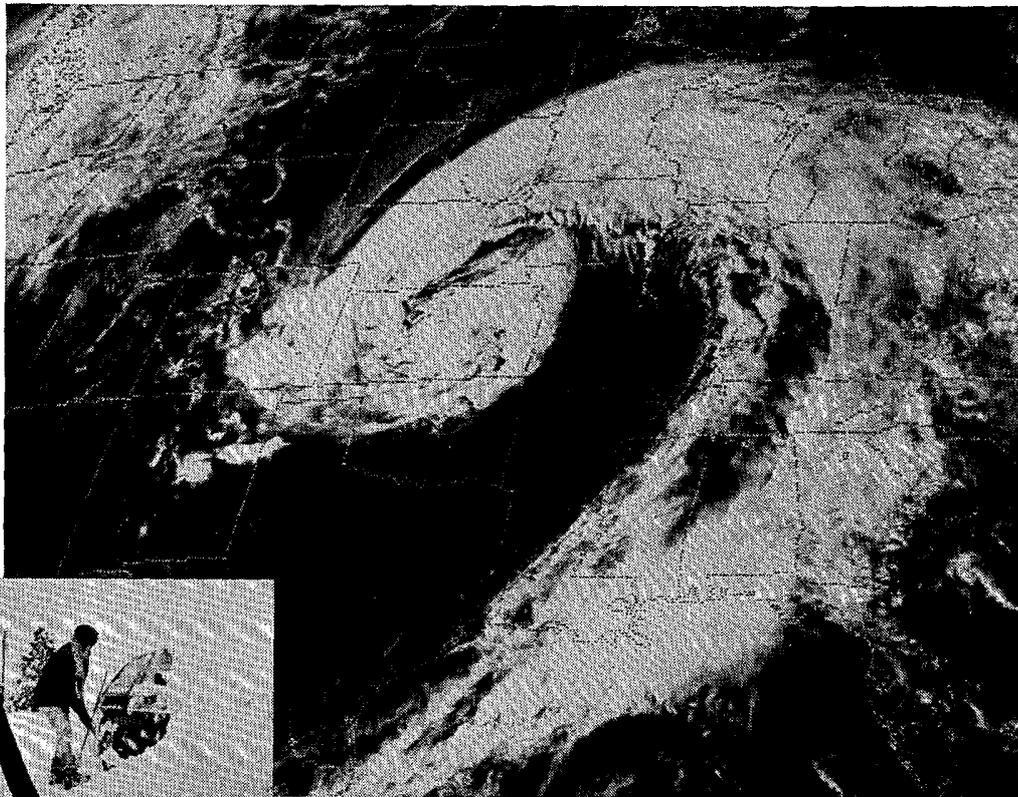


STORM DATA

WITH LATE REPORTS/CORRECTIONS



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Kenneth D. Walden

DIRECTOR
NATIONAL CLIMATIC DATA CENTER

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C O N T E N T S

Cover: A GOES 6 satellite, visible image taken at 1430CST on April 2nd reveals a massive swirling cyclone occupying the nation's midsection. The storm was responsible for a late-season heavy snowfall of up to 42 inches in the east-central Rockies and up to 19 inches in the High Plains. ---Photo from NESDIS. INSET: Coloradoans struggle with more than three feet of the white stuff west of Fort Collins. ---Photo by Blair Godbout, The Coloradoan, Fort Collins, Colorado. (See Item 1, pages 6 and 7)

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STORM DATA (ISSN 0039-1972)

The section on Outstanding Storms of the Month is prepared by Professor T. Theodore Fujita, editor, and Duane J. Stiegler, associate editor, the University of Chicago, with funding by the U. S. Office of Naval Research. The Storm Data and Unusual Weather Phenomena narratives, and summaries of Hurricanes/Tropical Storms are prepared by the National Weather Service. The National Climatic Data Center compiles statistics on deaths, injuries, damage and prepares the annual summaries of tornadoes and Lightning. This publication contains our best information on storms, but due to the difficulties inherent in collection of this type of data it is not all-inclusive. Late reports and corrections will be carried quarterly. Maps of zones used in the Storm Data and Unusual Weather Phenomena will be published in all editions.

Storm Data is published monthly by the National Climatic Data Center.

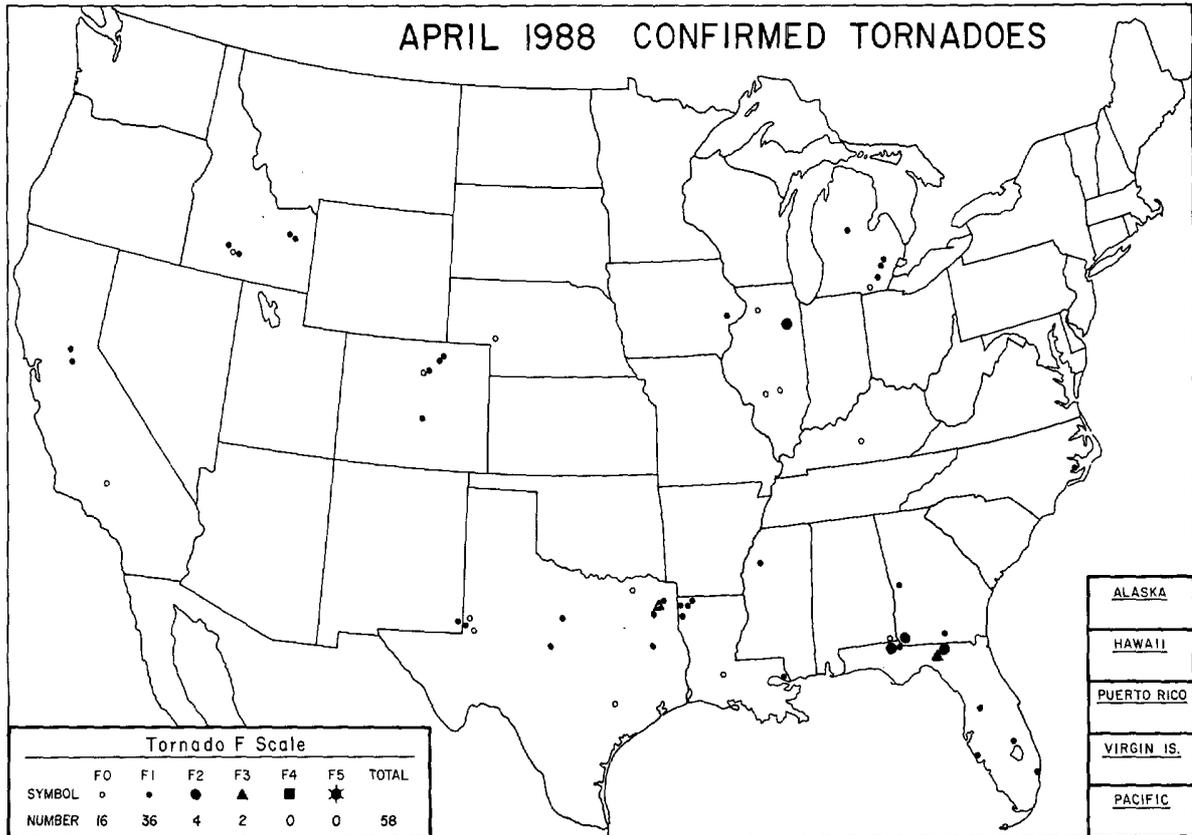
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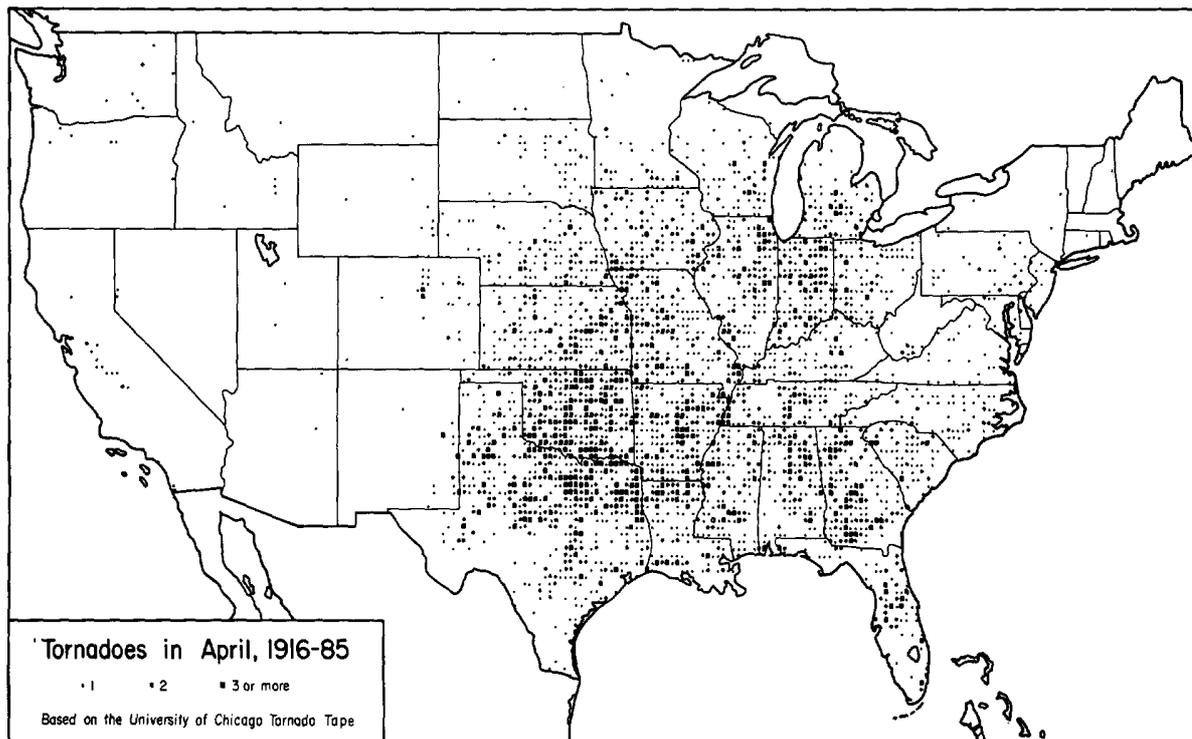
Subscription, pricing, and ordering information is available from:

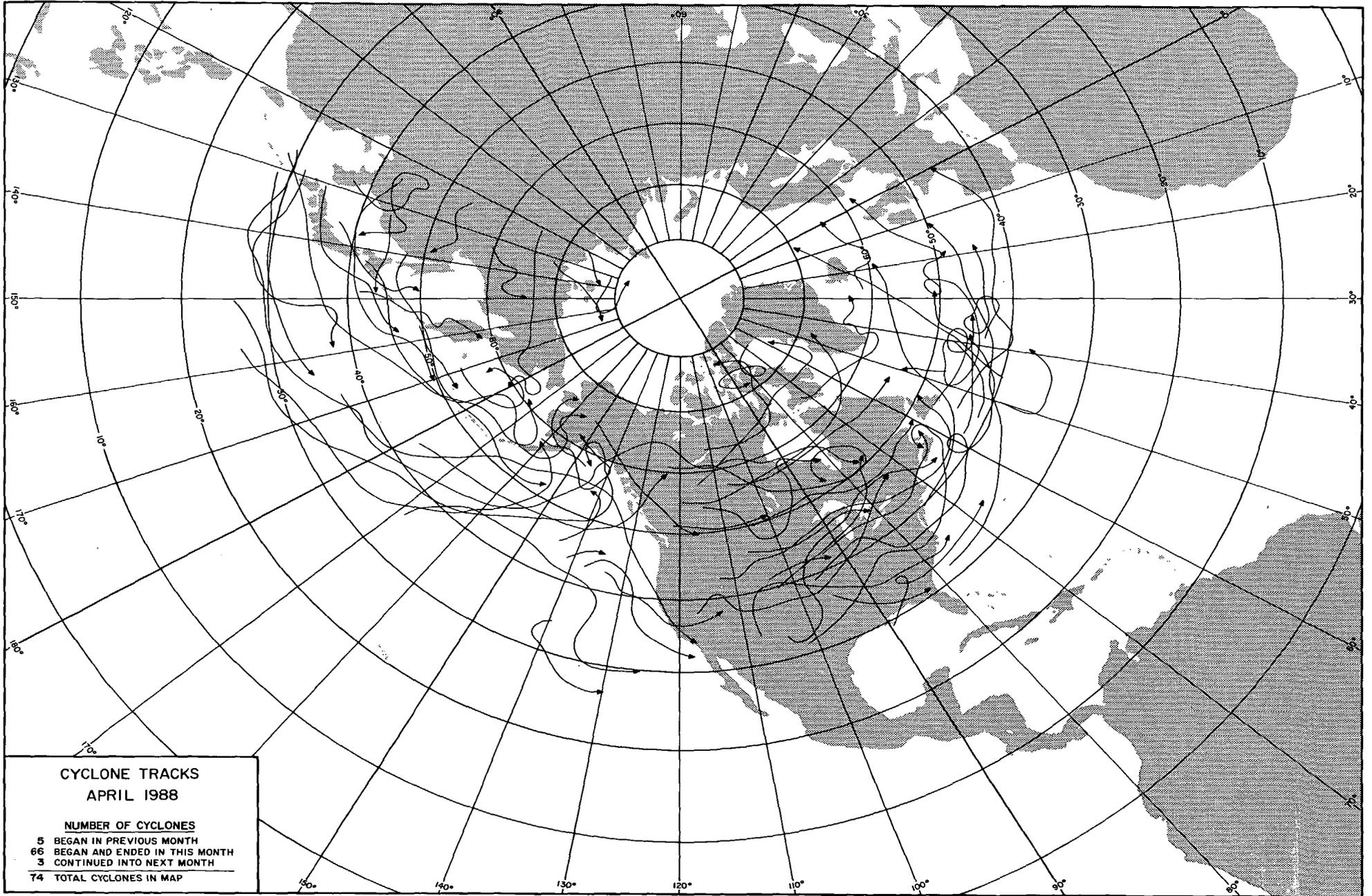
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Federal Building
Asheville, NC 28801-2696

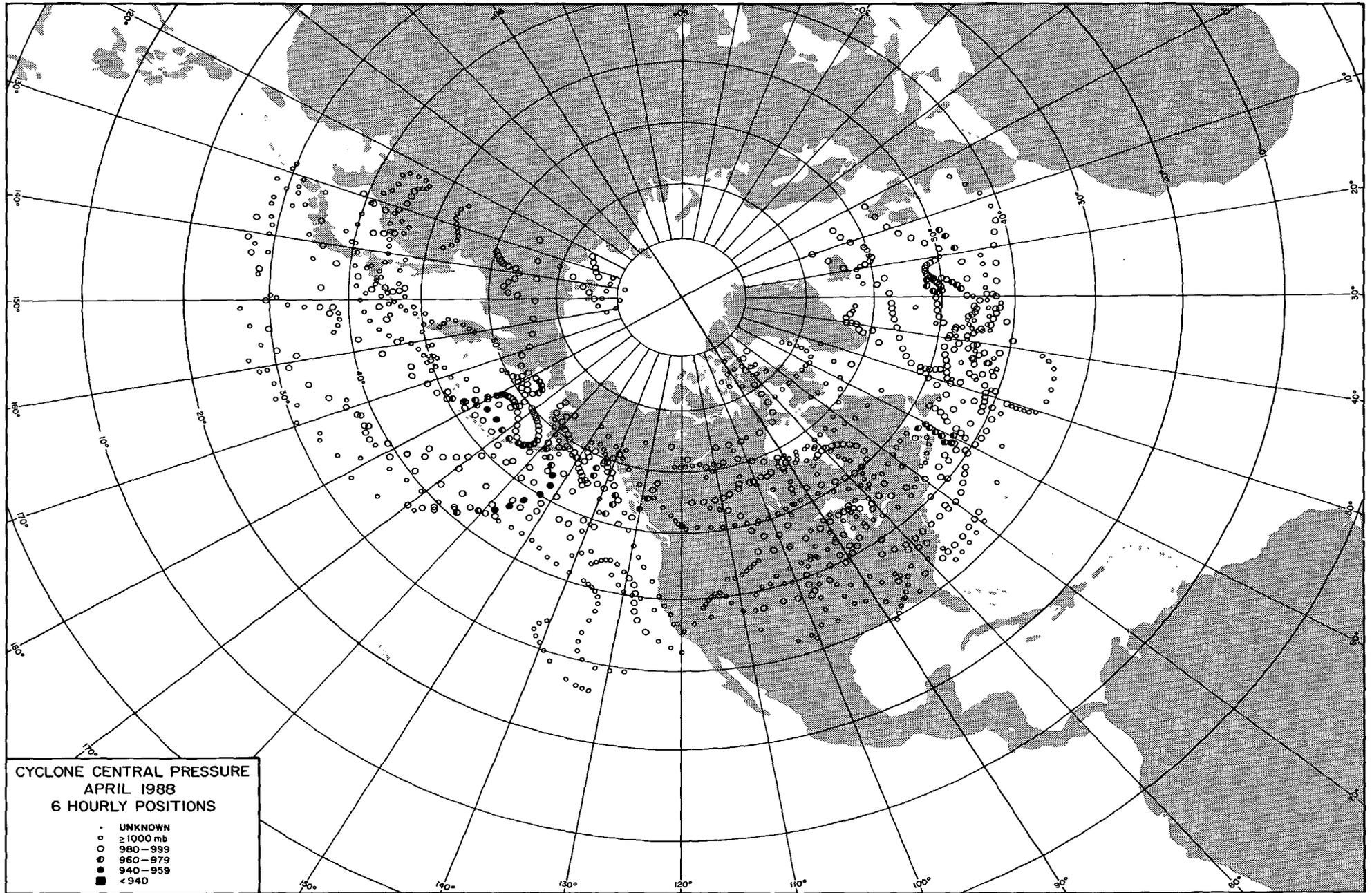
OUTSTANDING STORMS OF THE MONTH



● COMPLETE REPORT RECEIVED	● 1AL	● 7DE	● 14KS	● 21MN	● 28NJ	● 33OH	● 39SD	● 44VA	● 49AK(SE)
⊙ PRELIMINARY REPORT RECEIVED	● 2AZ	● 8FL	● 15KY	● 22MS	● 29NM	● 34OK	● 40IN	● 45WA	● 50HI
○ REPORT NOT RECEIVED	● 3AR	● 9GA	● 16LA	● 23MO	● 30NY(O)	● 35OR	● 41TX(N)	● 46WV	● 51PR
(N) northern (W) western	● 4CA(N)	● 10ID	⊙ 17ME	● 24MI	● 30NY(C)	● 36PA(E)	● 41TX(S)	● 47WI	● 52VI
(S) southern (C) central	● 4CA(S)	● 11IL	● 18MD	● 25NE	● 30NY(W)	● 36PA(W)	● 41TX(W)	● 48WY	● 53PC
(E) eastern (O) coastal	● 5CO	● 12IN	● 19MA	● 26NV	● 31NC	● 37RI	○ 49AK(N)		
(SE) southeastern	● 6CT	● 13IA	● 20MI	⊙ 27NH	● 32ND	● 38SC	● 43VT	● 49AK(S)	





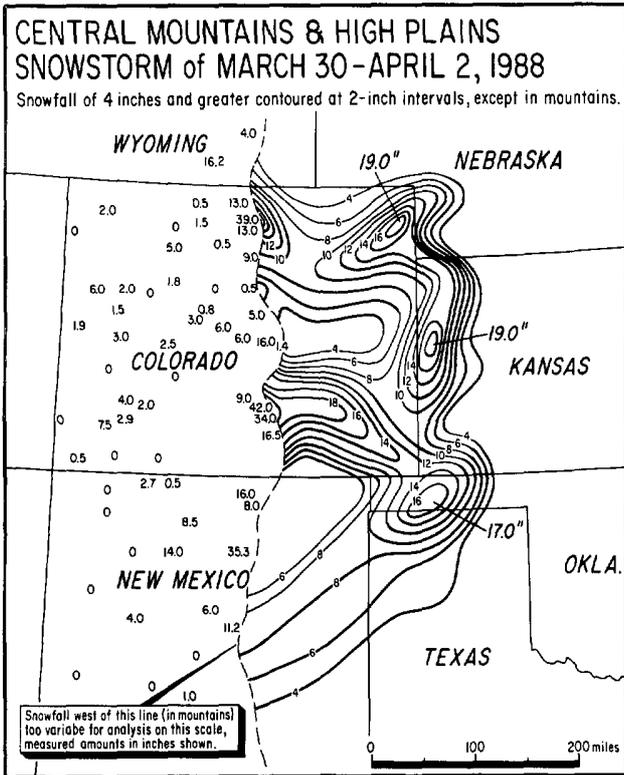


**CYCLONE CENTRAL PRESSURE
APRIL 1988
6 HOURLY POSITIONS**

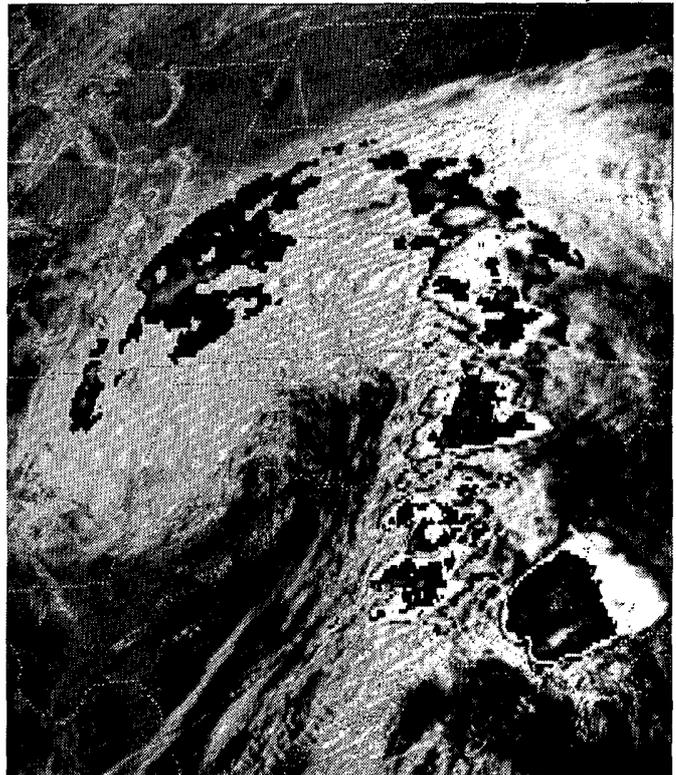
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- ≥ 1000 mb
- ◌ 980-999
- ◌ 960-979
- ◌ 940-959
- < 940

1. SNOWSTORM In the CENTRAL ROCKIES and HIGH PLAINS on March 30 - April 2, 1988

As a weak low pressure system that formed in the Four Corners area moved slowly eastward through the central Rocky Mountains on March 30th and 31st, moisture-laden upslope winds brought heavy snow to localized areas of the range's eastern front and foothills. By the end of the 31st, 42 inches of snow had fallen at Lake Isabel southwest of Pueblo, Colorado, 20 inches of which fell in only 6 hours. West of Fort Collins, 39 inches had fallen at Buckhorn Mountain. As the storm moved out into the Central Plains on April 1st, it intensified rapidly into a strong mid-latitude cyclone and brought additional heavy snow to the high plains as the storm's center turned northward from Texas and followed a path through Oklahoma, Kansas and Nebraska on April 1st and 2nd. The heaviest snowfall during this period occurred over northeast and southeast portions of Colorado, and in a non-uniform band from the extreme northern Texas Panhandle northward along the eastern border of Colorado. Snowfall was generally 8 to 16 inches in these areas, although a few spots had as much as 19 inches. The storm's impact was felt mainly in the form of power outages, transportation disruptions, and livestock losses. Elsewhere, heavy thunderstorm rains associated with the cyclone caused flooding in southeast Kansas, portions of central and northeast Oklahoma, and the New Orleans, Louisiana area.



Analysis of the event total snowfall from the March 30 through April 2, 1988 storm in the central Rocky Mountains and High Plains. ---Mapped by the University of Chicago from Cooperative Observer data supplied by NCDC and additional data supplied by NWSFO's at Denver, Colorado; Topeka, Kansas; Omaha, Nebraska; and Lubbock, Texas.

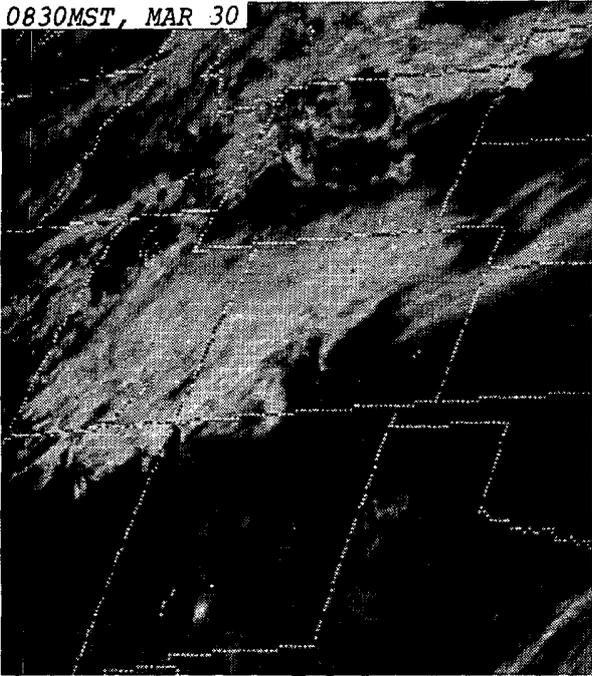


A GOES 6 satellite, combined visible and infrared image taken at 1600CST on April 1st depicts the comma cloud of the intensifying storm as it moved into the Plains States and triggered a north-south line of strong thunderstorms, revealed here by the IR enhancement of their cold cloud tops. ---Photo from NESDIS.

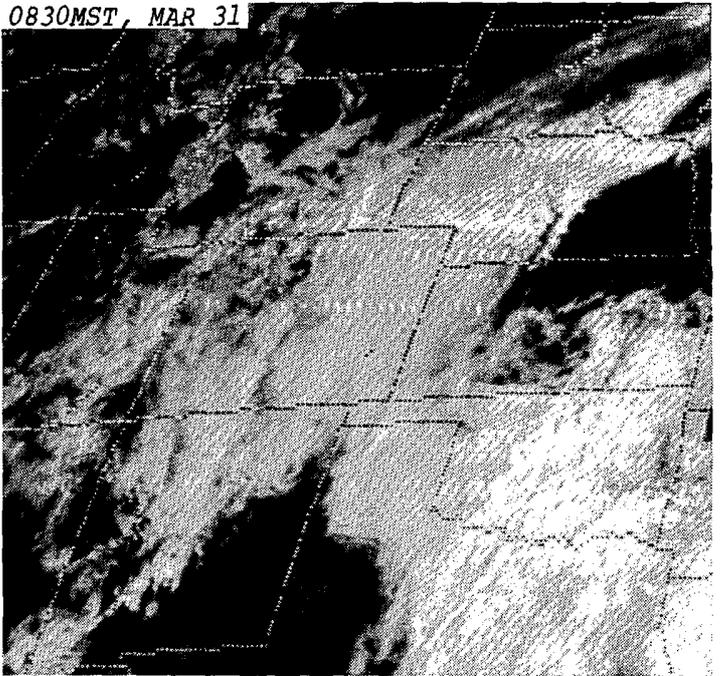


With the storm's closure of Colorado State University in Fort Collins, this professor stayed home and, with his daughter, dug out the family car from under three feet of snow. Their home is in Rist Canyon, located west of Fort Collins. ---Photo by Blair Godbout, The Coloradoan, Fort Collins, Colorado.

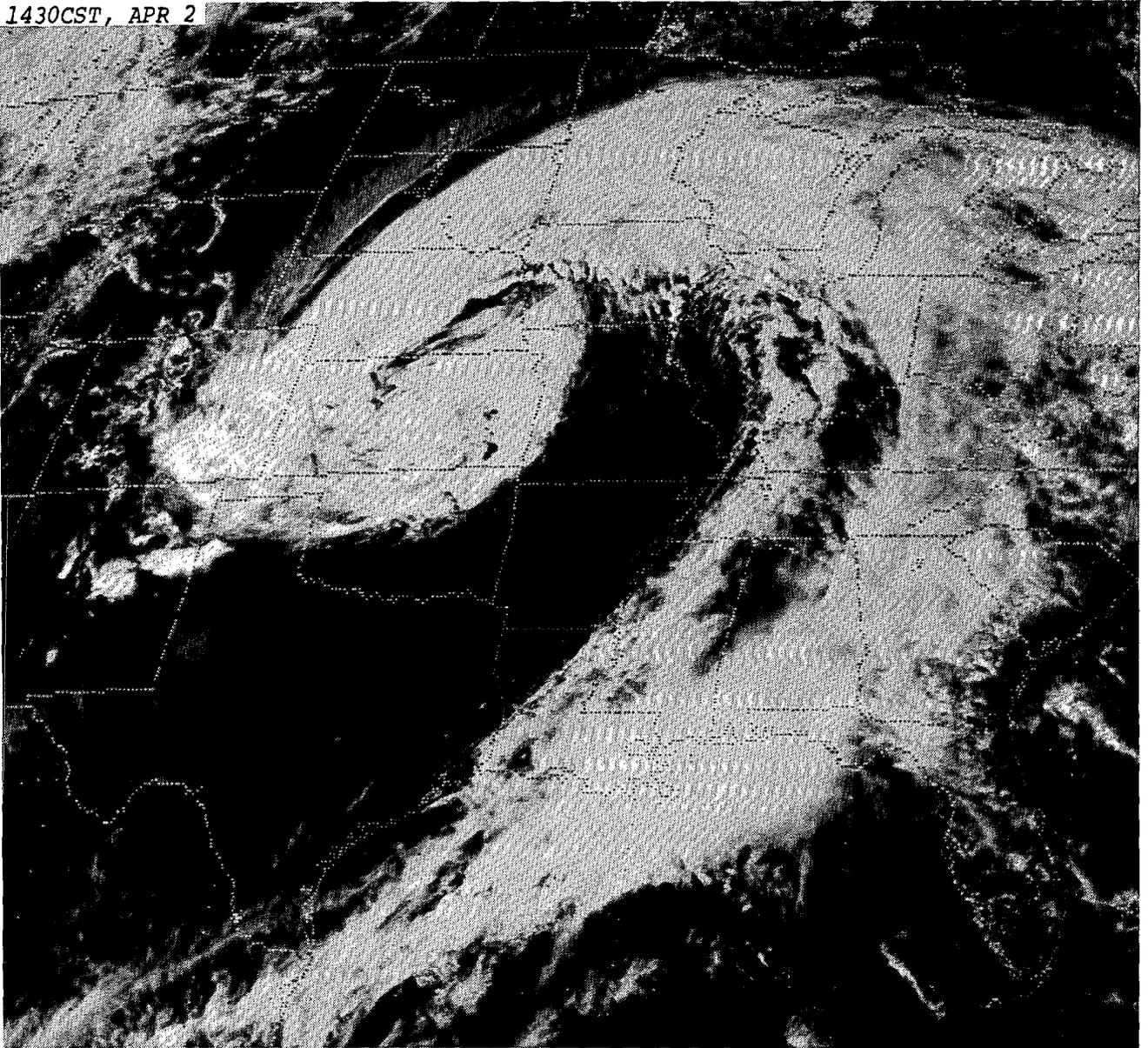
0830MST, MAR 30



0830MST, MAR 31



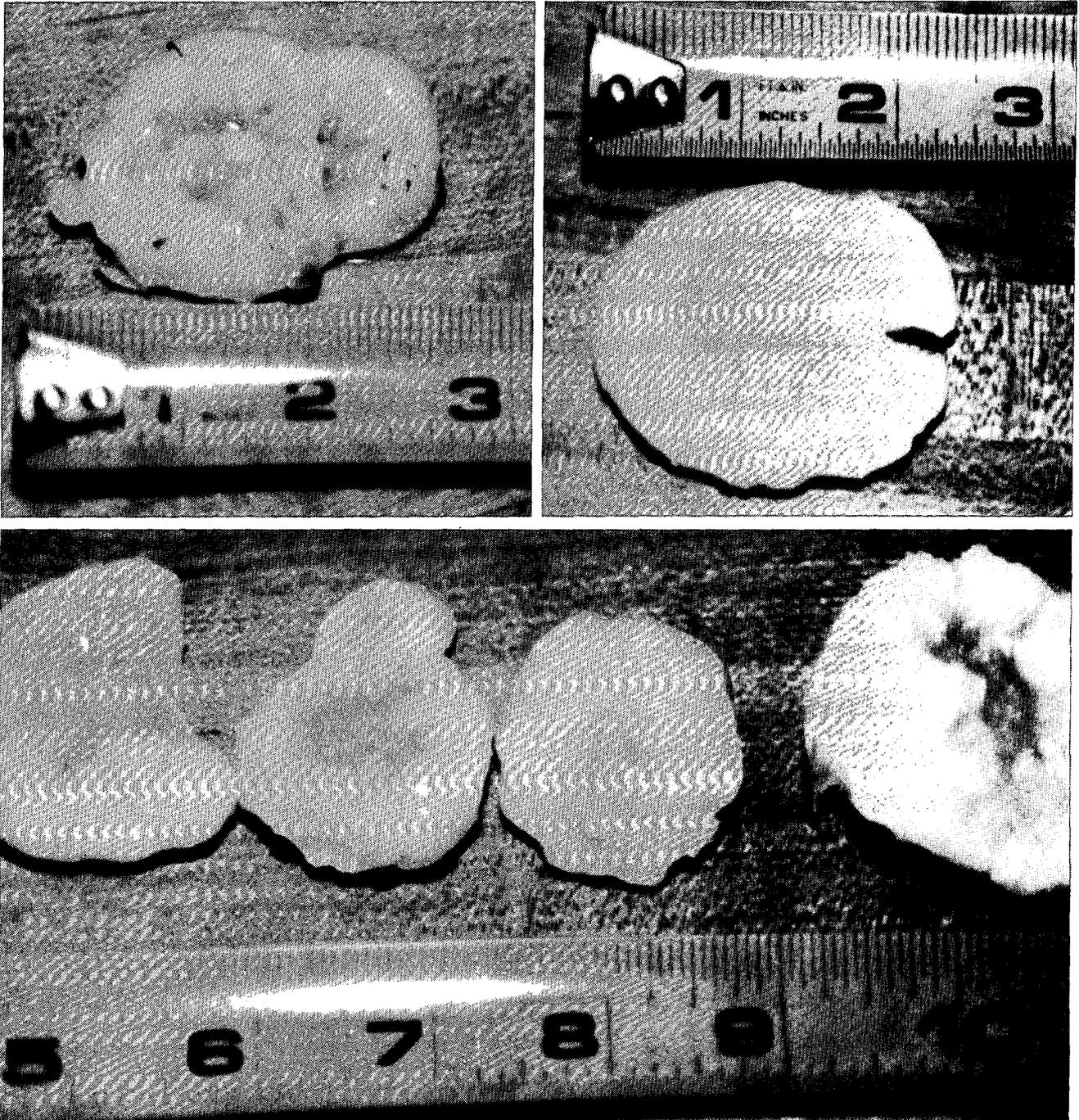
1430CST, APR 2



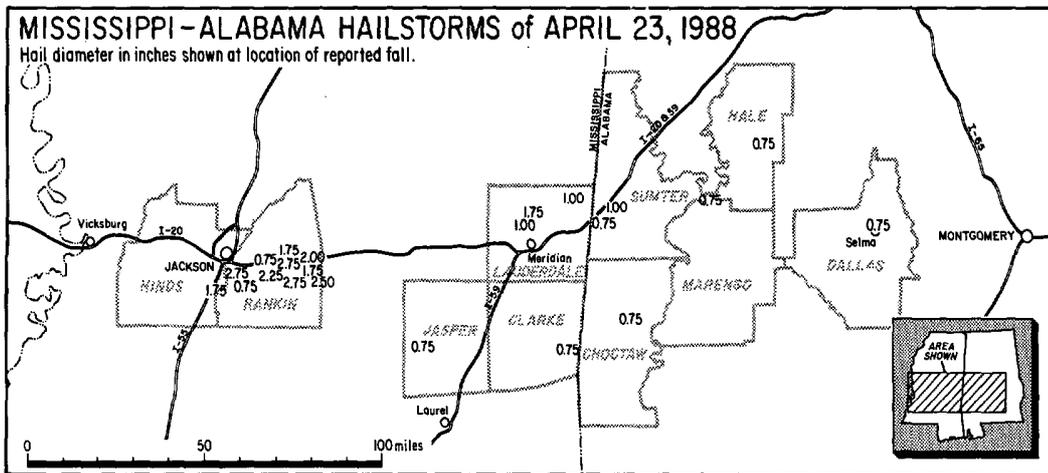
Additional GOES 6 satellite images, visible without IR enhancement, show the developing cloud system of the storm on March 30th and 31st (top), and the large spiralling cloud mass it became as the storm intensified and moved northward through the Central Plains (bottom). ---All three photos from NESDIS.

2. LARGE HAIL near JACKSON, MISSISSIPPI on April 23, 1988

On April 23rd, late morning and early afternoon thunderstorms pelted portions of central Mississippi and Alabama with large hail, the largest of which fell in a localized area of Rankin County, Mississippi, just south and east of Jackson. Hailstones of hen's egg to baseball size (2.00 to 2.75 inch diameter) fell in and around the towns of Richland, Brandon and Pelahatchie, breaking the windshields and denting the bodies of vehicles, and causing substantial damage to roofs as well. All of the hail in this area fell within a one hour period, as all of the reports were received between 1000 and 1045 CST. Scattered reports of hail were also received from counties in east-central Mississippi and west-central Alabama during the storms; however, with the exception of one report of golfball size hail north of Meridian, the stones were all an inch or less in diameter and resulted in little or no damage.

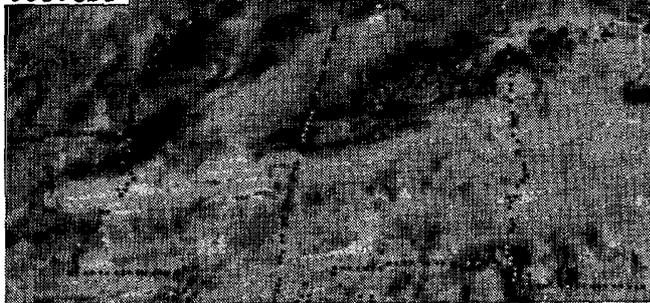


Examples of the large hail stones that fell in east Brandon, Mississippi during the morning of April 23rd. The stones, shown here at close to actual size, had a very oblate and irregular shape, most likely the result of smaller elements freezing together into clusters during the accretion process. These stones had a maximum major-axis diameter of 2.25 inches. ---Photos by David Imy, NWSFO at Jackson, Mississippi.

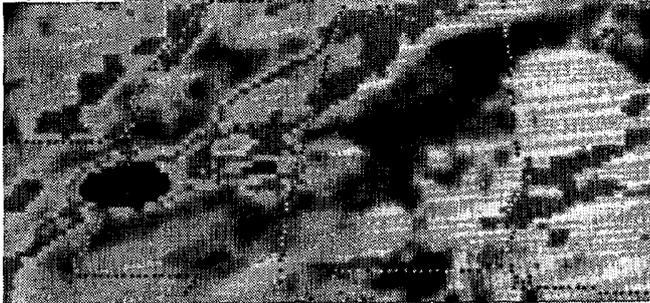


Location and size of reported hail (0.75 inch diameter and larger) in central Mississippi and Alabama during the late morning and early afternoon of April 23, 1988. Only affected counties are indicated. ---Graphic by the University of Chicago from data supplied by NWSFO's at Birmingham, Alabama and Jackson, Mississippi.

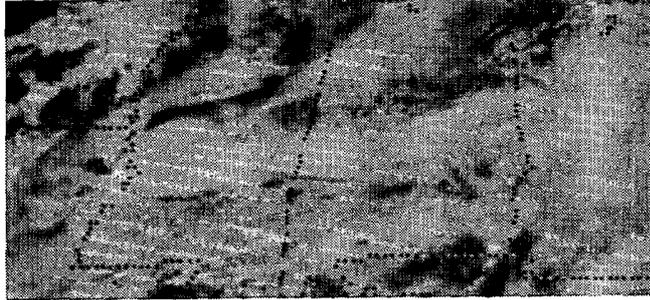
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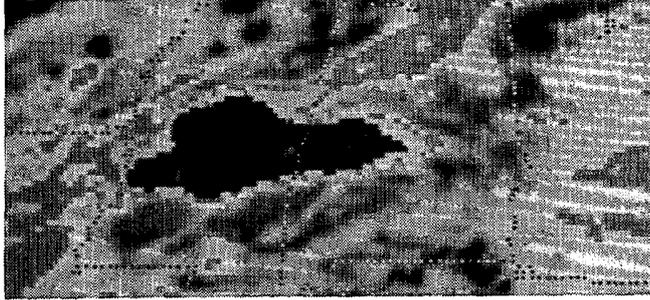
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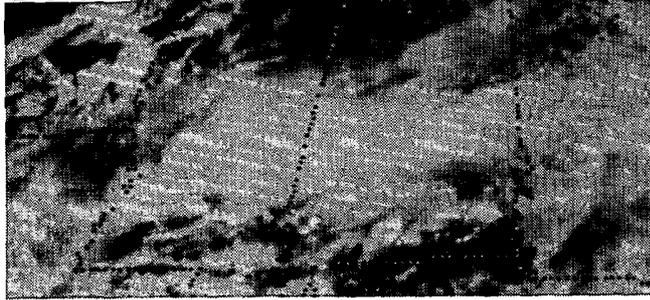
0930CST



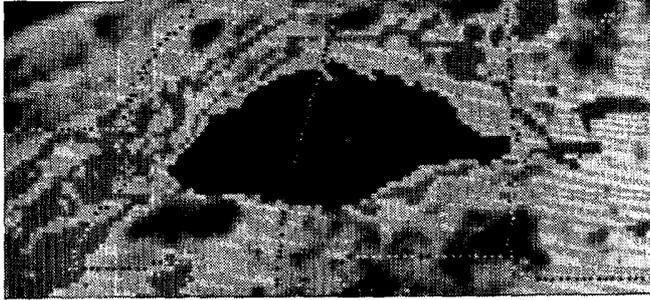
1000CST



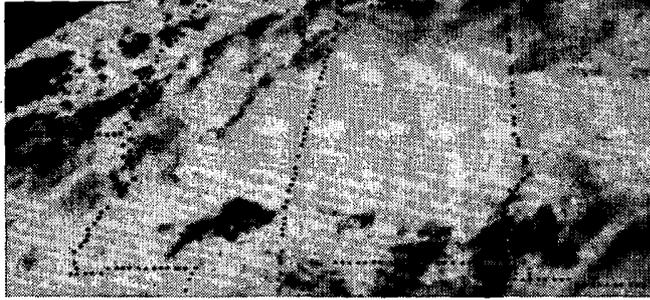
1030CST



1100CST



1130CST



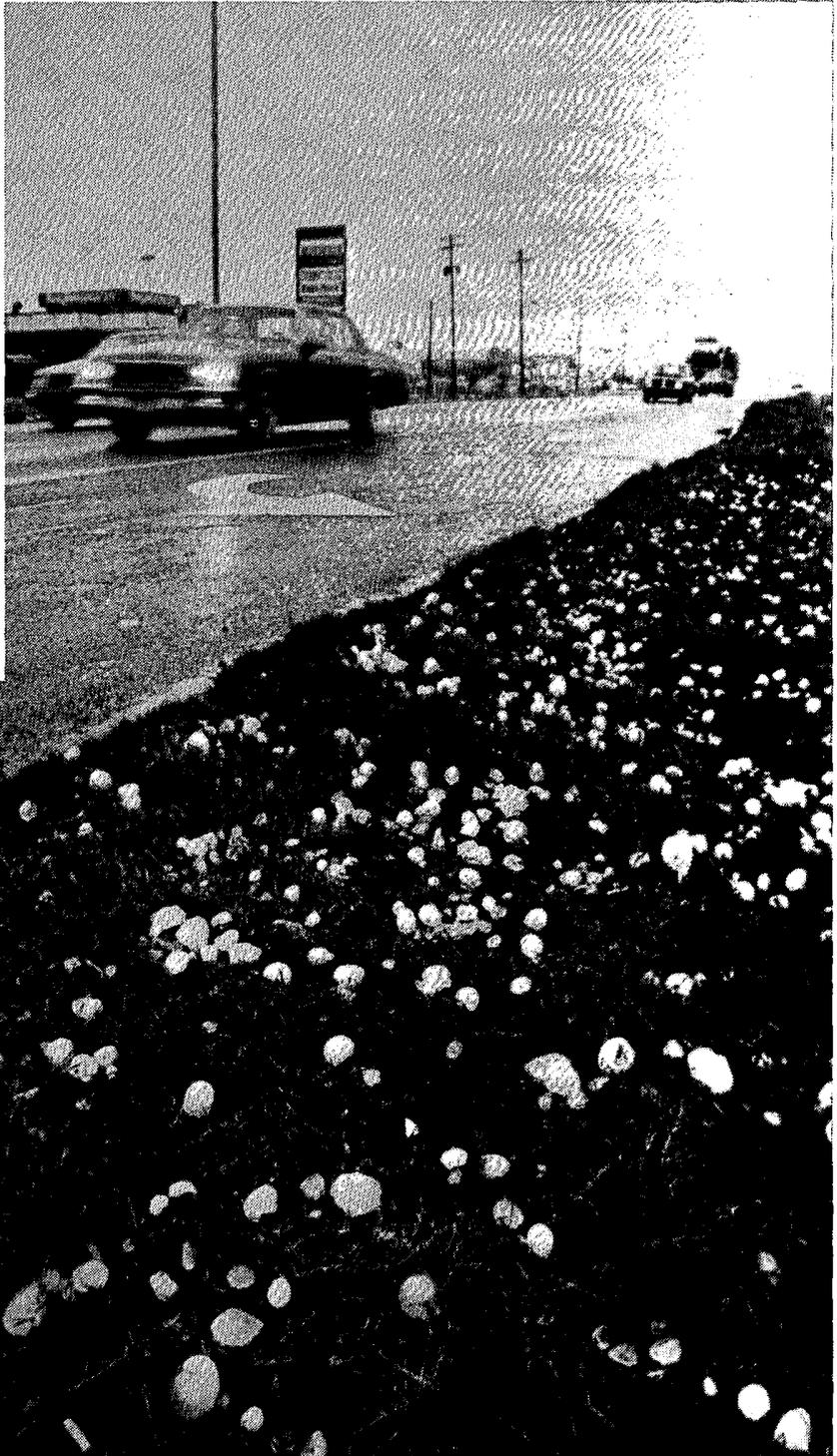
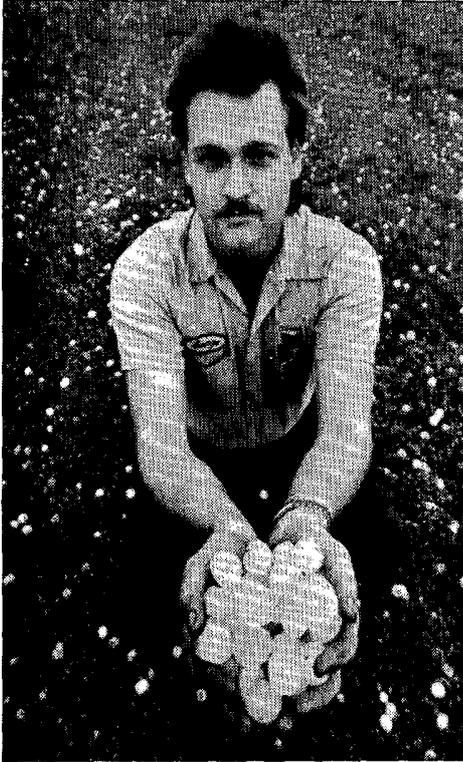
1200CST



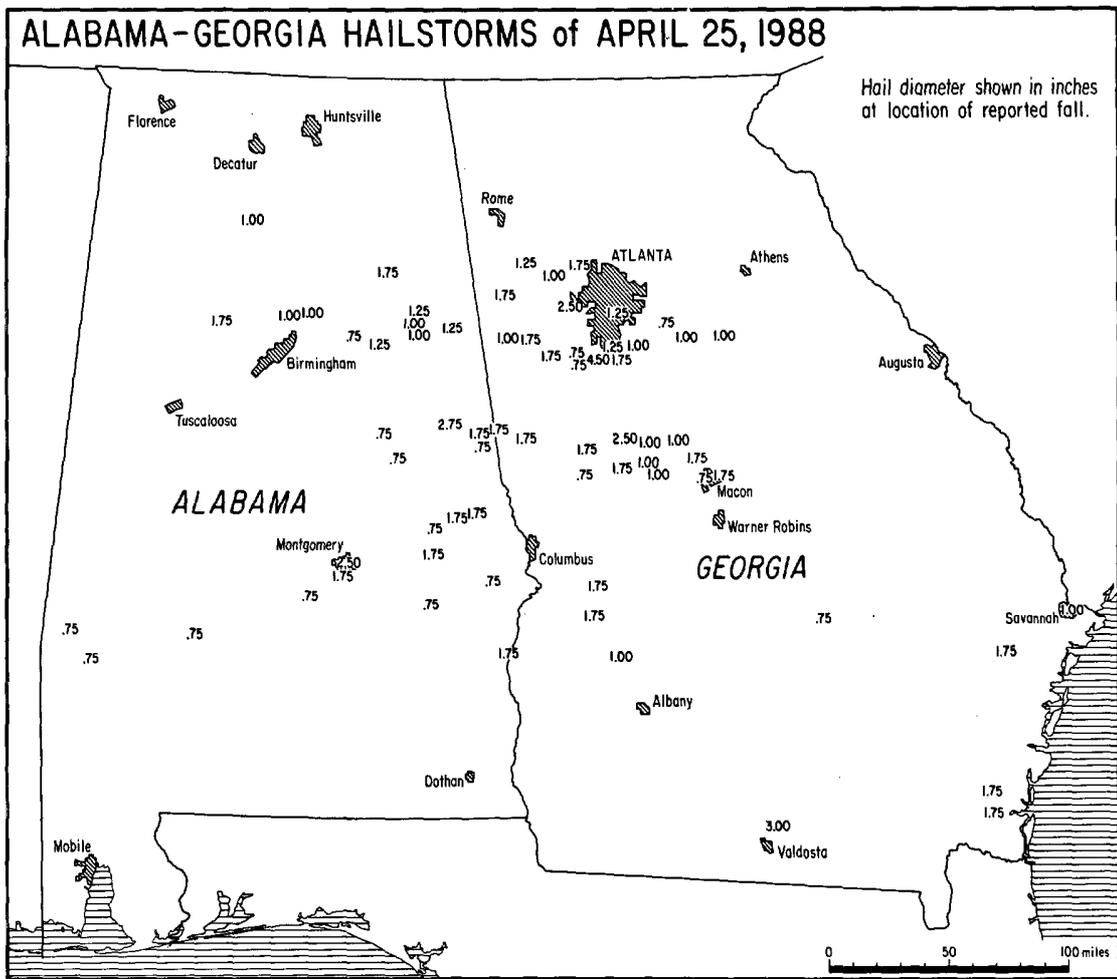
The hail-producing storms in Mississippi and Alabama on April 23rd as seen in GOES 6 satellite, visible (left) and infrared (right) image sequences taken during the late morning as the storms developed and dropped their largest stones. ---Photos from the National Environmental Satellite Data & Information Service, Washington, D.C.

3. LARGE HAIL In ALABAMA and GEORGIA on April 25, 1988

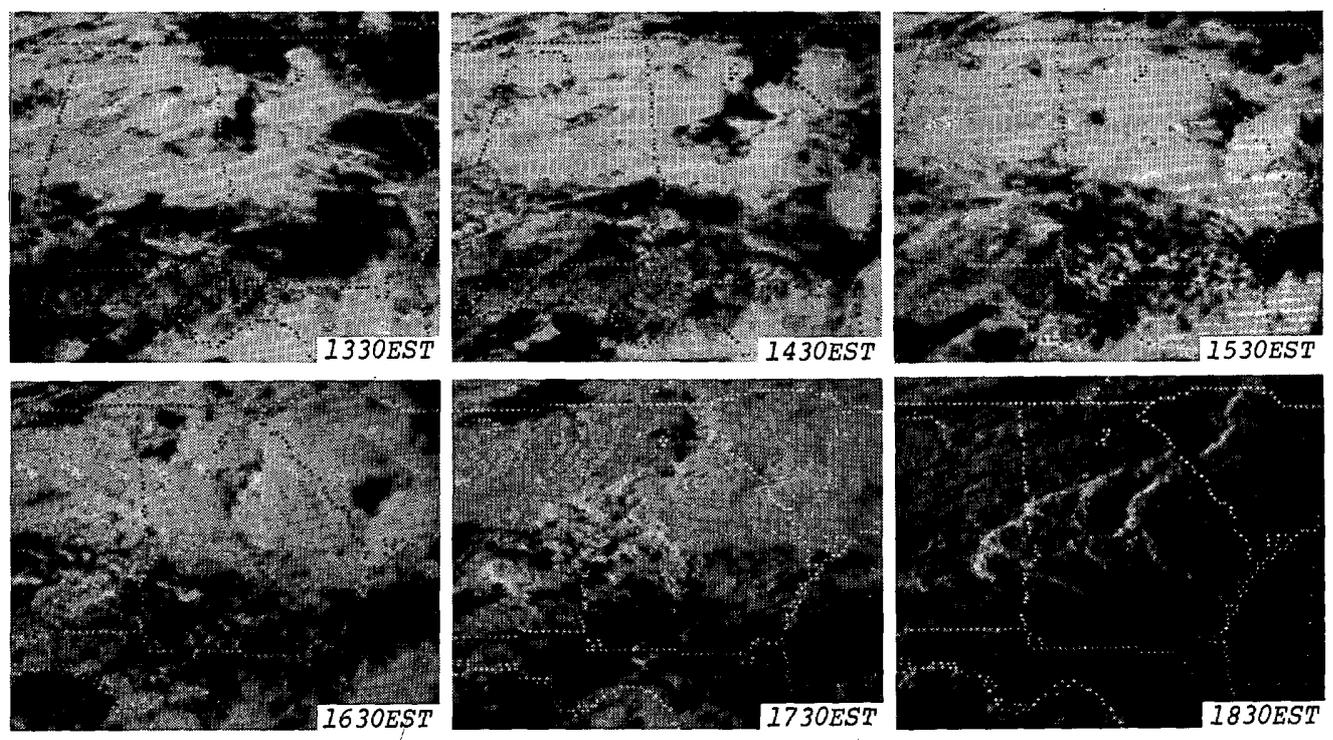
On April 25th, only two days after the pounding that the Jackson, Mississippi area received (Item 2, page 8), thunderstorms again brought large hail to the South. The hail affected a large area spread across the states of Alabama and Georgia, and ranged in diameter up to 2.75 inches with the exception of 3.00 inch diameter hail that accompanied a tornado northeast of Valdosta and 4.50 inch diameter hail that fell near Fayetteville south of Atlanta, both locations being in Georgia. Damage from the hail was extensive in both states and was imparted mainly to roofs, windows, vehicles and crops. Damage estimated at 50 million dollars in value in Alabama alone make this event the state's worst weather disaster since Hurricane Frederic in 1979. Montgomery, the state's capital, was hard hit by hail of golfball to tennis ball size.



Hail stones of up to tennis ball size dot the grass median of a highway in Montgomery, Alabama shortly after they were dropped by a late afternoon thunderstorm on April 25th. INSET: A service station attendant displays a handfull of golfball size stones that also fell in the area. ---Both photos by Frank C. Williams, The Advertiser, Montgomery, Alabama.



Location and size of reported hail (0.75 inch diameter and larger) in Alabama and Georgia on April 25, 1988. ---Graphic by the University of Chicago from data supplied by NWSFO's at Birmingham, Alabama and Atlanta, Georgia.



As seen in GOES 6 satellite, visible images taken during the afternoon of April 25th, the hail-producing thunderstorms formed and continually reformed in a seemingly disorganized pattern to the north of a weak cold front. ---Photos from NESDIS.

4. TORNADO at EAST MOUNTAIN, TEXAS on April 1, 1988

The same cyclone that was responsible for the heavy snow in the Central Rockies and High Plains (Item 1, page 6) produced a small outbreak of 8 tornadoes in the South on April 1st, 4 occurring in northeast Texas and 4 in northwest Louisiana. All of the tornadoes were F1 in intensity with the exception of one, that being an F3 that touched down just over a mile northeast of Gladewater, Texas and then traveled 13 miles to the northeast through the small community of East Mountain and adjoining rural areas. The tornado caused only 9 injuries, none of which required hospitalization. However, 19 houses and 9 mobile homes were destroyed, and 61 houses, 5 mobile homes and 4 businesses were damaged, resulting in an estimated loss due to damage of \$2.5 million.

---Photo Credits for pages 12 through 14:

(RALN) and (JRLN)....by Renee Agee and Jerry Roberts, respectively, The Longview News, Longview, Texas;

(NWS).....by Ernest S. Ethridge, NWSO at Shreveport, Louisiana.

All photos provided by Mr. Ethridge.



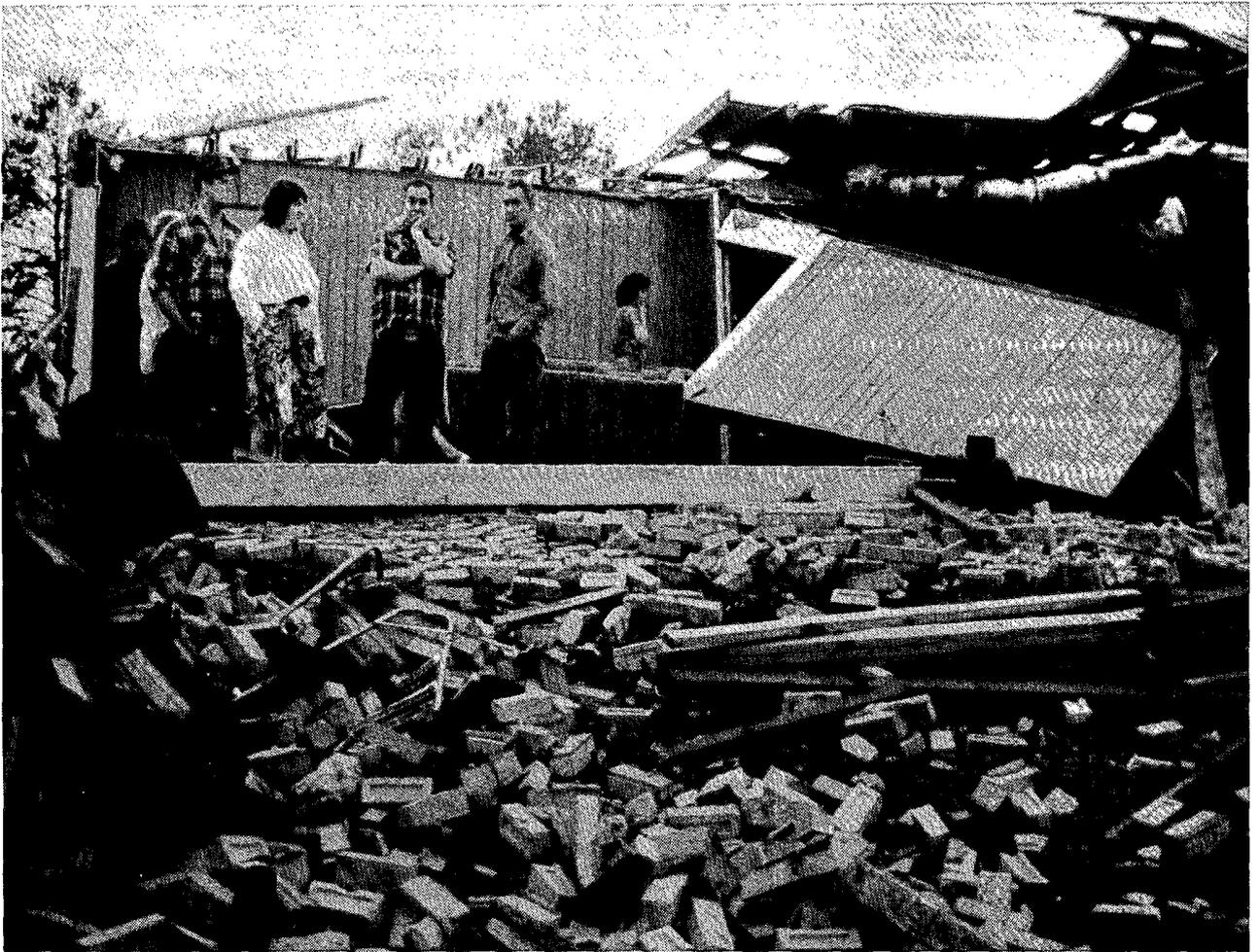
Neighbors gather to swap stories of the tornado in the debris-littered front yard of a three bedroom, brick house one mile west of East Mountain. The home was damaged to the extent of being irreparable. ---(JRLN)



A boat and trailer are trapped in the debris of a collapsed carport that was attached to the house shown in the photo above. ---(RALN)



Three-quarters of a mile west of East Mountain, this 6 month old, 2400 square foot house was blown horizontally off its foundation. ---(NWS)



In East Mountain, the southwest section of this three bedroom, brick home was ripped away while the rest of the four-year-old structure was left fairly intact. ---(RALN)



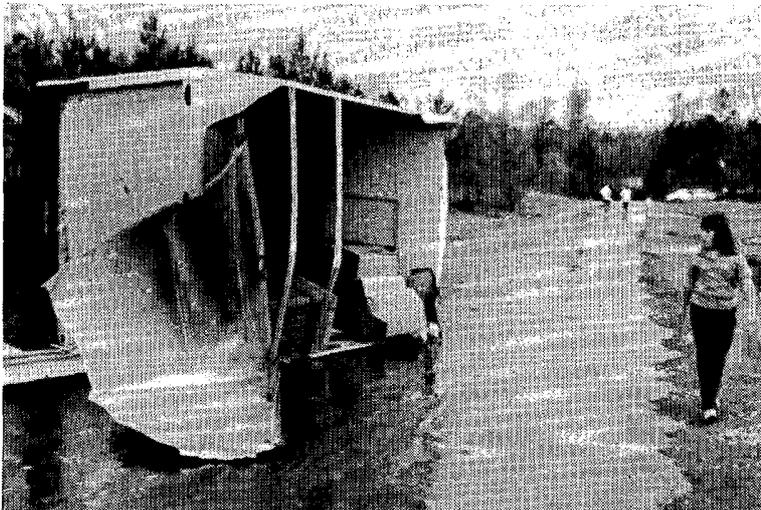
Behind the home pictured above, residents of the community sift through debris from mobile homes and other structures. The view is toward the north. ---(JRLN)



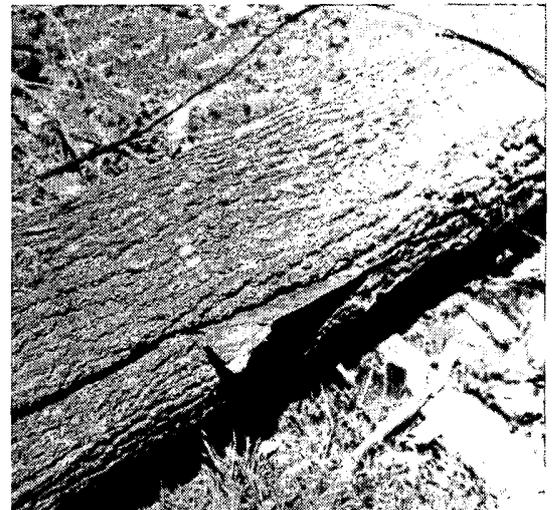
As the tornado sheared the roof from this East Mountain home, the exterior wall in the foreground of the photo was pushed out of position, causing the brick veneer to fall away. --- (NWS)



Piled against an uprooted tree are the remains of two mobile homes two miles east-northeast of East Mountain. --- (JRLN)



A truck that was blown half a block in distance and had its top torn open by the tornado, lies on its side 6 miles east-northeast of East Mountain. --- (RALN)



Also 6 miles east-northeast of East Mountain, this tree trunk was penetrated by a piece of paneling, causing it to split along its length. --- (NWS)

STORM DATA AND UNUSUAL WEATHER PHENOMENA

APRIL 1988

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED ¹ DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
ALABAMA									
Morgan County	02	0930CST			0	0	?	0	TSTM Wind
During a fishing tournament an apparent downburst whipped waves over boats, causing several of them to capsize. Six people were caught in the water but were soon rescued. No injuries or casualties were reported. The incident occurred on Wheeler Lake near Decatur.									
DeKalb County	02	1300CST			0	0	4	0	High Winds
Strong gradient winds not associated with thunderstorms uprooted trees and downed power lines mainly in Ft. Payne and Collinsville. The Ft. Payne High School field house received the worst damage as rain gutters and more than half of its felt and tar roof was peeled off. The wind also caused two revival tents to collapse, destroying one. Two other buildings had their roofs blown off.									
Mobile County	18	1451CST			0	0	?	0	Hail(1.75)
Golf ball size hail fell in the City of Mobile.									
Baldwin County	18	1517CST			0	0	?	0	Hail(1.75)
Golf ball size hail fell at Tensaw.									
Elmore County	18	1745CST			0	0	0	0	TSTM Wind
Trees were blown down at Millbrook.									
Houston County	18	1830CST	1	-50	0	0	0	0	Tornado(F0)
One mile east of Madrid off County Road 4 a small tornado touched down in open pasture then hopped and skipped northeast one mile. There were no injuries or damage.									
Houston County	18	1830CST			0	1	0	0	Lightning
A 9 year old girl was slightly injured by lightning in Cottonwood as she stood near a stove that was struck.									
Dallas County:	18	2045CST			0	0	0	0	TSTM Wind
Orrville	18	2055CST			0	0	0	0	Hail(0.75)
10 E Selma	18	2100CST			0	0	0	0	TSTM Wind
Pleasant Hill	Trees were blown down at Orrville at 2045CST. Golf ball size hail fell at Tyler about 10 miles east of Selma. At 2100 CST trees were blown down at Pleasant Hill.								
Washington County	18	2055CST			0	0	0	0	Hail(1.75)
Golf ball size hail fell at Millry.									
Autauga County	18	2120CST			0	0	?	0	TSTM Wind
Trees were blown onto power lines just northwest of Prattville.									
Montgomery County	18	2120CST			0	0	0	0	Hail(0.75)
Dime size hail fell in the City of Montgomery.									
Tallapoosa County	18	2200CST			0	0	?	0	Hail(1.75)
Golf ball size hail fell at Reeltown.									
Choctaw County	18	2200CST			0	0	0	0	Hail(1.00)
Nickel to quarter size hail fell 5 miles south of Butler.									
Elmore County	18	2200CST			0	0	0	0	Hail(1.00)
Quarter size hail fell at Tallassee.									
Barbour County	18	2205CST			0	0	?	0	Hail(1.75)
Golf ball size hail fell at Eufaula.									
Macon County	18	2230CST			0	0	0	0	TSTM Wind
Trees were blown down at Hardaway.									
Lee County	18	2245CST			0	0	0	0	TSTM Wind
Trees were blown down 7 miles south of Auburn.									
Lee County	19	2310CST			0	0	?	0	Hail(1.75)
19	2310CST				0	0	?	0	TSTM Wind
In the Smiths Community golfball size hail fell. Strong winds blew a sheriff's car off the road and numerous trees were uprooted.									
Sumter County	23	1030CST			0	0	0	0	Hail(1.00)
23	1030CST				0	0	0	0	Hail(0.75)
Quarter size hail fell at York and nickel size hail fell at Cuba.									
Marengo County	23	1100CST			0	0	0	0	Hail(0.75)
Dime size hail fell at Demopolis.									
Hale County	23	1108CST			0	0	0	0	Hail(0.75)
Dime size hail fell at Greensboro.									
Dallas County	23	1135CST			0	0	0	0	Hail(0.75)
Dime size hail fell at Selma.									
Autauga County	23	1225CST			0	0	?	0	TSTM Wind
Power lines were blown down at Prattville.									
Tallapoosa County	23	1235CST			0	0	?	0	TSTM Wind
At Davidson a garage collapsed. Two people inside hid under a workbench and were uninjured. At New Site a house was unroofed. Trees were blown down at scattered locations throughout the county. Some trees fell on the tops of cars at Alexander City.									
ALABAMA									
Choctaw County	23	1310CST			0	0	0	0	Hail(0.75)
Dime size hail fell at Butler.									
Clarke County	23	1330CST			0	0	0	0	TSTM Wind
Large tree limbs were blown down at Morvin.									
Randolph County	23	1340CST			0	0	?	0	TSTM Wind
Trees and power lines were blown down and a few windows were knocked out in Ronoake. A large tree was blown across U.S. 431 near Wedowee.									
Tuscaloosa County	23	1910CST			0	0	?	0	Hail(1.75)
Quarter to golf ball size hail fell over much of central and eastern Tuscaloosa County.									
Bibb County	23	1925CST			0	0	?	0	Hail(1.00)
Hail to the size of quarters fell over a large portion of north Bibb County.									
North-Central; East; South-Central and East Alabama:	On April 25, 1988 numerous hailstorms moved across much of North-Central, East, South-Central and East Alabama. In financial terms it was Alabama's worst weather disaster since Hurricane Frederic in 1979. Insurance authorities estimated damage to vehicles and homes would be around 50 million dollars. Specific locations are shown in sequence.								
Choctaw County	25	0400CST			0	0	?	0	Hail(0.75)
Dime size hail fell at several locations throughout the county.									
Clarke County	25	0415CST			0	0	?	0	Hail(0.75)
Dime size hail fell at West Bend.									
Walker County	25	1155CST			0	0	?	0	Hail(1.75)
Golf ball size hail fell at Goodsprings.									
Jefferson County	25	1205CST			0	0	?	0	Hail(1.00)
Quarter size hail covered the ground at Clay and Pinson in northeast Jefferson County.									
Cullman County	25	1235CST			0	0	?	0	Hail(1.00)
Quarter size hail fell at Jones Chapel.									
Calhoun County	25	1312CST			0	0	?	0	Hail(1.00)
One inch in diameter hail fell at the Bottom Community just west of Anniston.									
Calhoun County	25	1313CST			0	0	?	0	Hail(1.00)
One inch in diameter hail fell at Coldwater.									
Calhoun County	25	1314CST			0	0	?	0	Hail(1.25)
Half dollar size hail fell at Anniston.									
Cleburne County	25	1327CST			0	0	?	0	Hail(1.25)
Half dollar size hail fell at Heflin.									
St. Clair County	25	1400CST			0	0	?	0	Hail(0.75)
Dime size hail fell at Pell City.									
Talladega County	25	1412CST			0	0	?	0	Hail(1.25)
Half dollar size hail fell across much of the northern portion of the county.									
Etowah County	25	1412CST			0	0	?	0	Hail(1.75)
Golf ball size hail fell at Rainbow City just south of Gadsden.									
Coosa County	25	1445CST			0	0	?	0	Hail(0.75)
Dime size hail fell at Goodwater.									
Randolph County	25	1453CST			0	0	?	0	Hail(2.75)
Baseball size hail fell at Wadley.									
Tallapoosa County	25	1445CST			0	0	?	0	Hail(0.75)
Three quarter inch hail fell at Alexander City.									
Chambers County	25	1455CST			0	0	?	0	Hail(1.75)
Golf ball size hail fell in the Community of Standing Rock.									
Chambers County	25	1508CST			0	0	?	0	Hail(1.75)
Golf ball size hail fell in the Welch Community.									
Chambers County	25	1543CST			0	0	?	0	Hail(0.75)
Dime size hail fell in the Five Points Community.									
Lowndes County	25	1630CST			0	0	?	0	Hail(0.75)
Dime size hail fell at Hayneville.									
Montgomery County	25	1705CST			0	0	?	0	Hail(1.75)
25	1705CST				0	0	?	0	Hail(2.50)
Golf ball size hail fell at Hope Hull. There were numerous reports of golf ball to tennis ball size hail in the City of Montgomery. There was widespread damage in the Montgomery area to vehicles and windows in homes and businesses.									
Macon County	25	1735CST			0	0	?	0	Hail(1.75)
Golf ball size hail fell at Tuskegee.									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

APRIL 1988

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	PROPERTY	CROPS	
ALABAMA											
Macon County	25	1741CST			0	0	?	0			Hail(0.75) Dime size hail fell at Notasulga.
Lee County	25	1741CST			0	0	?	0			Hail(1.75) Dime to golf ball size hail fell at Auburn and Opelika.
Bullock County	25	1745CST			0	0	?	0			TSTM Wind 25 1745CST 0 0 ? 0 Hail(0.75) In the Union Springs area trees were blown onto power lines and dime size hail fell.
Barbour County	25	1815CST			0	0	?	0			Hail(1.75) Golf ball size hail fell in the Eufaula area.
Russell County	25	1930CST			0	0	?	0			TSTM Wind 25 1930CST 0 0 ? 0 Hail(0.75) At Hatchechubbee State Park dime size hail fell and many large trees were blown down.
Wilcox County	25	2007CST			0	0	?	0			Hail(0.75) Dime size hail fell midway between Yellow Bluff and Camden.
2 ARIZONA											
Maricopa County 20 WNW Phoenix	16	1103 MST			0	0	0	0			Funnel clouds Observers at Luke AFB watched several small, short-lived funnels form and dissipate over open land to the west and northwest. Movement was to the northeast.
AZZ005 Mogollon Rim	17	Morning			0	0	?	0			Heavy snow Snow rapidly accumulated in the Flagstaff area with up to 9 inches on the ground by mid-morning.
AZZ005 Mogollon Rim	21	Morning			0	1	?	0			Heavy snow A powerful Pacific storm developed off the Southern California coast late on the 20th. Thunderstorms, heavy snow and high winds moved over the central and north portions of the state. A rockslide caused by the rain and snow injured a woman near Sedona. A medical transport plane sustained minor damage while attempting to take off from Pulliam Airport. Between 9 and 10 am, the airport received 4 inches of new snow, while parts of east Flagstaff had 5 inches in the same period. Many trees in and around town had damage from the weight of the heavy snow.
Pima County 12 W Tucson	28	1030 MST			0	0	2	0			Thunderstorm winds Strong winds were reported at Ryan Field with 61 mph peak gusts. A small shed was blown away at Robles Junction.
3 ARKANSAS											
Sebastian and Crawford Counties	01	1730CST			0	0	?	?			Flash Flood Over three inches of rain in about three hours time caused flash flooding in and around the Fort Smith area. During the height of the storm, several drivers were rescued from their cars after they were washed off the road into rushing streams. Numerous streets were closed, and many cars stalled in high water.
Little River County	01	1900CST			0	0	3	?			Thunderstorm Wind Severe thunderstorms ripped through the Wallace Community and caused damage to four homes. Trees and power lines were also downed.
ARKANSAS											
Benton County	05	1520CST			0	0	?	?			Hail (0.75) Dime-size hail was reported at Centerton and Bella Vista.
Washington County	05	1610CST			0	0	?	?			Hail (1.00) Quarter-size hail was reported at Tontitown while Springdale reported dime-size hail shortly afterwards.
Crawford County	05	1630CST			0	0	?	?			Thunderstorm Wind High winds downed over ten trees three miles north of Dora on the Circle R Ranch.
Crawford County	05	1645CST			0	0	?	?			Hail (0.75) Dime-size hail was reported north of Van Buren.
Carroll County	05	1700CST			0	0	3	-			Thunderstorm Wind A Berryville restaurant sustained roof damage as high thunderstorm winds blasted through the area. Other residents in the area also suffered minor wind damage including several windows blown out of one house.
Little River County	05	1905CST			0	0	?	?			Hail (0.88) Nickel-size hail was reported at Wilton.
Miller County	05	1915CST			0	0	?	?			Hail (1.00) Quarter-size hail was reported at Texarkana.
Saline County	05	2000CST			0	0	?	?			Thunderstorm Wind High winds downed several trees and power lines on Glenrose Road near Haskell.
White County	05	2010CST			0	0	4	-			Lightning Lightning struck and killed 13 head of beefmaster cattle on a farm in Rose Bud. The cattle had an estimated value of \$30,000, and included a grand champion beefmaster bull from 1987's Arkansas State Fair. The cattle were not insured.
Pulaski County	05	2010CST			0	0	?	?			Thunderstorm Wind High thunderstorm winds downed large trees in Little Rock on Woodson Lateral Road and on 145th Street. The high winds knocked out power to over 7,000 customers of Arkansas Power and Light.
Miller County	05	2015CST			0	0	?	?			Hail (1.00) One-inch hail fell on U. S. Highway 71, four miles south of Fouke.
Clay County	05	2120CST			0	0	4	-			Thunderstorm Wind High winds downed part of a grain dryer facility at the Morris Farm Center in Greenway.
Garland County	17	1910CST			0	0	4	?			Thunderstorm Wind High winds downed as many as 40 trees in southeast Hot Springs. Several trees fell on houses and caused considerable damage. Golfball-size hail fell along with very heavy rain. Most of the damage was centered in the 100 and 200 blocks of Sherwood Circle and Sherwood Drive.
Saline County	17	1938CST			0	0	?	?			Thunderstorm Wind High winds with a severe thunderstorm downed trees and power lines in the Owensville area.
Hot Spring County	18	1613CST			0	0	?	?			Hail (1.75) Golf-ball size hail was reported at Bismarck.
Hot Spring County	18	1630CST			0	0	?	?			Hail (1.75) For the second time in an hour's time, golfball size hail was reported in Bismarck.
Clark County	18	1641CST			0	0	?	?			Hail (1.75) Clark County sheriff reported golfball-size hail in Arkadelphia.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

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					KILLED	INJURED	PROPERTY	CROPS	PROPERTY	CROPS	
4 CALIFORNIA, Northern											
Santa Barbara County Santa Maria	14	1340PST			0	0	0	0			Funnel Clouds
	A pair of funnel clouds associated with a deep cold-core upper low off the coast were sighted at Santa Maria.										
San Joaquin County, Lockeford (19NNE SCK)	19	1335PST	?	?	0	0	4	0			Tornado (F1)
Sacramento County: Folsom (15ENE SAC)	19	1358PST	1.0	33	0	0	5	0			Tornado (F1)
Hood (15SSW SAC)	19	1410PST			0	0	0	0			Funnel Cloud
	Thunderstorms triggered by a deep 500 millibar low off the Northern California coast and a cold front crossing the Sacramento and San Joaquin valleys produced two tornadoes and a funnel cloud. The tornado near Lockeford caused an estimated \$20,000 damage to a travel-trailer that was blown 30 feet into a ravine. The Folsom tornado damaged 46 homes within its path along which it touched down several times.										
San Mateo County, South San Francisco	20	1035PST			0	0	0	0			Funnel Cloud
Kern County, Bear	20	1140PST	1/4	10	0	0	3	0			Tornado (F0)
Stanislaus County, Modesto	20	1700PST			0	0	0	0			Funnel Cloud
	Cold advection from a 500 millibar low dropping southward along the Central California coast produced scattered thunderstorms from which 2 funnels and a tornado were spawned. The funnel in San Mateo County was over Mount San Bruno, 3 miles northwest of San Francisco International Airport, and was visible for less than 2 minutes. There was also small hail associated with this cell. The tornado in Kern County occurred at an elevation of 4500 feet. There was also some minor straight-line wind damage and small, one-half inch diameter hail.										
4 CALIFORNIA, Southern											
ALL ZONES	14	1200pst			0	?	?	0			Rain
	Although the weather wasn't severe, the event is of note, this was the first rain in Southern California since March 2 nd and 3 rd . The rain-slickened roads resulted in numerous accidents, the worst was a ten car pile-up on SR-91 near Raymond Street in Riverside. No injuries were reported but may have occurred. Two people were injured in a separate accident involving four vehicles on the Orange Freeway.										
CAZ-11-12-13 16-17-20 Santa Barbara, Ventura, Los Angeles, Orange, and San Diego Counties	19	1700pst			0	0	0	0			Heavy Rain
	Throughout the day numerous accidents and congested freeways were caused by the rain. Seven students were injured when their bus, unable to stop on the rain slick road, hit a car pulling from a driveway. In another accident, a student was injured when his bus driver braked suddenly to avoid a skidding car.										
	For the thirteenth time since 1962, the Dodgers Stadium was rained-out.										
	A drought was officially declared by the Water Resource Director. The rainfall did little to alleviate the drought conditions.										
	At 2000 pst (2100 pdt) the transition roads from the Westbound Ventura Freeway to the Golden State Freeway was closed due to flooding. No damage was reported.										
Los Angeles, Orange, and San Bernardino Counties	20	1200pst			0	0	?	0			Urban Flooding
		1600pst			0	0	5	?			Mud Slide
		1615pst			0	26	?	0			Heavy Rain
		1700pst			0	0	?	0			Heavy Rain
	Heavy rain began falling around noon. As the rain moved to the Southern Counties, urban flooding began to occur. In Carson, several businesses were forced to close as water in a flood channel began to rise and pour into the businesses. In Azusa thirteen apartment buildings were evacuated when rain water began pouring through the roofs. No injuries or damage were reported.										
— CALIFORNIA, Southern											
Los Angeles, San Diego, and Orange Counties	21	1300pst			0	0	?	0			Heavy Rains
	Heavy rain caused a mud slide in Santa Clarita. Nine homes were damaged before the flow was redirected by using sand bags. No damage total was available.										
	Along with minor urban flooding, many traffic accidents were reported. The worst accident involved 20 vehicles on the Pomona Freeway. At 1615 pst the traffic heading westbound drove into a light rain. When the sun broke through the clouds the spray from the vehicles combined with the glare off the pavement blinded the drivers. As the vehicles began braking a chain-reaction collision began. Twenty-six persons were injured as a result.										
	For the second day in a row, the L.A. Dodgers game was rained out. This was only the fourteenth time a game was rained out since 1962.										
	Many low-lying areas were flooded during the heavy rain over the past few days. At 6:15 pm pdt an accident on Interstate 8 in Mission Valley involved twenty-five vehicles. Two people were critically injured and at least eight other people received minor injuries. The drivers were suddenly blinded by the setting sun as it broke through the clouds. The glare produced by the road spray and the rain-slickened road surface blinded several drivers and a chain-reaction accident ensued.										
	Overall, 31,000 customers lost electrical power during some point during the storm.										
	For the third day straight the L.A. Dodgers baseball game was rained out. This was the first double-header rained out, and only the fifteenth game rained out in the twenty-six year history of Dodger Stadium.										
	The rainfall of the past few days did little to end the drought of California. However, the rain did offer some relief for the fire season.										
Orange County, Santa Ana	22	0600pst			0	0	0	0			Funnel Cloud
	Unstable air over Southern California produced numerous unconfirmed reports of funnel clouds. This was the only confirmed report and no damage was reported.										
Santa Barbara, Ventura, Los Angeles, Orange, and San Diego Counties	23	1030pst			0	9+	?	0			Lightning, Rain
	An intense late-winter storm moved through West Los Angeles County with small hail and frequent lightning. The squall line moved rapidly southeast and by 1030 pst had reached Tustin. A team of softball players had gathered for a game when the squall line moved through. When it began to rain the team gathered under a tree; the tree was struck by lightning and nine members of the team were injured. The injuries ranged from fainting to two girls with stopped hearts. Many girls sustained first to third degree burns. Two girls were revived and no deaths occurred.										
	By early afternoon the rain had spread to San Diego County. The El Toro Air Show was canceled due to the heavy rain.										
Los Angeles County:	30	1300pst			2	?	6	0			High Winds Heavy Surf
	Ten to fifteen foot waves damaged the fishing pier at Redondo Beach. One hundred and fifty-five feet of the end of the pier was damaged.										
Marina Del Rey Ballona Creek											One boater died when he left his boat in an attempt to reach help. Two other passengers in the boat drifted with the boat to safety. Age unknown.
Santa Catalina Island											A man was knocked overboard from a boat in the entrance to Avalon Harbor. Age unknown.

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APRIL 1988

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					KILLED	INJURED	PROPERTY	CROPS	
5 COLORADO									
E. Colorado except Front Range COZ012-013-014-015-016-017	1-2				0	0	6	0	Blizzard
A snowstorm brought blizzard conditions to much of southeast Colorado on the evening of the 1st; the blizzard spread to extreme northeast Colorado overnight and continued on the morning of the 2nd. The storm closed many roads throughout the area. Snow and wind combined to cause extensive power outages. Wray, in Yuma County, was without electricity for one and a half days on April 2-3. A roof was collapsed by snow, and over 600 power poles were snapped in Yuma County. Damage in the county was estimated at over half a million dollars. There were also some newborn calves killed by the storm in the county. La Junta, in Otero County, was buried by 19 inches of snow, mostly on the evening of the 1st. The town's airport was closed, and the snow collapsed roofs and awnings. Damage in the area was estimated at more than \$150,000. Total snowfall from the storm was 10 to 20 inches in most places. However, up to 30 inches fell in Yuma County. Rye, in the foothills west of Pueblo, was buried by 34 inches. Only 9 inches fell in Pueblo, but that all occurred in just three hours on the evening of the 1st.									
Gilpin County COZ002	5	0427MST			0	0	0	0	High winds (64) A gust of 74 mph was recorded at Rollinsville.
Otero County COZ016	8	1813MST			0	0	0	0	High winds (54) A gust of 62 mph was noted at La Junta.
El Paso County COZ014	19	1430MST			0	0	0	0	Hail (0.75) 3/4 inch hail fell just north of Peyton.
Weld County COZ011	19	1452MST	0.3	60	0	0	4	0	Tornado (F1) A tornado touched down in Fort Lupton, following a path 50 to 75 yards wide for 2 1/2 blocks. The tornado damaged roofs on two schools, and broke numerous windows; about 10 houses were also damaged, and several cars had windows blown out. A backstop on a baseball field was knocked over, and several trees were downed.
El Paso County COZ014	19	1528 MST			0	0	0	0	Hail (1.75) Golfball size hail fell 5 miles southeast of Ellicott.
Adams County COZ011	21	1435MST	0.2	30	0	0	0	0	Tornado (F0) A small tornado was observed by Weather Service employees about three miles northwest of Thornton. It was on the ground for about two minutes, and appeared to have developed after an earlier thunderstorm downburst.
Adams County COZ011	21	1610MST			1	1	0	0	Lightning Lightning struck two 14 year old girls on a softball field in Westminster. One was killed; the other suffered moderate injuries.
Fremont County COZ015	21	1700MST	0.3	30	0	0	4	0	Tornado (F1) A tornado touched down in Penrose, causing \$8000 damage.
Weld County COZ012	21	1730MST	0.5	40	0	0	2	0	Tornado (F1) A tornado was observed at a farm 15 miles southeast of Briggsdale. It knocked down a tank, and moved a large fuel truck.
Washington County COZ013	21	1810MST			0	0	0	0	Hail (1.75) Golfball size hail fell at Cope.
Logan County COZ012	21	1905MST			0	0	0	0	Hail (1.0) Quarter size hail fell 25 miles northwest of Sterling.
Weld County COZ012	24	1204MST	2.0	40	0	0	0	0	Tornado (F1) A tornado was observed 15 miles ENE of Greeley. It stayed on the ground for 10 minutes, moving toward the east.
Morgan County COZ012	25-26				0	0	0	4	Freeze Two successive nights of subfreezing temperatures damaged about 1000 acres of sugar beets in Morgan County.
6 CONNECTICUT ————— NONE REPORTED									
7 DELAWARE ————— NONE REPORTED									
8 FLORIDA									
Jackson Co., Malone Jackson Co., Bascom	18	2000CST	15.0	300	0	0	6	0	Tornado (F2)
A pair of tornadoes passed over northeast Jackson County. One house was destroyed, two were damaged, and three mobile homes were destroyed in Malone. One house was destroyed in Bascom. Ten barns were leveled in the area. The Malone tornado traveled from Malone to 15 miles east-northeast of Malone.									
Gadsden Co., Quincy Madison Co., Madison Hamilton Co., Bellville	19	0320EST			0	0	3	0	TSTM wind (55)
A tornado moved from just southwest of Madison to 11 miles east-northeast of Madison. Seventeen homes were destroyed and 30 homes were heavily damaged. Several commercial buildings were damaged or destroyed. A church was destroyed. Four chicken barns with 90,000 chicks were destroyed. At the North Florida Junior College three buildings were destroyed and nine buildings were heavily damaged. Two people were killed while sleeping in a mobile home and two people were killed in a farm 'cottage' building. Twelve people suffered minor injuries and six people suffered injuries requiring hospitalization. In Hamilton County two houses and one mobile home were destroyed. In Gadsden County high wind blew the roof off of a building and the roof landed in a parking lot, damaging several cars. M390, M410, M61M, F60M									
Orange Co., Lake Apopka(near) Lake Co., Mascotte(3.5mi N)	19	1130EST			0	0	4	0	TSTM wind (65)
In Orange County high wind blew the roof off of a house. A large tree was blown down and damaged a car. Two plant nurseries were severely damaged. In Lake County a tornado destroyed a mobile home and heavily damaged six others. One frame house was heavily damaged.									
Brevard Co., Titusville	19	1300EST			0	0	0	0	Hail (0.75) Hail 3/4 inch in diameter was reported just north of Titusville.
Monroe Co., Key West (6mi E)	25	1205EST	1.0	30	0	0	2	0	Waterspout- Tornado (F0)
A waterspout came ashore at Stock Island and a non-substantial plywood roof was blown off of a building.									
Okeechobee Co., Okeechobee	30	1250EST	2.0	30	0	0	4	0	Tornado (F1) Five buildings including city hall were damaged by a tornado. Several trees were downed.
Sarasota Co., Venice	30	1345EST	1.0	50	0	0	5	0	Tornado (F1) A tornado damaged 18 mobile homes, causing most damage to carports and porches, but two homes were heavily damaged.
Palm Beach Co., Boca Raton	30	1458EST	1.0	30	0	0	4	0	Tornado (F1) Several homes, a shopping center, and the city public works complex were damaged. Several trees were uprooted. A truck was overturned.
9 GEORGIA									
Tattnall County, Collins	06	1530EST			0	0	?	?	Hail (1.75)
Troup County, LaGrange	11	1300EST			0	0	?	?	Hail (1.75)
Monroe County, Forsyth	11	1400EST			0	0	?	?	Hail (1.00)
Gwinnett County, Lawrenceville	11	1730EST			0	0	5	0	Lightning Lightning started a fire that destroyed a store in Lawrenceville.

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— GEORGIA									
Appling County, Baxley	18	0300EST			0	0	3	0	TSTM Wind
Thunderstorm winds blew down an equipment shed and uprooted several trees near Baxley.									
Harris County, Waverly Hall	18	0915EST	0.8	150	0	0	5	?	Tornado (F1)
A tornado touched down on the southeast edge of the town of Waverly Hall. Three barns were destroyed and three cars were damaged in one of the barns. Another barn was unroofed. Fifty large pecan, oak and pine trees were uprooted or snapped off along the 3/4 mile path. Three houses were damaged by falling trees.									
Crawford County, Roberta	18	2005EST			0	0	?	?	Hail (0.75)
Early County: Blakely	18	2005EST			0	0	?	?	Hail (1.75)
Danascus	18	2015EST			0	0	?	?	Hail (1.75)
Bibb County: Macon	18	2022EST			0	0	?	?	Hail (1.25)
Macon	18	2030EST			0	0	?	0	TSTM Wind
Thunderstorms produced hail to one and one-fourth inches from Roberta to Macon and thunderstorm winds downed several power lines in Macon.									
Decatur County, 4W Bainbridge	18	2040EST	2.7	85	0	3	6	?	Tornado (F2)
A tornado touched down 1/2 mile south of U.S. Highway 84 four miles west of Bainbridge. The tornado moved to the northeast for nearly 3 miles, dissipating as it reached U.S. Highway 27 two miles northwest of Bainbridge. The tornado severely damaged or destroyed 17 mobile homes. Three people suffered serious injury. An auto repair shop was also destroyed. Hundreds of trees were either uprooted or snapped off along the path of the storm.									
Ben Hill County, 1NW Fitzgerald	19	0255EST			0	0	5	?	TSTM Wind
A strong downdraft caused a 1/2 mile wide and 6 mile long area of damage and uprooted trees across the northwest and northern part of Fitzgerald. Winds were estimated to be between 80 and 100 mph. Many homes had roof damage from the wind and flying debris. A mobile home was destroyed by the winds. A house was nearly severely damaged when a large pecan tree fell on it. Many of the uprooted trees were in pecan groves.									
Evans County: Claxton	19	0400EST			0	0	?	0	TSTM Wind
Belville	A tree was blown over onto a roof of a house in Claxton and a roof was blown off a building in Belville.								
Bulloch County, Denmark	19	0400EST			0	1	?	0	TSTM Wind
Three mobile homes were destroyed and five other mobile homes and one house and the roof of a church were heavily damaged by thunderstorm winds. One young girl suffered minor injuries when the mobile home she was in was destroyed.									
Chatham County, Wilmington	19	0500EST			0	1	?	0	TSTM Wind
Thunderstorm winds snapped off a tree which fell on a house. A man in a bedroom was struck on the head by several branches.									
Long County, 1W Ludowici	19	0600EST			0	0	?	0	TSTM Wind
Thunderstorm winds blew down trees just west of Ludowici.									
Bibb County, 3N Macon	23	1310EST			0	0	?	?	Hail (1.00)
Jones County, Gray	23	1330EST			0	0	?	?	Hail (1.00)
Monroe County, 1S Forsyth	23	1330EST			0	0	?	?	Hail (0.75)
Baldwin County, 1W Milledgeville	23	1350EST			0	0	?	?	TSTM Wind
Washington County, 3SE Sandersville	23	1430EST			0	0	5	?	TSTM Wind
Thunderstorm winds caused a 200 yard wide, 3 mile long area of damage along Georgia Highway 242. Most of the damage was in the Parsons Crossing Community. A shop and a garage were destroyed and a house heavily damaged by a falling tree. Many trees and power lines were blown down along the path of the storm.									
Barrow County, Winder	23	1500EST			0	0	?	0	TSTM Wind
Thunderstorm winds snapped large limbs that downed power lines on the west side of Milledgeville and downed several trees in Winder.									
Troup County, Hogansville	23	1500EST			0	0	4	?	TSTM Wind
Thunderstorm winds downed trees in scattered locations in and around Hogansville. The falling trees downed power lines and damaged a house and a car.									
— GEORGIA									
Richmond County, Augusta	23	1600EST			1	1	0	0	Lightning
A 32 year old man was killed and a 6 year old boy critically injured after lightning struck the tree they took refuge under while fishing on the shore of lake Olmstead in north Augusta. M320									
Lowndes County, Bemiss, Naylor	25	0915EST	16	50	0	0	6	?	Tornado (F1)
A weak tornado touched down just east of U.S. Highway 41 south of Bethel Church Road which is 2 miles south of Hahira. Most of the damage in this area was caused by trees falling on buildings. The next area of damage was from the same storm a few miles to the east in the community of Bemiss which is located along Georgia Highway 125 four miles southwest of Moody Air Force Base. The tornado then traveled along an intermittent path to the east for 8 more miles to the community of Naylor in the northeast corner of Lowndes County where the worst damage occurred. Many trees were uprooted and broken off by the tornado, and power and telephone lines were downed. One mobile home was destroyed by the storm, and several homes suffered roof damage. One house was heavily damaged by a falling tree. The fire station in Naylor was destroyed. Hail between 2 and 3 inches fell from the storm and there was considerable damage to crops due to the hail.									
Camden County, Woodbine, Waverly	25	1145EST			0	0	?	?	Hail (1.75)
Thunderstorm winds damaged two mobile homes and the roof of a church. Golf ball size hail damaged many cars and broke windows out of an elementary school.									
GAZ03-04	25	1300EST-			0	0	6	6	Severe TSTMs
Carroll, Haralson, Paulding, Douglas, Fulton, Coweta, Fayette, Clayton, Henry, DeKalb, Rockdale, and Newton Counties	25	1645EST							
Several thunderstorms moved across these counties during the afternoon producing large hail. Two of the thunderstorms produced mesocyclones that produced very long and damaging hail swaths. The first mesocyclone developed within a severe thunderstorm as it intensified near Carrollton shortly after 1 pm EST. This storm was tracked from near Carrollton to northern Coweta County then eastward across northern Fayette, Clayton, northern Henry, and southern Rockdale counties before weakening and dissipating as it reached the Covington area of Newton County. About an hour after the first storm, a second mesocyclone thunderstorm developed in the same area of Carroll County and followed the same path. A third very intense thunderstorm developed just north of Buchanan in Haralson County and moved nearly due east before weakening and dissipating in the northern suburbs of Atlanta. Most of the largest hail fell with these three storms. These and other smaller thunderstorms in the same area produced hundreds of reports of 1/4 to 1/2 inch size hail. The following reports are representative of the largest hail reports during the afternoon. These thunderstorms developed just north of a weak warm frontal boundary in an area of strong instability helped by unusually cold temperatures in the middle atmosphere. The largest hail reported was irregular shaped hail approximately 4.5 inches long and nearly 2 inches in diameter that fell in northern Fayette County from the first mesocyclone thunderstorm. Although these thunderstorms did produce some gusty winds, there was no damage reported due to wind. All of the damage was caused by hail to roofs, windows, cars, and agricultural crops.									
Carroll County: 5W Carrollton	25	1412EST			0	0	4	?	Hail (1.00)
Carrollton	25	1420EST			0	0	5	?	Hail (1.75)
Fulton County, Palmetto	25	1420EST			0	0	0	0	Hail (0.75)
Fayette County, 1S Tyrone	25	1430EST			0	0	?	?	Hail (0.75)
Fayette County, 4N Fayetteville	25	1440EST			0	0	5	?	Hail (4.50)
Bibb County, 5W Macon	25	1445EST			0	0	?	?	Hail (0.75)
Clayton County, 3W Jonesboro	25	1450EST			0	0	4	?	Hail (1.25)
Clayton County, Jonesboro	25	1455EST			0	0	5	?	Hail (1.75)
Henry County, Stockbridge	25	1515EST			0	0	?	?	Hail (1.00)
Coweta County, Roscoe	25	1515EST			0	0	?	?	Hail (1.75)
Rockdale County, Conyers	25	1525EST			0	0	?	?	Hail (0.75)
Newton County, Covington	25	1525EST			0	0	?	?	Hail (1.00)
Morgan County, 10W Madison	25	1545EST			0	0	?	?	Hail (1.00)
Clarke County, Athens	25	1545EST			0	1	0	0	Lightning
A man tying down an aircraft at the Clarke County Airport was injured by lightning.									
Haralson County, 3N Buchanan	25	1550EST			0	0	?	?	Hail (1.75)
Polk County, 2S Rockmart	25	1606EST			0	0	?	?	Hail (1.25)

STORM DATA AND UNUSUAL WEATHER PHENOMENA

APRIL 1988

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	
ILLINOIS									
Lee Co, Harmon	02	1650CST	0.2	25	0	0	0	0	Tornado (F0)
									State Police observed a brief tornado touchdown in an open field near Harmon.
Carroll Co, Thomson	05	1659CST			0	0	?	0	Hail (1.0)
Knox Co, Galesburg	05	1730-1822CST			0	?	7	0	Hail (2.75)
									Severe thunderstorms in the Galesburg area produced very large golfball to baseball size hail and caused extensive damage to the area. The Westport Subdivision west of Galesburg airport was hit first and then the damage extended eastward across Galesburg. Over 700 automobiles and many homes were damaged by the very large hail. Insurance agents in the area estimated the damage would total 5 to 10 million dollars.
McDonough Co	05	1730CST			0	0	0	0	Hail (1.50)
Henderson Co	05	1745CST			0	0	?	?	Hail (1.75)
Stephenson Co, German Valley	05	1750CST			0	0	?	0	Hail (1.75)
Warren Co	05	1805CST			0	0	?	0	Hail (0.75)
Schuyler Co, Rushville	05	1808CST			0	0	?	0	Hail (0.75)
Winnebago Co	05	1820CST			0	0	?	0	Hail (0.75)
									3/4 inch hail occurred at Meridian and Cemetery Road in west Winnebago county.
Sangamon Co, Springfield	05	1836CST			0	0	?	0	Tstm wind (52)
									The Weather Service Office at Springfield recorded a 60 mph wind gust at 6:36 pm CST. High winds caused spotty damage to homes with some windows reported blown out in Springfield.
Montgomery Co, Raymond	05	1900CST			0	0	?	0	Tstm wind
									Strong winds estimated to be over 60 mph caused some property damage in Raymond. On Route 48 just west of Raymond a large portion of a roof was blown off a home. Also a motel in town had significant damage. Large glass windows were blown out of a laundromat. The village hall sustained some roof damage.
Madison Co, Edwardsville	05	1900CST			0	0	?	0	Tstm wind (52)
									Winds gusts were measured at 58 mph at Edwardsville. The strong winds extensively damaged a large block storage building.
St. Clair Co, Cahokia	05	1900CST			0	0	?	0	Tstm wind Hail (1.75)
									A severe thunderstorm blasted Cahokia with 77 mph wind gusts measured at Parks College and golfball size hail was observed. 3 area businesses had extensive roof damage.
Marshall Co	05	1915CST			0	0	0	0	Tstm wind (61)
McLean Co, Bloomington, Chenoa, Lexington	05	1925CST	05		0	6	5	0	Tstm wind (65)
									Bloomington Airport aircraft controllers had to evacuate their tower when winds gusts reached 75 mph. Considerable damage occurred to 8 aircraft and 8 airport hangars. The roof of one hangar was completely blown off. 4 persons were injured when strong winds blew out 6 large plate glass windows at a department store in Bloomington. In the Chenoa and Lexington areas scattered wind damage occurred to about 50 area farms. Much of the damage was done to farm buildings, sheds and some downed trees.
Christian Co, Taylorville	05	1936CST			0	0	?	0	Tstm wind (61)
									Taylorville bore the brunt of severe thunderstorms with wind gusts measured up to 70 mph. Power lines were snapped and large trees and tree limbs were reported down in the area.
Hacon Co, Decatur	05	1947CST			0	0	?	0	Tstm wind (60)
									The Flight Service Station at Decatur measured wind gusts to 69 mph.
Livingston Co, Pontiac	05	1953CST			0	0	?	0	Tstm wind (62)
									Strong thunderstorm winds caused power outages, downed trees and did damage to building roofs in Pontiac, where the fire department measured wind gusts to 71 mph. Damage extended from Pontiac to Odell to Dwight along Interstate 55. A department store in Pontiac lost a section of its roof. A grain elevator near Dwight sustained extensive damage.
ILLINOIS									
Grundy Co, Will Co: South Wilmington to 1S Wilmington to 1W Manhattan to 2ESE New Lenox	05	2000-2046CST	30	50	0	?	?	0	Tornado (F2)
									The tornado first touched down near South Wilmington in Grundy County where tree tops were twisted and power lines were reported blown down. The tornado then skipped northeast to the Lakewood Shores Subdivision in southwest Will County at 8:18 pm CST and uprooted trees and downed power lines. The tornado continued to skip northeast and crossed Peotone Road near the Trail Road intersection where a barn was destroyed. The tornado then moved to just west of Manhattan and crossed Brown Road just west of Gouger Road where considerable roof damage to homes occurred and where a mobile home was pushed 20 yards and demolished. A roof of a condominium was torn off about a half of a mile northwest of Manhattan. Further to the northeast near Baker and Cedar Roads, a large tree fell onto a house and some out buildings were destroyed. About 2 miles southeast of New Lenox at the Howell Airport, about 1/4 of the roof of a hangar was blown off. The last damage report caused by the tornado occurred at Schumi Road near the EJ and E Railroad tracks where a trailer was demolished.
La Salle Co, Ottawa	05	2000CST			0	0	?	0	Tstm wind (63)
									An amateur weather observer on the North Bluff in Ottawa measured 72 mph wind gusts. A roof was blown off an apartment complex in Ottawa during strong thunderstorm winds.
Kankakee Co: Buckingham, Bradley, Momence	05	2015CST			0	0	3	0	Tstm wind
									Strong winds flattened a large commercial chicken coop building and downed some large trees nearby. A plating building made out of concrete blocks was badly damaged in Bradley.
Cook Co: Orland Hills Chicago Ridge	05	2020CST			0	0	?	0	Tstm wind (52)
	05	2030CST			0	0	?	0	Tstm wind (52)
O'Hare Airport	05	2054CST			0	0	?	0	Tstm wind (50)
									Severe thunderstorms caused winds gusts to 60 mph measured at Orland Hills and Chicago Ridge. The Weather Service Office at O'Hare International Airport clocked wind gusts to 58 mph and observed 1/4 inch hail.
Grundy Co: South Wilmington, Gardner	05	2023CST			0	0	5	0	Hail (0.75) Tstm wind
									A severe thunderstorm winds caused damage to some buildings over a wide area in southern Grundy County. All of the debris was found to the northeast of each damage site except one in South Wilmington where twisting was noted in tree damage and building debris was found in all directions. (Refer to tornado Grundy and Will Counties in this report). Total property damage in southern Grundy County alone was estimated at 323,000 dollars.
Kane Co, Elgin	05	2030CST			0	0	?	0	Hail (1.75)
Du Page Co: Du Page Co Airport, Bartlett	05	2030CST			0	0	?	0	Tstm wind
									At Du Page County Airport winds estimated at 70 mph flipped over a light plane and blew numerous other airplanes around. The storm also blew down some power lines in the area. A funeral home in Bartlett sustained \$200,000 damage to its roof and canopy.
Adams Co, Quincy	05	2030CST			0	0	?	0	Tstm wind (52)
									60 mph winds knocked out power to 9000 electrical co-op customers in south Quincy. Scattered minor damage was done to a few homes and sheds in Adams County.
Cook Co, Tinley Park	05	2030CST			0	0	?	0	Tstm wind
									Strong thunderstorm winds ripped part of the roof off two apartment buildings at 169th near Grissom High School. Part of a shopping plaza roof was damaged at 7700 West 159th St.
Cook Co, Chicago	05	2030CST			0	0	?	0	Tstm wind
									Windows were broken out of a tire store at the 6400 block and Cermak Road. A few large trees and some power lines were reported down in the north part of the City of Chicago.
Will Co, Joliet	05	2045CST			0	1	?	0	Tstm wind
									High winds badly damaged the southwest corner of a motel on Plainfield Road near Joliet. One person was injured by flying glass at the motel.
Cook Co, Schaumburg	05	2116CST			0	0	?	0	Tstm wind
									High winds tore a large part of a roof off a two-story apartment building on Knollwood Drive. 7 families had to evacuate the building.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

APRIL 1988

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	

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	

ILLINOIS																																										
Statewide	06	All Day			0	?	?	0	High wind																																	
<p>Very strong winds buffeted Illinois statewide during the daylight hours of the 6th. Sustained winds of 25 to 40 mph with gusts to 45 to 55 mph were common across the state. Over the northeast part of Illinois wind gusts reached 60 up to 75 mph in places. Some peak wind gusts officially recorded at regular weather stations:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>Meigs Field Chicago</td><td>75 mph</td><td>at 950 and 1050 am CST</td></tr> <tr><td>O'Hare Intl' Airport</td><td>68 mph</td><td>at 1016 am CST</td></tr> <tr><td>Glenview NAS</td><td>51 mph</td><td>at 1016 am CST</td></tr> <tr><td>Rockford</td><td>47 mph</td><td>at 652 am CST</td></tr> <tr><td>Springfield</td><td>44 mph</td><td>at 1136 am CST</td></tr> <tr><td>Peoria</td><td>51 mph</td><td>at 1139 am CST</td></tr> <tr><td>Decatur</td><td>59 mph</td><td>at 150 pm CST</td></tr> <tr><td>Champaign</td><td>56 mph</td><td>at 846 am CST</td></tr> <tr><td>Carbondale</td><td>46 mph</td><td>at 327 pm CST</td></tr> <tr><td>Bloomington</td><td>60 mph</td><td>at 646 pm CST</td></tr> <tr><td>Mt. Vernon</td><td>48 mph</td><td>at 150 pm CST</td></tr> </table> <p>The strong winds in downtown Chicago blew out 97 large glass windows at the Sears Tower (World's tallest building). The strong winds were responsible for scattered damage across northeast Illinois that consisted of some downed trees and power lines. 50,000 Com-Ed customers were without electrical power briefly because of downed power lines. The oldest tree in Illinois, estimated to be over 700 years old by the Illinois Conservation Department, was toppled by the strong wind gusts. (The Burr Oak tree was located in Chicago's Morgan Park.) Waves across Lake Michigan were reported running 8 to 14 feet. A rogue wave of over 20 feet high smashed into the manned 68th Street Crib, a large water intake building, 3 miles out in the lake. The giant wave broke windows that were 25 feet above the normal lake level at the crib. Elsewhere around the state, wind damage was mostly minor, with spotty reports of downed power lines and some tree damage.</p>										Meigs Field Chicago	75 mph	at 950 and 1050 am CST	O'Hare Intl' Airport	68 mph	at 1016 am CST	Glenview NAS	51 mph	at 1016 am CST	Rockford	47 mph	at 652 am CST	Springfield	44 mph	at 1136 am CST	Peoria	51 mph	at 1139 am CST	Decatur	59 mph	at 150 pm CST	Champaign	56 mph	at 846 am CST	Carbondale	46 mph	at 327 pm CST	Bloomington	60 mph	at 646 pm CST	Mt. Vernon	48 mph	at 150 pm CST
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Mt. Vernon	48 mph	at 150 pm CST																																								
Green Co., Greenfield	22	1630CST			0	0	?	0	Hail (1.50)																																	
Will Co., Near Romeoville	22	1640CST			0	0	?	0	Hail (1.75)																																	
Cook Co:																																										
Streamwood	22	1648CST			0	0	?	0	Hail (0.75)																																	
Chicago Ridge	22	1650CST			0	0	?	0	Hail (1.25)																																	
Burbank	22	1650CST			0	0	?	0	Hail (0.75)																																	
Chicago (95th St.)	22	1654CST			0	0	?	0	Hail (1.75)																																	
Chicago (103rd and Pulaski)	22	1701CST			0	0	?	0	Hail (1.00)																																	
Hoffman Estates	22	1715CST			0	0	?	0	Hail (0.75)																																	
Palatine	22	1717CST			0	0	?	0	Hail (0.75)																																	
Arlington Hts.	22	1721CST			0	0	?	0	Hail (1.00)																																	
Chicago (7100-93008 Lake Shore Dr.)	22	1730CST			0	0	?	0	Hail (1.00)																																	
Du Page Co., Wheaton	22	1700CST			0	0	5	0	Lightning																																	
Lightning hit and caused fire to the Du Page County Courthouse and did an estimated \$120,000 damage.																																										
Macopin Co., 2N Carlisle	22	1701CST			0	0	?	0	Hail (0.75)																																	
Kane Co., Elgin	22	1710CST			0	0	?	0	Hail (1.75)																																	
Montgomery Co., Near Raymond	22	1739CST	0.2	25	0	0	0	0	Tornado (F0)																																	
State Police observed a brief tornado touchdown in an open area outside of Raymond.																																										
8N Hillsboro	22	1745CST			0	0	?	0	Hail (0.75)																																	
Near Raymond	22	1750CST			0	0	?	0	Hail (2.75)																																	
Hail as large as baseballs were reported near Raymond. No damage report was received.																																										
NE of Butler	22	1760CST			0	0	?	0	Tstm wind																																	
A barn was destroyed by high wind.																																										
Fayette Co., 2N Ramsey	22	1760CST			0	0	?	0	Tstm wind																																	
High winds downed many trees 2 to 3 miles north of Ramsey.																																										
Shelby Co., Herrick	22	1804CST	0.5	25	0	0	4	0	Tornado (F0) Hail (2.00)																																	
A tornado tore a large part of the roof off of a cafe in Herrick. Persons in the cafe reported hearing a roaring sound like a jet airplane and felt pressure changes in their ears. 2 x 6 inch oak roof rafters gave way and were found blown 1/2 block away. 2 inch hail accompanied the tornado but hail damage was not reported.																																										
6SW Tower Hill	22	1815CST			0	0	?	0	Hail (1.75)																																	
Golfball size hail damaged many window panes of a large commercial greenhouse 6 miles southwest of Tower.																																										
Near Lakewood	22	1820CST			0	0	?	0	Hail (1.75)																																	

ILLINOIS									
Effingham Co., Beecher-Holland	22	1630CST			0	0	?	0	Hail (1.75)
Golf ball size hail occurred between Beecher and Holland.									
Livingston Co., Chateworth	22	1630CST			0	0	4	0	Tstm wind
The Recreational Center building in Chateworth was damaged by strong winds. Much of the roofing and siding materials were stripped off by high winds.									
Effingham Co., Cumberland Co.	22	1840CST			0	0	?	0	Hail (1.15)
Golfball size hail was reported along Interstate 57 from near the Effingham County line to Neoga.									
Coles Co., Sw Mattoon	22	1900CST			0	0	?	0	Hail (0.86)
Cumberland Co., 10S Mattoon	22	1911CST			0	0	?	0	Hail (1.00)
Carroll Co., Thomson	22	1936CST			0	0	?	0	Hail (1.75)
Clark Co., Martinsville	22	1939CST			0	0	?	0	Hail (1.75)
Tazewell Co., 1S East Peoria	22	2000CST			0	0	4	0	Tstm wind
Very high winds demolished a large construction trailer and also a building under construction a mile south of East Peoria.									
Morton	22	2000CST			0	0	3	0	Tstm wind
A large turkey farm building was nearly demolished by high winds.									
Woodford Co., El Paso	22	2000CST			0	0	?	0	Hail (1.75)
Golfball size hail piled up 4 inches deep near the town of El Paso. No damage reports were received.									
Ogle Co., SW Polo	22	2015CST			0	0	?	0	Hail (1.75)
Tazewell Co., Groveland, Morton	22	2050CST			0	0	?	0	Hail (1.75) Tstm wind
A severe thunderstorm produced golf ball size hail in the south end of Morton and in Groveland. A large part of a motel roof was torn off in Morton. Some downed trees and power lines blocked roads in the area.									
McHenry Co., McHenry	22	2120CST			0	0	?	0	Hail (1.75)
12 INDIANA									
Parke County, Rockville	3	1218 EST			0	0	0	0	Hail (1.50)
Walnut size hail fell in Rockville.									
Laporte County, 1N Hudson Lake	3	1220 EST			0	0	?	0	Tstm Wind
Just north of Hudson Lake in northeast Laporte County, 5 or 6 trees were downed.									
Montgomery County, Waynetown	3	1234 EST			0	2	6	0	Tstm Wind
In Waynetown strong winds damaged every trailer in a small 16-space trailer park and injured two men. Large trees snapped, blocking traffic on downtown streets, and several homes suffered damage from the storm.									
Tippecanoe County, Lafayette	3	1240 EST			0	0	?	?	Hail (0.75)
Thunderstorm winds damaged a barn just west of Lafayette, and 3/4 inch hail fell just north of Lafayette.									
Starke County, Knox	3	1244 EST			0	0	?	?	Hail (1.0)
St. Joseph County, Walkerton	3	1250 EST			0	0	?	?	Hail (1.75)
Tippecanoe County, 15S Lafayette	3	1258 EST			0	0	0	0	Hail (1.75)

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APRIL 1988

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					KILLED	INJURED	PROPERTY	CROPS	
INDIANA									
Huntington County, Roanoke	3	1300 EST			0	0	0	0	Hail (1.0)
Hancock County, SSE Greenfield	3	1313 EST			0	0	?	0	Tstm Wind
Thunderstorm winds downed trees 5 1/2 miles southeast of Greenfield.									
Clinton County, Frankfort	3	1315 EST			0	0	0	0	Hail (0.75)
St. Joseph County, 15 Mishawaka	3	1320 EST			0	0	5	0	Tstm Wind
Mishawaka	3	1322 EST			0	0	?	0	Hail (0.75-1.0)
Thunderstorm winds toppled a TV tower just south of Mishawaka.									
Jay County, Portland	3	1415 EST			0	0	0	0	Hail (0.75)
Allen County, Fort Wayne	3	1415 EST			0	0	0	0	Hail (0.75)
Fort Wayne	3	1430 EST			0	0	0	0	Hail (1.0)
Leo	3	1433 EST			0	0	0	0	Hail (1.0)
Laporte County, 1N Trail Creek	5	2245 EST			0	0	?	0	Tstm Wind (61)
Carroll County, 7E Flora	5	2300 EST			0	0	4	0	Tstm Wind
A house trailer was blown off its foundation and destroyed by high winds.									
Cass County, 8W Logansport	5	2318 EST			0	0	?	0	Tstm Wind
Thunderstorm winds downed several trees west of Logansport.									
Elkhart County, Wakarusa	5	2353 EST			0	0	4	0	Tstm Wind
Trailers were damaged and windows were broken out at Holiday Rambler Corp and Parkway Distributing Co.									
INZ001-002-004-005-007-008-009-011-012-013-014		1030 EST- 6 2230 EST			0	8	6	?	High Wind
Most of Indiana									
A very intense area of low pressure moved into west-central Indiana around mid morning. It moved very slowly northeast to around Fort Wayne by late morning and then stalled for several hours. By late evening it moved into central Ohio. The storm brought heavy rain and high winds to most of the state. Sustained winds of 30 to 40 mph with gusts of 50 to 90 mph were reported. The heavy rains accompanying the wind saturated the ground, allowing trees to be easily uprooted. Buildings were damaged, signs were torn down, and power was knocked out overnight at many locations.									
13 IOWA									
Muscatine County, Conesville	02	1545 CST			0	0	3	0	Hail (1.00)
Cedar County, Springdale to 2.5 NE Springdale	02	1630 CST	2.5	25	0	0	5	0	Tornado (F1)
Lowden	02	1725 CST			0	0	4	0	Hail (1.75)
Clinton County, Toronto	02	1710 CST			0	0	4	0	Hail (1.75)
Jackson County, Maquoketa	02	1830 CST			0	0	4	0	Hail (0.75)
During the afternoon hours, thunderstorms developed rapidly over East-Central Iowa. One of the cells became severe over Muscatine and Cedar counties. Many reports of hail were received, with some up to golf ball size. Most of the hail fell in a strip extending from Springdale to Lowden, in Cedar County. At Lowden, 1 1/4 to 1 3/4 inch diameter hail fell for 30 minutes. The hail was still on the ground the next morning. Winds from this storm were generally between 30 and 50 MPH. The storm spawned a tornado at Springdale. Five homes were damaged and twisted by the tornado. As the storm moved into Jackson County, they weakened. The last report of hail was at Maquoketa, where dime size hail fell.									
Sac County, Odebolt	22	0415 CST			0	0	5	0	Lightning
Lake View	22	0425 CST			0	0	4	0	Lightning
An early morning thunderstorm moved through Sac County. At Odebolt, a farm services building and 2000 pounds of farm chemicals were destroyed. About 10 minutes later, a barn was struck near Lake View. It was partially destroyed by fire.									
IOWA									
IAZ001-SD2018	22	All Day			0	0	0	0	Snow
Northwest Iowa									
A late-season snowfall affected Northwest Iowa. Snowfall amounts were generally in the 3 to 7 inch range. Amounts tapered off rapidly southeast of this area.									
IAZ001-002-003-004-005-SD2018	26	All Day			0	0	3	0	Snow and Heavy Snow
Iowa									
Snow began falling during the early morning hours of the 26th and continued heavily until early afternoon. The snow was light during the afternoon hours. Amounts were generally 3 to 6 inches. The heaviest amounts were over the extreme Northwest and North-Central Counties with 6 to 8 inches common. Once again, amounts tapered off rapidly southeast of this area.									
14 KANSAS									
KSZ016-017	1-	0600 to			0	0	4	0	Flood
	2	1200CST							
Southeast Kansas									
A storm system produced locally heavy rains of 3 to 5 inches across the southeast portion of the state. The rain caused minor to moderate flooding of streams and rivers in the area. The rains began during the afternoon of March 31st and continued intermittently through the afternoon of the 1st. Rainfall amounts in the area included: 4.80 inches at Walnut; 4.55 at Cherryvale; 4.18 inches at Coffeyville; 3.80 at Cedar Vale and 3.78 inches at Hale. Lighter precipitation amounts of 1 to 2 inches were reported across south-central and northeast Kansas. Flooding occurred along the Neosho, Verdigris and Marmaton rivers in southeast Kansas. Crests of 4 to 10 feet above flood stage were common throughout the area. Crests along the Neosho River included 31 feet at Chanute-8 feet above flood stage and 27 feet at Parsons-6 feet above flood stage. Along the Verdigris River, crests included 29 feet at Fredonia-10 feet above flood stage and 39 feet at Independence-9 feet above flood stage. Rivers and streams fell below flood stage on the afternoon of the 2nd. No major property damage resulted from the flood. Several roads had to be closed in the southeast corner of the state during the flood because of high water.									
KSZ001-002-003	1-	0600 to			0	0	6	0	Heavy Snow
	2	0600CST							
Far Western Kansas									
The same storm system that brought heavy rain to southeast Kansas also produced heavy snow across far western portions of the state. Snowfall amounts of 4 to 19 inches were reported with the storm with the heaviest snow falling in counties along the Kansas-Colorado border. Snowfall amounts from the storm included: 19 inches at Sharon Springs; 15 inches at Tribune; 14 inches at Elkhart and 13 inches at Goodland. Lighter amounts in the 2 to 6 inch range fell from Liberal northward to Oberlin. Strong north to northeasterly winds of 20 to 45 mph occurred during the storm and caused severe blowing and drifting of the snow across far southwest Kansas. Drifts up to 12 feet tall were reported in the Elkhart area. Many roads across the region were closed from the afternoon of the 1st until the early afternoon on the 2nd. Interstate 70 was closed west of Wakeeney due to a lack of motel accommodations. The heavy, wet snow and strong winds combined to topple many telephone and power poles across the area, resulting in widespread power outages. In the St. Francis area, approximately 400 power poles were downed resulting in \$500,000 damage. The heavy, wet snow did bring much needed moisture to the wheat crop.									
Finnney Co, Garden City	8	1838CST			0	0	3	0	TSTM Wind (63)
Thunderstorms developed along a cold front in western Kansas during the late afternoon and early evening hours. The thunderstorms produced locally strong winds up to 72 mph in the Garden City area. No major damage resulted from the strong winds.									
Sherman Co, Goodland	21	2035CST			0	0	2	0	Hail (.75)
Thunderstorms developed over far northwest Kansas during the evening hours of a storm system over Colorado. The thunderstorms produced one-half to three-quarter inch hail in the southwest part of Goodland. No major damage resulted from the hail.									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

APRIL 1988

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM	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							KILLED	INJURED	PROPERTY	CROPS		
15 KENTUCKY										16 LOUISIANA										
Taylor County	06	0710 EST	0.1	20	0	0	4	0	Tornado (F0)	Bossier Parish, 8 SE Bossier City	01	1610CST			0	0	?	?	Hail (0.75)	
									About 20 miles south of Campbellsville a small tornado destroyed a barn and also blew the roof off a garage. A house trailer was damaged and several boats near a boat dock were turned around. Treetops in a narrow path were also twisted off.	Caddo Parish, Robson	01	1612CST			0	0	?	?	Hail (1.00)	
Jefferson Co.	06-07	1730 EST-0500 EST			0	0	5	0	High Wind	Caddo Parish, 2 S Forbing	01	1630CST	0.5	150	0	0	?	?	Tornado (F1)	
									Winds gusting to 55 mph toppled trees, damaged cars and buildings and snapped utility poles, knocking out power to 18,500 homes. At 3:30 am est on the 7th a barge tow was blown against the shore and broke apart on the Ohio River near Louisville. Two coal barges sank and 13 other barges bobbed down the river.	Bossier Parish, Barksdale AFB	01	1632CST			0	0	0	0		Funnel Cloud
Henry, Oldham, and Shelby counties	06	1730 EST			0	0	4	0	High Wind	Bossier Parish, 3 E Benton	01	1712CST	0.8	100	0	0	?	?	Tornado (F1)	
									Winds gusting above 50 mph blew down trees, damaged barns and snapped utility lines.	Bossier Parish, 4 E Plain Dealing	01	1720CST	0.5	50	0	0	?	?	Tornado (F1)	
Fayette County	06	1730 EST			0	0	4	0	High Wind	Caddo Parish, Mooringsport	01	1840CST	1.0	150	0	0	?	?	Tornado (F1)	
									Strong winds blew the front porch off a grocery store in northern Lexington. Also some trees and power lines were blown down.	Natchitoches Parish, Grand Ecore and 2 S Grand Ecore	01	1929CST			0	0	?	?	Hail (.75)	
Nicholas County	06	1730 EST			0	0	4	0	High Wind	Natchitoches Parish, 5 NE Clarence	01	1935CST			0	0	?	?	TSTM Wind	
									Three houses and several barns were damaged when strong winds blew across the county. Also several trees and some utility poles were blown over.	Winn Parish, Dodson	01	1942CST			0	0	?	?	Hail (1.00)	
Bracken County	06	1730 EST			0	0	4	0	High Wind	Jackson Parish, Walker	01	1950CST			0	0	?	?	Hail (1.00)	
									Strong winds overturned a mobile home, however the home had recently been moved and was not tied down. Two other small aluminum buildings were also blown down. Many homes and barns sustained roof damage.	Severe thunderstorms developed over northwest Louisiana during the afternoon with numerous reports of hail. Tornadoes downed numerous trees near Forbing, Benton, Plain Dealing, and Mooringsport. Minor roof damage was also reported near Mooringsport. Near Clarence, Louisiana Highway 1226 was blocked by trees downed by thunderstorm wind gusts.										
Breckinridge Co.	06	1815 CST			0	0	4	0	High Wind	Evangeline Parish, Basile	02	0020CST			0	0	4	0	TSTM Wind	
									Winds gusting to 50 mph completely destroyed a barn in the community of Mook. Also several pieces of farm equipment were damaged.	Acadia Parish, 10 NW Iota	02	0030CST			0	0	4	0	TSTM Wind	
Kenton and Boone counties	06	1830 EST			0	0	4	0	High Wind	Thunderstorm winds destroyed several greenhouse buildings, downed several large trees, and blew a pickup truck off U.S. Highway 190 in Basile. Large trees were toppled and a mobile home moved off its foundation northwest of Iota.										
									Strong winds blew a television antenna into a power line and started a house fire in Newport. Also, strong winds blew down trees and utility lines, leaving 600 to 700 customers without power.	Washington Parish, north portion	02	0100CST-02 0600CST			0	0	5	?	Flash Flood	
Meade Co.	06	1930 EST			0	0	4	0	High Wind	Several roads were closed due to flash flooding and a few bridges washed out after heavy rains caused several streams and drainage ditches to overflow their banks.										
									Fifty mph winds ripped through the county, leaving trees uprooted, damaging several buildings, and snapping utility lines.	Jefferson Parish, north portion	02	0100CST-02 0700CST			1	0	7	?	Flash Flood	
Jefferson County	23	1355 EST			0	0	?	?	Hail (1.0)	Orleans Parish, west portion	02	0100CST-02 0700CST			0	0	6	?	Flash Flood	
Jefferson County	23	1405 EST			0	0	?	?	Hail (1.75)	St. Bernard Parish, north portion	02	0100CST-02 0700CST			0	0	6	?	Flash Flood	
Oldham County	23	1412 EST			0	0	?	?	Hail (1.0)	St. Charles Parish, north portion	02	0100CST-02 0700CST			0	0	5	?	Flash Flood	
Henry County	23	1418 EST			0	0	?	?	Hail (1.0)	Torrential rains of 7 to 9 inches fell across the greater New Orleans area during the evening of the 1st and early morning hours of the 2nd. The heavy rainfall overwhelmed drainage pumps and subsequently created severe ponding of water in several residential areas. The Lincolnshire and Woodmere subdivisions in Jefferson Parish were the hardest hit as 200 people were evacuated. Water was up to 2 feet deep in homes in the subdivision. One woman, age 36, died when she drove her car into a flooded canal in Marrero. In New Orleans, Orleans Parish, nearly 8 inches of rain (7.67) was recorded at Audubon Park between 01/1800 CST and 02/0200CST. The hardest hit area in New Orleans was the Broadmoor area where 20 homes were flooded. Water was 2.5 feet deep in many streets in the Uptown and Broadmoor areas of New Orleans. Flood water was also reported in approximately 40 houses in St. Bernard Parish. Water was reported in houses in Luling, Morco, and St. Rose; all in St. Charles Parish. In all, approximately 35 houses in St. Charles Parish were flooded. Damage over the 4 parish area was estimated at \$18 million. F36V.										
Letcher county	23	1429 EST			0	0	3	0	Thunderstorm Wind	St. Tammany Parish, southeast portion	02	0550CST-02 0610CST			0	0	5	0	TSTM Wind	
									A thunderstorm moved through Whitesburg and produced strong winds which blew a carport off a house. Also several trees were blown down in the same area.	St. Tammany Parish, Slidell	02	0555CST	1.7	65	0	0	6	0	Tornado (F1)	
Owen County	23	1430 EST			0	0	3	0	Thunderstorm Wind	A severe thunderstorm raked southeast St. Tammany Parish with strong wind gusts damaging many commercial signs and breaking many large tree limbs. Approximately 6,000 homes were without power as power poles and lines were downed by high winds. A tornado touched down near Palm Lake in Slidell and moved east across the Palm Lake subdivision and then across Ponchartrain Drive before lifting into the air. The tornado touched down momentarily about a half a mile further east. Roof and tree damage was widespread, and several boats on the west shore of Palm Lake and canals were tossed out of the water. Louisiana Office of Emergency Preparedness reported 3 homes and 5 businesses were destroyed, 17 homes suffered major damage, 13 businesses had moderate damage, and 31 homes had minor damage. The total damage in southeast St. Tammany Parish from the storm was estimated at approximately \$3 million.										
Pulaski County	23	1450 EST			0	0	?	?	Thunderstorm Wind											
									Trees and utility lines were blown down from 24 miles west of London to 28 WSW of London.											

STORM DATA AND UNUSUAL WEATHER PHENOMENA

APRIL 1988

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	

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	

LOUISIANA

Ascension Parish, Gonzales	05 2120CST					0	0	5	0	Lightning
Lightning started a fire that subsequently destroyed 2 businesses and damaged three others. Damage was estimated between 300,000 and 400,000.										
Caddo Parish, 4 NE Keithville	17 1935CST					0	0	?	?	Hail (1.00)
Desoto Parish, 3 E Stoneville	17 1940CST					0	0	?	?	Hail (1.00)
Bossier Parish, 2 SE Elm Grove	17 1950CST					0	0	?	?	Funnel Cloud
Webster Parish, 2 W Hefflin	17 2030CST					0	0	?	?	Hail (0.88)
Bienville Parish, 7 ENE Jamestown	17 2050CST					0	0	?	?	TSTM Wind
Severe thunderstorms produced widespread reports of hail across northwest Louisiana. The sheriff's office in Bienville Parish reported numerous trees blown down along Louisiana Highway 507.										
Washington Parish, Bogalusa	18 0345CST					0	0	4	0	TSTM Wind
Thunderstorm winds damaged the roof of one house, overturned two trucks trailers, and destroyed a storage building.										
Tangipahoa Parish, 10 NE Amite	18 1255CST					0	0	?	?	Hail (0.88)
Washington Parish, Mt. Hermon	18 1310CST					0	0	?	?	Hail (1.75)
Severe thunderstorms developed rapidly over southeast Louisiana and produced hail at a couple of locations.										
Caldwell Parish, 2 S Riverton	18 1447CST					0	0	?	?	Hail (1.75)
Caldwell Parish, 6 SE Columbia	18 1450CST-					0	0	?	?	Hail (1.00)
Franklin Parish, Liddieville	18 1500CST					0	0	?	?	Hail (1.00)
Richland Parish, 5 W Newlight	18 1510CST					0	0	?	?	Hail (1.00)
Caldwell Parish, 5 SE Holun	18 1550CST					0	0	?	?	Hail (1.00)
Avoyelles Parish, Mansura	18 1550CST					0	0	?	?	Hail (1.00)
Franklin Parish, 2 W Winnsboro	18 1610CST					0	0	?	?	Hail (1.00)
Franklin Parish, 2 N Winnsboro	18 1610CST					0	0	?	?	Hail (1.00)
Madison Parish, 3 S Tallulah	18 1612CST					0	0	?	?	Hail (1.00)
St. Landry Parish, Opelousas	18 1615CST					0	0	?	?	Hail (1.75)
St. Landry Parish, 1 SE Eunice	18 1615CST					0	0	4	?	TSTM Wind
Acadia Parish, 6 NW Church Point	18 1620CST	0.2	25			0	0	4	0	Tornado (F0)
Tensas Parish, 5 W St. Joseph	18 1640CST					0	0	?	?	Hail (1.00)
St. Landry Parish, 2 S Port Barre	18 1648CST					0	0	?	?	TSTM Wind
Severe thunderstorms developed rapidly from northeast to south-central Louisiana producing numerous reports of hail. A tornado touched down northwest of Church Point and destroyed a mobile home. Thunderstorm wind gusts damaged a mobile home near Eunice and downed several trees at Lake Bruin State Park north of St. Joseph.										
Acadia Parish, 1 S Crowley	29 2100CST					0	0	4	?	TSTM Wind
Thunderstorm wind gusts ripped the roof off of a mobile home.										
Cameron Parish, coastal area	30 0030CST					0	0	5	0	Coastal Storm
Low pressure center in the Gulf of Mexico caused a strong onshore flow along the southwest Louisiana coast producing abnormally large waves which caused erosion and flooding along the coast of Cameron Parish. Louisiana Highway 82 was damaged near Holly Beach and several homes and cabins along the beach were flooded.										

17 MAINE ————— NO REPORT RECEIVED

18 MARYLAND and D.C.

MDZ001 Coastal Maryland	12 Evening					0	0	3	0	Coastal Flood
A low center off the Carolina coasts produced moderate onshore flow from late on the 12th through the 13th. Ocean City reported northeast winds at 25 knots, with 12 foot waves. Tides were slightly above normal, and there was only minor beach erosion at Ocean City.										
Washington Co Hagerstown	27 1420EST					0	0	3	0	Thunderstorm Wind (24kt)
Frederick Co	27 1500EST					0	2	3	0	Thunderstorm Wind
Frederick Co Walkersville Woodsboro	27 1500EST					0	0	?	0	Hail (0.5)
A plate glass window in a car dealership was blown out and a wall under construction was blown over in Hagerstown. A weather observer in Hagerstown reported 28mph winds. Two vehicles in Walkersville were damaged by falling trees; occupants received minor injuries. Marble-sized hail was reported in Walkersville and Woodsboro. Rainfall ranged from one quarter to one inch in Frederick County.										

19 MASSACHUSETTS

Worcester County, Oxford	28 0600EST					0	0	4	0	Lightning
A bolt of lightning struck a garage attached to a house, starting a fire which did considerable damage to the garage and a portion of the house.										

20 MICHIGAN

Hilledale Co. 2 N Clayton, Lenawee Co.	03 1317EST					0	0	4		Thunderstorm Wind
	03 1344EST	2.0	30	0	0	0	0	4		Tornado (F0)
Onsted, Lenawee Co.	03 1348EST					0	0	0		Thunderstorm Wind (52)
Manchester, Washtenaw Co.	03 1445EST					0	0	0		Hail (1.50A)
Ann Arbor Airport Washtenaw Co.	03 1620EST					0	0	0		Thunderstorm Wind (63)
Univ. of Michigan, North Campus, Washtenaw Co.	03 1629EST					0	0	2		Thunderstorm Wind (99)
2 NW Saline to 3 N Ann Arbor, Washtenaw Co.	03 1635EST	8.2	50	0	0	0	0	4		Tornado (F1)
Salem Twp., Washtenaw Co.	03 1655EST					0	0	3		Thunderstorm Wind
1 NW Wixom, Oakland Co.	03 1719EST	1.2	30	0	0	0	0	3		Tornado (F1)
Just E of Clarkston, Oakland Co.	03 1738EST	1.0	50	0	0	0	0	1		Tornado (F1)
Trees and power lines were down and there was minor damage to rural buildings in a band about 10 miles wide from extreme southeast Hillsdale County to western Oakland County. The tornado near Clayton was seen by spotters. It destroyed a two-car garage. The next tornado touched down just northwest of the intersection of Wagner and Textile Roads, moved due north across Pleasant Lake Road, swerved northeast, and moved into the southwest extremity of Ann Arbor at 1640EST. It continued about 3 blocks into a residential area and then lifted. 20 houses suffered light to moderate damage and two garages were destroyed on this segment. The funnel moved aloft over the central section of the city and touched down again on the Huron River by Argo Park. It came ashore just east of the M14 Freeway, moved north-northeast turning slightly to the right										

STORM DATA AND UNUSUAL WEATHER PHENOMENA

APRIL 1988

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					KILLED	INJURED	PROPERTY	CROPS	
MICHIGAN									
									along the edge of a residential area, and lifted near the intersection of Pontiac Trail and Dhu Varren Road. 15 houses suffered moderate damage and several outbuildings were destroyed along this segment. The gap between the two track segments was 3.0 miles, over the most densely built up part of the city. In northeast Washtenaw and Western Oakland counties many rural buildings were blown down. Funnels aloft were observed at several locations. The tornado near Wixom destroyed a barn. The Clarkston tornado cut a path of downed trees and did minor damage to several houses. Traffic was stopped on Interstate 75 to allow the tornado to cross.
Southeast Ottawa Co.	03	1348EST			0	0	0		Thunderstorm Wind (51)
Southwest Kalamazoo Co.	03	1350EST			0	0	0		Hail (1.00)
1 N Vernon Center, Isabella Co.	03	1615EST	1.0	40	0	6	4		Tornado (F1)
									The roof was torn from a mobile home. A 2-foot diameter tree then fell on the home, injuring the occupants. Contents were sucked from the home and spread 100 yards downwind.
Pentwater, Oceana Co.	05	2320EST			0	0	0		Hail (.075)
Muskegon Airport, Muskegon County	05	2342EST			0	0	0		Thunderstorm Wind (53)
Grand Rapids, Kent Co.	05	2345EST			0	0	3		Thunderstorm Wind (51)
Jenison, Ottawa Co.	06	0003EST			0	0	0		Thunderstorm Wind (87)
Springfield, Calhoun Co.	06	0045EST			0	0	2		Thunderstorm Wind (52)
10 N. Albion, Calhoun Co.	06	0110EST			0	0	0		Thunderstorm Wind (52)
									A building under construction was blown down in Nunica. There was widespread minor damage to structures, trees, and power lines.
Berrien Co.	06	1600EST			0	2	3		Thunderstorm Wind
									A car was blown off the road, injuring 2 persons near Stevensville. Trees were blown down in New Buffalo and Lake Twp. A barn collapsed near Watervliet.
Lawrence, Van Buren Co.	23	2045EST			0	0	0	C	Hail (1.75)
Portage, Kalamazoo Co.	23	2055EST			0	0	0	C	Hail (1.75)
8 W. Hillsdale, Hillsdale Co.	23	2135EST			0	0	0	C	Hail (1.75)
N of Coldwater, Branch Co.	23	2150EST			0	0	0	C	Hail (.075)
Near Hudson, Hillsdale Co.	23	2200EST			0	0	0		Hail (1.75)
									Small hail was reported at several locations in Van Buren Co. between 2000EST and 2100EST, and in Allegan Co. between 2130EST and 2155EST. A house was damaged and some car windows broken near Vicksburg. Hail covered the ground to a depth of 4 inches near Austin and Long Lakes in Portage. The ground was covered with small hail in downtown Coldwater, and several cars and houses were damaged by falling trees. Several large trees were blown down in the Hillsdale area.
21 MINNESOTA									
MNZ018-019 Southeast		26 afternoon			0	0	0	0	Heavy Snow
									A band of snow in excess of 6 inches fell across southeast Minnesota from just north of Albert Lea through Rochester. Nine to ten inches fell around Dodge Center and 11 inches fell at Stewardville. Rochester set a 24-hour snowfall record for April with 13.7 inches. The bulk of the snow fell during the afternoon and evening and was very wet and heavy. Roads covered with inches of slush had to be cleared with plows. The snow melted within 48 hours.
22 MISSISSIPPI									
Lauderdale County, Tipton	02	0505CST			0	0	?	0	Thunderstorm Winds
									Strong winds near the leading edge of a thunderstorm blew down trees across seven acres of land near Tipton.
Hinds County, Jackson	03	0300-0900CST			0	0	5	0	Flash Flood
									Rainfall of 2 to 3 inches in a one hour period on saturated soils caused flash flooding in Jackson. A total of 8 homes, 20 apartment units and 27 vehicles were filled with water from 2 inches to 2 feet deep.
Harrison County, Gulfport/Biloxi	03	0400-0800CST			0	0	5	0	Flash Flood
									Nearly 4 inches of rain fell from 0200CST to 0500CST in Gulfport and Biloxi resulting in flash flooding. Water crept into 50 homes and 12 businesses.
Madison County, IOW Canton	05	1535CST			0	0	4	0	Thunderstorm Winds
									Strong winds blew down trees and power lines between Canton and Flora.
Madison County, ION Canton	05	1607CST			0	0	4	0	Thunderstorm Winds
									Numerous trees and power lines were blown down from 5 miles north of Canton to 15 miles north of Canton.
Attala County, Sallis	05	1641CST			0	0	?	0	Hail (1.00)
Tishomingo County, Iuka	06	0300CST			0	0	4	0	Thunderstorm Winds
									Strong winds blew large trees down on a mobile home and heavily damaged it.
Tallahatchie County, 2S Sumner to Brazil	17	2305-2313CST	7.0	75	0	0	5	0	Tornado (F1)
									A tornado touched down just south of Sumner, then moved rapidly northeast touching down sporadically until it dissipated near Brazil. Three unoccupied mobile homes in the path of the tornado were destroyed. Several large trees were uprooted, sheds destroyed and irrigation systems were mangled.
Lafayette County, 9E Oxford	18	0006CST			0	0	?	0	Thunderstorm Winds
									Several trees and one outbuilding were blown down 8 to 10 miles east of Oxford.
Leflore County, 5S Greenwood	18	0030CST			0	0	4	0	Thunderstorm Winds
									Strong winds blew 6 telephone poles down 5 miles south of Greenwood.
Alcorn County, Corinth	18	0030CST			0	0	5	0	Thunderstorm Winds
									Strong winds blew down trees and power lines. Several roofs and shutters were damaged. A door was torn off a house.
Pontotoc County, Pontotoc	18	0045CST			0	0	?	0	Thunderstorm Winds
									Several trees were blown down in Pontotoc.
Wilkinson County, Woodville	18	1335CST			0	0	?	0	Thunderstorm Winds
									Strong winds blew down several trees in Woodville.
Hancock County, Kfln	18	1400CST			0	0	?	?	Hail (.75)
Stone County, Perkinson	18	1400CST			0	0	?	?	Hail (1.75)
Jackson County, Ocean Springs	18	1410CST			0	0	?	?	Hail (1.75)
Lawrence County, 6W Monticello	18	1410CST			0	0	?	?	Hail (.75)

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					KILLED	INJURED	PROPERTY	CROPS	
MISSISSIPPI									
George County, Lucedale	18	1430CST			0	0	?	?	Hail (.75)
Jackson County, Pascagoula	18	1440CST			0	0	?	?	Hail (1.75)
Tippah County, Ripley	18	1600CST			0	0	?	?	Hail (.75)
Madison County, 2N Flora	18	1610CST			0	0	?	?	Hail (.75)
Warren County, 10NW Vicksburg	18	1620CST			0	0	?	?	Hail (1.75)
Hinds County, Brownsville	18	1635CST			0	0	?	?	Hail (1.00)
Warren County, 5SE Vicksburg	18	1640CST			0	0	?	?	Hail (1.00)
Alcorn County, Corinth	18	1645CST			0	0	?	?	Hail (1.75) Thunderstorm Winds Hail the size of dimes fell in Corinth with golf ball sized hail at the Corinth airport. Large trees were also blown down in Corinth.
Wilkinson County	18	1700CST			0	0	?	?	Thunderstorm Winds Several huge trees were blown down in Woodville. Power lines were also downed.
Jefferson Davis County, Bassfield	18	1735CST			0	0	?	?	Hail (1.75)
Lincoln County, Brookhaven	18	1754CST			0	0	?	?	Hail (.75)
Smith County, Taylorsville	18	1815CST			0	0	?	?	Hail (.75)
Smith County, Taylorsville	18	1830CST			0	0	?	?	Hail (1.75)
Jasper County, Stringer	18	1833CST			0	0	?	?	Hail (1.75)
Northern Jones County	18	1850CST			0	0	?	?	Thunderstorm Winds Trees were blown down on several highways between Laurel and the Jones-Jasper county line.
Covington County, 8E Mt. Olive	18	1910CST			0	0	?	?	Thunderstorm Winds Several trees were blown down across Highway 532 8 miles east of Mt. Olive.
Clarke County, Quitman	18	1920CST			0	0	?	?	Hail (1.00)
Southeast Jasper County	18	1945CST			0	0	?	?	Hail (1.00) Thunderstorm Winds Trees were blown down around the southeast portion of Jasper County with quarter-sized hail. Roofs and autos were damaged by the hail.
Pearl River County, 5NW Picayune	18	1945CST			0	0	?	?	Hail (.75)
Jones County, 4W Ellisville	18	1955CST			0	0	?	?	Thunderstorm Winds Trees were blown down 4 miles west of Ellisville.
Wayne County, Waynesboro	18	2030CST			0	0	?	?	Thunderstorm Winds Trees and power lines were blown down in Waynesboro.
Hinds County, Jackson	23	0900-1200CST			0	0	4	0	Flash Flood Rainfall amounts of 2 to 3 inches in 2 hours caused flooding of many streets in Jackson. Water crept into 6 homes.
Lauderdale County, Bailey	23	0920CST			0	0	?	?	Hail (1.75)
Lauderdale County, 13NW Meridian	23	0925CST			0	0	?	?	Hail (1.00)
Lauderdale County, 4NW Suqualena	23	0955CST			0	0	?	?	Thunderstorm Winds
Rankin County, Brandon and Pearl	23	1000-1200CST			0	0	3	?	Flash Flood Rainfall of 2 to 3 inches caused extensive flooding of roads in Brandon and Pearl.
Lauderdale County, Meridian	23	1000CST			0	0	?	?	Thunderstorm Winds Trees were blown down in Meridian.
MISSISSIPPI									
Rankin County, Richland	23	1000CST			0	0	?	?	Hail (2.75) Thunderstorm Winds (662)
Rankin County, Richland	23	1005CST			0	0	?	?	Hail (.75)
Lauderdale County, Lauderdale	23	1015CST			0	0	?	?	Hail (1.00)
Rankin County, 6SE Brandon	23	1015CST			0	0	5	?	Hail (2.75) Baseball-sized hail broke windshields in cars and knocked shingles off roofs.
Rankin County, West Brandon	23	1016CST			0	0	?	?	Hail (.75)
Rankin County, East Brandon	23	1018CST			0	0	5	?	Hail (2.25) Large hail dented cars and battered roofs in East Brandon.
Rankin County, 1S Pelahatchie	23	1025CST			0	0	5	?	Hail (2.00)
Rankin County, 6S Pelahatchie	23	1028CST			0	0	5	?	Hail (1.75)
Rankin County, 7E Brandon	23	1030CST			0	0	5	?	Hail (2.75) Baseball-sized hail knocked out windshields and heavily damaged roofs east of Brandon.
Hinds County, Bynam	23	1040CST			0	0	?	?	Hail (1.75)
Rankin County, 10SE Pelahatchie	23	1040CST			0	0	?	?	Hail (2.50)
Rankin County, 5NE Brandon	23	1045CST			0	0	?	?	Hail (1.75)
Smith County, Raleigh	23	1145CST			0	0	?	?	Thunderstorm Winds Trees and power lines were blown down near Raleigh.
Jasper County, 2E Bay Springs	23	1202CST			0	0	?	?	Hail (.75)
Clarke County, Crandall	23	1314CST			0	0	?	?	Hail (.75)
Tippah County, Blue Mountain	23	1730CST			0	0	5	?	Thunderstorm Winds Strong winds blew down numerous trees and power lines in Blue Mountain. A porch was blown off of a small cafe.
Prentiss County, Booneville	23	1754CST			0	0	?	?	Hail (1.00)
Prentiss County, Southeast Booneville	23	1755CST			0	0	?	?	Hail (1.75)
Carroll County, Teoc	23	1930CST			0	0	?	?	Thunderstorm Winds Strong winds blew down utility poles and blew a top off a trailer in Teoc or about 10 miles northwest of Carrollton.
23 MISSOURI									
Benton County, Warsaw	5	1525CST			0	0	0	0	Hail (0.75)
Cooper County, 5W Boonville	5	1542CST			0	0	0	0	Hail (0.75)
Jasper County, 5S Joplin	5	1555CST			0	0	0	0	Hail (0.75)
Boone County, Columbia	5	1600-1615CST			0	0	0	0	Hail (1.00) Hail of three-quarter to one inch diameter was widespread in areas south and east of Columbia.
Dade County, 2E Everton	5	1625CST			0	0	0	0	Hail (0.75)
Lockwood	5	1628CST			0	0	0	0	Hail (0.75)
Everton	5	1630CST			0	0	0	0	Hail (1.00)
Greene County, Walnut Grove	5	1637CST			0	0	0	0	Hail (0.75)
Audrain County, SE Mexico	5	1650CST			0	0	?	?	Hail (1.75)
Cole County, 10E Jefferson City	5	1655CST			0	0	0	0	Hail (0.75)

STORM DATA AND UNUSUAL WEATHER PHENOMENA

APRIL 1988

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	

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	

MISSOURI

Greene County: Pleasant Hope Springfield	5	1655CST 1656CST			0	0	0	0	Hail (0.75) Hail (0.75)	
The hail in Springfield fell in the southeast portion of the city.										
Pulaski County, Fort Leonard Wood	5	1658- 1709CST			0	0	?	?	Hail (1.50)	
Hail ranging from 1 1/4 inch to 1 1/2 inch diameter fell at Fort Leonard Wood.										
Polk County, 12SW Bolivar	5	1700CST			0	0	?	?	Hail (1.75)	
Ralls County, New London	5	1700CST			0	0	3	0	Hail (1.00) and TSTM Wind	
Hail of up to one-inch diameter and winds of 60 to 70 mph at the city hall in New London were reported. There was some damage, and some unofficial reports of hail of up to 1 3/4 inch diameter.										
Audrain County, Ladonia	5	1700CST			0	0	0	0	Hail (1.00)	
Hail of 3/4 inch to 1 inch diameter fell at Ladonia.										
Dallas County, Buffalo	5	1710CST			0	0	0	0	Hail (0.75)	
Newton County	5	1710CST			0	0	0	0	Hail (0.75)	
Three-quarter inch diameter hail fell between Seneca and Neosho.										
Greene County, Springfield	5	1712CST			0	0	0	0	TSTM Wind	
Winds of up to 62 mph occurred in downtown Springfield.										
Barry County, Monett	5	1720CST			0	0	0	0	Hail (0.75)	
Boone County, 5E Columbia	5	1720CST			0	0	?	?	Hail (2.00)	
Wright County, Mountain Grove	5	1720CST			0	0	0	0	TSTM Wind	
Winds of up to 60 mph occurred at Mountain Grove.										
Pike County, Bowling Green	5	1722CST			0	0	2	?	TSTM Wind	
Winds of up to 70 mph occurred at Bowling Green.										
Callaway County, Millersburg	5	1725CST			0	0	?	?	Hail (1.75)	
Hail of up to 1 3/4 inch diameter fell just northeast of Millersburg.										
Lincoln County, Whiteside	5	1735CST			0	0	0	0	Hail (0.75)	
Howell County, 10W West Plains	5	1735CST			0	0	0	0	Hail (1.00)	
Three-quarter to one inch diameter hail covered the ground 10 miles west of West Plains.										
Franklin County, 15E Washington	5	1738CST			0	0	4	0	TSTM Wind	
Trees and power lines were downed by winds of up to 60 mph.										
St. Louis County: Chesterfield Baldwin	5	1740CST 1740CST			0	0	2	0	TSTM Wind TSTM Wind	
Winds of up to 58 mph at Chesterfield and 60 mph at Baldwin produced tree damage at each location.										
Phelps County, Rolla	5	1740CST			0	0	3	0	TSTM Wind	
Winds of up to 65 mph produced tree damage.										
LaClede County, Lebanon	5	1745CST			0	0	?	?	TSTM Wind	
Winds of up to 70 mph occurred at Lebanon.										
Phelps County, 6S Rolla	5	1750CST			0	0	3	0	TSTM Wind	
Wind blew a roof off of a house.										
Webster County, Seymour	5	1810CST			0	0	3	0	TSTM Wind	
Winds of up to 62 mph produced tree damage.										
Texas County, Houston	5	1815CST			0	0	0	0	Hail (0.75)	
Three-quarter inch diameter hail fell around Houston.										
St. Charles County, St. Peters	5	1817CST			0	0	4	0	TSTM Wind (67)	
Winds of up to 67 knots (77 mph) were measured at the National Weather Service Forecast Office in St. Peters. Five cars belonging to Weather Service employees received damage from gravel which was blown off the roof. Damage to trees and signs in the area was also reported.										

MISSOURI

Washington County, 10W Potosi	5	1845CST			0	0	2	0	TSTM Wind	
Thunderstorm winds damaged trees 10 miles west of Potosi.										
Jefferson County: High Ridge	5	1845CST			0	0	4	0	TSTM Wind	
Hail (1.75) and TSTM Wind										
15N Hillsboro DeSoto	5	1855CST 1900CST			0	0	0	0	Hail (1.75) Hail (1.75) and TSTM Wind	
Countywide, winds of 65 to 70 mph blew down reinforced masonry walls and downed trees and power lines. Hail of up to 1 3/4 inch diameter fell as strong winds caused damage in the High Ridge area. Hail of up to 1 3/4 inch diameter also fell 15 miles north of Hillsboro and at Desoto. Winds at Desoto were up to 65 mph.										
St. Louis County, Webster Groves	5	1850CST			0	0	4	0	TSTM Wind	
Wind estimated at 65 mph damaged trees and roofs.										
St. Louis County	5	1900CST			0	0	2	0	TSTM Wind	
Shingles were blown off of a house on Manchester Road.										

24 MONTANA ————— NONE REPORTED

25 NEBRASKA

NEZ016 Southwest Nebraska	01- 02	2200CST- 1000CST			0	0	5	1	Heavy Snow	
Heavy snow fell in extreme southwest Nebraska with 14 inches reported at Haigler, 10 inches at Madrid, and 6 inches at Benkelman and Imperial. The wet snow broke an estimated 310 power poles and their associated power lines. Tree limbs also were broken.										
Box Butte Co. 7NE Hemmingford	04	2200CST			0	0	4	1	Damaging Wind	
A microburst wind gust heavily damaged a barn 7 miles northeast of Hemmingford.										
NEZ001-002-003- 005-006-007-011 Panhandle and North Central Nebraska	21- 22	2300CST- 1700CST			0	0	6	2	Heavy Snow	
Snow of 6 inches or more fell north of a line from around Big Springs to Niobrara. Heaviest snowfall was reported in a band in the sandhills of north-central Nebraska where Mullen recorded 15 inches, Brownlee 14 inches, and Valentine Lake Game Refuge 13 inches. Other heavier snow amounts occurred in the panhandle with 12 inches at Scottsbluff and 10 inches at Hemingford, Hay Springs and Alliance. The heavy wet snow broke tree limbs and power lines.										
Keith Co. 3NE Brule	24	1430CST	0.4	70	0	0	1	2	Tornado (F0)	
A tornado touched down 3 miles north-northeast of Brule and moved southeast in barren crop land.										
Buffalo Co. Pleasanton	25	2132CST			0	0	2	2	Hail (1.75)	
NEZ002-003-004 North Central and Northeast Nebraska	25- 26	2100CST- 0800CST			0	0	4	1	Heavy Snow	
Snow of 6 inches or more fell north of a line from Merriman to Pierce to Newcastle. Heavier snowfalls included 9 inches at Springview and Newport and 8 inches at Chambers, Creighton, Plainview and Osmond. The wet snow broke tree limbs and damaged utility lines.										

STORM DATA AND UNUSUAL WEATHER PHENOMENA

APRIL 1988

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					KILLED	INJURED	PROPERTY	CROPS	
26 NEVADA									
NV2003 Extreme Western Nevada	07	1000PST 1200PST			0	0	4	0	High Winds
NV2001-004 Northwest and West Central Nevada	07	1100PST 1500PST			0	0	3	0	High Winds
NV2002 Northeast Nevada	07	1400PST 1930PST			0	0	4	0	High Winds
		A strong, fast-moving cold front produced high winds as it moved across Northern Nevada. Winds gusting to more than 70 MPH caused roof damage to private and commercial buildings. As the front moved into the large valleys of Northern Nevada, high winds kicked up blowing dust and sand which reduced visibilities to near zero at times resulting in very hazardous driving conditions on Interstate 80 and other highways. Gusts to 82 MPH were reported at Battle Mountain airport where two hangar doors were destroyed. The front continued east through Elko County with winds gusting to 60 MPH. Roof damage was reported in the Spring Creek and Wells areas.							
Elko County	23	1600PST			0	0	0	0	Funnel Cloud
		A funnel cloud was spotted by a rancher and his wife 14 miles north of Elko. Pea size hail and frequent lightning was occurring at the time of the sighting.							
NV2007 Extreme Southern Nevada	30	1530PST 1900PST			0	0	3	0	High Winds
		High winds associated with a low pressure system that moved across Southern Nevada uprooted trees, blew down signs and knocked out power across much of Extreme Southern Nevada.							
27 NEW HAMPSHIRE ——— NO REPORT RECEIVED									
28 NEW JERSEY, Northern ——— NONE REPORTED									
28 NEW JERSEY, Southern ——— NONE REPORTED									
29 NEW MEXICO									
Northeast one-third of State	01	morning			0	0	?	5	Heavy Snow
		This is a continuation of the March 31st heavy snow episode reported in last month's storm report. Snowfall averaging 5 to 10 inches or more occurred across the region, and 9 to 14 inches fell in the Albuquerque metro area. Five hundred people were stranded along Interstate 40 in the east-central plains; 1500 people were stranded in the Clayton area. Interstate 40 and other less-traveled highways were closed Thursday night and Friday morning. A few flights were diverted at the Albuquerque Airport. In the Albuquerque area, 100,000 people were without power at times. At least 50,000 dollars worth of cattle and sheep were lost in the eastern plains. The sheep were freshly shorn.							
Eddy County	14	1229MST			0	0	5	0	Lightning
		Lightning struck and burned an FAA storage building in Carlsbad.							
Eddy County	16	1330MST			1	0	4	0	Thunderstorm Wind
		A boat capsized at Lake McMillan between Carlsbad and Artesia during a severe thunderstorm. One man drowned while the other four passengers made it to safety. M230							
Eddy County	16	1330MST			0	0	?	?	Hail (1.75)
		A spotter reported hail 3 miles west of Loving.							
NEW MEXICO									
Lea County	16	1448MST	?	?	0	0	0	0	Tornado (F1)
		A storm chaser reported a tornado 10 miles northwest of Jal moving east.							
Lea County	16	1500MST			0	0	?	?	Hail (1.75)
		Hail was reported in the southeast part of the county near the intersection of Highways 8 and 176.							
Lea County	16	1515MST			0	0	?	?	Hail (2.75)
		The Lovington Fire Department reported baseball size hail.							
Statewide	21	afternoon and evening			0	0	?	?	High Wind
		A spring storm produced winds of 30 to 45 mph with gusts of over 50 mph. The highest gusts were 70 mph at Deming and 69 mph at Ruidoso. The winds created blowing dust and sand over the east and south, and were accompanied by showers and thunderstorm plus snow and hail over the northwest.							
30 NEW YORK, Coastal ——— NONE REPORTED									
30 NEW YORK, Central ——— NONE REPORTED									
30 NEW YORK, Western ——— NONE REPORTED									
31 NORTH CAROLINA									
Martin Co. Robersonville	4	2150EST			0	0	0	0	Hail (1.75)
Hertford Co. Murrreesboro	5	0009EST			0	0	0	0	Hail (1.75)
Winton Gates Co. Roduco	5	0030EST			0	0	0	0	Hail (0.80)
Bertie Co. Aulander	5	0036EST			0	0	0	0	Hail (1.75)
Martin Co. Jamesville	5	0140EST			0	0	0	0	Hail (1.25)
		Thunderstorms moved through northeastern North Carolina during the evening of April 4 and the early morning of April 5 producing many reports of half dollar and golf ball size hail.							
NC2009-012	06	2100EST			0	0	4	0	High Wind
		High winds were reported across much of the higher elevations of the North Carolina mountains. Grandfather Mountain reported gusts to 172 MPH. Trees and power lines were blown down in Hendersonville and in parts of Transylvania County.							
NC2009	07	0600EST			0	0	0	0	Heavy Snow
		During the early morning hours of April 7, snow began falling in the northern North Carolina mountains. By daybreak about four inches of snow had accumulated in Blowing Rock, Boone, Banner Elk, and Newland. Mount Mitchell reported 8 inches of snow.							
NC2009	12	1000EST			0	0	0	0	Heavy Snow
		Snow began falling about daybreak in the northern mountains. By about noon Boone and Blowing Rock had received over 4 inches of snow. At higher elevations Grandfather Mountain received 12 inches and Mount Mitchell reported 17 inches. Temperatures remained above the freezing mark throughout the day. By afternoon most of the snow had melted. Areas as far east as Hickory received a light dusting.							

STORM DATA AND UNUSUAL WEATHER PHENOMENA

APRIL 1988

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					KILLED	INJURED	PROPERTY	CROPS	

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	

NORTH CAROLINA

NC2001	13	0540EST			0	0	5	0	High Winds
<p>During the morning of April 12 a strong low pressure system formed off the North Carolina coast. By the morning of the 13th winds along the northern coast were 40 gusting to 50 MPH. Coastal flooding and significant beach erosion began with the early morning high tide. One home in Nags Head was destroyed and ten others were severely undermined. About 275 feet of land was eroded from the north tip of Pea Island at Oregon Inlet. Alligator Bridge and Oregon Inlet reported winds gusting to 69 MPH. Highway 12 was closed due to overwash at Rodanthe.</p>									
Pitt Co.	15	1830EST			0	0	3	0	TSTM Winds
Greenville Lenoir Co.	15	1844EST			0	0	4	0	TSTM Winds
<p>Thunderstorm winds blew windows out of a house and the roof off a barn along State Highway 58 just south of Kinston. The public reported a funnel cloud in the same area. Trees were reported down in the Greenville area.</p>									
Pamlico Co.	19	1310EST	0.6	100	0	0	4	0	Tornado (F1)
<p>A tornado touched down 1/4 mile south of Merritt just west of State Highway 58. Eyewitnesses saw the tornado as it cut a damage path about 100 yards wide and about one-half mile long while moving west to east. The tornado blew down trees and power lines and destroyed a small utility building.</p>									
Robeson Co.	19	1430EST			0	0	0	0	Funnel Cloud
<p>A funnel cloud was sighted by the public four miles north of Lumberton as thunderstorms crossed the area.</p>									
Madison Co.	23	1425EST			0	0	3	0	TSTM Winds
Marshall Yancey Bald Creek	23	1455EST			0	0	0	0	Hail (0.75)
<p>Thunderstorm winds downed trees near Marshall and produced nickel size hail in Marshall and Bald Creek.</p>									
Pender Co.	24	0725EST			0	0	0	0	Hail (1.00)
Rocky Point New Hanover Co.	24	0725EST			0	0	0	0	Hail (1.00)
<p>Thunderstorms produced quarter size hail in southern Pender and northern New Hanover counties.</p>									

32 NORTH DAKOTA ————— NONE REPORTED

33 OHIO

Mercer County	03	1424 EST			0	0	?	0	Hail (.75)
<p>Dime size hail fell at the intersection of State Routes 29 & 49 in the western part of the county.</p>									
Williams County	03	1520 EST			0	2	4	0	Thunderstorm Wind
<p>A thunderstorm blew off a roof, leveled a barn and damaged trailers in Montpelier. Two people were injured from flying debris in Alfordton.</p>									
Williams County	03	1530 EST			0	0	4	0	Lightning
<p>Lightning destroyed a church steeple and struck a house in Pioneer. The kitchen was destroyed and minor damage occurred to the rest of the house from the ensuing fire.</p>									
Ross County	03	1950 EST			0	1	4	0	Thunderstorm Wind
<p>A thunderstorm moved a house one and one-half feet off its foundation, blew out windows, and blew a shed from the back to the front yard 2 miles west of Londonderry. One injury from flying glass occurred.</p>									

OHIO

OH2001	04	1900 EST			0	0	?	0	Flood
<p>Williams County</p> <p>The St. Joseph River at Montpelier crested at a stage of 13.3 feet at 1600 EST on the 8th. Flood stage is 12.0 feet. Only minor damage to lowland areas occurred.</p>									
OH2001	06	1400 EST			0	0	?	0	Flood
<p>Williams County</p> <p>The Tiffin River at Stryker crested at a stage of 12.2 feet at 1700 EST on the 7th. Flood stage is 11.0 feet. Only minor damage to lowland areas occurred.</p>									
Lucas County	22	2258 EST			0	0	?	0	Hail (1.75)
Lucas County	22	2309 EST			0	0	?	0	Hail (1.75)
<p>Golfball size hail fell at the intersection of Alexis and Levis roads in West Toledo. Golfball size hail was later reported in East Toledo and at Point Place.</p>									
Franklin County	23	1418 EST			0	0	?	0	Hail (1.0)
Franklin County	23	1423 EST			0	0	4	0	Thunderstorm Wind
<p>One inch hail and 50 knot winds were reported at Rickenbacker AFB. Trees and power lines were downed in the county.</p>									
Clermont County	23	1420 EST			0	0	4	0	Thunderstorm Wind
<p>A thunderstorm blew off two roofs, and downed trees and power lines in New Richmond.</p>									
Hamilton County	23	1425 EST			0	0	4	0	Thunderstorm Wind
<p>A thunderstorm blew down many 40-50 foot trees at scattered locations in the Cincinnati area.</p>									
Pickaway County	23	1425 EST			0	0	4	0	Thunderstorm Wind
<p>A thunderstorm blew off a patio roof and slate shingles, blew out windows and damaged a barn in Circleville.</p>									
Scioto County	23	1500 EST			0	0	4	0	Thunderstorm Wind
<p>A thunderstorm blew down trees and power lines in many parts of the county. There was roof damage to the county courthouse in Portsmouth.</p>									
Athens County	23	1600 EST			0	0	5	0	Thunderstorm Wind
<p>A thunderstorm blew down numerous trees, damaged many buildings and did severe damage to a house that was cut in half by a falling tree.</p>									
Hocking County	23	1600 EST			0	0	4	0	Thunderstorm Wind
<p>A thunderstorm blew down trees and power lines across the county.</p>									
Brown County	23	1715 EST			0	0	4	0	Thunderstorm Hail (1.75)
<p>A thunderstorm blew down trees and power lines, and dropped golfball size hail in Georgetown.</p>									

34 OKLAHOMA

Kay County,	01	0200CST			0	0	4	?	Lightning
<p>8 N Tonkawa</p> <p>Lightning caused around \$40 thousand damage to a house and its contents.</p>									
OK2001-002	01	0400CST-2300CST			0	0	?	?	Heavy Snow
<p>A strong low pressure system moved across the western two-thirds of the Panhandle dumping 12 to 16 inches of snow. Winds of 20 to 30 mph with some gusts up to 40 mph caused drifts up to 3 feet. Cimarron and Texas counties became isolated as all roadways were closed until the afternoon of the 2nd. Many people were stranded and all planned activities were cancelled. Although many accidents occurred, only minor injuries were reported. Visibilities were zero at times.</p>									

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APRIL 1988

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					KILLED	INJURED	PROPERTY	CROPS	
OKLAHOMA									
Lincoln County, Chandler	01	0900CST			0	0	5	?	Flash Flooding
					Heavy rains of the past week and an additional 3 to 5 inches of rain caused Bellcow Creek to flood portions of Chandler. Five families were evacuated from their homes. Damage to the homes was around \$20,000. Dry Creek and Chuckaho Creek also flooded portions of Lincoln County, washing out roads and causing damage to several bridges. Damage to roads and bridges was estimated at \$150,000. Schools were closed across the county because of the washed out roads. The water rose to within 2 feet of the Turner Turnpike.				
Washington County, Dewey and Bartlesville	01	1600CST			0	0	?	?	Flooding
					Very heavy rains caused the Caney River to flood portions of Dewey but only in yards. The flooding caused several roads to be closed around Dewey and Bartlesville.				
Canadian County, El Reno, Okarche, and Yukon	01	1030CST			0	0	?	?	Flash Flooding
					Three to five inch rains caused flooding of many small creeks across the county but did not threaten houses or businesses. Many streets and county roads were closed around El Reno. Highway 81 near Okarche and Highway 92 near Yukon were closed for a short time.				
Tulsa County, Skiatook	01	1200CST			0	0	?	?	Flooding
					Heavy rains caused Bird Creek to flood eastern sections of Skiatook. The flooding caused 35 houses and 7 businesses to be evacuated. The flooding was spread over a 4 to 5 block area and also closed the intersection of Highways 11 and 20. Bird Creek closed several roads and highways as it flooded down to Owasso.				
Pottawatomie County, Shawnee	01	1230CST			0	0	?	?	Flooding
					Rainfall totaling near seven inches caused the North Canadian River to flood southern sections of Shawnee. Five families were forced to evacuate their homes. Squirrel Creek also flowed out of its banks, closing several roads.				
Wagoner County, N Wagoner	01	1417CST			0	0	?	?	Hail (1.75)
					A thunderstorm produced heavy rain and golfball size hail.				
McCurtain County, Glover	01	1420CST			0	0	?	?	Hail (1.00) TSTM Wind
					A thunderstorm produced one inch hail and strong winds at Glover and 3 miles west of Broken Bow.				
Okfuskee County, Weleetka	05	1400CST			0	0	?	?	Hail (1.00)
Okmulgee County, Okmulgee	05	1404CST			0	0	?	?	Hail (1.75)
Okmulgee County, Morris	05	1415CST			0	0	?	?	TSTM Wind Funnel Cloud
Muskogee County, Haskell	05	1445CST			0	0	?	?	Hail (1.75)
Muskogee County, Muskogee Arpt.	05	1450CST			0	0	4	?	TSTM Wind
Mcintosh County, Pierce	05	1455CST			0	0	?	?	Hail (1.75)
Pittsburg County, Nr Indianola	05	1512CST			0	0	?	?	Hail (1.00)
Coal County, 6 NE Coalgate	05	1515CST			0	0	?	?	Hail (0.75)
Pittsburg County, Canadian	05	1515CST			0	0	?	?	Hail (0.75)
Cherokee County, 2 S Tahlequah	05	1520CST			0	0	4	?	TSTM Wind
Sequoyah County, Gore	05	1538CST			0	0	?	?	Hail (0.75)
Bryan County, Roberta	05	1540CST			0	0	?	?	Hail (0.75)
Haskell County, Enterprise	05	1545CST			0	0	?	?	Hail (0.75)
Atoka County, Redden	05	1550CST			0	0	?	?	Hail (0.75)
Leflore County, 1 SW Poteau	05	1640CST			0	0	?	?	Hail (0.75)
Pushmataha County, Nr Snow	05	1640CST			0	0	?	?	Hail (0.88)
McCurtain County, Haworth	05	1810CST			0	0	?	?	Hail (1.00)
OKLAHOMA									
Oklahoma County, NE Oklahoma City	17	1730CST			0	0	4	?	Lightning
					Lightning caused \$7000 damage to a house and its contents in northeastern Oklahoma City.				
Custer County, Custer City	24	2142CST			0	0	?	?	Hail (1.00)
Custer County, 5 S Thomas	24	2200CST			0	0	?	?	TSTM Wind (61)
Custer County, 7 SE Thomas	24	2210CST			0	0	?	?	Hail (1.00)
Blaine County, 2 N Hydro	24	2215CST			0	0	?	?	TSTM Wind (52)
Washita County, 4 NW Corn	24	2220CST			0	0	?	?	TSTM Wind (52)
Caddo County, Alfalfa	24	2225CST			0	0	?	?	TSTM Wind (59)
Canadian County, 4 NW Calumet	24	2250CST			0	0	?	?	TSTM Wind (52)
Kiowa County, Hobart	24	2255CST			0	0	?	?	TSTM Wind
Blaine County, Greenfield	24	2300CST			0	0	?	?	TSTM Wind (52)
Caddo County, Hinton	24	2300CST			0	0	?	?	TSTM Wind (52)
Canadian County, Calumet	24	2315CST			0	0	?	?	TSTM Wind (52)
Caddo County, Carnegie	24	2335CST			0	0	4	?	TSTM Wind (52) Hail (0.75)
					Thunderstorms produced winds up to 70 mph and widely scattered hail up to a one inch size. Many trees and power poles were downed and several outbuildings were damaged. A mobile home was destroyed and several sheds and buildings damaged in Carnegie, with a damage estimate of \$10,000.				
Jackson County, Altus	29	1600CST			0	0	?	?	TSTM Wind (52) Flash Flooding
					A thunderstorm produced 60 mph winds and dumped nearly 3 inches of rain in 20 minutes. The rain was too intense for drainage systems and caused flash flooding of dry creeks which closed several roads and streets for a few hours.				
Beckham County, Elk City	29	1630CST			0	0	4	?	Flash Flooding
					Rainfall of 3 to 4 1/2 inches in less than an hour caused several small creeks to overflow their banks flooding several roads. An automobile was washed off the road by a "wall of water". The occupant was able to climb out of the car. During the same time another auto was washed off a road less than a mile away. That occupant also managed to escape. Both drivers were teenagers. Damage to the automobiles was \$5,000.				
35 OREGON									
North and Central Oregon Coast ORZ001-002	02	1250-1935PST			0	0	?	0	High Wind
					A deep low pressure system moved close to the northern and central Oregon coast bringing gusty southerly winds in excess of 50 mph. Seaside reported a gust of 67 mph. The Astoria WSO reported a gust of 63 mph. Numerous gusts near 60 mph were also reported. No significant damage was reported.				
36 PENNSYLVANIA, Eastern - NONE REPORTED									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

APRIL 1988

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	
36 PENNSYLVANIA, Western									
Greene County, 14W Waynesburg	23	1400EST			1	0	0	0	Lightning
A man was struck and killed by lightning as he was digging holes. Lightning M480									
Westmoreland County, 15SW Greensburg	23	1545EST			0	0	0	0	Thunderstorm Wind
A sixty mph wind occurred at Rostraver Airport. Trees and power lines were downed at West Newton.									
Westmoreland County, 10 S Greensburg	23	1620EST			0	0	0	0	Thunderstorm Wind
Trees were downed and windows-blown out in Mt. Pleasant.									
Somerset County, 3S Meyersdale	23	1700EST			0	0	0	0	Hail (0.75) and Thunderstorm Wind
Power lines were downed by wind.									
37 RHODE ISLAND ————— NONE REPORTED									
38 SOUTH CAROLINA									
Lexington County 20 miles NW of Columbia	06	1525EST			0	0	2	2	TSTM Wind
Thunderstorm winds uprooted a large tree and caused other minor damage.									
Richland County Eastern Columbia	06	1600EST			0	0	3	0	Hail (0.75)
Hail reported on Fairmont Drive near Veteran Hospital.									
Colleton County 4 miles north of Walterboro	06	1755EST			0	0	3	4	Hail (1.5)
Large hail occurred four miles north of Walterboro.									
Clarendon County Low Fall Landing	07	1500EST			1	0	0	0	TSTM Wind (G45)
Strong winds overturned boat, an occupant wearing life jacket died from exposure. Accident occurred on Lake Marion near Low Fall Landing. (M150)									
SC2003-004-005-006 East and Lower Piedmont, North and South Midland	11	1300EST to 1500EST			0	0	2	0	Small Hail
Line of thunderstorms moved across West-Central, North-Central and Central South Carolina. Small hail reported at Columbia Airport, South Congaree, Wainsboro and near Lake Greenwood.									
Greenville County Parker Community	12	0315EST			0	0	6	0	Lightning
Lightning set Textile Mill on fire. A fireman was killed fighting the blaze.									
SC2-004-006 Lower Piedmont and South Midlands	12	PM			0	0	2	0	Small Hail
An intensifying low pressure moved through South Carolina causing scattered areas of small hail and strong winds over Lower Piedmont and South Midlands S.C.									
Calhoun County Fort Motte	12	1400EST			0	0	4	0	Lightning
Lightning struck tree and set two large wooden sheds afire.									
Horry County Socastee	13	0100EST			0	0	3	0	TSTM Wind
Thunderstorm wind in Socastee blew large tree across two cars damaging them severely.									
Lexington County	15	1906EST			0	0	0	0	TSTM Wind
15	1920EST				0	0	2	0	TSTM Wind
Winds blew down several trees in Irmo at 1920EST. Wind gusts to 61 mph reported at Columbia Airport at 1906.									
York County	18	0930EST			0	0	5	2	TSTM Wind
Thunderstorm winds in York blew down a 60 foot oak tree which damaged a home; also a 50 foot pecan tree was blown across a car and van.									
Beaufort County 1 mile NE of Beaufort	19	0500EST			0	0	4	0	TSTM Wind
Downburst winds during thunderstorm broke a number of pines along a 100 foot wide path three miles long. Two homes damaged by falling limbs. Damage path began one mile northeast of Beaufort and continued eastward to near Cedar Point.									
Foothills, East Piedmont, Lower Piedmont SC2002,003,004	20	AM			0	0	0	3	Frost
Scattered frost caused minor damage to tender crops.									
Richland County	23	1530EST			0	0	4	0	Lightning
Lightning struck chimney and blew out bricks, damaging seven cars at Tapp's in uptown Columbia.									
— SOUTH CAROLINA									
Darlington County Darlington area	24	0618EST			0	0	5	4	Hail (1.75)
Horry County Myrtle Beach	24	1015EST			0	0	3	0	Lightning
An line of thunderstorm accompanied by hail moved eastward across northeastern South Carolina. Lightning damaged a Myrtle Beach substation, causing loss of power. Small hail reported in Dillon, Latta, Marion, and southern Marlboro Counties.									
Jasper County Hardeeville	25	1915EST			0	0	4	4	Hail (1.75)
Beaufort County Bluffton	25	1926EST			0	0	4	4	Hail (1.75)
Beaufort County Hilton Head	25	1930EST			0	0	4	4	Hail (1.75) TSTM Wind
A severe thunderstorm accompanied by large hail and strong winds moved across portions of Jasper and Beaufort Counties. Hundred of birds killed including a few pelicans. Worst damage was on Hilton Head between Sea Crest Motel and Sea Pines Plantation. Power was disrupted by broken tree limbs.									
39 SOUTH DAKOTA									
SDZ007 Black Hills	22	0030 to 0700 MST			0	0	0	0	Heavy Snow
Five to eight inches of snow fell in the Black Hills.									
SDZ015-019 South Central South Dakota	22	0600 to 1600 CST			0	0	0	0	Snow
Five to ten inches of snow fell across parts of south central South Dakota.									
SDZ007-008-013-014-015-019 Southwest and South Central South Dakota	25	1230 to 26 1100 CST			0	0	0	0	Heavy Snow
Five to fourteen inches of snow fell across southwest and south central South Dakota. Several accidents occurred because of slippery roads. The following is a list of snowfall amounts in inches.									
Custer									14
Colome, Gregory									10
Winner, Todd County.									8
Murdo, Deerfield									6
40 TENNESSEE									
TNZ001-002-004-005-006-007-009-012-014	06	1500CST			0	0	4	0	High Wind
A strong cold front moved across the state from west to east. It produced very strong winds, observed at 30 to 58 mph. Damage was widespread, with at least 15 counties reporting some damage. However, the damage was mostly in the eastern half of the state. Numerous tree limbs, trees and power lines were downed. Mobile homes were damaged in Bluff City and Blountsville. A tree fell on a carport and car in Chattanooga. Five parked school buses were damaged in Cumberland Co. when an abandoned gym collapsed. Fishing boats were overturned on Douglas Lake and near Dayton, but the occupants were unharmed. A barn was damaged and the small plane that was parked behind it was flipped over in Central.									
Hickman County, Centerville	23	1730CST			0	0	0	0	Hail (1.75)
Williamson County, Franklin	23	1745CST			0	0	0	0	Hail (1.75)
Rutherford County: Smyrna	23	1800CST			0	0	0	0	Hail (1.75)
Murfreesboro	23	1815CST			0	0	0	0	Hail (1.75)
Lavergne	23	2015CST			0	0	2	0	Hail (1.75)
Thunderstorm wind									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

APRIL 1988

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	

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	

— TENNESSEE

Franklin County, Tullahoma	23	2045CST			0	0	2	0	Hail (1.75) Thunderstorm wind
Pickett County, NW corner	23	1955CST			0	0	0	0	Hail (0.75)

Severe thunderstorms were scattered throughout a 6 county area in central and east-central Tennessee. Large tree limbs and some trees were downed by the strong thunderstorm winds near Tims Ford, in Northwest Tullahoma and in Lavergne.

41 TEXAS, Northern

Dallas County	1	1330CST			0	0	?	?	Hail (1.00)
Irving	1	1345CST			0	0	?	?	Hail (1.00)
Addison	1	1402CST			0	0	?	?	Hail (0.75)
4 NW Dallas	1	1406CST			0	0	?	?	Hail (1.00)
Richardson	1	1402CST			0	0	?	?	Hail (1.00)
Collin County	1	1402CST			0	0	?	?	Hail (1.00)
Plano									

A thunderstorm produced scattered areas of hail through Dallas County and the southern part of Collin County.

Hill County	1	1405CST			0	0	?	?	Hail (1.00)
Malone									

Quarter-size hail fell in Malone.

Smith County	1	1545CST			0	0	?	?	TSTM Wind
Tyler									

Gregg County	1	1625CST	0.3	100	0	0	0	?	Tornado (F1) and Hail (1.00)
2 SW Gladewater to 1.75 SW Gladewater	1	1635CST			0	0	5	?	TSTM Wind (70)

Gladewater	1	1642CST-1700CST	13	440	0	9	6	?	Tornado (F3)
Gregg and Upshur Counties									

Upshur County	1	1645CST			0	0	?	?	TSTM Wind and Hail (1.00)
9 S Gilmer									

Harrison, Marion, and Cass Counties	1	1710CST-1730CST	16	100	0	0	?	?	Tornado (F1)
3.5 NNE Ashland to 4 NW Avinger	1	1710CST			0	0	?	?	Hail (1.00)

Harrison County	1	1755CST			0	0	?	?	TSTM Wind
3.5 NNE Ashland									

Cass County	1	1844CST			0	0	?	?	Hail (1.75)
5 W Atlanta									

Bowie County	1	1844CST			0	0	?	?	Hail (1.75)
12 NE Wright Patman Lake									

A thunderstorm produced strong winds which downed power lines at Tyler in Smith County at 1545CST.

The same thunderstorm produced a tornado two miles southwest of Gladewater in Gregg County at 1625CST. After traveling about 1/4 mile the tornado dissipated. No buildings were damaged by this tornado but there was considerable tree damage.

The thunderstorm continued moving northeastward into Gladewater where straight-line winds of up to 80 miles an hour produced damage in the city. The roof of the Gladewater City Hall was damaged as well as the roof, windows and portable buildings at the Broadway School. A grocery store and two automobile dealerships also sustained damage. Damage in Gladewater was estimated at \$200,000.

The thunderstorm spawned a second tornado which produced almost continuous damage along a 13 mile path from 1.25 miles northeast of Gladewater to 14.25 miles northeast of Gladewater. The tornado crossed the Gregg-Upshur county line at a point 2 miles northeast of Gladewater. The damage path ranged from 150 to 440 yards wide.

This tornado caused nine injuries, none of which required hospitalization. Nineteen houses and nine mobile homes were destroyed. Sixty-one houses, five mobile homes, and four businesses were damaged. Damage from the tornado was estimated at \$2.5 million.

Straight-line winds from the thunderstorm uprooted several trees and hail up to one inch in diameter fell northwest of the tornado in Upshur County (9 S Gilmer).

The thunderstorm produced a third tornado which caused intermittent heavy timber damage along a 16 mile track from 3.5 miles north-northeast of Ashland in Harrison County, through western Marion County, to 4 miles north-northwest of Avinger in Cass County. Width of the damage track was about 100 yards.

The tornado crossed the Harrison-Marion County line 3 miles southeast of One City. It crossed the Marion-Cass County line 4 miles southwest of Avinger. Hail up to one inch in diameter accompanied the tornado 3.5 miles north-northeast of Ashland.

— TEXAS, Northern

Anderson County	1	1635CST	4	100	0	1	5	?	Tornado (F1)
10 SE Elkhart to 12 E Elkhart									

The thunderstorm continued northeastward through Cass and Bowie Counties producing strong winds which uprooted trees 5 miles west of Atlanta and golf ball-size hail 12 miles northeast of Wright Patman Lake.

Shelby County	1	1645CST			0	0	?	?	Hail (1.00)
10 SW Center									

A tornado developed near Mound City (10 SE Elkhart) and produced intermittent damage along a 4 mile track to Denson Springs (12 E Elkhart). The tornado damaged 9 homes, 2 pickup trucks, and a barn. Damage was estimated at \$278,000. A 10 year-old boy was injured slightly but did not require hospitalization.

Panola County	1	1652CST			0	0	?	?	Hail (1.75)
2 E Delray	1	1702CST			0	0	?	?	Funnel Cloud and Hail (1.00)
1 E Ridgerville									

Harrison County	1	1722CST			0	0	?	?	Funnel Cloud and TSTM Wind
9 SE Marshall									

Rusk County	1	1731CST			0	0	?	?	Funnel Cloud, Hail (1.00) and TSTM Wind
4 NE Mt. Enterprise									

Other thunderstorms produced several funnel clouds and several areas of hail in Northeast Texas. Thunderstorm winds downed numerous trees 9 miles southeast of Marshall in Harrison County and 4 miles northeast of Mt. Enterprise in Rusk County.

Camp County	1	1745CST			0	0	?	?	TSTM Wind
6 SE Pittsburg									

Shelby County	1	1805CST			0	0	?	?	Hail (2.00)
James									

Rusk County	1	1821CST			0	0	?	?	Hail (1.00)
5 SW Tatum									

Harrison County	1	1835CST			0	0	?	?	TSTM Wind
5 W Darco									

Bowie County	1	1900CST			0	0	?	?	TSTM Wind
7 W New Boston									

Additional thunderstorms produced scattered areas of hail and strong winds in Northeast Texas. Winds downed trees 6 miles southeast of Pittsburg in Camp County and 5 miles west of Darco in Harrison County. An unoccupied mobile home was demolished by winds 7 miles west of New Boston in Bowie County.

Tarrant County	5	1550CST			0	0	?	?	Hail (0.75)
Arlington									

Fannin County	5	1610CST			0	0	?	?	Hail (0.88)
Trenton									

3 SW Honey Grove	5	1625CST	short	narrow	0	0	0	?	Tornado (F0)
Bonham	5	1625CST			0	0	?	?	Hail (0.88)
Collin County	5	1635CST			0	0	?	?	Hail (0.75)

Farmersville	5	1655CST			0	0	?	?	Hail (0.88)
Lamar County									

15 NW Paris	5	1744CST			0	0	?	?	TSTM Winds (52)
Kaufman County									

10 E Kaufman	5	1844CST			0	0	?	?	Hail (1.00)
Bowie County									

4 N New Boston	5	1900CST			0	0	?	?	Hail (1.00)
Hooks	5	1920CST			0	0	?	?	Hail (1.00)
Nash	5	1920CST			0	0	?	?	Hail (1.00)
Texarkana	5	1920CST			0	0	?	?	Hail (1.00)
Cass County	5	1930CST			0	0	?	?	Hail (0.88)

6 E Wright Patman Lake	5	1945CST			0	0	?	?	Hail (0.75)
Falls County									

Reagan	5	2000CST			0	0	?	?	TSTM Wind
Harrison County									

5 SE Harleton	5	2000CST			0	0	?	?	Hail (1.00)
5 S Woodlawn									

A squall line moved through North-Central and Northeast Texas producing scattered areas of hail which ranged from dime-size to one inch in diameter. A brief tornado was observed 3 miles southwest of Honey Grove in Fannin County at 1625CST but did no damage. Winds up to 60 miles an hour were observed 10 miles east of Kaufman in Kaufman County. Several trees were blown down 5 miles southeast of Harleton in Harrison County.

Young County	24	1900CST			0	0	?	?	TSTM Wind
6 N Graham									

Graham	24	1905CST			0	0	?	?	Hail (0.75)
10 N Lake Graham	24	1905CST			0	0	?	?	TSTM Wind
5 E Graham	24								

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APRIL 1988

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					KILLED	INJURED	PROPERTY	CROPS	

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	

TEXAS, Northern

Tarrant County	24	2105CST			0	0	?	?	TSTM Wind
Azle	24	2110CST			0	0	?	?	TSTM Wind
6 SW Benbrook	24	2110CST			0	0	?	?	TSTM Wind
Johnson County	24	2110CST			0	0	?	?	TSTM Wind
2.5 NE Cresson									
<p>A squall line moved through North-Central Texas producing isolated areas of wind damage, one brief tornado, and some hail.</p> <p>Strong winds damaged the roof of a house 6 miles north of Graham in Young County. Dime-size hail fell in Graham. Numerous trees were uprooted 10 miles north of Lake Graham and the roof of a house was damaged 5 miles east of Graham.</p> <p>A brief tornado damaged the roofs of two barns and a couple of houses at Gouldbusk in Coleman County at 1945CST.</p> <p>Winds of up to 60 miles an hour uprooted a tree onto a power line in Mineral Wells in Palo Pinto County. A large tree was uprooted in Stephenville blocking a street for a short time.</p> <p>Two people were injured at Whitt in Parker County at 2030CST when winds estimated at 60 miles an hour destroyed a mobile home. Two other mobile homes were damaged by the winds at Whitt. The roofs of two houses were damaged and a TV antenna blown over by winds 3 miles southwest of Wheatland in Parker County.</p> <p>Winds of up to 70 miles an hour were reported 5 miles southwest of Cresson in Hood County. Large limbs were broken from trees by the wind at Azle in Tarrant County and portable signs were blown over at Whiskey Flats (6 miles southwest of Benbrook) in Tarrant County. Large limbs were also broken from trees 2.5 miles northeast of Cresson in Johnson County.</p>									
Palo Pinto County	29	1600CST			0	0	?	?	Hail (1.00)
4 NE Metcalf Gap									
Young County	29	1633CST			0	0	?	?	Hail (0.75)
10 SE Graham									
Stephens County	29	1635CST			0	0	?	?	Hail (1.75)
Ivan									
Breckenridge	29	1735CST			0	0	?	?	Hail (0.75)
Hubbard Creek Lake	29	1800CST			0	0	?	?	Hail (1.00)
2 S Breckenridge	29	1802CST			0	0	?	?	Hail (0.75)
Hardeman County	29	1650CST			0	0	?	?	Hail (0.75)
Chillicothe									
Foard County	29	1807CST			0	0	?	?	Hail (0.75)
2.5 E Crowell									
Thalia	29	1834CST			0	0	?	?	Hail (0.75)
Eastland County	29	1829CST	0.3	33	0	0	3	?	Tornado (F1)
1.5 E Cisco									
Wilbarger County	29	1834CST			0	0	?	?	Hail (0.75)
Lockett									
1 W Vernon	29	1837CST			0	0	?	?	Hail (0.75)
Odell	29	1837CST			0	0	?	?	Hail (0.75)
<p>A squall line produced scattered areas of hail across North-Central Texas. A brief tornado occurred on the southernmost storm 1.5 miles east of Cisco in Eastland County. The tornado snapped off trees, damaged a storage building, and knocked over two radio antennas.</p>									

TEXAS, Southern

Bee County,	18	0615CST			0	0	?	?	Hail (1.75)
Beeville									Golfball size hail fell in Beeville. Damage not reported.
Menard County,	24	2008CST			0	0	0	0	Hail (1.00)
3N Menard									One-inch hail fell 3 miles north of Menard. Damage not reported.
Colorado County,	29	1010CST			0	0	0	0	Hail (0.75)
Rock Island									Three-quarter inch hail fell at Rock Island.
Colorado County,	29	1225CST	.25	100	0	0	4	4	Tornado (F0)
4W Columbus									A tornado touched down briefly 4 miles west of Columbus near the community of Clidden. A metal building was destroyed and nearby trees were downed.
Duval County,	29	1630CST			0	0	0	0	Hail (1.00)
5N Freer									One-inch diameter hail fell 5 miles north of Freer. Damage not reported.
Karnes County,	29	1650CST			0	0	0	0	Hail (1.00)
Karnes City									One-inch diameter hail fell near Karnes City. Damage not reported.
LaSalle County,	29	1651CST			0	0	0	0	Tstm Wind (63)
Cotulla									High wind from a thunderstorm produced a wind gust to 70 MPH at Cotulla. Damage not reported.
Jim Wells County,	29	1655CST			0	0	0	0	Hail (0.75)
Alice	29	1655CST			0	0	0	?	Tstm Wind (?)
<p>Three-quarter inch hail fell and high winds from a thunderstorm downed several large trees in the Alice area.</p>									
Nueces County,	29	1700CST			0	0	4	0	Tstm Wind (?)
Robstown									High winds from a thunderstorm blew over signs, fences and power poles in the town of Robstown.
Nueces County,	29	1725CST			0	0	4	0	Tstm Wind (49)
Corpus Christi	29	1725CST			0	0	0	0	Hail (0.75)
<p>High winds from a thunderstorm did scattered damage around the Corpus Christi International Airport. The wind blew the door off of the observation deck of the National Weather Service Office. Three-quarter inch hail fell at the airport also.</p>									
Kleberg County,	29	1725CST			0	0	0	?	Tstm Wind (?)
Kingsville									High winds from a thunderstorm toppled several large trees just south of Kingsville near the town of Ricardo.
Brooks County,	29	1730CST			0	0	5	?	Tstm Wind (58)
Falfurrias									High winds from a thunderstorm gusts to 65 MPH at Falfurrias. The high winds blew over mobile homes, uprooted trees and downed power lines.
Nueces County,	29	1730CST			0	0	0	0	Hail (1.75)
Corpus Christi	29	1730CST			0	0	5	0	Tstm Wind (?)
<p>Golfball size hail was reported in Corpus Christi. High winds from a thunderstorm blew over several palm trees, billboards and fences mainly on the south and west side of Corpus Christi.</p>									
Karnes County,	29	1800CST			0	0	0	0	Hail (1.75)
Kenedy									Golfball size hail fell in Kenedy. Damage not reported.
Wilson County,	29	1800CST			0	0	0	0	Hail (1.75)
Stockdale									Golfball size hail fell in Stockdale. Damage not reported.
Nueces County,	29	1800CST			0	0	5	0	Tstm Wind (54)
Port Aransas									High winds from a thunderstorm blew over several camper trailers at Port Aransas. The US Coast guard station reported a wind gust to 62 MPH.
Bexar County,	29	1814CST			0	0	0	0	Hail (0.75)
San Antonio	29	1814CST			0	0	5	0	Tstm Wind (?)
<p>Three-quarter inch hail was reported on the northeast side of the city of San Antonio. High winds from a thunderstorm blew portions of a roof off of a convenient store on the north side of the city. Flying debris broke the front windows out of a department store in the same area. A few cars were damaged and nearby fences were blown over in the Windcrest area. Trees were also blown over.</p>									
Bexar County,	29	1815CST			0	0	0	0	Hail (1.00)
Helotes									One-inch diameter hail fell in Helotes. Damage not reported.

41 TEXAS, Southern

Walker County,	01	1625CST			0	0	4	0	Tstm Wind (?)
10NW Huntsville									High winds from a thunderstorm overturned a camper trailer and destroyed a nearby shed.
Brazos County,	01	1750CST			0	0	0	0	Hail (1.00)
College Station									Hail the size of quarters fell in College Station.
Duval County,	05	1845CST			0	0	?	?	Hail (2.75)
San Diego									Baseball size hail fell near San Diego. Damage not reported.
Kleberg County,	05	1930CST			0	0	?	?	Hail (2.75)
6NE Falfurrias									Baseball size hail fell 6 miles northeast of Falfurrias.
Hidalgo County,	09	1615CST			0	0	0	0	Hail (1.75)
McAllen									Golfball size hail fell at McAllen. Damage not reported.
LaSalle County,	18	0420CST			0	0	0	0	Hail (0.75)
Cotulla									Three-quarter inch hail fell at Cotulla.
Live Oak County	18	0540CST			0	0	?	?	Hail (1.75)
									Golfball size hail reported near Georgewest. Damage not reported.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

APRIL 1988

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	
TEXAS, Southern									
Bee County, Pawnee	29	1830CST			0	0	?	?	Hail (?)
	29	1830CST			0	0	?	?	Tstm Wind (?)
Large hail was reported near Pawnee. Size and damage not reported. High winds from a thunderstorm overturned a mobile home and toppled some large trees at the same location.									
De Witt County, Cuero	29	1840CST			0	0	0	0	Hail (0.75)
Hail the size of pennies was reported in Cuero. Damage not reported.									
Goliad County, Charco	29	1900CST			0	0	0	?	Hail (0.75)
Three-quarter inch hail fell with extensive damage to crops in the Charco area of northwest Goliad County. Some windows in homes were broken out also.									
Kleberg County; Ricardo, Riviera	29	1900CST			0	0	0	?	Hail (0.75)
	29	1900CST			0	0	0	?	Tstm Wind (?)
Three-quarter inch hail fell south of Kingsville in the Ricardo and Riviera area. Also large trees were blown over in the area from thunderstorm winds.									
Gonzales County, Nixon	29	1910CST			0	0	?	?	Hail (2.75)
	29	1910CST			0	0	?	?	Tstm Wind (?)
Baseball size hail was reported in Nixon. High winds from a thunderstorm blew over some large trees in the same area.									
41 TEXAS, Western									
Northern Panhandle	01	0000CST			0	0	6	?	Snowstorm
A winter-like snowstorm roared out of the Rockies and dumped up to 9 inches of snow across much of the Panhandle's northern half. Winds to 40 knots accompanied the heavy snowfall, creating near-blizzard conditions at times. Many of the area highways were closed from early morning through midday of the 2nd, and power outages were common from western Amarillo to Dumas during the morning of the 2nd. The heavier snowfall totals included:									
					Stratford	-----	9	inches	
					Dalhart	-----	7	inches	
					Spearman	-----	7	inches	
					Dumas	-----	6	inches	
					Amarillo	-----	2	inches	
The storm also resulted in the death of approximately 3,000 head of cattle across the northern Panhandle. The cattle apparently died due to asphyxiation when they huddled together to shield themselves from the cold; they would slip in the snow and be stepped upon by their comrades, then would be buried by the snow.									
Tom Green County	09	Est.2300CST			0	0	4	0	Lightning
A nocturnal thunderstorm produced lightning that resulted in the death of four horses in northeast San Angelo. The horses, found together in an open pasture along Covington Road, were not near any trees or barbed-wire fences that would have attracted lightning. A fifth horse was found alive.									
Andrews County	16	1548CST	?	?	0	0	0	0	Tornado (F1)
		1617CST	?	?	0	0	0	0	Tornado (F0)
		1620CST	?	?	0	0	0	0	Tornado (F0)
A member of the Texas Tech University Storm Intercept Team sighted a multiple vortex tornado along the western boundary of the county at 1548 CST. The tornado was in open farm land and did no apparent damage. A second twister was noted by an Amateur Radio Operator in the southern part of the county, between Andrews and Odessa, at 1617 CST. At 1620 CST, a third tornado was observed by a Sheriff's Deputy 4 miles north of Frankel City, in the northwest part of the county.									
Kent County	16	1725CST			0	0	0	0	Hail (1.75)
Sheriff's Deputies encountered golfball-sized hail on Ranch Road 1231, 8 miles southwest of Clairmont.									
Gaines County	16	1755CST			0	0	0	0	Hail (0.75)
		1815CST			0	0	0	0	Hail (1.00)
The Sheriff's Office reported 0.75-inch hail 4 miles south of Seminole. At 1815 CST, a rainfall observer reported 1-inch hail at the Community of Loop.									
TEXAS, Western									
Andrews County	16	1845CST			0	0	0	0	Hail (1.00)
The Sheriff's Office reported golfball-sized hail on State Highway 176, between 10 and 13 miles west of the City of Andrews.									
Lynn County	16	1901CST							Funnel
A funnel cloud was sighted by Skywarn Storm Spotters at New Moore, in the southwest part of the county.									
Terry County	16	1915CST			0	0	0	0	Hail (2.75)
Golfball-sized hail was reported 5 miles east of Brownfield on U. S. Highway 62/82. The hail fell for about 5 minutes, but did no discernible damage.									
Andrews County	16	1920CST			0	0	0	0	Hail (2.00)
Hail the size of hen's eggs fell along State Highway 115, between 13 and 15 miles southwest of the City of Andrews.									
Lynn County	16	1923CST			0	0	?	0	Hail (2.75)
A Skywarn Spotter encountered hail the size of baseballs at New Moore. Damage was undetermined.									
Andrews County	16	1931CST			0	0	0	0	Hail (0.75)
		1938CST			0	0	0	0	Hail (0.75)
Hail the size of pennies was reported by the Sheriff's Dispatcher in the City of Andrews. Hail of the same size was encountered at 1938 CST by a Skywarn Spotter on State Highway 115, about 10 miles southwest of the City of Andrews.									
Lubbock County	16	1940CST			0	0	0	0	Hail (1.75)
		1949CST							Funnel
		1958CST			0	0	0	0	Hail (1.00)
		1958CST			0	0	0	0	TSTM Wind (57)
Hail a little larger than golfballs was reported just west of the Lubbock City Limits on 50th Street. With fields bare, no damage resulted. Nine minutes later, a funnel cloud was sighted by City Emergency Preparedness Workers 5 miles southwest of the City. At 1958 CST, 1.00-inch hail accompanied wind gusts to 57 knots at Reese Air Force Base, in the western part of the county. No damage was reported.									
Andrews County	16	2000CST			0	0	0	0	Hail (0.75)
		2015CST			0	0	0	0	Hail (1.00)
Dime-sized hail was reported on U. S. Highway 385, 8 miles south of the City of Andrews. Fifteen minutes later, hail the size of quarters was noted 10 miles south of Andrews on U. S. Highway 385.									
Lynn County	16	2020CST			0	0	0	0	Hail (1.75)
Hail the size of golfballs struck the Community of New Moore. It was the second time in less than an hour that large hail was observed in the town.									
Andrews County	16	2025CST			0	0	0	0	Hail (0.75)
Three-quarter inch hail again was observed along U. S. Highway 385, 13 miles south of Andrews, in the southeast part of the county.									
Ector County	16	2025CST			0	0	0	0	Hail (1.00)
Dime to quarter-sized hail fell west of Gardendale, at the intersection of State Highway 158 and U. S. 385. The hail fell in open country and inflicted no apparent damage.									
Midland County	16	2028CST			0	0	0	0	Hail (1.00)
The Sheriff's Office reported 1-inch hail near the intersection of Farm Road 1788 and State Highway 191, in the northwest part of the county.									
Culberson County	17	Est.1645CST			0	0	0	0	High Wind (53)
A west wind gusted to 53 knots along U. S. Highway 62/82 through Guadalupe Pass.									
Schleicher County	24	Est.1900CST			0	0	3	0	TSTM Wind
Thunderstorm wind of an undetermined speed unroofed a garage and workshop 8 miles southwest of Eldorado.									
Concho County	24	1934CST			0	0	0	0	Hail (1.00)
A rainfall observer at Paint Rock reported 0.75 to 1.00 inch hail along with heavy rainfall.									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

APRIL 1988

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	

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	

42 UTAH

UTZ008 Southeast Utah	04	2015MST	0	0	1	0	Thunderstorm Wind (966)	
A gust to 76 mph was recorded in a thunderstorm at the Bullfrog Marina at Lake Powell.								
UTZ001	07	1930MST	0	0	1	0	High Winds (652)	
UTZ002	07	2038MST	0	0	4	0	High Winds (661)	
UTZ003	07	2250MST	0	0	1	0	High Winds (653)	
Cache Valley, Great Salt Lake Desert, Wasatch Front								
UTZ008	14	1540MST	0	1	4	0	Lightning	
A 13 year old girl was seriously burned when lightning struck a tree near her home in Moab. The girl was talking on the telephone at the time and the electric charge traveled through the underground phone lines and into the phone. The lightning also caught the house on fire and did an estimated \$5000 damage.								

43 VERMONT ————— NONE REPORTED

44 VIRGINIA

VAZ001-002 Southeastern Virginia	12	Evening	0	0	6	0	Coastal Flood	
A low center off the Carolina coasts produced strong onshore flow from the evening of the 12th through the 13th. There was moderate tidal flooding along coastal Virginia and to a lesser extent along the Chesapeake Bay. The tide reached 5.8 feet above MLW at Sewells Point and 5.9 feet above MLW at the South Island Chesapeake Bay Bridge and Tunnel at the time of both morning and evening high tides. Moderate to severe beach erosion occurred along the Chesapeake Bay and Atlantic Ocean beaches of Virginia Beach. Several streets were impassable and some homes had shallow flooding in the area, with the most damage in the Sandbridge area of Virginia Beach. Peak northeast winds during the afternoon of the 13th reached 55 knots at the Chesapeake Bay Bridge and Tunnel, and 44 knots at Norfolk. Damage in Virginia Beach estimated at 3.6 million dollars.								
Roanoke Co	23	1810EST	0	0	2	3	Hail (1.0)	
Salem	23	1815EST	0	0	3	3	Hail (1.75)	
Roanoke Co	23	1830EST	0	0	2	3	Hail (1.0)	
Bedford Co	23	1830EST	0	0	2	3	Hail (1.0)	
Thunderstorms dropped widespread hail. Golfball size hail was reported in Roanoke County, and one-inch hail in Salem City Roanoke City. Traffic was slowed by motorists encountering large hail under an underpass. Quarter size hail was reported in extreme eastern Roanoke County, and Montvale and Moneta in Bedford County.								
Fauquier Co	27	1630EST	0	0	0	0	Thunderstorm Wind (52kt)	
Fauquier Co	27	1630EST	0	0	0	0	Hail (1.0)	
Thunderstorms moved into northwestern Virginia late in the afternoon. Wind gusts ranging from 41 to 52 knots and quarter size hail were reported in northern Fauquier County, as well as continuous lightning. Heavy rains produced one inch in one hour.								

45 WASHINGTON

Pacific and King Counties	02	Evening	0	0	4	0	High Wind	
A deep low pressure center developed in the Eastern Pacific during the day, and moved inland over British Columbia, Canada during the evening. The accompanying frontal system produced strong winds on the Washington and Oregon coasts and in parts of the interior of Western Washington. Peak wind speeds were 40 mph at Cape Disappointment on the south Washington coast and 34 mph at Seattle-Tacoma Airport. Power outages were scattered across the southern portions of King County.								
Benton County	28	1500 PST	0	0	0	0	Thunderstorm Wind	
Observation site at Hanford Nuclear Reservation recorded a peak gust of 63 mph in a thunderstorm.								
Spokane County	28	1805 PST	0	0	0	0	Funnel Cloud	
	28	1900 PST	0	0	4	0	Thunderstorm Wind	
A strong thunderstorm developed in Southeast Washington in the afternoon and moved over Spokane and into Idaho during the evening. The weather observer at Felts Field in northeast Spokane reported a momentary funnel cloud as the thunderstorm moved over. A spotter in Liberty Lake, 15 miles east of Spokane, reported wind gusts to 55 miles an hour along with an inch of rain in a 20-minute period. Trees and roofs in the area sustained wind damage and power outages were scattered across the region. Firefighters responded to several utility pole fires caused by lightning strikes. Other severe weather reports were received from Idaho as the thunderstorm remained intense after crossing the state border.								

46 WEST VIRGINIA

Mineral County	25	1800EST	0	0	0	0	Hail (0.75)	
Dime size hail fell in the northern part of the county.								

47 WISCONSIN

Washington Co., Slinger	05	1655CST	0	0	0	0	Hail (0.75)	
Sheboygan Co., Sheboygan Falls	05	1805CST	0	0	0	0	Hail (1.00)	
Green Co., Albany	05	1905CST	0	0	0	0	Hail (1.13)	
Rock Co., Evansville	05	1905CST	0	0	0	0	Hail (1.13)	
Edgerton	05	1930CST	0	0	0	0	Hail (0.75)	
Milton	05	1932CST	0	0	0	0	Hail (1.50)	
Jefferson Co., Hebron	05	2005CST	0	0	0	0	Hail (0.75)	
A series of thunderstorms produced hail up to walnut size across portions of southeast Wisconsin. The hail covered the ground for a time at Hebron. No damage was reported.								

48 WYOMING

Fremont County, Riverton	07	1330MST	0	0	4	0	Thunderstorm Wind (80)	
During the afternoon of April 7th, high-based showers and thunderstorms developed over west-central Wyoming. An intense downburst event occurred with these thunderstorms. Wind gusts were estimated to have been near 90 mph with this downburst. Damage was done to car windows. Glass fragments from a 5 foot square window struck and broke a large window at the Sears store in Riverton. Additionally, the wind ripped a large double-sided sign from the Sears store and sent it two blocks to the north.								
WYZ003-005-010 North and West-Central Wyoming	08	0100 to 0200MST	0	0	0	0	Wind	
WYZ001-004 Northwest and Big Horn Mountains	08	0100 to 1200MST	0	0	0	0	Snow	
A strong cold front moved through northern Wyoming late on April 7th and into the morning of the 8th. Frequent wind gusts above 46 mph and moderate snowfall occurred behind this front. At 0100MST, Sheridan County Airport had a wind gust to 53 mph. At about the same time, the airports near Lander and Worland reported wind gusts of 40 mph. During the early morning of April 8th, some								

STORM DATA AND UNUSUAL WEATHER PHENOMENA

APRIL 1988

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	

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	

WYOMING

<p>roads were closed in Yellowstone National Park due to snow and blowing snow. By 1200MST, Mammoth, located in Yellowstone Park, had 6 inches of new snow. Three to 5 inches of new snow were reported in the Big Horn Mountains west of Sheridan.</p>									
WYZ009-015 Wind River and South-Central Mountains	09	0600 to 1800MST			0	0	0	0	Heavy Snow
WYZ016-017 Southeast Corner of Wyoming	09	0600 to 1800MST			0	0	0	0	Snow
<p>A very strong upper-level disturbance moved southward through Wyoming during the daylight hours of April 9th. This in combination with a cool, moist and unstable air mass already in place produced snowfall amounts from west-central to southeast Wyoming. By 1800MST, snowfall amounts of 5 to 8 inches were reported over the Snowy Range west of Laramie. Also, South Pass at the south end of the Wind River Mountains received 8 inches of new snow. Elsewhere, 1 to 4 inches of new snow fell between Laramie and Cheyenne.</p>									
Campbell County, Gillette	20	1550 to 1600MST			0	0	3	0	Thunderstorm Win.
<p>During the afternoon of April 20th, a cool and unstable air mass was in place over northeast Wyoming. Showers and thunderstorms developed, and included some very gusty winds. These winds destroyed a carport and a batting cage at a public park in the northeast section of Gillette.</p>									
Fremont County, Lander	20	1955MST			0	0	0	0	Wind
<p>Thunderstorms rumbled through Fremont County during the evening of the 20th. Wind gusts of up to 54 mph were clocked at Hunt Field west of Lander with the passage of these storms.</p>									
WYZ017 Southeast Plains	21	1300MST			0	0	0	0	Funnel Clouds
WYZ017 Southeast Plains	21	1310MST			0	0	0	0	Small Hail
<p>After the passage of a very strong cold front, thunderstorms developed over Cheyenne. At 1300MST, two funnel clouds were sighted just southeast of the city by local residents. Hail of up to one-half inch diameter accompanied the funnels.</p>									
WYZ001-004-005 Northwest Mountains and North-Central Wyoming	21	1430MST to 1930MST			0	0	0	0	Heavy Snow
WYZ013 Southwest Wyoming	21	1430MST to 1930MST			0	0	0	0	Heavy Snow
WYZ011 Central Plains	21	2200MST to 2200MST			0	0	0	0	Snow
WYZ012-017 Eastern and Southeast Plains	22	1800MST to 0500MST			0	0	0	0	Heavy Snow
<p>On April 21st, a strong upper-level closed low moved northeastward into Colorado from California. A strong surface cold front moving southeastward through Wyoming interacted with this closed low. The result was rain, thunderstorms, and heavy snow for portions of Wyoming. This winter storm began over northwest Wyoming on the afternoon of the 21st and moved through the southeast part of the state by early morning of the 23rd.</p>									
<p>By 1730MST on the 22nd and during a thunderstorm, the rain changed to snow in Cheyenne and amounted to an inch of snowfall in less than a half hour. Snowfall totals from this storm included 11 inches at Dawin Ranch east of Jackson and 10 inches at Church Buttes Plant west of Rock Springs. Also, 6 to 8 inches of new snow was deposited on the Big Horn Mountains and northern Front Range near Sheridan. Additionally, 6 to 8 inches of snow fell over southeast Wyoming from Chugwater to Pine Bluffs. Near 4 inches of new snow fell in Casper.</p>									
WYZ001-002 Northwest Wyoming	25	0300MST to 0500MST			0	0	0	0	Heavy Snow
WYZ004-005-006 North-Central Wyoming and Northeast Plains	25	0500MST to 0500MST			0	0	0	0	Snow
WYZ017 Southeast Plains	25	2000MST			0	0	0	0	High Wind
<p>A strong cold front moved from northwest to southeast across Wyoming. An upper-level trough accompanied the front. The result was snow, winter-like temperatures, and strong winds. Around 8 inches of new snow fell at Dawin Ranch east of Jackson and at South Fork southwest of Cody. Four to 8 inches of new snow was deposited from Burgess Junction in the Big Horn Mountains east to Sundance in the Black Hills. On the evening of the 25th as the cold front moved through Cheyenne, there was a peak wind gust of 60 mph from the northwest. At about the same time, visibility dropped to one-half mile at Cheyenne for a short period of time due to a snow shower.</p>									

49 ALASKA, Northern — NO REPORT RECEIVED

49 ALASKA, Southern

ALASKA PENINSULA	4	2000 AST			0	0	0	0	Blizzard
<p>A storm brought blizzard conditions to the Alaska Peninsula with winds to 42 mph at Cold Bay. The snow depth on 5 April reached 10 inches—a record for April.</p>									
SOUTH CENTRAL/NORTH GULF COAST	9	1800 AST			7	1	6	0	High Winds/Seas and Heavy Snow
<p>An intense storm in the Gulf of Alaska produced heavy snow in the mountains along with high winds in South-Central and along the North Gulf Coast and in Cook Inlet. Winds to 80 mph were reported in east Anchorage along the hillside. Winds along the North Gulf Coast were more than 50 mph. Avalanche activity was numerous along the highway southeast of Anchorage, blocking the highway.</p>									
SOUTH CENTRAL	15	1800 AST			0	1	6	0	High Winds/Seas and Heavy Snow
<p>A strong low in the Southern Gulf of Alaska with central pressure near 946 mb produced high winds over a large area. Winds up to 82 mph were reported along the hillside in Anchorage. Kodiak City on Kodiak Island reported 35 mph winds, while Sitkinak on Kodiak Island observed 63 mph winds. A large 75 X 100 ft. boat storage building in Whittier collapsed under snow, and a tree blew down onto a roof in Anchorage.</p>									
SOUTH CENTRAL	28	1500 AST			0	0	1	0	Heavy Snow
<p>A significant storm brought heavy snows to the mountains of South-Central Alaska, which resulted in numerous avalanches along the highway southeast of Anchorage. The main highway south out of Anchorage was blocked for over 24 hours.</p>									

49 ALASKA, Southeastern

Coastal Waters	1-6						4		Winds
<p>A series of intense storm systems crossed the Southeast Alaska panhandle raising havoc with the area's black cod fishing fleet. Winds of over 60 kt and seas to 30 ft. grounded or disabled several boats. At least 1 sinking occurred during this period off of Cape Edgecumbe west of Sitka.</p>									

50 HAWAII — NONE REPORTED

51 PUERTO RICO

North Central Section	16						4	2	Flash Flooding
<p>A quasistationary front combined with an upper level short wave trough caused heavy downpours particularly over the North Central areas of Puerto Rico during the evening of Saturday, April 16, 1988. Most of these showers were heavy and occurred along the Rio Cibuco Basin - a river well known for flash flooding. The Rio Cibuco overflowed its banks resulting in severe flooding to the municipalities of Vega Alta and Vega Baja. Nearly ten (10) inches of rain fell that weekend. A cooperative station located along the upper watershed of Rio Cibuco measured 6.75 inches Saturday night. Four (4) persons lost their lives during this event. Three (3) persons drowned when their car was washed away by currents while trying to cross a small bridge in the municipality of Vega Alta. A fourth person was swept away by the rapidly rising waters of Rio Cibuco and his body was found later in Vega Baja. Around one hundred and fifty (150) homes were affected. The main access to both municipalities, highway #2, was completely blocked by waters until the next day. M7V, F28V, M53V, M420.</p>									

52 VIRGIN ISLANDS — NONE REPORTED

53 PACIFIC — NONE REPORTED

STORM SUMMARY

APRIL 1988

TYPE	ALABAMA	ARIZONA	ARKANSAS	CALIFORNIA	COLORADO	CONNECTICUT	DELAWARE	FLORIDA	GEORGIA	IDAHO	ILLINOIS	INDIANA	IOWA	KANSAS	KENTUCKY	LOUISIANA	MAINE	MARYLAND & DC	MASSACHUSETTS	MICHIGAN	MINNESOTA	MISSISSIPPI	MISSOURI	MONTANA	NEBRASKA	NEVADA	NEW HAMPSHIRE
TORNADOES						0	0										##				0			0		##	
Number	1			3	5			9	3	5	4		1		1	6				5		1			1		
Days	1			2	3			4	2	2	3		1		1	3				1		1			1		
Deaths	0			0	0			4	0	0	0		0		0	0				0		0			0		
Injuries	0			0	0			4	0	0	0		0		0	0				0		0			0		
Property Damage	0			0	0			18	6	0	?		0		0	0				0		0			0		
Crop Damage	0			0	0			7	5	0	0		0		0	?				0		0			1		
HAIL																											
Deaths	0		0						0		0	0	0		0	0		0				0			0		
Injuries	0		0						0		0	0	0		0	0		0				0			0		
Property Damage	8		?					6	6		7	?	4	2	?	?		?				?		?	2		
Crop Damage	0		?					6	6		0	?	0	0	?	?		0				?		?	2		
THUNDERSTORM WINDS																											
Deaths	0	0	0					0	0	0	0	0	0		0	0		0		0		0		0			
Injuries	0	0	0					0	2	0	0	2	0		0	0		0		0		0		0			
Property Damage	?	2	4					4	6	4	5	5		3	4	5		3		3		?		4			
Crop Damage	0	0	?					0	4	0	0	0		0	?	?		0		0		?		?			
HIGH WINDS																											
Deaths	0									0	0	0			0										0	0	
Injuries	0									0	?	8			0										0	0	
Property Damage	4									5	?	6			6									4	4		
Crop Damage	0									0	0	?			0									1	5		
LIGHTNING																											
Deaths	0	0	0	1				1	0	0	0		0		0			0		0							
Injuries	1	0	9	1				2	0	0	0		0		0			0		0							
Property Damage	0	4	?	0				5	0	3	5		5		5			4		0							
Crop Damage	0	0	0	0				0	0	0	0		0		0			0		0							
FLASH FLOODS																											
Deaths		0	0													0						0					
Injuries		0	0													0						0					
Property Damage		?	5												?							5					
Crop Damage		?	0																			?					
FLOODS																											
Deaths														0													
Injuries														0													
Property Damage														0													
Crop Damage														4													
HEAVY SNOWSTORMS AND BLIZZARDS @																											
Deaths		0			0								0		0										0		
Injuries		1			0								0		0										0		
Property Damage		?			6								3		6										6		
Crop Damage		0			0								0		0										2		
ICE STORMS #																											
Deaths																											
Injuries																											
Property Damage																											
Crop Damage																											
HURRICANES AND TROPICAL STORMS																											
Deaths																											
Injuries																											
Property Damage																											
Crop Damage																											
ALL OTHERS																											
Deaths				2	0					1						0		0									
Injuries				?	0					0						0		0									
Property Damage				6	0					4						5		3									
Crop Damage				0	4					0						0		0									

SEE REFERENCE NOTES FOR STORM DAMAGE CATEGORIES

STORM SUMMARY

APRIL 1988

TYPE	NEW JERSEY	NEW MEXICO	NEW YORK	NORTH CAROLINA	NORTH DAKOTA	OHIO	OKLAHOMA	OREGON	PENNSYLVANIA	RHODE ISLAND	SOUTH CAROLINA	SOUTH DAKOTA	TENNESSEE	TEXAS	UTAH	VERMONT	VIRGINIA	WASHINGTON	WEST VIRGINIA	WISCONSIN	WYOMING	ALASKA	HAWAII	PACIFIC	PUERTO RICO	VIRGIN ISLANDS	NATIONAL DEATH & INJURY TOTALS
TORNADOES	0		0		0					0	0					0			0	0		7	0	0	0	0	
Number		1		1										11													
Days		1		1										5													
Deaths		0		0										0													4
Injuries		0		0										10													37?
Property Damage		0		4										6													
Crop Damage		0		0										4													
HAIL																											
Deaths		0				0	0				0			0			0										0
Injuries		0				0	0				0			0			0										?
Property Damage		?				?	?				5			?			4										
Crop Damage		?				0	?				5			?			4										
THUNDERSTORM WINDS																											
Deaths		1		0		0	0				1		0	0	0			0				0					2
Injuries		0		0		3	0				0		0	2	0			0				0					18
Property Damage		4		4		5	5				5		2	5	1			4									
Crop Damage		0		0		?	?				4		0	?	0			0				0					
HIGH WINDS																											
Deaths		0		0				0	0				0					0									0
Injuries		0		0				0	0				0					0									8?
Property Damage		?		5				?	?				4					4									
Crop Damage		?		0				0	0				0					0									
LIGHTNING																											
Deaths		0				0	0		1		0			0	0												3
Injuries		0				0	0		0		0			0	1												14
Property Damage		5				4	4		0		6			4	4												
Crop Damage		0				0	?		0		0			0	0												
FLASH FLOODS																											
Deaths							0																		4		4
Injuries							0																		0		0
Property Damage							5																		2		
Crop Damage							?																		0		
FLOODS																											
Deaths						0	0																				
Injuries						0	0																				
Property Damage						?	?																				
Crop Damage						0	?																				
HEAVY SNOWSTORMS AND BLIZZARDS @																											
Deaths		0					0							0													0
Injuries		0					0							0													1
Property Damage		?					?							6													
Crop Damage		5					?							?													
ICE STORMS #																											
Deaths																											
Injuries																											
Property Damage																											
Crop Damage																											
HURRICANES AND TROPICAL STORMS																											
Deaths																											
Injuries																											
Property Damage																											
Crop Damage																											
ALL OTHERS																											
Deaths											0																3
Injuries											0																?
Property Damage											2																
Crop Damage											3																

SEE REFERENCE NOTES FOR STORM DAMAGE CATEGORIES

STORM DATA AND UNUSUAL WEATHER PHENOMENA

LATE REPORTS

CORRECTIONS

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	
20 MICHIGAN									
<u>FEBRUARY 1988</u>									
M12009 Near Standish, Arenac Co.	21	Unknown			1	0	0		Cold
A woman died of hypothermia when her car stalled in a remote area. F75V									
20 MICHIGAN									
<u>FEBRUARY 1988</u>									
DEATH AND INJURY COUNT CHANGE:									
Deaths and injuries indirectly related to the storm in the following entry from page 18 are corrected in the narrative as shown below:									
M12022 Detroit Metropolitan Area	03	1900EST			0	0	0		Heavy Snow
Up to 4 inches of snow accumulated overnight. There were about 40 auto accidents in which 2 persons were injured and 1 killed.									
REVISED ENTRIES:									
The entry of heavy snow on February 11th (page 18) is resubmitted as two entries shown below:									
M12013-015-022 Southeast Lower Michigan	11	1300EST			0	0	0		Heavy Snow
4 to 10 inches of snow accumulated during the afternoon and evening. About 600 auto accidents injured 24 persons and killed 2.									
M12022 Detroit, Wayne Co.	11	Unknown			1	0	0		Cold
A woman died of hypothermia when her furnace failed. F710									

STORM SUMMARY

LATE REPORTS & CORRECTIONS

FEBRUARY 1988

Page 26: MICHIGAN

- Delete 0 at column top.

Add for; ALL OTHERS - DEATHS

Late Report = 1
Correction = 1
Total = 2 (vice BLANK).

Page 27: NATIONAL DEATH

& INJURY TOTALS - ALL OTHERS - DEATHS = 3? (vice 1?).

REFERENCE NOTES

STORM DAMAGE CATEGORIES

1	Less than \$50	0/Blank	None reported.
2	\$50 to \$500	*	Miles instead of yards.
3	\$500 to \$5,000	**	Yards instead of miles.
4	\$5,000 to \$50,000	@	Includes heavy sleet storm.
5	\$50,000 to \$500,000	#	Freezing drizzle and freezing rain, commonly known as glaze.
6	\$500,000 to \$5 Million	≠	Report incomplete.
7	\$5 Million to \$50 Million	≠≠	Report not received.
8	\$50 Million to \$500 Million	o/c	Indicates Crop Damage amount is included in the value given for property damage.
9	\$500 Million to \$5 Billion		

When reports are not received or are incomplete, the Storm Summary National Death and Injury totals may also be incomplete.

Definition of Fujita Tornado Scale (F scale)

(F0) Gale tornado (40-72 mph): Light damage
Some damage to chimneys; break branches off trees; push over shallow-rooted trees; damage sign boards.

(F1) Moderate tornado (73-112 mph): Moderate damage
The lower limit (73 mph) is the beginning of hurricane wind speed; peel surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off the roads.

(F2) Significant tornado (113-157 mph): Considerable damage
Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light-object missiles generated.

(F3) Severe tornado (158-206 mph): Severe damage
Roofs and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted; heavy cars lifted off ground and thrown.

(F4) Devastating tornado (207-260 mph): Devastating damage
Well-constructed houses leveled; structure with weak foundation blown off some distance; cars thrown and large missiles generated.

(F5) Incredible tornado (261-318 mph): Incredible damage
Strong frame houses lifted off foundations and carried considerable distance to disintegrate; automobile-sized missiles fly through the air in excess of 100 m; trees debarked; incredible phenomena will occur.

(F6-F12) (319 mph to Mach 1, the speed of sound):
The maximum wind speeds of tornadoes are not expected to reach the F6 wind speeds.

(F0+F1) *Weak Tornado*

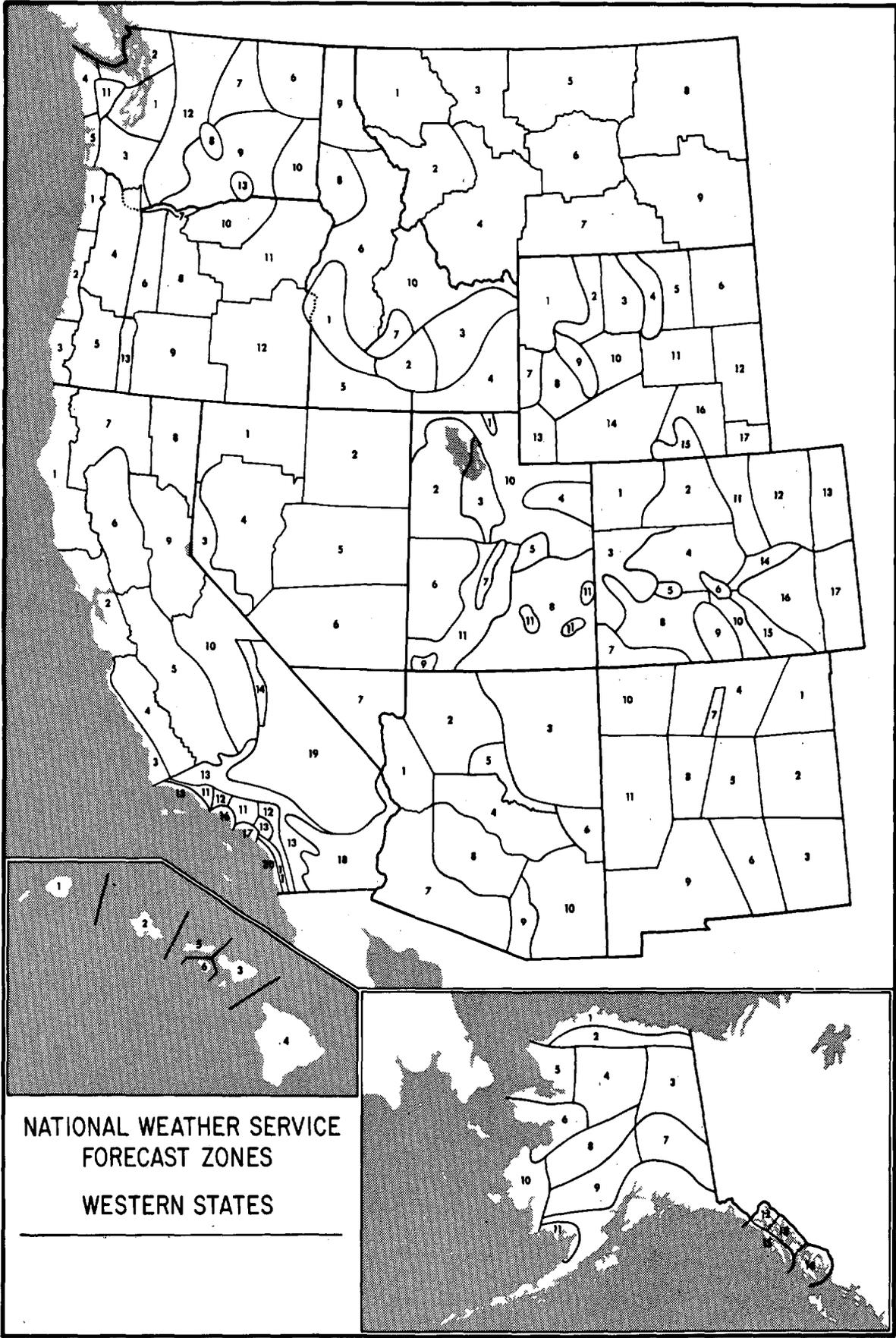
(F2+F3) *Strong Tornado*

(F4+F5) *Violent Tornado*

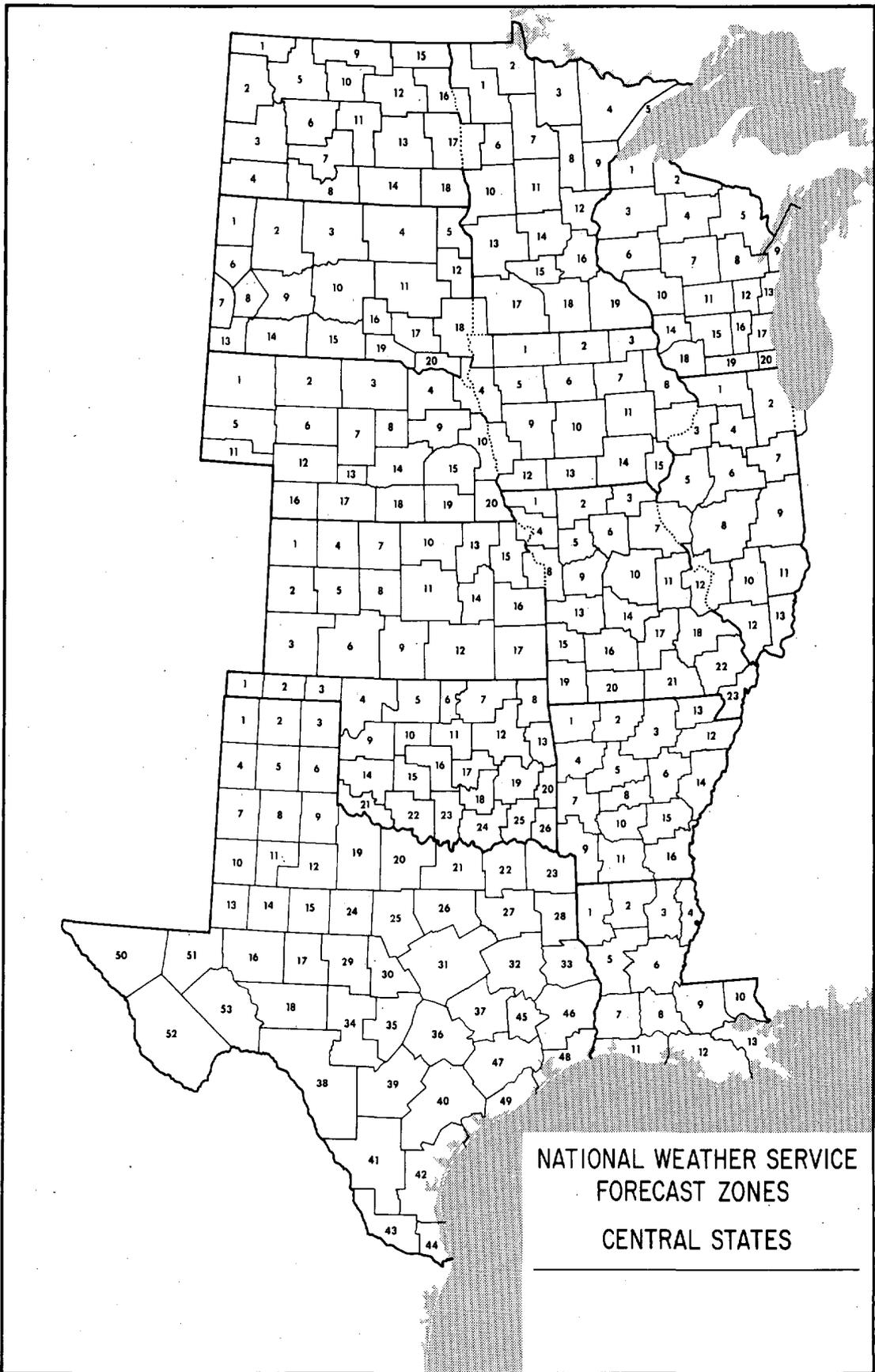
From J. Atmos. Sci., August 1981, p. 1517-1519

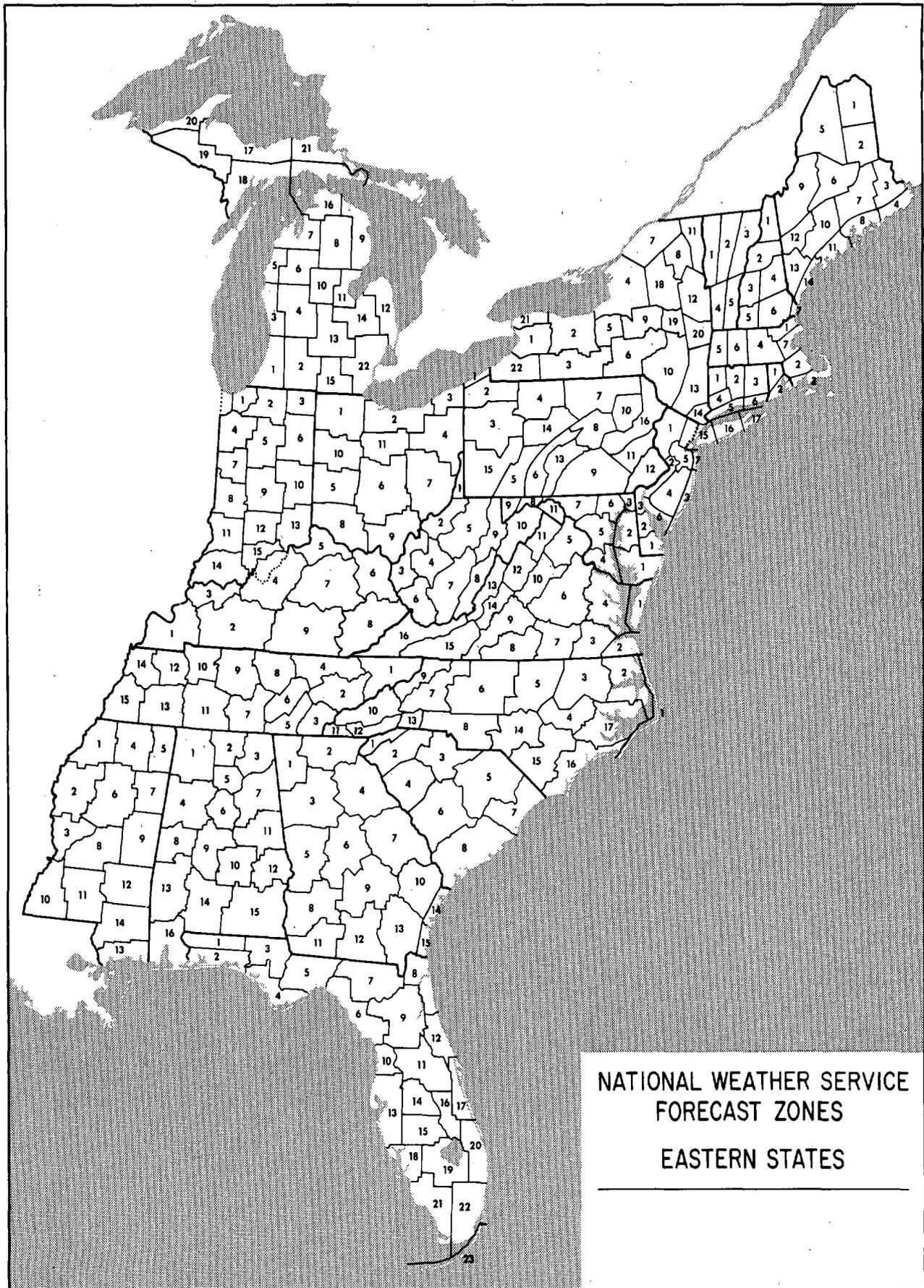


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FORECAST ZONES
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CLIMATOLOGICAL DATA

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VOLUME 35 NUMBER



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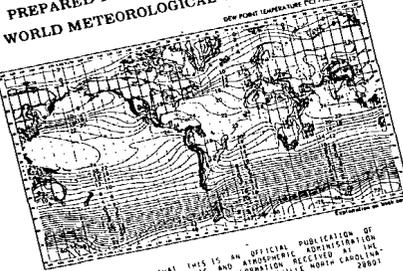
CLIMATOLOGICAL DATA

ARIZONA

ISSN 0145-0367

LOCAL CLIMATOLOGICAL DATA

Monthly Summary

MONTHLY CLIMATIC DATA FOR THE WORLD

PREPARED IN COOPERATION WITH THE WORLD METEOROLOGICAL ORGANIZATION

DEW POINT TEMPERATURE (°C) - MEAN

NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL CLIMATIC DATA CENTER, ANN ARBOR, MICHIGAN 48106

STORM DATA



DEPARTMENT OF COMMERCE
UNITED STATES OF AMERICA

NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION / NATIONAL ENVIRONMENTAL SATELLITE DATA AND INFORMATION SERVICE / NATIONAL CLIMATIC DATA CENTER ANN ARBOR, MICHIGAN 48106

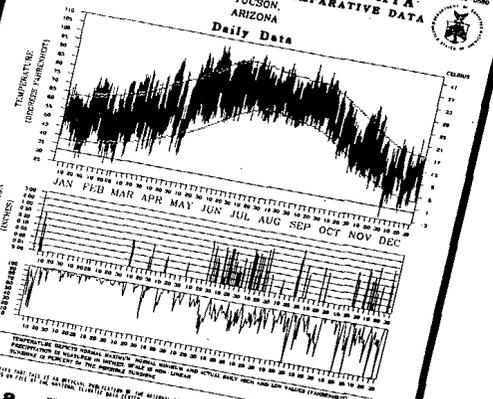
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LOCAL CLIMATOLOGICAL DATA

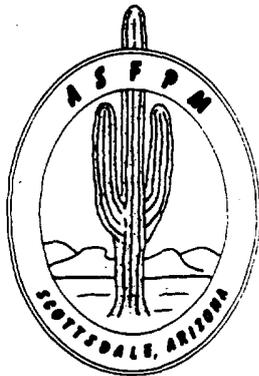
ANNUAL SUMMARY WITH COMPARATIVE DATA

TUCSON, ARIZONA

Daily Data



NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION / NATIONAL ENVIRONMENTAL SATELLITE DATA AND INFORMATION SERVICE / NATIONAL CLIMATIC DATA CENTER ANN ARBOR, MICHIGAN 48106



Association of State Floodplain Managers 13th Annual Conference

Scottsdale, Arizona
May 22-25, 1989



PARTNERSHIPS: Effective Flood Hazard Management

Most effective efforts involve **Partnerships**. The formulation and functioning of these partnerships are important to understand in order to build good relationships for better projects with the best results. This year's conference theme focuses on the effectiveness of networking and partnerships to create and implement solutions, programs, and projects to reduce flooding hazards and damages.

ABOUT THE CONFERENCE

The technical conference will be held Tuesday, Wednesday, and Thursday and will include a field trip in the Phoenix-Scottsdale area. The conference will feature one track of concurrent sessions dealing specifically with the floodplain management problems of the Arid West. The ASFP will conduct its committee and general membership meetings on Monday. All members and prospective members are invited to participate. A technical field trip including dinner is scheduled one evening. Optional field trips and spouse activities will be available.

REGISTRATION RATES

Registration prior to April 15, 1989 will be \$150 for members, \$165 for non-members, and \$65 for students and local government officials from the State of Arizona.

EXHIBIT SPACE

Exhibit space will be made available for a fee to individuals and organizations who wish to display a product or service to conference attendees. Information on exhibit space can be acquired from Susan Josheff, Exhibits Coordinator, at the address below.

ABOUT SCOTTSDALE

Scottsdale is noted throughout the country for its creative approach to city planning. Running the length of the City is the Indian Bend Wash Greenbelt, a 7.5 mile long flood control project that uses a system of parks, lakes, and golf courses as an alternative to a conventional concrete channel. This greenbelt offers endless recreational opportunities including fishing, sailing and other sports.

Scottsdale's quality lifestyle includes well-planned living, working and shopping areas, pleasant neighborhoods and residential areas protected from traffic and noise. The City's emphasis on mountain conservation and protection of its rich desert areas is reknown nationally. Scottsdale is also recognized for its architectural and landscape design excellence and rich cultural, business and recreational environments. The City is proud of its vital downtown areas. The ambiance of Scottsdale reflects a unique blend of traditional Western and modern living.

The conference will be held at the Wyndham Paradise Valley Resort in Scottsdale, Arizona. Conference room rates are \$53 single, and \$63 double. Paradise Valley Resort is an exceptional facility which showcases Scottsdale's best features.

CONFERENCE HOST: Arizona Department of Water Resources

CONFERENCE DIRECTOR

Jim Morris
Arizona Department
of Water Resources
15 S. 15th Avenue
Phoenix, Arizona 85007
(602) 255-1566

PROGRAM CHAIR

Rebecca Q. Hughes
Maryland DNR
Water Resources Admin.
Tawes State Office Bldg. D-3
Annapolis, Maryland 21401
(301) 974-3825

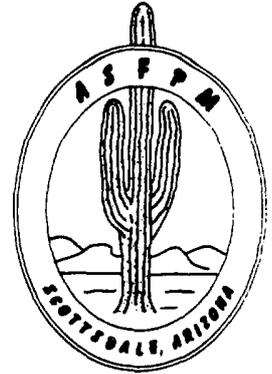
EXHIBITS COORDINATOR

Susan Josheff
Wisconsin DNR
P.O. Box 7921 (WZ/6)
Madison, Wisconsin 53707
(608) 266-2151



Association of State Floodplain Managers 13th Annual Conference

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PARTNERSHIPS: Effective Flood Hazard Management

The Association of State Floodplain Managers (ASFPM) is a national organization. Its goal is the reduction of flood damages and hazards through sound floodplain management. Its members include representatives of local, state, and federal governments as well as those of the private and non-profit communities. The Association sponsors an annual conference on the state-of-the-art in flood damage and hazard reduction. Conference topics always span a broad spectrum of issues of interest to those involved in floodplain management, including the following:

- Effectively integrating watershed-wide floodplain management concerns with local planning and zoning.
- Status of "temporary taking" and other legal issues: what's happening in the courts?
- Case histories of communities under sanction for non-compliance with the NFIP.
- A decade of Section 406 Hazard Mitigation Planning: have we made progress?
- Reducing flood loss potential: what works?
- Do federal programs adequately address state and local needs?
- Multi-objective projects: what makes them successful?
- Improving flood prevention and awareness programs aimed at local officials and private property owners.
- How can we improve technical assistance to small communities?
- What's new and improved in the field of floodproofing?

* * * MORE INFORMATION INSIDE * * *

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