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**A SUMMARY OF
PRODUCTIVE FOREIGN FISHING LOCATIONS
IN THE ALASKA REGION
DURING 1970-80 TRAWL FISHERIES**

**Gary B. Smith, R. S. Hadley, Robert French
Russell Nelson Jr., and Janet Wall**

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**Alaska Sea Grant Report 81-4
December 1981**

ALASKA SEA GRANT PROGRAM
University of Alaska
Fairbanks, Alaska 99701

A SUMMARY OF PRODUCTIVE FOREIGN FISHING LOCATIONS IN THE

ALASKA REGION DURING 1977-80: TRAWL FISHERIES

by

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Russell Nelson, Jr.¹, and Janet Wall¹

A Cooperative Effort of
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ACKNOWLEDGMENTS

The authors sincerely thank the many persons who contributed to this report.

During 1979 and 1980, the Northwest and Alaska Fisheries Center (NAFAC) placed 175 observers aboard foreign trawl fishing vessels operating in the Alaska region, as a part of the monitoring and management of North Pacific and Bering Sea fisheries. Once again, we gratefully acknowledge the contributions that these individuals have made in obtaining detailed catch information under difficult and trying work conditions.

We also thank Bruce Gibbs and Wendy Hirschberger of NAFAC for their help in data processing and production of the computer graphics, and Tricia Olsen, Alaska Sea Grant, for graphics and layout. Eric Anderson of NAFAC contributed the section on economic overview. We also thank the NAFAC Computer Center for support.

This report was compiled and printed as a cooperative effort by the Northwest and Alaska Fisheries Center, National Marine Fisheries Service, NOAA, and by the Alaska Sea Grant Program, cooperatively supported by the NOAA Office of Sea Grant, U.S. Department of Commerce, under Grant NA 81AA-D-00009, Project Number A/77-04 and by the University of Alaska with funds appropriated by the State of Alaska.

ABSTRACT

Data resulting from U.S. observer coverage of foreign trawling activities in the Alaska region during 1977-80 are summarized in a manner intended to promote the transfer of information to the U.S. fishing industry. In particular, the report attempts to supplement previous descriptions of foreign fisheries in the Alaska region by extending the areas and time periods covered. Coverage is expanded to include the northern Bering Sea and Aleutian Islands areas for the years 1977-80, and new trawl fisheries data are also reported from all other Alaskan areas for 1979-80.

A total of 16,367 new records of independent stern trawler operations were available, resulting from observer coverage of about 6 to 16% of the total foreign fishing effort during any one year. The most productive foreign trawling locations are described for eight principal target species, in five major geographical regions.

INTRODUCTION

The purpose of this document is to support the principal objective of the Fishery Conservation and Management Act of 1976 (FCMA), "to encourage the development of fisheries which are currently underutilized or not utilized by United States fishermen," by describing important characteristics of the current foreign trawl fisheries off Alaska. The report is based upon direct shipboard observations collected by the Foreign Fisheries Observer Program of the U.S. National Marine Fisheries Service (NMFS), an agency of the National Oceanic and Atmospheric Administration (NOAA).

In particular, the present report is intended to supplement the previous descriptions of foreign trawl fisheries (Smith and Hadley, 1979) and foreign longline fisheries (Smith et al., 1980) in the Alaska region, by extending the time and areas covered. Emphasis is placed upon describing foreign trawl fisheries during the years 1979 and 1980, and expanding the geographical coverage to include the northern Bering Sea and Aleutian Islands. Additionally, more detail is provided describing characteristics of the foreign trawl fisheries, the economic environment, the performance of different sizes of stern trawlers, production rates, and the qualitative composition of catches.

In this report we have attempted to provide a summary of exact productive fishing locations for the most important target fish species, productive fishing depths, catch characteristics, and seasonal changes--drawn from the experience of the foreign trawl fleets during the years 1977 through 1980. It is hoped that this information will be of assistance to the fisherman, processor, and investor in planning strategies to increase the proportion of the total groundfish harvest taken by U.S. vessels.

DESCRIPTION OF FOREIGN TRAWL FISHERIES

Foreign trawl fisheries have operated in the Bering Sea, Aleutian Islands, and Gulf of Alaska regions for many years, and excellent reviews of their histories and characteristics are provided by Pruter (1976), North Pacific Fishery Management Council (1979a,b), Bakkala et al. (1979), and Alton (1981). In summary, the total number of foreign vessels that fish in the Alaska region of the U.S. 200-mile Fishery Conservation Zone is extremely large (ca. 250-300 vessels per year), and in recent years the total foreign groundfish catch has varied between 1.4-1.6 million metric tons (mt) per year.

In 1979 and 1980, foreign fishing vessels harvested 1.4 and 1.5 million mt of bottomfish from the Alaska region. Seven nations participated in trawl fisheries--Japan, the Union of Soviet Socialist Republics (USSR), Republic of Korea (ROK), Poland, China (Taiwan), Mexico, and the Federal Republic of Germany. Tables 1-4 summarize the distribution of foreign fisheries catches among nations and species. Japanese vessels accounted for 79 to 81 percent of the total groundfish catch in the Bering Sea and Aleutian Islands areas, and 44 to 52 percent in the Gulf of Alaska.

Fishing Vessels

In the Alaska region, foreign trawl fisheries have two main components, an independent stern trawl fleet and a mothership fleet. Vessels in the independent stern trawl fleet have stand-alone capabilities for all phases of the fishing operations including catching, processing, and product storage. In comparison, mothership fleets usually consist of a central large factory-ship serviced by a number of small catcher vessels. Only data collected from independent stern trawl vessels are included in this report.

Table 1. Summary of 1979 foreign groundfish catches in the Bering Sea and Aleutian Islands regions (metric tons).^{1/}

Species	Japan	USSR	Republic of Korea	Poland	China, Taiwan	TOTAL
Walleye Pollock	779,004	58,715	83,788	18,230	1,929	941,666
Yellowfin Sole	53,483	41,259	1,349	--	3	96,094
Other Flatfish	75,776	12,128	1,961	2	19	89,886
Pacific Cod	35,480	2,616	3,233	16	39	41,384
Pacific Ocean Perch	6,875	22	281	2	3	7,183
Sablefish	1,691	49	425	2	6	2,173
Atka Mackerel	1,657	20,277	1,329	1	--	23,264
Squid	5,739	6	1,233	25	14	7,017
Pacific Herring	1,708	5,530	108	--	--	7,346
Other Fish	52,673	8,054	3,962	6	--	64,695
TOTAL	1,014,086 (79.2%)	148,656 (11.6%)	97,669 (7.6%)	18,284 (1.4%)	2,013 (0.2%)	1,280,708 (100.0%)

^{1/} Preliminary statistics from Pileggi and Thompson (1980), p. 22-23, including both trawl and longline fisheries results.

Table 2. Summary of provisional 1980 foreign groundfish catches in the Bering Sea and Aleutian Islands regions (metric tons).^{1/}

Species	Japan	USSR	Republic of China, West				TOTAL
			Korea	Poland	Taiwan	Germany	
Walleye Pollock	832,993	2,156	113,865	46,146	4,974	5,996	1,006,130
Yellowfin Sole	61,295	6	16,198	234	35	0	77,768
Turbot ^{2/}	47,464	1	7,126	335	71	7	55,004
Other Flatfish	26,687	3	6,497	276	55	8	33,526
Pacific Cod	29,524	11	6,404	627	200	552	37,318
Pacific Ocean Perch ^{3/}	4,103	5	740	37	18	15	4,918
Other Rockfish	3,024	2	493	23	9	1	3,552
Sablefish	1,882	0	350	152	38	16	2,438
Atka Mackerel	1,719	937	17,483	44	0	42	20,225
Squid	4,642	0	1,620	19	39	53	6,373
Pacific Herring ^{4/}	329	428	23	2	1	--	783
Other Fish	39,878	8	6,791	198	69	39	46,983
TOTAL	1,053,540 (81.4%)	3,557 (0.3%)	177,590 (13.7%)	48,093 (3.7%)	5,509 (0.4%)	6,729 (0.5%)	1,295,018 (100.0%)

^{1/} Preliminary statistics from French et al. (1981), p. 75-76, using the "best blend" estimates. Both trawl and longline fisheries results are included.

^{2/} Fish species included within the "turbot" group are Greenland turbot (*Reinhardtius hippoglossoides*), arrowtooth flounder (*Atheresthes stomias*), and Kamchatka flounder (*A. evermanni*). In 1979 and previously, these species were included in the "other flatfish" category.

^{3/} In 1980, the "Pacific ocean perch" category was expanded to include northern rockfish (*Sebastes polyspinis*), roughey rockfish (*S. aleutianus*), shortraker rockfish (*S. borealis*), and sharpchin rockfish (*S. zacentrus*)--in addition to Pacific ocean perch (*S. alutus*).

^{4/} In 1980, Pacific herring was classified as a prohibited species.

Table 3. Summary of 1979 foreign groundfish catches in the Gulf of Alaska region (metric tons).^{1/}

Species	Japan	USSR	Republic of Korea	Poland	Mexico	TOTAL
Walleye Pollock	32,114	17,177	25,549	19,551	8,677	103,068
Pacific Cod	9,823	834	807	127	939	12,530
Flatfish	12,332	366	597	19	113	13,427
Pacific Ocean Perch	7,334	1,066	822	5	457	9,684
Other Rockfish	1,068	122	184	19	7	1,400
Sablefish	5,866	150	758	--	55	6,829
Atka Mackerel	544	10,262	75	1	36	10,918
Squid	261	1	143	9	13	427
Other Fish	2,266	939	755	14	101	4,075
TOTAL	71,608 (44.1%)	30,917 (19.0%)	29,690 (18.3%)	19,745 (12.2%)	10,398 (6.4%)	162,358 (100.0%)

^{1/} Preliminary statistics from Pileggi and Thompson (1980), p. 20-21, including both trawl and longline fisheries results.

Table 4. Summary of provisional 1980 foreign groundfish catches in the Gulf of Alaska region (metric tons).^{1/}

Species	Japan	USSR	Republic of Korea	Poland	Mexico	TOTAL
Walleye Pollock	37,897	37,001	25,013	13,085	--	112,996
Pacific Cod	30,581	1,942	1,666	54	--	34,243
Flatfish	11,924	1,838	1,734	1	--	15,497
Pacific Ocean Perch ^{2/}	10,770	1,239	408	30	--	12,447
Thornyhead ^{3/}	1,216	3	132	0	--	1,351
Other Rockfish	2,786	7	52	4	--	2,849
Sablefish	4,831	416	891	0	--	6,138
Rattails	2,827	5	128	0	--	2,960
Atka Mackerel	1,896	10,474	736	57	--	13,163
Squid	697	37	107	1	--	842
Other Fish	2,548	1,641	1,321	44	--	5,554
TOTAL	107,973 (51.9%)	54,603 (26.2%)	32,188 (15.5%)	13,276 (6.4%)	--	208,040 (100.0%)

^{1/} Preliminary statistics from French et al. (1981), p. 147, using the "best blend" estimates. Both trawl and longline fisheries results are included.

^{2/} In 1980, the "Pacific ocean perch" category was expanded to include northern rockfish (*Sebastes polyspinis*), rougheye rockfish (*S. aleutianus*), shortraker rockfish (*S. borealis*), and sharpchin rockfish (*S. zacentrus*)--in addition to Pacific ocean perch (*S. alutus*).

^{3/} The "thornyhead" category includes the fish species shortspine thornyhead (*Sebastolobus alascanus*) and longspine thornyhead (*S. altivelis*). In 1979, and previously, these species were included in the "other rockfish" category.

Independent stern trawlers fishing in the Gulf of Alaska and Bering Sea are usually grouped, for convenience, into three basic size classes (see Table 5): small stern trawlers, large freezer trawlers, and large surimi trawlers. Vessels with a displacement less than 1500 gross register tonnage (GRT) are classified as small stern trawlers, have a crew of 20-45, and are usually equipped to produce frozen fish products. Large freezer trawlers range in size from 1500-5700 GRT, may have a crew of 70-165 persons, and only have a processing capability to produce frozen fish products (except on some vessels, also fish meal). Surimi trawlers have been defined as trawlers, of 1500 GRT or larger, with processing capabilities to produce "surimi" (a minced fish product), frozen fish products, and fish meal. All surimi trawlers are Japanese.

Target Species

Japan operates vessels of all three classes in both Gulf of Alaska and Bering Sea fisheries. In past years, Japan's large surimi trawlers have targeted exclusively on walleye pollock (Theragra chalcogramma) in both major regions. Japanese small trawlers and large freezer trawlers generally target upon a variety of species, depending upon the specific area being fished. In the Bering Sea and Aleutian Islands regions during 1979-80, Japanese small trawlers targeted upon Greenland turbot (Reinhardtius hippoglossoides), arrowtooth flounder (Atheresthes stomias), Kamchatka flounder (A. evermanni), rockfish (Sebastes spp. and Sebastodes spp.), walleye pollock, Pacific cod (Gadus macrocephalus), yellowfin sole (Limanda aspera), and sometimes squid. Japanese large freezer trawlers usually targeted on yellowfin sole, rockfish, or pollock. In the Gulf of Alaska, Japanese small trawlers and large freezer trawlers generally targeted upon pollock, rockfish, or flatfish (primarily arrowtooth flounder).

Table 5. Typical characteristics of the three classes of independent stern trawlers.

Vessel Class	Code ^{1/}	Nation	Length ^{2/} (m)	Gross Register Tonnage	Engine Horsepower	Size Crew
Small Stern Trawler	S	Japan	50-60	350-500	1200-2700	22-32
		Mexico	52-57	929	2200-2700	38
		Korea	68	1015	2500	44
Large Freezer Trawler	M	Japan	75-102	2000-4000	3400-4400	45-60
		USSR	76-89	2100-3800	2000-2320	78-96
		Korea	89-111	2800-5680	3500-6000	85-165
		Poland	79-90	2300-2500	2400-3600	78-91
		W. Germany	92	3182	4800	68
Surimi Trawler	L	Japan	92-112	2700-5500	3400-5900	60-100

^{1/} These codes are used in Appendices A-E for vessel class designations.

^{2/} Note: 1 meter (m) = 3.28 feet.

During 1979-80, the major target species for trawlers from all other nations (USSR, Korea, Poland, West Germany, Taiwan, and Mexico) was walleye pollock. Soviet trawlers also targeted on Atka mackerel (Pleurogrammus monopterygius) in the Gulf of Alaska and Aleutian Island areas, and on yellowfin sole in the eastern Bering Sea.

The size and design of trawls used by foreign trawlers in Alaskan waters have been so variable that a general description would be meaningless. In general, all classes of Japanese, Korean, and Mexican vessels used bottom trawl fishing methods for most target species. The only midwater trawling operations observed on these vessels were in fishing for squid by Japanese small trawlers in the western Aleutian Islands, and in pollock roe fisheries conducted in the northern Bering Sea during February to April by Japanese small trawlers and Korean trawlers. In contrast, Soviet, Polish, and West German vessels used pelagic trawling methods for walleye pollock throughout 1980. In the Gulf of Alaska, Soviet trawlers used midwater trawling methods for Atka mackerel, but took Atka mackerel and yellowfin sole in the Bering Sea by bottom trawling.

Products

The major product prepared on Japanese surimi trawlers was surimi, a minced fish product made from walleye pollock, sometimes with small amounts of Pacific cod added. The production of surimi was largely mechanized. Typically, machines are used to wash and fillet the fish, mince and refine the resulting flesh, and mix in desired additives. The finished surimi is extruded into plastic bags and frozen.

The processing of bycatch species aboard surimi trawlers has generally been less mechanized. During 1979-80, some surimi trawlers had machines to

head, gut, and remove the tail fins of Pacific cod or flatfish of a particular size. Other sizes, and other species, had to be either headed and gutted by hand or frozen whole. Fish wastes and "trash" fish were processed into fish meal and oil.

The major products of Japanese large freezer trawlers were headed and gutted rockfish and flatfish. Most ships had machines to remove the heads of the most common sizes and species of fish. Large Pacific cod, sablefish (Anoplopoma fimbria), rockfish, and pollock were usually hand filleted. Some trawlers had "kiriimi" machines that cut circular or square meat products from yellowfin sole. The pectoral girdles of rockfish and sablefish were sometimes packed separately. After butchering, fish were washed, quick frozen in trays, then the frozen blocks were glazed, bagged, and boxed. As on the surimi trawlers, less-valued fish species and fish wastes were processed into fish meal and oil.

In recent years, Japanese small trawlers would usually freeze some fish and squid whole; head and gut the major roundfish and flatfish species; and fillet large Pacific cod, sablefish, and rockfish as also done on the large freezer trawlers. Small trawlers, however, have not had machinery to produce fish meal or oil, and almost all processing of the catch has been done by hand. On some vessels a rotary saw was used for deheading by pushing fish by hand into a cutting blade.

In general, fish processing on Korean and Soviet stern trawlers has been less mechanized than on Japanese large freezer trawlers. Pollock, Pacific cod, and some rockfish have usually been headed and gutted or filleted. On Korean trawlers deheading was usually done by hand, and on Soviet vessels each fish was generally held by hand into a cone-like hood with a heading blade. Atka mackerel, some rockfish, rock sole (Lepidopsetta bilineata), and

most other flatfish were frozen whole. During winter months, pollock roe was often removed and frozen separately. Pollock livers have also sometimes been frozen or canned by Soviet trawlers. Fish meal and oil were also produced on these ships.

The preparation of fillets, and headed and gutted products, on Polish and West German vessels was highly mechanized during 1980. Heading, gutting, filleting, and skinning machines took the place of hand labor in processing the major species--walleye pollock, and sometimes Pacific cod. Two grades of fillets were produced on both Polish and West German vessels, standard and boneless. In addition, on the one West German vessel, small or damaged pollock fillets were minced, then frozen into blocks. Bycatch species--such as flatfish, rockfish, sablefish, and Atka mackerel--were usually headed and gutted. Fish meal and oil were produced on vessels of both nations.

DESCRIPTION OF NMFS OBSERVER COVERAGE

Field Methods

Since the implementation of the FCMA on March 1, 1977, all foreign vessels fishing within the U.S. 200-mile fishery conservation zone have been required to accept U.S. observers upon request by the United States. During 1979 and 1980, the Northwest and Alaska Fisheries Center placed 109 and 66 observers on board foreign trawlers fishing in the Gulf of Alaska and Bering Sea, respectively. The resultant coverage of foreign trawl fishing activities is summarized in Table 6.

During 1979, the percentage of foreign trawl fishing effort (i.e., total vessel months on the grounds) covered by U.S. observers was 10.1% in the Bering Sea/Aleutian Islands region, and 16.3% in the Gulf of Alaska. In 1980, U.S. observer coverage was 5.9% in the Bering Sea/Aleutian Islands, and 11.6% in the Gulf of Alaska.

Generally, U.S. observers were distributed among the foreign fleets in a manner intended to optimize the collection of critical data. The primary uses of the data are to monitor the in-season progress of foreign fishing activities, provide biological information for stock analyses, provide estimates of catches of prohibited species, and to provide information useful for enforcement purposes. In addition to these criteria, the placement of observers is also based upon the number of vessels operating in each fishery (i.e., region, nation, vessel class, and target species), national catch quotas, and the potential impacts of particular foreign fishing activities on important U.S. domestic fisheries.

The principal mission of each observer was to determine fishing locations, the species composition of catches, catch rates, and occurrences of prohibited

Table 6. Summary of the percentage of foreign trawling activities monitored by the U.S. National Marine Fisheries Service Observer Program during 1979 and 1980.^{1/}

Region	Nation	Vessel Class ^{2/}	1979			1980		
			Vessel Months	Observer Months	Percent Coverage	Vessel Months	Observer Months	Percent Coverage
Bering Sea and Aleutian Islands	Japan	Small trawlers	729.2	44.1	6.0	768.2	23.2	3.0
		Large freezer trawlers and surimi trawlers	136.5	31.5	23.2	150.6	22.7	15.1
	USSR	Large freezer trawlers	139.7	26.8	19.0	3.9	0.2	5.1
	Korea	Large freezer trawlers	93.4	13.3	14.2	140.1	12.8	9.1
	Poland	Large freezer trawlers	20.2	4.0	19.8	60.6	7.6	12.5
	Taiwan	Small trawlers and large freezer trawlers	7.3	0	0	10.9	0	0
	W. Germany	Large freezer trawlers	nf	nf	nf	3.8	0.8	21.1
		SUBTOTAL	1,124.3	113.7	10.1	1,138.1	67.3	5.9
Gulf of Alaska	Japan	Small trawlers	41.4	7.8	17.6	63.0	7.8	12.4
		Large freezer trawlers and surimi trawlers	37.4	11.6	31.0	47.7	6.5	13.6
	USSR	Large freezer trawlers	35.2	5.5	15.6	66.0	6.8	10.3
	Korea	Large freezer trawlers	24.5	2.4	9.8	14.5	3.4	23.4
	Poland	Large freezer trawlers	2.5	0.3	1.4	22.5	0.2	0.9
	Mexico	Large freezer trawlers	19.5	2.1	10.8	nf	nf	mf
			SUBTOTAL	182.5	29.7	16.3	213.7	24.7

^{1/} Percent coverage is calculated as the ratio of observer coverage ("observer months") to the estimated foreign vessel time on the fishing grounds ("vessel months"), multiplied by 100. One observer or vessel month is 28 days; "nf" indicates no fishing.

^{2/} See Table 5 for vessel class descriptions.

species; to collect biological data from species of interest; and to monitor the compliance of vessels to U.S. fishing regulations. On independent stern trawlers, observers determined the species composition of the catch by taking representative basket samples from the trawl hauls, then counting and weighing the individuals of each species in the samples. The overall species composition and catch rates resulting from each haul were then estimated by extrapolating the subsample to the total estimated weight of each trawl catch. The fishing position, fishing depth, and estimate of total tonnage landed for each haul were provided to the observer by the captain or officers of each foreign vessel.

Additional descriptions of the NMFS Observer Program, observer coverage of foreign vessels, and field methods are provided by Nelson et al. (1978, 1979, 1980) and Wall et al. (1978, 1979, 1980).

Analytical Methods

As described in the introduction, the purpose of this report is to supplement previous descriptions of foreign fisheries in the Alaska region. In particular, Table 7 is a summary of the new information upon which the present report is based.

The first report of foreign trawling activities (Smith and Hadley, 1979) was based upon records from 3,714 independent stern trawler operations during 1977-78, reporting data collected from the southeastern Bering Sea, western Gulf of Alaska, Kodiak Island, and southeast Alaska areas. The present report is based upon a total of 16,367 new observations of foreign stern trawler operations during 1977-80, resulting from both increased observer coverage (i.e., total observer months) and extension of the geographical coverage of reporting to include the northern Bering Sea and Aleutian Islands. The

Table 7. Summary of new information included in this report, indicated by the number of foreign trawl hauls sampled by U.S. observers in the major Alaskan regions during 1977-80.

Year	Regions					Total
	Northern Bering Sea	Aleutian Islands	Southeastern Bering Sea and Western Gulf of Alaska	Kodiak Island	Southeast Alaska	
1977	585	370	*	*	*	955
1978	1,550	741	*	*	*	2,291
1979	2,371	947	3,177	972	574	8,041
1980	1,443	260	2,385	477	515	5,080
TOTAL	5,949	2,318	5,562	1,449	1,089	16,367

-----number of trawl hauls-----

* Coverage previously reported by Smith and Hadley (1979).

newly-reported data include 5,949 (36%) foreign trawl records from the northern Bering Sea; 2,318 (14%) from the Aleutian Islands; 5,562 (34%) from the southeastern Bering Sea and western Gulf of Alaska; 1,449 (9%) from the Kodiak Island area; and 1,089 (7%) from off southeast Alaska.

The five geographical areas used to summarize the foreign trawl fishing data are shown in Table 8 and Figure 1. The areas were selected for their correspondence to a U.S. National Ocean Survey (NOS) navigational chart, and the boundaries were nonoverlapping. Foreign trawling records were selected by a geographic "window," year, three-month period, and vessel class for most summaries and analyses.

To describe recent general characteristics of the foreign trawl fisheries in each region, summaries of overall species composition and average catch rates (i.e., production rates, or catch per unit effort) were developed using the data from each 3-month period of 1980. The results for the three major vessel classes were summarized separately so as to distinguish differences in targeting strategies, production rates, and species and size composition of catches. Catch rates are shown both as average production per day of fishing activities on the grounds (i.e., including search time, gear handling time, loss of fishing time due to bad weather, etc.) and average production rate per hour of actual trawling effort (i.e., indicating available fish densities). Within each table, and for each vessel class, the top 8-12 species are listed in order from most abundant to rarest.

To describe more specific characteristics of the foreign trawl fisheries and target species in each region, listings were made of the most productive fishing locations for eight potential target species or groups (Table 9). The stern trawl data available for each region were selected by three-month intervals (independent of vessel class), then the best trawling locations for

Table 8. Geographical areas used for summarization of foreign trawling locations.

Region	NOS CHART	Window Boundaries (Lat., Long.)
Northern Bering Sea	INT 513 <u>1/</u>	55°30'N to 60°45'N by 172°00'W to 170°00'E
Aleutian Islands	INT 513 <u>1/</u>	50°00'N to 55°30'N by 172°00'W to 170°00'E
Southeastern Bering Sea and Western Gulf of Alaska	16011 <u>2/</u>	51°30'N to 59°10'N by 158°00'W to 172°00'W
Kodiak Island	16013 <u>2/</u>	54°30'N to 59°30'N by 144°00'W to 158°00'W
Southeast Alaska	16016 <u>2/</u>	55°00'N to 60°00'N by 132°00'W to 144°00'W

1/ Depths in meters.2/ Depths in fathoms.

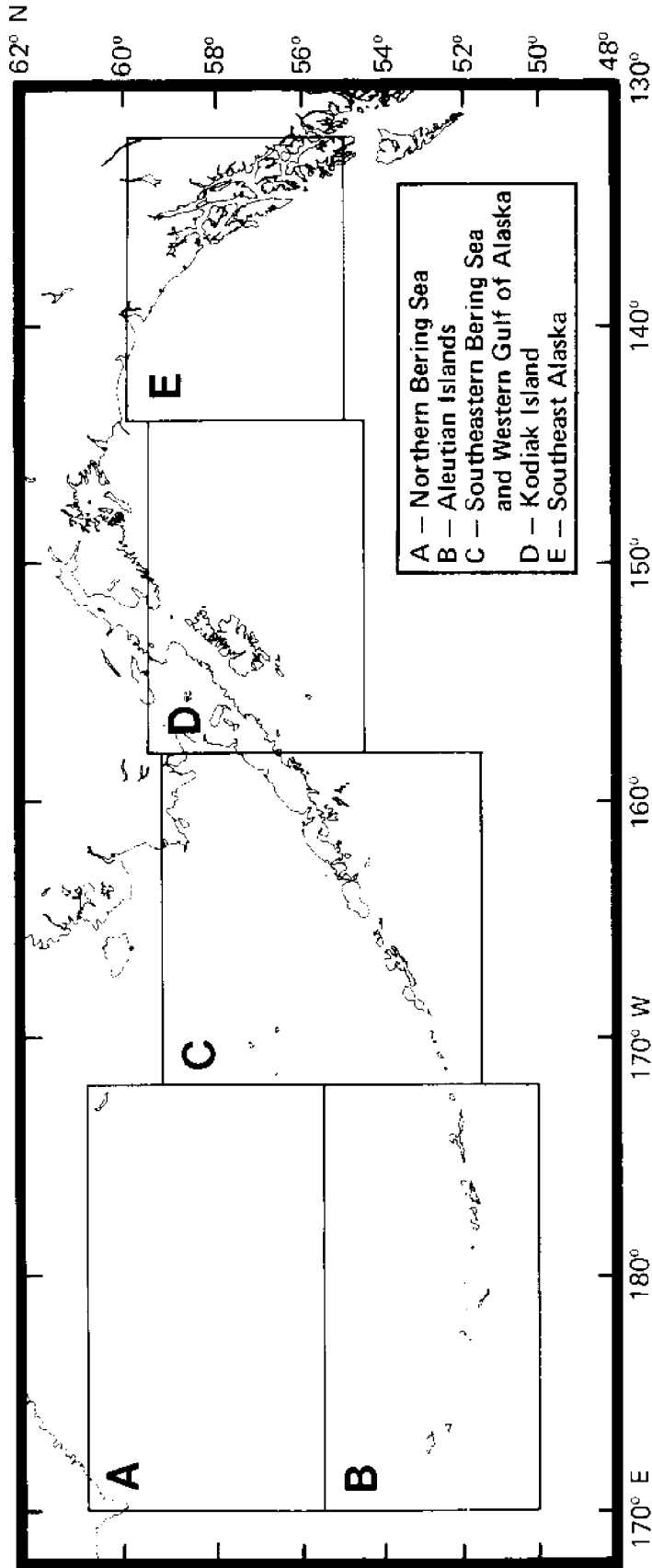


Figure 1. Summary of geographical areas used for reporting foreign trawl fisheries data.

Table 9. Fish species included in this analysis.

Group Name	Scientific Name or Class Definition
Walleye Pollock	<u>Theragra chalcogramma</u>
Pacific Cod	<u>Gadus macrocephalus</u>
"Turbot"	<u>Atheresthes stomias</u> , <u>A. evermanni</u> , and <u>Reinhardtius hippoglossoides</u>
Pacific Ocean Perch	<u>Sebastes alutus</u>
Other Rockfish	Includes all occurring <u>Sebastes</u> and <u>Sebastolobus</u> species other than <u>Sebastes alutus</u>
Atka Mackerel	<u>Pleurogrammus monopterygius</u>
Yellowfin Sole	<u>Limanda aspera</u>
Pacific Herring	<u>Clupea harengus pallasii</u>

each of the occurring eight target species were listed in order of "catch rate" from high to low. Information shown for each trawling location include nation, vessel class, date, starting position, Loran-C coordinates, fishing depth, total catch and catch rate for the target species, average size of the target species, weight of the bycatch fraction (i.e., all other species), and the overall total catch weight (see Figure 2 for examples). In order to limit the size of the report to a manageable size, each of these tables was restricted to reporting only locations with catch rates greater than or equal to 500 lbs/hr trawled, and limited to a maximum length of six pages (270 trawl records).

Page-size maps are included in the report showing the locations of the foreign fishing data included in the data tables. For these, all trawling locations are shown that had a catch rate greater than, or equal to, 500 lbs/hr. The center of a plus sign symbol (+) indicates the exact position of a productive foreign fishing location.

In illustrating the general patterns of foreign trawling operations for different target species, the page-size maps also indicate important considerations for the further development of U.S. domestic trawl fisheries in the Alaska region. These include the need for capabilities of distant-water operations, and the need for additional development of the necessary fisheries-related infrastructure--port facilities, product landing facilities, communications systems, and efficient transportation links.

Descriptions of the size composition (or more specifically, cumulative length-frequency distributions) of the catches of important target species from the Bering Sea and Gulf of Alaska regions are provided for 1979 and 1980. These represent summaries for each entire region, for all nations and vessel classes, for each year. Length-frequency distributions identified as "Bering

1 2
TABLE D-7. PACIFIC COD, APRIL-JUNE 1979-80

3	4	5	6	7	8	9	10	11	12	13	14			
NATION	VESSEL CLASS	DATE YYMMDD	LAT	LONG	APPX LORAN-C 7X	PULSE RATES 7Y	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LB/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)	
USSR	M	79 629	5730N	15033W	18735.0	32195.8	43005.1	63.	0.500	5407.	10.81	7.79	9993.	15400.
MEXICG	S	79 629	5703N	15143W	18720.4	32397.4	43044.8	55.	1.833	10365.	5.65	4.40	44635.	55000.
MEXICG	S	79 627	5701N	15132W	18719.5	32353.2	43043.2	63.	3.083	12397.	4.02	9.59	44143.	56540.
MEXICG	S	79 625	5705N	15132W	18721.8	32376.7	43030.6	60.	2.980	4163.	2.08	5.94	45117.	49280.
JAPAN	L	79 623	5718N	15126W	18728.7	32314.3	43002.3	62.	1.500	2669.	1.78	8.60	36711.	35380.
USSR	M	79 627	5828N	14832W	18745.9	31819.8	43120.2	112.	0.250	353.	1.41	5.06	17247.	17600.
JAPAN	S	80 627	5707N	15121W	18723.2	32353.5	43019.2	96.	0.500	592.	1.18	7.78	10408.	11000.
JAPAN	S	80 627	5659N	15131W	18718.4	32400.0	43045.0	97.	0.667	631.	0.95	6.82	8609.	9240.
JAPAN	L	79 623	5731N	15037W	18735.3	32196.8	43006.1	26.	1.333	1170.	0.88	4.71	24564.	25740.
JAPAN	L	79 613	5714N	15123W	18726.8	32327.1	43006.6	63.	2.000	1680.	0.84	7.28	96220.	97900.
USSR	M	79 629	5729N	15033W	18734.6	32199.9	43004.2	60.	0.750	601.	0.80	6.05	16999.	17600.
JAPAN	L	79 630	5617N	15257W	18683.7	32696.7	43493.9	87.	1.750	1392.	0.60	8.57	33808.	35200.
JAPAN	M	79 630	5757N	14915W	18744.5	31992.6	43048.4	174.	0.333	258.	0.77	7.26	6122.	6380.
JAPAN	L	79 627	5616N	15312W	18681.7	32724.9	43565.0	97.	0.750	539.	0.72	6.03	65463.	66000.
JAPAN	L	79 625	5709N	15133W	18723.9	32361.4	43020.1	60.	2.333	1619.	0.69	5.05	75381.	77000.
JAPAN	S	80 626	5707N	15132W	18723.2	32354.8	43019.7	102.	0.333	216.	0.65	8.00	5282.	5500.
JAPAN	S	80 626	5659N	15133W	18718.3	32402.8	43051.0	81.	0.583	379.	0.65	8.80	8861.	9240.
USSR	M	79 626	5812N	14849W	18747.7	31903.1	43000.5	115.	1.500	867.	0.58	6.42	10133.	11000.
JAPAN	M	80 6 1	5556N	15339W	18660.1	32846.8	43777.5	109.	0.583	335.	0.57	7.48	24965.	25300.
USSR	M	79 630	5720N	15034W	18734.1	32205.3	43003.3	66.	0.833	468.	0.96	7.31	19332.	19800.
USSR	M	79 629	5727N	15033W	18733.7	32208.2	43002.6	60.	1.050	568.	0.94	7.19	21432.	22000.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

1

Target species name.

2

Fishing period(s), by quarter of year.

3

Nationality of fishing vessel.

4

Vessel class:

S = small stern trawler

M = large freezer trawler

L = surimi trawler

5

Date of fishing (year, month, day).

6

Position reported by vessel's officers for setting the trawl

7

Loran-C rates computed from the reported position. The accuracy of position and subsequently calculated loran-C pulse rates is unknown. Use with caution.

8

Fishing depth (fathoms).

9

Haul duration, from time of net on-bottom to time of net off-bottom (hours).

10

Weight of target species caught (pounds).

11

Catch rate, listed in order from high to low (thousand pounds per hour of trawling).

12

Average weight per individual of the target species (pounds per individual fish).

13

Bycatch, weight of all species caught other than the target species (pounds).

14

Total catch of all species (pounds).

*Note: For each target species and quarter of year the tables list foreign trawling locations in order from "best" (i.e., highest catch rate) to "least productive".

Figure 2. How to read the appendix tables describing productive foreign trawling locations.

Sea" include data from the northern Bering Sea, southeastern Bering Sea, and Aleutian Islands. Length-frequency distributions identified as "Gulf of Alaska" include data from the western, central, and eastern areas of the Gulf of Alaska, and from off southeast Alaska. Whereas these figures summarize general characteristics of the all-nation, all-gear trawl landings, it is important to recognize that the specific size composition obtained within individual trawl catches may be highly variable between point locations, time periods, and gear dependent. The data on "average size" included in the productive fishing location tables provide some measure of between-location, between-season, and between-vessel class variations.

USES AND LIMITATIONS OF THESE DATA

In order to make best use of this report, the reader must keep in mind certain limitations. Beyond those limitations of data collection, selection, and presentation outlined in the "DESCRIPTION OF NMFS OBSERVER COVERAGE" section, the following must also be considered.

Factors Affecting Distribution of Fishing Effort

The geographical and seasonal distribution of the foreign trawling effort in the five areas covered by this report were not only affected by the distributions of the target species, but also by the various restrictions placed on these fisheries by U.S. fishing regulations (North Pacific Fishery Management Council, 1979a,b). Of primary importance were gear restrictions, catch quotas for target species, and the exclusion of foreign vessels from areas designated for protection.

The only gear restriction pertaining to foreign trawling in Alaskan waters during 1979-80 was the requirement for the use of pelagic trawls in the Gulf of Alaska from 1 December to 1 June. Foreign trawlers fishing during this period were required to use pelagic trawls equipped with functioning net-sonde devices.

Foreign nations, in receiving allocations for major target species, often received allocations of other species only sufficient to allow for a low bycatch. Therefore, the distribution of fishing effort by these nations was often guided by the need to maximize the catch of target species, while minimizing the bycatch of other species. All nations were required to minimize their incidental catches of prohibited species--particularly Pacific halibut (Hippoglossus stenolepis), salmon (Oncorhynchus spp.), king crab (Paralithodes camtschatica and P. platypus), and snow crab (Chionoecetes spp.)--which also often required changes in fishing areas and strategies.

Foreign trawlers were prohibited from fishing within 12 nautical miles of land in the Bering Sea and Gulf of Alaska except in the following areas and time periods in which foreign trawling was allowed between 3 and 12 miles:

1. The area located between 169°W and 170°W and north of the Aleutian chain from 1 June to 1 December;
2. The area located between 170°W and 172°W and north of the Aleutian chain year-round;
3. The area between 172°W and 176°W and north of the Aleutian chain from 1 June to 1 December;
4. The area west of 176°W and north of the Aleutian chain from 1 May to 1 January;
5. The area located between 169°W and 172°W and south of the Aleutian chain year-round;
6. The area between 176°00'W and 178°30'W and south of the Aleutian chain from 1 July to 1 November; and
7. The area west of 178°30'W and south of the Aleutian chain from 1 May to 1 January.

There were also numerous areas within the Gulf of Alaska and Bering Sea that were closed to foreign trawling for either a portion, or the entirety, of each year. Within the southeastern Bering Sea and western Gulf of Alaska there were four major restricted areas (Figure 3). These areas and time periods were: Davidson Bank and the Bristol Bay Pot Sanctuary, which were closed year-round; and the Misty Moon Grounds and "Winter Halibut Savings Area," which were closed from 1 December to 1 June.

In the Gulf of Alaska, the area located between 140°W and 147°W longitude was closed to foreign trawling from 1 November to 15 February, and the area

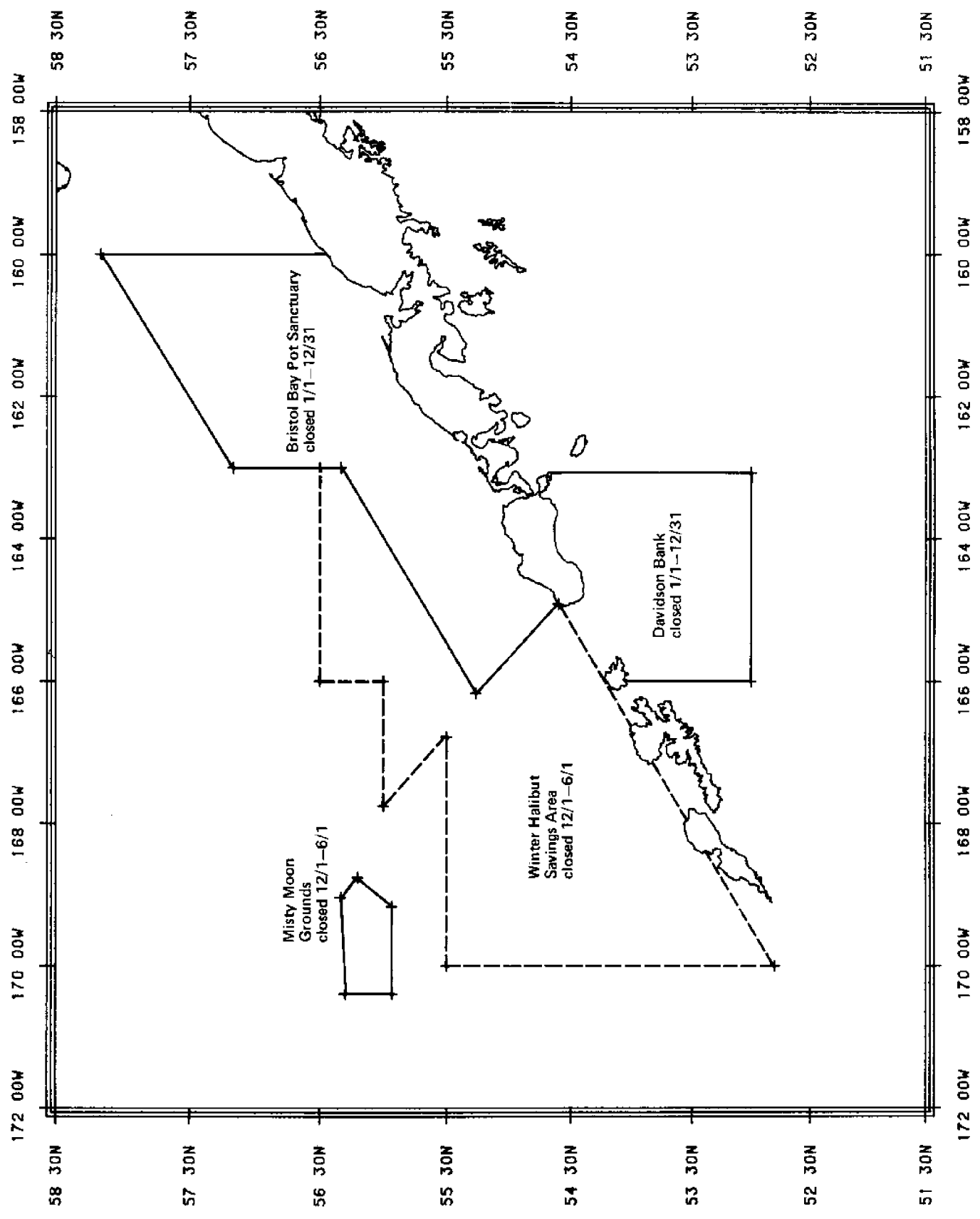


Figure 3. Areas in the Bering Sea and western Gulf of Alaska where foreign trawling was restricted.

located between 147°W and 157°W was closed from 16 February to 1 June. In addition, in the Kodiak Island region three "halibut areas" were closed from 5 days before to 5 days after the time period open for the U.S. domestic long-line fishery for Pacific halibut, and six crab "gear areas" were closed to trawling from 10 August to 1 June (Figure 4).

In southeast Alaska, three areas designated as U.S. fishing sanctuaries were closed to foreign fishing year-round (Figure 5). Those areas were Fairweather Gully, Cross Sound, and Salisbury Sound to Cape Edgecumbe.

Unknown Position Accuracy

Another important limitation to the information reported is the unknown accuracy of reported fishing positions. The accuracy of the position for each haul was dependent upon the captain or officers of the foreign vessel taking and then correctly reporting an accurate position to the observer. The observer had no independent means for assessing the position of the vessel.

Secondly, all data tables in this report contain Loran-C rates for each reported fishing location. It must be emphasized that these rates are only approximate, and that they were computed from the reported position. These rates should never be used for navigational purposes, but instead offer a readily understandable aid for plotting the approximate positions of successful fishing efforts.

Availability of Chart Overlays

To provide a more graphic and perhaps more convenient summary of the data described by this report, sets of large transparent chart overlays (Table 10) have been developed for the geographical areas defined in Table 8. Each overlay is scaled to exactly fit the corresponding National Ocean Survey navigational chart, and shows the point locations of trawling activities and catch

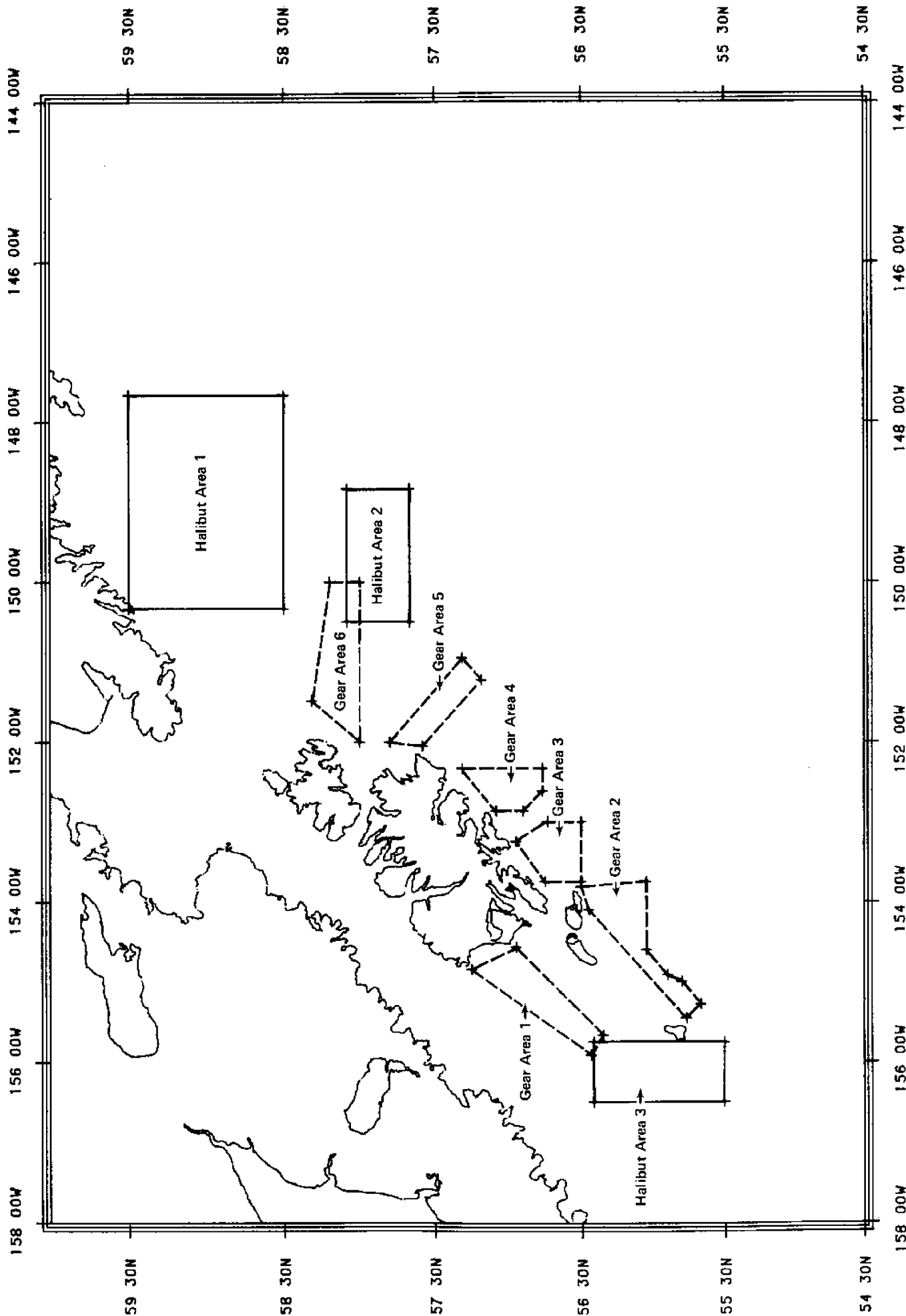


Figure 4. Areas in the central and eastern Gulf of Alaska where foreign trawling was restricted.

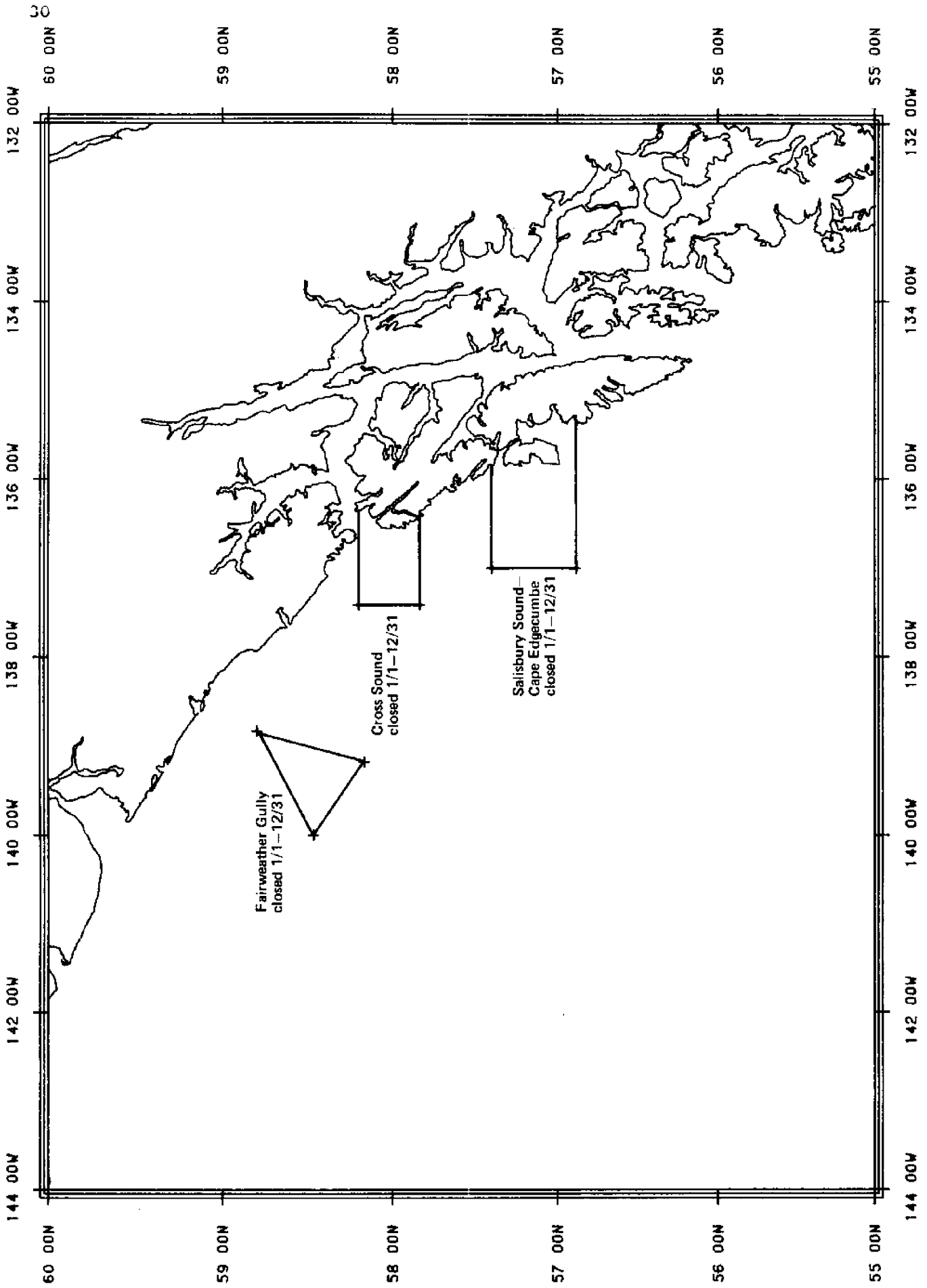


Figure 5. U.S. fishing sanctuaries off southeast Alaska that were closed to foreign trawling.

Table 10. New chart overlays of foreign trawling locations available from the Alaska Sea Grant Program.^{1/}

Set I. Northern Bering Sea and Aleutian Islands Region -- NOS Chart INT 513.

Walleye Pollock (summer months)
 Walleye Pollock (winter months)
 Pacific Cod
 Turbot
 Pacific Ocean Perch
 Atka Mackerel
 Pacific Herring

Set II. Southeastern Bering Sea and Western Gulf of Alaska Region -- NOS Chart 16011.

Walleye Pollock (summer months)
 Walleye Pollock (winter months)
 Pacific Cod
 Turbot
 Yellowfin Sole

Set III. Kodiak Island Region -- NOS Chart 16013.

Walleye Pollock
 Pacific Cod
 Pacific Ocean Perch
 Atka Mackerel

Set IV. Southeast Alaska Region -- NOS Chart 16016.

Turbot
 Pacific Ocean Perch

^{1/} The report of Smith and Hadley (1979) was also accompanied by chart overlays for the Kodiak Island, Albatross Bank, and Southeastern Bering Sea regions. Please contact the Alaska Sea Grant Office for information regarding availability.

rate (in units of "1,000 pounds per hour of trawling") obtained at each position. All trawling locations are shown that had a catch rate greater than, or equal to, 500 lbs/hr.

To request any of the four sets of chart overlays, which are available free of charge, please contact:

Alaska Sea Grant Program
University of Alaska
Fairbanks, Alaska 99701
(907) 479-7086.

It is hoped that fishermen entering the Alaskan bottomfish fishery will be able to use these overlays as a ready reference to fishing "hot spots."

Due to the high cost of large-format production, only a limited number of overlay sets have been printed. For this reason, at most, only one complete series of overlays will be sent to any one person or company.

National Ocean Survey navigation charts and chart catalogs are available from most marine supply dealers, or may be ordered from:

Distribution Division, C44
National Ocean Survey
Riverdale, Maryland 20840.

ECONOMIC OVERVIEW

The world market for trawl-caught fish, and fish products, is very large. The United Nations Food and Agriculture Organization estimates that the 1978 harvest of groundfish was about 16.9 million mt (Food and Agriculture Organization, 1979).^{1/} If the 1980 world catch was approximately the same, then the groundfish catch from Alaskan waters (U.S. and foreign combined) during 1980, 1.5 million mt, was about 8.9% of the world total.

Although the groundfish catch from the Alaska region is not a particularly large component of the total world market, it is an important amount when compared on a basis of national or regional trade. For example, during 1979 the foreign groundfish catch off Alaska was approximately equal to the total domestic landings of edible fish and shellfish by the United States of 3,318 million lb, or 1.5 million mt (Pileggi and Thompson, 1980: p. 6); U.S. consumption of edible seafood products was approximately 2,906 million lb, or 1.3 million mt (ibid., p. 76); and to meet U.S. demand, 2,369 million lb, or 1.1 million mt of additional edible seafood products were imported at a cost of \$2.7 billion (ibid., p. 38).

Though the Fishery Conservation and Management Act of 1976 has provided a significant mechanism and incentives for increased domestic utilization of fishery resources off Alaska, the real potential for domestic expansion remains uncertain largely due to economic factors.

By far the greatest part of Alaska bottomfish resources is walleye pollock, the least valuable species, representing 61% of the estimated optimum groundfish yield from the region. The unit value of pollock is low because

^{1/} Based upon Food and Agriculture Organization (1979), p. 7, summing the nominal catches of the flounder, cod, and redfish species groups.

fish represented in trawl landings are often too small for efficient filleting, they are highly perishable, and fisheries for pollock are located mostly in the eastern Bering Sea--far from shore-based processors, and farther still from consumers. However, the other important resource species--Pacific cod, flatfish, Pacific ocean perch (Sebastes alutus), and other rockfish--all suffer less from these disadvantages, and are more highly valued by consumers.

There are at least four forces in the international groundfish market which, it is hoped, will motivate the development of domestic bottomfish fisheries in the Alaska region. One, is growth in the huge U.S. and European consumption of frozen whitefish products. There is evidence that this growth is occurring, especially in the proliferation of fish and chips restaurants, as well as in the popularity of fish sandwiches at other fast food outlets (Kelly, 1980).

Second, even if consumption doesn't grow, there is hope that U.S.-caught fish products from Alaska will be able to compete with, and partially displace, the supplies of fresh and frozen groundfish fillets and frozen fish blocks and slabs currently imported to the United States. In 1979, these imported groundfish products accounted for 661 million lb (0.3 million mt), or 89% of the total U.S. supply (Pileggi and Thompson, 1980: p. 40). Displacement will require not only surmounting the obstacle of Alaska's high fishing, processing, and shipping costs, but also convincing buyers that the quality of the domestic product is comparable to that of the imports. Given the existence of subsidized, highly-organized, and long-established foreign competition, determined efforts will be required on the part of the U.S. industry to increase the proportion of domestic-caught products in U.S. markets.

Third, there is the possibility that phasing foreign fleets out of Alaska fisheries will cause the foreign nations to buy more U.S.-caught fish products.

In fact, the major fishing nations represented--Japan, the USSR, and Republic of Korea--have already started buying directly from U.S. fishermen through joint venture operations. However, U.S. fish processors have objected to these foreign joint ventures as unfair competition for the supply of fish. On the other hand, it isn't clear whether the foreign nations would buy much processed fish from the U.S. if the joint ventures were prohibited. For example, Japan has restrictive import quotas that might not be relaxed if its own fishing industry was successful in expanding harvests in home waters and finding substitute products.

It has been suggested (Stokes, 1980) that foreign nations might be willing to sign agreements promising to buy specified quantities of U.S.-processed fish products in exchange for continued fishing rights in the U.S. 200-mile zone. In other words, the U.S. could arrange an increase in demand for its value-added fish production, not by eliminating foreign fishing, but by permitting foreign fishing to continue. However, such arrangements could only be temporary because U.S. law (i.e., FCMA) requires an eventual phasing-out of foreign fishing in U.S. waters.

Another potential benefit of reducing or eliminating foreign fishing, is the effect that might have on U.S. harvesting costs. If congestion on the grounds was relieved, or if resource densities were increased, then more and perhaps larger fish could be caught with less effort. Lower harvesting costs might encourage U.S. fishermen to expand their groundfish effort even without increases in exvessel market prices.

The above discussion of harvesting costs leads to the fourth force which may drive development of the domestic groundfish fishery--overcrowding in the Alaska shrimp and crab fisheries, and to a lesser extent, overcrowded fisheries in other regions of the United States. It will require a substantial

improvement in expected profitability of year-round trawling to encourage the construction of sufficient numbers and tonnages of new vessels needed to fully utilize the Alaska groundfish resource. But temporarily converted shellfish boats might enter the trawl fishery between shellfish seasons at a low opportunity cost.

There have been a number of economic feasibility studies performed recently of Alaska groundfish development. Most conclude that at current prices, bottomfish trawling and processing is, on the whole, a marginally profitable business. Under some circumstances it can be profitable to enter the market, most notably in the joint venture operations (Lynde, 1980). As for the future, two of the most important sources of uncertainty are fish product prices and vessel fuel costs.

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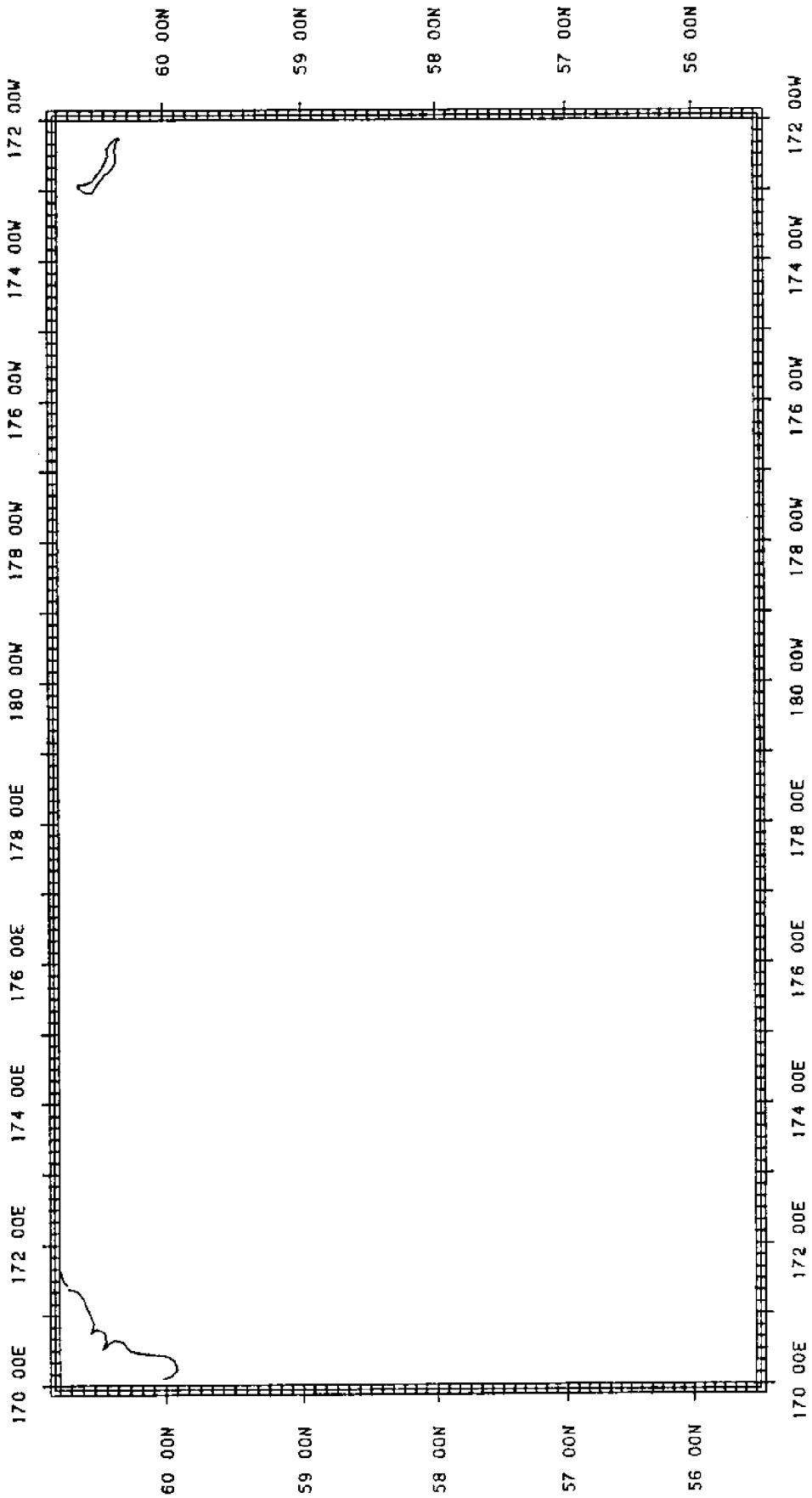
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APPENDIX A. NORTHERN BERING SEA REGION

APPENDIX A

Productive Foreign Fishing Locations in the Northern
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Table A-1

SUMMARY OF OVERALL CATCH COMPOSITION AND CATCH PER UNIT EFFORT OBSERVED IN THE NORTHERN BERING SEA REGION DURING JANUARY-MARCH 1980.^{1/}

	<u>Mean CPUE^{2/}</u> <u>(lbs/day)</u>	<u>Mean CPUE^{3/}</u> <u>(lbs/hr)</u>	<u>Proportion of^{4/}</u> <u>Total Catch</u>	<u>Mean Size</u> <u>(lbs/fish)</u>
Small Trawlers				
Greenland Turbot	15,409	1,074	0.579	2.24
Walleye Pollock	2,033	142	0.076	0.95
Filamented Rattail	2,029	141	0.076	3.24
Pacific Cod	1,606	112	0.060	2.58
Arrowtooth Flounder	1,062	74	0.040	2.42
Unidentified Rattails	959	67	0.036	4.70
Pacific Halibut	826	58	0.031	14.32
Shortraker Rockfish	494	34	0.019	15.36
Large Freezer Trawlers				
Walleye Pollock	102,278	8,921	0.942	1.25
Pacific Cod	1,946	170	0.018	2.40
Squid	1,844	161	0.017	1.37
Arrowtooth Flounder	1,660	145	0.015	1.52
Greenland Turbot	172	15	0.002	1.61
Pacific Halibut	108	9	0.001	3.10
Sablefish	97	8	0.001	2.99
Unidentified Sculpins	79	7	0.001	0.76
Surimi Trawlers				
Walleye Pollock	153,053	12,343	0.943	0.55
Pacific Cod	5,250	423	0.032	1.89
Arrowtooth Flounder	1,046	84	0.006	1.37
Squid	759	61	0.005	1.39
Greenland Turbot	624	50	0.004	1.74
Unidentified Skates	391	32	0.002	7.71
Unidentified Salmon	343	28	0.002	8.04
Unidentified Sculpins	139	11	0.001	1.04

^{1/} Based upon observer data from 77 gear operations by small trawlers, 229 gear operations by large freezer trawlers, and 413 gear operations by surimi trawlers.

^{2/} Average production rate per day of fishing activities on the grounds.

^{3/} Average production rate per hour of actual trawling effort.

^{4/} By vessel class.

Table A-2

SUMMARY OF OVERALL CATCH COMPOSITION AND CATCH PER UNIT EFFORT OBSERVED IN THE NORTHERN BERING SEA REGION DURING APRIL-JUNE 1980.^{1/}

	Mean CPUE ^{2/} (lbs/day)	Mean CPUE ^{3/} (lbs/hr)	Proportion of ^{4/} Total Catch	Mean Size (lbs/fish)
Small Trawlers				
Greenland Turbot	14,520	882	0.727	1.66
Arrowtooth Flounder	1,094	66	0.055	1.82
Pacific Cod	816	50	0.041	2.96
Squid	809	49	0.041	1.14
Walleye Pollock	547	33	0.027	0.90
Unidentified Rattails	446	27	0.022	0.98
Tanner Crab	163	10	0.008	0.38
Sablefish	162	10	0.008	3.47
Large Freezer Trawlers				
Walleye Pollock	93,149	8,399	0.749	0.43
Pacific Cod	22,731	2,050	0.186	3.13
Arrowtooth Flounder	2,199	198	0.018	0.63
Greenland Turbot	1,803	163	0.015	0.63
Unidentified Sculpins	632	57	0.005	1.72
Tanner Crab	474	43	0.004	0.22
Pacific Halibut	353	32	0.003	1.79
Squid	313	28	0.003	1.10
Surimi Trawlers				
Walleye Pollock	123,830	8,745	0.995	0.67
Pacific Cod	306	22	0.002	2.41
Squid	91	6	0.001	0.84
Unidentified Sculpins	33	2	<0.001	1.43
Arrowtooth Flounder	29	2	<0.001	0.76
Unidentified Skates	25	2	<0.001	10.25
Octopus	14	1	<0.001	11.16
Flathead Sole	10	1	<0.001	0.74

^{1/} Based upon observer data from 234 gear operations by small trawlers, 229 gear operations by large freezer trawlers, and 413 gear operations by surimi trawlers.

^{2/} Average production rate per day of fishing activities on the grounds.

^{3/} Average production rate per hour of actual trawling effort.

^{4/} By vessel class.

Table A-3

SUMMARY OF OVERALL CATCH COMPOSITION AND CATCH PER UNIT EFFORT OBSERVED IN THE NORTHERN BERING SEA REGION DURING JULY-SEPTEMBER 1980.^{1/}

	<u>Mean CPUE^{2/}</u> <u>(lbs/day)</u>	<u>Mean CPUE^{3/}</u> <u>(lbs/hr)</u>	<u>Proportion of^{4/}</u> <u>Total Catch</u>	<u>Mean Size</u> <u>(lbs/fish)</u>
Small Trawlers				
Greenland Turbot	12,936	783	0.658	5.65
Walleye Pollock	1,368	83	0.070	0.88
Arrowtooth Flounder	1,078	65	0.055	2.77
Unidentified Rattails	917	55	0.047	5.09
Pacific Cod	770	47	0.039	5.67
Squid	506	31	0.026	1.26
Sablefish	426	26	0.022	3.20
Unidentified Sculpins	297	18	0.015	0.89
Surimi Trawlers				
Walleye Pollock	54,827	4,363	0.996	0.38
Pacific Cod	136	11	0.002	2.28
Unidentified Eelpouts	76	6	0.001	0.44
Tanner Crab	4	<1	<0.001	0.57
Arrowtooth Flounder	2	<1	<0.001	0.96
Red Irish Lord	1	<1	<0.001	1.54

^{1/} Based upon observer data from 215 gear operations by small trawlers, and 3 gear operations by surimi trawlers.

^{2/} Average production rate per day of fishing activities on the grounds.

^{3/} Average production rate per hour of actual trawling effort.

^{4/} By vessel class.

Table A-4

SUMMARY OF OVERALL CATCH COMPOSITION AND CATCH PER UNIT EFFORT OBSERVED IN THE NORTHERN BERING SEA REGION DURING OCTOBER-DECEMBER 1980.^{1/}

	<u>Mean CPUE^{2/}</u> <u>(lbs/day)</u>	<u>Mean CPUE^{3/}</u> <u>(lbs/hr)</u>	<u>Proportion of^{4/}</u> <u>Total Catch</u>	<u>Mean Size</u> <u>(lbs/fish)</u>
Small Trawlers				
Greenland Turbot	12,905	880	0.584	7.20
Pacific Cod	1,783	122	0.081	4.96
Walleye Pollock	1,755	120	0.080	1.45
Unidentified Rattails	1,389	95	0.063	3.16
Arrowtooth Flounder	1,060	72	0.047	3.00
Sablefish	702	48	0.032	3.66
Pacific Halibut	460	31	0.021	43.17
Pectoral Rattail	445	30	0.020	2.45
Large Freezer Trawlers				
Walleye Pollock	84,993	8,517	0.918	1.41
Pacific Cod	3,352	336	0.036	5.54
Pacific Ocean Perch	1,599	160	0.017	1.85
Squid	946	95	0.010	1.54
Arrowtooth Flounder	669	67	0.007	2.39
Unidentified Sculpins	354	35	0.003	6.48
Kamchatka Flounder	225	23	0.002	2.37
Greenland Turbot	87	9	0.001	11.27
Surimi Trawlers				
Walleye Pollock	197,737	16,987	0.980	0.64
Squid	1,189	102	0.006	1.10
Pacific Cod	984	85	0.005	4.92
Smooth Lump sucker	468	40	0.002	5.99
Arrowtooth Flounder	403	35	0.002	1.36
Flathead Sole	239	25	0.001	0.40
Greenland Turbot	115	10	0.001	2.70
Unidentified Salmon	108	9	0.001	8.71

^{1/} Based upon observer data from 70 gear operations by small trawlers, 28 gear operations by large freezer trawlers, and 74 gear operations by surimi trawlers.

^{2/} Average production rate per day of fishing activities on the grounds.

^{3/} Average production rate per hour of actual trawling effort.

^{4/} By vessel class.

TABLE A-5. WALLIYE POLLOCK, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE YR/MO/D	LAT	LCNG	APPRX 7X	LORAN-C 7Y	PULSE 7Z	RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	79 221	5739N	17411W	17281.6	34363.7	50122.5	89	0.500	154307.	308.61	0.23	6293.	166600.	
JAPAN	L	79 219	5707N	17330W	17471.4	34656.5	50172.9	93	0.667	187063.	280.59	0.37	21937.	209000.	
JAPAN	L	77 3 6	5826N	17429W	17227.4	33963.4	49931.6	92	0.500	135418.	270.24	0.26	9782.	145200.	
JAPAN	L	79 218	5700N	17323W	17492.3	34710.5	50177.9	90	0.667	158782.	238.17	0.23	8218.	165000.	
JAPAN	L	78 316	5837N	17700W	16405.5	33656.1	49956.5	89	0.667	158140.	237.21	0.44	17600.	176000.	
JAPAN	L	78 219	5913N	17023W	16053.2	33291.8	49917.7	100	0.500	120540.	206.64	0.38	460.	121000.	
JAPAN	L	79 327	5742N	17325W	17546.8	34428.1	50112.6	89	0.833	165421.	198.51	0.23	3979.	169400.	
JAPAN	L	79 2 4	5845N	17510W	17014.8	33742.6	49944.6	96	0.500	97664.	195.33	0.53	1336.	98000.	
JAPAN	L	77 3 9	5826N	17430W	17222.2	33961.9	49933.9	104	0.750	133532.	178.04	0.38	2308.	136400.	
JAPAN	L	79 224	5730N	17358W	17346.2	34452.4	50140.2	90	0.750	131093.	175.59	0.25	11307.	143000.	
JAPAN	L	79 221	5707N	17340W	17408.9	34633.7	50172.3	89	0.667	107597.	161.40	0.28	2403.	110000.	
JAPAN	L	79 224	5731N	17357W	17356.4	34447.8	50138.3	93	0.833	133519.	160.22	0.38	16081.	149000.	
JAPAN	L	77 3 8	5825N	17428W	17232.8	33973.5	49996.6	109	0.667	104706.	157.06	0.39	894.	105000.	
JAPAN	L	78 2 8	5900N	17818W	16056.6	33393.6	49951.3	128	1.083	168733.	155.75	0.49	7267.	176000.	
JAPAN	L	80 3 7	5729N	17356W	17358.8	34463.3	50142.0	89	1.083	162355.	149.87	1.01	7045.	163400.	
JAPAN	L	79 224	5827N	17527W	16903.6	33866.7	50007.7	110	1.167	173549.	148.76	0.43	2451.	175000.	
JAPAN	L	78 314	5833N	17518W	16960.7	33831.8	49986.9	104	1.000	137841.	137.84	0.52	38159.	176000.	
JAPAN	L	79 219	5822N	17421W	17270.5	34009.9	50004.2	116	0.917	126351.	137.84	0.82	5649.	136000.	
JAPAN	L	79 212	5910N	17823W	16045.9	33313.7	49925.9	101	1.000	135902.	135.90	0.39	2698.	138000.	
JAPAN	L	79 212	5656N	17757W	16144.8	33444.6	49958.3	118	1.250	166438.	133.15	0.58	9562.	176000.	
JAPAN	L	79 219	5742N	17412W	17282.4	34303.5	50116.0	86	1.167	154135.	132.12	0.37	17465.	171600.	
JAPAN	L	77 219	5746N	17416W	17264.2	34303.7	50107.1	112	0.833	108866.	130.66	1.29	3314.	112000.	
JAPAN	L	78 320	6002N	17858W	15998.7	32895.5	49784.9	115	2.000	259337.	129.67	0.38	13663.	273000.	
JAPAN	L	78 214	5910N	17822W	16050.9	33314.7	49925.7	104	0.733	92586.	126.25	0.58	6414.	99000.	
JAPAN	L	78 221	5912N	17821W	16060.6	33301.2	49920.0	109	1.000	124786.	124.79	0.48	7214.	132000.	
JAPAN	L	79 212	5833N	17555W	16755.7	33778.0	49996.7	112	0.917	111674.	121.83	0.44	4926.	118600.	
JAPAN	L	79 221	5742N	17433W	17276.3	34338.4	50116.0	89	1.000	119639.	119.64	0.23	29961.	149000.	
JAPAN	L	79 225	5724N	17551W	17300.2	34506.8	50150.6	93	1.083	126824.	117.07	0.50	22776.	149000.	
JAPAN	L	80 3 3	5825N	17513W	16979.9	33904.0	50010.2	133	1.500	171385.	114.26	0.37	1315.	172700.	
JAPAN	L	76 2 7	5901N	17817W	16054.0	33385.3	49948.8	126	1.250	142643.	114.11	0.54	11357.	134000.	
JAPAN	L	77 310	5840N	17436W	17195.4	33831.9	49947.4	122	1.600	113255.	113.25	0.21	7745.	121000.	
JAPAN	L	78 214	5914N	17820W	16070.5	33287.6	49914.3	104	0.917	102617.	111.95	0.52	7383.	110000.	
USSR	M	79 123	6038N	17852W	16094.3	32619.2	49866.9	128	0.417	46085.	110.61	0.61	115.	46200.	
JAPAN	L	79 226	5830N	17542W	16823.7	33820.5	50002.4	111	0.917	100379.	109.50	0.45	521.	103000.	
JAPAN	L	80 1 8	5827N	17811W	16074.6	33420.9	49958.3	158	1.750	191143.	109.22	0.88	2457.	193600.	
JAPAN	L	78 2 9	5915N	17820W	16072.9	33280.2	49911.5	169	1.417	152074.	107.36	0.64	12906.	165000.	
JAPAN	L	80 1 8	5903N	17820W	16043.7	33367.5	49944.1	159	1.833	195233.	106.49	0.88	2767.	198000.	
JAPAN	L	79 227	5823N	17529W	16087.0	33895.0	50019.8	122	0.833	85045.	102.78	0.49	2152.	88000.	
JAPAN	L	79 321	5824N	17525W	16911.0	33893.4	50016.0	126	0.833	85471.	102.57	0.70	329.	85000.	
JAPAN	L	79 326	5741N	17329W	17545.6	34435.6	50115.4	85	1.583	161377.	101.92	0.34	10223.	171000.	
JAPAN	L	78 226	5913N	17822W	16058.2	33292.8	49917.5	122	1.47	115858.	99.31	0.61	5142.	121000.	
JAPAN	L	78 327	5915N	17757W	16187.6	33304.0	49905.6	161	1.250	120587.	96.47	0.61	413.	121000.	
JAPAN	L	79 327	5742N	17332W	17528.3	34421.9	50113.1	91	1.583	152575.	96.36	0.33	9225.	152400.	
KOREA	M	79 228	5819N	17556W	16727.4	33883.3	50035.6	410	0.917	88000.	96.00	1.36	0.	88000.	
JAPAN	L	79 210	5837N	17518W	16964.7	33798.9	49974.2	116	0.917	85342.	93.10	0.57	2558.	36000.	

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-5 (continued). WALLEYE POLLOCK, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE L9S/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
		YYMMDD			7X 7Y 7Z							
JAPAN	L	78 326	5950N	17844W	16036.6 32996.6 49216.4	139	1.417	131700.	92.96	0.41	300.	132000.
JAPAN	L	79 227	5826N	17520W	16941.7 33885.3 50006.9	97	1.667	149961.	69.96	0.39	4039.	154000.
JAPAN	L	80 1 6	5851N	17747W	16185.1 33492.9 49969.7	136	2.417	215247.	89.07	0.68	11333.	226000.
USSR	M	79 219	6029N	17930W	15917.9 32672.6 49714.0	148	0.750	66000.	88.00	0.62	0.	66000.
KOREA	M	79 3 7	5821N	17708W	16324.7 33758.9 50039.2	383	0.500	44000.	88.00	1.25	0.	44000.
USSR	M	79 329	6050N	17837W	16143.8 32688.9 49685.6	126	0.500	43996.	87.99	0.51	4.	44000.
JAPAN	L	78 2 9	5902N	17820W	16041.2 33374.7 49946.8	164	1.333	117227.	87.92	0.73	3773.	121000.
JAPAN	L	79 223	5731N	17358W	17350.1 34445.7 50136.3	96	0.750	65751.	87.67	0.58	9069.	74300.
JAPAN	L	78 3 6	5905N	17821W	16043.6 33352.0 49939.0	107	1.503	130895.	87.26	0.41	1105.	132000.
JAPAN	L	77 3 7	5831N	17433W	17208.1 33914.6 49978.0	142	1.667	139505.	63.70	0.41	3495.	143000.
JAPAN	L	79 2 8	5933N	17740W	16305.9 33181.3 49845.8	145	1.833	151304.	82.53	0.39	2696.	154000.
JAPAN	L	79 320	5826N	17534W	16862.9 33863.9 50032.2	121	1.000	82521.	82.52	0.57	1079.	33600.
JAPAN	L	79 1 4	5839N	17811W	16027.3 33547.1 50032.2	109	1.000	82394.	82.39	0.69	238.	82632.
JAPAN	L	78 221	5910N	17823W	16045.9 33313.7 49925.9	120	1.167	96037.	82.32	0.46	4963.	99000.
JAPAN	L	79 223	5730N	17357W	17354.5 34454.5 50140.2	94	2.063	169353.	81.29	0.42	6647.	176000.
JAPAN	L	79 222	5723N	17347W	17403.4 34522.0 50152.4	81	1.333	108119.	81.09	0.74	1981.	110000.
KOREA	M	79 3 3	5823N	17624W	16576.5 33810.6 50029.5	437	0.833	66000.	79.20	1.28	0.	65000.
JAPAN	L	79 2 6	5835N	17523W	16936.2 33800.0 49979.0	106	1.167	99797.	78.89	0.53	6963.	99300.
U.S.M	M	79 325	6038N	17855W	16081.9 32618.1 49668.4	109	0.417	32797.	78.71	0.28	203.	33000.
JAPAN	L	77 3 8	5833N	17429W	17231.0 33903.1 49969.3	104	1.333	104741.	78.56	0.24	5259.	110000.
JAPAN	L	80 2 4	5913N	17741W	16263.9 33336.0 49907.3	147	1.250	97570.	78.00	0.31	3630.	101200.
JAPAN	L	77 221	5748N	17416W	17267.2 34289.1 50102.3	119	0.917	70073.	76.44	0.91	9127.	79200.
JAPAN	L	79 324	5826N	17538W	16843.3 33842.2 50007.5	140	1.500	113540.	75.69	0.48	860.	114400.
KOREA	M	80 2 8	5935N	17956E	15613.2 33074.5 49893.4	186	1.500	113520.	75.68	1.47	0.	113520.
USSR	M	78 326	5945N	17842W	16035.0 33036.1 49830.8	98	0.581	44000.	75.43	0.31	0.	44000.
JAPAN	L	78 112	5826N	17534W	16862.9 33863.9 50032.2	113	1.917	142631.	74.42	0.93	369.	143000.
JAPAN	L	78 3 4	5905N	17821W	16043.6 33352.0 49939.0	119	1.833	135496.	73.91	0.50	3104.	135000.
JAPAN	L	80 2 7	5931N	17737W	16317.0 33199.8 49850.9	130	1.917	140918.	73.52	0.24	2062.	143000.
JAPAN	L	78 225	5906N	17821W	16046.1 33344.8 49936.3	120	1.833	134518.	73.37	0.61	6422.	143000.
JAPAN	L	79 2 3	5911N	17746W	16234.6 33345.9 49914.3	122	2.333	179976.	73.28	0.36	5024.	179000.
JAPAN	L	80 320	5834N	17601W	16724.0 33761.5 49995.2	112	2.000	143924.	71.96	0.29	12056.	155980.
JAPAN	L	80 2 7	5823N	17531W	16875.7 33891.9 50020.2	150	1.167	83792.	71.82	0.70	2008.	35300.
JAPAN	L	79 224	5821N	17524W	16912.6 33918.5 50024.4	137	1.833	131527.	71.74	0.75	7073.	133000.
JAPAN	L	79 2 9	5907N	17821W	16048.6 33337.6 49933.6	94	2.583	165050.	71.63	0.31	1950.	176000.
JAPAN	L	77 3 1	5826N	17426W	17244.5 33968.0 49992.5	92	0.667	47253.	71.63	0.29	647.	49400.
JAPAN	L	78 2 13	5850N	17933E	16256.6 33517.5 49969.8	77	1.583	113090.	77.	0.45	7910.	121000.
KOREA	M	80 3 14	5958N	17953E	15682.1 32877.7 49818.9	546	2.167	154000.	71.42	1.65	0.	154000.
JAPAN	L	79 2 1	5911N	17824W	16043.3 33305.3 49923.4	108	2.250	159776.	71.01	0.39	824.	160000.
JAPAN	L	78 3 27	5918N	17808W	16139.5 33270.2 49899.9	159	2.833	196680.	69.42	0.60	1320.	198000.
JAPAN	L	78 2 15	5915N	17816W	16092.8 33284.4 49910.5	98	1.667	115991.	69.41	0.41	5309.	121000.
JAPAN	L	79 2 20	5702N	17320W	17523.0 34706.9 50177.0	87	2.333	161182.	69.06	0.23	14018.	175000.
JAPAN	L	79 2 15	5825N	17519W	16946.1 33694.8 50011.7	108	2.583	172148.	66.87	0.33	3252.	176000.
JAPAN	L	79 2 9	5907N	17820W	16051.6 33338.7 49933.4	91	2.583	172178.	66.65	0.36	14622.	137000.
JAPAN	L	78 2 19	5909N	17822W	16048.5 33322.0 49928.4	106	1.417	94352.	66.60	0.50	4648.	99000.
USSR	M	79 2 8	5921N	17738W	16294.3 33277.4 49882.2	126	0.833	55000.	66.00	0.34	0.	55000.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-5 (continued). WAILEYE POLLOCK, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	LATE YR/MO	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	RATES 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
KOREA	M	79 3 7	5823N	17700W	16374.3	33756.8	50033.7	437	437	0.667	44000.	66.00	1.29	0.	44000.
JAPAN	L	79 227	5825N	17531W	16878.5	33876.3	50014.4	119	119	1.250	82427.	65.94	0.47	1173.	83600.
JAPAN	L	80 129	5915N	17819W	16077.8	33281.3	49911.2	128	128	1.917	128323.	65.91	0.73	21077.	147400.
JAPAN	L	79 221	5905N	17823W	16033.5	33349.8	49939.4	156	156	1.750	115289.	65.80	0.75	7911.	123200.
JAPAN	L	80 122	5844N	17742W	16194.9	33549.6	49967.1	137	137	1.333	87810.	65.88	0.32	11190.	99600.
USSR	M	79 325	6056N	17855W	16074.3	32633.8	49675.1	126	126	0.667	43646.	65.77	0.28	154.	44000.
JAPAN	L	77 210	5914N	17744W	16250.8	33325.2	49905.0	150	150	2.167	142469.	65.75	0.30	531.	143000.
JAPAN	L	77 2 4	5911N	17740W	16264.9	33352.3	49912.6	109	109	2.833	185836.	65.59	0.41	1164.	387000.
JAPAN	L	77 3 5	5746N	17416W	17264.2	34303.7	50107.1	124	124	1.167	75617.	64.81	1.13	1383.	77000.
JAPAN	L	79 221	5706N	17300W	17406.1	34639.3	50173.2	98	98	1.667	107832.	64.70	0.60	2169.	110000.
JAPAN	L	79 315	5828N	17514W	16977.6	33978.3	50001.3	119	119	1.250	108062.	64.64	0.56	2794.	33600.
JAPAN	L	79 319	5915N	17732W	16316.8	33314.6	49892.5	122	122	2.500	160852.	64.34	0.34	122.	166974.
JAPAN	L	80 125	5905N	17821W	16043.6	33352.0	49939.0	120	120	1.083	69535.	64.19	0.74	3065.	72600.
JAPAN	L	79 312	5822N	17514W	16970.7	33926.3	50019.4	137	137	1.500	96252.	63.72	0.80	2748.	59000.
KOREA	M	80 2 8	5933N	17934E	15613.2	33052.3	49886.0	186	186	2.417	154000.	63.72	1.48	0.	154000.
JAPAN	L	78 123	5821N	17522W	16924.0	33921.6	50024.0	158	158	2.667	169544.	63.58	0.91	6458.	176000.
JAPAN	L	79 225	5750N	17356W	17360.7	34456.6	50140.2	97	97	1.667	104281.	62.57	0.24	5719.	110000.
JAPAN	L	78 323	6021N	17640W	16115.3	32758.9	49716.9	201	201	2.333	142846.	61.22	0.65	2354.	145200.
JAPAN	L	80 1 9	5826N	17529W	16891.1	33871.5	50011.1	134	134	1.750	106597.	50.91	0.76	3403.	110000.
JAPAN	L	80 211	5823N	17530W	16881.4	33893.5	50020.0	137	137	1.833	111504.	50.82	0.68	3556.	115000.
JAPAN	L	77 3 7	5825N	17429W	17227.2	33971.9	49999.9	115	115	1.250	75887.	60.71	0.37	1113.	77000.
JAPAN	L	79 314	5821N	17510W	16992.2	33940.6	50021.4	161	161	1.417	68273.	50.62	0.91	2127.	80000.
JAPAN	L	79 222	5716N	17346W	17393.9	34567.8	50162.4	83	83	2.250	136304.	60.58	0.63	2246.	136000.
JAPAN	L	80 210	5824N	17532W	16871.5	33582.6	50017.5	142	142	1.833	109611.	59.79	0.66	5449.	115660.
JAPAN	L	79 225	5829N	17538W	16844.6	33834.3	50004.4	120	120	2.167	129420.	59.73	0.60	2580.	132000.
JAPAN	L	80 126	5929N	17821W	16099.7	33174.9	49871.7	149	149	1.833	109208.	59.57	0.28	2112.	111120.
JAPAN	L	79 213	5940N	17721W	16408.3	33141.3	49815.3	126	126	0.917	54548.	59.51	0.31	452.	55000.
JAPAN	L	79 223	5831N	17541W	16830.6	33314.1	49999.2	103	103	2.000	118973.	59.50	0.34	4207.	123200.
JAPAN	L	79 2 4	5842N	17514W	16990.9	33762.7	49956.3	101	101	1.250	73570.	58.86	0.55	1230.	74500.
JAPAN	L	80 213	5824N	17532W	16871.5	33852.6	50017.5	142	142	0.833	48844.	58.61	1.01	2196.	51040.
JAPAN	L	79 3 4	5821N	17525W	16907.0	33916.9	50024.7	113	113	1.667	96950.	58.17	0.62	2050.	99000.
JAPAN	L	79 218	5858N	17812W	16072.1	33412.6	49955.8	145	145	1.583	91651.	57.88	0.75	16169.	107300.
JAPAN	L	78 318	6016N	17831W	16145.6	32803.2	49729.0	138	138	2.333	134196.	57.51	0.40	4404.	338000.
JAPAN	L	80 3 3	5826N	17512W	16988.6	33897.5	50006.9	128	128	0.750	42972.	57.30	0.84	1028.	44000.
JAPAN	L	80 216	5836N	17617W	16039.0	33723.3	49993.0	119	119	2.500	142391.	57.20	0.33	7709.	130700.
JAPAN	L	74 3 2	5822N	17518W	16948.0	33920.1	50020.3	126	126	1.667	94792.	56.88	0.79	4202.	99000.
JAPAN	L	79 216	5829N	17519W	16950.8	33862.7	49995.6	95	95	1.500	85308.	56.87	0.28	2692.	88000.
JAPAN	L	78 323	6020N	17833W	16122.2	32767.8	49719.2	180	180	1.917	108927.	56.60	0.61	1373.	110000.
JAPAN	L	80 127	5916N	17812W	16115.0	33281.1	49906.7	124	124	2.750	155845.	56.67	0.26	4755.	130600.
JAPAN	L	80 127	5907N	17822W	16043.3	33336.5	49933.8	145	145	2.500	141554.	56.62	0.66	6046.	149600.
KOREA	M	79 3 6	5822N	17655W	16399.9	33771.2	50035.6	410	410	0.583	33000.	56.57	1.25	0.	33000.
JAPAN	L	78 326	5949N	17843W	16039.0	33005.0	49819.1	138	138	1.167	65706.	56.32	0.37	294.	68000.
USSR	M	79 211	6044N	17901W	16067.6	34266.7	49851.7	137	137	1.167	56269.	56.27	0.95	51.	56320.
JAPAN	L	80 214	5825N	17531W	16878.5	33876.3	50014.4	127	127	1.333	74841.	56.13	0.59	5079.	89520.
JAPAN	L	79 2 9	5924N	17732W	16329.4	33259.8	49871.0	120	120	3.533	186336.	55.90	0.58	604.	137000.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-5 (continued). WALLEYE POLLOCK, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE	RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE (LBS/FISH)	BYCATCH (LBS)	TOTAL CATCH (LBS)
U.S.K.	M	79 224	5933N	17836W	16036.5	33131.3	49864.4	153.	0.917	50564.	55.16	0.37	56.	50600.
U.S.K.	M	78 127	5954N	17849W	16022.2	32962.6	49806.1	109.	1.000	55000.	55.00	0.58	0.	55000.
JAPAN	L	79 227	5827N	17537W	16847.5	33851.5	50010.0	130.	2.000	109761.	54.88	0.70	259.	110000.
JAPAN	L	77 216	5836N	17647W	16474.4	33581.4	49598.9	110.	2.000	109735.	54.87	0.21	4565.	114400.
JAPAN	L	79 212	5837N	17759W	16136.8	33435.0	49956.1	109.	1.417	77520.	54.72	0.44	1680.	79200.
JAPAN	L	79 226	6009N	17848W	16057.7	32842.2	49759.1	147.	1.833	100076.	54.59	0.87	134.	100210.
JAPAN	L	79 211	5835N	17614W	16651.9	33735.3	49995.2	159.	2.000	106157.	54.08	0.46	1643.	110000.
JAPAN	L	79 3 9	6028N	17835W	16131.7	32785.2	49724.3	159.	2.833	152718.	53.90	0.80	1172.	153890.
JAPAN	L	79 215	5830N	17518W	16957.5	33256.2	49996.2	102.	2.167	116428.	53.74	0.50	4572.	121000.
JAPAN	L	80 229	5821N	17519W	16941.1	33926.3	50023.4	134.	1.833	98071.	53.49	0.88	3129.	101200.
JAPAN	L	80 129	6016N	17836W	16123.8	32800.4	49731.3	197.	2.563	137508.	53.23	0.73	1492.	136000.
JAPAN	L	79 326	5739N	17328W	17545.4	34452.6	50120.2	83.	2.333	123879.	53.09	0.56	3721.	127600.
JAPAN	L	79 2 9	5825N	17516W	16963.0	33899.4	50010.9	112.	1.833	97102.	52.96	0.62	1098.	99000.
JAPAN	L	78 317	6009N	17855W	16026.8	32843.9	49762.0	179.	2.417	127603.	52.80	0.82	4397.	132000.
KOREA	M	79 228	5821N	17610W	16651.6	33846.7	50032.5	410.	1.250	66000.	52.80	1.44	0.	65000.
U.S.K.	M	78 321	5956N	17839W	16072.0	32954.4	49796.2	98.	0.833	44000.	52.80	0.33	0.	44000.
KOREA	M	79 227	5821N	17535W	16850.1	33901.2	50026.8	410.	1.667	88000.	52.80	1.31	0.	88000.
JAPAN	L	79 210	5916N	17817W	16090.1	33275.9	49907.9	101.	1.667	87988.	52.79	0.43	12.	88000.
JAPAN	L	80 2 2	5914N	17759W	16175.5	33309.5	49909.0	142.	1.250	65987.	52.79	0.59	17613.	36000.
U.S.K.	M	77 212	5930N	17731W	16344.5	33213.2	49851.9	142.	0.833	43857.	52.63	0.33	143.	44000.
JAPAN	L	78 324	6027N	17838W	16134.4	32712.3	49696.1	138.	1.667	87701.	52.62	0.37	299.	88000.
JAPAN	L	77 2 9	5927N	17739W	16300.3	33229.5	49864.2	175.	1.833	95502.	52.09	0.54	3498.	99000.
JAPAN	L	79 213	5857N	17757W	16147.2	33437.3	49955.7	102.	3.083	160561.	52.07	0.59	4439.	160500.
JAPAN	L	79 327	5822N	17518W	16946.0	33920.1	50020.3	133.	1.750	90833.	51.90	0.38	3767.	94600.
JAPAN	L	80 123	5913N	17808W	16128.2	33307.5	49914.2	137.	2.750	142239.	51.72	0.48	761.	143000.
JAPAN	L	77 3 3	5709N	17346W	17373.8	34608.9	50170.2	162.	1.833	93710.	51.11	0.24	3090.	98800.
U.S.K.	M	79 2 9	6040N	17842W	16135.3	32607.0	49654.8	120.	1.083	55000.	50.77	0.30	0.	55000.
JAPAN	L	79 214	5828N	17526W	16910.4	33860.2	50004.4	88.	2.667	135360.	50.76	0.32	1040.	136400.
JAPAN	L	79 223	5821N	17526W	16901.3	33915.3	50024.9	146.	1.500	76027.	50.63	0.91	773.	77000.
JAPAN	L	80 217	5833N	17555W	16755.7	33778.0	49996.7	126.	1.500	75409.	50.27	0.22	2411.	78320.
JAPAN	L	79 217	5835N	17625W	16593.3	33719.7	49997.5	142.	2.083	104403.	50.11	0.74	7797.	112200.
JAPAN	L	79 2 7	5828N	17531W	16882.4	33522.7	50005.7	134.	1.250	62559.	50.05	0.79	5441.	65000.
JAPAN	L	79 210	5716N	17821W	16070.3	33271.8	49908.9	107.	3.083	153330.	49.73	0.40	870.	154000.
JAPAN	L	78 211	5859N	17816W	16054.1	33400.8	49953.9	137.	1.917	95269.	49.71	0.79	3731.	99000.
JAPAN	L	79 3 7	5908N	17822W	16046.0	33329.2	49931.1	109.	1.500	74305.	49.54	0.45	2695.	77000.
JAPAN	L	80 212	5831N	17517W	16964.1	33549.5	49992.9	121.	1.667	82306.	49.36	0.61	10974.	93280.
JAPAN	L	80 314	5857N	17719W	16302.1	33630.1	50001.5	149.	2.417	119253.	49.36	0.92	3917.	123200.
JAPAN	L	80 319	5832N	17547W	16795.6	33737.4	49997.7	205.	1.333	65793.	49.34	0.35	1527.	67320.
JAPAN	L	77 3 3	5707N	17349W	17357.4	34615.6	50171.9	109.	2.000	97461.	48.73	0.41	12539.	119000.
JAPAN	L	79 213	5857N	17759W	16136.8	33435.0	49956.1	109.	2.083	101449.	48.70	0.45	4151.	105800.
JAPAN	L	78 118	5824N	17516W	16951.8	33907.3	50013.9	139.	2.583	125736.	48.67	0.54	6264.	132000.
JAPAN	L	79 329	5926N	17735W	16318.1	33241.2	49863.9	131.	2.000	96299.	48.15	0.37	4901.	101200.
JAPAN	L	80 2 6	5832N	17533W	16755.3	33788.7	49999.1	135.	1.667	80142.	48.00	0.28	1898.	81540.
KOREA	M	79 3 3	5821N	17613W	16600.6	33832.9	50033.7	383.	0.917	44000.	48.00	1.30	0.	44000.
KOREA	M	79 3 8	5813N	17712W	16281.7	33807.6	50057.5	492.	0.917	44000.	48.00	1.43	0.	44000.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-5 (continued). WALLEYE POLLOCK, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	GATE YMMDD	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	79 215	3824N	17514W	16973.1	33910.4	50013.4	128.	128.	2.167	103868.	47.94	0.67	6152.	110000.
JAPAN	L	80 312	5834N	17559W	16735.1	33764.4	49994.7	130.	130.	2.750	131038.	47.65	0.26	1842.	132800.
JAPAN	L	79 220	6001N	17850W	16032.5	32908.5	49785.0	100.	100.	2.250	107087.	47.59	0.46	9513.	116000.
USSR	M	79 210	6023N	17853W	16063.0	32736.6	49716.6	131.	131.	1.167	55440.	47.52	0.76	0.	55440.
USSR	M	79 2 9	6044N	17840W	16153.9	32575.6	49640.1	82.	82.	1.167	55900.	47.14	0.17	0.	55900.
JAPAN	L	78 320	6005N	17900W	15996.2	32871.4	49776.4	128.	128.	3.750	175793.	46.88	0.58	207.	176000.
JAPAN	L	80 126	6020N	17837W	16126.5	32768.3	49718.7	169.	169.	1.750	81837.	46.76	0.29	1963.	83220.
JAPAN	L	78 2 7	5857N	17811W	16074.8	33420.9	49958.3	159.	159.	1.833	85607.	46.69	0.60	2393.	88000.
JAPAN	L	79 3 5	5822N	17517W	16953.7	33921.6	50020.0	139.	139.	1.833	84974.	46.35	0.96	5226.	90200.
KOREA	M	79 226	5812N	17526W	16697.9	33934.2	50049.6	383.	383.	1.667	77000.	46.20	1.34	0.	77000.
JAPAN	L	79 226	6016N	17835W	16131.7	32785.2	49724.3	164.	164.	2.917	133325.	45.71	0.74	875.	134200.
JAPAN	L	79 319	5919N	17731W	16325.4	33300.0	49886.1	120.	120.	2.167	98906.	45.65	0.40	4.	98912.
USSR	M	79 2 3	6015N	17828W	16157.1	32812.8	49730.8	123.	123.	1.000	45318.	45.32	0.29	2.	45320.
JAPAN	L	80 3 1	5820N	17525W	16955.6	33924.7	50027.5	154.	154.	2.900	112872.	45.15	0.75	3728.	116000.
JAPAN	L	79 3 7	5935N	17743W	16294.9	33162.8	49840.6	138.	138.	2.417	108080.	44.97	0.43	0.	108080.
KOREA	M	80 2 6	5635N	17249W	17624.3	34898.0	50170.1	96.	96.	1.083	48616.	44.82	1.61	26364.	77000.
JAPAN	L	79 323	5825N	17515W	16855.9	33670.2	50015.3	141.	141.	2.750	123261.	44.82	0.79	8739.	132000.
JAPAN	L	79 210	5906N	17822W	16041.1	33343.7	49936.5	127.	127.	3.667	164033.	44.74	0.62	967.	165000.
JAPAN	L	78 3 5	5655N	17614W	16054.2	33451.6	49964.0	186.	186.	1.583	70776.	44.70	1.07	6224.	77000.
JAPAN	L	79 224	5827N	17537W	16847.5	33951.5	50110.0	122.	122.	3.000	133459.	44.49	0.67	5141.	136000.
JAPAN	L	79 2 6	5905N	17820W	16848.7	33353.1	49938.8	155.	155.	3.167	140542.	44.38	0.86	2458.	143000.
JAPAN	L	79 2 4	5909N	17745W	16235.5	33362.1	49919.8	107.	107.	2.083	92289.	44.30	0.51	111.	92400.
JAPAN	L	79 2 6	5916N	17736W	16294.8	33116.2	49896.7	130.	130.	3.417	151144.	44.24	0.50	2856.	154000.
JAPAN	L	79 2 9	6016N	17846W	16068.5	32941.6	49755.1	156.	156.	3.667	160975.	43.90	0.83	1385.	162360.
USSR	M	79 330	6026N	17835W	16145.5	32721.6	49697.9	109.	109.	1.250	54825.	43.86	0.32	172.	55000.
USSR	M	79 331	6037N	17846W	16117.6	32629.4	49667.0	115.	115.	1.000	54825.	43.84	0.33	155.	44000.
JAPAN	L	80 311	5637N	17231W	17747.8	34930.9	50168.7	79.	79.	3.333	145926.	43.78	0.66	8074.	154000.
KOREA	M	80 1 6	5712N	17352W	17345.3	34578.2	50166.8	150.	150.	3.417	148681.	43.57	1.49	19319.	167200.
JAPAN	L	77 3 5	5741N	17359W	17484.0	34414.9	50116.2	80.	80.	1.000	43236.	43.24	0.24	764.	44000.
JAPAN	L	79 322	5826N	17532W	16874.2	33866.9	50011.8	123.	123.	2.500	108070.	43.23	0.68	6330.	114400.
JAPAN	L	78 319	6015N	17832W	16146.5	32778.8	49719.6	144.	144.	4.633	208793.	43.20	0.39	207.	209000.
JAPAN	L	78 218	5907N	17821W	16048.6	33337.6	49933.6	91.	91.	2.167	92978.	42.91	0.56	6022.	99000.
JAPAN	L	78 316	5837N	17647W	16478.4	33673.9	49998.2	97.	97.	1.000	42863.	42.86	0.44	3337.	46200.
JAPAN	L	78 111	5824N	17532W	16871.5	33882.6	50017.5	123.	123.	1.500	64134.	42.76	1.02	1686.	66000.
JAPAN	L	77 2 7	5917N	17742W	16266.7	33304.3	49895.5	187.	187.	4.083	173072.	42.39	0.56	2928.	176000.
JAPAN	L	79 311	5823N	17518W	16945.3	33912.2	50017.3	136.	136.	2.167	91457.	42.21	0.84	3143.	94000.
JAPAN	L	77 2 9	5825N	17558W	16301.6	33246.2	49870.0	162.	162.	2.500	105499.	42.20	0.53	101.	105600.
JAPAN	L	79 223	5830N	17542W	16823.7	33820.5	50002.4	114.	114.	2.750	115890.	42.14	0.60	11710.	127600.
KOREA	M	80 317	5937N	17946E	15645.5	32879.8	49823.6	546.	546.	1.833	76978.	41.99	1.52	22.	77000.
JAPAN	L	78 224	5857N	17811W	16074.8	33420.9	49958.3	159.	159.	2.750	115273.	41.92	0.77	5727.	121000.
JAPAN	L	80 2 3	5853N	17554W	16076.3	33375.9	49996.5	126.	126.	2.583	107143.	41.47	0.53	957.	107500.
JAPAN	L	79 329	5712N	17329W	17493.0	34630.1	50168.0	81.	81.	2.583	106901.	41.30	0.21	14099.	121000.
JAPAN	L	78 321	6016N	17836W	16127.3	32784.6	49724.8	173.	173.	2.250	93102.	41.36	0.62	1498.	94500.
JAPAN	L	78 317	6004N	17903W	15984.7	32877.0	49780.7	176.	176.	3.000	122524.	40.84	0.81	2876.	125400.
JAPAN	L	78 321	6026N	17843W	16111.3	32717.9	49702.0	175.	175.	2.750	112248.	40.82	0.61	2132.	114400.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-5 (continued). WALLLEYE POLLOCK, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	80 2 5	5822N	17522W	16925.3	33913.8	50821.1	150	1.417	57862	40.72	0.73	1718	59400
USSR	M	79 2 0	5938N	17713W	16443.8	33164.3	49818.4	128	1.083	44009	40.62	0.37	0	44000
USSR	M	79 2 8	5935N	17751W	16256.4	33155.8	49843.6	153	1.083	43997	40.61	0.33	3	44000
USSR	M	79 2 8	5935N	17731W	16256.4	33155.8	49843.6	137	1.563	63787	40.29	0.53	13	63500
JAPAN	L	79 1 20	5858N	17802W	16092.7	33417.2	49955.1	109	2.667	107389	40.27	0.45	59	107448
JAPAN	L	79 2 5	5842N	17512W	17001.7	33785.4	49955.6	104	2.167	86267	39.82	0.53	1733	86000
JAPAN	L	79 2 9	5901N	17512W	16064.2	33337.6	49988.5	92	2.750	109476	39.81	0.63	524	110000
JAPAN	L	79 3 2	5822N	17513W	16978.4	33927.9	50019.1	146	1.417	56364	39.79	0.80	3036	59400
JAPAN	L	77 1 12	5818N	17417W	17296.9	34050.2	50010.2	104	1.083	43072	39.76	0.62	928	44000
JAPAN	L	79 3 13	6015N	17832W	16135.5	32810.5	49732.7	153	3.667	145462	39.67	0.75	2	145464
JAPAN	S	79 3 8	5859N	17822W	16023.3	33393.9	49955.0	191	1.667	66000	39.60	1.24	0	66000
JAPAN	L	79 3 23	5825N	17535W	16855.9	33870.2	50015.3	151	2.167	85696	39.55	0.80	2304	88000
JAPAN	L	80 2 9	5823N	17531W	16875.7	33991.9	50020.2	140	1.667	85691	39.41	0.75	2739	88400
KOREA	M	79 1 29	5834N	17601W	16724.0	33761.5	49995.2	137	1.750	86661	39.23	0.95	1739	70400
USSR	M	79 2 13	5937N	17732W	16351.1	33156.3	49829.8	142	0.917	35965	39.23	0.31	1435	37400
JAPAN	L	78 3 2	5909N	17823W	16043.4	33320.9	49926.7	108	1.417	55432	39.13	0.55	3968	59400
JAPAN	L	79 2 18	5907N	17323W	17518.6	34672.6	50173.2	85	2.167	84327	38.92	0.49	3673	88000
KOREA	M	80 3 19	5958N	17921W	15886.5	32909.8	49605.1	546	2.833	109974	38.81	1.17	26	110300
JAPAN	L	78 3 15	5826N	17513W	16981.0	33896.0	50007.1	132	3.333	129363	38.81	0.84	9237	135000
JAPAN	L	77 2 27	5824N	17515W	16967.4	33908.9	50013.7	142	1.667	64566	38.74	0.61	1434	66000
JAPAN	L	77 2 21	5746N	17415W	17270.3	34305.7	50107.0	118	1.583	60448	36.18	1.35	9952	79400
JAPAN	M	79 2 8	6044N	17909W	16034.9	32565.5	49655.9	60	1.500	72000	38.13	0.27	0	57200
USSR	M	80 1 23	5910N	17825W	16035.9	33311.5	49926.4	153	2.750	104441	37.90	0.80	14339	116800
JAPAN	L	80 2 13	5923N	17737W	16302.9	33262.8	49675.8	148	3.083	116935	37.92	0.29	2085	119020
JAPAN	L	78 2 17	5902N	17018W	16051.4	33377.0	49946.4	131	2.917	110306	37.82	0.69	10692	121600
USSR	M	79 1 10	5934N	17756W	16230.5	33159.2	49848.5	131	1.083	40386	37.74	0.51	34	40920
USSR	M	79 3 1	5934N	17749W	16264.2	33165.4	49848.5	164	1.167	44000	37.71	0.40	0	44000
USSR	M	78 3 24	5949N	17838W	16062.1	33008.8	49817.4	98	1.167	43984	37.70	0.29	17	44000
JAPAN	L	79 2 11	5913N	17824W	16048.2	33290.7	49917.9	114	1.417	53405	37.70	0.42	1595	55000
USSR	M	78 3 28	5947N	17840W	16048.0	33022.5	49824.1	104	1.167	45961	37.68	0.34	39	44000
JAPAN	L	79 3 12	5821N	17520W	16935.4	33924.8	50023.6	165	0.833	51383	37.66	1.08	1617	53000
JAPAN	L	79 2 14	5852N	17747W	16187.5	33485.6	49967.1	123	1.500	56454	37.54	0.67	546	61800
JAPAN	L	80 2 16	5826N	17534W	16882.9	33263.9	50012.2	126	2.750	103345	37.58	0.57	16785	118140
JAPAN	L	80 3 7	5838N	17719W	16304.4	33622.9	49998.9	164	2.750	103322	37.57	1.10	6678	110000
JAPAN	L	79 1 15	5908N	17813W	16091.4	33359.0	49929.2	96	2.833	106032	37.42	0.80	30	104362
JAPAN	L	78 1 25	5822N	17524W	16914.0	33910.6	50021.0	148	2.000	74786	37.39	0.91	2214	77000
KOREA	M	80 1 7	5714N	17350W	17333.3	34570.9	50164.7	156	4.000	149500	37.37	1.05	26500	176000
USSR	M	79 3 27	6036N	17855W	16078.3	32633.8	49675.1	142	1.000	37338	37.34	0.26	82	37400
JAPAN	L	79 3 10	5910N	17741W	16257.8	33358.9	49915.8	108	1.750	65130	37.22	0.35	870	60000
JAPAN	L	79 3 10	5823N	17532W	16876.0	33890.4	50020.4	122	1.917	70493	36.74	0.57	2101	72000
JAPAN	L	79 3 11	6015N	17934W	16130.7	32809.4	49733.7	165	2.750	100901	36.69	0.72	937	101632
JAPAN	L	79 2 8	5856N	17753W	16155.5	33449.3	49957.6	112	4.583	167635	36.58	0.50	1765	109400
USSR	M	78 3 23	5953N	17950W	16015.5	32969.4	49009.5	120	1.083	39600	36.55	0.27	0	39600
JAPAN	L	79 2 10	5910N	17822W	16065.3	33270.8	49909.2	120	1.833	66953	36.52	0.66	3447	70400
JAPAN	L	79 2 25	5917N	17808W	16137.1	33277.7	49902.8	147	2.750	99379	36.14	0.68	4921	103400

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

1470 available trawl records (exceeding 500 lbs/hr CPUE) were not included.

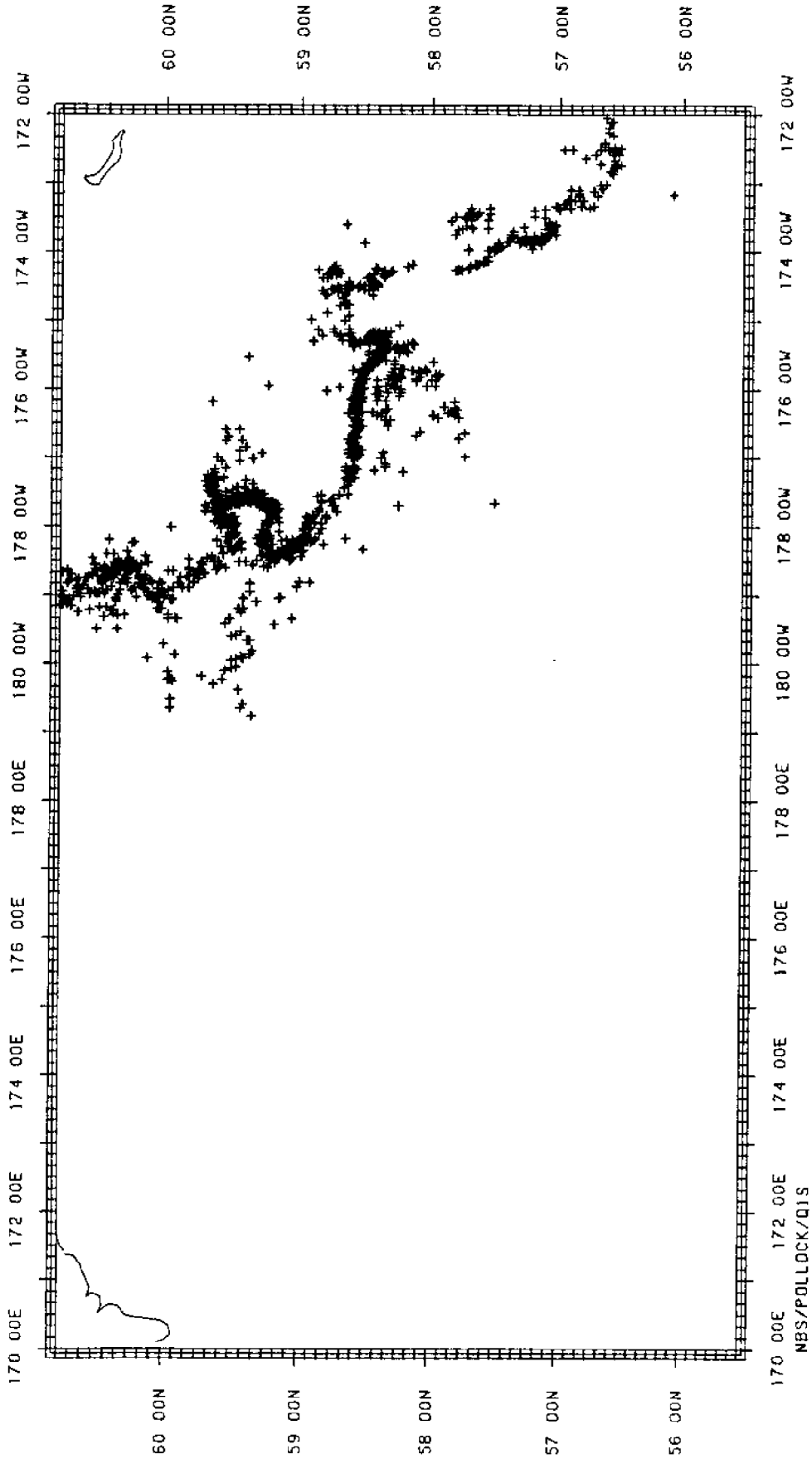


FIGURE A-1. TRAWLING LOCATIONS FOR WALLEYE POLLOCK, JANUARY-MARCH 1977-80

TABLE A-6. WALLEYE POLLOCK, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE YR/MO/D	LAT	LONG	APPROX LORAN-C PULSE RATES 7X	7Y	7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	77 416	5706N	17343W	17386.7	34632.5	50173.0	116	1.417	20120.1	142.02	0.32	7799.	20900.
JAPAN	M	77 523	5646N	17710W	16370.2	35576.2	49976.2	73	0.250	32868.	131.47	0.27	132.	33000.
JAPAN	L	77 426	5630N	17603W	16688.5	33736.0	47991.0	101	1.667	20972.4	125.83	0.53	5876.	215000.
JAPAN	L	77 424	5635N	17640W	16510.9	33698.6	50000.3	126	1.250	151423.	121.14	0.51	2577.	154000.
JAPAN	L	77 414	5716N	17351W	17356.7	34544.5	50159.5	107	1.500	168266.	112.58	0.14	7133.	175000.
JAPAN	L	79 421	5937N	17421W	16303.1	33147.7	49633.9	134	1.083	115971.	177.05	0.50	629.	115000.
JAPAN	L	79 616	5844N	17421W	17276.6	33816.0	49225.0	86	1.563	152775.	192.81	0.30	6025.	171000.
JAPAN	L	79 421	5923N	17738W	16227.9	33261.8	49276.1	163	1.500	143000.	95.33	0.72	0.	143000.
JAPAN	L	77 423	5909N	17822W	16048.5	33322.0	49928.4	90	1.500	141631.	94.57	0.32	1119.	143000.
JAPAN	L	77 428	5706N	17340W	17408.1	34639.3	50173.2	95	1.250	118137.	94.55	0.17	2813.	121000.
JAPAN	L	77 417	5710N	17343W	17365.7	34598.7	50169.1	114	1.417	130442.	72.08	0.25	1708.	132000.
JAPAN	L	79 413	6023N	17834W	16153.2	32706.1	49690.6	118	1.000	59102.	39.10	0.32	438.	89340.
KOREA	M	80 5 2	5837N	17417W	17297.4	33804.7	49949.3	81	1.917	164007.	25.86	0.26	1273.	165880.
JAPAN	L	79 526	5641N	17220W	17835.7	34941.6	50171.0	79	2.250	192330.	85.48	0.32	10070.	202400.
JAPAN	L	79 514	5842N	17723W	16221.9	33588.7	49989.2	86	1.167	98656.	64.73	0.29	144.	99000.
JAPAN	L	77 510	5847N	17720W	16321.2	33541.2	49970.0	73	1.917	153625.	60.15	0.29	375.	154000.
JAPAN	L	79 414	6037N	17859W	16004.9	32856.8	49769.9	126	2.250	171090.	76.04	0.52	510.	171600.
USSR	M	77 6 5	5908N	17748W	16218.1	33366.3	49933.4	82	0.583	43990.	75.26	0.28	300.	44000.
JAPAN	L	79 617	5643N	17423W	17233.2	33115.9	49932.5	93	1.667	124382.	74.63	0.30	3218.	127600.
JAPAN	L	77 418	5709N	17346W	17375.8	34608.9	50170.2	106	1.417	105233.	74.28	0.24	4767.	110000.
JAPAN	L	77 428	5837N	17636W	16427.3	33561.5	49997.8	107	1.200	146357.	74.18	0.43	5643.	154000.
JAPAN	L	79 4 6	5942N	17827W	16098.3	33071.0	49834.8	104	1.167	86149.	73.84	0.41	311.	86460.
JAPAN	L	77 422	5836N	17637W	16415.7	33667.5	50000.0	126	1.833	129991.	70.86	0.50	2099.	132000.
JAPAN	L	79 4 7	5833N	17521W	16944.1	33827.4	49987.8	90	1.917	133933.	69.88	0.29	42067.	170000.
JAPAN	L	79 412	6023N	17838W	16127.5	32744.0	49709.4	149	2.667	185378.	69.27	0.42	3622.	189200.
JAPAN	L	79 4 5	5837N	17439W	17178.0	33854.0	49959.5	130	2.500	173159.	69.27	0.53	631.	173000.
JAPAN	L	79 4 4	5837N	17434W	17183.4	33855.4	49959.1	130	2.250	153995.	68.44	0.53	5.	154000.
JAPAN	L	77 420	5709N	17346W	17375.3	34608.9	50170.2	109	1.583	107957.	68.18	0.15	2043.	110000.
JAPAN	M	77 428	5934N	17731W	16351.1	33121.3	49239.1	104	0.583	107957.	67.89	0.18	0.	30600.
JAPAN	L	79 410	6007N	17642W	16086.4	32887.4	49762.9	173	2.083	140810.	67.59	0.50	2184.	143000.
JAPAN	L	77 5 6	5832N	17747W	16127.5	33485.6	49987.1	90	1.417	94219.	66.51	0.40	4761.	97000.
USSR	M	77 5 2	5942N	17830W	16034.7	33068.5	49835.8	96	0.667	44000.	56.00	0.29	0.	44000.
USSR	M	77 521	5843N	17655W	16446.8	33633.2	49986.9	79	0.333	22000.	66.00	0.27	0.	22000.
USSR	M	77 429	5935N	17635W	16314.2	33166.3	49839.0	120	0.633	55000.	66.00	0.13	0.	55000.
USSR	M	77 5 3	5938N	17828W	16085.6	33100.6	49147.2	148	1.333	68000.	66.00	0.90	0.	68000.
USSR	M	77 523	5833N	17705W	16421.3	33532.4	49753.1	74	0.500	32902.	65.80	0.26	98.	33000.
JAPAN	L	77 424	5836N	17639W	16518.3	33692.5	49997.4	146	2.167	141137.	65.14	0.29	1063.	143000.
JAPAN	L	77 5 7	5859N	17807W	16100.3	33411.2	49752.3	263	1.667	106381.	63.83	0.42	3619.	110000.
JAPAN	L	77 510	5847N	17715W	16340.3	33561.1	49774.7	73	2.083	131286.	63.02	0.28	714.	132000.
JAPAN	L	77 513	5705N	17337W	17422.6	34651.6	50174.1	104	1.583	94600.	59.75	0.29	0.	94600.
JAPAN	M	77 418	5833N	17430W	17223.5	33901.6	49769.6	93	0.607	39600.	59.40	0.23	0.	39600.
JAPAN	L	79 420	6026N	17829W	16298.5	33237.4	49867.3	168	1.417	83261.	58.77	0.53	359.	83600.
JAPAN	L	79 410	6016N	17829W	16154.4	32804.3	49728.0	120	2.583	151341.	56.58	0.42	2659.	154000.
USSR	M	77 5 6	5943N	17812W	16175.2	33059.9	49820.2	109	0.583	32997.	56.57	0.16	3.	33000.
KOREA	M	80 5 1	5824N	17415W	17305.1	34002.1	49995.2	84	2.750	155256.	56.46	0.29	1164.	158420.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-6 (continued). WALLEYE POLLOCK, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	77 5 2	5638N	17714W	16331.5	33629.7	49998.1	89	2.667	149955	56.23	0.42	4045	154000
USSR	M	77 5 16	5915N	17702W	16464.2	33161.5	49888.6	55	0.833	44000	52.80	0.16	0	44000
USSR	M	77 4 29	5936N	17745W	16287.0	33153.1	49838.2	120	0.833	44000	52.80	0.17	0	44000
POLAND	M	77 3 25	5638N	17720W	17947.0	34995.8	50161.4	68	1.333	63963	52.76	0.33	37	44000
JAPAN	L	79 4 7	5943N	17832W	16077.4	33059.3	49833.5	104	1.333	69453	52.09	0.30	4687	74140
JAPAN	L	77 4 18	5707N	17343W	17389.6	34626.9	50172.2	107	3.167	164370	51.91	0.20	11630	176000
JAPAN	L	77 5 1	5852N	17747W	16187.5	33485.6	49967.1	91	1.000	50787	50.79	0.43	2013	52300
JAPAN	L	79 4 12	6026N	17332W	16150.4	32723.0	49696.4	126	1.750	86940	49.68	0.36	1360	80000
USSR	M	77 5 17	5925N	17702W	16479.1	33280.7	49856.6	55	0.667	33000	49.50	0.16	0	33000
USSR	M	77 4 20	5835N	17428W	17237.2	33887.0	49961.8	96	0.667	32979	49.47	0.20	21	33000
JAPAN	L	77 4 25	5836N	17646W	16479.9	33682.6	49998.7	118	2.333	115317	49.42	0.49	5663	121000
USSR	M	77 5 6	5840N	17816W	16146.6	33095.5	49837.1	82	0.917	44000	48.00	0.15	0	44000
JAPAN	L	77 4 21	5826N	17518W	16952.9	33838.3	50008.4	106	2.250	105865	47.05	0.37	4135	110000
JAPAN	L	78 4 23	5841N	17703W	16413.8	33626.5	49987.8	74	1.667	76756	46.06	0.36	234	77000
JAPAN	L	79 4 2	5933N	17817W	16127.5	33148.2	49858.6	131	2.417	109034	45.12	0.60	526	109560
JAPAN	L	77 4 24	5826N	17531W	16882.4	33652.7	50005.7	90	1.833	8112	44.30	0.19	238E	83600
USSR	M	77 4 18	5834N	17433W	17209.5	33888.6	49967.5	96	0.750	33000	44.00	0.23	0	33000
USSR	M	77 5 17	5924N	17656W	16507.4	33294.7	49857.4	55	1.250	55000	44.00	0.16	0	55000
USSR	M	77 5 20	5918N	17700W	16478.9	33339.5	49878.4	55	0.750	33000	44.00	0.18	0	33000
JAPAN	L	78 4 23	6014N	17831W	16142.1	32819.0	49735.5	128	2.500	109671	43.87	0.48	329	110000
JAPAN	L	77 5 1	5836N	17855W	16430.7	33670.3	50000.3	130	3.000	128674	42.89	0.45	9926	138000
JAPAN	L	79 4 8	5831N	17519W	16951.0	33646.6	49993.4	102	3.417	145087	42.46	0.31	2313	147400
JAPAN	L	79 6 17	5638N	17408W	17346.0	33888.0	49940.8	83	1.583	67197	42.44	0.20	3203	70400
JAPAN	L	79 4 12	6021N	17831W	16154.3	32763.4	49712.5	126	2.167	91835	42.39	0.36	565	92400
JAPAN	L	77 4 30	5703N	17337W	17416.7	34682.4	50175.6	107	1.583	66850	42.23	0.46	1340	68200
JAPAN	L	78 5 15	5847N	17736W	16233.9	33535.6	49970.3	82	2.083	82868	42.18	0.30	132	88000
JAPAN	L	77 4 19	5633N	17240W	17672.4	34924.6	50165.8	101	1.917	80831	42.17	0.86	569	81400
JAPAN	L	79 6 27	5646N	17319W	17476.2	34786.7	50179.9	98	2.167	89951	41.52	1.35	2449	92400
JAPAN	L	77 4 19	5710N	17347W	17372.1	34600.9	50169.2	113	2.250	92723	41.21	0.20	6277	99000
JAPAN	L	79 4 14	6023N	17832W	16153.4	32747.0	49706.4	118	2.500	102846	40.82	0.34	474	102520
JAPAN	L	80 4 6	5633N	17244W	17647.0	34915.9	50166.8	137	3.000	126596	40.20	0.62	404	121000
JAPAN	L	78 5 15	5841N	17721W	16300.4	33598.6	49991.5	92	1.917	76912	40.13	0.32	88	77000
JAPAN	L	76 4 28	5837N	17643W	16498.3	33679.5	49995.3	85	2.750	109698	39.89	0.36	302	110000
JAPAN	L	79 4 23	5912N	17751W	16211.4	33333.0	49912.7	131	1.750	68337	39.05	0.69	2063	70400
JAPAN	L	79 4 8	5937N	17820W	16121.5	33115.1	49847.6	112	3.333	129383	38.81	0.34	417	129800
JAPAN	L	77 4 18	5632N	17254W	17705.0	34940.9	50162.9	128	2.083	80787	38.78	0.80	7213	88000
JAPAN	L	79 4 13	6013N	17842W	16091.9	32820.6	49743.8	183	1.583	61327	38.73	0.52	273	61800
JAPAN	L	77 5 11	5910N	17710W	16415.5	33392.6	49906.8	85	2.000	76964	38.48	0.22	36	77000
JAPAN	L	77 4 26	5828N	17748W	16182.2	33484.4	49967.3	100	2.083	79697	38.25	0.44	1703	81400
JAPAN	L	77 5 6	5832N	17715W	16330.5	33613.8	49993.1	85	0.500	18904	37.81	0.47	896	19800
USSR	M	77 5 4	5940N	17720W	16413.1	33142.1	49814.9	93	1.167	44000	37.71	0.18	0	44000
JAPAN	L	79 4 2	5841N	17502W	17055.2	33787.6	49955.1	104	3.083	115843	37.57	0.59	757	116600
KOREA	M	79 5 5	5635N	17230W	17745.0	34939.9	50165.9	98	1.583	51866	37.38	0.68	214	59400
JAPAN	L	80 4 13	5915N	17757W	16137.6	33304.0	49905.6	98	2.250	84040	37.35	0.66	0	84040
JAPAN	L	79 5 25	5639N	17201W	17946.4	34990.6	50163.4	74	3.833	142146	37.08	0.33	854	143000

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-6 (continued). WALLEYE POLLOCK, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE 7X	RATES 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	79 4 6	5539N	17824W	16106.7	33096.4	49842.9	120	2.833	104120.	0.44	36.0	104500.
JAPAN	L	79 4 14	6001N	17856W	16005.6	32904.4	49787.2	101	1.833	67189.	0.49	1011.	68200.
JAPAN	L	77 5 16	5900N	17747W	16205.6	33427.0	49945.5	75	3.000	109791.	0.33	209.	110000.
JAPAN	L	78 4 24	6014N	17830W	16146.5	32819.6	49735.0	125	3.000	109533.	0.43	467.	110000.
JAPAN	L	80 4 12	5919N	17821W	16077.2	33249.7	49900.5	126	3.250	117661.	0.75	39.	117700.
JAPAN	L	79 4 10	6016N	17831W	16145.6	32803.2	49729.0	151	2.417	87311.	0.49	689.	38000.
JAPAN	L	77 5 6	5846N	17736W	16231.5	33542.6	49980.9	101	1.000	35852.	0.44	1548.	37400.
JAPAN	L	79 6 15	5829N	17422W	17268.1	33948.2	49980.5	85	1.750	62474.	0.30	1526.	63400.
JAPAN	L	77 4 15	5712N	17350W	17358.2	34582.6	50166.9	154	3.167	112958.	0.31	682.	121000.
JAPAN	L	77 4 16	5710N	17348W	17365.7	34598.7	50169.1	115	4.083	145053.	0.29	2347.	147400.
JAPAN	L	77 5 9	5939N	17817W	16139.9	33102.3	49840.5	96	3.083	108970.	0.48	1030.	110000.
JAPAN	L	77 4 30	5940N	17733W	16351.1	33131.3	49820.5	109	1.250	64000.	0.17	0.	44000.
USSR	L	79 6 12	5714N	17335W	17459.5	34604.6	50165.4	77	2.750	96745.	0.33	13255.	110000.
JAPAN	L	77 5 4	5828N	17420W	17278.8	33959.9	49983.2	77	2.417	84895.	0.24	7505.	92400.
USSR	M	77 5 30	5652N	17735W	16250.5	33500.3	49964.8	82	1.000	35102.	0.24	98.	35200.
JAPAN	L	77 4 24	5827N	17521W	16937.3	33875.8	50006.2	89	2.167	75455.	0.19	1545.	77000.
JAPAN	L	79 4 14	6008N	17648W	16055.7	32855.9	49762.3	112	2.667	92844.	0.35	3956.	96000.
JAPAN	L	79 4 24	5913N	17746W	16236.7	33330.7	49908.5	141	1.417	49166.	0.66	1432.	50600.
JAPAN	L	78 5 14	5639N	17716W	16322.9	33619.7	49995.9	84	3.167	109266.	0.34	134.	110000.
JAPAN	L	80 4 6	5634N	17247W	17632.5	34905.9	50168.6	126	2.833	97694.	0.68	1306.	99000.
JAPAN	L	77 5 28	5836N	17656W	16534.7	33696.7	49996.9	100	2.833	96570.	0.31	230.	96000.
JAPAN	L	77 5 14	5858N	17747W	16201.3	33441.8	49951.0	77	2.250	76165.	0.35	835.	77000.
JAPAN	L	79 4 24	5928N	17739W	16302.0	33221.7	49861.1	165	1.750	59101.	0.56	2499.	61600.
USSR	M	79 4 4	6041N	17900W	16066.4	32592.6	49661.1	131	2.667	89095.	0.44	5.	33000.
USSR	M	77 5 6	5934N	17751W	16254.8	33163.6	49846.7	55	1.000	33000.	0.17	0.	33000.
JAPAN	L	78 5 6	6006N	17853W	16029.5	32868.2	49770.6	105	3.333	109877.	0.33	123.	110000.
JAPAN	L	78 5 13	5837N	17653W	16443.6	33665.7	49997.3	92	2.000	65799.	0.24	201.	66000.
JAPAN	L	79 4 5	5937N	17819W	16126.3	33116.0	49847.2	120	2.333	76285.	0.40	715.	77000.
JAPAN	L	78 4 30	6006N	17856W	16016.1	32866.3	49771.8	126	3.333	108291.	0.43	1709.	110000.
JAPAN	L	77 4 7	5941N	17826W	16101.4	33079.5	49837.5	104	3.250	105457.	0.33	143.	105600.
USSR	M	79 4 3	6040N	17955W	16085.4	32602.3	49661.8	131	1.667	53953.	0.46	167.	54120.
JAPAN	L	77 5 3	5706N	17345W	17373.9	34627.9	50172.9	128	1.500	48135.	0.93	11265.	59400.
JAPAN	L	78 4 21	5912N	17753W	16201.3	33330.8	49913.2	95	2.750	88000.	0.42	0.	38000.
JAPAN	L	77 4 21	5827N	17533W	16869.9	34957.6	50009.1	107	2.000	63500.	0.45	6900.	70400.
JAPAN	L	78 4 24	6014N	17830W	16146.5	32819.6	49735.0	124	3.417	108259.	0.39	1731.	116000.
JAPAN	L	79 4 12	5934N	17818W	16056.4	33362.6	49941.1	93	1.750	55441.	0.66	1759.	57200.
JAPAN	L	80 4 13	5918N	17814W	16109.6	33264.1	49901.5	137	1.917	60474.	0.06	26.	60500.
USSR	M	77 5 25	5852N	17733W	16261.0	33502.6	49964.4	71	0.833	26227.	0.23	173.	26400.
KUWA	M	79 4 12	5714N	17351W	17356.9	34568.7	50154.6	120	2.250	70758.	1.01	1642.	72600.
JAPAN	L	78 5 9	5955N	17743W	16215.3	33468.6	49958.3	109	3.167	98835.	0.42	167.	99000.
JAPAN	L	77 4 11	6017N	17837W	16121.2	32792.0	49728.5	191	2.833	67993.	0.67	7.	68000.
JAPAN	L	77 4 18	5634N	17246W	17638.9	34908.1	50168.4	109	1.833	56796.	0.65	4894.	91600.
JAPAN	L	79 4 11	6024N	17838W	16129.2	32736.1	49706.1	153	2.583	79500.	0.50	15100.	94600.
JAPAN	L	77 4 13	5708N	17345W	17375.5	34616.8	50171.2	108	2.083	64047.	0.16	1953.	60000.
JAPAN	L	79 6 26	5634N	17248W	17626.2	34903.7	50168.6	109	2.333	71534.	1.31	5466.	77000.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-6 (continued). WALLEYE POLLOCK, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	7X	7Y	7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LB/SFISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	79 617	5843N	17420W	17281.5	33826.4	49928.2	86	2.667	81524	30.57	0.25	6876	88000
USSR	H	77 417	5830N	17437W	17185.5	33917.2	49982.9	104	1.083	33000	30.46	0.25	0	33000
JAPAN	L	77 6 2	5638N	17703W	16391.2	33644.6	49996.3	80	3.167	96443	30.40	0.33	357	96800
USSR	H	77 524	5856N	17731W	16280.2	33475.6	49953.1	74	1.083	32854	30.33	0.24	146	33000
USSR	M	77 523	5850N	17714W	16357.2	33541.3	49966.0	71	1.083	32801	30.28	0.28	199	33000
JAPAN	L	80 416	5931N	17740W	16302.4	33197.1	49852.1	142	3.083	93060	30.18	0.61	0	93060
JAPAN	L	79 412	6029N	17841W	16125.1	32695.0	49691.0	133	3.917	118089	30.15	0.39	2911	121000
USSR	H	77 525	5853N	17728W	16304.2	33439.1	49954.9	71	1.333	39429	29.57	0.26	171	39600
USSR	M	77 419	5830N	17430W	17224.2	33927.6	49980.2	82	1.500	44000	29.33	0.19	0	44000
USSR	M	77 526	5855N	17720W	16335.7	33496.4	49953.4	71	0.750	22000	29.33	0.24	0	22000
USSR	M	77 524	5853N	17715W	16358.0	33517.5	49957.9	74	0.750	21970	29.29	0.26	30	22000
JAPAN	L	78 512	5837N	17643W	16498.3	33679.5	49995.5	96	3.000	87746	29.25	0.32	254	88000
JAPAN	L	78 422	6010N	17843W	16059.7	32840.4	49756.0	150	3.417	99000	28.92	0.95	0	99000
JAPAN	L	79 414	6028N	17837W	16140.4	32704.8	49692.3	126	2.333	67206	20.80	0.29	1876	69000
USSR	M	77 523	5857N	17717W	16355.4	33484.9	49947.1	71	0.917	26400	28.80	0.27	0	26400
USSR	M	77 429	5936N	17758W	16224.6	33141.8	49843.0	131	0.917	26396	28.80	0.21	4	26400
JAPAN	L	77 529	5837N	17643W	16498.3	33579.5	49995.5	98	3.750	106846	28.49	0.30	932	107800
JAPAN	L	79 412	6027N	17834W	16151.5	32714.1	49694.1	128	3.000	85379	28.46	0.36	291	87780
JAPAN	L	79 411	6024N	17835W	16142.1	32737.6	49704.0	137	3.250	91953	28.29	0.34	447	92400
JAPAN	L	78 5 4	6021N	17836W	16132.6	32760.9	49715.0	159	2.333	65540	28.09	0.59	400	66000
JAPAN	L	79 417	5858N	17803W	16118.5	33423.0	49954.2	93	2.167	60779	28.05	0.61	821	61600
USSR	M	77 421	5827N	17426W	17245.0	33959.5	49989.0	87	1.417	39600	27.95	0.22	0	39600
JAPAN	L	77 423	5823N	17526W	16904.0	33997.7	50019.1	127	2.083	58094	27.88	0.58	1306	59400
JAPAN	L	78 5 8	5912N	17825W	16040.8	33297.0	49920.9	120	3.167	87658	27.68	0.50	342	38000
USSR	M	77 423	5838N	17430W	17227.2	33827.8	49951.9	93	1.750	48400	27.66	0.22	0	48400
JAPAN	L	77 515	5900N	17600W	16138.8	33412.0	49948.2	78	4.000	109844	27.46	0.34	156	110000
JAPAN	L	79 4 7	5838N	17525W	16927.3	33780.8	49973.2	91	5.500	150809	27.42	0.28	3191	154000
JAPAN	L	77 515	5900N	17801W	16133.6	33410.8	49948.4	78	4.000	109546	27.39	0.33	454	110000
JAPAN	L	78 5 2	6000N	17858W	15934.4	32910.7	49791.0	109	2.750	75032	27.30	0.43	1918	77000
JAPAN	L	79 615	5833N	17416W	17302.2	33921.8	49963.5	79	4.000	109128	27.28	0.34	7472	116600
JAPAN	L	79 418	5906N	17820W	16051.2	33345.9	49936.1	93	2.500	67288	27.16	0.52	13512	61600
JAPAN	L	79 417	5902N	17811W	16087.1	33384.9	49945.0	83	2.583	70032	27.11	0.42	365	70400
JAPAN	L	78 422	6007N	17855W	16022.7	32859.3	49768.3	131	4.000	108049	27.01	0.64	1951	110000
JAPAN	L	78 5 3	6020N	17831W	16152.6	32771.4	49715.8	137	3.667	98116	26.76	0.65	884	99000
JAPAN	L	80 416	5927N	17746W	16266.0	33119.3	49851.9	150	1.500	39952	26.65	0.85	08	40040
JAPAN	L	79 627	5634N	17249W	17619.3	34901.5	49866.6	153	2.333	61914	26.53	0.61	126	62040
JAPAN	M	77 521	5842N	17712W	16351.1	33603.2	49987.3	74	1.000	26400	26.40	0.29	0	26400
USSR	M	77 5 5	5933N	17800W	16209.3	33163.4	49833.0	93	1.250	33000	26.40	0.23	0	33000
USSR	M	77 421	5830N	17425W	17246.3	33933.6	49978.6	98	1.250	32993	26.35	0.21	7	33000
JAPAN	L	77 525	5837N	17710W	16351.0	33642.4	50000.1	96	1.583	41652	26.31	0.38	148	41800
JAPAN	L	77 5 7	5857N	17752W	16173.1	33443.2	49954.7	81	2.333	61021	26.17	0.42	4979	66000
KOREA	M	79 422	5843N	17313W	17503.5	34813.2	50178.7	82	1.333	34520	25.89	0.75	680	35200
JAPAN	L	79 4 2	5840N	17509W	17021.9	33878.8	49960.8	115	1.750	45216	25.84	0.40	984	46200
KOREA	M	80 428	5831N	17428W	17235.7	33921.9	49976.0	95	6.833	176000	25.76	0.45	0	176000

*** NOTE *** THE ACCURACY OF POSITION AND LOGAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-6 (continued). WALLEYE POLLOCK, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LGRAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
		YMMDD			7X 7Y 7Z	(FMS)		(LBS)	*****	LBS/FISH	(LBS)	(LBS)
JAPAN	L	79 410	5934N	17809W	16168.0 33147.7 49653.0	101.	2.417	62243.	25.70	0.24	17.	62260.
KOREA	M	79 5 6	5641N	17230W	17771.9 34919.0 50172.8	77.	1.833	47133.	25.71	0.39	1267.	48400.
JAPAN	L	77 5 2	5838N	17716W	16321.6 33627.0 49998.4	110.	2.833	72394.	25.55	0.40	4606.	77000.
JAPAN	L	80 4 7	5840N	17723W	16287.3 33603.1 49998.4	153.	3.500	89133.	25.47	0.66	187.	89320.
JAPAN	L	79 4 4	5847N	17842W	16035.3 33020.9 49824.8	131.	3.333	84839.	25.45	0.75	301.	85140.
JAPAN	L	79 413	6023N	17835W	16150.6 32697.7 49687.9	142.	4.000	101749.	25.44	0.38	1651.	103400.
JAPAN	L	77 420	5705N	17321W	17526.0 34688.4 50174.9	86.	2.000	50712.	25.36	0.22	15288.	56000.
JAPAN	L	77 417	5705N	17340W	17403.2 34644.8 50174.0	116.	2.583	65303.	25.28	0.28	697.	66000.
JAPAN	L	79 412	6017N	17835W	16123.9 32793.1 49727.6	176.	4.083	103112.	25.25	0.65	2468.	105000.
JAPAN	L	77 530	5836N	17620W	16622.6 33719.1 49993.7	106.	3.667	92126.	25.13	0.31	274.	92400.
JAPAN	L	80 414	5914N	17752W	16210.6 33316.8 49907.2	142.	2.000	50125.	25.06	0.20	35.	50160.
USSR	M	77 519	5924N	17702W	16477.7 33288.9 49859.8	55.	1.333	33000.	24.75	0.21	0.	33000.
USSR	M	77 6 4	5909N	17747W	16225.3 33359.9 49920.3	82.	1.333	32966.	24.72	0.28	34.	33000.
USSR	M	77 529	5903N	17730W	16299.9 33424.2 49931.1	77.	1.333	32913.	24.68	0.24	67.	33000.
JAPAN	L	79 422	5935N	17743W	16294.9 33162.8 49840.6	145.	1.500	36835.	24.56	0.54	565.	37400.
JAPAN	L	78 5 9	5908N	17822W	16046.0 33329.2 49931.1	98.	2.167	53059.	24.43	0.52	1941.	55000.
KOREA	M	79 4 1	5638N	17212W	17872.6 34969.6 50163.2	78.	2.167	52822.	24.38	0.60	2178.	55000.
USSR	M	77 422	5829N	17433W	17207.1 33931.8 49984.6	87.	1.063	26400.	24.37	0.21	0.	26400.
JAPAN	L	78 427	5836N	17628W	16589.6 33710.7 49994.9	93.	3.167	76919.	24.29	0.43	61.	77000.
KOREA	M	79 4 9	5707N	17324W	17512.2 34670.3 50171.2	87.	1.667	40464.	24.28	0.98	3536.	44000.
JAPAN	M	78 5 5	6021N	17832W	16150.0 32762.9 49713.0	125.	3.167	76770.	24.24	0.31	230.	77000.
USSR	M	79 4 4	6018N	17630W	16153.5 32787.8 49721.9	104.	1.083	26251.	24.23	0.37	149.	26400.
USSR	M	79 4 1	6034N	17851W	16091.5 32651.2 49679.6	150.	2.000	48400.	24.20	0.44	0.	48400.
USSR	M	77 524	5848N	17725W	16294.5 33542.2 49971.7	71.	1.083	26165.	24.15	0.26	235.	26400.
JAPAN	L	79 613	5837N	17418W	17292.0 33883.3 49949.8	86.	3.750	90404.	24.11	0.24	1996.	92400.
JAPAN	L	77 5 4	5827N	17427W	17239.4 33957.9 49989.4	85.	1.917	46100.	24.05	0.21	2300.	49400.
JAPAN	L	79 628	5653N	17239W	17672.7 34926.6 50165.6	90.	3.250	78060.	24.02	0.82	16540.	94000.
USSR	M	77 522	5846N	17654W	16451.9 33597.0 49972.9	74.	0.917	22000.	24.00	0.24	0.	22000.
USSR	M	77 522	5850N	17658W	16442.1 33561.5 49962.5	74.	0.917	21985.	23.98	0.27	15.	22000.
KOREA	M	79 5 2	5635N	17201W	17926.6 35002.3 50150.5	85.	2.500	59716.	23.89	0.57	1884.	61600.
JAPAN	L	79 416	5843N	17727W	16272.7 33576.2 49987.3	88.	1.667	39459.	23.68	0.63	2341.	41800.
JAPAN	L	79 4 4	5846N	17492W	17108.8 33809.9 49954.5	124.	2.750	64698.	23.33	0.62	1302.	68000.
JAPAN	L	79 419	5906N	17817W	16066.4 33349.2 49935.5	81.	3.000	70208.	23.60	0.41	4592.	74800.
JAPAN	L	77 428	5837N	17645W	16487.4 33676.7 49995.8	93.	1.917	44765.	23.36	0.36	1435.	46200.
JAPAN	L	77 514	5853N	17729W	16284.2 33500.3 49960.9	73.	3.000	69922.	23.31	0.29	472.	70400.
USSR	M	77 423	5634N	17420W	17280.6 33907.2 49961.8	93.	1.417	32999.	23.29	0.21	1.	33000.
JAPAN	L	78 426	5746N	17413W	17292.5 34309.6 50106.9	120.	1.833	42602.	23.24	0.77	1398.	44000.
POLAND	M	79 6 8	5844N	17216W	17874.2 34939.9 50173.4	67.	2.000	46184.	23.09	0.39	16.	46200.
JAPAN	L	77 6 7	5913N	17818W	16072.1 33297.0 49916.6	85.	3.250	74789.	23.01	0.35	11.	74800.
JAPAN	L	79 4 4	5746N	17829W	16085.1 33084.6 49841.5	115.	3.833	98173.	23.00	0.42	267.	83440.
JAPAN	L	78 422	5928N	17853W	16012.7 32929.3 49793.3	143.	3.333	76612.	22.98	0.39	368.	77000.
JAPAN	L	79 4 3	5839N	17454W	17097.4 33815.7 49958.8	154.	3.750	85244.	22.73	0.68	2756.	88000.
JAPAN	L	77 5 5	5837N	17606W	16701.1 33731.1 49987.6	91.	1.333	30173.	22.63	0.40	627.	30800.
USSR	M	77 5 9	5935N	17812W	16155.9 33137.4 49250.9	87.	0.563	13200.	22.63	0.15	0.	13200.
JAPAN	L	79 421	5933N	17741W	16301.1 33180.4 49846.1	148.	3.000	67885.	22.63	0.60	315.	68200.

*** NOTE *** THE ACCURACY OF POSITION AND LGRAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-6 (continued). WALLEYE POLLOCK, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
*****	*****	YYMMDD	*****	*****	7X	7Y	(FMS)	TRAWLED	(LBS)	PER HOUR	LB S/FISH	(LBS)	(LBS)
JAPAN	L	79 614	5800N	17355W	17406.6	34236.7	50067.0	80.	4.250	96002.	0.29	7398.	103400.
JAPAN	L	79 4 5	5934N	17800W	16211.3	33155.6	49849.9	120.	2.500	56090.	0.28	14.	56100.
JAPAN	L	79 4 2	5932N	17759W	16212.2	33172.1	49855.7	137.	2.167	48386.	0.36	10.	48400.
JAPAN	L	77 5 5	5837N	17600W	16734.0	33739.5	49996.2	84.	2.750	61132.	0.37	468.	61600.
JAPAN	L	79 4 2	5529N	17813W	16138.4	33182.3	49869.3	137.	2.667	59101.	0.35	299.	59400.
KOREA	M	79 517	5640N	17216W	17856.6	34954.1	50168.9	78.	2.750	60809.	0.55	791.	61600.
JAPAN	L	77 529	5837N	17707W	16367.3	33646.5	49995.6	93.	4.167	91974.	0.35	426.	92400.
JAPAN	L	79 417	5901N	17812W	16075.6	33391.0	49947.9	86.	2.083	45906.	0.50	294.	46200.
USSR	M	77 630	5945N	17740W	16325.6	33085.3	49607.2	87.	1.500	33000.	0.24	0.	33000.
JAPAN	L	78 5 6	607N	17851W	16040.4	32861.8	49766.7	107.	4.000	87957.	0.29	43.	88000.
JAPAN	L	78 511	5837N	17614W	16657.2	33719.8	49989.5	98.	2.500	54947.	0.37	53.	55000.
USSR	M	77 6 2	5911N	17740W	16264.9	33352.3	49912.6	93.	1.000	21898.	0.28	102.	22000.
JAPAN	L	79 410	5933N	17807W	16175.6	33157.2	49855.3	107.	2.833	62042.	0.24	218.	62260.
JAPAN	L	79 410	6023N	17840W	16118.9	32743.1	49710.3	174.	4.000	87455.	0.56	2745.	90200.
JAPAN	L	79 4 7	5836N	17523W	16936.2	33800.0	49979.0	112.	2.917	63574.	0.51	226.	63900.
JAPAN	L	79 628	5635N	17249W	17624.3	34898.0	50170.1	100.	1.917	41737.	1.54	2253.	44000.
USSR	M	77 530	5854N	17744W	16207.8	33474.7	49961.2	77.	1.500	32447.	0.24	553.	33000.
POLAND	M	60 4 7	5641N	17218W	17848.4	34946.1	50170.2	73.	0.917	19741.	0.46	59.	19800.
JAPAN	L	79 4 9	5938N	17828W	16085.6	33100.6	49847.2	188.	2.783	59256.	0.63	144.	59400.
JAPAN	L	77 510	5941N	17817W	16143.9	33086.9	49234.4	89.	5.167	106523.	0.32	1477.	110000.
JAPAN	L	76 5 7	5928N	17813W	16136.3	33189.9	49872.2	142.	2.083	43758.	0.47	242.	44000.
JAPAN	L	78 429	5912N	17824W	16045.8	33298.0	49920.7	112.	2.083	43569.	0.62	431.	44000.
USSR	M	77 424	5842N	17441W	17169.2	33807.5	49942.5	107.	1.583	33000.	0.22	0.	33000.
JAPAN	L	78 514	5844N	17730W	16258.9	33565.0	49985.1	84.	1.583	32891.	0.34	109.	33000.
JAPAN	L	79 415	6013N	17830W	16144.8	32827.5	49738.3	107.	2.917	60500.	0.28	1100.	61600.
JAPAN	L	77 5 2	5835N	17630W	16565.8	33712.6	49998.8	148.	2.167	44885.	0.62	10115.	55000.
JAPAN	L	80 4 9	5846N	17733W	16247.5	33546.7	49980.4	161.	2.563	52970.	0.84	50.	53000.
JAPAN	L	79 4 8	5936N	17818W	16125.0	33124.5	49849.9	107.	1.833	37356.	0.32	44.	37400.
JAPAN	L	78 5 4	6010N	17840W	16095.1	32845.2	49752.5	151.	2.667	54254.	0.54	746.	55000.
JAPAN	L	77 5 3	5836N	17626W	16585.6	33710.7	49994.9	101.	2.917	59338.	0.46	2562.	61500.
JAPAN	L	77 6 8	5906N	17804W	16132.3	33363.5	49932.7	77.	2.583	52545.	0.28	255.	52500.
KOREA	M	79 518	5647N	17316W	17499.4	34789.2	50180.0	81.	3.000	60788.	0.73	812.	61000.
JAPAN	L	79 4 9	5938N	17820W	16123.6	33107.4	49844.5	104.	2.167	43892.	0.32	109.	44000.
JAPAN	L	77 512	5706N	17326W	17496.5	34671.3	50173.9	83.	1.000	19976.	0.74	4224.	24200.
JAPAN	L	78 5 1	6007N	17858W	16009.3	32857.4	49769.5	125.	4.417	87587.	0.64	413.	88000.
USSR	M	77 430	5941N	17722W	16405.0	33132.3	49812.4	93.	1.667	33000.	0.18	0.	33000.
KOREA	M	79 430	5716N	17349W	17374.7	34561.2	50162.3	87.	2.667	52714.	0.54	2286.	55000.
JAPAN	L	79 4 4	5816N	17413W	17312.6	34073.5	50021.5	94.	1.750	34441.	0.47	9559.	44000.
KOREA	M	79 5 3	5635N	17207W	17889.4	34989.6	50156.0	87.	3.583	69995.	0.61	405.	70400.
JAPAN	L	80 630	5712N	17306W	17641.2	34683.2	50169.2	72.	2.650	51688.	0.33	672.	52360.
JAPAN	L	79 425	6009N	17844W	16075.4	32850.6	49757.4	127.	2.917	56847.	0.50	353.	57200.
JAPAN	L	79 615	5806N	17402W	17369.9	34175.3	50050.3	80.	2.250	43712.	0.25	2488.	46200.
JAPAN	L	77 515	5701N	17322W	17507.8	34707.5	50177.5	85.	1.333	25702.	0.20	698.	26400.
JAPAN	L	79 418	5900N	17805W	16113.0	33406.2	49949.2	81.	2.083	40130.	0.56	3670.	44000.
JAPAN	L	78 511	5836N	17603W	16716.0	33743.1	49989.8	95.	4.000	76891.	0.43	109.	77000.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

518 available trawl records (exceeding 500 lbs/hr CPUE) were not included.

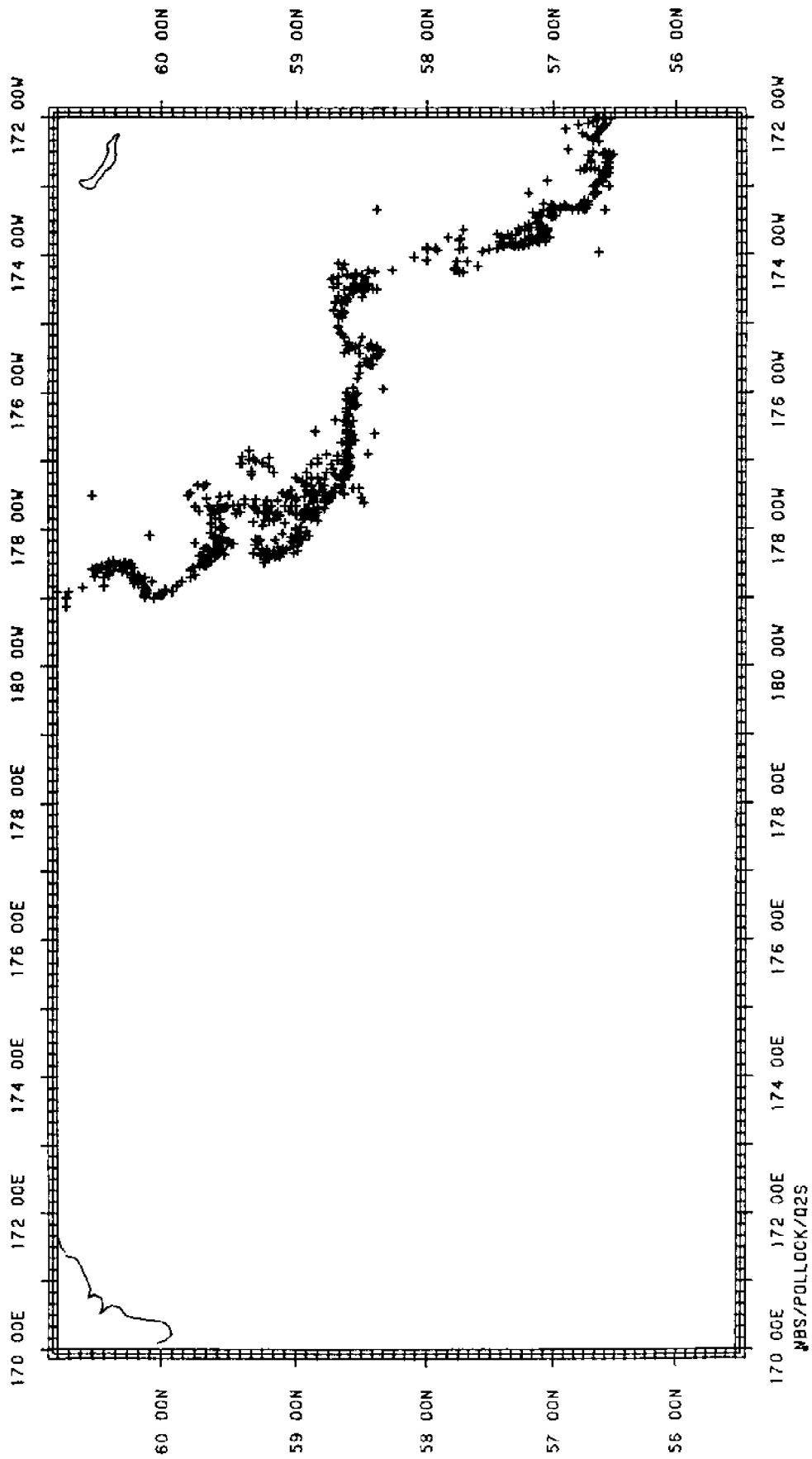


FIGURE A-2. TRAWLING LOCATIONS FOR WALLEYE POLLOCK, APRIL-JUNE 1977-80

TABLE A-7. WALLEYE POLLOCK, JULY-SEPTEMBER 1977-80

NATION	VESSEL CLASS	DATE	YINMOD	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
						7X	7Y	7Z		(LBS)	PER HOUR		(LBS)	(LBS)
JAPAN	L	79 713	5637N	17243W	*****	17671.4	34904.2	50171.0	74	*****	177.60	0.42	3203	135400
JAPAN	L	79 714	5636N	17252W	*****	17736.9	34932.1	50167.7	82	*****	114.83	1.13	5108	187000
JAPAN	L	78 721	5633N	17240W	*****	17672.4	34924.6	50165.8	136	*****	91.90	1.52	2781	110000
JAPAN	L	79 720	5708N	17325W	*****	17503.4	34662.4	50172.2	98	*****	76.57	0.75	10770	132000
JAPAN	L	78 8 4	5645N	17312W	*****	17517.7	34807.0	50179.3	78	*****	76.02	1.10	8295	154000
JAPAN	L	78 728	5643N	17316W	*****	17484.1	34806.4	50178.0	86	*****	72.63	1.00	4309	198000
JAPAN	L	79 718	5635N	17246W	*****	17643.4	34934.7	50169.5	83	*****	72.52	0.63	6798	176000
JAPAN	L	79 713	5641N	17307W	*****	17534.3	34835.0	50177.3	85	*****	71.82	0.58	2274	110000
JAPAN	L	76 725	5644N	17319W	*****	17468.6	34795.4	50179.3	104	*****	69.05	1.11	5412	134000
JAPAN	L	78 723	5648N	17321W	*****	17470.7	34773.3	50180.2	97	*****	67.75	1.57	18504	154000
JAPAN	L	79 715	5636N	17231W	*****	17743.3	34934.3	50167.4	83	*****	59.30	0.66	4048	127000
JAPAN	L	78 7 9	5648N	17235W	*****	17761.9	34877.5	50187.6	72	*****	58.48	0.37	2786	110000
JAPAN	L	78 6 6	5648N	17321W	*****	17470.7	34773.3	50180.2	99	*****	57.70	1.00	4282	187000
JAPAN	L	79 7 2	5636N	17231W	*****	17743.3	34934.3	50167.4	85	*****	57.64	0.95	4319	110000
JAPAN	L	79 715	5636N	17246W	*****	17647.9	34901.1	50170.6	77	*****	56.82	0.62	7084	197000
JAPAN	L	78 6 7	5635N	17251W	*****	17611.5	34891.6	50170.5	96	*****	55.58	0.93	4400	92400
JAPAN	L	78 722	5706N	17349W	*****	17406.1	34639.3	50173.2	109	*****	53.17	1.33	12051	176000
JAPAN	L	78 916	5812N	17729W	*****	16332.6	33336.5	49906.6	93	*****	50.22	0.54	118	88000
JAPAN	L	79 715	5634N	17246W	*****	17638.9	34908.1	50188.4	90	*****	47.72	0.88	1706	121000
JAPAN	L	78 726	5727N	17344W	*****	17430.5	34502.5	50145.7	74	*****	47.52	0.32	9	118000
JAPAN	L	78 819	5728N	17340W	*****	17457.6	34504.5	50183.9	75	*****	45.91	0.29	0	68000
JAPAN	L	78 825	6824N	17823W	*****	16193.8	32743.3	49698.4	102	*****	45.36	0.57	52	121000
JAPAN	L	78 8 3	5708N	17349W	*****	17353.8	34607.6	50171.0	137	*****	45.11	1.30	7121	165000
JAPAN	L	79 714	5634N	17231W	*****	17698.0	34927.9	50186.4	82	*****	44.44	0.79	1603	209000
JAPAN	L	78 8 6	5644N	17316W	*****	17488.0	34802.2	50179.2	83	*****	43.47	0.91	660	25000
JAPAN	L	78 7 8	5726N	17249W	*****	17776.9	34532.0	50147.5	67	*****	43.12	0.32	4549	83600
JAPAN	L	78 8 4	5641N	17312W	*****	17502.0	34823.7	50177.7	89	*****	42.55	1.15	18528	132000
JAPAN	L	79 7 3	5632N	17242W	*****	17655.1	34923.6	50165.1	128	*****	42.25	1.45	3058	94600
JAPAN	L	78 726	5727N	17344W	*****	17430.5	34502.5	50145.7	70	*****	39.47	0.36	0	131560
JAPAN	L	78 728	5707N	17347W	*****	17363.8	34617.9	50172.0	150	*****	38.89	1.01	7108	94600
JAPAN	L	77 9 2	5832N	17442W	*****	17135.2	33709.7	49909.4	75	*****	38.40	0.29	1174	110000
JAPAN	L	78 3 8	5636N	17313W	*****	17536.4	34734.0	50179.8	80	*****	38.08	0.60	1421	147400
JAPAN	L	78 819	5723N	17338W	*****	17460.5	34541.8	50192.6	72	*****	37.61	0.30	21	125400
JAPAN	L	78 827	6003N	17857W	*****	16001.1	32903.8	49787.6	102	*****	37.20	0.83	404	74600
JAPAN	L	79 719	5707N	17323W	*****	17518.6	34672.6	50173.2	81	*****	37.04	0.54	13922	88000
JAPAN	L	78 810	5936N	17834W	*****	16052.6	33110.6	49855.0	94	*****	36.78	0.74	2647	94600
JAPAN	L	78 724	5649N	17321W	*****	17474.3	34768.7	50180.3	100	*****	36.51	0.98	4005	83600
JAPAN	L	78 729	5644N	17310W	*****	17475.1	34797.7	50179.3	90	*****	36.39	0.97	18970	134200
JAPAN	L	79 714	5640N	17248W	*****	17656.3	34881.9	50174.6	72	*****	36.13	0.50	3573	121000
JAPAN	L	79 716	5634N	17248W	*****	17626.2	34903.7	50166.8	92	*****	35.83	0.68	5918	114400
JAPAN	L	78 8 5	5650N	17325W	*****	17452.0	34755.0	50180.4	104	*****	35.66	1.15	3892	99000
JAPAN	L	79 720	5709N	17327W	*****	17498.2	34652.1	50174.2	78	*****	35.28	0.67	4225	83600
JAPAN	L	78 8 7	5635N	17252W	*****	17605.1	34891.4	50170.6	106	*****	35.11	0.93	3141	88000
JAPAN	L	78 913	5936N	17820W	*****	16123.6	33107.4	49844.5	110	*****	35.03	0.61	432	80000
JAPAN	L	78 726	5713N	17356W	*****	17360.8	34576.8	50165.8	148	*****	34.84	1.72	2562	110000

*** NCIE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-7 (continued). WALLEYE POLLOCK, JULY-SEPTEMBER 1977-80

VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	78 818	5635H	17250W	7X 17617.9 7Y 34895.8 7Z 50170.3	80	1.417	48484	34.22	1.12	2116	50000
JAPAN	78 815	5642N	17308W	17531.0 34828.8 50177.9	79	3.000	102620	34.21	1.13	2920	105000
JAPAN	78 710	5752N	17223W	17947.1 34476.8 50065.4	61	4.417	151074	34.21	0.68	13928	165000
JAPAN	77 827	5837N	17520W	16953.7 33796.1 49974.6	178	2.167	73792	34.06	1.51	14268	88000
JAPAN	78 713	5802N	17207W	18028.0 34408.6 50013.4	59	2.750	87532	31.83	0.60	18008	105000
JAPAN	78 928	5933N	17804W	16190.1 33159.8 49854.3	114	3.833	120856	31.53	0.79	11144	132000
JAPAN	78 731	5720N	17352W	17365.0 34530.0 50156.7	164	5.167	157749	30.53	1.65	7731	165000
JAPAN	78 920	5825N	17727W	16355.7 33256.7 49866.1	101	4.333	132000	30.46	0.47	0	132000
JAPAN	78 914	5921N	17721W	16378.7 33294.3 49876.5	92	3.250	97695	30.06	0.43	1365	99000
JAPAN	77 911	5850N	17442W	17166.3 33735.0 49913.7	77	2.833	83953	29.63	0.30	4087	88000
JAPAN	78 819	5723N	17345W	17416.1 34526.4 50152.4	79	4.417	130292	29.50	0.37	1708	132000
JAPAN	77 931	5840N	17530W	16902.0 33757.4 49968.5	80	2.917	85919	29.46	1.40	2081	88000
JAPAN	79 714	5633N	17242W	17655.7 34920.3 50186.3	90	5.333	156494	29.34	0.95	8506	165000
JAPAN	78 619	5706N	17336W	17431.9 34648.4 50173.4	145	3.500	102391	29.25	1.75	1009	103000
JAPAN	79 713	5636N	17257W	17705.2 34921.1 50168.8	77	4.000	115709	28.93	0.66	591	116500
JAPAN	77 930	5957N	17855W	16001.4 32935.5 49799.1	112	3.500	100929	28.84	0.69	9071	110000
JAPAN	78 821	5826N	17410W	17333.6 33992.4 49986.1	79	4.583	131580	28.71	0.58	420	137000
JAPAN	77 912	5847N	17511W	17010.8 33724.2 49938.2	75	3.083	87812	28.48	0.39	168	88000
JAPAN	78 918	5910N	17756W	16181.9 33342.6 49919.7	98	3.250	90519	27.85	1.15	8431	99000
JAPAN	78 722	5705N	17335W	17435.5 34656.2 50174.2	144	4.167	112653	27.04	1.09	3947	116500
JAPAN	77 917	5910N	17521W	16971.4 33510.9 49860.5	77	3.667	98797	26.94	0.36	203	99000
JAPAN	78 718	5723N	17250W	17766.0 34650.4 50153.4	66	1.750	48401	26.60	0.51	1929	37000
JAPAN	78 822	5836N	17405W	17362.2 33910.3 49946.8	79	1.500	39596	26.31	0.42	4	39500
JAPAN	77 912	5850N	17519W	16970.2 33688.2 49931.2	73	4.500	118414	26.31	0.33	2388	121000
JAPAN	77 821	5827N	17416W	17300.6 33974.6 49985.1	82	4.000	98982	24.75	0.51	18	99000
JAPAN	78 929	5939N	17823W	16211.4 33097.3 49842.5	109	3.750	91862	24.50	0.80	9338	101200
JAPAN	77 919	5837N	17605W	16706.6 33732.5 49987.4	85	3.750	91355	24.36	0.47	12645	110000
JAPAN	78 821	5825N	17413W	17316.6 33996.5 49990.9	75	2.500	80577	24.23	0.65	1023	81500
JAPAN	78 917	5910N	17714W	16395.1 33388.2 49908.1	95	3.750	85598	23.97	0.42	9102	99000
JAPAN	78 818	5639N	17252W	17624.5 34876.7 50174.3	75	3.667	87338	23.82	0.52	662	88000
JAPAN	77 917	5906N	17518W	16984.9 33549.8 49873.7	75	3.667	86272	23.53	0.37	1728	88000
JAPAN	77 823	5839N	17452W	17108.2 33818.5 49957.9	156	4.333	103347	23.39	1.46	6553	110000
JAPAN	77 917	5914N	17517W	16993.2 33479.2 49943.2	75	4.667	108862	23.33	0.36	1138	110000
JAPAN	77 920	6006N	17859W	16002.0 32864.4 49773.0	119	4.500	103795	23.07	0.62	6205	110000
JAPAN	77 910	5837N	17630W	16565.6 33697.5 49992.9	85	3.167	72376	22.86	0.36	4924	77000
JAPAN	77 910	5837N	17607W	16695.6 33729.7 49987.9	82	4.333	98395	22.69	0.38	695	95000
JAPAN	78 727	5732N	17344W	17435.6 34468.7 50136.3	70	2.833	62593	22.13	0.35	2207	64900
JAPAN	77 912	5903N	17818W	16053.9 33369.8 49943.7	109	4.000	87986	22.00	0.54	14	88000
JAPAN	77 912	5902N	17813W	16076.9 33382.6 49945.4	109	4.000	87612	21.90	0.56	388	89000
JAPAN	77 927	5946N	17841W	16041.6 33029.3 49827.5	156	5.000	109180	21.84	0.65	820	110000
JAPAN	77 912	5849N	17450W	17123.7 33733.9 49921.5	76	3.500	76214	21.78	0.38	786	77000
JAPAN	79 719	5634N	17248W	17628.2 34903.7 50168.8	93	3.083	66569	21.59	1.30	6031	72000
JAPAN	77 928	5946N	17837W	16060.4 33032.5 49826.1	112	5.083	109023	21.45	0.58	977	110000
JAPAN	77 913	5847N	17501W	17054.2 33737.3 49933.8	79	3.083	65657	21.23	0.38	543	66000

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-7 (continued). WALLEYE POLLOCK, JULY-SEPTEMBER 1977-80

NATION	VESSEL CLASS	DATE YMMDD	LAT	LONG	APPROX LORAN-C PULSE RATES FX FY FZ	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	77 924	5950N	17544W	3295.6	49816.4	122	5.167	109250.	0.59	734.	11000.
JAPAN	L	78 921	5943N	17729W	33270.6	49873.1	108	3.687	76976.	0.55	24.	77000.
JAPAN	L	77 822	5859N	17458W	33180.2	49950.3	137	4.167	86812.	1.51	1183.	86000.
JAPAN	L	77 921	5951N	17448W	32946.1	49814.8	153	4.750	98745.	0.51	255.	99000.
JAPAN	L	77 922	6006N	17833W	32888.2	49770.6	112	4.000	83088.	0.56	15912.	99000.
JAPAN	L	78 921	5927N	17729W	33258.9	49850.6	101	4.667	96694.	0.62	106.	96500.
JAPAN	L	78 928	5936N	17819W	33123.2	49850.2	124	3.687	75733.	0.70	5667.	81400.
JAPAN	L	78 924	5943N	17726W	33112.7	49807.6	114	3.167	64860.	0.59	3340.	82000.
JAPAN	L	78 711	5752N	17218W	33486.1	50083.0	61	4.167	85020.	0.62	2980.	68000.
USSR	M	77 7 2	5938N	17750W	33333.0	49833.0	96	1.083	22000.	0.21	0.	22000.
JAPAN	L	77 530	6007N	17852W	32861.2	49767.1	128	5.250	106112.	0.70	3588.	110000.
JAPAN	L	78 820	5721N	17340W	34550.2	50155.7	71	3.333	65983.	0.23	17.	66000.
JAPAN	L	77 824	5836N	17501W	33814.5	49964.9	171	4.833	95643.	1.42	214.	99000.
JAPAN	L	77 9 5	5903N	17505W	33581.0	49877.6	73	5.000	98786.	0.38	418.	88000.
JAPAN	L	77 929	5955N	17851W	32953.5	49803.7	109	4.500	87582.	0.52	1103.	99000.
JAPAN	L	77 927	5846N	17839W	33030.9	49826.8	151	5.083	97897.	0.66	577.	48400.
JAPAN	L	77 5 5	5909N	17501W	33541.1	49852.5	73	4.000	76540.	0.33	160.	77000.
JAPAN	L	78 526	6015N	17809W	32833.2	49721.4	87	4.000	76597.	0.52	403.	77000.
JAPAN	L	78 728	5737N	17405W	33173.3	49889.9	73	2.500	47823.	0.46	2719.	72000.
JAPAN	L	79 7 3	5851N	17318W	34766.4	50180.4	98	2.167	41416.	1.53	2584.	44000.
JAPAN	L	78 929	5938N	17822W	33105.7	49845.2	115	3.667	69891.	0.84	1006.	99000.
JAPAN	L	78 923	5942N	17733W	33115.1	49814.0	113	5.167	97998.	0.57	3.	66000.
JAPAN	L	78 915	5911N	17737W	33355.6	49911.8	100	5.500	65997.	0.67	530.	110000.
JAPAN	L	77 831	5848N	17509W	33718.2	49933.9	85	5.833	109470.	0.46	375.	77000.
JAPAN	L	78 926	6018N	17826W	32789.9	49720.0	91	4.083	76625.	0.76	8537.	68000.
JAPAN	L	78 930	5946N	17838W	33031.7	49826.5	97	4.250	79463.	0.91	65.	101200.
JAPAN	L	76 917	5913N	17837W	33298.1	49916.3	81	5.417	101135.	0.44	256.	55000.
JAPAN	L	77 925	6018N	17838W	32823.6	49725.8	180	2.833	52710.	0.83	2290.	55000.
JAPAN	L	78 919	5914N	17805W	33303.2	49910.6	119	3.583	66050.	1.13	6550.	72600.
JAPAN	L	78 916	5908N	17732W	33383.9	49919.2	35	3.000	54744.	0.51	361.	55000.
JAPAN	L	78 923	5940N	17716W	33145.4	49813.1	114	3.000	54639.	0.51	361.	55000.
JAPAN	L	78 928	5931N	17810W	33189.8	49882.4	127	2.867	52117.	0.83	683.	52300.
JAPAN	L	77 828	5823N	17428W	33947.8	49986.4	98	4.833	87088.	0.55	312.	28000.
JAPAN	L	78 913	5933N	17803W	33160.7	49854.0	114	2.417	43834.	0.82	166.	44000.
JAPAN	L	76 8 3	5635N	17205W	34593.9	50158.1	161	3.250	58209.	1.76	7795.	96000.
JAPAN	L	77 920	6004N	17859W	32879.6	49775.1	134	4.750	83854.	0.67	4146.	58000.
JAPAN	L	77 9 5	5858N	17510W	33659.7	49898.7	74	3.750	65793.	0.39	207.	66000.
JAPAN	L	77 822	5828N	17430W	33944.8	49987.1	83	5.000	87576.	0.52	424.	86000.
JAPAN	L	78 914	5923N	17731W	33268.6	49873.6	114	3.167	54999.	1.737	1.	55000.
JAPAN	L	77 9 3	5845N	17505W	33744.0	49944.2	90	3.000	50531.	0.43	89.	50600.
JAPAN	L	77 9 4	5856N	17516W	33640.1	49908.9	73	4.250	71237.	0.41	5763.	77000.
JAPAN	L	77 923	6007N	17855W	32839.3	49708.3	105	5.167	86477.	0.58	1523.	68000.
JAPAN	L	77 9 4	5855N	17500W	33668.3	49904.6	73	4.500	74362.	0.35	2538.	77000.
JAPAN	L	77 9 4	5845N	17514W	33737.3	49946.2	78	4.000	65960.	0.46	40.	66000.
JAPAN	L	78 922	5828N	17732W	33228.2	49858.5	114	3.583	58303.	0.68	1097.	59400.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-7 (continued). WALLEYE POLLOCK, JULY-SEPTEMBER 1977-80

VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/AFISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
L	78 513	5944N	17814W	16131.9 33066.1 49824.0	102	2.000	32436	16.22	0.66	564	33000
L	77 827	5831N	17515W	16975.2 33852.5 49922.3	180	3.000	48546	16.18	1.57	6454	55000
L	77 9 7	5908N	17510W	17026.5 33540.6 49861.7	77	4.750	76779	16.16	0.37	221	77000
L	77 919	6002N	17858W	15998.7 32895.5 49784.9	169	3.583	57909	16.16	0.58	1491	59400
L	78 924	5941N	17741W	16314.6 33116.6 49820.6	119	3.717	59708	16.06	0.60	6292	66000
L	78 920	5917N	17721W	16371.9 33325.9 49880.9	93	3.633	58311	16.05	0.37	1369	59400
L	77 822	5836N	17435W	17200.1 33850.8 49954.2	194	5.083	81541	16.04	1.28	6459	88000
L	79 720	5708N	17333W	17456.8 34644.0 50171.6	82	2.000	32030	16.02	0.68	970	33000
L	78 724	5656N	17320W	17505.0 34737.7 50179.6	100	3.000	47775	15.93	1.53	5425	57200
L	77 823	5838N	17504W	17042.2 33810.3 49966.0	155	4.167	65407	15.70	1.23	593	66000
L	78 915	5821N	17728W	16343.9 33287.3 49878.9	104	4.333	67295	15.53	0.70	905	68200
L	78 927	6017N	17806W	16256.8 32808.5 49713.1	86	4.583	70995	15.45	0.47	1605	72600
L	77 5 9	5836N	17624W	16604.0 33698.2 49988.9	80	5.667	87081	15.37	0.43	919	88000
L	79 719	5849N	17319W	17487.3 34773.3 50180.3	95	2.333	35666	15.29	1.15	1734	37400
L	77 924	6003N	17856W	16009.8 32889.2 49781.1	96	6.333	96600	15.25	0.66	2400	99000
L	77 926	6004N	17854W	16020.9 32882.9 49777.2	93	6.083	91890	15.11	0.63	7110	99000
L	78 918	5913N	17811W	16113.1 33304.4 49914.9	81	3.833	57045	14.86	0.58	155	57200
L	77 928	5945N	17240W	16044.3 33037.7 49830.2	148	5.167	75930	14.70	0.61	1070	77000
L	78 820	5723N	17338W	17460.5 34541.8 50152.6	73	4.500	65940	14.65	0.22	54	66000
L	78 920	5912N	17735W	16292.2 33350.0 49908.3	106	4.500	65498	14.56	0.72	502	66000
L	77 827	5839N	17520W	16955.6 33779.5 49968.4	142	4.333	62890	14.51	1.35	3110	66000
M	77 7 1	5934N	17722W	16394.6 33189.2 49835.4	82	1.833	26400	14.40	0.25	0	26400
L	77 824	5837N	17508W	17019.5 33813.1 49970.8	186	3.000	42354	14.12	1.57	1646	44000
L	79 929	5941N	17828W	16092.0 33077.8 49838.2	118	4.167	58645	14.07	0.85	755	59400
L	78 821	5829N	17411W	17328.9 33964.5 49975.8	75	3.917	54984	14.04	0.61	16	55000
L	78 725	5651N	17315W	17520.4 34773.3 50180.4	86	1.917	26621	13.89	1.11	6379	33000
L	78 921	5926N	17728W	16352.5 33247.8 49863.4	101	4.750	65942	13.68	0.43	52	66000
L	78 723	5646N	17317W	17499.2 34791.3 50179.6	83	1.917	26040	13.59	1.39	13560	35600
L	78 914	5924N	17727W	16354.0 33264.6 49869.3	100	4.000	54136	13.53	0.26	964	55000
L	78 924	5937N	17756W	16236.1 33135.7 49839.2	125	1.083	14599	13.40	0.75	801	15400
L	77 821	5820N	17421W	17269.4 34026.9 50010.9	120	2.500	33341	13.34	1.37	15059	43400
L	77 9 3	5855N	17450W	17125.6 33680.3 49899.3	72	3.667	48590	13.25	0.37	2010	50500
M	77 7 2	5939N	17720W	16411.7 33150.3 49818.2	79	1.667	22000	13.20	0.22	0	22000
L	77 9 8	5915N	17533W	16911.1 33489.3 49863.4	77	4.500	59325	13.12	0.40	75	59400
L	77 823	5825N	17430W	17221.0 33970.4 49997.3	95	5.833	76520	13.12	0.38	400	77000
L	78 721	5635N	17248W	17630.7 34900.2 50169.9	102	4.000	51931	12.98	1.38	3069	55000
L	77 9 6	5911N	17511W	17022.4 33512.4 49851.0	74	4.667	59134	12.67	0.36	266	59400
L	77 9 5	5834N	17603W	16725.6 33763.0 49994.9	109	6.833	86036	12.59	0.51	1964	86000
L	78 750	5644N	17319W	17468.6 34795.4 50179.3	93	2.000	24850	12.43	1.09	5944	30500
L	77 9 6	5904N	17500W	17076.3 33587.6 49871.0	72	5.333	65747	12.53	0.32	253	66000
L	77 911	5844N	17731W	16253.6 33563.7 49985.3	87	2.083	25650	12.31	0.44	7350	33000
L	77 911	5914N	17810W	16120.4 33298.0 49911.8	85	5.333	65442	12.27	0.47	558	66000
L	77 910	5839N	17710W	16355.4 33627.8 49994.9	82	6.333	76729	12.12	0.60	271	77000
L	77 825	5839N	17452W	17102.2 33218.5 49957.9	151	5.167	62440	12.09	1.48	6600	66000
L	78 710	5644N	17223W	17829.5 34923.8 50176.5	71	3.167	37683	11.96	0.32	1717	39600

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-7 (continued). WALLEYE POLLOCK, JULY-SEPTEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATE	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	77 9 25	6006N	17854W	16025.0	32867.6	49771.0	51965.	11.77	0.70	3035.	55000.
JAPAN	L	77 8 23	5825N	17425W	17249.0	33978.1	49995.5	48198.	11.57	0.86	6902.	55000.
JAPAN	L	77 9 26	5946N	17838W	16055.8	33031.7	49826.5	54817.	11.54	0.80	187.	55000.
JAPAN	L	77 8 25	5836N	17512W	16996.7	33815.7	49975.4	40370.	11.53	1.31	3630.	44000.
JAPAN	L	77 8 26	5838N	17500W	17064.0	33815.9	49964.5	52864.	11.33	1.41	8736.	61800.
JAPAN	L	77 8 29	5828N	17430W	17223.2	33944.8	49987.1	47165.	11.32	0.58	1235.	48400.
JAPAN	L	78 9 25	6018N	17816W	16214.5	32795.2	49714.9	37090.	11.13	0.58	310.	37400.
JAPAN	L	78 9 15	5921N	17732W	16324.0	33283.4	49840.3	54429.	11.07	0.62	571.	55000.
JAPAN	L	77 9 8	5915N	17525W	16953.5	33462.1	49844.2	65789.	10.96	0.59	211.	66000.
JAPAN	L	77 8 28	5838N	17452W	17107.7	33827.1	49961.4	41701.	10.86	1.44	2299.	44000.
JAPAN	L	78 8 6	5637N	17301W	17556.2	34864.1	50173.9	29779.	10.83	1.03	3221.	33000.
JAPAN	L	77 9 10	5838N	17641W	16511.1	33674.7	49592.4	64820.	10.89	0.47	1160.	66000.
JAPAN	L	77 9 6	5903N	17512W	17014.4	33583.1	49881.5	54751.	10.77	0.57	249.	55000.
JAPAN	L	77 9 1	5843N	17537W	16867.2	33723.1	49961.2	43010.	10.75	0.39	990.	44000.
JAPAN	L	77 9 21	5946N	17841W	16041.8	33029.3	49827.5	63671.	10.61	0.81	2329.	66000.
JAPAN	L	78 7 9	5727N	17237W	17854.2	34652.3	50145.1	22098.	10.61	0.36	2102.	24200.
JAPAN	L	77 9 8	5911N	17530W	16926.3	33492.5	49861.0	54690.	10.59	0.37	310.	55000.
JAPAN	L	78 9 26	6027N	17816W	16228.5	32722.3	49684.5	43957.	10.55	0.57	43.	44000.
JAPAN	L	78 8 8	5641N	17315W	17482.7	34817.0	50177.9	31516.	10.51	0.51	3684.	55200.
JAPAN	L	77 9 14	5916N	17816W	16095.1	33277.0	49907.7	57739.	10.50	0.78	1661.	59400.
JAPAN	L	78 8 8	5657N	17316W	17534.2	34742.0	50179.4	36568.	10.45	0.73	332.	57400.
JAPAN	L	77 8 28	5835N	17512W	16935.3	33824.0	49978.6	43283.	10.39	1.40	717.	44000.
JAPAN	L	77 9 5	5856N	17514W	17000.5	33642.5	49907.9	32763.	10.35	0.42	230.	33000.
JAPAN	L	77 8 26	5839N	17452W	17102.2	33618.5	49957.9	46187.	10.33	1.43	2413.	50600.
JAPAN	L	80 7 2	5656N	17231W	17823.2	34853.4	50180.3	41093.	10.27	0.35	267.	41360.
JAPAN	L	77 9 3	5851N	17513W	17002.8	33687.2	49925.1	64115.	10.26	0.36	1385.	66000.
JAPAN	L	77 9 8	5912N	17523W	16962.2	33491.0	49854.2	43567.	10.25	0.38	433.	44000.
JAPAN	L	77 9 1	5850N	17510W	17016.0	33699.6	49927.3	63008.	10.22	0.31	292.	60000.
JAPAN	L	77 9 13	5905N	17818W	16058.8	33355.3	49936.4	43982.	10.15	0.26	18.	44000.
JAPAN	L	78 7 30	5653N	17319W	17501.4	34754.6	50180.2	63343.	10.13	1.07	2657.	66000.
JAPAN	L	77 9 6	5903N	17515W	16998.9	33579.7	49883.1	65706.	10.11	0.36	292.	66000.
USA	M	77 7 1	5948N	17736W	16345.2	33064.1	49795.8	17595.	10.05	0.18	5.	17500.
JAPAN	L	77 8 29	5828N	17428W	17234.4	33947.8	49986.4	37568.	10.02	1.17	17412.	55000.
JAPAN	L	78 7 13	5601N	17222W	17946.1	34394.4	50028.2	50568.	10.01	0.45	4132.	55000.
JAPAN	L	77 9 11	5838N	17625W	16598.6	33696.8	49989.1	65907.	9.89	0.24	93.	66000.
JAPAN	L	78 9 22	5922N	17730W	16335.7	33277.5	49876.5	36472.	9.73	0.78	928.	37400.
JAPAN	L	77 8 21	5751N	17317W	17627.1	34381.6	50085.9	10439.	9.64	0.24	561.	11000.
JAPAN	L	78 8 24	5840N	17453W	17103.4	33808.5	49954.9	31227.	9.61	1.34	1773.	33000.
JAPAN	L	78 9 19	5907N	17728W	16316.1	33396.0	49921.0	54388.	9.60	0.71	512.	35000.
JAPAN	L	78 5 22	5932N	17737W	16316.7	33191.9	49847.8	36549.	9.48	0.97	1051.	37400.
USA	M	77 7 2	5938N	17750W	16266.0	33133.0	49833.8	22000.	9.43	0.12	0.	22000.
JAPAN	L	77 8 24	5828N	17429W	17228.8	33946.3	49986.7	32239.	9.21	0.26	761.	33000.
JAPAN	L	78 8 9	5746N	17324W	17581.2	34407.6	50101.6	21208.	9.09	0.18	792.	22000.
JAPAN	L	77 8 25	5828N	17417W	17295.4	33964.4	49982.0	21343.	8.83	0.51	657.	22000.
JAPAN	S	80 8 11	5843N	17718W	16316.5	33602.5	49991.0	27887.	8.81	0.48	4033.	31900.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-7 (continued). WALLEYE POLLOCK, JULY-SEPTEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE (LBS)	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	77 9 7	5836N	17408W	17346.0	33906.2	49940.4	71.	2.083	17469.	8.34	0.34	351.	17820.
JAPAN	L	78 9 25	6013N	17816W	16206.5	32835.4	49731.6	89.	3.917	32661.	8.34	0.67	339.	33000.
JAPAN	L	78 8 20	5732N	17337W	17483.4	34423.4	50136.2	77.	2.667	21921.	8.22	0.53	79.	22000.
JAPAN	L	77 9 22	6007N	17856W	16018.2	32858.6	49768.7	117.	4.000	32235.	8.00	0.56	765.	33000.
JAPAN	L	77 8 31	5840N	17525W	16929.3	33769.3	49966.8	76.	5.417	43314.	8.00	0.45	586.	44000.
JAPAN	L	78 8 18	5634N	17250W	17613.4	34899.3	50169.2	124.	2.667	20846.	7.82	1.70	1154.	22000.
JAPAN	L	77 8 31	5838N	17544W	16823.2	33754.1	49978.9	77.	5.833	43976.	7.54	0.44	24.	44000.
JAPAN	L	77 8 28	5841N	17515W	16984.6	33769.8	49960.0	156.	5.000	37061.	7.41	1.43	6439.	44000.
JAPAN	L	78 9 27	6003N	17848W	16045.6	32894.5	49778.0	97.	5.833	43121.	7.39	0.87	879.	44000.
JAPAN	L	77 9 13	5901N	17817W	16054.0	33385.3	49948.8	131.	4.500	32949.	7.32	0.57	51.	33000.
JAPAN	L	77 9 9	5836N	17559W	16738.1	33748.8	49988.9	93.	6.000	43712.	7.29	0.39	288.	44000.
JAPAN	L	77 8 30	5825N	17530W	16884.1	33877.8	50014.2	137.	1.500	10914.	7.28	1.36	86.	11000.
JAPAN	L	77 9 24	6006N	17856W	16018.1	32866.3	49771.8	96.	3.000	21193.	7.06	0.71	307.	22000.
JAPAN	L	77 8 30	5835N	17602W	16720.0	33752.3	49992.5	139.	3.083	21508.	6.91	0.68	692.	22000.
JAPAN	L	78 9 19	5902N	17752W	16197.8	33361.9	49924.4	90.	4.000	27228.	6.81	0.87	1374.	28600.
JAPAN	L	78 8 16	5915N	17722W	16362.4	33340.5	49895.4	92.	4.833	32627.	6.79	0.53	173.	33000.
JAPAN	L	80 7 1	5712N	17317W	17570.3	34657.7	50168.6	67.	4.167	28159.	6.76	0.48	1.	28160.
JAPAN	L	77 8 26	5839N	17455W	17091.9	33814.4	49959.2	219.	3.167	20661.	6.52	1.38	1339.	22000.
JAPAN	S	77 8 30	5825N	17539W	16835.0	33832.8	50004.6	164.	3.000	19486.	6.50	1.54	534.	20026.
JAPAN	L	77 8 27	5640N	17517W	16972.9	33775.4	49964.1	131.	5.000	32454.	6.49	1.48	11546.	44000.
USSR	M	77 7 1	5948N	17743W	16316.4	33058.7	49798.7	87.	2.167	13200.	6.09	0.26	0.	13200.
JAPAN	L	78 7 28	5740N	17344W	17451.9	34411.9	50118.9	106.	5.500	33201.	6.04	1.44	10739.	44000.
JAPAN	L	77 9 1	5841N	17539W	16654.1	33736.8	49968.1	76.	5.500	32522.	5.91	0.41	478.	33000.
JAPAN	L	77 9 21	5836N	17711W	16343.3	33648.3	50002.8	151.	2.667	15107.	5.67	1.15	293.	15400.
JAPAN	L	78 9 23	5921N	17729W	16338.9	33266.3	49879.3	106.	3.667	20715.	5.65	0.75	1285.	22000.
JAPAN	L	77 8 26	5835N	17510W	17006.8	33826.9	49978.0	153.	3.833	21581.	5.63	1.44	419.	22000.
JAPAN	L	77 9 23	5951N	17848W	16020.3	32986.1	49814.8	137.	3.000	16885.	5.61	0.56	715.	17800.
JAPAN	L	78 8 10	5651N	17316W	17513.9	34771.0	50180.4	86.	2.417	13559.	5.61	0.79	1241.	15400.
JAPAN	L	78 8 3	5635N	17212W	17658.2	34978.9	50160.6	155.	2.417	12754.	5.28	1.91	15400.	15400.
JAPAN	L	78 7 8	5708N	17312W	17592.4	34692.5	50172.9	72.	2.417	12143.	5.02	0.66	3257.	15400.
JAPAN	L	78 7 28	5740N	17339W	17482.7	34422.3	50118.6	73.	3.500	17330.	4.95	0.45	270.	17600.
JAPAN	L	77 9 14	5915N	17822W	16062.9	33278.2	49912.0	137.	4.000	19470.	4.87	0.80	330.	19600.
JAPAN	L	77 9 13	5912N	17749W	16221.5	33335.1	49912.2	147.	3.667	17428.	4.75	0.97	172.	17600.
JAPAN	L	78 7 27	5707N	17346W	17370.3	34620.1	50172.0	139.	1.667	7759.	4.66	1.60	3241.	11000.
JAPAN	L	77 8 25	5825N	17430W	17221.6	33970.4	49997.3	138.	3.833	17063.	4.45	1.11	4937.	22000.
JAPAN	L	77 8 30	5826N	17513W	16983.2	33879.8	50001.0	145.	4.000	16836.	4.16	1.27	962.	17600.
JAPAN	S	77 8 30	5823N	17513W	16977.6	33920.0	50016.2	145.	4.167	16954.	4.07	1.20	646.	17600.
JAPAN	S	77 8 31	5820N	17526W	16895.9	33923.1	50027.7	159.	3.083	12539.	4.07	1.58	2421.	14960.
JAPAN	L	77 8 21	5823N	17422W	17265.4	33999.8	50001.2	120.	2.583	10188.	3.94	1.41	11812.	22000.
JAPAN	S	77 9 10	5812N	17359W	17505.2	34164.4	50023.2	66.	6.000	23421.	3.90	1.45	5179.	28600.
JAPAN	L	76 7 9	5724N	17244W	17805.8	34657.4	50151.5	65.	1.417	5271.	3.72	0.32	1329.	6600.
JAPAN	S	77 8 26	5925N	17725W	16363.8	33258.6	49865.4	96.	3.750	13384.	3.57	0.36	1356.	14740.
JAPAN	S	78 7 25	5656N	17322W	17490.5	34723.1	50178.9	107.	4.833	16402.	3.39	1.21	3398.	19800.
JAPAN	S	78 9 20	5634N	17233W	17721.4	34936.6	50165.4	104.	1.000	3337.	3.34	1.77	163.	3520.
JAPAN	L	78 7 25	5651N	17322W	17475.0	34757.2	50180.3	120.	3.333	10906.	3.27	1.45	2294.	13200.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

41 available trawl records (exceeding 500 lbs/hr CPUE) were not included.

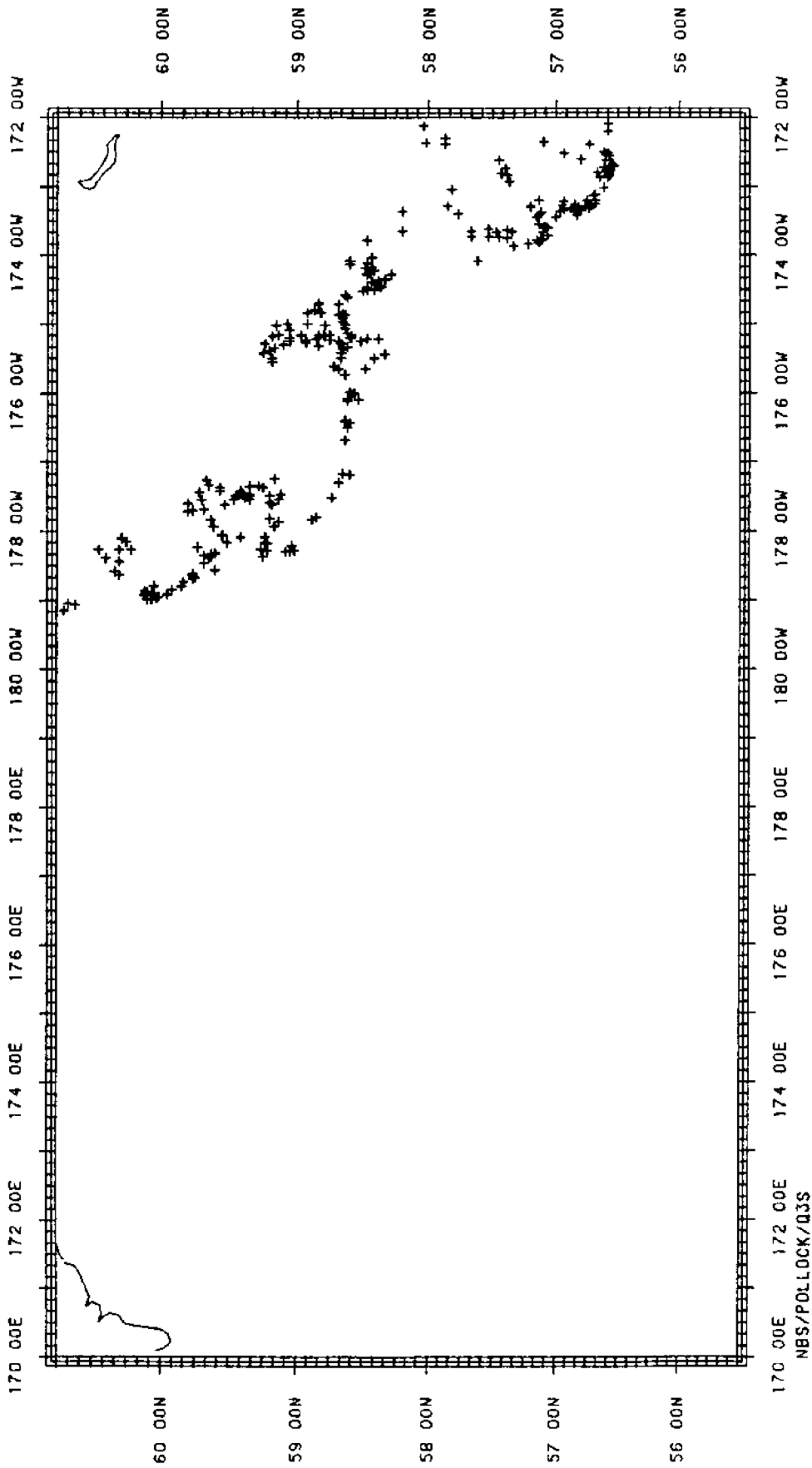


FIGURE A-3. TRAWLING LOCATIONS FOR WALLEYE POLLOCK, JULY-SEPTEMBER 1977-80

TABLE A-8. WALLLEY POLLOCK, OCTOBER-DECEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LGRAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LB5/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
		YYMMDD			7X 7Y 7Z							
JAPAN	L	781124	5935N	17813W	16150.8 33136.5 49651.3	104.	1-250	175914.	140.73	0.59	66.	176000.
JAPAN	L	781121	5937N	17752W	16255.2 33139.2 49837.7	136.	1-333	175895.	131.92	0.60	105.	176000.
JAPAN	L	781025	6029N	17825W	16193.2 32702.1 49682.6	102.	1-167	153649.	130.33	0.59	151.	154000.
JAPAN	L	791031	5828N	17515W	16972.0 33876.6 50001.6	115.	0-583	76025.	130.33	1-10	6035.	82480.
JAPAN	L	781124	5941N	17826W	16101.4 33079.2 49637.5	106.	1-750	197802.	113.03	0.58	198.	198000.
USSR	M	791216	5952N	17847N	16027.1 32979.2 49811.4	87.	0-500	55597.	111.19	0.55	83.	53460.
JAPAN	L	791030	5904N	17820W	16046.2 33360.3 49941.5	126.	0-833	92114.	110.54	0.91	266.	92400.
JAPAN	L	7911 8	5851N	17746W	16190.4 33494.1 49969.6	93.	1-417	140776.	99.37	0.86	4424.	145200.
USSR	M	791215	5956N	17850W	16022.0 32946.6 49800.3	109.	0-667	65069.	97.60	1.01	51.	55120.
JAPAN	L	791116	5857N	17715W	16323.6 33635.6 50000.9	123.	1-333	126594.	94.95	1-09	1006.	127600.
JAPAN	L	7911 7	5908N	17824W	16035.9 33327.1 49931.6	139.	1-500	141780.	94.53	1-05	5612.	147400.
JAPAN	L	7911 2	5908N	17823W	16041.0 33328.2 49931.4	104.	1-333	122207.	91.66	0.69	993.	123200.
JAPAN	L	7911 6	5900N	17815W	16061.7 33394.8 49951.1	120.	1-333	109098.	81.82	1.02	11902.	121000.
JAPAN	L	781115	5934N	17816W	16134.4 33141.5 49655.3	118.	2-417	193659.	80.13	0.42	4341.	198000.
JAPAN	L	791028	5855N	17751W	16173.6 33459.0 49959.9	101.	1-417	102413.	76.53	0.94	1587.	110000.
JAPAN	L	781121	5929N	17742W	16167.5 33187.9 49667.4	145.	2-583	197408.	76.42	0.74	592.	198000.
JAPAN	L	801128	5933N	17742W	16224.6 33328.6 49909.0	163.	1-583	118549.	74.87	0.95	2451.	121000.
JAPAN	L	781120	5932N	17808W	16162.8 33164.0 49858.7	116.	2-667	197584.	74.09	0.86	416.	198000.
JAPAN	L	781015	5846N	17756W	16231.5 33542.8 49980.9	90.	2-000	147566.	73.72	0.60	6434.	154000.
JAPAN	L	791114	5914N	17822W	16060.6 33285.5 49914.7	131.	2-083	151987.	72.95	1.02	6413.	152400.
JAPAN	L	7911 3	5914N	17823W	16055.6 33284.5 49915.0	142.	1-917	137644.	71.81	1.11	7556.	145200.
JAPAN	L	7911 9	5852N	17748W	16182.2 33484.4 49967.3	137.	1-500	107469.	71.65	0.96	6931.	114000.
JAPAN	L	801125	5916N	17709W	16430.5 33346.2 49888.0	85.	1-583	111986.	70.73	0.42	214.	112200.
JAPAN	L	781019	6014N	17822W	16181.7 32824.1 49731.2	97.	2-000	141258.	70.63	0.66	1742.	143000.
JAPAN	L	791114	5909N	17824W	16032.4 33319.6 49928.9	153.	2-167	153267.	69.82	1-07	2733.	154000.
JAPAN	L	781121	5938N	17751W	16261.8 33132.1 49634.2	125.	1-583	109244.	69.00	0.74	756.	110000.
JAPAN	L	7911 1	5914N	17822W	16060.6 33285.5 49914.7	126.	1-667	114406.	68.64	0.93	4394.	118800.
JAPAN	L	781118	5923N	17737W	16302.9 33262.6 49875.8	152.	2-833	193332.	68.31	1.06	4408.	193000.
JAPAN	L	791029	5913N	17822W	16058.2 33292.8 49917.5	126.	1-667	112822.	67.57	0.87	3978.	116600.
USSR	M	791216	5950N	17840W	16055.0 32999.7 49815.0	164.	0-667	44985.	67.46	1.23	115.	45100.
JAPAN	L	7911 8	5846N	17737W	16226.2 33541.6 49981.1	98.	1-250	92323.	65.86	1.00	5677.	68000.
JAPAN	L	7811 7	5916N	17728W	16335.0 33326.5 49894.2	104.	1-917	125501.	65.48	0.67	6499.	132000.
JAPAN	L	781029	5951N	17842W	16047.9 32990.5 49812.7	90.	1-667	108472.	65.08	0.52	1528.	110000.
JAPAN	L	781020	5954N	17844W	16045.1 32966.2 49804.3	83.	1-917	119590.	62.39	0.49	1410.	121000.
USSR	M	791214	5957N	17847W	16037.7 32941.1 49796.2	55.	1-250	97650.	62.13	0.38	0.	77660.
JAPAN	L	781028	5936N	17821W	16118.6 33106.6 49844.9	117.	2-500	153949.	61.58	0.38	51.	154000.
JAPAN	L	7911 1	5905N	17822W	16032.6 33350.9 49939.2	142.	1-833	112866.	61.56	1.03	1534.	114400.
JAPAN	L	781118	5918N	17737W	16293.6 33301.7 49891.0	159.	1-917	97385.	61.49	0.98	1635.	99000.
JAPAN	L	7911 2	5858N	17811W	16073.3 33413.7 49955.6	140.	1-917	117692.	61.40	0.98	3318.	121000.
JAPAN	L	791120	5957N	17854W	16006.0 32936.2 49798.7	131.	1-833	112333.	61.27	1.00	2007.	114400.
JAPAN	L	791030	5829N	17516W	15987.5 33887.2 49998.8	133.	1-250	76586.	61.27	1.19	9876.	66460.
JAPAN	L	781122	6012N	17636W	16107.7 32830.8 49745.2	156.	2-667	163160.	61.18	1.17	1640.	165000.
USSR	M	791214	5953N	17838W	16070.5 32978.2 49905.1	93.	0-563	35631.	61.08	0.78	9.	35640.
JAPAN	L	791115	5856N	17756W	16150.0 33445.8 49959.2	126.	1-583	96686.	61.06	0.96	4514.	101200.
JAPAN	L	791116	5837N	17718W	16307.5 33631.5 50001.3	148.	1-833	109665.	59.82	1.04	4735.	114400.

*** NOTE *** THE ACCURACY OF POSITION AND LGRAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-8 (continued). WALLEYE POLLOCK, OCTOBER-DECEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YMMDD			7X	7Y	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
USSR	M	791120	5947N	17939W	16053.2	33023.3	49233.0	191.	0.750	44315.	1.12	145.	44660.
JAPAN	L	791121	5823N	17920W	16938.0	33909.0	50017.8	137.	1.333	79053.	1.11	3787.	81540.
USSR	M	791128	5940N	17743W	16303.4	33123.0	49824.7	93.	1.083	48286.	0.22	1912.	65000.
JAPAN	L	791125	5835N	17704W	16379.3	33665.1	50004.3	148.	1.333	78632.	1.05	2762.	61400.
JAPAN	L	791121	5958N	17807W	16097.9	33418.4	49954.9	107.	1.000	57941.	0.85	8059.	66000.
JAPAN	L	781111	5941N	17727W	16381.2	33128.2	49814.6	124.	1.417	81726.	0.50	12674.	94000.
JAPAN	L	781115	5935N	17759W	16218.0	33148.7	49646.5	112.	1.917	10999.	0.60	12674.	110000.
JAPAN	L	791104	5835N	17821W	16615.3	33725.3	49996.7	109.	2.000	11395.	0.98	4464.	116000.
JAPAN	L	801116	6011N	17840W	16097.0	32837.4	49749.3	139.	2.500	14193.	0.70	1207.	143000.
JAPAN	L	781102	6007N	17837W	16102.7	32870.5	49760.8	90.	2.750	15292.	0.61	1508.	154000.
JAPAN	L	781116	5913N	17749W	16223.6	33327.5	49909.3	157.	3.583	196004.	1.04	1996.	195000.
JAPAN	L	781120	5932N	17805W	16182.3	33166.7	49657.7	117.	2.333	124076.	0.54	7324.	132000.
JAPAN	L	791102	6014N	17825W	16168.5	32822.4	49732.7	102.	0.583	50912.	0.62	108.	51020.
JAPAN	L	791109	5900N	17817W	16051.5	33392.5	49951.5	131.	2.417	126391.	0.94	5609.	132000.
JAPAN	L	801115	6014N	17829W	16150.9	32820.1	49734.6	115.	3.333	174309.	0.73	1691.	176000.
USSR	M	791215	5952N	17837W	16073.0	32986.6	49807.8	96.	1.167	60987.	0.85	173.	61160.
JAPAN	L	781117	6020N	17834W	16139.6	32769.9	49717.3	150.	2.750	143566.	1.02	1634.	145200.
JAPAN	L	801127	5913N	17753W	16203.5	33523.3	49910.3	153.	2.250	115590.	0.99	1010.	116000.
JAPAN	L	781115	6018N	17812W	16232.1	32797.3	49712.8	148.	2.667	136742.	0.93	1858.	138600.
JAPAN	L	801125	5918N	17707W	16443.8	33332.3	49681.0	84.	1.667	85431.	0.42	369.	85800.
JAPAN	L	791107	5906N	17823W	16041.0	33328.2	49931.4	120.	1.917	97777.	0.93	1223.	99000.
JAPAN	L	781117	5926N	17738W	16301.4	33538.3	49866.9	152.	2.583	131454.	1.00	546.	152000.
JAPAN	L	781113	6016N	17836W	16123.8	32800.4	49731.3	180.	1.500	76073.	0.99	927.	77000.
JAPAN	L	791117	5855N	17706W	16368.4	33662.4	50004.6	171.	1.750	86672.	1.11	572.	94600.
JAPAN	L	781025	6022N	17823W	16190.6	32759.4	49705.1	107.	2.750	138219.	0.62	381.	158000.
JAPAN	L	781114	5933N	17800W	16205.3	33163.4	49853.0	130.	1.417	70775.	0.42	5225.	77000.
JAPAN	L	791111	5958N	17854W	16008.1	32928.6	49795.7	126.	2.333	115895.	0.77	7305.	123200.
JAPAN	L	801115	5914N	17822W	16060.6	33285.5	49914.7	103.	1.417	68662.	0.93	1958.	70620.
JAPAN	L	791026	6002N	17657W	16003.2	32896.2	49784.5	137.	1.000	48457.	0.84	30743.	79200.
JAPAN	L	781028	5956N	17849W	16026.5	32947.3	49800.0	85.	2.250	108377.	0.60	1603.	110000.
JAPAN	L	781028	5950N	17837W	16068.8	33001.9	49614.0	88.	3.000	142509.	0.70	491.	143000.
JAPAN	L	791115	5902N	17818W	16051.4	33377.0	49946.4	135.	2.750	129937.	1.13	2063.	132000.
JAPAN	L	781018	6015N	17823W	16179.0	32815.5	49728.4	100.	2.667	122924.	0.66	276.	123200.
JAPAN	L	801127	5913N	17752W	16202.5	33324.4	49910.1	151.	1.417	64717.	0.92	1283.	86000.
JAPAN	L	791102	5905N	17820W	16048.7	33353.1	49936.8	109.	1.750	78774.	0.77	2626.	81400.
JAPAN	L	781031	5957N	17850W	16024.1	32939.0	49797.3	85.	3.083	137746.	0.41	854.	138000.
JAPAN	L	781117	5925N	17740W	16291.7	33244.2	49670.7	178.	2.417	107635.	0.99	2365.	110000.
JAPAN	L	791112	5907N	17854W	15882.9	33301.9	49939.9	137.	1.833	81608.	0.65	1347.	82300.
JAPAN	L	781112	6019N	17833W	16142.2	32778.3	49720.1	148.	2.500	110953.	0.85	1347.	112200.
USSR	M	791105	6004N	17832W	16115.4	32897.1	49768.2	142.	1.250	54885.	0.76	115.	55000.
JAPAN	L	791027	5637N	17300W	17562.6	34866.3	50173.7	94.	0.583	24835.	1.50	2885.	27120.
JAPAN	L	781116	6037N	17636W	16118.3	32824.1	49741.1	137.	2.417	109020.	1.08	14374.	114400.
JAPAN	L	801118	6018N	17815W	16219.0	32795.7	49714.4	90.	2.833	115467.	0.46	1133.	116000.
JAPAN	L	791106	5837N	17702W	16394.6	33653.3	49998.6	93.	2.667	107031.	0.91	2369.	110000.
JAPAN	L	791104	6025N	17834W	16148.1	32730.1	49700.7	129.	1.750	70960.	0.81	340.	70400.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-8 (continued). WALLEYE POLLOCK, OCTOBER-DECEMBER 1977-80

CATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES		DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
					7X	7Y							
USSR	L	7011 4	5645N	17320W	17466.0	34788.8	50179.7	112.	0.583	23297.	39.76	333.	23540.
KOREA	M	8011 8	5645N	17320W	16243.9	32782.1	49705.0	91.	2.000	78312.	39.16	8.	78320.
JAPAN	L	7911 14	5911N	17740W	16264.9	33352.3	49712.6	127.	2.157	64714.	39.10	3286.	68000.
JAPAN	L	7811 14	5935N	17817W	16131.7	33133.0	49852.6	115.	2.250	87699.	39.07	101.	85000.
USSR	M	7712 17	6005N	17833W	16116.8	32866.6	49765.5	79.	1.417	54926.	38.77	74.	25000.
USSR	M	7912 17	5948N	17843W	16036.9	33012.6	49822.1	96.	1.167	45946.	38.61	494.	43540.
USSR	M	7711 25	5941N	17823W	16115.6	33082.0	49836.5	120.	0.917	35179.	38.38	21.	35204.
JAPAN	L	7910 29	5827N	17536W	16866.3	33036.0	50039.3	114.	1.833	69373.	37.84	2567.	71940.
USSR	H	7912 16	6000N	17850W	16030.4	32916.1	49786.0	169.	0.750	28373.	37.83	227.	28000.
JAPAN	L	7811 5	5915N	17836W	16001.4	33265.8	49914.7	116.	3.917	147917.	37.77	6083.	154000.
JAPAN	L	7811 15	5937N	17759W	16236.1	33135.7	49839.2	106.	1.583	59411.	37.52	6529.	66000.
USSR	M	7711 19	5943N	17829W	16091.5	33061.7	49832.5	96.	0.533	21683.	37.17	315.	24000.
JAPAN	L	7810 22	5943N	17742W	16313.1	33099.8	49810.6	102.	2.833	104634.	37.00	5166.	110000.
JAPAN	L	8011 17	6014N	17821W	16186.1	32924.6	49730.7	94.	3.000	110878.	36.96	2.	116800.
JAPAN	L	7811 20	6020N	17830W	16156.9	32771.9	49715.3	126.	2.667	98433.	36.91	567.	99000.
KOREA	M	8011 3	5645N	17322W	17453.0	34784.3	50179.7	127.	2.667	98421.	36.91	4979.	103400.
JAPAN	L	7911 5	5835N	17838W	16521.8	33701.4	50000.0	112.	3.833	140641.	36.69	2359.	143000.
USSR	L	7711 14	5935N	17852W	16010.7	32952.8	49804.1	148.	1.167	42506.	36.44	1492.	44000.
JAPAN	L	7810 18	6023N	17824W	16187.9	32750.9	49702.3	106.	3.000	108603.	36.20	1397.	110000.
JAPAN	L	7911 3	6016N	17816W	16207.5	32786.1	49712.6	101.	2.333	84149.	36.08	2751.	86900.
JAPAN	L	7911 5	6019N	17823W	16185.7	32783.5	49715.1	104.	2.000	71697.	35.85	3543.	75240.
JAPAN	L	7810 29	6001N	17855W	16010.1	32905.1	49786.9	98.	2.750	97840.	35.50	1160.	99000.
JAPAN	L	7810 19	6024N	17822W	16198.1	32743.6	49697.9	102.	1.667	59262.	35.56	2338.	61300.
JAPAN	L	7811 19	6028N	17820W	16212.9	32712.4	49683.3	96.	3.417	121419.	35.54	1781.	123200.
JAPAN	L	7810 26	6015N	17824W	16174.5	32815.0	49728.9	107.	4.333	152454.	35.10	1546.	134000.
JAPAN	L	7811 16	5916N	17828W	16035.5	33264.7	49910.6	191.	4.000	139301.	34.83	3699.	143000.
JAPAN	L	7911 20	6006N	17855W	16020.6	32866.9	49771.4	120.	1.750	60405.	34.52	2595.	66000.
JAPAN	L	7810 22	5941N	17823W	16115.6	33082.0	49836.5	97.	2.833	97198.	34.31	1302.	99000.
USSR	M	7911 30	5939N	17740W	16316.1	33133.5	49826.7	98.	1.083	37116.	34.20	7704.	44380.
JAPAN	L	8011 25	5914N	17718W	16331.8	33352.6	49697.1	89.	2.417	82689.	34.22	7511.	90200.
JAPAN	L	8011 23	5914N	17717W	16386.8	33353.6	49896.8	80.	3.333	113928.	34.16	472.	114400.
JAPAN	L	7812 7	5836N	17658W	16414.3	33666.1	50000.8	155.	1.583	53813.	33.99	1185.	55000.
JAPAN	L	7811 26	6012N	17840W	16092.9	32829.6	49746.1	164.	3.667	124601.	33.98	1019.	125620.
JAPAN	L	8011 26	5909N	17730W	16311.7	33378.5	49913.7	86.	2.083	70173.	33.68	227.	70400.
KOREA	M	7711 9	5916N	17737W	16293.6	33301.7	49891.0	137.	6.417	215690.	33.61	4310.	220000.
JAPAN	L	7811 17	5923N	17738W	16297.9	33261.8	49876.1	166.	3.833	128797.	33.60	3203.	132000.
JAPAN	L	8011 19	5938N	17823W	16109.3	33104.9	49845.5	119.	3.417	114191.	33.40	209.	114400.
JAPAN	L	7911 12	5947N	17836W	16067.2	33025.6	49822.7	104.	1.917	63793.	33.28	2207.	66000.
JAPAN	L	7811 15	5945N	17832W	16081.6	33044.0	49827.4	105.	2.667	82349.	33.13	1891.	90200.
JAPAN	L	7811 3	6034N	17824W	16205.1	32562.1	49665.1	98.	2.167	71426.	32.97	1174.	72000.
JAPAN	L	7911 16	5836N	17705W	16376.0	33656.5	50001.9	120.	1.417	46668.	32.94	1732.	48400.
JAPAN	L	8011 17	6002N	17858W	15956.7	32895.5	49764.9	112.	2.000	56999.	32.85	2501.	62000.
JAPAN	L	7811 17	6031N	17831W	16170.6	32683.4	49679.1	108.	2.667	87075.	32.65	925.	88000.
JAPAN	L	7911 18	5908N	17922W	16046.0	33329.2	49931.1	101.	1.917	62371.	32.65	3425.	66000.
JAPAN	L	7911 21	5953N	17849W	16020.1	32970.1	49809.1	120.	2.333	75379.	32.31	6021.	61400.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION.***

TABLE A-8 (continued). WALLEYE POLLOCK, OCTOBER-DECEMBER 1977-80

BATTION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE 7X	7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	7812 5	6018N	17827W	16166.6	32789.4	49720.4	112.	2.417	76980.	31.85	0.69	2220.	79200.
JAPAN	L	781027	5949N	17836W	16071.4	3310.4	49816.7	101.	2.750	87492.	31.82	0.77	508.	88000.
JAPAN	L	7810 2	6011N	17830W	16141.2	32843.3	49744.3	109.	2.750	86957.	31.62	0.69	1043.	88000.
JAPAN	L	781117	6025N	17838W	16131.0	32728.2	49702.8	144.	3.083	97378.	31.58	1.02	1622.	99000.
JAPAN	L	781120	6027N	17837W	16136.7	32712.8	49695.6	150.	3.833	120669.	31.48	1.04	2531.	123200.
JAPAN	L	781019	6022N	17824W	16186.3	32758.9	49705.6	107.	3.500	110000.	31.43	0.77	0.	110000.
JAPAN	L	781119	5920N	17737W	16297.4	33286.2	49885.0	158.	2.417	75310.	31.16	1.01	1690.	77000.
JAPAN	L	801122	5915N	17726W	16343.2	33336.4	49896.6	95.	3.417	106344.	31.12	0.57	3656.	110000.
JAPAN	L	801121	5941N	17827W	16096.7	33078.6	49837.8	114.	2.583	80152.	31.03	0.53	1400.	14400.
JAPAN	L	7911 6	6006N	17857W	16011.7	32865.7	49772.2	124.	1.417	43603.	30.78	0.55	2597.	46200.
JAPAN	L	781017	6019N	17823W	16185.7	32783.5	49715.1	105.	3.667	112377.	30.65	0.74	2023.	114400.
JAPAN	L	791110	5903N	17820W	16043.7	33367.5	49944.1	137.	3.000	91314.	30.60	0.91	22566.	114400.
JAPAN	L	781119	5936N	17741W	16306.2	33156.6	49636.6	139.	1.917	58636.	30.59	0.72	764.	59400.
JAPAN	L	781014	5900N	17816W	16056.6	33393.6	49951.3	119.	3.500	106979.	30.57	1.00	16221.	121000.
JAPAN	L	781121	6023N	17820W	16205.2	32752.8	49700.2	99.	2.083	63673.	30.50	0.40	127.	53900.
JAPAN	L	7710 1	5959N	17855W	16005.8	32920.3	49793.0	100.	3.333	101796.	30.54	0.74	8204.	110000.
JAPAN	L	781015	5853N	17746W	16195.1	33479.6	49964.3	83.	2.417	73432.	30.39	0.61	10168.	53600.
JAPAN	L	7812 2	6019N	17823W	16185.7	32783.5	49715.1	104.	4.667	140972.	30.21	0.58	2028.	143000.
JAPAN	L	781020	5959N	17853W	16014.8	32921.7	49792.3	89.	2.500	75345.	30.14	0.74	1655.	77000.
JAPAN	L	781118	6018N	17820W	16197.1	32793.1	49717.0	97.	4.000	120361.	30.09	1.03	7239.	127600.
USSR	M	7912 8	5939N	17738W	16325.6	33135.2	49825.8	107.	1.417	42482.	29.95	0.21	1518.	44000.
JAPAN	L	7710 3	6006N	17849W	16047.3	32870.7	49769.0	109.	4.583	137394.	29.92	0.76	5606.	143000.
JAPAN	L	781123	6009N	17853W	16035.6	32845.1	49761.2	149.	2.583	76501.	29.61	1.09	499.	77300.
JAPAN	L	781027	5958N	17851W	16021.7	32930.7	49794.6	86.	3.333	98250.	29.47	0.64	750.	98000.
JAPAN	L	781129	5950N	17843W	16041.2	32997.4	49816.1	98.	4.000	117473.	29.37	0.49	10127.	127600.
JAPAN	L	7811 6	5901N	17813W	16074.4	33309.9	49948.1	88.	3.167	91561.	28.91	0.79	3039.	94600.
JAPAN	L	781128	5944N	17832W	16075.5	33051.7	49830.5	105.	3.167	91451.	28.88	0.56	3149.	94600.
JAPAN	L	781120	6029N	17837W	16142.1	32696.8	49689.0	126.	3.750	108283.	28.88	0.98	2717.	110000.
JAPAN	L	801117	6017N	17816W	16213.0	32803.3	49718.3	92.	2.917	84126.	28.84	0.51	1234.	35360.
JAPAN	L	801121	5937N	17824W	16102.5	33111.7	49848.9	137.	3.083	88930.	28.84	0.62	1270.	90200.
JAPAN	L	791111	5855N	17801W	16121.6	33447.1	49961.7	148.	2.917	83291.	28.56	0.97	4709.	99000.
JAPAN	L	7812 1	6008N	17845W	16069.1	32857.8	49761.0	109.	4.167	118541.	28.42	0.58	4659.	123200.
MORCA	M	8010 6	5647N	17322W	17460.5	34775.5	50180.1	121.	3.917	111382.	28.44	1.58	318.	112200.
USSR	M	771127	5916N	17814W	16148.1	33127.9	49848.8	175.	1.167	32999.	28.28	0.51	1.	33000.
USSR	M	771126	5941N	17827W	16096.7	33078.6	49337.8	142.	1.167	52997.	28.28	0.49	3.	33000.
USSR	M	771125	5942N	17827W	16098.8	33071.0	49834.8	126.	1.250	35049.	28.04	0.66	151.	35200.
JAPAN	L	781126	5937N	17728W	16376.3	33159.7	49828.2	95.	2.500	59637.	27.85	0.48	7363.	77000.
JAPAN	L	781127	6011N	17847W	16068.1	32833.3	49752.4	177.	3.500	97220.	27.78	1.08	7280.	104500.
JAPAN	L	781123	6004N	17838W	16092.5	32893.2	49770.8	175.	4.417	120812.	27.35	0.96	2388.	123200.
JAPAN	L	7812 5	6015N	17819W	16198.6	32817.7	49726.4	91.	2.000	54130.	27.06	0.41	870.	55000.
JAPAN	L	781130	6014N	17825W	16168.5	32822.4	49732.7	97.	4.167	112313.	26.96	0.54	2087.	114400.
JAPAN	L	781125	6010N	17848W	16055.7	32840.4	49756.0	159.	2.417	64417.	26.66	1.07	703.	65120.
USSR	M	771211	5933N	17741W	16301.1	33180.4	49846.1	131.	1.583	41602.	26.26	0.61	2398.	44000.
USSR	M	7912 8	5941N	17738W	16328.8	33119.1	49819.4	107.	1.083	28218.	26.05	0.22	322.	28000.
JAPAN	L	801119	6019N	17814W	16224.9	32788.2	49710.5	92.	2.250	58568.	26.03	0.48	172.	58740.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-8 (continued). WALLIYE POLLOCK, OCTOBER-DECEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YYMMDD			7X	7Y	7Z	(FMS)	TRAWLED	(LBS)	PER HOUR	LB/S/FISH	(LBS)	(LBS)
JAPAN	L	801126	5932N	17721W	16375.3	33310.1	49882.7	91.	2.167	56078.	25.88	0.53	1122.	57230.
JAPAN	L	781117	6058N	17900W	15998.4	32863.6	49773.4	136.	2.917	75191.	25.78	0.22	4449.	79640.
JAPAN	L	781117	5827N	17534W	16864.3	32256.0	5009.3	104.	3.667	94427.	25.75	0.90	1933.	96360.
JAPAN	L	781119	6018N	17815W	16215.0	32795.7	49714.4	90.	3.667	93815.	25.59	0.42	785.	94600.
JAPAN	L	781119	6028N	17834W	16149.6	32722.1	49697.4	131.	4.750	121334.	25.54	1.00	1566.	123200.
JAPAN	L	781121	6023N	17821W	16200.8	32752.4	49700.7	100.	4.417	112611.	25.50	0.52	1739.	114400.
JAPAN	L	781130	6014N	17822W	16181.7	32824.1	49731.2	95.	3.167	80574.	25.64	0.85	226.	91400.
USSR	M	791120	6007N	17858W	16009.3	32657.4	49769.5	178.	1.417	35919.	25.35	0.94	161.	36080.
JAPAN	L	801117	6011N	17825W	16156.9	32845.7	49743.0	92.	2.667	67555.	25.33	0.52	205.	67760.
JAPAN	L	781122	6015N	17832W	16135.5	32810.5	49732.7	148.	4.000	100559.	25.14	0.96	5941.	105600.
JAPAN	L	781124	6018N	17847W	16079.5	32778.8	49729.9	175.	3.000	75291.	25.10	1.07	609.	75900.
JAPAN	L	781027	6005N	17255W	16016.5	32874.6	49774.5	100.	2.583	64673.	25.03	0.82	1327.	66000.
JAPAN	L	781030	5954N	17839W	16057.9	32969.8	49602.4	96.	1.500	37367.	24.91	0.58	33.	37400.
USSR	M	791124	5950N	17836W	16073.5	33002.7	49613.6	101.	1.593	39312.	24.83	0.44	288.	39600.
JAPAN	L	791119	5901N	17819W	16043.8	33363.0	49949.2	142.	3.000	73859.	24.62	1.12	18541.	92400.
USSR	M	791126	5937N	17704W	16485.7	33180.2	49617.6	107.	1.500	36924.	24.82	0.21	476.	37400.
JAPAN	L	781116	6003N	17858W	16000.9	32887.9	49781.8	106.	2.167	53227.	24.57	0.77	13.	53240.
JAPAN	L	781022	5935N	17803W	16198.8	33145.2	49847.9	105.	3.083	75645.	24.53	0.55	1355.	77000.
JAPAN	L	781120	5931N	17817W	16123.3	33163.5	49864.6	144.	2.500	61142.	24.46	0.73	428.	61600.
JAPAN	L	791116	6015N	17825W	16170.2	32814.4	49729.4	105.	3.833	93481.	24.39	0.65	1779.	95200.
JAPAN	L	781020	6000N	17850W	16030.4	32916.1	49788.0	81.	1.167	28195.	24.17	0.45	405.	28600.
JAPAN	L	781031	6026N	17834W	16149.8	32722.1	49697.4	124.	3.333	60429.	24.13	0.70	971.	61400.
JAPAN	L	781031	6007N	17815W	16204.3	32802.2	49719.3	116.	4.500	106433.	24.10	0.73	11900.	119000.
JAPAN	L	781032	6002N	17857W	15998.9	32911.4	49750.7	109.	3.000	71697.	23.97	0.84	701.	72600.
JAPAN	L	781204	6007N	17852W	16036.0	32861.2	49767.1	109.	1.083	25920.	23.93	0.86	480.	26400.
KOREA	M	801114	5648N	17323W	17457.6	34768.7	50180.3	128.	1.917	45625.	23.90	1.50	1455.	47480.
JAPAN	L	801117	6010N	17631W	16135.0	32850.6	49744.5	104.	2.750	64762.	23.53	0.57	1238.	66300.
JAPAN	L	801118	6018N	17815W	16215.0	32795.7	49714.4	87.	2.500	58869.	23.53	0.46	531.	59400.
KOREA	M	771111	5930N	17817W	16121.2	33171.1	49667.5	175.	8.333	195591.	23.47	0.67	2409.	195900.
USSR	M	791211	5942N	17732W	16358.9	33116.0	49813.6	96.	1.000	23351.	23.35	0.21	3649.	33000.
JAPAN	L	791027	6020N	17830W	16156.9	32771.9	49715.3	137.	2.750	63911.	23.24	0.49	2089.	66000.
JAPAN	L	781205	6031N	17831W	16170.8	32683.4	49679.1	108.	2.750	63792.	23.20	0.59	8.	63800.
JAPAN	L	781117	6010N	17849W	16055.3	32639.8	49756.4	159.	1.917	44406.	23.17	1.05	694.	45100.
JAPAN	L	791114	5858N	17812W	16072.1	33412.6	49955.8	144.	2.023	48049.	23.06	0.92	351.	48400.
KOREA	M	771111	5930N	17810W	16155.0	33177.5	49865.3	194.	5.750	131693.	22.90	0.52	307.	132000.
USSR	M	791212	5942N	17715W	16433.7	33129.7	49603.9	90.	1.000	22870.	22.87	0.24	8810.	31680.
JAPAN	L	791028	5827N	17518W	17618.4	34059.8	49954.8	100.	1.583	36198.	22.85	1.05	2302.	38290.
USSR	M	771129	5944N	17842W	16032.6	33043.6	49833.6	142.	1.917	43802.	22.85	0.63	198.	44000.
JAPAN	L	801128	5914N	17720W	16344.1	33344.1	49899.7	91.	2.750	62797.	22.84	0.51	1003.	63600.
JAPAN	L	781127	5937N	17733W	16346.3	33155.5	49830.2	102.	2.417	55149.	22.82	0.44	17431.	72000.
JAPAN	L	801115	6015N	17833W	16135.1	32810.0	49733.2	142.	3.917	69278.	22.80	0.50	902.	90200.
JAPAN	L	791113	6015N	17840W	16095.1	32845.2	49752.5	139.	0.500	11373.	22.75	0.91	207.	14080.
JAPAN	L	781026	6017N	17821W	16191.1	32800.6	49720.8	100.	4.167	93944.	22.55	0.83	5056.	99000.
JAPAN	L	781116	5910N	17817W	16076.0	33320.1	49924.6	82.	2.000	44786.	22.39	0.42	1414.	46200.
JAPAN	L	791110	5855N	17753W	16163.2	33456.6	49960.2	126.	3.750	83627.	22.35	0.95	4173.	58000.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-8 (continued). WALLYE POLLOCK, OCTOBER-DECEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE 7X	APPROX LORAN-C PULSE 7Y	APPROX LORAN-C PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
KOREA	M	8010 4	5637N	17255W	17594.7	34877.5	50173.0	109.	3.917	86651.	22.12	1.28	1349.	86000.
JAPAN	L	7812 3	6027N	17826W	16185.7	32717.8	49689.9	107.	5.583	123030.	22.04	0.53	2370.	125400.
JAPAN	L	781128	5937N	17757W	16231.3	33134.9	49839.5	110.	3.417	75253.	22.03	0.50	3947.	79200.
JAPAN	L	791122	6027N	17833W	16155.8	32714.6	49693.6	125.	3.750	82558.	22.02	0.86	1042.	83600.
KOREA	M	791222	5820N	17526W	16899.9	33923.1	50027.7	186.	3.667	80569.	21.97	1.21	10511.	91080.
KOREA	M	8011 8	5652N	17322W	17478.5	34752.5	50180.3	115.	5.500	120155.	21.85	1.42	8545.	128700.
KOREA	M	771110	5935N	17823W	16101.0	33127.7	49854.5	158.	5.000	109134.	21.83	0.66	806.	110000.
USSR	M	791124	5944N	17728W	16380.9	33102.9	49805.2	93.	1.833	39972.	21.80	0.22	68.	40040.
USSR	M	771121	5551N	17847W	16024.9	32986.8	49814.5	148.	2.000	43523.	21.76	0.59	477.	44000.
KOREA	M	791121	5820N	17527W	16894.2	33921.5	50027.9	200.	3.833	83295.	21.73	1.23	25605.	109900.
USSR	M	7712 8	5941N	17725W	16390.7	33129.8	49813.8	123.	1.750	37991.	21.71	0.45	6009.	44000.
JAPAN	L	801124	5519N	17716W	16400.3	33315.2	49881.0	88.	2.583	54761.	21.20	0.44	239.	35000.
JAPAN	L	7710 1	6007N	17647W	16052.2	32864.3	49765.0	120.	5.500	116320.	21.15	0.73	4660.	123000.
JAPAN	L	7810 2	6016N	17827W	16163.2	32805.4	49727.0	111.	2.167	45602.	21.05	0.63	598.	46200.
USSR	M	791129	5936N	17808W	16176.8	33133.1	49846.5	96.	1.583	33142.	20.93	0.22	758.	34100.
JAPAN	L	781030	6006N	17831W	16038.4	32869.5	49769.8	122.	2.063	43570.	20.91	0.82	430.	44000.
JAPAN	L	781129	5936N	17818W	16129.0	33124.5	49849.9	107.	3.917	81072.	20.70	0.52	2528.	33600.
JAPAN	L	781114	6014N	17835W	16124.5	32816.8	49737.4	144.	2.500	51553.	20.62	1.03	10047.	61600.
JAPAN	L	781113	6020N	17837W	16126.5	32768.3	49718.7	116.	3.417	70051.	20.50	0.79	349.	70400.
JAPAN	L	781116	5937N	17819W	16126.3	33116.0	49247.2	115.	3.083	63007.	20.43	0.76	573.	63580.
JAPAN	L	781113	6018N	17822W	16188.4	32792.0	49718.0	145.	3.417	69598.	20.37	0.79	3012.	72600.
JAPAN	L	601114	5908N	17825W	16030.9	3326.0	49931.8	147.	2.000	40709.	20.35	0.99	871.	41800.
JAPAN	L	781124	6028N	17817W	16225.8	32713.7	49681.6	95.	4.250	26475.	20.33	0.36	1525.	83000.
JAPAN	M	791110	5835N	17755W	16152.8	33454.2	49960.6	131.	1.750	35471.	20.27	0.98	4129.	39600.
KOREA	M	6011 7	5631N	17304W	17516.7	34879.2	50168.6	101.	5.500	111437.	20.26	1.30	4063.	115500.
JAPAN	L	7811 9	5910N	17745W	16237.6	33354.5	49916.9	128.	4.000	61011.	20.25	0.66	389.	41400.
KOREA	M	791221	5827N	17510W	16999.0	33492.5	50003.3	191.	3.500	70594.	20.17	1.47	24226.	94820.
JAPAN	L	781123	5957N	17855W	16001.4	32955.5	49799.1	137.	2.667	53703.	20.14	0.79	1297.	35000.
JAPAN	L	781114	6028N	17842W	16119.1	32702.5	49694.9	153.	3.250	65042.	20.01	0.66	3158.	68200.
JAPAN	L	781122	6028N	17825W	16191.6	32710.2	49686.0	101.	5.250	104936.	19.99	0.34	664.	105600.
USSR	M	7711 3	6008N	17827W	16145.1	32868.8	49753.2	128.	1.867	33000.	19.80	0.59	0.	33000.
JAPAN	L	791030	5858N	17812W	16072.1	33412.6	49955.8	150.	3.500	69093.	19.74	0.94	3507.	72000.
JAPAN	L	7911 5	5837N	17713W	16334.7	33638.3	50000.6	109.	1.500	29432.	19.62	1.01	5768.	35200.
JAPAN	L	201116	6010N	17840W	16095.1	32845.2	49752.5	134.	1.833	35513.	19.37	0.75	567.	36080.
JAPAN	L	781127	5934N	17806W	16182.4	33150.3	49852.0	100.	6.750	130613.	19.35	0.50	1367.	132000.
JAPAN	L	781126	6020N	17837W	16126.5	32768.3	49718.7	169.	3.417	65761.	19.25	1.07	1559.	67320.
JAPAN	L	781115	5949N	17842W	16043.6	33005.8	49818.8	102.	2.167	41689.	19.24	0.73	111.	41600.
JAPAN	L	7710 2	6006N	17802W	16033.9	32868.8	49770.2	102.	3.167	60698.	19.17	0.71	5302.	56000.
KOREA	M	6011 5	5651N	17322W	17475.0	34757.2	50180.3	120.	5.833	111569.	19.13	1.42	6131.	117700.
JAPAN	L	7911 5	6027N	17842W	16117.3	32710.5	49698.2	160.	2.000	38112.	19.06	0.67	1262.	35380.
JAPAN	L	7811 7	5829N	17516W	16967.5	33867.2	49998.8	98.	4.500	85706.	19.05	0.33	974.	36080.
JAPAN	L	781127	5939N	17722W	16402.1	33142.6	49819.1	125.	3.000	56614.	16.94	0.66	35286.	92400.
JAPAN	L	781123	6029N	17833W	16159.1	32698.6	49686.9	113.	3.167	59805.	18.85	0.75	1755.	61600.
JAPAN	L	781119	5912N	17731W	16312.4	33354.3	49907.1	93.	2.917	54798.	18.79	0.64	202.	35000.
JAPAN	L	7811 3	6034N	17828W	16188.3	32660.5	49667.3	103.	2.917	54513.	18.69	0.52	487.	35000.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

437 available trawl records (exceeding 500 lbs/hr CPUE) were not included.

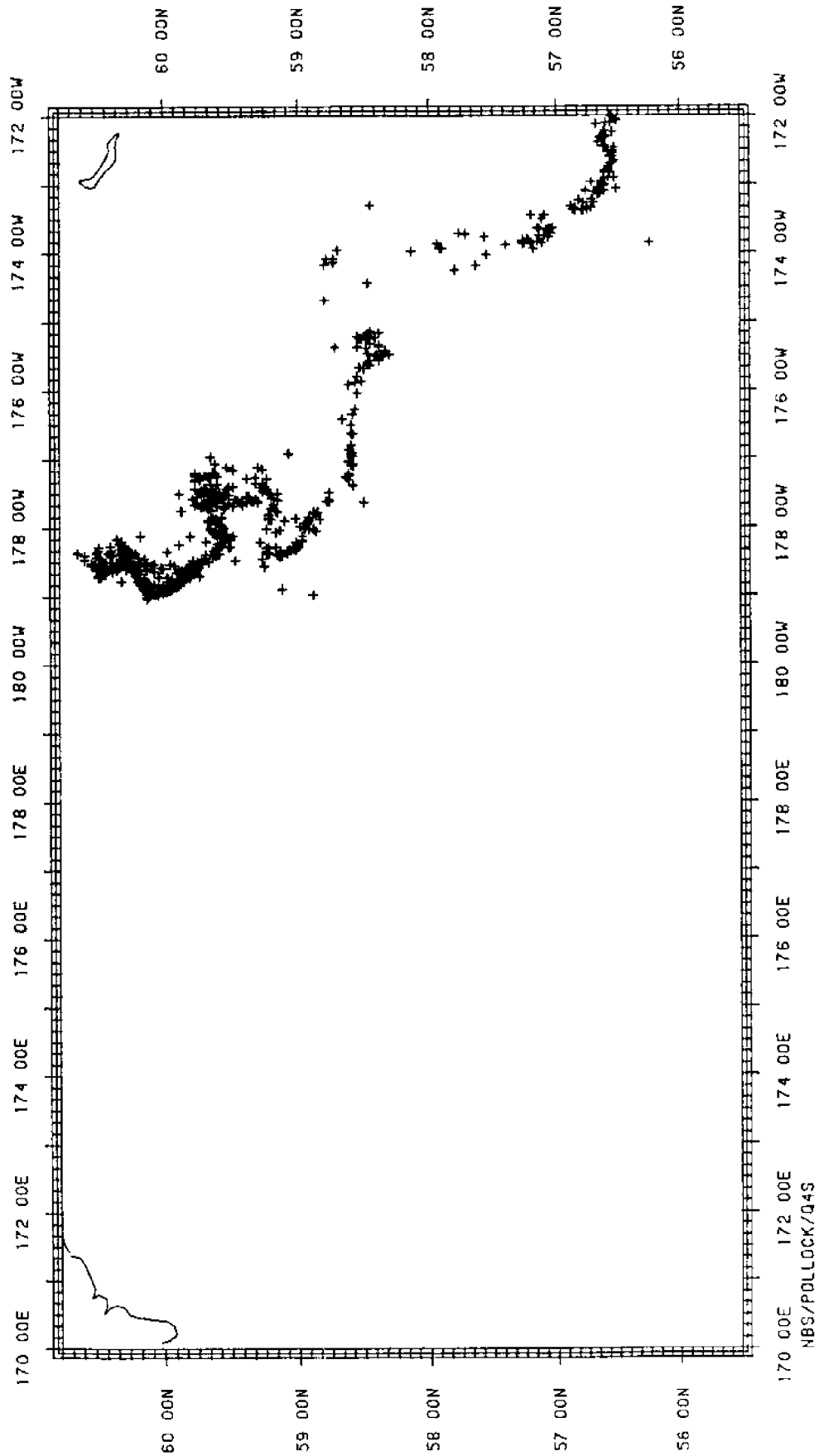


FIGURE A-4. TRAWLING LOCATIONS FOR WALLEYE POLLOCK, OCTOBER-DECEMBER 1977-80

TABLE A-9. PACIFIC COD, JANUARY-MARCH 1977-80

NATION	VESEL CLASS	DATE	YTHMDD	LAT	LONG	APPROX	LORAN-C	PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND	SIZE	BYCATCH	TOTAL
						7X	7Y	7Z	FZ	(FMS)	TRAWLED	(LBS)	PER HOUR	LB5/FISH	(LBS)	(LBS)
KUKEA	M	30	2	6	5635N	17624.3	34895.0	50170.1	*****	96-	1.083	27651.	25.52	3.13	49349.	77000.
JAPAN	L	79	225	5724N	17380.2	34508.8	50150.6	*****	*****	93-	1.083	19658.	18.15	1.79	129942.	149800.
JAPAN	L	80	2	8	5826N	17305.8	33984.8	49988.2	*****	83-	5.000	84835.	16.97	0.81	15225.	104060.
JAPAN	L	79	224	5731N	17356.4	34447.8	50138.3	*****	*****	93-	0.833	12763.	15.32	1.79	136837.	149800.
JAPAN	L	80	2	2	5914N	17330.5	33309.5	49909.0	*****	142-	1.250	16271.	13.02	2.86	67329.	33600.
JAPAN	L	80	312	5837N	16405.5	33656.1	49998.5	*****	*****	89-	0.667	8665.	13.00	3.30	167335.	176000.
JAPAN	L	80	312	5634N	17636.0	34914.7	50167.0	*****	*****	79-	1.417	14787.	10.44	3.11	7211.	22000.
JAPAN	L	79	221	5742N	17276.3	34336.4	50116.0	*****	*****	89-	1.000	10427.	10.43	2.05	139173.	149800.
JAPAN	L	80	129	5915N	16077.8	33281.3	49911.2	*****	*****	128-	1.917	19563.	10.21	2.35	127837.	147400.
JAPAN	L	79	219	5707N	17471.4	34656.5	50172.9	*****	*****	93-	0.667	6797.	10.20	2.61	202203.	239000.
JAPAN	L	79	218	5833N	16132.3	33465.0	49966.4	*****	*****	162-	3.167	28095.	8.87	0.60	114905.	143000.
JAPAN	L	79	216	5700N	17496.3	34710.5	50177.9	*****	*****	90-	0.667	5735.	8.69	1.81	159205.	165000.
JAPAN	L	80	214	5914N	16070.5	33287.6	49914.3	*****	*****	104-	0.917	6080.	6.63	3.00	103920.	110000.
JAPAN	L	77	221	5748N	17267.2	34289.1	50102.3	*****	*****	119-	0.917	5947.	6.49	0.49	73253.	79200.
JAPAN	L	79	224	5730N	17348.2	34432.4	50140.2	*****	*****	90-	0.750	4823.	6.43	1.04	138177.	143000.
JAPAN	L	80	122	5844N	16194.9	33549.6	49987.1	*****	*****	137-	1.333	8309.	6.23	2.28	50691.	99000.
JAPAN	L	80	212	5831N	16984.1	33849.5	49992.9	*****	*****	121-	1.667	10165.	6.10	2.47	83115.	93280.
JAPAN	L	78	2	7	5901N	16054.0	33385.3	49948.8	*****	126-	1.250	7597.	6.08	3.04	146403.	154000.
JAPAN	L	79	212	5856N	16144.8	33444.6	49958.3	*****	*****	118-	1.250	7146.	5.72	5.22	168252.	176000.
JAPAN	L	80	2	2	5915N	16172.6	33300.9	49986.4	*****	148-	1.833	10137.	5.54	2.11	47043.	57200.
JAPAN	L	79	3	3	5747N	17357.4	34615.6	50171.9	*****	109-	2.000	10664.	5.33	3.49	59336.	110000.
JAPAN	L	79	221	5739N	17411N	34383.7	50122.5	*****	*****	89-	0.500	2630.	5.26	1.10	157970.	160600.
JAPAN	L	79	223	5731N	17350.1	34445.7	50138.5	*****	*****	96-	0.750	3943.	5.26	4.13	70855.	74800.
JAPAN	L	79	212	5833N	16755.7	33778.0	49956.7	*****	*****	112-	0.917	4745.	5.18	1.30	11855.	116600.
JAPAN	L	80	128	5908N	16035.9	33327.1	49931.6	*****	*****	104-	2.917	15092.	5.17	2.57	86108.	101200.
JAPAN	M	80	210	5809N	17319.6	34135.0	50043.3	*****	*****	120-	1.250	6217.	4.97	2.10	2583.	8800.
JAPAN	M	30	2	2	5731N	17350.1	34445.7	50138.3	*****	87-	2.083	9867.	4.74	2.27	12133.	22000.
JAPAN	L	79	219	5742N	17202.4	34340.5	50116.0	*****	*****	86-	1.167	5428.	4.65	2.82	166172.	171600.
JAPAN	L	80	123	5810N	16035.9	33311.5	49926.4	*****	*****	151-	2.750	12791.	4.65	2.15	106009.	118800.
JAPAN	L	80	216	5826N	16862.9	33863.9	50032.2	*****	*****	126-	2.750	12773.	4.64	2.28	105367.	118140.
JAPAN	L	78	214	5810N	16050.9	33314.7	49925.7	*****	*****	104-	0.733	3372.	4.60	3.75	95628.	99000.
JAPAN	L	79	327	5742N	17546.6	34428.1	50112.0	*****	*****	89-	0.833	3814.	4.58	1.32	165566.	169400.
JAPAN	L	80	2	8	5825N	17305.5	33933.5	49991.7	*****	100-	2.083	9328.	4.38	0.89	12872.	22000.
JAPAN	L	79	220	5742N	17523.8	34706.9	50177.0	*****	*****	87-	2.333	10074.	4.32	2.85	185926.	176000.
JAPAN	L	78	221	5812N	16066.0	33301.2	49920.0	*****	*****	109-	1.000	4297.	4.30	3.52	127703.	132000.
JAPAN	L	80	210	5918N	16144.3	33271.2	49899.7	*****	*****	159-	2.167	8874.	4.10	2.20	81326.	90200.
JAPAN	L	80	117	5637N	17842.7	34864.0	50164.9	*****	*****	104-	3.083	11696.	3.79	3.33	82904.	94800.
JAPAN	L	77	221	5746N	17270.3	34305.7	50107.0	*****	*****	118-	1.583	5894.	3.72	5.80	64506.	70400.
JAPAN	L	80	320	5834N	16724.0	33761.5	49995.2	*****	*****	112-	2.000	7146.	3.57	2.10	149834.	159800.
JAPAN	L	79	221	5707N	17408.9	34633.7	50172.3	*****	*****	89-	0.667	2376.	3.56	1.85	107624.	110000.
JAPAN	L	80	125	5901N	16054.0	33385.3	49948.8	*****	*****	139-	1.563	5353.	3.51	2.03	49447.	55000.
JAPAN	S	80	120	5639N	17601.3	34939.6	50169.5	*****	*****	87-	1.500	5241.	3.49	2.68	10159.	15400.
JAPAN	L	79	327	5742N	17528.3	34421.9	50113.1	*****	*****	91-	1.583	5915.	3.48	1.17	152860.	156400.
KUKEA	M	79	321	5839N	16312.1	33617.1	49996.2	*****	*****	109-	0.917	3123.	3.41	5.67	4357.	7480.
JAPAN	L	79	2	6	5836N	16936.2	33800.0	49979.0	*****	106-	1.167	3959.	3.39	2.82	95041.	99000.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-9 (continued). PACIFIC COD, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	60 214	5822N	17523W	16919.7 33912.2 50021.4	134.	1.523	5180.	3.27	2.33	30920.	35200.
JAPAN	L	79 214	5822N	17747W	16187.5 33485.6 49967.1	123.	1.500	4888.	3.26	5.50	56712.	61600.
JAPAN	L	79 329	5822N	17520W	16936.7 33916.9 50020.7	128.	2.667	8609.	3.23	4.25	68391.	77000.
JAPAN	L	80 119	5715N	17350W	17365.8 34568.9 50163.5	149.	3.167	10197.	3.22	2.58	44803.	55000.
JAPAN	S	80 116	5645N	17300W	17595.3 34834.5 50178.7	142.	2.667	8490.	3.18	2.50	1410.	9900.
JAPAN	L	80 214	5825N	17531W	16878.5 33876.3 50014.4	127.	1.333	4197.	3.15	2.38	76323.	80520.
JAPAN	S	80 119	5839N	17711W	16350.0 33628.5 49995.1	137.	1.083	3356.	3.10	3.26	2584.	5940.
JAPAN	L	79 226	5831N	17230W	17726.0 34952.6 50160.3	83.	2.583	7962.	3.08	1.27	18438.	26400.
JAPAN	L	80 212	5823N	17519W	16943.6 33910.6 50017.6	139.	2.083	6375.	3.06	2.44	40045.	48420.
JAPAN	L	79 224	5821N	17524W	16912.6 33918.5 50024.4	137.	1.833	5573.	3.04	6.60	33327.	38600.
JAPAN	L	79 224	5727N	17355W	17361.1 34478.7 50145.5	192.	4.583	13868.	3.03	1.31	146732.	100600.
JAPAN	L	77 220	5749N	17416W	17266.6 34281.8 50099.9	138.	1.500	4375.	2.92	4.93	39625.	44000.
JAPAN	L	80 1 6	5851N	17747W	16185.1 33482.9 49969.7	136.	2.417	7012.	2.90	3.11	215568.	226600.
JAPAN	L	79 219	5825N	17421W	17270.5 34009.9 50004.2	116.	0.917	2621.	2.86	3.08	129375.	132000.
JAPAN	L	76 213	5830N	17733W	16256.6 33517.5 49969.8	77.	1.563	3441.	2.80	2.69	116559.	121000.
KOREA	M	80 121	5653N	17315W	17527.3 34763.9 50180.3	84.	4.667	12604.	2.70	3.03	53396.	66000.
JAPAN	L	79 218	5858N	17812W	16072.1 33422.6 49955.8	145.	1.583	4185.	2.54	9.90	103615.	107300.
JAPAN	L	80 126	5907N	17822W	16043.5 33336.5 49933.8	136.	4.000	10278.	2.57	2.19	75522.	85600.
JAPAN	L	79 328	5822N	17347W	17401.3 34528.4 50153.9	84.	2.667	6757.	2.53	1.52	83443.	90200.
JAPAN	L	79 216	5820N	17512W	16986.6 33897.5 50006.9	128.	2.667	6703.	2.51	5.15	85697.	92400.
JAPAN	L	79 221	5905N	17223W	16033.5 33349.8 49939.4	156.	1.750	4331.	2.47	4.51	118889.	123200.
JAPAN	L	80 214	5826N	17536W	16851.7 33860.8 50012.7	138.	3.417	8445.	2.47	2.34	69675.	98120.
JAPAN	L	80 120	5715N	17350W	17365.8 34564.9 50163.5	131.	2.567	6551.	2.46	2.31	30849.	37400.
JAPAN	L	80 2 2	5821N	17522W	16924.0 33921.6 50024.0	148.	1.500	3560.	2.37	2.86	40440.	44000.
JAPAN	L	77 228	5836N	17699W	16406.8 33664.8 50000.9	171.	2.833	6590.	2.33	6.90	30310.	37400.
KOREA	M	80 120	5640N	17305W	17543.1 34843.5 50176.5	79.	2.667	6161.	2.31	2.29	27059.	33220.
JAPAN	L	79 221	5914N	17822W	16060.6 33285.5 49914.7	147.	2.167	4942.	2.28	5.21	72058.	77000.
JAPAN	L	80 210	5824N	17532W	16271.5 33662.6 50017.5	142.	1.833	4136.	2.26	2.21	110924.	115000.
JAPAN	L	79 315	5828N	17514W	16977.6 33878.3 50001.3	119.	1.250	2770.	2.22	1.36	80830.	85800.
JAPAN	M	80 2 9	5713N	17357W	17315.9 34561.2 50165.4	169.	1.750	3784.	2.16	2.31	5016.	6400.
JAPAN	L	80 2 6	5827N	17432W	17211.6 33950.3 49991.3	101.	3.333	7195.	2.16	2.56	50825.	54020.
JAPAN	S	78 215	5633N	17241W	17666.1 34922.4 50156.1	79.	1.667	3582.	2.15	3.00	918.	4400.
JAPAN	L	80 310	5700N	17322W	17504.7 34712.8 50178.0	93.	1.917	4081.	2.13	1.58	21659.	25740.
JAPAN	L	76 314	5833N	17518W	16980.7 33831.2 49986.9	104.	1.000	2114.	2.11	2.53	173866.	176000.
JAPAN	L	79 216	5823N	17514W	16971.9 33918.4 50016.4	133.	5.250	11006.	2.10	4.77	109944.	121000.
JAPAN	L	79 225	5730N	17556W	17360.7 34456.6 50140.2	97.	1.667	3489.	2.09	2.53	165811.	116000.
JAPAN	L	78 215	5915N	17816W	16092.8 33284.4 49910.5	98.	1.667	3475.	2.06	2.31	117525.	121000.
JAPAN	L	80 125	5905N	17821W	16043.6 33352.0 49939.0	120.	1.083	2238.	2.07	1.85	70362.	72000.
JAPAN	L	79 217	5855N	17625W	16593.3 33719.7 49997.5	142.	2.083	4303.	2.07	5.28	107397.	112800.
JAPAN	S	78 214	5633N	17231W	17725.5 34944.2 50163.5	77.	1.417	2698.	2.05	3.05	1502.	4400.
USSR	M	79 327	5733N	17327W	17547.6 34498.2 50133.8	77.	2.833	5759.	2.03	1.15	55401.	61160.
JAPAN	L	80 3 4	5830N	17543W	16618.1 33819.0 50002.6	145.	3.000	6069.	2.02	2.48	60531.	75000.
JAPAN	L	79 219	5819N	17418W	17285.8 34040.1 50013.2	101.	3.667	7417.	2.02	5.16	10183.	17800.
KOREA	H	80 123	5649N	17315W	17513.2 34782.5 50180.3	85.	5.000	10071.	2.01	2.05	60109.	70180.
JAPAN	L	78 217	5902N	17512W	16051.4 33377.0 49946.4	131.	2.917	5831.	2.00	4.14	115169.	121000.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-9 (continued). PACIFIC COD, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX	DEPTH	HOURS	CATCH	THOUSAND	SIZE	BYCATCH	TOTAL
*****	*****	YMMDD	*****	*****	LORAN-C	(FMS)	*****	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
					7X							
JAPAN	L	79 3 2	5822N	17518W	16948.0	33920.1	50020.3	33920.3	1.96	2.34	95741.	99000.
JAPAN	L	80 2 7	5823N	17419W	17282.2	34004.5	50000.1	34000.1	1.94	2.30	115220.	122980.
JAPAN	L	80 3 17	5729N	17356W	17356.8	34463.3	50142.0	2091.	1.93	2.93	167309.	169400.
JAPAN	L	80 1 12	5716N	17350W	17368.3	34558.9	50162.2	4779.	1.91	2.48	39221.	44000.
JAPAN	L	78 3 2	5809N	17823W	16043.4	33320.9	49929.7	2699.	1.91	2.95	56701.	59400.
KOREA	M	80 1 7	5714N	17350W	17363.3	34570.9	50164.7	7608.	1.90	2.39	168392.	176000.
JAPAN	L	80 127	5807N	17822W	16043.5	33336.5	49933.8	4752.	1.90	2.22	164848.	149600.
JAPAN	L	78 219	5809N	17822N	16048.5	33322.0	49928.4	2690.	1.90	2.86	96310.	99000.
JAPAN	L	79 210	5837N	17518W	16964.7	33798.9	49974.2	1730.	1.89	2.97	86270.	88000.
JAPAN	L	78 226	5813N	17822W	16058.2	33292.8	49917.5	2200.	1.89	2.97	118800.	121000.
JAPAN	L	80 121	5836N	17630W	16458.0	33677.2	49999.4	9052.	1.87	2.55	43748.	52800.
JAPAN	L	80 210	5838N	17426W	17248.9	33863.3	49950.0	4614.	1.85	2.40	86026.	90640.
JAPAN	L	79 210	5916N	17822W	16065.3	33270.8	49909.2	3374.	1.84	4.77	67026.	70400.
JAPAN	L	78 218	5807N	17821W	16048.6	33337.6	49933.6	3878.	1.79	3.18	95122.	99000.
JAPAN	L	80 2 4	5821N	17521W	16929.7	33923.2	50023.8	3568.	1.78	3.32	67492.	71060.
JAPAN	L	79 223	5831N	17541W	16830.6	33814.1	49999.2	3551.	1.78	2.95	119649.	123200.
JAPAN	L	79 2 3	5911N	17746W	16234.6	33345.9	49914.3	429.	1.77	6.60	171871.	176000.
JAPAN	L	79 327	5822N	17518W	16948.0	33920.1	50020.3	3061.	1.75	5.06	91539.	94600.
JAPAN	L	78 316	5837N	17647W	16476.4	33673.9	49996.2	1748.	1.75	2.60	44452.	46200.
JAPAN	L	79 224	5827N	17527W	16903.6	33866.7	50007.7	2023.	1.73	2.90	173977.	176000.
JAPAN	S	79 313	5914N	17827W	16035.7	33280.3	49915.9	7827.	1.71	3.52	3525.	11352.
JAPAN	L	79 3 5	5822N	17517W	16953.7	33921.6	50020.0	3075.	1.68	5.15	87125.	90200.
JAPAN	L	77 216	5836N	17647W	16474.4	33681.4	49998.9	3354.	1.68	3.13	111046.	114400.
JAPAN	L	80 2 6	5914N	17747W	16235.7	33122.1	49905.8	3608.	1.62	2.26	112093.	115060.
JAPAN	L	78 225	5906N	17821W	16046.1	33144.8	49936.3	2919.	1.60	1.71	77132.	80740.
JAPAN	L	79 322	5826N	17532W	16674.2	33666.9	50011.8	3963.	1.59	3.41	140081.	143000.
JAPAN	L	79 213	5857N	17759W	16136.8	33435.0	49956.1	3301.	1.59	1.49	110437.	114400.
JAPAN	L	79 223	5830N	17542W	16823.7	33820.5	50002.4	437.	1.58	7.48	102299.	105600.
JAPAN	L	79 325	5837N	17648W	16471.0	33672.6	49996.4	4090.	1.58	1.85	53110.	57200.
JAPAN	L	80 2 8	5827N	17438W	17178.1	33941.2	49993.4	5220.	1.57	2.85	27560.	32780.
JAPAN	L	78 315	5826N	17513W	16981.0	33896.0	50007.1	5215.	1.56	3.17	133365.	138600.
JAPAN	L	78 221	5910N	17823W	16045.9	33113.7	49925.9	1822.	1.56	2.91	97178.	99000.
JAPAN	L	80 3 1	5743N	17414W	17271.7	34329.3	50113.9	3087.	1.54	0.92	15613.	18700.
JAPAN	L	79 326	5741N	17329W	17545.6	34435.6	50115.4	2441.	1.54	0.92	169159.	171600.
JAPAN	S	78 3 7	5634N	17229W	17746.6	34945.3	50164.3	1539.	1.54	3.12	1321.	2060.
JAPAN	L	80 211	5915N	17757W	16187.6	33304.0	49905.6	3687.	1.53	2.07	43613.	47300.
JAPAN	S	80 121	5639N	17225W	17795.0	34937.4	50169.7	1637.	1.47	2.65	3463.	3300.
JAPAN	L	79 220	5734N	17359W	17345.3	34423.2	50132.5	3245.	1.44	0.98	62755.	66000.
JAPAN	L	79 222	5734N	17359W	17474.1	34465.4	50132.1	2986.	1.43	1.22	58614.	61600.
KOREA	H	80 124	5641N	17243W	17688.6	34869.5	50174.7	4493.	1.42	2.96	34227.	38720.
JAPAN	M	79 128	5655N	17306W	17592.5	34775.2	50180.1	704.	1.41	1.32	8096.	8800.
JAPAN	L	80 311	5637N	17231W	17747.6	34930.9	50168.7	4692.	1.41	3.92	149308.	154000.
JAPAN	L	80 213	5824N	17532W	16871.5	33882.6	50017.5	1171.	1.41	2.51	49869.	51040.
JAPAN	L	80 127	5916N	17812W	16115.0	33281.1	49906.7	3848.	1.40	3.47	156752.	160600.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION**

TABLE A-9 (continued). PACIFIC COD, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LOGAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LB S/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	79 327	5827M	17512M	16987.7	33889.4	50003.8	134	2.583	3574.	1.38	2.51	80026.	83600.
USSR	M	79 112	5932N	17813M	16144.7	33159.5	49860.3	123	1.750	2420.	1.38	22.00	30580.	33000.
JAPAN	L	80 229	5823N	17516M	16960.6	33915.3	50016.9	147	2.667	3681.	1.38	3.15	69139.	72820.
KOREA	M	80 114	5837N	17430M	17226.9	33866.6	49955.5	116	3.917	5382.	1.37	2.65	126616.	132000.
JAPAN	L	79 226	5830N	17542M	16823.7	33820.5	50002.4	111	0.917	1248.	1.36	2.05	104352.	105600.
JAPAN	L	80 213	5829N	17737M	16313.6	33215.6	49857.2	132	2.500	3387.	1.35	2.44	48533.	51920.
JAPAN	L	80 2 8	5825N	17430M	17221.6	33970.4	49997.3	85	1.500	2015.	1.34	2.07	40565.	42680.
JAPAN	L	79 213	5857N	17757M	16147.2	33437.3	49955.7	102	3.083	4072.	1.32	1.93	160928.	165000.
JAPAN	M	80 2 1	5713N	17350M	17360.8	34576.8	50165.8	137	2.333	3063.	1.31	2.22	12337.	15400.
JAPAN	L	79 323	5823N	17519M	16949.3	33912.2	50017.3	141	3.250	4249.	1.31	7.15	83751.	88000.
JAPAN	L	79 226	5728N	17355M	17363.1	34472.1	50143.8	87	2.250	2935.	1.30	1.44	43265.	46200.
JAPAN	L	79 225	5917N	17802M	16137.1	33277.7	49902.8	147	2.750	3573.	1.30	7.04	99827.	103400.
JAPAN	L	80 113	5705N	17345M	17371.0	34633.4	50173.7	156	3.000	3985.	1.29	2.05	75315.	79200.
JAPAN	M	80 210	5719N	17352M	17362.7	34536.2	50158.1	153	3.000	3948.	1.28	2.14	26952.	30800.
JAPAN	L	78 2 9	5915N	17820M	16072.9	33280.2	49911.5	169	1.417	1807.	1.28	3.70	163193.	165000.
KOREA	M	80 121	5638N	17301M	17560.5	34860.3	50174.7	116	7.083	8916.	1.24	2.12	13164.	22000.
JAPAN	L	80 2 3	5835M	17636M	16532.8	33704.2	49999.6	133	1.167	1412.	1.21	2.34	7386.	8800.
JAPAN	L	80 315	5834N	17600M	16725.6	33763.0	49999.9	128	3.083	3593.	1.20	1.93	62747.	66440.
JAPAN	L	80 215	5827N	17513M	16982.1	33887.9	50004.1	115	2.500	2894.	1.20	1.96	50906.	53900.
JAPAN	S	80 122	5637N	17232M	1741.5	34928.7	50168.9	83	1.250	1494.	1.19	3.50	486.	1980.
JAPAN	M	79 127	5636M	17207M	17894.3	34986.7	50160.5	82	1.000	1193.	1.19	1.55	12007.	13200.
JAPAN	L	80 218	5835N	17617M	16637.4	33731.0	49995.8	120	2.500	2981.	1.19	1.98	81939.	84920.
JAPAN	L	79 213	5837N	17644M	16492.8	33878.1	49995.7	86	2.833	3364.	1.19	2.08	73636.	77000.
JAPAN	L	78 3 1	5915N	17813M	16107.7	33287.5	49909.8	96	3.667	4340.	1.18	3.21	83660.	88000.
JAPAN	L	80 2 5	5837N	17430M	17226.9	33866.6	49955.5	109	3.000	3542.	1.18	2.48	68618.	72160.
JAPAN	L	79 2 9	5825N	17517M	16957.4	33897.8	50011.2	109	1.667	1966.	1.18	2.86	48634.	50600.
JAPAN	L	80 210	5823N	17520M	16938.0	33909.0	50017.8	144	1.500	1769.	1.18	2.27	24191.	25960.
JAPAN	L	79 312	5822N	17514M	16970.7	33926.3	50019.4	137	1.500	1765.	1.18	1.58	97235.	99000.
JAPAN	L	80 110	5704N	17339M	17406.8	34652.5	50174.8	125	3.563	4209.	1.17	3.11	66191.	70400.
JAPAN	L	79 224	5827N	17537M	16847.5	33851.5	50010.0	122	3.000	3494.	1.16	4.18	135106.	136600.
JAPAN	L	79 226	5822N	17524M	16914.0	33910.6	50021.6	128	2.167	2491.	1.15	6.45	63509.	66000.
JAPAN	L	79 215	5825N	17518M	16957.5	33856.2	49996.2	102	2.167	2477.	1.14	1.48	116523.	121000.
JAPAN	L	80 211	5840N	17446M	1741.3	33818.2	49951.9	109	2.167	2448.	1.13	2.44	52992.	55440.
KOREA	M	80 131	5717N	17351M	17364.3	34550.7	50160.9	128	3.167	3555.	1.12	2.37	22845.	26400.
JAPAN	L	79 326	5739N	17328M	17545.4	34452.6	50120.2	83	2.333	2617.	1.12	1.32	124983.	127600.
JAPAN	S	78 215	5634N	17245M	17645.3	34910.3	50168.2	77	1.917	2142.	1.12	3.03	2478.	4620.
JAPAN	L	79 218	5835N	17642M	16493.9	33895.8	50000.7	149	2.333	2585.	1.11	1.98	76615.	79200.
JAPAN	L	76 3 4	5905N	17821M	16043.6	33352.0	49939.0	115	1.833	2019.	1.10	2.42	136581.	138600.
JAPAN	L	80 215	5828N	17517M	16960.8	33873.8	50002.1	101	2.250	2460.	1.09	7.01	42640.	45100.
JAPAN	L	80 2 4	5822M	17527M	16897.0	33906.0	50022.2	120	2.750	2947.	1.07	2.24	41053.	44000.
KOREA	M	80 2 5	5646N	17322M	17456.8	34779.9	50179.9	126	3.750	4017.	1.07	2.04	22383.	26400.
JAPAN	M	80 2 3	5631N	17244M	17637.6	34922.5	50164.3	120	2.000	2120.	1.06	2.21	6880.	11000.
JAPAN	L	80 2 9	5823N	17531M	16875.7	33891.9	50020.2	140	1.667	1743.	1.05	2.40	66677.	68420.
JAPAN	L	79 212	5857N	17759M	16136.8	33435.0	49956.1	109	1.417	1468.	1.04	5.50	77732.	79200.
JAPAN	L	79 317	5814N	17744M	16250.8	33325.2	49905.0	157	1.083	1122.	1.04	4.40	31878.	33000.

*** NOTE *** THE ACCURACY OF POSITION AND LOGAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-9 (continued). PACIFIC COD, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LB S/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
		YR MO DD			7X 7Y 7Z		IRAWLED	(LBS)			(LBS)	(LBS)
JAPAN	L	79 219	5746N	17416W	17264.2 34303.7 50107.1	112.	0.833	859.	1.03	2.60	11341.	112200.
JAPAN	L	79 213	5831N	17546W	16802.8 33806.7 50300.4	104.	2.500	2374.	1.03	3.52	76626.	79200.
JAPAN	L	80 213	5931N	17737W	16317.0 33199.8 49850.9	130.	1.917	1967.	1.03	2.56	141033.	143000.
JAPAN	L	80 1 9	5706N	17343W	17366.7 34632.5 50173.0	150.	2.750	2809.	1.02	3.65	80791.	83600.
JAPAN	L	79 3 4	5626N	17520W	16941.7 33885.3 50008.9	100.	1.083	1097.	1.01	1.27	36303.	37400.
USSR	M	78 320	5834N	17643W	16492.4 33701.6 50003.5	93.	0.667	672.	1.00	14.08	604.	1276.
JAPAN	L	79 322	5827N	17512W	16987.7 33889.4 50003.8	126.	3.500	3516.	1.00	1.55	93284.	96800.
JAPAN	L	79 211	5813N	17824W	16048.2 33290.7 49917.9	114.	1.417	1422.	1.00	2.95	53578.	55000.
JAPAN	L	79 222	5900N	17817W	16051.5 33392.5 49951.5	129.	1.583	1588.	1.00	3.96	33612.	35200.
KOREA	M	80 122	5855N	17314W	17540.6 34736.5 50180.0	83.	4.083	4082.	0.99	2.36	37518.	41580.
JAPAN	L	80 215	5824N	17520W	16935.2 33901.1 50014.9	123.	4.250	4227.	0.99	2.36	44173.	48400.
JAPAN	L	80 2 9	5826N	17414W	17311.4 33986.3 49987.6	92.	3.167	3154.	0.98	2.48	20426.	23540.
JAPAN	L	80 216	5834N	17527W	16735.1 33764.4 49994.7	125.	1.583	1545.	0.98	2.45	35635.	37180.
JAPAN	L	79 314	5823N	17527W	16898.3 33898.1 50019.3	134.	2.750	2683.	0.98	1.78	45717.	48400.
JAPAN	L	79 113	5825N	17516W	16983.0 33899.4 50019.9	112.	1.833	1771.	0.97	5.50	97229.	99000.
JAPAN	L	80 229	5836N	17647W	16474.4 33681.4 49998.9	132.	2.333	2245.	0.96	3.25	79155.	81400.
JAPAN	M	80 1 4	5707N	17346W	17309.4 34115.2 50037.6	131.	1.583	1520.	0.96	2.29	11680.	13200.
JAPAN	L	78 320	6002N	17858W	15998.7 32895.5 49784.9	115.	2.000	1906.	0.95	3.30	273094.	275000.
JAPAN	L	79 113	5904N	17819W	16051.3 33361.5 49941.3	109.	3.667	3475.	0.95	11.00	40239.	43714.
KOREA	M	80 1 4	5707N	17346W	17370.3 34620.1 50172.0	137.	3.167	2979.	0.94	2.99	34421.	37400.
USSR	M	79 325	5744N	17495.9 34396.6 50108.5	79.	2.000	1664.	1664.	0.93	1.74	26736.	28600.
JAPAN	L	79 227	5823N	17529W	16887.0 33895.0 50039.7	122.	0.833	776.	0.93	2.31	87224.	88000.
JAPAN	M	80 2 1	5835N	17252W	17605.1 34891.4 50170.6	142.	3.000	2736.	0.91	2.51	19264.	20000.
JAPAN	L	80 213	5822N	17526W	16982.7 33907.5 50022.0	141.	5.000	4540.	0.91	2.54	76640.	81180.
JAPAN	L	78 1 9	5833N	17244W	17647.0 34915.9 50166.8	118.	1.917	1727.	0.90	2.44	26873.	28600.
JAPAN	S	60 116	5655N	17322W	17488.7 34738.0 50179.8	159.	4.333	3903.	0.90	2.45	5997.	9900.
JAPAN	L	79 311	5823N	17512W	16945.3 33912.2 50017.3	136.	2.167	1951.	0.90	2.09	92649.	94600.
KOREA	M	80 112	5703N	17339W	17401.8 34657.9 50175.5	200.	9.917	8694.	0.90	2.06	79106.	88000.
JAPAN	S	78 216	5645N	17314W	17504.8 34802.5 50179.4	79.	1.917	1715.	0.89	3.10	485.	2200.
JAPAN	L	79 316	5827N	17512W	16987.7 33889.4 50003.8	115.	2.750	2458.	0.89	1.35	96542.	99000.
JAPAN	L	79 1 5	6006N	17848W	16051.7 32871.4 49768.6	109.	2.833	2529.	0.89	5.76	41779.	44308.
JAPAN	L	78 224	5837N	17811W	16074.8 33420.9 49958.3	159.	2.750	2453.	0.89	3.25	118547.	121000.
JAPAN	L	80 2 8	5827N	17539W	16836.3 33848.5 50010.4	175.	1.583	1392.	0.88	2.21	47908.	48400.
JAPAN	L	79 2 9	5856N	17753W	16165.5 33449.3 49957.6	98.	3.500	3061.	0.87	10.34	80539.	83600.
JAPAN	L	80 3 3	5828N	17512W	16986.6 33897.5 50006.9	128.	0.750	656.	0.87	4.09	43344.	44000.
JAPAN	S	80 118	5819N	17708W	16366.2 33630.5 49994.6	137.	2.333	1999.	0.86	2.02	2401.	4400.
JAPAN	S	80 3 6	5838N	17717W	16315.2 33625.6 49998.6	153.	2.500	2142.	0.86	2.99	55058.	57200.
JAPAN	L	77 211	5919N	17733W	16315.4 33292.0 49888.7	132.	2.667	2258.	0.85	11.99	28542.	30800.
JAPAN	L	78 210	5915N	17825W	16040.0 33275.1 49912.7	180.	1.667	1410.	0.85	4.12	53590.	55600.
JAPAN	L	79 219	5903N	17818W	16048.9 33384.2 49946.0	146.	0.84	2169.	0.84	6.60	52631.	55000.
JAPAN	L	79 324	5824N	17530W	16882.7 33885.7 50017.1	132.	3.417	2855.	0.84	1.35	74145.	77000.
JAPAN	L	80 315	5816N	17613W	16661.0 33729.0 49992.1	109.	2.083	1728.	0.83	2.35	37652.	39390.
JAPAN	L	80 116	5835N	17206W	17895.6 34991.8 50156.5	86.	3.250	2688.	0.83	2.31	30312.	33000.
JAPAN	L	79 319	5923W	17532W	16922.0 33383.4 49816.3	114.	1.667	1376.	0.83	1.26	47024.	48400.
KOREA	H	80 112	5703N	17333W	17416.7 34662.4 50175.6	139.	4.000	3276.	0.82	2.47	51724.	55000.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-9 (continued). PACIFIC COD, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LOMAN-C 7Y	PULSE RATES 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	78 217	5731N	17358W	17350.1	34445.7	50138.3	78.	1.500	1224.	0.82	2.49	3176.	4400.
JAPAN	L	79 3 5	5935N	17742W	16299.7	33163.6	49840.2	150.	3.250	2650.	0.82	17.60	88430.	91080.
KOREA	M	80 111	5713N	17352W	17347.9	34572.3	50165.7	160.	4.167	3392.	0.82	2.59	42803.	46200.
JAPAN	L	80 312	5829N	17537W	16850.2	33835.8	50004.1	116.	2.083	1892.	0.81	2.28	43188.	44980.
JAPAN	L	79 329	5712N	17329W	17493.0	34630.1	50168.0	81.	2.583	2095.	0.81	4.95	118915.	121000.
JAPAN	L	78 3 4	5900N	17812W	16077.1	33398.2	49950.6	90.	3.687	2998.	0.81	3.26	96042.	99000.
JAPAN	L	80 3 4	5826N	17532W	16874.2	33866.9	50011.8	119.	2.750	2215.	0.81	3.17	83145.	85360.
JAPAN	L	79 2 4	5845N	17510W	17014.6	33742.6	49944.6	96.	0.500	401.	0.80	1.32	98599.	99000.
JAPAN	L	80 214	5822N	17521W	16931.0	33915.4	50020.9	142.	1.750	1400.	0.80	2.46	9600.	11000.
JAPAN	L	79 227	5825N	17531W	16878.5	33876.3	50014.4	119.	1.250	995.	0.80	1.98	82605.	83600.
JAPAN	L	80 3 3	5825N	17513W	16979.9	33904.0	50010.2	133.	1.500	1194.	0.80	2.95	171506.	172700.
JAPAN	L	79 325	5837N	17646W	16481.9	33675.3	49996.0	97.	1.833	1440.	0.79	1.25	60160.	61600.
JAPAN	L	79 216	5829N	17519W	16950.8	33862.7	49999.6	95.	1.500	1178.	0.79	3.58	46822.	88000.
JAPAN	L	79 327	5825N	17551W	17382.3	34500.4	50149.0	78.	2.667	2079.	0.78	0.99	70521.	72600.
JAPAN	L	80 113	5706N	17345W	17373.9	34627.9	50172.9	175.	2.500	1948.	0.78	2.63	20052.	22000.
JAPAN	L	79 211	5835N	17614W	16653.9	33735.3	49995.2	109.	2.000	1557.	0.78	2.31	108443.	110000.
JAPAN	L	78 317	6004N	17903W	15980.7	32877.0	49780.7	178.	3.000	2332.	0.78	3.74	123068.	125400.
JAPAN	L	79 316	5813N	17752W	16204.5	33324.4	49910.1	156.	1.667	1293.	0.78	2.45	36107.	37400.
JAPAN	L	77 228	5836N	17517W	16969.2	33808.6	49977.1	140.	2.000	1551.	0.78	1.44	20449.	22000.
JAPAN	L	79 225	5824N	17516W	16961.8	33907.3	50033.9	116.	4.167	3150.	0.76	6.34	20450.	227600.
JAPAN	L	80 3 4	5822N	17515W	16905.0	33924.8	50019.6	124.	2.167	1638.	0.76	2.92	37962.	39600.
JAPAN	L	80 2 5	5822N	17522W	16925.3	33913.8	50021.1	150.	1.417	1057.	0.75	2.44	58343.	59400.
JAPAN	L	80 216	5836N	17617W	16639.0	33723.3	49993.0	119.	2.500	1856.	0.74	2.20	148844.	150700.
JAPAN	L	79 215	5824N	17514W	16973.1	33910.4	50013.4	128.	2.167	1599.	0.74	4.84	108401.	110000.
JAPAN	L	79 227	5826N	17520W	16941.7	33895.3	50008.9	97.	1.667	1229.	0.74	2.07	152779.	154000.
JAPAN	L	79 223	5730N	17337W	17354.5	34454.5	50140.2	94.	2.083	1521.	0.73	1.21	174479.	176000.
JAPAN	L	79 2 8	5933N	17740W	16305.9	33101.3	49845.8	145.	1.833	1329.	0.72	4.62	152671.	154000.
JAPAN	L	79 3 7	5822N	17524W	16914.0	33910.6	50021.6	132.	2.417	1743.	0.72	3.42	62055.	63800.
JAPAN	L	80 121	5833N	17555W	16755.7	33778.0	49996.7	115.	1.167	840.	0.72	2.18	27760.	28600.
KOREA	M	80 1 9	5713N	17351W	17354.5	34574.6	50165.8	148.	3.250	2336.	0.72	2.48	63664.	66000.
JAPAN	L	80 217	5835N	17555W	16755.7	33778.0	49996.7	126.	1.500	1078.	0.72	1.96	77242.	78320.
JAPAN	L	79 217	5825N	17517W	16957.4	33897.0	50011.2	109.	1.917	1331.	0.69	2.64	29469.	30800.
JAPAN	L	80 315	5851N	17745W	16195.6	33495.3	49969.4	107.	1.917	1124.	0.69	2.66	25076.	26400.
JAPAN	S	78 3 5	5747N	17416W	17265.7	34298.5	50104.7	98.	0.667	459.	0.69	4.04	1741.	2200.
JAPAN	L	80 2 9	5829N	17430W	17223.7	33936.2	49983.7	102.	4.083	2756.	0.68	2.17	17034.	19200.
JAPAN	L	79 222	5823N	17347W	17403.4	34522.0	50152.4	81.	1.333	903.	0.68	1.07	109097.	110000.
JAPAN	L	78 3 5	5855N	17814W	16054.2	33431.6	49964.0	186.	1.583	1070.	0.68	4.62	75930.	77000.
JAPAN	L	80 2 4	5813N	17741W	16263.9	33336.0	49907.1	147.	1.250	842.	0.67	1.43	100358.	101200.
JAPAN	S	80 118	5838N	17621W	16620.5	33702.4	49988.2	140.	2.667	1790.	0.67	2.26	2170.	3960.
JAPAN	L	80 3 5	5826N	17535W	16857.3	33862.4	50012.4	142.	2.750	1832.	0.67	2.44	45468.	47500.
JAPAN	L	80 214	5917N	17736W	16296.7	33310.5	49893.7	136.	3.000	1979.	0.66	2.59	4841.	6820.
JAPAN	L	80 212	5823N	17731W	16332.5	33268.6	49873.8	106.	3.250	2143.	0.66	3.02	37457.	39600.
USSR	M	79 327	5744N	17329W	17548.9	34412.9	50107.7	85.	2.000	1316.	0.66	1.20	42684.	44000.
KOREA	M	80 1 5	5719N	17351W	17365.1	34538.4	50158.2	153.	5.050	3306.	0.65	2.32	135294.	136600.
JAPAN	S	80 121	5633N	17235W	17704.0	34935.5	50164.6	120.	1.500	981.	0.65	3.48	1219.	2200.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-10. PACIFIC COD, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	YR	MO	DAY	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
								7X 7Y 7Z							
KOREA	M	80	427	5831N	17526W	16914.1	33836.2	49995.4	84.	1.667	22838.	13.70	3.30	20062.	42900.
KOREA	M	80	427	5714N	17347W	17382.5	34577.6	50164.8	80.	6.000	47492.	7.92	3.19	18508.	66000.
KOREA	M	80	423	5651N	17320W	17488.0	34761.8	50180.4	96.	3.917	29953.	7.65	3.16	39127.	69080.
KOREA	M	80	428	5711N	17345W	17387.6	34599.7	50168.3	80.	2.750	20024.	7.29	3.72	49716.	69740.
KOREA	M	80	425	5702N	17345W	17362.1	34649.6	50175.8	81.	7.583	41242.	5.44	3.33	43458.	84700.
JAPAN	L	79	418	5506N	17820W	16051.2	33345.9	49936.1	93.	2.503	12414.	4.97	2.17	68986.	81400.
KOREA	M	80	424	5640N	17305W	17543.1	34843.5	50176.5	84.	4.083	18779.	4.60	3.29	7621.	26400.
JAPAN	L	79	4	5816N	17413W	17312.6	34073.5	50021.5	94.	1.750	7654.	4.37	6.36	36346.	44000.
JAPAN	L	77	5	5835N	17630W	16565.8	33712.6	49998.5	148.	2.167	9203.	4.25	6.29	45797.	55000.
JAPAN	L	77	416	5706N	17343W	17386.7	34632.5	50173.0	116.	1.417	6008.	4.24	3.37	20292.	209000.
JAPAN	L	79	4	5833N	17521W	16944.1	33827.4	49987.8	90.	1.917	7937.	4.14	2.51	168063.	176000.
JAPAN	L	79	612	5707N	17333W	17454.1	34649.7	50172.7	93.	1.250	5005.	4.00	5.48	3795.	8800.
KOREA	M	80	422	5634N	17245W	17645.3	34910.3	50168.2	103.	2.583	10140.	3.93	3.01	3940.	14080.
KOREA	L	77	414	5718N	17351W	17366.7	34544.5	50159.5	107.	1.500	5523.	3.68	3.37	170477.	176000.
JAPAN	L	77	418	5707N	17343W	17385.6	34626.9	50172.2	107.	3.167	10469.	3.31	2.45	165531.	176000.
KOREA	M	80	423	5644N	17319W	17458.6	34795.4	50179.3	100.	4.000	12634.	3.16	3.31	36646.	49280.
JAPAN	L	79	627	5634N	17249W	17615.8	34901.5	50169.0	116.	3.333	9726.	2.92	5.06	89274.	99000.
JAPAN	S	80	429	5853N	17751W	16168.9	33473.5	49965.2	135.	1.500	4198.	2.80	3.61	3282.	7480.
JAPAN	L	77	5	5828N	17420W	17278.8	33959.9	49983.2	77.	2.417	6189.	2.55	3.16	86211.	92400.
JAPAN	L	77	421	5827N	17533W	16869.9	33857.6	50009.1	107.	2.000	5047.	2.52	5.89	63353.	70400.
JAPAN	S	78	423	5747N	17411W	17296.1	34306.3	50104.3	93.	1.000	2484.	2.48	4.83	156.	2640.
JAPAN	L	79	628	5633N	17239W	17678.7	34926.8	50165.6	90.	3.250	7736.	2.38	4.36	86864.	94600.
JAPAN	L	77	419	5710N	17347W	17372.1	34600.9	50169.2	113.	2.250	5135.	2.28	3.32	93865.	99000.
JAPAN	S	78	423	5744N	17406W	17322.3	34338.1	50111.1	87.	1.167	2636.	2.26	3.48	224.	2860.
JAPAN	L	77	418	5709N	17346W	17375.8	34608.9	50170.2	106.	1.417	3084.	2.18	2.93	108916.	110000.
JAPAN	L	77	420	5705N	17321W	17524.0	34688.4	50174.9	86.	2.000	4309.	2.15	2.78	61691.	66000.
JAPAN	S	80	425	5901N	17816W	16055.1	33386.4	49948.7	164.	3.583	7590.	2.12	2.92	3950.	11440.
JAPAN	L	77	512	5706N	17326W	17490.5	34671.3	50173.9	83.	1.000	1990.	1.99	3.49	22210.	24200.
KOREA	M	80	5	5827N	17413W	17317.2	33979.1	49983.8	96.	4.083	7872.	1.93	3.41	35248.	43120.
JAPAN	L	79	526	5641N	17220W	17835.7	34941.6	50171.0	79.	2.250	4085.	1.82	2.55	198315.	202400.
JAPAN	S	80	5	5836N	17655W	16430.7	33670.3	50000.3	164.	3.917	6951.	1.77	2.84	4769.	11660.
JAPAN	L	77	428	5706N	17340W	17406.1	34639.3	50173.2	95.	1.250	2205.	1.76	1.14	118795.	121000.
JAPAN	L	79	627	5634N	17233W	17721.4	34936.6	50165.4	90.	4.917	8318.	1.69	4.11	57682.	66000.
JAPAN	L	77	426	5636N	17608W	16686.5	33736.0	49991.0	101.	1.667	2756.	1.65	4.18	212844.	215600.
KOREA	M	80	428	5716N	17349W	17374.7	34561.2	50162.3	128.	9.417	15010.	1.59	2.96	22390.	37400.
JAPAN	M	78	420	5708N	17332W	17463.3	34646.3	50171.9	93.	1.000	1563.	1.56	3.52	10977.	12540.
JAPAN	M	79	411	6024N	17838W	16125.2	32736.1	49706.1	153.	2.583	3948.	1.53	5.28	90652.	94600.
KOREA	H	80	429	5858N	17702W	16396.7	33646.0	49996.2	101.	6.750	9873.	1.46	3.77	54367.	64240.
JAPAN	L	79	414	6008N	17848W	16055.7	32855.9	49762.3	112.	2.667	3851.	1.44	14.52	92949.	96800.
JAPAN	M	79	415	5947N	17836W	16067.2	33025.6	49822.7	100.	3.583	5010.	1.40	5.94	65390.	70400.
KOREA	M	80	425	5706N	17345W	17373.9	34627.9	50172.9	136.	8.167	11355.	1.39	2.76	20765.	32120.
KOREA	M	79	4	5707N	17324W	17512.2	34670.3	50173.2	87.	1.667	2235.	1.34	2.31	41765.	44000.
KOREA	M	78	617	5706N	17340W	17406.1	34639.3	50173.2	82.	5.583	7162.	1.28	4.49	16838.	44000.
JAPAN	L	79	626	5834N	17248W	17626.2	34903.7	50168.8	109.	2.333	2980.	1.28	5.10	74020.	77000.
JAPAN	L	77	418	5634N	17246W	17638.9	34908.1	50168.4	109.	1.833	2321.	1.27	12.10	59279.	61600.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-10 (continued). PACIFIC COD, APRIL-JUNE 1977-80

VESSEL CLASS	DATE	NATIJA	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
	YYMMDD				7X 7Y 7Z							
L	79 419	5907N		17821M	33337.6	49933.6	91	2.833	1.24	1.16	29488.	33000.
JAPAN												
S	79 530	5842N		17726M	33584.7	49989.7	98	3.000	1.22	7.88	2514.	6160.
JAPAN												
S	80 5 7	5836N		17655M	33670.3	50000.3	166	4.917	1.20	2.67	4639.	10560.
JAPAN												
S	80 5 5	5806N		17824M	33361.5	49936.9	166	2.833	1.20	3.51	1211.	4620.
JAPAN												
M	80 426	5835N		17634M	33707.0	49999.2	144	5.083	1.13	3.03	27687.	33440.
KOREA												
M	79 615	5845N		17245M	34869.0	50177.7	75	1.250	1.08	3.38	5245.	6600.
KOREA												
M	73 611	5839N		17237M	34865.5	50174.9	78	3.167	1.06	3.57	18585.	22000.
KOREA												
M	78 612	5836N		17257M	34869.3	50174.1	92	4.500	1.06	3.37	26025.	30800.
KOREA												
M	78 617	5806N		17336M	34648.4	50173.4	93	3.333	1.03	4.18	44980.	48400.
KOREA												
L	79 410	6007N		17842M	32867.4	49762.9	173	2.083	1.03	6.38	140863.	143000.
JAPAN												
S	80 5 8	5836N		17653M	33673.1	49959.9	169	4.917	1.02	2.66	8608.	13640.
JAPAN												
L	79 418	5914N		17822M	33285.5	49914.7	96	2.000	1.01	1.13	13378.	15400.
JAPAN												
L	79 628	5835N		17249M	34898.0	50170.1	100	1.917	0.97	6.93	42143.	44000.
JAPAN												
M	80 427	5714N		17350M	34570.9	50164.7	137	9.167	0.95	2.04	17662.	26400.
KOREA												
S	78 516	5849N		17301M	34814.8	50180.0	77	3.083	0.95	4.09	2356.	5280.
JAPAN												
L	77 5 8	5855N		17800M	33448.2	49961.5	142	1.833	0.94	8.53	4862.	6600.
JAPAN												
M	80 5 2	5830N		17425M	33935.0	49978.2	82	2.000	0.93	3.41	15516.	17380.
KOREA												
S	78 517	5837N		17429M	33868.0	49955.0	96	5.000	0.93	7.23	1091.	5720.
JAPAN												
M	79 415	5707N		17343M	34826.9	50172.2	109	4.583	0.90	2.93	55259.	59400.
KOREA												
M	79 416	5721N		17350M	34528.1	50155.3	91	5.750	0.90	3.01	58644.	63800.
KOREA												
S	79 527	5836N		17708M	33852.4	50002.4	164	4.000	0.88	6.97	11862.	15400.
JAPAN												
L	77 515	5702N		17322M	34702.3	50176.9	90	2.750	0.86	6.05	35033.	37400.
JAPAN												
L	79 4 8	5914N		17822M	33285.5	49914.7	126	2.333	0.85	2.51	2414.	4400.
JAPAN												
M	79 4 9	5857N		17318M	34737.4	50179.3	97	2.167	0.82	1.51	34954.	36740.
KOREA												
M	78 529	5838N		17266M	34893.9	50172.5	101	7.250	0.82	3.31	33691.	39600.
KOREA												
L	77 417	5710N		17348M	34598.7	50169.1	114	1.417	0.81	1.54	130848.	132000.
JAPAN												
L	79 418	5900N		17805M	33406.2	49949.2	81	2.083	0.81	2.82	42321.	44000.
JAPAN												
S	80 5 2	5854N		17757M	34459.0	49963.6	254	2.000	0.79	3.10	1273.	2860.
JAPAN												
S	78 519	5830N		17429M	33929.1	49979.8	93	2.750	0.78	5.05	2463.	4620.
JAPAN												
M	79 414	5717N		17353M	34590.7	50160.9	109	1.667	0.78	1.95	18497.	19800.
KOREA												
S	80 510	5857N		17810M	33422.1	49958.1	137	3.000	0.78	3.02	2276.	4620.
JAPAN												
S	78 518	5831N		17429M	33920.5	49976.4	97	3.250	0.77	5.27	1663.	4180.
JAPAN												
L	79 613	5716N		17338M	34585.7	50162.8	74	3.417	0.77	6.16	32555.	35200.
JAPAN												
L	79 4 2	5823N		17529M	33895.0	50019.8	120	1.917	0.75	2.66	27156.	28600.
JAPAN												
L	79 4 4	5839N		17452M	33818.5	49957.9	128	2.417	0.74	2.93	33411.	35200.
JAPAN												
L	77 415	5712N		17350M	34582.6	50166.9	154	3.167	0.74	6.82	118661.	121000.
JAPAN												
M	79 518	5836N		17231M	34934.3	50167.4	104	2.583	0.74	2.99	21857.	23760.
KOREA												
L	79 418	5904N		17818M	33862.6	49941.1	93	1.750	0.74	1.38	55913.	57200.
JAPAN												
M	80 5 1	5836N		17645M	33684.1	49998.5	141	3.667	0.74	2.66	12703.	15400.
KOREA												
M	79 417	5701N		17316M	34721.5	50177.7	82	2.333	0.73	2.00	40968.	42680.
KOREA												
M	79 422	5837N		17651M	33668.4	49996.8	126	6.750	0.72	7.08	32996.	37840.
KOREA												
L	77 5 8	5842N		17727M	34870.4	49949.8	89	4.083	0.71	6.73	21299.	24200.
JAPAN												
M	78 625	5837N		17210M	34977.1	50163.1	87	4.833	0.71	4.16	11968.	15400.
KOREA												
M	79 5 3	5835N		17205M	34993.9	50158.1	87	3.500	0.70	4.17	10733.	13200.
KOREA												
L	79 615	5833N		17410M	33921.8	49963.5	79	4.000	0.70	3.96	113781.	116600.
JAPAN												

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-10 (continued). PACIFIC COD, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
KOREA	M	79 430	5716N	17349W	17374.7 34561.2 50162.3	87	2.667	1872.	0.70	3.44	53128.	55000.
JAPAN	S	79 521	5710N	17350W	17352.8 34594.2 50169.0	150	3.500	2439.	0.70	7.12	3721.	6160.
JAPAN	L	79 4 5	5241N	17452W	17109.4 33801.3 49951.0	108	3.417	2379.	0.70	8.21	30621.	33000.
JAPAN	S	78 5 7	5745N	17415W	17208.8 34313.0 50109.4	98	0.500	344.	0.69	3.58	316.	660.
KOREA	M	78 6 9	5636N	17255W	17599.0 34873.7 50173.9	93	3.667	2519.	0.69	3.24	41481.	44000.
KOREA	M	79 4 1	5638N	17212W	17872.6 34969.6 50165.2	78	2.167	1485.	0.69	3.04	53515.	55000.
KOREA	H	79 426	5706N	17340W	17406.1 34639.3 50173.2	93	3.333	2280.	0.68	2.97	17520.	19800.
KOREA	M	80 430	5836N	17645W	16485.4 33684.1 49998.5	87	5.750	3901.	0.68	2.29	14799.	18700.
JAPAN	L	79 613	5717N	17337W	17453.8 34581.9 50181.5	77	4.750	3213.	0.68	2.62	40787.	44000.
JAPAN	L	77 5 6	5840N	17715W	16330.5 33613.8 49791.1	85	0.500	335.	0.67	3.50	19465.	19800.
KOREA	M	79 5 2	5635N	17201W	17926.6 35002.3 50156.5	85	2.500	1615.	0.65	3.70	59985.	61600.
JAPAN	S	80 520	5835N	17637W	16527.3 33702.8 49799.8	162	5.000	3197.	0.64	3.07	3183.	6380.
KOREA	M	80 427	5828N	17534W	16865.7 33848.2 50006.4	103	9.833	6258.	0.64	2.64	23442.	29700.
KOREA	M	79 5 6	5641N	17230W	17771.9 34919.0 50172.8	77	1.833	1146.	0.63	2.60	47254.	48400.
JAPAN	S	78 518	5834W	17428W	17236.8 33895.8 49765.4	93	3.250	1953.	0.60	5.59	2227.	4180.
JAPAN	L	77 419	5708N	17345W	17375.5 34616.8 50171.2	108	2.083	1244.	0.60	3.02	64756.	66000.
KOREA	M	78 620	5643N	17233W	17761.2 34904.6 50175.0	84	4.417	2574.	0.58	4.13	63426.	66000.
JAPAN	L	79 614	5727N	17342W	17443.1 34506.8 50145.7	75	3.250	1893.	0.58	2.64	48707.	50600.
KOREA	M	79 428	5711N	17336W	17445.5 34620.0 50168.7	98	2.500	1454.	0.58	3.23	22746.	24200.
KOREA	M	80 5 1	5830N	17418W	17290.5 33945.4 49975.3	82	6.333	3650.	0.58	2.73	18350.	22000.
JAPAN	S	80 519	5829N	17546W	16795.9 33822.4 50006.2	165	5.000	2845.	0.57	2.90	3755.	6600.
JAPAN	S	79 528	5835N	17645W	16483.4 33691.6 50001.2	175	3.500	1988.	0.57	3.63	13412.	15400.
KOREA	M	80 430	5842N	17624W	16610.7 33667.4 49977.4	84	5.167	2927.	0.57	2.35	72313.	75246.
JAPAN	L	79 614	5800N	17355W	17406.6 34236.7 50067.0	80	4.250	2392.	0.56	3.02	101008.	103400.
JAPAN	L	79 617	5843N	17428W	17239.2 33815.9 49932.5	93	1.667	933.	0.56	1.61	126667.	127600.
JAPAN	S	79 421	5638N	17206W	17910.3 34982.7 50163.4	191	3.000	1662.	0.55	4.32	3838.	5500.
JAPAN	L	79 615	5806N	17402W	17365.9 34175.3 50050.3	80	2.250	1245.	0.55	5.13	44955.	46200.
JAPAN	S	78 423	5744N	17400W	17359.1 34350.1 50110.6	126	1.750	968.	0.55	3.58	1232.	2200.
JAPAN	L	77 5 2	5838N	17716W	16320.6 33627.0 49998.4	110	2.833	1540.	0.54	7.15	75460.	77000.
JAPAN	S	80 5 4	5855N	17806W	16095.6 33441.1 49962.6	202	4.000	2173.	0.54	3.18	2447.	4620.
KOREA	M	80 429	5838N	17711W	16347.8 33633.8 49997.7	124	5.500	2917.	0.53	2.72	24583.	27500.
KOREA	M	80 5 2	5837N	17417W	17297.4 33884.7 49949.3	81	1.917	1016.	0.53	2.96	164864.	165880.
JAPAN	S	79 6 1	5951N	17846W	16025.5 32987.5 49814.1	120	4.167	2174.	0.52	4.72	50886.	7260.
JAPAN	L	77 5.5	5701W	17322W	17507.8 34707.5 50177.5	85	1.333	679.	0.51	3.41	25721.	26400.
JAPAN	L	80 4 3	5741N	17413W	17274.6 34345.5 50118.2	107	2.333	1186.	0.51	2.37	1014.	2200.
KOREA	M	79 418	5724N	17333W	17367.5 34502.5 50150.6	115	3.333	1675.	0.50	1.79	31985.	33660.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-11. PACIFIC COD, JULY-SEPTEMBER 1977-80

VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	PULSE 7Y	RATES 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	78 723	5642N	17321W	17470.7	34773.3	50180.2	97.	2.000	11341.	5.67	5.23	142659.	154000.
JAPAN	80 810	5640N	17740W	16195.6	33580.7	49996.9	77.	1.417	5679.	4.01	5.15	2021.	7700.
JAPAN	79 713	5637N	17243W	17671.4	34904.2	50171.0	74.	0.750	2716.	3.62	2.86	133682.	136400.
JAPAN	79 720	5708N	17325W	17506.4	34662.4	50172.2	78.	1.583	4944.	3.12	3.08	127456.	132000.
JAPAN	78 722	5706N	17340W	17406.1	34639.3	50173.2	109.	3.083	9469.	3.07	4.81	166531.	176000.
JAPAN	78 729	5644N	17318W	17475.1	34797.7	50179.3	90.	3.167	9602.	3.03	5.50	124598.	134200.
JAPAN	79 718	5635N	17246W	17643.4	34904.7	50169.5	83.	2.333	6173.	2.65	3.45	169827.	176000.
JAPAN	78 918	5910N	17756W	16181.9	33342.6	49919.7	98.	3.250	8121.	2.50	15.84	90879.	99000.
JAPAN	78 728	5707N	17347W	17363.6	34617.9	50172.0	150.	2.250	5025.	2.23	5.34	89575.	94500.
JAPAN	78 721	5633N	17240W	17672.4	34924.6	50165.8	136.	1.167	2243.	1.92	5.50	107757.	110000.
JAPAN	78 727	5707N	17346W	17370.3	34620.1	50172.0	139.	1.667	3154.	1.89	5.50	78446.	11000.
JAPAN	79 715	5636N	17231W	17743.3	34934.3	50167.4	83.	2.083	3821.	1.83	2.80	123779.	127600.
JAPAN	78 8 7	5635N	17251W	17611.5	34893.6	50170.5	96.	1.583	2816.	1.78	4.40	89584.	92400.
JAPAN	80 8 8	5800N	17359W	17382.9	34229.4	50067.8	93.	4.000	7084.	1.77	8.46	616.	7700.
JAPAN	79 715	5636N	17246W	17647.9	34901.1	50170.6	77.	3.167	5564.	1.76	2.20	181436.	187000.
JAPAN	78 8 9	5708N	17349W	17353.6	34607.8	50171.0	137.	3.500	6115.	1.75	4.31	158865.	165000.
JAPAN	79 7 2	5636N	17231W	17743.3	34934.3	50167.4	85.	1.833	3005.	1.64	2.61	106995.	110000.
JAPAN	78 724	5656N	17320W	17505.0	34737.7	50179.6	100.	3.000	4800.	1.60	5.91	52400.	57200.
JAPAN	78 8 4	5645N	17312W	17517.7	34807.0	50179.3	98.	1.917	2961.	1.55	5.50	151039.	154000.
JAPAN	78 8 3	5635N	17205W	17901.8	34993.9	50158.1	161.	3.250	4937.	1.52	5.23	61063.	66000.
JAPAN	79 7 4	5633N	17242W	17659.7	34920.3	50166.3	90.	5.333	7515.	1.41	2.72	157485.	165000.
JAPAN	78 818	5635N	17250W	17617.9	34895.8	50170.3	80.	1.417	1977.	1.40	5.21	48623.	50600.
JAPAN	79 719	5634N	17248W	17826.2	34903.7	50168.6	93.	3.803	4200.	1.36	2.39	68400.	72600.
JAPAN	79 719	5707N	17323W	17518.6	34672.6	50173.2	81.	2.000	2712.	1.36	2.40	85288.	86000.
JAPAN	80 8 9	5734N	17408W	17293.2	34604.4	50132.6	101.	4.833	5718.	1.18	7.49	1102.	6820.
JAPAN	79 812	5633N	17241W	17666.1	34922.4	50166.1	107.	3.633	3992.	1.10	7.42	2608.	6600.
JAPAN	80 811	5841N	17718W	16316.5	33602.5	49991.0	77.	3.167	3474.	1.10	6.53	28426.	31900.
JAPAN	79 716	5634N	17248W	17626.2	34903.7	50168.8	92.	3.083	3353.	1.09	2.39	111047.	114400.
JAPAN	78 8 8	5637N	17301W	17556.2	34864.1	50173.9	104.	2.750	2960.	1.08	4.23	30040.	33000.
JAPAN	78 8 4	5641N	17312W	17502.0	34823.7	50177.7	89.	2.667	2316.	0.87	5.50	129684.	132000.
JAPAN	78 731	5720N	17352W	17365.0	34530.0	50156.7	164.	5.167	4322.	0.84	3.85	160678.	165000.
JAPAN	79 714	5636N	17232W	17736.9	34932.1	50167.7	82.	1.583	1321.	0.83	2.31	185679.	187000.
JAPAN	77 823	5839N	17452W	17106.2	33818.5	49957.9	156.	4.333	3567.	0.82	12.76	106433.	110000.
JAPAN	78 930	5846N	17838W	16095.8	33031.7	49826.5	97.	4.250	3407.	0.80	15.84	84593.	28000.
JAPAN	78 8 5	5842N	17308W	17531.8	34828.7	50177.9	79.	3.000	2380.	0.79	5.87	103220.	105600.
JAPAN	79 7 3	5651N	17319W	17500.9	34786.4	50180.4	98.	2.167	1651.	0.76	4.03	42349.	44000.
JAPAN	78 730	5644N	17319W	17488.6	34795.4	50179.3	93.	2.000	1446.	0.72	5.28	29354.	30800.
JAPAN	79 7 3	5652N	17242W	17635.1	34923.6	50165.1	128.	2.167	1563.	0.72	5.39	93037.	94600.
JAPAN	78 723	5646N	17317W	17485.2	34791.3	50179.6	83.	1.917	1371.	0.72	4.40	36229.	39600.
JAPAN	77 621	5820N	17421W	17265.4	34025.9	50010.9	120.	2.500	1783.	0.71	13.20	46617.	48400.
JAPAN	78 928	5936N	17819W	16124.2	33121.6	49850.2	124.	3.667	2563.	0.70	12.76	78037.	81400.
JAPAN	79 8 7	5825N	17422W	17266.4	33982.7	49994.4	191.	0.417	283.	0.68	10.16	1597.	1820.
JAPAN	80 925	5839N	17522W	16944.7	33776.7	49969.0	120.	4.000	2612.	0.65	5.54	7728.	10340.
JAPAN	80 8 8	5810N	17412W	17314.5	34125.1	50040.4	93.	2.750	1767.	0.64	5.24	1093.	2860.
JAPAN	79 8 1	5846N	17736W	16231.5	33542.8	49980.9	115.	3.000	1907.	0.64	9.29	3373.	5280.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-11 (continued). PACIFIC COD, JULY-SEPTEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LOMAN-C	PULSE RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YMMDD			7X	7Y	7Z	TRAWLED	(LBS)	PER HOUR	LBS/FJSH	(LBS)	(LBS)
JAPAN	S	79 8 6	5837N	17437W	17182.9	33856.8	49958.6	3.117	1977.	0.63	7.36	15843.	17820.
JAPAN	L	78 7 26	5713N	17350W	17366.8	34576.8	50165.8	3.083	1864.	0.60	4.18	108136.	110000.
JAPAN	L	79 7 3	5641N	17307W	17534.3	34835.0	50177.3	1.500	902.	0.60	1.32	109098.	110000.
JAPAN	L	78 7 22	5705N	17335W	17435.5	34656.2	50174.2	4.167	2439.	0.59	4.03	114161.	116500.
JAPAN	S	79 9 29	5815N	17418W	17283.4	34073.6	50026.3	4.083	2206.	0.54	9.11	6154.	8360.
JAPAN	S	80 6 7	5807N	17409W	17329.7	34154.9	50049.0	5.000	2678.	0.54	4.67	2162.	4640.
JAPAN	L	79 7 14	5640N	17248W	17652.3	34881.9	50174.6	3.250	1727.	0.53	1.94	119273.	121000.
JAPAN	L	79 7 20	5709N	17327W	17498.2	34652.1	50174.2	2.250	1194.	0.53	1.94	82406.	83600.
JAPAN	L	78 9 30	5936W	17834W	16052.8	33110.6	49855.0	2.500	1315.	0.53	5.72	93265.	94600.
JAPAN	S	78 7 25	5658N	17322W	17494.5	34723.1	50178.9	4.833	2517.	0.52	3.67	17283.	19800.
JAPAN	L	78 7 25	5644N	17319W	17468.6	34795.4	50179.3	1.833	941.	0.51	4.40	131059.	132000.

*** NOTE *** THE ACCURACY OF POSITION AND LOMAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

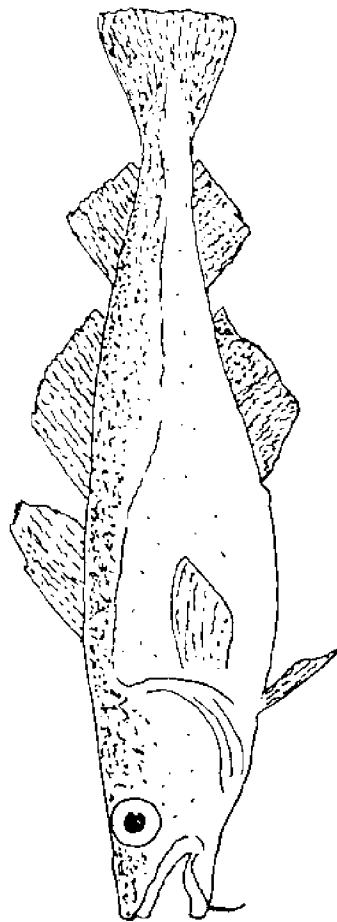


TABLE A-12. PACIFIC COD, OCTOBER-DECEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
		YR MO DD			7X 7Y 7Z							
USSR	M	791118	5632N	17228W	17743.4 34953.8 50161.2	82.	2.833	10230.	3.61	1.86	10450.	20980.
JAPAN	L	791027	5637N	17300W	17562.6 34866.3 50173.7	94.	0.583	1833.	3.14	4.03	2587.	27720.
JAPAN	L	791031	5828N	17515W	16972.0 33876.8 50001.6	115.	0.583	1682.	2.88	2.93	80376.	82060.
JAPAN	L	781120	5932N	17805W	16183.3 33166.7 49857.7	117.	2.333	6052.	2.59	15.82	125948.	132000.
JAPAN	L	791121	5858N	17807W	16097.9 33418.4 49954.9	107.	1.000	2419.	2.42	5.19	63581.	66000.
JAPAN	L	791028	5643N	17313W	17503.5 34813.2 50178.7	83.	0.500	1052.	2.10	2.20	8628.	9680.
JAPAN	L	791027	5638N	17301W	17560.5 34860.3 50174.7	94.	1.917	3945.	2.06	2.46	33015.	36960.
JAPAN	L	791030	5829N	17516W	16967.5 33867.2 49998.8	133.	1.250	2497.	2.00	6.60	83963.	86460.
JAPAN	S	7911 3	5714N	17335W	17455.5 34604.6 50165.4	109.	4.500	8172.	1.82	4.32	1728.	9900.
JAPAN	S	8010 3	5706N	17327W	17490.0 34669.0 50173.9	109.	4.667	8000.	1.71	4.66	4980.	12980.
USSR	M	791128	5649N	17314W	17519.7 34784.8 50180.2	77.	2.417	3749.	1.55	3.67	8571.	12320.
JAPAN	L	791121	5953N	17849W	16020.1 32970.1 49809.1	120.	2.333	3534.	1.51	23.98	77866.	81400.
JAPAN	S	8010 3	5714N	17348W	17376.1 34575.4 50164.8	93.	5.000	7519.	1.50	5.46	7221.	14740.
JAPAN	S	791113	5631N	17240W	17663.0 34931.1 50163.2	153.	4.000	5964.	1.49	7.23	4156.	10120.
JAPAN	S	801024	5636N	17228W	17762.3 34940.9 50166.7	175.	4.750	7068.	1.49	4.78	2612.	9680.
JAPAN	S	791012	5743N	17343W	17462.0 34391.9 50111.7	115.	4.750	6739.	1.42	10.12	20981.	27720.
JAPAN	S	791011	5746N	17343W	17465.5 34369.3 50104.1	137.	2.917	3878.	1.33	7.47	7562.	11440.
KOREA	M	8011 4	5647N	17323W	17454.1 34773.2 50180.1	126.	3.583	4608.	1.25	5.21	62272.	66880.
KOREA	M	8010 5	5633N	17236W	17697.7 34933.3 50164.6	126.	3.833	4691.	1.22	7.72	63509.	68200.
JAPAN	S	791116	5640N	17306W	17536.6 34841.3 50176.6	169.	3.333	4011.	1.20	4.04	3249.	7260.
JAPAN	S	8 10 1	5707N	17330W	17473.4 34656.5 50172.9	137.	5.417	6509.	1.20	5.34	5153.	11660.
KOREA	M	7 12 16	5615N	17137.4	34833.1 50161.3	131.	3.083	3672.	1.19	2.65	23168.	26840.
JAPAN	S	7912 5	5633N	17234W	17710.4 34937.7 50164.3	109.	2.500	2860.	1.14	4.56	1320.	4180.
JAPAN	L	801128	5913N	17748W	16228.6 33228.6 49909.0	163.	1.583	1770.	1.12	5.04	119230.	121000.
USSR	M	791118	5636N	17206W	17900.5 34938.8 50160.2	82.	2.000	2171.	1.09	3.63	19829.	22500.
JAPAN	L	781127	6011N	17847W	16066.1 32833.3 49752.4	177.	3.500	3719.	1.06	8.93	100781.	104500.
JAPAN	L	791120	6006N	17855W	16020.0 32866.9 49771.4	120.	1.750	1839.	1.05	7.87	64161.	66000.
USSR	M	791120	5639N	17219W	17833.0 34950.8 50168.4	74.	3.583	3587.	1.00	2.48	16653.	20240.
USSR	M	791119	5631N	17204W	17887.5 35006.9 50150.1	82.	3.167	3135.	0.99	2.54	12265.	15400.
KOREA	M	791210	5705N	17340W	17403.2 34644.8 50174.0	120.	3.083	3016.	0.98	2.94	24924.	27940.
KOREA	M	8011 5	5651N	17323W	17462.5 34754.9 50180.3	127.	4.750	4608.	0.97	11.00	77232.	81640.
USSR	M	771114	5955N	17852W	16010.7 32952.8 49804.1	148.	1.167	1119.	0.96	6.60	42881.	44000.
JAPAN	L	7911 6	5900N	17815W	16061.7 33394.0 49951.1	120.	1.333	1231.	0.92	2.95	119769.	121000.
JAPAN	L	7912 7	5633N	17247W	17628.0 34909.4 50167.5	98.	2.167	1977.	0.91	3.44	443.	2420.
JAPAN	L	7911 2	5805N	17820W	16048.7 33333.1 49538.8	103.	1.750	1588.	0.91	9.75	79612.	81400.
JAPAN	S	791118	5635N	17231W	17738.7 34937.7 50166.2	131.	5.833	5249.	0.90	4.16	2671.	7920.
KOREA	M	8010 4	5638N	17259W	17573.3 34864.8 50174.4	104.	5.000	4495.	0.90	6.61	72505.	77000.
JAPAN	L	7911 4	5835N	17621W	16615.3 33725.3 49966.7	109.	2.000	1786.	0.89	1.98	117014.	118000.
KOREA	M	8011 3	5645N	17322W	17453.0 34784.3 50179.7	127.	2.667	2382.	0.89	5.94	101018.	103400.
JAPAN	L	801122	5915N	17726W	16343.2 33356.4 49896.6	95.	3.417	2971.	0.87	4.43	107029.	110000.
KOREA	M	791219	5709N	17338W	17427.3 34627.0 50170.6	83.	6.667	5640.	0.85	2.02	29120.	34760.
JAPAN	M	7811 4	5936N	17755W	16235.0 33144.4 49843.9	124.	2.917	2434.	0.83	0.07	26366.	30600.
KOREA	M	791218	5734N	17346W	17430.4 34450.5 50132.2	73.	7.750	6462.	0.83	1.94	26318.	32780.
KOREA	M	791220	5829N	17513W	16984.3 33871.7 49997.9	189.	3.167	2616.	0.83	3.65	59404.	102080.
KOREA	M	791212	5643N	17320W	17456.3 34797.4 50179.0	155.	1.500	1193.	0.80	2.74	22347.	23540.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-12 (continued). PACIFIC COD, OCTOBER-DECEMBER 1977-80

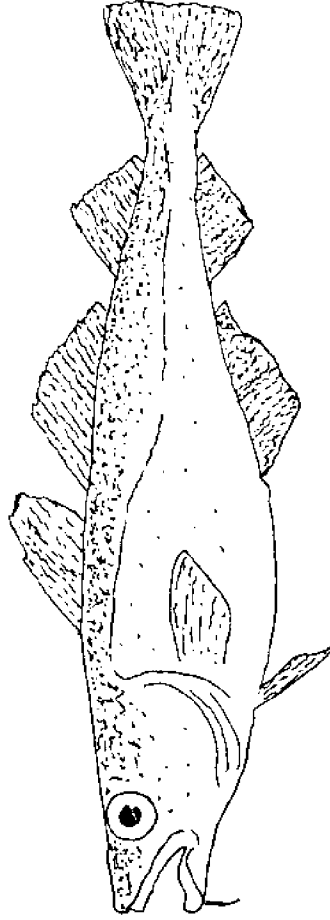
NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LOMAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	7810 7	5959N	17835W	16005.8	32920.3	49793.0	117.	3.667	2909.	0.79	18.92	30091.	33000.
JAPAN	L	7911 8	5851N	17746W	16194.4	33494.1	49965.6	93.	1.417	1115.	0.79	4.14	144085.	145200.
JAPAN	L	7812 5	6018N	17827W	16166.6	32789.4	49720.4	112.	2.417	1253.	0.77	4.73	77347.	79200.
KOREA	M	791218	5715N	17351W	16355.4	34562.7	50163.4	159.	3.167	2283.	0.75	2.93	27097.	29480.
JAPAN	S	7911 6	5708N	17343W	17392.4	34621.3	50171.3	109.	4.500	3367.	0.75	3.13	1693.	5060.
USSR	M	791117	5634N	17236W	17702.4	34930.0	50166.1	85.	1.833	1359.	0.74	2.86	9641.	11000.
JAPAN	S	791014	5743N	17344W	17655.8	34389.8	50111.8	104.	4.750	3458.	0.73	5.01	12602.	16060.
JAPAN	L	7911 1	5628N	17315W	16972.0	33676.8	50001.6	113.	2.583	1673.	0.73	7.15	16387.	18260.
JAPAN	S	791011	5754N	17356W	17395.3	34282.4	50084.4	137.	3.750	2718.	0.72	8.00	10042.	12760.
JAPAN	L	781019	6024N	17822W	16394.1	32743.8	49697.9	102.	1.667	1159.	0.72	6.93	60401.	61600.
KOREA	M	8012 2	5637N	17250W	17626.7	34848.6	50172.2	104.	3.250	2294.	0.71	2.69	13106.	15400.
KOREA	M	8010 4	5633N	17231W	17225.3	34944.2	50163.5	137.	4.333	3015.	0.70	4.25	23365.	26400.
KOREA	M	791216	5708N	17339W	17418.1	34630.4	50171.5	71.	6.750	4670.	0.69	2.06	16650.	23320.
JAPAN	S	791114	5637N	17257W	17581.9	34873.0	50173.3	127.	3.167	2186.	0.69	3.76	1994.	4180.
KOREA	M	8011 7	5651N	17321W	17481.5	34759.5	50180.4	126.	4.667	3216.	0.69	6.23	67844.	71060.
JAPAN	L	791029	5827N	17534W	16864.3	33056.0	50009.3	114.	1.833	1254.	0.68	2.20	70686.	71940.
JAPAN	S	791012	5755N	17356W	17396.3	34274.6	50081.6	137.	2.917	1994.	0.68	10.80	5486.	7480.
JAPAN	L	801125	5914N	17718W	16381.8	33352.6	49897.1	89.	2.417	1628.	0.67	5.09	88572.	90200.
JAPAN	S	791116	5637N	17228W	17766.9	34937.6	50168.0	120.	4.000	2619.	0.65	6.30	2881.	5500.
JAPAN	L	791112	5952N	17845W	16036.2	32980.7	49810.7	93.	5.000	3235.	0.65	4.92	89165.	92400.
JAPAN	L	791029	5913N	17822W	16058.2	33292.8	49917.5	126.	1.667	1071.	0.64	2.57	115929.	116600.
JAPAN	S	7912 6	5635N	17247W	17637.0	34902.5	50169.7	98.	1.917	1225.	0.64	2.82	1855.	3080.
KOREA	M	8011 5	5651N	17322W	17475.0	34757.2	50180.3	120.	5.833	3711.	0.64	4.60	113969.	117700.
KOREA	M	8011 8	5652N	17322W	17478.5	34752.5	50180.3	115.	5.500	3472.	0.63	5.19	125228.	128700.
KOREA	M	791219	5808N	17559W	17388.6	34164.1	50043.2	72.	1.250	786.	0.63	2.05	4400.	4400.
JAPAN	S	7911 8	5658N	17337W	17401.3	34688.6	50178.3	273.	5.000	3111.	0.62	2.54	1289.	4400.
USSR	M	791119	5640N	17503W	17555.9	34846.1	50176.3	76.	2.917	1804.	0.62	2.16	17996.	19800.
USSR	M	791121	5646N	17506W	17560.3	34816.5	50179.4	71.	3.083	1888.	0.61	2.22	20112.	22000.
JAPAN	S	8010 2	5714N	17349W	17369.7	34573.1	50164.7	118.	5.000	3030.	0.61	4.97	7310.	10340.
USSR	M	791120	5643N	17258W	17600.3	34847.4	50177.6	71.	2.750	1657.	0.60	2.49	18583.	20240.
JAPAN	L	7911 5	5835N	17704W	16379.3	33665.1	50004.3	148.	1.333	791.	0.59	5.61	80609.	81400.
KOREA	M	791210	5716N	17351W	17361.9	34556.7	50162.2	131.	1.833	1054.	0.57	2.81	2246.	3300.
KOREA	M	8011 4	5645N	17320W	17466.0	34788.8	50179.7	112.	0.583	333.	0.57	7.26	23540.	23540.
KOREA	M	8011 4	5646N	17323W	17457.8	34768.7	50180.3	128.	1.917	1086.	0.57	5.83	45994.	47080.
KOREA	M	791112	5635N	17249W	17624.3	34898.0	50170.1	126.	7.167	4040.	0.56	3.04	39960.	44000.
JAPAN	S	791025	5639N	17307W	17526.1	34843.0	50176.1	120.	3.583	2008.	0.56	5.45	1072.	3080.
KOREA	M	791113	5633N	17232W	17223.0	34942.0	50165.8	123.	2.917	1624.	0.56	7.99	37976.	39600.
KOREA	M	791217	5709N	17338W	17427.3	34627.0	50170.6	75.	8.333	4511.	0.54	2.34	28229.	33440.
KOREA	M	8011 6	5639N	17308W	17519.6	34940.7	50176.2	98.	5.083	2706.	0.53	4.90	58014.	60720.
JAPAN	L	791114	5911N	17740W	16264.9	33352.3	49912.6	127.	2.167	1136.	0.52	2.36	86864.	86000.
JAPAN	L	791117	5847N	17737W	16228.6	33534.3	49978.5	85.	3.417	1755.	0.51	4.06	24645.	26400.
JAPAN	L	7911 2	5822N	17530W	16880.0	33901.3	50022.8	151.	2.250	1144.	0.51	2.93	59796.	60940.
JAPAN	L	791110	5855N	17755W	16152.8	33454.2	49960.6	131.	1.750	885.	0.51	5.72	38715.	39600.
USSR	M	791117	5635N	17240W	17681.6	34917.9	50168.3	82.	3.917	1974.	0.50	2.40	4626.	6600.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-12 (continued). PACIFIC COD, OCTOBER-DECEMBER 1977-80

NATION	VESSEL	DATE	LAT	LONG	APPROX	LOKAN-C	PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND	LBS	SIZE	BYCATCH	TOTAL
	CLASS	YMMDD			7X	7Y	7Z	(FMS)	TRAWLED	(LBS)	PER HOUR	LB S/FISH	(LBS)		(LBS)	
JAPAN	L	791030	5658N	17812W	16072.1	33412.6	49955.6	150.	3.500	1758.	0.50	12.98	70842.	72600.		

*** NOTE *** THE ACCURACY OF POSITION AND LOKAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***



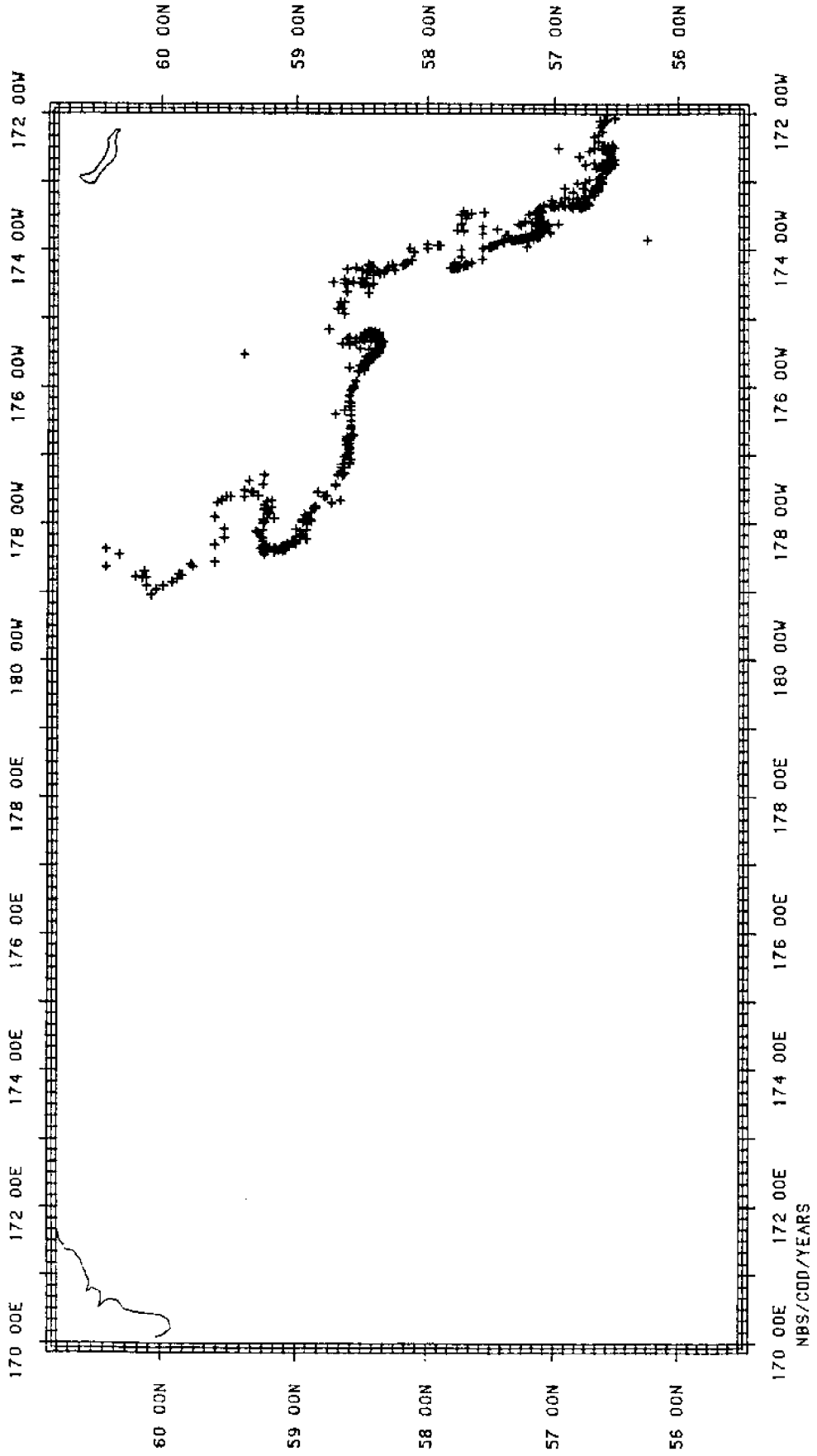


FIGURE A-5. TRAWLING LOCATIONS FOR PACIFIC COD, ALL MONTHS, 1977-80

TABLE A-13. TURBOT, JANUARY-MARCH 1977-80

NATION	VESSEL	DATE	LAT	LONG	APPROX	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
	CLASS	YRMO			7X	(FMS)	TRAWLED	(LBS)	PER HOUR	LENGTH	(LBS)	(LBS)
JAPAN	S	80 3 3	5942N	17835W	16061.2	246.	7.333	31389.	4.28	1.43	2491.	33880.
JAPAN	S	80 3 9	6003N	17909W	15951.0	295.	5.000	19833.	3.97	2.01	1507.	21340.
JAPAN	S	80 3 2	5944N	17839W	16046.8	219.	7.000	25717.	3.67	1.50	2223.	27940.
JAPAN	S	80 3 7	5958N	17902W	15972.0	306.	6.000	20883.	3.48	1.84	677.	21560.
KOREA	M	80 1 14	5637N	17430W	17226.9	116.	3.917	13393.	3.42	1.98	118607.	132000.
JAPAN	L	79 2 23	5731W	17358W	17350.1	96.	0.750	2472.	3.30	0.94	72328.	74800.
JAPAN	M	80 2 3	5828N	17434W	17201.0	284.	2.167	7103.	3.28	2.15	1697.	8800.
JAPAN	S	78 3 21	5832N	17611W	16665.5	323.	3.167	9674.	3.06	1.69	3526.	13200.
JAPAN	S	78 3 22	5836N	17720W	16294.3	421.	4.917	14783.	3.01	2.36	2817.	17600.
JAPAN	L	78 2 9	5915N	17820W	16072.9	169.	1.417	4172.	2.95	1.22	160828.	165000.
JAPAN	S	80 3 30	5633N	17206W	17285.5	325.	4.083	11879.	2.91	3.61	1101.	12780.
JAPAN	S	79 3 15	5835N	17455W	17089.3	355.	4.000	11511.	2.86	1.95	1689.	13200.
JAPAN	L	79 2 18	5858N	17812W	16072.1	145.	1.583	4464.	2.82	1.24	103336.	107800.
JAPAN	S	78 3 16	5832N	17606W	16682.1	323.	4.583	12768.	2.79	2.00	3732.	16500.
KOREA	M	80 1 7	5714N	17350W	17363.3	150.	4.000	11009.	2.75	1.50	164991.	176000.
JAPAN	L	79 2 24	5730N	17358W	17348.2	90.	0.750	2036.	2.71	0.84	140964.	143000.
JAPAN	S	80 3 6	6019N	17854W	16051.0	312.	6.000	16232.	2.71	1.83	2688.	18920.
JAPAN	S	79 3 31	5829N	17552W	16766.4	355.	8.000	21589.	2.70	1.82	411.	22000.
JAPAN	L	77 2 19	5746N	17415W	17264.2	112.	0.833	2148.	2.58	0.43	110052.	112200.
JAPAN	L	79 3 26	5741N	17329W	17545.6	85.	1.583	4053.	2.56	1.14	167547.	171800.
JAPAN	S	79 2 4	5711N	17357W	17310.6	334.	4.833	12000.	2.48	2.00	826.	12826.
JAPAN	S	79 3 31	5834N	17647W	16470.4	301.	5.750	14027.	2.44	1.35	3661.	17688.
JAPAN	L	80 3 17	5729N	17356W	17358.8	89.	1.083	2614.	2.41	0.73	166786.	169400.
JAPAN	S	80 3 5	5859N	17902W	15974.2	301.	7.167	16979.	2.37	2.96	3921.	20900.
JAPAN	S	80 2 28	5836N	17714W	16327.0	306.	7.000	16084.	2.30	1.56	1956.	18040.
JAPAN	S	78 3 31	5819N	17528W	16887.1	273.	5.000	11125.	2.23	3.93	4055.	15100.
JAPAN	L	78 2 9	5902N	17820W	16041.2	164.	1.333	2914.	2.19	1.34	118086.	121000.
JAPAN	L	75 2 6	5836N	17523W	16936.2	106.	1.167	2468.	2.12	2.11	98532.	99000.
JAPAN	S	80 3 6	5959N	17902W	15974.2	295.	6.333	13311.	2.10	1.66	2529.	15840.
JAPAN	S	80 2 5	5635N	17303W	17334.8	306.	3.167	6543.	2.07	3.28	2917.	9460.
JAPAN	L	77 2 21	5748N	17416W	17267.2	119.	0.917	1865.	2.03	2.04	77335.	79200.
JAPAN	L	78 3 14	5833N	17518W	16966.7	104.	1.000	2022.	2.02	4.84	173978.	176000.
JAPAN	S	79 3 12	5809N	17412W	17313.8	344.	5.000	10080.	2.02	1.73	3120.	13200.
KOREA	M	80 1 6	5703N	17338W	17410.3	202.	5.333	10605.	1.94	2.27	55395.	66000.
JAPAN	S	78 3 14	5611N	17413W	17309.4	388.	4.000	7846.	1.96	2.07	294.	8140.
JAPAN	L	78 1 10	5644N	17320W	17462.2	120.	2.000	3858.	1.93	1.49	29142.	33000.
JAPAN	L	79 2 21	5739N	17411W	17283.6	89.	0.500	964.	1.93	1.21	159636.	160500.
JAPAN	L	80 1 24	6027N	17847W	16096.0	180.	2.583	4952.	1.92	2.27	11328.	16280.
JAPAN	S	79 2 27	5836N	17511W	17002.2	355.	4.833	9261.	1.92	2.20	9900.	7920.
JAPAN	S	80 2 6	5644N	17324W	17436.3	295.	3.000	5661.	1.89	6.60	2259.	7920.
JAPAN	L	79 2 25	5724N	17351W	17380.2	93.	1.083	2029.	1.87	1.17	167571.	149600.
KOREA	M	80 1 5	5716N	17350W	17368.3	161.	5.500	10163.	1.85	1.89	55837.	66000.
JAPAN	S	78 3 23	5843N	17750W	16256.6	443.	5.000	9178.	1.84	1.94	1322.	10560.
JAPAN	L	80 1 17	5637N	17216W	17842.7	104.	3.083	5494.	1.78	0.99	89106.	94600.
JAPAN	S	80 2 27	5834N	17625W	16591.5	273.	5.667	9962.	1.76	1.89	5878.	15040.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-13 (continued). TURBOT, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YR/MO/D			7X	7Y	7Z	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
JAPAN	L	60 2 4	5913n	17741W	16263.9	33336.0	49907.1	1.250	2181	1.75	1.50	59019	101200
JAPAN	L	77 22 1	5746N	17415W	17270.3	34305.7	50107.0	1.583	2755	1.74	1.38	67645	70400
JAPAN	S	79 2 5	5650N	17342W	17365.0	34677.2	50178.1	4.833	8355	1.73	2.04	269	8624
JAPAN	S	79 328	5819N	17535W	16847.1	33916.5	50032.2	4.10	9422	1.71	3.90	1754	11176
JAPAN	L	80 110	5704N	17339W	17408.8	34652.5	50174.8	3.583	6102	1.70	1.47	64298	70400
JAPAN	L	79 226	5830N	17542W	16823.7	33820.5	50002.4	0.917	1560	1.70	0.86	104040	105600
JAPAN	L	79 221	5905N	17823W	16033.5	33349.8	49939.4	1.750	2957	1.69	1.12	120243	123200
JAPAN	S	78 330	5659N	17620W	16033.5	33396.2	49954.6	4.500	7536	1.68	2.37	3022	10560
KOREA	M	80 1 5	5719N	17351W	17369.1	34538.4	50158.2	5.050	6189	1.62	1.31	130411	138600
JAPAN	S	80 220	5631N	17231W	17719.7	34950.4	50160.8	4.000	6480	1.62	7.50	1660	8140
JAPAN	L	80 320	5834N	17601W	16724.0	33761.5	49995.2	2.000	3221	1.61	1.29	152759	155980
JAPAN	L	78 210	5915N	17825W	16048.0	34441.4	50138.3	1.667	2675	1.61	1.32	52325	55000
JAPAN	S	78 313	5731N	17400W	17337.6	34414.4	50138.3	5.000	7979	1.58	4.68	5001	12980
JAPAN	M	80 210	5838N	17456W	17085.8	33821.5	49963.0	1.37	2506	1.58	2.43	28294	30800
JAPAN	S	78 3 4	5746N	17416W	17264.2	34303.7	50107.1	0.583	918	1.57	1.26	3482	4400
JAPAN	L	80 310	5700N	17322W	17504.7	34712.8	50178.0	1.917	3012	1.57	1.08	22728	25740
JAPAN	S	78 317	5658N	17818W	16041.2	33405.6	49956.9	4.000	6263	1.57	2.25	777	7040
JAPAN	S	80 229	5833N	17620W	16617.4	33742.0	50002.0	7.667	11770	1.54	1.43	3630	15400
JAPAN	S	80 213	5634N	17228W	17752.9	34947.5	50164.0	5.000	7648	1.53	7.38	6212	13860
JAPAN	S	79 315	5836N	17455W	17090.0	33840.0	49969.4	5.500	8378	1.52	2.58	2622	11000
JAPAN	L	78 110	5644N	17320W	17462.2	34793.1	50179.4	2.417	3670	1.52	1.83	18330	22000
JAPAN	S	79 328	5835N	17514W	16984.7	33821.1	49979.3	7.583	11365	1.50	2.10	2671	14036
JAPAN	S	78 331	5858N	17821W	16025.8	33402.1	49957.4	5.000	7450	1.49	2.06	2890	10340
JAPAN	S	78 326	6000N	17900W	15985.4	32909.3	49791.8	4.583	6798	1.46	2.35	902	7700
JAPAN	S	80 2 5	5641N	17320W	17450.4	34805.7	50178.2	2.73	5685	1.48	4.83	2235	7920
JAPAN	L	80 122	5844N	17742W	16194.9	33549.6	49987.1	1.333	1959	1.47	1.14	97041	99000
JAPAN	L	77 3 7	5831N	17433W	17208.1	33914.6	49978.0	1.667	2593	1.44	1.36	140607	143000
KOREA	M	80 114	5838N	17719W	16304.4	33622.9	49998.9	7.417	10630	1.43	1.35	176370	187000
JAPAN	S	79 329	5832N	17632W	16549.2	33732.3	50007.0	7.000	10005	1.43	2.32	3195	13200
JAPAN	S	80 218	5636N	17303W	17539.1	34863.4	50173.3	5.000	7070	1.41	2.69	3930	11000
JAPAN	L	80 2 6	5914N	17747W	16235.7	33322.1	49905.8	2.250	3169	1.41	1.70	77571	80740
JAPAN	S	78 315	5815N	17507W	17001.9	33992.6	50038.1	4.000	5570	1.39	3.41	150	5720
JAPAN	L	80 1 9	5706N	17343W	17386.7	34632.5	50173.0	2.750	3819	1.39	2.00	79781	83600
JAPAN	S	79 325	5908N	17829W	16010.8	33321.7	49932.6	3.333	4620	1.39	1.53	264	4884
JAPAN	S	80 218	5836N	17304W	17532.7	34861.2	50173.5	4.333	5890	1.36	3.07	3130	9020
JAPAN	L	80 130	5930N	17822W	16097.0	33166.5	49869.0	3.917	5296	1.35	1.66	46824	51920
JAPAN	S	80 219	5631N	17243W	17612.4	34913.9	50165.3	1.483	6044	1.35	4.79	2096	8140
JAPAN	S	78 319	5658N	17817W	16046.4	33406.8	49956.7	4.500	6064	1.35	1.86	3396	9460
JAPAN	S	78 322	5837N	17720W	16296.6	33628.8	50001.6	4.16	7040	1.34	5.94	1980	9020
JAPAN	S	80 214	5645N	17322W	17453.0	34784.3	50179.7	3.000	4012	1.34	5.83	1928	5940
JAPAN	L	78 211	5859N	17816W	16054.1	33400.8	49953.9	1.37	2529	1.32	1.66	96471	99400
JAPAN	S	78 314	5811N	17414W	17303.7	34113.5	50037.8	4.000	5235	1.31	1.89	485	5720
JAPAN	L	78 214	5910N	17822W	16050.9	33314.7	49925.7	10.4	955	1.30	1.60	98045	99000
JAPAN	S	78 317	5857N	17826W	15997.5	33403.4	49960.8	3.39	5518	1.30	2.76	1082	6600
JAPAN	L	78 3 5	5855N	17814W	16054.2	33431.6	49964.0	1.86	2043	1.29	1.47	74957	77000

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-13 (continued). TURBOT, JANUARY-MARCH 1977-80

VESSEL CLASS	DATE	TIME	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE L9 S/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
KOREA	80 120	17305M	79	2.667	3420	1.26	1.61	29800	33220
JAPAN	80 219	17251M	246	4.500	5759	1.28	6.98	2821	8580
JAPAN	78 3 7	17822M	109	1.500	1906	1.27	2.01	75094	77000
KOREA	80 1 6	17352M	150	3.417	4337	1.27	1.66	162863	167200
JAPAN	79 215	17620M	150	3.000	3005	1.27	1.12	79795	83600
JAPAN	78 213	17733M	77	1.583	2005	1.27	1.04	118995	121000
JAPAN	78 323	17827M	273	4.500	5667	1.26	1.80	6873	12540
JAPAN	80 213	17328M	328	3.500	4382	1.25	5.64	1338	5720
KOREA	80 1 4	17346M	137	3.167	3963	1.25	1.65	33457	37400
JAPAN	79 321	17230M	394	5.083	6329	1.25	3.32	1063	7392
JAPAN	80 2 8	17901M	176	3.000	3729	1.24	2.30	21571	25300
JAPAN	80 220	17231M	246	4.000	4966	1.24	3.71	3394	8360
JAPAN	80 1 6	17471M	136	2.417	2998	1.24	1.27	223602	226600
JAPAN	80 120	17350M	131	2.667	3304	1.24	1.39	34096	37400
JAPAN	78 226	17922M	122	1.167	1442	1.24	1.95	119558	121000
JAPAN	78 225	17821M	120	1.833	2260	1.23	2.64	140740	143000
JAPAN	78 315	17524M	334	4.250	5226	1.23	4.46	274	5500
JAPAN	77 225	17523M	125	1.917	2317	1.21	1.76	54883	57200
JAPAN	79 217	17625M	142	2.083	2510	1.20	1.03	109690	112200
JAPAN	80 119	17350M	149	3.167	3796	1.20	1.26	51204	55000
KOREA	80 1 8	17351M	159	3.250	3685	1.20	2.22	117115	121000
JAPAN	80 116	17741M	172	2.917	3684	1.19	2.74	40516	44000
JAPAN	76 318	17831M	138	2.333	2784	1.19	0.86	135816	138600
JAPAN	79 327	17512M	134	2.583	3078	1.19	1.62	80522	83600
JAPAN	79 2 7	17531M	134	1.250	1478	1.18	2.04	64523	66000
JAPAN	78 1 9	17244M	118	1.917	2264	1.18	3.56	26336	28600
JAPAN	78 325	17815M	252	4.500	5253	1.17	2.01	1567	6820
JAPAN	79 2 6	17358M	383	5.500	6382	1.16	2.11	152	6534
JAPAN	79 316	17752M	156	1.667	1932	1.16	1.18	35468	37400
JAPAN	78 316	17540M	437	4.250	4922	1.16	2.45	2336	7260
JAPAN	78 325	17820M	260	4.500	5133	1.14	1.54	1467	5600
JAPAN	79 2 7	17342M	355	3.833	4233	1.10	2.14	13	4246
JAPAN	80 1 8	17618M	191	2.583	2825	1.09	1.89	12575	15400
JAPAN	79 328	17338M	76	3.167	3452	1.09	1.17	86748	90200
JAPAN	79 329	17538M	127	1.917	2040	1.06	1.11	35360	37400
JAPAN	80 217	17555M	126	1.500	1595	1.06	1.48	76725	78320
JAPAN	79 218	17642M	149	2.333	2470	1.06	1.35	76730	79200
KOREA	80 112	17033M	200	9.917	10496	1.06	1.33	77504	68000
JAPAN	78 321	17513M	339	4.500	4750	1.06	2.68	530	5280
JAPAN	78 322	17822M	230	4.500	4746	1.06	2.54	3172	7920
JAPAN	79 320	17200M	284	5.000	5245	1.05	1.81	981	6226
JAPAN	78 1 9	17246M	137	1.417	1478	1.04	2.86	31522	33000
JAPAN	78 317	17835M	350	4.000	4164	1.04	1.81	1116	5280
JAPAN	77 220	17416M	138	1.500	1560	1.04	1.37	42440	44000
JAPAN	80 213	17723M	116	3.667	3740	1.02	1.26	23760	27500

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-13 (continued). TURBOT, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE YMMDD	LAT	LONG	APPROX 7X	7Y	7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND PER HOUR	SIZE LBS/FFISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	80 2 6	5704N	17332W	17452.0	34668.5	50175.1	295	3.000	3058	1.02	2.36	902	3960
JAPAN	S	79 3 17	5616N	17512W	16974.5	33976.6	50036.2	355	8.833	8981	1.02	2.18	919	9900
JAPAN	S	80 2 9	5728N	17352W	17382.0	34478.5	50143.8	164	2.000	2027	1.01	4.02	833	2860
JAPAN	S	78 3 11	5716N	17357W	17524.5	34543.4	50161.9	358	5.083	5108	1.00	2.54	2812	7920
JAPAN	S	80 2 12	5629N	17248W	17603.1	34920.3	50162.7	273	3.000	3013	1.00	6.77	1167	4180
JAPAN	S	78 3 28	5904N	17822W	16036.1	33358.1	49941.9	222	3.500	3511	1.00	3.41	5289	6400
JAPAN	S	80 2 17	5702N	17365W	17362.1	34649.6	50175.8	246	1.500	1501	1.00	2.10	1579	3080
JAPAN	S	80 3 11	5657N	17340W	17378.7	34686.9	50178.6	317	7.000	6972	1.00	2.00	2048	9020
JAPAN	S	78 3 22	5657N	17810W	16079.9	33422.1	49958.1	219	4.000	3977	0.99	2.20	1761	5940
KOREA	M	80 1 6	5704N	17337W	17419.7	34657.1	50174.9	142	5.167	5122	0.99	1.44	71878	77000
JAPAN	S	80 2 16	5746N	17404W	17334.6	34342.1	50110.9	273	3.000	2947	0.96	4.66	3213	6160
JAPAN	S	79 3 16	5835N	17456W	17083.8	33847.0	49973.1	383	5.667	5562	0.98	2.54	1038	6600
JAPAN	S	80 2 28	5832N	17628W	16571.3	33738.0	50096.3	306	6.500	6285	0.97	1.59	2515	8800
JAPAN	S	78 3 13	5720N	17355W	17346.0	34523.4	50156.6	361	4.500	4347	0.97	2.69	493	4840
JAPAN	L	80 2 7	5823N	17511W	16875.7	33891.9	50020.2	150	1.167	1122	0.96	1.29	84678	65800
JAPAN	L	80 1 19	5926N	17736W	16303.4	33236.3	49866.9	159	2.250	2162	0.96	2.15	35238	37400
JAPAN	L	80 1 12	5716N	17350W	17368.3	34558.9	50162.2	150	2.500	2396	0.96	1.46	41604	44000
JAPAN	S	78 3 2	5655N	17333W	17385.0	34701.4	50179.4	385	1.517	1444	0.95	2.93	96	1540
JAPAN	S	78 3 19	5916N	17824W	16055.4	33268.8	49909.6	257	4.500	4270	0.95	2.03	2550	6220
JAPAN	S	79 3 17	5815N	17509W	16990.4	33989.3	50038.5	410	5.333	5024	0.94	1.96	476	5500
JAPAN	S	80 2 17	5706N	17355W	17309.4	34605.5	50172.4	328	3.667	3438	0.94	3.67	302	3740
JAPAN	S	78 3 19	5900N	17819W	16041.2	33390.2	49951.8	273	4.500	4151	0.92	1.95	1349	5500
JAPAN	S	78 3 21	5829N	17510W	17001.0	33276.2	49997.1	353	4.667	4286	0.92	2.55	1654	5940
JAPAN	S	79 3 28	5750N	17422W	17233.7	34262.8	50096.0	293	2.833	2587	0.91	3.69	1791	4378
KOREA	M	80 1 31	5717N	17351W	17364.3	34550.7	50160.9	128	3.167	2885	0.91	1.54	23515	26400
JAPAN	S	78 3 18	5931N	17833W	16046.3	33149.0	49869.3	412	4.500	4070	0.90	2.47	2750	6820
JAPAN	M	80 2 10	5719N	17352W	17462.7	34536.2	50156.1	153	3.000	2710	0.90	0.73	28090	30300
JAPAN	L	78 3 15	5826N	17513W	16981.0	33896.0	50007.1	132	3.333	3006	0.90	1.83	135594	138600
JAPAN	S	80 2 9	5717N	17353W	17351.6	34546.2	50160.8	164	1.500	1346	0.90	2.82	1514	2860
KOREA	H	80 1 11	5713N	17352W	17347.9	34572.3	50165.7	160	4.167	3723	0.89	1.28	42477	46200
JAPAN	L	79 2 27	5823N	17529W	16887.0	33895.0	50019.8	122	0.833	739	0.89	4.40	87261	98000
JAPAN	S	78 3 24	5910N	17829W	16015.8	33307.3	49927.2	258	4.000	3545	0.89	1.37	5055	8580
JAPAN	S	80 2 16	5751N	17424W	17223.0	34251.6	50095.7	273	3.500	3093	0.88	6.07	4607	7700
JAPAN	S	80 3 12	5657N	17340W	17378.7	34686.9	50176.6	323	7.167	6290	0.86	2.13	3390	9680
JAPAN	S	78 3 29	6000N	17858W	15994.4	32910.7	49791.0	254	5.000	4370	0.87	1.29	8280	12650
JAPAN	L	80 1 8	5857N	17811W	16074.8	33420.9	49956.3	158	1.750	1525	0.86	1.71	192075	193600
KOREA	M	80 1 9	5704N	17337W	17419.7	34657.1	50174.9	137	4.667	4022	0.86	1.70	105978	110000
JAPAN	S	78 3 17	5901N	17821W	16033.5	33320.7	49949.6	315	4.333	3730	0.86	2.10	1110	4840
JAPAN	L	80 3 17	5920N	17733W	16317.3	33290.2	49883.7	128	2.500	2135	0.85	1.06	44945	47080
JAPAN	L	79 2 20	5702N	17320W	17523.8	34706.9	50077.0	87	2.333	1986	0.85	0.77	174014	176000
JAPAN	S	80 2 7	5752N	17420W	17244.6	34251.8	50092.9	219	5.250	4410	0.84	3.45	9670	14080
JAPAN	L	77 2 23	5709N	17348W	17362.9	34604.4	50170.1	131	2.583	2145	0.83	1.00	35255	37400
JAPAN	S	80 2 19	5628N	17233W	17692.5	34955.2	50156.6	246	4.500	3733	0.83	5.85	4627	8360
JAPAN	L	80 1 7	5854N	17753W	16160.8	33463.9	49962.9	134	2.250	1858	0.83	1.49	3742	39600
JAPAN	S	78 3 18	5915N	17825W	16048.0	33275.1	49912.7	262	5.000	4108	0.82	2.47	2272	6380

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-13 (continued). TURBOT, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	7X	7Y	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
KOREA	M	80 110	5713N	17352W	17347.9	34572.3	50165.7	166.	3.250	2823.	0.81	1.38	63377.	66000.
KOREA	M	79 126	5833N	17558W	16739.1	33773.6	49997.4	134.	1.250	1009.	0.61	0.94	31991.	33000.
JAPAN	L	78 3 2	5909N	17823W	16043.4	33320.9	49926.7	108.	1.417	1132.	0.80	1.24	58268.	59400.
JAPAN	S	79 2 5	5711N	17358W	17304.2	34570.6	50167.0	394.	5.500	4380.	0.80	2.06	812.	5152.
JAPAN	S	79 210	5712N	17357W	17313.3	34567.1	50166.5	361.	5.250	4179.	0.80	1.89	441.	4620.
JAPAN	L	80 1 9	5826N	17529W	16891.1	33871.5	50011.1	134.	1.750	1387.	0.79	1.42	10613.	110000.
JAPAN	S	79 2 6	5711N	17357W	17310.6	34572.0	50167.6	301.	5.250	4135.	0.79	2.18	903.	5038.
JAPAN	M	79 128	5855N	17305W	17592.5	34775.2	50180.1	77.	0.500	391.	0.78	0.81	8409.	8800.
JAPAN	S	79 221	5631N	17247W	17616.8	34916.0	50165.0	246.	3.083	2403.	0.78	3.44	1557.	3960.
JAPAN	L	78 2 8	5900N	17816W	16056.6	33393.6	49951.3	128.	1.083	844.	0.78	1.54	175156.	176000.
JAPAN	S	80 2 2	5619N	17430W	17217.7	34020.8	50017.0	219.	2.667	2035.	0.76	4.17	1045.	3080.
JAPAN	S	80 311	5759N	17342W	17482.8	34268.8	50067.1	312.	6.167	4697.	0.76	2.31	4763.	9460.
JAPAN	S	78 320	5821N	17538W	16833.1	33696.4	50027.2	323.	3.500	2661.	0.76	12.09	1739.	4400.
JAPAN	S	80 2 5	5633N	17218W	17810.9	34972.1	50159.4	410.	4.300	3259.	0.76	7.78	921.	4180.
KOREA	M	80 119	5709N	17353W	17330.8	34593.2	50169.8	197.	11.167	8457.	0.76	1.40	35543.	44000.
JAPAN	S	79 319	5632N	17248W	17617.1	34910.5	50166.5	328.	3.833	2891.	0.75	1.91	991.	3872.
JAPAN	L	79 214	5834N	17608W	16695.4	33751.5	49996.7	114.	3.417	2358.	0.75	1.05	58642.	101200.
JAPAN	S	79 326	5828N	17547W	16792.9	33828.7	50009.3	301.	6.333	4723.	0.75	1.30	2273.	6996.
JAPAN	S	78 324	5916N	17825W	16050.4	33267.8	49909.9	252.	5.000	3728.	0.75	1.71	2652.	6380.
JAPAN	L	79 219	5901N	17818W	16048.9	33384.2	49949.0	148.	2.583	1916.	0.74	1.46	53084.	55000.
JAPAN	S	78 327	5858N	17723W	16282.7	33617.6	49999.5	405.	5.333	3945.	0.74	2.59	2215.	6160.
JAPAN	L	79 310	5823N	17532W	16870.0	33890.4	50020.4	122.	1.917	1411.	0.74	1.28	71189.	72600.
JAPAN	S	79 319	5822N	17526W	16902.7	33907.5	50022.0	355.	7.000	5137.	0.73	1.53	3663.	8000.
JAPAN	S	79 330	5833N	17644W	16408.4	33707.8	50006.4	301.	4.917	3595.	0.73	4.312	717.	4312.
JAPAN	S	79 331	5833N	17551W	16777.9	33783.8	49995.7	301.	7.583	5534.	0.73	1.36	758.	6292.
JAPAN	M	80 2 3	5631N	17244W	17637.8	34922.5	50164.3	120.	2.000	1455.	0.73	0.91	9545.	11000.
JAPAN	S	78 326	5904N	17820W	16046.2	33360.3	49941.5	227.	4.000	2907.	0.73	1.79	6333.	9240.
JAPAN	L	80 127	5907N	17822W	16043.5	33336.5	49933.8	145.	2.500	1814.	0.73	1.57	147766.	149600.
JAPAN	L	79 329	5926N	17735W	16318.1	33241.2	49865.9	131.	2.000	1446.	0.72	1.25	97754.	101200.
KOREA	M	79 127	5836N	17658W	16414.3	33666.1	50000.8	142.	2.667	1927.	0.72	0.96	37673.	59600.
JAPAN	S	78 316	5818N	17506W	17011.4	33970.7	50029.3	361.	4.583	3303.	0.72	6.47	877.	4180.
KOREA	M	79 225	5834N	17615W	16646.7	33741.5	49998.2	254.	3.583	2578.	0.72	1.40	34822.	37400.
JAPAN	L	79 314	5821N	17524W	16912.6	33918.5	50024.4	178.	2.083	1499.	0.72	2.01	75501.	77000.
JAPAN	L	79 324	5823N	17516W	16960.6	33915.3	50016.9	153.	3.417	2415.	0.71	1.19	59185.	61600.
JAPAN	L	77 222	5748N	17416W	17267.2	34289.1	50102.3	129.	2.167	1528.	0.71	1.14	24872.	26400.
JAPAN	L	78 212	5858N	17812W	16072.1	33412.6	49955.8	148.	2.000	1401.	0.70	1.19	75599.	77000.
JAPAN	S	78 326	5904N	17819W	16051.3	33361.5	49941.3	243.	4.500	3140.	0.70	1.62	3460.	6600.
JAPAN	S	79 210	5657N	17341W	17372.2	34684.6	50178.6	372.	5.583	3895.	0.70	2.04	395.	4290.
JAPAN	S	78 321	5833N	17638W	16518.0	33716.3	50005.3	372.	4.667	3250.	0.70	1.98	490.	3740.
KOREA	M	79 2 4	5833N	17555W	16755.7	33778.0	49996.7	148.	4.583	3166.	0.69	1.16	27634.	30000.
KOREA	M	79 210	5835N	17626W	16507.8	33718.3	49997.7	159.	5.750	3962.	0.69	1.19	9238.	13200.
JAPAN	L	80 210	5918N	17807W	16144.3	33271.2	49899.7	159.	2.167	1492.	0.69	1.40	8708.	90200.
JAPAN	S	78 325	5900N	17819W	16041.2	33390.2	49951.8	235.	4.500	3085.	0.69	1.91	3295.	6380.
JAPAN	L	78 221	5910N	17823W	16045.9	33313.7	49925.9	120.	1.167	798.	0.68	1.28	98203.	99000.
JAPAN	L	77 215	5840N	17500W	17065.4	33798.9	49957.7	125.	2.583	1759.	0.68	0.67	53241.	55000.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-13 (continued). TURBOT, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	78 122	5824N	17516W	16950.5	33904.2	50014.4	115.	2.500	1695.	0.68	1.82	86305.	88000.
JAPAN	L	80 121	6014N	17837W	16115.8	32815.6	49736.3	191.	3.000	2031.	0.68	2.17	30749.	32780.
JAPAN	S	78 330	5906N	17826W	16020.8	33339.3	49337.3	242.	3.083	2085.	0.68	1.85	9795.	11880.
JAPAN	S	80 120	5632N	17241W	17661.4	34925.7	50164.8	139.	1.167	788.	0.68	1.71	1192.	1980.
JAPAN	L	80 125	5901N	17817W	16054.0	33385.3	49948.8	139.	1.583	1067.	0.67	1.72	53933.	55000.
JAPAN	S	79 320	5633N	17228W	17748.2	34950.4	50162.6	246.	3.000	1987.	0.66	4.04	983.	2970.
JAPAN	S	79 329	5822N	17539W	16828.9	33687.2	50024.8	344.	6.000	3973.	0.66	1.99	427.	4400.
JAPAN	L	79 2 8	5933N	17740W	16305.9	33181.3	49845.8	145.	1.833	1209.	0.66	1.05	152791.	154000.
JAPAN	L	80 128	5908N	17824W	16035.9	33327.1	49931.6	104.	2.917	1903.	0.65	1.76	99297.	101200.
JAPAN	L	78 3 5	5652N	17811W	16077.3	33413.7	49955.6	151.	2.500	1630.	0.65	1.41	75370.	77000.
JAPAN	L	79 327	5725N	17351W	17382.3	34500.4	50149.0	78.	2.667	1733.	0.65	0.88	70867.	72000.
JAPAN	L	77 3 4	5712N	17350W	17358.2	34582.6	50166.9	132.	3.750	2429.	0.65	1.32	118571.	121000.
JAPAN	L	80 216	5836N	17617W	16639.0	33723.3	49993.0	119.	2.500	1617.	0.65	1.28	149083.	150700.
JAPAN	S	80 2 6	5655N	17326W	17462.8	34728.8	50179.7	339.	3.500	2282.	0.65	4.96	5458.	7700.
JAPAN	S	79 2 9	5711N	17358W	17304.2	34570.6	50187.6	101.	1.000	3504.	0.64	2.74	148.	3652.
JAPAN	L	79 212	5910N	17823W	16085.9	33313.7	49825.9	151.	1.000	635.	0.64	1.10	137965.	138600.
JAPAN	S	79 312	5826N	17803W	16190.7	33216.5	49874.5	257.	3.833	2423.	0.63	1.93	1471.	3894.
JAPAN	L	80 1 8	5903N	17820W	16043.7	33367.5	49944.1	159.	1.833	1155.	0.63	1.67	196845.	198000.
JAPAN	S	80 213	5635N	17306W	17515.6	34860.4	50172.9	328.	5.000	3141.	0.63	4.16	379.	3520.
JAPAN	L	80 126	5915N	17740W	16272.8	33321.7	49900.9	186.	2.917	1823.	0.63	1.83	108177.	110000.
JAPAN	L	79 219	5858N	17812W	16072.1	33412.6	49955.8	145.	2.333	1449.	0.62	1.40	44751.	46200.
JAPAN	L	78 211	5904N	17820W	16046.2	33360.3	49941.5	164.	3.167	1964.	0.62	1.99	53036.	55000.
JAPAN	S	79 224	5657N	17341W	17372.2	34698.6	50178.6	301.	4.917	3041.	0.62	1.72	919.	3960.
JAPAN	S	79 330	5834N	17747W	16142.8	33613.4	50012.4	355.	6.833	4211.	0.62	1.30	629.	4840.
JAPAN	L	79 223	5830N	17542W	16823.7	33820.5	50002.4	114.	2.750	1688.	0.61	1.71	125912.	127600.
JAPAN	M	79 127	5636N	17207W	17894.3	34986.7	50160.5	82.	1.000	613.	0.61	0.98	12587.	13200.
JAPAN	S	78 331	5933N	17828W	16003.0	33556.6	49945.6	227.	3.333	2038.	0.61	2.52	16662.	18700.
KOREA	M	80 1 8	5703N	17338W	17410.3	34660.2	50175.5	145.	3.667	2235.	0.61	1.44	63765.	66000.
JAPAN	S	80 2 4	5630N	17232W	17708.6	34951.3	50159.4	284.	4.333	2597.	0.60	6.50	2463.	5060.
JAPAN	S	79 329	5833N	17615W	16645.0	33749.1	50001.0	350.	4.833	2895.	0.60	1.49	801.	3696.
JAPAN	S	78 318	5916N	17825W	16056.4	33267.8	49909.9	295.	4.500	2689.	0.60	2.15	1051.	3740.
KOREA	M	80 1 3	5714N	17350W	17363.3	34570.9	50164.7	164.	3.750	2240.	0.60	1.36	68160.	70400.
JAPAN	S	79 313	5753N	17358W	17382.3	34286.3	50087.5	328.	4.500	2619.	0.58	2.37	5081.	7700.
KOREA	M	80 1 7	5704N	17340W	17400.3	34650.2	50174.7	142.	3.667	2131.	0.58	1.68	63969.	66000.
KOREA	M	79 211	5834N	17601W	16724.0	33761.5	49995.2	137.	5.000	2884.	0.58	1.20	25716.	28600.
JAPAN	S	80 2 3	5721N	17351W	17373.7	34525.9	50155.3	273.	4.000	2289.	0.57	3.24	2771.	5060.
JAPAN	L	78 216	5901N	17812W	16079.6	33391.0	49947.9	164.	3.417	1952.	0.57	3.52	86048.	88000.
JAPAN	L	80 113	5706N	17345W	17373.9	34627.9	50172.9	175.	2.500	1427.	0.57	1.53	20573.	22000.
JAPAN	L	80 214	5825N	17531W	16878.5	33876.3	50014.4	127.	1.333	754.	0.57	1.60	79766.	80520.
JAPAN	L	79 3 8	5822N	17513W	16976.4	33927.9	50019.1	146.	1.417	800.	0.56	1.76	58600.	59400.
JAPAN	L	78 2 7	5901N	17817W	16054.0	33385.3	49946.8	126.	1.250	705.	0.56	1.41	153295.	154000.
JAPAN	L	79 325	5824N	17530W	16882.7	33885.7	50017.1	136.	2.000	1123.	0.56	1.51	51677.	52800.
JAPAN	L	78 323	6024N	17840W	16115.3	32758.9	49716.9	201.	2.333	1288.	0.55	1.05	143912.	145200.
JAPAN	L	80 229	5821N	17519W	16941.1	33926.3	50023.4	134.	1.833	1000.	0.55	2.15	100200.	101200.
KOREA	M	79 2 5	5833N	17600W	16728.0	33770.7	49997.8	159.	4.833	2635.	0.55	1.38	28165.	30800.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

23 available trawl records (exceeding 500 lbs/hr CPUE) were not included.

TABLE A-14. TURBOT, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE YYMMDD	LAT	LONG	APPROX LORAN-C PULSE RATES 7X 7Y 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	78 6 3	5516N	17752W	33301.6 49901.4 301.	301.	3.050	16052.	5.26	1.84	228.	16280.
JAPAN	S	78 5 18	5918N	17750W	33288.5 49894.9 282.	282.	4.000	20730.	5.18	1.73	1270.	22000.
JAPAN	S	79 5 25	5745N	17417W	36309.0 50109.5 306.	306.	2.417	10695.	4.43	1.52	1845.	12540.
JAPAN	S	80 4 8	5834N	17658W	33680.8 50006.0 331.	331.	6.000	25617.	4.27	1.62	2983.	28600.
JAPAN	S	80 5 8	5837N	17723W	33624.7 50002.0 301.	301.	4.500	16655.	3.70	0.98	1165.	17820.
JAPAN	L	79 4 11	5824N	17838W	32736.1 49706.1 153.	153.	2.583	9513.	3.68	0.67	85087.	94600.
JAPAN	S	79 5 25	5823N	17503W	33935.6 50013.7 301.	301.	3.333	11443.	3.43	1.90	217.	11660.
JAPAN	S	80 5 9	5837N	17723W	33624.7 50002.0 301.	301.	4.333	18730.	3.40	1.02	890.	15620.
JAPAN	S	79 6 15	5829N	17234W	34950.1 50158.5 276.	276.	3.000	10172.	3.39	5.18	608.	10780.
JAPAN	S	80 5 10	5835N	17655W	33677.6 50002.9 295.	295.	5.000	16674.	3.33	1.01	486.	17160.
JAPAN	L	79 4 4	5839N	17455W	33914.4 49959.2 144.	144.	1.250	4082.	3.27	2.14	11312.	15400.
JAPAN	S	80 5 25	6014N	17851W	32807.7 49744.5 293.	293.	5.000	16147.	3.23	2.72	353.	16500.
JAPAN	S	80 4 9	5833N	17620W	33742.0 50002.0 303.	303.	5.500	17145.	3.12	1.47	1335.	18480.
JAPAN	S	80 6 8	5722N	17352W	34517.4 50153.8 252.	252.	4.167	12770.	3.06	7.50	3950.	16720.
JAPAN	S	78 5 19	5921N	17807W	33248.6 49991.0 355.	355.	2.417	7373.	3.05	1.62	327.	7700.
JAPAN	S	80 4 10	5833N	17636W	33719.1 50005.0 323.	323.	5.500	16535.	3.01	1.26	845.	17380.
JAPAN	S	80 4 26	5944N	17842W	33043.6 49833.8 377.	377.	4.000	12019.	3.00	1.27	2281.	14300.
JAPAN	S	78 6 3	5916N	16214.7 33301.6 49901.4 295.	295.	3.000	8772.	2.92	1.70	28.	8800.	
JAPAN	S	80 5 8	5837N	17723W	33524.7 50002.0 279.	279.	4.333	12655.	2.92	1.05	1205.	13860.
JAPAN	S	79 5 22	5630N	17200W	35017.6 50146.1 355.	355.	4.000	11479.	2.87	2.76	401.	11880.
JAPAN	S	80 4 10	5833N	17636W	33719.1 50005.0 334.	334.	5.583	15653.	2.80	1.49	1067.	16720.
JAPAN	L	77 4 20	5632N	17201W	35010.5 50150.7 104.	104.	2.000	5591.	2.80	2.30	38409.	44000.
JAPAN	S	79 5 6	5835N	17517W	33816.8 49980.3 317.	317.	3.500	9740.	2.78	1.60	380.	10120.
JAPAN	S	78 6 25	5916N	17748W	33305.8 49900.2 208.	208.	3.667	10009.	2.73	2.00	111.	10120.
JAPAN	S	78 6 8	6023N	17857W	32754.6 49718.4 293.	293.	3.583	9437.	2.63	3.06	683.	10120.
JAPAN	S	79 4 25	5835N	17448W	33858.5 49970.1 355.	355.	4.667	12159.	2.61	1.80	469.	12628.
JAPAN	S	79 6 23	5957N	17857W	32934.1 49799.8 262.	262.	6.917	17986.	2.60	2.46	2914.	20900.
JAPAN	S	79 6 28	5632N	17252W	34901.8 50167.4 260.	260.	3.417	8741.	2.56	2.34	4327.	13068.
JAPAN	S	78 4 5	5659N	17345W	34665.3 50177.5 372.	372.	4.000	10168.	2.54	3.98	392.	10560.
JAPAN	S	80 4 12	5834N	17626W	33725.8 50000.4 287.	287.	4.083	10334.	2.53	1.17	446.	10780.
JAPAN	S	78 6 10	6010N	17855W	32836.2 49758.9 252.	252.	4.000	10067.	2.52	2.78	273.	10340.
JAPAN	S	79 6 22	5953N	17853W	32967.2 49810.5 301.	301.	5.500	13825.	2.51	2.36	1355.	15180.
JAPAN	S	80 5 7	5837N	17723W	33624.7 50002.0 273.	273.	4.167	10407.	2.50	1.08	1473.	11880.
JAPAN	S	79 5 10	5946N	17844W	33026.9 49828.5 317.	317.	4.000	9968.	2.49	2.26	812.	10780.
JAPAN	S	80 5 13	5835N	17655W	33677.6 50002.9 295.	295.	5.167	12684.	2.45	1.00	736.	13420.
JAPAN	S	78 5 31	5835N	17513W	33822.6 49979.0 191.	191.	3.000	7355.	2.45	3.25	345.	7700.
JAPAN	S	78 6 9	6000N	17902W	32908.0 49792.5 206.	206.	4.083	9990.	2.45	2.22	130.	10120.
JAPAN	S	79 6 1	5915N	17751W	33310.3 49904.0 262.	262.	2.000	4831.	2.42	2.29	669.	5500.
JAPAN	S	79 6 22	5540N	17830W	33083.8 49841.8 273.	273.	6.000	14404.	2.40	2.83	1216.	15620.
JAPAN	L	77 5 3	5706N	17345W	34627.9 50172.9 128.	128.	1.500	3546.	2.36	1.58	55854.	59400.
JAPAN	S	80 5 6	5837N	17723W	33624.7 50002.0 290.	290.	4.500	10600.	2.36	1.11	840.	11440.
KOREA	M	80 4 26	5835N	17634W	33707.0 49999.2 144.	144.	5.083	11970.	2.35	0.65	21470.	33440.
JAPAN	S	79 4 10	5823N	17432W	33984.2 50004.6 336.	336.	3.167	7456.	2.35	1.82	684.	8140.
JAPAN	S	78 6 6	5925N	17824W	33202.1 49884.2 249.	249.	4.333	10077.	2.33	1.87	483.	10560.
JAPAN	S	79 5 31	5956N	17857W	32941.7 49802.9 326.	326.	5.417	12525.	2.31	2.16	455.	12980.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-14 (continued). TURBOT, APRIL-JUNE 1977-80.

NATION	VESSEL CLASS	DATE YMHDD	LAT	LONG	APPROX LORAN-C PULSE RATES 7X 7Y 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	80 411	5833N	17623W	16567.6 33729.1 50003.7	284	4.167	9473.	2.27	1.27	867.	10340.
JAPAN	S	79 5 5	5834N	17620W	16508.9 33706.0 50003.0	273.	4.000	9086.	2.27	1.36	374.	9460.
JAPAN	S	78 6 4	5916N	17752W	16214.7 33301.6 49901.4	306.	4.000	9086.	2.27	1.70	175.	9240.
JAPAN	S	80 511	5835N	17655W	16428.6 33677.6 50002.9	306.	5.000	11312.	2.26	1.02	1008.	12320.
JAPAN	S	79 611	5801N	17401W	17371.9 34217.7 50065.3	284.	4.333	9787.	2.26	2.98	3193.	12980.
JAPAN	S	79 627	6026N	17854W	16064.3 32712.7 49707.3	224.	6.000	13442.	2.24	2.96	410.	13860.
JAPAN	S	79 6 3	5829N	17233W	17697.5 34952.2 50158.2	219.	2.500	5556.	2.22	4.52	164.	5720.
JAPAN	S	79 530	5829N	17551W	16772.0 33814.9 50007.3	301.	4.417	9674.	2.19	1.73	1326.	11000.
JAPAN	S	78 6 4	5916N	17752W	16214.7 33301.6 49901.4	298.	3.500	7638.	2.18	1.70	62.	7700.
JAPAN	S	79 528	5831N	17605W	16697.1 33778.9 50006.6	317.	5.167	11196.	2.17	1.61	904.	12100.
JAPAN	S	78 6 9	6009N	17900W	16004.7 32840.9 49764.1	268.	3.667	7904.	2.16	2.48	236.	8140.
JAPAN	S	80 5 7	5837N	17723W	16286.4 33624.7 50002.0	284.	4.417	9521.	2.16	1.03	1699.	11220.
JAPAN	S	79 630	6029N	17903W	16031.8 32685.1 49701.9	227.	7.000	14979.	2.14	2.29	2181.	17160.
JAPAN	S	79 429	5946N	17843W	16052.5 33027.7 49828.2	290.	5.833	12457.	2.14	1.60	1183.	13640.
JAPAN	S	80 513	5835N	17753W	16152.8 33454.2 49960.6	301.	4.417	9406.	2.13	1.07	1154.	10560.
JAPAN	S	79 626	6041N	17916W	16000.5 32586.7 49669.3	235.	6.167	13132.	2.13	2.74	508.	13640.
JAPAN	S	78 6 6	5836N	17456W	17073.5 33935.7 49970.5	191.	3.250	6875.	2.12	2.62	825.	7700.
JAPAN	S	79 425	5837N	17723W	16286.4 33624.7 50002.0	328.	7.000	14782.	2.11	1.57	1718.	16500.
JAPAN	S	60 423	5845N	17730W	16218.6 33547.5 49983.9	312.	4.333	9116.	2.10	1.20	2104.	11220.
JAPAN	S	78 520	5834N	17653W	16437.5 33687.8 50005.2	317.	4.500	9335.	2.07	2.17	785.	10120.
JAPAN	S	80 512	5836N	17722W	16283.4 33633.2 50004.4	290.	4.417	9122.	2.07	1.03	998.	10120.
JAPAN	S	78 6 4	5825N	17431W	17216.0 33968.9 49997.6	339.	2.833	5840.	2.06	2.01	540.	6380.
JAPAN	S	79 428	5834N	17634W	16541.9 33714.5 50001.9	246.	4.000	8196.	2.05	1.31	304.	8580.
JAPAN	S	79 521	5657N	17326W	17469.3 34718.9 50179.1	301.	5.000	10194.	2.04	3.24	146.	10340.
JAPAN	S	79 610	6011N	17853W	16039.6 32829.7 49754.9	246.	5.000	10161.	2.03	1.71	839.	11000.
JAPAN	S	80 511	5835N	17655W	16428.6 33677.6 50002.9	290.	5.000	10081.	2.02	0.96	919.	11000.
JAPAN	S	79 524	5822N	17424W	17251.6 34005.2 50005.2	339.	4.750	9549.	2.01	2.76	1451.	11000.
JAPAN	S	79 514	6014N	17855W	16036.9 32805.4 49746.3	317.	5.000	9985.	2.00	1.88	575.	10560.
JAPAN	S	79 6 2	5945N	17844W	16025.7 33034.5 49631.5	301.	5.750	11432.	1.99	2.05	668.	12100.
JAPAN	S	79 613	5821N	17423W	17252.7 34015.2 50008.2	273.	3.333	6618.	1.99	1.58	862.	7480.
JAPAN	S	79 4 7	5832N	17208W	17868.0 34996.0 50153.9	279.	4.417	8724.	1.98	1.49	1176.	9900.
JAPAN	S	79 621	5852N	17806W	16082.1 33462.5 49970.4	257.	3.583	7067.	1.97	5.04	765.	7832.
JAPAN	S	79 612	5810N	17413W	17308.7 34123.4 50040.7	284.	4.500	8757.	1.95	2.06	1583.	10340.
JAPAN	S	79 5 5	5833N	17611W	16667.1 33754.9 50000.2	301.	4.000	7745.	1.94	1.29	175.	7920.
JAPAN	S	79 610	5743N	17353W	17400.6 34371.6 50112.5	334.	2.250	4352.	1.93	2.78	3128.	7480.
JAPAN	S	79 610	5642N	17320W	17454.4 34801.6 50178.7	342.	2.000	3851.	1.93	1.76	109.	3960.
JAPAN	S	78 531	5836N	17459W	17068.0 33834.3 49970.9	208.	3.167	6061.	1.91	2.39	539.	6600.
JAPAN	S	79 623	5941N	17811W	16077.8 33075.3 49839.2	252.	7.000	13350.	1.91	2.55	2050.	15400.
JAPAN	S	80 613	5806N	17410W	17323.1 34161.2 50052.3	273.	3.167	5970.	1.89	2.74	1510.	7480.
JAPAN	S	78 522	6010N	17857W	16020.0 32835.0 49759.7	290.	5.000	9358.	1.87	1.75	1642.	11000.
JAPAN	S	79 515	6011N	17900W	16008.8 32825.6 49757.8	328.	4.000	7483.	1.87	2.14	437.	7920.
JAPAN	S	78 528	5836N	17458W	17073.5 33835.7 49970.5	227.	3.000	5587.	1.86	2.55	133.	5720.
JAPAN	S	78 528	5835N	17514W	16984.7 33821.1 49979.3	219.	3.250	6024.	1.85	2.54	136.	6160.
JAPAN	S	78 4 1	5817N	17507W	17004.4 33976.9 50032.4	295.	5.000	9221.	1.84	2.75	569.	9790.
JAPAN	S	79 511	5644N	17323W	17442.8 34786.3 50175.5	252.	4.083	7513.	1.84	2.73	1287.	8400.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-14 (continued). TURBOT, APRIL-JUNE 1977-80

VESSEL CLASS	DATE	NATION	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
S	78 6 5	JAPAN	5835N	17513W	1699G.3	33822.6	49979.0	213.	4.000	7329.	1.83	3.52	1471.	8600.
S	80 4 24	JAPAN	5844N	17737W	16221.5	33556.0	49986.3	290.	4.333	7939.	1.83	1.28	1301.	9240.
S	79 6 20	JAPAN	5848N	17844W	16032.2	33011.8	49822.5	301.	5.000	9153.	1.83	2.95	747.	9900.
S	80 5 14	JAPAN	5835N	17655W	16428.6	33677.6	50002.9	301.	4.750	8661.	1.82	1.01	799.	9460.
S	78 5 24	JAPAN	6000N	17900W	15985.4	32909.3	49791.8	273.	6.000	10902.	1.82	1.47	98.	11000.
S	79 5 26	JAPAN	5833N	17615W	16645.0	33749.1	50001.0	328.	5.000	9069.	1.81	1.55	831.	9900.
S	78 4 3	JAPAN	5821N	17540W	16821.7	33893.3	50027.6	383.	4.667	8459.	1.81	3.57	303.	8800.
S	79 5 30	JAPAN	5831N	17201W	17905.9	35013.0	50148.7	328.	4.167	7537.	1.81	1.42	307.	7920.
S	79 6 26	JAPAN	6000N	17604W	16704.3	33772.7	50001.6	301.	5.500	9813.	1.78	1.42	307.	10120.
S	79 6 26	JAPAN	6000N	17901W	15980.9	32908.6	49792.1	221.	5.167	9197.	1.78	1.97	923.	10120.
S	78 6 1	JAPAN	5835N	17514W	16984.7	33821.1	49979.3	186.	3.583	6367.	1.78	3.02	1773.	8140.
S	80 4 14	JAPAN	5834N	17627W	16580.5	33724.4	50000.6	282.	4.667	8271.	1.77	1.26	1409.	9680.
S	79 5 31	JAPAN	6010N	17902W	15998.0	32832.0	49761.7	355.	6.667	11771.	1.77	2.53	769.	12540.
S	79 5 14	JAPAN	6018N	17857W	16036.1	32773.4	49734.4	361.	5.167	9067.	1.75	3.49	2593.	11660.
S	79 6 9	JAPAN	6008N	17904W	15980.6	32861.2	49774.9	230.	4.500	7880.	1.75	1.94	700.	8580.
S	79 4 24	JAPAN	6009N	17856W	16022.3	32843.3	49762.4	235.	5.000	8681.	1.74	2.10	1659.	10340.
L	77 4 24	JAPAN	5835N	17640W	16510.9	33698.6	50000.3	126.	1.250	2162.	1.73	0.63	151838.	154000.
S	79 6 25	JAPAN	6013N	17648W	16065.6	32817.2	49746.4	224.	6.250	10793.	1.73	2.21	1967.	12760.
S	78 5 25	JAPAN	5953N	17836W	16083.7	32964.3	49798.2	241.	5.917	10124.	1.71	1.67	876.	11000.
S	80 4 1	JAPAN	5633N	17213W	17842.1	34982.7	50157.6	295.	6.000	10182.	1.70	2.18	1258.	11440.
S	79 6 6	JAPAN	6020N	17848W	16076.9	32762.6	49723.9	273.	4.333	7351.	1.70	2.25	349.	7700.
S	79 5 4	JAPAN	5838N	17723W	16282.7	33617.6	49999.5	301.	4.333	7312.	1.69	1.44	168.	7480.
S	79 6 8	JAPAN	6020N	17843W	16091.9	32764.2	49722.5	241.	5.000	8377.	1.68	1.96	643.	9020.
S	80 6 7	JAPAN	5635N	17221W	17801.8	34959.5	50163.5	257.	4.000	6701.	1.68	5.42	999.	7700.
S	78 5 23	JAPAN	5832N	17612W	16659.9	33761.1	50003.2	306.	2.500	4167.	1.67	2.03	13.	4180.
S	79 4 28	JAPAN	5831N	17557W	16741.6	33901.6	50002.9	273.	4.250	7075.	1.66	1.34	625.	4180.
S	80 6 10	JAPAN	5736N	17419W	17284.5	34386.5	50124.7	235.	4.000	6622.	1.66	4.17	638.	7260.
S	79 6 12	JAPAN	6000N	17859W	15985.9	32910.0	49791.4	290.	5.000	8278.	1.66	2.46	742.	9020.
S	78 6 7	JAPAN	6011N	17840W	16097.0	32837.4	49749.3	249.	4.583	7573.	1.65	2.06	127.	7700.
S	79 6 3	JAPAN	5657N	17325W	17475.8	34721.2	50179.1	301.	4.000	6595.	1.65	2.12	1765.	8360.
S	80 6 17	JAPAN	5840N	17313W	17491.5	34825.5	50177.2	246.	5.500	9064.	1.65	4.16	836.	9900.
S	80 4 13	JAPAN	5834N	17625W	16591.5	33727.3	50000.2	312.	4.667	7634.	1.64	1.27	946.	8580.
S	80 6 29	JAPAN	6024N	17848W	16086.3	32731.2	49711.0	224.	5.000	8161.	1.63	2.67	1739.	9900.
S	79 5 29	JAPAN	5636N	17246W	17620.4	34921.4	50163.5	230.	3.500	5712.	1.63	5.57	228.	5940.
S	80 5 16	JAPAN	5832N	17602W	16715.4	33775.6	50001.1	301.	5.250	8565.	1.63	1.27	675.	9240.
S	79 4 11	JAPAN	5815N	17529W	16875.3	33956.6	50042.0	312.	6.417	10458.	1.63	1.85	1202.	11660.
S	80 5 14	JAPAN	5835N	17655W	16428.6	33677.6	50002.9	306.	4.833	7876.	1.63	1.06	924.	8800.
S	79 5 25	JAPAN	5810N	17414W	17302.9	34121.7	50041.0	328.	5.000	8137.	1.63	1.62	1763.	9900.
S	79 4 9	JAPAN	5634N	17228W	17752.9	34947.5	50164.0	295.	4.583	7441.	1.62	1.70	1139.	8580.
S	79 5 15	JAPAN	6002N	17911W	15940.6	32886.8	49785.7	344.	5.167	8381.	1.62	2.47	419.	8800.
S	79 6 22	JAPAN	5854N	17804W	16103.5	33450.7	49964.9	208.	2.750	4457.	1.62	4.16	1043.	5500.
S	78 4 1	JAPAN	5859N	17801W	16038.7	33397.3	49954.5	266.	4.500	7274.	1.62	2.22	3506.	10780.
S	78 6 22	JAPAN	5627N	17206W	17854.0	35013.0	50142.9	355.	3.533	5698.	1.61	9.94	902.	6600.
S	80 6 11	JAPAN	5759N	17400W	17376.1	34235.5	50070.9	328.	4.417	7113.	1.61	5.47	1247.	8360.
S	79 6 13	JAPAN	5947N	17843W	16034.7	33020.2	49825.2	284.	5.000	8049.	1.61	2.33	751.	8800.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-14 (continued). TURBOT, APRIL-JUNE, 1977-80

NATION	VESSEL CLASS	DATE YMMDD	LAT	LONG	APPROX 7X	LDRAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	79 525	5829N	17510W	17001.0	33876.2	49997.1	328.	5.000	7901.	1.58	1.62	899.	8800.
JAPAN	S	79 6 1	5631N	17202W	17899.7	35011.0	50149.2	273.	4.500	7105.	1.58	2.33	375.	7480.
JAPAN	S	80 6 1	6016N	17848W	16071.3	32793.8	49736.8	273.	6.000	9470.	1.58	2.13	430.	9900.
JAPAN	S	79 623	5948N	17845W	16027.6	33011.0	49822.8	219.	6.000	9450.	1.58	2.24	1550.	11000.
JAPAN	S	78 514	5705N	17350W	17338.7	34622.2	50173.4	252.	3.000	6272.	1.57	4.51	328.	6600.
JAPAN	S	79 623	5853N	17752W	16193.7	33472.3	49865.4	208.	3.500	5470.	1.56	3.62	1350.	6020.
JAPAN	S	79 614	5829N	17243W	17634.6	34931.0	50161.3	295.	3.667	5727.	1.56	8.87	873.	6600.
JAPAN	S	78 530	5921N	17807W	16150.8	33248.6	49991.0	360.	5.063	7922.	1.56	1.97	438.	8360.
JAPAN	S	79 628	5632N	17232W	17718.2	34945.2	50162.4	246.	3.167	4923.	1.55	4.60	555.	5478.
JAPAN	S	79 614	5642N	17321W	17447.9	34799.3	50178.7	282.	4.000	6217.	1.55	1.79	1263.	7480.
JAPAN	S	79 4 6	5626N	17213W	17806.0	35001.6	50144.4	309.	5.063	7868.	1.55	2.25	712.	6380.
JAPAN	S	78 529	5919N	17810W	16131.6	33260.7	49897.6	353.	4.917	7582.	1.54	1.95	778.	8360.
JAPAN	S	79 523	5630N	17201W	17900.6	35015.6	50146.6	301.	4.417	6796.	1.54	1.92	464.	7260.
JAPAN	S	79 412	5829N	17545W	16805.5	33823.9	50006.0	399.	4.500	6903.	1.53	1.52	1017.	7920.
JAPAN	S	79 5 2	5918N	17823W	16065.0	33255.1	49903.8	219.	4.500	6694.	1.53	1.70	146.	7040.
JAPAN	L	79 4 7	5833N	17521W	16944.1	33827.4	49987.8	90.	1.917	2927.	1.53	1.62	173073.	176000.
JAPAN	S	78 613	5631N	17226W	17751.1	34961.1	50159.0	435.	2.867	4352.	1.52	8.52	48.	4400.
JAPAN	S	78 630	6006N	17905W	15976.2	32860.6	49775.3	273.	5.000	7564.	1.51	3.26	136.	7700.
JAPAN	S	79 627	6044N	17915W	16010.3	32563.8	49659.0	205.	6.250	9454.	1.51	2.07	2866.	12320.
JAPAN	S	79 531	5630N	17200W	17906.6	35017.6	50146.1	328.	4.000	6043.	1.51	3.68	557.	6600.
JAPAN	S	79 422	5703N	17329W	17319.9	34628.5	50174.8	339.	4.500	6780.	1.51	1.61	252.	7040.
JAPAN	S	79 430	5818N	17508W	17000.0	33967.5	50029.7	301.	5.000	7541.	1.51	1.38	819.	8360.
JAPAN	S	79 523	5632N	17212W	17841.3	34987.7	50155.5	331.	4.000	6025.	1.51	2.04	135.	6160.
JAPAN	S	78 531	5923N	17744W	16264.5	33271.4	49884.2	257.	5.000	7524.	1.50	1.55	176.	7700.
JAPAN	S	78 617	5717N	17354W	17345.2	34544.0	50160.7	246.	3.367	5065.	1.50	4.51	435.	5500.
JAPAN	S	79 4 1	5832N	17612W	16659.9	33761.1	50003.2	301.	3.167	4764.	1.50	1.37	362.	5126.
JAPAN	S	79 5 4	5929N	17830W	16058.2	33166.6	49874.3	383.	6.083	9059.	1.49	2.89	2381.	11440.
JAPAN	S	79 611	5657N	17337W	17398.1	34693.7	50178.7	284.	3.667	5457.	1.49	1.66	703.	6160.
JAPAN	S	79 627	5633N	17249W	17615.3	34905.0	50167.9	206.	3.050	4529.	1.48	3.48	993.	5522.
JAPAN	S	79 430	6000N	17902W	15976.4	32908.0	49792.5	301.	4.333	6407.	1.48	1.67	193.	6600.
JAPAN	S	79 610	5753N	17356W	17394.3	34290.1	50087.2	284.	4.000	5898.	1.47	3.28	1142.	7040.
JAPAN	S	80 4 9	5833N	17631W	16556.6	33726.3	50004.1	309.	5.500	8093.	1.47	1.27	1147.	9240.
JAPAN	S	79 526	5812N	17415W	17298.6	34103.5	50035.0	301.	4.167	6118.	1.47	1.63	482.	6600.
JAPAN	S	79 421	5834N	17618W	16630.2	33737.2	49998.8	361.	2.583	3764.	1.46	1.62	548.	4312.
JAPAN	S	79 528	5833N	17628W	16573.2	33730.5	50003.5	273.	4.000	5803.	1.45	1.86	797.	6600.
JAPAN	S	78 5 3	5707N	17353W	17325.2	34604.4	50171.6	268.	4.000	5791.	1.45	2.24	1249.	7040.
JAPAN	L	77 5 8	5855N	17600W	16126.8	33448.2	49961.5	142.	1.833	2654.	1.45	2.22	3946.	6600.
JAPAN	S	80 6 6	6000N	17900W	15985.4	32909.3	49791.8	262.	5.000	7212.	1.44	1.97	1148.	8360.
JAPAN	S	78 6 6	5927N	17825W	16075.9	33186.2	49878.7	287.	5.000	7203.	1.44	1.86	57.	7260.
JAPAN	S	79 411	5657W	17334W	17417.5	34700.5	50178.6	394.	3.000	4321.	1.44	2.06	299.	4620.
JAPAN	S	79 430	6011W	17906W	15982.5	32822.0	49760.2	328.	4.417	6344.	1.44	2.05	476.	6820.
JAPAN	S	79 6 6	5636N	17255W	17590.4	34881.2	50172.1	257.	3.750	5372.	1.43	3.95	568.	5940.
JAPAN	S	78 4 1	5818N	17511W	16982.8	33962.6	50030.3	295.	5.000	7140.	1.43	2.05	2210.	9350.
JAPAN	S	79 5 3	6000N	17858W	15994.4	32910.7	49791.0	328.	7.583	10826.	1.43	1.93	834.	11660.
JAPAN	S	79 417	5859N	17829W	15987.5	33385.8	49956.2	295.	4.000	5708.	1.43	1.30	166.	5074.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-14 (continued). TURBOT, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE YMMDD	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	79 624	6C00N	17900W	15985.4	32909.3	49791.8	*****	301.	6.583	9336.	1.42	2.98	784.	10120.
JAPAN	S	79 628	6043N	17915W	16008.4	32571.6	49662.3	*****	227.	6.000	8482.	1.41	2.41	752.	9240.
KOREA	M	80 430	5842N	17625W	16618.7	33667.4	49977.4	84.	84.	5.167	7292.	1.41	0.53	67948.	75240.
JAPAN	S	79 527	5822N	17537W	16848.3	33903.3	50024.2	322.	322.	5.000	7038.	1.41	1.93	662.	7700.
JAPAN	S	78 629	5943N	17834W	16068.0	33057.7	49831.2	279.	279.	4.417	6205.	1.40	2.39	395.	6600.
JAPAN	S	78 617	5905N	17826W	16019.3	33346.5	49940.0	355.	355.	5.000	7022.	1.40	3.14	1778.	8800.
JAPAN	S	80 5 4	5853N	17755W	16148.0	33468.7	49965.9	328.	328.	4.583	6422.	1.40	1.37	1278.	7700.
JAPAN	S	79 621	5855N	17754W	16158.0	33455.4	49960.4	246.	246.	3.417	4759.	1.39	3.73	675.	5434.
JAPAN	S	79 611	5705N	17335W	17435.5	34656.2	50174.2	262.	262.	5.000	6959.	1.39	2.69	521.	7480.
JAPAN	S	80 616	5722N	17351W	17375.9	34519.6	50153.8	268.	268.	3.500	4867.	1.39	5.10	633.	5500.
JAPAN	S	79 615	6023N	17848W	16084.5	32739.1	49714.2	219.	219.	5.000	6952.	1.39	1.94	528.	7480.
JAPAN	S	79 517	5953N	17850W	16015.5	32969.4	49803.5	306.	306.	6.000	8338.	1.39	1.80	1122.	9460.
JAPAN	S	80 430	5836N	17712W	16317.9	33646.9	50003.0	312.	312.	4.500	6241.	1.39	1.31	1239.	7480.
JAPAN	S	80 615	5749N	17414W	17280.7	34285.7	50099.7	268.	268.	5.000	6930.	1.39	4.71	550.	7480.
JAPAN	S	78 6 4	5835N	17457W	17076.3	33845.6	49973.5	295.	295.	3.083	4272.	1.39	2.19	348.	4620.
JAPAN	S	78 521	5836N	17718W	16305.2	33638.7	50003.9	301.	301.	6.000	8309.	1.38	1.98	51.	8360.
JAPAN	S	79 426	6022N	17907W	16000.9	32737.3	49726.1	323.	323.	6.000	8291.	1.38	2.38	949.	9240.
JAPAN	S	80 4 5	5656N	17336W	17401.3	34701.0	50175.1	306.	306.	4.583	6320.	1.38	2.01	500.	6820.
JAPAN	S	80 422	5854N	17756W	16145.2	33460.2	49963.4	284.	284.	4.500	6199.	1.38	1.49	1281.	7480.
JAPAN	S	79 4 8	5631N	17205W	17881.4	35004.9	50150.6	306.	306.	5.000	6970.	1.37	2.28	730.	7700.
JAPAN	S	80 425	5843N	17735W	16225.8	33565.8	49988.5	328.	328.	4.667	6342.	1.36	1.41	1358.	7700.
JAPAN	S	80 517	5720N	17353W	17358.7	34527.8	50156.7	189.	189.	2.167	2943.	1.36	1.01	4317.	7260.
JAPAN	S	80 413	5834N	17655W	16426.5	33685.0	50005.5	317.	317.	5.000	6781.	1.36	1.23	919.	7700.
JAPAN	S	79 611	6000N	17900W	15985.4	32909.3	49791.8	328.	328.	5.000	6780.	1.36	3.78	260.	7040.
JAPAN	S	79 615	6000N	17859W	15985.9	32910.0	49791.8	273.	273.	5.000	6761.	1.35	2.20	499.	7260.
JAPAN	S	79 6 6	5646W	17325W	17437.4	34773.1	50180.0	301.	301.	4.500	6078.	1.35	2.62	2722.	8800.
JAPAN	S	79 524	5810W	17414W	17302.9	34121.7	50041.0	273.	273.	4.833	6487.	1.34	2.69	1213.	7700.
JAPAN	S	78 5 1	5836N	17439W	17177.5	33862.7	49963.0	262.	262.	4.000	5359.	1.34	2.31	3671.	8160.
JAPAN	S	79 514	6002N	17907W	15958.5	32889.5	49788.3	328.	328.	5.500	7364.	1.34	1.60	996.	8360.
JAPAN	S	79 5 5	5648W	17803W	16091.6	33494.6	49980.1	290.	290.	6.833	9139.	1.34	1.82	2521.	11660.
JAPAN	S	78 5 2	5823N	17423W	17259.8	33998.3	50001.5	448.	448.	4.667	6230.	1.34	2.23	6750.	12980.
JAPAN	S	78 6 7	6000N	17905W	15963.0	32905.9	49793.6	314.	314.	4.000	5350.	1.33	3.00	170.	5500.
JAPAN	S	78 521	6055N	17902W	15987.3	32870.1	49777.2	243.	243.	4.583	6061.	1.32	1.68	539.	6600.
JAPAN	S	79 627	6025N	17850W	16079.6	32722.4	49708.7	224.	224.	6.833	9024.	1.32	2.55	656.	9680.
JAPAN	S	79 515	6002N	17911W	15940.8	32886.8	49789.7	355.	355.	5.000	6580.	1.32	3.15	900.	7480.
JAPAN	S	78 522	5833N	17623W	16600.8	33737.7	50002.6	306.	306.	5.583	7333.	1.31	1.89	367.	7700.
JAPAN	S	78 518	5819N	17523W	16915.6	33935.6	50029.9	224.	224.	5.083	6671.	1.31	2.57	369.	7040.
JAPAN	S	78 6 9	6012N	17850W	16054.8	32823.8	49750.5	232.	232.	4.333	5681.	1.31	2.25	699.	6380.
JAPAN	S	79 429	5831N	17513W	16936.4	33855.5	49991.7	273.	273.	5.200	6811.	1.31	1.47	911.	7722.
JAPAN	S	79 425	5834N	17516W	16972.7	33826.5	49983.1	383.	383.	4.167	5455.	1.31	1.60	991.	6446.
JAPAN	S	78 6 6	5940N	17833W	16066.3	33081.3	49842.8	364.	364.	5.000	6519.	1.30	2.50	741.	7260.
JAPAN	S	78 6 6	5835N	17513W	16990.3	33822.6	49979.0	230.	230.	3.833	4988.	1.30	3.07	72.	5060.
JAPAN	S	78 5 3	5717W	17355W	17338.8	34541.8	50160.7	298.	298.	4.417	5735.	1.30	3.48	1305.	7040.
JAPAN	S	78 530	5920N	17744W	16262.6	33279.2	49887.2	344.	344.	5.167	6672.	1.29	1.44	1688.	8360.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-14 (continued). TURBOT, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE YMMDD	LAT	LONG	APPROX LORAN-C PULSE RATES 7X 7Y 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	80 614	5753N	17400W	17376.1 34235.5 50070.9	268.	4.000	5149.	1.29	2.61	1011.	6160.
JAPAN	S	78 627	6019N	17846W	16085.7 32721.5 49726.2	279.	4.083	5246.	1.28	2.62	474.	5720.
JAPAN	S	79 615	6025N	17653W	16066.7 32721.0 49710.1	230.	5.333	6846.	1.28	2.28	194.	7040.
JAPAN	S	79 5 4	5942N	17837W	16031.0 33062.8 49638.2	326.	7.000	8983.	1.28	2.98	2457.	11440.
JAPAN	S	79 5 3	5955N	17827W	16013.3 33345.4 49940.2	273.	5.000	6416.	1.28	1.66	404.	6820.
JAPAN	S	80 515	5835N	17655W	16428.6 33677.6 50002.9	279.	4.750	6092.	1.28	1.00	948.	7640.
JAPAN	L	79 412	6023N	17836W	16127.5 32744.0 49709.4	149.	2.667	3418.	1.28	0.62	185702.	189200.
JAPAN	S	60 628	5959N	17902W	15974.2 32415.5 49795.5	235.	4.000	5101.	1.28	2.48	1059.	6160.
JAPAN	S	79 5 7	5835N	17516W	16973.7 33818.3 49979.9	328.	3.750	4756.	1.27	1.57	304.	5060.
JAPAN	S	79 5 2	5918N	17824W	16066.1 33254.1 49904.1	273.	4.500	5701.	1.27	1.55	239.	5940.
JAPAN	S	79 626	6025N	17850W	16075.6 32722.4 49708.7	219.	6.000	7592.	1.27	3.26	108.	7700.
JAPAN	S	79 611	5743N	17349W	17425.1 34379.7 50112.2	328.	4.000	5052.	1.26	2.22	8148.	13200.
JAPAN	S	78 6 5	5833N	17629W	16617.4 33742.0 50002.0	312.	3.000	3776.	1.26	2.51	164.	3960.
JAPAN	S	79 426	6039N	17922W	15971.9 32599.8 49676.7	312.	6.000	7544.	1.26	2.66	1256.	8800.
JAPAN	S	79 518	5936N	17827W	16086.1 33116.7 49852.8	295.	6.333	7913.	1.25	1.42	2207.	10120.
JAPAN	S	79 616	5800N	17400W	17377.0 34227.5 50068.0	273.	3.500	4371.	1.25	2.63	1129.	5500.
JAPAN	S	79 430	5832N	17513W	16987.4 33847.3 49988.5	317.	5.000	6244.	1.25	1.36	576.	6320.
JAPAN	S	79 616	5834W	17640W	16508.9 33706.0 50003.0	284.	4.000	4974.	1.24	1.64	1186.	6160.
JAPAN	S	79 610	6002N	17904W	15971.9 32891.5 49787.2	202.	4.000	4962.	1.24	2.00	2076.	7040.
JAPAN	S	79 430	5959N	17901W	15978.7 32916.2 49795.2	383.	5.500	6796.	1.24	2.44	1344.	8140.
JAPAN	S	79 5 5	6000N	17906W	15954.5 32905.2 49794.0	328.	4.667	5760.	1.23	2.22	180.	5940.
JAPAN	S	78 525	5835N	17635W	16534.5 33720.6 50004.8	317.	3.083	3601.	1.23	2.06	159.	3960.
JAPAN	S	79 6 4	5830N	17245W	17628.8 34923.6 50163.2	219.	2.833	3493.	1.23	4.62	247.	3740.
JAPAN	S	79 525	5736N	17410W	17284.5 34386.5 50120.7	148.	3.667	4517.	1.23	0.89	11983.	16500.
JAPAN	S	78 621	5949N	17846W	16025.2 33002.7 49820.2	366.	4.500	5538.	1.23	1.75	1062.	6600.
JAPAN	S	79 4 9	5834N	17442W	17160.1 33875.7 49971.2	385.	4.333	5317.	1.23	1.92	3263.	8580.
JAPAN	S	79 525	5817N	17510W	16987.2 33972.1 50035.0	355.	5.083	6229.	1.23	1.62	371.	6600.
JAPAN	S	79 517	5941N	17833W	16068.4 33073.7 49839.8	328.	6.000	7330.	1.22	1.85	2130.	9460.
JAPAN	S	78 619	5948N	17845W	16027.6 33011.0 49822.8	290.	4.500	5492.	1.22	3.53	888.	6380.
JAPAN	S	79 615	5635N	17250W	17617.9 34895.8 50170.3	219.	4.000	4876.	1.22	2.95	1504.	6380.
JAPAN	S	78 619	5959N	17908W	15956.2 32912.8 49797.0	301.	5.333	6500.	1.22	4.20	540.	7040.
JAPAN	S	79 615	5630N	17245W	17626.8 34923.6 50163.2	290.	3.167	3650.	1.22	4.47	330.	4160.
JAPAN	S	60 5 2	5832N	17605W	16698.7 33771.2 50001.8	312.	5.000	6065.	1.21	1.05	1195.	7260.
JAPAN	S	79 4 8	5632N	17209W	17861.9 34994.0 50154.3	287.	6.000	7269.	1.21	1.76	1091.	8360.
JAPAN	S	78 625	5916N	17750W	16224.7 33303.7 49900.8	219.	4.500	5440.	1.21	1.96	280.	5720.
JAPAN	S	78 530	5828W	16798.5 33830.2 50009.1	290.	4.417	5319.	1.20	5.319	1.86	181.	5500.
JAPAN	S	78 520	5850N	17554W	16756.8 33802.8 50005.1	303.	3.500	4193.	1.20	2.35	427.	4620.
JAPAN	S	79 5 1	5958N	17855W	15990.1 32925.8 49797.1	230.	4.500	5381.	1.20	1.66	339.	5720.
JAPAN	S	79 425	6020N	17849W	16074.6 32762.1 49724.4	273.	6.000	7136.	1.19	2.48	1444.	6580.
JAPAN	S	78 4 3	5616N	17516W	16951.5 33970.1 50037.0	421.	4.667	5339.	1.19	6.14	841.	6380.
JAPAN	S	78 4 4	5721N	17354W	17354.6 34519.3 50155.2	355.	4.500	5341.	1.19	7.82	1919.	7260.
JAPAN	S	79 622	5845N	17751W	16155.3 33502.4 49975.6	271.	3.250	3841.	1.18	3.65	119.	3960.
JAPAN	S	79 522	5639N	17313W	17487.5 34829.5 50176.6	273.	2.417	2853.	1.18	2.06	1327.	4180.
JAPAN	S	78 527	5829N	17435W	17196.0 33928.8 49785.6	246.	2.333	2750.	1.18	3.12	330.	3080.
JAPAN	S	80 5 6	5836N	17721W	16288.9 33634.6 50004.3	344.	4.500	5279.	1.17	1.24	441.	5720.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

506 available trawl records (exceeding 500 lbs/hr CPUE) were not included.

TABLE A-15. TURBOT, JULY-SEPTEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	7Y	7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	78 712	6012N	17838W	16112.0	32783.6	49725.2	180.	1.417	17858.	12.61	2.85	1942.	19800.
JAPAN	S	78 718	6013N	17841W	16096.3	32821.2	49743.3	191.	1.063	13598.	12.55	2.70	702.	14300.
JAPAN	S	80 813	5703N	17332W	17449.1	34673.9	50175.8	219.	0.917	5226.	5.70	8.51	274.	5500.
JAPAN	S	78 750	6027N	17852W	16074.7	32705.8	49703.1	197.	0.567	3526.	5.39	8.51	1244.	4940.
JAPAN	S	79 721	6011N	17851W	16048.4	32830.9	49754.1	235.	2.000	9207.	4.60	2.70	33.	9240.
JAPAN	S	79 724	6019N	17839W	16116.1	32775.2	49723.0	191.	2.750	14360.	4.37	3.16	200.	11660.
JAPAN	S	79 722	6014N	17840W	16102.6	32813.9	49739.7	202.	1.333	5392.	4.04	2.45	108.	5500.
JAPAN	S	79 721	6012N	17844W	16081.2	32827.3	49747.9	191.	3.500	12877.	3.68	2.32	2083.	14960.
JAPAN	S	80 830	5739N	17414W	17265.0	34357.6	50122.6	273.	4.250	14586.	3.43	8.49	594.	15180.
JAPAN	S	79 721	6010N	17852W	16042.0	32838.0	49757.6	191.	2.750	8607.	3.13	2.03	193.	8600.
JAPAN	S	78 711	6039N	17912W	16013.2	32603.7	49673.8	246.	5.000	14184.	2.84	3.40	1656.	15840.
JAPAN	S	80 827	5703N	17329W	17468.5	34680.8	50175.9	208.	3.667	10371.	2.83	7.09	849.	11220.
JAPAN	S	80 830	5750N	17419W	17251.8	34268.6	50097.7	317.	4.333	12170.	2.81	7.85	3670.	15540.
JAPAN	S	79 720	6011N	17856W	16026.4	32827.9	49756.2	213.	2.583	6682.	2.66	2.66	158.	7040.
JAPAN	S	79 810	5630N	17203W	17888.3	35011.5	50147.8	334.	3.300	8714.	2.64	7.18	966.	5680.
JAPAN	S	79 724	6010N	17856W	16024.4	32835.6	49759.3	230.	0.900	2369.	2.63	2.88	491.	2860.
JAPAN	S	79 8 6	5837N	17437W	17188.9	33856.8	49928.6	197.	3.117	8172.	2.62	3.51	9648.	17820.
JAPAN	S	80 814	5654N	17325W	17465.9	34736.0	50180.0	290.	2.333	841.	2.47	11.54	841.	6600.
JAPAN	S	80 9 2	5628N	17244W	17621.5	34932.0	50160.2	331.	4.000	9664.	2.47	12.10	1797.	11660.
JAPAN	S	79 725	6042N	17858W	16074.7	32593.3	49660.1	175.	2.100	5066.	2.41	3.60	1094.	6160.
JAPAN	S	78 712	6040N	17910W	16023.5	32596.7	49669.5	221.	5.000	11956.	2.39	3.35	804.	12760.
JAPAN	S	79 812	5631N	17205W	17881.4	35004.9	50150.6	383.	3.333	7353.	2.28	4.93	405.	8360.
JAPAN	S	80 9 1	5631N	17247W	17618.8	34916.0	50165.0	339.	4.083	9579.	2.35	7.46	1641.	11220.
JAPAN	S	79 719	6012N	17849W	16055.2	32824.4	49750.1	235.	2.187	5081.	2.34	2.50	199.	5280.
JAPAN	S	79 725	6042N	17910W	16027.1	32581.2	49663.0	197.	4.000	9368.	2.34	3.52	1412.	10780.
JAPAN	S	79 813	5831N	17204W	17887.5	35036.9	50150.1	344.	3.433	8026.	2.34	5.56	774.	8800.
JAPAN	S	79 718	6019N	17843W	16088.7	32773.1	49724.9	219.	4.417	10140.	2.30	2.45	640.	10780.
JAPAN	S	80 731	5631N	17231W	17719.7	34950.4	50166.6	246.	3.250	7398.	2.28	12.45	84.	7480.
JAPAN	S	79 722	6012N	17842W	16101.2	32781.4	49727.6	202.	3.583	8130.	2.27	2.78	1770.	9900.
JAPAN	S	79 7 7	5033N	17252W	17596.2	34892.4	50168.5	273.	3.750	8382.	2.24	8.93	418.	8800.
JAPAN	L	79 720	508N	17325W	17508.4	34682.4	50172.2	78.	1.583	3531.	2.23	1.40	126469.	13200.
JAPAN	S	79 712	6041N	17913W	16012.9	32587.8	49687.8	224.	4.000	8840.	2.21	5.51	4800.	13640.
JAPAN	S	80 716	500N	17342W	17375.3	34666.9	50177.1	235.	5.000	11026.	2.21	4.17	634.	11660.
JAPAN	S	78 7 5	6017N	17844W	16090.7	32782.2	49731.8	232.	4.167	9158.	2.20	2.76	742.	9900.
JAPAN	S	80 711	5024N	17424W	17254.7	33968.2	49998.5	301.	5.000	10929.	2.19	3.73	2271.	13200.
JAPAN	S	78 711	6024N	17854W	16066.6	32728.3	49713.6	241.	4.833	10559.	2.18	3.85	1102.	11660.
JAPAN	S	80 814	5041N	17318W	17463.3	34810.2	50178.1	273.	4.167	9049.	2.17	9.79	191.	9240.
JAPAN	S	79 811	5030N	17202W	17894.5	35013.6	50147.1	334.	2.833	6054.	2.14	6.13	326.	6380.
JAPAN	S	80 730	5058N	17327W	17468.1	34711.5	50178.7	273.	2.500	5134.	2.05	11.59	146.	5280.
JAPAN	S	80 9 9	6030N	17330W	17462.0	34678.5	50175.9	268.	4.000	8204.	2.05	6.02	1476.	9680.
JAPAN	S	78 719	6042N	17913W	16014.7	32580.1	49664.3	213.	6.250	12566.	2.01	4.27	634.	13200.
JAPAN	S	79 8 7	6025N	17426W	17266.4	33982.7	49994.4	191.	0.417	820.	1.97	4.59	1160.	1980.
JAPAN	S	78 814	6018N	17837W	16123.0	32784.1	49725.3	202.	3.833	7520.	1.96	3.07	180.	7700.
JAPAN	S	79 716	6018N	17839W	16114.3	32783.0	49726.2	219.	3.583	6966.	1.94	2.69	1174.	8140.
JAPAN	S	80 714	5752N	17350W	17393.2	34297.9	50089.9	312.	5.750	11086.	1.93	4.33	3874.	14960.

*** NOTE *** THE ACCURACY OF POSITION AND LOGAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-15 (continued). TURBOT, JULY-SEPTEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LOKAN-C 7Y	PULSE 7Z	RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE (LBS/FISH)	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	79 7 1	6005N	17908W	15960.7	32866.2	49779.5	257.	6.050	11317.	1.87	2.07	1443.	12760.	
JAPAN	S	79 8 14	5659N	17334W	17423.9	34690.3	50178.0	164.	2.650	4908.	1.85	5.09	1692.	6600.	
JAPAN	S	79 7 23	6009N	17856W	16022.3	32843.3	49762.4	230.	2.917	5396.	1.85	3.06	104.	5500.	
JAPAN	S	78 8 4	5633N	17231W	17714.9	34953.5	50159.1	328.	2.333	4256.	1.82	10.21	144.	4400.	
JAPAN	L	78 7 10	5752N	17223W	17947.1	34476.8	50065.4	61.	4.417	7985.	1.81	0.69	157015.	165000.	
JAPAN	S	80 8 25	5635N	17230W	17745.0	34939.9	50165.9	183.	4.000	7217.	1.80	5.86	1143.	8360.	
JAPAN	S	80 9 2	5631N	17231W	17719.7	34950.4	50160.6	323.	4.000	7162.	1.79	11.33	318.	7480.	
JAPAN	S	79 7 23	6011N	17853W	16039.6	32829.7	49754.9	301.	3.583	6409.	1.79	6.45	191.	6600.	
JAPAN	S	78 7 15	6025N	17852W	16071.0	32721.5	49709.6	219.	5.500	9792.	1.78	4.41	1208.	11000.	
JAPAN	S	80 9 2	5633N	17250W	17608.9	34902.8	50168.1	246.	4.000	7086.	1.77	8.06	1274.	8360.	
JAPAN	S	80 8 28	5632N	17204W	17892.7	35004.3	50152.1	290.	4.000	7050.	1.76	6.09	1750.	8800.	
JAPAN	S	80 7 15	5747N	17349W	17430.1	34349.8	50192.2	350.	4.500	7872.	1.75	4.32	2028.	9900.	
JAPAN	S	78 8 13	6011N	17846W	16070.5	32833.9	49751.9	197.	4.083	7003.	1.71	3.33	697.	7700.	
JAPAN	S	78 7 28	5647N	17322W	17460.5	34775.5	50180.1	137.	1.333	2238.	1.68	4.74	402.	2640.	
JAPAN	S	79 7 22	6011N	17850W	16052.9	32631.5	49753.6	202.	2.333	3915.	1.68	2.04	2025.	5940.	
JAPAN	L	79 7 19	5707N	17323W	17516.6	34672.6	50173.2	81.	2.000	3321.	1.66	1.06	84679.	88000.	
JAPAN	S	78 7 2	6010N	17856W	16024.4	32835.6	49759.3	235.	4.750	7847.	1.65	2.68	953.	8800.	
JAPAN	S	80 9 1	5735N	17409W	17288.9	34395.5	50130.6	257.	6.000	9849.	1.64	10.21	111.	10560.	
JAPAN	S	78 7 12	6028N	17853W	16068.6	32713.2	49706.8	219.	5.167	8431.	1.63	3.00	2569.	11000.	
JAPAN	S	79 7 17	6018N	17842W	16101.2	32781.4	49727.6	213.	3.833	6227.	1.62	2.83	813.	7040.	
JAPAN	S	78 7 14	6022N	17842W	16108.5	32750.0	49714.6	191.	5.167	6299.	1.61	2.23	2701.	11000.	
JAPAN	S	80 8 12	5721N	17352W	17367.3	34523.7	50155.3	219.	4.167	6670.	1.60	7.19	1690.	8360.	
JAPAN	S	80 9 3	5635N	17227W	17763.9	34946.4	50165.1	200.	4.333	6931.	1.60	9.61	1209.	8140.	
JAPAN	S	79 7 24	6017N	17840W	16108.1	32790.4	49729.9	202.	2.167	3457.	1.60	3.42	943.	4400.	
JAPAN	S	78 7 17	5949N	17856W	15979.1	32595.1	49823.5	388.	4.417	7032.	1.59	7.12	2208.	9240.	
JAPAN	S	80 9 4	5633N	17210W	17860.7	34989.0	50156.5	241.	4.000	6331.	1.58	5.29	1369.	7700.	
JAPAN	S	80 9 3	5640N	17315W	17478.6	34821.0	50177.4	257.	4.000	6327.	1.58	5.44	1593.	7920.	
JAPAN	S	80 9 8	5637N	17305W	17530.6	34855.2	50174.4	312.	4.250	6715.	1.58	8.54	1865.	8580.	
JAPAN	S	80 7 25	5642N	17319W	17460.8	34803.8	50178.6	257.	4.500	7065.	1.57	6.17	635.	7700.	
JAPAN	S	80 8 31	5735N	17408W	17255.1	34397.5	50130.6	301.	5.500	8570.	1.56	10.33	1110.	9680.	
JAPAN	S	78 7 3	6002N	17908W	15954.0	32888.8	49788.6	383.	1.950	3036.	1.56	7.20	44.	3080.	
JAPAN	S	78 8 3	5632N	17254W	17576.9	34897.5	50167.8	273.	3.500	5427.	1.55	9.87	513.	5940.	
JAPAN	S	79 7 7	6001N	17903W	15974.2	32899.7	49789.8	202.	5.167	7992.	1.55	3.06	808.	8800.	
JAPAN	S	80 7 13	5753N	17356W	17394.3	34290.1	50087.2	252.	4.000	6185.	1.55	4.39	1075.	7260.	
JAPAN	S	80 7 8	5827N	17542W	16815.4	33844.0	50011.1	224.	5.000	7700.	1.54	4.05	880.	8580.	
JAPAN	S	79 7 12	6009N	17858W	16013.5	32842.1	49763.2	213.	4.333	6645.	1.53	3.03	395.	7040.	
JAPAN	S	80 9 4	5632N	17203W	17898.9	35006.4	50151.7	235.	4.250	6515.	1.53	5.40	1625.	8140.	
JAPAN	S	79 8 2	5848N	17741W	16205.7	33522.0	49976.6	230.	3.000	4582.	1.53	2.58	698.	5280.	
JAPAN	S	80 8 31	5751N	17421W	17241.2	34257.3	50095.5	230.	5.500	8389.	1.53	9.35	1511.	9900.	
JAPAN	S	80 8 24	5703N	17336W	17423.2	34664.7	50175.6	189.	5.250	8007.	1.53	4.19	4313.	12320.	
JAPAN	S	78 7 14	6039N	17905W	16042.2	32606.4	49670.3	219.	5.750	8671.	1.51	3.04	5629.	14300.	
JAPAN	S	79 7 1	5635N	17225W	17776.6	34950.8	50164.6	334.	4.150	6255.	1.51	2.64	697.	6952.	
JAPAN	S	79 7 20	6018N	17840W	16109.9	32782.5	49726.7	186.	4.250	6371.	1.50	2.61	229.	6600.	
JAPAN	S	79 7 4	5947N	17844W	16030.1	33019.4	49825.5	246.	5.500	8205.	1.49	2.22	595.	8800.	
JAPAN	S	80 8 24	5632N	17204W	17892.7	35004.3	50152.1	262.	4.000	5953.	1.49	5.18	867.	6820.	

*** NOTE *** THE ACCURACY OF POSITION AND LOKAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-15 (continued). TURBOT, JULY-SEPTEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSANDS LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	79 7 7	6040N	17909W	16027.5 32597.1 49669.0	197.	5.917	8614.	1.46	2.68	1286.	9900.
JAPAN	S	79 7 18	6026N	17856W	16055.8 32711.7 49706.3	238.	6.000	8682.	1.45	3.58	998.	9680.
JAPAN	S	80 7 8	5833N	17616W	16635.5 33747.7 50001.2	235.	5.000	7223.	1.44	3.70	2237.	9460.
JAPAN	S	78 7 30	6044N	17914W	16014.4 32564.2 49658.5	219.	4.167	6015.	1.44	3.94	805.	6820.
JAPAN	S	80 8 12	6035N	17900W	16055.6 32639.6 49680.9	186.	3.417	4924.	1.44	4.26	576.	5500.
JAPAN	S	79 7 27	6032N	17839W	16103.3 32830.2 49745.7	219.	2.000	2640.	1.42	2.98	460.	3300.
JAPAN	S	79 7 8	6039N	17908W	16029.7 32605.3 49671.8	197.	5.833	8278.	1.42	2.48	1402.	9680.
JAPAN	S	78 8 23	6016N	17837W	16119.4 32799.9 49731.8	197.	5.000	7083.	1.42	3.27	1717.	8800.
JAPAN	S	79 8 13	5634N	17215W	17834.5 34975.5 50160.0	257.	4.500	6325.	1.41	4.71	1155.	7480.
JAPAN	S	79 7 19	6039N	17840W	16111.7 32774.6 49723.4	230.	4.583	6419.	1.40	2.92	181.	6600.
JAPAN	S	78 7 2	5635N	17236W	17707.0 34926.7 50167.4	301.	3.583	5001.	1.40	9.28	279.	5280.
JAPAN	S	80 7 6	5836N	17716W	16316.1 33641.4 50003.6	252.	4.000	5569.	1.39	2.32	1031.	6600.
JAPAN	S	79 8 5	6017N	17840W	16108.1 32790.4 49729.9	219.	2.533	3511.	1.39	3.33	889.	4400.
JAPAN	S	80 7 15	5753N	17356W	17394.3 34290.1 50087.2	268.	4.583	6350.	1.39	3.62	910.	7260.
JAPAN	S	79 7 18	6019N	17839W	16116.1 32775.2 49723.0	208.	4.667	6407.	1.37	2.57	633.	7040.
JAPAN	S	80 9 10	5632N	17204W	17692.7 35004.3 50152.1	268.	4.000	5491.	1.37	6.58	1329.	6820.
JAPAN	S	79 7 12	6045N	17919W	15995.9 32554.7 49657.8	241.	3.000	4114.	1.37	4.44	1386.	5500.
JAPAN	S	78 7 17	6003N	17900W	15987.6 32901.8 49788.7	219.	4.333	5934.	1.37	3.96	666.	6600.
JAPAN	S	80 7 16	5717N	17353W	17351.6 34546.2 50160.8	246.	5.000	6784.	1.36	6.13	256.	7040.
JAPAN	S	79 7 4	6021N	17844W	16098.0 32756.8 49718.8	224.	6.000	8132.	1.36	2.29	668.	8800.
JAPAN	S	78 7 16	6016N	17843W	16093.2 32796.6 49734.6	224.	4.167	5631.	1.35	3.59	309.	5940.
JAPAN	S	80 9 9	5701N	17342W	17378.4 34661.7 50176.6	241.	4.000	5385.	1.35	7.08	1215.	6600.
JAPAN	S	80 8 23	5631N	17202W	17899.7 35011.0 50149.2	235.	4.000	5382.	1.35	5.20	1438.	6820.
JAPAN	S	80 8 12	5732N	17401W	17333.2 34432.6 50136.4	273.	4.083	5472.	1.34	9.12	1568.	7040.
JAPAN	S	79 7 13	6002N	17903W	15976.4 32822.2 49786.8	202.	5.500	7362.	1.34	2.72	778.	8140.
JAPAN	S	79 7 17	6025N	17846W	16096.7 32724.4 49706.7	191.	4.917	6541.	1.33	2.78	719.	7260.
JAPAN	S	80 9 5	5635N	17254W	17592.4 34867.0 50171.0	301.	4.000	5272.	1.32	8.05	1108.	6380.
JAPAN	S	80 9 10	5631N	17248W	17612.4 34913.9 50165.3	290.	4.000	5268.	1.32	8.77	1552.	6820.
JAPAN	S	79 7 17	6012N	17848W	16063.6 32824.9 49745.6	166.	2.250	2958.	1.31	2.14	562.	3520.
JAPAN	S	80 8 30	5632N	17206W	17880.4 35000.2 50153.0	202.	4.000	5239.	1.31	5.42	1361.	6600.
JAPAN	S	78 7 6	5702N	17336W	17420.2 34670.1 50176.3	246.	3.333	4354.	1.31	5.93	266.	4820.
JAPAN	S	79 7 24	6021N	17841W	16111.0 32758.4 49717.4	202.	5.000	7166.	1.30	6.48	534.	7700.
JAPAN	S	80 8 23	5658N	17327W	17466.1 34711.5 50178.7	191.	5.000	6494.	1.30	7.92	1646.	8140.
JAPAN	S	80 7 7	5834N	17646W	16475.9 33697.6 50004.0	262.	5.083	6571.	1.29	3.51	1789.	8360.
JAPAN	S	80 9 2	5635N	17254W	17592.4 34887.0 50171.0	262.	4.000	5164.	1.29	6.80	996.	6160.
JAPAN	S	78 7 15	6042N	17915W	16006.5 32579.3 49665.5	230.	5.083	6561.	1.29	3.58	2239.	8800.
JAPAN	S	80 7 3	6038N	17910W	16019.6 32612.3 49676.1	219.	5.000	6435.	1.29	2.79	605.	7040.
JAPAN	S	78 7 7	5655N	17323W	17482.2 34735.7 50179.8	159.	3.000	3860.	1.29	6.89	1640.	5500.
JAPAN	S	80 9 9	5700N	17328W	17465.9 34698.9 50177.7	287.	4.000	5080.	1.27	8.55	640.	5720.
JAPAN	S	80 8 24	5652N	17326W	17472.5 34713.8 50176.7	197.	5.083	6442.	1.27	6.47	1918.	8360.
JAPAN	S	78 7 20	6025N	17855W	16056.2 32720.0 49711.0	238.	5.167	6469.	1.25	5.47	791.	7260.
JAPAN	S	80 9 11	5833N	17610W	16672.7 33756.3 50000.0	219.	5.667	7076.	1.25	6.58	7224.	14300.
JAPAN	S	78 7 25	5652N	17351W	17290.7 34666.6 50179.8	519.	3.500	4359.	1.25	13.61	3121.	7480.
JAPAN	S	79 7 23	6019N	17840W	16111.7 32774.6 49723.4	241.	3.500	4351.	1.24	2.85	489.	4840.
JAPAN	S	79 7 27	6017N	17837W	16121.2 32792.0 49728.5	175.	4.833	6008.	1.24	3.44	372.	6380.

*** NCIE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-15 (continued). TURBOT, JULY-SEPTEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE (LBS/FISH)	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	79 7 19	6042N	17917W	15998.3 32578.6 49666.5	241.	5.917	7342.	1.24	6.22	1238.	8580.
JAPAN	S	79 7 29	5918N	17808W	16139.3 33270.2 49899.9	252.	3.000	3717.	1.24	2.79	463.	4180.
JAPAN	S	79 7 6	6021N	17846W	16089.4 32755.8 49719.8	227.	6.000	7405.	1.23	2.59	295.	7700.
JAPAN	S	80 9 5	5706N	17331W	17464.2 34659.8 50173.6	213.	6.250	7682.	1.23	2.78	1558.	9240.
JAPAN	S	80 7 12	5821N	17426W	17241.7 34010.5 50009.2	243.	6.583	5631.	1.23	3.99	749.	6380.
JAPAN	S	78 8 13	6012N	17844W	16081.2 32827.3 49747.9	191.	4.750	5812.	1.22	2.59	1228.	7040.
JAPAN	S	80 8 27	5733N	17336W	17417.2 34675.4 50176.8	273.	4.000	4671.	1.22	4.59	849.	6160.
JAPAN	S	80 5 5	5631N	17230W	17726.0 34952.6 50160.3	312.	4.000	4863.	1.22	6.23	1297.	6160.
JAPAN	S	80 7 17	5710N	17356W	17314.3 34560.8 50168.7	279.	5.000	6068.	1.21	4.31	312.	6380.
JAPAN	S	80 5 7	5517N	17820W	16077.6 33265.5 49905.9	208.	6.250	7581.	1.21	5.98	5399.	12980.
JAPAN	S	80 8 24	5703N	17329W	17468.5 34680.8 50175.9	273.	4.000	4845.	1.21	9.57	1095.	5940.
JAPAN	S	80 8 22	5630N	17257W	17550.7 34897.7 50166.2	227.	4.000	4803.	1.20	3.23	1137.	5940.
JAPAN	S	80 9 1	5749N	17409W	17305.7 34302.8 50101.7	323.	6.333	7554.	1.19	7.75	1466.	9020.
JAPAN	S	80 8 24	5632N	17203W	17898.9 35006.4 50151.7	241.	4.000	4749.	1.19	3.94	971.	5720.
JAPAN	S	79 9 11	5706N	17330W	17470.6 34662.1 50173.7	213.	3.967	4688.	1.18	11.91	4112.	8800.
JAPAN	S	78 7 31	6025N	17859W	16041.1 32718.1 49712.9	262.	5.250	6200.	1.18	4.75	400.	6600.
JAPAN	S	80 9 10	5633N	17229W	17741.9 34948.5 50162.9	268.	4.167	4914.	1.18	13.29	806.	5720.
JAPAN	S	79 7 26	6028N	17853W	16072.3 32697.5 49700.5	180.	3.700	4361.	1.18	3.41	1359.	5720.
JAPAN	S	79 8 11	5942N	17836W	16056.5 33063.6 49837.8	317.	4.617	5425.	1.16	4.05	2275.	7700.
JAPAN	S	76 7 3	5950N	17851W	16004.3 32991.3 49818.9	257.	5.417	6341.	1.17	3.04	699.	7040.
JAPAN	S	79 7 2	6022N	17850W	16074.0 32745.9 49718.4	262.	6.917	8053.	1.16	3.86	747.	8800.
JAPAN	S	79 7 26	6028N	17853W	16072.3 32697.5 49700.5	180.	3.700	4361.	1.16	3.07	582.	6380.
JAPAN	S	79 7 16	6030N	17900W	16046.3 32676.7 49697.2	208.	5.000	5798.	1.16	3.00	758.	7700.
JAPAN	S	79 7 9	6025N	17849W	16083.8 32722.9 49709.2	208.	6.000	6942.	1.16	3.74	302.	3080.
JAPAN	S	76 7 6	5834N	17620W	16619.1 33734.4 49999.3	317.	2.417	2778.	1.15	4.77	1075.	6820.
JAPAN	S	80 7 4	6045N	17921W	15987.7 32554.0 49658.8	273.	5.000	5745.	1.15	2.91	2891.	8580.
JAPAN	S	79 7 16	6020N	17840W	16113.5 32766.8 49720.2	186.	5.000	5689.	1.14	2.91	442.	4400.
JAPAN	S	79 7 8	6021N	17841W	16113.0 32758.4 49717.4	191.	6.750	7061.	1.13	2.35	1359.	9020.
JAPAN	S	78 7 6	5939N	17829W	16083.0 33092.2 49644.5	235.	4.583	5194.	1.13	3.32	306.	5500.
JAPAN	S	78 7 26	5633N	17252W	17596.2 34898.4 50168.5	273.	3.500	3958.	1.13	5.71	442.	4400.
JAPAN	S	79 8 3	5835N	17659W	16406.7 33672.1 50003.5	262.	3.683	4104.	1.11	4.03	956.	5060.
JAPAN	S	80 8 26	5637N	17335W	17411.0 34698.2 50179.8	284.	5.000	5554.	1.11	7.32	606.	6160.
JAPAN	L	79 7 20	5709N	17327W	17496.2 34652.1 50171.2	78.	2.250	2497.	1.11	1.27	81103.	83600.
JAPAN	S	79 8 5	5827N	17542W	16815.4 33844.0 50011.1	246.	3.667	4068.	1.11	2.12	2092.	6160.
JAPAN	S	79 7 25	6026N	17847W	16094.2 32716.0 49703.9	191.	4.500	4978.	1.11	3.61	522.	5500.
JAPAN	S	79 7 30	5914N	17749W	16225.6 33320.0 49900.4	235.	4.667	5087.	1.09	4.39	1733.	6920.
JAPAN	S	80 9 13	5633N	17231W	17729.3 34944.2 50163.5	197.	3.833	4143.	1.08	7.46	1137.	5280.
JAPAN	S	78 7 29	6027N	17856W	16057.7 32703.9 49705.0	219.	5.250	5657.	1.08	4.33	283.	5940.
JAPAN	S	79 7 10	6042N	17908W	16035.3 32581.9 49662.0	186.	5.750	6186.	1.08	2.47	1954.	8140.
JAPAN	S	80 7 7	5836N	17720W	16294.3 33636.0 50004.1	268.	5.000	5378.	1.08	2.83	562.	5940.
JAPAN	S	80 7 12	5836N	17746W	17183.0 33864.1 49962.6	246.	4.750	5101.	1.07	3.46	839.	5940.
JAPAN	S	79 7 20	6007N	17902W	15991.6 32854.9 49771.0	262.	4.500	4028.	1.07	4.15	672.	5500.
JAPAN	S	79 9 11	5634N	17251W	17607.1 34897.1 50169.4	219.	4.000	4290.	1.07	7.18	1650.	5940.
JAPAN	S	79 7 1	5635N	17252W	17778.6 34930.8 50164.6	320.	4.117	4403.	1.07	2.10	459.	4362.
JAPAN	S	80 9 15	5636N	17256W	17584.0 34878.9 50172.3	246.	5.500	5868.	1.07	6.47	1172.	7040.
JAPAN	S	79 8 5	5827N	17541W	16825.0 33645.5 50010.9	235.	4.450	4733.	1.06	4.81	1427.	6160.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-15 (Continued). TURBOT, JULY-SEPTEMBER 1977-80

NATION	VESSEL CLASS	DATE	YRMMDD	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
						7X 7Y 7Z							
JAPAN	S	80	727	5633N	17250W	17608.9 34902.8 50168.1	257	3.833	4068.	1.06	5.95	332.	4400.
JAPAN	S	78	8 4	5630N	17230W	17721.1 34955.6 50158.7	246	4.333	4593.	1.06	7.82	247.	4840.
JAPAN	S	78	7 5	6C20N	17843W	16100.5 32765.2 49721.6	262	5.250	5558.	1.06	3.94	4562.	10120.
JAPAN	S	78	7 13	6024N	17849W	16082.0 32730.8 49711.4	219	4.583	4844.	1.06	3.21	656.	5500.
JAPAN	S	79	7 5	6040N	17811W	16015.2 32596.3 49670.0	213	6.000	6335.	1.06	2.27	925.	7260.
JAPAN	S	78	5 14	6C27N	17850W	16063.2 32708.7 49702.1	235	4.583	4814.	1.05	4.66	686.	5500.
JAPAN	S	79	7 9	5633N	17251W	17602.6 34900.6 50168.3	273	3.283	3448.	1.05	8.33	50.	3498.
JAPAN	S	79	7 10	6C25N	17844W	16105.3 32725.3 49705.7	180	6.000	6298.	1.05	3.09	1402.	7700.
JAPAN	S	79	7 4	6043N	17621W	16230.8 32589.9 49632.4	262	6.000	6272.	1.05	2.99	768.	7040.
JAPAN	S	79	7 7	6019N	17843W	16098.7 32773.1 49724.9	230	6.000	6268.	1.04	2.75	772.	7040.
JAPAN	S	79	7 30	5917N	17808W	16132.1 33277.7 49902.3	213	4.000	4178.	1.04	3.12	662.	4840.
JAPAN	S	79	7 3	5959N	17903W	15969.7 32914.8 49795.9	273	5.167	5364.	1.04	3.03	576.	5940.
JAPAN	S	78	8 16	6C29N	17857W	16057.2 32687.8 49699.0	208	5.000	5166.	1.03	3.53	334.	5500.
JAPAN	S	80	8 2	5834N	17618W	16630.2 33737.2 49998.8	301	4.833	4954.	1.02	3.32	1866.	6820.
JAPAN	S	80	7 29	6020N	17850W	16070.3 32761.6 49724.9	186	4.500	4608.	1.02	3.72	892.	5500.
JAPAN	S	79	7 5	6021N	17840W	16115.3 32758.9 49716.9	230	5.917	6059.	1.02	2.85	545.	6600.
JAPAN	S	80	7 11	5806N	17409W	17329.0 34163.0 50052.0	235	5.167	5291.	1.02	4.24	2199.	7480.
JAPAN	S	79	7 23	6016N	17837W	16119.4 32799.9 49731.8	219	1.833	1874.	1.02	3.34	326.	2200.
JAPAN	S	79	7 6	6C00N	17902W	15976.4 32908.0 49792.5	206	5.750	5867.	1.02	2.65	733.	6600.
JAPAN	S	79	7 5	5634N	17225W	17771.8 34954.0 50163.2	273	3.833	3900.	1.02	2.51	456.	4356.
JAPAN	S	60	730	6C37N	17915W	15996.9 32616.0 49681.7	200	4.667	4713.	1.01	5.22	787.	5500.
JAPAN	S	80	7 18	5631N	17247W	17618.8 34916.0 50165.0	235	9.333	9421.	1.01	4.16	1799.	11220.
JAPAN	S	79	7 17	6040N	17911W	16019.2 32596.3 49670.0	219	6.000	6047.	1.01	2.92	1213.	7260.
JAPAN	S	79	8 6	6C20N	17846W	16087.6 32763.6 49723.0	230	2.567	2576.	1.00	3.54	724.	3300.
JAPAN	S	60	8 13	5630N	17231W	17714.9 34953.5 50159.1	295	4.417	4429.	1.00	5.71	851.	5280.
JAPAN	S	79	8 2	6C09N	17856W	16022.3 32843.5 49762.4	202	5.250	5262.	1.00	2.87	2438.	7700.
JAPAN	S	78	7 29	5827N	17243W	17625.0 34937.2 50158.4	383	1.500	1503.	1.00	5.42	257.	1760.
JAPAN	S	78	7 19	6C24N	17848W	16086.3 32731.2 49711.0	208	6.000	6010.	1.00	4.10	590.	6600.
JAPAN	S	79	8 12	5956N	17857W	15990.2 32941.7 49602.9	224	4.250	4240.	1.00	3.72	2360.	6600.
JAPAN	S	79	7 22	6019N	17842W	16101.1 32773.6 49724.4	224	3.000	2967.	0.99	2.48	553.	3920.
JAPAN	S	78	7 29	6043W	17915W	16004.6 32522.1 49668.8	241	5.583	5511.	0.99	4.19	649.	6160.
JAPAN	S	79	7 6	6016N	17839W	16110.7 32798.8 49732.7	197	6.000	5920.	0.99	2.43	900.	6820.
JAPAN	S	60	8 31	5633N	17209W	17866.9 34991.2 50156.1	279	4.000	3946.	0.99	5.66	1114.	5060.
JAPAN	S	79	8 9	5949W	17845W	16025.8 33003.5 49819.8	361	5.467	5389.	0.99	3.48	1211.	6600.
JAPAN	S	78	7 6	5709N	17354W	17324.4 34590.9 50169.8	249	4.250	4161.	0.98	5.97	219.	4400.
JAPAN	S	78	8 24	6017N	17837W	16121.2 32792.0 49726.5	208	4.833	4744.	0.98	2.68	1956.	6800.
JAPAN	S	79	7 17	6041W	17915W	16004.6 32589.9 49668.8	232	5.750	5635.	0.98	2.85	1185.	6820.
JAPAN	S	80	8 1	5704N	17331W	17458.5 34670.8 50175.2	262	2.167	2113.	0.98	9.38	527.	2640.
JAPAN	S	78	9 25	6021N	17845W	16093.7 32756.3 49719.3	273	4.500	4383.	0.97	5.93	2217.	6600.
JAPAN	S	79	7 5	6001N	17902W	15976.6 32900.4 49789.5	208	5.333	5194.	0.97	2.83	3166.	6360.
JAPAN	L	77	8 27	5837N	17520W	16953.7 34796.1 49974.8	178	2.167	2107.	0.97	2.20	85893.	88000.
JAPAN	S	79	7 10	6022N	17847W	16026.9 32747.4 49717.0	224	5.833	5655.	0.97	3.12	505.	6160.
JAPAN	S	79	8 8	5946N	17842W	16037.2 33028.5 49627.8	235	5.233	5058.	0.97	3.14	1982.	7040.
JAPAN	S	79	7 8	5934N	17826W	16088.5 33132.7 49858.5	273	4.833	4658.	0.96	3.48	842.	5500.
JAPAN	S	78	7 20	6013N	17841W	16096.3 32821.2 49743.3	186	1.333	1283.	0.96	1.98	257.	1540.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-15 (continued). TURBOT, JULY-SEPTEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES		DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
					7X	7Y							
JAPAN	S	78 9 8	6625N	17847W	16092.4	32723.9	49707.2	246.	4.333	4161.	0.96	899.	5060.
JAPAN	S	79 8 6	5835N	17508W	17017.8	33829.8	49977.3	290.	3.000	2869.	0.96	651.	3520.
JAPAN	S	79 7 1	6600N	17859W	15989.9	32910.0	49791.4	246.	5.000	4776.	0.96	944.	5726.
JAPAN	S	77 827	5948N	17847W	16018.4	33009.5	49823.5	339.	4.000	3793.	0.95	607.	4400.
JAPAN	S	80 924	5040N	17336W	17423.2	34664.7	50175.6	213.	5.000	4711.	0.94	1009.	5720.
JAPAN	S	79 710	6000N	17907W	16035.7	32597.8	49668.0	208.	6.000	5643.	0.94	517.	6160.
JAPAN	S	78 711	5709N	17353W	17330.8	34593.2	50169.8	219.	4.500	4230.	0.94	830.	5060.
JAPAN	S	79 731	5845N	17737W	16221.9	33548.8	49983.7	197.	4.217	3963.	0.94	3077.	7040.
JAPAN	S	79 6 4	5832N	17631W	16554.7	33733.7	50006.8	273.	4.000	3744.	0.94	1756.	5500.
JAPAN	S	79 8 4	5835N	17637W	16417.6	33674.9	50003.2	208.	3.950	3669.	0.93	1831.	5500.
JAPAN	S	79 714	6002N	17905W	15967.4	32890.8	49787.5	202.	6.000	5557.	0.93	1703.	7260.
JAPAN	S	79 726	6031N	17900W	16068.2	32670.9	49693.9	202.	6.667	6170.	0.93	1530.	7700.
JAPAN	S	79 7 7	5634N	17252W	17600.7	34894.9	50169.8	219.	3.683	3496.	0.92	48.	3454.
JAPAN	S	80 924	5657N	17336W	17417.5	34700.5	50178.8	262.	5.000	4617.	0.92	663.	5280.
JAPAN	S	78 924	6037N	17907W	16030.1	32621.2	49677.8	213.	5.000	4541.	0.91	959.	5500.
JAPAN	S	78 825	6016N	17638W	16115.0	32799.3	49732.3	202.	4.000	3624.	0.91	776.	4400.
JAPAN	S	78 716	6001N	17900W	15987.6	32901.8	49788.7	241.	4.417	3997.	0.91	403.	4400.
JAPAN	S	79 720	6022N	17850W	16074.0	32745.9	49718.4	257.	4.167	3755.	0.90	195.	3960.
JAPAN	S	79 8 3	5837N	17720W	16296.6	33621.8	50001.6	249.	4.000	3614.	0.90	566.	4180.
JAPAN	S	79 810	5634N	17215W	17834.5	34975.5	50160.0	252.	5.233	4795.	0.90	1895.	6600.
JAPAN	S	80 813	6019N	17850W	16068.4	32769.4	49728.1	180.	4.417	3960.	0.90	1540.	5500.
JAPAN	S	78 7 6	5949N	17844W	16034.4	33004.2	49819.5	241.	4.750	4254.	0.90	806.	5060.
JAPAN	S	79 724	6027N	17854W	16066.2	32704.9	49704.1	202.	4.500	4029.	0.90	811.	4840.
JAPAN	S	80 912	5634N	17252W	17600.7	34894.9	50169.8	257.	4.000	3582.	0.90	598.	4180.
JAPAN	S	78 7 3	5641N	17322W	17437.5	34801.2	50178.4	230.	4.500	4024.	0.89	1256.	5280.
JAPAN	S	79 718	6044N	17921W	15985.8	32581.7	49662.0	241.	6.333	5653.	0.89	947.	6600.
JAPAN	S	79 8 9	6008N	17856W	16020.3	32851.0	49765.6	197.	3.250	2899.	0.89	1061.	3960.
JAPAN	S	80 926	5837N	17503W	17046.9	33820.1	49989.0	191.	4.333	3654.	0.89	3626.	7480.
JAPAN	S	79 8 1	6011N	17847W	16066.1	32833.3	49752.4	219.	2.550	2262.	0.89	378.	2640.
JAPAN	S	79 827	5829N	17647W	16466.1	33732.8	50017.2	284.	4.667	4132.	0.89	791.	4928.
JAPAN	S	79 721	6023N	17845W	16097.4	32740.6	49712.8	213.	4.833	4273.	0.88	127.	4400.
JAPAN	S	80 731	5642N	17319W	17460.8	34803.8	50178.6	273.	5.833	5130.	0.88	590.	5720.
JAPAN	S	79 731	6024N	17847W	16090.6	32731.7	49710.5	208.	5.950	5223.	0.88	1157.	6380.
JAPAN	L	79 7 3	5641N	17307W	17534.3	34835.0	50177.3	85.	1.500	1315.	0.88	106685.	110000.
JAPAN	S	78 823	6002N	17905W	15967.4	32890.8	49787.5	262.	3.667	3204.	0.87	1196.	4400.
JAPAN	S	79 7 3	5634N	17229W	17746.6	34945.3	50164.3	306.	4.250	3711.	0.87	469.	4180.
JAPAN	S	79 812	5635N	17252W	17795.5	34957.3	50163.8	295.	4.000	3487.	0.87	473.	3960.
JAPAN	S	80 7 1	6024N	17858W	16043.4	32726.3	49715.7	273.	5.000	4345.	0.87	3135.	7480.
JAPAN	S	78 728	5835N	17300W	17554.0	34873.7	50172.0	246.	3.000	2590.	0.86	270.	2060.
JAPAN	S	80 914	5658N	17336W	17407.8	34690.9	50178.4	246.	4.750	4098.	0.86	1402.	5500.
JAPAN	S	79 710	6014N	17850W	16058.7	32808.3	49744.1	273.	5.500	4745.	0.86	95.	4840.
JAPAN	S	79 918	5949N	17359W	17432.3	34334.6	50097.0	301.	3.000	2583.	0.86	7171.	3300.
JAPAN	S	79 7 9	5948N	17843W	16036.9	33012.6	49822.1	246.	5.500	4728.	0.86	1212.	5940.
JAPAN	S	77 828	5927N	17825W	16075.9	33186.2	49878.7	301.	4.250	3632.	0.85	328.	3960.
JAPAN	S	78 911	6027N	17857W	16053.4	32703.5	49705.5	224.	4.667	3980.	0.85	420.	4400.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-16. TURBOT, OCTOBER-DECEMBER 1977-80

NATION	WESSEL CLASS	DATE	LAT	LONG	APPROX 7X	7Y	PULSE RATES 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	801026	5642N	17320W	17454.4	34801.6	50178.7	317.	2.917	10818.	3.71	5.12	622.	11440.
JAPAN	S	7910 1	5845N	17750W	16154.2	33532.2	49985.7	279.	1.200	3856.	3.21	6.48	7144.	11000.
JAPAN	L	7911 9	5852N	17748W	16182.2	33484.4	49967.3	337.	1.500	3950.	2.63	4.69	110450.	114400.
JAPAN	S	801127	5628N	17252W	17573.1	34915.0	50162.5	273.	4.000	10343.	2.59	11.29	3077.	13420.
JAPAN	S	801127	5636N	17259W	17577.6	34916.7	50172.4	328.	4.000	10210.	2.55	11.68	4970.	15180.
JAPAN	S	801116	5631N	17229W	1732.3	34954.7	50160.0	383.	4.000	8175.	2.04	9.29	3705.	11880.
JAPAN	S	8010 5	5704N	17335W	17432.8	34661.6	50175.0	219.	5.000	10174.	2.03	5.65	2146.	12320.
JAPAN	S	801120	5630N	17231W	17214.9	34953.5	50159.1	317.	3.500	6750.	1.93	10.08	290.	7040.
JAPAN	S	801126	5635N	17301W	17547.6	34871.5	50172.2	273.	4.000	7482.	1.87	6.58	1318.	8800.
JAPAN	S	801128	5635N	17255W	17586.0	34884.8	50171.2	328.	4.917	9184.	1.87	10.18	1376.	10560.
JAPAN	S	801031	5636N	17501W	17551.9	34867.8	50173.0	328.	3.417	6274.	1.84	8.21	986.	7260.
JAPAN	S	791029	5634N	17251W	17607.1	34897.1	50169.4	262.	4.500	8233.	1.83	7.54	1227.	9460.
JAPAN	L	791112	5907N	17854W	15882.9	33301.9	49939.9	137.	1.833	3261.	1.78	1.50	84739.	80000.
JAPAN	S	791022	5631N	17212W	17838.2	34990.5	50153.7	273.	4.000	7011.	1.75	6.19	249.	7260.
JAPAN	S	801026	5636N	17304W	17532.7	34861.2	50173.5	273.	3.167	5485.	1.73	5.15	455.	5940.
JAPAN	S	8012 1	5659N	17328W	17462.8	34704.1	50178.2	301.	5.000	8590.	1.72	6.96	3950.	12540.
JAPAN	S	7812 7	5632N	17247W	17623.4	34912.7	50166.3	273.	2.000	3362.	1.69	6.64	1018.	4400.
JAPAN	S	8011 4	5644N	17325W	17429.8	34781.8	50179.6	339.	4.000	5662.	1.67	8.18	816.	7480.
JAPAN	S	801126	5658N	17328W	17459.8	34789.2	50178.6	273.	5.000	8272.	1.65	8.99	9548.	17820.
JAPAN	S	8010 7	5635N	17229W	17751.3	34942.1	50165.7	230.	4.417	7219.	1.63	7.29	481.	7700.
JAPAN	S	7912 5	5645N	17324W	17440.1	34779.7	50179.8	273.	4.583	7318.	1.60	4.38	2802.	10120.
JAPAN	S	781026	5635N	17253W	17598.8	34889.2	50170.8	273.	5.167	8215.	1.59	9.39	1685.	9900.
JAPAN	S	801114	5645N	17324W	17440.1	34779.7	50179.8	355.	4.583	7269.	1.59	7.69	1311.	8580.
JAPAN	S	7910 2	5853N	17803W	16106.3	33459.0	49967.3	220.	3.450	5466.	1.58	3.75	2674.	2140.
JAPAN	S	801013	5630N	17231W	17714.9	34953.5	50155.1	246.	5.000	7681.	1.54	4.91	899.	8580.
JAPAN	S	801027	5631N	17230W	17726.0	34952.6	50160.3	317.	3.833	5764.	1.50	12.42	596.	6160.
JAPAN	S	791026	5631N	17230W	17726.0	34952.6	50160.3	273.	5.500	8224.	1.50	4.03	136.	2360.
JAPAN	S	791020	5635N	17215W	17835.4	34922.5	50161.6	246.	4.000	5929.	1.48	4.69	1111.	7040.
JAPAN	S	801126	5645N	17324W	17440.1	34779.7	50179.8	273.	3.500	4982.	1.42	7.66	3378.	8360.
JAPAN	S	801025	5630N	17230W	17721.1	34955.6	50158.7	355.	4.750	6706.	1.41	11.37	774.	7480.
JAPAN	S	801110	5636N	17303W	17535.1	34863.4	50173.3	301.	3.000	4213.	1.40	8.44	407.	4620.
JAPAN	S	801015	5631N	17228W	17738.5	34956.8	50159.6	328.	4.500	6077.	1.35	7.32	523.	6600.
JAPAN	S	8011 2	5645N	17323W	17446.6	34782.0	50179.8	328.	4.333	5823.	1.34	6.63	557.	6380.
JAPAN	S	801117	5632N	17228W	17743.4	34953.8	50161.2	317.	4.250	5645.	1.33	8.75	515.	6160.
JAPAN	S	791013	5635N	17229W	17751.3	34942.1	50165.7	230.	3.500	4020.	1.32	7.60	880.	5500.
JAPAN	S	791012	5743N	17343W	17462.0	34391.9	50111.7	115.	4.750	6153.	1.30	2.72	21567.	27720.
JAPAN	S	801119	5627N	17258W	17531.4	34905.4	50162.7	326.	2.917	3735.	1.28	8.99	1545.	5280.
JAPAN	S	801130	5636N	17256W	17584.0	34876.9	50172.3	328.	5.750	7319.	1.27	10.14	1921.	9240.
JAPAN	S	801015	5635N	17221W	17801.8	34959.5	50163.5	246.	4.583	5783.	1.26	3.39	1257.	7040.
JAPAN	S	7812 6	5658N	17340W	17381.9	34681.8	50178.2	293.	5.000	6241.	1.25	2.53	799.	7040.
KOREA	M	791219	5709N	17338W	17427.3	34629.0	50170.6	83.	6.667	8260.	1.24	1.26	26500.	34760.
JAPAN	S	791010	5749N	17411W	17298.2	34291.5	50099.4	293.	3.667	4443.	1.21	4.83	1717.	6160.
JAPAN	S	7910 6	5827N	17509W	17004.6	33894.0	50003.0	193.	3.133	3784.	1.21	5.72	14916.	18700.
JAPAN	S	7910 9	5738N	17412W	17275.7	34368.6	50124.6	301.	4.417	5288.	1.20	5.31	1092.	6380.
JAPAN	S	801127	5658N	17328W	17459.6	34709.2	50178.6	355.	5.500	6399.	1.16	9.92	3941.	10340.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-16 (continued). TURBOT. OCTOBER-DECEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LGRAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
		YTHDD			7X 7Y 7Z							
JAPAN	S	8010 5	5712N	17354W	17332.5 34573.7 50166.7	232.	5.000	5753.	1.15	5.96	1727.	7480.
JAPAN	S	7910 11	5632N	17202W	17905.0 35008.4 50151.2	246.	4.333	4948.	1.14	5.73	2092.	7040.
JAPAN	S	7910 12	5633N	17204W	17897.9 35001.6 50154.0	213.	4.333	4696.	1.08	8.26	1904.	6600.
JAPAN	S	7811 17	5755N	17356W	17396.3 34274.6 50081.6	437.	1.750	4894.	1.00	11.31	2946.	4840.
JAPAN	S	7911 2	5653N	17325W	17475.8 34721.2 50179.1	230.	4.083	4415.	1.08	3.91	1525.	5940.
JAPAN	S	7910 14	5633N	17229W	17741.9 34948.5 50162.9	202.	4.833	5196.	1.08	2.89	744.	5940.
JAPAN	S	7910 13	5632N	17206W	17880.4 35000.2 50153.0	219.	4.000	4291.	1.07	3.24	989.	5280.
JAPAN	L	7911 11	5958N	17854W	16006.1 32528.6 49795.7	126.	2.333	2499.	1.07	1.12	120701.	123200.
JAPAN	S	7910 11	5634N	17228W	17752.9 34947.5 50164.0	273.	4.133	4394.	1.06	3.43	886.	5280.
JAPAN	S	8010 18	5704N	17334W	17439.1 34663.9 50175.0	224.	4.083	4204.	1.03	5.27	856.	5060.
JAPAN	S	7910 10	5635N	17225W	17776.6 34950.8 50164.6	273.	4.083	4166.	1.02	3.45	894.	5060.
JAPAN	S	7910 4	5745N	17347W	17439.9 34368.8 50107.1	249.	2.917	2957.	1.01	5.26	2763.	5720.
JAPAN	S	8010 17	5700N	17339W	17394.7 34673.8 50177.3	219.	5.000	5066.	1.01	7.33	654.	5720.
JAPAN	S	7910 15	5632N	17204W	17892.7 35004.3 50152.1	219.	4.000	4032.	1.01	4.83	1028.	5060.
JAPAN	S	7911 3	5706N	17350W	17341.6 34616.7 50172.6	273.	4.667	4673.	1.00	3.91	607.	5280.
JAPAN	L	7911 20	5957N	17854W	16006.0 32936.2 49798.7	131.	1.833	1835.	1.00	1.45	112565.	114400.
JAPAN	S	8010 28	5632N	17230W	17730.8 34949.5 50161.8	219.	4.000	3977.	0.99	5.08	863.	4840.
JAPAN	S	7910 15	5634N	17230W	17740.3 34943.1 50164.6	246.	4.000	3965.	0.99	2.06	1095.	5060.
JAPAN	L	7911 5	5835N	17704W	16379.3 33665.1 50004.3	148.	1.333	1313.	0.98	1.16	80087.	81400.
JAPAN	S	8011 3	5829N	17233W	17697.5 34952.2 50158.2	328.	3.083	3034.	0.98	11.96	266.	3300.
JAPAN	S	7910 3	5821N	17425W	17247.4 34012.0 50080.9	279.	3.250	3194.	0.98	2.56	986.	4180.
JAPAN	S	7912 5	5631N	17244W	17637.8 34922.5 50164.3	312.	2.500	2451.	0.98	3.01	629.	3080.
JAPAN	S	7910 14	5735N	17410W	17282.7 34393.4 50130.7	257.	5.500	5362.	0.97	7.92	2338.	7700.
JAPAN	S	7810 9	5636N	17258W	17571.2 34074.5 50172.6	246.	5.167	5015.	0.97	10.24	485.	5500.
JAPAN	S	7810 31	5927N	17823W	16085.6 33188.1 49878.1	246.	2.333	2256.	0.97	5.40	384.	2040.
JAPAN	S	8011 4	5701N	17343W	17371.9 34659.4 50176.5	246.	5.000	4753.	0.95	9.00	747.	5500.
JAPAN	S	7811 29	5630N	17203W	17888.3 35011.5 50147.5	317.	4.667	4344.	0.93	5.11	1156.	5500.
JAPAN	S	7910 10	5634N	17228W	17752.9 34947.5 50164.0	262.	4.667	4292.	0.92	4.18	986.	5280.
USSR	S	7911 21	5646N	17306W	17560.3 34816.5 50179.4	71.	3.083	2624.	0.92	0.84	19176.	22000.
JAPAN	S	7812 7	5659N	17341W	17378.6 34674.4 50177.7	273.	5.000	4577.	0.92	2.77	923.	5500.
JAPAN	S	7810 13	5632N	17204W	17892.7 35004.3 50152.1	273.	4.000	3614.	0.90	7.39	786.	4400.
JAPAN	S	8011 24	5624N	17213W	17795.3 35006.5 50140.2	273.	5.333	4809.	0.90	4.76	2011.	6820.
JAPAN	S	6011 6	5630N	17231W	17714.9 34953.5 50159.1	273.	3.500	3119.	0.89	7.45	401.	3520.
JAPAN	S	8011 1	5631N	17229W	17732.3 34954.7 50160.0	328.	4.750	4223.	0.89	8.71	617.	4840.
USSR	M	7911 20	5639N	17219W	17833.0 34950.8 50168.4	74.	3.583	3183.	0.89	0.78	17057.	20240.
JAPAN	S	8010 17	5716N	17353W	17345.1 34552.3 50162.1	230.	5.500	4881.	0.89	5.22	1279.	6160.
JAPAN	S	8011 1	5636N	17300W	17558.4 34870.1 50172.9	262.	4.167	3697.	0.89	5.62	923.	4620.
JAPAN	S	7910 2	5823N	17427W	17237.3 33992.0 50002.9	205.	2.333	2068.	0.89	2.50	1452.	3520.
JAPAN	S	7811 4	5706N	17331W	17464.2 34659.8 50173.6	219.	2.333	1994.	0.85	10.10	1526.	3520.
JAPAN	S	7912 5	5705N	17350W	17338.7 34622.2 50173.4	317.	3.833	3198.	0.83	2.07	2522.	5720.
JAPAN	S	7911 14	5818N	17513W	16971.4 33959.4 50030.8	301.	4.167	3463.	0.83	2.63	1817.	5280.
JAPAN	S	7811 2	5739N	17413W	17271.2 34359.6 50122.5	164.	1.500	1234.	0.82	6.42	2066.	3400.
JAPAN	L	7811 15	5934N	17816W	16134.4 33141.5 49655.3	118.	2.417	1980.	0.82	3.59	196020.	198000.
JAPAN	L	7810 15	5853N	17746W	16195.1 33479.6 49964.3	83.	2.417	1950.	0.81	1.93	81650.	83600.
JAPAN	S	7810 9	5631N	17234W	17700.9 34944.0 50161.5	257.	4.500	3621.	0.80	9.00	999.	4620.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE: A-16 (continued). TURBOT, OCTOBER-DECEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	7910 6	5703N	17352W	17319.9	34228.5	50174.8	355	5.000	4016	0.80	3.56	2364	6380
JAPAN	S	781018	5633N	17219W	17004.6	34970.0	50159.8	293	4.500	3566	0.79	9.11	1054	4620
JAPAN	S	801117	5631N	17251W	17719.7	34950.4	50160.6	355	4.083	3700	0.77	6.25	790	3960
JAPAN	S	7910 8	5655N	17326W	17462.8	34728.8	50179.7	273	4.583	3544	0.78	6.88	416	3960
JAPAN	S	791012	5633N	17205W	17891.7	34999.5	50154.5	219	4.833	3726	0.77	5.19	4194	7920
JAPAN	S	801125	5636N	17301W	17551.9	34667.8	50173.0	273	5.000	3811	0.76	7.87	1029	4840
JAPAN	L	791112	5947N	17836W	16067.2	33025.6	49822.7	104	1.917	1450	0.76	1.51	64550	66000
JAPAN	S	8012 1	5643N	17323W	17438.9	34790.6	50179.2	355	5.000	3766	0.75	8.29	854	4620
JAPAN	S	7910 1	5652N	17604W	16098.5	33465.0	49970.0	230	4.750	3583	0.75	3.25	3037	6600
JAPAN	S	7812 8	5630N	17244W	17633.1	34925.7	50163.0	312	2.750	2043	0.74	5.47	157	2200
JAPAN	L	791029	5913N	17822W	16058.2	33292.8	49917.5	126	1.667	1236	0.74	2.97	115364	116600
JAPAN	S	7910 8	5704N	17347W	17355.1	34634.4	50174.4	339	5.333	3941	0.74	6.59	239	4180
JAPAN	S	7911 1	5633N	17321W	17410.8	34834.6	50173.4	273	4.333	3200	0.74	5.03	1420	4620
JAPAN	S	7810 9	5637N	17255W	17594.7	34877.5	50173.0	246	4.500	3313	0.74	9.97	1307	4620
JAPAN	S	7912 2	5641N	17316W	17476.2	34814.7	50178.0	273	5.000	3379	0.74	9.00	5561	9240
JAPAN	S	801129	5629N	17255W	17684.9	34948.0	50158.8	273	5.500	4039	0.73	5.86	801	4840
JAPAN	S	7910 2	5833N	17441W	17165.0	33885.7	49974.2	246	3.333	2445	0.73	5.33	2835	5280
JAPAN	S	7910 6	5718N	17356W	17334.9	34533.5	50159.3	339	5.000	3629	0.73	8.15	2751	6320
JAPAN	S	7910 4	5822N	17803W	16103.0	33486.2	49969.9	239	3.533	2549	0.72	3.83	1511	7700
JAPAN	S	791027	5631N	17231W	17719.7	34950.4	50160.6	257	5.000	3598	0.72	5.06	1242	4840
JAPAN	S	7910 5	5753N	17357W	17582.3	34268.2	50287.3	246	3.000	2349	0.72	4.48	1591	3740
JAPAN	S	7910 5	5716N	17355W	17341.2	34535.7	50159.4	257	5.000	3348	0.71	2.88	1292	4840
JAPAN	S	801013	5631N	17202W	17899.7	35011.0	50149.2	241	5.000	3543	0.71	3.80	637	4180
JAPAN	S	7910 8	5720N	17356W	17339.6	34521.2	50156.6	317	4.833	3408	0.71	3.38	1212	4620
JAPAN	S	781028	5824N	17431W	17215.4	33977.3	50001.0	328	3.500	2464	0.70	6.18	1496	3960
KOREA	M	8011 3	5645N	17322W	17453.0	34784.3	50179.7	127	2.867	1853	0.69	3.47	101547	103400
JAPAN	S	8011 5	5700N	17343W	17368.8	34664.7	50177.1	262	5.083	3507	0.69	5.37	3093	6600
JAPAN	L	801125	5914N	17716W	16381.8	33352.6	49897.1	89	2.417	1661	0.69	1.95	88539	90200
JAPAN	S	781116	5827N	17508W	17010.2	33895.5	50002.7	255	4.000	2727	0.68	6.48	1673	4400
JAPAN	S	791024	5631N	17232W	17713.4	34948.3	50160.9	262	2.500	1704	0.68	5.53	276	1980
JAPAN	S	7910 9	5806N	17411W	17317.3	34159.5	50052.5	301	4.417	2946	0.67	4.03	2114	5060
JAPAN	S	801115	5705N	17333W	17448.4	34660.7	50174.3	273	3.167	2111	0.67	4.46	969	3080
USSR	H	791128	5649N	17314W	17519.7	34784.8	50180.2	77	2.417	1575	0.65	2.31	10745	12320
JAPAN	S	7811 1	5831N	17434W	17202.6	33913.1	49978.4	164	2.083	1354	0.65	2.82	2826	4180
JAPAN	S	7812 6	5700N	17342W	17375.3	34666.9	50177.1	252	4.500	2917	0.65	4.11	823	3740
JAPAN	S	791114	5829N	17510W	17001.0	33876.2	49997.1	284	3.917	2535	0.65	2.15	325	2860
JAPAN	L	791120	6006N	17855W	16020.6	32866.9	49771.4	120	1.750	1124	0.64	1.37	64876	66000
JAPAN	S	7910 7	5701N	17352W	17313.6	34639.1	50176.1	350	5.333	3420	0.64	7.54	4060	7480
JAPAN	S	7910 2	5652N	17805W	16093.3	33463.7	49970.2	282	4.367	2780	0.64	3.75	3380	6160
JAPAN	S	7810 1	6000N	17905W	15961.0	32905.9	49793.6	262	5.000	3161	0.63	6.50	359	3520
JAPAN	S	791019	5630N	17234W	17666.1	34947.1	50160.0	224	4.083	2567	0.63	5.07	2053	4620
KOREA	M	791211	5638N	17301W	17566.5	34860.3	50174.7	138	3.333	2087	0.63	1.38	25413	27500
JAPAN	S	801129	5628N	17234W	17686.3	34553.1	50156.9	355	6.000	3756	0.63	10.11	3944	7700
JAPAN	S	7812 8	5633N	17204W	17897.9	35001.6	50154.0	273	1.500	935	0.62	3.87	605	1540
JAPAN	S	7912 5	5629N	17233W	17697.5	34952.2	50158.2	290	2.083	1297	0.62	3.08	463	1760

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-16 (continued). TURBOT, OCTOBER-DECEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C 7X	PULSE 7Y	RATES 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LB S/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	7910 8	5757N	17357W	17392.2	34256.9	50076.1	202.	4.000	2485.	0.62	4.15	3675.	6160.
JAPAN	S	7912 6	5630N	17234W	17696.1	34947.1	50160.0	262.	2.167	1335.	0.62	2.93	425.	1760.
JAPAN	S	7810 1	6003N	17906W	15965.2	32882.6	49784.8	252.	5.000	3071.	0.61	5.92	869.	3960.
JAPAN	S	7810 1	5729N	17357W	17352.5	34461.2	50142.0	273.	4.000	2405.	0.60	10.47	2435.	4840.
JAPAN	S	7910 7	5705N	17330W	17467.8	34667.6	50174.5	273.	3.500	2066.	0.59	5.89	1894.	3960.
JAPAN	S	7810 2	5953N	17854W	15997.2	32966.5	49810.9	273.	4.583	2695.	0.59	5.21	605.	3300.
JAPAN	S	7811 9	5800N	17359W	17382.9	34229.4	50067.8	284.	2.250	1308.	0.56	6.36	672.	1980.
JAPAN	S	7811 4	5655N	17335W	17404.5	34708.2	50179.5	301.	3.167	1833.	0.58	3.73	807.	2640.
JAPAN	S	7811 1	5655N	17434W	17204.4	33878.5	49964.4	164.	1.417	818.	0.58	2.83	6002.	6420.
JAPAN	S	8012 5	6035N	17906W	16030.6	32637.2	49683.9	213.	3.500	2005.	0.57	4.04	1735.	3740.
JAPAN	S	7910 1	5822N	17428W	17231.0	33998.9	50006.6	241.	3.917	2229.	0.57	2.95	3051.	5280.
JAPAN	S	7910 6	5820N	17525W	16905.6	33924.7	50027.5	180.	4.000	2275.	0.57	5.56	12025.	14300.
JAPAN	S	7810 4	5936N	17826W	16090.6	33117.5	49852.5	257.	5.333	3031.	0.57	7.99	1589.	4620.
JAPAN	L	791026	6002N	17857W	16003.2	32896.2	49784.5	137.	1.000	564.	0.56	2.53	78636.	79200.
JAPAN	L	7911 3	6010N	17840W	16095.1	32845.2	49752.5	139.	0.500	282.	0.56	1.83	13798.	14080.
JAPAN	S	7811 7	5755N	17357W	17390.3	34272.7	50081.8	262.	0.750	422.	0.56	3.46	898.	1320.
JAPAN	L	791115	5856N	17758W	16150.0	33445.8	49958.2	126.	1.583	882.	0.56	2.34	100318.	101200.
JAPAN	L	7811 5	5928N	17829W	16058.6	33175.0	49876.9	101.	2.500	1385.	0.55	1.59	29415.	30800.
JAPAN	L	791121	5953N	17849W	16020.1	32970.1	49809.1	120.	2.333	1287.	0.55	1.09	80113.	81400.
JAPAN	S	7912 3	5710N	17355W	17320.7	34583.0	50168.7	273.	4.563	2507.	0.55	4.13	353.	2860.
JAPAN	L	791114	5914N	17822W	16060.6	33285.5	49914.7	131.	2.083	1138.	0.55	1.33	157262.	158400.
JAPAN	S	791113	5820N	17423W	17258.1	34023.7	50011.5	241.	3.750	2038.	0.54	4.25	1702.	3740.
JAPAN	S	791012	5744N	17346W	17444.8	34378.3	50109.5	208.	4.167	2250.	0.54	6.80	3250.	5500.
JAPAN	S	7912 4	5656N	17325W	17472.6	34726.2	50179.5	301.	5.000	2691.	0.54	4.69	1489.	4180.
JAPAN	L	791117	5836N	17648W	16469.0	33680.0	49999.1	112.	3.083	1656.	0.54	1.66	42344.	44000.
JAPAN	S	7910 1	5853N	17806W	16090.6	33455.4	49967.6	297.	5.017	2689.	0.54	3.49	4400.	4400.
JAPAN	S	7912 4	5636N	17228W	17762.3	34940.9	50166.7	191.	2.000	1069.	0.53	3.37	2671.	3740.
JAPAN	S	781117	5745N	17342W	17470.5	34378.9	50106.6	164.	2.417	1277.	0.53	3.05	3343.	4620.
JAPAN	L	791116	5837N	17718W	16307.5	33631.5	50001.3	148.	1.833	967.	0.53	1.52	113433.	114400.
JAPAN	S	7810 5	6000N	17900W	15985.4	32909.3	49791.6	273.	5.000	2600.	0.52	6.09	480.	3080.
JAPAN	S	781118	5838N	17444W	17151.2	33832.3	49958.1	164.	2.333	1210.	0.52	3.35	1430.	2640.
KOREA	M	791216	5615N	17351W	17137.4	34833.1	50161.3	131.	3.083	1597.	0.52	1.51	23243.	26840.
JAPAN	S	7810 6	5836N	17645W	16485.4	33684.1	49998.5	257.	4.750	2460.	0.52	6.23	3040.	5500.
JAPAN	S	7812 4	5658N	17342W	17365.0	34677.2	50178.1	301.	5.500	2240.	0.52	4.40	1560.	4400.
JAPAN	S	791027	5635N	17253W	17598.3	34889.2	50170.6	262.	4.667	2406.	0.52	7.00	234.	2640.
JAPAN	S	781028	5807N	17611W	16617.5	33946.0	50066.9	246.	5.000	2555.	0.51	4.28	1845.	4400.
JAPAN	S	7811 7	5745N	17343W	17464.3	34376.9	50106.7	164.	2.333	1174.	0.50	3.52	2786.	3960.
JAPAN	S	601128	5645N	17325W	17433.6	34777.5	50179.8	355.	4.500	2254.	0.50	8.31	826.	3080.

... NOTE ... THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION...

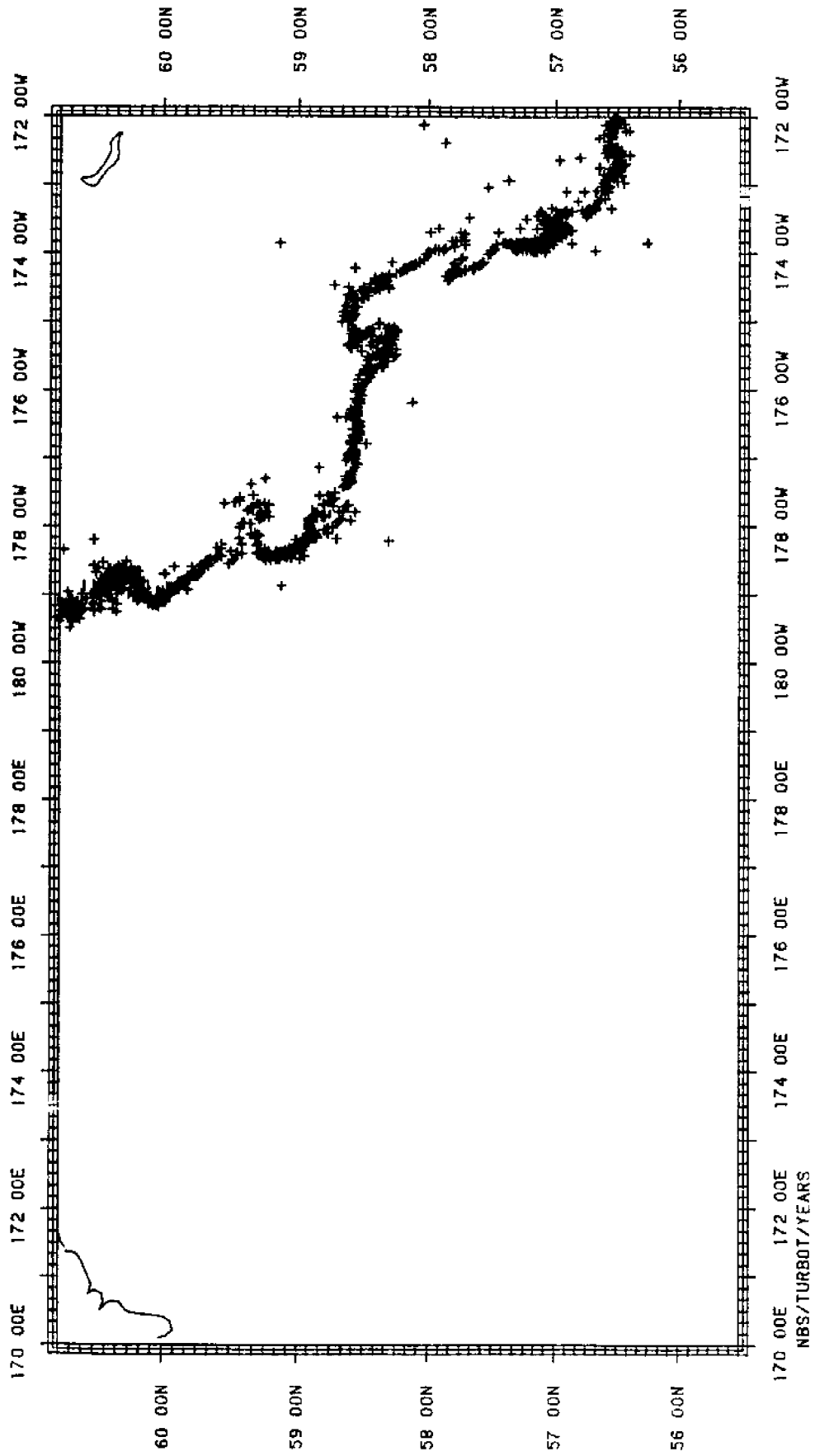


FIGURE A-6. TRAWLING LOCATIONS FOR TURBOT, ALL MONTHS, 1977-80

TABLE A-17. PACIFIC HERRING, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YYMMDD			7X	7Y	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
JAPAN	L	77 315	5855N	17428W	17083.6	33670.7	75.	0.917	36126.	39.41	0.37	1274.	37400.
JAPAN	L	78 314	5833N	17518W	16960.7	33831.8	104.	1.000	34001.	34.00	0.48	141999.	176000.
JAPAN	L	77 312	5842N	17419W	17287.1	33836.8	87.	1.333	41742.	31.31	0.40	6658.	48400.
JAPAN	L	77 316	5826N	17429W	17221.8	33963.4	92.	0.500	9711.	19.42	0.39	135489.	145200.
JAPAN	L	77 310	5842N	17432W	17217.5	33819.5	103.	3.500	64367.	18.39	0.40	67633.	132000.
USSR	M	79 217	5924N	17651W	16532.2	33299.5	85.	0.500	8072.	16.14	0.38	2928.	11000.
JAPAN	L	78 316	5837N	17700W	16405.5	33656.1	89.	0.667	8569.	12.85	0.45	167431.	178000.
JAPAN	L	77 314	5853N	17455W	17098.8	33692.1	76.	3.000	36486.	12.16	0.38	914.	37400.
USSR	M	79 216	5921N	17701W	16478.3	33314.2	85.	0.750	8832.	11.78	0.27	2168.	11000.
USSR	M	78 121	5935N	17703W	16487.9	33197.6	112.	0.917	10197.	11.12	0.45	16203.	26400.
USSR	M	78 220	5937N	17734W	16341.5	33154.6	96.	2.500	23271.	9.31	0.35	20729.	44000.
USSR	M	79 215	5933N	17635W	16621.2	33238.8	87.	0.750	6687.	8.92	0.34	4313.	11000.
JAPAN	L	77 316	5852N	17508W	17023.8	33604.8	77.	1.250	11098.	8.88	0.35	2102.	13200.
USSR	M	79 214	5927N	17654W	16521.3	33271.9	85.	1.333	11373.	8.53	0.35	10627.	22000.
USSR	M	79 216	5926N	17645W	16564.4	33208.7	85.	1.250	8793.	7.03	0.27	2207.	11000.
JAPAN	L	78 320	6002N	17858W	15998.7	32895.5	115.	2.000	13723.	6.86	0.37	261277.	275000.
JAPAN	L	77 317	5845N	17434W	17207.5	33790.1	85.	2.917	19521.	6.69	0.38	2479.	22000.
USSR	M	78 124	5924N	17720W	16388.6	33271.4	87.	1.667	9525.	5.72	0.38	23475.	33000.
JAPAN	L	77 317	5843N	17418W	17292.5	33829.1	84.	2.583	14433.	5.59	0.41	7567.	22000.
USSR	M	79 216	5927N	17703W	16477.0	33263.4	85.	1.417	7812.	5.51	0.30	3188.	11000.
JAPAN	L	78 226	5941N	17729W	17107.4	33738.9	79.	2.500	13144.	5.34	0.37	4256.	17800.
USSR	M	77 316	5855N	17459W	16371.7	33126.5	109.	2.500	13107.	5.24	0.38	19893.	33000.
JAPAN	L	77 320	5850N	17500W	17071.1	33712.4	82.	2.000	10331.	5.17	0.35	1796.	6600.
USSR	M	78 227	5942N	17742W	16311.5	33107.8	107.	2.833	14001.	4.94	0.42	7999.	22000.
USSR	M	78 221	5939N	17734W	16344.7	33138.5	107.	2.500	12065.	4.83	0.39	20935.	33000.
JAPAN	L	77 320	5853N	17456W	17093.5	33690.9	76.	1.333	6382.	4.79	0.35	218.	6600.
JAPAN	L	77 315	5850N	17513W	17002.1	33695.8	78.	1.000	4452.	4.45	0.37	4348.	8200.
JAPAN	L	77 310	5840N	17436W	17195.4	33831.9	122.	1.000	4398.	4.40	0.40	116602.	121000.
USSR	M	78 121	5939N	17721W	16406.9	33149.4	115.	1.333	5569.	4.18	0.40	38431.	44000.
USSR	M	78 219	5937N	17737W	16327.1	33152.0	109.	3.000	12419.	4.14	0.40	31581.	44000.
USSR	M	79 217	5917N	17656W	16497.5	33351.6	85.	1.083	4463.	4.12	0.29	6537.	11000.
JAPAN	L	79 220	6001N	17850W	16032.5	32908.5	100.	2.250	8954.	3.98	0.34	107646.	116600.
JAPAN	L	77 318	5833N	17429W	17231.0	33903.1	104.	1.333	5259.	3.94	0.38	104741.	110000.
JAPAN	L	77 319	5826N	17430W	17222.2	33961.9	104.	0.750	2746.	3.66	0.44	133654.	136400.
USSR	M	78 119	5934N	17718W	16414.0	33192.7	120.	1.750	5976.	3.41	0.45	7224.	13200.
JAPAN	L	77 318	5840N	17415W	17302.4	33260.3	89.	3.333	9529.	2.86	0.38	3671.	13200.
USSR	M	78 222	5939N	17732W	16354.3	33140.2	104.	2.250	6312.	2.81	0.36	26688.	33000.
JAPAN	L	79 328	5926N	17736W	16313.2	33240.2	131.	2.500	6726.	2.69	0.47	70274.	77000.
JAPAN	L	77 229	5836N	17608W	16688.5	33736.0	100.	2.667	6939.	2.60	0.41	4061.	11000.
JAPAN	L	77 314	5845N	17507W	17030.9	33746.6	90.	1.583	4001.	2.53	0.35	3699.	7700.
USSR	M	78 223	5937N	17729W	16365.5	33158.9	109.	2.833	7133.	2.52	0.47	36865.	44000.
USSR	M	78 226	5939N	17740W	16316.1	33133.5	109.	1.917	4743.	2.47	0.36	17257.	22000.
JAPAN	L	79 323	5825N	17535W	16855.9	33870.2	143.	2.750	6402.	2.33	0.63	125598.	132000.
USSR	M	78 222	5937N	17720W	16408.8	33166.6	109.	3.583	8082.	2.26	0.34	35916.	44000.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN - USE WITH CAUTION***

TABLE A-17 (continued). PACIFIC HERRING, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	78 220	5936N	17753W	16344.7	33163.5	49833.5	109.	2.333	4915.	2.11	0.36	17085.	22000.
USSR	M	78 217	5933N	17758W	16315.6	33183.0	49845.0	109.	3.000	6278.	2.09	0.36	37722.	44000.
USSR	M	78 124	5930N	17723W	16359.2	33216.0	49850.7	67.	1.583	3304.	2.09	0.39	9896.	13200.
USSR	M	78 118	5928N	17731W	16341.2	33229.1	49858.2	98.	1.833	3676.	2.01	0.39	9524.	13200.
USSR	M	78 123	5933N	17727W	16378.2	33144.4	49821.2	98.	1.500	2947.	1.96	0.47	10253.	13200.
JAPAN	L	77 317	5841N	17409W	17340.5	33859.2	49929.8	61.	3.333	6532.	1.96	0.36	22668.	88000.
USSR	M	79 2 5	5932N	17642W	16586.1	33241.1	49824.2	82.	1.417	2748.	1.94	0.25	1652.	44000.
USSR	M	78 126	5941N	17716W	16433.0	33137.2	49809.7	109.	1.417	2441.	1.72	0.47	5259.	77000.
USSR	M	78 224	5941N	17725W	16390.7	33129.8	49814.8	109.	3.000	4529.	1.51	0.46	39471.	44000.
JAPAN	L	79 227	5826N	17520W	16941.7	33885.3	50008.9	97.	1.667	2451.	1.47	0.46	151549.	154000.
USSR	M	78 125	5939N	17715W	16435.6	33154.4	49815.9	107.	2.000	2928.	1.46	0.45	8072.	110000.
USSR	M	78 224	5940N	17731W	16366.6	33133.0	49819.7	109.	3.833	5597.	1.46	0.46	27403.	330000.
JAPAN	L	79 329	5929N	17741W	16294.0	33211.9	49858.7	159.	2.000	2900.	1.45	0.51	71900.	748000.
USSR	M	78 221	5937N	17733W	16346.3	33155.5	49830.2	109.	4.083	5069.	1.24	0.44	27931.	330000.
JAPAN	L	79 329	5926N	17735W	16315.1	33241.2	49865.9	131.	2.000	2423.	1.21	0.50	93777.	1012000.
USSR	M	78 218	5942N	17747W	16287.8	33103.7	49819.9	98.	2.667	3189.	1.20	0.45	40811.	440000.
USSR	M	79 2 5	5933N	17645W	16572.6	33230.1	49822.2	85.	1.167	1279.	1.10	0.40	921.	22000.
JAPAN	S	78 114	5849N	17434W	17206.3	33754.1	49915.1	78.	2.000	2192.	1.09	0.47	678.	28600.
USSR	M	79 2 4	5937N	17730W	16504.9	33183.6	49815.7	87.	0.917	959.	1.05	0.28	21041.	220000.
JAPAN	L	77 3 9	5838N	17428W	17234.1	33860.5	49950.9	96.	1.667	1733.	1.04	0.40	59367.	616000.
JAPAN	L	77 317	5843N	17435W	17201.7	33806.6	49936.0	97.	2.000	2070.	1.04	0.42	28730.	308000.
USSR	M	78 225	5852N	17747W	16280.9	33135.5	49832.6	137.	2.083	2147.	1.03	0.30	41853.	440000.
JAPAN	L	77 3 8	5825N	17428W	17232.8	33973.5	49996.6	109.	0.667	685.	1.03	0.42	104915.	1056000.
USSR	M	78 125	5939N	17715W	16435.6	33154.4	49815.9	109.	1.250	1284.	1.03	0.38	9716.	110000.
USSR	M	78 223	5940N	17727W	16375.7	33136.3	49818.0	115.	4.500	4467.	0.99	0.46	28533.	330000.
USSR	M	79 213	5937N	17732W	16351.1	33156.3	49829.6	142.	0.917	854.	0.93	0.48	36546.	374000.
JAPAN	L	79 322	5826N	17532W	16874.2	33366.9	50011.8	123.	2.500	2231.	0.89	0.55	112169.	1144000.
USSR	M	78 122	5833N	17730W	16354.3	33190.2	49841.9	90.	1.583	1405.	0.89	0.37	9595.	110000.
JAPAN	L	79 226	5827N	17519W	16948.5	33828.8	50005.7	95.	2.417	2087.	0.86	0.42	52913.	550000.
JAPAN	L	78 213	5850N	17733W	16256.6	33517.5	49969.8	77.	1.583	1336.	0.84	0.58	119864.	1210000.
JAPAN	S	78 115	5852N	17427W	17245.2	33735.3	49897.6	79.	1.667	1347.	0.81	0.48	193.	15400.
JAPAN	L	79 2 4	5845N	17510W	17014.8	33742.6	49944.8	96.	0.500	401.	0.80	0.44	98599.	990000.
JAPAN	L	79 214	5829N	17530W	16885.3	33846.3	50002.4	86.	1.500	1154.	0.77	0.50	53846.	550000.
JAPAN	L	79 216	5829N	17519W	16950.8	33862.7	49999.6	95.	1.500	1123.	0.75	0.45	86877.	880000.
JAPAN	S	78 114	5846N	17415W	17508.3	33805.4	49915.8	85.	2.000	1449.	0.72	0.49	1411.	28600.
JAPAN	L	78 316	5837N	17647W	16476.4	33673.9	49996.2	97.	1.000	702.	0.70	0.45	45498.	462000.
JAPAN	L	79 331	5927N	17736W	16315.0	33232.3	49863.1	142.	3.083	2125.	0.69	0.46	103475.	1056000.
JAPAN	L	77 3 5	5741N	17539W	17484.0	34414.9	50116.2	80.	2.000	686.	0.69	0.46	43314.	440000.
USSR	M	78 217	5928N	17534W	16326.5	33226.3	49859.3	120.	2.000	1560.	0.68	0.42	20640.	220000.
JAPAN	L	79 319	5923N	17532W	16922.0	33383.4	49818.3	114.	1.667	1104.	0.66	0.49	47296.	484000.
JAPAN	L	79 326	5925N	17736W	16311.4	33248.1	49869.3	137.	2.750	1757.	0.64	0.50	92843.	946000.
USSR	M	78 219	5933N	17734W	16335.0	33186.6	49843.5	109.	3.417	2154.	0.63	0.35	30846.	330000.
USSR	M	78 218	5941N	17744W	16500.3	33114.2	49821.9	93.	2.583	1501.	0.58	0.51	20499.	220000.
JAPAN	S	78 113	5844N	17412W	17324.3	33827.7	49919.8	79.	1.667	911.	0.55	0.48	1069.	19800.
JAPAN	L	79 327	5930N	17739W	16305.6	33205.9	49854.8	153.	4.500	2447.	0.54	0.55	111953.	1144000.

*** NCIE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-17 (continued). PACIFIC HERRING, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE YMMDD	LAT	LONG	APPROX LORAN-C 7X	PULSE 7Y	RATES 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	78 112	5849N	17435W	17203.0	33752.8	49913.7	78.	2.167	1171.	0.54	0.49	1029.	2200.
JAPAN	S	78 115	5845N	17415W	17508.4	33814.6	49917.7	77.	2.167	1164.	0.54	0.42	1036.	2200.
JAPAN	L	80 128	6020N	17837W	16126.5	32708.3	49718.7	169.	1.750	685.	0.51	0.53	82935.	83820.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-18. PACIFIC HERRING, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE YMMDD	LAT	LONG	APPROX LORAN-C 7X	PULSE 7Y	RATES 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	79 4 7	5833N	17521W	16944.1	33827.4	49987.8	90.	1.917	29664.	15.43	0.50	146336.	176000.
JAPAN	L	79 4 7	5843N	17832W	16077.4	33059.3	49833.5	104.	1.333	4359.	3.27	0.50	69781.	74140.
USSR	H	79 4 4	6030N	17730W	16429.1	32716.5	49648.1	82.	1.167	2024.	1.74	0.47	19976.	22000.
JAPAN	H	78 419	5823N	17320W	17609.7	34094.7	49972.4	64.	1.000	624.	0.62	0.43	1884.	2508.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-19. PACIFIC HERRING, JULY-SEPTEMBER 1977-80

NATION	VESSEL CLASS	DATE YMMDD	LAT	LONG	APPROX LORAN-C 7X	PULSE 7Y	RATES 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	77 9 9	5837N	17605W	16706.6	33732.5	49987.4	85.	3.750	18431.	4.92	0.50	91569.	110000.
JAPAN	S	77 9 15	5805N	17343W	17480.1	34217.3	50048.3	66.	1.583	6122.	3.87	0.56	38.	6160.
JAPAN	L	77 9 11	5844N	17731W	16253.6	33563.7	49985.3	87.	2.083	7188.	3.45	0.55	25812.	33000.
JAPAN	L	78 9 17	5910N	17714W	16395.1	33388.2	49903.1	85.	3.750	9090.	2.42	0.45	89910.	99000.
JAPAN	L	77 9 30	5857N	17855W	16001.4	32935.5	49799.1	112.	3.500	7965.	2.26	0.67	102035.	110000.
JAPAN	S	77 9 15	5808N	17359W	17388.6	34164.1	50043.2	71.	3.500	5370.	1.53	0.62	790.	6160.
JAPAN	L	77 9 10	5837N	17630W	16569.4	33697.5	49992.9	85.	3.167	4597.	1.45	0.47	72403.	77000.
JAPAN	L	77 9 4	5856N	17516W	16990.0	33640.1	49908.9	75.	4.250	5760.	1.36	0.48	71240.	77000.
JAPAN	L	77 9 1	5850N	17442W	17166.3	33735.0	49913.7	77.	2.833	3322.	1.17	0.48	84678.	88000.
JAPAN	L	77 9 26	6004N	17854W	16020.9	32482.9	49777.2	93.	6.083	3752.	0.62	0.66	95248.	99000.
JAPAN	L	77 9 4	5855N	17500W	17073.3	33668.3	49904.6	73.	4.500	2629.	0.58	0.57	74371.	77000.
JAPAN	L	77 9 2	5850N	17519W	16970.2	33688.2	49931.2	73.	4.500	2568.	0.57	0.40	116432.	121000.
JAPAN	S	77 9 16	5807N	17339W	17504.1	34207.4	50040.5	85.	1.917	1038.	0.54	0.52	1162.	2200.
JAPAN	L	77 9 3	5855N	17450W	17125.6	33680.3	49899.3	72.	3.667	1850.	0.50	0.41	48750.	50600.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-20. PACIFIC HERRING, OCTOBER-DECEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
		YYMMDD			7X	7Y	7Z						
USSR	M	791213	5942N	17725W	16392.2	33121.6	49610.5	10.4	65489	196.47	0.46	1171	66660
USSR	M	791213	5942N	17725W	16373.2	33118.4	49812.2	101	50511	75.77	0.34	5365	55680
USSR	M	771118	5950N	17840W	16055.0	32999.7	49815.0	101	15248	36.59	0.40	2352	17600
USSR	M	771127	5947N	17829W	16095.7	33031.1	49820.3	85	25171	30.21	0.34	7829	33000
USSR	M	771117	5948N	17838W	16060.0	33016.5	49820.4	87	14414	8.2	0.46	986	15400
USSR	M	771130	5937N	17805W	16191.0	33128.0	49842.4	85	23720	25.88	0.35	7080	30800
USSR	M	79127	5937N	17758W	16322.3	33151.2	49832.3	98	29777	23.82	0.52	3223	33000
USSR	M	771117	5948N	17836W	16069.3	33018.0	49819.7	85	25769	17.18	0.42	7231	33000
USSR	M	771112	5956N	17845W	16026.5	32947.3	49800.0	79	28525	17.12	0.31	4675	33000
USSR	M	771120	5955W	17833W	16097.4	32966.4	49797.0	82	5222	14.21	0.40	678	6600
USSR	M	79125	5936N	17715W	16431.4	33179.0	49825.9	112	15333	13.31	0.63	17467	33000
USSR	M	79124	5938N	17728W	16371.9	33151.7	49824.9	128	17444	13.08	0.64	8956	26400
USSR	M	79123	5931N	17724W	16386.3	33211.6	49846.0	93	11770	12.30	0.38	4130	15400
USSR	M	79124	5938N	17735W	16338.3	33145.7	49827.8	134	17651	11.63	0.71	6749	24200
JAPAN	L	781127	5939N	17722W	16402.1	33148.6	49819.1	125	32386	10.80	0.58	60014	92400
USSR	M	771111	5953N	17847W	16029.2	32971.6	49808.4	96	8281	9.94	0.33	4919	13200
USSR	M	791211	5942N	17732W	16398.9	33116.0	49813.6	96	9823	9.62	0.51	23377	33000
USSR	M	79126	5944N	17718W	16428.2	33110.8	49800.6	118	13779	9.19	0.62	8221	22000
JAPAN	L	781111	5941N	17727W	16381.2	33128.2	49814.7	124	12405	8.76	0.56	2195	94600
USSR	M	791212	5941N	17714W	16443.1	33132.8	49808.6	96	23005	8.63	0.41	5375	28380
USSR	M	791130	5942N	17739W	16325.7	33110.3	49816.6	93	6293	8.39	0.53	9107	15400
USSR	M	791212	5942N	17715W	16439.7	33129.7	49805.9	90	8249	8.25	0.47	23431	31680
USSR	M	77127	5940N	17730W	16365.4	33133.8	49819.2	123	12885	7.73	0.50	4715	17600
USSR	M	79126	5940N	17716W	16432.2	33145.4	49813.1	123	15419	7.40	0.55	7461	22880
USSR	M	791128	5946N	17712W	16459.2	33098.9	49790.9	85	5398	7.19	0.44	3404	8800
USSR	M	791130	5939N	17740W	16316.1	33133.5	49826.7	98	7703	7.11	0.55	37177	44880
JAPAN	L	781127	5937N	17733W	16346.3	33155.5	49830.2	102	16610	6.87	0.42	5590	72600
USSR	M	791130	5946N	17718W	16430.9	33094.3	49793.6	93	7357	6.79	0.45	14643	22000
USSR	M	79123	5929N	17724W	16377.1	33227.7	49852.4	104	13205	6.60	0.40	17595	30800
USSR	M	77122	5948N	17832W	16087.8	33021.1	49818.3	85	10988	6.59	0.38	2212	13200
USSR	M	791125	5938N	17732W	16352.7	33148.3	49826.6	112	16418	6.57	0.47	9982	26400
USSR	M	77125	5948N	17834W	16078.6	33019.5	49819.0	82	8460	6.34	0.49	340	8800
USSR	M	771115	5950N	17836W	16073.5	33002.7	49813.6	82	14788	5.91	0.40	11632	26400
USSR	M	791126	5938N	17731W	16357.5	33119.1	49826.2	118	10214	5.84	0.56	7386	17600
USSR	M	791129	5946N	17714W	16449.8	33097.4	49791.9	90	4199	5.04	0.37	15161	19360
USSR	M	77124	5940N	17730W	16365.4	33133.8	49819.2	98	6636	4.98	0.40	10966	17600
USSR	M	791125	5939N	17729W	16368.6	33142.7	49822.1	112	10732	4.95	0.51	6868	17600
USSR	M	791123	5933N	17743W	16291.4	33178.6	49846.9	98	4539	4.54	0.63	13061	17600
USSR	M	77123	5958N	17821W	16158.0	32951.5	49762.7	79	4470	4.47	0.35	4330	2800
USSR	M	77123	5948N	17807W	16204.2	33040.4	49808.8	79	5554	4.44	0.35	16446	22000
USSR	M	77124	5939N	17658W	16517.0	33168.6	49807.9	87	4920	4.22	0.24	3880	8800
USSR	M	79125	5938N	17722W	16397.7	33173.0	49828.9	112	5684	4.01	0.60	16316	22000
JAPAN	L	78119	5937N	17704W	16485.7	33180.2	49817.6	96	20640	3.87	0.44	84960	105600
USSR	M	771120	5958N	17843W	16057.9	32936.3	49791.6	79	5691	3.79	0.46	5309	11000
USSR	M	77125	5953N	17730W	16384.4	33027.6	49776.0	74	3754	3.75	0.34	646	4400

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-20 (continued). PACIFIC HERRING, OCTOBER-DECEMBER 1977-80

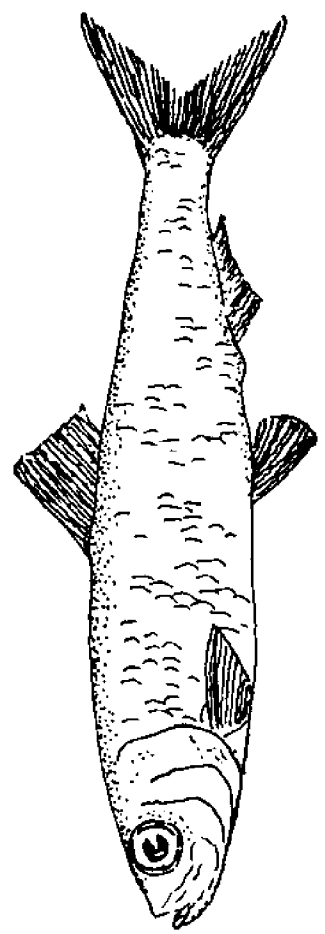
NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX	7X	7Y	PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND	SIZE	BYCATCH	TOTAL
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
USSR	M	771118	5956N	17845W	16044.7	32950.2	49798.5			79	1.083	4062	3.75	0.51	2538	6600
JAPAN	L	781114	5933N	17800W	16209.3	33163.4	49853.0			130	1.417	5264	3.72	0.68	71736	77000
USSR	M	7912 5	5937N	17712W	16447.2	33173.4	49821.3			123	1.167	4289	3.68	0.62	3631	7920
USSR	M	7712 8	5941N	17725W	16390.7	33129.8	49813.8			123	1.750	6009	3.43	0.49	37991	44000
USSR	M	7912 6	5944N	17715W	16442.4	33113.2	49799.2			107	1.917	6381	3.33	0.61	26619	33000
USSR	M	771130	5938N	17804W	16199.7	33121.1	49839.0			87	3.167	10518	3.32	0.39	20282	30800
USSR	M	791127	5931N	17759W	16307.3	33198.0	49851.7			128	2.000	6420	3.21	0.56	4580	11000
USSR	M	7712 6	5952N	17745W	16313.4	33024.9	49786.4			77	1.333	4185	3.14	0.33	9015	13200
USSR	M	7712 8	5939N	17744W	16297.0	33130.1	49828.3			123	2.833	8795	3.10	0.58	35205	44000
USSR	M	771211	5938N	17734W	16343.1	33146.6	49827.4			115	2.667	8130	3.05	0.53	46870	55000
USSR	M	791130	5939N	17716W	16430.8	33153.6	49816.4			107	1.333	3762	2.82	0.48	24838	28600
JAPAN	L	7811 7	5916N	17728W	16335.0	33326.5	49894.2			104	1.917	5070	2.65	0.65	126930	132000
USSR	M	7912 7	5939N	17745W	16292.2	33129.3	49828.7			107	3.000	7702	2.57	0.43	18698	26400
USSR	M	771124	5940N	17830W	16080.4	33083.8	49841.8			98	2.167	5553	2.56	0.43	38447	44000
USSR	M	771215	5933N	17733W	16335.4	33187.5	49843.1			101	2.583	6573	2.54	0.39	6627	13200
USSR	M	771213	5933N	17750W	16354.3	33190.2	49841.9			87	2.667	6512	2.44	0.47	11088	17600
USSR	M	7712 6	5932N	17707W	16464.5	33218.8	49835.7			87	1.667	4068	2.44	0.36	4732	8000
JAPAN	L	781129	5950N	17843W	16041.2	32997.4	49816.1			98	4.000	9362	2.34	0.49	118238	127600
JAPAN	L	781126	5937N	17728W	16370.3	33159.7	49828.2			95	2.500	5828	2.33	0.50	71172	77000
USSR	M	771210	5939N	17727W	16376.2	33144.4	49821.2			131	1.167	2655	2.28	0.41	3945	6600
USSR	M	771214	5936N	17733W	16344.7	33163.5	49833.5			93	2.000	4425	2.21	0.43	8775	13200
USSR	M	771216	5939N	17727W	16378.2	33144.4	49821.6			118	2.083	4601	2.21	0.56	28399	33000
USSR	M	791129	5940N	17738W	16327.2	33127.1	49822.6			109	1.000	2196	2.20	0.57	13204	15400
USSR	M	7912 1	5923N	17732W	16327.6	33267.7	49874.1			96	2.000	4132	2.07	0.46	24028	28160
USSR	M	7712 9	5940N	17735W	16341.5	33129.6	49821.4			120	1.583	3117	1.97	0.56	18883	22000
JAPAN	L	781115	5937N	17756W	16236.1	33135.7	49839.2			106	1.583	3102	1.96	0.60	62898	66000
USSR	M	771213	5933N	17732W	16344.6	33188.4	49842.7			93	1.583	3044	1.92	0.42	10156	13200
USSR	M	771212	5935N	17731W	16352.7	33173.3	49835.9			96	2.500	4722	1.89	0.47	6278	11000
USSR	M	791127	5934N	17751W	16254.6	33163.6	49846.7			112	1.500	2590	1.73	0.75	19410	22000
JAPAN	L	7710 2	6006N	17852W	16033.9	32868.8	49770.2			102	3.167	5192	1.64	0.69	60808	66000
USSR	M	771214	5937N	17732W	16351.1	33156.3	49829.8			93	2.167	3479	1.61	0.51	11921	15400
USSR	M	791128	5940N	17743W	16303.4	33123.0	49824.7			93	1.083	1709	1.58	0.48	64251	66000
USSR	M	7912 7	5943N	17740W	16322.6	33101.4	49813.7			109	1.250	1965	1.57	0.33	20035	22000
USSR	M	7912 4	5938N	17737W	16328.8	33144.0	49828.7			120	1.250	1925	1.54	0.69	11275	13200
USSR	M	771211	5933N	17741W	16301.1	33180.4	49846.1			131	1.583	2371	1.50	0.64	41629	44000
USSR	M	7712 2	5951N	17838W	16066.3	32993.5	49811.3			85	2.167	3211	1.48	0.34	14389	17600
USSR	M	791129	5945N	17733W	16356.8	33090.8	49804.1			96	1.750	2532	1.45	0.57	8468	11000
USSR	M	771212	5931N	17731W	16346.2	33205.3	49848.7			96	2.833	4064	1.43	0.51	17936	22000
JAPAN	L	781022	5943N	17742W	16313.1	33099.8	49814.6			102	2.833	4018	1.42	0.71	105982	110000
USSR	M	7912 3	5932N	17726W	16372.1	33201.8	49843.5			98	1.083	1394	1.29	0.40	7406	8800
USSR	M	7912 1	5937N	17731W	16355.9	33157.2	49829.4			123	1.500	1885	1.26	0.70	4715	6600
USSR	M	771119	5951N	17841W	16052.5	32991.3	49812.3			82	1.083	1287	1.19	0.51	5313	6600
USSR	M	771128	5941N	17812W	16167.5	33091.1	49832.6			82	2.833	3244	1.14	0.39	9956	13200
USSR	M	7912 8	5939N	17738W	16325.6	33135.2	49825.8			107	1.417	1485	1.05	0.55	42515	44000
JAPAN	L	781115	5934N	17816W	16134.4	33141.5	49855.3			118	2.417	1443	0.80	0.50	196057	198000

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE A-20 (continued). PACIFIC HERRING, OCTOBER-DECEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH (FMS)	HOURS	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
		YYMMDD			7X	7Y	7Z	RAWLED					
JAPAN	L	7911 8	5851N	17746W	1619C.4	33494.1	49969.6	93.	1109.	0.78	0.69	144091.	145200.
JAPAN	L	781019	6014N	17822W	16181.7	32824.1	49731.2	97.	1399.	0.70	0.68	141601.	143000.
USSR	M	771216	5935N	17735W	16333.4	33169.8	49837.5	98.	1377.	0.69	0.40	5223.	6600.
JAPAN	L	771C 3	6C06N	17849W	16047.3	32870.7	49769.0	109.	2843.	0.62	0.53	140157.	143000.
JAPAN	L	7811 7	5935N	17746W	16230.4	33361.0	49920.0	116.	1862.	0.55	0.56	26138.	22000.
USSR	M	791119	5946N	17719W	16426.2	33093.5	49794.3	82.	1162.	0.54	0.48	9838.	11000.
USSR	M	791129	5936N	17808W	16176.8	33133.1	49846.5	96.	839.	0.53	0.55	33261.	34100.
USSR	M	771128	5944N	17835W	16065.5	33049.3	49831.5	87.	1119.	0.52	0.40	12081.	13200.
USSR	M	771119	5943N	17829W	16091.5	33061.7	49832.5	96.	298.	0.51	0.32	21702.	22000.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***



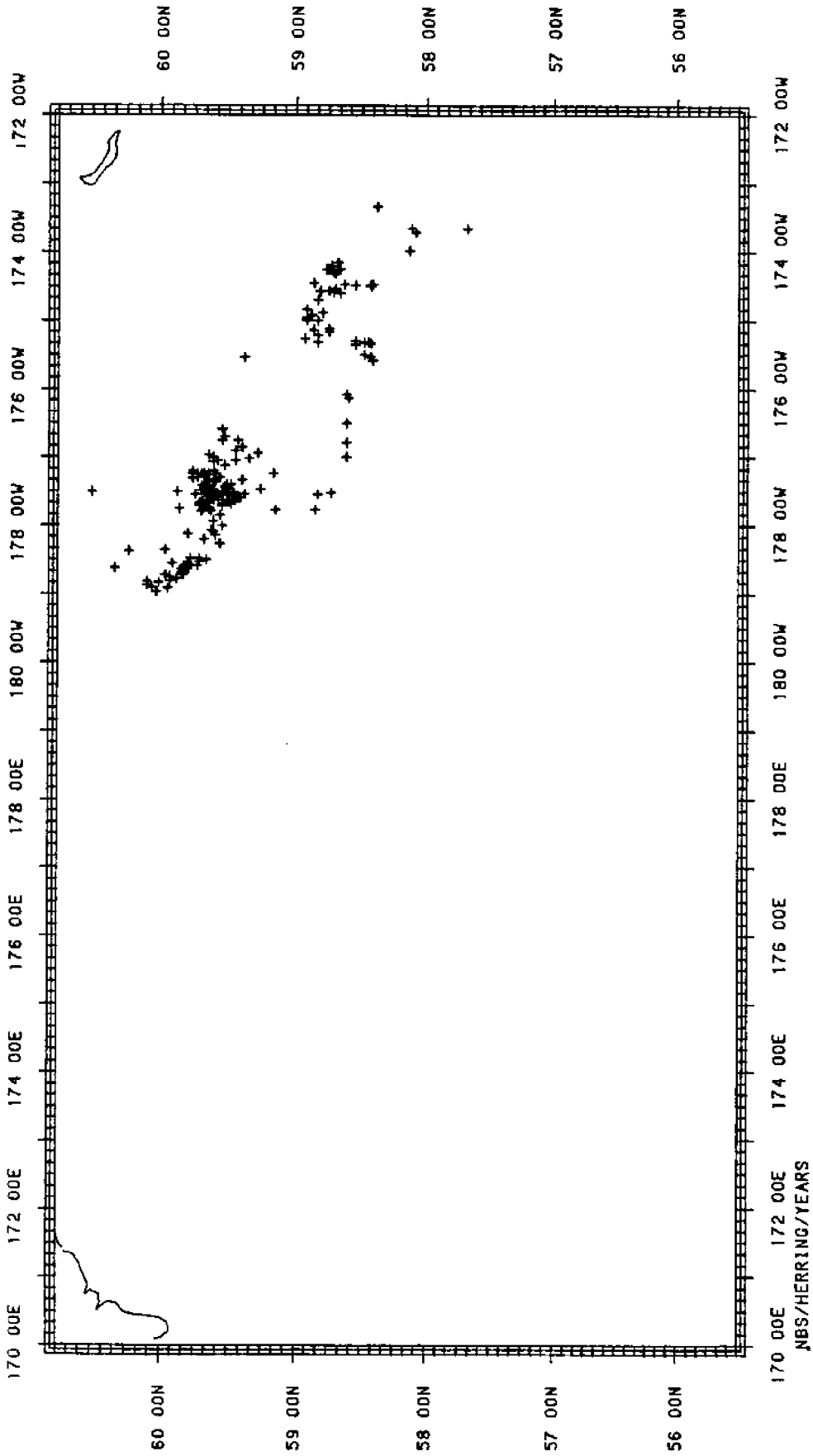
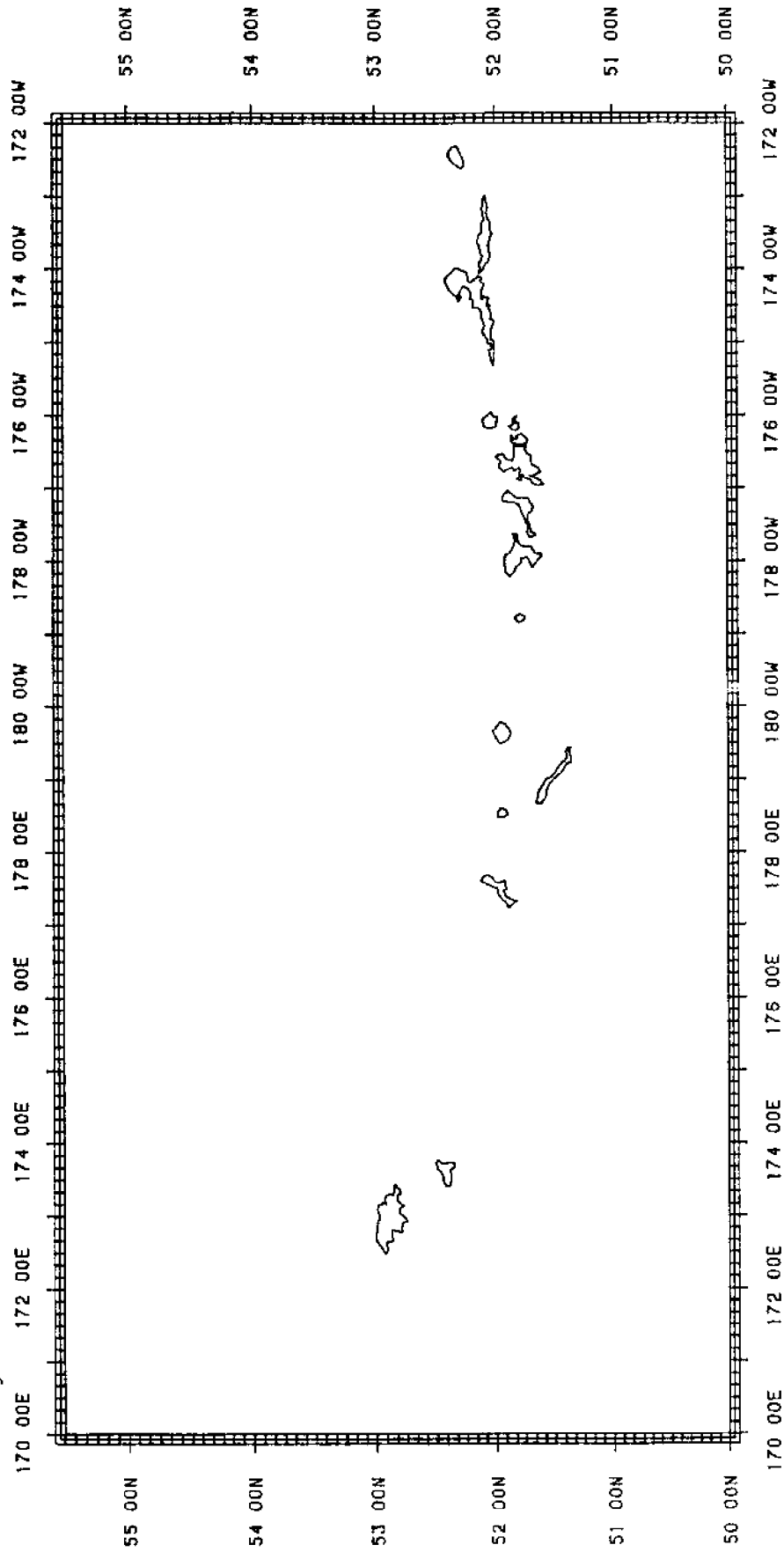


FIGURE A-7. TRAWLING LOCATIONS FOR PACIFIC HERRING, ALL MONTHS, 1977-80



APPENDIX B. ALEUTIAN ISLAND REGION

APPENDIX B

Productive Foreign Fishing Locations in the Aleutian
Islands Region

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Productive Foreign Fishing Locations in the Aleutian
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Table B-1

SUMMARY OF OVERALL CATCH COMPOSITION AND CATCH PER UNIT EFFORT OBSERVED IN THE ALEUTIAN ISLANDS REGION DURING JANUARY-MARCH 1980.^{1/}

	<u>Mean CPUE^{2/}</u> <u>(lbs/day)</u>	<u>Mean CPUE^{3/}</u> <u>(lbs/hr)</u>	<u>Proportion of^{4/}</u> <u>Total Catch</u>	<u>Mean Size</u> <u>(lbs/fish)</u>
Small Trawlers				
Pacific Ocean Perch	16,732	1,891	0.695	1.12
Greenland Turbot	3,051	345	0.127	3.62
Arrowtooth Flounder	1,006	114	0.042	3.77
Squid	896	101	0.037	1.04
Pectoral Rattail	858	97	0.036	3.68
Pacific Halibut	374	42	0.016	17.52
Sablefish	256	29	0.011	3.11
Walleye Pollock	159	18	0.007	1.62
Large Freezer Trawlers				
Atka Mackerel	62,705	15,638	0.959	0.79
Yellow Irish Lord	645	161	0.010	1.95
Pacific Cod	487	121	0.007	5.41
Pacific Ocean Perch	352	88	0.005	0.45
Rock Sole	293	73	0.004	1.07
Starfish	196	49	0.003	0.98
Walleye Pollock	163	41	0.002	1.78
Sponge	163	41	0.002	3.70

^{1/} Based upon observer data from 8 gear operations by small trawlers, and 9 gear operations by large freezer trawlers.

^{2/} Average production rate per day of fishing activities on the grounds.

^{3/} Average production rate per hour of actual trawling effort.

^{4/} By vessel class.

Table B-2

SUMMARY OF OVERALL CATCH COMPOSITION AND CATCH PER UNIT EFFORT OBSERVED IN THE ALEUTIAN ISLANDS REGION DURING APRIL-JUNE 1980.^{1/}

	<u>Mean CPUE^{2/}</u> <u>(lbs/day)</u>	<u>Mean CPUE^{3/}</u> <u>(lbs/hr)</u>	<u>Proportion of^{4/}</u> <u>Total Catch</u>	<u>Mean Size</u> <u>(lbs/fish)</u>
Small Trawlers				
Pacific Ocean Perch	4,127	612	0.333	1.00
Squid	2,776	412	0.224	1.18
Walleye Pollock	2,065	306	0.167	1.25
Sponge	1,042	155	0.084	1.92
Pacific Cod	421	62	0.034	7.39
Rougheye Rockfish	314	47	0.025	1.99
Arrowtooth Flounder	282	42	0.023	4.47
Northern Rockfish	179	27	0.014	0.88
Pacific Halibut	144	21	0.012	8.97
Greenland Turbot	134	20	0.011	4.06
Unidentified Sculpins	123	18	0.010	0.19
Harlequin Rockfish	102	15	0.008	3.36

1/ Based upon observer data from 95 gear operations by small trawlers.

2/ Average production rate per day of fishing activities on the grounds.

3/ Average production rate per hour of actual trawling effort.

4/ By vessel class.

Table B-3

SUMMARY OF OVERALL CATCH COMPOSITION AND CATCH PER UNIT EFFORT OBSERVED IN THE ALEUTIAN ISLANDS REGION DURING JULY-SEPTEMBER 1980.^{1/}

	<u>Mean CPUE^{2/}</u> <u>(lbs/day)</u>	<u>Mean CPUE^{3/}</u> <u>(lbs/hr)</u>	<u>Proportion of^{4/}</u> <u>Total Catch</u>	<u>Mean Size</u> <u>(lbs/fish)</u>
Small Trawlers				
Unidentified Rattails	11,142	1,394	0.305	8.97
Pacific Ocean Perch	4,231	529	0.116	0.98
Sablefish	4,181	523	0.114	4.21
Greenland Turbot	4,089	512	0.112	13.02
Darkblotched Rockfish	3,228	404	0.088	2.47
Walleye Pollock	3,089	386	0.085	1.97
Shortraker Rockfish	2,202	275	0.060	6.86
Arrowtooth Flounder	1,109	139	0.030	4.38
Shortspine Thornyhead	638	80	0.017	1.63
Atka Mackerel	523	65	0.014	0.99
Rex Sole	419	52	0.011	1.11
Unidentified Sculpins	365	46	0.010	0.55

1/ Based upon observer data from 6 gear operations by small trawlers.

2/ Average production rate per day of fishing activities on the grounds.

3/ Average production rate per hour of actual trawling effort.

4/ By vessel class.

Table B-4

SUMMARY OF OVERALL CATCH COMPOSITION AND CATCH PER UNIT EFFORT OBSERVED IN THE ALEUTIAN ISLANDS REGION DURING OCTOBER-DECEMBER 1980.^{1/}

	<u>Mean CPUE^{2/}</u> <u>(lbs/day)</u>	<u>Mean CPUE^{3/}</u> <u>(lbs/hr)</u>	<u>Proportion of^{4/}</u> <u>Total Catch</u>	<u>Mean Size</u> <u>(lbs/fish)</u>
Small Trawlers				
Walleye Pollock	23,063	2,895	0.635	1.04
Squid	7,076	888	0.195	1.05
Atka Mackerel	1,236	155	0.034	0.92
Pacific Cod	1,090	137	0.030	4.98
Pacific Ocean Perch	663	83	0.018	0.66
Unidentified Sculpins	612	77	0.017	0.55
Rock Sole	587	74	0.016	0.93
Pacific Halibut	249	31	0.007	8.66
Large Freezer Trawlers				
Atka Mackerel	43,290	13,020	0.826	1.00
Walleye Pollock	5,516	1,659	0.105	2.29
Pacific Cod	1,983	596	0.038	10.77
Pacific Halibut	318	96	0.006	11.54
Sablefish	261	78	0.005	3.48
Unidentified Sculpins	189	57	0.004	1.80
Great Sculpin	174	52	0.003	5.45
Northern Rockfish	110	33	0.002	1.24

^{1/} Based upon observer data from 120 gear operations by small trawlers, and 22 gear operations by large freezer trawlers.

^{2/} Average production rate per day of fishing activities on the grounds.

^{3/} Average production rate per hour of actual trawling effort.

^{4/} By vessel class.

TABLE B-5. WALLEYE POLLOCK, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LCRAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	79 3 3	5233N	17326W	16053.2	35107.9	49578.0	137.	0.167	3494.	20.97	1.87	1016.	4510.
JAPAN	M	79 3 4	5234N	17320W	16088.5	35110.7	49568.9	131.	0.583	9109.	15.62	1.80	3915.	13024.
JAPAN	M	79 3 2	5234N	17316W	16108.6	35112.7	49561.0	153.	0.250	1118.	4.47	1.45	1676.	2794.
JAPAN	M	79 3 2	5235N	17313W	16128.7	35113.9	49557.7	137.	0.250	878.	3.51	1.62	1322.	2200.
JAPAN	M	79 3 3	5235N	17320W	16093.6	35110.5	49571.6	142.	0.167	443.	2.66	1.46	701.	1144.
USSR	M	79 126	5200N	17211W	16248.7	35136.6	49325.3	90.	1.167	1596.	1.37	1.75	20404.	22000.
JAPAN	M	79 313	5232N	17329W	16033.0	35106.5	49581.1	120.	0.500	481.	0.96	2.75	1015.	1496.
USSR	M	79 225	5158N	17204W	16270.4	35137.4	49302.3	74.	0.333	266.	0.80	1.58	43734.	44000.
USSR	M	79 216	5157N	17204W	16265.6	35137.5	49300.1	80.	0.500	312.	0.62	1.32	48748.	49060.
USSR	M	79 127	5157N	17204W	16265.6	35137.5	49300.1	93.	1.833	968.	0.53	1.82	43032.	44000.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

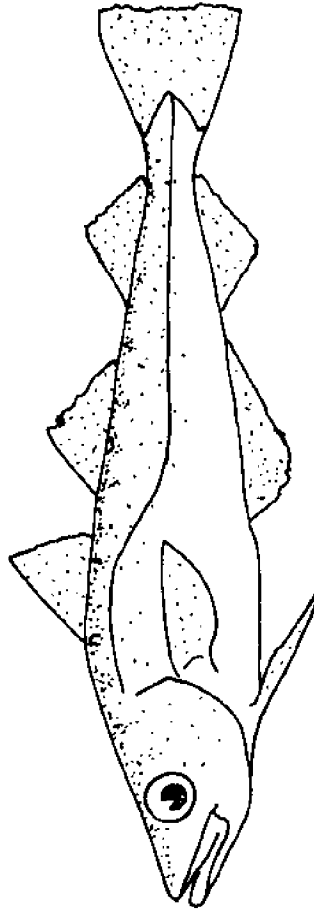


TABLE B-6. WALLEYE POLLOCK, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	LAI	LONG	APPROX LORAN-C	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YYMMDD			7X 7Y 7Z	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
JAPAN	S	79 512	5249A	17224E	11022.4 34076.0 50166.3	120.	1.167	29133.	24.97	0.67	3867.	33000.
JAPAN	S	80 414	5226N	17950E	13631.3 34698.2 50018.2	109.	0.633	12541.	15.05	1.63	659.	12760.
JAPAN	S	80 414	5223N	18000E	13686.0 34715.3 50008.3	105.	0.633	12141.	14.57	1.61	619.	12760.
JAPAN	S	80 414	5223N	17944W	13789.1 34735.7 49998.3	104.	0.417	5121.	12.29	0.30	819.	5940.
JAPAN	S	77 512	5203N	17202W	16303.0 35137.5 49311.2	59.	0.283	2593.	9.15	1.53	2027.	4620.
JAPAN	S	79 5 4	5216N	17507E	11736.5 34347.5 50121.3	128.	1.917	15456.	8.06	1.88	14464.	29920.
USSR	M	78 5 3	5240N	17922W	13992.1 34740.0 50008.3	90.	1.583	11989.	7.57	0.83	18811.	30600.
JAPAN	M	78 5 3	5240N	17922W	13992.1 34740.0 50008.3	90.	1.000	7567.	7.57	1.19	17733.	25300.
JAPAN	S	80 416	5226N	17958E	13683.2 34708.5 50013.5	131.	1.167	8079.	6.92	1.67	721.	8800.
JAPAN	S	79 512	5229N	17258E	11028.5 34159.3 50154.5	115.	1.500	9076.	6.05	1.01	3244.	12320.
USSR	M	78 5 2	5240N	17924W	13979.2 34737.4 50009.5	90.	1.083	6248.	5.77	0.89	27852.	34100.
USSR	M	77 520	5234N	17254E	11611.2 34144.3 50157.2	85.	0.833	4146.	4.70	0.90	254.	4400.
JAPAN	S	80 416	5226N	17958E	13683.2 34708.5 50013.5	131.	1.167	5479.	4.70	1.55	21.	5500.
JAPAN	S	78 629	5148N	17727E	12604.3 34572.5 50047.9	80.	0.417	1627.	3.91	1.43	4973.	6600.
JAPAN	S	80 415	5125N	17958E	13675.8 34709.9 50012.1	120.	1.250	4675.	3.74	1.57	385.	5060.
JAPAN	S	78 520	5155N	17816E	12933.1 34623.7 50031.6	131.	2.167	7065.	3.26	2.26	1955.	9020.
USSR	M	78 428	5135N	17925W	13954.1 34743.2 50003.1	94.	1.083	3316.	3.06	1.04	23084.	26400.
JAPAN	S	79 5 3	5115N	17612E	12162.3 34432.9 50101.8	126.	0.833	2290.	2.75	2.08	10250.	12540.
JAPAN	S	79 512	5124N	17259E	11043.2 34170.5 50152.2	120.	2.083	5216.	2.50	1.06	3144.	8360.
USSR	M	78 5 4	5137N	17924W	13968.0 34741.7 50005.3	85.	1.417	3536.	2.50	1.56	7904.	11440.
JAPAN	S	79 5 5	5114N	17611E	12106.9 34526.8 50046.5	131.	2.167	5291.	2.44	2.08	7029.	12320.
JAPAN	S	78 625	5148N	17728E	12610.7 34573.8 50047.4	77.	0.333	758.	2.27	1.31	2542.	3300.
USSR	M	78 427	5135N	17925W	13954.1 34743.2 50003.1	94.	1.417	2614.	1.84	1.09	33686.	36300.
JAPAN	S	79 516	5154N	17214E	11044.4 34053.0 50168.8	115.	0.750	1311.	1.75	1.12	7049.	8360.
JAPAN	S	80 414	5225N	17951W	13750.9 34724.0 50005.5	131.	2.250	3920.	1.74	1.79	920.	4840.
JAPAN	S	79 6 6	5143N	17752E	12755.0 34611.1 50030.5	137.	1.000	1675.	1.68	1.83	745.	2420.
JAPAN	S	78 628	5139N	17551E	11993.5 34466.3 50079.2	96.	0.417	642.	1.54	1.53	27958.	28600.
JAPAN	S	78 619	5143N	17808E	12856.8 34631.0 50022.2	79.	0.250	365.	1.46	1.44	3155.	3520.
JAPAN	S	80 416	5127N	17958W	13712.5 34712.2 50012.4	120.	2.083	2964.	1.42	1.65	1436.	4400.
JAPAN	S	78 523	5138N	17226W	16371.9 35131.1 49465.1	167.	1.750	2356.	1.35	1.32	3144.	5500.
USSR	M	78 5 2	5240N	17924W	13979.2 34737.4 50009.5	192.	1.167	1519.	1.30	0.96	29281.	30800.
JAPAN	S	79 5 3	5115N	17920E	13251.2 34753.0 49942.6	109.	1.500	1948.	1.30	1.53	252.	2200.
JAPAN	S	78 630	5149N	17730E	12625.2 34574.8 50047.5	90.	0.500	644.	1.29	1.31	5956.	6600.
JAPAN	S	79 5 9	5216N	17612E	12164.1 34431.1 50102.6	104.	1.250	1587.	1.27	1.86	613.	2200.
USSR	M	78 5 1	5239N	17923W	13981.9 34740.2 50007.5	90.	1.000	1232.	1.23	0.95	17488.	18700.
JAPAN	S	79 515	5245N	17242E	11004.2 34106.8 50162.9	148.	4.600	5615.	1.22	0.85	985.	6600.
USSR	M	78 427	5235N	17925W	13954.1 34743.2 50003.1	93.	1.167	1415.	1.21	1.14	22765.	24200.
JAPAN	S	77 426	5208N	17656E	12439.4 34501.5 50080.4	122.	0.550	638.	1.16	1.28	1122.	1760.
JAPAN	S	80 413	5229N	17933W	13880.9 34741.4 49999.7	131.	2.583	2862.	1.11	0.96	2858.	5720.
JAPAN	S	79 524	5116N	17918E	13241.0 34749.5 49945.4	153.	1.000	1103.	1.10	1.90	4617.	5720.
USSR	M	78 519	5233N	17927W	13933.9 34743.5 50001.5	85.	1.750	1813.	1.04	1.31	26787.	28600.
USSR	M	77 6 3	5153N	17549E	11987.3 34441.1 50091.6	61.	0.750	753.	1.00	1.59	25647.	26400.
JAPAN	S	79 5 1	5116N	17909E	13185.8 34739.1 49951.7	126.	0.417	379.	0.91	1.52	3340.	3740.
USSR	M	78 423	5235N	17925W	13954.1 34743.2 50003.1	101.	1.083	981.	0.91	0.99	35319.	36300.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-6 (continued). WALLEYE POLLOCK, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE YMMDD	LAT	LONG	APPROX 7X	APPROX 7Y	APPROX 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE (LBS/FISH)	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	78 523	5236N	17215W	16412.6	35133.9	49434.1	175.	2.000	1772.	0.89	1.67	868.	2640.
USSR	H	78 428	5236N	17216W	13951.4	34740.5	50005.2	90.	1.750	1418.	0.81	1.16	12442.	13860.
JAPAN	S	79 516	5250N	17233E	11025.9	34072.6	50166.7	198.	1.250	994.	0.80	0.61	986.	1980.
JAPAN	S	78 614	5130N	17832E	12983.4	34677.9	49993.4	153.	0.917	726.	0.79	1.92	2574.	3300.
USSR	M	78 517	5231N	17934W	13881.6	34737.3	50003.2	87.	1.833	1466.	0.79	1.01	33534.	34980.
JAPAN	S	78 630	5149N	17732E	12638.0	34577.3	50046.6	77.	0.167	122.	0.73	0.92	6038.	6160.
USSR	M	78 613	5300N	17221E	11066.0	34048.7	50163.9	87.	1.250	911.	0.73	0.89	3489.	4400.
JAPAN	S	79 6 3	5144N	17750E	12744.1	34507.2	50032.6	142.	2.000	1394.	0.70	1.98	586.	1980.
USSR	M	78 622	5255N	17058E	11083.7	33958.0	50174.9	93.	0.583	405.	0.69	1.78	32595.	33000.
JAPAN	S	79 6 8	5233N	17213E	11041.1	34053.9	50168.6	115.	1.000	659.	0.66	1.00	1.	660.
JAPAN	S	79 516	5203N	17212W	16258.9	35136.3	49335.7	82.	2.417	1586.	0.66	1.51	7214.	8800.
USSR	M	77 625	5151N	17550E	14008.8	34741.2	50008.5	87.	1.250	784.	0.63	1.10	25176.	25960.
USSR	M	78 430	5242N	17926W	13973.8	34731.9	50013.6	90.	2.000	1230.	0.61	1.32	21844.	22000.
JAPAN	S	78 613	5246N	17203W	16520.6	35135.6	49434.2	137.	2.000	1224.	0.61	1.50	42330.	43560.
USSR	M	78 530	5240N	17921W	13998.6	34741.3	50007.7	93.	2.583	1457.	0.56	1.77	42543.	44000.
USSR	M	78 531	5230N	17930W	13903.8	34743.8	49999.2	93.	3.167	1765.	0.56	1.13	12535.	14300.
JAPAN	S	78 523	5238N	17228W	16362.5	35130.5	49469.9	200.	2.500	1370.	0.55	1.61	3690.	5060.
USSR	M	78 423	5235N	17925W	13954.1	34743.2	50003.1	97.	1.000	546.	0.55	1.10	34654.	35200.
JAPAN	S	78 623	5148N	17738E	12674.7	34586.3	50042.7	96.	0.333	179.	0.54	1.73	1581.	1760.
JAPAN	S	79 523	5118N	17859E	13128.3	34725.1	49961.1	97.	0.750	589.	0.52	1.68	1391.	1980.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-7. WALLEYE POLLOCK, JULY-SEPTEMBER 1977-80

NATION	VESSEL CLASS	DATE YMMDD	LAT	LONG	APPROX 7X	APPROX 7Y	APPROX 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE (LBS/FISH)	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	78 722	5206N	17209W	16287.2	35136.6	49336.5	131.	1.417	13378.	9.44	1.65	21822.	35200.
JAPAN	S	78 9 2	5235N	17048E	11088.3	33946.0	50175.5	164.	1.750	5244.	3.00	1.95	1356.	6600.
JAPAN	S	78 815	5233N	17318W	16093.5	35111.9	49562.3	120.	0.833	2104.	2.52	2.06	3176.	5280.
JAPAN	S	80 817	5155N	17214W	16230.3	35136.2	49329.9	109.	1.833	3918.	2.14	1.96	5322.	9240.
JAPAN	S	77 7 6	5135N	17920W	13790.8	34822.7	49910.3	131.	0.833	1448.	1.74	2.66	1852.	3300.
JAPAN	S	78 7 6	5148N	17227E	12604.3	34572.5	50047.9	90.	0.667	988.	1.48	1.37	2972.	3960.
JAPAN	S	79 728	5133N	17923E	13308.4	34735.3	49964.8	230.	0.667	927.	1.39	3.64	10073.	11000.
JAPAN	S	78 730	5200N	17215W	16230.6	35136.0	49335.0	77.	2.500	2706.	1.08	1.77	19294.	22000.
JAPAN	S	79 817	5156N	17653E	12398.8	34517.2	50070.3	164.	2.500	2262.	0.90	1.89	1478.	3740.
JAPAN	S	78 7 2	5149N	17733E	12638.0	34577.3	50046.6	85.	0.500	450.	0.90	1.37	2190.	2640.
JAPAN	S	77 714	5426N	17933E	14042.2	34442.5	50150.0	82.	1.167	1005.	0.86	1.54	755.	1760.
JAPAN	S	79 928	5235N	17446E	11622.2	34284.6	50138.2	137.	2.917	2551.	0.81	1.25	5787.	8140.
JAPAN	S	77 712	5414N	17935E	13993.6	34474.7	50140.7	149.	0.667	520.	0.78	1.78	2560.	3080.
JAPAN	S	79 912	5220N	17610E	12158.4	34421.5	50108.4	139.	2.667	1860.	0.70	2.37	560.	2420.
JAPAN	S	78 710	5143N	17810W	14193.6	34883.8	49668.5	142.	1.833	1258.	0.69	1.91	4242.	5000.
JAPAN	S	77 715	5426N	17927E	14003.0	34433.3	50151.2	98.	1.250	853.	0.68	1.56	2007.	2860.
JAPAN	S	78 7 6	5149N	17733E	12644.4	34578.6	50046.1	75.	0.333	203.	0.61	1.18	4637.	4840.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-8. WALLEYE POLLOCK, OCTOBER-DECEMBER 1977-80

VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	7Y	PULSE RATES 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
S	801116	5259N	17216E	11064.8	34044.7	50170.0	137	0.333	19537	58.61	0.75	263	19800
S	801114	5252N	17211E	11038.6	34053.5	50168.5	115	0.500	20258	40.52	0.90	422	20680
S	801116	5253N	17207E	11044.1	34046.4	50169.2	115	1.000	39600	39.60	0.87	0	39600
S	801117	5253N	17208E	11043.6	34047.7	50169.1	115	0.667	25908	38.86	1.10	492	26400
S	801113	5252N	17211E	11038.6	34053.5	50168.5	112	0.333	12661	37.98	1.12	99	12760
S	801113	5252N	17209E	11035.6	34051.0	50168.7	115	0.833	25098	30.12	1.11	202	25300
S	801117	5253N	17209E	11039.6	34051.0	50168.7	115	0.500	14867	29.73	0.93	93	14960
S	801115	5253N	17207E	11044.1	34046.4	50169.2	120	0.667	19504	29.26	0.91	296	19800
S	801117	5255N	17212E	11049.2	34048.3	50169.3	126	0.500	13748	27.50	0.89	772	14520
S	801118	5300N	17216E	11069.5	34042.5	50170.3	137	0.667	16800	25.20	1.00	360	17160
S	801211	5250N	17206E	11034.6	34051.6	50168.4	109	2.000	46353	23.18	1.19	9747	56100
S	801116	5248N	17228E	11017.5	34083.1	50165.6	120	0.500	10787	21.57	0.77	213	11000
S	801118	5300N	17216E	11069.5	34042.5	50170.3	137	0.500	9770	19.54	1.05	350	10120
S	801212	5251N	17210E	11035.7	34054.4	50168.3	120	0.833	16249	19.50	0.99	5751	22000
S	801115	5252N	17210E	11039.1	34052.3	50168.6	115	0.333	6368	19.10	0.93	12	6380
S	801211	5250N	17204E	11035.6	34049.1	50168.6	118	1.917	35619	18.58	0.98	3981	39600
S	801015	5247N	17233E	11012.4	34091.4	50164.7	126	1.833	32278	17.61	0.80	2262	34540
S	801211	5250N	17203E	11036.1	34047.9	50168.7	104	1.500	24686	16.46	1.00	2374	27060
S	801113	5252N	17208E	11040.1	34049.8	50168.8	131	1.167	15746	13.50	1.14	974	16720
M	801031	5210N	17202W	16338.6	35137.3	49330.2	92	1.563	20591	13.01	2.37	2949	23540
S	801116	5256N	17216E	11051.5	34051.2	50169.2	137	0.667	7628	11.44	0.90	72	7700
S	791210	5155N	17812E	12907.3	34618.7	50033.7	164	1.167	12650	10.84	2.09	6490	19140
S	801118	5300N	17221E	11068.0	34048.7	50169.9	137	0.833	8774	10.53	1.07	246	9020
S	801115	5250N	17204E	11035.6	34049.1	50168.6	126	1.000	9416	9.42	1.30	3124	12540
S	801214	5252N	17216E	11035.1	34062.2	50167.8	117	2.500	23036	9.21	1.00	3364	26400
S	801119	5300N	17213E	11070.5	34038.8	50170.6	137	1.000	9174	9.17	1.02	506	9680
S	801031	5238N	17249E	11001.7	34129.9	50159.5	120	1.000	8644	8.64	0.63	156	8800
S	801212	5249N	17205E	11032.1	34052.5	50168.2	131	2.250	17228	7.88	0.92	4272	22000
S	801212	5253N	17207E	11044.1	34046.4	50169.2	104	2.000	14519	7.32	1.33	4422	15400
S	801015	5249N	17204E	11032.6	34051.2	50168.3	118	3.000	19796	7.26	0.96	5281	19800
M	801129	5231N	17201W	16450.3	35136.6	49386.2	164	3.583	21999	6.14	2.29	1764	21560
S	801019	5145N	17744E	12707.7	34598.2	50036.6	123	2.500	14128	5.65	1.77	2152	16280
S	801116	5300N	17214E	11070.2	34040.0	50170.5	142	0.667	3682	5.52	1.24	278	3960
S	801113	5250N	17203E	11036.1	34047.9	50168.7	126	1.333	7257	5.44	1.09	2203	9460
S	801013	5146N	17744E	12705.4	34596.8	50037.7	104	4.167	22580	5.42	1.89	3820	26400
S	801116	5249N	17226E	11021.3	34078.5	50166.1	137	1.000	5343	5.34	0.82	157	5500
S	801215	5253N	17215E	11040.2	34056.3	50168.4	101	1.750	9209	5.26	1.07	3991	13200
S	801130	5207N	17351E	11286.0	34267.8	50133.9	148	4.667	23798	5.10	1.48	9202	33000
S	801214	5203N	17950W	13685.7	34754.7	49974.3	153	2.000	9880	4.94	0.65	2220	12100
S	801129	5213N	17331E	11181.2	34231.6	50141.3	112	5.083	25102	4.94	1.11	62898	86000
M	801129	5227N	17200W	16434.0	35136.9	49372.4	164	5.000	24195	4.84	2.29	5	24200
S	801212	5207N	17351E	11298.0	34267.8	50133.9	141	4.333	20314	4.69	1.22	23686	44000
S	801012	5143N	17753E	12761.4	34612.3	50030.0	115	5.167	22292	4.31	1.79	6528	28820
S	801214	5208N	17944W	13735.5	34755.6	49977.3	136	1.900	7928	4.17	0.72	3072	11000

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-8 (continued). WAILEYE POLLOCK, OCTOBER-DECEMBER 1977-80

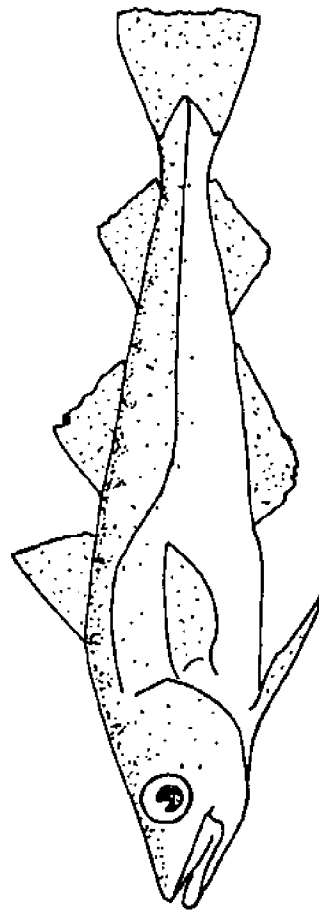
NATION	CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YYMMDD			7X 7Y 7Z	(FMS)	TRAWLED	(LBS)	PER HOUR	LB S/FISH	(LBS)	(LBS)
JAPAN	S	791017	5140N	17820W	1417.1 3489.5 4986.3	120.	2.917	11200.	3.84	2.32	1780.	12980.
JAPAN	S	8012 5	5249N	17228E	11020.3 34081.0 50165.9	120.	4.583	16914.	3.69	0.84	8606.	25520.
JAPAN	S	8010 8	5145N	17747E	12726.8 34602.0 50335.1	115.	2.333	7523.	3.22	1.90	3917.	11440.
JAPAN	S	8012 1	5212N	17331E	11183.6 34233.5 50140.7	148.	4.167	12700.	3.05	1.17	22500.	35200.
JAPAN	S	8011 6	5249N	17222E	11023.4 34073.5 50166.5	126.	2.333	3734.	2.89	4.82	446.	4100.
JAPAN	S	801011	5143N	17800E	12805.9 34621.0 50026.4	126.	2.333	6284.	2.69	1.87	1636.	7920.
JAPAN	S	801012	5143N	17759E	12799.6 34619.8 50026.9	112.	4.667	11864.	2.54	1.67	3536.	15400.
JAPAN	S	801117	5252N	17210E	11039.1 34052.3 50168.6	126.	0.833	1968.	2.36	1.08	232.	2200.
JAPAN	S	801014	5144N	17750E	12744.1 34607.2 50332.6	131.	2.667	6223.	2.33	1.87	2357.	8360.
JAPAN	S	801130	5212N	17331E	11183.6 34233.5 50140.7	137.	4.167	9565.	2.30	1.10	21235.	30800.
JAPAN	S	8012 6	5250N	17205E	11035.1 34050.3 50168.5	124.	1.417	3131.	2.21	1.07	7869.	11000.
JAPAN	S	7811 5	5144N	17756E	12782.3 34614.6 50029.5	68.	1.500	3215.	2.14	1.99	1405.	4620.
JAPAN	S	8012 1	5212N	17331E	11183.6 34233.5 50140.7	137.	4.167	8573.	2.06	1.15	7927.	16300.
JAPAN	S	801214	5206N	17943W	13739.5 34759.4 49973.7	153.	2.000	4102.	2.05	0.98	2278.	6380.
JAPAN	S	801010	5146N	17743E	12703.1 34595.5 50038.2	123.	6.167	12508.	2.03	1.74	5092.	17600.
JAPAN	S	8012 5	5250N	17208E	11033.6 34054.1 50168.2	131.	6.500	13062.	2.01	0.79	14638.	27720.
JAPAN	S	8012 7	5243N	17237E	11003.3 34104.7 50162.8	104.	6.850	13697.	2.00	0.51	10503.	24200.
JAPAN	S	801213	5202N	17951W	13676.3 34754.7 49973.7	142.	2.150	4295.	2.00	0.60	1645.	5940.
JAPAN	S	781031	5214N	17331E	11178.8 34229.7 50141.8	148.	4.000	7384.	1.85	1.52	6256.	13640.
JAPAN	S	801211	5250N	17203E	11036.1 34047.9 50168.7	148.	3.717	6557.	1.76	1.07	15443.	22000.
JAPAN	S	8012 3	5213N	17330E	11176.9 34230.4 50141.5	134.	4.283	7428.	1.73	1.05	5772.	13200.
JAPAN	S	8012 4	5252N	17210E	11039.1 34052.3 50168.6	104.	4.250	7276.	1.71	0.65	5484.	12760.
JAPAN	S	8011 6	5250N	17204E	11035.6 34049.1 50168.6	131.	0.833	1424.	1.71	1.27	8916.	10340.
JAPAN	S	801010	5147N	17746E	12724.0 34597.8 50037.0	126.	3.667	6065.	1.65	1.65	2295.	8360.
JAPAN	S	801030	5143N	17756E	12780.5 34616.1 50028.4	131.	1.500	2340.	1.56	2.14	740.	3080.
JAPAN	S	801014	5228N	17457E	12712.5 34601.0 50035.1	126.	3.167	4625.	1.46	1.76	2195.	6820.
JAPAN	S	791030	5138N	17816W	14169.4 34890.7 49858.0	104.	1.167	1692.	1.45	2.00	508.	2200.
JAPAN	S	801127	5144N	17744E	12705.9 34599.7 50035.5	137.	3.417	4940.	1.45	2.05	2760.	7700.
JAPAN	S	801128	5208N	17351E	11286.2 34266.0 50134.4	93.	3.500	4862.	1.39	0.90	3498.	8360.
KOREA	M	8011 2	5157N	17201W	16278.9 35137.7 49292.0	74.	1.000	1383.	1.36	1.67	124677.	126060.
JAPAN	S	801014	5228N	17457E	11684.6 34312.3 50131.6	134.	2.333	3215.	1.38	1.91	4265.	7480.
JAPAN	S	801013	5143N	17758E	12793.2 34618.6 50027.4	109.	7.000	9482.	1.35	1.80	3718.	13200.
JAPAN	S	801011	5144N	17747E	12725.0 34603.4 50034.1	123.	3.333	4493.	1.35	1.77	1227.	5720.
JAPAN	S	801011	5146N	17747E	12728.6 34600.5 50036.2	98.	1.667	2231.	1.34	1.66	849.	3080.
JAPAN	S	8010 9	5143N	17759E	12799.6 34619.8 50026.9	104.	6.000	7830.	1.30	1.44	2070.	9900.
JAPAN	S	7811 8	5208N	17348E	11271.2 34262.2 50135.1	126.	4.000	5185.	1.30	1.61	5155.	10340.
JAPAN	S	761031	5202N	17350E	11292.6 34275.7 50131.2	131.	3.750	4718.	1.26	1.62	15962.	20680.
JAPAN	S	7811 4	5144N	17806E	12646.0 34627.1 50024.4	112.	2.000	2380.	1.19	2.07	1800.	4180.
JAPAN	S	8012 2	5220N	17406E	11353.4 34262.4 50138.0	138.	3.500	4146.	1.18	0.93	4654.	8300.
KOREA	M	8011 1	5158N	17200W	16288.2 35137.8 49292.0	92.	1.083	1265.	1.17	2.73	46255.	47520.
JAPAN	S	801210	5232N	17437E	11556.6 34278.8 50038.3	143.	3.500	4026.	1.15	0.74	5874.	9900.
JAPAN	S	7811 5	5144N	17746E	12718.6 34602.2 50034.6	109.	3.000	3430.	1.14	2.02	1190.	4620.
JAPAN	S	7811 7	5202N	17103E	11106.5 33948.8 50175.9	142.	1.083	1122.	1.04	2.08	3278.	4400.
KOREA	M	801031	5203N	17221W	16217.9 35134.9 49357.3	101.	2.167	2093.	0.97	2.29	8907.	11000.
JAPAN	S	7811 3	5144N	17849E	13119.5 34680.1 50000.5	77.	3.417	3297.	0.96	2.14	1983.	5280.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-8 (continued). WALLEYE POLLOCK, OCTOBER-DECEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
		YRMO			7X	7Y	7Z						
JAPAN	S	8012 8	5207N	1735E	11286.0	34267.8	50133.9	148.	4492.	0.96	1.29	7608.	12100.
JAPAN	S	781128	5237N	17226W	16366.6	35131.2	49462.5	191.	1544.	0.88	1.87	1756.	3300.
JAPAN	S	801017	5142N	1780E	12810.4	34623.7	50024.7	115.	2342.	0.83	1.79	958.	3300.
KOREA	M	8011 1	5156N	17201W	16274.1	35137.7	49290.0	73.	461.	0.79	2.20	108659.	109120.
JAPAN	S	8010 9	5144N	17746E	12718.6	34602.2	50034.6	104.	2625.	0.79	1.92	1995.	4620.
JAPAN	S	7812 8	5237N	17225W	16371.3	35131.5	49460.2	159.	1539.	0.77	1.97	661.	2200.
JAPAN	S	781128	5237N	17226W	16366.6	35131.2	49462.5	164.	1137.	0.76	1.97	623.	1760.
JAPAN	S	791123	5144N	17746E	12718.6	34602.2	50034.6	148.	980.	0.74	2.10	1660.	2640.
JAPAN	S	781124	5237N	17227W	16361.9	35130.9	49464.6	169.	1402.	0.70	1.92	1458.	2860.
JAPAN	S	7811 8	5208N	17350E	11281.2	34264.7	50134.6	128.	2391.	0.68	1.48	8389.	10780.
JAPAN	S	8010 8	5144N	17748E	12731.4	34604.7	50033.6	126.	1590.	0.68	1.71	1050.	2640.
JAPAN	S	8012 2	5221N	17407E	11358.8	34261.7	50138.3	109.	1988.	0.66	0.88	10112.	12100.
JAPAN	S	8012 8	5214N	17353E	11286.5	34257.3	50137.4	100.	1990.	0.57	1.05	3510.	5500.
JAPAN	S	801210	5226N	17417E	11420.2	34264.9	50139.1	113.	2606.	0.57	0.73	3994.	6600.
JAPAN	S	7811 4	5145N	17748E	12733.2	34603.2	50034.7	120.	1768.	0.56	2.11	1532.	3300.
JAPAN	S	7811 6	5208N	17350E	11281.2	34264.7	50134.6	115.	915.	0.52	2.03	3925.	4840.
KOREA	M	8011 9	5158N	17200W	16288.2	35137.8	49292.8	75.	483.	0.52	1.94	65517.	66000.
JAPAN	S	781021	5255N	17051E	11086.9	33949.6	50175.3	128.	1154.	0.51	2.11	1706.	2860.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***



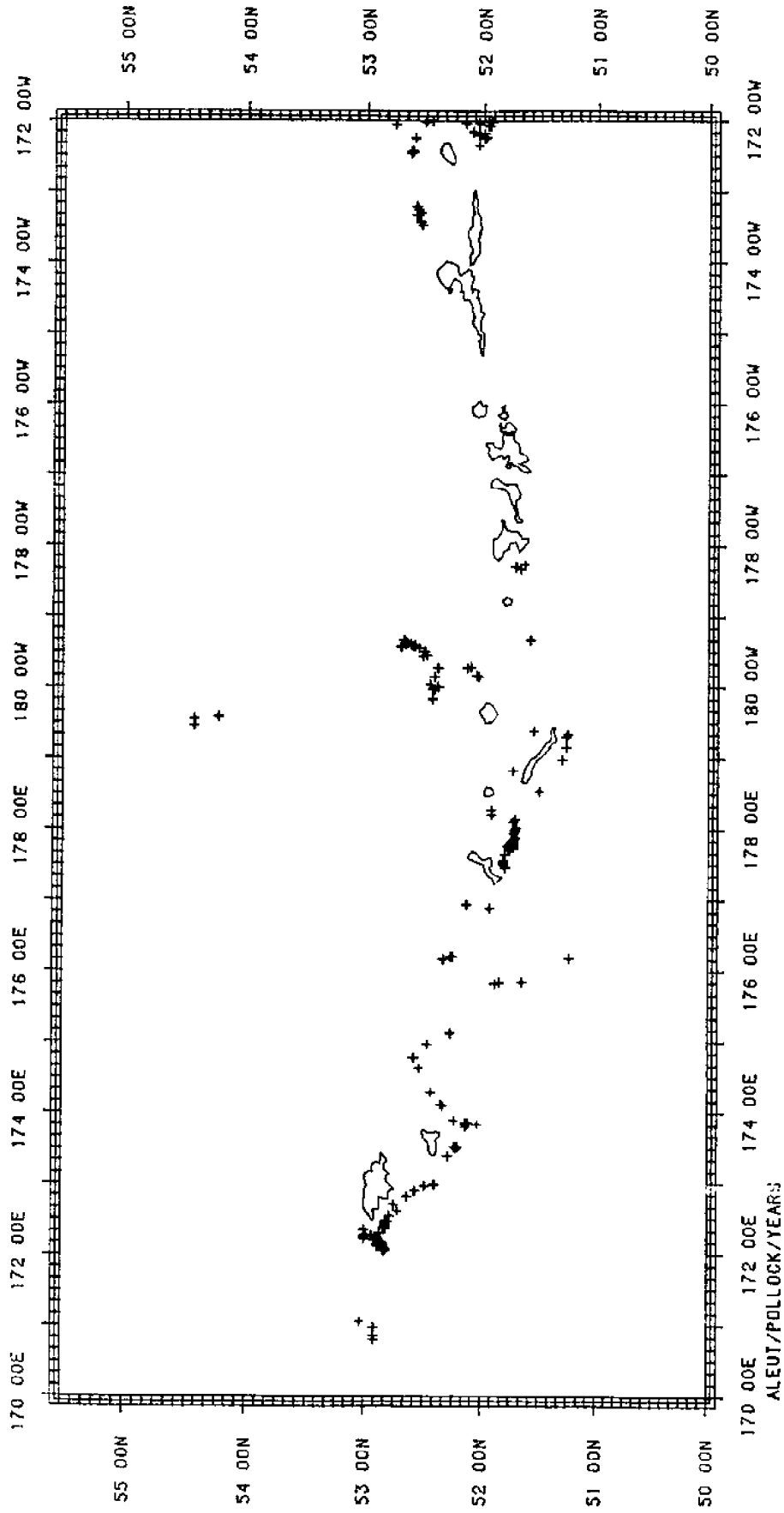


FIGURE B-1. TRAWLING LOCATIONS FOR WALLEYE POLLOCK, ALL MONTHS, 1977-80

TABLE B-9. PACIFIC COD, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	79 225	5158N	17204W	16270.4 35137.4 49302.6	74.	0.333	3997.	11.99	3.66	40003.	44000.
USSR	M	79 226	5200N	17207W	16266.7 35137.1 49315.5	74.	0.500	5245.	10.49	6.50	38755.	44000.
USSR	M	79 124	5203N	17219W	16227.1 35135.2 49352.6	85.	1.250	7271.	5.82	9.72	13629.	20900.
USSR	M	79 122	5203N	17210W	16267.9 35136.6 49330.9	85.	1.417	6075.	5.70	14.30	13045.	21120.
USSR	M	79 219	5157N	17206W	16283.4 35137.8 49290.1	74.	1.000	5294.	5.29	6.25	60706.	66000.
USSR	M	79 226	5158N	17208W	16252.5 35137.0 49312.6	80.	1.000	4938.	4.94	5.78	29162.	34100.
USSR	M	79 125	5202N	17212W	16254.0 35136.4 49333.1	87.	0.417	1945.	4.67	8.63	9055.	11000.
USSR	M	79 3 2	5157N	17200W	16283.4 35137.8 49290.1	69.	0.583	2716.	4.66	5.87	54464.	57200.
USSR	M	79 3 8	5200N	17205W	16275.7 35137.3 49310.6	74.	0.667	3015.	4.52	21.76	40985.	44000.
USSR	M	79 217	5158N	17209W	16248.0 35136.9 49315.1	96.	1.000	4356.	4.36	11.00	39644.	44000.
USSR	M	79 123	5200N	17212W	16244.2 35136.4 49327.7	87.	1.333	5195.	3.90	7.86	27805.	33000.
USSR	M	79 3 7	5200N	17205W	16275.7 35137.3 49310.6	77.	0.667	2546.	3.52	6.33	53774.	56320.
USSR	M	79 124	5158N	17204W	16271.4 35137.4 49302.6	87.	1.000	3103.	3.10	14.52	32097.	35200.
USSR	M	79 3 4	5158N	17201W	16283.8 35137.7 49295.3	68.	1.083	3139.	2.90	12.43	40861.	44000.
USSR	M	79 3 5	5200N	17208W	16262.5 35136.9 49317.9	74.	0.750	2105.	2.81	16.72	19895.	22000.
USSR	M	79 3 5	5157N	17200W	16283.4 35137.8 49290.1	74.	0.500	1329.	2.66	6.44	25071.	26400.
USSR	M	79 123	5158N	17214W	16225.4 35136.3 49327.2	87.	0.917	2365.	2.58	7.70	30635.	33000.
USSR	M	79 218	5157N	17200W	16283.4 35137.8 49290.1	74.	1.000	2415.	2.41	4.73	50825.	53240.
USSR	M	79 218	5157N	17204W	16265.6 35137.5 49300.1	80.	0.500	1094.	2.19	4.62	47966.	49060.
JAPAN	S	78 320	5217N	17410E	11379.1 34273.1 50135.5	104.	3.833	8194.	2.14	4.90	7206.	15400.
USSR	M	79 3 6	5208N	17205W	16315.1 35137.0 49332.1	74.	0.750	1599.	2.13	3.85	44601.	46200.
USSR	M	79 313	5200N	17217W	16221.5 35135.7 49335.8	107.	1.000	2012.	2.01	3.55	19968.	22000.
USSR	M	79 228	5157N	17201W	16278.9 35137.7 49292.6	82.	0.667	1307.	1.96	3.96	53693.	55000.
USSR	M	79 127	5159N	17210W	16248.4 35136.7 49320.2	93.	1.000	1733.	1.73	4.94	9267.	11000.
USSR	M	79 217	5158N	17203W	16274.9 35137.5 49300.3	77.	1.083	1696.	1.57	6.31	53304.	55000.
USSR	M	79 218	5158N	17203W	16274.9 35137.5 49300.3	74.	1.167	1598.	1.37	5.33	16002.	17000.
USSR	M	79 3 6	5157N	17200W	16283.4 35137.8 49290.1	71.	0.583	788.	1.35	4.73	45412.	46200.
USSR	M	79 312	5159N	17219W	16207.6 35135.4 49341.9	115.	0.833	1089.	1.31	6.23	31911.	33000.
USSR	M	79 3 3	5157N	17201W	16278.9 35137.7 49292.6	74.	0.417	529.	1.27	4.84	15971.	16500.
JAPAN	S	78 320	5218N	17410E	11378.5 34271.2 50136.0	126.	3.607	4552.	1.24	6.93	948.	5500.
USSR	M	79 214	5200N	17208W	16262.3 35136.9 49317.9	85.	1.000	1211.	1.21	5.50	42739.	44000.
JAPAN	S	78 319	5220N	17410E	11377.4 34267.4 50137.2	126.	3.500	3815.	1.09	3.24	5205.	9020.
USSR	M	79 2 8	5202N	17201W	16303.4 35137.6 49306.0	74.	1.583	1696.	1.07	6.64	31304.	33000.
USSR	M	79 3 9	5159N	17206W	16266.3 35137.2 49310.4	74.	0.750	776.	1.03	2.79	43224.	44000.
USSR	M	79 3 7	5150N	17206W	16222.9 35137.5 49286.5	80.	0.833	859.	1.03	4.12	54141.	55000.
USSR	M	79 216	5158N	17209W	16248.0 35136.9 49315.1	88.	1.333	1356.	1.02	5.06	53644.	55000.
USSR	M	79 2 2	5156N	17202W	16269.6 35137.7 49282.5	98.	1.167	1107.	0.95	4.13	14293.	15400.
USSR	M	79 126	5200N	17211W	16248.7 35136.6 49325.3	90.	1.167	912.	0.72	4.99	21098.	22000.
JAPAN	S	79 214	5259N	17242W	16377.9 35120.4 49573.4	80.	1.750	1349.	0.77	5.06	53651.	55000.
JAPAN	S	79 3 4	5234N	17320W	16088.5 35110.7 49568.9	131.	0.583	448.	0.77	6.43	12576.	13024.
USSR	M	79 216	5158N	17204W	16270.4 35137.4 49302.6	86.	1.167	894.	0.77	6.60	3706.	6600.
USSR	M	79 3 7	5200N	17204W	16280.2 35137.4 49308.1	77.	0.750	514.	0.68	3.96	43486.	44000.
USSR	M	79 214	5157N	17202W	16274.5 35137.6 49295.1	82.	1.250	815.	0.65	6.16	25585.	26400.
USSR	M	79 3 5	5158N	17206W	16261.5 35137.2 49307.7	77.	0.500	313.	0.63	4.84	21687.	22000.
JAPAN	S	78 319	5223N	17415E	11407.3 34268.1 50137.8	159.	4.500	2806.	0.62	5.40	12374.	15180.

*** NCIE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-9 (continued). PACIFIC COD, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LGRAN-C 7Y	PULSE RATES 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE (LBS/FISH)	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	79 218	5158N	17208W	16252.5	35137.0	49312.6	169.	1.083	638.	0.59	4.57	19162.	19600.
USSR	M	79 131	5157N	17205W	16281.1	35137.4	49302.6	104.	1.500	856.	0.57	11.22	25544.	26400.
USSR	M	79 210	5205N	17210W	16277.6	35136.5	49336.3	77.	0.583	331.	0.57	6.22	16669.	11000.
USSR	M	79 3 4	5157N	17200W	16293.4	35137.8	49290.1	85.	0.917	500.	0.54	5.54	48120.	48620.
USSR	M	79 215	5159N	17204W	16275.3	35137.4	49305.6	85.	1.750	953.	0.54	5.50	32927.	33680.
USSR	M	79 226	5200N	17208W	16282.3	35136.9	49317.9	74.	1.167	621.	0.53	4.62	33479.	34100.
JAPAN	S	78 321	5226N	17428E	11691.1	34278.9	50136.8	109.	6.000	2093.	0.52	5.10	3407.	5500.
JAPAN	M	79 3 3	5233N	17326W	16053.2	35107.9	49578.0	137.	0.167	86.	0.51	6.38	4424.	4510.

*** NCIE *** THE ACCURACY OF POSITION AND LGRAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

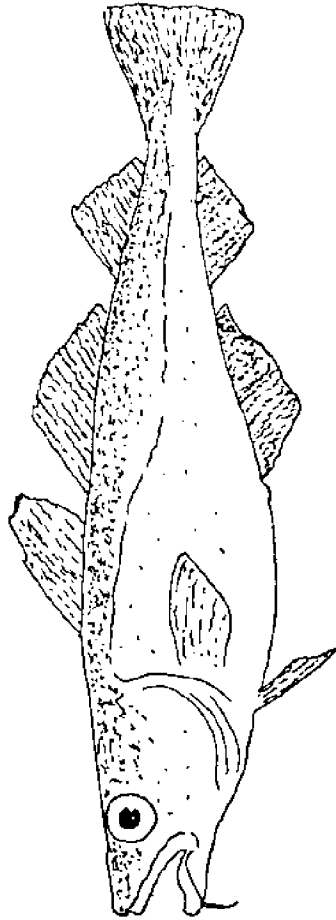


TABLE B-10. PACIFIC COD, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LOMAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE (LBS/FISH)	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	77 527	5226N	17539E	11962.6 34370.3 50119.8	82	0.133	3372	25.29	11.75	3228	6600
USSR	M	78 519	5159N	17202M	16284.2 35137.6 49300.5	71	0.833	15618	18.74	8.57	10782	26400
JAPAN	S	78 628	5139N	17551E	11993.5 34666.3 50079.2	96	0.417	7373	17.70	17.50	21227	28600
USSR	M	78 521	5200N	17202M	16285.2 34666.3 50079.2	82	1.250	13031	10.42	9.68	2369	15400
JAPAN	S	79 5 3	5215N	17612E	12852.3 34832.9 50101.8	126	0.833	8171	9.60	11.78	4369	12540
USSR	M	78 517	5231N	17934M	13831.6 34737.3 50035.2	87	1.833	8745	4.77	30.47	26235	34980
JAPAN	S	78 629	5148N	17827E	12604.3 34572.5 50047.9	80	0.417	1810	4.34	8.54	4790	6600
USSR	M	77 526	5226N	17539E	11952.6 34370.3 50119.8	82	0.417	1724	4.14	8.84	11476	13200
USSR	M	77 528	5226N	17540E	11971.3 34369.8 50120.2	82	0.400	1577	3.94	12.92	9423	11000
USSR	M	77 514	5226N	17543E	11805.5 34375.5 50118.7	159	0.750	2756	3.67	11.15	10444	13200
USSR	M	77 524	5226N	17541E	11976.1 34372.9 50119.2	71	0.700	2465	3.55	11.39	1915	4400
USSR	M	78 429	5236N	17925M	13957.8 34741.8 50004.5	90	1.167	3399	2.91	12.10	21901	25300
JAPAN	S	79 5 4	5216N	17507E	11736.5 34347.5 50121.3	128	1.917	4364	2.28	6.44	25556	29920
USSR	M	77 622	5202N	17606M	15043.3 35002.5 49758.1	52	0.383	863	2.25	11.26	10137	11000
JAPAN	S	80 430	5159N	17555E	12029.9 34438.6 50094.4	82	1.333	2680	2.01	21.94	8980	11660
JAPAN	S	78 630	5149N	17730E	12625.2 34574.8 50047.5	90	0.500	965	1.93	6.70	5635	6600
JAPAN	S	79 6 5	5205N	17927E	13416.7 34698.7 50004.4	126	1.500	2811	1.87	9.53	49	2860
JAPAN	S	78 620	5143N	17807E	12850.4 34629.7 50022.7	77	0.500	931	1.86	4.17	18869	19800
USSR	M	79 514	5205N	17206M	16295.8 35137.0 49328.5	77	2.750	4528	1.65	8.80	28472	33000
USSR	M	78 5 3	5240N	17922M	13992.1 34740.0 50008.3	90	1.583	2583	1.63	11.66	26217	30800
JAPAN	S	79 5 5	5114N	17611E	12108.9 34528.8 50048.3	131	2.167	3499	1.61	9.02	8021	12320
JAPAN	S	79 520	5139N	17821E	12931.5 34652.5 50016.5	137	1.000	1477	1.48	9.53	723	2200
USSR	M	77 527	5226N	17539E	11962.6 34370.3 50119.8	82	0.333	467	1.40	9.85	3933	4400
USSR	M	77 6 3	5151N	17548E	11979.8 34443.1 50090.3	57	0.850	1184	1.39	12.92	31816	33000
USSR	M	79 514	5204N	17213M	16255.3 35136.1 49340.8	82	2.167	2920	1.35	11.00	8080	11000
JAPAN	S	78 610	5200N	17200M	16298.0 35137.7 49298.2	64	0.750	987	1.32	6.16	2313	3300
USSR	M	78 516	5115N	17911E	13196.2 34742.6 49949.0	164	1.667	2186	1.31	4.95	41814	44000
JAPAN	S	77 629	5159N	17649E	12377.7 34507.3 50074.8	82	1.000	1256	1.26	8.78	4244	5500
JAPAN	S	79 514	5157N	17230M	16147.4 35133.5 49362.5	98	2.000	2442	1.22	8.11	8552	11000
JAPAN	S	79 513	5200N	17202M	16285.1 35137.6 49303.1	77	0.833	981	1.18	5.94	8919	9900
USSR	M	78 520	5234N	17925M	13950.5 34744.6 50001.7	87	1.583	1848	1.17	14.63	15752	17600
JAPAN	S	80 4 2	5228N	17951E	13644.6 34696.6 50020.2	175	2.083	2279	1.09	13.94	1901	4160
JAPAN	S	79 528	5116N	17901E	13136.8 34729.2 49957.2	172	1.500	1628	1.09	6.83	4532	6160
USSR	M	78 523	5159N	17202M	16284.2 35137.6 49300.5	74	1.083	1174	1.08	7.48	1026	2200
USSR	M	78 523	5159N	17202M	16284.2 35137.6 49300.5	82	1.250	1339	1.07	7.08	5261	6600
USSR	M	77 628	5152N	17547E	11974.1 34440.2 50091.4	55	0.333	336	1.01	15.18	6264	6600
JAPAN	S	78 624	5144N	17806E	12846.0 34627.1 50024.6	85	0.250	251	1.01	8.25	629	880
JAPAN	S	79 5 7	5201N	17701E	12459.0 34519.4 50072.0	126	1.500	1368	0.91	9.15	2812	4180
JAPAN	S	78 520	5143N	17835E	13028.4 34664.3 50007.4	71	1.000	869	0.87	7.85	1991	2860
JAPAN	S	78 621	5141N	17811E	12872.0 34637.5 50018.3	84	0.500	431	0.86	7.33	889	1320
JAPAN	S	79 516	5203N	17212M	16258.9 35136.3 49315.7	82	2.417	2077	0.66	10.08	6723	8800
USSR	M	78 522	5159N	17203M	16279.8 35137.5 49302.9	82	1.417	1217	0.86	5.50	983	2200
JAPAN	S	78 625	5144N	17807E	12852.4 34628.3 50023.8	81	0.250	210	0.84	5.38	1330	1540
JAPAN	S	77 428	5200N	17644E	12346.9 34499.3 50077.7	89	0.267	218	0.82	12.87	2488	2706

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-10 (continued). PACIFIC COD, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	7X	7Y	7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	78 6 9	5201N	17214W	16240.0	35136.1	49335.2	89.	1.100	885.	0.80	8.63	1315.	2200.
JAPAN	S	77 531	5150N	17556E	12029.1	34454.8	50086.7	71.	0.917	723.	0.79	25.30	9177.	9900.
JAPAN	S	78 618	5144N	17807E	12852.4	34628.3	50023.8	72.	0.500	394.	0.79	6.60	4036.	4400.
USSR	M	77 513	5225N	17543E	11987.6	34377.4	50118.0	82.	1.000	714.	0.71	14.30	3686.	4400.
JAPAN	S	79 5 8	5226N	17542E	11982.8	34374.2	50119.0	120.	2.000	1422.	0.71	11.88	10238.	11660.
USSR	M	78 530	5233N	17927W	13926.7	34746.3	49998.7	90.	1.833	1273.	0.69	6.22	25127.	26400.
JAPAN	S	78 619	5143N	17808E	12856.8	34631.0	50022.2	79.	0.250	160.	0.64	5.28	3360.	3520.
USSR	M	77 518	5226N	17545E	12002.9	34378.1	50118.2	79.	1.333	823.	0.62	6.93	5777.	6600.
USSR	M	77 516	5225N	17540E	11967.4	34373.5	50118.8	93.	1.167	717.	0.61	24.20	3683.	4400.
JAPAN	S	79 511	5218N	17409E	11372.5	34270.0	50136.2	98.	1.833	1093.	0.60	2.62	33667.	34760.
JAPAN	S	80 413	5229N	17933W	13880.9	34741.4	49999.7	131.	2.583	1523.	0.59	4.95	4197.	5720.
JAPAN	S	78 520	5145N	17831E	13007.2	34656.6	50012.0	98.	1.167	867.	0.57	6.51	3073.	3740.
JAPAN	S	77 426	5208N	17656E	12439.4	34501.5	50080.4	122.	0.550	309.	0.56	18.85	1451.	1760.
USSR	M	78 426	5235N	17925W	13954.1	34743.2	50003.1	96.	1.617	904.	0.56	9.24	27696.	28600.
USSR	M	77 525	5226N	17539E	11962.6	34370.3	50119.8	82.	0.250	136.	0.55	5.39	4262.	4400.
JAPAN	S	77 428	5200N	17641E	12327.4	34495.5	50078.8	83.	0.633	348.	0.55	10.45	4998.	5346.
JAPAN	S	80 416	5226N	17958E	13683.2	34708.5	50013.5	131.	1.167	639.	0.55	12.91	8161.	8800.
USSR	M	78 517	5228N	17539W	13838.7	34735.1	50002.1	87.	2.250	1231.	0.55	20.90	12849.	14080.
JAPAN	S	79 5 1	5116N	17909E	13165.8	34739.1	49951.7	126.	0.417	225.	0.54	4.80	3515.	3740.
JAPAN	S	78 627	5141N	17812E	12878.3	34638.7	50017.8	81.	0.250	132.	0.53	6.05	3828.	3960.
JAPAN	S	79 610	5144N	17746E	12718.6	34602.2	50034.6	169.	0.833	435.	0.52	4.40	3305.	3740.
JAPAN	S	79 515	5157N	17228W	16156.6	35133.9	49357.9	104.	2.000	1038.	0.52	10.45	5562.	6600.
JAPAN	S	79 5 2	5128N	17851E	13098.1	34703.3	49979.2	90.	1.167	602.	0.52	3.74	19418.	20020.
USSR	M	77 610	5233N	17920W	13978.9	34752.4	49997.0	68.	0.833	429.	0.52	9.02	12771.	13200.
JAPAN	S	79 5 3	5201N	17655E	12420.0	34511.7	50074.3	137.	2.083	1055.	0.51	7.67	3345.	4400.
JAPAN	S	77 427	5229N	17955W	13738.8	34713.2	50013.3	168.	0.750	379.	0.51	10.01	5341.	5720.
USSR	M	78 530	5240N	17921W	13998.6	34741.3	50007.7	93.	2.583	1304.	0.50	7.92	42696.	44000.
JAPAN	S	77 5 1	5146N	17707E	12473.5	34550.5	50054.9	69.	0.433	218.	0.50	5.14	1784.	2000.
USSR	M	77 515	5227N	17535E	11937.7	34363.3	50121.5	71.	0.833	418.	0.50	6.27	2882.	3300.
JAPAN	S	79 524	5130N	17954E	13493.9	34775.3	49938.8	156.	0.667	334.	0.50	7.01	1426.	1760.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-11. PACIFIC COD, JULY-SEPTEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YYMMDD			7X	7Y	7Z	(FMS)	TRAWLED	(LBS)	PER HOUR	LB S/FISH	(LBS)	(LBS)
JAPAN	S	78 722	5203N	17201W	16306.3	35137.6	49308.7	77.	1.000	16361.	16.36	8.25	27639.	44000.
JAPAN	S	78 731	5202N	17206W	16281.0	35137.1	49318.4	66.	1.333	19439.	14.58	9.53	46561.	66000.
JAPAN	S	79 727	5256N	17444E	11610.5	34280.0	50139.2	137.	2.833	26839.	9.47	6.51	4181.	31020.
JAPAN	S	78 731	5203N	17208W	16276.9	35136.8	49326.0	68.	1.750	13146.	7.51	8.64	41854.	55000.
JAPAN	S	78 731	5158N	17208W	16252.5	35137.0	49312.6	77.	1.917	11499.	6.00	8.83	21501.	33000.
JAPAN	S	79 725	5236N	17443E	11603.7	34278.0	50139.4	137.	2.667	15991.	5.85	6.34	2669.	10260.
JAPAN	S	78 722	5206N	17209W	16287.2	35136.6	49336.5	131.	1.417	8096.	5.71	7.78	27104.	35200.
JAPAN	S	78 730	5204N	17205W	16295.3	35137.1	49321.3	87.	1.500	8295.	5.53	8.60	13705.	22000.
JAPAN	S	78 730	5205N	17206W	16295.8	35137.0	49326.5	71.	1.500	5005.	3.34	6.01	8195.	13200.
JAPAN	S	78 730	5159N	17206W	16266.3	35137.2	49310.4	72.	2.083	6766.	3.25	7.86	37234.	44000.
JAPAN	S	78 731	5202N	17208W	16272.0	35136.9	49323.3	60.	1.583	4480.	2.83	7.70	24120.	28600.
JAPAN	S	78 730	5159N	17215W	16225.8	35136.1	49332.3	82.	1.583	4465.	2.82	9.56	24135.	28600.
JAPAN	S	79 726	5236N	17444E	11610.5	34280.0	50139.2	137.	2.667	6029.	2.26	6.35	12451.	18480.
JAPAN	S	78 7 4	5204N	17207W	16286.4	35136.9	49326.2	77.	1.750	3178.	1.82	7.48	18822.	22000.
JAPAN	S	78 730	5200N	17215W	16230.6	35136.0	49335.0	77.	2.500	3900.	1.56	5.11	18100.	22000.
JAPAN	S	79 726	5236N	17446E	11624.1	34282.6	50138.8	148.	2.417	3277.	1.36	6.99	1123.	4400.
JAPAN	S	79 525	5228N	17531E	11912.8	34356.2	50123.3	90.	1.667	1519.	0.91	9.24	16301.	17820.
JAPAN	S	78 7 3	5154N	17637E	12293.0	34500.1	50074.9	94.	0.250	182.	0.73	13.51	478.	660.
JAPAN	S	78 7 6	5158N	17744E	12732.6	34578.8	50050.5	85.	0.750	433.	0.58	3.46	227.	660.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-12. PACIFIC COD, OCTOBER-DECEMBER 1977-80

NATION	CLASS	DATE	LAT	LONG	APPROX	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YYMMDD			7X	(FMS)	TRAWLED	(LBS)	PER HOUF	LBS/FISH	(LBS)	(LBS)
KOREA	M	8011 1	5156N	17201W	16274.1	73	0.581	824.9	14.14	19.69	100871.	109120.
KOREA	M	8011 9	5158N	17200W	16288.2	75	0.933	1041.9	11.16	11.44	55561.	66000.
JAPAN	S	7912 7	5156N	17804E	12857.8	115	3.667	219.9	5.98	13.43	501.	22440.
JAPAN	S	791210	5155N	17812E	12907.3	164	1.167	573.1	4.91	11.44	13409.	19140.
JAPAN	S	7912 7	5155N	17810E	12894.4	109	3.667	1778.2	4.85	13.41	478.	18260.
JAPAN	S	8012 6	5150N	17205E	11035.1	124	1.417	630.0	4.45	6.03	4700.	11000.
KOREA	M	8011 8	5159N	17202W	16284.2	74	0.667	187.7	2.82	9.79	64123.	66000.
KOREA	M	8011 2	5157N	17201W	16278.9	74	1.000	212.7	2.13	7.70	123933.	126000.
JAPAN	S	7912 5	5136N	17825E	12950.9	98	3.667	672.8	1.83	12.11	92.	6820.
JAPAN	S	7912 5	5136N	17825E	12950.9	98	3.167	568.7	1.80	9.79	473.	6160.
JAPAN	S	7912 9	5141N	17804E	12827.6	98	3.500	560.7	1.60	11.42	773.	6380.
JAPAN	S	801211	5250N	17206E	11034.6	165	2.000	305.7	1.53	5.96	53043.	56100.
JAPAN	S	7912 6	5140N	17808E	12851.1	104	4.000	582.9	1.46	10.63	331.	6160.
KOREA	M	8011 2	5158N	17202W	16275.3	77	0.583	64.1	1.10	10.12	56779.	57420.
JAPAN	S	791017	5134N	17812W	14200.7	87	3.000	325.0	1.08	6.64	2030.	5280.
JAPAN	S	8012 5	5250N	17208E	11033.6	131	6.500	620.4	0.95	5.65	21516.	27720.
JAPAN	S	791020	5106N	17828E	13424.1	104	3.000	275.9	0.92	12.45	321.	3080.
KOREA	M	8011 1	5158N	17200W	16288.2	92	1.083	91.8	0.85	9.90	46602.	47520.
JAPAN	S	801214	5208N	17944W	13739.5	136	1.900	155.4	0.82	7.68	9446.	11000.
JAPAN	S	801014	5228N	17457E	11684.6	134	2.333	181.8	0.78	5.09	5662.	7480.
JAPAN	S	801214	5203N	17950W	13685.7	151	2.000	147.1	0.74	7.58	10629.	12100.
JAPAN	S	791620	5155N	17916E	13318.5	109	3.583	236.1	0.71	12.15	1399.	3960.
JAPAN	S	801128	5208N	17351E	11286.2	93	3.500	235.1	0.67	4.07	6009.	8360.
JAPAN	S	7912 6	5136N	17824E	12944.6	93	3.500	232.7	0.66	14.10	313.	2640.
JAPAN	S	8012 7	5243N	17237E	11003.3	104	6.850	429.3	0.63	5.50	19907.	24200.
JAPAN	S	801211	5200N	17203E	11036.1	148	3.717	226.5	0.61	3.94	19735.	22000.
JAPAN	S	801213	5202N	17931W	13676.3	142	2.150	122.0	0.57	9.40	4720.	5940.
JAPAN	S	7911 4	5115N	17918E	13235.0	109	2.000	112.4	0.56	6.35	1076.	2200.
JAPAN	S	791022	5158N	17822E	13364.9	109	3.833	211.1	0.55	11.98	749.	2860.
JAPAN	S	7911 5	5115N	17917E	13232.9	87	2.500	135.5	0.54	4.56	1725.	3080.

*** NCIE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

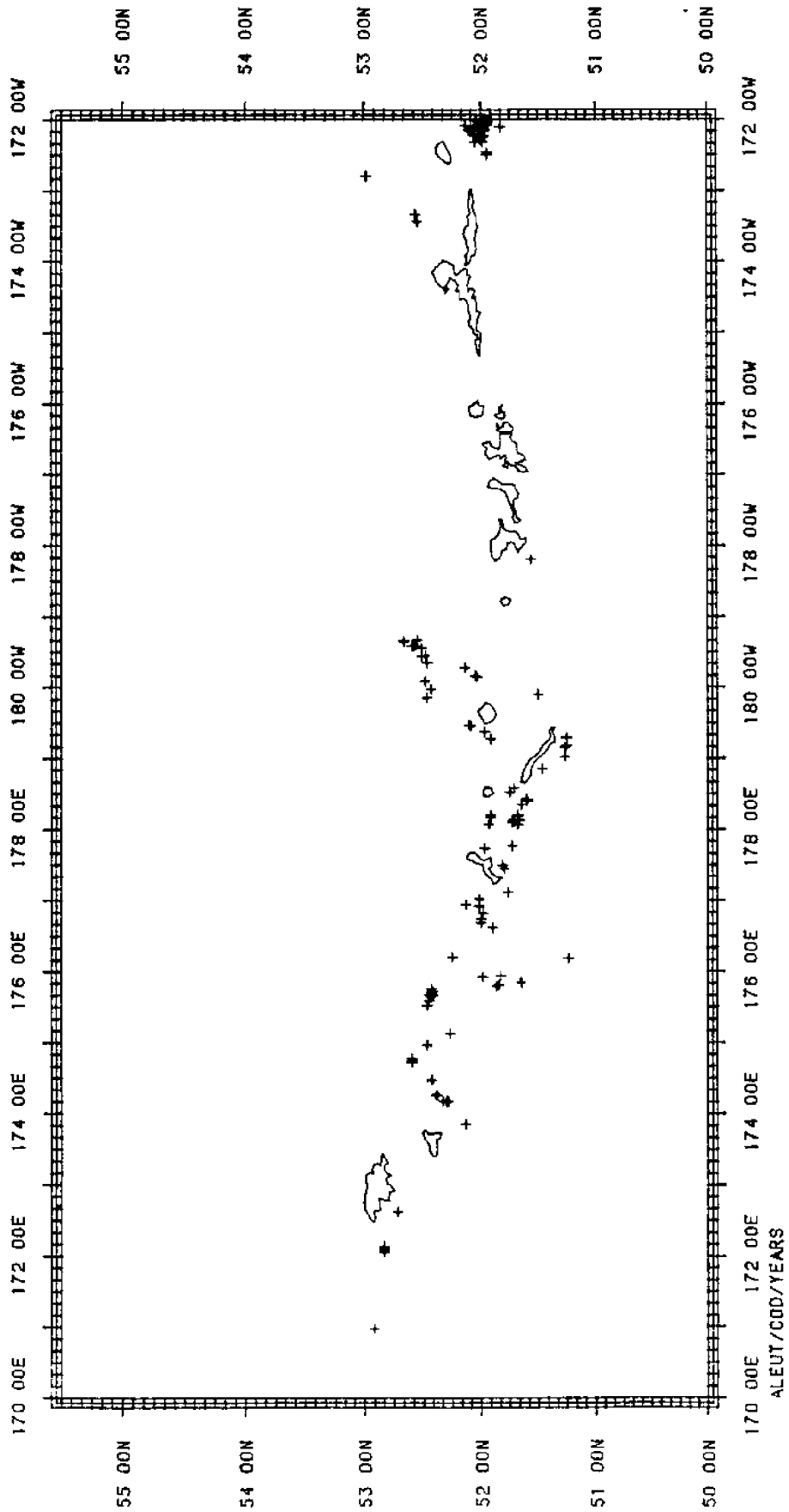


FIGURE B-2. TRAWLING LOCATIONS FOR PACIFIC COD, ALL MONTHS, 1977-80

TABLE B-13. TURBOT, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPX 7X	7Y	7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FTISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	78 316	5239N	17316W	16134.0	35111.5	49574.5	344.	1.500	6454.	4.30	7.41	6306.	12760.
JAPAN	S	80 327	5240N	17221W	16405.8	35132.2	49459.5	301.	2.000	4922.	2.46	4.17	1898.	6820.
JAPAN	S	78 315	5231N	17320W	16023.8	35113.6	49534.3	328.	3.000	6258.	2.09	2.76	1002.	7260.
JAPAN	M	79 3 3	5233N	17326W	16053.2	35107.9	49578.0	137.	0.167	339.	2.03	2.20	4171.	4510.
JAPAN	S	78 315	5222N	17320W	16028.7	35113.4	49536.9	355.	4.000	8114.	2.00	3.22	906.	9020.
JAPAN	S	78 319	5223N	17418E	11426.1	34271.9	50137.2	109.	4.333	4102.	1.87	3.22	918.	9020.
JAPAN	S	78 310	5235N	17322W	16083.5	35109.4	49575.1	109.	3.333	5669.	1.70	1.0.82	1591.	7260.
JAPAN	S	79 212	5236N	17324W	16076.5	35108.2	49582.1	235.	1.917	2919.	1.52	4.30	2647.	5566.
JAPAN	S	78 316	5240N	17310W	16169.2	35114.2	49565.3	383.	3.000	4221.	1.41	7.39	1279.	5500.
JAPAN	M	79 3 2	5235N	17313W	16126.7	35113.9	49557.7	137.	0.250	341.	1.36	2.17	1859.	2200.
JAPAN	S	78 311	5221N	17303W	16107.8	35120.9	49499.5	131.	4.000	5167.	1.29	6.36	553.	5720.
JAPAN	S	80 328	5239N	17234W	16339.3	35128.6	49486.2	323.	2.500	3162.	1.26	3.85	1458.	4620.
JAPAN	S	80 327	5221N	17303W	16107.8	35120.9	49499.5	385.	4.083	4990.	1.22	3.16	2050.	7040.
JAPAN	M	79 3 2	5234N	17316W	16106.6	35112.7	49561.0	153.	0.250	290.	1.16	3.23	2504.	2794.
JAPAN	S	78 318	5223N	17520E	11830.4	34351.3	50122.7	328.	2.000	1975.	0.99	4.81	3525.	5500.
JAPAN	M	79 3 3	5235N	17320W	16093.6	35110.5	49571.6	142.	0.167	163.	0.98	1.63	981.	1144.
JAPAN	S	79 213	5222N	17259W	16132.3	35122.3	49493.7	369.	5.167	4310.	0.83	2.67	1124.	5434.
JAPAN	S	79 214	5224N	17329W	15993.4	35108.5	49560.0	396.	5.083	4200.	0.83	2.71	662.	4862.
JAPAN	M	79 3 4	5234N	17320W	16028.5	35110.7	49568.9	131.	0.583	467.	0.80	2.64	1257.	13024.
JAPAN	S	79 2 1	5236N	17312W	16138.7	35114.1	49558.4	252.	2.000	1500.	0.75	4.13	1759.	3258.
JAPAN	S	79 216	5222N	17252W	16137.1	35122.7	49491.6	372.	5.417	4039.	0.75	3.11	515.	4554.
JAPAN	S	78 318	5222N	17526E	11868.8	34360.9	50120.4	252.	3.000	2163.	0.72	15.77	13237.	15400.
JAPAN	S	79 216	5236N	17324W	16078.5	35108.2	49582.1	238.	2.000	1439.	0.72	3.50	1377.	2316.
JAPAN	S	79 129	5222N	17322W	16018.7	35112.4	49540.9	470.	5.167	3584.	0.69	2.72	1773.	5357.
JAPAN	S	79 217	5236N	17312W	16138.7	35114.1	49558.4	279.	2.000	1376.	0.69	3.52	846.	2222.
JAPAN	S	78 311	5237N	17303W	16188.5	35118.1	49542.9	164.	5.000	3027.	0.61	4.19	405.	3432.
JAPAN	M	79 314	5236N	17324W	16078.5	35108.2	49582.1	206.	2.000	1197.	0.60	2.07	2675.	3872.
JAPAN	S	79 2 2	5236N	17324W	16076.5	35108.2	49582.1	241.	2.000	1127.	0.56	4.09	2164.	3291.
JAPAN	S	79 130	5222N	17259W	16132.3	35122.3	49493.7	421.	6.167	3405.	0.55	4.36	1361.	4765.
JAPAN	M	79 313	5237N	17317W	16118.8	35111.5	49571.1	202.	0.561	319.	0.55	3.02	1309.	1628.
JAPAN	S	79 127	5236N	17312W	16138.7	35114.1	49558.4	257.	2.000	1062.	0.53	5.88	690.	1751.
JAPAN	S	79 2 3	5227N	17327W	16018.3	35108.8	49564.0	470.	6.250	3150.	0.50	6.72	282.	3432.
JAPAN	S	78 310	5236N	17306W	16168.6	35116.9	49546.3	98.	3.000	1502.	0.50	7.80	1952.	3454.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-14. TURBOT, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	WYMOID	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE (LBS/FISH)	BYCATCH (LBS)	TOTAL CATCH (LBS)
						7X 7Y 7Z							
JAPAN		79 614	5235N	17325W	16088.3	35107.9	49581.4	252.	2.000	2.87	4.22	204.	5940.
JAPAN		79 418	5237N	17321W	16098.7	35109.5	49575.0	293.	1.500	2.54	3.92	361.	4180.
JAPAN		79 418	5236N	17311W	16143.7	35114.6	49556.4	290.	1.083	2.53	3.48	348.	3060.
JAPAN		79 420	5224N	17323W	16023.6	35111.5	49548.2	410.	3.250	2.53	3.17	589.	8800.
JAPAN		78 622	5221N	17330W	15973.6	35108.7	49550.5	344.	4.083	2.49	4.01	3024.	13200.
JAPAN		78 622	5226N	17339W	15962.1	35102.1	49585.5	252.	1.083	2.49	3.85	1706.	4400.
JAPAN		79 6 5	5236N	17319W	16128.8	35113.2	49562.4	252.	4.083	2.38	4.74	184.	9900.
JAPAN		79 417	5242N	17221W	16416.3	35132.0	49465.2	317.	2.000	2.35	4.55	573.	5280.
JAPAN		79 419	5237N	17311W	16148.8	35114.4	49559.1	257.	1.333	2.29	3.58	245.	3300.
JAPAN		78 621	5235W	17335W	15953.2	35105.9	49566.3	328.	3.667	2.21	5.96	5113.	13200.
JAPAN		79 6 8	5236N	17314W	16128.8	35113.2	49566.4	219.	2.167	2.14	4.24	426.	5060.
JAPAN		79 418	5237N	17321W	16098.7	35109.5	49579.0	312.	2.083	2.07	3.49	523.	4840.
JAPAN		78 526	5226N	17339W	15952.3	35102.7	49584.3	383.	2.333	2.05	5.05	1826.	6600.
JAPAN		79 420	5221N	17303W	16107.8	35120.9	49499.5	387.	3.000	1.98	2.65	890.	6820.
JAPAN		79 417	5236N	17233W	16336.8	35125.1	49481.2	312.	2.167	1.83	4.73	208.	4180.
JAPAN		79 5 5	5235N	17233W	16344.1	35129.0	49484.0	273.	1.917	1.73	4.08	648.	3960.
JAPAN		79 6 6	5217N	17628E	12219.1	34439.7	50100.8	208.	0.917	1.64	4.30	5097.	6600.
JAPAN		79 417	5241N	17220E	16415.7	35132.4	49468.0	306.	1.750	1.63	4.20	670.	3520.
JAPAN		78 625	5222N	17324W	16008.7	35111.5	49544.9	347.	3.833	1.60	7.09	2675.	8900.
JAPAN		79 422	5231N	17301W	16117.5	35121.7	49495.3	388.	4.333	1.56	2.65	944.	7700.
JAPAN		79 610	5237N	17320W	16103.7	35110.0	49577.0	301.	1.417	1.46	5.31	136.	2200.
JAPAN		79 424	5226N	17326W	16018.4	35109.6	49559.4	383.	5.000	1.46	2.66	636.	7220.
JAPAN		79 426	5238N	17235W	16325.3	35128.5	49485.6	306.	2.667	1.42	5.23	398.	4180.
JAPAN		79 419	5222N	17304W	16107.8	35120.4	49500.3	410.	3.000	1.42	3.14	806.	5060.
JAPAN		79 618	5213N	17618E	12207.7	34435.4	50102.3	191.	2.417	1.38	5.20	4360.	7700.
JAPAN		79 528	5236N	17313W	16133.8	35113.7	49560.4	262.	4.833	1.36	4.79	1139.	7700.
JAPAN		79 416	5222N	17303W	16112.7	35120.8	49502.2	407.	3.000	1.36	3.04	330.	4400.
JAPAN		79 421	5239N	17303W	16198.8	35117.7	49568.4	410.	2.333	1.35	9.49	7846.	11000.
JAPAN		79 530	5237N	17321W	16098.7	35109.5	49579.0	246.	4.500	1.35	4.23	538.	6600.
JAPAN		79 416	5222N	17303W	16112.7	35120.8	49502.2	432.	3.417	1.34	3.23	687.	5280.
JAPAN		78 526	5226N	17338W	15957.4	35103.2	49582.4	383.	6.750	1.33	3.23	1601.	10560.
JAPAN		79 531	5235N	17311W	16138.8	35114.8	49553.7	246.	4.750	1.32	4.08	347.	6600.
JAPAN		79 520	5205N	17921E	13376.1	34691.2	50008.0	276.	3.000	1.31	4.52	3315.	7260.
JAPAN		79 421	5235W	17335W	15983.1	35106.7	49568.4	402.	5.750	1.30	3.00	1318.	8800.
JAPAN		79 612	5217N	17619E	12212.4	34438.4	50101.2	246.	1.750	1.30	4.37	2124.	4400.
JAPAN		79 527	5237W	17337W	15987.2	35102.4	49593.6	328.	3.250	1.26	4.62	735.	4840.
JAPAN		79 612	5218N	17628E	12274.3	34448.3	50099.0	219.	2.333	1.26	4.39	3661.	6600.
JAPAN		78 625	5219N	17259W	16122.2	35123.2	49483.5	353.	4.000	1.25	6.49	480.	5500.
JAPAN		79 5 6	5241N	17221W	16411.0	35132.1	49462.4	301.	2.250	1.25	4.19	260.	3080.
JAPAN		79 524	5239N	17230W	16358.3	35129.9	49477.2	317.	2.000	1.23	4.72	621.	3080.
JAPAN		79 424	5227N	17328W	16023.3	35109.3	49562.0	394.	5.000	1.20	3.56	1897.	7920.
JAPAN		79 524	5247N	17940E	13563.6	34683.8	50025.1	219.	4.250	1.18	5.95	2119.	7040.
JAPAN		79 617	5236N	17321W	16093.6	35109.7	49576.3	232.	2.250	1.15	3.78	2025.	4620.
JAPAN		79 5 1	5224N	17315W	16063.5	35115.3	49532.2	372.	2.500	1.15	3.41	431.	3300.
JAPAN		78 611	5234N	17329W	16043.0	35106.0	49586.4	328.	3.000	1.14	8.17	2968.	6380.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-14 (continued). TURBOT, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LB5/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	79 6 9	5236N	17323W	16082.5 35108.7 49580.2	234.	1.750	1986.	1.13	4.64	434.	2420.
JAPAN	S	78 6 24	5222N	17331W	15973.4 35108.0 49558.6	323.	4.000	4476.	1.12	3.31	1024.	5500.
JAPAN	S	79 5 27	5237N	17311W	16148.8 35114.4 49559.1	328.	2.833	3167.	1.12	5.35	793.	3960.
JAPAN	S	78 6 18	5236N	17325W	16073.4 35107.6 49584.0	317.	3.060	3303.	1.10	9.35	217.	3520.
JAPAN	S	79 6 6	5236N	17312W	16138.7 35114.1 49558.4	257.	2.250	2450.	1.09	4.94	850.	3300.
JAPAN	S	79 5 2	5223N	17303W	16117.7 35120.6 49504.8	372.	5.000	5436.	1.09	2.80	724.	6160.
JAPAN	S	78 6 12	5222N	17305W	16102.9 35120.0 49506.3	443.	3.500	3687.	1.05	3.21	1373.	5060.
JAPAN	S	79 5 5	5240N	17225W	16387.0 35131.2 49468.7	246.	1.917	2017.	1.05	4.00	843.	2860.
JAPAN	S	79 5 21	5236N	17324W	16078.5 35108.2 49582.1	235.	2.417	2468.	1.02	3.16	832.	3300.
JAPAN	S	78 6 21	5219N	17300W	16112.5 35122.4 49487.8	301.	4.000	4074.	1.02	5.07	1426.	5500.
JAPAN	S	77 4 30	5139N	17550E	11987.5 34465.1 50075.5	145.	0.500	508.	1.02	6.55	2792.	3300.
JAPAN	S	79 5 29	5236N	17312W	16138.7 35114.1 49558.4	257.	4.000	4055.	1.01	3.36	785.	4840.
JAPAN	S	79 6 15	5235N	17328W	16053.1 35106.3 49587.1	224.	3.333	3363.	1.01	5.09	1257.	4620.
JAPAN	S	79 6 8	5236N	17323W	16083.5 35108.7 49580.2	219.	2.167	2184.	1.01	4.25	576.	2860.
JAPAN	S	79 5 2	5151N	17957W	14065.2 34567.7 50112.1	219.	3.000	3007.	1.00	14.81	3593.	6600.
JAPAN	S	78 6 24	5219N	17259W	16117.3 35122.8 49485.7	298.	4.000	3925.	0.98	3.93	475.	4400.
JAPAN	S	78 6 23	5222N	17333W	15963.3 35107.0 49562.5	331.	4.083	3938.	0.96	5.20	462.	4400.
JAPAN	S	79 5 29	5230N	17339W	15972.0 35101.6 49594.8	339.	2.750	2650.	0.96	4.12	650.	3300.
JAPAN	S	79 6 15	5236N	17314W	16128.8 35113.2 49562.4	221.	2.083	2006.	0.96	3.23	634.	2640.
JAPAN	S	76 6 13	5222N	17326W	15998.7 35110.5 49548.8	342.	4.500	4329.	0.96	4.55	1171.	5500.
JAPAN	S	78 6 13	5300N	17221E	11068.0 34048.7 50169.9	87.	1.250	1197.	0.96	1.17	3203.	4400.
JAPAN	S	79 4 25	5222N	17306W	16098.0 35119.5 49508.4	410.	5.000	4778.	0.96	4.39	2482.	7260.
JAPAN	S	78 6 23	5219N	17258W	16122.2 35123.2 49483.5	287.	4.000	3791.	0.95	4.17	609.	4400.
JAPAN	S	79 5 4	5238N	17235W	16325.3 35128.5 49485.6	306.	3.167	2903.	0.92	4.31	2157.	5060.
JAPAN	S	77 4 26	5151N	17559E	12048.0 34457.0 50086.4	101.	0.617	559.	0.91	7.61	3841.	4400.
JAPAN	S	79 6 6	5236N	17323W	16083.5 35108.7 49580.2	241.	4.063	3659.	0.90	3.57	741.	4400.
JAPAN	S	79 4 21	5230N	17338W	15977.1 35102.1 49592.9	336.	6.083	5437.	0.89	6.09	1823.	7260.
JAPAN	S	79 4 19	5237N	17321W	16094.7 35109.5 49579.0	312.	1.833	1627.	0.89	4.50	133.	1760.
JAPAN	S	79 6 5	5223N	17446E	11604.0 34307.6 50131.0	241.	3.750	3284.	0.88	3.64	4416.	7700.
JAPAN	S	79 6 13	5217N	17620E	12219.1 34439.7 50100.8	219.	3.417	2990.	0.88	4.62	4710.	7700.
JAPAN	S	79 6 16	5228N	17338W	15967.3 35102.7 49587.7	208.	3.167	2743.	0.87	5.37	2092.	4840.
JAPAN	S	78 6 22	5219N	17258W	16122.2 35123.2 49483.5	347.	4.000	3454.	0.86	4.15	946.	4400.
JAPAN	S	78 5 22	5223N	17338W	15942.8 35104.0 49574.6	328.	5.583	4800.	0.86	2.00	1800.	6600.
JAPAN	S	79 6 1	5235N	17312W	16133.7 35114.4 49555.7	243.	4.333	3714.	0.86	3.98	246.	3960.
JAPAN	S	79 6 10	5236N	17314W	16128.8 35113.2 49562.4	205.	2.250	1922.	0.84	4.52	498.	2420.
JAPAN	S	79 6 3	5218N	17930E	13475.3 34684.1 50019.3	243.	5.000	4190.	0.84	5.53	1310.	5500.
JAPAN	S	79 4 30	5223N	17304W	16112.8 35120.2 49506.9	394.	4.750	3969.	0.84	4.03	1311.	5280.
JAPAN	S	77 5 9	5235N	17312W	16133.7 35114.4 49555.7	295.	1.367	1097.	0.80	3.03	223.	1320.
JAPAN	S	79 6 16	5236N	17325W	16073.4 35107.6 49584.0	328.	4.083	3262.	0.80	5.34	698.	3960.
JAPAN	S	79 5 4	5223N	17223W	16412.2 35131.4 49472.7	312.	2.583	2058.	0.80	3.78	362.	2420.
JAPAN	S	78 6 13	5227N	17257W	16142.0 35123.1 49489.5	301.	4.083	3243.	0.79	3.73	2257.	5500.
JAPAN	S	79 6 3	5206N	17919E	13368.1 34687.3 50010.4	235.	5.000	3944.	0.79	5.70	2656.	6600.
JAPAN	S	79 4 30	5400N	17957W	14108.4 34546.5 50120.9	208.	4.000	3137.	0.78	11.45	2363.	5500.
JAPAN	S	79 4 15	5238N	17313W	16143.9 35113.2 49565.7	317.	4.750	3698.	0.78	3.99	702.	4400.
JAPAN	S	78 6 30	5226N	17337W	15962.5 35103.8 49580.5	230.	2.167	1680.	0.78	5.31	520.	2200.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-14 (continued). TURBOT, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	79 615	5236N	17314W	7X ***** 35113.2 49562.4	230.	4.833	3702.	0.77	3.51	258.	3960.
JAPAN	S	79 429	5408N	17940E	34456.2 50134.6	213.	4.250	3108.	0.73	1.1-1.8	1292.	4400.
JAPAN	S	79 523	5207N	17941W	34760.6 49973.8	215.	5.333	3869.	0.73	8.10	1631.	5500.
JAPAN	S	79 525	5226N	17937E	34681.4 50025.5	222.	5.500	3987.	0.72	5.64	2613.	6600.
JAPAN	S	79 616	5230N	17339W	35109.3 49594.8	323.	3.250	2356.	0.72	5.16	284.	2640.
JAPAN	S	78 614	5223N	17328W	35108.8 49555.4	372.	4.667	3380.	0.72	4.74	1020.	4400.
JAPAN	S	79 430	5225N	17328W	35108.8 49560.6	383.	5.000	3602.	0.72	4.18	2558.	6160.
JAPAN	S	78 619	5224N	17334W	35105.9 49569.6	355.	2.167	1539.	0.72	7.42	641.	2200.
JAPAN	S	79 416	5235N	17328W	35106.3 49587.1	317.	4.000	2860.	0.72	4.58	660.	3520.
JAPAN	S	79 530	5230N	17358W	35102.1 49592.9	262.	3.250	2321.	0.71	3.58	539.	2860.
JAPAN	S	79 612	5236N	17313W	35113.7 49560.4	262.	4.417	3124.	0.71	4.25	176.	3300.
JAPAN	S	79 425	5228N	17325W	35109.6 49562.7	426.	5.000	3500.	0.70	3.32	2220.	5720.
JAPAN	S	79 617	5236N	17313W	35113.6 49560.4	254.	5.250	3655.	0.70	3.40	305.	3960.
JAPAN	S	79 611	5236N	17322W	35109.2 49578.2	219.	2.833	1964.	0.69	4.85	1336.	3300.
JAPAN	S	79 529	5229N	17937E	34676.9 50025.3	217.	5.333	3689.	0.69	4.89	1371.	5064.
JAPAN	S	79 415	5238N	17312W	35113.7 49563.9	355.	5.167	3571.	0.69	6.49	1709.	5280.
JAPAN	S	79 617	5217N	17621E	34441.0 50100.5	219.	1.500	1024.	0.68	3.92	4476.	5500.
JAPAN	S	79 512	5230N	17328W	35107.6 49573.9	355.	6.583	5723.	0.67	2.44	2857.	8584.
JAPAN	S	79 526	5227N	17940E	34683.8 50025.1	241.	5.667	3775.	0.67	5.89	3925.	7700.
JAPAN	S	79 516	5252N	17958W	34564.1 50113.4	235.	2.833	1839.	0.65	8.40	2121.	3960.
JAPAN	S	79 531	5206N	17920E	34688.5 50009.9	224.	5.000	3244.	0.65	5.12	716.	3960.
JAPAN	S	78 621	5235N	17310W	35115.3 49551.7	246.	2.333	1467.	0.63	4.80	293.	1760.
JAPAN	S	78 614	5222N	17256W	35122.7 49491.6	353.	4.250	2652.	0.62	5.47	548.	3300.
JAPAN	S	79 617	5218N	17628E	34448.3 50099.0	213.	2.500	1559.	0.62	4.63	1741.	3300.
JAPAN	S	78 527	5226N	17339W	35102.3 49584.3	399.	4.167	2586.	0.62	4.04	2254.	4840.
JAPAN	S	79 423	5226N	17325W	35110.1 49557.4	383.	5.000	3078.	0.62	2.25	222.	3300.
JAPAN	S	79 510	5233N	17958W	34562.0 50114.4	224.	3.000	1841.	0.61	12.38	4319.	6160.
JAPAN	S	79 527	5114N	17906E	33163.7 34737.9	137.	0.833	511.	0.61	5.08	2129.	2640.
JAPAN	S	79 523	5222N	17937W	34745.9 49992.4	239.	3.167	1930.	0.61	5.01	1810.	3740.
JAPAN	S	78 624	5222N	17501W	35121.5 49498.0	437.	4.563	2774.	0.61	8.01	306.	3080.
JAPAN	S	79 511	5234N	17330W	35105.5 49586.3	290.	4.867	2920.	0.60	4.71	622.	3542.
JAPAN	S	78 627	5235N	17310W	35115.3 49551.7	219.	2.500	1494.	0.60	5.47	46.	1540.
JAPAN	S	79 614	5217N	17923E	34676.6 50022.0	266.	5.167	3067.	0.59	5.92	893.	3960.
JAPAN	S	78 614	5223N	17326W	35110.3 49551.5	358.	4.417	2594.	0.59	6.26	706.	3300.
JAPAN	S	79 524	5231N	17956W	34709.0 50016.6	246.	4.500	2637.	0.59	8.11	4403.	7040.
JAPAN	S	78 629	5236N	17326W	35107.1 49586.0	383.	3.500	2049.	0.59	8.01	151.	2200.
JAPAN	S	78 624	5223N	17318W	35114.1 49535.6	416.	4.167	2422.	0.58	9.43	658.	3080.
JAPAN	S	78 625	5222N	17324W	35111.5 49544.9	364.	3.333	1936.	0.58	4.10	264.	2200.
JAPAN	S	79 617	5232N	17333W	35104.4 49586.7	290.	2.250	1284.	0.57	6.12	916.	2200.
JAPAN	S	79 414	5204N	17947E	34634.0 50066.9	276.	2.000	1140.	0.57	11.59	1500.	2640.
JAPAN	S	79 415	5232N	17338W	35087.1 35101.6	353.	6.250	3530.	0.56	6.73	4390.	7920.
JAPAN	S	79 425	5240N	17222W	34401.1 35131.9	273.	2.167	1215.	0.56	4.79	545.	1760.
JAPAN	S	80 514	5155N	17553E	34442.8 50091.8	241.	2.750	1510.	0.55	4.65	1130.	2640.
JAPAN	S	79 511	5355N	17955E	34547.4 50118.0	219.	3.500	1902.	0.54	13.75	2718.	4620.
JAPAN	S	79 423	5226N	17326W	35109.6 49559.4	410.	5.000	2675.	0.54	2.30	625.	3300.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-14 (continued). TURBOT, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LOGRAN-C 7Y	PULSE 7Z	RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	79 427	5238N	17246W	16276.6	35124.7	49509.8	426.	426.	3.083	1644.	0.53	8.58	16616.	18260.
JAPAN	S	79 427	5241N	17249W	16277.7	35123.1	49524.6	448.	448.	3.250	1712.	0.53	9.26	2688.	4400.
JAPAN	S	79 5 4	5238N	17231W	16348.3	35129.7	49476.7	326.	326.	2.167	1139.	0.52	2.99	621.	1760.
JAPAN	S	79 531	5220N	17932E	13454.6	34663.8	50020.7	247.	247.	5.750	2996.	0.52	6.57	524.	3520.
JAPAN	S	78 625	5222N	17301W	16122.5	35121.5	49498.0	437.	437.	3.833	1976.	0.52	5.42	664.	2640.
JAPAN	S	78 622	5237N	17310W	16153.8	35114.9	49557.1	366.	366.	2.417	1259.	0.51	11.42	81.	1320.
JAPAN	S	79 6 9	5236N	17313W	16133.8	35113.7	49560.4	246.	246.	4.850	2458.	0.51	4.32	182.	2640.
JAPAN	S	79 5 7	5208N	17559E	12065.9	34428.4	50100.4	246.	246.	2.250	1134.	0.50	4.90	1066.	2200.

*** NOTE *** THE ACCURACY OF POSITION AND LOGRAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

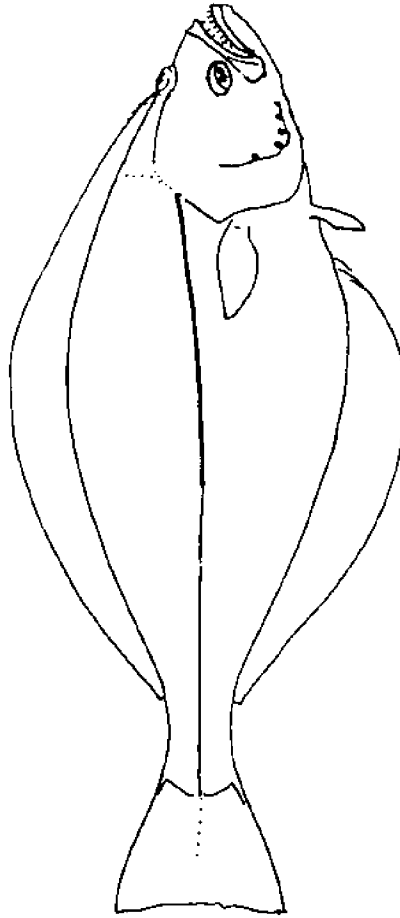


TABLE B-15. TURBOT, JULY-SEPTEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	HYCATCH	TOTAL CATCH
		YYMMDD			7X	7Y	7Z	(FMS)	(LBS)	PER HOUR	LB/S/FISH	(LBS)	(LBS)
JAPAN	S	80 816	5240N	17210W	16456.6	35134.7	49433.6	273	1.000	5594	13.83	18606	24200
JAPAN	S	79 727	5229N	17502E	11719.6	34316.8	50131.0	224	2.000	10868	4.41	1012	11880
JAPAN	S	79 8 9	5229N	17932W	13887.3	34742.7	49999.1	230	3.000	14031	12.49	2249	16280
JAPAN	S	79 728	5244N	17917W	14039.6	34740.8	50010.8	224	1.250	4191	10.48	869	5060
JAPAN	S	79 728	5225N	17508E	11753.6	34332.1	50127.0	230	1.667	5270	4.34	2870	8140
JAPAN	S	78 826	5239N	17321W	16108.8	35109.0	49584.4	197	1.750	4781	5.29	279	5060
JAPAN	S	78 815	5238N	17308W	16168.9	35115.6	49555.8	219	2.250	5428	4.67	7112	12540
JAPAN	S	79 8 1	5212N	17920E	13392.1	34680.0	50017.4	235	3.750	8334	6.01	906	9240
JAPAN	S	76 826	5435N	17911E	13946.7	34385.8	50159.6	208	1.167	2507	12.80	5193	7700
JAPAN	S	79 730	5247N	17916W	14057.7	34737.7	50014.5	219	1.917	3937	9.57	1343	5280
JAPAN	S	79 8 4	5203N	17908E	13288.7	34677.7	50013.0	284	4.417	9040	6.50	640	9680
JAPAN	S	78 817	5225N	17313W	16078.4	35116.0	49530.8	202	1.667	3562	3.60	2358	5720
JAPAN	S	79 716	5145N	17835E	13032.7	34661.6	50009.8	301	1.167	2336	7.67	2064	4400
JAPAN	S	79 810	5225N	17932W	13887.3	34742.7	49999.1	208	3.417	6646	9.85	2374	9020
JAPAN	S	78 817	5235N	17324W	16073.4	35108.4	49579.4	298	1.917	3649	6.49	311	3960
JAPAN	S	78 825	5441N	17910E	13972.7	34388.3	50163.1	219	1.083	2039	18.30	3461	5500
JAPAN	S	79 724	5236N	17446E	11624.1	34282.6	50130.8	153	2.750	5148	5.93	5632	10780
JAPAN	S	79 8 6	5203N	17908E	13288.7	34677.7	50013.0	235	4.583	8399	7.78	1061	9460
JAPAN	S	79 719	5144N	17817W	14202.9	34684.0	49869.3	238	2.250	3987	7.78	4593	8580
JAPAN	S	79 8 5	5224N	17939W	13824.7	34740.8	49996.6	175	2.917	5104	10.94	396	5500
JAPAN	S	79 715	5146N	17832E	13015.8	34656.5	50012.6	312	1.667	2755	2.79	2745	5000
JAPAN	S	79 729	5231N	17929W	13913.8	34743.7	50000.0	213	3.500	5742	10.02	1738	7480
JAPAN	S	78 828	5436N	17912E	13958.5	34384.7	50160.1	230	0.917	1491	12.10	709	2200
JAPAN	S	78 820	5238N	17201W	16487.0	35136.3	49406.1	230	1.200	1899	13.82	1401	3300
JAPAN	S	78 722	5233N	17216W	16423.7	35133.5	49445.0	191	2.000	3127	6.02	173	3300
JAPAN	S	79 816	5153N	17540E	11931.1	34429.7	50094.6	137	3.167	4766	9.22	12394	17160
JAPAN	S	78 823	5236N	17314W	16128.8	35113.2	49562.4	298	1.583	2260	5.01	600	2860
JAPAN	S	78 823	5353N	17948E	13975.7	34541.3	50118.9	262	4.583	6332	14.82	268	8600
JAPAN	S	79 819	5217N	17931E	13478.7	34686.9	50017.5	241	3.833	5242	5.69	3358	6600
JAPAN	S	78 818	5226N	17255W	16171.7	35123.2	49496.1	375	6.000	6010	5.27	7830	15840
JAPAN	S	78 818	5222N	17323W	16013.7	35112.0	49542.9	465	7.000	9322	6.01	8278	17600
JAPAN	S	78 824	5237N	17232W	16338.4	35129.5	49476.1	416	2.500	3328	4.85	412	3740
JAPAN	S	78 826	5235N	17311W	16131.6	35114.8	49553.7	290	1.583	2103	4.75	537	2640
JAPAN	S	78 823	5225N	17255W	16166.7	35123.4	49493.3	546	6.500	8358	2.92	2642	11000
JAPAN	S	79 723	5217N	17926E	13446.2	34680.5	50020.3	243	4.917	6192	5.76	1288	7480
JAPAN	S	78 811	5441N	17910E	13972.7	34368.3	50163.1	230	1.833	2248	7.70	1052	3300
JAPAN	S	78 824	5237N	17233W	16331.6	35129.2	49478.4	317	2.500	3046	5.55	254	3300
JAPAN	S	79 831	5236N	17232W	16333.2	35129.6	49473.3	273	2.667	3145	4.99	815	3960
JAPAN	S	79 721	5229N	17932W	13887.3	34742.7	49999.1	210	2.917	3405	11.71	1215	4620
JAPAN	S	79 821	5214N	17924E	13424.0	34682.3	50017.7	252	3.333	3854	5.66	1866	5720
JAPAN	S	79 8 7	5225N	17540E	11967.4	34373.5	50118.9	284	4.500	5040	4.68	2660	7700
JAPAN	S	78 816	5235N	17311W	16138.6	35114.8	49553.7	273	1.833	2048	3.61	2352	4400
JAPAN	S	79 720	5229N	17931W	13693.7	34743.9	49998.5	241	2.583	2821	9.98	919	3740
JAPAN	S	79 8 9	5223N	17936W	13840.5	34745.8	49993.2	208	3.500	3801	11.23	1479	5280
JAPAN	S	78 820	5237N	17225W	16371.3	35131.5	49460.2	148	2.583	2782	10.97	1178	3960

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-15 (continued). TURBOT, JULY-SEPTEMBER 1977-80

NATION	VESSEL CLASS	DATE YMMDD	LAT	LONG	APPROX 7X	LOMAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	78 722	5239N	17215W	16428.3	35133.7	49442.6	219.	2.000	2042.	1.02	5.19	158.	2200.
JAPAN	S	79 821	5210N	17916E	13360.2	34677.8	50017.2	235.	4.000	4029.	1.01	5.66	371.	4400.
JAPAN	S	78 823	5235N	17311W	16138.6	35114.8	49553.7	134.	1.667	1649.	0.99	5.86	1651.	3300.
JAPAN	S	79 8 3	5231N	17936W	13739.4	34709.0	50016.6	219.	4.667	4577.	0.97	7.55	263.	4840.
JAPAN	S	78 828	5235N	17256W	16161.9	35123.0	49495.5	546.	6.833	6604.	0.98	6.07	3296.	9900.
JAPAN	S	78 825	5233N	17312W	16133.7	35114.4	49555.7	211.	1.667	1597.	0.96	5.36	163.	1760.
JAPAN	S	79 820	5217N	17927E	13452.7	34681.8	50015.8	246.	3.833	3698.	0.94	5.04	794.	4400.
JAPAN	S	79 9 1	5237N	17231W	16343.1	35129.8	49473.9	265.	2.333	2156.	0.92	5.06	264.	2420.
JAPAN	S	79 8 9	5229N	17944E	13602.4	34686.0	50025.4	235.	4.500	4102.	0.91	6.33	738.	4840.
JAPAN	S	78 819	5225N	17333W	15978.0	35106.2	49570.3	317.	6.000	5350.	0.89	3.44	1250.	6600.
JAPAN	S	78 715	5225N	17336W	15975.9	35105.7	49572.2	394.	4.000	3546.	0.89	3.34	854.	4400.
JAPAN	S	78 812	5402N	17945E	13995.5	34517.2	50128.1	235.	4.500	3986.	0.89	6.08	1514.	5500.
JAPAN	S	78 715	5222N	17311W	16073.4	35117.4	49518.7	383.	4.000	3519.	0.88	3.21	1761.	5280.
JAPAN	S	79 820	5217N	17930E	13472.2	34685.6	50018.1	246.	4.167	3653.	0.88	4.82	967.	4620.
JAPAN	S	79 814	5223N	17544E	11950.5	34382.3	50116.3	257.	4.000	3507.	0.88	4.69	2213.	5720.
JAPAN	S	78 824	5231N	17232W	16336.4	35129.5	49476.1	347.	2.250	1919.	0.85	4.39	1381.	3300.
JAPAN	S	79 811	5213N	17544E	11974.6	34400.4	50108.9	257.	3.667	3116.	0.85	4.64	1284.	4400.
JAPAN	S	79 812	5222N	17544E	11988.7	34384.2	50115.5	301.	4.000	3384.	0.85	4.25	2336.	5720.
JAPAN	S	78 816	5224N	17311W	16083.3	35117.1	49524.1	243.	2.167	1814.	0.84	4.05	386.	2200.
JAPAN	S	79 817	5159N	17611E	12132.3	34459.0	50088.9	159.	4.500	3597.	0.80	8.24	1903.	5500.
JAPAN	S	79 816	5159N	17554E	12021.5	34437.4	50094.8	295.	4.500	3593.	0.80	6.46	3007.	6600.
JAPAN	S	79 8 7	5203N	17907E	13282.2	34676.4	50013.6	273.	4.750	3707.	0.78	9.00	2013.	5720.
JAPAN	S	78 814	5407N	17939E	13984.7	34497.0	50134.0	219.	4.417	3432.	0.77	10.25	748.	4180.
JAPAN	S	79 8 7	5215N	17923E	13420.6	34679.5	50019.5	235.	5.083	3891.	0.77	6.64	1169.	5060.
JAPAN	S	79 8 2	5230N	17944E	13605.8	34684.5	50026.7	230.	4.167	3149.	0.76	5.85	591.	3740.
JAPAN	S	79 820	5209N	17918E	13370.3	34681.8	50014.8	235.	4.500	3337.	0.74	5.45	623.	3960.
JAPAN	S	79 816	5153N	17550E	11993.5	34442.3	50091.2	98.	2.417	1743.	0.72	9.61	3757.	5500.
JAPAN	S	78 821	5225N	17330W	15993.2	35107.8	49564.5	342.	6.667	4791.	0.72	3.00	1809.	6600.
JAPAN	S	78 821	5224N	17256W	16156.8	35123.1	49492.8	541.	6.500	4657.	0.72	3.20	1063.	5720.
JAPAN	S	79 821	5209N	17920E	13383.2	34684.3	50013.7	230.	2.583	1850.	0.72	5.40	130.	1980.
JAPAN	S	79 8 1	5203N	17908E	13288.7	34677.7	50013.0	293.	4.417	3159.	0.72	4.96	581.	3740.
JAPAN	S	78 817	5235N	17326W	16063.3	35107.3	49523.3	328.	2.833	2019.	0.71	5.13	1501.	3520.
JAPAN	S	78 811	5440N	17911E	13973.7	34372.5	50162.4	219.	1.750	1241.	0.71	11.76	959.	2200.
JAPAN	S	79 8 2	5154N	17540E	11931.6	34428.0	50095.4	120.	4.167	2863.	0.69	4.45	2417.	5280.
JAPAN	S	79 721	5223N	17939W	13821.3	34742.0	49995.2	175.	2.167	1470.	0.68	8.86	2050.	3520.
JAPAN	S	79 8 8	5214N	17548E	12002.3	34403.7	50108.4	257.	4.000	2711.	0.68	4.12	1689.	4400.
JAPAN	S	78 817	5236N	17308W	16158.6	35116.0	49550.4	246.	2.583	1739.	0.67	3.57	461.	2200.
JAPAN	S	79 8 1	5153N	17550E	11993.5	34442.3	50091.2	301.	6.250	4125.	0.66	5.47	4675.	2800.
JAPAN	S	78 825	5355N	17956W	14090.9	34560.7	50115.8	213.	2.750	1810.	0.66	12.45	2590.	4400.
JAPAN	S	79 8 6	5211N	17955W	13745.6	34710.3	50016.0	235.	5.583	3671.	0.66	7.85	949.	4620.
JAPAN	S	79 8 17	5144N	17555E	12015.6	34463.3	50082.0	213.	2.250	1468.	0.65	10.23	1172.	2640.
JAPAN	S	78 818	5410N	17946E	14045.7	34500.6	50134.7	219.	4.167	2682.	0.64	11.89	618.	3300.
JAPAN	S	78 826	5239N	17220W	16405.2	35132.5	49454.3	202.	4.667	2976.	0.64	4.16	764.	3740.
JAPAN	S	79 7 31	5153N	17540E	11931.1	34425.7	50094.6	257.	3.833	2419.	0.63	5.05	1981.	4400.
JAPAN	S	79 8 10	5159N	17553E	12017.2	34436.1	50095.1	235.	4.250	2661.	0.63	4.88	1519.	4180.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-15 (continued). TURBOT, JULY-SEPTEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPRO 7X	LOMAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	79 811	5223N	17535E	11930.4	34370.7	50118.7	219.	0.667	417.	0.63	9.41	243.	660.
JAPAN	S	78 824	5225N	17940W	14344.2	34517.3	50138.8	273.	1.583	982.	0.62	14.30	1218.	2200.
JAPAN	S	79 9 2	5239N	17219W	16405.8	35132.8	49452.0	298.	2.583	1599.	0.62	4.86	821.	2420.
JAPAN	S	78 822	5226N	17255W	16171.7	35123.2	49496.1	546.	6.750	4166.	0.62	3.07	1774.	5940.
JAPAN	S	79 6 4	5154N	17551E	12000.5	34441.9	50091.7	164.	2.167	1298.	0.60	5.53	1342.	2640.
JAPAN	S	79 9 4	5239N	17204W	16478.7	35135.8	49416.3	235.	3.117	1863.	0.60	5.07	2537.	4400.
JAPAN	S	79 7 22	5231N	17954W	13752.3	34711.6	50015.4	246.	4.917	2923.	0.59	7.14	597.	3520.
JAPAN	S	78 817	5235N	17310W	16143.6	35115.3	49551.7	208.	1.917	1121.	0.58	4.61	1739.	2860.
JAPAN	S	79 813	5221N	17543E	11980.3	34384.7	50115.1	284.	4.000	2336.	0.58	4.24	2064.	4400.
JAPAN	S	78 821	5239N	17200W	16496.9	35136.4	49406.6	208.	1.833	1069.	0.58	5.02	3771.	4840.
JAPAN	S	78 819	5235N	17323W	16078.5	35108.9	49577.5	230.	2.583	1504.	0.58	4.98	1796.	3300.
JAPAN	S	79 9 22	5233N	17446E	11618.8	34288.5	50137.0	252.	2.750	1565.	0.57	5.42	1515.	3080.
JAPAN	S	79 7 15	5218N	17641E	12360.8	34465.2	50094.7	252.	0.583	329.	0.56	8.41	331.	660.
JAPAN	S	78 827	5236N	17234W	16323.7	35129.0	49477.8	276.	2.250	1266.	0.56	4.02	274.	1540.
JAPAN	S	78 816	5257N	17234W	16328.9	35128.9	49460.6	284.	3.583	1989.	0.56	5.34	1091.	3080.
JAPAN	S	79 8 8	5214N	17922E	13411.0	34679.7	50018.8	235.	5.083	2819.	0.55	6.67	703.	3520.
JAPAN	S	79 9 11	5214N	17550E	12015.4	34406.3	50107.8	252.	5.000	2763.	0.55	7.51	2517.	5280.
JAPAN	S	78 822	5225N	17256W	16161.9	35123.0	49495.5	546.	6.500	3559.	0.55	3.04	1281.	4840.
JAPAN	S	79 810	5221N	17542E	11973.6	34383.4	50115.4	279.	3.750	2052.	0.55	4.73	1908.	3960.
JAPAN	S	79 7 31	5152N	17540E	11930.6	34431.4	50093.8	273.	3.333	1818.	0.55	4.57	1042.	2860.
JAPAN	S	79 8 1	5155N	17515E	11771.4	34394.8	50104.1	268.	3.750	1960.	0.52	5.04	4640.	6600.
JAPAN	S	79 813	5222N	17544E	11988.7	34384.2	50115.5	273.	4.000	2072.	0.52	4.97	1668.	3740.
JAPAN	S	78 822	5223N	17327W	15998.5	35109.8	49553.4	364.	6.250	3215.	0.51	4.91	1185.	4400.
JAPAN	S	79 7 18	5128N	17947E	12445.7	34785.5	49941.1	399.	4.167	2123.	0.51	3.85	6017.	8140.
JAPAN	S	79 8 4	5153N	17540E	11931.1	34429.7	50094.6	197.	3.833	1938.	0.51	5.02	702.	2640.

*** NOTE *** THE ACCURACY OF POSITION AND LOMAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-16. TURQUOT, OCTOBER-DECEMBER 1977-80

NATION	VESSEL CLASS	DATE YMMDD	LAT	LONG	APPROX LORAN-C PULSE RATES 7X 7Y 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	791120	5225N	17337W	15957.6 35104.1 49577.9	344.	2.250	15829.	7.03	4.21	451.	16280.
JAPAN	S	791126	5240N	17223W	16396.4 35131.7 49464.1	328.	2.250	11004.	4.89	4.40	876.	11860.
JAPAN	S	791128	5228N	17337W	15972.4 35103.2 49585.8	344.	3.500	16078.	4.59	5.22	642.	16720.
JAPAN	S	791125	5225N	17339W	15947.4 35103.0 49581.7	328.	3.583	14806.	4.13	4.65	1474.	16280.
JAPAN	S	791125	5227N	17340W	15952.1 35101.8 49588.8	328.	3.917	15812.	4.04	3.91	908.	16720.
JAPAN	S	791125	5222N	17327W	15953.6 35110.0 49550.8	339.	4.167	15399.	3.70	4.63	1.	15400.
JAPAN	S	791127	5227N	17339W	15957.2 35102.4 49586.9	334.	3.167	10820.	3.42	4.47	180.	11000.
JAPAN	S	791121	5227N	17340W	15952.1 35101.8 49588.8	339.	4.583	15375.	3.35	4.50	465.	15840.
JAPAN	S	791130	5227N	17340W	15952.1 35101.8 49588.8	339.	3.583	11764.	3.28	4.68	116.	11880.
JAPAN	S	791126	5247N	17233W	16386.2 35128.0 49506.7	339.	2.333	7184.	3.08	4.47	736.	7920.
JAPAN	S	791122	5236N	17227W	16356.7 35131.0 49462.0	312.	2.500	7590.	3.04	4.47	110.	7700.
JAPAN	S	791121	5224N	17336W	15957.8 35104.9 49573.4	344.	3.167	9143.	2.89	4.44	317.	9460.
JAPAN	S	781014	5241N	17221W	16411.0 35132.1 49462.4	301.	2.250	6328.	2.81	4.66	492.	6820.
JAPAN	S	791130	5227N	17339W	15957.2 35102.4 49586.9	344.	3.667	10273.	2.80	4.44	947.	11220.
JAPAN	S	791120	5225N	17340W	15942.3 35102.4 49583.6	355.	4.167	10090.	2.42	4.81	1130.	11220.
JAPAN	S	7912 2	5238N	17233W	16332.8 35129.1 49481.2	328.	2.167	4333.	2.00	3.67	67.	4400.
JAPAN	S	7912 1	5219N	17259W	16117.3 35122.0 49485.7	295.	4.000	7797.	1.95	3.87	123.	9020.
JAPAN	S	781118	5220N	17300W	16117.4 35122.3 49490.5	262.	3.750	6834.	1.62	4.42	3066.	9900.
JAPAN	S	791129	5221N	17310W	16073.4 35118.1 49514.0	328.	4.667	8302.	1.78	5.05	278.	8580.
JAPAN	S	7812 8	5236N	17308W	16158.6 35116.0 49550.4	339.	2.833	4839.	1.71	4.68	661.	5500.
JAPAN	S	791128	5230N	17337W	15982.3 35102.7 49591.0	344.	6.333	10507.	1.66	6.39	933.	11440.
JAPAN	S	7910 2	5236N	17232W	16333.2 35129.6 49473.5	230.	4.417	6493.	1.47	3.10	2747.	9240.
JAPAN	S	781118	5221N	17322W	16013.8 35112.7 49538.3	350.	4.333	6263.	1.45	4.42	1657.	7920.
JAPAN	S	781126	5236N	17308W	16158.6 35116.0 49550.4	355.	2.750	3438.	1.25	6.09	1402.	4840.
JAPAN	S	7910 3	5236N	17230W	16342.6 35130.2 49468.8	219.	4.583	5198.	1.13	4.56	1842.	7040.
JAPAN	S	7910 2	5236N	17233W	16322.4 35129.3 49475.5	252.	4.667	5287.	1.13	4.28	2193.	7480.
JAPAN	S	781127	5230W	17340W	15966.9 35101.0 49596.6	350.	2.833	2707.	0.96	5.77	593.	3300.
JAPAN	S	781014	5242N	17222W	16411.6 35131.8 49467.5	344.	3.250	3104.	0.96	11.52	636.	3740.
JAPAN	S	7910 6	5225N	17340W	15942.3 35102.4 49583.6	339.	6.833	6234.	0.91	4.45	146.	6380.
JAPAN	S	791016	5237N	17229W	16352.5 35130.4 49469.3	148.	1.750	1493.	0.85	6.64	1587.	3080.
JAPAN	S	781116	5240N	17220W	16415.7 35132.4 49460.0	334.	2.000	1702.	0.65	5.14	498.	2200.
JAPAN	S	7910 4	5225N	17340W	15942.3 35102.4 49583.6	350.	4.833	4101.	0.85	4.57	299.	4400.
JAPAN	S	791031	5131N	17937E	13390.9 34754.3 49952.5	215.	3.167	2571.	0.81	5.10	16789.	19360.
JAPAN	S	7910 5	5219N	17306W	16083.2 35120.1 49500.4	366.	7.750	6180.	0.80	2.36	860.	7040.
JAPAN	S	7612 1	5235N	17323W	16078.5 35108.9 49577.5	539.	2.250	1794.	0.80	6.37	626.	2420.
JAPAN	S	7812 2	5220N	17300W	16117.4 35122.3 49490.5	361.	3.667	2855.	0.78	2.89	445.	3300.
JAPAN	S	7810 5	5239N	17219W	16405.8 35132.8 49452.0	339.	2.750	2111.	0.77	5.71	1189.	3300.
JAPAN	S	7910 1	5222N	17331W	15973.4 35108.0 49558.6	323.	5.500	4130.	0.75	2.21	1370.	5500.
JAPAN	S	7812 7	5220N	17259W	16122.3 35122.6 49488.4	328.	3.583	2590.	0.72	4.02	710.	3300.
JAPAN	S	7910 1	5222N	17330W	15978.3 35108.5 49556.7	355.	2.317	1654.	0.71	4.40	766.	2420.
JAPAN	S	7910 7	5220N	17308W	16078.5 35119.1 49507.2	350.	5.917	4138.	0.70	4.07	482.	4620.
JAPAN	S	7910 3	5236N	17233W	16328.4 35129.3 49475.5	241.	6.000	1189.	0.57	3.71	1189.	4620.
JAPAN	S	791019	5243N	17956W	13746.4 34706.1 50019.2	208.	2.917	1641.	0.56	8.29	4299.	5940.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

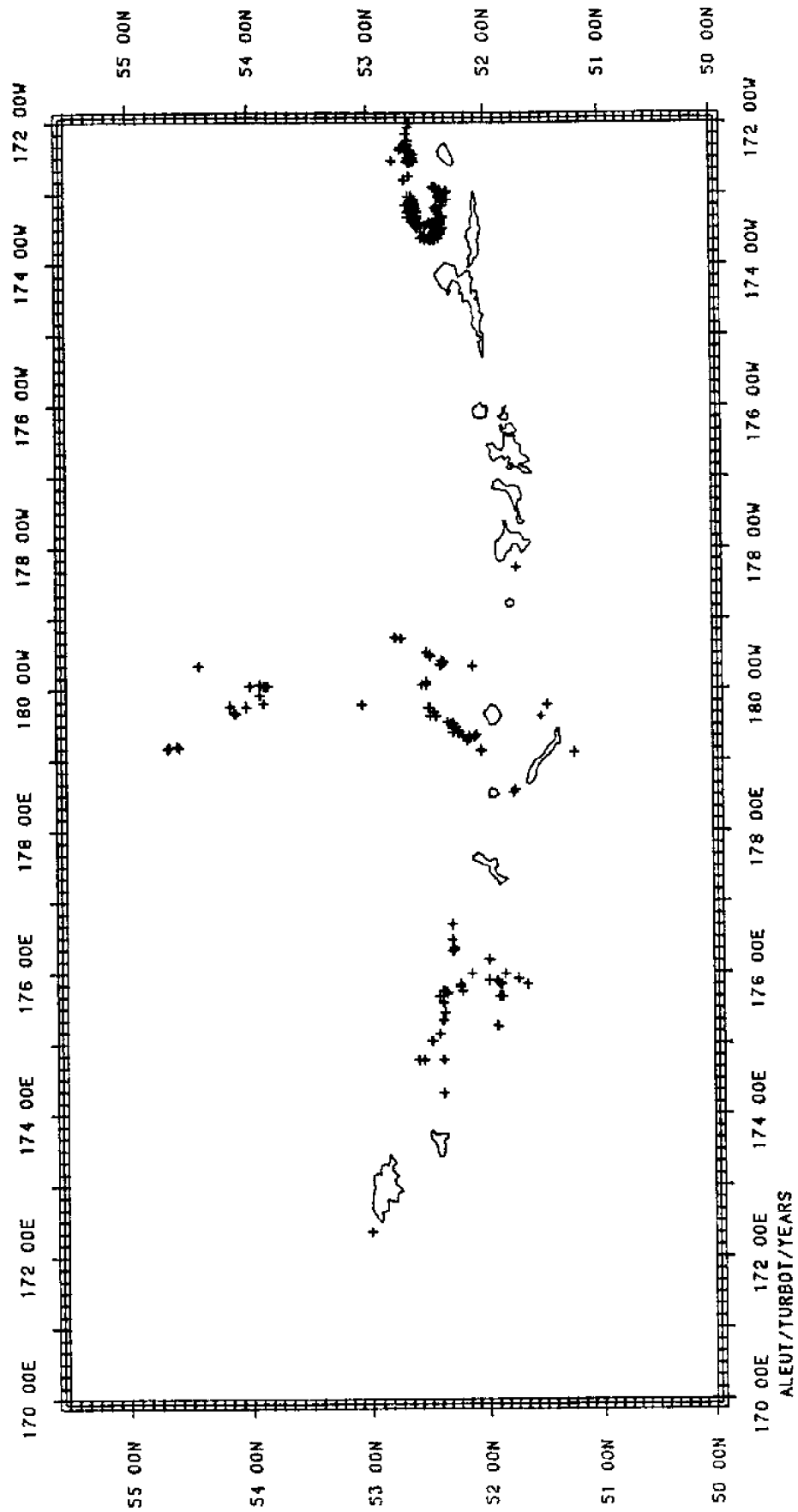


FIGURE B-3. TRAWLING LOCATIONS FOR TURBOT, ALL MONTHS, 1977-80

TABLE B-17. PACIFIC OCEAN PERCH, JANUARY-MARCH 1977-80

NATION	VESSEL	DATE	LAT	LONG	APPROX 7X	LOMAN-C 7Y	PULSE 7Z	RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	80 329	5222N	17938W	13824.2	34744.6	49993.1	175.	175.	2.500	39348.	15.74	1.16	692.	40040.
JAPAN	S	80 329	5222N	17938W	13824.2	34744.6	49993.1	180.	180.	1.667	13276.	7.97	1.03	144.	13420.
JAPAN	M	79 3 4	5159N	17227W	16170.9	35134.0	49360.8	134.	134.	0.333	929.	2.79	0.75	545.	1474.
JAPAN	M	79 3 2	5234N	17316W	16108.6	35112.7	49561.0	153.	153.	0.250	522.	2.09	1.64	2272.	2794.
USSR	M	78 331	5206N	17603E	12085.3	34436.9	50097.5	82.	82.	0.750	1559.	2.08	0.86	20441.	22000.
JAPAN	M	79 3 2	5255N	17313W	16128.7	35113.9	49557.7	137.	137.	0.250	509.	2.04	1.64	1691.	2200.
JAPAN	M	79 3 3	5233W	17326W	16051.2	35107.9	49578.0	137.	137.	0.167	170.	1.02	1.01	4340.	4510.
JAPAN	M	79 3 4	5159N	17226W	16175.5	35134.2	49358.5	115.	115.	0.417	362.	0.87	0.68	848.	1210.
USSR	M	78 322	5152N	17555E	12024.2	34450.3	50088.7	104.	104.	0.167	138.	0.83	1.65	24062.	24200.
USSR	M	78 325	5139N	17538E	11915.4	34450.1	50083.9	120.	120.	3.000	2033.	0.68	0.26	18867.	20900.
USSR	M	79 1 8	5140N	17506E	11727.9	34408.7	50095.6	93.	93.	0.500	312.	0.62	1.05	6288.	6600.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

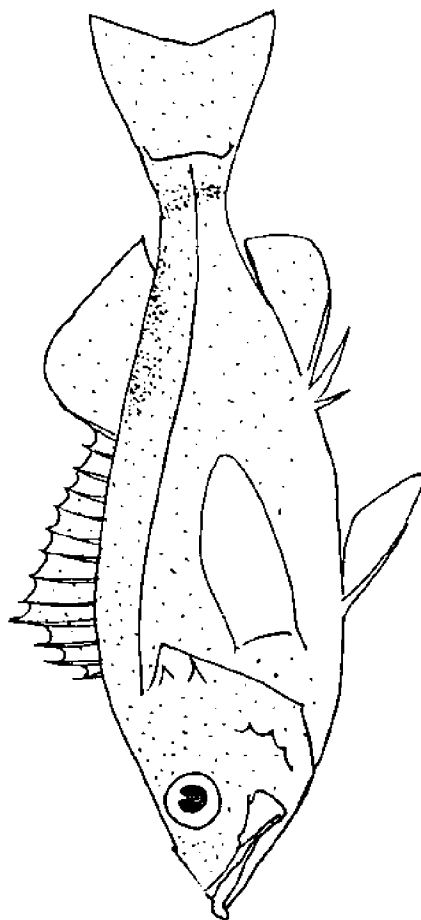


TABLE B-18. PACIFIC OCEAN PERCH, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	TIME	LAT	LONG	APPRX 7X	LORAN-C 7Y	PULSE 7Z	RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	77 5 1	5128N	17848E	13079.4	34699.7	49983.1		126.	0.583	14107.	24.18	0.59	6793.	20906.	
JAPAN	S	77 5 1	5220N	17426E	11476.1	34287.7	50133.7		112.	0.667	15505.	23.26	0.86	2755.	18260.	
JAPAN	S	77 5 16	5254N	17212E	11045.3	34050.5	50169.0		153.	0.417	9562.	22.95	0.71	1438.	11000.	
JAPAN	S	77 5 1	5143N	17654E	12387.2	34538.8	50057.6		213.	0.217	4587.	21.17	1.64	33.	4620.	
JAPAN	S	77 5 15	5146N	17516E	11783.9	34411.2	50097.6		109.	0.500	10476.	20.95	1.02	84.	10560.	
JAPAN	S	77 6 8	5217N	17322E	11137.8	34214.0	50144.8		120.	1.000	16647.	16.65	0.53	6653.	25300.	
JAPAN	S	77 4 29	5140N	17548E	11975.6	34461.0	50081.1		104.	0.363	6314.	16.47	1.46	286.	6600.	
JAPAN	S	77 5 8	5447N	17843E	13814.6	34310.5	50169.2		164.	0.417	6210.	14.90	1.56	170.	6380.	
JAPAN	S	77 5 13	5223N	17427E	11483.1	34283.3	50135.3		164.	0.583	7813.	13.39	0.78	547.	8360.	
JAPAN	S	77 5 11	5218N	17409E	11372.5	34270.0	50136.2		98.	1.033	22248.	12.14	0.58	12512.	34760.	
JAPAN	S	80 4 7	5214N	17527E	11864.7	34376.8	50114.5		153.	1.717	20784.	12.11	1.57	2976.	23760.	
JAPAN	S	77 6 9	5124N	17854E	13102.7	34711.9	49972.2		87.	0.667	7600.	11.40	0.57	100.	7700.	
JAPAN	S	77 6 6	5124N	17853E	13102.7	34710.7	49972.8		104.	0.500	5613.	11.23	0.71	987.	6600.	
JAPAN	S	77 5 10	5159N	17227W	16170.9	35134.0	49360.8		141.	1.167	13066.	11.20	0.80	156.	13222.	
JAPAN	S	79 5 15	5223N	17429E	11495.9	34285.9	50134.8		202.	1.167	13064.	11.20	1.11	2336.	15400.	
JAPAN	S	80 4 22	5259N	17059E	11097.1	33950.5	50175.6		213.	2.000	22263.	11.13	0.64	3257.	25320.	
JAPAN	S	79 5 3	5358N	17955E	14046.0	34540.9	50121.5		164.	0.833	8864.	10.64	1.76	156.	9020.	
JAPAN	S	78 6 30	5220N	17410E	11377.4	34267.4	50137.2		126.	0.417	4388.	10.53	0.78	12.	4400.	
USSR	M	77 6 20	5158N	17608E	12112.0	34456.8	50089.2		52.	0.250	2618.	10.47	0.77	6182.	8800.	
USSR	M	77 6 23	5202N	17606W	15043.3	35002.5	49758.1		52.	0.363	3915.	10.21	0.74	15885.	19800.	
USSR	M	77 6 20	5159N	17608E	12113.1	34455.1	50090.0		52.	0.750	7605.	10.14	0.79	14395.	22000.	
JAPAN	S	78 6 30	5219N	17410E	11377.9	34269.3	50136.6		139.	0.333	3278.	9.84	0.78	22.	3300.	
USSR	M	77 6 21	5158N	17608E	12112.0	34456.8	50089.2		52.	0.833	8172.	9.81	0.79	46828.	55000.	
JAPAN	S	77 5 13	5223N	17426E	11476.7	34282.1	50135.5		115.	0.917	8718.	9.51	1.07	2502.	11220.	
JAPAN	S	77 5 19	5258N	17213E	11061.3	34043.1	50170.0		156.	0.583	5210.	8.93	0.73	70.	5280.	
JAPAN	S	79 5 2	5128N	17851E	13058.1	34703.3	49979.2		90.	1.167	10183.	8.73	0.55	9837.	20020.	
JAPAN	S	78 6 29	5220N	17410E	11377.4	34267.4	50137.2		128.	0.500	4356.	8.71	0.71	44.	4400.	
JAPAN	S	77 6 10	5124N	17854E	13108.9	34711.9	49972.2		87.	0.500	4270.	8.54	0.57	130.	4400.	
JAPAN	S	79 5 8	5446N	17843E	13827.0	34313.3	50168.8		156.	1.083	9189.	8.48	1.56	271.	9460.	
JAPAN	S	79 5 12	5216N	17418E	11427.5	34285.1	50133.1		115.	0.583	4932.	8.45	0.65	2108.	7040.	
JAPAN	S	78 6 30	5149N	17730E	12625.2	34574.8	50047.5		94.	0.500	4113.	8.23	0.57	2487.	6600.	
JAPAN	S	77 5 2	5122N	17852E	13092.7	34712.0	49970.9		227.	0.767	6266.	8.17	0.68	774.	7040.	
USSR	M	77 6 22	5202N	17606W	15043.3	35002.5	49758.1		52.	0.383	2932.	7.65	0.76	8068.	11000.	
JAPAN	S	79 4 30	5401N	17955E	14060.5	34534.4	50124.3		109.	0.833	5974.	7.17	1.77	626.	6600.	
USSR	M	77 6 17	5159N	17610E	12125.9	34457.7	50089.3		52.	0.500	3474.	6.95	0.78	18526.	22000.	
JAPAN	S	79 5 29	5218N	17506E	11731.9	34342.6	50122.9		167.	0.500	3420.	6.84	0.76	960.	4400.	
JAPAN	S	78 6 25	5148N	17728E	12611.7	34573.8	50047.4		77.	0.333	2279.	6.84	0.66	1021.	3300.	
JAPAN	S	77 5 20	5259N	17213E	11065.9	34041.0	50170.3		156.	0.833	5641.	6.77	0.77	959.	6600.	
JAPAN	S	77 4 30	5140N	17551E	11993.8	34404.7	50080.0		115.	0.550	3597.	6.54	1.41	1463.	5060.	
JAPAN	S	77 5 24	5304N	17110E	11111.6	33952.9	50175.9		115.	1.000	6477.	6.48	0.60	1003.	7480.	
JAPAN	S	78 6 28	5139N	17551E	11993.5	34466.3	50079.2		96.	0.417	2646.	6.35	0.70	25954.	28600.	
USSR	M	77 6 24	5156N	17604E	12084.4	34455.1	50088.9		52.	0.833	5122.	6.15	0.88	38878.	44000.	
JAPAN	S	77 5 3	5230N	17449E	11634.1	34298.1	50134.6		102.	0.667	5291.	6.11	1.43	385.	5076.	
JAPAN	S	78 6 29	5148N	17727E	12044.3	34572.5	50047.9		80.	0.417	2533.	6.06	0.61	4067.	6600.	
JAPAN	S	79 5 28	5212N	17503E	11707.8	34349.7	50119.7		120.	0.333	2023.	6.07	0.87	617.	2840.	

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-18 (continued). PACIFIC OCEAN PERCH, APRIL-JUNE 1977-80

VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CAATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
*****	*****	*****	*****	7X 7Y 7Z	*****	*****	*****	*****	*****	*****	*****
JAPAN S	77 427	5229N	17555W	13731.8 34713.2 50033.3	168.	0.750	4336.	5.78	1.14	1384.	5720.
JAPAN S	77 529	5214N	17504E	11715.5 34347.3 50120.8	98.	0.500	2678.	5.76	0.84	422.	3300.
JAPAN S	77 6 8	5214N	17554E	13108.9 34711.9 49972.2	142.	0.500	2842.	5.68	0.72	458.	3300.
JAPAN S	79 514	5218N	17410E	11378.5 34271.2 50136.0	198.	2.167	12162.	5.61	0.87	3898.	16060.
JAPAN S	77 610	5244N	17854E	13108.9 34711.9 49972.2	148.	0.667	3722.	5.58	0.69	238.	3960.
JAPAN S	80 413	5225N	17945W	13789.6 34731.6 50001.7	153.	2.063	11317.	5.43	1.24	1443.	12760.
JAPAN S	77 622	5152N	17543E	11945.2 34435.2 50092.8	77.	0.667	3535.	5.30	0.71	865.	4400.
JAPAN S	60 424	5215N	17418E	11428.0 34287.0 50132.5	164.	2.063	11030.	5.29	0.89	7670.	18700.
JAPAN S	77 426	5151N	17559E	12048.6 34457.0 50086.4	101.	0.617	3257.	5.28	1.56	1143.	4400.
JAPAN S	79 518	5255N	17214E	11048.3 34050.8 50159.1	114.	0.667	3474.	5.21	0.74	3786.	7260.
JAPAN S	79 513	5218N	17428E	11468.5 34294.1 50132.1	120.	2.167	10899.	5.03	0.74	6701.	17600.
JAPAN S	78 630	5149N	17732E	12638.0 34577.3 50046.6	77.	0.167	831.	4.98	0.40	5329.	16160.
JAPAN S	79 516	5254N	17214E	11044.4 34053.0 50168.8	115.	0.750	3720.	4.96	0.78	4640.	8360.
JAPAN S	77 429	5140N	17552E	11995.8 34466.0 50079.7	83.	0.667	3222.	4.83	0.92	5578.	8800.
JAPAN S	77 528	5314N	17039E	11164.5 33893.3 50178.7	126.	1.583	7627.	4.82	0.46	73.	7700.
JAPAN S	79 524	5145N	17747E	12726.8 34602.0 50035.1	159.	0.500	2295.	4.59	0.92	1445.	3740.
JAPAN S	77 5 5	5332N	17445E	11610.3 34269.1 50136.6	273.	0.833	3714.	4.46	0.76	246.	3960.
JAPAN S	77 5 2	5132N	17829E	12968.4 34621.7 49997.6	175.	1.763	7855.	4.40	1.00	505.	8360.
USSR M	78 620	5255N	17058E	11083.7 33958.0 50174.9	90.	0.417	1812.	4.35	0.37	2588.	4400.
JAPAN S	77 621	5204N	17550E	12002.8 34423.7 50100.1	82.	0.333	1432.	4.24	0.77	348.	1760.
JAPAN S	60 4 1	5222N	17939W	13817.8 34743.4 49993.7	180.	1.917	6030.	4.19	1.06	2090.	10120.
JAPAN S	80 4 9	5219N	17427E	11482.3 34290.9 50132.9	153.	1.763	7427.	4.16	0.97	4673.	12100.
JAPAN S	78 629	5219N	17433E	11396.0 34273.1 50136.0	149.	0.917	3717.	4.06	0.83	23.	3740.
USSR M	77 618	5158N	17609E	12116.4 34458.1 50086.8	52.	0.417	1653.	3.97	0.83	8247.	9900.
JAPAN S	77 430	5139N	17550E	11987.5 34465.1 50075.5	145.	0.500	1978.	3.96	1.57	1322.	3300.
JAPAN S	79 512	5219N	17422E	11451.1 34284.5 50134.0	115.	1.583	6281.	3.95	0.61	3639.	9900.
JAPAN S	77 530	5146N	17317E	11729.8 34412.5 50096.6	98.	1.583	6221.	3.93	0.90	379.	6000.
JAPAN S	78 623	5148N	17738E	12674.7 34586.3 50042.7	96.	0.333	1288.	3.86	0.65	472.	1760.
USSR M	77 621	5202N	17606W	15043.3 35002.5 49758.1	52.	0.333	1288.	3.86	0.65	27312.	28600.
JAPAN S	79 5 7	5247N	17846E	13851.8 34315.1 50168.9	150.	1.083	4194.	3.86	1.54	1756.	5940.
USSR M	78 625	5255N	17058E	11083.7 33958.0 50174.9	90.	1.250	4779.	3.82	0.49	28221.	33000.
USSR M	78 6 7	5140N	17540E	11927.4 34451.0 50084.0	82.	0.750	2838.	3.78	0.99	242.	3080.
USSR M	77 616	5153N	17600E	12056.4 34455.0 50087.8	42.	0.500	1892.	3.78	0.63	15708.	17600.
JAPAN S	79 5 8	5226N	17542E	11982.8 34374.2 50119.0	120.	2.000	7529.	3.76	0.90	4131.	11660.
USSR M	78 622	5255N	17058E	11083.7 33958.0 50174.9	93.	0.917	3448.	3.76	0.35	26752.	24200.
USSR M	77 617	5157N	17607E	12104.5 34457.2 50088.7	52.	0.917	3824.	3.74	0.61	29576.	33000.
JAPAN S	79 522	5120N	17932W	13677.3 34624.8 49997.3	150.	0.667	2474.	3.71	1.01	4506.	7040.
JAPAN S	77 526	5233N	17045E	11083.3 33946.7 50175.3	142.	1.000	3631.	3.63	0.74	109.	3740.
JAPAN S	77 522	5302N	17055E	11105.8 33939.1 50176.3	142.	2.667	9612.	3.63	0.53	248.	9900.
JAPAN S	77 6 8	5124N	17854E	13108.9 34711.9 49972.2	142.	1.000	3519.	3.52	0.52	441.	3960.
JAPAN S	79 5 1	5337N	17949E	14001.5 34534.2 50122.4	137.	1.833	6426.	3.51	1.59	1494.	7920.
JAPAN S	80 4 8	5214N	17527E	11864.7 34376.6 50114.5	153.	1.667	5808.	3.46	1.43	2112.	7920.
JAPAN S	79 530	5205N	17501E	11692.6 34359.7 50115.4	153.	0.833	2889.	3.47	1.20	411.	3300.
USSR M	77 620	5159N	17608E	12113.1 34455.1 50090.0	49.	0.667	2292.	3.44	0.67	1008.	3300.
JAPAN S	79 516	5256N	17045E	11093.0 33940.2 50175.9	126.	2.000	6845.	3.42	0.90	635.	7480.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION.***

TABLE B-18 (continued). PACIFIC OCEAN PERCH, APRIL-JUNE 1977-80

VESEL CLASS	DATE	LAT	LONG	APPROX LONAN-C 7X	7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	79 5 4	5216N	17507E	11736.5	34347.5	50121.3	128	1.917	6504	3.39	1.87	23416	29920
USSR	77 6 28	5159N	17610W	15006.2	35000.8	49757.0	52	0.500	1641	3.28	0.75	7159	8800
JAPAN	77 5 1	5146N	17707E	12473.5	34550.5	50054.9	69	0.433	1421	3.20	1.12	581	2002
JAPAN	79 5 1	5401N	17957E	14073.7	34537.4	50123.7	109	1.000	3214	3.21	1.78	86	3300
JAPAN	79 6 16	5210N	17457E	11668.9	34345.6	50119.9	175	1.000	3163	3.16	1.29	1017	4180
JAPAN	79 5 28	5128N	17504E	11714.2	34350.9	50119.4	137	1.000	3141	3.14	0.86	1259	4400
USSR	77 6 24	5158N	17607E	12105.6	34455.5	50089.5	52	0.500	1570	3.14	0.75	9430	11000
JAPAN	77 5 9	5236N	17242W	16285.5	35126.4	49495.5	334	0.217	678	3.13	1.60	1522	2200
JAPAN	80 4 8	5206N	17456E	11661.7	34351.6	50117.4	197	1.167	3622	3.10	1.47	1438	5060
JAPAN	79 6 1	5205N	17504E	11711.2	34363.5	50114.6	126	0.333	1023	3.07	1.19	77	1100
USSR	77 6 26	5153N	17548E	11981.0	34439.8	50091.9	60	0.667	2038	3.06	0.74	162	2200
JAPAN	77 6 8	5124N	17654E	13108.9	34711.9	49972.2	137	0.667	2005	3.01	0.69	195	2200
JAPAN	79 5 11	5223N	17432E	11515.2	34289.7	50134.2	159	2.333	6723	2.88	1.03	5597	12320
JAPAN	79 5 11	5217N	17410E	11375.1	34273.1	50135.5	93	1.167	3349	2.87	0.69	2591	5940
JAPAN	77 6 26	5200N	17608E	12114.2	34453.5	50090.8	71	0.833	2346	2.81	0.81	74	2420
USSR	77 6 6	5152N	17547E	11974.1	34440.2	50091.4	49	1.000	2793	2.79	0.73	8207	11000
JAPAN	79 5 15	5221N	17431E	11507.9	34292.2	50133.2	164	1.750	4827	2.76	0.99	4413	9240
JAPAN	77 4 23	5200N	17439E	11560.4	34240.8	50117.9	168	0.550	1447	2.63	1.21	533	1980
JAPAN	79 6 10	5144N	17746E	12718.6	34602.2	50034.6	169	0.833	2175	2.61	0.76	1565	1740
JAPAN	77 5 31	5143N	17555E	12019.2	34464.9	50081.1	98	0.917	2374	2.59	1.00	486	2660
JAPAN	78 6 29	5148N	17749E	12745.1	34600.1	50037.4	90	0.667	1708	2.56	0.51	2692	4400
JAPAN	77 6 11	5142N	17532E	13108.9	34711.9	49972.2	142	0.667	1686	2.53	0.69	74	1760
JAPAN	79 5 31	5142N	17532E	11875.6	34437.8	50086.5	104	1.667	4163	2.51	0.76	1537	5720
JAPAN	77 5 21	5255N	17046E	11089.3	33943.6	50175.6	115	2.667	6654	2.50	0.50	3246	8900
JAPAN	79 5 23	5121N	17932W	13679.8	34823.8	49898.8	153	0.917	2287	2.49	1.00	3433	5720
USSR	78 6 20	5255N	17056E	11084.6	33955.6	50175.0	93	0.833	2063	2.48	0.35	26537	28800
USSR	77 6 20	5202N	17606W	15043.3	35002.5	49756.1	52	0.350	858	2.45	0.77	10142	11000
JAPAN	80 4 30	5159N	17555E	12025.9	34438.6	50094.4	82	1.333	3268	2.45	0.91	8392	11660
USSR	77 6 5	5151N	17547E	11973.6	34441.9	50090.6	49	1.667	4065	2.44	0.73	4735	9300
JAPAN	77 5 24	5302N	17113E	11102.4	33960.9	50175.3	123	1.083	2631	2.43	0.54	889	3520
JAPAN	79 6 15	5210N	17458E	11675.2	34346.9	50119.6	175	1.167	2829	2.42	1.11	911	3740
JAPAN	78 6 13	5241N	17205W	16484.8	35135.5	49424.5	142	1.283	3103	2.42	1.08	3497	6600
JAPAN	79 5 26	5148N	17534E	11892.3	34430.5	50092.6	98	1.667	4013	2.41	0.69	3027	7040
JAPAN	78 6 21	5147N	17532E	11880.0	34429.5	50092.5	93	0.917	2205	2.41	0.71	655	2860
JAPAN	77 5 6	5201N	17702E	12455.5	34520.7	50071.5	172	1.617	3817	2.36	1.61	363	4180
JAPAN	79 5 1	5405N	17955E	14080.1	34525.5	50127.9	142	0.583	1372	2.33	0.75	828	2200
JAPAN	78 6 25	5146N	17757E	12792.4	34613.0	50031.2	107	0.250	587	2.35	0.71	73	860
USSR	78 6 20	5255N	17056E	11084.6	33955.6	50175.0	96	1.167	2734	2.34	0.39	29166	31900
JAPAN	79 5 26	5143N	17532E	11875.6	34436.2	50089.3	104	1.833	4253	2.32	0.83	2567	6620
JAPAN	78 6 21	5145N	17532E	11875.7	34432.9	50090.9	93	0.667	1518	2.28	0.68	682	2200
JAPAN	77 5 20	5201N	17217W	16226.4	35135.7	49342.4	113	1.833	4149	2.26	0.92	273	4420
USSR	77 6 21	5158N	17607E	12105.6	34455.5	50089.5	52	0.750	1685	2.25	0.78	9315	11000
JAPAN	77 5 6	5201N	17658E	12439.5	34515.6	50073.2	180	0.583	1309	2.24	1.76	11	1320
JAPAN	79 5 8	5245N	17215E	11016.6	34073.2	50166.0	153	0.667	1493	2.24	0.80	3347	4840
JAPAN	77 5 22	5302N	17053E	11116.7	33936.7	50176.4	131	2.583	5760	2.23	0.55	180	5940

*** NOTE *** THE ACCURACY OF POSITION AND LONAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-18 (continued). PACIFIC OCEAN PERCH, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE (LBS/FISH)	BYCATCH (LBS)	TOTAL CATCH (LBS)
		YY MM DD			7X 7Y 7Z							
USSR	M	77 620	5202N	17606W	15043.3 35002.5 49758.1	52.	0.433	965.	2.23	0.77	10035.	11000.
JAPAN	S	78 528	5236N	17214W	16417.2 35134.1 49431.7	169.	1.000	2226.	2.23	1.30	854.	3080.
USSR	M	78 620	5205N	17056E	11084.6 33955.6 50175.0	93.	0.417	919.	2.21	0.39	29881.	30800.
JAPAN	S	77 519	5258N	17213E	11061.3 34043.1 50170.0	159.	0.750	1628.	2.17	0.78	132.	1760.
JAPAN	S	79 5 8	5228N	17533E	11926.2 34358.8 50122.7	109.	1.833	3978.	2.17	0.73	7242.	11220.
JAPAN	S	79 513	5257N	17949E	14001.5 34534.2 50122.4	197.	1.500	3202.	2.13	2.45	538.	3740.
USSR	M	77 6 8	5151N	17548E	11975.8 34443.1 50090.3	52.	0.667	1397.	2.10	1.07	11903.	13200.
USSR	M	77 625	5158N	17608E	12112.0 34456.8 50089.2	49.	1.167	2444.	2.10	0.72	19556.	22000.
JAPAN	S	79 530	5209N	17502E	11700.0 34353.8 50117.9	115.	1.667	3477.	2.09	0.91	1143.	4020.
JAPAN	S	79 516	5404N	17946E	14015.9 34514.3 50125.6	180.	2.000	4160.	2.08	1.67	240.	4400.
JAPAN	S	77 425	5146N	17555E	12021.7 34456.8 50085.3	120.	0.667	1376.	2.06	1.35	245.	660.
USSR	M	78 624	5255N	17052E	11086.5 33950.8 50175.3	93.	0.667	3090.	2.06	0.36	14024.	15400.
JAPAN	S	79 528	5116N	17901E	13136.8 34729.8 49957.2	172.	1.500	3090.	2.06	1.23	3070.	6160.
JAPAN	S	80 4 3	5218N	17941W	13791.4 34746.2 49989.4	164.	1.250	2556.	2.04	1.01	1164.	3740.
JAPAN	S	77 6 7	5124N	17854E	13106.9 34711.9 49972.2	142.	0.500	1008.	2.02	0.67	92.	1100.
JAPAN	S	78 621	5145N	17747E	12726.8 34602.0 50035.1	145.	0.417	836.	2.01	1.01	484.	1320.
USSR	M	77 6 6	5151N	17553E	12011.0 34449.4 50066.6	49.	1.333	2655.	1.99	0.72	10545.	13200.
JAPAN	S	77 620	5154N	17553E	12013.1 34444.5 50091.0	77.	1.250	2421.	1.94	0.67	1979.	4400.
JAPAN	S	77 528	5122N	17035E	11157.2 33893.0 50017.6	148.	1.000	1910.	1.91	1.01	290.	2200.
JAPAN	S	79 510	5156N	17238W	16105.4 35131.9 49378.3	142.	1.417	2656.	1.87	0.85	644.	3300.
JAPAN	S	79 512	5229N	17258E	11028.5 34159.3 50154.5	115.	1.500	2809.	1.87	0.57	9511.	12320.
JAPAN	S	79 5 9	5156N	17240W	16096.1 35131.4 49382.9	148.	1.583	2952.	1.86	0.91	1008.	3760.
JAPAN	S	79 524	5129N	17951W	14048.9 34521.6 50126.2	197.	2.000	3718.	1.86	2.14	662.	4400.
JAPAN	S	79 524	5129N	17951W	13583.9 34793.8 49926.0	139.	0.750	1393.	1.86	0.68	1467.	2660.
JAPAN	S	79 526	5144N	17747E	12725.0 34603.4 50034.1	109.	0.833	1541.	1.85	0.71	1319.	2860.
JAPAN	S	77 529	5202N	17444E	11589.1 34343.5 50117.9	115.	0.563	1075.	1.84	0.81	25.	1100.
JAPAN	S	78 627	5150N	17730E	12626.9 34573.3 50048.6	69.	0.333	610.	1.83	0.50	270.	480.
JAPAN	S	79 510	5221N	17418E	11426.1 34275.7 50136.0	82.	1.500	2743.	1.83	0.59	1677.	4620.
JAPAN	S	79 523	5117N	17859E	13126.4 34726.2 49959.8	126.	0.917	1668.	1.82	0.93	1192.	2860.
JAPAN	S	77 525	5302N	17103E	11106.5 33946.8 50175.9	120.	1.167	2111.	1.81	0.55	89.	2200.
JAPAN	S	77 525	5141N	17532E	11879.6 34439.4 50387.7	98.	2.000	3581.	1.79	0.82	1479.	5060.
JAPAN	S	77 611	5116N	17906E	13167.5 34735.6 49953.6	137.	0.583	1039.	1.78	0.67	61.	1100.
JAPAN	S	78 629	5148N	17749E	12745.1 34600.1 50037.4	87.	2.583	4575.	1.77	0.53	3125.	7700.
JAPAN	S	77 523	5300N	17159E	11075.6 34021.5 50171.7	126.	2.333	4124.	1.77	0.46	276.	4400.
USSR	M	77 623	5159N	17608E	12113.1 34455.1 50090.0	52.	0.583	1014.	1.74	0.68	31986.	33000.
JAPAN	S	78 624	5148N	17738E	12674.7 34586.3 50042.7	95.	0.333	577.	1.73	0.79	63.	660.
JAPAN	S	78 622	5145N	17747E	12726.8 34602.0 50035.1	123.	0.417	719.	1.72	0.67	381.	1100.
USSR	M	77 625	5202N	17606W	15043.3 34502.5 49758.1	52.	0.417	715.	1.72	0.68	12485.	13200.
JAPAN	M	78 620	5143N	17807E	12850.4 34629.7 50022.7	77.	0.500	856.	1.71	0.35	18944.	19800.
USSR	M	78 615	5255N	17058E	11003.7 33958.0 50174.9	93.	0.333	565.	1.69	0.35	21435.	22000.
JAPAN	S	79 5 8	5245N	17210E	11019.0 34067.1 50166.5	153.	1.500	2491.	1.66	1.30	4109.	6600.
JAPAN	S	79 614	5145N	17531E	11873.7 34431.7 50091.2	104.	1.833	3000.	1.66	0.74	740.	3740.
USSR	M	77 6 4	5152N	17548E	11980.4 34441.5 50091.1	49.	0.917	1498.	1.63	0.82	7502.	8800.
JAPAN	S	77 619	5120N	17930W	13689.4 34827.1 49895.6	109.	1.333	2149.	1.61	0.61	51.	2200.
JAPAN	S	78 523	5238N	17226W	16371.9 35131.1 49465.3	167.	1.750	2793.	1.60	1.55	2707.	5500.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-18 (continued), PACIFIC OCEAN PERCH, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YR MO DD			7X 7Y 7Z	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
JAPAN	S	77 423	5217N	17525E	11855.2 34368.8 50117.2	164	1.150	1600	1.56	1.73	620	2420
JAPAN	S	79 514	5223N	17600E	12899.1 34559.7 50069.3	164	3.333	5210	1.56	0.76	3590	8600
JAPAN	S	79 514	5217N	17423E	11488.5 34295.9 50131.5	112	2.000	3124	1.56	0.85	5456	8580
JAPAN	S	79 5 7	5447N	17845E	13845.4 34313.6 50169.0	150	2.500	3901	1.56	1.45	3139	7040
USSR	M	77 626	5158N	17608E	12112.0 34456.8 50089.2	52	0.917	1420	1.55	0.83	3158C	3300C
JAPAN	S	80 5 1	5143N	17808E	12856.8 34831.0 50022.2	131	2.167	3333	1.54	0.91	2827	6160
JAPAN	S	79 428	5158N	17220W	16198.2 35135.3 49341.6	142	2.583	3948	1.54	1.26	2632	6600
JAPAN	S	79 520	5221N	17609E	12153.7 34418.4 50107.5	159	0.750	1132	1.51	1.57	408	1540
JAPAN	S	79 525	5144N	17746E	12718.6 34602.2 50034.6	153	0.500	747	1.49	2.00	1453	2200
JAPAN	S	77 624	5155N	17555E	12026.4 34445.3 50091.2	71	1.000	1491	1.49	0.67	1149	2640
JAPAN	S	79 429	5356N	17957E	14049.5 34548.2 50119.0	109	2.000	2952	1.48	1.64	128	3080
JAPAN	S	78 629	5224N	17427E	11483.5 34281.4 50135.8	118	0.917	3345	1.47	1.04	195	1540
JAPAN	S	77 6 1	5214N	17505E	11722.0 34348.6 50120.5	98	1.417	2061	1.46	0.83	359	2420
USSR	M	77 630	5157N	17605E	12091.8 34454.7 50089.4	55	0.500	726	1.45	0.59	1474	2200
JAPAN	S	78 627	5203N	17551E	12008.2 34426.7 50099.0	87	0.500	725	1.45	0.73	1035	1760
USSR	M	77 624	5158N	17608E	12112.0 34456.8 50089.2	52	0.417	590	1.42	0.96	6010	6600
USSR	M	77 6 3	5149N	17553E	12009.8 34452.7 50086.9	48	0.417	588	1.41	0.68	8212	8800
USSR	M	78 619	5255N	17058E	11083.7 33558.0 50174.9	93	1.583	2221	1.40	0.43	4379	6600
JAPAN	S	77 527	5315N	17045E	11167.1 33898.2 50178.6	148	1.500	2104	1.40	0.78	756	2860
JAPAN	S	79 5 7	5158N	17200W	16288.2 35137.8 49292.8	148	4.000	5004	1.40	1.13	996	6800
JAPAN	S	79 517	5306N	17102E	11122.6 33938.8 50176.6	98	0.417	581	1.40	0.64	299	280
JAPAN	S	79 520	5202N	17218W	16226.7 35135.5 49347.5	112	1.250	1729	1.38	1.38	537	2266
JAPAN	S	77 526	5314N	17046E	11162.3 33901.7 50178.4	142	1.583	2182	1.35	0.60	2878	5060
JAPAN	S	78 623	5147N	17747E	12730.4 34599.1 50037.3	83	0.417	574	1.38	0.63	306	880
JAPAN	S	77 629	5157N	17652E	12393.9 34514.4 50071.8	87	0.833	1131	1.35	0.70	3929	5060
JAPAN	S	79 5 1	5116N	17909E	13185.8 34739.1 49951.7	126	0.417	562	1.35	0.96	3178	3740
JAPAN	S	79 6 7	5220N	17415E	11407.8 34273.8 50136.1	137	1.333	1796	1.35	0.95	1282	3080
JAPAN	S	79 528	5206N	17503E	11705.3 34360.4 50115.5	131	0.333	448	1.34	1.23	212	660
USSR	M	78 626	5255N	17058E	11083.7 33958.0 50174.9	60	0.917	1225	1.34	0.54	4275	4400
JAPAN	S	79 523	5118N	17859E	13128.3 34725.1 49961.1	97	0.750	1001	1.33	0.91	979	1980
JAPAN	S	77 526	5315N	17047E	11166.5 33900.6 50178.5	142	1.083	1434	1.32	0.67	326	1760
USSR	M	77 627	5158N	17608E	12112.0 34456.8 50089.2	52	0.417	551	1.32	0.46	12649	13200
USSR	M	77 624	5202N	17606W	15043.3 35002.5 49758.1	52	0.500	654	1.31	0.70	21346	22000
JAPAN	S	78 520	5145N	17831E	13007.2 34656.6 50012.0	98	1.167	1511	1.30	1.05	3740	3740
USSR	M	77 619	5158N	17608E	12112.0 34456.8 50089.2	52	0.750	967	1.29	0.78	5633	6600
USSR	M	78 619	5255N	17058E	11083.7 33958.0 50174.9	93	1.500	1929	1.29	0.41	7971	9900
JAPAN	S	79 515	5254N	17055E	11081.8 33556.5 50174.9	235	5.500	6996	1.27	0.80	1144	8140
JAPAN	S	80 4 7	5212N	17521E	11823.6 34372.7 50114.8	156	1.000	1264	1.26	1.75	496	1760
JAPAN	S	77 5 3	5233N	17446E	11616.6 34288.5 50137.0	159	0.967	1220	1.26	0.70	2410	3630
USSR	M	77 619	5158N	17608E	12112.0 34456.8 50089.2	52	1.083	1367	1.26	0.88	5233	6600
USSR	M	78 623	5255N	17058E	11083.7 33958.0 50174.9	93	1.000	1260	1.26	0.38	24040	25300
JAPAN	S	79 5 3	5401N	17956E	14067.1 34535.9 50124.0	164	1.000	3770	1.26	1.79	843	4620
JAPAN	S	77 520	5253N	17208E	11043.6 34047.7 50169.1	165	0.667	839	1.26	0.53	41	880
JAPAN	S	77 611	5124N	17854E	13108.9 34711.9 49972.2	82	0.500	628	1.26	0.48	32	660
JAPAN	S	79 430	5230N	17336W	15987.4 35103.3 49589.1	148	2.000	2496	1.25	1.17	3224	5720

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-18 (continued). PACIFIC OCEAN PERCH, APRIL-JUNE 1977-80

NATION	VESSEL	DATE	LAT	LCNG	APPROX 7X	LOMAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	79 5 5	5221N	17618E	12213.8	34430.1	50104.7	131.	0.750	933.	1.24	0.61	3247.	4180.
JAPAN	S	79 5 8	5200N	17229W	16166.5	35133.5	49368.1	137.	1.500	1851.	1.23	0.76	1009.	2860.
JAPAN	S	78 6 25	5147N	17754E	12775.2	34607.8	50033.9	71.	0.750	917.	1.22	0.52	2383.	3300.
USSR	M	77 6 25	5202N	17606W	15043.3	35002.5	49758.1	52.	0.833	1006.	1.21	0.69	12192.	13200.
JAPAN	S	79 5 23	5145N	17746E	12720.4	34600.7	50035.6	156.	0.833	1007.	1.21	1.17	753.	1760.
USSR	M	76 6 16	5255N	17058E	11083.7	33958.0	50174.9	93.	0.667	803.	1.20	0.37	21197.	22000.
USSR	M	78 6 16	5255N	17058E	11083.7	33958.0	50174.9	93.	0.833	1002.	1.20	0.40	7798.	8800.
JAPAN	S	78 5 28	5236N	17214W	16417.2	35134.1	49431.7	164.	1.417	1697.	1.20	1.32	943.	2640.
USSR	M	78 6 7	5140N	17540E	11927.4	34451.0	50084.0	82.	0.667	797.	1.19	0.98	1403.	2200.
JAPAN	S	79 5 3	5215N	17612E	12162.3	34432.9	50101.8	126.	0.833	988.	1.19	1.47	11552.	12540.
JAPAN	S	77 4 28	5200N	17641E	12327.4	34495.5	50074.6	83.	0.633	750.	1.18	0.58	4596.	5346.
JAPAN	S	79 5 11	5157N	17204W	16265.6	35137.5	49300.1	126.	2.000	2344.	1.17	0.88	2860.	2860.
JAPAN	S	80 4 18	5220N	17428E	11488.7	34290.3	50133.3	164.	3.000	3459.	1.15	0.95	1821.	5280.
USSR	M	77 6 25	5152N	17549E	11986.6	34442.7	50090.8	60.	0.500	575.	1.15	0.71	3625.	4400.
JAPAN	S	79 6 12	5117N	17906E	13169.4	34734.4	49955.1	164.	1.667	1912.	1.15	1.10	508.	2420.
JAPAN	S	80 4 30	5202N	17551E	12007.2	34428.4	50098.2	109.	1.083	1240.	1.14	1.16	960.	2200.
JAPAN	S	79 5 5	5203N	17445E	11594.8	34343.0	50118.4	120.	1.000	1144.	1.14	0.86	2816.	3960.
USSR	M	77 6 22	5202N	17606W	15043.3	35002.5	49758.1	52.	0.500	571.	1.14	0.76	10429.	11000.
JAPAN	S	78 6 26	5146N	17755E	12779.7	34610.5	50032.2	75.	0.500	571.	1.14	0.51	2729.	3300.
USSR	M	78 6 16	5255N	17058E	11083.7	33958.0	50174.9	93.	0.667	751.	1.13	0.53	21249.	22000.
USSR	M	77 6 30	5158N	17608E	12112.0	34456.8	50089.2	52.	0.750	841.	1.12	0.57	1359.	2200.
JAPAN	S	79 6 17	5207N	17511E	11756.0	34368.8	50114.0	169.	2.667	2913.	1.09	1.65	827.	3740.
JAPAN	S	77 4 26	5208N	17656E	12439.4	34501.5	50080.4	122.	0.550	599.	1.09	1.25	1151.	1760.
USSR	M	77 6 18	5151N	17549E	11986.6	34444.4	50089.9	49.	0.583	635.	1.09	0.54	10365.	11000.
JAPAN	S	78 6 19	5143N	17808E	12856.8	34631.0	50022.2	77.	0.667	722.	1.08	0.46	16878.	17600.
USSR	M	77 6 26	5158N	17608E	12112.0	34456.6	50089.2	52.	0.417	449.	1.08	0.66	28151.	28600.
JAPAN	S	77 6 22	5153N	17555E	12024.9	34448.6	50089.5	71.	1.667	1738.	1.04	0.72	3762.	5500.
JAPAN	S	79 5 24	5130N	17954E	13493.9	34775.3	49938.8	156.	0.667	693.	1.04	0.37	1067.	1760.
JAPAN	S	79 5 10	5202N	17441E	11571.2	34339.7	50118.7	151.	0.750	777.	1.04	1.06	2083.	2860.
JAPAN	S	79 5 31	5146N	17532E	11875.8	34431.3	50091.7	98.	1.833	1898.	1.04	0.82	2082.	3960.
USSR	M	77 6 19	5152N	17549E	11986.6	34442.7	50090.8	49.	0.583	603.	1.03	0.76	3797.	4400.
JAPAN	S	78 6 24	5146N	17748E	12735.0	34601.5	50035.7	81.	0.250	258.	1.03	0.58	182.	440.
USSR	M	78 6 25	5255N	17058E	11083.7	33958.0	50174.9	93.	0.750	773.	1.03	0.46	25827.	26400.
JAPAN	S	79 5 31	5147N	17531E	11873.9	34428.4	50092.8	96.	1.000	1028.	1.03	0.79	952.	1980.
JAPAN	S	80 4 6	5205N	17458E	11674.0	34355.9	50116.2	197.	1.667	1695.	1.02	1.49	1825.	3520.
JAPAN	S	79 5 22	5201N	17956W	13641.5	34749.9	49975.5	137.	0.500	503.	1.01	0.84	157.	660.
JAPAN	S	77 5 21	5302N	17053E	11110.7	33936.7	50176.4	148.	3.167	3176.	1.00	0.86	124.	3300.
JAPAN	S	80 4 5	5206N	17456E	11661.7	34351.6	50117.4	197.	1.417	1421.	1.00	1.73	3199.	4620.
USSR	M	78 5 14	5115N	17917E	13232.9	34749.5	49944.8	126.	1.167	1150.	0.99	1.10	1050.	2200.
JAPAN	S	79 5 5	5402N	17955E	14065.4	34532.2	50125.2	191.	3.000	2926.	0.98	1.72	156.	3080.
JAPAN	S	78 6 19	5145N	17746E	12720.4	34600.7	50035.6	150.	0.333	324.	0.97	1.51	334.	660.
JAPAN	S	78 6 25	5144N	17808E	12858.7	34629.5	50023.3	87.	0.167	161.	0.97	0.58	81.	242.
JAPAN	S	79 6 10	5144N	17746E	12718.6	34602.2	50034.6	169.	0.833	805.	0.97	1.04	1615.	2420.
USSR	M	77 6 7	5151N	17548E	11979.8	34443.1	50090.3	49.	0.917	885.	0.97	0.69	7915.	8800.
JAPAN	S	78 6 27	5203N	17551E	12008.2	34426.7	50099.0	75.	0.750	720.	0.96	0.90	4780.	5500.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-19. PACIFIC OCEAN PERCH, JULY-SEPTEMBER 1977-80

NATION	VESSEL CLASS	DATE	YMHDD	LAT	LONG	APPROX 7X	APPROX 7Y	APPROX 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USK	M	77 7 3	5139N	17536E	11903.5	34447.6	50024.6	93.	0.083	1100.	13.20	1.07	1100.	2200.	
JAPAN	S	77 7 25	5452N	17839E	13835.5	34290.4	50171.6	148.	0.750	7975.	10.63	1.52	1265.	9240.	
JAPAN	S	78 7 4	5147N	17517E	11785.7	34410.8	50097.4	98.	0.500	4834.	9.67	0.68	6.	4840.	
JAPAN	S	78 7 7	5143N	17808E	12056.6	34631.0	50022.2	98.	0.500	3748.	7.50	0.71	212.	3960.	
JAPAN	S	78 7 4	5151N	17517E	11785.4	34404.1	50100.5	137.	0.583	4305.	7.30	0.83	95.	4400.	
JAPAN	S	79 9 21	5204N	17445E	11594.5	34341.2	50115.0	66.	1.000	5920.	5.92	1.19	680.	6600.	
JAPAN	S	78 7 4	5147N	17517E	11789.7	34410.8	50097.4	112.	0.333	1750.	5.25	0.77	10.	1760.	
JAPAN	S	78 7 7	5147N	17748E	12736.8	34600.3	50036.8	87.	0.333	1652.	4.90	0.58	2748.	4400.	
JAPAN	S	78 7 3	5205N	17620E	12192.5	34460.4	50090.9	95.	0.667	2770.	4.15	0.65	90.	2860.	
JAPAN	S	79 7 25	5236N	17444E	11010.5	34280.0	50139.2	137.	0.667	10880.	4.00	0.96	7600.	18480.	
JAPAN	S	78 7 2	5149N	17732E	12636.0	34577.3	50046.6	85.	0.500	2007.	4.01	0.59	633.	2640.	
JAPAN	S	78 7 4	5213N	17943W	13762.0	34750.4	49983.7	142.	0.833	3164.	3.80	1.25	136.	3300.	
JAPAN	S	77 7 12	5414N	17935E	13993.6	34474.7	50140.7	148.	0.667	2503.	3.75	1.31	577.	3080.	
JAPAN	S	79 7 25	5237N	17446E	11626.1	34280.7	50139.3	159.	0.333	8001.	3.43	1.07	1239.	9240.	
JAPAN	S	78 8 30	5400N	17952E	14035.9	34532.1	50124.3	186.	0.583	1891.	3.24	1.59	309.	2200.	
JAPAN	S	78 8 19	5402N	17955E	14065.4	34532.2	50125.2	164.	2.000	6217.	3.11	1.61	383.	6600.	
USK	M	77 7 2	5158N	17608E	12112.0	34456.8	50089.2	107.	0.333	1003.	3.01	0.86	9997.	11000.	
JAPAN	S	79 7 26	5451N	17840E	13836.1	34294.8	50171.2	145.	0.583	1728.	2.96	1.38	912.	2840.	
JAPAN	S	78 7 6	5148N	17727E	12604.3	34572.5	50047.9	90.	0.667	1895.	2.84	0.62	2065.	3960.	
JAPAN	S	78 8 28	5435N	17912E	13953.2	34387.3	50159.5	232.	0.667	1758.	2.64	2.81	442.	2200.	
JAPAN	S	78 7 5	5155N	17635E	12281.5	34496.0	50076.6	87.	0.667	1859.	2.48	0.72	781.	2640.	
JAPAN	S	78 7 31	5203N	17208W	16276.9	35116.8	49326.0	68.	1.750	4302.	2.46	0.69	50698.	55000.	
JAPAN	S	78 7 2	5206N	17620E	12200.0	34458.7	50091.7	96.	1.167	2820.	2.42	0.69	460.	3300.	
JAPAN	S	77 7 4	5147N	17748E	12736.8	34600.3	50036.8	77.	0.500	1168.	2.34	0.46	5432.	6600.	
JAPAN	S	80 8 17	5159N	17214W	16230.3	35136.2	49329.9	109.	1.833	4256.	2.32	0.97	4924.	9240.	
JAPAN	S	78 7 6	5146N	17747E	12726.6	34600.5	50036.2	84.	0.250	563.	2.25	0.63	2737.	3300.	
JAPAN	S	78 8 25	5440N	17911E	13973.7	34372.5	50162.4	191.	1.583	3305.	2.09	1.76	2195.	5500.	
JAPAN	S	78 7 7	5147N	17748E	12736.8	34600.3	50036.8	67.	0.333	691.	2.07	0.55	5909.	6600.	
JAPAN	S	78 7 6	5158N	17752E	12784.5	34589.0	50046.7	90.	0.667	1335.	2.00	0.57	3065.	4400.	
JAPAN	S	78 7 6	5149N	17733E	12644.4	34578.6	50046.1	75.	0.333	664.	1.99	0.39	4176.	4840.	
JAPAN	S	77 7 6	5155N	17920W	13790.8	34822.7	49910.3	131.	0.833	1644.	1.97	0.70	1656.	3300.	
JAPAN	S	78 7 1	5149N	17731E	12631.6	34576.1	50047.1	74.	2.000	3853.	1.93	0.56	2747.	6600.	
JAPAN	S	78 7 3	5154N	17637E	12293.0	34500.1	50074.9	94.	0.250	462.	1.85	0.81	198.	660.	
JAPAN	S	77 7 11	5415N	17933E	14006.0	34459.7	50145.0	142.	1.500	2737.	1.82	1.34	343.	3080.	
JAPAN	S	78 7 22	5239N	17216W	16423.7	35133.5	49445.0	191.	1.000	1774.	1.77	2.53	1526.	3300.	
JAPAN	S	77 7 5	5149N	17748E	12740.6	34597.4	50039.0	98.	1.250	2191.	1.75	0.60	1109.	3300.	
JAPAN	S	78 8 24	5359N	17956E	14057.4	34540.3	50122.1	164.	2.500	4289.	1.72	1.63	111.	4400.	
JAPAN	S	78 7 10	5143N	17812W	14193.6	34883.8	49268.5	142.	1.833	3145.	1.72	1.11	2355.	5500.	
JAPAN	S	79 7 24	5236N	17446E	11624.1	34282.6	50138.8	153.	2.750	4548.	1.65	0.92	6232.	10780.	
JAPAN	S	77 7 10	5418N	17932E	13994.3	34460.6	50144.4	126.	1.417	2328.	1.64	1.17	312.	2840.	
JAPAN	S	79 7 24	5237N	17444E	11610.5	34280.0	50139.2	153.	2.500	3934.	1.57	1.07	2886.	6820.	
JAPAN	S	79 7 26	5247N	17446E	11651.2	34260.7	50144.9	153.	2.000	2988.	1.49	0.92	312.	3300.	
JAPAN	S	76 7 1	5149N	17735E	12657.2	34581.1	50045.2	74.	0.917	1312.	1.43	0.42	7488.	8600.	
JAPAN	S	78 7 22	5203N	17201W	16306.3	35137.5	49508.7	77.	1.000	1309.	1.31	0.49	42691.	44000.	
JAPAN	S	78 7 9	5156N	17636E	12289.3	34495.6	50077.1	87.	0.500	650.	1.30	0.71	890.	1540.	

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-19 (continued). PACIFIC OCEAN PERCH, JULY-SEPTEMBER 1977-80

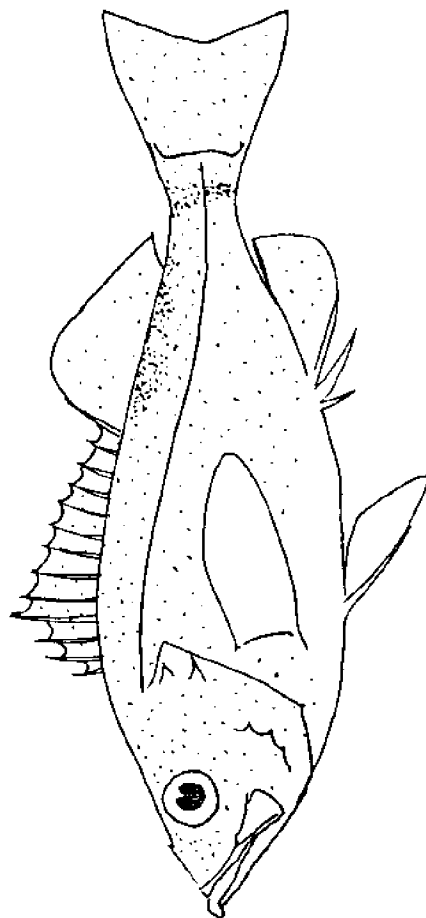
NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE (LBS/FT)	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	78 7 2	5205N	17623E	12205.0 34461.7 50090.5	89.	1.083	1405.	1.30	0.73	355.	1760.
JAPAN	S	78 7 1	5142N	17738E	12674.7 34586.3 50042.7	92.	0.250	322.	1.29	0.65	998.	1320.
JAPAN	S	78 7 0	5146N	17754E	12773.3 34609.3 50032.6	72.	0.833	1068.	1.28	0.46	332.	4400.
JAPAN	S	78 8 20	5227N	17338E	15962.3 35103.0 49585.0	164.	2.083	2661.	1.28	1.04	2839.	5500.
JAPAN	S	79 7 27	5236N	17444E	11616.5 34280.0 50135.2	148.	2.917	3570.	1.22	0.87	2150.	5720.
JAPAN	S	78 7 3	5146N	17750E	12747.7 34609.3 50034.7	79.	0.583	704.	1.21	0.56	396.	1100.
JAPAN	S	78 8 24	5400N	17952E	14035.9 34532.1 50124.3	159.	3.500	4207.	1.20	1.65	193.	4400.
USSR	M	77 7 4	5158N	17608E	12112.0 34456.8 50089.2	52.	0.667	797.	1.20	0.99	5803.	6600.
JAPAN	S	77 7 4	5425N	17925E	13984.7 34432.8 50150.9	131.	1.333	1587.	1.19	1.14	173.	1760.
JAPAN	S	79 9 22	5236N	17442E	11600.9 34273.5 50140.7	219.	3.667	4144.	1.13	1.05	2456.	6600.
JAPAN	S	79 7 25	5247N	17444E	11637.4 34258.1 50145.3	153.	2.917	3158.	1.08	0.95	1902.	5060.
JAPAN	S	78 8 19	5355N	17956E	14038.1 34548.9 50118.3	169.	3.500	3781.	1.08	1.66	179.	3960.
JAPAN	S	79 7 27	5236N	17444E	11610.5 34280.0 50139.2	137.	2.833	2986.	1.05	0.97	26032.	31020.
JAPAN	S	78 8 26	5435N	17911E	13948.7 34385.8 50159.6	208.	1.167	1214.	1.04	0.51	6486.	7700.
JAPAN	S	78 7 3	5205N	17624E	12223.1 34467.2 50088.6	96.	0.750	744.	0.99	0.73	136.	880.
JAPAN	S	78 8 11	5454N	17833E	13808.9 34273.5 50172.9	180.	2.083	2019.	0.97	1.58	181.	2200.
JAPAN	S	78 9 13	5136N	17543E	11945.2 34457.9 50081.3	109.	1.000	920.	0.92	1.47	1060.	1980.
JAPAN	S	77 7 9	5426N	17925E	13990.0 34430.3 50151.6	131.	0.583	523.	0.90	1.32	137.	660.
JAPAN	S	78 8 21	5233N	17200E	16496.9 35136.4 49406.6	203.	1.833	1500.	0.82	1.42	3340.	4840.
JAPAN	S	80 8 17	5159N	17219E	16207.6 35135.4 49341.9	120.	2.167	1719.	0.79	0.98	4881.	6600.
JAPAN	S	78 8 19	5402N	17559E	14091.6 34538.2 50124.0	175.	2.083	1634.	0.78	1.64	566.	2200.
JAPAN	S	79 7 22	5228N	17933E	13877.3 34742.8 49998.3	180.	2.500	1927.	0.77	1.50	2253.	4180.
JAPAN	S	78 7 22	5236N	17216E	16416.5 35133.6 49442.1	219.	3.833	2833.	0.74	1.55	1347.	4180.
JAPAN	S	79 9 15	5149N	17519E	11801.5 34410.0 50098.3	164.	3.333	2434.	0.73	1.60	1086.	3320.
JAPAN	S	78 8 26	5436N	17912E	13952.5 34384.7 50160.1	230.	0.917	651.	0.71	3.77	1549.	2200.
JAPAN	S	78 7 5	5159N	17648E	12371.2 34506.0 50075.2	90.	0.750	527.	0.70	0.83	793.	1320.
JAPAN	S	79 9 2	5237N	17221E	16390.0 35132.5 49451.0	175.	1.333	921.	0.69	1.17	1279.	2200.
JAPAN	S	78 7 2	5149N	17733E	12644.4 34578.6 50046.1	77.	1.333	859.	0.64	0.59	1781.	2640.
USSR	M	77 7 2	5158N	17608E	12112.0 34456.8 50089.2	107.	1.500	965.	0.64	0.89	7635.	8600.
JAPAN	S	78 7 4	5208N	17944E	13739.5 34755.6 49977.3	138.	2.500	1607.	0.64	1.26	813.	2420.
JAPAN	S	79 7 23	5206N	17557E	12442.1 34506.1 50078.2	191.	1.667	1062.	0.64	1.52	3778.	4840.
JAPAN	S	79 9 27	5234N	17443E	11600.1 34282.7 50138.2	164.	2.250	1407.	0.63	0.91	1893.	3300.
JAPAN	S	78 7 4	5211N	17542E	13761.9 34754.2 49980.2	134.	1.833	1126.	0.61	1.17	414.	1540.
JAPAN	S	79 7 25	5236N	17443E	11603.7 34278.8 50139.4	137.	2.667	1591.	0.60	0.98	16669.	18260.
JAPAN	S	77 7 15	5426N	17927E	14003.0 34433.3 50151.2	98.	1.250	739.	0.59	0.59	2121.	2860.
JAPAN	S	77 7 13	5423N	17927E	13987.4 34440.8 50149.1	87.	1.333	772.	0.58	0.62	3188.	3960.
JAPAN	S	78 7 1	5149N	17735E	12657.2 34581.3 50045.2	72.	0.750	428.	0.57	0.41	8372.	8000.
JAPAN	S	77 7 12	5424N	17927E	13992.8 34438.3 50149.8	98.	1.000	515.	0.52	0.83	365.	880.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-20. PACIFIC OCEAN PERCH, OCTOBER-DECEMBER 1977-80

NATION	VESSEL CLASS	DATE	YR/MO	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	801212		52°31N	172°10E	11035.7	34054.4	50168.3	120.	0.833	3921.	4.71	0.52	18079.	22000.
JAPAN	S	7910 1		52°30N	178°22W	14849.2	34547.1	50156.1	142.	0.667	2034.	3.05	0.71	166.	2200.
JAPAN	S	8012 3		52°18N	174°00E	11320.0	34256.6	50139.1	145.	1.583	3245.	2.05	0.65	2255.	5500.
JAPAN	S	7812 4		52°37N	172°27W	16361.9	35130.9	49464.8	142.	1.083	1649.	1.52	1.90	551.	2200.
JAPAN	S	781123		52°37N	172°27W	16361.9	35130.9	49464.8	186.	1.833	2512.	1.37	1.98	1008.	3520.
JAPAN	S	8011 7		52°35N	172°12E	11049.2	34048.3	50169.3	126.	0.500	537.	1.07	0.69	13983.	14520.
JAPAN	S	801212		52°31N	172°07E	11044.1	34046.4	50169.2	104.	2.000	1719.	0.86	0.56	16981.	19800.
JAPAN	S	801211		52°33N	172°12E	11041.6	34052.6	50168.7	115.	1.500	1286.	0.86	0.62	14114.	15400.
JAPAN	S	801211		52°30N	172°04E	11035.6	34049.1	50168.6	118.	1.917	1603.	0.84	1.96	37997.	39600.
JAPAN	S	7910 1		54°00N	178°39W	14824.2	34578.7	50136.1	169.	1.000	746.	0.75	0.60	134.	860.
KOREA	M	801031		52°10N	172°02W	16336.6	35137.3	49330.2	92.	1.583	1162.	0.73	2.00	22378.	23540.
JAPAN	S	781126		52°37N	172°26W	16366.6	35131.2	49462.5	191.	1.750	1247.	0.71	1.50	2053.	3300.
JAPAN	S	801212		52°39N	172°05E	11032.1	34052.5	50168.2	131.	2.250	1455.	0.65	0.40	20545.	22000.
JAPAN	S	781030		52°37N	171°02E	11088.7	33958.5	50175.1	124.	3.333	2138.	0.64	4.40	15462.	17600.
JAPAN	S	801013		51°46N	177°44E	12705.4	34596.8	50037.7	104.	4.167	2671.	0.64	0.92	23729.	26400.
JAPAN	S	791030		51°30N	176°48W	14680.0	34984.9	49746.3	191.	3.500	1941.	0.55	0.61	4659.	6600.
JAPAN	S	781122		52°37N	172°26W	16366.6	35131.2	49462.5	186.	1.583	854.	0.54	1.72	1346.	2200.
JAPAN	S	7812 3		52°30N	172°27W	16367.2	35130.8	49467.6	186.	1.917	1024.	0.53	1.70	1176.	2200.
JAPAN	S	801211		52°30N	172°08E	11034.6	34051.6	50168.4	109.	2.000	1052.	0.53	0.74	55048.	56100.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***



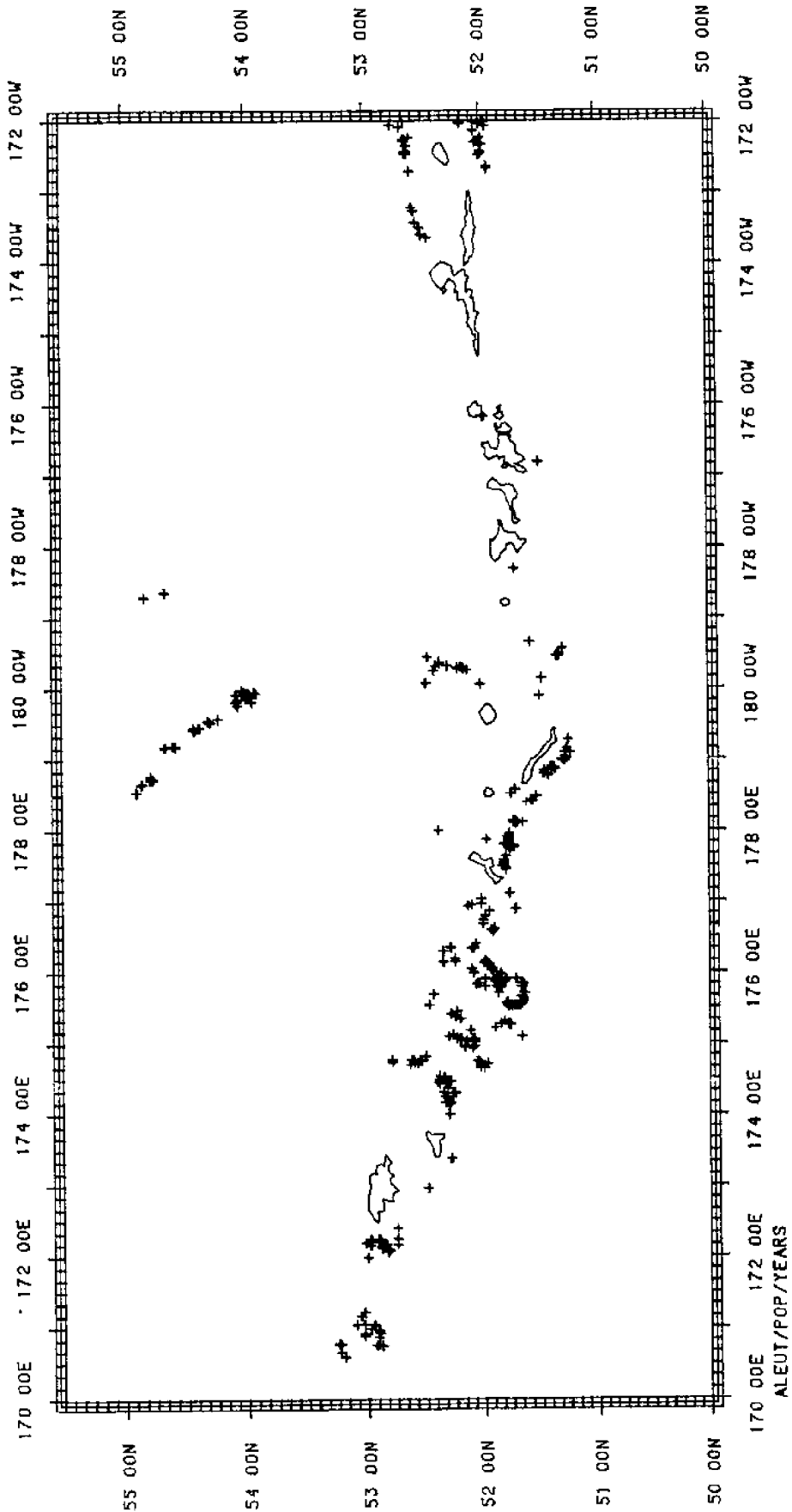


FIGURE B-4. TRAWLING LOCATIONS FOR PACIFIC OCEAN PERCH, ALL MONTHS, 1977-80

TABLE B-21. OTHER ROCKFISH, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE (LBS/FISH)	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	79 225	5158N	17204W	16270.4	35137.4	49302.8	74	0.333	925	2.78	1.83	43075	44000
USSR	M	79 3 5	5157N	17200W	16283.4	35137.8	49290.1	74	0.500	727	1.45	1.08	25673	26400
USSR	M	79 116	5139N	17537E	11905.4	34448.9	50084.3	101	0.750	834	1.12	0.89	4222	5060
USSR	M	79 3 8	5200N	17205W	16275.7	35137.3	49310.6	74	0.667	726	1.09	2.86	43274	44000
USSR	M	79 116	5138N	17535E	11897.6	34448.0	50084.1	98	1.000	1060	1.06	0.96	18080	19140
JAPAN	H	79 3 2	5234N	17316W	16108.6	35112.7	49561.0	153	0.250	263	1.05	1.84	2531	2794
JAPAN	S	79 212	5236N	17324W	16078.5	35108.2	49582.1	235	1.917	1809	0.94	3.56	3757	5566
USSR	M	79 3 2	5157N	17200W	16283.4	35137.8	49290.1	69	0.583	543	0.93	1.76	5657	57200
USSR	M	79 3 7	5150N	17206W	16228.9	35137.5	49286.5	80	0.833	656	0.79	1.28	54344	55000
USSR	M	78 327	5140N	17536E	11903.5	34446.0	50085.4	118	1.000	750	0.75	0.91	12450	13200
USSR	M	79 226	5200N	17207W	16266.7	35137.1	49315.5	74	0.500	361	0.72	1.36	43639	44000
JAPAN	S	79 2 2	5236N	17324W	16078.5	35108.2	49582.1	241	2.000	1442	0.72	6.23	1849	3291
USSR	M	79 3 6	5157N	17200W	16283.4	35137.8	49290.1	71	0.583	361	0.62	0.87	45839	46200
JAPAN	M	79 3 3	5235N	17320W	16093.6	35110.5	49371.6	142	0.167	101	0.61	1.03	1043	1144
USSR	M	79 312	5159N	17218W	16212.1	35135.6	49339.5	107	0.833	494	0.60	1.29	26342	26840
USSR	M	78 328	5138N	17534E	11691.6	34446.7	50084.5	115	1.417	832	0.59	0.86	21168	22000
JAPAN	S	79 2 1	5236N	17312W	16132.7	35114.1	49558.4	252	2.000	1163	0.58	7.05	2095	3258
JAPAN	M	79 313	5232N	17329W	16033.0	35106.5	49581.1	120	0.500	288	0.58	1.05	1208	1496
JAPAN	S	78 318	5222N	17526E	11668.8	34360.9	50120.4	252	3.000	1670	0.56	3.32	13730	15400
USSR	M	78 328	5138N	17540E	11927.3	34454.2	50082.3	112	1.583	871	0.55	0.98	22229	23100
JAPAN	M	79 3 3	5233N	17326W	16053.2	35107.9	49578.0	137	0.167	88	0.53	1.20	4422	4510

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

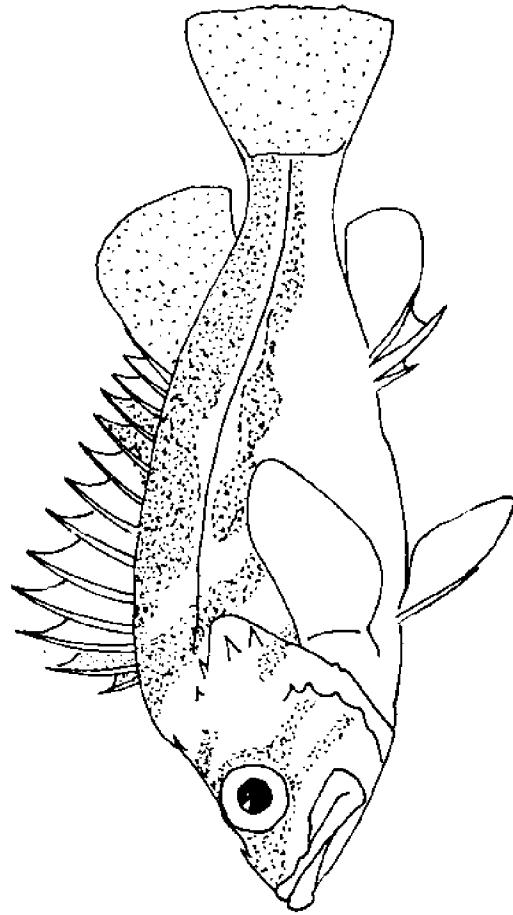


TABLE B-22. OTHER ROCKFISH, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	APPROX 7Y	PULSE 7Z	RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	78 630	5149N	17732E	12638.0	34577.3	50046.8	50046.8	77.	0.167	5148.	30.89	0.63	1012.	6160.
JAPAN	S	78 620	5143N	17807E	12850.4	34629.7	50022.7	50022.7	77.	0.500	14966.	29.93	0.76	4834.	19800.
USSR	M	77 611	5153N	17547E	11974.7	34438.5	50092.3	50092.3	46.	0.333	9946.	29.84	0.75	23054.	35000.
JAPAN	S	78 619	5139N	17808E	12856.8	34631.0	50022.2	50022.2	77.	0.667	15027.	22.54	0.79	2573.	17600.
JAPAN	S	78 628	5139N	17551E	11993.5	34466.3	50079.2	50079.2	96.	0.417	7649.	18.84	0.93	20751.	29600.
USSR	M	77 6 3	5143N	17555E	12019.2	34464.9	50081.1	50081.1	82.	0.500	8774.	17.55	0.73	26.	8800.
USSR	M	77 613	5154N	17543E	11950.3	34431.8	50094.4	50094.4	85.	0.750	13014.	17.35	0.75	13386.	26400.
USSR	M	77 524	5203N	17559E	12059.7	34436.9	50096.4	50096.4	56.	0.583	9787.	16.78	0.76	12213.	22000.
USSR	M	77 6 3	5153N	17549E	11987.3	34441.1	50091.6	50091.6	61.	0.750	11798.	15.73	0.72	14602.	26400.
JAPAN	S	78 622	5144N	17808E	12852.7	34629.5	50023.3	50023.3	77.	0.583	8653.	14.83	0.75	9900.	22000.
USSR	M	77 630	5153N	17553E	12012.3	34446.1	50090.2	50090.2	63.	0.500	6832.	13.68	0.77	15168.	22000.
USSR	M	77 527	5200N	17534E	11897.4	34416.3	50102.0	50102.0	55.	0.500	6632.	13.26	0.59	15368.	22000.
USSR	M	77 628	5152N	17547E	11974.1	34440.2	50091.4	50091.4	101.	0.667	7735.	11.60	0.80	7665.	15400.
JAPAN	S	78 627	5141N	17812E	12278.3	34632.7	50017.8	50017.8	81.	0.250	2763.	11.05	0.80	1197.	3960.
USSR	M	77 613	5151N	17554E	12017.3	34450.7	50080.2	50080.2	55.	0.233	2455.	10.52	0.73	6345.	8800.
JAPAN	S	78 619	5143N	17808E	12856.8	34631.0	50022.2	50022.2	79.	0.250	2580.	10.32	0.82	940.	3520.
USSR	M	77 531	5152N	17547E	11974.1	34440.2	50091.4	50091.4	55.	0.667	6356.	9.53	0.68	6844.	13200.
USSR	M	78 519	5159N	17202W	16284.2	35137.6	49300.5	49300.5	71.	0.833	7893.	9.47	1.04	18507.	26400.
USSR	M	77 6 9	5153N	17544E	11956.0	34434.8	50093.3	50093.3	44.	0.583	5518.	9.46	0.61	16402.	22000.
USSR	M	77 531	5152N	17546E	11967.9	34432.9	50091.8	50091.8	55.	0.750	6804.	9.07	0.64	1996.	8800.
JAPAN	S	77 531	5150N	17556E	12025.1	34454.8	50086.7	50086.7	71.	0.917	8244.	8.99	0.79	1656.	9900.
USSR	M	77 6 2	5153N	17549E	11987.3	34441.1	50091.6	50091.6	68.	0.583	5244.	8.99	0.71	5756.	11000.
USSR	M	77 514	5150N	17555E	12022.9	34453.6	50087.0	50087.0	71.	0.467	4177.	8.95	0.70	9023.	13200.
JAPAN	S	77 628	5200N	17644E	12346.9	34499.3	50077.7	50077.7	89.	0.267	2235.	8.38	0.63	471.	2706.
JAPAN	S	79 5 1	5128N	17848E	13075.4	34699.7	49981.1	49981.1	126.	0.583	4616.	7.91	0.91	16264.	20900.
USSR	M	77 525	5208N	17557E	12052.9	34425.8	50101.0	50101.0	55.	0.750	5932.	7.78	0.60	2968.	8800.
USSR	M	77 613	5154N	17543E	11950.3	34431.8	50094.4	50094.4	85.	0.500	3768.	7.54	0.77	632.	4400.
USSR	M	77 526	5204N	17557E	12048.0	34432.7	50097.8	50097.8	55.	0.667	4892.	7.34	0.61	6108.	11000.
USSR	M	77 628	5152N	17547E	11974.1	34440.2	50091.4	50091.4	55.	0.333	2440.	7.32	0.78	4160.	6600.
USSR	M	77 614	5153N	17547E	11974.7	34438.5	50092.3	50092.3	82.	0.750	5304.	7.07	0.72	3496.	8800.
USSR	M	77 611	5153N	17547E	11974.7	34438.5	50092.3	50092.3	46.	0.333	2298.	6.89	0.66	8702.	11000.
JAPAN	S	77 428	5200N	17641E	12327.4	34495.5	50078.8	50078.8	83.	0.633	4189.	6.61	0.64	1157.	5346.
USSR	M	77 612	5153N	17547E	11974.7	34438.5	50092.3	50092.3	46.	0.250	1639.	6.55	0.65	7161.	8800.
JAPAN	S	77 429	5140N	17552E	11995.8	34466.0	50079.7	50079.7	83.	0.667	4321.	6.46	1.25	4479.	8800.
USSR	M	77 530	5152N	17547E	11974.1	34440.2	50091.4	50091.4	55.	0.550	3529.	6.42	0.73	5271.	8800.
JAPAN	S	78 626	5146N	17755E	12779.7	34610.5	50032.2	50032.2	72.	0.417	2616.	6.28	0.73	684.	3500.
JAPAN	S	77 6 5	5150N	17556E	12025.1	34454.8	50066.7	50066.7	66.	0.333	2078.	6.23	0.65	1442.	3520.
JAPAN	S	79 5 9	5215N	17609E	12142.4	34429.0	50102.8	50102.8	79.	0.167	1038.	6.23	0.96	282.	1120.
USSR	M	77 618	5151N	17550E	11992.3	34445.6	50089.6	50089.6	55.	0.200	1216.	6.08	0.94	9784.	11000.
JAPAN	S	78 618	5144N	17807E	12852.4	34628.3	50023.8	50023.8	72.	0.500	3023.	6.05	0.74	1377.	4400.
JAPAN	S	78 627	5203N	17551E	12008.2	34426.7	50099.0	50099.0	75.	0.750	4409.	5.88	0.86	1091.	5500.
USSR	M	77 6 9	5153N	17544E	11956.0	34434.8	50093.3	50093.3	44.	0.333	1938.	5.81	0.63	15662.	17600.
USSR	M	77 627	5151N	17551E	11996.5	34446.9	50089.2	50089.2	56.	0.583	3011.	5.16	0.60	29989.	33000.
USSR	M	77 6 3	5151N	17548E	11979.8	34443.1	50090.3	50090.3	57.	0.850	4273.	5.03	0.68	26727.	33000.
JAPAN	S	78 626	5146N	17755E	12775.7	34610.5	50032.2	50032.2	75.	0.500	2467.	4.93	0.73	833.	3300.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN - USE WITH CAUTION***

TABLE B-22 (continued), OTHER ROCKFISH, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	79 511	5218N	17409E	11372.5 34270.0 50136.2	98.	1.833	7982.	4.35	0.83	26778.	34760.
USSR	H	78 4 5	5159N	17540E	11927.3 34452.6 50083.2	112.	0.500	2107.	4.21	0.86	25393.	27500.
JAPAN	S	78 620	5143N	17807E	12850.4 34629.7 50022.7	101.	0.500	2037.	4.07	0.76	823.	2860.
USSR	H	77 530	5206N	17558E	12056.8 34430.5 50099.1	71.	0.417	1664.	3.99	0.59	536.	2200.
JAPAN	S	78 620	5142N	17808E	12854.9 34632.4 50021.0	77.	0.250	995.	3.98	0.97	105.	1100.
USSR	M	78 4 6	5140N	17534E	11891.5 34443.5 50086.1	119.	1.333	5228.	3.92	0.77	27772.	33000.
JAPAN	S	78 629	5148N	17749E	12745.1 34600.1 50037.4	90.	0.667	2585.	3.88	0.74	1815.	4400.
JAPAN	S	79 6 6	5217N	17620E	12215.1 34439.7 50100.0	208.	0.917	3466.	3.78	1.31	3134.	6600.
JAPAN	S	78 618	5142N	17812E	12880.3 34637.3 50018.9	79.	0.500	1820.	3.64	0.84	380.	2200.
JAPAN	S	78 611	5141N	17812E	12876.3 34638.7 50017.8	91.	0.833	2985.	3.58	0.75	315.	3300.
JAPAN	S	78 623	5144N	17807E	12852.4 34628.3 50023.8	74.	0.333	1193.	3.58	0.77	2107.	3300.
JAPAN	S	80 430	5159N	17555E	12029.9 34438.6 50094.4	82.	1.333	4618.	3.46	0.97	7042.	11660.
USSR	H	77 530	5152N	17547E	11974.1 34440.2 50091.4	55.	0.867	2846.	3.28	0.84	5954.	8800.
USSR	M	77 627	5151N	17551E	11994.5 34446.9 50089.2	58.	0.583	1816.	3.11	0.87	24584.	26400.
JAPAN	S	78 625	5147N	17754E	12775.2 34607.8 50033.9	71.	0.750	2311.	3.06	0.84	989.	3300.
USSR	M	77 529	5226N	17538E	11955.9 34369.0 50120.0	71.	0.667	1999.	3.00	0.62	201.	2200.
USSR	M	77 6 1	5151N	17549E	11986.1 34444.4 50085.9	55.	0.200	583.	2.92	0.69	10417.	11000.
USSR	M	77 529	5226N	17542E	11982.8 34374.2 50119.0	71.	0.467	1299.	2.76	0.66	3101.	4400.
JAPAN	S	79 5 5	5203N	17445E	11594.8 34343.0 50116.4	120.	1.000	2640.	2.64	1.1E	1320.	3960.
JAPAN	S	78 619	5143N	17806E	12844.1 34628.5 50023.2	87.	0.250	636.	2.54	0.83	464.	1100.
USSR	M	77 6 6	5151N	17554E	12017.3 34450.7 50088.2	49.	0.533	1323.	2.48	0.67	14077.	15400.
JAPAN	S	79 512	5216N	17418E	11427.5 34285.1 50133.1	115.	0.583	1416.	2.43	1.32	5624.	7040.
USSR	M	78 421	5152N	17544E	11955.5 34436.4 50092.5	57.	0.750	1820.	2.43	0.65	37780.	39800.
USSR	M	77 624	5152N	17547E	11974.1 34440.2 50091.4	55.	1.000	2378.	2.32	0.90	24022.	26400.
USSR	M	77 619	5154N	17608M	14999.5 35005.8 49743.9	49.	1.417	3264.	2.30	0.82	16536.	19800.
USSR	M	77 526	5204N	17557E	12048.0 34432.7 50097.8	55.	1.333	3053.	2.29	0.63	3547.	6600.
JAPAN	S	79 515	5239N	17231E	11001.3 34105.5 50162.1	185.	0.500	1142.	2.28	3.21	1718.	2860.
JAPAN	S	79 5 5	5221N	17618E	12213.8 34430.1 50104.7	131.	0.750	1706.	2.27	1.46	2474.	4180.
JAPAN	S	79 522	5120N	17932M	13677.3 34824.8 49897.3	150.	0.667	1508.	2.26	1.75	5932.	7040.
JAPAN	S	79 5 2	5128N	17851E	13058.1 34703.3 49979.2	90.	1.167	2612.	2.24	0.88	17408.	20020.
USSR	M	77 621	5151N	17550E	11992.3 34445.6 50089.6	55.	0.250	550.	2.20	1.45	19250.	19600.
USSR	M	78 416	5153N	17556E	12031.2 34449.9 50089.2	68.	1.083	2372.	2.19	0.86	3788.	6160.
USSR	M	77 615	5153N	17546E	11968.5 34437.3 50092.6	55.	0.417	911.	2.19	0.71	12289.	13200.
JAPAN	S	79 6 7	5217N	17621E	12225.7 34441.0 50100.5	219.	1.500	3220.	2.15	3.91	2280.	5500.
USSR	M	77 527	5200N	17535E	11903.7 34411.5 50101.7	55.	0.417	890.	2.13	0.64	1310.	2260.
JAPAN	S	79 524	5145N	17747E	12726.8 34602.0 50035.1	159.	0.500	1024.	2.05	2.77	2716.	3740.
JAPAN	S	79 525	5144N	17746E	12718.6 34602.2 50034.6	153.	0.500	1023.	2.05	1.55	1177.	2200.
USSR	M	77 615	5151N	17549E	11986.1 34444.4 50089.9	46.	0.550	1093.	1.99	0.88	9907.	11000.
JAPAN	S	78 610	5200N	17200M	16298.0 35137.7 49298.2	64.	0.750	1470.	1.96	1.15	1830.	3300.
JAPAN	S	77 629	5157N	17652E	12393.9 34514.4 50071.8	87.	0.833	1563.	1.88	0.84	3497.	5060.
USSR	M	77 6 4	5151N	17548E	11975.8 34443.1 50090.3	57.	0.563	1037.	1.78	1.11	14363.	15400.
JAPAN	S	79 618	5218N	17618E	12207.7 34435.4 50102.3	191.	2.417	4227.	1.75	2.84	3473.	7700.
JAPAN	S	80 4 5	5206N	17456E	11661.7 34351.6 50117.4	197.	1.417	2467.	1.74	2.14	2153.	4620.
JAPAN	S	78 627	5203N	17551E	12008.2 34426.7 50099.0	87.	0.500	854.	1.71	0.84	906.	1760.
JAPAN	S	79 613	5217N	17620E	12219.1 34439.7 50100.8	202.	1.833	3097.	1.69	2.47	203.	3300.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-22 (continued). OTHER ROCKFISH, APRIL-JUNE 1977-80

NATION	VESSEL	DATE	LAT	LONG	APPROX	LORAN-C	PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
*****	*****	YMMDD	*****	*****	7X	7Y	7Z	7Z	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/AFISH	(LBS)	(LBS)
JAPAN	S	78 627	5203N	17551E	12008.2	34426.7	50099.0	50099.0	82.	2.750	4598.	1.67	0.85	462.	5060.
JAPAN	S	80 5 1	5202N	17551E	12007.2	34428.4	50098.2	50098.2	115.	1.333	2216.	1.66	1.00	2184.	4400.
USSR	M	77 530	5205N	17557E	12049.1	34431.0	50098.0	50098.0	71.	0.533	855.	1.60	0.62	245.	1100.
JAPAN	S	79 526	5148N	17534E	11892.3	34430.5	50092.6	50092.6	98.	1.667	2593.	1.56	1.19	4447.	7040.
JAPAN	S	77 629	5150N	17649E	12377.7	34507.3	50074.8	50074.8	82.	1.000	1525.	1.52	0.86	3975.	5500.
JAPAN	S	78 629	5148N	17727E	12604.3	34572.5	50047.9	50047.9	80.	0.417	630.	1.51	0.95	5970.	6600.
USSR	M	77 6 4	5153N	17549E	11987.3	34441.1	50091.6	50091.6	46.	0.283	423.	1.49	0.86	32577.	33000.
JAPAN	S	79 5 4	5216N	17507E	11736.5	34347.5	50121.3	50121.3	128.	1.917	2863.	1.49	1.41	27057.	29920.
JAPAN	S	79 612	5218N	17628E	12274.3	34448.3	50099.0	50099.0	219.	2.333	3479.	1.49	2.44	3121.	6600.
USSR	M	77 615	5153N	17550E	11993.3	34442.3	50091.2	50091.2	44.	0.583	864.	1.48	0.83	16736.	17600.
USSR	M	77 6 2	5153N	17551E	11999.8	34443.6	50090.9	50090.9	44.	0.583	861.	1.48	0.77	239.	1100.
USSR	M	77 616	5151N	17550E	11992.3	34445.6	50089.6	50089.6	55.	0.167	245.	1.47	0.40	17355.	17600.
USSR	M	77 610	5153N	17545E	11962.2	34436.0	50092.9	50092.9	46.	0.500	724.	1.45	0.80	21276.	22000.
JAPAN	S	77 527	5114N	17906E	13163.7	34737.9	49951.1	49951.1	137.	0.833	1206.	1.45	2.47	1434.	2640.
USSR	M	77 612	5151N	17549E	11986.1	34444.4	50089.9	50089.9	55.	0.650	933.	1.44	0.67	21067.	22000.
USSR	M	77 610	5151N	17549E	11986.1	34444.4	50089.9	50089.9	55.	0.633	892.	1.41	0.82	34308.	35200.
JAPAN	S	77 6 6	5124N	17853E	13102.7	34710.7	49972.8	49972.8	104.	0.500	702.	1.40	1.29	5898.	6600.
USSR	M	76 417	5152N	17555E	12024.2	34650.3	50088.7	50088.7	66.	1.250	1701.	1.36	0.76	7759.	9460.
USSR	M	77 619	5158N	17607N	15021.3	35004.2	49751.0	49751.0	49.	1.167	1572.	1.35	0.77	18228.	19800.
JAPAN	S	77 511	5217N	17410E	11375.1	34273.1	50135.5	50135.5	93.	1.167	1521.	1.30	0.77	4419.	5940.
JAPAN	S	77 613	5217N	17620E	12215.1	34439.7	50100.5	50100.5	219.	3.417	4453.	1.30	2.38	3247.	7700.
JAPAN	S	77 625	5144N	17807E	12852.4	34628.3	50023.8	50023.8	81.	0.250	323.	1.29	0.97	1217.	1540.
USSR	M	77 618	5151N	17550E	11992.3	34445.6	50089.6	50089.6	52.	0.417	536.	1.29	0.75	14864.	15400.
JAPAN	S	77 5 8	5228N	17530E	11926.2	34358.8	50122.7	50122.7	109.	1.833	2335.	1.27	1.10	8885.	11220.
JAPAN	S	77 526	5143N	17532E	11879.6	34436.2	50089.3	50089.3	104.	1.833	2305.	1.26	1.03	4515.	6620.
JAPAN	S	77 430	5140N	17551E	11993.8	34404.7	50084.0	50084.0	115.	0.550	691.	1.26	1.81	4369.	5060.
JAPAN	S	77 612	5217N	17619E	12212.4	34436.4	50101.2	50101.2	246.	1.750	2116.	1.21	2.39	2284.	4400.
JAPAN	S	77 630	5135N	17550E	11987.5	34465.1	50079.5	50079.5	145.	0.500	595.	1.19	1.70	2705.	3300.
USSR	M	77 624	5255N	17058E	11083.7	33958.0	50174.9	50174.9	93.	0.500	588.	1.18	6.93	13712.	14300.
JAPAN	S	78 616	5142N	17812E	12880.3	34637.3	50018.9	50018.9	79.	0.333	371.	1.11	0.81	65.	440.
JAPAN	S	78 629	5148N	17749E	12745.1	34600.1	50037.4	50037.4	87.	2.583	2856.	1.11	0.73	4844.	7700.
JAPAN	S	78 520	5145N	17631E	13007.2	34656.6	50012.0	50012.0	98.	1.167	1286.	1.10	1.17	2454.	3740.
JAPAN	S	79 515	5223N	17429E	11495.9	34285.9	50134.8	50134.8	202.	1.167	1281.	1.10	1.06	14119.	15400.
JAPAN	S	77 425	5142N	17555E	12021.7	34456.8	50085.3	50085.3	120.	0.200	217.	1.09	1.23	443.	660.
USSR	M	78 4 9	5139N	17534E	11891.0	34445.1	50082.3	50082.3	109.	0.917	798.	1.06	0.79	25602.	26400.
JAPAN	S	77 6 4	5144N	17555E	12019.6	34463.3	50082.0	50082.0	71.	0.750	969.	1.06	1.15	131.	1100.
JAPAN	S	77 5 9	5236N	17242N	16285.5	35126.4	49495.5	49495.5	334.	0.217	228.	1.05	1.27	1972.	2200.
JAPAN	S	78 621	5141N	17811E	12472.0	34637.5	50018.3	50018.3	84.	0.500	517.	1.03	0.69	803.	1320.
JAPAN	S	77 424	5154N	17513E	11765.2	34394.0	50104.0	50104.0	156.	0.533	549.	1.03	2.73	771.	1320.
JAPAN	S	79 514	5218N	17410E	11378.5	34271.2	50136.0	50136.0	198.	2.167	2228.	1.03	0.76	13832.	16060.
JAPAN	S	79 512	5219N	17422E	11451.1	34284.5	50134.0	50134.0	115.	1.583	1618.	1.02	1.18	8282.	9900.
JAPAN	S	79 6 6	5213N	17620E	12221.0	34438.0	50101.7	50101.7	213.	2.250	2277.	1.01	3.74	2123.	4400.
USSR	M	78 613	5300N	17221E	11068.0	34048.7	50169.9	50169.9	87.	1.250	1264.	1.01	1.31	3136.	4400.
USSR	M	77 614	5151N	17553E	12011.0	34449.4	50089.6	50089.6	71.	0.033	34.	1.01	0.36	8766.	8800.
JAPAN	S	79 5 6	5403N	17958W	14116.4	34540.5	50124.1	50124.1	224.	3.667	3657.	1.00	1.72	743.	4400.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-22 (continued). OTHER ROCKFISH, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPX LORAN-C	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LdS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
.....	YYMMDD	7X	7Y	7Z	*****	*****	*****	*****	*****	*****
USSR	M	77 611	5133N	17547E	11974.7	34438.5	50092.3	46	0.583	0.99	0.70	3823	4400
JAPAN	S	78 621	5145N	17532E	11879.7	34432.9	50090.9	91	0.667	0.98	0.76	1549	2200
JAPAN	S	79 531	5146N	17532E	11879.8	34431.3	50091.7	98	1.833	0.96	0.92	2199	3960
JAPAN	S	79 514	5242N	17337E	11167.7	34182.2	50134.2	120	4.417	0.95	1.60	4601	8600
JAPAN	S	79 6 7	5217N	17620E	12219.1	34439.7	50100.8	219	1.917	0.90	3.55	1573	3300
JAPAN	S	79 528	5212N	17503E	11707.8	34349.7	50119.7	120	0.333	0.90	1.33	2341	2640
JAPAN	S	79 531	5142N	17532E	11879.6	34437.8	50088.5	104	1.667	0.88	0.97	4246	5720
JAPAN	S	79 524	5144N	17747E	12725.0	34603.4	50034.1	169	0.833	1.43	1.43	1247	1980
JAPAN	S	79 531	5147N	17531E	11873.9	34428.4	50092.8	96	1.000	0.87	0.80	1113	1980
USSR	H	78 626	5235N	17058E	11063.7	33958.0	50174.9	60	0.917	0.85	1.54	43220	44000
JAPAN	S	79 617	5236N	17321E	16093.6	35109.7	49576.3	232	2.250	0.85	3.54	2717	4620
JAPAN	S	78 624	5144N	17808E	12848.0	34627.1	50024.4	35	0.250	0.84	0.82	670	880
JAPAN	S	79 524	5231N	17958N	13735.4	34709.0	50016.6	248	4.500	0.84	5.79	3273	7040
JAPAN	S	79 512	5224N	17259E	11043.2	34710.5	50152.2	120	2.063	0.83	1.38	6639	8360
JAPAN	S	78 620	5145N	17808E	12860.7	34628.1	50024.5	72	0.250	0.82	0.84	234	440
JAPAN	S	79 526	5144N	17747E	12725.0	34603.4	50033.7	105	0.833	0.80	1.38	2189	2860
JAPAN	S	79 510	5220N	17426E	11476.1	34287.7	50133.7	112	0.667	0.80	1.01	17724	18260
JAPAN	S	79 5 9	5219N	17608E	12143.1	34420.6	50106.2	191	0.750	0.80	3.64	497	1100
JAPAN	S	79 523	5121N	17933E	13675.8	34823.8	49898.8	153	0.917	0.79	1.09	4993	5720
JAPAN	S	79 614	5220N	17407E	11359.3	34263.6	50137.8	137	3.333	0.79	2.18	6173	8800
JAPAN	S	79 613	5218N	17619E	12210.5	34440.2	50100.4	219	1.500	0.79	2.13	140	1320
JAPAN	S	79 518	5405N	17948E	14034.1	34515.0	50124.5	241	3.000	0.75	3.02	1605	3960
JAPAN	S	78 613	5241N	17205E	16484.3	35135.5	49424.5	142	1.283	0.78	1.55	5593	6600
USSR	H	77 616	5151N	17550E	11992.3	34445.6	50089.6	55	0.417	0.78	0.80	6275	6600
JAPAN	S	79 525	5229N	17954N	13745.3	34714.5	50012.7	219	6.083	0.78	4.39	781	5500
JAPAN	S	79 528	5226N	17937E	13546.7	34681.4	50025.5	232	5.250	0.77	4.43	2566	6600
JAPAN	S	80 4 6	5205N	17456E	11661.7	34351.6	50117.4	197	1.167	0.76	2.16	4174	5060
JAPAN	S	79 527	5145N	17532E	11875.7	34432.9	50090.9	98	2.833	0.75	0.88	3586	5720
JAPAN	S	79 430	5401N	17955E	14860.5	34534.4	50124.3	109	0.833	0.75	2.20	5974	6600
JAPAN	S	78 621	5141N	17801E	12808.6	34625.1	50023.6	81	0.583	0.75	0.71	224	660
USSR	H	77 617	5151N	17550E	11992.3	34445.6	50089.6	49	0.583	0.73	0.73	10571	11000
JAPAN	S	79 5 2	5351N	17957N	14065.2	34567.7	50112.1	219	3.000	0.73	2.56	4400	6000
JAPAN	S	79 510	5353N	17958N	14068.1	34562.0	50114.4	224	3.000	0.72	1.58	4006	6160
JAPAN	S	78 622	5143N	17806E	12844.1	34628.5	50023.2	90	0.250	0.72	0.75	261	440
USSR	H	78 420	5152N	17543E	11949.2	34435.2	50092.8	60	0.750	0.71	0.63	13765	14300
JAPAN	S	79 524	5129N	17951W	13581.9	34793.8	49926.0	139	0.750	0.71	0.99	2327	2860
USSR	H	78 426	5234N	17929W	13924.7	34739.5	50004.2	77	1.333	0.71	0.44	14455	15400
JAPAN	S	79 5 3	5215N	17612E	12162.3	34432.9	50101.8	126	0.833	0.71	1.93	11950	12540
JAPAN	S	78 621	5222N	17335W	15953.2	35105.9	49966.3	328	3.667	0.71	4.22	10613	13200
JAPAN	S	77 621	5205N	17604E	12075.1	34436.1	50097.3	87	0.917	0.70	0.55	455	1100
JAPAN	S	79 529	5218N	17506E	11731.9	34342.6	50122.9	167	0.500	0.70	1.60	4051	4400
JAPAN	S	78 628	5203N	17552E	12014.7	34428.0	50098.6	77	0.417	0.70	0.77	370	660
JAPAN	S	79 5 9	5249N	17224E	11022.4	34076.0	50166.3	109	3.833	0.69	1.00	19347	22000
JAPAN	S	79 528	5212N	17504E	11714.2	34350.9	50119.4	137	1.000	0.68	1.45	3719	4400
JAPAN	S	79 5 9	5403N	17958W	14116.4	34540.5	50124.1	219	4.333	0.68	2.94	1020	3960

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-22 (continued). OTHER ROCKFISH, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	79 5 2	3350N	17959W	14047.3	34566.8	50111.8	219.	3.250	2204.	0.68	5.82	3296.	5500.
JAPAN	S	79 5 7	5424N	17924E	13973.0	34433.7	50150.4	159.	0.750	508.	0.68	4.45	372.	800.
JAPAN	S	77 6 23	5152N	17556E	12030.5	34451.6	50088.3	77.	0.917	621.	0.68	0.70	1579.	2200.
JAPAN	S	79 6 5	5220N	17515E	11793.1	34350.4	50122.0	197.	2.167	1454.	0.67	2.57	2946.	4400.
USSR	M	78 5 21	5200N	17202W	16285.1	35137.6	49303.1	82.	1.250	837.	0.67	0.95	14563.	15400.
JAPAN	S	79 5 27	5228N	17339W	15962.1	35102.1	49589.5	252.	1.083	717.	0.66	3.55	3683.	4400.
JAPAN	S	79 5 28	5116N	17901E	13136.8	34729.8	49957.2	172.	1.500	993.	0.66	2.33	5167.	6160.
JAPAN	S	79 6 17	5218N	17628E	12274.3	34448.3	50099.0	213.	2.500	1654.	0.66	2.75	1646.	3300.
JAPAN	S	79 5 13	5218N	17428E	11488.5	34294.1	50132.1	120.	2.167	1431.	0.66	1.23	16169.	17600.
JAPAN	S	78 6 23	5148N	17738E	12674.7	34536.3	50042.7	96.	0.333	220.	0.66	2.96	1540.	1760.
JAPAN	S	79 5 7	5447N	17646E	13851.8	34315.1	50168.9	150.	1.083	709.	0.65	6.29	5231.	5940.
JAPAN	S	78 6 22	5145N	17756E	12784.2	34613.2	50030.0	80.	1.000	649.	0.65	0.80	231.	880.
JAPAN	S	77 6 8	5124N	17854E	13108.9	34711.9	49972.2	142.	0.500	324.	0.65	1.43	2976.	3300.
JAPAN	S	77 6 5	5148N	17547E	11972.1	34446.8	50088.2	77.	0.583	376.	0.64	0.89	64.	440.
JAPAN	S	79 6 5	5223N	17446E	11606.0	34307.6	50131.0	241.	3.750	2405.	0.64	2.94	5295.	7700.
JAPAN	S	79 5 15	5221N	17431E	11507.9	34292.2	50133.2	164.	1.750	1112.	0.64	0.93	8128.	9240.
USSR	M	77 6 3	5153N	17549E	11987.3	34441.1	50091.6	63.	0.500	318.	0.64	0.62	1882.	2200.
JAPAN	S	79 6 6	5216N	17622E	12230.4	34444.4	50099.4	219.	1.917	1215.	0.63	3.18	985.	2200.
JAPAN	S	79 5 11	5402N	17957W	14116.1	34544.2	50122.8	230.	2.500	1568.	0.63	4.24	632.	2200.
JAPAN	S	77 6 23	5200N	17439E	11560.4	34340.8	50117.9	168.	0.550	343.	0.62	1.37	1637.	1986.
JAPAN	S	79 6 10	5144N	17746E	12718.6	34602.2	50034.6	169.	0.833	519.	0.62	1.00	3221.	3740.
JAPAN	S	79 5 13	5257N	17103E	11028.2	33959.7	50175.0	164.	3.667	2231.	0.61	1.91	4369.	6600.
USSR	M	78 5 3	5237N	17924W	13968.0	34741.7	50005.3	85.	1.750	1062.	0.61	0.50	27978.	29040.
JAPAN	S	79 6 15	5223N	17413E	11394.8	34265.5	50138.2	148.	4.333	2621.	0.60	1.13	679.	3300.
JAPAN	S	79 5 26	5229N	17954W	13745.3	34714.5	50012.7	228.	6.167	3728.	0.60	3.71	2872.	6000.
JAPAN	S	78 6 13	5146N	17747E	12728.6	34600.5	50036.2	82.	0.333	194.	0.58	0.73	466.	660.
JAPAN	S	79 6 14	5144N	17532E	11875.7	34434.5	50090.1	107.	2.000	1160.	0.58	0.78	2140.	3300.
JAPAN	S	78 6 21	5147N	17532E	11880.0	34429.6	50092.5	93.	0.917	527.	0.57	0.77	2333.	2860.
JAPAN	S	79 5 30	5141N	17532E	11879.6	34439.4	50087.7	98.	2.000	1145.	0.57	1.02	3915.	5060.
JAPAN	S	79 6 8	5221N	17410E	11376.9	34265.5	50137.7	137.	4.667	2668.	0.57	2.82	632.	3300.
JAPAN	S	78 6 21	5144N	17807E	12852.4	34628.3	50023.6	79.	0.417	237.	0.57	0.79	1523.	1760.
JAPAN	S	80 4 18	5206N	17456E	11661.7	34351.6	50117.4	186.	1.167	654.	0.56	1.98	1326.	1980.
JAPAN	S	79 5 16	5254N	17214E	11044.4	34053.0	50168.8	115.	0.750	420.	0.56	0.60	7940.	8360.
JAPAN	S	78 6 27	5150N	17730E	12626.9	34573.3	50046.6	69.	0.333	186.	0.56	0.91	694.	880.
JAPAN	S	78 6 15	5139N	17543E	11945.3	34456.3	50082.1	109.	0.250	140.	0.56	0.80	300.	440.
JAPAN	S	80 4 6	5205N	17458E	11674.0	34355.9	50116.2	197.	1.667	928.	0.56	1.84	2592.	3520.
JAPAN	S	79 5 7	5447N	17845E	13845.4	34313.6	50169.0	150.	2.500	1390.	0.56	4.37	5650.	7040.
JAPAN	S	79 5 27	5113N	17906E	13161.8	34739.1	49949.8	153.	3.167	1746.	0.55	2.78	1552.	3300.
USSR	M	77 6 10	5151N	17549E	11986.1	34444.4	50089.9	49.	0.450	247.	0.55	0.66	19553.	19800.
USSR	M	78 4 15	5200N	17555E	12030.9	34436.9	50095.2	101.	0.917	496.	0.54	0.58	22162.	22660.
USSR	M	77 5 28	5227N	17544E	11998.2	34375.0	50119.1	71.	1.833	994.	0.54	0.69	5606.	6600.
JAPAN	S	79 6 7	5218N	17615E	12187.3	34431.5	50103.2	246.	1.083	587.	0.54	3.60	513.	1100.
USSR	M	77 6 10	5153N	17544E	11956.0	34434.8	50093.3	44.	0.500	268.	0.54	0.48	32732.	33000.
USSR	M	77 6 17	5237N	17927W	13948.6	34737.8	50007.2	60.	0.500	267.	0.53	0.46	1933.	2200.
JAPAN	S	79 5 20	5205N	17921E	13378.1	34691.2	50008.0	276.	3.000	1556.	0.52	4.30	5704.	7260.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-22 (continued). OTHER ROCKFISH, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
*****	*****	YYMMDD	*****	*****	7X 7Y 7Z	*****	*****	*****	*****	*****	*****	*****	*****
JAPAN	S	78 622	5221N	17330W	15973.6	35108.7	49554.0	344	4.083	0.52	3.90	11050	13200
JAPAN	S	79 6 8	5212N	17354E	11294.9	34282.3	50136.0	191	5.000	0.51	2.88	739	3300
USSR	M	77 6 1	5151N	17554E	12017.3	34450.7	50080.2	49	0.417	0.51	0.55	32789	33000

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

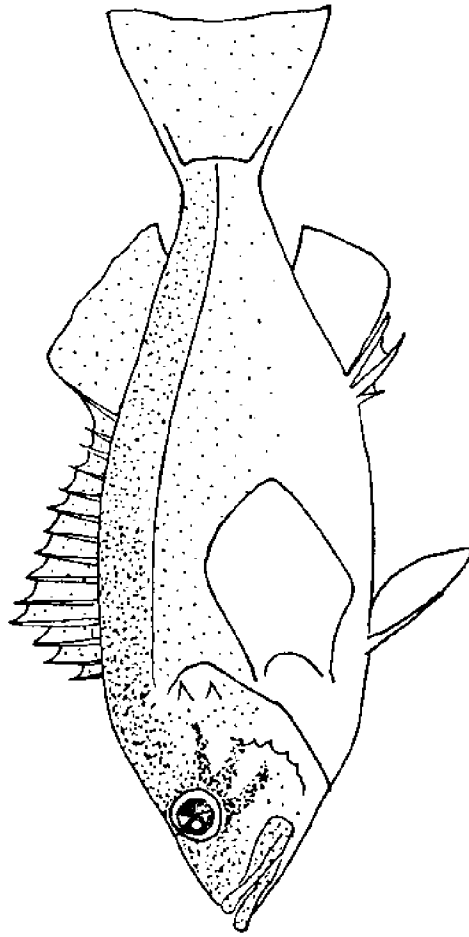


TABLE B-23. OTHER ROCKFISH, JULY-SEPTEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LOGAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	78 7 8	5143N	17807E	12851.4	34629.7	50022.7	100.	0.167	2964.	17.78	0.70	336.	3300.
JAPAN	S	78 7 9	5149N	17559E	12047.2	34400.3	50084.9	77.	0.167	2439.	14.63	0.70	201.	2640.
JAPAN	S	78 7 7	5147N	17748E	12736.8	34600.3	50036.6	87.	0.333	4490.	13.47	0.73	210.	6600.
JAPAN	S	78 7 7	5144N	17606E	12846.0	34627.1	50024.4	76.	0.250	3221.	12.88	0.83	519.	3740.
JAPAN	S	77 7 4	5147N	17748E	12736.8	34600.3	50036.6	75.	0.500	5420.	10.84	0.70	1180.	6600.
JAPAN	S	78 7 6	5149N	17733E	12644.4	34578.6	50046.1	75.	0.333	3526.	10.56	0.67	1314.	4840.
JAPAN	S	78 7 1	5149N	17735E	12657.2	34581.1	50045.2	74.	0.917	5727.	6.25	0.63	3073.	8800.
JAPAN	S	78 7 6	5146N	17747E	12728.6	34600.5	50036.2	84.	0.250	1232.	4.93	0.92	2068.	3300.
JAPAN	S	78 7 22	5203N	17201W	16306.3	35137.6	49308.7	77.	1.000	4668.	4.67	0.94	19332.	44000.
JAPAN	S	78 7 6	5158N	17752E	12784.5	34589.0	50046.7	90.	0.667	2943.	4.41	0.91	4400.	4400.
JAPAN	S	80 8 16	5240N	17210W	16456.6	35134.7	49433.6	273.	1.000	4004.	4.00	4.33	20196.	24200.
JAPAN	S	78 7 7	5147N	17748E	12736.8	34600.3	50036.6	87.	0.333	1330.	3.99	0.84	3070.	4400.
JAPAN	S	78 7 1	5148N	17738E	12674.7	34586.3	50042.7	92.	0.250	952.	3.81	0.92	368.	1320.
JAPAN	S	78 7 1	5146N	17754E	12773.3	34609.3	50032.8	75.	0.667	2458.	3.69	0.71	402.	2860.
JAPAN	S	79 8 16	5153N	17540E	11931.1	34429.7	50094.8	137.	3.167	11029.	3.48	3.28	6131.	17160.
JAPAN	S	79 7 30	5137N	17937W	13691.6	34801.1	49926.9	216.	1.667	5757.	3.45	3.72	623.	6180.
JAPAN	S	78 7 8	5146N	17754E	12773.3	34609.3	50036.6	72.	0.833	2679.	3.21	0.77	1721.	4400.
JAPAN	S	78 8 15	5238N	17308W	16168.9	35115.6	49555.8	219.	2.250	7057.	3.14	6.07	5483.	12340.
JAPAN	S	78 8 21	5405N	17956E	14086.7	34527.0	50127.7	241.	2.083	6114.	2.93	7.73	46.	6160.
JAPAN	S	78 8 25	5441N	17910E	13972.7	34368.3	50163.1	219.	1.083	2985.	2.76	4.06	2515.	5900.
JAPAN	S	79 7 30	5137N	17937W	13665.4	34799.9	49927.7	219.	1.833	4603.	2.51	2.91	237.	4840.
JAPAN	S	78 8 23	5405N	17948E	14034.1	34515.0	50129.9	246.	2.333	5836.	2.50	6.19	764.	6600.
JAPAN	S	78 8 21	5404N	17950E	14042.3	34520.3	50128.5	230.	1.500	3718.	2.48	3.58	22.	3740.
JAPAN	S	79 7 13	5423N	17927E	13987.4	34440.8	50149.1	87.	1.333	2434.	1.83	0.73	1526.	3960.
JAPAN	S	79 7 23	5206N	17657E	12442.1	34506.1	50078.2	191.	1.667	2967.	1.78	3.38	1873.	4840.
JAPAN	S	78 8 16	5238N	17217W	16403.3	35133.5	49438.8	164.	1.000	1732.	1.73	2.17	248.	1980.
JAPAN	S	78 7 9	5156N	17636E	12289.3	34495.6	50077.1	87.	0.500	864.	1.71	0.82	676.	1540.
JAPAN	S	77 7 13	5428N	17933E	14042.2	34442.5	50150.0	82.	0.667	1152.	1.73	0.63	168.	1320.
JAPAN	S	79 7 28	5207N	17650E	1239E.1	34495.5	50061.8	246.	2.417	4025.	1.67	3.31	1035.	5060.
JAPAN	S	78 8 21	5406N	17950E	14052.2	34515.8	50130.2	235.	2.167	3604.	1.68	6.49	1896.	5700.
JAPAN	S	77 7 12	5424N	17927E	13992.6	34436.3	50149.8	96.	1.917	2999.	1.56	0.81	301.	3300.
JAPAN	S	78 8 22	5405N	17951E	14053.8	34519.5	50129.1	262.	3.083	4767.	1.55	5.05	1833.	6000.
JAPAN	S	78 7 22	5239N	17216W	16423.7	35133.5	49445.0	191.	1.000	1511.	1.51	3.16	1789.	3300.
JAPAN	S	77 7 1	5203N	17601E	12072.6	34439.5	50095.7	87.	0.500	744.	1.49	0.64	1456.	2200.
JAPAN	S	79 7 26	5133N	17923E	13308.4	34735.3	49964.8	230.	0.667	976.	1.46	2.39	10024.	11000.
JAPAN	S	79 7 31	5137N	17937W	13691.6	34801.1	49926.9	221.	2.083	3038.	1.46	3.11	482.	3520.
JAPAN	S	78 7 5	5150N	17559E	12047.9	34458.6	50085.6	86.	0.500	717.	1.43	0.72	163.	880.
JAPAN	S	78 7 6	5148N	17727E	12604.3	34572.5	50047.9	96.	0.667	929.	1.39	0.92	3031.	3960.
JAPAN	S	78 8 25	5440N	17911E	13973.7	34372.5	50162.4	191.	1.583	2195.	1.39	4.43	3305.	5500.
JAPAN	S	77 7 15	5426N	17935E	14055.2	34445.5	50149.6	82.	1.750	2379.	1.36	0.87	261.	2640.
JAPAN	S	79 8 16	5153N	17550E	11993.5	34442.5	50091.2	96.	2.417	3274.	1.35	2.53	2226.	5500.
JAPAN	S	78 8 28	5405N	17949E	14040.6	34516.5	50129.6	246.	4.333	5755.	1.33	5.78	625.	6380.
JAPAN	S	79 7 19	5140N	17830W	14111.2	34873.6	49674.7	235.	3.000	3969.	1.32	4.41	211.	4180.
JAPAN	S	79 8 2	5227N	17540E	11971.3	34369.8	50120.2	191.	1.500	1901.	1.27	2.25	739.	2640.

*** NOTE *** THE ACCURACY OF POSITION AND LOGAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-23 (continued). OTHER ROCKFISH, JULY-SEPTEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX L OMAN-C PULSE RATE	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LB5/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
		YYMMDD			7X 7Y 7Z							
JAPAN	S	79 7 18	5128N	17947E	13445.7 34769.5 49941.1	399	4.167	5186.	1.24	2.11	2954.	8140.
JAPAN	S	80 8 18	5147N	17457W	15364.1 35066.5 49624.8	213.	3.250	4044.	1.24	2.51	2996.	7040.
JAPAN	S	78 8 16	5405N	17953E	14057.0 34522.5 50128.5	246.	2.167	2487.	1.15	4.32	153.	2640.
JAPAN	S	79 7 19	5144N	17817W	14202.9 34884.0 49869.3	238.	2.250	2513.	1.12	2.71	6067.	8580.
JAPAN	S	79 7 24	5205N	17657E	12440.2 34507.8 50077.3	180.	2.167	2204.	1.02	3.75	3080.	3080.
JAPAN	S	77 7 15	5426N	17927E	14003.0 34433.3 50151.2	98.	1.250	1267.	1.01	0.61	1593.	2860.
JAPAN	S	79 8 11	5228N	17533E	11926.2 34328.8 50122.7	202.	2.000	1996.	1.00	3.85	864.	2860.
JAPAN	S	79 7 19	5140N	17847W	14125.4 34876.9 49871.9	235.	4.083	4074.	1.00	4.35	2306.	6380.
JAPAN	S	79 8 18	5157N	17647E	12361.6 34508.0 50073.3	104.	0.833	825.	0.99	1.00	935.	1760.
JAPAN	S	78 7 1	5147N	17755E	12781.6 34609.1 50033.3	72.	0.667	650.	0.96	0.68	230.	680.
JAPAN	S	79 7 16	5145N	17835E	13032.7 34661.6 50009.6	301.	1.167	1122.	0.95	4.21	3278.	4400.
JAPAN	S	78 7 5	5159N	17648E	12371.2 34506.0 50075.2	90.	0.750	714.	0.95	1.01	606.	1320.
JAPAN	S	78 7 5	5155N	17635E	12281.5 34496.0 50076.6	87.	0.750	670.	0.90	0.83	1962.	2640.
JAPAN	S	79 7 23	5206N	17650E	12396.2 34497.1 50080.9	164.	2.083	1883.	0.90	3.34	537.	2420.
JAPAN	S	77 7 5	5149N	17748E	12740.6 34597.4 50035.0	98.	1.250	1093.	0.87	0.77	2207.	3500.
JAPAN	S	78 8 3	5403N	17943E	13991.2 34512.0 50129.5	164.	2.167	1851.	0.85	2.60	349.	2200.
JAPAN	S	78 7 1	5149N	17731E	12631.6 34576.1 50047.1	74.	2.000	1617.	0.81	0.77	4983.	6600.
JAPAN	S	78 7 1	5146N	17754E	12773.3 34609.3 50032.8	73.	0.333	268.	0.80	0.69	172.	440.
JAPAN	S	77 7 4	5148N	17749E	12745.1 34600.1 50037.4	82.	0.833	655.	0.79	0.77	445.	1100.
JAPAN	S	79 8 5	5224N	17959W	13695.8 34715.2 50009.0	230.	3.083	2382.	0.77	5.10	918.	3300.
JAPAN	S	79 7 18	5140N	17826W	14135.4 34876.0 49871.0	230.	1.833	1403.	0.77	3.13	577.	1920.
JAPAN	S	78 8 16	5235N	17311W	16138.6 35114.8 49553.7	273.	1.833	1571.	0.75	2.46	3029.	4400.
JAPAN	S	78 8 13	5401N	17944E	13986.0 34518.0 50127.5	230.	3.750	2753.	0.73	5.97	327.	3620.
JAPAN	S	79 9 3	5237N	17916W	16394.7 35132.7 49446.7	126.	1.300	903.	0.69	1.64	1297.	2200.
JAPAN	S	79 7 30	5247N	17916W	14057.7 34737.7 50014.5	219.	1.917	1293.	0.67	2.12	3987.	5280.
JAPAN	S	79 9 4	5239N	17204W	16478.7 35155.8 49416.3	235.	3.117	2092.	0.67	4.39	2308.	4400.
JAPAN	S	79 9 6	5240N	17220W	16410.4 35132.4 49457.2	153.	1.583	1056.	0.67	1.74	922.	1960.
JAPAN	S	78 8 23	5235N	17311W	16138.6 35114.8 49553.7	134.	1.667	1086.	0.65	2.79	2214.	3300.
JAPAN	S	79 7 26	5452N	17839E	13835.5 34290.4 50171.6	148.	0.750	488.	0.65	4.45	8752.	9240.
JAPAN	S	77 7 1	5203N	17601E	12072.6 34439.5 50095.7	82.	0.667	431.	0.65	0.69	669.	1100.
JAPAN	S	78 8 17	5225N	17313W	16076.4 35116.0 49530.6	202.	1.667	1064.	0.64	2.03	4656.	5720.
JAPAN	S	77 7 14	5426N	17933E	14042.2 34442.5 50153.0	84.	1.167	732.	0.63	0.81	1760.	1760.
JAPAN	S	79 7 29	5244N	17917W	14035.6 34740.8 50010.8	224.	1.250	755.	0.60	3.42	4305.	5060.
JAPAN	S	78 8 25	5355N	17956W	14091.9 34560.7 50115.8	213.	2.750	1656.	0.60	1.04	2744.	4400.
JAPAN	S	79 9 17	5215N	17510E	11755.1 34353.2 50119.9	153.	3.250	1951.	0.60	2.51	2229.	4180.
JAPAN	S	78 8 11	5441N	17910E	13972.7 34368.3 50163.1	230.	1.833	1052.	0.57	4.80	2248.	3300.
JAPAN	S	79 7 21	5223N	17939W	13821.3 34742.0 49995.2	175.	2.167	1229.	0.57	2.04	2291.	3520.
JAPAN	S	79 9 26	5217N	17508E	11743.9 34347.0 50121.7	241.	5.000	2763.	0.55	2.43	2737.	5500.
JAPAN	S	79 8 2	5229N	17955W	13738.8 34713.2 50013.3	238.	3.167	1746.	0.55	3.22	894.	2640.
JAPAN	S	78 8 11	5440N	17911E	13973.7 34372.5 50162.4	219.	1.750	959.	0.55	0.32	1241.	2200.
JAPAN	S	79 7 26	5236N	17444E	11610.5 34280.0 50139.2	137.	2.667	1453.	0.54	1.25	17027.	18480.
JAPAN	S	79 8 1	5133N	17550E	11993.5 34442.3 50091.2	301.	6.250	3400.	0.54	2.27	5400.	8800.
JAPAN	S	79 9 25	5228N	17531E	11912.6 34356.2 50123.3	90.	1.667	904.	0.54	0.92	16916.	17820.
JAPAN	S	79 8 16	5159N	17554E	12023.3 34437.4 50094.8	295.	4.500	2433.	0.54	2.95	4167.	6600.
JAPAN	S	79 7 22	5228N	17933W	13877.3 34742.8 49998.3	180.	2.500	1342.	0.54	1.59	2838.	4180.

*** NOTE *** THE ACCURACY OF POSITION AND LOMAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-23 (continued). OTHER ROCKFISH, JULY-SEPTEMBER 1977-80

NATION	VESSEL CLASS	DATE	YMHDD	LAT	LONG	APPROX 7X	LOHRAN-C 7Y	PULSE 7Z	DLPTM (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	79 720	5140N	17829W	14117.2	34874.7	49873.8	241.	3.333	1712.	0.51	3.77	708.	2420.	
JAPAN	S	79 819	5200N	17658E	12437.7	34517.2	50072.2	153.	3.583	1833.	0.51	2.15	3007.	4840.	
JAPAN	S	79 920	5227N	17542E	11984.9	34372.4	50119.7	301.	4.167	2124.	0.51	2.45	1176.	3300.	
JAPAN	S	79 8 8	5212N	17543E	11999.5	34407.3	50106.9	284.	4.063	2052.	0.50	1.74	1908.	3960.	

*** NOTE *** THE ACCURACY OF POSITION AND LOHRAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-24. OTHER ROCKFISH, OCTOBER-DECEMBER 1977-80

NATION	VESSEL CLASS	DATE	YMHDD	LAT	LONG	APPROX 7X	LOHRAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	801212	5251N	17210E	11035.7	34054.4	50168.3	120.	0.833	1378.	1.65	1.47	20622.	22000.	
JAPAN	S	791019	5233N	17936W	13746.4	34706.1	50019.2	208.	2.917	3467.	1.19	4.84	2473.	5940.	
KOREA	M	6011 2	5157N	17201W	16272.9	35137.7	49292.6	74.	1.000	1140.	1.14	1.03	124920.	126060.	
JAPAN	S	7911 2	5134N	17928W	13738.6	34814.7	49715.3	262.	3.917	4388.	1.12	1.52	452.	4840.	
JAPAN	S	791022	5225N	17955W	13736.6	34713.2	50013.3	241.	3.917	4063.	1.04	4.74	1877.	5940.	
JAPAN	S	601211	5250N	17206E	11034.6	34051.6	50168.4	109.	2.000	1791.	0.90	0.90	54309.	56100.	
JAPAN	S	791022	5231N	17953W	13758.8	34712.9	50014.8	252.	4.500	3721.	0.83	4.54	1119.	4840.	
JAPAN	S	791019	5226N	17952W	13747.9	34721.3	50007.5	205.	3.167	2942.	0.80	5.09	1418.	3960.	
KOREA	M	6011 1	5158N	17200W	16288.2	35137.8	49292.8	92.	1.083	684.	0.63	0.82	46836.	47520.	
JAPAN	S	7911 1	5130N	17945W	13623.5	34799.6	49922.8	273.	3.383	2240.	0.63	2.24	400.	2640.	
JAPAN	S	791030	5130N	17648W	14680.0	34984.9	49746.3	191.	3.500	2146.	0.61	2.94	4454.	6000.	
POLAND	M	801123	5142N	17753E	12759.6	34613.8	50028.8	191.	0.333	192.	0.58	4.37	270.	462.	
JAPAN	S	791029	5142N	17536W	15310.9	35039.6	49073.7	180.	4.250	2432.	0.57	2.58	1088.	3520.	
JAPAN	S	8012 9	5246N	17227E	11011.0	34086.0	50165.0	284.	2.000	1120.	0.56	1.09	1740.	2860.	
JAPAN	S	791020	5231N	17954W	13752.3	34711.6	50015.4	230.	3.833	1941.	0.51	4.12	1799.	3740.	

*** NOTE *** THE ACCURACY OF POSITION AND LOHRAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

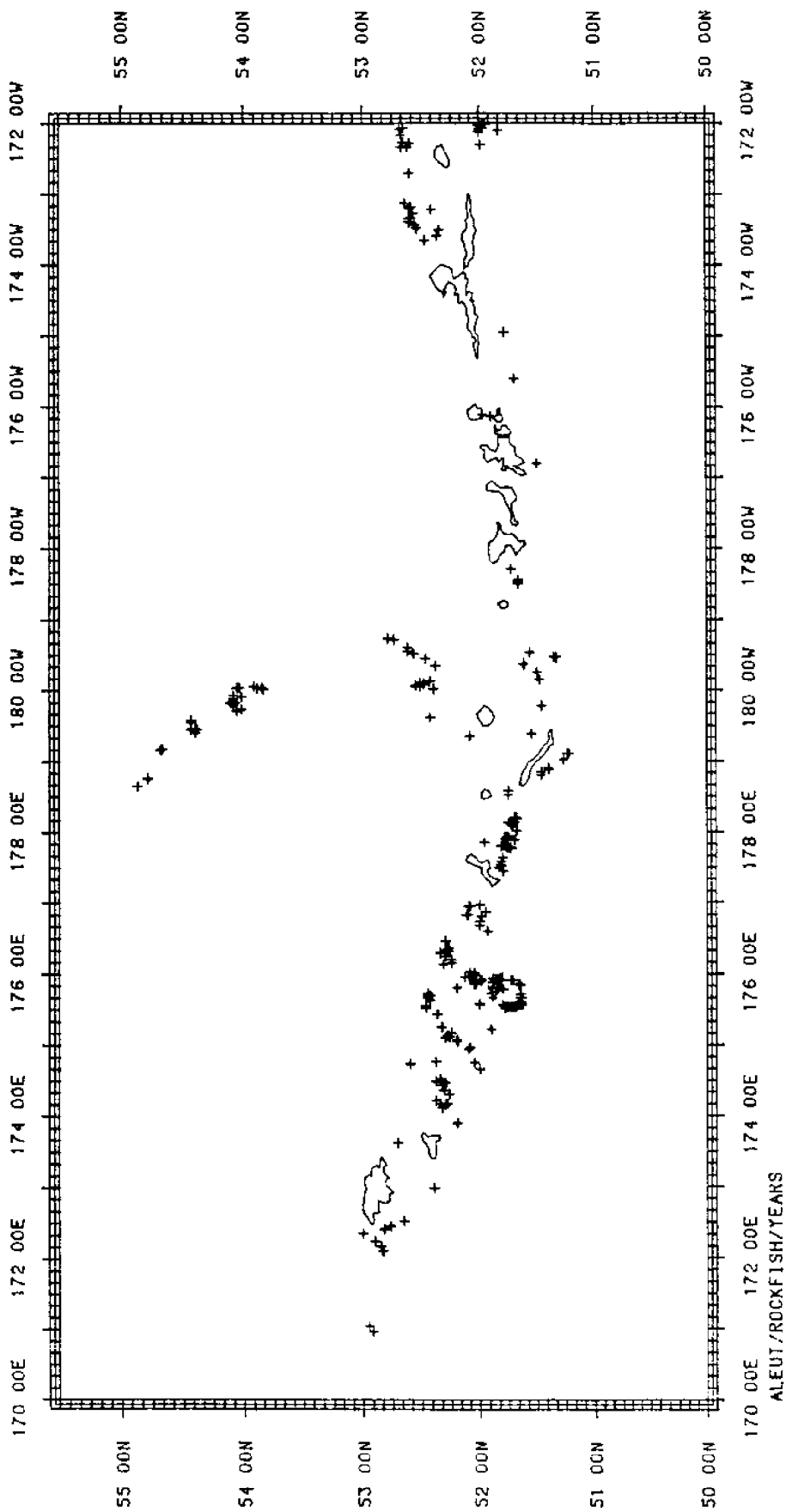


FIGURE B-5. TRAWLING LOCATIONS FOR OTHER ROCKFISH, ALL MONTHS, 1977-80

ALEUT./ROCKFISH/YEARS

TABLE B-25. ATKA MACKEREL, JANUARY-MARCH 1977-80

NATION	VESSL CLASS	DATE	YHMD	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	8Y CATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	78 322	5152N	17555E	16274.2	34450.3	50088.7	104.	0.167	24062.	144.37	0.41	138.	24200.	
USSR	M	79 213	5200N	17201W	16293.6	35137.6	49300.7	79.	0.167	21775.	130.65	1.07	225.	22000.	
USSR	M	79 225	5158N	17204W	16274.4	35137.4	49302.8	74.	0.333	35358.	106.07	1.13	8642.	44000.	
USSR	M	78 324	5111N	17555E	16273.5	34451.9	50087.9	104.	0.333	32694.	98.08	0.39	306.	33000.	
USSR	M	79 216	5157N	17204W	16265.6	35137.5	49306.1	80.	0.500	47654.	95.31	1.14	1406.	49060.	
USSR	M	79 3 2	5157N	17200W	16283.4	35137.5	49290.1	69.	0.583	51771.	88.75	1.03	5429.	57200.	
USSR	M	79 228	5157N	17201W	16278.9	35137.7	49292.6	82.	0.667	53381.	80.07	1.11	1619.	55000.	
USSR	M	79 3 7	5200N	17205W	16275.7	35137.3	49310.6	77.	0.667	53172.	79.76	1.15	3148.	56320.	
USSR	M	79 3 6	5157N	17200W	16283.4	35137.8	49290.1	71.	0.583	44829.	76.85	1.24	1371.	46200.	
USSR	M	79 128	5159N	17204W	16275.3	35137.4	49305.4	104.	0.583	44800.	75.43	1.06	0.	44000.	
USSR	M	78 3 7	5139N	17549E	11981.4	34463.8	50079.9	77.	0.917	65977.	71.97	0.41	23.	66000.	
USSR	M	79 212	5200N	17202W	16285.1	35137.6	49303.1	71.	0.667	43862.	65.79	0.92	138.	44000.	
USSR	M	79 3 7	5150N	17206W	16222.9	35137.5	49286.5	80.	0.833	53304.	63.96	1.01	1696.	55000.	
USSR	M	79 211	5200N	17200W	16298.0	35137.7	49298.2	71.	0.583	37031.	63.48	1.07	369.	37400.	
USSR	M	79 226	5200N	17207W	16266.7	35137.1	49315.5	74.	0.500	31397.	62.79	0.99	12603.	44000.	
USSR	M	79 219	5157N	17200W	16283.4	35137.8	49290.1	74.	1.000	60706.	60.71	1.09	5294.	66000.	
USSR	M	79 3 8	5200N	17205W	16275.7	35137.3	49310.6	74.	0.667	39896.	59.84	1.09	4104.	44000.	
USSR	M	79 3 6	5208N	17205W	16315.1	35137.0	49332.1	74.	0.667	44441.	59.25	1.07	1759.	46200.	
USSR	M	79 224	5157N	17210W	16238.7	35136.8	49314.8	80.	1.000	59215.	59.22	1.06	165.	59400.	
USSR	M	79 3 7	5200N	17204W	16280.2	35137.4	49308.1	77.	0.750	42824.	57.10	1.05	1176.	44000.	
USSR	M	79 3 9	5159N	17206W	16266.3	35137.2	49310.4	74.	0.750	41334.	55.11	0.97	2666.	44000.	
USSR	M	79 314	5200N	17218W	16217.0	35135.6	49342.2	107.	0.500	26840.	53.68	1.07	0.	26840.	
USSR	M	79 3 5	5159N	17204W	16275.3	35137.4	49305.4	77.	0.500	26400.	22.80	1.15	0.	26400.	
USSR	M	79 217	5158N	17203W	16274.9	35137.5	49300.3	74.	1.000	52624.	52.62	1.12	176.	52800.	
USSR	M	78 329	5204N	17549E	11996.4	34422.5	50100.4	98.	0.500	26176.	52.35	0.50	224.	26400.	
USSR	M	79 3 4	5157N	17200W	16283.4	35137.8	49290.1	85.	0.917	47806.	52.15	1.12	814.	48620.	
USSR	M	79 218	5157N	17200W	16283.4	35137.8	49290.1	74.	1.000	50264.	50.26	1.09	2976.	53240.	
USSR	M	79 217	5158N	17203W	16274.9	35137.5	49300.3	77.	1.083	52987.	48.91	1.18	2013.	55000.	
USSR	M	79 3 5	5157N	17200W	16283.4	35137.8	49290.1	74.	0.500	23947.	47.89	1.06	2453.	26400.	
USSR	M	78 318	5205N	17549E	11997.4	34420.6	50101.2	93.	0.917	43663.	47.85	0.41	137.	44000.	
USSR	M	79 113	5139N	17507E	11734.1	34411.6	50094.5	104.	0.917	43760.	47.74	1.24	240.	44000.	
USSR	M	79 211	5200N	17200W	16296.0	35137.7	49298.2	77.	0.917	43541.	47.28	1.24	659.	44000.	
USSR	M	79 218	5158N	17203W	16274.9	35137.5	49300.3	74.	0.750	35200.	46.93	1.09	0.	35200.	
USSR	M	78 323	5151N	17556E	16255.8	34453.2	50087.5	101.	0.500	22000.	44.00	0.43	0.	22000.	
USSR	M	79 2 9	5200N	17202W	16289.1	35137.6	49303.1	77.	0.750	32931.	43.91	1.11	69.	33000.	
USSR	M	79 1 9	5140N	17507E	11733.6	34409.9	50095.3	98.	0.500	21895.	43.79	0.76	105.	22000.	
USSR	M	78 321	5157N	17555E	16226.1	34442.0	50092.8	109.	0.500	21804.	43.61	0.40	196.	22000.	
USSR	M	79 3 5	5158N	17206W	16261.5	35137.2	49307.7	77.	0.500	21517.	43.03	1.11	483.	22000.	
USSR	M	79 127	5159N	17210W	16248.4	35136.7	49320.2	107.	1.000	42851.	42.85	1.10	1149.	44000.	
USSR	M	79 214	5200N	17208W	16262.3	35136.9	49317.9	85.	1.000	42640.	42.64	1.08	1360.	44000.	
USSR	M	79 3 2	5158N	17200W	16282.2	35137.8	49292.8	88.	1.083	43640.	40.28	1.03	360.	44000.	
USSR	M	79 216	5158N	17209W	16246.0	35136.9	49315.1	88.	1.333	53638.	40.23	1.13	1362.	55000.	
USSR	M	79 217	5158N	17209W	16246.0	35136.9	49315.1	96.	1.000	39644.	39.64	1.14	4356.	44000.	
USSR	M	78 322	5151N	17555E	16273.5	34451.9	50087.9	104.	0.500	19759.	39.52	0.37	41.	19800.	
USSR	M	79 215	5158N	17204W	16270.4	35137.4	49302.8	82.	1.167	45662.	39.16	1.26	518.	46200.	

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-25 (continued). ATKA MACKEREL, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	79 217	5157N	17201W	7X ***** 16278.9 35137.7 49292.6	77	0.667	25740.	38.61	1.13	0.	25740.
USSR	M	79 312	5159N	17219W	16207.6 35135.4 49341.9	115	0.834	31894.	38.27	1.13	1106.	33000.
USSR	M	79 3 7	5200N	17204W	16280.2 35137.4 49308.1	77	0.583	21893.	37.53	1.31	107.	22000.
USSR	M	79 117	5140N	17507E	11733.6 34409.9 50095.3	87	0.583	21865.	37.48	0.68	135.	22000.
USSR	M	79 3 4	5158N	17201W	16283.8 35137.7 49295.3	68	1.083	40419.	37.31	1.11	3501.	44000.
USSR	M	79 129	5200N	17203W	16284.8 35137.5 49305.6	104	1.417	52800.	37.27	1.00	0.	52800.
USSR	M	79 311	5200N	17218W	16217.0 35135.6 49342.2	102	0.583	21738.	37.26	1.07	262.	22000.
USSR	M	79 3 3	5157N	17201W	16278.9 35137.7 49292.6	74	0.417	15283.	36.68	1.09	1217.	16500.
USSR	M	79 2 8	5201N	17201W	16298.5 35137.6 49303.3	74	0.917	32622.	35.59	1.08	378.	33000.
USSR	M	79 1 8	5140N	17507E	11733.6 34409.9 50095.3	87	0.750	26301.	35.07	0.71	99.	26400.
USSR	M	80 1 9	5202N	17217W	16231.3 35135.6 49345.1	87	1.000	34268.	34.27	0.66	932.	35200.
USSR	M	79 128	5158N	17205W	16265.9 35137.3 49305.2	98	1.083	36670.	33.85	1.03	730.	37400.
USSR	M	78 326	5150N	17552E	12004.2 34449.8 50088.1	115	0.667	22000.	33.00	0.46	0.	22000.
USSR	M	78 321	5151N	17554E	12017.1 34450.7 50088.2	104	1.333	44000.	33.00	0.38	0.	44000.
USSR	M	78 324	5200N	17552E	12011.7 34433.1 50096.2	109	0.667	21904.	32.86	0.45	96.	22000.
USSR	M	78 323	5137N	17538E	11915.4 34453.3 50082.2	123	0.333	10756.	32.82	0.66	244.	11000.
USSR	M	79 3 9	5200N	17206W	16271.2 35137.2 49313.0	71	0.667	21377.	32.07	1.06	623.	22000.
USSR	M	79 123	5158N	17214W	16225.4 35136.3 49327.2	87	0.917	29191.	31.84	1.02	3809.	33000.
USSR	M	79 3 6	5156N	17200W	16278.5 35137.8 49287.5	80	0.833	26396.	31.68	0.86	4.	26400.
USSR	M	79 124	5158N	17204W	16270.4 35137.4 49302.8	87	1.000	31549.	31.55	1.05	3651.	35200.
USSR	M	79 312	5159N	17218W	16212.1 35135.6 49339.5	107	0.833	25971.	31.17	1.02	869.	26840.
USSR	M	79 129	5200N	17203W	16284.6 35137.5 49305.6	109	1.417	44000.	31.06	1.01	0.	44000.
USSR	M	79 214	5259N	17246W	16377.9 35120.4 49573.4	80	1.750	53651.	30.66	1.06	1349.	55000.
USSR	M	79 2 9	5200N	17202W	16269.1 35137.6 49303.1	71	1.083	32806.	30.28	0.99	194.	33000.
USSR	M	76 330	5200N	17552E	12011.7 34433.1 50096.2	98	0.583	17553.	30.09	0.50	47.	17600.
USSR	M	79 2 9	5200N	17202W	16289.1 35137.6 49303.1	71	0.750	21697.	28.93	0.99	303.	22000.
USSR	M	79 226	5200N	17208W	16262.3 35136.9 49317.9	74	1.167	32341.	27.72	1.03	1759.	34100.
USSR	M	78 331	5206N	17603E	12089.3 34436.9 50097.5	82	0.750	20441.	27.25	0.15	1559.	22000.
USSR	M	78 329	5203N	17549E	11995.4 34424.2 50099.6	98	0.417	10991.	26.38	0.61	9.	11000.
USSR	M	78 315	5140N	17550E	11987.7 34463.5 50080.4	77	1.250	32915.	26.33	0.46	85.	33000.
USSR	M	79 213	5200N	17201W	16293.6 35137.6 49300.7	74	0.833	21892.	26.27	1.06	108.	22000.
USSR	M	79 314	5200N	17220W	16207.9 35135.2 49348.9	107	0.500	13134.	26.27	1.04	66.	13200.
USSR	M	79 117	5141N	17539E	11921.5 34448.2 50085.2	82	0.417	10901.	26.16	0.70	99.	11000.
USSR	M	79 313	5159N	17215W	16225.8 35136.1 49332.3	107	1.000	26160.	26.16	1.05	240.	26400.
USSR	M	78 313	5139N	17549E	11981.4 34463.8 50079.9	77	0.583	15260.	26.16	0.41	140.	15400.
USSR	M	79 3 5	5200N	17208W	16262.3 35136.9 49317.9	74	0.750	19572.	26.10	1.08	2428.	22000.
USSR	M	79 215	5203N	17216W	16240.7 35135.7 49345.4	96	1.833	47338.	26.09	1.19	562.	48400.
USSR	M	78 330	5138N	17540E	11927.3 34454.2 50082.3	118	1.333	34297.	25.72	0.60	903.	35200.
USSR	M	79 115	5133N	17507E	11737.9 34421.3 50089.8	109	1.333	32875.	24.66	0.78	125.	33000.
USSR	M	79 111	5142N	17506E	11727.9 34408.7 50093.6	98	1.000	24200.	24.20	0.73	0.	24200.
USSR	M	79 226	5158N	17208W	16252.5 35137.0 49312.6	80	1.000	23965.	23.97	1.00	10135.	34100.
USSR	M	78 325	5200N	17552E	12011.7 34433.1 50096.2	98	0.917	21843.	23.83	0.45	157.	22000.
USSR	M	80 1 8	5202N	17210W	16263.0 35136.6 49328.2	77	1.000	23374.	23.57	0.79	626.	24200.
USSR	M	79 127	5157N	17204W	16265.6 35137.5 49300.1	93	1.833	42666.	23.27	1.02	1334.	44600.
USSR	M	79 3 5	5200N	17205W	16275.7 35137.3 49310.6	74	0.833	18863.	22.66	1.10	477.	19360.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-25 (continued). ATKA MACKEREL, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX	7X	7Y	7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	79 116	5133N	17507E	11734.7	34413.2	50093.7	109	1.167	26254.	22.51	6.72	136.	26400.	
USSR	M	78 329	5139N	17540E	11927.3	34452.6	50083.2	120	1.250	27749.	22.20	0.64	851.	26600.	
USSR	M	79 130	5133N	17203W	16250.6	35137.6	49287.0	109	1.500	32924.	21.95	1.04	76.	33000.	
USSR	M	78 328	5204N	17530E	12002.8	34423.7	50100.1	109	0.500	10951.	21.90	0.55	49.	11000.	
USSR	M	78 316	5136N	17542E	11938.1	34459.9	50079.9	96	0.500	10781.	21.56	0.54	219.	11000.	
USSR	M	79 114	5139N	17506E	11728.4	34410.3	50094.8	71	1.000	21449.	21.45	0.81	551.	32000.	
USSR	M	79 215	5137N	17203W	16270.0	35137.5	49297.6	83	1.417	30237.	21.34	1.19	563.	30800.	
USSR	M	79 311	5137N	17221W	16193.6	35135.2	49344.0	115	0.833	17602.	21.22	1.08	578.	18260.	
USSR	M	79 123	5200N	17212W	16244.2	35135.4	49322.7	87	1.333	27552.	20.66	1.03	5448.	33000.	
USSR	M	79 214	5137N	17202W	16274.3	35137.6	49295.1	82	1.250	25413.	20.33	1.24	987.	26400.	
USSR	M	80 1 7	5139N	17207W	16261.9	35137.1	49312.8	87	1.083	21497.	19.84	0.83	503.	22000.	
USSR	M	79 125	5202N	17212W	16234.0	35136.4	49333.1	87	0.417	8217.	19.72	1.02	2783.	11000.	
USSR	M	79 2 8	5202N	17201W	16301.4	35137.6	49306.0	74	1.583	31214.	19.71	1.04	1786.	33000.	
USSR	M	79 3 9	5200N	17200W	16298.0	35137.7	49298.2	77	1.167	22093.	18.94	0.86	347.	22440.	
USSR	M	80 1 8	5202N	17216W	16235.8	35135.9	49342.7	90	1.750	33126.	18.93	0.83	536.	33560.	
USSR	M	79 215	5139N	17204W	16279.3	35137.4	49305.4	85	1.750	32775.	18.73	1.06	1105.	33880.	
USSR	M	79 113	5139N	17507E	11734.1	34411.6	50094.5	104	1.167	21776.	18.67	0.84	224.	22000.	
USSR	M	79 129	5200N	17202W	16289.1	35137.6	49303.1	109	1.417	26354.	18.60	1.00	46.	26400.	
USSR	M	79 313	5200N	17217W	16221.5	35135.7	49339.8	107	1.000	18466.	18.49	1.01	3514.	22000.	
USSR	M	79 110	5140N	17507E	11733.6	34409.9	50095.3	93	1.417	26159.	18.47	0.65	241.	26400.	
USSR	M	79 210	5205N	17210W	16277.8	35136.5	49336.3	77	0.583	10643.	18.24	1.12	357.	11000.	
USSR	M	78 3 8	5135N	17548E	11975.4	34462.0	50080.3	77	0.500	8800.	17.60	0.45	0.	8800.	
USSR	M	79 218	5138N	17208W	16252.5	35137.0	49312.6	109	1.083	19022.	17.56	1.11	778.	19800.	
USSR	M	78 331	5139N	17540E	11927.3	34452.6	50083.2	115	1.500	25919.	17.28	0.70	481.	26400.	
USSR	M	79 131	5137N	17205W	16261.1	35137.4	49302.8	104	1.500	25041.	16.69	1.01	1359.	26400.	
USSR	M	79 126	5200N	17211W	16248.7	35136.8	49325.3	90	1.167	19062.	16.34	1.05	2938.	22000.	
USSR	M	79 213	5203N	17200W	16302.9	35137.7	49300.8	79	1.333	21756.	16.32	1.11	244.	22000.	
USSR	M	78 315	5133N	17549E	11980.8	34473.3	50074.8	77	1.083	17505.	16.16	0.41	95.	17600.	
USSR	M	78 327	5204N	17549E	11996.4	34422.5	50100.4	98	0.417	6506.	15.62	0.55	94.	6600.	
USSR	M	78 326	5141N	17542E	11935.6	34451.9	50084.1	82	1.117	17327.	15.52	0.62	273.	17600.	
USSR	M	79 2 8	5200N	17202W	16289.1	35137.6	49303.1	71	2.083	32187.	15.45	1.05	813.	33000.	
USSR	M	79 114	5138N	17507E	11734.7	34413.2	50093.7	96	2.000	30767.	15.38	0.76	33.	30800.	
USSR	M	79 214	5137N	17203W	16276.0	35137.5	49297.6	85	1.000	15367.	15.37	1.22	33.	15400.	
USSR	M	80 1 6	5200N	17206W	16271.2	35137.2	49313.0	79	1.667	25327.	15.20	0.69	1073.	26400.	
USSR	M	79 111	5140N	17507E	11731.6	34409.9	50095.3	98	2.167	32908.	15.19	0.73	92.	33000.	
USSR	M	79 3 3	5137N	17200W	16281.4	35137.8	49290.1	74	1.000	15142.	15.14	1.12	1358.	16500.	
USSR	M	78 313	5135N	17550E	11982.5	34465.1	50079.5	77	0.750	11000.	14.67	0.43	0.	11000.	
USSR	M	78 315	5133N	17549E	11980.8	34473.3	50074.8	77	0.750	11000.	14.67	0.45	0.	11000.	
USSR	M	78 328	5136N	17539E	11921.5	34459.3	50079.4	109	0.750	10998.	14.66	0.76	2.	11000.	
USSR	M	79 129	5203N	17203W	16294.5	35137.4	49311.0	109	1.500	21933.	14.62	1.00	67.	22000.	
USSR	M	78 322	5141N	17545E	11957.7	34455.6	50083.1	85	0.883	12893.	14.60	0.68	307.	13200.	
USSR	M	79 116	5138N	17535E	11897.6	34448.7	50084.1	98	1.000	14544.	14.54	0.75	4596.	19140.	
USSR	M	78 328	5136N	17534E	11891.6	34446.7	50084.5	115	1.417	20531.	14.49	0.65	1469.	22000.	
USSR	M	78 316	5136N	17534E	11891.6	34449.9	50082.6	98	1.500	21688.	14.46	0.56	312.	22000.	
USSR	M	78 328	5138N	17540E	11927.3	34454.2	50082.3	112	1.583	21678.	13.69	0.65	1422.	23100.	

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-2S (continued). ATKA MACKEREL, JANUARY-MARCH 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATE	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	78 316	5204N	17549E	11996.4	34422.5	50100.4	93.	0.333	4400.	0.46	4400.
USSR	M	78 326	5150N	17552E	12004.2	34449.8	50088.1	115.	0.500	6599.	0.52	6600.
USSR	M	79 131	5200N	17203W	16284.6	35137.5	49305.6	109.	1.667	21971.	29.	22000.
USSR	M	79 1 8	5140N	17507E	11733.0	34409.9	50095.3	87.	0.333	13043.	0.72	13200.
USSR	M	78 331	5200N	17549E	11992.6	34429.3	50097.2	93.	0.333	4324.	0.48	4400.
USSR	M	79 215	5157N	17209W	16243.2	35136.9	49312.4	93.	1.167	14982.	418.	15400.
USSR	M	79 218	5158N	17203W	16274.9	35137.5	49300.3	74.	1.167	14954.	2646.	17600.
USSR	M	79 115	5139N	17536E	11903.5	34447.6	50084.6	101.	1.000	12752.	448.	13200.
USSR	M	79 1 8	5140N	17506E	11727.9	34408.7	50095.6	93.	0.500	6270.	330.	6600.
USSR	M	78 327	5140N	17536E	11903.5	34446.0	50085.4	118.	1.000	12279.	921.	13200.
USSR	M	78 323	5137N	17539E	11921.3	34454.6	50081.9	115.	1.417	17202.	318.	17600.
USSR	M	79 116	5139N	17535E	11897.3	34446.4	50085.0	107.	1.083	13048.	152.	13200.
USSR	M	79 117	5140N	17507E	11733.6	34409.9	50095.3	87.	1.833	21952.	48.	22000.
USSR	M	78 325	5139N	17540E	11927.3	34452.6	50083.2	115.	1.250	14967.	433.	15400.
USSR	M	79 131	5200N	17202W	16289.1	35137.6	49303.1	104.	1.833	21820.	180.	22000.
USSR	M	79 115	5140N	17507E	11733.6	34409.9	50095.3	104.	1.250	14738.	662.	15400.
USSR	M	79 2 2	5156N	17202W	16269.0	35137.7	49292.5	98.	1.167	13752.	1648.	15400.
USSR	M	78 316	5136N	17535E	11897.7	34451.2	50082.5	93.	1.000	10861.	139.	11000.
USSR	M	79 122	5159N	17204W	16275.3	35137.4	49305.4	79.	0.583	6279.	321.	6600.
USSR	M	78 326	5202N	17551E	12007.2	34428.4	50098.2	109.	0.417	4400.	0.	4400.
USSR	M	78 330	5204N	17549E	11996.4	34422.5	50100.4	104.	0.583	6566.	34.	6600.
USSR	M	78 329	5139N	17540E	11997.4	34420.8	50101.2	93.	1.000	10992.	8.	11000.
USSR	M	79 2 7	5156N	17202W	16265.6	35137.7	49292.5	71.	1.750	19144.	656.	19800.
USSR	M	78 317	5137N	17534E	11891.7	34448.3	50083.7	93.	1.000	10861.	139.	11000.
USSR	M	78 316	5136N	17535E	11897.7	34451.2	50082.5	93.	1.000	10844.	136.	11000.
USSR	M	79 122	5159N	17204W	16275.3	35137.4	49305.4	79.	0.583	6279.	321.	6600.
USSR	M	78 326	5202N	17551E	12007.2	34428.4	50098.2	109.	0.417	4400.	0.	4400.
USSR	M	78 329	5139N	17540E	11997.4	34420.8	50101.2	93.	1.000	10992.	8.	11000.
USSR	M	79 124	5203N	17219W	16227.1	35135.2	49352.6	85.	1.250	13046.	2854.	20900.
USSR	M	78 327	5151N	17556E	12029.8	34453.2	50087.5	109.	0.417	4336.	64.	4400.
USSR	M	80 1 7	5203N	17210W	16267.9	35136.6	49330.9	82.	1.583	16369.	1231.	17600.
USSR	M	78 317	5137N	17534E	11891.7	34448.3	50083.7	98.	1.083	10872.	128.	11000.
USSR	M	78 131	5139N	17540E	11927.3	34452.6	50083.2	115.	1.833	17376.	224.	17600.
USSR	M	79 1 9	5138N	17506E	11725.0	34412.0	50094.1	93.	1.167	13000.	0.73	11000.
USSR	M	78 327	5140N	17533E	11885.6	34442.3	50086.5	115.	1.667	15553.	0.61	16500.
USSR	M	79 127	5159N	17210W	16242.4	35136.7	49320.2	93.	1.000	8688.	947.	16500.
USSR	M	79 122	5203N	17210W	16267.9	35136.6	49330.9	85.	1.417	12486.	2112.	11000.
USSR	M	79 114	5139N	17506E	11728.4	34410.3	50094.6	96.	0.500	4349.	8834.	21120.
USSR	M	79 1 9	5139N	17507E	11734.1	34411.6	50094.5	93.	1.250	10868.	51.	4400.
USSR	M	78 330	5139N	17540E	11927.3	34452.6	50083.2	115.	1.500	13008.	132.	11000.
USSR	M	79 117	5140N	17507E	11733.6	34409.9	50095.3	93.	1.000	8649.	0.67	13200.
USSR	M	79 126	5202N	17220W	16217.6	35135.1	49352.3	101.	1.000	8421.	0.70	8200.
USSR	M	79 218	5159N	17205W	16270.8	35137.3	49307.9	77.	1.000	8367.	151.	8800.
USSR	M	79 2 1	5202N	17203W	16294.5	35137.4	49311.0	71.	1.667	13140.	379.	8800.
USSR	M	79 2 1	5201N	17203W	16285.5	35137.4	49300.3	79.	1.917	15079.	1.08	8500.
USSR	M	78 328	5134N	17539E	11921.5	34459.3	50079.4	123.	0.833	6539.	60.	13200.
USSR	M									0.99	321.	15400.
USSR	M									0.74	61.	6600.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-25 (continued). ATKA MACKEREL, JANUARY-MARCH 1977-80

VESSEL CLASS	DATE	LAT	LCNG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE (LBS/FTSH)	BYCATCH (LBS)	TOTAL CATCH (LBS)
*****	*****	*****	*****	7Y 7Z	*****	*****	*****	*****	*****	*****	*****
USSR	80 1 7	5204N	17208W	16267.1 35136.9	49320.6	1.667	12818.	7.69	6.85	1042.	13866.
USSR	78 318	5204N	17549E	34422.5 50100.4	90	0.833	6408.	7.69	0.43	192.	6600.
USSR	79 118	5139N	17538E	34450.1 50083.9	101	0.833	6375.	7.65	0.73	225.	6600.
USSR	79 214	5159N	17208W	35137.0 49315.3	96	1.417	10611.	7.44	1.20	389.	11000.
USSR	78 331	5204N	17549E	34422.5 50100.4	90	0.583	4337.	7.44	0.60	63.	4400.
USSR	78 322	5137N	17539E	34454.6 50081.9	120	2.000	14411.	7.21	0.71	989.	15400.
USSR	78 327	5204N	17549E	34422.5 50100.4	98	0.917	6600.	7.20	0.49	0.	6600.
USSR	78 128	5200N	17203W	35137.5 49305.6	107	1.583	11000.	6.95	1.12	0.	11000.
USSR	78 125	5202N	17219W	35135.3 49349.9	90	1.583	10560.	6.66	1.01	460.	11000.
USSR	78 2 1	5201N	17203W	35137.4 49306.3	98	1.667	11000.	6.60	1.00	0.	11000.
USSR	78 130	5207N	17203W	35137.3 49324.5	109	2.583	17026.	6.59	1.05	574.	17600.
USSR	78 319	5205N	17549E	34420.8 50101.2	93	1.000	6572.	6.57	0.46	28.	6600.
USSR	78 123	5202N	17212W	35136.4 49333.1	85	1.417	9294.	6.56	1.04	1766.	11000.
USSR	78 113	5140N	17506E	34408.7 50095.6	98	1.667	10849.	6.51	0.71	151.	11000.
USSR	78 119	5139N	17536E	34447.6 50084.6	98	1.000	6457.	6.46	0.70	143.	6600.
USSR	78 325	5139N	17538E	34450.1 50083.9	120	3.000	18704.	6.23	0.73	2196.	20300.
USSR	78 119	5139N	17507E	34411.6 50094.5	96	1.417	8600.	5.91	0.74	194.	6600.
USSR	78 1 9	5140N	17507E	34409.9 50095.3	93	1.083	6406.	5.91	0.74	194.	6600.
USSR	78 124	5201N	17217W	35135.7 49342.4	85	1.333	7774.	5.83	1.01	1022.	9800.
USSR	78 114	5139N	17536E	34447.6 50084.6	104	0.750	4358.	5.81	0.73	42.	4400.
USSR	78 1 8	5203N	17211W	35136.5 49333.3	82	1.750	10064.	5.75	0.83	936.	11000.
USSR	78 323	5200N	17533E	34434.4 50095.9	97	0.750	4312.	5.75	0.42	88.	4400.
USSR	78 119	5139N	17506E	34448.5 50084.7	85	0.667	3199.	4.80	0.68	101.	3300.
USSR	78 216	5158N	17204W	35137.7 49300.8	112	1.583	6647.	4.74	0.72	57.	4400.
USSR	78 210	5201N	17204W	35137.4 49302.8	86	1.167	5515.	4.74	1.07	60.	4400.
USSR	78 130	5157N	17203W	35137.5 49297.6	107	1.833	9889.	4.73	1.07	1025.	6600.
USSR	78 116	5138N	17507E	34413.2 50093.7	109	2.000	10585.	4.67	0.66	768.	6600.
USSR	78 117	5140N	17506E	34448.5 50084.7	98	0.667	3199.	4.74	0.68	101.	3300.
USSR	78 115	5136N	17506E	34415.2 50092.5	191	0.917	4340.	4.74	0.77	60.	4400.
USSR	78 216	5158N	17204W	35137.4 49302.8	86	1.167	5515.	4.73	1.07	1025.	6600.
USSR	78 118	5139N	17507E	34411.6 50094.5	87	1.250	5832.	4.67	0.66	768.	6600.
USSR	78 326	5140N	17536E	34446.0 50085.4	93	1.417	6447.	4.55	0.58	153.	6600.
USSR	78 117	5141N	17540E	34449.4 50084.8	79	0.917	4139.	4.51	0.66	261.	4400.
USSR	78 116	5139N	17537E	34448.9 50084.3	101	0.750	3375.	4.50	0.70	1685.	5060.
USSR	78 330	5203N	17507E	34425.5 50099.3	109	0.500	2199.	4.40	0.53	1.	2200.
USSR	78 119	5138N	17507E	34413.2 50093.7	93	1.507	5990.	3.59	0.70	610.	6600.
USSR	78 313	5137N	17534E	34448.3 50083.7	101	0.667	2156.	3.23	0.55	44.	2200.
USSR	78 128	5200N	17203W	35137.5 49305.6	104	1.333	4211.	3.16	1.21	189.	4400.
USSR	78 115	5139N	17536E	34447.6 50084.6	98	0.917	2507.	2.73	0.76	133.	2640.
USSR	78 130	5138N	17208W	35137.0 49312.6	104	1.500	3991.	2.66	1.00	409.	4400.
USSR	78 317	5136N	17535E	34451.2 50082.5	96	1.083	2151.	1.99	0.63	49.	2260.
USSR	78 126	5202N	17216W	35135.8 49342.7	96	1.917	3719.	1.94	0.90	681.	4400.
USSR	78 115	5139N	17536E	34447.6 50084.6	98	1.167	2151.	1.84	0.68	49.	2200.
USSR	78 325	5204N	17549E	34422.5 50100.4	115	0.667	1074.	1.61	0.57	26.	1100.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-25 (continued). ATKA MACKREL, JANUARY-MARCH 1977-80

NATION	VESSLE CLASS	DATE	LAT	LONG	APPROX	LOXAN-C	PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND	SIZE	BYCATCH	TOTAL
*****	*****	*****	*****	*****	FX	LY	7Z	7Z	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
USSR	B	79 119	5138N	17506E	11729.0	34412.0	50094.1	104.	0.833	1095.	1.31	0.70	5.	1100.	
USSR	B	79 118	5142N	17539E	11921.6	34446.5	50086.0	79.	0.500	594.	1.19	0.65	66.	860.	
USSR	A	79 116	5138N	17507E	11734.7	34413.2	50093.7	109.	1.833	1981.	1.08	0.83	219.	2200.	

*** NOTE *** THE ACCURACY OF POSITION AND LOXAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

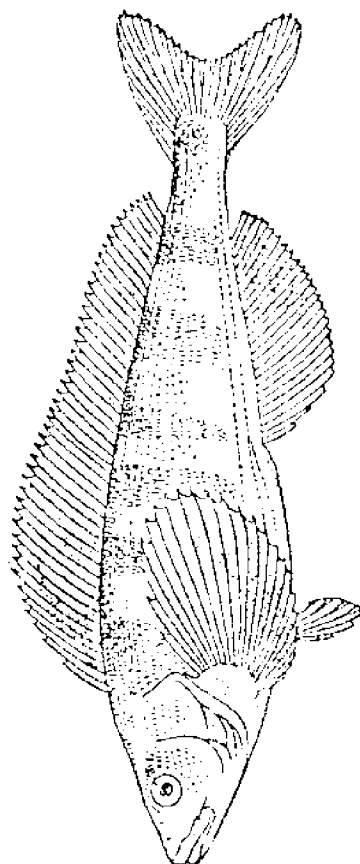


TABLE B-26. ATKA MACKEREL, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	YR/MO	LAI	LONG	APPROX LGRAN-C 7X	PULSE 7Y	RATES 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	77 6 14	5151N	17553E	12011.0	34449.4	50089.6	71.	0.033	8759.	262.76	0.52	41.	8800.	
USSR	M	77 6 2	5152N	17550E	11992.9	34444.0	50090.4	55.	0.233	32964.	141.27	0.63	36.	33000.	
USSR	M	77 6 5	5153N	17549E	11987.3	34441.1	50091.6	45.	0.250	33000.	132.00	0.67	0.	33000.	
USSR	M	77 6 16	5150N	17551E	11997.9	34448.5	50082.4	49.	0.250	33000.	132.00	0.54	0.	33000.	
USSR	M	77 6 14	5153N	17547E	11974.7	34438.5	50092.3	55.	0.167	21922.	131.53	0.58	78.	22000.	
USSR	M	77 6 4	5153N	17549E	11987.3	34441.1	50091.6	46.	0.283	32488.	114.66	0.71	512.	33000.	
USSR	M	77 6 16	5151N	17550E	11992.3	34445.6	50089.6	55.	0.167	17322.	103.93	0.57	278.	17600.	
USSR	M	77 6 17	5151N	17550E	11992.3	34445.6	50089.6	49.	0.333	33000.	99.00	0.50	0.	33000.	
USSR	M	77 6 21	5151N	17550E	11992.3	34445.6	50089.6	49.	0.333	32989.	98.97	0.38	11.	33000.	
USSR	M	77 6 5	5153N	17549E	11987.3	34441.1	50091.6	44.	0.333	32856.	98.57	0.69	144.	33000.	
USSR	M	77 6 3	5151N	17550E	11992.3	34445.6	50089.6	57.	0.367	33000.	90.00	0.71	0.	33000.	
USSR	M	77 6 25	5151N	17550E	11992.3	34445.6	50089.6	55.	0.250	21792.	87.17	0.42	208.	22000.	
USSR	M	77 6 21	5202N	17606W	15043.3	35002.5	49758.1	52.	0.333	27290.	81.87	0.53	1310.	28600.	
USSR	M	77 6 19	5151N	17551E	11998.5	34446.9	50089.2	49.	0.333	26299.	78.90	0.47	101.	26400.	
USSR	M	77 6 1	5151N	17554E	12017.3	34450.7	50088.2	49.	0.417	32789.	78.69	0.79	211.	33000.	
USSR	M	77 6 21	5151N	17550E	11992.3	34445.6	50089.6	55.	0.250	19311.	76.04	0.60	789.	19800.	
USSR	M	77 6 17	5151N	17551E	11992.5	34446.9	50089.2	55.	0.200	15181.	75.90	0.45	219.	15400.	
USSR	M	77 6 11	5151N	17550E	11992.3	34445.6	50089.6	55.	0.450	32923.	73.16	0.72	77.	33000.	
USSR	M	77 6 20	5151N	17552E	12004.8	34448.2	50088.9	52.	0.217	15400.	71.08	0.56	0.	15400.	
USSR	M	78 6 20	5255N	17056E	11084.6	33955.6	50175.0	93.	0.417	29544.	70.91	0.72	1256.	30800.	
USSR	M	77 6 2	5151N	17548E	11979.8	34443.1	50090.3	57.	0.467	32980.	70.67	0.73	20.	33000.	
USSR	M	77 6 11	5153N	17547E	11974.7	34438.5	50092.3	46.	0.333	22621.	67.86	0.68	16379.	33000.	
USSR	M	77 6 26	5158N	17608E	12112.0	34456.8	50089.2	52.	0.417	28038.	67.29	0.54	562.	28600.	
USSR	M	77 6 5	5151N	17549E	11986.1	34444.4	50089.9	55.	0.300	19800.	66.00	0.62	0.	19800.	
USSR	M	77 6 10	5153N	17544E	11956.0	34434.8	50093.3	44.	0.500	32732.	65.46	0.63	268.	33000.	
USSR	M	77 6 20	5151N	17550E	11992.3	34445.6	50089.6	55.	0.267	17455.	65.46	0.61	145.	17600.	
USSR	M	78 6 15	5255N	17058E	11083.7	33958.0	50174.9	93.	0.333	21257.	63.77	0.70	743.	22000.	
USSR	M	77 6 6	5151N	17552E	12064.8	34448.2	50088.9	49.	0.300	17476.	58.25	0.63	124.	17600.	
USSR	M	77 6 21	5158N	17608E	12112.0	34456.8	50089.2	52.	0.833	46828.	56.19	0.55	8172.	55000.	
USSR	M	77 6 23	5159N	17608E	12113.1	34455.1	50090.0	52.	0.583	31986.	54.63	0.63	1014.	33000.	
USSR	M	78 6 22	5255N	17058E	11083.7	33958.0	50174.9	93.	0.583	31090.	54.67	0.71	1110.	33000.	
USSR	M	77 6 10	5151N	17549E	11986.1	34444.4	50089.9	55.	0.633	34243.	54.07	0.66	957.	35200.	
USSR	M	77 6 21	5151N	17551E	11998.5	34446.9	50089.2	55.	0.333	17569.	52.71	0.64	31.	17600.	
USSR	M	77 6 24	5151N	17550E	11992.3	34445.6	50089.6	55.	0.333	17425.	52.28	0.42	175.	17600.	
USSR	M	77 6 26	5158N	17610W	15004.2	35001.4	49754.9	52.	0.417	21652.	51.96	0.61	348.	22000.	
USSR	M	77 6 1	5151N	17549E	11986.1	34444.4	50089.9	55.	0.200	10363.	51.82	0.66	837.	11000.	
USSR	M	77 6 27	5151N	17551E	11998.5	34446.9	50089.2	58.	0.583	29951.	51.34	0.48	3049.	33000.	
USSR	M	78 4 5	5139N	17540E	11927.3	34452.6	50083.2	112.	0.500	24888.	49.72	0.65	2612.	27500.	
USSR	M	77 6 4	5153N	17549E	11987.3	34441.1	50091.6	44.	0.667	33000.	49.50	0.71	0.	33000.	
USSR	M	78 4 21	5151N	17544E	11955.5	34436.4	50092.5	57.	0.750	37105.	49.47	0.56	2495.	39600.	
USSR	M	77 6 5	5151N	17549E	11986.1	34444.4	50089.9	55.	0.367	17600.	48.00	0.66	0.	17600.	
USSR	M	77 6 18	5151N	17550E	11992.3	34445.6	50089.6	55.	0.200	9525.	47.62	0.52	1475.	11000.	
USSR	M	77 6 9	5153N	17544E	11956.0	34434.8	50093.3	44.	0.333	15657.	46.97	0.62	1943.	17600.	
USSR	M	77 6 24	5156N	17604E	12084.4	34455.1	50088.9	52.	0.833	38878.	46.65	0.55	5122.	44000.	
USSR	M	77 6 21	5151N	17550E	11992.3	34445.6	50089.6	55.	0.383	17499.	45.65	0.66	101.	17600.	

*** NOTE *** THE ACCURACY OF POSITION AND LGRAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-26 (continued). ATKA MACKEREL, APRIL-JUNE 1977-80

NATION	VESEL CLASS	DATE	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCAT (LBS)	TOTAL CATCH (LBS)
USSR	M	78 626	5255N	17058E	11081.7	33958.0	50174.9	60	0.917	41728	45.52	0.75	2277	44000
USSR	M	77 6 7	5235N	17322W	13909.0	34734.2	50007.5	66	0.500	21967	43.93	0.51	33	22000
USSR	M	77 6 7	5151N	17544E	11954.9	34438.1	50091.7	46	1.000	43474	43.47	0.45	526	44000
USSR	M	77 610	5151N	17549E	11986.1	34444.4	50089.9	49	0.450	19506	43.35	0.66	294	19800
USSR	M	77 624	5202N	17606W	15043.3	35002.5	49758.1	52	0.500	21335	42.67	0.66	665	22000
USSR	M	77 610	5153N	17545E	11962.2	34436.0	50092.9	46	0.500	21276	42.55	0.70	724	22000
USSR	M	77 627	5151N	17551E	11982.5	34446.9	50089.2	58	0.583	24552	42.09	0.47	1848	26400
USSR	M	77 623	5202N	17606W	15043.3	35002.5	49758.1	52	0.383	15965	41.39	0.58	3935	19800
USSR	M	77 627	5159N	17610W	15008.2	35000.8	49757.0	52	0.333	13017	39.05	0.57	123	13200
USSR	M	78 422	5235N	17927W	13941.2	34740.7	50004.4	93	0.750	29205	38.94	0.64	495	29700
USSR	M	78 422	5236N	17927W	13944.9	34739.3	50005.8	93	1.000	37282	37.26	0.64	138	37400
USSR	M	78 4 1	5142N	17541E	11933.7	34449.0	50089.3	93	0.583	21639	37.10	0.66	361	22000
USSR	M	77 617	5159N	17610E	12125.9	34457.7	50089.3	52	0.500	18528	37.05	0.84	3474	22000
USSR	M	78 623	5255N	17058E	11083.7	33958.0	50174.9	93	0.833	30203	36.24	0.74	597	30800
USSR	M	77 618	5151N	17550E	11992.3	34445.6	50089.6	52	0.417	14844	35.63	0.57	556	15400
USSR	M	78 4 9	5159N	17530E	11903.5	34447.6	50084.6	107	1.250	43657	34.93	0.62	343	44000
USSR	M	78 621	5253N	17049E	11081.5	33951.5	50175.1	93	1.000	34761	34.76	0.74	439	35200
USSR	M	77 626	5158N	17608E	12112.0	34456.8	50089.2	52	0.917	31580	34.45	0.46	1420	33000
USSR	M	78 4 9	5159N	17534E	11891.6	34445.1	50085.3	109	0.750	25457	33.94	0.52	943	26400
USSR	M	78 427	5232N	17919W	13981.7	34755.1	49994.9	87	1.167	39534	35.89	0.67	506	40040
USSR	M	78 625	5255N	17058E	11083.7	33958.0	50174.9	93	0.750	25308	33.85	0.72	1012	26400
USSR	M	78 423	5235N	17925W	13954.1	34743.2	50003.1	97	1.000	33836	33.84	0.62	1564	35200
USSR	M	77 619	5151N	17551E	11998.5	34446.9	50089.2	49	0.333	10985	32.95	0.62	15	11000
USSR	M	77 529	5228N	17538E	11955.9	34369.0	50120.0	82	0.333	10950	32.85	0.99	50	11000
USSR	M	77 611	5151N	17549E	11986.1	34444.4	50089.9	49	0.333	10940	32.82	0.73	60	11000
USSR	M	77 619	5151N	17549E	11986.1	34444.4	50089.9	55	0.333	10861	32.58	0.59	139	11000
USSR	M	77 6 3	5151N	17548E	11979.8	34443.1	50090.3	57	0.850	27463	32.31	0.57	5537	33000
USSR	M	77 612	5151N	17549E	11986.1	34444.4	50089.9	55	0.650	20900	32.15	0.74	1100	22000
USSR	M	77 623	5202N	17606W	15043.3	35002.5	49758.1	52	0.333	10713	32.14	0.60	287	11000
USSR	M	77 617	5157N	17607E	12104.5	34457.2	50088.7	52	0.917	29418	32.09	0.64	3582	33000
USSR	M	78 423	5235N	17925W	13954.1	34743.2	50003.1	101	1.083	34474	31.82	0.62	1826	36300
USSR	M	78 616	5255N	17058E	11083.7	33958.0	50174.9	93	0.667	21158	31.74	0.71	842	22000
USSR	M	77 618	5151N	17549E	11986.1	34444.4	50089.9	55	0.417	13185	31.64	0.60	15	13200
USSR	M	78 616	5255N	17058E	11083.7	33958.0	50174.9	93	0.667	21083	31.62	0.74	917	22000
USSR	M	77 619	5151N	17550E	11992.3	34445.6	50089.6	55	0.417	13177	31.62	0.58	23	13200
USSR	M	78 620	5255N	17056E	11084.6	33955.6	50175.0	93	0.833	26326	31.59	0.75	2274	29600
USSR	M	77 627	5159N	17610W	15008.2	35000.8	49757.0	52	0.417	13133	31.52	0.61	67	13200
USSR	M	77 616	5151N	17600E	12056.4	34455.0	50087.8	48	0.500	15686	31.37	0.60	1914	17600
USSR	M	77 623	5151N	17550E	11992.3	34445.6	50089.6	55	0.283	8749	30.86	0.55	51	9800
USSR	M	78 424	5236N	17925W	13957.8	34741.8	50004.5	96	1.000	30832	30.83	0.65	1068	31900
USSR	M	77 527	5200N	17534E	11897.4	34410.3	50102.0	55	0.500	15368	30.74	0.68	8632	22000
USSR	M	77 621	5202N	17606W	15043.3	35002.5	49758.1	52	0.500	15247	30.49	0.49	153	15400
USSR	M	77 627	5158N	17608E	12112.0	34456.8	50089.2	52	0.417	12649	30.36	0.62	551	13200
USSR	M	77 6 4	5151N	17548E	11979.8	34443.1	50090.3	55	0.583	17600	30.17	0.61	0	17600
USSR	M	77 630	5153N	17553E	12012.3	34446.1	50090.2	63	0.500	15072	30.14	0.53	6928	22000

... NOTE ... THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION...

TABLE B-26 (continued). ATKA MACKEREL, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	78 516	5233N	17927W	13933.9 34743.5 50001.5	85	1.500	44558	29.71	0.56	102	44660
USSR	M	77 625	5202N	17606W	15043.3 35002.5 49752.1	52	0.417	12329	29.59	0.25	871	13200
USSR	M	77 615	5153N	17546E	11968.5 34437.3 50092.6	55	0.417	12273	29.46	0.53	927	13200
USSR	M	78 411	5156N	17540E	11927.3 34457.4 50080.7	107	1.167	33971	29.12	0.58	769	34760
USSR	M	78 424	5233N	17937W	13876.7 34727.8 50010.6	96	1.000	29009	29.01	0.60	691	29700
USSR	M	78 422	5236N	17925W	13957.8 34741.8 50004.5	93	1.250	35752	28.60	0.65	548	36300
USSR	M	77 615	5153N	17550E	11993.5 34442.3 50091.2	44	0.583	16648	28.54	0.69	952	17600
USSR	M	77 612	5153N	17547E	11974.7 34438.5 50092.3	46	0.250	7116	28.40	0.63	1684	8000
USSR	M	77 6 9	5153N	17544E	11956.0 34434.8 50093.3	44	0.583	16482	28.26	0.69	5518	22000
USSR	M	76 426	5237N	17924W	13968.0 34741.7 50003.3	87	0.917	25877	28.23	0.60	303	26180
USSR	M	77 6 7	5235N	17932W	13905.0 34734.2 50007.5	66	1.167	32915	28.21	0.57	85	33000
USSR	M	77 620	5202N	17606W	15043.3 35002.5 49752.1	52	0.350	9805	28.01	0.71	1195	11000
USSR	M	77 623	5152N	17607E	12105.6 34455.5 50089.5	52	1.167	32421	27.79	0.46	579	33000
USSR	M	77 526	5226N	17539E	11962.6 34370.3 50119.8	82	0.417	11467	27.52	0.93	1733	13200
USSR	M	78 5 2	5241N	17920W	14008.8 34741.7 50000.5	87	1.583	43057	27.19	0.60	1163	44220
USSR	M	78 624	5255N	17058E	11083.7 33958.0 50174.9	93	0.500	13374	26.75	0.73	926	14300
USSR	M	77 620	5151N	17550E	11992.3 34445.6 50089.6	49	0.333	8800	26.40	0.69	0	8000
USSR	M	77 626	5151N	17551E	11998.5 34446.9 50089.2	50	0.417	10966	26.32	0.44	34	11000
USSR	M	78 615	5255N	17058E	11083.7 33958.0 50174.9	93	0.667	17507	26.26	0.72	93	17600
USSR	M	77 6 6	5151N	17554E	12017.3 34450.7 50068.2	49	0.533	14094	26.26	0.74	1396	15400
USSR	M	77 523	5142N	17540E	11927.7 34447.8 50085.7	53	0.250	6563	26.23	1.08	37	6600
JAPAN	S	78 623	5123N	17854E	13107.0 34713.1 49970.9	77	0.167	4568	26.21	0.68	32	4400
USSR	M	78 515	5232N	17928W	13923.8 34743.6 50000.8	82	1.667	43601	26.10	0.41	399	44000
USSR	M	77 611	5153N	17547E	11974.7 34438.5 50092.3	46	0.333	8687	26.06	0.65	2313	11000
USSR	M	77 613	5151N	17554E	12017.3 34450.7 50088.2	55	0.233	6059	25.97	0.59	2741	8800
USSR	M	77 622	5152N	17608E	12112.0 34456.8 50089.2	52	0.633	21590	25.92	0.50	404	22000
USSR	M	77 627	5159N	17548E	11985.3 34629.7 50086.8	49	0.500	12784	25.57	0.61	416	13200
USSR	M	78 410	5139N	17536E	11903.5 34447.6 50084.6	104	1.583	39411	24.85	0.56	405	39820
USSR	M	78 5 2	5240N	17924W	13979.2 34737.4 50005.5	90	1.083	26941	24.87	0.60	7159	34100
USSR	M	77 620	5158N	17608E	12112.0 34456.8 50089.2	52	0.250	6182	24.73	0.86	2618	8600
USSR	M	77 6 4	5151N	17548E	11979.3 34443.1 50090.3	57	0.583	14307	24.53	0.61	1093	15400
JAPAN	S	78 628	5139N	17551E	11993.5 34466.3 50079.2	96	0.417	10929	24.21	0.83	18511	28600
USSR	M	77 527	5226N	17539E	11966.6 34370.3 50119.8	82	0.133	3228	24.21	1.01	3372	6600
USSR	M	78 412	5139N	17539E	11921.4 34451.4 50083.5	159	1.333	32544	24.18	0.57	1196	33440
USSR	M	78 415	5200N	17555E	12030.9 34436.9 50095.2	101	0.917	22159	24.17	0.60	501	22660
USSR	M	78 5 2	5240N	17924W	13979.2 34737.4 50009.5	92	1.167	28136	24.16	0.91	2614	30800
USSR	M	78 620	5255N	17056E	11084.6 33955.6 50175.0	95	1.167	28014	24.01	0.70	3866	31900
USSR	M	77 624	5152N	17547E	11974.1 34440.2 50091.4	55	1.000	23958	23.96	0.53	242	26400
USSR	M	78 4 2	5140N	17536E	11903.5 34446.0 50085.4	115	1.333	3128	23.95	0.68	1072	33000
USSR	M	78 516	5115N	17911E	13196.2 34742.6 49949.0	164	1.667	3963	23.92	0.91	4137	34000
USSR	M	78 623	5255N	17058E	11083.7 33958.0 50174.9	93	1.000	23790	23.79	0.66	1510	25300
USSR	M	77 528	5227N	17540E	11971.3 34369.3 50120.2	82	0.400	9409	23.52	1.02	1591	11000
USSR	M	77 6 8	5233N	17933W	13902.5 34732.2 50008.1	66	0.750	17403	23.52	0.40	197	17600
USSR	M	78 427	5235N	17925W	13954.1 34743.2 50003.1	94	1.417	32683	23.07	0.66	3517	36300
USSR	M	77 620	5202N	17606W	15043.3 35002.5 49752.1	52	0.433	9995	23.07	0.70	1005	11000

*** NOTE *** - THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-26 (continued). ATKA MACKEREL, APRIL-JUNE 1977-80

VESSID	DATE	LAT	LONG	APPROX	DEPTH	HOURS	CATCH	THOUSAND	SIZE	BYCATCH	TOTAL
CLASS	YRMON			7X	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
USSR	78 421	5152N	17545E	11961.7	58	1.333	29861	22.40	0.54	939	30800
USSR	78 625	5255N	17058E	11983.7	90	1.250	27523	22.02	0.71	5477	33000
USSR	77 622	5158N	17608E	12112.0	52	0.500	10916	21.83	0.53	84	11000
USSR	77 626	5158N	17608E	12112.0	52	0.563	12703	21.78	0.55	497	13200
USSR	77 623	5158N	17608E	12112.0	52	0.917	19604	21.39	0.48	196	19800
USSR	78 430	5242N	17926W	13973.8	90	2.000	42141	21.07	0.65	1419	43560
USSR	77 622	5202N	17606W	15043.3	52	0.500	10423	20.86	0.57	571	11000
USSR	77 526	5226N	17539E	11982.6	82	0.317	6600	20.84	0.99	0	6600
USSR	78 4 8	5140N	17533E	11885.6	112	1.000	20752	20.75	0.63	148	20900
USSR	77 524	5203N	17559E	12059.7	56	0.583	12088	20.69	0.55	5932	22000
USSR	78 624	5255N	17052E	11088.5	93	0.667	13732	20.67	0.73	1668	15400
USSR	78 621	5255N	17058E	11081.7	93	1.250	25617	20.49	0.77	783	26400
USSR	77 623	5151N	17550E	11992.3	55	0.533	10869	20.38	0.54	131	11000
USSR	78 4 6	5140N	17534E	11891.5	119	1.333	26977	20.23	0.67	6023	33000
USSR	77 623	5152N	17547E	11974.1	55	1.067	21578	20.23	0.48	422	22000
USSR	78 5 1	5241N	17920W	14002.8	87	1.250	25176	20.14	0.60	764	25960
USSR	78 428	5235N	17925W	13954.1	94	1.083	21768	20.09	0.64	4632	26400
USSR	78 622	5255N	17058E	11083.7	93	0.917	18143	19.79	0.69	6057	24200
USSR	77 618	5158N	17609E	12116.4	52	0.417	8247	19.79	0.60	1653	9400
USSR	77 6 3	5149N	17553E	12005.8	48	0.817	8212	19.71	0.58	588	8800
USSR	77 620	5151N	17550E	11992.3	49	0.333	6566	19.70	0.56	34	6000
USSR	77 630	5153N	17553E	12012.3	63	0.333	6562	19.69	0.44	38	6600
USSR	78 4 1	5140N	17533E	11885.6	115	1.167	22761	19.51	0.71	339	23100
USSR	77 624	5202N	17602N	15068.2	52	0.450	8759	19.46	0.59	41	8600
USSR	78 614	5255N	17058E	11083.7	93	0.333	6428	19.26	0.77	172	6600
USSR	77 620	5159N	17608E	12113.1	52	0.750	14395	19.19	0.62	7605	22000
USSR	78 427	5235N	17925W	13954.1	93	1.167	22204	19.03	0.67	1996	24200
USSR	77 615	5151N	17550E	11992.3	52	0.583	11000	18.86	0.52	0	11000
USSR	78 4 6	5140N	17534E	11891.5	120	0.750	14139	18.85	0.66	161	14300
USSR	77 624	5158N	17607E	12105.8	52	0.500	9420	18.84	0.57	1580	11000
USSR	77 622	5202N	17606W	15043.3	52	0.383	7190	18.76	0.57	3810	11000
USSR	77 614	5150N	17555E	12022.9	71	0.467	8749	18.75	0.54	4451	13200
USSR	77 6 3	5153N	17549E	11987.3	61	0.750	15849	18.47	0.25	12531	26400
USSR	78 429	5235N	17925W	13957.8	90	1.167	21326	18.33	0.63	3914	25300
USSR	77 622	5151N	17550E	11992.3	55	0.600	10944	18.24	0.51	56	11000
USSR	78 420	5152N	17543E	11945.2	60	0.750	13601	18.14	0.56	699	14300
USSR	77 617	5151N	17550E	11992.3	49	0.583	10571	18.12	0.65	429	11000
USSR	77 615	5151N	17549E	11986.1	46	0.550	9867	17.94	0.53	1133	11000
USSR	77 616	5151N	17550E	11992.3	44	0.483	8568	17.73	0.70	232	8800
USSR	77 618	5151N	17549E	11986.1	49	0.583	10335	17.72	0.58	665	11000
USSR	77 6 8	5151N	17548E	11979.8	52	0.667	11803	17.70	0.59	1397	13200
USSR	77 6 8	5235N	17933W	13902.5	66	0.500	8790	17.58	0.40	19	9800
USSR	78 430	5240N	17922W	13992.1	96	2.250	39498	17.55	0.59	1202	40700
USSR	77 613	5154N	17543E	11950.3	85	0.750	13050	17.40	0.74	1350	26400
USSR	78 516	5239N	17923W	13981.9	82	2.000	34475	17.24	0.71	131	34606

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-26 (continued). ATKA MACKEREL, APRIL-JUNE 1977-80

NATION	VESSEL CLASS	DATE YMMDD	LAT	LUNG	APPROX 7X	LOTRAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	77 6 9	5238N	17923M	13978.2	34741.6	50006.1	66	1.250	21501.	17.20	0.58	499.	22000.
USSR	H	77 6 4	5151N	17548E	11979.0	34443.1	50090.3	52	1.000	17199.	17.20	0.70	401.	17600.
USSR	M	78 5 1	5239N	17923M	13981.9	34740.2	50007.5	90	1.000	16958.	16.96	0.60	1742.	18700.
USSR	M	77 6 27	5158N	17608E	12112.0	34456.8	50089.2	52	1.000	16950.	16.95	0.46	650.	17600.
USSR	M	77 6 15	5238N	17922M	13984.6	34742.9	50005.5	66	1.000	16906.	16.91	0.57	694.	17600.
USSR	M	77 5 25	5226N	17539E	11962.6	34370.3	50115.8	82	0.250	4197.	16.79	0.97	203.	4400.
USSR	M	77 6 25	5158N	17608E	12112.0	34456.8	50089.2	49	1.167	19556.	16.76	0.64	2444.	22000.
USSR	M	78 4 26	5235N	17925M	13954.1	34743.2	50003.1	96	1.617	27001.	16.70	0.65	1599.	28600.
USSR	M	78 4 21	5152N	17545E	11961.7	34437.7	50092.1	57	1.667	27129.	16.28	0.55	371.	27500.
USSR	M	78 6 14	5255N	17058E	11083.7	33958.0	50174.9	93	0.667	10836.	16.25	0.67	164.	11000.
USSR	M	77 6 18	5151N	17551E	11998.5	34446.9	50089.2	52	0.417	6600.	15.84	0.89	0.	6600.
USSR	M	78 5 30	5240N	17921M	13992.6	34741.3	50007.7	93	2.583	40421.	15.65	0.68	3579.	44000.
USSR	M	78 5 3	5240N	17922M	13992.1	34740.0	50008.3	90	1.500	22998.	15.33	0.60	12202.	35200.
USSR	M	77 6 10	5233N	17920M	13978.9	34752.4	49997.0	68	0.833	12692.	15.23	0.59	508.	13200.
USSR	M	78 5 19	5232N	17927M	13933.9	34743.5	50001.5	85	1.750	26642.	15.22	0.63	1958.	28600.
USSR	M	78 6 14	5255N	17058E	11083.7	33958.0	50174.9	93	0.833	12290.	14.75	0.72	910.	13200.
USSR	M	77 6 16	5151N	17550E	11992.3	34445.6	50089.6	55	0.417	6117.	14.68	0.82	483.	6600.
USSR	M	77 6 25	5202N	17606M	15043.3	35002.5	49758.1	52	0.833	12192.	14.61	0.59	1008.	13200.
USSR	M	78 4 5	5139N	17532E	11879.7	34442.7	50086.0	131	1.500	21908.	14.61	0.80	92.	22000.
USSR	M	77 6 13	5151N	17550E	11992.3	34445.6	50089.6	49	0.583	8437.	14.46	0.68	363.	8800.
USSR	M	77 6 24	5158N	17608E	12112.0	34456.8	50089.2	52	0.417	5965.	14.32	0.51	635.	6600.
USSR	M	78 4 5	5140N	17533E	11889.6	34442.3	50086.5	118	1.500	21202.	14.13	0.88	798.	22000.
USSR	M	77 6 28	5159N	17610M	15008.2	35000.8	49757.0	52	0.500	7060.	14.12	0.58	1740.	8800.
USSR	M	78 5 3	5234N	17926M	13944.0	34743.4	50002.3	85	2.167	30224.	13.95	0.64	2556.	32800.
USSR	M	77 5 14	5226N	17543E	11985.5	34375.5	50118.7	159	0.750	10390.	13.85	1.02	2810.	13200.
USSR	M	78 5 21	5240N	17921M	13998.6	34741.3	50007.7	79	1.583	21800.	13.77	0.65	200.	22000.
USSR	M	78 6 26	5255N	17057E	11084.2	33956.8	50175.0	93	0.917	12439.	13.57	0.74	761.	13200.
USSR	M	78 5 17	5231N	17934M	13881.6	34737.3	50003.2	87	1.833	24735.	13.49	0.75	10245.	34980.
USSR	M	78 5 30	5231N	17927M	13926.7	34746.3	49998.7	90	1.833	24247.	13.23	0.67	2153.	26400.
USSR	M	77 6 9	5237N	17921M	13987.3	34745.6	50003.4	66	1.500	19833.	13.22	0.69	2167.	22000.
USSR	M	78 4 26	5235N	17925M	13954.1	34743.2	50003.1	93	1.550	20470.	13.21	0.64	430.	20900.
USSR	M	77 5 12	5226N	17541E	11976.1	34372.9	50119.2	74	0.333	4320.	12.96	1.00	80.	4400.
USSR	M	77 6 23	5159N	17609E	12119.5	34456.4	50085.6	52	0.667	8458.	12.69	0.57	342.	8000.
USSR	M	78 4 29	5235N	17925M	13954.1	34743.2	50003.1	96	0.950	11959.	12.59	0.57	1241.	13200.
USSR	M	77 6 21	5158N	17607E	12105.6	34455.5	50089.5	52	0.750	9315.	12.42	0.59	1685.	11000.
USSR	M	78 4 19	5148N	17542E	11941.3	34440.5	50089.9	60	1.083	13416.	12.38	0.53	804.	14300.
USSR	M	78 4 4	5139N	17532E	11875.7	34442.7	50086.0	128	1.833	21887.	11.94	0.73	113.	22000.
USSR	M	78 5 3	5237N	17924M	13968.0	34741.7	50005.3	85	1.750	20659.	11.80	0.53	8381.	29040.
USSR	M	77 5 27	5226N	17539E	11962.6	34370.3	50119.8	82	0.333	3931.	11.79	1.06	469.	4400.
USSR	M	78 5 31	5240N	17921M	13998.6	34741.3	50007.7	77	1.750	20498.	11.71	0.65	1502.	22000.
USSR	M	78 4 27	5242N	17920M	14012.6	34739.8	50009.9	87	1.417	16571.	11.70	0.62	589.	17160.
USSR	M	77 6 28	5152N	17547E	11974.1	34440.2	50091.4	55	0.333	3824.	11.47	0.67	2776.	6600.
USSR	M	77 6 28	5152N	17547E	11974.1	34440.2	50091.4	101	0.667	7588.	11.38	0.67	7812.	15400.
USSR	M	78 5 19	5233N	17927M	13933.9	34743.5	50001.5	85	1.500	16799.	11.20	0.73	801.	17600.
USSR	M	76 4 14	5142N	17550E	11988.3	34460.3	50082.1	85	0.917	10173.	11.10	0.51	167.	10340.

*** NOTE *** THE ACCURACY OF POSITION AND LOAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-26 (continued). ATKA MACKEREL, APRIL-JUNE 1977-80

NATIJA	VESSEL CLASS	DATE	IAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	78 4 8	5140N	17534E	11891.5	34443.5	50086.1	118.	1.167	12914.	11.07	0.64	206.	13200.
USSR	M	78 4 25	5236N	17925W	13957.8	34741.8	50004.5	94.	1.133	12433.	10.97	0.57	767.	13200.
USSR	M	78 6 15	5255N	17058E	11083.7	33558.0	50174.9	93.	0.750	8193.	10.92	0.69	607.	8800.
USSR	M	78 4 19	5152N	17555E	12024.2	34450.3	50088.7	66.	1.000	10682.	10.68	0.39	316.	11000.
USSR	M	78 4 13	5135N	17539E	11921.4	34457.7	50080.2	96.	1.417	15088.	10.65	0.49	92.	15180.
USSR	M	77 6 25	5151N	17549E	11986.1	34444.4	50089.9	49.	0.417	4361.	10.47	0.40	39.	4400.
USSR	M	78 4 26	5234N	17929W	13924.7	34739.5	50004.2	77.	1.333	13807.	10.36	0.66	1593.	15400.
JAPAN	S	79 5 14	5205N	17206W	16295.8	35137.0	49326.5	77.	2.750	27798.	10.11	1.22	5202.	33000.
USSR	M	78 4 5	5140N	17533E	11885.6	34442.3	50086.5	115.	1.500	15157.	10.10	0.68	243.	15400.
USSR	M	78 4 6	5140N	17532E	11875.6	34441.0	50086.8	131.	1.750	17332.	9.90	0.82	268.	17600.
USSR	M	77 6 2	5133N	17549E	11927.3	34441.1	50091.6	68.	0.583	5756.	9.87	0.71	5244.	11000.
USSR	M	78 4 7	5140N	17534E	11891.5	34443.5	50086.1	115.	1.833	18013.	9.82	0.67	688.	18700.
USSR	M	77 5 1	5152N	17547E	11974.1	34440.2	50091.4	55.	0.667	6537.	9.81	0.80	6663.	13200.
USSR	M	77 6 14	5230N	17930W	13993.8	34743.8	49999.2	71.	1.500	14701.	9.80	0.61	699.	15400.
USSR	M	77 6 28	5159N	17609W	15013.9	35001.7	49755.7	52.	0.417	4079.	9.79	0.57	321.	4400.
USSR	M	78 5 20	5234N	17925W	13950.5	34744.6	50001.7	67.	1.583	15255.	9.63	0.65	2345.	17600.
JAPAN	S	79 5 13	5200N	17202W	16289.1	35137.6	49103.1	77.	0.833	7993.	9.59	1.26	1907.	9900.
USSR	M	77 5 25	5227N	17539E	11964.6	34368.5	50120.5	82.	0.233	2200.	9.43	0.99	0.	2200.
USSR	M	77 5 29	5226N	17538E	11955.9	34369.0	50120.0	82.	0.467	4400.	9.43	0.98	0.	4400.
USSR	M	78 5 18	5232N	17928W	13923.8	34743.6	50000.8	87.	1.250	16445.	9.40	1.79	55.	16500.
USSR	M	78 5 3	5240N	17922W	13982.1	34740.0	50008.3	90.	1.583	14645.	9.25	0.63	16155.	30800.
USSR	M	78 4 20	5151N	17554E	12017.3	34450.7	50088.2	67.	0.917	8427.	9.19	0.55	373.	8800.
USSR	M	77 6 24	5158N	17608E	12112.0	34456.8	50089.2	52.	0.667	6046.	9.07	0.60	554.	6600.
USSR	M	77 5 30	5152N	17547E	11974.1	34440.2	50091.4	55.	0.550	4987.	9.07	0.72	3813.	8800.
USSR	M	78 4 9	5140N	17532E	11879.6	34441.0	50086.8	131.	1.500	13581.	9.05	0.49	81.	13662.
USSR	M	78 6 16	5235N	17058E	11083.7	33958.0	50174.9	93.	0.833	7505.	9.01	0.75	1295.	8000.
USSR	M	77 5 26	5204N	17557E	12048.0	34432.7	50087.8	55.	0.667	5946.	8.92	0.74	5054.	11000.
USSR	M	78 5 29	5233N	17926W	13940.4	34744.8	50000.9	93.	1.417	12635.	8.92	0.71	565.	13200.
USSR	M	78 4 17	5152N	17555E	12024.2	34450.3	50088.7	66.	1.167	10383.	8.90	0.37	177.	10560.
USSR	M	78 4 29	5236N	17925W	13957.8	34743.6	50004.5	93.	1.583	13945.	8.81	0.61	1454.	15400.
USSR	M	77 6 17	5156N	17602E	12071.7	34452.5	50089.6	49.	1.167	10204.	8.75	0.62	796.	11000.
USSR	M	77 5 23	5226N	17543E	11976.1	34372.9	50119.2	71.	1.000	8719.	8.72	0.98	81.	8000.
USSR	M	78 5 20	5234N	17925W	13950.5	34744.6	50001.7	90.	1.500	13009.	8.67	0.75	191.	13700.
USSR	M	77 6 19	5154N	17608W	14995.5	35005.8	49743.9	49.	1.417	12250.	8.65	0.53	7550.	19800.
USSR	M	78 5 25	5238N	17922W	13984.6	34742.9	50005.5	77.	2.250	19412.	8.63	0.59	388.	19800.
USSR	M	77 6 7	5151N	17548E	11979.0	34443.1	50090.3	49.	0.917	7894.	8.61	0.56	906.	8600.
USSR	M	78 4 29	5236N	17925W	13951.4	34740.5	50005.2	87.	1.750	14835.	8.48	0.57	565.	15400.
USSR	M	77 6 3	5149N	17553E	12009.8	34452.7	50086.9	55.	0.500	4198.	8.40	0.68	202.	4400.
USSR	M	77 6 26	5158N	17610W	15008.2	35000.8	49757.0	52.	0.500	4189.	8.38	0.55	211.	4400.
USSR	M	77 5 19	5156N	17607W	15021.3	35004.2	49751.0	49.	1.167	9671.	8.29	0.67	10129.	19800.
USSR	M	78 5 1	5240N	17925W	13972.8	34736.1	50010.2	93.	2.000	16475.	8.24	0.60	1125.	17600.
USSR	M	77 5 6	5152N	17547E	11974.1	34440.2	50091.4	49.	1.000	8187.	8.19	0.74	2813.	11000.
USSR	M	77 5 12	5151W	17550E	11992.3	34445.6	50089.6	44.	0.750	6108.	8.14	0.56	492.	6600.
USSR	M	77 5 11	5151N	17549E	11986.1	34444.4	50089.9	55.	0.800	6488.	8.11	0.71	112.	6600.
USSR	M	77 6 4	5152N	17548E	11980.4	34441.5	50091.1	49.	0.917	7259.	7.92	0.68	1541.	8800.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

188 available trawl records (exceeding 500 lbs/hr CPUE) were not included.

TABLE B-27. ATKA MACKEREL, JULY-SEPTEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX	PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND	SIZE	BYCATCH	TOTAL
*****	*****	YMMDD	*****	*****	7X	7Y	7Z	(FMS)	IRAWLEO	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
USSR	M	77 7 2	5138N	17608E	12112.0	34456.8	50089.2	107.	0.333	9997.	29.99	0.48	1003.	11000.
JAPAN	S	78 7 31	5202N	17206W	16281.0	35137.1	49318.4	66.	1.333	38878.	29.16	1.10	27122.	66000.
JAPAN	S	78 7 22	5203N	17201W	16308.3	35137.6	49308.7	77.	1.000	21596.	21.60	1.34	22404.	44000.
JAPAN	S	78 7 31	5203N	17208W	16276.9	35136.6	49326.0	68.	1.750	32028.	18.30	1.08	22972.	55000.
JAPAN	S	78 7 30	5159N	17206W	16286.3	35137.2	49310.4	72.	2.083	36371.	17.46	1.03	7629.	44000.
JAPAN	S	78 7 30	5159N	17215W	16225.8	35136.1	49332.3	82.	1.583	22349.	14.12	1.03	6251.	28600.
USSR	M	77 7 3	5139N	17536E	11903.5	34447.8	50084.6	93.	0.083	1094.	13.13	0.55	1106.	2200.
JAPAN	S	78 7 31	5202N	17208W	16272.0	35136.9	49323.3	60.	1.583	18473.	11.67	0.99	10127.	28600.
JAPAN	S	78 7 31	5158N	17208W	16252.5	35137.0	49312.6	77.	1.917	18719.	9.77	1.00	14261.	33000.
JAPAN	S	78 7 4	5204N	17207W	16286.4	35136.9	49326.2	77.	1.750	16876.	9.64	1.00	5124.	22000.
JAPAN	S	79 9 25	5226N	17531E	11912.8	34356.2	50123.3	90.	1.667	14865.	8.92	1.07	2955.	17820.
USSR	M	77 7 4	5138N	17608E	12112.0	34456.8	50089.2	52.	0.667	5803.	8.70	0.51	797.	6600.
JAPAN	S	78 7 22	5206N	17209W	16287.2	35136.6	49336.5	131.	1.417	11775.	9.31	1.12	23425.	35200.
JAPAN	S	78 7 30	5204N	17205W	16295.3	35137.1	49321.3	87.	1.500	10820.	7.08	1.05	11380.	22000.
JAPAN	S	78 7 6	5146N	17747E	12728.6	34600.5	50036.2	84.	0.256	1505.	6.02	1.08	1795.	3300.
USSR	M	77 7 2	5158N	17608E	12112.0	34456.8	50089.2	107.	1.500	7835.	5.22	0.51	965.	8800.
JAPAN	S	78 7 30	5200N	17215W	16230.6	35136.0	49335.0	77.	2.500	12796.	5.12	1.03	9204.	22000.
JAPAN	S	78 7 7	5147N	17748E	12736.8	34600.3	50036.8	87.	0.333	1379.	4.14	1.22	5221.	6600.
JAPAN	S	78 7 7	5147N	17748E	12736.8	34600.3	50036.8	87.	0.333	1375.	4.12	1.27	3025.	4400.
USSR	M	77 7 4	5158N	17608E	12112.0	34456.8	50089.2	52.	0.583	2120.	3.64	0.55	80.	2200.
JAPAN	S	78 7 30	5205N	17206W	18295.8	35137.0	49326.5	71.	1.500	5389.	3.59	1.05	7811.	13200.
JAPAN	S	77 7 1	5203N	17601E	12072.6	34439.5	50095.7	87.	0.500	1452.	2.90	0.79	748.	2200.
USSR	M	77 7 5	5153N	17559E	12050.1	34453.7	50088.1	49.	1.667	3939.	2.36	0.51	461.	4400.
JAPAN	S	78 7 7	5144N	17806E	12846.0	34627.1	50024.4	76.	0.250	435.	1.74	0.95	3305.	3740.
JAPAN	S	78 7 1	5149N	17735E	12857.2	34581.1	50045.2	74.	0.917	1453.	1.58	1.04	7347.	8800.
JAPAN	S	78 7 8	5143N	17807E	12850.4	34629.7	50022.7	100.	0.167	202.	1.21	1.01	3098.	3300.
JAPAN	S	78 7 6	5149N	17733E	12844.4	34578.6	50046.1	75.	0.333	383.	1.15	1.39	4457.	4840.
JAPAN	S	77 7 1	5203N	17601E	12072.6	34439.5	50095.7	82.	0.667	666.	1.00	0.79	434.	1100.
JAPAN	S	79 8 6	5217N	17540E	11954.0	34388.1	50113.0	77.	4.500	4155.	0.92	1.19	2005.	6160.
JAPAN	S	78 7 9	5149N	17559E	12047.2	34460.3	50084.8	77.	0.167	153.	0.92	1.04	2487.	2640.
JAPAN	S	78 7 2	5149N	17733E	12844.4	34578.6	50046.1	77.	1.333	1197.	0.90	0.91	1443.	2640.
JAPAN	S	78 7 1	5149N	17735E	12857.2	34581.1	50045.2	72.	0.8750	591.	0.79	1.04	8209.	8800.
JAPAN	S	78 7 8	5146N	17754E	12773.3	34609.3	50032.8	72.	0.833	623.	0.75	0.94	3777.	4400.
JAPAN	S	78 7 7	5147N	17748E	12736.8	34600.3	50036.8	109.	0.333	175.	0.52	1.27	89.	264.
JAPAN	S	78 7 8	5146N	17750E	12747.7	34604.3	50034.7	79.	0.583	299.	0.51	1.24	801.	1100.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE B-28. ATKA MACKEREL, OCTOBER-DECEMBER 1977-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE	RATES	DEPTH	HOURS	CAATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YYMMDD			7X	7Y	7Z	(FMS)	TRAWLED	(LBS)	PER HOUR	LB S/FISH	(LBS)	(LBS)
KOREA	M	8011 1	5156N	17201W	16274.1	35137.7	49290.0	73.	0.583	100368.	172.06	1.03	8752.	109120.
KOREA	M	8011 2	5157N	17201W	16278.9	35137.7	49292.6	74.	1.000	120581.	120.58	0.98	5479.	126060.
KOREA	M	8011 2	5158N	17202W	16279.3	35137.6	49297.8	77.	0.583	56581.	97.00	1.01	839.	57420.
KOREA	M	8011 8	5159N	17202W	16284.2	35137.6	49300.5	74.	0.667	63976.	95.96	0.99	2024.	60000.
KOREA	M	8011 1	5158N	17200W	16288.2	35137.8	49292.6	74.	1.167	111553.	95.62	0.98	207.	111760.
KOREA	M	8011 9	5158N	17200W	16288.2	35137.8	49292.8	75.	0.933	54069.	57.93	1.03	11931.	66000.
KOREA	M	8011 1	5158N	17200W	16288.2	35137.8	49292.8	92.	1.083	43055.	39.74	0.97	4465.	47520.
JAPAN	S	8011 6	5250N	17204E	11035.6	34049.1	50168.6	131.	0.833	6804.	10.56	1.04	1536.	10140.
KOREA	M	801031	5158N	17202W	16279.3	35137.6	49297.8	101.	5.417	22465.	4.15	1.00	4595.	27060.
JAPAN	S	801030	5257N	17102E	11088.7	33958.5	50175.1	128.	3.333	12880.	3.86	0.75	4720.	17600.
JAPAN	S	8011 4	5205N	17112E	11114.9	33953.1	50175.9	131.	1.500	5255.	3.50	0.55	7945.	13200.
JAPAN	S	801211	5206N	17203E	11036.1	34047.9	50168.7	148.	3.717	12346.	3.32	0.87	9654.	22000.
KOREA	M	801031	5203N	17221W	16217.9	35134.9	49357.3	101.	2.167	5225.	2.41	1.45	5775.	11000.
JAPAN	S	8011 5	5250N	17204E	11035.6	34049.1	50168.6	126.	1.000	2377.	2.38	1.10	10163.	12340.
JAPAN	S	801211	5252N	17212E	11041.6	34052.6	50168.7	115.	1.500	2311.	1.54	1.08	13089.	15400.
JAPAN	S	801113	5250N	17203E	11036.1	34047.9	50168.7	126.	1.333	1662.	1.25	0.91	7798.	9460.
JAPAN	S	801211	5250N	17206E	11034.6	34051.6	50168.4	109.	2.000	1967.	0.98	1.28	54133.	56100.
JAPAN	S	8012 5	5253N	17215E	11040.2	34056.3	50168.4	101.	1.750	1709.	0.98	1.08	13491.	13200.
JAPAN	S	8012 6	5250N	17205E	11035.1	34050.3	50168.5	124.	1.417	1339.	0.95	1.18	9661.	11000.
JAPAN	S	8012 5	5249N	17226E	11020.3	34081.0	50165.9	120.	4.583	3106.	0.68	0.94	22414.	25520.
JAPAN	S	801113	5252N	17208E	11040.1	34049.8	50168.6	131.	1.167	632.	0.54	1.12	16088.	16720.
JAPAN	S	8012 5	5250N	17208E	11033.6	34054.1	50168.2	131.	6.500	3522.	0.54	1.07	24198.	27720.
JAPAN	S	801212	5253N	17207E	11044.1	34046.4	50169.2	104.	2.000	1059.	0.53	1.03	18741.	19800.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

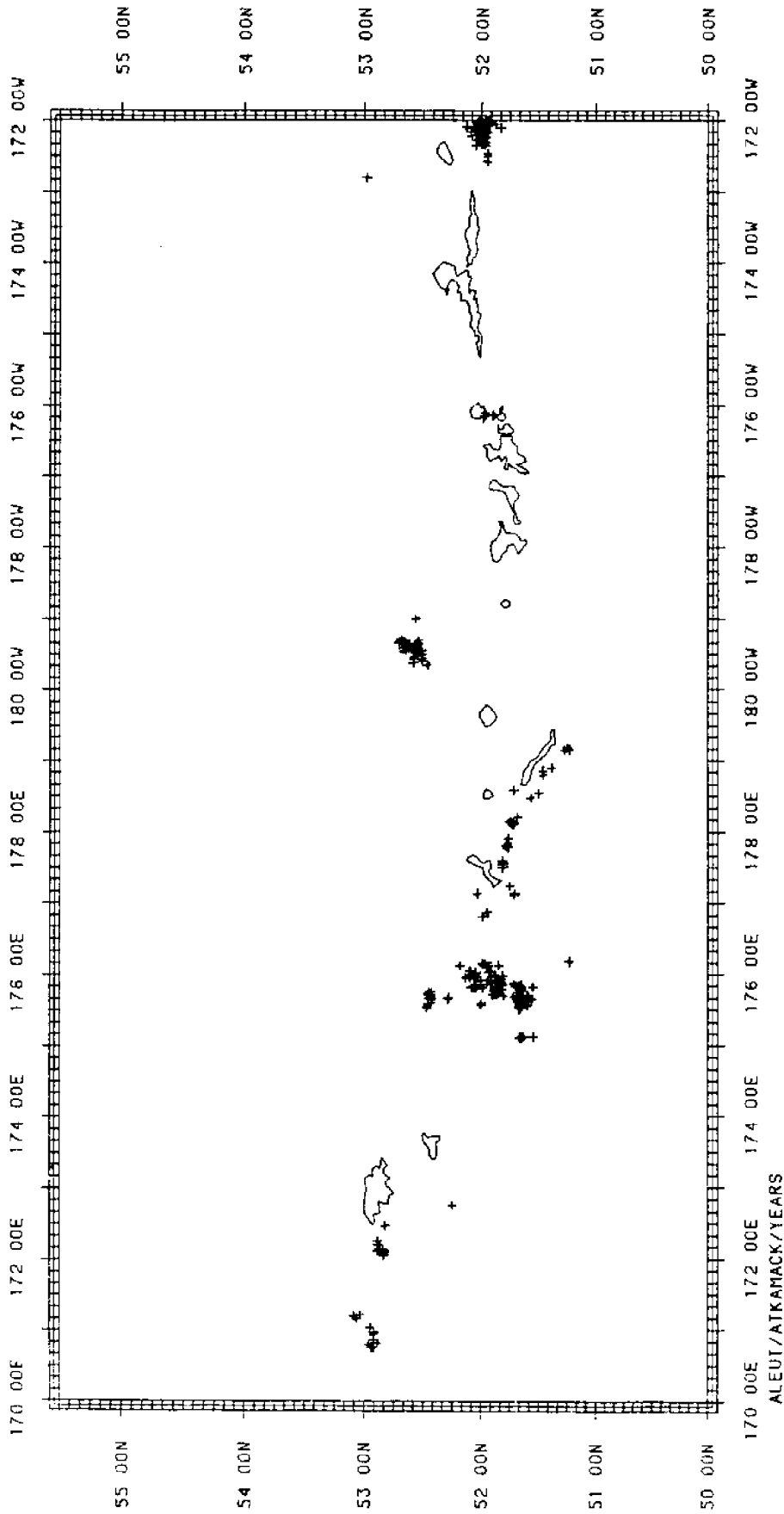
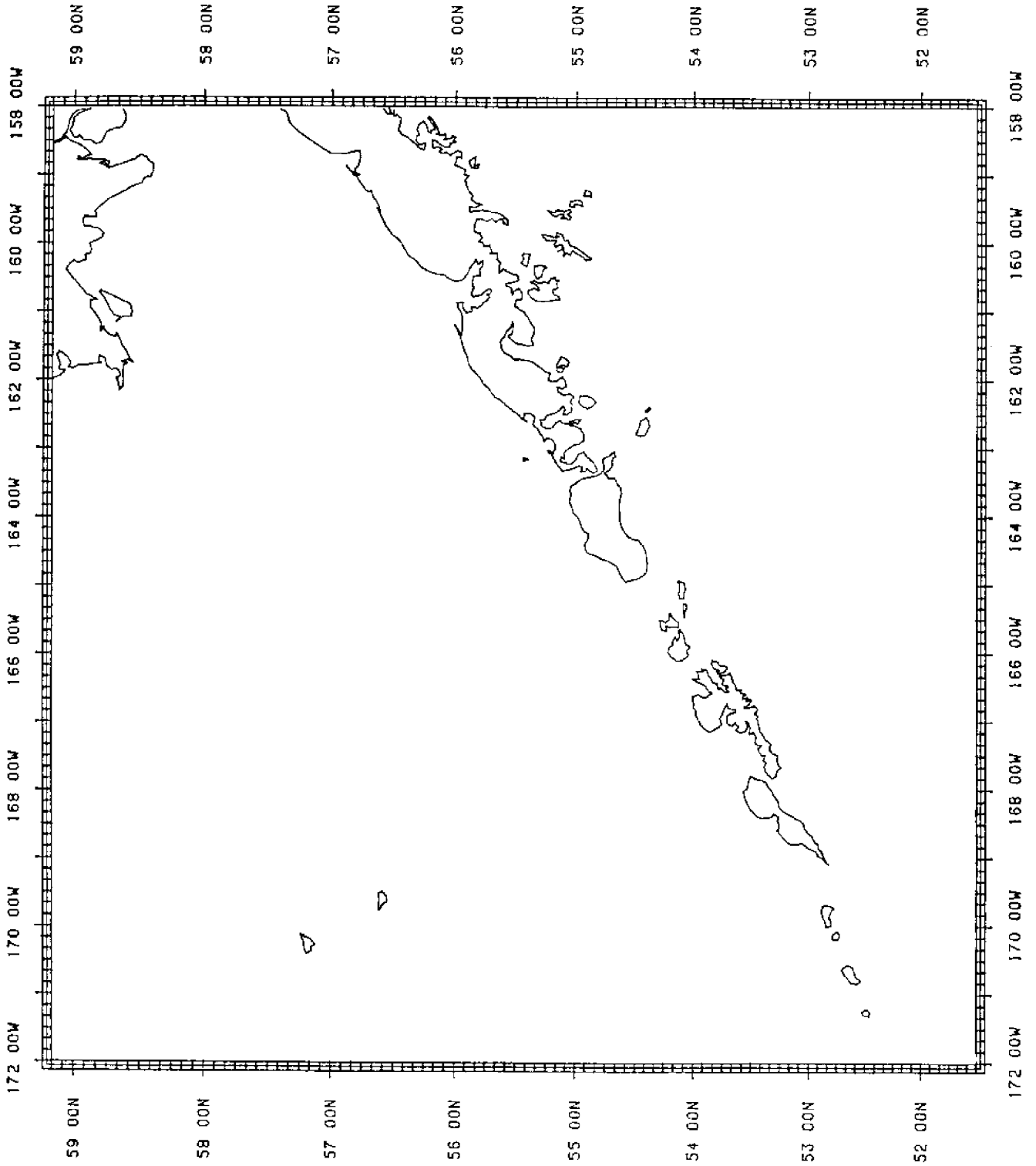


FIGURE B-6. TRAWLING LOCATIONS FOR ATKA MACKEREL, ALL MONTHS, 1977-80



APPENDIX C. SOUTHEASTERN BERING SEA AND WESTERN GULF OF ALASKA REGION

APPENDIX C

Productive Foreign Fishing Locations in the Southeastern
Bering Sea and Western Gulf of Alaska Region

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Productive Foreign Fishing Locations in the Southeastern
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Table C-1

SUMMARY OF OVERALL CATCH COMPOSITION AND CATCH PER UNIT EFFORT OBSERVED IN THE SOUTHEASTERN BERING SEA AND WESTERN GULF OF ALASKA REGION DURING JANUARY-MARCH 1980.^{1/}

	<u>Mean CPUE^{2/}</u> <u>(lbs/day)</u>	<u>Mean CPUE^{3/}</u> <u>(lbs/hr)</u>	<u>Proportion of^{4/}</u> <u>Total Catch</u>	<u>Mean Size</u> <u>(lbs/fish)</u>
Small Trawlers				
Yellowfin Sole	14,959	1,422	0.474	0.49
Greenland Turbot	6,443	613	0.204	4.14
Pacific Cod	2,174	207	0.069	1.99
Walleye Pollock	1,972	187	0.063	0.93
Arrowtooth Flounder	1,123	107	0.036	2.07
Alaska Plaice	952	91	0.030	1.00
Rock Sole	587	56	0.019	0.88
Pacific Halibut	446	42	0.014	3.96
Large Freezer Trawlers				
Walleye Pollock	49,234	4,490	0.667	1.42
Yellowfin Sole	19,509	1,779	0.264	0.57
Alaska Plaice	1,869	170	0.025	1.02
Pacific Cod	1,423	130	0.019	1.94
Jellyfish	256	23	0.003	1.22
Pectoral Rattail	234	21	0.003	8.96
Rock Sole	167	15	0.002	0.88
Tanner Crab	108	10	0.001	0.94
Surimi Trawlers				
Walleye Pollock	89,714	11,963	0.807	1.00
Pacific Cod	8,413	1,122	0.076	3.03
Arrowtooth Flounder	7,252	967	0.065	1.32
Pacific Halibut	1,502	200	0.014	4.40
Unidentified Sculpins	1,426	190	0.013	2.67
Flathead Sole	1,061	142	0.010	1.30
Unidentified Skates	711	95	0.006	8.63
Octopus	403	54	0.004	22.20

^{1/} Based upon observer data from 180 gear operations by small trawlers, 129 gear operations by large freezer trawlers, and 8 gear operations by surimi trawlers.

^{2/} Average production rate per day of fishing activities on the grounds.

^{3/} Average production rate per hour of actual trawling effort.

^{4/} By vessel class.

Table C-2

SUMMARY OF OVERALL CATCH COMPOSITION AND CATCH PER UNIT EFFORT OBSERVED IN THE SOUTHEASTERN BERING SEA AND WESTERN GULF OF ALASKA REGION DURING APRIL-JUNE 1980.^{1/}

	<u>Mean CPUE^{2/}</u> <u>(lbs/day)</u>	<u>Mean CPUE^{3/}</u> <u>(lbs/hr)</u>	<u>Proportion of^{4/}</u> <u>Total Catch</u>	<u>Mean Size</u> <u>(lbs/fish)</u>
Small Trawlers				
Greenland Turbot	17,759	1,186	0.604	8.06
Unidentified Rattails	3,328	222	0.113	1.15
Walleye Pollock	1,226	82	0.042	1.97
Yellowfin Sole	749	50	0.025	0.48
Arrowtooth Flounder	683	46	0.023	2.41
Unidentified Sculpins	652	44	0.022	1.58
Pacific Cod	632	42	0.022	2.07
Tanner Crab	490	33	0.017	0.46
Large Freezer Trawlers				
Walleye Pollock	65,672	5,317	0.870	0.72
Pacific Cod	2,406	195	0.032	2.99
Yellowfin Sole	2,389	193	0.032	0.44
Atka Mackerel	835	68	0.011	1.44
Pacific Ocean Perch	470	38	0.006	1.07
Unidentified Sculpins	438	35	0.006	1.32
Arrowtooth Flounder	385	31	0.005	0.88
Yellow Irish Lord	342	28	0.005	0.91
Surimi Trawlers				
Walleye Pollock	101,930	11,894	0.947	0.51
Octopus	2,390	279	0.022	27.78
Pacific Cod	854	100	0.008	5.48
Tanner Crab	397	46	0.004	0.51
Arrowtooth Flounder	143	17	0.001	0.56
Bigmouth Sculpin	116	14	0.001	6.39
Sablefish	111	13	0.001	3.31
Flathead Sole	35	4	<0.001	0.17

^{1/} Based upon observer data from 124 gear operations by small trawlers, 444 gear operations by large freezer trawlers, and 4 gear operations by surimi trawlers.

^{2/} Average production rate per day of fishing activities on the grounds.

^{3/} Average production rate per hour of actual trawling effort.

^{4/} By vessel class.

Table C-3

SUMMARY OF OVERALL CATCH COMPOSITION AND CATCH PER UNIT EFFORT OBSERVED IN THE SOUTHEASTERN BERING SEA AND WESTERN GULF OF ALASKA REGION DURING JULY-SEPTEMBER 1980.^{1/}

	<u>Mean CPUE^{2/}</u> <u>(lbs/day)</u>	<u>Mean CPUE^{3/}</u> <u>(lbs/hr)</u>	<u>Proportion of^{4/}</u> <u>Total Catch</u>	<u>Mean Size</u> <u>(lbs/fish)</u>
Small Trawlers				
Greenland Turbot	16,198	1,107	0.488	8.99
Yellowfin Sole	4,288	293	0.129	0.54
Unidentified Rattails	3,998	273	0.120	1.08
Walleye Pollock	1,252	86	0.038	1.25
Arrowtooth Flounder	1,217	83	0.037	2.70
Unidentified Sculpins	785	54	0.024	2.20
Pacific Cod	720	49	0.022	2.75
Shortraker Rockfish	587	40	0.018	12.85
Large Freezer Trawlers				
Walleye Pollock	97,779	7,747	0.724	1.57
Yellowfin Sole	18,716	1,483	0.139	0.51
Pacific Cod	5,785	458	0.043	3.16
Atka Mackerel	2,739	217	0.020	1.56
Sablefish	2,099	166	0.016	2.81
Arrowtooth Flounder	1,588	126	0.012	1.48
Alaska Plaice	931	74	0.007	1.23
Pacific Ocean Perch	677	54	0.005	0.88
Surimi Trawlers				
Walleye Pollock	194,074	14,621	0.969	0.74
Pacific Cod	3,955	298	0.020	1.99
Pacific Herring	743	56	0.004	0.47
Squid	451	34	0.002	1.00
Arrowtooth Flounder	208	16	0.001	1.33
Greenland Turbot	155	12	0.001	8.38
Unidentified Sculpins	133	10	0.001	1.61
Sablefish	112	8	0.001	3.52

^{1/} Based upon observer data from 93 gear operations by small trawlers, 228 gear operations by large freezer trawlers, and 500 gear operations by surimi trawlers.

^{2/} Average production rate per day of fishing activities on the grounds.

^{3/} Average production rate per hour of actual trawling effort.

^{4/} By vessel class.

Table C-4

SUMMARY OF OVERALL CATCH COMPOSITION AND CATCH PER UNIT EFFORT OBSERVED IN THE SOUTHEASTERN BERING SEA AND WESTERN GULF OF ALASKA REGION DURING OCTOBER-DECEMBER 1980.^{1/}

	<u>Mean CPUE^{2/}</u> <u>(lbs/day)</u>	<u>Mean CPUE^{3/}</u> <u>(lbs/hr)</u>	<u>Proportion of^{4/}</u> <u>Total Catch</u>	<u>Mean Size</u> <u>(lbs/fish)</u>
Small Trawlers				
Walleye Pollock	12,449	1,283	0.378	1.57
Yellowfin Sole	11,276	1,162	0.342	0.53
Greenland Turbot	2,647	273	0.080	7.19
Pacific Cod	1,797	185	0.055	3.66
Pacific Ocean Perch	1,143	118	0.035	0.92
Alaska Plaice	621	64	0.019	1.40
Arrowtooth Flounder	532	55	0.016	1.97
Atka Mackerel	314	32	0.010	1.34
Large Freezer Trawlers				
Walleye Pollock	79,193	7,179	0.802	1.23
Yellowfin Sole	6,004	544	0.061	0.63
Pacific Cod	5,608	508	0.057	4.37
Arrowtooth Flounder	2,547	231	0.026	0.81
Atka Mackerel	1,570	142	0.016	1.75
Sablefish	785	71	0.008	3.05
Pacific Ocean Perch	483	44	0.005	1.17
Irish Lord	377	34	0.004	1.05
Surimi Trawlers				
Walleye Pollock	173,152	13,585	0.960	0.68
Pacific Cod	5,407	424	0.030	1.72
Squid	516	41	0.003	0.97
Arrowtooth Flounder	220	17	0.001	1.55
Greenland Turbot	188	15	0.001	6.83
Sablefish	154	12	0.001	3.96
Flathead Sole	109	9	0.001	0.54
Unidentified Salmon	104	8	0.001	7.52

^{1/} Based upon observer data from 89 gear operations by small trawlers, 329 gear operations by large freezer trawlers, and 257 gear operations by surimi trawlers.

^{2/} Average production rate per day of fishing activities on the grounds.

^{3/} Average production rate per hour of actual trawling effort.

^{4/} By vessel class.

TABLE C-5. WALLEYE POLLOCK, JANUARY-MARCH 1979-80

NATION	VESSEL CLASS	DATE	TIME	LAT	LONG	APPROX LORAN-C FIX	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	80 114	0630N	17151W	17966.6	35033.0	50143.3	126.	2.250	92084.	40.93	1.05	17916.	110000.
JAPAN	L	80 311	0631N	17159W	17918.1	35017.1	50147.9	127.	2.083	95462.	28.54	1.19	2138.	61600.
POLAND	M	80 2 8	0611N	17036W	18219.6	35138.1	49957.7	71.	1.333	35265.	26.45	0.87	375.	35640.
POLAND	M	80 2 6	0608N	17037W	18172.6	35138.2	49938.2	82.	1.333	32116.	24.09	1.41	884.	33000.
POLAND	M	80 2 7	0611N	17036W	18219.8	35138.1	49957.9	71.	1.583	33172.	20.95	1.05	268.	33440.
JAPAN	L	80 117	0632N	17150W	17978.1	35032.6	50145.0	131.	2.167	43655.	20.24	1.10	11145.	55000.
JAPAN	L	79 119	0626N	16629W	18626.9	34534.2	46664.0	56.	0.167	3083.	18.50	0.98	2417.	5500.
POLAND	M	80 2 6	0609N	17036W	18204.9	35138.2	49948.9	77.	1.167	21210.	18.18	1.52	790.	22006.
USSR	M	80 3 6	0416N	16022W	18386.8	33994.2	46301.9	208.	2.500	43677.	17.47	2.00	323.	44000.
POLAND	M	80 2 4	0617N	17037W	18260.5	35137.7	49987.6	88.	1.167	19594.	16.79	1.37	206.	19800.
POLAND	M	80 2 19	0632N	17156W	17941.7	35020.6	50148.2	87.	2.667	43845.	16.44	0.70	155.	44000.
POLAND	M	80 2 4	0540N	16805W	18362.3	34928.3	49164.9	87.	0.667	10913.	16.37	0.25	87.	11000.
POLAND	M	80 2 14	0635N	17142W	18042.7	35041.3	50147.2	71.	2.000	32737.	16.37	1.01	263.	33000.
POLAND	M	80 2 19	0629N	17142W	18005.0	35054.4	50132.4	87.	2.750	43837.	15.94	0.90	163.	44000.
POLAND	M	80 2 16	0638N	17147W	18028.2	35023.5	50156.2	71.	2.250	32970.	14.65	1.08	30.	33000.
JAPAN	M	79 122	0628W	16658W	18631.0	34614.3	48856.1	60.	1.000	14185.	14.19	0.25	3415.	17600.
POLAND	M	80 128	0404N	16140W	18306.9	34200.6	46767.2	191.	2.500	34567.	13.83	1.24	413.	34800.
POLAND	M	80 2 5	0607N	17027W	18224.9	35137.5	49914.3	98.	2.333	31064.	13.31	1.34	1936.	33000.
POLAND	M	80 2 15	0619N	17110W	18122.1	35115.4	50063.7	74.	2.667	34797.	13.05	1.36	403.	35200.
POLAND	M	80 2 18	0624N	17108W	18168.5	35113.7	50079.6	77.	1.750	22088.	12.62	0.55	132.	22220.
JAPAN	M	79 125	0630N	16716W	18630.6	34668.2	46974.3	61.	1.000	12105.	12.10	0.30	3295.	15400.
USSR	M	80 3 19	0419N	15940W	18414.6	33893.0	46054.8	189.	3.667	43958.	11.99	1.79	42.	44000.
POLAND	M	80 2 18	0625N	17132W	18046.9	35067.8	50112.4	88.	1.667	19728.	11.84	0.59	72.	19200.
POLAND	M	80 2 5	0620N	17040W	18270.3	35136.7	50008.6	77.	3.583	40003.	11.16	0.97	3997.	44000.
USSR	M	80 3 4	0413N	16050W	18363.6	34065.0	46469.7	202.	5.167	56735.	10.92	1.79	465.	57200.
USSR	M	80 3 3	0415N	16034W	18377.9	34023.7	46373.9	197.	2.000	21828.	10.91	1.79	172.	22000.
POLAND	M	80 2 7	0606N	17026W	18221.2	35137.3	49906.8	77.	2.000	21406.	10.70	1.52	594.	22000.
JAPAN	L	80 115	0629N	17121W	18129.6	35090.2	50113.7	81.	2.000	20333.	10.17	0.41	12667.	33000.
USSR	M	80 3 20	0420N	15935W	18419.5	33879.1	46020.3	235.	2.167	21988.	10.15	1.77	14.	22000.
POLAND	M	80 2 17	0633N	17136W	18067.4	35057.3	50138.5	79.	2.000	20150.	10.07	0.63	90.	20240.
USSR	M	80 3 8	0414N	16014W	18385.7	33982.0	46255.9	213.	6.167	61296.	9.94	1.77	304.	61600.
POLAND	M	80 2 1	0420N	15943W	18415.9	33896.6	46067.6	219.	2.250	21847.	9.71	2.03	153.	22000.
USSR	M	79 330	0606N	17030W	18206.1	35138.0	49912.0	77.	1.583	14560.	9.20	0.83	18760.	34320.
POLAND	M	80 3 26	0610N	17151W	17842.4	35070.9	50065.9	83.	0.750	6583.	8.76	0.62	174.	6000.
POLAND	M	80 131	0420N	15939W	18417.7	33887.9	46044.0	257.	2.500	21973.	8.75	2.02	127.	22000.
POLAND	M	80 2 9	0607N	17039W	18177.9	35138.0	49948.0	77.	1.750	15269.	6.73	1.30	131.	15400.
USSR	M	80 3 4	0419N	16014W	18398.7	33987.9	46257.4	197.	6.500	54680.	8.32	1.86	940.	55000.
USSR	M	80 3 5	0414N	16035W	18374.7	34028.7	46380.2	202.	6.667	54116.	8.12	2.01	884.	55000.
USSR	M	80 3 5	0415N	16020W	18385.3	33992.5	46290.7	164.	5.500	43861.	7.98	1.94	119.	44000.
JAPAN	M	80 112	0635N	16658W	18650.1	34590.1	48860.9	57.	2.417	18801.	7.72	1.39	29597.	48400.
USSR	M	80 3 20	0419N	16006W	18402.6	33950.2	46204.2	137.	3.500	28354.	7.53	1.77	46.	26000.
POLAND	M	80 2 1	0419W	15947W	18411.6	33908.3	46092.9	260.	4.167	31373.	7.53	2.00	87.	31460.
POLAND	M	80 2 13	0622N	17100W	18193.0	35123.5	50058.8	71.	2.750	20317.	7.39	1.32	143.	20460.
JAPAN	M	79 210	0613N	16650W	18576.7	34646.7	48786.4	67.	1.750	12668.	7.24	0.51	3488.	16126.
USSR	M	80 3 13	0415N	16028W	18381.1	34010.3	46338.1	197.	5.333	43709.	6.90	1.75	951.	44660.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-5 (continued). WAILEYE POLLOCK, JANUARY-MARCH 1979-80

NATION	VESS	DATE	LAT	LONG	APPROX	DEPTH	HOURS	CATCH	THOUSAND	SIZE	BYCATCH	TOTAL	
CLA	YMMDD	7Y	7Y	7Z	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)		
USSR	M	80 3 6	5417N	16010W	18395.5	33964.7	46230.1	235.	6.333	43369.	6.85	1.85	44000.
JAPAN	M	79 224	5637N	16720W	18653.2	34653.7	49006.9	57.	0.333	2270.	6.81	0.89	20900.
USSR	M	80 3 8	5423N	15933W	18427.8	33865.9	46005.0	224.	5.833	39543.	6.78	1.76	39600.
USSR	M	80 3 8	5422N	15934W	18424.7	33871.1	46012.5	230.	6.500	43941.	6.76	1.72	44000.
POLAND	M	80 2 8	5611N	17040W	18201.4	35137.6	49958.4	77.	1.750	10981.	6.27	1.28	11000.
JAPAN	L	80 3 10	5628N	17136W	18038.1	35067.0	50124.9	94.	3.667	22497.	6.14	1.19	24200.
USSR	M	80 3 2	5403N	16142W	18302.5	34201.5	46779.0	219.	2.667	15872.	5.95	1.46	16500.
POLAND	M	80 1 30	5403N	16148W	18298.4	34221.0	46814.3	191.	3.500	20283.	5.80	2.11	26680.
JAPAN	M	79 225	5631N	16723W	18632.5	34687.0	49020.8	60.	0.500	2821.	5.64	0.76	8602.
JAPAN	M	79 1 4	5646N	16744W	18676.8	34695.7	49171.1	54.	1.083	6095.	5.63	1.38	18700.
JAPAN	S	80 1 10	5628N	17126W	18095.3	35083.8	50115.7	90.	3.000	16446.	5.48	0.48	22000.
JAPAN	M	79 1 2	5624N	16619W	18622.6	34510.9	48597.0	58.	1.000	5124.	5.12	1.18	8600.
USSR	M	80 2 29	5414N	16124W	18346.9	34139.1	46671.4	197.	10.667	53612.	5.03	1.61	55000.
JAPAN	M	79 1 4	5629N	16700W	18530.6	34620.7	48869.2	60.	1.083	5442.	5.02	0.30	6600.
USSR	M	80 3 12	5427N	15917W	18443.7	33819.1	45906.5	224.	4.500	21989.	4.89	1.85	22000.
JAPAN	M	79 3 19	5559N	16837W	18429.2	34979.4	49398.5	142.	0.167	812.	4.87	3.80	10604.
USSR	M	80 3 3	5403W	16147W	18295.1	34218.7	46808.4	219.	4.333	21083.	4.87	1.90	22000.
JAPAN	M	79 1 23	5630N	16653W	18635.2	34594.4	48824.3	59.	1.167	5619.	4.82	0.34	8600.
POLAND	M	80 2 5	5622N	17030W	18326.3	35138.2	49991.8	68.	3.667	17442.	4.76	1.30	17600.
JAPAN	M	80 2 5	5235W	17008W	16934.9	35119.1	49076.7	153.	2.500	11609.	4.64	2.32	13200.
USSR	M	80 3 10	5417N	16040W	18386.1	34031.6	46408.4	208.	8.167	37557.	4.60	1.66	38280.
USSR	M	80 3 11	5417N	16125W	18337.5	34149.1	46677.9	197.	4.833	21574.	4.46	1.72	22000.
USSR	M	80 3 12	5414N	16025W	18380.0	34006.4	46321.0	213.	8.000	35433.	4.43	1.61	36300.
JAPAN	M	79 1 3	5628N	16626W	18621.3	34532.8	48642.8	57.	1.000	4387.	4.39	1.43	2653.
USSR	M	80 3 6	5415N	16037W	18376.3	34030.4	46391.6	219.	9.500	41430.	4.36	1.92	7040.
USSR	M	80 3 16	5425N	15920W	18437.9	33831.6	45928.5	219.	2.000	8656.	4.33	2.02	44000.
USSR	L	80 1 15	5538N	16841W	18295.3	35008.5	49348.3	161.	3.000	12917.	4.31	1.60	8600.
JAPAN	M	79 227	5635N	16720W	18646.7	34661.8	49005.2	57.	1.250	5366.	4.29	1.32	26400.
JAPAN	M	80 2 8	5222N	17142W	16487.9	35138.4	49312.7	153.	1.917	8194.	4.28	2.61	6622.
POLAND	M	80 1 28	5417N	16015W	18393.0	33975.8	46259.7	186.	2.583	10775.	4.17	1.90	11000.
USSR	M	80 3 17	5420N	15954W	18410.8	33920.8	46132.6	246.	5.333	21961.	4.12	1.85	22000.
POLAND	M	80 1 27	5414W	16126W	18345.3	34130.0	48647.6	191.	3.583	14045.	3.92	2.06	14938.
POLAND	M	80 1 29	5417W	16113W	18361.9	34106.2	46605.2	186.	4.333	16431.	3.79	1.43	17160.
JAPAN	M	79 1 2	5622N	16622W	18615.8	34528.1	45615.0	57.	1.167	4373.	3.75	0.67	5500.
USSR	M	80 3 15	5414N	16034W	18375.3	34026.5	48374.3	197.	4.667	17117.	3.67	1.77	17600.
USSR	M	80 3 15	5425N	15927W	18434.9	33846.9	45968.0	219.	6.000	21990.	3.66	1.74	22000.
USSR	M	80 3 7	5414W	16024W	18380.5	34004.2	46315.0	197.	16.500	60436.	3.66	1.96	61600.
JAPAN	M	79 2 18	5632N	16721W	18036.4	34676.7	49008.9	60.	1.167	4146.	3.55	0.22	22220.
POLAND	M	80 2 16	5613W	17100W	18125.0	35127.8	50025.1	82.	6.250	21810.	3.49	1.10	22000.
POLAND	M	80 2 4	5532N	16819W	18275.9	34908.6	49215.2	137.	2.500	8709.	3.48	1.30	2800.
POLAND	M	80 2 14	5624N	17107W	18171.7	35114.8	50078.1	71.	4.417	15308.	3.47	1.34	15400.
USSR	M	80 3 13	5416N	16013W	18391.4	33974.2	46248.0	197.	7.500	25620.	3.44	1.81	26400.
USSR	M	80 3 11	5415N	16100W	18363.7	34082.1	46528.3	206.	11.333	38781.	3.42	1.78	40040.
JAPAN	S	80 1 9	5626N	17129W	18065.9	35082.0	50112.5	123.	1.833	5816.	3.17	1.30	9900.
POLAND	M	80 1 29	5418N	16014W	18396.1	33970.8	46253.1	175.	4.333	12896.	2.98	1.98	13200.

*** NOTE *** THE ACCURACY OF POSITION AND LOGAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-5 (continued). WALLEYE POLLOCK, JANUARY-MARCH 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	RATES 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	80 319	5420N	16009W	16403.7	33954.0	46222.0	230	230	7.500	21987	2.93	1.73	13	22000
USSR	M	79 212	5634N	16730W	18641.5	34698.3	49069.4	59	59	1.500	4260	2.83	0.24	25240	29480
USSR	M	80 316	5427N	15911W	18446.2	33506.1	45671.0	210	210	3.167	8793	2.78	1.81	7	8300
JAPAN	M	79 123	5629N	16649W	18632.7	34585.6	48797.3	58	58	2.333	6378	2.73	1.05	7922	14300
USSR	M	80 227	5416N	16120W	18335.0	34124.7	46647.6	197	197	7.833	21177	2.70	1.65	1043	22220
USSR	M	80 318	5415N	16035W	18377.4	34025.9	46379.7	219	219	6.500	17274	2.66	1.91	326	17600
USSR	M	79 313	5706N	17124W	18293.3	34939.0	50178.1	58	58	1.500	3984	2.66	0.99	32096	36080
USSR	M	79 114	5633N	17155W	18616.5	34601.8	48786.2	61	61	1.050	2689	2.56	0.99	3911	6600
JAPAN	M	79 114	5633N	17155W	17953.1	35020.1	50149.8	120	120	1.750	4465	2.55	1.37	2135	6600
JAPAN	M	79 113	5626N	16628W	18627.5	34524.8	48644.3	56	56	1.000	2532	2.53	1.17	6268	8800
JAPAN	M	80 216	5210N	17043W	16701.9	35131.0	49131.7	150	150	1.083	2708	2.50	2.74	1252	3960
JAPAN	M	80 111	5631N	16641W	18640.3	34551.9	48746.4	57	57	2.000	4963	2.48	1.98	3177	8140
JAPAN	M	79 117	5637N	16554W	18661.9	34376.4	48438.3	46	46	1.500	3567	2.38	1.17	3033	6600
USSR	M	80 319	5418N	16008W	18395.0	33957.5	46217.5	219	219	5.167	11903	2.30	1.78	1297	13200
USSR	M	80 317	5415N	15954W	18406.3	33923.7	46133.7	246	246	4.833	10926	2.26	1.77	74	11000
JAPAN	M	79 125	5631N	16713W	18634.6	34654.7	48955.9	61	61	1.000	2218	2.22	0.45	6582	8800
JAPAN	M	79 118	5634N	16714W	18571.0	34716.5	48940.4	71	71	1.333	2953	2.22	1.47	3757	6710
JAPAN	M	79 113	5624N	16615W	18621.4	34496.4	48570.7	55	55	1.500	3293	2.20	2.16	4407	7700
JAPAN	M	80 114	5632N	16658W	18643.9	34598.3	48859.5	57	57	2.000	4367	2.18	2.29	7513	11880
JAPAN	M	79 123	5628N	16648W	18625.7	34586.3	48789.7	59	59	2.917	6126	2.10	0.99	13674	19800
JAPAN	M	79 319	5213N	17037W	16716.0	35129.2	49105.4	159	159	0.667	1362	2.04	2.53	4160	5522
POLAND	M	80 217	5632N	17140W	18038.0	35051.9	50138.7	77	77	1.083	2183	2.01	0.63	17	2200
JAPAN	M	79 120	5630N	16659W	18634.1	34613.6	48863.5	60	60	1.333	2646	1.96	0.55	6154	8800
JAPAN	M	79 112	5623N	16619W	18619.5	34514.9	48596.2	56	56	1.167	2313	1.98	1.10	3847	6160
JAPAN	M	79 118	5642N	16740W	18676.0	34686.5	49144.1	54	54	1.083	2120	1.96	0.71	8220	10340
USSR	M	80 315	5419N	16005W	18403.0	33948.0	46198.9	208	208	4.833	9374	1.94	1.79	66	9460
JAPAN	M	79 225	5632N	16723W	18636.0	34583.2	49021.9	60	60	0.833	1501	1.80	0.64	8223	9724
USSR	M	80 317	5416N	16020W	18327.9	33989.7	46290.1	219	219	6.333	10956	1.73	1.91	44	11000
JAPAN	M	79 217	5637N	16725W	18652.5	34670.1	49039.7	59	59	0.833	1433	1.72	0.16	79967	81400
JAPAN	M	79 128	5634N	17118W	18177.7	35087.5	50126.5	71	71	1.000	1716	1.72	1.65	484	2200
JAPAN	M	79 111	5622N	16622W	18615.8	34528.1	48615.0	57	57	1.250	2119	1.70	1.59	10201	12320
KOREA	M	79 325	5537N	16835W	18299.6	34997.3	49314.4	93	93	3.000	5014	1.67	0.99	1586	6600
JAPAN	M	80 119	5524N	16838W	18398.0	34987.5	49387.4	89	89	1.583	2624	1.66	1.60	2216	4840
POLAND	M	80 212	5421N	15948W	18416.0	33904.7	46096.4	246	246	5.167	6559	1.66	1.99	241	3800
JAPAN	M	79 226	5645N	16708W	18678.1	34578.9	48932.4	49	49	0.500	826	1.65	0.72	1374	2200
JAPAN	M	79 116	5648N	16738W	18685.0	34666.3	49132.5	51	51	1.083	1788	1.65	2.96	27252	29040
JAPAN	M	79 222	5638N	16715W	18651.8	34641.4	49773.3	57	57	0.333	547	1.64	0.53	22553	23100
USSR	M	79 212	5621N	17150W	18347.0	35138.3	49275.0	77	77	0.583	956	1.64	2.75	12244	13200
JAPAN	M	79 116	5646N	16736W	18675.1	34668.5	49118.3	54	54	1.083	1672	1.54	1.19	4488	6160
JAPAN	M	79 114	5625N	16622W	18625.2	34516.3	48617.4	56	56	0.917	1409	1.54	1.35	2991	4400
JAPAN	M	79 120	5631N	16707W	18635.0	34635.4	48916.7	60	60	1.250	1915	1.53	0.49	5785	7700
KOREA	M	79 326	5533N	16824W	18293.8	34976.2	49244.5	113	113	2.167	3299	1.52	1.23	1101	4400
JAPAN	M	80 129	5615N	16633W	18585.6	34548.0	48675.7	63	63	2.167	3254	1.50	2.69	7306	10560
JAPAN	M	79 213	5634N	16734W	18640.6	34711.4	49055.4	60	60	3.250	4852	1.49	0.23	8348	13200
JAPAN	M	79 226	5636N	16712W	18651.2	34631.3	48953.6	57	57	1.333	1771	1.48	2.20	4739	6710

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-S (continued). WALLIYE POLLOCK, JANUARY-MARCH 1979-80

COUNTRY	DATE	LAT	LCNG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS FRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FTISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	79 2 1	5630N	16626W	18639.6 34508.4 48647.1	54	1.750	2565.	1.47	1.14	7335.	9900.
JAPAN	79 2 1	5635N	16717W	18647.2 34652.0 48985.6	59	0.250	366.	1.46	0.95	40334.	40700.
JAPAN	79 1 25	5629N	16706W	18629.3 34639.7 48908.2	60	1.250	1814.	1.45	0.68	4086.	5900.
JAPAN	79 2 27	5634N	16712W	18644.8 34639.7 48952.0	57	0.667	948.	1.42	1.43	592.	1340.
JAPAN	80 1 11	5628N	16846W	18584.0 34956.2 49530.8	76	2.500	3433.	1.37	1.20	3167.	6000.
USSR	80 1 9	5631N	17126W	18113.7 35079.0 50124.9	98	4.000	5419.	1.35	0.61	5581.	11000.
JAPAN	79 2 28	5617N	17159W	18287.8 35137.9 49287.6	74	0.750	1000.	1.33	3.08	54000.	55000.
JAPAN	79 2 7	5614N	16704W	18575.1 34666.1 48877.0	62	3.167	4212.	1.33	0.29	14510.	18720.
JAPAN	79 1 6	5214N	17034W	16726.8 35128.3 49099.1	153	0.167	217.	1.30	2.52	707.	924.
JAPAN	79 2 3	5632N	16645W	18642.6 34560.6 48775.4	55	1.000	1298.	1.30	0.51	902.	2200.
JAPAN	79 2 9	5623N	16645W	18613.8 34596.1 48765.8	60	3.250	4194.	1.29	1.37	21986.	26180.
USSR	80 3 16	5422N	15933W	18425.2 33068.9 46006.5	208	6.833	8780.	1.28	1.72	20.	8800.
JAPAN	79 2 8	5625N	16650W	18618.0 34623.2 48939.2	60	2.583	3282.	1.28	2.03	27846.	31108.
JAPAN	79 1 24	5631N	16712W	18634.8 34651.5 48949.3	60	1.500	1887.	1.26	0.48	5813.	7700.
JAPAN	79 1 5	5646N	16744W	18676.8 34695.7 49171.1	54	0.750	935.	1.25	0.71	14465.	15400.
USSR	79 2 3	5201N	17150W	16347.0 35138.3 49275.6	74	0.750	918.	1.22	7.51	27682.	28600.
USSR	80 3 15	5427N	15938W	18435.0 33965.0 46031.4	219	3.000	9757.	1.22	1.73	143.	9900.
USSR	79 2 3	5202N	17150W	16352.0 35138.3 49278.3	77	0.667	794.	1.19	4.93	21206.	22000.
JAPAN	79 2 15	5641N	16730W	18664.7 34670.1 49075.6	55	4.167	4891.	1.17	0.18	13149.	18040.
JAPAN	79 3 5	5214N	17035W	16722.8 35128.6 49102.2	148	0.417	486.	1.17	2.23	7302.	7788.
JAPAN	79 3 18	5600N	16836W	18436.4 34975.8 49396.3	164	0.833	967.	1.16	3.70	2003.	2970.
JAPAN	79 1 30	5609N	16639W	18545.8 34642.4 48709.1	72	1.250	1412.	1.13	2.30	4748.	6160.
JAPAN	79 1 5	5215N	17036W	16724.2 35129.0 49107.9	148	0.500	564.	1.13	2.79	8368.	8932.
JAPAN	79 3 8	5219N	17036W	16719.0 35128.9 49105.2	153	0.250	281.	1.12	2.70	3393.	3674.
JAPAN	80 1 18	5638N	16712W	18644.3 34639.7 48952.0	58	1.500	1655.	1.10	2.56	7585.	9240.
JAPAN	79 2 27	5633N	16722W	18635.6 34670.1 49019.4	57	3.167	3411.	1.08	1.53	3035.	6446.
JAPAN	79 1 18	5620N	16720W	18597.0 34737.9 49047.6	69	1.083	1147.	1.06	1.60	2153.	3300.
JAPAN	79 1 5	5646N	16740W	18675.1 34685.1 49144.7	54	1.000	1057.	1.06	1.13	8843.	9900.
USSR	79 3 31	5653N	17108W	18344.4 35065.3 50168.9	55	2.083	2190.	1.05	0.56	6610.	8000.
USSR	79 3 31	5659N	17115W	18326.4 35027.1 50178.5	56	2.000	2012.	1.01	1.06	6768.	8200.
JAPAN	80 2 1	5613N	16636W	18602.6 34562.8 48703.5	62	2.000	2011.	1.01	1.99	7449.	9460.
JAPAN	80 2 5	5253N	17031W	18946.0 35129.0 49205.2	137	2.000	2005.	1.00	2.50	2395.	4400.
JAPAN	79 2 10	5625N	16653W	18617.2 34632.7 48858.7	61	2.833	2837.	1.00	0.67	22177.	25014.
JAPAN	79 2 26	5628N	16706W	18625.9 34643.7 48907.2	57	2.083	1969.	0.95	0.72	2123.	4092.
JAPAN	80 2 5	5234N	17011W	16918.5 35120.4 49083.6	148	1.500	1373.	0.92	2.48	827.	2200.
JAPAN	79 2 3	5627N	16702W	18623.4 34634.7 48860.2	61	1.000	900.	0.90	1.09	4600.	5500.
JAPAN	80 1 12	5625N	16843W	18570.4 34953.8 49511.0	62	2.000	1792.	0.90	1.02	3928.	5720.
JAPAN	79 1 4	5623N	16618W	18619.7 34511.8 48589.6	56	1.000	885.	0.89	1.34	2415.	3300.
JAPAN	79 2 10	5632N	16658W	18607.0 34640.5 48848.9	61	5.083	4443.	0.87	0.72	19515.	23958.
JAPAN	79 1 7	5647N	16747W	18681.6 34703.5 49191.5	59	1.000	869.	0.87	1.78	3091.	3960.
JAPAN	79 3 7	5216N	17034W	16737.1 35128.4 49104.7	153	1.000	864.	0.86	2.23	6066.	6930.
JAPAN	79 1 19	5637N	16749W	18646.2 34749.3 49196.1	56	2.000	1704.	0.85	0.54	6656.	8360.
JAPAN	80 1 7	5641N	16645W	18668.7 34521.4 48786.3	51	1.250	1058.	0.85	1.75	8841.	9900.
JAPAN	79 1 24	5631N	16718W	18633.6 34670.8 48988.3	61	1.867	1410.	0.85	0.55	2990.	4400.
JAPAN	80 1 8	5629N	17142W	18009.0 35034.4 50132.4	142	3.167	2625.	0.83	1.74	1775.	4400.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-5 (continued). WALLEYE POLLOCK, JANUARY-MARCH 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATE	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YYMMDD			7X	7Y	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
JAPAN	M	80 1 9	5641N	167024	18667.4	34577.2	40890.9	3.250	2662.	0.82	1.70	29018.	31680.
JAPAN	M	79 2 12	5639N	16739M	18657.0	34708.4	49133.0	3.083	2521.	0.82	0.43	35979.	38500.
JAPAN	M	80 1 6	5645N	16717M	18677.6	34609.0	49942.1	55.	1330.	0.60	1.44	6600.	6600.
JAPAN	M	80 1 16	5636N	16715M	18650.8	34641.4	48973.3	57.	1703.	0.79	1.22	51097.	52800.
JAPAN	M	80 1 8	5643N	16706M	18672.7	34501.5	48918.3	55.	1935.	0.78	1.23	9721.	11660.
USSR	M	79 3 12	5707N	17124M	18292.9	34964.7	50178.9	1.500	1134.	0.76	0.28	20566.	29700.
JAPAN	M	79 1 7	5637N	16541M	18662.6	34335.7	48351.9	44.	2063.	0.75	0.65	6737.	8800.
JAPAN	M	79 3 18	5607N	16820M	18494.2	34924.6	49327.3	87.	1235.	0.74	1.63	1581.	2816.
JAPAN	M	80 1 14	5635N	16706M	18561.2	34599.2	48916.2	56.	2203.	0.73	1.40	20457.	22660.
JAPAN	M	79 3 19	5600N	16839M	18432.4	34982.9	49412.6	148.	1502.	0.72	1.36	12248.	13750.
JAPAN	M	80 1 6	5638N	16759M	18649.7	34778.6	49262.0	61.	1190.	0.71	1.69	1670.	2360.
JAPAN	M	80 1 9	5635N	16655M	18650.5	34580.3	48841.2	56.	1360.	0.71	1.24	23720.	25080.
JAPAN	M	80 1 7	5645N	16721M	18677.4	34622.4	49018.6	53.	1046.	0.70	1.11	5994.	7040.
USSR	M	79 3 17	5712N	17123M	18309.6	34937.1	50173.7	57.	1608.	0.68	0.31	9692.	11000.
JAPAN	M	79 3 18	5615N	17034M	16731.9	35128.4	49101.9	159.	502.	0.67	2.59	3898.	4400.
JAPAN	M	79 3 22	5552N	16852M	18363.6	35019.7	49453.5	107.	333.	0.67	1.81	767.	1100.
JAPAN	M	79 3 18	5605N	16819M	18484.4	34925.5	49316.0	93.	654.	0.65	1.42	1502.	2156.
JAPAN	M	79 2 11	5622N	16700M	18606.4	34646.8	48861.8	61.	2137.	0.64	2.00	8863.	11000.
JAPAN	M	79 3 1	5614N	17034M	16726.6	35128.3	49099.1	156.	317.	0.63	2.40	4083.	4400.
JAPAN	M	79 3 10	5632N	16747M	16630.1	34760.9	49177.0	61.	1257.	0.63	1.73	7543.	8800.
JAPAN	M	79 1 8	5637N	16550M	18662.2	34363.8	48411.7	45.	1254.	0.63	0.62	2046.	3300.
JAPAN	M	79 3 1	5615N	17034M	16721.7	35122.3	49090.4	164.	308.	0.62	2.64	4202.	4510.
JAPAN	S	80 1 13	5625N	16842M	18571.2	34951.0	49505.1	72.	1113.	0.61	0.79	1747.	2660.
JAPAN	M	79 3 12	5628N	16628M	18633.3	34523.0	48658.9	57.	605.	0.61	1.23	3795.	4400.
JAPAN	M	80 1 8	5645N	16711M	18672.0	34589.0	48952.3	51.	1751.	0.60	1.63	11449.	13200.
JAPAN	M	80 1 15	5633N	16700M	18641.6	34604.8	48872.6	59.	1188.	0.59	1.18	25652.	28940.
JAPAN	M	80 1 15	5639N	16707M	18661.1	34602.5	48922.8	57.	1262.	0.59	1.15	19398.	20800.
JAPAN	M	79 2 3	5626N	16700M	18620.4	34632.1	48266.2	60.	679.	0.59	0.49	9241.	10120.
JAPAN	S	80 2 11	5625N	16843M	18570.4	34953.8	49511.0	77.	1239.	0.57	3.10	3161.	4400.
USSR	M	79 3 17	5714N	17120M	18332.3	34931.6	50170.6	57.	836.	0.56	0.33	7964.	8800.
USSR	M	79 3 30	5707N	17125M	18284.3	34962.1	50178.3	55.	1200.	0.55	1.72	5400.	6000.
JAPAN	M	80 2 4	5653N	17027M	16901.3	35127.6	49169.8	153.	1552.	0.55	1.75	648.	2200.
USSR	M	79 3 17	5717N	17122M	18322.6	34905.3	50164.0	57.	1074.	0.54	0.31	9926.	11000.
JAPAN	M	80 1 16	5641N	16721M	18665.6	34640.2	49016.4	57.	1563.	0.53	1.73	43297.	44660.
JAPAN	M	79 2 24	5636N	16713M	18651.1	34634.8	48960.2	57.	1437.	0.52	1.25	21663.	23100.
JAPAN	M	79 2 8	5624N	16655M	18614.8	34623.8	48631.7	61.	1393.	0.51	0.60	9101.	10494.
JAPAN	M	79 2 13	5638N	16732M	18654.7	34689.2	49026.3	59.	1549.	0.50	0.32	22651.	24200.
JAPAN	M	79 2 24	5636N	16714M	18550.9	34638.1	48966.8	57.	1585.	0.50	1.02	23715.	25300.

*** NOTE *** - THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

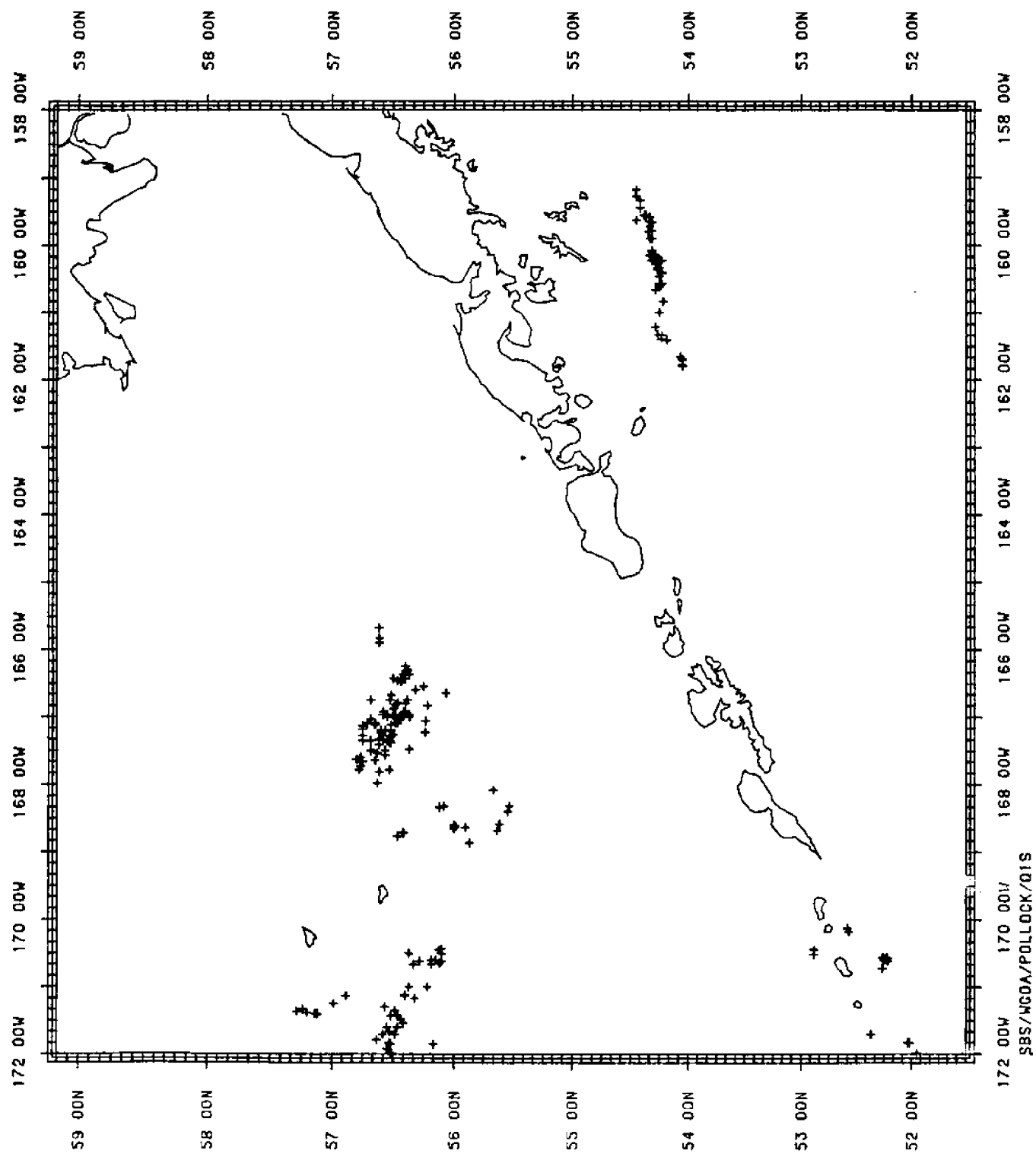


FIGURE C-1. TRAWLING LOCATIONS FOR WALLEYE POLLOCK, JANUARY-MARCH 1979-80

SBS/WCOA/POLLOCK/01S

TABLE C-6. WALLEYE POLLOCK, APRIL-JUNE 1979-80

NATION	VESSEL CLASS	DATE YMMDD	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/5FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	79 630	3603N	16941W	16337.4	35100.4	49728.4	96.	1.583	206476.	130.41	1.74	13524.	220000.
USSR	H	79 627	5505N	15850W	16534.4	33636.3	45698.5	71.	1.000	66782.	66.78	0.54	338.	87120.
POLAND	M	79 5 1	5627N	17117W	18138.8	35098.9	50102.5	77.	0.450	32855.	73.01	0.79	145.	33000.
KOREA	M	79 511	5630N	17123W	18124.6	35085.6	50119.0	80.	0.750	46777.	62.37	0.74	1623.	48400.
JAPAN	L	79 629	5615N	17035W	18252.7	35138.1	49973.3	70.	2.917	180865.	62.02	0.33	28115.	209000.
POLAND	M	79 513	5608N	17030W	18221.0	35138.0	49927.6	77.	0.533	32958.	61.80	0.81	42.	33000.
USSR	M	79 626	5505N	15849W	18534.7	33634.1	45692.3	71.	0.583	35127.4	60.22	0.62	73.	35200.
USSR	M	79 627	5528N	16801W	18300.3	34933.9	49107.4	77.	2.333	133162.	57.07	1.30	158.	133320.
USSR	M	79 627	5540N	16755W	18375.1	34904.5	49109.6	55.	1.417	77859.	54.96	0.30	21.	77890.
POLAND	M	79 5 7	5638N	17058W	18313.5	35112.8	50117.7	66.	0.667	35197.	52.80	0.53	3.	35200.
JAPAN	L	79 6 6	5452N	16529W	18295.0	34631.7	48162.4	82.	3.500	179089.	51.17	0.81	21111.	200200.
POLAND	M	80 629	5618N	17020W	18333.3	35136.2	49943.6	65.	1.500	75836.	50.56	0.50	6004.	81840.
POLAND	M	79 515	5616N	17028W	18288.7	35138.0	49950.4	66.	0.633	39577.	47.49	0.64	23.	39600.
JAPAN	L	79 6 3	5503N	16655W	18256.4	34817.2	48678.4	87.	3.083	135886.	44.07	0.40	512.	136400.
USSR	M	79 628	5546N	16754W	18408.6	34892.9	49120.6	49.	1.250	53411.	42.73	0.20	49.	53460.
JAPAN	L	79 630	5627N	17124W	18100.2	35088.4	50110.5	91.	1.417	60490.	42.70	0.76	5510.	66000.
POLAND	M	80 5 6	5533N	16731W	18366.1	34856.7	48955.5	66.	1.250	50156.	40.13	0.48	4.	50160.
POLAND	M	79 5 2	5630N	17115W	18165.1	35098.0	50110.4	77.	0.667	26332.	39.50	0.64	68.	26400.
USSR	M	80 428	5523N	15837W	18571.7	33543.0	45595.0	82.	1.167	43795.	37.54	0.27	205.	44000.
JAPAN	L	79 630	5620N	16833W	18533.1	34930.2	49554.2	67.	1.583	57380.	36.24	0.83	920.	58300.
JAPAN	L	79 629	5621N	17056W	18205.2	35127.4	50047.4	74.	1.333	48241.	36.18	0.34	159.	48400.
JAPAN	L	79 627	5623N	16840W	18562.2	34949.3	49487.9	62.	1.750	62441.	35.68	0.67	1579.	64020.
POLAND	M	79 5 9	5611N	17029W	18247.3	35138.0	49938.4	71.	1.200	42473.	35.39	0.77	1527.	44000.
KOREA	M	79 626	5532N	16811W	18308.3	34951.4	49173.0	87.	2.583	69581.	34.68	0.70	2819.	92400.
USSR	M	79 630	5505N	15851W	18534.2	33638.5	45704.6	71.	1.083	37564.	54.67	0.59	56.	37620.
JAPAN	L	79 630	5624N	16840W	18567.5	34947.3	49490.8	71.	1.667	57491.	34.49	0.65	1909.	59400.
KOREA	M	79 628	5549N	16845W	18358.6	35007.7	49407.0	91.	2.500	86187.	34.47	1.07	1813.	88000.
USSR	M	79 625	5530N	16810W	18298.3	34951.4	49161.5	63.	2.667	90200.	33.82	0.79	0.	90200.
JAPAN	L	79 625	5622N	16841W	18555.9	34954.1	49491.0	66.	1.500	49635.	33.09	1.02	3605.	53240.
POLAND	M	80 517	5632N	17122W	18142.7	35064.1	50124.2	71.	2.000	65167.	33.08	0.36	53.	66220.
JAPAN	L	79 6 2	5509N	16718W	18257.1	34861.2	48207.7	87.	2.333	77107.	33.05	0.32	2093.	79200.
JAPAN	L	79 6 6	5452N	16543W	18285.4	34665.6	48244.4	82.	2.833	92183.	32.54	0.90	17817.	110000.
USSR	M	80 615	5434N	16122W	18404.8	34079.8	46655.4	49.	1.000	32362.	32.36	1.42	638.	33000.
JAPAN	L	79 629	5623N	16844W	18556.8	34960.5	49511.4	63.	3.167	100466.	31.73	0.65	2494.	102960.
USSR	M	79 416	5633N	17123W	18143.1	35080.7	50128.1	65.	0.583	18252.	31.29	0.70	8.	18260.
USSR	M	80 429	5502N	15814W	18538.1	33569.5	45482.6	66.	0.917	28595.	31.19	0.25	5.	28600.
JAPAN	L	79 630	5602N	16952W	18301.4	35114.1	49769.4	89.	1.667	51621.	30.97	1.67	3379.	55000.
POLAND	M	79 518	5623N	17034W	18317.8	35137.9	50007.1	61.	1.417	43841.	30.95	0.68	159.	44000.
KOREA	M	79 510	5622N	17117W	18105.9	35104.4	50065.1	80.	1.917	57153.	29.82	0.64	4557.	61710.
KOREA	M	79 513	5619N	17059W	18176.6	35125.9	50044.8	74.	3.000	88043.	29.35	0.76	2157.	90200.
JAPAN	L	79 629	5624N	16847W	18561.8	34967.1	49531.7	62.	2.000	57501.	28.75	1.32	3439.	60740.
KOREA	M	80 527	5658N	18855W	18712.7	34891.0	49646.6	41.	2.917	62951.	28.44	1.27	5049.	88000.
JAPAN	L	79 527	5640N	17117W	18215.5	35078.5	50143.2	68.	2.250	63631.	28.28	0.67	6769.	70400.
POLAND	M	80 523	5535N	16734W	18373.1	34860.9	48977.7	71.	1.417	39598.	27.95	0.42	2.	39600.
JAPAN	L	79 626	5625N	16825W	18581.3	34901.1	49403.0	70.	0.417	11335.	27.20	0.80	105.	11440.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-6 (continued). WALLEYE POLLOCK, APRIL-JUNE 1979-80

VESSEL	CLASS	DATE	TIME	LAT	LONG	APPROX	DEPTH	HOURS	CATCH	THOUSAND	SIZE	BYCATCH	TOTAL
						LORAN-C	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FFISH	(LBS)	(LBS)
						7X							
KOREA	M	80 6 1	5444N	16520W	18273.0	34625.8	48097.1	102.	3.583	27.07	1.39	11885.	108900.
USSR	M	80 428	5511N	15826W	18510.4	33525.8	45529.0	92.	1.333	27.02	0.19	8417.	44440.
KOREA	M	79 5 7	5630N	17056W	16275.0	35124.3	50080.7	70.	2.383	26.59	0.43	424.	63800.
POLAND	M	80 4 8	5633N	17124W	18074.7	35093.7	50097.4	82.	0.500	26.40	0.92	1.	13200.
USSR	M	80 617	5437N	16115W	18416.5	34054.8	46612.0	57.	1.000	25.76	1.22	637.	25400.
JAPAN	L	79 628	5639N	16826W	18601.9	34893.9	49418.0	62.	2.667	25.73	1.22	1134.	69740.
JAPAN	L	79 629	5636N	16839W	18576.8	34940.2	49485.9	62.	1.833	25.39	0.91	4927.	51460.
POLAND	M	79 5 2	5632N	17114W	18187.5	35096.9	50115.9	77.	2.250	24.42	0.66	46.	55000.
POLAND	M	79 5 7	5636N	16804W	18341.2	34931.1	49147.6	79.	1.083	24.27	0.67	112.	26400.
JAPAN	L	79 630	5622N	16836W	18566.1	34940.0	49461.6	67.	2.437	24.16	0.90	3435.	61820.
POLAND	M	80 415	5635N	16902W	18338.3	34927.7	49133.7	74.	1.583	24.02	0.33	468.	38500.
JAPAN	L	79 622	5599N	16538W	18554.6	34479.5	48308.6	59.	3.000	23.71	0.39	5364.	77000.
KOREA	M	80 616	5302N	16758W	17485.9	35008.9	48567.7	94.	7.000	23.55	1.84	27634.	192500.
POLAND	M	80 428	5631N	17112W	18192.0	35101.2	50110.3	71.	2.583	23.53	0.42	1262.	62040.
KOREA	M	80 528	5645N	16910W	18656.4	34989.1	49724.1	45.	4.000	23.43	1.44	21565.	115280.
KOREA	M	80 528	5645N	16901W	18666.6	34960.1	49668.4	46.	4.000	23.25	1.36	5982.	99000.
POLAND	M	80 425	5635N	16808W	18329.9	34941.4	49186.2	79.	1.750	22.55	0.46	133.	39600.
POLAND	M	79 5 1	5617N	17120W	18056.7	35105.5	50071.2	84.	2.000	22.55	0.70	7.	45100.
KOREA	M	80 617	5626N	16727W	17568.3	34959.0	48533.9	107.	6.333	22.27	2.01	24610.	165660.
KOREA	M	79 5 6	5631N	17108W	18213.6	35106.8	50105.3	71.	2.000	22.15	0.68	1935.	46244.
USSR	M	80 5 1	5635N	16816W	18523.6	33602.1	45317.3	87.	4.667	22.11	0.67	0.	103180.
POLAND	M	79 524	5636N	17139W	18066.3	35044.9	50147.8	66.	2.000	21.99	0.29	22.	44000.
USSR	M	80 429	5520N	15829W	18567.9	35336.9	45349.0	71.	1.667	21.95	0.17	2798.	39380.
POLAND	M	79 5 1	5625N	17117W	18125.7	35191.2	50095.6	77.	2.000	21.89	0.70	210.	44000.
KOREA	M	79 513	5622N	16842W	18545.6	34973.5	49531.5	70.	2.000	21.89	0.66	211.	44000.
POLAND	M	79 430	5617N	17113W	18093.0	35113.7	50060.8	77.	2.000	21.87	0.48	260.	44000.
POLAND	M	79 5 2	5625N	17119W	18114.9	35098.4	50098.1	77.	1.500	21.85	0.73	220.	33000.
JAPAN	L	79 625	5618N	16850W	18524.8	34985.5	49531.0	66.	2.833	21.45	1.12	3245.	64020.
KOREA	M	79 5 5	5629N	17106W	18210.9	35111.6	50095.4	72.	2.750	21.44	0.67	442.	59400.
PELANE	M	80 5 5	5635N	16750W	18354.1	34899.7	49067.7	75.	2.667	21.43	0.42	41.	57200.
USSR	M	80 616	5425N	16119W	18381.2	34038.1	46639.2	57.	2.000	21.42	1.06	1163.	44000.
POLAND	M	79 514	5617N	17027W	18300.1	35137.9	49960.2	66.	1.750	21.30	0.62	130.	37400.
KOPLA	M	80 528	5651N	16915W	18683.1	34988.3	49767.9	46.	3.500	20.67	1.36	4650.	77000.
KOREA	M	80 628	5301N	16735W	17543.6	34980.0	48566.5	64.	3.833	20.53	1.65	4914.	83600.
POLAND	L	79 426	5608N	17033W	18205.4	35138.2	49936.2	70.	2.000	20.46	0.86	0.	40920.
JAPAN	L	79 6 8	5455N	16551W	18290.6	34679.2	48296.2	76.	2.917	20.27	0.99	17865.	77000.
USSR	M	80 614	5455N	16121W	18408.1	34074.8	48649.1	52.	1.583	20.11	1.30	1163.	33000.
JAPAN	L	79 625	5628N	16825W	18597.7	34893.5	49409.7	65.	1.500	20.08	0.86	3105.	53220.
KOREA	M	80 527	5655N	16850W	18703.1	34886.3	48611.7	44.	6.000	19.68	1.39	7991.	126060.
KOREA	M	80 627	5301N	16739W	17533.6	34986.3	48581.9	63.	3.667	19.42	1.70	5804.	77000.
KOREA	M	79 6 5	5459N	16549W	18310.1	34666.7	48291.5	77.	2.917	19.31	0.83	666.	56980.
KOREA	M	80 614	5299N	16739W	17523.4	34945.9	48578.9	74.	7.500	19.10	1.80	21561.	164780.
KOREA	M	79 514	5614N	17048W	18191.3	35134.6	50000.9	74.	3.093	18.99	0.77	845.	59400.
USSR	M	80 430	5453N	15819W	18515.4	33611.0	45526.3	98.	1.750	18.85	0.65	6.	33000.
POLAND	M	79 520	5616N	17113W	18086.2	35114.4	50057.0	84.	1.667	18.46	0.73	33.	30600.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-6 (continued). WALLEYE POLLOCK, APRIL-JUNE 1979-80

NATION	VESSEL CLASS	DATE YMMDD	LAT	LONG	APPROX LORAN-C FIX	PULSE RATE %	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LB S/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
POLAND	M	79 517	5623N	17040W	18292.7	35156.3	50022.0	61.	0.717	13143.	0.95	57.	13200.
POLAND	M	79 521	5633N	17125W	18331.6	34977.3	50129.9	71.	3.000	54938.	18.34	62.	55000.
KOREA	M	80 528	5652N	16913W	18086.2	34978.3	49757.0	46.	6.167	112336.	1.46	8044.	120780.
POLAND	M	80 519	5634N	16732W	18370.2	34857.6	48963.7	77.	2.167	39594.	0.39	6.	39600.
KOREA	M	80 529	5655N	16900W	18282.4	34921.9	49577.2	49.	5.500	100191.	1.31	9809.	110000.
JAPAN	L	79 6 5	5450N	16536W	18281.7	34652.6	49200.1	85.	2.750	50068.	1.06	4932.	55000.
KOREA	M	80 522	5743N	16829W	18750.2	34641.3	49449.8	43.	7.167	129912.	1.48	9568.	135480.
POLAND	M	80 421	5555N	16832W	18292.5	34992.9	49292.3	134.	3.167	57089.	0.60	111.	57200.
USSR	M	80 518	5647N	15819W	18507.4	33631.1	45335.3	107.	3.667	65990.	1.24	10.	66000.
POLAND	M	79 515	5615N	17028W	18281.2	35138.0	49353.8	86.	1.833	32852.	0.64	148.	33000.
KOREA	M	79 625	5533N	16815W	18306.0	34959.0	49197.4	90.	4.833	85776.	1.06	2224.	86000.
POLAND	M	79 517	5616N	17025W	18300.0	35137.6	49949.6	66.	2.500	43684.	0.70	316.	44000.
POLAND	M	80 5 2	5535N	16806W	18332.8	34936.9	49155.4	77.	3.500	61118.	0.64	482.	61600.
POLAND	M	80 5 7	5535N	16740W	18366.2	34675.6	49011.7	71.	1.333	23065.	0.70	35.	23100.
POLAND	M	80 519	5559N	16730W	18398.0	34844.1	48964.9	77.	3.583	61566.	0.37	34.	61600.
KOREA	M	79 611	5433N	16534W	18211.7	34678.5	48159.9	103.	4.000	67405.	1.55	5855.	73260.
KOREA	M	79 610	5441N	16525W	18256.1	34543.4	48121.4	93.	3.167	53103.	1.61	8497.	61600.
JAPAN	L	79 6 8	5452N	16533W	18295.2	34641.5	48185.9	87.	2.833	47183.	0.90	1212.	48400.
KOREA	M	80 612	5403N	16727W	17573.4	34968.6	48536.3	72.	7.167	119041.	1.71	7899.	126940.
JAPAN	L	79 529	5613N	17033W	18246.7	35138.2	49958.8	67.	3.503	59136.	0.94	13466.	72600.
POLAND	M	80 526	5536N	16710W	18403.0	34798.4	48841.4	63.	1.667	27500.	0.29	0.	27500.
KOREA	M	79 5 2	5619N	17035W	18283.7	35137.9	49391.5	67.	2.583	42612.	0.78	2048.	44660.
POLAND	M	79 524	5638N	17131W	18003.6	35015.0	50157.9	68.	1.333	21981.	0.66	19.	22000.
POLAND	M	79 512	5616N	17044W	18221.5	35135.9	50000.4	68.	2.000	32862.	0.79	138.	33000.
KOREA	M	79 514	5631N	16811W	18618.0	34941.3	49326.4	67.	1.917	31257.	0.61	1083.	32340.
JAPAN	L	79 624	5625N	16825W	18583.3	34901.1	49403.0	67.	1.000	16233.	0.70	927.	17160.
KOREA	M	80 528	5654N	16912W	18696.0	34968.0	49253.8	46.	4.000	64668.	1.29	6612.	71280.
POLAND	M	80 5 6	5535N	16753W	18350.3	34906.8	49084.3	75.	3.333	53821.	0.58	79.	53900.
JAPAN	L	79 6 4	5458N	16607W	18287.6	34712.2	48394.6	81.	2.833	45608.	0.44	592.	46200.
JAPAN	L	79 531	5615N	17056W	18162.2	35129.9	50022.4	77.	1.917	30666.	0.46	6734.	37400.
KOREA	M	79 511	5634N	17127W	18126.0	35071.9	50134.4	73.	2.667	42558.	0.51	1442.	44000.
KOREA	M	79 5 8	5633N	17050W	18319.9	35126.3	50086.0	68.	1.933	29167.	0.38	4933.	34100.
KOREA	M	79 5 4	5631N	17131W	18065.0	35070.3	50125.2	78.	2.000	31453.	0.61	1547.	33000.
JAPAN	L	80 630	5621N	17015W	18373.3	35134.2	49541.4	62.	2.333	36634.	0.59	1366.	38060.
POLAND	M	80 420	5532N	16925W	18286.2	34981.2	49246.3	104.	0.917	14396.	0.59	124.	14520.
JAPAN	L	79 623	5555N	16543W	18537.2	34507.4	48336.5	65.	4.167	65397.	0.35	603.	66000.
KOREA	M	80 615	5402N	16730W	17561.0	34973.0	48547.1	87.	6.833	107187.	1.77	26353.	133540.
KOREA	M	79 513	5618N	17031W	18292.2	35138.2	49976.1	67.	5.000	78289.	0.76	471.	78760.
POLAND	M	79 511	5615N	17037W	18245.6	35137.9	49978.6	68.	3.083	48181.	0.68	217.	48400.
JAPAN	L	79 6 7	5452N	16532W	18296.1	34639.0	48180.0	85.	2.167	33578.	1.03	10422.	44000.
KOREA	M	79 5 9	5621N	17034W	18302.8	35138.0	49998.0	66.	3.833	59382.	0.84	4220.	63602.
POLAND	M	80 516	5631N	17110W	18202.9	35104.0	50107.8	75.	3.917	60542.	0.39	178.	60720.
KOREA	M	80 614	5650N	16903W	18682.2	34951.0	49690.1	44.	6.000	92469.	1.26	12031.	104500.
JAPAN	L	79 6 9	5458N	16557W	18297.8	34688.1	48336.6	79.	4.250	65367.	0.88	633.	66000.
POLAND	M	79 519	5606N	17025W	18224.9	35137.0	49903.7	76.	1.000	15365.	1.12	35.	15400.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-6 (continued). WALLEYE POLLOCK, APRIL-JUNE 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
		YYMMDD			7X 7Y 7Z							
POLAND	M	80 517	5633N	17113W	18199.4 35097.0 50118.1	71.	1.667	25519.	15.11	0.44	1.	25520.
KOREA	G	79 5 7	5634N	17053W	18312.0 35122.0 50095.1	67.	3.750	56408.	15.04	0.43	792.	57200.
JAPAN	L	79 624	5627N	16824W	18551.5 34893.0 49401.4	65.	1.250	18771.	15.02	1.04	2129.	20900.
POLAND	M	80 519	5641N	16719W	18418.0 34812.1 48905.7	68.	2.500	37371.	14.95	0.45	26.	37400.
KOREA	M	80 527	5637N	16910W	18715.7 34940.8 49740.1	43.	2.500	37340.	14.94	1.27	2260.	39600.
POLAND	L	79 627	5622N	16839W	18557.7 34948.5 49479.3	67.	2.833	41201.	14.54	0.84	4339.	45540.
POLAND	L	80 515	5530N	16832W	18310.1 34933.8 49118.8	78.	3.833	55220.	14.41	0.81	0.	55220.
POLAND	M	80 5 2	5533N	16806W	18321.4 34939.2 49149.4	63.	3.533	51525.	14.38	0.51	175.	51700.
POLAND	M	80 5 5	5537N	16811W	18337.1 34945.8 49186.5	74.	2.833	40659.	14.35	0.58	41.	40700.
POLAND	M	80 515	5626N	17116W	18137.7 35101.5 50097.9	75.	3.750	53717.	14.32	0.37	183.	53900.
POLAND	M	80 518	5536N	16733W	18379.4 34856.8 48974.5	77.	3.500	49720.	14.21	0.34	0.	49720.
KOREA	M	80 611	5725N	16935W	18741.9 34853.9 49666.9	41.	3.417	48095.	14.08	1.64	3605.	51700.
POLAND	M	79 520	5616N	17113W	18026.2 35114.4 50057.0	82.	1.250	17575.	14.06	0.97	25.	17600.
POLAND	M	79 522	5637N	17148W	18016.9 35024.1 50154.6	73.	2.833	39367.	13.96	0.68	33.	39600.
JAPAN	L	79 6 4	5500N	16611W	18292.5 34718.2 48421.6	82.	3.500	48441.	13.95	0.53	3959.	52800.
KOREA	M	79 6 2	5449N	16603W	18251.0 34718.5 48354.3	92.	4.500	62785.	13.95	0.68	8275.	71066.
POLAND	M	79 511	5610N	17034W	18220.3 35132.3 49948.0	65.	3.000	41782.	13.93	0.68	18.	41800.
KOREA	M	80 521	5725N	16835W	18750.7 34647.1 49484.6	43.	7.167	99340.	13.89	1.61	26520.	126060.
KOREA	M	79 5 7	5628N	17100W	18235.0 35119.5 50082.8	70.	3.250	45083.	13.87	0.69	1117.	46200.
JAPAN	L	79 625	5625N	16848W	18566.2 34968.0 49540.3	66.	3.500	48419.	13.83	1.04	2181.	50600.
KOREA	M	79 5 6	5620N	17052W	18216.9 35130.8 50035.3	71.	1.917	26472.	13.81	0.51	6704.	33176.
POLAND	M	79 511	5618N	17038W	18293.8 35137.5 49954.6	82.	3.500	48190.	13.77	0.70	210.	48400.
POLAND	M	80 513	5628N	17118W	18139.2 35096.2 50107.1	70.	2.250	50421.	13.52	0.50	379.	30800.
KOREA	M	80 525	5713N	16904W	18746.3 34840.5 49700.4	43.	6.083	50555.	13.24	0.90	10745.	91300.
POLAND	M	79 620	5456N	16745W	18145.4 34932.7 48928.4	90.	3.333	43956.	13.19	1.28	44.	44000.
POLAND	M	79 5 3	5617N	17111W	18103.2 35115.8 50057.7	87.	3.000	39484.	13.16	0.86	116.	39600.
JAPAN	L	79 6 6	5451N	16545W	18275.0 34672.3 48254.3	90.	3.500	46052.	13.16	1.14	6949.	55000.
KOREA	M	80 523	5720N	16901W	18750.5 34778.9 49666.9	43.	6.417	84020.	13.05	1.37	21800.	105820.
POLAND	M	79 510	5616N	17103W	18136.0 35124.1 50040.0	77.	1.300	16965.	13.07	0.73	615.	17600.
KOREA	M	80 616	5730N	16838W	18749.5 34617.0 49490.7	38.	4.917	63690.	12.95	0.85	10010.	73700.
USSR	M	80 615	5435N	16115W	18411.0 34060.6 46612.3	60.	1.000	12792.	12.75	1.49	408.	13200.
POLAND	M	80 518	5633N	17124W	18137.5 35079.0 50129.0	71.	1.917	24169.	12.61	0.41	31.	24200.
KOREA	M	79 5 7	5632N	17054W	18293.0 35123.0 50089.7	69.	5.000	63047.	12.51	0.32	753.	63800.
POLAND	M	79 512	5617N	17026W	18303.8 35137.8 49957.2	68.	1.750	21876.	12.50	0.86	124.	22000.
POLAND	M	80 516	5623N	17052W	17605.9 35138.2 49795.2	71.	2.917	36430.	12.49	0.45	90.	36520.
POLAND	M	80 428	5630N	17111W	18190.9 35103.8 50105.6	66.	3.083	38500.	12.49	0.46	0.	38500.
POLAND	M	79 514	5612N	17030W	18251.0 35138.1 49945.8	60.	3.167	39513.	12.42	0.75	87.	39600.
KOREA	M	79 512	5638N	17110W	18247.9 35094.4 50131.2	77.	2.250	60292.	12.46	0.61	1748.	62040.
KOREA	M	79 512	5638N	17110W	18247.9 35094.4 50131.2	67.	2.250	28029.	12.46	0.69	703.	28732.
JAPAN	L	79 5 7	5451N	16540W	18284.1 34660.3 48225.2	83.	4.500	55493.	12.33	0.66	14907.	70400.
POLAND	M	79 5 5	5620N	17055W	18202.8 35128.6 50041.3	68.	2.333	28580.	12.25	0.64	20.	28600.
POLAND	M	80 419	5544N	16844W	18327.3 35009.8 49384.4	87.	3.000	36642.	12.21	0.59	208.	36650.
KOREA	M	80 331	5717N	16320W	18745.9 34652.3 49401.1	43.	8.000	97534.	12.19	0.79	8066.	105600.
POLAND	M	80 418	5541N	16722W	18416.0 34819.9 48923.2	60.	3.250	39567.	12.17	0.41	33.	39600.
KOREA	M	80 429	5202N	16733W	17553.6 34977.0 48560.3	60.	3.917	47627.	12.16	1.51	7373.	55000.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-6 (continued). WALLEYE POLLOCK, APRIL-JUNE 1979-80

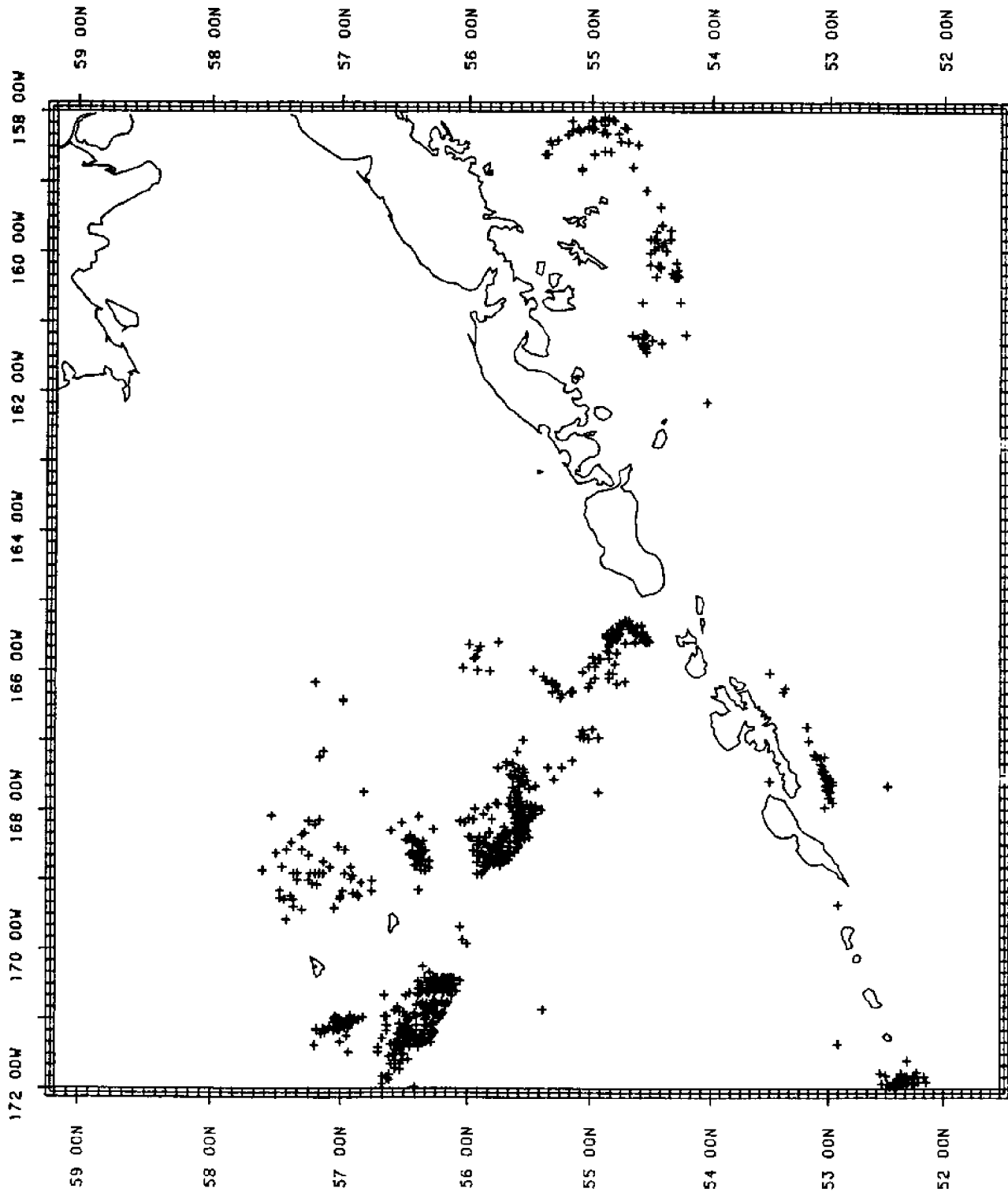
NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YYMMDD			7X	7Y	(FMS)	IRAWLED	(LBS)	PER HOUR	LB/S/FISH	(LBS)	(LBS)
JAPAN	L	80 03	5620N	17025W	18350.3	35137.7	68	4.583	55431	12.09	0.52	1909	57420
KOREA	M	80 01	5529N	16740W	17370.0	34995.8	60	13.667	165015	12.07	1.65	19125	184140
JAPAN	L	79 02	5622N	16835W	18560.9	34937.2	68	2.417	29106	12.04	0.83	1714	51020
POLAND	M	80 5 9	5546N	16840W	18346.3	34999.8	85	4.333	52141	12.03	0.89	659	52800
POLAND	M	80 5 6	5533N	16735W	18361.5	34866.5	72	2.750	32998	12.00	0.48	2	33000
POLAND	M	79 5 4	5624N	17115W	18129.8	35105.0	71	2.783	52769	11.77	0.31	231	33000
JAPAN	L	79 6 9	5456N	16550W	18290.0	34674.9	73	4.417	51952	11.76	0.90	7448	59400
USSR	M	80 01	5433N	16112W	18407.1	34039.5	55	1.833	21492	11.72	1.33	508	22000
POLAND	M	80 41	5609N	17036W	18204.9	35138.2	72	1.500	17515	11.68	0.49	85	17600
POLAND	M	80 5 9	5542N	16822W	18318.3	35007.4	82	6.083	70366	11.56	0.98	54	70400
KOREA	M	80 01	5658N	16835W	18712.6	34818.8	44	7.167	82201	11.55	1.26	10599	93500
POLAND	M	80 41	5610N	17098W	18161.9	35135.4	74	2.083	23974	11.51	0.57	226	24200
USSR	M	80 01	5430N	16117W	18396.3	34079.6	57	1.167	13381	11.47	1.95	919	14300
POLAND	M	79 02	5439N	16651W	18241.5	34813.8	90	3.633	43964	11.47	0.37	36	44000
POLAND	M	80 51	5630N	17130W	18084.7	35073.9	73	2.000	22935	11.47	0.47	165	23100
POLAND	M	79 01	5553N	16845W	18391.0	35092.1	87	1.917	21948	11.45	1.34	52	22000
USSR	M	80 01	5433N	16124W	18401.0	34087.3	60	1.333	15260	11.44	1.46	140	15400
USSR	M	80 5 6	5500N	15816W	18533.8	33580.7	66	4.833	54916	11.36	0.21	84	55000
KOREA	M	79 02	5625N	17109W	18188.3	35108.7	73	5.917	66997	11.32	0.73	1703	68200
JAPAN	L	80 02	5430N	16836W	18741.2	34826.4	41	6.250	70583	11.29	0.40	5417	77000
POLAND	M	80 5 7	5532N	16738W	18352.7	34875.3	75	3.667	41360	11.26	0.50	0	41360
POLAND	M	80 41	5539N	16820W	18335.5	34963.6	75	2.917	32761	11.23	0.55	39	33000
KOREA	M	80 02	5716N	16835W	18742.0	34699.4	42	8.000	89769	11.22	1.42	1511	108680
JAPAN	L	79 02	5628N	16558W	18555.9	34527.8	69	3.500	39186	11.20	0.44	112	35000
POLAND	M	80 02	5440N	16836W	18316.2	34986.8	77	3.917	43826	11.19	0.47	174	44000
POLAND	M	79 43	5622N	17116W	18111.2	35105.7	77	1.583	17450	11.02	0.88	150	17600
KOREA	M	79 01	5544N	16844W	18322.1	35015.9	112	3.667	40216	10.97	0.62	5984	46200
POLAND	M	80 5 4	5537N	16753W	18361.2	34904.0	75	2.917	31679	10.93	0.55	21	31900
USSR	M	80 01	5434N	16111W	18410.3	34054.3	57	1.000	10920	10.92	1.46	80	11000
KOREA	M	80 02	5710N	16809W	18736.1	34658.4	43	8.750	95504	10.91	1.34	15596	111100
KOREA	M	79 01	5504N	16602W	18319.6	34688.8	75	4.333	47297	10.91	0.87	2463	50160
KOREA	M	79 01	5440N	16525W	18251.6	34645.2	117	3.750	40329	10.75	1.72	4071	48400
JAPAN	L	79 01	5433N	15908W	18461.0	33761.1	55	2.500	26778	10.71	1.07	1822	28600
POLAND	M	80 5 4	5534N	16753W	18344.8	34908.2	77	4.500	47728	10.61	0.49	12	47740
POLAND	M	80 5 4	5535N	16801W	18339.7	34925.4	74	3.250	34320	10.56	0.59	0	34320
JAPAN	L	79 02	5623N	16840W	18502.2	34949.3	64	2.417	25316	10.48	0.91	1522	26840
KOREA	M	80 01	5718N	16527W	18750.6	34889.0	41	6.417	67065	10.45	1.73	635	73700
JAPAN	L	79 0 9	5456N	16544W	18300.8	34680.8	75	4.083	42593	10.43	0.75	10205	52800
KOREA	M	79 02	5522N	16848W	18370.5	35011.3	85	8.083	83407	10.32	1.39	4593	89600
KOREA	M	80 02	5711N	16905W	18743.9	34837.4	44	8.500	67581	10.30	1.36	15599	103180
POLAND	M	79 5 3	5620N	17110W	18128.9	35114.6	79	5.667	58261	10.28	0.64	39	56300
JAPAN	L	79 02	5549N	16601W	18507.3	34777.6	63	4.333	44533	10.27	0.45	919	45320
KOREA	M	80 01	5722N	16510W	18746.3	34743.4	38	2.417	24803	10.26	1.89	2697	27500
POLAND	M	79 01	5616N	17031W	18277.1	35138.2	65	5.167	52788	10.22	0.66	12	52000
KOREA	M	79 01	5620N	16835W	18550.3	34941.2	72	4.500	45605	10.13	0.61	1695	47300

*** NOTE ** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-6 (continued). WALLEYE POLLOCK, APRIL-JUNE 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
POLAND	M	80 5 3	5535N	16818W	16315.1	34963.5	49219.5	78	5.667	56840	10.03	0.70	140	56980
POLAND	M	79 6 9	5553N	16827W	18415.0	34980.7	49331.2	84	3.833	38426	10.02	0.57	74	38500
JAPAN	L	79 63C	5534N	16821W	16304.6	34970.9	49232.1	86	4.000	40054	10.02	1.16	8336	48400
KOREA	M	80 531	5712N	16855W	18744.0	34813.7	49641.7	44	5.167	51793	10.01	0.50	3297	55000
POLAND	M	79 5 8	5619N	17037W	18275.5	35137.6	49896.6	71	4.417	43859	9.93	0.81	141	44000
POLAND	M	80 424	5559N	16807W	18464.2	34804.4	49230.3	77	5.000	49312	9.86	0.55	1288	50600
KOREA	M	79 529	5609N	17032W	18220.7	35138.2	4937.9	77	3.750	36796	9.81	0.88	2364	39160
POLAND	M	80 428	5634N	17130W	18108.5	35066.4	50136.7	70	3.000	29254	9.75	0.42	446	29700
KOREA	M	79 522	5620N	17106W	18149.2	35118.9	50061.1	74	6.917	67382	9.74	0.56	3018	70600
POLAND	M	79 618	5552N	16853W	18361.9	35021.7	49458.5	109	2.250	21890	9.73	1.32	116	22000
POLAND	M	79 5 5	5616N	17050W	18196.9	35133.2	50014.0	71	2.250	21873	9.72	0.70	127	22000
POLAND	M	79 521	5616N	17110W	18101.4	35117.5	50052.2	83	5.667	54950	9.70	0.70	50	55000
POLAND	M	79 521	5629N	17120W	18135.1	35091.8	50112.7	77	4.083	39368	9.64	0.75	232	39600
KOREA	M	79 6 3	5451N	16550W	18273.9	34684.2	48281.3	83	3.250	31156	9.59	0.78	8004	39160
POLAND	M	80 517	5629N	17121W	18129.6	35090.2	50113.7	74	1.833	17559	9.58	0.32	41	17600
POLAND	M	80 5 2	5532N	16824W	18287.8	34979.1	49241.2	78	3.667	35087	9.57	0.74	113	35200
USSR	M	80 5 8	5506N	15817W	18544.9	33561.8	45494.8	87	5.750	54993	9.56	0.18	9	55000
KOREA	M	79 513	5622N	17031W	18322.4	35138.2	49994.6	66	6.167	58753	9.53	0.84	5091	63844
POLAND	M	79 522	5635N	17131W	18108.4	35062.6	50140.1	68	3.000	28562	9.52	0.64	38	28600
JAPAN	L	79 623	5554N	16540W	18534.9	34802.0	48316.3	68	3.917	37289	9.52	0.42	111	37400
KOREA	M	79 6 9	5452N	16542W	18296.1	34639.0	48180.0	75	5.000	47273	9.45	1.14	4867	52140
POLAND	M	80 424	5552N	16804W	18429.8	34908.5	49193.9	79	3.833	36201	9.44	0.63	1199	37400
POLAND	M	80 424	5557N	16808W	18452.4	34910.5	49230.6	77	2.167	20405	9.42	0.54	495	20900
POLAND	M	79 429	5615N	17046W	18207.4	35135.3	50000.7	71	2.333	21970	9.42	0.62	30	22000
KOREA	M	80 614	5303N	16729W	17568.5	34971.3	48545.1	64	5.583	52137	9.34	1.62	12103	64240
JAPAN	L	79 623	5555N	16600W	18530.1	34556.4	48444.9	63	1.250	11664	9.33	0.43	216	11880
KOREA	M	80 612	5708N	16845W	18736.6	34801.5	49578.7	44	6.917	64464	9.32	1.29	12536	77000
USSR	M	80 516	5454N	15834W	18517.0	34839.6	45615.3	82	5.917	54992	9.29	0.26	8	55000
KOREA	M	80 613	5705N	16850W	18731.1	34837.2	49613.8	41	7.333	67886	9.23	1.34	7114	74800
JAPAN	L	80 629	5621N	17046W	18251.5	35134.0	50026.9	68	2.500	22959	9.19	0.46	1231	24200
JAPAN	L	79 6 3	5503N	16555W	18256.4	34817.2	48678.4	89	1.917	17591	9.18	2.20	9	17600
POLAND	M	79 611	5527N	16740W	18321.6	34887.3	48990.0	79	4.333	39590	9.14	0.40	10	39600
KOREA	M	80 626	5330N	16736W	17892.1	34970.3	48644.6	77	6.167	56326	9.13	1.73	674	57200
POLAND	M	80 417	5556N	16759W	18456.3	34888.8	49176.1	75	5.000	45516	9.12	0.52	364	45980
POLAND	M	80 421	5537N	16837W	18296.1	35001.4	49324.6	115	6.000	54952	9.09	0.57	228	54780
POLAND	M	80 423	5533N	16838W	18391.9	34988.6	49384.1	79	1.917	17364	9.06	0.78	236	17600
POLAND	M	80 5 5	5532N	16728W	18364.3	34851.0	48935.8	75	2.417	21763	9.01	0.43	237	22000
KOREA	M	79 531	5607N	17030W	18213.5	35138.0	49231.1	77	3.500	31307	8.94	0.92	4773	36080
POLAND	M	79 516	5613N	17028W	18266.1	35137.9	49944.6	66	3.667	32536	8.87	0.86	464	33000
POLAND	M	79 426	5608N	17025W	18255.8	35137.1	49912.8	71	1.833	16265	8.87	0.70	15	16280
KOREA	M	80 529	5701N	16832W	18720.4	34792.9	49494.4	50	3.417	30258	8.86	1.27	2742	33000
USSR	M	80 524	5421N	15942W	18418.8	33891.5	46060.8	109	1.000	8800	8.80	1.40	0	8800
POLAND	M	80 515	5625N	17115W	18336.5	35103.9	50093.1	78	1.500	13200	8.80	0.36	0	13200
POLAND	M	79 5 5	5619N	17053W	18205.0	35130.5	50033.1	68	3.500	30791	8.80	0.64	9	30800
POLAND	M	79 529	5619N	17029W	18307.5	35136.2	49975.2	68	4.250	37377	8.79	0.79	23	37400

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***



172 00W 170 00W 168 00W 166 00W 164 00W 162 00W 160 00W 158 00W
SBS/MG0A/POLLOCK/Q2S

FIGURE C-2. TRAWLING LOCATIONS FOR WALLEYE POLLOCK, APRIL-JUNE, 1979-80

TABLE C-7. WALLYE POLLOCK, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE YHRDD	LAT	LONG	APPROX LCRAN-C PULSE RATES 7X	7Y	7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
KOREA	M	79 720	5432N	16538E	18202.8	34689.3	48180.8	98.	0.750	165877.	221.17	1.39	10123.	176006.
JAPAN	L	80 2 3	5445N	16530E	18258.2	34647.7	48156.9	128.	1.000	197909.	197.91	0.94	91.	198000.
JAPAN	L	79 717	5602N	17006E	18255.9	35127.1	48222.4	77.	1.333	188989.	141.74	1.14	20011.	209000.
JAPAN	L	80 825	5535N	16805E	18328.5	34543.6	49171.6	79.	0.667	94268.	141.40	0.57	332.	94600.
JAPAN	L	80 9 1	5543N	16843E	18322.8	35008.6	49375.9	85.	0.833	112952.	135.54	0.58	1440.	114406.
JAPAN	L	75 718	5605N	17017E	18245.9	35134.0	49873.9	75.	0.667	86244.	129.17	0.97	1756.	82006.
JAPAN	L	79 8 7	5456N	16623E	18266.8	34753.7	48482.4	82.	1.750	210136.	120.08	0.55	1064.	211200.
JAPAN	L	80 911	5447N	16607E	18237.2	34731.1	48373.3	107.	0.833	89680.	107.62	0.58	520.	90200.
JAPAN	L	79 712	5630N	17126E	18107.6	35080.6	50121.9	77.	2.000	203723.	101.86	0.80	5277.	209000.
JAPAN	L	79 2 2	5607N	16954E	18332.3	35116.0	49799.6	69.	0.833	84771.	161.72	0.70	1029.	85300.
JAPAN	L	79 729	5505N	16725E	18241.9	34685.7	48480.7	96.	1.833	186466.	101.71	0.60	2732.	169200.
JAPAN	L	79 917	5452N	16540E	18288.4	34658.4	48226.9	71.	1.667	169195.	101.52	0.55	3285.	172486.
JAPAN	L	79 727	5514N	16721E	18279.3	34801.2	48850.2	86.	3.167	308958.	97.57	0.49	1242.	310200.
KOREA	M	79 825	5258N	16753E	17482.3	35003.8	49636.3	66.	1.417	138214.	97.56	1.78	3686.	141900.
JAPAN	L	80 9 4	5549N	16829E	18381.2	34972.7	49323.0	80.	0.607	64471.	96.71	0.56	1529.	66000.
KOREA	M	79 824	5259N	16747E	17501.0	34996.1	48613.5	66.	0.833	79751.	95.70	1.81	549.	80300.
JAPAN	L	80 9 6	5512N	16738E	18245.1	34901.8	48937.5	109.	2.250	208622.	92.72	0.57	2578.	211200.
JAPAN	L	79 713	5538N	16826E	18320.4	34977.7	49271.3	79.	1.000	91821.	91.82	0.44	579.	92400.
JAPAN	L	79 7 9	5605N	17017E	18245.9	35134.0	49673.9	80.	2.250	206044.	91.58	1.15	2956.	209000.
JAPAN	L	79 9 1	5453N	16533E	18295.5	34639.4	48187.5	81.	2.000	178247.	89.12	0.64	1053.	179100.
JAPAN	L	80 9 0	5508N	16732E	18252.1	34893.4	48894.1	115.	1.250	109576.	87.86	0.53	422.	110000.
JAPAN	L	80 917	5447N	16535E	18271.7	34655.9	48189.3	122.	1.333	114193.	85.64	0.96	207.	114400.
JAPAN	L	80 825	5537N	16807E	18342.7	34936.7	49166.9	75.	1.167	99246.	85.07	0.53	1954.	101200.
JAPAN	L	79 812	5459N	16702E	18227.0	34838.6	48707.5	95.	2.500	205437.	82.17	0.64	1363.	206900.
JAPAN	L	79 927	5444N	16524E	18269.9	34635.3	48120.4	109.	1.000	105008.	82.10	1.41	8095.	90200.
JAPAN	L	79 928	5443N	16525E	18264.6	34639.6	48124.7	114.	1.333	105008.	78.76	1.38	8292.	113300.
JAPAN	L	79 8 4	5558N	16808E	18457.8	34908.8	49233.4	81.	2.417	186064.	77.24	0.57	5836.	192500.
JAPAN	L	79 929	5444N	16524E	18269.9	34635.3	48120.4	108.	1.083	83008.	76.82	1.31	9392.	92400.
JAPAN	L	80 918	5445N	16537E	18261.0	34664.3	48157.5	121.	2.417	182344.	75.45	1.06	4656.	187000.
JAPAN	L	79 7 1	5602N	16942E	18327.3	35101.9	49728.3	110.	1.583	119062.	75.20	1.58	1938.	121000.
JAPAN	L	79 7 5	5605N	16954E	18317.7	35116.1	49790.6	71.	1.000	74900.	74.90	0.98	2100.	77000.
JAPAN	L	80 9 9	5522N	16729E	18311.0	34808.6	48915.5	79.	1.167	86136.	73.83	0.55	1864.	88000.
JAPAN	L	80 919	5444N	16532E	18261.8	34654.3	48166.9	131.	0.750	54991.	73.32	1.00	9.	55000.
JAPAN	L	80 9 5	5446N	16546E	18256.0	34683.8	48251.2	126.	1.833	134263.	73.23	0.77	4337.	136000.
JAPAN	L	79 8 6	5458N	16628E	18264.5	34762.1	48915.0	81.	2.167	150168.	73.00	0.57	2432.	166600.
JAPAN	L	79 9 4	5514N	16733E	18283.1	34888.4	48916.0	93.	2.250	163267.	72.56	0.51	3933.	167200.
JAPAN	L	79 9 0	5458N	16637E	18253.9	34783.1	48566.0	84.	1.667	120395.	72.24	0.62	605.	121000.
JAPAN	L	80 9 5	5447N	16549E	18257.2	34669.1	48270.3	109.	1.167	82753.	70.93	0.78	847.	83600.
JAPAN	L	79 727	5505N	18724E	18248.9	34874.6	48853.5	89.	2.083	147255.	70.68	0.55	2345.	149000.
JAPAN	L	79 7 3	5619N	16836E	18544.1	34946.0	49453.5	73.	1.167	82156.	70.42	0.62	1004.	83160.
JAPAN	L	80 9 4	5445N	16600E	18236.1	34718.2	48329.6	119.	2.333	162113.	69.48	0.82	2887.	165000.
JAPAN	L	79 717	5603N	17015E	18237.9	35132.9	49858.1	79.	1.833	126371.	66.93	1.00	5629.	132000.
JAPAN	L	80 823	5524N	16750E	18293.7	34914.1	49036.4	107.	1.333	93885.	68.91	0.95	13715.	105000.
JAPAN	L	80 829	5449N	16602E	18252.1	34716.2	48346.6	95.	1.000	68896.	68.70	0.70	1704.	70400.
JAPAN	L	79 913	5445N	16625E	18225.2	34709.4	48479.0	101.	0.500	34146.	68.29	0.86	614.	34760.

*** NOTE *** THE ACCURACY OF POSITION AND LCRAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-7 (continued). WALLEYE POLLOCK, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LDNG	APPROX LORAN-C	PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YYMMDD			7X	7Y	7Z	(FMS)	IRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
JAPAN	L	79 6 2	5008N	16953M	16336.8	35117.1	4908.0	68.	1.250	85281.	66.22	0.77	4919.	90200.
JAPAN	L	79 8 6	5459N	16622M	18276.0	34746.3	4842.9	81.	2.167	147295.	67.98	0.53	2305.	149600.
JAPAN	L	80 9 7	5448N	16545M	18265.9	34677.8	48249.0	96.	2.000	134562.	67.28	0.73	8438.	143000.
JAPAN	L	79 9 7	5504N	16644M	18274.7	34790.1	48618.9	80.	1.333	89445.	67.08	0.55	755.	90200.
KOREA	M	79 824	5259N	16747M	17503.0	34936.1	48613.3	68.	1.250	83445.	66.80	1.93	3845.	87340.
JAPAN	L	79 9 4	5452N	16615M	18251.2	34741.5	48428.7	85.	2.000	131240.	65.62	0.66	320.	131560.
JAPAN	L	79 7 1	5538N	16820M	18329.7	34964.7	49239.7	79.	1.500	98376.	65.58	0.49	2824.	101200.
KOREA	M	79 721	5433N	16534M	18211.7	34678.5	48159.9	88.	2.917	169335.	64.92	1.40	8665.	198000.
JAPAN	L	79 830	5459N	16627M	18270.4	34758.1	48511.5	103.	1.033	117498.	64.09	0.96	1962.	119460.
JAPAN	L	80 910	5448N	16525M	18295.9	34630.0	48132.6	98.	2.750	173977.	63.26	0.72	6423.	180400.
JAPAN	L	80 728	5507N	16722M	18241.1	34872.7	48387.3	95.	2.417	152025.	63.24	0.87	1175.	154000.
JAPAN	L	80 5 3	5540N	16847M	18297.0	35018.8	49385.4	124.	1.667	103933.	62.36	1.26	6067.	110000.
JAPAN	L	79 819	5450N	16533M	18266.6	34645.4	48182.6	88.	2.250	139877.	62.17	1.00	17423.	157300.
JAPAN	L	80 516	5442N	16526M	18259.3	34643.9	48128.9	124.	2.000	123902.	61.95	0.99	3698.	127600.
JAPAN	L	79 527	5511N	16729M	18252.6	34883.2	48886.1	95.	1.750	107818.	61.62	0.48	842.	106800.
JAPAN	L	80 7 8	5600N	16759M	18477.2	34881.4	49186.5	70.	1.750	106010.	60.58	0.47	30.	106040.
JAPAN	L	80 515	5446N	16544M	18258.1	34679.1	48239.7	127.	1.167	70187.	60.16	0.88	213.	70400.
JAPAN	L	80 516	5446N	16525M	18268.9	34637.2	48126.2	124.	2.750	165304.	60.11	0.82	4096.	169400.
JAPAN	L	79 7 4	5608N	16944M	18314.4	35103.9	49754.1	80.	1.250	97459.	59.70	1.30	8981.	83600.
JAPAN	L	79 8 9	5455N	16618M	18281.8	34743.6	48351.9	85.	2.833	167788.	59.22	0.53	952.	168740.
JAPAN	L	79 8 8	5459N	16626M	18271.6	34755.6	48505.8	84.	3.583	209819.	58.55	0.53	2481.	212300.
JAPAN	L	79 8 7	5458N	16622M	18271.4	34748.0	48480.8	84.	3.583	207626.	57.94	0.56	1374.	209000.
JAPAN	L	79 9 8	5501N	16709M	18277.8	34851.5	48750.9	92.	1.833	104735.	57.13	0.52	865.	105600.
JAPAN	L	79 728	5510N	16728M	18248.6	34882.2	48878.0	93.	3.333	190124.	57.04	0.59	176.	193000.
JAPAN	L	80 831	5521N	16840M	18382.9	34994.1	49391.3	84.	2.083	118405.	56.83	0.52	2595.	121000.
JAPAN	L	80 911	5445N	16550M	18247.2	34694.9	48272.4	128.	2.333	132000.	56.57	0.79	0.	132000.
JAPAN	L	80 917	5447N	16533M	18273.8	34651.1	48177.7	120.	1.750	99000.	56.57	0.95	0.	99000.
JAPAN	L	80 512	5449N	16603M	18251.0	34718.5	48354.3	92.	1.500	84131.	56.10	0.62	3849.	88000.
JAPAN	L	79 713	5513N	16737M	18262.8	34696.0	48940.3	95.	1.083	60332.	55.69	0.82	1268.	61600.
JAPAN	L	80 5 2	5606N	16943M	18353.9	35102.6	49749.9	71.	1.833	102011.	55.64	0.92	3569.	105600.
JAPAN	L	79 528	5444N	16525M	18266.9	34637.7	48126.2	113.	1.417	78563.	55.46	1.28	12737.	91300.
JAPAN	L	80 516	5446N	16534M	18268.4	34655.4	48181.8	118.	0.833	46200.	55.44	0.93	200.	46200.
JAPAN	L	79 918	5453N	16533M	18299.3	34639.5	48187.5	90.	1.083	59860.	55.26	0.64	200.	60600.
JAPAN	L	79 8 1	5538N	16814M	18318.5	34551.4	49207.7	77.	1.583	86564.	54.87	0.26	3636.	90200.
JAPAN	L	80 710	5508N	16815M	18450.3	34926.8	49273.3	82.	1.417	76963.	54.33	0.53	37.	77000.
JAPAN	L	80 724	5452N	16614M	18252.4	34739.2	48623.0	89.	2.583	140285.	54.30	0.62	515.	140600.
JAPAN	L	79 8 7	5455N	16613M	18267.4	34731.8	48423.3	82.	2.167	117625.	54.25	0.58	1175.	118800.
JAPAN	L	80 910	5449N	16538M	18277.4	34659.3	48210.1	86.	1.667	88661.	53.32	0.76	16739.	105600.
JAPAN	L	79 8 5	5504N	16701M	18253.8	34829.5	48714.2	83.	2.583	137363.	53.17	0.57	1237.	138600.
JAPAN	L	80 919	5445N	16530M	18266.2	34647.7	48156.9	126.	1.667	87673.	52.60	1.03	2527.	90200.
JAPAN	L	80 515	5445N	16538M	18260.0	34666.7	48203.3	134.	1.000	52496.	52.50	1.09	304.	52800.
JAPAN	L	79 710	5611N	16808M	18525.6	34883.8	49267.3	80.	1.250	65482.	52.39	1.35	2058.	67540.
JAPAN	L	79 5 5	5556N	16630M	18514.8	34840.1	48835.7	87.	2.417	126572.	52.37	0.62	1028.	127600.
JAPAN	L	80 824	5543N	16822M	18306.7	35026.4	49421.0	157.	1.750	91009.	52.01	1.12	1611.	92620.
JAPAN	L	79 8 8	5459N	16837M	18258.6	34781.6	48568.2	83.	3.167	162997.	51.47	0.53	2093.	165000.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-7 (continued). WALLEYE POLLOCK, JULY-SEPTEMBER 1979-80

VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	79 916	5501M	16624M	18283.2	34747.7	48498.5	75	1.833	93227	50.85	0.64	1373	94500
JAPAN	80 910	5459N	16715M	18206.9	34867.2	48778.4	109	2.083	105037	50.42	0.55	563	105600
JAPAN	79 9 3	5456N	16619M	18285.4	34744.3	48459.0	83	2.417	120471	49.85	0.62	529	121000
JAPAN	80 9 2	5543N	16847M	18315.0	35016.6	49396.1	92	1.833	90017	49.10	0.67	183	90200
JAPAN	79 7 19	5527N	16746M	18315.7	34901.2	49023.1	78	2.833	138983	49.00	0.52	717	139700
JAPAN	79 8 28	5449N	16556M	18256.0	34702.0	48314.2	69	2.583	126106	48.82	0.54	1054	127160
JAPAN	80 7 19	5548N	16820M	18387.8	34953.1	49271.2	77	2.250	109774	48.75	0.58	446	110200
JAPAN	79 9 26	5514N	16728M	18270.0	34877.2	48888.7	90	3.250	158111	48.65	0.55	7549	158860
JAPAN	79 7 28	5511N	16723M	18260.9	34869.8	48853.4	89	3.167	153709	48.54	0.50	731	154400
JAPAN	79 8 13	5503N	16713M	18232.6	34857.9	48777.9	89	2.583	125391	48.54	0.55	8809	134200
JAPAN	79 9 7	5502N	16654M	18252.6	34816.3	48674.5	87	2.083	100928	48.45	0.51	272	101200
JAPAN	79 9 7	5443N	16532M	18257.5	34656.2	48165.3	128	2.250	107562	47.81	1.06	238	107800
JAPAN	79 8 3	5609N	16944M	18372.9	35103.4	49767.2	84	1.417	67528	47.67	0.88	5072	72600
JAPAN	79 7 24	5445N	16528M	18270.2	34643.0	48145.3	110	2.083	98066	47.46	1.12	134	99000
JAPAN	79 9 17	5448N	16523M	18287.0	34825.2	48120.9	78	1.500	71171	47.45	0.59	549	71720
JAPAN	80 9 18	5442N	16527M	18256.3	34646.2	48134.7	126	1.167	54833	47.00	1.02	167	55000
JAPAN	80 9 13	5444N	16543M	18250.3	34680.3	48230.4	143	1.167	54652	46.84	0.85	348	55000
JAPAN	79 7 10	5555N	16822M	18425.3	34948.7	49303.7	83	0.833	39016	46.82	0.44	584	39600
JAPAN	79 9 22	5453N	16550M	18282.0	34680.6	48286.8	81	1.750	61906	46.80	0.94	2574	84460
JAPAN	80 9 18	5446N	16536M	18266.4	34660.1	48193.4	125	1.750	81400	46.51	0.90	0	81400
JAPAN	79 7 31	5516N	16706M	18308.2	34823.2	48771.3	83	2.583	120116	46.50	0.48	444	120560
KOREA	79 7 20	5432N	16537M	18203.9	34687.0	48771.5	131	3.450	160276	46.46	1.41	15724	176000
JAPAN	79 9 28	5442N	16527M	18256.3	34646.2	48134.7	118	1.333	61714	46.29	0.95	4286	66000
JAPAN	80 9 25	5444N	16532M	18261.8	34654.3	48166.9	120	2.417	111104	45.97	0.89	5436	116600
JAPAN	79 9 1	5506N	16727M	18228.7	34884.9	48861.7	101	2.833	129922	45.85	0.73	98	130020
JAPAN	79 9 18	5446N	16529M	18273.4	34643.5	48152.8	114	1.833	83396	45.49	1.52	5704	69100
JAPAN	79 8 9	5450N	16554M	18265.3	34695.6	48304.6	87	2.583	113160	43.98	0.64	3240	116600
JAPAN	79 8 7	5458N	16628M	18264.5	34762.1	48515.0	83	3.083	135125	43.82	0.57	1275	136400
JAPAN	80 8 12	5446N	16536M	18266.4	34660.1	48193.4	121	2.000	87552	43.78	0.95	448	88000
JAPAN	80 9 15	5446N	16533M	18269.4	34653.0	48176.0	126	1.750	76499	43.71	0.96	501	77000
JAPAN	80 9 16	5446N	16523M	18279.3	34629.1	48117.7	107	2.250	98194	43.64	0.85	7406	105600
JAPAN	80 9 24	5513N	16715M	18281.9	34846.8	48914.4	84	2.583	112201	43.43	0.75	2195	114400
JAPAN	80 9 27	5443N	16629M	18191.2	34787.1	48482.3	159	1.500	65141	43.43	0.90	3059	68200
USCN	79 7 4	5612N	16900M	18476.4	35018.2	49566.1	71	2.000	68801	43.40	0.48	1199	88000
JAPAN	79 7 2	5538N	16832M	18310.7	34990.3	49302.4	76	1.583	68200	43.34	0.54	1560	70180
JAPAN	79 8 27	5446N	16541M	18270.0	34668.3	48225.8	91	1.000	43200	43.20	0.75	360	43560
JAPAN	80 9 5	5446N	16544M	18256.1	34679.1	48239.7	114	1.833	79163	43.18	0.78	2237	81400
JAPAN	80 9 3	5536N	16820M	18317.9	34966.8	49233.3	87	1.333	58940	42.70	0.58	260	57200
JAPAN	80 9 3	5540N	16839M	18311.1	35002.9	49345.1	79	1.500	63874	42.45	0.59	126	63600
JAPAN	79 9 1	5445N	16526M	18272.2	34638.2	48333.7	111	2.083	8712	42.10	0.92	288	88000
JAPAN	79 7 11	5623N	16819M	18572.3	34888.1	49361.9	74	1.917	7793	41.63	0.50	727	80520
JAPAN	80 9 27	5444N	16530M	18263.9	34649.6	48155.3	133	1.667	60981	41.39	0.85	319	69300
KOREA	79 7 22	5440N	16527M	18245.7	34649.9	48131.4	98	3.083	128753	41.11	1.45	27247	154000
KOREA	80 7 18	5206N	16716M	17614.7	34952.0	48494.5	87	2.833	116344	41.06	1.65	4656	121000
JAPAN	79 8 9	5451N	16605M	18257.9	34719.8	48369.6	92	2.917	119405	40.94	0.58	12595	132000

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-7 (continued). WALLEYE POLLOCK, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE (LBS/FISH)	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	79 7 5	5605N	16945W	18341.7	35105.4	49754.0	75	2.833	115861	40.89	1.18	16139	132000
JAPAN	L	80 9 11	5447N	16602W	18242.9	34719.5	48344.8	102	1.667	68124	40.87	0.56	76	68200
JAPAN	L	80 9 18	5442N	16529W	18256.3	34651.0	48146.2	124	2.563	105202	40.72	0.93	392	105600
KOREA	L	79 8 26	5259N	16748W	17500.4	34997.4	48017.6	68	2.000	81353	40.68	1.75	1367	82720
JAPAN	L	80 9 24	5438N	16532W	18235.8	34665.2	48156.9	126	2.500	101690	40.66	1.01	1710	133400
JAPAN	L	80 9 9	5517N	16738W	18304.9	34838.3	48813.2	86	2.417	96165	40.62	0.54	835	99000
JAPAN	L	80 9 7	5511N	16738W	18239.6	34903.0	48934.7	120	2.000	81211	40.61	0.86	169	81400
JAPAN	L	79 7 9	5524N	16830W	18409.2	34969.1	49344.4	81	2.583	104718	40.54	0.64	5282	110000
JAPAN	L	79 9 4	5446N	16536W	18266.4	34660.1	48193.4	91	4.167	167485	40.20	0.61	1255	168740
JAPAN	L	79 7 3	5536N	16828W	18305.2	34983.8	49275.1	84	2.417	96772	40.04	0.78	4428	101200
JAPAN	L	79 7 4	5539N	16835W	18311.8	34995.6	49321.2	81	2.167	86664	40.00	0.60	5736	92400
JAPAN	L	80 7 4	5619N	16812W	18562.4	34877.1	49310.3	82	1.167	46640	39.90	0.70	0	46640
JAPAN	L	80 7 4	5619N	16812W	18562.4	34877.1	49310.3	82	1.167	46640	39.90	0.70	0	46640
JAPAN	L	80 9 8	5447N	16625W	18273.1	34635.3	48127.8	120	2.063	83122	39.90	0.86	4878	88000
KOREA	H	80 7 21	5305N	16718W	17605.0	34955.3	48501.1	82	3.633	150384	39.23	1.72	3616	154000
JAPAN	L	80 9 14	5444N	16539W	18254.6	34670.9	48207.4	137	1.667	65121	39.07	0.95	879	66000
KOREA	H	80 8 27	5306N	16714W	17619.3	34949.2	48485.5	87	3.833	149650	39.04	1.58	4351	154000
USSR	H	80 9 8	5417N	16025W	18387.9	33998.1	46319.1	98	1.750	67879	38.79	1.28	101	67980
JAPAN	L	79 8 27	5446N	16541W	18261.2	34672.0	48222.4	106	3.083	119138	38.64	1.08	542	119680
JAPAN	L	79 9 30	5445N	16525W	18273.1	34635.8	48127.8	110	1.250	47490	37.99	1.40	5330	53020
JAPAN	L	79 7 11	5604N	16757W	18499.3	34867.9	49184.8	78	2.500	94717	37.84	0.44	4283	99000
JAPAN	L	79 7 20	5457N	16546W	18304.3	34663.2	48270.5	74	2.500	94611	37.84	0.90	2189	96600
JAPAN	L	79 5 27	5451N	16548W	18276.0	34679.5	48271.7	83	2.583	97677	37.81	0.84	1323	99000
JAPAN	L	79 7 23	5444N	16529W	18264.3	34647.2	48149.5	120	3.000	113299	37.77	1.39	661	113960
JAPAN	L	79 8 11	5444N	16617W	18211.3	34758.8	48423.6	139	2.167	61798	37.75	1.26	4002	85300
JAPAN	L	79 8 2	5454N	16615W	18256.0	34747.6	48455.5	85	3.750	141176	37.65	0.55	1824	143000
JAPAN	L	79 7 12	5536N	16826W	18302.5	34979.6	49264.7	82	1.250	47037	37.63	1.07	3343	50380
JAPAN	L	80 8 11	5439N	16530W	18242.3	34658.8	48147.1	122	2.083	78306	37.59	1.03	9694	68000
JAPAN	L	79 7 2	5413N	17025W	18277.4	35137.4	49935.8	69	2.000	75102	37.55	0.68	6298	81400
JAPAN	L	80 9 27	5444N	16631W	18193.5	34790.2	48501.6	153	2.000	74699	37.35	0.85	4501	79200
JAPAN	L	79 7 28	5506N	16720W	18231.6	34869.5	48623.8	95	3.500	136605	37.32	0.60	3595	134200
JAPAN	L	79 7 10	5529N	17125W	18107.1	35083.9	50117.8	88	1.500	55653	37.10	1.36	5947	61600
JAPAN	L	79 9 2	5452N	16610W	18256.9	34729.8	48400.2	85	2.833	104696	36.95	0.53	904	105600
JAPAN	L	80 8 19	5458N	16710W	18210.8	34857.6	48768.7	116	3.250	119969	36.91	1.02	1031	121000
JAPAN	L	80 9 15	5438N	16532W	18235.2	34665.2	48156.9	153	2.167	79971	36.81	1.04	1429	81400
JAPAN	L	80 7 3	5615N	16807W	18546.3	34872.0	49270.8	82	2.667	98152	36.81	0.52	5248	103400
KOREA	H	80 8 30	5309N	16705W	17654.9	34834.6	48451.6	85	2.417	88121	36.71	1.78	10279	99000
JAPAN	L	80 5 30	5441N	16540W	18240.3	34678.6	48208.0	152	2.083	76404	36.67	0.90	376	76780
JAPAN	L	79 7 4	5543N	16841W	18326.2	35004.5	49365.7	82	1.500	54991	36.66	0.63	4409	59400
JAPAN	L	79 7 12	5535N	16821W	18310.5	34969.9	49335.3	83	1.500	54655	36.44	0.43	125	54780
JAPAN	L	79 7 29	5515N	16735W	18265.7	34891.6	48929.6	94	1.500	54387	36.39	0.50	633	55220
JAPAN	L	79 7 15	5526N	16752W	18302.0	34916.1	49053.0	82	1.167	42445	36.38	0.51	1115	63560
JAPAN	L	80 7 25	5448N	16602W	18247.5	34717.8	48346.8	98	2.000	72309	36.25	0.89	91	72600
JAPAN	L	79 5 5	5445N	16550W	18247.2	34694.9	48272.4	130	2.583	93818	36.24	0.68	542	94160
KOREA	H	80 8 10	5305N	16717W	17607.3	34953.9	48496.6	87	2.533	84546	36.23	1.74	3454	88000
JAPAN	L	79 7 8	5602N	16953W	18298.6	35115.2	49773.3	84	1.000	36030	36.03	1.43	4850	44880

*** NCIE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-7 (continued). WALLEYE POLLOCK, JULY-SEPTEMBER 1979-80

NATION	VESSSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C 7X	APPROX LORAN-C 7Y	RATES 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	80 026	5517N	16742W	18266.6	34904.7	48973.1	95	1.250	64734	35.79	0.86	1466	66200
JAPAN	L	79 812	5453N	16557W	18275.5	34697.3	49327.4	81	2.417	86234	35.68	0.62	1326	87360
JAPAN	L	80 028	5446N	16600W	18240.6	34711.6	48331.5	96	2.417	86158	35.65	0.74	1842	88000
JAPAN	L	79 811	5507N	16656W	18275.1	34913.5	48693.5	81	2.167	77058	35.57	0.95	162	77220
JAPAN	L	80 717	5605N	16802W	18500.2	34879.5	49216.8	83	1.500	53238	35.49	0.47	2	53240
JAPAN	L	80 914	5442N	16528W	18257.3	34641.6	48140.4	138	2.750	96981	35.27	1.15	2019	99000
JAPAN	L	79 716	5539N	16812W	18459.0	34917.4	49255.0	80	1.333	46992	35.24	0.56	2728	49720
JAPAN	L	80 913	5449N	16541W	18274.4	34666.4	48227.6	74	1.500	52800	35.20	0.72	0	52800
JAPAN	L	80 921	5446N	16533W	18269.4	34653.0	48176.0	111	2.000	70279	35.14	0.77	1721	88000
JAPAN	L	79 828	5456N	16556W	18290.0	34689.4	48327.1	78	3.250	113790	35.01	0.59	2810	116600
JAPAN	L	80 710	5456N	16713W	18196.0	34866.5	48755.8	132	2.667	93311	34.99	0.99	629	93940
JAPAN	L	79 717	5604N	16939W	18349.4	35097.4	49724.1	84	0.583	20369	34.92	1.32	531	20900
JAPAN	L	80 918	5505N	16723W	18229.1	34877.4	48637.4	101	1.500	52265	34.86	0.56	515	52800
JAPAN	L	80 828	5447N	16557W	18248.5	34707.9	48316.2	108	1.917	66717	34.81	0.88	1483	68200
JAPAN	L	79 922	5444N	16530W	18263.9	34649.6	48155.3	129	1.250	43480	34.78	1.27	1400	44880
JAPAN	L	79 530	5444N	16528W	18265.9	34644.9	48143.7	121	1.583	54958	34.71	1.27	4662	59420
JAPAN	L	80 715	5626N	16819W	18591.6	34880.4	49368.5	76	2.083	72143	34.63	0.73	17	72160
JAPAN	L	79 819	5447N	16526W	18280.7	34634.3	48136.9	109	1.500	51939	34.63	1.02	861	52800
JAPAN	L	79 913	5507N	16637W	18297.2	34768.5	48585.7	79	1.833	63475	34.62	0.51	325	63000
MEXICO	S	79 817	5326N	16657W	17858.1	34824.5	48200.2	102	1.000	34022	34.62	1.84	8278	42900
JAPAN	L	80 715	5539N	16822W	18332.5	34968.0	49253.5	77	2.667	92128	34.55	0.93	272	92400
JAPAN	L	80 729	5450N	16632W	18221.3	34783.8	48520.3	106	3.667	126520	34.51	0.92	1080	127600
JAPAN	L	80 715	5450N	16632W	18221.3	34783.8	48520.3	106	3.667	126520	34.51	0.92	1080	127600
JAPAN	L	79 821	5454N	16544W	18293.2	34664.2	48253.6	77	2.167	74733	34.49	0.68	4667	79200
JAPAN	L	79 713	5433N	16609W	18262.8	34725.8	48396.4	84	2.667	91910	34.47	0.59	490	92400
JAPAN	L	80 916	5446N	16534W	18266.4	34655.4	48181.8	129	3.250	111985	34.46	1.01	215	112200
JAPAN	L	80 516	5502N	16716W	18220.4	34870.1	48602.4	109	1.583	54496	34.42	0.63	504	55000
JAPAN	L	79 827	5452N	16544W	18224.4	34668.0	48250.2	79	3.000	103061	34.35	0.84	2539	105600
JAPAN	L	80 816	5519N	16727W	18297.8	34868.2	48896.5	106	2.167	74353	34.32	0.59	447	74300
JAPAN	L	79 714	5602N	16949W	18309.6	35110.7	49757.3	85	2.667	91350	34.26	1.71	7650	99000
JAPAN	L	79 819	5449N	16526W	18289.1	34630.4	48140.0	90	3.000	102729	34.24	0.93	7271	110000
JAPAN	L	79 713	5629W	17149W	17967.5	35041.3	50137.3	102	1.583	54053	34.14	1.52	947	55000
JAPAN	L	79 810	5456N	16700W	18229.7	34834.1	48696.5	89	2.083	71071	34.11	0.55	71929	143000
JAPAN	L	80 915	5444N	16548W	18241.9	34744.8	48424.6	104	2.083	70993	34.08	0.62	1607	72600
JAPAN	L	80 916	5444N	16548W	18244.9	34692.0	48259.2	137	2.167	73721	34.03	0.88	1079	74800
JAPAN	L	80 916	5445N	16530W	18268.2	34647.7	48150.9	126	2.333	79017	33.86	0.91	163	79200
JAPAN	L	79 813	5508N	16728W	18237.9	34884.7	48872.6	96	3.333	112874	33.86	0.64	1526	114400
JAPAN	L	80 718	5556N	16751W	18464.0	34867.6	49129.5	75	1.750	59175	33.81	0.42	225	59400
JAPAN	L	80 815	5530N	16801W	18311.6	34931.5	49113.4	91	2.167	73184	33.78	0.61	1616	74800
JAPAN	L	79 728	5509N	16734W	18234.6	34896.6	48907.6	115	2.500	84414	33.77	1.36	1386	85200
JAPAN	L	80 325	5451N	16637W	18219.8	34793.6	48550.4	109	2.833	95556	33.73	0.58	3444	99000
JAPAN	L	79 711	5556N	16823W	18425.8	34949.7	49312.2	84	3.000	100672	33.56	0.50	4928	105600
JAPAN	L	79 727	5500N	16704W	18225.4	34841.7	48721.0	90	1.917	64111	33.45	0.61	1889	66000
JAPAN	L	79 814	5434N	16536W	18213.9	34681.4	48173.0	134	2.917	97515	33.43	1.50	12465	110000
JAPAN	L	79 814	5434N	16536W	18213.9	34681.4	48173.0	134	2.333	77298	33.13	1.63	12902	90200
JAPAN	L	79 929	5503N	16705W	18243.5	34839.9	48733.9	86	2.333	77276	33.12	0.55	604	77880

NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-7 (continued). WALL-EY POLLOCK, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX	LCRAN-C	PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND	SIZE	HYCATCH	TOTAL
		YYMMDD			7X	7Y	7Z		(FMS)	IRAWLED	(LBS)	PER HOUR	LB 5/FTSH	(LOS)	(LBS)
JAPAN	L	79 820	54>IN	16619W	18241.9	34752.5	48449.4	85	2.750	91015	33.10	0.64	285	91300	
JAPAN	L	79 819	5447N	16608W	18236.1	34733.5	48378.9	99	2.750	90873	33.04	0.57	427	91300	
JAPAN	L	79 730	5419N	16718W	18305.1	34847.1	48846.3	82	2.667	89986	32.99	0.51	454	88440	
JAPAN	L	80 714	5613N	16750W	18547.9	34827.2	49163.0	77	2.000	65967	32.98	0.47	33	66000	
KOREA	M	80 720	5304N	16721W	17592.8	34959.9	48512.1	79	4.000	131626	32.91	1.67	4774	156400	
JAPAN	L	79 731	5520N	16717W	18315.5	34843.2	48843.2	81	4.667	153554	32.90	0.51	446	154000	
KOREA	M	79 823	5259N	16756W	17475.6	35007.2	48551.5	60	2.000	65611	32.81	1.79	2589	66200	
JAPAN	L	80 826	5435N	16526W	18244.4	34654.1	48135.5	121	2.000	65109	32.55	0.86	891	66000	
JAPAN	L	79 810	5446N	16616W	18221.9	34753.4	48422.1	155	2.667	86577	32.47	0.99	1423	88000	
JAPAN	L	80 829	5450N	16699W	18246.8	34750.8	48390.5	89	1.750	56629	32.36	0.72	571	57200	
JAPAN	L	79 9 5	5457N	16715W	18196.4	34859.6	49773.2	120	3.033	99757	32.35	0.81	563	100320	
JAPAN	L	80 917	5447N	16531W	18275.7	34646.3	48169.0	106	2.000	64562	32.28	0.86	10238	74800	
USSR	M	80 715	5456N	16121W	18410.8	34071.7	46648.9	60	3.000	32274	32.27	1.23	726	33000	
JAPAN	L	79 728	5502N	16705W	18231.3	35114.7	49831.5	89	3.167	102136	32.25	0.87	164	57200	
JAPAN	L	79 8 2	5611W	16933W	18364.3	34841.3	48731.4	71	1.667	53633	32.19	0.70	3547	57200	
JAPAN	L	79 715	5520N	16744W	18280.2	34905.5	48982.4	94	2.750	86408	32.17	0.74	6352	96800	
JAPAN	L	80 925	5439N	16530W	18242.3	34658.8	48147.1	115	3.333	106941	32.08	0.89	11000	110000	
JAPAN	L	80 5 9	5449N	16549W	18266.1	34605.5	48273.9	90	2.000	63984	31.99	0.61	2016	66000	
JAPAN	L	79 720	5454N	16537W	18299.9	34647.2	48212.6	77	3.333	106494	31.95	0.68	1306	107800	
JAPAN	L	79 711	5555N	16840W	18401.1	34900.9	49401.4	92	3.333	106091	31.83	1.34	7649	113740	
JAPAN	L	79 718	5604N	17009W	18265.2	35129.3	49842.1	73	2.583	82185	31.81	0.96	10215	92400	
JAPAN	L	79 8 9	5418N	15845W	18565.7	33578.8	45651.3	106	1.667	53020	31.81	0.74	0	53020	
JAPAN	L	79 929	5443N	16525W	18264.6	34659.6	48124.7	113	1.417	44924	31.71	1.25	7876	52000	
JAPAN	L	79 9 2	5445N	16545W	18252.8	34683.2	48243.7	111	4.033	129034	31.60	0.83	1865	130900	
JAPAN	L	79 828	5456N	16556W	18290.0	34689.4	48327.1	77	2.917	91826	31.46	0.59	2774	94000	
JAPAN	L	80 7 5	5621N	16801W	18578.3	34839.1	49247.1	86	2.583	81276	31.46	0.46	124	81400	
JAPAN	L	80 710	5551N	16826W	18397.1	34963.4	49313.2	85	1.417	44485	31.40	0.91	395	44800	
JAPAN	L	80 5 7	5514N	16738W	18239.6	34903.0	48934.7	119	2.667	83600	31.35	0.60	0	83600	
JAPAN	L	80 513	5445N	16554W	18242.8	34704.5	48295.3	128	2.500	78284	31.31	0.90	916	79200	
JAPAN	L	79 813	5503N	16710W	18236.7	34851.2	48761.4	92	3.417	106627	31.21	0.57	2273	108900	
JAPAN	L	79 730	5523N	16742W	18299.5	34397.3	48590.0	85	2.000	62394	31.20	0.52	5806	68200	
JAPAN	L	79 810	5453N	16623W	18246.6	34758.5	48476.1	85	2.167	67525	31.17	0.55	235	67760	
KOREA	M	80 717	5301N	16736W	17541.1	34621.4	48576.9	82	3.167	98683	31.16	1.30	317	99000	
JAPAN	L	80 731	5447N	16530W	18273.7	34643.9	48160.2	109	4.917	152919	31.10	0.78	1091	154000	
JAPAN	L	80 724	5454N	16625W	18249.0	34761.6	48489.6	88	2.250	69965	31.10	0.42	435	70400	
JAPAN	L	80 7 7	5609N	16823W	18502.1	34929.1	49350.2	78	3.667	113960	31.08	0.42	0	113960	
JAPAN	L	80 828	5448N	16555W	18255.2	34701.4	48306.6	99	3.000	93045	31.01	0.71	3755	96800	
JAPAN	L	80 9 1	5548N	16840W	18358.5	34998.0	49377.7	79	2.333	72345	31.00	0.44	255	72600	
JAPAN	L	79 9 7	5500N	16646W	18252.7	34800.9	48621.1	83	2.500	77416	30.97	0.53	1762	79200	
JAPAN	L	80 912	5445N	16651W	18171.1	34832.6	46613.4	133	1.833	56753	30.96	0.47	57200	57200	
JAPAN	L	79 731	5520N	16718W	18314.2	34845.6	48449.9	80	3.000	92768	30.92	0.53	1832	94600	
JAPAN	L	80 921	5444N	16529W	18264.9	34647.2	48149.5	103	1.750	54038	30.82	0.38	3162	57200	
JAPAN	L	80 825	5524N	16717W	18335.9	34837.0	48453.2	80	2.083	64207	30.82	0.58	1793	66000	
JAPAN	L	80 731	5445N	16555W	18241.7	34706.6	48301.1	127	2.500	76901	30.76	0.90	59	77000	
JAPAN	L	79 913	5449N	16633W	18215.2	34737.5	48523.7	90	2.583	79320	30.70	0.57	320	79640	

*** NOTE *** THE ACCURACY OF POSITION AND LCRAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

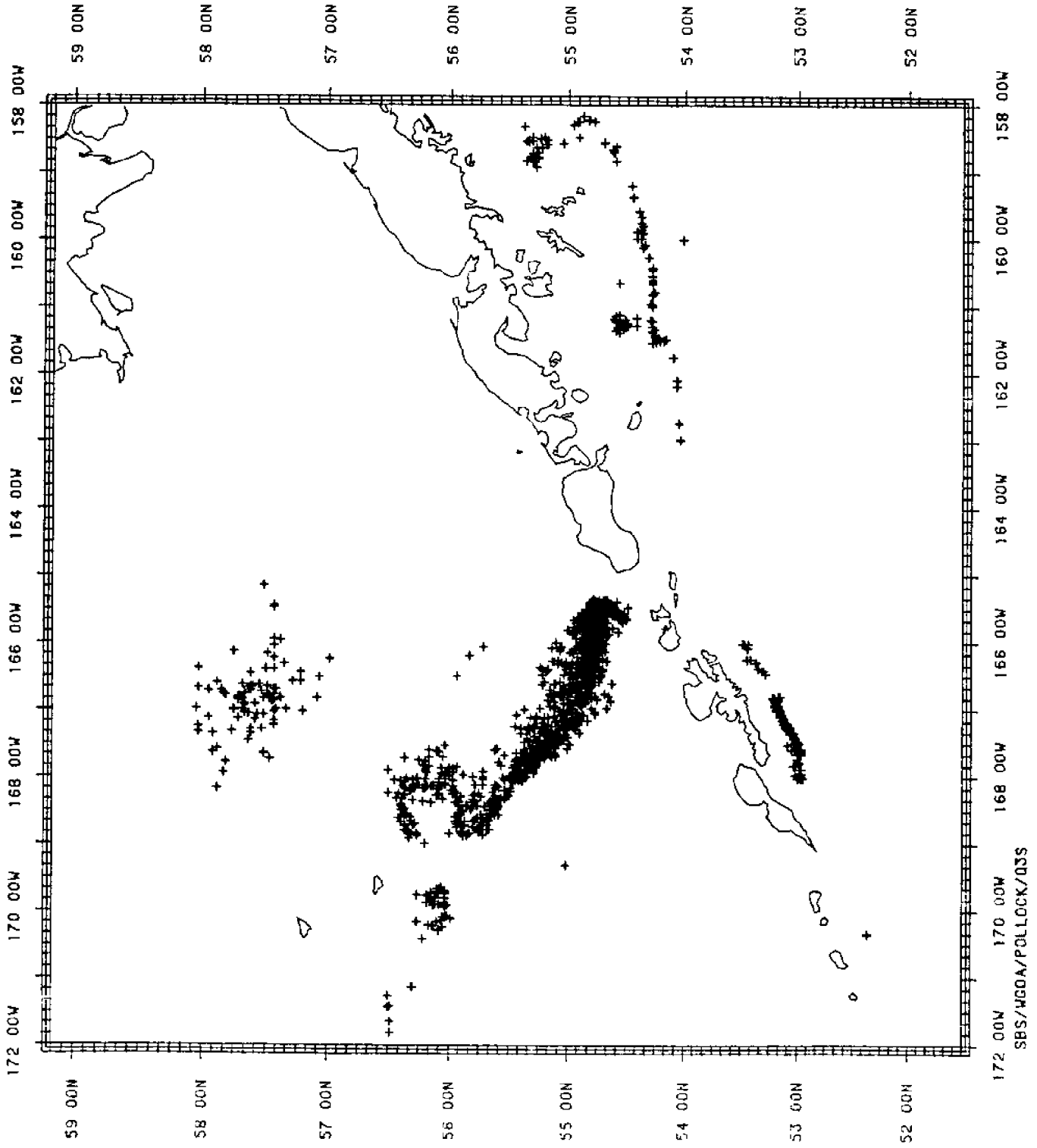


FIGURE C-3. TRAWLING LOCATIONS FOR WALLEYE POLLOCK, JULY-SEPTEMBER, 1979-80

TABLE C-8 (continued). WAILEYE POLLOCK, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	801010	5522N	16745W	7X ***** 7Y ***** 7Z *****	87	1.667	69500	41.70	0.61	900	70400
JAPAN	L	791013	5448N	16530W	18289.7 34905.3 49003.5	87	1.667	69500	41.70	0.61	900	70400
JAPAN	L	791010	5448N	16530W	18281.0 34642.0 48161.8	96	1.417	52680	41.42	1.31	5120	63800
JAPAN	L	791010	5520N	16747W	18275.9 34912.7 49008.6	95	2.833	117349	41.42	0.42	131	117480
JAPAN	L	801031	5442N	16523W	18262.4 34636.8 48111.4	102	2.167	89552	41.05	0.80	148	89100
KOREA	H	801012	5320N	16624W	17794.3 34652.5 48282.0	120	2.917	119387	40.93	1.46	25813	145200
JAPAN	L	801012	5320N	16624W	18251.2 34855.4 48891.5	90	2.167	26789	40.06	0.52	1211	88000
JAPAN	L	791016	5453N	16630W	18223.8 34779.2 48509.1	100	3.000	119499	39.83	6.16	622	120120
JAPAN	L	791116	5536N	16832W	18296.6 34992.0 49295.7	89	3.607	145672	39.73	0.51	1945	147620
KOREA	H	801014	5318N	16622W	17776.9 34876.7 48297.2	139	3.417	135348	39.61	1.60	18652	154000
KOREA	M	801014	5325N	16618W	17837.1 34841.4 48243.1	93	2.500	96581	38.63	1.74	6819	103400
JAPAN	L	791014	5446N	16547W	18254.9 34686.1 48257.0	118	1.833	69340	37.82	1.17	1500	70840
JAPAN	L	791013	5446N	16523W	18279.3 34629.1 48117.7	102	1.750	66111	37.78	1.28	12429	78540
KOREA	M	801012	5324N	16619W	17823.1 34850.9 48263.8	93	3.583	134293	37.64	1.25	3707	138600
JAPAN	L	791015	5448N	16527W	18283.9 34634.8 48144.3	101	1.250	46644	37.31	1.22	7256	53900
JAPAN	L	791019	5454N	16704W	18194.6 34849.5 48705.0	131	1.917	70099	36.57	1.34	9541	79640
JAPAN	L	791010	5524N	16748W	18302.0 34906.5 49003.7	84	2.667	96965	36.36	0.40	275	97240
JAPAN	L	791019	5509N	16718W	18257.1 34863.2 48820.7	87	2.000	72099	36.05	0.62	721	72820
KOREA	M	801023	5328N	16601W	17874.6 34915.5 48184.0	98	3.167	113212	35.75	1.52	3388	116600
JAPAN	L	791013	5443N	16523W	18265.6 34637.2 48118.8	146	2.417	85233	35.27	1.34	1447	86680
JAPAN	L	791019	5505N	16724W	18227.7 34879.6 48482.9	107	1.750	61055	34.89	0.59	1425	62480
KOREA	H	801026	5328N	16738W	17529.8 34937.0 48374.1	102	4.383	158851	34.86	1.51	7909	168760
JAPAN	L	791012	5448N	16524W	18286.8 34627.6 48126.7	105	1.563	54728	34.56	0.95	492	55220
JAPAN	L	791011	5451N	16546W	18278.0 34674.7 48260.1	91	1.667	57550	34.53	0.59	970	58520
JAPAN	L	791026	5535N	16825W	18421.5 34955.9 49320.2	85	1.000	34503	34.51	0.54	15875	50380
JAPAN	L	801127	5450N	16827W	18227.5 34772.4 48492.3	97	2.750	94781	34.47	0.56	4217	99000
JAPAN	L	791013	5447N	16528W	18278.7 34639.1 48148.5	124	1.833	61912	33.77	1.56	3208	65120
JAPAN	L	791015	5454N	16623W	18231.4 34756.9 48478.2	85	3.000	101242	33.75	0.57	398	101640
JAPAN	L	801119	5448N	16548W	18262.7 34684.9 48266.3	102	2.667	89563	33.59	0.57	857	90420
JAPAN	L	801112	5449N	16527W	18288.2 34632.8 48145.9	105	2.333	77677	33.29	0.73	423	78100
JAPAN	L	791011	5519N	16725W	18300.3 34893.5 48825.4	84	1.667	54997	33.00	0.37	223	55220
JAPAN	L	801116	5443N	16538W	18259.2 34716.9 48314.4	151	2.500	82211	32.88	0.95	1389	83600
JAPAN	L	801018	5450N	16700W	18183.7 34845.8 48874.4	161	3.000	98287	32.76	0.97	713	99000
JAPAN	L	791118	5532N	16815W	18295.9 34998.6 49215.2	102	3.500	114574	32.74	0.84	5766	120340
JAPAN	L	801018	5516N	16746W	18244.1 34916.9 48986.0	153	2.000	65444	32.72	0.75	556	66000
JAPAN	L	791014	5448N	16523W	18275.3 34629.1 48117.7	98	1.250	40774	32.62	1.25	7626	48400
GERMANY	M	801114	5442N	16542W	18242.8 34681.5 48221.2	164	2.250	72320	32.14	1.32	281	72600
JAPAN	L	791012	5449N	16525W	18285.9 34630.0 48132.6	90	1.093	34475	31.82	0.75	945	35420
JAPAN	L	791013	5446N	16521W	18279.3 34629.1 48117.7	96	1.250	39668	31.72	1.29	6992	46640
JAPAN	L	801011	5505N	16725W	18284.2 34891.7 48849.3	98	2.667	83065	31.15	0.53	535	83000
JAPAN	L	801011	5502N	16736W	18226.2 34902.1 48915.6	131	3.333	102450	30.74	0.54	3150	105600
JAPAN	L	801011	5459N	16638W	18257.6 34783.9 48573.6	84	2.000	60969	30.48	0.55	631	61600
JAPAN	L	801014	5518N	16768W	18283.3 34916.7 49008.3	139	3.917	119310	30.46	0.55	1690	121000
JAPAN	L	791013	5442N	16523W	18282.4 34636.8 48111.4	101	1.333	40553	30.41	1.10	8507	49660
JAPAN	L	791019	5457N	16707W	18295.8 34852.3 48729.9	109	1.333	40283	30.21	1.02	5257	45540
JAPAN	L	801030	5448N	16527W	18233.9 34634.8 48144.3	102	3.000	90367	30.12	1.01	2033	92400

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-8 (continued). WALLEYE POLLOCK, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	7910 2	5451N	16535W	18289.0	34648.2	43196.0	74.	3.75C	112778.	30.07	5.50	522.	113300.
JAPAN	L	8010 8	5510N	16736W	18237.1	34899.8	48921.2	118.	3.583	107347.	29.96	0.59	453.	107800.
GERMANY	M	6011 8	5441N	16555W	18223.6	34713.3	48293.6	153.	2.25C	67378.	29.95	1.04	822.	68200.
JAPAN	L	8011 7	5445N	16522W	18276.1	34628.6	48110.3	90.	1.333	39418.	29.56	0.75	182.	39600.
JAPAN	L	7910 4	5455N	16525W	18273.1	34635.8	48127.0	110.	1.167	34223.	29.33	1.28	4057.	38280.
JAPAN	L	7910 9	5537N	16825W	18433.0	34953.2	49326.4	84.	1.043	31403.	28.99	1.69	4457.	35860.
JAPAN	L	801010	5522N	16729W	18311.0	34888.6	48915.5	80.	2.000	57887.	26.94	0.59	3713.	61600.
KOREA	M	801015	5301N	16729W	17552.3	34972.1	48540.3	93.	5.000	144326.	28.87	1.56	3074.	147400.
GERMANY	M	601122	5442N	16556W	18227.0	34714.0	48301.1	164.	1.417	40717.	28.74	1.08	643.	41360.
JAPAN	L	8011 2	5445N	16523W	18275.1	34631.0	48116.2	87.	1.833	52186.	28.45	0.80	194.	52360.
JAPAN	L	7910 8	5557N	16830W	18426.7	34955.3	49353.9	89.	1.833	52051.	28.35	1.53	7349.	59400.
JAPAN	L	791015	5446N	16611W	18227.9	34742.0	48393.9	115.	1.917	54381.	28.37	1.41	1279.	55660.
JAPAN	L	791018	5502N	16701W	18243.6	34832.3	48709.3	90.	2.417	68382.	28.30	0.51	9278.	77660.
JAPAN	L	7910 2	5446N	16524W	18276.4	34631.5	48123.6	101.	1.167	32823.	28.13	1.29	6777.	39600.
JAPAN	L	801011	5506N	16713W	18246.2	34833.9	48785.5	90.	1.833	51422.	28.05	0.54	1378.	52800.
JAPAN	L	8010 2	5443N	16533W	18256.5	34658.6	48171.0	147.	1.917	53750.	28.04	0.75	150.	53900.
JAPAN	L	801124	5451N	16645W	18209.4	34811.6	48594.7	118.	2.000	56083.	28.04	0.55	1117.	57200.
KOREA	M	801016	5302N	16726W	17570.7	34967.6	48529.5	89.	1.667	45903.	27.54	1.39	297.	46200.
JAPAN	L	791111	5523N	16753W	18281.8	34921.9	49049.6	98.	2.833	78017.	27.54	0.64	1403.	79420.
JAPAN	L	601115	5449N	16555W	18258.7	34699.7	48308.5	85.	1.750	48171.	27.53	0.56	229.	48400.
JAPAN	L	801029	5507N	16658W	18272.7	34818.2	48704.7	81.	1.833	50457.	27.52	0.54	143.	50600.
JAPAN	L	801121	5447N	16612W	18231.4	34742.7	48401.6	110.	2.250	61108.	27.18	0.59	494.	61600.
JAPAN	L	801011	5515N	16728W	18275.3	34875.9	48891.4	90.	1.500	40719.	27.15	0.63	1081.	41800.
JAPAN	S	601025	5435N	15838W	18476.3	33710.3	45665.5	100.	0.500	13556.	27.11	2.04	521.	14080.
JAPAN	L	801030	5509N	16702W	18277.8	34824.5	48731.9	82.	2.000	53689.	26.84	0.55	131.	55000.
JAPAN	L	8011 6	5443N	16541W	18248.1	34677.4	48127.2	149.	2.083	55874.	26.82	0.90	666.	56540.
JAPAN	L	7910 8	5504N	16728W	18216.5	34889.4	48861.7	121.	2.250	60246.	26.78	0.62	254.	60500.
JAPAN	L	8011 5	5450N	16621W	18234.8	34758.6	48458.6	96.	1.333	35630.	26.72	0.58	450.	36080.
JAPAN	L	8010 2	5504N	16737W	18202.8	34908.6	48905.7	163.	3.750	100203.	26.72	0.77	997.	101200.
JAPAN	L	8010 4	5518N	16747W	18264.8	34914.5	49002.9	109.	2.917	77686.	26.64	0.57	1514.	79200.
KOREA	M	601012	5327N	16613W	17848.5	34837.9	48242.2	87.	2.333	61781.	26.48	1.49	8619.	70400.
JAPAN	L	8011 5	5448N	16544W	18268.9	34675.4	48243.2	98.	1.003	28527.	26.33	0.68	73.	28600.
JAPAN	S	801030	5455N	15823W	18502.2	33646.1	45562.2	115.	0.750	19522.	26.03	1.56	5338.	24860.
JAPAN	L	801128	5430N	16634W	18218.8	34781.3	48531.5	104.	2.583	66461.	25.73	0.58	2395.	68860.
KOREA	M	601018	5325N	16615W	17835.3	34843.1	48248.0	96.	3.083	78767.	25.55	1.81	4833.	83600.
JAPAN	L	6010 2	5521N	16747W	18281.4	34911.0	49011.5	96.	3.917	99275.	25.35	0.57	4125.	103400.
KOREA	M	801016	5319N	16625W	17785.6	34856.7	48289.6	82.	4.167	105356.	25.29	1.65	4644.	110000.
JAPAN	L	791030	5311N	16730W	18251.2	34889.4	48891.5	97.	3.417	88251.	25.24	0.51	3069.	89320.
KOREA	M	601114	5466N	16525W	18277.4	34633.9	48129.4	116.	4.167	105063.	25.22	0.80	4937.	110000.
JAPAN	L	7911 4	5522N	16748W	18285.3	34912.0	49019.8	93.	6.000	150943.	25.16	0.63	1297.	152240.
JAPAN	L	7910 8	5508N	16712W	18249.6	34851.7	48786.0	87.	1.667	41882.	25.13	0.63	1018.	42900.
JAPAN	S	7910 6	5415N	16033W	18372.5	34021.5	46367.8	138.	0.250	6281.	25.13	2.21	315.	6600.
JAPAN	L	791031	5505N	16715W	18240.3	34859.7	48754.9	90.	4.417	109982.	24.90	0.55	2438.	112420.
JAPAN	L	7911 7	5531N	16808W	18310.0	34941.5	49143.3	85.	2.833	70510.	24.89	0.48	330.	70640.
JAPAN	L	801016	5506N	16737W	18213.8	34906.4	48915.3	157.	2.500	60636.	24.33	0.90	5164.	66000.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-8 (continued). WALLEYE FOLLOCK, OCTOBER-DECEMBER 1979-80

VESSEL	DATE	LAT	LONG	APPROX	DEPTH	HOURS	CATCH	THOUSAND	SIZE	BYCATCH	TOTAL
CLASS	YMMDD			7X	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
L	801011	5507N	16715W	18250.7	86.	3.667	89215.	24.33	0.57	985.	90200.
L	801012	5500N	16716W	18212.7	109.	2.250	54274.	24.12	0.55	726.	55000.
M	801102	5438N	16540W	18227.1	180.	0.750	18052.	24.07	0.95	208.	18260.
L	801030	5507N	16650W	18282.3	81.	2.500	59956.	23.98	0.53	1644.	61600.
M	801109	5439N	16536W	18231.7	186.	1.667	39612.	23.89	1.43	668.	40480.
M	801027	5528N	16738W	17520.6	102.	3.417	81390.	23.82	1.64	670.	82060.
L	791014	5459N	16534W	18281.4	94.	2.250	53454.	23.76	1.06	7046.	80500.
L	801126	5451N	16627W	18232.3	102.	3.333	78449.	23.53	0.55	751.	79200.
L	801030	5437N	16654W	18227.5	94.	2.000	47069.	23.53	0.64	1331.	48400.
L	801123	5448N	16630W	18214.2	116.	2.000	46816.	23.41	0.56	1144.	47960.
L	791104	5513N	16733W	18257.7	87.	3.000	70139.	23.38	0.49	921.	71060.
L	801014	5507N	16737W	18219.2	138.	3.250	75860.	23.34	0.55	1140.	77000.
M	801117	5446N	16525W	18277.4	120.	1.300	30109.	23.16	1.01	2891.	33000.
L	801013	5527N	16803W	18284.0	126.	2.333	53958.	23.12	0.63	162.	54120.
L	801110	5449N	16536W	18279.4	104.	2.000	46095.	23.05	0.69	545.	46640.
L	801017	5456N	16708W	18201.2	94.	4.417	101616.	23.01	0.56	1784.	103400.
L	801012	5514N	16739W	18254.5	109.	4.000	91809.	22.95	0.57	2791.	94600.
L	791018	5454N	16659W	18205.6	121.	1.333	30477.	22.86	0.96	2303.	32780.
L	801029	5447N	16524W	18282.6	83.	1.633	41134.	22.44	0.75	666.	41800.
L	801102	5527N	16811W	18279.4	157.	2.417	54141.	22.40	0.62	195.	54340.
L	801014	5457N	16715W	18198.4	137.	2.333	52169.	22.36	0.69	631.	52800.
L	801109	5445N	16611W	18221.3	125.	2.000	44241.	22.12	0.67	1299.	45540.
L	801019	5443N	16530W	18259.6	137.	1.917	42183.	22.01	1.09	1315.	44000.
L	791013	5447N	16529W	18277.7	106.	2.333	50977.	21.85	1.14	6663.	57640.
L	801107	5443N	16554W	18231.6	144.	3.500	54397.	21.76	0.66	603.	55000.
L	801129	5452N	16626W	18238.3	87.	3.167	68240.	21.55	0.59	3260.	71500.
M	801010	5601N	16959W	18274.0	82.	4.050	66962.	21.47	1.62	7638.	94600.
L	801106	5441N	16548W	18231.5	151.	1.833	39233.	21.40	0.84	1467.	40700.
L	791019	5509N	16732W	18237.5	103.	2.333	49179.	21.08	0.64	541.	49720.
L	791123	5535N	16824W	18305.7	90.	3.667	76845.	20.96	0.48	2575.	79420.
L	801011	5513N	16736W	18251.4	97.	3.417	71513.	20.93	0.55	1087.	72600.
L	791101	5433N	16635W	18232.1	90.	2.667	39620.	20.92	0.59	3260.	71500.
L	801104	5326N	16800W	18267.7	175.	1.917	39620.	20.67	0.94	420.	40040.
M	801024	5326N	16614W	17841.9	98.	5.563	115232.	20.64	1.41	5768.	121000.
L	791009	5510N	16735W	18234.6	110.	1.667	34379.	20.63	0.44	161.	34540.
L	801109	5442N	16531W	18254.2	143.	1.750	35776.	20.56	0.83	104.	36080.
L	801106	5444N	16606W	18224.5	141.	3.917	80492.	20.55	0.78	3328.	43820.
L	801017	5459N	16733W	18184.9	134.	2.333	47916.	20.54	0.66	464.	48400.
L	791105	5511N	16730W	18251.2	69.	3.333	55922.	20.34	0.64	1718.	57640.
L	791025	5446N	16614W	18233.7	96.	3.333	67650.	20.30	0.67	990.	68640.
L	791020	5446N	16525W	18277.4	106.	1.667	33811.	20.29	1.26	9089.	42900.
L	791106	5508N	16735W	18231.6	83.	3.833	77749.	20.28	0.40	1671.	75420.
M	801026	5507N	16711W	17631.3	93.	3.333	67570.	20.27	1.44	3710.	71280.
L	801017	5446N	16722W	18129.0	184.	2.167	43800.	20.22	1.09	640.	44440.
L	791020	5454N	16701W	18202.6	126.	2.000	40405.	20.20	0.95	4695.	45100.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-8 (continued). WALLEYE POLLOCK, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LCNG	APPROX LGNAN-C 7X	APPROX LGNAN-C 7Y	APPROX LGNAN-C 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE (LBS/FTISH)	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	801014	3455N	16707W	18199.5	34854.8	48724.8	120.	2.667	53741.	20.15	0.57	1259.	55060.
JAPAN	L	801011	3442N	16636W	18177.0	34803.9	48524.6	174.	3.750	75242.	20.06	1.00	1338.	76786.
JAPAN	L	801019	3503N	16723W	18207.8	34882.1	48826.0	137.	3.750	75160.	20.04	0.73	1834.	77000.
JAPAN	L	80115	3446N	16600W	18240.6	34716.6	48331.5	109.	1.917	38348.	20.01	0.64	812.	59160.
JAPAN	L	801121	3448N	16552W	18256.5	34594.4	48289.4	112.	4.167	83223.	20.00	0.50	1597.	84920.
JAPAN	L	801126	3452N	16632W	18231.0	34780.8	48524.7	94.	2.500	49975.	19.99	0.54	185.	50160.
JAPAN	L	80118	3444N	16631W	18193.5	34790.2	48501.6	148.	1.833	36844.	19.99	0.82	756.	37400.
KOREA	M	801113	3447N	16526W	18280.7	34634.3	48136.9	126.	4.500	89816.	19.96	0.89	9134.	99000.
JAPAN	L	80105	3518N	16748W	18263.3	34916.7	49008.5	125.	2.917	57965.	19.87	0.56	335.	58300.
JAPAN	L	801016	3501N	16727W	18201.8	34890.7	48846.2	149.	4.417	87412.	19.79	0.99	4288.	92400.
JAPAN	L	801010	3444N	16647W	18171.7	34825.2	48589.3	171.	2.417	47640.	19.71	1.01	760.	48400.
JAPAN	L	80114	3527N	16807W	18285.6	34948.0	49136.5	112.	1.607	32336.	19.52	0.65	684.	33220.
JAPAN	L	80105	3515N	16739W	18266.0	34900.5	48951.3	107.	2.467	52017.	19.51	0.95	783.	52800.
KOREA	M	801026	3301N	16730W	17555.9	34973.4	48544.7	101.	6.917	134052.	19.38	1.67	8942.	143000.
KOREA	M	801113	3447N	16555W	18250.7	34703.2	49304.8	104.	3.083	59508.	19.30	0.80	6492.	66000.
JAPAN	L	80107	3443N	16528W	18261.6	34646.7	48142.1	126.	2.250	43298.	19.24	0.67	202.	43560.
JAPAN	L	80117	3444N	16557W	18234.9	34712.9	48310.6	139.	2.750	52865.	19.22	0.93	2135.	55000.
JAPAN	L	791010	3459N	16524W	18332.7	34604.9	48143.7	87.	1.333	25610.	19.21	1.06	1230.	26640.
KOREA	M	80111	3444N	16527W	18266.9	34842.5	48137.9	123.	4.503	87967.	19.19	0.98	15433.	103400.
GERMANY	M	801119	3437N	16537W	18226.0	34678.5	48183.8	159.	3.667	70283.	19.17	1.16	1217.	71500.
KOREA	M	801013	3326N	16602W	17872.9	34817.3	48189.0	96.	3.167	60276.	19.03	1.64	3524.	63800.
JAPAN	L	79106	3455N	16624W	18254.9	34757.6	48488.0	83.	2.167	41143.	18.99	0.82	217.	41560.
JAPAN	L	80107	3505N	16730W	18216.9	34892.6	48075.2	130.	4.167	79942.	18.97	0.59	158.	79200.
JAPAN	L	801124	3452N	16453W	18214.4	34810.7	48597.1	112.	3.500	65773.	18.79	0.56	1987.	67760.
KOREA	M	791019	3511N	16734W	18245.4	34854.2	48713.2	98.	0.583	10924.	18.73	0.59	76.	11000.
JAPAN	L	791115	3555N	16825W	18304.1	34978.4	49256.2	81.	3.000	58018.	18.67	0.48	2282.	59300.
JAPAN	L	791118	3535N	16829W	18297.5	34866.7	49276.9	102.	3.000	58075.	18.62	0.64	1545.	57420.
JAPAN	L	80103	3526N	16802W	18287.5	34938.3	49106.7	98.	5.000	92120.	18.54	0.56	1880.	94900.
JAPAN	L	80116	3443N	16556W	18231.5	34712.3	48303.0	161.	3.000	55332.	18.44	0.77	328.	55660.
JAPAN	L	79109	3512N	16739W	18243.6	34804.0	48942.9	121.	1.833	33217.	18.12	0.64	223.	33440.
KOREA	M	791029	3311N	16651W	17895.5	34512.3	48391.4	131.	8.167	145906.	17.82	1.87	8494.	154000.
JAPAN	L	80109	3507N	16740W	18214.9	34811.7	48384.0	139.	2.083	37033.	17.78	0.68	367.	37400.
JAPAN	L	791029	3513N	16728W	18284.7	34878.5	48686.0	93.	3.417	60719.	17.77	0.55	1101.	61200.
KOREA	M	80116	3436N	16533W	18226.0	34671.0	48159.3	116.	6.917	122394.	17.70	0.80	2006.	143000.
JAPAN	L	79107	3505N	16720W	18233.4	34570.8	48821.2	110.	3.833	67761.	17.68	0.30	659.	69420.
GERMANY	M	801112	3442N	16550W	18233.6	34760.1	48267.0	164.	3.250	57383.	17.66	1.62	1137.	58520.
JAPAN	L	801116	3442N	16526W	18259.3	34643.9	48128.9	89.	3.167	55941.	17.63	0.75	259.	56100.
KOREA	M	80101	3444N	16530W	18283.9	34649.6	48155.3	154.	3.583	62933.	17.56	1.39	7467.	76400.
JAPAN	L	80114	3446N	16523W	18279.5	34629.1	48117.7	89.	1.250	21944.	17.56	0.72	56.	22000.
JAPAN	L	791117	3533N	16824W	18293.8	34976.2	49244.5	100.	2.500	43377.	17.53	0.57	1263.	45100.
KOREA	M	791021	3526N	16815W	18267.1	34966.0	49175.1	169.	1.250	21859.	17.49	1.66	141.	22000.
JAPAN	L	801120	3523N	17143W	16888.7	35138.3	49318.1	165.	1.600	17475.	17.46	2.68	345.	17820.
JAPAN	L	80117	3445N	16609W	18256.6	34739.0	48380.6	133.	2.333	40764.	17.47	0.87	2576.	43340.
JAPAN	L	801013	3512N	16735W	18249.4	34895.2	48821.5	107.	3.167	55406.	17.47	0.59	15094.	70400.
KOREA	M	801027	3500N	16729W	17353.3	34972.4	48337.8	109.	6.033	106073.	17.44	1.68	27027.	133100.

*** NOTE *** THE ACCURACY OF POSITION AND LGNAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-8 (continued). WALLEYE POLLOCK, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE YHMOD	LAT	LONG	APPROX LGRAN-C PULSE RATES 7X	7Y	7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
KOREA	M	6011 9	5445N	16546W	18251.5	34585.6	48249.5	121.	5.500	95475.	17.36	0.82	16725.	112200.
JAPAN	L	6011 6	5447N	16543W	18263.5	34674.9	48235.7	113.	2.083	55670.	17.21	0.69	218.	36080.
JAPAN	L	7910 1	5501N	16707W	18230.5	34347.1	48239.9	96.	1.500	28750.	17.17	0.59	210.	25960.
JAPAN	L	6010 3	5521N	16746W	18282.8	34908.8	49006.1	89.	2.167	36829.	17.00	0.52	571.	37400.
JAPAN	L	7911 7	5505N	16714W	18241.7	34857.5	48788.4	87.	3.333	56651.	17.00	0.59	989.	57640.
JAPAN	L	791014	5444N	16542W	18251.4	34677.9	48224.7	155.	1.250	21009.	16.81	1.43	2531.	23540.
KOREA	M	7912 2	5541N	16848W	18301.4	35020.1	49393.9	142.	3.017	50650.	16.79	1.70	4350.	55000.
KOREA	M	601114	5619N	16944W	18444.8	35101.2	49811.0	79.	5.583	93477.	16.74	1.63	10363.	103630.
JAPAN	L	6011 7	5444N	16556W	18238.1	34710.6	48304.9	128.	2.333	38893.	16.67	0.69	707.	39600.
KOREA	M	601019	5300N	16735W	17538.5	34960.4	48564.1	90.	6.083	101267.	16.65	1.39	8733.	110000.
KOREA	M	601113	5608N	16942W	18370.0	35100.8	49754.3	75.	4.583	76055.	16.59	1.56	11065.	87120.
KOREA	M	601112	5447N	16524W	18282.8	34629.5	48125.2	102.	4.250	70584.	16.56	0.88	8816.	79200.
KOREA	M	601022	5320N	16626W	17790.5	34865.9	48291.7	96.	3.583	59171.	16.51	2.03	2429.	61600.
KOREA	M	7912 3	5542N	16849W	18305.9	35021.3	49402.5	137.	2.417	39690.	16.51	1.67	810.	40700.
KOREA	M	791026	5312N	16652W	17698.3	34913.3	48398.3	107.	6.583	108638.	16.50	1.77	5762.	114400.
KOREA	M	6011 2	5444N	16526W	18267.9	34640.1	48132.1	131.	4.500	74252.	16.50	1.02	9348.	83600.
JAPAN	L	7910 4	5451N	16629W	18229.9	34765.4	48505.7	94.	2.500	41215.	16.49	0.68	145.	41360.
JAPAN	L	601028	5447N	16539W	18267.7	34665.4	48212.5	114.	2.833	46571.	16.44	0.81	69.	46640.
KOREA	M	791222	5533N	16812W	18312.6	34952.5	49181.5	82.	8.167	134216.	16.43	1.32	19782.	154000.
KOREA	M	6011 6	5444N	16529W	18264.9	34647.2	48149.5	130.	6.500	106398.	16.37	1.00	3602.	110000.
JAPAN	L	7910 7	5502N	16714W	18226.0	34861.3	48780.7	98.	3.000	49081.	16.36	0.62	199.	49280.
JAPAN	L	6010 6	5444N	16557W	18234.9	34712.9	48310.6	141.	1.333	21807.	16.36	0.68	193.	22000.
JAPAN	L	791013	5447N	16535W	18271.7	34655.9	48189.3	121.	1.417	23160.	16.35	1.00	380.	23540.
JAPAN	L	6011 3	5446N	16532W	18248.4	34700.2	48291.5	116.	2.000	32695.	16.35	0.71	305.	33000.
JAPAN	L	791117	5536W	16832W	18291.6	34992.0	48295.7	86.	3.333	54441.	16.33	0.53	2979.	57420.
KOREA	M	791228	5309N	16653W	17681.3	34916.5	48396.2	148.	7.833	127660.	16.30	0.18	4340.	132000.
JAPAN	L	791017	5459N	16705W	18222.9	34845.3	48724.0	98.	1.833	29875.	16.30	0.62	2025.	31900.
JAPAN	L	601116	5448N	16543W	18267.9	34673.1	48237.4	95.	3.667	59709.	16.28	0.60	131.	59840.
JAPAN	L	6010 5	5524N	16744W	18302.0	34900.5	49003.7	82.	4.167	57820.	16.28	0.55	2530.	70400.
GERMANY	M	6011 4	5432N	16541W	18199.3	34696.1	48197.8	191.	5.500	89500.	16.24	1.55	900.	90200.
JAPAN	L	601029	5443N	16525W	18264.8	34639.6	48124.7	86.	2.333	37706.	16.16	0.81	354.	18060.
JAPAN	L	7910 5	5445N	16522W	18276.1	34628.6	48110.3	98.	1.750	28276.	16.16	1.18	3624.	31900.
KOREA	M	601031	5447N	16528W	18278.7	34639.1	48148.5	143.	5.167	83400.	16.14	1.04	53000.	136400.
JAPAN	L	6010 3	5526N	16811W	18271.5	34957.6	49154.3	165.	2.750	64189.	16.07	0.73	251.	44440.
JAPAN	L	6010 2	5445N	16633W	18195.7	34793.2	48514.8	145.	3.333	53509.	16.05	0.78	1271.	54780.
JAPAN	L	791016	5427N	16713W	18201.3	34865.3	48762.4	132.	2.417	38692.	16.01	1.32	2448.	41140.
JAPAN	L	7911 2	5438N	16628W	18264.5	34762.1	48515.0	80.	2.667	42662.	16.00	0.55	2438.	45100.
JAPAN	L	601120	5447N	16543W	18263.5	34674.9	48235.7	101.	3.167	50314.	15.89	0.62	1386.	51700.
JAPAN	L	791015	5444N	16547W	18246.0	34669.7	48253.4	137.	1.000	15856.	15.86	1.37	3944.	19800.
JAPAN	L	791011	5510N	16723W	18255.6	34871.1	48850.7	86.	2.500	39449.	15.78	0.57	1031.	40680.
KOREA	M	601117	5441N	16526W	18255.1	34645.7	48127.2	109.	2.000	31539.	15.77	1.31	1461.	33000.
JAPAN	S	601029	5445N	15825W	18501.5	33650.4	45574.1	98.	1.000	15769.	15.77	1.56	2051.	17820.
JAPAN	L	6010 7	5527N	16720W	18347.8	34839.5	48877.7	77.	2.750	43170.	15.70	0.53	830.	44000.
JAPAN	L	6010 3	5526N	16809W	18276.7	34853.4	49141.8	131.	3.500	54821.	15.66	0.62	179.	55000.
KOREA	M	7912 4	5537N	16839W	18292.6	35005.3	49334.7	137.	2.667	41431.	15.54	3.39	2569.	44000.

*** NOTE *** THE ACCURACY OF POSITION AND LOGAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

685 available trawl records (exceeding 500 lbs/hr CPUE) were not included.

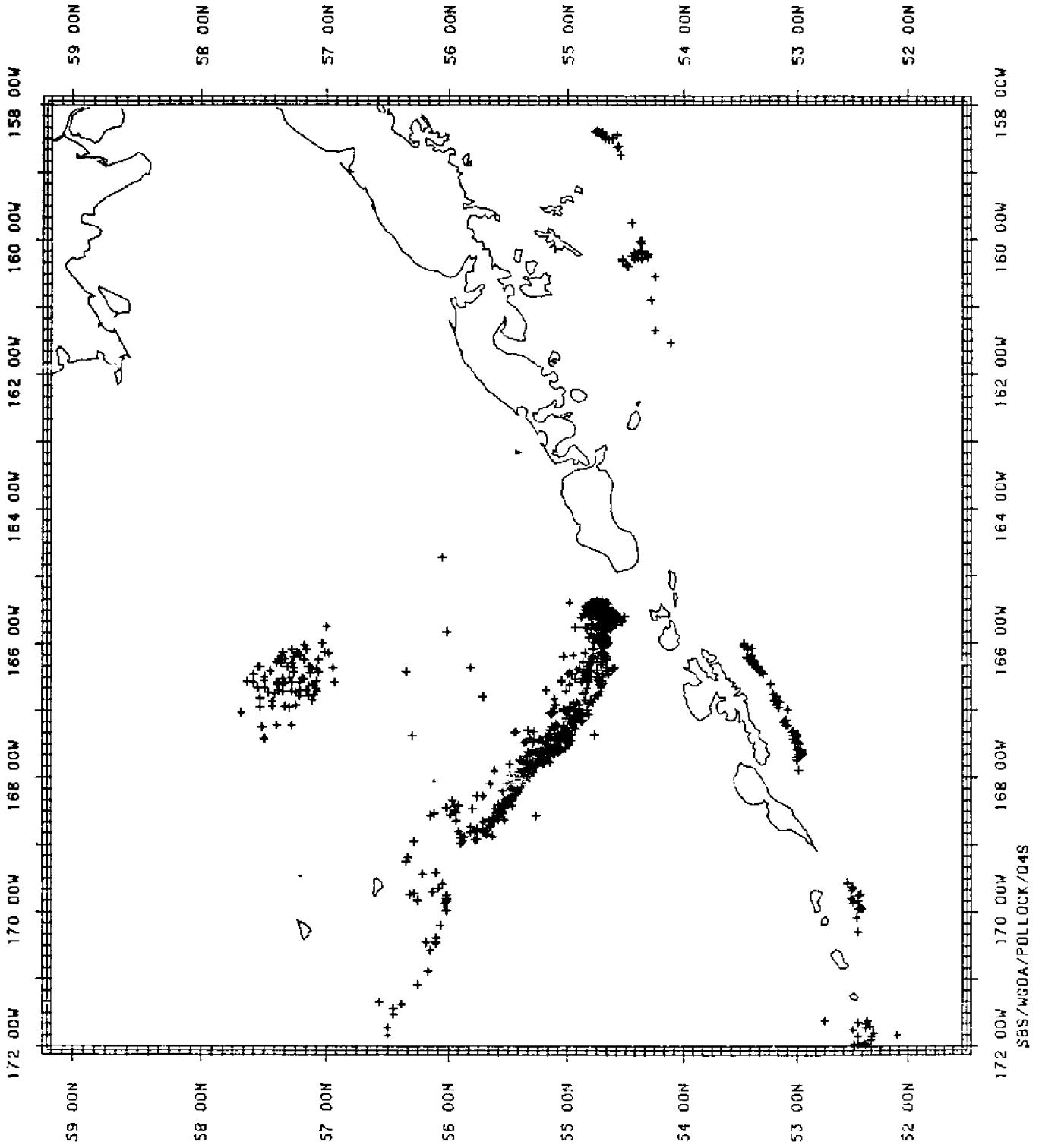


FIGURE C-4. TRAWLING LOCATIONS FOR WALLEYE POLLOCK, OCTOBER-DECEMBER, 1979-80
SBS/WG0A/POLLOCK/04S

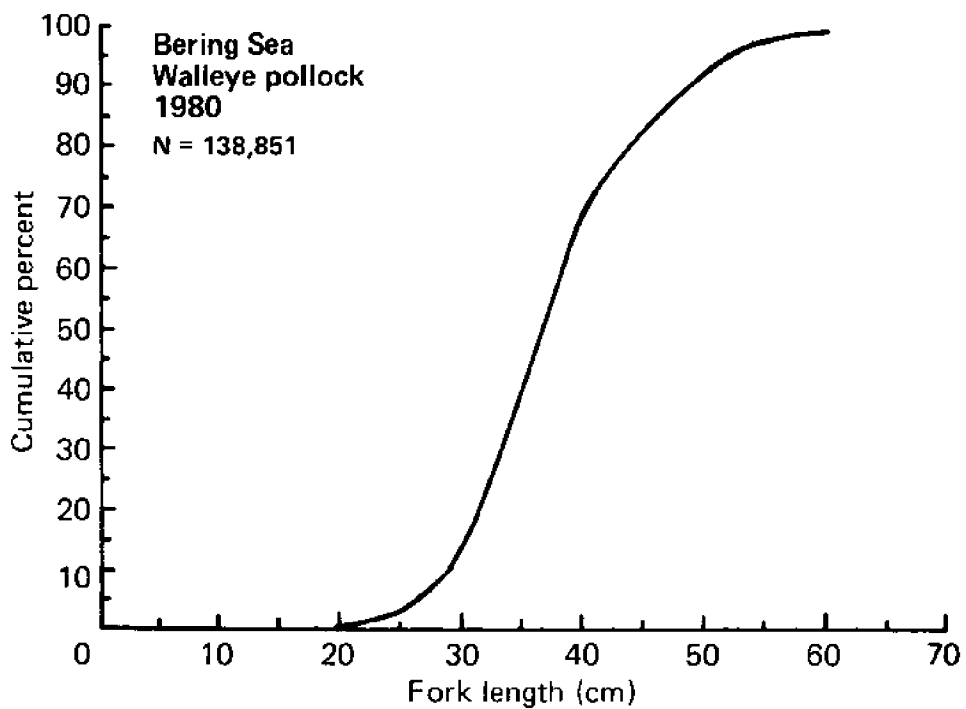
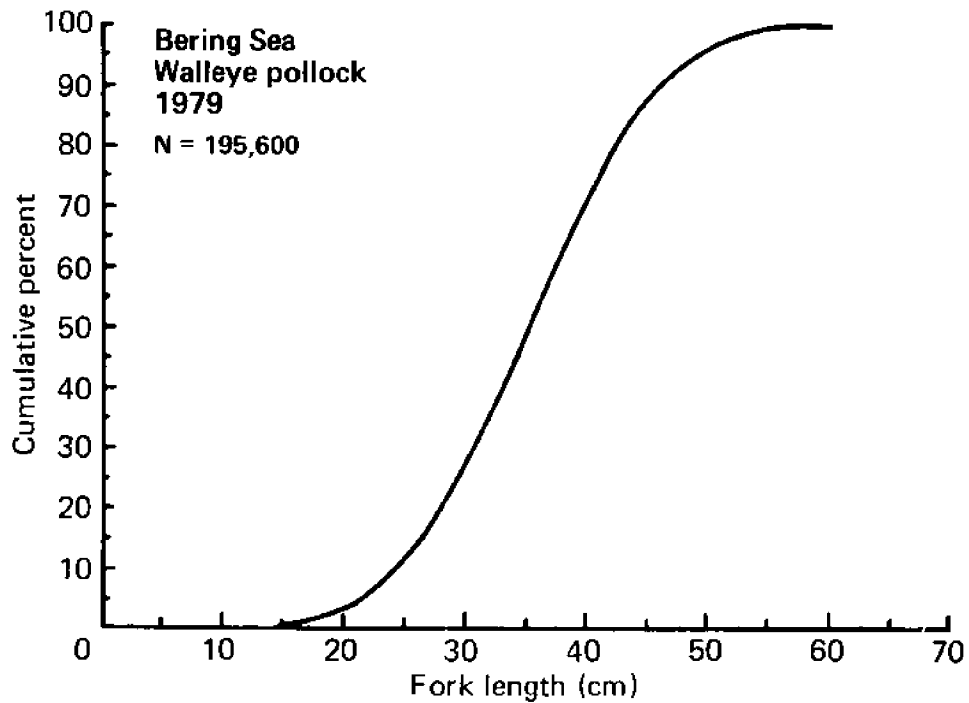


FIGURE C-5. CUMULATIVE LENGTH-FREQUENCY DISTRIBUTIONS OF THE WALLEYE POLLOCK CATCH FROM ALL AREAS OF THE EASTERN BERING SEA DURING 1979-80

TABLE C-9. PACIFIC COD, JANUARY-MARCH 1979-80

NATION	VESEL CLASS	JATE	YMMDD	LAT	LONG	APPROX LGRAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	79 330	5636N	17030W	18204.1	35138.0	49918.6	77	1583	10.49	1.46	17710	36320
USSR	M	79 333	5636N	17030W	16292.2	35137.9	49285.1	69	0.333	8.72	6.96	41093	44000
JAPAN	L	80 115	5629N	17121W	18129.6	35090.2	50113.7	81	2.000	4.86	2.62	23280	33000
USSR	M	79 228	5157N	17159W	16287.8	35137.9	49287.6	74	0.750	4.52	5.23	51607	55000
JAPAN	M	79 212	5634N	16730W	18641.5	34698.3	49089.4	59	1.500	3.99	0.97	23489	29480
USSR	M	79 334	5136N	17159W	16292.7	35137.9	49290.3	68	0.750	3.25	8.58	41566	44000
JAPAN	M	79 224	5637N	16720W	18653.2	34653.7	49086.9	57	0.333	3.18	0.96	19841	20900
USSR	M	79 217	5201N	17150W	16347.0	35138.3	49275.6	82	1.083	2.81	10.12	7960	11000
JAPAN	L	80 117	5632N	17150W	17978.1	35032.6	50145.0	131	2.167	2.57	3.51	49421	55000
JAPAN	M	79 213	5638N	16733W	18654.5	34692.5	49092.9	59	2.000	2.39	0.80	20512	25300
JAPAN	M	79 212	5639N	16739W	18657.0	34708.4	49133.0	59	3.083	2.28	0.97	31463	38500
JAPAN	M	80 112	5635N	16658W	18650.1	34590.1	48860.9	57	2.417	2.25	2.21	42971	48400
JAPAN	M	79 219	5623N	16645W	18613.8	34596.1	48765.8	60	3.250	2.13	1.98	19266	26180
USSR	M	79 312	5157N	17159W	16287.8	35137.9	49287.6	69	0.417	2.07	7.15	21135	22000
JAPAN	M	79 225	5631N	16723W	18632.5	34687.0	49020.8	60	0.500	2.00	1.30	7604	8602
USSR	M	79 317	5171N	17122W	18322.6	34905.3	50164.6	57	2.000	1.96	1.04	7076	11000
USSR	M	79 212	5620N	17150W	16347.0	35138.3	49275.6	77	0.583	1.91	6.40	12087	13200
JAPAN	M	79 119	5629W	16629W	18626.9	34534.2	48664.0	56	0.167	1.80	1.10	5200	5500
USSR	M	79 215	5620N	17150W	16442.5	35138.0	49327.7	82	0.833	1.79	6.25	24907	26400
JAPAN	S	80 112	5622N	17125W	18062.8	35093.5	50995.2	90	3.000	1.62	2.36	2845	7700
JAPAN	M	79 125	5630N	16716W	18630.6	34668.2	48974.3	61	1.000	1.59	1.96	13812	15400
JAPAN	S	80 221	5631N	16711W	18635.0	34648.3	48942.8	59	0.667	1.48	1.24	4730	5720
JAPAN	S	80 114	5629N	16846W	18589.3	34534.1	49535.4	74	3.000	1.47	2.00	2201	6600
USSR	M	79 317	5172N	17123W	18305.6	34937.1	50173.7	57	1.917	1.45	1.11	8215	11000
JAPAN	M	80 118	5634N	16712W	18644.8	34639.7	48952.0	58	1.500	1.43	1.46	7102	9240
JAPAN	S	80 110	5628N	17126W	18095.3	35083.8	50115.7	90	3.000	1.41	0.81	17765	22000
JAPAN	M	79 226	5636N	16712W	18651.2	34631.5	48953.6	57	1.333	1.33	0.95	4939	6710
JAPAN	M	80 124	5638N	16708W	18656.0	34610.0	48928.8	56	2.667	1.31	1.16	11692	15180
JAPAN	S	80 211	5620N	16851W	18535.2	34985.0	49542.8	65	2.667	1.27	1.52	4747	8140
JAPAN	S	80 112	5625N	16843W	18570.4	34953.8	49511.0	62	2.000	1.25	1.65	3226	5720
JAPAN	M	79 213	5638N	16732W	18654.7	34689.2	49086.3	59	3.083	1.25	0.92	20361	24200
JAPAN	M	79 114	5643N	16539W	18676.7	34300.6	48339.3	43	0.917	1.23	0.67	5473	6600
JAPAN	L	80 115	5638N	16841W	18295.3	35008.5	49348.3	161	3.000	1.22	4.93	22727	26400
JAPAN	M	79 116	5641N	16519W	18673.0	34248.5	48205.7	43	2.667	1.19	0.58	7378	10560
JAPAN	M	79 123	5628N	16648W	18629.7	34586.3	48789.9	59	2.917	1.17	1.23	16386	19800
JAPAN	S	80 211	5619N	16636W	18602.6	34582.9	48703.3	62	2.000	1.17	4.01	7122	9460
USSR	M	79 317	5174N	17120W	18332.3	34931.6	50170.8	57	1.500	1.15	1.08	7068	8800
USSR	M	79 331	5659N	17115W	18326.4	35027.1	50178.5	56	2.000	1.15	0.89	6505	8600
JAPAN	M	79 222	5636N	16715W	18650.8	34641.4	48973.3	57	0.333	1.11	1.13	22729	23100
JAPAN	L	80 114	5631N	17151W	17966.8	35033.0	50143.3	126	2.250	1.09	2.45	107554	110000
POLAND	M	80 219	5620N	17040W	18270.3	35136.7	50008.6	77	3.583	1.06	4.61	40166	44000
JAPAN	S	80 119	5631N	17126W	18113.7	35079.0	50124.4	98	4.000	1.06	2.68	6773	11000
JAPAN	M	80 215	5253N	17031W	16946.0	35129.0	49202.2	137	2.000	1.03	3.87	2332	4400
JAPAN	M	79 310	5215N	17035W	16728.1	35128.7	49104.9	175	0.083	1.03	5.13	2290	2676
JAPAN	M	79 125	5631N	16713W	18634.6	34654.7	48955.8	61	1.000	1.02	0.99	7780	8800

*** NOTE *** THE ACCURACY OF POSITION AND LURAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-9 (continued). PACIFIC COD, JANUARY-MARCH 1979-80

NATION	VE-CL	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
	CLASS	YMMDD			7X	7Y	7Z	TRAWLED	(LBS)	PER HOUR	LOS/FISH	(LBS)	(LBS)
JAPAN	M	79 220	5634N	16716W	18644.1	34652.7	40378.2	0.500	508.	1.02	1.54	83092.	83600.
JAPAN	S	80 130	5645N	16710W	18678.0	34585.6	46945.7	0.500	1013.	1.01	2.71	11747.	12760.
JAPAN	S	80 111	5628N	16846W	18584.0	34956.2	49356.6	2.500	2531.	1.01	1.83	4069.	6600.
JAPAN	S	80 1 9	5645N	16846W	18350.0	35013.1	49398.1	2.833	2662.	1.01	5.43	2198.	5060.
JAPAN	M	79 115	5643N	16547W	18676.4	34325.8	48392.7	1.917	1922.	1.00	0.70	6878.	8800.
JAPAN	M	79 114	5643N	16536W	18676.7	34297.5	46332.6	1.083	1083.	1.00	0.83	5957.	7040.
JAPAN	S	80 1 9	5644N	16638W	18398.0	34987.5	49387.4	1.583	1582.	0.98	3.30	3288.	4840.
JAPAN	M	80 116	5636N	16715W	18650.8	34641.4	46373.3	2.167	2112.	0.97	1.95	50688.	52900.
JAPAN	S	80 229	5634N	16702W	18646.4	34607.2	48686.5	0.667	643.	0.96	0.94	2657.	3500.
JAPAN	M	79 123	5630N	16653W	18635.2	34594.4	46824.3	1.167	1088.	0.93	1.65	7712.	8900.
JAPAN	M	79 210	5625N	16659W	18617.2	34632.7	48858.7	2.833	2805.	0.92	1.30	22409.	25014.
JAPAN	M	79 125	5629N	16706W	18625.3	34639.9	46908.2	1.250	1120.	0.90	1.00	8780.	9900.
JAPAN	S	80 124	5636N	16704W	18652.3	34605.4	49301.1	0.667	586.	0.88	1.59	4254.	4840.
JAPAN	S	80 1 9	5626N	17129W	18085.9	35082.0	50112.5	1.833	1596.	0.87	3.00	8304.	5900.
JAPAN	M	79 115	5639N	16531W	18668.0	34295.2	43285.6	2.000	1710.	0.86	0.60	5990.	7700.
JAPAN	M	79 3 5	5214N	17035W	16722.9	35128.6	49102.2	0.417	354.	0.85	5.19	7434.	7788.
JAPAN	M	80 114	5620N	16650W	18538.3	34782.3	49537.2	2.417	1962.	0.81	2.06	1118.	3080.
JAPAN	S	80 113	5625N	16840W	18572.8	34945.2	49493.2	2.000	1550.	0.78	1.91	1084.	2640.
JAPAN	M	79 213	5634N	16736W	18640.6	34711.4	49095.4	3.250	2505.	0.77	1.85	10695.	13200.
USSR	M	79 3 3	5157N	17159W	16287.8	35137.9	49287.6	0.833	623.	0.75	4.95	32377.	33000.
JAPAN	S	80 113	5623N	16843W	18555.6	34957.8	49505.5	2.417	1757.	0.73	1.91	1983.	3740.
JAPAN	M	79 112	5643N	16505W	18677.7	34195.7	46112.1	1.750	1263.	0.72	0.78	7537.	8800.
POLAND	M	80 2 5	5607N	17027W	18224.9	35137.5	49914.3	2.333	1680.	0.72	3.22	31320.	33000.
JAPAN	M	79 124	5629N	16700W	18630.6	34620.7	48669.2	1.083	772.	0.71	1.10	5828.	6600.
JAPAN	M	79 122	5625N	16658W	18631.0	34614.3	48656.8	1.000	709.	0.71	2.47	17938.	17600.
JAPAN	S	80 224	5643N	16750W	18666.7	34728.9	49208.5	0.583	414.	0.71	1.09	26.	440.
JAPAN	M	80 111	5631N	16641K	18640.3	34551.9	48746.4	2.000	1417.	0.71	2.20	6723.	8140.
JAPAN	M	79 120	5630N	16659W	18634.1	34613.6	48663.5	1.333	946.	0.71	1.23	7856.	8800.
JAPAN	M	79 1 4	5646N	16744W	18678.8	34695.7	49171.1	1.083	762.	0.70	0.91	17938.	16700.
JAPAN	M	79 223	5632N	16725W	18636.9	34663.2	49021.9	0.833	581.	0.70	1.20	9143.	9724.
JAPAN	M	79 1 8	5645N	16746W	18676.0	34686.5	49144.1	1.083	745.	0.69	0.62	9595.	10340.
JAPAN	S	80 111	5628N	16842W	18587.9	34944.5	49512.9	2.333	1581.	0.68	1.80	1719.	3300.
JAPAN	S	80 222	5637N	16651W	18656.9	34558.8	46316.1	0.583	393.	0.67	1.39	5767.	6160.
JAPAN	M	79 115	5640N	16515W	18671.0	34241.1	48178.9	2.583	1739.	0.67	0.60	6621.	8360.
JAPAN	M	80 114	5632N	16658W	18643.9	34598.3	48859.5	2.000	1340.	0.67	1.67	10540.	11880.
USSR	M	79 212	5200N	17159W	16302.4	35137.8	49295.7	0.583	391.	0.67	5.72	43609.	44000.
JAPAN	M	80 114	5639N	16648W	18616.5	34601.6	48786.2	3.000	1993.	0.66	1.94	15727.	17710.
JAPAN	S	80 3 2	5635N	16700W	18661.2	34599.2	46916.2	3.000	1974.	0.66	1.75	20686.	22660.
JAPAN	S	79 120	5631N	16707W	18635.8	34635.4	48916.7	1.000	658.	0.66	1.51	1542.	2200.
JAPAN	M	79 3 9	5214N	17035W	16724.9	35128.6	49102.2	1.250	621.	0.66	1.32	6879.	7700.
JAPAN	M	79 110	5637N	16538W	18663.0	34326.4	48331.9	2.583	109.	0.65	3.25	7063.	7172.
POLAND	M	80 2 6	5606N	17037W	18178.6	35138.2	49938.2	1.333	853.	0.64	0.75	4946.	6600.
JAPAN	M	79 114	5639N	16533W	18667.9	34301.4	48298.9	2.500	1564.	0.63	0.71	7236.	8800.
JAPAN	M	79 3 6	5215N	17034W	16731.9	35128.4	49101.9	1.39.	462.	0.62	0.71	3938.	4400.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-9 (continued). PACIFIC COD, JANUARY-MARCH 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	79 123	5629N	16649W	18632.7	34585.6	46797.3	58.	2.333	1435.	0.62	0.75	12865.	14300.
POLAND	M	80 2 6	5609N	17036W	18204.9	35138.2	49948.9	77.	1.167	708.	0.61	5.12	21292.	22000.
JAPAN	M	80 110	5635N	16655W	18650.3	34580.3	48841.2	55.	3.167	1894.	0.60	2.05	6246.	8140.
USSR	M	79 331	5653N	17108W	18344.4	35065.3	50168.9	55.	2.083	1245.	0.60	1.01	7555.	8800.
JAPAN	S	80 111	5620N	16841W	18545.0	34937.9	49485.4	68.	2.500	1488.	0.60	1.98	1152.	2640.
JAPAN	M	79 224	5638N	16714W	18650.9	34638.1	48966.8	57.	3.167	1863.	0.59	1.09	23437.	25300.
JAPAN	M	80 1 9	5641N	16702W	18667.4	34577.2	48890.9	54.	3.250	1911.	0.59	3.10	29769.	31680.
JAPAN	M	80 120	5635N	16711W	18648.2	34632.4	48948.3	58.	2.083	1220.	0.59	1.42	13300.	14520.
JAPAN	M	80 119	5642N	16718W	18668.9	34625.8	48997.2	56.	6.000	3473.	0.58	2.20	63847.	67320.
JAPAN	S	80 113	5625N	16842W	18571.2	34951.0	49505.1	72.	1.833	1060.	0.58	1.94	1800.	2660.
JAPAN	S	80 211	5625N	16843W	18570.4	34953.8	49511.0	77.	2.167	1250.	0.58	1.65	3150.	4400.
JAPAN	M	79 111	5639N	16523W	18668.4	34270.5	48232.2	44.	1.833	1045.	0.57	0.68	5115.	6160.
JAPAN	S	80 123	5637N	16708W	18654.9	34614.3	48928.1	57.	0.667	366.	0.55	2.54	6234.	6600.
JAPAN	S	80 2 2	5620N	16851W	18535.2	34985.0	49542.8	66.	2.467	1348.	0.55	1.65	3492.	4840.
JAPAN	M	79 211	5622N	16700W	18606.4	34646.8	48861.8	61.	3.333	1821.	0.55	1.19	9179.	11000.
JAPAN	M	79 215	5641N	16730W	18664.7	34670.1	49075.6	55.	4.167	2259.	0.54	1.54	15781.	18040.
JAPAN	M	79 1 7	5637N	16554W	18661.9	34378.4	48438.3	46.	1.500	809.	0.54	1.65	5791.	6600.
JAPAN	S	80 127	5634N	16705W	18645.9	34616.9	48906.2	61.	1.333	717.	0.54	2.36	5883.	6600.
JAPAN	M	80 119	5637N	16716W	18653.8	34640.5	48980.7	58.	2.500	1342.	0.54	1.24	16918.	18260.
JAPAN	M	80 131	5614N	16610W	18592.8	34521.5	48329.8	62.	2.500	1334.	0.53	2.38	2846.	4180.
JAPAN	M	80 127	5644N	16722W	18674.5	34630.5	49024.7	55.	2.667	1369.	0.51	1.17	14911.	16280.
JAPAN	S	80 1 8	5632N	17156W	17941.7	35020.6	50148.2	148.	3.000	1529.	0.51	3.11	2975.	4400.
JAPAN	S	80 2 5	5632N	17155W	17991.3	35010.8	50158.7	74.	3.083	1565.	0.51	1.63	1735.	3300.
JAPAN	M	79 3 9	5213N	17037W	16710.0	35129.2	49105.4	159.	0.667	338.	0.51	5.87	5184.	5222.
JAPAN	M	79 113	5643N	16448W	18678.2	34144.4	47998.4	43.	2.000	1092.	0.50	0.61	2958.	3960.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

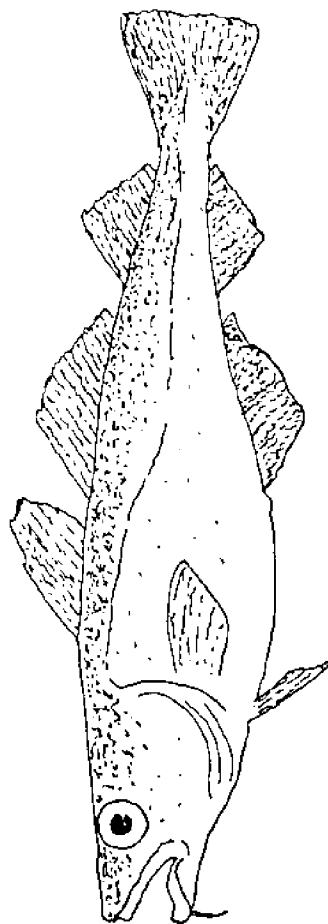


TABLE C-10, PACIFIC COD, APRIL-JUNE 1979-80

COUNTRY	GLASS	DATE	LAT	LONG	APPROX	7X	7Y	7Z	DEPTH	HOURS	CATCH	THOUSAND	SIZE	BYCATCH	TOTAL
		YYMM			LORAN-C			PULSE	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
KOREA	M	80 5 6	3716N	16511W	18730.2	34029.7	46139.4	39	6.523	4246	0.64	1.19	27214	51460	
JAPAN	L	79 6 30	3624N	16840W	18567.5	34947.3	49490.6	71	1.667	1073	0.64	7.70	58327	59400	
USK	M	79 4 7	5700N	17109W	18368.9	35037.9	50178.6	52	2.083	1339	0.64	1.23	20381	22220	
KOREA	M	79 5 28	5546N	16846W	18323.8	35013.9	49394.6	93	6.083	3894	0.64	3.49	9306	13200	
KOREA	M	80 5 28	5654N	16912W	18696.9	34968.0	47753.8	46	4.000	2510	0.63	5.21	68770	71260	
KOREA	M	80 5 26	5710N	16855W	18741.2	34826.4	49643.9	41	6.250	3908	0.63	4.30	73092	77000	
KOREA	M	79 6 17	5432N	16535W	18206.2	34682.4	46163.8	112	6.750	4193	0.62	5.28	44207	48400	
KOREA	M	79 5 27	5534N	16815W	18313.9	34552.0	49200.5	109	6.667	4133	0.62	3.63	13467	17600	
USK	M	79 4 14	5708N	17121W	18314.9	34966.8	50178.3	56	2.167	1342	0.62	0.70	16258	17000	
KOREA	M	80 6 8	5300N	16750W	17500.4	34999.6	49628.7	66	8.750	5392	0.62	17.51	92728	98120	
USK	M	79 4 5	5705N	17102W	18400.0	35001.0	50178.8	57	2.417	1487	0.62	0.74	20513	22000	
KOREA	M	80 6 28	5301N	16743W	17523.5	34990.4	48601.2	60	8.000	4892	0.61	33.00	72108	77000	
USK	M	79 4 2	5703N	17108W	18386.0	35027.2	50180.1	54	1.500	915	0.61	2.97	4585	5500	
KOREA	M	80 5 11	5716N	16528W	18733.3	34089.5	48251.5	39	7.083	4317	0.61	1.21	18123	22440	
KOREA	M	79 6 11	5432N	16535W	18206.2	34682.4	48163.8	90	5.833	3541	0.61	9.86	21095	24640	
JAPAN	S	79 4 19	5616N	17041W	18236.3	35136.9	49993.1	72	3.500	2122	0.61	0.99	518	2640	
KOREA	M	79 6 1	5443N	16610W	18215.1	34744.4	49382.3	134	4.500	2674	0.59	4.50	23726	26400	
KOREA	M	80 6 2	5446N	16530W	18272.5	34645.8	48158.6	68	4.333	2569	0.59	7.06	23831	26400	
KOREA	M	79 6 11	5440N	16522W	18254.9	34638.2	48102.5	109	3.833	2268	0.59	5.80	26532	30800	
KOREA	M	80 6 8	5723N	16915W	18749.5	34994.6	49749.5	43	6.917	4053	0.59	1.93	50947	55000	
JAPAN	L	79 6 30	5602N	16952W	18301.4	35114.1	49769.4	89	1.667	975	0.59	1.94	54025	55000	
KOREA	M	80 5 4	5715N	16749W	18740.8	34555.5	49197.0	42	5.500	3186	0.58	1.98	12654	15840	
KOREA	M	79 6 19	5527N	16738W	18299.0	34928.4	49028.3	97	4.917	2828	0.57	3.68	12574	15400	
KOREA	M	79 6 15	5432N	16531W	18210.7	34673.3	48141.1	121	6.000	3441	0.57	5.30	53759	57200	
USK	M	80 6 9	5419N	16125W	18360.7	34122.2	46676.5	52	0.917	523	0.57	3.31	2777	3300	
USK	M	79 4 11	5655N	17104W	18376.9	35088.2	50171.1	55	1.500	850	0.57	0.81	4620	5200	
JAPAN	S	80 5 28	5659N	16627W	18709.7	34371.4	48558.6	41	1.000	563	0.56	2.20	2737	3300	
JAPAN	S	80 5 5	5220N	17152W	16433.7	35137.9	49332.7	153	1.167	655	0.56	6.12	8585	9240	
USK	M	79 4 8	5704N	17106W	18402.2	35027.9	50180.2	57	1.917	1065	0.56	0.86	16095	17160	
USK	M	80 4 29	5520N	16829W	18597.9	35336.9	45549.0	71	1.667	928	0.56	2.64	36454	39800	
KOREA	M	80 5 31	5717N	16820W	18745.9	34652.3	49401.1	43	8.000	4400	0.55	5.50	101200	105600	
JAPAN	L	79 6 26	5825N	16848W	18568.2	34988.0	49540.3	66	3.500	1915	0.55	5.37	48865	50600	
KOREA	M	80 5 29	5701N	16832W	18720.4	34792.9	49494.4	50	3.417	1648	0.54	4.71	31152	33000	
JAPAN	S	79 4 21	5615N	17058W	18152.8	35128.5	50026.4	89	1.333	721	0.54	6.31	159	880	
KOREA	M	79 6 11	5433N	16536W	18205.5	34683.0	48171.2	96	5.333	2871	0.54	4.12	31229	34100	
KOREA	M	80 6 4	5437N	16530W	18231.6	34662.3	48143.7	107	8.833	4750	0.54	7.62	64110	68660	
KOREA	M	80 5 6	5717N	16642W	18737.4	34313.5	43747.1	40	6.833	3659	0.54	1.54	16781	22440	
KOREA	M	79 6 23	5426N	16013W	18417.0	33945.6	46241.6	82	4.583	2452	0.54	6.95	12288	14740	
JAPAN	L	79 6 27	5623N	16840W	18562.2	34949.3	49487.9	62	1.750	935	0.53	4.82	63085	64020	
KOREA	M	79 5 29	5609N	17032W	18226.7	35138.2	49337.9	77	3.750	1994	0.53	6.09	37166	39160	
KOREA	M	79 6 16	5514N	16724W	18275.4	34868.1	42866.8	96	8.417	4464	0.53	3.79	10936	15400	
KOREA	M	79 5 13	5622N	17031W	18322.4	35138.2	49994.6	66	6.167	3255	0.53	7.77	60969	63844	
KOREA	M	80 5 27	5655N	16850W	18703.1	34866.3	49611.7	44	6.000	3139	0.52	4.97	122921	126060	
USK	M	80 6 11	5450N	16117W	18396.3	34079.6	46826.0	57	1.167	604	0.52	2.05	13696	14300	
KOREA	M	80 6 11	5300N	16744W	17515.8	34992.0	48603.0	65	2.667	1388	0.52	8.82	17100	18480	

*** NCIE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-10 (Continued). PACIFIC OOD, APRIL-JUNE 1979-80

NATION	VESSEL CLASS	DATE	TIME	LAT	LONG	APPROX LORAN-C PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YYMMDD				7X	7Y	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
KOREA	M	79 5 9	5522H	35011.3	16848W	18370.3	35011.3	85	5.000	31760	6.35	5.17	29884	61644
KOREA	M	79 5 9	5428N	31873.0	15943W	18435.2	31873.0	68	4.667	29241	6.27	7.86	17399	46640
KOREA	M	79 6 1	5428N	34665.6	16543W	18285.4	34665.6	82	2.833	17559	6.20	5.83	92441	110000
JAPAN	L	79 6 6	5455N	34679.2	16551W	18290.5	34679.2	79	5.250	17654	6.06	8.60	59336	77000
JAPAN	L	79 6 8	5428N	33822.5	15950W	18432.2	33822.5	79	3.500	31259	5.92	10.05	7681	38940
KOREA	M	79 6 6	5452N	35011.9	16529W	18299.0	35011.9	82	2.833	19948	5.70	4.07	180252	200200
JAPAN	L	79 5 12	5544N	35015.9	16845W	18325.5	35015.9	92	2.500	15678	5.53	4.31	2010	17688
JAPAN	S	79 5 5	5544N	35022.5	16847W	18324.1	35022.5	87	2.000	12437	4.97	3.83	3007	15444
JAPAN	S	79 5 7	5531N	34659.0	16853W	18355.6	34659.0	82	2.000	9648	4.82	3.63	296	9944
JAPAN	L	79 6 7	5452N	35010.6	16532W	18296.1	35010.6	85	2.167	10030	4.63	9.24	33970	44000
JAPAN	L	79 5 6	5428N	35017.2	16846W	18342.7	35017.2	86	4.083	17632	4.32	3.64	19258	19358
KOREA	M	79 6 24	5429N	33885.5	15950W	18434.7	33885.5	77	5.333	20282	3.80	8.35	21738	42020
JAPAN	S	79 5 8	5550N	35019.2	16851W	18352.8	35019.2	74	2.667	9320	3.49	3.64	514	9834
JAPAN	L	79 5 7	5451N	34660.3	16540W	18284.1	34660.3	83	4.250	10079	3.26	3.65	591	10070
JAPAN	L	79 6 30	5627N	35088.4	17124W	18100.2	35088.4	91	1.417	4636	3.27	10.12	55649	70400
JAPAN	L	79 6 29	5627N	35091.5	17122W	18111.3	35091.5	85	1.750	5150	2.94	6.65	5850	11000
JAPAN	L	79 6 25	5436N	33730.7	15849W	18474.6	33730.7	74	3.250	9425	2.90	1.10	9680	9680
KOREA	M	79 6 26	5429N	33905.5	15859W	18430.8	33905.5	77	5.063	14333	2.78	8.70	22167	36300
JAPAN	S	79 5 7	5551N	35012.2	16848W	18364.1	35012.2	86	4.833	12890	2.68	2.95	996	13926
JAPAN	S	79 5 9	5550N	35000.4	16842W	18367.6	35000.4	81	4.833	12892	2.67	4.04	3222	16214
JAPAN	L	79 6 9	5458N	34680.8	16534W	18300.6	34680.8	75	4.083	9992	2.45	7.92	42800	52800
JAPAN	L	79 6 6	5451N	34672.3	16545W	18279.0	34672.3	90	3.500	8346	2.38	4.77	46554	55000
JAPAN	S	79 5 8	5548N	35008.5	16845W	18350.4	35008.5	82	1.333	2987	2.24	4.37	357	3344
KOREA	M	80 5 28	5645N	34989.1	16910W	18656.4	34989.1	45	4.000	8727	2.18	5.60	106533	115280
JAPAN	S	79 5 16	5550N	35013.1	16848W	18397.6	35013.1	73	3.250	7043	2.17	4.67	2879	9922
JAPAN	S	79 5 16	5540N	35002.9	16839W	18311.1	35002.9	80	3.333	7221	2.17	4.81	2217	9438
KOREA	M	79 5 11	5630N	35085.6	17123W	18124.6	35085.6	80	0.750	1623	2.16	6.38	46777	48400
USSR	M	80 4 28	5521N	35226.8	15826W	18574.4	35226.8	82	1.333	2817	2.11	2.86	41623	44440
KOREA	M	79 6 6	5431N	34667.6	16830W	18220.6	34667.6	66	1.000	2091	2.09	6.47	63909	66000
JAPAN	S	79 5 10	5542N	34981.3	16830W	18344.0	34981.3	82	4.583	9366	2.04	3.86	2798	12166
JAPAN	S	79 5 6	5541N	34995.9	16836W	18322.3	34995.9	82	3.833	7670	2.00	3.01	5464	13124
JAPAN	S	79 5 10	5542N	35002.3	16842W	18355.3	35002.3	77	5.500	10706	1.95	3.64	3924	14630
USSR	M	79 4 9	5659N	35047.0	17107W	18377.7	35047.0	59	2.000	3887	1.94	0.66	18113	22000
USSR	M	79 4 7	5700N	35060.4	17100W	18426.5	35060.4	56	1.250	2399	1.92	1.15	27961	30360
JAPAN	S	79 5 11	5546N	35012.3	16846W	18336.3	35012.3	73	3.083	5863	1.91	3.51	1003	6886
USSR	M	79 4 14	5658N	35058.1	17104W	18392.7	35058.1	55	1.167	2188	1.88	1.14	19812	22000
JAPAN	S	79 5 16	5540N	35005.0	16840W	18305.4	35005.0	80	2.833	5199	1.84	4.84	1247	6446
KOREA	M	79 6 7	5451N	34684.2	16550W	18273.9	34684.2	83	3.250	5632	1.80	4.84	3322	39160
JAPAN	L	79 6 29	5626N	34940.2	16839W	18578.8	34940.2	62	1.833	3225	1.76	5.84	48255	51480
JAPAN	S	79 5 9	5550N	35019.2	16851W	18352.8	35019.2	74	4.583	7922	1.73	3.70	812	8734
USSR	M	79 4 9	5648N	35048.4	17108W	18367.2	35048.4	57	0.750	1284	1.71	0.66	8396	9680
JAPAN	S	79 5 8	5545N	35000.7	16840W	18340.2	35000.7	80	2.583	4374	1.69	3.14	1852	6226
JAPAN	S	79 5 18	5542N	35001.3	16839W	18323.4	35001.3	74	4.083	6898	1.69	3.52	3090	9988
JAPAN	L	79 6 5	5450N	34652.6	16536W	18283.7	34652.6	85	2.750	4629	1.68	7.97	50371	55000

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-10 (continued). PACIFIC COD, APRIL-JUNE 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
*****	*****	YYMMDD	*****	*****	7X	7Y	(FMS)	RAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
JAPAN	S	79 517	5542N	16842W	18318.3	35007.4	76.	5.333	6596.	1.24	3.67	2028.	8624.
JAPAN	L	79 627	5622N	16839W	18557.7	34948.5	67.	2.833	3468.	1.22	4.63	42072.	45540.
JAPAN	L	79 67	5451N	16538W	18266.0	34655.5	87.	4.083	4981.	1.22	5.67	23619.	28600.
JAPAN	S	79 422	5617N	17105W	18131.2	35121.7	77.	1.517	1825.	1.20	6.39	4775.	6600.
JAPAN	L	79 623	5623N	16831W	18569.2	34923.5	68.	2.750	3149.	1.15	21271.	24420.	24420.
KOREA	M	80 616	5730N	16838W	18745.5	34617.0	38.	4.917	521.	1.12	3.02	68179.	73700.
KOREA	M	80 521	5725N	16835W	18750.7	34674.1	43.	7.167	8021.	1.12	1.20	118039.	126060.
USSR	M	79 415	5701N	17100W	18430.5	35056.4	55.	2.750	3054.	1.11	1.10	18946.	22000.
JAPAN	S	79 513	5544N	16832W	18348.9	34984.7	82.	4.417	4873.	1.10	4.54	1265.	6138.
KOREA	M	80 577	5714N	16501W	18727.4	34011.5	40.	12.500	13604.	1.09	1.61	33476.	47080.
JAPAN	S	79 513	5550N	16854W	18347.6	35025.3	87.	2.083	2249.	1.08	3.73	237.	2486.
KOREA	M	80 611	5444N	16520W	18273.8	34625.8	108.	3.583	3864.	1.02	6.01	105036.	108900.
KOREA	M	80 525	5713N	16904W	18746.3	34840.5	43.	6.083	6450.	1.06	4.35	84850.	91300.
KOREA	M	80 523	5720N	16901W	18750.5	34778.9	43.	6.417	6761.	1.05	3.90	59059.	105820.
KOREA	M	79 611	5433N	16534W	18211.7	34672.5	103.	4.000	4205.	1.05	7.92	69055.	73260.
USSR	M	79 411	5654N	17104W	18374.0	35071.3	55.	1.750	1820.	1.04	1.32	23694.	25520.
KOREA	M	79 613	5440N	16525W	18251.8	34645.2	117.	3.750	3392.	1.04	8.80	44508.	48400.
JAPAN	L	79 617	5259N	16736W	17530.9	34982.0	60.	3.583	3687.	1.03	12.27	20513.	24200.
KOREA	M	80 529	5655N	16500W	18702.4	34921.9	49.	5.500	5640.	1.03	5.56	104360.	110000.
KOREA	M	79 618	5432N	16534W	18207.3	34680.1	98.	4.333	4436.	1.02	2.66	21964.	26400.
KOREA	M	80 613	5438N	16536W	18231.5	34674.5	115.	4.167	4238.	1.02	6.69	23922.	28160.
JAPAN	S	79 519	5550N	16844W	18364.4	35004.7	75.	2.917	2952.	1.01	3.01	1360.	4312.
KOREA	M	79 614	5451N	16607W	18255.7	34724.5	86.	2.417	2438.	1.01	8.98	9002.	11440.
KOREA	M	80 528	5649N	16901W	18660.8	34960.1	46.	4.000	4001.	1.00	5.17	94999.	99000.
JAPAN	L	79 625	5622N	16841W	18555.9	34954.1	66.	1.500	1500.	1.00	5.76	51740.	53240.
KOREA	M	79 528	5553N	16832W	18400.5	34974.9	65.	1.833	1820.	0.99	4.87	380.	2200.
KOREA	M	80 612	5447N	16525W	18281.6	34631.9	96.	4.583	4513.	0.99	5.87	11982.	16500.
KOREA	M	79 610	5441N	16525W	18258.1	34643.4	93.	3.167	3114.	0.98	3.30	58466.	61000.
JAPAN	S	79 420	5616N	17043W	18227.8	35136.3	107.	1.917	1877.	0.98	6.35	323.	2200.
KOREA	M	79 519	5621N	17039W	18362.8	35138.0	66.	3.833	3714.	0.97	4.58	59688.	63602.
KOREA	M	79 510	5554N	16847W	18322.1	35015.9	112.	3.667	3538.	0.96	3.32	42662.	46200.
KOREA	L	79 626	5618N	16850W	18524.8	34985.5	66.	2.833	2687.	0.94	7.55	61353.	64020.
KOREA	M	80 521	5710N	16809W	18716.1	34638.4	43.	8.750	8230.	0.94	3.78	102870.	111100.
JAPAN	S	80 528	5659N	16626W	18739.6	34368.1	38.	1.500	1401.	0.93	2.10	2559.	3960.
JAPAN	L	79 617	5259N	16750W	17495.3	34999.3	52.	2.667	2463.	0.92	7.79	13157.	15620.
KOREA	M	80 612	5703N	16845W	18736.6	34891.5	44.	6.917	6358.	0.92	4.13	70644.	77000.
KOREA	M	80 514	5718N	16506W	18332.1	34002.0	40.	6.833	6247.	0.91	1.29	20593.	26840.
JAPAN	L	79 630	5624N	16840W	18367.5	34947.3	64.	1.750	1577.	0.90	5.78	8103.	9680.
KOREA	M	79 618	5447N	16612W	18231.4	34742.7	112.	8.417	7493.	0.89	3.72	7907.	15400.
KOREA	M	80 528	5651N	16915W	18683.1	34988.3	46.	3.500	3112.	0.89	5.17	73888.	77000.
JAPAN	S	79 518	5602N	16841W	18441.6	34985.2	381.	4.833	4292.	0.89	3.95	196.	4488.
KOREA	M	80 627	5301N	16739W	17533.6	34585.3	63.	3.667	3642.	0.88	23.10	73758.	77000.
USSR	M	79 416	5707N	17106W	18410.7	35011.9	56.	2.000	1760.	0.88	0.95	25740.	27500.
KOREA	M	79 530	5622N	17116W	18111.2	35105.7	80.	3.333	2332.	0.89	2.86	26548.	29480.
KOREA	M	79 624	5419N	16023W	18394.2	33988.0	77.	5.667	4931.	0.87	6.31	21029.	25960.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-10 (continued). PACIFIC COD, APRIL-JUNE 1979-80

NATION	VESSEL CLASS	DATE	LAI	LONG	APPROX LORAN-C	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		TYMDD			7X	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
KOREA	M	80 626	5301N	16740M	17531.1	79	6.333	5451.	0.86	18.33	27549.	33000.
KOREA	M	79 618	5447N	16532M	16274.8	107	5.833	5013.	0.86	5.68	14787.	19800.
KOREA	M	79 609	5452N	16532M	18296.1	75	5.000	4282.	0.85	6.60	47858.	52140.
KOREA	M	79 530	5534N	16815M	18313.9	93	6.250	5316.	0.85	4.01	7884.	13200.
USSR	M	79 408	5703N	17113M	18365.5	55	3.250	2729.	0.84	0.84	39071.	41800.
USSR	M	79 410	5654N	17103M	18380.2	55	2.583	2152.	0.83	0.97	22268.	24420.
KOREA	M	79 604	5433N	16532M	18214.0	71	1.917	1377.	0.82	4.25	55623.	57200.
JAPAN	L	79 630	5603N	16941M	18337.4	98	1.583	1302.	0.82	3.96	9767.	11000.
USSR	M	79 402	5703N	17110M	18373.0	55	1.500	1233.	0.82	0.83	9767.	11000.
KOREA	M	80 519	5547N	16844M	18345.9	98	5.667	4615.	0.81	4.02	6385.	11000.
USSR	M	79 412	5703N	17103M	18424.1	55	1.667	1353.	0.81	1.06	11847.	13200.
USSR	M	79 404	5707N	17110M	18384.5	55	2.167	1737.	0.80	1.29	26843.	30580.
KOREA	M	80 524	5718N	16822M	18746.9	43	7.917	6339.	0.80	4.04	49101.	55440.
JAPAN	S	79 511	5200N	17151M	16337.7	131	1.417	1131.	0.80	7.92	3929.	5060.
KOREA	M	80 603	5440N	16525M	18251.8	104	8.917	7088.	0.79	7.58	82672.	89760.
KOREA	M	80 528	5652N	16913M	18686.2	46	6.167	4869.	0.79	6.79	115911.	120780.
JAPAN	L	79 630	5622N	16836M	18560.1	67	2.417	1902.	0.79	4.49	59918.	61820.
KOREA	M	80 607	5722N	16855M	18750.7	42	5.000	3871.	0.77	2.93	35729.	39600.
JAPAN	L	79 624	5627N	16824M	18593.5	65	1.250	952.	0.76	4.52	19948.	20900.
KOREA	M	80 516	5712N	16718M	18734.2	42	11.833	8949.	0.76	2.19	12171.	21120.
KOREA	M	79 610	5432N	16536M	18205.1	104	4.000	2988.	0.75	3.78	43212.	46200.
KOREA	M	80 526	5711N	16905M	18743.9	44	8.500	3436.	0.75	3.96	96834.	103180.
JAPAN	L	79 529	5613N	17033M	18246.7	67	3.583	2644.	0.74	6.60	69356.	72600.
USSR	M	79 402	5702N	17168M	18322.6	54	2.167	1596.	0.74	0.34	9404.	11000.
JAPAN	L	79 626	5622N	16852M	18545.7	65	4.083	2997.	0.73	4.78	35503.	38500.
KOREA	M	80 527	5659N	16910M	18715.7	43	2.500	1817.	0.73	4.24	37783.	39600.
KOREA	M	79 513	5619N	17059M	18176.0	74	3.000	2157.	0.72	9.68	88043.	90200.
KOREA	M	80 509	5722M	16732M	18746.0	40	6.500	4662.	0.72	1.43	20858.	25520.
KOREA	M	79 627	5419N	16020M	18395.7	83	6.500	4661.	0.72	6.95	24135.	26400.
USSR	M	79 401	5656N	17129M	18224.8	55	2.583	1852.	0.72	0.98	4748.	6600.
JAPAN	S	80 505	5220N	17151M	16438.1	148	1.333	939.	0.70	5.97	5441.	6380.
JAPAN	L	79 630	5623N	16843M	18559.6	62	3.250	2265.	0.70	5.23	24135.	26400.
KOREA	M	79 626	5532N	16811M	18308.3	87	2.583	1790.	0.69	2.27	90510.	92400.
KOREA	M	79 504	5631N	17131M	18085.0	77	2.000	1383.	0.69	3.52	31617.	33000.
JAPAN	L	79 531	5615N	17056M	18162.2	77	1.917	1324.	0.69	3.43	36076.	37400.
KOREA	M	80 426	5626N	16529M	18273.4	109	4.750	3273.	0.68	5.41	15427.	18700.
POLAND	M	79 420	5225N	17159M	16428.2	137	2.833	1932.	0.68	4.03	24468.	26400.
JAPAN	S	79 525	5205N	17151M	16362.4	82	2.000	1330.	0.68	5.95	5131.	6380.
KOREA	M	80 614	5259N	16739M	17523.4	74	7.500	4945.	0.66	6.97	159835.	164780.
JAPAN	L	79 620	5531N	16756M	18324.2	83	0.750	493.	0.66	4.67	3907.	4400.
JAPAN	L	79 604	5504N	16652M	18265.1	85	1.000	654.	0.65	4.65	5946.	6600.
JAPAN	S	79 512	5551N	16851M	18359.1	74	4.000	2600.	0.65	4.00	2196.	4796.
KOREA	M	80 524	5718N	16835M	18746.0	42	8.000	5181.	0.65	3.11	103499.	108680.
JAPAN	S	79 430	5251N	17107M	16791.1	142	2.450	1587.	0.65	6.86	3253.	4640.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-10 (continued). PACIFIC COD, APRIL-JUNE 1979-80

NATION	VESSEL CLASS	LATE	YR/POD	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
*****	*****	*****	*****	*****	*****	7X	7Y	7Z	*****	*****	*****	*****	*****	*****
JAPAN	L	79 620	5530N	16808W	18301.3	34947.0	49150.9	91.	2.417	4024.	1.67	3.85	4776.	8800.
KOREA	M	79 5 6	5620N	17052W	18216.9	35130.8	50035.3	71.	1.917	3151.	1.64	6.69	30025.	33176.
JAPAN	L	79 626	5628N	17135W	18043.9	35068.7	50124.1	90.	4.333	7117.	1.64	3.87	14883.	22000.
JAPAN	S	79 511	5553N	16853W	18368.2	35020.9	49462.1	77.	3.250	5313.	1.63	4.03	1419.	6732.
JAPAN	L	79 6 9	5456N	16550W	18296.0	34674.9	48292.1	73.	4.417	7085.	1.60	6.74	52315.	59400.
JAPAN	S	79 515	5541N	16834W	18325.6	34991.8	49322.9	85.	4.500	7161.	1.59	4.33	1573.	8734.
JAPAN	S	80 617	5252N	16922W	17203.6	35092.0	48977.3	148.	0.667	1056.	1.59	7.41	4662.	5720.
USSR	M	79 4 7	5705N	17105W	16411.6	35025.2	50180.2	56.	2.000	3153.	1.58	0.83	18847.	22000.
USSR	M	79 4 7	5657N	17057W	18422.1	35083.9	50168.3	56.	1.250	1939.	1.55	0.92	37561.	39600.
KOREA	M	79 6 5	5438N	16537W	18230.4	34676.6	48185.6	87.	3.417	5291.	1.55	5.67	14509.	19600.
KOREA	M	79 623	5427N	15956W	16427.2	33904.7	46139.0	88.	4.917	7549.	1.54	5.71	20831.	26380.
JAPAN	L	79 622	5559N	16538W	18552.8	34479.5	48308.6	59.	3.000	4397.	1.53	3.76	72403.	77000.
KOREA	M	79 625	5420N	16019W	18398.8	33976.2	46281.5	77.	5.000	7520.	1.52	8.18	21420.	29040.
USSR	M	79 4 4	5657N	17115W	18318.5	35035.1	50176.6	58.	1.833	2786.	1.52	1.18	10414.	13200.
KOREA	M	79 510	5622N	17117W	18105.9	35104.4	50085.1	60.	1.917	2903.	1.51	5.28	58807.	61710.
KOREA	M	79 6 2	5449N	16603W	18251.0	34718.5	48354.3	92.	4.500	6734.	1.50	5.91	64324.	71060.
JAPAN	S	79 421	5650N	17101W	18174.0	35123.7	50052.5	74.	2.000	2990.	1.49	6.88	1630.	4020.
JAPAN	S	79 419	5612N	17042W	18202.5	35137.1	49977.3	72.	1.000	1491.	1.49	5.99	269.	1760.
JAPAN	L	79 619	5549N	16847W	18353.3	35011.6	49417.3	87.	3.083	4565.	1.49	3.84	24015.	28600.
JAPAN	S	79 511	5544N	16839W	18335.7	34999.5	49358.9	78.	4.500	6596.	1.47	3.83	1654.	8250.
JAPAN	S	79 513	5552N	16853W	18361.9	35021.7	49458.5	82.	4.000	5812.	1.45	3.68	2108.	7920.
KOREA	M	79 6 2	5451N	16603W	18260.1	34715.1	48358.2	85.	6.083	8795.	1.44	5.16	39835.	48620.
KOREA	M	79 628	5424N	15953W	18421.1	33908.9	46123.5	92.	4.333	6148.	1.42	10.58	11452.	17600.
KOREA	M	80 512	5717N	16648W	18737.8	34333.5	48787.2	40.	5.750	8129.	1.41	1.32	14751.	22680.
KOREA	M	79 624	5533N	16836W	18394.9	34984.4	49373.5	82.	6.250	8805.	1.41	3.97	52795.	61600.
JAPAN	S	79 518	5530N	16845W	18362.8	35006.9	49410.5	77.	4.750	6593.	1.39	3.65	1525.	8118.
KOREA	M	79 613	5530N	16806W	18304.3	34942.6	49140.2	87.	1.833	2543.	1.39	4.46	1860.	4400.
KOREA	M	80 527	5658N	16855W	18712.7	34891.0	49446.6	41.	2.917	4080.	1.38	4.25	83960.	88000.
JAPAN	S	79 514	5552N	16853W	18361.9	35021.7	49458.5	79.	1.917	2656.	1.38	5.64	708.	3344.
KOREA	M	79 625	5557N	16835W	18420.1	34877.2	49181.2	87.	5.667	7751.	1.37	4.58	36249.	44000.
JAPAN	S	79 514	5541N	16832W	18328.8	34867.5	49312.5	79.	3.083	4211.	1.37	4.46	2301.	6512.
JAPAN	L	79 611	5552N	16849W	18368.7	35013.4	49438.1	87.	4.833	6594.	1.36	2.82	26406.	35000.
KOREA	M	79 622	5431N	15950W	18435.5	33379.4	46095.6	68.	4.000	5455.	1.36	8.21	9945.	15400.
JAPAN	L	79 625	5628N	16825W	18597.7	34893.5	49409.7	65.	1.500	2039.	1.36	4.62	31181.	33220.
JAPAN	L	79 6 1	5537N	16819W	18125.3	34963.5	49231.2	83.	2.917	3912.	1.34	3.25	13688.	17600.
KOREA	M	79 6 1	5543N	16536W	18504.6	34518.9	48280.7	131.	5.250	7026.	1.34	6.21	23774.	30800.
KOREA	M	79 531	5534N	16802W	18332.7	34929.0	49130.7	80.	12.833	16899.	1.32	3.59	22701.	39600.
JAPAN	L	79 528	5544N	16848W	18320.3	35019.9	49408.7	101.	3.000	3905.	1.30	3.16	24695.	28600.
KOREA	M	80 5 3	5732N	16806W	18750.6	34491.2	49278.4	40.	3.917	5098.	1.30	1.60	18442.	23540.
KOREA	M	80 630	5701N	16743W	17523.5	34990.4	48601.2	60.	8.083	10421.	1.29	12.83	55579.	66000.
KOREA	M	80 629	5702N	16733W	17553.6	34977.0	48560.3	60.	3.917	5039.	1.29	17.23	49961.	55000.
JAPAN	L	79 629	5624N	16847W	18561.8	34967.1	49531.7	62.	2.000	2561.	1.28	6.19	58379.	60940.
KOREA	M	79 6 7	5446N	16520W	18282.2	34621.9	48100.2	87.	7.250	9140.	1.26	9.35	62800.	71940.
KOREA	M	79 528	5405N	16141W	18309.3	34200.4	46773.1	68.	2.500	3149.	1.26	10.90	1471.	4620.
JAPAN	L	79 610	5554N	16821W	18304.6	34970.9	49232.1	86.	4.000	5008.	1.25	3.71	43392.	48400.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-10 (continued). PACIFIC COD, APRIL-JUNE 1979-80

NATL	VESEL	DATE	LAT	LONG	APPROX	LCRAN-C	PULSE	RATCS	DEPTH	HOURS	CATCH	THOUSAND	SIZE	BYCATCH	TOTAL
*****	CLASS	YMMDD	*****	*****	7X	7Y	7Z	*****	(FMS)	TRAWLED	(LBS)	PER HOUR	LB/S/FISH	(LBS)	(LBS)
KOREA	M	80 518	3712N	16813W	18739.4	34660.2	49360.8	44.	44.	2.167	1116.	0.51	4.04	14064.	15180.
USSR	M	79 4 5	5710N	17118W	18336.8	34962.7	50176.5	57.	57.	2.333	1196.	0.51	0.74	19704.	20900.
JAPAN	L	79 621	5501N	16615W	18292.9	34726.1	48446.7	81.	81.	2.333	1192.	0.51	8.43	12008.	13200.
KOREA	N	80 524	5720N	16855W	18750.4	34757.2	49627.5	41.	41.	5.833	2956.	0.51	3.64	27844.	30200.
JAPAN	I	80 629	5618N	17020W	18331.3	35136.2	49943.6	65.	65.	1.500	757.	0.50	5.94	21083.	81840.
JAPAN	I	79 6 5	5447N	16546W	18260.4	34682.0	49253.0	115.	115.	2.333	1177.	0.50	5.69	20823.	22000.
KOREA	I	79 628	5549N	16845W	18356.6	35007.7	49407.0	91.	91.	2.500	1258.	0.50	5.50	86742.	88000.
JAPAN	I	79 531	5623N	16509W	18532.4	35026.8	49652.6	73.	73.	2.000	1002.	0.50	4.07	16598.	17000.

*** NOTE ** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

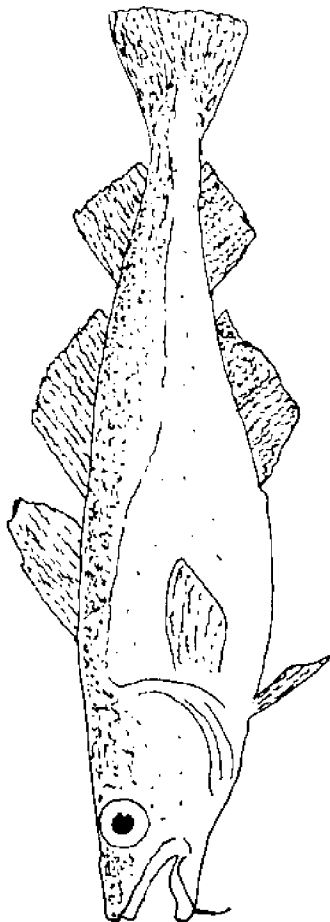


TABLE C-11. PACIFIC COD, JULY-SEPTEMBER 1979-80

NATION	VESEL CLASS	DATE YMMDD	LAT	LONG	APPROX LORAN-C PULSE RATES 7X	APPROX LORAN-C PULSE RATES 7Y	APPROX LORAN-C PULSE RATES 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	79 7 17	5602N	17006E	18255.9	35127.1	49822.4	77	1.333	16066	12.05	12-12	192934	209000
KOREA	M	79 7 20	5432N	16538E	18202.8	34669.3	48180.8	98	0.750	7993	10.66	7-35	168007	176000
JAPAN	L	80 8 23	5524N	16750E	18293.7	34914.1	49036.4	107	1.333	12841	9.63	5-40	92759	105600
JAPAN	L	80 5 2	5602N	16945E	18320.1	35105.8	47740.9	90	3.000	27915	9.30	6-95	29485	48400
JAPAN	L	80 5 26	5433N	16705E	18192.0	34852.9	48708.9	154	3.583	32760	9.14	0-59	240	33000
JAPAN	L	79 7 1	5607N	16949E	18345.8	35110.2	49779.4	74	1.000	8655	8.65	8-08	17745	26400
MEXICO	S	79 8 4	5455N	15815E	18244.4	33595.7	45499.2	100	0.667	5721	8.58	7-60	4971	10692
JAPAN	L	79 7 8	5602N	16953E	18298.6	35115.2	49773.5	84	1.000	8149	8.15	6-48	36731	44880
JAPAN	L	80 5 2	5525N	16755E	18292.1	34924.0	49066.3	93	2.000	15272	7.64	4-43	39728	55000
JAPAN	L	79 8 19	5450N	16533E	18286.9	34645.4	48182.6	88	2.250	16271	7.23	2-75	141029	157300
MEXICO	S	79 8 3	5453N	15810E	18521.9	33592.0	45472.3	98	1.417	10197	7.20	8-60	6303	16500
JAPAN	L	79 7 16	5603N	16820E	18472.4	34931.5	49316.0	98	1.833	13150	7.17	8-43	5110	18260
JAPAN	L	79 7 20	5451N	16330E	18293.8	34636.2	48166.7	81	2.000	13863	6.93	6-22	20897	34760
MEXICO	S	79 8 7	5426N	16605E	17858.1	34824.5	48200.2	102	1.000	6740	6.74	8-54	36160	42900
JAPAN	L	79 9 28	5444N	16525E	18266.9	34637.7	48126.2	113	1.417	8786	6.20	4-16	82514	91300
JAPAN	L	79 9 25	5444N	16524E	18269.9	34635.3	48120.4	108	1.083	6308	5.82	2-78	86092	92400
JAPAN	L	79 9 28	5443N	16525E	18264.6	34639.6	48124.7	114	1.333	7626	5.72	3-27	105674	113300
JAPAN	L	79 9 27	5444N	16524E	18269.9	34635.3	48120.4	109	1.000	5522	5.52	4-36	84678	90200
JAPAN	L	80 9 26	5500N	16721E	18205.4	34879.0	48613.4	133	4.333	22957	5.30	0-60	23243	46200
MEXICO	S	79 8 4	5456N	15815E	18526.3	33592.3	45497.7	101	1.667	8786	5.27	7-63	6614	15400
KOREA	M	80 9 12	5438N	16526E	18242.2	34651.2	48122.4	85	2.083	10821	5.19	3-27	50779	61900
JAPAN	L	80 9 17	5447N	16531E	18257.7	34646.3	48166.0	106	2.000	9802	4.90	4-62	64998	74800
JAPAN	L	80 9 26	5453N	16706E	18190.6	34855.0	48114.3	148	2.417	10972	4.54	0-61	11028	22000
JAPAN	L	79 9 30	5440N	16528E	18248.7	34652.3	48137.2	117	1.167	5214	4.47	2-25	20746	25960
JAPAN	L	79 8 14	5436N	16536E	18213.9	34661.4	48173.0	134	2.333	10219	4.32	5-17	79981	90200
KOREA	M	79 7 20	5432N	16537E	18201.9	34687.0	48175.2	131	3.450	14251	4.13	8-25	161749	176000
KOREA	M	80 5 4	5431N	16537E	18199.5	34688.6	48173.4	82	3.250	13379	4.12	2-84	58781	72160
USSR	M	79 7 27	5450N	15813E	18515.2	33606.4	45495.0	107	2.583	10150	3.93	6-88	35930	45980
JAPAN	L	79 8 19	5448N	16528E	18283.0	34637.2	48150.2	97	1.833	7111	3.98	2-92	43489	50600
JAPAN	L	79 8 20	5441N	16526E	18235.1	34645.7	48127.2	93	2.750	10034	3.87	2-91	75166	85800
JAPAN	L	80 9 10	5435N	16538E	18277.4	34659.3	48210.1	86	1.667	6309	3.79	4-69	99291	105500
JAPAN	L	80 9 15	5455N	16545E	18296.5	34684.7	48261.2	74	2.250	8510	3.78	5-89	64090	72000
MEXICO	S	79 8 11	5458N	15818E	18529.4	33591.8	45512.8	101	0.667	5215	3.77	5-58	3865	6380
JAPAN	L	79 9 29	5432N	16525E	18264.6	34639.6	48124.7	113	1.417	5274	3.72	2-74	47526	52800
JAPAN	L	79 9 10	5455N	16525E	18273.1	34635.8	48127.8	110	1.250	4540	3.63	3-06	48480	53020
MEXICO	S	79 8 18	5500N	15808E	18535.9	33583.8	45489.4	87	1.833	6586	3.59	5-39	2872	9460
JAPAN	L	80 5 7	5442N	16545E	18265.9	34677.3	48235.0	96	2.000	6970	3.48	4-74	136030	143000
JAPAN	L	79 8 13	5434N	16542E	18247.0	34679.7	48222.9	142	2.583	8873	3.43	8-53	41727	50600
KOREA	M	80 9 1	5444N	16543E	18253.5	34673.2	48213.2	131	5.667	19154	3.38	5-24	91386	100540
MEXICO	S	79 8 18	5452N	15810E	18520.0	33595.3	45473.9	87	2.250	7520	3.34	7-18	1940	9460
JAPAN	L	79 8 18	5451N	16522E	18271.8	34689.0	48234.6	86	2.833	9391	3.31	4-33	50440	59840
JAPAN	L	80 9 1	5447N	16839E	18354.0	34998.8	49369.1	81	3.083	9944	3.23	5-83	58256	68200
KOREA	M	80 7 2	5437N	16537E	18208.5	34685.3	48176.9	120	3.250	7991	3.07	15-03	67009	77000
USSR	M	79 7 31	5738N	16728E	18750.6	34316.0	49017.1	34	2.543	4913	3.06	6-97	20907	28620
KOREA	M	80 5 29	5718N	16705E	18740.2	34384.0	48299.6	40	4.017	12189	3.03	3-01	31831	44000

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-11 (continued). PACIFIC COD, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE YMMDD	LAT	LONG	APPROX LCRAN-C PULSE RATES 7X	DEPTH (FMS)	HOURS FRAHLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	79 720	5453N	16533W	18295.5	80	1.583	4692	2.96	8.58	34908	39600
JAPAN	L	80 516	5446N	16523W	34629.1	107	2.250	6666	2.96	4.21	98934	105600
USSR	M	79 928	5705N	16650W	34413.9	38	2.167	6341	2.93	1.72	29299	35640
JAPAN	L	79 816	5458N	16538W	18268.7	108	2.083	6076	2.93	4.87	53324	59400
JAPAN	L	79 710	5629N	17125W	18107.1	88	1.500	4540	2.89	4.16	57260	61600
KOREA	M	80 522	5717N	16655W	34356.9	40	3.167	6179	2.85	3.19	44421	50600
JAPAN	L	79 7 4	5541N	16843W	18310.4	93	3.083	8780	2.85	3.96	30820	39600
JAPAN	L	79 720	5452N	16536W	18292.3	82	3.250	9231	2.84	8.14	52809	62040
JAPAN	L	79 814	5434N	16536W	18213.9	134	2.917	8259	2.83	5.08	161741	110000
JAPAN	L	79 818	5449N	16556W	18258.6	91	3.333	9420	2.83	2.82	60540	69960
KOREA	M	79 8 2	5440N	16617W	18192.3	161	7.583	21057	2.78	7.55	42743	63600
JAPAN	L	79 929	5447N	16530W	18276.7	110	1.093	3902	2.77	2.48	20758	23760
JAPAN	L	79 928	5442N	16527W	18256.3	118	1.333	3633	2.72	2.41	62367	66000
KOREA	M	80 7 3	5431N	16536W	18200.8	120	2.250	6092	2.71	29.70	42308	48400
USSR	L	79 7 9	5730N	16624W	18746.8	36	3.000	7902	2.63	1.96	27738	35840
USSR	M	79 923	5731N	16740W	18750.5	36	1.867	4377	2.63	1.55	37423	41800
JAPAN	L	79 711	5618N	17108W	18325.3	85	1.333	3671	2.60	5.18	75229	11000
KOREA	M	80 830	5309N	16705W	17854.9	85	2.437	6274	2.60	4.56	75226	99000
JAPAN	L	79 918	5446N	16529W	18273.4	114	1.833	4734	2.58	4.64	84366	89100
JAPAN	L	79 820	5447N	16530W	18276.7	92	3.833	9840	2.57	2.09	70020	79860
JAPAN	L	79 725	5453N	16544W	18288.8	85	1.750	4369	2.50	3.83	28631	33000
USSR	M	80 713	5738N	16704W	18250.8	36	3.000	7444	2.48	1.29	26436	33800
KOREA	M	80 514	5432N	16535W	18206.2	148	7.333	18949	2.46	3.10	75891	93940
JAPAN	L	79 617	5448N	16540W	18271.0	101	1.600	4969	2.44	2.31	27171	31240
JAPAN	L	79 711	5605N	16941W	18351.7	79	1.833	4345	2.37	5.10	51535	55800
JAPAN	L	79 723	5444N	16532W	18261.8	130	2.583	6096	2.36	5.56	61004	67100
JAPAN	L	79 716	5602N	16949W	18309.8	78	2.250	5326	2.32	4.95	13694	18920
KOREA	M	80 528	5722N	16703W	18743.8	39	4.500	10433	2.32	2.09	77567	82000
USSR	M	79 715	5602N	16715W	18737.0	32	2.667	6149	2.31	0.94	27511	33660
JAPAN	L	80 631	5524N	16755W	18286.5	104	2.833	6340	2.24	5.15	81660	88000
JAPAN	L	79 716	5602N	16943W	18325.3	120	1.500	3338	2.23	6.09	18662	22000
MEXICO	S	79 8 2	5447N	15815W	18508.6	97	1.500	3294	2.20	9.71	2206	5500
JAPAN	L	79 7 3	5537N	16814W	18301.3	94	2.000	4390	2.20	4.33	23110	27500
JAPAN	L	79 530	5444N	16528W	18265.9	121	1.583	3461	2.19	2.73	56159	59820
USSR	M	79 731	5732N	16718W	18750.2	36	2.083	4541	2.18	1.07	11299	15840
JAPAN	L	79 7 8	5550N	16831W	18352.8	91	2.667	5780	2.17	5.62	16220	22000
JAPAN	L	80 630	5442N	16626W	18190.3	123	2.167	4961	2.15	3.49	52539	57200
KOREA	M	80 525	5716N	16642W	18738.2	40	1.583	3385	2.14	2.71	19935	23320
JAPAN	L	79 7 4	5602N	16949W	18309.8	85	2.667	5849	2.12	4.73	93351	95000
JAPAN	L	79 7 3	5535N	16627W	18300.8	90	2.167	4582	2.11	4.32	21158	25740
JAPAN	L	79 821	5455N	16538W	18031.3	75	1.917	3983	2.08	4.87	13617	17600
JAPAN	L	80 5 3	5540N	16847W	18297.0	124	1.667	3436	2.06	3.59	106564	110000
KOREA	M	80 729	5726N	16603W	18742.0	32	6.333	13056	2.06	2.32	65944	99000
JAPAN	L	79 711	5528N	16804W	18295.9	92	3.333	6853	2.06	3.21	43747	50800
JAPAN	L	79 7 9	5554N	16834W	18433.7	81	2.000	4088	2.04	5.45	36832	40920

*** NOTE *** THE ACCURACY OF POSITION AND LOGAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-11 (continued). PACIFIC COD, JULY-SEPTEMBER 1979-80

COUNTRY	CLASS	DATE	YR	LCNG	7X	7Y	7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE (LBS/FT-H)	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	80 9 5	5446N	16546M	18256.0	34683.8	48251.2	126	1.833	3713	2.03	4.61	13887	13887
JAPAN	L	79 7 27	5466N	16545M	18257.0	34681.4	48245.5	123	2.333	4703	2.02	4.23	39737	44446
USSR	M	79 7 14	5737N	16707M	18743.2	34090.5	48833.7	33	2.500	4996	2.00	1.03	24264	29266
JAPAN	L	79 7 12	5536N	16826M	18308.5	34979.6	49264.7	82	1.250	2466	1.97	2.54	47914	50360
JAPAN	L	79 7 4	5539N	16835M	18311.8	34995.6	49261.2	81	2.167	4250	1.96	3.37	88150	92400
JAPAN	L	79 8 17	5447N	16543M	18263.5	34674.9	48235.7	106	1.833	3580	1.95	3.59	47020	50600
JAPAN	L	80 9 12	5449N	16603M	18251.0	34718.5	48354.3	92	1.500	2910	1.94	4.92	85090	88000
KOREA	M	79 7 21	5433N	16534M	18211.7	34678.5	48159.9	68	2.917	5618	1.93	2.00	192382	198000
JAPAN	L	79 8 19	5449N	16526M	18285.1	34630.4	48140.0	90	3.000	5745	1.92	1.98	104255	110000
KOREA	M	79 8 6	5433N	16536M	18209.5	34683.0	48171.2	77	6.833	12957	1.90	5.28	86043	99000
JAPAN	L	79 7 10	5529N	16810M	18292.5	34952.4	49158.4	100	2.500	4721	1.89	3.59	63479	68200
JAPAN	L	79 7 16	5525N	16803M	18280.2	34941.5	49109.0	120	2.250	4243	1.89	4.03	39737	44000
USSR	M	79 8 1	5737N	16721M	18750.8	34300.9	48973.8	35	2.000	3709	1.85	6.97	16091	19800
JAPAN	L	79 8 1	5609N	16949M	18360.3	35110.0	49788.2	74	2.083	3832	1.84	3.85	35108	38940
JAPAN	L	80 9 10	5448N	16529M	18285.9	34630.0	48132.6	98	2.750	5057	1.84	4.22	175343	180400
JAPAN	L	79 9 17	5452N	16540M	18288.4	34638.4	48226.9	71	1.667	3048	1.83	8.37	168432	172480
JAPAN	L	79 8 3	5609N	16944M	18372.9	35103.4	49767.2	84	1.417	2583	1.82	3.14	70017	72800
JAPAN	L	80 9 21	5446N	16548M	18253.8	34588.5	48262.8	115	2.833	5094	1.80	3.91	41106	46200
USSR	M	79 7 12	5737N	16643M	18750.3	34177.1	48725.1	33	2.167	3867	1.78	1.18	27373	31240
JAPAN	L	79 7 14	5521N	16743M	18287.0	34902.1	48989.3	88	1.667	2960	1.78	2.70	8920	11880
KOREA	M	79 8 22	5506N	16730M	18224.3	34891.4	48677.9	131	6.833	15591	1.77	7.35	19849	25640
JAPAN	L	79 8 19	5452N	16558M	18270.0	34701.5	48331.3	87	2.583	4553	1.76	3.35	52647	57200
JAPAN	L	79 7 3	5536N	16828M	18305.2	34983.8	49275.1	84	2.417	4157	1.72	3.84	97943	103200
JAPAN	L	80 9 2	5606N	16943M	18353.9	35102.6	49745.1	71	1.833	3149	1.72	2.132	102451	103600
JAPAN	L	79 7 11	5602N	16955M	18292.9	35117.3	49781.2	84	1.750	2923	1.71	5.72	81467	83600
JAPAN	L	80 8 28	5450N	16553M	18266.3	34693.2	48296.8	88	2.583	4366	1.69	8.49	17634	22000
KOREA	M	79 9 6	5543N	16604M	18482.5	34603.2	48453.9	147	6.500	10880	1.67	7.28	77120	88000
JAPAN	L	79 7 11	5602N	16955M	18292.9	35117.3	49781.2	84	1.750	2923	1.67	5.20	23917	26940
JAPAN	L	80 7 3	5619N	16807M	18546.5	34872.0	49270.8	82	2.667	4445	1.67	7.33	59955	103400
JAPAN	L	80 9 10	5442N	16526M	18259.3	34543.9	48126.9	124	2.000	3327	1.66	4.21	124273	127800
JAPAN	L	80 9 25	5444N	16532M	18261.8	34654.3	48166.9	120	2.417	3985	1.65	3.74	112615	116600
JAPAN	L	79 7 17	5515N	16753M	18289.9	34822.0	48929.6	109	2.167	3564	1.64	6.05	14256	18200
JAPAN	L	79 7 4	5536N	16829M	18301.6	34985.9	49280.2	85	2.250	3636	1.62	5.48	40364	44000
KOREA	M	80 7 29	5726N	16557M	18742.5	34108.2	48437.0	37	6.083	9823	1.61	2.64	73777	83600
USSR	M	79 7 27	5741N	16700M	18750.7	34201.1	48828.3	33	2.500	4031	1.61	0.98	18409	22440
USSR	M	79 9 24	5731N	16739M	18750.5	34407.3	49104.3	36	1.500	2393	1.60	1.45	37207	39600
JAPAN	L	79 7 17	5603N	17015M	18237.9	35132.9	49858.1	79	1.833	2912	1.59	4.84	129038	132000
JAPAN	L	80 9 1	5543N	16843M	18322.0	35008.6	49375.9	85	0.833	1311	1.57	4.77	113089	114400
JAPAN	L	79 8 29	5458N	16551M	18303.3	34673.5	48501.5	115	3.500	5500	1.57	3.06	104500	110000
USSR	M	79 7 23	5437N	15840M	16475.9	33788.2	45674.6	87	1.750	2743	1.57	9.53	23657	26400
KOREA	M	80 9 14	5434N	16532M	18215.4	34672.2	48150.2	93	7.750	12018	1.55	3.51	61902	73920
JAPAN	L	79 7 26	5443N	16536M	18253.4	34665.6	48188.4	144	2.333	3006	1.55	7.09	31594	35200
JAPAN	L	79 8 15	5445N	16524M	18274.1	34633.4	48122.0	114	2.667	4063	1.52	2.97	50937	55000
JAPAN	L	79 7 11	5555N	16840M	18401.1	34990.9	49401.4	92	3.333	5027	1.51	3.72	108713	113740
USSR	M	79 9 6	5736N	16640M	18750.0	34174.9	43707.2	36	2.500	3756	1.50	1.36	11644	15400

*** NCI. *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-11 (continued). PACIFIC COD, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPNCR 7X	LCRAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
KOREA	M	60 917	5442N	16615W	18204.3	34757.3	48408.3	148.	8.083	12135.	1.50	3.52	51005.	63140.
JAPAN	L	79 712	5630N	17126W	18107.6	35080.6	50121.9	77.	2.000	2995.	1.50	2.42	206005.	209000.
USSR	M	79 9 8	5730N	16750W	18750.6	34452.3	49178.5	36.	3.000	4402.	1.47	1.17	32938.	37400.
USSR	M	79 9 4	5602N	16623W	18745.4	33915.1	48542.3	30.	3.000	4421.	1.47	1.07	30779.	52200.
JAPAN	L	60 230	5435N	16535W	18219.4	34677.4	48169.0	142.	2.600	2945.	1.47	4.72	43255.	46200.
USSR	M	79 723	5735N	16721W	18742.6	34150.9	48327.5	33.	2.167	3178.	1.47	0.98	15082.	18260.
KOREA	M	79 717	5432N	16540W	18200.4	34693.0	49192.2	128.	12.750	16082.	1.47	2.80	113318.	132000.
JAPAN	L	79 718	5604N	17009W	18265.2	35129.3	49842.1	73.	2.583	3783.	1.46	3.77	88617.	92400.
JAPAN	L	60 6 7	5513N	16741W	18246.1	34907.2	48956.4	96.	4.667	6771.	1.44	6.42	114279.	121000.
JAPAN	L	79 7 5	5530N	16825W	18310.1	34977.5	49259.5	80.	3.833	5194.	1.41	3.99	57306.	62700.
JAPAN	L	60 829	5449N	16602W	18252.1	34716.2	48348.6	95.	1.000	1390.	1.39	4.84	65010.	70400.
USSR	M	79 714	5738N	16641W	18750.5	34613.1	48710.1	33.	2.500	3469.	1.39	1.14	23151.	26620.
JAPAN	L	60 516	5444N	16525W	18268.9	34637.7	48126.2	124.	2.750	3005.	1.38	4.26	165595.	169400.
USSR	M	79 712	5735N	16640W	18750.0	34174.9	48707.2	33.	3.000	4133.	1.38	1.30	36127.	40260.
KOREA	M	60 525	5708N	16646W	18725.9	34382.8	48781.5	40.	1.667	2293.	1.38	2.66	21027.	23320.
KOREA	M	60 9 8	5720N	16625W	18735.2	34238.0	48630.4	39.	4.333	5923.	1.37	0.43	152477.	158400.
JAPAN	L	60 5 9	5442N	16541W	18270.0	34668.3	48225.8	101.	3.250	4441.	1.37	4.69	61559.	66000.
JAPAN	L	79 814	5442N	16525W	18260.4	34641.5	48123.1	141.	2.563	3521.	1.36	8.49	44879.	48400.
JAPAN	L	79 7 5	5603N	16954W	18317.7	35116.1	49790.6	71.	1.000	1363.	1.36	1.18	75637.	77000.
USSR	M	79 829	5745N	16700W	18750.1	34169.3	48819.5	31.	2.500	3489.	1.36	0.99	14211.	17600.
KOREA	M	60 913	5435N	16535W	18219.4	34677.4	48169.0	93.	6.333	8549.	1.35	2.36	70211.	78760.
USSR	M	79 913	5704N	16615W	18717.7	34303.9	48576.1	34.	2.000	2617.	1.31	1.38	25763.	29380.
USSR	M	79 711	5732N	16644W	18748.8	34217.2	48740.7	34.	3.000	3916.	1.31	1.26	16524.	22440.
JAPAN	L	79 715	5518N	16744W	18269.2	34907.9	49086.7	97.	3.500	4486.	1.28	3.13	24114.	28800.
JAPAN	L	79 8 4	5516N	16733W	18263.1	34888.4	48716.0	93.	2.250	2876.	1.28	3.08	164324.	167200.
USSR	M	60 9 5	5435N	16118W	18405.6	34067.6	46630.8	57.	0.750	950.	1.27	2.24	3450.	4400.
USSR	M	79 7 3	5802N	16641W	18743.2	33968.6	46566.2	30.	3.833	4831.	1.26	1.07	29047.	33880.
JAPAN	L	79 720	5452N	16534W	18302.5	34930.5	49261.4	115.	2.250	2815.	1.25	4.53	6185.	11000.
USSR	M	79 829	5748N	16721W	18747.5	34211.3	48947.1	31.	2.583	3223.	1.25	1.30	14377.	17600.
JAPAN	L	79 825	5446N	16523W	18279.3	34629.1	48117.7	100.	1.583	1973.	1.25	2.28	29047.	31020.
JAPAN	L	79 722	5436N	16534W	18224.9	34873.3	48165.0	109.	1.167	1444.	1.24	6.11	26716.	28160.
JAPAN	L	60 9 5	5446N	16544W	18258.1	34679.1	48239.7	114.	1.833	2237.	1.22	6.20	79163.	81400.
JAPAN	L	60 919	5445N	16530W	18268.2	34647.7	48156.9	126.	1.667	2011.	1.21	4.38	66189.	90200.
JAPAN	L	79 720	5452N	16534W	18294.2	34843.9	48191.0	86.	4.583	5517.	1.20	6.95	108883.	114400.
JAPAN	L	79 724	5442N	16530W	18255.3	34653.3	48152.0	127.	3.750	4508.	1.20	3.78	61492.	66300.
JAPAN	L	79 710	5552N	16843W	18378.3	35030.6	49407.1	83.	1.333	1598.	1.20	3.13	2802.	4400.
JAPAN	L	79 8 9	5451N	16605W	18257.9	34719.8	48369.6	92.	2.917	3689.	1.20	3.30	128511.	132000.
USSR	M	79 910	5731N	16705W	18749.3	34293.5	48980.6	33.	3.000	3570.	1.19	1.22	31630.	35200.
JAPAN	L	79 915	5502N	16644W	18265.0	34793.2	48614.4	81.	2.000	2377.	1.19	6.64	48223.	50600.
JAPAN	L	60 525	5446N	16631W	18203.2	34787.3	48508.0	131.	2.750	3256.	1.18	4.47	29744.	33000.
USSR	M	79 9 8	5737N	16654W	18750.6	34212.6	48797.2	34.	2.667	3167.	1.18	1.40	25453.	28600.
KOREA	M	60 513	5443N	16559W	18228.1	34715.2	48320.1	159.	7.417	8734.	1.18	5.32	120186.	128920.
KOREA	M	79 922	5442N	16534W	18251.1	34662.7	48175.1	153.	4.583	5587.	1.17	8.74	18633.	24200.
KOREA	M	60 911	5442N	16600W	18222.4	34723.2	48323.8	153.	6.583	7628.	1.16	5.16	56172.	63800.
USSR	M	79 926	5735N	16709W	18750.5	34276.8	48899.4	37.	2.167	2463.	1.14	1.04	42197.	44660.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-II (continued). PACIFIC COD, JULY-SEPTEMBER 1979-80

COUNTRY	VESSEL CLASS	DATE YR/MO	LAT	LCAG	APPROX LORAN-C PULSE RATES 7X 7Y 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	80 9 18	5445N	16537N	18261.0 34604.3 48197.5	123	2.417	2735	1.13	4.20	184265	167000
JAPAN	L	79 7 14	5527N	16503W	18301.0 34937.1 49121.1	82	1.917	2167	1.13	2.50	51073	53240
JAPAN	L	80 8 31	5552N	16840W	18382.9 34994.1 49391.3	84	2.063	2343	1.12	4.40	118657	121000
JAPAN	L	79 7 9	5601N	17005W	18255.7 35126.3 49014.3	82	2.917	3279	1.12	5.11	18721	22000
JAPAN	L	79 7 8	5554N	16851W	18377.9 35015.9 49455.5	100	1.167	1310	1.12	5.94	21470	32800
KOREA	M	80 5 18	5524N	16757W	18243.9 34929.6 49074.9	130	7.417	8286	1.12	4.62	91374	99600
JAPAN	L	79 7 14	5511N	16730W	18251.2 34805.4 48651.5	95	2.500	2776	1.11	4.16	45624	49400
JAPAN	L	79 7 26	5490N	16540W	18273.7 34602.2 48221.5	90	3.750	4163	1.11	3.34	110897	115060
JAPAN	S	80 5 30	5704N	16631W	18716.6 34356.4 48683.4	39	3.667	1843	1.11	2.19	17957	19000
USK	M	80 7 21	5434N	16123W	18404.3 34082.1 48061.5	60	1.500	1653	1.10	2.64	20347	22000
KOREA	M	79 7 13	5433N	16538W	18207.2 34687.6 48182.6	101	4.083	4490	1.10	4.00	79110	83600
USK	M	79 6 30	5740N	16703W	18756.0 34218.7 48850.0	31	3.083	3381	1.10	1.26	14219	17600
JAPAN	L	79 7 27	5446N	16550W	18251.7 34693.2 49274.3	112	2.333	2555	1.09	4.53	31105	33660
JAPAN	L	79 7 8	5602N	16957W	18287.2 35119.3 49784.7	75	2.003	2281	1.09	4.62	35119	37400
JAPAN	L	79 7 2	5543N	16802W	18382.9 34917.1 49157.1	74	1.083	1182	1.09	3.23	22578	23760
JAPAN	L	79 7 26	5449N	16543W	18272.2 34671.2 48233.2	96	2.750	2957	1.08	2.80	22343	25300
JAPAN	L	79 8 2	5602N	16953W	18336.6 35117.1 49325.7	85	1.500	1596	1.06	5.16	13804	15400
KOREA	M	80 5 7	5710N	16659W	18729.9 34414.4 48867.2	39	5.583	5894	1.06	2.20	88874	90200
USK	M	79 5 12	5731N	16653W	18732.1 34315.9 48704.0	34	3.083	3247	1.05	3.00	104546	110440
USK	M	79 3 8	5731N	16650W	18746.7 34244.1 46781.6	33	2.833	2979	1.05	1.42	38531	41800
KOREA	M	80 9 17	5590N	16725W	18193.3 34887.6 48633.8	149	8.833	9240	1.05	1.42	45421	48400
JAPAN	L	80 8 22	5526N	16802W	18287.5 34938.3 49106.7	108	1.583	1656	1.05	3.67	66654	75900
KOREA	M	79 3 16	5437N	16553W	18216.9 34712.0 48273.2	145	7.417	7646	1.03	4.94	26944	28600
JAPAN	L	79 7 28	5502N	16729W	18241.9 34885.7 48880.7	96	1.833	1878	1.03	8.23	36354	44000
JAPAN	L	80 9 19	5444N	16633W	18183.2 34799.0 48523.6	137	4.833	4902	1.02	6.16	187322	189200
MEXICO	S	79 8 18	5457N	15810W	18523.6 35578.3 45466.1	87	0.417	422	1.01	3.58	78698	83600
KOREA	M	80 8 5	5207N	16710W	17633.6 34942.9 48469.7	115	5.667	5720	1.01	5.64	128	550
JAPAN	L	80 8 29	5448N	16607W	18241.8 34729.5 48375.2	96	3.917	3943	1.01	5.94	61380	67100
JAPAN	L	79 7 12	5630N	17110W	18163.6 35096.5 50111.5	77	1.667	1674	1.01	7.43	110457	114400
KOREA	M	79 7 24	5446N	16537W	18265.4 34662.5 48199.2	137	5.083	5101	1.00	2.76	42326	44000
USK	M	80 7 22	5434N	16123W	18404.3 34082.1 48061.5	57	1.667	1662	1.00	10.10	25699	30800
KOREA	M	80 9 11	5442N	16608W	18215.3 34736.9 48357.7	153	7.667	7662	1.00	4.35	9332	11000
JAPAN	L	79 7 1	5606N	16941W	18358.8 35099.8 49741.3	85	1.833	1828	1.00	5.15	95038	106700
JAPAN	L	79 8 21	5456N	16544W	18293.2 34664.2 48253.6	77	2.167	2159	1.00	2.71	42172	44000
KOREA	M	80 9 18	5545N	16850W	18323.0 35021.1 49418.3	148	9.167	9125	1.00	8.07	77041	79200
JAPAN	L	80 8 29	5431N	16601W	18262.3 34710.3 48346.7	86	1.333	1519	1.00	4.55	31355	40400
USK	M	79 7 10	5358N	16822W	18326.6 34969.0 49250.3	79	1.833	1799	0.99	6.48	14081	15400
JAPAN	L	79 7 10	5605N	16815W	18488.3 34914.9 49292.9	87	1.333	1502	0.98	3.52	51681	53680
JAPAN	L	79 7 25	5452N	16549W	18275.4 34680.0 48273.2	84	2.167	2115	0.98	4.65	11896	13200
USK	M	79 7 5	5737N	16622W	18745.9 34129.1 48626.5	36	3.000	2922	0.98	6.60	63885	66000
JAPAN	L	79 8 3	5602N	16952W	18345.1 35113.7 49796.0	70	2.250	2185	0.97	0.98	12698	15620
JAPAN	L	79 9 22	5444N	16530W	18263.9 34649.6 48155.3	125	1.250	1214	0.97	7.15	46215	46400
KOREA	M	80 5 4	5442N	16550W	18224.7 34714.6 48312.5	159	7.667	7443	0.97	4.95	43566	44880
KOREA	M	80 9 2	5435N	16536W	18216.3 34679.7 48174.7	156	7.063	6870	0.97	4.30	71757	79200

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-II (continued). PACIFIC COD, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE YMMDD	LAT	LCNG	APPROX LORAN-C PULSE RATE 7Y	DEPTH (FMS)	HOURS FRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
RUSSIA	M	79 720	5447N	16525W	16281.0	34631.9	48131.0	6210.	0.97	2.61	48790.	55000.
JAPAN	L	79 926	5447N	16530W	18276.7	34643.5	48160.2	1692.	0.97	2.29	9302.	11000.
KOREA	M	79 811	5445N	16536W	18262.1	34662.0	48191.8	7005.	0.97	4.56	47995.	55000.
JAPAN	L	79 816	5448N	16550W	18260.6	34689.7	48277.9	3922.	0.96	3.04	89760.	96600.
JAPAN	L	80 829	5448N	16555W	18255.2	34701.4	48306.6	2678.	0.96	6.74	93922.	96600.
USSR	M	79 921	5721N	16606W	18738.8	34170.1	48502.5	2868.	0.96	1.79	29252.	32120.
KOREA	M	80 510	5454N	16708W	18192.9	34558.1	48727.7	6672.	0.95	4.12	58888.	65960.
USSR	M	79 912	5731N	16656W	18746.9	34263.8	48821.2	1903.	0.95	1.05	17897.	19000.
JAPAN	L	79 717	5524N	16757W	18283.6	34929.6	49074.0	3483.	0.95	3.12	25117.	28000.
JAPAN	L	79 719	5554N	16830W	18403.2	34969.1	49344.4	2451.	0.95	2.71	107549.	110000.
JAPAN	L	79 718	5554N	16849W	18381.1	35011.7	49445.2	2589.	0.94	6.78	52631.	55220.
KOREA	M	80 815	5301N	16729W	17551.3	34972.1	48540.3	4916.	0.94	4.49	127084.	132000.
USSR	M	79 920	5722N	16615W	18740.3	34192.4	48561.5	2723.	0.93	1.39	39517.	42240.
JAPAN	L	80 916	5512N	16738W	18245.1	34961.8	48937.5	2099.	0.93	2.04	209101.	211200.
KOREA	M	80 815	5305N	16716W	17605.6	34952.5	48492.1	6361.	0.93	7.39	134439.	140600.
JAPAN	L	80 914	5549N	16829W	18381.2	34972.7	49323.0	620.	0.93	5.74	65380.	66000.
USSR	M	79 713	5729N	16640W	18747.1	34225.7	48715.6	2863.	0.93	1.31	23977.	26840.
JAPAN	L	79 713	5515N	16737W	18262.6	34896.0	48940.5	998.	0.92	3.07	60802.	61600.
KOREA	M	79 913	5310N	16650W	17692.7	34911.3	48384.5	5206.	0.92	7.11	58194.	103400.
MEXICO	S	79 816	5425N	15959W	18420.9	33917.3	46158.5	612.	0.92	1.18	4888.	5500.
JAPAN	L	79 715	5513N	16736W	18251.4	34896.2	48929.5	3188.	0.91	4.03	40812.	44000.
USSR	M	79 910	5717N	16635W	18736.8	34890.3	48900.3	2808.	0.91	1.18	22832.	35640.
JAPAN	L	80 828	5428N	16652W	18205.0	34825.7	48635.6	1363.	0.91	5.92	38237.	39600.
KOREA	M	80 913	5432N	16537W	18201.7	34687.0	49175.2	501.	0.91	5.21	42081.	47520.
KOREA	M	79 713	5422N	16546W	18282.4	34672.8	48261.2	3019.	0.91	3.74	108981.	110000.
JAPAN	M	79 711	5726N	16624W	18744.2	34194.6	48616.5	2714.	0.90	1.00	13346.	16950.
USSR	M	79 727	5740N	16646W	18750.8	34183.9	48739.1	2773.	0.90	0.83	19887.	22660.
USSR	M	79 718	5737N	16628W	18745.9	34129.1	48626.5	901.	0.90	0.94	6139.	7040.
JAPAN	L	79 716	5536N	16827W	18306.6	34961.7	49269.9	1972.	0.90	2.96	21968.	23540.
USSR	M	79 714	5738N	16641W	18750.5	34163.1	48710.1	2045.	0.90	1.09	8675.	11220.
USSR	M	80 720	5432N	16116W	18402.3	34071.6	46819.4	1861.	0.89	9.39	9139.	11000.
USSR	M	79 726	5743W	16652W	18750.7	34159.2	48772.1	1704.	0.89	0.92	16396.	18420.
JAPAN	L	80 825	5537N	16807W	18342.7	34936.7	49160.9	1040.	0.89	6.82	100160.	101200.
KOREA	M	79 715	5450N	16555W	18284.7	34650.2	48194.3	3926.	0.89	3.54	66474.	70400.
JAPAN	L	80 826	5517N	16742W	18266.0	34904.7	48973.1	1101.	0.88	4.34	45099.	46200.
USSR	M	79 729	5745N	16608W	18750.8	34006.3	48481.4	2319.	0.87	0.91	13081.	15400.
USSR	M	79 817	5812N	16735W	18716.9	34034.3	48956.9	1962.	0.85	1.01	9435.	11000.
USSR	M	79 725	5745N	16647W	18745.6	34096.0	48726.5	2110.	0.84	0.90	22090.	24200.
USSR	M	79 923	5723N	16744W	18749.9	34447.9	49143.8	2179.	0.84	1.57	40721.	42900.
JAPAN	L	80 917	5445N	16525W	18273.1	34635.8	48127.2	1750.	0.84	4.71	86250.	86000.
USSR	M	79 729	5751N	16643W	18745.1	34067.2	48696.1	1959.	0.84	0.63	18061.	20020.
USSR	M	79 911	5741N	16651W	18750.8	34172.2	48769.7	2622.	0.83	1.13	14978.	17600.
KOREA	M	79 720	5432N	16538W	18205.1	34864.7	43169.5	3656.	0.83	3.71	62344.	65600.
KOREA	M	79 814	5432N	16538W	18202.6	34689.3	48160.8	6201.	0.83	9.12	59799.	56000.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

192 available trawl records (exceeding 500 lbs/hr CPUE) were not included.

TABLE C-12. PACIFIC OOD, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	LAT- YMPDD	LAT	LCNG	APPROX LORAN-C PULSE 7X	RATES 7Z	DEPTH (FMS)	HOURS TRAWLCO	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FAISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	801018	505N	16737M	18230-2	34903-1	4923.7	128	42286	22.44	0.67	1314	83600
JAPAN	L	791026	5355N	16825M	18421-5	34955-7	4930.2	85	14156	14.16	2.60	38224	50380
JAPAN	L	791016	5454N	16655M	18211-1	34829-7	4858.9	111	1045	8.04	6.64	5595	13640
JAPAN	L	801018	5512N	16732M	18245-1	34901-8	48937.5	114	17157	7.35	0.66	443	17600
USSR	M	791215	5625N	17123M	18093-0	35052-6	50102.9	79	10946	6.57	2.79	2254	13200
JAPAN	M	801115	5730N	16631M	18747-2	34109-4	48657.5	38	11593	6.05	3.13	14807	10400
JAPAN	L	791033	5442N	16521M	18262-4	34636-8	48111.4	101	6830	5.12	2.15	42230	9060
USSR	M	801012	5426N	16012M	18417-4	33943-3	48235.6	82	10866	4.66	2.92	30274	1140
JAPAN	L	791033	5446N	16521M	18279-5	34629-1	48117.7	96	5796	4.64	2.77	40844	46840
JAPAN	L	791022	5446N	16524M	18278-4	34631-5	48123.6	101	5304	4.55	2.23	34296	39600
JAPAN	L	791033	5448N	16527M	18283-9	34634-8	48144.3	101	5630	4.50	2.70	48270	53900
KOREA	M	801118	5446N	16545M	18257-0	34681-4	48245.5	112	16828	4.21	6.49	40372	57200
USSR	M	791215	5628N	17125M	18100-9	35085-4	50114.7	82	8299	4.15	3.25	11501	19800
JAPAN	L	791033	5446N	16523M	18275-3	34629-1	48117.7	96	5119	4.09	2.60	43281	48400
JAPAN	L	791011	5451N	16530M	18293-8	34636-2	48166.7	79	4093	4.09	2.90	114047	118140
JAPAN	L	791027	5522N	16853M	18361-9	35021-7	49458.5	96	2035	4.07	6.80	53845	55680
JAPAN	L	801013	5512N	16735M	18249-4	34895-2	48921.3	107	12881	4.07	5.54	57515	70400
JAPAN	L	791026	5554N	16851M	18377-9	35015-9	49455.5	94	2931	3.91	5.50	117409	120340
KOREA	M	801031	5447N	16528M	18278-7	34639-1	48148.5	143	18952	3.86	7.33	116448	136400
KOREA	M	801111	5448N	16542M	18269-0	34670-7	48231.6	128	8390	3.76	5.57	23610	33000
JAPAN	L	791033	5446N	16523M	18279-3	34629-1	48117.7	102	6535	3.73	2.36	72005	78340
JAPAN	L	801028	5442N	16522M	18263-4	34634-4	48105.6	89	10247	3.51	6.47	38153	48400
JAPAN	L	801033	5519N	16740M	18280-5	34897-8	48967.9	89	8777	3.51	9.42	35223	44000
KOREA	M	801120	5707N	16637M	18231-8	34358-7	48721.9	41	5851	3.51	3.04	31549	37400
JAPAN	M	801114	5727N	16625M	18745-0	34190-9	48621.9	35	3459	3.50	2.70	25101	28600
KOREA	M	801124	5615N	16949M	18403-9	35109-2	49814.9	85	3788	3.20	3.50	39612	48400
KOREA	M	801112	5617N	16943M	18432-8	35100-2	49797.6	73	15433	3.19	6.20	73327	82660
JAPAN	L	791020	5445N	16525M	18273-1	34635-8	48127.8	108	2660	3.19	3.12	11200	13860
JAPAN	S	801030	5445N	15823M	18502-2	35646-1	45062.2	115	2354	3.14	4.12	22506	24860
JAPAN	L	791020	5446N	16525M	18277-4	34633-9	48129.4	106	4996	3.00	3.52	37994	42900
JAPAN	L	791033	5445N	16525M	18273-1	34635-8	48127.8	110	3426	2.94	2.74	34294	38280
JAPAN	M	801120	5711N	16645M	18730-2	34361-3	48772.6	40	3896	2.92	2.89	30204	34100
KOREA	M	801021	5259N	16754M	17484-8	35004-8	48643.1	60	2431	2.92	8.80	17369	19800
JAPAN	L	791019	5457N	16707M	18209-8	34852-3	48729.9	105	3699	2.77	4.03	41841	45540
JAPAN	L	791013	5448N	16530M	18281-0	34642-0	48161.8	98	3929	2.77	2.46	59871	63000
USSR	M	791213	5628N	17137M	18032-3	35065-3	50125.8	93	6853	2.74	2.95	1947	8300
POLAND	M	801222	5554N	16854M	18372-9	35022-9	49470.8	109	9009	2.70	5.95	5511	14520
JAPAN	S	791239	5607N	17029M	18217-4	35137-9	49920.2	98	12401	2.66	2.92	11359	23760
JAPAN	L	791033	5446N	16529M	18247-7	34654-6	48143.0	126	4606	2.63	3.94	6394	11000
JAPAN	L	791017	5458N	16710M	18210-8	34857-6	48748.7	116	3501	2.63	3.45	80099	83600
JAPAN	M	801119	5713N	16646M	18732-9	34352-2	48777.7	40	3977	2.57	2.99	51476	59400
JAPAN	L	791033	5444N	16524M	18265-9	34635-3	48120.4	105	3999	2.53	2.93	26581	30580
KOREA	M	801139	5444N	16526M	18267-9	34640-1	48132.1	114	10661	2.51	5.12	4739	15400
KOREA	M	791027	5443N	16553M	18234-9	34705-4	48285.9	142	13154	2.51	5.47	41846	50000
JAPAN	L	801016	5503N	16735M	18200-4	34905-4	48896.3	168	12316	2.46	4.73	75684	88000

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION**

TABLE C-12 (continued). PACIFIC COD, OCTOBER-DECEMBER 1979-80

VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES			DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LB/S/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
				7X	7Y	7Z							
M	0119	5445N	16546W	18251.5	34885.6	48249.5	121	5.500	13513.	2.46	95687.	112200.	
M	01223	5540N	16846W	18336.3	35012.3	49401.6	93	3.500	8493.	2.43	38687.	44000.	
L	0101	5444N	16528W	18285.9	34844.9	48143.7	105	1.250	3001.	2.40	56399.	59400.	
M	01120	5710N	16648W	18725.0	34377.4	48793.5	41	1.917	4519.	2.36	17481.	22000.	
M	0110	5704N	16615W	18717.7	34303.9	48576.1	36	1.700	3817.	2.25	28303.	32120.	
L	01019	5458N	16712W	18266.0	34861.9	48759.6	121	3.667	8191.	2.23	24809.	33000.	
M	01125	5442N	16538W	18246.9	34872.1	48194.2	153	10.583	23542.	2.22	44658.	68200.	
M	01222	5535N	16812W	18312.6	34952.5	49181.5	82	8.167	18099.	2.22	135901.	154000.	
L	01014	5449N	16534W	18281.4	34849.7	48166.8	94	2.250	4933.	2.19	55567.	60500.	
L	01013	5447N	16527W	18279.7	34836.7	48142.7	99	0.667	1435.	2.15	5165.	8600.	
M	01116	5436N	16533W	18226.0	34671.0	48159.3	116	6.917	14838.	2.15	128162.	143000.	
M	01119	5710N	16650W	18725.2	34384.1	48806.9	40	1.167	2456.	2.11	10742.	13200.	
L	01010	5521N	16728W	18307.0	34867.7	48907.3	80	2.500	5255.	2.10	38745.	44000.	
L	01018	5455N	16704W	18201.7	34848.2	48708.5	121	1.083	2258.	2.08	14682.	16940.	
L	01013	5447N	16529W	18277.7	34841.5	48154.4	106	2.333	4750.	2.04	52890.	57640.	
M	01213	5555N	16842W	18388.9	35006.6	49443.5	109	5.083	16344.	2.03	11216.	21560.	
M	012	5708N	16624W	18724.4	34309.2	48634.1	40	0.500	1016.	2.03	41004.	42020.	
M	0119	5447N	16555W	18250.7	34703.2	48304.8	104	3.083	6076.	1.97	59924.	66300.	
L	01012	5451N	16528W	18295.7	34651.3	48154.9	83	0.583	1137.	1.95	11323.	115050.	
M	01119	5440N	16531W	18245.6	34659.3	48154.5	132	6.333	12425.	1.95	86675.	99000.	
L	010	5446N	16524W	18278.4	34631.5	48123.0	103	2.083	4044.	1.94	21256.	25300.	
L	01016	5502N	16702W	18232.1	34837.3	48710.0	89	2.167	4406.	1.90	145494.	149600.	
M	01130	5312N	16652W	17698.3	34913.3	48398.3	98	7.250	13082.	1.80	85918.	99000.	
M	01027	5434N	16537W	18242.8	34683.6	48178.0	134	5.750	10388.	1.77	44812.	55000.	
M	01113	5608N	16842W	18370.6	35100.6	49754.3	75	4.583	8038.	1.75	92050.	87120.	
M	01120	5445N	16542W	18255.8	34676.1	48226.4	118	6.500	11350.	1.75	52050.	103400.	
M	010	5720N	16653W	18741.3	34330.5	48817.2	38	2.167	3744.	1.73	29256.	33000.	
L	010	5457N	16659W	18220.9	34634.6	48686.1	100	1.083	1871.	1.73	61469.	63360.	
M	01031	5333N	16616W	18223.7	34846.5	48248.9	91	5.000	8500.	1.70	134500.	143000.	
M	01116	5440N	16602W	18210.8	34730.9	48331.3	169	1.500	2550.	1.70	5150.	7700.	
M	01119	5612N	17105W	18098.0	35124.4	50027.6	92	4.000	6663.	1.67	1037.	7700.	
M	011	5446N	16532W	18270.5	34650.6	48170.2	119	6.417	10873.	1.66	44327.	55000.	
L	010	5452N	16522W	18276.1	34828.6	48110.3	98	1.750	2908.	1.66	28992.	31900.	
M	01114	5601N	16845W	18313.0	35105.9	49738.0	66	7.000	11338.	1.65	45224.	56760.	
M	01116	5441N	16553W	18225.9	34708.7	48282.2	189	2.000	3287.	1.64	9253.	12540.	
M	01115	5727N	16631W	18745.4	34210.4	48561.7	38	2.083	3422.	1.64	29578.	33600.	
M	01213	5628N	17134W	18049.7	35070.5	50123.2	77	1.917	3103.	1.62	8997.	12100.	
M	01113	5441N	16551W	18228.2	34784.1	48270.8	153	7.417	11989.	1.62	13331.	25300.	
L	01010	5522N	16729W	18311.0	34808.6	48915.5	80	2.000	3221.	1.61	58379.	61600.	
L	010	5536N	16838W	18300.3	35002.6	49333.1	93	5.583	8913.	1.60	5387.	14300.	
L	01010	5536N	16737W	18213.8	34906.4	48915.3	157	2.500	3974.	1.59	62026.	66000.	
M	010	5718N	16657W	18739.6	34397.1	48846.2	36	2.000	3744.	1.42	30266.	33440.	
M	01118	5443N	16609W	18216.3	34742.1	48376.0	137	8.667	13601.	1.57	85399.	99000.	
M	010	5726N	16656W	18746.3	34299.5	48629.1	30	2.000	3156.	1.57	23264.	26400.	
M	01122	5706N	16644W	18722.7	34387.9	48769.4	41	1.500	2352.	1.57	37248.	39600.	

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-12 (continued). PACIFIC COD, OCTOBER-DECEMBER 1979-80

COUNTRY	VESSEL CLASS	DATE	LAT	LONG	APPROX LCRAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	791113	5615N	1710W	18095.4 35119.2 50046.6	116.	4.000	6184.	1.55	5.18	636.	6020.
JAPAN	L	791020	5511N	16724W	18259.5 34872.1 46850.8	91.	0.750	1158.	1.54	2.64	87502.	86660.
KOREA	M	8010 1	5444N	16530W	18263.9 34649.6 48155.3	154.	3.583	5332.	1.54	3.27	64868.	70400.
PHILIPPINE	M	8012 2	5541N	16841W	18313.8 35002.2 49358.7	98.	4.417	6757.	1.53	5.19	2483.	9240.
KOREA	M	801124	5613N	16923W	18440.3 35072.6 49702.2	79.	1.667	2515.	1.51	3.75	8485.	11000.
KOREA	M	8010 1	5431N	16536W	18200.6 34686.4 48167.6	93.	5.500	8248.	1.50	3.36	24752.	33000.
USSR	M	791026	5730N	16640W	18747.7 34218.6 48717.0	37.	2.750	4034.	1.47	1.38	52066.	56100.
USSR	M	791127	5627N	17131W	18060.9 35077.2 50117.5	87.	2.083	3054.	1.47	3.72	7946.	11000.
USSR	M	791020	5726N	16642W	18746.7 34239.3 48733.3	38.	3.333	4878.	1.46	1.28	37142.	42020.
JAPAN	L	8010 1	5509N	16734W	18229.2 34697.2 48904.9	118.	3.500	5121.	1.46	4.51	54279.	59400.
USSR	M	7910 5	5717N	16713W	18719.9 34417.8 48954.2	36.	2.000	2907.	1.45	1.64	26133.	29040.
KOREA	M	8011 1	5444N	16527W	18266.9 34642.5 48137.9	123.	4.583	6650.	1.45	5.00	96750.	103400.
JAPAN	M	7912 3	5705N	16625W	18719.9 34330.6 48642.6	41.	1.333	1929.	1.45	3.14	44931.	46860.
KOREA	M	801112	5445N	16523W	18275.1 34631.0 48116.2	112.	5.750	8319.	1.45	4.38	24685.	33000.
JAPAN	L	801127	5450N	16627W	18227.5 34772.4 48492.3	97.	2.750	3954.	1.44	4.61	95046.	99000.
JAPAN	S	791112	5610N	17111W	18054.7 35120.3 50030.5	109.	4.000	5719.	1.43	3.96	1541.	7260.
KOREA	M	801118	5442N	16611W	18209.2 34748.2 48385.9	147.	6.500	9290.	1.43	4.68	19310.	28800.
KOREA	M	801110	5445N	16525W	18273.1 34635.8 48127.8	116.	3.833	5465.	1.43	5.66	53935.	59400.
KOREA	M	791123	5442N	16555W	18228.1 34711.6 48295.5	148.	9.063	12800.	1.41	4.92	42200.	55000.
JAPAN	L	801012	5514N	16734W	18261.7 34800.6 48912.4	91.	4.250	5961.	1.40	8.58	44639.	50600.
KOREA	M	8011 8	5444N	16520W	18267.9 34640.1 48132.1	133.	7.333	10140.	1.36	4.73	104260.	114400.
KOREA	M	801113	5447N	16526W	18280.7 34634.3 48136.7	126.	4.500	6158.	1.37	7.73	92842.	99000.
GERMANY	M	801316	5440N	16534W	18242.4 34666.3 48171.3	169.	4.167	5081.	1.36	5.92	16319.	22000.
JAPAN	M	7912 2	5707N	16631W	18724.8 34405.5 48215.7	40.	1.333	1817.	1.36	2.83	43943.	45760.
GERMANY	M	801316	5440N	16533W	18241.3 34668.7 48177.5	169.	4.500	6120.	1.36	6.15	14760.	20900.
JAPAN	L	791018	5454N	659W	18205.6 34838.5 48678.3	121.	1.333	1807.	1.36	3.89	30973.	32780.
JAPAN	M	801116	5725N	627W	18743.7 34211.1 48637.8	39.	0.667	904.	1.36	2.23	7896.	8800.
JAPAN	L	791019	5451N	6851W	18201.4 34244.9 48627.7	133.	1.333	1793.	1.35	4.61	16907.	18700.
KOREA	M	801110	5445N	6524W	18274.1 34633.4 48122.0	107.	4.333	5603.	1.34	5.17	13997.	19800.
JAPAN	L	791116	5532N	819W	18295.9 34966.6 49215.2	102.	3.500	4639.	1.33	4.85	115701.	120340.
JAPAN	M	801121	5712N	645W	18731.5 34355.1 48771.8	40.	2.750	3529.	1.32	3.00	73371.	77000.
JAPAN	S	791030	5629N	1127W	18095.8 35080.6 50119.8	120.	4.000	5169.	1.29	4.32	2531.	7700.
KOREA	M	801119	5445N	6530W	18268.2 34647.7 48156.9	112.	8.833	11367.	1.29	2.08	100813.	112200.
KOREA	M	801113	5602N	6953W	18292.6 35115.2 49773.3	71.	4.583	5877.	1.28	5.00	47583.	53460.
JAPAN	L	791019	5454N	704W	18198.6 34849.5 48706.0	131.	1.917	2444.	1.28	3.80	77196.	79640.
JAPAN	M	7912 3	5706N	640W	18725.5 34362.8 48741.3	40.	0.583	742.	1.27	1.15	21698.	22440.
JAPAN	M	801117	5727N	620W	18744.7 34174.8 48588.7	38.	1.617	1798.	1.27	2.81	13602.	15400.
JAPAN	L	791015	5444N	6947W	18246.0 34689.7 48253.4	137.	1.000	1264.	1.26	6.00	18536.	19800.
JAPAN	M	7912 4	5701N	6623W	18711.1 34347.1 48631.1	41.	1.250	1574.	1.26	2.32	15586.	17160.
JAPAN	M	801118	5720N	6633W	18739.8 34264.2 48683.7	39.	4.500	5658.	1.26	2.02	27342.	33000.
USSR	M	7910 9	5724N	6713W	18746.1 34370.4 48944.9	38.	2.500	3106.	1.24	1.51	40894.	44000.
JAPAN	L	801111	5445N	6536W	18275.4 34654.5 48198.5	87.	1.500	1640.	1.23	8.07	354.	2200.
JAPAN	L	801015	5500N	6719W	18208.4 34874.7 48802.6	126.	3.750	4533.	1.21	4.16	50467.	55000.
KOREA	M	801028	5227N	67018W	16855.4 35123.1 49085.9	109.	2.500	3008.	1.20	3.35	28672.	31680.
USSR	M	7910 6	5731N	16713W	18745.7 34320.1 48933.3	36.	2.833	3391.	1.20	1.69	30049.	33440.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-12 (continued). PACIFIC COD, OCTOBER-DECEMBER 1979-RN

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
KOREA	M	801114	5445N	16534W	18264.1 34657.2 48180.2	126.	6.250	7462.	1.19	5.39	84938.	92400.
KOREA	M	8010 8	5601N	16949W	18302.3 35110.7 49752.9	93.	6.167	7315.	1.19	5.67	21285.	28600.
KOREA	M	791114	5505N	16737W	18208.3 34907.5 48912.5	159.	8.667	10185.	1.18	4.79	47015.	57200.
USSR	M	791021	5735N	16643W	18749.8 34192.0 48728.6	37.	2.667	3098.	1.16	1.33	21764.	24860.
JAPAN	L	801010	5517N	16719W	18297.5 34852.4 48866.8	81.	4.000	4640.	1.16	7.81	59160.	63800.
KOREA	M	8010 9	5601N	16959W	18274.0 35121.2 49792.1	82.	4.833	5427.	1.12	5.86	53973.	59400.
USSR	M	8010 9	5422N	16004W	18411.1 33937.1 46190.7	85.	2.250	2502.	1.11	3.49	7838.	10340.
POLAND	M	8012 1	5535N	16827W	18300.8 34982.6 49266.6	131.	4.250	4702.	1.11	4.77	2998.	7700.
KOREA	M	801122	5706N	16631W	18271.9 34344.8 48682.3	41.	2.883	3184.	1.10	2.01	62816.	66000.
KOREA	M	8010 9	5601N	16959W	18274.0 35121.2 49792.1	85.	4.917	4328.	1.10	5.19	86974.	92400.
JAPAN	S	791118	5615N	17109W	18095.4 35119.2 50046.6	96.	4.000	4384.	1.10	5.54	3976.	8560.
JAPAN	L	791013	5447N	16528W	18272.7 34639.1 48146.5	124.	1.833	2000.	1.09	4.53	63120.	65120.
JAPAN	L	801027	5443N	15826W	18497.1 33659.1 45583.0	98.	0.750	809.	1.08	7.14	10411.	11220.
JAPAN	L	801116	5733N	16621W	18448.2 34135.9 48586.8	38.	2.833	3049.	1.06	2.86	56351.	59400.
JAPAN	L	7910 9	5597N	16825W	18433.0 34931.2 49126.4	84.	1.083	1159.	1.07	3.25	34701.	35860.
USSR	M	791025	5738N	16634W	18750.3 34140.7 48664.2	37.	3.083	3294.	1.07	1.17	35206.	38500.
GERMANY	M	801113	5441N	16531W	18247.8 34682.2 48187.7	164.	2.750	2916.	1.06	1.99	3024.	5940.
USSR	M	791212	5714N	16636W	18733.4 34312.7 48709.8	39.	2.000	2106.	1.05	3.42	71591.	73700.
JAPAN	L	791020	5454N	16701W	18202.8 34842.9 48689.7	126.	2.000	2106.	1.05	3.63	42994.	45100.
KOREA	M	801114	5444N	16559W	18232.7 34717.6 48322.0	133.	4.333	4555.	1.05	5.37	21845.	26400.
USSR	M	8010 7	5424N	16013W	18411.9 33951.4 46243.0	82.	1.750	1831.	1.05	2.81	10045.	11880.
JAPAN	S	791210	5613N	17057W	18141.1 35129.9 50016.1	74.	3.500	3620.	1.03	3.67	2100.	5720.
USSR	M	801014	5432N	16019W	18423.4 33941.3 46273.7	82.	2.333	2495.	1.03	3.15	37195.	39600.
JAPAN	S	8010 5	5549N	16849W	18345.9 35016.0 49427.5	109.	4.833	4965.	1.03	5.44	16375.	21340.
JAPAN	M	801120	5707N	16650W	18724.7 34402.1 48209.0	40.	1.583	1622.	1.02	2.71	13778.	15400.
KOREA	M	801120	5710N	16642W	18728.6 34337.4 48753.3	41.	1.117	1143.	1.02	2.86	16457.	17600.
KOREA	M	801111	5446N	16527W	18275.4 34636.7 48141.1	112.	3.750	3820.	1.02	6.00	13760.	17600.
JAPAN	M	7912 2	5707N	16648W	18724.5 34395.4 48795.6	42.	1.333	1349.	1.01	1.79	19771.	21120.
JAPAN	M	801116	5713N	16642W	18732.6 34338.9 48750.9	40.	1.417	1427.	1.01	2.08	10673.	12100.
JAPAN	L	791119	5540N	16842W	18305.9 35009.0 49360.3	104.	4.250	4275.	1.01	5.15	66785.	71060.
KOREA	M	801117	5446N	16525W	18277.4 34633.9 48129.4	120.	1.300	1395.	1.00	3.18	31695.	33000.
JAPAN	S	791113	5622N	17122W	18079.1 35097.7 50091.5	115.	4.000	3973.	0.99	4.78	427.	4400.
KOREA	M	8011 5	5694N	17012W	18253.4 35131.3 49652.5	79.	2.583	2561.	0.99	5.33	10639.	13200.
JAPAN	L	791015	5447N	16540W	18266.7 34667.8 48218.3	112.	1.583	1587.	0.99	3.19	2833.	4400.
KOREA	M	801121	5446N	16611W	18218.6 34745.1 48389.9	134.	4.000	3960.	0.99	3.24	20240.	24200.
JAPAN	S	7911 3	5636N	17028W	18211.7 35137.7 49912.7	142.	2.333	2279.	0.98	4.63	4321.	6600.
USSR	M	7910 3	5635N	16669W	18709.0 34312.7 48538.0	36.	1.667	1618.	0.97	1.25	26542.	28160.
KOREA	M	801115	5709N	16647W	18727.5 34380.1 48787.5	41.	1.333	1254.	0.94	3.43	9746.	11000.
JAPAN	M	7912 3	5708N	16632W	18725.0 34336.2 48687.7	40.	0.833	777.	0.93	1.04	19463.	20240.
GERMANY	M	801112	5440N	16543W	18232.6 34682.3 48223.4	165.	1.417	1519.	0.93	7.58	13421.	14740.
KOREA	M	801112	5447N	16524W	18282.6 34629.5 48325.2	102.	4.250	3923.	0.92	3.80	75279.	79200.
KOREA	M	8011 3	5455N	16523W	18275.1 34631.0 48116.2	122.	6.833	6300.	0.92	4.89	86100.	92400.
JAPAN	M	7912 4	5742N	16617W	18714.6 34328.4 48603.9	41.	0.633	766.	0.92	1.41	28454.	25260.
JAPAN	L	791014	5446N	16542W	18251.4 34677.9 48224.7	155.	1.250	1168.	0.92	7.46	22394.	23540.
USSR	M	791214	5631N	17154W	17948.5 35027.1 50145.0	82.	1.500	1352.	0.90	2.98	848.	2200.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-12 (continued). PACIFIC COD, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
		YRMMDD			7X 7Y 7Z							
JAPAN	L	7910 5	5449N	16528W	18267.2 34635.3 48151.8	91.	1.167	1051.	0.90	2.62	17869.	18920.
JAPAN	M	7912 2	5707N	16642W	18724.1 34375.4 48755.4	40.	0.500	450.	0.90	1.75	48650.	45100.
USSR	M	791112	5720N	16636W	18741.5 34340.5 48837.2	36.	2.750	2455.	0.89	1.34	26145.	28600.
POLAND	M	801213	5556N	16839W	18408.5 34987.6 49395.4	137.	5.000	4435.	0.69	4.40	8985.	13420.
JAPAN	S	791010	5440N	16625W	18182.0 34782.5 48459.7	161.	3.000	2648.	0.28	6.28	7252.	9900.
USSR	M	791113	5717N	16618W	18735.6 34234.7 48526.7	36.	2.500	2204.	0.88	1.47	32996.	35200.
JAPAN	S	801031	5441N	16830W	18491.7 33674.1 45609.7	98.	1.750	1539.	0.28	3.21	9461.	11000.
KOREA	M	791127	5523N	16804W	18267.3 34945.8 49108.2	153.	9.333	8207.	0.28	2.92	57793.	66000.
JAPAN	L	791122	5546N	16817W	18380.4 34948.6 49248.7	90.	2.000	1758.	0.88	3.40	18702.	20460.
JAPAN	S	791129	5559N	17002W	18250.3 35123.6 49794.3	123.	4.250	3720.	0.28	2.95	5100.	9020.
JAPAN	M	79112 4	5704N	16621W	18718.1 34323.5 48616.3	41.	0.667	583.	0.87	1.97	19437.	20920.
JAPAN	M	7912 3	5708N	16639W	18725.4 34359.4 48734.6	40.	0.500	437.	0.87	1.93	9683.	10120.
KOREA	M	8011 8	5444N	16533W	18261.8 34656.7 48172.7	115.	4.333	3760.	0.87	4.10	55640.	59400.
KOREA	M	801020	5259N	16742W	17515.8 34989.8 48591.9	60.	1.000	668.	0.87	8.39	14532.	15400.
USSR	M	791030	5719N	16621W	18737.9 34231.5 48604.7	36.	2.000	1729.	0.86	1.89	18291.	20920.
JAPAN	S	791119	5625N	17122W	18098.5 35094.1 50101.7	90.	5.000	4319.	0.26	3.16	2061.	6380.
JAPAN	L	791016	5446N	16559W	18241.8 34714.2 48325.8	113.	3.000	2589.	0.86	2.39	44711.	47300.
USSR	M	791114	5704N	16626W	18716.3 34339.9 48649.8	44.	1.667	1433.	0.86	1.85	42507.	44000.
JAPAN	M	791122	5446N	16847W	18334.6 35014.3 49406.7	98.	2.500	2148.	0.86	4.80	32832.	34980.
KOREA	M	8011 2	5455N	16527W	18271.2 34640.6 48139.5	150.	5.667	4856.	0.26	4.56	8344.	13200.
USSR	M	791011	5738N	16725W	18749.8 34367.6 49014.2	38.	3.000	2552.	0.85	1.12	41448.	44000.
USSR	M	791115	5710N	16642W	18728.6 34357.4 48753.3	36.	2.083	1767.	0.85	1.50	40933.	41800.
KOREA	M	801115	5422N	16611W	18205.2 34748.2 48385.9	147.	7.833	6594.	0.84	4.13	48406.	55000.
USSR	M	7910 7	5731N	16715W	18749.8 34326.7 48946.5	36.	3.000	2524.	0.84	1.51	51136.	55000.
KOREA	M	791116	5515N	16745W	18251.2 34913.6 48983.5	153.	4.083	3422.	0.84	2.57	51578.	55000.
JAPAN	L	791017	5457N	16708W	18208.4 34654.4 48735.3	131.	1.167	976.	0.84	4.36	9804.	10780.
USSR	M	791029	5733N	16640W	18749.0 34197.0 48712.5	37.	1.833	1531.	0.84	1.70	45549.	47080.
JAPAN	L	7911 9	5527N	16801W	18294.0 34935.0 49104.4	86.	1.667	1387.	0.83	3.82	12773.	129140.
KOREA	M	791227	5305N	16700W	17646.1 34929.2 48419.5	169.	7.500	6197.	0.83	10.71	97233.	103400.
JAPAN	L	791015	5446N	16532W	18270.5 34650.6 48170.2	115.	1.250	1022.	0.82	2.92	21418.	22440.
USSR	M	801011	5430N	16022W	18423.0 33954.0 46293.1	82.	2.417	1960.	0.81	3.86	38320.	40480.
USSR	M	791126	5539N	16844W	18290.1 35013.7 49368.9	93.	1.500	1208.	0.81	5.72	5792.	11000.
JAPAN	L	801014	5516N	16738W	18268.8 34697.0 48948.7	93.	3.417	2725.	0.80	6.94	19275.	22000.
JAPAN	M	7912 9	5701N	16630W	18713.4 34370.1 48678.0	40.	0.583	459.	0.79	2.49	29241.	29700.
KOREA	M	801119	5706N	16646W	18722.8 34394.6 48782.8	41.	3.000	784.	0.78	2.86	19016.	19600.
USSR	M	791028	5716N	16622W	18734.7 34254.1 48614.4	36.	2.000	1558.	0.78	1.71	18242.	19800.
KOREA	M	791118	5530N	16824W	18275.9 34980.9 49234.6	144.	12.000	9311.	0.74	4.66	59589.	108900.
KOREA	M	7912 2	5541N	16848W	18301.4 35020.1 49393.9	142.	3.017	2329.	0.77	4.31	52871.	55000.
USSR	M	801010	5423N	16002W	18414.5 33929.8 46178.0	93.	2.250	1735.	0.77	4.02	12565.	14500.
POLAND	M	801129	5538N	16853W	18273.0 35031.5 49407.7	93.	3.667	2814.	0.77	3.87	11486.	14300.
KOREA	M	8011 7	5443N	16533W	18258.5 34658.6 48171.0	131.	4.167	3189.	0.77	5.78	12211.	15400.
GERMANY	M	801117	5442N	16544W	18240.4 34686.1 48232.7	159.	2.250	1715.	0.76	8.98	21385.	23100.
GERMANY	M	801121	5442N	16630W	18185.1 34790.7 48391.6	164.	6.667	5072.	0.76	6.40	42008.	47680.
USSR	M	8010 6	5424N	16016W	18410.5 33558.1 45261.0	82.	1.000	759.	0.76	2.85	3081.	4620.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-12 (continued). PACIFIC COD, OCTOBER-DECEMBER 1979-80

VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES		DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
				7X	7Y							
JAPAN	79122	5708N	16643W	18725.7	34372.8	48761.4	40	51.5	0.75	1.55	24547	24860
JAPAN	791114	5528N	16803W	18297.3	34938.3	49118.1	84	749	0.75	3.09	43911	44660
JAPAN	79112	5458N	16628W	18264.5	34762.1	48515.0	80	1996	0.75	5.74	43104	45100
KOREA	801120	5443N	16609W	18216.3	34742.1	48376.6	136	6968	0.75	4.30	52432	59400
GERMANY	80112	5440N	16558W	18215.5	34721.0	48308.7	169	3146	0.74	5.84	34254	37400
JAPAN	80116	5521N	16644W	18255.8	34947.8	49102.1	168	1603	0.74	6.14	4997	6600
JAPAN	80102	5521N	16747W	18281.4	34911.0	49011.5	96	2083	0.74	5.20	100517	103400
JAPAN	80114	5726N	16629W	18744.5	34210.8	48649.8	39	1165	0.74	3.10	34035	35200
JAPAN	80102	5526N	16801W	18268.9	34936.1	49101.4	123	367	0.73	5.32	2713	3080
JAPAN	80112	5407N	16132W	18321.2	34175.1	46719.9	164	855	0.73	9.40	9265	10120
JAPAN	79108	5507N	16830W	18426.7	34965.3	49353.9	89	1344	0.73	2.52	58056	59400
JAPAN	80119	5710N	16651W	18725.2	34387.5	48613.6	40	663	0.72	2.55	47737	48400
USSR	791022	5732N	16641W	18746.7	34207.5	48720.5	37	1980	0.72	1.56	33220	35200
JAPAN	79117	5627N	17126W	18089.0	35085.3	50112.6	131	1979	0.72	5.53	2421	4400
JAPAN	80116	5441N	16546W	18231.5	34897.1	48253.7	151	1313	0.72	6.12	39387	40700
JAPAN	801029	5445N	15825W	18501.5	33550.4	45574.1	98	715	0.71	3.40	17105	17820
POLAND	80128	5559N	16833W	18434.3	34969.9	49376.7	82	4321	0.71	4.79	49958	50600
JAPAN	791117	5536N	16832W	18291.6	34992.0	49295.7	86	2366	0.71	3.82	55054	57420
KOREA	791230	5711N	16646W	17701.9	34907.6	48377.3	142	5689	0.71	4.18	27331	33000
KOREA	801014	5325N	16614W	17837.1	34841.4	48243.1	93	1766	0.71	3.13	101634	103400
USSR	791030	5732N	16649W	18749.0	34233.5	48773.3	37	1822	0.71	1.59	29198	31020
KOREA	80114	5446N	16525W	18277.4	34633.9	48129.4	118	2920	0.70	3.56	107080	110000
JAPAN	79107	5558N	16820W	18444.6	34939.4	49401.5	86	642	0.70	2.92	49958	50600
JAPAN	80128	5450N	16634W	18218.8	34768.3	48531.5	104	1791	0.69	5.30	67069	68800
JAPAN	801031	5446N	15824W	18503.9	34645.0	45566.6	115	1886	0.69	3.89	38114	39600
USSR	801014	5427N	16015W	18418.6	33947.1	46252.9	82	1704	0.68	2.62	9076	10780
JAPAN	801013	5501N	16718W	18215.1	34871.3	48799.8	114	2492	0.68	6.05	30508	33000
JAPAN	791010	5596N	16524W	18332.7	34604.9	48143.7	87	905	0.68	2.56	25935	26840
KOREA	80111	5434N	16536W	18213.9	34681.4	48173.0	136	3495	0.68	3.87	9705	13200
KOREA	791126	5441N	16531W	18229.9	34657.5	48156.2	159	4393	0.68	3.27	19807	24200
USSR	791118	5630N	17150W	17967.1	35037.2	50140.3	72	1799	0.67	2.45	27021	28820
JAPAN	801020	5733N	16711W	18750.2	34298.5	48916.4	41	1347	0.67	2.19	3053	4400
JAPAN	791119	5530N	16806W	18304.3	34942.0	49140.2	98	3347	0.67	3.49	58473	61820
JAPAN	801025	5435N	15838W	18276.3	33710.3	45665.5	100	335	0.67	3.62	13745	14080
JAPAN	801019	5443N	16530W	18259.0	34651.5	48153.7	137	1276	0.67	3.93	42724	44000
USSR	791120	5639N	17034W	18212.9	35136.3	49943.4	82	2682	0.66	2.36	25074	26400
KOREA	801010	5601N	16959W	18274.0	35121.2	49792.1	82	4050	0.66	5.67	91918	94600
KOREA	801211	5523N	16755W	18280.9	34926.3	49068.4	134	6418	0.66	3.80	98082	104500
JAPAN	801211	5633N	16602W	18673.9	34373.2	48492.8	47	1314	0.66	2.83	6606	7920
USSR	791029	5702N	16600W	18713.7	34266.6	48476.5	36	1641	0.66	2.11	32019	33660
KOREA	801115	5443N	16524W	18265.0	34637.2	48118.8	115	4134	0.65	4.00	35660	44000
JAPAN	791112	5610N	17053W	18135.6	35133.1	49994.9	123	2609	0.65	3.28	4651	7260
JAPAN	791130	5705N	16636W	18720.6	34367.1	43716.3	40	324	0.65	1.68	30916	31240
JAPAN	79116	5630N	17143W	18006.8	35050.5	50135.7	126	1622	0.65	5.50	2778	4400
KOREA	801116	5445N	16525W	18273.1	34635.8	48127.8	128	2270	0.65	3.46	15330	17600

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

73 available trawl records (exceeding 500 lbs/hr CPUE) were not included.

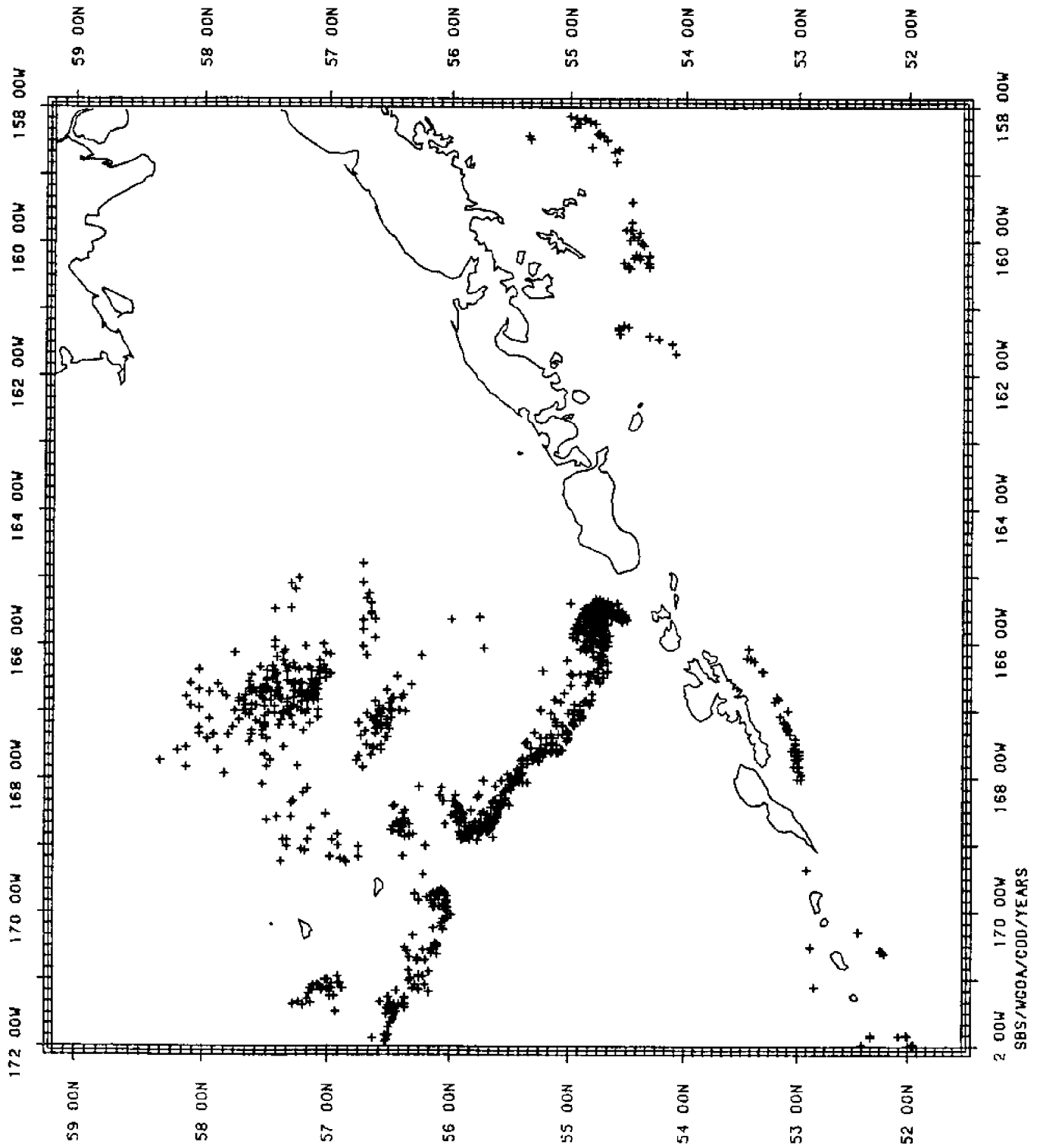


FIGURE C-6. TRAWLING LOCATIONS FOR PACIFIC COD, ALL MONTHS, 1979-80

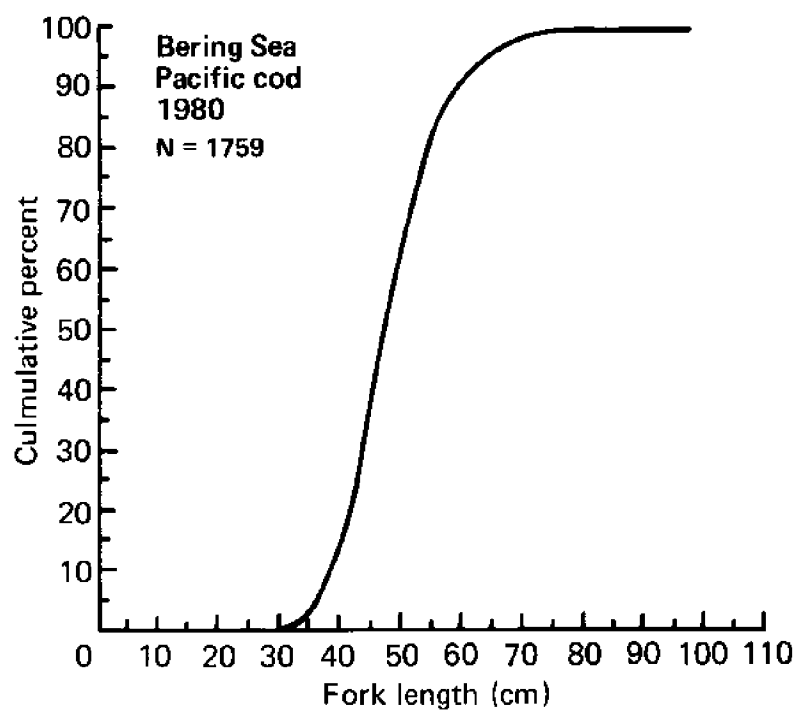
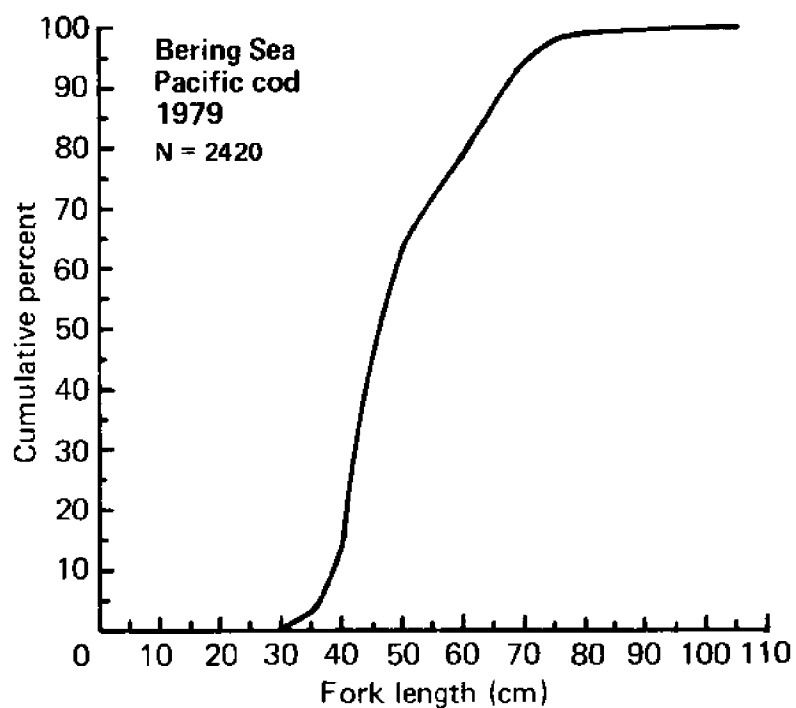


FIGURE C-7. CUMULATIVE LENGTH-FREQUENCY DISTRIBUTIONS OF THE PACIFIC COD CATCH FROM ALL AREAS OF THE EASTERN BERING SEA DURING 1979-80.

TABLE C-13. TURBOT, JANUARY-MARCH 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	7Y	7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	80 212	5628N	17149W	1795C-4	35047-6	50129-8	328.	1.000	7592.	7.59	5.83	2748.	10340.
JAPAN	M	79 312	5253N	17037W	16922-7	35130-8	49220-6	328.	1.500	9611.	6.41	3.90	1719.	11330.
JAPAN	S	80 328	5300N	17031W	16984-8	35129-3	49223-4	320.	2.833	16831.	5.94	4.25	1649.	18480.
JAPAN	L	80 114	5631N	17151W	17966-6	35033-0	50143-3	126.	2.250	8582.	3.73	1.14	101618.	110000.
JAPAN	S	80 215	5603N	16843W	18444-9	34988-7	49444-1	399.	3.917	14524.	3.70	5.51	1536.	16060.
JAPAN	M	79 312	5246N	17052W	16824-9	35134-4	49244-4	388.	2.500	9261.	3.70	4.19	2487.	11748.
JAPAN	M	79 311	5247N	17053W	16831-8	35134-7	49253-3	355.	1.750	6346.	3.63	6.95	584.	6930.
JAPAN	S	80 217	5537N	16854W	18264-7	35033-9	49408-9	421.	6.500	21357.	3.29	5.16	1963.	23320.
JAPAN	M	79 310	5250N	17048W	16862-8	35133-6	49244-6	355.	1.750	5677.	3.24	7.48	1033.	6710.
JAPAN	M	79 311	5253N	17040W	16911-0	35131-7	49229-7	339.	1.500	4693.	3.13	5.05	279.	4972.
JAPAN	S	79 322	5603N	16831W	18460-0	34959-5	49378-1	347.	2.000	5678.	2.84	5.92	922.	6600.
JAPAN	S	80 216	5537N	16854W	18264-7	35033-5	49408-9	421.	7.000	19373.	2.77	5.64	3067.	22440.
JAPAN	S	79 324	5556N	16853W	18387-1	35018-4	49472-9	375.	3.000	6086.	2.70	5.41	714.	6800.
JAPAN	S	80 215	5537N	16253W	18266-8	35032-1	49404-1	383.	6.833	17154.	2.51	3.66	5006.	22220.
JAPAN	S	79 330	5606N	16840W	18466-5	34977-6	49437-4	314.	1.833	4228.	2.31	4.69	832.	5060.
JAPAN	S	80 217	5542N	16856W	18292-8	35034-6	49437-4	372.	4.467	10298.	2.31	5.21	3782.	14080.
JAPAN	S	80 210	5557N	16859W	18383-4	35010-1	49507-1	317.	4.367	9970.	2.28	4.13	2350.	12320.
JAPAN	S	79 326	5552N	16846W	18410-4	35001-3	49443-4	325.	2.250	5131.	2.28	5.57	369.	5500.
JAPAN	L	80 115	5538N	16841W	18295-3	35008-5	49348-3	161.	3.000	6800.	2.27	1.77	19600.	26400.
JAPAN	S	80 217	5537N	16854W	18264-7	35033-9	49408-9	366.	3.500	7433.	2.12	3.83	1587.	9020.
JAPAN	S	80 218	5556N	16900W	18375-3	35032-9	49508-5	366.	6.000	12737.	2.12	4.05	2003.	14740.
JAPAN	S	79 322	5603N	16831W	18460-0	34959-5	49378-1	301.	2.000	4082.	2.04	4.34	1418.	5500.
JAPAN	S	79 323	5556N	16853W	18345-3	35023-3	49451-3	293.	2.000	3951.	1.98	2.54	449.	4400.
JAPAN	S	80 216	5541N	16826W	18286-4	35035-2	49433-3	383.	4.067	8000.	1.97	3.40	2560.	10560.
JAPAN	S	80 213	5534N	16835W	18281-2	34999-7	49304-2	394.	5.417	10410.	1.92	4.83	2790.	13200.
JAPAN	S	80 219	5536N	16836W	18275-9	35001-7	49309-2	437.	5.917	11222.	1.90	5.74	2198.	13420.
JAPAN	S	79 321	5558N	16845W	18411-9	34999-0	49438-1	388.	2.000	3721.	1.86	5.90	679.	4400.
JAPAN	S	79 328	5545N	16857W	18317-6	35026-9	49433-2	252.	1.833	3366.	1.84	2.51	374.	3740.
JAPAN	S	80 216	5547N	16854W	18328-5	35027-5	49445-5	410.	3.250	5498.	1.69	3.94	882.	6380.
JAPAN	S	80 218	5535N	16855W	18275-1	35000-5	49300-7	426.	6.500	10885.	1.67	5.09	5175.	16060.
JAPAN	S	80 216	5551N	16857W	18346-6	35030-5	49475-0	410.	2.783	4656.	1.67	4.04	1064.	5720.
JAPAN	S	79 328	5556N	16857W	18380-5	35026-7	49493-3	355.	2.167	3603.	1.66	2.36	797.	4400.
JAPAN	L	80 117	5632N	17150W	17978-1	35032-6	50145-0	131.	2.167	3583.	1.65	1.54	51417.	55000.
JAPAN	S	79 329	5550N	16855W	18345-8	35027-3	49461-4	301.	2.167	3576.	1.65	3.16	822.	4400.
JAPAN	S	79 329	5544N	16852W	18313-1	35025-7	49424-6	295.	2.250	3710.	1.65	2.76	690.	4400.
JAPAN	S	79 321	5603N	16840W	18448-9	34981-6	49427-8	317.	2.333	3845.	1.65	8.23	555.	4400.
JAPAN	S	79 328	5550N	16856W	18344-0	35029-3	49466-4	465.	2.500	4111.	1.64	6.19	289.	4400.
JAPAN	S	79 325	5556N	16857W	18380-5	35026-7	49493-3	391.	2.500	4087.	1.63	3.26	313.	4400.
JAPAN	S	80 331	5627N	17145W	17979-7	35052-9	50129-4	309.	3.917	6340.	1.62	1.75	920.	7260.
JAPAN	M	79 310	5247N	17053W	16826-4	35134-6	49250-3	328.	1.000	1501.	1.50	4.77	369.	1670.
JAPAN	S	79 326	5556N	16857W	18386-5	35026-7	49493-3	394.	2.250	3372.	1.50	3.23	368.	3740.
JAPAN	S	80 219	5543N	16856W	18295-2	35034-0	49440-7	344.	2.667	3943.	1.48	4.31	2217.	6160.
JAPAN	S	79 326	5559N	16847W	18415-1	35002-5	49452-1	361.	2.000	2956.	1.48	1.77	344.	3300.
JAPAN	S	80 330	5626N	17145W	17973-9	35054-8	50126-7	331.	4.583	6680.	1.46	3.72	1460.	8140.
JAPAN	S	79 327	5556N	16856W	18382-2	35024-7	49468-2	394.	2.167	2916.	1.35	2.81	382.	3100.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-13 (continued). TURBOT, JANUARY-MARCH 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
		YYMMDD			7X	7Y	7Z						
JAPAN	M	79 318	5600N	16836W	18436.4	34575.8	49396.3	164.	0.833	1.33	1.69	1865.	2970.
JAPAN	S	79 324	5600N	16846W	18422.6	34999.1	49450.2	388.	3.000	1.32	2.99	446.	4400.
JAPAN	S	79 325	5552N	16837W	18455.0	35029.8	49478.7	399.	1.500	1.31	3.07	241.	2200.
JAPAN	S	80 218	5537N	16853W	18266.6	35032.1	49404.1	372.	6.167	1.29	4.67	1707.	9680.
JAPAN	S	79 331	5603N	16834W	18456.4	34997.0	49394.8	369.	2.000	1.23	3.82	850.	3300.
JAPAN	S	80 127	5537N	16853W	18266.6	35032.1	49404.1	372.	6.333	1.20	3.38	1860.	9460.
JAPAN	S	79 326	5558N	16846W	18410.4	35001.3	49443.4	295.	2.000	1.19	3.51	475.	2860.
JAPAN	S	80 2 9	5543N	16853W	18304.9	35028.3	49426.0	383.	4.667	1.19	2.99	1920.	7480.
JAPAN	S	79 330	5605N	16850W	18447.4	35002.8	49488.5	344.	1.583	1.19	3.69	978.	2860.
JAPAN	S	80 127	5537N	16851W	18380.0	35034.1	49517.2	394.	6.750	1.18	3.96	2574.	10560.
JAPAN	S	79 331	5606N	16840W	18466.5	34977.6	49437.4	284.	2.000	1.16	3.32	539.	2860.
JAPAN	S	80 214	5558N	16903W	18382.9	35037.4	49530.9	492.	4.500	1.16	4.04	3592.	8800.
JAPAN	S	79 330	5604N	16844W	18445.6	34989.9	49452.8	432.	1.500	1.15	6.85	1141.	2860.
JAPAN	S	79 325	5556N	16857W	18380.5	35026.7	49493.3	426.	2.000	1.15	2.67	569.	2860.
JAPAN	S	80 210	5626N	17140W	18083.0	35083.6	50122.7	273.	2.500	1.13	7.29	909.	3740.
JAPAN	S	79 331	5604N	16833W	18463.4	34963.1	49382.3	342.	2.000	1.13	3.50	602.	2860.
JAPAN	S	79 327	5559N	16847W	18415.1	35002.5	49452.1	399.	2.500	1.07	2.63	181.	2860.
JAPAN	S	80 1 9	5626N	17129W	18085.9	35082.0	50132.5	123.	1.833	1.04	1.24	7985.	9900.
JAPAN	M	79 319	5559N	16837W	18429.2	34979.4	49398.5	142.	0.167	1.03	1.76	10433.	16604.
JAPAN	M	79 317	5559N	16822W	18447.9	34942.9	49345.7	98.	1.000	0.99	0.87	1097.	2090.
JAPAN	S	79 323	5544N	16853W	18311.2	35027.6	49429.6	388.	2.000	0.97	2.13	251.	2200.
JAPAN	S	79 330	5557N	16850W	18398.2	35011.1	49460.9	383.	2.000	0.97	3.68	258.	2200.
JAPAN	M	79 1 8	5614N	16714W	18571.0	34716.5	48940.4	71.	1.333	0.96	2.43	5424.	6710.
JAPAN	S	80 210	5551N	16858W	18346.6	35032.5	49480.0	410.	6.167	0.93	5.05	1304.	7040.
JAPAN	S	79 324	5545N	16850W	18323.0	35021.1	49418.3	291.	1.667	0.90	3.13	693.	2200.
JAPAN	S	79 331	5606N	16840W	18466.5	34977.6	49437.4	295.	1.917	0.88	3.62	512.	2200.
JAPAN	S	80 214	5556N	16903W	18370.0	35038.8	49523.4	519.	4.167	0.87	5.21	4950.	8580.
JAPAN	M	79 319	5600N	16839W	18432.4	34982.9	49412.6	148.	2.083	0.87	2.85	11938.	13750.
JAPAN	S	79 324	5557N	16855W	18385.1	35028.0	49502.0	410.	3.167	0.84	3.23	649.	3300.
JAPAN	S	79 329	5550N	16855W	18345.8	35027.3	49461.4	262.	2.500	0.83	2.37	354.	2420.
JAPAN	S	80 212	5543N	16856W	18293.2	35034.0	49440.7	492.	5.083	0.79	3.59	4796.	8800.
JAPAN	S	79 121	5556N	16854W	18385.5	35020.5	49478.0	351.	2.000	0.78	3.06	1071.	2640.
JAPAN	S	79 327	5556N	16857W	18380.5	35026.7	49493.3	309.	2.417	0.77	4.05	328.	2200.
JAPAN	S	79 322	5603N	16840W	18448.9	34981.6	49427.8	369.	2.167	0.73	4.49	625.	2200.
USSR	M	79 317	5714N	17120W	18332.3	34931.6	50170.6	57.	1.500	0.69	1.32	7761.	8400.
USSR	M	79 317	5712N	17123W	18305.8	34937.1	50173.7	57.	1.917	0.65	1.35	9756.	11000.
JAPAN	L	80 115	5629N	17121W	18129.6	35090.2	50113.7	81.	2.000	0.60	0.83	31799.	33000.
JAPAN	M	79 318	5605N	16819W	18404.4	34925.5	49316.0	93.	1.000	0.59	1.21	1568.	2156.
JAPAN	S	80 211	5615N	17111W	18085.4	35117.2	50050.0	246.	3.000	0.59	8.04	4619.	6380.
JAPAN	S	79 322	5552N	16852W	18363.6	35019.7	49453.3	107.	0.500	0.58	1.03	809.	1100.
JAPAN	S	79 321	5558N	16845W	18411.9	34999.0	49438.1	298.	2.500	0.57	3.52	778.	2200.
JAPAN	M	79 316	5600N	16822W	18453.5	34941.4	49518.6	98.	0.917	0.53	1.18	945.	1430.
JAPAN	S	79 329	5544N	16851W	18314.9	35023.8	49419.7	301.	2.100	0.52	2.19	457.	1540.
JAPAN	S	80 128	5537N	16852W	18268.6	35030.2	49399.2	355.	5.333	0.50	1.46	5467.	8140.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-14. TURBOT, APRIL-JUNE 1979-80

VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LB S/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN S	80 6 2	5425N	16716W	7X ***** 7Y ***** 7Z *****	437	4.583	19082	4.16	8.03	498	19580
JAPAN S	80 6 22	5420N	16740W	17941.9 34903.6 48694.2	492	6.000	23009	3.83	11.49	12191	35200
JAPAN S	80 6 5	5419N	16744W	17946.5 34952.0 48816.2	546	4.500	15789	3.51	11.29	1591	17380
JAPAN S	80 6 7	5614N	16922W	18454.4 35064.2 49686.7	219	0.167	575	3.45	5.89	745	1320
JAPAN S	80 6 14	5432N	16730W	18035.3 34924.2 48784.9	377	2.750	8970	3.26	7.25	270	9240
JAPAN S	80 6 1	5426N	16718W	18028.7 34906.7 48707.0	492	4.500	14424	3.21	11.45	316	14740
JAPAN S	79 6 18	5253N	17048W	16879.3 35133.8 49253.6	418	1.833	5820	3.17	3.17	760	6600
JAPAN S	80 6 7	5422N	16713W	18016.4 34900.7 48671.1	519	4.000	11619	2.90	9.82	701	12320
JAPAN S	79 6 3	5254N	17031W	16951.5 35129.0 49205.2	210	2.000	5772	2.89	3.57	828	6600
JAPAN S	79 5 3	5533N	16838W	18263.7 35006.4 49315.8	334	1.667	4619	2.77	6.54	2377	6996
JAPAN S	79 4 14	5606N	16844W	18461.5 34987.4 49459.4	344	1.800	4794	2.66	7.41	486	5280
JAPAN S	79 4 16	5604N	16851W	18439.9 35006.2 49490.4	465	1.750	4570	2.61	9.64	710	5280
JAPAN S	80 6 23	5430N	16754W	17981.7 34968.3 48896.4	546	5.500	14247	2.59	12.20	7093	21340
JAPAN S	79 6 11	5252N	17035W	16925.0 35130.2 49211.5	219	2.000	5113	2.56	4.16	827	5940
JAPAN S	20 6 27	5427N	16759W	17954.2 34978.4 48911.4	546	6.000	15326	2.55	12.75	9314	24640
JAPAN S	20 6 4	5423N	16713W	18011.1 34901.6 48668.5	546	5.167	13160	2.55	11.13	1360	14520
JAPAN S	20 6 19	5422N	16714W	18014.8 34902.6 48676.2	546	4.083	10262	2.51	10.65	2278	12540
JAPAN S	79 6 20	5252N	17039W	16909.4 35131.4 49221.6	290	2.167	5438	2.51	5.13	722	6160
JAPAN S	80 6 29	5425N	16750W	17945.2 34974.5 48891.1	546	7.000	17288	2.47	13.15	8452	25740
JAPAN S	20 6 30	5443N	16748W	18067.0 34949.0 48895.5	546	6.833	16622	2.43	13.18	7578	24200
USSR H	80 6 18	5434N	16114W	18405.8 34661.2 48606.7	55	1.333	3240	2.43	1.78	3360	6600
JAPAN S	80 6 30	5432N	16749W	18063.1 34956.4 48878.1	546	2.917	7032	2.41	12.66	1108	8140
JAPAN S	79 6 12	5254N	17032W	16947.6 35129.3 49208.3	241	1.750	4159	2.37	5.59	465	4620
JAPAN S	20 6 3	5420N	16647W	18050.5 34852.6 48532.4	426	4.500	10672	2.37	7.85	328	11000
JAPAN S	79 4 17	5604N	16846W	18444.9 34994.6 49463.6	451	2.000	4740	2.37	6.11	540	5280
JAPAN S	79 4 6	5547N	16850W	18335.6 35019.6 49425.4	361	1.500	3520	2.35	1.77	220	3740
JAPAN S	80 6 10	5418N	16737W	17949.2 34946.8 48779.5	519	5.167	12049	2.33	10.44	1151	13200
JAPAN S	79 4 15	5606N	16844W	18461.5 34987.4 49459.4	358	1.667	3866	2.32	10.93	94	3960
JAPAN S	80 6 2	5420N	16715W	18002.2 34906.1 48676.0	519	3.917	9038	2.31	11.63	862	9900
JAPAN S	80 6 14	5420N	16729W	18036.3 34923.9 48773.3	383	3.833	8810	2.30	9.15	650	9460
JAPAN S	80 6 28	5428N	16756W	17966.2 34972.8 48900.1	546	5.667	13002	2.29	12.49	24398	37400
JAPAN S	80 6 26	5420N	16721W	17991.1 34917.1 48706.1	372	3.500	7752	2.21	9.14	2368	10120
JAPAN S	79 4 22	5253N	17043W	16899.2 35132.5 49238.7	375	2.167	4701	2.17	4.11	579	5280
JAPAN S	79 4 4	5544N	16850W	18316.7 35021.0 49414.7	314	1.667	3602	2.16	3.15	358	3960
JAPAN S	80 6 13	5420N	16712W	18007.6 34990.5 48669.9	546	4.000	8640	2.16	6.13	1040	9680
JAPAN S	80 6 23	5444N	16743W	18061.8 34938.9 48883.3	546	3.833	8166	2.13	11.99	4374	12540
JAPAN S	80 6 13	5418N	16737W	17949.2 34946.8 48779.5	536	3.750	7967	2.12	7.87	833	8800
JAPAN S	79 5 2	5603N	16841W	18447.6 34984.0 49433.2	424	3.167	6648	2.10	3.70	854	7502
JAPAN S	79 4 5	5541N	16852W	18294.0 35027.7 49413.8	284	1.500	3141	2.09	3.59	599	3740
JAPAN S	80 6 27	5425N	16757W	17947.0 34976.2 48895.9	546	6.000	12480	2.08	12.33	6440	18920
USSR H	79 4 7	5700N	17100W	18426.9 35060.4 50177.4	56	1.250	2591	2.07	0.93	27769	30360
JAPAN S	79 4 10	5537N	16833W	18266.6 35032.1 49404.1	437	1.500	3101	2.07	2.42	199	3300
JAPAN S	79 6 13	5251N	17035W	16919.5 35130.2 49208.5	224	2.167	4629	2.04	5.90	1071	5500
JAPAN S	79 6 2	5253N	17045W	16891.3 35133.0 49244.7	416	2.667	5440	2.04	8.26	1600	7040
JAPAN S	79 6 3	5252N	17035W	16925.0 35130.2 49211.5	219	2.167	4362	2.01	4.67	478	4840

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-14 (continued). TURBOT, APRIL-JUNE 1979-80

NATION	DATE	TIME	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	79 4 5	5537N	328.	1.833	3678.	2.01	2.60	722.	4400.
JAPAN	80 6 25	5432N	410.	3.000	6001.	2.00	8.68	1039.	7040.
JAPAN	80 8 22	5530N	355.	3.583	7096.	1.98	6.77	2144.	9240.
JAPAN	80 5 27	5555N	432.	4.500	6778.	1.95	5.92	1122.	9900.
JAPAN	79 4 6	5541N	377.	1.667	3229.	1.94	1.73	291.	3520.
JAPAN	79 7 17	5416N	541.	4.083	7888.	1.93	9.04	472.	8360.
JAPAN	80 6 4	5422N	546.	5.500	10583.	1.92	11.61	857.	11440.
JAPAN	80 6 12	5420N	421.	5.000	9588.	1.92	7.09	1412.	11000.
JAPAN	79 4 10	5541N	355.	1.417	2709.	1.91	1.67	151.	2860.
JAPAN	79 4 9	5541N	410.	1.500	2867.	1.91	3.61	213.	3080.
JAPAN	80 6 29	5445N	546.	6.250	11911.	1.91	12.78	12269.	24200.
JAPAN	80 6 6	5418N	541.	5.167	9731.	1.88	11.19	1929.	11660.
JAPAN	79 4 5	5537N	407.	1.383	2592.	1.87	2.42	488.	3080.
JAPAN	79 5 17	5535N	383.	4.250	7956.	1.87	4.50	3154.	11110.
JAPAN	80 6 11	5419N	514.	4.500	8344.	1.85	9.18	456.	8800.
JAPAN	79 6 5	5256N	334.	2.300	4245.	1.85	2.81	155.	4400.
JAPAN	79 6 11	5254N	219.	1.333	2431.	1.82	5.87	869.	3300.
JAPAN	79 4 5	5537N	306.	6.167	11164.	1.82	1.82	523.	3740.
JAPAN	80 6 24	5445N	492.	6.167	11164.	1.81	11.99	13476.	24640.
JAPAN	79 4 5	5603N	476.	1.667	2961.	1.78	9.01	339.	3300.
JAPAN	79 4 5	5607N	437.	1.450	2562.	1.77	3.22	298.	2860.
JAPAN	80 6 4	5607N	290.	5.000	8826.	1.77	6.19	3494.	12320.
JAPAN	80 6 15	5427N	380.	4.000	6973.	1.74	7.50	727.	7700.
JAPAN	79 6 19	5253N	328.	2.083	3615.	1.74	4.26	345.	3960.
JAPAN	80 6 11	5448N	288.	4.167	7218.	1.73	8.20	1142.	8360.
JAPAN	80 4 2	5626N	398.	5.833	10047.	1.72	1.62	1833.	11820.
JAPAN	79 5 2	5534N	325.	5.167	8787.	1.70	3.10	4479.	13260.
JAPAN	80 6 24	5443N	498.	5.167	8778.	1.70	11.24	4862.	13640.
JAPAN	79 4 10	5541N	301.	1.500	2544.	1.70	2.12	316.	2860.
JAPAN	79 6 3	5253N	410.	2.417	4049.	1.68	2.17	351.	4400.
JAPAN	80 6 15	5426N	391.	3.500	5853.	1.67	7.70	747.	6600.
JAPAN	80 5 18	5623N	273.	5.083	8474.	1.67	4.73	2966.	11440.
JAPAN	80 6 3	5603N	213.	4.250	7038.	1.66	6.08	4402.	11440.
JAPAN	79 4 6	5534N	399.	1.083	1776.	1.64	5.13	1084.	2660.
JAPAN	79 4 11	5536N	432.	1.500	2447.	1.63	2.45	193.	2640.
JAPAN	80 6 5	5416N	546.	5.000	8072.	1.61	11.04	248.	10560.
JAPAN	79 4 16	5606N	459.	1.833	2951.	1.61	7.96	349.	3300.
JAPAN	80 6 26	5442N	492.	6.167	9883.	1.60	11.91	2877.	12760.
JAPAN	79 4 11	5537N	416.	1.667	2667.	1.60	1.97	193.	2860.
JAPAN	80 6 16	5421N	402.	4.000	6377.	1.59	6.96	663.	7040.
JAPAN	79 4 7	5537N	383.	1.667	2640.	1.58	2.40	220.	2860.
JAPAN	79 4 11	5535N	377.	2.000	3150.	1.58	4.73	142.	3300.
JAPAN	80 6 16	5419N	426.	0.500	775.	1.55	6.37	105.	880.
JAPAN	79 4 8	5625N	298.	6.000	9287.	1.55	2.06	2153.	11440.
JAPAN	80 6 14	5446N	399.	4.250	6503.	1.53	8.11	1197.	7700.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-14 (continued). TURBOT, APRIL-JUNE 1979-80

NATION	VESSEL CLASS	DATE	YMHMO	LAT	LONG	APPROX 7X	LRAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	79 410	5537N	16852W	18268.0	35030.2	49399.2	372.	1.333	2036.	153	1.51	162.	2200.	
JAPAN	S	80 531	5533N	16902W	18552.4	35038.9	49507.3	536.	5.000	7538.	1.50	8.63	822.	8360.	
JAPAN	S	80 6 7	5415N	16639W	18058.3	34837.7	48488.1	448.	7.750	11660.	1.50	6.40	880.	12540.	
JAPAN	S	79 623	5526N	16815W	18267.1	34966.0	49175.1	186.	3.583	5362.	1.50	1.94	3812.	9174.	
JAPAN	S	80 619	5418N	16653W	18030.3	34866.3	48558.7	546.	3.667	5454.	1.49	1.04	1586.	7040.	
JAPAN	S	80 530	5506N	16901W	18373.5	35034.9	49513.5	481.	4.000	5907.	1.48	6.96	693.	6500.	
JAPAN	S	80 529	5555N	16902W	18365.3	35037.6	49514.7	410.	4.250	6235.	1.47	6.66	365.	6600.	
JAPAN	S	79 5 5	5551N	16857W	18346.6	35030.5	49475.0	309.	3.750	5466.	1.46	2.41	320.	5786.	
JAPAN	S	79 4 2	5544N	16852W	18313.1	35025.7	49424.6	355.	1.950	2815.	1.44	1.46	265.	3880.	
JAPAN	S	80 618	5426N	16721W	18023.3	34912.3	48722.2	399.	4.107	5979.	1.44	6.53	621.	6600.	
JAPAN	S	79 4 6	5535N	16845W	18269.3	35018.4	49357.7	339.	1.833	2631.	1.43	4.01	669.	3300.	
JAPAN	S	80 6 9	5604N	16837W	18458.0	34973.0	49414.5	361.	5.000	7081.	1.42	5.60	1279.	8360.	
JAPAN	S	80 519	5624N	17124W	18081.1	35092.5	50100.7	301.	4.167	5885.	1.41	4.42	2475.	8360.	
JAPAN	S	80 610	5425N	16718W	18023.4	34907.6	48704.3	514.	5.500	7754.	1.41	1.02	1046.	8800.	
JAPAN	S	80 6 5	5625N	17126W	18076.4	35088.1	50106.2	328.	4.000	5619.	1.40	7.11	2301.	7920.	
JAPAN	S	79 6 1	5626N	17141W	17997.2	35061.9	50123.5	262.	4.417	6184.	1.40	2.00	856.	7040.	
JAPAN	S	79 624	5522N	16802W	18264.6	34942.6	49094.6	186.	4.000	5549.	1.39	2.63	2151.	7700.	
JAPAN	S	79 4 3	5634N	17120W	18166.3	35084.2	50128.4	317.	4.000	5639.	1.38	1.29	302.	5940.	
JAPAN	S	80 625	5444N	16735W	18058.1	34923.7	48842.8	503.	6.000	8147.	1.36	12.30	3493.	13640.	
JAPAN	S	79 412	5556N	16858W	18378.8	35028.8	49498.4	372.	2.667	3590.	1.35	2.22	370.	3960.	
JAPAN	S	79 513	5627N	17146W	17973.8	35051.1	50130.1	273.	4.500	6006.	1.33	2.74	1254.	7260.	
JAPAN	S	79 4 4	5550N	16853W	18345.3	35023.1	49451.3	273.	2.417	3224.	1.33	2.59	1176.	4400.	
JAPAN	S	79 5 1	5556N	16859W	18377.0	35030.8	49503.4	328.	5.000	6663.	1.33	2.36	685.	7348.	
JAPAN	S	80 519	5549N	16850W	18346.2	35018.0	49432.6	153.	3.417	4477.	1.31	1.51	2563.	7040.	
JAPAN	S	79 4 6	5541N	16854W	18290.2	35031.5	49423.6	374.	1.500	1954.	1.30	1.93	246.	2200.	
JAPAN	S	80 612	5415N	16720W	17966.2	34919.1	48687.4	546.	4.500	5829.	1.30	1.03	2531.	8360.	
JAPAN	S	80 6 9	5604N	16837W	18458.6	34973.0	49414.5	394.	4.833	6205.	1.28	7.40	835.	7040.	
JAPAN	S	79 4 7	5627N	17142W	17997.3	35058.3	50127.1	303.	6.000	7691.	1.28	2.14	1109.	8800.	
USSR	M	80 6 5	5429N	16021W	18420.9	33954.7	46287.7	82.	4.167	5291.	1.27	1.22	3289.	3580.	
JAPAN	S	79 524	5629N	17158W	17913.4	35023.9	50142.8	328.	4.500	5704.	1.27	2.65	676.	6380.	
JAPAN	S	79 4 9	5541N	16853W	18292.1	35029.6	49418.7	339.	0.833	1047.	1.26	1.42	53.	1100.	
JAPAN	S	80 628	5444N	16744W	18080.0	34940.8	48888.4	546.	6.000	7522.	1.25	12.00	5678.	13200.	
JAPAN	S	79 412	5559N	16847W	18415.1	35002.5	49452.1	355.	2.000	2500.	1.25	2.89	360.	2660.	
JAPAN	S	79 4 7	5542N	16854W	18290.0	35030.0	49427.2	383.	1.417	1764.	1.25	2.00	216.	1960.	
JAPAN	S	80 5 9	5557N	16850W	18398.2	35011.1	49460.9	372.	2.833	3526.	1.24	2.74	1094.	4620.	
JAPAN	S	79 430	5556N	16902W	18371.8	35036.9	49518.5	413.	3.417	4243.	1.24	4.91	1125.	5368.	
JAPAN	S	79 4 4	5550N	16854W	18347.6	35025.3	49456.4	328.	2.500	3083.	1.23	3.25	437.	3520.	
JAPAN	S	79 410	5541N	16853W	18292.1	35029.6	49418.7	328.	1.500	1848.	1.23	1.49	352.	2200.	
JAPAN	S	79 4 2	5545N	16852W	18315.4	35025.6	49428.3	336.	1.833	2233.	1.22	2.09	407.	2640.	
JAPAN	S	79 618	5254N	17045W	16896.0	35133.1	49247.7	410.	2.167	2605.	1.20	3.42	35.	2640.	
JAPAN	S	79 6 5	5631N	17159W	17918.1	35017.1	50147.7	301.	4.417	5279.	1.20	3.07	221.	5500.	
JAPAN	S	79 429	5537N	16851W	18270.5	35028.4	49394.3	328.	3.750	4477.	1.19	3.14	1155.	5632.	
JAPAN	S	79 417	5604N	16846W	18446.9	34994.6	49463.6	421.	2.583	3059.	1.18	8.27	241.	3300.	
JAPAN	S	79 422	5613N	17118W	18040.1	35111.3	50053.6	344.	1.167	1375.	1.18	3.06	385.	1760.	
JAPAN	S	79 4 7	5538N	16832W	18274.9	35029.6	49402.8	355.	1.917	2253.	1.18	1.77	367.	2640.	

*** NOTE *** THE ACCURACY OF POSITION AND LRAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-14 (continued). TURBOT, APRIL-JUNE 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FTISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	79 414	5604N	16844W	18445.6	34589.9	49452.8	429.	2042.	1.17	6.44	598.	2644.
JAPAN	S	79 418	5605N	16851W	18446.0	35005.1	49493.9	443.	1741.	1.16	3.70	239.	1980.
JAPAN	S	79 514	5252N	17043W	16873.8	35133.7	49250.6	394.	2308.	1.15	4.67	112.	2420.
JAPAN	S	79 4 8	5556N	16844W	18413.4	34996.7	49432.8	361.	2103.	1.15	4.83	1197.	3100.
JAPAN	S	79 421	5614N	17124W	18015.6	35103.4	50066.1	394.	1715.	1.14	2.73	485.	2200.
JAPAN	S	79 523	5629N	17159W	17907.3	35022.0	50143.4	339.	5726.	1.13	3.22	214.	5940.
JAPAN	S	79 6 5	5627N	17149W	17956.1	35045.5	50132.3	301.	4597.	1.13	2.12	683.	5280.
JAPAN	S	80 531	5533N	16832W	18280.3	34994.6	49285.5	399.	6927.	1.12	7.19	773.	7700.
JAPAN	S	79 4 3	5605N	16852W	18444.6	35007.4	49499.2	492.	2135.	1.11	8.78	505.	2640.
JAPAN	S	80 5 9	5603N	16844W	18443.6	34991.1	49449.5	383.	4141.	1.10	3.33	1579.	5720.
JAPAN	S	79 526	5629N	17157W	17919.4	35025.9	50142.2	301.	5496.	1.10	2.80	664.	6160.
JAPAN	S	79 625	5513N	16750W	18232.4	34926.5	49004.3	191.	4387.	1.10	6.47	5513.	9900.
KOREA	M	80 619	5322N	16616W	17819.1	34847.3	48246.9	118.	2550.	1.09	1.59	18570.	21120.
JAPAN	S	79 411	5540N	16855W	18281.9	35033.5	49424.8	448.	2030.	1.08	2.67	170.	2200.
JAPAN	S	79 523	5627N	17150W	17950.2	35043.7	50133.0	301.	3233.	1.08	2.60	287.	3520.
JAPAN	S	80 6 6	5625N	17126W	18076.4	35088.1	50106.2	268.	4268.	1.07	6.67	1452.	5720.
JAPAN	S	79 411	5537N	16852W	18268.6	35030.2	49399.2	394.	1490.	1.06	1.56	50.	1540.
JAPAN	S	79 4 7	5625N	17145W	17968.0	35056.7	50124.0	328.	3606.	1.06	1.89	486.	4092.
JAPAN	S	80 6 8	5553N	16900W	18356.0	35035.0	49497.4	426.	4652.	1.05	5.08	848.	5500.
JAPAN	S	79 414	5604N	16844W	18445.6	34989.9	49452.8	426.	1576.	1.05	7.12	844.	2420.
JAPAN	S	80 6 8	5542N	16900W	18362.5	35034.3	49501.1	410.	4713.	1.05	5.92	1227.	5940.
JAPAN	S	79 4 3	5605N	16845W	18454.2	34991.0	49461.5	476.	2086.	1.04	4.89	772.	2860.
JAPAN	S	79 4 7	5554N	16857W	18367.7	35028.3	49486.0	273.	2608.	1.04	2.61	692.	3300.
JAPAN	S	79 4 8	5603N	16832W	18458.9	34962.0	49383.7	328.	2599.	1.04	3.55	461.	3080.
JAPAN	S	79 4 8	5601N	16839W	18438.4	34981.7	49415.9	301.	1555.	1.04	3.06	1745.	3300.
JAPAN	S	79 4 8	5605N	16841W	18455.4	34981.4	49439.7	290.	1809.	1.03	3.93	391.	2200.
JAPAN	S	79 4 5	5542N	16853W	18298.3	35029.0	49422.3	301.	2387.	1.02	2.49	913.	3300.
JAPAN	S	79 6 5	5626N	17139W	18006.8	35065.4	50121.6	219.	4081.	1.02	2.60	539.	4620.
JAPAN	S	79 527	5624N	17124W	18081.1	35092.5	50100.7	252.	3368.	1.01	4.65	372.	3740.
JAPAN	S	80 530	5556N	16859W	18377.0	35030.8	49503.4	344.	3778.	0.99	3.36	402.	4180.
JAPAN	S	79 530	5626N	17139W	18008.8	35065.4	50121.8	213.	4431.	0.98	5.80	189.	4620.
USSR	M	79 415	5701N	17100W	18430.9	35056.4	50178.4	55.	2672.	0.97	0.86	19328.	22000.
JAPAN	S	79 626	5523N	16808W	18260.9	34954.2	49125.2	219.	3856.	0.96	7.83	4504.	8360.
JAPAN	S	79 411	5541N	16854W	18290.2	35031.5	49423.6	383.	1435.	0.96	1.56	105.	1340.
JAPAN	S	79 5 1	5551N	16856W	18350.4	35028.6	49470.0	313.	3736.	0.93	2.28	554.	4250.
JAPAN	S	79 4 5	5558N	16847W	18408.9	35003.5	49448.6	383.	1476.	0.93	3.10	284.	1760.
JAPAN	S	79 514	5628N	17145W	17985.5	35050.9	50132.0	246.	3715.	0.93	1.75	465.	4180.
JAPAN	S	79 4 3	5606N	16841W	18465.3	34980.1	49442.9	361.	1855.	0.93	4.82	565.	2420.
JAPAN	S	79 611	5526N	17035W	16947.1	35130.4	49223.5	328.	3699.	0.92	4.18	261.	3960.
JAPAN	S	79 4 4	5558N	16847W	18406.9	35003.5	49448.6	366.	2908.	0.92	4.15	392.	3300.
JAPAN	S	79 6 2	5626N	17136W	18026.1	35070.5	50119.2	213.	4043.	0.92	2.81	1457.	5500.
JAPAN	S	79 416	5605N	16844W	18455.5	34988.6	49456.1	465.	912.	0.91	6.40	188.	1100.
JAPAN	S	79 414	5604N	16851W	18439.9	35006.2	49490.4	487.	1488.	0.89	7.68	272.	1760.
JAPAN	S	79 4 7	5544N	16853W	18311.2	35027.6	49429.6	383.	2191.	0.88	2.33	449.	2640.
JAPAN	S	79 620	5522N	17042W	18997.6	35132.2	49232.7	317.	2478.	0.87	4.73	382.	2860.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-14 (continued). TURBOT, APRIL-JUNE 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LOXAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS IRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	79 410	5535N	16844W	18271.2	35016.5	49352.7	366.	1.167	1015.	0.87	2.71	305.	1320.
JAPAN	S	79 422	5614N	17124W	18015.0	35103.4	50066.1	372.	1.500	1298.	0.87	2.33	242.	1540.
JAPAN	S	79 530	5628N	17145W	17985.5	35050.9	50132.0	246.	4.250	3872.	0.86	3.60	508.	4180.
JAPAN	S	80 6 4	5608N	17036W	18197.5	35138.2	41944.4	273.	5.000	4296.	0.86	4.89	3184.	7480.
JAPAN	S	79 4 2	5556N	16856W	18382.2	35024.7	49488.2	347.	2.167	1657.	0.86	2.89	343.	2200.
JAPAN	S	79 414	5604N	16831W	18465.8	34958.0	49381.2	355.	2.333	1990.	0.85	3.75	870.	2860.
JAPAN	S	79 4 2	5628N	17155W	17926.0	35032.1	50138.7	290.	6.500	5929.	0.85	1.31	1071.	6600.
JAPAN	S	79 622	5628N	16733W	18011.9	34932.8	48787.8	465.	4.250	3612.	0.85	1.58	3670.	7282.
JAPAN	S	79 4 3	5607N	16846W	18464.8	34990.9	49473.6	498.	1.500	1254.	0.84	5.96	506.	1760.
JAPAN	S	79 623	5506N	16743W	18204.4	34919.0	48947.0	219.	4.333	3596.	0.83	1.89	1640.	5236.
USSR	M	79 4 7	5707N	17112W	18371.4	34996.1	50179.3	55.	2.167	1783.	0.82	0.70	11417.	13200.
KOREA	M	79 628	5624N	15953W	18421.1	33906.9	46123.5	92.	4.333	3553.	0.82	2.09	14047.	17600.
JAPAN	L	79 629	5626N	16859W	18576.8	34940.2	47489.9	62.	1.833	1498.	0.82	1.92	49962.	51480.
JAPAN	S	79 5 3	5558N	16900W	18388.1	35031.3	49315.9	426.	2.833	2314.	0.82	2.42	766.	3080.
JAPAN	S	80 4 7	5627N	17148W	17962.0	35047.4	50131.6	334.	4.000	3254.	0.81	3.21	706.	3960.
JAPAN	S	79 413	5606N	16846W	18470.8	34989.6	47476.8	306.	1.500	1200.	0.80	3.02	340.	1540.
JAPAN	S	80 6 5	5608N	17048W	18147.3	35135.7	49974.8	254.	1.333	1064.	0.80	3.75	1796.	2860.
JAPAN	S	79 6 4	5258N	17031W	16973.7	35129.2	47217.3	295.	3.000	2393.	0.80	5.01	247.	2640.
JAPAN	S	79 613	5251N	17035W	16919.5	35130.5	49208.5	224.	2.250	1792.	0.80	4.32	848.	2640.
JAPAN	S	79 418	5604N	16846W	18446.9	34994.6	47463.6	487.	1.500	1189.	0.79	5.32	131.	1320.
JAPAN	S	80 519	5493N	16850W	18346.2	35016.0	49432.6	180.	4.500	3531.	0.78	2.28	1749.	5280.
JAPAN	S	79 414	5603N	16849W	18436.6	35002.7	49476.4	328.	1.500	1165.	0.78	4.14	155.	1320.
JAPAN	S	79 518	5252N	17048W	16873.8	35133.7	49250.6	383.	2.963	2300.	0.77	3.35	1242.	3542.
JAPAN	S	79 413	5556N	16858W	18378.8	35028.8	49498.4	366.	2.333	1787.	0.77	2.18	193.	1980.
JAPAN	S	79 416	5606N	16841W	18465.3	34980.1	49442.9	457.	1.063	821.	0.76	3.26	279.	1100.
JAPAN	S	79 5 5	5600N	16843W	18426.9	34992.3	49434.2	305.	1.333	1009.	0.76	5.78	443.	1452.
JAPAN	S	79 525	5627N	17136W	18032.1	35068.8	50122.1	301.	4.167	3083.	0.74	2.26	217.	3300.
JAPAN	S	80 616	5482N	16732W	18123.3	34914.3	48338.6	372.	4.583	3360.	0.73	8.10	820.	5060.
JAPAN	S	79 525	5608N	16846W	18355.9	34936.4	47970.1	312.	3.417	2470.	0.72	3.84	2590.	5060.
JAPAN	S	79 412	5527N	16837W	18386.8	35025.9	49496.9	383.	2.000	1442.	0.72	3.06	98.	1540.
JAPAN	S	79 4 9	5550N	16853W	18345.3	35023.3	49451.3	364.	2.333	1675.	0.72	2.18	305.	1980.
JAPAN	S	79 413	5604N	16842W	18452.2	34985.1	49441.9	388.	1.417	1008.	0.71	4.61	532.	1540.
JAPAN	S	79 4 7	5629N	17157W	17919.4	35025.9	50142.2	306.	5.417	3837.	0.71	1.13	937.	4774.
JAPAN	S	79 626	5510N	16750W	18215.6	34929.5	48995.5	219.	4.500	3078.	0.68	7.44	4292.	7370.
JAPAN	S	79 412	5558N	16847W	18408.9	35003.5	49448.6	355.	2.833	1937.	0.68	2.11	263.	2200.
JAPAN	S	79 418	5606N	16842W	18464.0	34982.5	49448.4	383.	1.500	1007.	0.67	4.58	93.	1100.
JAPAN	S	79 623	5444N	16733W	18099.6	34919.8	48332.5	432.	5.583	3717.	0.67	1.76	2465.	6182.
JAPAN	S	79 629	5421N	16759W	17920.0	34981.5	48893.4	546.	6.000	3909.	0.65	12.78	3351.	7260.
JAPAN	S	79 619	5257N	17030W	16972.0	35128.8	49211.2	230.	3.917	2548.	0.65	3.40	752.	3500.
JAPAN	S	79 527	5621N	17124W	18061.7	35096.1	50090.6	219.	4.500	2918.	0.65	4.27	2362.	5280.
JAPAN	S	80 6 3	5608N	17036W	18197.5	35138.2	49944.4	224.	2.500	1609.	0.64	1.93	3231.	4840.
JAPAN	S	79 624	5518N	16803W	18240.1	34946.7	49087.6	273.	5.000	3214.	0.64	3.11	1406.	4620.
KHCA	M	79 613	5440N	16525W	18251.8	34645.2	48119.8	117.	3.750	2384.	0.64	2.16	46016.	48400.
JAPAN	S	80 519	5549N	16850W	18346.2	35018.0	49432.6	142.	3.333	2115.	0.63	1.69	3165.	5280.
JAPAN	S	79 418	5604N	16846W	18446.9	34994.6	49463.6	437.	2.000	1261.	0.63	4.88	279.	1540.

*** NOTE *** THE ACCURACY OF POSITION AND LOXAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-14 (continued). TURBOT, APRIL-JUNE 1979-80

NATION	VESSEL CLASS	DATE	LAJ	LONG	APPROX	LOXAN-C	PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND	SIZE	BYCATCH	TOTAL
		YMMDD			7X	7Y	7Z		(FMS)	TRAWLED	(LBS)	PER HOUR	LB/S/FISH	(LBS)	(LBS)
JAPAN	S	79 415	5603N	16845N	18442.2	34993.4	49454.9	*****	410.	1.333	839.	0.63	5.24	481.	1320.
JAPAN	S	80 6 4	5416N	16711W	17998.9	34900.4	48650.0	*****	405.	2.033	1775.	0.63	7.21	425.	2200.
JAPAN	S	79 630	5602N	16952W	18301.4	35114.1	49769.4	*****	89.	1.667	1030.	0.62	2.46	53970.	55000.
JAPAN	S	79 6 4	5249N	17034W	16912.4	35129.8	49195.5	*****	153.	3.333	2059.	0.62	2.88	2341.	4400.
JAPAN	S	79 629	5439N	16749W	18042.5	34953.7	48988.7	*****	546.	7.000	4223.	0.60	11.97	3477.	7700.
JAPAN	S	79 625	5523N	16816W	18236.0	34972.5	49164.2	*****	383.	2.667	1604.	0.60	7.78	2356.	3960.
JAPAN	S	79 626	5530N	16826W	18272.5	34985.0	49244.9	*****	383.	2.917	1746.	0.60	7.96	1972.	3716.
JAPAN	S	79 622	5440N	16744W	18057.6	34943.9	48876.7	*****	481.	4.667	2777.	0.60	1.85	3493.	6270.
JAPAN	S	79 518	5259N	17032W	16975.4	35129.5	49223.4	*****	326.	5.750	3417.	0.59	6.72	785.	4202.
JAPAN	S	79 525	5628N	17155W	17928.0	35032.1	50138.7	*****	328.	4.750	2818.	0.59	2.45	482.	3300.
KOREA	H	79 6 3	5451N	16550W	18273.9	34684.2	49283.3	*****	83.	3.250	1911.	0.59	2.26	37249.	39160.
JAPAN	S	79 523	5626N	17137W	18021.4	35068.3	50120.1	*****	224.	4.667	2733.	0.59	2.52	567.	3300.
JAPAN	S	79 621	5221N	17146W	16465.2	35138.2	49320.3	*****	142.	2.250	1283.	0.57	2.90	3777.	5060.
JAPAN	S	79 4 9	5627N	17146W	17973.8	35051.1	50130.1	*****	405.	3.000	1709.	0.57	1.99	381.	2090.
JAPAN	S	80 6 6	5628N	17154W	17932.0	35034.0	50138.1	*****	339.	4.000	2270.	0.57	8.88	590.	2860.
JAPAN	S	80 6 3	5601N	17020W	18205.7	35135.1	49865.4	*****	312.	4.667	2621.	0.56	3.36	3099.	5720.
JAPAN	S	79 5 2	5615N	17109W	18095.4	35119.2	50046.6	*****	273.	3.083	2790.	0.53	4.71	510.	3300.
JAPAN	S	79 4 6	5634N	17158W	17940.0	35011.3	50153.3	*****	301.	5.333	2653.	0.54	1.30	467.	3322.
KOREA	H	79 6 1	5443N	16610W	18215.1	34744.4	48382.3	*****	134.	4.500	2398.	0.53	0.91	24002.	26400.
JAPAN	S	79 418	5606N	16841W	18465.3	34980.1	49442.9	*****	386.	1.083	576.	0.53	3.74	84.	660.
JAPAN	S	79 411	5545N	16854W	18315.8	35028.9	49438.2	*****	426.	1.767	931.	0.53	4.35	169.	1100.
JAPAN	S	79 526	5241N	17125W	16661.2	35138.3	49322.3	*****	339.	2.000	1046.	0.52	6.02	714.	1760.
JAPAN	S	79 417	5604N	16845W	18448.2	34992.2	49458.2	*****	437.	1.167	606.	0.52	6.54	54.	660.
KOREA	H	79 624	5553N	16836W	18394.9	34924.1	49373.3	*****	82.	6.250	3198.	0.51	1.88	58402.	61600.
KOREA	H	80 6 9	5323N	16619W	17812.3	34851.7	48263.7	*****	87.	3.583	1814.	0.51	1.05	16666.	18480.
JAPAN	S	79 5 3	5533N	16838W	18265.7	35006.4	49315.8	*****	241.	1.000	500.	0.50	2.97	886.	1386.
JAPAN	S	80 6 4	5600W	17010W	18232.3	35129.8	49827.5	*****	317.	4.000	2000.	0.50	3.44	3280.	5280.

*** NOTE *** THE ACCURACY OF POSITION AND LOXAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-15. TURBOT, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	79 717	5428N	15925W	18442.8	33833.5	45953.0	98	1.833	20235	11.04	2.61	12105	32340
JAPAN	M	79 718	5414N	16128W	18344.4	34148.2	45695.2	104	1.667	9660	5.80	2.13	5920	15180
JAPAN	S	80 7 6	5522N	16808W	18255.1	34955.1	49126.1	273	5.000	25483	5.10	3.84	2920	2920
USSR	M	80 910	5410N	16129W	18332.1	34160.7	46701.8	96	1.167	5325	4.56	2.86	7875	13200
USSR	M	79 723	5437N	15840W	18475.9	33708.2	45674.6	87	1.750	7533	4.30	1.06	18867	26400
JAPAN	S	80 7 5	5512N	16759W	18212.3	34946.1	49046.4	410	3.000	11222	3.74	10.49	8028	19250
JAPAN	L	80 826	5452N	16652W	18205.0	34825.7	48635.6	133	1.500	5546	3.70	3.29	34054	39600
JAPAN	S	79 9 7	5438N	16630M	18165.6	34796.2	48482.8	198	4.917	17226	3.61	5.03	3174	20900
JAPAN	S	79 824	5418N	16057M	18373.7	34067.2	46509.3	96	1.433	1434	3.52	2.35	1567	6600
JAPAN	S	79 821	5418N	16049M	18376.0	34049.1	46461.6	98	0.417	1434	3.44	2.44	326	1760
JAPAN	S	80 7 9	5530N	16827W	18270.8	34987.0	49250.0	273	4.083	13964	3.42	3.19	6698	20460
JAPAN	M	79 718	5416N	16125W	18352.1	34136.1	46677.0	95	1.333	4476	3.36	2.29	3664	8140
JAPAN	S	79 810	5627N	17145W	17975.7	35052.9	50129.4	219	4.500	14340	3.19	5.63	1720	16060
JAPAN	S	79 9 6	5423N	16637W	18111.1	34787.9	48379.6	503	4.667	14225	3.05	8.69	4695	18920
JAPAN	S	80 7 7	5504N	16758M	18168.2	34951.3	49018.9	301	4.333	12500	2.88	9.42	6640	19140
JAPAN	M	79 719	5403N	16247W	18254.1	34354.4	47159.7	118	1.167	3275	2.81	1.68	5785	9020
JAPAN	M	79 715	5403N	16244W	18256.5	34347.6	47142.2	104	1.500	4052	2.70	1.55	4088	8140
JAPAN	S	79 7 3	5535N	16841W	18276.7	35010.8	49337.8	492	1.000	2700	2.70	9.57	1260	3960
JAPAN	S	79 9 6	5436N	16630M	18155.8	34798.8	48478.4	209	4.917	12751	2.59	7.38	1325	14020
JAPAN	M	79 719	5402N	16259W	18240.7	34883.7	47229.1	104	2.000	5109	2.55	2.17	6771	11880
JAPAN	S	79 7 2	5533N	16828W	18287.2	34986.4	49265.1	306	1.500	3761	2.51	9.94	1735	5500
JAPAN	S	80 7 3	5434N	16750M	18012.4	34958.9	48888.8	546	3.500	8474	2.42	11.49	2086	10560
JAPAN	S	79 827	5437N	16630M	18166.7	34797.5	48480.6	202	5.000	11850	2.37	6.56	1570	13420
JAPAN	L	79 727	5446N	16545W	18257.0	34681.4	48245.5	123	2.333	5491	2.35	1.17	38949	44440
JAPAN	S	80 9 6	5624N	17124W	18081.1	35052.5	50100.7	219	4.333	10162	2.33	10.57	3258	13420
JAPAN	L	80 828	5446N	16619M	18218.3	34760.3	48439.0	162	2.500	5837	2.33	4.65	49163	55000
JAPAN	S	79 824	5418N	16055W	18374.8	34082.7	46497.4	92	1.750	4024	2.30	8.16	816	4840
JAPAN	S	80 7 14	5419N	16721M	17985.7	34917.9	48703.4	355	1.833	8601	2.30	10.16	2199	11000
JAPAN	S	80 7 3	5426N	16748W	17971.4	34960.5	48855.7	546	5.000	11190	2.24	12.45	2450	13640
JAPAN	S	80 7 3	5426N	16757W	17952.7	34975.6	48898.9	546	6.000	13176	2.23	12.90	10384	23760
JAPAN	S	80 831	5627N	17143M	17991.5	35056.5	50127.9	284	4.000	8815	2.20	6.10	9460	9460
JAPAN	S	80 713	5433N	16753M	18006.7	34964.7	48900.5	546	4.000	8402	2.20	12.42	6378	15180
JAPAN	S	80 823	5628N	17142M	18003.2	35056.4	50129.8	254	4.000	8718	2.18	5.31	10120	10120
JAPAN	S	80 714	5422N	16719W	18005.5	34911.9	48701.4	355	5.500	11926	2.17	8.43	8974	20900
JAPAN	S	80 7 4	5445N	16748W	18078.2	34947.5	48911.4	546	6.500	13882	2.14	13.15	13618	27500
JAPAN	S	79 814	5628N	17148M	17967.8	35045.3	50134.1	273	4.500	9505	2.11	3.79	615	10120
JAPAN	S	79 828	5454N	16721M	18173.5	34885.8	48797.3	202	3.333	6896	2.07	5.50	8064	14960
JAPAN	S	80 7 5	5427N	16757M	17958.4	34975.1	48901.9	546	5.667	11646	2.06	13.49	7604	19250
JAPAN	S	80 823	5626N	17139M	18008.8	35065.4	50121.8	295	4.083	8017	1.96	7.59	1003	9020
JAPAN	S	79 926	5442N	16702M	18139.5	34859.4	48665.2	230	3.833	7445	1.94	7.00	5975	13420
JAPAN	S	80 829	5627N	17148W	17962.0	35047.4	50131.6	172	4.000	7673	1.92	6.66	687	8360
JAPAN	S	79 828	5439N	16558M	18211.0	34723.4	48306.8	191	4.500	8545	1.90	9.98	3335	11880
JAPAN	S	80 811	5624N	17124M	18081.1	35092.5	50100.7	265	4.250	8029	1.89	10.91	4291	12320
JAPAN	S	80 7 4	5422N	16754W	17936.4	34972.9	48872.7	546	6.500	12274	1.89	12.84	3566	15840
JAPAN	S	79 830	5446N	16704M	18157.2	34859.1	48685.9	219	4.167	7855	1.89	5.68	6445	14300

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-15 (continued). TURBOT, JULY-SEPTEMBER 1979-80

NATION	CLASS	DATE	LAT	LONG	APPROX LGRAN-C	PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YRMMDD			7X	7Y	7Z	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FTISH	(LBS)	(LBS)
JAPAN	S	80 7 2	5424N	16753W	17945.8	34970.1	48873.9	546	7.000	13174	1.88	12.83	2886	16060
JAPAN	S	80 8 29	5625N	17126W	18076.4	35088.1	50106.2	249	4.000	7519	1.88	6.14	1281	8800
JAPAN	S	80 7 8	5421N	16800W	17917.8	34983.1	48898.1	546	5.917	10995	1.86	13.69	3305	14300
JAPAN	L	79 7 27	5446N	16550W	18251.7	34693.2	48274.3	112	2.333	4329	1.86	1.31	29331	33660
JAPAN	S	80 7 16	5440N	16754W	18036.5	34961.9	48926.3	546	5.000	9240	1.85	13.29	16060	25300
JAPAN	S	79 7 11	5521N	16812W	18242.7	34964.4	49143.7	355	3.250	5796	1.78	9.02	6106	11902
JAPAN	S	79 9 2	5429N	16720W	18041.2	34907.9	48725.1	421	7.750	13784	1.78	8.80	2716	16500
JAPAN	S	79 5 27	5450N	16710W	18169.0	34867.1	48728.2	200	4.000	7087	1.77	5.23	3913	11000
JAPAN	S	79 9 5	5425N	16711W	18035.8	34894.4	48668.8	410	8.667	15326	1.77	7.08	4914	20240
JAPAN	M	79 7 20	5413N	16130W	18340.3	34155.3	46707.3	115	1.500	2628	1.75	2.34	26412	29040
JAPAN	S	79 8 29	5438N	16557W	18207.6	34722.7	48299.2	201	4.833	8333	1.72	6.01	2007	10340
JAPAN	S	80 7 7	5422N	16757W	17930.0	34977.8	48887.0	546	6.500	10959	1.69	13.09	4441	15400
JAPAN	S	79 8 27	5424N	16615W	18118.7	34782.4	48370.9	492	5.417	9040	1.67	23.01	1080	10120
USSR	M	80 9 23	5417N	16113W	18361.9	34108.2	46605.2	82	2.000	3331	1.67	2.89	8769	12100
JAPAN	S	80 5 17	5615N	17104W	18124.1	35123.7	50037.8	175	3.500	5798	1.66	10.19	2362	8360
JAPAN	S	79 9 3	5439N	16726W	18084.5	34910.7	48782.8	440	6.500	10761	1.66	8.58	1559	12320
JAPAN	S	79 5 26	5436N	16647W	18131.5	34835.0	48570.4	224	3.833	6312	1.65	11.05	2268	8580
JAPAN	S	79 9 4	5443N	16724W	18105.6	34903.1	48783.4	519	4.500	7388	1.64	9.59	1632	9020
JAPAN	S	79 9 6	5419N	16643W	18051.9	34845.7	48509.1	426	7.083	11575	1.63	8.02	2945	14520
JAPAN	S	80 7 15	5442N	16747W	18063.2	34947.9	48897.6	546	5.000	8053	1.61	12.90	4047	12100
JAPAN	S	79 9 22	5437N	16637W	18151.0	34812.6	48518.8	219	2.833	4555	1.61	8.35	2045	6600
JAPAN	S	79 9 2	5418N	16638W	18054.9	34836.8	48480.6	476	6.500	10391	1.60	7.28	2589	12980
JAPAN	S	79 5 21	5438N	16642W	18148.8	34822.0	48548.2	210	2.417	3740	1.55	6.79	1760	5500
JAPAN	S	80 5 15	5628N	17146W	17975.6	35049.0	50132.7	301	4.000	6046	1.51	7.47	774	6820
JAPAN	S	79 8 16	5428N	15909W	18445.3	33798.7	45858.0	118	3.000	4508	1.50	2.01	1652	6160
KOREA	M	80 5 17	5500N	16725W	18155.5	34887.6	48834.8	149	8.833	13264	1.50	4.63	62636	75900
JAPAN	S	79 5 28	5506N	16741W	18207.5	34914.8	48936.5	194	3.000	4482	1.49	4.21	2558	7040
JAPAN	S	79 7 12	5531N	16830W	18271.7	34992.2	49268.6	383	4.000	5976	1.49	8.10	5728	11704
JAPAN	S	79 8 28	5440N	16556W	18217.5	34717.2	48297.4	186	4.583	6827	1.49	6.75	2193	9020
JAPAN	S	80 8 29	5628N	17143W	17997.3	35054.5	50130.5	230	4.167	6192	1.49	6.14	628	6820
JAPAN	S	80 7 6	5514N	16802W	18218.8	34950.4	49070.1	410	3.750	5486	1.46	11.08	4008	9900
JAPAN	L	79 7 8	5524N	16849W	18381.1	35011.7	49445.2	96	2.750	4001	1.45	9.15	5074	10560
JAPAN	L	79 7 16	5603N	16820W	18472.4	34931.5	49316.0	98	1.833	2660	1.45	1.42	51219	55220
JAPAN	S	79 7 11	5531N	16828W	18275.1	34988.2	49258.4	213	3.250	4671	1.44	4.56	4327	18250
JAPAN	S	80 7 23	5630N	17158W	17918.8	35021.5	50145.0	246	4.500	6384	1.42	5.46	216	6600
JAPAN	S	80 9 4	5626N	17141W	18005.0	35058.2	50129.0	230	4.083	5787	1.42	5.64	7700	7700
JAPAN	S	79 9 23	5451N	16711W	18172.8	34868.1	48736.1	213	4.333	6117	1.41	9.58	2243	8360
JAPAN	S	80 9 5	5629N	17148W	17973.4	35043.2	50136.6	235	4.250	5996	1.41	7.39	604	6600
JAPAN	M	79 7 22	5423N	15945W	18422.3	33892.2	46076.8	98	2.333	3268	1.40	1.72	5312	8580
JAPAN	S	79 8 29	5437N	16630W	18160.7	34797.5	48480.6	200	4.750	6272	1.32	6.84	1648	7920
JAPAN	S	80 7 3	5442N	16749W	18055.4	34951.6	48907.5	546	8.000	10538	1.32	13.32	4422	14960
JAPAN	M	79 7 17	5418N	16024W	18391.1	33993.0	46312.6	164	1.000	1314	1.31	6.77	4186	5500
JAPAN	S	79 8 21	5406N	16145W	18309.6	34206.9	46796.6	98	0.500	654	1.31	2.04	7046	7700
JAPAN	S	79 5 26	5437N	16651W	18130.5	34842.2	48594.2	235	4.000	5209	1.30	9.32	3591	8800

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-15 (continued). TURBOT, JULY-SEPTEMBER 1979-80

NATION	VESEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
*****	*****	*****	*****	*****	7X	7Y	7Z	*****	*****	*****	*****	*****	*****
JAPAN	S	79 829	5423N	16639W	18078.3	34833.4	46497.4	437.	5799.	1.29	7.55	1901.	7700.
JAPAN	S	80 831	5828N	17146W	17979.6	35049.0	50132.7	194.	4938.	1.29	5.65	782.	5720.
JAPAN	S	80 7 1	5426N	16744W	17979.4	34933.7	48836.3	519.	8357.	1.29	11.49	3081.	11440.
JAPAN	S	79 920	5438N	16652W	18134.1	34843.2	48602.0	219.	2339.	1.27	9.18	981.	3520.
JAPAN	S	80 9 1	5625N	17125W	18082.0	35089.7	50105.1	268.	5071.	1.27	6.48	649.	5720.
JAPAN	S	79 823	5419N	16104W	18372.6	34080.3	46550.8	93.	2231.	1.26	2.10	409.	2640.
JAPAN	S	79 929	5509N	16745W	18217.9	34920.1	48966.2	140.	3760.	1.25	3.69	1740.	5500.
JAPAN	S	80 830	5428N	17144W	17991.4	35052.7	50331.3	252.	4934.	1.23	8.48	786.	5720.
JAPAN	S	79 5 1	5438N	16605W	18194.2	34747.6	48361.0	204.	8394.	1.23	8.77	2385.	10780.
JAPAN	S	80 511	5428N	17141W	18009.0	35058.2	50129.0	224.	4910.	1.23	6.86	1250.	6160.
JAPAN	S	79 925	5443N	16700W	18147.7	34854.1	48657.0	208.	4787.	1.20	6.07	1813.	6600.
JAPAN	S	79 922	5440N	16648W	18150.2	34832.3	48585.3	191.	3179.	1.19	6.72	1441.	4620.
JAPAN	S	79 823	5419N	16100W	18374.8	34071.2	46526.9	102.	1657.	1.17	2.60	543.	2200.
JAPAN	S	79 923	5455N	16725W	18172.6	34893.1	48821.2	216.	3305.	1.17	9.36	1095.	4400.
JAPAN	S	79 9 3	5421N	16734W	17971.6	34939.6	48773.2	443.	7980.	1.14	7.65	1920.	9900.
JAPAN	S	80 911	5428N	17146W	17979.6	35049.0	50132.7	284.	4539.	1.13	7.29	2061.	6600.
USSR	S	79 714	5738N	16641W	18750.5	34163.1	48710.1	33.	2852.	1.13	3.77	23798.	26620.
JAPAN	S	79 720	5404N	16211W	18285.1	34270.6	46949.3	112.	1682.	1.12	2.30	9098.	10780.
JAPAN	S	79 830	5424N	16614W	18120.1	34780.3	48365.4	530.	3254.	1.11	11.04	2666.	9900.
JAPAN	S	79 913	5428N	17136W	18038.1	35067.0	50124.9	252.	3932.	1.11	8.95	3768.	7700.
JAPAN	S	79 921	5444N	16705W	18145.3	34863.4	48686.2	208.	2364.	1.10	6.41	476.	2860.
JAPAN	S	79 713	5336N	16833W	18279.2	35013.9	49351.3	355.	5487.	1.10	8.07	5931.	11418.
JAPAN	S	80 517	5609N	17042W	18180.3	35137.3	49564.6	257.	3284.	1.09	12.76	1336.	4620.
JAPAN	S	79 9 5	5502N	16746W	18177.3	34829.1	48951.1	273.	5641.	1.09	5.28	2279.	7920.
JAPAN	S	79 720	5406N	16145W	18309.6	34206.9	46796.6	114.	1450.	1.09	3.95	3830.	5280.
JAPAN	S	79 9 9	5600N	17018W	18205.3	35134.2	49854.5	246.	5500.	1.06	7.40	3080.	8580.
JAPAN	S	79 717	5454N	16656W	18209.7	34831.9	48662.4	121.	1852.	1.06	1.90	13548.	15400.
JAPAN	S	80 814	5424N	17124W	18081.1	35092.5	50100.7	224.	4449.	1.06	8.80	2591.	7040.
MEXICO	S	79 810	5450N	15814W	18514.9	33610.5	45500.9	103.	435.	1.04	3.47	6165.	6600.
JAPAN	S	79 714	5550N	16858W	18346.4	35033.2	49476.3	437.	4695.	1.04	10.03	4765.	9460.
JAPAN	S	79 523	5440N	16659W	18133.8	34955.5	48644.2	219.	3106.	1.04	7.92	2394.	5500.
JAPAN	S	79 5 4	5457N	16742W	18156.0	34925.8	48915.9	295.	3837.	1.02	10.07	1003.	4840.
JAPAN	S	80 916	5607N	17036W	18190.0	35138.2	49939.9	383.	4249.	1.02	8.82	2351.	6600.
JAPAN	S	80 515	5623N	17123W	18080.2	35095.2	50096.2	232.	4493.	1.00	7.27	1227.	5720.
JAPAN	S	79 9 1	5426N	16609W	18136.5	34766.9	48342.3	546.	6944.	0.99	11.65	3176.	10120.
JAPAN	S	80 716	5441N	16745W	18061.3	34945.0	48844.6	548.	5200.	0.99	13.03	1780.	7040.
KOREA	H	80 8 8	5425N	16615W	17835.3	34843.1	48248.0	118.	7033.	0.98	2.07	65567.	72600.
JAPAN	L	79 716	5525N	16803W	18280.2	34941.5	49109.0	120.	2203.	0.98	1.49	41797.	46000.
JAPAN	L	79 710	5611N	16808W	18525.6	34883.8	49267.3	80.	1218.	0.97	1.51	46324.	67540.
JAPAN	S	79 927	5459N	16731W	18184.9	34901.3	48863.9	208.	2553.	0.97	7.12	2367.	4620.
JAPAN	L	79 819	5458N	16558W	18276.0	34701.5	48331.3	87.	2481.	0.96	0.89	54719.	57200.
JAPAN	S	79 922	5438N	16653W	18132.6	34845.2	48607.3	230.	2698.	0.95	5.30	2362.	5060.
JAPAN	M	79 721	5417N	16049W	18375.3	34051.9	46462.0	119.	1577.	0.95	3.88	3923.	5500.
JAPAN	S	79 925	5446N	16702W	18160.2	34854.9	48675.2	191.	2832.	0.94	3.04	4868.	7700.
JAPAN	S	79 712	5522N	16804W	18261.5	34946.8	49105.1	186.	4713.	0.94	9.02	6397.	11110.

*** NCIE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-15 (continued). TURBOT, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LGRAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	20 830	5435N	1635W	7X ***** 7Y ***** 7Z *****	142	2.000	1862	0.93	1.89	44338	46200
JAPAN	L	79 8 2	5608N	1635W	18215.4 34677.4 48169.0	68	1.250	1161	0.93	1.10	89039	90200
JAPAN	L	79 819	5448N	1653W	18336.8 35117.1 49808.0	95	7.000	2399	0.93	0.81	20481	22880
KOREA	M	80 510	5454N	1670W	18292.9 34858.1 48727.7	145	1.500	6435	0.92	3.31	59125	65560
JAPAN	S	79 822	5418N	16054W	18375.3 34060.4 46491.4	93	1.500	1378	0.92	2.12	382	1760
JAPAN	S	79 9 9	5616N	17123W	18034.2 35102.8 50071.9	215	4.167	3828	0.92	10.16	5412	9240
JAPAN	S	79 929	5506N	16742W	18206.0 34916.6 48941.8	194	3.667	3272	0.89	2.94	3328	6600
JAPAN	S	80 825	5628N	17145W	17985.5 35050.9 50132.0	186	4.000	3547	0.89	5.03	1293	4840
JAPAN	S	79 5 4	5240N	17157W	16515.7 35136.8 49402.1	219	1.750	1546	0.88	4.52	3074	4620
JAPAN	L	79 810	5445N	16607W	18228.0 34734.4 48369.3	139	1.417	1248	0.88	3.61	31752	33000
JAPAN	L	79 8 2	5611N	16953W	18364.3 35114.7 49813.5	71	1.667	1456	0.87	1.52	55744	57200
JAPAN	M	79 722	5423N	15951W	18419.6 33905.5 46112.5	112	1.500	1308	0.87	3.22	3532	4840
JAPAN	L	79 818	5450N	16605W	18251.3 34721.5 48367.7	93	1.583	1371	0.87	0.87	18429	19800
JAPAN	S	79 711	5521N	16812W	18242.7 34964.4 49143.7	437	3.500	3821	0.86	7.81	3689	6710
JAPAN	S	79 7 7	5441N	16751W	18050.0 34955.9 48914.5	530	5.333	4595	0.86	9.75	6845	11440
JAPAN	S	79 930	5455N	16725W	18172.6 34893.1 48821.2	213	3.500	3012	0.86	5.90	948	3960
JAPAN	S	60 517	5609N	17042W	18180.3 35137.3 49964.6	246	3.500	2989	0.85	8.02	2071	5060
JAPAN	L	79 928	5444N	16525W	18268.9 34637.7 48126.2	113	1.417	1209	0.85	1.43	90091	91300
JAPAN	S	79 9 9	5604N	17033W	18175.6 35138.2 49916.2	243	4.167	3505	0.84	11.17	3755	7260
JAPAN	S	79 920	5454N	16724W	18168.8 34892.1 48813.2	221	2.000	1663	0.83	6.00	757	2420
JAPAN	S	80 916	5608N	17035W	18201.5 35138.2 49941.7	191	3.917	3255	0.83	13.03	4885	8140
JAPAN	S	79 910	5617N	17123W	18040.8 35101.8 50075.4	246	3.917	3221	0.82	8.16	4478	7700
JAPAN	S	79 921	5439N	16654W	18136.2 34846.2 48615.1	219	2.500	2032	0.81	8.46	1488	3520
JAPAN	S	80 723	5625N	17136W	18020.0 35072.1 50116.3	273	4.417	3547	0.80	9.44	413	3960
JAPAN	L	79 816	5447N	16538W	18262.7 34863.0 48206.7	108	2.083	1666	0.80	1.34	57734	59400
JAPAN	L	79 7 8	5546N	16837W	18351.1 34993.5 49355.3	85	2.417	1924	0.80	0.58	11276	13200
KOREA	M	80 924	5448N	16650W	18187.6 34826.6 48615.1	153	6.917	5497	0.79	3.63	20683	26180
JAPAN	L	79 7 8	5554N	16850W	18375.5 35013.6 49450.3	104	2.833	2239	0.79	1.54	7221	9460
KOREA	M	80 724	5442N	16555W	18228.1 34711.6 48295.5	159	6.750	5300	0.79	2.80	43100	48400
JAPAN	S	79 7 9	5444N	16752W	18065.0 34955.6 48928.3	546	5.167	4052	0.78	9.54	4748	8800
JAPAN	S	60 710	5613N	16936W	18419.9 35090.3 49749.1	191	3.333	2601	0.78	2.71	5099	7700
JAPAN	L	79 726	5449N	16543W	18272.3 34871.2 48239.2	96	2.750	2142	0.78	0.88	23158	25300
JAPAN	S	79 830	5418N	16645W	18043.6 34850.7 48517.2	519	7.083	5481	0.77	11.59	2219	7700
JAPAN	S	79 9 8	5557N	17002W	18235.6 35123.7 49785.4	246	3.000	2312	0.77	9.44	1428	3740
JAPAN	S	79 7 9	5424N	16752W	17951.9 34568.5 48869.1	530	7.000	5369	0.77	9.73	6797	12166
JAPAN	S	79 7 2	5519N	16801W	18249.1 34943.5 49080.2	219	5.500	4120	0.75	7.74	2700	6820
JAPAN	L	79 718	5451N	16542W	18282.1 34665.1 48236.3	82	4.167	3114	0.75	1.74	89286	92400
JAPAN	L	79 8 5	5602N	16759W	18487.5 34877.5 49151.6	78	1.500	1119	0.75	0.63	51461	52580
JAPAN	S	79 713	5422N	15954W	18415.7 33915.0 46131.2	109	3.000	2239	0.75	2.29	5461	7700
JAPAN	S	80 923	5629N	17157W	17919.4 35025.9 50142.2	301	5.000	3700	0.74	4.18	260	3960
JAPAN	S	80 522	5452N	16758W	18055.4 34960.8 48982.3	191	1.167	861	0.74	7.31	679	1540
JAPAN	S	60 826	5627N	17152W	17938.3 35040.0 50134.4	284	5.833	4219	0.72	6.74	841	5060
JAPAN	S	79 7 2	5531N	16826W	18278.5 34984.1 49248.2	191	5.000	3594	0.72	7.86	1906	5500
JAPAN	S	60 9 1	5628N	17145W	17965.5 35050.9 50132.0	235	4.167	2993	0.72	7.16	1187	4180
JAPAN	L	79 925	5444N	16524W	18265.9 34635.3 48120.4	108	1.083	772	0.71	1.25	91628	92400

*** NOTE *** THE ACCURACY OF POSITION AND LOGAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-15 (continued). TURBOT, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAI	LONG	APPROX L	RAN-C	PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YMMDD			7X	7Y	7Z	F7Z	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FTISH	(LBS)	(LBS)
JAPAN	L	80 827	5452N	16651W	18206.4	34823.5	48630.1	138.	138.	2.167	1541.	0.71	2.20	55659.	57200.
JAPAN	L	79 811	5444N	16617W	18211.3	34758.8	48423.6	139.	139.	2.167	1539.	0.71	2.33	84261.	85800.
JAPAN	S	80 918	5615N	17122W	18032.8	35104.9	50066.9	279.	279.	3.917	2747.	0.70	8.74	1213.	3960.
JAPAN	S	79 615	5423N	15940W	18424.5	33881.3	46047.1	125.	125.	2.783	1939.	0.70	2.37	9281.	11220.
JAPAN	S	79 7 2	5630N	17159W	17912.7	35019.6	50145.5	289.	289.	4.133	2846.	0.69	1.95	212.	3058.
JAPAN	S	79 528	5500N	16735W	18184.0	34908.6	48887.8	213.	213.	3.500	2403.	0.69	5.63	2437.	4840.
KOREA	M	80 8 9	5259N	16800W	17469.0	35012.0	48668.3	61.	61.	9.333	6358.	0.68	1.96	186802.	193160.
JAPAN	L	79 7 8	5554N	16851W	18377.9	35015.5	49455.5	100.	100.	1.167	776.	0.67	0.88	32004.	32780.
JAPAN	S	79 822	5406N	16146W	18309.0	34209.2	46802.5	98.	98.	0.717	476.	0.66	1.66	844.	1320.
KOREA	M	80 710	5441N	16546W	18233.3	34692.5	48242.3	175.	175.	4.583	3031.	0.66	2.74	40969.	44000.
JAPAN	L	79 831	5447N	16625W	18215.6	34772.4	48474.7	116.	116.	2.917	1915.	0.66	2.11	56165.	58080.
JAPAN	S	79 716	5535N	16848W	18263.6	35024.1	49372.4	465.	465.	1.333	874.	0.66	7.57	2162.	3036.
JAPAN	S	80 715	5429N	16755W	17973.9	34970.6	48898.3	519.	519.	6.333	4128.	0.65	13.11	2912.	7040.
KOREA	M	80 913	5443N	16559W	18228.1	34719.2	48320.1	159.	159.	7.417	4827.	0.65	2.69	124093.	128920.
USSR	M	80 514	5430N	16115W	18397.3	34075.0	46613.8	63.	63.	1.917	1239.	0.65	1.84	8221.	9460.
JAPAN	S	80 9 6	5610N	17056W	18126.1	35131.5	50001.4	224.	224.	3.833	2471.	0.64	9.89	3029.	5500.
USSR	M	79 728	5437N	15842W	18475.2	33712.5	45686.5	85.	85.	2.167	1380.	0.64	1.10	29420.	30800.
KOREA	M	80 525	5442N	16624W	18192.9	34777.4	48458.4	148.	148.	2.167	1370.	0.63	3.72	3470.	4840.
JAPAN	S	79 715	5550N	16859W	18338.5	35035.1	49481.5	437.	437.	5.250	3315.	0.63	7.83	3461.	6776.
JAPAN	S	79 7 9	5441N	16746W	18059.5	34946.8	48889.6	546.	546.	5.833	3665.	0.63	9.98	5135.	8900.
JAPAN	L	80 822	5526N	16802W	18287.5	34938.3	49106.7	108.	108.	1.583	992.	0.63	0.97	27808.	28800.
JAPAN	L	79 714	5510N	16738W	18261.4	34898.3	48945.9	95.	95.	2.500	1559.	0.62	0.55	27041.	28600.
JAPAN	S	80 525	5626N	17139W	18008.8	35065.4	50121.8	328.	328.	5.167	3220.	0.62	8.51	520.	3740.
JAPAN	M	79 721	5411N	16130W	18334.4	34160.5	46707.5	126.	126.	2.000	1232.	0.62	5.00	6908.	8140.
KOREA	M	80 510	5444N	16632W	18192.2	34792.4	48507.1	153.	153.	6.500	4003.	0.62	2.90	35157.	39160.
JAPAN	S	79 714	5424N	15935W	18429.1	33867.3	46016.4	109.	109.	3.000	1838.	0.61	2.74	3222.	5060.
JAPAN	L	79 718	5605N	17017W	18245.9	35134.0	49873.9	75.	75.	0.667	408.	0.61	1.54	87592.	88000.
JAPAN	L	79 525	5443N	16525W	18264.6	34639.6	48124.7	113.	113.	1.417	863.	0.61	1.49	51937.	52900.
JAPAN	S	79 710	5440N	16652W	18144.3	34840.8	48606.8	205.	205.	4.167	2517.	0.60	4.65	2389.	4900.
JAPAN	L	79 529	5447N	16530W	18276.7	34643.5	48160.2	110.	110.	1.083	654.	0.60	1.08	23106.	23760.
JAPAN	S	80 516	5603N	17019W	18224.1	35134.8	49871.3	268.	268.	3.917	2359.	0.60	9.84	4021.	6380.
KOREA	M	79 8 6	5432N	16537W	18203.9	34687.0	48175.2	180.	180.	6.167	3659.	0.59	2.42	5741.	59400.
JAPAN	S	79 531	5424N	16620W	18111.6	34792.9	46398.0	546.	546.	6.333	3731.	0.59	12.55	4409.	8140.
JAPAN	S	79 713	5510N	16818W	18167.1	34984.9	49138.7	246.	246.	6.000	3529.	0.59	9.06	4699.	8228.
MEXICO	S	79 811	5458N	15818W	18255.4	33591.8	45312.8	101.	101.	0.667	391.	0.59	1.65	5989.	6380.
JAPAN	L	79 725	5453N	16544W	18288.8	34666.1	48251.9	85.	85.	1.750	1005.	0.57	0.92	31995.	33000.
JAPAN	S	79 515	5612N	17058W	18131.3	35129.6	50013.9	219.	219.	5.000	2839.	0.57	11.46	1361.	4600.
KOREA	M	80 8 3	5432N	16541W	18195.3	34696.1	48197.8	159.	159.	4.250	2408.	0.57	1.98	81192.	83600.
JAPAN	L	79 7 3	5535N	16827W	18300.8	34982.6	49266.6	96.	96.	2.167	1222.	0.56	1.45	24518.	25740.
JAPAN	S	79 717	5521N	16804W	18255.8	34947.8	49102.1	219.	219.	5.000	2797.	0.56	8.05	2153.	4950.
KOREA	M	80 7 3	5431N	16536W	18200.6	34686.4	48167.8	120.	120.	2.250	1241.	0.55	4.03	47159.	48400.
USSR	M	80 516	5431N	16111W	18402.1	34062.9	46589.3	79.	79.	1.833	1003.	0.55	1.32	14397.	15400.
JAPAN	L	79 718	5457N	16710W	18205.6	34858.8	48746.2	120.	120.	3.000	1641.	0.55	1.31	4959.	6600.
USSR	M	79 727	5450N	15813W	18515.2	33602.4	45495.0	107.	107.	2.583	1401.	0.54	1.52	44579.	45980.
JAPAN	S	79 910	5608N	17049W	18142.9	35135.3	49977.2	219.	219.	1.283	693.	0.54	8.09	1287.	1980.

*** NOTE *** - THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-15 (continued). TURBOT, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	AFFRQZ 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
MEXICO	S	79 818	5500N	15808W	18535.9	33563.8	45449.4	87.	1.833	965.	0.53	1.78	8495.	9460.
JAPAN	L	79 817	5447N	16543W	18263.5	34674.9	48235.7	106.	1.833	964.	0.53	1.03	49636.	50600.
JAPAN	S	79 717	5506N	16746W	18195.6	34925.2	48962.0	219.	3.500	1820.	0.52	9.35	1832.	3652.
JAPAN	S	79 714	5604N	16841W	18453.5	34982.7	49436.5	437.	6.250	3241.	0.52	16.02	2039.	5280.
JAPAN	L	79 714	5602N	16949W	18305.0	35110.7	49757.3	85.	2.667	1379.	0.52	1.16	97621.	99000.
JAPAN	S	79 715	5604N	16844W	18449.6	34989.9	49452.8	465.	5.750	2973.	0.52	7.95	3407.	6380.
JAPAN	L	79 715	5520N	16744W	18280.2	34905.5	48992.4	94.	2.750	1421.	0.52	0.74	95379.	96800.
KOREA	H	80 812	5301N	16735W	17543.6	34980.0	48566.5	108.	7.417	3804.	0.51	0.91	95196.	99000.
KOREA	H	80 812	5447N	16532W	18274.8	34648.7	48171.9	169.	4.167	2130.	0.51	2.49	52470.	94600.
JAPAN	S	79 530	5515N	16753W	18261.5	34926.4	49037.9	219.	3.333	1704.	0.51	2.74	1816.	3520.
JAPAN	L	79 716	5559N	16812W	18459.0	34917.4	49259.0	80.	1.333	680.	0.51	0.68	49040.	49720.
JAPAN	S	79 715	5552N	16900W	18345.6	35035.7	49493.7	465.	6.000	3045.	0.51	9.60	3775.	6820.
KOREA	H	80 827	5444N	16623W	18203.8	34772.3	48457.1	147.	12.083	6059.	0.50	4.88	35741.	41300.
JAPAN	L	79 710	5629N	17125W	16107.1	35083.9	50117.8	88.	1.500	751.	0.50	0.99	60849.	61600.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

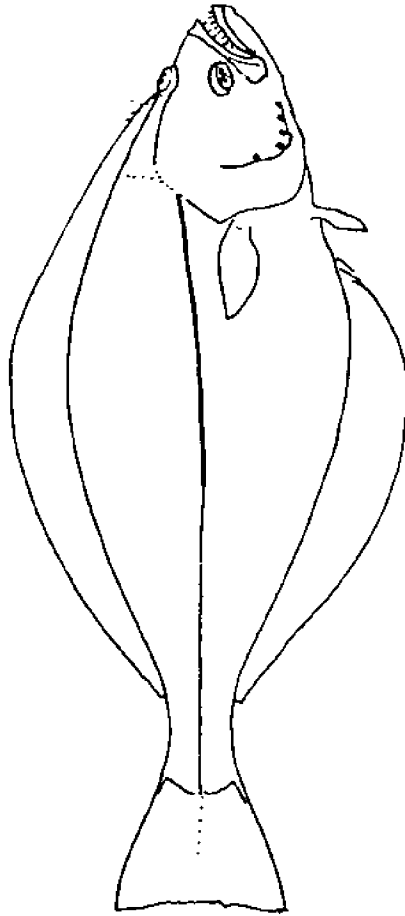


TABLE C-16. TURBOT, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YYMMDD			7X	7Y	7Z	(FMS)	TRAILED	(LBS)	PER HOUR	LB/S/FISH	(LBS)	(LBS)
JAPAN	M	801117	5733N	16619W	18748.1	34129.5	48573.6	38.	2.250	40833.	18.15	0.57	3167.	44000.
JAPAN	M	801116	5733N	16621W	18748.2	34135.9	48586.3	38.	2.833	49287.	17.40	0.52	10113.	59400.
JAPAN	M	801117	5731N	16620W	18747.1	34146.9	48583.2	38.	3.833	50093.	13.07	0.46	7107.	57200.
JAPAN	M	801116	5725N	16627W	18742.7	34211.1	48637.8	39.	0.667	7257.	10.89	0.64	1543.	8800.
JAPAN	M	801117	5727N	16620W	18744.7	34174.8	48588.7	38.	1.417	11914.	8.41	0.57	3486.	15400.
JAPAN	M	801116	5743N	16642W	18732.6	34338.9	48750.9	40.	1.417	9128.	6.44	0.56	2972.	12100.
JAPAN	S	8010 8	5627N	17155W	17926.4	35034.3	50136.4	246.	4.500	14291.	3.18	9.99	449.	14740.
JAPAN	S	7912 8	5448N	16732W	18123.3	34914.3	48038.6	372.	3.000	9302.	3.10	7.84	158.	9460.
JAPAN	S	7912 1	5551N	16957W	18368.6	35030.5	49475.0	328.	2.063	6214.	2.98	10.77	166.	6380.
JAPAN	L	791019	5454N	16704W	18198.6	34849.5	48706.0	131.	1.917	4711.	2.46	2.54	74929.	79640.
USSR	M	801012	5426N	16012W	18417.4	33943.3	46235.6	82.	2.333	5484.	2.35	1.48	35656.	41140.
JAPAN	L	7910 9	5527N	16825W	18431.0	34953.2	49326.4	84.	1.083	2475.	2.28	0.74	33365.	35860.
JAPAN	S	791119	5420N	16703W	18021.5	34883.6	48151.1	383.	3.000	6643.	2.21	6.78	1057.	7700.
JAPAN	S	791128	5438N	16730W	18072.1	34919.3	48900.5	387.	2.500	5914.	2.21	5.69	206.	5720.
USSR	M	801010	5419N	16013W	18395.1	33965.7	46246.5	93.	1.667	3529.	2.12	3.19	6811.	10340.
JAPAN	S	801028	5435N	15827W	18480.2	33686.9	45600.6	104.	1.000	2086.	2.09	2.61	10232.	12320.
JAPAN	L	7910 8	5556N	16831W	18419.5	34969.0	49356.2	87.	2.167	4666.	2.06	0.71	14454.	18920.
JAPAN	S	801014	5628N	1735W	18043.9	35068.7	50124.1	235.	4.667	9582.	2.05	5.59	758.	10340.
JAPAN	S	791123	5558N	17019W	18187.0	35134.5	49648.7	317.	3.500	7071.	2.02	11.09	1289.	8360.
JAPAN	S	791130	5600N	17010W	18232.3	35129.8	49327.5	301.	2.083	10119.	1.95	8.55	3743.	13660.
JAPAN	S	7910 4	5451N	16702W	18186.0	34848.9	48687.7	175.	2.833	5621.	1.96	5.26	1419.	7040.
JAPAN	L	791019	5451N	16651W	18201.4	34824.9	48627.7	133.	1.333	2623.	1.97	2.07	16077.	18700.
JAPAN	S	7910 1	5501N	16734W	18191.1	34905.5	48885.4	191.	3.333	6486.	1.95	5.04	2754.	9240.
JAPAN	S	7912 4	5627N	17153W	17932.3	35038.1	50135.1	306.	2.167	4191.	1.93	11.09	869.	5060.
USSR	M	8010 4	5424N	16013W	18411.9	33951.4	46243.0	82.	1.750	3351.	1.91	1.92	8529.	11880.
JAPAN	S	801112	5616N	17125W	18023.6	35100.2	50074.6	328.	2.000	3781.	1.89	7.45	1499.	5280.
KOREA	M	801012	5727N	16613W	17548.5	34837.9	48242.2	87.	2.333	4411.	1.89	2.16	65989.	70400.
JAPAN	S	791119	5420N	16627W	18081.8	34812.3	48426.9	410.	3.000	5656.	1.89	4.06	724.	6360.
JAPAN	S	7910 5	5437N	16628W	18163.4	34793.2	48469.7	210.	3.000	5573.	1.86	6.76	1247.	6820.
JAPAN	S	7911 2	5605N	17038W	18167.2	35138.2	49936.4	437.	3.750	6721.	1.79	9.24	3179.	9900.
JAPAN	L	7910 7	5558N	16820W	18214.3	35130.3	49822.0	273.	3.167	5636.	1.78	4.85	2284.	7920.
JAPAN	L	7910 7	5558N	16820W	18444.6	34939.4	49301.5	86.	0.917	1612.	1.76	0.75	48988.	50600.
USSR	M	801014	5427N	16015W	18416.6	33947.1	46252.9	82.	2.500	4179.	1.67	1.45	6601.	10780.
JAPAN	L	791015	5444N	16547W	18246.0	34689.7	48253.4	137.	1.000	1670.	1.67	1.98	18130.	19800.
JAPAN	S	791111	5607N	17035W	18194.0	35138.3	49937.2	164.	4.750	7827.	1.65	8.56	533.	8360.
JAPAN	S	801118	5614N	17113W	18072.4	35115.8	50049.4	355.	2.500	4116.	1.65	9.04	4024.	8140.
JAPAN	S	791127	5600N	17010W	18232.3	35129.8	49827.5	301.	4.333	6998.	1.61	10.95	2902.	9900.
JAPAN	S	7911 5	5628N	17148W	17967.8	35045.3	50134.1	208.	3.917	6267.	1.60	8.81	2973.	9240.
JAPAN	S	791124	5558N	17002W	18242.9	35123.7	49789.9	290.	5.500	8784.	1.60	10.82	2216.	11000.
JAPAN	L	7910 8	5557N	16830W	18426.7	34965.5	49353.9	89.	1.833	2845.	1.55	0.61	56555.	59400.
JAPAN	L	791016	5455N	16704W	18203.7	34848.2	48708.5	121.	3.000	1651.	1.52	3.12	15289.	16940.
JAPAN	S	791119	5421N	16645W	18056.8	34847.6	48524.3	383.	3.000	4568.	1.52	8.20	712.	5280.
JAPAN	S	7910 4	5437N	16620W	18174.1	34775.7	48425.6	197.	3.167	4786.	1.51	4.39	2254.	7040.
JAPAN	L	791016	5454N	16655W	18211.1	34829.7	48656.9	111.	1.000	1489.	1.49	2.82	12151.	13640.
JAPAN	S	7911 4	5608N	17039W	18185.3	35137.9	49952.4	275.	2.667	3929.	1.47	7.30	1571.	5500.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-16 (continued). TURBOT, OCTOBER-DECEMBER 1979-80

NATION	CLASS	JATE	LAI	LCNG	APPROX LORAN-C	RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
*****	*****	*****	*****	*****	7X	7Y	(FMS)	IRAWLED	(LBS)	PER HOUR	LBS/FLSH	(LBS)	(LBS)
JAPAN	S	801011	5628N	17135W	18043.9	35068.7	50124.1	230.	6515.	1.45	7.71	745.	7260.
JAPAN	S	7910 4	5442N	16645W	18164.5	34823.4	48573.8	189.	4199.	1.40	6.99	1961.	6160.
JAPAN	S	7910 5	5441N	16653W	18147.9	34841.7	48614.6	202.	4157.	1.39	5.79	2443.	6600.
USK	H	601010	5423N	16002W	18414.5	33929.8	45178.0	93.	3116.	1.38	2.30	11184.	14500.
JAPAN	S	7910 5	5442N	16652W	18154.5	34838.4	48611.6	186.	4114.	1.37	4.01	2046.	6160.
JAPAN	L	791017	5458N	16710W	18210.8	34857.6	48748.7	116.	1825.	1.33	2.40	61775.	83600.
JAPAN	S	7912 2	5542N	16855W	18333.0	35028.7	49454.1	339.	3635.	1.36	3.27	545.	4180.
JAPAN	S	7911 4	5605N	17023W	18224.7	35136.4	49893.0	273.	6542.	1.35	7.25	1918.	8360.
GERMANY	M	601112	5422N	16627W	18091.6	34810.0	48431.3	372.	1457.	1.34	4.18	1183.	2640.
JAPAN	S	791112	5604N	17020W	18228.0	35135.3	49879.0	219.	3803.	1.33	7.55	1237.	7040.
JAPAN	S	7910 3	5437N	16720W	18191.0	34820.3	48800.0	183.	3707.	1.31	5.13	1793.	5500.
JAPAN	S	791126	5557N	17002W	18235.6	35123.7	49785.4	312.	5637.	1.30	5.54	1181.	6820.
JAPAN	S	801123	5626N	17130W	18060.3	35080.4	50113.5	317.	1276.	1.28	1.308	924.	2200.
JAPAN	S	7910 6	5438N	16618W	18370.6	35031.6	49499.7	361.	4661.	1.27	4.26	619.	5280.
JAPAN	S	7910 6	5438N	16618W	18181.5	34769.9	48416.7	191.	3758.	1.25	4.76	1742.	5500.
KOREA	M	601014	5325N	16614W	17837.1	34841.4	48243.1	93.	3130.	1.25	2.22	100270.	103400.
JAPAN	S	8010 7	5624N	17138W	18002.5	35070.5	50115.2	301.	5419.	1.25	7.05	741.	6160.
JAPAN	S	7910 7	5442N	16653W	18153.0	34840.5	48617.0	200.	3481.	1.23	5.12	1359.	4840.
KOREA	M	791119	5546N	16855W	18320.3	35030.1	49446.8	153.	9806.	1.21	3.74	97114.	106920.
JAPAN	S	7911 2	5603N	17019W	18224.1	35134.8	49271.3	287.	5453.	1.21	6.55	1587.	7040.
KOREA	M	6010 8	5601N	16945W	18302.3	35110.7	49752.9	93.	7385.	1.20	3.68	21215.	28600.
JAPAN	S	791112	5607N	17035W	18194.0	35138.3	49937.2	213.	5379.	1.20	9.01	781.	6160.
JAPAN	S	791127	5600N	17010W	18232.3	35129.8	49827.5	312.	5161.	1.19	1.00	1439.	6600.
JAPAN	S	791030	5630N	17157W	17924.9	35023.5	50144.4	246.	5304.	1.18	3.26	1296.	6500.
USSR	M	6010 5	5419N	16014W	18398.7	33967.9	46252.4	87.	1460.	1.17	1.10	2720.	4180.
JAPAN	S	791018	5437N	16623W	18170.2	34762.3	48442.2	208.	2918.	1.17	4.51	3242.	6160.
KOREA	M	8010 9	5601N	16948W	18305.0	35109.6	49748.9	120.	9228.	1.17	2.09	30372.	39600.
JAPAN	S	7910 6	5445N	16650W	18172.5	34830.4	48608.0	172.	3482.	1.16	4.70	2238.	5720.
JAPAN	S	7912 2	5446N	16706W	18154.2	34803.3	48696.6	202.	3859.	1.16	6.02	1641.	5500.
JAPAN	S	7912 2	5522N	16857W	18355.0	35029.2	49478.7	328.	575.	1.15	3.66	85.	560.
JAPAN	S	7912 1	5558N	16846W	18410.4	35001.3	49443.4	257.	3733.	1.12	4.39	1767.	5500.
JAPAN	S	791012	5439N	16623W	18179.8	34779.5	48446.5	186.	3358.	1.12	4.05	1922.	5280.
JAPAN	S	7910 6	5433N	16637W	18155.9	34811.3	48521.0	189.	3335.	1.11	3.68	1945.	5280.
JAPAN	S	791016	5444N	16656W	18155.8	34848.7	48648.0	200.	3237.	1.08	5.49	2043.	5280.
JAPAN	S	7910 8	5436N	16622W	18166.7	34761.5	48434.5	213.	3194.	1.06	5.76	2306.	5500.
JAPAN	S	791014	5442N	16634W	18179.7	34799.5	48313.7	169.	3188.	1.06	4.37	3412.	6600.
JAPAN	S	791018	5439N	16604W	18203.8	34737.0	48340.6	197.	2982.	1.05	5.16	1858.	4240.
JAPAN	S	7910 5	5440N	16622W	18185.9	34775.9	48443.1	175.	2964.	1.05	3.63	3856.	6820.
KOREA	H	791027	5434N	16537W	18212.8	34683.6	48178.6	134.	6010.	1.05	3.74	48990.	55000.
JAPAN	S	8011 2	5627N	17148W	17962.0	35047.4	50131.6	273.	3973.	1.04	4.58	1087.	5060.
JAPAN	S	791022	5437N	16600W	18199.4	34731.1	48314.2	221.	3075.	1.02	3.83	1545.	4620.
JAPAN	S	7912 1	5628N	17142W	18001.2	35056.4	50129.8	213.	5205.	1.01	2.68	3155.	8360.
JAPAN	S	7910 7	5433N	16625W	18172.3	34785.7	48455.4	197.	3282.	0.98	5.02	2212.	5500.
JAPAN	S	791010	5443N	16558W	18229.2	34716.9	48314.4	153.	2934.	0.96	2.68	3686.	6600.
JAPAN	L	791015	5446N	16532W	18270.5	34650.6	48170.2	115.	1216.	0.97	1.33	21224.	22440.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-16 (continued). TURBOT, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	LATE YMMOD	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	791025	5434N	15837W	16474.6	33711.3	45661.0	98	1.417	1351.	0.95	2.65	6349.	7700.
JAPAN	S	801030	5626N	17147W	17962.2	35051.2	50128.3	328	4.250	3965.	0.93	6.32	6520.	4620.
JAPAN	S	791113	5607N	17035W	18194.0	35138.3	49937.2	219	3.833	3535.	0.92	9.01	865.	4400.
JAPAN	S	791117	5607N	17036W	18190.0	35138.2	49935.9	224	5.000	4586.	0.92	9.79	914.	5500.
JAPAN	S	791113	5605N	17045W	18167.6	35136.6	49972.0	191	2.083	1904.	0.91	10.39	1176.	3080.
JAPAN	S	791118	5605N	17024W	18221.1	35136.7	49896.1	383	3.833	3474.	0.91	8.68	926.	4400.
GERMANY	M	801113	5441N	16511W	18226.2	34704.1	48270.0	153	7.417	6716.	0.91	2.16	14584.	25300.
JAPAN	S	791110	5601N	17011W	18236.4	35130.5	49835.5	202	3.250	2828.	0.87	6.90	2672.	5500.
JAPAN	L	791018	5615N	16950W	18401.4	35110.6	49819.1	71	1.000	870.	0.87	2.45	15630.	16500.
JAPAN	S	791114	5614N	17100W	18136.2	35127.4	50026.2	202	4.167	3534.	0.85	10.20	3066.	6600.
JAPAN	S	791021	5442N	16658W	18145.6	34851.1	48643.9	208	2.667	2228.	0.84	8.56	852.	3080.
JAPAN	S	791118	5608N	17041W	18177.0	35137.6	49957.6	290	3.000	2484.	0.83	9.26	1476.	3960.
JAPAN	S	791017	5437N	16630W	18160.7	34797.5	48480.6	210	3.333	2752.	0.83	4.74	2088.	4840.
JAPAN	S	791019	5441N	16652W	18145.4	34839.6	48609.2	202	2.667	2195.	0.82	5.89	1105.	3300.
JAPAN	S	791117	5558N	17003W	18235.9	35124.6	49793.5	191	2.917	2593.	0.82	7.28	3107.	5500.
JAPAN	S	791012	5440N	16601W	18212.0	34728.6	48325.6	180	3.167	2594.	0.82	3.59	2246.	4840.
JAPAN	S	791011	5439N	16630W	18170.5	34794.9	48485.0	178	3.000	2450.	0.82	5.36	2390.	4840.
JAPAN	S	791214	5537N	16851W	18270.5	35028.4	49394.3	355	1.917	1564.	0.82	6.26	196.	1760.
KOREA	M	801010	5603N	16935W	18351.8	35091.7	49702.3	124	5.667	4531.	0.80	3.66	32869.	37400.
JAPAN	S	791110	5606N	17030W	18206.1	35138.0	49918.6	328	4.167	3316.	0.80	10.02	8664.	4180.
KOREA	M	601114	5619N	16944W	18444.8	35101.2	49811.0	79	5.583	4416.	0.79	2.54	59424.	103840.
JAPAN	S	791119	5600N	17012W	18225.7	35131.0	49834.4	295	4.583	3604.	0.79	6.25	796.	4400.
JAPAN	L	791019	5437N	16707W	18205.8	34852.3	48725.9	105	1.333	1042.	0.78	3.08	44498.	45540.
JAPAN	S	791017	5442N	16634W	18179.7	34799.5	48513.7	175	3.000	2341.	0.78	5.02	3159.	5500.
JAPAN	S	791017	5442N	17058W	18131.3	35129.6	50013.9	301	4.083	3186.	0.78	7.70	7700.	5500.
KOREA	M	791118	5523N	16802W	18276.4	34941.5	49097.6	131	7.833	6104.	0.78	2.39	18756.	24860.
JAPAN	S	791116	5603N	17017W	18231.0	35133.9	49864.8	191	5.167	3988.	0.77	7.14	1952.	5940.
JAPAN	S	791029	5606N	17047W	18137.0	35136.3	49963.8	262	4.667	3601.	0.77	11.87	2999.	6600.
USSR	M	801011	5430N	16022W	18423.0	33954.0	46293.1	82	2.417	1861.	0.77	1.94	36619.	40480.
JAPAN	S	791116	5625N	17127W	18070.9	35086.6	50107.3	328	4.583	3511.	0.77	6.28	889.	4400.
JAPAN	S	791111	5558N	17002W	18242.9	35123.7	49789.9	339	2.833	2158.	0.76	6.11	1802.	3960.
JAPAN	S	791017	5441N	16630W	18180.2	34792.1	48489.4	165	3.000	2242.	0.75	4.22	1718.	3960.
JAPAN	S	791126	5438N	16731W	18070.3	34921.2	48005.6	355	2.000	1473.	0.74	7.72	67.	1540.
JAPAN	S	791016	5440N	16630W	18175.3	34793.5	49487.2	194	3.000	2185.	0.73	4.58	1775.	3960.
USSR	M	601011	5419N	16016W	18397.2	33972.4	46264.3	87	2.167	1540.	0.71	2.79	7040.	8560.
JAPAN	S	791018	5440N	16621W	18187.2	34773.6	48437.5	180	2.833	2004.	0.71	3.61	1956.	3960.
USSR	M	801018	5422N	16012W	18407.3	33954.9	48238.4	104	2.083	1468.	0.70	2.97	6452.	7920.
JAPAN	S	791020	5437N	16636W	18152.4	34810.5	48513.3	219	2.833	1960.	0.69	7.41	1560.	3520.
JAPAN	S	791030	5609N	17042W	18180.3	35137.3	49964.6	202	3.333	2295.	0.69	7.29	1005.	3300.
KOREA	M	801118	5442N	16611W	18205.2	34748.2	48385.9	147	6.500	4450.	0.68	2.41	24150.	28600.
KOREA	M	791117	5502N	16724W	18211.7	34883.1	48834.8	167	8.750	5987.	0.68	1.99	68813.	74800.
JAPAN	S	791013	5441N	16635W	18173.5	34803.1	48516.9	159	3.000	2042.	0.68	4.37	2358.	4400.
JAPAN	S	801012	5628N	17134W	18045.7	35070.5	50123.2	219	4.500	3056.	0.68	5.00	904.	3960.
JAPAN	S	791012	5445N	16624W	18207.3	34773.1	48464.8	131	1.667	1114.	0.67	6.05	12965.	14080.
JAPAN	S	791020	5446N	16525W	18277.4	34633.9	48129.4	106	1.667	1110.	0.67	1.56	41790.	42900.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-16 (continued). TURBOT, OCTOBER-DECEMBER 1979-80

NAIION	CLASS	DATE YYMMDD	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS FRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	791015	5444N	16637W	18185.5	34803.4	48534.6	164.	3.000	1927.	0.64	3.83	2033.	3960.
KOREA	M	791127	5233N	16804W	18267.3	34945.8	49108.2	153.	9.333	5918.	0.63	2.30	60082.	66000.
JAPAN	S	791127	5610N	17041W	18191.8	35137.5	49986.5	262.	5.750	3641.	0.63	3.86	11759.	15600.
JAPAN	S	801125	5627N	17150W	17950.2	35043.7	50133.0	301.	5.000	3146.	0.63	4.37	814.	3960.
JAPAN	S	791020	5447N	16653W	18178.4	34834.4	48629.1	169.	2.833	1749.	0.62	4.16	2651.	4400.
JAPAN	S	791129	5609N	17034W	18212.9	35138.3	49943.4	273.	3.750	2309.	0.62	2.34	8691.	11000.
JAPAN	S	791121	5552N	16855W	18352.5	35025.8	49468.7	246.	1.917	1180.	0.62	3.38	580.	1760.
JAPAN	S	791107	5629N	17156W	17925.5	35027.9	50141.6	328.	6.417	3937.	0.61	4.96	903.	8440.
JAPAN	S	791203	5553N	16857W	18361.4	35029.1	49482.4	328.	2.000	1225.	0.61	4.55	95.	3320.
JAPAN	S	791011	5440N	16655W	18135.8	34847.1	48622.9	208.	3.333	2038.	0.61	5.98	2362.	4400.
KOREA	M	801011	5601N	16958W	18276.9	35120.2	49788.3	83.	4.833	2941.	0.61	3.23	36659.	39800.
JAPAN	S	791112	5607N	17035W	18194.0	35138.3	49937.2	219.	5.500	3333.	0.61	8.24	1287.	4620.
JAPAN	S	791110	5544N	16854W	18305.4	35029.5	49434.5	383.	2.500	1515.	0.61	3.99	905.	2420.
JAPAN	M	801115	5231N	16948W	16985.9	35108.8	48999.5	131.	1.500	904.	0.60	5.34	5256.	6160.
JAPAN	S	791021	5439N	16637W	18160.8	34810.0	48523.3	197.	3.000	1801.	0.60	8.79	839.	2640.
KOREA	M	791023	5300N	16728W	17555.7	34971.1	48533.4	115.	6.500	3885.	0.60	3.16	73115.	77000.
JAPAN	S	791009	5440N	16600W	18213.2	34726.4	48320.0	189.	2.833	1690.	0.60	3.31	7550.	9240.
JAPAN	L	791018	5456N	16711W	18198.9	34862.2	48749.0	137.	1.667	989.	0.59	3.37	93171.	94160.
JAPAN	S	791022	5438N	16621W	18177.6	34776.5	48433.3	194.	2.667	1529.	0.57	3.30	1771.	3300.
KOREA	M	801105	5444N	16531W	18262.9	34652.0	48161.1	138.	5.500	3123.	0.57	2.74	84877.	88000.
JAPAN	S	791013	5441N	16602W	18215.4	34729.3	48333.2	172.	3.167	1795.	0.57	3.07	2605.	4400.
JAPAN	M	801112	5230N	16950W	16973.6	35109.9	49003.4	178.	1.500	840.	0.56	1.97	3780.	4620.
KOREA	M	801117	5443N	16540W	18249.1	34675.0	48211.4	132.	4.500	2514.	0.56	2.22	17286.	19800.
KOREA	M	791114	5505W	16737W	18208.3	34907.5	48912.5	155.	8.667	4627.	0.56	2.50	52373.	57200.
KOREA	M	801124	5613N	16926W	18440.3	35072.6	49702.2	79.	1.667	912.	0.55	1.81	10088.	11000.
KOREA	M	801008	5601N	16951W	18296.9	35113.0	49761.0	125.	5.333	2911.	0.55	3.12	85089.	88000.
JAPAN	L	791020	5445N	16525W	18273.1	34635.8	48127.8	108.	0.833	451.	0.54	1.24	13409.	13860.
KOREA	M	791101	5523N	16805W	18265.7	34947.9	49113.5	159.	4.500	2419.	0.54	1.74	52581.	55000.
KOREA	M	791218	5547N	16848W	18335.1	35015.5	49415.3	120.	8.250	4422.	0.54	2.02	30778.	35200.
JAPAN	S	791017	5447N	16650W	18182.6	34827.9	48612.8	164.	3.000	1599.	0.53	3.29	2361.	3960.
USSR	M	801009	5422N	16004W	18411.1	33937.1	46190.7	85.	2.250	1190.	0.53	2.88	9150.	10340.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

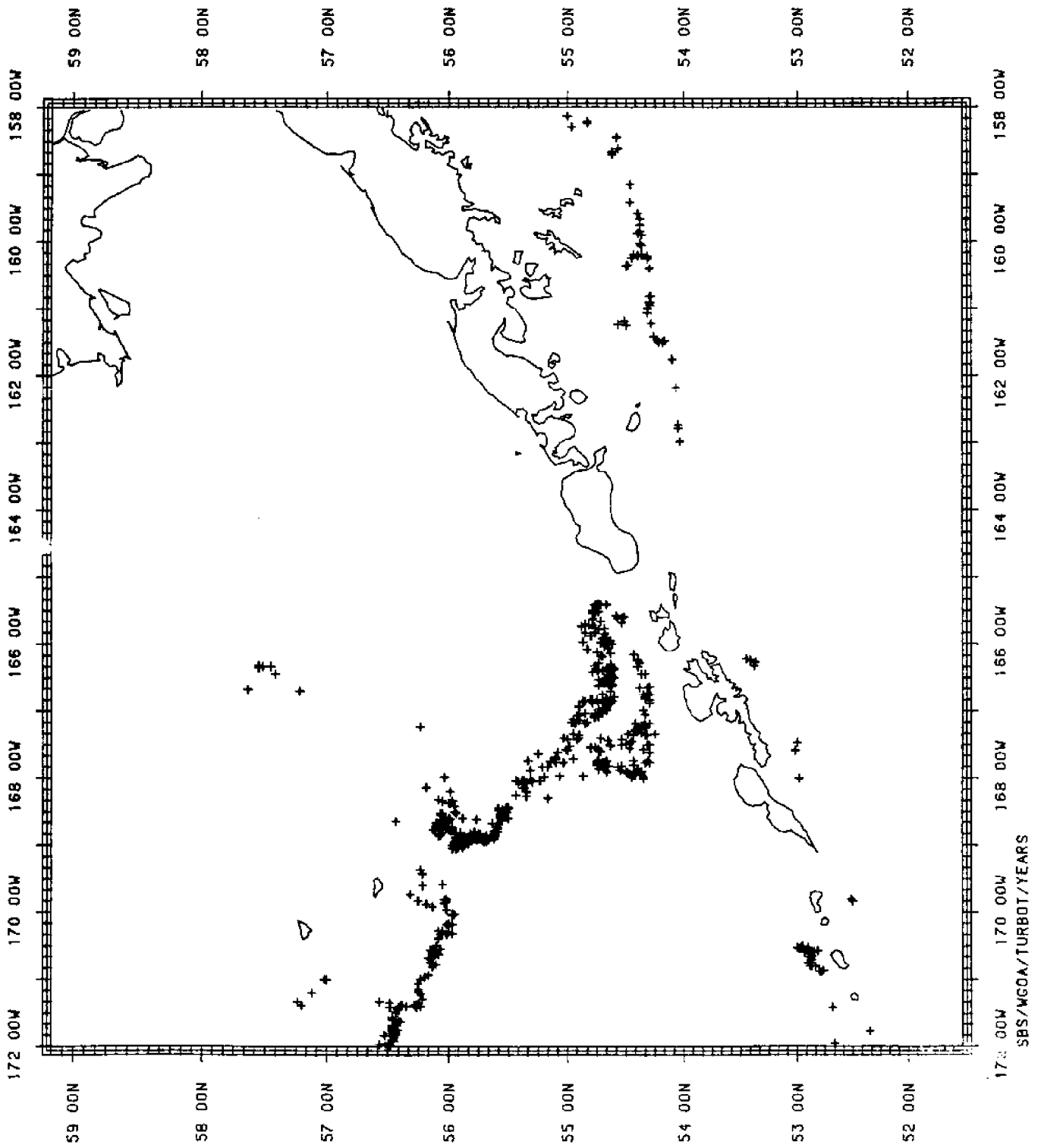


FIGURE C-8. TRAWLING LOCATIONS FOR TURBOT, ALL MONTHS, 1979-80

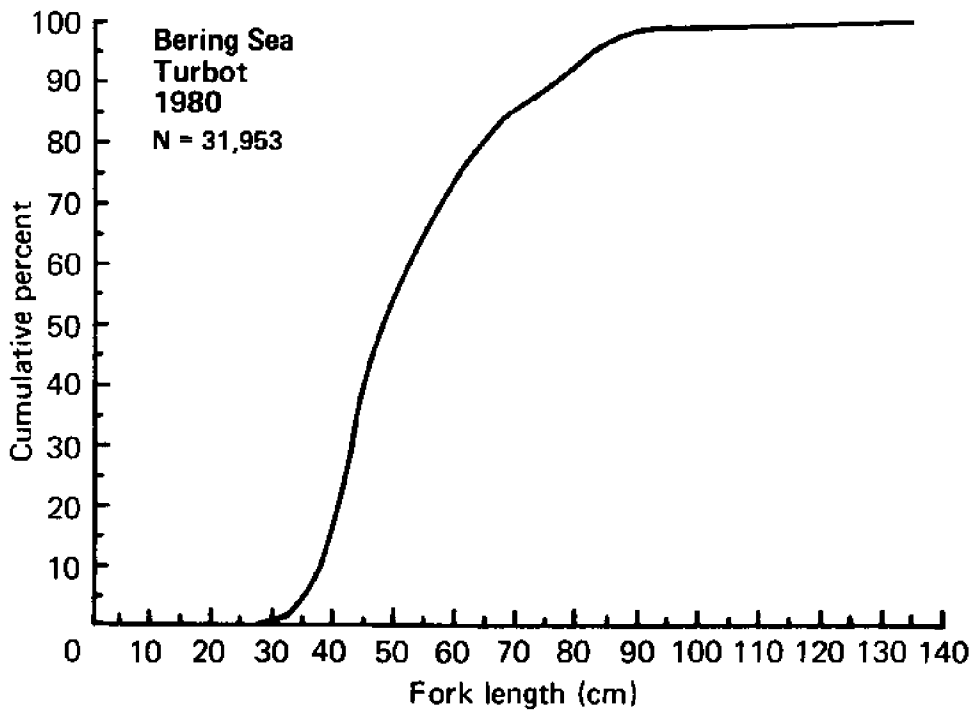
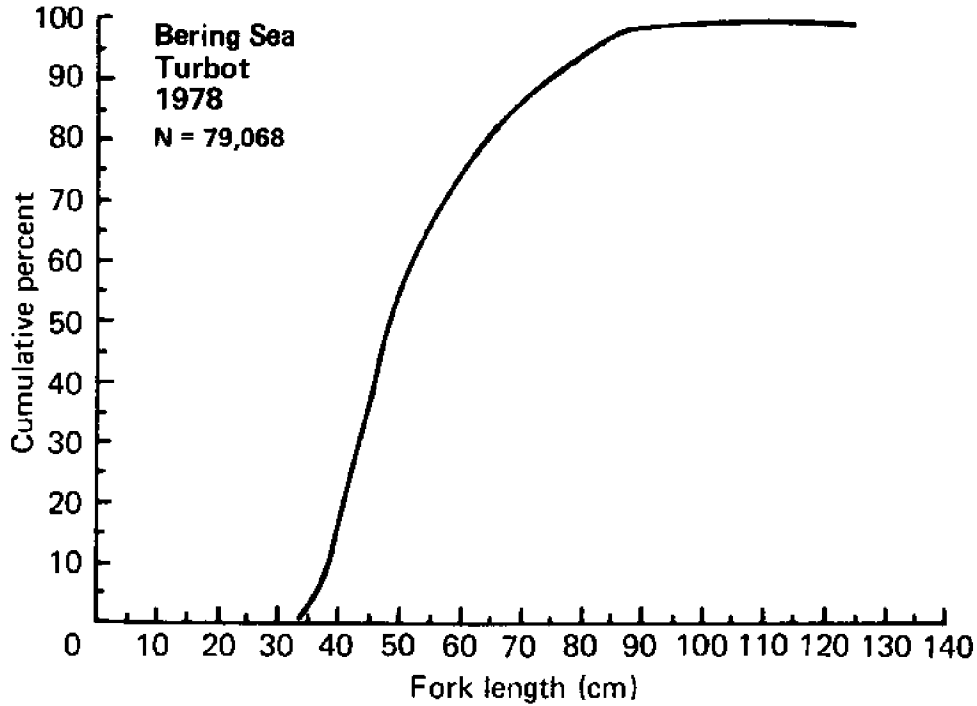


FIGURE C-9. CUMULATIVE LENGTH-FREQUENCY DISTRIBUTIONS OF THE TURBOT CATCH FROM ALL AREAS OF THE EASTERN BERING SEA DURING 1979-80.

TABLE C-17. PACIFIC OCEAN PERCH, JANUARY-MARCH 1979-80

NATION	VESSEL CLASS	DATE	TIME	LAT	LONG	7X	7Y	7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	79 3 19	0559N	5215N	16837W	18425.2	34979.4	49358.5	142.	0.167	8103.	48.62	2.33	2501.	10604.
JAPAN	M	79 3 9	5214N	17035W	16722.9	35128.6	49102.2	164.	0.167	6483.	38.90	0.89	689.	7172.	2376.
JAPAN	M	79 3 10	5215N	17035W	16728.1	35128.7	49104.9	175.	0.083	1597.	19.17	0.88	779.	8932.	7788.
JAPAN	M	79 3 5	5215N	17038W	16724.2	35129.0	49107.9	148.	0.500	5486.	13.17	0.95	2302.	850.	3674.
JAPAN	M	79 3 8	5214N	17036W	16719.0	35128.9	49105.2	153.	0.250	2824.	11.30	0.84	850.	2510.	6930.
JAPAN	M	79 3 7	5216N	17034W	16737.1	35128.4	49104.7	153.	1.000	4420.	4.42	0.91	2510.	5763.	6490.
JAPAN	M	79 3 7	5220N	17017W	16822.0	35122.4	49063.2	186.	0.167	3234.	4.36	1.10	5763.	1166.	4400.
JAPAN	M	79 3 6	5215N	17034W	16731.9	35128.4	49101.9	139.	0.750	1876.	4.31	0.94	2524.	3630.	2316.
JAPAN	M	79 3 10	5216N	17034W	16747.4	35128.5	49110.2	175.	0.250	1323.	4.17	0.97	987.	2977.	5522.
JAPAN	M	79 3 2	5213N	17036W	16713.9	35128.9	49102.4	175.	0.333	2545.	3.97	0.93	2977.	4400.	4400.
JAPAN	M	79 3 9	5213N	17037W	16710.0	35129.2	49105.4	159.	0.667	936.	3.82	0.98	2524.	3410.	3410.
JAPAN	M	79 3 1	5214N	17034W	16726.8	35128.3	49099.1	156.	0.500	1876.	3.75	0.98	2524.	1056.	924.
JAPAN	M	79 3 11	5214N	17035W	16722.9	35128.6	49102.2	142.	0.250	2451.	3.75	1.10	164.	3410.	3410.
JAPAN	M	79 3 8	5213N	17037W	16716.0	35129.2	49105.4	153.	0.667	911.	3.68	0.85	959.	1188.	1188.
JAPAN	M	79 3 12	5214N	17035W	16722.9	35128.6	49102.2	164.	0.250	536.	3.64	0.91	145.	4400.	4400.
JAPAN	M	79 3 6	5214N	17034W	16726.8	35128.3	49099.1	153.	0.167	2653.	3.21	0.85	388.	1100.	1100.
JAPAN	M	79 3 1	5212N	17037W	16704.9	35129.2	49102.7	172.	1.000	5344.	2.65	0.92	757.	13750.	13750.
JAPAN	M	79 3 19	5600N	16839W	18432.4	34822.9	49412.6	148.	2.083	601.	2.57	1.89	8406.	587.	1188.
JAPAN	M	79 3 12	5214N	17034W	16726.8	35128.3	49099.1	153.	0.333	1049.	1.80	0.96	587.	3351.	4400.
JAPAN	M	79 3 8	5215N	17034W	16731.9	35128.4	49101.9	159.	0.750	2438.	1.40	1.06	3351.	8562.	11000.
JAPAN	M	80 2 6	5222N	17142W	16487.9	35136.4	49312.7	153.	1.917	500.	1.27	1.37	8562.	4510.	4510.
JAPAN	M	79 3 1	5213N	17034W	16721.7	35128.3	49096.4	164.	0.500	763.	1.00	1.54	4010.	1364.	1364.
JAPAN	M	79 3 9	5213N	17036W	16713.9	35128.9	49102.4	153.	0.833	530.	0.92	0.85	601.	1144.	1144.
JAPAN	M	79 3 6	5216N	17034W	16737.1	35128.4	49104.7	150.	0.833	192.	0.64	0.92	614.	902.	902.
JAPAN	M	79 3 13	5215N	17043W	16696.7	35131.0	49128.9	137.	0.333		0.58	0.77	710.		

*** NOTE *** THE ACCURACY OF POSITION AND LOGAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-18. PACIFIC OCEAN PERCH, APRIL-JUNE 1979-80

NATION	VESSEL CLASS	DATE	TIME	LONG	APPROX LOCAN-C		DEPTH (FMS)	HOURS FISHED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LB/AFISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
					7X	7Y							
JAPAN	S	80 017	51 5W	16505W	17313.0	35078.1	48943.7	137	4666	6.22	1.39	834	5500
JAPAN	S	80 017	51 1N	16943W	17221.7	35106.5	49099.4	164	838	3.35	1.47	1602	2646
JAPAN	S	79 525	52 5N	17151W	16362.4	35138.2	49288.9	82	683	3.34	1.83	6517	1320
KOREA	M	80 016	51 2N	16758W	17485.9	35008.9	48667.7	94	19252	2.75	1.17	173248	192500
KOREA	M	80 015	51 2N	16751W	17561.0	34973.0	48547.1	87	18073	2.07	1.28	114867	143540
JAPAN	S	79 429	51 3N	17151W	16332.8	35138.5	49272.8	126	2726	2.73	0.92	1012	3740
KOREA	H	80 013	51 2N	16616W	17819.1	34847.3	48246.9	118	5750	2.46	1.10	15370	21120
JAPAN	S	80 5 5	52 0W	17151W	16438.1	35138.0	49330.2	148	2807	2.11	1.98	3573	6380
KOREA	M	79 6 7	51 9N	16733W	17538.3	34978.1	48552.9	98	8996	1.96	1.16	16504	25300
KOREA	M	80 017	51 2N	16727W	17568.3	34969.0	48533.9	107	12404	1.96	1.10	153256	169660
JAPAN	S	79 428	51 0W	17150W	16320.1	35138.1	49285.6	126	1708	1.86	1.09	932	2640
JAPAN	L	79 017	52 3N	16750W	17495.3	34999.9	48620.1	52	4592	1.72	0.93	11028	15020
JAPAN	S	79 430	51 8N	17110W	16751.4	35137.3	49295.9	142	1333	1.45	1.59	1967	3300
JAPAN	S	80 5 7	51 5N	17140W	16421.4	35138.2	49311.2	93	1648	1.41	0.94	2774	4620
JAPAN	L	79 018	51 8N	16750W	17525.0	34982.4	48563.5	80	3748	1.41	0.98	3072	6020
JAPAN	S	79 5 6	51 9N	17151W	16332.8	35138.3	49272.8	186	1691	1.35	1.31	2709	4400
JAPAN	S	79 429	51 1N	17151W	16342.7	35138.3	49278.1	131	802	1.32	0.93	878	1760
JAPAN	S	79 211	51 0N	17151W	16337.7	35138.3	49275.4	131	1684	1.32	0.84	3191	5060
JAPAN	L	79 016	51 1N	16725W	17568.0	34966.6	48522.6	92	2512	1.26	1.05	1448	3760
JAPAN	S	79 031	51 1N	17140W	16465.2	35138.2	49320.3	142	2619	1.25	2.01	2241	5060
JAPAN	S	79 521	52 2N	17140W	16474.7	35138.3	49320.5	159	2862	1.88	2.02	1780	4642
JAPAN	S	79 430	52 1N	17107W	16791.1	35137.1	49302.4	142	2514	1.03	1.70	2326	4840
JAPAN	S	80 018	51 4N	16130W	16437.4	35138.1	49324.9	104	1173	1.01	0.99	7187	8360
USA	H	80 018	51 4N	16130W	18405.8	34861.2	46606.7	55	1305	0.98	1.05	5295	6000
JAPAN	M	80 017	51 9N	16922W	17201.9	35092.0	48977.3	148	652	0.90	1.16	5068	5720
KOREA	M	79 027	51 5N	16023W	18551.6	33940.9	46306.6	93	4473	0.94	0.78	18627	23100
JAPAN	S	80 5 5	51 2N	17149W	16457.4	35138.1	49330.7	156	549	0.94	2.15	771	1320
JAPAN	S	79 420	51 5N	17150W	16428.2	35137.1	49354.3	137	1702	0.93	1.70	4676	6380
KOREA	M	80 014	51 3N	16739W	17523.4	34985.9	48578.9	74	6786	0.90	0.78	157994	184780
JAPAN	S	80 5 5	51 3W	17152W	16433.7	35137.9	49332.7	153	981	0.84	2.29	8259	9240
JAPAN	L	79 016	51 6N	17148W	16331.3	35138.4	49257.0	180	2084	0.81	1.71	6076	8140
KOREA	M	79 028	51 4N	15953W	18421.1	33966.9	46123.5	92	3545	0.77	0.93	14257	17600
JAPAN	S	79 5 8	51 2N	17039W	16748.6	35130.2	49136.5	164	1568	0.85	1.02	2614	4180
JAPAN	S	79 5 6	51 0N	16836W	18322.3	34995.9	49333.2	82	2293	0.80	1.10	10641	13150
JAPAN	S	80 5 6	51 2W	17151W	16438.1	35138.0	49330.2	115	724	0.58	0.90	3236	5960
KOREA	M	80 010	51 8N	16735W	17518.2	34966.3	48570.5	115	3249	0.56	1.00	16331	19580

*** NOTE *** THE ACCURACY OF POSITION AND LOCAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-19. PACIFIC OCEAN PERCH, JULY-SEPTEMBER 1979-80

NATJJA	VESSEL	DATE	LAT	LONG	APPROX	PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND	SIZE	BYCATCH	TOTAL
*****	CLASS	YMHDD	*****	*****	7X	7Y	7Z	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FTSH	(LBS)	(LBS)
USSR	M	79 717	5431N	15920W	18451.8	34813.4	45920.0	68	1.167	16375	14.04	0.83	1225	17600
JAPAN	M	79 720	5413N	16130W	18340.3	34155.3	46707.3	115	1.500	19573	13.05	1.28	5467	29040
JAPAN	M	79 718	5404N	16206W	18286.8	34259.2	46920.0	120	1.000	6229	6.23	1.24	3011	9240
USSR	M	79 723	5437N	15840W	18479.9	33708.2	45674.6	87	1.750	10319	5.90	0.63	16081	26400
JAPAN	M	79 717	5428N	15925W	18442.8	33833.5	45953.0	98	1.833	8928	4.87	0.95	23412	32340
USSR	M	79 727	5450N	15813W	18515.2	33608.4	45495.0	107	2.583	12261	4.75	0.89	33719	45980
JAPAN	M	79 720	5404N	16211W	18285.1	34270.6	45949.3	112	1.500	6889	4.46	1.30	4091	10780
JAPAN	M	79 719	5403N	16247W	18254.1	34354.4	47159.7	118	1.167	4278	3.67	1.36	4742	9020
JAPAN	M	79 721	5411N	16130W	18334.4	34160.5	46707.5	126	2.000	4353	2.18	1.23	3787	8140
JAPAN	S	80 7 9	5607N	16935W	18375.9	35090.6	49719.2	208	2.833	5851	2.07	1.78	3541	5394
JAPAN	M	79 717	5428N	15912W	18446.1	33805.2	45875.7	107	1.167	2128	1.82	1.29	4692	8820
KOREA	M	79 824	5259N	16747W	17503.0	34996.1	48613.3	68	1.250	2097	1.68	2.31	85243	87340
JAPAN	M	79 720	5406N	16145W	18309.6	34206.9	46796.6	114	1.333	1993	1.49	1.29	3287	5280
MEXICO	S	79 8 6	5429N	15838W	18463.4	33729.1	45673.9	60	1.417	2063	1.46	0.81	2777	4840
KOREA	M	79 826	5259N	16746W	17505.6	34994.9	48609.0	63	1.500	2006	1.34	0.02	40694	42900
USSR	M	79 721	5425N	15946W	18426.7	33888.5	45081.0	85	1.667	1998	1.20	0.99	202	2200
KOREA	M	80 720	5258N	16740W	17515.7	34987.5	48580.8	87	3.833	3822	1.00	0.95	106178	110000
JAPAN	M	79 721	5417N	16049W	18375.3	34051.9	46462.0	115	1.667	1647	0.99	1.55	3853	5700
JAPAN	S	79 712	5401N	16000W	18359.3	33966.7	46183.4	164	2.583	2205	0.85	0.99	6595	8600
JAPAN	M	79 722	5423N	15951W	18419.6	33905.5	46112.5	112	1.500	1231	0.82	1.11	3609	4840
KOREA	M	79 9 5	5259N	16738W	17525.9	34984.6	48574.6	65	2.667	1987	0.74	1.20	75013	77000
KOREA	M	80 712	5432N	16541W	18195.3	34696.1	48197.8	175	6.167	4445	0.72	1.59	70355	74800
USSR	M	79 728	5437N	15842W	18475.2	33712.5	45686.5	85	2.167	1555	0.72	0.64	29245	30600
USSR	M	79 724	5442N	15834W	18492.5	33679.3	45632.0	74	2.250	1541	0.68	0.72	31459	33000
KOREA	M	80 8 9	5259N	16800W	17469.0	35012.0	48668.3	61	9.333	5858	0.63	0.72	187302	193160
JAPAN	M	79 722	5423N	15945W	18422.3	33892.2	46076.8	98	2.333	1457	0.62	1.00	7123	8580
JAPAN	S	80 718	5220N	17020W	16811.3	35123.6	49072.6	137	2.000	1176	0.59	0.90	1904	3020
KOREA	M	80 710	5441N	16546W	18233.8	34692.5	48242.3	175	4.583	2619	0.57	2.05	41381	44000
MEXICO	S	79 8 4	5455N	15815W	18524.4	33595.7	45499.2	100	0.667	344	0.52	0.85	10348	10692
JAPAN	S	80 710	5606N	16922W	18400.5	35068.5	49654.9	161	3.167	1603	0.51	1.72	6317	7920

*** NOTE ***- THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-20. PACIFIC OCEAN PERCH, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	PULSE 7Y	RATES 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LB S/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
KOREA	M	801012	5320N	16624W	17794.3	34862.5	48282.0	120.	2.917	21779.	7.47	1.33	123421.	145200.
KOREA	M	801014	5318N	16626W	17776.9	34870.7	48297.2	139.	3.417	12827.	3.75	1.31	141173.	154000.
JAPAN	S	801031	5446N	15824W	14503.9	33646.1	45566.6	115.	2.167	6587.	3.04	0.95	33013.	39600.
JAPAN	S	801030	5445N	15823W	18502.2	33646.1	45562.2	115.	0.750	1992.	2.66	1.00	22868.	24860.
JAPAN	S	801006	5208N	17150W	16371.8	35138.3	49209.1	115.	0.333	846.	2.54	1.02	7734.	8580.
JAPAN	S	801024	5442N	15826W	18495.1	33662.3	45584.4	101.	0.917	1895.	2.07	0.79	8005.	9900.
JAPAN	M	801027	5441N	15831W	18491.4	33678.2	45615.6	97.	1.667	3348.	2.01	0.91	17552.	20900.
JAPAN	M	801117	5227N	16950W	16957.8	35109.6	48995.0	230.	2.667	4187.	1.57	1.06	5273.	9460.
JAPAN	L	791026	5554N	16851W	18377.9	35015.9	49455.5	94.	0.750	1172.	1.56	1.47	119168.	120340.
JAPAN	S	801031	5441N	15830W	18491.7	33674.1	45609.7	98.	1.750	2419.	1.38	0.85	8581.	11000.
JAPAN	M	801115	5231N	16948W	16985.9	35108.8	48999.5	131.	1.500	1958.	1.31	1.08	4202.	6160.
USSR	M	801010	5423N	16002W	18414.5	33929.6	46178.0	93.	2.250	2103.	0.93	0.75	12197.	14300.
JAPAN	L	791026	5555N	16825W	18421.5	34955.9	49320.2	85.	1.000	885.	0.88	1.32	49495.	50380.
JAPAN	M	801117	5230N	16952W	16966.5	35111.0	49010.1	153.	1.167	927.	0.79	1.12	2593.	3520.
JAPAN	S	801027	5443N	15826W	18497.1	33659.1	45583.0	98.	0.750	537.	0.72	0.79	10683.	11220.
USSR	M	801010	5419N	16013W	16395.1	33965.7	46246.5	93.	1.667	1181.	0.71	0.94	9159.	10340.
JAPAN	S	801029	5445N	15825W	18501.5	33650.4	45574.1	98.	1.000	699.	0.70	0.71	17121.	17820.
JAPAN	L	791027	5552N	16853W	18361.9	35021.7	49458.5	96.	0.500	339.	0.68	2.20	55541.	55880.
JAPAN	S	791006	5415N	16033W	18376.5	34021.5	46367.8	132.	0.250	169.	0.68	1.25	6431.	6600.
JAPAN	S	801026	5441N	15830W	18491.7	33674.1	45609.7	97.	1.563	1022.	0.65	0.79	23178.	24200.
JAPAN	M	801117	5226N	16955W	16934.7	35112.5	49008.9	128.	1.833	1135.	0.62	1.19	5245.	6380.
JAPAN	M	801120	5219N	17148W	16446.2	35138.2	49319.8	169.	1.000	586.	0.59	1.83	2494.	3080.
JAPAN	M	801119	5226N	16956W	16931.1	35113.0	49012.2	138.	1.333	767.	0.57	1.02	3193.	3960.
JAPAN	M	801118	5227N	16945W	16975.5	35107.0	48973.2	126.	0.667	377.	0.56	1.06	2263.	2640.
JAPAN	S	801029	5441N	15829W	18492.0	33671.9	45603.7	101.	0.667	375.	0.56	0.67	37025.	37400.
JAPAN	S	801028	5437N	15830W	18483.4	33686.9	45615.4	104.	1.500	831.	0.55	0.85	6869.	7700.
USSR	M	801011	5419N	16016W	18397.7	33972.4	46264.3	87.	2.167	1108.	0.51	0.79	7472.	8580.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

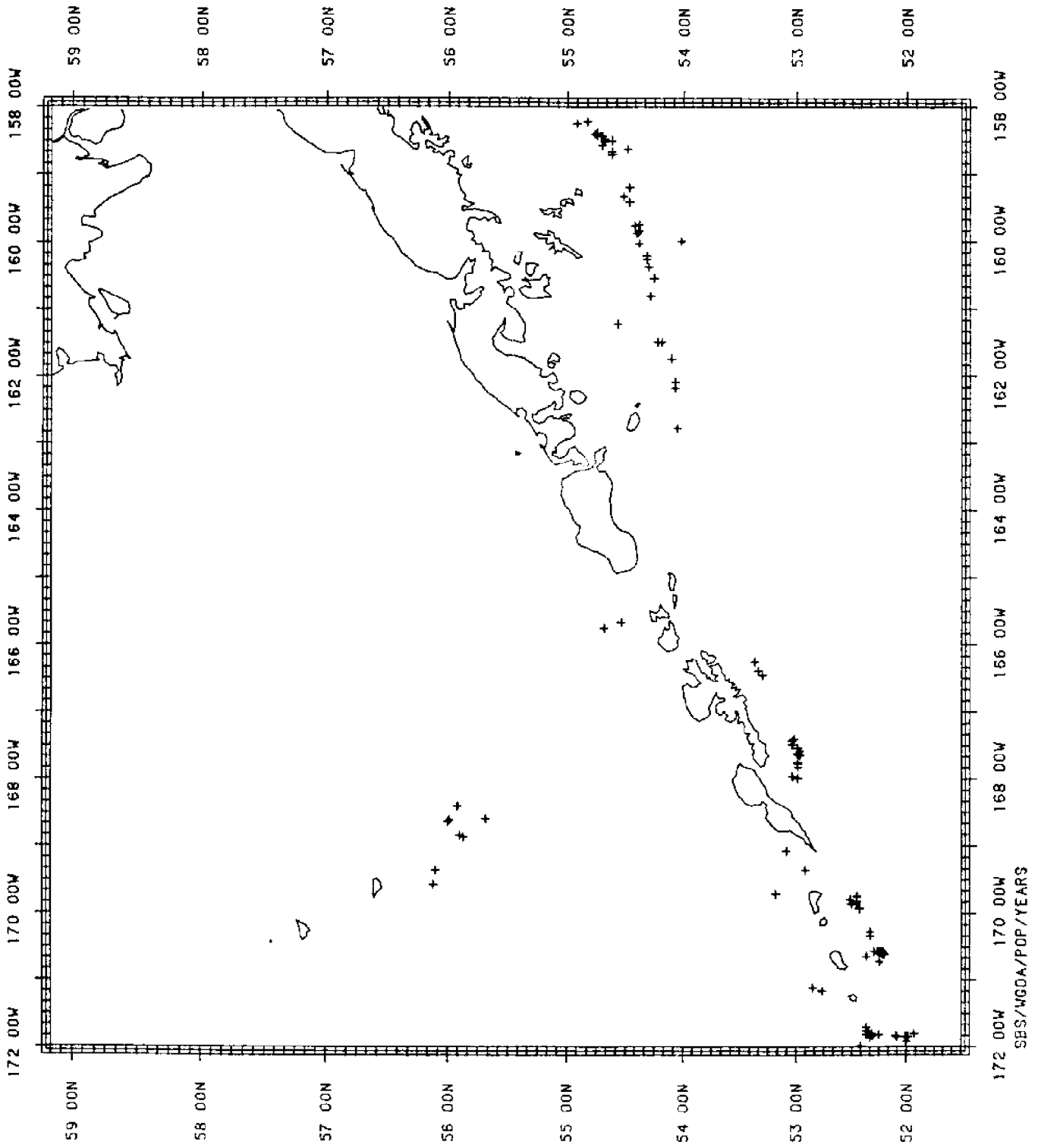


FIGURE C-10. TRAWLING LOCATIONS FOR PACIFIC OCEAN PERCH, ALL MONTHS, 1979-80

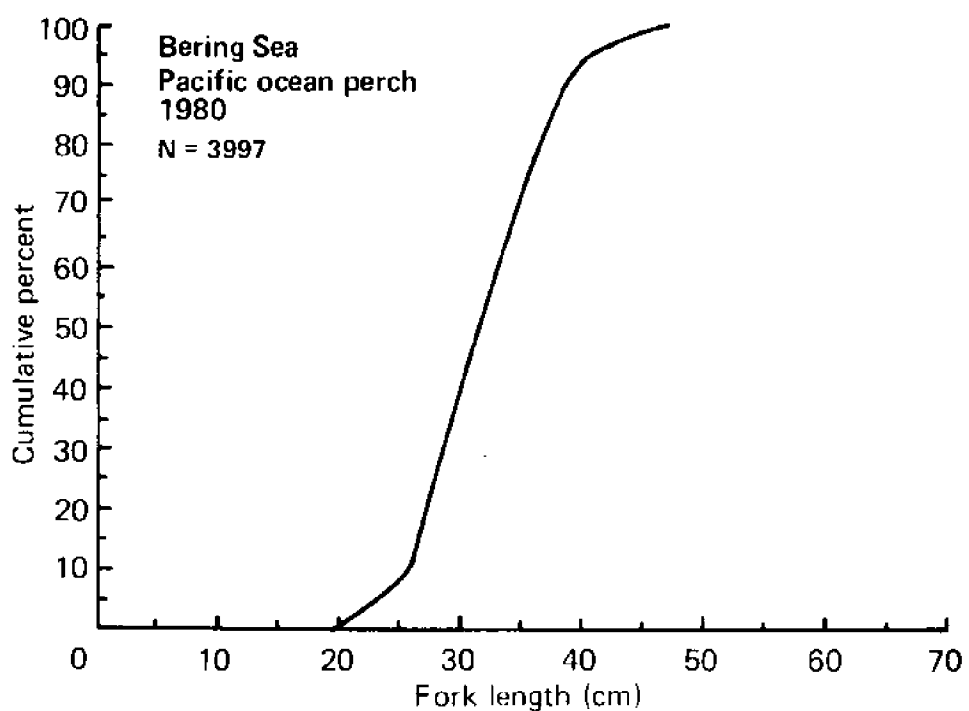
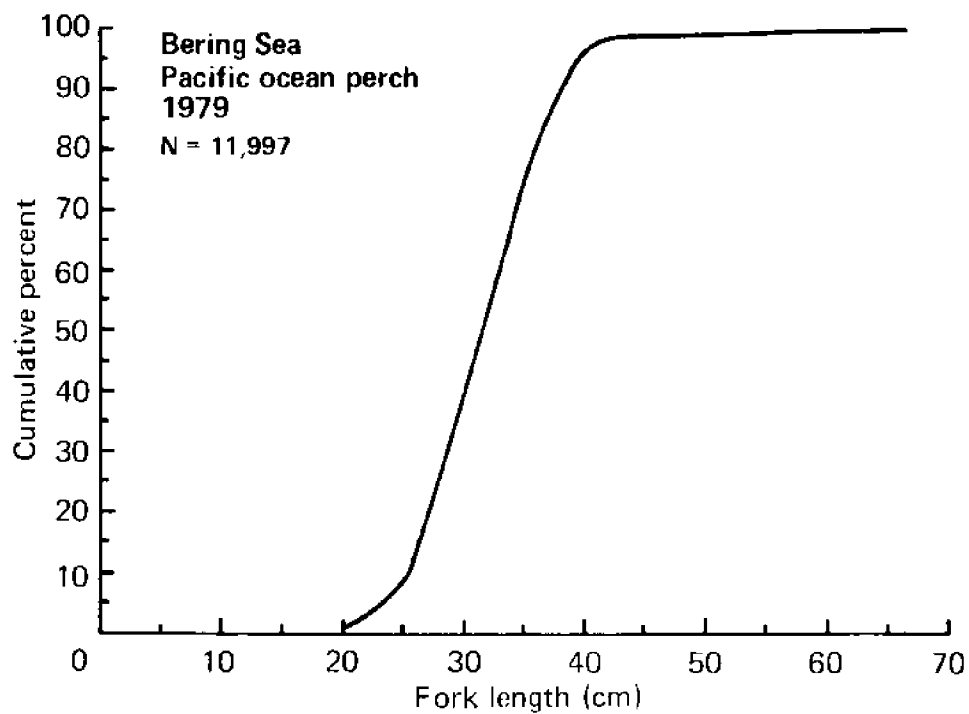


FIGURE C-11. CUMULATIVE LENGTH-FREQUENCY DISTRIBUTIONS OF THE PACIFIC OCEAN PERCH CATCH FROM ALL AREAS OF THE EASTERN BERING SEA DURING 1979-80.

TABLE C-21. ATKA MACKEREL, JANUARY-MARCH 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPX LORAN-C	PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YYMMDD			7X	7Y	7Z	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
USSR	M	79 3 3	5157N	17150W	16292.2	35137.9	49265.1	69.	0.333	38968.	116.90	1.06	5032.	44000.
USSR	M	79 3 3	5157N	17150W	16302.4	35137.8	49295.7	71.	0.563	43597.	74.74	1.04	403.	44000.
USSR	M	79 3 4	5157N	17150W	16292.2	35137.9	49285.1	72.	0.500	32453.	64.91	0.99	547.	33000.
USSR	M	79 2 28	5157N	17150W	16287.8	35137.9	49287.6	74.	0.750	47250.	63.00	1.09	7750.	55000.
USSR	M	79 2 21	5200N	17150W	16306.9	35137.9	49293.2	71.	0.917	50328.	54.90	1.03	272.	50600.
USSR	M	79 3 4	5152N	17150W	16292.7	35137.9	49290.3	68.	0.750	40811.	54.41	1.07	3189.	44000.
USSR	M	79 2 4	5201N	17150W	16347.0	35138.3	49275.6	74.	0.667	32793.	49.19	1.14	207.	33000.
USSR	M	79 3 2	5157N	17150W	16207.6	35137.9	49287.6	69.	0.417	20127.	48.31	1.02	1873.	22000.
USSR	M	79 2 4	5202N	17150W	16352.0	35138.3	49278.3	77.	0.833	32725.	39.27	1.14	275.	33000.
USSR	M	79 3 3	5157N	17150W	16287.8	35137.9	49287.6	72.	0.833	31071.	37.29	1.05	1929.	33000.
USSR	M	79 2 3	5201N	17150W	16347.0	35138.3	49275.6	74.	0.750	27636.	36.85	1.19	964.	28600.
USSR	M	79 1 5	5206N	17148W	16380.6	35138.3	49284.0	71.	0.833	26400.	31.69	1.09	872.	22000.
USSR	M	79 2 4	5202N	17150W	16352.0	35138.3	49278.3	82.	0.833	26041.	31.25	1.04	359.	26400.
USSR	M	79 2 5	5222N	17150W	16442.5	35138.0	49327.7	82.	0.833	24867.	29.84	1.05	1533.	26400.
USSR	M	79 1 5	5206N	17147W	16384.9	35138.4	49261.4	74.	1.333	39600.	29.70	1.13	0.	35600.
USSR	M	79 2 11	5200N	17150W	16302.4	35137.8	49295.7	71.	1.250	32852.	26.28	1.07	148.	33000.
USSR	M	79 2 6	5201N	17150W	16347.0	35138.3	49275.6	82.	0.833	21633.	25.96	1.19	367.	22000.
USSR	M	79 2 3	5201N	17149W	16351.4	35138.3	49273.0	77.	1.000	23538.	23.54	1.17	2862.	26400.
USSR	M	79 1 3	5206N	17148W	16380.6	35138.3	49284.0	71.	0.500	10941.	21.88	1.12	59.	11000.
USSR	M	79 2 6	5202N	17150W	16352.0	35138.3	49278.3	77.	1.000	21822.	21.82	1.14	178.	22000.
USSR	M	79 2 2	5201N	17150W	16347.0	35138.3	49275.6	77.	0.583	11046.	18.94	1.01	2154.	13200.
USSR	M	79 2 6	5201N	17150W	16347.0	35138.3	49275.6	77.	0.833	15287.	18.34	1.11	113.	15400.
USSR	M	79 2 5	5216N	17151W	16417.7	35138.1	49319.1	79.	1.417	25985.	18.34	1.19	415.	26400.
USSR	M	79 3 1	5157N	17150W	16292.2	35137.9	49285.1	74.	0.583	10590.	18.16	1.04	410.	11000.
USSR	M	79 2 10	5201N	17150W	16307.4	35137.8	49298.3	82.	1.000	17576.	17.58	1.11	24.	17600.
USSR	M	79 3 3	5157N	17150W	16287.8	35137.9	49287.6	74.	1.083	16290.	15.84	1.12	210.	16500.
USSR	M	79 1 4	5206N	17148W	16380.6	35138.3	49284.0	71.	0.833	10967.	13.16	1.12	33.	11000.
USSR	M	79 1 4	5206N	17148W	16380.6	35138.3	49284.0	71.	1.000	13055.	13.05	1.08	145.	13200.
USSR	M	79 1 3	5206N	17148W	16380.6	35138.3	49284.0	71.	0.733	8695.	11.86	1.15	105.	8800.
USSR	M	79 1 2	5206N	17148W	16380.6	35138.3	49284.0	77.	0.750	8750.	11.67	0.73	50.	8800.
USSR	M	79 2 7	5203N	17150W	16327.1	35137.7	49309.1	87.	1.000	10637.	10.64	1.25	363.	11000.
USSR	M	79 3 6	5156N	17150W	16282.9	35137.9	49285.0	77.	0.333	3252.	9.76	1.04	48.	3300.
USSR	M	79 1 2	5206N	17148W	16380.6	35138.3	49284.0	71.	0.583	4758.	8.16	0.76	82.	4840.
USSR	M	79 2 7	5206N	17147W	16384.9	35138.4	49281.4	74.	0.583	4365.	7.52	0.73	15.	4400.
USSR	M	79 2 7	5201N	17150W	16347.0	35138.3	49275.6	82.	1.083	7817.	7.22	1.18	3183.	11000.
USSR	M	79 2 5	5216N	17150W	16432.3	35138.1	49322.1	79.	1.500	10662.	7.11	1.13	338.	11000.
USSR	M	79 1 3	5206N	17147W	16384.9	35138.4	49281.4	82.	0.667	4334.	6.50	1.25	66.	4400.
USSR	M	79 1 5	5206N	17147W	16384.9	35138.4	49281.4	82.	1.083	6600.	6.09	1.08	0.	6600.
USSR	M	79 1 4	5207N	17147W	16385.9	35138.4	49284.1	77.	1.083	4400.	4.06	1.03	0.	4400.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-22. ATKA MACKEREL, APRIL-JUNE 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
KOREA	M	79 6 5	5435N	16528W	18227.1	34661.2	48129.9	66.	0.750	64291.	85.72	1.75	1709.	66000.
KOREA	M	79 6 6	5434N	16530W	18226.6	34667.6	48136.7	66.	1.000	62359.	62.36	2.00	3641.	66000.
USSR	M	79 6 8	5422N	16117W	18373.8	34101.8	46627.9	52.	0.667	25580.	38.37	1.39	820.	26400.
KOREA	M	79 6 10	5435N	16528W	18227.1	34661.2	48128.9	72.	2.333	66973.	28.70	1.89	2327.	69300.
KOREA	M	79 6 4	5433N	16532W	18214.0	34673.9	48148.5	71.	1.917	54802.	28.59	1.86	2398.	57200.
USSR	M	79 6 10	5422N	16116W	18374.4	34099.5	46621.9	52.	1.250	25823.	20.66	1.30	137.	25860.
KOREA	M	79 6 3	5445N	16516W	18281.9	34614.3	48075.2	66.	4.417	58549.	13.26	1.69	7451.	66000.
KOREA	M	79 6 10	5432N	16536W	18205.1	34684.7	46169.5	104.	4.000	42265.	10.57	1.90	3935.	46200.
KOREA	M	79 6 16	5434N	16528W	18222.7	34663.0	48127.3	66.	2.667	22685.	8.51	2.09	11855.	34540.
JAPAN	L	79 6 16	5255N	16745W	17508.1	34993.6	48604.8	55.	2.333	16736.	7.17	1.57	3944.	20680.
KOREA	M	80 6 8	5300N	16750W	17500.4	34999.6	48628.7	66.	8.750	56695.	6.48	1.46	41425.	98120.
JAPAN	S	80 5 5	5250N	17120W	16731.2	35138.2	49335.4	98.	2.417	11674.	4.83	1.43	2626.	14300.
KOREA	M	79 6 14	5432N	16536W	18205.1	34684.7	48169.5	58.	4.563	22000.	4.80	1.91	33000.	55000.
USSR	M	80 6 10	5419N	16124W	18361.3	34125.9	46670.5	52.	1.000	4200.	4.20	1.93	200.	4400.
KOREA	M	79 6 18	5432N	16534W	18207.3	34680.1	48158.1	98.	4.333	16813.	3.88	1.70	9587.	26400.
KOREA	M	80 6 11	5200N	16744W	17515.8	34992.0	48603.0	65.	2.667	6987.	2.62	1.23	11493.	18480.
JAPAN	L	79 6 17	5239N	16736W	17510.9	34982.0	48565.9	60.	3.583	8176.	2.28	1.65	16024.	24200.
KOREA	M	79 6 3	5443N	16537W	18252.3	34668.0	48194.1	118.	4.417	9324.	2.11	1.80	28076.	37400.
KOREA	M	79 6 17	5432N	16535W	18208.2	34682.4	48163.8	112.	6.750	8910.	1.32	2.44	39490.	48400.
KOREA	M	79 5 8	5633N	17050W	18319.9	35126.3	50086.0	68.	1.833	2209.	1.21	1.63	11891.	34100.
KOREA	M	80 6 1	5444N	16520W	18273.8	34825.8	48097.1	108.	3.583	3989.	1.11	1.33	104911.	108900.
JAPAN	S	80 5 7	5219N	17150W	16437.4	35138.1	49324.9	104.	1.167	1178.	1.01	1.62	7162.	8360.
JAPAN	S	80 5 8	5220N	17150W	16442.5	35138.0	49327.7	98.	1.167	1076.	0.92	1.38	6404.	7480.
KOREA	M	80 6 28	5301N	16735W	17543.6	34980.0	48566.5	64.	3.833	3176.	0.83	4.95	80424.	83000.
USSR	M	80 6 11	5422N	16124W	18369.9	34117.8	46670.0	55.	1.667	1236.	0.74	1.34	964.	2200.
JAPAN	S	80 5 6	5220N	17150W	16442.5	35138.0	49327.7	98.	1.063	693.	0.64	1.43	4367.	5060.
JAPAN	S	79 5 11	5200N	17151W	16337.7	35138.3	49275.4	131.	1.417	879.	0.62	1.26	4181.	5060.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

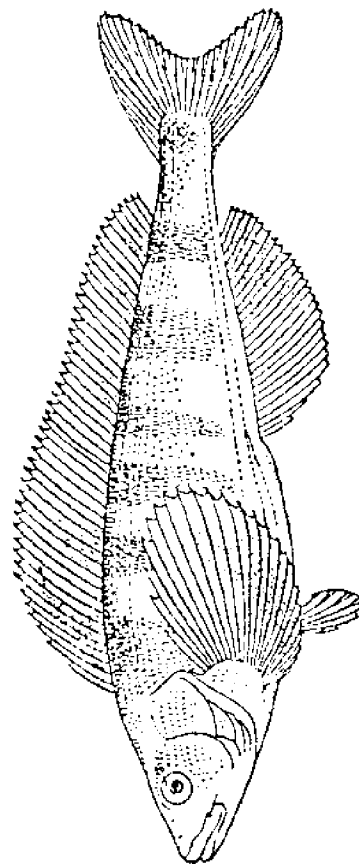


TABLE C-23. ATKA MACKEREL, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE YRMMDD	LAT	LCNG	APPROX LORAN-C PULSE RATES 7X	7Y	7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LB#/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
KOREA	M	80 9 12	5438N	16526W	18242.2	34651.2	46122.4	85	2.083	42206	20.26	1.55	19394	61600
KOREA	M	80 9 4	5431N	16537W	18195.5	34688.6	46173.4	82	3.250	56982	17.53	1.55	15178	72160
USSR	M	79 7 28	5437N	15842W	18475.2	33712.5	45686.5	85	2.167	23623	10.90	2.09	7177	30200
USSR	M	79 7 24	5442N	15834W	18492.5	33679.3	45632.0	74	2.250	21067	9.36	1.92	11933	33000
KOREA	M	80 9 13	5435N	16535W	18219.4	34677.4	48169.0	93	6.333	59256	9.36	1.49	19504	78760
KOREA	M	80 9 14	5434N	16532W	18218.4	34672.2	48150.2	93	7.750	50782	6.55	1.49	21138	73920
KOREA	M	79 7 22	5440N	16527W	18249.7	34649.9	48131.4	98	3.083	18401	5.97	2.04	135599	154000
KOREA	M	80 8 1	5435N	16524W	18231.4	34652.0	48106.0	71	2.250	10795	4.80	1.60	11205	22000
KOREA	M	79 8 25	5258N	16753W	17482.3	35003.8	46536.3	66	1.417	3660	2.58	2.07	138240	141900
KOREA	M	79 9 5	5259N	16738W	17525.9	34984.6	48574.6	65	2.667	4818	1.81	1.72	72182	77000
KOREA	M	79 8 28	5259N	16746W	17505.6	34994.9	48609.0	63	1.500	2593	1.73	1.94	40307	42700
JAPAN	L	79 7 5	5605N	16545W	16341.7	35105.4	49754.0	75	2.833	4651	1.64	2.33	127349	132000
KOREA	M	80 9 3	5432N	16537W	18203.9	34687.0	48175.2	159	9.000	12301	1.37	1.66	87579	99800
JAPAN	L	79 7 1	5607N	16949W	18345.8	35110.2	49779.4	74	1.000	1326	1.33	1.86	25074	26400
KOREA	M	79 8 24	5259N	16747W	17503.0	34996.1	48613.3	68	1.250	1573	1.26	1.73	85767	87340
USSR	M	79 7 26	5442N	15834W	18492.5	33679.3	45632.0	79	2.500	3066	1.23	1.81	2434	7500
MEXICO	S	79 8 6	5429N	15838W	18463.4	33729.1	45673.9	60	1.417	1510	1.07	1.81	3330	4840
KOREA	M	79 8 23	5300N	16744W	17515.8	34992.0	48403.0	66	2.000	2022	1.01	1.69	46378	48400
JAPAN	L	79 7 4	5606N	16944W	18351.4	35103.9	49754.1	80	1.250	1258	1.01	1.69	82342	83600
KOREA	M	80 8 9	5259N	16800W	17465.0	35012.0	48668.3	61	9.333	8930	0.96	1.96	184230	193160
USSR	M	79 7 29	5443N	15835W	18494.2	33678.2	45636.6	79	3.333	2406	0.72	1.97	1994	4400
KOREA	M	80 9 1	5432N	16537W	18203.9	34687.0	48175.2	159	5.917	3866	0.65	1.99	33312	37100
KOREA	M	79 7 20	5432N	16536W	18205.1	34684.7	48169.5	121	4.417	2546	0.58	1.97	63454	66000
USSR	M	79 7 25	5437N	15841W	18475.6	33710.4	45680.6	74	2.083	1056	0.51	1.32	2024	3680

TABLE C-24. ATKA MACKEREL, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE YRMMDD	LAT	LCNG	APPROX LORAN-C PULSE RATES 7X	7Y	7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LB#/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	80 10 6	5206N	17150W	16371.8	35136.3	49289.1	115	0.333	6909	20.73	1.33	1671	8580
KOREA	M	80 10 31	5323N	16616W	17823.9	34846.5	48248.9	91	5.000	91365	16.31	1.69	51435	143000
KOREA	M	80 10 31	5447N	16528W	18276.7	34839.1	48148.5	143	5.167	28365	5.43	1.79	108035	136400
KOREA	M	80 10 1	5431N	16536W	18200.6	34886.4	48167.8	93	5.500	17718	3.22	1.83	15282	33000
KOREA	M	80 10 9	5601N	16959W	18274.0	35121.2	49792.1	85	4.917	14668	2.98	1.75	77732	92400
KOREA	M	80 10 21	5259N	16754W	17484.2	35004.8	48643.1	60	0.833	1925	2.31	1.74	17675	19800
KOREA	M	80 11 1	5444N	16527W	18266.9	34842.5	48137.9	123	4.583	6437	1.40	1.84	96763	103400
KOREA	M	80 11 2	5444N	16526W	18267.9	34840.1	48132.1	131	4.500	6320	1.40	1.84	96763	103400
KOREA	M	79 10 26	5306N	16709W	17630.8	34942.0	48462.0	108	5.917	7583	1.28	1.87	77280	83600
KOREA	M	80 10 2	5440N	16524W	18252.8	34842.9	48114.0	87	5.417	4871	0.90	1.89	17129	22000
KOREA	M	80 11 2	5445N	16527W	18271.2	34840.6	48139.5	150	5.567	4869	0.86	1.86	8331	13200
KOREA	M	80 11 4	5448N	16529W	18282.0	34859.6	48156.0	134	6.833	5863	0.86	3.22	8737	94600
KOREA	M	79 11 30	5312N	16652W	17698.3	34913.3	48396.3	98	7.250	6074	0.84	2.04	92926	99000
KOREA	M	80 10 18	5601N	16714W	17614.3	34949.6	48483.1	98	9.667	6247	0.65	1.27	44353	50600
KOREA	M	80 11 14	5601N	16945W	18311.0	35105.9	49736.6	68	7.000	4507	0.64	1.72	52253	56760
KOREA	M	79 10 25	5327N	16604W	17864.6	34821.8	48197.2	109	7.000	4197	0.60	2.25	50803	55000

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

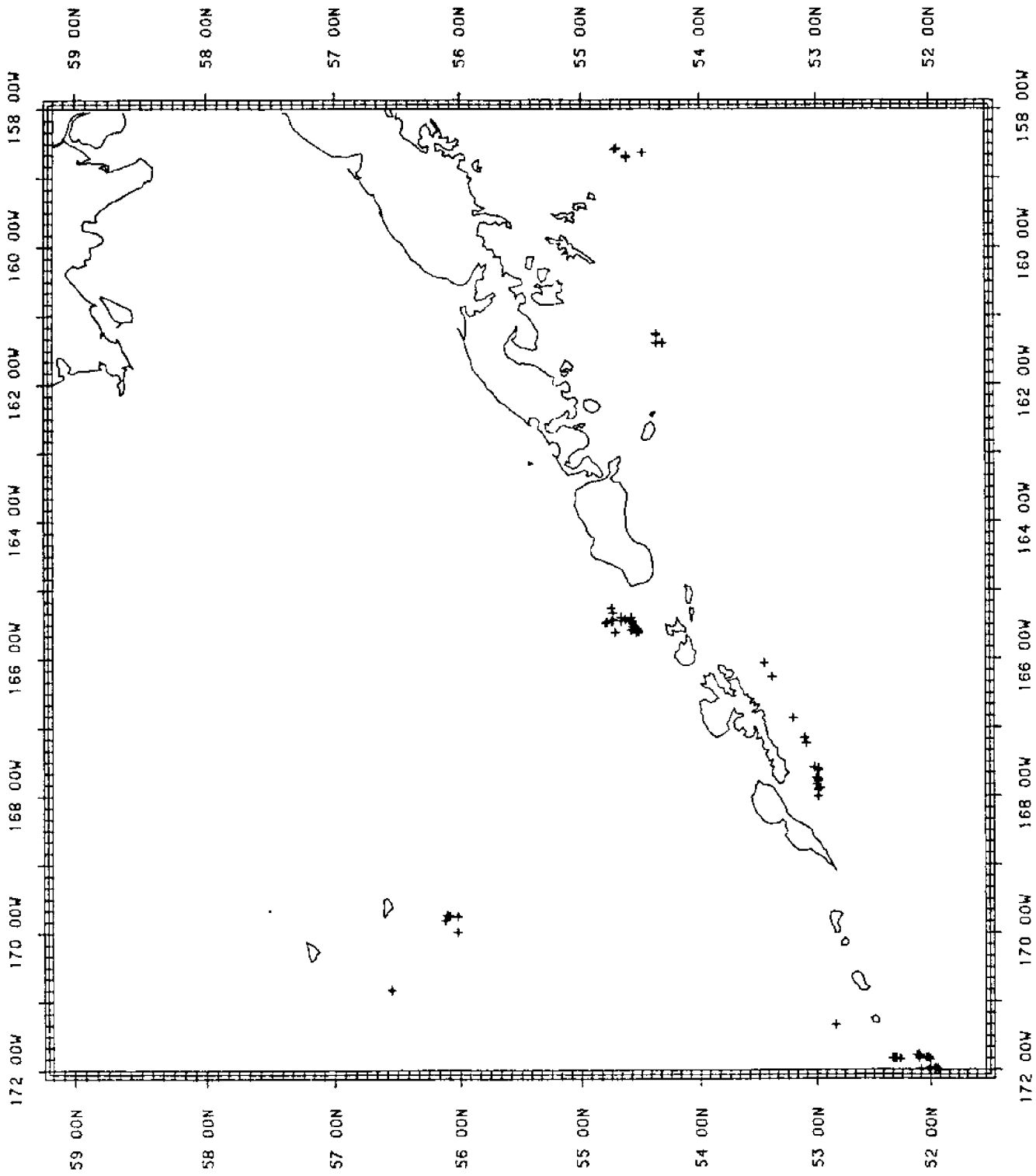


FIGURE C-12. TRAWLING LOCATIONS FOR ATKA MACKEREL, ALL MONTHS, 1979-80

SBS/WGDA/ATKAMACK/YEARS

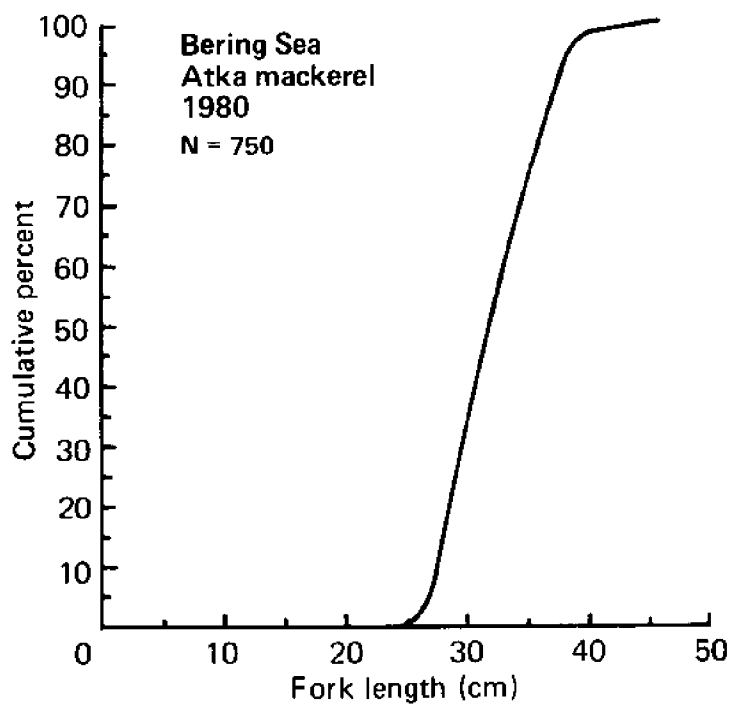
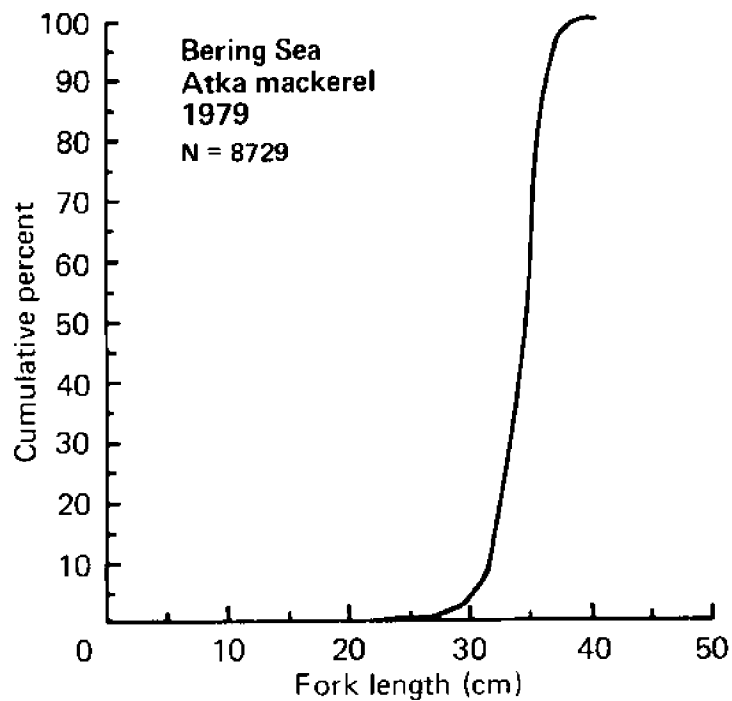


FIGURE C-13. CUMULATIVE LENGTH-FREQUENCY DISTRIBUTIONS OF THE ATKA MACKEREL CATCH FROM ALL AREAS OF THE EASTERN BERING SEA DURING 1979-80.

TABLE C-25. YELLOWFIN SOLE, JANUARY-MARCH 1979-80

NATION	VESSEL	DATE	LAT	LONG	APPROX	DEPTH	HOURS	CATCH	THOUSAND	SIZE	BYCATCH	TOTAL
CLASS	YMDDD				LORAN-C	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
					7X	7Y	7Z					
JAPAN	M	79 221	5636N	16714W	18650.3	34651.2	48993.0	58.	0.167	32913.	87.	33000.
JAPAN	M	79 220	5636N	16716W	18644.1	34652.7	48978.2	59.	0.500	82013.	1567.	83600.
JAPAN	M	79 221	5635N	16717W	18647.2	34652.0	48985.6	57.	0.250	40016.	684.	40700.
JAPAN	M	79 222	5638N	16715W	18657.1	34633.1	48979.8	59.	0.333	43795.	205.	44000.
JAPAN	M	79 217	5637N	16725W	18652.5	34670.1	49039.7	59.	0.333	79508.	1892.	81400.
JAPAN	M	79 222	5636N	16715W	18656.8	34641.4	48973.3	57.	0.333	21987.	1113.	23100.
JAPAN	S	80 321	5646N	16810W	18676.3	34784.4	49342.0	57.	0.250	14433.	87.	14520.
JAPAN	S	80 320	5646N	16812W	18675.0	34791.3	49355.1	57.	0.333	18571.	569.	19140.
JAPAN	S	80 321	5646N	16811W	18672.7	34791.9	49347.7	57.	0.333	16139.	141.	16280.
JAPAN	M	79 224	5637N	16720W	18653.2	34653.7	49006.9	57.	0.333	16042.	4858.	20900.
USSR	M	79 315	5704N	17125W	18278.3	34978.3	50180.1	60.	0.500	22108.	112.	22200.
JAPAN	M	79 219	5635N	16723W	18646.2	34671.6	49024.8	59.	2.167	81093.	4707.	85800.
JAPAN	M	79 216	5632N	16721W	18636.4	34676.7	49003.9	60.	1.833	56594.	5006.	61600.
JAPAN	S	80 320	5646N	16811W	18676.2	34787.9	49348.6	57.	0.333	9871.	29.	9900.
USSR	M	79 314	5714N	17133W	18247.6	34898.2	50176.4	56.	0.750	21291.	929.	22220.
JAPAN	M	80 121	5641N	16724W	18665.3	34650.1	49036.1	58.	1.500	38287.	1973.	40260.
JAPAN	M	79 1 9	5648N	16743W	18684.6	34663.3	49165.6	54.	0.750	18891.	909.	19800.
JAPAN	M	79 223	5639N	16723W	18655.2	34655.3	49028.1	57.	0.333	2303.	497.	8600.
JAPAN	M	79 1 6	5648N	16738W	18685.0	34666.3	49132.5	57.	1.000	26151.	2887.	29040.
JAPAN	S	80 317	5644N	16815W	18668.6	34809.5	49372.7	57.	0.833	19848.	392.	20240.
JAPAN	H	79 1 8	5640N	16745W	18684.7	34690.2	49178.8	54.	0.833	19040.	760.	19800.
JAPAN	M	80 116	5636N	16715W	18650.8	34641.4	48973.3	57.	2.167	46083.	6717.	52800.
JAPAN	M	80 122	5639N	16722W	18655.1	34652.0	49021.6	58.	2.250	47552.	6788.	54340.
JAPAN	M	80 123	5640N	16713W	18661.4	34617.9	48963.0	56.	1.833	37341.	2259.	39600.
USSR	M	79 113	5702N	17124W	18295.3	34959.0	50173.1	58.	1.500	29217.	6863.	36080.
JAPAN	M	80 123	5637N	16705W	18655.3	34604.5	48908.4	56.	2.833	52405.	2595.	55000.
USSR	M	79 316	5710N	17129W	18266.9	34934.1	50176.0	59.	2.000	36523.	437.	36960.
JAPAN	M	79 1 5	5646N	16744W	18678.8	34695.7	49171.1	54.	0.750	13686.	1714.	15400.
USSR	M	79 312	5707N	17124W	18292.9	34964.7	50178.9	56.	1.500	27217.	2483.	29700.
JAPAN	S	80 3 2	5626N	16640W	18624.8	34568.9	48735.9	59.	0.500	4637.	603.	9240.
JAPAN	M	80 117	5637N	16716W	18651.8	34640.5	48980.7	58.	2.667	44669.	4831.	49500.
JAPAN	S	80 319	5645N	16813W	18672.4	34792.7	49360.7	57.	0.500	8252.	108.	8360.
JAPAN	S	80 222	5638N	16658W	18659.1	34577.3	48862.9	56.	0.500	8034.	106.	8140.
JAPAN	S	80 319	5644N	16615W	18666.6	34809.5	49372.7	57.	0.667	10385.	175.	10560.
JAPAN	S	80 225	5637N	16718W	18651.5	34647.1	48993.8	58.	0.500	7774.	146.	7920.
JAPAN	S	80 312	5645N	16816W	18672.0	34808.9	49380.3	56.	1.000	15373.	1127.	16500.
JAPAN	M	80 116	5641N	16721W	18665.6	34640.2	49016.4	57.	2.583	39669.	4991.	44060.
JAPAN	M	79 218	5635N	16727W	18645.5	34684.7	49050.9	59.	1.417	20343.	3857.	24200.
JAPAN	M	79 218	5632N	16721W	18636.4	34676.7	49008.9	60.	1.167	15673.	6547.	22220.
JAPAN	M	79 2 7	5625N	16653W	18618.7	34613.7	48815.7	60.	1.417	18667.	3575.	22242.
JAPAN	S	80 318	5645N	16818W	18671.7	34815.8	49393.3	57.	0.667	8696.	104.	8800.
JAPAN	M	79 223	5635N	16712W	18648.0	34635.6	48952.8	58.	3.083	38682.	3118.	41800.
JAPAN	S	80 316	5645N	16815W	18672.1	34805.5	49373.7	57.	0.667	8290.	510.	8800.
JAPAN	M	79 1 9	5649N	16746W	18687.5	34689.0	49185.9	52.	1.000	12391.	809.	13200.
JAPAN	M	79 224	5636N	16714W	18650.9	34636.1	48966.8	57.	2.503	51661.	2239.	34100.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-25 (continued). YELLOWFIN SOLE, JANUARY-MARCH 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
		YR MO DD			7X 7Y 7Z							
JAPAN	M	79 223	5634N	16712W	18644.8 34639.7 48952.0	57	2.500	30566	12.23	0.46	2434	33000
JAPAN	S	80 225	5640N	16713W	18663.6 34617.9 48963.0	56	0.500	6006	12.01	0.51	154	6160
JAPAN	S	80 322	5646N	16811W	18676.2 34787.9 49348.6	57	0.500	5866	11.73	0.40	294	6160
JAPAN	S	80 315	5646N	16815W	18675.7 34801.5 49374.7	56	0.667	7766	11.65	0.42	592	8360
JAPAN	M	80 1 8	5642N	16705W	18670.0 34582.7 48914.3	54	1.750	20354	11.63	0.62	1866	22220
JAPAN	S	80 313	5647N	16811W	18675.5 34783.7 49349.5	56	0.833	9590	11.51	0.44	750	10340
JAPAN	S	80 314	5646N	16816W	18675.5 34805.0 49381.3	56	0.833	9421	11.31	0.42	699	10120
JAPAN	S	80 319	5645N	16810W	18672.9 34788.5 49341.1	57	0.500	5650	11.30	0.42	70	5720
JAPAN	S	80 317	5644N	16810W	18669.4 34792.5 49340.1	56	0.917	10217	11.15	0.46	783	11000
JAPAN	S	80 130	5645N	16710W	18678.0 34535.6 49294.7	55	1.000	11063	11.06	0.64	1697	12760
JAPAN	M	79 214	5642N	16735W	18667.2 34682.6 49109.2	54	2.417	26452	10.95	0.43	828	27280
JAPAN	M	80 225	5637N	16708W	18661.0 34605.8 49209.4	56	0.500	5441	10.88	0.51	279	5720
JAPAN	M	79 224	5637N	16720W	18651.2 34553.7 49006.9	57	0.583	6346	10.88	0.41	254	6600
JAPAN	M	80 127	5640N	16701W	18664.6 34578.4 48863.8	55	3.417	36790	10.77	0.56	3470	40260
USSR	M	79 314	5714N	17134W	18241.4 34895.7 50170.3	56	2.583	27335	10.58	0.54	1265	28600
JAPAN	M	80 120	5638N	16716W	18657.0 34636.4 48581.4	57	2.250	23621	10.50	0.57	3675	27500
JAPAN	M	79 1 4	5646N	16744W	18676.8 34695.7 49171.1	54	1.083	11520	10.45	0.54	7380	18700
JAPAN	M	80 115	5633N	16700W	18641.6 34604.8 48872.6	59	2.000	20892	10.45	0.61	5948	26840
JAPAN	M	80 1 9	5635N	16655W	18650.5 34580.3 48841.2	56	1.917	19994	10.43	0.58	5086	25080
JAPAN	M	79 119	5626N	16825W	18626.9 34534.2 48664.9	56	0.167	1713	10.28	0.45	3787	5500
JAPAN	S	80 311	5647N	16816W	18679.0 34800.9 49382.2	56	0.833	8459	10.15	0.47	561	9020
JAPAN	S	80 318	5644N	16810W	18669.4 34787.5 49340.1	56	0.833	8423	10.11	0.44	377	8800
JAPAN	S	80 3 3	5628N	16652W	18622.3 34606.8 48814.2	60	0.833	8251	9.90	0.50	549	8800
JAPAN	M	79 219	5634N	16723W	18642.3 34625.5 49023.9	59	2.833	27858	9.83	0.51	10862	38720
JAPAN	M	80 126	5640N	16717W	18669.0 34622.5 48990.6	55	1.417	13752	9.71	0.58	988	14740
JAPAN	S	80 311	5648N	16610W	18682.9 34778.1 49343.7	56	1.000	5670	9.67	0.49	890	10560
JAPAN	S	80 229	5637N	16707W	18655.0 34611.0 48921.5	59	0.667	6375	9.56	0.50	665	7040
JAPAN	S	80 3 3	5646N	16818W	18675.2 34311.3 49394.3	55	0.833	7942	9.53	0.46	638	8580
JAPAN	S	80 223	5635N	16710W	18648.3 34629.1 48939.7	59	0.500	4755	9.51	0.53	85	4840
JAPAN	S	80 222	5637N	16651W	18658.9 34558.8 48616.1	56	0.583	5530	9.48	0.54	630	6160
JAPAN	M	80 119	5642N	16718W	18668.9 34625.8 48977.2	56	6.000	56581	9.43	0.55	10739	67320
JAPAN	M	80 126	5645N	16715W	18668.2 34620.2 48976.8	56	2.250	20910	9.29	0.54	2190	23100
JAPAN	M	79 212	5638N	16730W	18641.5 34598.3 49069.4	59	1.500	13871	9.25	0.53	15609	29480
USSR	M	79 320	5702N	17128W	18252.0 34960.6 50180.2	60	2.333	21490	9.21	0.56	510	22000
JAPAN	M	79 213	5638N	16733W	18654.5 34692.5 49092.9	55	2.000	18290	9.14	0.40	7010	25300
JAPAN	S	80 123	5637N	16708W	18654.9 34614.3 48928.1	57	0.667	6005	9.01	0.61	595	6600
JAPAN	S	79 2 8	5625N	16656W	18618.0 34623.2 48639.2	60	2.583	23226	8.99	0.57	7882	31108
JAPAN	S	80 316	5646N	16814W	18675.8 34798.1 49368.2	56	0.667	5948	8.92	0.44	6160	6160
JAPAN	M	80 112	5635N	16658W	18650.1 34590.1 48660.9	57	2.417	19910	8.24	0.56	28490	48400
JAPAN	M	79 1 5	5646N	16740W	18675.1 34668.1 49144.7	54	1.000	6193	8.19	0.46	1707	9900
JAPAN	M	80 221	5631N	16701W	18643.4 34608.0 48879.1	55	0.667	5408	8.11	0.66	92	5100
USSR	M	79 315	5705N	17123W	18304.0 34955.7 50177.3	60	2.583	20233	7.83	0.66	447	20660
JAPAN	M	79 218	5635N	16725W	18645.9 34678.1 49037.9	59	1.917	14952	7.80	0.39	1328	16280
JAPAN	M	80 115	5639N	16707W	18661.1 34602.5 48922.8	57	2.167	16731	7.72	0.55	3949	20680
JAPAN	M	79 212	5639N	16739W	18657.0 34708.4 49133.0	59	3.083	23683	7.68	0.44	14817	38500

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-25 (continued). YELLOWFIN SOLE, JANUARY-MARCH 1979-80

NATION	BOAT CLASS	DATE	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FTISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
U.S.R	M	79 315	5715N	17127W	16282.2	34906.8	50168.7	57.	2.000	14997.	7.50	0.57	1503.	16500.
JAPAN	M	79 1 1	5622N	16622W	18615.8	34528.1	48615.9	57.	1.250	9350.	7.48	0.55	2970.	12320.
JAPAN	S	80 227	5635N	16725W	18645.9	34678.1	49037.9	61.	0.667	4964.	7.45	0.53	316.	5280.
JAPAN	S	80 313	5643N	16815W	18664.9	34813.3	49371.6	60.	0.833	6195.	7.43	0.43	1065.	7260.
JAPAN	M	79 112	5640N	16735W	18679.4	34865.2	49111.7	52.	0.833	6064.	7.28	0.47	536.	6600.
JAPAN	S	80 318	5644N	16814W	18680.7	34866.1	49366.2	57.	0.833	6039.	7.25	0.45	121.	6160.
JAPAN	M	79 113	5642N	16544W	18680.9	34308.4	48372.8	43.	1.167	8400.	7.20	0.48	180.	8580.
JAPAN	S	80 314	5647N	16810W	18679.7	34780.3	49342.9	55.	1.000	7176.	7.18	0.45	744.	7920.
JAPAN	M	80 113	5637N	16702W	18655.6	34594.6	48888.6	55.	3.250	23319.	7.19	0.58	4841.	28160.
JAPAN	M	79 2 1	5647N	16635W	18629.0	34549.1	48704.1	57.	3.167	22500.	7.11	0.49	3900.	26400.
JAPAN	M	79 224	5638N	16713W	18651.1	34634.8	48960.2	57.	2.750	19481.	7.08	0.40	3619.	23100.
JAPAN	S	80 3 1	5635N	16700W	18645.6	34596.6	48074.1	59.	0.667	4714.	7.07	0.46	346.	5060.
JAPAN	M	79 214	5647N	16738W	18661.7	34696.9	49128.1	55.	2.250	15834.	7.04	0.42	1766.	17600.
JAPAN	M	79 117	5645N	16601W	18680.5	34360.3	48486.3	44.	1.000	7037.	7.04	0.38	663.	7700.
JAPAN	M	80 1 9	5641N	16702W	18667.4	34577.2	48690.9	54.	3.250	22250.	6.25	0.54	9430.	31680.
JAPAN	M	79 1 8	5644N	16744W	18672.6	34704.4	49169.8	54.	1.250	8383.	6.71	0.43	1517.	9900.
JAPAN	M	79 224	5638N	16714W	18650.9	34638.1	48966.8	57.	3.167	2015.	6.64	0.40	4285.	25300.
JAPAN	M	79 113	5645N	16544W	18680.9	34308.4	48372.8	43.	0.917	6054.	6.60	0.47	546.	6600.
JAPAN	M	79 223	5637N	16715W	18654.0	34637.2	48974.1	57.	0.417	2736.	6.57	0.41	562.	3300.
USSR	M	79 315	5715N	17124W	18307.6	34914.4	50168.7	56.	2.000	13113.	6.56	0.57	1187.	14300.
JAPAN	M	80 112	5641N	16704W	18667.2	34583.8	48904.1	56.	6.000	38659.	6.48	0.57	12841.	51700.
JAPAN	S	80 129	5641N	16709W	18666.8	34603.3	48937.2	56.	1.833	11882.	6.37	0.96	418.	12100.
JAPAN	S	80 128	5638N	16707W	18656.1	34606.3	48922.2	55.	1.833	11682.	6.35	0.95	683.	12320.
JAPAN	M	79 1 8	5645N	16740W	18676.0	34686.5	49144.1	54.	1.083	6875.	6.35	0.44	3465.	10340.
JAPAN	M	80 3 6	5625N	16638W	18622.0	34566.5	48722.2	60.	0.833	5226.	6.27	0.59	934.	6160.
JAPAN	M	79 225	5637N	16720W	18653.2	34653.7	49006.9	57.	3.667	22971.	6.26	0.47	6729.	29700.
JAPAN	M	80 120	5638N	16715W	18647.6	34545.4	48972.5	60.	3.000	18773.	6.26	0.55	4327.	23100.
JAPAN	S	80 312	5647N	16817W	18678.9	34804.3	49388.7	56.	1.083	6081.	6.17	0.46	579.	7260.
JAPAN	S	80 124	5638N	16704W	18652.3	34605.4	48901.1	57.	0.667	4058.	6.09	0.62	782.	4840.
JAPAN	S	80 3 4	5625N	16638W	18622.0	34566.5	48722.2	60.	0.500	3028.	6.06	0.48	492.	3520.
JAPAN	M	80 119	5637N	16716W	18653.8	34640.5	48980.7	58.	2.500	15066.	6.03	0.55	3194.	18260.
JAPAN	S	80 130	5638N	16706W	18658.2	34603.5	48915.8	55.	1.000	5848.	5.85	0.52	752.	6600.
JAPAN	M	79 224	5636N	16720W	18658.0	34657.7	49006.1	57.	0.333	1939.	5.82	0.42	261.	2200.
JAPAN	M	79 1 6	5647N	16736W	18682.3	34654.0	49116.8	52.	1.000	5801.	5.80	0.49	799.	6600.
JAPAN	M	79 225	5632N	16723W	18636.0	34683.2	49021.9	60.	0.833	4813.	5.78	0.51	4906.	5724.
JAPAN	M	79 225	5631N	16723W	18632.5	34687.0	49020.8	60.	0.500	2864.	5.73	0.52	5738.	8602.
JAPAN	M	80 127	5643N	16724W	18671.4	34641.4	49037.4	55.	2.417	13844.	5.73	0.54	2876.	16720.
JAPAN	M	79 225	5635N	16722W	18645.7	34664.3	49019.2	58.	4.000	2032.	5.71	0.46	4668.	27500.
JAPAN	M	79 213	5638N	16732W	18654.7	34669.2	49086.3	59.	3.083	17228.	5.59	0.40	6972.	24200.
JAPAN	S	80 221	5631N	16711W	18635.0	34646.3	48942.8	59.	0.667	3714.	5.57	0.52	2006.	5720.
JAPAN	S	80 126	5635N	16707W	18648.8	34619.3	48920.1	56.	1.333	7426.	5.57	0.55	1374.	6800.
JAPAN	M	80 1 7	5641N	16645W	18668.7	34521.4	48778.5	51.	1.250	6956.	5.57	0.59	2944.	9900.
JAPAN	S	80 315	5647N	16816W	18675.0	34800.9	49382.2	56.	1.000	5503.	5.50	0.42	437.	5740.
JAPAN	M	79 2 1	5626N	16634W	18626.0	34549.9	48696.7	59.	3.250	17480.	5.38	0.51	4520.	22000.
JAPAN	M	79 114	5643N	16559W	18676.7	34300.6	48339.3	43.	0.917	4681.	5.33	0.50	1717.	6600.

*** NULL *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-25 (continued). YELLOWFIN SOLE, JANUARY-MARCH 1979-80

NATION	VESSL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	80 125	5635N	16712W	18648.0 34635.6 48952.8	59	1.167	6187	5.30	0.50	1513	7700
JAPAN	S	80 3 1	5630N	16700W	18633.9 34616.8 48870.1	59	0.750	3964	5.29	0.48	436	4400
JAPAN	M	80 110	5635N	16654W	18650.6 34577.1 48834.6	56	2.333	12202	5.23	0.59	4958	17160
JAPAN	M	79 1 2	5628N	16450W	18704.9 34671.3 48008.6	40	3.083	15964	5.18	0.51	1636	17600
JAPAN	M	79 1 3	5634N	16455W	18698.4 34108.2 48043.4	42	3.167	16366	5.17	0.43	1234	17600
USSR	M	79 319	5713N	17122W	18317.9 34933.1 50172.3	57	4.000	20485	5.12	0.54	3275	23760
JAPAN	S	80 129	5640N	16707W	18664.0 34598.1 48923.4	56	1.333	6801	5.10	0.65	899	7700
JAPAN	S	80 316	5647N	16811W	18679.5 34783.7 49349.5	56	1.000	5050	5.05	0.44	670	5720
JAPAN	M	79 1 7	5647N	16743W	18681.9 34687.9 49165.1	54	1.000	5000	5.00	0.53	500	5500
JAPAN	S	80 312	5646N	16809W	18676.4 34781.0 49335.5	56	0.833	4145	4.97	0.47	475	4620
JAPAN	M	79 1 3	5626N	16626W	18627.5 34524.9 48644.3	56	1.000	4918	4.94	0.51	169	2640
JAPAN	S	80 313	5646N	16813W	18675.9 34794.7 49361.7	55	0.667	3239	4.86	0.44	501	3740
JAPAN	M	79 114	5643N	16538W	18676.7 34297.5 48332.6	43	1.083	5245	4.84	0.51	1795	7040
JAPAN	M	80 127	5644N	16722W	18674.5 34630.3 49024.7	55	2.667	12704	4.76	0.58	3576	16280
JAPAN	M	79 225	5636N	16724W	18649.4 34670.9 49032.2	57	1.583	7463	4.71	0.53	3867	11330
JAPAN	M	79 125	5629N	16706W	18629.3 34639.9 48908.2	60	1.250	5869	4.69	0.59	4031	9900
USSR	M	79 331	5654N	17112W	18324.3 35053.0 50172.0	55	2.063	9755	4.68	0.63	1245	11000
JAPAN	S	80 3 3	5626N	16650W	18622.7 34600.5 48601.2	60	0.667	3118	4.68	0.52	182	3300
JAPAN	M	79 1 9	5647N	16741W	18682.0 34681.0 49151.9	52	0.750	3449	4.60	0.43	291	3740
JAPAN	M	79 1 14	5647N	16452W	18693.2 34115.2 48024.0	42	1.500	6751	4.50	0.46	949	7700
JAPAN	S	80 314	5647N	16817W	18676.9 34804.3 49328.7	56	1.000	4473	4.47	0.43	367	4840
JAPAN	S	80 226	5636N	16656W	18653.4 34579.3 48848.5	58	0.667	2921	4.38	0.49	379	3300
JAPAN	M	80 114	5639N	16705W	18661.2 34599.2 48916.2	56	3.000	13028	4.34	0.60	9632	22060
JAPAN	S	80 317	5646N	16815W	18675.7 34801.5 49374.7	57	0.833	3603	4.32	0.43	357	3960
JAPAN	M	79 123	5642N	16537W	18674.5 34299.3 48325.9	43	1.500	6376	4.25	0.46	1544	7920
JAPAN	S	80 315	5646N	16809W	18676.4 34761.0 49335.5	56	0.833	3473	4.17	0.41	487	3960
JAPAN	M	79 2 3	5626N	16700W	18620.4 34632.1 48866.2	60	1.500	6240	4.16	0.54	3800	10120
JAPAN	H	79 2 8	5624N	16653W	18615.3 34617.5 48018.7	60	3.167	12649	4.06	0.54	1979	14828
JAPAN	S	80 229	5636N	16703W	18658.5 34593.6 48895.8	58	1.000	4050	4.05	0.50	350	4400
JAPAN	H	79 214	5643N	16738W	18670.1 34688.4 49129.6	54	2.333	9308	3.99	0.43	1692	11000
JAPAN	S	80 3 7	5626N	16646W	18621.9 34587.8 48775.1	60	1.000	3980	3.98	0.54	860	4640
JAPAN	M	79 116	5642N	16538W	18674.5 34302.4 48332.6	43	0.833	3248	3.90	0.44	712	3960
JAPAN	M	79 116	5645N	16556W	18680.6 34344.3 48452.9	43	1.500	5769	3.85	0.40	831	6600
JAPAN	M	79 1 3	5634N	16456W	18692.4 34111.2 48050.1	40	3.583	13778	3.85	0.56	1622	15400
USSR	M	79 331	5655N	17101W	18397.5 35075.0 50170.0	52	2.083	7925	3.80	0.60	3075	11000
JAPAN	S	80 311	5649N	16817W	18685.6 34796.0 49390.4	55	1.000	3764	3.76	0.48	4840	11000
JAPAN	M	79 210	5625N	16659W	18617.2 34632.7 48958.7	61	2.833	10629	3.75	0.51	14385	25014
USSR	M	79 331	5707N	17114W	18356.3 34990.8 50179.3	55	1.917	7149	3.73	0.69	2751	9900
JAPAN	M	79 125	5631N	16713W	18634.6 34654.7 48955.8	61	1.000	3726	3.73	0.52	5074	8800
USSR	M	79 331	5659N	17056W	18447.6 35073.8 50175.3	55	2.250	8345	3.71	0.69	2655	11000
JAPAN	M	79 112	5643N	16505W	18677.7 34195.7 48112.1	43	1.750	6484	3.71	0.44	2316	8800
JAPAN	M	79 2 9	5624N	16648W	18616.5 34601.8 48786.2	59	3.000	10872	3.62	0.53	6838	17710
JAPAN	S	80 229	5634N	16702W	18646.4 34607.2 48886.5	59	0.667	2410	3.62	0.51	890	3300
JAPAN	M	79 117	5644N	16538W	18676.9 34292.6 48332.7	43	1.083	3846	3.55	0.46	554	4400

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-25 (continued). YELLOWFIN SOLE, JANUARY-MARCH 1979-80

NATION	VESSEL CLASS	DATE YMMDD	LAT	LONG	APPROX 7Y	LOXAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	80 120	3635N	16711W	18648.2	34632.4	48946.3	58	2.083	7380	3.54	0.57	7140	14520
JAPAN	S	80 3 3	5627N	16641W	18627.8	34568.1	48743.3	59	0.667	2311	3.47	0.54	549	2060
JAPAN	M	79 120	5631N	16707W	18635.8	34635.4	48916.7	60	1.250	4308	3.45	0.60	3392	7700
JAPAN	M	79 124	5631N	16712W	18634.8	34651.5	48949.3	60	1.500	5121	3.41	0.54	2579	7700
JAPAN	M	80 128	5637N	16704W	18658.0	34601.2	48901.8	54	1.167	3975	3.41	0.53	1085	5060
JAPAN	M	80 124	5638N	16708W	18658.0	34610.0	48926.8	56	2.667	9056	3.40	0.58	6124	15180
JAPAN	M	79 114	5641N	16518W	18673.1	34245.4	48199.0	43	2.167	7250	3.35	0.46	1550	8400
JAPAN	M	79 120	5630N	16659W	18634.1	34613.6	48863.5	60	1.333	4369	3.28	0.57	4431	8800
JAPAN	M	79 2 1	5630N	16626W	18639.6	34508.4	48647.1	54	1.750	5719	3.27	0.51	4181	9900
JAPAN	M	79 1 6	5646N	16736W	18675.3	34668.5	49118.3	54	1.083	3532	3.26	0.48	2628	6160
JAPAN	S	80 310	5623N	16638W	18615.5	34574.2	48720.2	59	1.333	4271	3.20	0.51	789	5060
JAPAN	M	79 115	5643N	16547W	18676.4	34325.8	48392.7	43	1.917	6021	3.14	0.48	2779	8800
JAPAN	M	80 3 7	5625N	16636W	18622.4	34560.2	48709.0	60	1.083	3386	3.13	0.52	574	3960
JAPAN	M	79 2 9	5623N	16645W	18613.8	34596.1	48765.8	60	3.250	10092	3.11	0.51	16088	26180
JAPAN	M	79 112	5643N	16448W	18676.2	34144.4	47998.4	43	1.750	5413	3.09	0.35	1167	6600
JAPAN	M	80 1 7	5645N	16721W	18677.4	34622.4	49016.6	53	1.500	4627	3.08	0.60	2413	7040
JAPAN	M	80 1 8	5643N	16706W	18672.7	34581.5	48918.3	55	2.500	7621	3.05	0.54	4039	11660
JAPAN	M	79 2 2	5625N	16630W	18623.6	34541.3	48669.7	57	2.000	6087	3.04	0.47	2713	8800
JAPAN	S	80 127	5634N	16705W	18645.9	34616.9	48906.2	61	1.333	4038	3.03	0.57	2562	6600
JAPAN	S	80 228	5634N	16704W	18646.1	34613.7	48899.6	59	0.667	1989	2.98	0.47	211	2200
JAPAN	M	80 125	5645N	16728W	18676.9	34646.0	49064.0	54	1.833	5468	2.98	0.58	692	6160
JAPAN	M	80 1 8	5645N	16711W	18678.0	34589.0	48952.3	51	2.917	8643	2.96	0.56	4557	13200
JAPAN	M	79 1 9	5637N	16538W	18663.0	34326.4	48331.9	44	2.917	8600	2.95	0.42	2400	11000
JAPAN	M	79 1 9	5637N	16538W	18663.0	34326.4	48331.9	44	2.500	7334	2.93	0.45	1466	8800
JAPAN	M	79 1 4	5631N	16456W	18696.7	34116.6	48050.4	40	3.750	10862	2.90	0.45	2338	13200
JAPAN	H	79 2 7	5614N	16704W	18575.1	34686.1	48877.0	62	3.167	9147	2.89	0.50	9575	18722
JAPAN	S	80 127	5634N	16709W	18645.3	34629.9	48932.4	60	1.333	3629	2.87	0.61	571	4400
JAPAN	M	80 114	5633N	16637W	18644.0	34595.1	48822.9	59	2.000	5607	2.80	0.63	3193	8800
JAPAN	M	79 123	5640N	16545W	18669.6	34334.0	46379.0	44	1.500	4191	2.79	0.46	1089	5280
JAPAN	M	79 226	5635N	16720W	18646.7	34661.8	49005.2	61	4.000	11129	2.78	0.48	15271	26400
JAPAN	M	80 112	5639N	16705W	18661.3	34595.9	48909.6	57	4.250	11616	2.78	0.53	6004	17820
JAPAN	M	79 1 7	5647N	16747W	18681.6	34701.5	49191.5	55	1.000	2777	2.78	0.46	1183	3960
JAPAN	S	80 3 4	5626N	16650W	18622.7	34600.5	48801.2	60	0.917	2522	2.75	0.50	558	3080
USSR	M	79 330	5657N	17110N	18350.3	35047.3	50175.7	57	2.083	5700	2.74	0.63	900	6600
JAPAN	M	79 225	5627W	16719W	18619.2	34688.8	48990.4	58	3.000	8188	2.73	0.46	3912	12100
USSR	M	79 316	5702N	17126W	18252.6	34980.6	50180.2	56	2.083	5601	2.69	0.61	2099	7700
JAPAN	M	79 1 2	5623N	16619W	18615.5	34514.9	48596.2	56	1.167	3127	2.68	0.52	3033	6160
JAPAN	M	79 215	5642N	16733W	18667.5	34675.9	49096.1	55	3.500	9258	2.65	0.42	2842	12100
JAPAN	M	79 1 2	5640N	16518W	18670.9	34250.3	46198.9	43	1.417	3746	2.64	0.42	1754	5500
JAPAN	M	79 123	5628N	16648W	18629.7	34586.3	48765.9	59	2.917	7632	2.82	0.49	12168	19800
JAPAN	M	79 1 2	5624N	16619W	18622.6	34510.9	48597.0	56	1.000	2598	2.60	0.49	6202	8800
JAPAN	M	79 110	5640N	16524W	18670.6	34268.7	48239.0	44	2.500	6326	2.53	0.45	2034	8360
JAPAN	M	80 1 6	5645N	16717W	18677.6	34609.0	48992.1	55	1.667	4207	2.52	0.54	2393	6600
JAPAN	S	80 227	5635N	16725W	18645.9	34678.1	49037.9	60	1.000	2507	2.51	0.50	133	2640
JAPAN	M	80 122	5636N	16717W	18650.5	34647.9	48936.4	59	2.167	5426	2.50	0.58	2274	7700

*** NOTE *** THE ACCURACY OF POSITION AND LOXAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-25 (continued). YELLOWFIN SOLE, JANUARY-MARCH 1979-80

NATLJA	VESSL	CLASS	DATE	LAT	LONG	APPROX	7X	7Y	7Z	DEPTH	HOURS	CATCH	THOUSAND	SIZE	BYCATCH	TOTAL
			YHMD0			LOGAN-C				(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
JAPAN	M		79 123	5629N	16649W	18632.7	34585.6	48797.3	58.	58.	2.333	5820.	2.49	0.46	8480.	14300.
JAPAN	S		80 126	5633N	16705W	18642.7	34621.0	48905.3	61.	61.	1.667	4130.	2.48	0.59	2910.	7040.
JAPAN	S		80 125	5635N	16715W	18647.6	34645.4	48972.5	60.	60.	1.583	3923.	2.46	0.56	477.	4400.
JAPAN	M		79 2 3	5627N	16702W	18623.4	34634.7	48880.2	61.	61.	1.600	2461.	2.46	0.59	3039.	5500.
JAPAN	M		79 115	5631N	16531W	18668.0	34295.2	48285.6	43.	43.	2.000	4648.	2.42	0.44	2852.	7700.
JAPAN	M		79 110	5646N	16740W	18675.1	34682.1	49144.7	54.	54.	0.750	1811.	2.41	0.41	389.	2200.
JAPAN	M		79 116	5641N	16519W	18671.0	34248.5	48205.7	43.	43.	2.667	6384.	2.39	0.41	4176.	10560.
JAPAN	S		80 3 9	5623N	16642W	18614.5	34586.7	48746.3	60.	60.	1.083	2580.	2.38	0.56	720.	3300.
JAPAN	S		80 223	5634N	16703W	18646.2	34610.4	48893.0	55.	55.	0.833	1873.	2.37	0.52	227.	2200.
JAPAN	M		79 2 2	5623N	16632W	18616.8	34555.4	48681.1	57.	57.	2.667	6282.	2.36	0.56	3178.	9460.
JAPAN	M		79 125	5624N	16635W	18619.4	34560.9	48701.6	59.	59.	1.500	3533.	2.36	0.53	1747.	5280.
JAPAN	M		79 114	5631N	16533W	18667.9	34301.4	48296.9	44.	44.	2.500	5885.	2.35	0.42	2915.	8600.
JAPAN	M		79 215	5641N	16730W	18664.7	34670.1	49075.6	55.	55.	4.167	9646.	2.31	0.44	8394.	18040.
JAPAN	M		79 114	5641N	16514W	18673.2	34233.1	48172.3	43.	43.	2.000	4603.	2.30	0.42	1997.	6600.
JAPAN	S		80 226	5635N	16700W	18645.8	34596.6	48674.1	58.	58.	0.667	1533.	2.30	0.47	227.	1760.
JAPAN	M		79 210	5622N	16658W	18607.0	34640.5	48848.9	61.	61.	5.083	11676.	2.30	0.51	12282.	23958.
JAPAN	M		79 1 6	5726N	16436W	18716.2	33984.0	47911.2	39.	39.	1.667	3815.	2.29	0.41	585.	4400.
JAPAN	M		80 114	5633N	16658W	18643.9	34598.3	48859.5	57.	57.	2.000	4552.	2.28	0.63	7328.	11880.
JAPAN	M		79 115	5640N	16515W	18671.0	34241.1	48178.9	44.	44.	2.583	5854.	2.27	0.42	2500.	6360.
JAPAN	M		79 1 2	5629N	16648W	18616.5	34601.8	48786.2	61.	61.	1.050	2361.	2.25	0.56	4239.	6600.
JAPAN	M		79 2 2	5629N	16635W	18635.2	34541.0	48705.6	56.	56.	2.750	6152.	2.24	0.51	2648.	8800.
JAPAN	M		79 1 7	5704N	16444W	18713.7	34019.4	47365.3	39.	39.	1.583	3523.	2.23	0.41	877.	4400.
JAPAN	M		79 122	5628N	16628W	18633.3	34523.0	48656.9	57.	57.	1.000	2209.	2.21	0.58	2191.	4400.
USSR	M		79 331	5653N	17109W	18344.4	35065.3	50168.9	55.	55.	2.083	4562.	2.17	0.68	4278.	8800.
JAPAN	M		79 125	5628N	16627W	18633.4	34519.8	48652.3	56.	56.	1.500	3253.	2.17	0.50	1587.	4840.
JAPAN	S		80 3 7	5626N	16645W	18623.8	34584.7	48768.6	60.	60.	1.000	2147.	2.15	0.52	713.	2860.
JAPAN	M		79 1 1	5627N	16630W	18629.9	34533.3	48671.3	59.	59.	3.000	6326.	2.11	0.84	4674.	11000.
USSR	M		79 316	5707N	17114W	18358.3	34990.8	50179.3	57.	57.	1.750	3652.	2.09	0.53	748.	4400.
JAPAN	M		79 110	5640N	16527W	18670.5	34278.0	48259.0	44.	44.	2.500	5216.	2.09	0.43	5784.	11000.
JAPAN	M		79 111	5648N	16745W	18684.6	34693.5	49129.5	53.	53.	1.167	2406.	2.06	0.45	894.	3300.
JAPAN	M		79 1 4	5625N	16622W	18625.2	34516.3	48617.4	56.	56.	0.917	1887.	2.06	0.52	2513.	4400.
JAPAN	S		80 3 9	5623N	16635W	18616.1	34564.8	48700.7	60.	60.	1.417	2894.	2.04	0.53	1286.	4180.
JAPAN	S		80 3 1	5631N	16709W	18635.4	34641.8	48929.7	59.	59.	1.000	2040.	2.04	0.47	820.	2560.
USSR	M		79 320	5703N	17126W	18268.8	34980.8	50180.2	60.	60.	2.000	4069.	2.03	0.51	1654.	5720.
JAPAN	M		79 111	5639N	16523W	18668.4	34270.5	48232.2	44.	44.	1.833	3658.	2.00	0.45	2492.	6160.
JAPAN	M		79 1 4	5623N	16618W	18619.7	34511.8	48589.6	56.	56.	1.000	1954.	1.95	0.53	1346.	3300.
JAPAN	S		80 128	5642N	16711W	18669.5	34602.5	48950.9	56.	56.	2.167	4232.	1.95	0.56	608.	4840.
JAPAN	M		79 119	5638N	16750W	18691.6	34748.8	49203.7	60.	60.	1.167	2266.	1.94	0.58	2134.	4400.
JAPAN	M		79 125	5634N	16616W	18615.2	34564.1	48706.1	59.	59.	1.500	2695.	1.93	0.44	2605.	5500.
JAPAN	M		79 2 8	5624N	16635W	18614.8	34623.8	48631.7	61.	61.	2.750	5291.	1.92	0.48	5203.	10494.
JAPAN	M		79 1 3	5624N	16615W	18623.4	34498.4	46570.7	55.	55.	1.500	2682.	1.92	0.55	4818.	7700.
JAPAN	S		80 3 3	5627N	16635W	18625.0	34549.1	48704.1	60.	60.	1.000	1909.	1.91	0.51	951.	2560.
USSR	M		79 331	5659N	17115W	18326.4	35027.1	50178.5	56.	56.	2.000	3736.	1.90	0.49	5004.	8800.
USSR	M		79 330	5705N	17136W	18339.9	34946.4	50180.0	49.	49.	2.000	3766.	1.89	0.76	2814.	6600.
JAPAN	M		79 1 7	5637N	16541W	18662.8	34335.7	48351.9	44.	44.	2.750	5125.	1.86	0.52	3675.	8800.

*** NOTE *** THE ACCURACY OF POSITION AND LOGAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

84 available trawl records (exceeding 500 lbs/hr CPUE) were not included.

TABLE C-26. YELLOWFIN SOIL, APRIL-JUNE 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	79 4 9	5701N	17108W	18375.0	35036.2	50179.2	57.	2.667	27128.	10.17	10272.	37400.
USSR	M	79 4 7	5700N	17100W	18426.5	35060.4	50177.4	56.	1.250	11133.	8.91	19277.	30360.
USSR	M	79 4 4	5708N	17121W	18314.9	34966.8	50178.3	56.	2.167	15214.	7.02	2306.	17600.
USSR	M	79 4 4	5711N	17110W	18392.9	34977.4	50175.0	56.	2.000	13059.	6.53	4981.	18040.
USSR	M	79 4 4	5707N	17110W	18304.5	35001.4	50175.4	55.	2.167	12240.	5.65	18340.	30580.
USSR	M	79 4 8	5709N	17113W	18365.5	34981.9	50177.8	55.	3.250	17057.	5.25	24743.	41800.
USSR	M	79 4 4	5655N	17102W	18391.3	35072.8	50170.4	55.	2.167	11084.	5.12	22136.	33220.
USSR	M	79 4 5	5708N	17108W	18400.0	35001.0	50178.8	57.	2.417	10005.	4.14	11995.	22000.
USSR	M	79 4 9	5658N	17108W	18367.2	35048.4	50176.5	57.	0.750	2868.	3.82	6812.	9686.
USSR	M	79 4 9	5653N	17100W	18393.4	35082.9	50165.4	56.	2.917	10462.	3.59	18138.	28600.
USSR	M	79 4 2	5703N	17110W	18373.0	35022.0	50180.1	55.	1.500	5244.	3.50	5756.	11000.
USSR	M	79 4 4	5710N	17109W	18397.7	34986.4	50176.9	56.	2.000	6561.	3.28	7737.	14300.
USSR	M	79 4 14	5649N	17059W	18377.1	35094.2	50154.6	55.	1.667	5460.	3.28	11040.	16500.
USSR	M	79 4 4	5707N	17110W	18384.5	35001.4	50179.4	55.	2.000	6528.	3.13	8872.	15400.
USSR	M	79 4 1	5708N	17109W	18391.5	34998.3	50178.9	55.	2.000	5299.	2.65	5701.	11000.
USSR	M	79 4 9	5659N	17107W	18377.7	35047.0	50177.4	59.	2.000	5296.	2.65	16704.	22000.
USSR	M	79 4 2	5702N	17108W	18382.6	35031.8	50179.7	54.	2.167	5487.	2.53	5513.	11000.
KOREA	M	80 5 8	5716N	16511W	18730.2	34029.7	48139.4	39.	6.583	16524.	2.51	14936.	31460.
KOREA	M	80 5 10	5719N	16649W	18740.0	34323.7	48791.6	42.	6.083	14847.	2.44	7373.	22220.
KOREA	M	79 4 7	5700N	17109W	18368.9	35037.9	50178.6	52.	2.083	5020.	2.41	17200.	22220.
USSR	M	79 4 3	5711N	17109W	18399.5	34980.1	50175.6	56.	2.000	4716.	2.36	7384.	12100.
KOREA	M	80 5 5	5723N	16538W	18736.8	34068.5	48313.7	38.	3.667	6592.	2.34	2408.	11000.
USSR	M	79 4 7	5659N	17110W	18358.5	35039.6	50177.9	55.	2.583	5842.	2.26	5136.	11000.
KOREA	M	80 5 9	5718N	16651W	18735.1	34337.0	48606.1	40.	12.417	27403.	2.21	15937.	43340.
KOREA	M	80 5 7	5719N	16635W	18738.9	34277.4	48698.2	39.	6.583	14349.	2.18	8091.	22440.
USSR	M	79 4 3	5708N	17109W	18393.5	34998.3	50178.8	52.	2.000	4279.	2.14	6721.	11000.
USSR	M	79 4 10	5654N	17103W	18380.2	35073.5	50168.9	55.	2.583	5252.	2.03	19168.	24420.
KOREA	M	80 5 10	5718N	16630W	18737.5	34267.4	48665.9	40.	9.333	18234.	1.95	8608.	26840.
KOREA	M	80 5 12	5712N	16611W	18729.1	34243.3	48544.2	40.	8.333	15996.	1.91	9404.	25300.
KOREA	M	80 5 7	5714N	16501W	18727.4	34011.5	48074.0	40.	12.500	23413.	1.87	23667.	47080.
KOREA	M	80 5 4	5718N	16506W	18732.1	34002.0	48104.4	40.	6.833	12739.	1.86	14101.	26840.
USSR	M	79 4 9	5654N	17102W	18386.4	35075.7	50168.5	57.	1.500	2726.	1.82	8274.	11000.
USSR	M	79 4 2	5703N	17108W	18386.0	35027.2	50180.1	54.	1.500	2691.	1.79	2809.	5500.
USSR	M	79 4 1	5700N	17120W	18297.9	35010.3	50179.5	55.	2.083	3880.	1.77	5120.	8800.
KOREA	M	80 5 6	5718N	16608W	18735.9	34195.9	48518.9	36.	13.000	22117.	1.70	7583.	29700.
USSR	M	79 4 6	5708N	17104W	18426.3	35011.6	50179.0	56.	2.000	3369.	1.68	29631.	33000.
KOREA	M	80 5 5	5722N	16611W	18740.1	34179.5	48334.8	37.	10.750	17358.	1.61	6182.	23540.
USSR	M	79 4 3	5710N	17108W	18404.2	34989.0	50176.9	55.	2.417	3900.	1.61	6000.	9900.
USSR	M	79 4 15	5651N	17101W	18376.6	35085.8	50161.2	56.	2.833	4365.	1.61	17435.	22000.
USSR	M	79 4 8	5654N	17102W	18386.4	35075.7	50168.5	57.	1.167	1873.	1.61	9127.	11000.
KOREA	M	80 5 17	5713N	16626W	18731.4	34286.0	48643.8	38.	11.250	17715.	1.57	15285.	33000.
KOREA	M	80 5 16	5714N	16506W	18727.6	34026.7	48107.4	38.	10.250	15967.	1.56	3833.	19800.
KOREA	M	80 5 9	5722N	16732W	18746.0	34449.1	49074.1	40.	6.500	9301.	1.47	15939.	19800.
JAPAN	S	80 5 28	5659N	16627W	18705.7	34171.4	48658.6	41.	1.000	1473.	1.47	1827.	3300.
KOREA	M	80 5 11	5718N	16528W	18733.3	34069.5	48251.5	39.	7.083	10134.	1.47	12056.	22440.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-26 (continued), YELLOWFIN SOLE, APRIL-JUNE 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LCRAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS IRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	79 4 1	5705N	17108W	18402.2	34995.1	50178.0	53	2.000	2905.	1.45	1.23	3695.	6600.
USSR	M	79 4 3	5707N	17110W	18384.5	35001.4	50179.4	55	1.917	2652.	1.36	0.62	3948.	6000.
KOREA	M	80 515	5709N	16637W	18226.8	34346.8	48720.5	39	10.500	13308.	1.28	0.45	7292.	20680.
USSA	M	79 4 2	5702N	17113W	18350.2	35019.0	50175.9	56	2.500	3122.	1.25	0.67	1278.	4400.
KOREA	M	80 512	5712N	16648W	18737.8	34333.5	48787.2	40	5.750	7132.	1.24	0.44	1574.8	22880.
USSR	M	79 4 4	5711N	17110W	18392.9	34977.4	50175.6	56	2.000	2469.	1.23	0.75	1161.1	14980.
USSR	M	79 4 8	5652N	17101W	18382.0	35083.3	50163.6	57	1.667	1479.	1.19	0.75	902.1	11000.
USSR	M	79 4 7	5707N	17115W	18351.3	34988.2	50179.2	55	2.833	3267.	1.16	0.37	331.3	5000.
KOREA	M	80 511	5721N	16638W	18741.1	34274.0	48716.0	40	6.667	9905.	1.14	0.40	6155.	16060.
USSR	M	79 4 8	5704N	17106W	18402.2	35027.5	50180.2	57	1.917	2118.	1.10	0.75	1504.2	17160.
KOREA	M	80 5 5	5718N	16536W	18733.8	34094.4	48305.0	39	5.500	6045.	1.08	0.38	7595.	13640.
USSR	M	79 4 14	5658N	17104W	18392.7	35058.1	50175.7	55	1.167	1265.	1.08	0.73	20735.	22000.
USSR	M	80 522	5722N	16924W	18745.0	34344.7	49610.3	42	2.083	2251.	1.02	1.05	3249.	5500.
KOREA	M	79 4 1	5701N	17108W	18379.0	35036.2	50179.2	52	7.083	7374.	1.04	0.45	6654.6	73920.
KOREA	M	80 6 7	5722N	16855W	18750.7	34741.7	49622.7	42	5.000	5071.	1.01	0.51	34529.	39000.
KOREA	M	80 6 9	5722N	16918W	18749.7	34623.6	49772.0	41	6.333	5962.	0.94	0.54	7213.8	76100.
USSR	M	79 4 7	5657N	17102W	18400.8	35066.4	50173.8	55	3.607	3426.	0.93	0.57	22974.	26400.
KOREA	M	80 5 6	5717N	16642W	18737.4	34313.5	48747.1	40	6.833	6314.	0.92	0.43	16126.	22440.
JAPAN	S	80 510	5725N	16515W	18739.2	33984.5	48158.3	38	2.000	1814.	0.91	0.42	1706.	3520.
KOREA	M	80 6 8	5727N	16850W	18749.9	34683.5	49576.7	42	5.333	4832.	0.91	0.55	3606.8	42900.
USSR	M	79 4 4	5704N	17110W	18376.2	35017.1	50180.2	55	2.083	1660.	0.89	0.68	2540.	4400.
KOREA	M	80 5 4	5715N	16749W	18740.8	34535.5	49197.0	42	5.500	4398.	0.79	0.46	1149.7.	15840.
USSR	M	79 4 7	5705N	17105W	18411.8	35025.2	50180.2	56	2.000	1526.	0.78	0.83	2044.4	22000.
USSR	M	79 4 3	5701N	17110W	18366.1	35031.1	50179.3	57	1.667	1268.	0.77	0.61	5314.	6600.
KOREA	M	80 5 2	5722N	16645W	18742.6	34293.8	49758.1	39	7.083	5358.	0.76	0.40	1246.2	17020.
JAPAN	S	80 528	5659N	16626W	18705.8	34368.1	48651.9	38	1.500	1103.	0.74	0.50	2857.	3960.
KOREA	M	80 614	5650N	16903W	18682.2	34951.0	49690.1	44	6.000	4256.	0.71	0.58	10024.4	104500.
KOREA	M	80 514	5721N	16530W	18736.5	34056.6	48262.2	39	10.167	6860.	0.62	0.42	5240.	12100.
KOREA	M	80 521	5725N	16835W	18750.7	34647.1	49464.6	43	7.167	4418.	0.62	0.45	12164.2	126060.
JAPAN	S	79 4 6	5705N	17107W	18392.8	35019.9	50180.2	55	2.417	1450.	0.60	0.61	5150.	6600.
KOREA	M	80 514	5710N	16545W	18724.8	34172.2	48371.4	38	3.917	2332.	0.60	0.49	1848.	4140.
KOREA	M	80 5 9	5726N	16918W	18746.5	34728.5	49758.2	43	7.833	4546.	0.58	0.56	6695.4	71500.
KOREA	M	80 513	5712N	16635W	18730.9	34321.9	48704.9	42	5.750	3317.	0.58	0.42	8123.	11440.
JAPAN	S	80 514	5715N	16601W	18732.1	34192.5	48474.8	38	3.417	1951.	0.57	0.53	1789.	3740.
KOREA	M	80 528	5645N	16910W	18656.4	34989.1	49724.1	45	4.000	2277.	0.57	0.51	11300.3	115280.
KOREA	M	80 523	5720N	16501W	18750.5	34778.9	49666.9	43	6.417	3611.	0.56	0.44	10220.9	105320.
KOREA	M	80 612	5708N	16845W	18736.6	34801.5	49578.7	44	6.917	3601.	0.55	0.52	7319.9	77000.
KOREA	M	80 516	5712N	16718W	18734.2	34466.9	46992.7	42	11.833	6471.	0.55	0.43	1464.9	21120.
USSR	M	79 4 13	5638N	17106W	18380.0	35053.2	50176.2	56	2.000	1082.	0.54	0.90	221.8	3300.
KOREA	M	80 517	5727N	16654W	18746.8	34285.8	48814.3	40	12.000	6591.	0.53	0.48	758.9	14080.
KOREA	M	80 613	5658N	16835W	18712.6	34818.8	49514.1	44	7.167	3811.	0.53	0.58	2968.9	93500.
KOREA	M	80 513	5713N	16800W	18725.6	34201.7	48469.7	40	5.333	2797.	0.52	0.43	424.3	7040.
JAPAN	S	80 512	5709N	16548W	18723.7	34187.7	48392.2	38	3.250	1680.	0.52	0.47	1640.	3520.
USSR	M	79 4 6	5700N	17110W	18362.4	35035.4	50174.7	55	2.000	1029.	0.51	0.61	777.1	6800.
KOREA	M	80 524	5718N	16835W	18748.0	34699.4	49459.2	42	6.000	4102.	0.51	0.43	10457.8	108680.

*** NOTE *** THE ACCURACY OF POSITION AND LONAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-26 (continued). YELLOWFIN SOLE, APRIL-JUNE 1979-80

VESSEL	DATE	APPHC	LOKAN-C	PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
CLASS	YYMMDD	7X	7Y	7Z	(FMS)	TRAILED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)	
M	80 6 8	18749.5	34804.6	49749.5	43.	6.917	3490.	0.50	0.51	51510.	55000.	

*** NOTE *** THE ACCURACY OF POSITION AND LOKAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

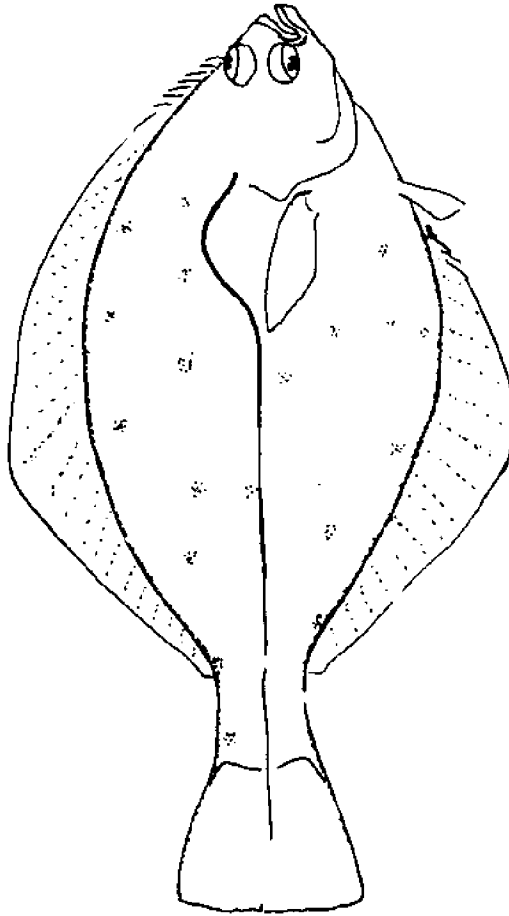


TABLE C-27. YELLOWFIN SOLE, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE YMMDD	LAT	LONG	APPROX 7X	LRAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
KOREA	M	80 9 8	3720N	16625W	18739.2	34238.0	48630.4	39.	4.353	144300.	33.30	0.48	14109.	158400.
KOREA	M	80 9 6	3711N	16702W	18731.5	34418.5	48886.5	35.	5.506	160526.	29.19	0.54	18774.	179300.
KOREA	M	80 9 5	3718N	16636W	18738.0	34287.2	48705.9	40.	4.167	120190.	28.85	0.53	16870.	137060.
USSR	M	79 9 29	3731N	16640W	18748.2	34211.4	48715.5	36.	1.583	35038.	22.13	0.46	4122.	39160.
KOREA	M	80 9 28	3717N	16655W	18738.4	34356.9	48833.9	40.	2.167	43417.	20.04	0.57	7183.	50600.
USSR	M	79 9 28	3741N	16712W	18750.5	34239.9	48906.3	36.	2.383	40073.	16.81	0.45	2607.	42690.
KOREA	M	80 9 7	3710N	16659W	18725.9	34414.4	48867.2	39.	5.583	93004.	16.66	0.53	17436.	110440.
KOREA	M	80 9 9	3713N	16700W	18734.0	34399.3	48871.4	39.	5.500	90656.	16.42	0.55	8342.	99000.
KOREA	M	80 9 28	3722N	16703W	18742.6	34350.5	48681.3	39.	6.500	73676.	16.42	0.62	14124.	88000.
USSR	M	79 9 26	3735N	16709W	18750.5	34276.8	48899.4	37.	2.167	35351.	16.32	0.52	9309.	44860.
KOREA	M	80 9 27	3718N	16710W	18740.7	34401.0	48933.0	39.	4.250	65960.	15.52	0.59	3340.	69300.
USSR	M	79 9 22	3714N	16623W	18732.5	34269.9	48622.9	36.	2.500	38062.	15.22	0.49	4838.	42900.
USSR	M	79 9 20	3721N	16617W	18739.6	34205.5	48575.9	36.	2.583	38759.	15.00	0.46	3041.	41800.
KOREA	M	80 9 30	3724N	16648W	18744.3	34286.8	48778.8	38.	6.083	87696.	14.42	0.50	22304.	110000.
USSR	M	79 9 10	3731N	16711W	18745.6	34313.4	48920.1	34.	2.750	39209.	14.26	0.54	4791.	44000.
USSR	M	79 9 8	3731N	16650W	18748.7	34244.1	48781.6	33.	2.833	39997.	14.12	0.52	8403.	48400.
USSR	M	79 9 21	3722N	16608W	18739.9	34169.9	48514.6	36.	2.500	34979.	13.99	0.47	4621.	39600.
KOREA	M	80 9 29	3714N	16644W	18734.0	34339.3	48763.4	40.	2.167	29907.	13.80	0.56	3093.	33000.
USSR	M	79 9 23	3726N	16744W	18749.9	34447.0	49143.2	36.	2.583	34732.	13.44	0.52	8168.	42500.
USSR	M	79 9 24	3731N	16739W	18750.5	34407.3	49104.3	36.	1.500	10837.	12.56	0.47	20763.	39600.
USSR	M	79 9 23	3731N	16740W	18750.5	34410.7	49116.6	36.	1.667	20810.	12.49	0.52	20990.	41800.
USSR	M	79 9 24	3713N	16613W	18730.5	34243.6	48556.8	34.	2.667	33201.	12.45	0.54	2879.	36080.
KOREA	M	80 9 8	3720N	16650W	18741.0	34320.5	48797.2	38.	5.000	61701.	12.34	0.50	8699.	70400.
KOREA	M	80 9 25	3716N	16642W	18736.2	34315.9	48748.1	40.	1.583	19340.	12.21	0.58	3980.	23320.
KOREA	M	80 9 25	3708N	16646W	18725.9	34382.8	48721.5	40.	1.667	20177.	12.11	0.58	3143.	23320.
KOREA	M	80 9 7	3713N	16652W	18733.4	34372.3	48817.8	39.	6.000	70608.	11.77	0.47	10792.	81400.
USSR	M	79 9 24	3717N	16632W	18736.6	34280.4	48680.2	34.	2.917	33689.	11.62	0.53	7691.	41580.
USSR	M	79 9 20	3722N	16615W	18740.3	34192.4	48561.5	36.	2.917	33745.	11.57	0.45	8495.	42240.
USSR	M	79 9 7	3738N	16716W	18750.8	34276.6	48939.0	34.	3.000	34074.	11.36	0.51	3326.	37400.
USSR	M	79 9 14	3724N	16646W	18744.2	34280.2	48765.5	34.	3.083	34515.	11.19	0.50	5085.	39600.
KOREA	M	80 9 26	3706N	16647W	18726.0	34366.1	48768.2	40.	5.667	63256.	11.16	0.69	4064.	67320.
KOREA	M	80 9 26	3710N	16640W	18726.4	34350.7	48739.9	40.	5.500	60155.	10.94	0.56	14205.	74360.
USSR	M	79 9 27	3715N	16627W	18733.9	34276.9	48648.7	34.	3.083	33502.	10.87	0.47	4778.	36280.
USSR	M	79 9 13	3704N	16615W	18717.7	34303.9	48576.1	34.	2.000	21421.	10.71	0.55	6959.	28380.
USSR	M	79 9 28	3705N	16650W	18721.4	34413.9	48610.2	38.	2.167	22537.	10.40	0.58	13103.	35640.
USSR	M	79 9 17	3659N	16615W	18709.2	34332.2	48578.2	35.	2.833	29051.	10.25	0.51	3729.	32780.
USSR	M	79 9 19	3718N	16636W	18738.1	34293.8	48719.3	36.	3.000	30214.	10.07	0.50	3886.	34100.
USSR	M	79 9 26	3720N	16647W	18740.8	34110.5	48777.1	34.	2.833	27805.	9.81	0.52	3655.	31460.
USSR	M	79 9 9	3725N	16642W	18744.7	34260.1	48737.5	34.	3.083	30203.	9.80	0.52	7197.	37400.
USSR	M	79 9 15	3702N	16720W	18735.9	34685.2	48900.0	34.	2.000	19422.	9.71	0.45	14018.	33440.
USSR	M	79 9 25	3727N	16714W	18748.0	34352.5	48946.8	37.	2.000	19187.	9.59	0.48	3693.	22880.
USSR	M	79 9 13	3712N	16631W	18730.5	34308.6	48676.1	34.	3.000	28408.	9.47	0.51	4812.	33220.
USSR	M	79 9 27	3716N	16629W	18735.3	34277.0	48661.2	34.	3.083	29129.	9.45	0.51	4311.	33440.
USSR	M	79 9 28	3714N	16650W	18734.5	34359.3	48803.5	35.	3.083	28490.	9.24	0.51	4510.	33000.
JAPAN	S	80 9 30	3704N	16631W	18718.6	34356.4	48683.4	39.	1.667	15353.	9.21	0.61	4447.	19800.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-27 (continued). YELLOWFIN SOLE, JULY-SEPTEMBER 1979-80

NATLJA	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PGM HOUR	SIZE LBS/FSH	BYCATCH (LBS)	TOTAL CATCH (LBS)
KOREA	M	80 527	5710N	16650W	18725.2 34384.1 48606.9	35	3.417	31450	9.20	0.56	1550	33000
USSR	M	79 921	5722N	16617W	18740.5 34198.9 48574.8	36	2.000	17495	8.75	0.47	1645	19140
USSR	M	79 910	5717N	16635W	18736.8 34290.3 48700.3	33	3.083	26887	8.72	0.50	8753	36840
KOREA	M	80 729	5726N	16603W	18742.9 34127.2 48476.9	38	6.333	54374	8.59	0.39	44626	99000
USSR	M	79 913	5712N	16636W	18730.9 34325.2 48711.6	35	3.250	27781	8.55	0.51	1919	29700
USSR	M	79 913	5722N	16701W	18743.7 34343.8 48667.9	34	3.000	25393	8.46	0.47	5407	30800
USSR	M	79 816	5808N	16732W	18724.4 34064.4 48953.3	34	2.083	17631	8.46	0.45	4309	22440
USSR	M	79 921	5721N	16652W	18738.8 34170.1 48502.5	36	3.000	24996	8.33	0.46	7124	32120
USSR	M	79 811	5726N	16652W	18746.0 34286.2 48802.6	34	2.500	20422	8.17	0.38	5978	26400
USSR	M	79 919	5725N	16643W	18744.7 34263.4 48744.2	36	3.000	24494	8.16	0.45	9606	34100
USSR	M	79 919	5727N	16658W	18747.0 34299.1 48840.9	34	3.083	25172	8.16	0.56	3428	28000
USSR	M	79 927	5720N	16645W	18740.7 34303.2 48763.8	33	3.083	25164	8.16	0.49	5196	30360
USSR	M	79 910	5731N	16705W	18749.3 34293.5 48880.6	33	3.000	23850	7.95	0.56	11350	35200
USSR	M	79 914	5802N	16623W	18745.4 33915.1 48542.3	30	3.000	23802	7.93	0.39	11398	35200
USSR	M	79 910	5737N	16654W	18750.6 34212.6 48797.2	34	2.667	21022	7.88	0.53	7578	28600
USSR	M	79 917	5704N	16624W	18718.2 34333.3 48636.4	36	3.250	25451	7.83	0.53	1169	26620
KOREA	M	80 930	5704N	16624W	18718.2 34333.3 48636.4	40	5.417	42256	7.80	0.52	6144	46400
USSR	M	79 910	5720N	16700W	18741.8 34353.9 48863.8	33	3.083	23918	7.76	0.52	7542	31460
KOREA	M	80 929	5718N	16705W	18740.2 34384.0 48899.6	40	4.017	30644	7.63	0.61	13356	40000
USSR	M	79 925	5720N	16628W	18735.4 34247.8 48650.4	33	3.083	23267	7.55	0.50	27940	47940
USSR	M	79 923	5718N	16648W	18738.9 34327.0 48786.1	34	3.250	24436	7.52	0.53	3944	28380
USSR	M	79 912	5731N	16656W	18748.9 34263.8 48821.2	33	2.000	16943	7.47	0.51	4657	19800
USSR	M	79 712	5737N	16643W	18750.3 34177.1 48725.1	33	2.167	18098	7.43	0.39	15144	31240
USSR	M	79 910	5719N	16632W	18738.7 34267.5 48678.2	33	3.250	24938	7.43	0.48	5782	29920
KOREA	M	80 731	5725N	16612W	18742.7 34182.7 48538.0	38	6.000	43393	7.23	0.51	20407	63800
USSR	M	79 911	5720N	16659W	18741.7 34350.6 48957.2	34	3.417	24698	7.23	0.51	10282	34980
KOREA	M	80 825	5711N	16704W	18731.7 34425.3 48899.9	40	5.000	36127	7.23	0.52	7873	44000
USSR	M	79 915	5716N	16635W	18735.7 34296.7 48701.3	34	3.083	22440	7.21	0.48	3940	26180
USSR	M	79 923	5731N	16706W	18745.4 34296.6 48887.2	33	3.167	22777	7.19	0.53	3623	26400
USSR	M	79 925	5746N	16657W	18750.0 34151.7 48797.8	32	2.750	19756	7.18	0.40	2904	22060
USSR	M	79 929	5737N	16659W	18750.6 34228.9 48630.0	36	2.500	17639	7.06	0.43	8101	25740
USSR	M	79 914	5716N	16637W	18735.9 34303.3 48714.7	34	3.750	26269	7.01	0.53	3431	29700
KOREA	M	80 770	5723N	16558W	18740.1 34131.4 48447.0	37	5.167	35692	6.91	0.40	23708	59400
USSR	M	79 916	5717N	16635W	18736.8 34290.3 48700.3	34	3.250	22416	6.90	0.53	2884	25300
USSR	M	79 916	5718N	16616W	18736.5 34221.8 48572.3	34	3.667	25146	6.86	0.51	1914	27060
USSR	M	79 926	5713N	16627W	18731.5 34289.3 48650.5	34	3.083	21070	6.83	0.47	4650	25200
USSR	M	79 912	5709N	16610W	18725.0 34258.2 48539.6	34	3.083	20764	6.73	0.50	2556	23120
USSR	M	79 913	5723N	16646W	18743.4 34287.0 48766.0	35	3.500	23523	6.72	0.48	2877	26400
USSR	M	79 912	5713N	16635W	18732.1 34115.7 48704.0	34	3.083	20669	6.70	0.55	21131	41800
USSR	M	79 817	5755N	16730W	18740.9 34178.6 48984.0	34	2.000	13379	6.69	0.42	5101	18480
USSR	M	79 812	5728N	16651W	18747.2 34268.8 48792.9	35	1.500	9911	6.61	0.37	7909	17820
USSR	M	79 919	5733N	16647W	18749.3 34219.7 48758.4	33	2.667	17585	6.59	0.51	4415	22000
USSR	M	79 725	5749N	16647W	18745.6 34096.0 48726.5	31	2.500	16355	6.54	0.45	7845	24200
USSR	M	79 919	5716N	16634W	18735.6 34293.4 48694.0	34	3.083	19551	6.34	0.54	7729	27260
USSR	M	79 814	5750N	16756W	18740.3 34304.2 49162.1	34	1.917	12013	6.27	0.43	6247	18260

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-27 (continued). YELLOWFIN SOLE, JULY-SEPTEMBER 1979-80

NATION	VESSEL	DATE	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	79 314	57°44N	166°45W	18744.3	34276.9	48758.8	34	3.500	21799.	6.23	0.50	4601.	26400.
KOREA	M	80 824	57°09N	167°11W	18729.3	34461.3	48948.3	40	4.667	28988.	6.21	0.53	15012.	44000.
USSR	M	79 914	57°18N	166°33W	18737.7	34277.3	48685.9	35	3.083	18661.	6.12	0.51	3359.	22220.
USSR	M	79 725	57°43N	167°08W	18756.3	34211.0	48675.8	33	3.000	18225.	6.08	0.41	11255.	29480.
USSR	M	79 928	57°40N	166°55W	18750.8	34192.8	48797.8	36	2.500	15025.	6.01	0.47	7855.	22680.
KOREA	M	80 729	57°26N	166°14W	18743.6	34162.3	48550.1	38	6.000	35994.	6.00	0.40	43206.	79200.
USSR	M	79 913	57°24N	166°40W	18743.8	34260.4	48725.6	33	2.667	15963.	5.99	0.53	6037.	22000.
USSR	M	79 727	57°41N	167°00W	18750.7	34201.1	48828.3	33	2.500	14680.	5.95	0.41	7560.	22440.
USSR	M	79 724	57°42N	166°36W	18750.8	34123.1	48682.9	33	2.500	14559.	5.82	0.47	3921.	18480.
USSR	M	79 9 7	57°35N	166°55W	18750.2	34231.0	48807.5	33	2.833	16453.	5.81	0.53	7747.	24200.
USSR	M	79 911	57°13N	166°33W	18731.9	34309.0	48690.6	34	3.083	17798.	5.77	0.49	5522.	23320.
USSR	M	79 911	57°28N	166°49W	18747.1	34262.3	48779.7	34	2.250	12872.	5.72	0.49	6928.	19800.
USSR	M	79 723	57°55N	167°21W	18742.6	34150.9	48927.5	33	2.167	12591.	5.72	0.41	5869.	18260.
USSR	M	79 916	57°25N	167°00W	18745.9	34319.8	48857.1	35	3.250	18376.	5.65	0.52	6044.	24420.
USSR	M	79 911	57°28N	167°05W	18746.0	34315.3	48865.6	34	3.000	16737.	5.58	0.48	5263.	22000.
KOREA	M	80 926	57°05N	166°59W	18722.0	34444.2	48874.5	40	3.000	16460.	5.49	0.61	2240.	12700.
USSR	M	79 925	56°33N	165°00W	18697.3	34284.3	48412.3	35	3.083	16898.	5.48	0.48	6202.	23100.
USSR	M	79 727	57°40N	166°46W	18750.8	34163.9	48739.1	32	3.067	16839.	5.43	0.45	6021.	22660.
USSR	M	79 726	57°47N	166°52W	18749.9	34127.9	48763.3	31	2.417	13095.	5.42	0.40	2525.	15620.
KOREA	M	80 826	57°10N	167°07W	18730.5	34441.6	48920.8	40	5.000	27083.	5.42	0.54	8117.	35200.
USSR	M	79 723	57°33N	166°36W	18746.8	34029.3	48646.5	33	2.750	14879.	5.41	0.44	7561.	22440.
KOREA	M	80 926	57°10N	167°01W	18730.0	34421.2	48880.6	40	9.583	51831.	5.41	0.62	4269.	56100.
USSR	M	79 728	57°57N	166°43W	18746.3	34017.4	48681.7	30	2.167	11449.	5.28	0.41	4391.	15840.
USSR	M	79 624	58°08N	167°49W	18717.4	34113.0	49055.1	30	2.250	11699.	5.20	0.53	1501.	13200.
USSR	M	79 729	57°51N	166°43W	18749.1	34067.2	48696.1	33	2.333	12125.	5.20	0.38	7895.	20020.
USSR	M	79 724	57°45N	167°01W	18750.1	34122.5	48826.0	33	2.333	11945.	5.12	0.44	4115.	16060.
USSR	M	79 9 6	57°37N	167°18W	18750.3	34291.0	48954.2	34	3.000	15317.	5.11	0.57	4483.	19800.
USSR	M	79 923	57°55N	166°37W	18734.7	34309.7	48715.6	34	3.167	16069.	5.07	0.52	4391.	20460.
USSR	M	79 9 3	56°22N	166°41W	18743.2	33968.6	48656.2	30	3.833	19448.	5.07	0.40	14432.	33880.
JAPAN	S	80 925	57°40N	166°40W	18750.7	34164.8	48699.8	36	3.167	15733.	5.04	0.53	5147.	21120.
JAPAN	S	80 929	57°07N	166°35W	18723.7	34352.1	48708.5	39	1.000	5044.	5.04	0.60	456.	5500.
USSR	M	79 9 4	58°04N	166°49W	18740.3	33975.0	48701.1	30	3.000	15110.	5.04	0.43	3810.	18920.
USSR	M	79 915	57°12N	166°30W	18730.4	34305.3	48671.4	35	3.083	15271.	4.95	0.52	2549.	17820.
USSR	M	79 623	58°12N	167°49W	18710.3	34073.4	49039.5	30	2.417	11620.	4.81	0.49	1580.	13200.
USSR	M	79 616	56°58N	167°50W	18716.9	34115.8	49061.0	33	3.500	16824.	4.81	0.47	4296.	21120.
KOREA	M	80 730	57°26N	165°27W	18740.7	34014.7	48237.3	38	6.000	28759.	4.79	0.36	15241.	44000.
USSR	M	79 817	58°12N	167°35W	18716.9	34344.3	48956.5	33	1.833	8735.	4.76	0.47	2265.	11000.
KOREA	M	80 726	57°30N	166°42W	18747.8	34225.1	48730.3	38	4.833	22652.	4.69	0.48	21348.	44000.
USSR	M	79 713	57°38N	167°04W	18750.8	34237.4	48660.7	36	3.000	13936.	4.65	0.43	19944.	33880.
USSR	M	79 714	57°38N	166°41W	18750.5	34163.1	48710.1	33	2.500	11265.	4.51	0.43	15355.	26620.
USSR	M	79 728	57°43N	166°49W	18750.7	34150.2	48752.5	33	2.167	9914.	4.48	0.38	4146.	13860.
USSR	M	79 922	57°15N	166°18W	18733.3	34247.4	48586.5	36	2.333	10251.	4.39	0.52	749.	11000.
USSR	M	79 925	57°18N	166°24W	18737.1	34247.8	48625.8	33	3.063	13316.	4.32	0.50	3184.	16500.
USSR	M	79 914	57°31N	166°19W	18735.7	34212.0	48589.2	34	3.083	13290.	4.31	0.50	6950.	20240.
USSR	M	79 829	57°35N	167°25W	18741.9	34163.3	48952.6	28	2.063	8918.	4.28	0.52	2082.	11000.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-27 (continued). YELLOWFIN SOLE, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE YMMDD	LAT	LONG	APPROX FIX	LORAN-C 7Y	PULSE 7Z	RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	79 726	5743N	16652W	18750.7	34159.8	48772.1	33.	2.000	8295.	4.15	0.40	10185.	18480.	
KOREA	M	80 727	5729N	16610W	18745.4	34129.0	48519.6	38.	5.333	21321.	4.00	0.32	29279.	50600.	
USSR	M	79 910	5732N	16640W	18746.6	34204.2	48713.9	33.	3.000	11992.	4.00	0.50	5608.	17600.	
USSR	M	79 8 3	5727N	16653W	18746.7	34262.5	48807.7	33.	2.833	11316.	3.99	0.36	11124.	22440.	
KOREA	M	80 728	5728N	16643W	18746.7	34242.6	48739.9	37.	6.000	23858.	3.98	0.46	9142.	33000.	
KOREA	M	80 729	5723N	16611W	18741.0	34172.9	48533.7	38.	6.250	24835.	3.97	0.52	14765.	39600.	
USSR	M	79 9 8	5730N	16750W	18750.6	34252.3	49178.5	36.	3.000	11891.	3.96	0.52	25509.	37400.	
USSR	M	79 911	5725N	16649W	18745.1	34283.2	48784.0	34.	2.083	8249.	3.96	0.48	4951.	13200.	
USSR	M	79 9 6	5736N	16640W	18750.0	34174.9	48707.2	36.	2.500	9830.	3.93	0.52	5570.	15400.	
USSR	M	79 9 5	5806N	16655W	18737.3	33974.9	48732.9	30.	3.417	13398.	3.92	0.41	4202.	17600.	
USSR	M	79 930	5759N	16721W	18736.8	34115.3	48915.6	31.	2.500	9845.	3.86	0.52	5755.	15400.	
KOREA	M	80 729	5726N	16557W	18742.5	34108.2	48437.0	37.	6.083	23329.	3.83	0.44	60271.	83000.	
USSR	M	79 824	5811N	16759W	18706.7	34111.0	49101.9	27.	3.333	12761.	3.83	0.45	2639.	15400.	
USSR	M	79 8 6	5755N	16738W	18739.2	34203.2	49033.9	34.	2.917	11152.	3.82	0.39	6888.	18040.	
USSR	M	79 713	5729N	16640W	18747.1	34225.7	48718.6	33.	3.083	11727.	3.80	0.44	15113.	26040.	
USSR	M	79 817	5826N	16758W	18675.1	33952.9	49032.3	33.	3.500	13165.	3.76	0.45	2895.	16060.	
USSR	M	79 730	5751N	16643W	18745.1	34067.2	48696.1	33.	2.583	9585.	3.71	0.34	3835.	13420.	
USSR	M	79 715	5802N	16715W	18737.0	34070.2	48669.1	32.	2.667	9765.	3.66	0.42	23895.	33660.	
USSR	M	79 729	5745N	16608W	18730.8	34006.3	48461.4	33.	2.667	9456.	3.55	0.38	5944.	15400.	
USSR	M	79 824	5805N	16713W	18734.2	34037.0	48847.4	27.	2.750	9738.	3.54	0.44	3462.	13200.	
USSR	M	79 831	5753N	16736W	18741.6	34215.0	49027.6	31.	3.250	11431.	3.52	0.51	6169.	17600.	
USSR	M	79 8 6	5752N	16738W	18742.2	34230.1	49043.3	35.	2.000	6978.	3.49	0.44	4022.	11000.	
KOREA	M	80 727	5729N	16607W	18745.2	34119.4	48499.7	38.	6.583	22934.	3.48	0.41	18885.	41600.	
USSR	M	79 9 5	5802N	16557W	18740.7	34016.4	48756.8	29.	3.500	12130.	3.47	0.44	5470.	17600.	
USSR	M	79 8 4	5749N	16747W	18743.2	34284.9	49109.0	33.	2.667	9208.	3.45	0.44	4652.	13860.	
USSR	M	79 7 8	5737N	16628W	18745.9	34129.1	48626.5	33.	1.000	3438.	3.44	0.41	3602.	7040.	
USSR	M	79 724	5745N	16631W	18750.8	34077.8	48631.4	33.	2.833	9715.	3.43	0.37	6125.	15840.	
USSR	M	79 831	5745N	16726W	18748.6	34252.4	48987.0	31.	3.333	11354.	3.41	0.50	6246.	17600.	
USSR	M	79 8 3	5726N	16647W	18745.7	34269.7	48769.4	34.	1.917	6358.	3.32	0.36	9482.	15840.	
USSR	M	79 826	5603N	16750W	18725.1	34164.5	49079.8	29.	3.083	9960.	3.23	0.47	3240.	13200.	
USSR	M	79 730	5751N	16643W	18745.1	34067.2	48696.1	31.	2.500	8033.	3.21	0.39	3187.	11220.	
USSR	M	79 823	5758N	16725W	18735.0	34136.5	48943.5	30.	2.833	9089.	3.21	0.51	4111.	13200.	
USSR	M	79 727	5735N	16644W	18745.9	34195.2	48735.2	33.	2.500	7798.	3.12	0.43	3642.	11440.	
USSR	M	79 810	5731N	16509W	18743.3	33926.5	48112.2	33.	2.167	6737.	3.11	0.34	3823.	10560.	
USSR	M	79 7 9	5750N	16624W	18746.8	34166.3	48611.1	36.	3.000	9125.	3.04	0.38	26515.	58640.	
USSR	M	79 723	5749N	16652W	18745.3	34111.6	48758.7	33.	3.000	8999.	3.00	0.41	6841.	15840.	
USSR	M	79 829	5758N	16730W	18737.8	34151.6	48974.6	29.	2.417	7175.	2.97	0.51	1625.	8800.	
USSR	M	79 7 9	5728N	16612W	18744.9	34142.3	48534.2	36.	1.000	2964.	2.96	0.37	4844.	8440.	
KOREA	M	80 728	5728N	16648W	18747.0	34259.0	48773.1	38.	6.000	17541.	2.92	0.41	17659.	35200.	
USSR	M	79 825	5753N	16735W	18741.8	34211.9	49021.4	29.	2.833	8239.	2.91	0.51	4961.	13200.	
USSR	M	79 816	5618N	16725W	18712.3	33942.3	48463.3	30.	3.250	9388.	2.89	0.44	2272.	11660.	
USSR	M	79 912	5729N	16702W	18748.3	34298.1	48864.2	34.	2.500	7213.	2.89	0.35	5987.	13200.	
USSR	M	79 731	5758N	16728W	18750.6	34316.0	49017.1	34.	2.583	7094.	2.75	0.38	21726.	28820.	
USSR	M	79 8 2	5740N	16656W	18750.6	34196.1	48804.4	33.	2.083	5658.	2.72	0.38	7982.	13640.	
USSR	M	79 9 2	5746N	16715W	18745.0	34208.9	48913.8	32.	3.083	8197.	2.66	0.50	9403.	17600.	

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-27 (continued). YELLOWFIN SOLE, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	79 818	5609N	16751W	18714.7	36	3.333	8791.	2.64	0.62	3309.	12100.
USSR	M	79 9 1	5755N	16740W	18735.7	31.	3.083	8116.	2.63	0.58	7284.	15400.
USSR	M	79 8 5	5733N	16810W	18732.5	33.	2.500	6555.	2.62	0.41	4885.	11440.
USSR	M	79 8 1	5726N	16702W	18748.7	36.	2.500	6540.	2.62	0.40	9080.	15620.
USSR	M	79 830	5747N	16656W	18749.8	31.	2.333	5974.	2.56	0.47	7226.	13200.
USSR	M	79 818	5820N	16744W	18697.7	33.	3.750	9513.	2.54	0.57	5667.	15180.
USSR	M	79 713	5734N	16705W	18750.2	34.	3.000	7442.	2.48	0.57	8618.	16060.
JAPAN	S	80 926	5739N	16648W	18750.7	36.	2.667	6443.	2.42	0.54	2357.	8800.
JAPAN	S	80 926	5742N	16649W	18750.8	36.	2.667	6404.	2.40	0.50	3716.	10120.
USSR	M	79 817	5825N	16749W	18684.0	32.	3.833	9104.	2.37	0.50	2556.	11660.
USSR	M	79 714	5757N	16707W	18743.2	33.	2.500	5913.	2.37	0.41	23347.	29260.
USSR	M	79 823	5810N	16807W	18704.0	30.	2.667	6303.	2.36	0.54	2497.	8000.
USSR	M	79 8 5	5753N	16735W	18741.6	33.	2.500	5891.	2.36	0.44	5769.	11660.
USSR	M	79 830	5740N	16703W	18750.8	31.	3.083	7184.	2.33	0.61	10416.	17600.
JAPAN	S	80 923	5741N	16641W	18750.8	37.	2.167	5028.	2.32	0.53	1132.	6160.
USSR	M	79 714	5738N	16641W	18750.5	36.	2.583	5728.	2.22	0.41	5712.	11440.
USSR	M	79 9 3	5753N	16700W	18748.9	32.	3.000	6422.	2.14	0.38	4578.	11000.
USSR	M	79 9 2	5758N	16640W	18746.0	31.	3.000	6048.	2.02	0.43	3852.	9900.
USSR	M	79 8 6	5746N	16719W	18748.7	35.	2.167	4365.	2.01	0.41	7075.	11440.
USSR	M	79 814	5806N	16635W	18741.0	33.	3.417	6828.	2.00	0.40	9460.	9460.
USSR	M	79 815	5810N	16712W	18728.3	32.	3.500	6826.	1.95	0.40	2634.	9460.
USSR	M	79 829	5748N	16721W	18747.5	31.	2.583	5036.	1.95	0.54	12564.	17600.
ROMA	M	80 730	5726N	16529W	18740.6	38.	5.333	10389.	1.95	0.39	47911.	58300.
JAPAN	S	80 712	5726N	16710W	18747.2	38.	2.833	5379.	1.93	0.55	4210.	9080.
USSR	M	79 711	5732N	16644W	18742.8	34.	3.000	5723.	1.91	0.43	16717.	22440.
JAPAN	S	80 922	5714N	16620W	18732.2	40.	1.667	3158.	1.85	0.52	1022.	4180.
JAPAN	S	80 924	5746N	16700W	18749.9	37.	3.333	6279.	1.88	0.53	3841.	10120.
USSR	M	79 712	5736N	16640W	18750.0	33.	3.000	5629.	1.86	0.40	34631.	40260.
JAPAN	S	80 923	5745N	16654W	18750.3	37.	3.000	5525.	1.84	0.55	3055.	8580.
JAPAN	S	80 928	5751N	16725W	18745.1	37.	2.000	3665.	1.83	0.54	955.	4620.
USSR	M	79 9 2	5800N	16703W	18741.4	31.	2.917	5111.	1.75	0.43	3689.	8800.
USSR	M	79 731	5732N	16718W	18750.2	36.	2.083	3577.	1.72	0.33	12263.	15840.
USSR	M	79 8 2	5723N	16650W	18743.7	36.	2.500	4280.	1.71	0.37	7160.	11440.
USSR	M	79 922	5715N	16628W	18734.0	35.	3.083	5278.	1.71	0.50	662.	5940.
JAPAN	S	80 922	5724N	16618W	18742.3	40.	1.500	2547.	1.70	0.50	1853.	4400.
USSR	M	79 730	5750N	16646W	18749.3	30.	2.917	4902.	1.68	0.36	8738.	13640.
USSR	M	79 8 1	5737N	16721W	18750.8	35.	2.000	3318.	1.66	0.39	16482.	19800.
USSR	M	79 829	5745N	16700W	18750.1	31.	2.500	4142.	1.66	0.52	13458.	17600.
USSR	M	79 9 1	5741N	16651W	18750.8	32.	3.167	5244.	1.66	0.40	12356.	17600.
USSR	M	79 828	5804N	16728W	18731.3	28.	4.250	7033.	1.65	0.53	3967.	11000.
JAPAN	S	80 925	5740N	16637W	18750.7	37.	3.000	4943.	1.65	0.49	1657.	6600.
USSR	M	79 711	5726N	16624W	18744.2	34.	3.000	4869.	1.62	0.39	11191.	16080.
USSR	M	79 9 5	5803N	16659W	18735.4	33.	3.333	4050.	1.39	0.43	6350.	11000.
JAPAN	S	80 928	5746N	16739W	18746.7	37.	2.167	2923.	1.35	0.58	1477.	4400.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-27 (continued). YELLOWFIN SOLE, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YYMMDD			7X	7Y	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
USSR	M	79 7 8	5737N	16620W	18745.9	34129.1	48626.5	36	3,000	1.29	0.38	11765	15620
USSR	M	80 7 25	5714N	16652W	18734.7	34366.0	48816.9	41	6,000	1.27	0.49	12179	19800
KOREA	S	80 9 23	5742N	16635W	18750.8	34113.6	48663.3	37	2,667	1.23	0.52	1341	4620
JAPAN	S	79 7 10	5731N	16652W	18748.8	34250.6	48794.8	36	2,167	1.18	0.45	973	3520
USSR	S	80 9 27	5736N	16636W	18749.9	34162.0	48680.8	37	1,833	1.16	0.49	1389	3520
JAPAN	S	79 8 14	5808N	16647W	18737.0	33933.6	48677.4	31	1,750	1.10	0.44	3581	5500
USSR	M	79 8 15	5806N	16651W	18738.1	33963.2	48708.0	31	2,667	1.05	0.37	1171	3960
USSR	M	79 8 4	5726N	16642W	18745.4	34253.2	48736.2	35	2,000	1.03	0.42	2568	4620
USSR	S	80 9 28	5743N	16650W	18750.7	34153.4	48759.0	37	2,500	0.97	0.51	4395	6820
JAPAN	S	80 9 27	5741N	16651W	18750.8	34172.2	48769.7	36	2,500	0.93	0.50	1189	3520
JAPAN	S	80 7 11	5712N	16702W	18732.9	34412.3	48885.6	38	2,500	0.93	0.55	6471	8800
USSR	M	79 7 22	5741N	16636W	18750.8	34130.8	48684.8	33	1,667	0.92	0.41	5286	6820
USSR	M	79 8 1	5737N	16725W	18750.7	34314.0	48999.8	36	2,583	0.92	0.34	2253	4620
JAPAN	S	80 9 27	5744N	16637W	18750.8	34104.4	48672.4	36	2,583	0.90	0.46	2518	4840
USSR	M	79 7 10	5721N	16636W	18746.9	34267.5	48702.6	36	1,667	0.79	0.43	1330	2640
JAPAN	S	80 7 12	5726N	16714W	18747.4	34359.7	48948.5	36	3,500	0.71	0.50	5228	7700
JAPAN	S	80 9 22	5729N	16647W	18747.5	34248.6	48764.9	40	1,000	0.60	0.57	1158	1760
USSR	M	79 7 22	5754N	16634W	18748.6	34014.9	48631.4	33	2,333	0.56	0.46	1325	2640

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

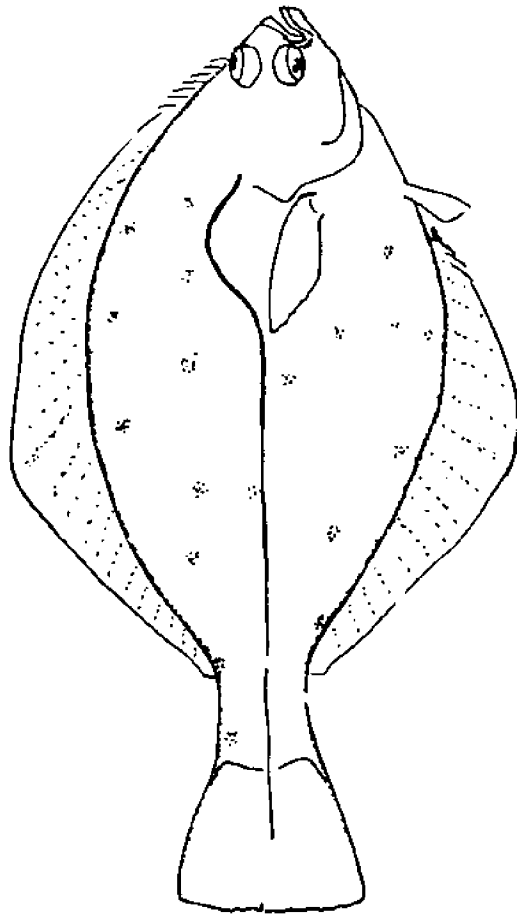


TABLE C-28. YELLOWFIN SOLE, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE (LBS/FISH)	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	7912 8	5710N	16625W	18727.4 34301.1 48639.4	40	0.333	76594	229.78	0.56	3926	30520
JAPAN	M	7912 9	5710N	16625W	18727.4 34304.4 48640.1	40	0.333	40412	121.23	0.54	288	40700
JAPAN	M	7912 7	5708N	16625W	18724.5 34313.2 48640.8	40	0.500	49033	98.07	0.57	2007	51040
JAPAN	M	7912 6	5711N	16626W	18728.8 34298.3 48645.4	40	0.500	45694	91.39	0.55	946	46640
JAPAN	M	7912 2	5707N	16642W	18724.1 34375.4 48735.4	40	0.500	44011	88.02	0.60	1089	45100
JAPAN	M	791111	5708N	16621W	18724.3 34300.0 48614.0	40	0.667	5823	83.74	0.55	1377	57200
JAPAN	M	7912 9	5708N	16624W	18724.4 34309.9 48634.1	40	0.500	40608	81.22	0.54	1412	42020
JAPAN	M	7912 8	5710N	16629W	18727.6 34314.3 48666.2	40	0.833	65376	78.45	0.49	1064	66440
JAPAN	M	7912 9	5707N	16627W	18723.1 34325.7 48654.8	40	0.750	53968	71.96	0.57	812	54780
JAPAN	M	7912 1	5709N	16636W	18726.9 34350.1 48727.2	40	0.500	35305	70.61	0.57	1875	37180
JAPAN	M	7912 8	5711N	16629W	18725.0 34308.2 48665.5	40	0.500	30313	60.63	0.54	47	30360
JAPAN	M	791130	5705N	16636W	18726.6 34367.1 48716.3	40	0.500	29955	59.91	0.55	1285	31240
JAPAN	M	7912 2	5708N	16643W	18725.7 34372.8 48761.4	40	0.417	23985	57.56	0.57	875	24860
JAPAN	M	7912 1	5709N	16636W	18726.7 34343.5 48713.8	40	0.667	37986	56.98	0.56	1934	39820
JAPAN	M	791128	5708N	16638W	18725.4 34356.1 48727.9	40	0.833	45074	54.05	0.58	1566	46640
JAPAN	M	7912 1	5705N	16634W	18720.4 34366.5 48702.9	41	0.500	25974	51.91	0.55	1323	27280
JAPAN	M	801119	5710N	16631W	18725.2 34387.5 48813.6	40	0.917	47118	51.40	0.68	1282	48400
JAPAN	M	7912 7	5706N	16627W	18721.6 34331.6 48655.4	40	1.000	50815	50.82	0.57	1105	51920
JAPAN	M	791130	5707N	16637W	18723.8 34358.7 48721.9	40	0.500	29911	49.82	0.58	1709	26620
JAPAN	M	7912 9	5701N	16633W	18713.4 34370.1 48678.0	40	0.583	29027	49.76	0.53	673	29700
JAPAN	M	791114	5701N	16625W	18713.2 34353.7 48644.5	41	0.917	43149	47.07	0.56	851	44000
JAPAN	M	791129	5715N	16639W	18734.8 34316.3 48725.0	40	0.833	36809	46.57	0.54	2551	41360
JAPAN	M	791114	5657N	16622W	18705.7 34366.0 48625.7	42	1.083	48932	45.17	0.53	1448	50380
JAPAN	M	7912 7	5705N	16623W	18719.8 34324.3 48629.2	40	0.667	29178	43.77	0.58	302	29480
JAPAN	M	7912 7	5708N	16630W	18724.8 34329.6 48674.3	40	0.583	23223	40.67	0.57	697	24420
JAPAN	M	791130	5709N	16639W	18726.9 34353.4 48733.9	40	0.667	26359	39.54	0.58	701	27060
JAPAN	M	7912 9	5712N	16621W	18729.8 34275.8 48611.1	40	0.500	19589	59.18	0.57	1091	20680
JAPAN	M	7912 2	5703N	16630W	18720.2 34347.3 48676.1	41	0.750	28844	38.46	0.54	1076	29920
USSR	M	791212	5714N	16636W	18733.4 34312.7 48709.8	39	2.000	71186	35.59	0.56	2514	73700
JAPAN	M	7912 3	5708N	16640W	18725.5 34362.8 48741.3	40	0.583	19982	34.26	0.55	2458	22440
JAPAN	M	7912 3	5705N	16637W	18726.8 34346.8 48720.5	41	0.917	31307	34.15	0.56	813	32120
JAPAN	M	7912 3	5705N	16625W	18719.9 34330.8 48642.8	41	1.333	43539	32.65	0.54	3321	46860
JAPAN	M	7912 4	5703N	16622W	18716.5 34332.5 48623.5	41	0.667	21073	31.61	0.54	2467	23540
JAPAN	M	7912 6	5712N	16631W	18730.5 34308.6 48678.1	40	0.833	25377	30.45	0.54	1683	27060
JAPAN	M	7912 2	5707N	16651W	18724.8 34405.5 48615.7	40	1.333	40336	30.25	0.53	5424	45760
JAPAN	M	791113	5705N	16623W	18719.8 34324.3 48629.2	40	1.000	29832	29.83	0.58	1408	31240
JAPAN	M	7912 4	5702N	16619W	18714.6 34328.4 48603.9	41	0.833	24405	29.25	0.53	4855	29260
JAPAN	M	7912 1	5705N	16637W	18720.6 34370.5 48723.0	40	1.083	30699	28.34	0.54	981	31680
JAPAN	M	801121	5712N	16645W	18731.5 34355.1 48771.8	40	2.750	71755	26.09	0.72	5245	77000
JAPAN	M	7912 4	5704N	16621W	18718.1 34323.5 48616.3	41	0.667	17368	26.05	0.56	2652	20020
USSR	M	791014	5717N	16606W	18734.7 34195.9 48506.5	34	2.333	57769	24.76	0.50	4271	62040
USSR	M	791114	5707N	16623W	18722.9 34312.5 48628.0	44	1.667	41120	24.67	0.51	2880	44000
ADSEA	M	801122	5706N	16644W	18722.7 34367.9 48769.4	41	1.500	36374	24.25	0.60	3226	39600
USSR	M	791114	5718N	16631W	18737.6 34270.7 48672.5	36	1.750	42435	24.25	0.52	2005	44440
JAPAN	M	801114	5727N	16625W	18745.0 34190.9 48621.9	39	1.000	24097	24.10	0.48	4503	28600

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-28 (continued) YELLOWFIN SOLE, OCTOBER-DECEMBER 1979-80

NATION	VESSEL	DATE	LAT	LONG	APPROX 7X	LORAN-C PULSE 7Y	RATES 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	791114	5700N	16620W	18716.3	34319.9	48645.8	44.	1.667	39582.	23.75	0.49	4418.	44000.
JAPAN	M	791115	5657N	16622W	18705.7	34366.0	48625.7	41.	1.000	23537.	23.54	0.48	1983.	25520.
USSR	M	791027	5730N	16657W	18745.4	34259.7	48826.1	37.	2.417	55682.	23.12	0.52	3298.	59180.
JAPAN	M	791124	5701N	16622W	18713.0	34333.9	48628.4	42.	1.250	28474.	22.78	0.50	1856.	30360.
JAPAN	M	791104	5710N	16646W	18728.9	34370.7	46780.1	40.	2.917	64572.	22.14	0.71	2528.	67100.
JAPAN	M	791123	5708N	16632W	18725.0	34336.2	48687.7	40.	0.833	18368.	22.04	0.54	1872.	20240.
JAPAN	M	791120	5711N	16645W	18730.2	34361.3	48712.6	40.	1.333	28934.	21.70	0.69	5166.	34100.
USSR	M	791029	5731N	16640W	18749.0	34197.0	48715.3	37.	1.833	39269.	21.42	0.53	7811.	47080.
JAPAN	M	801114	5726N	16629W	18744.5	34210.8	48649.8	39.	1.583	33338.	20.93	0.59	2062.	35200.
KOREA	M	801122	5706N	16631W	18721.9	34344.8	48682.3	41.	2.883	60186.	20.87	0.55	5814.	66000.
JAPAN	M	791127	5715N	16657W	18736.3	34376.5	48849.4	40.	1.583	32757.	20.65	0.56	4863.	37020.
USSR	M	791010	5724N	16712W	18746.0	34367.0	48938.3	38.	2.583	52061.	20.15	0.54	2939.	55000.
JAPAN	M	791117	5705N	16641W	18720.9	34383.8	48749.9	42.	1.667	33337.	20.00	0.54	3183.	36520.
JAPAN	M	801118	5708N	16655W	18726.6	34413.0	48841.9	41.	4.083	78400.	19.20	0.64	3000.	81400.
JAPAN	M	791123	5708N	16639W	18725.4	34359.4	48734.6	40.	0.500	9267.	18.53	0.52	853.	10120.
USSR	M	791010	5728N	16644W	18746.8	34245.8	48746.6	36.	2.583	47303.	18.31	0.49	3297.	50600.
KOREA	M	801120	5707N	16637W	18723.8	34358.7	48721.9	41.	1.667	29644.	17.79	0.59	7756.	37400.
USSR	M	791014	5719N	16557W	18736.2	34154.3	48444.4	34.	2.333	40874.	17.43	0.48	1346.	42020.
USSR	M	791113	5712N	16631W	18730.5	34308.6	48678.1	42.	1.667	29047.	17.43	0.55	3953.	33000.
USSR	M	791127	5704N	16627W	18718.4	34343.2	48656.5	38.	3.000	52173.	17.39	0.48	2827.	55000.
KOREA	M	801119	5706N	16646W	18722.8	34394.6	48782.8	41.	1.000	17321.	17.32	0.60	2479.	19800.
JAPAN	M	801115	5728N	16630W	18745.9	34200.2	48653.7	39.	1.083	18719.	17.28	0.65	1081.	19800.
JAPAN	M	791118	5705N	16643W	18721.0	34390.4	48763.3	41.	2.083	35356.	16.97	0.52	3584.	38940.
USSR	M	791022	5730N	16628W	18746.9	34173.2	48624.3	37.	2.250	37988.	16.89	0.46	62.	38060.
USSR	M	791211	5713N	16638W	18734.8	34313.0	48722.3	39.	1.917	31835.	16.61	0.55	1165.	33000.
USSR	M	791012	5723N	16708W	18745.0	34360.5	48913.1	38.	3.250	53696.	16.52	0.54	4604.	58300.
USSR	M	791028	5730N	16640W	18747.7	34218.6	48717.0	37.	2.750	44930.	16.34	0.58	11370.	56100.
USSR	M	791112	5711N	16632W	18725.2	34318.1	48685.6	43.	1.917	31130.	16.24	0.59	1870.	33000.
JAPAN	M	801119	5713N	16646W	18732.9	34352.2	48777.7	40.	3.083	50028.	16.23	0.60	9372.	59400.
USSR	M	791014	5701N	16608W	18712.4	34298.3	48530.5	36.	1.333	21135.	15.85	0.51	3725.	24860.
KOREA	M	801114	5706N	16655W	18723.4	34424.8	48843.1	41.	5.283	82707.	15.85	0.68	5293.	80000.
USSR	M	791024	5737N	16646W	18750.4	34186.8	48744.8	37.	2.583	40335.	15.61	0.50	3885.	44220.
USSR	M	791029	5721N	16608W	18738.9	34176.5	48515.9	36.	2.833	44151.	15.58	0.48	7109.	51260.
USSR	M	791115	5710N	16642W	18728.6	34357.4	48753.3	36.	2.083	32463.	15.58	0.45	9337.	41800.
USSR	M	791113	5715N	16644W	18735.2	34332.9	48762.4	33.	1.750	27254.	15.57	0.58	1346.	28600.
USSR	M	791017	5732N	16709W	18749.8	34299.3	48905.1	36.	2.000	31034.	15.52	0.52	4166.	35200.
USSR	M	791112	5723N	16701W	18744.5	34337.0	48866.6	37.	1.667	24213.	14.89	0.57	1587.	26400.
USSR	M	791114	5716N	16612W	18734.0	34221.6	48547.5	36.	2.333	34482.	14.78	0.53	7379.	32120.
JAPAN	M	791116	5700N	16639W	18712.0	34405.5	48738.7	42.	1.083	15806.	14.59	0.52	1794.	17600.
USSR	M	791014	5704N	16615W	18717.7	34303.9	48576.1	36.	1.700	24741.	14.55	0.52	7379.	32120.
USSR	M	791017	5704N	16615W	18749.8	34326.7	46946.5	36.	3.000	43620.	14.54	0.50	12040.	55660.
JAPAN	M	791211	5702N	16633W	18715.3	34374.4	48697.7	41.	0.750	10856.	14.47	0.53	584.	11440.
JAPAN	M	791116	5656N	16635W	18704.1	34414.1	48713.0	42.	0.750	10851.	14.47	0.50	1029.	11880.
USSR	M	791028	5716N	16626W	18735.0	34267.1	48641.1	37.	2.667	37970.	14.24	0.50	4490.	42460.
USSR	M	791013	5659N	16609W	18705.0	34312.7	48538.0	36.	1.667	23456.	14.07	0.51	4704.	26160.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-28 (continued). YELLOWFIN SOLE, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE (LBS/FISH)	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	7912 2	5707N	16640W	18724.5 34395.4 46795.6	42.	1.333	10497.	13.87	0.52	2623.	21120.
USSR	M	791114	5719N	16626W	18738.3 34247.8 48638.1	36.	2.500	34599.	13.84	0.52	3245.	37840.
USSR	M	791030	5727N	16632W	18745.4 34213.6 48668.4	37.	2.917	40297.	13.82	0.51	2163.	42460.
USSR	M	791211	5714N	16636W	18733.4 34312.7 48799.8	39.	1.500	28462.	13.69	0.64	1462.	22000.
JAPAN	M	801115	5727N	16631W	18745.4 34216.4 48661.7	38.	2.083	28462.	13.66	0.61	4538.	33000.
USSR	M	791211	5707N	16646W	18724.4 34388.7 48782.2	38.	2.750	37318.	13.57	0.52	6684.	44000.
KOREA	M	801120	5710N	16642W	18728.6 34357.4 48753.3	41.	1.117	15024.	13.45	0.71	2576.	17600.
USSR	M	791029	5724N	16617W	18742.2 34189.5 48572.5	33.	2.167	28575.	13.19	0.52	4425.	33000.
USSR	M	7910 6	5722N	16650W	18741.7 34300.3 48793.4	38.	3.000	39143.	13.05	0.49	5297.	44400.
JAPAN	M	791113	5708N	16627W	18724.6 34319.7 48654.2	40.	1.500	19449.	12.97	0.91	1671.	21120.
USSR	M	7910 5	5718N	16657W	18735.6 34357.1 48846.2	36.	2.000	25562.	12.78	0.49	7878.	33440.
USSR	M	791010	5731N	16725W	18750.1 34360.2 49012.3	38.	3.083	38986.	12.64	0.54	5014.	44000.
USSR	M	7910 4	5713N	16647W	18733.0 34355.6 48784.4	36.	1.833	22846.	12.46	0.50	3994.	26840.
USSR	M	791013	5720N	16616W	18738.5 34208.8 48570.3	34.	2.000	24821.	12.41	0.53	1359.	26180.
USSR	M	791021	5741N	16702W	18750.7 34207.6 48841.3	37.	3.750	46537.	12.41	0.53	4943.	51480.
USSR	M	7910 9	5724N	16713W	18748.1 34370.4 48944.9	38.	2.500	30021.	12.01	0.53	13979.	44000.
USSR	M	791012	5710N	16650W	18728.1 34236.1 48505.4	34.	2.417	28911.	11.96	0.52	4309.	33220.
USSR	M	791013	5710N	16608W	18726.1 34239.3 48512.1	34.	2.000	23831.	11.92	0.48	7949.	31680.
JAPAN	M	7910 4	5701N	16623W	18714.1 34347.1 48631.1	41.	1.250	14759.	11.91	0.49	2401.	17160.
USSR	M	791027	5722N	16641W	18742.2 34277.2 48734.7	37.	2.833	33338.	11.77	0.51	2962.	36300.
USSR	M	7910 1	5713N	16605W	18735.7 34186.3 48458.6	33.	3.000	34922.	11.64	0.50	1158.	36080.
USSR	M	791022	5732N	16641W	18748.7 34207.5 48720.5	37.	2.750	31163.	11.33	0.52	4037.	35200.
USSR	M	791013	5717N	16618W	18735.6 34234.7 48586.7	36.	2.500	27802.	11.12	0.57	7398.	35200.
USSR	M	7910 6	5720N	16653W	18741.3 34330.5 48817.2	38.	2.167	23953.	11.06	0.52	9047.	33000.
USSR	M	791021	5712N	16703W	18732.7 34405.5 48872.2	39.	2.000	22031.	11.02	0.54	2169.	24200.
USSR	M	791012	5712N	16608W	18728.9 34233.6 48524.1	34.	3.083	33450.	10.85	0.49	2630.	36080.
USSR	M	791024	5729N	16643W	18747.3 34235.5 48736.4	37.	3.083	33129.	10.74	0.49	4271.	37400.
JAPAN	S	8012 9	5642N	16608W	18671.3 34397.2 48532.6	44.	1.667	17845.	10.71	0.52	1735.	19580.
USSR	M	791024	5722N	16626W	18744.3 34201.0 48629.8	37.	3.083	32443.	10.52	0.48	537.	33000.
USSR	M	7910 7	5721N	16642W	18741.4 34287.2 48742.6	38.	3.000	31131.	10.38	0.52	1869.	33000.
USSR	M	7911 6	5726N	16652W	18746.0 34265.2 48802.6	33.	2.583	26872.	10.32	0.49	4348.	31020.
USSR	M	791111	5717N	16638W	18737.1 34300.2 48720.3	36.	2.500	25710.	10.28	0.54	2890.	28600.
USSR	M	791020	5726N	16642W	18746.7 34239.3 48733.3	36.	3.333	34214.	10.26	0.48	7806.	42020.
USSR	M	791011	5730N	16725W	18745.8 34367.6 49014.2	38.	3.000	30568.	10.19	0.57	13432.	44000.
USSR	M	7910 6	5732N	16715W	18750.1 34319.3 48944.6	36.	2.500	25124.	10.05	0.49	3036.	28160.
USSR	M	791025	5738N	16634W	18750.3 34140.7 48664.2	37.	3.083	30929.	10.03	0.48	7571.	38500.
JAPAN	S	801210	5642N	16601W	18673.0 34374.9 48480.0	47.	2.000	19859.	9.93	0.54	821.	20680.
JAPAN	M	791117	5714N	16645W	18734.2 34345.9 48776.8	41.	1.417	14063.	9.93	0.55	1777.	15840.
USSR	M	791112	5721N	16636W	18740.9 34267.5 48702.6	36.	2.333	23160.	9.93	0.52	3240.	26400.
USSR	M	7910 8	5726N	16656W	18746.3 34299.5 48829.1	36.	2.000	19537.	9.77	0.48	6863.	26400.
USSR	M	7910 5	5717N	16713W	18735.9 34417.8 48954.2	38.	2.000	19215.	9.61	0.50	8825.	29040.
USSR	M	791023	5738N	16652W	18750.7 34198.5 48782.2	37.	3.250	30566.	9.40	0.48	3094.	33660.
USSR	M	7910 7	5732N	16722W	18750.3 34342.6 48950.6	36.	2.250	20875.	9.28	0.49	5965.	26840.
USSR	M	7910 7	5709N	16636W	18726.7 34343.5 48713.8	38.	3.333	30883.	9.26	0.53	2117.	33000.
USSR	M	791013	5723N	16636W	18742.7 34254.1 48700.2	36.	2.833	25835.	9.12	0.52	7605.	33440.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-28 (continued). YELLOWFIN SOLE, OCTOBER-DECEMBER 1979-80

NATION	VESSEL	DATE	LAT	LONG	APPROX	LORAN-C	PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND	LBS	SIZE	BYCATCH	TOTAL
	CLASS	YMMDD			7X	7Y	7Z	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS	LBS/FISH	(LBS)	(LBS)	(LBS)
USSR	M	791030	5732N	16649W	18745.0	34233.5	48773.3	37	2.503	23313.	9.02	0.50	7707.	51020.		
USSR	M	79111	5723N	16642W	18743.1	34273.8	48740.2	37	2.033	25111.	8.86	0.51	5689.	30200.		
JAPAN	S	7912 E	5725N	16735W	18745.2	34235.1	49059.2	43	1.333	11785.	8.84	0.55	315.	12100.		
JAPAN	M	801119	5710N	16650W	18725.2	34384.1	48606.9	40	1.167	10297.	8.83	0.64	2903.	13200.		
JAPAN	S	801211	5640N	16614W	18668.1	34425.8	48572.1	49	2.333	20555.	8.81	0.58	2325.	22880.		
KOREA	M	801120	5710N	16648W	18725.0	34377.4	48793.5	43	1.917	16620.	8.78	0.60	5180.	22000.		
USSR	M	791026	5732N	16637W	18748.5	34194.5	48694.1	37	3.833	33294.	8.69	0.49	3006.	36300.		
JAPAN	M	7912 7	5704N	16623W	18716.2	34330.1	48629.7	42	0.917	7943.	8.67	0.54	857.	8800.		
USSR	M	791010	5709N	16608W	18724.9	34251.8	48526.2	34	3.500	30178.	8.62	0.49	3482.	33660.		
USSR	M	7910 6	5731N	16713W	18749.7	34320.1	48933.3	36	2.833	24306.	8.61	0.47	9054.	33440.		
USSR	M	7910 8	5703N	16626W	18716.7	34345.6	48650.3	36	2.583	21650.	8.46	0.54	2560.	24420.		
USSR	M	7912 6	5705N	16708W	18722.5	34468.0	48917.4	38	2.333	19666.	8.43	0.45	2334.	22000.		
USSR	M	791029	5702N	16600W	18713.7	34266.8	48476.5	36	2.500	21023.	8.41	0.36	12637.	33660.		
USSR	M	791030	5731N	16638W	18748.9	34324.0	48685.9	33	2.667	21736.	8.15	0.51	1144.	22880.		
USSR	M	791020	5734N	16650W	18745.8	34222.1	48776.5	38	3.000	24442.	8.15	0.53	2398.	26840.		
JAPAN	M	801120	5707N	16650W	18724.7	34402.1	48309.0	40	1.583	12792.	8.08	0.66	2608.	15400.		
USSR	M	7910 9	5710N	16621W	18727.1	34288.0	48612.6	34	2.750	22141.	8.05	0.50	4699.	26840.		
JAPAN	M	791127	5709N	16655W	18728.1	34407.0	48841.1	40	1.000	8045.	8.04	0.55	2075.	10120.		
USSR	M	791028	5706N	16545W	18705.8	34230.2	48376.7	36	2.583	20749.	8.03	0.50	2571.	23200.		
JAPAN	M	601114	5714N	16609W	18732.9	34289.6	48663.0	40	0.750	6014.	8.02	0.59	586.	6600.		
USSR	M	791029	5732N	16621W	18747.7	34143.0	48588.3	33	2.333	18578.	7.96	0.48	3862.	22440.		
JAPAN	S	801214	5642N	16654W	18687.1	34354.8	49306.4	42	2.083	16573.	7.96	0.51	1027.	17600.		
USSR	M	791026	5725N	16635W	18744.2	34237.2	48651.0	37	2.187	16926.	7.81	0.52	3314.	20240.		
USSR	M	791022	5735N	16641W	18745.8	34185.5	48715.5	37	2.667	20539.	7.70	0.50	1901.	22440.		
JAPAN	M	801120	5707N	16650W	18724.7	34402.1	48809.0	41	3.583	27432.	7.66	0.62	3368.	30800.		
USSR	M	7910 9	5713N	16635W	18732.1	34315.7	48704.0	37	3.167	24120.	7.64	0.53	6400.	30580.		
USSR	M	791031	5711N	16607W	18727.5	34236.5	48518.1	36	2.500	19089.	7.64	0.51	1371.	20460.		
USSR	M	791026	5726N	16642W	18745.4	34253.2	48736.2	33	2.833	21462.	7.57	0.51	1638.	23100.		
USSR	M	7910 5	5723N	16739W	18747.2	34466.2	49119.1	36	2.167	16398.	7.57	0.51	5162.	21560.		
JAPAN	M	801022	5742N	16646W	18750.8	34148.5	48735.1	38	1.000	7361.	7.56	0.51	1899.	9460.		
USSR	M	791031	5714N	16629W	18732.9	34289.6	48663.0	33	2.917	21890.	7.51	0.52	1870.	23760.		
USSR	M	791021	5735N	16643W	18745.0	34192.0	48720.6	37	2.667	19646.	7.37	0.51	5214.	24060.		
USSR	M	791012	5721N	16631W	18740.6	34231.0	48669.3	33	3.083	22665.	7.35	0.51	11875.	54540.		
USSR	M	7912 9	5706N	16602W	18720.5	34269.6	48528.1	38	3.333	24228.	7.27	0.42	2172.	26400.		
USSR	M	791027	5735N	16628W	18745.3	34143.8	48629.8	33	3.167	22845.	7.21	0.52	9935.	32780.		
USSR	M	791115	5706N	16638W	18722.3	34367.9	48729.2	38	2.167	15490.	7.15	0.36	6510.	22000.		
JAPAN	S	801211	5642N	16603W	18673.5	34331.2	48699.3	47	2.000	14175.	7.09	0.51	785.	14960.		
USSR	M	7911 5	5724N	16647W	18744.3	34283.5	48772.1	33	2.583	18406.	7.09	0.57	1054.	19360.		
JAPAN	M	801115	5730N	16631W	18747.2	34189.4	48697.5	36	1.917	13554.	7.07	0.55	12846.	20400.		
JAPAN	S	801210	5641N	16610W	18670.8	34408.3	48945.8	45	2.000	14138.	7.07	0.56	2362.	16500.		
JAPAN	S	8012 8	5645N	16610W	18680.3	34369.0	48566.4	45	1.833	12561.	6.85	0.53	859.	13420.		
USSR	M	791029	5735N	16635W	18749.5	34166.2	48776.0	37	2.250	15401.	6.84	0.49	2199.	17600.		
USSR	M	791011	5708N	16602W	18723.1	34238.4	48486.7	33	3.083	20941.	6.79	0.51	3039.	23960.		
USSR	M	7910 6	5731N	16719W	18750.4	34325.0	48969.0	36	2.333	15756.	6.75	0.48	2944.	18700.		
USSR	M	791010	5714N	16621W	18732.3	34203.4	48809.5	33	4.250	28327.	6.67	0.49	4673.	33000.		

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-28 (continued). YELLOWFIN SOLE, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	7910 9	5711N	16628W	18729.0	34304.9	48658.8	36.	3.167	21009.	6.63	0.51	4511.	25520.
USSR	M	791025	5740N	16648W	18750.7	34144.8	48699.8	37.	3.583	23549.	6.57	0.49	4391.	27940.
USSR	M	791028	5730N	16630W	18747.1	34185.1	48650.8	37.	2.083	13645.	6.55	0.49	5055.	18700.
USSR	M	791112	5720N	16656W	18741.5	34340.5	48837.2	36.	2.750	17799.	6.47	0.54	10801.	28600.
MORCA	M	801115	5705N	16647W	18727.5	34380.1	48787.5	41.	1.333	8406.	6.31	0.64	2592.	11000.
USSR	M	7911 5	5722N	16618W	18740.6	34202.1	49381.5	33.	3.000	18864.	6.29	0.49	1816.	20680.
USSR	M	791023	5735N	16652W	18750.1	34221.2	48787.8	37.	2.750	17192.	6.25	0.46	2608.	19600.
USSR	M	791030	5719N	16621W	18737.9	34231.5	48604.7	36.	2.000	12382.	6.19	0.42	7638.	20020.
USSR	M	791027	5713N	16610W	18730.3	34233.9	48536.7	33.	3.583	21920.	6.12	0.48	7560.	29480.
USSR	M	7910 9	5726N	16650W	18745.9	34279.6	48789.3	36.	2.417	14659.	6.06	0.49	3825.	18480.
USSR	M	7910 6	5713N	16632W	18731.9	34305.7	48683.9	36.	3.333	20021.	6.01	0.53	3519.	23540.
JAPAN	M	79102 7	5656N	16628W	18703.9	34391.0	48666.1	42.	0.667	3989.	5.98	0.55	1071.	5060.
USSR	M	791019	5730N	16640W	18747.7	34218.6	48717.0	38.	3.583	21418.	5.98	0.51	2782.	24200.
USSR	M	791028	5725N	16633W	18744.1	34230.7	48677.7	33.	2.750	16119.	5.86	0.48	1481.	17600.
USSR	M	7911 3	5725N	16645W	18744.9	34270.0	48757.5	33.	2.500	14550.	5.82	0.52	7890.	22440.
JAPAN	S	801213	5643N	16607W	18675.7	34389.2	48528.1	43.	2.500	14400.	5.76	0.49	997.	15400.
USSR	M	7910 8	5717N	16643W	18732.4	34316.8	48753.8	33.	3.250	18174.	5.59	0.55	6686.	24860.
JAPAN	S	801212	5640N	16625W	18667.4	34461.1	48669.2	40.	1.500	8156.	5.44	0.57	1084.	9240.
USSR	M	791025	5720N	16558W	18737.3	34151.0	48450.1	33.	2.500	13527.	5.41	0.54	1433.	14960.
JAPAN	M	791117	5723N	16620W	18741.6	34201.9	48593.6	39.	1.333	7071.	5.30	0.45	1949.	9020.
USSR	M	791028	5716N	16622W	18734.7	34254.1	48614.4	36.	2.000	10464.	5.23	0.52	9336.	19800.
USSR	M	791029	5732N	16558W	18713.6	34260.4	48463.1	36.	2.500	12990.	5.20	0.36	2630.	15620.
USSR	M	791031	5717N	16635W	18736.8	34290.3	48700.3	36.	2.667	13837.	5.19	0.52	2663.	16500.
JAPAN	M	801118	5720N	16633W	18735.8	34264.2	48683.7	39.	4.500	23047.	5.12	0.61	9953.	33000.
USSR	M	791026	5732N	16632W	18741.5	34247.7	48674.8	37.	2.167	11069.	5.11	0.52	1911.	12980.
USSR	M	791010	5713N	16611W	18730.4	34237.1	48543.4	34.	3.250	16589.	5.10	0.49	4311.	20900.
USSR	M	791020	5730N	16618W	18746.5	34147.5	48571.3	38.	4.250	21161.	4.98	0.51	2599.	23760.
JAPAN	M	791111	5711N	16615W	18728.1	34262.4	48571.7	40.	1.563	7625.	4.82	0.50	3815.	11440.
USSR	M	791026	5723N	16615W	18741.2	34185.8	48560.3	33.	3.667	17615.	4.80	0.52	7465.	25080.
USSR	M	791030	5730N	16633W	18747.3	34195.8	48670.7	37.	2.500	12000.	4.80	0.52	5600.	17600.
USSR	M	791029	5724N	16637W	18743.6	34250.6	48705.6	36.	2.667	12785.	4.79	0.57	4815.	17600.
USSR	M	791031	5709N	16621W	18725.7	34294.1	48613.3	36.	2.833	13461.	4.75	0.48	5899.	19360.
JAPAN	S	7912 7	5733N	16754W	18750.7	34442.5	49197.9	43.	1.000	4744.	4.74	0.54	96.	4040.
JAPAN	M	791116	5652N	16625W	18707.7	34370.3	48645.5	42.	1.500	6942.	4.63	0.50	2298.	9240.
USSR	M	7910 8	5719N	16703W	18741.1	34370.7	48885.1	38.	3.000	13509.	4.50	0.52	2111.	15620.
USSR	M	791030	5722N	16618W	18740.6	34202.1	48581.5	33.	2.000	8866.	4.44	0.44	4754.	13640.
USSR	M	7911 3	5733N	16646W	18750.4	34186.8	48744.8	33.	2.583	11109.	4.40	0.49	551.	11660.
USSR	M	7911 2	5720N	16621W	18738.9	34225.0	48603.7	33.	2.500	10653.	4.26	0.49	1227.	11880.
JAPAN	S	7912 6	5725N	16750W	18749.0	34489.8	49188.5	44.	1.000	4236.	4.24	0.54	164.	4400.
USSR	M	791029	5730N	16636W	18747.5	34205.6	48690.6	37.	2.417	10223.	4.23	0.52	1877.	12100.
USSR	M	7911 1	5725N	16644W	18744.8	34266.7	48750.8	37.	3.917	16562.	4.23	0.54	1698.	18260.
JAPAN	S	7912 7	5730N	16750W	18750.8	34452.3	49178.5	44.	1.000	4183.	4.18	0.55	217.	4400.
USSR	M	7910 8	5727N	16718W	18746.2	34366.0	48973.3	36.	2.000	8324.	4.18	0.50	5536.	13860.
USSR	M	7911 7	5715N	16655W	18738.1	34369.6	48836.0	33.	2.667	11069.	4.15	0.44	2131.	13200.
USSR	M	7911 6	5711N	16602W	18727.2	34220.3	48484.6	35.	2.667	10979.	4.12	0.47	8381.	19360.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE C-28 (continued). YELLOWFIN SOLE, OCTOBER-DECEMBER 1979-80

NAUTLN	CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YMMDD			7X 7Y 7Z	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FTISH	(LBS)	(LBS)
USSR	M	7911 4	5724N	1629W	18741.0 34224.4 48652.4	33.	2.583	10376.	4.02	0.55	3044.	13420.
USSR	M	791031	5720N	16645W	18740.7 34303.8 48763.8	37.	2.917	11694.	4.01	0.49	546.	12540.
JAPAN	M	791113	5703N	16620W	18716.4 34326.0 48610.1	41.	3.167	12696.	4.01	0.53	2704.	15400.
JAPAN	S	7912 5	5729N	16720W	18749.7 34386.5 49042.4	43.	1.000	4009.	4.01	0.49	391.	4400.
USSR	P	791027	5714N	16608W	18731.4 34221.2 48522.5	36.	2.167	8615.	3.98	0.53	4525.	13200.
USSR	M	7910 8	5720N	16656W	18741.5 34340.5 48837.2	38.	3.000	11904.	3.97	0.51	1296.	13200.
USSR	M	7911 4	5728N	16630W	18745.9 34200.2 48653.7	33.	2.667	10563.	3.96	0.54	1317.	11880.
USSR	M	791031	5721N	16643W	18741.4 34290.6 48749.3	37.	2.500	5801.	3.92	0.45	3399.	13200.
JAPAN	S	7912 5	5728N	16729W	18749.3 34395.9 49044.3	43.	1.000	3902.	3.90	0.50	498.	4400.
JAPAN	S	7912 6	5730N	16735W	18750.2 34401.4 49080.0	43.	1.250	4655.	3.72	0.52	405.	5060.
USSR	M	7911 5	5726N	16619W	18743.9 34178.4 48583.3	33.	2.583	9532.	3.69	0.53	588.	10120.
USSR	M	7911 1	5719N	16618W	18737.7 34221.8 48584.7	33.	2.750	9880.	3.59	0.56	680.	10560.
USSR	M	7910 7	5718N	16638W	18738.1 34293.8 48719.3	33.	3.250	11209.	3.45	0.52	1551.	12760.
USSR	M	7911 1	5718N	16557W	18735.2 34160.7 48445.4	33.	3.083	10153.	3.29	0.51	2167.	14320.
USSR	M	7912 9	5659N	16632W	18705.9 34387.9 48692.1	38.	3.417	11149.	3.26	0.47	2051.	13200.
JAPAN	S	801211	5640N	16621W	18667.6 34448.3 48618.7	46.	2.000	6510.	3.25	0.55	1850.	8360.
USSR	M	7910 8	5730N	16746W	18750.9 34432.7 49152.3	36.	3.333	10619.	3.25	0.48	5681.	16500.
USSR	S	7912 9	5718N	16701W	18735.9 34370.5 48820.9	43.	1.000	3182.	3.18	0.51	118.	3300.
JAPAN	S	8012 4	5719N	16704W	18741.2 34374.0 48891.7	42.	1.500	4723.	3.15	0.54	2317.	7040.
USSR	M	791025	5731N	16640W	18748.2 34211.4 48715.5	33.	3.250	10089.	3.10	0.49	691.	10780.
JAPAN	S	801021	5737N	16648W	18750.4 34193.2 48757.9	39.	1.833	5642.	3.08	0.50	1398.	7040.
USSR	M	7911 3	5720N	16614W	18738.4 34202.3 48556.9	33.	3.083	9262.	3.00	0.48	4158.	13420.
USSR	M	791031	5725N	16639W	18744.5 34250.3 48717.6	37.	1.750	5158.	2.95	0.48	1442.	6600.
JAPAN	S	7912 7	5727N	16739W	18749.4 34437.3 49112.1	41.	2.000	5866.	2.93	0.54	294.	6160.
JAPAN	S	7912 4	5721N	16723W	18744.5 34425.1 49015.7	43.	1.000	2902.	2.90	0.54	398.	3300.
USSR	S	7910 7	5649N	16551W	18689.3 34308.3 48419.5	36.	3.083	8915.	2.89	0.54	1205.	10120.
JAPAN	S	801211	5643N	16602W	18675.9 34373.2 48492.8	47.	2.000	5731.	2.87	0.57	7520.	7520.
USSR	M	791028	5724N	16635W	18743.4 34244.0 48592.3	33.	3.417	9771.	2.86	0.52	9369.	19140.
USSR	M	7911 6	5720N	16635W	18735.9 34270.8 48697.1	33.	3.000	8408.	2.80	0.55	3692.	12100.
JAPAN	S	801023	5744N	16651W	18750.6 34148.7 48765.4	38.	2.167	5858.	2.70	0.50	742.	6600.
USSR	M	7911 2	5717N	16625W	18736.1 34257.5 48633.5	33.	2.583	6792.	2.63	0.57	688.	7480.
JAPAN	S	7912 9	5723N	16707W	18744.9 34357.1 48906.5	43.	1.500	3920.	2.61	0.58	260.	4180.
JAPAN	S	7912 8	5724N	16708W	18745.7 34353.6 48911.7	43.	1.500	3888.	2.59	0.52	512.	4400.
JAPAN	S	8012 4	5718N	16702W	18740.0 34373.9 48879.6	41.	2.167	5600.	2.58	0.51	3000.	6600.
USSR	M	7911 4	5725N	16646W	18744.9 34273.3 48764.1	33.	3.083	7893.	2.56	0.57	907.	8800.
USSR	M	791031	5726N	16631W	18744.7 34217.3 48663.1	33.	2.917	7459.	2.56	0.55	461.	7920.
JAPAN	S	8012 5	5723N	16704W	18744.7 34347.0 48866.5	42.	2.000	4964.	2.48	0.52	1196.	6160.
JAPAN	S	7912 8	5732N	16737W	18750.0 34392.9 49089.1	42.	1.000	2455.	2.45	0.50	405.	2860.
USSR	M	7910 7	5705N	16630W	18728.3 34233.6 48673.6	33.	2.750	6598.	2.40	0.50	1982.	8580.
JAPAN	S	8012 4	5745N	16715W	18746.9 34370.1 48956.7	42.	2.333	5052.	2.17	0.53	1108.	6160.
JAPAN	M	7912 6	5657N	16605W	18705.2 34310.8 48511.8	42.	0.500	1073.	2.15	0.52	467.	1540.
JAPAN	S	8012 5	5722N	16704W	18743.9 34353.9 48887.9	42.	2.000	4153.	2.08	0.53	2007.	6160.
JAPAN	S	801212	5637N	16627W	16659.3 34481.2 48657.4	48.	1.667	3397.	2.04	0.57	1443.	4840.
JAPAN	S	801213	5645N	16603W	16680.5 34366.6 48499.7	45.	2.000	4067.	2.03	0.53	993.	5060.
USSR	M	791210	5707N	16652W	18724.8 34408.9 48822.4	38.	3.250	6547.	2.01	0.58	2253.	8800.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

25 available trawl records (exceeding 500 lbs/hr CPUE) were not included.

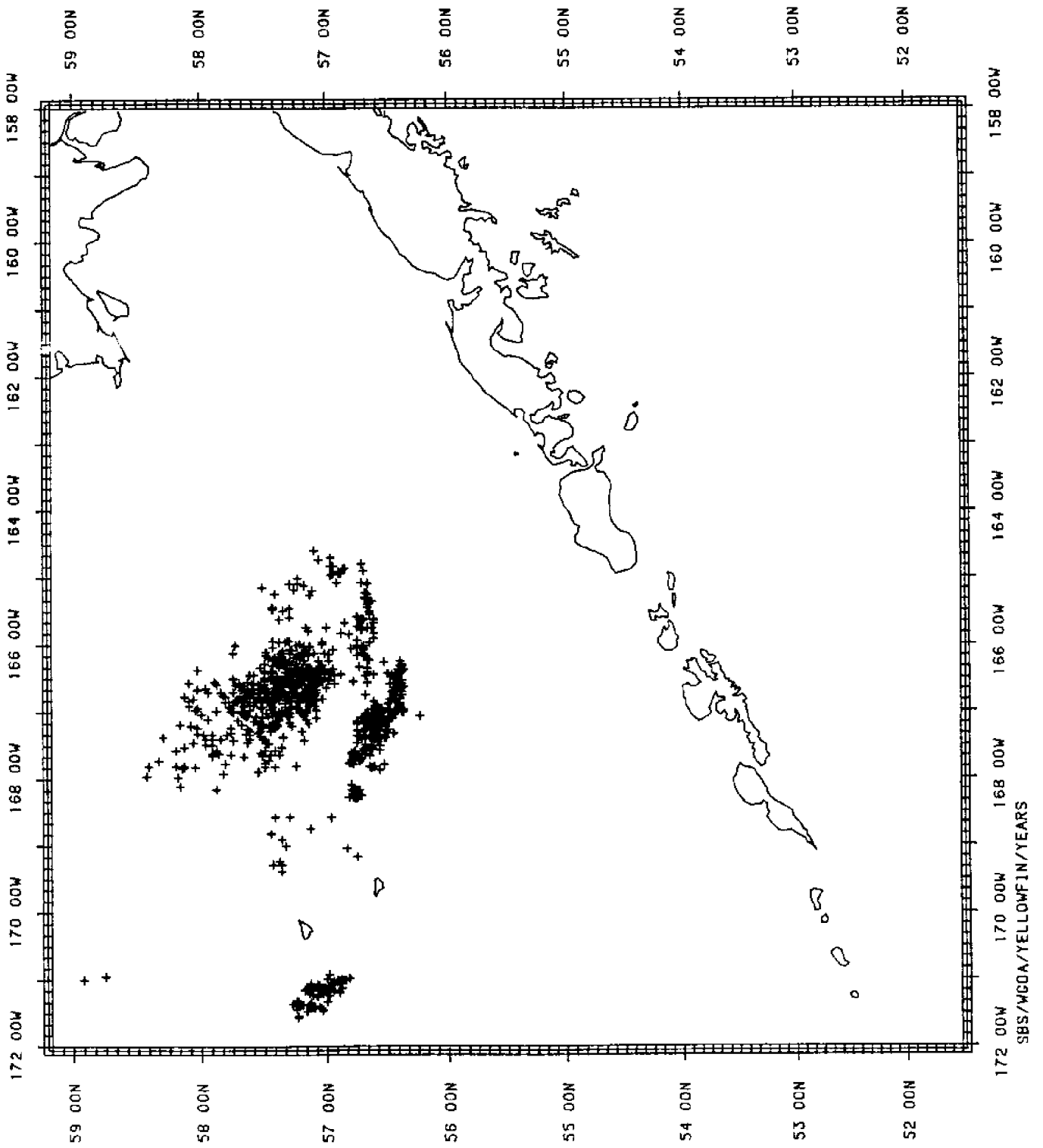


FIGURE C-14. TRAWLING LOCATIONS FOR YELLOWFIN SOLE, ALL MONTHS, 1979-80

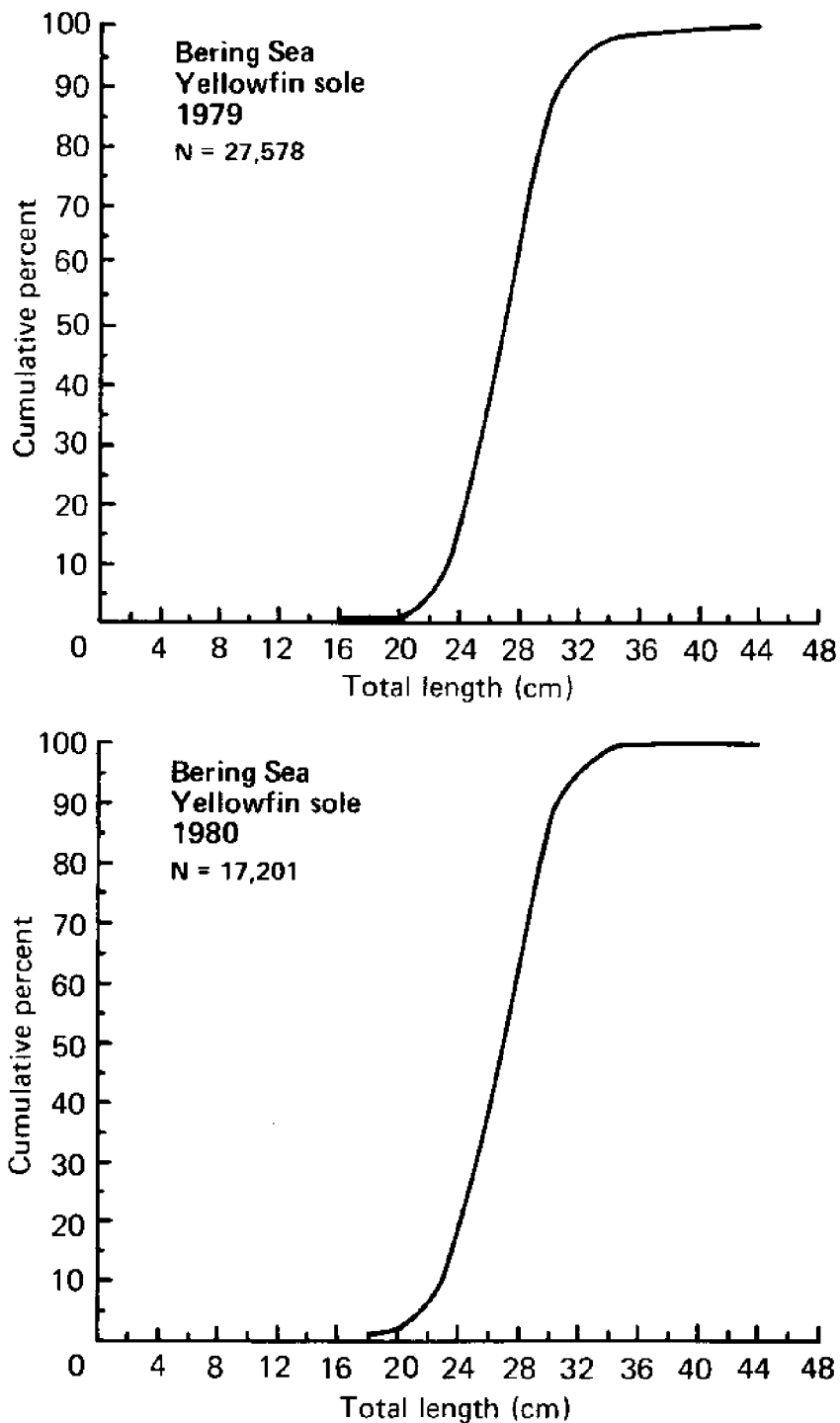
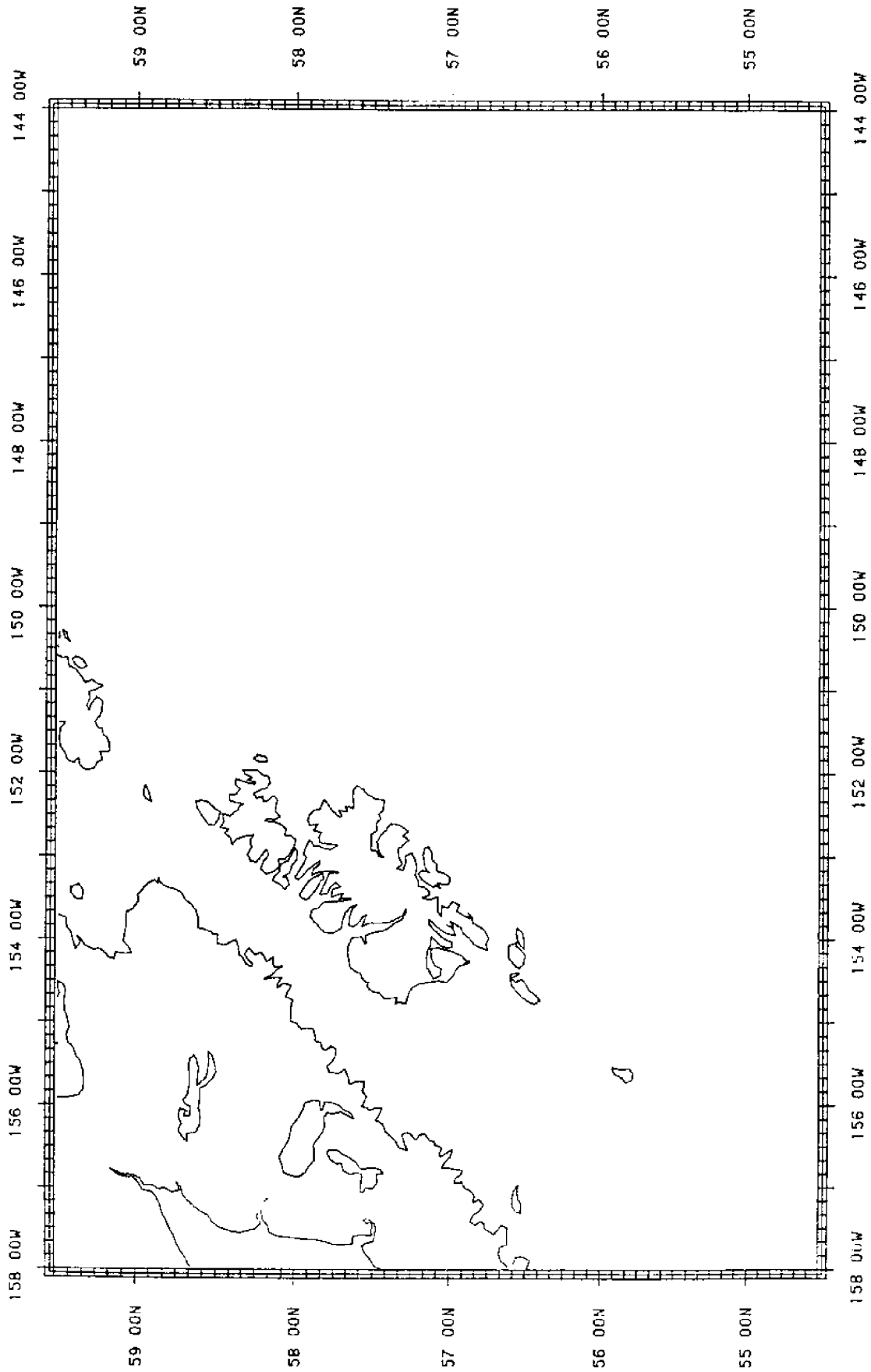


FIGURE C-15. CUMULATIVE LENGTH-FREQUENCY DISTRIBUTIONS OF THE YELLOWFIN SOLE CATCH FROM ALL AREAS OF THE EASTERN BERING SEA DURING 1979-80.



APPENDIX D. KODIAK ISLAND REGION

APPENDIX D

Productive Foreign Fishing Locations in the Kodiak
Island Region

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Productive Foreign Fishing Locations in the Kodiak
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Table D-1

SUMMARY OF OVERALL CATCH COMPOSITION AND CATCH PER UNIT EFFORT OBSERVED IN THE KODIAK ISLAND REGION DURING APRIL-JUNE 1980.^{1/}

	<u>Mean CPUE^{2/}</u> <u>(lbs/day)</u>	<u>Mean CPUE^{3/}</u> <u>(lbs/hr)</u>	<u>Proportion of^{4/}</u> <u>Total Catch</u>	<u>Mean Size</u> <u>(lbs/fish)</u>
Small Trawlers				
Walleye Pollock	19,517	2,548	0.742	1.04
Pacific Ocean Perch	3,852	503	0.146	1.24
Pacific Halibut	691	90	0.026	57.65
Pacific Cod	679	89	0.026	7.44
Arrowtooth Flounder	659	86	0.025	2.18
Northern Rockfish	216	28	0.008	1.00
Atka Mackerel	184	24	0.007	1.77
Sablefish	179	23	0.007	2.73
Large Freezer Trawlers				
Walleye Pollock	19,115	3,593	0.526	1.45
Pacific Ocean Perch	5,605	1,053	0.154	1.22
Sablefish	3,444	647	0.095	2.22
Northern Rockfish	2,450	461	0.067	1.05
Arrowtooth Flounder	1,393	262	0.038	1.91
Unidentified Sculpins	716	135	0.020	1.47
Pacific Cod	665	125	0.018	4.35
Dover Sole	483	91	0.013	0.88
Surimi Trawlers				
Walleye Pollock	138,710	10,134	0.934	1.01
Pacific Ocean Perch	5,656	413	0.038	0.88
Arrowtooth Flounder	1,329	97	0.009	2.01
Flathead Sole	591	43	0.004	0.42
Pacific Cod	572	42	0.004	4.78
Sablefish	532	39	0.004	2.88
Pacific Halibut	507	37	0.003	28.04
Unidentified Sculpins	284	21	0.002	0.71

^{1/} Based upon observer data from 28 gear operations by small trawlers, 13 gear operations by large freezer trawlers, and 17 gear operations by surimi trawlers. No data were available for the periods January-March 1979-80.

^{2/} Average production rate per day of fishing activities on the grounds.

^{3/} Average production rate per hour of actual trawling effort.

^{4/} By vessel class.

Table D-2

SUMMARY OF OVERALL CATCH COMPOSITION AND CATCH PER UNIT EFFORT OBSERVED IN THE KODIAK ISLAND REGION DURING JULY-SEPTEMBER 1980.^{1/}

	<u>Mean CPUE^{2/}</u> <u>(lbs/day)</u>	<u>Mean CPUE^{3/}</u> <u>(lbs/hr)</u>	<u>Proportion of^{4/}</u> <u>Total Catch</u>	<u>Mean Size</u> <u>(lbs/fish)</u>
Small Trawlers				
Walleye Pollock	16,212	1,788	0.557	1.09
Shortraker Rockfish	2,344	258	0.081	8.46
Pacific Ocean Perch	2,004	221	0.069	1.16
Arrowtooth Flounder	1,889	208	0.064	2.50
Pacific Cod	1,435	158	0.049	7.20
Sablefish	974	107	0.033	4.55
Rougheye Rockfish	857	94	0.029	2.55
Pacific Halibut	638	70	0.022	53.04
Large Freezer Trawlers				
Atka Mackerel	16,361	1,760	0.337	1.62
Walleye Pollock	14,022	1,508	0.289	1.19
Pacific Cod	5,830	627	0.120	4.43
Arrowtooth Flounder	2,495	268	0.051	1.30
Pacific Halibut	1,923	207	0.040	38.72
Northern Rockfish	1,816	195	0.037	0.82
Sablefish	1,649	177	0.034	3.06
Pacific Ocean Perch	1,376	148	0.028	0.90
Surimi Trawlers				
Walleye Pollock	75,506	6,484	0.854	1.01
Atka Mackerel	10,123	869	0.114	1.53
Pacific Halibut	667	57	0.008	33.06
Pacific Cod	635	55	0.007	5.70
Arrowtooth Flounder	499	43	0.006	1.62
Sablefish	308	26	0.003	2.88
Flathead Sole	193	17	0.002	0.46
Unidentified Sculpins	115	10	0.001	1.23

1/ Based upon observer data from 132 gear operations by small trawlers, 113 gear operations by large freezer trawlers, and 34 gear operations by surimi trawlers.

2/ Average production rate per day of fishing activities on the grounds.

3/ Average production rate per hour of actual trawling effort.

4/ By vessel class.

Table D-3

SUMMARY OF OVERALL CATCH COMPOSITION AND CATCH PER UNIT EFFORT OBSERVED IN THE KODIAK ISLAND REGION DURING OCTOBER-DECEMBER 1980.^{1/}

	<u>Mean CPUE^{2/}</u> <u>(lbs/day)</u>	<u>Mean CPUE^{3/}</u> <u>(lbs/hr)</u>	<u>Proportion of^{4/}</u> <u>Total Catch</u>	<u>Mean Size</u> <u>(lbs/fish)</u>
Small Trawlers				
Walleye Pollock	26,503	3,952	0.817	1.61
Arrowtooth Flounder	1,964	293	0.061	2.40
Sablefish	1,525	227	0.047	3.03
Pacific Ocean Perch	394	59	0.012	1.24
Pacific Halibut	280	42	0.009	11.56
Rougheye Rockfish	266	40	0.008	2.33
Shortraker Rockfish	234	35	0.007	8.43
Dover Sole	221	33	0.007	1.15
Large Freezer Trawlers				
Walleye Pollock	42,649	5,737	0.753	1.36
Atka Mackerel	3,533	475	0.062	1.61
Arrowtooth Flounder	3,031	408	0.054	1.26
Pacific Cod	1,960	264	0.035	4.66
Pacific Ocean Perch	1,422	191	0.025	1.14
Pacific Halibut	908	122	0.016	12.04
Sablefish	873	117	0.015	3.07
Squid	515	69	0.009	1.05

^{1/} Based upon observer data from 70 gear operations by small trawlers, and 70 gear operations by large freezer trawlers.

^{2/} Average production rate per day of fishing activities on the grounds.

^{3/} Average production rate per hour of actual trawling effort.

^{4/} By vessel class.

TABLE D-4. WAILEYE POLLOCK, APRIL-JUNE 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YYMMDD			7X 7Y 7Z	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
MEXICO	S	79 629	5703N	15139W	18720.5 32394.6 43042.8	66.	0.503	56070.	96.12	0.85	30.	56100.
USSR	M	79 630	5728N	15035W	18734.1 32206.6 43003.3	71.	0.500	43662.	87.32	0.80	332.	44000.
JAPAN	L	79 627	5616N	15312W	18681.7 32724.5 43365.0	97.	0.750	65391.	87.17	1.08	619.	66400.
JAPAN	L	79 627	5617N	15310W	18682.7 32717.3 43351.4	68.	0.333	26400.	79.20	1.13	0.	26400.
MEXICO	L	79 610	5659N	15131W	18718.4 32400.0 43049.0	95.	0.833	65655.	79.03	1.15	145.	66000.
JAPAN	L	79 625	5701N	15141W	18715.2 32405.7 43052.2	39.	1.667	124575.	74.74	0.77	605.	125120.
JAPAN	L	79 612	5718N	15127W	18728.6 32315.6 43002.4	49.	1.500	101226.	77.49	0.69	412.	101640.
JAPAN	L	79 628	5615N	15313W	18680.7 32730.0 43574.0	115.	1.063	72521.	66.94	1.08	779.	72600.
JAPAN	L	79 611	5719N	15127W	18729.1 32311.4 43001.5	58.	2.000	115758.	57.88	0.62	842.	116600.
MEXICO	L	79 611	5718N	15130W	18728.6 32319.6 43002.7	95.	1.250	65911.	52.73	1.00	89.	66000.
JAPAN	L	79 613	5714N	15123W	18726.8 32327.1 43006.6	63.	2.000	96028.	48.01	0.69	1874.	97900.
JAPAN	L	79 624	5702N	15143W	18719.8 32401.5 43048.5	44.	2.667	120849.	45.32	0.84	151.	121000.
JAPAN	L	80 623	5652N	15222W	18712.2 32501.4 43184.2	83.	1.500	65061.	43.37	1.10	939.	66000.
JAPAN	L	80 6 1	5756N	15339W	18660.1 32846.8 43777.5	105.	0.582	23043.	39.50	1.53	2257.	25300.
JAPAN	L	79 613	5708N	15124W	18723.6 32353.4 43018.3	61.	3.500	135356.	38.67	0.73	1044.	136400.
JAPAN	L	80 628	5651N	15224W	18711.5 32508.5 43196.2	90.	2.000	77331.	38.66	1.22	789.	78100.
MEXICO	S	79 612	5658N	15132W	18717.8 32405.5 43053.5	82.	1.167	44000.	37.71	0.09	0.	44000.
JAPAN	L	79 610	5610N	15327W	18675.1 32772.4 43661.6	133.	2.667	98985.	37.12	1.17	15.	99000.
JAPAN	L	79 626	5617N	15304W	18681.2 32707.8 43524.4	96.	1.000	35052.	30.56	1.06	238.	30800.
JAPAN	L	79 629	5617N	15310W	18682.7 32717.3 43551.4	98.	1.333	39548.	29.66	1.00	52.	39600.
JAPAN	L	79 6 7	5627N	15543W	18605.6 33176.8 44537.1	108.	1.750	51107.	28.20	0.64	373.	51480.
USSR	M	79 630	5733N	15026W	18736.2 32174.6 43008.6	68.	1.500	3742.	29.16	0.82	258.	44000.
JAPAN	L	79 625	5709N	15133W	18723.9 32361.4 43020.1	60.	2.333	65608.	28.12	0.79	11392.	77000.
JAPAN	L	79 612	5715N	15124W	18725.2 32307.4 43001.3	69.	4.500	118269.	26.28	0.67	531.	118800.
JAPAN	L	79 6 8	5625N	15553W	18605.2 33203.1 44599.5	97.	5.000	129747.	25.95	0.61	53.	129800.
JAPAN	L	79 623	5718N	15126W	18728.7 32314.3 43002.3	62.	1.500	35780.	23.85	0.73	3600.	35300.
JAPAN	L	80 623	5645N	15219W	18707.7 32525.9 43210.6	85.	2.167	49887.	23.02	1.07	713.	50600.
USSR	M	79 630	5728N	15036W	18734.1 32205.3 43003.3	66.	0.833	18935.	22.72	0.75	865.	19200.
USSR	M	79 629	5729N	15033W	18734.6 32199.9 43004.2	60.	0.750	16575.	22.10	0.81	1025.	17600.
USSR	M	79 623	5710N	15109W	18725.1 32325.0 43009.6	71.	1.000	21734.	21.73	0.66	2466.	24200.
JAPAN	L	80 622	5646N	15220W	18708.3 32523.3 43208.7	88.	2.000	43089.	21.54	1.08	911.	44000.
MEXICO	L	79 625	5705N	15132W	18721.8 32376.7 43030.6	60.	2.000	42709.	21.35	0.65	6571.	45280.
USSR	M	79 629	5727N	15033W	18733.7 32208.2 43002.6	60.	1.050	21246.	20.23	0.84	754.	22000.
JAPAN	L	80 626	5623N	15607W	18600.0 33237.2 44685.3	110.	2.667	52647.	19.74	0.80	153.	52800.
JAPAN	S	80 626	5707N	15120W	18723.2 32352.1 43018.8	93.	0.833	15824.	18.99	0.95	676.	16500.
JAPAN	L	79 630	5617N	15257W	18681.7 32696.7 43493.9	87.	1.750	32997.	18.86	1.09	2203.	35200.
JAPAN	N	80 6 2	5613N	15318W	18678.5 32746.0 43006.0	124.	0.167	2908.	17.45	1.25	2152.	5060.
JAPAN	L	79 610	5615N	15313W	18680.7 32730.0 43574.0	171.	2.667	44653.	16.75	1.06	5.	44660.
JAPAN	L	79 623	5731N	15037W	18735.3 32196.6 43006.1	56.	1.333	22067.	16.55	0.67	3673.	25740.
MEXICO	S	79 629	5703N	15141W	18720.4 32397.4 43044.8	55.	1.833	30215.	16.48	0.64	24785.	55000.
JAPAN	L	80 629	5644N	15218W	18707.0 32528.6 43212.5	85.	3.000	48004.	16.00	1.10	1496.	49500.
USSR	M	79 629	5730N	15033W	18735.0 32195.8 43005.1	63.	0.500	7844.	15.89	0.81	7556.	15400.
MEXICO	S	79 627	5701N	15132W	18719.5 32393.2 43043.2	63.	3.083	42679.	13.84	0.66	13861.	56540.
JAPAN	L	79 6 8	5527N	15545W	18609.3 33100.6 44548.5	107.	4.000	55000.	13.75	0.77	0.	55000.
JAPAN	S	80 626	5707N	15122W	18723.2 32354.8 43019.7	102.	0.333	45444.	13.63	0.97	956.	5500.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-4 (continued). WALLIEYE POLLOCK, APRIL-JUNE 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPND	7X	7Y	7Z	DEPTH (FMS)	HOURS TRAWLED	CAATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	79 621	5647N	15143W	18710.6	32465.7	43112.9	126.	1.083	14066.	12.98	1.18	1334.	15400.	
USSR	M	80 628	5659N	15133W	18718.3	32402.8	43051.0	81.	0.583	7462.	12.79	0.99	1778.	9240.	
JAPAN	S	80 627	5659N	15131W	18718.3	32406.0	43049.0	97.	0.667	7979.	11.97	1.05	1261.	9240.	
JAPAN	L	79 6 5	5722N	15131W	18731.4	32295.5	43000.0	66.	3.917	44568.	11.38	0.87	3832.	48400.	
JAPAN	S	80 626	5714N	15102W	18727.3	32299.2	43003.4	90.	0.667	7504.	11.26	0.97	1296.	8800.	
USSR	M	80 6 4	5718N	15045W	18725.6	32260.6	43009.2	87.	0.833	8552.	10.62	1.45	2146.	11000.	
USSR	M	79 620	5649N	15142W	18711.9	32456.2	43102.5	107.	1.250	13222.	10.58	1.16	2178.	15400.	
MEXICO	S	79 628	5700N	15134W	18718.9	32400.1	43048.5	66.	1.167	11748.	10.07	0.84	352.	12100.	
JAPAN	L	80 628	5617N	15308W	18682.9	32714.1	43542.3	104.	2.667	26363.	9.89	0.93	37.	26400.	
JAPAN	L	80 628	5617N	15248W	18684.5	32679.5	43448.5	112.	1.750	16822.	9.61	0.89	332.	17160.	
JAPAN	L	79 626	5650N	15222W	18710.9	32509.7	43194.6	73.	3.833	54974.	9.12	1.51	9686.	44860.	
JAPAN	L	80 630	5643N	15222W	18706.1	32538.5	43230.7	101.	3.167	28017.	8.85	1.07	803.	28220.	
JAPAN	L	79 6 7	5527N	15544W	18609.5	33178.7	44542.8	109.	2.000	16886.	8.44	1.01	714.	17600.	
USSR	M	79 622	5649N	15146W	18711.7	32461.9	43109.3	109.	1.167	9583.	8.21	1.08	1412.	11000.	
JAPAN	L	80 630	5656N	15226W	18714.7	32490.5	43177.2	82.	3.000	23185.	7.73	0.85	5415.	28800.	
JAPAN	S	80 627	5707N	15119W	18723.3	32350.8	43018.4	93.	1.250	8503.	6.80	1.00	1397.	9900.	
USSR	M	79 629	5727N	15036W	18733.7	32212.0	43002.5	66.	0.333	2175.	6.53	0.77	25.	2200.	
JAPAN	L	80 629	5647N	15222W	18708.9	32522.1	43210.1	93.	2.500	15578.	6.23	1.26	1582.	17160.	
USSR	M	79 630	5725N	15048W	18732.6	32235.5	43001.0	57.	0.583	3576.	6.13	0.79	824.	4400.	
USSR	M	80 6 3	5711N	15106W	18725.6	32319.5	43007.9	82.	1.167	6992.	5.99	1.19	928.	7920.	
USSR	M	80 6 6	5811N	14852W	18747.5	31910.3	43078.5	87.	2.333	13253.	5.88	1.90	13147.	26400.	
JAPAN	L	79 629	5617N	15307W	18683.0	32712.5	43537.8	104.	2.417	13413.	5.55	1.07	7.	13420.	
JAPAN	L	79 6 9	5617N	15322W	18681.9	32736.5	43607.7	122.	2.500	13619.	5.45	0.75	2221.	15840.	
JAPAN	S	80 626	5707N	15119W	18723.3	32350.8	43018.4	101.	1.167	6045.	5.18	1.02	2315.	8360.	
JAPAN	L	79 630	5614N	15315W	18679.7	32737.2	43587.7	169.	3.500	17593.	5.03	1.15	5899.	17600.	
USSR	M	79 621	5649N	15142W	18711.9	32456.2	43102.5	126.	1.917	9501.	4.96	1.11	15400.	15400.	
JAPAN	S	80 628	5702N	15130W	18720.2	32386.3	43038.3	94.	0.750	3413.	4.55	1.17	1647.	5060.	
JAPAN	L	80 629	5641N	15229W	18704.4	32557.1	43265.3	95.	2.500	10802.	4.32	1.14	638.	11440.	
MEXICO	S	79 613	5642N	15148W	18707.0	32493.0	43144.9	82.	5.417	22000.	4.06	0.99	0.	22000.	
JAPAN	S	80 627	5707N	15121W	18723.2	32353.5	43019.2	96.	0.500	2024.	4.05	1.00	6976.	11000.	
JAPAN	L	79 627	5650N	15222W	18710.9	32509.7	43194.6	75.	1.500	5638.	3.89	1.39	1642.	7480.	
JAPAN	L	80 626	5524N	15527W	18603.1	33214.4	44625.1	105.	2.833	10992.	3.88	0.78	8.	11000.	
JAPAN	M	79 6 3	5609N	15329W	18673.9	32779.6	43675.4	114.	1.667	6440.	3.86	1.77	2580.	9020.	
USSR	M	80 630	5641N	15147W	18706.4	32495.6	43147.5	109.	1.333	5071.	3.80	1.12	1529.	6600.	
JAPAN	M	80 6 1	5557N	15334W	18661.7	32834.7	43749.5	153.	0.583	2179.	3.74	1.55	3321.	5500.	
JAPAN	S	80 624	5707N	15117W	18723.3	32348.1	43017.6	93.	1.417	5148.	3.63	1.14	1452.	6600.	
JAPAN	L	79 611	5616N	15305W	18682.2	32713.3	43533.4	107.	3.000	9900.	3.30	1.14	0.	9900.	
JAPAN	S	80 628	5658N	15132W	18717.8	32405.5	43053.5	85.	1.000	2900.	2.90	1.14	774.	3674.	
JAPAN	S	80 626	5707N	15116W	18723.3	32346.7	43017.2	98.	0.833	2416.	2.90	0.99	1984.	4400.	
JAPAN	L	79 625	5637N	15235W	18701.2	32582.5	43307.9	84.	4.167	11237.	2.70	1.47	2843.	14080.	
JAPAN	S	80 627	5703N	15132W	18726.7	32385.0	43036.7	86.	0.750	1989.	2.65	1.13	211.	2200.	
JAPAN	L	79 628	5617N	15309W	18682.8	32715.7	43546.8	98.	3.333	8759.	2.62	1.11	61.	8600.	
JAPAN	L	80 628	5614N	15317W	18679.5	32740.4	43597.0	98.	2.500	6472.	2.59	0.88	126.	8600.	
JAPAN	M	79 6 3	5630N	15209W	18691.3	32571.7	43255.4	131.	1.000	2575.	2.57	1.30	2045.	8200.	
JAPAN	L	79 620	5603N	15337W	18667.4	32816.3	43739.1	128.	2.333	5922.	2.54	1.67	1338.	7260.	

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-4 (continued). WALLEYE POLLOCK, APRIL-JUNE 1979-80

NATION	VESEL CLASS	DATE	LAT	LONG	APPROX 7X	LOCAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	79 626	5638N	15234W	18702.0	32576.9	43299.0	78.	4.000	8728.	2.18	1.65	3152.	11880.
JAPAN	L	79 624	5646N	15224W	18708.1	32529.2	43222.1	100.	3.417	7425.	2.17	1.61	2475.	9900.
JAPAN	L	79 6 6	5505N	15718W	18557.2	33442.7	45141.5	60.	1.500	3094.	2.06	0.66	1306.	4400.
JAPAN	L	79 626	5638N	15230W	18702.2	32570.9	43284.1	87.	4.083	8109.	1.95	1.41	5531.	13640.
USSR	M	80 6 5	5812N	14850W	18747.7	31904.1	43080.7	96.	1.000	1345.	1.84	0.88	11255.	13200.
USSR	M	79 627	5828N	14832W	18749.9	31919.8	43120.5	112.	0.250	468.	1.97	1.49	17132.	17600.
JAPAN	S	80 624	5715N	15049W	18728.1	32278.1	43001.6	97.	1.667	3018.	1.81	1.26	1382.	4400.
USSR	M	79 627	5835N	14842W	18748.2	31883.5	43026.9	126.	0.500	875.	1.75	1.74	1325.	2200.
USSR	M	79 623	5704N	15128W	18721.4	32375.4	43030.8	126.	1.167	2007.	1.72	1.57	6793.	8900.
JAPAN	L	79 622	5641N	15230W	18704.3	32558.6	43299.0	94.	2.167	3675.	1.70	1.52	4025.	7700.
JAPAN	S	80 629	5707N	15127W	18723.0	32381.6	43022.1	95.	0.833	1302.	1.56	1.07	238.	1540.
JAPAN	M	79 630	5759N	14903W	18745.0	31971.3	43051.5	120.	1.833	2827.	1.54	1.37	11033.	13360.
JAPAN	S	80 629	5703N	15131W	18720.7	32383.6	43035.9	87.	1.000	1395.	1.35	1.16	585.	1980.
JAPAN	S	80 627	5704N	15131W	18721.3	32379.5	43032.9	87.	1.000	1165.	1.17	1.08	155.	1520.
USSR	M	80 6 7	5706N	15128W	18724.7	32356.2	43021.1	80.	1.250	1442.	1.15	1.83	2958.	4400.
JAPAN	S	80 628	5706N	15129W	18722.4	32368.5	43025.3	87.	0.917	1024.	1.12	1.16	296.	1320.
JAPAN	L	79 627	5645N	15226W	18710.2	32516.8	43206.6	89.	4.000	4855.	1.02	1.42	7575.	11660.
JAPAN	M	79 630	5757N	14915W	18744.5	31982.6	43048.4	134.	0.333	332.	1.00	2.08	6048.	6380.
JAPAN	S	80 626	5712N	15106W	18726.2	32312.8	43006.2	105.	0.750	745.	0.99	1.16	795.	1540.
JAPAN	L	80 626	5522N	15612W	18597.6	33250.5	44716.7	104.	2.167	2151.	0.99	0.82	49.	2200.
USSR	M	79 625	5813N	14848W	18747.9	31897.9	43082.9	118.	1.583	1561.	0.99	2.12	9439.	11000.
JAPAN	S	80 628	5706N	15130W	18722.4	32369.8	43026.4	103.	1.500	1348.	0.90	0.97	192.	1540.
USSR	M	79 621	5636N	15226W	18700.9	32573.0	43279.9	87.	0.500	423.	0.85	1.24	897.	1320.
JAPAN	S	80 628	5707N	15137W	18723.3	32348.1	43017.6	82.	0.500	422.	0.84	1.00	678.	1100.
USSR	M	79 624	5814N	14845W	18748.1	31888.6	43084.5	120.	1.000	326.	0.83	0.03	14574.	15400.
USSR	M	79 624	5728N	15022W	18734.4	32190.4	43003.5	101.	1.750	1414.	0.81	1.45	9586.	11000.
JAPAN	S	80 627	5703N	15132W	18720.7	32385.0	43036.7	87.	0.750	582.	0.78	1.12	516.	1100.
JAPAN	S	80 625	5722N	15040W	18731.5	32237.7	43000.1	107.	1.167	844.	0.72	1.36	476.	1320.
JAPAN	S	80 625	5658N	15133W	18717.8	32406.9	43054.5	96.	1.333	945.	0.71	1.44	155.	1100.
USSR	M	79 625	5813N	14848W	18747.9	31897.9	43082.9	123.	1.167	777.	0.67	2.29	8023.	8800.
JAPAN	S	80 624	5632N	15140W	18711.9	32441.2	43088.6	90.	1.333	792.	0.59	1.13	308.	1100.
JAPAN	F	79 6 3	5633N	15202W	18700.0	32549.4	43221.1	120.	1.667	914.	0.55	1.30	7226.	8140.

*** NOTE *** THE ACCURACY OF POSITION AND LOCAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-5. WALLIYE POLLOCK, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YYMMDD			7X 7Y 7Z	(FMS)	BRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
JAPAN	L	79 717	5611N	15329W	16675.8 32771.7 43667.0	60.	0.167	76797.	460.78	0.80	203.	77000.
JAPAN	L	79 715	5617N	15311W	18682.7 32718.9 43555.9	55.	0.167	52782.	316.69	0.74	18.	52860.
JAPAN	L	79 714	5614N	15315W	18679.7 32737.2 43587.7	77.	0.250	76919.	307.68	0.84	81.	77000.
USSR	M	79 715	5701N	15140W	18719.3 32404.3 43051.1	51.	0.167	48037.	288.22	0.86	363.	48400.
JAPAN	L	79 715	5631W	15317W	18678.6 32744.4 43601.3	82.	0.167	43833.	263.00	0.90	167.	44000.
USSR	M	79 712	5701N	15135W	18715.3 32402.9 43050.0	46.	0.250	54705.	218.82	0.82	295.	55000.
JAPAN	L	79 713	5618N	15307W	18683.8 32708.5 43533.3	59.	0.333	65989.	197.97	0.77	11.	66000.
JAPAN	L	79 717	5611N	15327W	18676.0 32768.5 43657.3	60.	0.167	30553.	183.32	0.76	247.	30800.
JAPAN	L	79 9 8	5632N	15224W	18698.0 32586.1 43293.1	120.	0.583	99000.	169.71	1.14	0.	99000.
USSR	M	79 723	5702N	15139W	18719.9 32398.8 43046.4	46.	0.167	28149.	168.89	0.97	451.	28600.
USSR	M	79 711	5702N	15140W	18719.9 32400.1 43047.4	52.	0.333	54482.	163.45	0.87	518.	55000.
USSR	M	79 7 1	5726N	15058W	18732.9 32244.1 43001.4	52.	0.500	80920.	161.84	0.83	480.	81400.
USSR	M	79 710	5658N	15137W	18717.6 32412.5 43058.9	55.	0.250	38563.	154.25	0.83	5437.	44000.
JAPAN	L	79 7 2	5610N	15342W	18673.8 32797.0 43735.6	93.	0.583	87886.	150.66	0.86	114.	88000.
USSR	M	79 718	5703N	15141W	18720.4 32397.4 43044.8	52.	0.167	23671.	143.23	0.88	329.	24200.
JAPAN	M	79 712	5702N	15140W	18719.9 32400.1 43047.4	44.	0.333	46207.	138.62	0.90	1093.	47300.
USSR	M	79 8 9	5635N	15220W	18700.5 32568.1 43264.6	74.	0.250	32193.	128.77	1.14	807.	33000.
JAPAN	L	79 712	5617N	15310W	18682.7 32717.3 43551.4	87.	0.917	114320.	124.71	0.69	60.	114400.
JAPAN	L	79 527	5632N	15224W	18698.0 32586.1 43293.1	115.	0.500	59054.	118.11	1.31	2586.	61600.
USSR	M	79 711	5702N	15141W	18715.8 32401.5 43048.5	45.	0.333	38121.	114.36	0.81	5879.	44000.
USSR	M	79 714	5701N	15142W	18715.2 32407.1 43053.3	46.	0.250	26182.	104.73	0.92	218.	26400.
USSR	M	79 7 9	5700N	15138W	18718.8 32405.6 43052.6	49.	0.417	43169.	103.65	0.79	811.	44000.
JAPAN	L	79 7 5	5612N	15318W	18677.6 32749.9 43810.4	87.	0.833	83441.	100.13	1.05	160.	83600.
USSR	M	79 722	5702N	15145W	18719.7 32407.1 43053.3	46.	0.250	24611.	98.44	1.01	2887.	27500.
JAPAN	L	79 719	5616N	15311W	18681.8 32722.9 43566.4	55.	0.583	57166.	98.00	0.81	32.	57200.
JAPAN	L	79 9 9	5632N	15228W	18697.8 32592.1 43307.0	98.	0.917	87164.	95.09	1.12	836.	88000.
USSR	M	79 725	5637N	15225W	18701.7 32567.4 43271.4	77.	0.333	31325.	93.97	0.97	1675.	33000.
JAPAN	L	79 729	5609N	15011W	18746.8 32004.2 43096.1	82.	1.500	140800.	93.87	0.63	0.	140800.
USSR	M	79 8 11	5634N	15223W	18699.6 32576.6 43279.7	71.	0.333	30591.	91.77	1.02	209.	30800.
USSR	M	79 710	5655N	15145W	18715.5 32436.0 43081.5	46.	0.167	14668.	89.21	0.83	532.	15400.
USSR	M	79 7 9	5719N	15104W	18729.6 32281.1 43000.4	55.	0.583	50365.	86.34	0.82	235.	50800.
USSR	M	79 7 8	5715N	15110W	18727.6 32305.6 43003.4	55.	0.667	54529.	81.79	0.74	471.	55000.
JAPAN	L	79 718	5618N	15318W	18681.1 32726.1 43584.2	87.	0.417	32995.	79.19	0.80	6.	33000.
USSR	M	79 7 2	5724N	15101W	18731.9 32256.3 43000.4	49.	0.500	32554.	79.11	0.77	46.	39600.
USSR	M	79 712	5703N	15140W	18720.4 32396.0 43043.8	63.	0.333	26278.	78.63	0.88	122.	26400.
USSR	M	79 7 4	5722N	15056W	18731.2 32256.2 43000.0	55.	0.750	58661.	78.22	0.76	739.	59400.
JAPAN	L	79 714	5615N	15315W	18680.6 32733.2 43583.3	66.	1.000	78770.	76.77	0.75	230.	77000.
JAPAN	L	79 516	5651N	15141W	18711.2 32446.7 43092.3	153.	0.583	41478.	71.10	1.31	2522.	44000.
JAPAN	L	79 9 7	5632N	15228W	18697.8 32592.1 43307.0	115.	1.500	103161.	68.77	1.49	2435.	105600.
JAPAN	L	79 715	5616N	15313W	18681.6 32726.1 43569.6	77.	1.250	85773.	68.62	0.77	27.	95800.
JAPAN	L	79 928	5613N	15317W	18676.6 32744.4 43601.3	139.	0.750	49802.	66.40	1.35	5198.	55000.
JAPAN	L	79 925	5637N	15194W	18701.3 32521.7 43181.8	108.	1.000	66294.	66.29	1.17	146.	66400.
JAPAN	M	79 926	5751N	14951W	18742.8 32035.2 43037.2	126.	0.833	53061.	63.67	1.15	3479.	56540.
JAPAN	M	79 9 2	5608N	15325W	18673.3 32777.1 43660.5	107.	1.667	103400.	62.04	0.69	0.	103400.
JAPAN	L	79 7 3	5609N	15337W	18673.3 32792.7 43714.6	89.	1.417	67622.	61.85	0.83	378.	88000.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-5 (continued). WALLEYE POLLOCK, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	79 817	5702N	15135W	18720.0	32393.2	43042.5	60.	0.417	25608.	61.46	0.87	792.	26400.
JAPAN	L	79 7 1	5617N	15307W	16683.0	32712.5	43537.8	98.	0.583	35200.	60.34	1.06	0.	35200.
JAPAN	L	79 7 6	5610N	15322W	16675.5	32764.3	43637.8	92.	0.917	54559.	59.52	1.15	441.	55000.
USSR	M	79 7 7	5731N	15029W	18735.4	32186.6	43006.2	60.	0.917	51652.	56.57	0.81	948.	52800.
JAPAN	L	79 9 8	5628N	15236W	16694.2	32620.3	43356.3	132.	0.833	46249.	55.50	1.27	2151.	48400.
JAPAN	L	79 7 4	5609N	15336W	16673.4	32751.1	43709.6	79.	1.667	92112.	55.27	0.92	288.	92400.
JAPAN	L	79 712	5616N	15312W	16681.7	32724.5	43565.0	66.	0.500	26393.	52.79	0.87	7.	26400.
USSR	M	79 711	5702N	15140W	18715.9	32400.1	43047.4	46.	0.250	13147.	52.59	0.86	53.	13200.
USSR	M	79 7 2	5613N	14808W	18746.1	31857.2	43076.2	73.	0.250	12712.	50.85	0.77	488.	13200.
JAPAN	L	79 718	5618N	15318W	16683.1	32726.1	43564.2	82.	1.750	87993.	50.28	0.83	7.	88000.
JAPAN	M	79 713	5701N	15138W	18715.3	32401.5	43048.9	60.	1.667	83505.	50.10	0.84	95.	83600.
USSR	M	79 7 3	5728N	15048W	18733.9	32222.9	43003.0	57.	1.167	58325.	49.99	0.73	1075.	59400.
JAPAN	M	79 714	5702N	15137W	18715.9	32396.0	43044.4	56.	1.167	57499.	49.29	0.92	141.	57640.
JAPAN	L	79 915	5632N	15203W	18695.2	32554.8	43228.7	109.	1.000	48022.	48.02	1.22	378.	48400.
USSR	M	79 812	5705N	15142W	18721.5	32390.5	43038.7	63.	0.667	31650.	47.47	0.90	1350.	33600.
USSR	M	80 527	5820N	14840W	18745.0	31860.9	43099.9	104.	1.000	47102.	47.10	1.14	11198.	50300.
JAPAN	L	79 9 4	5617N	15308W	16682.9	32714.1	43542.3	105.	0.833	37400.	44.88	0.96	0.	37400.
USSR	M	79 815	5702N	15136W	18715.9	32397.4	43045.4	49.	0.667	28304.	42.46	0.82	4696.	33000.
JAPAN	M	79 5 6	5631N	15236W	16686.6	32608.3	43341.5	100.	1.333	56328.	42.25	1.22	5272.	61600.
USSR	M	79 7 1	5728N	15042W	18734.0	32215.4	43003.1	57.	1.000	42044.	42.04	0.77	1956.	44000.
JAPAN	L	79 825	5633N	15229W	16688.5	32589.6	43305.6	101.	1.750	66000.	37.71	0.99	0.	66000.
JAPAN	L	79 723	5809N	15024W	18746.7	32018.8	43102.4	71.	2.250	84563.	37.58	0.68	137.	84700.
USSR	M	79 816	5703N	15130W	18720.7	32382.2	43035.2	74.	0.583	21557.	36.95	0.90	4843.	26400.
JAPAN	L	79 830	5632N	15225W	16697.9	32587.6	43296.5	113.	1.083	35192.	36.18	1.10	402.	39600.
JAPAN	L	80 7 9	5640N	15150W	18705.6	32503.9	43158.4	131.	4.000	143980.	35.99	0.96	120.	144100.
JAPAN	L	79 720	5609N	15325W	16674.3	32773.1	43556.3	55.	1.167	41962.	35.97	0.74	2038.	44000.
JAPAN	L	79 917	5650N	15142W	18712.5	32452.1	43082.2	115.	1.667	59809.	35.89	1.37	6191.	66000.
JAPAN	L	79 828	5615N	15258W	16682.2	32658.3	43466.4	94.	0.667	23814.	35.72	1.06	606.	24420.
USSR	M	79 7 3	5724N	15052W	18732.1	32244.7	43000.5	63.	1.500	53395.	35.60	0.81	1605.	55000.
JAPAN	L	79 911	5632N	15225W	18697.9	32587.6	43296.5	121.	0.750	26400.	35.20	1.11	0.	26400.
JAPAN	M	80 519	5856N	14803W	18750.8	31687.8	43294.2	120.	1.500	51876.	34.58	1.03	3124.	55000.
USSR	M	79 7 4	5716N	15111W	18726.0	32302.8	43062.6	55.	1.583	54319.	34.31	0.79	681.	55000.
JAPAN	L	79 7 3	5610N	15347W	16673.4	32805.3	43761.0	92.	2.750	92019.	33.46	0.82	381.	92400.
USSR	M	79 710	5639N	15130W	18718.2	32409.8	43056.3	52.	0.500	16565.	33.13	0.81	1035.	17600.
JAPAN	M	79 714	5704N	15139W	18721.0	32390.5	43039.4	59.	2.333	76800.	32.91	0.92	200.	77000.
USSR	M	79 7 1	5717N	15050W	18720.9	32279.0	43000.9	68.	1.000	32605.	52.69	0.86	315.	33000.
JAPAN	L	79 910	5632N	15222W	18697.8	32582.1	43307.0	114.	0.667	21730.	32.59	1.31	270.	22000.
JAPAN	M	79 713	5702N	15136W	18720.0	32394.6	43043.5	59.	1.333	42846.	32.13	0.90	2034.	44280.
JAPAN	M	79 711	5703N	15139W	18720.5	32394.6	43042.8	51.	0.833	26092.	31.31	0.97	746.	26840.
USSR	M	79 821	5702N	15131W	18720.1	32387.7	43039.1	90.	0.500	15043.	30.09	0.67	2557.	17600.
USSR	M	79 725	5703N	15145W	18720.3	32402.9	43049.2	52.	0.750	22425.	29.90	0.95	3975.	26400.

** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-5 (continued). WALLYE POLLOCK, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YEAR			7X	7Y	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
JAPAN	S	80 7 6	5658N	15132W	18717.8	32405.5	100.	0.417	12444.	29.87	0.95	2076.	14520.
JAPAN	L	79 9 1	5616N	15122W	18675.5	32764.3	87.	1.333	39588.	29.69	0.90	12.	39600.
JAPAN	S	80 7 22	5616N	15152W	18683.2	32692.8	104.	1.317	38222.	29.03	0.94	278.	38500.
JAPAN	L	79 7 10	5631N	15106W	18698.2	32563.2	109.	1.500	43502.	29.00	0.92	498.	44000.
JAPAN	L	79 9 16	5652N	15137W	18714.0	32437.0	129.	1.750	50600.	28.91	1.20	0.	50600.
JAPAN	L	79 9 7	5631N	15119W	18697.5	32582.6	82.	1.667	48123.	28.87	1.16	277.	48400.
JAPAN	L	79 9 28	5609N	15135W	18674.3	32773.1	119.	1.167	33350.	28.76	1.37	3850.	37400.
USSR	M	79 7 17	5703N	15143W	18720.3	32400.2	49.	0.250	6907.	27.63	1.00	2993.	9900.
JAPAN	L	79 9 3	5603N	15314W	18667.1	32823.0	125.	0.667	18307.	27.46	1.32	1493.	19800.
JAPAN	M	79 7 15	5616N	15314W	18081.6	32727.7	51.	1.667	45001.	27.00	0.97	99.	45100.
USSR	M	79 8 14	5702N	15138W	18715.9	32397.4	49.	0.833	22347.	26.82	0.81	10653.	33000.
JAPAN	L	79 9 11	5631N	15234W	18696.7	32605.2	112.	1.833	46061.	25.12	1.11	15339.	61600.
JAPAN	L	79 8 1	5604N	15423W	18664.3	32889.9	97.	2.667	66203.	24.83	1.20	897.	67100.
JAPAN	L	79 7 29	5608N	15012W	18746.6	32009.6	109.	4.000	99220.	24.81	0.75	0.	99220.
JAPAN	S	79 9 27	5629N	15114W	18698.3	32583.1	134.	0.917	21626.	23.59	1.36	374.	22000.
USSR	M	79 8 2	5641N	15244W	18703.7	32579.7	98.	0.333	7826.	23.48	1.58	974.	8600.
USSR	M	79 8 11	5703N	15144W	18720.3	32401.6	55.	0.500	11617.	23.23	0.89	1583.	13200.
USSR	M	79 8 13	5702N	15138W	18719.9	32397.4	52.	0.250	5782.	23.13	0.90	27218.	33000.
JAPAN	L	79 7 25	5809N	15018W	18746.8	32012.1	75.	2.333	53365.	22.87	0.74	95.	53460.
JAPAN	L	79 9 29	5609N	15340W	18673.0	32797.7	137.	1.167	26592.	22.79	1.47	6408.	33000.
JAPAN	M	79 7 24	5613N	15345W	18676.5	32790.0	96.	1.167	25949.	22.24	0.95	11.	25960.
JAPAN	L	80 7 13	5621N	15236W	18688.5	32648.2	131.	2.833	61528.	21.92	1.18	4641.	52140.
JAPAN	L	79 9 17	5651N	15141W	18713.2	32446.7	116.	1.667	35783.	21.92	0.90	72.	61600.
JAPAN	S	80 7 14	5633N	15225W	18698.7	32583.6	103.	1.250	26773.	21.42	0.79	2047.	44000.
USSR	M	79 7 2	5716N	15105W	18728.2	32294.9	49.	1.500	32095.	21.40	0.75	905.	33000.
USSR	M	79 8 17	5702N	15135W	18720.6	32389.1	66.	1.167	24720.	21.19	0.98	1680.	26400.
USSR	M	79 8 13	5702N	15138W	18715.9	32397.4	52.	0.833	17652.	21.18	0.90	4348.	22000.
USSR	M	79 8 1	5702N	15140W	18719.9	32400.1	59.	0.583	12270.	21.03	0.95	938.	13200.
JAPAN	L	79 9 8	5632N	15223W	18658.1	32584.6	134.	0.633	13140.	20.75	1.53	60.	13200.
JAPAN	L	79 7 7	5609N	15323W	18674.4	32789.9	98.	1.917	39149.	20.43	1.19	451.	39600.
JAPAN	L	79 9 2	5610N	15325W	18675.2	32769.2	119.	1.833	37400.	20.40	0.92	0.	37400.
JAPAN	L	79 9 20	5639N	15152W	18704.8	32510.8	114.	2.000	39076.	19.54	1.15	524.	39600.
JAPAN	L	79 9 20	5654N	15135W	18715.3	32426.0	115.	2.000	38958.	19.48	1.37	642.	39600.
JAPAN	S	80 7 5	5700N	15132W	18719.0	32397.3	89.	0.833	16022.	19.23	1.05	478.	16500.
USSR	M	79 7 16	5701N	15141W	18715.2	32405.7	65.	0.167	3180.	19.08	0.92	1220.	4400.
JAPAN	M	79 7 7	5618N	15047W	18748.3	32005.1	109.	1.333	25252.	18.94	1.70	8628.	33680.
JAPAN	S	80 7 4	5633N	15222W	18698.9	32579.1	93.	0.917	16451.	17.95	0.90	489.	16940.
JAPAN	S	80 9 27	5802N	14851W	18745.8	31946.2	169.	2.500	44810.	17.92	1.14	7990.	52800.
JAPAN	S	79 9 28	5618N	15239W	18685.8	32664.7	153.	1.167	20709.	17.75	1.48	191.	20900.
JAPAN	L	79 9 4	5612N	15318W	18677.6	32749.9	129.	1.020	22000.	17.60	1.02	0.	22000.
JAPAN	S	79 9 19	5616N	15308W	18682.0	32718.1	142.	1.083	12874.	17.42	1.76	926.	19800.
JAPAN	M	79 7 10	5650N	15137W	18712.7	32445.1	54.	1.833	31874.	17.39	0.89	26.	31900.
JAPAN	M	79 9 23	5751N	14931W	18742.8	32035.2	137.	1.667	28908.	17.35	1.17	1892.	30800.
JAPAN	S	80 7 13	5633N	15226W	18698.6	32585.1	94.	0.667	11451.	17.16	0.81	645.	12100.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-5 (continued). WALLEYE POLLOCK, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE YRMMDD	LAT	LONG	APPROX 7X	LGRAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	79 914	5556N	15336W	18669.4	32841.8	43763.1	131.	0.833	14223.	17.07	1.55	77.	14300.
JAPAN	L	60 7 2	5622N	15234W	18711.8	32519.0	43228.1	84.	1.667	28404.	17.04	1.13	416.	28620.
USSR	M	79 814	5702N	15139W	18715.9	32398.8	43046.4	52.	0.167	2840.	17.04	0.88	5960.	8800.
USSR	S	79 920	5616N	15308W	18682.0	32718.1	43546.8	154.	1.000	16737.	16.74	0.84	863.	17600.
JAPAN	S	80 7 6	5659N	15132W	18716.4	32401.4	43050.0	85.	0.667	11025.	16.54	1.06	195.	11220.
JAPAN	L	79 720	5612N	15318W	18677.6	32745.9	43610.4	97.	1.333	21985.	16.49	0.83	15.	22000.
JAPAN	L	79 914	5632N	15214W	18698.2	32581.6	43283.0	147.	1.750	28198.	16.11	1.17	4802.	33000.
JAPAN	L	79 519	5630N	15234W	18695.9	32609.3	43338.9	131.	1.667	26764.	16.06	1.17	1836.	28600.
JAPAN	M	79 7 6	5651N	15139W	18713.3	32443.8	43089.3	118.	1.667	26501.	15.90	1.58	3199.	29700.
JAPAN	S	79 826	5633N	15159W	18700.1	32545.0	43213.2	126.	0.433	6700.	15.46	1.32	340.	7040.
JAPAN	L	79 928	5613N	15317W	18678.6	32744.4	43501.3	118.	1.417	21885.	15.45	1.35	2315.	24200.
JAPAN	L	79 830	5632N	15234W	18697.4	32601.2	43329.0	104.	1.583	23739.	14.99	1.22	2661.	26400.
JAPAN	M	80 519	5601N	14757W	18756.7	31650.1	43211.4	115.	1.333	19781.	14.84	1.08	1999.	21780.
JAPAN	S	79 730	5657N	15134W	18717.1	32412.4	43059.2	98.	0.750	11043.	14.72	1.21	1057.	12100.
USSR	M	79 730	5702N	15135W	18720.0	32393.2	43042.5	71.	0.750	10868.	14.49	0.88	132.	11000.
JAPAN	L	79 9 9	5632N	15228W	18697.8	32592.1	43502.0	101.	2.333	33605.	14.40	1.30	3595.	35200.
USSR	M	79 814	5703N	15138W	18720.5	32393.2	43041.9	46.	0.667	9515.	14.27	0.91	1485.	11000.
JAPAN	L	79 922	5655N	15134W	18715.9	32420.6	43066.7	108.	1.750	24678.	14.10	1.19	1722.	26400.
JAPAN	M	79 7 8	5817N	14836W	18746.6	31689.2	43090.9	105.	1.000	14080.	14.08	0.79	0.	14080.
USSR	M	79 7 7	5732N	15044W	18735.6	32201.1	43027.3	57.	2.197	30424.	14.04	0.79	376.	30600.
MEXICO	S	79 715	5646N	15154W	18709.4	32485.5	43138.9	126.	2.033	29086.	13.95	1.45	9214.	38280.
JAPAN	L	79 926	5649N	15143W	18711.9	32457.6	43104.1	118.	1.083	15080.	13.92	1.09	320.	15400.
JAPAN	J	80 8 9	5534N	15340W	18658.0	32856.2	43790.5	107.	1.083	15027.	13.87	1.18	1473.	16500.
JAPAN	L	79 9 9	5617N	15344W	18683.2	32797.8	43324.4	131.	2.833	38508.	13.59	1.08	3292.	41800.
JAPAN	S	79 921	5617N	15303W	18683.2	32706.2	43520.0	125.	1.267	16981.	13.39	1.78	1739.	18700.
USSR	M	79 811	5703N	15141W	18720.4	32397.4	43044.8	55.	0.500	6603.	13.21	0.90	2197.	8600.
JAPAN	M	60 712	5633N	15226W	18698.6	32585.1	43295.0	100.	0.583	7655.	13.12	0.95	485.	8140.
USSR	M	79 814	5705N	15142W	18721.5	32390.5	43038.7	68.	1.500	19683.	13.12	0.93	2315.	22000.
JAPAN	L	79 926	5653N	15137W	18714.6	32432.9	43078.3	106.	0.500	6547.	13.09	1.18	51.	6500.
JAPAN	L	80 711	5640N	15150W	18705.6	32503.9	43158.4	131.	2.000	25887.	12.94	0.98	73.	25760.
MEXICO	S	79 7 5	5649N	15141W	18711.9	32454.8	43100.8	126.	0.917	11628.	12.69	0.93	5092.	16720.
JAPAN	L	79 921	5704N	15128W	18721.4	32375.4	43030.8	102.	1.583	19873.	12.55	1.34	1247.	21120.
JAPAN	M	79 714	5700N	15139W	18716.7	32407.0	43053.7	50.	1.500	18888.	12.46	0.99	12.	18700.
JAPAN	L	79 7 8	5616N	15245W	18693.7	32681.9	43449.3	128.	3.500	43503.	12.43	1.15	497.	44000.
JAPAN	L	79 723	5613N	15317W	18672.6	32744.4	43601.3	97.	2.583	31652.	12.33	0.80	1148.	33000.
JAPAN	S	80 727	5632N	15227W	18697.8	32590.6	43303.5	109.	1.000	12083.	12.08	1.36	237.	12320.
USSR	M	79 731	5705N	15143W	18720.9	32396.0	43043.3	60.	0.833	10068.	12.02	0.69	932.	11000.
JAPAN	L	79 914	5632N	15226W	18697.9	32589.1	43030.1	109.	1.000	25135.	12.00	0.79	1265.	26400.
USSR	M	79 7 7	5729N	15038W	18734.5	32206.2	43084.1	57.	1.000	11947.	11.95	1.19	1253.	13200.
JAPAN	L	79 919	5631N	15222W	18697.3	32587.1	43291.3	116.	2.000	23647.	11.82	1.14	2753.	26400.
JAPAN	L	79 715	5612N	15353W	18674.9	32607.2	43784.5	90.	2.063	24627.	11.82	1.09	1773.	26400.
JAPAN	S	79 923	5614N	15246W	18681.8	32621.8	43462.7	158.	1.083	12642.	11.67	1.69	558.	13200.
JAPAN	L	79 913	5609N	15341W	18673.0	32799.3	43734.5	142.	1.500	17463.	11.64	1.12	137.	17600.
JAPAN	L	79 713	5611N	15352W	18674.0	32809.6	43783.1	86.	2.833	32959.	11.63	1.02	2241.	35200.
JAPAN	L	79 910	5632N	15223W	18698.1	32584.6	43285.7	101.	0.750	8595.	11.46	1.10	205.	8800.

*** NCIE *** THE ACCURACY OF POSITION AND LGRAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-5 (continued). WALLEYE POLLOCK, JULY-SEPTEMBER 1979-80

COUNTRY	VEHICLE CLASS	DATE YRMO	LAT	LONG	APPROX LORAN-C	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FSH	BYCATCH (LBS)	TOTAL CATCH (LBS)
			7X	7Y	7Z							
MEXICO	S	79 7 1	5659N	15135W	18718.3	32405.6	43053.0	68.	1.000	0.91	2420.	11860.
JAPAN	M	79 7 6	5646N	15146W	18709.8	32474.0	43122.8	115.	2.667	1.55	2188.	32340.
JAPAN	L	79 7 24	5809N	15024W	18746.7	32018.8	43102.4	82.	3.917	0.75	28.	44000.
JAPAN	L	79 9 15	5632N	15222W	18698.1	32583.1	43286.3	148.	2.500	1.19	2692.	30800.
JAPAN	L	80 7 9	5650N	15144W	18712.5	32455.0	43101.5	87.	2.833	1.10	1506.	31000.
JAPAN	L	79 7 12	5611N	15351W	18674.1	32807.9	43777.9	78.	3.000	1.08	1942.	35200.
JAPAN	L	79 7 2	5611N	15329W	18675.8	32771.7	43667.0	63.	1.167	0.70	317.	13200.
JAPAN	S	80 7 1	5632N	15222W	18698.1	32583.1	43286.3	83.	0.500	0.97	1085.	8600.
USSR	M	79 7 3	5726N	15048W	18733.0	32231.3	43001.6	57.	0.750	0.79	593.	8800.
JAPAN	S	79 9 28	5631N	15226W	18697.1	32593.1	43305.0	142.	1.083	1.37	369.	12100.
JAPAN	L	80 7 10	5636N	15155W	18702.5	32527.2	43188.8	122.	3.333	0.90	21.	36080.
MEXICO	S	79 7 16	5658N	15146W	18717.3	32425.0	43070.4	85.	1.333	1.53	1673.	16060.
MEXICO	S	79 7 5	5708N	15125W	18723.6	32354.7	43018.7	134.	3.500	1.04	4943.	42460.
JAPAN	S	80 7 19	5633N	15226W	18698.6	32585.1	43295.0	101.	0.583	0.96	357.	6600.
JAPAN	S	80 7 3	5634N	15228W	18695.3	32584.1	43297.0	103.	0.750	0.90	4131.	12100.
JAPAN	L	79 8 1	5604N	15423W	18664.3	32889.9	43975.0	93.	1.667	1.05	0.	17600.
JAPAN	L	79 9 11	5632N	15229W	18697.7	32593.7	43310.6	118.	0.750	1.27	935.	8800.
MEXICO	S	79 7 13	5646N	15144W	18705.9	32471.2	43119.1	126.	0.667	1.60	2712.	9680.
JAPAN	L	79 6 4	5600N	15420W	18664.4	32900.6	43972.4	105.	3.333	1.33	0.	34540.
JAPAN	L	79 9 26	5641N	15149W	18706.3	32498.5	43151.7	145.	1.167	1.47	1273.	13200.
JAPAN	S	79 7 29	5637N	15153W	18701.3	32520.3	43179.3	114.	0.667	1.41	3766.	10560.
JAPAN	S	79 9 18	5610N	15321W	18675.5	32762.7	43633.1	118.	1.267	1.57	367.	13200.
JAPAN	L	79 7 6	5610N	15322W	18675.5	32764.3	43637.8	93.	1.333	0.80	70.	13200.
JAPAN	S	79 7 31	5646N	15147W	18705.7	32475.5	43124.7	115.	0.950	1.11	561.	9900.
JAPAN	S	79 9 11	5634N	15154W	18701.1	32533.7	43195.9	135.	0.917	1.44	913.	9900.
JAPAN	L	79 7 25	5809N	15019W	18746.7	32013.2	43099.0	80.	3.833	0.77	0.	37400.
JAPAN	S	79 9 10	5632N	15229W	18697.7	32593.7	43310.6	138.	1.167	1.60	897.	12100.
USSR	M	79 8 13	5704N	15141W	18721.0	32393.2	43041.3	57.	1.167	0.92	2058.	13200.
JAPAN	L	79 7 29	5819N	14926W	18746.7	31912.5	43111.1	91.	1.333	0.90	117.	12760.
JAPAN	L	79 8 2	5604N	15423W	18664.3	32889.9	43975.0	94.	3.167	1.25	340.	30360.
JAPAN	S	80 7 13	5633N	15225W	18698.7	32583.6	43291.5	107.	0.750	0.93	594.	7700.
MEXICO	S	79 7 13	5646N	15147W	18705.7	32475.5	43124.7	124.	0.833	1.57	2943.	10780.
JAPAN	S	79 7 31	5650N	15143W	18712.5	32453.6	43099.0	98.	1.583	1.19	1702.	16500.
JAPAN	L	80 7 8	5645N	15149W	18705.0	32482.4	43133.1	109.	2.500	1.03	322.	23540.
JAPAN	S	79 9 7	5600N	15330W	18665.1	32816.5	43718.0	126.	1.133	1.33	50.	10560.
JAPAN	L	80 7 9	5640N	15151W	18705.5	32505.4	43160.6	104.	2.667	0.92	3934.	28600.
JAPAN	M	79 7 4	5657N	15131W	18717.2	32408.2	43056.0	120.	1.167	1.80	3314.	14080.
JAPAN	L	80 7 3	5701N	15137W	18719.4	32400.1	43047.9	60.	0.167	0.93	95928.	97460.
JAPAN	L	79 9 13	5609N	15327W	18674.1	32776.4	43665.8	102.	1.333	0.97	1036.	13200.
JAPAN	S	79 9 11	5632N	15231W	18697.6	32596.7	43317.9	137.	1.750	1.31	606.	16500.
JAPAN	S	79 9 29	5615N	15243W	18682.2	32682.7	43446.2	164.	1.167	1.42	515.	11000.
JAPAN	L	79 7 19	5615N	15253W	18682.2	32698.3	43486.4	95.	1.917	0.87	380.	17000.
JAPAN	M	80 9 2	5707N	15119W	18723.3	32350.8	43018.4	131.	1.167	2.16	3871.	14300.
JAPAN	L	79 7 17	5618N	15308W	18683.8	32710.1	43537.6	62.	2.000	0.82	18.	17600.
JAPAN	L	79 8 1	5603N	15428W	18662.8	32902.5	44006.0	116.	3.633	1.09	0.	33660.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-5 (continued). WALLEYE POLLOCK, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	79 719	5614N	15316W	18675.6 32738.8 43592.3	93	0.750	6556.	8.74	0.82	44.	6600.
JAPAN	S	79 9 7	5632N	15231W	18697.6 32596.7 43317.9	130	1.517	13199.	8.70	1.57	1.	13200.
JAPAN	S	80 716	5629N	15215W	18698.2 32584.6 43278.6	107	2.250	19482.	8.66	0.90	9558.	29040.
JAPAN	S	80 723	5616N	15306W	18682.1 32714.9 43537.8	109	1.500	12680.	8.45	1.08	4920.	17600.
JAPAN	L	79 718	5610N	15321W	18675.5 32762.7 43633.1	68	2.083	17593.	8.44	0.81	7.	17600.
JAPAN	L	79 713	5611N	15345W	18674.6 32798.0 43746.9	82	3.000	25280.	8.43	1.29	1120.	26400.
JAPAN	L	79 722	5610N	15346W	18671.5 32803.6 43753.9	98	1.083	9094.	8.39	1.17	1906.	11000.
JAPAN	L	80 7 6	5639N	15129W	18705.9 32477.8 43123.8	106	2.167	18148.	8.38	1.18	3052.	22000.
JAPAN	L	80 7 3	5654N	15227W	18713.4 32500.4 43191.2	86	2.000	16673.	8.34	1.34	487.	17160.
JAPAN	S	79 923	5614N	15251W	18681.5 32659.1 43482.9	155	1.167	9606.	8.23	1.54	294.	9900.
JAPAN	S	79 727	5659N	15135W	18718.4 32401.4 43050.0	98	1.500	12266.	8.18	1.25	936.	13200.
JAPAN	S	79 922	5611N	15318W	18676.7 32753.9 43614.7	137	1.333	10878.	8.16	1.29	122.	11000.
MEXICO	S	79 731	5703N	15140W	18724.4 32396.0 43043.8	60	1.333	10798.	8.10	1.41	4602.	15400.
JAPAN	M	79 7 5	5657N	15131W	18717.2 32408.2 43056.0	115	1.667	13485.	8.09	1.79	8735.	22220.
JAPAN	L	79 829	5631N	15227W	18697.1 32594.7 43308.5	156	1.417	11382.	8.03	1.31	1818.	13200.
JAPAN	L	79 921	5659N	15132W	18704.8 32510.8 43167.6	116	1.083	8614.	7.95	1.17	186.	8800.
JAPAN	S	79 915	5632N	15224W	18696.0 32586.1 43293.1	147	1.500	11840.	7.89	1.53	260.	12100.
JAPAN	S	79 922	5617N	15301W	18683.4 32703.0 43511.2	150	1.617	12748.	7.89	1.78	452.	13200.
JAPAN	L	79 721	5601N	15425W	18660.9 32907.0 44001.7	109	1.417	10953.	7.73	1.32	47.	11000.
JAPAN	S	80 7 2	5632N	15222W	18656.1 32583.1 43288.3	86	1.167	8951.	7.67	0.94	1169.	10120.
JAPAN	S	79 912	5632N	15222W	18698.1 32583.1 43286.3	142	1.233	9440.	7.65	1.55	460.	9900.
JAPAN	S	80 724	5655N	15338W	18659.2 32849.0 43778.8	112	0.667	5024.	7.54	1.31	47E.	5500.
JAPAN	L	79 9 6	5615N	15255W	18682.3 32696.8 43482.3	118	2.333	17430.	7.47	1.09	170.	17000.
JAPAN	L	79 723	5610N	15023W	18746.9 32613.3 43105.6	74	1.500	11000.	7.33	0.7E	C.	11000.
JAPAN	S	80 712	5634N	15229W	18699.2 32585.6 43300.6	103	1.167	8553.	7.33	0.92	2887.	11440.
JAPAN	L	80 7 1	5646N	15218W	18700.4 32520.4 43202.3	80	3.167	23051.	7.28	1.08	1149.	24200.
USA	M	79 929	5638N	15151W	18704.1 32513.4 43170.0	101	2.500	18105.	7.24	1.19	7635.	25740.
JAPAN	L	79 710	5644N	15149W	18708.3 32486.4 43137.8	98	1.167	8303.	7.12	1.12	497.	8800.
JAPAN	S	79 923	5615N	15243W	18682.7 32718.9 43555.9	139	1.417	10044.	7.09	1.84	956.	11000.
JAPAN	M	79 7 4	5709N	15243W	18682.9 32682.7 43446.2	148	1.667	11690.	7.01	1.53	410.	12100.
JAPAN	L	79 7 4	5610N	15346W	18724.6 32327.8 43010.9	125	1.333	9266.	6.95	1.86	5254.	14520.
JAPAN	L	79 7 4	5610N	15346W	18673.4 32808.9 43788.2	103	2.417	16710.	6.91	1.00	890.	17600.
JAPAN	S	79 9 8	5632N	15225W	18697.9 32587.6 43298.5	131	1.800	12209.	6.78	1.42	551.	12760.
MEXICO	M	79 813	5701N	15135W	18715.4 32397.4 43046.0	66	1.250	8470.	6.78	0.91	2530.	11000.
MEXICO	S	79 7 4	5703N	15137W	18720.5 32391.9 43041.0	68	1.917	12976.	6.77	0.84	3744.	16720.
JAPAN	L	79 9 1	5607N	15329W	18672.0 32787.5 43683.8	117	3.000	20194.	6.73	1.02	706.	20900.
JAPAN	L	80 7 7	5658N	15223W	18705.6 32516.5 43201.7	89	3.000	20186.	6.73	1.17	1814.	22000.
JAPAN	L	79 7 9	5617N	15310W	18682.7 32717.3 43591.4	98	4.333	32476.	6.72	1.25	2724.	35200.
JAPAN	M	80 5 1	5603N	14744W	18750.6 31630.6 43211.9	159	1.500	10607.	6.67	1.27	6493.	16500.
JAPAN	L	80 7 7	5649N	15223W	18710.2 32515.3 43203.2	89	2.333	15525.	6.65	1.24	1635.	17160.
JAPAN	S	79 930	5617N	15234W	18685.0 32667.1 43447.4	155	1.083	7170.	6.62	1.41	530.	7700.
JAPAN	L	79 722	5609N	15348W	18676.4 32810.9 43770.1	110	2.667	17600.	6.60	0.93	0.	17600.
JAPAN	S	80 712	5634N	15229W	18699.2 32585.6 43300.6	80	1.167	7625.	6.54	0.95	1615.	9240.
JAPAN	S	79 813	5657N	15132W	18717.2 32409.6 43037.1	109	1.167	7548.	6.47	1.04	152.	7700.
MEXICO	S	79 731	5704N	15139W	18721.0 32396.5 43035.4	62	1.250	8086.	6.47	1.27	7314.	15400.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-6. WALLEYE POLLOCK, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	7X	7Y	7Z	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	7910 6	5602N	15342W	18666.0	32828.5	43767.7	85.	0.250	65973.	263.89	1.10	27.	66000.	
JAPAN	L	7910 3	5554N	15345W	18657.5	32864.6	43814.7	117.	0.833	87037.	104.44	0.99	763.	86000.	
JAPAN	M	7911 5	5634N	15154W	18701.1	32533.7	43195.9	134.	0.583	54209.	72.93	1.36	7391.	61600.	
JAPAN	L	7910 6	5602N	15341W	18674.4	32769.9	43646.8	118.	0.750	60055.	72.07	1.20	1545.	51600.	
USSR	M	791128	5618N	14837W	18748.7	31766.1	43093.7	164.	0.417	27651.	66.36	1.02	5349.	33000.	
JAPAN	L	791121	5642N	15340W	18707.0	32493.0	43144.9	146.	0.833	51386.	61.66	1.11	3614.	50000.	
JAPAN	L	791113	5554N	15340W	18658.0	32856.2	43790.5	120.	0.607	39337.	59.01	1.08	263.	39600.	
USSR	M	791127	5615N	14846W	18748.2	31887.6	43087.7	164.	0.917	52393.	57.16	0.96	2607.	55000.	
JAPAN	L	791116	5555N	15336W	18659.4	32045.7	43767.3	116.	1.000	51848.	51.85	1.00	952.	52800.	
JAPAN	S	801120	5513N	15634W	18579.8	33326.2	44866.0	159.	1.417	71688.	50.60	1.32	252.	71940.	
JAPAN	L	791010	5608N	15335W	18672.5	32793.4	43708.8	130.	1.583	73084.	46.16	1.16	3916.	77000.	
POLAND	M	791115	5533N	15616W	18612.9	33217.0	44713.6	137.	1.750	75486.	43.13	1.51	194.	75680.	
JAPAN	M	7911 7	5631N	15201W	18698.5	32555.9	43228.2	148.	1.167	48369.	41.46	1.27	6631.	55000.	
JAPAN	L	7910 4	5544N	15347W	18657.3	32867.9	43024.3	125.	0.417	17194.	41.26	0.99	406.	17600.	
USSR	M	801015	5643N	15220W	18706.2	32535.6	43224.1	71.	1.167	47671.	40.86	1.33	10849.	58520.	
JAPAN	L	7910 2	5606N	15334W	18672.6	32791.6	43703.9	114.	0.583	22835.	39.15	1.33	1365.	24200.	
JAPAN	M	7911 6	5632N	15159W	18695.4	32548.9	43218.0	148.	0.833	31962.	38.35	1.32	3238.	35200.	
JAPAN	L	7910 2	5607N	15332W	18671.8	32792.4	43698.3	124.	1.063	37030.	34.18	1.35	2570.	39600.	
USSR	M	791130	5618N	14834W	18748.7	31803.0	43093.1	191.	0.667	21833.	32.75	0.93	1970.	23760.	
JAPAN	L	791112	5554N	15340W	18658.0	32856.2	43790.5	110.	1.000	32252.	32.25	0.95	748.	33000.	
JAPAN	M	8011 6	5610N	15653W	18571.1	33374.6	44983.8	87.	0.333	10374.	31.12	1.62	1066.	11440.	
JAPAN	L	791122	5612N	15201W	18658.3	32551.9	43223.3	124.	0.750	32350.	31.00	1.26	950.	24200.	
JAPAN	M	8011 7	5509N	15649W	18570.3	33370.2	44962.5	104.	0.583	17527.	30.05	1.66	513.	18040.	
JAPAN	M	8011 3	5739N	14958W	18738.8	32115.9	43016.8	148.	0.500	14663.	29.33	1.12	517.	15180.	
JAPAN	M	8011 2	5736N	15001W	18738.4	32123.6	43015.4	153.	0.500	14506.	29.01	1.21	894.	15400.	
JAPAN	L	791119	5609N	15322W	18674.5	32768.2	43642.1	142.	1.833	52351.	28.55	1.02	449.	52800.	
JAPAN	L	791114	5554N	15340W	18658.0	32856.2	43790.5	124.	1.167	33266.	28.51	1.07	1934.	35200.	
JAPAN	L	7910 5	5607N	15331W	18671.9	32790.8	43693.5	131.	2.667	74581.	27.97	1.37	2415.	77000.	
JAPAN	L	791117	5555N	15336W	18659.4	32845.7	43767.3	120.	1.167	30417.	26.07	1.00	2583.	33000.	
JAPAN	M	8011 5	5537N	15353W	18659.8	32866.4	43042.4	134.	0.500	13018.	26.04	1.29	1282.	14300.	
JAPAN	S	8011 1	5506N	15708W	18561.2	33419.0	45080.4	104.	2.000	51031.	25.82	1.90	3369.	55000.	
JAPAN	M	8011 9	5456N	15723W	18540.1	33484.3	45188.5	90.	1.063	27876.	25.73	1.93	2924.	30200.	
POLAND	M	791115	5539N	15623W	18620.3	33207.5	44741.6	137.	1.750	43088.	25.08	1.34	112.	44000.	
JAPAN	M	7911 9	5632N	15158W	18699.4	32547.5	43215.5	142.	0.667	16493.	24.74	1.40	7707.	24200.	
JAPAN	M	8011 6	5512N	15644W	18576.2	33349.5	44926.6	120.	0.583	14000.	24.00	1.59	2720.	16720.	
JAPAN	S	801111	5513N	15631W	18560.4	33320.3	44848.5	161.	0.917	21291.	23.23	1.80	49.	21140.	
JAPAN	S	801116	5513N	15636W	18579.4	33330.1	44877.6	164.	1.167	26305.	22.55	1.89	95.	26400.	
JAPAN	S	801111	5513N	15641W	18578.4	33340.0	44906.8	167.	0.917	20519.	22.38	1.45	161.	20680.	
JAPAN	L	791111	5554N	15340W	18658.0	32856.2	43790.5	116.	1.063	33855.	22.02	0.91	345.	24200.	
USSR	M	801012	5642N	15239W	18704.6	32568.0	43292.8	79.	1.063	23292.	21.50	1.22	3768.	27060.	
JAPAN	M	801111	5608N	15643W	18570.0	33361.9	44929.7	134.	1.000	19482.	19.48	1.71	1638.	21120.	
JAPAN	L	7910 4	5558N	15355W	18660.7	32865.9	43848.6	109.	1.667	32416.	19.45	0.96	562.	33000.	
JAPAN	L	7910 3	5608N	15327W	18673.2	32700.3	43670.0	114.	1.750	33888.	19.36	1.29	1312.	35200.	
JAPAN	S	8011 8	5513N	15633W	18580.0	33324.2	44860.2	159.	1.083	20324.	18.76	1.65	136.	20460.	

* NOTE *** THE ACCURACY OF POSITION AND LOGAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-6 (continued). WALLEYE POLLOCK, OCTOBER-DECEMBER 1979-80

VESSEL CLASS	NATION	DATE	LAT	LONC	APPROX LORAN-C		PULSE RATE	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
					7X	7Y								
L	JAPAN	7910 7	5607N	15331W	18671.9	32790.8	43693.5	129.	1.333	24964.	18.72	1.02	1436.	26400.
M	JAPAN	7911 5	5633N	15152W	18700.2	32543.5	43210.6	142.	0.833	15259.	18.31	1.50	4541.	19600.
S	JAPAN	801111	5613N	15635W	18579.6	33328.2	44671.8	153.	1.167	20876.	17.89	1.63	24.	20900.
L	JAPAN	791111	5555N	15337W	18659.3	32847.4	43772.0	113.	0.417	7344.	17.62	1.07	356.	7700.
L	JAPAN	7910 9	5609N	15340W	18673.0	32797.7	43729.5	120.	1.500	26071.	17.36	1.10	329.	26400.
L	JAPAN	791121	5632N	15153W	18704.0	32516.3	43174.6	132.	1.000	17037.	17.04	0.82	563.	17600.
S	JAPAN	801113	5607N	15652W	18566.4	33323.3	44924.4	164.	0.917	15376.	16.77	2.13	24.	15400.
S	JAPAN	801116	5514N	15639W	18520.4	33332.4	44892.9	159.	1.500	25074.	16.72	1.43	226.	25300.
M	JAPAN	801111	5451N	15738W	18527.0	33332.1	45285.9	98.	1.000	16626.	16.63	1.58	974.	17600.
M	USSR	791126	5615N	14845W	18746.2	31866.6	43087.5	164.	0.667	10866.	16.30	0.90	2334.	13200.
M	JAPAN	7911 8	5639N	15152W	18704.8	32510.8	43167.6	142.	1.500	24114.	16.02	1.55	886.	31000.
L	JAPAN	7910 8	5609N	15338W	18673.2	32794.4	43719.5	116.	0.750	11825.	15.77	1.12	1375.	13200.
L	JAPAN	7910 2	5610N	15322W	18675.5	32754.3	43637.8	120.	1.333	20943.	15.71	1.47	1057.	22000.
M	USSR	801011	5637N	15225W	18701.7	32567.4	43271.4	87.	0.833	13086.	15.70	1.31	2314.	15400.
M	JAPAN	8011 7	5612N	15646W	18575.8	33333.5	44938.3	79.	0.667	10199.	15.30	1.33	1461.	11660.
L	JAPAN	791112	5602N	15326W	18673.2	32778.7	43665.3	153.	2.583	37376.	14.47	1.51	2224.	39600.
L	JAPAN	791120	5554N	15400W	18655.9	32889.9	43889.4	115.	1.250	16048.	14.44	1.17	652.	18700.
M	JAPAN	8011 6	5744N	14950W	18740.5	32085.9	43024.9	164.	1.167	16803.	14.40	1.28	2777.	19580.
M	JAPAN	801110	5457N	15721W	18542.4	33476.8	45174.8	85.	0.583	8238.	14.12	1.57	562.	8800.
M	JAPAN	7910 9	5602N	15332W	18672.7	32788.5	43694.1	103.	1.000	14056.	14.06	1.05	1344.	15400.
M	JAPAN	7911 5	5713N	15056W	18728.9	32295.5	43003.7	164.	1.417	19810.	13.98	1.15	8790.	28600.
M	POLAND	791114	5541W	15617W	18623.9	33188.1	44701.0	131.	2.333	32605.	13.97	1.36	395.	33000.
L	JAPAN	791113	5609N	15323W	18674.4	32769.9	43646.8	157.	2.333	32168.	13.79	1.05	832.	33000.
L	JAPAN	791116	5555N	15335W	18655.5	32844.0	43762.5	130.	1.167	16070.	13.77	0.91	1530.	17600.
L	JAPAN	791116	5554N	15341W	18657.9	32657.9	43753.3	104.	1.167	17185.	13.75	1.21	415.	17600.
L	JAPAN	7910 1	5608N	15327W	18673.2	32780.3	43670.0	137.	2.750	37529.	13.65	1.51	2071.	39600.
M	USSR	801012	5642N	15225W	18705.3	32547.1	43246.0	68.	1.633	24668.	13.46	1.33	1512.	26160.
M	JAPAN	791111	5645N	15147W	18709.1	32479.5	43129.2	113.	1.250	16509.	13.21	1.07	1091.	17600.
S	JAPAN	8011 4	5511N	15645W	18574.4	33355.1	44934.7	156.	3.667	48285.	13.17	1.83	115.	48400.
L	JAPAN	791122	5646N	15146W	18705.8	32474.0	43122.6	116.	1.333	17201.	12.90	0.83	399.	17600.
M	JAPAN	791019	5816N	14840W	18743.4	31877.3	43089.1	112.	1.500	19306.	12.87	1.15	18754.	38060.
M	POLAND	7911 8	5507N	15652W	18566.4	33383.3	44984.4	153.	3.500	43898.	12.54	2.17	102.	44000.
M	JAPAN	7911 7	5642N	15149W	18707.0	32494.5	43147.0	137.	2.083	24833.	11.92	1.32	12567.	37400.
M	USSR	801014	5638N	15226W	18702.4	32564.9	43269.8	74.	1.750	20637.	11.91	1.25	1603.	22440.
S	JAPAN	7910 2	5630N	15217W	18698.9	32583.6	43279.9	142.	1.333	15777.	11.83	1.24	1623.	17600.
M	JAPAN	8011 4	5741N	14953W	18739.5	32101.8	43019.9	150.	1.000	11666.	11.67	1.08	5274.	15940.
M	JAPAN	7911 3	5813N	14830W	18742.0	31879.4	43079.5	142.	0.583	6765.	11.60	0.98	2035.	8600.
M	POLAND	791113	5540N	15620W	18622.1	33197.8	44721.3	131.	2.250	25986.	11.55	1.43	414.	26400.
M	USSR	8010 4	5644N	15150W	18702.3	32487.8	43139.8	109.	1.583	16114.	11.44	1.21	5426.	23540.
M	JAPAN	801115	5513N	15641W	18578.4	33340.0	44906.8	159.	2.000	22786.	11.39	1.54	314.	23100.
M	USSR	801014	5638N	15153W	18704.0	32516.3	43174.6	90.	1.083	12251.	11.31	1.26	899.	21120.
L	JAPAN	7910 3	5555N	15338W	18659.2	32849.0	43776.8	109.	1.333	14637.	10.98	0.80	763.	15400.
L	JAPAN	791123	5555N	15335W	18655.5	32844.0	43762.5	130.	0.583	6240.	10.70	0.94	1460.	7700.
L	JAPAN	791122	5641N	15148W	18706.3	32497.0	43149.6	149.	1.000	10111.	10.11	0.96	889.	11000.
S	JAPAN	791012	5639N	15152W	18704.8	32510.8	43167.6	151.	0.917	9219.	10.06	1.17	681.	9900.

*** NOTE *** THE ACCUR Y OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-6 (continued). WALLEYE POLLOCK, OCTOBER-DECEMBER 1979-80

NAUJN	CLASS	DATE	LAT	LONG	APPROX	7X	7Y	7Z	DEPTH	HOURS	CATCH	THOUSAND	SIZE	BYCATCH	TOTAL
*****	*****	YMMDD	****	*****	*****	*****	*****	*****	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FTISH	(LBS)	(LBS)
POLANC	M	791114	5532N	15618W	18612.6	33220.9	43028.5	137.	1.500	15046.	10.03	1.37	134.	13180.	*****
JAPAN	M	80112	5746N	14948W	18741.2	32075.3	44725.5	159.	1.083	10734.	9.91	1.44	4666.	13400.	*****
USSR	M	80113	5811N	15151W	18706.9	32497.3	43151.2	131.	1.083	10519.	9.71	1.29	3561.	14080.	*****
JAPAN	S	801114	5513N	15642W	18578.2	33342.0	44912.7	153.	2.000	19304.	9.65	1.61	496.	19300.	*****
JAPAN	M	801111	5458N	15721W	18544.2	33473.3	45172.6	87.	0.833	7978.	9.57	1.36	1482.	9460.	*****
JAPAN	M	80114	5740N	14956W	18735.2	32109.5	43018.3	156.	1.000	9557.	9.57	1.26	3653.	13420.	*****
JAPAN	M	80112	5743N	14951W	18740.2	32091.2	43023.2	159.	1.000	9553.	9.55	1.43	7167.	16720.	*****
JAPAN	S	80119	5512N	15628W	18575.4	33318.1	44833.5	156.	2.000	18055.	9.43	1.63	65.	18920.	*****
POLANC	M	791111	5528N	15620W	18605.1	33243.6	44749.0	118.	1.417	13323.	9.40	1.24	97.	13420.	*****
JAPAN	M	79103	5635N	15201W	18701.5	32539.9	43208.7	142.	0.667	6252.	9.38	1.48	348.	6600.	*****
POLANC	M	791112	5540N	15627W	18621.1	33211.3	44763.5	137.	2.333	21587.	9.25	1.30	413.	22000.	*****
USSR	M	80104	5649N	15147W	18711.7	32463.3	43111.1	120.	1.833	16939.	9.24	1.24	6601.	23540.	*****
USSR	M	801011	5641N	15225W	18704.6	32551.2	43251.1	68.	2.083	19141.	9.19	1.30	5059.	24200.	*****
POLANC	M	791113	5540N	15624W	18621.6	33205.5	44745.4	131.	2.667	23815.	8.93	1.38	385.	24200.	*****
USSR	M	801013	5642N	15220W	18705.5	32539.7	43229.2	71.	1.000	8881.	8.88	1.28	1019.	9900.	*****
JAPAN	M	80118	5508N	15649W	18568.7	33373.8	44964.7	122.	1.333	11812.	8.86	1.80	288.	12100.	*****
POLANC	M	791114	5542N	15617W	18625.3	33184.2	44698.8	137.	2.500	21703.	8.68	1.41	297.	22000.	*****
POLANC	M	79117	5507N	15655W	18565.7	33389.3	45001.9	175.	3.833	32752.	8.54	2.15	248.	33600.	*****
JAPAN	M	801111	5454N	15731W	18534.4	33507.5	45239.3	90.	0.500	4268.	8.54	1.51	352.	4620.	*****
POLANC	M	791112	5529N	15619W	18606.7	33237.9	44740.8	131.	2.583	21919.	8.48	1.39	61.	22000.	*****
JAPAN	M	80119	5507N	15702W	18564.2	33403.3	45043.0	123.	1.500	12650.	8.43	1.78	990.	13840.	*****
JAPAN	L	791112	5604N	15334W	18668.7	32807.5	43720.4	165.	1.333	10970.	8.23	1.24	2230.	13400.	*****
JAPAN	S	801120	5508N	15649W	18568.7	33373.8	44964.7	153.	2.000	16434.	8.22	1.32	66.	16500.	*****
USSR	M	80107	5700N	15132W	18719.0	32397.3	43046.6	90.	2.167	17702.	8.17	1.29	1658.	19360.	*****
JAPAN	M	79119	5634N	15154W	18701.1	32533.7	43195.9	159.	1.167	9400.	8.06	1.37	17000.	25400.	*****
USSR	M	801014	5642N	15149W	18707.0	32494.5	43147.0	71.	1.667	13306.	7.98	1.39	2974.	16280.	*****
USSR	M	801013	5642N	15224W	18705.3	32545.6	43242.6	77.	2.783	22055.	7.92	1.29	5445.	27500.	*****
JAPAN	L	791117	5608N	15358W	18672.2	32798.3	43723.6	128.	2.000	15827.	7.91	0.86	673.	16500.	*****
JAPAN	S	801110	5513N	15631W	18580.4	33320.3	44848.5	164.	4.000	31196.	7.80	1.58	44.	31240.	*****
JAPAN	S	801118	5512N	15643W	18576.4	33347.6	44920.8	169.	2.250	17308.	7.69	1.87	72.	17380.	*****
JAPAN	S	80115	5513N	15633W	18580.0	33324.2	44860.2	159.	2.750	20381.	7.59	2.02	15.	20900.	*****
JAPAN	S	791019	5513N	14718W	18745.8	31507.7	43232.5	137.	0.583	4275.	7.33	1.28	1225.	5300.	*****
JAPAN	M	80114	5739N	15001W	18738.8	32119.5	43016.9	150.	0.500	3663.	7.33	1.13	957.	4620.	*****
JAPAN	S	801110	5513N	15639W	18578.8	33336.1	44895.1	175.	2.750	19814.	7.21	1.56	206.	20020.	*****
POLANC	M	79117	5515N	15637W	18582.4	33324.9	44878.9	115.	3.000	21549.	7.18	2.17	451.	22000.	*****
JAPAN	S	801119	5513N	15638W	18575.0	33334.1	44089.3	186.	1.833	13011.	7.10	1.56	189.	13200.	*****
JAPAN	S	79102	5630N	15228W	18696.2	32600.2	43317.0	142.	0.750	5320.	7.09	1.46	180.	5500.	*****
USSR	M	80103	5642N	15147W	18707.1	32491.6	43142.9	126.	2.833	19614.	6.92	1.33	7446.	27080.	*****
JAPAN	M	801110	5452N	15737W	18529.2	33526.6	45278.2	100.	0.833	5711.	6.85	1.86	449.	6160.	*****
USSR	M	80105	5654N	15158W	18715.2	32450.2	43075.6	87.	2.750	18747.	6.82	1.24	4791.	23540.	*****
JAPAN	M	80113	5745N	14949W	18740.9	32080.6	43026.7	148.	1.000	6734.	6.73	1.22	966.	7700.	*****
JAPAN	M	80115	5545N	15637W	18580.8	33328.5	44681.2	180.	1.917	12604.	6.58	1.50	156.	12760.	*****
JAPAN	S	791014	5702N	15128W	18720.2	32383.6	43036.7	152.	2.167	13680.	6.31	1.14	1720.	15400.	*****
USSR	M	80101	5641N	15217W	18705.0	32539.3	43224.6	71.	1.333	8240.	6.18	1.22	14200.	22440.	*****
JAPAN	S	801114	5513N	15637W	18579.2	33332.1	44683.5	153.	1.417	8672.	6.12	1.61	348.	9020.	*****

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-6 (continued). WALLIYE POLLOCK, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE YHRDD	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
					7X 7Y 7Z							
JAPAN	M	801110	5456N	15726W	18539.4 33490.4 45206.1	86.	1.083	6606.	6.10	1.32	1314.	7920.
JAPAN	S	791010	5614N	15246W	18681.8 32691.3 43462.7	164.	1.333	7994.	6.00	1.54	806.	8800.
JAPAN	S	801031	5451N	15732W	18528.7 33519.7 45250.7	123.	1.500	8970.	5.98	1.66	3570.	12540.
JAPAN	S	801104	5508N	15647W	18569.1 33369.8 44953.0	175.	4.583	26529.	5.79	1.72	531.	27060.
JAPAN	S	791013	5702N	15128W	18720.2 32383.6 43036.7	157.	3.250	18772.	5.78	1.17	3228.	22000.
JAPAN	S	801117	5513N	15642W	18572.2 33342.0 44912.7	164.	1.833	10233.	5.75	1.52	27.	10560.
JAPAN	S	801112	5509N	15647W	18570.7 33366.2 44950.8	169.	3.417	19267.	5.64	1.56	533.	19000.
JAPAN	S	791009	5555N	15348W	18658.2 32965.7 43825.4	153.	1.833	10169.	5.55	1.53	831.	11000.
JAPAN	S	801106	5509N	15647W	18570.7 33366.2 44950.8	148.	3.000	16427.	5.48	1.67	73.	16500.
JAPAN	M	801103	5751N	14939W	18742.7 32044.2 43037.9	128.	0.750	4058.	5.41	1.56	2982.	7040.
POLAND	M	791111	5507N	15701W	18564.4 33401.3 45037.1	155.	2.500	12866.	5.15	2.14	334.	13200.
JAPAN	M	801107	5708N	15111W	18724.0 32335.9 43013.5	112.	2.000	10104.	5.05	1.40	3536.	13840.
JAPAN	S	791008	5557N	15352W	18655.9 32864.7 43837.4	148.	0.833	4149.	4.98	1.63	251.	4400.
JAPAN	S	791009	5558N	15358W	18660.4 32870.9 43863.9	148.	1.500	7237.	4.82	1.52	1563.	8200.
JAPAN	S	791012	5637N	15131W	18717.2 32408.2 43056.0	159.	1.667	7652.	4.71	1.80	948.	8800.
POLAND	M	791112	5538N	15616W	18619.9 33197.8 44701.9	131.	2.333	10886.	4.67	1.40	114.	11000.
JAPAN	S	791011	5615N	15242W	18683.0 32661.1 43442.3	151.	1.250	5678.	4.54	1.67	922.	6000.
JAPAN	L	791119	5602N	15339W	18672.2 32800.0 43728.6	138.	1.333	6011.	4.51	0.92	589.	6600.
JAPAN	M	791108	5637N	15152W	18702.4 32518.8 43177.0	150.	1.333	5959.	4.47	1.32	11641.	17600.
JAPAN	M	801105	5554N	15348W	18657.2 32869.6 43829.4	131.	1.333	5727.	4.30	1.41	1753.	7480.
JAPAN	M	801106	5510N	15652W	18571.3 33372.6 44977.9	87.	0.750	3195.	4.26	1.41	1645.	4840.
POLAND	M	791107	5512N	15643W	18576.4 33347.6 44920.8	175.	2.000	8455.	4.23	2.08	125.	8580.
JAPAN	S	801103	5513N	15638W	18579.0 33334.1 44889.3	178.	2.333	9829.	4.21	1.78	71.	9900.
JAPAN	M	801106	5553N	15342W	18656.7 32863.4 43804.2	134.	1.000	4124.	4.12	1.41	7316.	11440.
JAPAN	M	801119	5508N	15649W	18568.7 33373.8 44964.7	161.	4.417	17790.	4.03	1.39	250.	18040.
JAPAN	S	801104	5514N	15634W	18581.4 33322.6 44863.7	159.	2.833	11067.	3.91	1.76	593.	11660.
POLAND	M	791108	5506N	15646W	18566.0 33374.9 44951.6	153.	3.000	10943.	3.65	2.22	57.	11000.
JAPAN	S	791010	5555N	15348W	18658.2 32865.7 43825.4	149.	2.000	7251.	3.63	1.55	449.	7700.
JAPAN	S	801112	5512N	15631W	18572.8 33323.9 44850.9	164.	2.750	9479.	3.45	1.36	201.	5680.
JAPAN	S	801023	5445N	15756W	18510.4 33589.4 45402.3	101.	1.583	5394.	3.41	1.59	986.	6380.
JAPAN	L	791118	5608N	15340W	18672.1 32801.6 43733.6	160.	1.667	5635.	3.38	0.86	965.	6600.
JAPAN	S	801023	5505N	15710W	18559.0 33426.5 45094.2	100.	1.333	4487.	3.37	1.45	1013.	5500.
POLAND	M	791113	5542N	15617W	18625.3 33184.2 44698.8	131.	2.500	8342.	3.34	1.36	678.	9020.
JAPAN	M	791011	5620N	15238W	18687.6 32655.2 43402.9	153.	1.500	4884.	3.26	1.29	616.	5500.
POLAND	M	791106	5533N	15615W	18613.1 33215.1 44707.7	120.	1.333	4329.	3.25	0.98	71.	4400.
JAPAN	S	791009	5555N	15346W	18658.4 32862.4 43815.6	115.	2.500	7605.	3.04	1.42	5815.	13420.
JAPAN	S	791014	5655N	15132W	18716.0 32417.2 43064.4	150.	2.167	6529.	3.01	1.18	1171.	7700.
JAPAN	S	801102	5510N	15648W	18572.2 33364.7 44954.4	131.	2.250	6753.	3.00	1.91	67.	6820.
JAPAN	S	801107	5508N	15649W	18568.7 33373.8 44964.7	161.	5.167	15341.	2.97	1.67	59.	15400.
JAPAN	S	791011	5614N	15249W	18681.6 32696.0 43474.8	169.	3.667	10468.	2.85	1.47	532.	11000.
USSR	M	801002	5646N	16709.7	32478.3	43128.5	120.	6.917	2.83	1.23	6019.	25400.
JAPAN	S	791001	5629N	16695.4	32605.7	43325.5	142.	2089.	2.76	1.29	111.	2200.
JAPAN	L	791112	5610N	15321W	18675.5 32702.7 43633.1	131.	1.333	3695.	2.77	0.86	705.	4400.
JAPAN	M	791104	5758N	14903W	18744.8 31975.4 43049.3	137.	2.500	6901.	2.76	0.88	10699.	17900.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-6 (continued). WAILEVE POLLOCK, OCTOBER-DECEMBER 1979-80

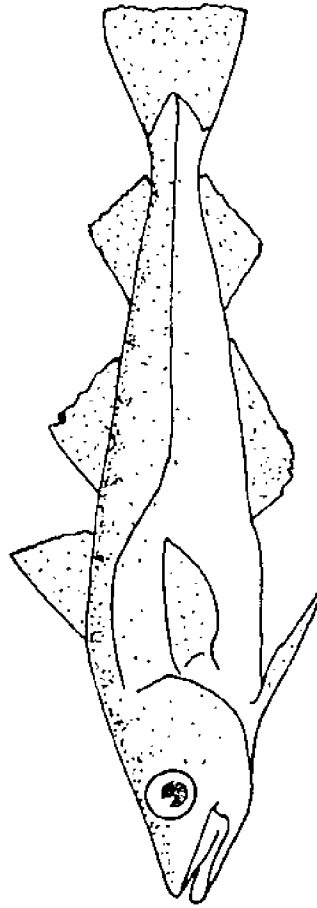
NATION	VE. CL.	DATE	LAT	LONG	APPROX	7X	7Y	7Z	DEPTH	HOURS	CATCH	THOUSAND	SIZE	BYCATCH	TOTAL
		YMMDD			LOMAN-C				(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
USSR	S	801013	5642N	15220W	18705.5	32539.7	43229.2	71.	0.917	2520.	2.75	1.28	1220.	3745.	
USSR	S	801012	5654N	15137W	18715.1	32431.6	43077.0	98.	2.633	7578.	2.67	1.25	3422.	11008.	
JAPAN	S	801011	5629N	14830W	18750.0	31813.7	43122.9	153.	1.000	2557.	2.56	1.18	83.	2646.	
JAPAN	S	801113	5509N	15647W	18570.7	33306.2	44950.8	153.	1.250	3016.	2.41	1.41	64.	3085.	
JAPAN	S	791013	5657N	15130W	18717.3	32406.8	43055.0	148.	1.417	3407.	2.40	1.78	993.	4400.	
POLAND	S	791116	5513N	15639W	18576.6	33336.1	44695.1	142.	0.917	2174.	2.37	2.28	26.	2200.	
JAPAN	S	791011	5615N	15242W	18683.0	32681.1	43442.3	156.	1.250	2922.	2.34	1.35	378.	3100.	
JAPAN	S	791014	5633N	15158W	18700.2	32543.5	43210.6	169.	0.500	1158.	2.32	1.12	1042.	2200.	
JAPAN	S	791012	5617N	15238W	18685.0	32687.1	43417.4	159.	0.917	2018.	2.20	1.46	182.	2200.	
JAPAN	S	791011	5630N	15216W	18696.9	32582.1	43276.8	161.	1.333	2904.	2.18	1.13	396.	3300.	
JAPAN	S	801015	5651N	14811W	18750.9	31704.2	43184.6	164.	2.250	4831.	2.15	1.31	2209.	7040.	
JAPAN	S	791115	5630N	15234W	18695.9	32609.3	43338.9	149.	1.083	2237.	2.06	1.36	9863.	12100.	
JAPAN	S	801118	5508N	15650W	18558.5	33375.8	44970.5	134.	1.500	3005.	2.00	1.45	295.	3300.	
USSR	S	801011	5643N	15148W	18707.7	32489.0	43140.3	101.	1.750	3352.	1.92	1.26	2368.	5720.	
JAPAN	S	801118	5512N	15643W	18576.4	33347.6	44920.8	164.	2.333	4346.	1.86	1.61	274.	4620.	
JAPAN	S	801110	5631N	15235W	18696.6	32606.8	43337.7	156.	1.000	1848.	1.85	1.60	572.	2420.	
USSR	S	801018	5639N	15226W	18703.1	32580.8	43264.8	82.	2.750	4717.	1.72	1.24	8263.	12980.	
JAPAN	S	791013	5650N	15142W	18712.5	32452.1	43098.2	154.	1.667	2806.	1.68	1.89	494.	3300.	
USSR	S	801013	5640N	15149W	18705.6	32502.5	43156.3	96.	2.750	4616.	1.68	1.22	3964.	6580.	
JAPAN	S	791012	5627N	15207W	18694.7	32572.7	43254.6	159.	2.000	3084.	1.54	1.47	3516.	6600.	
JAPAN	S	801111	5516N	15633W	18581.6	33320.6	44657.9	104.	0.833	1235.	1.48	1.81	105.	1540.	
USSR	S	801011	5643N	15148W	18707.7	32489.0	43140.3	96.	3.667	5156.	1.41	1.26	1224.	6360.	
POLAND	S	791116	5513N	15624W	18581.8	33306.6	44808.0	142.	1.083	3159.	1.40	2.15	21.	1540.	
JAPAN	S	791010	5558N	15358W	18660.4	32670.9	43863.9	138.	3.333	4281.	1.25	1.29	1219.	5500.	
USSR	S	801016	5643N	15228W	18705.9	32547.4	43251.5	96.	2.167	2770.	1.28	1.36	1630.	4400.	
USSR	S	801017	5637N	15156W	18703.2	32524.6	43186.4	96.	1.850	2332.	1.26	1.19	2068.	4400.	
JAPAN	S	801115	5511N	15645W	18574.6	33355.1	44934.7	142.	2.500	3110.	1.24	1.94	190.	3300.	
JAPAN	S	801117	5721N	15043W	18731.0	32245.7	42599.9	120.	1.000	1197.	1.20	1.19	563.	1760.	
JAPAN	S	801016	5650N	14811W	18750.9	31708.4	43181.4	197.	2.750	3235.	1.18	1.31	35485.	58720.	
JAPAN	S	801118	5506N	15657W	18563.6	33398.8	45015.8	159.	4.583	5350.	1.17	1.56	150.	5300.	
USSR	S	801012	5646N	15146W	18709.8	32474.0	43122.6	90.	2.500	2828.	1.13	1.19	1572.	4400.	
JAPAN	S	801117	5507N	15652W	18586.4	33383.3	44984.4	156.	2.333	2603.	1.12	1.63	37.	2640.	
JAPAN	S	801117	5513N	15642W	18578.2	33342.0	44912.7	148.	1.083	1205.	1.11	1.60	115.	1320.	
JAPAN	S	791018	5644N	14840W	18750.9	31760.5	43174.7	126.	2.833	3076.	1.09	1.10	4844.	7920.	
JAPAN	S	791013	5617N	15235W	18684.9	32668.6	43421.2	146.	1.833	1904.	1.04	1.62	1396.	3300.	
JAPAN	S	791015	5640N	14814W	18750.7	31752.8	43150.7	175.	3.000	3033.	1.01	1.92	1367.	4400.	
JAPAN	S	801017	5207N	14847W	18746.8	31921.5	43067.7	164.	2.250	2219.	0.99	1.35	11421.	13640.	
JAPAN	S	791030	5529N	14456W	18747.6	31397.8	43228.0	191.	3.000	2675.	0.96	1.19	5265.	8140.	
JAPAN	S	791018	5636N	14635W	18750.5	31739.4	43146.0	169.	3.000	2004.	0.87	1.07	5096.	7700.	
USSR	M	801016	5645N	15222W	18707.5	32530.3	43220.4	82.	2.333	2006.	0.86	1.20	13394.	15600.	
JAPAN	S	791018	5500N	15342W	18653.5	32874.2	43816.3	162.	2.250	1970.	0.83	1.64	330.	2200.	
JAPAN	L	791114	5609N	15340W	18673.0	32797.7	43729.5	139.	1.043	896.	0.83	1.02	204.	1100.	
JAPAN	L	791114	5608N	15340W	18672.1	32801.6	43733.6	131.	2.083	1713.	0.82	1.06	487.	2200.	
JAPAN	S	791016	5912N	14644W	18749.9	31544.5	43215.0	153.	3.033	2489.	0.82	1.11	8951.	11440.	
JAPAN	L	791113	5609N	15339W	18673.1	32796.0	43724.5	137.	2.583	2014.	0.78	1.32	166.	2200.	

*** NCIE *** - THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-6 (continued). WALLEYE POLLOCK, OCTOBER-DECEMBER 1979-80

NATL/JN	VESSEL CLASS	DATE YR/MO/D	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
			7X	7Y	7Z	7Z							
JAPAN	S	791015	18746.4	31931.8	43063.3	130.	1.000	736.	736.	0.74	1.12	3002.	3740.
JAPAN	S	791018	18750.7	31705.8	43242.3	109.	3.000	2132.	2132.	0.71	1.08	5128.	7260.
JAPAN	S	7910 6	18749.6	31541.1	43228.7	169.	3.583	2507.	2507.	0.70	1.25	7833.	10340.
USSR	H	8010 8	18705.7	32535.2	43219.6	82.	1.033	687.	687.	0.66	1.31	2393.	3080.
JAPAN	S	8010 6	18747.6	31391.5	43225.5	180.	1.833	1210.	1210.	0.66	1.25	3410.	4620.
JAPAN	M	8011 1	18745.8	31950.4	43057.2	131.	0.917	573.	573.	0.63	0.99	307.	880.
USSR	M	8010 1	18702.4	32563.4	43266.3	68.	3.000	1855.	1855.	0.62	1.18	4745.	6600.
JAPAN	S	791021	18747.2	31914.4	43072.7	191.	3.000	1852.	1852.	0.62	1.06	6948.	8800.
JAPAN	S	791029	18747.5	31387.0	43227.9	191.	2.500	1498.	1498.	0.60	1.21	10382.	11880.
USSR	M	801011	18707.5	32530.3	43220.4	82.	3.083	1609.	1609.	0.52	1.23	1911.	3520.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***



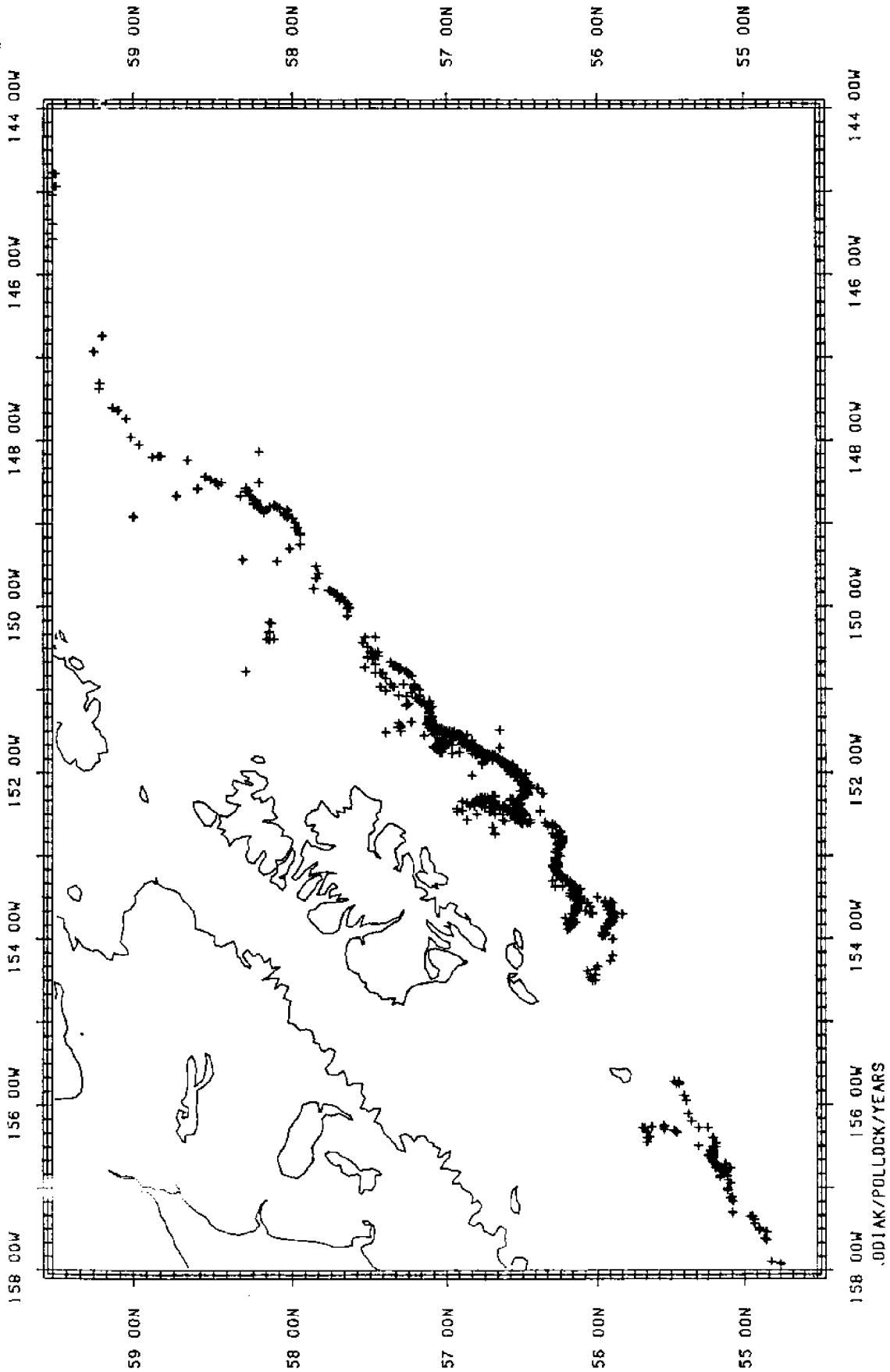


FIGURE D-1. TRAWLING LOCATIONS FOR WALLEYE POLLOCK, ALL MONTHS, 1979-80

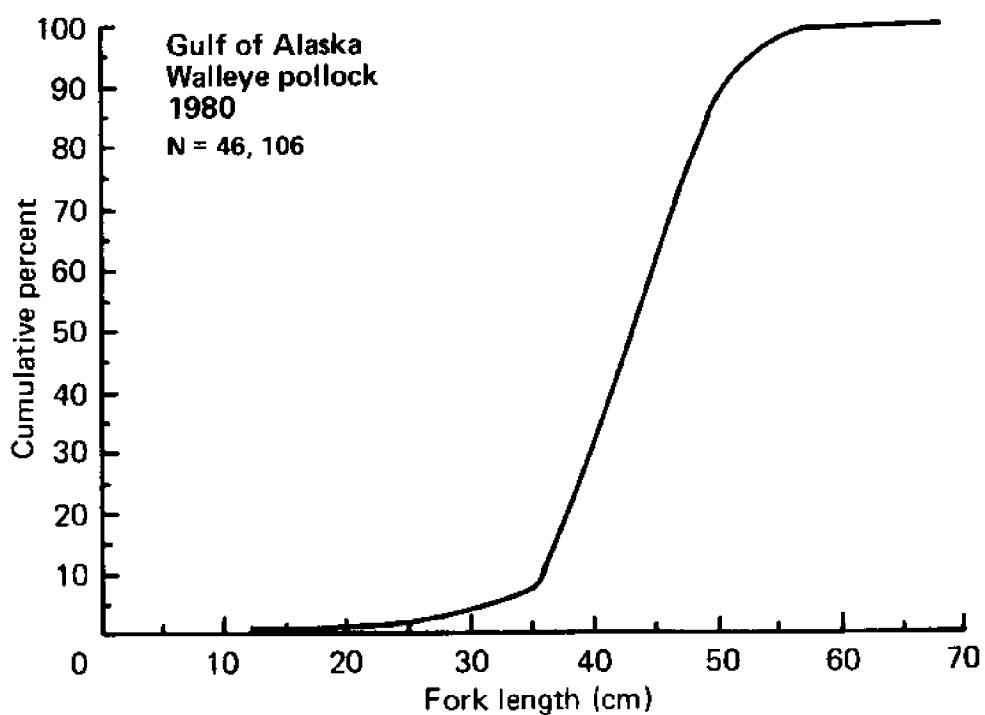
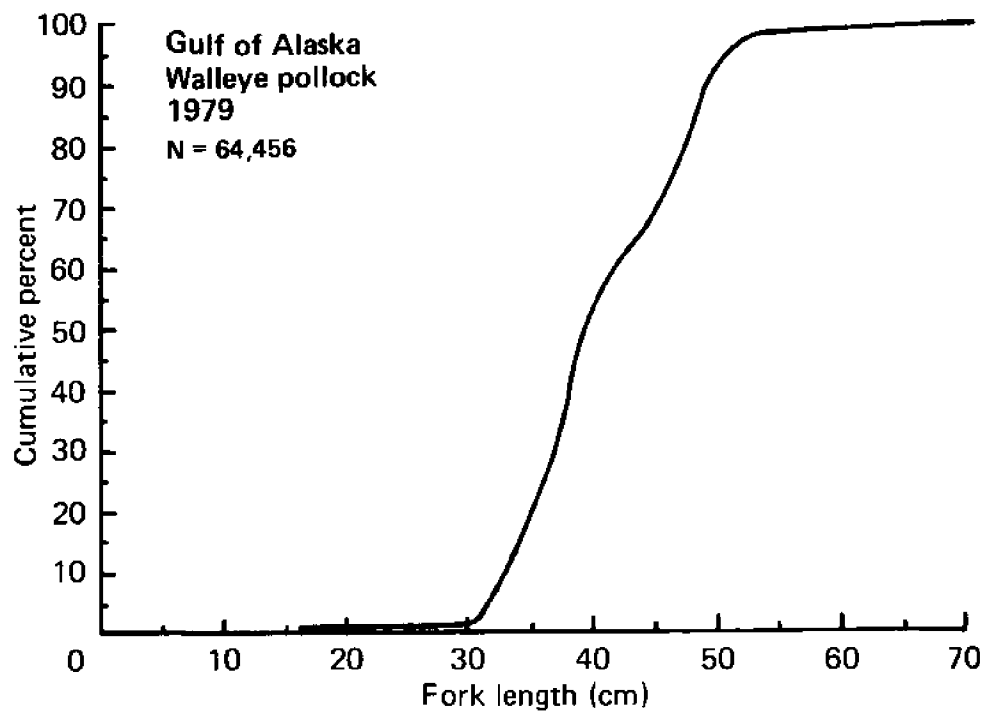


FIGURE D-2. CUMULATIVE LENGTH-FREQUENCY DISTRIBUTIONS OF THE WALLEYE POLLOCK CATCH FROM ALL AREAS OF THE GULF OF ALASKA DURING 1979-80.

TABLE D-7. PACIFIC COD, APRIL-JUNE, 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	7X	7Y	7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	79 629	5730N	15033W	18735.0	32195.8	43005.1	63	0.500	5407	10.81	7.79	9993	15400
MEXICO	S	79 629	5703N	15141W	18720.4	32397.4	43044.8	55	1.832	10365	5.65	4.40	44635	55000
MEXICO	S	79 627	5701N	15132W	18719.5	32393.2	43043.2	63	3.063	12397	4.02	9.59	44143	56540
MEXICO	S	79 625	5705N	15132W	18721.8	32376.7	43030.6	60	2.000	4163	2.08	5.94	45117	49280
JAPAN	L	79 623	5718N	15126W	18728.7	32314.3	43002.3	62	1.500	2669	1.78	6.60	36711	39380
USSR	M	79 627	5828N	14632W	18745.9	31819.8	43120.5	112	0.250	353	1.41	5.06	17247	17600
JAPAN	S	80 627	5707N	15121W	18723.2	32353.5	43019.2	96	0.500	592	1.18	7.78	10408	11000
JAPAN	S	80 627	5659N	15131W	18718.4	32400.0	43049.0	97	0.667	631	0.95	6.82	8609	9240
JAPAN	L	79 623	5731N	15037W	18735.3	32196.6	43006.1	56	1.333	1176	0.88	6.71	24564	25740
JAPAN	L	79 613	5714N	15123W	18728.8	32327.1	43006.8	63	2.000	1680	0.84	7.28	56220	97900
USSR	M	79 629	5729N	15033W	18734.6	32199.9	43004.2	60	0.750	601	0.80	6.05	16995	17600
JAPAN	L	79 610	5617N	15257W	18683.7	32696.7	43493.9	87	1.750	1392	0.80	8.37	33808	35200
JAPAN	M	79 610	5757N	14915W	18744.5	31992.6	43048.4	134	0.333	258	0.77	7.26	6122	6380
JAPAN	L	79 627	5616N	15312W	18681.7	32724.5	43565.0	97	0.750	539	0.72	6.03	65461	66000
JAPAN	L	79 625	5709N	15133W	18723.9	32361.4	43020.1	60	2.333	1619	0.69	5.05	7381	77000
JAPAN	S	80 628	5707N	15122W	18723.2	32354.8	43019.7	102	0.333	218	0.65	8.80	5282	5500
JAPAN	S	80 628	5659N	15133W	18718.3	32402.8	43051.0	81	0.583	379	0.65	8.80	8661	9240
USSR	M	79 626	5812N	14849W	18747.7	31903.1	43080.5	115	1.500	867	0.50	6.42	10133	11000
JAPAN	M	80 6 1	5556N	15339W	18660.1	32846.8	43777.5	109	0.583	335	0.57	7.48	24965	25300
USSR	M	79 610	5728N	15034W	18734.1	32205.3	43003.3	66	0.833	468	0.56	7.31	19332	19800
USSR	M	79 629	5727N	15033W	18733.7	32208.2	43002.6	60	1.050	568	0.54	7.19	21432	22000

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

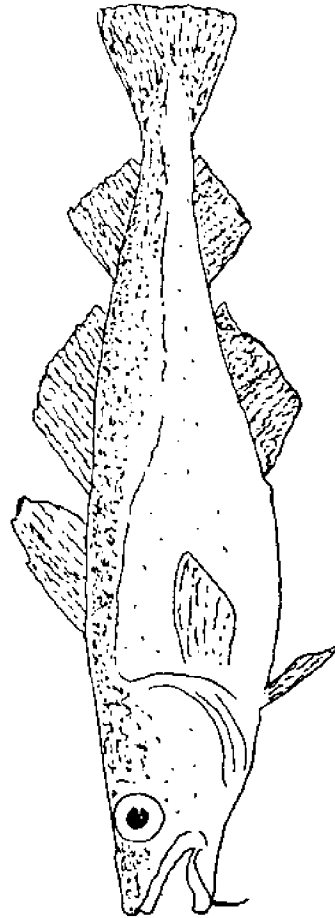


TABLE D-8. PACIFIC COD, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	TIME	LAT	LONG	APPROX 7X	APPROX 7Y	APPROX 7Z	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	79 8 4	5646N	15220W	15220W	18706.3	32523.3	43208.7	43208.7	60	0.333	5827	17.48	4.25	2973	8300
USSR	M	80 9 27	5620N	14840W	14840W	18749.0	31860.9	43099.9	43099.9	104	1.000	10607	10.61	5.56	47693	58300
USSR	M	79 8 7	5635N	15220W	15220W	18700.5	32568.1	43264.6	43264.6	71	0.583	5975	10.24	9.80	13825	19800
USSR	M	79 7 17	5703N	15130W	15130W	18720.3	32400.2	43046.9	43046.9	49	0.250	2425	9.70	6.59	7475	9900
USSR	M	79 8 9	5633N	15220W	15220W	18695.0	32576.1	43274.7	43274.7	74	1.000	9134	9.13	6.59	1866	11000
USSR	M	79 7 31	5703N	15140W	15140W	18720.4	32396.0	43043.8	43043.8	55	0.917	8198	8.94	8.46	602	8800
USSR	M	80 5 27	5630N	15210W	15210W	18697.2	32574.7	43261.4	43261.4	77	2.000	13651	6.83	2.70	7909	21560
USSR	M	79 8 16	5703N	15130W	15130W	18720.7	32382.2	43035.2	43035.2	74	0.583	3665	6.63	10.36	22535	26400
USSR	M	79 8 17	5658N	15132W	15132W	18717.8	32405.5	43053.5	43053.5	74	0.667	4102	6.15	9.62	298	4400
JAPAN	L	80 7 3	5701N	15137W	15137W	18719.4	32400.1	43047.9	43047.9	60	0.167	861	5.16	5.98	96599	97460
USSR	M	80 7 31	5634N	15221W	15221W	18695.7	32573.6	43272.9	43272.9	71	0.833	4262	5.11	6.20	5418	5880
USSR	M	79 8 5	5637N	15225W	15225W	18701.7	32567.4	43271.4	43271.4	52	0.083	409	4.91	1.59	8391	9200
USSR	M	79 8 5	5642N	15222W	15222W	18705.4	32542.6	43235.8	43235.8	57	0.417	2027	4.86	2.44	4573	6600
USSR	M	79 8 21	5702N	15131W	15131W	18720.1	32387.7	43039.1	43039.1	90	0.500	2341	4.68	8.53	15259	17600
JAPAN	S	80 7 3	5634N	15228W	15228W	18699.3	32584.1	43297.0	43297.0	103	0.750	3229	4.31	12.34	8871	12100
USSR	M	79 8 10	5645N	15218W	15218W	18707.7	32524.5	43207.4	43207.4	60	1.000	4194	4.19	7.11	2406	6600
JAPAN	S	80 7 30	5928N	14514W	14514W	18747.8	31414.2	43230.6	43230.6	101	0.333	1348	4.04	13.51	4152	5500
USSR	M	79 7 25	5703N	15145W	15145W	18720.3	32402.9	43049.2	43049.2	52	0.750	2976	3.97	8.17	23424	26400
USSR	M	80 8 6	5637N	15223W	15223W	18701.9	32564.5	43264.5	43264.5	78	1.000	3909	3.91	6.84	5771	9680
JAPAN	S	80 7 6	5658N	15132W	15132W	18717.8	32405.5	43053.5	43053.5	100	0.417	1448	3.47	9.79	13072	14520
JAPAN	M	79 9 26	5751N	14931W	14931W	18742.0	32035.2	43037.2	43037.2	126	0.633	2460	2.95	8.46	54080	56540
MEXICO	S	79 7 28	5704N	15140W	15140W	18721.0	32391.9	43040.3	43040.3	60	2.000	5848	2.92	10.51	9552	15400
USSR	M	80 8 14	5638N	15224W	15224W	18702.5	32561.9	43262.9	43262.9	71	1.750	4990	2.85	5.08	28230	33220
MEXICO	S	79 7 31	5704N	15159W	15159W	18721.0	32390.5	43039.4	43039.4	62	1.250	3469	2.78	5.04	11931	15400
USSR	M	79 7 3	5721N	15058W	15058W	18730.7	32265.0	42999.9	42999.9	57	1.333	3589	2.65	8.03	7411	11000
USSR	M	80 9 26	5629N	15201W	15201W	18697.0	32563.8	43237.9	43237.9	77	1.333	3225	2.42	4.06	3155	6380
USSR	M	79 7 25	5637N	15225W	15225W	18701.7	32567.4	43271.4	43271.4	77	0.333	798	2.39	4.09	32202	33000
USSR	M	80 8 12	5636N	15224W	15224W	18702.5	32561.9	43262.9	43262.9	74	1.333	3020	2.26	5.23	5300	12320
JAPAN	S	80 7 24	5537N	15351W	15351W	18660.0	32863.0	43632.4	43632.4	115	1.000	2193	2.19	11.53	4407	6600
USSR	M	80 8 7	5614N	15318W	15318W	18679.5	32742.0	43601.7	43601.7	109	3.000	6470	2.16	8.62	4090	10560
USSR	M	79 7 30	5703N	15137W	15137W	18720.5	32391.9	43041.0	43041.0	57	0.833	1784	2.14	6.98	2616	4400
JAPAN	S	80 7 3	5632N	15223W	15223W	18698.1	32584.6	43289.7	43289.7	66	1.000	2104	2.10	6.99	6916	9020
USSR	M	80 7 29	5643N	15223W	15223W	18706.1	32540.0	43234.0	43234.0	60	1.917	3841	2.00	4.56	3419	7260
USSR	M	79 7 15	5701N	15140W	15140W	18719.3	32404.3	43051.1	43051.1	51	0.167	319	1.91	8.25	48081	48400
USSR	M	80 7 5	5641N	15222W	15222W	18704.7	32546.7	43240.9	43240.9	66	1.417	2637	1.86	5.29	8363	11000
USSR	M	79 8 9	5635N	15220W	15220W	18700.5	32568.1	43264.6	43264.6	74	0.250	439	1.76	2.04	32561	33000
USSR	M	80 8 9	5640N	15224W	15224W	18703.9	32553.2	43252.7	43252.7	77	1.917	3368	1.76	2.93	28532	31900
MEXICO	S	79 7 10	5659N	15130W	15130W	18716.5	32398.7	43048.1	43048.1	98	2.583	4525	1.75	7.98	10375	15400
USSR	M	80 9 29	5635N	15200W	15200W	18701.5	32538.5	43206.1	43206.1	79	1.500	2598	1.73	2.75	4882	7480
USSR	M	79 8 6	5645N	15218W	15218W	18707.7	32524.5	43207.4	43207.4	60	1.000	1726	1.73	2.45	11474	13200
JAPAN	S	79 9 27	5633N	14826W	14826W	18750.3	31793.2	43133.5	43133.5	93	2.250	3612	1.61	5.53	7368	11000
USSR	M	79 8 18	5703N	15138W	15138W	18720.5	32393.2	43041.9	43041.9	50	0.583	926	1.59	4.47	21074	22000
USSR	M	79 8 2	5641N	15223W	15223W	18704.7	32548.2	43244.2	43244.2	49	1.000	1574	1.57	1.85	31426	33000
USSR	M	80 7 30	5632N	15214W	15214W	18698.6	32571.2	43260.6	43260.6	71	1.417	2173	1.53	8.73	687	2860
JAPAN	M	79 7 13	5702N	15136W	15136W	18720.0	32394.6	43043.5	43043.5	59	1.333	1999	1.50	9.80	42861	44680

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-8 (continued). PACIFIC COD, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE YRMMDD	LAT	LONG	APPROX LORAN-C 7X	7Y	7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/5FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	80 7 7	5641N	15221W	18704.8	32545.2	43237.5	63	1.000	1380.	1.38	6.38	7420.	8900.
JAPAN	S	80 8 6	5642N	15146W	18707.0	32493.0	43144.9	109	3.167	4207.	1.33	8.20	10093.	14300.
MEXICO	S	79 7 4	5703N	15137W	18720.5	32391.9	43041.0	68	1.917	2506.	1.31	10.62	14214.	16720.
USSR	M	80 9 29	5638N	15151W	18704.1	32513.4	43170.0	101	2.500	3222.	1.29	7.57	22518.	25740.
USSR	M	79 7 23	5702N	15135W	18715.9	32398.8	43046.4	46	0.167	211.	1.26	5.70	28389.	28600.
USSR	M	80 8 31	5642N	15225W	18707.4	32534.8	43230.7	93	2.917	3687.	1.26	3.75	15233.	18920.
USSR	M	80 8 5	5609N	15335W	18673.0	32789.4	43704.7	84	1.750	2200.	1.26	8.08	440.	2640.
JAPAN	S	80 8 7	5614N	15314W	18675.0	32735.6	43583.1	164	2.750	3455.	1.26	5.07	9965.	13420.
JAPAN	M	80 9 2	5707N	15119W	18723.1	32350.8	43018.4	131	1.167	1452.	1.24	5.94	12848.	14300.
USSR	M	80 8 11	5636N	15233W	18700.0	32583.5	43305.3	74	1.563	1919.	1.21	5.98	9301.	11220.
USSR	M	80 8 4	5610N	15326W	18675.1	32770.8	43656.8	85	1.500	1687.	1.12	9.19	513.	2200.
USSR	M	79 8 10	5642N	15222W	18705.0	32542.6	43235.8	60	1.333	1487.	1.12	3.37	5113.	6600.
JAPAN	M	80 9 19	5658N	14803W	18750.0	31867.8	43204.2	120	1.500	1655.	1.10	17.16	53345.	55000.
JAPAN	L	79 9 5	5617N	15304W	18683.2	32707.8	43524.4	131	2.833	3012.	1.06	8.36	38788.	41800.
MEXICO	S	79 7 3	5659N	15135W	18718.0	32405.6	43033.0	68	1.000	1062.	1.06	7.10	12798.	13660.
JAPAN	S	80 8 6	5643N	15147W	18707.0	32487.6	43138.3	126	3.000	3165.	1.06	7.81	11575.	14740.
USSR	M	79 7 23	5655N	15144W	18715.0	32434.6	43080.0	45	0.583	615.	1.05	2.31	19185.	19800.
USSR	M	80 8 9	5636N	15226W	18700.0	32576.0	43287.0	77	2.167	2277.	1.05	2.42	32703.	34980.
USSR	M	79 7 1	5728N	15042W	18734.0	32215.4	43003.1	57	1.000	1039.	1.04	5.50	42961.	44000.
USSR	M	80 8 5	5635N	15230W	18699.9	32583.0	43299.2	82	1.417	1459.	1.04	5.01	4471.	5940.
JAPAN	S	79 8 11	5706N	15120W	18722.2	32356.2	43021.1	100	1.417	1467.	1.04	7.97	1701.	3166.
USSR	M	79 8 13	5704N	15141W	18721.0	32393.2	43041.3	57	1.167	1191.	1.02	6.45	12009.	13200.
JAPAN	S	80 7 23	5616N	15306W	18682.1	32714.9	43537.8	109	1.500	1478.	0.99	10.91	16122.	17800.
JAPAN	M	79 8 2	5658N	15137W	18717.0	32412.5	43058.9	54	2.500	2394.	0.96	5.44	3326.	5720.
USSR	M	80 7 29	5649N	15213W	18710.0	32500.7	43171.7	57	1.750	1675.	0.96	3.08	6245.	7920.
USSR	M	79 8 21	5704N	15132W	18721.2	32380.8	43033.6	93	1.043	1011.	0.93	8.70	3389.	4400.
USSR	M	79 8 3	5640N	15223W	18704.0	32552.3	43249.3	46	0.333	308.	0.92	2.91	15092.	15400.
JAPAN	S	80 7 7	5634N	15229W	18699.2	32585.6	43300.6	87	1.333	1230.	0.92	7.06	3170.	4400.
USSR	M	80 7 29	5644N	15217W	18707.1	32527.1	43205.4	55	1.250	1146.	0.92	3.30	6334.	7480.
USSR	M	79 7 24	5658N	15140W	18717.3	32416.6	43062.4	44	0.500	454.	0.91	6.07	690.	1144.
USSR	M	79 7 21	5659N	15139W	18718.1	32411.1	43057.4	44	0.333	300.	0.90	6.84	15100.	15400.
MEXICO	S	79 7 6	5646N	15145W	18705.0	32472.6	43120.9	126	2.583	2321.	0.90	10.34	20559.	22880.
MEXICO	S	79 7 15	5646N	15154W	18709.4	32485.5	43138.9	126	2.083	1789.	0.86	5.39	36491.	38280.
JAPAN	S	80 8 11	5606N	14848W	18746.0	31926.7	43065.5	142	3.450	2958.	0.86	8.22	6942.	9900.
USSR	M	80 8 8	5610N	15330W	18674.8	32777.3	43676.0	98	1.833	1568.	0.86	5.94	2832.	4400.
USSR	M	79 7 12	5703N	15141W	18720.4	32397.4	43044.8	52	0.167	141.	0.85	6.73	24059.	24200.
JAPAN	S	80 7 12	5634N	15229W	18699.2	32585.6	43300.6	103	1.167	985.	0.84	7.04	10455.	11480.
USSR	M	79 8 2	5640N	15226W	18701.0	32556.7	43259.7	46	0.833	701.	0.84	1.94	25699.	26400.
USSR	M	80 9 2	5637N	15225W	18701.7	32507.4	43271.4	77	1.500	1260.	0.84	4.90	940.	2200.
USSR	M	79 7 31	5704N	15143W	18720.9	32396.0	43043.3	60	0.833	687.	0.82	7.97	10313.	11000.
JAPAN	M	80 9 3	5635N	15158W	18701.0	32535.5	43201.0	137	1.667	1373.	0.82	11.00	5227.	6600.
JAPAN	M	79 8 25	5752N	14947W	18742.9	32049.2	43041.0	139	2.167	1782.	0.82	6.71	50358.	52140.
JAPAN	S	79 8 10	5707N	15114W	18723.4	32344.0	43016.4	82	3.000	2423.	0.81	8.00	4177.	6600.
USSR	M	79 7 11	5702N	15140W	18715.9	32400.1	43047.4	52	0.333	261.	0.78	6.53	54739.	55000.

*** NOTE *** - THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-8 (continued). PACIFIC COD, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE (LBS/FT ³)	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	20 7 15	5633N	15227W	18692.6 32586.6 43298.5	101.	0.667	520.	0.78	8.88	1460.	1980.
USSR	M	20 8 8	5611N	15329W	18675.8 32771.7 43667.0	96.	2.417	1877.	0.78	3.86	6043.	7920.
USSR	M	79 8 5	5633N	15220W	18655.0 32576.1 43274.7	74.	1.000	753.	0.75	6.58	1447.	2200.
USSR	M	79 8 21	5702N	15136W	18720.0 32394.6 43043.5	55.	0.500	374.	0.75	4.32	10626.	11000.
USSR	M	79 7 9	5700N	15138W	18718.8 32405.6 43052.6	49.	0.417	312.	0.75	6.54	43688.	44000.
USSR	M	20 8 7	5610N	15328W	18675.0 32774.1 43666.4	82.	1.917	1430.	0.75	5.63	770.	2200.
JAPAN	M	79 7 7	5818N	15047W	18748.3 32005.1 43156.7	109.	1.333	992.	0.74	7.59	32888.	33880.
USSR	M	79 8 4	5638N	15225W	18702.4 32563.4 43266.3	49.	1.000	732.	0.73	4.54	10268.	11000.
USSR	M	80 8 29	5641N	15224W	18704.6 32549.7 43247.7	90.	4.083	2942.	0.72	3.52	13998.	16940.
USSR	M	79 7 7	5815N	14843W	18748.2 31884.5 43087.1	109.	1.417	1015.	0.72	6.89	2285.	3300.
JAPAN	S	79 8 1	5657N	15139W	18717.0 32419.4 43065.1	63.	2.250	1601.	0.71	6.86	1699.	3300.
JAPAN	L	79 9 7	5632N	15228W	18697.8 32592.1 43307.0	115.	1.500	1055.	0.70	7.04	104545.	105600.
JAPAN	S	80 7 16	5625N	15215W	18696.2 32584.6 43278.6	107.	2.250	1572.	0.70	3.27	27468.	29040.
JAPAN	S	80 7 10	5632N	15222W	18698.1 32583.1 43286.3	100.	1.000	890.	0.69	12.83	7040.	7040.
USSR	M	79 8 17	5703N	15135W	18720.6 32389.1 43039.2	66.	1.167	803.	0.69	4.18	25597.	26400.
JAPAN	M	20 9 4	5645N	15148W	18709.0 32480.9 43131.2	126.	1.833	1260.	0.69	4.70	3140.	4400.
USSR	M	79 7 3	5724N	15052W	18732.1 32244.7 43000.5	63.	1.500	1029.	0.69	9.90	53971.	55000.
USSR	M	79 8 1	5702N	15140W	18715.9 32400.1 43047.4	59.	0.583	400.	0.69	5.79	12800.	13200.
JAPAN	S	79 8 12	5707N	15119W	18723.3 32350.8 43018.4	107.	1.583	1080.	0.68	7.07	4420.	5500.
USSR	M	20 9 1	5645N	15225W	18707.4 32534.8 43230.7	93.	3.833	2603.	0.68	4.32	5977.	8580.
USSR	M	80 8 28	5634N	15219W	18699.8 32570.6 43266.4	98.	2.000	1344.	0.67	4.82	3056.	4400.
USSR	M	79 7 11	5702N	15141W	18715.8 32401.5 43048.5	45.	0.333	224.	0.67	7.47	43776.	46000.
JAPAN	M	20 9 3	5632N	15206W	18695.0 32559.3 43237.0	131.	1.333	884.	0.66	6.44	3736.	4620.
MEXICO	S	79 7 9	5646N	15146W	18709.8 32474.0 43122.8	115.	3.667	2333.	0.64	11.86	12407.	14740.
USSR	M	75 8 4	5636N	15223W	18707.6 32568.5 43269.6	57.	1.250	794.	0.64	3.96	31326.	32120.
USSR	M	80 9 2	5645N	15221W	18707.6 32528.9 43217.1	93.	2.667	1650.	0.62	3.42	11550.	13200.
USSR	M	79 7 22	5659N	15140W	18718.1 32412.5 43058.6	45.	0.583	359.	0.62	5.36	17241.	17600.
USSR	M	80 8 11	5640N	15224W	18703.9 32553.8 43252.7	77.	2.250	1358.	0.60	4.84	9862.	11220.
USSR	M	79 8 12	5705N	15142W	18721.5 32390.5 43038.7	63.	0.667	399.	0.60	7.70	32601.	33000.
USSR	M	20 8 26	5634N	15219W	18699.8 32570.6 43266.4	77.	1.917	1135.	0.59	4.82	5465.	6600.
JAPAN	S	80 6 9	5554N	15340W	18658.0 32856.2 43790.5	107.	1.083	614.	0.57	17.16	15886.	16500.
USSR	M	79 8 21	5703N	15140W	18720.4 32398.0 43043.8	55.	0.583	331.	0.57	5.64	109.	440.
USSR	M	79 7 27	5449N	15254W	18518.8 33571.9 45383.8	93.	2.000	1106.	0.55	7.52	3294.	4400.
JAPAN	L	79 7 23	5611N	15345W	18674.6 32778.0 43748.9	75.	1.083	590.	0.54	6.58	6010.	6000.
JAPAN	S	80 8 6	5707N	15114W	18723.4 32344.0 43016.4	93.	1.750	945.	0.54	6.66	1695.	2640.
USSR	M	20 8 5	5627N	15232W	18693.6 32618.2 43346.3	131.	2.583	1375.	0.53	2.89	825.	2200.
USSR	M	79 7 4	5722N	15056W	18731.2 32258.2 43000.0	55.	0.750	399.	0.53	5.43	5901.	59400.
JAPAN	S	79 7 30	5659N	15136W	18718.2 32407.0 43054.1	60.	2.000	1055.	0.53	6.89	1305.	2860.
USSR	M	79 7 2	5815N	14846W	18748.2 31887.6 43087.7	115.	1.750	915.	0.52	7.04	4585.	5500.
JAPAN	S	20 7 13	5633N	15226W	18698.8 32585.1 43295.0	94.	0.667	347.	0.52	11.44	11753.	12100.
JAPAN	M	79 7 24	5514N	15630W	18582.2 33314.7 44840.4	74.	2.167	1105.	0.51	9.44	875.	1980.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-9. PACIFIC COD, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX	7X	7Y	7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	801014	5638N	15153W	18704.0	32516.3	43174.6	90.	1.083	2539.	2339.	2.34	5.02	16581.	21120.
USSR	M	801014	5644N	15150W	18708.3	32487.8	43139.6	109.	1.583	2658.	2658.	1.68	6.38	20882.	23544.
JAPAN	M	801103	5751N	14939W	18742.7	32044.2	43037.9	128.	0.750	1074.	1074.	1.43	4.57	5986.	7040.
USSR	M	801013	5642N	15151W	18706.9	32497.3	43151.2	131.	1.083	1369.	1369.	1.26	8.93	12711.	14080.
USSR	M	791128	5818N	14837W	18748.7	31866.1	43093.7	164.	0.417	399.	399.	0.96	2.42	32603.	33000.
JAPAN	M	801107	5706N	15111W	18724.0	32335.9	43013.5	112.	2.000	1697.	1697.	0.85	7.63	11743.	13640.
USSR	M	801014	5649N	15147W	18711.7	32463.5	43111.1	120.	1.833	1408.	1408.	0.77	3.89	22132.	23540.
USSR	M	791126	5815N	14845W	18748.2	31888.6	43087.5	164.	0.667	490.	490.	0.73	5.67	12710.	13200.
JAPAN	L	791122	5852N	15201W	18699.3	32551.9	43225.3	124.	0.750	525.	525.	0.70	13.20	23675.	24200.
JAPAN	M	801111	5452N	15721W	18544.2	33473.3	45172.0	87.	0.833	565.	565.	0.68	3.55	8895.	9460.
JAPAN	M	801104	5740N	14956W	18735.2	32109.5	43018.3	156.	1.000	653.	653.	0.65	3.40	12767.	13420.
JAPAN	M	791105	5713N	15056W	18726.9	32295.5	43003.7	164.	1.417	882.	882.	0.62	10.45	27718.	28600.
USSR	M	801015	5654N	15138W	18715.2	32430.2	43075.6	87.	2.750	1708.	1708.	0.62	7.96	21832.	23540.
USSR	M	801011	5638N	15225W	18702.4	32563.4	43266.3	68.	3.000	1767.	1767.	0.59	2.81	4033.	6600.
JAPAN	M	801104	5741N	14553W	18739.5	32101.0	43019.9	150.	1.000	577.	577.	0.58	3.65	16363.	16940.
USSR	M	801012	5642N	15239W	18704.8	32558.0	43298.6	79.	1.083	590.	590.	0.54	4.57	26470.	27060.
JAPAN	M	791107	5642N	15149W	18707.0	32454.5	43147.0	137.	2.083	1098.	1098.	0.53	5.67	26302.	37400.
JAPAN	M	801102	5732N	15001W	18738.4	32423.6	43015.4	153.	0.500	262.	262.	0.52	4.31	15138.	15400.
USSR	M	801013	5642N	15147W	18707.1	32491.6	43142.9	126.	2.833	1469.	1469.	0.52	5.40	25591.	27060.
JAPAN	L	791114	5554N	15340W	18658.0	32356.2	43790.5	124.	1.167	605.	605.	0.52	10.12	34595.	35200.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

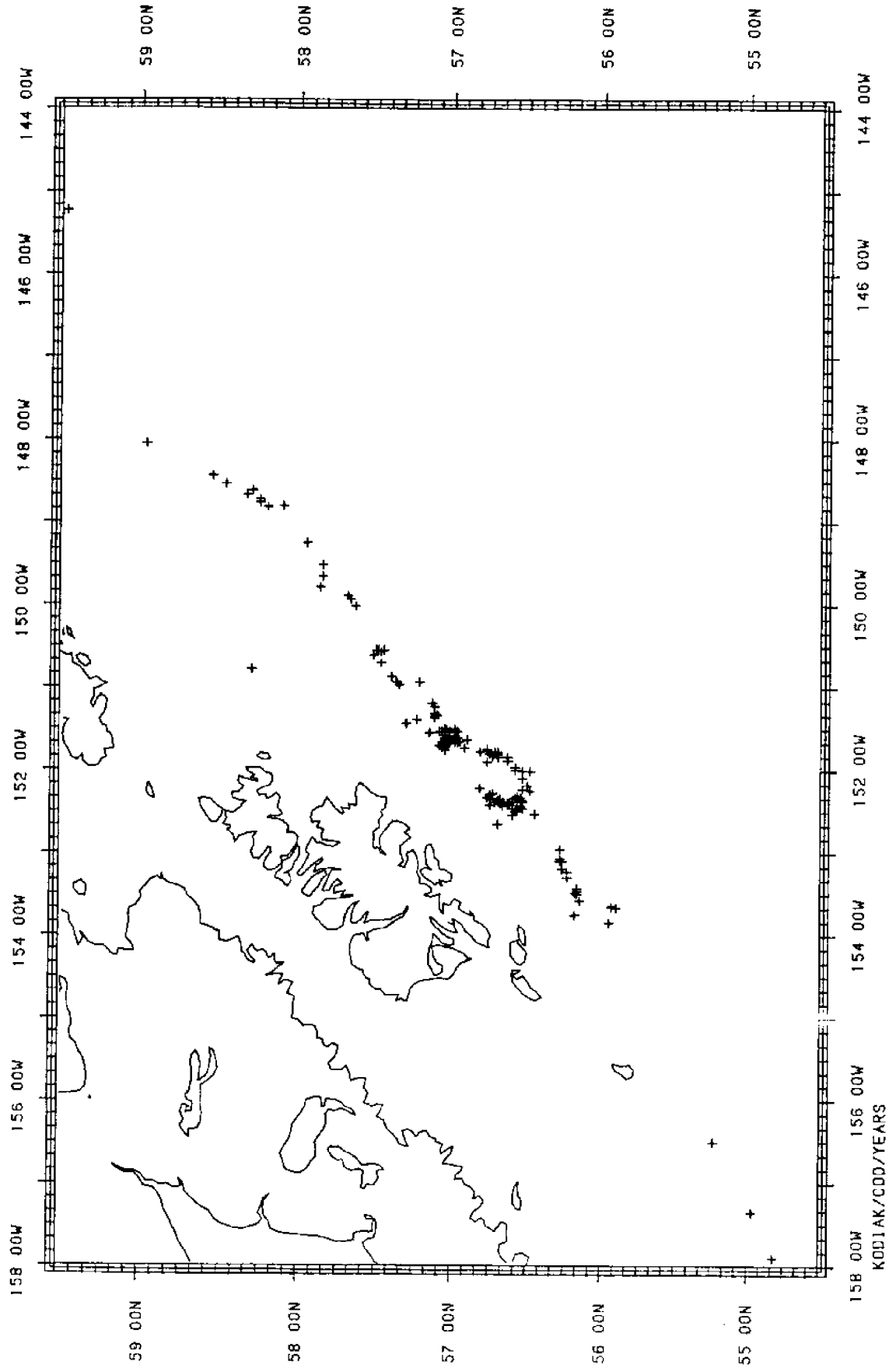


FIGURE D-3 TRAWLING LOCATIONS FOR PACIFIC COD, ALL MONTHS, 1979-80

TABLE D-10. TURBOT, APRIL-JUNE 1979-80

NATION	VESSEL CLASS	DATE	YMMOD	LAT	LCNG	APPROX 7X	7Y	PULSE RATES 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	79 630	5757N	14915M	18744.5	31992.6	43048.4	134	0.333	2878	6380	1.22	2878	6380	
JAPAN	L	79 630	5606N	15341M	18670.0	32811.2	43746.6	168	1.000	1881	9026	5.31	1881	9026	
JAPAN	L	79 620	5606N	15350M	18665.3	32826.1	43792.1	130	2.167	2952	9900	2.72	2952	9900	
USSR	M	79 627	5628N	14832M	18749.9	31819.8	43120.5	112	0.250	468	17600	3.36	17132	17600	
JAPAN	L	79 626	5650N	15222M	18710.9	32509.7	43194.6	73	3.833	36091	44660	1.70	36091	44660	
JAPAN	L	79 627	5649N	15224M	18710.2	32516.8	43206.6	89	4.000	5720	11660	2.16	5948	11660	
JAPAN	L	79 628	5607N	15344M	18670.8	32812.2	43757.6	159	3.083	4287	6160	3.54	1873	6160	
USSR	M	79 629	5730N	15033M	18735.0	32195.8	43005.1	63	0.500	687	15400	0.79	14713	15400	
JAPAN	L	79 621	5606N	15357M	18670.7	32829.9	43820.7	111	2.667	2932	6600	2.81	3668	6600	
USSR	M	79 624	5814N	14843M	18748.1	31888.6	43084.5	120	1.000	1081	15400	2.47	14319	15400	
JAPAN	L	79 622	5802N	14919M	18745.6	31976.4	43060.7	93	1.833	1879	5280	2.37	3401	5280	
JAPAN	M	79 6 3	5633N	15202M	18700.0	32549.4	43221.1	120	1.667	1580	8140	1.03	6580	8140	
JAPAN	L	79 622	5641N	15230M	18704.3	32558.6	43269.0	94	2.167	1841	7700	0.85	5859	7700	
USSR	M	79 623	5710N	15109M	18725.1	32325.0	43009.6	71	1.000	836	24200	0.84	23364	24200	
USSR	M	80 6 8	5825N	15549M	18605.8	33195.5	44576.7	109	1.500	1228	13200	0.82	11972	13200	
USSR	M	79 625	5813N	14848M	18747.9	31897.9	43082.9	118	1.583	1232	11000	0.78	9768	11000	
USSR	M	79 620	5649N	15142M	18711.9	32456.2	43102.5	107	1.250	955	15400	0.76	14445	15400	
JAPAN	M	79 6 3	5609N	15329M	18673.9	32779.6	43675.4	118	1.667	1260	9020	0.76	7760	9020	
JAPAN	M	79 6 3	5630N	15209M	18697.3	32571.7	43255.4	131	1.000	721	4620	0.72	3899	4620	
JAPAN	L	79 627	5650N	15222M	18710.9	32509.7	43194.6	75	1.500	1068	7480	1.60	6412	7480	
JAPAN	S	80 626	5712N	15106M	18726.2	32312.8	43006.2	105	0.750	527	1540	2.97	1013	1540	
USSR	M	80 6 4	5718N	15045M	18725.6	32260.6	43000.2	87	0.833	584	11000	0.70	10416	11000	
USSR	M	79 628	5826N	14833M	18749.9	31820.8	43120.8	117	0.750	522	4400	2.69	3878	4400	
USSR	M	79 621	5836N	15226M	18700.9	32573.0	43279.9	87	0.500	335	1320	0.85	965	1320	
JAPAN	M	80 6 2	5613N	15318M	18678.5	32746.0	43606.0	124	0.167	111	5060	0.67	4949	5060	
JAPAN	L	79 625	5709N	15133M	18723.9	32361.4	43020.1	60	2.333	1542	7700	1.39	75456	7700	
JAPAN	M	80 6 1	5657N	15334M	18661.7	32834.7	43749.5	153	0.583	380	5500	0.66	5120	5500	
JAPAN	L	80 630	5656N	15226M	18714.7	32490.5	43177.2	82	3.000	1948	28600	0.65	26652	28600	
USSR	M	79 624	5728N	15022M	18734.4	32190.4	43003.5	101	1.750	1131	11000	0.65	9869	11000	
JAPAN	M	79 630	5759N	14803M	18745.0	31971.3	43051.5	120	1.833	1184	13860	0.65	12676	13860	
USSR	M	79 626	5612N	14849M	18747.7	31903.1	43000.5	115	1.500	966	11000	0.64	10034	11000	
JAPAN	L	79 626	5638N	15230M	18702.2	32570.9	43284.1	87	4.083	2478	13640	0.61	11162	13640	
JAPAN	S	80 626	5714N	15102M	18727.3	32299.2	43003.4	90	0.667	384	8800	2.07	8416	8800	
JAPAN	S	80 627	5659N	15131M	18718.4	32400.0	43049.0	97	0.667	364	9240	3.15	8876	9240	
USSR	M	79 626	5812N	14849M	18747.7	31903.1	43020.5	115	1.333	724	6600	0.54	5876	6600	
USSR	M	80 6 3	5711N	15108M	18725.6	32319.5	43007.9	82	1.167	619	7920	0.53	7301	7920	

*** NOTE *** THE ACCURACY OF POSITION AND LOGAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-11. TURBOT, JULY-SEPTEMBER 1979-80

VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULS	RATES	DEPTH	HOURS	CAICH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
*****	YMMDD	*****	*****	7X	7Y	7Z	(FMS)	TRANLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
JAPAN	79 7 3	5757N	14907W	18744.5	31983.9	43047.6	126	1.333	11013	8.26	4.82	4607	15620
JAPAN	79 7 26	5850N	14450W	18747.5	31389.8	43229.0	164	1.0CC	7484	7.48	2.33	876	8360
JAPAN	79 7 28	5613N	15317W	18678.6	32744.4	43601.3	139	0.750	5198	6.93	2.02	49802	55000
JAPAN	79 8 3	5707N	15119W	18723.3	32350.8	43018.4	94	1.167	6485	5.56	4.86	115	6600
JAPAN	79 9 11	5631N	15234W	18696.7	32605.2	43334.0	112	1.833	9218	5.03	2.44	52384	61600
JAPAN	79 9 17	5651N	15141W	18713.2	32446.7	43082.3	118	1.667	5942	3.57	2.66	38058	44000
JAPAN	79 7 8	5601N	14918W	18745.4	31979.4	43058.1	131	1.500	4858	3.24	3.89	3064	7920
JAPAN	79 9 28	5609N	15325W	18674.3	32773.1	43056.3	119	1.167	3707	3.18	3.30	33693	37400
JAPAN	79 9 17	5650N	15142W	18712.5	32452.1	43098.2	115	1.667	4867	2.92	1.48	61133	66000
JAPAN	79 9 29	5609N	15340W	18673.0	32797.7	43729.5	137	1.167	3162	2.71	2.80	29838	33000
JAPAN	79 7 8	5750N	14936W	18742.5	32045.0	43035.6	126	1.000	2686	2.65	3.36	2594	5280
JAPAN	79 9 6	5631N	15236W	18696.6	32608.3	43341.5	109	1.333	3491	2.62	2.29	58109	61600
JAPAN	79 9 16	5651N	15141W	18713.2	32446.7	43092.3	153	0.583	1484	2.54	2.49	42516	44000
JAPAN	79 9 27	5632N	15224W	18696.0	32586.1	43293.1	115	0.500	1116	2.23	1.51	60484	61600
JAPAN	79 9 14	5632N	15221W	18696.2	32581.6	43263.0	147	1.750	3897	2.23	3.08	29103	33000
JAPAN	80 7 26	5632N	15226W	18697.9	32589.1	43300.0	115	1.000	2111	2.11	4.93	4489	6600
USSR	80 8 31	5635N	15225W	18707.4	32534.8	43230.7	93	2.917	5948	2.04	1.60	12972	18920
JAPAN	79 7 4	5657N	15131W	18717.2	32408.2	43056.0	120	1.167	2222	1.90	2.60	11858	14080
USSR	80 9 29	5635N	15200W	18701.5	32538.5	43206.1	79	1.500	2811	1.87	1.09	4669	7480
JAPAN	79 7 4	5705N	15108W	18724.6	32327.8	43010.9	125	1.333	2423	1.82	1.46	12097	14520
JAPAN	79 7 12	5639N	15142W	18705.3	32496.4	43146.7	120	0.917	1377	1.50	3.56	14038	16500
JAPAN	79 9 7	5631N	15234W	18696.7	32605.2	43334.0	105	1.563	2363	1.45	3.07	16837	18200
USSR	80 9 2	5645N	15221W	18707.6	32528.9	43217.1	93	2.667	3963	1.49	1.20	9237	13200
JAPAN	79 7 2	5707N	15119W	18723.3	32350.6	43018.4	131	1.167	1614	1.38	1.89	12686	14300
JAPAN	79 7 2	5803N	14930W	18745.7	31984.2	43065.2	131	1.000	1375	1.37	2.77	1045	2420
USSR	80 9 1	5648N	15218W	18707.0	32528.6	43212.5	98	2.167	2912	1.34	0.94	10288	13200
JAPAN	79 8 3	5707N	15116W	18723.3	32346.7	43017.2	104	1.333	1744	1.31	3.32	2656	4400
JAPAN	79 7 9	5802N	14854W	18745.8	31949.4	43057.1	137	1.333	1720	1.29	3.74	2680	4400
JAPAN	79 7 9	5612N	15318W	18677.6	32749.9	43610.4	96	3.000	3678	1.23	2.97	10622	14500
JAPAN	79 7 2	5757N	14908W	18744.5	31965.0	43047.7	147	2.333	2777	1.19	7.71	6243	9020
JAPAN	80 9 27	5802N	14851W	18745.8	31946.2	43056.8	169	2.500	2921	1.17	1.74	49879	52800
USSR	79 8 2	5641N	15244W	18703.7	32579.7	43324.2	98	0.333	368	1.16	2.35	8412	8800
JAPAN	79 9 3	5603N	15341W	18667.1	32823.0	43758.8	125	0.667	750	1.12	4.00	19050	19800
JAPAN	79 7 16	5609N	15324W	18674.3	32771.5	43651.5	246	3.083	3456	1.12	5.91	2044	5500
JAPAN	79 9 6	5627N	15236W	18693.4	32624.3	43361.2	142	2.167	2349	1.02	4.44	8651	11000
USSR	80 7 3	5634N	15234W	18695.0	32593.1	43319.0	74	1.417	1518	1.00	1.00	7282	6800
MEXICO	79 7 31	5703N	15140W	18726.4	32396.0	43043.8	60	1.333	1371	1.03	2.05	14029	15400
KOREA	80 9 25	5930N	14823W	18747.5	31413.0	43233.0	103	3.750	3826	1.02	1.05	13774	17600
JAPAN	79 9 21	5617N	15303W	18683.2	32706.2	43520.0	125	1.267	1281	1.01	5.54	17419	18700
JAPAN	79 9 21	5654N	15135W	18715.3	32426.0	43073.7	116	2.000	1990	0.99	3.95	13410	15400
JAPAN	79 9 26	5641N	15149W	18706.3	32488.5	43151.7	145	1.167	1138	0.98	1.49	12062	13200
USSR	80 8 9	5636N	15226W	18704.8	32576.0	43287.0	77	2.167	2070	0.96	0.73	32910	34900
JAPAN	79 7 10	5612N	15317W	18677.7	32748.3	43605.7	115	3.000	2845	0.95	3.27	10355	13200

NOTE: THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION.

TABLE D-11 (continued). TURBOT, JULY-SEPTEMBER 1979-80

NATION	CLASS	DATE	TIME	LAT	LONG	APPRX 7X	LOKAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	79 6 1	5707N	15114W	18723.4	32344.0	43016.4	105.	1.167	1065.	0.91	3.40	5535.	6000.	
JAPAN	L	79 9 12	5617N	15304W	18683.2	32707.8	43524.4	100.	1.500	1345.	0.90	2.63	9655.	11000.	
JAPAN	L	79 9 3	5637N	15351W	18671.9	32790.8	43693.5	117.	2.167	1938.	0.89	3.57	9062.	11000.	
JAPAN	L	79 9 28	5613N	15317W	18678.6	32744.4	43601.3	114.	3.417	1261.	0.89	1.79	22939.	24200.	
JAPAN	S	80 8 1	5606N	14736W	18750.4	31613.0	43219.0	164.	3.333	2903.	0.87	3.79	7437.	10340.	
JAPAN	S	79 7 20	5609N	15325W	18674.3	32773.1	43656.3	55.	1.167	1015.	0.87	1.05	42985.	44000.	
MEXICO	S	79 7 5	5649N	15141W	18711.9	32454.8	43100.6	126.	0.917	797.	0.87	3.74	15923.	16720.	
JAPAN	S	79 7 16	5609N	15339W	18673.1	32796.0	43724.5	109.	2.833	2397.	0.85	3.71	2003.	4400.	
JAPAN	L	79 9 19	5631N	15222W	18697.3	32587.1	43291.3	116.	2.000	1647.	0.82	3.25	24753.	26400.	
JAPAN	L	79 9 11	5632N	15229W	18697.7	32593.7	43310.6	118.	0.750	614.	0.82	2.52	8186.	8000.	
JAPAN	S	79 6 3	5709N	15109W	18724.6	32329.1	43011.2	98.	1.500	1190.	0.80	2.73	2104.	3300.	
USSR	M	80 7 5	5641N	15222W	18704.7	32546.7	43240.9	66.	1.417	1125.	0.79	1.30	9875.	11000.	
JAPAN	S	80 9 22	5603N	14852W	18746.0	31943.1	43059.1	164.	2.917	2297.	0.79	1.69	12223.	14520.	
JAPAN	S	79 7 18	5634N	15157W	18701.0	32532.1	43203.3	109.	2.000	1570.	0.79	3.69	5250.	6820.	
JAPAN	L	79 9 8	5628N	15236W	18694.2	32620.3	43356.3	132.	0.833	642.	0.77	3.15	47758.	48400.	
JAPAN	M	79 7 4	5742N	14955W	18739.8	32100.0	43021.6	126.	1.000	769.	0.77	2.43	3851.	4620.	
JAPAN	S	79 6 6	5626N	15233W	18692.0	32623.8	43354.9	123.	1.333	1020.	0.76	3.20	2280.	3300.	
JAPAN	S	79 7 8	5612N	15318W	18677.6	32749.9	43610.4	103.	2.250	1682.	0.75	3.17	12836.	14520.	
JAPAN	M	79 7 5	5657N	15131W	18717.2	32408.2	43056.0	115.	1.667	1227.	0.74	2.22	20993.	22220.	
JAPAN	S	79 9 22	5617N	15302W	18683.3	32704.6	43515.6	142.	1.500	1100.	0.73	2.68	5500.	6600.	
JAPAN	M	80 9 19	5608N	14736W	18750.2	31603.1	43224.6	175.	1.500	1096.	0.73	1.74	3304.	4400.	
JAPAN	S	80 9 27	5608N	14856W	18745.3	31559.7	43052.9	169.	2.550	1860.	0.73	2.29	9580.	11440.	
JAPAN	L	79 7 22	5610N	15346W	18673.5	32803.6	43755.9	98.	1.033	787.	0.73	1.67	10213.	11000.	
JAPAN	S	79 7 10	5613N	15317W	18678.0	32744.4	43601.3	109.	2.417	1750.	0.72	2.77	13650.	15400.	
JAPAN	S	79 7 29	5633N	15159W	18700.1	32545.0	43213.2	107.	1.000	718.	0.72	1.47	602.	1320.	
JAPAN	L	79 9 7	5632N	15228W	18697.8	32592.1	43307.0	115.	1.500	1055.	0.70	3.52	10545.	105600.	
USSR	M	80 9 10	5640N	15223W	18704.0	32552.3	43249.3	77.	1.667	1171.	0.70	1.26	3689.	5060.	
JAPAN	S	79 9 10	5632N	15231W	18697.6	32596.7	43317.9	137.	1.667	1167.	0.70	2.87	4113.	5280.	
JAPAN	S	79 9 28	5633N	14826W	18750.3	31793.2	43133.5	159.	2.667	1830.	0.65	1.53	4110.	5940.	
JAPAN	S	79 9 19	5618N	15308W	18692.0	32716.1	43546.8	142.	1.083	729.	0.67	4.13	19071.	19000.	
JAPAN	S	80 8 12	5600N	14757W	18750.7	31654.2	43208.1	148.	3.250	2185.	0.67	2.57	3535.	5720.	
JAPAN	S	80 9 23	5603N	14853W	18746.0	31944.2	43059.3	153.	3.000	1965.	0.66	2.34	6835.	6000.	
JAPAN	S	79 9 10	5632N	15229W	18697.7	32593.7	43310.6	136.	1.167	759.	0.65	2.50	11341.	12100.	
JAPAN	S	79 7 5	5633N	15159W	18700.1	32545.0	43213.2	109.	3.000	1924.	0.64	2.94	8416.	10340.	
JAPAN	S	79 8 25	5631N	15157W	18698.8	32550.0	43217.7	164.	2.250	1427.	0.63	4.85	3633.	5060.	
JAPAN	S	79 7 25	5706N	15123W	18722.6	32360.3	43022.5	115.	2.333	1470.	0.63	3.49	2930.	4400.	
JAPAN	S	79 8 2	5606N	14848W	18746.0	31926.7	43065.5	120.	3.917	2422.	0.62	3.09	5058.	7480.	
JAPAN	S	80 7 30	5628N	14514W	18747.8	31414.2	43230.5	101.	0.333	205.	0.62	1.80	5295.	5500.	
JAPAN	M	79 9 25	5752N	14847W	18742.9	32049.2	43041.0	139.	2.167	1266.	0.59	3.63	50854.	52140.	
JAPAN	L	79 9 25	5609N	15338W	18673.2	32794.4	43719.5	103.	0.417	247.	0.59	1.41	1953.	2200.	
JAPAN	S	79 8 13	5704N	15127W	18721.4	32374.0	43030.1	132.	2.083	1205.	0.58	3.37	6495.	7700.	
JAPAN	L	79 9 19	5630N	15234W	18695.9	32609.3	43332.9	131.	1.667	946.	0.57	2.24	27654.	28600.	
JAPAN	S	79 7 9	5612N	15317W	18677.7	32748.3	43605.7	137.	2.583	1465.	0.57	3.12	7555.	9020.	
MEXICO	S	79 7 31	5704N	15139W	18721.0	32390.5	43039.4	62.	1.250	706.	0.57	2.05	14694.	15400.	
JAPAN	S	80 8 8	5616N	15310W	18681.9	32721.3	43555.6	155.	2.333	1313.	0.56	2.16	4647.	6160.	

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-11 (continued). TURBOT, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	79 8 12	5707N	15113W	18723.4	32362.7	43016.1	126.	3.000	1676.	11522.	13200.
USSR	M	80 6 6	5637N	15223W	18701.6	32566.5	43266.5	78.	1.000	558.	9122.	9680.
JAPAN	S	79 8 4	5646N	15146W	18705.8	32474.0	43122.8	96.	1.500	816.	3144.	3960.
USSR	M	80 8 8	5611N	15329W	18675.8	32771.7	43667.0	96.	2.417	1307.	6613.	7920.
JAPAN	S	80 9 28	5836N	14820W	18759.5	31775.0	43140.6	202.	1.667	895.	1965.	2860.
JAPAN	M	79 7 7	5701N	15125W	18719.8	32363.6	43037.5	118.	1.500	792.	2948.	3740.
USSR	M	80 7 7	5641N	15221W	18704.8	32545.2	43237.5	63.	1.000	523.	6277.	8800.
JAPAN	S	80 9 25	5627N	15209W	18695.0	32583.6	43270.2	137.	3.333	1743.	7497.	9240.
JAPAN	M	79 7 7	5818N	15047W	18748.3	32005.1	43156.7	109.	1.333	690.	33190.	33880.
JAPAN	S	80 9 21	5758N	14858W	18744.9	31967.8	43048.6	164.	3.667	1896.	4924.	6820.
JAPAN	S	80 7 25	5609N	15322W	18674.5	32768.2	43642.1	98.	1.250	639.	2881.	3520.
JAPAN	S	79 8 10	5701N	15128W	18720.8	32379.5	43033.7	104.	3.000	1527.	2873.	4400.
USSR	M	80 7 3	5641N	15221W	18704.8	32545.2	43237.5	71.	2.167	1103.	16497.	17600.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

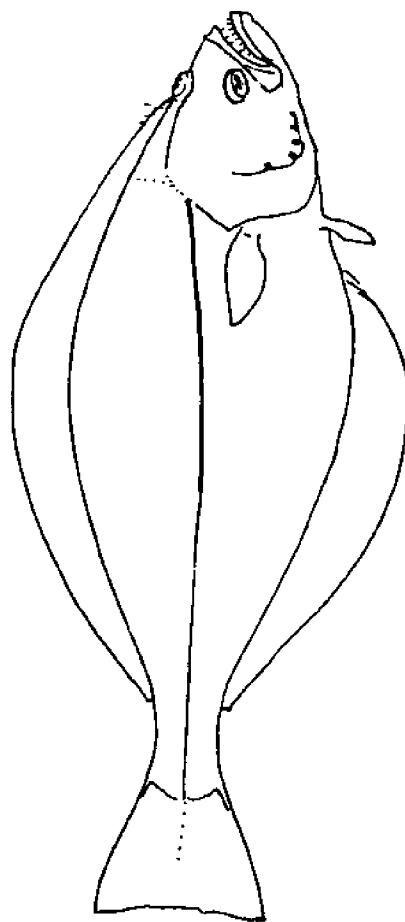


TABLE D-12. TURBOT, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE	YMPDD	LAI	LONG	APPROX 7X	LOTRAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	1 THOUSAND LBS PER HOUR	SIZE LBS/FISH	RYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	791115	*****	5630N	15234W	18695.9	32609.3	43336.9	149.	1.083	6797.	6.27	1.34	5303.	12100.
JAPAN	M	801106	*****	5653N	15342W	18656.7	32263.4	43804.2	134.	1.000	4553.	4.35	1.48	7087.	11440.
JAPAN	M	791107	*****	5642N	15149W	18700.2	32494.5	43147.0	137.	2.083	8207.	3.94	2.04	29193.	37400.
JAPAN	M	791105	*****	5633N	15158W	18707.0	32543.5	43210.6	142.	0.833	3008.	3.61	1.68	16792.	19800.
JAPAN	L	791006	*****	5602N	15311W	18666.1	32826.9	43762.8	87.	0.750	2706.	3.61	2.17	52294.	55000.
JAPAN	S	801018	*****	5746N	14944W	18741.2	32070.7	43028.3	175.	1.667	5805.	3.45	2.50	3655.	9460.
JAPAN	L	791121	*****	5642N	15148W	18707.0	32493.0	43144.9	146.	0.833	2872.	3.45	1.04	52128.	55000.
JAPAN	S	801016	*****	5828N	14830W	18745.9	31817.8	43119.9	191.	2.417	7938.	3.28	4.31	4382.	12320.
JAPAN	M	791109	*****	5654N	15154W	18701.1	32533.7	43195.9	159.	1.167	3284.	2.80	1.36	23136.	26400.
JAPAN	M	801102	*****	5743N	14951W	18740.2	32091.2	43023.2	159.	1.000	2713.	2.71	2.23	14007.	16720.
JAPAN	M	791108	*****	5637N	15152W	18703.4	32518.8	43177.0	150.	1.333	3476.	2.61	1.80	14124.	17600.
JAPAN	M	791105	*****	5713N	15056W	18726.9	32295.5	43003.7	164.	1.417	3585.	2.52	1.69	25035.	26600.
JAPAN	S	801016	*****	5850N	14811W	18750.9	31708.4	43181.4	197.	2.750	6640.	2.41	2.11	32080.	38720.
JAPAN	M	801106	*****	5812N	15644W	18578.2	33349.5	44958.6	120.	0.583	1370.	2.35	1.31	15350.	16720.
JAPAN	M	791109	*****	5632N	15158W	18699.4	32567.5	43215.5	142.	0.667	1532.	2.30	1.51	22668.	24200.
JAPAN	M	791108	*****	5639N	15152W	18704.8	32510.8	43187.6	142.	1.500	3130.	2.09	1.49	29870.	33000.
JAPAN	L	791123	*****	5555N	15335W	18659.5	32344.0	43762.5	130.	0.583	1126.	1.93	1.22	6574.	7700.
JAPAN	M	791103	*****	5813N	14830W	18740.0	31879.4	43079.5	142.	0.523	1104.	1.89	1.93	7696.	8600.
JAPAN	M	791107	*****	5631N	15201W	18694.5	32555.9	43228.2	148.	1.167	2060.	1.77	1.25	52940.	55000.
JAPAN	M	801104	*****	5740N	14950W	18739.2	32109.5	43018.3	156.	1.000	1703.	1.70	1.51	11717.	13420.
USSR	M	801014	*****	5638N	15153W	18704.0	32516.3	43174.6	90.	1.083	1819.	1.68	1.59	19301.	21120.
JAPAN	S	801012	*****	5742N	14845W	18735.9	32093.0	43021.4	169.	1.917	3034.	1.58	1.86	8186.	11220.
JAPAN	S	801017	*****	5807N	14647W	18746.8	31921.5	43067.7	164.	2.250	3511.	1.56	1.56	10127.	13640.
JAPAN	M	801105	*****	5557N	15353W	18655.8	32866.4	43642.4	134.	0.500	779.	1.56	1.51	13521.	14300.
USSR	M	801012	*****	5642N	15239W	18704.6	32568.0	43296.6	79.	1.083	1543.	1.42	1.71	25517.	27060.
USSR	M	801008	*****	5639N	15226W	18703.1	32560.8	43264.8	82.	2.750	3796.	1.36	0.80	9184.	12980.
JAPAN	S	791029	*****	5646W	14446W	18747.5	31387.0	43227.9	191.	2.500	3283.	1.31	1.54	8597.	11820.
JAPAN	L	791105	*****	5609N	15323W	18674.4	32789.9	43646.8	118.	0.833	1088.	1.31	1.49	60512.	61600.
JAPAN	M	801102	*****	5746N	14948W	18741.2	32075.3	43028.5	159.	1.063	1407.	1.30	1.32	13993.	15400.
JAPAN	M	791105	*****	5634N	15154W	18701.1	32533.7	43195.9	134.	0.583	755.	1.29	1.47	60845.	61600.
JAPAN	M	791019	*****	5816N	14840W	18748.4	31977.3	43085.1	112.	1.500	1898.	1.27	1.60	36162.	36060.
JAPAN	M	801106	*****	5510N	15653W	18571.1	33374.6	44983.8	87.	0.333	410.	1.23	1.56	11030.	11440.
USSR	M	791128	*****	5818N	14837W	18742.7	31866.1	43093.7	164.	0.417	508.	1.22	1.23	32492.	33000.
USSR	M	791130	*****	5818N	14834W	18742.7	31863.0	43093.1	191.	0.667	803.	1.20	1.23	22957.	23760.
JAPAN	S	801006	*****	5829N	14447W	18747.6	31391.5	43225.5	180.	1.833	2171.	1.18	1.73	2449.	4620.
JAPAN	M	791108	*****	5632N	15159W	18699.4	32548.9	43218.0	146.	0.833	905.	1.09	0.69	34295.	35200.
JAPAN	S	791030	*****	5829N	14456W	18747.6	31397.8	43228.0	191.	3.000	3246.	1.08	2.53	4694.	8140.
JAPAN	S	801019	*****	5637N	15152W	18703.4	32518.8	43177.0	164.	2.500	2528.	1.01	1.46	10892.	13420.
JAPAN	M	801109	*****	5456N	15723W	18540.1	33484.3	45188.5	90.	1.063	1085.	1.00	2.35	29715.	30600.
JAPAN	L	791010	*****	5602N	15335W	18672.5	32793.4	43708.8	130.	1.583	1575.	0.99	1.59	75425.	77000.
JAPAN	L	791006	*****	5609N	15338W	18673.2	32794.4	43719.5	116.	0.750	741.	0.99	1.42	12459.	13200.
JAPAN	M	801103	*****	5753N	14939W	18742.7	32044.2	43037.5	128.	0.750	738.	0.98	1.52	6302.	7040.
JAPAN	S	801018	*****	5631N	14826W	18750.2	31801.5	43127.5	202.	2.333	2202.	0.94	3.18	1758.	3960.
JAPAN	S	801019	*****	5620N	15242W	18687.3	32661.4	43418.4	175.	2.167	1986.	0.92	3.17	4174.	6160.
USSR	M	801012	*****	5647N	15224W	18706.1	32541.5	43237.4	74.	3.750	3343.	0.89	0.94	13597.	16940.

*** NOTE *** THE ACCURACY OF POSITION AND LOTRAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-12 (continued). TURBOT, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPXOR LORAN-C	PULSE RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YYMMDD			7X	7Y	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FTSH	(LBS)	(LBS)
JAPAN	S	6010 8	5605N	15330W	18676.0	32797.0	208.	3.000	2635.	0.88	3.44	4405.	7040.
JAPAN	S	7910 6	5912N	14644W	18749.9	31544.5	153.	3.033	2640.	0.87	1.95	8600.	11440.
JAPAN	L	791018	5604N	15334W	18668.7	32207.5	165.	1.333	1149.	0.86	1.93	12051.	13200.
JAPAN	S	801019	5651N	15135W	18713.4	32439.6	191.	2.417	2063.	0.85	2.32	2777.	4840.
USSR	M	791127	5815N	14846W	18748.2	31887.6	164.	0.917	776.	0.85	1.21	54224.	55000.
USSR	M	801015	5643N	15220W	18708.2	32535.1	71.	1.167	970.	0.83	1.30	57550.	58520.
JAPAN	S	7910 6	5515N	14655W	18749.6	31541.1	169.	3.583	2900.	0.81	2.50	7440.	10340.
USSR	M	801013	5642N	15224W	18705.3	32545.8	77.	2.783	2155.	0.77	1.11	25345.	27500.
JAPAN	S	801016	5802N	14852W	18745.8	31947.2	169.	2.333	1771.	0.76	2.77	3949.	5720.
JAPAN	M	8011 8	5510N	15652W	18571.3	33372.6	87.	0.750	566.	0.75	1.48	4274.	4840.
JAPAN	L	7910 2	5610N	15322W	18675.5	32764.3	120.	1.333	966.	0.72	1.65	21034.	22000.
USSR	M	8010 4	5649N	15147W	18711.7	32463.3	120.	1.833	1282.	0.70	1.33	22258.	23540.
JAPAN	M	8011 4	5735N	15001W	18738.8	32119.5	150.	0.500	348.	0.70	1.05	4272.	4820.
USSR	M	8010 3	5642N	15147W	18707.1	32491.6	126.	2.833	1893.	0.67	1.51	25167.	27060.
JAPAN	S	7910 4	5633N	15158W	18700.2	32543.5	169.	0.500	333.	0.67	1.82	1867.	2200.
JAPAN	L	7910 5	5608N	15332W	18672.7	32768.5	103.	1.000	662.	0.66	1.31	14738.	15400.
JAPAN	L	7910 2	5607N	15334W	18672.6	32791.8	114.	0.583	384.	0.66	2.02	23816.	24200.
JAPAN	L	7910 2	5607N	15332W	18671.8	32792.4	124.	1.083	713.	0.66	2.75	38887.	38600.
JAPAN	L	7910 1	5608N	15327W	18671.2	32780.3	137.	2.750	1808.	0.66	0.26	37792.	38600.
JAPAN	L	791122	5641N	15148W	18706.3	32497.0	149.	1.000	657.	0.66	0.91	10343.	11000.
USSR	M	801011	5637N	15225W	18701.7	32567.4	87.	0.833	514.	0.62	1.18	14886.	15400.
JAPAN	S	8010 6	5512N	14648W	18745.9	31547.6	164.	2.583	1568.	0.61	2.00	3052.	4620.
USSR	M	8010 6	5645N	15222W	18767.5	32530.3	82.	2.333	1405.	0.60	0.78	13995.	13400.
JAPAN	S	801015	5648N	14812W	18750.9	31726.0	169.	2.333	1401.	0.60	2.23	5199.	6600.
JAPAN	L	7910 3	5608N	15327W	18671.2	32780.3	114.	1.750	1007.	0.56	1.11	34193.	35200.
JAPAN	S	791018	5636N	14835W	18750.5	31789.4	109.	3.000	1721.	0.57	1.07	5979.	7700.
JAPAN	M	7911 4	5758N	14903W	18744.8	31975.4	137.	2.500	1377.	0.55	1.02	16223.	17600.
JAPAN	M	801111	5508N	15643W	18570.0	33351.9	134.	1.000	533.	0.53	4.58	20587.	21120.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

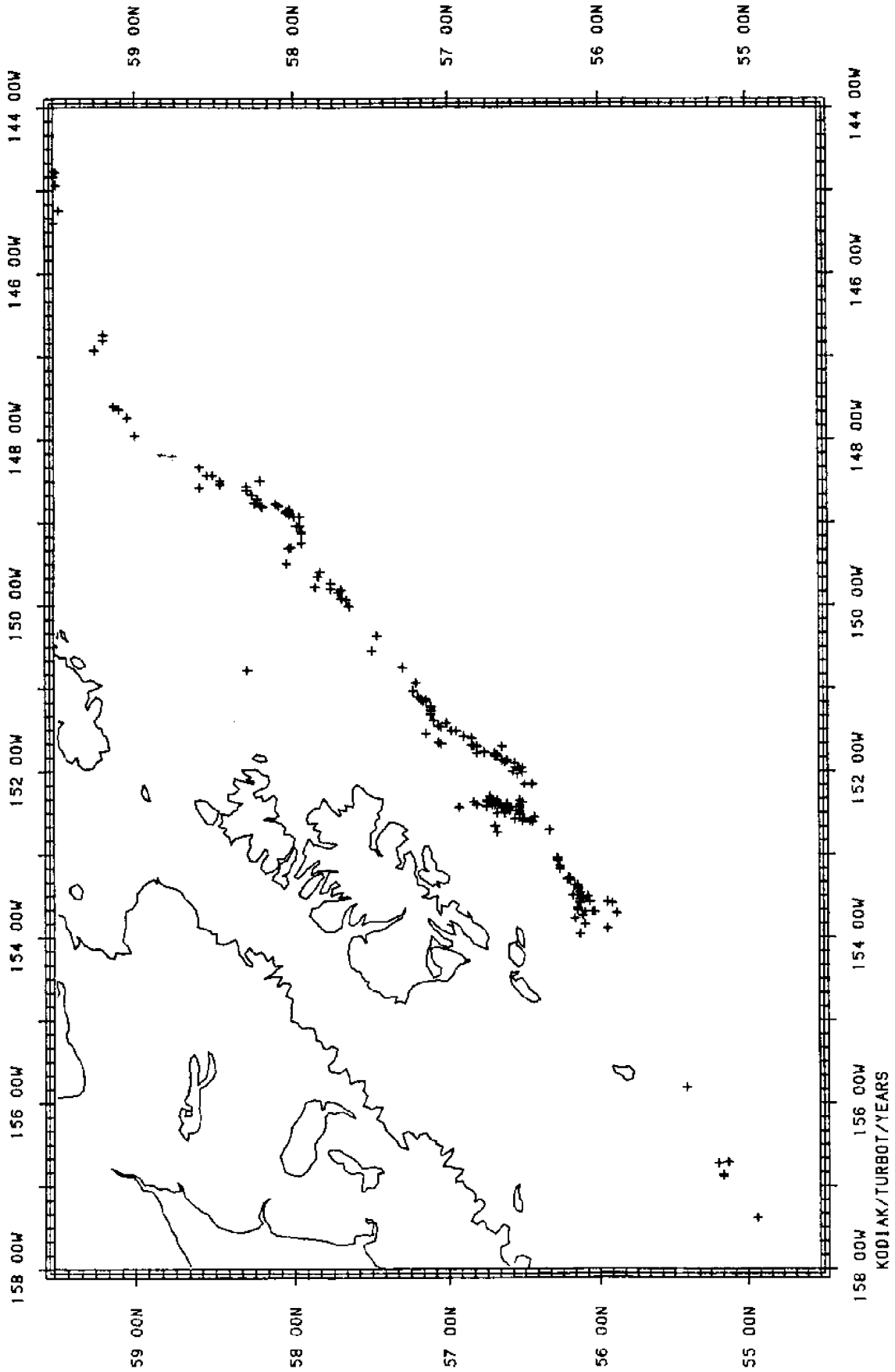


FIGURE D-4. TRAWLING LOCATIONS FOR TURBOT, ALL MONTHS, 1979-80

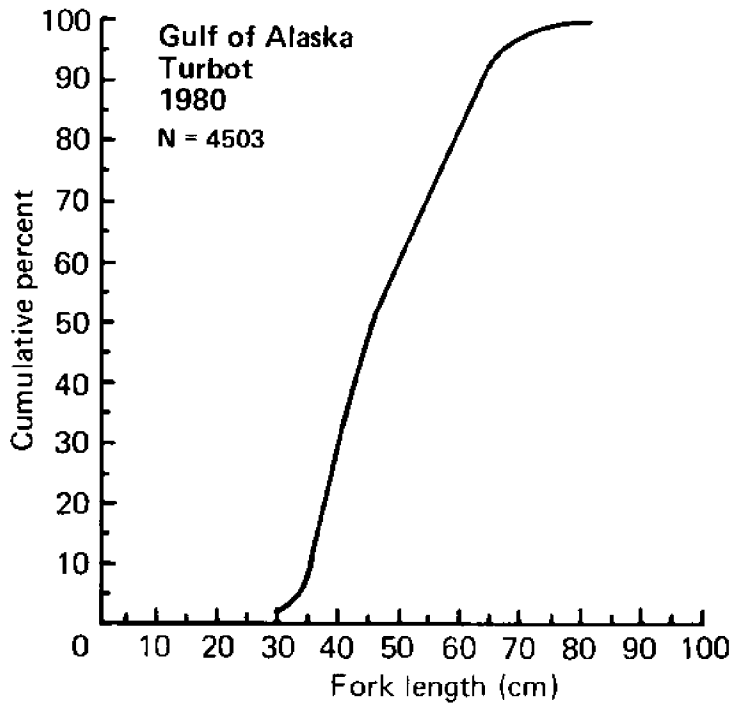
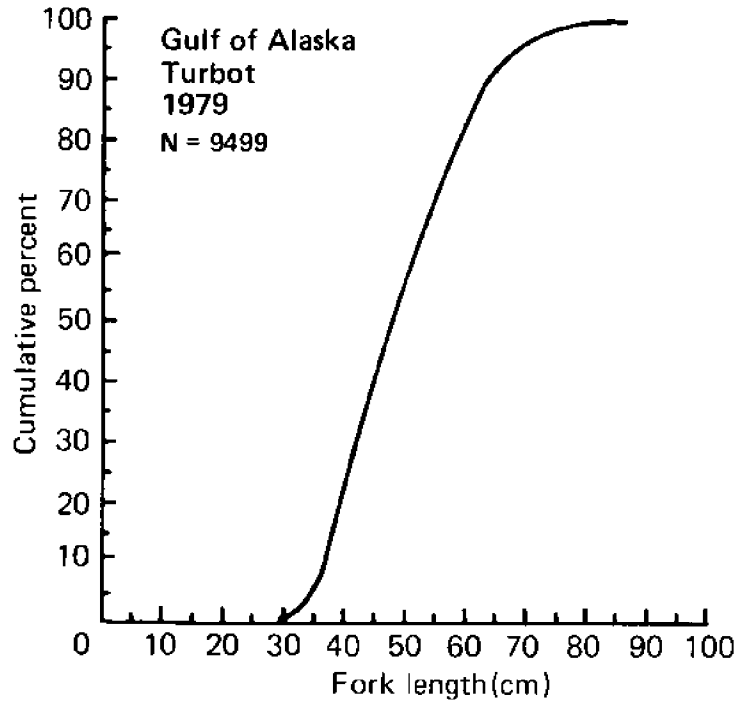


FIGURE D-5. CUMULATIVE LENGTH-FREQUENCY DISTRIBUTIONS OF THE TURBOT CATCH FROM ALL AREAS OF THE GULF OF ALASKA DURING 1979-80.

TABLE D-13. PACIFIC OCEAN PERCH, APRIL-JUNE 1979-80

NATION	MODEL CLASS	DATE	LAT	LONG	APPROX 7X	LOGRAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USER	M	79 627	5628N	14832W	18745.9	31819.8	43120.5	112.	0.250	14782.	59.13	1.02	2818.	17600.
JAPAN	S	80 627	5707N	15121W	18723.2	32353.5	43015.2	96.	0.500	7601.	15.20	1.17	3399.	11000.
USER	M	79 624	5814N	14843W	18748.1	31888.6	43084.5	120.	1.000	11926.	11.93	1.12	3474.	15400.
USER	M	80 6 5	5812N	14850W	18747.7	31904.1	43080.7	96.	1.000	7293.	7.29	1.22	5907.	13200.
JAPAN	L	80 627	5607N	15311W	18711.9	32790.8	43693.5	115.	1.833	11423.	6.23	0.88	17.	11440.
USER	M	79 625	5813N	14842W	18747.9	31897.9	43082.9	123.	1.167	8702.	5.74	1.08	2098.	8800.
JAPAN	M	79 630	5737N	14915W	18744.5	31992.6	43088.4	134.	0.333	1899.	5.70	1.10	4481.	6380.
USER	M	79 626	5812N	14849W	18747.7	31903.1	43080.5	115.	1.500	8241.	5.49	1.09	2759.	11000.
USER	M	79 623	5704N	15128W	18721.4	32375.4	43030.8	126.	1.167	6234.	5.34	1.08	2566.	8000.
USER	M	79 627	5813N	14848W	18747.9	31897.9	43082.9	123.	1.667	7558.	4.53	1.11	1242.	8800.
USER	M	79 625	5813N	14848W	18747.9	31897.9	43082.9	118.	1.583	7012.	6.43	1.11	3988.	11000.
JAPAN	M	79 630	5759N	14903W	18745.0	31971.3	43051.5	120.	1.833	8071.	4.40	1.07	5789.	13860.
USER	M	79 625	5819N	14834W	18748.0	31856.9	43095.7	120.	2.000	8558.	4.28	1.11	2442.	11000.
USER	M	79 628	5828N	14833W	18745.9	31820.8	43120.3	117.	0.750	3158.	4.21	0.99	1242.	4400.
JAPAN	M	80 6 1	5537N	15334W	18661.7	32634.7	43749.5	153.	0.583	2406.	4.12	1.21	3094.	5500.
JAPAN	M	80 6 2	5613N	15319W	18675.5	32746.0	43606.0	124.	0.167	607.	3.64	1.17	15.	6600.
JAPAN	L	80 627	5522N	15612W	18597.6	32520.5	44716.7	107.	2.167	6585.	2.63	1.05	3760.	8140.
JAPAN	M	79 6 3	5633N	15202W	18700.0	32549.4	43221.1	120.	1.667	4380.	2.58	1.09	3156.	6600.
USER	M	79 626	5812N	14849W	18747.7	31903.1	43080.5	115.	1.333	3444.	2.26	1.17	2713.	5720.
JAPAN	M	79 630	5806N	14849W	18746.6	31926.7	43065.9	120.	1.333	3007.	2.26	1.17	2713.	5720.
JAPAN	M	80 6 1	5536N	15339W	18660.1	32848.8	43777.5	109.	0.583	1246.	2.14	1.07	24054.	25300.
JAPAN	S	80 626	5707N	15116W	18723.3	32346.7	43017.2	98.	0.833	1622.	1.95	1.33	2778.	4400.
JAPAN	S	80 626	5707N	15126W	18723.2	32354.8	43019.7	102.	0.333	640.	1.92	1.23	4860.	5500.
JAPAN	S	80 626	5707N	15119W	18723.3	32350.8	43016.4	101.	1.167	2120.	1.82	1.21	6240.	8360.
USER	M	79 621	5649N	15142W	18711.9	32456.2	43102.5	126.	1.917	3419.	1.78	1.10	11981.	15400.
USER	M	79 627	5815N	14842W	18746.2	31883.5	43080.9	126.	0.500	791.	1.58	0.90	1409.	2200.
USER	M	80 6 6	5811N	14852W	18747.3	31910.3	43074.5	87.	2.333	3658.	1.57	1.12	22742.	26400.
USER	M	79 624	5728N	15022W	18734.4	32190.4	43003.5	101.	1.750	2262.	1.29	1.53	8738.	11000.
USER	M	80 6 2	5618N	15255W	18684.7	32689.6	43480.0	109.	1.167	1423.	1.22	1.53	2977.	4400.
JAPAN	M	79 6 3	5650N	15209W	18697.3	32571.7	43253.4	131.	1.000	1044.	1.04	0.85	3576.	4620.
JAPAN	S	80 627	5707N	15119W	18724.3	32350.8	43018.4	93.	1.250	1285.	1.03	1.50	8615.	9900.
JAPAN	M	80 624	5707N	15117W	18723.3	32348.1	43017.6	93.	1.417	1207.	0.85	1.24	5393.	6000.
USER	M	80 630	5641N	15147W	18706.4	32495.6	43147.5	109.	1.333	1087.	0.81	2.12	5513.	6600.
JAPAN	S	80 626	5707N	15120W	18723.2	32352.1	43018.3	93.	0.833	585.	0.70	1.17	15915.	16500.
USER	M	79 623	5710N	15109W	18725.1	32325.0	43009.6	71.	1.000	551.	0.55	1.05	23649.	24200.
USER	M	80 6 5	5811N	14853W	18747.5	31914.4	43078.7	96.	1.417	764.	0.54	1.15	1436.	2200.
JAPAN	S	80 624	5715N	15049W	18728.1	32278.1	43001.6	97.	1.667	878.	0.53	1.16	3522.	4400.
JAPAN	S	80 628	5707N	15117W	18723.3	32348.1	43017.6	82.	0.500	259.	0.52	1.16	841.	1100.

*** NOTE *** THE ACCURACY OF POSITION AND LOGRAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-14. PACIFIC OCEAN PERCH, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LORAN-C 7Y	PULSE 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	79 7 13	5641N	15149W	18706.3	32498.5	43151.7	128	1.167	14969	12.83	1.12	4831	19600
USSR	M	79 7 13	5641N	15149W	18706.3	32498.5	43151.7	126	0.667	6542	9.81	1.13	2258	8800
JAPAN	S	80 7 30	5628N	14514W	18747.8	31414.2	43230.6	101	0.333	2446	7.34	1.25	3054	5500
USSR	M	79 7 15	5636N	15154W	18702.6	32525.7	43186.4	126	0.667	4585	6.88	1.16	2015	6600
MEXICO	S	79 7 7	5638N	15152W	18704.1	32514.8	43172.3	128	2.000	13579	6.79	1.16	8201	21780
USSR	M	79 7 12	5635N	15142A	18705.3	32496.4	43146.7	120	0.917	5926	6.46	1.12	2674	8400
JAPAN	S	79 7 29	5637N	15153W	18702.3	32520.3	43179.3	114	0.667	3538	5.31	1.16	7022	10560
MEXICO	S	79 7 6	5646N	15146W	18705.8	32472.6	43120.9	126	2.583	12904	5.00	1.18	9976	22880
MEXICO	S	79 7 6	5646N	15146W	18705.8	32472.6	43120.9	126	2.083	10174	4.88	1.17	9846	20020
MEXICO	S	79 7 7	5644N	15146W	18705.5	32482.1	43131.8	126	3.083	13575	4.40	1.16	11205	24860
MEXICO	S	79 7 7	5644N	15146W	18705.5	32482.1	43131.8	128	1.333	5536	4.15	2.57	28344	33880
JAPAN	M	79 7 5	5657N	15047W	18748.3	32005.1	43056.7	109	1.667	6423	3.85	1.11	15797	22220
JAPAN	M	79 7 5	5657N	15047W	18748.3	32005.1	43056.7	109	1.667	6423	3.85	1.11	15797	22220
MEXICO	S	79 7 15	5646N	15131W	18717.2	32408.2	43056.0	115	2.083	6792	3.26	1.17	31488	38280
USSR	M	79 7 1	5614N	14845W	18748.1	31890.7	43084.9	118	1.667	5263	3.16	1.14	3537	8300
JAPAN	M	79 7 3	5621N	14832W	18745.1	31848.7	43100.7	150	1.167	3594	3.08	1.10	1466	5060
MEXICO	S	79 7 13	5646N	15144W	18705.9	32471.2	43119.1	126	0.667	1977	2.97	1.47	7703	9080
USSR	M	79 7 2	5613N	14848W	18747.9	31897.9	43082.9	123	1.833	5069	2.77	1.11	3731	8800
MEXICO	S	79 7 13	5646N	15147W	18705.7	32475.5	43124.7	124	0.833	2107	2.53	1.40	8673	10780
MEXICO	S	79 7 8	5646N	15149W	18705.7	32478.3	43124.5	94	2.083	5215	2.50	1.17	7325	12340
MEXICO	S	79 7 9	5642N	15148W	18707.0	32493.0	43144.9	120	2.833	6900	2.44	1.17	6520	13420
USSR	M	80 7 29	5649N	15213W	18710.6	32500.7	43171.7	57	1.750	4242	2.42	0.64	3678	7320
MEXICO	S	79 7 12	5648N	15142W	18711.3	32460.3	43106.8	128	2.750	6282	2.28	1.16	17918	24200
JAPAN	M	79 7 1	5612N	14849W	18747.7	31903.1	43080.5	134	1.333	2926	2.19	1.15	2334	5280
JAPAN	M	79 7 7	5642N	15148W	18707.0	32493.0	43144.9	109	3.083	6456	2.05	1.07	4541	11000
JAPAN	M	79 7 5	5632N	15203W	18695.2	32554.8	43228.7	116	1.167	2287	1.96	1.04	2533	4840
MEXICO	S	79 7 8	5638N	15153W	18704.0	32516.3	43174.6	115	2.833	5218	1.84	1.22	8202	13420
JAPAN	M	79 7 6	5651N	15139W	18713.3	32443.8	43089.3	118	1.667	2904	1.74	1.13	26796	29700
JAPAN	M	79 7 3	5757N	14907W	18744.5	31983.9	43047.6	126	1.333	2288	1.72	1.13	13332	15620
JAPAN	M	79 7 5	5706N	15124W	18722.6	32361.7	43023.1	118	2.667	4205	1.61	1.14	14195	16486
JAPAN	M	79 7 2	5757N	14906W	18744.5	31985.0	43047.7	147	2.333	3738	1.60	1.14	5282	9020
MEXICO	S	79 7 9	5646N	15146W	18705.8	32474.0	43122.8	115	3.667	5568	1.52	1.19	9172	14740
JAPAN	S	80 7 24	5657N	15351W	18660.0	32263.0	43832.4	115	1.000	1508	1.51	1.27	5092	6000
USSR	M	80 9 29	5638N	15151W	18704.1	32513.4	43170.0	101	2.500	3700	1.48	1.32	22040	25740
JAPAN	M	79 7 1	5610N	14850W	18747.4	31912.4	43075.6	144	1.500	2216	1.48	1.44	3064	5280
JAPAN	S	80 7 23	5616N	15306W	18682.1	32714.9	43537.8	109	1.500	2215	1.48	1.23	13385	17600
JAPAN	S	79 8 3	5636N	15154W	18702.8	32225.7	43186.4	109	2.967	4325	1.46	1.23	11075	15400
JAPAN	S	79 7 5	5639N	15151W	18704.8	32509.4	43165.3	109	2.000	2795	1.40	1.09	4905	7700
JAPAN	M	80 9 1	5603N	14744W	18750.6	31630.6	43211.9	159	1.500	1995	1.33	1.35	14505	16500
JAPAN	M	79 7 7	5701N	15125W	18715.8	32381.6	43037.5	118	1.500	1949	1.30	1.17	1791	3740
JAPAN	M	79 7 2	5612N	14849W	18747.7	31903.1	43080.5	131	1.333	1700	1.27	1.12	3140	4840
JAPAN	S	80 8 12	5642N	14811W	18750.8	31741.7	43155.8	164	3.250	4092	1.26	1.29	4268	8360
USSR	M	80 9 30	5635N	15159W	18701.6	32537.0	43203.5	98	1.333	1675	1.26	0.98	4485	6160
JAPAN	S	80 7 29	5708N	15111W	18724.0	32335.9	43013.5	93	1.000	1255	1.26	1.17	2045	3300
JAPAN	S	80 8 6	5643N	15147W	18707.8	32487.6	43138.3	126	3.000	3550	1.18	1.18	11190	14740
JAPAN	S	79 7 8	5612N	15318W	18677.8	32749.9	43610.4	109	2.250	2851	1.18	1.13	11865	14520

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-14 (continued). PACIFIC OCEAN PERCH, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE YMMDD	LAT	LONG	APPROX LORAN-C 7X	PULSE 7Y	RATES 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	79 7 1	5617N	15247W	18684.4	32881.0	43452.5	86	2.750	3527.	1.17	1.13	11073.	14300.
JAPAN	S	80 6 7	5713N	15076W	18726.9	32295.5	43003.7	101	1.667	1879.	1.13	1.16	6261.	8140.
MEXICO	S	79 7 12	5648N	15133W	18711.2	32461.7	43108.5	131	2.917	3007.	1.03	1.19	13053.	16060.
JAPAN	S	80 5 15	5830N	14430W	18747.4	31376.0	43223.7	148	0.500	506.	1.01	0.94	594.	1100.
JAPAN	S	79 6 27	5632N	15159W	18699.4	32548.9	43218.0	148	2.917	2825.	0.97	1.23	2235.	5060.
JAPAN	S	79 6 1	5707N	15114W	18723.4	32344.0	43016.4	109	1.167	1427.	0.97	1.18	5473.	6600.
USSR	M	80 8 9	5636N	15228W	18700.8	32576.0	43287.0	77	2.167	2070.	0.96	0.83	32910.	34980.
MEXICO	S	79 6 1	5649N	15143W	18711.9	32457.6	43104.1	115	2.000	1871.	0.94	1.22	11329.	13200.
JAPAN	S	80 7 28	5632N	15231W	18697.6	32596.7	43317.9	109	1.167	1089.	0.93	1.19	2871.	3960.
JAPAN	S	79 7 6	5645N	15146W	18705.1	32478.1	43127.3	120	3.000	2780.	0.93	1.12	17780.	10560.
MEXICO	S	79 7 16	5658N	15146W	18717.3	32425.0	43070.4	85	1.333	1229.	0.92	1.13	14831.	16060.
JAPAN	M	79 7 1	5612N	14648W	18747.7	31902.0	43080.3	131	1.333	1204.	0.90	1.13	2536.	3740.
JAPAN	S	79 7 9	5612N	15317W	18677.7	32748.3	43605.7	137	2.583	2306.	0.89	1.30	6714.	9020.
JAPAN	P	80 5 19	5658N	14803W	18750.8	31667.8	43204.2	120	1.500	1315.	0.84	1.14	53685.	55000.
JAPAN	S	79 8 25	5631N	15157W	18598.8	32550.0	43217.7	164	2.250	1960.	0.87	1.45	3100.	5060.
JAPAN	S	80 7 26	5632N	15227W	18697.8	32590.6	43303.5	104	0.833	706.	0.85	1.22	3694.	4400.
JAPAN	M	79 7 8	5750N	14936W	18742.5	32045.0	43035.6	126	1.000	846.	0.85	1.19	4434.	5280.
JAPAN	S	80 8 7	5630N	15201W	18697.8	32599.8	43233.0	191	4.250	3550.	0.84	1.26	9430.	12980.
JAPAN	S	79 8 26	5632N	15158W	18695.4	32547.5	43215.5	153	2.250	1877.	0.83	1.23	3183.	5060.
JAPAN	M	79 7 3	5615N	14843W	18748.2	31824.5	43087.1	134	2.000	1647.	0.82	1.16	2313.	3960.
USSR	M	79 7 15	5659N	15138W	18716.2	32409.8	43056.3	64	0.167	137.	0.82	1.04	26263.	26400.
USSR	M	80 5 27	5630N	15211W	18697.2	32574.7	43261.4	77	2.000	1601.	0.80	0.53	19959.	21560.
JAPAN	S	80 7 10	5632N	15222W	18698.1	32583.1	43286.3	100	1.000	785.	0.78	1.18	6255.	7040.
JAPAN	S	79 7 5	5633N	15159W	18700.1	32545.0	43213.2	109	3.000	2349.	0.78	1.21	7991.	10340.
JAPAN	S	80 7 6	5617N	15306W	18683.0	32710.9	43533.3	106	0.750	575.	0.77	1.16	2065.	2640.
JAPAN	S	80 6 6	5642N	15148W	18707.0	32493.0	43144.9	105	3.167	2421.	0.76	1.21	11879.	14500.
JAPAN	S	80 5 25	5628N	15206W	18696.0	32575.1	43256.6	137	3.167	2414.	0.76	1.28	4186.	6600.
JAPAN	S	79 7 10	5612N	15317W	18677.7	32748.3	43605.7	115	3.000	2276.	0.76	1.03	10924.	13200.
JAPAN	S	80 7 16	5629N	15215W	18696.2	32584.6	43276.6	107	2.250	1704.	0.76	0.80	27336.	29040.
JAPAN	S	80 7 15	5632N	15221W	18698.2	32581.6	43283.0	136	1.417	1061.	0.75	1.19	2239.	3500.
USSR	M	80 5 28	5613N	14850W	18747.9	31900.0	43083.3	82	2.000	1493.	0.75	0.85	927.	2420.
JAPAN	S	79 7 10	5613N	15317W	18678.6	32744.4	43601.3	109	2.417	1786.	0.74	1.09	13614.	15400.
JAPAN	S	79 6 6	5626N	15233W	18692.8	32623.8	43354.9	123	1.333	981.	0.74	1.16	2319.	3300.
JAPAN	S	79 8 2	5606N	14848W	18746.6	31926.7	43065.5	142	3.450	2847.	0.73	1.13	4633.	7480.
JAPAN	S	80 7 14	5633N	15225W	18698.7	32583.6	43291.5	103	1.250	895.	0.72	0.37	27925.	28820.
JAPAN	S	79 5 26	5751N	14931W	18742.8	32035.2	43037.2	126	0.833	580.	0.70	1.20	55960.	56540.
JAPAN	M	80 6 11	5606N	14848W	18746.6	31926.7	43065.5	142	3.450	2310.	0.67	1.50	7590.	9900.
JAPAN	M	79 7 4	5709N	15108W	18724.6	32327.8	43010.9	125	1.333	892.	0.67	1.21	13628.	14520.
JAPAN	S	79 6 24	5630N	15204W	18697.6	32564.3	43241.2	142	2.667	1770.	0.66	1.21	3950.	5720.
JAPAN	S	79 7 4	5742N	14955W	18739.8	32100.0	43021.6	126	1.000	661.	0.66	1.24	3959.	4620.
JAPAN	M	80 9 5	5653N	14812W	18750.9	31696.8	43191.8	159	2.000	1311.	0.66	1.24	2649.	3960.
JAPAN	S	79 7 18	5634N	15157W	18701.0	32538.1	43203.3	105	2.000	1275.	0.64	1.04	5545.	6820.
USSR	M	79 7 27	5449N	15754W	18518.8	33511.9	45383.8	93	2.000	1260.	0.63	0.86	3140.	4400.
JAPAN	S	80 7 12	5634N	15229W	18699.2	32585.6	43300.6	103	1.167	733.	0.63	1.14	10707.	11440.
JAPAN	S	80 5 27	5802N	14851W	18745.8	31946.2	43056.8	165	2.500	1553.	0.62	0.97	51247.	52800.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-14 (continued). PACIFIC OCEAN PERCH, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YYMMDD			7X	7Y	7Z	(FMS)	TRAWLED	(LBS)	PER HOUR	LB5/FISH	(LBS)	(LBS)
JAPAN	M	79 925	5752N	14947W	18742.9	32049.2	43041.0	139.	2.167	1334.	0.62	1.67	50806.	52140.
JAPAN	S	80 726	5609N	15324W	18674.3	32771.5	43651.5	109.	1.333	811.	0.61	1.20	949.	1760.
USSR	M	79 7 7	5757N	14912W	18744.5	31989.3	43048.1	123.	1.417	853.	0.60	1.06	1347.	2200.
USSR	M	80 812	5638N	15224W	18702.5	32561.9	43262.9	74.	1.333	795.	0.60	0.58	11525.	12320.
JAPAN	S	79 812	5707N	15113W	18723.4	32342.7	43016.1	126.	3.000	1732.	0.56	1.25	11468.	13200.
JAPAN	M	80 9 3	5632N	15206W	18699.0	32559.3	43237.0	131.	1.333	746.	0.56	1.25	3874.	4620.
JAPAN	S	80 811	5743N	14951W	18740.2	32091.2	43023.2	142.	3.250	1754.	0.54	0.98	5066.	6820.
USSR	M	79 7 2	5613N	14808W	18745.1	31857.2	43076.2	73.	0.250	132.	0.53	1.05	13068.	13200.
JAPAN	S	79 716	5613N	15317W	18678.6	32744.4	43601.3	115.	3.083	1598.	0.52	1.13	4352.	5940.
JAPAN	S	79 813	5704N	15127W	18721.4	32374.0	43030.1	132.	2.083	1055.	0.51	1.03	6645.	7700.
JAPAN	S	80 812	5500N	14757W	18750.7	31654.2	43208.1	148.	3.250	1630.	0.50	1.29	4090.	5720.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

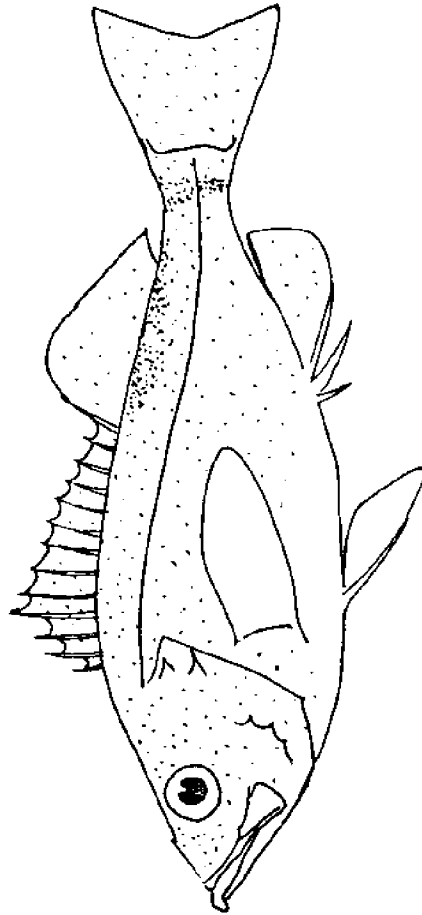


TABLE D-15. PACIFIC OCEAN PERCH, OCTOBER-DECEMBER, 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH	HOURS	L. FISH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YYMMDD			7X 7Y 7Z	7Z	(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
JAPAN	M	7911 5	5634N	15154W	18701.1	32533.7	43195.9	134	0.583	4811.	1-12	56789.	61600.
JAPAN	M	7911 9	5632N	15156W	18695.4	32547.5	43215.5	142	0.567	3997.	1-19	20203.	24200.
JAPAN	M	7910 9	5613N	14713W	18745.8	31563.6	43230.2	137	0.917	5531.	1-10	869.	4400.
JAPAN	M	8011 4	5741N	14953W	18735.5	32101.8	43019.9	150	1.000	5934.	1-47	13406.	16940.
JAPAN	M	7911 8	5637N	15152W	18703.4	32518.8	43177.0	150	1.332	4046.	1-17	13554.	17600.
JAPAN	M	8011 2	5743N	14951W	18740.2	32091.2	43023.2	159	1.000	579.	1-34	14141.	16720.
JAPAN	M	7911 8	5635N	15152W	18704.8	32510.8	43167.6	142	1.500	3150.	1-18	29850.	33000.
JAPAN	M	7911 2	5632N	15159W	18695.4	32548.9	43218.0	148	0.832	1935.	1-13	33665.	35200.
JAPAN	S	7910 9	5513N	14718W	18745.8	31567.7	43232.5	137	0.563	951.	1-01	4549.	5500.
JAPAN	M	7911 7	5631N	15201W	18692.5	32595.9	43228.2	148	1.167	1697.	1-19	53503.	55000.
JAPAN	M	8011 2	5746N	14948W	18741.2	32075.3	43028.5	159	1.083	1496.	1-51	13904.	15400.
USSR	M	8010 4	5638N	15153W	18704.0	32516.3	43174.6	90	1.083	1448.	1-34	19672.	21120.
JAPAN	M	7911 5	5713N	15056W	18726.9	32295.5	43003.7	164	1.417	1819.	1-20	26781.	26600.
JAPAN	M	8011 7	5512N	15646W	18375.8	33353.5	44938.3	79	0.667	816.	1-22	10844.	11660.
JAPAN	M	8011 9	5456N	15723W	18540.1	33484.3	45188.5	90	1.083	1298.	0-78	29502.	30200.
JAPAN	M	7911 5	5634N	15154W	18701.1	32533.7	43195.9	159	1.167	1343.	1-22	25057.	26400.
JAPAN	M	8011 6	5533N	15342W	18656.7	32863.4	43004.2	134	1.000	1338.	0-98	10302.	11440.
JAPAN	S	8010 31	5451N	15732W	18526.7	33519.7	45250.7	123	1.500	1621.	1-66	10919.	12540.
JAPAN	S	8010 18	5742N	14949W	18735.9	32093.0	43021.4	169	1.917	1898.	1-67	9122.	11220.
JAPAN	S	8010 15	5846N	14812W	18750.9	31726.0	43168.8	169	2.333	2264.	1-18	4336.	6600.
JAPAN	M	8011 6	5744N	14950W	18740.5	32085.9	43024.9	164	1.167	1111.	1-32	18469.	19580.
JAPAN	M	7911 4	5758N	14903W	18744.8	31975.4	43049.3	137	2.500	1871.	1-12	15729.	17600.
JAPAN	S	7910 6	5915W	14655W	18745.6	31541.1	43228.7	169	3.583	2436.	1-56	7904.	10340.
JAPAN	S	7910 15	5805N	14849W	18746.4	31531.8	43083.3	130	1.000	866.	0.67	3074.	3740.
JAPAN	M	7911 5	5633N	15158W	18700.2	32563.5	43210.6	142	0.833	518.	1-22	19282.	19800.
USSR	M	8010 1	5843N	15148W	18707.7	32489.0	43140.3	101	1.750	1038.	1-06	4632.	5720.
JAPAN	S	7910 6	5912N	14644W	18745.9	31544.5	43215.0	153	3.033	1595.	1-27	9845.	11440.
USSR	M	8010 4	5645N	15147W	18711.7	32463.3	43111.1	120	1.833	943.	1-18	22597.	23540.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

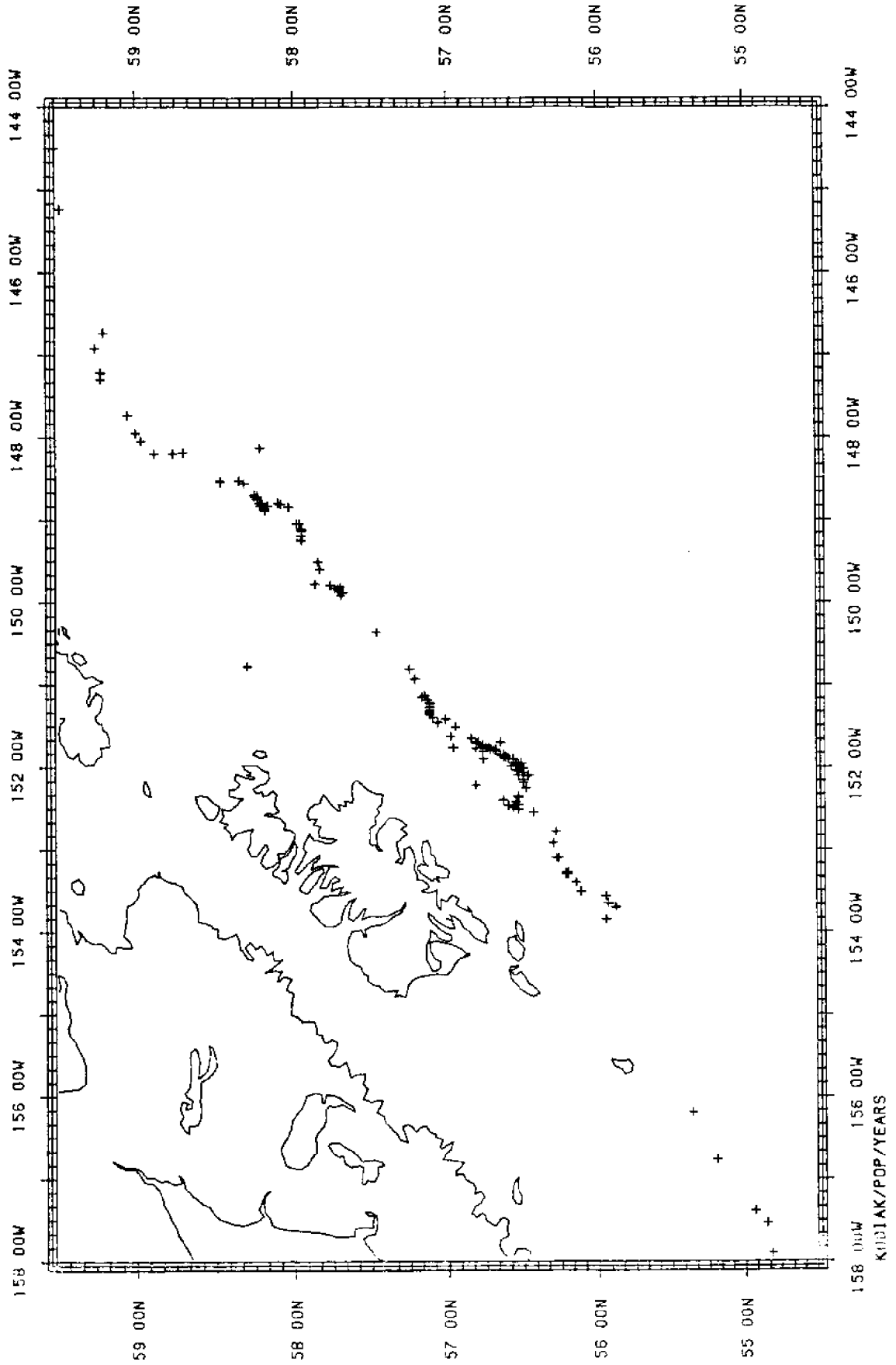


FIGURE D-6. TRAWLING LOCATIONS FOR PACIFIC OCEAN PERCH, ALL MONTHS, 1979-80

KUJIAK/POP/YEARS

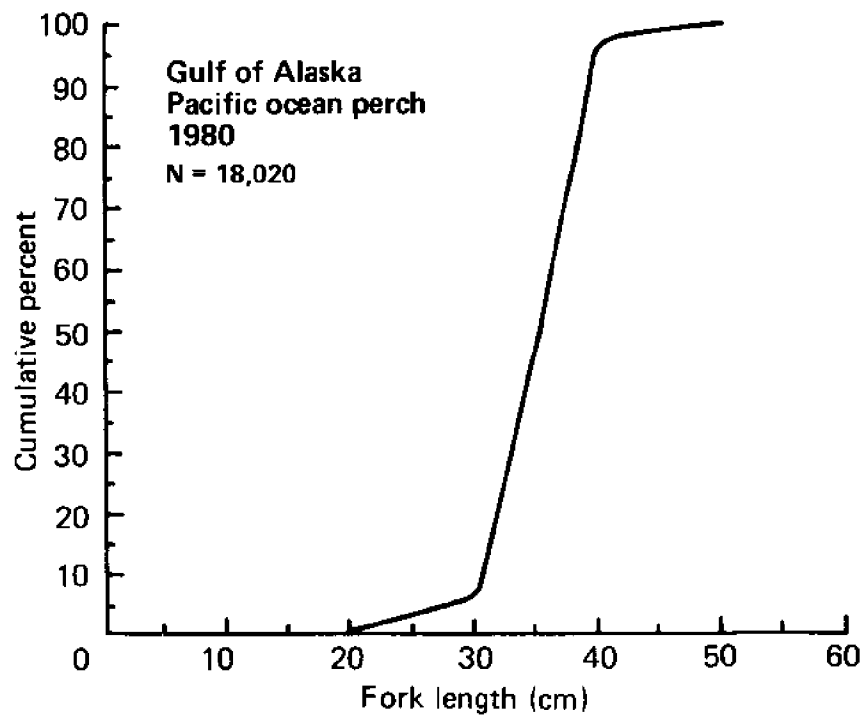
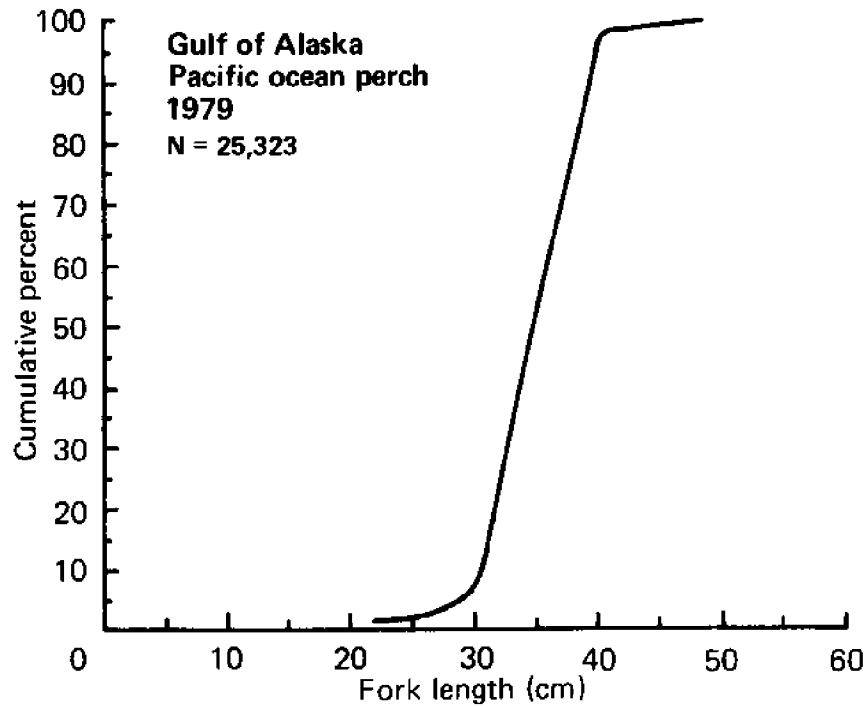


FIGURE D-7. CUMULATIVE LENGTH-FREQUENCY DISTRIBUTIONS OF THE PACIFIC OCEAN PERCH CATCH FROM ALL AREAS OF THE GULF OF ALASKA DURING 1979-80.

TABLE D-16. OTHER ROCKFISH, APRIL-JUNE 1979-80

NATIJA	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	LOGRAM-C 7Y	PULSE RATES 7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	80 6 8	5525N	15349W	16605.8	31195.5	44576.7	109.	1.500	8477.	5.65	0.85	4723.	13200.
USSR	M	80 6 6	5811N	14852W	18747.5	31910.3	43078.5	87.	2.133	2518.	1.08	1.16	23882.	26400.
JAPAN	S	80 6 27	5707N	15121W	18723.2	32353.5	43019.2	96.	0.500	497.	0.99	1.09	10503.	11000.
USSR	M	79 6 27	5828N	14832W	18745.9	31819.8	43120.5	112.	0.250	243.	0.97	0.70	17357.	17600.
JAPAN	L	79 6 22	5807N	14920W	18746.6	31956.6	43073.8	79.	1.500	1097.	0.73	0.71	883.	1980.
JAPAN	L	79 6 30	5606N	15341W	18670.0	32811.2	43746.6	168.	1.000	570.	0.57	1.37	8450.	9020.
JAPAN	M	79 6 30	5806N	14848W	18746.6	31926.7	43065.5	120.	1.333	704.	0.53	0.57	5016.	5720.

*** NOTE *** THE ACCURACY OF POSITION AND LOGRAM-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

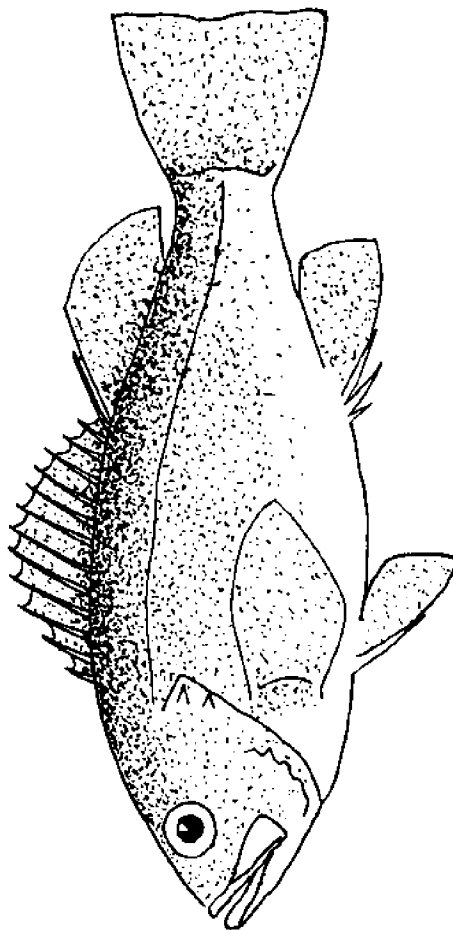


TABLE D-17 (continued). OTHER ROCKFISH, JULY-SEPTEMBER 1979-80

NATION	MODEL CLASS	DATE	LAT	LONG	APPROX	DEPTH	HOURS	CATCH	THOUSAND	SIZE	8YCATCH	TOTAL
		YRMMDD			7X	(FMS)	TRAWLED	(LBS)	PER HOUR	LB S/FISH	(LBS)	(LBS)
					7Y							
					7Z							
USSR	M	79 7 8	5809N	14855W	18747.2	31921.7	43074.0	71-	0.167	17441.	159.	17600.
USSR	M	79 7 9	5807N	14856W	18746.6	31931.0	43069.2	71-	0.333	25832.	568.	26400.
USSR	M	79 7 7	5807N	14858W	18746.8	31931.0	43069.2	71-	0.250	14796.	604.	15400.
USSR	M	79 8 5	5837N	15225W	18701.7	32567.4	43271.4	52.	0.083	3109.	5691.	8800.
USSR	M	79 7 8	5805N	14858W	18746.4	31941.3	43064.6	68.	0.250	8227.	573.	8800.
USSR	M	79 8 4	5841N	15219W	18704.9	32542.3	43231.0	49.	0.500	10214.	11786.	22000.
JAPAN	M	80 5 1	5828N	14834W	18745.9	31821.8	43121.1	71.	0.167	2891.	189.	3080.
USSR	M	79 8 6	5849N	15218W	18707.7	32524.5	43207.4	60.	1.000	10675.	2525.	13200.
USSR	M	80 8 9	5836N	15228W	18706.8	32576.0	43287.0	77.	2.167	22078.	12902.	34980.
USSR	M	79 8 2	5836N	15225W	18700.9	32571.5	43276.4	46.	0.167	1290.	2010.	3300.
USSR	M	79 8 2	5841N	15223W	18704.7	32548.2	43244.2	49.	1.000	5241.	27759.	33000.
USSR	M	79 8 13	5835N	15221W	18700.4	32569.6	43267.9	90.	0.250	1204.	3196.	4400.
USSR	M	79 8 12	5834N	15223W	18695.6	32576.6	43275.7	90.	0.250	1098.	3302.	4400.
USSR	M	79 8 12	5834N	15223W	18695.6	32576.6	43275.7	90.	0.250	1051.	3349.	4400.
USSR	M	79 8 10	5835N	15220W	18701.5	32568.1	43264.6	57.	0.833	3432.	3168.	6600.
USSR	M	80 7 11	5834N	15221W	18695.7	32573.6	43272.9	71.	0.833	3093.	6587.	9680.
USSR	M	80 8 6	5837N	15223W	18701.8	32564.5	43264.5	78.	1.000	3657.	6023.	9680.
JAPAN	S	80 7 30	5928N	14519W	18747.8	31414.2	43230.8	101.	0.333	1211.	4289.	5500.
USSR	M	79 8 10	5835N	15221W	18700.4	32569.6	43267.9	66.	1.250	17973.	17973.	22000.
USSR	M	79 8 8	5836N	15219W	18701.3	32566.5	43256.3	71.	1.000	2076.	3624.	6600.
USSR	M	79 8 2	5841N	15221W	18704.8	32545.2	43237.5	41.	1.467	4321.	22079.	26400.
JAPAN	S	80 8 6	5824N	15224W	18691.7	32618.0	43332.8	159.	2.667	7773.	3667.	11440.
USSR	M	79 8 7	5835N	15218W	18700.6	32505.1	43258.1	77.	0.833	2194.	6385.	8800.
USSR	M	79 8 2	5840N	15226W	18701.8	32556.7	43259.7	46.	0.833	2394.	24006.	26400.
USSR	M	79 8 7	5835N	15220W	18700.5	32568.1	43264.6	71.	0.583	1564.	18236.	19800.
JAPAN	M	80 5 5	5809N	14849W	18747.0	31919.5	43070.5	120.	1.333	3525.	435.	3960.
JAPAN	S	80 6 2	5759N	14918W	18744.9	31987.7	43053.3	164.	4.000	10172.	5448.	15620.
USSR	M	80 8 12	5838N	15224W	18702.3	32561.9	43262.9	74.	1.333	3194.	5126.	12320.
USSR	M	79 8 2	5840N	15226W	18703.3	32558.7	43259.7	49.	0.750	1760.	4840.	6600.
USSR	M	79 8 5	5842N	15228W	18703.4	32542.6	43235.8	57.	0.417	964.	5636.	6000.
USSR	M	80 9 27	5830N	15211W	18697.2	32574.7	43261.4	77.	2.000	4619.	16941.	21560.
USSR	M	79 8 4	5835W	15226W	18700.2	32577.0	43284.9	46.	0.417	935.	10065.	11000.
JAPAN	S	80 8 1	5840N	14815W	18750.7	31753.7	43151.1	191.	4.083	8678.	5404.	14080.
USSR	M	79 8 3	5840N	15223W	18704.0	32552.3	43249.5	46.	0.333	645.	14755.	15400.
USSR	M	79 8 4	5838N	15225W	18702.4	32563.4	43266.3	49.	1.000	1909.	9091.	11000.
JAPAN	S	80 8 5	5814N	15247W	18681.8	32692.8	43466.7	175.	3.667	6956.	2944.	9900.
JAPAN	S	80 8 9	5823W	15227W	18690.7	32648.1	43348.9	164.	3.167	5076.	4154.	9460.
JAPAN	S	80 8 11	5815W	14840W	18748.2	31481.5	43086.5	164.	3.167	5074.	4166.	9240.
JAPAN	S	80 8 8	5818W	15311W	18681.6	32722.9	43560.4	153.	3.333	5212.	6668.	11880.
JAPAN	S	80 7 1	5832N	15222W	18696.1	32563.1	43286.3	83.	0.500	776.	5824.	6600.
USSR	M	80 8 14	5838N	15224W	18702.5	32561.9	43262.9	71.	1.467	2591.	30629.	33220.
USSR	M	79 8 6	5844N	15220W	18706.9	32531.5	43216.9	63.	0.917	1332.	868.	2200.
JAPAN	S	80 7 16	5829W	15215W	18696.2	32584.6	43274.6	107.	2.250	3046.	25994.	29040.
JAPAN	S	80 7 31	5812N	14639W	18749.9	31540.5	43213.2	175.	1.833	2396.	1344.	3760.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-17. OTHER ROCKFISH, JULY-SEPTEMBER 1979-80.

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 7X	7Y	7Z	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FTISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	79 8 8	57 03N	151 38W	18720.5	32393.2	43041.9	50	0.583	726	1.24	0.68	21274	22000
USSR	M	79 8 15	56 34N	152 26W	18699.4	32581.1	43290.0	101	1.417	1675	1.16	0.67	2065	3740
USSR	M	79 8 11	56 34N	152 24W	18695.5	32578.1	43283.1	63	1.750	2017	1.15	0.71	3395	5412
USSR	M	79 8 2	56 41N	152 44W	18703.7	32579.7	43324.2	98	0.333	378	1.14	0.81	8422	8800
JAPAN	S	80 8 2	56 16N	153 10W	18681.9	32571.3	43355.8	159	2.333	2557	1.10	2.67	3603	6160
USSR	M	79 8 12	56 34N	152 24W	18695.5	32578.1	43263.1	90	0.500	530	1.06	0.76	8270	8900
USSR	M	79 8 5	56 40N	152 23W	18704.0	32552.3	43249.3	55	1.583	1659	1.05	0.80	2741	4400
JAPAN	S	80 8 4	56 10N	153 21W	18675.5	32762.7	43635.1	151	1.250	3352	1.03	4.14	4348	7700
USSR	M	79 8 9	56 35N	152 20W	18699.0	32576.1	43274.7	74	1.000	1030	1.03	0.77	1170	2200
USSR	M	79 8 9	56 35N	152 20W	18700.5	32568.1	43264.6	68	1.417	1450	1.02	0.68	1170	13200
JAPAN	S	80 8 7	56 30N	152 01W	18697.8	32559.8	43233.0	191	4.250	4123	0.97	3.76	8657	12980
JAPAN	S	79 8 26	56 31N	151 59W	18692.6	32552.9	43222.9	153	3.667	3387	0.92	1.93	2553	5940
USSR	M	79 8 8	56 35N	152 20W	18706.5	32568.1	43264.6	66	0.750	688	0.92	0.77	3712	4400
JAPAN	S	80 9 21	56 03N	148 54W	18746.0	31945.3	43059.4	120	2.833	2590	0.91	3.68	3570	6160
USSR	M	79 8 6	56 37N	152 25W	18701.1	32559.3	43261.3	55	1.000	914	0.91	0.85	6786	7700
JAPAN	S	80 8 3	56 24N	152 11W	18692.6	32558.4	43290.9	191	3.000	2727	0.91	3.40	2993	5720
JAPAN	S	80 9 22	58 03N	148 52W	18746.0	31943.1	43059.1	164	2.917	2610	0.89	1.60	11910	14520
JAPAN	S	80 8 2	58 25N	148 25W	18749.6	31825.3	43110.0	191	2.167	1875	0.87	5.58	1865	3740
JAPAN	S	80 7 31	59 10N	146 45W	18750.1	31553.3	43209.4	186	2.817	2369	0.84	3.28	5991	8360
USSR	M	80 7 1	56 53N	151 32W	18714.6	32426.9	43071.9	183	2.333	1941	0.83	4.28	2200	2200
JAPAN	S	80 8 4	56 15N	152 44W	18682.9	32684.2	43450.1	191	3.833	3337	0.82	3.84	2143	5280
USSR	M	79 8 9	56 33N	152 20W	18695.0	32576.1	43274.7	74	1.000	312	0.81	0.82	10188	11000
JAPAN	S	80 8 1	59 14N	147 03W	18749.7	31511.5	43225.0	186	4.000	3194	0.80	4.60	2086	5280
USSR	M	79 8 10	56 35N	152 19W	18700.5	32566.6	43261.4	77	1.417	1110	0.78	0.87	3290	4400
JAPAN	S	80 9 25	56 31N	151 58W	18698.7	32551.4	43220.3	175	3.000	2342	0.78	3.18	2278	4620
JAPAN	S	80 7 14	56 33N	152 25W	18698.7	32583.6	43291.5	103	1.250	966	0.77	0.83	27854	28820
JAPAN	S	79 9 27	58 33N	148 29W	18750.3	31596.7	43134.5	164	3.000	2282	0.76	0.95	3878	6160
USSR	M	80 8 29	56 41N	152 24W	18704.6	32549.7	43247.7	90	4.083	3076	0.75	1.12	13964	16940
USSR	M	79 8 7	56 35N	152 20W	18700.2	32377.0	43284.9	49	1.333	973	0.73	0.69	14427	15400
USSR	M	79 8 5	56 37N	152 25W	18701.7	32567.4	43271.4	46	1.000	709	0.70	0.68	3100	3800
USSR	M	80 5 27	56 36N	152 58W	18699.2	32621.6	43409.8	77	1.500	1037	0.69	0.93	943	1980
JAPAN	S	80 9 19	56 06N	147 36W	18750.2	31603.1	43224.6	175	1.500	1025	0.68	1.05	3375	4400
JAPAN	S	80 8 7	56 06N	153 29W	18671.1	32791.4	43688.0	191	3.233	2405	0.68	3.24	3075	5280
USSR	M	80 8 9	56 40N	152 24W	18703.9	32553.8	43252.7	77	1.917	1305	0.68	0.76	30595	31900
JAPAN	S	80 9 24	56 02N	148 50W	18745.8	31945.1	43056.6	164	2.217	1500	0.68	2.37	4220	5720
USSR	M	79 7 12	56 39N	151 42W	18705.3	32496.4	43146.7	120	0.917	611	0.67	0.91	8189	8800
USSR	M	79 8 2	56 41N	152 24W	18704.6	32549.7	43247.7	44	0.550	360	0.65	0.73	1100	1100
USSR	M	80 7 29	56 45N	152 13W	18710.6	32500.7	43171.7	57	1.750	1142	0.65	0.64	6778	7920
USSR	M	79 8 3	56 37N	152 24W	18701.7	32566.0	43267.9	38	0.833	536	0.64	0.60	6064	6600
JAPAN	S	80 9 5	56 04N	148 00W	18746.0	31865.0	43056.1	60	1.333	932	0.62	0.64	1148	1980
JAPAN	S	80 5 1	59 03N	147 44W	18750.6	31630.6	43211.9	155	1.500	913	0.61	0.86	15587	16500
USSR	M	79 8 2	56 40N	152 23W	18704.0	32552.3	43249.3	38	1.133	646	0.57	0.68	13214	13360
JAPAN	S	80 9 25	56 28N	152 06W	18696.0	32575.1	43256.6	137	3.167	1622	0.56	2.60	4838	6600
USSR	M	79 8 10	56 45N	152 18W	18707.7	32524.5	43201.4	60	1.000	549	0.55	0.67	6051	6600
USSR	M	80 9 26	56 24N	152 01W	18697.0	32563.8	43237.9	77	1.333	729	0.55	0.64	5651	6380

*** NOTE *** THE ACCURACY OF POSITION AND LOGAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN, USE WITH CAUTION***

TABLE D-17 (continued). OTHER ROCKFISH, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
		YYMMDD			7X 7Y 7Z	7Z							
USSR	M	79 8 2	5641N	15218W	18704.9	32540.8	43227.8	49.	0.583	0.53	6.74	789.	1100.
USSR	M	79 8 7	5633N	15218W	16699.1	32573.1	43268.2	55.	0.500	0.52	0.84	292.	550.
JAPAN	S	80 8 1	5506N	14738W	18750.4	31613.0	43219.0	164.	3.333	0.51	1.39	8640.	10340.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-18. OTHER ROCKFISH, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
		YYMMDD			7X 7Y 7Z	7Z							
JAPAN	S	791015	5805N	14849W	18746.4	31931.8	43063.3	130.	1965.	1.97	0.78	1775.	3740.
JAPAN	S	801016	5802N	14852W	18745.8	31947.2	43056.9	169.	3014.	1.29	3.04	2706.	5720.
JAPAN	M	8011 6	5512N	15644W	18576.2	33349.5	44926.6	120.	732.	1.26	1.23	15988.	16720.
JAPAN	S	801018	5742N	14949W	18739.9	32093.0	43021.4	169.	2364.	1.23	1.44	8956.	11220.
JAPAN	L	791117	5555N	15336W	18655.4	32845.7	43767.3	120.	1435.	1.23	0.65	31565.	33000.
JAPAN	M	7911 4	5758N	14903W	18744.3	31975.4	43049.3	137.	2969.	1.19	0.79	14631.	17600.
JAPAN	M	7911 9	5632N	15158W	18699.4	32547.5	43215.5	142.	662.	0.99	2.70	23538.	24200.
JAPAN	S	801018	5746N	14944W	18741.2	32070.7	43028.3	175.	1559.	0.94	1.33	7901.	9460.
JAPAN	S	8010 8	5605N	15330W	18670.0	32797.0	43097.0	208.	2154.	0.72	3.94	4826.	7040.
JAPAN	T	8011 2	5743N	14951W	18740.2	32091.2	43023.2	159.	571.	0.57	0.80	16169.	16720.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

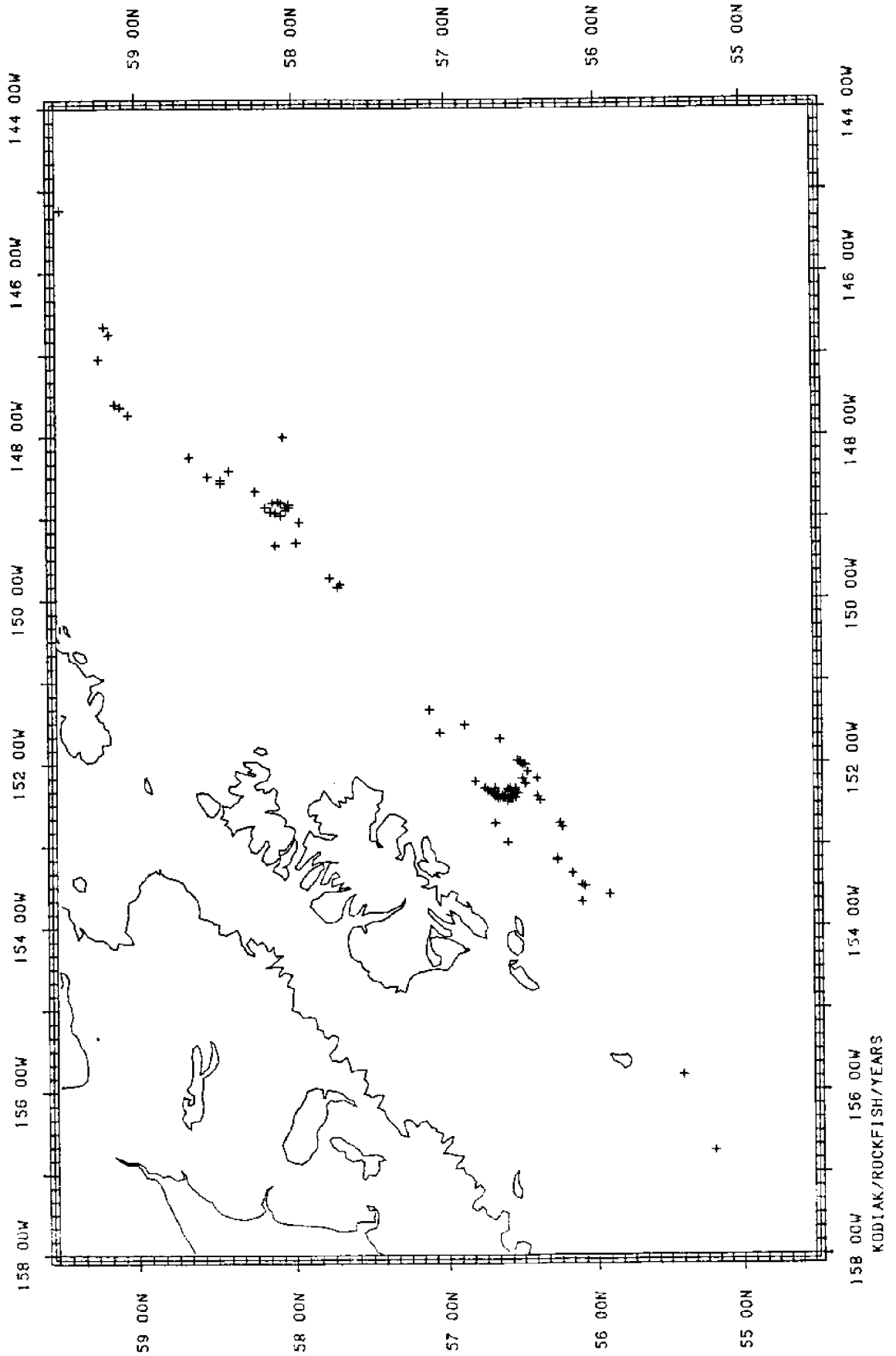


FIGURE D-8. TRAWLING LOCATIONS FOR OTHER ROCKFISH, ALL MONTHS, 1979-80

TABLE D-19. ATKA MACKEREL, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YYMMDD			7X	7Y	7Z	(FMS)	TRAWLED	(LBS)	PER HOUR	LB/S/FISH	(LBS)	(LBS)
JAPAN	L	79 7 3	5701N	15137W	18719.4	32400.1	43047.9	60.	0.167	94770.	568.62	1.53	2690.	97460.
USSR	M	79 7 14	5706N	15138W	18716.8	32405.6	43052.3	44.	0.250	54895.	219.58	1.52	105.	53000.
USSR	M	79 7 15	5659N	15136W	18718.2	32409.8	43056.3	44.	0.167	26177.	157.06	1.69	223.	26400.
USSR	M	79 7 15	5658N	15140E	18717.5	32416.6	43062.4	44.	0.417	54955.	131.89	1.57	45.	55000.
USSR	M	79 7 16	5658N	15141W	18717.5	32416.0	43063.7	44.	0.250	32924.	131.69	1.73	76.	33000.
USSR	M	79 8 13	5702N	15138W	18719.9	32397.4	43045.4	52.	0.250	27014.	108.06	1.67	5986.	33000.
USSR	M	79 7 16	5659N	15139W	18716.1	32411.1	43057.4	46.	0.500	50422.	100.84	1.81	178.	56600.
USSR	M	79 8 3	5639W	15222W	18703.3	32554.9	43251.0	49.	0.582	54481.	93.40	1.41	519.	55000.
USSR	M	79 7 12	5658N	15141W	18717.5	32418.0	43063.7	46.	0.500	43820.	87.64	1.62	180.	44000.
USSR	M	79 7 13	5658N	15140W	18717.5	32416.6	43062.4	44.	0.250	21869.	87.46	1.37	131.	22000.
USSR	M	79 7 20	5700N	15139W	18712.7	32407.0	43053.7	41.	0.607	54266.	81.40	1.11	734.	55000.
USSR	M	79 7 22	5700N	15140W	18718.7	32408.4	43054.8	40.	0.417	32930.	79.03	1.52	70.	33000.
USSR	M	79 7 14	5658N	15140W	18717.5	32416.6	43062.4	44.	0.417	32783.	78.68	1.70	217.	33000.
USSR	M	79 7 18	5700N	15138W	18712.8	32405.6	43052.6	44.	0.250	19653.	78.61	1.57	147.	19600.
USSR	M	79 7 24	5658N	15140W	18717.5	32416.6	43062.4	42.	0.500	39227.	78.45	1.62	373.	39600.
USSR	M	79 7 21	5701N	15141W	18715.2	32405.7	43052.2	49.	0.333	25996.	77.99	1.51	404.	26400.
USSR	M	79 7 14	5657N	15141W	18716.9	32422.2	43067.6	44.	0.333	21795.	65.38	1.21	205.	22000.
USSR	M	79 8 4	5640N	15224W	18701.9	32553.8	43252.7	46.	0.667	43531.	65.30	7.22	469.	44000.
USSR	M	79 8 5	5637N	15225W	18701.7	32567.4	43271.4	52.	0.083	5238.	62.86	1.61	3562.	8000.
USSR	M	79 7 19	5701N	15138W	18715.3	32401.5	43048.9	42.	0.417	26060.	62.54	1.83	340.	26400.
USSR	M	79 7 13	5657N	15141W	18716.9	32405.6	43052.6	39.	0.417	25733.	61.76	1.34	667.	26400.
USSR	M	79 7 23	5700N	15140W	18716.7	32408.4	43054.8	39.	0.583	34773.	59.61	1.34	627.	35200.
USSR	M	79 7 11	5658N	15140W	18717.5	32416.6	43062.4	52.	0.583	32813.	56.25	1.12	187.	33000.
USSR	M	79 7 19	5659N	15140W	18718.1	32412.5	43056.6	44.	0.583	32690.	56.04	1.66	310.	33000.
USSR	M	79 7 13	5657N	15141W	18716.9	32405.6	43052.6	44.	0.250	13114.	52.45	1.22	86.	13200.
USSR	M	79 8 12	5704N	15138W	18721.0	32389.1	43038.5	52.	0.417	21833.	52.40	2.83	167.	22000.
USSR	M	79 7 19	5700N	15138W	18718.8	32405.6	43052.6	40.	0.333	17314.	51.94	1.47	286.	17600.
USSR	M	79 7 21	5655N	15145W	18715.5	32436.0	43081.5	40.	0.750	38906.	51.87	1.17	694.	39600.
USSR	M	79 7 15	5658N	15144W	18717.4	32422.2	43067.6	44.	0.467	21906.	46.94	1.50	94.	22000.
USSR	M	79 7 14	5659N	15140W	18716.1	32412.5	43056.6	41.	0.333	15308.	45.92	1.49	92.	15400.
USSR	M	79 7 20	5700N	15138W	18718.8	32405.6	43052.6	39.	0.333	15190.	45.57	1.19	210.	15400.
USSR	M	79 7 21	5659N	15139W	18716.1	32411.1	43057.4	44.	0.333	15008.	45.02	1.73	392.	15400.
USSR	M	79 7 16	5658N	15140W	18717.5	32416.6	43062.4	45.	0.250	10932.	43.73	1.76	68.	11000.
USSR	M	79 8 3	5640N	15223W	18704.0	32552.3	43249.3	46.	0.333	14441.	43.32	1.65	959.	15400.
USSR	M	79 8 5	5640N	15218W	18704.2	32544.9	43232.5	46.	1.000	43274.	43.27	1.32	726.	44000.
USSR	M	79 7 24	5700N	15140W	18716.7	32408.4	43054.8	38.	0.417	17457.	41.90	1.63	143.	17600.
USSR	M	79 7 23	5654N	15145W	18714.9	32440.1	43085.8	42.	0.583	23855.	40.89	1.74	345.	24200.
USSR	M	79 7 17	5658N	15140W	18717.5	32416.6	43062.4	45.	0.833	32784.	39.34	1.63	216.	33000.
USSR	M	79 7 22	5659N	15139W	18718.1	32411.1	43057.4	44.	0.667	26076.	39.11	1.83	324.	26400.
USSR	M	79 8 16	5702N	15138W	18719.9	32397.4	43045.4	49.	0.333	12688.	38.07	1.29	512.	13200.
USSR	M	79 8 5	5637N	15225W	18701.7	32567.4	43271.4	46.	0.917	32653.	35.62	1.23	347.	33000.
USSR	M	79 7 23	5700N	15140W	18716.7	32408.4	43054.8	39.	0.250	8784.	35.14	1.65	16.	8800.
USSR	M	79 7 18	5658N	15140W	18717.5	32416.6	43062.4	45.	0.500	17375.	34.75	1.54	225.	17600.
USSR	M	79 7 19	5659N	15140W	18718.1	32412.5	43056.6	41.	0.500	17176.	34.35	1.61	424.	17600.
USSR	M	79 8 14	5702N	15139W	18719.9	32398.8	43046.4	52.	0.167	5701.	34.21	1.35	3099.	3800.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-19 (continued). ATKA MACKEREL, JULY-SEPTEMBER 1979-80

VESSEL	DATE	LAT	LONG	APPROX	DEPTH	HOURS	CAATCH	THOUSAND	SIZE	BYCATCH	TOTAL
CLASS	TIME			LORAN-C	(FMS)	TRAWLED	(LBS)	PER HOUR	LB5/FISH	(LBS)	CATCH
				PULSE							(LBS)
				7X	7Y	7Z					
USSR	79 8 9	5702N	15138W	18720.5	32393.2	4304.9	19049.	32.66	1.49	2951.	22000.
USSR	79 7 23	5655N	15144W	18715.6	32434.6	43080.0	18952.	32.49	1.67	848.	19800.
USSR	79 8 15	5703N	15138W	18720.5	32393.2	4304.9	16056.	32.11	1.28	1544.	17600.
USSR	80 7 30	5648N	15220W	18706.9	32531.5	43218.9	23969.	31.76	1.79	231.	24200.
USSR	79 7 20	5659N	15140W	18718.1	32412.5	43058.6	17139.	29.38	1.75	461.	17600.
USSR	79 8 2	5640N	15226W	18703.8	32556.7	43259.7	22225.	26.67	1.06	4175.	28400.
USSR	79 7 7	5659N	15139W	18718.1	32411.1	43057.4	20857.	26.23	1.52	143.	22000.
USSR	79 8 2	5641N	15223W	18704.7	32548.2	43244.2	26086.	26.09	1.43	6914.	33000.
USSR	79 8 3	5636N	15226W	18700.9	32573.0	43275.9	51667.	25.83	1.37	253.	51920.
USSR	79 8 19	5700N	15139W	18718.7	32407.0	43053.7	14883.	25.51	1.14	517.	15400.
USSR	79 8 7	5633N	15215W	18695.2	32570.1	43261.8	2100.	25.20	1.65	100.	22000.
USSR	79 8 4	5635N	15223W	18701.1	32568.5	43269.6	30289.	24.23	1.57	1831.	32120.
USSR	79 8 4	5635N	15226W	18700.2	32577.0	43284.9	9877.	23.70	1.29	1123.	11000.
USSR	79 8 4	5641N	15219W	18704.9	32542.3	43231.0	11656.	23.31	1.31	10344.	22000.
USSR	79 8 2	5635N	15221W	18700.4	32569.6	43267.9	38680.	23.21	1.34	920.	39600.
USSR	79 7 30	5701N	15141W	18719.2	32405.7	43052.2	21836.	21.64	1.41	164.	27000.
USSR	79 7 10	5700N	15139W	18718.8	32405.6	43052.6	10849.	21.70	1.77	151.	11000.
USSR	79 7 3	5703N	15138W	18718.8	32405.6	43052.6	10841.	21.58	1.72	159.	11000.
USSR	79 7 21	5657N	15142W	18716.9	32433.6	43069.0	10600.	21.20	1.29	400.	11000.
USSR	80 8 1	5638N	15225W	18702.4	32563.4	43266.3	31321.	20.88	1.63	1399.	33220.
USSR	80 8 1	5638N	15226W	18702.4	32564.9	43265.6	32725.	20.67	1.73	275.	33000.
USSR	79 8 0	5702N	15135W	18720.0	32393.2	43042.5	10333.	20.67	1.30	667.	11000.
USSR	79 8 8	5632N	15217W	18698.4	32575.6	43270.0	2603.	20.65	1.69	197.	3800.
USSR	79 8 1	5702N	15136W	18720.0	32394.6	43043.5	10169.	20.34	1.40	831.	11000.
USSR	79 8 13	5702N	15136W	18719.9	32397.4	43045.4	16732.	20.06	1.38	5268.	22000.
USSR	79 7 10	5658N	15137W	18717.6	32412.5	43058.9	5017.	20.07	1.63	38983.	44000.
USSR	79 8 7	5635N	15220W	18700.5	32568.1	43264.6	11627.	19.93	1.57	8173.	19800.
USSR	79 8 4	5702N	15139W	18715.9	32398.8	43046.4	6430.	19.29	1.28	170.	6600.
USSR	79 8 9	5635N	15220W	18700.5	32568.1	43264.6	25505.	19.13	1.41	895.	26400.
USSR	80 7 31	5642N	15219W	18706.3	32534.1	43220.8	8589.	17.18	1.76	211.	8800.
USSR	79 8 10	5702N	15135W	18720.0	32393.2	43042.5	8452.	16.90	1.40	348.	8800.
USSR	79 7 11	5702N	15141W	18719.8	32401.5	43048.5	5452.	16.35	1.61	33548.	44000.
USSR	79 8 1	5658N	15140W	18718.1	32412.5	43058.6	5429.	16.29	1.13	71.	5500.
USSR	79 7 25	5658N	15141W	18717.5	32418.0	43063.7	14924.	16.28	1.56	476.	15400.
USSR	79 8 12	5634N	15224W	18695.5	32578.1	43283.1	8064.	16.13	1.61	736.	8800.
USSR	79 7 23	5655N	15145W	18715.5	32436.0	43071.8	8595.	15.64	1.52	85.	6500.
USSR	79 7 18	5655N	15141W	18717.5	32418.0	43063.7	10814.	15.49	1.17	145.	6600.
USSR	79 8 2	5641W	15221W	18704.8	32545.2	43237.5	21067.	15.16	0.97	32.	6600.
USSR	79 8 10	5635N	15221W	18700.4	32569.6	43267.9	17520.	15.04	0.92	360.	15400.
USSR	80 8 9	5640N	15224W	18703.9	32533.8	43252.7	26016.	14.02	1.42	4480.	22000.
USSR	79 7 19	5700N	15138W	18718.8	32405.6	43052.6	4331.	13.99	1.60	5864.	31900.
								12.99	1.34	69.	4400.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-19 (continued). ATKA MACKEREL, JULY-SEPTEMBER 1979-80

NATION	VESEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YYMMDD			7X	7Y	7Z	(FMS)	IRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
USSR	M	79 8 12	5634N	15223W	18699.6	32576.6	43279.7	90	0.250	3205	12.82	1.47	1195	4400
USSR	M	79 8 9	5614N	15220W	18699.7	32576.6	43269.6	68	0.167	2103	12.62	1.68	97	2200
USSR	M	79 8 12	5614N	15223W	18699.6	32576.6	43279.7	90	0.250	3149	12.60	1.46	1251	4400
USSR	M	79 8 15	5743N	15138W	18720.5	32593.2	43041.9	49	0.500	6250	12.50	1.50	350	6600
USSR	M	79 8 3	5640N	15223W	18704.0	32552.3	43249.3	46	0.500	6082	12.16	1.40	518	6600
USSR	M	79 8 13	5635N	15221W	18700.4	32569.6	43267.9	90	0.250	3010	12.04	1.17	1390	4400
USSR	M	79 8 14	5702N	15136W	18715.9	32397.4	43065.4	49	0.833	10028	12.03	1.50	22972	33000
USSR	M	79 8 15	5703N	15136W	18720.5	32393.2	43041.9	49	0.500	5984	11.97	1.54	616	6600
USSR	M	79 8 2	5636N	15225W	18700.9	32571.5	43276.4	46	0.167	1285	11.91	1.49	1315	3300
USSR	M	79 8 22	5722N	15145W	18719.7	32407.1	43053.0	46	0.250	2387	11.55	1.41	24613	27500
USSR	M	80 8 14	5636N	15223W	18701.1	32568.5	43269.6	75	2.917	32753	11.23	1.52	247	33000
USSR	M	79 8 1	5649N	15155W	18711.4	32474.7	43126.8	38	0.250	2753	10.93	1.55	127	2860
USSR	M	79 8 4	5636N	15222W	18701.1	32567.0	43266.2	41	2.083	21891	10.51	1.46	549	22440
USSR	M	79 8 7	5635N	15226W	18700.2	32577.0	43284.9	49	1.333	13947	10.46	1.25	1453	15400
USSR	M	79 8 31	5701N	15141W	18719.2	32405.7	43052.2	41	1.083	10862	10.03	1.32	138	11000
USSR	M	79 8 8	5636N	15226W	18700.9	32573.0	43279.9	48	1.250	12281	9.83	1.18	919	13200
USSR	M	79 8 23	5653N	15147W	18714.2	32447.0	43093.4	45	0.667	6422	9.63	1.60	178	5600
USSR	M	79 8 30	5701N	15139W	18715.5	32402.9	43050.0	46	0.567	6377	9.57	1.12	223	6600
USSR	M	79 8 2	5640N	15223W	18704.0	32552.3	43249.3	38	1.133	10615	9.37	1.49	3245	13860
USSR	M	80 8 15	5635N	15221W	18700.4	32569.6	43267.9	74	1.750	16322	9.33	1.62	1718	18040
USSR	M	80 8 16	5638N	15226W	18702.4	32564.9	43269.6	79	1.667	15039	9.02	1.65	361	15400
USSR	M	79 8 5	5642N	15222W	18705.4	32542.6	43235.8	57	0.417	3329	8.47	1.88	3071	6600
USSR	M	79 8 18	5703N	15136W	18720.5	32393.2	43041.9	50	0.500	4228	8.46	1.35	172	4400
USSR	M	79 8 4	5638N	15225W	18702.4	32563.4	43266.3	49	1.000	8175	8.18	1.55	2825	11000
USSR	M	79 8 5	5637N	15225W	18701.7	32567.4	43271.4	48	1.040	8005	8.00	1.47	795	8800
USSR	M	80 8 4	5646N	15220W	18708.3	32323.3	43208.7	60	0.333	2632	7.90	1.52	6168	8800
USSR	M	80 8 6	5642N	15222W	18705.4	32542.6	43235.8	52	1.667	13108	7.86	1.66	312	13420
USSR	M	79 8 3	5640N	15226W	18703.8	32556.7	43259.7	46	1.083	8390	7.74	1.23	410	3800
USSR	M	80 8 1	5641N	15220W	18704.8	32543.8	43234.3	60	1.417	10723	7.57	1.60	717	11440
USSR	M	79 8 7	5635N	15218W	18700.6	32565.1	43258.1	77	0.833	6295	7.55	1.34	2505	8800
USSR	M	79 8 25	5700N	15140W	18718.7	32408.4	43054.8	40	0.417	3097	7.43	1.61	203	3300
USSR	M	79 8 3	5637N	15224W	18701.7	32566.0	43267.9	38	0.833	6010	7.21	1.45	590	6600
USSR	M	79 8 7	5635N	15227W	18706.1	32578.5	43288.5	55	0.917	6590	7.19	1.28	10	6600
USSR	M	80 8 15	5636N	15225W	18700.9	32571.5	43276.4	74	2.000	14108	7.05	1.64	1292	15400
USSR	M	79 8 1	5633N	15147W	18714.2	32447.0	43041.9	38	0.717	4899	6.84	1.49	381	5280
USSR	M	79 8 15	5702N	15136W	18719.9	32397.4	43045.4	49	0.667	4436	6.65	1.28	28564	33000
USSR	M	79 8 6	5639N	15225W	18703.1	32559.3	43261.9	55	1.000	6544	6.54	1.29	1156	7700
USSR	M	80 8 16	5637N	15228W	18701.5	32571.9	43281.3	79	2.333	15229	6.53	1.61	171	15400
USSR	M	79 8 21	5703N	15136W	18716.8	32405.6	43052.6	39	0.333	2184	6.49	1.36	36	2200
USSR	M	79 8 18	5637N	15141W	18716.9	32422.2	43087.6	46	0.667	4275	6.41	1.52	125	4400
USSR	M	79 8 16	5701N	15141W	18715.2	32405.2	43052.2	45	0.167	1065	6.39	1.56	335	4400
USSR	M	79 8 14	5703N	15138W	18720.5	32393.2	43041.9	52	0.583	3677	6.30	1.42	723	4400
USSR	M	79 8 2	5640N	15226W	18702.8	32556.7	43259.7	49	0.750	4684	6.22	1.22	1936	6600
USSR	M	79 8 17	5700N	15139W	18716.7	32407.0	43053.7	46	0.333	2043	6.13	1.78	157	2200
USSR	M	79 8 1	5702N	15142W	18715.8	32402.9	43049.5	41	1.500	9128	6.08	1.39	334	9460

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-19 (continued). ATKA MACKEREL, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE YR/MO/DA	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
USSR	M	79 8 6	5636N	15226W	18700.9 32573.0 43279.9	55	2.083	12630	6.06	1.32	570	13200
USSR	M	79 7 10	5659N	15138W	18718.2 32409.8 43056.3	48	0.500	2916	5.81	1.37	394	3300
USSR	M	79 7 31	5701N	15140W	18719.3 32404.3 43051.1	46	1.167	6487	5.56	1.08	113	6600
USSR	M	79 8 19	5656N	15142W	18717.5 32419.4 43065.0	52	0.833	4369	5.24	1.57	31	4400
USSR	M	80 8 14	5636N	15222W	18702.5 32561.9 43262.9	71	1.750	9116	5.21	1.71	24104	33220
USSR	M	80 9 28	5640N	15223W	18704.0 32552.3 43249.3	74	1.667	8615	5.17	1.53	1265	9900
USSR	M	80 7 3	5641N	15221W	18704.8 32545.2 43237.5	71	2.167	11119	5.13	1.48	6421	17600
USSR	M	79 8 6	5639N	15225W	18703.1 32559.3 43261.3	57	0.833	4269	5.12	1.14	135	4400
USSR	M	80 8 6	5636N	15222W	18702.5 32561.9 43262.9	52	1.667	8120	4.87	1.54	680	8800
USSR	M	79 8 13	5702N	15138W	18719.9 32397.4 43045.4	52	0.833	4014	4.82	1.30	17986	22000
USSR	M	80 7 29	5646N	15217W	18707.1 32527.1 43209.4	55	1.250	6016	4.81	1.63	1462	7480
USSR	M	79 8 9	5635N	15220W	18700.5 32568.1 43264.6	68	1.417	6435	4.54	1.39	6765	13200
USSR	M	80 8 11	5636N	15223W	18700.5 32563.5 43305.3	74	1.563	7113	4.49	1.58	4107	11220
USSR	M	79 8 3	5641N	15221W	18704.8 32545.2 43237.5	44	2.800	12380	4.42	1.47	820	13200
USSR	M	79 8 8	5635N	15226W	18700.5 32568.1 43264.6	66	0.750	3297	4.40	1.47	1103	6400
USSR	M	79 8 4	5641N	15223W	18704.7 32545.2 43237.5	41	1.417	6121	4.32	1.20	479	6600
USSR	M	79 7 19	5659N	15140W	18717.5 32416.6 43062.4	43	0.750	3186	4.25	1.48	112	3300
USSR	M	80 9 30	5645N	15220W	18707.6 32527.4 43213.8	82	2.417	10250	4.24	1.53	8010	18260
USSR	M	79 7 16	5658N	15140W	18717.5 32416.6 43062.4	44	0.750	3118	4.16	1.49	1282	4400
USSR	M	79 7 19	5658N	15140W	18717.5 32416.6 43062.4	45	1.500	6197	4.13	1.35	403	6600
USSR	M	79 7 10	5658N	15146W	18713.6 32449.7 43096.1	43	0.583	2407	4.13	1.42	233	2640
USSR	M	79 8 19	5701N	15139W	18719.3 32402.9 43050.0	49	0.750	3013	4.02	1.27	287	3300
USSR	M	80 8 13	5635N	15220W	18700.5 32568.1 43264.6	68	1.000	3304	3.81	1.52	1252	5060
USSR	M	79 8 4	5639N	15223W	18703.2 32556.3 43234.4	49	1.500	5577	3.72	1.41	1023	6600
USSR	M	79 8 11	5703N	15141W	18720.4 32397.4 43064.0	55	0.500	1843	3.69	1.45	6957	8800
USSR	M	79 8 7	5644N	15221W	18706.9 32533.0 43222.2	57	1.750	5945	3.40	1.01	655	6800
USSR	M	79 8 20	5659N	15141W	18718.1 32413.9 43053.8	44	0.417	1407	3.32	1.22	133	1540
JAPAN	M	79 7 12	5702N	15140W	18719.9 32400.1 43047.4	44	0.333	1075	3.25	1.68	46225	47300
USSR	M	80 7 6	5642N	15221W	18705.5 32541.2 43232.4	63	1.667	5281	3.17	1.66	1319	6600
USSR	M	80 8 11	5640N	15224W	18703.9 32553.8 43232.7	77	2.250	7033	3.13	1.79	4185	11220
USSR	M	79 8 21	5703N	15138W	18720.5 32393.2 43041.9	55	0.667	2079	3.12	1.26	121	2200
USSR	M	79 8 10	5635N	15220W	18700.5 32568.1 43264.6	57	0.833	2585	3.08	1.53	4035	6600
USSR	M	79 8 11	5703N	15144W	18716.2 32430.5 43075.8	44	0.500	1525	3.05	1.23	235	1760
USSR	M	79 8 11	5703N	15144W	18720.3 32461.6 43048.0	55	0.500	1488	2.97	1.16	11714	13200
USSR	M	79 8 8	5636N	15219W	18701.3 32562.5 43256.3	71	1.000	2024	2.82	1.58	3776	6600
USSR	M	79 7 10	5655N	15145W	18715.5 32436.0 43081.5	46	0.167	469	2.81	1.54	14931	15400
USSR	M	79 8 9	5635N	15226W	18700.2 32577.0 43284.9	49	1.250	3478	2.78	1.25	922	4400
USSR	M	80 8 13	5635N	15221W	18700.4 32568.6 43267.9	71	2.167	5598	2.58	1.58	342	5940
USSR	M	79 8 15	5702N	15138W	18719.9 32397.4 43045.4	49	0.667	1669	2.50	1.48	531	2200
USSR	M	80 7 7	5641N	15221W	18704.6 32545.2 43237.5	63	1.250	2698	2.32	1.54	1502	4400
USSR	M	80 8 29	5644N	15214W	18707.2 32522.7 43200.2	49	1.750	3997	2.28	1.60	413	4400
USSR	M	80 8 12	5638N	15222W	18702.5 32561.9 43262.9	74	1.333	2972	2.23	1.71	9348	12320
USSR	M	79 7 21	5702N	15139W	18719.9 32398.8 43046.4	38	0.167	364	2.18	1.36	76	440
USSR	M	79 8 11	5634N	15223W	18699.6 32576.6 43279.7	63	0.917	1975	2.16	1.63	225	2200
USSR	M	79 8 18	5702N	15138W	18719.9 32397.4 43045.4	49	0.500	1043	2.09	1.36	1157	2200

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-19 (continued). ATKA MACKEREL, JULY-SEPTEMBER 1979-80

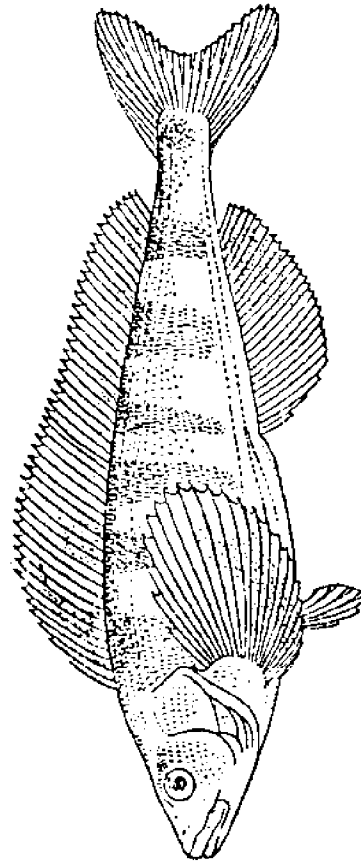
NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	DEPTH	HOURS	CATCH	THOUSAND LBS	SIZE	BYCATCH	TOTAL
		YR MO DD			7X 7Y 7Z	(FMS)	TRAWLED	(LBS)	PER HOUR	LB 5/FISH	(LBS)	(LBS)
USSR	M	79 7 24	5658N	15140W	18717.5 32416.6 43062.4	45	0.667	1382	2.07	1.69	816	2200
USSR	M	79 7 7	5807N	14856W	18744.8 31931.0 43069.2	71	0.250	501	2.00	1.33	14899	15400
USSR	M	80 9 30	5640N	15223W	18704.0 32552.3 43249.3	77	1.667	3323	1.99	1.58	1757	5060
USSR	M	79 7 13	5658N	15141W	18717.5 32418.0 43063.7	44	0.500	964	1.93	1.03	136	1100
USSR	M	79 7 14	5644N	15151W	18702.2 32489.3 43141.9	52	0.250	480	1.92	1.62	46	528
USSR	M	79 8 11	5635N	15222W	18700.4 32571.0 43271.3	68	0.917	1653	1.80	1.59	547	2200
USSR	M	80 7 28	5643N	15218W	18708.4 32529.7 43211.3	49	1.000	1789	1.75	1.57	411	2200
USSR	M	79 8 13	5701N	15135W	18719.4 32397.4 43046.0	66	1.250	2224	1.78	1.92	8776	11000
USSR	M	79 7 16	5701N	15138W	18719.3 32401.5 43048.9	45	0.333	574	1.72	1.71	86	660
USSR	M	79 7 8	5805N	14856W	18746.4 31941.3 43064.6	68	0.250	419	1.67	1.38	8381	8800
USSR	M	80 7 31	5634N	15221W	18699.7 32573.6 43272.9	71	0.833	1320	1.58	1.76	8360	9680
USSR	M	79 8 5	5640N	15223W	18704.0 32552.3 43249.3	55	1.583	2467	1.56	1.33	1933	4400
USSR	M	79 7 9	5807N	14856W	18746.8 31931.0 43069.2	71	0.333	513	1.54	1.32	2587	26400
USSR	M	79 8 14	5703N	15138W	18720.5 32393.2 43041.9	46	0.667	992	1.49	1.39	1008	11000
USSR	M	80 8 15	5635N	15219W	18700.5 32566.6 43261.4	79	2.167	3070	1.42	1.63	2430	5500
USSR	M	80 7 29	5643N	15223W	18706.1 32540.0 43234.0	60	1.917	2480	1.29	1.64	4780	7260
USSR	M	79 7 10	5659N	15138W	18718.2 32409.3 43056.3	52	0.500	609	1.22	1.42	16991	17600
USSR	M	79 7 23	5702N	15139W	18719.9 32398.8 43046.4	46	0.167	195	1.22	1.37	2678	4400
USSR	M	79 8 2	5641N	15224W	18704.6 32549.7 43247.7	44	0.550	643	1.17	1.59	28405	28600
USSR	M	79 7 25	5637N	15225W	18701.7 32567.4 43271.4	77	0.333	386	1.17	1.50	457	1100
USSR	M	79 8 20	5703N	15140W	18720.4 32396.0 43043.8	55	0.417	482	1.16	1.36	32614	33000
USSR	M	79 8 2	5641N	15218W	18704.9 32540.3 43227.8	49	0.583	668	1.14	1.47	432	1100
USSR	M	80 7 5	5642N	15220W	18705.5 32539.7 43229.2	66	1.667	1893	1.14	1.40	9107	11000
USSR	M	79 7 24	5658N	15140W	18717.5 32416.6 43062.4	44	0.500	552	1.10	1.77	592	1144
USSR	M	80 8 9	5636N	15228W	18700.8 32576.0 43287.0	77	2.167	2208	1.02	1.17	32772	34980
USSR	M	80 9 27	5639N	15224W	18703.2 32557.8 43257.8	71	1.750	1758	1.00	1.61	442	2200
USSR	M	80 8 28	5635N	15220W	18700.5 32568.1 43264.6	79	2.667	2641	0.99	1.57	1759	4400
USSR	M	79 7 8	5805N	14855W	18747.2 31921.7 43074.0	71	0.167	159	0.96	1.69	17441	17600
USSR	M	80 7 5	5641N	15222W	18704.7 32546.7 43240.9	66	1.417	1315	0.93	1.80	9685	11000
USSR	M	79 7 18	5703N	15141W	18720.4 32397.4 43044.8	52	0.167	148	0.89	1.48	24052	24200
JAPAN	M	79 7 11	5703N	15139W	18720.5 32394.6 43042.6	51	0.833	718	0.86	1.79	26122	26840
USSR	M	79 7 12	5701N	15139W	18719.3 32402.9 43050.0	46	0.250	212	0.72	1.46	54788	55000
USSR	M	80 9 25	5642N	15222W	18705.4 32542.6 43235.8	77	1.750	1264	0.25	1.87	1376	2640
USSR	M	79 8 11	5634N	15224W	18699.5 32578.1 43283.1	63	1.750	1180	0.68	1.40	4224	5412
USSR	M	79 8 9	5635N	15220W	18700.5 32568.1 43264.6	74	0.250	169	0.67	1.56	32831	33000
JAPAN	L	79 9 27	5632N	15224W	18698.0 32586.1 43293.1	115	0.500	325	0.65	1.54	61275	61600
JAPAN	S	80 7 15	5634N	15226W	18699.4 32581.1 43290.0	101	1.417	911	0.64	1.63	2829	3740
USSR	M	79 7 17	5659N	15140W	18718.1 32412.5 43058.6	45	1.250	792	0.63	1.40	308	1100
USSR	M	80 7 6	5643N	15219W	18706.3 32534.1 43220.8	66	1.500	782	0.52	1.16	1418	2200

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE D-20. ATKA MACKEREL, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LRS/FISH	RYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	791019	5810N	14840W	18748.4	31877.3	43089.1	112.	1.500	16503.	11.00	21557.	38060.
JAPAN	M	7911 9	5631N	15154W	18701.1	32533.7	43195.9	159.	1.167	10771.	9.23	15629.	26400.
USSR	M	8010 1	5641N	15217W	18705.0	32539.3	43224.6	71.	1.333	12255.	9.19	10185.	22440.
USSR	M	801015	5643N	15220W	18706.2	32535.6	43224.1	71.	1.167	8748.	7.50	49772.	58520.
USSR	M	8010 6	5645N	15222W	18707.5	32530.3	43220.4	82.	2.333	9413.	4.03	5987.	15400.
USSR	M	801012	5643N	15224W	18706.1	32541.5	43237.4	74.	3.750	10790.	2.88	6150.	16940.
USSR	M	8010 2	5648N	15218W	18705.8	32512.1	43192.0	77.	2.167	5766.	2.66	1934.	7700.
USSR	M	8010 8	5642N	15217W	18705.7	32535.2	43219.6	82.	1.033	1690.	1.64	1390.	3080.
JAPAN	S	791021	5809N	14846W	18747.2	31914.4	43072.7	191.	3.000	4631.	1.54	4169.	6800.
JAPAN	S	791012	5829N	15207W	18696.7	32572.7	43254.6	159.	2.000	2886.	1.44	3714.	6600.
USSR	M	791126	5815N	14845W	18748.2	31886.6	43087.5	164.	0.667	694.	1.04	12506.	13200.
USSR	M	801011	5643N	15225W	18704.6	32551.2	43251.1	68.	2.083	2114.	1.01	22086.	24200.
USSR	M	8010 8	5639N	15226W	18703.1	32560.8	43264.8	82.	2.750	2576.	0.94	10404.	12980.
USSR	M	8010 1	5638N	15225W	18702.4	32563.4	43266.3	68.	3.000	2235.	0.75	4365.	6600.
USSR	M	801012	5642N	15239W	18704.6	32568.0	43298.6	79.	1.083	740.	0.68	26320.	27060.
USSR	M	791127	5815N	14848W	18748.2	31887.6	43087.7	164.	0.917	625.	1.36	54375.	55000.
JAPAN	M	8011 2	5748N	14948W	18741.2	32079.3	43028.5	159.	1.083	703.	0.65	14697.	15400.
JAPAN	M	7911 4	5758N	14903W	18744.8	31975.4	43049.3	137.	2.500	1300.	0.52	16300.	17600.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***



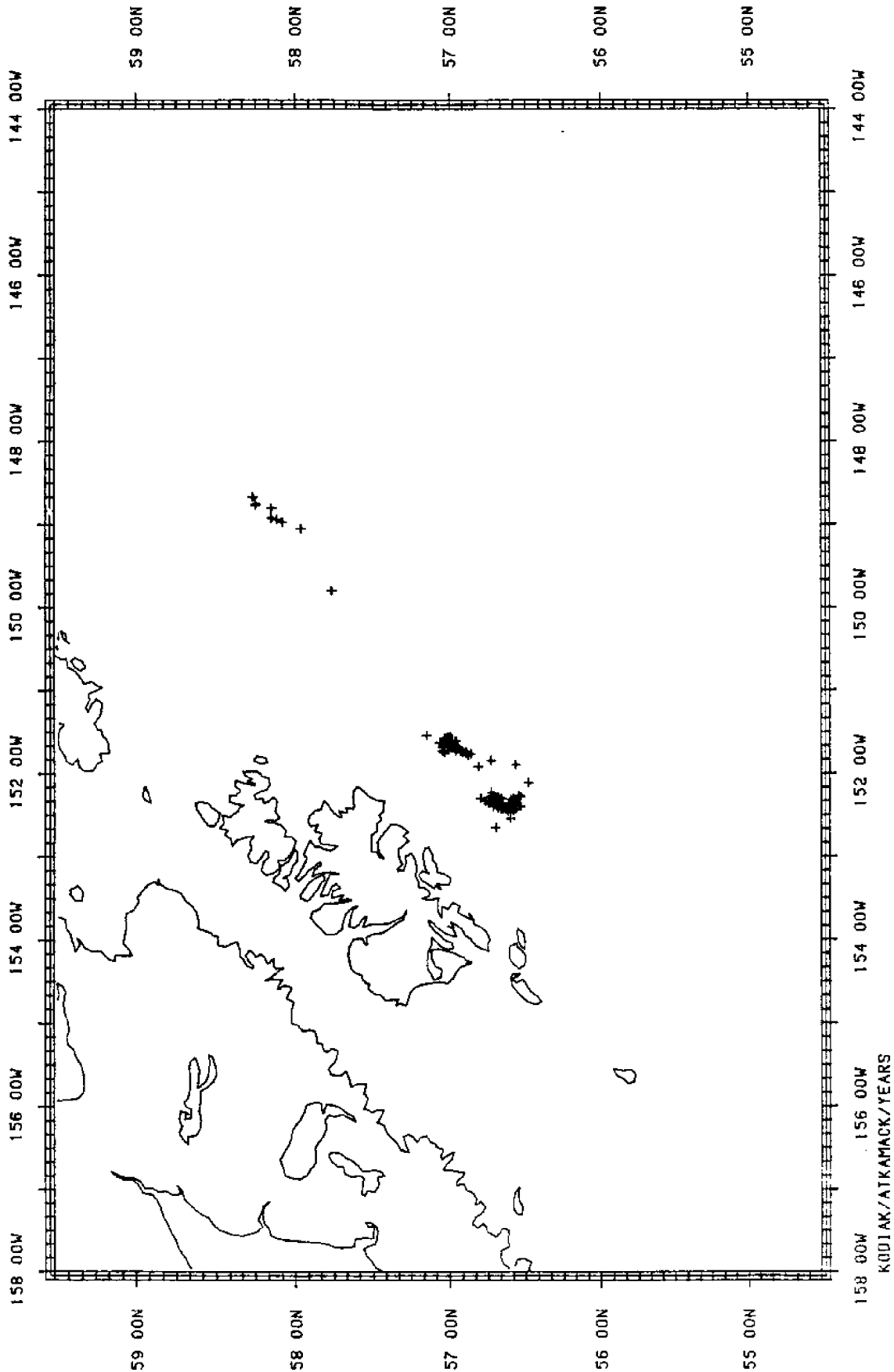


FIGURE D-9. TRAWLING LOCATIONS FOR ATKA MACKEREL, ALL MONTHS, 1979-80

KODIAK/ATKAMACK/YEARS

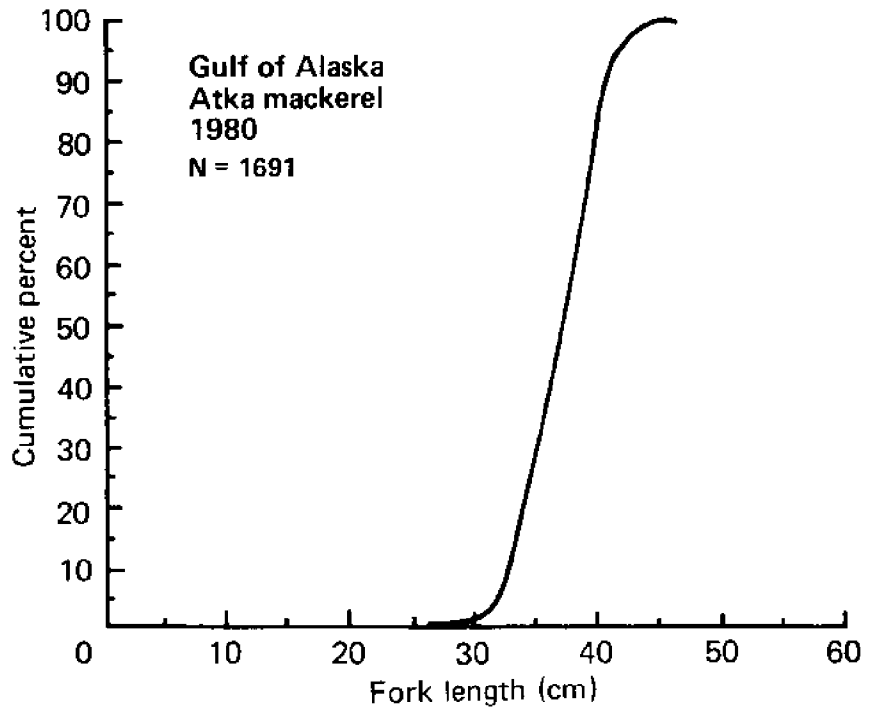
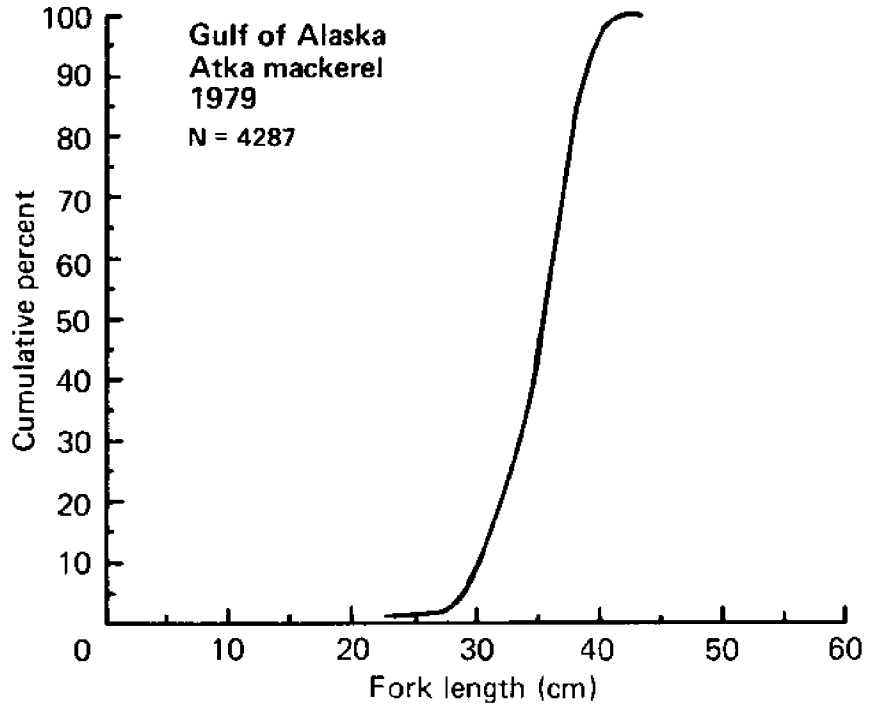
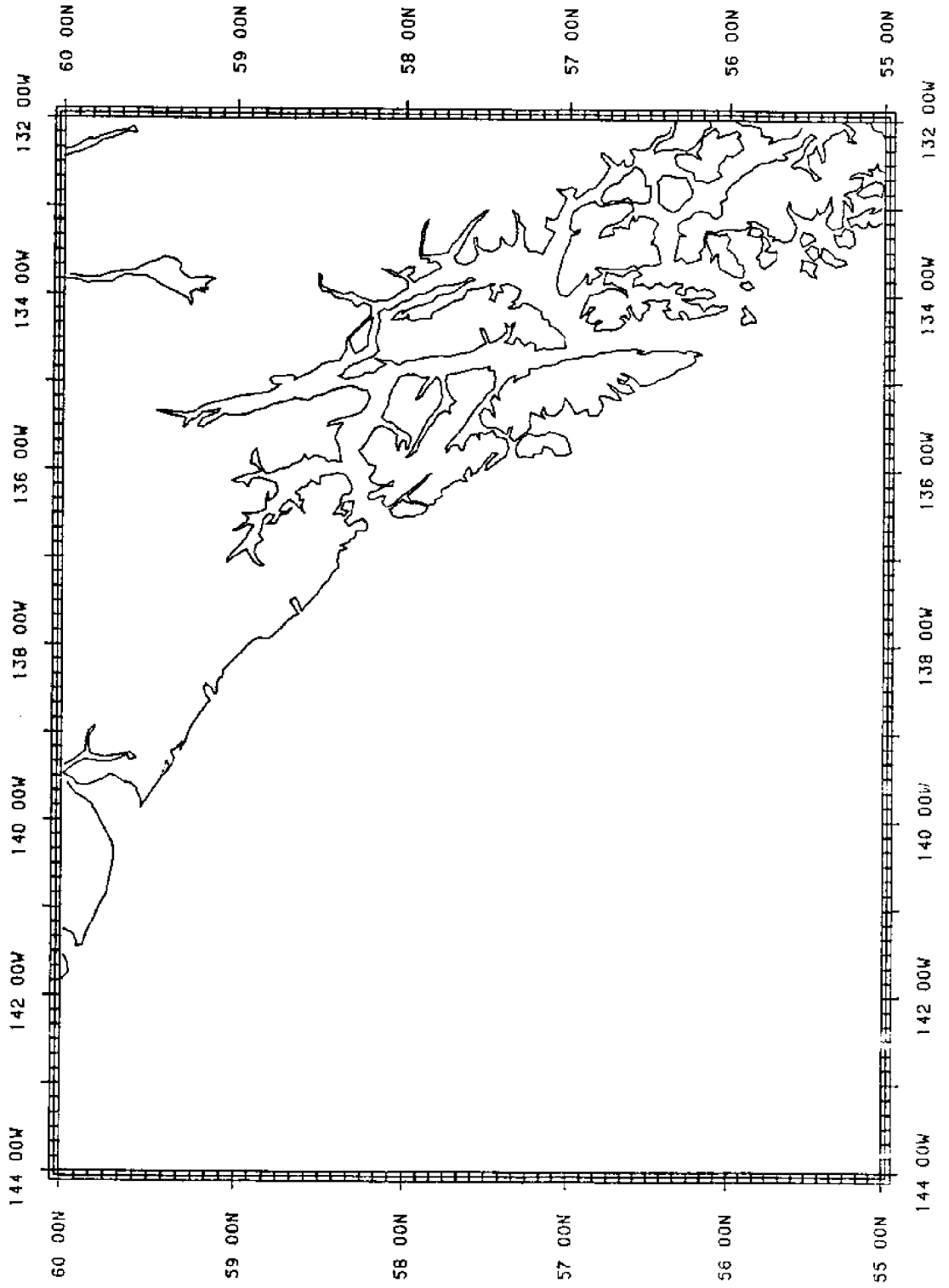


FIGURE D-10. CUMULATIVE LENGTH-FREQUENCY DISTRIBUTIONS OF THE ATKA MACKEREL CATCH FROM ALL AREAS OF THE GULF OF ALASKA DURING 1979-80.



APPENDIX E. SOUTHEAST ALASKA REGION

APPENDIX E

Productive Foreign Fishing Locations in the
Southeast Alaska Region

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Productive Foreign Fishing Locations in the
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Table E-1

SUMMARY OF OVERALL CATCH COMPOSITION AND CATCH PER UNIT EFFORT OBSERVED IN THE SOUTHEAST ALASKA REGION DURING APRIL-JUNE 1980.^{1/}

	<u>Mean CPUE^{2/}</u> <u>(lbs/day)</u>	<u>Mean CPUE^{3/}</u> <u>(lbs/hr)</u>	<u>Proportion of^{4/}</u> <u>Total Catch</u>	<u>Mean Size</u> <u>(lbs/fish)</u>
Small Trawlers				
Pacific Cod	169	226	0.256	5.25
Walleye Pollock	130	173	0.196	1.16
Arrowtooth Flounder	109	145	0.164	1.55
Sharpchin Rockfish	98	131	0.148	0.61
Yellowtail Rockfish	73	98	0.111	2.03
Sablefish	43	57	0.065	4.54
Pacific Ocean Perch	29	39	0.044	1.29
Rex Sole	6	8	0.009	0.33
Large Freezer Trawlers				
Pacific Ocean Perch	14,614	1,483	0.360	1.36
Arrowtooth Flounder	8,751	888	0.215	2.73
Roughey Rockfish	5,801	589	0.143	3.01
Redstripe Rockfish	2,346	238	0.058	0.83
Harlequin Rockfish	1,841	187	0.045	0.56
Sharpchin Rockfish	1,408	143	0.035	0.57
Pacific Halibut	879	89	0.022	36.38
Yellowmouth Rockfish	729	74	0.018	1.83
Walleye Pollock	727	74	0.018	1.20
Shortspine Thornyhead	720	73	0.018	0.40
Dover Sole	694	70	0.017	1.49
Widow Rockfish	435	44	0.011	3.15

^{1/} Based upon observer data from one gear operation by a small trawler, and 52 gear operations by large freezer trawlers. No data were available for the periods January-March 1979-80.

^{2/} Average production rate per day of fishing activities on the grounds.

^{3/} Average production rate per hour of actual trawling effort.

^{4/} By vessel class.

Table E-2

SUMMARY OF OVERALL CATCH COMPOSITION AND CATCH PER UNIT EFFORT OBSERVED IN THE SOUTHEAST ALASKA REGION DURING JULY-SEPTEMBER 1980.^{1/}

	<u>Mean CPUE^{2/}</u> <u>(lbs/day)</u>	<u>Mean CPUE^{3/}</u> <u>(lbs/hr)</u>	<u>Proportion of^{4/}</u> <u>Total Catch</u>	<u>Mean Size</u> <u>(lbs/fish)</u>
Small Trawlers				
Pacific Ocean Perch	9,227	1,128	0.344	1.38
Walleye Pollock	4,394	537	0.164	1.16
Arrowtooth Flounder	4,312	527	0.161	4.25
Shortraker Rockfish	1,649	202	0.061	8.45
Rougheye Rockfish	1,607	196	0.060	2.73
Dusky Rockfish	1,031	126	0.038	2.22
Pacific Halibut	916	112	0.034	32.49
Sablefish	729	89	0.027	3.95
Large Freezer Trawlers				
Walleye Pollock	17,991	1,603	0.271	1.17
Pacific Ocean Perch	11,581	1,032	0.174	1.34
Arrowtooth Flounder	9,552	851	0.144	4.08
Redstripe Rockfish	7,735	689	0.116	1.29
Harlequin Rockfish	3,539	315	0.053	0.55
Sharpchin Rockfish	3,387	302	0.051	0.67
Silvergray Rockfish	1,779	159	0.027	4.71
Shortraker Rockfish	1,532	137	0.023	5.46
Surimi Trawlers				
Walleye Pollock	2,487	553	0.878	1.17
Pacific Ocean Perch	93	21	0.033	0.77
Dusky Rockfish	92	20	0.032	1.54
Northern Rockfish	84	19	0.030	1.02
Pacific Halibut	43	10	0.015	33.64
Harlequin Rockfish	24	5	0.008	0.39
Pacific Cod	7	1	0.002	5.25
Arrowtooth Flounder	4	1	0.002	3.04

^{1/} Based upon observer data from 194 gear operations by small trawlers, 190 gear operations by large freezer trawlers, and one gear operation by a surimi trawler.

^{2/} Average production rate per day of fishing activities on the grounds.

^{3/} Average production rate per hour of actual trawling effort.

^{4/} By vessel class.

Table E-3

SUMMARY OF OVERALL CATCH COMPOSITION AND CATCH PER UNIT EFFORT OBSERVED IN THE SOUTHEAST ALASKA REGION DURING OCTOBER-DECEMBER 1980.^{1/}

	<u>Mean CPUE^{2/}</u> <u>(lbs/day)</u>	<u>Mean CPUE^{3/}</u> <u>(lbs/hr)</u>	<u>Proportion of^{4/}</u> <u>Total Catch</u>	<u>Mean Size</u> <u>(lbs/fish)</u>
Small Trawlers				
Arrowtooth Flounder	3,701	389	0.212	3.47
Shortraker Rockfish	3,583	377	0.206	9.38
Pacific Ocean Perch	2,397	252	0.138	1.53
Flathead Sole	2,002	211	0.115	1.20
Rougheye Rockfish	1,682	177	0.096	2.78
Walleye Pollock	1,258	132	0.072	1.12
Shortspine Thornyhead	679	71	0.039	0.49
Sablefish	548	58	0.031	5.85
Pacific Halibut	536	56	0.031	30.02
Dover Sole	305	32	0.017	1.87
Large Freezer Trawlers				
Walleye Pollock	16,758	2,281	0.301	1.14
Arrowtooth Flounder	11,661	1,587	0.209	2.32
Redstripe Rockfish	5,994	816	0.107	1.25
Pacific Ocean Perch	5,736	781	0.103	1.40
Silvergray Rockfish	2,802	381	0.050	5.50
Sharpchin Rockfish	2,095	285	0.038	0.60
Harlequin Rockfish	1,806	246	0.032	0.61
Rougheye Rockfish	1,434	195	0.026	3.11
Pacific Halibut	1,325	180	0.024	20.64
Widow Rockfish	977	133	0.018	7.56

^{1/} Based upon observer data from 45 gear operations by small trawlers, and 32 gear operations by large freezer trawlers.

^{2/} Average production rate per day of fishing activities on the grounds.

^{3/} Average production rate per hour of actual trawling effort.

^{4/} By vessel class.

TABLE E-4. WALLIYE POLLOCK, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	L	79 727	5925N	14218W	14441.1 30951.3 C.0	299.	1.000	120560.	120.56	0.95	0.	120560.
JAPAN	M	79 526	5839N	14025W	14407.5 30662.5 C.0	186.	1.250	81784.	65.43	1.03	6216.	88000.
JAPAN	M	80 9 5	5939N	14255W	14446.8 31084.7 C.0	157.	1.667	25343.	51.21	1.18	2657.	68000.
JAPAN	S	80 812	5534N	14235W	14464.5 30923.3 C.0	142.	0.500	21503.	43.01	1.13	7097.	28600.
JAPAN	L	79 726	5944N	14313W	14434.3 31178.2 C.0	155.	4.167	139260.	33.42	0.94	C.	139260.
JAPAN	L	79 728	5927N	14219W	14454.2 30872.6 C.0	219.	2.833	93232.	32.92	0.89	438.	93720.
JAPAN	M	80 9 6	5914N	14315W	14344.1 31092.4 C.0	154.	1.917	62240.	32.47	1.09	10360.	72600.
JAPAN	M	80 327	5934N	14313W	14350.3 31087.2 C.0	161.	0.917	28978.	31.61	1.23	1822.	30800.
JAPAN	M	79 526	5843N	14051W	14368.3 30189.6 C.0	197.	0.583	17430.	29.88	1.24	2370.	19800.
JAPAN	M	80 5 2	5938N	14257W	14432.5 31050.9 C.0	168.	2.083	54056.	25.95	1.23	7544.	61600.
JAPAN	M	80 511	5933N	14330W	14286.3 31122.3 C.0	156.	1.167	29694.	25.45	1.21	3306.	33000.
JAPAN	L	79 726	5926N	14218W	14445.1 30860.5 C.0	197.	3.667	90200.	24.60	0.93	C.	90200.
JAPAN	S	80 731	5933N	14235W	14456.4 30974.1 C.0	120.	0.500	11909.	23.82	1.21	3600.	23320.
JAPAN	M	79 927	5918N	14203W	14428.8 30742.1 C.0	148.	0.833	19720.	23.66	0.96	2577.	31680.
JAPAN	M	79 928	5853N	14058W	14415.4 30304.0 C.0	137.	1.500	29103.	19.40	0.99	1291.	13200.
JAPAN	M	79 927	5840N	14034W	14391.6 30303.3 C.0	148.	0.583	8153.	13.98	1.00	2847.	11000.
JAPAN	M	80 910	5931N	14338W	14245.8 31124.7 C.0	145.	0.833	11156.	13.39	1.15	6444.	17600.
JAPAN	S	80 914	5915N	14153W	14433.5 30683.8 C.0	139.	1.083	12615.	11.64	1.11	1685.	14300.
JAPAN	L	79 726	5948N	14316W	14453.0 31227.7 C.0	138.	4.667	52712.	11.30	0.94	1408.	54120.
JAPAN	M	80 5 5	5934N	14321W	14325.3 31108.1 C.0	133.	1.500	16835.	11.22	1.08	5165.	22000.
JAPAN	M	80 514	5901N	14115W	14432.1 30833.9 C.0	200.	2.917	28945.	9.92	1.15	6255.	35200.
JAPAN	M	79 928	5917N	14158W	14435.0 30717.6 C.0	153.	1.167	10834.	9.29	0.92	5226.	16060.
JAPAN	M	80 915	5913N	14149W	14429.4 30653.1 C.0	148.	0.667	5700.	8.55	1.15	900.	6600.
JAPAN	M	79 929	5847N	14055W	14485.4 30239.4 C.0	194.	2.500	20846.	8.34	1.09	8854.	29700.
JAPAN	M	79 728	5924N	14217W	14436.1 30839.1 C.0	319.	1.167	9599.	8.23	0.93	961.	10560.
JAPAN	M	79 929	5911N	14143W	14430.7 30615.9 C.0	159.	1.083	8517.	7.86	1.01	3583.	12100.
JAPAN	L	80 910	5935N	14327W	14314.8 31132.6 C.0	119.	2.833	21966.	7.75	1.06	8834.	30800.
JAPAN	M	79 515	5846N	14056W	14385.8 30251.9 C.0	159.	1.333	9773.	7.33	1.16	4527.	14300.
JAPAN	M	79 930	5940N	14250W	14470.0 31020.3 C.0	159.	0.833	5822.	6.99	1.22	3418.	9240.
JAPAN	S	80 726	5923N	14212W	14442.4 30915.1 C.0	164.	3.000	19857.	6.62	1.17	3683.	23540.
JAPAN	M	80 517	5758N	13755W	14492.5 29120.7 C.0	126.	1.000	6596.	6.60	1.10	1104.	7700.
JAPAN	M	79 924	5839N	14037W	14427.3 30033.9 C.0	175.	1.333	8736.	6.55	0.93	3364.	12100.
JAPAN	M	79 924	5832N	13957W	14430.2 29892.3 C.0	131.	0.500	3527.	6.45	0.97	1173.	4400.
JAPAN	M	80 527	5516N	13426W	14192.7 26938.0 C.0	112.	0.500	3198.	6.40	1.36	14182.	17380.
JAPAN	M	80 5 9	5932N	14338W	14254.1 31133.6 C.0	139.	1.000	5869.	5.97	1.01	2831.	8800.
JAPAN	S	80 913	5912N	14146W	14430.0 30634.5 C.0	150.	1.250	7344.	5.88	1.15	1456.	6800.
JAPAN	S	80 416	5843N	14049W	14371.5 30162.7 C.0	153.	2.250	12841.	5.71	1.13	4319.	17160.
JAPAN	M	80 917	5755N	13740W	14512.6 29032.9 C.0	164.	0.833	4119.	4.94	1.12	1381.	5500.
JAPAN	M	80 916	5755N	13732W	14528.7 29000.4 C.0	164.	1.500	7316.	4.88	1.12	1484.	8300.
JAPAN	M	80 925	5516N	13428W	14189.0 26947.9 C.0	111.	1.167	792.	4.75	1.45	2068.	2860.
JAPAN	S	79 930	5923N	14213W	14459.6 30818.1 C.0	191.	1.750	7685.	4.39	1.09	6615.	14300.
JAPAN	S	80 7 7	5537N	13504W	14197.5 27241.6 C.0	126.	0.500	1984.	3.97	1.56	1976.	3960.
JAPAN	M	79 914	5845N	14054W	14374.2 30217.9 C.0	175.	1.417	5601.	3.95	1.23	13099.	18700.
JAPAN	M	80 912	5935N	14310W	14367.9 31068.3 C.0	153.	0.917	3572.	3.90	1.12	1708.	5280.
JAPAN	L	79 727	5944N	14313W	14434.3 31178.2 C.0	151.	2.000	7734.	3.87	0.90	1066.	8600.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-4 (continued). WALLEYE POLLOCK, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	YRMMDD	LAT	LONG	APPROX LORAN-C	PULSE	RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	80 915	5844N	14042W	14378.0	30140.3	0.0	0.0	189	2.333	6616	3.69	1.15	6782	15400
JAPAN	M	80 913	5832N	14257W	14432.5	31080.9	0.0	0.0	167	3.083	11194	3.63	1.17	13006	24200
JAPAN	L	79 726	5948N	14318W	14451.0	31227.7	0.0	0.0	124	1.667	5940	3.56	0.93	0	5940
JAPAN	S	80 916	5913N	14152W	14421.1	30662.4	0.0	0.0	136	1.000	3513	3.51	0.91	887	4400
JAPAN	L	79 727	5824N	14218W	14433.2	30842.1	0.0	0.0	312	2.500	8633	3.46	0.91	822	9460
JAPAN	H	79 822	5834N	14329W	14299.9	31128.7	0.0	0.0	137	0.500	1721	3.44	1.24	2679	4400
JAPAN	M	80 912	5933N	14317W	14325.5	31082.7	0.0	0.0	175	1.333	4540	3.40	1.18	2940	7480
JAPAN	M	80 811	5919N	14206W	14428.1	30760.3	0.0	0.0	160	1.667	5393	3.24	1.20	2967	8360
JAPAN	M	80 919	5837N	13840W	14453.9	29380.8	0.0	0.0	126	1.500	4589	3.06	1.17	7700	7700
JAPAN	M	80 929	5817N	13427W	14194.4	26947.9	0.0	0.0	112	0.833	2483	2.98	1.36	6317	8800
JAPAN	H	80 925	5836N	13457W	14207.1	27201.1	0.0	0.0	148	1.167	3454	2.96	1.49	4906	8360
JAPAN	S	80 914	5934N	14318W	14334.7	31100.3	0.0	0.0	153	2.917	8498	2.91	1.12	742	9240
JAPAN	H	80 911	5755N	13740W	14512.6	29032.9	0.0	0.0	142	1.500	4095	2.73	1.15	7345	11440
JAPAN	H	79 828	5831N	14058W	14405.4	30285.8	0.0	0.0	164	1.167	3071	2.63	1.03	1329	4400
JAPAN	H	80 826	5837N	14307W	14393.8	31098.6	0.0	0.0	141	1.417	3729	2.63	1.24	2871	6600
JAPAN	S	80 917	5925N	14208W	14469.4	30821.6	0.0	0.0	126	0.333	874	2.62	1.30	666	1540
JAPAN	M	80 913	5934N	14311W	14356.5	31081.9	0.0	0.0	172	0.833	2164	2.60	1.25	3336	5500
JAPAN	M	80 930	5808N	14137W	14424.6	30569.4	0.0	0.0	168	1.583	4068	2.57	1.14	3192	7260
JAPAN	S	80 814	5937N	14257W	14424.2	31071.8	0.0	0.0	164	3.250	8032	2.47	1.15	6498	14080
JAPAN	M	79 921	5749W	14522.4	28892.9	30584.9	0.0	0.0	126	1.833	4402	2.40	2.37	24198	28600
JAPAN	M	80 910	5750N	13745W	14508.0	29062.3	0.0	0.0	126	2.333	5394	2.31	1.15	15506	20900
JAPAN	S	80 913	5842N	14052W	14352.9	30184.0	0.0	0.0	172	2.083	4782	2.30	1.04	2918	7700
JAPAN	M	79 929	5857N	14101W	14435.9	30350.6	0.0	0.0	131	0.667	1486	2.23	1.22	1154	2640
JAPAN	M	80 921	5934N	14342W	14257.9	31161.5	0.0	0.0	131	2.000	4444	2.22	1.08	5896	10340
JAPAN	M	79 928	5843N	14051W	14368.3	30189.6	0.0	0.0	186	1.000	2121	2.12	1.24	4039	5160
JAPAN	S	80 917	5930N	14213W	14495.0	30882.7	0.0	0.0	115	0.333	691	2.07	1.14	11409	12100
JAPAN	M	80 910	5755N	13730W	14532.6	28992.2	0.0	0.0	153	4.833	10004	2.07	1.13	35096	45100
JAPAN	M	80 913	5911N	14131W	14463.1	30577.7	0.0	0.0	180	1.167	2342	2.01	1.11	2718	5060
JAPAN	S	80 726	5906N	14133W	14420.6	30538.3	0.0	0.0	180	2.583	4808	1.86	1.26	18732	23540
JAPAN	M	79 928	5939N	14139W	14426.6	30584.9	0.0	0.0	160	1.000	1846	1.85	1.26	13114	14960
JAPAN	M	79 916	5839N	14017W	14427.3	30033.9	0.0	0.0	142	0.583	983	1.69	1.42	1217	2200
JAPAN	M	80 914	5911N	14143W	14430.7	30615.9	0.0	0.0	159	1.250	2064	1.65	1.22	11136	13200
JAPAN	M	79 914	5842N	14047W	14371.9	30166.7	0.0	0.0	164	1.000	1615	1.61	1.60	3385	5500
JAPAN	M	80 918	5902N	14122W	14420.8	30466.1	0.0	0.0	191	1.500	2382	1.59	1.16	11478	13860
JAPAN	M	80 824	5827N	13454W	14179.5	27134.5	0.0	0.0	126	0.500	789	1.58	1.38	4051	4840
JAPAN	S	80 914	5934N	14316W	14341.0	31095.1	0.0	0.0	142	3.167	4678	1.48	1.13	4122	8000
JAPAN	M	80 917	5905N	14130W	14421.3	30519.5	0.0	0.0	189	2.000	2631	1.32	1.13	4629	7260
JAPAN	M	80 917	5902N	14120W	14426.1	30459.5	0.0	0.0	208	1.750	2165	1.24	1.15	3995	6160
JAPAN	M	79 818	5850N	14057W	14401.1	30273.4	0.0	0.0	148	1.250	1512	1.21	1.10	2898	4400
JAPAN	M	79 928	5840N	14035W	14385.1	30106.8	0.0	0.0	164	1.250	1444	1.16	1.05	3740	4840
JAPAN	S	80 812	5932N	14237W	14442.4	30970.5	0.0	0.0	131	1.583	1827	1.15	1.26	3013	4840
JAPAN	M	80 917	5807N	13643W	14447.3	29392.6	0.0	0.0	186	2.500	2833	1.13	1.19	9267	12100
JAPAN	S	80 717	5542N	13502W	14208.7	27291.8	0.0	0.0	127	0.667	718	1.08	1.41	822	1540
JAPAN	S	80 816	5843N	14047W	14378.7	30175.7	0.0	0.0	159	1.833	1959	1.07	1.16	6841	8500
JAPAN	M	80 825	5834N	14310W	14355.6	31079.2	0.0	0.0	173	1.417	1437	1.01	1.04	1423	2860

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-4 (continued). WALLEYE POLLOCK, JULY-SEPTEMBER 1979-80

NATION	VESSEL	DATE	LAT	LONG	APPROX	LD	RAN-C	PULSE	RATES	DEPTH	HOURS	CATCH	THOUSAND	SIZE	BYCATCH	TOTAL
	CLASS	YMMDD			GX	GY				(FMS)	TRAWLED	(LBS)	PER HOUR	LBS/FISH	(LBS)	(LBS)
JAPAN	M	79 826	5528N	13454W	14183.2	27140.1			0.0	138.	1.333	1342.	1.01	2.50	1518.	2860.
JAPAN	M	79 929	5845N	14055W	14371.6	30221.3			0.0	213.	0.833	806.	0.97	1.01	954.	1760.
JAPAN	S	79 5 9	5858N	14103W	14441.9	30366.5			0.0	169.	2.917	2774.	0.95	1.34	6026.	8800.
JAPAN	M	79 921	5748N	13717W	14521.1	28875.6			0.0	142.	0.667	604.	0.91	1.70	27996.	28600.
JAPAN	M	80 3 9	5839N	14005W	14456.5	29990.8			0.0	142.	2.500	2229.	0.89	1.15	3491.	5720.
JAPAN	M	79 918	5838N	13547W	14339.9	27842.4			0.0	137.	1.333	1176.	0.88	1.53	4324.	5500.
JAPAN	M	79 929	5844N	14367.4	30208.9				0.0	230.	1.167	1027.	0.88	1.29	2273.	3500.
JAPAN	M	79 927	5835N	14014W	14434.7	30023.2			0.0	131.	0.500	419.	0.84	1.11	1121.	1540.
JAPAN	M	80 8 7	5558N	13523W	14230.0	27445.0			0.0	120.	1.667	1378.	0.83	1.43	3902.	5280.
JAPAN	M	79 925	5902N	14121W	14423.4	30462.8			0.0	180.	1.833	1507.	0.82	1.61	5093.	6000.
JAPAN	M	79 912	5557N	13503W	14276.1	27365.8			0.0	159.	1.583	1255.	0.79	1.95	4245.	5500.
JAPAN	M	79 524	5841N	14027W	14415.9	30087.6			0.0	131.	0.583	443.	0.76	1.86	1757.	2200.
JAPAN	S	79 911	5843N	14046W	14367.7	30154.3			0.0	164.	4.083	2974.	0.73	1.20	3186.	6160.
JAPAN	S	80 512	5907N	14133W	14428.0	30547.4			0.0	189.	1.083	780.	0.72	1.21	1860.	2640.
JAPAN	M	80 811	5548N	13510W	14227.8	27339.7			0.0	137.	2.500	1678.	0.67	1.40	6242.	7920.
JAPAN	S	80 815	5811N	14143W	14430.7	30615.9			0.0	131.	3.000	1936.	0.65	1.08	7964.	9900.
JAPAN	M	79 912	5558N	13517W	14253.4	27440.5			0.0	157.	2.333	1494.	0.64	1.92	7306.	8600.
JAPAN	M	79 928	5843N	14054W	14360.5	30199.9			0.0	215.	1.083	692.	0.64	1.07	1948.	2640.
JAPAN	S	79 830	5514N	13428W	14189.3	26918.3			0.0	169.	0.333	207.	0.62	1.53	453.	860.
JAPAN	S	79 9 7	5846N	14052W	14372.6	30202.0			0.0	164.	3.250	2009.	0.62	0.93	3711.	5720.
JAPAN	S	80 722	5558N	13501W	14276.0	27349.2			0.0	153.	3.000	1789.	0.60	1.49	3491.	5280.
JAPAN	M	80 523	5908N	14134W	14432.7	30559.8			0.0	183.	1.833	1088.	0.59	1.10	7932.	9020.
JAPAN	M	79 9 5	5508N	13428W	14133.0	26875.9			0.0	152.	1.750	1029.	0.59	2.52	2931.	3960.
JAPAN	S	79 9 9	5841N	14045W	14370.2	30150.8			0.0	164.	4.083	2346.	0.57	1.00	5574.	7920.
JAPAN	L	80 7 4	5932N	14332W	14273.5	31118.4			0.0	131.	3.500	1931.	0.55	1.17	269.	2200.
JAPAN	M	80 725	5605N	13525W	14265.9	27527.5			0.0	168.	1.500	805.	0.54	1.88	6235.	7040.
JAPAN	S	80 813	5932N	14237W	14442.4	30970.5			0.0	131.	1.333	715.	0.54	1.26	1925.	2640.
JAPAN	M	80 810	5554N	13522W	14228.0	27437.5			0.0	156.	1.000	517.	0.52	1.63	5643.	6160.
JAPAN	M	79 529	5842N	14047W	14371.9	30166.7			0.0	175.	0.500	258.	0.52	1.47	1292.	1540.
JAPAN	M	80 827	5517N	13430W	14182.8	26952.8			0.0	109.	1.000	512.	0.51	1.76	6088.	6600.
JAPAN	M	80 527	5516N	13431W	14181.3	26962.8			0.0	112.	1.333	682.	0.51	1.35	3278.	3960.
JAPAN	S	79 8 3	5836N	14007W	14432.0	29970.8			0.0	148.	2.833	1435.	0.51	0.95	2525.	3960.
JAPAN	M	80 524	5844N	14050W	14377.8	30195.1			0.0	150.	1.833	928.	0.51	1.02	5892.	6820.
JAPAN	S	80 911	5516N	14155W	14435.7	30699.2			0.0	157.	1.500	750.	0.50	1.18	1010.	1760.

*** NOTE *** THE ACCURACY OF POSITION AND LOGAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

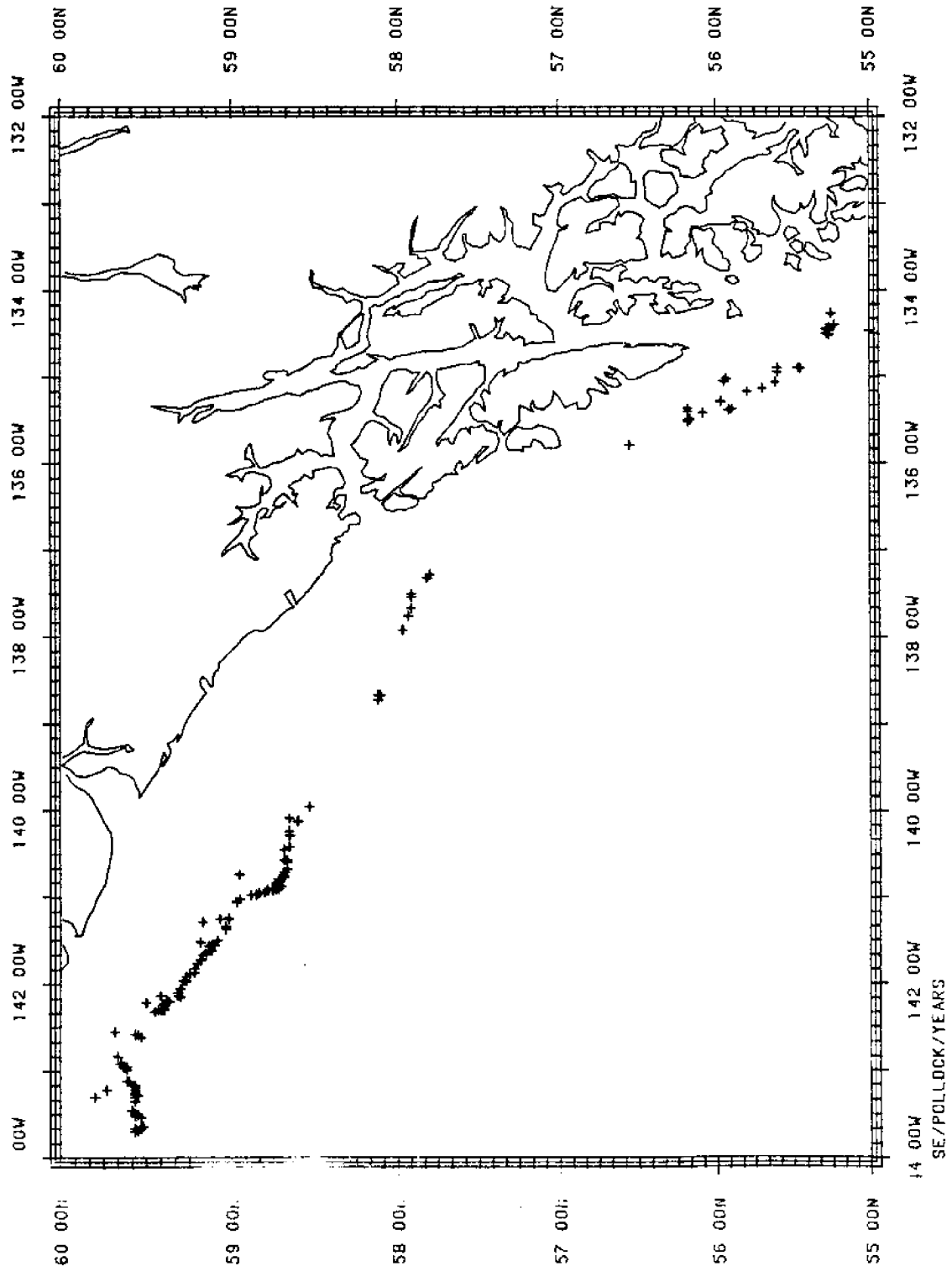
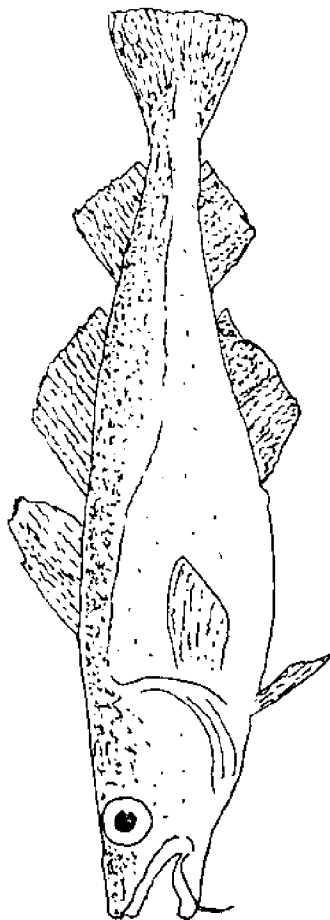


FIGURE E-1. TRAWLING LOCATIONS FOR WALLEYE POLLOCK, ALL MONTHS, 1979-80

TABLE L-6. PACIFIC COD, JULY-SEPTEMBER 1979-80

NATION	VESEL CLASS	DATE	YRMO	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	RYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	79 821	5503N	14121W	14430.7	30471.9	0.0	153.	0.667	1485.	2.23	6.16	9515.	11000.
JAPAN	M	80 827	5533N	14335W	14272.2	31135.0	0.0	119.	0.500	535.	1.07	4.78	3425.	3960.
JAPAN	S	80 713	5534N	14330W	14298.7	31131.3	0.0	109.	0.500	435.	0.87	8.07	4625.	5050.
JAPAN	S	80 712	5533N	14330W	14288.3	31122.3	0.0	104.	0.333	248.	0.74	5.28	10532.	10780.
JAPAN	M	80 705	5558N	13517W	14253.4	27440.5	0.0	144.	1.667	1205.	0.72	5.87	6495.	7700.
JAPAN	M	80 510	5531N	14338W	14245.8	31124.7	0.0	145.	0.833	567.	0.68	8.07	17033.	17600.
JAPAN	S	80 5 6	5534N	14234W	14467.4	30980.5	0.0	90.	0.667	357.	0.54	10.63	3163.	3520.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***



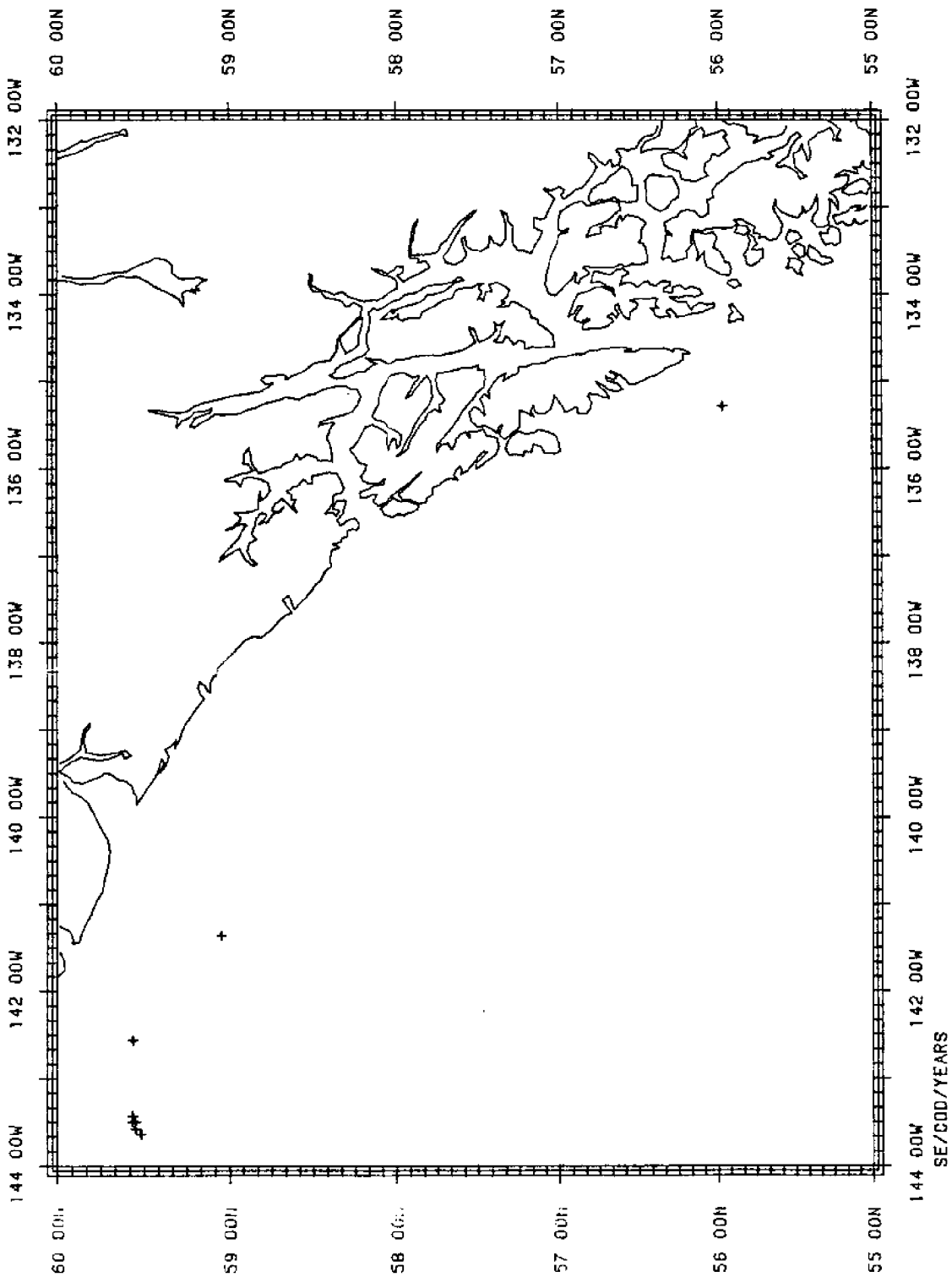


FIGURE E-2. TRAWLING LOCATIONS FOR PACIFIC COD, ALL MONTHS, 1979-80

TABLE E-7. TURBOT, APRIL-JUNE 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
		YYMMDD			6X	6Y						
JAPAN	M	80 614	5604N	13525W	14261.9	27520.8	0.0	177.	1.500	12442.	2298.	14740.
JAPAN	M	80 613	5604N	13525W	14261.9	27520.8	0.0	171.	1.500	10668.	1432.	12100.
JAPAN	M	80 611	5602N	13525W	14253.9	27506.7	0.0	184.	1.750	5663.	1597.	7260.
JAPAN	M	80 612	5602N	13527W	14252.0	27537.5	0.0	176.	1.633	5144.	1236.	6580.
JAPAN	M	79 619	5558N	13506W	14274.4	27387.3	0.0	145.	1.000	2469.	6771.	9240.
JAPAN	M	80 616	5604N	13525W	14261.9	27520.8	0.0	175.	1.667	3580.	1700.	5280.
JAPAN	M	80 614	5558N	13514W	14259.1	27426.0	0.0	142.	1.000	2063.	5197.	7260.
JAPAN	M	80 619	5558N	13521W	14245.7	27459.8	0.0	181.	1.500	2757.	1203.	3960.
JAPAN	M	80 615	5558N	13522W	14247.7	27471.5	0.0	178.	0.833	1070.	470.	1540.
JAPAN	M	80 610	5603N	13524W	14259.8	27509.0	0.0	171.	1.167	1251.	1169.	2420.
JAPAN	M	79 613	5608N	13525W	14276.0	27549.4	0.0	169.	1.000	971.	789.	1760.
JAPAN	M	80 614	5558N	13510W	14266.8	27406.6	0.0	175.	1.250	1188.	2332.	3520.
JAPAN	M	80 610	5558N	13518W	14251.5	27445.3	0.0	175.	1.583	1430.	2970.	4400.
JAPAN	M	80 616	5557N	13522W	14239.8	27457.8	0.0	182.	1.083	958.	3582.	4840.
JAPAN	M	79 619	5623N	13537W	14316.7	27718.0	0.0	126.	1.250	1083.	1117.	2200.
JAPAN	M	79 619	5612N	13531W	14282.7	27607.1	0.0	131.	1.000	847.	2233.	3080.
JAPAN	M	79 616	5609N	13530W	14272.4	27580.5	0.0	153.	0.917	736.	4104.	4840.
JAPAN	M	80 618	5558N	13520W	14247.8	27455.0	0.0	191.	1.333	1016.	2724.	3740.
JAPAN	M	80 614	5603N	13525W	14257.9	27513.8	0.0	175.	1.000	740.	7400.	8140.
JAPAN	M	80 613	5558N	13511W	14264.9	27411.5	0.0	153.	1.417	1023.	2057.	3080.
JAPAN	M	79 618	5557N	13505W	14272.3	27375.5	0.0	156.	1.500	987.	4953.	5940.
JAPAN	M	80 611	5613N	13532W	14284.9	27619.2	0.0	151.	1.333	872.	10788.	11860.
JAPAN	M	80 615	5558N	13510W	14266.8	27406.6	0.0	153.	1.167	711.	1049.	1760.
JAPAN	M	79 619	5612N	13532W	14280.8	27611.8	0.0	131.	1.333	799.	3601.	4400.
JAPAN	M	79 620	5558N	13508W	14271.8	27397.0	0.0	167.	1.750	1046.	4454.	5300.
JAPAN	M	79 610	5612N	13532W	14280.8	27611.8	0.0	137.	1.083	619.	4661.	5280.
JAPAN	M	79 623	5559N	13521W	14245.7	27466.7	0.0	145.	2.417	1376.	7424.	8800.
JAPAN	M	79 621	5625N	13538W	14323.1	27738.1	0.0	137.	1.083	611.	2469.	3080.
JAPAN	M	80 614	5601N	13525W	14245.9	27495.8	0.0	175.	0.833	466.	1514.	1980.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-8. TURBOT, JULY-SEPTEMBER 1979-80

COUNTRY	VESSEL CLASS	DATE	LAT	LONG	APPROX. DEPTH (FMS)	LORAN-C PULSE RATES	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	80 718	5003N	14113W	0.0	14451.8 30465.6	0.583	7760.	13.30	5.21	380.	8140.
JAPAN	M	80 629	5116N	14137W	0.0	14484.6 30642.9	1.417	18051.	12.75	5.74	4819.	22880.
JAPAN	S	80 718	5003N	14146W	0.0	14362.8 30532.5	0.583	6418.	11.00	4.86	402.	6320.
JAPAN	M	79 528	5009N	14139W	0.0	14426.6 30584.9	1.000	9733.	9.73	3.93	5227.	14360.
JAPAN	M	79 821	5003N	14123W	0.0	14436.7 30471.9	0.807	4672.	7.31	6.73	6128.	11000.
JAPAN	M	79 819	5009N	14130W	0.0	14434.7 30575.3	1.833	12776.	6.97	4.04	5924.	18700.
JAPAN	S	80 725	5839N	14023W	0.0	14412.5 30025.3	2.033	14071.	6.75	6.68	6829.	20900.
JAPAN	M	80 815	5537N	13522W	0.0	14235.8 27457.8	1.833	12355.	6.74	6.37	1945.	14300.
JAPAN	M	80 8 3	5608N	13527W	0.0	14274.1 27559.0	2.333	13381.	5.73	6.00	1359.	14740.
JAPAN	M	80 8 2	5604N	13524W	0.0	14261.8 27516.0	2.000	11390.	5.69	6.83	1600.	12980.
JAPAN	M	80 731	5534N	13528W	0.0	14135.3 27341.0	2.000	11018.	5.51	5.80	4822.	15840.
JAPAN	M	79 618	5028N	14138W	0.0	14421.9 30572.6	1.167	6360.	5.45	5.30	15640.	22000.
JAPAN	M	80 510	5736N	13745W	0.0	14506.0 29062.3	2.333	12417.	5.32	4.02	8493.	20900.
JAPAN	M	79 820	5822N	14127W	0.0	14556.5 30666.8	2.083	10016.	4.81	3.98	994.	11000.
JAPAN	M	80 5 4	5911N	14147W	0.0	14434.7 30615.9	1.250	5873.	4.70	2.73	7327.	13200.
JAPAN	S	80 715	5910N	14137W	0.0	14439.5 30587.7	0.667	3057.	4.59	5.70	903.	3960.
JAPAN	M	79 929	5842N	14046W	0.0	14374.5 30163.3	1.333	5838.	4.38	3.96	2962.	8600.
JAPAN	M	79 822	5534N	14329W	0.0	14239.9 31128.7	0.500	2140.	4.28	2.01	2260.	4400.
JAPAN	S	80 818	5934N	14235W	0.0	14464.5 30983.3	0.500	2056.	4.11	4.25	26544.	28600.
JAPAN	S	80 714	5931N	14237W	0.0	14434.3 30961.3	0.500	1856.	3.71	4.45	11344.	13200.
JAPAN	M	79 929	5841N	14039W	0.0	14395.6 30429.9	1.000	3660.	3.66	5.33	960.	4620.
JAPAN	S	80 715	5912N	14136W	0.0	14457.2 30602.9	0.917	3353.	3.66	5.80	827.	4180.
JAPAN	M	80 9 2	5906N	14130W	0.0	14428.7 30528.6	2.667	9251.	3.47	5.36	6139.	15400.
JAPAN	S	80 5 4	5911N	14144W	0.0	14426.0 30615.0	1.417	4687.	3.42	3.34	2193.	7040.
JAPAN	M	79 928	5919W	14156W	0.0	14435.0 30717.6	1.167	3950.	3.59	4.98	12110.	16060.
JAPAN	M	80 9 3	5936N	14237W	0.0	14432.5 31080.9	3.063	10320.	3.35	3.45	13680.	24200.
JAPAN	S	80 830	5908N	14135W	0.0	14430.0 30583.0	1.333	4421.	3.32	5.04	1079.	5500.
JAPAN	S	80 724	5754N	13736W	0.0	14515.3 29007.6	3.167	10332.	3.26	3.85	16508.	26640.
JAPAN	M	79 819	5920N	14130W	0.0	14531.5 30637.8	1.250	3904.	3.12	3.24	496.	4400.
JAPAN	M	80 510	5755N	13730W	0.0	14532.6 28932.2	4.833	15014.	3.11	4.58	30866.	45100.
JAPAN	M	80 923	5908N	14134W	0.0	14432.7 30559.8	1.833	5616.	3.06	4.20	3404.	9020.
JAPAN	M	80 911	5759N	13740W	0.0	14512.6 29032.9	1.500	4489.	2.99	3.32	6951.	11440.
JAPAN	M	80 510	5902N	14132W	0.0	14426.6 30466.1	1.500	4475.	2.96	4.98	9425.	13660.
JAPAN	S	80 726	5908N	14133W	0.0	14426.6 30536.3	2.583	7165.	2.77	4.63	16375.	23540.
JAPAN	S	80 715	5910N	14136W	0.0	14442.2 30584.5	0.417	1113.	2.67	5.44	207.	1320.
JAPAN	M	80 827	5806N	13526W	0.0	14276.1 27558.2	1.500	1991.	2.66	6.09	1289.	5280.
JAPAN	M	79 820	5907N	14137W	0.0	14417.2 30560.2	1.417	3493.	2.47	3.54	907.	4400.
JAPAN	M	79 930	5940N	14250W	0.0	14470.0 31080.3	0.633	2053.	2.46	4.71	7187.	9240.
JAPAN	M	79 914	5608N	13527W	0.0	14274.1 27559.0	2.000	4877.	2.44	4.64	4583.	9460.
JAPAN	M	79 821	5907N	14134W	0.0	14425.3 30550.6	1.167	2779.	2.38	4.18	1621.	4400.
JAPAN	M	79 930	5923N	14213W	0.0	14435.6 30818.1	1.750	4074.	2.33	4.64	10226.	14300.
JAPAN	M	79 824	5904N	14129W	0.0	14416.6 30507.1	2.000	4536.	2.27	5.48	2724.	7260.
JAPAN	S	80 716	5911N	14136W	0.0	14445.7 30593.7	0.583	1309.	2.24	5.46	231.	1540.
JAPAN	M	79 914	5601N	13521W	0.0	14257.6 27420.5	2.583	5794.	2.24	6.81	2786.	6780.
JAPAN	M	79 820	5908N	14139W	0.0	14419.2 30575.8	1.167	2401.	2.06	4.52	899.	3300.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-8 (continued). TURBOT, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	TIME	LAT	LONG	APPROX GX	APPROX GY	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	60 728	5607N	13526W	14272.0	27547.0	0.0	219.	2.833	5659.	2.00	5.39	5341.	11000.	
JAPAN	M	79 915	5601N	13522W	14255.7	27485.3	0.0	175.	2.500	4890.	1.96	5.12	4350.	9240.	
JAPAN	M	79 925	5639N	14032W	14390.0	30687.2	0.0	148.	3.033	647.	1.94	3.55	13653.	14300.	
JAPAN	M	79 824	5519N	14130W	14525.9	30648.5	0.0	169.	1.000	1932.	1.93	4.76	268.	2200.	
JAPAN	M	79 929	5511N	14143W	14430.7	30615.9	0.0	159.	1.083	2085.	1.92	4.58	10015.	12100.	
JAPAN	M	79 823	5533N	14321W	14316.9	31099.1	0.0	142.	1.000	1923.	1.92	4.28	7700.	7700.	
JAPAN	S	60 714	5509N	14138W	14429.3	30591.7	0.0	139.	0.583	1104.	1.89	5.43	2856.	3960.	
JAPAN	M	79 917	5601N	13522W	14255.7	27485.3	0.0	171.	1.917	3618.	1.89	5.72	2322.	5940.	
JAPAN	M	80 725	5755N	13739W	14514.7	29028.9	0.0	131.	2.500	4688.	1.88	3.62	7632.	12320.	
JAPAN	M	80 9 2	5538N	14257W	14432.5	31060.9	0.0	168.	2.083	3869.	1.86	2.65	57731.	61600.	
JAPAN	M	79 928	5647N	14056W	14392.8	30242.8	0.0	208.	1.000	1055.	1.85	5.14	5405.	7260.	
JAPAN	M	80 823	5559N	13510W	14270.7	27413.6	0.0	137.	1.500	2776.	1.85	5.24	2064.	4840.	
JAPAN	M	80 824	5644N	14050W	14377.8	30195.1	0.0	150.	1.833	3383.	1.85	3.35	3437.	6820.	
JAPAN	M	80 730	5604N	13525W	14261.5	27520.8	0.0	167.	2.000	3690.	1.84	4.97	2690.	6380.	
JAPAN	S	80 814	5906N	14133W	14420.6	30538.3	0.0	153.	1.833	3359.	1.83	6.87	2141.	5500.	
JAPAN	M	79 9 7	5609N	13529W	14274.3	27575.7	0.0	180.	1.583	2897.	1.83	9.33	4583.	7480.	
JAPAN	M	79 915	5608N	13527W	14274.1	27559.0	0.0	162.	1.917	3397.	1.77	5.42	1663.	5060.	
JAPAN	M	79 914	5645N	14054W	14374.2	30217.9	0.0	175.	1.417	2502.	1.77	5.13	16198.	18700.	
JAPAN	M	79 826	5840N	14027W	14405.2	30378.6	0.0	191.	0.833	1469.	1.76	5.55	1391.	2860.	
JAPAN	S	80 725	5755N	13739W	14514.7	29028.9	0.0	153.	3.333	5821.	1.75	3.13	7159.	12980.	
JAPAN	M	79 822	5525N	14215W	14445.7	30842.4	0.0	142.	1.500	2368.	1.71	3.51	1832.	4400.	
JAPAN	S	80 726	5906N	14132W	14423.3	30535.1	0.0	153.	2.333	3900.	1.67	4.80	12600.	16500.	
JAPAN	M	79 928	5843N	14031W	14358.3	30189.6	0.0	186.	1.000	1537.	1.59	4.17	4573.	6160.	
JAPAN	S	80 716	5911N	14137W	14467.0	30596.9	0.0	142.	1.000	1570.	1.57	5.32	850.	2420.	
JAPAN	S	60 7 1	5932N	14236W	14445.4	30567.7	0.0	137.	0.750	1177.	1.57	3.68	1453.	2640.	
JAPAN	S	80 815	5850N	14057W	14401.1	30273.4	0.0	137.	1.000	1546.	1.55	4.63	2854.	4400.	
JAPAN	M	79 911	5608N	13529W	14270.3	27568.5	0.0	184.	2.667	4105.	1.54	5.50	6015.	10120.	
JAPAN	M	80 8 6	5606N	13526W	14268.0	27539.8	0.0	159.	1.833	2771.	1.51	5.24	4840.	4840.	
JAPAN	M	79 8 4	5600N	13526W	14244.0	27497.6	0.0	153.	0.917	1587.	1.49	12.60	1273.	2640.	
JAPAN	M	79 921	5746N	13717W	14521.1	28875.6	0.0	142.	0.667	994.	1.48	4.84	27616.	29600.	
JAPAN	M	79 926	5839N	14025W	14407.5	30082.5	0.0	186.	1.250	1817.	1.45	3.85	66183.	88000.	
JAPAN	M	60 723	5842N	14045W	14377.0	30159.8	0.0	159.	2.000	2900.	1.45	3.97	3700.	6000.	
JAPAN	M	79 927	5840N	14034W	14391.6	30103.3	0.0	148.	0.583	844.	1.45	6.00	10156.	11000.	
JAPAN	M	79 914	5842N	14047W	14371.9	30166.7	0.0	164.	1.000	1447.	1.45	6.53	4053.	5500.	
JAPAN	M	79 8 3	5601N	13524W	14251.8	27495.0	0.0	180.	1.083	1520.	1.40	4.26	3320.	4840.	
JAPAN	M	79 819	5518N	14131W	14535.7	30642.4	0.0	175.	1.417	1982.	1.40	3.07	218.	2200.	
JAPAN	S	60 7 9	5931N	14236W	14437.3	30958.5	0.0	148.	0.833	1144.	1.37	5.05	2816.	3560.	
JAPAN	M	79 912	5601N	13522W	14255.7	27485.3	0.0	182.	2.000	2745.	1.37	5.59	3635.	6380.	
JAPAN	S	80 712	5933N	14330W	14305.1	31140.2	0.0	101.	0.500	682.	1.36	4.99	3938.	4620.	
JAPAN	S	80 819	5931N	14237W	14434.3	30961.3	0.0	128.	1.333	1796.	1.35	4.68	2604.	4400.	
JAPAN	M	79 821	5609N	14135W	14437.4	30572.1	0.0	164.	0.917	1204.	1.31	4.06	996.	2200.	
JAPAN	S	80 514	5915N	14153W	14433.5	30683.8	0.0	139.	1.083	1405.	1.30	3.02	12895.	14300.	
JAPAN	M	79 922	5936N	14309W	14375.3	31094.8	0.0	148.	1.083	1390.	1.29	3.68	5204.	6600.	
JAPAN	M	80 827	5934N	14313W	14350.3	31087.2	0.0	161.	0.917	1165.	1.27	3.35	29635.	30800.	
JAPAN	S	80 912	5907N	14133W	14428.0	30547.4	0.0	189.	1.083	1368.	1.24	3.20	1292.	2640.	

*** NOTE *** THE ACCURACY OF POSITION AND LOGMAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-8 (continued). TURBOT, JULY-SEPTEMBER 1979-80

REGION	VESSEL CLASS	DATE	LAT	LCNG	APPROX 6X	APPROX 6Y	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE (LBS) FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	80 7 7	3903N	14113M	14451.8	30445.6	0.0	142.	2.333	2873.	1.23	5.333	7027.	9900.
JAPAN	M	80 5 25	5536N	13457M	14207.1	27201.1	0.0	148.	1.167	1432.	1.23	4.92	6928.	8360.
JAPAN	S	80 1 11	5910N	14142M	14425.9	30603.6	0.0	169.	1.333	1628.	1.22	5.06	1232.	2260.
JAPAN	M	79 5 14	5904N	14127M	14422.0	30500.6	0.0	175.	0.750	913.	1.22	4.69	4587.	5500.
JAPAN	M	79 5 11	5605N	13529M	14274.3	27575.7	0.0	165.	2.833	3438.	1.21	4.75	5802.	9240.
JAPAN	M	79 4 18	5512N	14136M	14457.2	30602.9	0.0	159.	1.250	1498.	1.20	3.04	1142.	2640.
JAPAN	M	79 4 9	5602N	13523M	14257.7	27497.1	0.0	176.	1.417	1694.	1.20	4.61	4026.	5720.
JAPAN	M	79 4 28	5840N	14035M	14395.1	30106.8	0.0	164.	1.250	1489.	1.19	3.82	2251.	3740.
JAPAN	M	79 9 15	5602N	13522M	14259.7	27492.3	0.0	178.	1.333	1585.	1.19	4.46	2155.	3740.
JAPAN	M	79 9 21	5749N	13719M	14522.4	28892.9	0.0	126.	1.833	2083.	1.14	3.88	26517.	28000.
JAPAN	M	80 9 13	5911N	14131M	14463.1	30577.7	0.0	180.	1.167	1317.	1.13	3.88	3743.	5060.
JAPAN	M	79 9 15	5848N	14056M	14385.8	30251.9	0.0	159.	1.333	1502.	1.13	4.19	12798.	14300.
JAPAN	M	79 7 29	5522N	13521M	14222.1	27415.3	0.0	203.	0.500	562.	1.12	3.70	3178.	3740.
JAPAN	M	80 8 2	5610N	13526M	14284.2	27568.7	0.0	126.	1.833	2037.	1.11	5.42	1703.	3740.
JAPAN	M	80 5 15	5841N	14042M	14376.0	30140.3	0.0	189.	2.333	2559.	1.10	3.73	12841.	15400.
JAPAN	M	80 8 31	5919N	14206M	14428.1	30760.3	0.0	160.	1.667	1817.	1.09	3.89	6543.	8360.
JAPAN	M	79 8 5	5605N	13526M	14264.0	27532.7	0.0	186.	1.917	2079.	1.08	6.79	2321.	4400.
JAPAN	M	79 5 7	5608N	13529M	14276.3	27568.5	0.0	194.	1.917	2078.	1.08	5.14	4962.	7040.
JAPAN	S	80 9 26	5559N	13523M	14245.6	27476.3	0.0	191.	2.333	2517.	1.08	4.87	1443.	3960.
JAPAN	M	79 8 5	5604N	13526M	14260.0	27525.6	0.0	180.	1.833	1955.	1.07	5.54	4645.	6600.
JAPAN	M	79 9 29	5847N	14055M	14385.4	30239.4	0.0	194.	2.500	2629.	1.05	3.84	27071.	29700.
JAPAN	M	79 9 12	5558N	13517M	14253.4	27440.5	0.0	157.	2.333	2419.	1.04	3.49	6381.	8600.
JAPAN	M	80 7 25	5605N	13525M	14255.9	27527.9	0.0	168.	1.500	1552.	1.03	5.01	5488.	7040.
JAPAN	M	79 5 13	5602N	13523M	14257.7	27457.1	0.0	180.	1.833	1879.	1.02	5.18	5506.	5500.
JAPAN	M	79 8 9	5556N	13503M	14272.2	27358.9	0.0	131.	1.583	1612.	1.02	3.79	4548.	6160.
JAPAN	M	79 9 29	5844N	14054M	14367.4	30208.9	0.0	230.	1.167	1193.	1.01	4.58	2117.	3300.
JAPAN	S	80 5 10	5840N	14040M	14376.3	30124.4	0.0	175.	3.000	3029.	1.01	4.01	5771.	8800.
JAPAN	M	80 8 1	5557N	13518M	14247.5	27438.5	0.0	146.	1.667	1662.	1.00	4.20	5378.	7040.
JAPAN	M	80 7 30	5558N	13520M	14247.6	27455.0	0.0	162.	2.167	2160.	1.00	4.01	2900.	5060.
JAPAN	M	79 7 30	5552N	13521M	14222.1	27415.3	0.0	208.	0.583	571.	0.98	4.49	4709.	5280.
JAPAN	M	79 9 13	5606N	13524M	14271.0	27530.3	0.0	169.	1.833	1778.	0.97	4.77	5922.	7700.
JAPAN	M	80 8 14	5601N	13526M	14248.0	27504.6	0.0	197.	2.500	2412.	0.96	4.23	4408.	6820.
JAPAN	M	80 9 5	5935N	14255M	14448.8	31084.7	0.0	157.	1.667	1561.	0.94	3.40	86439.	88000.
JAPAN	S	80 8 14	5912N	14138M	14451.8	30609.2	0.0	148.	1.333	1245.	0.93	5.88	3155.	4400.
JAPAN	M	79 8 25	5842N	14047M	14371.9	30166.7	0.0	159.	1.250	1158.	0.93	4.37	2142.	3300.
JAPAN	S	79 7 24	5550N	13503M	14272.2	27358.9	0.0	137.	2.417	2197.	0.91	4.53	5503.	7700.
JAPAN	M	80 5 6	5934N	14315M	14344.1	31092.4	0.0	154.	1.917	1716.	0.90	3.06	70854.	72600.
JAPAN	M	79 8 24	5924N	14213M	14447.4	30827.5	0.0	153.	1.000	893.	0.89	4.74	867.	1760.
JAPAN	M	79 9 11	5603N	13522M	14263.7	27499.4	0.0	182.	1.500	1330.	0.89	5.49	3070.	4400.
JAPAN	M	79 5 6	5605N	13527M	14252.0	27537.5	0.0	189.	1.000	681.	0.88	5.14	2199.	3080.
JAPAN	M	79 8 12	5603N	13528M	14244.1	27514.2	0.0	186.	1.000	880.	0.88	2.73	6380.	7260.
JAPAN	M	79 9 27	5923N	14215M	14457.6	30351.6	0.0	137.	1.333	1160.	0.87	3.09	3240.	4400.
JAPAN	M	79 8 2	5555N	13521M	14233.9	27439.4	0.0	100.	0.417	362.	0.87	6.60	8438.	8800.
JAPAN	M	80 5 17	5905N	14130M	14421.3	30519.5	0.0	189.	2.000	1721.	0.86	4.54	5539.	7260.
JAPAN	M	79 8 8	5603N	13520M	14267.5	27409.8	0.0	175.	1.500	1286.	0.86	4.65	3334.	4620.

*** NOTE *** THE ACCURACY OF POSITION AND LOGAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-8 (continued). TURBOT, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX BX	LOTRAN-C BY	PULSE RATES	DEPTH (FMS)	HOURS FISHED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	79 918	5603N	14528W	14252.1	27528.1	0.0	150	1.500	1286	0.86	4.71	1354	2040
JAPAN	S	80 726	5623N	14212W	14442.4	30915.1	0.0	164	3.000	2557	0.86	4.22	2073	2540
JAPAN	M	79 914	5602N	13528W	14248.1	27521.1	0.0	180	1.083	922	0.85	3.42	2818	3740
JAPAN	M	79 673	5632N	14331W	14276.0	31115.9	0.0	219	1.583	1347	0.85	3.30	853	2200
JAPAN	M	80 810	5638N	14137W	14424.6	30369.4	0.0	168	1.563	1332	0.84	3.45	5928	7260
JAPAN	M	80 9 8	5645N	14055W	14371.6	30221.3	0.0	186	1.333	1118	0.84	3.10	642	1760
JAPAN	M	80 510	5635N	14327W	14314.6	31132.6	0.0	119	2.893	2362	0.83	1.76	28438	3000
JAPAN	M	80 831	5643N	14037W	14404.2	30140.9	0.0	137	2.667	2216	0.83	4.40	6144	8360
JAPAN	S	79 723	5658N	13514W	14259.1	27426.0	0.0	142	2.767	2292	0.83	4.23	4308	6600
JAPAN	S	80 7 7	5637N	14233W	14454.8	31005.4	0.0	98	1.500	1234	0.82	3.39	26926	28160
JAPAN	M	79 527	5638N	14029W	14390.8	30867.6	0.0	164	0.417	333	0.80	4.27	1867	2200
JAPAN	M	79 815	5605N	13526W	14264.0	27552.7	0.0	191	1.667	1315	0.75	5.05	5285	6600
JAPAN	M	80 514	5601N	14115W	14432.1	30433.9	0.0	200	2.917	2291	0.75	4.27	32909	35200
JAPAN	M	79 925	5644N	14127W	14424.0	30500.6	0.0	180	1.250	980	0.76	5.75	1220	2200
JAPAN	M	79 8 5	5603N	13524W	14259.8	27509.0	0.0	175	1.417	1102	0.78	4.46	1538	2640
JAPAN	M	79 9 8	5658N	13523W	14241.6	27465.4	0.0	175	0.417	320	0.77	4.05	2540	2860
JAPAN	M	79 814	5604N	13526W	14260.0	27525.6	0.0	191	1.083	824	0.76	3.42	2256	3080
JAPAN	S	80 710	5631N	14237W	14434.3	30961.3	0.0	148	0.667	506	0.76	3.75	3234	3740
JAPAN	S	80 712	5630N	14330W	14286.3	31122.3	0.0	104	0.333	240	0.74	3.52	10532	10780
JAPAN	M	79 916	5657N	13526W	14232.1	27477.0	0.0	201	1.750	1278	0.74	2.26	3102	4400
JAPAN	M	80 5 7	5634N	14321W	14325.3	31108.1	0.0	133	1.500	1111	0.74	2.20	20899	22000
JAPAN	M	79 914	5602N	13526W	14255.6	27501.9	0.0	176	2.500	1845	0.74	4.85	3655	5500
JAPAN	M	79 8 1	5601N	13528W	14244.1	27514.2	0.0	175	1.250	920	0.74	4.48	2380	5300
JAPAN	M	80 713	5610N	14136W	14442.2	30564.5	0.0	148	0.667	490	0.74	4.01	390	880
JAPAN	M	79 918	5613N	13532W	14284.9	27615.2	0.0	153	0.583	428	0.73	4.54	892	1320
JAPAN	M	79 523	5602N	14121W	14423.4	30462.8	0.0	180	1.833	1342	0.73	4.01	5258	6500
JAPAN	M	80 917	5602N	14120W	14426.1	30455.5	0.0	208	1.750	1280	0.73	4.42	4860	6160
JAPAN	M	80 8 8	5658N	13519W	14249.0	27450.1	0.0	169	1.333	970	0.73	3.35	1290	2860
JAPAN	S	80 711	5658N	14100W	14435.4	30338.1	0.0	137	1.333	952	0.72	3.25	2778	3740
JAPAN	M	79 927	5643N	14051W	14368.3	30189.6	0.0	177	0.583	413	0.71	4.55	19305	19600
JAPAN	M	79 811	5650N	14037W	14401.1	30273.4	0.0	148	1.250	888	0.71	2.90	3512	4400
JAPAN	M	80 910	5655N	13734W	14516.7	29024.8	0.0	164	2.333	1630	0.70	4.03	6730	8360
JAPAN	M	79 8 3	5603N	13528W	14252.1	27528.1	0.0	197	1.583	1104	0.70	5.71	2196	3500
JAPAN	M	79 919	5632N	13513W	14183.6	27291.7	0.0	186	2.250	1564	0.70	3.35	2236	4400
JAPAN	S	80 7 2	5642N	14047W	14371.9	30166.7	0.0	123	0.750	518	0.69	3.57	2122	2640
JAPAN	M	80 810	5655N	13523W	14230.0	27445.0	0.0	153	1.167	805	0.69	4.56	10635	11440
JAPAN	M	79 913	5605N	14128W	14426.7	30513.0	0.0	169	0.750	510	0.68	6.00	7190	7700
JAPAN	M	80 9 2	5633N	14317W	14325.5	31088.7	0.0	175	1.333	905	0.68	3.64	6575	7450
JAPAN	M	79 515	5645N	14054W	14374.2	30217.9	0.0	180	1.250	845	0.68	5.12	2455	3300
JAPAN	M	79 813	5603N	13528W	14252.1	27528.1	0.0	191	1.417	954	0.67	3.95	3520	3500
JAPAN	M	80 917	5655N	13740W	14512.6	29032.9	0.0	154	0.833	551	0.66	3.94	4949	5500
JAPAN	M	79 8 4	5600N	13526W	14244.0	27497.0	0.0	180	0.667	1378	0.66	5.74	1922	3300
JAPAN	M	79 711	5609N	13529W	14274.3	27575.7	0.0	142	1.583	1065	0.66	4.05	3355	4400
JAPAN	S	80 515	5613N	14149W	14425.4	30653.1	0.0	148	0.667	437	0.66	3.10	6163	6600
JAPAN	M	79 929	5642N	14047W	14371.9	30166.7	0.0	175	0.500	326	0.65	3.47	1214	1540

*** NOTE *** THE ACCURACY OF POSITION AND LOTRAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-8 (continued). TURBOT, JULY-SEPTEMBER 1979-80

BALLOON	VESSEL CLASS	DATE	LAT	LONG	APPROX LCRAN-C BY	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL LATCH (LBS)
JAPAN	M	80 913	5909N	14139W	14426.0	30504.9	0.0	140.	1194.	0.65	2.35	2766.	3960.
JAPAN	M	79 731	5552N	13521W	14222.1	27419.3	0.0	213.	380.	0.65	3.54	1390.	1760.
JAPAN	M	79 917	5601N	13522W	14255.7	27485.3	0.0	175.	1237.	0.65	4.63	1403.	2640.
JAPAN	M	79 614	5537N	13508W	14276.2	27370.7	0.0	148.	905.	0.64	3.49	2175.	3080.
JAPAN	S	80 913	5912N	14140W	14430.0	30634.5	0.0	150.	787.	0.63	3.35	8013.	8000.
JAPAN	M	79 928	5843N	14058W	14360.5	30199.9	0.0	219.	667.	0.62	5.06	1973.	2640.
JAPAN	M	80 814	5559N	13525W	14241.9	27485.9	0.0	164.	1637.	0.61	3.42	3863.	5500.
JAPAN	M	79 6 2	5558N	13526W	14236.0	27483.9	0.0	191.	356.	0.61	4.98	744.	1100.
JAPAN	M	79 9 2	5526N	13448W	14187.3	27099.3	0.0	149.	1524.	0.61	2.23	5736.	7260.
JAPAN	M	79 8 3	5601N	13528W	14244.1	27514.2	0.0	186.	759.	0.61	4.28	1441.	2200.
JAPAN	S	80 815	5511N	14174W	14430.7	30615.9	0.0	131.	1808.	0.60	4.20	8092.	9900.
JAPAN	M	79 927	5839N	14014W	14434.7	30023.2	0.0	131.	391.	0.60	4.26	1239.	1540.
JAPAN	S	80 916	5913N	14152W	14421.1	30662.4	0.0	136.	600.	0.60	1.74	3800.	4400.
JAPAN	S	80 813	5603N	13523W	14261.7	27504.2	0.0	153.	1196.	0.60	4.89	1884.	3080.
JAPAN	S	80 9 6	5934N	14234W	14467.4	30930.5	0.0	98.	398.	0.60	4.45	3122.	3720.
JAPAN	M	80 9 9	5939N	14095W	14456.5	29990.8	0.0	142.	1481.	0.59	3.81	4239.	8360.
JAPAN	M	80 7 9	5913N	14150W	14426.6	30856.2	0.0	153.	2159.	0.59	3.70	6191.	1100.
JAPAN	S	80 7 9	5912N	14138W	14451.8	30609.2	0.0	134.	632.	0.58	4.95	468.	1100.
JAPAN	M	79 825	5642N	14048W	14389.3	30170.2	0.0	175.	631.	0.58	5.83	1569.	2200.
JAPAN	M	79 9 8	5609N	13529W	14274.3	27575.7	0.0	165.	1744.	0.58	5.87	1556.	3300.
JAPAN	M	79 8 8	5600N	13523W	14245.8	27483.2	0.0	197.	916.	0.58	4.02	8544.	9460.
JAPAN	M	79 9 8	5609N	13530W	14276.4	27580.5	0.0	211.	1821.	0.57	6.01	3439.	5060.
JAPAN	M	79 917	5757N	13767W	14509.4	29079.4	0.0	126.	664.	0.57	3.34	3736.	4400.
JAPAN	M	80 5 3	5934N	14311W	14356.5	31061.9	0.0	172.	474.	0.57	4.16	5026.	5500.
JAPAN	M	79 916	5839N	14016W	14429.8	30030.4	0.0	131.	521.	0.57	5.28	8279.	8000.
JAPAN	M	79 924	5839N	14017W	14427.3	30033.9	0.0	175.	755.	0.57	3.36	11345.	12100.
KOREA	M	80 927	5913N	14106W	14542.8	30514.8	0.0	105.	3031.	0.55	2.36	23369.	26400.
JAPAN	M	79 910	5603N	13523W	14261.7	27504.2	0.0	175.	412.	0.55	4.13	4202.	4620.
JAPAN	M	79 912	5557N	13503W	14276.1	27365.8	0.0	159.	855.	0.54	3.39	4645.	5500.
JAPAN	M	79 9 6	5607N	13528W	14258.2	27556.5	0.0	195.	659.	0.53	4.90	5051.	5720.
JAPAN	M	79 730	5552N	13521W	14222.1	27419.3	0.0	202.	446.	0.53	3.85	3960.	3960.
JAPAN	M	80 724	5801N	13005W	14474.4	29188.0	0.0	109.	534.	0.53	1.60	7008.	8140.
JAPAN	S	80 816	5854N	14053W	14423.9	30316.5	0.0	153.	1688.	0.53	4.26	2492.	4180.
JAPAN	M	79 812	5608N	13526W	14276.1	27554.2	0.0	164.	526.	0.53	3.32	1454.	1980.
JAPAN	S	80 7 2	5844N	14047W	14355.5	30184.8	0.0	137.	259.	0.52	3.05	401.	664.
JAPAN	M	80 8 6	5605N	13529W	14258.2	27547.0	0.0	186.	776.	0.52	4.40	3461.	4180.
JAPAN	M	79 928	5853N	14056W	14419.4	30304.0	0.0	137.	768.	0.51	2.53	30912.	31680.
JAPAN	M	79 919	5520N	13442W	14176.9	27037.6	0.0	148.	716.	0.51	4.01	2144.	2660.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE L-9 (continued). TURBOT, OCTOBER-DECEMBER 1979-80

NATION	VESEL CLASS	DATE	YRMO	YRMO	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAMLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FTJSH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	7910 4	5609N	13529W	14274.3	27575.7	0.0	161.	2.000	6270.	3.14	4.96	13530.	19800.	
JAPAN	M	7910 5	5610N	13526W	14284.2	27568.7	0.0	159.	1.333	4067.	3.05	4.04	31133.	35200.	
JAPAN	M	7911 2	5604N	13523W	14265.7	27511.2	0.0	177.	1.917	5728.	2.99	2.96	6592.	12320.	
JAPAN	S	7911 9	5756N	13749W	14495.8	29078.5	0.0	191.	3.000	8776.	2.93	3.42	2224.	11000.	
JAPAN	M	7910 7	5531N	13500W	14182.7	27186.6	0.0	166.	1.667	4663.	2.80	6.37	5017.	5680.	
JAPAN	M	7910 4	5610N	13521W	14293.7	27544.9	0.0	153.	1.333	3678.	2.76	3.99	8642.	12320.	
JAPAN	M	791030	5529N	13458W	14179.2	27165.4	0.0	159.	2.917	8013.	2.75	5.87	5847.	13860.	
JAPAN	M	801031	5522N	14211W	14437.4	30802.9	0.0	191.	1.667	4578.	2.75	3.61	3122.	7700.	
JAPAN	M	6010 5	5606N	13525W	14265.9	27535.0	0.0	169.	1.667	4454.	2.67	2.53	4346.	8600.	
JAPAN	M	7910 2	5609N	13525W	14282.0	27556.7	0.0	169.	1.667	4448.	2.67	4.41	5452.	9900.	
JAPAN	M	791014	5610N	13530W	14278.5	27587.7	0.0	148.	1.500	3975.	2.65	5.47	6585.	10560.	
JAPAN	S	791111	5577N	13522W	14235.8	27457.8	0.0	202.	2.333	6068.	2.60	3.80	1412.	7480.	
JAPAN	M	791027	5577N	13525W	14234.0	27472.2	0.0	122.	1.833	4759.	2.60	2.60	6021.	10780.	
JAPAN	M	791030	5602N	13530W	14244.2	27530.7	0.0	219.	1.000	2531.	2.53	3.24	2969.	5500.	
JAPAN	M	7911 5	5537N	13504W	14197.5	27241.6	0.0	169.	2.750	6932.	2.52	3.07	3188.	10120.	
JAPAN	M	7910 1	5610N	13530W	14276.5	27587.7	0.0	150.	1.500	3778.	2.52	4.72	13382.	17160.	
JAPAN	M	791015	5603N	13528W	14252.1	27528.1	0.0	183.	1.500	3771.	2.51	3.42	15389.	19140.	
JAPAN	M	801029	5847N	14055W	14385.4	30239.4	0.0	159.	0.750	1842.	2.46	2.82	11358.	13200.	
JAPAN	M	7910 3	5603N	13522W	14263.7	27499.4	0.0	212.	2.000	4848.	2.42	4.71	6152.	11000.	
JAPAN	S	791027	5603N	13531W	14246.3	27542.5	0.0	219.	1.167	2778.	2.38	3.14	11522.	14300.	
JAPAN	M	791019	5637N	14259W	14418.2	31077.2	0.0	185.	1.333	3134.	2.35	1.37	3466.	6600.	
JAPAN	M	7510 4	5603N	13528W	14252.1	27528.1	0.0	172.	1.833	4283.	2.34	3.64	18377.	22660.	
JAPAN	M	7911 4	5609N	13530W	14272.4	27580.5	0.0	159.	1.833	4208.	2.30	2.59	1732.	5940.	
JAPAN	M	7911 6	5531N	13459W	14184.7	27181.7	0.0	180.	1.500	3634.	2.29	3.65	3386.	6820.	
JAPAN	M	7911 1	5603N	13529W	14250.1	27532.9	0.0	184.	1.250	2854.	2.28	1.52	1766.	4620.	
JAPAN	M	791013	5609N	13529W	14274.3	27575.7	0.0	143.	1.333	2979.	2.23	5.83	8021.	11000.	
JAPAN	M	791029	5603N	13528W	14252.1	27528.1	0.0	190.	1.917	4184.	2.18	1.55	3736.	7920.	
JAPAN	S	7910 5	5534N	13511W	14356.5	31081.9	0.0	164.	3.000	6302.	2.10	3.04	6898.	13200.	
JAPAN	M	791013	5554N	13523W	14226.1	27442.3	0.0	213.	1.833	3815.	2.08	1.85	2565.	6380.	
JAPAN	M	7910 5	5600N	13523W	14245.8	27483.2	0.0	175.	0.667	1367.	2.05	2.60	1713.	3080.	
JAPAN	M	8010 2	5558N	13526W	14230.0	27483.9	0.0	175.	0.667	1336.	2.00	2.59	1304.	2640.	
JAPAN	M	791012	5540N	13506W	14204.9	27289.6	0.0	186.	3.500	6727.	1.92	4.59	14613.	21340.	
JAPAN	M	801031	5519N	14208W	14422.4	30766.4	0.0	194.	1.000	1903.	1.90	2.54	5137.	7060.	
JAPAN	M	801030	5523N	14212W	14442.4	30815.1	0.0	159.	1.167	2212.	1.90	2.32	2188.	4400.	
JAPAN	M	7911 3	5559N	13524W	14243.9	27481.1	0.0	182.	1.917	3576.	1.87	2.99	2582.	6160.	
JAPAN	M	801031	5522N	14212W	14634.5	30805.9	0.0	191.	1.750	3183.	1.82	2.21	23217.	26400.	
JAPAN	M	791023	5510N	14117W	14492.5	30523.1	0.0	160.	0.500	895.	1.79	2.29	47505.	48400.	
JAPAN	M	7911 5	5528N	13457W	14177.4	27154.9	0.0	224.	1.500	2663.	1.78	5.02	3497.	6160.	
JAPAN	S	791111	5603N	13525W	14250.1	27532.9	0.0	175.	1.633	3255.	1.76	2.38	2485.	5720.	
JAPAN	M	7911 4	5601N	13527W	14246.0	27505.4	0.0	164.	0.750	1368.	1.74	3.63	2212.	3520.	
JAPAN	M	7910 4	5600N	13521W	14253.6	27473.6	0.0	165.	2.333	4011.	1.72	4.12	10069.	14080.	
JAPAN	M	791012	5550N	13501W	14177.1	27185.9	0.0	191.	2.000	3349.	1.67	5.23	5671.	5020.	
JAPAN	S	791014	5805N	13644W	14433.5	29378.7	0.0	164.	3.217	5315.	1.65	5.13	3465.	8600.	
JAPAN	M	7910 6	5603N	13528W	14252.1	27528.1	0.0	173.	1.000	1635.	1.63	3.77	13345.	12980.	
JAPAN	M	7910 2	5631N	13522W	14295.9	27557.0	0.0	137.	1.333	2187.	1.63	6.00	17193.	19360.	

*** NALE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-9. TURBOT, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 6X	APPROX 6Y	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	7911 2	5602N	13529W	14246.1	27525.9	C.0	246.	0.583	81374.	139.50	7.13	26.	81400.
JAPAN	M	791017	5602N	13524W	14255.8	27501.9	0.0	169.	0.667	52271.	87.41	5.08	8609.	66880.
JAPAN	M	791017	5603N	13528W	14264.0	27532.7	0.0	176.	0.667	40720.	61.08	5.90	3280.	44000.
JAPAN	M	791028	5603N	13529W	14276.3	27568.5	0.0	159.	1.083	56177.	51.86	7.23	2343.	58520.
JAPAN	M	791016	5601N	13523W	14253.7	27490.2	0.0	172.	1.167	49866.	42.74	3.99	4914.	54780.
JAPAN	M	7911 6	5603N	13524W	14258.8	27509.0	0.0	175.	1.833	67458.	36.80	5.50	6242.	73700.
JAPAN	M	791031	5558N	13524W	14238.9	27474.2	C.0	131.	2.417	71382.	28.54	6.95	30258.	101640.
JAPAN	M	7911 2	5602N	13523W	14257.7	27497.1	0.0	175.	2.000	35721.	17.86	2.84	2339.	38060.
JAPAN	M	791028	5602N	13523W	14257.7	27497.1	0.0	177.	1.667	20903.	12.54	3.58	2417.	23320.
JAPAN	M	7911 4	5602N	13523W	14257.7	27497.1	0.0	180.	1.667	19304.	11.58	2.82	2036.	21540.
JAPAN	M	791031	5603N	13524W	14258.8	27509.0	0.0	176.	1.500	15120.	10.08	3.83	1600.	16720.
JAPAN	M	791026	5604N	13524W	14263.8	27516.0	0.0	174.	2.000	18352.	9.18	3.03	2768.	21120.
JAPAN	M	791029	5603N	13526W	14255.9	27518.5	C.0	177.	1.083	9566.	8.83	4.35	1874.	11440.
JAPAN	M	791027	5604N	13524W	14263.8	27516.0	0.0	176.	1.583	13971.	8.82	3.07	3189.	17160.
JAPAN	M	791025	5603N	13528W	14252.1	27528.1	0.0	191.	1.917	15723.	8.20	4.49	19037.	34760.
JAPAN	M	7911 2	5603N	13525W	14282.0	27558.7	0.0	159.	2.000	15898.	7.95	2.05	3242.	19140.
JAPAN	M	7911 1	5604N	13523W	14265.7	27511.2	0.0	177.	1.333	10365.	7.77	1.63	1515.	11880.
JAPAN	M	7910 3	5604N	13521W	14253.6	27473.6	0.0	167.	2.000	14704.	7.35	4.16	16316.	31020.
JAPAN	M	791026	5603N	13526W	14264.0	27532.7	0.0	172.	1.833	12092.	6.60	3.01	2208.	14300.
JAPAN	M	7910 1	5603N	13521W	14257.6	27480.5	0.0	167.	2.000	12312.	6.16	5.66	9688.	22000.
JAPAN	M	801029	5624N	14214W	14444.6	36830.3	C.0	178.	1.000	5892.	5.89	1.62	12808.	18700.
JAPAN	M	801031	5618N	14153W	14427.3	30708.4	0.0	202.	1.417	8126.	5.74	2.05	16954.	25080.
JAPAN	M	7911 4	5608N	13525W	14276.0	27549.4	C.0	159.	1.333	7569.	5.68	1.74	2331.	9900.
JAPAN	M	791025	5603N	13527W	14279.2	27568.2	0.0	148.	1.833	10331.	5.64	4.20	3305.	13640.
JAPAN	M	802030	5941N	14233W	14527.7	31042.5	C.0	153.	0.833	4695.	5.63	1.83	4325.	5020.
JAPAN	M	791027	5603N	13523W	14261.7	27504.2	0.0	178.	1.833	9687.	5.28	2.37	5713.	15400.
JAPAN	M	791015	5608N	13521W	14253.6	27473.6	0.0	168.	2.000	9786.	4.89	2.07	2974.	12760.
JAPAN	M	6010 3	5608N	13524W	14268.3	27573.2	0.0	180.	1.833	8336.	4.55	5.07	7724.	18060.
JAPAN	M	7910 2	5602N	13521W	14271.5	27530.3	C.0	167.	1.833	8128.	4.43	3.25	4192.	12320.
JAPAN	M	7910 2	5602N	13521W	14261.6	27487.5	0.0	149.	2.167	9365.	4.41	4.39	2755.	12320.
JAPAN	M	7911 5	5602N	13527W	14250.0	27516.3	0.0	175.	0.833	3592.	4.31	2.85	1688.	5280.
JAPAN	M	7910 3	5607N	13525W	14271.9	27542.2	C.0	169.	1.633	7892.	4.38	3.87	16982.	24860.
JAPAN	M	791013	5608N	13524W	14282.9	27544.7	0.0	169.	1.833	7699.	4.20	2.70	1321.	9020.
JAPAN	M	7910 5	5539N	13519W	14253.5	27457.0	C.0	164.	1.667	6853.	4.11	3.84	2607.	9460.
JAPAN	M	791014	5610N	13529W	14278.4	27583.0	C.0	144.	1.500	6077.	4.05	4.19	7343.	13420.
JAPAN	M	791031	5603N	13528W	14252.1	27528.1	0.0	186.	1.667	6647.	3.99	4.78	14693.	21340.
JAPAN	M	7911 2	5603N	13529W	14250.1	27532.9	C.0	191.	1.333	5268.	3.95	3.51	9692.	14960.
JAPAN	M	7910 3	5604N	13523W	14265.7	27511.2	0.0	156.	1.667	6355.	3.81	3.86	11245.	17600.
JAPAN	M	801030	5516N	14203W	14411.9	36760.2	0.0	159.	1.167	4387.	3.76	2.36	9473.	13860.
JAPAN	M	791029	5603N	13529W	14250.1	27532.9	C.0	191.	1.667	6256.	3.75	2.38	2764.	9020.
JAPAN	M	791016	5539N	13506W	14201.2	27263.5	0.0	167.	3.000	10845.	3.62	2.25	6095.	16940.
JAPAN	M	791013	5610N	13502W	14291.3	27549.7	0.0	142.	1.167	3894.	3.34	5.61	13926.	17820.
JAPAN	M	7911 1	5602N	13528W	14246.1	27521.1	C.0	186.	1.500	4874.	3.25	1.74	14046.	16920.
JAPAN	M	791027	5529N	13528W	14236.1	27500.3	0.0	197.	1.083	3493.	3.22	2.53	4207.	7700.
JAPAN	M	7910 1	5611N	13524W	14292.1	27566.5	C.0	128.	1.333	4259.	3.19	7.83	11801.	16060.

*** NOTE *** THE ACCURACY OF POSITION AND LOGAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE 4-9 (continued). TURBOT, OCTOBER-DECEMBER, 1979-80

NATION	VESSEL CLASS	DATE YMMDD	LAT	LONG	APPROX BX	LCRAN-C 6Y	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	791015	5802N	13830W	14442.6	29304.6	0.0	180	3.133	5092.	1.63	4.93	3708.	8500.
JAPAN	M	791017	5958N	13909W	14268.7	27401.8	0.0	155	2.000	3184.	1.59	4.24	996.	4180.
JAPAN	S	791012	5748N	13716W	14223.1	28871.5	0.0	180	2.500	3959.	1.58	4.44	6601.	10560.
JAPAN	M	791015	5557N	13520W	14243.7	27448.1	0.0	184	1.500	2359.	1.56	2.81	6681.	9020.
JAPAN	M	791016	5525N	13453W	14174.1	27118.6	0.0	169	1.667	2582.	1.56	3.09	5768.	8160.
JAPAN	S	7911 6	5955N	13925W	14228.1	27452.7	0.0	191	2.500	3667.	1.55	2.07	4893.	12760.
JAPAN	S	7910 4	5859N	14104W	14446.4	26379.0	0.0	215	1.667	2500.	1.50	4.96	580.	3080.
JAPAN	S	7910 9	5834N	14303W	14362.7	27076.6	0.0	186	3.000	4874.	1.49	3.57	3886.	8360.
JAPAN	M	791031	5602N	13530W	14244.2	27530.7	0.0	219	0.833	1200.	1.44	1.83	4300.	5500.
JAPAN	M	791026	5601N	13526W	14246.0	27504.6	0.0	175	1.167	1643.	1.41	3.24	9577.	11220.
JAPAN	S	801011	5832N	14340W	14247.6	27138.7	0.0	197	2.417	3802.	1.41	2.54	3858.	7260.
JAPAN	S	7911 6	5621N	13533W	14306.4	27707.4	0.0	153	2.000	2769.	1.38	1.73	2291.	5060.
JAPAN	M	791028	5559N	13519W	14251.5	27457.0	0.0	153	1.750	2452.	1.34	3.37	948.	3100.
JAPAN	M	7911 3	5603N	13529W	14250.1	27532.9	0.0	188	1.667	2190.	1.31	2.50	9030.	11220.
JAPAN	S	791014	5602N	13829W	14449.1	29292.7	0.0	180	3.250	4240.	1.27	5.01	4240.	8160.
JAPAN	M	791015	5603N	13527W	14254.0	27523.3	0.0	190	1.333	1667.	1.25	2.45	25513.	27280.
JAPAN	S	791011	5601N	13821W	14480.7	29251.9	0.0	164	2.917	3639.	1.25	4.49	4061.	7700.
JAPAN	S	791025	5839N	14029W	14397.5	30076.6	0.0	153	3.000	3720.	1.24	5.04	1560.	5280.
JAPAN	M	791011	5526N	13454W	14175.8	27129.0	0.0	213	2.167	2609.	1.20	3.48	17191.	19800.
JAPAN	V	801030	5840N	14040W	14376.3	30124.6	0.0	131	1.000	1181.	1.18	3.35	4759.	5940.
JAPAN	M	791014	5630N	13530W	14276.5	27567.7	0.0	127	1.500	1734.	1.16	4.94	2366.	10120.
JAPAN	M	801031	5823N	14211W	14445.2	30312.1	0.0	205	1.333	1994.	1.12	2.52	5326.	6820.
JAPAN	S	801012	5832N	14341W	14244.4	31141.2	0.0	175	2.250	2424.	1.06	3.27	4176.	6000.
JAPAN	M	791029	5551N	13519W	14222.1	27403.1	0.0	219	0.667	716.	1.07	4.56	8084.	8000.
JAPAN	M	7910 7	5526N	13456W	14172.0	27138.9	0.0	227	1.667	1776.	1.07	3.80	9884.	11660.
JAPAN	M	791015	5611N	13530W	14260.5	27595.0	0.0	141	3.167	3344.	1.06	2.99	14036.	17380.
JAPAN	M	7911 3	5588N	13526W	14236.0	27483.9	0.0	140	1.250	1280.	1.02	1.92	12800.	14080.
JAPAN	M	791031	5527N	13502W	14184.1	27173.9	0.0	235	1.000	1012.	1.01	4.47	2288.	3500.
JAPAN	S	801010	5822N	14124W	14564.3	30657.2	0.0	168	3.000	3024.	1.01	4.62	12616.	15340.
JAPAN	S	7910 7	5845N	14054W	14374.2	30217.9	0.0	180	2.500	2490.	1.00	5.17	5650.	8140.
JAPAN	S	791110	5746N	13705W	14534.0	26808.0	0.0	180	2.000	1933.	0.97	2.08	4007.	5740.
JAPAN	S	791018	5834N	14331W	14293.5	31133.8	0.0	124	1.000	959.	0.96	1.10	21041.	22000.
JAPAN	M	7910 6	5587N	13527W	14236.1	27481.9	0.0	235	2.167	2034.	0.93	2.03	4366.	6380.
JAPAN	M	801030	5757N	13748W	14507.3	29083.4	0.0	131	1.833	1670.	0.91	1.75	5370.	7040.
JAPAN	M	8010 1	5839N	14029W	14397.5	30076.6	0.0	175	2.500	2238.	0.90	4.35	3702.	5940.
JAPAN	M	791029	5610N	13531W	14274.5	27582.5	0.0	142	1.917	1716.	0.90	2.34	5324.	7040.
JAPAN	S	801013	5756N	13749W	14495.8	29076.5	0.0	191	2.500	2234.	0.89	3.61	6346.	8580.
JAPAN	S	801013	5827N	14111W	14635.1	30662.3	0.0	175	1.667	1474.	0.88	1.38	5566.	7040.
JAPAN	M	791026	5601N	13528W	14244.1	27514.2	0.0	186	0.417	368.	0.82	1.86	1832.	2200.
JAPAN	M	7910 6	5531N	13459W	14184.7	27131.7	0.0	183	1.500	1307.	0.87	4.64	9033.	10340.
JAPAN	S	791111	5588N	13513W	14261.1	27421.2	0.0	184	2.000	1737.	0.87	2.80	1122.	2660.
JAPAN	S	7911 7	5683N	13559W	14450.2	26145.5	0.0	154	2.500	2158.	0.87	2.57	3772.	5940.
JAPAN	S	791023	5843N	14042W	14376.0	30140.3	0.0	137	2.500	2159.	0.86	4.14	4681.	8620.
JAPAN	M	801029	5606N	13640W	14448.1	29371.9	0.0	131	1.167	991.	0.85	1.67	17049.	18040.
JAPAN	S	7910 3	5758N	13758W	14452.3	29132.6	0.0	164	4.167	3525.	0.85	4.81	3075.	6600.

*** NOTE *** THE ACCURACY OF POSITION AND LOGAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-9 (continued). TURBOT, OCTOBER-DECEMBER 1979-80

NATLJA	VESEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	7910 9	5932N	14255W	14438.5 31075.5	0.0 159.	2.000	1639.	0.82	2.50	3421.	5060.
JAPAN	S	791029	5511N	14144W	14428.0 30615.0	0.0 180.	2.000	1633.	0.82	3.03	15087.	16720.
JAPAN	S	791112	5556N	13525W	14230.1 27465.4	0.0 191.	3.000	2415.	0.81	2.93	2645.	5060.
JAPAN	H	791020	5610N	13520W	14295.6 27540.2	0.0 148.	2.167	1723.	0.80	1.75	5940.	5940.
JAPAN	H	7911 4	5611N	13531W	14276.6 27599.8	0.0 142.	2.000	1588.	0.79	2.30	5234.	6820.
JAPAN	S	791013	5747N	13716W	14517.8 28862.5	0.0 219.	3.433	2719.	0.79	3.85	3881.	6600.
JAPAN	S	801012	5532N	14340W	14247.6 31133.7	0.0 180.	2.063	1642.	0.79	3.00	4298.	5940.
JAPAN	H	8010 2	5544N	13509W	14214.4 27309.2	0.0 131.	1.000	786.	0.79	2.32	3394.	4180.
JAPAN	S	801014	5805N	13842W	14437.9 29376.8	0.0 164.	2.667	2058.	0.77	3.65	892.	2860.
JAPAN	S	7911 6	5643N	13559W	14360.2 27977.6	0.0 164.	2.333	1795.	0.77	3.13	16405.	18260.
JAPAN	H	791031	5533N	13521W	14226.0 27426.0	0.0 137.	1.250	945.	0.76	1.79	3455.	4400.
JAPAN	S	7911 8	5556N	13525W	14230.1 27465.4	0.0 191.	3.000	2248.	0.75	1.93	15572.	17820.
JAPAN	S	8010 8	5754N	13736W	14515.3 29007.6	0.0 164.	3.000	2212.	0.74	4.01	5708.	7920.
JAPAN	S	791027	5746N	13706W	14532.1 28812.2	0.0 191.	3.500	2533.	0.72	3.94	6067.	8520.
JAPAN	S	791110	5638N	13553W	14345.7 27909.8	0.0 180.	2.167	1560.	0.72	3.16	3720.	5280.
JAPAN	S	791012	5800N	13809W	14480.5 29195.0	0.0 175.	2.583	1859.	0.72	5.08	3201.	5060.
JAPAN	H	801029	5801N	13807W	14490.2 29196.0	0.0 120.	0.667	477.	0.72	2.66	23943.	24420.
JAPAN	S	801014	5802N	13831W	14444.8 29306.6	0.0 191.	2.500	1786.	0.71	4.98	3054.	4840.
JAPAN	S	7911 8	5603N	13520W	14267.5 27489.8	0.0 191.	3.000	2013.	0.67	2.74	2167.	4180.
JAPAN	S	791017	5534N	14340W	14264.4 31156.5	0.0 134.	1.167	781.	0.67	1.99	3619.	4400.
JAPAN	M	791029	5559N	13528W	14238.1 27500.3	0.0 215.	2.000	1320.	0.66	1.83	7920.	9240.
JAPAN	M	801010	5928N	14108W	14650.1 30602.0	0.0 164.	3.000	1975.	0.66	3.72	4185.	6160.
JAPAN	M	791030	5526N	14448W	14127.3 27099.3	0.0 149.	1.833	1380.	0.64	2.25	12900.	14080.
JAPAN	S	791027	5837N	14006W	14440.9 29973.2	0.0 131.	2.500	1599.	0.64	4.12	2801.	4400.
JAPAN	H	7911 1	5803N	13531W	14246.3 27542.5	0.0 230.	0.750	477.	0.64	2.22	2383.	2660.
JAPAN	H	791028	5612N	13527W	14290.4 27568.1	0.0 159.	2.083	1318.	0.63	1.73	3082.	4400.
JAPAN	H	7910 8	5828N	13500W	14171.6 27189.7	0.0 202.	2.167	1351.	0.62	5.13	8109.	9460.
JAPAN	S	7910 1	5613N	13904W	14435.8 29522.0	0.0 142.	1.833	1127.	0.61	3.00	3713.	4640.
JAPAN	S	801014	5927N	14111W	14635.1 30662.3	0.0 169.	1.667	1014.	0.61	4.70	2506.	3520.
JAPAN	S	791012	5756N	13747W	14503.9 29070.4	0.0 180.	2.833	1691.	0.60	4.33	3369.	5060.
JAPAN	S	791028	5507N	14137W	14417.2 30500.2	0.0 191.	3.333	1942.	0.59	3.09	2898.	4240.
JAPAN	S	7910 5	5922N	14125W	14561.7 30666.4	0.0 153.	3.317	1901.	0.57	3.07	3619.	5720.
JAPAN	M	791012	5531N	13450W	14201.0 27137.3	0.0 155.	0.833	477.	0.57	1.60	1503.	1980.
JAPAN	S	7910 4	5928N	14112W	14640.2 30675.0	0.0 169.	3.450	1965.	0.57	4.01	1775.	3740.
JAPAN	H	791026	5601N	13528W	14244.1 27514.2	0.0 191.	0.250	141.	0.56	1.79	1179.	1320.
JAPAN	S	7910 1	5811N	13854W	14446.3 29471.4	0.0 180.	3.000	1670.	0.56	3.63	6690.	8360.
JAPAN	S	791015	5807N	13842W	14445.5 29388.7	0.0 164.	2.417	1341.	0.56	3.59	1519.	2860.
JAPAN	S	7910 6	5933N	14341W	14252.8 31150.1	0.0 153.	2.367	1267.	0.54	3.42	5993.	7260.
JAPAN	S	791112	5603N	13520W	14267.5 27485.8	0.0 191.	3.000	1591.	0.53	2.93	1269.	2860.
JAPAN	M	8010 5	5548N	13505W	14227.8 27307.2	0.0 101.	1.167	611.	0.52	1.27	5109.	5720.
JAPAN	S	601011	5910N	14340W	14431.4 30597.2	0.0 186.	3.000	1525.	0.51	3.76	7495.	9020.
JAPAN	S	801013	5932N	14340W	14247.6 31138.7	0.0 175.	2.167	1100.	0.51	2.38	3300.	4600.
JAPAN	S	8010 2	5644N	13600W	14362.7 27990.3	0.0 180.	2.750	1390.	0.51	6.06	7630.	9020.
JAPAN	S	8010 4	5501N	14114W	14434.7 30430.6	0.0 164.	1.000	503.	0.50	4.16	3677.	4180.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

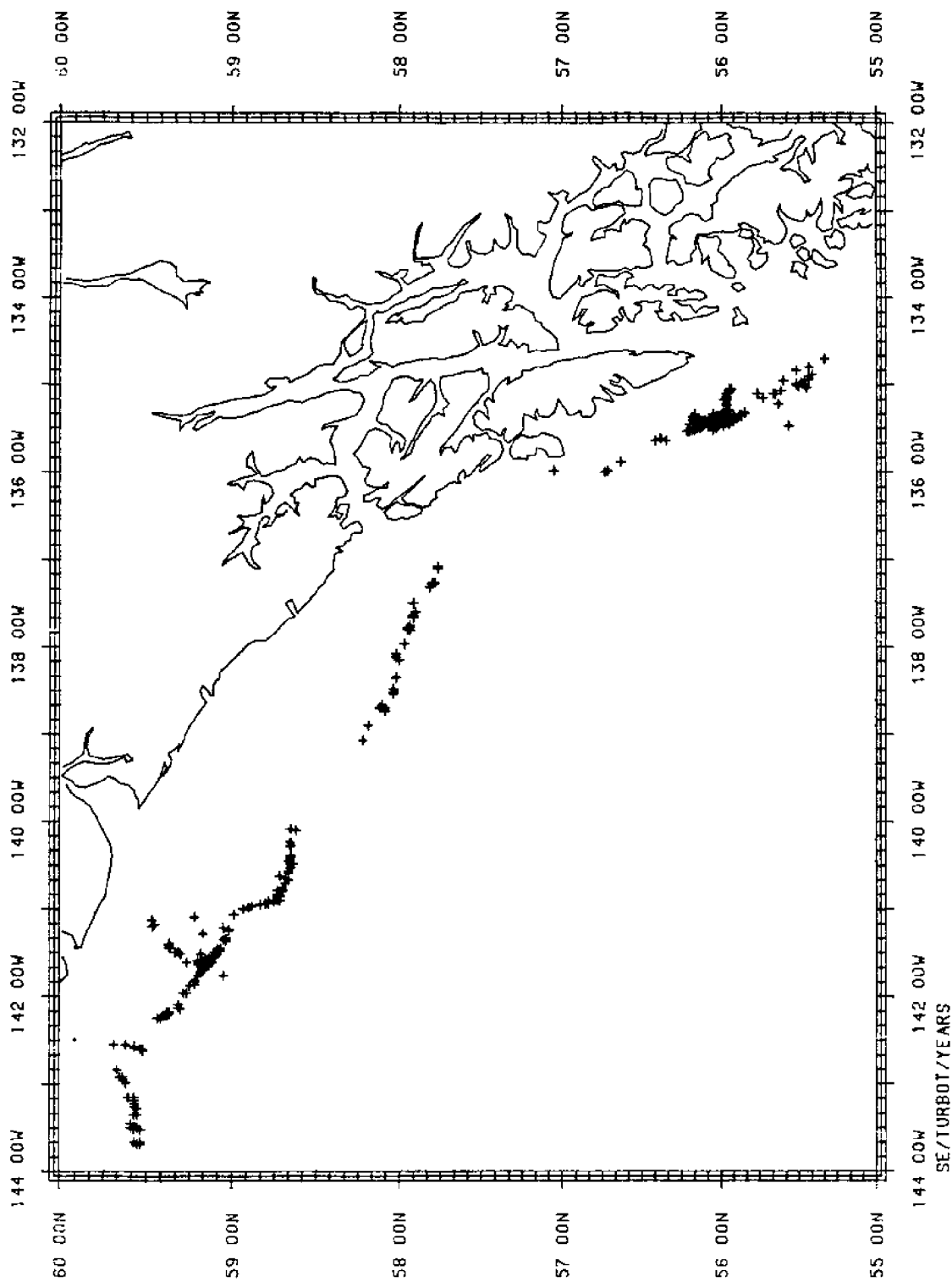


FIGURE E-3. TRAWLING LOCATIONS FOR TURBOT, ALL MONTHS, 1979-80

TABLE E-10. PACIFIC OCEAN PERCH, APRIL-JUNE 1979-80

NATION	CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	79 622	5559N	13521W	14249.7 27466.7 0.0	148.	1.167	15623.	13.39	1.69	437.	16060.
JAPAN	M	80 6 5	5555N	13523W	14230.0 27449.0 0.0	132.	0.750	8136.	10.85	1.16	444.	8580.
JAPAN	M	79 6 6	5558N	13513W	14261.1 27421.2 0.0	142.	1.000	8634.	8.63	1.41	156.	8800.
JAPAN	M	80 6 6	5559N	13525W	14241.9 27495.9 0.0	137.	0.667	5547.	8.32	1.24	3913.	9460.
JAPAN	M	80 6 7	5556N	13515W	14257.2 27430.6 0.0	142.	1.000	7866.	7.87	1.46	474.	8360.
JAPAN	M	80 6 11	5613N	13532W	14284.9 27619.2 0.0	151.	1.333	9709.	7.28	1.32	1951.	11660.
JAPAN	M	79 6 19	5558N	13506W	14274.4 27357.3 0.0	145.	1.000	6641.	6.64	1.34	2599.	9240.
JAPAN	M	80 6 6	5600N	13526W	14244.0 27497.6 0.0	142.	0.833	5331.	6.40	1.32	3249.	3880.
JAPAN	M	79 6 16	5558N	13514W	14259.1 27426.0 0.0	131.	1.417	8895.	6.28	1.24	345.	9240.
JAPAN	M	79 6 20	5558N	13522W	14243.8 27464.6 0.0	180.	1.250	8586.	5.49	1.05	622.	7480.
JAPAN	M	79 6 14	5558N	13517W	14253.4 27440.5 0.0	153.	0.917	4971.	5.42	1.52	309.	5280.
JAPAN	M	79 6 19	5558N	13514W	14259.1 27426.0 0.0	126.	1.417	7531.	5.32	1.28	829.	5360.
JAPAN	M	80 6 4	5558N	13514W	14259.1 27426.0 0.0	142.	1.000	4920.	4.92	1.40	2340.	7260.
JAPAN	M	80 6 5	5600N	13527W	14242.0 27502.4 0.0	142.	1.000	4874.	4.87	1.26	1286.	6160.
JAPAN	M	79 6 8	5617N	13534W	14297.5 27658.4 0.0	131.	0.917	4391.	4.78	1.26	1119.	5500.
JAPAN	M	79 6 14	5558N	13525W	14231.0 27479.0 0.0	142.	1.083	4616.	4.26	1.41	2424.	7040.
JAPAN	M	79 6 10	5612N	13532W	14280.2 27611.8 0.0	137.	1.083	4359.	4.02	1.45	921.	5280.
JAPAN	M	79 6 6	5609N	13530W	14272.4 27580.5 0.0	153.	0.917	3647.	3.98	1.46	1193.	4840.
JAPAN	M	80 6 18	5620N	14200W	14452.8 30751.3 0.0	126.	0.917	1631.	3.91	1.33	1229.	2660.
JAPAN	M	79 6 9	5610N	13526W	14284.2 27568.7 0.0	137.	1.000	3753.	3.75	1.41	647.	4400.
JAPAN	M	80 6 4	5617N	13534W	14297.5 27656.4 0.0	128.	0.917	3262.	3.26	1.59	1138.	4400.
JAPAN	M	79 6 15	5558N	13514W	14259.1 27426.0 0.0	164.	0.917	4154.	3.32	1.52	686.	4340.
JAPAN	M	79 6 11	5610N	13528W	14289.3 27578.2 0.0	129.	0.917	3041.	3.32	1.32	259.	3300.
JAPAN	M	79 6 16	5558N	13513W	14261.1 27421.2 0.0	153.	1.667	3487.	3.29	1.28	233.	5720.
JAPAN	M	79 6 18	5591N	13517W	14226.0 27393.3 0.0	120.	0.417	3357.	3.26	1.17	3043.	4400.
JAPAN	M	79 6 17	5558N	13506W	14274.4 27387.3 0.0	164.	1.333	3206.	3.15	1.44	854.	5060.
JAPAN	M	79 6 23	5559N	13521W	14249.7 27466.7 0.0	145.	2.417	1922.	2.86	1.33	1078.	8900.
JAPAN	M	79 6 18	5557N	13505W	14272.3 27375.5 0.0	156.	1.500	3955.	2.64	1.53	1965.	5440.
JAPAN	M	80 6 12	5612N	13532W	14280.2 27611.8 0.0	131.	1.167	2935.	2.52	1.31	1025.	3960.
JAPAN	M	80 6 15	5556N	13524W	14232.0 27460.6 0.0	131.	1.000	2441.	2.44	1.32	419.	2860.
JAPAN	M	79 6 14	5552N	13520W	14224.1 27414.5 0.0	153.	1.667	3452.	2.31	1.57	2525.	6380.
JAPAN	M	80 6 11	5614N	13533W	14297.0 27631.3 0.0	145.	1.417	3220.	2.27	1.51	1400.	4620.
JAPAN	M	79 6 8	5616N	13534W	14291.3 27650.9 0.0	145.	1.107	2475.	2.12	1.45	1045.	3520.
JAPAN	M	79 6 20	5557N	13506W	14270.4 27380.4 0.0	145.	1.083	2261.	2.09	1.32	599.	2860.
JAPAN	M	79 6 23	5556N	13516W	14255.4 27452.2 0.0	156.	1.503	3177.	2.01	2.03	563.	3740.
JAPAN	M	79 6 11	5556N	13508W	14270.4 27397.0 0.0	148.	1.833	3594.	1.96	1.37	366.	3960.
JAPAN	M	79 6 7	5557N	13505W	14272.3 27375.5 0.0	137.	1.667	3241.	1.94	1.22	279.	3520.
JAPAN	M	80 6 8	5601N	13525W	14249.9 27495.8 0.0	146.	0.833	1610.	1.93	1.33	1030.	2640.
JAPAN	M	79 6 4	5558N	13521W	14245.7 27459.8 0.0	137.	1.000	1907.	1.91	1.02	953.	2660.
JAPAN	M	80 6 6	5557N	13522W	14239.8 27457.8 0.0	182.	1.083	1999.	1.85	1.56	2841.	4840.
JAPAN	M	79 6 13	5555N	13524W	14228.1 27453.9 0.0	128.	0.750	1364.	1.82	1.28	1936.	3300.
JAPAN	M	80 6 6	5602N	13527W	14256.0 27516.3 0.0	164.	1.250	2272.	1.82	1.51	1248.	3520.
JAPAN	M	79 6 17	5601N	13524W	14251.8 27495.0 0.0	161.	1.000	1798.	1.80	1.25	182.	1980.
JAPAN	M	79 6 17	5554N	13524W	14224.1 27447.2 0.0	148.	0.917	1637.	1.75	1.22	1003.	2640.
JAPAN	M	80 6 18	5654N	14058W	14426.5 30313.1 0.0	131.	2.333	4064.	1.74	1.11	2316.	6180.

*** NCL *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-10 (continued). PACIFIC OCEAN PERCH, APRIL-JUNE 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPRX> LORAN-C 6X	PULSE 6Y	RATES	DEPTH (FMS)	HOURS FRAHLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	79 6 9	5612N	13532W	14280.8	27611.2	0.0	131.	1.333	2221.	1.67	1.53	2179.	4400.
JAPAN	S	79 6 25	5559N	13519W	14253.5	27457.0	0.0	164.	3.083	5059.	1.64	2.46	441.	5500.
JAPAN	M	79 6 26	5558N	13508W	14270.6	27397.0	0.0	167.	1.750	2480.	1.42	1.48	3020.	5500.
JAPAN	M	79 6 23	5559N	13521W	14249.7	27456.7	0.0	150.	1.167	1594.	1.35	1.43	606.	2200.
JAPAN	M	79 6 12	5557N	13517W	14249.5	27433.6	0.0	120.	1.250	1683.	1.35	1.17	4917.	6600.
JAPAN	M	80 6 16	5602N	13527W	14250.0	27516.3	0.0	148.	1.667	2170.	1.30	1.45	910.	3080.
JAPAN	M	80 6 10	5558N	13518W	14251.5	27445.3	0.0	175.	1.583	1956.	1.24	1.47	2444.	4400.
JAPAN	M	80 6 13	5558N	13511W	14254.9	27411.5	0.0	153.	1.417	1729.	1.22	1.41	1351.	3080.
JAPAN	M	80 6 5	5615N	13533W	14291.4	27638.7	0.0	141.	1.333	1618.	1.21	1.53	1682.	3300.
JAPAN	M	79 6 13	5558N	13508W	14276.6	27397.0	0.0	148.	1.833	2188.	1.19	1.40	232.	2420.
JAPAN	M	79 6 11	5605N	13529W	14274.3	27575.7	0.0	153.	1.083	1278.	1.18	1.42	262.	1540.
JAPAN	M	80 6 9	5550N	13514W	14227.9	27372.2	0.0	126.	1.333	1556.	1.17	1.31	642.	2200.
JAPAN	M	80 6 6	5554N	13523W	14226.1	27442.3	0.0	169.	1.250	1430.	1.14	1.23	990.	2420.
JAPAN	M	80 6 14	5558N	13510W	14266.8	27406.6	0.0	175.	1.250	1387.	1.11	1.92	2133.	3520.
JAPAN	M	80 6 9	5604N	13529W	14254.1	27539.9	0.0	184.	1.167	1216.	1.04	1.47	3184.	4400.
JAPAN	M	79 6 22	5558N	13508W	14270.6	27397.0	0.0	148.	1.667	1730.	1.04	1.33	910.	2640.
JAPAN	M	79 6 7	5607N	13528W	14258.2	27556.5	0.0	180.	1.417	1451.	1.02	2.92	2509.	3960.
JAPAN	M	80 6 7	5602N	13528W	14246.1	27521.1	0.0	125.	1.333	1346.	1.01	1.44	416.	1760.
JAPAN	M	80 6 8	5558N	13520W	14247.6	27455.0	0.0	191.	1.333	1313.	0.98	1.62	2427.	3740.
JAPAN	M	79 6 21	5632N	13546W	14337.5	27829.9	0.0	148.	0.750	690.	0.92	1.47	850.	1540.
JAPAN	M	79 6 12	5611N	13523W	14294.0	27561.8	0.0	128.	1.417	1272.	0.90	1.45	928.	2200.
JAPAN	M	79 6 19	5612N	13531W	14282.7	27607.1	0.0	131.	1.000	809.	0.81	1.13	2271.	3080.
JAPAN	S	79 6 29	5559N	13525W	14241.9	27485.9	0.0	159.	3.250	2456.	0.76	1.50	1504.	3960.
JAPAN	S	79 6 30	5620N	13537W	14304.1	27695.1	0.0	153.	2.667	1991.	0.75	1.63	969.	2860.
JAPAN	M	80 6 13	5602N	13528W	14246.1	27521.1	0.0	186.	1.417	1004.	0.71	1.44	316.	1320.
JAPAN	M	79 6 21	5625N	13538W	14323.1	27738.1	0.0	137.	1.083	766.	0.71	1.27	2314.	3080.
JAPAN	M	80 6 18	5641N	14034W	14396.3	30112.3	0.0	126.	1.333	940.	0.71	1.03	4560.	5500.
JAPAN	M	80 6 14	5604N	13525W	14251.9	27520.8	0.0	177.	1.500	1041.	0.69	1.51	13699.	14740.
JAPAN	M	79 6 6	5608N	13528W	14272.2	27563.7	0.0	153.	1.083	696.	0.64	1.44	622.	1120.
JAPAN	M	80 6 15	5558N	13510W	14266.6	27406.6	0.0	153.	1.167	715.	0.61	1.55	1045.	1760.
JAPAN	M	79 6 7	5609N	13528W	14276.3	27570.9	0.0	148.	1.417	667.	0.61	1.40	1113.	1980.
JAPAN	M	79 6 9	5623N	13537W	14316.7	27718.0	0.0	126.	1.250	741.	0.59	1.36	1459.	2200.
JAPAN	M	80 6 11	5559N	13525W	14241.9	27485.9	0.0	191.	1.500	854.	0.57	1.45	4426.	5290.
JAPAN	M	80 6 10	5604N	13529W	14254.1	27539.9	0.0	208.	1.500	936.	0.56	1.45	2684.	3520.
JAPAN	M	80 6 16	5604N	13525W	14251.9	27520.8	0.0	175.	1.667	921.	0.55	1.57	2659.	5290.
JAPAN	M	80 6 13	5559N	13525W	14241.9	27485.9	0.0	120.	0.667	351.	0.54	1.28	13937.	14300.
JAPAN	M	79 6 15	5613N	13532W	14284.9	27619.2	0.0	139.	1.667	894.	0.54	1.57	1746.	2640.
JAPAN	S	79 6 28	5558N	13517W	14253.4	27440.5	0.0	148.	3.000	1582.	0.53	1.47	1278.	2860.
JAPAN	M	80 6 14	5601N	13525W	14249.9	27499.8	0.0	175.	0.833	422.	0.51	1.41	1558.	1980.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-11. PACIFIC OCEAN PERCH, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C 6X	ULTRASE 61	RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	79 925	5839N	14032W	14350.0	30087.2	C.0	148.	0.333	12581.	37.74	1.44	1719.	14300.
JAPAN	S	80 5 8	5927N	14213W	14471.1	30858.9	C.0	110.	0.167	6149.	36.89	1.93	5291.	11440.
JAPAN	M	79 921	5748N	13717W	14521.1	28875.6	0.0	142.	0.667	22818.	34.23	1.59	5782.	28600.
JAPAN	S	80 5 7	5930N	14213W	14495.0	30888.7	C.0	115.	0.333	16918.	32.76	1.05	1182.	12100.
JAPAN	S	80 712	5933N	14330W	14286.3	31121.3	0.0	104.	0.333	9957.	29.87	1.16	823.	10780.
JAPAN	S	80 512	5929N	14214W	14484.2	30871.4	0.0	146.	0.333	9259.	27.72	1.33	661.	5900.
JAPAN	M	79 727	5954N	13519W	14233.8	27421.0	C.0	106.	0.167	4265.	25.55	1.56	2335.	6001.
JAPAN	S	80 714	5931N	14237W	14434.3	30961.3	0.0	156.	0.500	11344.	22.69	1.33	1856.	13200.
JAPAN	M	80 830	5912N	14142W	14441.0	30621.9	0.0	119.	0.333	8823.	20.47	1.30	3297.	10120.
JAPAN	S	80 913	5913N	14145W	14440.3	30640.5	0.0	114.	0.500	6825.	17.25	1.27	2375.	11000.
JAPAN	M	79 818	5908N	14138W	14421.9	30572.6	0.0	164.	1.167	15539.	13.32	1.42	6461.	22000.
JAPAN	S	80 711	5935N	14325W	14321.0	31127.4	C.0	126.	0.500	6455.	12.91	1.03	1465.	7920.
JAPAN	M	79 921	5749N	13719W	14522.4	28897.9	0.0	126.	1.833	17833.	9.73	1.43	10767.	28600.
JAPAN	M	79 913	5905N	14128W	14426.7	30513.0	0.0	169.	0.750	6636.	8.85	1.32	1064.	7700.
JAPAN	S	80 811	5931N	14236W	14437.3	30558.5	C.0	98.	0.500	4410.	8.82	1.30	4390.	8800.
JAPAN	S	80 5 6	5919N	14157W	14453.2	30732.9	0.0	131.	0.750	6363.	8.48	1.25	237.	8600.
JAPAN	M	79 916	5839N	14016W	14425.8	30330.4	0.0	131.	0.917	7059.	7.70	1.30	1741.	8800.
JAPAN	S	80 712	5935N	14330W	14305.1	31140.2	C.0	101.	0.500	3731.	7.46	1.17	889.	4620.
JAPAN	S	80 713	5934N	14330W	14296.7	31131.3	0.0	109.	0.500	3722.	7.44	1.19	1338.	5060.
JAPAN	S	80 7 1	5931N	14235W	14440.2	30955.7	C.0	134.	0.417	3050.	7.32	1.35	470.	3920.
JAPAN	M	79 812	5801N	13528W	14244.1	27514.2	C.0	186.	1.000	6266.	6.27	1.60	994.	7260.
JAPAN	M	79 821	5903N	14121W	14430.7	30471.9	0.0	153.	0.667	3952.	5.93	1.26	7048.	11000.
JAPAN	M	80 828	5909N	14138W	14425.3	30581.7	0.0	127.	1.667	9789.	5.87	1.24	3411.	13200.
JAPAN	M	79 910	5804N	13530W	14252.2	27544.7	0.0	224.	1.083	6204.	5.73	1.50	2916.	9020.
JAPAN	M	79 919	5802N	13529W	14248.1	27525.9	0.0	175.	1.167	6678.	5.72	2.26	1022.	7700.
JAPAN	M	79 914	5845N	14054W	14374.2	30217.9	0.0	175.	1.417	8031.	5.67	1.53	10669.	18700.
JAPAN	S	80 5 4	5840N	14030W	14401.7	30089.2	0.0	126.	1.000	5523.	5.52	1.26	1077.	6600.
JAPAN	M	80 829	5838N	14006W	14447.5	29985.3	C.0	153.	2.000	11044.	5.52	1.93	29656.	40700.
JAPAN	M	79 9 8	5858N	13523W	14241.6	27465.4	C.0	175.	0.417	2300.	5.52	1.59	560.	2860.
JAPAN	M	79 918	5841N	13557W	14355.3	27952.3	0.0	137.	0.417	2278.	5.47	1.62	362.	2640.
JAPAN	S	80 916	5913N	14137W	14462.0	30615.3	0.0	131.	0.417	2267.	5.44	1.30	3033.	3300.
JAPAN	M	79 910	5803N	13523W	14261.7	27504.2	C.0	175.	0.750	4004.	5.34	1.66	616.	4620.
JAPAN	S	80 828	5841N	14030W	14406.4	30092.2	C.0	126.	0.417	2197.	5.27	1.18	3.	2200.
JAPAN	S	80 9 9	5929N	14214W	14424.2	30876.4	C.0	108.	1.000	5236.	5.24	1.87	3564.	8800.
JAPAN	S	80 7 3	5912N	14146W	14430.0	30634.5	0.0	142.	0.417	2104.	5.05	1.37	96.	2200.
JAPAN	S	80 914	5913N	14143W	14445.8	30634.2	0.0	115.	0.917	4462.	4.86	1.23	15338.	19800.
JAPAN	S	80 717	5841N	14033W	14400.6	30108.8	0.0	129.	0.167	611.	4.86	1.40	509.	1320.
JAPAN	S	80 726	5906N	14152W	14423.3	30535.1	0.0	153.	2.333	11315.	4.85	1.41	5165.	16500.
JAPAN	S	80 828	5906N	14134W	14432.7	30559.8	0.0	180.	0.833	3895.	4.67	1.43	505.	4400.
JAPAN	M	79 914	5904N	14127W	14422.0	30500.6	0.0	175.	0.750	3492.	4.66	1.50	2008.	5500.
JAPAN	S	80 714	5909N	14138W	14429.3	30581.7	0.0	139.	0.583	2688.	4.61	1.65	1272.	3960.
JAPAN	M	79 823	5933N	14321W	14316.9	31099.1	C.0	142.	1.000	4531.	4.53	1.34	3169.	7700.
JAPAN	S	80 9 2	5841N	14037W	14390.7	30122.9	C.0	128.	1.000	4523.	4.52	1.30	317.	4840.
JAPAN	M	79 920	5841N	13507W	14206.8	27280.7	0.0	126.	0.333	1502.	4.51	1.55	598.	2200.
JAPAN	M	79 822	5936N	14309W	14375.3	31094.6	0.0	148.	1.083	4815.	4.45	1.13	1785.	6600.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-II (continued). PACIFIC OCEAN PERCH, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	TIME	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FTISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	79 917	5516N	13420W	14203.9	26908.1	0.0	113.	3893.	4.25	2.17	24667.	32566.
JAPAN	S	80 726	5906N	14133W	14420.6	30538.3	0.0	180.	10791.	4.18	1.47	12745.	23540.
JAPAN	M	80 918	5902N	14122W	14426.8	30466.1	0.0	191.	6143.	4.10	1.37	7717.	13860.
JAPAN	M	80 912	5559N	13525W	14241.9	27485.9	0.0	142.	17620.	4.07	1.56	1740.	19360.
JAPAN	M	79 815	5601N	13527W	14246.0	27509.4	0.0	164.	4798.	3.84	1.43	1142.	5940.
JAPAN	M	80 810	5554N	13522W	14222.0	27437.5	0.0	156.	3766.	3.77	1.43	2394.	6160.
JAPAN	S	80 911	5842N	14033W	14407.6	30117.8	0.0	120.	5003.	3.67	1.24	1097.	6600.
JAPAN	S	80 916	5918N	14157W	14445.5	30723.7	0.0	138.	3798.	3.60	1.27	402.	2200.
JAPAN	S	80 816	5843N	14047W	14372.7	30175.7	0.0	159.	6515.	3.55	1.58	2285.	8806.
JAPAN	M	79 927	5838N	14029W	14391.8	30067.6	0.0	164.	1478.	3.55	1.37	722.	2200.
JAPAN	M	80 810	5555N	13523W	14230.0	27449.0	0.0	153.	4052.	3.67	1.25	7388.	11440.
JAPAN	S	80 927	5640N	13527W	14350.9	27944.2	0.0	191.	6361.	3.67	1.73	2879.	9240.
JAPAN	M	79 914	5601N	13522W	14255.7	27485.3	0.0	177.	6047.	3.66	1.68	2533.	8580.
JAPAN	S	80 910	5841N	14029W	14410.9	30094.7	0.0	128.	1151.	3.45	0.69	169.	1320.
JAPAN	M	80 814	5603N	13525W	14250.1	27532.9	0.0	215.	6236.	3.40	1.54	5424.	11660.
JAPAN	M	80 828	5914N	14137W	14465.5	30624.5	0.0	122.	4800.	3.39	1.18	1800.	6600.
JAPAN	M	80 912	5600N	13528W	14240.1	27507.2	0.0	197.	3889.	3.33	1.67	1611.	5500.
JAPAN	M	79 724	5551N	13516W	14227.9	27382.5	0.0	126.	4899.	3.27	0.87	601.	5500.
JAPAN	S	80 717	5537N	13504W	14197.5	27241.6	0.0	126.	1617.	3.23	1.38	2343.	3560.
JAPAN	M	79 918	5501N	13424W	14144.0	26880.5	0.0	167.	1861.	3.19	1.70	339.	2200.
JAPAN	M	80 912	5937N	14327W	14331.4	31150.6	0.0	137.	2907.	3.17	1.24	1053.	3960.
JAPAN	M	80 914	5911N	14143W	14430.7	30615.9	0.0	159.	3918.	3.13	1.38	9282.	13200.
JAPAN	M	80 916	5934N	14315W	14344.1	31092.4	0.0	154.	5959.	3.11	1.15	6664.	72600.
JAPAN	M	79 927	5840N	14034W	14391.6	30103.3	0.0	148.	1813.	3.11	1.56	9187.	11000.
JAPAN	M	79 818	5600N	13523W	14249.8	27463.2	0.0	197.	4912.	3.10	1.72	4548.	9460.
JAPAN	M	80 725	5558N	13517W	14251.4	27440.5	0.0	144.	5112.	3.07	1.49	2588.	7700.
JAPAN	M	79 917	5604N	13520W	14271.5	27496.9	0.0	186.	7047.	3.02	1.49	1753.	8600.
JAPAN	M	79 922	5748N	13713W	14526.9	28859.2	0.0	175.	4524.	3.02	1.64	2076.	6600.
JAPAN	M	79 819	5509N	14136W	14434.7	30575.3	0.0	148.	5515.	3.01	1.29	13185.	18700.
JAPAN	M	79 813	5601N	13524W	14251.0	27495.0	0.0	180.	3166.	2.92	1.63	1674.	4840.
JAPAN	M	80 913	5934N	14311W	14356.5	31081.9	0.0	172.	2392.	2.87	1.63	3108.	5500.
JAPAN	S	80 829	5506N	14137W	14424.6	30569.4	0.0	165.	2152.	2.87	1.52	48.	2200.
JAPAN	S	80 611	5932N	14236W	14445.4	30967.7	0.0	98.	1192.	2.86	1.34	3200.	4400.
JAPAN	M	80 918	5501N	13423W	14145.6	26855.6	0.0	186.	4254.	2.84	1.72	806.	5060.
JAPAN	S	80 716	5844N	14043W	14382.9	30182.1	0.0	132.	1617.	2.77	1.29	143.	1760.
JAPAN	M	79 813	5603N	13528W	14252.1	27528.2	0.0	202.	3902.	2.75	1.51	498.	4400.
JAPAN	S	80 724	5754N	13736W	14515.3	29007.6	0.0	175.	6610.	2.72	1.75	18230.	26840.
JAPAN	M	80 725	5605N	13525W	14265.9	27527.9	0.0	188.	4027.	2.68	1.73	3013.	7040.
JAPAN	M	80 828	5921N	14201W	14457.6	30763.5	0.0	121.	1770.	2.65	1.19	650.	2420.
JAPAN	M	79 916	5607N	13528W	14268.2	27556.5	0.0	195.	3304.	2.64	1.65	2416.	5720.
JAPAN	M	79 830	5526N	13448W	14197.3	27099.3	0.0	149.	6982.	2.62	1.34	1818.	6000.
JAPAN	S	80 911	5842N	14033W	14394.9	30135.4	0.0	137.	2173.	2.61	1.32	467.	2640.
JAPAN	M	79 913	5606N	13524W	14271.8	27530.3	0.0	169.	4763.	2.60	1.86	2937.	7700.
JA	M	79 611	5602N	13528W	14248.1	27521.1	0.0	180.	3666.	2.59	1.70	734.	4400.
JA	M	79 827	5526N	13449W	14185.4	27104.5	0.0	151.	7330.	2.59	1.27	1470.	6000.

THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-11 (continued). PACIFIC OCEAN PERCH, JULY-SEPTEMBER 1979-80

NATION	VESEL CLASS	DATE YMMDD	LAT	LONG	APPROX LORAN-C GX	APPROX LORAN-C GY	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	80 5 1	5536N	14309W	14375.3	31094.6	0.0	148.	1.750	4516.	2.56	1.25	2744.	7266.
JAPAN	M	80 8 9	5516N	14137W	14484.6	30642.9	0.0	113.	1.417	3642.	2.57	1.20	19238.	22850.
JAPAN	M	79 8 9	5556N	13503W	14272.2	27358.9	0.0	131.	1.583	4057.	2.56	1.31	2103.	6160.
JAPAN	M	79 9 9	5602N	13523W	14257.2	27497.1	0.0	176.	1.417	3578.	2.53	1.59	2142.	5720.
JAPAN	S	80 7 9	5931N	14236W	14437.3	30558.5	0.0	148.	0.833	2104.	2.52	1.34	1856.	3960.
JAPAN	S	79 8 13	5600N	13527W	14242.0	27502.4	0.0	202.	1.500	3786.	2.52	1.52	614.	4400.
JAPAN	S	79 8 31	5748N	13716W	14523.1	28871.5	0.0	159.	1.417	3557.	2.51	1.65	183.	3740.
JAPAN	S	80 5 30	5644N	13559W	14364.7	27985.7	0.0	164.	2.033	5044.	2.48	1.72	1556.	6600.
JAPAN	M	79 9 9	5600N	13527W	14242.0	27502.4	0.0	162.	1.083	2868.	2.46	1.53	852.	3520.
JAPAN	M	79 5 17	5759N	13803W	14487.5	29161.9	0.0	177.	0.750	1816.	2.42	1.28	2584.	4400.
JAPAN	M	79 9 7	5609N	13529W	14274.3	27575.7	0.0	180.	1.583	3784.	2.39	1.64	3696.	7480.
JAPAN	M	79 8 5	5604N	13526W	14260.0	27525.6	0.0	180.	1.833	4316.	2.35	1.47	2204.	6000.
JAPAN	M	79 5 27	5512N	14203W	14428.6	30742.1	0.0	168.	0.833	1927.	2.35	1.31	21363.	21320.
JAPAN	M	79 9 23	5746N	13703W	14537.9	28799.8	0.0	159.	1.750	4059.	2.32	1.62	5401.	9460.
JAPAN	M	79 8 25	5601N	13526W	14248.0	27504.6	0.0	175.	0.667	1534.	2.30	1.49	226.	1760.
JAPAN	M	79 8 4	5601N	13527W	14246.0	27509.4	0.0	169.	1.000	2285.	2.29	1.52	355.	2640.
JAPAN	S	80 5 11	5841N	14029W	14410.9	30894.7	0.0	131.	0.543	1303.	2.23	1.04	237.	1540.
JAPAN	M	79 5 24	5841N	14027W	14415.9	30887.6	0.0	131.	0.583	1300.	2.23	1.17	900.	2200.
JAPAN	M	80 6 19	5501N	13423W	14145.0	26855.6	0.0	215.	1.833	4067.	2.22	1.65	1653.	5720.
JAPAN	S	80 7 25	5840N	14037W	14384.0	30113.0	0.0	164.	2.333	5093.	2.18	1.38	2167.	7260.
JAPAN	M	79 8 29	5525N	13448W	14181.6	27093.9	0.0	145.	2.667	5782.	2.17	1.54	1478.	7260.
JAPAN	S	80 7 2	5842N	14047W	14371.9	30166.7	0.0	123.	0.750	1617.	2.16	1.37	1023.	2640.
JAPAN	S	80 7 25	5839N	14023W	14412.5	30655.3	0.0	154.	2.083	4454.	2.14	1.55	16446.	20900.
JAPAN	M	79 9 20	5600N	13526W	14244.0	27487.6	0.0	180.	1.000	2129.	2.13	1.41	1171.	3300.
JAPAN	S	80 7 4	5820N	14202W	14447.0	30757.4	0.0	128.	0.833	1771.	2.13	1.33	429.	2200.
JAPAN	M	79 9 23	5756N	13747W	14503.9	29070.4	0.0	115.	0.883	177.	2.12	1.40	483.	660.
JAPAN	M	80 5 7	5503N	14113W	14451.0	30445.6	0.0	142.	2.333	4945.	2.12	1.34	4955.	9900.
JAPAN	M	79 8 15	5605N	13526W	14254.0	27532.7	0.0	191.	1.667	3521.	2.11	1.75	3079.	6600.
JAPAN	M	79 8 6	5859N	13527W	14236.1	27495.5	0.0	180.	1.750	3672.	2.10	1.51	508.	4180.
JAPAN	S	80 5 27	5644N	13600W	14352.7	27990.3	0.0	164.	2.667	5594.	2.10	1.60	2546.	8140.
JAPAN	M	80 8 2	5533N	13523W	14222.2	27435.7	0.0	180.	2.167	4486.	2.07	1.61	2354.	7040.
JAPAN	N	79 8 8	5603N	13520W	14257.5	27485.6	0.0	175.	1.500	3092.	2.06	1.54	1528.	4620.
JAPAN	M	80 8 27	5608N	13525W	14278.0	27549.4	0.0	164.	1.000	2027.	2.03	1.78	613.	2640.
JAPAN	S	80 7 10	5931N	14237W	14434.3	30961.3	0.0	148.	0.667	1343.	2.01	1.27	2397.	3740.
JAPAN	S	80 8 16	5839N	14023W	14412.5	30855.3	0.0	180.	3.250	6528.	2.01	1.39	4652.	11220.
JAPAN	S	80 8 15	5850N	14057W	14401.1	30273.4	0.0	137.	1.000	2002.	2.00	1.66	2398.	4400.
JAPAN	M	80 7 24	5840N	14018W	14431.5	30946.6	0.0	186.	2.000	3920.	2.00	1.37	1724.	5720.
JAPAN	M	79 8 14	5606N	13526W	14250.0	27525.6	0.0	191.	1.083	2154.	1.99	1.71	926.	3080.
JAPAN	S	79 8 31	5747N	13711W	14527.6	28841.9	0.0	153.	1.250	2446.	1.96	1.67	414.	2360.
JAPAN	M	80 8 11	5606N	13529W	14272.2	27563.7	0.0	140.	1.667	3191.	1.91	1.66	989.	4180.
JAPAN	M	79 8 18	5633N	13547W	14335.9	27842.4	0.0	137.	1.333	2546.	1.91	1.76	2954.	5500.
JAPAN	M	79 5 11	5608N	13529W	14270.3	27568.5	0.0	184.	2.667	5063.	1.89	1.61	5057.	10120.
JAPAN	M	79 7 28	5600N	13527W	14242.0	27502.4	0.0	180.	1.000	1637.	1.89	1.74	533.	2420.
JAPAN	S	79 7 24	5556N	13503W	14272.2	27358.9	0.0	137.	2.417	4548.	1.80	1.44	3152.	7700.
JAPAN	M	79 8 23	5937N	14303W	14406.0	31087.9	0.0	159.	1.500	2813.	1.86	1.34	1527.	4400.

*** ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-11 (continued). PACIFIC OCEAN PERCH, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	TIME	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LB S/FISH	6YCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	80 9 2	0000	58 41 N	140 50 W	14357.3	183	1.333	2493	1.87	1.40	1027	3520
JAPAN	M	80 9 13	0000	58 41 N	140 50 W	30168.1	0.0	2.000	3728	1.86	1.59	1112	4840
JAPAN	M	79 6 6	0000	56 01 N	135 28 W	14230.1	175	1.250	2325	1.86	1.43	975	3300
JAPAN	M	80 7 28	0000	55 57 N	135 25 W	14244.1	175	2.000	3713	1.86	1.35	1127	4840
JAPAN	M	80 5 18	0000	55 13 N	141 47 W	14334.9	127	1.333	2473	1.85	1.29	1707	4180
JAPAN	M	79 5 14	0000	56 08 N	135 27 W	14274.1	159	2.000	3708	1.85	1.61	5752	9460
JAPAN	M	79 8 10	0000	56 01 N	135 23 W	14253.7	180	1.667	3078	1.85	1.74	3082	6160
JAPAN	M	79 9 7	0000	56 08 N	135 29 W	14270.3	194	1.917	3534	1.84	1.30	3506	7040
KOREA	M	80 5 27	0000	55 13 N	141 06 W	14542.8	105	5.500	10125	1.84	0.43	16275	26400
JAPAN	M	79 8 21	0000	55 44 N	135 11 W	14210.5	153	0.667	1201	1.80	1.67	119	1320
JAPAN	M	79 5 11	0000	56 09 N	135 29 W	14274.3	155	2.833	5098	1.80	1.56	4142	9240
JAPAN	M	79 5 12	0000	55 58 N	135 17 W	14253.4	157	2.333	4144	1.78	1.54	4656	8800
JAPAN	M	80 7 31	0000	55 34 N	135 28 W	14139.3	165	2.000	3551	1.78	1.66	12289	15840
JAPAN	M	80 8 23	0000	55 29 N	134 57 W	14181.1	148	3.333	5888	1.77	1.37	5112	11000
JAPAN	S	80 5 1	0000	58 42 N	140 46 W	14374.5	134	0.667	1169	1.75	1.01	151	1320
JAPAN	S	80 7 1	0000	55 32 N	142 36 W	14445.4	137	0.750	1312	1.75	1.35	1322	2640
JAPAN	M	80 7 28	0000	56 07 N	135 26 W	14272.0	215	2.833	4929	1.74	1.76	6071	11000
JAPAN	S	80 7 31	0000	59 31 N	143 36 W	14252.3	98	0.500	869	1.74	1.24	2631	3300
JAPAN	M	79 6 13	0000	56 03 N	135 28 W	14252.1	191	1.417	2461	1.74	1.60	1059	3520
JAPAN	M	79 8 11	0000	56 01 N	135 28 W	14244.1	180	1.417	2452	1.73	1.52	188	2040
JAPAN	S	79 7 26	0000	55 58 N	135 10 W	14266.8	164	0.617	1066	1.73	1.45	254	1320
JAPAN	M	80 8 14	0000	55 58 N	135 25 W	14236.0	175	1.500	2570	1.71	1.66	3150	5720
JAPAN	M	80 6 7	0000	55 58 N	135 25 W	14238.0	191	2.000	3404	1.70	1.68	1656	5060
JAPAN	S	80 7 7	0000	55 33 N	134 59 W	14192.1	137	0.667	1113	1.67	1.41	427	1540
JAPAN	S	79 7 28	0000	58 55 N	140 59 W	14430.9	153	2.500	4115	1.65	1.30	1385	5500
JAPAN	M	79 7 31	0000	56 07 N	135 29 W	14274.3	142	1.583	2602	1.64	1.59	1798	4400
JAPAN	M	79 5 13	0000	56 02 N	135 23 W	14257.7	180	1.633	2997	1.63	1.62	2503	5500
JAPAN	M	79 5 11	0000	56 03 N	135 22 W	14263.7	182	1.500	2439	1.63	1.49	1961	4400
JAPAN	M	79 5 15	0000	56 00 N	135 26 W	14244.0	162	1.417	2248	1.59	1.64	832	3080
JAPAN	M	79 5 6	0000	56 05 N	135 27 W	14262.0	189	1.000	1584	1.58	1.61	1496	3080
JAPAN	M	79 5 14	0000	56 02 N	135 28 W	14248.1	180	1.063	1716	1.58	1.64	2024	3740
JAPAN	M	79 7 25	0000	55 24 N	134 52 W	14172.3	131	0.583	921	1.58	0.66	179	1100
JAPAN	M	80 5 5	0000	59 34 N	143 21 W	14325.3	133	1.500	2354	1.57	1.18	19646	22000
JAPAN	M	80 8 1	0000	55 57 N	135 18 W	14247.5	148	1.667	2612	1.57	1.82	4428	7040
JAPAN	M	79 7 24	0000	55 54 N	135 22 W	14228.0	120	1.000	1562	1.56	1.53	198	1760
JAPAN	M	80 8 11	0000	55 51 N	135 16 W	14227.9	148	2.000	3122	1.56	1.61	2598	5720
JAPAN	S	80 8 17	0000	58 39 N	140 23 W	14412.5	191	4.417	6856	1.55	1.38	3034	9900
JAPAN	M	80 8 5	0000	56 02 N	135 30 W	14244.2	235	1.000	1548	1.55	1.55	1312	2860
JAPAN	S	80 7 13	0000	59 37 N	143 14 W	14314.6	118	0.333	511	1.53	1.25	369	880
JAPAN	M	79 5 29	0000	58 47 N	140 55 W	14385.4	194	2.500	3601	1.52	1.42	25899	29700
JAPAN	M	79 5 18	0000	56 41 N	135 57 W	14355.3	115	1.000	1508	1.51	1.60	1132	2640
JAPAN	M	79 5 20	0000	55 59 N	135 24 W	14243.9	175	0.917	1376	1.50	1.58	154	1540
JAPAN	M	80 5 25	0000	55 36 N	134 57 W	14207.1	148	1.167	1749	1.50	1.44	6631	8360
JAPAN	M	80 8 29	0000	58 39 N	140 15 W	14432.2	114	1.333	1987	1.49	1.81	5713	7700
JAPAN	M	79 9 12	0000	55 57 N	135 03 W	14276.1	159	1.583	2358	1.49	1.57	3142	5300

NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-11 (continued). PACIFIC OCEAN PERCH, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	YRMO	LAT	LONG	APPROX LURAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
						6X	6Y						
JAPAN	S	80 7 17	5856N	14100W	14435.4	30338.1	0.0	1.333	1981.	1.49	1.38	1759.	3740.
JAPAN	M	80 8 7	5855N	13523W	14230.0	27449.0	0.0	1.667	2469.	1.48	1.59	2811.	5280.
JAPAN	M	79 8 14	5857N	13504W	14274.2	27300.7	0.0	1.417	2093.	1.48	1.55	987.	3080.
JAPAN	M	79 8 25	5902N	14121W	14423.4	30462.8	0.0	1.833	2667.	1.45	1.22	3933.	6000.
JAPAN	S	80 8 15	5911N	14143W	14430.7	30615.9	0.0	3.000	4273.	1.42	1.37	5627.	9700.
JAPAN	M	79 7 27	5600N	13526W	14244.0	27497.7	0.0	0.833	1173.	1.41	1.51	587.	1760.
JAPAN	M	79 9 14	5842N	14047W	14371.9	30166.7	0.0	1.000	1396.	1.40	1.57	4104.	5500.
JAPAN	M	79 9 5	5900N	13428W	14132.0	26875.9	0.0	1.750	2435.	1.39	1.61	1525.	3960.
JAPAN	S	80 7 25	5755N	13739W	14514.7	29028.9	0.0	3.333	4632.	1.35	1.32	8348.	12980.
JAPAN	S	80 7 2	5920N	14200W	14452.6	30751.3	0.0	0.833	1157.	1.39	1.50	1043.	2280.
JAPAN	M	80 8 19	5801N	13423W	14145.6	26855.6	0.0	2.667	3679.	1.38	1.74	2701.	6380.
JAPAN	M	79 8 25	5842N	14048W	14369.3	30170.2	0.0	1.75	1494.	1.38	1.60	706.	2200.
JAPAN	S	80 8 15	5907N	14134W	14354.9	30135.4	0.0	0.250	345.	1.38	1.45	95.	440.
JAPAN	S	80 8 15	5840N	14036W	14425.3	30550.6	0.0	0.750	1033.	1.38	1.26	507.	1540.
JAPAN	M	79 8 28	5801N	13420W	14386.5	30110.3	0.0	1.833	2514.	1.37	1.49	786.	3300.
JAPAN	M	79 9 15	5845N	14054W	14374.2	30217.9	0.0	0.250	906.	1.36	1.77	194.	1100.
JAPAN	M	79 7 30	5611N	12531W	14278.6	27599.0	0.0	0.917	1696.	1.36	1.42	1604.	3300.
JAPAN	S	80 7 4	5920N	14201W	14445.8	30754.3	0.0	1.333	1799.	1.36	1.45	517.	1760.
JAPAN	M	80 8 11	5848N	13510W	14227.8	27339.7	0.0	2.500	3341.	1.34	1.48	841.	2640.
JAPAN	M	79 8 18	5850N	14057W	14401.1	30273.4	0.0	1.250	1666.	1.33	1.52	4579.	7920.
JAPAN	M	79 9 17	5757N	13747W	14509.4	29079.9	0.0	1.167	1554.	1.33	0.79	2734.	4400.
JAPAN	S	80 9 3	5841N	14048W	14362.5	30161.2	0.0	1.000	1350.	1.33	1.36	650.	1980.
JAPAN	M	79 8 29	5842N	14046W	14374.5	30163.3	0.0	1.333	1759.	1.32	1.36	7041.	8300.
JAPAN	M	79 8 2	5854N	13521W	14230.0	27432.7	0.0	2.663	2742.	1.32	1.36	998.	3740.
JAPAN	M	79 9 12	5601N	13522W	14255.7	27485.3	0.0	2.000	2609.	1.30	1.56	3771.	6380.
JAPAN	M	79 8 12	5608N	13526W	14276.1	27554.2	0.0	1.000	1302.	1.30	1.55	678.	1980.
JAPAN	M	79 9 2	5839N	13507W	14199.2	27268.4	0.0	1.88	3788.	1.30	1.58	3252.	7040.
JAPAN	S	79 7 28	5832N	14058W	14412.4	30294.9	0.0	2.700	3490.	1.29	1.51	1790.	5280.
JAPAN	S	79 7 23	5852N	13514W	14259.1	27426.0	0.0	2.767	3526.	1.27	1.94	3074.	6600.
JAPAN	S	79 9 9	5839N	14024W	14410.0	30058.9	0.0	3.833	4815.	1.26	1.52	2685.	7700.
JAPAN	M	79 9 15	5802N	13522W	14259.7	27492.3	0.0	1.333	1673.	1.25	1.67	2067.	3740.
JAPAN	M	80 8 15	5802N	13524W	14255.6	27501.9	0.0	1.94	4178.	1.25	1.66	3742.	7920.
JAPAN	M	80 8 31	5843N	14037W	14404.2	30140.9	0.0	2.667	3539.	1.25	0.72	5021.	8360.
JAPAN	S	80 9 7	5825N	14208W	14465.4	30821.6	0.0	0.333	416.	1.25	1.29	1124.	1540.
JAPAN	S	79 9 7	5840N	14036W	14386.5	30110.3	0.0	2.917	3628.	1.24	1.42	3412.	7040.
JAPAN	S	79 8 31	5747N	13706W	14537.5	26821.2	0.0	1.250	1551.	1.24	1.25	1309.	2860.
JAPAN	S	80 8 14	5912N	14138W	14451.8	30609.2	0.0	1.333	1642.	1.23	1.37	2758.	4400.
JAPAN	M	80 8 3	5859N	13522W	14247.7	27471.5	0.0	0.333	409.	1.23	1.79	2011.	2420.
JAPAN	M	79 8 4	5600N	13526W	14244.0	27497.6	0.0	0.917	1119.	1.22	1.49	1521.	2640.
JAPAN	S	80 9 12	5818N	14201W	14434.4	30736.0	0.0	0.667	813.	1.22	1.21	507.	1320.
JAPAN	M	79 8 22	5836N	13503W	14195.8	27230.7	0.0	1.667	2013.	1.21	1.68	627.	2640.
JAPAN	S	80 7 31	5833N	14235W	14456.4	30974.1	0.0	0.500	604.	1.21	0.90	12596.	13200.
JAPAN	M	79 7 26	5804N	13530W	14252.2	27544.7	0.0	1.600	1205.	1.21	1.56	1435.	2640.
JAPAN	M	80 8 8	5906N	14130W	14428.7	30528.6	0.0	2.667	3214.	1.21	1.25	12186.	15400.

*** NOTE *** THE ACCURACY OF POSITION AND LURAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE 4-11 (continued). PACIFIC OCEAN PERCH, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C FIX	APPROX LORAN-C PULSE RATE	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LB SW/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	79 8 6	55.9N	135.20W	14251.0	27461.8	0.0	1.250	1505.	1.20	1.48	695.	2200.
JAPAN	M	79 9 3	55.5N	135.01W	14195.7	27214.9	0.0	3.333	4005.	1.20	1.73	2595.	6600.
JAPAN	S	80 8 19	55.31N	142.34W	14434.3	30961.3	0.0	1.333	1597.	1.20	1.59	2803.	4400.
JAPAN	M	80 8 28	57.7N	137.42W	14519.5	29059.1	0.0	0.333	399.	1.20	2.38	6201.	6600.
JAPAN	M	79 9 10	56.02N	135.24W	14255.6	27501.9	0.0	2.500	2983.	1.19	1.69	2517.	5500.
JAPAN	S	80 9 10	56.37N	135.53W	14345.6	27901.8	0.0	2.750	3270.	1.19	1.69	3550.	6820.
JAPAN	M	79 9 15	56.01N	135.22W	14255.7	27485.3	0.0	2.500	2956.	1.18	1.69	6284.	9240.
JAPAN	M	80 9 10	55.31N	143.38W	14245.8	31124.7	0.0	0.833	985.	1.18	1.20	16615.	17600.
JAPAN	M	80 8 27	55.33N	143.35W	14272.2	31135.0	0.0	0.500	585.	1.17	0.83	3375.	3960.
JAPAN	M	80 9 2	55.33N	143.17W	14329.5	31088.7	0.0	1.333	1540.	1.16	1.48	5940.	7480.
JAPAN	M	80 7 30	55.31N	134.59W	14184.7	27181.7	0.0	1.333	1514.	1.14	1.60	1126.	2640.
JAPAN	M	80 9 10	55.35N	143.27W	14314.6	31132.6	0.0	2.833	3214.	1.13	1.37	27586.	36800.
JAPAN	S	80 8 16	56.43N	140.49W	14373.5	30182.7	0.0	2.250	2544.	1.13	1.44	14616.	17160.
JAPAN	M	79 9 26	59.03N	141.25W	14420.0	30485.0	0.0	0.833	935.	1.12	1.30	605.	1540.
JAPAN	M	79 9 29	58.42N	140.47W	14371.9	30166.7	0.0	0.500	560.	1.12	1.37	980.	1540.
JAPAN	M	80 7 23	58.42N	140.45W	14377.0	30159.8	0.0	2.000	2240.	1.12	1.42	4360.	6600.
JAPAN	M	80 9 15	58.41N	140.42W	14378.0	30140.3	0.0	2.333	2582.	1.11	1.38	12818.	15400.
JAPAN	M	79 7 28	55.56N	135.25W	14231.1	27465.4	0.0	2.000	2205.	1.10	1.54	435.	2640.
JAPAN	M	80 7 28	56.09N	135.24W	14283.9	27551.9	0.0	2.500	2747.	1.10	1.68	2093.	4840.
JAPAN	M	79 9 22	57.7N	137.06W	14533.4	28829.5	0.0	1.583	1728.	1.09	1.42	2672.	4400.
JAPAN	M	79 9 15	55.19N	140.29W	14397.5	30076.6	0.0	0.607	726.	1.09	1.37	374.	1100.
JAPAN	M	79 9 24	59.04N	141.29W	14418.0	30507.1	0.0	2.000	2158.	1.08	1.34	5102.	7260.
JAPAN	M	79 9 29	55.58N	135.26W	14238.0	27483.9	0.0	0.583	618.	1.06	1.72	482.	1100.
JAPAN	M	80 8 24	56.44N	135.23W	14265.7	27511.2	0.0	2.000	2116.	1.06	1.67	3364.	5500.
JAPAN	M	79 8 11	56.03N	135.28W	14252.1	27528.1	0.0	1.167	1203.	1.03	1.30	777.	1980.
JAPAN	M	79 8 26	58.40N	140.27W	14409.2	30078.6	0.0	0.833	854.	1.02	1.37	2006.	2860.
JAPAN	M	80 9 4	55.09N	141.36W	14344.7	30575.3	0.0	1.417	1437.	1.01	1.36	1203.	2640.
JAPAN	M	80 7 30	55.52N	135.20W	14247.6	27455.0	0.0	2.167	2192.	1.01	1.46	2368.	5060.
JAPAN	S	80 7 17	55.54N	140.59W	14423.9	30316.5	0.0	1.333	1341.	1.01	1.46	859.	2200.
JAPAN	S	80 9 2	58.42N	140.51W	14361.5	30180.6	0.0	1.250	1253.	1.00	1.41	267.	1340.
JAPAN	M	79 8 25	58.42N	140.47W	14371.9	30166.7	0.0	1.250	1251.	1.00	1.44	2049.	3360.
JAPAN	M	79 8 25	55.13N	134.28W	14178.3	26933.4	0.0	0.563	562.	1.00	1.84	518.	1100.
USSR	M	79 8 10	58.46N	140.55W	14378.5	30230.4	0.0	0.917	910.	0.99	1.58	190.	1100.
JAPAN	M	80 8 23	56.04N	135.23W	14265.7	27511.2	0.0	2.500	2449.	0.98	1.55	2391.	4840.
JAPAN	M	79 9 17	56.01N	135.22W	14255.7	27485.3	0.0	1.917	1875.	0.98	1.51	4065.	5940.
JAPAN	M	79 7 24	55.55N	135.18W	14239.7	27424.9	0.0	1.917	1872.	0.98	1.52	328.	2200.
JAPAN	M	80 8 14	56.01A	135.26W	14248.0	27504.6	0.0	2.500	2440.	0.98	1.63	4380.	6320.
JAPAN	M	80 9 10	57.55N	137.38W	14516.7	29024.8	0.0	2.333	2269.	0.97	1.53	6091.	8360.
JAPAN	M	79 9 17	57.56N	137.47W	14503.9	29070.4	0.0	1.417	1370.	0.97	1.38	1930.	3300.
JAPAN	S	80 7 17	58.44N	140.47W	14385.5	30184.4	0.0	0.500	482.	0.96	1.12	178.	660.
JAPAN	M	79 8 3	56.01N	135.28W	14244.1	27514.2	0.0	1.250	1205.	0.96	1.65	995.	2200.
JAPAN	M	79 8 22	55.41N	135.08W	14204.9	27285.6	0.0	1.167	1123.	0.96	1.57	837.	1760.
JAPAN	S	80 7 15	55.10N	141.37W	14439.5	30587.7	0.0	0.667	639.	0.96	1.33	3321.	3960.
JAPAN	M	79 8 21	59.07N	141.34W	14425.3	30550.6	0.0	1.167	1114.	0.96	1.43	3286.	4400.
JAPAN	M	79 8 16	56.03N	135.28W	14252.1	27528.1	0.0	1.833	1750.	0.95	1.34	1550.	3300.

NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

139 available trawl records (exceeding 500 lbs/hr CPUE) were not included.

TABLE E-12. PACIFIC OCEAN PERCH, OCTOBER-DECEMBER 1979-80

NATION	ISSUE CLASS	LATE TIMEPDD	LAT	LCNG	APPROX LORAN-C 6X	6Y	RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	791016	5932N	14336W	14260.6	31128.6	0.0	115.	0.250	6242.	24.97	1.31	4758.	11000.
JAPAN	M	791015	5610N	13527W	14254.0	27523.3	0.0	190.	1.333	24429.	18.32	1.67	2851.	27280.
JAPAN	M	791025	5610N	13526W	14284.2	27566.7	0.0	159.	1.333	24285.	18.21	1.55	10915.	35200.
JAPAN	M	791031	5558N	13524W	14239.9	27474.2	0.0	131.	2.417	28029.	11.60	1.49	73611.	101640.
JAPAN	M	791022	5610N	13522W	14295.9	27557.0	0.0	137.	1.333	15415.	11.56	1.43	3945.	19360.
JAPAN	M	791013	5613N	13522W	14291.8	27549.7	0.0	142.	1.333	13238.	11.35	1.35	4562.	17920.
JAPAN	M	79113	5538N	13526W	14236.0	27483.9	0.0	140.	1.250	12371.	9.90	1.67	1709.	14080.
JAPAN	M	791015	5603N	13528W	14252.1	27528.1	0.0	183.	1.500	14129.	9.42	1.59	5011.	19140.
JAPAN	M	79111	5602N	13528W	14246.1	27521.1	0.0	186.	1.500	13604.	9.07	1.56	5316.	18920.
JAPAN	M	79106	5603N	13528W	14252.1	27528.1	0.0	173.	1.000	9013.	9.01	1.64	3967.	12920.
JAPAN	M	79103	5607N	13525W	14273.9	27542.2	0.0	169.	1.833	16244.	8.86	1.70	8616.	24860.
JAPAN	M	791025	5603N	13528W	14252.1	27528.1	0.0	191.	1.917	16524.	8.62	1.71	18236.	34760.
JAPAN	M	791031	5603N	13528W	14252.1	27528.1	0.0	166.	1.667	14124.	8.47	1.52	7216.	21340.
JAPAN	M	791027	5603N	13531W	14246.3	27542.5	0.0	219.	1.167	9833.	8.43	1.80	4467.	14300.
JAPAN	M	79104	5603N	13528W	14252.1	27528.1	0.0	172.	1.833	14473.	7.89	1.66	8167.	22660.
JAPAN	M	791026	5601N	13526W	14246.0	27504.6	0.0	175.	1.167	9163.	7.85	1.56	2057.	11220.
JAPAN	M	79103	5603N	13521W	14253.6	27473.6	0.0	167.	2.000	15511.	7.76	1.78	15509.	31020.
JAPAN	M	79101	5610N	13530W	14270.5	27567.7	0.0	150.	1.500	10532.	7.02	1.64	6628.	17160.
JAPAN	M	79112	5603N	13529W	14250.1	27532.9	0.0	191.	1.333	9073.	6.80	1.67	5887.	14960.
JAPAN	M	79104	5609N	13529W	14274.3	27575.7	0.0	161.	2.000	12998.	6.50	1.65	6802.	19000.
JAPAN	M	79101	5611N	13524W	14292.1	27566.5	0.0	128.	1.333	8591.	6.44	1.48	7469.	16060.
JAPAN	M	791029	5558N	13525W	14236.0	27479.0	0.0	137.	1.583	9886.	6.24	1.34	3314.	13200.
JAPAN	M	79104	5610N	13521W	14293.7	27544.9	0.0	153.	1.333	7550.	5.66	1.43	4770.	12320.
JAPAN	M	79105	5604N	13523W	14265.7	27511.2	0.0	150.	1.667	9433.	5.66	1.54	8167.	17000.
JAPAN	S	79116	5643N	13559W	14360.2	27977.6	0.0	164.	2.333	12225.	5.45	1.57	5535.	18260.
JAPAN	M	791013	5609N	13529W	14274.3	27575.7	0.0	143.	1.333	7238.	5.43	1.40	3762.	11000.
JAPAN	M	791010	5601N	13421W	14145.6	26845.8	0.0	128.	2.333	11665.	5.00	1.71	4395.	15060.
JAPAN	S	79118	5558N	13525W	14230.1	27465.4	0.0	191.	3.000	14672.	4.89	1.59	3148.	17820.
JAPAN	S	791024	5641N	14040W	14383.1	30133.4	0.0	142.	2.500	11081.	4.75	1.82	1759.	13640.
JAPAN	M	79108	5518N	13459W	14184.7	27181.7	0.0	183.	1.500	7065.	4.71	1.63	3275.	10340.
JAPAN	M	79113	5603N	13529W	14250.1	27532.9	0.0	186.	1.667	7738.	4.64	1.69	3462.	11220.
JAPAN	M	791031	5602N	13530W	14244.2	27530.7	0.0	219.	0.833	3664.	4.40	1.58	1836.	5500.
JAPAN	M	791014	5610N	13530W	14276.5	27567.7	0.0	127.	1.500	6391.	4.26	1.30	3729.	10120.
JAPAN	M	79101	5601N	13521W	14257.6	27480.5	0.0	167.	2.000	8453.	4.23	1.85	13547.	22000.
JAPAN	M	791015	5507N	13520W	14243.7	27448.1	0.0	184.	1.500	6260.	4.17	1.51	2760.	5020.
JAPAN	M	791026	5601N	13528W	14244.1	27514.2	0.0	191.	0.250	1030.	4.12	1.66	290.	1320.
JAPAN	M	791026	5601N	13528W	14244.1	27514.2	0.0	186.	0.417	1639.	3.93	1.80	561.	2200.
JAPAN	M	791014	5610N	13530W	14276.5	27587.7	0.0	146.	1.500	5751.	3.83	1.34	4809.	10560.
JAPAN	M	791029	5551N	13519W	14222.1	27403.1	0.0	219.	0.667	2547.	3.62	1.62	6253.	8200.
JAPAN	M	791030	5535N	13501W	14188.2	27203.1	0.0	208.	1.063	4061.	3.75	1.73	5179.	9240.
JAPAN	M	791029	5559N	13528W	14236.1	27500.3	0.0	219.	2.000	7341.	3.67	1.70	1899.	9240.
JAPAN	M	791014	5610N	13529W	14276.4	27583.0	0.0	144.	1.500	5132.	3.42	1.32	8288.	13420.
JAPAN	M	791015	5611N	13530W	14280.5	27595.0	0.0	141.	3.167	10479.	3.31	1.30	6901.	17360.
JAPAN	M	80108	5516N	13431W	14183.3	26962.8	0.0	115.	0.667	2189.	3.28	1.95	12311.	14520.
JAPAN	M	79113	5602N	13530W	14268.3	27573.2	0.0	180.	1.833	5859.	3.20	1.61	10201.	16060.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-12 (continued). PACIFIC OCEAN PERCH, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LONAN-C	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	S	7911 6	5555N	13525W	14226.1	27458.7	0.0	191.	7942.	3.16	1.61	4618.	12760.
JAPAN	M	801031	5916N	14158W	14427.3	30708.4	0.0	202.	4380.	3.09	1.27	20700.	25080.
JAPAN	M	7911 2	5604N	13523W	14265.7	27511.2	0.0	177.	5692.	2.97	1.35	6620.	12320.
JAPAN	M	7910 7	5528N	13457W	14177.4	27154.9	0.0	161.	2413.	2.90	1.68	887.	3300.
JAPAN	M	7910 2	5609N	13525W	14282.0	27556.7	0.0	169.	4778.	2.87	1.65	5122.	9700.
JAPAN	S	791026	5746N	13705W	14534.0	28808.9	0.0	164.	8848.	2.75	1.57	2592.	11440.
JAPAN	M	791027	5559N	13528W	14236.1	27500.3	0.0	197.	2904.	2.68	1.56	4796.	7700.
JAPAN	M	791027	5603N	13523W	14261.7	27504.2	0.0	178.	4794.	2.61	1.52	10606.	15400.
JAPAN	M	7911 4	5601N	13527W	14246.0	27509.4	0.0	164.	1930.	2.57	1.62	1590.	3520.
JAPAN	M	7910 8	5501N	13422W	14147.7	26850.7	0.0	123.	3789.	2.53	1.57	2591.	6380.
JAPAN	M	791012	5540N	13506W	14204.9	27269.6	0.0	186.	6009.	2.52	1.68	12531.	23360.
JAPAN	M	791016	5525N	13453W	14174.1	27118.6	0.0	169.	4139.	2.48	1.62	4221.	8360.
JAPAN	M	7911 1	5603N	13531W	14246.3	27542.5	0.0	230.	1724.	2.30	1.58	1136.	2860.
JAPAN	M	791027	5557N	13525W	14234.0	27472.2	0.0	122.	4159.	2.27	1.89	6621.	10780.
JAPAN	M	801031	5519N	14208W	14422.4	30766.4	0.0	194.	2250.	2.25	1.26	4790.	7040.
JAPAN	M	791030	5602N	13530W	14244.2	27530.7	0.0	215.	2219.	2.22	1.62	3281.	5500.
JAPAN	M	7910 5	5600N	13523W	14249.8	27483.2	0.0	175.	1472.	2.21	1.54	1608.	3020.
JAPAN	S	791013	5747N	13704W	14541.2	28813.0	0.0	180.	6112.	2.16	1.51	3128.	9240.
JAPAN	M	791031	5553N	13521W	14226.0	27426.0	0.0	137.	2655.	2.12	1.42	1745.	4400.
JAPAN	M	791028	5609N	13527W	14278.2	27566.2	0.0	148.	2454.	2.10	1.33	846.	3300.
JAPAN	S	791012	5748N	13716W	14523.1	28871.5	0.0	180.	5165.	2.07	1.55	5395.	10560.
JAPAN	M	791030	5526N	13448W	14187.3	27059.3	0.0	149.	3746.	2.04	1.67	10334.	14080.
JAPAN	M	7911 6	5531N	13459W	14184.7	27181.7	0.0	180.	2818.	1.88	1.62	4002.	6820.
JAPAN	S	8010 2	5644N	13600W	14362.7	27990.3	0.0	180.	5077.	1.85	1.72	3943.	9020.
JAPAN	M	791025	5604N	13527W	14278.2	27566.2	0.0	148.	3092.	1.69	1.68	16546.	13640.
JAPAN	M	801030	5757N	13748W	14507.3	29083.4	0.0	131.	3078.	1.68	1.33	3762.	7040.
JAPAN	M	7911 5	5602N	13527W	14250.0	27516.3	0.0	175.	1388.	1.67	1.50	3892.	5280.
JAPAN	S	791110	5746N	13705W	14534.0	28808.0	0.0	180.	3266.	1.63	1.51	2674.	5940.
JAPAN	M	791027	5604N	13524W	14263.8	27516.0	0.0	176.	2479.	1.57	1.60	14663.	17160.
JAPAN	M	8010 5	5606N	13525W	14269.9	27535.0	0.0	169.	2601.	1.56	1.79	6199.	8800.
JAPAN	M	801030	5518N	14209W	14411.9	30760.2	0.0	159.	1782.	1.53	1.16	12078.	13860.
JAPAN	M	791031	5526N	13454W	14175.8	27125.0	0.0	213.	2990.	1.38	1.67	16810.	19600.
JAPAN	M	8010 2	5544N	13509W	14214.4	27305.2	0.0	131.	1370.	1.37	1.61	2810.	4180.
JAPAN	S	791027	5746N	13706W	14532.1	28812.2	0.0	191.	4715.	1.35	1.46	3865.	8580.
JAPAN	M	801029	5534N	14326W	14305.4	31121.0	0.0	115.	992.	1.32	1.25	3408.	4400.
JAPAN	M	8010 2	5558N	13526W	14236.0	27483.9	0.0	175.	878.	1.32	1.64	1762.	2640.
JAPAN	M	8010 3	5606N	13524W	14271.6	27530.3	0.0	167.	2383.	1.30	1.64	9937.	12320.
JAPAN	M	791016	5535N	13506W	14201.2	27263.5	0.0	167.	3846.	1.28	1.74	13094.	16940.
JAPAN	M	791029	5603N	13528W	14252.1	27528.1	0.0	180.	2427.	1.27	1.37	5493.	7920.
JAPAN	S	7910 7	5845N	14054W	14374.2	30217.9	0.0	180.	3147.	1.26	1.40	4993.	8140.
JAPAN	M	7910 3	5603N	13522W	14261.7	27495.4	0.0	212.	2499.	1.25	1.56	8501.	11000.
JAPAN	M	801031	5522N	14212W	14434.5	30805.9	0.0	191.	2186.	1.25	1.68	24214.	26400.
JAPAN	M	7911 2	5609N	13525W	14282.0	27556.7	0.0	153.	2478.	1.24	1.35	16662.	19140.
JAPAN	M	7911 1	5603N	13529W	14250.1	27532.9	0.0	184.	1545.	1.24	1.58	3075.	4620.
JAPAN	M	791010	5501N	13421W	14149.6	26845.8	0.0	130.	3501.	1.24	1.61	10139.	13640.

*** NOTE *** THE ACCURACY OF POSITION AND LONAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-12 (continued). PACIFIC OCEAN PERCH, OCTOBER-DECEMBER 1979-80

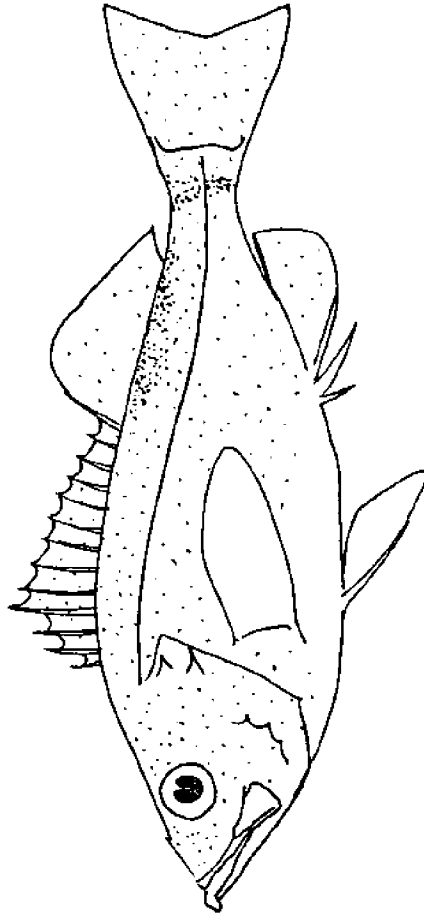
NATION	VESEL CLASS	DATE	LAT	LONG	APPROX BX	LOMAN-C BY	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	791029	5603N	15226W	14255.9	27518.5	0.0	177.	1.083	1313.	1.21	1.63	10127.	11440.
JAPAN	S	791018	5534N	14311W	14293.5	31133.8	0.0	124.	1.000	1212.	1.21	1.47	20788.	22000.
JAPAN	M	791007	5531N	13500W	14182.7	27166.6	0.0	166.	1.667	1942.	1.17	1.67	7738.	9680.
JAPAN	M	791111	5603N	13529W	14250.1	27532.9	0.0	175.	1.833	2120.	1.16	1.61	3600.	5720.
JAPAN	S	801013	5756N	13749W	14495.8	29078.5	0.0	191.	2.500	2886.	1.16	1.53	5692.	8580.
JAPAN	M	801030	5640N	14040W	14376.3	30124.4	0.0	131.	1.000	1149.	1.15	1.24	4791.	5940.
JAPAN	M	791101	5610N	13528W	14280.3	27578.2	0.0	131.	1.500	1685.	1.12	1.34	1615.	3300.
JAPAN	S	791023	5641N	14042W	14378.0	30140.3	0.0	137.	2.500	2775.	1.11	1.44	4045.	6820.
JAPAN	M	791104	5608N	13525W	14278.0	27549.4	0.0	159.	1.333	1453.	1.09	1.34	8447.	9900.
JAPAN	M	791103	5559N	13524W	14243.9	27481.1	0.0	182.	1.917	2086.	1.09	1.72	4074.	6160.
JAPAN	S	791110	5636N	13533W	14343.9	27905.8	0.0	180.	2.167	2243.	1.04	1.62	3037.	5280.
JAPAN	M	791104	5600N	13521W	14251.6	27473.6	0.0	165.	2.333	2389.	1.02	1.68	11691.	14080.
JAPAN	M	791028	5612N	13527W	14290.4	27588.1	0.0	159.	2.083	2114.	1.01	1.40	2286.	4400.
JAPAN	S	791006	5533N	14341W	14252.6	31150.1	0.0	153.	2.367	2384.	1.01	1.25	4876.	7260.
JAPAN	M	791029	5610N	13520W	14295.6	27540.2	0.0	148.	2.167	2123.	0.96	1.22	3817.	5940.
JAPAN	M	791008	5530N	13457W	14284.8	27166.1	0.0	144.	1.667	1626.	0.98	1.34	2114.	3740.
JAPAN	M	791029	5610N	13531W	14274.5	27592.5	0.0	142.	1.917	1846.	0.96	1.24	5194.	7040.
JAPAN	M	791029	5603N	13529W	14250.1	27532.9	0.0	191.	1.667	1601.	0.96	1.43	7419.	9020.
JAPAN	S	801003	5746N	13703W	14548.3	28818.0	0.0	169.	2.500	2334.	0.93	1.73	2066.	4400.
JAPAN	S	801013	5749N	13717W	14526.4	28884.7	0.0	137.	3.083	2860.	0.93	1.12	1540.	4400.
JAPAN	M	791105	5528N	13457W	14177.4	27154.9	0.0	224.	1.500	1373.	0.92	1.62	4787.	6160.
JAPAN	S	791016	5533N	14337W	14265.8	31140.0	0.0	119.	1.167	1062.	0.91	1.25	1138.	2200.
JAPAN	M	801031	5923N	14211W	14445.2	30812.1	0.0	205.	1.333	1161.	0.87	1.40	5659.	6820.
JAPAN	M	791104	5602N	13523W	14257.7	27497.1	0.0	180.	1.667	1440.	0.87	1.73	19892.	21340.
JAPAN	M	791002	5602N	13521W	14261.6	27487.5	0.0	169.	2.167	1793.	0.83	1.76	10527.	12320.
JAPAN	S	801002	5638N	13544W	14348.0	27914.4	0.0	219.	3.167	2608.	0.82	1.50	7952.	10560.
JAPAN	M	801007	5516N	13432W	14181.4	28967.8	0.0	112.	0.667	519.	0.81	2.32	13101.	13640.
JAPAN	M	791015	5600N	13521W	14251.6	27473.6	0.0	168.	2.800	1611.	0.81	1.72	11149.	12760.
JAPAN	M	791105	5537N	13504W	14197.5	27241.6	0.0	169.	2.750	2195.	0.80	1.68	7925.	10120.
JAPAN	S	801007	5804N	13835W	14447.5	29334.3	0.0	164.	2.500	1995.	0.80	1.54	5465.	7480.
JAPAN	M	791101	5611N	13530W	14280.5	27595.0	0.0	134.	1.167	922.	0.79	1.34	1938.	2860.
JAPAN	S	791017	5523N	14205W	14459.3	30797.1	0.0	137.	1.500	1139.	0.76	1.54	1061.	2200.
JAPAN	S	801004	5746N	13706W	14532.1	28812.2	0.0	175.	2.750	1980.	0.72	1.46	3740.	3740.
JAPAN	M	791028	5608N	13529W	14270.3	27568.5	0.0	159.	1.033	779.	0.72	1.62	57741.	58520.
JAPAN	M	791031	5603N	13524W	14259.8	27509.0	0.0	176.	1.500	1064.	0.71	1.82	15656.	16720.
JAPAN	M	791017	5605N	13526W	14264.0	27532.7	0.0	176.	0.667	456.	0.68	2.06	43544.	44000.
JAPAN	M	791016	5601N	13523W	14251.7	27490.2	0.0	172.	1.167	790.	0.68	1.76	53990.	54780.
JAPAN	M	791104	5609N	13530W	14272.4	27580.5	0.0	159.	1.833	1187.	0.65	1.65	4753.	5940.
JAPAN	S	791110	5642N	14355W	14355.8	27969.4	0.0	169.	2.167	1377.	0.64	1.64	3023.	4400.
JAPAN	M	791006	5557N	13527W	14230.1	27481.9	0.0	235.	2.167	1374.	0.63	1.52	5006.	6380.
JAPAN	S	791028	5835N	14027W	14402.5	30065.6	0.0	153.	3.500	2194.	0.63	1.33	4620.	4620.
JAPAN	S	791002	5748N	13712W	14510.9	28855.0	0.0	180.	3.833	2394.	0.62	1.44	5940.	5940.
JAPAN	M	791005	5555N	13519W	14253.5	27457.0	0.0	164.	1.667	1012.	0.61	1.73	8448.	9460.
JAPAN	M	791102	5602N	13523W	14257.7	27497.1	0.0	175.	2.000	1193.	0.60	1.69	36967.	38060.
JAPAN	S	791002	5756N	13748W	14501.9	29074.4	0.0	164.	2.833	1659.	0.59	1.61	3121.	4840.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-12 (continued). PACIFIC OCEAN PERCH, OCTOBER-DECEMBER 1979-80

NATION	VESSL CLASS	DATE YTHDD	LAT	LONG	APPRX BX	LRAN-C 6Y	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	791028	5602N	13523W	14257.7	27497.1	0.0	177.	1.667	952.	0.57	1.65	22368.	23320.
JAPAN	M	791114	5611N	13531W	14278.6	27599.8	0.0	142.	2.000	1140.	0.57	1.12	5680.	6420.
JAPAN	H	791030	5529N	13458W	14175.2	27165.4	0.0	159.	2.917	1640.	0.56	1.70	12220.	13860.
JAPAN	S	791015	5600N	13822W	14452.9	29247.0	0.0	180.	3.583	2006.	0.56	1.76	4594.	6600.
JAPAN	M	791016	5544N	13509W	14214.4	27309.2	0.0	119.	1.333	742.	0.56	1.50	2558.	3300.
JAPAN	H	791031	5527N	13502W	14164.1	27173.9	0.0	235.	1.000	542.	0.54	1.61	2758.	3300.
JAPAN	M	791012	5530N	13501W	14177.1	27185.9	0.0	191.	2.000	1082.	0.54	1.64	7938.	9020.
JAPAN	N	801031	5522N	14211W	14437.4	30802.9	0.0	191.	1.667	890.	0.53	1.51	6810.	7700.
JAPAN	S	791027	5637N	14006W	14440.9	29976.2	0.0	131.	2.500	1336.	0.53	1.85	3064.	4400.
JAPAN	S	801016	5748N	13716W	14523.1	28971.5	0.0	180.	3.583	1699.	0.53	1.60	6901.	8800.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***



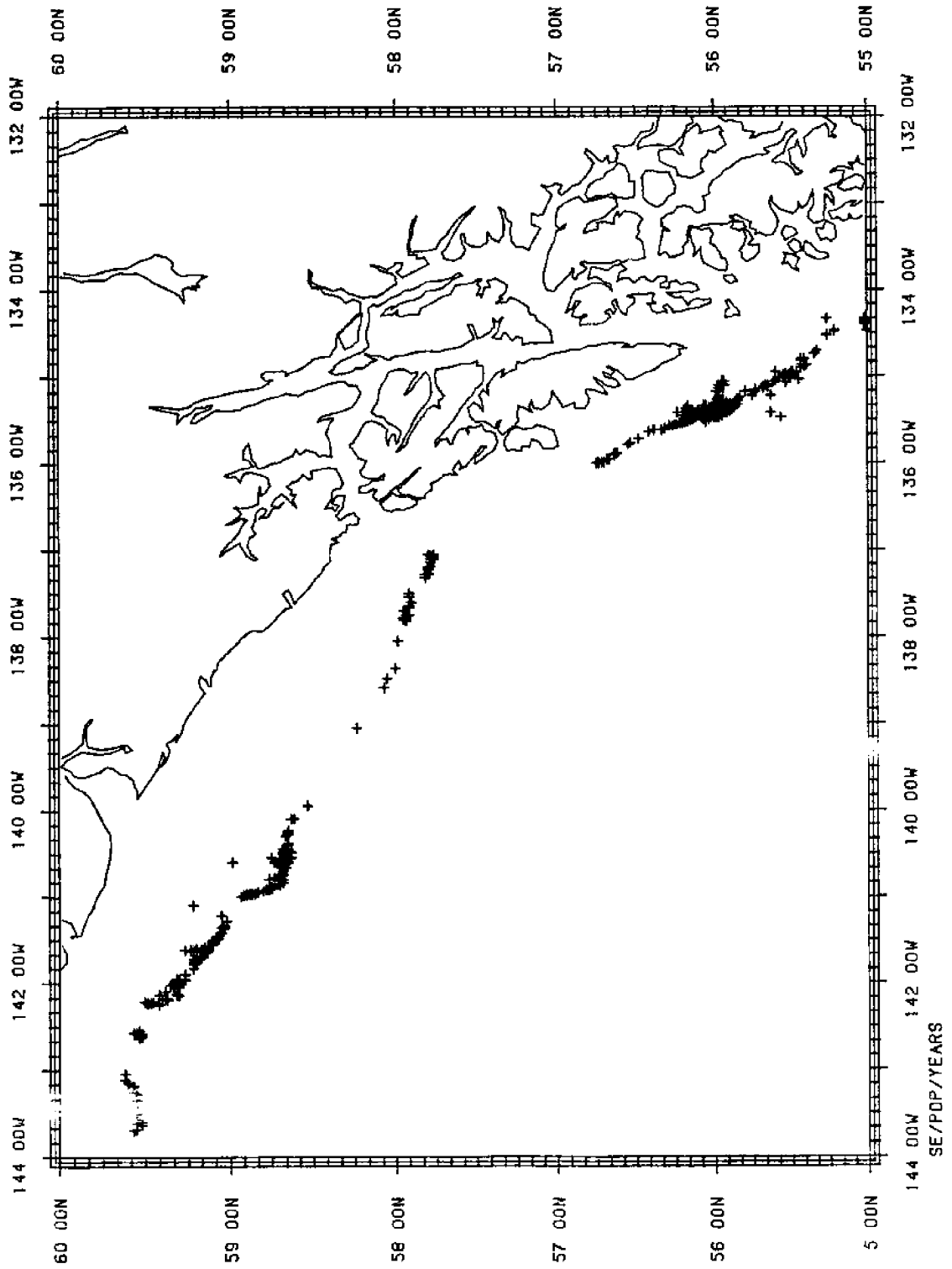


FIGURE E-4. TRAWLING LOCATIONS FOR PACIFIC OCEAN PERCH. ALL MONTHS, 1979-80

TABLE E-13. OTHER ROCKFISH, APRIL-JUNE, 1979-80

VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	80 10	55.6N	135.23W	14233.9	27455.8	0.0	0.083	17264.	207.17	0.62	996.	18264.
JAPAN	80 13	55.5N	135.25W	14241.9	27465.9	0.0	0.667	13595.	20.39	1.22	705.	14300.
JAPAN	80 5	55.7N	135.23W	14237.9	27462.6	0.0	0.250	4370.	17.48	0.91	690.	5060.
JAPAN	79 18	55.1N	135.17W	14226.0	27393.3	0.0	0.417	2970.	7.13	0.48	1430.	4400.
JAPAN	80 4	56.0N	135.25W	14257.9	27513.8	0.0	1.000	6934.	6.93	3.06	1206.	8144.
JAPAN	80 8	55.5N	135.25W	14241.9	27485.9	0.0	0.607	3787.	5.68	0.68	5573.	9460.
JAPAN	80 9	55.3N	135.06W	14182.7	27186.6	0.0	0.833	3697.	4.44	2.34	703.	4400.
JAPAN	80 7	56.0N	142.4W	14244.0	27477.6	0.0	1.250	4667.	3.89	3.09	633.	5500.
JAPAN	79 12	55.5N	135.17W	14245.5	27433.5	0.0	1.250	4697.	3.76	0.57	1903.	6600.
JAPAN	80 6	56.0N	135.25W	14244.0	27497.6	0.0	0.833	3042.	3.65	0.57	5536.	8580.
JAPAN	80 11	55.5N	135.25W	14241.9	27465.9	0.0	1.500	4085.	2.72	2.77	1195.	5280.
JAPAN	80 4 9	56.0N	135.25W	14254.1	27535.9	0.0	1.167	2950.	2.53	3.10	1450.	4400.
JAPAN	80 18	56.0N	142.0W	14452.0	30751.3	0.0	0.417	3049.	2.52	0.71	1811.	2860.
JAPAN	79 22	56.0N	135.25W	14240.1	27597.2	0.0	1.083	2464.	2.27	4.22	176.	2640.
JAPAN	79 14	55.8N	135.25W	14238.0	27479.0	0.0	1.42	2305.	2.20	1.75	4655.	7040.
JAPAN	79 13	55.5N	135.24W	14228.1	27453.9	0.0	1.28	1619.	2.16	0.74	1581.	3300.
JAPAN	80 15	55.9N	135.24W	14243.9	27481.1	0.0	1.750	3586.	2.05	2.54	814.	4400.
JAPAN	80 10	56.0N	135.25W	14241.9	27485.9	0.0	1.333	2504.	1.86	2.81	352.	2860.
JAPAN	79 14	55.2N	135.25W	14224.1	27414.5	0.0	1.667	2474.	1.65	2.71	1046.	3520.
JAPAN	79 21	56.5N	135.86W	14335.1	27335.1	0.0	1.083	1373.	1.48	1.65	3706.	6380.
JAPAN	79 19	56.1N	135.31W	14282.7	27607.1	0.0	1.000	1159.	1.27	0.52	1707.	3060.
JAPAN	80 8	56.0N	135.26W	14246.0	27497.6	0.0	0.833	958.	1.19	0.52	1891.	3080.
JAPAN	79 21	56.2N	135.36W	14314.4	27705.6	0.0	1.34	1482.	1.16	1.64	794.	1760.
JAPAN	79 17	55.9N	135.24W	14224.1	27447.2	0.0	0.917	979.	1.11	0.38	938.	2420.
JAPAN	79 6 7	56.7N	135.25W	14268.2	27556.5	0.0	1.417	1504.	1.07	1.63	1661.	2640.
JAPAN	80 5 5	56.0N	135.27W	14243.0	27502.4	0.0	1.000	942.	0.94	3.95	2456.	3560.
JAPAN	80 6 3	56.0N	135.25W	14245.9	27499.8	0.0	0.833	746.	0.90	0.56	5218.	6160.
JAPAN	80 6 6	55.7N	135.27W	14239.8	27457.8	0.0	1.083	984.	0.89	0.80	3876.	4840.
JAPAN	80 6 8	55.8N	135.26W	14247.6	27455.0	0.0	1.333	1140.	0.86	1.42	2600.	3740.
JAPAN	79 21	56.3N	135.86W	14337.5	27825.9	0.0	0.750	836.	0.85	0.59	904.	1540.
JAPAN	80 14	56.0N	135.25W	14245.9	27499.8	0.0	0.833	700.	0.84	1.23	1260.	1980.
JAPAN	79 15	56.1N	135.25W	14256.1	27571.3	0.0	1.500	1233.	0.82	0.51	1407.	2640.
JAPAN	80 11	56.1N	135.33W	14257.0	27531.3	0.0	1.43	984.	0.69	0.21	3636.	4620.
JAPAN	80 14	55.6N	135.10W	14256.8	27406.6	0.0	1.75	785.	0.63	1.36	2735.	3520.
JAPAN	80 12	56.1N	135.32W	14250.8	27611.8	0.0	1.167	722.	0.62	0.84	3238.	3960.
JAPAN	80 14	56.0N	135.25W	14261.9	27520.8	0.0	1.500	897.	0.59	1.22	13853.	14740.
JAPAN	80 6 7	55.8N	135.24W	14235.9	27474.2	0.0	1.500	886.	0.59	1.10	1974.	2860.
JAPAN	80 10	56.3N	135.24W	14255.8	27509.0	0.0	1.167	606.	0.52	1.34	1814.	2420.

*** BLIE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-14. OTHER ROCKFISH, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	YMMDD	LAT	LONG	APPN01	6X	APPN02	6Y	RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	80	514	5517N	13427W	14194.4	26947.9	0.0	110.	0.0	110.	0.333	28978.	86.93	1.37	02.	29040.
JAPAN	M	80	914	5523N	13445W	14182.0	27068.2	0.0	109.	0.0	109.	0.333	12100.	36.30	1.23	0.	12100.
JAPAN	S	80	919	5527N	14213W	14471.1	30854.9	0.0	110.	0.0	110.	0.167	5291.	31.75	1.78	6149.	11440.
JAPAN	M	79	917	5516N	13420W	14203.9	26968.1	0.0	113.	0.0	113.	0.917	28667.	31.27	0.81	3893.	32560.
JAPAN	M	80	810	5533N	13518W	14231.8	27411.5	0.0	100.	0.0	100.	1.000	30324.	30.32	0.76	1136.	31460.
JAPAN	M	80	826	5517N	13435W	14179.4	26987.6	0.0	105.	0.0	105.	0.667	19519.	29.28	1.06	281.	19800.
JAPAN	M	80	827	5516N	13426W	14192.7	26938.0	0.0	112.	0.0	112.	0.500	13751.	27.50	1.00	3625.	17380.
JAPAN	M	80	813	5524N	13517W	14229.9	27400.0	0.0	103.	0.0	103.	0.667	18040.	27.06	0.79	0.	18040.
JAPAN	M	80	817	5528N	13528W	14216.3	27466.5	0.0	103.	0.0	103.	1.500	39600.	26.40	1.24	0.	39600.
JAPAN	M	80	812	5554N	13517W	14237.7	27413.3	0.0	98.	0.0	98.	1.000	25738.	25.74	0.71	1322.	27060.
JAPAN	M	80	915	5517N	13427W	14194.4	26947.9	0.0	110.	0.0	110.	0.333	7196.	21.59	1.56	64.	7260.
JAPAN	M	80	913	5517N	13430W	14188.8	26962.8	0.0	112.	0.0	112.	1.167	24125.	20.68	1.23	75.	24200.
JAPAN	M	79	916	5517N	13428W	14192.5	26952.9	0.0	112.	0.0	112.	0.417	8443.	20.27	0.98	135.	8580.
JAPAN	M	80	828	5577N	13742W	14515.5	29055.1	0.0	109.	0.0	109.	0.333	6149.	18.45	0.84	451.	6600.
JAPAN	M	79	812	5555N	13521W	14233.9	27439.4	0.0	100.	0.0	100.	0.417	7195.	17.27	0.52	1605.	8500.
JAPAN	S	80	713	5537N	14233W	14494.8	31005.4	0.0	98.	0.0	98.	1.500	24870.	16.58	2.11	3290.	28160.
JAPAN	S	80	914	5513N	14143W	14445.8	30634.2	0.0	115.	0.0	115.	0.917	14875.	16.23	1.21	6925.	19800.
JAPAN	M	80	911	5556N	13522W	14235.7	27431.0	0.0	98.	0.0	98.	0.667	9746.	14.62	0.58	154.	9900.
JAPAN	M	79	919	5514N	13433W	14172.5	26963.0	0.0	112.	0.0	112.	0.167	2377.	14.26	0.97	43.	2420.
JAPAN	M	80	829	5638N	14006W	14447.5	29985.3	0.0	153.	0.0	153.	2.000	27610.	13.81	3.51	13090.	40700.
JAPAN	M	79	727	5554N	13519W	14233.8	27423.0	0.0	106.	0.0	106.	0.167	2221.	13.33	2.35	4379.	6500.
JAPAN	M	80	815	5555N	13518W	14235.7	27424.9	0.0	98.	0.0	98.	0.333	4361.	13.08	1.15	39.	4400.
JAPAN	M	80	925	5516N	13428W	14185.0	26947.9	0.0	111.	0.0	111.	0.167	1985.	11.91	1.19	2860.	2860.
JAPAN	M	80	915	5518N	13431W	14190.5	26972.8	0.0	112.	0.0	112.	1.500	16300.	10.87	1.15	640.	16940.
JAPAN	M	80	930	5516N	13427W	14190.3	26943.0	0.0	109.	0.0	109.	1.000	10712.	10.71	1.11	288.	11000.
JAPAN	M	80	825	5518N	13435W	14182.9	26992.7	0.0	115.	0.0	115.	0.500	5137.	10.27	0.81	363.	5500.
JAPAN	M	80	915	5516N	13430W	14185.2	26957.9	0.0	109.	0.0	109.	1.167	11916.	10.21	1.07	184.	12100.
JAPAN	M	80	830	5512N	14142W	14441.0	30821.9	0.0	115.	0.0	115.	0.333	3126.	9.38	0.95	6954.	10120.
JAPAN	M	80	913	5516N	13419W	14205.7	26903.1	0.0	115.	0.0	115.	1.333	10938.	8.20	1.00	1182.	12100.
JAPAN	S	80	713	5515N	14146W	14452.3	30662.0	0.0	115.	0.0	115.	0.417	3366.	8.02	1.19	154.	3520.
JAPAN	M	80	727	5520N	13440W	14190.7	27027.7	0.0	175.	0.0	175.	1.500	11660.	7.77	1.34	0.	11660.
JAPAN	M	80	926	5513N	13427W	14180.2	26928.4	0.0	279.	0.0	279.	1.500	11475.	7.65	3.09	1285.	12760.
JAPAN	M	80	824	5527N	13454W	14175.5	27134.5	0.0	126.	0.0	126.	0.500	3770.	7.54	0.59	1070.	4840.
JAPAN	S	80	811	5531N	14236W	14437.3	30958.5	0.0	98.	0.0	98.	0.500	3722.	7.44	1.11	5978.	9800.
JAPAN	M	79	730	5552N	13521W	14222.1	27419.3	0.0	208.	0.0	208.	0.583	4238.	7.27	3.47	1042.	5280.
JAPAN	M	80	817	5526N	13452W	14179.6	27115.1	0.0	175.	0.0	175.	1.167	8434.	7.23	0.57	366.	8400.
JAPAN	M	80	929	5517N	13427W	14194.4	26947.9	0.0	112.	0.0	112.	0.833	5082.	7.06	1.02	2918.	8800.
JAPAN	M	80	724	5801N	13805W	14454.4	29188.0	0.0	109.	0.0	109.	1.000	6855.	6.85	3.10	1285.	8140.
JAPAN	S	80	811	5532N	14236W	14445.4	30967.7	0.0	98.	0.0	98.	0.417	2818.	6.76	0.89	1582.	4400.
JAPAN	M	79	920	5524N	13449W	14176.1	27093.4	0.0	115.	0.0	115.	0.500	3280.	6.56	1.09	460.	3740.
USSR	M	79	911	5534N	14234W	14467.4	30980.5	0.0	86.	0.0	86.	0.167	1091.	6.55	0.62	9.	1100.
JAPAN	S	80	718	5512N	14141W	14443.7	30618.7	0.0	121.	0.0	121.	0.417	2644.	6.35	1.10	876.	3520.
JAPAN	M	79	829	5513N	13428W	14178.3	26933.4	0.0	175.	0.0	175.	1.500	9449.	6.30	1.24	1551.	11000.
JAPAN	M	80	813	5559N	13522W	14247.7	27471.5	0.0	115.	0.0	115.	0.333	1966.	5.90	1.11	454.	2420.
JAPAN	M	80	817	5529N	13457W	14191.1	27160.5	0.0	142.	0.0	142.	1.500	8706.	5.80	0.52	534.	9240.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-14 (continued). OTHER ROCKFISH, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPRX 6X	LCRAN-C 6Y	RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	80 327	5517N	13430W	14185.8	20962.8	0.0	109	1.000	5772.	5.77	1.09	828.	6600.
JAPAN	M	80 726	5539N	13528W	14240.0	27490.7	0.0	148	1.500	8634.	5.76	1.45	606.	9240.
JAPAN	M	79 923	5756N	13747W	14503.9	29070.4	0.0	115	0.083	470.	5.64	0.70	190.	660.
JAPAN	M	79 729	5522N	13521W	14222.1	27419.3	0.0	202	0.500	2587.	5.17	2.84	1153.	3740.
JAPAN	M	80 514	5531N	14335W	14245.3	31124.7	0.0	145	0.633	4255.	5.11	0.58	13345.	17600.
JAPAN	M	80 514	5518N	13430W	14195.3	26907.8	0.0	110	2.333	11853.	5.08	1.20	242.	12100.
JAPAN	M	80 810	5535N	13523W	14230.0	27449.0	0.0	153	1.167	5815.	4.98	3.03	5625.	11440.
JAPAN	M	80 827	5533N	14335W	14272.2	31135.0	0.0	119	0.500	2337.	4.71	0.81	1603.	3960.
JAPAN	M	79 8 1	5535N	13428W	14185.4	26943.0	0.0	110	0.667	3004.	4.51	0.89	76.	3080.
JAPAN	M	79 928	5847N	14056W	14382.8	30242.8	0.0	208	1.000	4437.	4.44	1.53	2823.	7260.
JAPAN	S	80 513	5513N	14144W	14446.3	30646.5	0.0	114	0.500	2190.	4.38	1.53	6610.	11000.
JAPAN	M	80 829	5839N	14015W	14432.2	30026.8	0.0	114	1.333	5597.	4.20	0.86	2103.	7700.
JAPAN	S	80 731	5931N	14336W	14252.3	31119.7	0.0	98	0.500	2075.	4.15	0.68	1225.	3300.
JAPAN	M	80 929	5518N	13427W	14197.9	26952.9	0.0	120	1.000	3896.	3.90	0.85	504.	4400.
JAPAN	M	80 822	5531N	13500W	14182.7	27186.6	0.0	164	1.667	6435.	3.86	0.97	2145.	6580.
JAPAN	M	80 912	5538N	13521W	14245.7	27458.8	0.0	104	0.833	2852.	3.42	0.84	448.	3300.
JAPAN	M	80 731	5532N	13504W	14175.7	27212.1	0.0	252	0.500	1697.	3.39	2.56	723.	2420.
JAPAN	S	80 818	5534N	14235W	14484.5	30983.3	0.0	142	0.500	1631.	3.38	1.00	26909.	28600.
JAPAN	M	80 630	5839N	14005W	14456.9	29990.8	0.0	120	0.333	1104.	3.31	0.84	436.	1540.
JAPAN	M	79 921	5748N	13717W	14521.1	28875.6	0.0	142	0.667	2181.	3.27	0.65	26419.	28600.
JAPAN	M	80 724	5603N	13829W	14454.8	29303.6	0.0	126	2.000	6451.	3.23	0.57	1689.	2140.
JAPAN	S	80 8 7	5828N	14214W	14476.3	30687.1	0.0	110	0.417	1329.	3.19	1.39	431.	1760.
JAPAN	M	80 825	5520N	13436W	14185.2	27007.8	0.0	115	0.500	1583.	3.17	0.56	175.	1760.
JAPAN	S	80 723	5602N	13528W	14272.2	27563.7	0.0	180	3.333	10523.	3.16	3.15	917.	11440.
JAPAN	S	80 9 9	5529N	14214W	14484.2	30876.4	0.0	108	1.000	3864.	3.06	1.55	5736.	8800.
JAPAN	S	80 717	5841N	14033W	14400.8	30108.8	0.0	129	0.107	495.	2.97	0.68	825.	1320.
JAPAN	M	80 917	5607N	13843W	14447.3	29395.6	0.0	186	2.500	7203.	2.82	3.26	4892.	12100.
JAPAN	M	79 730	5552N	13521W	14222.1	27419.3	0.0	202	0.833	2365.	2.84	1.55	1595.	3960.
JAPAN	M	80 9 9	5935N	14332W	14281.9	31127.4	0.0	113	2.083	5617.	2.70	0.87	983.	6600.
JAPAN	S	80 8 5	5635N	14067W	14451.7	29996.0	0.0	60	0.500	1344.	2.69	1.11	416.	1760.
JAPAN	M	80 8 4	5633N	13529W	14250.1	27532.9	0.0	219	1.833	4626.	2.54	2.76	7004.	11660.
JAPAN	M	80 725	5735N	13739W	14514.7	29028.9	0.0	131	2.500	6323.	2.53	0.78	5997.	12320.
JAPAN	S	80 721	5606N	13529W	14272.2	27563.7	0.0	150	3.333	8370.	2.51	3.12	4610.	12780.
JAPAN	M	80 527	5516N	14331W	14183.3	26982.8	0.0	112	1.333	3266.	2.45	1.23	694.	3960.
JAPAN	M	79 917	5759N	13803W	14487.5	29163.9	0.0	137	0.750	1808.	2.41	0.50	2592.	4400.
JAPAN	M	79 919	5547N	13511W	14222.0	27338.1	0.0	115	0.333	789.	2.37	0.57	91.	880.
JAPAN	S	80 721	5608N	13528W	14272.2	27563.7	0.0	164	3.667	8667.	2.36	3.47	2773.	11440.
JAPAN	M	79 8 6	5600N	13523W	14245.8	27443.2	0.0	197	1.563	3626.	2.29	2.74	5834.	9460.
JAPAN	M	80 727	5514N	13430W	14172.1	26948.1	0.0	120	1.333	3007.	2.26	0.87	293.	3300.
JAPAN	S	79 9 1	5637N	14007W	14418.5	29976.9	0.0	148	2.250	5008.	2.23	1.71	1152.	6160.
JAPAN	M	80 910	5735N	13730W	14532.6	28992.2	0.0	153	4.833	10596.	2.19	3.16	34504.	45100.
JAPAN	S	80 910	5913N	14137W	14462.0	30615.3	0.0	131	0.417	871.	2.09	1.36	2429.	3300.
JAPAN	S	80 722	5608N	13528W	14272.2	27563.7	0.0	164	3.667	7481.	2.06	3.00	2859.	10340.
JAPAN	M	79 920	5541N	13507W	14208.8	27280.7	0.0	126	0.333	683.	2.05	0.57	1517.	2200.
JAPAN	M	80 8 4	5528N	13658W	14175.5	27159.8	0.0	208	1.500	3070.	2.05	2.36	230.	3300.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-14 (continued). OTHER ROCKFISH, JULY-SEPTEMBER 1979-80

NATION	VESSL CLASS	DATE	YRMO	LAT	LONG	6X	6Y	RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	79 926	5839N	14025W	14407.5	30062.5	0.0	0.0	186.	1.250	2518.	2.01	7.11	85482.	88000.
JAPAN	S	80 724	5604N	13526W	14260.0	27525.6	0.0	0.0	191.	1.250	2481.	1.98	4.09	159.	2640.
JAPAN	M	79 510	5604N	13530W	14252.2	27544.7	0.0	0.0	224.	1.083	2110.	1.95	2.58	6910.	9020.
JAPAN	M	80 516	5537N	14335W	14303.9	31170.8	0.0	0.0	77.	0.833	1594.	1.91	0.88	166.	1760.
JAPAN	M	80 818	5529N	13458W	14175.2	27165.4	0.0	0.0	120.	1.833	3258.	1.78	1.28	702.	3960.
JAPAN	S	79 919	5858N	14103W	14441.9	30366.5	0.0	0.0	169.	2.917	5160.	1.77	2.01	3640.	6800.
JAPAN	M	80 919	5807N	13840W	14453.9	29380.8	0.0	0.0	126.	1.500	2638.	1.76	1.13	5062.	7700.
JAPAN	S	79 911	5839N	14029W	14397.5	30076.6	0.0	0.0	184.	2.583	4523.	1.75	3.87	1857.	6580.
JAPAN	M	80 916	5936N	14335W	14297.5	31161.9	0.0	0.0	71.	0.667	1350.	1.73	1.27	390.	1540.
JAPAN	S	79 913	5838N	14010W	14437.8	29999.8	0.0	0.0	164.	3.667	6312.	1.72	3.34	2048.	8560.
JAPAN	S	80 718	5803N	13927W	14323.0	29528.0	0.0	0.0	123.	0.417	685.	1.64	0.49	415.	1100.
JAPAN	S	80 711	5935N	14321W	14321.0	31127.4	0.0	0.0	126.	0.500	815.	1.63	0.61	7105.	7920.
JAPAN	S	80 911	5925N	14211W	14460.9	30830.5	0.0	0.0	115.	0.750	1214.	1.62	1.91	326.	1540.
JAPAN	M	80 816	5605N	13529W	14258.2	27547.0	0.0	0.0	186.	1.500	2413.	1.61	2.97	1767.	4180.
JAPAN	M	80 916	5552N	13520W	14224.1	27414.5	0.0	0.0	328.	1.833	2947.	1.61	1.65	1673.	4620.
JAPAN	M	80 814	5525N	13452W	14176.0	27113.6	0.0	0.0	208.	1.500	2325.	1.55	2.52	1635.	3960.
JAPAN	S	80 827	5640N	13557W	14350.9	27944.2	0.0	0.0	191.	1.833	2827.	1.54	3.08	6413.	9240.
JAPAN	S	80 830	5932N	14233W	14454.1	30959.2	0.0	0.0	101.	1.000	1521.	1.52	1.58	1119.	2640.
JAPAN	S	80 727	5537N	14255W	14430.2	31066.3	0.0	0.0	208.	4.000	5922.	1.48	4.40	3778.	7700.
JAPAN	S	79 916	5833N	14002W	14424.6	29925.5	0.0	0.0	153.	1.917	2802.	1.46	1.13	718.	3520.
JAPAN	S	79 913	5839N	14030W	14395.0	30080.2	0.0	0.0	153.	4.083	5965.	1.46	3.04	1515.	7460.
JAPAN	M	79 731	5552N	13521W	14222.1	27415.3	0.0	0.0	213.	0.583	846.	1.45	2.48	914.	1760.
JAPAN	M	80 731	5525N	13450W	14179.9	27103.6	0.0	0.0	122.	1.500	2148.	1.43	0.72	712.	2860.
JAPAN	S	80 818	5932N	14233W	14454.1	30959.2	0.0	0.0	169.	3.853	5350.	1.40	4.26	3010.	8360.
JAPAN	M	79 810	5601N	13530W	14253.7	27490.2	0.0	0.0	180.	1.667	2311.	1.39	1.74	3849.	6160.
JAPAN	S	80 817	5529N	14218W	14472.9	30888.1	0.0	0.0	191.	3.667	5066.	1.38	4.76	2634.	7700.
JAPAN	M	80 826	5525N	13448W	14183.6	27093.9	0.0	0.0	126.	1.000	1382.	1.33	0.67	378.	1760.
JAPAN	S	80 813	5934N	14305W	14375.0	31065.9	0.0	0.0	164.	2.983	4055.	1.36	4.76	2105.	6160.
JAPAN	M	79 726	5604N	13530W	14252.2	27544.7	0.0	0.0	180.	1.000	1350.	1.35	2.56	1290.	2640.
JAPAN	M	80 810	5554N	13522W	14228.0	27437.5	0.0	0.0	156.	1.000	1342.	1.34	2.07	4818.	6160.
JAPAN	M	80 822	5604N	13809W	14502.9	29231.1	0.0	0.0	115.	0.500	667.	1.33	0.64	880.	880.
JAPAN	S	80 722	5608N	13528W	14272.2	27563.7	0.0	0.0	161.	3.500	4552.	1.30	3.04	1608.	6160.
JAPAN	M	79 917	5757N	13747W	14505.4	29079.4	0.0	0.0	126.	1.167	1516.	1.30	0.37	2884.	4400.
JAPAN	M	80 825	5525N	13450W	14179.8	27103.6	0.0	0.0	128.	1.000	1299.	1.30	0.65	241.	1540.
JAPAN	M	80 814	5558N	13525W	14238.0	27479.0	0.0	0.0	175.	1.500	1929.	1.29	2.85	3791.	5720.
JAPAN	S	79 914	5838N	14006W	14447.5	29965.3	0.0	0.0	153.	3.417	4260.	1.25	3.83	2120.	6380.
JAPAN	S	80 718	5840N	14015W	14432.8	30035.8	0.0	0.0	124.	0.667	831.	1.25	0.89	269.	1100.
JAPAN	S	79 915	5650N	14037W	14401.1	30273.4	0.0	0.0	169.	3.083	3839.	1.25	1.25	2321.	6160.
JAPAN	S	79 911	5800N	13805W	14488.6	29179.0	0.0	0.0	153.	2.083	2572.	1.23	1.25	1168.	3740.
JAPAN	M	80 910	5755N	13738W	14516.7	29024.3	0.0	0.0	164.	2.333	2869.	1.23	1.04	5491.	8360.
JAPAN	M	80 919	5532N	14338W	14254.1	31133.6	0.0	0.0	139.	1.000	1212.	1.21	0.73	7588.	8800.
JAPAN	S	80 727	5633N	14319W	14323.2	31093.9	0.0	0.0	206.	4.000	4752.	1.15	4.91	1408.	6160.
JAPAN	M	80 816	5530N	13500W	14175.0	27180.9	0.0	0.0	164.	2.000	2529.	1.16	2.22	1411.	3740.
JAPAN	M	80 726	5603N	13526W	14255.9	27516.5	0.0	0.0	219.	1.500	1734.	1.16	2.57	3326.	5060.
JAPAN	S	80 713	5934W	14330W	14296.7	31131.3	0.0	0.0	109.	0.500	568.	1.14	1.29	4492.	5060.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-14 (continued). OTHER ROCKFISH, JULY-SEPTEMBER 1979-80

NATION	VESSEL	DATE	LAT	LONG	APPROX	LCRAN-C	DEPTH	HOURS	CATCH	THOUSAND	SIZE	BYCATCH	TOTAL
	CLA	TYMDD			6X	BY	(FMS)	FRANLED	(LBS)	PEK HOUR	LR\$/FISH	(LBS)	(LBS)
JAPAN	S	79 9 2	5838N	14007W	14445.1	29588.9	0.0	159.	4332.	1.11	1.41	3588.	7920.
USSR	S	79 8 10	5814N	13903W	14444.0	29533.1	0.0	112.	2100.	1.10	0.69	1200.	3300.
JAPAN	P	80 8 23	5825N	13457W	14181.1	27150.9	0.0	148.	3630.	1.09	1.52	7370.	11000.
JAPAN	P	80 8 30	5822N	14035W	14402.5	30124.9	0.0	159.	3498.	1.05	5.07	5084.	8580.
JAPAN	S	79 9 4	5836N	14025W	14400.9	30053.5	0.0	164.	3375.	1.04	2.22	1905.	5280.
JAPAN	S	80 7 11	5833N	14336W	14275.3	31132.5	0.0	101.	688.	1.03	1.29	412.	1100.
JAPAN	S	80 9 30	5840N	14040W	14376.3	30124.6	0.0	173.	3074.	1.02	2.08	5726.	8800.
JAPAN	M	79 9 6	5837N	13529W	14268.2	27556.5	0.0	195.	1266.	1.01	3.37	4454.	5720.
JAPAN	M	80 8 11	5831N	13510W	14227.9	27388.3	0.0	148.	2022.	1.01	0.70	3698.	5720.
JAPAN	S	79 9 10	5734N	13740W	14507.2	29023.9	0.0	186.	3657.	1.01	1.44	2723.	6380.
JAPAN	M	79 9 9	5600N	13528W	14240.1	27507.2	0.0	180.	3249.	1.00	1.74	3791.	7046.
JAPAN	M	79 8 15	5635N	13526W	14284.0	27532.7	0.0	191.	1862.	1.00	2.72	4938.	6000.
JAPAN	S	80 7 23	5608N	13528W	14272.2	27563.7	0.0	175.	1291.	0.99	2.50	2909.	6160.
JAPAN	M	79 9 17	5736N	13747W	14503.9	29076.4	0.0	120.	1386.	0.95	0.49	1904.	3300.
JAPAN	S	80 9 10	5837N	13533W	14345.6	27941.8	0.0	202.	2686.	0.98	2.36	4134.	6820.
JAPAN	S	80 9 15	5814N	14143W	14453.3	30643.6	0.0	119.	1704.	0.97	1.12	496.	2200.
JAPAN	S	79 9 7	5840N	14036W	14368.5	30110.3	0.0	193.	2817.	0.97	1.85	4223.	7040.
JAPAN	S	80 7 12	5833N	14330W	14268.3	31122.3	0.0	104.	521.	0.96	1.14	10459.	10780.
JAPAN	S	79 7 26	5837N	13502W	14276.0	27360.9	0.0	193.	2386.	0.95	0.59	2674.	5060.
JAPAN	M	79 9 18	5841N	13537W	14355.3	27952.3	0.0	115.	947.	0.95	0.66	1693.	2640.
JAPAN	S	80 7 7	5822N	13508W	14298.7	27291.8	0.0	127.	629.	0.94	0.51	911.	1540.
JAPAN	S	79 9 30	5823N	14213W	14439.9	30818.1	0.0	191.	1641.	0.94	2.09	12659.	14300.
JAPAN	M	80 8 22	5809N	14138W	14429.3	30581.7	0.0	177.	1553.	0.93	0.71	11647.	13200.
JAPAN	S	80 8 15	5801N	14117W	14426.6	30440.5	0.0	175.	2510.	0.91	2.61	2770.	5280.
JAPAN	M	80 8 2	5837N	13518W	14273.1	27432.5	0.0	148.	1511.	0.91	2.32	5529.	7040.
JAPAN	M	79 7 26	5836N	13525W	14230.1	27465.4	0.0	191.	3359.	0.91	3.54	1201.	6600.
JAPAN	S	80 7 23	5838N	13528W	14272.2	27563.7	0.0	164.	2860.	0.89	3.19	1200.	4180.
JAPAN	M	79 9 28	5843N	14034W	14366.5	30199.9	0.0	219.	955.	0.82	2.24	1685.	2640.
JAPAN	M	80 8 2	5833N	13523W	14222.2	27435.7	0.0	180.	1685.	0.87	1.80	5155.	7040.
JAPAN	M	79 9 26	5843N	14031W	14388.3	30189.6	0.0	197.	503.	0.86	1.33	19297.	19600.
JAPAN	M	80 8 21	5834N	14342W	14257.9	31161.5	0.0	131.	1701.	0.85	0.73	8639.	10340.
JAPAN	M	79 9 30	5814N	13624W	14189.3	26918.3	0.0	169.	283.	0.85	0.96	377.	650.
JAPAN	S	79 9 2	5836N	14008W	14434.4	29857.2	0.0	153.	2465.	0.85	1.76	1275.	3740.
JAPAN	S	79 9 4	5835N	14033W	14387.4	30090.8	0.0	164.	2269.	0.82	2.74	1691.	3960.
JAPAN	M	79 9 24	5839N	14017W	14427.3	30033.9	0.0	175.	1070.	0.80	1.81	11030.	12100.
JAPAN	M	80 7 28	5838N	13535W	14160.4	27350.2	0.0	145.	1335.	0.80	1.31	1305.	1640.
JAPAN	S	80 7 25	5839N	14103W	14412.5	30055.3	0.0	164.	1662.	0.80	2.37	19238.	20900.
JAPAN	S	80 7 2	5820N	14100W	14452.6	30751.3	0.0	130.	659.	0.79	0.77	1541.	2200.
JAPAN	M	80 8 2	5825N	13449W	14181.7	27098.6	0.0	120.	1305.	0.78	0.82	1555.	2860.
JAPAN	S	80 7 10	5832N	14236W	14445.4	30967.7	0.0	107.	390.	0.78	1.12	490.	880.
JAPAN	S	80 9 24	5802N	13130W	14244.2	27530.7	0.0	219.	2340.	0.78	1.27	2940.	5280.
JAPAN	S	80 7 6	5843N	13110W	14216.3	27320.4	0.0	126.	390.	0.78	0.65	490.	820.
JAPAN	M	79 9 10	5840N	14150W	14471.0	31080.3	0.0	169.	647.	0.78	1.26	8593.	9240.
JAPAN	M	79 9 20	5843N	14051W	14368.3	30189.6	0.0	186.	776.	0.78	1.46	5384.	6160.
JAPAN	M	79 9 21	5816N	13931W	14299.1	27636.7	0.0	120.	517.	0.76	0.68	363.	820.

*** NOTE *** THE ACCURACY OF POSITION AND LOGAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-14 (continued). OTHER ROCKFISH, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX 6X	APPROX 5Y	RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	79 524	5832N	13957W	14436.2	29898.3	0.0	131	0.500	386.	0.77	0.76	4014.	4400.
JAPAN	S	80 713	5835N	14327W	14314.6	31132.6	0.0	118	0.333	257.	0.77	0.69	623.	880.
JAPAN	M	79 916	5857N	13526W	14232.1	27477.0	0.0	201	1.750	1344.	0.77	1.38	3056.	4400.
JAPAN	M	79 4 3	5603N	13528W	14252.1	27528.1	0.0	197	1.583	1215.	0.77	3.25	2085.	3300.
JAPAN	M	80 916	5624N	14211W	14453.1	30821.3	0.0	131	1.333	1016.	0.76	1.12	1184.	2200.
JAPAN	M	79 921	5749N	13719W	14522.4	28892.9	0.0	126	1.233	1396.	0.76	0.99	27204.	20800.
JAPAN	M	80 815	5602N	13524W	14255.8	27501.9	0.0	194	3.333	2534.	0.76	1.91	5386.	7920.
JAPAN	M	80 730	5531N	13459W	14184.7	27181.7	0.0	180	1.333	1011.	0.76	0.92	1629.	2640.
JAPAN	M	79 728	5604N	13529W	14254.1	27539.9	0.0	191	1.500	1123.	0.75	2.65	1077.	2200.
JAPAN	S	80 814	5837N	14257W	14424.2	31071.8	0.0	164	3.250	2424.	0.75	2.04	11656.	14080.
JAPAN	M	80 819	5501N	13423W	14145.6	26855.6	0.0	164	2.667	1984.	0.74	0.79	4396.	6380.
JAPAN	S	79 929	5747N	13714W	14521.7	28854.2	0.0	219	2.750	2014.	0.73	1.94	6126.	8140.
JAPAN	M	79 825	5605N	13528W	14260.1	27542.2	0.0	175	1.083	790.	0.73	2.96	750.	1540.
JAPAN	M	80 729	5601N	13528W	14244.1	27514.2	0.0	153	3.000	2185.	0.73	3.48	2555.	4840.
JAPAN	M	80 918	5813N	14147W	14434.9	30646.2	0.0	127	1.333	954.	0.72	0.75	3226.	4180.
JAPAN	M	79 919	5520N	13442W	14176.9	27037.6	0.0	148	1.417	1005.	0.71	0.64	1855.	2860.
JAPAN	M	79 920	5600N	13526W	14244.0	27497.6	0.0	180	3.000	709.	0.71	1.91	2591.	3300.
JAPAN	S	80 7 1	5854N	14326W	14309.4	31121.0	0.0	126	0.417	294.	0.71	0.57	366.	660.
JAPAN	M	80 9 5	5854N	14321W	14325.3	31108.1	0.0	133	1.500	1048.	0.70	0.60	20952.	22000.
KOREA	M	80 527	5813N	14106W	14542.6	30514.8	0.0	109	5.500	3797.	0.69	2.18	22603.	26400.
JAPAN	M	79 729	5607W	13527W	14270.1	27551.8	0.0	191	1.000	681.	0.68	3.33	639.	1320.
JAPAN	S	80 9 7	5836N	14213W	14495.0	30882.7	0.0	115	0.333	226.	0.68	1.87	11874.	12100.
JAPAN	M	80 811	5548N	13510W	14227.8	27339.7	0.0	137	2.500	1690.	0.68	1.23	6230.	7520.
JAPAN	S	80 930	5644N	13559W	14364.7	27965.7	0.0	164	2.033	1362.	0.67	2.16	5258.	6600.
JAPAN	S	79 929	5812N	13900W	14438.8	29503.6	0.0	164	1.550	1036.	0.67	2.39	724.	1760.
JAPAN	S	79 9 8	5858N	14011W	14435.4	30003.4	0.0	164	3.250	2158.	0.66	2.49	1142.	3300.
JAPAN	S	80 727	5933N	14329W	14291.5	31119.7	0.0	175	3.583	2367.	0.66	2.25	3793.	6160.
JAPAN	M	80 819	5501N	13423W	14145.8	26855.6	0.0	219	1.833	1210.	0.66	1.01	4510.	5720.
JAPAN	S	80 928	5845N	13600W	14367.1	27998.4	0.0	153	2.667	1753.	0.66	0.61	2867.	4620.
JAPAN	M	79 925	5835N	14032W	14390.0	30067.2	0.0	148	0.333	217.	0.65	4.18	14083.	14300.
JAPAN	M	80 913	5809N	14139W	14426.6	30584.9	0.0	140	1.633	1195.	0.65	0.85	2765.	3960.
JAPAN	M	80 821	5521N	13444W	14176.7	27052.7	0.0	175	1.633	1174.	0.64	0.77	2126.	3300.
JAPAN	S	80 924	5854N	13523W	14226.1	27442.3	0.0	219	3.000	1906.	0.64	1.18	2274.	4180.
JAPAN	M	80 829	5838N	14006W	14447.5	29985.3	0.0	118	2.000	1266.	0.63	1.30	2934.	3300.
JAPAN	S	79 910	5641N	14045W	14370.2	30150.8	0.0	153	3.750	2361.	0.63	1.03	4459.	6020.
JAPAN	S	80 927	5644N	13600W	14362.7	27990.3	0.0	164	2.667	1660.	0.62	1.80	6480.	8140.
JAPAN	S	79 9 6	5845N	14053W	14376.3	30214.5	0.0	164	3.583	2223.	0.62	1.73	2837.	5060.
JAPAN	M	79 914	5601N	13522W	14255.7	27465.3	0.0	177	1.750	1072.	0.61	7.70	7508.	9580.
JAPAN	M	80 830	5839N	14011W	14442.0	30012.4	0.0	131	1.833	1119.	0.61	0.77	1521.	2640.
JAPAN	S	80 5 6	5854N	14234W	14467.4	30980.5	0.0	98	0.667	405.	0.61	1.00	3115.	3520.
JAPAN	M	79 929	5637N	14101W	14435.9	30350.6	0.0	131	0.667	405.	0.61	1.73	2235.	2640.
JAPAN	S	80 816	5839N	14023W	14412.5	30055.3	0.0	180	3.250	1970.	0.61	2.99	9250.	11220.
JAPAN	M	79 831	5526N	13448W	14187.3	27099.3	0.0	151	2.167	1296.	0.60	0.49	2224.	3520.
JAPAN	M	79 9 2	5526N	13448W	14187.3	27099.3	0.0	149	2.500	1492.	0.60	0.58	5768.	7260.
JAPAN	M	80 812	5859N	13528W	14236.1	27500.3	0.0	208	3.000	1789.	0.60	2.03	4371.	6160.

*** ALTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-14 (continued). OTHER ROCKFISH, JULY-SEPTEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LCNG	APPROX LONAN-C 6X	APPROX LONAN-C 6Y	RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	80 9 1	5936N	14309W	14379.3	31094.8	0.0	148.	1.750	1043.	0.60	0.64	6217.	7260.
JAPAN	M	80 9 14	5901N	14115W	14422.1	30433.9	0.0	200.	2.917	1737.	0.60	0.83	33463.	35200.
JAPAN	S	80 8 15	5529N	14339W	14225.8	31109.5	0.0	191.	3.917	2321.	0.59	3.31	539.	2860.
JAPAN	S	79 9 5	5844N	14036W	14413.5	30146.5	0.0	164.	3.417	2017.	0.59	1.01	5023.	7040.
JAPAN	M	80 8 14	5559N	13525W	14241.9	27485.9	0.0	164.	2.667	1574.	0.59	1.60	3926.	5500.
JAPAN	M	79 9 23	5746N	13703W	14537.9	28799.8	0.0	169.	1.750	1011.	0.58	2.43	6449.	9460.
JAPAN	M	79 9 18	5633N	13547W	14339.9	27842.4	0.0	137.	1.333	753.	0.56	0.43	4747.	5500.
JAPAN	S	80 7 24	5754N	13736W	14515.3	29007.6	0.0	175.	3.167	1787.	0.56	1.16	25053.	26840.
JAPAN	M	79 9 5	5530N	13459W	14180.9	27176.0	0.0	189.	1.750	987.	0.56	1.34	2093.	3080.
JAPAN	M	80 9 10	5756N	13745W	14502.0	29062.3	0.0	186.	2.333	1313.	0.56	0.99	19587.	20900.
JAPAN	M	79 9 7	5608N	13529W	14270.3	27562.5	0.0	194.	1.917	1066.	0.56	2.33	5974.	7040.
JAPAN	S	79 9 10	5839N	14024W	14410.0	30058.9	0.0	164.	3.917	2173.	0.55	1.28	4427.	6600.
JAPAN	M	79 9 23	5758N	13743W	14522.9	29072.2	0.0	115.	0.750	415.	0.55	0.41	685.	1100.
JAPAN	M	79 9 29	5844N	14054W	14367.4	30208.9	0.0	230.	1.167	641.	0.55	0.71	2659.	3300.
JAPAN	M	79 9 14	5842N	14047W	14371.9	30166.7	0.0	164.	1.000	548.	0.55	1.52	4952.	5500.
JAPAN	S	80 8 14	5934N	14316W	14341.0	31095.1	0.0	142.	3.167	1733.	0.55	2.50	7067.	8800.
JAPAN	M	79 9 19	5602N	13529W	14246.1	27525.9	0.0	175.	1.167	636.	0.54	2.03	7064.	7700.
JAPAN	M	80 9 9	5839N	14005W	14456.5	29990.8	0.0	142.	2.500	1353.	0.54	1.21	4367.	5720.
JAPAN	S	79 9 3	5836N	14007W	14432.0	29970.8	0.0	148.	2.833	1524.	0.54	1.10	2436.	3960.
JAPAN	M	79 9 14	5602N	13528W	14248.1	27521.1	0.0	180.	1.063	563.	0.52	1.89	3177.	3740.
JAPAN	M	79 9 22	5747N	13708W	14533.4	28829.5	0.0	115.	1.583	618.	0.52	0.82	3582.	4400.
JAPAN	M	80 9 17	5755N	13740W	14512.6	29032.9	0.0	164.	0.833	428.	0.51	0.49	5072.	5500.
JAPAN	M	80 9 2	5938N	14257W	14432.5	31080.9	0.0	168.	2.083	1066.	0.51	0.58	60534.	61600.
JAPAN	M	79 8 25	5513N	13428W	14172.3	26933.4	0.0	150.	0.583	298.	0.51	0.75	802.	1100.
JAPAN	M	80 9 17	5902N	14120W	14428.1	30459.5	0.0	208.	1.750	892.	0.50	0.90	5278.	6160.
JAPAN	M	79 9 28	5909N	14139W	14426.6	30584.9	0.0	160.	1.000	504.	0.50	0.52	14456.	14960.
JAPAN	S	79 8 31	5747N	13706W	14537.3	28821.2	0.0	142.	1.250	629.	0.50	0.86	2231.	2960.

*** NOTE *** THE ACCURACY OF POSITION AND LONAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-15. OTHER ROCKFISH, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LGRAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	791011	5536N	13453W	14214.7	27181.4	0.0	55996.	333.58	0.94	284.	55880.
JAPAN	M	791016	5535N	13454W	14209.1	27180.4	0.0	54588.	328.13	1.24	92.	54780.
JAPAN	M	791011	5536N	13453W	14214.7	27181.4	0.0	49486.	296.92	1.25	14.	49500.
JAPAN	M	791017	5536N	13454W	14212.8	27186.3	0.0	15032.	90.19	1.12	368.	15400.
JAPAN	M	791010	5515N	13430W	14181.7	26953.0	0.0	109.	43.18	1.04	318.	36300.
JAPAN	M	801029	5801N	13807W	14490.2	25196.0	0.0	23234.	34.85	2.52	1186.	24420.
JAPAN	M	791030	5517N	13504W	14123.7	27130.5	0.0	20779.	24.93	0.69	341.	21120.
JAPAN	M	801017	5516N	13432W	14181.4	26967.8	0.0	12811.	19.22	1.13	829.	13640.
JAPAN	S	791016	5532N	14336W	14260.6	31128.6	0.0	4576.	18.30	0.91	6424.	11000.
JAPAN	M	801018	5516N	13431W	14182.3	26982.8	0.0	11794.	17.69	1.12	2726.	14520.
JAPAN	M	791031	5515N	13439W	14128.2	27091.1	0.0	13027.	11.17	1.17	613.	13640.
JAPAN	M	801016	5516N	13427W	14190.8	26943.0	0.0	17542.	8.77	0.83	938.	18480.
JAPAN	M	791029	5519N	12519W	14222.1	27403.1	0.0	5009.	7.51	3.32	3791.	8800.
JAPAN	M	791011	5526N	13454W	14175.8	27125.0	0.0	13988.	6.46	2.97	5812.	19100.
JAPAN	M	791017	5526N	13456W	14172.0	27138.9	0.0	8291.	4.97	2.38	3369.	11660.
JAPAN	M	791011	5529N	13504W	14167.6	27195.0	0.0	4924.	4.92	3.46	576.	5500.
JAPAN	M	791030	5526N	13448W	14187.3	27099.3	0.0	7778.	4.24	0.57	6302.	14080.
JAPAN	M	791018	5528N	13500W	14171.6	27189.7	0.0	7437.	3.43	2.97	2023.	9460.
JAPAN	M	791030	5533N	13501W	14188.2	27203.1	0.0	3583.	3.31	2.28	5657.	9240.
JAPAN	M	801015	5546N	13506W	14227.8	27307.2	0.0	3744.	3.21	0.77	1976.	5720.
JAPAN	M	791010	5501N	13421W	14149.6	26845.8	0.0	8721.	3.08	1.56	4919.	13640.
JAPAN	M	801029	5534N	14326W	14305.4	31121.0	0.0	2241.	2.99	1.91	2159.	4400.
JAPAN	M	791011	5512N	13429W	14172.9	26933.6	0.0	4339.	2.89	2.64	1381.	5720.
JAPAN	S	801014	5747N	13713W	14521.7	28850.1	0.0	6937.	2.87	2.90	2303.	9240.
JAPAN	S	791029	5911N	14144W	14428.0	30619.0	0.0	4737.	2.37	7.95	11983.	16720.
JAPAN	S	801012	5632N	13554W	14348.0	27914.4	0.0	6731.	2.13	3.94	3829.	10560.
JAPAN	M	801011	5525N	13454W	14172.2	27123.5	0.0	4099.	2.05	2.16	521.	4620.
JAPAN	M	791025	5610N	15226W	14284.2	27568.7	0.0	2718.	2.04	3.82	32422.	35200.
JAPAN	S	791011	5813N	13854W	14446.3	29471.4	0.0	5967.	1.99	4.63	2393.	6360.
JAPAN	S	791018	5934N	14331W	14293.5	31133.8	0.0	1939.	1.94	1.24	20061.	22000.
JAPAN	M	801012	5544N	13509W	14214.4	27309.2	0.0	1833.	1.83	0.68	2347.	4180.
JAPAN	S	791011	5813N	13904W	14435.8	29528.0	0.0	3293.	1.80	4.07	1547.	4840.
JAPAN	M	791012	5530N	13501W	14177.1	27185.9	0.0	3560.	1.78	1.37	5460.	9020.
JAPAN	S	801017	5804N	13835W	14447.5	29334.3	0.0	4423.	1.77	3.41	3057.	7480.
JAPAN	M	801030	5601N	13805W	14454.4	29188.0	0.0	1178.	1.77	1.12	362.	1540.
JAPAN	S	791013	5758N	13610W	14467.2	29181.1	0.0	5007.	1.63	0.87	2913.	7920.
JAPAN	M	791013	5603N	13522W	14263.7	27499.4	0.0	3197.	1.60	2.97	7803.	11000.
JAPAN	S	801015	5755N	13748W	14456.4	29065.4	0.0	4687.	1.56	3.44	1913.	6600.
JAPAN	M	791014	5603N	13528W	14252.1	27528.1	0.0	2820.	1.54	2.49	19840.	22660.
JAPAN	M	801029	5806N	13640W	14446.1	29371.9	0.0	1718.	1.47	1.02	16322.	18040.
JAPAN	S	801019	5747N	13714W	14521.7	26854.2	0.0	6113.	1.47	2.09	3127.	9240.
JAPAN	M	801016	5526N	13456W	14172.0	27138.9	0.0	2166.	1.44	0.67	1574.	3740.
JAPAN	S	801013	5638N	13554W	14348.0	27914.4	0.0	4757.	1.43	1.94	2283.	7040.
JAPAN	S	791011	5804N	13838W	14440.9	29146.1	0.0	5320.	1.42	2.04	1940.	7260.
JAPAN	M	791010	5501N	13421W	14149.6	26845.8	0.0	3304.	1.42	1.10	12756.	16060.

*** NOTE *** THE ACCURACY OF POSITION AND LGRAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-15 (continued). OTHER ROCKFISH, OCTOBER-DECEMBER 1979-80

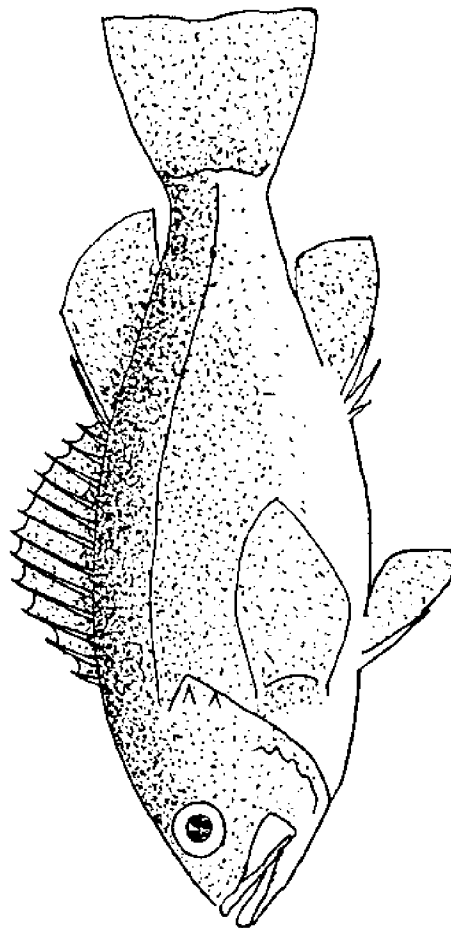
NATIG	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CAICH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
JAPAN	M	7910 6	5603N	13522W	14252.1 27528.1	0.0	1.000	1397.	1.40	3.05	11583.	12980.
JAPAN	M	7910C29	5558N	13525W	1423E.0 27479.0	0.0	1.583	2190.	1.38	0.59	11010.	13200.
JAPAN	S	8010 6	5748N	13716W	14523.1 28871.5	0.0	3.583	4929.	1.38	2.08	3871.	8800.
JAPAN	M	7910J31	5527N	13502W	14164.1 27173.9	0.0	1.000	1313.	1.31	2.17	1987.	3300.
JAPAN	M	7910 6	5544N	13509W	14214.4 27305.2	0.0	1.333	1735.	1.30	0.65	1565.	3300.
JAPAN	S	801012	5532N	13414W	14244.4 31141.2	0.0	2.250	2756.	1.22	5.94	3844.	6600.
JAPAN	S	8010 8	5734N	13738W	14515.3 29007.6	0.0	3.000	3608.	1.20	2.66	4312.	7920.
JAPAN	S	8010 8	5805N	13844W	14433.5 29378.7	0.0	2.300	2752.	1.20	2.55	1428.	4180.
JAPAN	S	801012	5932N	14340W	14247.6 31136.7	0.0	2.083	2425.	1.16	5.47	3515.	5940.
JAPAN	M	791010	5515N	13416W	14207.7 26883.3	0.0	0.500	576.	1.15	0.75	1404.	1980.
JAPAN	M	8010 8	5529N	13500W	14175.3 27175.3	0.0	1.000	1149.	1.15	1.74	391.	1540.
JAPAN	S	801013	5756N	13749W	14499.8 29078.5	0.0	2.500	2885.	1.15	2.31	5715.	8580.
JAPAN	M	7910C27	5603N	13531W	14246.3 27542.5	0.0	1.167	1322.	1.13	2.18	12978.	14300.
JAPAN	M	791012	5540N	13506W	14204.9 27265.6	0.0	3.500	3938.	1.13	1.20	17402.	21340.
JAPAN	M	7910 7	5533N	13500W	14182.7 27186.6	0.0	1.667	1856.	1.11	1.15	7824.	9680.
JAPAN	S	8010 4	5747N	13715W	14515.8 28258.4	0.0	3.167	3376.	1.07	3.12	5884.	7260.
JAPAN	M	7911 1	5611N	13530W	14280.5 27595.0	0.0	1.167	1240.	1.06	0.63	1620.	2860.
JAPAN	M	791011	5601N	13821W	14460.7 29231.9	0.0	2.917	3078.	1.06	2.76	4622.	7700.
JAPAN	S	7911 5	5528N	13457W	14177.4 27154.9	0.0	2.24	1521.	1.01	2.29	4639.	6160.
JAPAN	S	791014	5602N	13829W	14449.1 29292.7	0.0	1.250	3288.	1.01	2.26	5072.	8360.
JAPAN	S	801014	5802N	13831W	14444.8 29300.6	0.0	2.500	2508.	1.00	4.23	2332.	4840.
JAPAN	M	791025	5603N	13528W	14252.1 27528.1	0.0	1.917	1912.	1.00	3.23	32848.	34760.
JAPAN	S	8010 3	5756N	13735W	14517.5 29093.5	0.0	1.75	3217.	0.99	4.11	2723.	5940.
JAPAN	S	7910 2	5747N	13702W	14545.0 28894.7	0.0	3.000	3248.	0.99	1.75	2992.	5940.
JAPAN	S	7911 6	5643N	13559W	14360.2 27977.6	0.0	2.333	2271.	0.97	1.74	15989.	18260.
JAPAN	S	791012	5800N	13809W	14490.5 29195.0	0.0	2.583	2502.	0.97	1.93	2558.	5060.
JAPAN	M	7910 6	5557N	13527W	14230.1 27481.9	0.0	2.167	2091.	0.96	1.41	4229.	6380.
JAPAN	S	7910 2	5756N	13748W	14501.9 29074.4	0.0	2.833	2605.	0.92	1.87	2235.	4840.
JAPAN	M	791030	5529N	13458W	14179.2 27165.4	0.0	2.917	2656.	0.91	1.25	11204.	13860.
JAPAN	S	791013	5758N	13801W	14486.1 29144.9	0.0	3.667	3333.	0.91	0.71	3267.	6600.
JAPAN	S	7910 7	5845N	14054W	14374.2 30217.9	0.0	2.500	2176.	0.87	1.64	5964.	8140.
JAPAN	S	801011	5932N	14340W	14247.6 31136.7	0.0	2.417	2089.	0.86	3.25	5171.	7260.
JAPAN	M	7911 3	5608N	13530W	14268.3 27573.2	0.0	1.833	1567.	0.85	4.84	14493.	16060.
JAPAN	S	791015	5600N	13822W	14452.9 29247.0	0.0	3.583	3040.	0.85	1.11	3560.	6600.
JAPAN	S	791015	5602N	13832W	14442.6 29304.6	0.0	1.80	2651.	0.85	2.77	6149.	9800.
JAPAN	M	801031	5822N	14212W	14434.5 30805.9	0.0	1.91	1441.	0.82	0.99	24955.	25400.
JAPAN	S	8010 2	5644N	13600W	14362.7 27990.3	0.0	1.80	2258.	0.82	1.61	6782.	5020.
JAPAN	S	791010	5824N	14214W	14444.6 30830.3	0.0	1.64	2035.	0.81	2.46	1925.	3960.
JAPAN	M	7911 1	5603N	13531W	14246.3 27542.5	0.0	2.750	605.	0.81	2.39	2255.	2860.
JAPAN	S	8010 6	5747N	13714W	14521.7 28254.2	0.0	3.000	2354.	0.78	3.58	2046.	4400.
JAPAN	S	8010 1	5639N	14029W	14397.5 30076.6	0.0	1.75	1955.	0.78	2.01	3985.	5940.
JAPAN	S	791013	5747N	13704W	14541.2 28813.0	0.0	2.833	2149.	0.76	2.92	7051.	9240.
JAPAN	S	791012	5756N	13747W	14501.9 29070.4	0.0	1.80	2126.	0.75	0.96	2932.	5060.
JAPAN	M	801031	5922N	14211W	14437.4 30802.9	0.0	1.91	1212.	0.73	3.76	7700.	9700.
JAPAN	S	791013	5747N	13716W	14517.8 28862.5	0.0	2.19	2464.	0.72	1.71	4136.	6600.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***

TABLE E-15 (continued). OTHER ROCKFISH, OCTOBER-DECEMBER 1979-80

NATION	VESSEL CLASS	DATE	LAT	LONG	APPROX LORAN-C	PULSE RATES	DEPTH (FMS)	HOURS TRAWLED	CATCH (LBS)	THOUSAND LBS PER HOUR	SIZE LBS/FISH	BYCATCH (LBS)	TOTAL CATCH (LBS)
		*****	*****	*****	6X	6Y	*****	*****	*****	*****	*****	*****	*****
JAPAN	S	7910 2	5748N	13712W	14530.9	28855.0	0.0	180.	2737.	0.71	2.22	3203.	5940.
JAPAN	S	791017	5934N	14340W	14264.4	31156.5	0.0	134.	833.	0.71	0.80	3567.	4400.
JAPAN	M	791014	5610N	13530W	14276.5	27587.7	0.0	127.	1070.	0.71	0.63	9050.	10120.
JAPAN	S	791014	5805N	13844W	14431.5	29378.7	0.0	164.	2295.	0.71	2.54	6505.	8800.
JAPAN	M	7910 6	5531N	13459W	14184.7	27181.7	0.0	183.	1051.	0.70	0.92	9289.	10340.
JAPAN	M	801031	5923N	14211W	14445.2	30812.1	0.0	205.	919.	0.69	2.35	5901.	6220.
JAPAN	M	791013	5554N	13523W	14226.1	27442.3	0.0	213.	1252.	0.68	1.04	5128.	6380.
JAPAN	M	791031	5602N	13530W	14244.2	27530.7	0.0	219.	548.	0.66	1.46	4952.	5500.
JAPAN	S	791110	5642N	13559W	14355.8	27969.4	0.0	169.	1416.	0.65	1.91	2984.	4400.
JAPAN	M	791029	5610N	13531W	14274.5	27592.5	0.0	142.	1244.	0.65	0.74	5796.	7040.
JAPAN	M	7910 8	5501N	13422W	14147.7	26850.7	0.0	123.	944.	0.63	0.65	5436.	6380.
JAPAN	S	8010 1	5801N	14059W	14402.8	30289.2	0.0	186.	1880.	0.61	1.82	3400.	5280.
JAPAN	N	791015	5603N	13527W	14254.0	27523.3	0.0	190.	803.	0.60	2.16	26477.	27280.
JAPAN	M	801029	5924N	14214W	14444.9	30830.3	0.0	178.	595.	0.60	0.83	10105.	18700.
JAPAN	M	791016	5539N	13506W	14201.2	27263.5	0.0	167.	1735.	0.58	0.44	15205.	16940.
JAPAN	M	791031	5558N	13524W	14239.9	27474.2	0.0	131.	1385.	0.57	2.33	160255.	101640.
JAPAN	S	8010 2	5802N	13830W	14447.0	29296.6	0.0	164.	1966.	0.56	2.06	1334.	3300.
JAPAN	S	791010	5858N	14102W	14444.4	30363.1	0.0	164.	1456.	0.52	1.61	1184.	2640.
JAPAN	M	7911 1	5610N	13528W	14280.3	27578.2	0.0	131.	779.	0.52	0.75	2522.	3300.
JAPAN	M	791030	5602N	13530W	14244.2	27530.7	0.0	219.	509.	0.51	1.66	4991.	5500.
JAPAN	M	7910 2	5611N	13522W	14295.9	27557.0	0.0	137.	668.	0.50	0.56	18692.	19360.

*** NOTE *** THE ACCURACY OF POSITION AND LORAN-C INFORMATION REPORTED IN THIS TABLE IS UNKNOWN. USE WITH CAUTION***



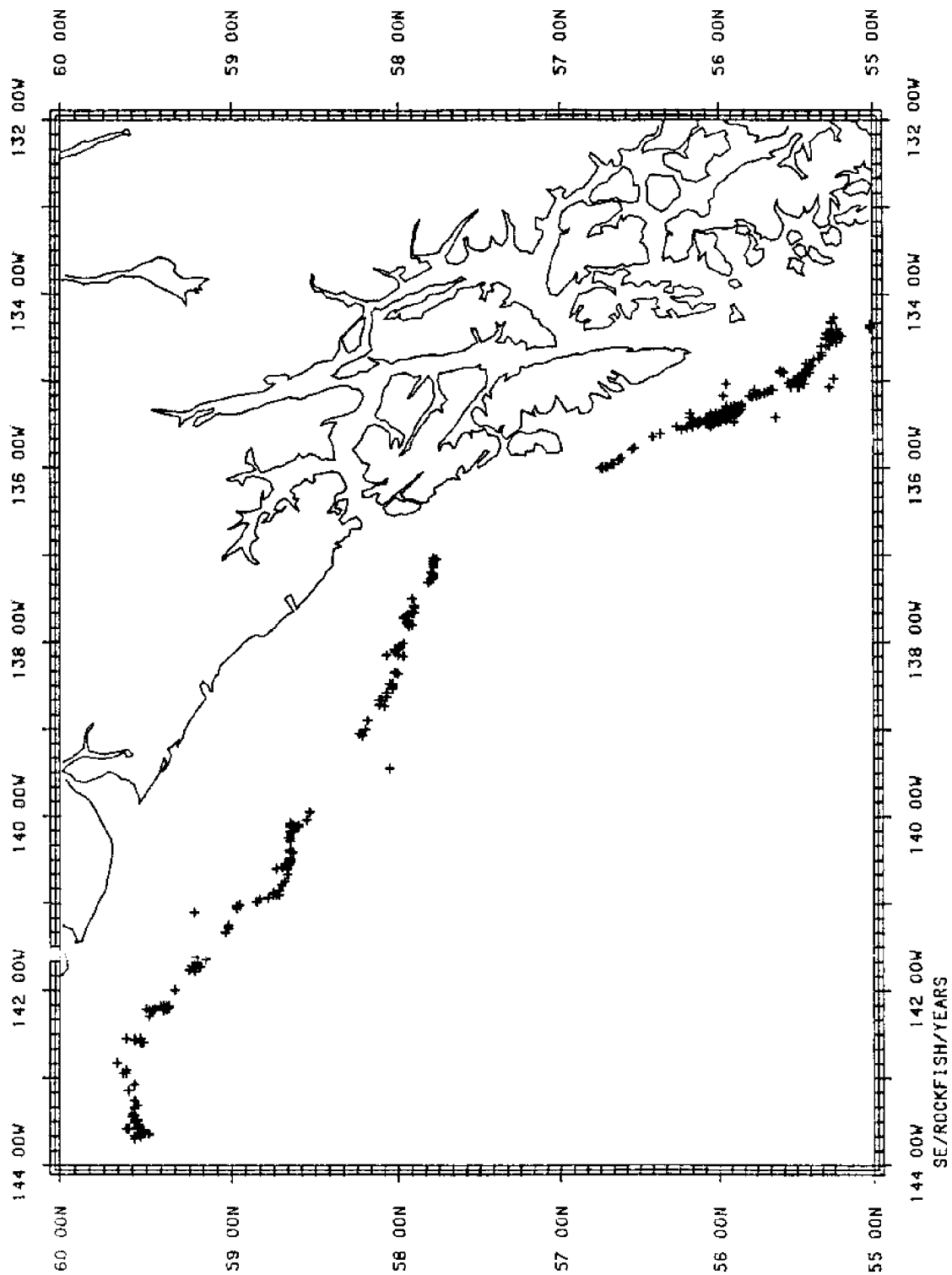


FIGURE F-5. TRAWLING LOCATIONS FOR OTHER ROCKFISH, ALL MONTHS, 1979-80

APPENDIX F

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