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STORM DATA



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NATIONAL OCEANIC AND
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ENVIRONMENTAL DATA AND
INFORMATION SERVICE

NATIONAL CLIMATIC CENTER
ASHEVILLE, N.C.

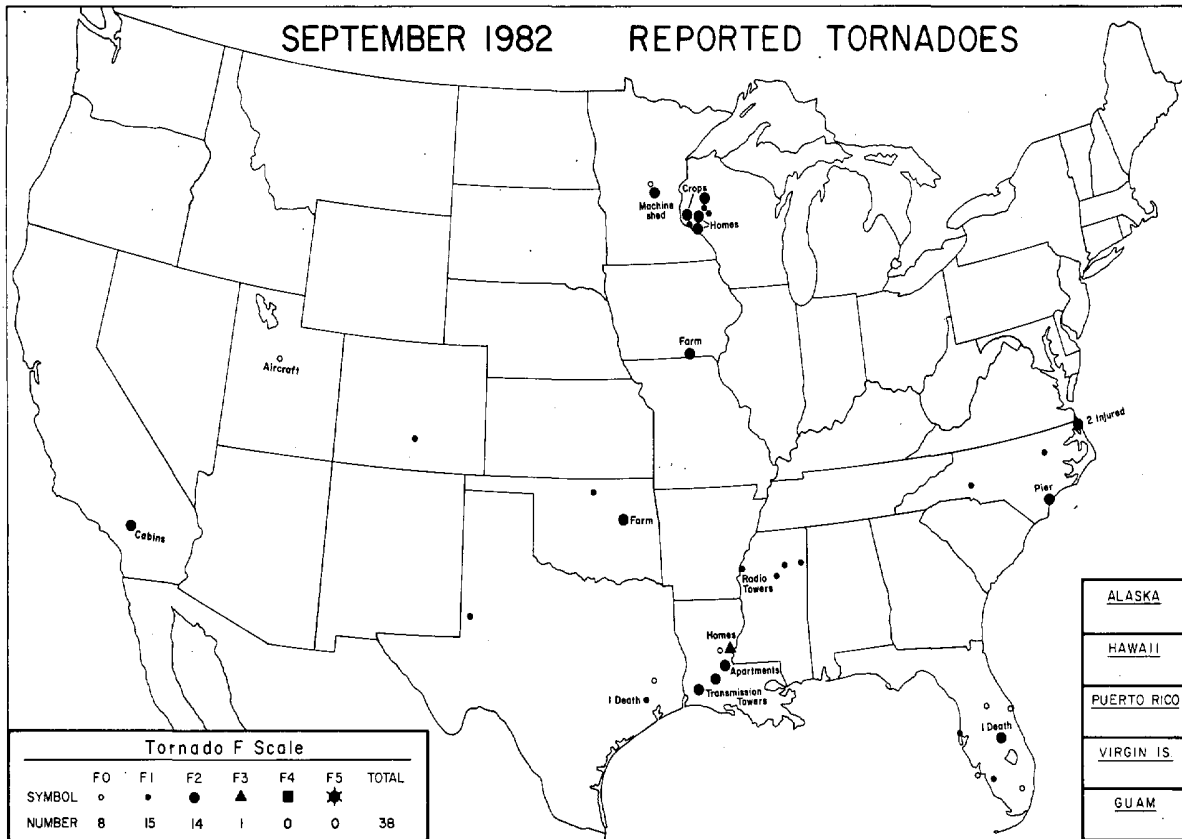
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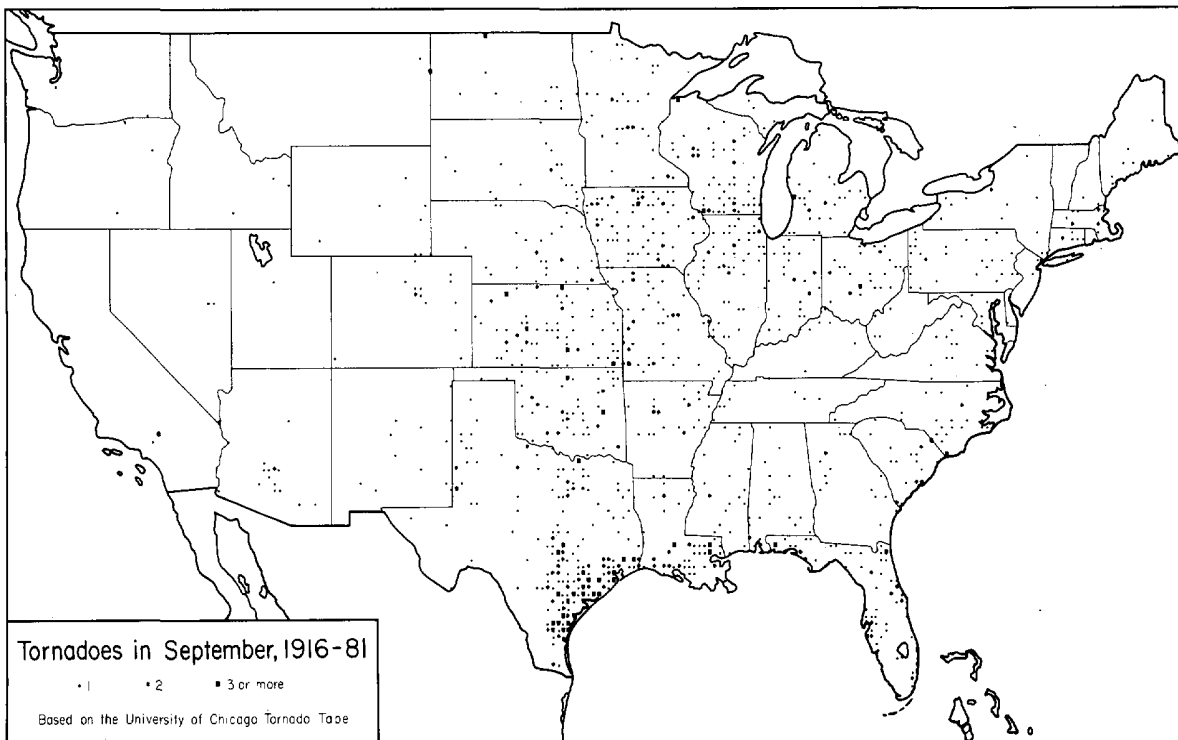
NOTE: The section on Outstanding Storms of the Month is prepared and edited by Professor T. Theodore Fujita, University of Chicago. The narrative descriptions of Storms by State and Summary of Hurricanes and Tropical Storms are prepared by the National Weather Service. The National Climatic Center compiles the statistics on deaths, injuries, and damage. 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.

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OUTSTANDING STORMS OF THE MONTH

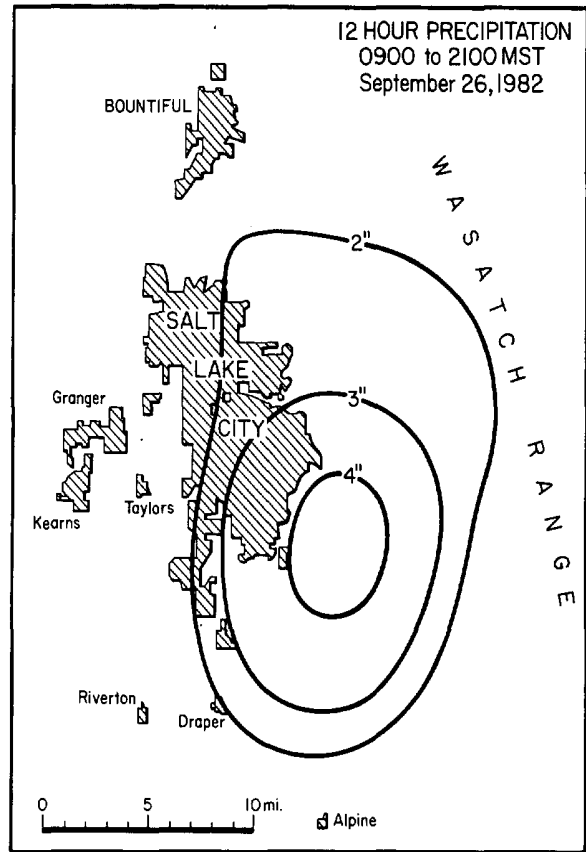
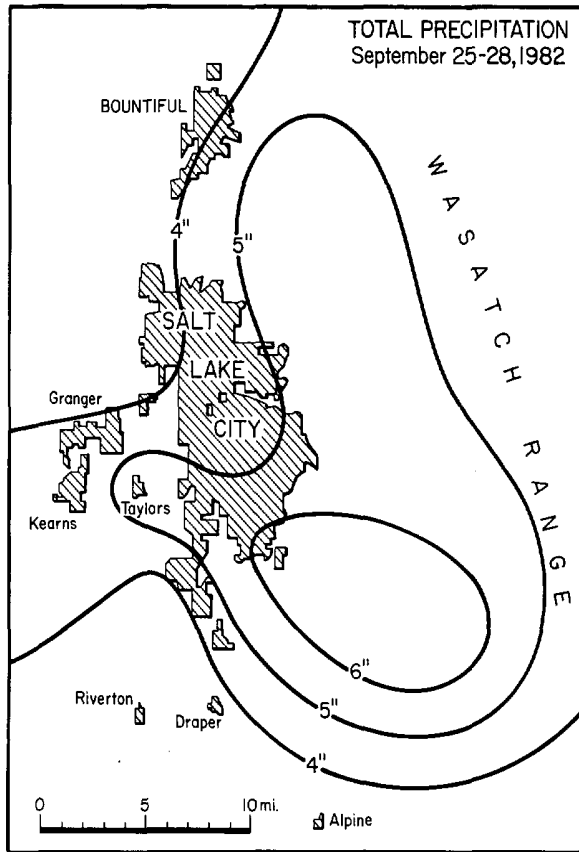


● TYPED REPORT RECEIVED	○ PRELIMINARY REPORT RECEIVED	○ NO REPORT RECEIVED	(N) northern (S) southern	(E) eastern (W) western	(C) central (O) coastal						
● 1AL	● 5CO	● 10ID	● 15KY	● 20MI	● 25NE	● 30NY(O)	● 33OH	○ 37RI	● 41TX(S)	● 45WA	● 50HI
● 2AZ	○ 6CT	● 11IL	● 16LA	● 21MN	○ 26NV	● 30NY(C)	● 34OK	● 38SC	● 41TX(W)	● 46WV	● 51PR
● 3AR	● 7DE	● 12IN	○ 17ME	● 22MS	○ 27NH	● 30NY(W)	○ 35OR	● 39SD	● 42UT	● 47WI	● 52VI
● 4CA(N)	● 8FL	● 13IA	● 18MD	● 23MO	● 28NJ	● 31NC	● 36PA(E)	● 40TN	● 43VT	● 48WY	● 53GU
● 4CA(S)	● 9GA	● 14KS	○ 19MA	● 24MT	● 29NM	● 32ND	● 36PA(W)	● 41TX(N)	● 44VA	● 49AK	



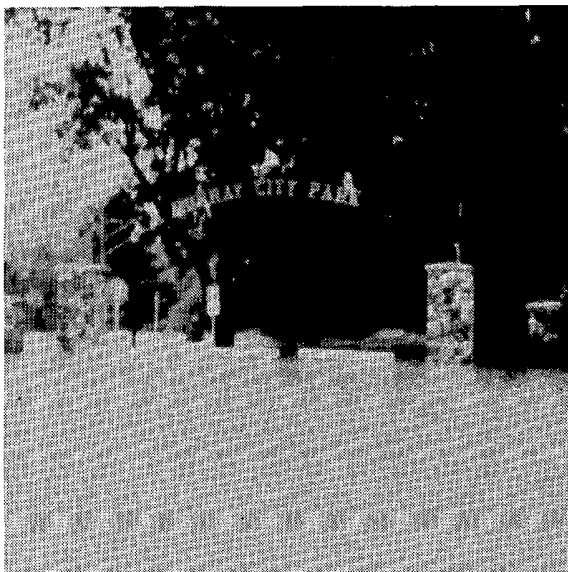
1. HEAVY RAIN and FLOOD at SALT LAKE CITY, UTAH on September 25-28, 1982

A fall storm, supplied with moisture from the remnants of Hurricane OLIVIA, dumped unusually heavy rain over Utah on September 25th to 28th. The heaviest rain fell over the west (windward) slopes of the Wasatch Mountains, the runoff from which caused flooding of creeks and rivers in southern sections of the Salt Lake City area.



A map of total rainfall for the 4-day storm period over the Salt Lake City area and nearby Wasatch Mountains.

A map of total rainfall for the 12-hour period when the heaviest rains fell and most of the flooding occurred.



Murray City Park, just south of Salt Lake City, engulfed by floodwaters on the afternoon of September 26th. ---Photo by William Alder.



Mudslide across a road in Big Cottonwood Canyon in the Wasatch Mountains on the morning of September 29th. ---Photo by David Carpenter.

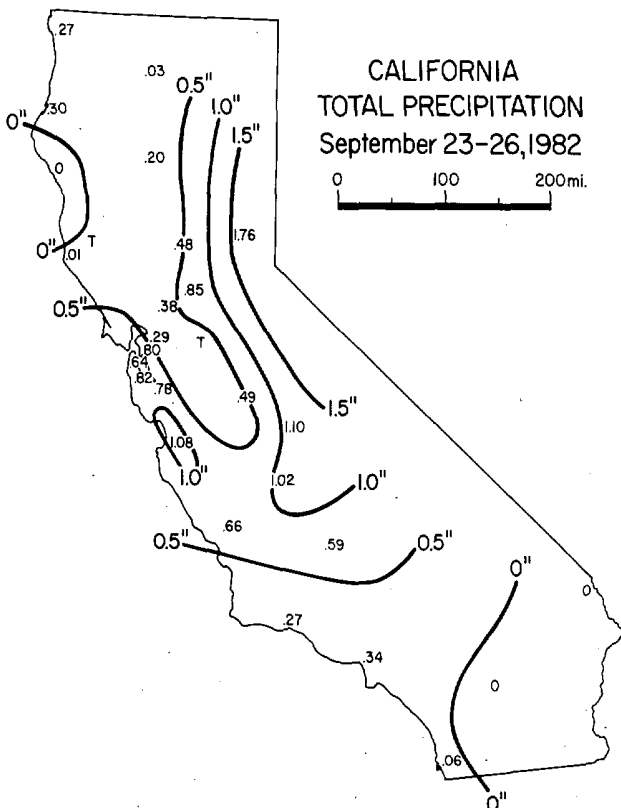
HEAVY RAIN and FLOOD at SALT LAKE CITY ---- Continued



A portion of road in the Big Cottonwood Canyon which was eroded away. This picture, taken September 29th, also shows heavy equipment brought in to clear away mudslides and correct the stream path so road repairs can be made. ---Photo by David Carpenter.

---All maps and photos supplied by David Carpenter, NWSFO Salt Lake City, Utah.

2. RAIN in CALIFORNIA on September 23-26, 1982

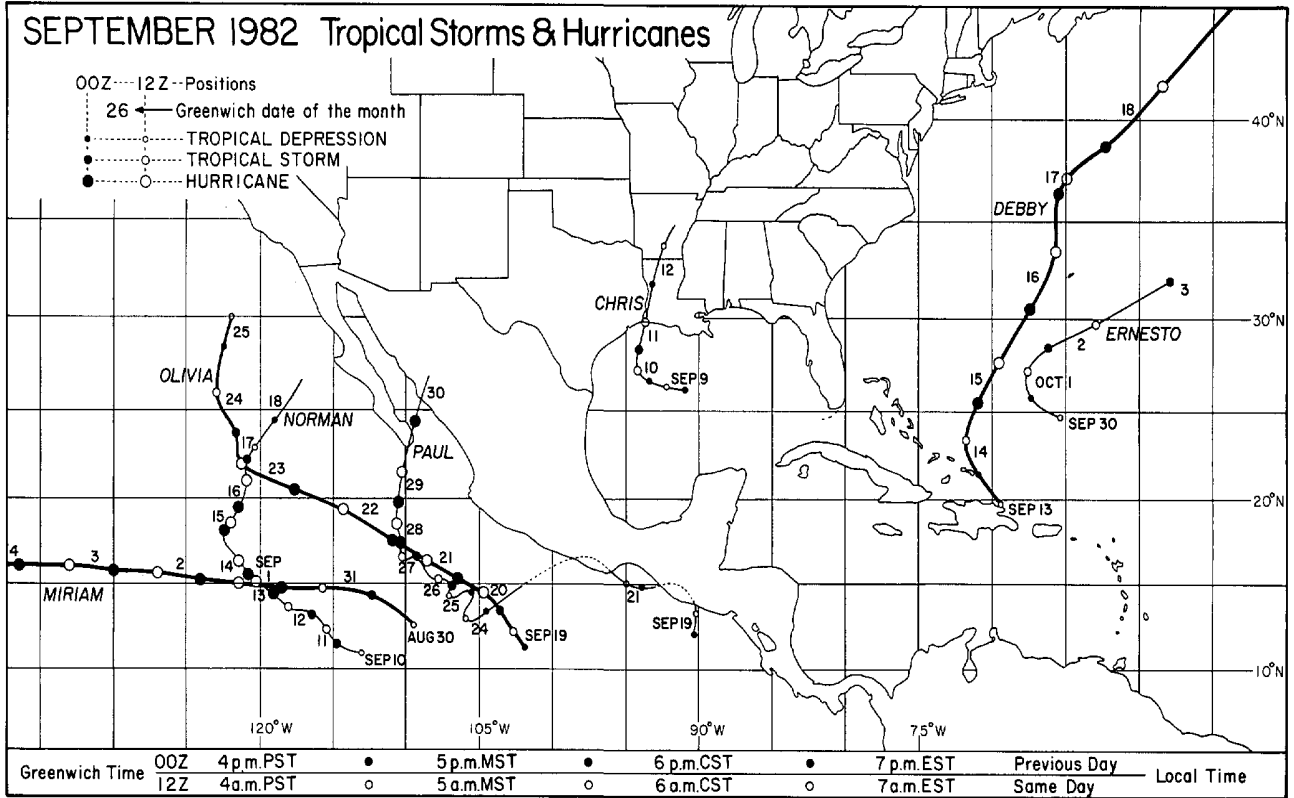


Unseasonable rain which had spread northward from the dissipating hurricane OLIVIA, dampened the normally dry early fall weather over California on September 23rd to 26th. Rainfall amounts, mapped at left, varied over much of the state and generally ranged from 0 to 2 inches. Some mountain areas received up to 3 inches.

Although the rainfall amounts do not appear excessive, in areas where only a few hundredths of an inch is normal they were disastrous to crops which require dry weather to mature and dry. Crop damage was estimated to be \$309 to \$325 million. Approximately one-half of the total natural raisin crop was lost along with one-quarter of the wine grapes and one-tenth of all canning tomatoes. Crop losses also occurred for table grapes, fresh market tomatoes, beans, almonds, walnuts, strawberries, dried figs and alfalfa.

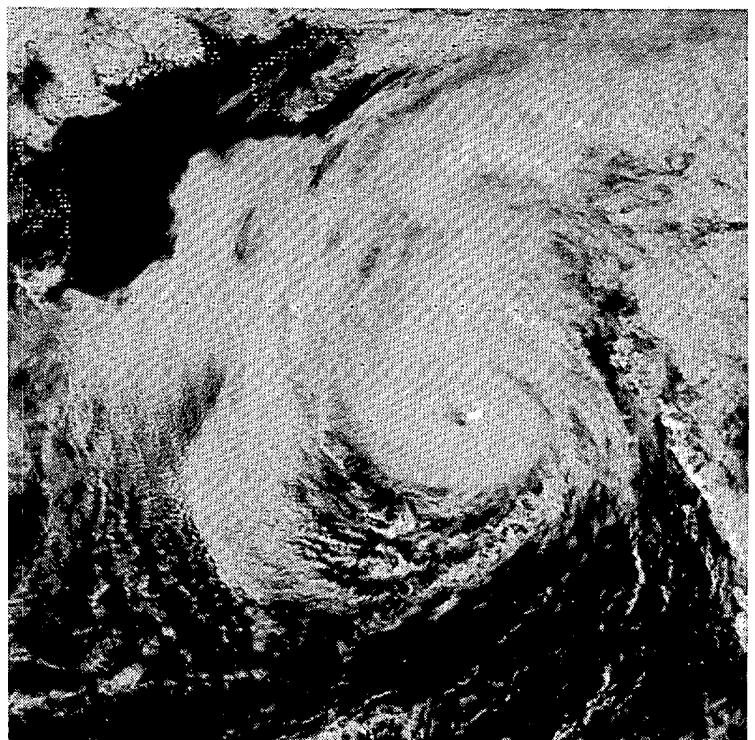
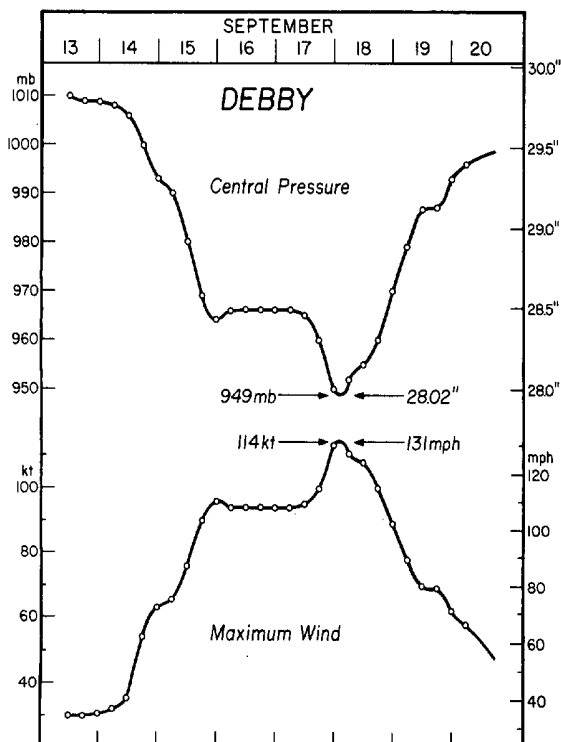
---Data supplied by Norm Hoffman, NWSFO Redwood City, California.

TROPICAL STORMS AND HURRICANES



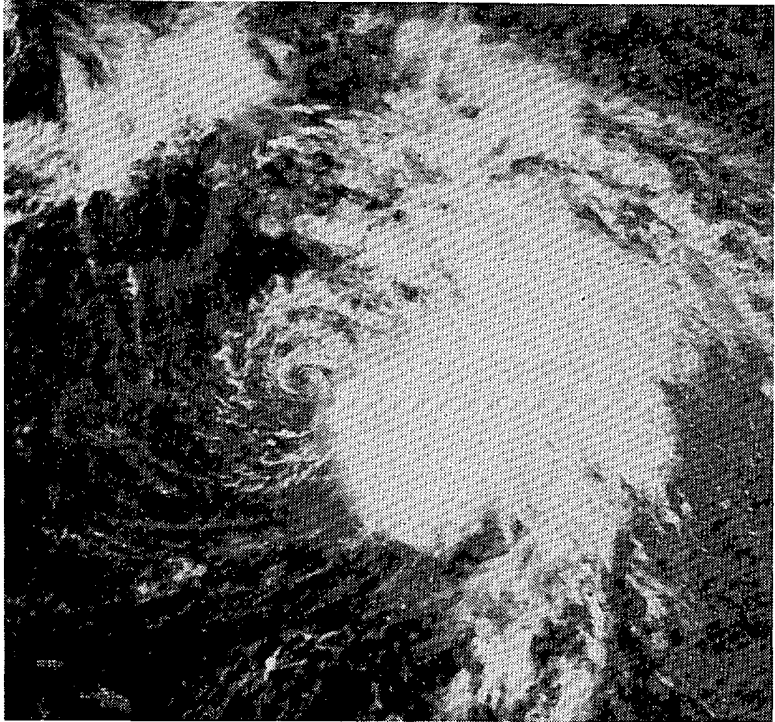
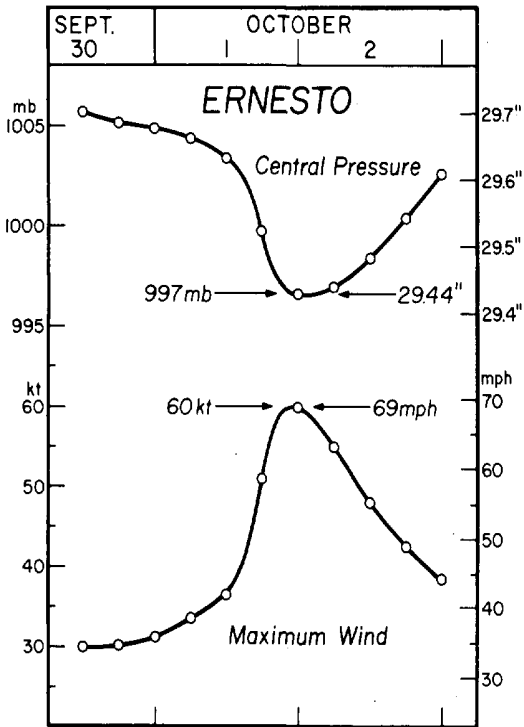
3. HURRICANE DEBBY on September 13-20, 1982

A depression which formed just north of the Dominican Republic on September 13th, quickly intensified to become Hurricane DEBBY within 36 hours. DEBBY moved north-northeast through the Atlantic, her eye passing to within 80 miles of Bermuda on September 16th. The visible satellite picture, taken at 1930 GMT on September 17th, shows DEBBY about 6 hours before reaching peak intensity (949 mb and 131 mph). Cape Cod appears at the upper left edge, and Nova Scotia at top center. ---Data and photo from the National Hurricane Research Laboratory and National Hurricane Center, Coral Gables, Florida.



4. TROPICAL STORM ERNESTO on September 30 - October 2, 1982

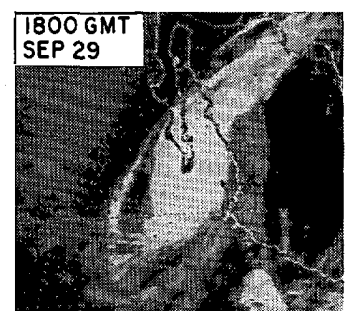
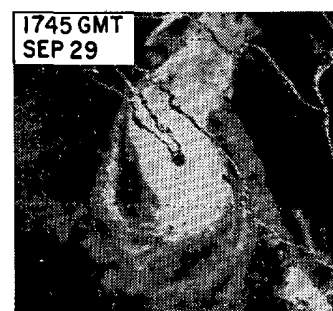
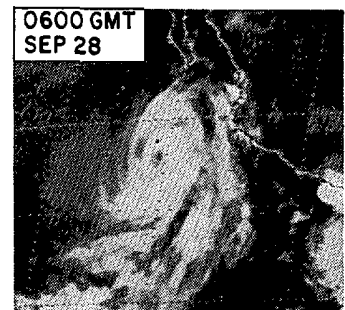
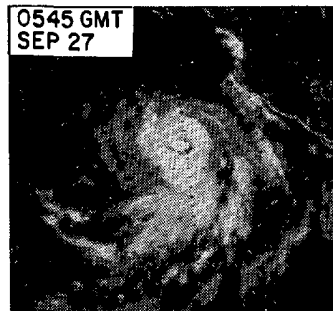
Tropical Storm ERNESTO lasted only three days. While moving northwest and intensifying on October 1st, it made a U-turn to the northeast and thereafter weakened as it merged with an extratropical low. A satellite picture taken at 1400 GMT on October 1st shows the cloud mass of convective activity to exist entirely to the east of the circulation center of the storm. ---Data and photo from the National Hurricane Research Laboratory and National Hurricane Center, Coral Gables, Florida.



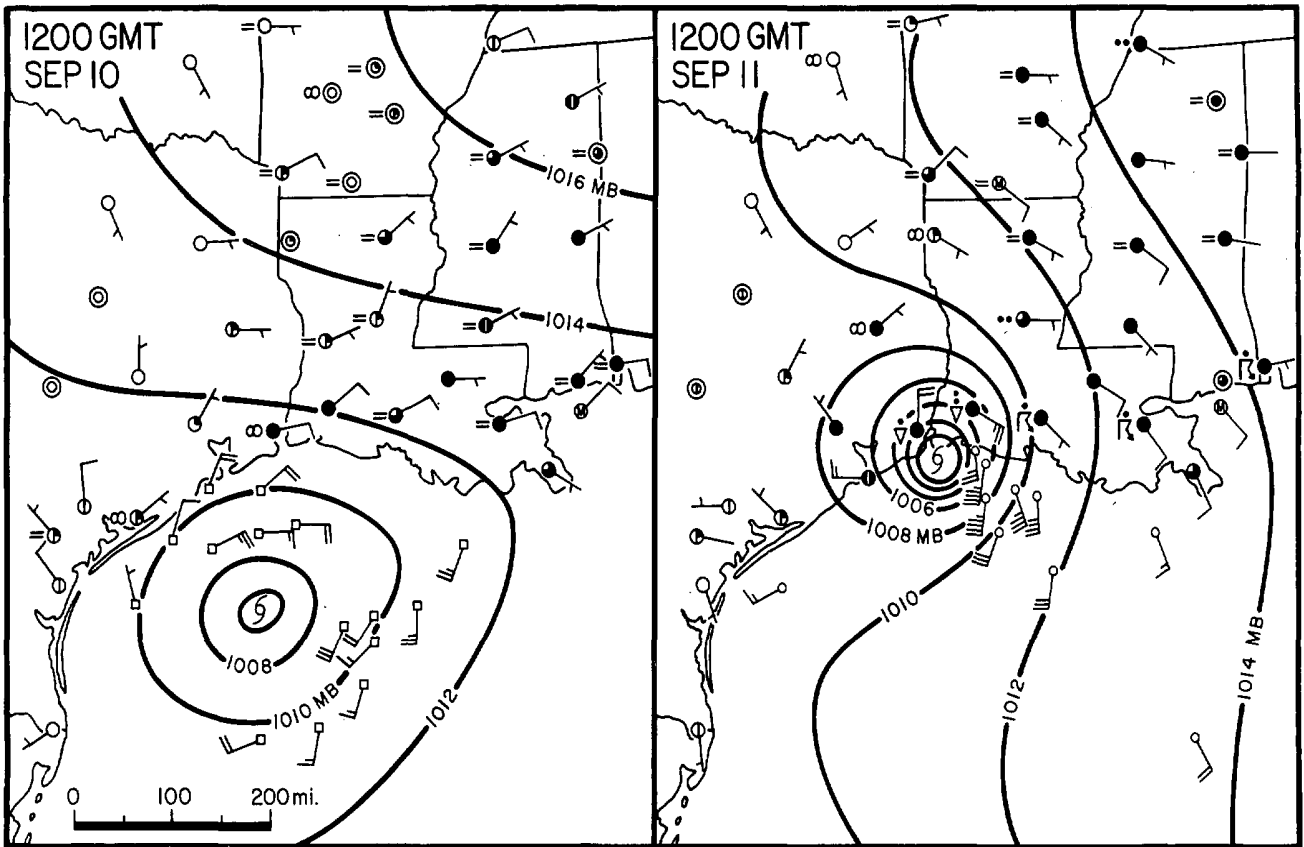
5. HURRICANE PAUL on September 19-30, 1982

PAUL began along the Central America coast as a depression on September 19th and moved inland twice before moving out to sea as a disturbance. After reforming on September 24th the depression turned northwest on a meandering course and intensified to hurricane strength by the 28th. As a hurricane, PAUL moved north striking the tip of Baja California before making landfall over the Mexico mainland.

At right is a sequence of near-simultaneous pictures from the GOES West (left) and GOES East (right) satellites. The top pair of photos show PAUL as it approached hurricane strength; and, on the bottom pair of photos PAUL'S eye can be clearly seen directly over the tip of Baja California. ---Photos from NESS.

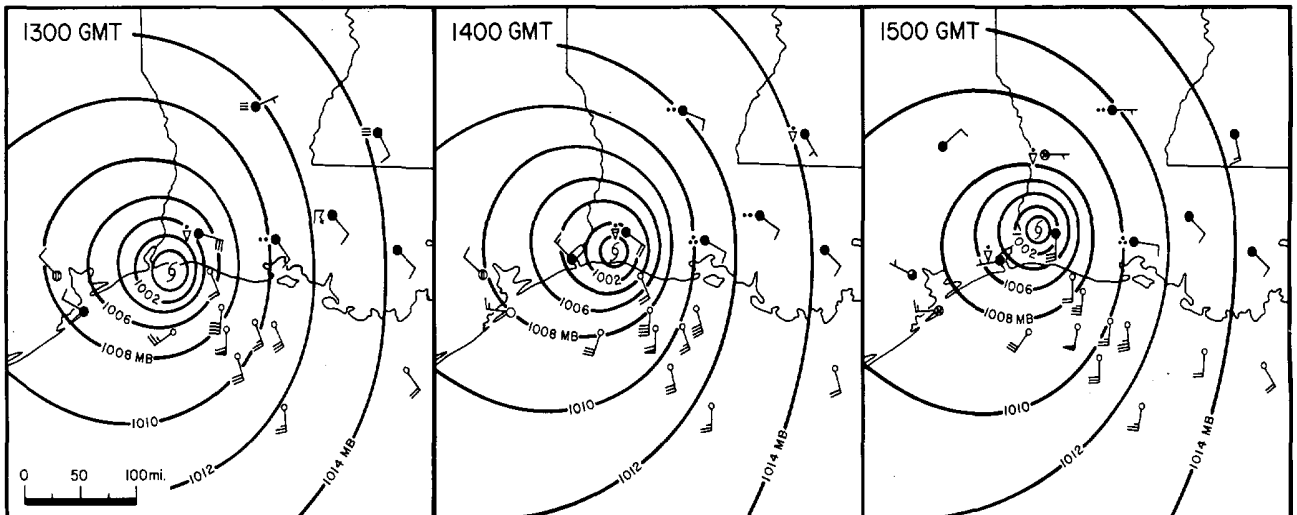


TROPICAL STORM CHRIS ---- Continued



Surface analyses above show CHRIS at the pivotal point of its turn northward (left) and just prior to landfall 24 hours later. In the Gulf of Mexico, small squares represent aircraft data and small circles represent oil rig or buoy data.

Landfall of CHRIS on September 11, 1982



The hourly sequence of analyses above show the storm's surface structure as it made landfall. The minimum central pressure was 994 mb during this period.

---All data and photos from the National Hurricane Research Laboratory and National Hurricane Center, Coral Gables, Florida.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

SEPTEMBER 1962

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	
1 ALABAMA											
Alabaster Area, Shelby County	02	1515CST			0	0	2	0			Wind Thunderstorm winds downed 4 or 5 large trees.
Eldridge, Walker County	15	1500CST			0	0	2	0			Wind Thunderstorm winds knocked out electrical power and downed several trees.
Eight Mile, Mobile County	18	1705CST			0	0	3	0			Lightning Lightning struck an oil storage tank and set it ablaze. The fire was reported to still be burning 5 hours later.
Talladega Area, Talladega County	18	1750CST			0	0	3	0			Lightning Lightning struck a tree that fell across a power line in the yard of a residence. The resulting fire ignited a tool storage shed. Some electrical appliances in the residence were also reported to have been damaged by the lightning strike.
Sulligent Area, Lamar County	25	1705CST			0	0	1	0			Hail Hail 3/4" in diameter reported 3 miles west of Sulligent.
Livingston, Sumter County	25	1840CST			0	0	3	0			Hail/lightning Sheriff's office reported golf ball size hail. Also numerous reports of smaller hail. Lightning struck a tree and ignited a fire.
2 ARIZONA											
Flagstaff, Coconino County	6	1330MST			0	0	4	0			Flash Flooding, Hail A severe thunderstorm with over 1 inch of rain and hail caused flooding and power outages. Two inches of hail covered the ground in some sections. Hail up to 1 inch in diameter covered the ground to a depth of 2 to 3 inches, 4 to 5 miles north-northwest of the city.
Pinal County	7	1540MST			1	2	5	0			Dust Storm A severe downdraft from a thunderstorm caused a blinding dust storm with visibility near zero on Interstate 10 near Casa Grande. As one vehicle stopped, several others came from behind and crashed into it, causing a chain-reaction. Five tractor-trailer rigs and eleven other vehicles were involved. The highway was closed for about four hours. One person was killed, two suffered major injuries and numerous others had minor injuries.
Tucson, Pima County	8	1555MST			0	0	4	0			Wind A severe thunderstorm moved through the southern portion of the city with wind gusts to 64MPH at Tucson International Airport. There was some damage to power lines, roofs, signs and trees.
Tucson, Pima County	9	Afternoon			1	0	0	0			Lightning A man was struck in the chest by lightning while playing golf. He was revived at the golf course and taken to the burn unit where he remained in critical condition until he died October 14th.
Tucson, Pima County	11	11-1300MST			0	0	4	0			Flash Flooding, Hail Several severe thunderstorms with a total of 2 to 4 inches of rain and local hail up to 3/4 inch in diameter caused considerable street flooding, closing numerous intersections. The hardest hit was the northeast side. Over a dozen persons were rescued from their stalled cars in deep water. A car was swept down Arroyo Chico, but the driver escaped without injury.
3 ARKANSAS											
Pulaski County	01	about 1530CST			0	0	?	0			Lightning Lightning struck several utility poles and transformers, leaving 500 residences and several business without electrical service in Jacksonville.
Phillips County	02	about 1330CST			0	0	3	0			Lightning Lightning caused an explosion at a residence in West Helena, damaging 2 TV sets, cabinets, and electrical wiring.
Prairie County	02	about 1330CST			0	0	?	?			Wind Strong winds from thunderstorms blew down trees plus unspecified number of acres of rice crop near DeValls Bluff.
— ARKANSAS											
Monroe County	02	1400CST	-	-	0	0	?	?			Severe Thunderstorm A severe thunderstorm moved through Clarendon and Holly Grove. Strong winds damaged homes and businesses. Hundreds of rice and soybean acres were damaged along a 5 mile area.
Pulaski County	02	1412CST	-	-	0	0	?	0			Wind The Sheriff's Department reported trees blown down in the southwestern section of the county by strong winds from a thunderstorm.
Jefferson County	02	1500CST	-	-	0	0	4	0			Lightning Lightning struck 11 buildings in Pine Bluff, causing major damage to one of them. Six transformers were struck. About 2200 customers were without electrical power.
Ouachita County	02	about 1700CST	-	-	0	0	?	0			Winds Strong winds from a thunderstorm downed tree limbs and a tree in Camden.
Poinsett County	12	unknown	-	-	0	0	?	0			Wind Strong winds from a thunderstorm blew a tree onto a residence in Marked Tree.
Benton County	13	1400-1530CST	-	-	0	0	5	0			Severe Thunderstorm A severe thunderstorm moved through the county. Lightning caused two house fires, one resulting in major damage in Centerton. Strong winds damaged one home and one poultry house in Siloam Springs.
Washington County	13	about 1600CST	-	-	0	0	?	-			Lightning Lightning struck a tree in Springdale, knocking it down. The tree snapped power lines leading to a transformer.
Faulkner County	15	1530CST	-	-	0	0	3	0			Severe Thunderstorm A strong thunderstorm moved through Conway. Marble size hail was reported. Lightning struck one home, several businesses and one fire station. Several trees were uprooted. Tree limbs and power lines were downed.
4 CALIFORNIA, Northern											
(Mendocino, Lake and Sonoma Counties)	15	1200pst	-	-	0	0	0	6			Rain Significant damage to wine grapes from rain during and near harvest time due to mold and mildew.
Ukiah (Mendocino)	15	1420pst	-	-	0	0	5	5			Hail Hail and heavy rain fell for 35 to 40 min. Hail size was reported to be 1/4 to 1/2 inch in diameter with up to 3 inches on the ground. Heavy rain accompanied the storm with water running through some down-town business. Up to .60 of an inch of rain fell in 40 minutes. Significant damage to Wine Grapes from the Hail.
Central Valley (Southern Sacramento and San Joaquin Valley)	23	1000pst	-	-	0	0	0	8			Rain 1 to 3 inches of rain fell from Tropical Storm Olivia, causing almost total damage to the raisin crop, significant damage to tomatoes and wine grapes due to mold and mildew, also damage to almonds.
Southern Sacramento Valley	29	1000pst	-	-	0	0	4	0			Wind Wind gusts up to 43 mph were reported with a few trees blown down and many power lines broken. Some minor damage reported to buildings, mainly roofs.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

SEPTEMBER 1982

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		
4 CALIFORNIA, Southern										
San Bernardino County	7	1330PST	?	?	0	2	?	?		Tornado (F2) Three houses, two cars and two cabins were destroyed by a tornado 6 miles NNW of Joshua Tree. Two women in one of the houses were slightly injured by the flying debris.
San Bernardino County	7	Afternoon			0	0	0	0		Funnel Clouds Four funnel clouds were reported between Twenty-nine Palms and Joshua Tree.
Inyo County	25-26				0	0	?	?		Heavy Rains Inyo County Sheriff's Office reported extensive flooding between Lone Pine and Bishop Creek. Several bridges were washed out, several flooded. Several camp grounds were isolated with campers. Helicopters assisted in the evacuation of 1700 people. One dam overflowed, another partially burst at North Lake.
5 COLORADO										
Colorado Springs	7	1415 MST			0	0	0	0		Hail 3/4 inch hail fell in Colorado Springs.
Morgan County	7	1758 MST			0	0	3	0		Lightning, heavy rain Lightning damaged the roof of a house in Fort Morgan, and 300 homes in the area suffered a power outage. An inch of rain fell in the city.
Pueblo County	13	1315 MST	1	40	0	0	0	0		Tornado (F1) A tornado was sighted and photographed 20 miles southwest of Pueblo, moving south. It was on the ground only briefly.
Pueblo County	13	1330-1400 MST			0	0	5	5		Svr. thunderstorm The Pueblo area was battered by a severe thunderstorm that produced up to baseball size hail; 3 1/2 inches of rain fell in just 30 minutes at Boone, just east of Pueblo, as the storm did damage in a swath about 6 miles wide and 16 miles long. Vehicles and roofs were damaged and windows broken; widespread street and basement flooding occurred; and many crops were damaged or destroyed, including corn, pumpkins, beans, and chili peppers.
Northeast plains and foothills	13	aftn, eve.			0	0	4	4		Heavy rain, hail Torrential rain drenched the foothills and plains between Denver and the Wyoming border. Many spots in Larimer county had 3 to 4 inches of rain; the largest amount reported was 4.73 inches at Pinewood Lake, 14 miles west of Loveland. There was some local flooding, along with a few minor road washouts. Many spots in Weld county suffered crop damage from the heavy rain. Just east of Denver, 2 1/3 inches of rain fell in 5 hours, along with hail that did minor damage to a few planes.
Otero County	13	1650 MST			0	0	0	4		Hail 3/4 inch hail fell in La Junta, with stones up to golfball size reported nearby. There was significant crop damage in the area, mainly to melons. 1 1/2 inches of rain fell in La Junta.
6 CONNECTICUT ————— NO REPORT RECEIVED										
7 DELAWARE ————— NONE REPORTED										
8 FLORIDA										
Jupiter Beach, Palm Beach County	01	0910EST	-	-	-	-	-	-	-	Waterspout A large waterspout was observed 3 miles northeast of Jupiter Beach by the Beach Patrol. The waterspout which was moving west dissipated before making landfall.
Palma Sola, Manatee County	01	1710EST	-	-	-	-	-	-	-	Waterspout A waterspout was observed at the mouth of the Manatee River near Palma Sola moving toward the southwest. No landfall reported.
Lake Worth Beach, Palm Beach County	02	0855EST	-	-	-	-	-	-	-	Waterspout A waterspout was sighted 1 mile east of Lake Worth Beach moving toward the west. It dissipated before landfall.
Choctawhatchee Bay, Okaloosa County	02	1700EST	-	-	-	-	-	-	-	Waterspout A waterspout was observed in the Choctawhatchee Bay south of Niceville which dissipated before reaching shore.
FLORIDA										
Leesburg, Lake County	04	2100EST	-	-	-	-	-	3	-	Wind Strong, brief winds caused tree damage in the Twin Palms area on the shore of Lake Griffin near Leesburg. Fruit trees and large oak trees were uprooted.
Air Force Beach, Palm Beach County	05	0908EST	-	-	-	-	-	-	-	Waterspout Park Police reported a waterspout 3 to 4 miles offshore from Air Force Beach moving slowly southwestward. It dissipated before reaching the coast.
Hollywood, Broward County	06	1100EST	-	-	0	4	-	-	-	Lightning Lightning struck a large oak tree and injured 4 people who were under the tree seeking shelter from a thunderstorm during a Labor Day picnic at Topeekeegee Yugnee Park in Hollywood. A 15 year old boy was critically injured and was still in a coma a month later. He is not expected to regain consciousness.
Key West, Monroe County	06	1400EST	-	-	1	1	-	-	-	Lightning As a father and son were climbing back into a wooden boat after snorkeling, a bolt of lightning struck the water nearby killing the 17 year old son and briefly stunning the father. The lightning strike occurred 8 miles northwest of Key West.
Kissimmee, Osceola County	09	1200EST	-	-	-	-	-	-	-	Funnel Clouds Two funnel clouds were observed 10 miles east of Kissimmee moving toward the west.
Winter Haven, Polk County	09	1500EST	-	-	-	-	4	-	-	Wind Localized strong winds blew off the roofs of two mobile homes in Orange Manor East near Winter Haven. Damage estimated at \$9,000.
Eatonville, Orange County	10	1650EST	0.25	?	0	0	0	0	0	Tornado (F0) A tornado briefly touched down in an open field near Eatonville, a community of northern Orlando, causing no significant damage.
Key West, Monroe County	13	1312EST	-	-	-	-	-	-	-	Funnel Cloud A funnel cloud was observed 2 miles west of Key West moving slowly west.
Key West, Monroe County	13	1745EST	-	-	-	-	-	-	-	Waterspouts Two waterspouts were observed 3 miles northwest of Key West moving slowly west.
St. Vincent Island, Franklin County	18	1855EST	-	-	-	-	-	-	-	Waterspout A waterspout was sighted just offshore from southwestern Franklin County near St. Vincent Island moving slowly north. It dissipated before making landfall.
Miami, Dade County	21	0640EST	-	-	-	-	-	-	-	Waterspout Two waterspouts were observed east of Government Cut, entrance to Miami Harbor. No landfall.
Honestead, Dade County	21	0720EST	-	-	-	-	-	-	-	Waterspout A waterspout was observed about 8 miles east of Honestead.
Oldsmar, Pinellas County	21	1005EST	0.33	10	0	0	5	0	0	Tornado (F1) A tornado briefly touched down for 3 city blocks in the Harbor Palms subdivision of Oldsmar. The tornado caused damage to 17 homes, 4 of which received moderate roof damage. The tornado also uprooted trees and shrubbery. A 78 year old man was picked up by the tornado and moved 10 feet in the air. He was deposited gently back on the ground without injury. Damage was estimated at \$50,000.
Marathon, Monroe County	21	1115EST	-	-	-	-	-	-	-	Waterspout A waterspout was observed 4 miles south of Marathon.
Miami Shores, Dade County	21	1415EST	-	-	-	-	-	-	-	Funnel Cloud A funnel cloud was observed by a pilot over Miami Shores.
Bonaventure, Broward County	22	1310EST	-	-	-	-	3	-	-	Wind Strong thunderstorm winds blew over several large trees in the Bonaventure area. Damage to trees estimated at \$1,000.
Fort Lauderdale, Broward County	23	1355EST	-	-	-	-	-	-	-	Funnel Cloud A funnel cloud was observed about 4 miles west of Fort Lauderdale Executive Airport.
Coconut Creek, Broward County	23	1420EST	0.5	5	0	0	0	0	0	Tornado (F0) A rope like tornado briefly touched down in an undeveloped area west of Coconut Creek, about 11 miles west of Pompano Beach.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

SEPTEMBER 1982

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	

— FLORIDA										
West Kendall, Dade County	23	1435EST	0.75	10	0	0	3	0	Tornado (F0)	<p>A small tornado briefly touched down in central Dade County west of the Kendall area and moved toward the south southwest. Only damage was several Australian pine trees downed across State Road 27.</p>
Lake Worth, Palm Beach County	24	0745EST	-	-	-	-	-	-	Waterspout	<p>A waterspout was observed 5 miles east of Lake Worth Pier moving toward the north.</p>
Upper Florida Keys, Monroe County	24	1245EST	-	-	-	-	-	-	Waterspouts	<p>Several waterspouts were observed near the upper Florida Keys near Tavernier, Plantation Key, and Key Largo. No landfall.</p>
Hollywood, Broward County	24	1345EST	-	-	-	-	2	-	Wind	<p>Strong thunderstorm winds downed several trees at Echo Grande Golf Course in Hollywood. Damage estimated at several hundred dollars.</p>
South Florida	26	pre-dawn	-	-	-	-	-	-		<p>A mesoscale low moved out of a synoptic scale low pressure area over the southeastern Gulf of Mexico and crossed the southern Florida Peninsula during the pre-dawn hours that Sunday morning. The small low, 29.68 inches, moved northeastward at 35 mph entering the southwest coast of Florida near Fort Myers where 5 separate areas of damage were reported between 0130 and 0230 EST. The next damage report was about 25 miles northwest of Lake Okeechobee where a tornado killed a woman and demolished 8 mobile homes. No damage was reported from the system after this location. The mesoscale low probably exited the Florida Peninsula about 0500 EST near Melbourne. That day a woman in Melbourne found cancelled checks from the tornado site northwest of Lake Okeechobee in her front yard. At least 3 separate tornadoes were reported, 2 of which were directly associated with the mesoscale low and the 3rd tornado with the squallline south of the low. High winds caused other damage. The following 6 separate damage reports were associated with this system.</p>
Sanibel Island, Lee County	26	0130EST	0.5	15	0	0	4	0	Tornado (F0)	<p>A tornado, possibly a waterspout/tornado, moved across Sanibel Island causing extensive damage to trees and shrubbery. A swimming pool screened enclosure was severely damaged. The damage was in a narrow, straight path. Damage was estimated at \$10,000.</p>
Cape Coral, Lee County	26	0145EST	-	-	-	-	3	-	Wind	<p>Strong winds from a thunderstorm blew over several large trees of different varieties. Tree values estimated near \$5,000.</p>
Bonita Beach, Lee County	26	0145EST	-	-	-	-	3	-	Wind	<p>Strong thunderstorm winds blew a church steeple off the roof of the Beach Baptist Church. Damage estimated at \$4,000.</p>
Naples, Collier County	26	0200EST	-	-	-	-	3	-	Wind	<p>A dozen or so trees were uprooted and a tennis fence was blown over at the Naples Beach Club and Hotel Golf Course. Damage was several thousand dollars.</p>
Golden Gate, Collier County	26	0210EST	0.75	25	0	0	5	0	Tornado (F1)	<p>A tornado touched down and moved northeast through the southern sections of Golden Gate, east of Naples. Nine homes were damaged, one roof completely removed; pool screening enclosures destroyed; trees and shrubbery uprooted; telephone poles snapped off; windows popped out of a Chevy Blazer; 3 other cars damaged. Damage estimated at \$100,000. A loud, deafening roar like a train was heard.</p>
Basinger, Okeechobee County	26	0400EST	4	60	1	7	5	0	Tornado (F2)	<p>A tornado touched down southwest of Basinger along Eagle Island Road cutting a mile long path beside a paved county road. Crossing the road it demolished an unoccupied double-wide mobile home. The tornado then briefly lifted off the ground breaking off the tops of pine trees. It then touched down in an open field before flattening a barn and severely damaging the roof of a concrete-block house. The tornado then traveled 2 miles through open pasture before entering the New Covenant Christian Outreach Camp. Here the tornado demolished 6 mobile homes. Flying trailer debris caused considerable damage to the roof and one wall of a church building. A 30 foot long metal tank half full of molasses was torn from its stand and thrown 100 feet. A pickup truck was moved 70 feet. Trailers and contents were picked up and thrown into the tree tops. Three steel trailer frames were twisted around trees as high as 20 feet off the ground. Of the 9 people at the camp, 1 53 year old woman was killed and 7 were injured, one critically. The tornado continued northeast a short distance destroying another unoccupied mobile home. Total estimated damage \$200,000.</p>
Miami, Dade County	27	1400EST	-	-	0	1	0	0	Lightning	<p>Lightning hit the infield rail of Calder Race Track knocking a race track worker unconscious for a brief time.</p>

— FLORIDA										
Key West, Monroe County	29	0700EST	-	-	-	-	-	-	Funnel Cloud	<p>A funnel cloud was observed 5 miles northeast of Key West moving slowly west.</p>
Port St. Lucie, St. Lucie County	29	0815EST	-	-	-	-	-	-	Waterspout	<p>A waterspout was observed 1 miles east of the St. Lucie Power Plant moving toward the west. No landfall.</p>
9 GEORGIA										
Cobb, Fulton, DeKalb, and Gwinnett Counties	26	1620EST-1840EST	-	-	0	0	0	0	Hail	<p>Thunderstorms dropped golfball-size hail in Cobb County at 5:55 PM EST. The storms also dropped a large amount of small hail, mostly pea-size, in the northern part of the Atlanta Metropolitan Area. The ground was covered to a depth of more than 5 inches in a few locations in north Fulton and north DeKalb Counties.</p>
10 IDAHO ————— NONE REPORTED										
11 ILLINOIS ————— NONE REPORTED										
12 INDIANA ————— NONE REPORTED										
13 IOWA										
North Central, Central and South Central Iowa	12	1815 CST to 2100 CST	-	-	0	0	5	0	Severe Thunderstorms	<p>A line of thunderstorms produced very heavy rain, strong winds and funnel clouds (recorded separately). Three inches of rain fell in a half hour at Gowrie (Webster County) flooding streets and basements. High winds destroyed a building on the west side of Hampton (Franklin County) and damaged six others. Large tree limbs were broken which in turn fell on power lines and caused widespread power outages. Small hail fell 3 miles west of Creston (Union County).</p>
3 Miles Southeast of Willisca (Montgomery County)	12	1835 CST	-	-	-	-	-	-	Funnel Clouds	<p>Several funnel clouds observed by State Trooper. No ground contact observed.</p>
Southwest of Nodaway (Adams County)	12	1840 CST	-	-	-	-	-	-	Funnel Cloud	<p>Funnel cloud observed with no ground contact.</p>
South Central and Eastern Iowa	13	1500 CST to 1800 CST	-	-	0	0	5	5	Severe Thunderstorms	<p>An area of thunderstorms produced heavy rains, high winds, hail and one tornado (recorded separately). One inch hail fell in Lucas County while golf ball size hail fell at Oelwein (Fayette County) and south of Ottumwa (Wapello County) where crops were stripped by the hail. Winds of 60-70 MPH destroyed a barn 1 1/2 miles west of Oelwein. One hundred and fifty hogs were in the barn, a dozen were found dead and several others had to be sent to slaughter. Large trees and power lines were downed. A wind gust of 58 MPH was recorded at the Cedar Rapids Airport.</p>
Six miles Southwest of Ottumwa to 5 miles Northeast of Fairfield	13	1600 to 1635 CST	26	?	0	0	6	0	Tornado (F2)	<p>A garage and a hog building on a farm were destroyed southwest of Ottumwa (Wapello County). A mobile home that was anchored down was totally destroyed. A man, woman and child in the mobile home took shelter in the bathroom and survived with only a few scratches. Football bleachers were destroyed at a high school 3 1/2 miles north of Eldon (Wapello County). Also the roof and sides of a softball dugout were torn off and the scoreboard and football field lights were damaged at the school. A lumberyard lost a portion of its roof near Batavia (Jefferson County). A 40 x 330' hangar was destroyed at the Fairfield Airport, 3 1/2 miles north of Fairfield (Jefferson County). The Hangar was the only building at the Airport damaged. Remnants of the Hangar were strewn over a 5-acre area east of the Airport. Thirteen aircraft that were in the Hangar were damaged. Three aircraft parked in the open 100 yards north of the Hangar were not damaged.</p>

STORM DATA AND UNUSUAL WEATHER PHENOMENA

SEPTEMBER 1982

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	

14 KANSAS										
Sublette, Haskell County	01	0440CST				0	0	0	4	Lightning Lightning set fire to stacks of hay a mile and a half northwest of Sublette. The fire burned 400 tons of alfalfa.
Kismet, Seward County	05	1900CST				0	1	0	0	Lightning A man escaped with only minor injuries when he was struck by lightning while outdoors watching a thunderstorm.
Sedgwick and Cowley Counties	12	1640-1845CST				0	2	5	0	Wind Thunderstorms packing heavy rain and damaging winds crossed Sedgwick and Cowley Counties. A recreational vehicle was overturned and demolished 7 miles west of Conway Springs at 1640. Two people were injured when a barn was blown away 4 miles northwest of Viola. The injured were treated and released from a Wichita Hospital. A mobile home was destroyed in northeast Sedgwick County around 1730CST. Power lines and tree limbs were also downed at Arkansas City.
Centralia and Kelly, Hemaha County	12	1800-1900CST				0	0	5	0	Wind Fierce thunderstorm winds toppled trees and ripped the roof from a carport in Centralia. The winds also damaged several out-buildings at a farm near Kelly.
Shawnee, Johnson County	12	2200CST				0	0	4	0	Lightning Lightning set fire to a home at 11926 W. 64th in Shawnee. Considerable roof damage resulted.
Parsons, Labette County	14	1900CST				0	0	0	0	Hail Hail as large as golf balls fell at Parsons. Some small limbs were broken, but otherwise no damage resulted. Kansas-Oklahoma Hail Loss Service reports indicate hail was especially damaging to crops on the following dates in the listed counties. 2 Stanton 4 Wichita

15 KENTUCKY										
Marion, Taylor, Adair, Russell, Cumberland, Clinton and Wayne Counties of south central Kentucky	01	Afternoon				1	17	5	6	Flash Floods Severe flash flooding resulted after over 5 inches of rain fell on already saturated ground. Taylor County...over 9 inches of rain fell within 10 days with flash flooding reported over parts of Taylor County. Several people stated that it was the worst flooding they had seen in over 60 years. Water was halfway over cars in one parking lot. In Campbellsville 2 men were making deliveries when their truck veered off the road into a flooded river. The men escaped through the window shortly before the truck was sucked into a 6 foot diameter culvert pipe. The truck was never found. Adair County...6 inches of rain fell within 6 hours and sent all rivers out of their banks. 150 businesses were damaged with 22,000 acres of cropland destroyed. The waters of Russell Creek were the highest anyone could remember. Numerous roads were washed out. Russell County...property damage in Russell county exceeded 1.5 million dollars mainly due to crop losses. 5 bridges were damaged with 30 roads washed out due to the heavy rains. Wayne County...one child was killed when a school bus struck a car during a heavy rain storm. 13 children and 2 adults were injured. Numerous reports of flooded roads and croplands were indicated.
Lincoln and Boyle Counties	13	All Day				0	2	5	4	Flash Flooding 3 to 5 inches of rain resulted in the evacuation of 28 families in eastern Lincoln and west Boyle counties. Water was 4 feet deep in areas. Major damage also was reported at the water treatment plant. Several people were injured in water related car accidents.

KENTUCKY										
Portions of Pike, Floyd, Knott, Letcher, Perry, Leslie and Harlan counties	14	Morning				0	0	6	4	Severe Flash Flood Heavy rains from the remnants of tropical storm Chris sent flood water through several southeast Kentucky counties. Much of the cities of Fleming and Neon were inundated and the city of Jenkins was evacuated. Letcher county was hardest hit where over 200 homes were damaged. 5 feet of water was measured in the center of the city of Fleming-Neon and the city of Jenkins was evacuated when a dam overflowed. In Letcher county alone more than 1.5 million dollars worth of damage resulted and 170 bridges were destroyed. 4.75 inches of rain was recorded in the county.
Edmondson County	14	Afternoon				0	2	0	0	Flooding Two Brownsville boys narrowly escaped drowning when they attempted to wade through water near a culvert. The current swept them into a concrete drain. One person stated that he saw only "four hands sticking out of the water" before he rescued them.

16 LOUISIANA										
Webster Parish	02	1925CST								Lightning Lightning struck two houses and a utility pole during an intense thunderstorm in Minden, La. In each instance resulting fires caused minor damage.
St. Mary Parish	03	1600CST								Lightning Lightning struck a house in Berwick, La. causing considerable damage to the structure.
Jeff Davis Parish	11	2100CST	1	150					4	Tornado (F2) A tornado accompanying the remnants of Tropical Storm Chris struck .5 miles west of Roanoke, La. Three power transmission towers on U.S. Highway 90 were twisted and destroyed. The path length was about 1 mile long with a path width of 150 yards.
Avoyelles Parish	11	2130CST	.75	100					5	Tornado (F2) A tornado accompanying the remnants of Tropical Storm Chris touched down briefly in Moreauville, La. Four apartments in a complex were severely damaged. Alos, at least two automobiles were destroyed. The path was short (less than 1 mile) and about 100 yards wide. No injuries or deaths reported.
Evangeline Parish	11	2200CST	2.5	150					5	Tornado (F2) A tornado associated with the remnants of Tropical Storm Chris struck the small community of Vidrine (6 miles west of Ville Platte). The tornado moved from south to north. The path was about 150 yards wide and 2.5 miles long. Approximately 12 houses were either severely damaged or destroyed. Approximately 20 other homes sustained significant roof and window damage. No injuries or deaths reported.
Concordia Parish	12	0045CST	2	200					5	Tornado (F3) A tornado associated with the remnants of Tropical Storm Chris struck 1 mile south of Clayton, La. The tornado traveled for about 2 miles parallel to U.S. Highway 65. Eleven houses, a church, and numerous automobiles were destroyed. The houses were generally well built brick homes with only a few interior walls standing. Damage was in excess of 1 million dollars.
Catahoula Parish	12	0050CST	?	?						Tornado (F0) A tornado was reported by the public 20 miles south southwest of Jonesville, La. No reports of damage or injuries.
Richland, Franklin, Madison, and Tensas Parishes	12	early morning							7	Flash Flood Rains averaging 12 inches fell during a four hour period over the 4 parish area in association with the remnants of Tropical Storm Chris. The heaviest precipitation fell at Delhi in Richland Parish where over 16 inches were recorded. Damage was extensive and widespread with a total in excess of 2 million dollars in Richland Parish alone. Eighteen business establishments received major flood damage while 13 had minor damage. Approximately 187 homes were damaged of which 17 were destroyed. Crop losses for the area were 7,000 acres of rice and 60,000 acres of cotton damaged or destroyed. In Franklin Parish about 50 homes and several business establishments had varying amounts of water damage. Estimates were \$500,000 in personal property, \$200,000 in public property, and \$200,000 in agricultural interest. In Madison Parish, the town of Tullulah received widespread property damage. This included the high school, an apartment complex, numerous homes and crops. Total damage estimates were 1.5 million dollars. In Tensas Parish, property damage was confined to agricultural interests with a total damage estimated at \$250,000. There were no reported deaths or injuries during the flood event in any of the effected parishes.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

SEPTEMBER 1982

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	
LOUISIANA									
Iberia Parish	14	Afternoon				4			Flash Flood
A flash flood occurred when a levee broke at Spanish Lake located northwest of New Iberia, La. The rains which caused the levee break were caused by Tropical Storm Chris. Damage was \$20,000 to the levee.									
Caddo Parish	16	Evening				2			Lightning
A bolt of lightning accompanying a thunderstorm struck the ground traveled to an automobile where all 4 tires were blown then hit and debarked a tree.									
Rapides Parish	16	Afternoon				3			High Wind
A thunderstorm accompanied by high wind struck the Alexandria-Pineville area causing scattered areas of wind damage including broken windows and downed power lines. No injuries or deaths.									
Orleans Parish	24	2030CST				4			High Wind
A thunderstorm moving southward across the eastern portion of New Orleans produced a significant downburst which completely removed roofs from 4 houses, destroyed several wooden fences and did minor damage to several other roofs. The path was 2 miles long and 50 to 100 yards wide. There was no evidence of circulation in the debris pattern.									
17 MAINE ————— NO REPORT RECEIVED									
18 MARYLAND and D.C.									
Carroll County	2	2000EST			0	1	0	1	Lightning
A charge from a nearby lightning strike apparently entered through a kitchen window of a home in the Smallwood community near Westminster. "It felt like somebody kicked me in the chest", said a 26-year-old man who was standing by the sink. He was knocked unconscious and his breathing stopped. One witness, who was only a foot or two away, described it as looking like a rocket coming at him. A neighbor administered mouth-to-mouth resuscitation until ambulance attendants arrived. The fortunate man was released after only a few hours in the hospital, suffering from only superficial burns and sore muscles.									
19 MASSACHUSETTS ————— NO REPORT RECEIVED									
20 MICHIGAN									
2 Miles N of Port Sanilac, Sanilac County	02	1500EST			0	1	4	0	Wind
Mobile home rolled over and destroyed. Woman inside injured.									
1 Mile S of Cedar, Leelanau County	05	1010EST			0	0	4	0	Lightning
Barn and contents burned. 3 firefighters slightly injured.									
21 MINNESOTA									
East Central	5	0630-0800 CST			0	0	3	0	Wind, Lightning
An area of thunderstorms moving east through Minnesota reached severe limits along the northern edge of the Twin Cities metropolitan area. Damage was confined to downed trees and scattered power outages. Numerous lightning strikes were reported and a gust of 77 mph was observed near Anoka.									
Benton County	12	1530-1540 CST	3/4	narrow	0	0	5	3	Tornado (F2)
A tornado tore through a farm site 5 miles north of Foley moving east northeast. A machine shed was knocked down and the machinery within damaged. The tornado flattened a path through a corn field leading to the machine shed.									
Dennison (Rice County)	12	1615 CST			0	0	0	0	Funnel
A funnel aloft was observed east of Dennison moving northeast.									
Gilman (Benton County)	12	1620 CST	1	narrow	0	0	0	4	Tornado (F0)
A tornado skipped across the ground just north of Gilman in a northeast direction. A path of flattened corn fields and broken trees were left behind.									
MINNESOTA									
Dodge County	12	1700-2000 CST			0	0	4	0	Wind
Olmsted County	Heavy thunderstorms moving northeast through southeast Minnesota reached severe limits over Dodge and Olmsted Counties. At 1812CST Rochester Airport measured winds to 62 mph. Damage was mostly confined to downed trees and power outages but heavy rains of around 2 inches caused minor low-land flooding.								
Saginaw (St. Louis County)	12	1830 CST			0	0	4	0	Funnel, Wind
A funnel aloft was observed about 20 miles west of Duluth near Saginaw. Winds damaged a metal shed and a horse shelter at the site. The wind was estimated at over 50 mph.									
22 MISSISSIPPI									
Cleveland, Bolivar Co.	12	0640CST	1	125	0	5	6	?	Tornado (F1)
As the remnants of Tropical Storm Chris moved over north Mississippi, heavy thunderstorms produced a small tornado in Cleveland. The tornado touched down in the southern part of town and moved north for about one mile before lifting. The tornado destroyed a radio station shack and the towers and a mobil home. Numerous homes and businesses had damage to roofs, porches and windows. A church suffered major damage and a tractor-trailer rig was overturned. Five people were injured, 4 of them in the mobil home. Damages were estimated at over \$500,000.									
North Mississippi	12	0830 to 1130CST					4	6	Rain/ Flooding
Remnants of Tropical Storm Chris moved into northern Mississippi on the 12th bring torrential rains. Heaviest hit were the Sunflower and Tallahatchie County areas where up to 13 inches of rain fell. In Sunflower County 75 percent of the rice and much of the cotton and soybean crop was destroyed by rain, flooding and wind. A few homes and businesses were flooded in Inverness and Indianola. Damages to crops alone were estimated at over 1.5 million dollars.									
Sunflower Co.	12	0830CST			0	0	4	0	Wind
Strong thunderstorm winds blew over numerous sheds and tractor barns just north of Indianola. A large barn and a recreation building were destroyed at a club 3 miles north of Morehead.									
Eden, Yazoo Co.	12	1020CST			0	0	3	?	Wind
Strong thunderstorm winds destroyed an old house and damaged 3 others just east of Eden. Considerable damage was done to cotton fields in the area.									
Coffeeville, Yalabusha Co.	12	1030CST			0	0	3	?	Wind
Strong thunderstorm winds blew down numerous large trees causing some building and power line damage in Coffeeville.									
Tallahatchie Co.	12	1030CST			0	0	3	0	Wind
Strong thunderstorm winds produced damage in the Murphreesboro and Springhill communities. The damage consisted of downed trees, broken windows and damage to small sheds and barns.									
Tippah Co.	12	1330CST			0	0	3	0	Wind
Strong thunderstorm winds blew the roof off of a barn, moved a mobil home off of its foundation in the Peoples community.									
Walshall, Webster Co.	12	1400CST	1/4	100	0	0	4	0	Tornado (F1)
A small tornado touched down briefly in the center of Walshall. Damage was limited to a few sheds but a number of large trees were twisted and broken off above the ground.									
Keownville, Union Co.	12	1415CST			0	0	4	0	Wind
Strong thunderstorm winds destroyed a barn, uprooted and broke off trees in the area of Keownville.									
Houston, Chickasaw Co.	12	1505CST	1/4	100	0	0	4	0	Tornado (F1)
A small tornado touched down briefly just south of Houston near Highway 389 uprooting trees and overturning a mobil home. A house was damaged and large trees were blown over just east of the Natchez Trace Parkway along Highway 8.									
Shannon, Lee Co.	12	1515CST			0	0	3	0	Wind
Strong thunderstorm winds produced damage to trees and a barn in Shannon.									
Monroe Co.	12	1615CST	1/4	100	0	0	4	0	Tornado (F1)
A small tornado touched down between Nettleton and Amory at the junction of Highway 6 and Old Highway 6. One mobil home was destroyed. Five houses and a church received major damage.									
Pontotoc Co.	12	1745CST			0	0	4	0	Wind
Strong thunderstorm winds destroyed a mobil home and a utility building in the Buckhorn community. Major roof damage was reported to a large warehouse in Pontotoc.									
Waveland, Hancock Co.	15	1500CST			0	0	3	0	Wind
High winds from a thunderstorm blew down trees and destroyed a small utility shed in Waveland.									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

SEPTEMBER 1982

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	

23 MISSOURI

Shannon	1	1825CST			0	0	0	0	Large Hail
Hail to golf ball size at Birchtree.									
Boone	2	0045CST			0	0	0	0	High Wind
Wind gusts to 58 mph at Columbia Regional Airport.									
Saline	13	1416CST			0	0	2	0	Damaging Wind
Thunderstorm winds downed trees at Nelson which is 12 miles southeast of Marshall.									
Newton	13	1450CST			0	0	0	0	High Wind
Wind to 60 mph reported at Neosho airport.									
Cedar	13	1630CST			0	0	0	0	Large Hail
Hail to 3/4 inch diameter along with strong wind at El Dorado Springs.									
Benton	13	1720CST			0	0	0	0	High Wind
Wind to 60 mph at Edward.									
Moniteau	13	1730CST			0	0	2	0	Damaging Wind
Wind to 60 mph produced tree damage at Sandy Hook.									
Pulaski	13	1830CST			0	0	3	0	Damaging Wind
Wind damaged trees, an outhouse and power lines in Crocker.									
Audrain	14	1040CST			0	0	0	0	High Wind
KXEO Radio reports wind to 70 mph at Mexico.									
St. Louis & St. Louis City	14	1305-1330CST			0	0	5	0	Damaging Wind
A line of severe thunderstorms moved through the area producing widespread scattered damage including: A roof and windows out in Creve Coeur, carport and car in Bridgeton, power lines down in St. Ann, scattered damage to St. Louis City and additional scattered light damage to St. Louis County.									
Barton	14	1921CST			0	0	0	0	Large Hail
Hail to 3/4 inch diameter at Lamar.									
Cedar	17	1726CST			0	0	0	0	Large Hail
Hail to 3/4 inch diameter at El Dorado Springs.									

24 MONTANA

Southwest and South Central	13-14	Midnight on 13th to evening on 14th	-	-	0	0	5	5	Heavy Snow
A heavy snowstorm passed across Southwest and South Central areas. The storm lasted up to 36 hours in some areas. The area of heaviest snow was over the extreme southern sections of Park, Sweetgrass, Stillwater, and Carbon Counties. Red Lodge in Carbon county received 35 inches of snow and Mystic Lake Power House in Stillwater County received 30 inches of snow.									

25 NEBRASKA

Cedar, Holt, and Wayne Counties	31	2320CST			0	0	5	5	Hail and Damaging Winds
-01 -0030CST Hail up to 2 inches broke windows in cars and homes, damaged roof shingles and crops at O'Neill, Randolph and Wayne. Sixty m.p.h. winds with the thunderstorms blew over trees and downed power lines. Falling trees smashed cars and damaged homes at Atkinson, O'Neill, Randolph and Wayne.									
Burt County	01	0100CST			0	0	2	0	Damaging Winds
At Tekamah, thunderstorm winds caused tree damage.									
Lancaster County	04	1414CST			0	0	0	0	Funnel Cloud
A funnel cloud was reported 9 miles northwest of Lincoln.									
Holt County	09	1500CST			0	0	5	5	Hail
-1600CST Hail up to 4 inches in diameter fell in a path 3 miles wide and 5 miles long 20 miles northwest of O'Neill, damaging crops, farm homes and buildings. Several county areas reported 1/4 inch hail.									
Washington County	11	1730CST			0	0	3	0	Flash Flooding
-2245CST Four to six inches of rain fell in the Blair area, flooding streets, causing water to back into some yards and basements.									

NEBRASKA

Seward County	11	1900CST			0	0	4	0	Damaging Winds
Thunderstorm winds blew portions off of the roof of a motel 2 miles north of Milford.									
Washington County	17	0735CST			0	0	2	2	Hail
A few one inch hailstones fell around Blair.									
Box Butte County	23	0030CST			0	0	3	0	Lightning
Lightning related fire destroyed a garage in Alliance.									
Knox County	27	1430CST			0	0	3	0	Damaging Winds
High winds caused power outages in the Crofton area for about 2 hours.									
Knox, Wayne, and Madison Counties	28	1530CST			0	0	4	4	Hail
-1930CST Hail up to 2 inches damaged crops, buildings and cars.									
Boone, Madison, and Cedar Counties	28	1600CST			0	0	5	5	Damaging Winds
-1930CST Thunderstorm winds caused extensive damage to power lines, trees and buildings. A gust to 81 m.p.h. was recorded at the Norfolk Weather Service Airport Station. Wind damage 3/4 miles west of Norfolk included a 40 foot shed blown over, a transformer pole blown onto a house, a garage moved off its foundation, and other outbuildings destroyed. A grain wagon was overturned and a grain bin blown over.									
Gage County	29	0510CST			0	0	4	2	Damaging Winds
Thunderstorm winds blew over a mobile home and totally destroyed it in northwest Beatrice. Another trailer was damaged.									
Douglas County	29	0615CST			0	0	4	0	Damaging Winds
In the Omaha area, thunderstorm winds downed trees and power lines. One home was damaged by a fallen tree. Most damage in the Omaha area was east of 72nd Street.									
Merrick County	29	1920CST			0	0	3	0	Damaging Winds
In Clarks, near 1 inch hail and winds estimated and Hail to 60 m.p.h. broke windows and caused roof damage.									
Platte County	29	2230CST			0	0	4	4	Damaging Winds
Thunderstorm winds destroyed 2 sheds, a lean-to and moved a mobile home that had tie downs about 3 feet off its blocks. A camper shell was carried a mile and a half away.									

26 NEVADA ————— NO REPORT RECEIVED

27 NEW HAMPSHIRE ————— NO REPORT RECEIVED

28 NEW JERSEY ————— NONE REPORTED

29 NEW MEXICO

San Felipe Pueblo, Sandoval County	18	Afternoon			0	0	4	0	Flash Flood
Heavy rains of two to three inches fell in the area causing flash flooding and a small dike to break, flooding some homes in the pueblo.									
Artesia to Carlsbad, Eddy County	20	Afternoon			0	0	4	0	Flash Flood
Heavy rains described by some local people as a cloudburst caused some damage to streets, homes, and highways from Artesia to Carlsbad.									
Luis Lopez, Socorro County	20	Night			0	0	3	4	Flash Flood
Two to three inches of rain fell over nearby mountains Monday night causing arroyos to overflow damaging 600 to 1000 acres of crops ready for harvest.									
Southern New Mexico, Dona Ana, Otero, Eddy, and Lea Counties	30	Afternoon			0	0	5	4	Heavy Rains and Flooding
The remains of dying Hurricane Paul dumped four to five inches of rain from El Paso, Texas, across southern New Mexico to Lovington, New Mexico, causing damage to crops and homes.									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

SEPTEMBER 1982

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	

30 NEW YORK, Coastal ——— NONE REPORTED

30 NEW YORK, Central ——— NONE REPORTED

30 NEW YORK, Western

Chautauque County Airport 02 2000EST - - - - 6 - Wind
 Strong winds reaching more than 100 miles an hour snapped the moorings of 5 light planes. They rolled on the ground and were heavily damaged. A commuter plane suffered a minor damage on its wings.
 A portion of the terminal's roof was peeled off. Numerous windows were broken. Debris from the blown roof was dropped and dented cars in the parking lot.
 Airport landing equipment was also damaged.

31 NORTH CAROLINA

MOCKSVILLE, DAVIE COUNTY 18 1700EST 1 0 0 0 Lightning
 A man was killed by lightning while standing by a metal gate.

SHERRILLS FORD, CATAWBA COUNTY 18 1905EST Short Narrow 0 0 4 0 Waterspout/Tornado (F1)
 A waterspout destroyed a boathouse, six piers and damaged eight small boats.

MENT HILL, MECKLENBURG COUNTY 18 2140EST 0 0 5 0 Lightning
 Lightning caused a fire which destroyed a home and its contents.

DUNN 4E, HARNETT COUNTY 20 Afternoon 0 0 4 0 Wind
 A severe thunderstorm moved through Harnett and Sampson Counties, destroying a mobile home near Dunn.

CAROLINA BEACH, NEW HANOVER COUNTY 21 0000EST 0 0 5 0 Lightning
 Lightning caused a fire that damaged several classrooms and the library of the Carolina Beach Elementary School.

TOPSAIL BEACH, PENDER COUNTY 26 0730EST 1 15 0 0 4 0 Waterspout/Tornado (F2)
 A waterspout moved across Topsail Beach, damaged a home 2.5 miles north of the Town Hall, and then destroyed a 25 foot section of a pier on the west side of the barrier island. The tornado moved west.

HAMILTON 3S, MARTIN COUNTY 26 1540EST 2 30 0 0 4 0 Tornado (F1)
 A small tornado touched down south of Hamilton where it destroyed an unoccupied house. It lifted briefly, then touched down again two miles to the northeast and destroyed a mobile home.

KILL DEVIL HILLS, DARE COUNTY 28 2125EST 1/2 30 0 2 5 0 Waterspout/Tornado (F2)
 A waterspout, moving northeastward, crossed the Outer Banks at Kill Devil Hills, slightly injured two people and caused extensive damage to six dwellings and five vehicles. The tornado remained on the ground for approximately one-quarter mile, lifting momentarily before heading into the Atlantic Ocean.

32 NORTH DAKOTA

Kindred (Cass County) 28 1700CST 0 0 4 4 Thunderstorm Winds
 Strong thunderstorm winds broke windows, uprooted fencing, twisted fence posts, uprooted trees, and damaged crops.

Larimore 18SW (Grand Forks County) 28 1715CST Funnel

Grand Forks (Grand Forks County) 28 1905CST 0 0 3 0 Thunderstorm Winds
 Strong thunderstorm winds tore up the front steps on a house, damaged a TV antenna and roof shingles, and moved a storage shed 70 to 80 feet.

Grafton 3SW (Walsh County) 28 1920CST 0 0 3 0 Thunderstorm Winds
 Strong thunderstorm winds severely damaged a metal farm building.

Grafton 11E (Walsh County) 28 1940CST 0 0 4 0 Thunderstorm Winds
 Strong thunderstorm winds severely damaged a mobile home, and blew down a garage.

33 OHIO

Dalton, Wayne County 02 AFTN - - - 0 0 3 0 Lightning
 Thirty-four holstein cows were killed when lightning struck a tree under which they were standing.

34 OKLAHOMA

Griggs, Cimarron Co. 01 afternoon 0 0 ? ? Lightning
 Fire started by lightning burned approximately 50 acres of grass. Firemen from both Boise City and Keys responded to the blaze.

Pawnee, Pawnee Co. 06 0150CST 0 0 ? ? Lightning
 Fire started by lightning burned approximately 65 acres of pastureland. Local Farmers and two city fire units battled the blaze for four hours.

Hobart, Kiowa Co. 12 1500CST 0 0 ? ? Lightning, Wind and Hail
 Fire started by lightning burned 36 large round bales of hay and approximately 100 acres of pastureland. Wind driven hail damaged approximately 230 acres of cotton. Also several outbuildings and trees were damaged by the wind.

Binger, Caddo Co. 12 1505CST 0 0 ? ? Wind
 Wind 30-50MPH damaged trees and power lines.

Enid, Garfield Co. 12 1600CST 0 0 ? ? Wind
 Wind unroofed a house in northwest Enid. From the pictures it did not appear that the roof was secured to the walls. Other houses nearby and a barn were undamaged.

Oklahoma City, Oklahoma Co. 12 1630CST 0 0 ? ? Wind
 Winds 60-70MPH were reported in northwest Oklahoma City, Warr Acres, and Bethany with considerable damage to trees and power lines.

Tonkawa, Kay Co. 12 1720CST 1.5 50 0 0 ? ? Tornado (F1) and Wind
 A tornado took out eleven utility poles and disrupted electrical service. Also straight winds of 60MPH with heavy rain and small hail were reported over much of Kay County. Winds of 50MPH were reported at Blackwell and 30-40MPH winds were reported at Ponca City.

Enid, Garfield Co. 12 1750CST 0 0 ? ? Wind
 High wind blew scaffolding which had been stacked for storage into a natural gas pressure regulator station. It took a repair crew an hour and a half to stop the gas leak.

Okemah, Okfuskee Co. 13 1650CST 1.0 50 0 0 ? ? Tornado (F2) and Hail
 A tornado struck a farm just southwest of Okemah damaging the farm house, a barn and uprooting several large trees. Reportedly a piece of glass was stuck into a post, one man tried to pull it out and couldn't. Apparently the post had been twisted, the glass blown in, and then it twisted back. Large hail was also reported.

Oklahoma City, Oklahoma Co. 13 1830CST 0 0 0 0 Funnel Cloud

Norman, Cleveland Co. 13 1830CST 0 1 ? ? Lightning
 A lightning discharge injured a student sitting in a metal framed window. The young man was admitted to the Norman Municipal Hospital for observation.

Stella, Oklahoma Co. 13 1944CST 0 0 ? ? Hail
 Golfball sized hail reported.

Bethel Acres, Pottawatomie Co. 13 1958CST 0 0 0 0 Funnel Cloud

Stillwater, Payne Co. 13 2250CST 0 0 6 ? Wind and Hail
 High winds and large hail caused considerable damage in Stillwater. The highest wind gust recorded by the Civil Defense was 52MPH at 2257CST, although citizens in the area estimated winds from 80-100MPH. Both the Airport and the University were damaged. Baseball park bleachers were blown and twisted. The roof of a warehouse was blown off and into a parking lot damaging autos. Six airplanes were damaged.

Edmond, Oklahoma Co. 14 1745CST 0 0 ? ? Wind
 Winds 50MPH damaged outbuildings and blew over some trees.

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					KILLED	INJURED	PROPERTY	CROPS	
OKLAHOMA									
Harrah, Oklahoma Co.	14	1818CST			0	0	0	0	Funnel Cloud
Oklahoma City, Oklahoma Co.	14	1835CST			0	0	?	?	Wind and Hail Golfball sized hail and high winds 60MPH blew down trees and damaged one outbuilding in Northwest Oklahoma City.
Oklahoma City, Oklahoma Co.	14	1910CST			0	0	?	?	Hail and Wind Widespread reports of golfball sized hail and high winds (up to 75MPH).
Oklahoma City, Oklahoma Co.	14	1926CST			0	0	0	0	Funnel Cloud
Newcastle, McClain Co.	14	1942CST			0	0	?	?	Wind Wind reported 75MPH with a tree blown onto the hwy.
Delaware, Nowata Co.	14	1945CST			0	0	6	?	Lightning Fire started by lightning destroyed the Delaware High School. Fire units from several area towns responded, some from as far away as Bartlesville. The fire was not brought under control until 0300CST due to problems getting water to the scene. Damages were estimated between \$500,000 to \$700,000.
Edmond, Oklahoma Co.	14	2004CST			0	0	0	0	Funnel Cloud
Broken Arrow, Tulsa Co.	14	2130CST			0	0	?	?	Wind Winds estimated at 60MPH caused some damage.
Claremore, Rogers Co.	14	evening			0	0	3	?	Lightning A bull, two cows, and two calves were killed by lightning. The animals were under a tree which had been split by lightning.
Comanche Co.	15	morning			0	0	5	?	Flooding Overnight rains of 4 to 6 inches caused flooding over much of Comanche County. Several low water crossings and bridges were damaged. Some of these were temporary structures built since the spring flooding. In Lawton about 40 residents were evacuated when the Squaw Creek drainage canal flooded.
35 OREGON ————— NO REPORT RECEIVED									
36 PENNSYLVANIA, Eastern									
Blair, Franklin, Berks, Lehigh and Northampton County	2	1600 to 1900 EST			0	1	4	0	Wind Thunderstorms moving across the state caused damage in some areas. In the Nevery area of Blair County trees, tree limbs and utility lines were downed with one home damaged by a falling tree. Around Waynesboro, Franklin County, many trees, limbs and utility lines were downed with one house damaged by a falling tree. Near Hamburg in Berks County considerable wind damage occurred. Trees were uprooted or broken off, a travel trailer nearly destroyed, the chimney blown off and the roof torn loose on an inn and the roof and side of a barn torn off. In the Allentown area trees and limbs were downed and some damage occurred at the fair grounds. A concert was interrupted and some concession stands were damaged. One boy was hit by flying debris. An unspecified number of people received some minor injuries when glass flew from light bulbs on rides and concession stands. In Easton, Northampton County, trees and limbs were downed with at least one main road blocked by downed trees. Wind speeds of 50 to 55 miles per hour were recorded.
36 PENNSYLVANIA, Western — NONE REPORTED									
37 RHODE ISLAND ————— NO REPORT RECEIVED									
38 SOUTH CAROLINA									
Aiken, S. C. Aiken County	18	1830EST			0	0	4	0	Electrical Scattered thunderstorms, some locally heavy, caused several fires in the Aiken area. A school in Aiken was damaged by lightning.
Orangeburg, S. C. Orangeburg County	19	1800EST			0	2	3	0	Electrical Heavy thunderstorm moved across central S. C. ahead of a frontal passage. Numerous power disruptions occurred in Orangeburg and Ellorree areas. Lightning injured a girl standing by a flagpole in Orangeburg. A man standing by a television was "shook-up" when the television was struck by lightning.
Orangeburg, S.C. Orangeburg County	20	0519EST			0	0	4	0	Electrical Lightning burned warehouse, killed horse and destroyed horse trailer. Home damaged.
39 SOUTH DAKOTA									
Meade County	4	0630CST	-	-	0	0	3	0	Lightning Lightning struck a home in Flandreau causing a small fire and knocking out a window.
Lake County	4	0800CST	-	-	0	0	3	0	Lightning Lightning struck a home in Nunda causing considerable roof damage. The upstairs was filled with smoke and sparks flew from the appliances.
Brown County	4	1320-1340CST	20	1760	0	0	?	?	Hail Hail, three-quarters inch in diameter, fell north of Barnard.
Custer County	5	1810-1820CST	-	-	0	0	2	?	Hail Hail, one and one-half inches in diameter, fell at Custer damaging roofs and cars. The hail covered the ground.
Meade County	8	Night	-	-	0	0	0	?	Lightning Lightning caused a fire near Spearfish, burning three-quarters of an acre of farmland.
Minnehaha and Lincoln Counties	9	1815-2115CST	-	-	0	0	3	?	Wind, Heavy Rain Heavy thunderstorms persisted in Minnehaha and Lincoln Counties for almost three hours producing heavy rains and strong winds. Wind gusts to 53 mph were recorded at the National Weather Service Office in Sioux Falls; higher gusts of 60 mph were reported southwest of the city at Tea. Rainfall amounts of two to five inches in the Sioux Falls area caused urban and lowland flooding. Basements flooded; cars stalled in high water; and storm sewers backed up. Water collected eight inches deep on the roof of a nursing home in Sioux Falls and leaked into hallways. Skunk Creek and the Big Sioux River in southern Minnehaha County overflowed their banks causing lowland flooding. Hartford, in western Minnehaha County, received one inch of rain in a ten minute period.
Clay County	28	1730CST	-	-	0	0	3	6	High Winds, Hail Strong thunderstorm winds along with hail of unknown size damaged three farms, five miles west of Vermillion. A farm-house window was blown out and a few outbuildings were damaged or destroyed. Soybean crops were damaged in the southern half of the county with the heaviest damage in a one and one-half mile strip from Meckling to Hub City.
Lawrence County	29	2300CST	-	-	0	0	2	0	Snow An early snowfall resulted in the breakage of tree branches and caused power outages in parts of Lead and Nevada Gulch.

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					KILLED	INJURED	PROPERTY	CROPS	

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					KILLED	INJURED	PROPERTY	CROPS	

41 TEXAS, Northern

Near Cooper, Delta County	2	1540CST	0	0	?	?	?	?	Windstorm
Estimated 100 MPH winds were reported just outside of Cooper. The storm, which was accompanied by marble size hail, caused an unknown amount of damage.									
Duncanville, Dallas County	2	1601CST	0	0	?	?	?	?	Windstorm
Amateur Radio spotters recorded 60 MPH winds for a short time in Duncanville.									
Tyler, Smith County	15	1545CST	0	0	?	?	?	?	Windstorm and Lightning
Strong thunderstorm winds caused roof damage to at least one business in southeast Tyler. Lightning strikes caused minor damage to several residences in Tyler.									

41 TEXAS, Southern

Humble, Harris County	3	1530 CST	1	200	1	2	3	0	Tornado (F1)
A thunderstorm moving southward out of Montgomery County produced a tornado just as it entered Humble, in northern Harris County: Witnesses observed the tornado as it damaged several homes in Humble along its mile-long path. They reported hearing a roaring "train sound" as the tornado passed nearby. Four workmen in a garage under construction saw the tornado approaching and tried to find shelter in the building. The tornado collapsed the structure on the men, killing one and injuring two. Minor damage was reported to cars, trees and roofs along the path of the tornado and brief, heavy rains preceded it. Radar observers reported a marked decrease in the parent thunderstorm intensity about the time of the tornado's touchdown.									
Orange, Jefferson Counties	11	0400 CST-0900 CST	0	0	6	4			Tropical storm
Tropical Storm Chris moved onshore about 0630 CST near the Port Arthur area. The highest sustained winds offshore were estimated at 55 mph with higher gusts. Winds along the coast were reported gusting to 51 mph near Sea Rim State Park, with the highest tides 5 to 6 feet.									
No beach erosion was noted with the storm and the only reported flooding was in Sabine Pass and was minor flooding. Damage was estimated at \$200,000 to a restaurant on Pleasure Island in Port Arthur and a 65-foot utility boat was sunk about 9 miles southeast of Sabine Pass. All three crewmembers of the ship were rescued. Another offshore crewboat was washed ashore near Sabine. In general, less than one-half inch of rain fell along the upper Texas coastline.									
Real, Bandera, Uvalde Counties	13	1230 CST	0	0	?	?			Flash Flood
Abundant moisture, an unstable airmass and an upper level impulse moving eastward across northern Mexico combined to produce thunderstorms across much of the western and central portions of south Texas. The rain began falling over the Hill Country about 0600 CST and by noon accumulations of 3 to 4 inches were reported across much of Real, Bandera and Uvalde Counties. The greatest amount was just over 5 inches at Leakey in Real County.									
Flooding began after noon CST with the rains ending shortly afterward. No damages were reported although J.S. 83 and FM 337 were flooded near Leakey for a short time.									
McFaddin, Victoria County	14	1125 CST	0	0	0	0			Funnel cloud
A funnel cloud was briefly sighted near McFaddin. The parent storm was moving northward.									
Livingston, Polk County	14	1500 CST	.5	50	0	0	5	0	Tornado (F0)
A tornado touched down briefly three miles south of Livingston, destroying a lumber shed and damaging a burner at the lumber yard. No other damage was reported. Small hail and heavy rain accompanied the tornado. It and the parent thunderstorm were moving toward the south.									
Jourdanton, Atascosa County	15	1600 CST	0	0	4	?			Thunderstorm winds
Strong winds from a thunderstorm damaged several mobile homes in Jourdanton. Trees were also blown over by the storm. Small hail was reported, but did not cause any known damage.									

TEXAS, Southern

Kendall County	15	1710 CST	0	0	?	?	?	?	Flash Flood Thunderstorm winds
A very small, but intense, storm developed in central Kendall County, producing winds that toppled several trees just south of Sisterdale. Just after 1530 CST heavy rains began falling south of Sisterdale and continued until 1730 CST. During that 2-hour period, between 10 and 12 inches of rain fell in an area centered 7 miles south of Sisterdale and no more than 10 miles in diameter. The resulting runoff forced Wasp Creek to overrun its banks which, in turn, caused the Guadalupe River to rise sufficiently to cut off FM 3160 and FM 474 at their crossings. The only reported damage was to these two roads. It is interesting to note that rainfall observers only 9 to 10 miles north, south and east of the center of maximum rainfall reported one inch of rain or less.									
Hearne, Robertson County	16	1530 CST	1	0	0	0			Lightning
A four-year old boy standing outside his home just east of Hearne was killed when he was struck by lightning from a nearby storm. He died instantly.									

41 TEXAS, Western

Post, Garza County	14	2020CST	0	0	4	0	0	0	Wind
Thunderstorm wind to 60 mph damaged power lines and blew carports off some houses.									
El Paso, El Paso County	20	Evening	0	0	5	0			Flash Flood
Record-breaking rain swamped El Paso and Juarez, Mexico, damaging several homes in El Paso. The established records are: .60 inch in 5 minutes, .90 inch in 15 minutes, 1.44 inches in 30 minutes, 2.18 inches in 60 minutes and 2.20 inches in 120 minutes.									
Seminole, Gaines County	28	2056CST	Touched down	0	9	5	0		Tornado (F1) briefly
A tornado touched down briefly on east side of Seminole. It struck a mobile home park. Four mobile homes were demolished; several others were damaged. Some damage to power lines and out buildings in the vicinity. Nine people were injured with three of them being hospitalized.									
El Paso, El Paso County	30	Night through afternoon	0	0	?	?			Flood
The remains of Hurricane Paul out of the Pacific flooded much of El Paso. Rains in excess of 2 inches deposited rocks and debris on a number of highways. At least 1 pickup truck was lost. Home damage was widespread but difficult to estimate.									

42 UTAH

Utah County Provo	13	1839HST 1/2	UNKN	0	0	4	0	0	Tornado (F0)
A waterspout over Utah Lake moved ashore and caused damage to a small airplane at the Provo Airport. The plane was tied down, but the winds snapped the back wheel tie down and flipped the machine on its back. The tornado was accompanied by a thunderstorm.									
Salt Lake County	26	\$27		0	1	7			Flood
A major Fall storm produced record amounts of rainfall over northern Utah. The heaviest period of rain which set the all time record for a 24 hour rainfall amount at the Salt Lake International Airport occurred on Sunday, September 26, between 10 AM MDT and 11 PM MDT. Rainfall amounts during this time were in the 2 to 3 inch range for most of the valley and 3.5 to 4 inches in the mountains to the east. Tropical moisture from dying hurricane Olivia fed moisture to a Pacific storm, which was moving into the area, to produce the precipitation. The rainfall was especially heavy in two particular canyons in the Wasatch Mountains to the east of the Salt Lake City metropolitan area. These canyons, Big and Little Cottonwood canyons, are composed mostly of granite which allows a large percentage of runoff. The characteristic of this storm which makes it unique, is the fact that the flood was caused entirely by rainfall. Past floods in the Salt Lake Valley have been due to a rapid snow melt which was enhanced by rain.									

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					KILLED	INJURED	PROPERTY	CROPS	

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UTAH

This is not an exhaustive review of the numerous details of damage. Damage costs have been estimated by state agencies to run in excess of 15 million dollars. Destruction took the form of washed out roadways and bridges, mudslides over several canyon roads, and flooded houses and mobil homes. over 2000 homes received damage and 200 people were evacuated during the course of the flooding. Flood damage to homes ranged from minor basement flooding to major structural damage as Big Cottonwood Creek cut a new path through a housing division. A condominium complex received extensive damage, as did a mobile home park along the Jordan River which runs through the city. Road damage was greatest in Big Cottonwood Canyon where many sections were made impassable to all but foot traffic. One section of road lost an entire lane on the creek side for about 1/4 mile. The roadbed was completely washed out in another place. Mudslides blocked the roads in several canyons. A two lane bridge on 6600 South which crosses Little Cottonwood Creek was washed out. Several Interstate 15 underpasses in the Midvale area were flooded such that auto traffic could not cross during the course of the flooding. Murray City Park, along Little Cottonwood Creek, was filled with water during the flooding. This park, as are others in the area, is designed to hold a certain amount of flood water. The pressure in the sewer system in the City of Murray was such that water lifted drainhole covers and shot 10 feet in the air in places. No fatalities occurred. However, one woman nearly drowned when she suffered an epileptic seizure and fell into a pond of flood water.

Washington County Springdale 27 0030NST 0 0 6 0 Flash Flood

Heavy rainfall moved southward from the Wasatch Front to inundate portions of southwestern Utah late Sunday night, September 26. Eastern portions of Washington County in the vicinity of Zion National Park received an estimated 2 inches or more rain late Sunday night. The flash floods flushed up to two feet of debris and mud from two ravines leading from West Temple Mountain into the heart of Springdale. One resident heard the flood approaching and reported that it sounded just like a "jet airplane". Boulders the size of cars were reported to have filled drainages and culverts. One unit of the Zion Park Motel was nearly filled with mud according to the Mayor of Springdale. The canyon road to the Dixie college amphitheater was washed out along with the city baseball diamond. The Zion shadows trailer court was devastated by mud and a campground north of the trailer park was also washed out. Damage was estimated at around 800,000 dollars.

43 VERMONT NONE REPORTED

44 VIRGINIA

Loudon County 2 0 0 3 0 Wind
Locally heavy thunderstorms developed ahead of a cold front between 6PM and 9PM. At Leesburg airport, some damage was reported, including a parked aircraft that was overturned.

James City County 3 0015EST 0 0 3 0 Lightning
Lightning struck a convenience store in the town of Norge. The roof of the store had three holes punctured into it, and the cupola was shattered and sent into the parking lot. Some electrical damage was also reported.

Wise County 14 0 0 6 4 Rain, Flooding
Rainfall of up to 5 inches in a 6-hour period, occurred during the early hours of the day, and triggered rapid rises in streams. The town of Pound was hardest hit, with roads leading into the community blocked by up to 5 feet of water. Over 100 inhabitants had to be evacuated as their homes were threatened. An estimated \$1.7 million loss was inflicted upon homes, businesses and private roads and bridges. Damage to public roads and bridges was figured to be around \$137,000.

45 WASHINGTON

Walla Walla County 12 1040PST 0 0 0 0 0 0 Funnel Cloud
15 ESE of AEW
A funnel cloud was sighted near the Walla Walla airport for only a few minutes.

46 WEST VIRGINIA

Mingo, Logan and Wyoming counties 1 mid-0700EST 0 0 6 3 Flooding

Thunderstorms dumped heavy rains for the second straight night over portions of Mingo, Logan and Wyoming counties in southwestern WV. 2-day rainfalls of 3.5 to 4.5 inches were common. Hardest hit was the Elk Creek in Mingo county. Nearly every small private bridge along the length of the creek was washed away. The county road along the creek was heavily damaged. Some houses and mobile homes were pushed off their foundation and severe cars were damaged.

Significant flooding also occurred along Marrowbone Creek in Mingo county and low Cow Creek in Logan county. Costliest damage throughout the area was inflicted on the road system.

47 WISCONSIN

Viroqua area, Vernon County 01 0300CST ? ? 0 0 ? 4 Hail

Hail of unknown size damaged farm crops in the area between Viroqua and Westby. Heaviest hail fall was just north of Viroqua.

2 1/2 northwest of Blair, Trempealeau County 01 0300CST 0 0 4 0 Lightning

Lightning struck and killed two horses, coincidentally named Lightning and Thunder. They were a mated pair, both born on the same day during a thunderstorm.

Bruce area, Rusk County 12 1500CST 12 ? 0 0 5 4 Tornado (F2)

A tornado cut an intermittent path from Highway 40 5 miles southeast of Bruce, northeast across Caley Lake, northeast across Highways E and 8, then dissipated near the Soo Line railroad tracks 3 miles north-northwest of Ladysmith.

South of Eau Claire to Altoona, Eau Claire County 12 1518CST 5 200 0 0 6 5 Tornado (F2)

The tornado first touched down near the intersection of Highways F and II south of Eau Claire, then moved northeast through extreme southern Eau Claire, and northeast from there into Altoona. Twenty-five houses were damaged, many severely, in the Burgess Addition subdivision, and also around the London Square Mall.

Menomonie area, Dunn County 12 1630CST ? ? 0 0 4 4 Tornado (F1)

A small tornado touched down briefly in a rural area along Highway 88 just north of Highway 12. There was some damage to field crops, and to farm structures in the area.

Downsville, Dunn County 12 1800CST ? ? 0 0 6 5 Tornado (F2)

A tornado caused major damage to 12 houses, 8 barns, 6 silos and 3 trailer homes in the Downsville area. 800 acres of crops were also destroyed.

Wheaton and Tilden Townships, Chippewa County 12 1817CST 10 150 0 0 5 5 Tornado (F1)

A tornado moved northeast from an initial touch-down on the Dunn/Chippewa county line just north of Highway 12. The 10-mile continuous path through farm lands in southwestern Chippewa County averaged about 150 yards in width, but the area of high winds expanded to about one mile in width in northeast Wheaton Township. The tornado damaged 23 farm buildings, 15 pieces of farm machinery and 650 acres of farm land planted in corn and soybeans. The path extended from just north of Highway 12 across Highway 29 and County T northeast to near the intersection of county roads N and S. Five inches of rain fell across Tilden Township in thunderstorms accompanying the tornado, but no serious flooding occurred.

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					KILLED	INJURED	PROPERTY	CROPS	
WISCONSIN									
Eau Claire, Eau Claire County	12	1827CST	5	75	0	0	6	0	Tornado (F2)
	<p>The tornado first touched down just north of Highway 85 in Brunswick Township, then moved northeast into Eau Claire. It lifted just before Highway 12, touched down again over Half Moon Lake, lifted again, then touched down again in Carson Park. The tornado was on the ground about 2 1/2 miles on the discontinuous 5-mile path. In Eau Claire, the tornado damaged 14 homes extensively and 13 more slightly.</p>								
Cornell, Chippewa County	12	1845CST	?	?	0	0	4	?	Tornado (F1)
	<p>A weak tornado touched down briefly at a farm near Cornell. A barn and silo were damaged.</p>								
Sturgeon Bay area, Door County	19	1700CST-2000CST	?	?	0	0	?	4	Hail
	<p>Scattered areas of hail fell across Nasewauppee and Sturgeon Bay, with the heaviest amounts on the east side of Nasewauppee where hail accumulated four inches deep.</p>								
48 WYOMING									
Carpenter, Laramie County	6	2300MST			0	0	0	4	Hail
	<p>A destructive late summer hail storm accompanied by up to two inches of rain and some high winds caused up to 50% damage to corn crops, damaged beans, packed down just-planted wheat fields, and stopped winter wheat planting and ensilage cutting in an area three miles east and two miles south of town.</p>								
Counties: Yellowstone National Park, Park, Hot Springs, Fremont, Big Horn, Sheridan, Johnson, Natrona	13	PM			0	6	6	6	Heavy wet snow
	14	Day							
	<p>This late summer snow storm dumped heavy wet snow in northwest, northcentral and central Wyoming which stranded hundreds of motorists, left thousands of people without electricity and closed several roads and schools. The areas most affected along with some snow depth reports as of noon on the 14th include: Lander 16.9 inches; Story 10; South Fork of the Shoshone River 12 to 18; Powell 5; Sheridan 4-1/2; Cody 3-1/2; and Casper 1. Damages from the storm to property and crops are estimated in the millions of dollars. The six known injuries were from storm related vehicle accidents.</p>								
49 ALASKA									
South Central	15	1000-1400 AST			0	0	5	0	High Wind
	<p>A strong weather front moved through the Anchorage area producing strong winds along the mountains in the east side of the city. Wind gusts were estimated at 90 mph. There was considerable minor damage and some local severe structural damage to homes and businesses.</p>								
Northwest	15-16				2	?	2	0	Heavy Rain
	<p>A strong band of southerly winds brought two days of heavy rain to Northwest Alaska. The Noatak river rose 15 feet on the 15th cresting well above flood stage. Two hunters were lost in the flood.</p>								
West Coast	19-20				0	?	5	0	High Wind and Sea
	<p>An intense storm moved out of Bristol Bay and along the west coast of Alaska on the 19th and 20th. The villages of Aklak, Aklachak and Russian Mission sustained heavy wind damage and were declared State disaster areas. A oil rig platform under tow in the Bering sea broke its tow and went aground off Nunivak Island.</p>								
50 HAWAII									
Oahu	1	1100-1400HST			0	0	3	0	Heavy Rain
	<p>Heavy showers over the Koolau mountains caused minor overflow of streams draining into the Kahuluu area northwest of Kaneohe.</p>								
51 PUERTO RICO									
Southern Section	12-13	PM-AM			1	0	6	C	Heavy Rain, Wind, Flooding
	<p>The passage of a strong tropical wave from east to west over Puerto Rico generated heavy rains, thunderstorms and strong winds which affected primarily the southern portions of the island. The disturbance increased in intensity as it moved off Puerto Rico to become tropical storm Debbie in the vicinity of the eastern Bahamas. The heaviest rains fell in the Guayanilla-Peñuelas-Yauco area with the highest total of nearly 13 inches reported at Peñuelas. High intensity rains in this area caused flooding of the Guayanilla river into the town where a number of commercial and residential establishments were affected. Another high rainfall area of 8 to 9 inches fell over the southeastern sections around Humacao and Naguabo. One man drowned near Naguabo when the car in which he was a passenger left the road into a swollen stream. There was considerable damage to roads with a number of landslides in the interior sections. Gusty winds associated with thunderstorm activity felled a number of trees and caused some minor crop damage. Civil Defense reported about six hundred families evacuated to shelters mostly in the Guayanilla-Humacao municipalities.</p>								
52 VIRGIN ISLANDS ————— NONE REPORTED									
53 PACIFIC ————— NONE REPORTED									

STORM SUMMARY

SEPTEMBER 1982

STATE	TORNADOES				HAILSTORMS				WINDSTORMS				LIGHTNING				FLOODING				HEAVY SNOWSTORMS AND BLIZZARDS				ICE STORMS				ALL OTHER			
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE				
								PROP. ERTY	CROPS			PROP. ERTY	CROPS			PROP. ERTY	CROPS			PROP. ERTY	CROPS			PROP. ERTY	CROPS			PROP. ERTY	CROPS			
Alabama								3																								
Arizona								4		1	2	2	5		1																	
Arkansas												4		?																		
California	1	1						5	5																							
Colorado	1	1			2	?		5	5																				8			
Connecticut	≠																															
Delaware																																
Florida	7	4	1	7	5							4		1	6																	
Georgia																																
Idaho																																
Illinois																																
Indiana																																
Iowa	1	1				6			5	?																						
Kansas										?				2		5																
Kentucky																																
Louisiana																																
Maine	5	2				5																										
Maryland & DC	≠																															
Massachusetts	≠																															
Michigan											1		4																			
Minnesota	2	1				5																										
Mississippi	4	1				6																										
Missouri																																
Montana																																
Nebraska																																
Nevada	≠																															
New Hampshire	≠																															
New Jersey																																
New Mexico																																
New York																																
North Carolina																																
North Dakota	3	2				2	6																									
Ohio																																
Oklahoma																																
Oregon	2	2				?																										
Pennsylvania																																
Rhode Island	≠																															
South Carolina																																
South Dakota																																
Tennessee																																
Texas	3	3	1	11	5																											
Utah	1	1				4																										
Vermont																																
Virginia																																
Washington	2	2																														
West Virginia																																
Wisconsin	7	1				6																										
Wyoming																																
Alaska																																
Hawaii																																
Pacific																																
Puerto Rico																																
Virgin Islands																																

REFERENCE NOTES

† Storm damage categories are from	*	Miles instead of yards
1 to 9 as follows:	**	Yards instead of miles
1 Less than \$50	o	Includes crop damage
2 \$50 to \$500	@	Includes heavy sleet storm
3 \$500 to \$5,000	#	Freezing drizzle and freezing
4 \$5,000 to \$50,000		rain, commonly known as glaze
5 \$50,000 to \$500,000	≠	Not received or incomplete
6 \$500,000 to \$5 Million		
7 \$5 Million to \$50 Million		
8 \$50 Million to \$500 Million		
9 \$500 Million to \$5 Billion		

"F" SCALE DEFINITIONS

0 = 40-72	MPH	Breaks branches off trees; signboards damaged.
1 = 73-112	MPH	Peels surface off roofs; trailer houses pushed or damaged.
2 = 113-157	MPH	Tears roofs off frame houses and outbuildings; cars blown off highway.
3 = 158-206	MPH	Windows of skyscrapers smashed; frame houses destroyed; cars lifted off ground.
4 = 207-260	MPH	Skyscrapers twisted; frame houses leveled; cars blown some distance.
5 = 261-	MPH	or greater.

USCOMM-NOAA-ASHEVILLE, NC 1982-3000

DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
ENVIRONMENTAL DATA AND INFORMATION SERVICE
NATIONAL CLIMATIC CENTER
FEDERAL BUILDING
ASHEVILLE, N.C. 28901

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