

### The record early snowstorm of October 10, 1979--

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The storm began on October 9th when a low- pressure area moved east through New York state and Massachusetts. Washington was in the warm sector of the storm and temperatures topped out in the low '70's before the trailing cold front swept through during the late afternoon.

During the nighttime hours, unseasonably cold air surged down the East Coast. As cold air invaded the D.C. area, a second storm center took shape over the Carolinas.

A chilly rain broke out that evening and continued all night. By midnight, the temperature had fallen to 50 degrees F. The relentless drop of the Mercury continued during the pre-dawn hours and many people in the northern and western suburbs awoke to see snow falling.

During the early morning a burst of 1 - 3 inches of snow fell in central and northern Montgomery County and a coating of snow accumulated in Fairfax and lower Montgomery County.

The precipitation tapers off for all in all sections between 7 and 9 A.M. but by 10:00 A.M. in New band of heavy snow broke out this time centering its fury on the southern half of the metropolitan area.

Huge snowflakes were accompanied by lightning and thunder. By noon, the worst was over and the snow it tapered off.

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Aside from the October 10, 1979 storm, there have been only two measurable October snows on record.

Those took place October 19, 1940 and October 30, 1925. (p. 86-87 Washington Weather Book 2002 by Ambrose, Henry, Weiss)

## The Record Early Snowstorm of October 10, 1979

## Richmond's Earliest Snow but only a Trace

Washington's earliest measurable snowstorm on record occurred on October 10, 1979. National Airport reported 0.3 inches of snow; however, much heavier snow fell to the west of Washington, causing significant tree damage in the mountains of Virginia. The tree damage was especially severe because the trees had not yet lost their leaves, allowing large amounts of snow to accumulate on their branches.

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KDCA had 0.3 Inches & Dulles had 1.3 Inches  
Dale Enterprise in Rockingham County had  
8.0 inches and Naked Creek had 12.0 inches

all sections between 7:00 and 9:00 a.m., but by 10:00 a.m., a new band of heavy snow broke out, this time centering its fury on the southern half of the metropolitan area. Huge snowflakes were accompanied by lightning and thunder. By noon, the worst was over and the snow had tapered off.

During the second burst, 1 to 3 inches of snow fell in the central and southern parts of the region. A snowfall maximum of 3 inches was centered in Fairfax County and in the Upper Marlboro area of Prince George's County. Even National Airport, on the relatively warm Potomac, recorded 0.3 inches of snow, despite temperatures that

never dropped below 36°F.

Snowfall amounts from this late morning burst rapidly decreased to the north – only flurries fell in the immediate northern suburbs, such as College Park and Silver Spring.

Approximately 114,000 customers in the area lost power during the storm. Trees were still fully covered with leaves at the time of the storm and were especially vulnerable to the heavy, sticky snowfall. Roads were mainly just slushy, but several schools were closed due to lack of heat.

Accumulating snow in October is a very rare occurrence in Washington. Aside from the October 10, 1979 storm, there have been only two measurable October snows on record. Those took place on October 19, 1940 and October 30, 1925. Both of those snowfall events were also in the 1 to 3 inch range.

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# Record Early Snowstorm Powders East

By THE ASSOCIATED PRESS

An "abnormal" October snowstorm surprised the East on Wednesday, breaking records and burying foliage under accumulations up to a foot deep.

Hundreds of thousands of homes went dark and schools closed as leaf-laden trees toppled onto power lines in the earliest snowfall many areas had ever seen.

In the suburbs of Washington, D.C., where the last time it snowed this early was Oct. 5, 1892, more than 72,000 utility customers lost their power and a layer of slush up to 4 inches deep made driving treacherous.

Washington forecaster Jeffrey Bowman said the snow wasn't predicted until just before it fell because the weather bureau "just didn't see it coming."

It was the earliest snowfall on record in Newark, N.J., and weather officials in

Virginia said no snowstorm of such intensity had hit the state so early in the season since the government started keeping records in 1872.

"The weather is abnormal to say the least," said Ben Scott, officer in charge of the National Weather Service at Newark International Airport. "Even seeing it, I have trouble believing it."

Across the Hudson River in New York City, it was just the second time in 110 years that snow had fallen this early in the year. A "trace" fell on Oct. 10, 1925, the weather bureau said.

In Virginia, where power was knocked out to more than 200,000 customers of several utility companies, one resident of Gum Spring in Louisa County said snowflakes were falling "as big as good old cotton balls."

Snow in varying amounts was reported from the Virginias to New England, but

especially hard hit were the mountain communities of Appalachia.

Numerous minor accidents were reported on slick roads in several states. In New York, a school bus carrying 23 high school students crashed into a dirt-moving machine during a snowstorm at Pleasant Valley, N.Y. Several students and the bus driver suffered cuts and bruises.

In West Virginia, where the storm dumped 12 inches in Canaan Valley, the Monongahela Power Co. reported 10,000 to 20,000 people lost their electricity in several counties when tree limbs snapped under the heavy, wet snow and ripped down power lines.

In Virginia, a power company reported 78,000 customers were without power, including 17,000 in the Harrisonburg area where the snow was 10 inches deep.

In Baltimore, where the Orioles and the

Pittsburgh Pirates were waiting to get on with the World Series after being rained out Tuesday, morning rains were changing to snow.

Elsewhere in Maryland, snow was thick on the ground and Baltimore Gas & Electric Co. reported power was knocked out to 23,000 customers, mostly west and northwest of Baltimore City.

The weather service said it was the

earliest snow in Washington area since Oct. 5, 1892.

An unofficial record also was set in the Blue Hills area south of Boston as temperatures plunged 20 degrees in 24 hours. Snow was falling in Boston, Worcester and Springfield.

Among the few who benefitted were the ski resorts of New England. The Killington Ski Area at Sherburne, Vt., opened

Wednesday, the earliest in the history of the area.

By midday, snow accumulations in Virginia were measured at 10 inches in Harrisonburg, 8 in Staunton, 5 in Front Royal, and 4 to 5 inches in the hilly areas of Prince William County.

West Virginia recorded 12 inches in Canaan Valley, 8 in Pickens, 6 in Summersville and 4 in Green Bank.

risonburg, especially U.S. 33 from Rawley Springs to the top of Shenandoah Mountain, were especially troublesome because of fallen trees, he noted.

Va. 263 near Little North Mountain and the Union Springs and Hone Quarry areas also were bad, he reported.

Osborne said highway workers received a lot of help from people who cleaned up trees for firewood.

Motorists will have to watch the next several days for brush piled beside roads.

Timberville weather observer Edwin Baker reported only four inches of snow but added that much of it may have melted before he made his measurement. He said the soggy snow melted down to 1.85 inches of water.

Continued on Page 23, Col. 3

## *Snow Earliest And Heaviest*

Wednesday's snowfall was the earliest ever recorded at the Dale Enterprise weather station west of Harrisonburg.

It also was the heaviest October snow on record.

The earliest previous measurable snow at Dale Enterprise was Oct. 20, 1940. Six inches fell then, and until Wednesday, that was the heaviest October snow on record.

There also are three other Octobers with measurable snow in the 100 years the Dale Enterprise records have been kept.

In 1925, five inches were recorded. That came in two storms, and like Wednesday, the snow also came before the first killing frost.

The first October snow in 1925 was an inch on the 22nd. Four more inches fell the 30th.

The other two October snows fell in 1917 (two inches) and 1887 (a half-inch).

# *Hardest By Storm*

One of the most obvious, and disheartening, effects of Wednesday's snowfall was the damage to trees.

The heavy, wet snow piled up on branches with still-green leaves and snapped out tree tops and limbs.

Unfortunately it appears that little can be done to protect the shattered trees.

Bob Brooks of the U.S. Forest Service said about the only thing to do with heavily damaged limbs is — sorry — saw them off. He advised homeowners to make sure the cut is sloped to prevent water accumulation, which can rot the tree.

State forester Wesley Ford noted that people should be careful not to cut limbs where they could fall on power lines.

Ford also said jagged edges should be trimmed flush to the tree trunk if possible because smooth surfaces are less likely to rot.

If the tree crown is damaged, Ford suggested that homeowners wait until after the leaves have fallen to have it pruned. Otherwise, he said, the tree could grow lopsided.

A feeding of 5-10-5 fertilizer in the spring will boost damaged trees, Ford added.

Major splits may be even harder to repair. "Once the darn thing is split, you create a weak point, and it has a tendency to continue to split," Brooks said.

Limbs might be strengthened by wrapping a metal chain around them, he added. But Ford said the best thing to do with split trees is to consult a tree surgeon.

Both Brooks and Ford agreed that there probably isn't much reason to treat the wound with a coating, although it might give an added degree of protection.

Even after treatment, heavily damaged trees probably will suffer.

"It depends on the extent of the damage. I suppose eventually you'll get rot going into the trunk," Brooks said. He added, though, that the rotting probably would not be serious for a decade or two.

## **Part III, The Snowstorm of October 10, 1979.**

**The October 10, 1979 snowstorm will be know as the earliest significant October snowfall for the Mid-Atlantic region of the 20<sup>th</sup> Century.**

The snowfall of 1925 occurred on the 29<sup>th</sup>-30<sup>th</sup> of October, the snowfall of 1940 occurred on the 19<sup>th</sup> of October. Even this last October snowstorm of 2011 occurred on the 29<sup>th</sup>. Most October snowfalls have occurred during the middle or end of the month. Since average air and ground temperatures are warmer during the beginning on October, it's harder for snow to occur during this time. This doesn't mean snow can't occur. It just means that it's going to be rarer.

Before the October 2009 snowfall here at Manchester 1SW, Md., there had not been any measurable October snowfall in this area since October 10, 1979 when a record 3.5" snow fell at Finksburg 2NW at my parent's house.



Figure 1 October 10, 1979 snowstorm at Finksburg 2NW, Md. There was a snowfall of 3.5 inches.



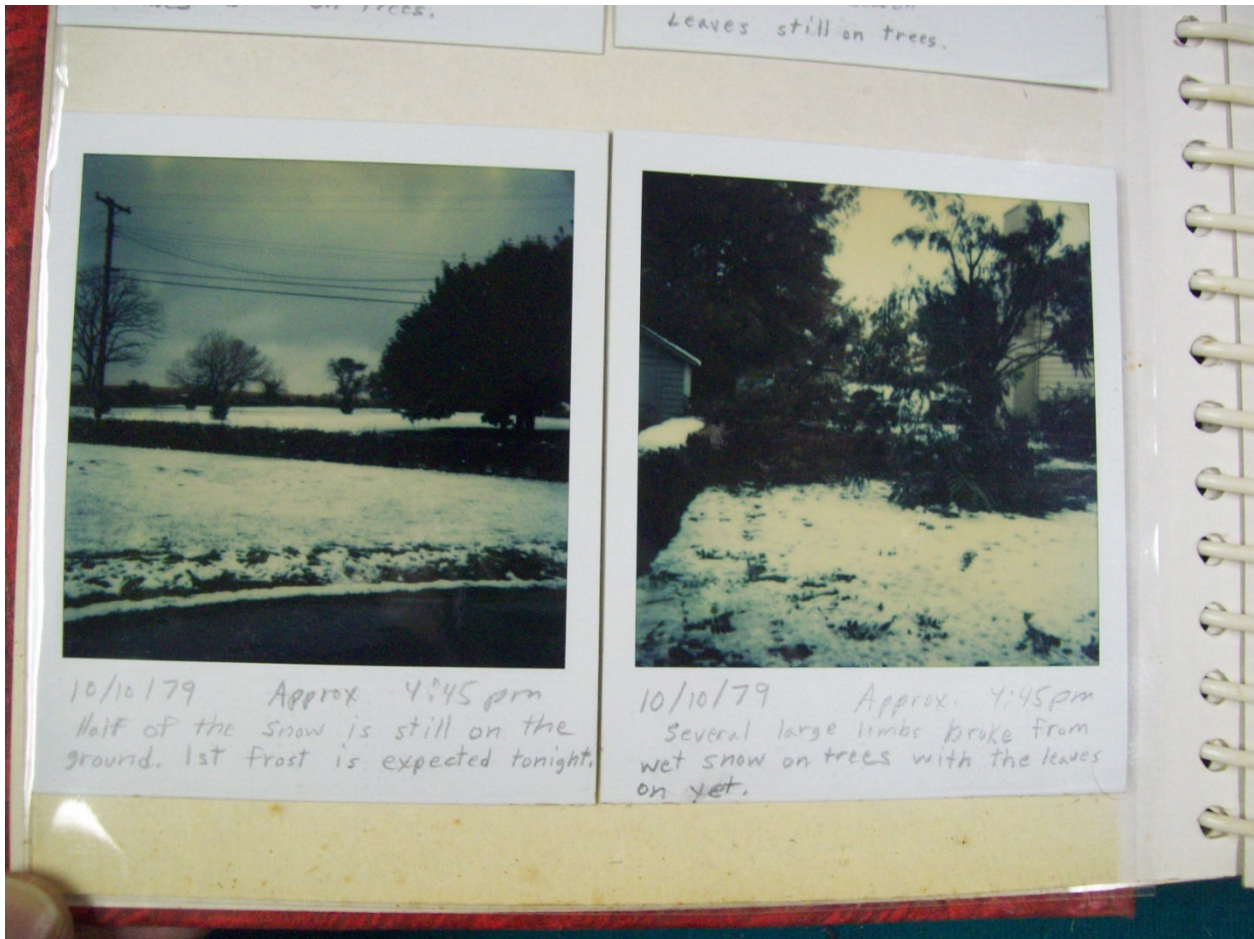


Figure 2 Photos showing remaining snowcover at 4:45pm in the afternoon of October 10, 1979 at Finksburg 2NW, Md.

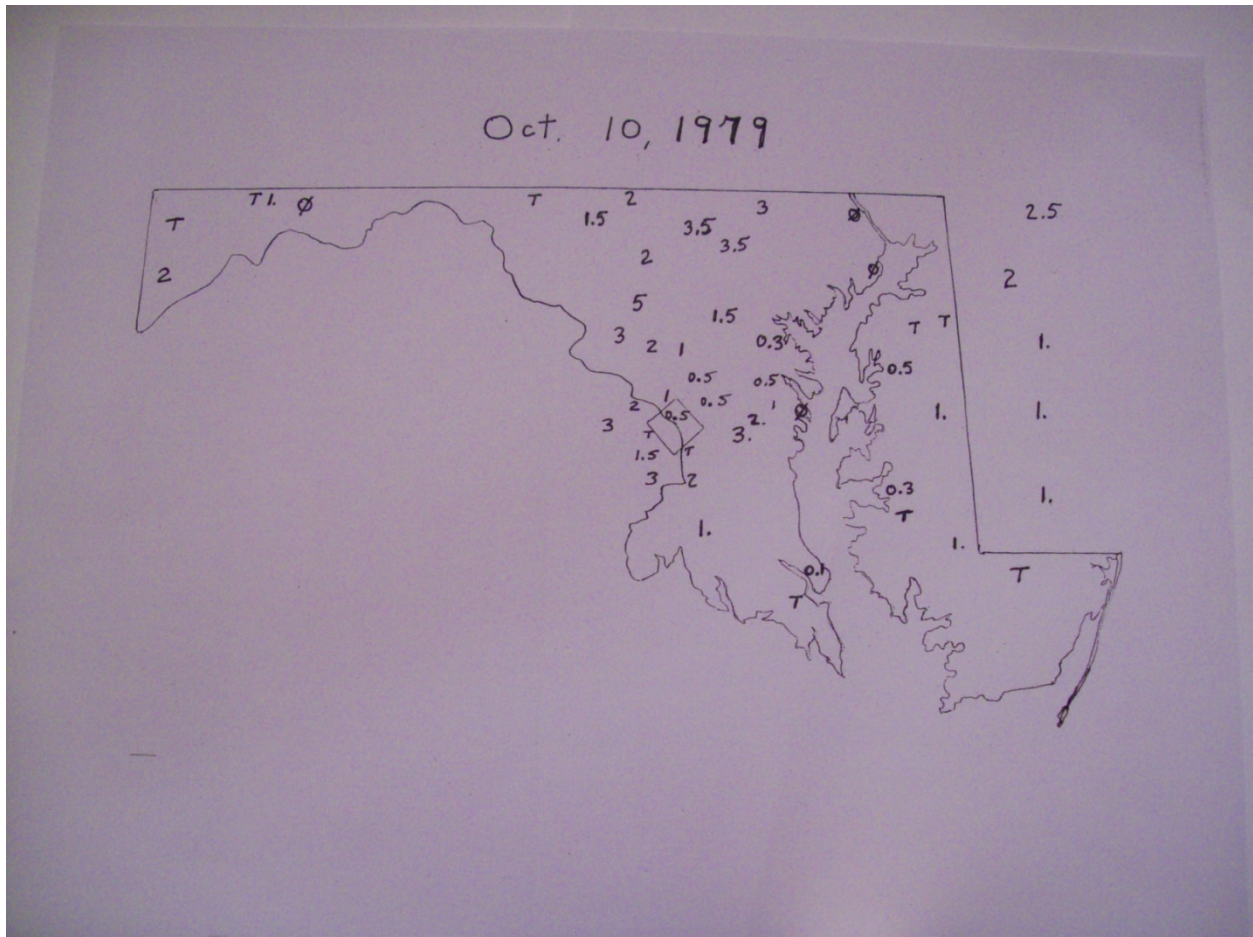


Figure 3 Snowfall Map of Maryland for the Oct. 10, 1979 Snowstorm.

Data provided by NOAA, NCDC and the Metro Climate Review.

Map done by Herb Close, Jr.

Note that even Salisbury and Patuxent NAS in southern Maryland had a trace of snow during this storm. Two to five inches snow fell in central and north central Maryland. Damascus, Maryland had five inches of snowfall. In the mountains to the west, up to a foot of snow fell with many trees and power lines down in parts of West Virginia, Virginia and Maryland. Even in areas east of the mountains there were some down trees and power lines.

That record of 3.5" snow at Finksburg 2NW still holds because only 2.0" snow fell during the October 2011 snowstorm. Plus this snowfall came much later in the month. Much of their snow melted as it fell in this last October snowstorm and they live just ten miles south of my house. The elevation at my parent's house is 660 ft.

Ray Muller in Reisterstown about 6 miles SE of my parents house reported 3.6" snowfall on Oct. 29, 2011 but his elevation is a little higher than my parents location. That would explain his higher snowfall amount.

Because temperatures stayed above freezing at lower elevations and locations to the south and east, this 2011 storm was not the biggest October snowstorm for those locations. For some, the October 10, 1979 storm is still the record snowstorm.

OCTOBER 10 - EARLIEST MEASURABLE SNOW IN HISTORY, POWER FAILURES

Temperatures continued dropping and rain continued falling after midnight (see text for October 8-9). Davidson (station 247A east of Rockville) stated "Rain became mixed with snow around 4 am with the temperature plummeting to 32 by 5 am. Rain again by 7:45, but became mixed with snow at 9:15 again. Gradually became all snow by 10 am with temp holding at 32°. Snowed moderate to occasionally heavy for two hours, accumulating 1/2 to 3/4 inch on some lawns and cars. Began to look a little like Christmas. Turned to all rain at noon after a finale of very huge flakes. Melted by evening with a maximum temperature of 37 all day." Hogan (467) and others reported a similar sequence of rain/snow events. Gajary (256) reported a "Thunderstorm with snow and rain mixed at 9 am, was the first time that a combination of these occurred here since February 2, 1976." Windolph (116) reported an inch of snow accumulating on the ground by 9 am, with Seneca Creek flooding for the second time in less than two weeks. Munro (675), Gervase (770), Shaver (674), and Callicott (771) were among those reporting thunder around 9 am, huge snow flakes (1.5" wide, said Munro) and accumulations of two inches or more. Others reporting thunder were Hudelson (591), Ewing (720), Opredek (781), Cavanaugh (795), Stowe (829A), Best (838), Staunton (900), Carpenter (955), Claggett (959), Bornemann (971A), and Mather (1040). (Continued on page 12)

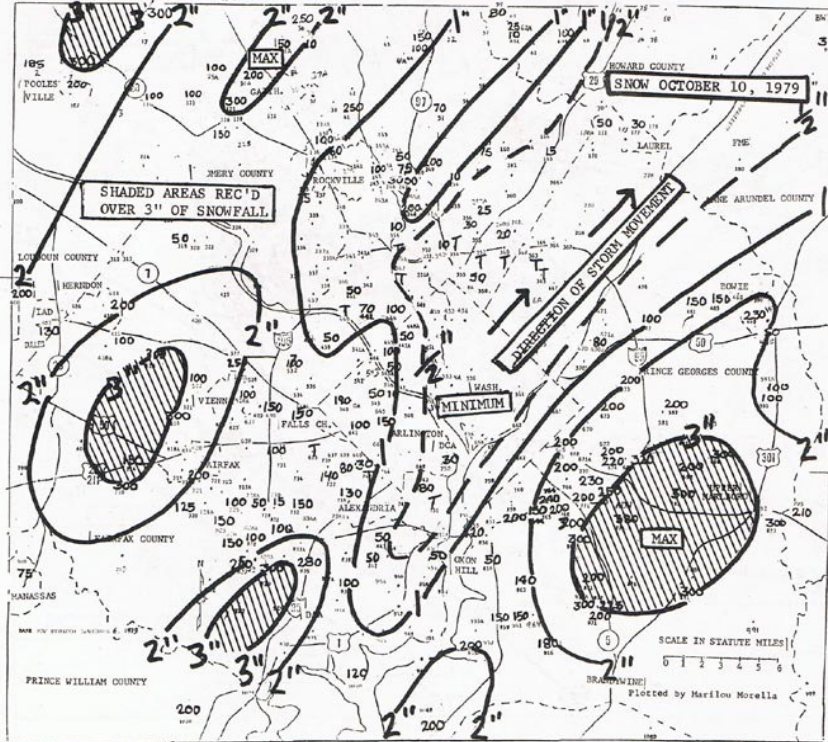


Figure 4 Metro Climate Review, page 9, October 10, 1979 snowfall amounts in the Washington, D.C. area.

OCTOBER 10, 1979 - Continued from page 9

Snow depths ranged from a trace (where all the snow melted as it fell) to three inches in the southeastern suburbs and parts of northern Virginia. Normally, the heavier amounts are in the higher elevations of the northern and western suburbs. In this case, however, the larger amounts in the southeast are attributable to the heaviest snow falling when temperatures were coldest, which was also the time when thunder was reported in the southeastern suburbs.

Power failures were rather widespread. Hudelson (591) lost power for six hours "due to snow-laden branches falling on power lines." Lucchesi (672) lost power from 5:45 to 10:55 am. Pines had a 5-hour power failure, Mathers (630) six hours, and Whitehurst (522A) about 5 hours. Whitehurst also stated "Power transformers were blowing out everywhere - tree branches broken everywhere from the weight of the snow."

Cavanaugh (795) observed thunder, snow, ice pellets and rain all at the same time (9:13 am).

#### NEW DULLES AIRPORT RECORDS

Dulles reported the following new record temperatures: October 10th, low maximum 44° (old record 55 in 1964). October 15, minimum 30 (old record 33 in 1976). Maximum 85 on the 22d (old record 81, set last year). The October 10th snowfall set a new total snowfall and 24-hour record for the month of October (1.3"), and was the earliest snowfall of record.

**Figure 5 Metro Climate Review, Oct 10, 1979. Provided by Lowell L. Koontz.**

This information from the Metro Climate Review was provided to me by Caroline at the NOAA Central Library, Kevin Shaw of ACON, and Lowell L. Koontz. Thanks to all of you for your help on my research project.

# THE EVENING SUN

PHONE 637-3736

HANOVER, PA. WEDNESDAY, OCTOBER 10, 1979 Section A

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Oct. 7-13, 1979



**EARLY FALL SNOWFALL** — The date is Oct. 10, 1979, and not 1777 as the heavy wet snow drifting on the auto's rear windshield may seem to appear. Residents this morning were treated to

the early fall snowfall which continued through most of the morning, accumulating on cool surfaces. (Evening Sun Photo)

## Snowfall Takes Us By Surprise

By **GEORGE WEIGEL**  
Sun Reporter

Caught by surprise, Hanover area residents awoke this morning to find one of the earliest snowfalls of the year in some time.

Although the weather had been expected to get colder, and rainy conditions were present, weather forecasters still were not expecting snow to form this far to the south or in these lower altitudes.

The steady rains that fell throughout Tuesday continued into the night, and as the temperature dropped towards morning, the raindrops began taking the form of flakes. By approximately 7 a.m., the rain had changed to wet snow, which coated rooftops and grass fields.

Forecasters said the Hanover area could receive as much as two inches of snow in certain areas before the system moves off the East coast later today.

Wednesday's forecast had

called for some snow flurries in higher elevations to the north of Hanover. But when a low pressure wave formed in North Carolina, overcast conditions here stayed around long enough to meet with a large wave of arctic air that came from the northwest.

Precipitation since 7 a.m. Tuesday amounted to nearly 1.2 inches by 7 a.m. today. The temperature also dropped below the freezing mark for the first time this fall. At 7 a.m., the reading was 30 degrees, but by 10 a.m., the mercury had dipped another two degrees to 28.

Temperatures were expected to rise later this afternoon when the system was to move eastward. Thursday afternoon and evening will show clearing conditions, say the weather forecasters, and the sun may even show through a bit.

Conditions are to remain partly cloudy and cold Friday and Saturday, although no more white stuff is foreseen.

Sidewalks and roads remained warm enough to melt the snow, but some slippery road conditions were reported,

especially on back roads in Adams County area. Gettysburg the front came from the giving that area an extra for the slush to accumulate.

Snowy conditions were worse in some areas south of Hanover, as the Westinghouse area received some four inches of snow, resulting in a power outage from snow on power lines.

No similar problems reported in this area as of this morning.

Figure 6 Front page of The Evening Sun at Hanover, Pa on October 10, 1979.

# Snow in October? Don't be funny

By PAUL DAUGHERTY  
Times Staff Writer

We were lucky it didn't stick.

County and municipal crews were caught completely off guard this week by a freak snow storm which dumped three inches of snow on the county between 4 a.m. and 2 p.m. Wednesday. Local weather observer Larry Myers said Wednesday that it was the earliest date a measurable amount of snow had ever fallen in the county, topping the previous mark of 2.5 inches set October 19, 1972.

County roads spokesman Jay Nave said that the county's snow removal and salt spreading equipment would not have been able to operate Wednesday. He said that the county had not received this winter's supply of salt and cinders, but that it had a sufficient supply of those materials left over from last year ready to use Wednesday.

The towns were unequally as unprepared. "If you had told me yesterday that it was going to snow today, I would have laughed in your face," said Carman Lynch, assistant public works director in Westminster. Like the county, Westminster had a supply of cinders ready to be spread should the need have arisen, but the city's snow removal equipment was not ready.

Problems were the same in Man-

chester and Taneytown. Neither municipality had snow removal equipment ready. Manchester had a small amount of salt remaining from last year, Mayor Phillip R. Miller said, but Taneytown, which gets its salt from the county, was left empty handed.

The snow did not accumulate on the roads. The storm's greatest damage was caused by fallen trees, which blocked roads and knocked down numerous power lines throughout the county. County roads spokesman said that 39 roads were closed Wednesday due to downed trees, and flooding closed Mayberry Road and several small roads in Detour.

Frank Wanken, a spokesman for Baltimore Gas & Electric, said yesterday that Carroll was the hardest hit region in BG&E's service area. He said that 19,000 homes in the county had been without power at some point Wednesday, and as of noon yesterday, 2,000 homes were still without electricity. Wanken said he was receiving 200 calls an hour yesterday from people without power, and that the company had already given away three tons of dry ice to families affected by the power outage, for food preservation.

County public schools also closed two hours early Wednesday due to the snow, and more than 10 schools in Carroll were without electricity for at least part of the day.



The snow made this farm along Md. 97 look like a scene fr

Here's why  
it happened

Figure 7 Carroll County Times. October 12, 1979.

ready.  
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Oct. 11, 1979.

# Here's why it happened

## A Times Staff Report

Wednesday's unexpected snow storm was caused by a classic meeting of a cold front and a low pressure system, according to spokesmen for the National Weather Service station at Baltimore-Washington International Airport.

Forecasters there said a moisture-laden low pressure system developed in the Carolinas early Tuesday, and moved north.

At almost the same time, a large mass of icy Canadian air moved into the state, dropping surface

temperatures to the low 40's by Tuesday night, and plunging temperatures aloft to below freezing.

When the two weather systems collided, the result was inevitable, forecasters said: snow. And lots of it.

Parts of West Virginia were covered with nearly a foot, and the mountainous areas of Virginia and North Carolina were hit with between eight and 10 inches.

The largest amount of snowfall in Maryland was six inches in Garrett County.

Figure 8 Carroll County Times. October 11, 1979.

Oct. 11, 1979

## Century' Earliest Snowfall Dissipates

The earliest snowfall this century disappeared from the Hanover area Wednesday just as quickly as it came.

By mid-afternoon, all traces of the surprise snow were gone, leaving behind nothing more than a few wet roads and an extra third of an inch of precipitation.

Weather forecasters estimate that between two and three inches of snow fell on Hanover, but one report estimates that more than four inches fell in some areas.

Although the snow caught everyone by surprise, no serious problems resulted from the storm in the Hanover area. There were some downed lines in parts of Adams County. Roads stayed warm enough to melt the snow as fast as it was falling.

### Heavier Elsewhere

Parts of Virginia, West Virginia and Maryland did not fare as well as this area. Some 13 inches of snow were dumped in portions of Virginia, and apple growers there were checking today to determine whether the snow and near-freezing temperatures had damaged their crops.

Some six inches of snow fell in parts of Maryland, knocking out power to 90,000 electric customers. Overall, more than 350,000 customers lost electrical power in five states from snow- and leaf-covered limbs falling on lines.

According to the National Weather Service, the last time snow fell this early in the year was back on Oct. 9, 1895, but even that did not amount to much. The earliest measurable snowstorm on record before Wednesday was on Oct. 19, 1940 when just more than an inch-and-a-half fell.

### Temperature Record

Low temperatures also set records across the state. Wednesday's high in Philadelphia and Hanover got up to just 42 degrees, which is the lowest maximum temperature since the 45 degrees recorded in 1925.

The low pressure system that caused the snow Wednesday has moved off into the Atlantic Ocean, but the cold air flow from Canada was to continue breezing through the area keeping temperatures a bit lower than normal.

November-like weather was expected to last until at least Saturday, when the first signs of any kind of extended warming spell are foreseen. Today's high was expected to be in the mid 50s, but overnight lows are expected to dip back into the mid 30s.

A chance of showers were in the forecast for Friday again, with clearing skies Saturday.

The system that began as rain Tuesday morning and ended as flurries early Wednesday afternoon accounted for a total of 1.42 inches of precipitation.

Figure 9 Carroll County Times. October 11, 1979.





# Snow Catches County Unprepared

10/10/79  
cc

WESTMINSTER—If it snows again tonight, don't call the county roads department. The roads department isn't ready.

The county commissioners reacted to that news Tuesday morning by voting unanimously to fire Charles R. Warfield, chief of the division of vehicle maintenance and motor pool.

"That doesn't solve the problem," Steven Hudgins, acting director of public works, pointed out.

"No, but it's sure as hell a step in the right direction," responded county commissioner Louis B. Scharon.

Thirty spreaders which were taken off the trucks last spring have never been cleaned, Elbert Koontz, chief of the division of roads maintenance, reported. The spreaders should have been washed down to get the salt off and oiled when they were taken

off the trucks, Koontz said. Otherwise, the salt eats into the metal, he explained.

Bearings should have been flushed out to get rid of the salt and greased, according to Koontz. When the bearings are put in, "they'll all fly off because they haven't been greased," he added.

Koontz said he had made at least 12 requests to have the equipment cleaned during the summer. The county commissioners were also informed of

the problem, he added.

Maintenance crews have to maintain all the shop equipment during the summer, but should have been able to work the spreaders in between other jobs, Koontz said. In past years, with other supervision, the job has always been done, he added.

The roads maintenance division chief estimated that the equipment could be prepared for this winter in a few days if all the mechanics went to work on it. The county has five or six

maintenance men on day shift, an equal number at night.

The snowplow blades should have the rust scraped off, Koontz said.

What would happen if it snowed or sleeted tonight? Scharon asked. "It would be no use even calling us," replied Benton Watson, supervisor of highway maintenance.

Warfield did not respond to requests from The Carroll County Evening Sun for information.

## Weather Outlook

State of weather — Snowing.  
Wind direction — West.  
24-hour precipitation — 1.16 inches.  
Temperature 7 a.m. — 30.  
Low previous 24 hours — 30.  
High previous 24 hours — 61.  
Low year ago — 30.  
High year ago — 61.  
Weather year ago — Clear.

### Miniature Almanac

Sun rises Thursday — 7:13 a.m.  
Sun sets today — 6:37 p.m.  
Last Quarter — Oct. 12.  
New Moon — Oct. 20.  
York-Adams Area — Partly

cloudy and cold tonight, lows 35 to 40. Mostly sunny Thursday, highs in the mid to upper 50s. Precipitation probability 20 percent tonight and 10 percent Thursday. Winds northerly five to 10 miles per hour.

### Three-Day Forecast

Eastern Pennsylvania — Partly cloudy and cold Friday and Saturday. Lows in the 30s and highs in the upper 40s and 50s. Some moderation and chance of rain Sunday. Lows in the 40s and highs in the upper 50s to mid 60s.

## FORECAST

Until Thursday



Figure 10 Carroll County Times. Oct. 10, 1979.

## STORM DATA AND UNUSUAL V

| PLACE                                | DATE | TIME - LOCAL STANDARD | LENGTH OF PATH (MILES) | WIDTH OF PATH (YARDS) | NO. OF PERSONS   |         | ESTIMATED DAMAGE |       | CHARACTER OF STORM          |
|--------------------------------------|------|-----------------------|------------------------|-----------------------|--|---------|------------------|-------|-----------------------------|
|                                      |      |                       |                        |                       | KILLED   | INJURED | PROPERTY         | CROPS |                             |
| MAINE (continued)                    |      |                       |                        |                       |  |         |                  |       |                             |
| New Meadows River, Cumberland County | 7    | 5:44 p                |                        |                       | 2  | 0       | 0                | 0     | Lightning                   |
|                                      |      |                       |                        |                       | Lightning killed a father and son who were working in a 14-foot open skiff. The accident occurred about one-quarter mile offshore in the basin section of the New Meadows River between Phippsburg and Cundy's Harbor.   |         |                  |       |                             |
| Mechanic Falls, Androscoggin County  | 24   | 3:30p                 |                        |                       | 0  | 0       | 2                | 0     | Lightning                   |
|                                      |      |                       |                        |                       | Lightning hit tree and house. Damaged three clocks, five panes of glass around front door and two cellar windows.  |         |                  |       |                             |
| MARYLAND & D.C.                      |      |                       |                        |                       |  |         |                  |       |                             |
| Central                              | 1    | Early AM              |                        |                       | 0  | 0       | 3                | 0     | Rain                        |
|                                      |      |                       |                        |                       | Up to 3 inches of rain caused several roads to be closed in Frederick, Carroll and Howard Counties. Some families were forced to evacuate in the Marriottsville and Elkridge sections of Howard County.  |         |                  |       |                             |
| Harford County and Baltimore City    | 5    | 11:30 a               |                        |                       | 0  | 1       | 5                | 0     | Wind, Lightning             |
|                                      |      |                       |                        |                       | A cold front initiated intense thunderstorm activity in the area with localized strong winds causing damage, especially in the south-east section of Baltimore. Several homes and businesses reported broken windows and some structural damage. A small car was turned upside-down, the driver receiving a fractured shoulder. Elsewhere in the area an unoccupied tractor-trailer was blown over. Shortly after lightning struck 10 insulators of an overhead power line, causing a delay of two and a half hours in Amtrak service between Washington, D.C. and Wilmington, Delaware.                   |         |                  |       |                             |
| Statewide and District of Columbia   | 10   | Early AM-Afternoon    |                        |                       | 0  | 0       | 5                | 0     | Snow                        |
|                                      |      |                       |                        |                       | Unusually early snowfall in some sections the earliest on record. The heavy, wet snow accumulated 4 to 6 inches over portions of Frederick, Montgomery and Carroll Counties, with 1 to 2 inches common elsewhere. Buildup on fully leafed trees resulted in considerable damage. Trees were pulled to the ground or had limbs snapped off, blocking roads and causing widespread power line breakage. Due lack of electricity many schools over the region had to closed. In the Washington, D.C. area some 72,000 households had power outages in what was the earliest snowfall since October 5th, 1892. |         |                  |       |                             |
| MASSACHUSETTS                        |      |                       |                        |                       |  |         |                  |       |                             |
| Statewide                            | 3    | aftrn.                |                        |                       | 0  | 0       | 6                | 0     | Lightning, heavy rain, wind |

Figure 14 The October 1979 issue of STORM DATA from the NCDC, Asheville, N.C. Data for Maryland & D.C.

# STORM DATA AND UNUSUAL WEATH

| PLACE  | DATE | TIME - LOCAL STANDARD           | LENGTH OF PATH (MILES) | WIDTH OF PATH (YARDS) | NO. OF PERSONS |         | ESTIMATED DAMAGE |       | CHARACTER OF STORM | PLACE   |
|--|------|---------------------------------|------------------------|-----------------------|----------------|---------|------------------|-------|--------------------|---|
|  |      |                                 |                        |                       | KILLED         | INJURED | PROPERTY         | CROPS |                    |   |
| PENNSYLVANIA (continued)   |      |                                 |                        |                       |                |         |                  |       |                    |   |
| EASTERN<br>Southeast Portion of<br>Eastern Penna.  | 10   | 8:00 AM<br>to<br>2:00 PM<br>EDT |                        |                       | 0              | 0       | 4                | 4     | Snow               | TEXAS (cont<br>NORTHERN<br>McLennan County                    |
| <p>The earliest measurable snowfall in over 100 years of record hit Philadelphia with 2.1 inches recorded. This record for early snowfall was likely also true of other locations. Although snow fell over all of the southern half of Eastern Pennsylvania and the Pocono Mountains the most significant snowfall was over the southeast portion. In low lying and built-up areas most of the snow melted as it fell, but on the tops of higher hills and ridges 2 to 3 inches of snow accumulated on the grass, trees and bushes. Since green foliage was still on the trees, the weight of the wet snow brought down many limbs and with them many utility lines. The weight of the snow also damaged unharvested corn crops.</p> |      |                                 |                        |                       |                |         |                  |       |                    |   |
| PENNSYLVANIA<br>WESTERN  |      |                                 |                        | NONE REPORTED         |                |         |                  |       |                    | Western Bosque<br>County<br><br>Gatesville,<br>Coryell County |

Figure 15 The October 1979 issue of STORM DATA from the NCDC in Asheville, N.C. Data for Pennsylvania.

|   | DATE  | TIME<br>STAN | LENGT<br>(MI) | WIDTH<br>(YA) | KILLED | INJURED | PROPERTY | CROPS | OF<br>STORM       | PLACE  | DATE | TIME - LQ<br>STANDARD   | LENGTH OF P.  |
|---|---|--------------|---------------|---------------|--------|---------|----------|-------|-------------------|--|------|---|---|
| <b>NEW YORK<br/>COASTAL</b><br>Extreme Southeast,<br>Nassau, Suffolk Co.<br>Metropolitan Area | 10  | 8a-3p        |               |               | 0      | 0       | ?        | ?     | Snow, Waterspouts | <b>OKLAHOMA (continued)</b><br>Custer County<br>Grant County<br>Waurika,<br>Jefferson County<br>Oklahoma City Area<br>Shawnee,<br>Pottawatomie County<br>Lincoln County<br>Carter County | 17   | early<br>morning  |   |
|   | <p>A cold front mixed with a push of cold Canadian air caused the surprise snowstorm across the Northeastern part of the nation. In Central Park a trace of snow was recorded, it was just the second time that snow had fallen this early in the year. A trace fell on October 10, 1925. Most of the snow melted soon after it touched the ground.</p> <p>The dramatic elements of the storm in the Metropolitan Area were series of waterspouts in New York Harbor, near the Verrazano-Narrows Bridge. They were caused by the clash between the cold Canadian air and the ocean water, which was still at a relatively mild temperature, in the upper 30s.</p> |              |               |               |        |         |          |       |                   |  |      | Hail up to 1 in. The hail was falling at about 2 a.m. injured at the and fell for ab Damage occurred damage between |   |
|   | <p>The dramatic elements of the storm in the Metropolitan Area were series of waterspouts in New York Harbor, near the Verrazano-Narrows Bridge. They were caused by the clash between the cold Canadian air and the ocean water, which was still at a relatively mild temperature, in the upper 30s.</p>   |              |               |               |        |         |          |       |                   |  |      | 21  | 6:30p   |
| <b>NEW YORK<br/>CENTRAL</b><br>ESSEX AND FRANKLIN<br>COUNTIES                                 | 6   | 7P - 10P     |               |               | 0      | 0       | 5        | 0     | WIND              |  | 21   | 7:15p   |   |
|   | <p>WINDS UP TO 70 MPH PICKED UP A PARTIALLY CONSTRUCTED BUILDING IN THE LAKE PLACID AREA AND SCATTERED PIECES OF THE STRUCTURE 200 FEET AWAY. SEVERAL TREES WERE REPORTED DOWNED BY THE STRONG WINDS, ONE OF WHICH FELL ON AN AUTOMOBILE PARKED IN A DRIVEWAY.</p>  |              |               |               |        |         |          |       |                   |  | 21   | evening   | Winds of 50 t area with uno with isolated                                   |
| HUDSON & CHAMPLAIN<br>VALLEYS. CATSKILL &<br>ADIRONDACK MOUNTAIN<br>REGIONS.                  | 10  | 5A - 12P     |               |               | 0      | 0       | 4        |       | SNOWSTORM         |  | 21   | 7:30p   |   |
|   | <p>UP TO 7 1/2 INCHES OF SNOW FELL IN THE AREA WITH THE HIGHEST SNOW AMOUNTS BEING RECORDED IN THE HIGHER ELEVATIONS OF THE SOUTHERN PORTIONS OF THE AREA. MANY AREAS REPORTED POWER OUTAGES AND DOWNED TREE LIMBS DUE TO THE WEIGHT OF THE WET SNOW. MOTORISTS WERE CAUGHT UNPREPARED, WITHOUT SNOW TIRES, RESULTING IN NUMEROUS TRAFFIC ACCIDENTS DUE TO THE SLIPPERY CONDITIONS. MUCH OF THE SNOW TURNED TO RAIN IN THE AFTERNOON.</p>   |              |               |               |        |         |          |       |                   |  | 21   | 8:00p   | At Davenport ground, ripp turned a tra destroyed an ripped away the County. |
| <b>NEW YORK<br/>WESTERN</b>   |   |              |               |               |        |         |          |       | NONE REPORTED     |  | 21   | 8:06p   |   |

Figure 16 The October 1979 issue of STORM DATA from Asheville, N.C. Data for New York state.

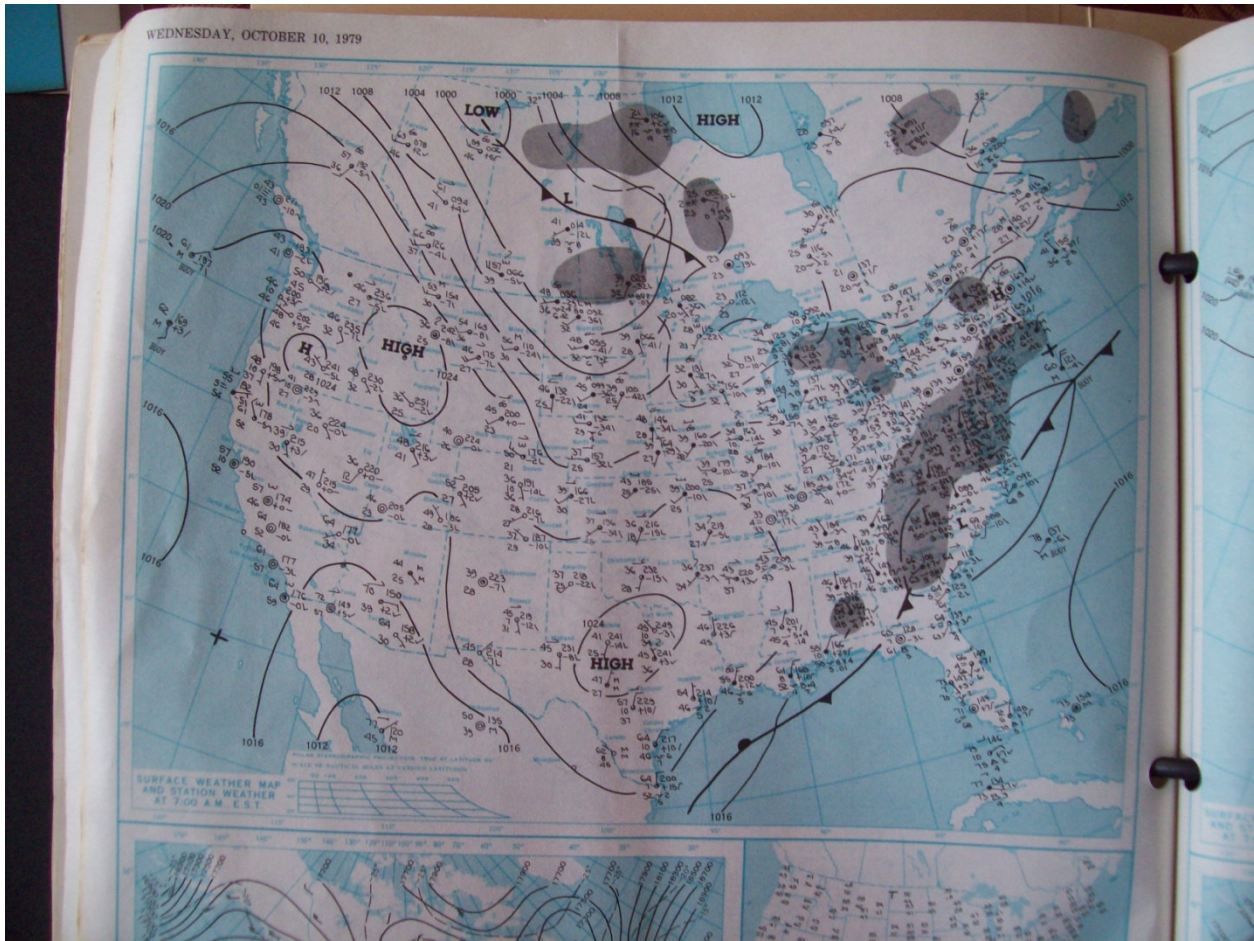


Figure 17 The Daily Weather Map for October 10, 1979. This daily weather map was provided by David Lesher.

NOAA, EDS

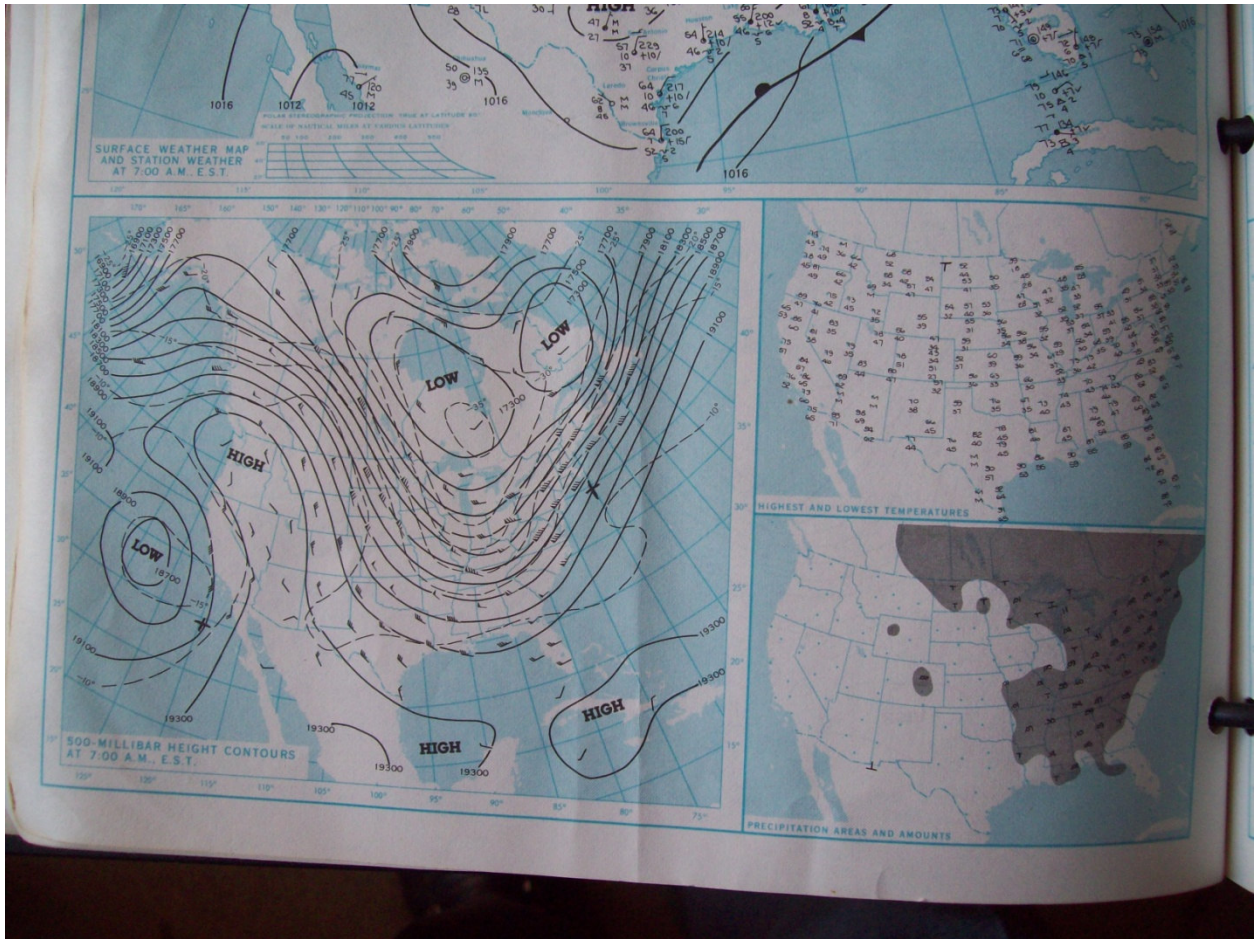


Figure 18 The Daily Weather Map for October 10, 1979. This map is provided by David Lesher.

# **ACKNOWLEDGMENTS**

**I would like to give a special thanks to all those who helped with this report.**

**Thanks to Lowell L. Koontz for all the great information he provided on past October snowstorms. Lowell provided news reports, weather maps, and weather records.**

**Thanks to ACON Coordinator Kevin Shaw for all the snowstorm information on the snowstorms of 2011 and 1979.**

**Thanks to Caroline and the staff of the NOAA Central Library and the Metro Climate Review for the October 10, 1979 snowfall information for the DC metro area.**

**Thanks to Jeff Taylor for Climatological Data on the October 1940 snowstorm.**

**Thanks to David Leshar for all the climatological data that he has supplied me with.**

**Thanks to weather observers Stan Rossen, Marty Brumback, Robert Rickell, and Ray Muller for their help.**

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**Thanks to all the weather observers of ACON, Cocorahs, CO-OP Observers, SKYWARN, National Weather Service, and Emergency Management, and the general public for their snowfall and storm reports.**

**Special thanks to all the staff and offices of the National Oceanic and Atmospheric Administration, National Weather Service, and the Environmental Data Service.**

**NOAA, National Weather Service, Sterling, Va.**

**NOAA, National Weather Service, State College, Pa.**

**NOAA, National Weather Service, Mt. Holly, Pa.**

**NOAA, National Weather Service, New York, NY**

**NOAA, National Weather Service, Binghamton, NY**

**NOAA, National Weather Service, Taunton, MA**

**NOAA, National Weather Service, Portland, Me.**

**NOAA, National Weather Service, Grey, Me.**

**NOAA, National Weather Service, Caribou, Me.**

**NOAA, NWS, STORM PREDICTION CENTER, NORMAN, OK**

**NOAA, NATIONAL CLIMATE DATA CENTER in Asheville, N.C.**

**The American Meteorological Society**

**(NOAA, NATIONAL ENVIRONMENTAL SATELLITE DATA AND INFORMATION SERVICE)  
NOAA ENVIRONMENTAL VISUALIZATION LABORATORY**

**Figure 1 NOAA, NESIS**

**Figure 2 NOAA, NWS, State College, Pa.**

Figure 3 WGAL Channel 8 in Lancaster, Pa.

**Figure 4 Data provided by NOAA, NWS, Sterling, Virginia.**

**Snowfall Amounts**

**NATIONAL WEATHER SERVICE STERLING VA  
NATIONAL WEATHER SERVICE MOUNT HOLLY NJ  
NATIONAL WEATHER SERVICE BINGHAMTON NY  
NATIONAL WEATHER SERVICE NEW YORK NY  
NATIONAL WEATHER SERVICE TAUNTON MA  
NATIONAL WEATHER SERVICE CARIBOU ME**

**CLIMATE REPORT FROM THE NWS AT GRAY, ME**

**AREA FORECAST DISCUSSION  
NATIONAL WEATHER SERVICE STATE COLLEGE PA**

**A report by Matt Daniel of earthsky.org**

**“Unprecedented snowfall hits New England late October 2011”.**

**<http://earthsky.org/earth/unprecedented-snowfall-hits-new-england-late-october-2011>**

Figure 5 GOES Satellite Photo from NOAA

Figure 6 Water vapor image from NOAA GOES Satellite photo

**“ Review of Snow-tober 2011” by NOAA, NWS in Taunton, Massachusetts.**

Figure 7 NOAA, NWS U.S. Map of watches and Warnings.

**[http://www.washingtonpost.com/blogs/capital-weather-gang/post/historic-october-northeast-storm-epic-incredible-downright-ridiculous/2011/10/31/gIQAp7LZM\\_blog.html](http://www.washingtonpost.com/blogs/capital-weather-gang/post/historic-october-northeast-storm-epic-incredible-downright-ridiculous/2011/10/31/gIQAp7LZM_blog.html)**

Figure 8 Visible GOES Satellite photo



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National Centers for Environmental Prediction  
Storm Prediction Center  
120 David L. Boren Blvd.  
Norman, OK 73072 U.S.A.

## **THE WEATHER CHANNEL**

### **WEATHER.COM (The Weather Channel)**

**Special thanks to the media, all the newspapers, broadcast media, and private forecast services, ACCUWEATHER, THE WEATHER CHANNEL, Capital-Weather-Gang of the Washington Post, earthsky.org, and the DC Weather Examiner.**

**Washington Post, Washington, D.C.**

**The Baltimore Sun, Baltimore, Md.**

**The Evening Sun of Hanover, Pa.**

**The Carroll County Section of the Evening Sun in Westminster, Md.**

**The Carroll County Times, Westminster, Md.**

**The New Haven Register, New Haven, Ct.**

**Daily News Record**

**WGAL TV Channel 8 in Lancaster, Pa.**

**FOX 43 News in York, Pa.**

**Thanks to Google for all their help in my research.**

**For further reading on October snowstorms including the historic snowstorm of October 29, 2011 check out the web sites from Google and the World Wide Web. There are many great reports out there including the web sites of the above credits. Check them out!**

**In the months ahead, I hope to do a follow up report on early snowstorms focusing on storms from the 1800s back. I've been continuing my research in old diaries, garden books, journals, weather history books including those by David M. Ludlum. I was hoping to include that information in this report. However this report was quickly becoming too large and this report was taking much longer to finish than I thought it would. I will have to do a second report. There are a number of very interesting October storms that hit the northeast United States in the past. I would like to share those with you.**

**Until then, take care and Happy Holidays!**

**Herbert Close, Jr.**

1979-02-17

1979-02-20

The President's Day Storm I

This storm shutdown Washington DC, Baltimore, Philadelphia and New York City with over a foot of snow. Heavy snow blanketed the mid-Atlantic from North Carolina to southern New York. Dover, DE reported 25 inches and Baltimore, MD received 20 inches. Washington D.C. wasn't far behind with almost 19 inches and even Richmond, VA reported 11 inches of snow. This storm registered as a Cat 4 for the Southeast Region and a Cat 1 in the Northeast and Ohio Valley Regions. (Kocin and Uccellini)

February 18-19, 1979: "The Presidents Day Storm" was considered the worst storm in 57 years to strike Northern Virginia. Snow depths from the storm ranged from 6 to 8 inches southwest and southeast, 8 to 14 inches in the piedmont from south-central Virginia through central Virginia (Richmond reported 11 inches), and up to 20 inches over Northern Virginia. At times, snow was falling 2 to 3 inches per hour and temperatures were in the single digits to teens. Huge tractors and other farm machinery had been driven to the Mall in Washington, D.C. to protest for higher agricultural pricing. When the storm hit, the farmers used their equipment to help locals dig out of nearly two feet. Four deaths were attributed to heart attacks from stress due to overexertion during and after the storm, and 18 injuries occurred from falls on ice. Temperatures across the state were very cold (single digits in the north) when the snow began making the storm similar to the February 1899 storm. Even Norfolk got 7 inches before changing to rain and recorded nearly 13 inches of snow for the month.

## The Presidents' Day Snowstorm of 1979

On February 18, 1979 a small, but intense low-pressure system "exploded" near Cape Hatteras, North Carolina and moved slowly up the coast. Snow began to fall in the District during the afternoon on February 18. On the morning of February 19 (Washington's Birthday), Washingtonians awoke to the biggest snowfall since the Knickerbocker Snowstorm of 1922. National Airport received 18.7 inches of snow, while up to 26 inches of snow buried the eastern suburbs. With 6 inches of snow on the ground before the storm, the snow cover in the Washington area ranged from 24 to 30 inches.

In the days preceding the storm, a bitter cold Arctic air mass had brought the coldest weather of the season to the Washington area, with highs in the teens and lows in the single digits. By February 18, a massive high-pressure system settled in over New York State. It was so expansive that its chilling influence was felt to the Gulf of Mexico.

Forecasters believed the storm would move south of Washington and out to sea, only grazing the area with a light snow of 1 to 3 inches. However, the storm intensified and moved north-northeast up the coast. As snow piled up across the Washington area, snowfall forecasts were updated frequently to

---

**A woman throws a snowball at a friend who digs out a car in the 4400 block of MacArthur Boulevard NW, February 21, 1979.** A snowfall of 18.7 inches on February 18-19, 1979 gave Washington its second largest snow on record. *Copyright Washington Post; Reprinted by permission of the D.C. Public Library*



**A classic Georgetown snow scene on Wisconsin Avenue after the Presidents' Day Snowstorm, February 19, 1979.** A series of snowstorms dropped 30.6 inches of snow in Washington during a two-week period from February 6 to February 20, 1979. *Copyright Washington Post; Reprinted by permission of the D.C. Public Library*



**Sailboats locked in ice and snow in Annapolis, Maryland after the Presidents' Day Snowstorm, February 19, 1979.** Two weeks of very cold temperatures had frozen portions of the harbor before the snowstorm dumped over twenty inches of snow on Annapolis. *Copyright Washington Post; Reprinted by permission of the D.C. Public Library*



**Navigating through a sea of snow in Washington, February 20, 1979.** Very heavy snowfall rates occurred during the Presidents' Day Snowstorm, with 4 inches of snow falling in one hour at Dulles Airport and 10 inches of snow falling in three hours in Baltimore, Maryland.

*Copyright Washington Post; Reprinted by permission of the D.C. Public Library*



**Floral Street in Washington after the Presidents' Day Snowstorm, February 19, 1979.** A very intense snowstorm hit Washington, starting on the afternoon of February 19, 1979 and lasting through the morning of February 20, 1979. The snowfall at National Airport measured 18.7 inches. The heaviest accumulations were to the east of the city, with 20 inches of snow falling in Baltimore, Maryland and 22 inches falling in Upper Marlboro, Maryland . *Copyright Washington Post: Reprinted by permission of the D.C. Public Library*

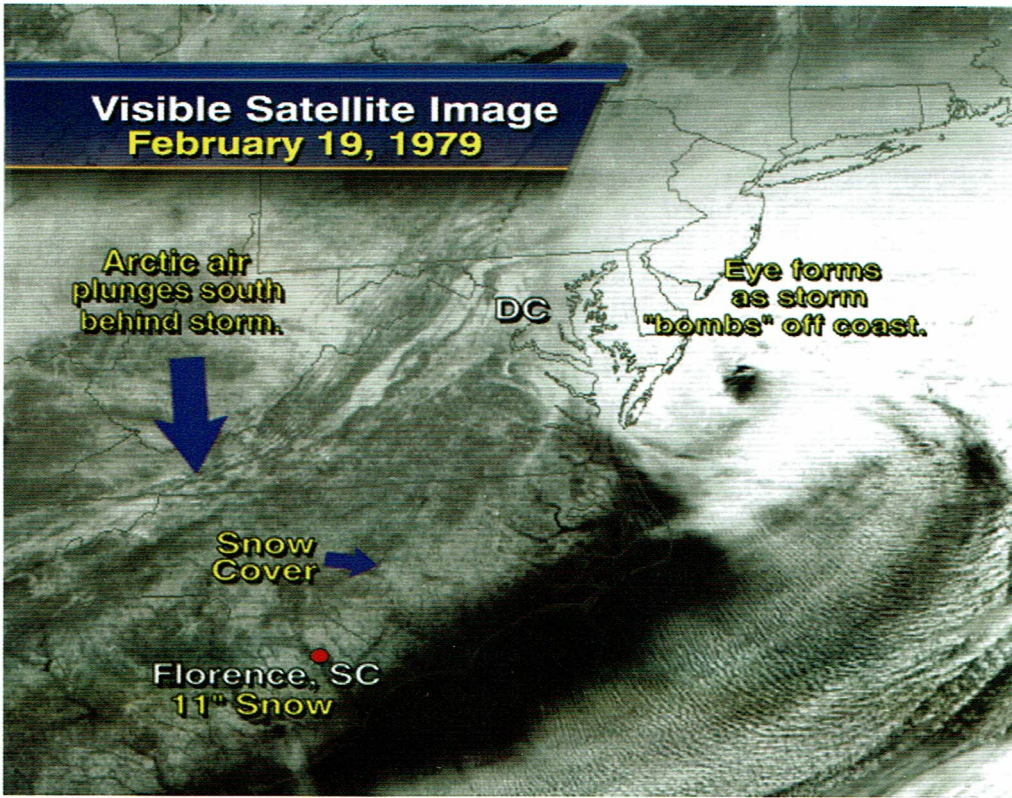


**Snowmobiles in Georgetown after the Presidents' Day Snowstorm, February 19, 1979.**

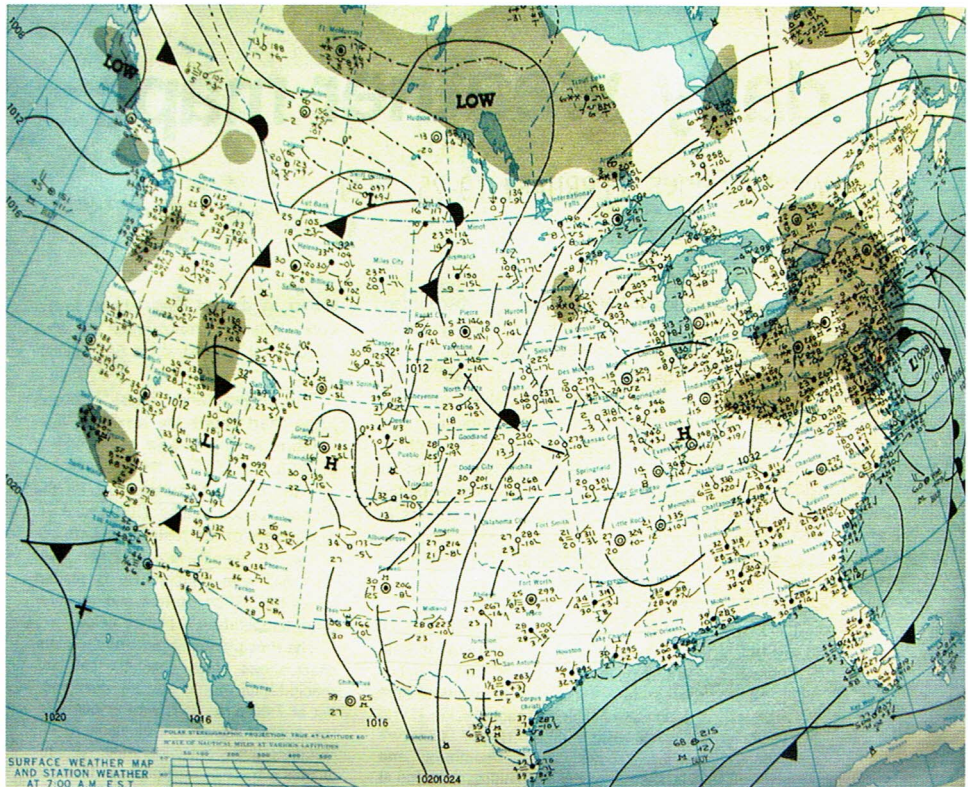
Two weeks of extremely cold weather preceded the snowstorm, culminating on February 18 with a high temperature of 15°F and a low temperature of 6°F. Warmer weather followed the storm and the snow quickly melted from roadways. *Copyright Washington Post: Reprinted by permission of the D.C. Public Library*



## Visible Satellite Image February 19, 1979



The visible satellite image shows that the Presidents' Day Storm has developed a well-defined eye, February 19, 1979. The storm quickly intensified off of the Middle Atlantic coast.  
NOAA Library



The surface weather map for February 19, 1979. The storm tracked out to sea, sparing Northeast cities from the heavy snowfall accumulations that occurred in the Middle Atlantic region. NOAA Library.

catch up with the rapidly increasing accumulations. By the morning of February 19, the forecast totals matched the actual snowfall amounts, but by that time the storm was winding down. National Airport received 18.7 inches of snow and Dulles Airport received 16.3 inches of snow.

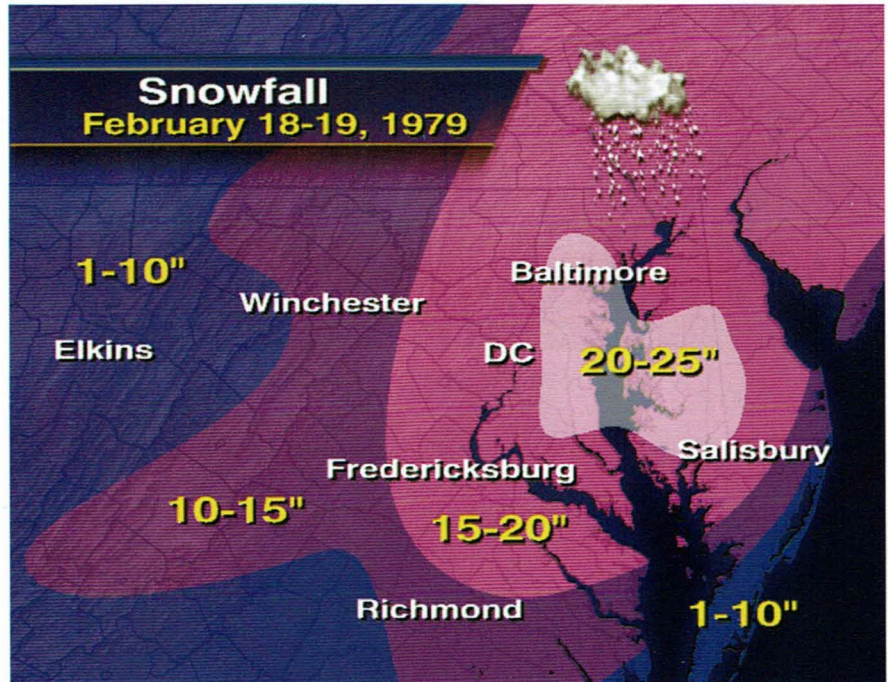
Washington was paralyzed by the snowstorm. Coincidentally, U.S. farmers were in D.C. protesting for higher wages. They used their tractors to help city officials with snow removal. They also pulled cars out of snowbanks, cleared entrances to hospitals and fire departments and plowed parking lots. Farmers expanded their efforts to the suburbs and even delivered medication to snow-bound individuals.

Soon after the storm, temperatures moderated and the snow began to slowly melt. However, many school systems remained closed the entire week.

air was invading the D.C. area, a second storm center took shape over the Carolinas. A chilly rain broke out that evening and continued all night. By midnight, the temperature had fallen to 50°F.

The relentless drop of the mercury continued during the predawn hours and many people in the northern and western suburbs awoke to see snow falling. During the early morning, a burst of 1-3 inches of snow fell in central and northern Montgomery County and a coating of snow accumulated in Fairfax and lower Montgomery County.

The precipitation tapered off for a while in

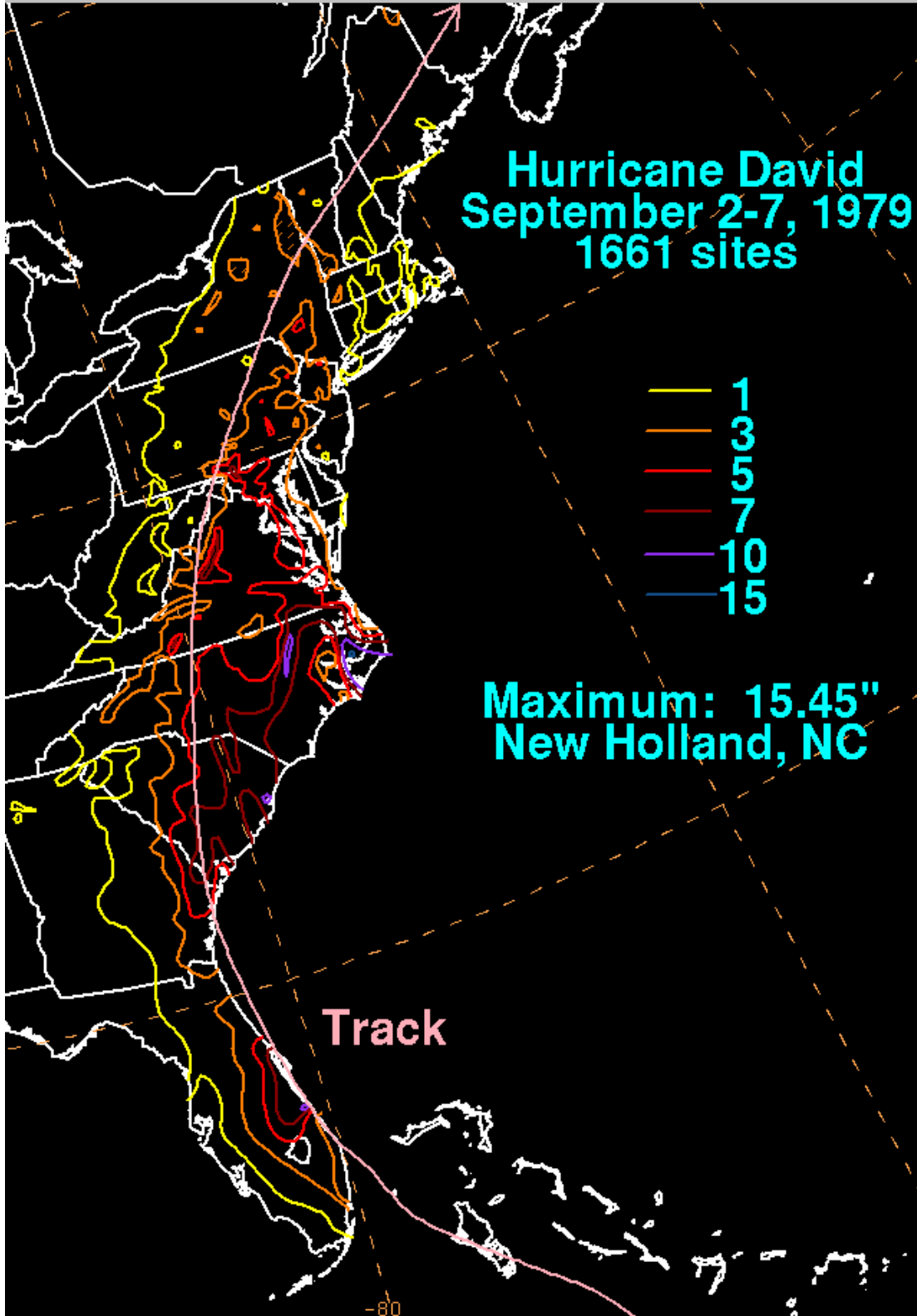


**Hurricane David**  
**September 2-7, 1979**  
**1661 sites**



**Maximum: 15.45"**  
**New Holland, NC**

**Track**



# Hurricane David

Dates: 08/25 - 09/08 1979

Maximum Wind Speed: 175 mph

Minimum Pressure: 924 mb

US Landfall Category: Category 2 Hurricane

Deaths: 2068

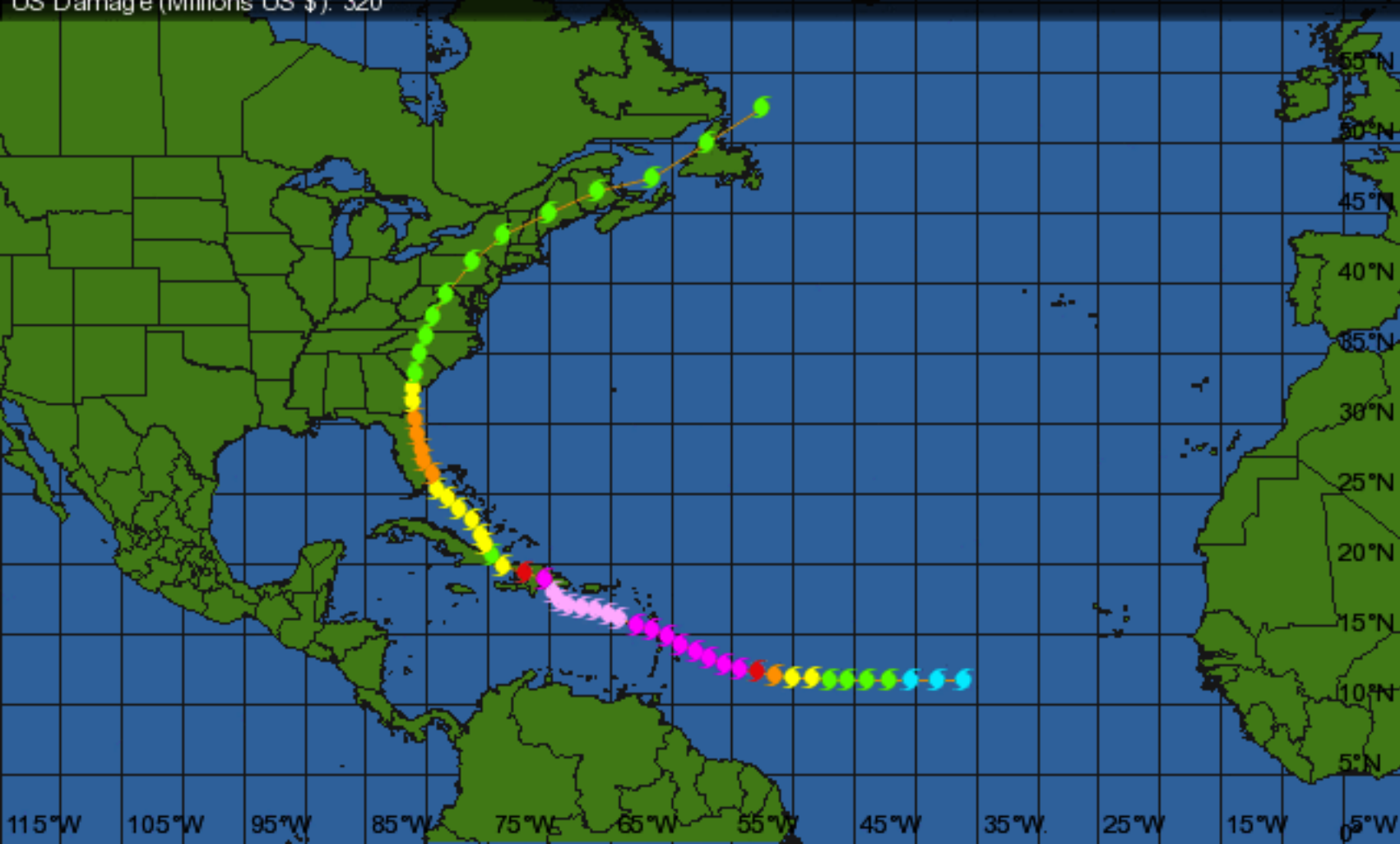
US Damage (Millions US \$): 320

## Storm Category



Weather Underground®  
wunderground.com

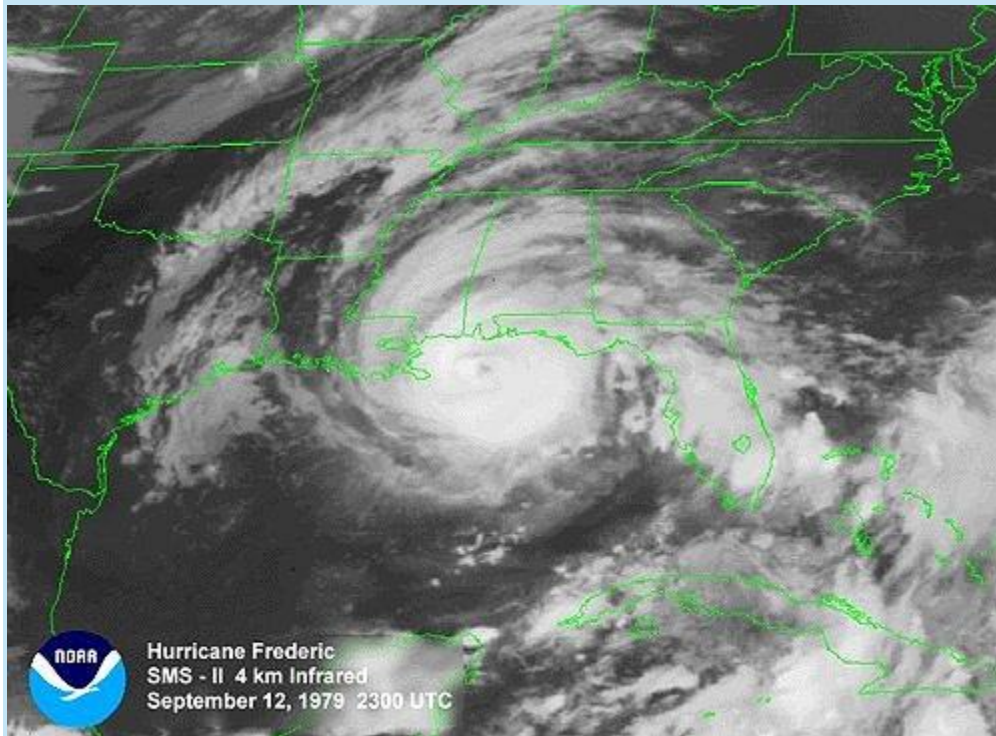
| Tropical Depression | Tropical Storm | Category 1 | Category 2 | Category 3  | Category 4  | Category 5 |
|---------------------|----------------|------------|------------|-------------|-------------|------------|
| < 39 mph            | 39-73 mph      | 74-95 mph  | 96-110 mph | 111-130 mph | 131-155 mph | 156+ mph   |



# Hurricane Frederic - September 12, 1979

[Weather.gov](#) > [Mobile/Pensacola](#) > Hurricane Frederic - September 12, 1979

## Hurricane Frederic *September 12, 1979*



Frederic formed on August 29 as a tropical depression over the far eastern Atlantic and became a hurricane on September 10 over the Gulf of Mexico.

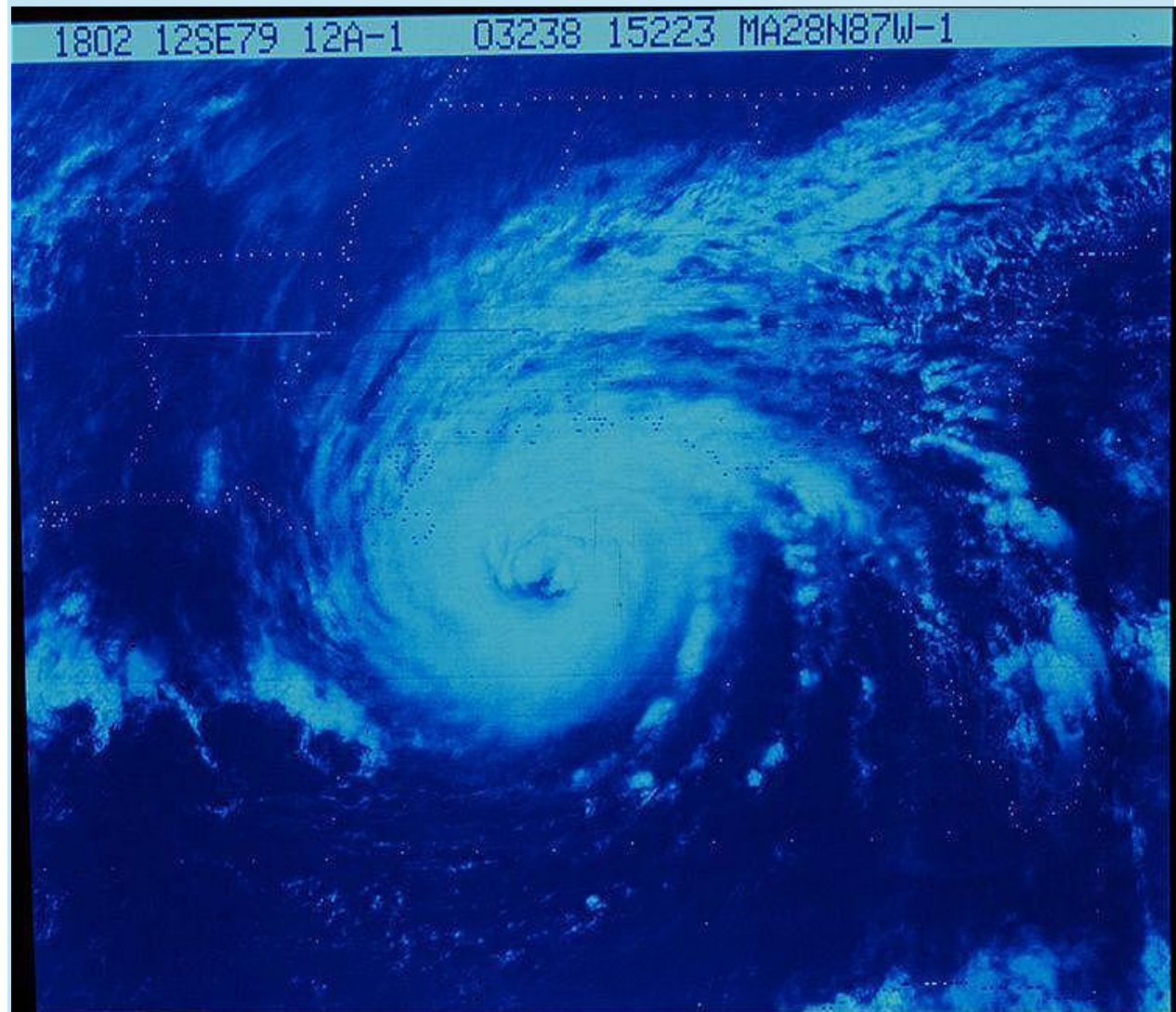
Hurricane Frederic strengthened to a Category 4 hurricane over the central Gulf of Mexico with maximum sustained winds near 132 mph.

On Wednesday, September 12, 1979 at 5am, the NWS issued Hurricane Warnings from Panama City, FL to Grand Isle, LA. Frederic continued to strengthen with highest winds estimated at 130mph and central pressure of 28.05 inches of mercury. Frederic continued moving northwest with a slightly increased forward speed at 12mph located about 220 miles south of the Alabama Coast. Hurricane Frederic was expected to produce a storm surge of 10-15 feet above normal in the area where the center made landfall.

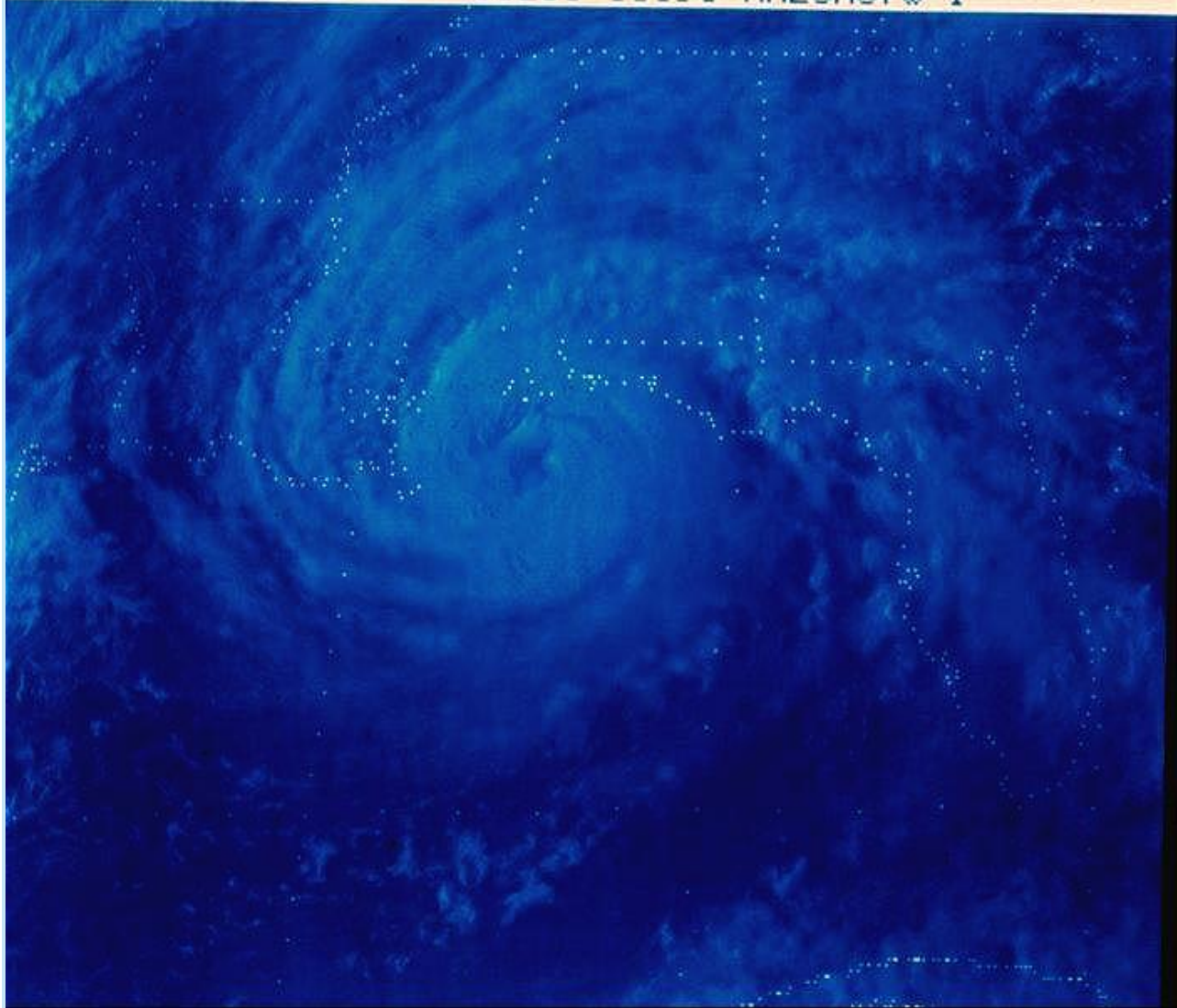
By 11am on September 12, Frederic was located 175 miles south

of Pensacola moving north-northwest at 12-15 mph. The diameter of the hurricane eye was reported to be about 10 miles. Reports from hurricane hunter reconnaissance aircraft and coastal weather radar networks indicated the eye of Frederic would cross the coast between Gulfport, MS and Pensacola, FL. Evacuation of the Gulf Coast was nearing completion at that time.

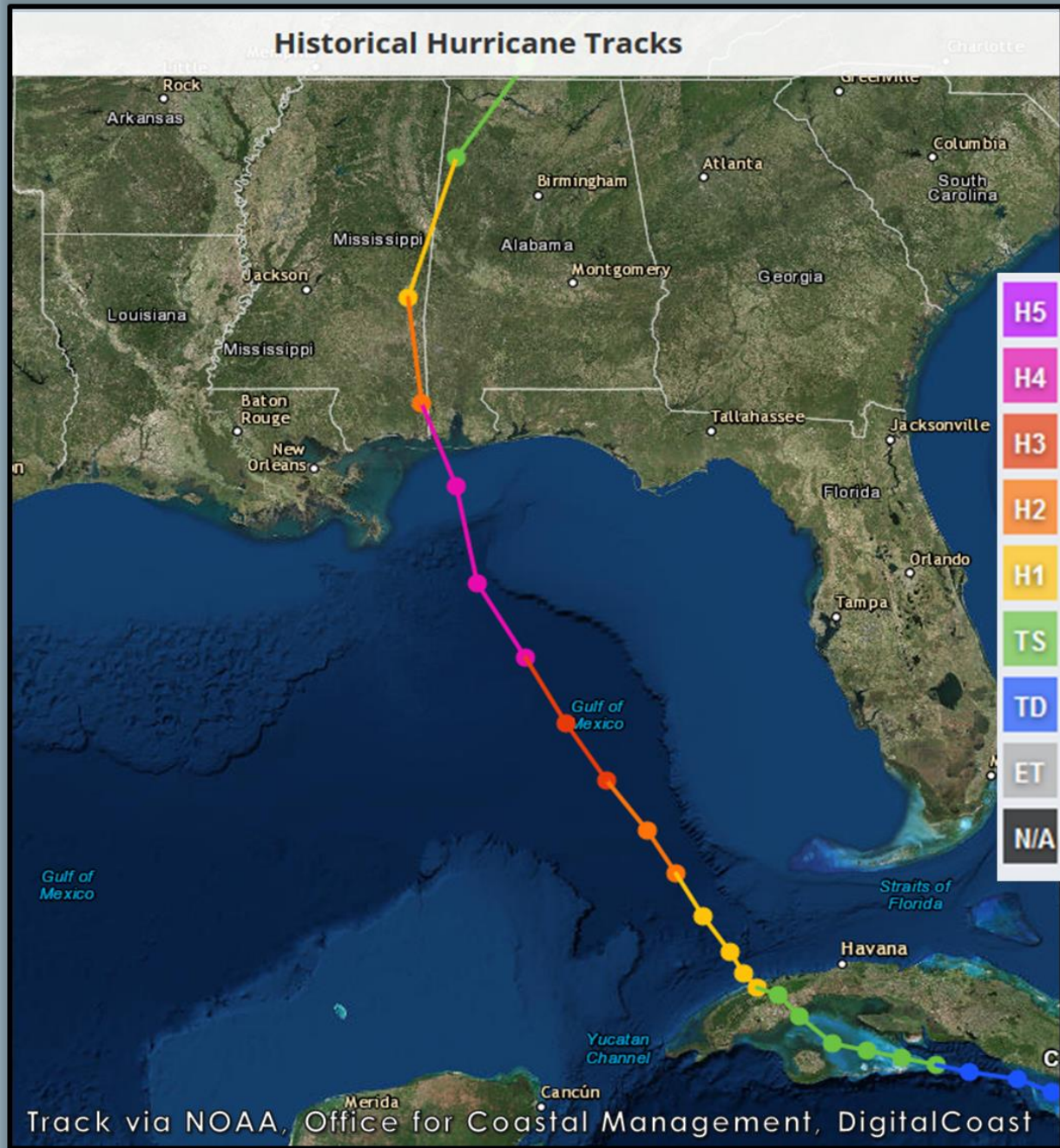
By 5pm on September 12, the center of Hurricane Frederic was about 80 miles south of Gulf Shores, AL moving north at 15 mph.



2201 12SE79 12A-1 03238 15193 MA28N87W-1



Conditions began to rapidly deteriorate during the afternoon of September 12 as Frederic approached the Alabama Gulf Coast. Hurricane Frederic approached the coast with a forward speed of 15mph. The eye of the Frederic measured 50 miles in diameter east to west and 40 miles north to south. *In the opinion of some weather forecasters at the time, Frederic had the largest storm center they had ever recorded.*



*Photo courtesy of [NOAA, Office for Coastal Management, DigitalCoast](#)*

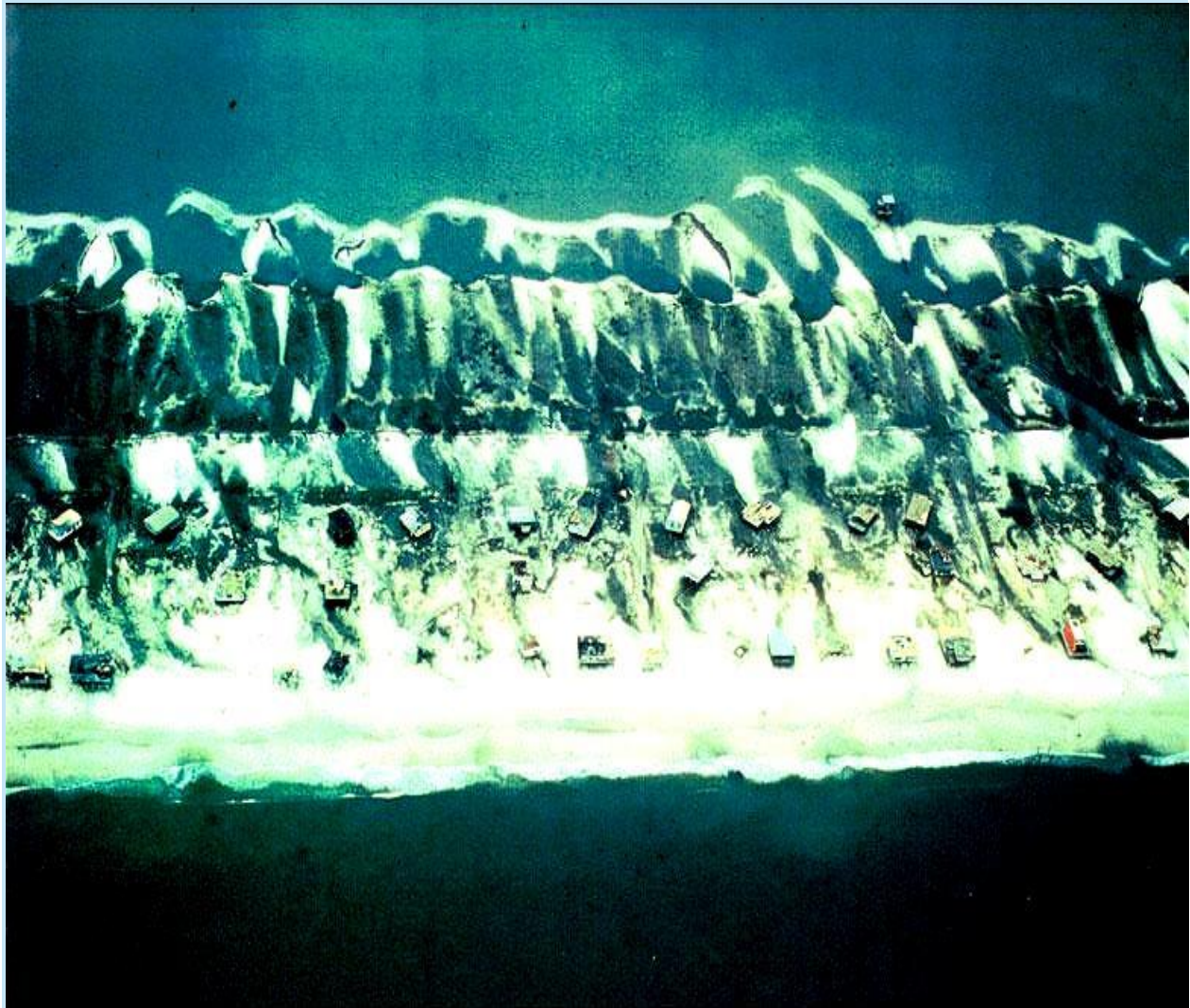
Shortly before 10pm on September 12, the northern eyewall of Frederic move ashore on Dauphin Island, AL. As the eye moved inland, it decreased in size to about 15 miles in diameter. The storm center crossed over the western end of Dauphin Island at 10pm. An automated wind gust recorder (located at the top of the Dauphin Island Bridge), recorded a peak wind gust of 145mph around 940pm. At landfall, Frederic was as strong Category 3 on the Saffir-Simpson Hurricane Intensity Scale, raking the Mobile



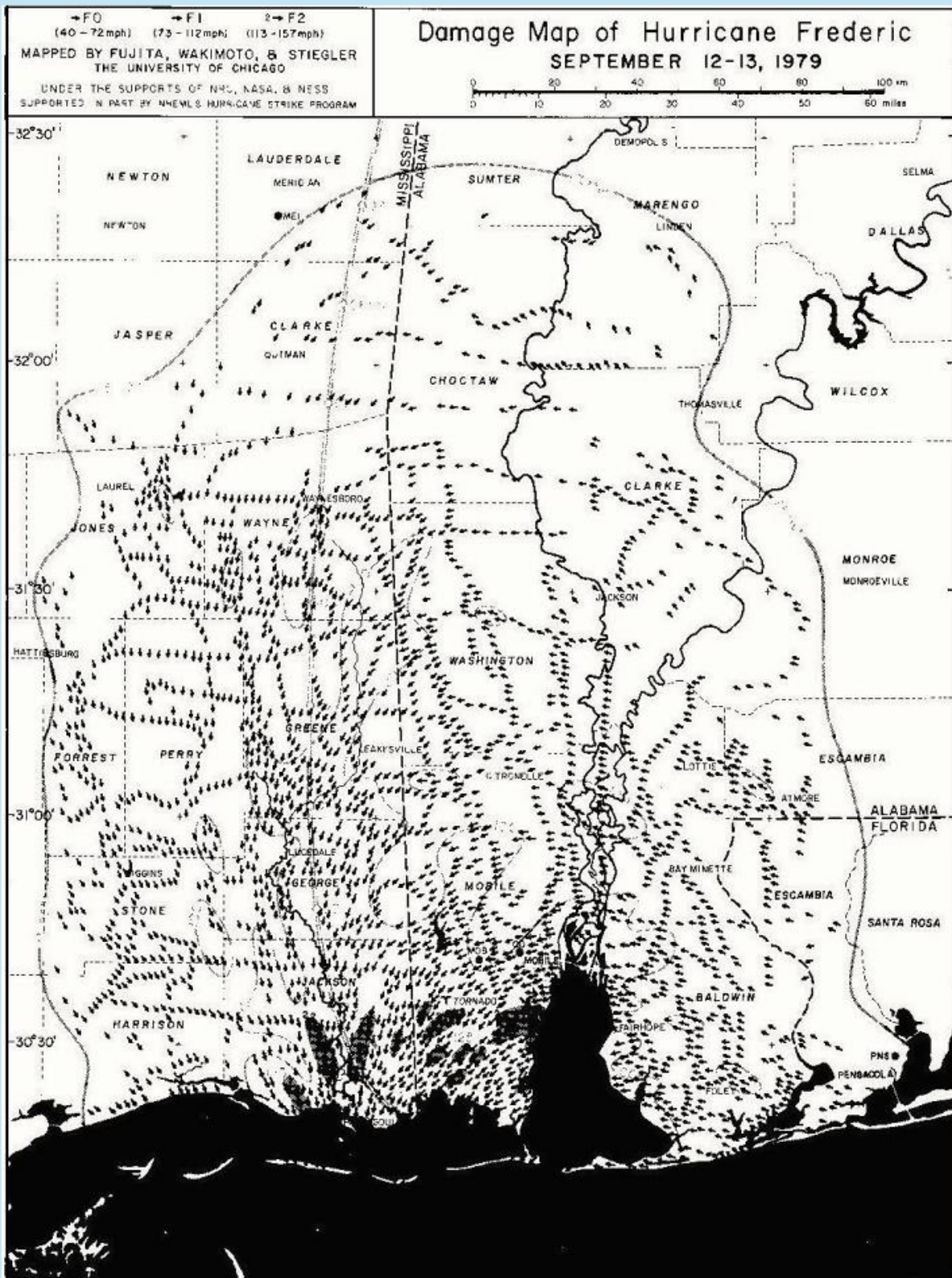
Bay area with winds gusting from 100-145 mph for several hours on the evening of September 12 through the early morning of September 13. Hurricane wind gusts were experienced as far inland as Choctaw County, AL during the early morning hours of September 13.



The damage cost from Frederic was \$2.3 billion. Five deaths were directly attributable to the storm. A storm surge of 12-15 feet on the Gulf beaches and 8-10 feet in northern Mobile Bay destroyed numerous coastal buildings. Storm surge damage was documented for 80 miles along the coast.



The winds from Hurricane Frederic damaged or destroyed many homes and businesses. Many homes and businesses well inland suffered severe damage when large pine trees fell onto them or the roof structures failed. Along with peak wind gusts of 145mph at the Dauphin Island Bridge, wind gusts of 97mph from the east were recorded at Mobile Regional Airport at 1107pm. At midnight, Mobile County Civil Defense also reported measured wind gusts at 97mph, along with massive damage in Mobile and surrounding areas. At midnight, wind gusts from the north at 98mph were reported by Biloxi Civil Defense with north winds gusting to 127mph at Ingalls Shipbuilding in Pascagoula, MS.



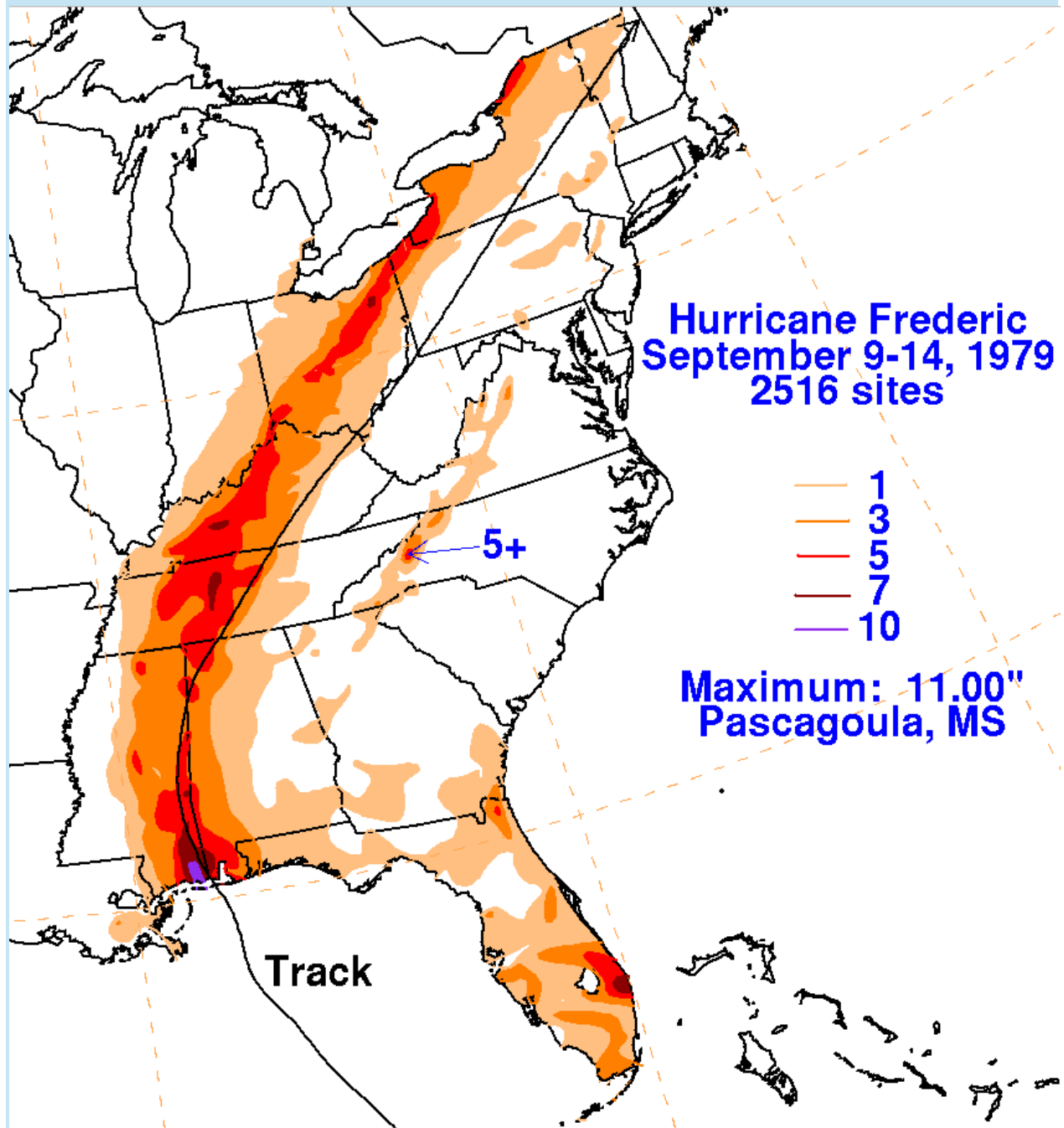
At 2am on Thursday, September 13, the NWS issued an intermediate advisory reporting

the center of Hurricane Frederic had passed just west of Mobile and the hurricane force winds began to slowly subside in the Mobile area as Frederic continued to move north along the Alabama/Mississippi border. Extensive reports of damage in the Mobile metropolitan area were beginning to come in to the NWS. After moving inland from the coast, the hurricane moved north and then northeast, increasing its forward speed to 23mph. It did not lose hurricane intensity until it was in the vicinity of Meridian, MS at about 7am!

By 8am on September 13, Frederic was downgraded to a tropical storm. Frederic maintained that intensity as it moved north through Mississippi, crossing back into Alabama west of Tuscaloosa. Late that afternoon, Frederic was further downgraded to a tropical depression as it moved north through Alabama.

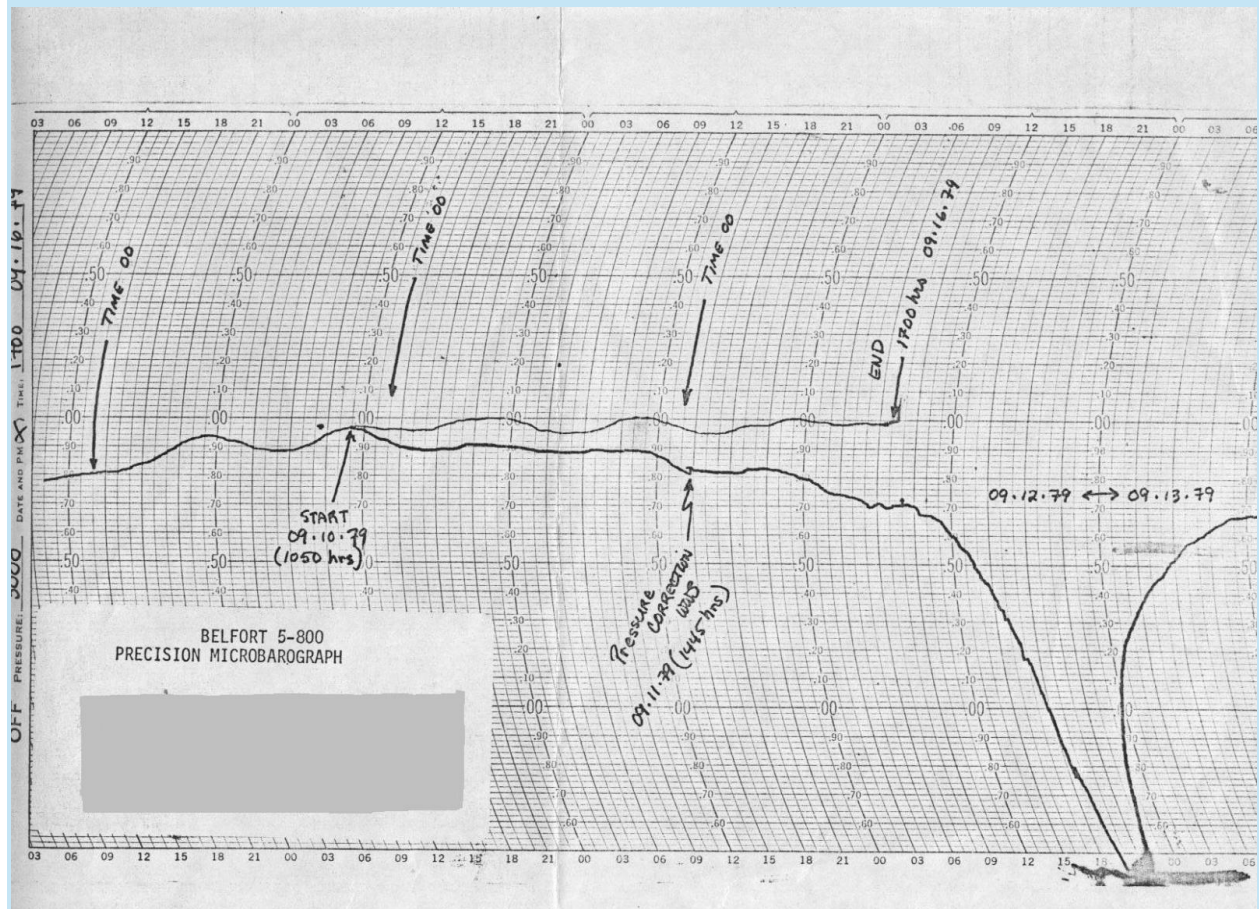


Numerous large swaths of significant wind damage were documented in the days immediately following the landfall of Frederic. Fallen trees were a significant impact to residents, bringing down thousands of power lines and blocking roads for several days. Some areas of Mobile County experienced electric power outages for 5 weeks.



Frederic moved north along the Alabama/Mississippi border dropping 3-11 inches of

rain along its path. The highest rainfall total of 11 inches was reported in Pascagoula, MS.



Microbarograph trace from Dauphin Island Sea Lab (NOAA)

The lowest barometric pressure recorded in Frederic by NOAA Hurricane Hunter reconnaissance aircraft was 943mb (27.85 inches of mercury). Mobile Regional Airport set an all-time recorded low barometric pressure at 1040pm on September 12 of 28.38 inches of mercury. Dauphin Island Sea Lab reported a minimum pressure of 943mb (27.85 inches of mercury).

**Over 500,000 people evacuated from the Central Gulf Coast Region ahead of Hurricane Frederic - the largest evacuation along the Gulf Coast up to that time. Frederic was the first hurricane to directly strike Mobile since 1932.** Before Frederic, the last hurricane with Category 3 winds to directly strike the Alabama Gulf Coast occurred in 1916. There was also the [1926 "Great Miami" Hurricane](#) that weakened to a Category 2 storm as it passed over Fort Morgan and Dauphin Island, AL.

By RANDY MURPHEY

News-Record Staff Writer

1979 was a very good year — if you fancy moderate to cool temperatures, lots of rain and snow in October.

Temperatures recorded at the Dale Enterprise official weather station averaged lower than normal most of the year while 46.2 inches of rain fell. And a record early snow of eight inches fell on Oct. 10.

Eight months of 1979 were colder than normal with February the frostiest with an average temperature of 24.7 degrees or 10.2 degrees colder than the norm. There were six days in the month on which the low fell to zero or lower with the lowest temperature (-4) coming on Feb. 20.

Although there were no below-zero days, January followed with a 30.1-degree average — about 3.1 degrees colder than normal.

But the warm spring thawed the ice.

March, which was 3.4 degrees warmer than the norm, had the highest above-average temperature, 45.9 degrees.

Except for a slight increase in August, temperatures were below normal from April through October. However, there were 184 days between the first and last killing frosts, April 11 and Oct. 11.

The cool trend reversed in November and December, with both averaging nearly three degrees warmer than normal, extending the Indian summer nearly to Christmas.

The highest temperature recorded for the year was 95 on Aug. 8 and came during the only real heat wave of the year, Aug. 1-11, when the mercury climbed to 90 or higher nine days.

In July, the temperature reached 90 only once. And in June and September, it never did hit 90.

Rain was probably primarily responsible for last summer's pleasantly cool temperatures.

During the year, the annual average total of 34 inches of precipitation was surpassed by 12.2 inches more precipitation than the annual average total of 34 inches. Measurable precipitation was recorded on 130 days of the year even though there were only nine days of snow.

Eight months of 1979 received more than the usual rainfall with the most being recorded in September.

In September, 6.74 inches fell. That is more than double the average. But unlike the other months, September's rain came in spurts.

During Hurricane David's three-day rage, Sept. 2-3, about 3½ inches of rain fell. And several weeks later, Sept. 21-23, the county was drenched again with 2.87 inches.

A modest amount of the increased precipitation came in the form of snow. About 29.5 inches or four inches more than the average fell between Jan. 1 and Dec. 31.

However, snow brought the year's freakiest weather. The eight inches which fell Oct. 10 left thousands of Shenandoah Valley residents without electricity, phone service and cable television.

That snow was the earliest recorded in the 99-year history of Dale Enterprise and the deepest for any October snowfall. The previous mark was Oct. 20, 1940, when six inches of snow fell.

Pictures of police officers pushing snowbound motorists in downtown Harrisonburg that day made the front pages of many of the nation's major newspapers.

Like the Easter ice storm of 1978, the Oct. 10 snowstorm was probably the weather event of 1979.

- NAT. AIRPORT -

47.31 inches for 1979

38.98 inches Ave.

## Weather Broke Records, But Left Area Healthy

By Paul W. Valentine  
Washington Post Staff Writer

Winds, rain, snow, heat, cold and sunshine alternately stroked and battered the Washington area in 1979, smashing a half dozen meteorological records and disrupting life on several occasions. But in the end, the local landscape was left at its healthiest in years.

Abundant rain filled the Potomac River. Melting snow replenished the water table. Steady winds and above-average cloudiness kept air pollution down. Mild temperatures consoled Washington's muggy summertime agony to six weeks in July and flower-growing warmth right up to the end of November.

National Weather Service forecasters are quick to say that none of this suggests some fundamental climatic shift is about to occur. The events of 1979, no matter how welcome, were

more blips on the meteorological graph, insignificant episodes in the long run of history.

Besides, it wasn't all joy in 1979. A near-blizzard—the worst snowstorm in half a century—struck in mid-February, and in September, Tropical Storm David slammed into the area, killing two persons, cutting off power to 35,600 households and toppling hundreds of trees with tornado-like winds.

The February storm left the area buried under two feet of snow, isolated entire communities and disrupted public transportation for days. The month as a whole turned out to be the coldest February since 1881 with an average temperature of 28.4 degrees—almost 10 degrees below normal. On 11 days, including the week of Feb. 9 to 15, the temperature never rose above freezing.

A total of 30.6 inches of snow fell

# Area Weather Records Fell During 1979

REVIEW, From C1

during February. This, combined with another four inches in January, made the winter the snowiest since 1966.

Then in the spring and summer months, the weekends were bedeviled by rains and cloudy skies, putting a crimp in picnics, boat trips and other outings. Rain fell on 20 of the 27 weekends between March 21 and Sept. 22, according to National Weather Service forecaster Bill Miller, and only eight of the 54 weekend days in that period were classified as "clear." All the others were cloudy or partly cloudy.

Record high temperatures were set or tied on six days of the year and record low temperatures were tied on two days. In addition, the first 90-degree reading of the year did not occur until July 12—the latest date in any year since the National Weather Service began keeping records here in 1871. Ninety-degree weather ordinarily occurs in May and June and occasionally in April.

The highest temperature of the year—97 degrees—occurred on Aug. 10 at National Airport, the weather service's official measuring station. The coldest reading—6 degrees—was recorded on Feb. 10 and again on Feb. 18.

Just to confuse things, a freak early autumn snow occurred on Oct. 10—the earliest recorded since a similar snow flurry on Oct. 5, 1892—only to be followed by record-breaking warm weather in November.

Record high readings of 75 and 74 degrees were set on Nov. 23 and 26, respectively, and the temperature hit 70 degrees or higher on nine consecutive days from Nov. 18 to 26—another record.

As a whole, November averaged 54.4 degrees, matching the highest recorded average for the month, set in 1975.

The extremes of heat and cold throughout the year, however, tended to balance each other out. Thus the average temperature for the whole year turned out to be 58.0 degrees, only .7 degrees above the normal annual average of 57.3 degrees, according to unofficial calculations. The average annual temperature in 1978 was 58.1 degrees, almost the same as in 1979.

Precipitation throughout 1979 also fluctuated widely, ranging from almost seven inches in both January and September to less than one inch in December. But the total for the year—47.31 inches—was far above the normal accumulation of 32.89 inches and was the greatest amount since 1975 when 50.50 inches fell.

Generous rains and melting snow filled the Potomac River to the brim. The U.S. Geological Survey reported that the river's 1979 flow rate—an average of 13.5 billion gallons per day at Little Falls—was almost double the normal rate and was the second highest annual rate on record.

"Not a single month was below normal in streamflow," said Geological Survey hydrologist Myron Lys. Daily flow fluctuated between a high of 130 billion gallons on Feb. 27 and 2.4 billion gallons on Aug. 11—all well above the 300 to 400 million gallons withdrawn from the river each day for public consumption in the District of Columbia, suburban Maryland and parts of Virginia.

Lys also noted that groundwater levels remained above normal levels throughout 1979 because of the rain and snow. At the end of the year, groundwater levels monitored at a key local observation well were at about 10.7 feet below the land surface

—about 1.8 feet above the long-term average for this time of year.

Lys said the entire decade of the 1970s was the "wettest" decade on record in terms of streamflow and contrasted sharply with the 1960s when several periods of severe drought occurred, threatening municipal water supplies.

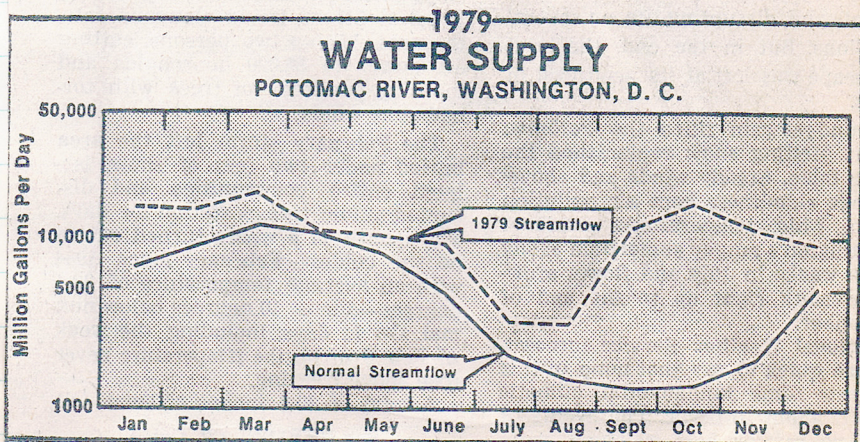
He said there is "no particular significance to this shift in the hydrologic pendulum in terms of the future. It does, however, provide a reminder that such sharp fluctuations are part of the natural cycle and must be anticipated in plans for the future.

Officials at the Metropolitan Washington Council of Governments, which is responsible for monitoring air pollution, reported that the summer of 1979 was relatively smog-free—apparently because clouds frequently prevented the sun from interacting with pollutants and because of the timely arrival of Winds to flush out accumulated filth.

"It was a very, very good summer," said COG's Jim Alexander. Under new, somewhat relaxed federal standards, no health advisories or alerts were issued, although "a couple probably would have been issued under the old (stricter) standards, Alexander said.

This table shows the average temperature for each month in 1979 compared with the 30-year norms for each month in Washington. Average monthly temperature is computed by totaling the daily maximum and minimum temperatures of the months and dividing the sum by double the number of days in the month.

| MONTH          | 1979         | NORMAL       |
|----------------|--------------|--------------|
| Jan.           | 35.1 degrees | 35.6 degrees |
| Feb.           | 28.4         | 37.3         |
| Mar.           | 51.5         | 45.1         |
| Apr.           | 56.0         | 56.4         |
| May            | 67.7         | 66.2         |
| June           | 72.4         | 74.6         |
| July           | 78.6         | 78.7         |
| Aug.           | 78.5         | 77.1         |
| Sept.          | 71.5         | 70.6         |
| Oct.           | 58.5         | 59.8         |
| Nov.           | 54.4         | 48.0         |
| Dec.           | 43.7         | 37.4         |
| Annual Average | 58.0         | 57.3         |



Source: U.S. Geological Survey



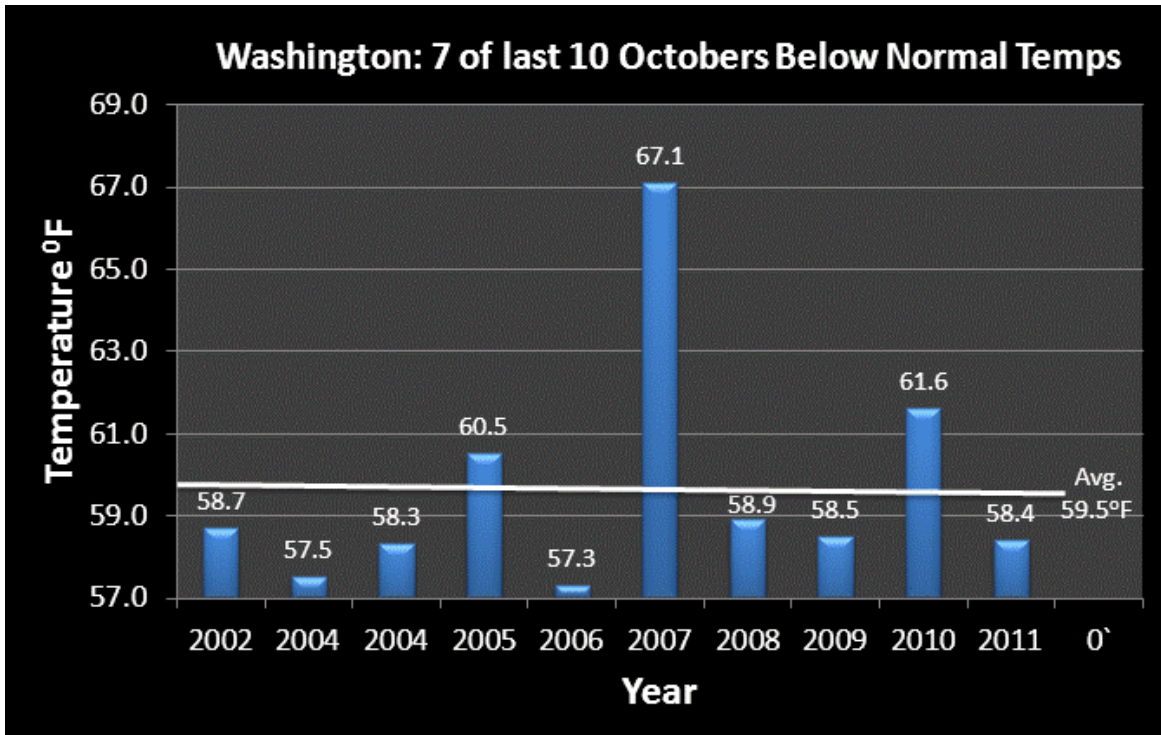


# PRESTO

PREcipitation Summary and Temperature Observations  
For the Washington, DC and Baltimore, MD Area



## OCTOBER 2011: Subnormal Temperatures in Washington; Severe Weather in Northern Virginia; First Winter Storm Impacts Region



### October Highlights

- ✦ First month with subnormal average monthly temperature since March at DCA, since January at IAD
- ✦ Ninth consecutive month with above normal temperatures at BWI
- ✦ Anomalously cold first 3 days of month with highs mainly in the 50s across the area; DCA, 52°F on 2<sup>nd</sup>, 53°F on 3<sup>rd</sup>, equals coldest maximum readings on record; 51°F at BWI and 50°F at IAD on 2<sup>nd</sup> set new record low maximum temperatures
- ✦ Anomalously cold on 29<sup>th</sup>: Record low maximum temperatures: DCA and BWI, 42°F; IAD, 39°F
- ✦ Freezing temperatures: first 32°F or lower reading across many suburban locations occurred last 2 days of month: 31°F at BWI and IAD on 30<sup>th</sup>
- ✦ Highs at or above 80°F on 10<sup>th</sup> at DCA; at BWI and IAD on both 9<sup>th</sup> and 10<sup>th</sup>
- ✦ Highs below 60°F on 6 days at DCA, 7 at BWI and 9 at IAD
- ✦ On the 29<sup>th</sup>, the 39°F maximum at IAD was earliest maximum temperature in season below 40°F
- ✦ More than 6" of precipitation at IAD; wettest October since 2005
- ✦ Five EF-0 tornadoes in Northern Virginia on 13<sup>th</sup> resulting in tree and property damage; wind speeds up to 80 mph during the Aquia Harbor (Stafford County) tornado; 3" to more than 4" of rainfall across portions of Northern Virginia
- ✦ Rare early winter storm on 29<sup>th</sup> with nearly a foot of snow across northern Maryland and across portions of the Shenandoah; over 5" in portions of Loudoun County (5.7" near Bluemont, VA) and Baltimore County (5.5" near Lineboro, MD); daily record 0.6" at IAD and trace at DCA, BWI, earliest in season at DCA, BWI and IAD since October 10, 1979

## October 2011

**Temperatures:** Despite several anomalously cold days, October featured near normal readings. Temperatures departures were -1.1°F at DCA and -0.9°F at IAD; BWI was slightly above normal at +0.5°F. Unseasonably chilly conditions prevailed the first 3 days with maximum readings mainly in the 50s. Record low maximum readings were tied or broken on the 2<sup>nd</sup> and 3<sup>rd</sup> at the three major airports (see cover highlights).

More seasonable conditions prevailed the following 2 weeks including the warmest days of the month on the 9<sup>th</sup> and 10<sup>th</sup> when many areas were at or above 80°F, including 85°F on the 10<sup>th</sup> at BWI.

The area returned to cooler temperatures from the 20<sup>th</sup> through month's end; maximum readings were below 70°F at all three major airports. On the 29<sup>th</sup>, additional record low maximum readings were observed including 42°F at DCA and BWI, and 39°F at IAD. The season's first freeze occurred on the 30<sup>th</sup> at BWI (31°F) and at IAD (30°F).

**Precipitation/Severe Weather:** Near normal rainfall was observed at DCA 3.91" (+0.51") and BWI 3.31" (-0.02") while IAD recorded well above normal totals: 6.27" (+3.02"). Four significant storm systems impacted the region during the month.

On the 2<sup>nd</sup>, northern and western locations reported more than an inch of rain, including 1.52" in Poolesville, (Montgomery County) MD, and 1.28" in Leesburg, (Fairfax County), VA.

On the 13<sup>th</sup>, Northern Virginia was impacted by a severe weather outbreak that included five EF-0 tornadoes. No fatalities or injuries were reported but the tornadoes did result in tree and property damage according to press reports. The five tornadoes were reported near Nasons (Orange County); Bealeton (Fauquier County); Aquia Harbor (Stafford County); Triangle (Prince William County) and Clifton (Fairfax County). Maximum wind speeds ranged from 65 mph to 80 mph, with the strongest winds measured in the Aquia Harbor tornado. Rainfall was also heaviest across Northern Virginia, with 4.11" near Reston (Fairfax County), 3.17" in Manassas and a daily record of 1.92" at IAD.

The month's third storm system occurred on the 19<sup>th</sup>-20<sup>th</sup>. The greatest rainfall totals in Maryland included 1.58" at Perry Hall (Baltimore County) and 1.47" in Middletown (Frederick County). Northern Virginia totals included 1.43" in Broad Run (Fauquier County). Flash flooding closed a road on the Dulles Greenway near Belmont (Loudoun County), VA.

A significant winter storm impacted the area on the 29<sup>th</sup>. The storm began as a soaking rain then changed to wet snow, first in the northern and western suburbs in the morning, then across most of the area in the afternoon. The combination of above freezing temperatures and lighter snowfall during the afternoon resulted in a trace of snow across the immediate metro area, including DCA and BWI. It was the earliest snowfall at these locations since October 10, 1979. A daily record 0.6" was measured at IAD. Much greater totals occurred well north and west, including 11.5" in Sabillasville (Frederick County), and 7.8" near Manchester (Carroll County), MD. The greatest totals in Virginia included 9.0" in Skyland (Madison County) and 8.0" near Linden (Warren County). Most areas recorded over an inch of water equivalent from the storm, including a daily record 1.03" at IAD.

### October 2011 Weather Statistics for the Washington/Baltimore Area

| Location        | Station Temperatures (°F) |      |      |      | Extreme/Day |       |       | Precipitation (Inches) |      |        |      |            |
|-----------------|---------------------------|------|------|------|-------------|-------|-------|------------------------|------|--------|------|------------|
|                 | AvMx                      | AvMn | AvgT | NmIT | DepNml      | Max   | MinT  | Total                  | Norm | DepNml | Snow | Yr to Date |
| National (DCA)  | 66.5                      | 50.2 | 58.4 | 59.5 | -1.1        | 83/10 | 34/29 | 3.91                   | 3.40 | +0.51  | T    | 40.05      |
| Baltimore (BWI) | 66.3                      | 47.0 | 56.6 | 56.1 | +0.5        | 85/10 | 30/31 | 3.31                   | 3.33 | -0.02  | T    | 49.57      |
| Dulles (IAD)    | 64.9                      | 45.2 | 55.1 | 56.0 | -0.9        | 81/10 | 28/31 | 6.27                   | 3.25 | +3.02  | 0.6  | 39.56      |

**Looking Ahead to November:** After the season's first winter storm, the immediate metro area is still waiting for its first inch. In the last 10 years, the first snow has fallen anywhere from early December to late January. The earliest snow (>1") in Washington, D.C., fell on October 30, 1925, (2.2") and October 20, 1940, (1.4"). The earliest measurable snow ever recorded at DCA fell on October 10, 1979, (0.3"). DCA recorded less than 1" of snow during the 1997-98 and 1972-73 seasons. The first inch has occurred at DCA on December 5th on four of the past nine years.

#### Snow Season First 1" (or greater) Snowfall at DCA

|           |             |
|-----------|-------------|
| 2010-2011 | December 16 |
| 2009-2010 | December 5  |
| 2008-2009 | January 27  |
| 2007-2008 | December 5  |
| 2006-2007 | January 21  |

#### Snow Season First 1" (or greater) Snowfall at DCA

|           |            |
|-----------|------------|
| 2005-2006 | December 5 |
| 2004-2005 | January 19 |
| 2003-2004 | December 4 |
| 2002-2003 | December 5 |
| 2001-2002 | January 19 |