

NOAA Technical Memorandum NWS NHC 17

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ANNUAL DATA AND VERIFICATION TABULATION
ATLANTIC TROPICAL CYCLONES 1981

Staff, NHC

National Hurricane Center
Miami, Florida
November 1982

UNITED STATES
DEPARTMENT OF COMMERCE
Malcolm Baldrige, Secretary

National Oceanic and
Atmospheric Administration
John V. Byrne, Administrator

National Weather
Service
Richard E. Hallgren, Director



INTRODUCTION

This is the eighth report of an annual series prepared by the National Hurricane Center (NHC) to provide a source of summarized data on Atlantic tropical cyclones. It will not duplicate the narrative overview of the hurricane season and the description of individual storms, which will continue to be published in the Monthly Weather Review.

In addition to data supplied by the National Weather Service, materials have been furnished by the NOAA National Earth Satellite Services (NESS) Miami Office, and the CARCAH (Chief Aerial Reconnaissance Coordination, all Hurricanes).

OBJECTIVE FORECAST TECHNIQUES

The following tropical cyclone prediction models were used at the National Hurricane Center for forecasting motion on an operational basis:

1. NHC-67 (Miller, Hill, Chase, 1968). A stepwise screening regression model using predictors derived from the current and 24-hour old 1000, 700, and 500 mb data, and includes persistence during the early forecast periods.
2. SANBAR (Sanders and Burpee, 1968). A filtered barotropic model using input data derived from the 1000 to 100 mb pressure weighted winds. The model requires use of "bogus" data in data-void areas. The system was modified by Pike (1972) so that the initial wind field near the storm would conform to the current storm motion.
3. HURRAN (Hope and Neumann, 1970). An analog system using as as data base the tracks of all Atlantic tropical storms and hurricanes dating back to 1886.

- 4 CLIPER (Neumann, 1972). Stepwise multiple screening regression using the predictors derived from climatology and persistence.
5. NHC-72 (Neumann, Hope, Miller, 1972). A modified stepwise multiple screening regression system which combines the NHC-67 concept and the CLIPER system into a single model
6. NHC-73 (Neumann and Lawrence, 1973). Similar in concept to the NHC-72 except it also uses the "perfect prog" and MOS (model output statistics) methods to introduce NMC (National Meteorological Center) numerical prognostic data into the prediction equations.
- 7 NMC MFM MODEL (Hovermale, 1975). A ten-level baroclinic model which uses a moving fine mesh (MFM) grid nested within the coarser NMC fixed grid primitive equation (PE) model.

In addition, operational forecasts of tropical cyclone intensity changes in knots at 12-hourly intervals out to 72 hours are generated by a program named SHIFOR (Statistical Hurricane Intensity FORcasts). Generation of the forecast equations was done by multiple screening regression techniques using historical tropical cyclone data as input. Results over the past several years have shown that SHIFOR and official intensity forecasts have comparable skill scores.

The National Hurricane Center uses the above models as guidance in the formulation of its forecasts. The hurricane forecaster also makes extensive use of analyses and prognoses produced by NMC and RCTM (Regional Center for Tropical Meteorology) in Miami.

VERIFICATION

Verification statistics for the 1981 season are shown in Table 1.

The initial position error in Table 1 is the difference between the operational initial position and that determined during post analysis (best track position) The forecast displacement error is the vector difference between the forecast displacement and the actual displacement computed from best-track positions. Landfall prediction errors for the official forecasts are given in Tables 2a and 2b These are defined as the distance from the predicted landfall point, made 24 hours prior to actual landfall, to the actual landfall point In cases where a storm either crossed an island or made landfall when predicted to remain offshore, the error was designated as the distance from the landfall point to the nearest point on the forecast track

Tropical cyclone warning lead times for United States landfalling storms are given in Table 3a. A summary of warning lead times for the period 1970-1981 for hurricanes only and for both tropical storms and hurricanes is given in Table 3b. The length of time between the issuance of the warnings and the time that the center crossed the coast, as determined from the track, was taken as the warning lead time. A more complete discussion of the verification of tropical cyclone warning lead times, as well as verifications for individual storms from 1970-1977, can be found in the 1977 Annual Data and Verification Tabulation (Lawrence, Hebert, and Staff, 1979)

DATA SUMMARIES

A summary of 1981 North Atlantic tropical and subtropical cyclone statistics is given in Table 4. Tracks of 1981 named storms as well as the November subtropical cyclone are shown in Figure 1.

The best track, initial, and forecast positions for 1981 named storms are in Table 5, along with initial position and forecast errors, storm average errors

Table 6 lists all center fix positions and intensity evaluations used operationally at the National Hurricane Center during 1981. Fixes are in chronological order, and include those obtained by aerial reconnaissance penetrations, satellite (Miami SFSS), and land-based radar. The legend precedes the initial table

Supplementary Vortex Data Messages which replaced Vortex Profiles in the 1977 Annual Data Tabulation are given in Table 7. A diagram of the paths flown in obtaining these Data Messages is given in Figure 2. The symbolic code for interpreting the Data Messages is given as Appendix A.

Table 8 is an aerial reconnaissance summary for the 1981 season.

Graphs of the lowest central pressure versus time for 1981 tropical cyclones and the subtropical cyclone are presented in Figure 3.

Daily SMS-2 and GOES-5 satellite photographs of 1981 named tropical cyclones and the subtropical cyclone are shown in Figure 4

ACKNOWLEDGMENTS

Main contributors were: Frank Revitte and Andrew Stern, who listed the center fixes in chronological order and performed other miscellaneous tasks; Dr. Joseph Pelissier, who computed the verification statistics; Ms. Mary Watson, who drafted the pressure/time graphs; Mr. Frank Marques who did all reduction work on the graphs and tables; and Ms. Liliias Wilson and Ms. Mary Ellen Dell, who typed the tables and manuscript

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LIST OF FIGURES, TABLES, AND APPENDICES

- Table 1. Verification of 1981 tropical storm and hurricane forecasts. Figures in parentheses are the number of cases.
- Table 2a. Landfall prediction errors for 1981 tropical storms and hurricanes.
- Table 2b. Twelve-year summary of errors in the prediction of the point of landfall of Atlantic tropical storms and hurricanes during the period 1970-1981.
- Table 3a. Warning lead times for 1981 landfalling United States tropical storms and hurricanes.
- Table 3b. Summary of warning lead times for hurricanes only and all tropical cyclones for the period 1970-1981.
- Table 4. Summary of 1981 tropical and subtropical cyclone statistics.
- Table 5. Best track, initial and forecast positions, initial position error and forecast errors for 1981 tropical cyclones.
- Table 6. Center fix positions and intensity evaluations for 1981 tropical and subtropical cyclones.
- Table 7. Supplementary Vortex Data Messages, 1981 Atlantic tropical cyclones.
- Table 8. Tropical cyclone reconnaissance summary for 1981 hurricane season.
- Figure 1. Tracks of 1981 tropical and subtropical cyclones.
- Figure 2. Flight pattern flown in obtaining Supplementary Vortex Data Messages.
- Figure 3. Lowest pressure vs. time, 1981 tropical and subtropical cyclones.
- Figure 4. Daily satellite photographs of 1981 tropical and subtropical cyclones.
- Appendix A. Code for Supplementary Vortex Data Messages of Table 7.

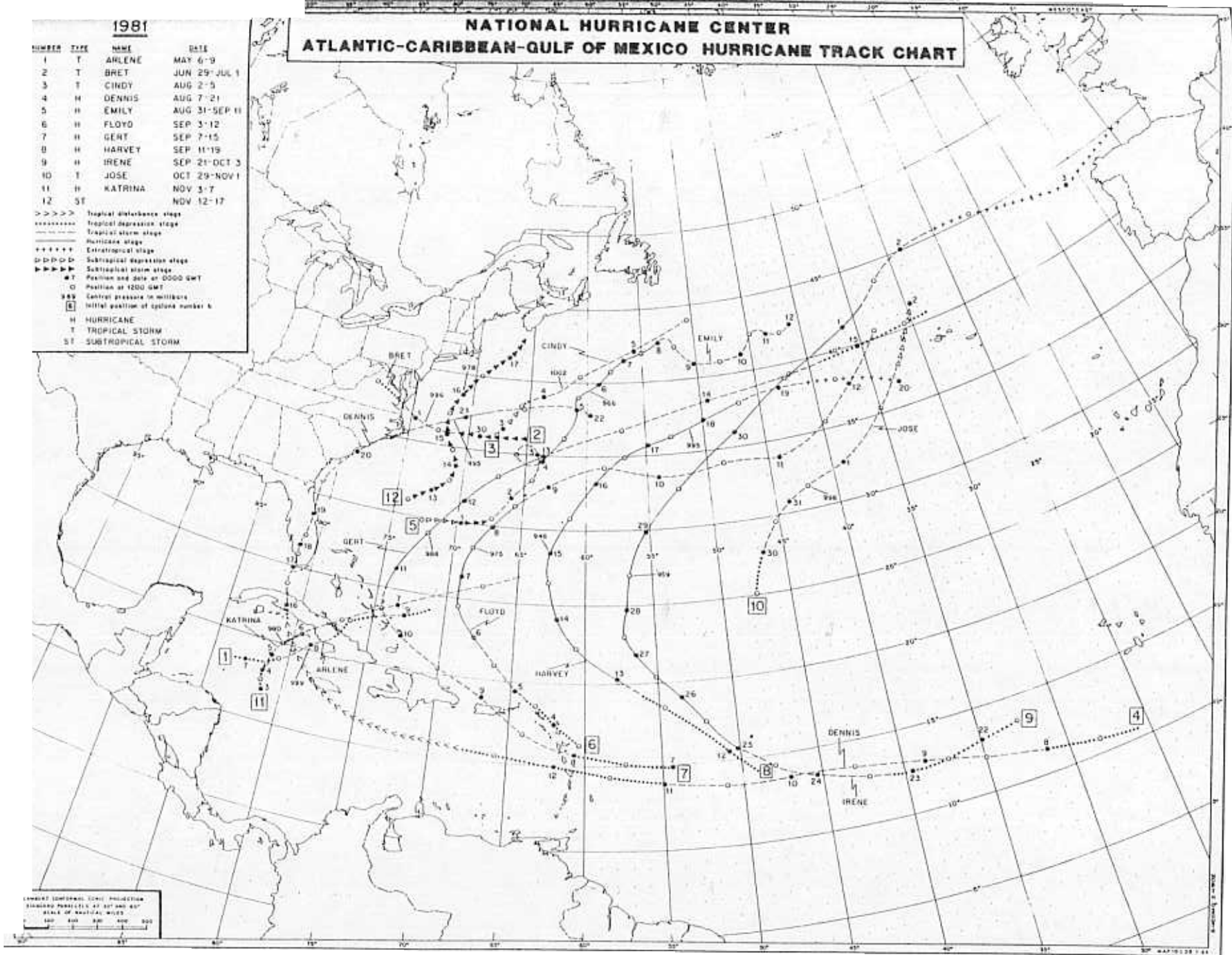
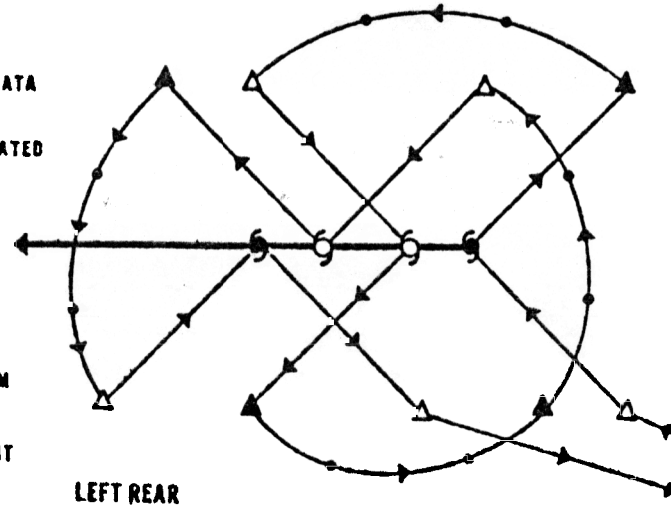
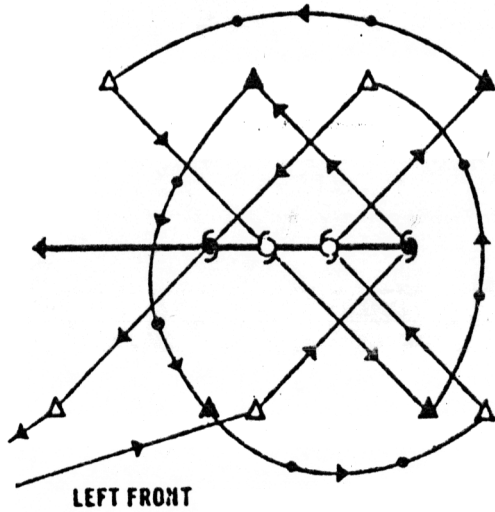
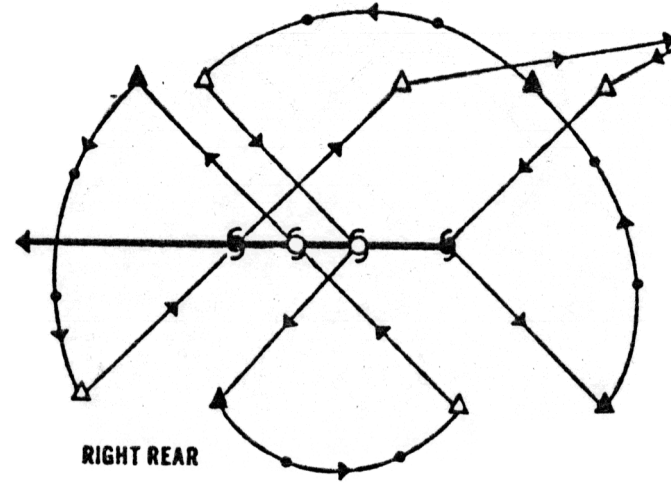
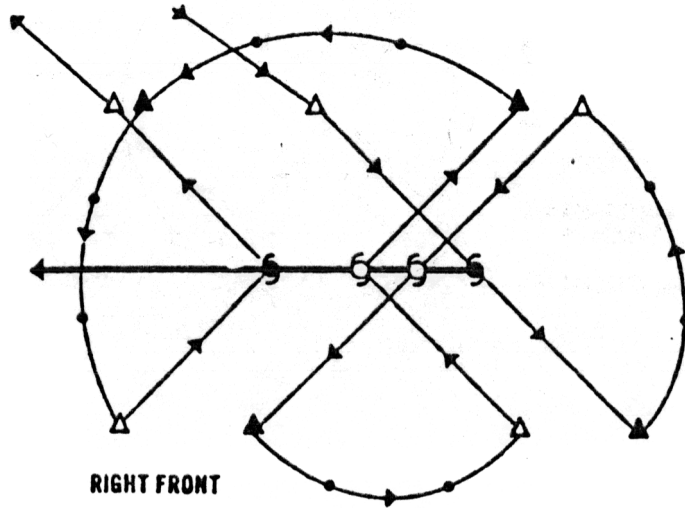


Figure 1. Tracks of 1981 tropical and subtropical cyclones.

RECOMMENDED PATTERN "A" EXECUTION



Legend

- ☉ DETAILED VORTEX DATA PLUS CENTER DROP
- DETAILED/ABBREVIATED VORTEX DATA
- ▲ RECCO [SECTION 1] PLUS DROP
- △ RECCO [SECTION 1]
- RECCO [SECTION 3]
- ← DIRECTION OF STORM MOVEMENT
- ↔ DIRECTION OF FLIGHT

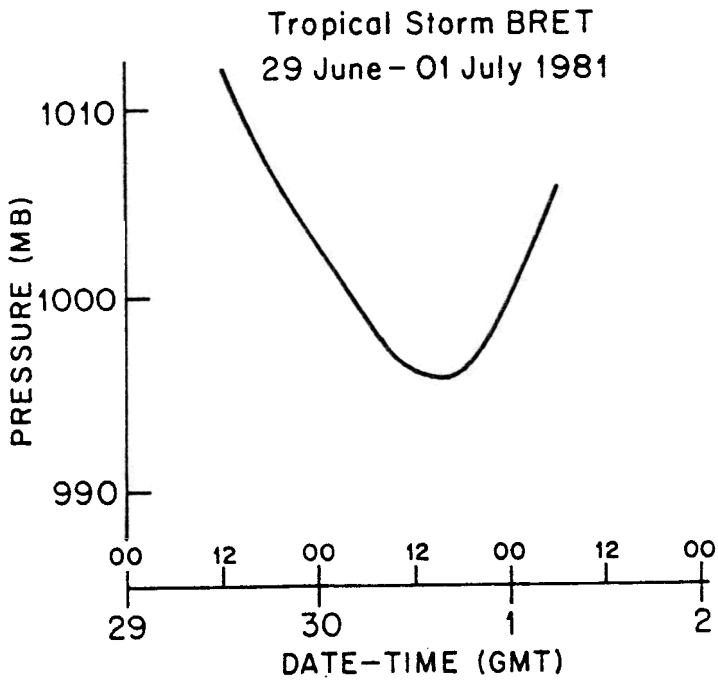
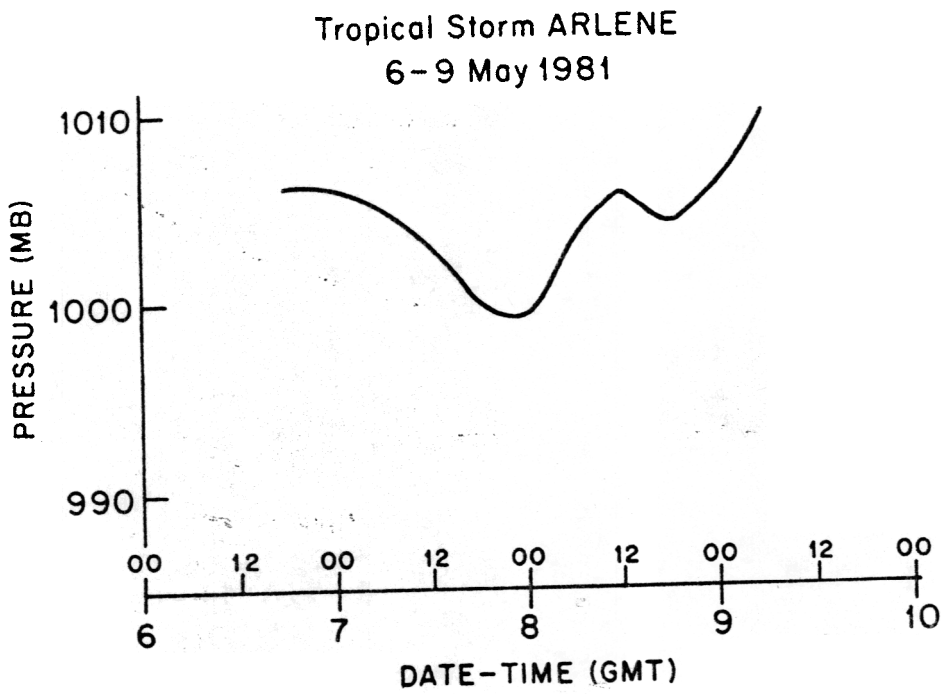


Figure 3. Lowest pressure vs time, 1981 tropical and subtropical cyclones.

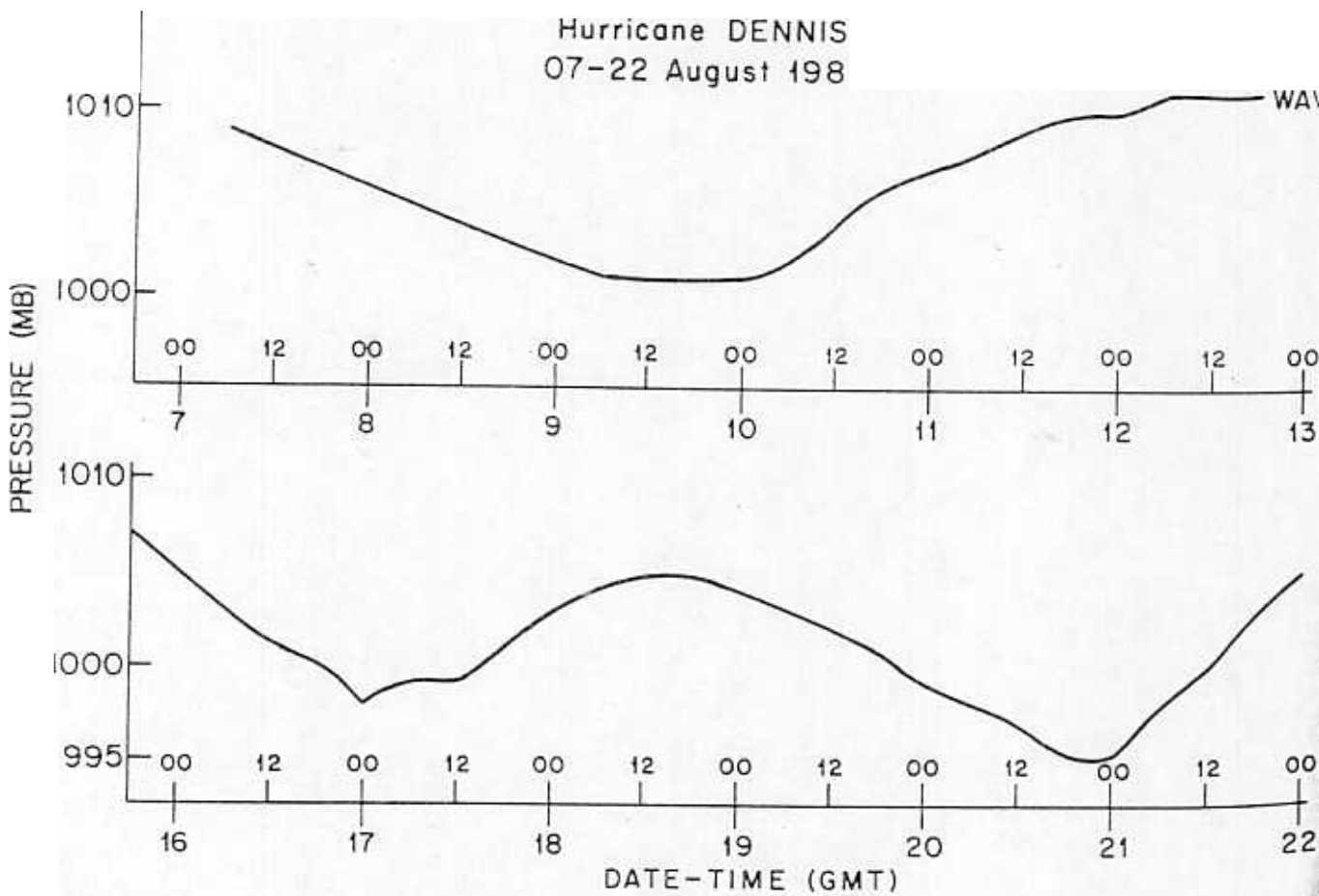
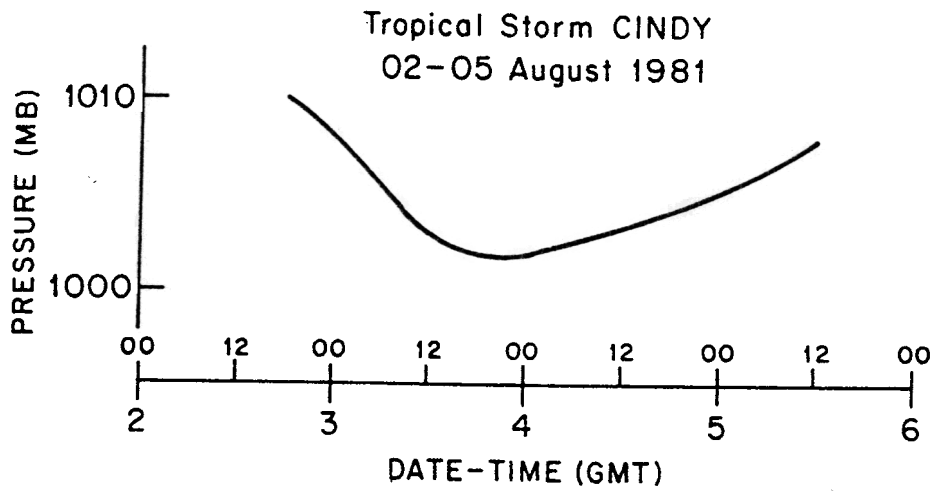


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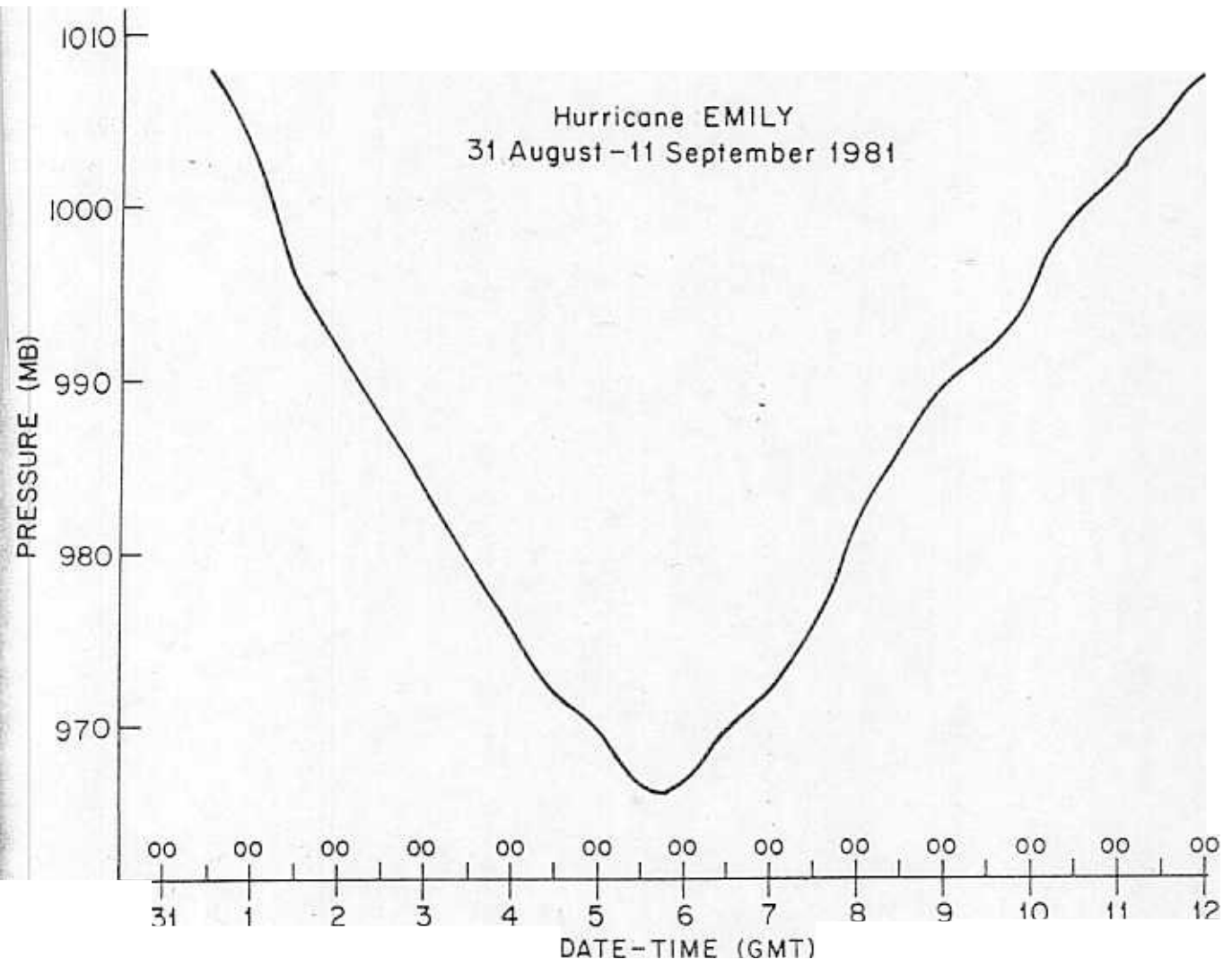


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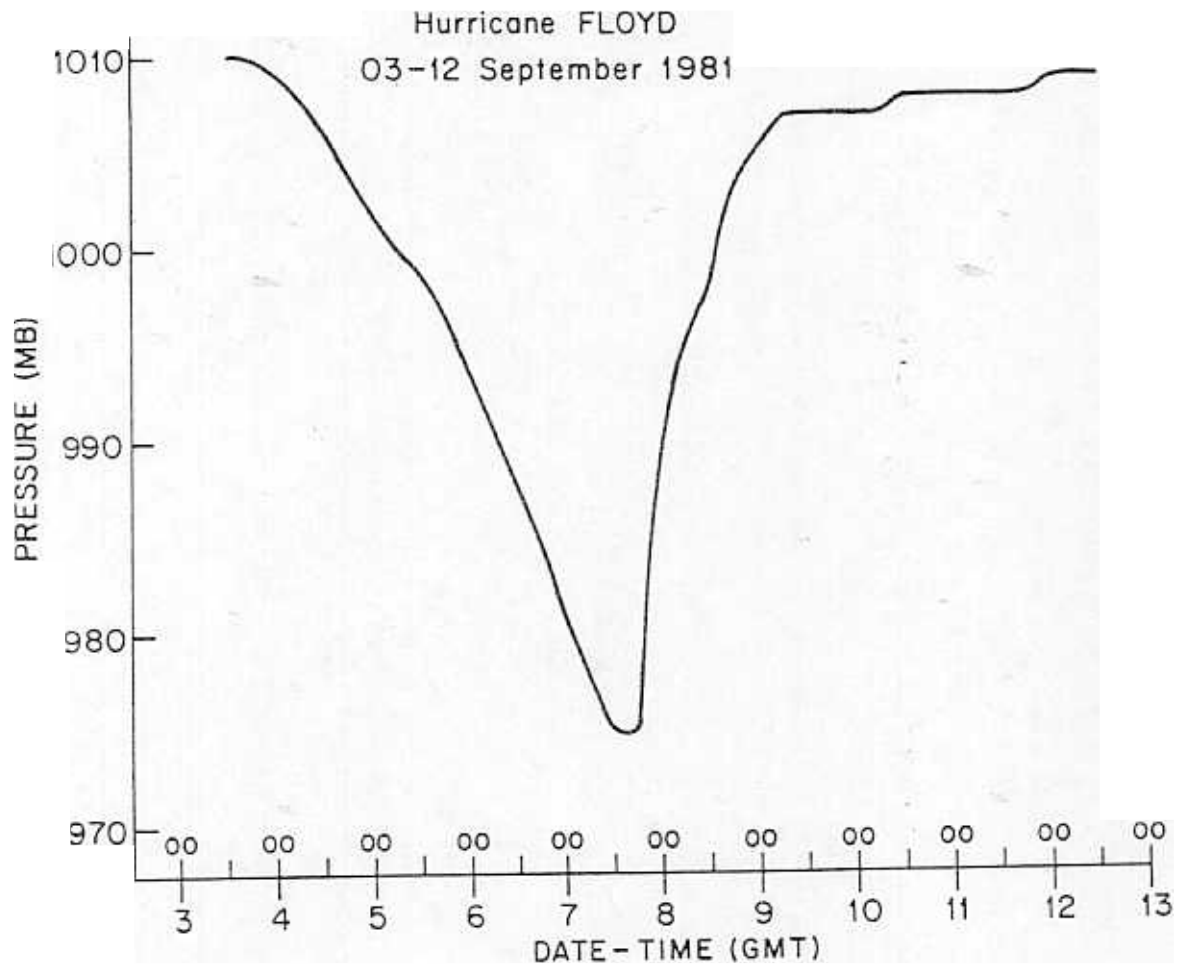


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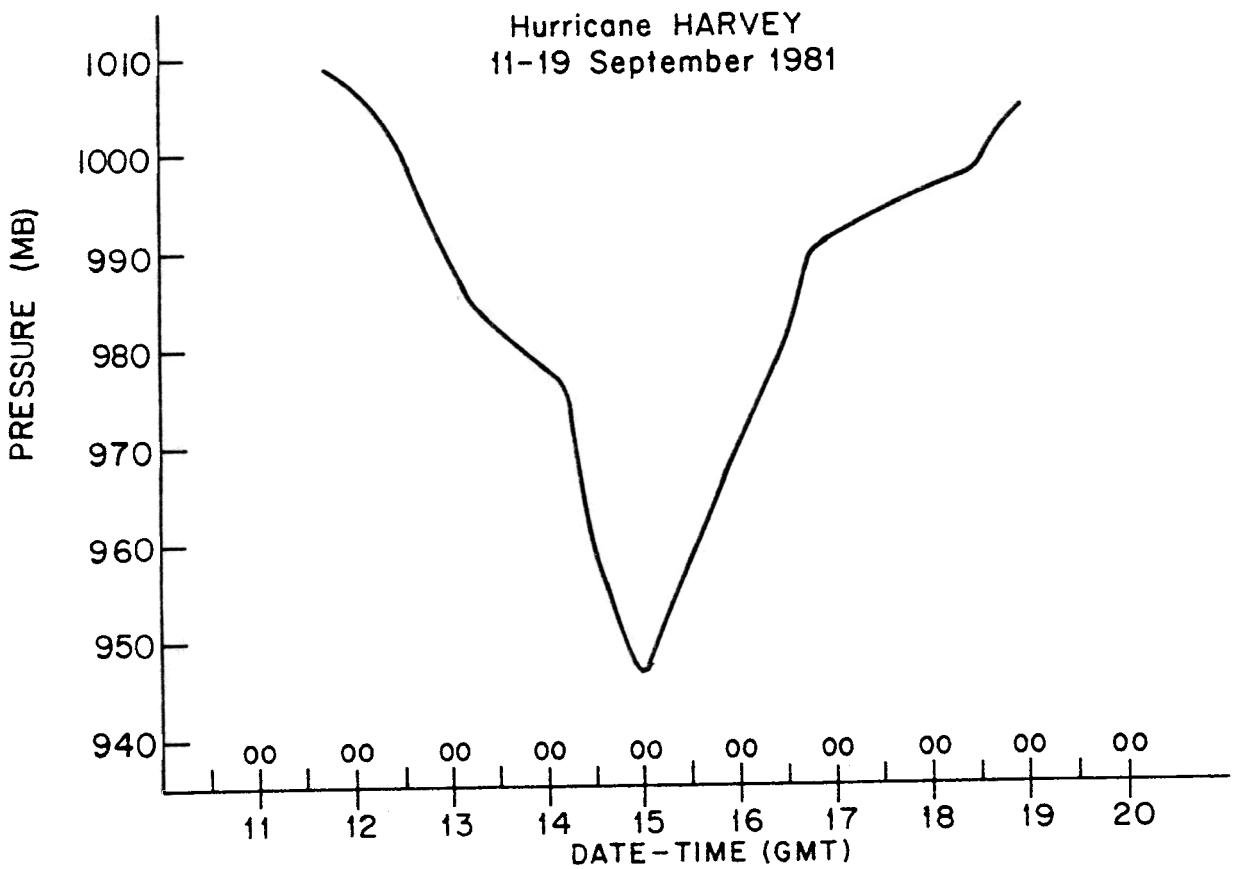
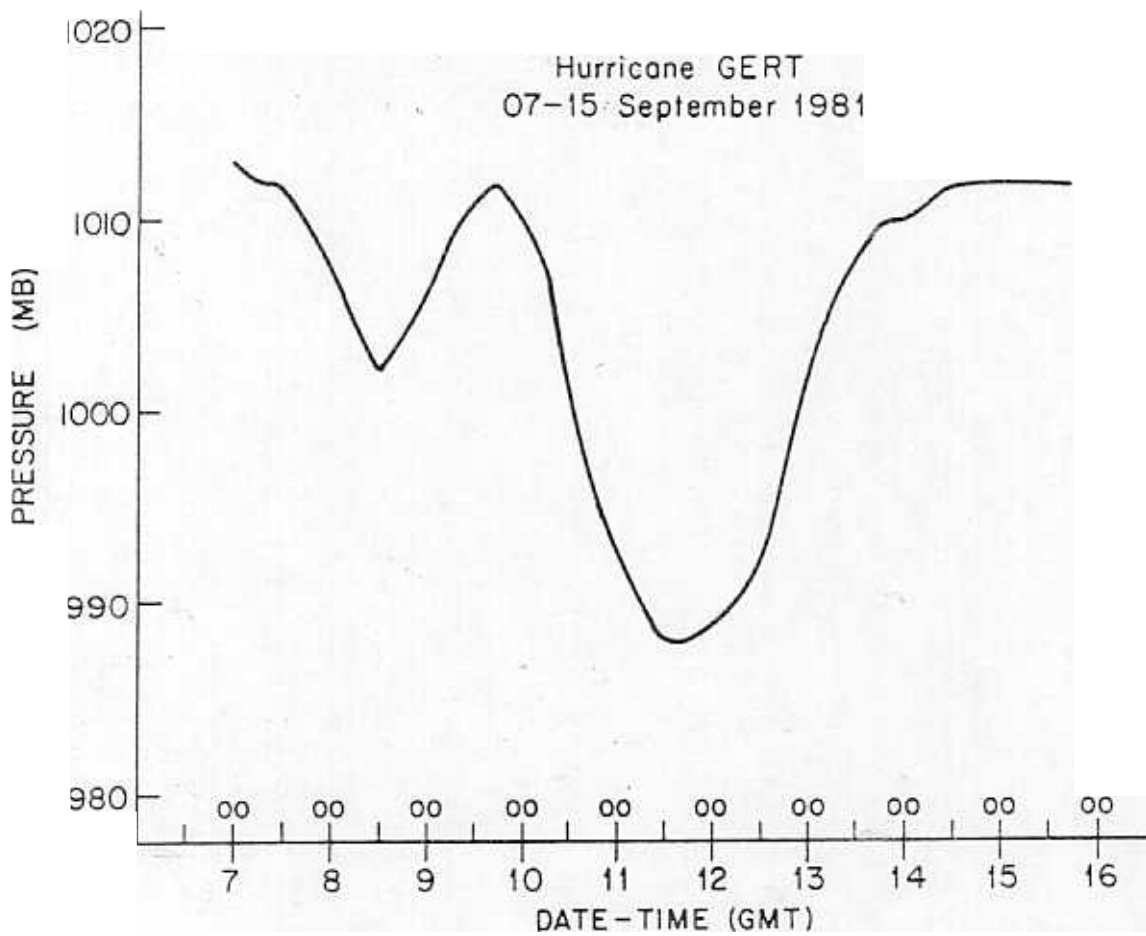


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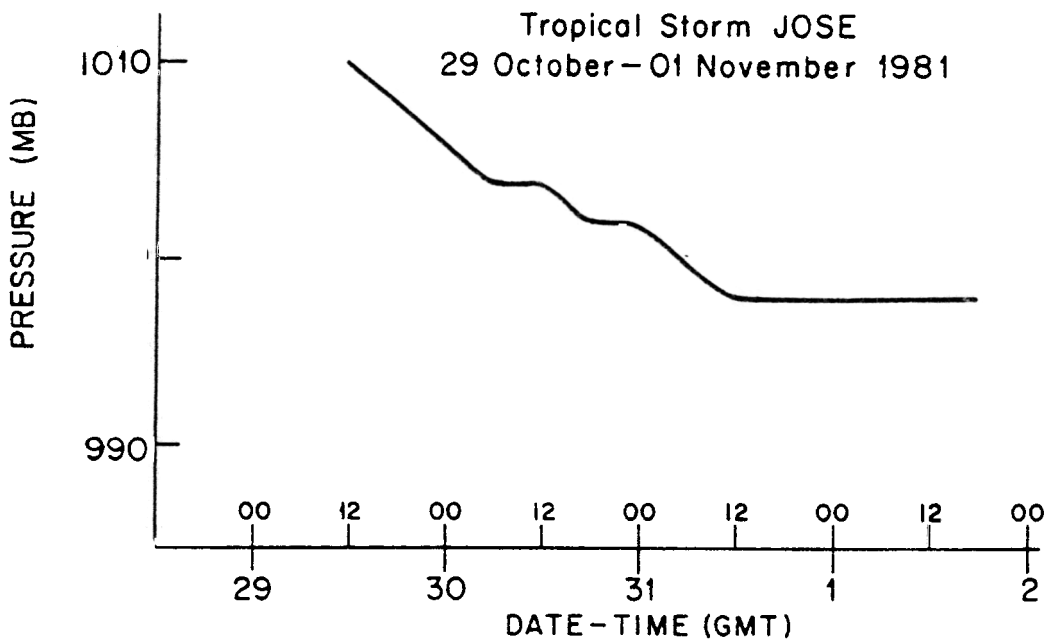
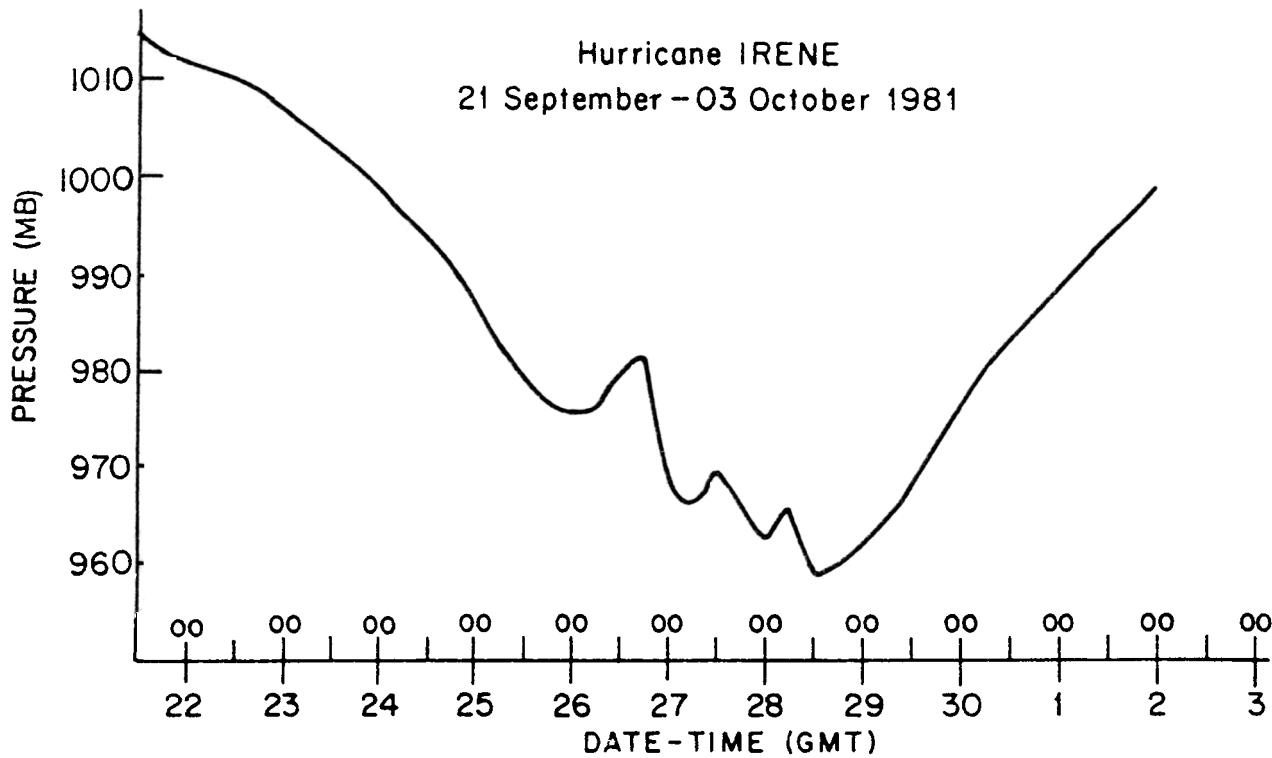
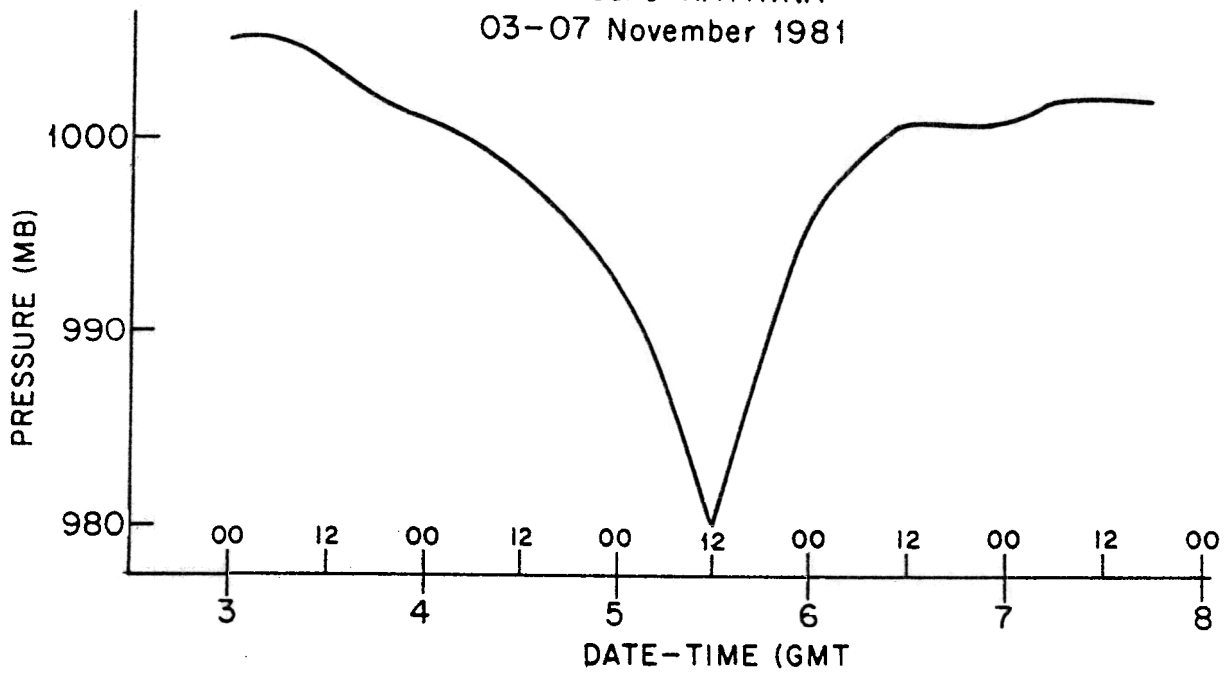


Figure 3 continued.

Hurricane KATRINA
03-07 November 1981



Subtropical Storm
12-17 November 1981

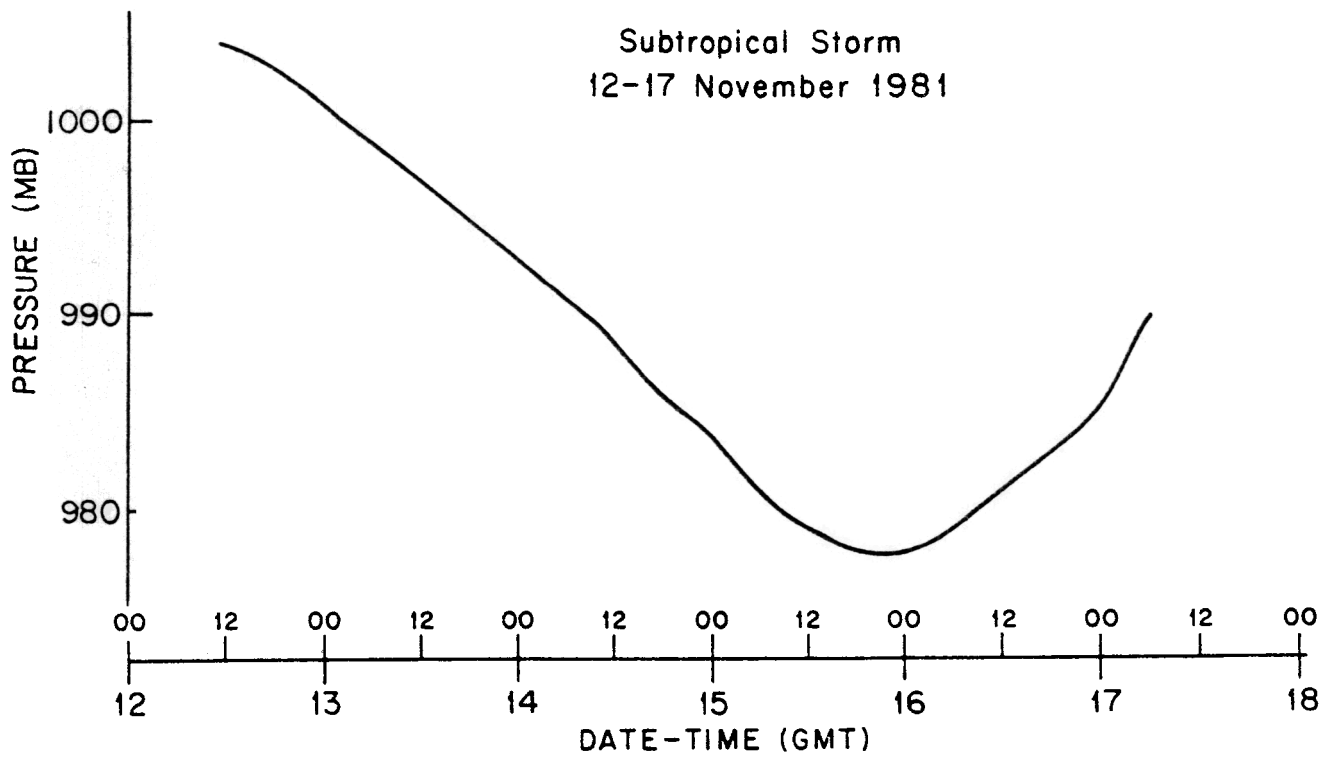
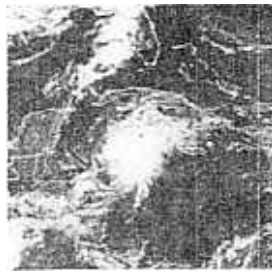
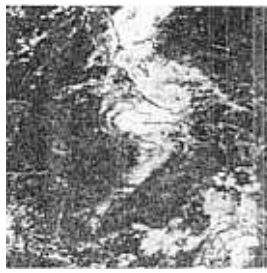


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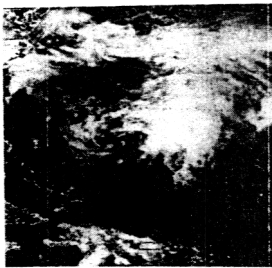


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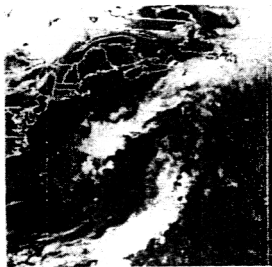


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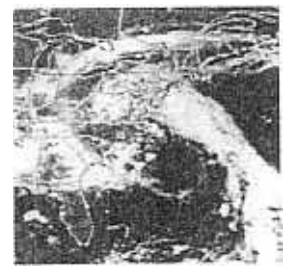
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BRET



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1931 GMT 8/3/81
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CINDY

Figure 4. Daily satellite photographs of 1981 tropical and subtropical cyclones.



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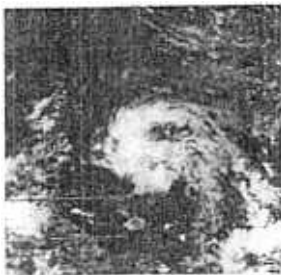
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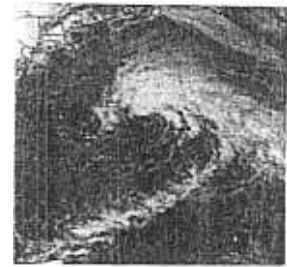
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1831 GMT 9/1/81
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985 MB

EMILY



1831 GMT 9/3/81
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1931 GMT 9/5/81
966 MB

Figure 4 continued.



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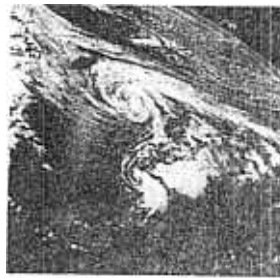


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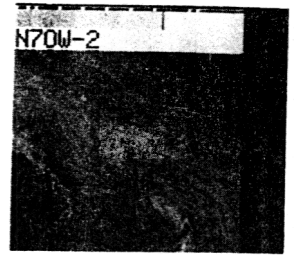
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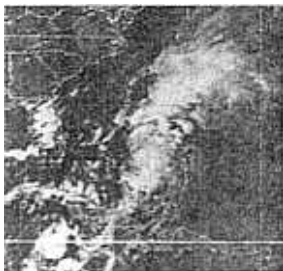


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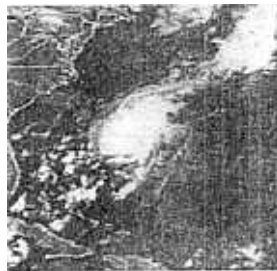


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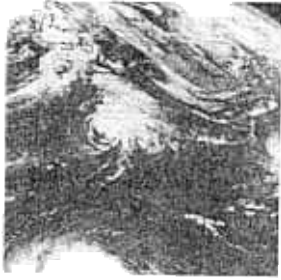
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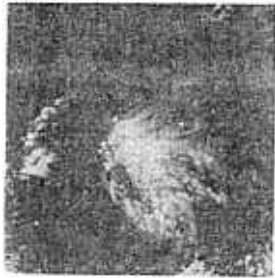
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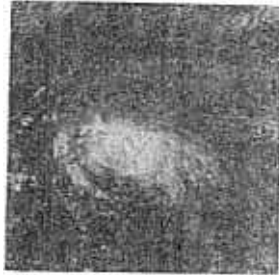
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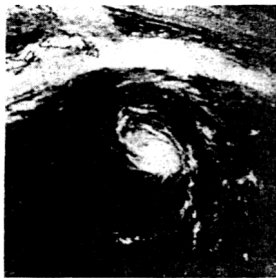
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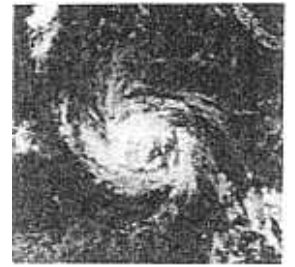
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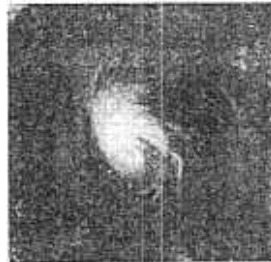
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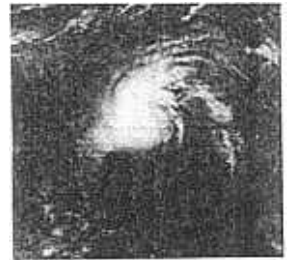
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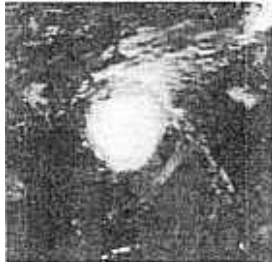


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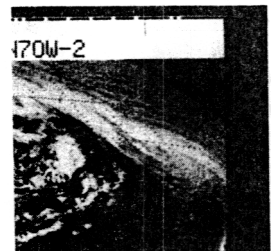
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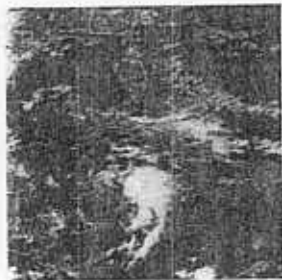


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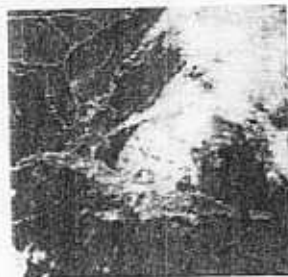


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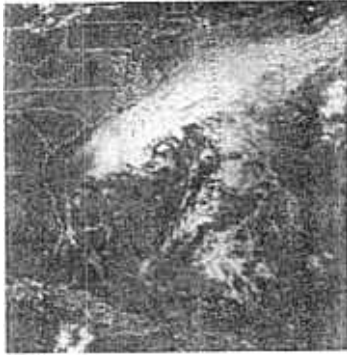
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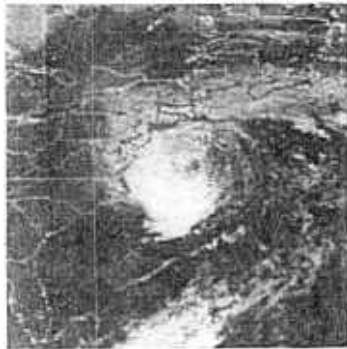


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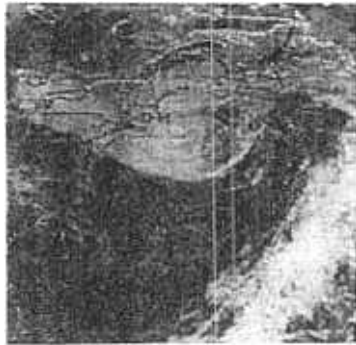


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**SUBTROPICAL
STORM**



1601 GMT 11/15/81
978 MB



1601 GMT 11/16/81
982 MB

APPENDIX A

CODE FOR SUPPLEMENTARY VORTEX DATA MESSAGES.

| DATE | | AIRCRAFT NUMBER | | FLIGHT METEOROLOGIST | | | |
|---|---|-----------------|----------|----------------------|----------|----------|----------|
| MANOP HEADING (PRECEDENCE IMMEDIATE) | | | | | | | |
| MISSION IDENTIFIER AND OBSERVATION NUMBER | | | | | | | |
| SUPPLEMENTARY VORTEX DATA MESSAGE | | | | | | | |
| 1 | 2 dd | 3 FLZZZ | | | | | |
| | DEG | DEG FL | | | | | |
| 4 | 5 | 6 | | | | | |
| LEFT | FRONT | QUAD | | | | | |
| RIGHT | REAR | | | | | | |
| 7 DjHHH | 8 DTTQQ | 9 DjHHH | 10 DTTQQ | 11 DjHHH | 12 DTTQQ | 13 DjHHH | 14 DTTQQ |
| 8 | 8 | 4 | 4 | 3 | 3 | 1 | 1 |
| 15 DjHHH | 16 DTTQQ | 17 64RRR | 18 50RRR | 19 34RRR | 20 MXFFF | 21 BBBRR | 22 hhhhh |
| 8 | 8 | 64 | 50 | 34 | MX | | |
| 23 | 24 | 25 | | | | | |
| LEFT | FRONT | QUAD | | | | | |
| RIGHT | REAR | | | | | | |
| 26 DjHHH | 27 DTTQQ | 28 DjHHH | 29 DTTQQ | 30 DjHHH | 31 DTTQQ | 32 DjHHH | 33 DTTQQ |
| 8 | 8 | 4 | 4 | 3 | 3 | 1 | 1 |
| 34 DjHHH | 35 DTTQQ | 36 64RRR | 37 50RRR | 38 34RRR | 39 MXFFF | 40 BBBRR | 41 hhhhh |
| 8 | 8 | 64 | 50 | 34 | MX | | |
| 42 | 43 | 44 | | | | | |
| LEFT | FRONT | QUAD | | | | | |
| RIGHT | REAR | | | | | | |
| 45 DjHHH | 46 DTTQQ | 47 DjHHH | 48 DTTQQ | 49 DjHHH | 50 DTTQQ | 51 DjHHH | 52 DTTQQ |
| 8 | 8 | 4 | 4 | 3 | 3 | 1 | 1 |
| 53 DjHHH | 54 DTTQQ | 55 64RRR | 56 50RRR | 57 34RRR | 58 MXFFF | 59 BBBRR | 60 hhhhh |
| 8 | 8 | 64 | 50 | 34 | MX | | |
| 61 | 62 | 63 | | | | | |
| LEFT | FRONT | QUAD | | | | | |
| RIGHT | REAR | | | | | | |
| 64 DjHHH | 65 DTTQQ | 66 DjHHH | 67 DTTQQ | 68 DjHHH | 69 DTTQQ | 70 DjHHH | 71 DTTQQ |
| 8 | 8 | 4 | 4 | 3 | 3 | 1 | 1 |
| 72 DjHHH | 73 DTTQQ | 74 64RRR | 75 50RRR | 76 34RRR | 77 MXFFF | 78 BBBRR | 79 hhhhh |
| 8 | 8 | 64 | 50 | 34 | MX | | |
| Remarks | | | | | | | |
| CODE FIGURES | dd - True direction in tens of degrees (pattern orientation based on direction of storm motion). zzz - Flight level in hundreds of feet (absolute altitude below 5500 feet). D - Group indicator designating the distance from the center in nautical miles (8-80, 4-45, 3-30, 1-15, #-center). hhhhh - Height of the eyewall in feet. jHHH - Pressure height data in RECCO format. TTQQ - Temperature/dewpoint in degrees Celsius. Add 50 for negative values. FFF - Maximum observed wind speed in knots. BBBRR - Bearing and range from the center of MXFFF. RRR - Radial extent of 64 kt, 50 kt, and 34 kt winds from the center in nautical miles. // - Data are unknown or unobtainable. | | | | | | |

Table 1. Verification of 1981 tropical storm and hurricane forecasts.

Figures in parentheses are number of cases.

| METHOD | INITIAL POSITION ERROR (N.MI.) | FORECAST DISPLACEMENT ERRORS (N.MI.) | | | |
|----------|---|--------------------------------------|--------------|--------------|--------------|
| | | 12 HR | 24 HR | 48 HR | 72 HR |
| OFFICIAL | 20 (210) | 58 (210) | 120 (190) | 246 (146) | 426 (106) |
| NHC67 | 20 (176) | 57 (176) | 129 (164) | 290 (139) | 443 (110) |
| NHC72 | 21 (202) | 58 (202) | 134 (184) | 276 (145) | 406 (112) |
| HURRAN | 18 (137) | 53 (137) | 120 (124) | 297 (97) | 481 (73) |
| CLIPER | 20 (206) | 59 (206) | 126 (188) | 263 (149) | 436 (115) |
| NHC73 | 19 (85) | 53 (85) | 113 (78) | 219 (70) | 418 (56) |
| SANBAR | 19 (91) | 61 (91) | 116 (81) | 225 (65) | 374 (52) |
| MFM | 19 (20) | 83 (20) | 131 (20) | 191 (18) | -- |

Table 2a Landfal prediction errors for 1981 tropical storms and hurricanes.

Following is a list of landfall prediction errors for tropical storms and hurricanes during 1981. Each error represents the distance (in nautical miles) from the predicted landfall point determined from the "Official" forecast issued 24 hours prior to landfall to the actual landfall point determined from the Best Track. Only tropical storms and hurricanes are included. In some cases the storm crossed an island when predicted to pass offshore. In such cases, the perpendicular distance from the landfall point to the forecast track is taken as the landfall prediction error.

| Storm name | Category at Landfall | Date/Time (Z) of Landfall | Landfall Forecast Error (n.mi.) | Location and Remarks |
|------------------------|---|---------------------------|---------------------------------|---|
| Arlene | Trop. Storm | 05/08/02Z | * | Eastern Cuba. |
| Bret | Trop. Dep | 07/01/06Z | | Virginia eastern shore. Trop. Depression at time of landfall. |
| Cindy | (No landfa | | | |
| Dennis | Trop. Storm | 08/16/21Z | * | Florida Keys |
| Dennis (11) | Trop. Storm | 08/17/06Z | 15 mi. S | Southwest tip of Florida |
| Dennis (1 | Trop. Storm | 08/20/02Z | 35 mi. NE | Near Cape Fear, NC |
| Emily Floyd | (No landfall) (No landfall) | | | |
| Gert | Trop. Storm | 09/08/20Z | 55 mi. S | Landfall in Puerto Rico. Storm forecast to remain offshore to the south of P.R. |
| Harvey Irene Joe | (No landfall) (No landfall) (No landfall) | | | |
| Katrina | Trop Storm | 11/06/03Z | 35 mi. NW | Landfall in eastern Cuba |

*Storm developed within 24 hours of making landfall, therefore no forecast was made 24 hours prior to landfall.

Table 2b Twelve-year summary of errors in the prediction of the points of landfal of Atlantic tropical storms and hurricanes during the period 1970-1981.

| | <u>United States Landfalls</u> | <u>All Landfalls</u> |
|--|--------------------------------|----------------------|
| 1981 Mean 24-Hour Landfal Prediction Error (number of cases) | 25 n.mi. (2) | 35 n.mi. (4) |
| 12 year average 1970-1981 | 39 n.mi. (21) | 50 n.mi (55) |

Table 3a. Tropical cyclone warning lead times of 981 United States landfalling tropical storms and hurricanes.

| Storm Name | Category at Landfall | Date/Time (Z) of Landfall | Location of Landfall | Type and Time (Z) of warnings issued for point of landfall | Warning lead time (hours) |
|--------------|---|---------------------------|----------------------|---|---------------------------|
| Arlene | (No US landfall) | | | | |
| Bret | (Trop. Depression at time of landfall-no warnings required) | | | | |
| Cindy | (No U. S. landfall) | | | | |
| Dennis (I) | Trop. Storm | 08/16/21Z | Florida Keys | 08/16/04Z, Gale Warnings issued for the Florida Keys. | 17 hours |
| Dennis (II) | Trop. Storm | 08/17/06Z | SW tip of Florida | (No Gale Warnings were issued for the southwest tip of the Florida peninsula) | 0 hours |
| Dennis (III) | Trop. Storm | 08/20/02Z | Near Cape Fear, NC | 08/19/16Z, Gale Warnings issued Little River, SC, to Cape Lookout, North Carolina | 10 hours |
| Emily) | | | | | |
| Floyd) | | | | | |
| Gert) | | | | | |
| Harvey) | (No landfalls on U.S. mainland) | | | | |
| Irene) | | | | | |
| Jose) | | | | | |
| Katrina) | | | | | |

28

Table 3b. Average warning lead times for all tropical storms and hurricanes and for hurricanes alone, which made landfall on the mainland of the United States during 1981 and during the 12-year period of 1970-1981).

| | All Tropical Storms and Hurricanes | | All Hurricanes | |
|---------------------------|------------------------------------|-----------|----------------|-----------|
| | 1981 | 1970-1981 | 1981 | 1970-1981 |
| Average Lead Time (hours) | 9 | 18 | -- | 21 |
| (number of cases) | (3) | (28) | (0) | (12) |

| NO. | NAME | CLASS ¹ | DATES ² | MAXIMUM SUSTAINED WINDS (KT) | LOWEST PRESSURE (MB) | U.S. DAMAGE (\$ MILLION) | DEATHS |
|-----|---------|--------------------|--------------------|---------------------------------------|----------------------------|--------------------------------|--------|
| 1 | Arlene | T | 6-9 May | 50 | 999 | | |
| 2 | Bret | T | 29 Jun - 1 Jul | 60 | 996 | Minor | |
| 3 | Cindy | T | 2-5 Aug | 50 | 1002 | | |
| 4 | Dennis | H | 7-21 Aug | 70 | 995 | 25 | |
| 5 | Emily | H | 31 Aug - 11 Sep | 80 | 966 | | |
| 6 | Floyd | H | 3-12 Sep | 100 | 975 | | |
| 7 | Gert | H | 7-15 Sep | 90 | 988 | | |
| 8 | Harvey | H | 11-19 Sep | 115 | 946 | | |
| 9 | Irene | H | 21 Sep - 3 Oct | 105 | 959 | | |
| 10 | Jose | T | 29 Oct - 1 Nov | 45 | 998 | | |
| 11 | Katrina | H | 3-7 Nov | 75 | 980 | | Cuba 2 |
| 12 | | ST | 12-17 Nov | 60 | 978 | Minor | |

1. T - tropical storm (winds 34-63 knots)
H - hurricane (winds 64 knots or higher)
ST - subtropical storm (winds 34-63 knots)

2. The day starts at 0000 GMT

Best track, initial and forecast positions, initial position error
and forecast errors for 1981 tropical cyclones.

TROPICAL STORM ARLENE 6-9 MAY 1981

| DATE/TIME (GMT) | BEST TRACK | | OPERATIONAL POSITION | | POSITION ERROR (N.MI.) | 12 HOUR FORECAST | | | 24 HOUR FORECAST | | | 48 HOUR FORECAST | | | 72 HOUR FORECAST | | |
|-------------------------|------------|-------|-------------------------|-------|------------------------------|------------------|-------|------------------|------------------|-------|------------------|------------------|-------|------------------|------------------|-------|------------------|
| | LAT. | LONG. | LAT. | LONG. | | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) |
| 0712 | 19.0 | 80.6 | 19.1 | 80.4 | 13 | 20.0 | 78.0 | 37 | 21.0 | 76.0 | | 23.0 | 74.0 | | 26.0 | 72.0 | |
| 0718 | 19.6 | 79.7 | 19.7 | 79.6 | 8 | 21.0 | 78.0 | | 22.0 | 76.5 | 134 | 25.0 | 74.0 | | 28.0 | 73.0 | |
| 0800 | 20.3 | 78.7 | 20.3 | 78.8 | | 21.5 | 77.0 | | 23.0 | 75.5 | | 26.0 | 74.0 | | 28.0 | 74.0 | |
| 0818 | 23.0 | 74.5 | 23.0 | 74.6 | | 24.5 | 71.0 | | 26.0 | 67.0 | | 27.0 | 63.0 | | | | |
| MEAN VECTOR ERRORS (NM) | | | | | 11 | | | 37 | | | 134 | | | | | | |
| NUMBER OF CASES | | | | | 2 | | | 1 | | | 1 | | | | | | |

TROPICAL STORM BRET 29 JUNE - 1 JULY 1981

| DATE/TIME (GMT) | BEST TRACK | | OPERATIONAL POSITION | | POSITION ERROR (N.MI.) | 12 HOUR FORECAST | | | 24 HOUR FORECAST | | | 48 HOUR FORECAST | | | 72 HOUR FORECAST | | |
|-------------------------|------------|-------|-------------------------|-------|------------------------------|------------------|-------|------------------|------------------|-------|------------------|------------------|-------|------------------|------------------|-------|------------------|
| | LAT. | LONG. | LAT. | LONG. | | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) |
| 3018 | 36.2 | 73.8 | 36.1 | 73.7 | | 36.5 | 76.5 | | 38.0 | 79.0 | | | | | | | |
| 0100 | 36.6 | 74.7 | 36.5 | 74.7 | | 37.5 | 77.0 | | | | | | | | | | |
| MEAN VECTOR ERRORS (NM) | | | | | 0 | | | 0 | | | 0 | | | | | | |
| NUMBER OF CASES | | | | | 0 | | | 0 | | | 0 | | | | | | |

TROPICAL STORM CINDY 2 - 5 AUGUST 1981

| DATE/TIME (GMT) | BEST TRACK | | OPERATIONAL POSITION | | POSITION ERROR (N.MI.) | 12 HOUR FORECAST | | | 24 HOUR FORECAST | | | 48 HOUR FORECAST | | | 72 HOUR FORECAST | | |
|-------------------------|------------|-------|-------------------------|-------|------------------------------|------------------|-------|------------------|------------------|-------|------------------|------------------|-------|------------------|------------------|-------|------------------|
| | LAT. | LONG. | LAT. | LONG. | | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) |
| 0318 | 38.7 | 64.9 | 38.7 | 65.1 | 9 | 40.0 | 63.0 | 45 | 42.0 | 60.0 | 76 | 47.0 | 52.0 | | 51.0 | 40.0 | |
| 0400 | 39.0 | 63.8 | 39.0 | 64.7 | 42 | 40.0 | 61.0 | 37 | 42.0 | 58.0 | 64 | 46.0 | 50.0 | | 50.0 | 40.0 | |
| 0406 | 39.4 | 62.2 | 39.4 | 62.1 | 5 | 40.8 | 59.3 | 54 | 42.5 | 56.5 | 178 | 47.0 | 48.0 | | 51.0 | 38.0 | |
| 0412 | 40.4 | 60.7 | 40.6 | 60.7 | 12 | 42.0 | 57.5 | 84 | 43.5 | 54.5 | | 47.5 | 45.5 | | | | |
| 0418 | 41.3 | 58.4 | 41.2 | 58.3 | 8 | 43.0 | 55.0 | 106 | 45.0 | 51.0 | | 49.0 | 42.0 | | | | |
| 0500 | 42.2 | 55.7 | 42.2 | 56.0 | | 44.0 | 50.0 | | 46.0 | 43.0 | | | | | | | |
| 0506 | 43.3 | 52.7 | 43.2 | 53.2 | | | | | | | | | | | | | |
| MEAN VECTOR ERRORS (NM) | | | | | 15 | | | 65 | | | 106 | | | | | | |
| NUMBER OF CASES | | | | | 5 | | | 5 | | | 3 | | | | | | |

Table 5 continued

HURRICANE DENNIS 7 - 21 AUGUST 1981

| DATE/TIME (GMT) | BEST TRACK | | OPERATIONAL POSITION | | POSITION ERROR (N.MI.) | 12 HOUR FORECAST ERROR | | | 24 HOUR FORECAST ERROR | | | 48 HOUR FORECAST ERROR | | | 72 HOUR FORECAST ERROR | | |
|-------------------------|------------|-------|----------------------|-------|---------------------------|------------------------|-------|---------|------------------------|-------|---------|------------------------|-------|---------|------------------------|-------|---------|
| | LAT. | LONG. | LAT. | LONG. | | LAT. | LONG. | (N.MI.) | LAT. | LONG. | (N.MI.) | LAT. | LONG. | (N.MI.) | LAT. | LONG. | (N.MI.) |
| 0800 | 11.3 | 31.3 | 11.2 | 31.2 | 8 | 11.5 | 34.5 | 34 | 11.8 | 37.5 | 84 | 12.0 | 43.0 | 243 | 12.5 | 48.5 | |
| 0806 | 11.7 | 33.1 | 11.5 | 32.6 | 32 | 11.5 | 35.5 | 63 | 11.7 | 38.6 | 123 | 12.5 | 44.5 | 239 | 13.0 | 50.0 | |
| 0812 | 12.0 | 35.0 | 12.0 | 35.0 | 0 | 12.5 | 38.5 | 22 | 13.0 | 42.0 | 61 | 14.0 | 48.0 | 177 | 15.0 | 54.0 | |
| 0818 | 12.5 | 36.7 | 12.5 | 36.5 | 12 | 13.3 | 40.0 | 37 | 14.0 | 43.5 | 82 | 15.2 | 50.5 | 160 | 16.5 | 57.5 | |
| 0900 | 12.8 | 38.7 | 13.0 | 38.2 | 32 | 13.5 | 41.5 | 58 | 14.5 | 45.0 | 100 | 15.5 | 50.5 | | 16.5 | 57.0 | |
| 0906 | 13.1 | 40.8 | 13.4 | 40.8 | 18 | 14.3 | 44.0 | 66 | 15.0 | 47.0 | 137 | 16.0 | 53.0 | | 18.0 | 59.0 | |
| 0912 | 13.3 | 43.0 | 13.3 | 43.0 | 0 | 13.7 | 47.0 | 12 | 14.0 | 51.0 | 30 | 15.5 | 58.0 | | 18.0 | 64.0 | |
| 0918 | 13.5 | 45.0 | 13.5 | 45.0 | 0 | 13.8 | 49.2 | 21 | 14.5 | 52.5 | 59 | 16.0 | 59.0 | | 17.5 | 63.0 | |
| 1000 | 13.5 | 47.0 | 13.5 | 47.0 | 0 | 14.0 | 51.0 | 30 | 14.5 | 54.5 | | 16.0 | 60.5 | | 17.5 | 65.0 | |
| 1006 | 13.5 | 49.0 | 13.5 | 49.0 | 0 | 13.5 | 53.0 | 8 | 14.5 | 56.0 | | 16.0 | 61.0 | | 18.0 | 67.0 | |
| 1012 | 13.5 | 51.0 | 13.4 | 51.4 | | 13.5 | 55.5 | | 14.0 | 60.0 | | 15.5 | 66.0 | | 17.0 | 71.0 | |
| 1018 | 13.6 | 52.9 | 13.5 | 53.0 | | 13.5 | 57.0 | | 14.0 | 61.0 | | 15.5 | 67.0 | | 17.0 | 72.0 | |
| 1600 | 22.4 | 81.0 | 22.5 | 80.5 | 28 | 24.0 | 81.0 | 8 | 25.0 | 81.0 | 11 | 27.0 | 81.0 | 29 | 29.0 | 81.0 | 39 |
| 1606 | 23.0 | 81.2 | 23.3 | 80.8 | 28 | 24.5 | 81.0 | 19 | 25.5 | 81.0 | 11 | 27.5 | 81.0 | 29 | 29.5 | 81.0 | 43 |
| 1612 | 23.8 | 81.4 | 23.7 | 81.3 | 8 | 24.5 | 81.4 | 21 | 25.5 | 81.5 | 25 | 27.5 | 81.5 | 40 | 29.5 | 81.5 | 94 |
| 1618 | 24.5 | 81.3 | 24.7 | 81.3 | 12 | 25.5 | 81.3 | 8 | 26.5 | 81.3 | 8 | 27.5 | 81.3 | 24 | 29.5 | 81.3 | 188 |
| 1700 | 24.9 | 81.3 | 24.9 | 81.3 | 0 | 25.2 | 81.3 | 36 | 25.6 | 81.4 | 55 | 27.5 | 81.5 | 81 | 29.0 | 81.5 | 298 |
| 1706 | 25.2 | 81.2 | 25.2 | 81.3 | 5 | 26.5 | 81.3 | 18 | 27.5 | 81.3 | 42 | 29.5 | 81.0 | 13 | 31.5 | 80.0 | 241 |
| 1712 | 25.8 | 81.2 | 25.0 | 81.3 | 48 | 27.2 | 81.0 | 91 | 28.5 | 80.5 | 130 | 30.5 | 79.5 | 75 | 32.5 | 77.5 | 172 |
| 1718 | 26.2 | 81.2 | 26.8 | 81.3 | 36 | 28.0 | 81.0 | 38 | 29.5 | 80.5 | 84 | 31.0 | 80.0 | 108 | 33.0 | 79.0 | 373 |
| 1800 | 26.5 | 81.2 | 26.8 | 81.2 | 18 | 26.8 | 81.2 | 43 | 28.0 | 81.2 | 64 | 30.0 | 81.0 | 249 | 32.0 | 80.0 | 573 |
| 1806 | 26.8 | 81.1 | 26.8 | 81.2 | 5 | 26.8 | 81.2 | 48 | 27.0 | 81.0 | 162 | 28.0 | 81.0 | 449 | 30.0 | 80.0 | 754 |
| 1812 | 27.2 | 81.0 | 26.8 | 81.2 | 26 | 26.8 | 81.2 | 91 | 27.0 | 81.0 | 216 | 28.0 | 81.0 | 513 | 30.0 | 80.0 | 852 |
| 1818 | 27.6 | 81.0 | 27.5 | 81.0 | 6 | 29.0 | 80.3 | 45 | 30.0 | 80.0 | 126 | 31.5 | 78.5 | 393 | 33.5 | 77.0 | 747 |
| 1900 | 28.7 | 80.8 | 28.7 | 80.7 | 5 | 31.0 | 80.0 | 36 | 33.0 | 79.0 | 28 | 36.0 | 76.0 | 283 | 38.0 | 73.0 | |
| 1906 | 29.7 | 80.8 | 29.7 | 81.0 | 10 | 31.5 | 80.5 | 47 | 33.0 | 80.0 | 173 | 36.0 | 77.0 | 436 | 38.0 | 73.0 | |
| 1912 | 31.0 | 80.8 | 30.0 | 80.9 | 60 | 33.0 | 80.5 | 88 | 35.0 | 79.0 | 185 | 40.0 | 74.0 | 435 | 42.0 | 65.0 | |
| 1918 | 32.2 | 79.9 | 32.5 | 79.5 | 27 | 34.5 | 77.5 | 54 | 37.0 | 74.5 | 94 | 38.0 | 66.0 | 175 | 39.0 | 56.0 | |
| 2000 | 33.4 | 78.8 | 33.5 | 78.5 | 16 | 35.1 | 75.7 | 49 | 37.0 | 73.5 | 163 | 40.0 | 68.0 | | 42.0 | 60.0 | |
| 2006 | 34.7 | 77.0 | 34.4 | 77.1 | 19 | 36.5 | 74.0 | 53 | 38.0 | 70.0 | 95 | 40.0 | 62.0 | | 41.0 | 55.0 | |
| 2012 | 35.5 | 75.2 | 35.5 | 75.5 | 15 | 37.5 | 72.0 | 67 | 39.5 | 68.0 | 137 | 40.5 | 60.0 | | 41.0 | 53.0 | |
| 2018 | 36.3 | 73.0 | 36.2 | 73.5 | 25 | 37.5 | 69.0 | 27 | 39.0 | 65.0 | 90 | 42.0 | 56.0 | | 44.0 | 46.0 | |
| 2100 | 37.1 | 70.4 | 36.6 | 71.2 | 49 | 37.5 | 65.5 | 34 | 38.5 | 60.5 | | | | | | | |
| 2106 | 37.8 | 68.0 | 38.0 | 67.5 | 27 | 40.0 | 60.0 | 136 | | | | | | | | | |
| 2112 | 38.1 | 65.4 | 37.6 | 65.0 | | 38.5 | 60.0 | | 39.5 | 54.0 | | 40.6 | 41.0 | | 40.0 | 28.0 | |
| 2118 | 38.4 | 62.8 | 37.5 | 63.4 | | 39.0 | 58.0 | | 39.5 | 52.0 | | 40.0 | 39.0 | | | | |
| MEAN VECTOR ERRORS (NM) | | | | | 18 | | | 44 | | | 92 | | | 207 | | | 364 |
| NUMBER OF CASES | | | | | 32 | | | 32 | | | 28 | | | 20 | | | 12 |

Table 5 continued

HURRICANE EMILY 31 - 11 1981

| DATE/TIME (GMT) | BEST LAT. | ACK LONG. | OPERATIONAL POSITION | | | 12 HOUR FORECAST | | | 24 HOUR FORECAST | | | 48 HOUR FORECAST | | | 72 HOUR FORECAST | | |
|-------------------------|--------------|--------------|-------------------------|-------|------------------|------------------|-------|------------------|------------------|-------|------------------|------------------|-------|------------------|------------------|-------|------------------|
| | | | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) |
| 0118 | 31.3 | 66.6 | 31.5 | 67.0 | 24 | 32.0 | 66.0 | 54 | 33.0 | 65.0 | 82 | 34.5 | 64.0 | 70 | 36.0 | 63.5 | 120 |
| 0200 | 31.9 | 65.9 | 31.8 | 65.6 | 16 | 33.3 | 63.8 | 16 | 34.5 | 63.0 | 42 | 36.5 | 62.0 | 136 | 38.5 | 60.5 | 25 |
| 0206 | 32.6 | 65.1 | 32.5 | 65.0 | 8 | 33.7 | 64.7 | 39 | 34.5 | 64.0 | 95 | 36.0 | 63.0 | 52 | 38.0 | 62.0 | 68 |
| 0212 | 33.3 | 64.4 | 33.0 | 64.0 | 27 | 35.5 | 63.5 | 48 | 37.0 | 62.5 | 197 | 39.0 | 62.0 | 188 | 41.0 | 61.5 | 147 |
| 0218 | 34.1 | 64.1 | 34.5 | 63.8 | 28 | 36.0 | 63.3 | 72 | 37.8 | 62.7 | 199 | 40.0 | 62.2 | 162 | 42.0 | 62.0 | 171 |
| 0300 | 35.0 | 64.0 | 35.1 | 63.5 | 25 | 36.5 | 63.0 | 140 | 38.0 | 62.7 | 199 | 40.0 | 62.2 | 132 | 42.0 | 62.0 | 199 |
| 0306 | 36.0 | 65.0 | 35.5 | 63.5 | 79 | 36.7 | 63.5 | 180 | 37.5 | 63.5 | 197 | 39.5 | 63.5 | 214 | 41.5 | 63.0 | 296 |
| 0312 | 35.0 | 65.8 | 35.0 | 64.5 | 64 | 35.0 | 66.0 | 184 | 35.5 | 67.0 | 314 | 37.0 | 68.0 | 419 | 39.5 | 68.0 | 524 |
| 0318 | 34.2 | 65.0 | 34.5 | 64.5 | 31 | 34.5 | 64.5 | 131 | 34.5 | 64.5 | 254 | 34.5 | 65.5 | 427 | 35.0 | 66.0 | 579 |
| 0400 | 34.6 | 63.6 | 34.5 | 64.0 | 21 | 34.5 | 63.5 | 113 | 34.5 | 63.5 | 241 | 34.5 | 63.5 | 374 | 34.5 | 63.5 | 515 |
| 0406 | 35.3 | 62.7 | 35.0 | 62.5 | 21 | 36.0 | 62.0 | 68 | 36.8 | 61.8 | 107 | 38.5 | 61.0 | 158 | 40.5 | 61.0 | 249 |
| 0412 | 36.2 | 61.9 | 36.0 | 62.0 | 13 | 38.0 | 61.0 | 0 | 39.5 | 60.5 | 46 | 42.5 | 59.0 | 121 | 45.0 | 58.5 | 243 |
| 0418 | 37.1 | 61.2 | 37.1 | 61.0 | 10 | 39.0 | 60.5 | 25 | 40.5 | 60.0 | 67 | 43.5 | 58.5 | 150 | 46.0 | 58.0 | 284 |
| 0500 | 38.2 | 60.9 | 38.1 | 60.5 | 20 | 40.3 | 59.8 | 89 | 42.0 | 59.5 | 138 | 43.0 | 59.0 | 146 | 44.0 | 58.5 | 254 |
| 0506 | 38.6 | 60.8 | 39.1 | 60.9 | 30 | 41.5 | 60.5 | 99 | 43.0 | 60.5 | 159 | 44.0 | 59.0 | 163 | 44.0 | 59.0 | 280 |
| 0512 | 39.0 | 60.8 | 39.1 | 60.8 | 6 | 39.1 | 60.8 | 99 | 39.1 | 60.8 | 168 | 41.0 | 60.5 | 256 | 43.0 | 60.5 | 382 |
| 0518 | 39.4 | 59.9 | 39.2 | 60.2 | 18 | 39.2 | 60.2 | 88 | 39.2 | 60.2 | 158 | 41.5 | 60.5 | 275 | 43.0 | 60.5 | 410 |
| 0600 | 39.9 | 59.0 | 39.5 | 59.3 | 28 | 40.8 | 58.5 | 26 | 42.0 | 58.0 | 63 | 43.0 | 57.5 | 173 | 44.0 | 57.5 | 371 |
| 0606 | 40.3 | 58.4 | 40.0 | 58.5 | 19 | 41.5 | 57.0 | 43 | 42.5 | 56.5 | 58 | 43.5 | 56.0 | 159 | 45.0 | 56.0 | 399 |
| 0612 | 40.8 | 58.0 | 40.9 | 57.8 | 11 | 42.0 | 57.0 | 25 | 43.0 | 56.5 | 93 | 44.5 | 56.0 | 229 | | | |
| 0618 | 41.2 | 57.4 | 41.3 | 57.5 | 8 | 42.0 | 57.0 | 45 | 43.0 | 56.5 | 108 | 44.5 | 56.0 | 262 | | | |
| 0700 | 41.6 | 56.8 | 41.5 | 57.2 | 19 | 42.5 | 56.8 | 72 | 43.5 | 56.0 | 111 | 46.0 | 54.0 | 340 | | | |
| 0706 | 41.9 | 55.9 | 42.8 | 57.3 | 82 | 42.5 | 56.0 | 47 | 43.5 | 54.5 | 32 | 46.0 | 52.0 | 260 | | | |
| 0712 | 42.0 | 55.0 | 41.7 | 55.5 | 29 | 42.5 | 53.5 | 19 | 42.5 | 52.5 | 36 | | | | | | |
| 0718 | 42.3 | 54.1 | 42.5 | 54.0 | 13 | 43.0 | 52.0 | 19 | 43.5 | 50.0 | 108 | | | | | | |
| 0800 | 42.7 | 53.4 | 42.7 | 53.0 | 18 | 43.5 | 50.4 | 92 | 44.0 | 43.5 | 332 | | | | | | |
| 0806 | 42.9 | 52.5 | 42.9 | 52.3 | 9 | 43.5 | 50.0 | 117 | 44.0 | 48.0 | 190 | | | | | | |
| 0812 | 42.2 | 51.9 | 42.5 | 52.0 | 19 | 42.8 | 50.5 | 90 | 43.0 | 49.0 | 117 | 44.5 | 46.0 | 113 | | | |
| 0818 | 41.7 | 51.2 | 41.7 | 51.8 | 27 | 42.0 | 51.5 | 104 | 43.0 | 51.5 | 215 | 45.0 | 50.0 | 271 | | | |
| 0900 | 41.0 | 50.2 | 41.0 | 50.5 | 14 | 40.7 | 49.5 | 60 | 41.0 | 48.0 | 82 | 44.0 | 45.0 | 124 | | | |
| 0906 | 40.9 | 49.1 | 41.1 | 49.1 | 12 | 41.5 | 46.5 | 26 | 43.0 | 45.0 | 54 | 45.0 | 43.0 | 163 | | | |
| 0912 | 40.9 | 47.9 | 41.0 | 47.5 | 19 | 41.0 | 45.0 | 29 | 41.0 | 42.0 | 144 | 41.0 | 36.0 | 263 | | | |
| 0918 | 41.0 | 46.9 | 40.9 | 46.5 | 19 | 40.5 | 43.5 | 95 | 40.2 | 40.5 | 201 | 40.0 | 35.0 | | 40.0 | 29.0 | |
| 1000 | 41.2 | 45.9 | 41.0 | 45.5 | 22 | 41.0 | 43.0 | 100 | 41.0 | 40.0 | 144 | 41.0 | 34.5 | | 41.0 | 28.5 | |
| 1006 | 41.9 | 45.1 | 41.8 | 45.0 | 7 | 41.8 | 43.0 | 63 | 42.0 | 40.0 | 116 | 42.0 | 35.0 | | | | |
| 1012 | 42.5 | 44.8 | 42.5 | 44.8 | 0 | 44.0 | 44.0 | 112 | 46.0 | 43.0 | 232 | 51.0 | 40.0 | | | | |
| 1018 | 42.7 | 44.0 | 42.5 | 45.0 | 46 | 44.0 | 44.0 | 127 | 45.0 | 43.0 | | 47.0 | 41.0 | | | | |
| 1100 | 42.2 | 43.3 | 42.3 | 44.0 | 32 | 43.0 | 43.0 | 44 | 44.0 | 41.0 | | 47.0 | 38.0 | | | | |
| 1106 | 42.1 | 42.7 | 42.0 | 42.8 | | 43.0 | 41.0 | | 44.0 | 39.5 | | 46.5 | 37.5 | | | | |
| 1111 | 42.2 | 42.0 | 42.3 | 42.0 | | 42.5 | 40.5 | | 43.5 | 39.0 | | 46.0 | 37.0 | | | | |
| MEAN VECTOR ERRORS (NM) | | | | | 23 | | | | | | 74 | | | | | | 290 |
| NUMBER OF CASES | | | | | 38 | | | | | | 38 | | | | | | 19 |

Table 5 continued

HURRICANE FLOYD 3 - 12 SEPTEMBER 1981

| DATE/TIME (GMT) | BEST TRACK | | OPERATIONAL POSITION | | POSITION ERROR (N.MI.) | 12 HOUR FORECAST | | | 24 HOUR FORECAST | | | 48 HOUR FORECAST | | | 72 HOUR FORECAST | | |
|-------------------------|------------|-------|-------------------------|-------|------------------------------|------------------|-------|------------------|------------------|-------|------------------|------------------|-------|------------------|------------------|-------|------------------|
| | LAT. | LONG. | LAT. | LONG. | | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) |
| 0418 | 19.0 | 64.0 | 19.2 | 63.8 | 17 | 20.5 | 65.5 | 16 | 22.0 | 67.0 | 8 | 24.0 | 69.0 | 102 | 27.0 | 70.0 | 196 |
| 0500 | 19.5 | 64.7 | 19.5 | 64.6 | 6 | 21.0 | 66.0 | 8 | 23.0 | 68.0 | 33 | 26.0 | 70.0 | 59 | 30.0 | 70.0 | 151 |
| 0506 | 20.1 | 65.5 | 20.0 | 65.2 | 18 | 21.5 | 67.0 | 13 | 22.5 | 68.0 | 62 | 25.0 | 70.0 | 163 | 28.0 | 71.0 | 293 |
| 0512 | 20.9 | 66.2 | 21.0 | 66.0 | 13 | 22.3 | 67.3 | 26 | 23.5 | 68.5 | 70 | 25.5 | 70.0 | 202 | 28.0 | 70.0 | 319 |
| 0518 | 21.7 | 67.1 | 22.0 | 67.0 | 19 | 23.0 | 68.3 | 55 | 24.0 | 69.5 | 111 | 26.5 | 70.5 | 238 | 28.5 | 71.0 | 402 |
| 0600 | 22.6 | 67.7 | 22.6 | 67.8 | 6 | 24.0 | 69.0 | 32 | 25.5 | 70.0 | 69 | 27.5 | 71.0 | 242 | 29.5 | 71.0 | 454 |
| 0606 | 23.6 | 68.6 | 23.5 | 68.5 | 8 | 26.0 | 69.5 | 45 | 27.5 | 70.0 | 64 | 29.0 | 70.0 | 208 | 30.5 | 70.0 | 513 |
| 0612 | 24.5 | 69.1 | 24.4 | 68.7 | 23 | 26.5 | 69.5 | 45 | 28.5 | 70.0 | 101 | 31.5 | 70.0 | 246 | 34.0 | 69.5 | 567 |
| 0618 | 25.5 | 69.1 | 25.5 | 69.3 | 11 | 27.5 | 69.6 | 27 | 29.5 | 70.0 | 105 | 32.5 | 70.0 | 261 | 35.0 | 69.5 | 647 |
| 0700 | 26.4 | 69.1 | 26.6 | 69.2 | 13 | 28.2 | 68.9 | 29 | 29.6 | 68.5 | 69 | 32.0 | 67.0 | 208 | 35.5 | 63.0 | 452 |
| 0706 | 27.5 | 68.9 | 27.4 | 69.0 | 8 | 29.3 | 68.2 | 17 | 31.0 | 67.0 | 36 | 33.0 | 64.0 | 165 | 35.0 | 59.0 | 387 |
| 0712 | 28.4 | 68.5 | 28.5 | 68.5 | 6 | 30.5 | 67.5 | 34 | 32.0 | 65.5 | 30 | 33.5 | 61.5 | 157 | 35.0 | 57.0 | 414 |
| 0718 | 29.3 | 67.8 | 29.5 | 68.0 | 16 | 31.0 | 66.5 | 16 | 32.0 | 65.0 | 13 | 33.5 | 60.0 | 177 | 34.5 | 55.0 | 416 |
| 0800 | 29.9 | 67.2 | 30.0 | 66.8 | 22 | 31.5 | 65.0 | 10 | 32.5 | 63.0 | 36 | 34.0 | 58.0 | 221 | 35.0 | 53.0 | 465 |
| 0806 | 30.6 | 66.5 | 30.5 | 66.5 | 6 | 31.5 | 64.5 | 26 | 32.5 | 62.0 | 93 | 34.0 | 57.0 | 286 | 35.0 | 51.0 | 460 |
| 0812 | 31.4 | 65.6 | 31.3 | 65.5 | 8 | 32.0 | 63.4 | 54 | 33.0 | 61.0 | 146 | 34.0 | 56.0 | 368 | 35.0 | 50.0 | 510 |
| 0818 | 32.0 | 64.7 | 31.6 | 64.7 | 24 | 32.4 | 62.3 | 97 | 33.0 | 60.0 | 187 | 34.0 | 55.0 | 429 | 35.0 | 48.0 | 479 |
| 0900 | 32.9 | 63.0 | 32.6 | 62.1 | 49 | 33.5 | 58.0 | 31 | 34.0 | 54.0 | 66 | 34.5 | 49.0 | 295 | 35.0 | 45.0 | 457 |
| 0906 | 33.7 | 60.7 | 33.5 | 60.2 | 28 | 34.5 | 56.0 | 55 | 35.0 | 52.0 | 113 | 35.5 | 46.0 | 247 | 36.0 | 40.0 | 303 |
| 0912 | 34.2 | 58.5 | 34.0 | 58.0 | 28 | 35.0 | 53.0 | 105 | 35.5 | 49.0 | 109 | 36.0 | 42.0 | 143 | 36.5 | 36.0 | 276 |
| 0918 | 33.8 | 56.3 | 33.8 | 56.5 | 10 | 33.0 | 52.0 | 44 | 32.5 | 48.0 | 114 | 32.0 | 40.0 | 286 | 32.0 | 32.0 | |
| 1000 | 33.5 | 54.0 | 33.3 | 54.1 | 13 | 32.7 | 49.7 | 80 | 32.4 | 45.5 | 97 | 32.0 | 38.0 | 328 | 32.0 | 31.0 | |
| 1006 | 33.6 | 51.3 | 32.5 | 52.0 | 75 | 32.5 | 47.5 | 31 | 32.0 | 43.0 | 89 | 32.0 | 36.0 | 354 | | | |
| 1012 | 34.0 | 48.7 | 34.0 | 48.5 | 10 | 36.0 | 43.0 | 139 | 38.0 | 38.0 | 166 | 43.0 | 29.0 | 237 | | | |
| 1018 | 34.0 | 46.4 | 34.2 | 46.3 | 13 | 36.0 | 42.0 | 80 | 38.0 | 37.0 | 92 | 43.0 | 30.0 | | | | |
| 1100 | 33.8 | 44.1 | 35.0 | 44.8 | 80 | 37.5 | 41.0 | 56 | 40.5 | 36.5 | 114 | 46.0 | 29.0 | | | | |
| 1106 | 34.5 | 41.7 | 34.6 | 41.7 | 6 | 35.5 | 37.5 | 82 | 36.5 | 33.5 | 176 | 40.0 | 25.0 | | | | |
| 1112 | 35.5 | 39.7 | 36.0 | 40.0 | 33 | 36.8 | 35.0 | 131 | 38.5 | 30.0 | 231 | 42.0 | 22.0 | | | | |
| 1118 | 36.6 | 38.3 | 36.6 | 38.4 | 5 | 37.8 | 34.5 | 81 | 39.0 | 30.5 | | 43.0 | 22.0 | | | | |
| 1200 | 37.6 | 36.9 | 37.5 | 36.7 | 11 | 38.6 | 33.0 | 114 | 40.0 | 29.5 | | 43.0 | 21.5 | | | | |
| 1206 | 39.0 | 35.2 | 39.0 | 35.0 | | 40.5 | 31.5 | | 42.5 | 28.0 | | 47.0 | 22.0 | | | | |
| 1212 | 40.6 | 33.4 | 40.4 | 34.0 | | 43.5 | 29.0 | | 46.0 | 25.0 | | | | | | | |
| MEAN VECTOR ERRORS (NM) | | | | | 19 | | | 53 | | | 93 | | | 234 | | | 408 |
| NUMBER OF CASES | | | | | 30 | | | 30 | | | 28 | | | 24 | | | 20 |

Table 5 continued

HURRICANE GERT 7 15 SEPTEMBER 1981

| DATE/TIME (GMT) | BEST TRACK | | OPERATIONAL POSITION | | POSITION ERROR (N.MI.) | 12 HOUR FORECAST | | | 24 HOUR FORECAST | | | 48 HOUR FORECAST | | | 72 HOUR FORECAST | | |
|-------------------------|------------|-------|-------------------------|-------|------------------------------|------------------|------|------------------|------------------|------|------------------|------------------|-------|------------------|------------------|-------|------------------|
| | LAT. | LONG. | LAT. | LONG. | | LAT. | LONG | ERROR (N.MI.) | LAT. | LONG | ERROR (N.MI.) | LAT. | LONG. | ERROR (M.MI.) | LAT. | LONG. | ERROR (N.MI.) |
| 0800 | 15.6 | 60.6 | 16.0 | 60.0 | 42 | 16.5 | 63.2 | 44 | 17.5 | 65.5 | 117 | 19.5 | 69.5 | 235 | 22.0 | 73.5 | 282 |
| 0806 | 16.1 | 62.3 | 16.0 | 62.5 | 13 | 16.5 | 65.5 | 72 | 17.0 | 68.5 | 150 | 19.0 | 74.0 | 216 | 21.0 | 78.0 | 475 |
| 0812 | 16.8 | 64.0 | 16.6 | 63.8 | 17 | 17.5 | 67.0 | 74 | 18.5 | 70.0 | 97 | 21.5 | 75.0 | 126 | 25.0 | 78.0 | 402 |
| 0818 | 17.8 | 65.4 | 17.5 | 65.5 | 19 | 19.0 | 67.0 | 81 | 20.5 | 68.5 | 188 | 23.0 | 70.5 | 237 | 25.0 | 72.0 | 299 |
| 0900 | 18.9 | 66.9 | 19.0 | 66.5 | 23 | 21.5 | 69.0 | 74 | 23.0 | 70.0 | 141 | 27.0 | 70.0 | 191 | 30.0 | 68.5 | 103 |
| 0906 | 19.6 | 68.3 | 20.0 | 68.5 | 27 | 22.0 | 71.0 | 53 | 25.0 | 72.0 | 154 | 28.0 | 72.0 | 64 | 31.0 | 71.0 | 163 |
| 0912 | 20.3 | 70.0 | 20.3 | 70.2 | 11 | 22.2 | 72.8 | 13 | 25.0 | 75.0 | 80 | 28.5 | 77.5 | 280 | 31.5 | 78.5 | 578 |
| 0918 | 21.3 | 71.7 | 21.5 | 71.5 | 16 | 23.9 | 74.1 | 69 | 26.5 | 76.0 | 133 | 29.5 | 77.0 | 332 | 32.0 | 77.5 | 623 |
| 1000 | 22.1 | 72.8 | 22.5 | 73.5 | 46 | 24.5 | 75.5 | 29 | 27.5 | 76.5 | 112 | 31.5 | 76.5 | 317 | 35.0 | 73.0 | 432 |
| 1006 | 22.7 | 73.7 | 23.0 | 74.0 | 24 | 25.0 | 76.0 | 71 | 28.0 | 76.5 | 170 | 32.0 | 76.0 | 368 | 35.0 | 71.0 | 492 |
| 1012 | 23.7 | 74.5 | 23.7 | 75.0 | 27 | 25.2 | 74.8 | 69 | 27.0 | 75.0 | 179 | 29.5 | 75.0 | 445 | 32.0 | 74.0 | 865 |
| 1018 | 24.8 | 74.4 | 24.8 | 74.5 | 5 | 27.0 | 74.0 | 64 | 28.0 | 73.0 | 169 | 32.0 | 68.0 | 171 | 33.0 | 64.0 | 594 |
| 1100 | 26.3 | 73.9 | 26.4 | 73.9 | 6 | 29.2 | 72.3 | 17 | 31.4 | 69.0 | 33 | 34.0 | 64.0 | 65 | 36.0 | 59.0 | 481 |
| 1106 | 27.7 | 73.0 | 27.4 | 73.2 | 21 | 29.8 | 71.5 | 22 | 31.5 | 68.5 | 43 | 34.0 | 62.0 | 105 | 36.0 | 55.0 | 464 |
| 1112 | 29.0 | 72.0 | 28.8 | 72.1 | 13 | 30.8 | 69.8 | 30 | 32.5 | 65.5 | 95 | 34.5 | 60.0 | 190 | 36.5 | 53.5 | 565 |
| 1118 | 30.2 | 70.9 | 30.4 | 70.7 | 16 | 32.5 | 67.5 | 42 | 34.0 | 63.5 | 96 | 36.0 | 55.0 | 149 | 36.0 | 46.0 | |
| 1200 | 31.5 | 69.6 | 31.4 | 69.5 | 8 | 33.0 | 66.0 | 53 | 34.3 | 62.5 | 54 | 36.0 | 55.0 | 303 | 36.0 | 46.0 | |
| 1206 | 32.5 | 68.5 | 32.6 | 68.3 | 12 | 35.0 | 65.5 | 48 | 36.5 | 61.5 | 60 | 37.0 | 52.0 | 332 | 37.0 | 43.0 | |
| 1212 | 33.4 | 67.1 | 33.4 | 67.2 | 5 | 35.1 | 63.9 | 19 | 36.5 | 59.0 | 93 | 37.0 | 49.0 | 356 | 37.0 | 40.0 | |
| 1218 | 34.1 | 65.6 | 34.2 | 65.4 | 12 | 35.5 | 62.0 | 77 | 36.5 | 58.0 | 252 | 37.0 | 48.0 | | 37.0 | 38.0 | |
| 1300 | 34.9 | 63.5 | 34.8 | 63.1 | 21 | 35.5 | 59.7 | 167 | 36.0 | 55.0 | 316 | 36.5 | 45.0 | | 37.0 | 35.0 | |
| 1306 | 35.8 | 60.7 | 35.6 | 61.2 | 27 | 36.5 | 56.7 | 156 | 36.5 | 52.5 | 329 | 36.5 | 42.5 | | 37.5 | 32.5 | |
| 1312 | 36.8 | 57.0 | 37.0 | 57.5 | 27 | 38.5 | 50.5 | 28 | 40.0 | 43.5 | 62 | 41.0 | 29.0 | | | | |
| 1318 | 37.7 | 53.2 | 37.5 | 54.0 | 40 | 38.5 | 45.0 | 66 | 39.0 | 38.0 | | 41.0 | 29.0 | | 46.0 | 22.0 | |
| 1400 | 38.3 | 49.4 | 38.0 | 50.0 | 34 | 39.0 | 42.0 | 24 | 39.5 | 34.0 | | 42.0 | 24.0 | | 45.0 | 15.0 | |
| 1406 | 38.8 | 45.6 | 39.0 | 46.0 | | 40.0 | 38.5 | | 40.5 | 30.5 | | | | | | | |
| 1412 | 39.2 | 41.9 | 39.5 | 42.0 | 20 | 40.5 | 34.0 | | 41.0 | 26.0 | | | | | | | |
| MEAN VECTOR ERRORS (NM) | | | | | 20 | | | 58 | | | 136 | | | 236 | | | 455 |
| NUMBER OF CASES | | | | | 25 | | | 25 | | | 23 | | | 19 | | | 15 |

Table 5 continued

HURRICANE HARVEY 11 - 19 SEPTEMBER 1981

| DATE/TIME (GMT) | BEST TRACK | | OPERATIONAL POSITION | | POSITION ERROR (N.MI.) | 12 HOUR FORECAST | | | 24 HOUR FORECAST | | | 48 HOUR FORECAST | | | 72 HOUR FORECAST | | |
|--------------------------|------------|-------|-------------------------|-------|------------------------------|------------------|-------|------------------|------------------|-------|------------------|------------------|-------|------------------|------------------|-------|------------------|
| | LAT. | LONG. | LAT. | LONG. | | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) |
| 1218 | 19.4 | 56.3 | 19.4 | 56.5 | 11 | 20.5 | 60.5 | 70 | 21.5 | 64.0 | 164 | 22.5 | 68.0 | 409 | 23.0 | 72.0 | 819 |
| 1300 | 20.2 | 57.8 | 20.0 | 58.0 | 16 | 21.9 | 61.4 | 34 | 23.2 | 64.5 | 133 | 25.0 | 68.0 | 339 | 27.0 | 72.0 | 746 |
| 1306 | 21.2 | 59.3 | 21.3 | 59.5 | 13 | 23.0 | 62.5 | 51 | 24.0 | 65.0 | 148 | 26.0 | 68.5 | 385 | 28.0 | 72.0 | 802 |
| 1312 | 22.2 | 60.6 | 22.1 | 60.6 | 6 | 23.8 | 62.8 | 46 | 25.0 | 65.0 | 147 | 27.0 | 68.0 | 421 | 29.0 | 71.0 | 802 |
| 1318 | 23.1 | 61.4 | 23.1 | 61.5 | 6 | 24.6 | 63.5 | 61 | 26.0 | 65.0 | 148 | 28.0 | 67.5 | 443 | 30.0 | 70.0 | 784 |
| 1400 | 24.1 | 62.0 | 23.9 | 62.0 | 12 | 25.5 | 63.8 | 73 | 27.3 | 65.4 | 158 | 29.5 | 67.5 | 475 | 32.0 | 70.0 | 786 |
| 1406 | 25.2 | 62.5 | 25.0 | 62.6 | 13 | 26.5 | 63.7 | 69 | 27.9 | 64.7 | 147 | 30.6 | 65.8 | 440 | 33.5 | 66.0 | 612 |
| 1412 | 26.4 | 62.7 | 26.0 | 62.8 | 25 | 28.4 | 63.2 | 36 | 30.0 | 63.4 | 112 | 32.0 | 62.0 | 297 | 34.0 | 58.0 | 278 |
| 1418 | 27.6 | 62.8 | 27.2 | 62.8 | 24 | 29.5 | 63.0 | 44 | 31.0 | 62.5 | 120 | 33.5 | 60.5 | 253 | 35.0 | 56.0 | 239 |
| 1500 | 28.4 | 62.6 | 28.4 | 62.5 | 5 | 30.5 | 62.5 | 75 | 32.5 | 61.5 | 128 | 35.0 | 57.0 | 120 | 36.0 | 51.0 | 88 |
| 1506 | 29.5 | 62.3 | 29.2 | 62.4 | 19 | 31.5 | 62.0 | 84 | 33.2 | 60.5 | 127 | 35.5 | 55.0 | 54 | 37.0 | 49.0 | 36 |
| 1512 | 30.8 | 61.2 | 30.8 | 61.1 | 5 | 32.5 | 58.0 | 70 | 33.5 | 54.0 | 158 | 36.0 | 45.0 | 369 | 37.0 | 35.0 | 560 |
| 1518 | 32.1 | 60.3 | 32.0 | 60.4 | 8 | 34.0 | 58.5 | 21 | 36.0 | 55.5 | 50 | 39.0 | 49.0 | 193 | 41.0 | 40.0 | 297 |
| 1600 | 33.2 | 59.2 | 32.6 | 58.0 | 70 | 33.5 | 54.0 | 93 | 34.0 | 49.0 | 237 | 36.0 | 40.0 | 422 | 40.0 | 32.0 | 474 |
| 1606 | 34.2 | 58.0 | 32.5 | 56.3 | 133 | 32.5 | 52.5 | 100 | 32.7 | 48.5 | 201 | 34.5 | 40.0 | 328 | 38.0 | 31.0 | |
| 1612 | 34.9 | 56.8 | 35.0 | 56.5 | 16 | 37.5 | 52.0 | 158 | 39.5 | 46.0 | 359 | 41.0 | 39.0 | 391 | 42.5 | 29.0 | |
| 1618 | 35.3 | 55.7 | 36.0 | 55.5 | 43 | 38.0 | 52.5 | 99 | 40.5 | 47.0 | 275 | 42.5 | 40.0 | 309 | 43.5 | 30.0 | |
| 1700 | 35.7 | 54.8 | 36.5 | 55.0 | 49 | 38.2 | 52.0 | 84 | 39.5 | 48.5 | 122 | 41.0 | 39.0 | 218 | 42.0 | 28.0 | |
| 1706 | 35.9 | 53.8 | 37.5 | 53.0 | 103 | 39.0 | 50.0 | 59 | 40.5 | 46.0 | 106 | 42.0 | 36.0 | | 43.0 | 25.0 | |
| 1712 | 36.2 | 52.7 | 36.2 | 52.5 | 10 | 36.5 | 50.0 | 39 | 37.0 | 47.0 | 57 | 37.5 | 41.0 | | 38.0 | 33.0 | |
| 1718 | 36.5 | 51.3 | 36.6 | 51.2 | 8 | 37.0 | 48.5 | 41 | 37.5 | 45.5 | 57 | 38.0 | 39.0 | | 38.5 | 31.0 | |
| 1800 | 37.1 | 49.9 | 37.0 | 50.0 | 8 | 37.8 | 47.5 | 28 | 38.2 | 44.5 | 67 | 39.5 | 38.0 | | 40.0 | 30.0 | |
| 1806 | 37.5 | 48.2 | 37.8 | 48.7 | 30 | 38.5 | 46.0 | 15 | 39.0 | 43.0 | | 40.0 | 36.0 | | 40.0 | 28.0 | |
| 1812 | 37.9 | 46.8 | 38.0 | 47.0 | 11 | 38.5 | 44.0 | 38 | 39.0 | 41.0 | | 40.0 | 34.0 | | 40.5 | 26.0 | |
| 1818 | 38.3 | 45.2 | 38.3 | 45.3 | | 39.0 | 42.0 | | 39.5 | 38.5 | | 40.5 | 30.5 | | 41.0 | 22.0 | |
| 1900 | 38.5 | 43.0 | 38.6 | 43.0 | | 38.8 | 38.0 | | 39.0 | 32.5 | | | | | | | |
| MEAN VECTORS ERRORS (NM) | | | | | 27 | | | 62 | | | 146 | | | 326 | | | 523 |
| NUMBER OF CASES | | | | | 24 | | | 24 | | | 22 | | | 18 | | | 14 |

Table 5 continued

HURRICANE IRENE 21 SEPTEMBER - 3 OCTOBER 1981

| DATE/TIME GMT | BEST TRACK | | OPERATIONAL POSITION | | POSITION ERROR (N.M.I.) | 12 HOUR FORECAST | | | 24 HOUR FORECAST | | | 48 HOUR FORECAST | | | 72 HOUR FORECAST | | |
|-------------------------|------------|-------|-------------------------|-------|-------------------------------|------------------|-------|-------------------|------------------|-------|-------------------|------------------|-------|-------------------|------------------|-------|-------------------|
| | LAT. | LONG. | LAT. | LONG. | | LAT. | LONG. | ERROR (N.M.I.) | LAT. | LONG. | ERROR (N.M.I.) | LAT. | LONG. | ERROR (N.M.I.) | LAT. | LONG. | ERROR (N.M.I.) |
| 2312 | 12.7 | 42.2 | 12.8 | 42.6 | 24 | 13.0 | 45.5 | 27 | 13.2 | 48.5 | 74 | 14.0 | 55.0 | 258 | 16.0 | 61.0 | 410 |
| 2318 | 13.0 | 43.8 | 12.9 | 43.8 | 6 | 13.2 | 47.0 | 35 | 14.0 | 50.0 | 84 | 15.5 | 55.5 | 220 | 18.0 | 61.0 | 347 |
| 2400 | 13.3 | 45.3 | 14.0 | 45.3 | 42 | 14.0 | 48.0 | 61 | 15.0 | 51.0 | 94 | 16.5 | 56.0 | 244 | 19.0 | 61.0 | 333 |
| 2406 | 13.8 | 46.7 | 14.0 | 47.2 | 31 | 14.8 | 50.0 | 42 | 15.5 | 53.0 | 108 | 17.0 | 57.0 | 214 | 19.0 | 61.0 | 300 |
| 2412 | 14.3 | 47.8 | 14.4 | 47.9 | 8 | 15.0 | 50.8 | 55 | 16.0 | 53.5 | 121 | 18.0 | 59.0 | 259 | 20.0 | 63.0 | 368 |
| 2418 | 15.0 | 48.9 | 15.2 | 49.2 | 21 | 16.9 | 51.8 | 18 | 18.3 | 54.0 | 52 | 20.5 | 57.5 | 94 | 23.0 | 61.0 | 202 |
| 2500 | 15.6 | 50.1 | 15.7 | 50.4 | 18 | 17.0 | 52.5 | 32 | 18.5 | 54.5 | 58 | 21.0 | 58.5 | 114 | 23.0 | 62.0 | 285 |
| 2506 | 16.6 | 51.2 | 16.6 | 50.9 | 17 | 18.0 | 52.7 | 17 | 20.0 | 55.0 | 59 | 22.0 | 57.0 | 37 | 25.0 | 60.0 | 196 |
| 2512 | 17.4 | 52.0 | 17.3 | 52.1 | 8 | 18.8 | 54.2 | 36 | 20.0 | 56.0 | 47 | 22.0 | 59.0 | 109 | 25.0 | 61.0 | 254 |
| 2518 | 18.2 | 52.8 | 18.2 | 53.0 | 11 | 20.0 | 54.5 | 18 | 21.5 | 56.0 | 31 | 24.0 | 58.0 | 35 | 26.0 | 60.0 | 240 |
| 2600 | 19.1 | 53.5 | 19.0 | 53.5 | 6 | 20.5 | 55.0 | 19 | 22.0 | 56.5 | 19 | 25.0 | 59.0 | 117 | 27.0 | 61.0 | 342 |
| 2606 | 19.7 | 54.3 | 19.9 | 54.5 | 16 | 21.6 | 56.1 | 27 | 23.3 | 57.8 | 61 | 26.5 | 60.0 | 164 | 30.0 | 61.0 | 362 |
| 2612 | 20.3 | 55.1 | 20.4 | 55.1 | 6 | 22.0 | 56.5 | 8 | 23.5 | 58.0 | 50 | 27.0 | 60.0 | 176 | 31.0 | 61.0 | 440 |
| 2618 | 21.0 | 55.7 | 21.0 | 55.8 | 6 | 22.5 | 57.0 | 8 | 24.0 | 58.5 | 67 | 28.0 | 60.5 | 223 | 32.0 | 61.0 | 543 |
| 2700 | 21.8 | 56.4 | 21.8 | 56.5 | 6 | 23.5 | 58.0 | 49 | 25.0 | 59.5 | 137 | 28.0 | 61.0 | 313 | 31.0 | 62.0 | 778 |
| 2706 | 22.4 | 56.8 | 22.5 | 56.7 | 8 | 23.9 | 58.0 | 49 | 25.2 | 59.4 | 152 | 28.5 | 61.0 | 408 | 32.0 | 62.0 | 901 |
| 2712 | 23.0 | 57.2 | 23.1 | 57.1 | 8 | 24.3 | 58.3 | 87 | 25.5 | 59.5 | 183 | 29.0 | 61.0 | 491 | 32.5 | 62.0 | 1033 |
| 2718 | 23.8 | 57.2 | 23.8 | 57.1 | 5 | 26.0 | 57.5 | 45 | 28.0 | 57.5 | 78 | 31.0 | 57.5 | 409 | 34.0 | 57.0 | 915 |
| 2800 | 24.7 | 56.9 | 24.9 | 56.9 | 12 | 27.0 | 56.8 | 13 | 29.0 | 56.5 | 87 | 32.0 | 56.0 | 489 | 35.0 | 55.5 | 991 |
| 2806 | 25.8 | 56.8 | 25.7 | 56.9 | 8 | 28.0 | 56.5 | 21 | 30.0 | 55.5 | 102 | 35.0 | 52.0 | 359 | 41.0 | 46.0 | 553 |
| 2812 | 27.0 | 56.7 | 27.0 | 56.4 | 16 | 29.4 | 56.1 | 62 | 31.5 | 55.0 | 152 | 36.0 | 51.0 | 458 | 41.0 | 45.0 | 611 |
| 2818 | 28.4 | 56.2 | 28.7 | 56.0 | 21 | 31.5 | 55.0 | 62 | 34.0 | 53.0 | 141 | 37.0 | 48.5 | 474 | 40.0 | 42.5 | 627 |
| 2900 | 29.8 | 55.3 | 30.0 | 55.5 | 16 | 33.0 | 54.0 | 62 | 35.0 | 51.5 | 197 | 40.0 | 44.0 | 361 | 44.0 | 35.0 | 615 |
| 2906 | 31.3 | 54.0 | 31.3 | 54.2 | 10 | 34.0 | 51.0 | 21 | 36.5 | 47.0 | 101 | 40.0 | 39.0 | 275 | 42.0 | 30.0 | |
| 2912 | 32.6 | 52.6 | 32.8 | 52.5 | 13 | 35.4 | 48.7 | 76 | 38.0 | 44.0 | 104 | 41.0 | 36.0 | 251 | 42.5 | 27.0 | |
| 2918 | 34.1 | 50.4 | 34.1 | 50.4 | 0 | 36.6 | 46.8 | 98 | 38.5 | 43.0 | 186 | 41.5 | 34.6 | 273 | 44.0 | 25.0 | |
| 3000 | 35.9 | 47.5 | 36.0 | 47.5 | 6 | 38.7 | 42.5 | 19 | 41.0 | 36.0 | 24 | 44.0 | 25.0 | 205 | 46.0 | 14.0 | |
| 3006 | 37.5 | 45.1 | 37.8 | 45.1 | 18 | 39.5 | 40.0 | 53 | 40.0 | 35.0 | 178 | 40.0 | 27.0 | | 39.0 | 19.0 | |
| 3012 | 38.9 | 42.4 | 39.1 | 42.4 | 12 | 41.0 | 36.0 | 30 | 41.0 | 32.0 | 174 | 40.0 | 24.5 | | 38.5 | 18.0 | |
| 3018 | 40.0 | 39.5 | 40.0 | 39.5 | 0 | 41.0 | 34.5 | 97 | 41.0 | 29.0 | 235 | 39.5 | 20.0 | | 38.0 | 15.0 | |
| 0100 | 41.3 | 36.1 | 41.0 | 36.0 | 19 | 41.7 | 29.7 | 141 | 41.0 | 24.0 | 278 | 39.0 | 16.0 | | | | |
| 0106 | 42.5 | 33.7 | 42.4 | 33.8 | 7 | 42.5 | 25.0 | 269 | 42.0 | 17.0 | | | | | | | |
| 0112 | 43.7 | 32.0 | 43.7 | 32.0 | 0 | 45.5 | 26.5 | 254 | 46.5 | 20.0 | | | | | | | |
| 0118 | 44.8 | 30.3 | 44.8 | 30.3 | | 46.5 | 26.0 | | 47.5 | 20.0 | | | | | | | |
| 0200 | 45.1 | 20.5 | 45.1 | 28.5 | | 44.5 | 24.0 | | 44.0 | 19.0 | | | | | | | |
| MEAN VECTOR ERRORS (NM) | | | | | 12 | | | 58 | | | 111 | | | 260 | | | 506 |
| NUMBER OF CASES | | | | | 33 | | | 33 | | | 31 | | | 27 | | | 23 |

Table 5 continued

TROPICAL STORM JOSE 29 OCTOBER - 1 NOVEMBER 1981

| DATE/TIME (GMT) | BEST TRACK | | OPERATIONAL POSITION | | POSITION ERROR (N.MI.) | 12 HOUR FORECAST | | | 24 HOUR FORECAST | | | 48 HOUR FORECAST | | | 72 HOUR FORECAST | | |
|-------------------------|------------|-------|-------------------------|-------|------------------------------|------------------|-------|------------------|------------------|-------|------------------|------------------|-------|------------------|------------------|-------|------------------|
| | LAT. | LONG. | LAT. | LONG. | | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) |
| 3000 | 27.7 | 46.6 | 27.8 | 46.7 | 8 | 29.5 | 45.5 | 16 | 31.5 | 44.0 | 42 | 36.0 | 39.0 | 204 | 39.0 | 33.0 | |
| 3006 | 28.7 | 45.9 | 28.4 | 45.6 | 24 | 30.2 | 43.8 | 28 | 32.0 | 41.5 | 98 | 36.0 | 36.5 | 156 | 39.5 | 31.0 | |
| 3012 | 29.6 | 45.2 | 29.6 | 45.2 | 0 | 31.5 | 43.5 | 52 | 33.5 | 41.5 | 125 | 37.0 | 37.0 | 144 | 40.5 | 32.0 | |
| 3018 | 30.2 | 44.5 | 30.3 | 44.4 | 8 | 32.5 | 42.5 | 82 | 34.5 | 40.5 | 150 | 38.0 | 36.0 | | 41.5 | 31.0 | |
| 3100 | 30.7 | 43.9 | 30.8 | 42.0 | 98 | 32.2 | 42.0 | 94 | 34.0 | 40.0 | 168 | 38.0 | 34.0 | | | | |
| 3106 | 31.1 | 43.1 | 31.4 | 43.5 | 27 | 32.5 | 41.5 | 24 | 34.5 | 39.5 | 108 | | | | | | |
| 3112 | 31.5 | 42.2 | 31.2 | 42.2 | 18 | 34.0 | 40.0 | 119 | 36.0 | 37.5 | 141 | 42.0 | 30.0 | | | | |
| 3118 | 31.9 | 40.8 | 31.5 | 41.0 | 26 | 32.5 | 38.5 | 81 | 33.5 | 36.0 | | 38.0 | 31.0 | | | | |
| 0100 | 32.5 | 39.0 | 32.0 | 39.4 | 36 | 33.0 | 36.5 | 123 | 35.0 | 33.0 | | 40.0 | 28.0 | | | | |
| 0106 | 33.7 | 37.0 | 33.3 | 37.3 | | 35.0 | 34.0 | | 37.5 | 29.5 | | | | | | | |
| 0112 | 35.3 | 34.9 | 35.0 | 35.0 | | 38.5 | 30.0 | | 42.0 | 25.0 | | | | | | | |
| MEAN VECTOR ERRORS (NM) | | | | | 27 | | | 69 | | | 119 | | | 168 | | | |
| NUMBER OF CASES | | | | | 9 | | | 9 | | | 7 | | | 3 | | | |

TROPICAL STORM KATRINA 3 - 7 NOVEMBER 1981

| DATE/TIME (GMT) | BEST TRACK | | OPERATIONAL POSITION | | POSITION ERROR (N.MI.) | 12 HOUR FORECAST | | | 24 HOUR FORECAST | | | 48 HOUR FORECAST | | | 72 HOUR FORECAST | | |
|-------------------------|------------|-------|-------------------------|-------|------------------------------|------------------|-------|------------------|------------------|-------|------------------|------------------|-------|------------------|------------------|-------|------------------|
| | LAT. | LONG. | LAT. | LONG. | | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) | LAT. | LONG. | ERROR (N.MI.) |
| 0406 | 18.3 | 81.4 | 18.8 | 81.7 | 35 | 19.5 | 81.7 | 13 | 21.0 | 81.6 | 61 | 23.5 | 80.5 | 135 | 27.0 | 78.0 | 393 |
| 0412 | 18.6 | 81.3 | 18.6 | 81.3 | 0 | 19.5 | 81.2 | 19 | 20.5 | 81.0 | 41 | 23.5 | 79.5 | 153 | 26.0 | 75.0 | 405 |
| 0418 | 18.9 | 81.2 | 18.6 | 81.5 | 25 | 19.7 | 81.3 | 27 | 20.7 | 81.0 | 49 | 23.5 | 79.5 | 207 | 26.0 | 75.0 | 550 |
| 0500 | 19.2 | 81.1 | 19.2 | 81.1 | 0 | 20.0 | 80.7 | 11 | 21.0 | 80.2 | 40 | 23.5 | 78.5 | 287 | 26.5 | 74.5 | |
| 0506 | 19.6 | 80.8 | 19.8 | 80.8 | 12 | 20.8 | 80.3 | 16 | 22.0 | 79.8 | 84 | 24.0 | 78.0 | 410 | 27.0 | 75.0 | |
| 0512 | 20.0 | 80.5 | 20.0 | 80.5 | 0 | 21.0 | 80.2 | 40 | 22.0 | 79.8 | 157 | 24.0 | 78.0 | 582 | 27.0 | 75.0 | |
| 0518 | 20.4 | 80.1 | 20.4 | 80.2 | 6 | 21.5 | 79.5 | 62 | 22.7 | 78.8 | 179 | 24.5 | 77.0 | 684 | 27.0 | 73.0 | |
| 0600 | 20.9 | 79.5 | 21.0 | 79.5 | 6 | 22.3 | 78.0 | 57 | 23.5 | 76.5 | 179 | 25.5 | 73.0 | | 28.0 | 69.0 | |
| 0606 | 21.6 | 78.3 | 21.3 | 78.3 | 18 | 22.0 | 76.0 | 61 | 23.0 | 73.0 | 167 | 26.0 | 66.0 | | 31.0 | 60.0 | |
| 0612 | 22.4 | 77.0 | 22.3 | 77.0 | 6 | 23.5 | 74.5 | 70 | 24.5 | 71.5 | 231 | 27.0 | 64.5 | | 31.0 | 59.0 | |
| 0618 | 23.2 | 75.5 | 23.8 | 75.0 | 45 | 28.0 | 68.0 | 183 | 32.0 | 63.0 | 281 | 40.0 | 52.0 | | | | |
| 0700 | 24.0 | 73.3 | 24.5 | 73.0 | 34 | 26.5 | 67.5 | 17 | | | | | | | | | |
| 0706 | 25.0 | 70.6 | 24.7 | 70.5 | 19 | 26.5 | 65.0 | 32 | | | | | | | | | |
| 0712 | 25.9 | 67.5 | | | | | | | | | | | | | | | |
| 0718 | 26.8 | 64.5 | | | | | | | | | | | | | | | |
| MEAN VECTOR ERRORS (NM) | | | | | 16 | | | 47 | | | 134 | | | 351 | | | 449 |
| NUMBER OF CASES | | | | | 13 | | | 13 | | | 11 | | | 7 | | | 3 |

LEGEND FOR TABLE 6

Key to Observational (obs. Unit and Resolution

OBSERVATIONAL UNIT

Reconnaissance

AF = Air Force
NOAA = National Oceanographic and Atmospheric Administration

Satellite

SMS-2 = Synchronous Meteorological Satellite
GOES-5 = Geostationary Operational Environmental Satellite

Radar

EYW-R = Key West, Florida National Weather Service Radar
MIA-R = Miami, Florida National Weather Service Radar
TBW-R = Tampa Bay, Florida National Weather Service Radar
DAB-R = Daytona Beach, Florida National Weather Service Radar
CHS-R = Charleston, South Carolina National Weather Service Radar
ILM-R = Wilmington, North Carolina National Weather Service Radar
HAT-R = Cape Hatteras, North Carolina National Weather Service Radar

RESOLUTION

Reconnaissance

Navigational Accuracy/Meteorological Accuracy. (Example-5/5).

Satellite

Classification confidence*, location and confidence**, visible or infrared, resolution (Km).

*1 = completely certain as to current intensity number used.
2 = tempted to vary up or down by 1/2 T or S number.
3 = might vary up or down by 1 T or S number, or more.

**1 = well defined eye with certain picture registration.
2 = well defined eye with uncertain picture registration.
3 = well defined circulation center with certain picture registration.
4 = well defined circulation center with uncertain picture registration.
5 = poorly defined circulation center with certain picture registration.
6 = poorly defined circulation center with uncertain picture registration.

(Example - 1,1, VSBL 1 = classification confidence 1, location confidence 1, visible picture with 1 kilometer resolution.)

(Example - 2,5, IR 8 = classification confidence 2, location confidence 5, infrared picture with 8 kilometer resolution.)

ations for 1981

TROPICAL STORM ARLENE
6 - 9 MAY 1981

CENTER FIXES

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE | | OBS. UNIT | RESOLUTION | ACFT ALT. |
|---------|------|------------|-----------|------------|----------------|-----------|-----------------|--------------------|----------|------|---------------------------------|-----------------|-----------|------------|-----------|
| | | | LAT. (°N) | LONG. (°W) | SFC. | FLT. LVL. | | | IN. | OUT. | C=CIR. DIA. E=ELIP. (N.M.I.) | CHARACTERISTICS | | | |
| 1 | 06 | 1830 | 18.4 | 83.5 | 25 | | | | | | | | SMS-2 | 2,5 VSBLI | |
| 2 | 07 | 0000 | 18.5 | 82.7 | 25 | | | | | | | | SMS-2 | 2,5 IR8 | |
| 3 | 07 | 0600 | 18.5 | 82.0 | 25 | | | | | | | | SMS-2 | 2,5 IR8 | |
| 4 | 07 | 1230 | 19.1 | 80.4 | 35 | | | | | | | | SMS-2 | 1,3 VSBLI | |
| 5 | 07 | 1712 | 19.6 | 79.7 | 40 | 35 | 1000 | | 26 | 24 | | | AF | 2/3 | 314M |
| 6 | 07 | 1830 | 19.8 | 79.7 | 45 | | | | | | | | SMS-2 | 1,3 VSBLI | |
| 7 | 07 | 2028 | 20.1 | 79.3 | 30 | 25 | 999 | | 25 | 25 | | | AF | 2/2 | 314M |
| 8 | 07 | 2130 | 20.1 | 79.1 | 45 | | | | | | | | SMS-2 | 1,3 VSBLI | |
| 9 | 08 | 0000 | 20.2 | 78.8 | 45 | | | | | | | | SMS-1 | 1,3 IR8 | |
| 10 | 08 | 0300 | 20.6 | 78.0 | 45 | | | | | | | | GOES | 1,3 IR8 | |
| 11 | 08 | 0600 | 20.8 | 77.7 | 45 | | | | | | | | GOES | 1,5 IR8 | |
| 12 | 08 | 1230 | 22.4 | 76.4 | 30 | | | | | | | | SMS-2 | 2,5 VSBLI | |
| 13 | 08 | 1455 | 22.7 | 76.0 | 15 | 15 | 1006 | | 22 | 22 | | | NOAA | 5/10 | 420M |
| 14 | 08 | 1815 | 23.0 | 74.6 | 50 | 55 | 1004 | | 23 | 22 | | | NOAA | 5/5 | 340M |
| 15 | 08 | 1830 | 23.0 | 74.6 | 30 | | | | | | | | SMS-2 | 2,3 VSBLI | |
| 16 | 08 | 2200 | 23.0 | 73.5 | | | | | | | | | SMS-2 | 3 VSBLI | |
| 17 | 09 | 0000 | 23.4 | 72.8 | 30 | | | | | | | | SMS-2 | 2,5 IR8 | |
| 18 | 09 | 0500 | 23.9 | 71.3 | | | | | | | | | SMS-2 | 5 IR8 | |
| 19 | 09 | 0600 | 24.0 | 71.0 | 30 | | | | | | | | SMS-2 | 2,5 IR8 | |
| 20 | 09 | 1230 | 25.4 | 68.1 | | | | | | | | | SMS-2 | 5 VSBLI | |
| 21 | 09 | 1905 | 27.7 | 70.5 | 15 | 18 | 1011 | | 21 | 21 | | | AF | 3/15 | 430M |
| 22 | 10 | 2000 | 30.0 | 67.3 | 35 | | | | | | | | SMS-2 | 2,3 VSBLI | |
| 23 | 11 | 0000 | 30.0 | 62.0 | | | | | | | | | SMS-2 | 5 IR8 | |

Table 6 continued.

TROPICAL STORM BRET
30 JUNE - 1 JULY 1981

CENTER FIXES

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. | MIN. 700MB | TEMP. °C | | EYE | | CHARACTERISTICS | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|------------|----------------|-----------|------------|------------|----------|------|-------------|----------------|-----------------|-----------|------------|------------|
| | | | LAT. (°N) | LONG. (°W) | SFC | FLT. LVL. | | | IN. | OUT. | C=CIR. DIA. | E=ELIP. (N.MI) | | | | |
| 1 | 30 | 1230 | 36.1 | 72.6 | 25 | | | | | | | | | SMS-2 | 2,3 VSBL 1 | |
| 2 | 30 | 1735 | 36.1 | 73.6 | | | | | | | | | WELL DEFINED | HAT-R | | |
| 3 | 30 | 1800 | 36.2 | 73.8 | 35-40 | | | | | | | | | SMS-2 | 2,3 VSBL 1 | |
| 4 | 30 | 2100 | 36.8 | 74.4 | 35-40 | | | | | | | | | SMS-2 | 2,5 VSBL 1 | |
| 5 | 30 | 2100 | 36.4 | 74.3 | 65 | | 997 | | 22 | 21 | C | 5 | POORLY DEFINED | AF | 5,2 | |
| 6 | 30 | 2200 | 36.5 | 74.5 | | | | | | | | | | SMS-2 | 3 VSBL 1 | |
| 7 | 30 | 2200 | 36.6 | 74.3 | 65 | 55 | 999 | | | | | | | AF | | |
| 8 | 01 | 2304 | 36.5 | 74.3 | 65 | 49 | | | | | | | | AF | | |
| 9 | 01 | 0030 | 36.7 | 74.6 | 35 | | | | | | | | | SMS-2 | 2,3 IR 8 | |
| 10 | 01 | 0330 | 37.2 | 75.4 | 35 | | | | | | | | | SMS-2 | 2,5 IR 8 | |

TROPICAL STORM CINDY
2 - 5 AUGUST 1981

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE | | CHARACTERISTICS | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|------------|----------------|-----------|-----------------|--------------------|----------|------|-------------|-----------------|-----------------|-----------|------------|------------|
| | | | LAT. (°N) | LONG. (°W) | SFC | FLT. LVL. | | | IN. | OUT. | C=CIR. DIA. | E=ELIP. (N.MI.) | | | | |
| 1 | 02 | 1730 | 36.1 | 67.9 | 35 | | | | | | | | | SMS-2 | 1,3 VSBL 1 | |
| 2 | 02 | 2300 | 36.3 | 66.9 | | | | | | | | | | SMS-2 | 3 IR 8 | |
| 3 | 03 | 0000 | 36.3 | 66.7 | 35 | | | | | | | | | SMS-2 | 2,3 IR 8 | |
| 4 | 03 | 0500 | 36.6 | 65.8 | | | | | | | | | | SMS-2 | 5 IR 8 | |
| 5 | 03 | 0600 | 36.7 | 65.7 | 35 | | | | | | | | | SMS-2 | 2,5 IR 8 | |
| 6 | 03 | 1130 | 38.3 | 65.6 | 35-40 | | | | | | | | | SMS-2 | 1,3 VSBL 1 | |
| 7 | 03 | 1830 | 38.7 | 65.1 | 45-50 | | | | | | | | | SMS-2 | 1,3 VSBL 1 | |
| 8 | 04 | 0000 | 39.0 | 63.7 | 55 | | | | | | | | | SMS-2 | 1,1 IR 8 | |
| 9 | 04 | 0600 | 39.4 | 62.1 | 55 | | | | | | | | | SMS-2 | 1,3 IR 8 | |
| 10 | 04 | 1200 | 40.6 | 60.7 | 55 | | | | | | | | | SMS-2 | 1,5 VSBL 1 | |
| 11 | 04 | 1800 | 41.2 | 58.3 | 55 | | | | | | | | | SMS-2 | 1,3 VSBL 1 | |
| 12 | 04 | 1915 | 41.5 | 58.5 | 50 | 50 | 1002 | | 23 | 23 | | | POORLY DEFINED | AF | 5/2 | 310M |
| 13 | 05 | 0000 | 42.2 | 55.8 | 45 | | | | | | | | | SMS-2 | 1,3 IR 8 | |
| 14 | 05 | 0400 | 42.7 | 54.3 | 45 | | | | | | | | | SMS-2 | 2,5 IR 8 | |

cont.

HURRICANE DENNIS
6 - 11 AUGUST 1981

CENTER FIXES

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE | | OBS. UNIT | RESOLUTION | ALT |
|---------|------|------------|-----------|------------|----------------|-----------|-----------------|--------------------|----------|------|-------------|------------------|-----------|------------|------|
| | | | LAT. (°N) | LONG. (°W) | SFC | FLT. LVL. | | | IN. | OUT. | C=CIR. DIA. | E=ELIP. (N.M.I.) | | | |
| 1 | 07 | 0000 | 9.9 | 25.5 | 25 | | | | | | | | GOES 5 | 3.5 IR 8 | |
| 2 | 07 | 0600 | 9.8 | 26.5 | 35 | | | | | | | | GOES 5 | 3.5 IR 8 | |
| 3 | 07 | 1130 | 11.0 | 27.0 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 4 | 07 | 1200 | 10.8 | 27.0 | 35 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 5 | 07 | 1400 | 10.9 | 28.3 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 6 | 07 | 1600 | 11.0 | 29.1 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 7 | 07 | 1700 | 11.1 | 29.3 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 8 | 07 | 1800 | 11.5 | 29.6 | 35 | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 9 | 08 | 0000 | 11.5 | 31.0 | 45 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 10 | 08 | 0600 | 11.6 | 32.6 | 45 | | | | | | | | GOES 5 | 2.5 IR 8 | |
| 11 | 08 | 1200 | 12.1 | 35.0 | 45 | | | | | | | | GOES 5 | 2.5 IR 8 | |
| 12 | 08 | 1400 | 12.3 | 35.2 | | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 13 | 08 | 1600 | 12.5 | 36.0 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 14 | 08 | 1730 | 12.7 | 36.4 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 15 | 08 | 1900 | 12.8 | 37.0 | 45 | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 16 | 08 | 2330 | 13.0 | 38.1 | | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 17 | 08 | 2330 | 13.0 | 38.1 | 45 | | | | | | | | GOES 5 | 3 IR 8 | |
| 18 | 09 | 0600 | 13.4 | 40.8 | 45 | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 19 | 09 | 1100 | 13.3 | 42.7 | | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 20 | 09 | 1200 | 13.3 | 43.0 | 55 | | | | | | | | GOES 5 | 3 VSBL 4 | |
| 21 | 09 | 1400 | 13.3 | 43.7 | | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 22 | 09 | 1600 | 13.4 | 44.5 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 23 | 09 | 1800 | 13.3 | 45.2 | 55 | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 24 | 10 | 0000 | 13.3 | 47.0 | 55 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 25 | 10 | 0600 | 13.3 | 49.0 | 55 | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 26 | 10 | 1300 | 13.4 | 51.6 | 55 | | | | | | | | GOES 5 | 5,2 IR 8 | |
| 27 | 10 | 1730 | 13.4 | 52.8 | 55 | | | | | | | | GOES 5 | 2.5 VSBL 1 | |
| 28 | 10 | 1908 | 14.0 | 53.4 | 30 | 35 | 1009 | 25 | 24 | C | 40 | POORLY DEFINED. | GOES 5 | 2.5 VSBL 1 | |
| 29 | 10 | 2100 | 13.8 | 54.4 | 55 | | | | | | | | AF | 5/10 | 311M |
| 30 | 11 | 0000 | 14.0 | 55.8 | 55 | | | | | | | | GOES 5 | 2.5 VSBL 1 | |
| 31 | 11 | 0300 | 14.0 | 56.8 | 55 | | | | | | | | GOES 5 | 2.5 IR 8 | |
| 32 | 11 | 0600 | 13.5 | 58.0 | 45 | | | | | | | | GOES 5 | 2.5 IR 8 | |
| 33 | 11 | 0900 | 13.5 | 59.0 | 45 | | | | | | | | GOES 5 | 2.5 IR 8 | |

17

Table 6 continue

Hurricane Dennis continued.

| FIX NO. | DATE | TIME (GHT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE C=CIR. DIA. E=ELIP. (N.M.I.) | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|------------|----------------|-----------|-----------------|--------------------|----------|------|--|------------------|------------|------------|
| | | | LAT. (°N) | LONG. (°W) | SFC | FLT. LVL. | | | IN. | OUT. | | | | |
| 34 | 11 | 1100 | 13.3 | 59.3 | 12 | 17 | 1013 | | | | | AF | 5/5 | |
| 35 | 11 | 1200 | 14.2 | 58.2 | | | | | | | | GOES 5 | 5 VSBL 1 | |
| 36 | 11 | 1230 | 14.2 | 58.3 | 45 | | | | | | | GOES 5 | 2.5 VSBL 1 | |
| 37 | 11 | 1730 | 14.8 | 60.0 | | | | | | | | GOES 5 | 5 VSBL 1 | |
| 38 | 11 | 1830 | 14.8 | 60.0 | 30 | | | | | | | GOES 5 | 2.5 VSBL 1 | |
| 39 | 11 | 2330 | 15.5 | 61.7 | 30 | | | | | | | GOES 5 | 2.5 IR 8 | |
| 40 | 12 | 0600 | 16.0 | 63.5 | 25 | | | | | | | GOES 5 | 2.5 IR 8 | |
| 41 | 12 | 1230 | 15.6 | 65.7 | 25 | | | | | | | GOES 5 | 1.5 VSBL 1 | |
| 42 | 12 | 1730 | 15.3 | 68.0 | | | | | | | | GOES 5 | 5 VSBL 1 | |
| 43 | 12 | 1830 | 15.5 | 68.0 | 25 | | | | | | | GOES 5 | 1.5 VSBL 1 | |
| 44 | 13 | 0000 | 16.0 | 71.0 | 25 | | | | | | | GOES 5 | 2.5 IR 8 | |
| 45 | 13 | 1230 | 16.3 | 74.0 | | | | | | | | GOES 5 | 5 VSBL 1 | |
| 46 | 14 | 1200 | 15.7 | 78.6 | | | | | | | | GOES 5 | 5 VSBL 1 | |
| 47 | 15 | 1130 | 19.8 | 81.1 | | | | | | | | SMS-2 | 5 VSBL 1 | |
| 48 | 15 | 1230 | 20.7 | 80.2 | 30 | | | | | | | SMS-2 | 1.5 VSBL 1 | |
| 49 | 15 | 1630 | 21.6 | 80.7 | 33 | | | | | | | SMS-2 | 1.5 VSBL 1 | |
| 50 | 15 | 1730 | 21.7 | 80.4 | | | | | | | | SMS-2 | 5 VSBL 1 | |
| 51 | 15 | 1830 | 21.8 | 80.9 | 35 | | | | | | | SMS-2 | 1.5 IR 8 | |
| 52 | 15 | 1930 | 21.8 | 80.9 | | | | | | | | GOES 5 | 5 VSBL 1 | |
| 53 | 15 | 1930 | 22.8 | 81.1 | | | | | | | | POSSIBLE CENTER. | EYW-R | |
| 54 | 15 | 2010 | 22.5 | 81.0 | | | | | | | | POSSIBLE CENTER. | EYW-R | |
| 55 | 15 | 2130 | 22.0 | 80.9 | 35 | | | | | | | GOES 5 | 2.5 VSBL 1 | |
| 56 | 15 | 2310 | 23.1 | 81.2 | | | | | | 10 | GOOD FIX. | EYW-R | | |
| 57 | 15 | 2330 | 22.7 | 80.5 | | | | | | | | GOES 5 | 5 IR 8 | |
| 58 | 16 | 0030 | 23.4 | 81.3 | | | | | | 20 | FAIR FIX. | EYW-R | | |
| 59 | 16 | 0030 | 23.1 | 80.4 | | | | | | | | GOES 5 | 2.5 IR 8 | |
| 60 | 16 | 0110 | 23.1 | 80.8 | | | | | | 18 | | EYW-R | | |
| 61 | 16 | 0130 | 23.1 | 80.7 | | | | | | 20 | FAIR FIX. | EYW-R | | |
| 62 | 16 | 0205 | 23.1 | 80.6 | | | | | | 20 | GOOD FIX. | EYW-R | | |
| 63 | 16 | 0230 | 23.0 | 80.8 | | | | | | 18 | GOOD FIX. | EYW-R | | |
| 64 | 16 | 0300 | 22.9 | 81.0 | | | | | | | | GOES 5 | 2.5 IR 8 | |
| 65 | 16 | 0310 | 23.2 | 80.9 | | | | | | 30 | FAIR FIX. | EYW-R | | |
| 66 | 16 | 0330 | 23.3 | 80.9 | | | | | | 20 | FAIR FIX. | EYW-R | | |
| 67 | 16 | 0408 | 23.1 | 81.1 | | | | | | 35 | POOR FIX. | EYW-R | | |

continued.

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE | | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|------------|----------------|-----------|-----------------|--------------------|----------|------|-----------------------------|-----------------|-----------|------------|------------|
| | | | LAT. (°N) | LONG. (°W) | SFC | FLT. LVL. | | | IN. | OUT. | C-CIR. DIA. E-ELIP. (N.MI.) | CHARACTERISTICS | | | |
| 68 | 16 | 0435 | 23.3 | 81.1 | | | | | | | 45 | POOR FIX. | EYW-R | | |
| 69 | 16 | 0500 | 23.4 | 80.7 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 70 | 16 | 0506 | 23.0 | 81.0 | | | | | | | 50 | POOR FIX. | EYW-R | | |
| 71 | 16 | 0535 | 23.0 | 81.0 | | | | | | | 50 | POOR FIX. | EYW-R | | |
| 72 | 16 | 0600 | 23.4 | 80.5 | 45 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 73 | 16 | 0900 | 23.5 | 80.7 | 45 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 74 | 16 | 0910 | 23.6 | 81.3 | | | | | | | 40 | FAIR FIX. | EYW-R | | |
| 75 | 16 | 0930 | 23.6 | 81.4 | | | | | | | 35 | FAIR FIX. | EYW-R | | |
| 76 | 16 | 1010 | 23.7 | 81.4 | | | | | | | 25 | FAIR FIX. | EYW-R | | |
| 77 | 16 | 1030 | 23.7 | 81.5 | | | | | | | 25 | FAIR FIX. | EYW-R | | |
| 78 | 16 | 1105 | 23.7 | 81.5 | | | | | | | 25 | FAIR FIX. | EYW-R | | |
| 79 | 16 | 1130 | 23.7 | 81.5 | | | | | | | 20 | FAIR FIX. | EYW-R | | |
| 80 | 16 | 1159 | 23.7 | 81.3 | 35 | 40 | 1001 | | 24 | 21 | | | NOAA | 5/5 | 510M |
| 81 | 16 | 1200 | 23.8 | 81.3 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 82 | 16 | 1205 | 23.8 | 81.5 | | | | | | | 30 | FAIR FIX. | EYW-R | | |
| 83 | 16 | 1230 | 23.8 | 81.5 | | | | | | | 30 | FAIR FIX. | EYW-R | | |
| 84 | 16 | 1230 | 23.8 | 81.3 | 45 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 85 | 16 | 1305 | 23.8 | 81.5 | | | | | | | 30 | FAIR FIX. | EYW-R | | |
| 86 | 16 | 1330 | 23.8 | 81.5 | | | | | | | 25 | GOOD FIX. | EYW-R | | |
| 87 | 16 | 1405 | 23.9 | 81.3 | | | | | | | 18 | GOOD FIX. | EYW-R | | |
| 88 | 16 | 1430 | 24.0 | 81.2 | | | | | | | 12 | GOOD FIX. | EYW-R | | |
| 89 | 16 | 1458 | 24.2 | 81.2 | 50 | 50 | 1002 | | 26 | 24 | | | NOAA | 5/10 | 402M |
| 90 | 16 | 1500 | 24.2 | 81.1 | 45 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 91 | 16 | 1505 | 24.2 | 81.2 | | | | | | | 20 | GOOD FIX. | EYW-R | | |
| 92 | 16 | 1530 | 24.2 | 81.2 | | | | | | | 20 | GOOD FIX. | EYW-R | | |
| 93 | 16 | 1605 | 24.3 | 81.2 | | | | | | | 20 | GOOD FIX. | EYW-R | | |
| 94 | 16 | 1630 | 24.5 | 81.3 | | | | | | | 30 | FAIR FIX. | EYW-R | | |
| 95 | 16 | 1710 | 24.6 | 81.5 | | | | | | | 30 | POOR FIX. | EYW-R | | |
| 96 | 16 | 1730 | 24.6 | 81.5 | | | | | | | 40 | POOR FIX. | EYW-R | | |
| 97 | 16 | 1730 | 24.5 | 81.2 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 98 | 16 | 1759 | 24.6 | 81.3 | 35 | 40 | 1001 | | 25 | 24 | | | NOAA | 5/10 | 510M |
| 99 | 16 | 1800 | 24.7 | 81.3 | 45 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 100 | 16 | 1805 | 24.6 | 81.5 | | | | | | | 35 | POOR FIX. | EYW-R | | |

43

Table 6 continued.

Hurricane Dennis continued.

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE | | CHARACTERISTICS | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|------------|----------------|-----------|-----------------|--------------------|----------|------|------------------------------|-----------------------|-----------------|-----------|------------|------------|
| | | | LAT. (°N) | LONG. (°W) | SFC | FLT. LVL. | | | IN. | OUT. | C=CIR. DIA. E=ELIP. (N.M.I.) | | | | | |
| 101 | 16 | 1830 | 24.6 | 81.5 | | | | | | | | | | | | |
| 102 | 16 | 1930 | 24.6 | 81.5 | | | | | | | 35 | POOR FIX. | EYW-R | | | |
| 103 | 16 | 2005 | 24.7 | 81.5 | | | | | | | 25 | FAIR FIX. | EYW-R | | | |
| 104 | 16 | 2030 | 24.6 | 81.5 | | | | | | | 35 | FAIR FIX. | EYW-R | | | |
| 105 | 16 | 2100 | 24.8 | 81.5 | 45 | | | | | | 35 | FAIR FIX. | EYW-R | | | |
| 106 | 16 | 2103 | 24.7 | 81.4 | | | | | | | | | GOES 5 | 2.5 | VSBL 1 | |
| 107 | 16 | 2105 | 24.7 | 81.4 | | | | | | | | FAIR FIX. | MIA-R | | | |
| 108 | 16 | 2130 | 24.8 | 81.3 | | | | | | | | FAIR FIX. | EYW-R | | | |
| 109 | 16 | 2132 | 24.8 | 81.3 | | | | | | | | POOR FIX. | EYW-R | | | |
| 110 | 16 | 2235 | 25.0 | 81.4 | | | | | | | | POOR FIX. 15° OVERLAY | MIA-R | | | |
| 111 | 16 | 2305 | 24.9 | 81.4 | | | | | | | | POOR FIX. | EYW-R | | | |
| 112 | 16 | 2330 | 24.9 | 81.3 | | | | | | | | POOR FIX. | EYW-R | | | |
| 113 | 16 | 2344 | 24.9 | 81.4 | 30 | 30 | 998 | | | | | POOR FIX. | EYW-R | | | |
| 114 | 17 | 0000 | 25.0 | 81.5 | 35 | | | | | | | NOAA | 2/2 | | | 523M |
| 115 | 17 | 0005 | 24.9 | 81.2 | | | | | | | | GOES 5 | 2.5 | IR 8 | | |
| 116 | 17 | 0105 | 25.0 | 81.3 | | | | | | | | POOR FIX. | EYW-R | | | |
| 117 | 17 | 0135 | 25.0 | 81.2 | | | | | | | 25 | POOR FIX. | EYW-R | | | |
| 118 | 17 | 0259 | 25.1 | 81.3 | | 40 | 999 | | 25 | 23 | 25 | POOR FIX. | EYW-R | | | |
| 119 | 17 | 0300 | 25.2 | 81.4 | 35 | | | | | | | NOAA | 3/2 | | | 538M |
| 120 | 17 | 0305 | 25.1 | 81.2 | | | | | | | | GOES 5 | 2.5 | IR 8 | | |
| 121 | 17 | 0335 | 25.1 | 81.2 | | | | | | | 25 | POOR FIX. | EYW-R | | | |
| 122 | 17 | 0409 | 25.2 | 81.4 | | | | | | | 30 | POOR FIX. | EYW-R | | | |
| 123 | 17 | 0428 | 25.2 | 81.4 | | | | | | | 38 | FAIR FIX. | EYW-R | | | |
| 124 | 17 | 0510 | 25.3 | 81.5 | | | | | | | 18 | FAIR FIX. | EYW-R | | | |
| 125 | 17 | 0531 | 25.3 | 81.4 | | | | | | | 30 | FAIR FIX. | EYW-R | | | |
| 126 | 17 | 0559 | 25.3 | 81.3 | | 50 | 999 | | 25 | 24 | 25 | FAIR FIX. | EYW-R | | | |
| 127 | 17 | 0600 | 25.3 | 81.3 | 35 | | | | | | | NOAA | 2/2 | | | 530M |
| 128 | 17 | 0606 | 25.2 | 81.4 | | | | | | | | GOES 5 | 2.5 | IR 8 | | |
| 129 | 17 | 0630 | 25.2 | 81.2 | | | | | | | 22 | FAIR FIX. | EYW-R | | | |
| 130 | 17 | 0706 | 25.2 | 81.2 | | | | | | | 16 | FAIR FIX. | EYW-R | | | |
| 131 | 17 | 0723 | 25.5 | 81.3 | | 45 | 999 | | 25 | 24 | 18 | FAIR FIX. | EYW-R | | | |
| 132 | 17 | 0730 | 25.3 | 81.3 | | | | | | | | NOAA | 2/2 | | | 522M |
| 133 | 17 | 0808 | 25.6 | 81.3 | | 25 | 998 | | 25 | 24 | 30 | FAIR FIX. | EYW-R | | | |
| 134 | 17 | 0831 | 25.3 | 81.4 | | | | | | | | NOAA | 2/2 | | | 520M |
| 135 | 17 | 0900 | 25.4 | 81.2 | 35 | | | | | | 35 | FAIR FIX. | EYW-R | | | |
| 136 | 17 | 0909 | 25.5 | 81.2 | | | | | | | | GOES 5 | 2.5 | IR 8 | | |
| 137 | 17 | 0929 | 25.6 | 81.2 | | | | | | | 40 | POOR FIX. | EYW-R | | | |
| | | | | | | | | | | | 40 | POOR FIX. | EYW-R | | | |

77

Table 6 continued.

Hurricane Dennis continued.

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE C=CIR. DIA. E=ELIP. (N.MI.) | CHARACTERISTICS | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|------------|----------------|-----------|-----------------|--------------------|----------|------|---------------------------------|-----------------|-----------|------------|------------|
| | | | LAT. (°N) | LONG. (°W) | SFC | FLT. LVL. | | | IN. | OUT. | | | | | |
| 138 | 17 | 1014 | 25.8 | 81.3 | | | | | | | 60 | POOR FIX. | EYW-R | | |
| 139 | 17 | 1035 | 25.9 | 81.3 | | | | | | | 60 | POOR FIX. | EYW-R | | |
| 140 | 17 | 1110 | 25.9 | 81.5 | | | | | | | 55 | POOR FIX. | EYW-R | | |
| 141 | 17 | 1135 | 25.8 | 81.4 | | | | | | | 50 | POOR FIX. | EYW-R | | |
| 142 | 17 | 1200 | 25.4 | 81.4 | 45 | | | | | | | | | | |
| 143 | 17 | 1205 | 25.8 | 81.4 | | | | | | | 48 | POOR FIX. | GOES 5 | 2,5 VSBL 1 | |
| 144 | 17 | 1500 | 26.6 | 80.5 | | | | | | | | | | | |
| 145 | 17 | 1800 | 26.3 | 81.2 | | | | | | | | | | | |
| 146 | 17 | 1830 | 25.8 | 81.3 | | | | | | | | FAIR FIX. | EYW-R | | |
| 147 | 17 | 1905 | 25.8 | 81.3 | | | | | | | | FAIR FIX. | EYW-R | | |
| 148 | 18 | 0000 | 25.6 | 80.6 | | | | | | | | | GOES 5 | 5 IR 8 | |
| 149 | 18 | 0600 | 25.2 | 81.1 | | | | | | | | | GOES 5 | 5 IR 8 | |
| 150 | 18 | 0830 | 25.5 | 80.8 | | | | | | | | POSSIBLE CENTER | EYW-R | | |
| 151 | 18 | 0900 | 24.9 | 81.4 | 45 | | | | | | | | GOES 5 | 3,5 IR 8 | |
| 152 | 18 | 1830 | 27.6 | 80.9 | | | | | | | | | GOES 5 | 5 VSBL 1 | |
| 153 | 18 | 2020 | 27.6 | 80.6 | | | | | | | 18 | FAIR FIX. | TBW-R | | |
| 154 | 18 | 2045 | 27.6 | 80.5 | | | | | | | 14 | FAIR FIX. | DAB-R | | |
| 155 | 18 | 2100 | 27.6 | 80.5 | | | | | | | 23 | POOR FIX. | TBW-R | | |
| 156 | 18 | 2119 | 27.7 | 80.5 | | | | | | | 23 | | TBW-R | | |
| 157 | 18 | 2132 | 27.8 | 80.4 | | | | | | | 20 | FAIR FIX. | DAB-R | | |
| 158 | 18 | 2246 | 28.4 | 80.8 | | | | | | | 20 | GOOD FIX. | TBW-R | | |
| 159 | 18 | 2300 | 28.5 | 80.8 | | | | | | | 26 | GOOD FIX. | TRW-R | | |
| 160 | 18 | 2317 | 28.5 | 80.8 | | | | | | | 16 | GOOD FIX. | DAB-R | | |
| 161 | 18 | 2318 | 28.5 | 80.7 | | | | | | | 20 | POOR FIX. | TBW-R | | |
| 162 | 19 | 0000 | 28.9 | 81.0 | | | | | | | | | GOES 5 | 5 IR 8 | |
| 163 | 19 | 0103 | 28.9 | 80.6 | | | | | | | 10 | FAIR FIX. | DAB-R | | |
| 164 | 19 | 0130 | 29.7 | 81.1 | | | | | | | | POOR FIX. | TBW-R | | |
| 165 | 19 | 0300 | 29.5 | 81.3 | | | | | | | | | GOES 5 | 5 IR 8 | |
| 166 | 19 | 0530 | 29.6 | 81.0 | | 32 | | 16 | 16 | | | | AF | 1/3 | 1765M |
| 167 | 19 | 0600 | 29.8 | 81.1 | 40 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 168 | 19 | 0900 | 30.4 | 81.1 | 45 | | | | | | | | GOES 5 | 1,5 IR 8 | |
| 169 | 19 | 0900 | 30.4 | 81.0 | | 37 | 1000 | 24 | 24 | | | | AF | 3/10 | 433M |
| 170 | 19 | 1200 | 30.9 | 80.5 | 45 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 171 | 19 | 1200 | 31.0 | 80.8 | 20 | 15 | 1003 | 25 | 24 | | | | AF | 3/5 | 229M |
| 172 | 19 | 1400 | 31.3 | 80.0 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 173 | 19 | 1444 | 31.7 | 80.2 | 22 | 25 | 1001 | 25 | 24 | | | POORLY DEFINED | AF | 3/3 | 244M |

45

Table 6 continued.

Hurricane Dennis continued

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (HB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE | | CHARACTERISTICS | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|------------|----------------|-----------|-----------------|--------------------|----------|------|-------------|------------------|-----------------|------------|------------|------------|
| | | | LAT. (°N) | LONG. (°W) | SFC | FLT. LVL. | | | IN. | OUT. | C=CIR. DIA. | E=ELIP. (N.M.I.) | | | | |
| 174 | 19 | 1500 | 31.6 | 79.8 | | | | | | | | | | | | |
| 175 | 19 | 1515 | 31.9 | 79.6 | 45 | | | | | | | | | | | |
| 176 | 19 | 1535 | 31.8 | 79.7 | | | | | | | | | | | | |
| 177 | 19 | 1554 | 31.9 | 80.1 | | | | | | | | | | | | |
| 178 | 19 | 1610 | 31.8 | 79.7 | 25 | 20 | 1001 | | 25 | 25 | | | GOOD FIX. | CHS-R | 2,3 VSBL 1 | |
| 179 | 19 | 1700 | 32.3 | 79.4 | | | | | | | | | GOOD FIX. | CHS-R | | |
| 180 | 19 | 1755 | 32.2 | 79.9 | | | | | | | | | POOR FIX. | AF | 3/3 | 268M |
| 181 | 19 | 1800 | 32.6 | 79.4 | 40 | 43 | 999 | | 25 | 24 | | | | CHS-R | | |
| 182 | 19 | 1804 | 32.4 | 79.6 | 45 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 183 | 19 | 1910 | 32.5 | 79.6 | | | | | | | | | | AF | 3/3 | 241M |
| 184 | 19 | 1935 | 32.7 | 79.5 | | | | | | | | | POOR FIX. | GOES 5 | 2,3 VSBL 1 | |
| 185 | 19 | 2030 | 32.7 | 78.9 | | | | | | | | | | CHS-R | | |
| 186 | 19 | 2033 | 32.7 | 79.4 | | | | | | | | | POOR FIX. | CHS-R | | |
| 187 | 19 | 2058 | 33.1 | 78.6 | | | | | | | | | 20° OVERLAY. | ILM-R | | |
| 188 | 19 | 2100 | 32.8 | 79.2 | | | | | | | | | | CHS-R | | |
| 189 | 19 | 2100 | 32.8 | 78.9 | 45 | | | | | | | | 10° OVERLAY. | ILM-R | | |
| 190 | 19 | 2130 | 32.8 | 78.7 | | | | | | | | | POOR FIX. | CHS-R | | |
| 191 | 19 | 2131 | 32.9 | 79.2 | | | | | | | | | | GOES-5 | 2,3 VSBL 1 | |
| 192 | 19 | 2158 | 33.0 | 78.9 | | | | | | | | | 10° OVERLAY. | ILM-R | | |
| 193 | 19 | 2200 | 33.0 | 79.0 | | | | | | | | | POOR FIX. | CHS-R | | |
| 194 | 19 | 2228 | 33.2 | 78.7 | | | | | | | | | 10° OVERLAY. | ILM-R | | |
| 195 | 19 | 2230 | 33.3 | 78.7 | | | | | | | | | POOR FIX. | CHS-R | | |
| 196 | 19 | 2231 | 33.0 | 79.0 | | | | | | | | | 10° OVERLAY. | ILM-R | | |
| 197 | 19 | 2254 | 33.5 | 78.6 | | | | | | | | | | GOES 5 | 5 VSBL 1 | |
| 198 | 19 | 2305 | 33.2 | 78.9 | | | | | | | | | POOR FIX. | CHS-R | | |
| 199 | 19 | 2358 | 33.7 | 78.7 | | | | | | | | | | ILM-R | | |
| 200 | 20 | 0000 | 33.1 | 78.1 | 45 | | | | | | | | POOR FIX. | CHS-R | | |
| 201 | 20 | 0000 | 33.1 | 78.3 | | | | | | | | | | ILM-R | | |
| 202 | 20 | 0024 | 33.0 | 78.6 | | | | | | | | | | GOES 5 | 1,5 IR 8 | |
| 203 | 20 | 0025 | 33.8 | 78.5 | | | | | | | | | POOR FIX. | CHS-R | | |
| 204 | 20 | 0030 | 33.5 | 78.5 | 25 | 25 | 999 | | | | | | GOOD FIX. | CHS-R | | |
| 205 | 20 | 0100 | 33.1 | 78.6 | | | | | | | | | | ILM-R | | |
| 206 | 20 | 0214 | 33.2 | 78.0 | | | | | | | | | | NOAA | 20/30 | |
| 207 | 20 | 0255 | 33.2 | 77.7 | | | | | | | | | GOOD FIX. | CHS-R | | |
| 208 | 20 | 0300 | 33.3 | 77.8 | | | | | | | | | GOOD FIX. | ILM-R | | |
| 209 | 20 | 0311 | 33.4 | 77.5 | 55 | | | | | | | 8 | FAIR FIX. | ILM-R | | |
| 210 | 20 | 0315 | 34.1 | 78.1 | | | | | | | | | | GOES 5 | 5 IR 8 | |
| | | | | | 30 | | | | | | | | 5 | FAIR FIX. | ILM-R | |
| | | | | | | | | | | | | | | OVER LAND. | AF | 700MB |

Table 6 continued.

Hurricane Dennis continued.

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE | | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|------------|----------------|-----------|-----------------|--------------------|----------|------|-------------|------------------|-----------|------------|------------|
| | | | LAT. (°N) | LONG. (°W) | SFC | FLT. LVL. | | | IN. | OUT. | C=CIR. DIA. | E=ELIP. (N.M.I.) | | | |
| 211 | 20 | 0347 | 33.5 | 77.3 | | | | | | | 8 | POOR FIX. | ILM-R | | |
| 212 | 20 | 0415 | 33.8 | 77.1 | | | | | | | 6 | POOR FIX. | ILM-R | | |
| 213 | 20 | 0435 | 33.9 | 77.1 | | | | | | | | POOR FIX. | ILM-R | | |
| 214 | 20 | 0448 | 34.1 | 77.6 | | | | | | | 20 | FAIR FIX. | ILM-R | | |
| 215 | 20 | 0502 | 34.2 | 77.4 | | | | | | | 20 | FAIR FIX. | ILM-R | | |
| 216 | 20 | 0505 | 34.3 | 77.3 | | 47 | | 3034 | 11 | 11 | | | AF | 10/5 | 700MB |
| 217 | 20 | 0600 | 34.0 | 76.8 | 55 | | | | | | | | GOES 5 | 1,3 IR 8 | |
| 218 | 20 | 0603 | 34.1 | 77.5 | | | | | | | | | ILM-R | | |
| 219 | 20 | 0614 | 34.2 | 77.4 | | | | | | | | POOR FIX. | ILM-R | | |
| 220 | 20 | 0633 | 34.0 | 77.3 | | | | | | | | POOR FIX. | ILM-R | | |
| 221 | 20 | 0653 | 34.2 | 77.1 | | | | | | | | POOR FIX. | ILM-R | | |
| 222 | 20 | 0717 | 34.2 | 76.8 | | | | | | | | POOR FIX. | ILM-R | | |
| 223 | 20 | 0800 | 34.0 | 77.3 | | | | | | | | FAIR FIX. | HAT-R | | |
| 224 | 20 | 0831 | 34.2 | 77.1 | | | | | | | | FAIR FIX. | HAT-R | | |
| 225 | 20 | 0900 | 35.0 | 75.6 | 55 | | | | | | | | GOES 5 | 1,5 IR 8 | |
| 226 | 20 | 0905 | 34.8 | 76.6 | | | | | | | 20 | GOOD FIX. | HAT-R | | |
| 227 | 20 | 0923 | 35.2 | 76.5 | | 35 | | 3038 | 11 | 10 | | | AF | 3/15 | 700MB |
| 228 | 20 | 0956 | 34.8 | 75.8 | | | | | | | | GOOD FIX. | HAT-R | | |
| 229 | 20 | 1033 | 34.9 | 75.9 | | | | | | | | FAIR FIX. | HAT-R | | |
| 230 | 20 | 1056 | 35.1 | 75.8 | | | | | | | 15 | GOOD FIX. | HAT-R | | |
| 231 | 20 | 1130 | 36.0 | 75.6 | 40 | 30 | | 3052 | | | 6 | GOOD FIX. | AF | 3/5 | 700MB |
| 232 | 20 | 1201 | 35.1 | 75.3 | | | | | | | | | HAT-R | | |
| 233 | 20 | 1211 | 35.6 | 75.1 | 45 | 50 | 1000 | | | | | | AF | 3/5 | |
| 234 | 20 | 1230 | 35.6 | 74.6 | 55 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 235 | 20 | 1235 | 35.1 | 75.2 | | | | | | | | GOOD FIX. | HAT-R | | |
| 236 | 20 | 1412 | 35.6 | 74.5 | 50 | 40 | 999 | | 23 | 23 | | | AF | 5/3 | 421M |
| 237 | 20 | 1730 | 36.5 | 72.5 | 65 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 238 | 20 | 1745 | 36.2 | 73.5 | 65 | 68 | 996 | | | | | | AF | 2/2 | 37M |
| 239 | 20 | 2000 | 36.4 | 72.5 | 35 | 38 | 995 | | 25 | 25 | | | AF | 5/4 | 41M |
| 240 | 20 | 2307 | 36.5 | 71.6 | 70 | 66 | 995 | | 25 | 22 | | | AF | 5/8 | 44M |
| 241 | 21 | 0000 | 36.7 | 70.9 | 65 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 242 | 21 | 0600 | 38.1 | 67.5 | 55 | | | | | | | | GOES 5 | 2,6 IR 8 | |
| 243 | 21 | 0607 | 37.9 | 67.9 | | 45 | 999 | 3034 | 11 | 15 | | POORLY DEFINED. | AF | 5/5 | 700MB |
| 244 | 21 | 1130 | 37.5 | 65.5 | | | | | | | | | GOES 5 | 3 VSBL 2 | |
| 245 | 21 | 1200 | 37.5 | 65.4 | 45 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 246 | 21 | 1730 | 37.5 | 63.5 | 35 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 247 | 22 | 0000 | 38.3 | 59.4 | 35 | | | | | | | | GOES 5 | 2,5 IR 8 | |

Table 6 continued.

HURRICANE EMILY
29 AUGUST - 6 SEPTEMBER 1981

CENTER FIXES

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE | | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|----------|----------------|-----------|-----------------|--------------------|----------|-----|-------------|------------------|-----------|------------|------------|
| | | | LAT. (°N) | LN. (°W) | SFC | FLT. LVL. | | | IN. | OUT | C=CIR. DIA. | E=ELIP. (N.M.I.) | | | |
| 1 | 29 | 1230 | 30.0 | 67.5 | 25 | | | | | | | | | | |
| 2 | 29 | 1900 | 30.0 | 68.5 | 25 | | | | | | | | GOES 5 | 1,5 VSBL 1 | |
| 3 | 01 | 1730 | 31.3 | 66.8 | 35 | | | | | | | | GOES 5 | 1,3 VSBL 1 | |
| 4 | 01 | 2330 | 31.6 | 65.4 | | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 5 | 02 | 0030 | 31.8 | 65.2 | 40 | | | | | | | | GOES 5 | 5 IR 8 | |
| 6 | 02 | 0600 | 32.6 | 64.8 | 40 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 7 | 02 | 1200 | 33.5 | 64.3 | 40 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 8 | 02 | 1530 | 34.1 | 63.9 | | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 9 | 02 | 1800 | 34.5 | 63.8 | 40 | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 10 | 02 | 2300 | 35.0 | 63.5 | | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 11 | 03 | 0000 | 35.1 | 63.5 | 45 | | | | | | | | GOES 5 | 5 IR 8 | |
| 12 | 03 | 0600 | 35.5 | 63.5 | 55 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 13 | 03 | 1200 | 35.0 | 64.8 | | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 14 | 03 | 1200 | 35.0 | 64.8 | 55 | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 15 | 03 | 1530 | 34.8 | 64.7 | | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 16 | 03 | 1800 | 34.5 | 64.5 | 60 | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 17 | 03 | 2300 | 34.5 | 64.0 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 18 | 04 | 0100 | 34.4 | 63.7 | 60 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 19 | 04 | 0600 | 35.2 | 62.4 | 60 | | | | | | | | GOES 5 | 3 IR 8 | |
| 20 | 04 | 1200 | 36.5 | 61.7 | 77 | 60 | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 21 | 04 | 1325 | 36.5 | 61.8 | 55 | 40 | | | | | | | GOES 5 | 2,2 VSBL 1 | |
| 22 | 04 | 1500 | 36.9 | 61.8 | | | 971 | 2833 | 12 | 9 | E12/40/20 | POORLY DEFINED. | AF | 2/5 | 700MB |
| 23 | 04 | 1601 | 36.9 | 61.5 | | 45 | 967 | 2801 | | | | | GOES 5 | 1 IR 8 | |
| 24 | 04 | 1704 | 37.0 | 61.3 | 65 | 60 | 967 | 2797 | 14 | 9 | C 35 | CLOSED WALL. | AF | 2/5 | 700MB |
| 25 | 04 | 1800 | 37.1 | 61.1 | 77 | | | | | | | | GOES 5 | 2,2 IR 8 | |
| 26 | 04 | 2315 | 38.1 | 60.8 | | 42 | 970 | 2823 | 15 | 14 | C 30 | POORLY DEFINED. | AF | 3/5 | 700MB |
| 27 | 05 | 0000 | 38.1 | 60.4 | 77 | | | | | | | | GOES 5 | 1,1 IR 8 | |
| 28 | 05 | 0220 | 38.6 | 60.8 | | 50 | 969 | 2824 | | | C 4 | POORLY DEFINED. | AF | 3/5 | 700MB |
| 29 | 05 | 0513 | 39.1 | 60.9 | | 53 | 970 | 2820 | 15 | 12 | C 4 | POORLY DEFINED. | AF | 3/5 | 700MB |
| 30 | 05 | 0600 | 39.3 | 60.4 | 77 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 31 | 05 | 1137 | 39.0 | 60.9 | | 60 | 967 | 2812 | 12 | 10 | C 30 | POORLY DEFINED. | AF | 3/3 | 700MB |
| 32 | 05 | 1200 | 39.1 | 60.8 | 77 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 33 | 05 | 1730 | 39.2 | 60.2 | 65 | | | | | | | | GOES 5 | 2,1 VSBL 1 | |
| 34 | 05 | 1806 | 39.3 | 60.2 | 45 | 48 | 971 | 2810 | 12 | 14 | E10/30/20 | POORLY DEFINED. | AF | 3/5 | 700MB |
| 35 | 05 | 2050 | 39.4 | 59.6 | 55 | 56 | | 2797 | | | | | AF | | |
| 36 | 05 | 2237 | 39.5 | 59.4 | | | | | | | | | AF | | |
| 37 | 05 | 2354 | 39.6 | 59.2 | | 59 | 966 | 2309 | 13 | 10 | C 20 | OPEN SW. | AF | 2/2 | 700MB |

able 6 continued.

Hurricane Emily continued.

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE | | CHARACTERISTICS | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|-----------|----------------|-----------|-----------------|--------------------|----------|-----|-------------|-----------------|-----------------|-----------|------------|------------|
| | | | LAT. (°N) | Lon. (°W) | SFC | FLT. LVL. | | | IN. | OUT | C=CIR. DIA. | E=ELIP. (N.MI.) | | | | |
| 38 | 06 | 0030 | 39.5 | 59.1 | 65 | | | | | | | | | GOES 5 | 1,1 IR 8 | |
| 39 | 06 | 0604 | 40.1 | 58.4 | | 41 | | | | | | | OPEN NE. | AF | 2/3 | 700MB |
| 40 | 06 | 0630 | 40.1 | 58.3 | 65 | | 970 | 2812 | 13 | 09 | C | 30 | | GOES 5 | 1,1 IR 8 | |
| 41 | 06 | 0748 | 40.3 | 58.2 | | 49 | | 2799 | | | | | | AF | | 700MB |
| 42 | 06 | 0937 | 40.4 | 58.1 | | 40 | | 2803 | | | | | | AF | | 700MB |
| 43 | 06 | 1100 | 40.6 | 57.9 | | 48 | | 2810 | 14 | 10 | C | 40 | OPEN SW. | AF | 2/4 | 700MB |
| 44 | 06 | 1130 | 40.9 | 57.7 | 65 | | | | | | | | | GOES 5 | 1,1 VSBL 1 | |
| 45 | 06 | 1700 | 41.2 | 57.7 | 71 | | | | | | | | | GOES 5 | 1,1 VSBL 1 | |
| 46 | 06 | 1708 | 41.2 | 57.7 | | 43 | 971 | 2826 | 13 | 12 | C | 40 | OPEN SE-SW. | AF | 3/5 | 700MB |
| 47 | 06 | 2015 | 41.2 | 57.7 | | 46 | | 2823 | 12 | 12 | | | | AF | 3/5 | 700MB |
| 48 | 06 | 2305 | 41.3 | 57.3 | | 51 | 971 | 2817 | 13 | 11 | C | 15 | OPEN E-SW. | AF | 3/5 | 700MB |
| 49 | 07 | 0000 | 41.5 | 57.2 | 77 | | | | | | | | | GOES 5 | 1,1 IR 8 | |
| 50 | 07 | 0600 | 41.8 | 56.5 | 77 | | | | | | | | | GOES 5 | 1,1 IR 8 | |
| 51 | 07 | 1119 | 41.8 | 55.6 | | 15 | 975 | | 12 | 10 | | | POORLY DEFINED. | | | 700MB |
| 52 | 07 | 1230 | 42.0 | 55.2 | 77 | | | | | | | | | GOES 5 | 2,1 VSBL 1 | |
| 53 | 07 | 1730 | 42.4 | 54.1 | 77 | | | | | | | | | GOES 5 | 2,1 VSBL 1 | |
| 54 | 08 | 0000 | 42.7 | 53.0 | 77 | | | | | | | | | GOES 5 | 1,3 IR 8 | |
| 55 | 08 | 0600 | 42.9 | 52.3 | 77 | | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 56 | 08 | 1230 | 42.4 | 51.9 | 55 | | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 57 | 08 | 1430 | 42.2 | 51.8 | | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 58 | 08 | 1800 | 41.7 | 51.8 | 55 | | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 59 | 08 | 2300 | 41.0 | 50.5 | 55 | | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 60 | 09 | 0600 | 41.1 | 49.1 | 55 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 61 | 09 | 1230 | 41.0 | 47.5 | 55 | | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 62 | 09 | 1400 | 40.9 | 47.2 | | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 63 | 09 | 1700 | 40.8 | 46.8 | 45 | | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 64 | 10 | 0000 | 41.1 | 45.5 | 45 | | | | | | | | | GOES 5 | 3 IR 8 | |
| 65 | 10 | 0600 | 41.8 | 45.0 | 45 | | | | | | | | | GOES 5 | 5 IR 8 | |
| 66 | 10 | 1130 | 42.4 | 44.8 | 45 | | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 67 | 10 | 1730 | 42.5 | 44.9 | 35 | | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 68 | 11 | 0030 | 42.3 | 44.0 | 35 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 69 | 11 | 0600 | 42.0 | 42.8 | 30 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 70 | 11 | 1230 | 42.1 | 42.3 | | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 71 | 11 | 1800 | 42.3 | 41.8 | | | | | | | | | | GOES 5 | 3 VSBL 1 | |

Table 6 continued.

HURRICANE FLOYD
5 - 12 SEPTEMBER 1981

CENTER FIXES

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE | | CHARACTERISTICS | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|-----------|----------------|-----------|-----------------|--------------------|----------|-----|-------------|-----------------|-----------------|-----------|------------|------------|
| | | | LAT. (°N) | Lon. (°W) | SFC | FLT. LVL. | | | IN. | OUT | C=CIR. DIA. | E=ELIP. (N.MI.) | | | | |
| 1 | 02 | 1330 | 15.5 | 60.0 | 25 | | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 2 | 02 | 1830 | 15.3 | 59.3 | 25 | | | | | | | | | GOES 5 | 3,5 VSBL 1 | |
| 3 | 03 | 0030 | 16.0 | 59.5 | 25 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 4 | 03 | 0600 | 16.0 | 60.0 | 25 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 5 | 03 | 1200 | 16.2 | 60.3 | 25 | | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 6 | 03 | 1800 | 16.7 | 60.7 | 25 | | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 7 | 04 | 0030 | 17.5 | 61.5 | 25 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 8 | 04 | 0600 | 18.0 | 62.5 | 25 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 9 | 04 | 1230 | 18.5 | 62.8 | 30 | | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 10 | 04 | 1500 | 18.5 | 63.5 | | | | | | | | | | GOES 5 | 5 VSBL 1 | |
| 11 | 04 | 1830 | 18.9 | 63.9 | 30 | | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 12 | 04 | 1832 | 19.3 | 64.0 | 35 | 30 | 1004 | 25 | 24 | | | | | AF | 2/5 | 216M |
| 13 | 05 | 0030 | 19.5 | 64.7 | 35 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 14 | 05 | 0630 | 20.0 | 65.5 | 35 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 15 | 05 | 1130 | 21.0 | 66.1 | 45 | | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 16 | 05 | 1430 | 21.5 | 67.7 | 60 | 20 | 999 | 23 | 23 | C | 30 | OPEN NE-E. | | AF | 3/3 | 378M |
| 17 | 05 | 1700 | 21.9 | 67.0 | 70 | 20 | 997 | 26 | 24 | C | 30 | OPEN NE-E. | | AF | 3/3 | 280M |
| 18 | 05 | 1800 | 22.3 | 67.3 | 50 | | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 19 | 05 | 2314 | 22.7 | 67.6 | | 40 | 994 | 3050 | 17 | 12 | C | 10 | OPEN S. | AF | 5/2 | 700MB |
| 20 | 06 | 0000 | 22.5 | 68.0 | 55 | | | | | | | | | GOES 5 | 1,5 IR 8 | |
| 21 | 06 | 0232 | 23.1 | 68.0 | | 60 | 994 | 3038 | | | | | | AF | | |
| 22 | 06 | 0517 | 23.5 | 68.3 | | 27 | 997 | 3065 | 16 | 10 | C | 15 | OPEN SE. | AF | 5/2 | 700MB |
| 23 | 06 | 0600 | 24.1 | 68.3 | 60 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 24 | 06 | 1137 | 24.4 | 68.7 | 90 | 61 | 987 | 3008 | 16 | 16 | | | POORLY DEFINED. | AF | 3/3 | 300M |
| 25 | 06 | 1200 | 24.4 | 69.0 | 63 | | | | | | | | | GOES 5 | 1,4 VSBL 1 | |
| 26 | 06 | 1402 | 24.9 | 69.1 | 100 | 76 | 987 | 3004 | 18 | 9 | E05/30/20 | | POORLY DEFINED. | AF | 3/3 | 700MB |
| 27 | 06 | 1430 | 25.2 | 69.2 | | | | | | | | | | GOES 5 | 1 VSBL 1 | |
| 28 | 06 | 1700 | 25.4 | 69.2 | 71 | | | | | | | | | GOES 5 | 1,1 VSBL 1 | |
| 29 | 06 | 1703 | 25.4 | 69.2 | 70 | 95 | 985 | 2965 | 16 | 11 | E05/30/20 | | CLOSED. | AF | 3/3 | 700MB |
| 30 | 06 | 1910 | 25.8 | 69.2 | 100 | 90 | 982 | 2931 | 15 | 9 | C | 15 | CLOSED. | AF | 3/3 | 700MB |
| 31 | 06 | 2100 | 26.1 | 69.2 | 110 | 60 | 981 | 2925 | | | | | | AF | | |
| 32 | 06 | 2219 | 26.3 | 69.2 | 95 | 75 | 979 | 2920 | 17 | 8 | C | 20 | OPEN E-S. | AF | 3/3 | 700MB |
| 33 | 06 | 2310 | 26.4 | 69.2 | 95 | 95 | 979 | 2909 | 19 | 8 | C | 20 | OPEN E-S. | AF | 3/3 | 700MB |
| 34 | 07 | 0000 | 26.5 | 68.9 | 72 | | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 35 | 07 | 0500 | 27.4 | 69.1 | | 80 | 978 | 2924 | 17 | 9 | E17/20/10 | | OPEN SE. | AF | 5/2 | 700MB |

Table 6 continued.

Hurricane Floyd continued

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE | | CHARACTERISTICS | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|-----------|----------------|-----------|-----------------|--------------------|----------|-----|-------------|-----------------|-----------------|-----------|------------|------------|
| | | | LAT. (°N) | LOH. (°W) | SFC | FLT. LVL. | | | IN. | OUT | C=CIR. DIA. | E=ELIP. (N.MI.) | | | | |
| 36 | 07 | 0600 | 27.4 | 68.5 | 77 | | | | | | | | | | | |
| 37 | 07 | 1200 | 28.4 | 68.0 | 77 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 38 | 07 | 1224 | 28.4 | 68.0 | 100 | | | | | | | | | GOES 5 | 2,1 VSBL 1 | |
| 39 | 07 | 1456 | 28.8 | 68.3 | 77 | 100 | 975 | 2935 | 21 | 12 | C | 22 | OPEN W-S. | NOAA | 10/5 | 700MB |
| 40 | 07 | 1700 | 29.1 | 68.0 | 77 | | 975 | 2878 | 20 | 10 | C | 20 | OPEN SE | NOAA | 10/5 | |
| 41 | 07 | 1701 | 29.2 | 68.1 | | 110 | 975 | 2872 | 19 | 11 | E11/25/15 | | CLOSED. | GOES 5 | 2,1 VSBL 1 | |
| 42 | 07 | 1930 | 29.3 | 67.6 | | | | | | | | | | NOAA | 10/5 | 700MB |
| 43 | 17 | 2100 | 29.6 | 67.2 | 77 | | | | | | | | | GOES 5 | 3 IR 8 | |
| 44 | 08 | 0020 | 29.9 | 67.2 | | 38 | 991 | 3035 | 21 | 17 | E03/30/20 | | OPEN SW. | GOES 5 | 2,3 VSBL 1 | |
| 45 | 08 | 0030 | 30.0 | 66.5 | 77 | | | | | | | | | AF | 3/5 | 700MB |
| 46 | 08 | 0300 | 30.3 | 66.6 | 77 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 47 | 08 | 0355 | 30.3 | 66.9 | | 39 | 995 | 3044 | | | | | | GOES 5 | 1,5 IR 8 | |
| 48 | 08 | 0501 | 30.4 | 66.9 | | 47 | 995 | 3057 | | | | | | AF | | |
| 49 | 08 | 0630 | 30.5 | 66.6 | 55 | | | | | | C | 25 | POORLY DEFINED. | AF | 3/5 | 700MB |
| 50 | 08 | 0930 | 30.6 | 66.3 | 55 | | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 51 | 08 | 1130 | 31.5 | 65.5 | 55 | | | | | | | | | GOES 5 | 1,3 IR 8 | |
| 52 | 08 | 1230 | 31.3 | 65.5 | 45 | 50 | | 3093 | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 53 | 08 | 1335 | 31.2 | 65.2 | 85 | 50 | 994 | 3027 | 10 | 5 | E07/20/10 | | OPEN SW. | AF | | |
| 54 | 08 | 1500 | 31.8 | 65.1 | 64 | | | | | | | | | AF | 5/2 | 700MB |
| 55 | 08 | 1613 | 31.4 | 65.0 | 85 | 38 | | 3110 | | | | | | GOES 5 | 2,3 VSBL 2 | |
| 56 | 08 | 1708 | 31.6 | 64.7 | 60 | 46 | 1003 | 3117 | 10 | 9 | | | POORLY DEFINED. | AF | | |
| 57 | 09 | 0000 | 32.7 | 63.0 | 65 | | | | | | | | | AF | 5/2 | |
| 58 | 09 | 0030 | 32.7 | 62.1 | 40 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 59 | 09 | 0534 | 33.5 | 60.3 | | 44 | 1007 | 3022 | | | | | | AF | 5/5 | |
| 60 | 09 | 0630 | 33.7 | 60.5 | 55 | | | 3067 | 8 | | | | | AF | 5/8 | 700MB |
| 61 | 09 | 1230 | 34.2 | 58.4 | 55 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 62 | 09 | 1400 | 34.0 | 57.4 | | | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 63 | 09 | 1700 | 33.7 | 56.4 | | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 64 | 10 | 0000 | 33.3 | 54.1 | 55 | | | | | | | | | GOES 5 | 2,1 VSBL 1 | |
| 65 | 10 | 0600 | 32.5 | 52.0 | 55 | | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 66 | 10 | 1130 | 34.0 | 48.6 | 55 | | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 67 | 10 | 1730 | 34.2 | 46.5 | 45 | | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 68 | 11 | 0030 | 35.1 | 44.8 | 35 | | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 69 | 11 | 0600 | 34.6 | 41.7 | 65 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 70 | 11 | 1230 | 35.8 | 39.7 | 65 | | | | | | | | | GOES 5 | 2,1 IR 8 | |
| | | | | | | | | | | | | | | GOES 5 | 3,3 VSBL 1 | |

51

Table 6 continued.

Hurricane Floyd continued.

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE | | CHARACTERISTICS | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|------------|----------------|-----------|-----------------|--------------------|----------|------|-------------|-----------------|-----------------|-----------|------------|------------|
| | | | LAT. (°N) | LONG. (°W) | SFC | FLT. LVL. | | | IN. | OUT. | C=CIR. DIA. | E=ELIP. (N.MI.) | | | | |
| 71 | 11 | 1800 | 36.7 | 38.3 | 65 | | | | | | | | | GOES 5 | 1,3 VSBL 1 | |
| 72 | 12 | 0000 | 37.6 | 36.8 | 45 | | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 73 | 12 | 0600 | 39.2 | 35.1 | | | | | | | | | | GOES 5 | 3 IR 8 | |
| 74 | 12 | 0630 | 39.3 | 35.0 | 45 | | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 75 | 12 | 1230 | 40.8 | 33.2 | 45 | | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 76 | 12 | 1800 | 42.0 | 31.5 | 35 | | | | | | | | | GOES 5 | 1,5 VSBL 1 | |

HURRICANE GERT
31 AUGUST - 11 SEPTEMBER 1981

CENTER FIXES

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE | | CHARACTERISTICS | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|------------|----------------|-----------|-----------------|--------------------|----------|------|-------------|-----------------|-----------------|-----------|------------|------------|
| | | | LAT. (°N) | LONG. (°W) | SFC | FLT. LVL. | | | IN. | OUT. | C=CIR. DIA. | E=ELIP. (N.MI.) | | | | |
| 1 | 04 | 1930 | 17.0 | 39.0 | 25 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 2 | 05 | 0000 | 16.8 | 39.7 | 25 | | | | | | | | | GOES 5 | 1,5 IR 8 | |
| 3 | 05 | 0630 | 17.0 | 42.2 | 25 | | | | | | | | | GOES 5 | 1,5 IR 8 | |
| 4 | 05 | 1300 | 15.0 | 44.5 | 25 | | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 5 | 05 | 1830 | 14.5 | 45.7 | 25 | | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 6 | 06 | 0000 | 14.7 | 47.2 | 25 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 7 | 06 | 0600 | 14.7 | 48.7 | 25 | | | | | | | | | GOES 5 | 1,5 IR 8 | |
| 8 | 06 | 1200 | 14.7 | 51.5 | 25 | | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 9 | 06 | 1800 | 14.5 | 53.8 | 30 | | | | | | | | | GOES 5 | 1,5 VSBL 1 | |
| 10 | 07 | 0030 | 14.6 | 54.9 | 32 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 11 | 07 | 0630 | 15.0 | 56.5 | 35 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 12 | 07 | 1130 | 15.0 | 57.5 | 35 | | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 13 | 07 | 1500 | 15.6 | 57.8 | 30 | 25 | | 1012 | | | | | | AF | | |
| 14 | 07 | 1715 | 15.5 | 57.7 | 25 | 22 | | 1010 | | | | | | AF | | |
| 15 | 07 | 1800 | 15.3 | 59.0 | 35 | | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 16 | 08 | 0300 | 15.8 | 61.6 | 41 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 17 | 08 | 0505 | 15.4 | 62.2 | | | | 1002 | 3114 | | | | | AF | | 700MB |
| 18 | 08 | 0900 | 15.8 | 63.3 | 45 | | | | | | | | | GOES 5 | 1,5 IR 8 | |

Hurricane Gert continued.

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE | | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|------------|----------------|-----------|-----------------|--------------------|----------|-----|-----------------------------|-----------------|-----------|------------|------------|
| | | | LAT. (°N) | LONG. (°W) | SFC | FLT. LVL. | | | IN. | OUT | C=CIR. DIA. E=ELIP. (N.MI.) | CHARACTERISTICS | | | |
| 19 | 08 | 1105 | 16.6 | 63.8 | 45 | 50 | 1001 | | 24 | 29 | | | AF | 3/2 | 271M |
| 20 | 08 | 1200 | 16.9 | 63.9 | 45 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 21 | 08 | 1350 | 17.0 | 64.5 | 30 | 33 | 1003 | | | | | | AF | | |
| 22 | 08 | 1500 | 17.1 | 64.7 | 45 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 23 | 08 | 1620 | 17.3 | 65.0 | 35 | 43 | 1005 | | | | | | AF | | |
| 24 | 08 | 1700 | 17.5 | 65.2 | | | | | | | | | GOES 5 | 3 IR 8 | |
| 25 | 08 | 1711 | 17.5 | 65.1 | 20 | 25 | 1004 | | 24 | 27 | | | AF | 5/4 | 308M |
| 26 | 08 | 2030 | 18.4 | 65.6 | 45 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 27 | 08 | 2330 | 19.0 | 66.5 | 45 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 28 | 09 | 0630 | 19.8 | 68.5 | 35 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 29 | 09 | 1200 | 20.3 | 70.1 | 35 | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 30 | 09 | 1700 | 21.4 | 71.3 | | | | | | | | | GOES 5 | 5 VSBL 1 | |
| 31 | 09 | 1800 | 21.5 | 71.4 | 35 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 32 | 09 | 2100 | 22.5 | 72.0 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 33 | 10 | 0000 | 22.3 | 73.2 | 35 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 34 | 10 | 0226 | 22.4 | 72.8 | | 20 | 1010 | | 25 | 25 | | | AF | 5/5 | 375M |
| 35 | 10 | 0300 | 22.7 | 73.6 | 35 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 36 | 10 | 0600 | 23.5 | 74.0 | 35 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 37 | 10 | 0640 | 22.8 | 73.2 | | 50 | 1009 | | 23 | 23 | | | AF | 2/2 | 408M |
| 38 | 10 | 0908 | 23.0 | 74.5 | | 26 | 1009 | | 25 | 24 | | | AF | 2/5 | 381M |
| 39 | 10 | 1200 | 24.2 | 74.0 | 35 | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 40 | 10 | 1230 | 23.5 | 74.3 | 50 | 55 | | 1440 | 20 | 17 | | | NOAA | 2/5 | 850MB |
| 41 | 10 | 1456 | 24.0 | 74.3 | | 60 | | 1440 | 22 | 17 | | | NOAA | 2/4 | 850MB |
| 42 | 10 | 1500 | 24.0 | 74.3 | 45 | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 43 | 10 | 1545 | 24.1 | 74.5 | 70 | | 998 | | 26 | 23 | C | 20 | NOAA | | 403M |
| 44 | 10 | 1800 | 24.9 | 74.2 | 55 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 45 | 10 | 1819 | 24.9 | 74.5 | 75 | 68 | 996 | | 25 | 22 | | | NOAA | 2/4 | 561M |
| 46 | 10 | 1918 | 25.1 | 74.4 | | 68 | 996 | 1405 | 22 | 16 | | | NOAA | 2/4 | 850MB |
| 47 | 10 | 2103 | 23.6 | 74.2 | 65 | 70 | | 1403 | 21 | 17 | C | 35 | NOAA | 5/4 | 850MB |
| 48 | 10 | 2330 | 25.9 | 74.0 | | | | | | | | | GOES 5 | 3 IR 8 | |
| 49 | 10 | 2359 | 26.3 | 73.9 | | 75 | 994 | | 22 | 18 | C | 25 | NOAA | 4/6 | 850MB |
| 50 | 11 | 0000 | 26.3 | 73.7 | 65 | | | | | | | | GOES 5 | 3 IR 8 | |
| 51 | 11 | 0303 | 25.9 | 73.6 | | 70 | 994 | 1391 | 22 | 17 | E04/35/25 | | NOAA | 7/7 | 850MB |
| 52 | 11 | 0600 | 27.5 | 72.9 | 65 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 53 | 11 | 0610 | 27.4 | 72.8 | | 70 | 995 | | 23 | 17 | C | 40 | NOAA | 2/2 | 850MB |

53

Table 6 continued.

Hurricane Gert continued.

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE | | CHARACTERISTICS | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|-----------|----------------|-----------|-----------------|--------------------|----------|-----|-------------|------------------|------------------|-----------|------------|------------|
| | | | LAT. (°N) | Lon. (°W) | SFC | FLT. LVL. | | | IN. | OUT | C=CIR. DIA. | E=ELIP. (N.M.I.) | | | | |
| 54 | 11 | 0909 | 28.2 | 72.6 | | 65 | 989 | 1356 | 26 | 19 | C | 30 | OPEN SE. | NOAA | 2/2 | 850MB |
| 55 | 11 | 1200 | 29.7 | 71.3 | 65 | | | | | | | | | GOES 5 | 2,6 VSBL 1 | |
| 56 | 11 | 1202 | 28.8 | 72.1 | 75 | 82 | 992 | | 27 | 18 | C | 30 | OPEN SW. | NOAA | 4/2 | 1540 |
| 57 | 11 | 1515 | 29.7 | 71.3 | 75 | 58 | 994 | | 20 | 17 | C | 25 | OPEN SE. | NOAA | 2/4 | 1547 |
| 58 | 11 | 1800 | 30.5 | 70.8 | 64 | | | | | | | | | GOES 5 | 1,3 IR 8 | |
| 59 | 11 | 1806 | 30.4 | 70.7 | 85 | 68 | 990 | | 25 | 16 | C | 25 | OPEN SE. | NOAA | 2/4 | 1539 |
| 60 | 11 | 2015 | 30.7 | 70.4 | 80 | 80 | 988 | | 24 | 17 | | | NORTH WALL ONLY. | NOAA | 2/4 | 1546 |
| 61 | 11 | 2300 | 31.3 | 68.8 | | | | | | | | | | GOES 5 | 3 IR 8 | |
| 62 | 12 | 0000 | 31.4 | 68.8 | 65 | | | | | | | | | GOES 5 | 2/3 IR 8 | |
| 63 | 12 | 0020 | 31.4 | 69.5 | | 90 | 989 | | 23 | 16 | C | 40 | OPEN SE + SW. | NOAA | 2/2 | 1543 |
| 64 | 12 | 0122 | 31.6 | 69.3 | | 80 | 989 | | 23 | 15 | C | 40 | OPEN SE-SW. | NOAA | 3/5 | 1550 |
| 65 | 12 | 0231 | 31.8 | 69.1 | | 80 | 991 | | 26 | 16 | C | 40 | OPEN SE-SW. | NOAA | 4/6 | 1545 |
| 66 | 12 | 0328 | 32.1 | 68.8 | | 75 | | | | | | | | NOAA | | |
| 67 | 12 | 0411 | 32.2 | 68.7 | | 75 | 991 | | | | | | | NOAA | | |
| 68 | 12 | 0500 | 32.4 | 68.6 | | 70 | 992 | | | | | | | NOAA | | |
| 69 | 12 | 0600 | 32.7 | 68.2 | 65 | | | | 23 | 16 | C | 40 | OPEN SE-S-W. | NOAA | 6/8 | 1550 |
| 70 | 12 | 0800 | 33.0 | 68.2 | | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 71 | 12 | 0900 | 33.0 | 67.9 | 65 | | | | | | | | | GOES 5 | 3 IR 8 | |
| 72 | 12 | 0900 | 32.9 | 67.8 | | 55 | 992 | | 23 | 19 | | | OPEN SE-S-W. | GOES 5 | 2,3 IR 8 | |
| 73 | 12 | 0954 | 33.1 | 67.7 | | 70 | 992 | | | | | | | NOAA | 5/5 | 1540 |
| 74 | 12 | 1142 | 33.3 | 67.2 | 70 | 65 | 922 | | 23 | 21 | | | OPEN E-S-W. | NOAA | | |
| 75 | 12 | 1300 | 33.4 | 66.9 | 65 | | | | | | | | | NOAA | 6/6 | 1520 |
| 76 | 12 | 1437 | 33.4 | 66.6 | 80 | 52 | 1000 | 3076 | 16 | 14 | | | | GOES 5 | 1/3 VSBL 1 | |
| 77 | 12 | 1500 | 33.6 | 66.5 | 55 | | | | | | | | | NOAA | 2/10 | 700MB |
| 78 | 12 | 1800 | 33.9 | 65.5 | 55 | | | | | | | | | GOES 5 | 1,3 VSBL 1 | |
| 79 | 12 | 1821 | 34.2 | 65.3 | 50 | | 998 | | 24 | 24 | | | | GOES 5 | 2,3 VSBL 1 | |
| 80 | 12 | 2006 | 34.4 | 64.8 | 50 | | 999 | | 25 | 24 | E03/30/20 | | POORLY DEFINED. | NOAA | 6/6 | |
| 81 | 13 | 0030 | 34.8 | 63.1 | 45 | | | | | | | | | NOAA | 3/5 | 375M |
| 82 | 13 | 0600 | 35.7 | 61.2 | 45 | | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 83 | 13 | 1200 | 37.2 | 57.0 | 45 | | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 84 | 13 | 1830 | 37.5 | 53.2 | 45 | | | | | | | | | GOES 5 | 1,3 VSBL 1 | |
| 85 | 13 | 2300 | 38.4 | 50.3 | | | | | | | | | | GOES 5 | 1,3 VSBL 1 | |
| 86 | 14 | 0000 | 38.6 | 49.9 | 45 | | | | | | | | | GOES 5 | 3 IR 8 | |
| 87 | 14 | 0400 | 38.7 | 46.9 | | | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 88 | 14 | 0600 | 39.4 | 46.0 | 45 | | | | | | | | | GOES 5 | 3 IR 8 | |
| | | | | | | | | | | | | | | GOES 5 | 2,3 IR 8 | |

Table 6 continued.

Hurricane Gert cont'd.

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE | | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|-----------|----------------|-----------|-----------------|--------------------|----------|------|-------------|-----------------|-----------|------------|------------|
| | | | LAT. (°N) | LON. (°W) | SFC | FLT. LVL. | | | IN. | OUT. | C=CIR. DIA. | E=ELIP. (N.MI.) | | | |
| 88 | -14 | 0600 | 39.4 | 46.0 | 45 | | | | | | | | | | |
| 89 | 14 | 1230 | 40.0 | 41.7 | 35 | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 90 | 14 | 1830 | 39.5 | 38.5 | 35 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 91 | 14 | 2300 | 39.5 | 35.9 | | | | | | | | | GOES 5 | 1,3 VSBL 1 | |
| 92 | 15 | 0000 | 39.8 | 35.3 | 25 | | | | | | | | GOES 5 | 3 IR 8 | |
| 93 | 15 | 0400 | 40.0 | 33.5 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 94 | 15 | 0600 | 40.5 | 32.5 | 25 | | | | | | | | GOES 5 | 5 IR 8 | |
| 95 | 15 | 1230 | 40.2 | 31.1 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 96 | 15 | 1900 | 39.8 | 29.4 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| | | | | | | | | | | | | | GOES 5 | 5 IR 8 | |

HURRICANE HARVEY
11 - 19 SEPTEMBER 1981

CENTER FIXES

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE | | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|-----------|----------------|-----------|-----------------|--------------------|----------|------|-------------|-----------------|-----------|------------|------------|
| | | | LAT. (°N) | LON. (°W) | SFC | FLT. LVL. | | | IN. | OUT. | C=CIR. DIA. | E=ELIP. (N.MI.) | | | |
| 1 | 11 | 0100 | 12.8 | 43.2 | 25 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 2 | 11 | 0630 | 12.8 | 45.5 | 25 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 3 | 11 | 1030 | 13.5 | 47.0 | 25 | | | | | | | | GOES 5 | 1,5 VSBL 1 | |
| 4 | 11 | 1830 | 13.9 | 49.0 | 30 | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 5 | 12 | 0030 | 15.5 | 50.4 | 30 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 6 | 12 | 0630 | 17.9 | 53.6 | 35 | | | | | | | | GOES 5 | 3 IR 8 | |
| 7 | 12 | 1300 | 18.4 | 54.5 | 35 | | | | | | | | GOES 5 | 1,5 VSBL 1 | |
| 8 | 12 | 1344 | 18.5 | 54.9 | 30 | 35 | 1001 | | | | | | AF | | |
| 9 | 12 | 1607 | 19.0 | 55.7 | 70 | 73 | 997 | | | | | | AF | | |
| 10 | 12 | 1830 | 19.6 | 56.2 | 49 | | | | | | | | GOES 5 | 2,5 VSBL 1 | |

Table 6 continued.

Hurricane Harvey continued.

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE C-CIR. DIA. E-ELIP. (N.M.I.) | CHARACTERISTICS | OBS. UNIT | RESOLUTION | ACFT ALT. |
|---------|------|------------|-----------|----------|----------------|-----------|-----------------|--------------------|----------|-----|----------------------------------|-----------------|-----------|------------|-----------|
| | | | LAT. (°N) | LN. (°W) | SFC | FLT. LVL. | | | IN. | OUT | | | | | |
| 11 | 13 | 0000 | 20.3 | 57.6 | 65 | | | | | | | | | | |
| 12 | 13 | 0003 | 20.2 | 57.9 | | 40 | | | | | | | GOES 5 | 2,3 | IR 8 |
| 13 | 13 | 0217 | 20.5 | 58.5 | | 56 | 990 | | | | | | AF | | |
| 14 | 13 | 0300 | 20.7 | 58.8 | | | | 3005 | | | | | AF | | 700MB |
| 15 | 13 | 0600 | 21.3 | 59.5 | 65 | | | | | | | | GOES 5 | 3 | IR 8 |
| 16 | 13 | 1118 | 22.0 | 60.5 | 40 | 40 | 984 | | | | | | GOES 5 | 2,3 | IR 8 |
| 17 | 13 | 1230 | 22.4 | 60.6 | 65 | | | | | | | | AF | | |
| 18 | 13 | 1322 | 22.3 | 60.7 | 70 | 47 | | 2974 | | | | | GOES 5 | 1 | VSBL 1 |
| 19 | 13 | 1830 | 23.2 | 61.6 | 77 | | | | | | | | AF | | 700MB |
| 20 | 13 | 2300 | 23.7 | 62.2 | | | | | | | | | GOES 5 | 3 | VSBL 1 |
| 21 | 13 | 2300 | 23.9 | 61.9 | | 47 | 981 | | | | | | GOES 5 | 3 | IR 8 |
| 22 | 14 | 0048 | 24.3 | 62.1 | | 55 | | 2923 | | | | | AF | | |
| 23 | 14 | 0100 | 24.1 | 62.3 | 77 | | | | | | | | AF | | 700MB |
| 24 | 14 | 0400 | 24.7 | 62.3 | | | | | | | | | GOES 5 | 2,3 | IR 8 |
| 25 | 14 | 0600 | 25.2 | 62.4 | 77 | | | | | | | | GOES 5 | 3 | IR 8 |
| 26 | 14 | 1110 | 25.8 | 62.8 | 90 | 86 | 960 | | | | | | GOES 5 | 2,3 | IR 8 |
| 27 | 14 | 1200 | 26.1 | 62.7 | 95 | | | | | | | | AF | | |
| 28 | 14 | 1255 | 26.5 | 62.9 | 95 | 75 | 960 | | | | | | GOES 5 | 2,1 | VSBL 1 |
| 29 | 14 | 1800 | 27.1 | 62.8 | 110 | | | | | | | | AF | | |
| 30 | 14 | 2100 | 27.6 | 62.7 | | | | | | | | | GOES 5 | 2,1 | VSBL 1 |
| 31 | 14 | 2300 | 28.1 | 62.5 | | | | | | | | | GOES 5 | 1 | VSBL 1 |
| 32 | 14 | 2309 | 28.2 | 62.6 | | 77 | 946 | | | | | | GOES 5 | 1 | IR 8 |
| 33 | 15 | 0000 | 28.3 | 62.5 | 115 | | | | | | | | AF | | |
| 34 | 15 | 0039 | 28.4 | 62.7 | | 107 | | 2617 | | | | | GOES 5 | 2,1 | IR 8 |
| 35 | 15 | 0100 | 28.4 | 62.5 | | | | | | | | | AF | | |
| 36 | 15 | 0300 | 28.7 | 62.4 | | | | | | | | | GOES 5 | 1 | IR 8 |
| 37 | 15 | 0400 | 28.9 | 62.3 | | | | | | | | | GOES 5 | 1 | IR 8 |
| 38 | 15 | 0600 | 29.5 | 62.3 | 115 | | | | | | | | GOES 5 | 1 | IR 8 |
| 39 | 15 | 0800 | 30.0 | 61.9 | | | | | | | | | GOES 5 | 2,1 | IR 8 |
| 40 | 15 | 1000 | 30.1 | 61.8 | | | | | | | | | | | |
| 41 | 15 | 1200 | 30.8 | 61.1 | 115 | | | | | | | | GOES 5 | | VSBL |
| | | | | | | | | | | | | | GOES 5 | 2,3 | VSBL |

Hurricane Harvey continued.

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE C=CIR. DIA. E=ELIP. (N.M.I.) | CHARACTERISTICS | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|----------|----------------|-----------|-----------------|--------------------|----------|-----|----------------------------------|-----------------|-----------|------------|------------|
| | | | LAT. (°N) | LN. (°W) | SFC | FLT. LVL. | | | IN. | OUT | | | | | |
| 42 | 15 | 1205 | 30.8 | 61.1 | 110 | 95 | 958 | | | | | | AF | | |
| 43 | 15 | 1412 | 31.3 | 60.8 | | 86 | | 2744 | | | | | AF | | 700MB |
| 44 | 15 | 1800 | 32.2 | 60.0 | 115 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 45 | 15 | 1827 | 32.1 | 60.4 | 95 | 98 | 963 | | | | | | AF | | |
| 46 | 15 | 2300 | 32.6 | 58.2 | | | | | | | | | GOES 5 | 3 IR 8 | |
| 47 | 16 | 0000 | 32.6 | 57.9 | 90 | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 48 | 16 | 0100 | 32.6 | 57.2 | | | | | | | | | GOES 5 | 3 IR 8 | |
| 49 | 16 | 0200 | 32.8 | 57.5 | | | | | | | | | GOES 5 | 3 IR 8 | |
| 50 | 16 | 0400 | 32.5 | 56.7 | | | | | | | | | GOES 5 | 5 IR 8 | |
| 51 | 16 | 0600 | 32.5 | 56.3 | 90 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 52 | 16 | 1200 | 35.1 | 56.5 | 77 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 53 | 16 | 1400 | 35.5 | 55.9 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 54 | 16 | 1800 | 35.8 | 55.7 | 65 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 55 | 16 | 2330 | 36.5 | 55.0 | | | | | | | | | GOES 5 | 5 IR 8 | |
| 56 | 17 | 0030 | 36.7 | 54.6 | 65 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 57 | 17 | 0600 | 37.2 | 53.8 | 65 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 58 | 17 | 1200 | 36.2 | 52.6 | 65 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 59 | 17 | 1400 | 36.2 | 52.1 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 60 | 17 | 1800 | 36.6 | 51.2 | 65 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 61 | 17 | 2330 | 37.2 | 50.0 | | | | | | | | | GOES 5 | 5 IR 8 | |
| 62 | 18 | 0030 | 37.3 | 49.9 | 65 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 63 | 18 | 0230 | 37.3 | 49.7 | | | | | | | | | GOES 5 | 5 IR 8 | |
| 64 | 18 | 0600 | 38.3 | 48.7 | 65 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 65 | 18 | 1200 | 38.0 | 46.9 | 55 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 66 | 18 | 1400 | 38.0 | 46.3 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 67 | 18 | 1800 | 38.3 | 45.3 | 45 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 68 | 19 | 0000 | 38.6 | 43.0 | 35 | | | | | | | | GOES 5 | 1,5 VSBL 1 | |
| 69 | 19 | 0700 | 38.2 | 39.9 | 35 | | | | | | | | GOES 5 | 1,5 IR 8 | |
| 70 | 19 | 1230 | 38.3 | 38.0 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 71 | 19 | 1830 | 37.8 | 35.4 | | | | | | | | | GOES 5 | 5 VSBL 1 | |
| 72 | 20 | 0030 | 36.9 | 33.0 | | | | | | | | | GOES 5 | 5 IR 8 | |

Table 6 continued.

HURRICANE IRENE
3 SEPTEMBER - 2 OCTOBER 1981

CENTER FIXES

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE | | OBS. UNIT | RESOLUTION | ACFT ALT. |
|---------|------|------------|-----------|------------|----------------|-----------|-----------------|--------------------|----------|------|------------------------------|-----------------|-----------|------------|-----------|
| | | | LAT. (°N) | LONG. (°W) | SFC | FLT. LVL. | | | IN. | OUT. | C=CIR. DIA. E=ELIP. (N.M.I.) | CHARACTERISTICS | | | |
| 1 | 21 | 1200 | 13.5 | 32.4 | 25 | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 2 | 21 | 1800 | 13.3 | 34.0 | 25 | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 3 | 22 | 0000 | 12.5 | 35.1 | 30 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 4 | 22 | 0600 | 12.7 | 36.6 | 30 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 5 | 22 | 1200 | 13.0 | 37.0 | 30 | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 6 | 22 | 1830 | 12.5 | 38.5 | 30 | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 7 | 23 | 0030 | 12.5 | 39.5 | 30 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 8 | 23 | 0700 | 12.5 | 41.0 | 30 | | | | | | | | GOES 5 | 1,5 IR 8 | |
| 9 | 23 | 1200 | 12.8 | 42.6 | 30 | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 10 | 23 | 1800 | 13.0 | 43.7 | 35 | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 11 | 24 | 0100 | 14.3 | 45.6 | 55 | | | | | | | | GOES 5 | 1,3 IR 8 | |
| 12 | 24 | 0600 | 14.0 | 47.2 | 55 | | | | | | | | GOES 5 | 1,5 IR 8 | |
| 13 | 24 | 1200 | 14.4 | 47.9 | 55 | | | | | | | | GOES 5 | 2,3 VSBL 4 | |
| 14 | 24 | 1330 | 14.3 | 48.3 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 15 | 24 | 1500 | 14.7 | 48.5 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 16 | 24 | 1700 | 15.1 | 49.0 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 17 | 24 | 1830 | 15.2 | 49.2 | 55 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 18 | 25 | 0000 | 15.7 | 50.4 | 65 | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 19 | 25 | 0300 | 16.0 | 50.6 | | | | | | | | | GOES 5 | 1 IR 8 | |
| 20 | 25 | 0600 | 16.6 | 50.9 | 77 | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 21 | 25 | 1140 | 17.3 | 52.0 | 80 | 48 | 980 | 2933 | 17 | 18 | 35 | OPEN EAST. | AF | 5/3 | 700MB |
| 22 | 25 | 1230 | 17.6 | 52.1 | 77 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 23 | 25 | 1330 | 17.6 | 52.2 | | | | | | | | | GOES 5 | 1 VSBL 1 | |
| 24 | 25 | 1423 | 17.8 | 52.5 | 100 | 60 | 980 | 2921 | | | | | AF | | 700MB |
| 25 | 25 | 1530 | 18.0 | 52.5 | | | | | | | | | GOES 5 | 1 VSBL 1 | |
| 26 | 25 | 1700 | 18.2 | 52.6 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 27 | 25 | 1700 | 18.1 | 52.8 | 90 | 88 | 977 | 2875 | 16 | | 55 | LOSED WALL. | AF | 3/2 | 700MB |
| 28 | 25 | 1800 | 18.3 | 52.8 | 77 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 29 | 25 | 1930 | 18.5 | 53.2 | | | | | | | | | GOES 5 | 1 VSBL 1 | |
| 30 | 25 | 2354 | 19.0 | 53.5 | | 78 | 976 | 2881 | 17 | 13 | 50 | PEN SE. | AF | 5/5 | 700MB |
| 31 | 26 | 0000 | 18.8 | 53.6 | 77 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 32 | 26 | 0220 | 19.4 | 53.9 | | 70 | 975 | 2876 | 16 | 8 | 50 | PEN SE. | AF | 5/5 | 700MB |
| 33 | 26 | 0502 | 19.8 | 54.2 | | 60 | 976 | 2886 | 19 | 11 | 03/40/30 | PEN E-S. | AF | 5/5 | 700MB |

Hurricane Irene continued.

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE | | CHARACTERISTICS | OBS. UNIT | RESOLUTION | ACFT ALT. |
|---------|------|------------|-----------|------------|----------------|-----------|-----------------|--------------------|----------|------|------------------------------|-----------------|-----------------|------------|------------|-----------|
| | | | LAT. (°N) | LONG. (°W) | SFC | FLT. LVL. | | | IN. | OUT. | C=CIR. DIA. E=ELIP. (N.M.I.) | | | | | |
| 34 | 26 | 0600 | 19.9 | 54.4 | 77 | | | | | | | | | | | |
| 35 | 26 | 1200 | 20.7 | 55.0 | 77 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 36 | 26 | 1218 | 20.4 | 55.1 | 70 | 60 | 980 | 2953 | 18 | 15 | E13/30/25 | | GOES 5 | 2,5 VSBL 1 | | |
| 37 | 26 | 1425 | 20.6 | 55.4 | 65 | 58 | 982 | 2934 | | | | | AF | 5/5 | 700MB | |
| 38 | 26 | 1630 | 20.8 | 55.7 | 100 | 72 | 979 | 2910 | | | | | AF | | 700MB | |
| 39 | 26 | 1744 | 20.9 | 55.8 | 80 | 72 | 977 | 2899 | 15 | 11 | | | AF | | 700MB | |
| 40 | 26 | 1800 | 21.1 | 55.6 | 77 | | | | | | | POORLY DEFINED. | AF | 5/5 | 700MB | |
| 41 | 26 | 2357 | 21.8 | 56.5 | | 65 | 968 | 2819 | 16 | 10 | | | GOES 5 | 2,3 VSBL 1 | | |
| 42 | 27 | 0000 | 21.9 | 56.5 | 77 | | | | | | | | AF | 3/3 | 700MB | |
| 43 | 27 | 0240 | 22.1 | 56.6 | | 48 | | 2815 | | | | | GOES 5 | 2,3 IR 8 | | |
| 44 | 27 | 0427 | 22.3 | 56.8 | | 53 | 968 | 2815 | | | | | AF | | 700MB | |
| 45 | 27 | 0530 | 22.5 | 56.8 | | 52 | 966 | 2799 | 15 | 11 | C 25 | OPEN S. | AF | 3/3 | 700MB | |
| 46 | 27 | 0600 | 22.4 | 56.5 | 77 | | | | | | | | GOES 5 | 2,3 | | |
| 47 | 27 | 1110 | 22.9 | 57.2 | 60 | 80 | 970 | 2819 | 14 | 13 | | OPEN XCPN | AF | 5/5 | 700MB | |
| 48 | 27 | 1230 | 23.1 | 57.1 | 90 | | | | | | | | GOES 5 | 1,1 VSBL 1 | | |
| 49 | 27 | 1336 | 23.2 | 57.2 | 85 | 80 | 968 | 2820 | | | | | AF | | 700MB | |
| 50 | 27 | 1506 | 23.4 | 57.2 | 65 | 76 | 966 | 2799 | | | | | AF | | 700MB | |
| 51 | 27 | 1703 | 23.7 | 52.2 | 100 | 77 | 966 | 2779 | 14 | 10 | | POORLY DEFINED. | AF | 5/5 | 700MB | |
| 52 | 27 | 1800 | 23.7 | 57.0 | 90 | | | | | | | | GOES 5 | 1,1 VSBL 1 | | |
| 53 | 27 | 2349 | 24.9 | 56.9 | | 105 | 962 | 2797 | 17 | 8 | C 25 | OPEN SE-S-W. | AF | 5/5 | 700MB | |
| 54 | 28 | 0000 | 24.6 | 56.8 | 90 | | | | | | | | GOES 5 | 2,1 IR 8 | | |
| 55 | 28 | 0148 | 25.1 | 57.0 | | 93 | 967 | 2801 | | | | | AF | | 700MB | |
| 56 | 28 | 0318 | 25.3 | 56.9 | | | 968 | 2811 | | | | | AF | | 700MB | |
| 57 | 28 | 0500 | 25.6 | 56.9 | | 118 | 966 | 2807 | 15 | 10 | C 25 | OPEN S-SW. | AF | 5/5 | 700MB | |
| 58 | 28 | 0600 | 25.8 | 56.7 | 90 | | | | | | | | GOES 5 | 2,3 IR 8 | | |
| 59 | 28 | 1153 | 26.9 | 56.5 | 90 | 73 | 959 | 2720 | 20 | 11 | | | AF | 3/3 | 700MB | |
| 60 | 28 | 1230 | 27.3 | 56.4 | 77 | | | | | | | | GOES 5 | 1,3 VSBL 1 | | |
| 61 | 28 | 1359 | 27.5 | 56.5 | 100 | 59 | 960 | 2747 | | | | | AF | | 700MB | |
| 62 | 28 | 1800 | 28.7 | 55.9 | 90 | | | | | | | | GOES 5 | 1,3 VSBL 1 | | |
| 63 | 29 | 0000 | 30.0 | 55.5 | 90 | | | | | | | | GOES 5 | 2,5 IR 8 | | |
| 64 | 29 | 0600 | 31.3 | 53.9 | 90 | | | | | | | | GOES 5 | 2,3 IR 8 | | |
| 65 | 29 | 1200 | 32.8 | 52.5 | 77 | | | | | | | | GOES 5 | 1,3 VSBL 1 | | |
| 66 | 29 | 1300 | 32.8 | 52.5 | 65 | 35 | 969 | 2807 | 12 | 12 | C 15 | POORLY DEFINED. | AF | 4/5 | 700MB | |
| 67 | 29 | 1500 | 33.4 | 51.5 | | | | | | | | | GOES 5 | 3 VSBL 1 | | |
| 68 | 29 | 1539 | 33.5 | 51.4 | 70 | 68 | 965 | 2786 | | | | | AF | | 700MB | |

Table 6 continued.

Hurricane Irene continued.

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE C=CIR. DIA. E=ELIP. (N.M.I.) | CHARACTERISTICS | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|------------|----------------|-----------|-----------------|--------------------|----------|------|----------------------------------|-----------------|-----------|------------|------------|
| | | | LAT. (°N) | LONG. (°W) | SFC | FLT. LVL. | | | IN. | OUT. | | | | | |
| 69 | 29 | 1800 | 34.1 | 50.4 | 70 | | | | | | | | | | |
| 70 | 29 | 2300 | 35.5 | 48.0 | | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 71 | 30 | 0000 | 35.9 | 47.5 | 77 | | | | | | | | GOES 5 | 3 IR 8 | |
| 72 | 30 | 0600 | 37.8 | 45.1 | | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 73 | 30 | 1200 | 39.1 | 42.4 | 77 | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 74 | 30 | 1800 | 40.0 | 39.5 | 77 | | | | | | | | GOES 5 | 1,3 VSBL 1 | |
| 75 | 30 | 2300 | 41.0 | 36.7 | | | | | | | | | GOES 5 | 1,5 VSBL 1 | |
| 76 | 01 | 0030 | 41.4 | 36.0 | 55 | | | | | | | | GOES 5 | 3 IR 8 | |
| 77 | 01 | 0630 | 42.5 | 33.5 | 55 | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 78 | 01 | 1200 | 43.8 | 32.0 | 55 | | | | | | | | GOES 5 | 2,3 IR 8 | |
| 79 | 01 | 1500 | 44.2 | 51.5 | | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 80 | 01 | 1800 | 44.8 | 30.2 | 55 | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 81 | 01 | 2300 | 45.0 | 29.0 | | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 82 | 02 | 0000 | 44.5 | 28.5 | 50 | | | | | | | | GOES 5 | 5 IR 8 | |
| | | | | | | | | | | | | | GOES 5 | 2,5 IR 8 | |

TROPICAL STORM JOSE
29 OCTOBER - 2 NOVEMBER 1981

CENTER FIXES

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE C=CIR. DIA. E=ELIP. (N.M.I.) | CHARACTERISTICS | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|------------|----------------|-----------|-----------------|--------------------|----------|------|----------------------------------|-----------------|-----------|------------|------------|
| | | | LAT. (°N) | LONG. (°W) | SFC | FLT. LVL. | | | IN. | OUT. | | | | | |
| 1 | 29 | 1200 | 25.1 | 47.4 | 30 | | | | | | | | | | |
| 2 | 29 | 1800 | 26.1 | 47.3 | 30 | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 3 | 30 | 0000 | 27.6 | 46.5 | | | | | | | | | GOES 5 | 2,5 VSBL 1 | |
| 4 | 30 | 0600 | 28.4 | 45.6 | 45 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 5 | 30 | 1200 | 29.6 | 45.2 | | | | | | | | | GOES 5 | 2,2 IR 8 | |
| 6 | 30 | 1300 | 29.7 | 45.0 | 45 | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 7 | 30 | 1730 | 30.2 | 44.4 | | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 8 | 30 | 1900 | 30.3 | 44.4 | 45 | | | | | | | | GOES 5 | 3 IR 8 | |
| 9 | 30 | 2330 | 30.6 | 44.0 | 35 | | | | | | | | GOES 5 | 1,3 VSBL 1 | |
| | | | | | | | | | | | | | GOES 5 | 2,2 IR 8 | |

Tropical Storm Jose continued.

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE | | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|-----------|----------------|-----------|-----------------|--------------------|----------|------|-------------|------------------|-----------|------------|------------|
| | | | LAT. (°N) | LON. (°W) | SFC | FLT. LVL. | | | IN. | OUT. | C=CIR. DIA. | E=ELIP. (N. MI.) | | | |
| 10 | 31 | 0530 | 31.3 | 43.5 | 35 | | | | | | | | | | |
| 11 | 31 | 1200 | 31.2 | 42.2 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 12 | 31 | 1230 | 31.3 | 42.0 | 35 | | | | | | | | GOES 5 | 5 VSBL 1 | |
| 13 | 31 | 1830 | 31.5 | 41.0 | 45 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 14 | 01 | 0000 | 32.0 | 39.4 | 45 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 15 | 01 | 0600 | 33.3 | 37.3 | 45 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 16 | 01 | 1200 | 35.4 | 34.9 | 45 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 17 | 01 | 1400 | 36.2 | 34.2 | | | | | | | | | GOES 5 | 1,5 IR 8 | |
| 18 | 01 | 1730 | 37.8 | 32.6 | | | | | | | | | GOES 5 | 3 VSBL 1 | |
| 19 | 01 | 1830 | 38.2 | 31.8 | | | | | | | | | GOES 5 | 3 IR 8 | |
| 20 | 02 | 0000 | 41.5 | 29.5 | | | | | | | | | GOES 5 | 1,5 VSBL 1 | |
| | | | | | | | | | | | | | GOES 5 | 1,5 IR 8 | |

HURRICANE KATRINA
3 - 11 NOVEMBER 1981

CENTER FIXES

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE | | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|-----------|----------------|-----------|-----------------|--------------------|----------|------|-------------|------------------|-----------|------------|------------|
| | | | LAT. (°N) | LON. (°W) | SFC | FLT. LVL. | | | IN. | OUT. | C=CIR. DIA. | E=ELIP. (N. MI.) | | | |
| 1 | 02 | 1930 | 16.8 | 81.3 | 25 | | | | | | | | | | |
| 2 | 03 | 0000 | 16.4 | 80.9 | 25 | | | | | | | | GOES 5 | 5 VSBL 1 | |
| 3 | 03 | 0600 | 17.3 | 81.4 | 25 | | | | | | | | GOES 5 | 1,5 IR 8 | |
| 4 | 03 | 1230 | 17.4 | 81.6 | 25 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 5 | 03 | 1800 | 18.0 | 81.7 | 35 | | | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 6 | 03 | 1932 | 17.7 | 81.5 | 30 | | 1002 | | | | | | GOES 5 | 2,3 VSBL 1 | |
| 7 | 03 | 2300 | 18.4 | 81.8 | | | | | | | | | AF | 2/10 | |
| 8 | 04 | 0000 | 18.5 | 81.8 | 35 | | | | | | | | GOES 5 | 5 IR 8 | |
| 9 | 04 | 0500 | 18.8 | 81.7 | | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 10 | 04 | 0600 | 18.8 | 81.6 | 35 | | | | | | | | GOES 5 | 5 IR 8 | |
| 11 | 04 | 1200 | 18.7 | 81.4 | 40 | | | | | | | | GOES 5 | 2,5 IR 8 | |
| 12 | 04 | 1400 | 18.5 | 81.4 | 45 | 51 | 997 | | 13 | 12 | C 18 | | GOES 5 | 2,3 VSBL 1 | |
| 13 | 04 | 1713 | 18.6 | 81.5 | 35 | 40 | 996 | 3053 | 11 | 11 | E16/10/5 | CLOSED WALL. | AF | 2/5 | 700MB |
| | | | | | | | | | | | | CLOSED WALL. | AF | 2/5 | 700MB |

61

Table 6 continued.

Hurricane Katrina continued.

| FIX NO. | DATE | TIME (GMT) | POSITION | | MAX. WIND (KT) | | MIN. PRES. (MB) | MIN. 700MB HT. (M) | TEMP. °C | | EYE | | CHARACTERISTICS | OBS. UNIT | RESOLUTION | ACFT. ALT. |
|---------|------|------------|-----------|------------|----------------|-----------|-----------------|--------------------|----------|-----|-------------|------------------|-----------------|-----------|------------|------------|
| | | | LAT. (°N) | LONG. (°W) | SFC | FLT. LVL. | | | IN. | OUT | C=CIR. DIA. | E=ELIP. (N.M.I.) | | | | |
| 14 | 04 | 1830 | 19.0 | 81.4 | 45 | | | | | | | | | | | |
| 15 | 04 | 2100 | 19.0 | 81.4 | 50 | | | | | | | | | | | |
| 16 | 05 | 0000 | 19.2 | 81.1 | 50 | | | | | | | | | | | |
| 17 | 05 | 0000 | 19.1 | 80.8 | 30 | 50 | 994 | 3039 | 14 | 12 | E01/30/10 | | | | | |
| 18 | 05 | 0154 | 19.2 | 80.8 | | 50 | 992 | 3022 | 13 | 11 | E01/30/15 | OPEN SE. | AF | 5/3 | | 700MB |
| 19 | 05 | 0300 | 19.2 | 81.0 | 55 | | | | | | | CLOSED WALL. | AF | 3/3 | | 700MB |
| 20 | 05 | 0359 | 19.3 | 80.7 | | 78 | 991 | 3011 | 15 | 10 | | | GOES 5 | 2,5 | IR 8 | |
| 21 | 05 | 0526 | 20.1 | 80.9 | | 40 | 990 | 3010 | 17 | 8 | C 15 | CLOSED WALL. | AF | 3/3 | | 700MB |
| 22 | 05 | 0600 | 19.7 | 80.7 | 60 | | | | | | C 15 | CLOSED WALL. | AF | 2/2 | | 700MB |
| 23 | 05 | 0730 | 19.9 | 80.8 | | | | | | | | | GOES 5 | 2,3 | IR 8 | |
| 24 | 05 | 0900 | 20.0 | 80.9 | 60 | | | | | | | | GOES 5 | 3 | IR 8 | |
| 25 | 05 | 1118 | 19.9 | 80.6 | | 75 | 983 | | 30 | 24 | C 15 | | GOES 5 | 2,3 | IR 8 | |
| 26 | 05 | 1224 | 20.0 | 80.5 | | 90 | 980 | | 29 | 24 | C 15 | POORLY DEFINED. | NOAA | 2/2 | | 547M |
| 27 | 05 | 1230 | 20.1 | 80.6 | 65 | | | | | | | CLOSED WALL. | NOAA | 2/2 | | 602M |
| 28 | 05 | 1530 | 20.2 | 80.5 | 71 | | | | | | | | GOES 5 | 2,3 | VSBL 1 | |
| 29 | 05 | 1730 | 20.4 | 80.2 | 75 | 70 | 989 | | 30 | 23 | | | GOES 5 | 2,3 | VSBL 1 | |
| 30 | 05 | 1830 | 20.5 | 80.2 | 71 | | | | | | | N WALL ONLY. | NOAA | 2/2 | | |
| 31 | 05 | 2130 | 20.8 | 80.0 | 65 | | | | | | | | GOES 5 | 3,3 | VSBL 1 | |
| 32 | 06 | 0022 | 21.0 | 79.4 | | 50 | 996 | | 27 | 22 | | | GOES 5 | 2,5 | VSBL 1 | |
| 33 | 06 | 0030 | 20.9 | 79.8 | 65 | | | | | | | | NOAA | 2/2 | | 550M |
| 34 | 06 | 0301 | 20.9 | 78.9 | | 60 | 998 | | 31 | 21 | | | GOES 5 | 2,5 | IR 8 | |
| 35 | 06 | 0330 | 21.0 | 79.4 | 65 | | | | | | | | NOAA | 5/5 | | 548M |
| 36 | 06 | 0546 | 20.9 | 78.3 | | 50 | 1003 | | | | | | GOES 5 | 2,5 | IR 8 | |
| 37 | 06 | 0630 | 21.2 | 78.5 | | | | | | | | | NOAA | | | |
| 38 | 06 | 0900 | 22.0 | 77.4 | | | | | | | | | GOES 5 | 5 | IR 8 | |
| 39 | 06 | 1215 | 22.3 | 77.0 | 20 | 20 | 1001 | | 23 | 23 | | | GOES 5 | 6 | IR 8 | |
| 40 | 06 | 1230 | 22.4 | 77.0 | 55 | | | | | | | | NOAA | 2/10 | | 506M |
| 41 | 06 | 1530 | 22.4 | 76.5 | 55 | | | | | | | | GOES 5 | 2,3 | VSBL 1 | |
| 42 | 06 | 1739 | 23.7 | 75.2 | 45 | 45 | 1001 | | 23 | 23 | | | GOES 5 | 2,3 | VSBL 1 | |
| 43 | 06 | 1830 | 23.0 | 75.2 | 45 | | | | | | | | NOAA | 2/10 | | 517M |
| 44 | 07 | 0030 | 23.5 | 73.0 | 45 | | | | | | | | GOES 5 | 2,5 | VSBL 1 | |
| 45 | 07 | 0530 | 24.5 | 71.0 | | | | | | | | | GOES 5 | 2,5 | IR 8 | |
| 46 | 07 | 0630 | 25.0 | 70.5 | 35 | | | | | | | | GOES 5 | 5 | IR 8 | |
| 47 | 07 | 1230 | 25.5 | 67.1 | 35 | | | | | | | | GOES 5 | 2,5 | IR 8 | |
| 48 | 07 | 1830 | 26.8 | 64.6 | 35 | | | | | | | | GOES 5 | 2,5 | VSBL 1 | |
| 49 | 08 | 0000 | 28.0 | 61.5 | 35 | | | | | | | | GOES 5 | 2,5 | VSBL 1 | |
| | | | | | | | | | | | | | GOES 5 | 2,5 | IR 8 | |

ARLENE

URNT12 KMIA 092130 COR
 AF985 0301 ARLENE OB 12 COR KMIA
 SUPPLEMENTARY VORTEX DATA MESSAGE
 AZIMUTH 09 DEG FL014
 RIGHT REAR QUAD
 80012 82220 40011 42119 30011 32020 10/// 12020
 00011 02120 64/// 50/// 34/// MX015 21080 /////
 RIGHT FRONT QUAD
 8/// 8/// 4/// 4/// 30011 32020 10011 12020
 00011 02120 64/// 50/// 34/// MX025 13015 /////
 LEFT FRONT QUAD
 8/// 8/// 4/// 4/// 30011 32020 10011 12020
 00011 02020 64/// 50/// 34/// MX022 05015 /////
 LEFT REAR QUAD
 8/// 8/// 4/// 4/// 30013 31919 10012 11919
 00011 02020 64/// 50/// 34/// MX019 33030 /////
 REMARKS SFC WINDS FOR RIGHT REAR QUAD 80NM - 34015 45NM - 33015
 SFC WINDS FOR LEFT REAR QUAD 30NM - 36015 15NM - 36015

DENNIS

URNT 12 KMIA 191311 COR
 AF553 1506 DENNIS OB 07 COR KMIA
 SUPPLEMENTARY VORTEX DATA MESSAGE
 AZIMUTH 36 DEG FL011
 RIGHT REAR QUAD MX042 12080
 90004 80004 60003 40001 30001 10001 00000
 924// 823// 623// 423// 323// 124// 024//
 92031 82042 61836 41827 31717 1/// 09905
 RIGHT FRONT QUAD MX029 01090
 90006 80004 60004 40003 30003 10003 00003
 925// 825// 625// 424// 325// 124// 025//
 91029 81322 61216 40814 31215 1/// 09903
 REMARKS SFC WND IN RR QUAD AT 30NM 19030
 SFC WINDS IN RF QUAD - 100NM 11020 80NM 12020 60NM 12015
 45NM 10010 30NM 12005 15NM 12003
 CNTR WND 990030

Table 7 continued.

URNT12 KMIA 191830
AF980 1606 DENNIS OB 10 KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 36 DEG FL010
RIGHT FRONT QUAD MX027 05030
9///// 80005 60004 40004 30004 10002 00001
9///// 82524 62624 42523 32524 12523 02524
9///// 81831 61320 41814 31826 11612 09905
LEFT REAR QUAD MX026 23045
9///// 8///// 60005 40003 30003 10002 00001
9///// 8///// 62222 42222 32424 12424 02524
9///// 8///// 63318 43523 32617 13511 09905
RIGHT REAR QUAD MX043 14045
90007 80007 60005 40003 30002 10000 00000
92423 82322 62322 42323 32424 12424 02525
92435 82230 62330 42243 32021 12413 09905
REMARKS UNABLE TO DO LEFT FRONT QUAD
DUE TO PROXIMITY OF LAND.

URNT12 KMIA 192056
AF980 1606 DENNIS OB 15 KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE -
AZIMUTH 05 DEG FL010 -
RIGHT FRONT QUAD MX036 09080
90006 80005 60004 40002 30001 10000 00000
92524 82523 62424 42524 32624 12424 02525
91936 82036 61925 41922 31921 12421 09905
LEFT FRONT QUAD MX018 36045
9///// 80006 60004 40003 30001 10000 00000
9///// 82523 62523 42424 32524 12524 02525
9///// 80716 60918 41018 31210 10712 09905
RIGHT REAR QUAD MX046 11060
9///// 8///// 60004 40004 30003 10001 00000
9///// 8///// 62424 42424 32424 12524 02525
9///// 8///// 62234 22133 32123 12619 09905
RIGHT FRONT QUAD MX045 09060
9///// 8///// 60004 40003 30001 10000 00999
9///// 8///// 62423 42423 32424 12524 02525
9///// 8///// 62045 41835 31827 11820 09905

URNT12 KMIA 200510 COR 02
 AF866 1706 DENNIS OB 06 COR 02 KMIA
 SUPPLEMENTARY VORTEX DATA MESSAGE
 AZIMUTH 04 DEG FLO99
 RIGHT FRONT QUAD MX045 09075
 93114 83105 63093 43083 33068 13056 00999
 90909 80909 60909 40909 31008 11010 02322
 92137 82045 62039 42039 32035 12026
 RIGHT REAR QUAD MX030 16050
 93126 83113 63110 43095 33080 13062 0////
 90907 81007 61107 41008 31007 11010 01110
 92426 82505 62526 42726 32924 12926

EMILY

URNT12 KMIA 041648 COR
 AF967 0109 EMILY OB 11 COR KMIA
 SUPPLEMENTARY VORTEX DATA MESSAGE
 AZIMUTH 060 DEG FL 095
 RIGHT FRONT QUAD MX054 13080
 93013 8//// 63970 4//// 3//// 1//// 03833
 91005 80903 60805 40907 3//// 1//// 01208
 92235 82354 62351 42250 32140 12123 0////
 LEFT FRONT QUAD MX045 02015
 93982 8//// 63955 43933 33888 13868 03801
 90808 8//// 60906 40909 30909 11109 01409
 90719 80711 61039 41035 30940 10545 0////
 RIGHT REAR QUAD MX057 20030
 93011 83996 63978 43966 33940 13866 03801
 91103 81005 61005 41006 31006 11010 01409
 92379 82742 62752 43420 32957 12853
 LEFT REAR QUAD MX044 22060
 93984 83978 6//// 43931 33925 13838 03797
 90905 80905 6//// 40907 30909 11111 02409
 93533 83333 63444 40130 30233 10345 0////

URNT12 KMIA 050212 COR 02
 AF968 0209 EMILY OB 06 COR 02 KMIA
 SUPPLEMENTARY VORTEX DATA MESSAGE
 AZIMUTH 020 DEG FL100
 LEFT REAR QUAD MX042 26015
 93997 83982 63979 43970 33930 13878 03823
 910// 811// 610// 409// 310// 114// 015//
 93030 83138 63127 4//// 33341 13342
 RIGHT REAR QUAD MX060 15020
 93019 83004 63989 43952 33928 13894 03823
 909// 810// 608// 409// 310// 111// 015//
 92438 82445 62549 42550 32459 12457
 LEFT FRONT QUAD MX050 32020
 93999 83977 63956 43929 33895 13837 03824
 909// 809// 608// 410// 311// 113// 015//
 90428 80434 60339 40446 30248 10230
 LEFT REAR QUAD MX036 25030
 93989 83974 63955 43945 33919 13882 03824
 909// 808// 610// 410// 311// 114// 015//
 93527 83532 63327 43335 33236 13121

ZCZC WBC 652

URNT12 KMIA 050617 COR
 AF968 0209 EMILY OB 14 COR KMIA
 SUPPLEMENTARY VORTEX DATA MESSAGE
 AZIMUTH 020 DEG FL100
 RIGHT FRONT QUAD MX 053 06050
 93007 83995 63980 43957 33912 13869 03820
 908// 808// 608// 408// 309// 110// 015//
 91240 81345 61245 41250 31233 11346
 LEFT FRONT QUAD MX055 34042
 93998 83974 63955 43927 33912 13855 03820
 908// 807// 608// 409// 310// 113// 015//
 90742 80844 60941 40853 30742 10637

URNT12 KMIA 051945 COR 03
 AF967 0409 EMILY OB 06 COR 03 KMIA
 SUPPLEMENTARY VORTEX DATA MESSAGE
 AZIMUTH 360 DEG FL095
 LEFT FRONT QUAD MX048 32010
 93018 83983 63971 43961 33949 13928 03810
 90806 80807 60907 40907 31005 10908 01211
 90524 80540 60529 40528 30428 10538 09905
 RIGHT FRONT QUAD MX046 05020
 93967 83958 63932 4//// 33878 13817 03810
 90805 80905 61007 41007 31010 11210 01211
 91426 81629 61534 41434 31436 11212 09905
 LEFT REAR QUAD MX054 22035
 93990 83974 63956 43939 33924 13892 03797
 90905 81006 60907 41007 30908 11008 01210
 93136 83037 62940 43046 33045 13154 09905
 RIGHT REAR QUAD MX052 05030
 93978 83964 63950 43922 33887 13833 03797
 90906 80905 60908 41009 31009 11109 01210
 92338 82337 62344 42344 32252 12244 09905

ZCZC WBC 106
 URNT12 KMIA 061205
 AF967 0509 EMILY OB 16 KMIA
 SUPPLEMENTARY VORTEX DATA MESSAGE
 AZIMUTH 05 DEG FL095
 RIGHT REAR QUAD MX 052 18030
 93983 83965 63942 43925 33915 13835 03803
 90808 80905 61007 41009 31010 11310 01409
 92641 82745 62843 42736 32752 12643 0////
 RIGHT FRONT QUAD MX 048 12060
 93986 8//// 63953 43938 33904 13872 03810
 90906 8//// 60908 41008 31007 11110 01410
 92242 82138 62148 42246 32346 12142 0////

URNT12 KMIA 061830 COR 02
 AF968 0609 EMILY OB 08 COR 02 KMIA
 SUPPLEMENTARY VORTEX DATA MESSAGE
 AZIMUTH 04 DEG FL100
 LEFT REAR QUAD MX 043 30060
 93977 83958 63915 43851 33829 1//// 03826
 908// 809// 610// 411// 313// 1//// 013//
 90134 80140 60243 40221 30108 1////
 LEFT FRONT QUAD MX 050 35030
 93006 83988 63967 43946 33921 13875 03926
 908// 808// 608// 409// 309// 110// 013//
 90836 80941 61044 40948 31150 11246
 RIGHT FRONT QUAD MX 046 09015
 93991 83976 63958 43936 33912 13860 03823
 909// 810// 610// 410// 310// 112// 012//
 91941 81729 61742 41638 31538 11546
 RIGHT REAR QUAD MX 055 18060
 93030 83995 63964 43927 33906 13842 03823
 908// 808// 608// 409// 310// 111// 012//
 92940 82843 62855 42947 32947 13033

Table 7 continued.

URNT12 KMIA 071245 COR
AF968 0709 EMILY OB 06 COR KMIA
SUPPLEMENTARY FORTEX DATA MESSAGE
AZIMUTH 03 DEG FL100
LEFT REAR QUAD MX 049 28015
93022 83016 63010 43994 33982 13979 02848
90807 80808 60807 40807 30808 10909 01212
93522 83420 63432 43428 33525 13630
RIGHT REAR QUAD MX 061 17020
93012 83997 63979 47954 33930 13890 03848
90806 80807 60808 40909 30909 10909 01212
92739 82743 62650 42751 32752 12853
RIGHT FRONT QUAD MX 043 08045
93002 83970 63956 43928 33882 1//// 03847
90808 80808 60909 40909 31010 1//// 01211
91742 81528 61737 41743 31642 1////
LEFT FRONT QUAD MX 038 35015
93999 83983 63968 43950 33928 13901 03847
90807 80808 60808 40909 30909 10908 01211
91020 80930 60928 40931 30931 10838

FLOYD

URNT12 KMIA 051555 COR
AF972 0210 FLOYD OB 09 COR KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 360 DEG FL012
RIGHT FRONT QUAD MX055 04015
90013 80013 60012 40012 30010 10007 00999
92522 82422 62422 42422 32322 12322 02322
91727 81627 61530 41535 31742 11855 0////
LEFT FRONT QUAD MX065 33020
90012 80012 60011 40009 30006 10998 00997
92522 82522 62422 42422 32522 12623 02623
90815 80419 60525 40530 30237 10565 0////

le 7 continued.

URNT12 KMIA 060433 COR
AF980 0310 FLOYD OB 11 COR KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 31 DEG FL100
LEFT REAR QUAD MX026 16015
93175 83175 63163 43150 33130 13095 03050
90905 80906 60906 41006 30908 11407 01706
92212 82616 62316 42215 32021 12326
RIGHT FRONT QUAD MX060 36010
93178 3170/ 63170 43166 33144 13123 03038
91002 81005 61005 40806 30706 10808 01709
91115 80910 60924 40626 30944 1////
RIGHT REAR QUAD MX068 09020
93170 83166 6//// 43139 33107 13077 03038
90906 80908 6//// 40909 31208 11105 01709
91533 81413 6//// 41642 31468 11342
LEFT FRONT QUAD MX027 27015
93162 83161 63151 43143 33130 13106 03065
90906 80806 60805 40807 30907 11010 01606
93614 83308 63317 43516 33215 10127

URNT12 KMIA 061330 COR
AF964 0410 FLOYD OB 09 COR KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 31 DEG FL100
LEFT FRONT QUAD MX061 34018
93160 83154 63148 43139 33118 13106 03008
90906 80906 60905 40806 30909 11008 01615
90112 83324 63225 43129 33135 12832
LEFT REAR QUAD MX025 18045
93164 83165 63159 43148 33135 13112 03008
91003 81003 60806 40908 30908 11010 01615
92511 82714 62618 42325 32322 12328
RIGHT REAR QUAD MX076 09006
93201 83171 63168 43166 33138 13147 03004
91006 80906 60907 40807 30808 10907 01809
92030 81834 61738 41930 31838 11845
RIGHT FRONT QUAD MX046 36045
93169 83159 63147 43138 33191 13107 03004
90606 80707 60707 40808 30908 10808 01809
91227 80935 61138 41246 30938 11031

URNT12 KMIA 070710
AF980 0610 FLOYD OB 06 KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 36 DEG FL100
RIGHT REAR QUAD MX080 13010
93184 83173 63168 43162 33133 13077 03924
91001 80903 60905 40907 31006 10909 01706
91930 82038 62038 42135 32052 12173
LEFT FRONT QUAD MX048 30008
93166 83165 63154 43143 33129 13086 03924
90805 80806 60806 40907 30909 11110 01706
90207 80408 60108 40208 30521 10142

URNT12 KMIA 080150 COR 02
AF866 0810 FLOYD OB 09 COR 02 KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 04 DEG FL100
LEFT REAR QUAD MX034 27015
93165 83167 63167 43161 33158 13124 03035
90802 80702 60703 40803 30903 10909 02108
90708 80425 60225 40130 30119 13634
RIGHT REAR QUAD MX050 22050
93176 83164 63149 43120 33106 13080 03035
91002 81005 61007 40909 31106 11105 02108
92431 82529 62636 42439 32648 12440
RIGHT FRONT QUAD MX046 04012
93182 83173 63158 43142 33106 13066 03038
90902 80904 60705 40806 31010 11307 02004
91731 81631 61835 41839 31944 11945
LEFT FRONT QUAD MX048 34009
93172 83163 63150 43145 33137 13092 03038
90803 80803 60707 40908 30909 11108 02004
91111 81121 61225 41134 3//// 10940

URNT12 KMIA 081715 COR
AF980 0910 FLOYD OB 12 COR KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 04 DEG FL100
LEFT REAR QUAD MX033 26015
93155 83950 63147 43135 33126 13107 03027
90802 80904 61004 41007 31105 11104 01005
90214 80217 63520 43424 33332 13233
RIGHT REAR QUAD MX038 17045
93206 83162 63161 43152 33146 13132 03110
91001 80905 61004 41105 31205 11105 01004
92728 82538 62434 42434 32619 12830

GERT

URNT12 KMIA 081648 COR
AF969 0311 GERT OB 07 COR KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 29 DEG FLO10
LEFT REAR QUAD MX027 15015
90013 80013 60012 40012 30012 10010 00001
92318 82318 62316 42217 32217 12218 02724
99905 89905 62316 42327 32427 12127
RIGHT REAR QUAD MX033 36030
90013 80012 60012 40010 30007 1///// 00003
92420 82419 62318 42320 32421 1///// 02622
91233 81026 61031 41033 30832 /////
LEFT FRONT QUAD MX018 25060
90012 80012 60012 40012 30011 10009 00003
92621 82621 62420 42420 32320 12420 02622
92311 82217 62118 42415 32216 12610
LEFT REAR QUAD MX043 15025
90013 80014 60013 40013 30012 10012 00005
92518 82418 62316 42216 32119 12120 02422
91814 82018 62325 42527 32136 12143

Table 7 continued.

URNT12 KMIA 081932
AF969 0311 GERT OB 14 KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 29 DEG FL010
RIGHT FRONT QUAD MX027 33030
9//// 8//// 6//// 40010 30009 10007 00005
9//// 8//// 6//// 42519 32420 12422 02422
//// 8//// 6//// 40626 30427 10620
LEFT FRONT QUAD MX023 25020
9//// 8//// 6//// 40011 30009 10007 00003
9//// 8//// 6//// 42521 32420 12421 02723
9//// 8//// 6//// 40113 33420 13123
REMARKS LAST REPORT OBS 01 - 14 TO KMIA.
ETA MKPA 08/1820Z.

URNT12 KMIA 101015
AF968 0811 GERT OB 13 KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 32 DEG FL013
RIGHT REAR QUAD MX026 10030
90013 80013 60013 40012 30011 10011 00009
92424 82422 62422 42422 32423 12424 02524
91714 81523 61522 41523 31826 11925
LEFT FRONT QUAD MX019 27080
90012 80011 60011 40010 30010 10010 00009
92524 82522 62523 42623 32524 12523 02524
90919 80919 60918 40414 33615 13614

7 continued.

URNT12 KMIA 121630
AF906 1511 GERT OB 09 KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 36 DEG FL099
LEFT REAR QUAD MX052 21032
93150 83135 63107 4//// 3//// 1//// 03076
91009 81107 61426 4//// 3//// 1//// 01609
93116 83036 62835 4//// 3//// 1////
LEFT REAR QUAD MX034 21015
9//// 8//// 6//// 4//// 3//// 13170 03076
9//// 8//// 6//// 4//// 3//// 11111 01609
9//// 8//// 6//// 4//// 3//// 13034

URNT12 KMIA 122136 COR
AF866 1611 GERT OB 09 COR KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 04 DEG FL100
RIGHT REAR QUAD MX050 17060
9//// 83153 63141 43139 33104 13078 00998
9//// 80804 61005 41005 31208 11408 02424
9//// 82747 62746 42840 33033 13547
RIGHT FRONT QUAD MX060 10060
9//// 83115 63101 43070 3//// 1//// 00999
9//// 80808 61004 41111 3//// 1//// 02523
9//// 82060 61835 4//// 3//// 1////
LEFT REAR QUAD MX043 27030
93136 83133 63128 43124 33121 13115 00999
91052 80952 60802 40902 30904 11004 02523
93117 82915 63026 43128 30243 13533

Table 7 continued.

HARVEY

URNT12 KMIA 121705 COR
AF972 0212 HARVEY OB 12 COR KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTE 29 DEG FLO10
RIGHT REAR QUAD MX050 08010
90012 80012 60010 40012 30009 10008 00001
92522 82421 62422 42322 32322 12422 02524
91222 81321 61236 41433 31348 11743
RIGHT FRONT QUAD MX073 36015
90011 80011 60009 40008 30005 1//// 00000
92421 82121 62420 42421 32121 1//// 02722
90822 80826 60633 40850 30757 1////
LEFT REAR QUAD MX030 15020
9//// 8//// 60008 40008 30008 10007 00997
9//// 8//// 62422 42422 32422 12322 02722
9//// 8//// 61910 41810 31725 11820

URNT12 KMIA 130642 COR 03
AF980 0312 HARVEY OB 13 COR 03 KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 29 DEG FL100
LEFT REAR QUAD MX042 13030
93140 83131 63125 43120 33115 13085 03981
91108 80907 60908 41107 30907 10907 01607
91830 81830 61729 41839 32042 12031
RIGHT REAR QUAD MX053 03010
93115 83109 63097 43085 33067 13052 03981
90807 80807 60907 40806 30906 10907 01607
91353 81451 61244 41144 31040 10945
RIGHT FRONT QUAD MX045 33045
9//// 83091 63072 43048 33014 13987 03983
9//// 81009 60908 40909 31009 11309 01610
9//// 81037 60945 40945 30418 13107
LEFT FRONT QUAD MX039 21100
93095 83092 63090 43074 33059 13041 03983
90909 80909 60808 40909 30808 11111 01610
90439 83620 60623 43517 30212 13523

continued.

URNT12 KMIA 131430 COR 02
AF972 0412 HARVEY OB 08 COR 02 KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 30 DEG FL100
RIGHT REAR QUAD MX048 08060
93123 83116 63098 43073 33054 13021 03982
90905 80908 60908 40808 31010 11210 01510
91845 81839 61848 41840 31743 11741
RIGHT FRONT QUAD MX047 35045
93122 83107 63089 43075 33054 13988 03974
90808 80907 60908 40907 31109 11312 01711
90837 80534 60741 40747 30746 10429
LEFT FRONT QUAD MX027 26060
93113 83105 63083 43074 33053 13015 03974
90908 80908 60908 41009 31009 11208 01711
90223 80123 63527 43520 33424 13125
LEFT REAR QUAD MX042 17015
93119 83113 63098 43081 33063 13031 03969
91008 80906 61005 41008 31008 11210 01609
92432 82039 62033 42432 32438 12642

URNT12 KMIA 140010 COR 02
AF967 0512 HARVEY OB 06 COR 02 KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 31 DEG FL100
LEFT REAR QUAD MX047 18030
9//// 83094 63102 43079 33059 13016 03928
9//// 80902 60805 40903 31005 10908 01410
9//// 82426 63333 43137 33047 13235
RIGHT REAR QUAD MX054 09015
93128 83104 63089 43073 33031 13985 03928
90907 80805 61003 41003 31307 11210 01410
91642 81847 61848 41853 31854 11954
RIGHT FRONT QUAD MX055 08051
93107 83097 63064 43043 33995 13949 03923
90806 80707 60707 40907 30909 11109 01110
90941 80851 60841 40649 30255 13110
LEFT FRONT QUAD MX040 27015
93116 83095 63076 43055 33030 13970 03923
90804 80804 60707 40906 30908 11308 01110
93629 81406 60108 43527 33631 13440

Table 7 continued.

URNT12 KMIA 141303 COR
AF972 0612 HARVEY OB 07 COR KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 30 DEG FL100
LEFT REAR QUAD MX086 22025
93086 83051 63036 43999 33803 13773 03760
90905 81108 61108 41107 31312 11511 01710
92442 82541 62542 42648 32764 12718
RIGHT REAR QUAD MX088 13015
93110 83093 63063 43053 33995 13893 03760
90905 80907 60909 41009 31110 11010 01710
91853 81860 61750 41759 31765 11988
RIGHT FRONT QUAD MX075 05030
93086 83069 63056 43958 33917 13920 03738
90907 81008 61009 41010 31110 11411 01619
91346 81048 60942 40753 31075 10735
LEFT FRONT QUAD MX065 31015
93121 83106 62099 43074 33041 13954 03738
90906 81008 61009 40909 31109 11110 01609
90121 83131 63636 43334 33438 13465

URNT12 KMIA 150200 COR 02
AF966 0712 HARVEY OB 13 COR 02 KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 34 DEG FL098
RIGHT REAR QUAD MX107 12005
9//// 83111 63045 43045 33005 13935 03617
9//// 805// 607// 407// 307// 107// 015//
9//// 82065 62055 42163 32166 12282
LEFT FRONT QUAD MX079 30005
93121 83103 63078 43004 33996 13926 03617
909// 808// 606// 407// 307// 108// 051//
90429 80244 60347 40345 30251 10450

URNT12 KMIA 150725 COR
AF966 0712 HARVEY OB 20 COR KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 36 DEG FLO98
LEFT REAR QUAD MX085 21005
93108 83112 63096 43077 33029 13968 03606
911// 811// 611// 409// 310// 108// 016//
92843 82837 62844 42846 32957 12965
RIGHT FRONT QUAD MX072 36020
93105 83069 63029 4//// 33902 13801 03606
905// 807// 606// 4//// 310// 108// 016//
91725 81542 61555 41468 31469 11472
LEFT FRONT QUAD MX066 30025
93104 83092 63043 43996 33924 1//// 03631
909// 810// 608// 407// 308// 111// 016//
90239 80142 63649 43553 33555 13555
RIGHT REAR QUAD MX080 18020
93126 83100 63070 43027 33965 13898 03631
907// 810// 609// 407// 309// 114// 016//
92543 82753 62667 42666 32675 12571

URNT12 KMIA 151340 COR
AF980 0812 HARVEY OB 08 COR KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 36 DEG FL100
LEFT REAR QUAD MX095 21020
9//// 8//// 63067 43040 33006 13970 03730
9//// 8//// 60903 41003 30904 11104 01505
9//// 8//// 62961 42952 32961 12952
RIGHT REAR QUAD MX091 13045
93135 83107 63067 43031 33971 13877 03730
90905 80704 60805 40905 30806 11207 01505
92260 82268 62371 42291 32490 12580
RIGHT FRONT QUAD MX086 04060
93080 83046 63010 43917 33836 13781 03744
90606 80905 60906 41007 31307 11408 01709
91673 8//// 61486 4//// 31154 11152
LEFT FRONT QUAD MX072 05030
9//// 83081 63039 43991 33923 13847 03744
9//// 80806 61107 41107 31308 11809 01709
9//// 80641 60432 40450 30172 10247

Table 7 continued.

URNT12 KMIA 152019
AF972 0912 HARVEY OB 08 KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 36 DEG FL100
RIGHT REAR QUAD MX098 15015
93123 83114 63087 43058 33030 13962 03737
90905 80906 60906 41006 31009 11106 01412
92267 82259 62271 42382 32375 12498
RIGHT FRONT QUAD MX065 06045
93065 83042 63006 43919 33739 13752 03737
90707 80808 61010 40707 31211 11511 01412
92217 82119 61556 41665 32140 12642

IRENE

URNT12 KMIA 251315 COR
AF972 0114 IRENE OB 07 COR KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 31 DEG FL100
LEFT FRONT QUAD MX048 27050
93103 83085 63047 43982 3//// 1///// 03933
91005 80706 60707 40808 3//// 1///// 01706
90127 83648 60323 40436 3//// 1/////
RIGHT FRONT QUAD MX070 36030
93100 83070 63037 43009 33954 13936 03933
90808 80808 60909 40909 31111 11507 01706
91242 80850 61043 41140 31070 11062
LEFT REAR QUAD MX061 18015
93115 83106 63095 43080 33052 13990 03921
90904 80905 60805 41006 31007 11407 01310
92528 82527 62544 42444 32556 12461
RMKS ACFT CHANGED ALPHA PATTERN. RIGHT FRONT QUAD
NOT FLOWN DUE TO RADAR ATTENUATION.

URNT12 KMIA 260053 COR 02
AF967 0214 IRENE OB 06 COR 02 KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 32 DEG FL099
LEFT REAR QUAD MX078 18020
93098 83084 63066 43022 33987 13928 03881
90803 80706 60905 40909 31305 11808 01706
92638 82736 62844 42847 32760 12678
RIGHT REAR QUAD MX090 12025
93110 83096 63068 43023 33970 13906 03881
90805 80804 61003 40908 31305 11707 01706
91850 81860 61775 41880 31890 12151
LEFT FRONT QUAD MX070 29030
93104 83089 63074 43057 33005 13907 03876
90604 80705 60804 40806 30807 11310 01606
90257 80241 60152 43552 33570 13225
RIGHT FRONT QUAD MX081 01030
93096 83084 63057 43032 33984 13919 03876
90706 80707 60808 40808 30707 11110 01606
91050 81050 60965 40975 31081 10963

URNT12 KMIA 261340
AF964 0314 IRENE OB 07 KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 32 DEG FL100
RIGHT FRONT QUAD MX32 FL100
93058 83041 63016 43977 33952 13948 00353
90808 81010 61111 41609 31709 12105 01808
91157 81351 61449 41547 31840 12036
LEFT FRONT QUAD MX063 26100
93059 83040 63010 43978 33939 13/// 03934
90806 81008 61209 40909 31609 1//// 01610
90263 80161 63154 43158 32638 12840
LEFT REAR QUAD MX048 18045
93104 83079 63068 43052 33998 13957 03934
91008 80909 60909 40909 30909 11410 01610
92919 83045 62838 42748 32634 12533

URNT12 KMIA 270515 COR
 AF972 04 14 IRENE OB 15 COR KMIA
 SUPPLEMENTARY VORTEX DATA MESSAGE
 AZIMUTH 32 DEG FL100
 LEFT REAR QUAD MX052 15015
 93052 83043 63016 43987 33929 13887 03815
 91007 81008 61008 41109 31109 11310 01610
 92635 82639 62446 42545 32649 12752
 RIGHT FRONT QUAD MX053 36015
 93062 83030 63016 43984 33906 13849 03815
 90905 80807 60808 40908 30909 11210 01610
 90857 80746 6//// 40848 30950 10753
 LEFT FRONT QUAD MX047 25015
 93049 83032 63020 43971 33928 13860 03799
 90907 81008 61008 41008 31107 11411 01510
 93229 83336 63345 43237 33039 13147

URNT12 KMIA 271228 COR 02
 AF967 0514 IRENE OB 06 COR 02 KMIA
 SUPPLEMENTARY VORTEX DATA MESSAGE
 AZIMUTH 32 DEG FL100
 LEFT REAR QUAD MX080 18045
 93049 83023 63997 43954 33903 13849 03819
 90906 80805 60806 41105 31307 11507 01410
 93145 83159 62958 42980 32956 12937
 LEFT FRONT QUAD MX074 28060
 93059 83048 63019 43989 33943 13876 03819
 90706 80705 61005 41005 31208 11110 01410
 90156 80154 63674 43568 30253 10147
 RIGHT REAR QUAD MX080 09080
 93064 83050 63004 43954 33895 13830 03820
 90807 80706 60808 40908 31208 11211 01509
 91966 81980 61874 41853 31862 11841
 RIGHT FRONT QUAD MX076 36045
 93067 83028 63998 43957 33912 13833 03799
 90806 80808 60808 40909 31210 11311 01608
 90851 80862 60855 40876 30751 10540

URNT12 KMIA 280107 COR
AF964 0614 IRENE OB 06 COR KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 36 DEG FL100
RIGHT REAR QUAD MX100 12045
93092 83083 63051 43987 33883 13844 03797
90908 80808 60808 40808 31010 11313 01714
91955 82077 62173 47000 32180 11941

URNT12 KMIA 281315 COR
AF972 0714 IRENE OB 07 COR KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 36 DEG FL100
LEFT REAR QUAD MX073 22070
93071 83050 63032 43013 33979 13947 03720
90805 80805 60907 40906 31005 11109 02008
92927 82937 63052 42358 32965 12949
RIGHT FRONT QUAD MX062 04080
93024 83037 63967 43939 33886 13738 03720
90606 81010 60909 50808 31111 11511 02008
91360 01462 61256 41261 31141 19905
LEFT FRONT QUAD MX059 29030
93045 83015 63978 43938 33875 13787 03747
90807 80707 60807 41009 31208 11411 02009
90638 80242 60348 40354 30159 13538
RIGHT REAR QUAD MX071 14060
93035 83999 63961 43909 3//// 1//// 03747
91103 81203 61206 41308 3//// 1//// 02009
92358 82369 62371 42459 32562 12526

URNT12 KMIA 291515 COR 02
 AF966 0814 IRENE OB 09 COR 02 KMIA
 SUPPLEMENTARY VORTEX DATA MESSAGE
 AZIMUTH 04 DEG FLO99
 LEFT REAR QUAD MX040 26100
 93969 83941 63892 43862 33819 1//// 03807
 90907 80808 60808 41111 31212 1//// 01212
 93440 8//// 63525 43635 3//// 1////
 RIGHT REAR QUAD MX084 17045
 93016 83984 63938 43890 33874 13809 03807
 9//05 80707 60908 41009 31212 11313 01212
 92756 82766 62673 42684 32470 12423
 RIGHT FRONT QUAD MX068 09100
 93999 83933 6//// 43885 33820 1//// 03786
 90808 80908 61108 41109 31010 1//// 01313
 91868 81760 61753 41650 31340 1////
 LEFT FRONT QUAD MX035 32015
 93954 83939 63908 43884 33866 13820 03786
 90808 80808 60808 41010 30909 11111 01313
 91223 91220 61026 40522 30535 13635
 100NM INBND SFC WND 28065. 30NM OBND SFC WND 27085

KATRINA

URNT12 KMIA 041555 COR
 AF963 0217 CYCLONE OB 12 COR KMIA
 AZIMUTH 36 DEG FL100
 LEFT REAR QUAD MX/// ////
 9//// 8//// 6//// 4//// 3//// 1//// 03039
 9//// 8//// 6//// 4//// 3//// 1//// 013//
 9//// 7//// 6//// 4//// 3//// 1////
 RIGHT REAR QUAD MX033 13060
 93122 83116 63110 43108 33104 13086 03039
 908// 808// 608// 409// 311// 109// 013//
 92029 82331 62333 42629 32524 1////
 RIGHT FRONT QUAD MX040 05100
 93129 83113 43104 33088 13062 03053
 908// 808// 608// 409// 309// 111// 011//
 91540 81326 61128 41032 31734 10432
 LEFT FRONT QUAD MX016 27035
 93112 83109 63107 43100 33098 13083 03053
 909// 810// 611// 311// 112// 011//
 90413 83615 63615 43515 30116 13612

7 continued.

URNT12 KMIA 050257 COR
AF972 0317 KATRINA OB 09 COR KMIA
SUPPLEMENTARY VORTEX DATA MESSAGE
AZIMUTH 045 DEG FL100
RIGHT FRONT QUAD MX035 02100
93117 83113 63108 43099 33090 13069 03039
90907 80907 61007 41009 310// 109// 01408
91730 81725 61726 4//// 31522 11916
LEFT FRONT QUAD MX040 34050
93115 83102 63093 43084 33072 13050 03022
91007 81106 61005 41007 30908 11010 01309
90932 80519 60326 40540 30437 1////
LEFT REAR QUAD MX050 25015
93112 83107 63088 43093 33083 13040 03022
91105 81205 61205 41207 30907 10907 01309
93115 83025 62919 43216 33623 13350
RIGHT REAR QUAD MX078 13015
93115 83111 63108 43092 33083 13077 03011
90908 80908 60908 41007 30908 10907 01509
92335 82050 61838 42221 32323 12478

Table 8. Tropical Cyclone Reconnaissance Summary for 1981.

| | | |
|------------------------------|-----------------|---------------------------|
| 1. Requirements Levied | Atlantic | Eastern & Central Pacific |
| Cyclones | 143 | 0 |
| Invest | 34 | 0 |
| | TOTAL 177 | 0 |
| 2. Requirements Accomplished | Atlantic | Eastern & Central Pacific |
| 53 WRS (Cyclones/invest) | 28/9 | 0/0 |
| 920 WRG (Cyclones/invest) | 70/31 | 0/0 |
| RFC (Cyclones/invest) | 30/6 | 0/0 |
| | TOTAL 128/46 | 0/0 |
| 3. Missions Flown | | |
| 53 WRS | 25 | 0 |
| 920 WRG | 66 | 0 |
| RFC | 15 | 0 |
| | TOTAL 106 | 0 |
| 4. Flying Time (Hours) | Atlantic | Eastern & Central Pacific |
| 53 WRS | 242.3 | 0 |
| 920 WRG | 650.7 | 0 |
| RFC | 138.3 | 0 |
| | TOTAL 1031.3 | 0 |
| 5. Observations | Horizontal 1558 | Vertical 58 |

Three unaccomplished requirements.

Does not include ferry missions or flying time.