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NOAA Technical Memorandum EDS NCC-2

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Environmental Data Service

CLIMATIC DATA REPORT SOUTHEASTERN SNOW STORM, FEBRUARY 8-11, 1973

WILLIAM T. HODGE



National
Climatic
Center
Asheville, N.C.
May 1973

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Cover Photo: Snow- and moss-covered live oak tree in Charleston, South Carolina.
Photo courtesy of Charleston Post-Courier.



U.S. DEPARTMENT OF COMMERCE
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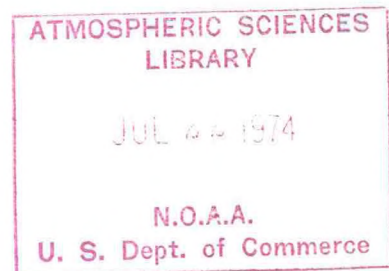
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Climatic Data Report, Southeastern Snowstorm, February 8-11, 1973

WILLIAM T. HODGE



ASHEVILLE, N.C.
MAY 1973

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PREFACE

Certain weather events stand out in memory. Just as the "old-timers" remember the big snows of fifty to one hundred years ago, the children of today will look back on the "Big Snow of '73".

The purpose of this report is to provide a description of the storm while the source materials are still fresh and readily available.

Newspaper accounts were used to obtain the impact of the storm on business and transportation. News staffs were most generous in providing photographs from which the illustrations could be selected. Individual acknowledgements are given at the end of the report.

Mistakes and omissions are inevitable in storm reports of this scope. Corrections and additions are welcomed, and will be placed in the file on this storm for use by future research workers.

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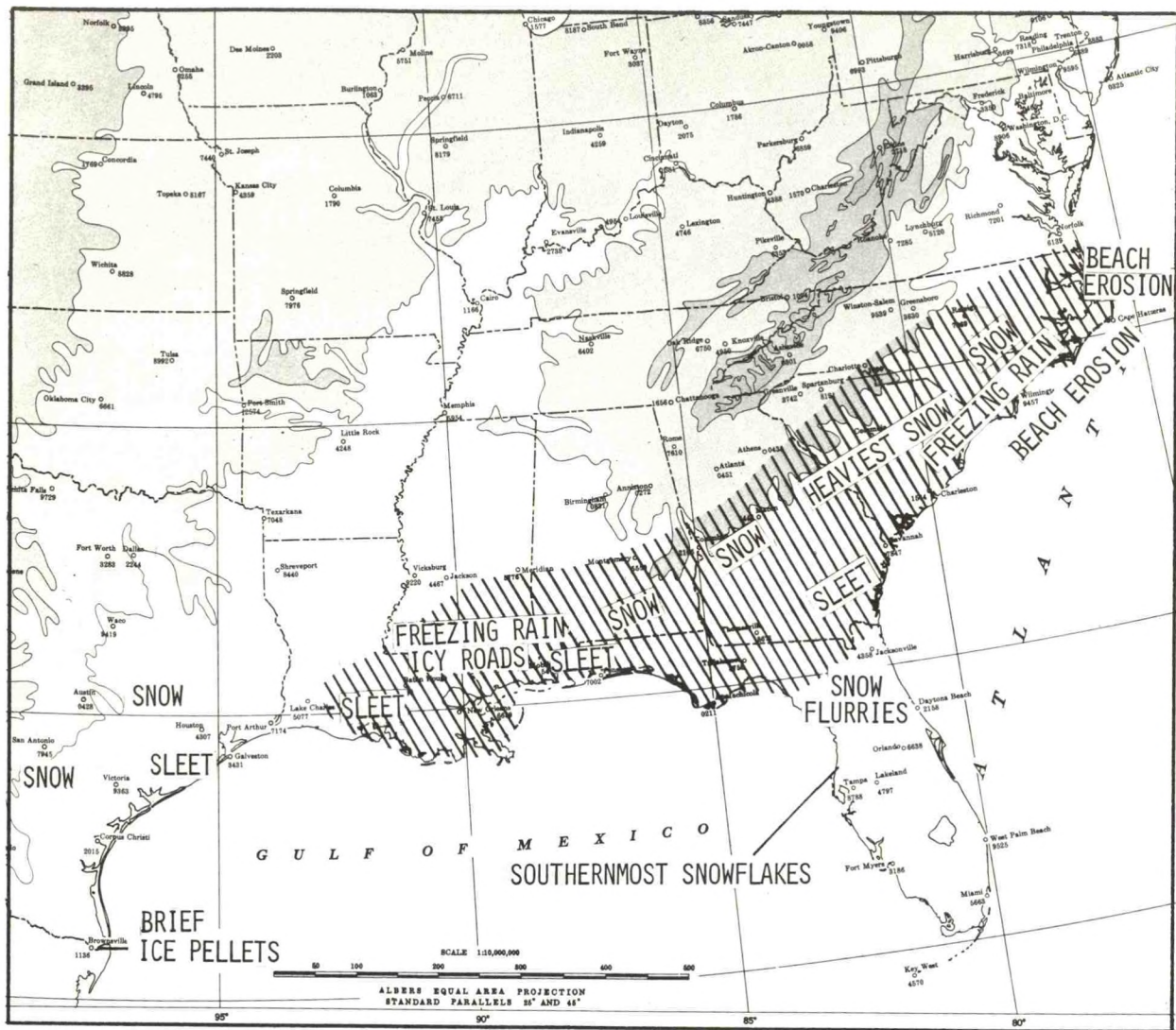


Figure 1. Main Events of the Southeastern Snow Storm.

A variety of weather accompanied the storm. The hatched area experienced the most severe conditions. In central Texas and along the northern edge of the storm, the weather was not considered very unusual; these areas are somewhat accustomed to winter storms. Farther south and near the coasts, snow and ice storms such as this are rare.

CHAPTER 1

Summary of the Snow Storm

The snow storm that crossed the Southeastern states from February 8 to February 11 brought never-before-heard-of amounts of snow to parts of Alabama, Georgia, South Carolina, and North Carolina. In other areas from Texas to Virginia, it stopped traffic, crippled communications, damaged buildings and killed trees and other plants. Along coasts it eroded beaches, undermined and washed away buildings, and damaged piers. It exhibited the features of a true winter storm in a part of the country that seldom sees such drastic weather: sharply falling temperatures, freezing rain, ice pellets (sleet) and heavy snow.

Freak snow flurries and sleet fell so far south in Texas and Florida that many persons had their first look at such precipitation.

Travelers were marooned where the snow was deepest and the roads were iciest.

A survey of the storm is shown in Figure 1. Texas received the first snows. As the weather system moved nearer the Gulf of Mexico, freezing rain and sleet began falling. In parts of Louisiana, Mississippi, and Alabama, it was more of an ice storm than a snow storm. The heaviest snows began falling in Southern Alabama and continued through mid-Georgia, South Carolina, and Eastern North Carolina. Areas of major beach erosion are shown on the map.

The total snowfall is shown in Figure 2. Depths in the areas of heaviest snowfall were affected by drifting; the map shows the depths that are believed to be representative of open areas free from drifting. As indicated in the figure caption, a few unofficial but reliable reports were used where official ones could not be found. Note the sharp and relatively straight demarcation of the snow along the northern edge of the belt from Alabama to North Carolina.

New Records Set

Extremes of snowfall are based on statistics taken from the observations at official weather stations. Some of the ways that the "greatest snow" can be measured are:

- Greatest Depth on Ground
- Greatest 24-Hour Snowfall
- Greatest Snow for One Storm
- Greatest Monthly Snowfall
- Greatest Annual Snowfall



EVERGREEN, ALABAMA. This view is typical of the scene that greeted Southerners the morning after the storm. The snowy streets and overpasses created traffic hazards until sunshine and decreasing northern winds led to thawing. This picture was taken at 8:40 A.M., February 10, looking south along Front Street. The snow remained on the ground for several days at Evergreen due to the cold temperatures that followed the storm. Photo Courtesy of Evergreen Courant.

Daily observations are on hand for thousands of weather stations in the South. They date to before the Civil War at some locations. It has not been possible to search these extensive records for all of the statistics shown above. Consequently, the following listing of new records established must necessarily be considered incomplete. The National Weather Service stations having full-time observers kept the most detailed records and have been relied on most for extreme statistics.

TEXAS

Corpus Christi. This was the second measurable snowfall of the winter. No previous season has had more than one. Records began in 1887.

Victoria. The 1.0-inch snowfall of the 9th created the first occurrence in which measurable amounts of snow fell in two consecutive months.

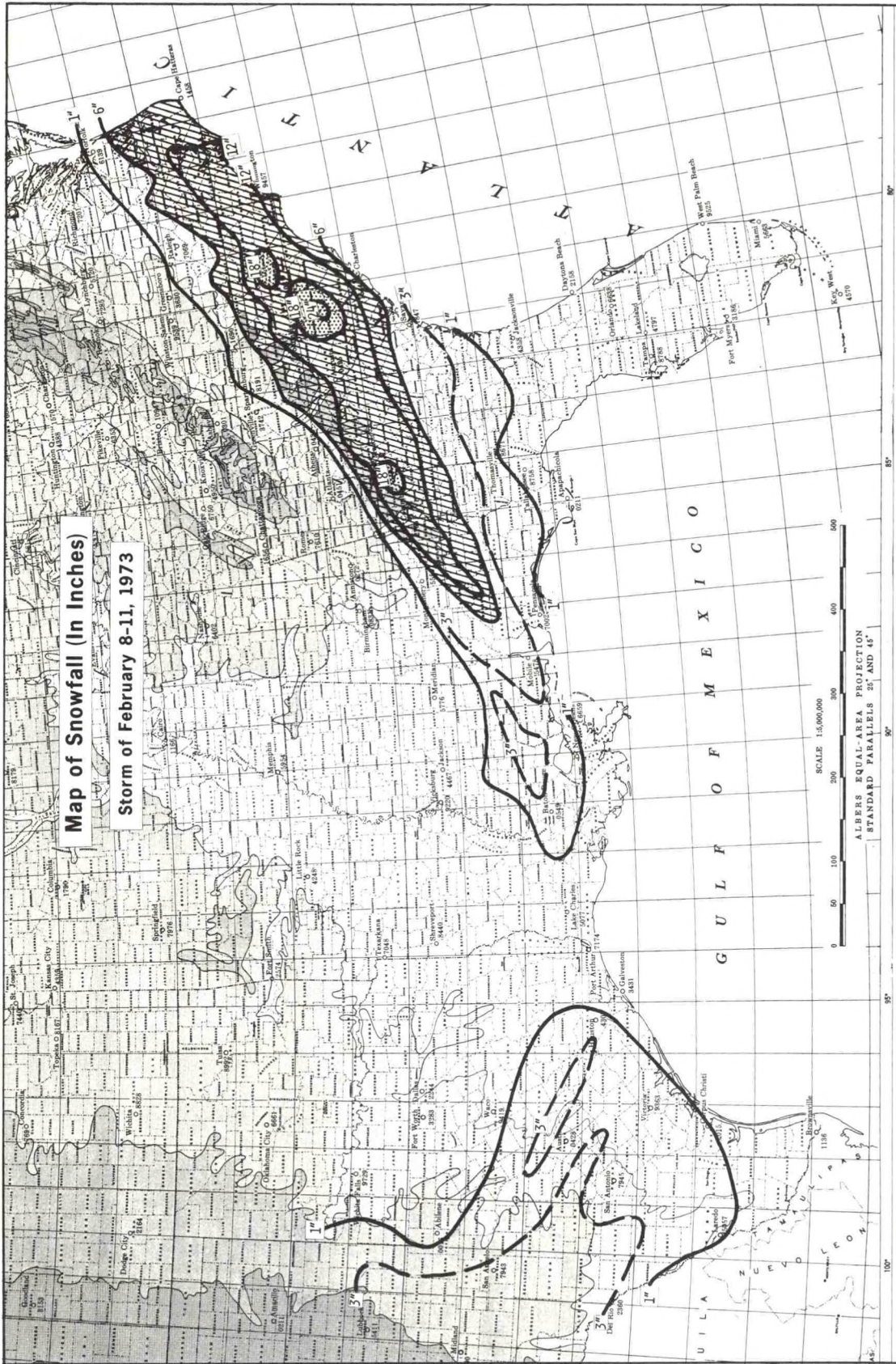


Figure 2. Map of Snowfall (In Inches), Storm of February 8-11, 1973. Depths of ice pellets (sleet) and glazed ice are included. Based mostly on official reports from cooperative weather observers. A few unofficial but seemingly reliable reports were used where there were no official weather observers. Snow varies greatly over short distances so all of the variations cannot be shown accurately on a map. This chart gives the general pattern; measurements by locality will be found in Climatological Data published for each state.

LOUISIANA

Baton Rouge and New Orleans. This was the first occasion during the past 80 years in which two measurable accumulations of snow occurred during a single season.

MISSISSIPPI

At several stations in the southern third of the state, it was the greatest snow of record; at some others, the greatest since 1895.

ALABAMA

It was considered the worst snow storm of record in the area from Evergreen to Phenix City. This storm exceeded by several inches the big storm of February 25, 1914, when 6 to 8 inches fell. Amounts in 1973 for the same area were 10 to 14 inches. New records were not set at Montgomery or Mobile.

FLORIDA

The heaviest snowfall in 15 years and the third greatest snowfall in history hit Florida on February 9 and 10. Many record snow amounts were set at weather stations in the northern counties. Snow flakes were reported on the Gulf Coast as far south as Hudson. In the central peninsula snow was seen briefly at Clermont west of Orlando. On the Atlantic Coast snow flakes were in the air in the Daytona Beach area.

Tallahassee. Although a new record was not set, it was the first time measurable snow occurred at this station since February 13, 1958.

Milton Experiment Station. 3.3 inches of snow fell. Since 1886, amounts equal to 3 inches have been reported in Florida only 5 times. Milton holds the Florida record for 24-hour and single storm snowfalls, 4.0 inches. These records were established March 6, 1954.

GEORGIA

This month's snowfall was the greatest recorded in middle Georgia during the 80 to 100 years that weather records are available. Practically all previous snowfall records were broken in the central and southern counties. The total snowfall of 19.3 inches at Thomaston tied the previous greatest single storm snowfall record for the state. The same amount fell at Cedartown March 2-3, 1942.

Augusta. A new greatest-in-24-hours snowfall record was set with 13.7 inches on the 9th - 10th. The previous record was 10.5 inches on February 25-26, 1914. A new record snow depth of 14 inches was set on February 10, 1973. The weather station at Augusta has kept records since 1870.

Columbus. The snowfall of 14.0 inches exceeded the previous greatest known, unofficially 8 to 9 inches on February 25, 1914. In 27 years of detailed record-keeping, no more than 1 inch had been previously measured.

Macon. Macon had a new record daily and monthly snowfall of 16.5 inches. The previous greatest since the Weather Service office opened in 1889 was 7 inches in 1914.

SOUTH CAROLINA

A new February snowfall record for the state was set with 24.0 inches at Rimini. The previous record was 21.8 inches at Caesar's Head Mountain in 1969. In the non-mountainous part of the state the previous record was 18 inches at Smiths Mill in 1912 and Society Hill in 1914. By comparison, in the 1973 storm 18 inches or more fell over an area the size of 5 or 6 counties. The coastal beaches, which rarely have snow, were covered with from 3 to 7 inches. This storm was the greatest to occur in central South Carolina during the 75 years that detailed records have been kept.

Charleston. The 7.1 inches set new daily, monthly and annual records, almost doubling the old daily record of 3.9 inches set in 1899.

Columbia. New daily (15.7 inches), monthly (16.0 inches) and annual snowfall records were set. The previous 24-hour record was established in the 1914 storm and the previous monthly record was set during the February 1899 storm.

NORTH CAROLINA

It was the greatest snow of record in the extreme Southeast.

Wilmington. The 12.5 inches from this storm broke the previous record snowfall from a single storm (12.1 inches in 1896). It was the second greatest snowfall for a 24-hour period, 11.7 inches as compared to 12.1 inches in the 1896 storm.

Pattern of Snowfall

The snowfall map, Figure 2, shows two main areas of snow. Texas received snow in the first stages of the storm, but, as the weather moved east, the snow diminished. Little or no snow fell in extreme eastern Texas and western Louisiana.

From central Louisiana to the Outer Banks of North Carolina, the snow, ice and sleet created an elongated pattern. The main storm system responsible for the snow moved in a path about 200 miles south of, and roughly parallel to, the center line of the snow belt. It developed in the north central part of the Gulf of Mexico, crossed the Florida peninsula, moved northeastward along the Gulf Stream, past the Outer Banks, and then went into the North Atlantic Ocean. It was a small storm while in the Gulf, but deepened into a large one by the time it was off the Outer Banks.

The area having a foot or more of snow was 600 miles long and up to 100 miles wide. Depths of more than one and a half feet of snow occurred in west central Georgia and south central and eastern South Carolina.

As usual there were marked changes over short distances near the sea coast. The large bodies of water were warmer than the cold air blowing in from the north. Precipitation of first one kind and then another fell as conditions changed aloft.

Inland there were variations of another sort. Winds caused drifting snow; the highest drifts formed downwind from houses, trees and signs. Fields with stubble filled rapidly with snow.

In the southern sections and while temperatures were near freezing, the snow was wet and heavy and did not drift. As temperatures became colder, the snow became drier, lighter and more powdery. The most blowing and drifting occurred from mid-Georgia to eastern North Carolina. The strong winds that came as the storm strengthened had much to do with the drifting in the later stages of the storm.

Table I. Statistics for the Feb. 8-11, 1973 Storm

PLACE	TOTAL PRECIP	TOTAL SNOW FALL	MAX. SNOW DEPTH	DATE/TIME	MIN. TEMP. °F	PEAK WIND GUST			FREEZING RAIN DURATION		
						KNOTS	DIR.	DATE/TIME	NO. HOURS	FIRST	LAST
TEXAS											
Corpus Christi	0.39	1.1	1	8/2350	30	35	N	8/0711			
Victoria	0.89	1.0	1	9/0546	29	33	N	8/0333	4	8/2049	9/0120
Houston Airport	1.65	1.4	1	9/0545	30	28	NW	8/0127	1	8/2150	9/0210
LOUISIANA											
Lafayette	1.56	2.0	2	9/1154	31	32	NW	8/0654	4	9/0305	9/0649
Baton Rouge	1.49	1.8	2	9/1152	27	28	NW	8/0712	*	9/0245	9/0300
New Orleans	2.03	E0.6	1	9/1749	30	34	N	9/2155			
MISSISSIPPI											
McComb	2.45	E2.0	2	9/0550	25	23	N	8/1757	3	8/2050	8/2345
Biloxi (AFB)	E2.23	3.0	3	9/2034		30	N	9/0558	U		9/0617
ALABAMA											
Mobile	1.94	3.6	3	9/2350	28	26	N	9/0356	1	9/0504	9/0742
Montgomery	1.47	3.1	2	9/1750	28	26	W	8/1032			
Dothan	2.77	2.5	2	10/0557	30	23	NW	8/1732			
FLORIDA											
Pensacola	2.81	1.9	2	9/2354	29	31	N	9/1056	4	9/1210	9/1540
Panama City (AFB)	1.87	1.1	1	10/0545	34	28	NE	9/1600	3	10/0007	10/0715
Tallahassee	3.23	0.4	*	10/0830	32	30	NE	9/1756	2	10/0420	10/0633
GEORGIA											
Columbus	2.93	14.0	14	10/0650	26	24	NE	9/1918	1	9/0641	9/0846
Macon	2.55	E16.5	13	10/1250	26	28	NE	10/1235			
Augusta	2.13	14.0	14	10/1500	16	33	NE	10/0038			
Savannah	2.42	3.2	3	10/2240	28	27	N	10/0550	2	9/2335	10/0342
SOUTH CAROLINA											
Columbia	2.27	16.0	15	10/1550	25	31	N	10/0954			
Florence	1.17	17.0	17	10/1658	23	35	N	10/1125			
Charleston	3.18	7.1	7	10/2314	25	29	N	10/0926	3	9/1639	9/1945
Beaufort MCAS	1.52	6.4	6	10/2356	26	31	NE	10/0221	5	9/1845	9/2345
NORTH CAROLINA											
Jacksonville	1.96	16.2	10	10/0658	28	35	N	10/0109	6	9/1005	10/1210
Cherry Point	1.97	15.8	15	11/0050	26	44	N	10/1612	1	9/0930	9/1020
Cape Hatteras	2.28	3.3	3	10/0415	31	56	NE	10/1259			
Wilmington	2.12	12.5	8	10/2252	26	46	N	10/1605			
New Bern	2.17	13.0	13	10/2358	27	40	N	10/0858			
Fayetteville	.90	7.8	8	10/1855	23	45	N	10/1110			
Rocky Mount	.56	5.0	5	10/1856	22	30	NE	10/1157			
Raleigh	.63	4.5	5	10/1251	22	28	N	10/1156			
VIRGINIA											
Norfolk	.40	3.9	4	10/1940	25	50	N	10/2335			

NOTES: Precipitation and snow depths are in inches.
Times are in Local Standard Time.

Table I. Statistics for February 8-11 Storm.

Data are from National Weather Service stations where available; otherwise FAA or military weather station records were used. Total precipitation, minimum temperature and peak wind gusts are for the days on which frozen precipitation fell, generally February 8 and 9 west of Alabama and February 9 and 10 elsewhere. The number of hours given in the durations col-

Table I. (Continued)

ICE PELLETS DURATION			SNOWFALL DURATION								
NO. HOURS	FIRST	LAST	LIGHT			MODERATE			HEAVY		
			NO. HOURS	FIRST	LAST	NO. HOURS	FIRST	LAST	NO. HOURS	FIRST	LAST
4	8/2120	9/0155									
5	8/2029	9/0120	3	9/0120	9/0610						
5	8/1853	9/0150	8	8/1930	9/1110	1	9/0952	9/1041			
4	9/0305	9/0650	1	9/0730	9/0830						
4	9/0235	9/0633	3	9/0356	9/0830						
8	9/0507	9/1250	5	9/0950	9/1720						
1	9/0320	9/0435	1	9/0435	9/0517						
8	9/0617	9/1445	3	9/1406	9/2034	3	9/1453	9/2013			
7	9/0614	9/1328	5	9/1338	9/2253	4	9/1430	9/2032			
5	9/0125	9/0828	1	9/0720	9/1330	4	9/0940	9/1330			
3	9/1603	9/1957	9	9/1836	10/0757	4	9/2137	10/0156			
4	9/1040	9/1830	4	9/1830	9/2254						
1	10/0055	10/0134	6	10/0107	10/0822						
			2	10/0633	10/1240						
1	9/0831	9/1528	11	9/0900	10/1230	14	9/0950	10/1130	1	10/0140	10/0235
1	9/0937	9/1015	9	9/1007	10/0828	12	9/1029	10/0554	1	9/1052	9/1152
1	9/0955	9/1052	15	9/1055	10/1420	10	9/1140	10/1105	2	9/1725	9/2223
10	10/0224	10/1610	8	10/0342	10/2240	1	10/1942	10/2024			
			12	9/1313	10/1550	11	9/1956	10/1415	3	9/2030	10/1340
6	9/0551	10/1010	5	9/1316	10/1658	10	9/1952	10/1658	9	10/0056	10/1658
13	9/1922	10/1555	14	9/2242	10/2314	3	10/1346	10/2056	1	10/1357	10/1508
12	9/1255	10/1256	3	10/0554	10/2245	4	10/1411	10/2130			
			13	9/1114	10/2304	*	9/1502	10/0603	15	9/1502	10/0603
14	9/0905	10/2043	13	9/1127	10/2332	12	9/1205	10/2205	4	10/1847	10/2205
			16	9/1205	11/0445	8	9/1625	10/0430			
13	9/1050	10/1750	13	9/1350	10/2252	4	9/1425	10/1935			
1	10/1440	10/1512	4	9/1528	10/2330	19	9/1615	10/2330	2	10/1455	10/1655
	10/0149	10/0740	5	9/2252	10/1538	5	10/0330	10/1525	7	10/0348	10/1325
			7	10/0255	10/1856	7	10/0456	10/1552			
			5	10/0450	10/1316	2	10/0640	10/1116	1	10/0950	10/1116
			6	10/0710	10/1940	7	10/1035	10/1901			

* - Less than 1/2
 E - Estimated
 U - Unknown

umns tell how many hours the precipitation fell. Precipitation did not always fall continuously between the first and last times shown. Occasionally two or more types of precipitation fell simultaneously. Very light precipitation, when it was too slight to accumulate on the ground, was not counted.

Duration of the Storm

Precipitation fell over a span of only a few hours in Louisiana, but it continued much longer in South Carolina and North Carolina. Table I shows the differences in the durations of falling precipitation at selected weather stations through the storm area.

Southern snow storms customarily follow a pattern of cold rain changing to freezing rain first, then to sleet, and finally to snow. This storm did not break the pattern except in a few localities. In the Carolinas at Beaufort and Cherry Point, freezing air was already layered near the ground when precipitation started. Rain falling into the cold air froze solidly, reaching the ground as ice pellets; then the air warmed letting the rain reach the ground later as a freezing rain and reversing the usual sequence.

Freezing rain fell for the longest time at coastal locations such as Victoria, Texas; Pensacola, Florida; Beaufort and Myrtle Beach, South Carolina; and Jacksonville, North Carolina. In Louisiana freezing rain fell for more than 5 hours at Alexandria.

Ice pellets, or sleet, fell in nearly all of the storm area--falling for 10 hours or longer at Savannah, Georgia; Beaufort and Charleston, South Carolina; and Wilmington and Cherry Point, North Carolina.

In the later stages of the storm, snow fell for as long as 24 hours. In contrast to Louisiana where the snow was brief and light, it reached a heavy intensity for a number of hours in the Carolinas.

Deaths and Damages

Most deaths attributed to the snow storm were indirect ones, such as traffic casualties; however, 8 fatalities in South Carolina resulted from exposure, and a child was killed by a collapsing carport. In North Carolina, an aircraft lost in the storm crashed, killing two and injuring three seriously. In Georgia, three traffic deaths occurred because of the storm; in Louisiana, at least one.

Damages can be estimated only roughly. Property damage, including snow removal and rescue of stranded persons, cost between \$50,000 and \$500,000 in Louisiana and Alabama; between \$500,000 and \$5 million in North Carolina; between \$5 million and \$50 million in Georgia; and near \$30 million in South Carolina.

Crop damages were heavy in Alabama; timber in the southern counties was killed or damaged by the freezing rain. The poultry industry in South Carolina lost \$3 million due to collapsed chicken houses and dead birds. North Carolina lost some crop commodities as warehouse roofs caved in. Late harvests were further delayed with additional loss and damage to crops.

CHAPTER 2

Meteorology of the Storm

A weather map of the Northern Hemisphere on any day will show a number of high and low pressure systems. A few are nearly stationary, fixed to large ocean areas or continents. Most, however, move, usually migrating from west to east. If they have an additional movement toward the north or south, colder or warmer air is carried along resulting in falling or rising temperatures.

For the southern United States this means that the weather on a given day might be more a product of conditions far away than of events in the local area. There are so many factors at work that a storm cannot be attributed to any one simple cause.

In the case of this storm, several weather systems seemed to have played a part. Nearly a week before the storm, a high pressure system began building over the Mackenzie River Basin east of Alaska. The snow cover and long nights permitted the air to get colder and colder. Temperatures of -20°F were common and some reached -33°F . The central pressure was 1052 millibars Monday morning, February 5. The high's southern edge had already reached Montana.

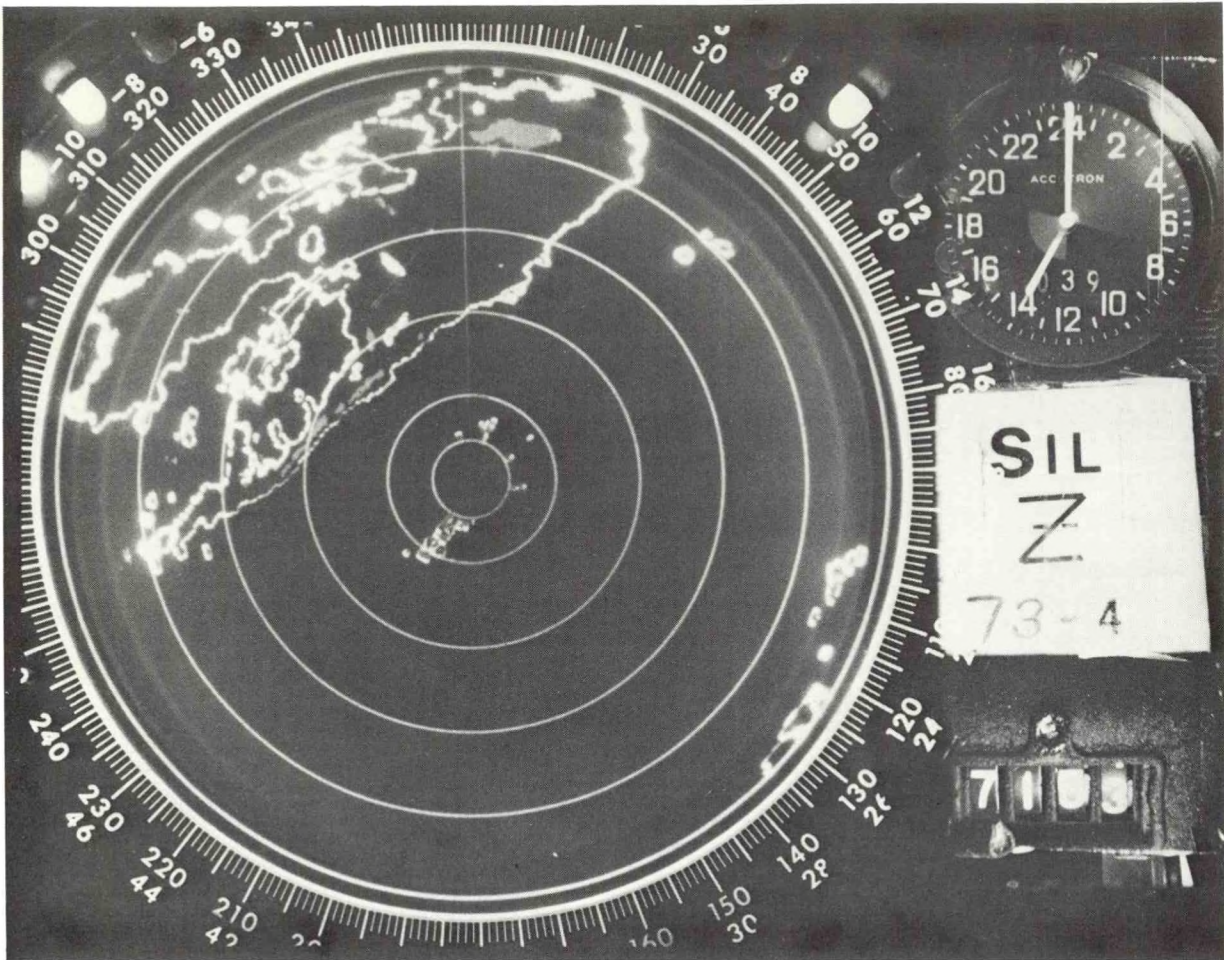
In succeeding days the mass of Arctic air blew across the midsection of the country, heading for the Gulf States where the weather was warm. Afternoon temperatures had reached the 80's in parts of Texas, but Wednesday morning Great Falls, Montana, had 46°F below zero.

Another factor on the weather map was a Pacific storm that crossed the West Coast south of the normal storm tracks. It caused rains and snows in California, Arizona, Nevada and New Mexico. It dissipated in crossing the mountains, but the upper air weather charts still showed traces of a low pressure system aloft. This helped the generation of the new storm which formed in the Gulf of Mexico, Thursday, February 8 -- the one which would cause the once-in-a-century snow storm.

Storms with prolonged heavy precipitation need abundant supplies of warm, moist air. In this case, the source was right at hand. A high pressure system east of Florida had been steering moist winds into the Gulf of Mexico for days.

Thursday, February 8, 1973

The cold front had reached northern Texas about noon Wednesday. Pushed by strong northerly winds it had crossed the entire state by sunup Thursday morning. Temperatures remained steady or continued falling during the day rather than rising as



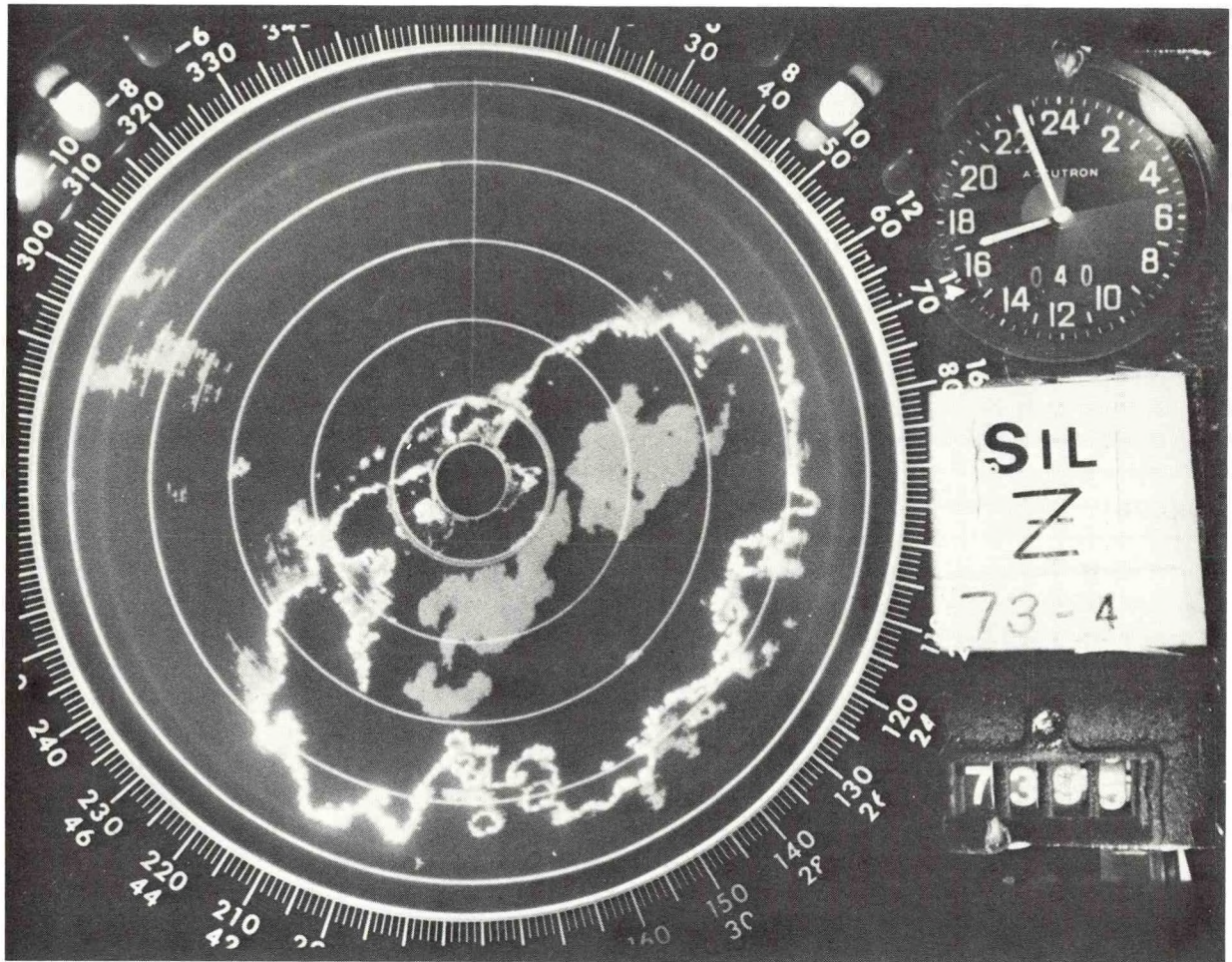
RADARSCOPE PHOTO. SLIDELL, LOUISIANA

Time: 8:00 A.M. CST, February 8, 1973. The radar was set on the 125-mile range and the outer concentric circles are 25 miles apart. The images in the northwest part of the scope show precipitation approaching the area behind the cold front. At the time, nearby New Orleans was still in the warm air with a temperature of 68° and wind from the south at 12 knots. The cold front lay along the southeast edge of the precipitation echoes in the radarscope. This photograph shows a new type of presentation in which the echoes are contoured (Video Integrator Processor -- VIP). After the front passed New Orleans, the wind shifted to the north and the temperature fell 11° in one hour.

usual. The cold front had reached Jackson, Mississippi; Birmingham, Alabama; and Chattanooga, Tennessee also. (See weather map for 7:00 A.M. EST, February 8)

The main snow falling at this time was in northern and western Texas. The freezing temperatures had just reached Fort Worth. Light to moderate rains were falling behind the front from southern Texas to Pittsburgh, Pennsylvania.

During the day the cold front pushed further into the Gulf. Over land it had reached the central Carolinas and Georgia by evening. The ground had been so warm from the preceding mild weather that it took a number of hours for the temperature to fall to freezing.



RADARSCOPE PHOTO. SLIDELL, LOUISIANA

Time: 10:57 A.M. CST, February 9, 1973. At the time of this Video Integrator Processor photo ice pellets and snow showers were occurring in the New Orleans area. Light rain mixed with the frozen precipitation had just ended. The temperature was 33°. Along the Mississippi Gulf Coast east of Slidell, freezing rain was occurring at Gulfport (temperature 28°); light rain and ice pellets at Keesler Air Force Base (temperature 31°); and moderate ice pellets at Mobile, Alabama (temperature 31°).

In central Louisiana at 2:00 P.M., sleet began falling with the rains that were continuing. As evening approached, the little warmth that had been received during daytime stopped; temperatures fell a few additional degrees, icing began and spread southward. In coastal Texas ice pellets occasionally mixed with freezing rain fell from shortly after sundown until a few hours after midnight.

The way the temperatures fell with the passage of the cold front can be seen in Figure 3. At Mobile, the temperature rose to a high of 73 before the cold front blew in about noon. Note that after the first few hours the temperature fell more slowly.

Late on the 8th a new low pressure center formed on the cold front in the Gulf of Mexico.

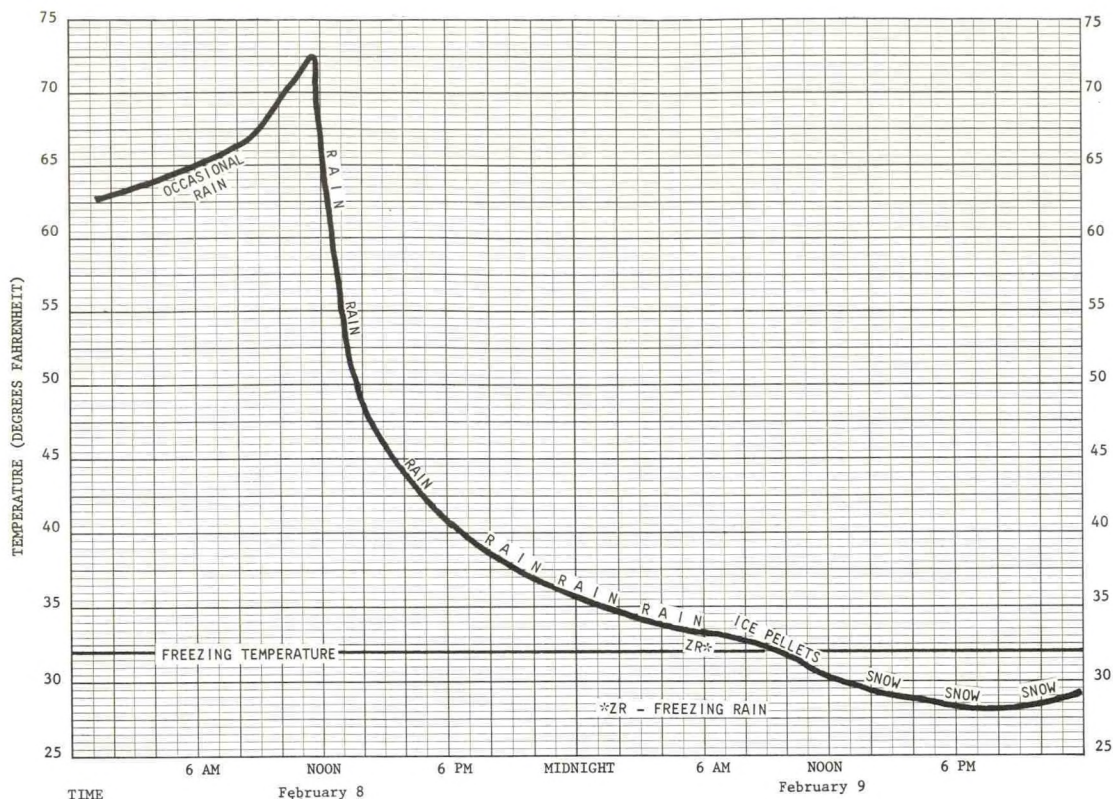


Figure 3. Temperature Fall at Mobile, Alabama.

The curve shows rising temperatures during the morning of February 8 while the front was approaching. As it passed the station shortly before noon, the winds shifted abruptly to the north and temperatures fell rapidly. Later the temperature fell more slowly. The notations beside the curve show the types of precipitation. The Mobile curve is somewhat typical of the temperature fall at other southern cities.

Friday, February 9, 1973

During the morning the ice pellets and snow spread rapidly, falling as far east as the Carolinas. At first it was light, however.

Where freezing rain had fallen during the night the temperatures were generally cold enough to keep roads, bridges and overpasses icy.

As the deepening low in the Gulf moved eastward the precipitation in Texas and Louisiana stopped and the snow began in the area which was to become the main part of the snow belt. Starting as flurries, the snow soon changed to larger flakes. As it fell faster, schools and businesses were closed. By evening it was tapering off along the Gulf Coast from New Orleans to Pensacola, but freezing rain and ice pellets had reached most of the coastal areas of the Carolinas. At 7:00 P.M. EST, moderate snow was falling at Columbus, Georgia; heavy snow at Robins Air Force Base near Macon; and light snow had spread as far east as Cape Hatteras, North Carolina.

Saturday, February 10, 1973

During the night the low pressure center crossed the Florida peninsula and this is when some of the heaviest bursts of snow fell in Georgia. The weather map for 7:00 A.M. EST, February 10, shows the still deepening storm center a little over 100 miles off the South Carolina coast. Vessels in the offshore shipping lanes were reporting strong winds and heavy seas. Skies were clear west of the Mississippi River.

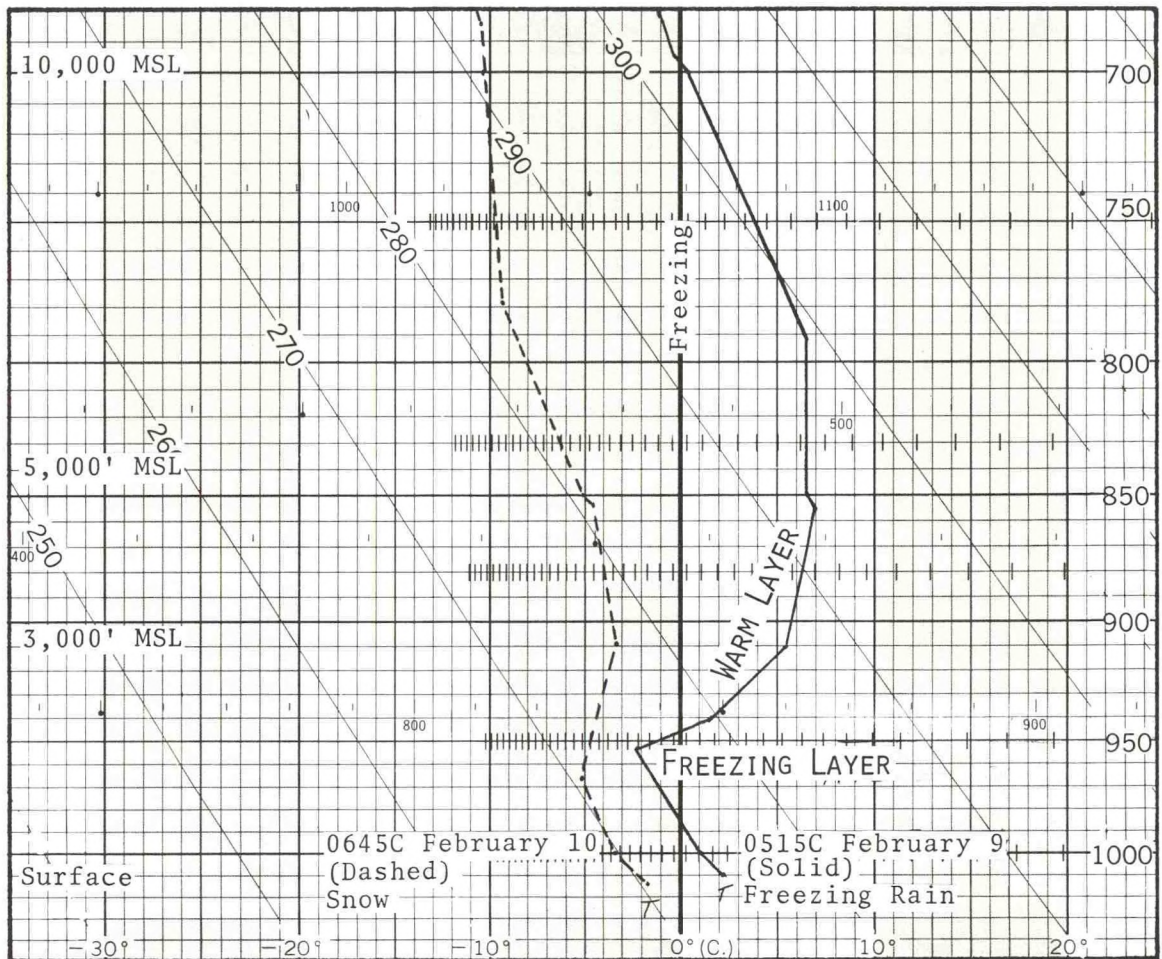


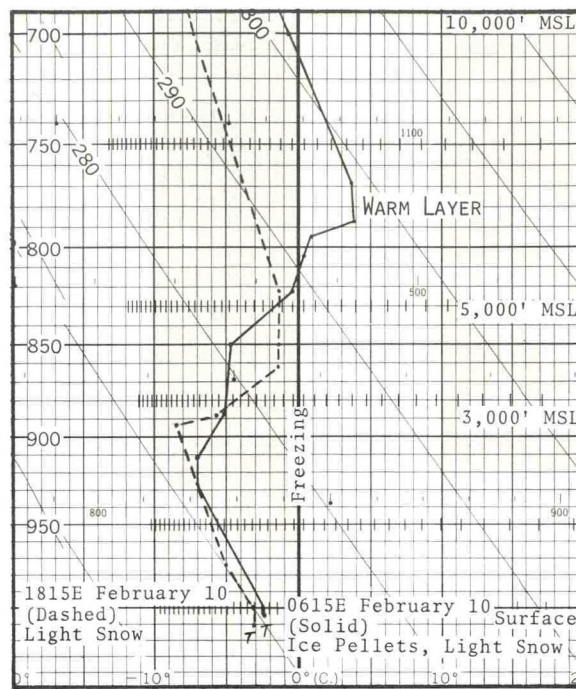
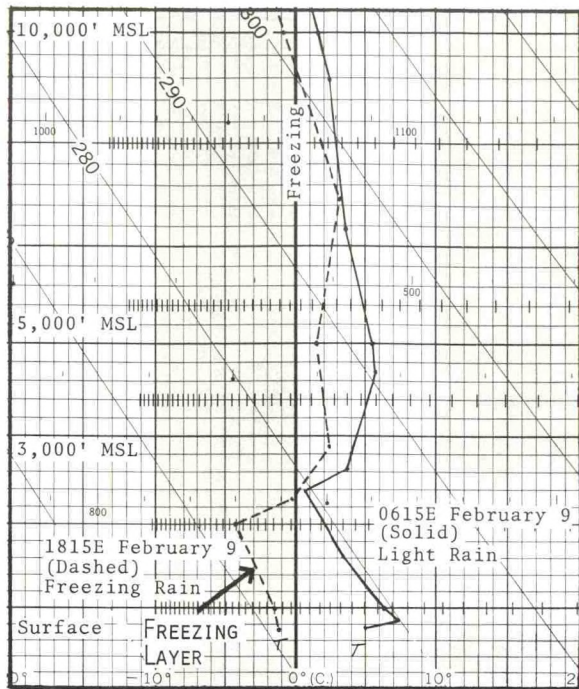
Figure 4. Radiosonde Observations, Eglin Air Force Base, Florida
0515C February 9 and 0645C February 10, 1973

The two sets of lines show the temperature variation with height during two soundings approximately one day apart. Warmer temperatures are to the right with above-freezing temperatures occurring to the right of the line marked "Freezing". The graph illustrates how warmer and colder layers aloft caused changes in the type of precipitation.

During the day the storm moved slowly northeastward parallel to the coast line. As it did so, the heaviest snow area shifted from Georgia to South Carolina, then to eastern North Carolina. Along the coast lines the warm air from the Gulf Stream met the cold continental air, creating temperature patterns suitable for freezing rain and sleet as well as snow.

By nightfall the snow had ended from central Georgia to central South Carolina and was showing signs of diminishing along the coast. In the evening it continued at a moderate rate in northeastern North Carolina, then stopped shortly before midnight except on the Outer Banks.

Radiosonde observations showed marked changes aloft as the precipitation varied from rain to freezing rain, sleet and snow. Figure 4 shows temperature profiles for Eglin Air Force Base, east of Pensacola, Florida, at times when freezing rain and snow were falling. On the soundings for 5:15 A.M. on the 9th, note the cold layer through which the rain had to fall before reaching the ground. This shallow layer



Figures 5 A & B. Radiosonde Observations, Charleston, South Carolina, February 9 and 10, 1973.

These graphs show the changes of temperature aloft that resulted in precipitation at the ground, changing from rain to freezing rain, ice pellets and snow.

was sufficient to create the glazing situation. A day later the cold air had moved in at all altitudes. It was below freezing from the surface up and snow was falling to the ground.

Consecutive changes aloft at Charleston are shown in Figure 5 A and B. On the morning of the 9th, temperatures were above freezing from the surface to higher than 10,000 feet and rain was falling. By evening, temperatures were below freezing in the lowest couple of thousand feet and the precipitation was reaching the ground as freezing rain. Twelve hours later, on the morning of the 10th, the lowest 6,000 feet were below freezing and the rain drops were completely frozen by the time they reached the ground. Snow was mixed with the ice pellets. Another 12 hours later, freezing temperatures prevailed all the way up and snow was falling.

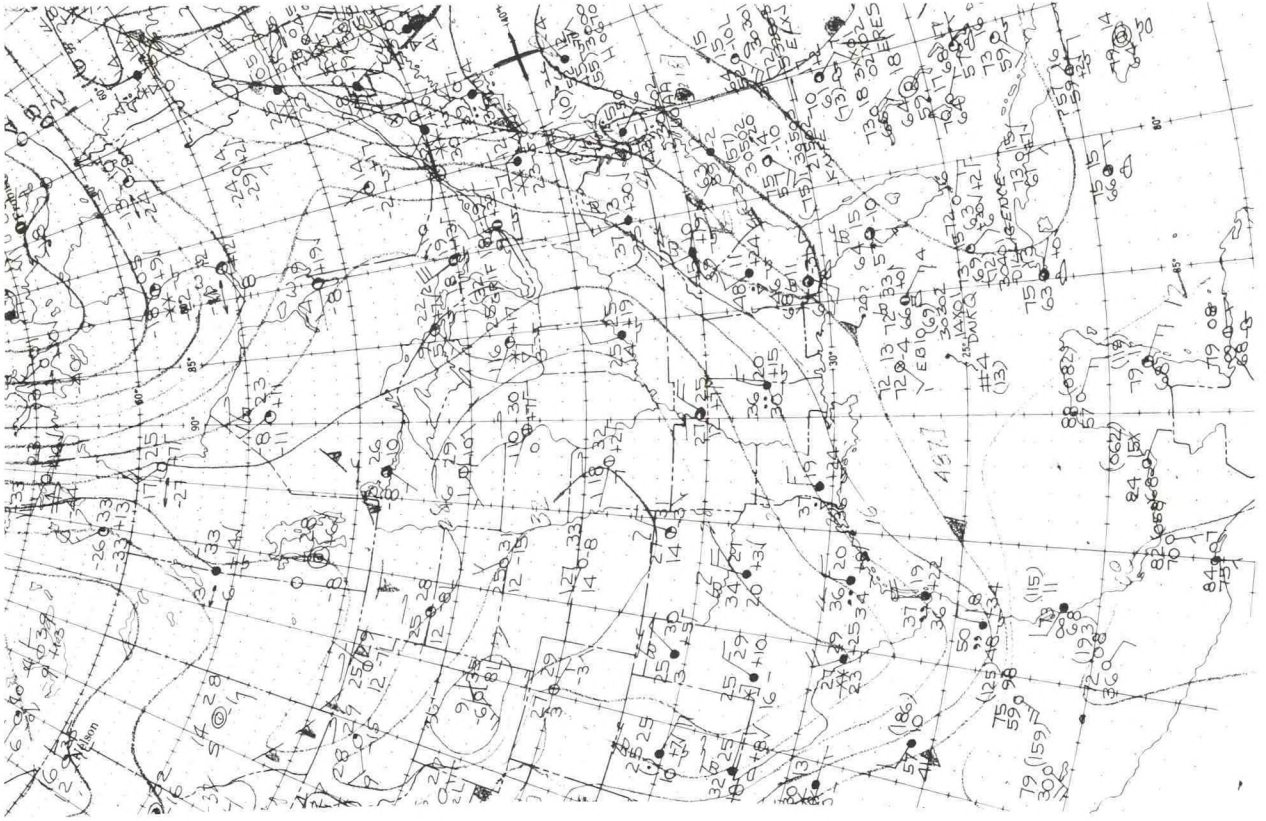
Sunday, February 11, 1973

Shortly after midnight the only station still reporting precipitation was Cape Hatteras. The snow stopped there at 4:45 A.M. Although the storm was moving away from the coast, gusty winds continued during the first part of the day.

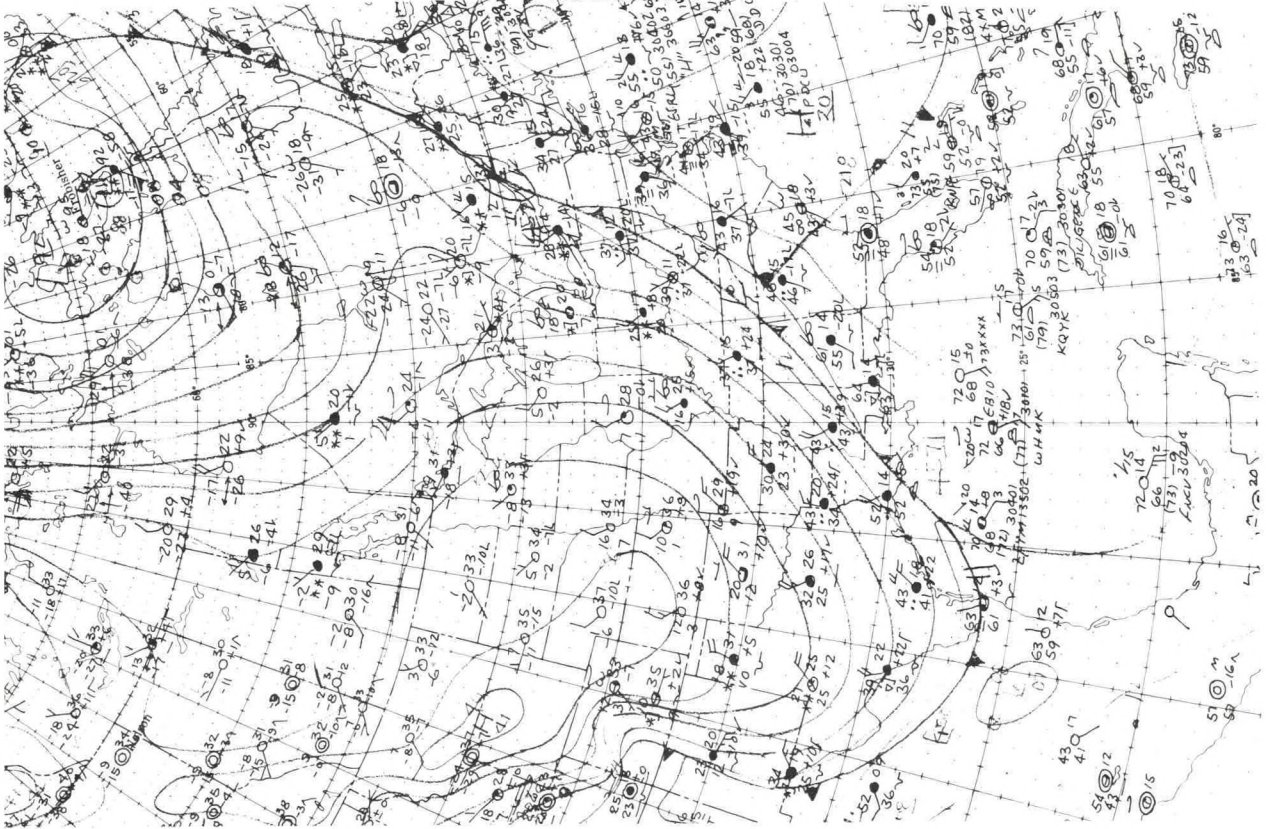
Northerly winds continued blowing over the Carolinas on the 11th and prevented the temperature from rising enough to clear roads in the areas with heaviest snow.

On the 12th the storm was far at sea, skies cleared and thawing began throughout the whole region. Nevertheless, so much snow was on the ground that it took several days for activities to return to normal.

WEATHER MAPS

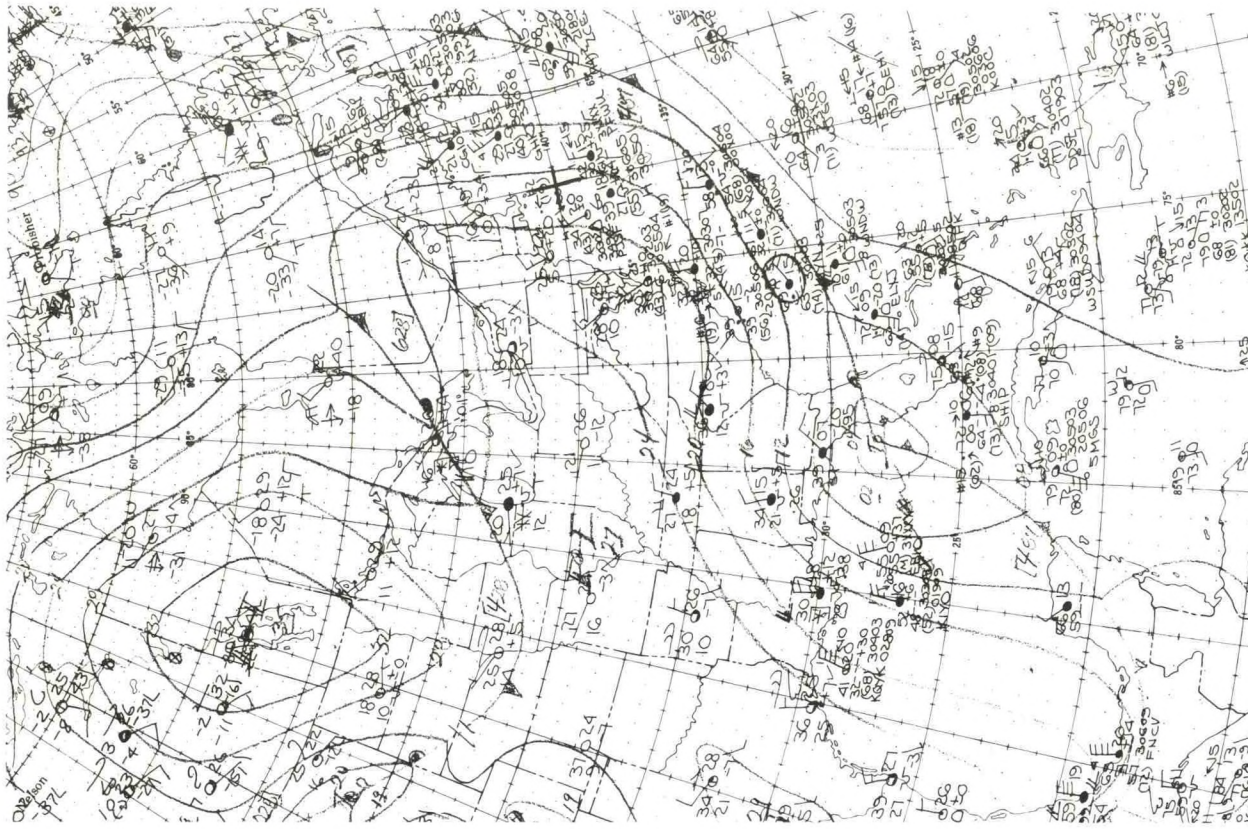


7:00 PM EST, THURSDAY, FEB 8, 1973

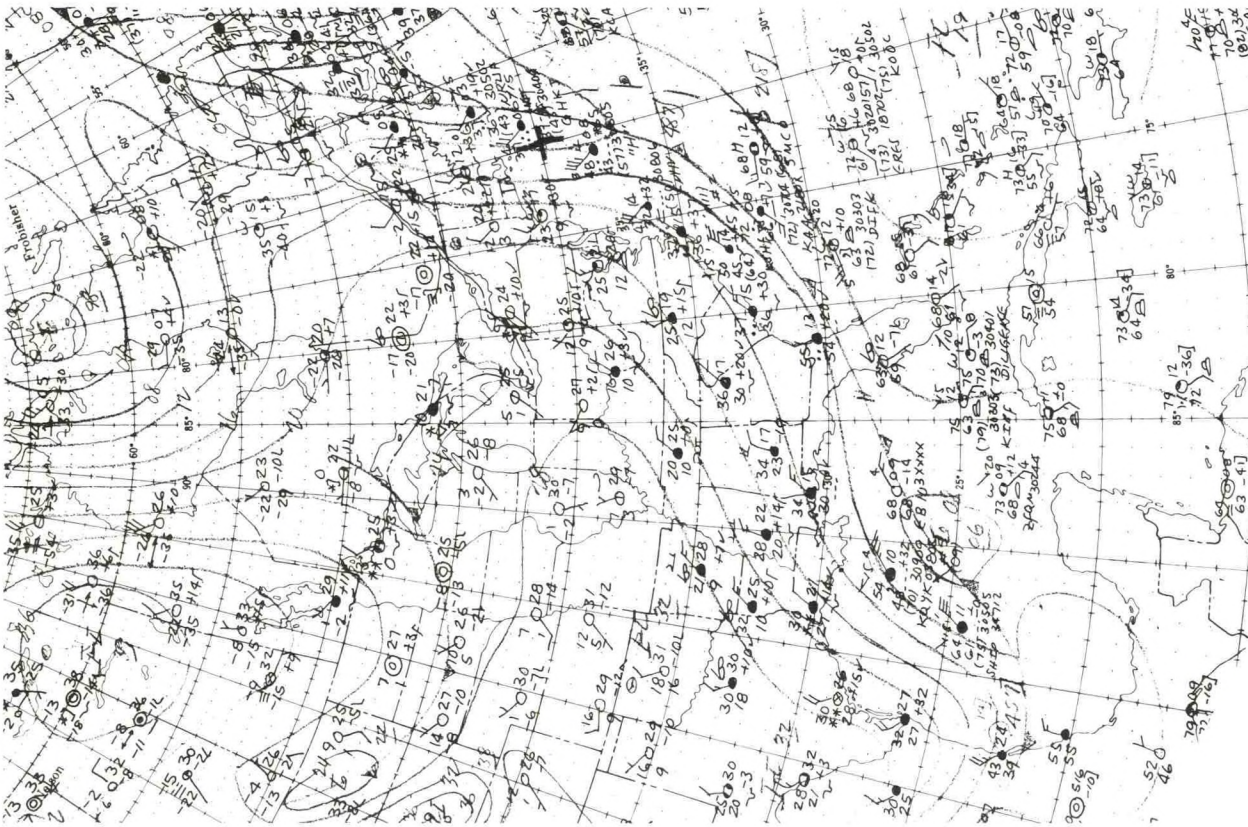


7:00 AM EST, THURSDAY, FEB 8, 1973

WEATHER MAPS

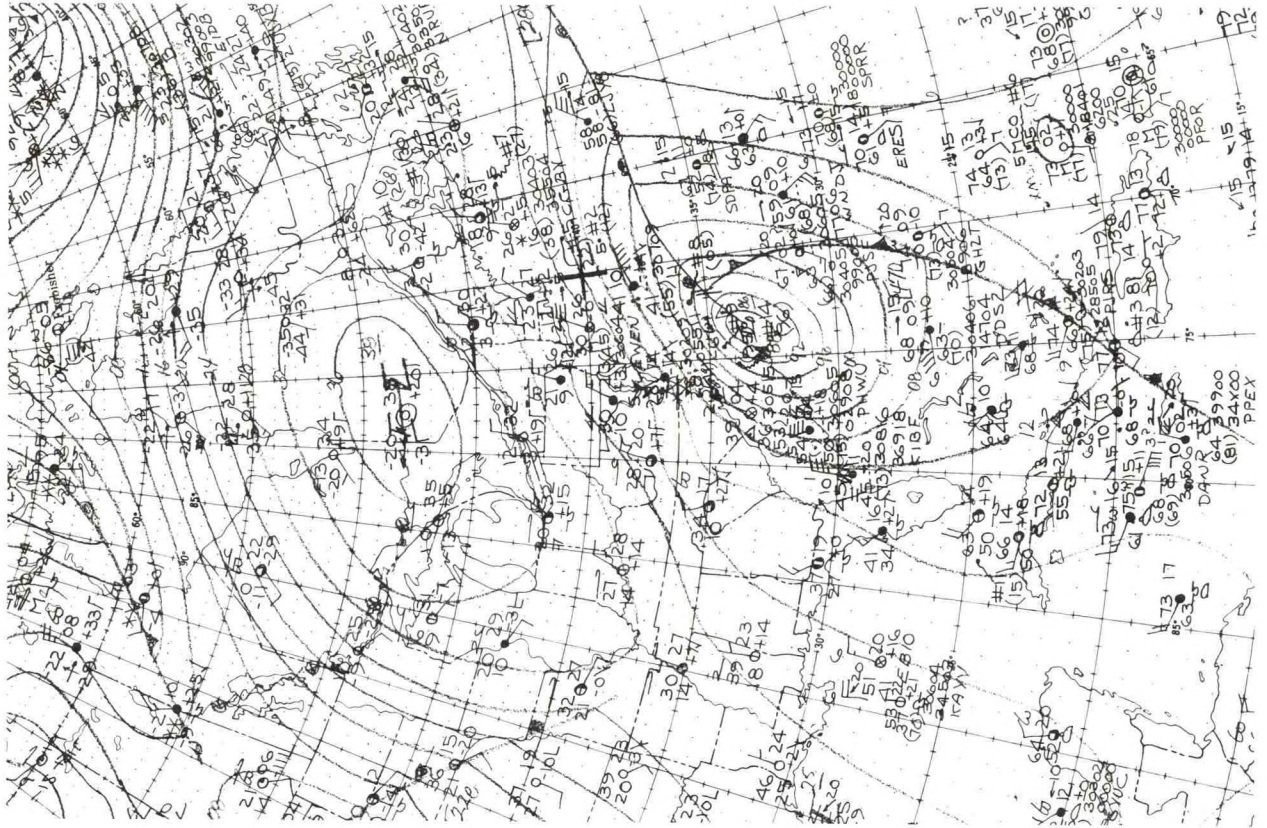


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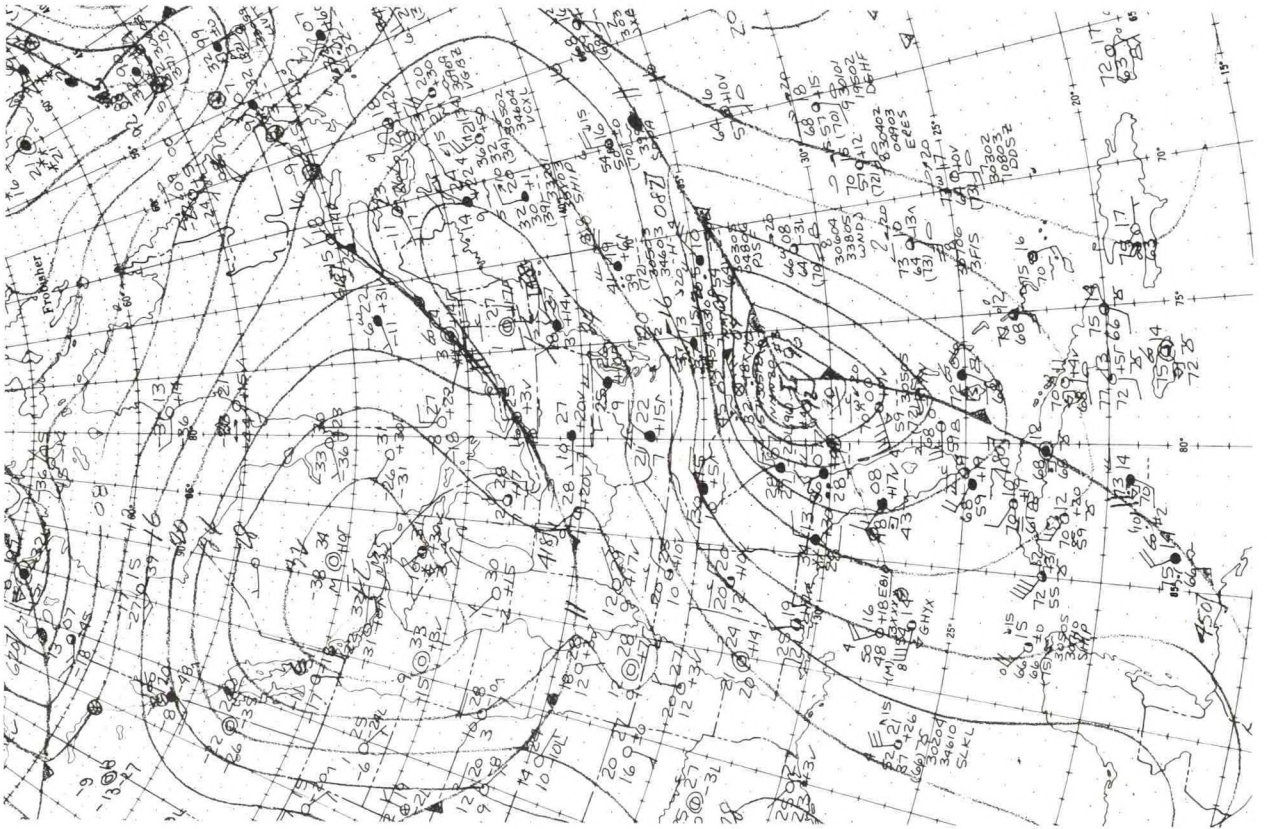


7:00 AM EST, FRIDAY, FEB 9, 1973

WEATHER MAPS

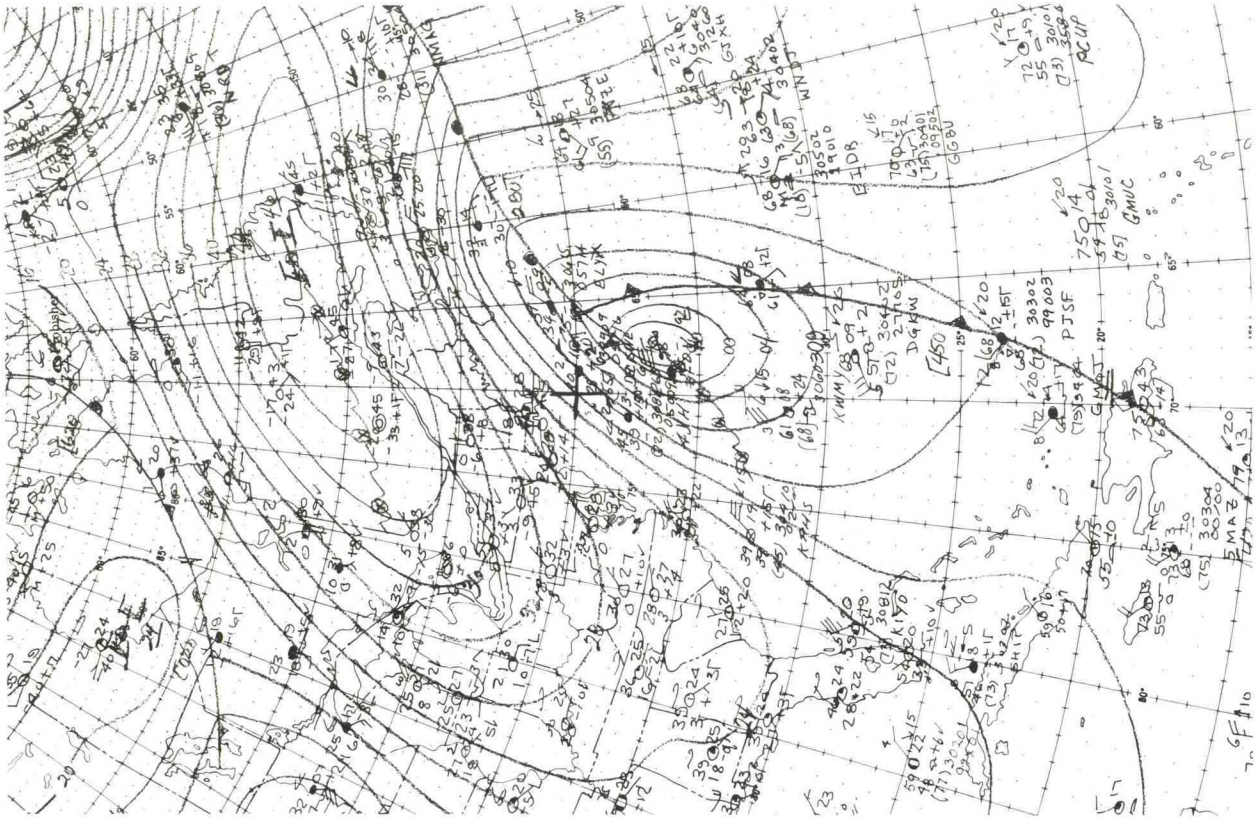


7:00 PM EST, SATURDAY, FEB 10, 1973

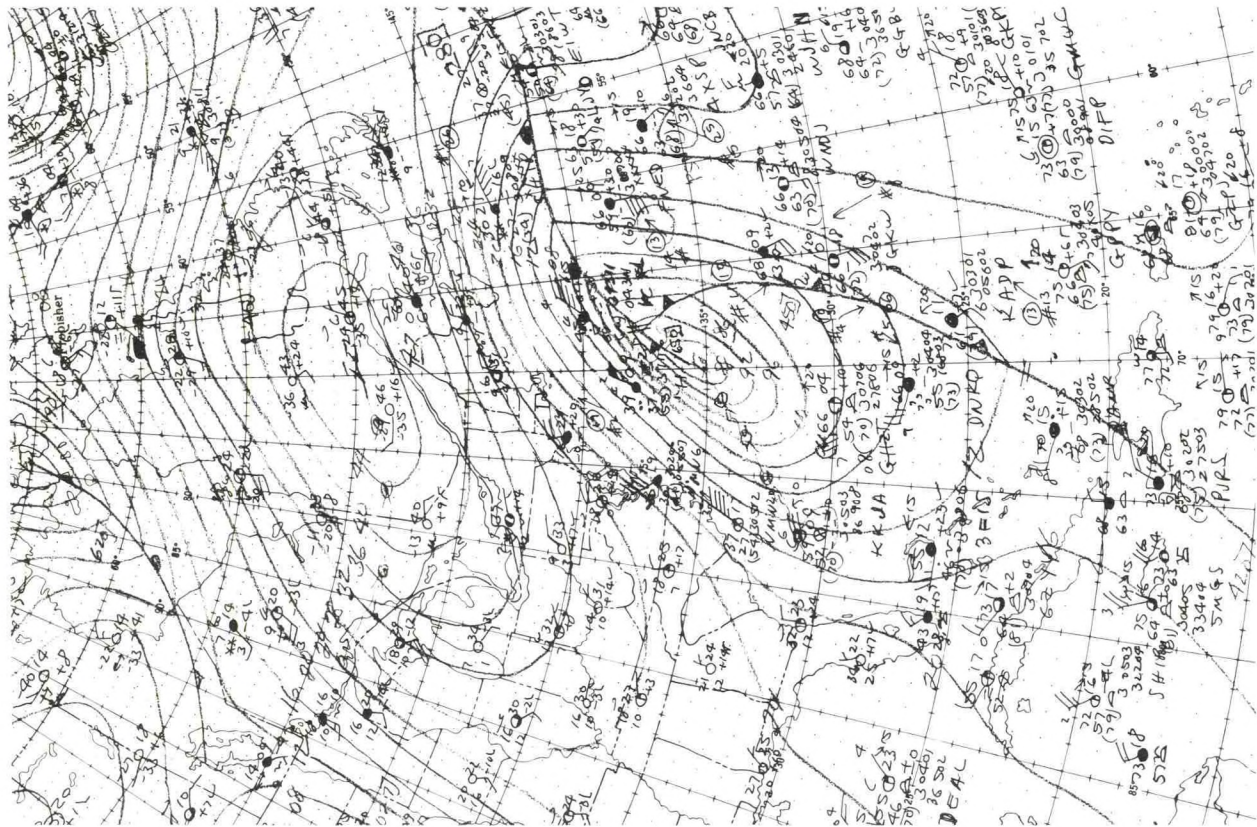


7:00 AM EST, SATURDAY, FEB 10, 1973

WEATHER MAPS



7:00 PM EST, SUNDAY, FEB 11, 1973



7:00 AM EST, SUNDAY, FEB 11, 1973

CHAPTER 3

Storm Effects by State

This chapter gives a condensed account of the effects of the storm on transportation and business. While some details concerning the times of precipitation in localities are given, more information of this nature will be found in the periodical publications of the Department of Commerce. Information about some of these will be found in the bibliography on page 43.

TEXAS

The heaviest precipitation in Texas fell in the high plains where the snowfall was not considered unusual. The snow, sleet and freezing rain were more unusual along the Gulf Coast and in the Lower Rio Grande Valley. Some of the comments from the weather observers were:

Harlingen. Almost an inch of sleet covered the ground on the morning of the 9th.

Hebbronville. Freezing rain and sleet covered the streets.

Presidio. Light snow. Mountains white with snow all around.

Weslaco. Sleet, small hail, with thunder 12:15 to 1:00 A.M., 9th.

LOUISIANA

The snow, ice pellets (sleet) and freezing rain which overspread the southern half of the state during the evening of the 8th and the morning of the 9th closed schools and made roads and highways very hazardous or impassable. Telephone service was interrupted in some areas and fuel shortages curtailed some businesses and industries. All Mississippi River bridges south of the Vidalia-Natchez one were closed for varying periods. Reports from weather stations are:

Alexandria. Freezing rain began at 6:55 P.M. on the 8th. It ended during the night.

Baton Rouge. Sleet began 2:35 A.M. (9th) and was mixed briefly with freezing rain. Snow fell from about 4:00 to 10:00 A.M.

Boothville. Light snow shower fell from 2:00 to 8:00 P.M. (9th). Snow is rare at the mouth of the Mississippi River.

Covington 4NNW. Ice pellets about 2 inches deep stayed on the ground about 48 hours. A trace of snow fell during the 30 minutes beginning 2:45 P.M., February 9.

Crowley Experiment Station. Sleet began about 2:30 A.M. on 9th. Snow fell from 4:00 to 8:30 A.M. Trees were coated with ice.

Lafayette. Freezing rain fell intermittently from 1:00 to 7:00 A.M. (9th). Ice pellets and light snow fell from 3:00 to 9:00 A.M.

Lake Charles. Freezing rain fell occasionally from midnight to 3:30 A.M. (9th). Light ice pellets and snow continued until 7:00 A.M.



MOBILE, ALABAMA -- Overpasses and bridges were among the first structures to ice up during the storm. Although the snow stayed on the ground only for several days, so many traffic accidents occurred that the period is called the "Crinkle Fender Week." Photo Courtesy of Mobile Press-Register.

New Orleans. A thunderstorm about 4:00 A.M. (9th) was followed by light ice pellets which changed to snow at 10:00 A.M. and ended about 5:00 P.M.
Shriever. Rain, sleet and snow 6:30 A.M. to 5:00 P.M., 9th.

MISSISSIPPI

The band of rain, sleet and snow which followed the cold front was just north of a line from Vicksburg to Philadelphia at 2:00 P.M. (8th). The precipitation moved southeastward, finally reaching the Gulf Coast. Ice formed on wires and trees; bridges and overpasses were iced over south of Jackson. At 5:30 A.M. (9th) freezing rain and sleet continued south of a line from Natchez to Quitman. The heaviest snow was reported unofficially from the Jackson fire tower north of Pascagoula. The observer stated that 3 inches of snow fell on top of 3 inches of sleet. Some businesses and highways were closed. Falling tree limbs due to ice accumulations damaged buildings. Roads cleared on the 10th. Reports by location:

Biloxi (Keesler Air Force Base). Freezing rain began early on the 9th, then changed to rain mixed with sleet. At 2:00 P.M. snow began and continued until 8:30 P.M.

Buckatunna. Schools closed; roads iced.

Gulf Coast Area. Icing caused widespread interruption of power service. Telephone systems were overloaded. A rash of minor traffic accidents; shipyards curtailed most activities.

Gulfport. Freezing rain began during the night of 8-9 and changed to snow about 1:00 P.M. (9th). The snow continued intermittently until 8:00 P.M.

Jackson. Ice pellets were mixed occasionally with light snow and very light freezing rain between 2:00 and 7:00 P.M. (8th).

McComb. Light freezing rain began at 9:00 P.M. (8th) and ended before midnight. Ice pellets and light snow fell from 4:00 to 6:00 A.M. (9th).

Quitman. Rain and sleet. Trees and bridges iced over. Sleet collected on cars and houses.

Saucier Experiment Forest. Trees iced over, sleet heavy on ground. Some snow.

ALABAMA

A mixture of sleet and freezing rain that spread over south Alabama on the night of the 8th caused roads to become icy early on the 9th. It changed entirely to snow Friday morning and continued until record amounts built up. The snow tapered off early February 10. Reports by location:

Abbeville. Severe ice storm followed by snow. The ground was covered to a depth of 12 inches.

Brundidge. Record snow began on 9th, ended on 10th. Snow nearly gone on 14th.

Damaged carpports, chicken houses and timber.

Covington County. Extensive damage to timber from the freezing rain at the onset of the storm. The damage may have exceeded \$1 million in this county.

Evergreen. Some interruptions of electric service, considerable minor damage to metal awnings, etc.

Ft. Rucker. Ice pellets mixed with rain fell at midday (9th) and changed to a mixture of ice pellets and snow. The snow ended at 7:00 A.M. (10th).

Highland Home. Twelve to 13 inches of snow, drifts to 26 inches. Ice storm the night before.

Lafayette. Driving hazardous, some roads closed. Cars in ditches.

Mobile. Freezing rain began at 5:00 A.M. (9th), changed to ice pellets which continued until 1:00 P.M. Snow fell from 2:00 P.M. to 11:00 P.M. Icy roads led to at least two fatal accidents in the area.

Montgomery. Ice pellets began at 1:30 A.M. (9th) and continued intermittently until 8:30 A.M. Snow fell at intervals between 7:00 A.M. and 4:00 P.M. The airport was closed to traffic. In a 12-hour period beginning 6:00 A.M., 91 accidents were reported.

Opelika. Some roads were closed due to the heavy snow which caused automobiles to stall and trucks to jackknife on hills.

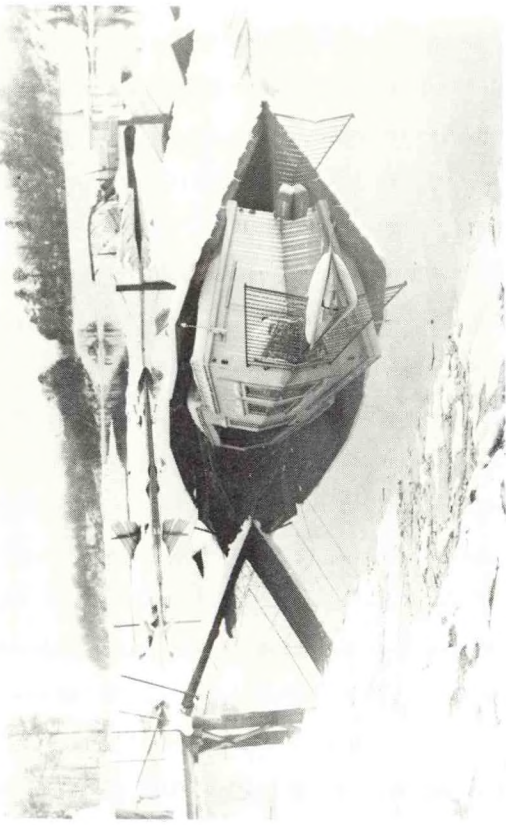
Selma. Very little precipitation. Freezing rain and ice pellets fell about 6:00 A.M. (9th) and light snow for a short period about noon.

MOBILE, ALBAMA. Snow in the amount shown here is rare at Mobile. Photo courtesy of Mobile Press-Register.





EUFULA, ALBAMA. At left, the historic Shorter Mansion is shown while the snow was still falling. At right, boats were sunk at the Chewalla Marina when a sheltering roof collapsed under the weight of snow. Photos courtesy of The Eufaula Tribune.



EUFULA, ALABAMA. Uprooted, bent, and broken trees. Photos courtesy of The Eufaula Tribune.



FLORIDA

It was the second snow of the season in the Panhandle. Most of the damage, however, was caused by ice. At many places the snow was a novelty rather than a cause of damage. Reports by location:

Apalachicola. The trace of snow melted as it fell.

Crestview. Ice pellets began at 4:00 P.M. (9th) and changed to light snow which ended about midnight. Rain preceded the storm.

Hudson. This was reported to be the southernmost Florida town having snowflakes.

The snow was so rare that press reports stated: "Children are going crazy trying to catch the snowflakes before they reach the ground."

Hurlburt Field. Moderate rains on the 9th were mixed with ice pellets beginning at 2:00 P.M. Freezing rain was first reported at 4:30 P.M. Moderate snow fell at times during the evening, changed to light snow about midnight and ended in the early morning.

Jacksonville. Very light snow and snow grains were reported between 8:50 A.M. (10th) and midnight but there was no accumulation since the snow melted as it fell.

Okaloosa County. There were 14 storm-related traffic accidents.

Pensacola. The storm began with rain on the 8th, which changed into freezing rain and sleet on the 9th. Snow started at 6:30 P.M. and continued until shortly after midnight. Thousands of homes were without power early on the 10th after ice-laden tree limbs snapped power lines. Many families lit their indoor fireplaces and spent the night before the fire in sleeping bags. Numerous cases of flu and colds developed in the following week.

Perry. Snow off and on all day the 10th. Enough at 8:00 A.M. to make snowballs.

GEORGIA

Sleet and freezing rain moved into the west central sections during the early morning hours of the 9th, changed to snow and spread rapidly reaching the eastern counties before noon. It continued through the afternoon and night of the 9th and ended in the west early on the 10th. The east and southeast continued to have snow through most of the 10th. Depths reached 18 inches in parts of two or three west-central counties and falls of 14 inches or more occurred over a 40 to 70-mile wide belt across the middle of the state. Heaviest snows were centered roughly from Columbus to Macon to Augusta. Damage was extensive as weaker roofs collapsed. Freezing rain occurred in some sections causing heavy damage to pine trees. Snow was the major problem however. Many highways were closed and hundreds of motorists had to be rescued. Schools closed early on the 9th and many remained closed as late as the 12th. Governor Jimmy Carter ordered the National Guard into action and nearly 10,000 emergency missions were run. After making a flying survey, he described the sheet of ice and snow across middle Georgia as "unbelievable." At first property damage in mid-Georgia was believed not as extensive as that which occurred in north Georgia when an ice storm had struck a month earlier. Reports by localities:

Americus. Highways northwest and southwest of the city were heavily iced.

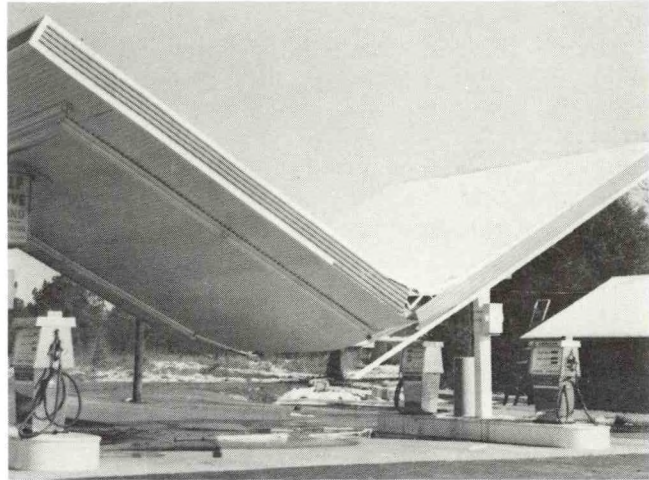
Albany. Moderate rain on the 9th was followed by ice pellets in the evening. Snow began about 11:00 P.M. and continued until the forenoon of the 10th.

Athens. Two inches of snow fell during the early morning of the 10th.

Augusta. Light snow began about 11:00 A.M. (9th) and increased to heavy snow by late afternoon. It tapered off at midday of the 10th.

Brunswick. A short period of freezing rain and sleet on the morning of the 10th was followed by snow that fell intermittently the remainder of the day.

Columbus. Freezing rain which began before 7:00 A.M. (9th) was followed by ice pellets. Snow began about 9:00 A.M., lasted the remainder of the day and ended shortly before noon of the 10th. The snow accumulated rapidly on the 9th. By noon schools had closed and by midafternoon the heart of the city's business district was almost



GREENVILLE, ALABAMA. Two prefabricated awnings that collapsed causing damage are shown. Photos Courtesy of Greenville Advocate.

deserted. The Metropolitan Airport had no equipment for snow removal and closed. Mail collection and delivery was suspended. Some streets were closed for safety and the mayor urged citizens to stay at home if at all possible. Eighty auto accidents occurred in less than 6 hours. One power company repairman worked continuously from Thursday to Saturday as falling tree limbs knocked out power sporadically.

Ft. Benning (Lawson Army Air Field). Freezing rain began at 8:00 A.M. (9th) and was followed by a short period of sleet. This changed to heavy snow before 10:00 A.M. Sleet continued to fall intermittently with snow the remainder of the day. The heaviest snow ended during the night and the remaining light snow ended at noon of the 10th. It was the heaviest snow in the Post's 54-year history.

Forsyth. An estimated 1,000 motorists in the area had to seek emergency shelter. Most were stranded on Interstate 75. Many people were on their way to Florida and had no cold weather gear.

Macon. Ice pellets began at 10:00 A.M. (9th) and heavy snow at 11:00 A.M. The snow fell with moderate intensity most of the day and ended at midday of the 10th. The mayor declared a state of emergency and ordered an 8:00 P.M. curfew. Every road in the area was closed.

Savannah. Freezing rain began shortly before midnight of the 9th, was mixed with ice pellets in the early morning and changed to snow about 4:00 A.M. (10th). The snow ended about 11:00 P.M. Bridges were described as "solid sheets of ice." The airport runway was coated with 1/2 inch of ice, grounding all flights. Talmadge Memorial Bridge was closed blocking travelers who had been able to move along the roads that far.

Thomaston. The National Guard Rescue Team evacuated an estimated 200 occupants of vehicles in the area, sending them to a special disaster shelter for food and lodging.

Valdosta. Freezing rain began at 2:00 A.M. and light snow about 7:00 A.M. of the 10th. The snow ended at 5:00 P.M.

SOUTH CAROLINA

Snow fell for approximately 24 hours beginning in late afternoon on the 9th. The belt of largest amounts lay parallel to the coast about 75 miles inland. The report of the Climatologist for South Carolina stated:

"About 30,000 tourists traveling to or from Florida and more northern states, were

stranded on the State's highways. Many were rescued by helicopter and some by other vehicles. When the hotels and motels were filled, they were housed in armories, schools, and churches. Farmers gave aid to travelers stranded near their homes. Many farm homes had 50 to 60 unexpected guests for a day or two."

"The snow was accompanied by strong winds and followed by severe cold. Drifts up to 7 or 8 feet could be found in some locations and all highways in the central part of the State were closed for from 2 to 4 days. Many tons of food and supplies were airlifted by helicopter to snowed-in families. At least 200 buildings collapsed, as did thousands of store awnings and carports. Many power and telephone poles and lines were downed, disrupting service. Damage to timber was not great due to the fact that there was very little freezing rain. The property damage and road damage plus the cost of snow removal and rescue operations has been estimated at close to \$30 million."

Reports by locations:

Beaufort Marine Corps Air Station. Freezing rain began about 7:00 P.M. (9th) and became mixed with sleet before midnight. The sleet continued until 2:00 P.M. the next day. Snow began about noon on the 10th and ended around midnight. It fell at the greatest rate between 2:00 and 4:00 P.M.

Blackville. Snow and sleet totaled 17 inches. Some remained in shaded areas until February 23.

Charleston. Light freezing rain began at 5:00 P.M. (9th) and was followed by sleet and snow. The heaviest snow came during the afternoon of the 10th. An estimated 40,000 homes throughout the area were without electrical power for varying periods of time.

Columbia. Snow started falling shortly after noon on the 9th, became heavy during the evening and continued with varying intensity until 4:00 P.M. of the 10th. Deep drifts on city streets stopped traffic. Although major arteries were cleared Sunday, most Columbians remained stranded until Monday due to impassable side roads. Roofs on at least two buildings collapsed due to heavy accumulations of snow.

Florence. Snow started at 1:00 P.M. (9th) and ended at 5:00 P.M. (10th), but was followed by blowing snow caused by gusty winds.

Georgetown. On 9th, sleet and frozen rain. On 10th, glaze, thunder, damaging wind. Winds to 55 m.p.h. on coast.

Givhans Ferry. River gage could not be read February 10 to 14 due to deep snow blocking roads.

Kingstree. Severe property damage to several businesses. The chief of police imposed a curfew of 8:00 P.M. Saturday night.

Little Mountain. Thunder 3:30 A.M., 10th. Fourteen- to 20-inch drifts.

McClellanville. Precipitation was a combination of rain, sleet, and snow.

Myrtle Beach. Mixed rain, sleet and snow starting at midday (9th), changed to freezing rain in the evening. Varying mixtures of freezing rain, sleet, snow and blowing snow occurred throughout the 10th.

Pageland. Drifts to 5 feet.

Pelion 4NW. On 11th had snow drifts from 2 1/2 to 5 feet. Would have lost cattle had it not been for heavy tractors and terrace blade.

Santuck. 10th, high winds.

Summerton. Between 2,500 and 3,000 persons stranded on Interstate 95 between Summerton and Manning were taken to emergency shelters.

Sumter (Shaw Air Force Base). Deepest snow in many years. Interstate highway closed several days. Light snow started at noon (9th) and continued until 5:00 P.M. (10th). Occasionally it fell at a heavy rate.

Walterboro. 9th, sleet and ice turning to snow.

Winthrop College. Snow very dry; lightning, deep drifts, and strong wind.

NORTH CAROLINA

The heaviest snow and sleet fell in the eastern part of the state. Along the coast strong winds caused severe beach erosion. See Chapter 5 for details of this. High winds caused such severe drifting that some areas were virtually paralyzed. Many cities had no snow removal equipment, and roads remained blocked until temperatures rose. Reports by locality:

Atlantic Beach. There were reports of 10 inches of snow which blocked highways and stranded motorists.

Cape Hatteras. Rain changed to snow on the 9th, but rising temperatures on the 10th caused a mixture of rain and snow.

Charlotte. The snow was of short duration on the 10th and left only one inch.

Cherry Point. Sleet and freezing rain on the morning of the 9th changed to light snow which continued until near midnight of the 10th. Much of the 10th the snow was mixed with sleet.

Durham. The wind piled up deep drifts of snow Saturday, the 10th. There were 90 accidents between 7:00 A.M. and 3:00 P.M., but only 6 between 3:00 P.M. and 5:00 P.M. as the roads emptied of local traffic.

Fayetteville. Over 1,000 motorists were stranded in the vicinity late Saturday night when I-95 closed after traffic backed up on the snowbound highway.

Jacksonville. At midday of the 9th freezing rain gave way to heavy snow. After 8:00 A.M. (10th), the snow became mixed with freezing rain, sleet and blowing snow until late evening. Travel was stopped and business and government offices closed through Monday. Mail was curtailed Monday. Schools were closed through Tuesday.

New Bern. Snow fell from 3:30 P.M. (9th) to midnight of 10th.

Raleigh. The snow fell in a comparatively short time, beginning at 4:00 A.M. (10th) and ending at 1:00 P.M. The airport closed Saturday and reopened Sunday morning. Most streets were cleared by Sunday afternoon.

Rocky Mount. The precipitation fell entirely as snow between 2:00 A.M. and 9:00 P.M. of the 10th. About 600 people spent Saturday night marooned in makeshift lodgings and about 350 were still marooned Sunday night.

Wilmington. The precipitation was a mixture of snow, sleet and freezing rain from 1:00 P.M. of the 9th to 11:00 P.M. of the 10th. The city had no snow removal equipment to cope with the 8 inches of snow drifted by 45-mile-an-hour winds.

VIRGINIA

The storm affected only the southeastern corner of the state. At Norfolk snow began about 7:00 A.M. (10th) and ended before midnight. At Virginia Beach deep snowdrifts stranded 1,000 persons attending a church convention in the Virginia Beach Civic Center. The Red Cross provided blankets and food.

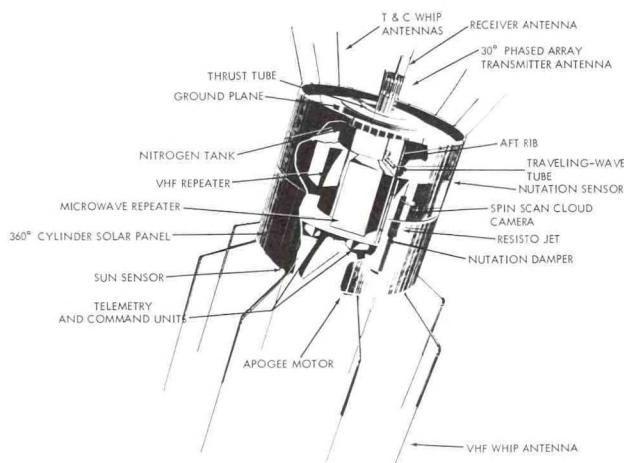
CHAPTER 4

Satellite Pictures

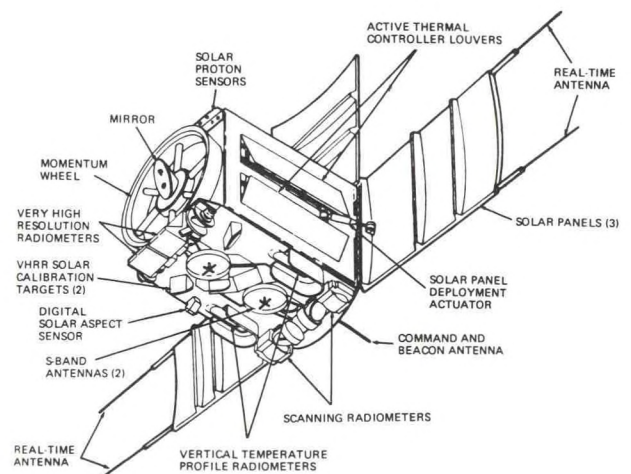
This was the first major snow storm in the southeastern coastal regions to have satellite coverage. Photographs from two satellites will be used as examples.

NOAA II, launched October 15, 1972, is in a 910 mile-high orbit which carries it very near the poles. The sensors point continuously at the earth photographing swaths beneath the satellite's path. It crosses the equator at 9:00 A.M. Local Sun Time when southbound and at 9:00 P.M. Local Sun Time when northbound. It is over each part of the earth twice daily. The Very High Resolution Radiometer, VHRR, pictures have a resolution of one-half mile below the satellite. The VHRR is designed to photograph clouds and to measure sea surface temperatures rather than give a picture of geographic features on the earth. The Scanning Radiometer, SR, has less clarity but the swath for this camera is 2,000 miles wide. The resolution falls off near the edges of the swath.

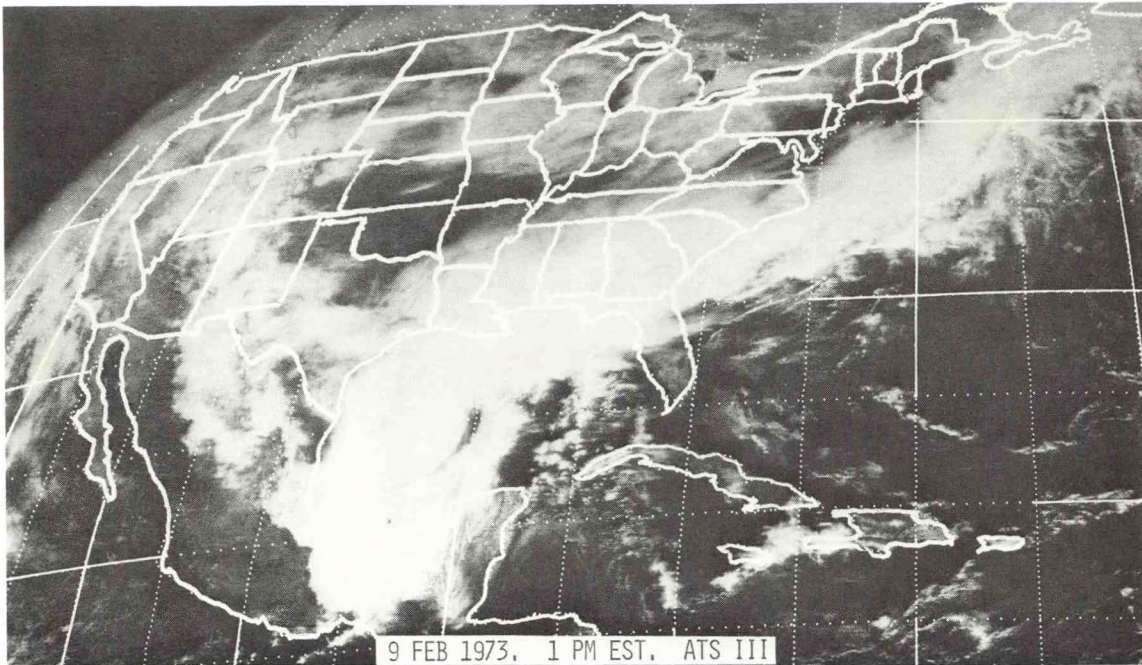
ATS-3 is "parked" in an equatorial orbit and takes daytime pictures more or less continuously of the Western Hemisphere, including North America, South America, the Atlantic Ocean and Western Africa. The pictures shown here have been trimmed to show only the area near the United States. The distortion is caused by the curvature of the earth. The position of the satellite is 22,300 miles above Brazil. It can take pictures of the entire viewing area from northern Canada to the tip of South America every 24 minutes.



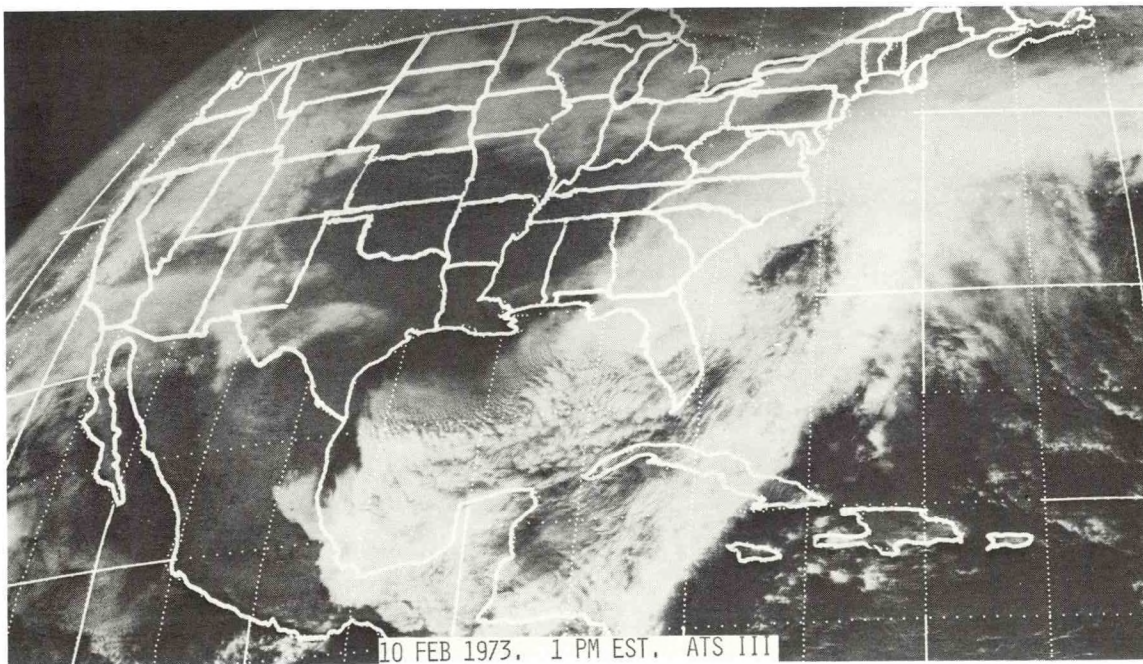
ATS-III SATELLITE



NOAA-II SATELLITE



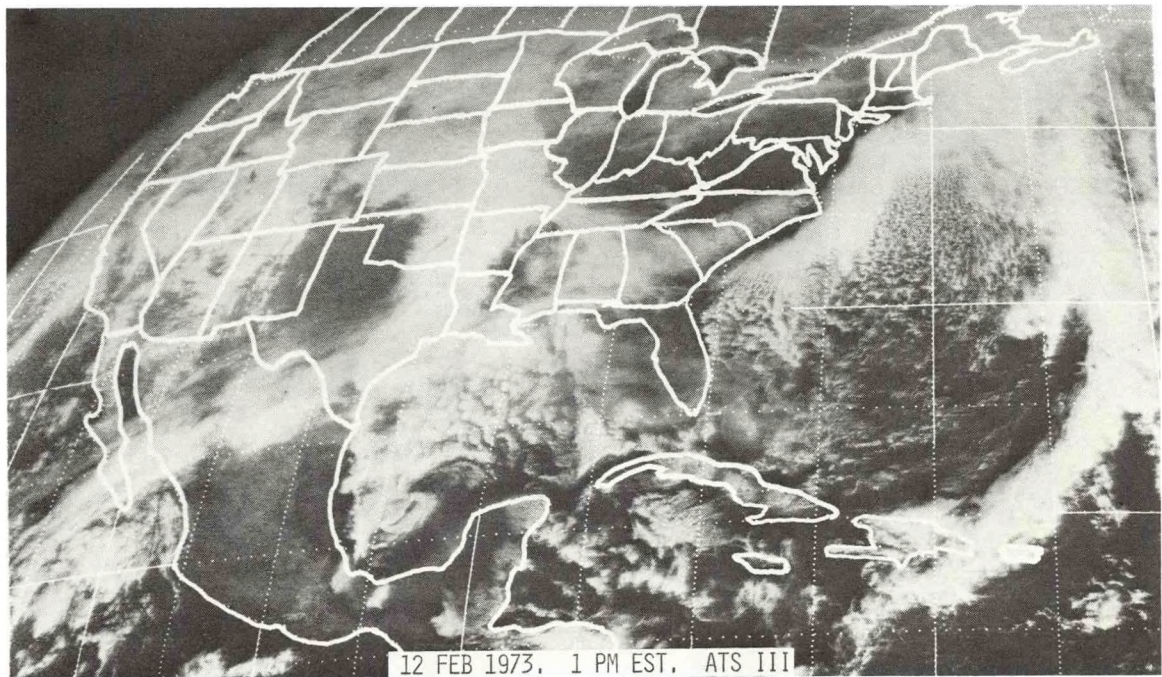
9 February. The western Gulf of Mexico is covered with clouds from the developing storm center. The band of clouds extending northeastward along the Atlantic Coast is from the cold front.



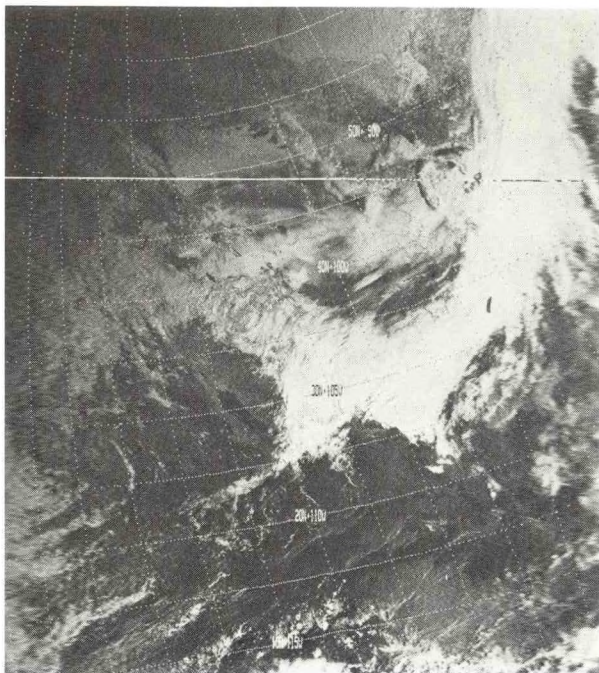
10 February. "Cloud streets" have formed in the Central Gulf as the cold air is heated by the warm water. The white haze over central Texas is snow. The snow in southern Mississippi and Alabama is shown faintly. The whiteness from Georgia to North Carolina is caused by clouds.



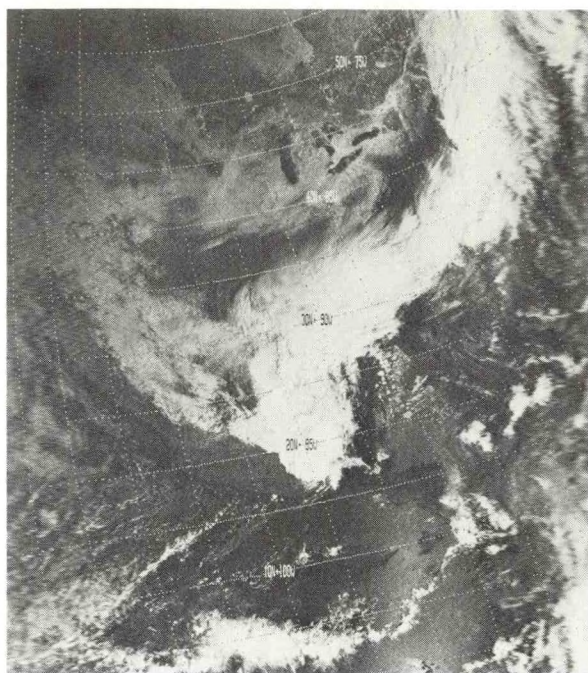
11 February. Snow appears from southern Alabama to North Carolina. The Texas snow is obscured by high clouds moving in from the west. The cold front has pushed far into the Atlantic. Clouds in Central America have formed along the mountains where the air is forced to rise.



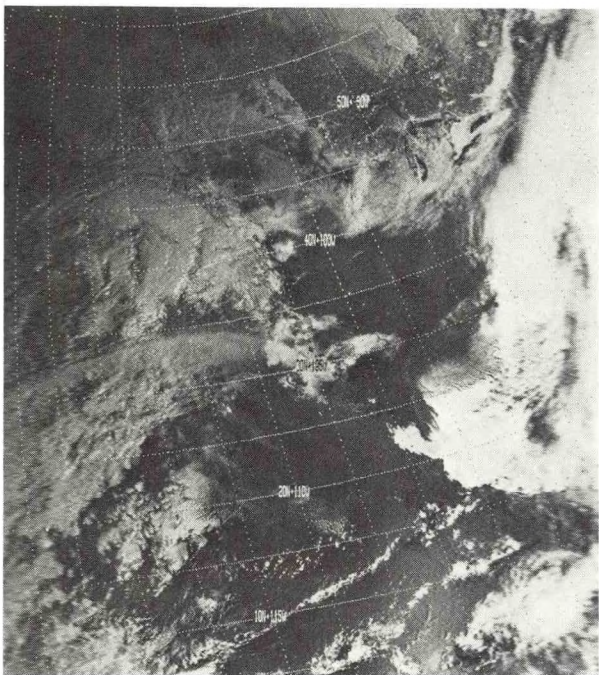
12 February. Snow can still be seen in the Carolinas, but the haze from Texas to Georgia is from clouds. Mottled clouds appear over the western North Atlantic indicating the passage of very cold air over warm water.



8 Feb., 12:10 PM EST, NOAA II SR
 From above the Pacific Ocean, the frontal cloud system appears as an arc from the Rocky Mountains to the Gulf and then to New England.



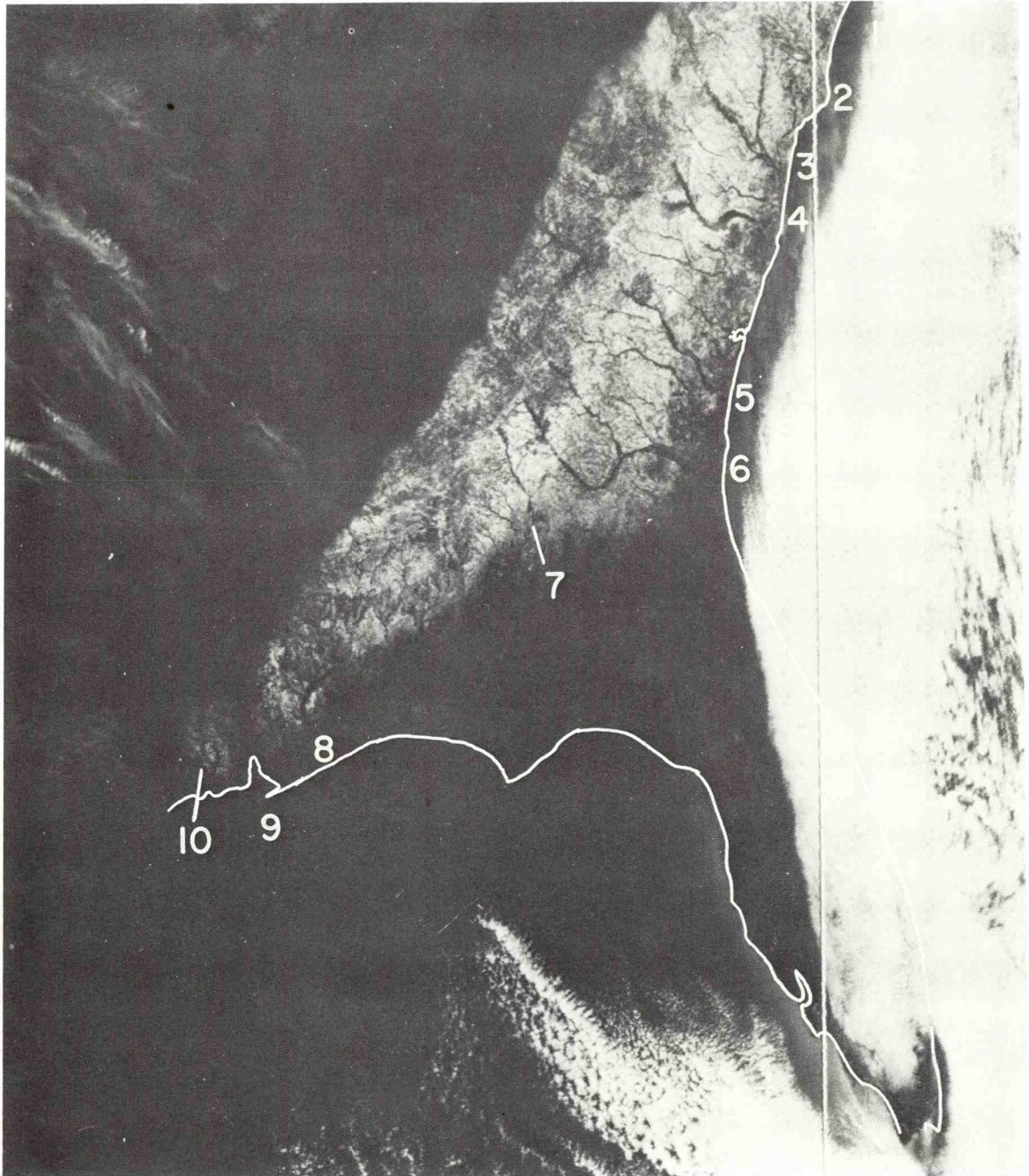
9 Feb., 11:10 AM EST, NOAA II SR
 Clouds around the storm center fill the Gulf of Mexico. Snow surrounds the Great Lakes.



10 Feb., 12:06 PM EST, NOAA II SR
 The storm moves east out of the picture. Most of the clouds in the lower part of the picture are in the tropical Pacific Ocean.



11 Feb., 11:06 AM EST, NOAA II SR
 Snow appears on the ground extending northeastward from the coordinates "30N. 90W."



11 February 1973, 11:06 AM EST. This is an enlargement of a portion of the VHRR picture to show details of the snow cover. There is some distortion since the satellite is viewing the snow area from an angle. At this time the snow in southern Mississippi, southern Alabama and northern Florida had been subjected to about 1½ days of sunshine; therefore, much of it had melted.

The rivers and other features that are labeled are:

- | | |
|------------------------------|------------------------------|
| 1. Storm clouds moving away. | 6. Altamaha River, Ga. |
| 2. Cape Fear, N.C. | 7. Flint River, Ga. |
| 3. Peedee River, S.C. | 8. Escambia River, Fla.-Ala. |
| 4. Santee River, S.C. | 9. Mobile Bay, Ala. |
| 5. Savannah River, S.C.-Ga. | 10. Escatawpa River, Miss. |

CHAPTER 5

The Storm at Sea

After the storm center had crossed Florida, it deepened and the winds around it became stronger. Waves and swells built under the force of the wind. Tides rose a number of feet above normal and the pounding surf eroded beaches in the Carolinas. Vessels in the shipping lanes parallel to the coast reported heavy seas. The SS FAIRLAND met 60-knot northerly winds and 50-foot waves between latitudes 34.4 and 34.9N at longitude 74.6W. This was between 7:00 P.M. EST of the 10th and 1:00 P.M. of the 11th.

Farther north the USCGC GRESHAM was on position at Ocean Weather Station Hotel, 38°N, 71°W. Seas were nearly calm early on the 10th, but rose to 28 feet before noon of the 11th. Mixtures of rain, snow and sleet fell late on the 11th and 12th. A wind speed of 78 knots was reached at 10:00 A.M. EST on the 11th.

Waves of 35 feet were reported at Diamond Shoals off Cape Hatteras. The Coast Guard light tower at Frying Pan Shoals, off Cape Fear near Wilmington, had gusts of 75-80 m.p.h. with 20- and 25-foot seas.

Damage along the Outer Banks was the most severe since the Ash Wednesday storm of 1962. Waves broke across the dunes, demolishing buildings and eating away the beach. Power lines were snapped, leaving many homes without heat as the temperature dropped into the 20's. Some Outer-Bankers were isolated from the mainland. Drinking water from private wells had to be boiled because of the threat of contamination due to the flooding. As late as the afternoon of Monday the 12th, a heavy surf was still visible from the air.

Press reports of damage along the North Carolina coast included:
Atlantic Beach. Only slight erosion damage.

Buxton. A number of cottages and motel units were lost when the surf took away up to 200 feet of beach. Some of the protective barrier dunes vanished. It was estimated that the island would have been cut in two with one more day of storm. Debris from the wrecked houses littered the area. Highway N. C. 12 north of town was buried by drifting sand. At one time water flowed across Hatteras Island so strongly that a pickup truck was overturned while driving through it. A beach-front house being built disappeared entirely along with the lot.

Carolina Beach. Sand washing into city streets and sewers caused \$15,000 damage. The erosion was most severe at the south end of an 1100-foot seawall erected by the Corps of Engineers. The seawall was credited with saving the northern end of the beach. No buildings were destroyed.

Kill Devil Hills. Large amounts of sand and debris washed over the dunes and buried U. S. Highway 158. The community's stringent beach zoning ordinances were given credit for the lack of building damage.

Kitty Hawk. Four beach cottages were washed away, 9 were toppled but left partially standing, 12 others received structural damage and dozens were left in precarious situations. The sea encroached so much that another storm would undermine them. Up to 40 feet of beach was eroded in some places. Backyards that once sloped gently to the beach were left with vertical drops of up to 12 feet at the high water line. Some wind damage occurred in the places that the sea did not reach.

Nags Head. The damage was not major except to the oldest commercial structure -- a hotel which lost two wings to the surf. Up to 30-35 feet of the beach was washed away.

Topsail Beach. Only minor property damage occurred, but 40 feet of beach was cut away at the southern end of the island.

Wrightsville Beach. Sharp vertical banks were cut at the highwater mark when 20-30 feet of the beach was eroded. A popular fishing pier lost two pilings, but no other damage resulted.

Upper Right
Erosion at Wrightsville
Beach, N.C. Photo
courtesy Staff,
Wilmington Star News.

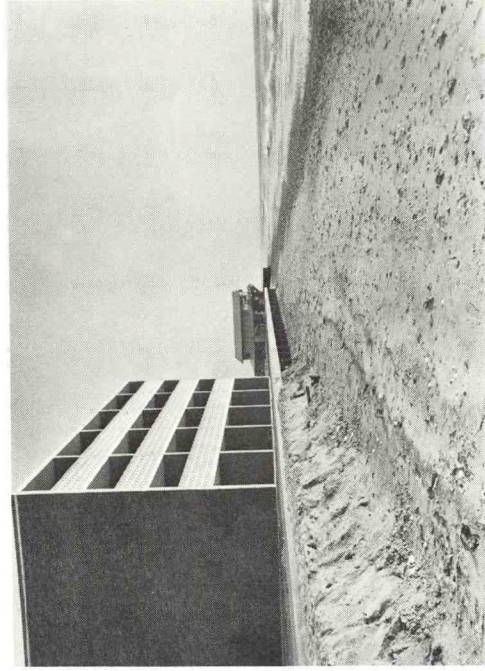


Lower Right
Highway damage near Buxton,
N.C. Photo courtesy Ray
Couch and Dare County
Tourist Bureau.





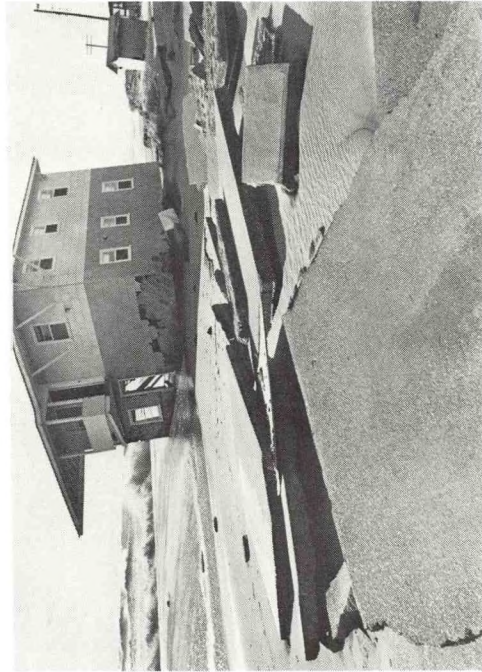
A beach cottage succumbs to the surf at Kill Devil Hills, N.C.



The beach eroded in this area, leaving the buildings vulnerable to other storms.



Wind-driven waters washed away the sand from under this Kitty Hawk, N.C. cottage.



A wrecked two-story cottage.

All Photos on this page are courtesy of the Raleigh News and Observer.



The pictures on this page show how the erosion during the February storm led to more damage later. These pictures were taken in the vicinity of Buxton, N.C. March 23-25, 1973. All pictures on this page are courtesy of Ray Couch and Dare County Tourist Bureau.

CHAPTER 6

Snow Storms of the Past

One of the first questions after every southern snow storm is, "When was the last time this much snow fell?" An answer requires the keeping of records for every weather station, since the pattern is different for each storm.

This year's storm was compared often with the 1914 and 1899 ones. Newspaper files have good coverage of these storms and many older citizens can still give eyewitness accounts of them.

The approximate storm center tracks, based on lowest pressure, are shown in Figure 6. They appear similar, but there are major differences. In 1899, the low formed in the western Gulf of Mexico, accelerated as it crossed Florida and moved roughly parallel to the Atlantic Coastline at a speed of more than 40 m.p.h. See Figure 7. It remained close enough to the New England coasts to cause snow inland. In 1914, a strong "Colorado low" formed on the polar front as it moved southward. That low moved almost due eastward to the Atlantic causing snow in the northern states. When the front finally reached the Gulf, the second low, the one that caused the southeastern snows, formed in the eastern rather than the western part. The storm center was blocked from moving up the coast by a high over Pennsylvania. See Figure 8. It moved about 30 m.p.h. along a track well south of the 1899 and 1973 ones. In 1973, the low moved at more than 30 m.p.h. while in the Gulf and slowed to 15 to 20 m.p.h. after crossing Florida. While off the Outer Banks, it changed direction toward the east sparing New England from heavy snow.

In 1899, snowflakes fell as far south as Fort Myers, Florida, a record. Five inches or more fell in central and southern Louisiana, Mississippi, and Alabama, and in central Georgia. More than 10 inches fell in central South Carolina and more than 15 inches in east-central North Carolina. The snow was accompanied by record low temperatures at many places.

In 1914, the five-inch snow line began farther east than in 1899 and, in general, the snow fell farther inland from the coasts. Alabama had less snow overall than in 1899 but Georgia, more. Fifteen inches fell in central North Carolina and north-eastern South Carolina.

A listing of earlier snow storms is given in Table II. For additional information about individual storms, see the books and periodicals listed in the bibliography at the end of this chapter.

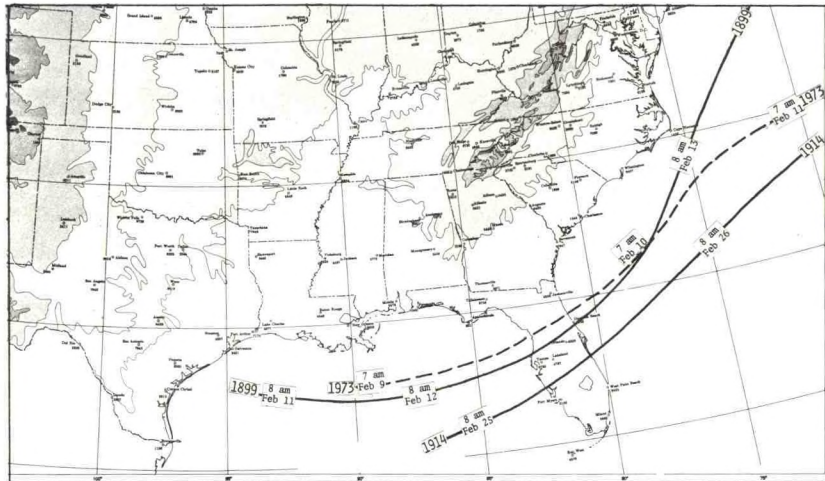


Figure 6. Storm Tracks for 1899, 1914 and 1973 Snowstorms.

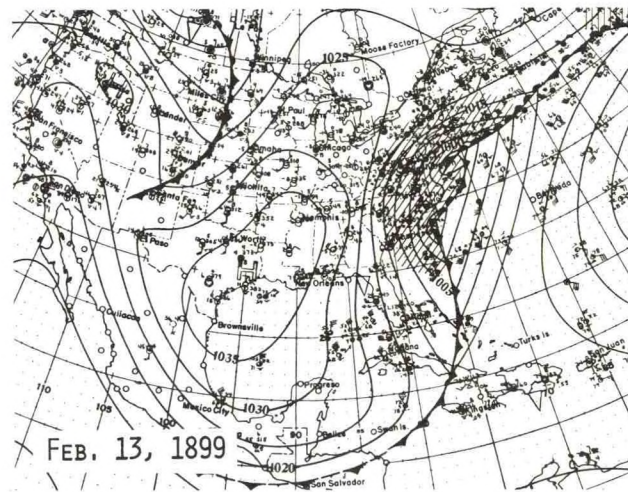
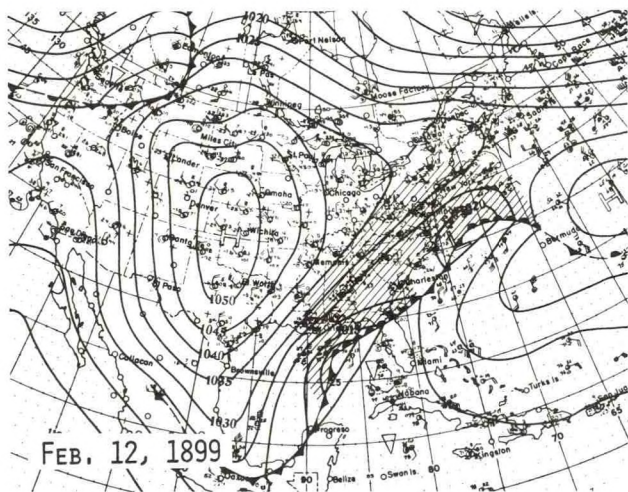


Figure 7. Weather Maps, 8:00 A.M., February 12 and 13, 1899.

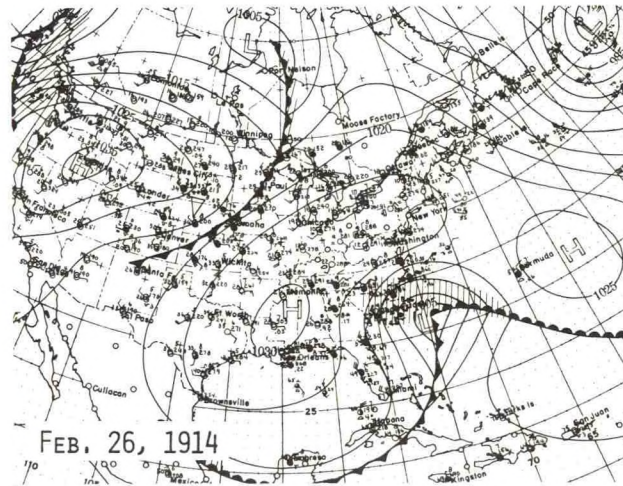
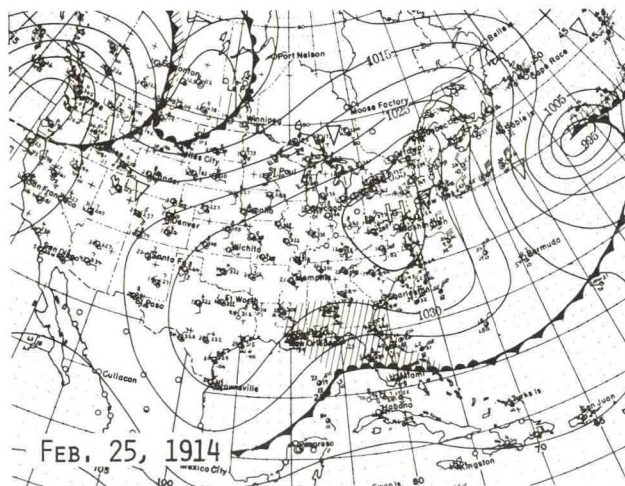


Figure 8. Weather Maps, 8:00 A.M., February 25 and 26, 1914.

Table II. Outstanding Snow Storms in the Southeastern United States

Major sources for this table include Dr. David Ludlum's two books Early American Winters, Vol. I, 1604-1820, and Vol. II, 1821-1870 (see bibliography). These should be consulted by anyone interested in further details of the earlier storms. Information for some of the storms during the period 1886-1963 was taken from the Environmental Data Service Letter Supplement 6211, "Some Outstanding Snow Storms".

The snow amounts for the earlier years are largely from accounts written by persons who were giving general impressions rather than writing for a scientific record. On occasion the measurements may have been taken in the deepest drifts or in accumulations of snow in ditches.

Snow storms equal to some of those shown in the list undoubtedly occurred in sparsely settled, remote areas and were not recorded. Consequently, the list cannot be considered to be fully complete. Other snow storms are recorded in obscure diaries and newspapers but have not been searched out.

- 1726 February SOUTH CAROLINA
Deepest snow known to that time in Charleston.
- 1740 December 6 GEORGIA
At Savannah, 4 or 5 inches of snow was left by the storm that began in early morning and ended about 10:00 A.M. It melted by noon.
- 1771 December GEORGIA
In Savannah, a cold rain changed to sleet, then snow, and the ground remained icy for two or three days.
- 1772 January 26 - 27 NORTH CAROLINA AND VIRGINIA
At Bethabara near Winston-Salem, rain changed to snow during the evening of the 26th and continued falling the following day, leaving a depth on the ground of about 6 inches. This storm extended northeast and was mentioned in both Washington's and Jefferson's diaries. Jefferson stated that it was the deepest snow that they had ever seen and was 3 feet deep in Albemarle.
- 1773 February 21 - 22 SOUTH CAROLINA
At Charleston, the greatest fall of snow known by any person living was said to have occurred. The depth is not given.
- 1774 Unspecified Date FLORIDA
A snow storm is said to have extended over most of the territory, but the area is not specified.
- 1775 December 23 - 25 GEORGIA AND SOUTH CAROLINA
In Western South Carolina on the Reedy River, it snowed without stopping for 30 hours, covering the ground about 2 feet deep. Near Winston-Salem, the snow was one and a half feet deep. In Georgia it was said to be generally 18 inches deep. Troops taking part in the Revolutionary War campaigns in the area marched in snow for up to 7 days.
- 1776 December 25 NORTH CAROLINA AND VIRGINIA
While the snow was only "shoe top" deep at Salem, it was more than a foot deep at Friedberg and increased northward to 22 inches at Charlottesville, Virginia. At the end of this winter in Salem, the Moravians commented that there had been 5 snows in the winter and almost no one could remember such a winter in the Carolinas.
- 1780 January - February NORTH CAROLINA, SOUTH CAROLINA AND GEORGIA
Although particulars are not given, at Winston-Salem the past winter was said to have had more continuous cold and snow than anyone remembered. In the South Carolina backcountry, an extraordinary fall of snow was reported prior to January 19. In Savannah, Georgia, only a little snow was reported, but the weather was among the coldest experienced.

Table II. (Continued)

- 1783 December 21- 22 NORTH CAROLINA
At Salem, heavy snow fell and other storms later maintained the snow cover so that traveling was difficult during the holidays.
- 1784 January - March NORTH CAROLINA
At Salem, heavy snows were mentioned at intervals through the winter. Two feet of snow fell on the 18th of January. It was said that the oldest "brother" in North Carolina did not remember such a storm. The storm extended up into Virginia where some persons perished from famine. It is mentioned in the diaries of George Washington at Mt. Vernon and James Madison at Orange.
- 1784 January - February LOUISIANA
There is a mention of "heavy snow" at New Orleans in January and of ice floes extending across the river in February and drifting into the Gulf as far south as 28° north latitude.
- 1790 December 30 - 31 NORTH CAROLINA, SOUTH CAROLINA AND GEORGIA
Snow was said to have fallen four feet deep at New Bern, North Carolina, but this may have been a measurement in deepest drift. The snow whitened the ground at Savannah and Midway, Georgia. It was 4 to 6 inches deep at Charleston, South Carolina, according to one source; 2 to 4 according to another.
- 1792 February 28 SOUTH CAROLINA
Five or 6 inches of snow fell at Charleston. Hail or ice pellets followed the snow, and it is reported that a bridge gave way under the combined weight of the snow and two wagons.
- 1798 February 16 NORTH CAROLINA AND VIRGINIA
At Halifax, North Carolina, the snow measured 16 inches on the level. The newspaper in Norfolk, Virginia, reported the greatest fall of snow ever experienced -- upward of 6 feet in many places. Other accounts there give the depth as more than 40 inches on the 14th of February and one states that neither sleet nor snow fell at a location 25 miles inland from Norfolk.
- 1800 January 9 - 10 GEORGIA, FLORIDA AND SOUTH CAROLINA
This storm seemed to have left the greatest amounts ever reported in the region. At Savannah the snow was 16 to 18 inches deep on the level and 3 feet deep in drifts. There were 6 to 7 inches near Berkeley, South Carolina. Five inches fell on the Florida-Georgia border near the mouth of St. Mary's River.
- 1800 January 31 - February 2 MISSISSIPPI AND LOUISIANA
Snow fell at New Orleans on February 2, but the amount was not given. At Natchez, snow fell on the 31st, changing to freezing rain February 1, followed by snow again February 2. Although the snow was only 2 inches deep, the coating of ice on the trees caused many limbs to break.
- 1800 February 2 NORTH CAROLINA
Near Winston-Salem, there were 3-foot drifts at Bethania, 5-foot drifts at Salem, and one and a half feet of snow in bushes where it was unaffected by wind. At Friedberg, it was 18 to 20 inches deep.
- 1803 February 15 - 16 GEORGIA, SOUTH CAROLINA AND NORTH CAROLINA
At Savannah on February 15, "a considerable fall" occurred. At Salem, North Carolina, it fell 12 to 18 inches deep; at Raleigh, North Carolina, 18 inches to 2 feet.
- 1804 December 20 - 24 NORTH CAROLINA
Near Winston-Salem, 15 or 16 inches of snow on the level fell December 20, followed by another storm the 23rd. The accumulation was 2 feet deep near Salem and 3 feet or more near Salisbury.
- 1809 January 28 - 29 MISSISSIPPI
The snow measured 6 1/2 to 10 inches on the level at Natchez.
- 1812 January 10 MISSISSIPPI, LOUISIANA AND ALABAMA
Eight inches at Natchez, one foot 20 miles south of there, and four inches 40 miles northeast. Opelousas, Louisiana, had 11 inches and Mobile, Alabama, 2 or 3 inches.
- 1813 January 28 NORTH CAROLINA
Near Winston-Salem, 9 inches of snow on the level with drifts several feet high. Another storm on the 29th raised the snow depth to 12 inches. It snowed again January 31, February 9, and February 19.

Table II (Continued)

- 1818 January 30 - 31 NORTH CAROLINA
Twelve inches of snow fell at Raleigh.
- 1818 February 7 SOUTH CAROLINA
Nine to 10 inches of snow fell at Camden.
- 1818 December 18 NORTH CAROLINA
Fifteen inches of snow fell at Fayetteville.
- 1819 December 30 NORTH CAROLINA
About a foot of snow fell near Winston-Salem.
- 1837 March 4 GEORGIA AND SOUTH CAROLINA
At Savannah, 8 to 12 inches of snow fell; at Charleston, 2 inches.
- 1843 March 15 - 16 MISSISSIPPI AND EASTWARD
Four inches of snow fell at Natchez, 5 inches in central Mississippi and heavier amounts through Tennessee and eastward to Virginia, Maine, and Nova Scotia.
- 1843 March 24 - 25 MISSISSIPPI
At Natchez, 3 inches of snow fell, and pomegranates, orange trees and all other tropical shrubs were killed.
- 1849 February 15 - 16 LOUISIANA, MISSISSIPPI AND ALABAMA
Rain, sleet and hail were reported near Baton Rouge; enough snow fell to whiten the roofs at New Orleans; an unspecified depth of snow fell at Natchez and up to 5 inches in Alabama.
- 1849 April 16 SOUTH CAROLINA AND NORTH CAROLINA
Light amounts of snow fell elsewhere in the south, and at Wilmington, North Carolina, the snow accumulated to a depth of 6 inches where insulated from the earth's heat. Fayetteville, North Carolina, had 4 inches and Santee - Columbia, South Carolina, 3 inches.
- 1851 December 17 FLORIDA TO SOUTH CAROLINA
The amounts ranged from snow flurries at Pensacola, Florida, to 3 inches at Charleston, South Carolina.
- 1852 January 12 - 12 TEXAS, LOUISIANA, MISSISSIPPI, ALABAMA, NORTHERN FLORIDA AND GEORGIA
Along the coast this was the greatest snow storm since 1800 and would not be exceeded until 1899. New Orleans had 4 inches; Baton Rouge, 4.5 inches; Pensacola, 4 inches; Tallahassee, 2 to 4 inches; Jacksonville, one-half inch; and Savannah - Charleston, 2 inches. The same Arctic outbreak caused an unspecified amount of snow to fall as far south as Brownsville, Texas.
- 1857 January 17 - 19 GEORGIA, SOUTH CAROLINA AND NORTH CAROLINA
Amounts in South Carolina were 6 inches at Spartanburg, 2.5 at Aiken. In Georgia, Athens had 8 inches and Augusta, 2. Coastal locations had less than one inch. In North Carolina, there was a belt through the central and northern counties. Chapel Hill reported 12 to 15 inches; Weldon, 16 inches; Gaston, 22; and Murfreesboro, 10.
- 1886 December 3-6 ALABAMA, CAROLINAS, TENNESSEE AND VIRGINIA
Heavy snow storm with high wind. At Montgomery, Alabama, 11 inches of snow, heaviest ever in 24 hours. In Tennessee, total 22 1/2 inches at Knoxville in 2 days with 13 inches at Chattanooga. At Asheville, North Carolina, 26 inches; and at Wytheville, Virginia, 16 inches of snow caused roofs to collapse.
- 1895 February 14 - 15 LOUISIANA AND MISSISSIPPI
Very cold with snowfall a few inches at Mississippi jetties to 2 feet in southwestern Louisiana and heaviest fall in years at many stations in Mississippi. At Rayne, Louisiana, 24 inches in 24 hours and for storm, greatest to that date in the state.
- 1899 February 11 - 14 MIDDLE AND NORTH ATLANTIC COASTAL STATES
Snowfall was heaviest from Virginia through southern New England where 15 to over 30 inches fell. After this storm an alltime record depth of 34.2 inches was measured for Washington D.C. and the depth was 31 inches in Baltimore, Maryland, with drifts 3 to 8 feet deep.

Table II (Continued)

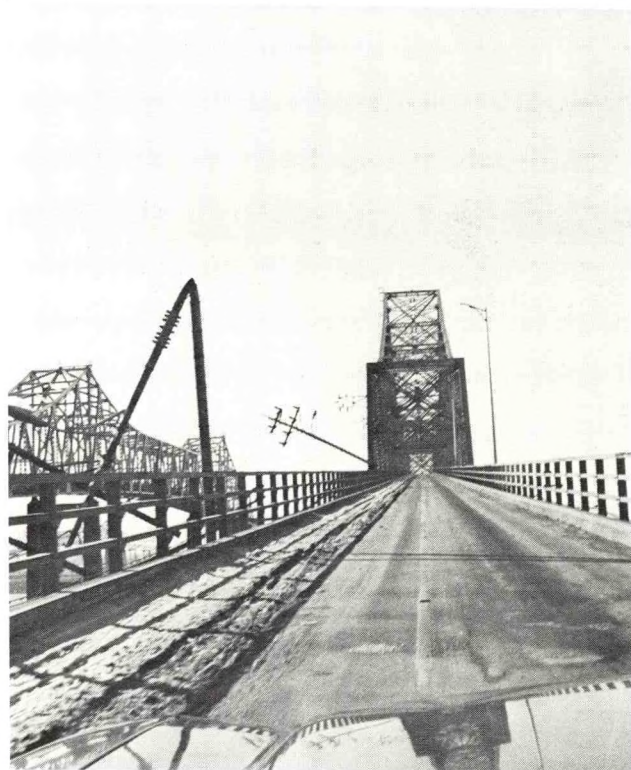
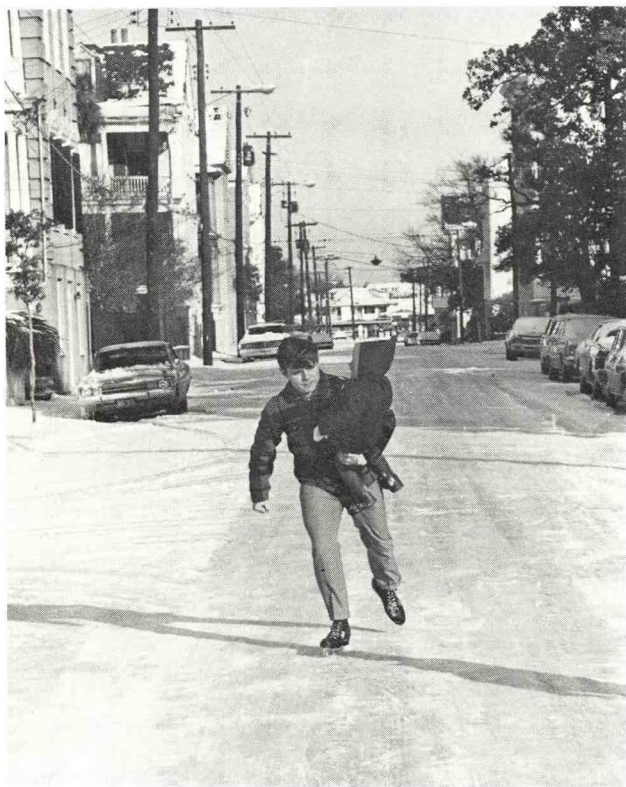
- 1904 January 27 - 28 MISSISSIPPI, ALABAMA AND GEORGIA
A very heavy snowfall from 12 inches at Jackson and central Mississippi to 15 inches in northern Georgia. Atlanta had 7.6 inches.
- 1912 February 10 - 11 NORTHERN ALABAMA, GEORGIA, SOUTH CAROLINA AND
NORTH CAROLINA
Unusually heavy snow in the Eastern Carolinas, ranging up to 18 inches at Smiths Mill, South Carolina. Other amounts: Wilmington, N.C., 10 inches; Raleigh, 7 inches; Cape Hatteras, 4 inches; and Columbia, S.C., 8 inches.
- 1914 February 25 - 26 SOUTH CAROLINA AND NORTH CAROLINA
Snowfall 6 to 18 inches. At Society Hill, 18 inches; state record for 24 hours and single storm.
- 1917 December 29 - 30 NORTH CAROLINA AND VIRGINIA
Five inches of snow fell in southern North Carolina; 10 inches in central N.C.; 12 inches at Cape Hatteras; and 14 inches at Norfolk, Virginia. Up to 25 inches fell in the mountains of northwestern N.C. Due to melting, the greatest depth on the ground at Cape Hatteras was 10 inches.
- 1919 January 2 - 3 MISSISSIPPI AND ALABAMA
Heavy snowfall in a narrow band from near Vicksburg, Mississippi, northeastward to Chattanooga. Jackson, Mississippi, had 10 inches; Edinburg, Mississippi, 14.2 inches. Over parts of central Mississippi it was the deepest snow of record to that time.
- 1922 January 27 - 29 ATLANTIC COASTAL STATES
Great snow storm from South Carolina to southeastern Massachusetts. Snowfall 36 inches at Roxboro, N.C., 28 inches in the District of Columbia (25 inches in 24 hours record for single storm), 26.5 inches at Baltimore, 19.1 inches at Richmond, Virginia, and 18 inches at Wilmington, Delaware. A few dozen buildings and warehouses collapsed. In the District of Columbia, collapse of theater (Knickerbocker) killed 98, injured 130.
- 1927 March 1 - 2 NORTH CAROLINA AND VIRGINIA
Snow storm unusual as to depths and lateness in season. Winds 74 m.p.h. at Cape Hatteras, 62 m.p.h. at Cape Henry, and 52 m.p.h. at Norfolk on the 2nd. Average depth of snow in North Carolina 14 inches, heaviest of record for time of year, drifted considerably; at Nashville, 31 inches in 24 hours, state record. Travel interrupted or delayed for 2 to 3 days. Heavy damage, 2 deaths.
- 1929 December 21 - 22 TEXAS AND ARKANSAS
Exceptionally heavy snow from middle Rio Grande Valley northeastward to middle and lower Louisiana border. At Clifton, Texas, 24-inch snowfall in 24 hours and at Hillsboro 26 inches during storm. At El Dorado, Arkansas, 18.2 inches was an unprecedented snowfall for southern Arkansas.
- 1936 January 29 - 30 NORTHERN MISSISSIPPI, ALABAMA, GEORGIA, SOUTH
CAROLINA AND NORTH CAROLINA
One of the most notable snow storms known in Georgia: 4 inches covered the ground as far south as Newnan, Griffin, Greensboro, Monticello, and Washington. Other amounts: Atlanta, Georgia, 8 inches; Columbia, S.C., 6 inches; Raleigh, 10 inches; Cape Hatteras, 8 inches; Wilmington, 7 inches; Stoneville, Mississippi, 10 inches.
- 1940 January 23 - 24 MISSISSIPPI, ALABAMA, GEORGIA, CAROLINAS, TENNESSEE,
VIRGINIA, DISTRICT OF COLUMBIA, MARYLAND, NEW JERSEY
Snow storm almost to coast in Mississippi. At Louisville, Mississippi, 15.5 inches set new record for 24 hours and a single storm. Fayette and Valley Head, Alabama, recorded 14 inches and Farmville and New Canton, Virginia, 24 inches in 24 hours; Washington, D.C., 9.5 inches; and Cape May, New Jersey, 13 inches. In South Carolina, 5 deaths; in Virginia, 12; and in Tennessee, several. Damage in Virginia estimated at \$1/2 million.
- 1942 March 2 - 3 NORTH CAROLINA
Heavy snow from Piedmont through the western third of the state. A new record for a single snow storm of 16 inches was set at Asheville. Some drifts to 6 feet.
- 1951 January 28 - 31 TEXAS TO WEST VIRGINIA
Said to be the greatest ice storm in history to that time. Total damages near \$100 million. Ice thicknesses 1/2 to 4 inches. Severest weather in North Gulf states and across Texas.

Table II (Continued)

- 1956 February 1-8 TEXAS AND NEW MEXICO
Snowfall continued for 92 consecutive hours at Roswell, New Mexico, and totaled 15.1 inches. Snowfall about 1 to over 2 feet in New Mexico and west Texas; 30 inches at Plainview, Texas, on 5th. Heavy drifting blocked highways and isolated many rural areas in both states. Airlift carried supplies to ranches and feed to range cattle. Damage in millions of dollars. Twenty-three deaths.
- 1958 December 11 SOUTH CAROLINA AND NORTH CAROLINA
Record snowfalls of 16 inches at Elizabeth City, North Carolina, and 9 inches at Raleigh. Cape Hatteras received 4 inches and Columbia, South Carolina, 9 inches.
- 1958 February 13-19 NORTH CAROLINA, VIRGINIA, MARYLAND, DISTRICT OF COLUMBIA, DELAWARE, PENNSYLVANIA, NEW JERSEY
Snowfall 1/2 to over 3 feet; Baltimore, 15.5 inches; Washington, D.C., 14 inches. Transportation paralyzed. Twenty-four deaths in Pennsylvania, 17 in North Carolina, and 2 in Virginia. Damage estimated at \$500 million in Maryland, Delaware and District of Columbia, and \$20 million in North Carolina.
- 1960 February 12-15 LOUISIANA, MISSISSIPPI, ALABAMA, GEORGIA, TENNESSEE, NORTH CAROLINA, VIRGINIA TO NEW ENGLAND
Snowfall ranged from 6 inches to over a foot in parts of Louisiana, Mississippi, Alabama, and Georgia and quite generally northward to Canada. Buildings collapsed from weight of snow. Considerable damage to utility lines. Forty-three deaths reported; 17 in New York; 7 in New Jersey; 6 in Virginia; 5 in Connecticut; 3 in North Carolina; 2 each in Tennessee and Pennsylvania; and one in Alabama from accidents, overexertion and exposure.
- 1960 February 17-19 MISSISSIPPI, ALABAMA, GEORGIA, SOUTH CAROLINA, NORTH CAROLINA AND VIRGINIA
The storm left a broad band of heavy snow which left a record 27.6 inches for the month at Roanoke, Virginia.
- 1960 March 8-10 GEORGIA, SOUTH CAROLINA, NORTH CAROLINA, VIRGINIA, KENTUCKY, TENNESSEE, INDIANA AND ILLINOIS
Snowfall up to 10 inches in north Georgia, 2 feet in Kentucky and eastern Tennessee, 4 to over 15 inches in Virginia. Drifts in North Carolina 3 to 30 feet. Many buildings collapsed and much structural damage from weight of snow. Damage in millions of dollars. Three traffic deaths in Georgia and one from exposure in Indiana.
- 1963 December 31-January 1 (1964) LOUISIANA, MISSISSIPPI, ALABAMA AND TENNESSEE
Snowfall 3 inches in Mobile, 4 inches in New Orleans, 10 1/2 inches in Bay St. Louis to over 16 inches northern sections, following freezing rain and sleet many areas. Numerous new snowfall records set. Trees, power and telephone lines damaged and roofs collapsed by weight of wet snow and ice. Many roads closed. Damage over \$1 million. Several deaths.
- 1965 January 15-16 SOUTH CAROLINA
A record 24-hour snowfall for January was set at Landrum, 10 inches.
- 1966 January 29-30 MISSISSIPPI TO VIRGINIA
Twelve inches fell at Cleveland, Mississippi, and New Market, Alabama. Some described it as the worst blizzard in two-thirds of a century to strike some Appalachian and east coastal areas.
- 1968 February 8 GEORGIA
A new all-time record for snowfall at Savannah Airport was set, 3.6 inches.
- 1969 February 15-16 SOUTH CAROLINA
At Caesar's Head, 28.9 inches broke previous snowfall records.

Bibliography

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CHARLESTON, S.C. Left, Rutledge Avenue proved a bumpy but useable surface for ice skating. Right, gale winds and ice bent heavy steel poles like twigs. Photos courtesy Charleston (S.C.) Post-Courier.

APPENDIX

Additional Photographs

The pictures that follow were received too late to be included in the main part of the book. They are included here because they give an understanding of the amount of snow that fell.

OPELIKA-AUBURN, ALABAMA

Photos courtesy of
The Opelika-Auburn (Ala.) Daily News



UNION SPRINGS, ALABAMA



Photos courtesy of
The Union Springs (Ala.) Herald



TROY, ALABAMA



Photos courtesy of
The Troy (Ala.) Messenger



MOBILE, ALABAMA



Photos courtesy of
The Mobile (Ala.) Press-Register



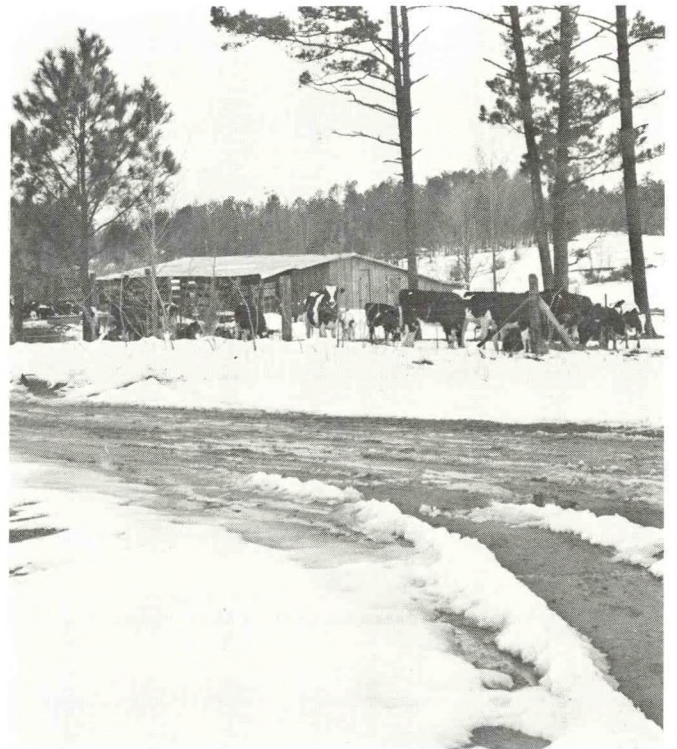
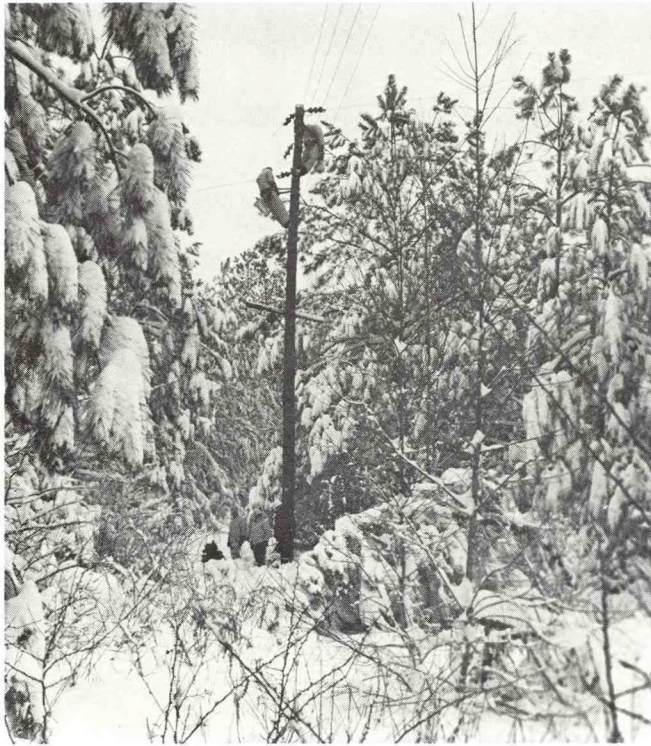
MONTGOMERY, ALABAMA

Photos courtesy of
The Montgomery (Ala.) Advertiser Journal



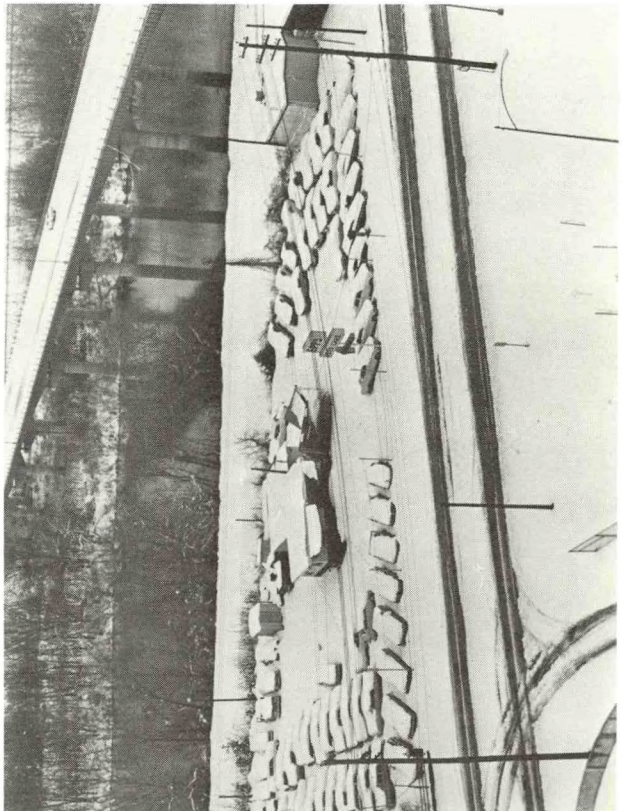
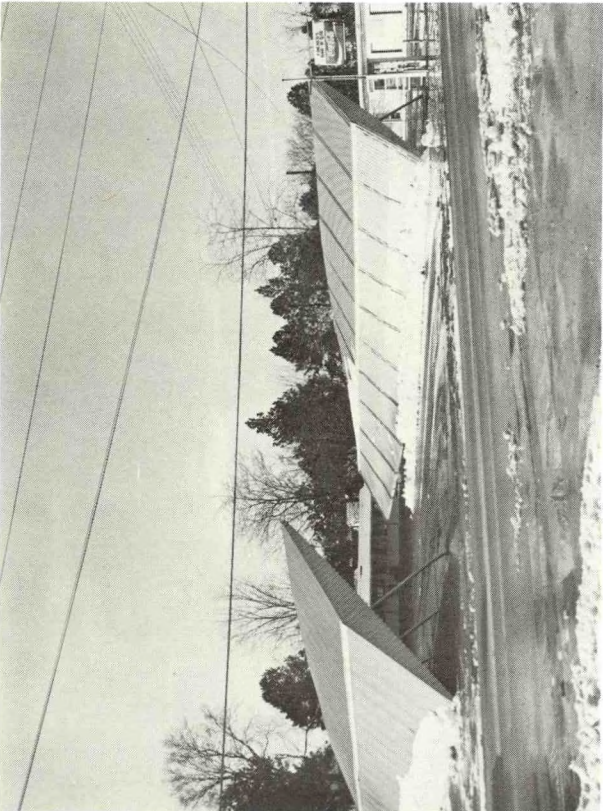
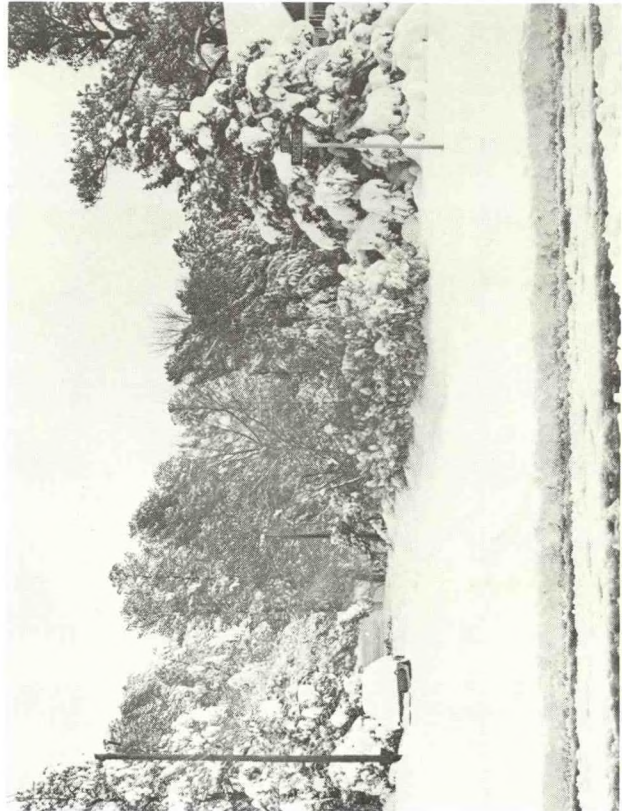
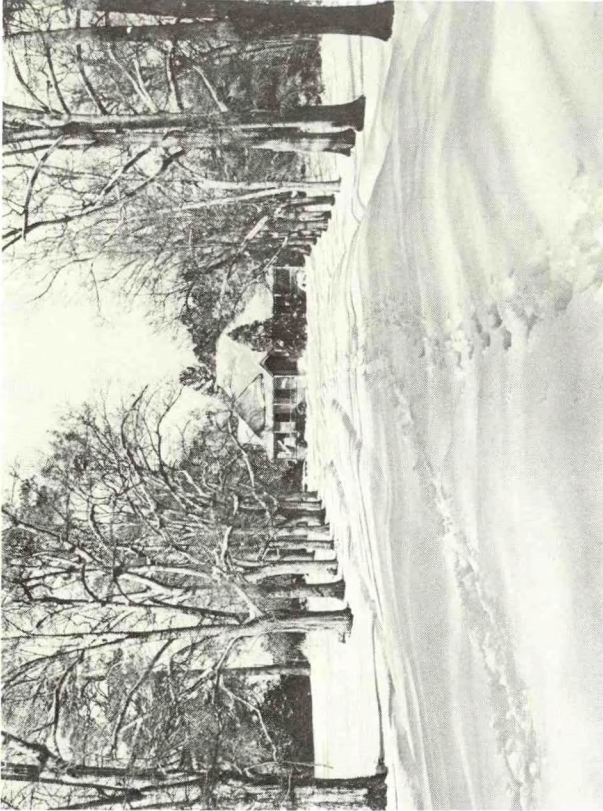
MACON, GEORGIA

Photos courtesy of
The Macon (Ga.) Telegraph and News



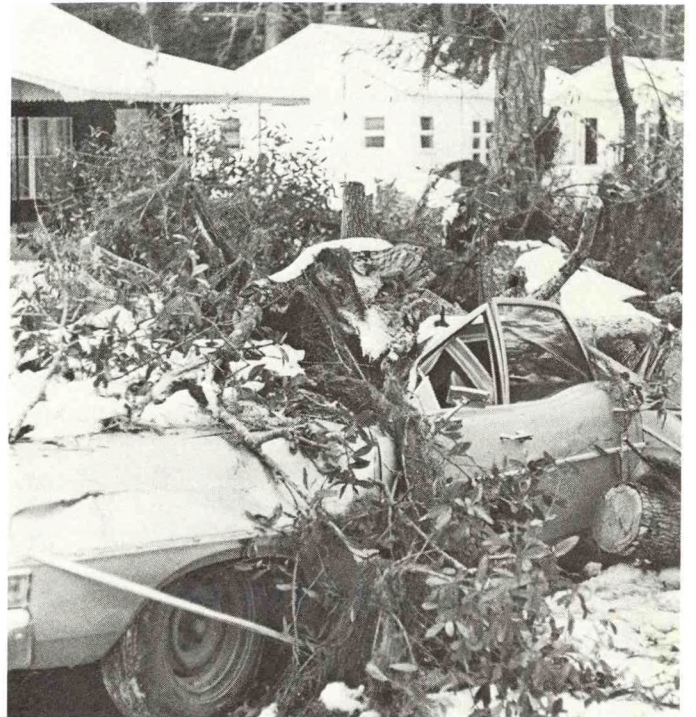
MACON, GEORGIA

Photos courtesy of
The Macon (Ga.) Telegraph and News



CHARLESTON, SOUTH CAROLINA

Photos courtesy of
The Charleston (S.C.) Post-Courier



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NWSO, Columbus, Georgia	NWSO, Savannah, Georgia
NWSO, Macon, Georgia	NWSO, Wilmington, North Carolina

NWSO Eastern Region Headquarters, Garden City, New York
National Environmental Satellite Service, Washington, D.C.

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