

AND UNUSUAL WEATHER PHENOMENA WITH LATE REPORTS AND CORRECTIONS



Cover: An F3 tornado moved through the Fairview subdivision (N.C.) during the early morning hours of November 23. This strong tornado killed two people and caused an estimated two million dollars in damage. Pictured is one of the many homes that were destroyed or damaged by the tornado. See pages 8 through 12 for additional information. (Photo courtesy: Rod Gonski, WPM, NWSFO Raleigh, North Carolina.)

CONTENTS

Pi	
Climatic Data of the Month	4
Outstanding Storms of the Month	8
Storm Data and Unusual Weather Phenomena	14
Reference Notes and "F" Scale Definitions	97
Storm Summary	98

STORM DATA

(ISSN 0039-1972)

National Climatic Data Center

Editor: Grant W. Goodge

Publication Staff: William Angel, Greg Hammer, Jay Hollifield, and Sharon Weaver

STORM DATA is prepared, funded, and distributed by the National Oceanic and Atmospheric Administration (NOAA). The Outstanding Storms of the Month section is prepared by the Data Operations Branch of the National Climatic Data Center.

The Storm Data and Unusual Weather Phenomena narratives and Hurricane/Tropical Storm summaries are prepared by the National Weather Service. Monthly and annual statistics and summaries of tornado and lightning events resulting in deaths, injuries, and damage are compiled by cooperative efforts between the National Climatic Data Center and the National Severe Storms Forecast Center.

STORM DATA contains all confirmed information on storms available to our staff at the time of publication. However, due to difficulties inherent in the collection of this type of data, it is not all-inclusive. Late reports and corrections are printed in each edition.

Maps of the National Weather Service Forecast Zones which are used in the Storm Data and Unusual Weather Phenomena section will be printed in all editions

Except for limited editing to correct grammatical errors, materials submitted are generally published as received.

Subscription, pricing, and ordering information is available from:

National Climatic Data Center 37 Battery Park Avenue Asheville, NC 28801-2733 (704) 271-4800 or (704) CLIMATE

The editor of STORM DATA solicits your help in acquiring photographs (prints or slides; black and white, or color), maps, clippings, etc. of significant or unusual weather events (past or present). These could be for use in the "Outstanding Storms of the Month" or "Et Cetera" sections of STORM DATA. We request our subscribers or other interested persons to mail such items to:

Grant W. Goodge National Climatic Data Center 37 Battery Park Avenue Asheville, NC 28801-2733

Any such items received by the editor will be for use in STORM DATA only. Any other use will be with the permission of the owner of said items. Materials submitted will be returned if requested in the original submission.

"I certify that this is an official publication of the National Oceanic and Atmospheric Administration and is compiled from information received at the National Climatic Data Center, Asheville, North Carolina 28801-2733."

Herrick D Woden

Director,

National Climatic Data Center

CLIMATIC DATA OF THE MONTH

PRECIPITATION AND TEMPERATURE ANOMALIES - NOVEMBER 1992

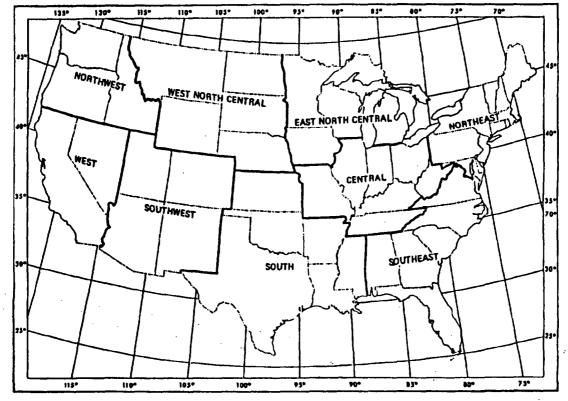
Table 1 lists the 98-year temperature and precipitation rankings for the nine climatically homogeneous regions in the United States outlined below in Figure 1.

Areally averaged mean monthly temperatures across the nation ranked November 1992 as the 19th coolest November on record. An active storm track enabled cold air to spread further south than is normal for November. Regionally, it was the 6th coldest November since 1895 for the Southwest and the 10th coolest November for the South. Monthly departures were as much as nine degrees below normal in southern Colorado and northern New Mexico. However, monthly temperatures along parts of both the Atlantic and Pacific coasts were two to five degrees above normal. Temperatures in Alaska averaged from near normal in the north to as much as six degrees above normal in the South. Monthly temperatures were seasonable across the Hawaiian Islands.

Nationally, November 1992 was the 5th wettest November on record. The Central and Southeast regions logged their 3rd wettest November since 1895. It was the 5th and 6th wettest November for the South and East North Central regions, respectively. By contrast, much of California and Nevada, and the southern half of Arizona received less than 25% of their normal precipitation. Thus, the West region experienced their 6th driest November in 98 years. Much of Alaska and the eastern Hawaiian Islands recorded above normal precipitation.

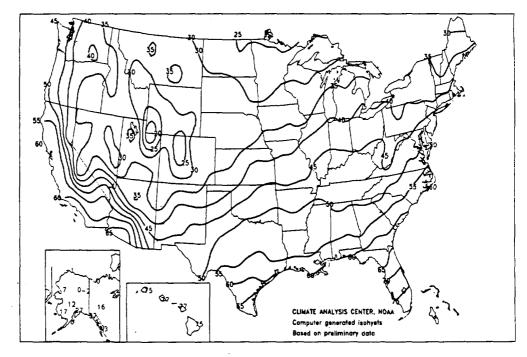
1 = DRIEST, 98 = WE	TTEST; 1 = COLDEST,	, 98 = HOTTEST.
REGION	PRECIPITATION.	TEMPERATURE
Northeast	71	47
East North Central	93	32
Central	96	47
Southeast	96	61
West North Central	62	40
South	94	10
Southwest	42	6.
Northwest	33	25
West	6	29
National	94	19

Fig. 1



From National Climatic Data Center

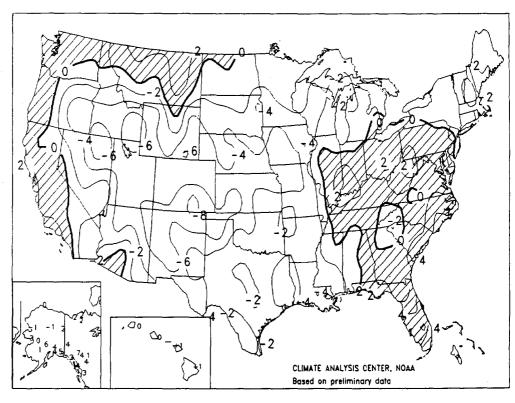
Fig. 2



Reprinted from Weekly Weather and Crop Bulletin - December 8, 1992

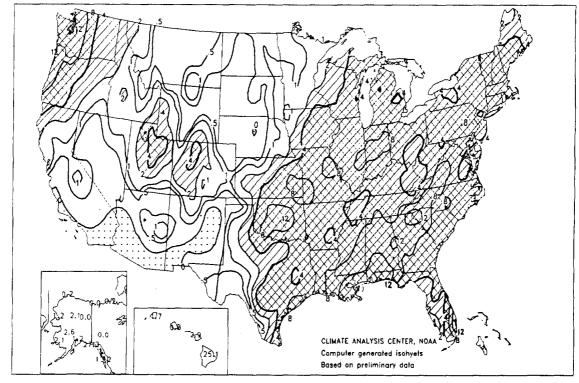
Departure of Average Temperature (°F) from Normal

Fig. 3



Reprinted from Weekly Weather and Crop Bulletin - December 8, 1992

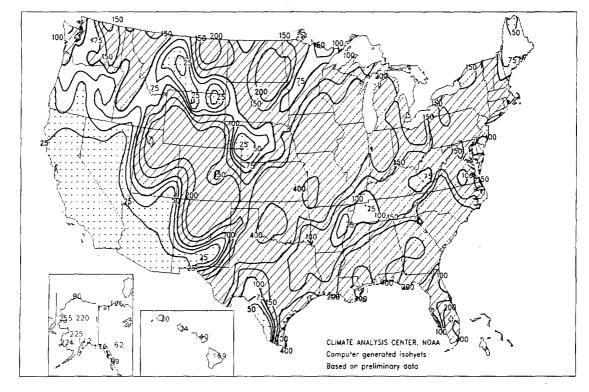
Fig. 4



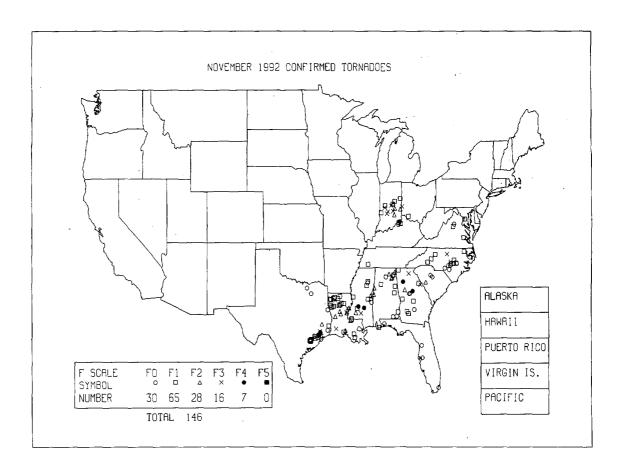
Reprinted from Weekly Weather and Crop Bulletin - December 8, 1992

Percent of Normal Precipitation for November 1992

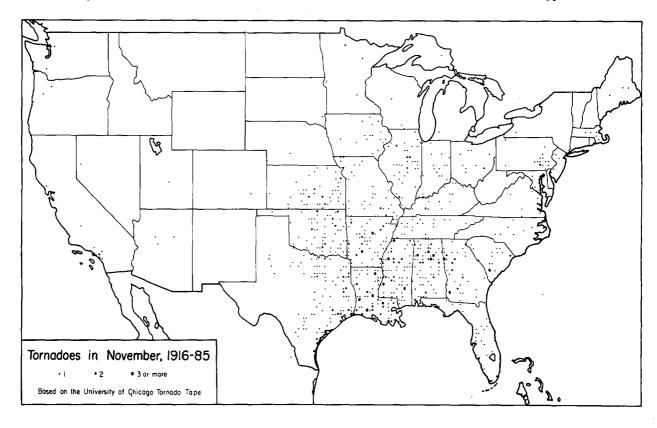
Fig. 5



Reprinted from Weekly Weather and Crop Bulletin - December 8, 1992



One hundred forty-six tornadoes were reported nationwide in November 1992, of which three crossed state borders. Most of the tornado activity was confined to the Gulf Coast through the Southeast and lower Ohio River Valley. Fifty-one of the 146 tornadoes were rated at or greater than F2 intensity (winds greater than 112 mph) as defined by the Fujita Tornado Scale. The month's strongest tornadoes, seven F4's (with winds from 207 to 260 mph), struck Kentucky, Georgia(2), Mississippi(2), and Texas(2). The state of Louisiana led the nation with 30 tornadoes for the month. Twenty-six people were killed by the 146 tornadoes. Twelve of the 26 deaths resulted from an F4 tornado in Mississippi.



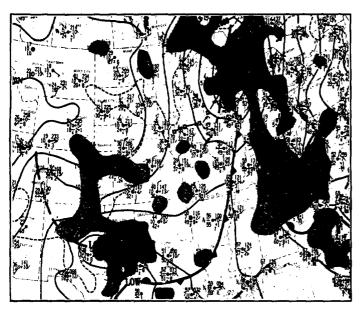
OUTSTANDING STORMS OF THE MONTH

1. TORNADOES STRIKE THE SOUTHEAST LATE IN NOVEMBER

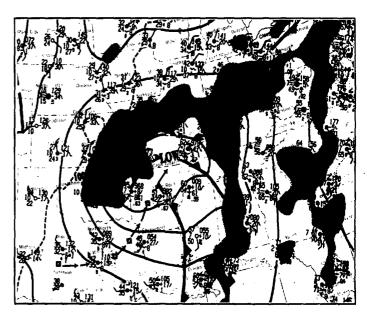
A powerful storm system formed in Texas and moved northeast to the Great Lakes November 21 through the 23rd. The low pressure system and associated cold front brought severe weather to most of the Southeast, Indiana, and Ohio. The tornadoes and severe weather struck Texas, Mississippi, and Louisiana on November 21 and the 22nd. States further east and north were affected on the 22nd.

A total of six F4 tornadoes, as defined by the Fujita Tornado Scale, struck Mississippi(2), Texas(1), Georgia(2), and Kentucky(1). Sixteen deaths and 212 injuries resulted from the F4 tornadoes. Overall, twenty-six people died with over 600 people injured due to the tornadic storms. (See tables below.)

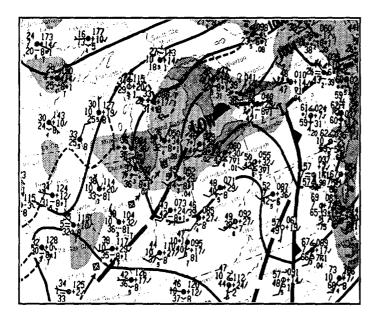
DEATHS											
<u>STATE</u>	<u>F1</u>	<u>F2</u>	<u>F3</u>	<u>F4</u>							
North Carolina			2								
South Carolina			1								
Kentucky				1							
Georgia			1	5							
Mississippi	2	1		12							
Tennessee	1										
Total	3	1	4	18							
	INЛ	JRIES									
<u>STATE</u>	<u>F1</u>	<u>F2</u>	<u>F3</u>	<u>F4</u>							
North Carolina	13		59								
South Carolina			9								
Ohio			21								
Louisiana		4	19								
Kentucky				9							
Georgia	1	4	7	132							
Mississippi	6	16	105	142							
Texas	1	17	1	15							
Tennessee	3										
Alabama		42									
Total	24	83	221	298							



November 21, 7:00 a.m. EST.



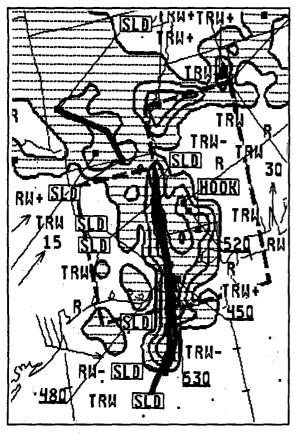
November 22, 7:00 a.m., EST.



Maps provided by NOAA, Climate Analysis Center, Washington, D.C., surface weather maps, Weekly Series November 16 - 22, 1992 and Weekly Series November 23 - 29, 1992.

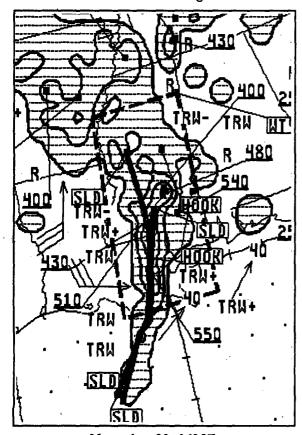
November 23, 7:00 a.m. EST.

RADAR SUMMARY CHARTS FOR NOVEMBER 22

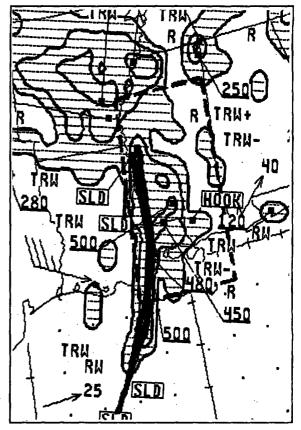


November 22, 0435Z

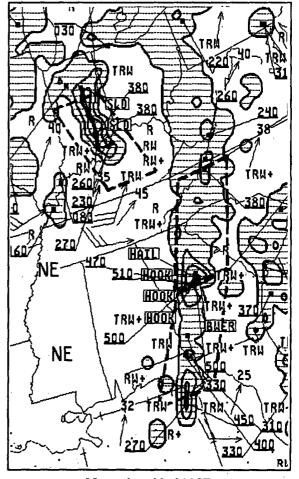
HOOK = Possible tornado formation, SLD = Solid, BWER = Bounded Weak Echo Region



November 22, 0635Z



November 22, 0535Z



November 22, 2135Z

A. SOUTH CAROLINA

As the severe weather moved through South Carolina during the evening of the 22nd, four tornadoes touched down. The strongest tornado, rated as an F3, killed an 81-year old man in his home. Another person was injured. (See pictures below.) The storm also damaged large areas of woodlands in and around the Sumter National Forest. In all, the tornadoes destroyed 14 homes, 10 mobile homes, and 5 businesses. Numerous frame homes and mobile homes sustained damage. Other notable damage reports included a car and truck that were thrown into a nearby field despite being parked in a garage. An A-frame house was also moved off its foundation!



Left and below: This home located near the intersection of S.C. Highway #395 and secondary road #56 was destroyed by the F3 tornado. (Photo courtesy: Neal Lott, National Climatic Data Center, Asheville, North Carolina.)





B. NORTH CAROLINA

Severe weather moved into North Carolina during the evening of the 22nd and the early morning hours of the 23rd. Five tornadoes (3 F1's, 2 F3's) struck the state killing two and injuring 72 others. One of the F3 tornadoes, moved through the western and northern sections of Hillsborough, including the Fairview subdivision, during the early morning hours of the 23rd. The tornado reached its greatest intensity while the damage path was nearly three-quarters mile wide along Highway 70, west of Hillsborough. The damage path narrowed to 200 yards in the Fairview subdivision. Fifty-three homes and one business were destroyed, with 109 homes and one business damaged. Property damage was estimated at two million dollars. The fatalities occurred when the tornado reached its maximum intensity. Ten injuries occurred in the Fairview subdivision. (See photographs below.) The other F3 tornado touched down in eastern Harnett County and remained on the ground for a lengthy three hours and fifteen minutes. During that time, it traversed 160 miles through eight other counties in northeastern North Carolina. Fortunately, there were no deaths, but 49 injuries did result from the tornado.



photographs were taken on the morning of the 23rd in the Fairview subdivision. Right: A sustained woman several fractures when her mobile home was thrown against some nearby trees. Left: The tornado took the roof off this home and scattered it across the ground. Below (left): This mobile home was totally destroyed. Below (right): The tornado's F3 winds, (158 and 206 mph),



also destroyed this mobile home. (Photographs supplied and courtesy of Rod Gonski, WPM, NWSFO Raleigh, North Carolina.)





2. HEAVY SNOWS OVER THE CENTRAL ROCKIES

Two major snowstorms struck portions of Utah, Colorado, and New Mexico on November 18 through the 24th. Heavy snow and blizzard conditions blanketed the area. Snow amounts are given below for selected locations in the area.

A. NOVEMBER 18 - 21

A large mass of Canadian air moved through the Southwest U.S. at the same time an upper level storm approached the area from the Pacific Northwest. Snow amounts ranged from a couple of inches to more than 20 inches in several locations in Colorado. In Utah, the greatest snow amounts were in the northwest portion of the state where lake effect and orography increased snowfall in the mountains downwind of the Great Salt Lake. Generally, snow amounts in the affected regions ranged from 13 to 26 inches. The heaviest snow amounts in New Mexico fell in the Central Mountains with snowfall generally in the four to eight inch range. Albuquerque, New Mexico recorded five inches of snow, half their average annual amount!

B. NOVEMBER 22 - 24

A very strong upper level system moved over the Four Corners region from the Pacific Northwest. As the system moved into northern New Mexico, a strong cold front and associated surface low pressure system developed in eastern Colorado, producing strong uplsope conditions on the 23rd. Whiteout conditions developed in northeast Colorado with visibilities often below one-quarter mile. Snow drifts of over 4 feet were common. Greatest snow amounts were about twenty inches. In Utah, the snowfall was phenomenal. Alta ski resort set a new 24-hour state snowfall record of 45 inches, with a storm total of 54 inches! Most locations received only 10 to 26 inches of snow, but favored locations in the Wasatch Mountains received 37 to 54 inches.

	SNOW TO	OTALS		
	ľ	November	November	Storm
		18 - 21	22 - 24	Total
UTAH				
Alta		27	54	. 81
Snowbird		25	50	75
Solitude		13	45	58
Bountiful		16	19	35
Olympus		16	15	31
COLORADO				
Buckhorn Mountain		19	18	37
Boulder		13	21	34
Mt. Evans Research Station		21	12	33
Lake Eldora		12	18	30
Castle Rock		12	16	28
Gross Reservoir	. *	13	13	26
Strontia Springs Dam		12	14	26

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		nber of rsons Injured	D	imated amage rty_Crops	November 1992 Character of Storm
ALABAMA									
Mobile County	01	2100CST			0	0	5	?	Thunderstorm Winds
	Seve mic	ere thunderst rowave relay	orm winds tower wa	s took a ro s destroye	of off o d 7 mil	of a buil es north	lding a	t the Mo	obile Regional Airport. Also, a obile Regional Airport.
Houston County	02	0245CST			0	0	4	0	Thunderstorm Winds
	Thu	nderstorm w	inds dama	ged a pear	nut trail	er in the	e Wick	sburg v	icinity.
Dale County	02	0245CST			0	0	?	0	Thunderstorm Winds
,	Pow	ver lines wer	e blown do	own by thi	understo	orm win	ds in t	he Midl	and City vicinity.
Henry County 3 SW Abbeville to 1E Abbeville	04	0312CST	5	50	0	0	6	0	Tornado (F1)
	torn	ornado touch ado continue n equipment	ed northeas	outhwest o st destroyi	of Abbe ng two	ville and storage	d infli build	cted stru ings and	ctural damage on a home. The causing extensive damage to a
Dallas County	04	0620CST			0	0	5	0	Thunderstorm Winds
	Thu	nderstorm w	inds tore t	he roof of	fofas	hopping	cente	r in Seln	na.
Mobile County 5 NNE Mobile Semmes 4 S Mobile	04 04 04	0655CST 0700CST 0710CST			0 0 0	0	4 3 3	0 0 0	Thunderstorm Winds Thunderstorm Winds (G51) Thunderstorm Winds
	win	nobile home od ds unroofed a enhouse soutl	ı baseball d	lugout at N	indersto Mary G.	rm wind High S	ds in tl chool	he Satsui in Semm	ma vicinity. Also thunderstorm es and damaged a boat shed and
Baldwin County 20 E Mobile	04	0740CST			0	0	?	0	Thunderstorm Winds
20 E Mobile	• •		ra blassm a	laum hu th	•	•	•	-	nish Fort community.
Mobile County	3646	ciai tiecs we	ie biowii c	lown by u	iuliacis	юш wi	nas m	ine Spai	msn Port community.
5 NNE Mobile	04	0750CST			0	0	4	0	Thunderstorm Winds
	Thu	nderstorm w	inds unroc	fed a mob	ile hon	ne a Bell	lingrat	h Garde	ns.
Baldwin County	0.4	00 <i>450</i> 00			^	0	•		701 . F . A 387 3
5E Summerdåle	04	0845CST			0	0	?	0	Thunderstorm Winds
		umber of ca imerdale.	rs were da	amaged an	id sevei	rai trees	blow	n down	by thunderstorm winds east of
Butler County	04	0900CST			0	0	?	?	Thunderstorm Winds
	Seve struc	eral trees we ctural damag	re uproote e.	ed and sna	pped in	the cit	y cent	er. Also	o two buildings received minor
Pike County	04	1050CST			0	0	4	?	Thunderstorm Winds
	Ар	nderstorm wortion of the mated at \$40	e roof land	alarge por ded in a p	rtion of parking	the roo lot dan	of off onaging	of Smith three c	Hall at Troy State University. ars. Damage to the roof was
Geneva County Coffee Springs	12	1410CST			0	0	4	0	Tornado (F0)
	A sr a sc	nall tornado oreboard was	touched do s blown do	own in the own at a fo	Coffee ootball	Springs stadium.	s vicin	ity. Nu	nerous trees were snapped, and

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		nber of sons Injured	D٤	imated image ty Crops	November 1992 Character of Storm
ALABAMA Cont	'd								
Houston County 6 WSW Dothan	12	1445CST	0.5	25	0	0	4	0	Tornado (F0)
		nall tornado to damage to tw							d downed trees and caused major
Marengo County Linden	21	1640CST			0	0	3	0	Thunderstorm Winds
	Tree Also	es and power o, a home in L	lines wer Linden rec	e downed eived roo	by thu f damag	indersto ge due t	rm wi	nds at v wind.	various locations in the county.
Sumter County 2 N Geigor Panola	22 22	0330CST- 0400CST	6	100	0	0	6	?	Tornado (F2)
	Pano	ola vicinity. 🛭 🗚	A total of:	five mobil	le home	s were	destroy	yed alon	eveled northwest, ending in the g the track. Also, a church was image in Panola.
Pickens County Ethelsville	22	0330CST	2	125	0	7	6	0	Tornado (F2)
	A to appr hom	oximately 2 n	d down b niles. A	riefly 2 n total of 6	niles so mobile	outh of homes	Ethels were	ville and destroye	d skipped north northeast from ed. All injured were in mobile
Choctaw County 12 SE Butler	22	0400CST			0	0	4	0	Thunderstorm Winds
	Thu	nderstorm win	ids damag	ed a mob	ile hom	e and d	owned	trees in	the Ararat vicinity.
Pickens County Gordo	22	0400CST			0	0	4	0	Thunderstorm Winds
	Seve	ere thundersto	rm winds	damaged	a chick	en hous	se and	a large	utility building.
Lamar County	22	0445CST			0	0	0	0	Thunderstorm Winds
	Nun	nerous trees w	ere blowr	down in	the Mt	. Olive	vicini	ty.	
Walker County Oakman to Burrows Crossing	22 22	0518CST- 0535CST	10	45	0	0	6	0	Tornado (F1)
S	A to Burn	rnado touched ows Crossing	l down in , east of J	the Oakm	nan vici total o	nity and f 35 str	d skipp ucture:	ed nortl	neast for about 10 miles to near ither damaged or destroyed.
Bibb County 17 NE Centreville	22	0542CST			0	0	?	0	Thunderstorm Winds
	Nun	nerous trees w	ere blowr	down ac	ross hig	ghway 1	0 near	the Bib	bb/Shelby County line.
Cullman County Cullman	22	0600CST			0	0	?	0	Thunderstorm Winds
	Thus	nderstorm win ullman.	ds downe	d numero	us trees	and po	ower I	ines, and	d damaged buildings in the city
Morgan County Cole Springs	22	0614CST			0	0	?	0	Thunderstorm Winds
	Nun		ere blowr	down by					Cole Springs vicinity.
Morgan County 3 SW Eva to 3 NE Eva	22	0620CST	6	18	0	0	5	0	Tornado (F0)

		Time Local/	Path Length	Path Width	Pers		Estima Dama Property	ated age	November 1992
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm
ALABAMA Cont'	d								
		nall tornado tou ough a roof wa							mainly to various out buildings damaged.
Dallas County	22	0645CST			0	0	?	0	Thunderstorm Winds
	Num	erus trees wer	e blown d	lown by th	nunder	storm w	inds in	the Su	mmerfield vicinity.
Madison County 3 SW New Hope 3 NE New Hope	22	0655CST	6	100	0	5	6	0	Tornado (F2)
	move	ed into Madiso	on County es receive	producing d varying	g a stro amoun	onger to	rnado v image.	vhich to Eleven	community of Morgan County ouched down in the New Hope i mobile homes were destroyed es.
Chilton County	22	0710CST			0	0	?	0	Thunderstorm Winds
	Thur	nderstorm wind	ds downed	numerou	s trees	in diffe	erent loc	ations	across the county.
Talladega County	22	0745CST			0	0	?	0	Thunderstorm Winds
	Seve	ral trees were	downed b	y thunder	storm '	winds ii	n the cit	y of Ta	alladega.
DeKalb County 3 SW Rodentown	22	0810CST			0	0	?	?	Thunderstorm Winds
	Num	erous trees and	d power li	nes were	downed	d by thu	ındersto	rm win	ds in the community of Arona.
Coosa County 2 N Rockford	22	0820CST			0	0	4	0	Thunderstorm Winds
	Thun	derstorm wind	ls damage	d two hor	nes, bl	ew a ro	of off o	f a bar	n, and overturned a truck.
Etowah County and									
DeKalb County Sardis City to 8 NE Ider	22 22	0820CST- 0900CST	40	100	0	25	7	?	Tornado (F2)
	City. of Degreat wom before varyi	The tornado seKalb County. est. The torn an was trapped the leaving the	skipped to Its path t ado contind in her of county and damage,	the norther ook it through north overturned distate appared and 17 week	east for ough Re heast n mobil proxim	approxodentow lear the e home ately 8	imately vn, Cros Rainsv . The miles n	40 mil sville a ille con tornado ortheas	y two miles northeast of Sardis es along the Sand Valley region and Dawson where damage was munity to Henagar where a passed near the town of Ider at of Ider. 133 homes received ther damage was to various out
Tallapoosa County	22	0845CST			0	0	0	0	Hail (1.00)
	One-	inch-diameter	hail fell in	Alexand	er City	•			
Jackson County	22	0847CST			0	0	4	0	Thunderstorm Winds
		ouse and barn lerstorm winds		naged and	l nume	rous tr	ees wer	e down	ned in the Skyline vicinity by
Randolph County and Tallapoosa County 13 ENE Alexander City to Wadley	22	0850CST 0910CST	17	50	0	5	6	?	Tornado (F1)
	for a Most amou	pproximately of the damag	17 miles a e occurred	ind ended I in Wadle	in the ey whe	Wadley re 3 ho	vicinit mes we	y of So re dest	ilitary Park, skipped northeast outhwestern Randolph County. royed and 40 received varying or destroyed. All injured were

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		iber of sons Injured	Dan	nated nage y Crops	November 1992 Character of Storm
LACAUON	Date	Stantiard	(IVIIICS)	(14.08)	Kilicu	Injuica	riopeit	у стора	Character of Stories
ALABAMA Cont	'd								
Cleburn County 7 N Hollis Crossroads	22	0910CST		0	1	5	?	Thur	nderstorm Winds
		nderstorm wi ived major ro							ssroads area. Also, one home
Tallapoosa County 3 N Jacksons Gap	22	0925CST		0	0	5	0	Thur	nderstorm Winds
	Seve	eral homes sus	stained ro	of damage	e from t	hunders	storm w	/ind.	
Cleburn County 3 N Hollis Crossroads to 7 N Hollis Crossroads	22	0930CST	10	50	0	0	5	0	Tornado (F1)
	Hig	veak tornado hway #9. Mo a barn were d	st of the d	lamage wa	rth of H as to tree	Hollis C es, altho	Crossroa ough tw	ads and o home	I moved north northeast along s, a trailer, two chicken houses,
Lee County NW Portion 3 S Opelika	22 22	1025CST 1030CST			0	0	3 ?	?	Thunderstorm Winds Thunderstorm Winds
	the	ome received northwest pornity.	minor da rtion of t	mage and he county	numero . Also	ous trees , nume	s were to	blown ees we	down by thunderstorm winds in re blown down in the Opelika
Russell County 2 N Phenix City	22	1302CST			0	0	?	?	Thunderstorm Winds
	Nun Phe	nerous trees, l nix City.	large limb	os, and po	wer line	es were	blown	down 1	by thunderstorm winds north of
Baldwin County Bon Secour	24	0500CST	2.5	50	0	1	4	0	Tornado (F1)
	A wand	eak tornado b another overt	riefly toud urned.	ched down	in the l	Bon Sec	our vic	inity. (One mobile home was destroyed
Baldwin County 1 S Foley	24	0510CST			0	0	4	?	Thunderstorm Winds
	Two	mobile home	s were da	amaged al	ong wit	h two "	A" fran	ne struc	ctures in the Foley vicinity.
Houston County 3 E Dothan	24	0845CST			0	0	?	?	Thunderstorm Winds
	Seve	eral trees were	downed	by thunde	erstorm	winds a	long H	ighway	#12, 3 miles east of Dothan.
Butler County	25	0133CST			0	0	?	?	Flash Flood
	Stree Gree	et flooding o enville.	ccurred i	n Greenv	ille and	flash	floodin	ig wash	ned out state Highway #10 in
Crenshaw County	25 25	0210CST- 0449CST			0	0	?	?	Flash Flood
	Wid due	espread flash to heavy rains	flooding s. Three	occurred i families v	in the L vere eva	uverne cuated	vicinity from th	y. Nun leir hor	nerous streets were under water nes due to the high water.
Lee County	25 25	0330CST- 0430CST			0	0	?	?	Flash Flood

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		nber of sons Injured	Da	imated mage ty Crops	November 1992 Character of Storm
ALABAMA Cont'	d					٠			
	Flas	h flooding fro under water.	om heavy	rains occu	ırred ir	the Au	ıburn a	ınd Ope	lika vicinity. Numerous streets
Macon County	25 25	0330CST- 0430CST			0	0	?	?	Flash Flood
Chambers County	Nun 25	nerous streets 0400CST	were floo	oded in the	city o	f Tuske; 0	gee.	?	Flash Flood
	Nun	nerous roads v	vere unde	r water in	Lafaye	tte and l	Lanett	due to f	lash flooding from heavy rains.
Covington County	25 25	0430CST- 0600CST			0	0	?	?	Flash Flood
	Flas	h flooding res	sulted in n	iumerous i	oad cle	osings a	cross t	he coun	ty.
Bullock County	25	0440CST			0	0	?	?	Flash Flood
	Flas	h flooding fro	m heavy	rains was	reporte	d in the	city c	f Union	Springs.
Pike County	25 25	0630CST- 0715CST			0	0	?	?	Flash Flood
	brid	ges on county							ng in the Saco vicinity. Also, water.
Russell County	25 25	0700CST 0900CST			0	0	?	?	Flash Flood Flash Flood
	place	nerous roads v es. Also, nur creek.	were repo nerous ho	rted under mes along	the U	across chee Cr	the co eek rea	unty. S eived m	Some roads were washed out in najor damage due to flooding of
ARIZONA		•							
Yavapai County									
Chino Valley	10	1530MST			0	0	0	0	Hail
	Pea-	size hail fell l	oriefly du	ring a thur	ndersto	rm.			
Maricopa County 22 NW Phoenix	10	1538MST			0	0	0	0	Heavy Rain
	A ha	alf of an inch	(0.50 incl	h) of rain	fell in	twelve 1	ninute	s.	
Pinal County Apache Junction	10	1615MST			0	0	0	0	Heavy Rain
	Clos	e to a half of	an inch (0.46 inch)	of rain	n fell in	thirty	minutes	•
Maricopa County Phoenix	20	1345MST			0	0	?	0	Strong Winds
		fteen foot tall moving cold i		blown dov	vn by e	stimated	l wind	gusts be	etween 40 and 45 mph behind a
ARKANSAS									
Carroll County Green Forest	01	0230CST			0	0	0	0	Hail (1.75)
Lafayette County	03	1420CST			0	0	0	0	Hail (1.75)
4 NE Bradley Columbia County Magnolia	03	1435CST			0	0	0	0	Hail (1.75)
Columbia County 3 W Macedonia	03	1448CST			. 0	0	3	0	Thunderstorm Winds

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		aber of sons Injured	D	imated amage ty Crops	November 1992 Character of Storm
ARKANSAS Con	t'd								
	Thu	nderstorm wi	nds knock	ed down s	several	trees.			
Columbia County 8 SE Magnolia	03	1523CST			0	0	0	0	Hail (1.75)
Union County Mt. Holly	03	1530CST			0	0	0	0	Hail (1.75)
Union County Smackover	03	1537CST			0	0	0	0	Hail (0,88)
Ashley County 5 W Hamburg	03	1800CST			0	0	4	0	Thunderstom Winds
		nderstorm wi n fallen trees.	nds blew	down nun	nerous (rees.	Severa	l mobile	homes received minor damage
Desha County McGehee	21	2230CST			0	0	3	0	Thunderstorm Winds (G43)
	Thu	nderstorm wi	nds tore s	ome sheet	metal o	off seve	ral roo	ofs.	
Arkansas County Stuttgart	22	0039CST			0	0	5	0	Thunderstorm Winds
	roof	nderstorm wi and window dings were da	/ damage.	red down : A mobi	a numb le hom	er of tr e was	ees an moved	d power off its	lines. Several homes received foundation and several storage
Prairie County 1 W Fairmount	22	0039CST			0	0	5	0	Thunderstorm Winds
	A n	aircraft was umber of tree dings near the	es and po	wer lines	were al	lso blov	dama wn do	ge by the	understorm winds at the airport. farm house and several storage
Sebastian County Greenwood	22	0200CST			0	0	3	0	Thunderstorm Winds
	Thu	nderstorm wi	nds down	ed several	trees as	nd pow	er line	s.	
Craighead County 5 NW Cash	22	0239CST			0	0.	4	0	Thunderstorm Winds
	Thu	nderstorm wi	nds blew	down two	large u	tility lii	nes.		
CALIFORNIA, N	orthe	ern							
	Non	e reported.				1 -			
CALIFORNIA, S	outhe	ern							
CAZALL	03	1745PST			0	0	?	0	High Winds
	and Sand near	below passes lberg, 42 mp	and cany h at El To reported	ons in the oro, 39 m	coasta oh at Po	l areas. oint Mu	Som igu an	e report d 35 mp	nta Ana winds, in the mountains ed wind gusts were, 45 mph at h at Riverside. A wind gust of lany other areas had wind gusts
CAZALL	18	2000PST			0	0	?	0	High Winds
	cany	ty northwest ons. Wind g es reduced vi	ust from 1	30 to 40 m	ıph wer	e comn	in are ion. E	as and o	coastal areas below passes and dust and sand in some mountain

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pers Killed	ber of ons Injured	Estim Dam Property	age	Character of Storm	November 1992
COLORADO Nov COZ002-004-008- 010-012-014-015 Mountains, Front Range, Northeast Plains, Pikes Peak/Palmer Divide and Southern Foothills	01- 02	0000MST- 2400MST			?	?	2	0	Heavy Snow	
	The	winter storm	which hed	ran on Ha	llowee	n eve c	ontinue	d thro	ugh the first c	ounle of days of

The winter storm which began on Halloween eve continued through the first couple of days of November. The mountains were the hardest hit areas with snowfalls ranging from just a couple of inches to over a foot and half. Mountain snow totals during the 1st and 2nd included 20 inches at Arapahoe Basin ski area; 18 inches at Gothic ski area and Red Mountain Pass; 17 inches at Berthoud Pass; 16 inches at Monarch ski area and the town of Klondike (near Eldorado Springs); 14 inches at Leadville; 12 inches at Steamboat Springs; 11 inches at Divide, Doubleheader and Winter Park; 8 inches Conifer, Empire and Bailey; 7 inches at Silverton and Colorado Sierra; and 6 inches at Lake City, Rollinsville and Loveland ski area.

The eastern plains and foothills received snow amounts of up to 9 inches, including 9 inches at Fort Collins; 6 inches at Golden Gate Canyon; and 4 inches at Denver, Morrison, Nunn, Wheatridge and Aurora.

Two mountain climbers (both male) were lost in an avalanche at Flat Top mountain in Rocky Mountain National Park. The heavy snow contributed to the snow slide.

COZ002-003-004-006-007-008-010-015 Mountains, Four Corners, Upper Arkansas Valley, West Central Valleys, Southern Foothills

08- 0000MST-10 1800MST ? ? ? Heavy Snow

An upper level storm moved over the Great Basin to the Four Corners region and produced heavy snow for a large portion southern Colorado. The storm began early on the 8th and intensified rapidly across the mountains. By the evening of the 10th, the storm had dropped up to two feet of snow in some mountain areas. High country snowfall totals included 25 inches at Snowmass ski area; 18.5 inches at Gothic ski area; 17.5 inches at Red Mountain Pass; 16 inches at Telluride; 14.5 inches at Vail; 14 inches at Aspen; 13.5 inches at Winter Park; 13 inches at Wolf Creek; 12.5 inches at Irwin ski area; 12 inches at Loveland and Avon ski areas; 11.5 inches Berthoud Pass; 10 inches at Steamboat Springs; 9.5 inches at Bear Lake; 9 inches at Silverton, Empire, and Fraser; 8.5 inches Beaver Creek; and 8 inches at the Eisenhower Tunnel on Interstate 70. In the lower elevations, snowfall amounts of more than half a foot were reported, including 9 inches at Rye; 7 inches at San Isabel; 6 inches at Montrose; 5 inches at Eagle and Beulah; and 3 inches at Eckert and Salida.

COZ001-002-003-004-005-006-007-008-009-010-011-012-013-014-015-016-017 Statewide 18- 0000MST-21 1800MST

? ? ? Heavy Snow

A large mass of Canadian air moved through Colorado on the 18th at the same time an upper level storm from the west approached the state. The combination of cold air at the surface and very moist air aloft produced heavy snow across the entire state. The snow started in the west and mountains on the 18th and continued in the mountains through the 20th. The eastern plains and foothills began receiving snow on the 20th when upslope conditions developed. The storm began winding down early on the 21st with skies clearing over most of the state by that evening. By the end, the mountains had received snow from a couple of inches to over a foot. Mountain snowfall totals included 16 inches at Bear Lake; 15 inches at Allens Park and Divide; 14 inches at Klondike, Wondervu, Ouray and Lake Isabel; 13 inches at Aspen Springs, Conifer, Gross Reservoir and Cuchara; 12 inches at Lake Eldora, Irwin and Monarch ski areas and at Colorado Sierra and LaVeta

		Time	Path	Path	Number of	Estimated	November 1992
		Local/	Length	Width	Persons	Damage	
Location	Date	Standard	(Miles)	(Yards)	Killed Injured	Property Crops	Character of Storm

COLORADO Cont'd

Pass; 11 inches at Wolf Creek; 10 inches at Woodland Park; 1 inches at Poudre Park, Rustic, Sunlight ski area and Ironton; 8 inches at Red Mountain Pass and Rollinsville; and 7 inches at Berthoud Pass, Arapahoe Basin and Doubleheader. The lower elevations also received snowfalls of over a foot including 22 inches at Rye; 15 inches at Monument; 14 inches near Loveland; 13 inches at Fort Collins, Boulder and Hourglass Lake; 12 inches at Castle Rock, Beulah and Red Feathers Lake; 10 inches at Golden Gate Canyon, in Loveland and Morrison; 9 inches at Wellington and Colorado Springs; 8 inches at Eaglecrest, Kiowa, Longmont, Berthoud, Windsor, Palmer Lake, Stratton and Eastonville; 7 inches at Greeley, Pueblo and Trinidad; 6 inches at Denver, Brighton, Limon and La Junta; and 5 inches at Stonington, Cañon City and Joes.

COZ001-002-003-004- 22- 006-007-008-010- 24 -016-017 West, Mountains, Upper Arkansas Valley, Southeast Plains and Border	0000MST- 1200MST	?	?	?	?	Heavy Snow
COZ011-012-013-014- 22- 015 23 Front Range, Northeast Plains and Border, Pikes Peak/Palmer Divide and Southern Foothills	0900MST- 0600MST	0	1	?	?	Blizzard Heavy Snow

A very strong storm system moved rapidly from the Pacific Northwest to the Four Corners region, producing heavy snow for most of the state. The snow began on the 22nd in the mountains and west, dropping as much as a foot and half of snow over the mountains before ending early on the 24th. As the upper system moved into northern New Mexico, a strong cold front and associated surface low pressure system developed in eastern Colorado, producing strong upslope conditions on the 23rd. Dubbed by local media as "the pre-Thanksgiving blizzard", gusty north to northeast wind of 30 to 40 mph caused near whiteout conditions across much of the northeast. Visibilities were often below one-quarter mile. Snow drifts of over 4 feet, especially along the Front Range were common. Hundreds of holiday travelers found themselves stranded at Denver Stapleton Airport as airlines canceled flights. A 45-year old woman in Black Forest suffered from hypothermia when she fell in a snow drift outside her home. Blizzard conditions began around midmorning on the 23rd and ended by mid-afternoon but heavy snow continued to fall through the night.

Mountain snowfall amounts included 18 inches at Lake Eldora and Buckhorn Mountain; 15.5 inches at Poudre Park; 15 inches at Snowmass ski area; 12 inches at Conifer and Doubleheader; 11 inches at Steamboat Springs and Aspen Mountain; 8 inches at Empire, Vail and at Henderson and Sunlight ski areas; 7 inches at Aspen Highlands, Breckenridge and Telluride; and 6 inches Klondike, Loveland and Arapahoe Basin ski areas, Saint Paul and Copper Mountain ski areas, Cedaredge and Wolf Creek. In the lower elevations, mainly in eastern Colorado, snow totals included 19 inches at Littleton; 17 inches at Trinidad and Horsetooth Reservoir; 16 inches at Castle Rock; 12 inches at Morrison, Kiowa, Wheatridge, Rye and Loveland; 10 inches at Eaglecrest, Fleming and the Hohnholz Ranch; 9 inches at Longmont, Brighton and Berthoud; 8 inches at Aurora, Fort Collins, Eaton and Greeley; 7 inches at Denver Stapleton Airport; and 6 inches at Nathrop and Parker.

COZ002-004-008-09-010-011-012-013-014-015 Mountains, San Luis Valley, Front Range, Northeast Plains and Border, Pikes Peak/ Palmer Divide and Southern Foothills 8- 1200MST-9 1800MST ? ? ? Snow

An upper level storm moved over Colorado and dusted most of the state with a few inches of snow. The higher snowfall totals occurred on the east slope of the mountains. Overall, amounts were less than 10 inches with 8 inches falling at Doubleheader and Conifer; 7 inches at Rye and Cuchara; 6

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		nber of sons Injured	Estin Dan Property	nated nage / Crops	November Character of Storm	1992
COLORADO Con	t'd									
	inche in th areas	e extreme No: s, Aspen Sprir	rtheastern 1gs, Allen	Border a s Park, C	rea; 4 i Colorado	inches a o Sierra	at Mary and Ca	Jane, I añon C	ern Mountains and at Sedg Loveland and Beaver Cree ity; and 3 inches at Bear I ski area and Walsenburg.	k ski Lake,
COZ002-011 Northern and Central Mountains and Front	30 Range	1500MST- 2400MST e			0	0	3	?	High Winds	
	at mi static an ir cause	id-afternoon wons reported grach and half o	vith a 100 usts of 70 of gravel i zards in m	mph gust to 90 mp from a di any areas	at the h. A rriveway	mesone esident and b	t station reported lew dov	n on Fr d wind wn seve	O mph. The strong winds be itz Peak. Several other me estimated at 100 mph remeral storage sheds. The version producing low visibilities versions.	sonet noved winds
CONNECTICUT									•	
CTZALL Statewide	13	0000EST- 0400EST			0	0	?	0	High Winds	
	peak arou	gust to 77 m	ph was re Other gus	corded at ts recorde	the 25 d by th	story e Natio	level of onal We	a dow	sand homes across the state intown Hartford office build ervice included: Bridgepor 38EST.	lding
CTZ002-004-005 Southwest Quarter	23	0000EST- 0530EST			0	0	4	0	Heavy Rain	
	South	hington resulti	ng in seve central and	ral detour I southern	rs for ea Conne	arly mo ecticut c	rning m luring a	otorists 24 hou	d several roads in Merider s. Up to 3.50 inches of rain ir period. Early morning of	n fell
DELWARE										
DEZALL	12	0100EST			0	0	3	0	High Wind	
	dama	ge was scatter	red throug power lin	ghout Del les and tr	aware. ees wei	New	Castle (Co. hac	ing winds ahead of it. Mail a few areas with trees be clayton and Harrington of	lown
FLORIDA										
Escambia County 2 NNE Pensacola	01	2350EST			0	0	3	0	Thunderstorm Winds	
		nburst winds d ral trees were							verturned a bus at Ellyson F of Ellyson.	ield.
Escambia County 6 SW Pensacola	01	2350EST			0	0	3	0	Thunderstorm Winds	
	Stron	g thunderstori	m winds b	lew down	n a tree	onto a	house a	and rip	ped down a sign.	
Escambia County Beulah	01	2358EST			0	0	0	0	Thunderstorm Winds	
	Stron	g thunderstori	n winds b	lew down	severa	al trees	in Beul	ah.		
Santa Rosa County 2 SW Milton	02	0020EST			0	0	4	0	Thunderstorm Winds	
	Stron dama	g thunderstori ge and one wa	m winds j as blown d	peeled th	e roof indation	off an near C	asphalt Falt. Ti	plant. rees fel	Two mobile homes suffl on two other homes.	fered

	ъ.	Time Local/	Path Length (Miles)	Path Width	Pen	nber of	Da	mated mage	November 1992
Location	Date	Standard	(Mues)	(Yards)	Killed	Injured	rropen	y Crops	Character of Storm
FLORIDA Cont'd									
Bay County Panama City	02	0300EST			0	0	2	0	Thunderstorm Winds
	Stro	ng thundersto	rm winds	blew seve	ral tree	s down	across	power	lines in Panama City.
Gulf County 15 SE Panama City	02	0355EST			0	0	0	0	Hail (0.75)
•	Mar	ble-size hail i	fell near B	eacon Hil	1.				
Franklin County 8 E Apalachicola	02	0500EST	short		0	0	4	0	Waterspout Tornado (F0)
	A w	vaterspout mo f off an adjace	ved onsho ent welding	re near Ea g shop.	astpoint	damag	ing a r	narine s	supply store roof and lifting the
Franklin County 24 ENE Apalachicola	02	0520EST			0	0	2	0	Thunderstorm Winds
•	Stro	ng thundersto	rm winds	knocked o	down tr	ees in I	anark	Village	and Carabelle.
Wakulla County	,								
South Portion	02	0615EST			0	0	2	0	Thunderstorm Winds
	Stro	ng thundersto	orm winds	knocked o	down tr	ees nea	r Pana	cea.	
Escambia County Pensacola	04	1005EST			0	0	2	0	Thunderstorm Winds (G58)
		nderstorm wi mobile.	nd gusts t	to 67 mph	down	ed trees	in Pe	nsacola.	One tree damaged a moving
Santa Rosa County 25 N Pensacola	04	1015EST			0	0	4	0	Thunderstorm Winds
	Stro	ng thundersto	rm winds	destroyed	two la	rge bari	ns and	downed	several trees south of Jay.
Okaloosa County				•		Ū			•
Crestview	04	1130EST			0	0	0	0	Funnel Cloud Thunderstorm Winds
	A fi	unnel cloud w iderstorm win	as observe ds blew d	ed near the	e Crest al trees	view A	irport.	It did 1	not touch down although strong
Gulf County	0.4	4#0070070			•	0	_	•	
22 E Panama City		1700EST		mantad thum	0	0 a abada	5 hlove	0	Thunderstorm Winds
		in Wewahitch		ported thi	ee large	e sneus	DIOWN	over an	d one shed with its roof blown
Frankin County	•	4-6-77-6-7			_	_		_	
9 E Apalachicola	04	1735EST			0	0	0	0	Thunderstorm Winds
	Stro	ng thundersto	rm winds	snapped s	everal	large tre	ees in l	Eastpoin	it.
Citrus County Central Portion	05	0945EST			0	0	0	0	Thunderstorm Winds
	Stro	ng thundersto	rm winds	blew dow	n trees	and del	bris on	to a roa	d in central Citrus County.
Levy County								.*	•
26 SSW Gainesville	05	1000EST			0	0	2	0	Thunderstorm Winds
	Stro	ng thundersto	rm winds	downed to	rees and	i power	· lines i	in Morr	iston.
Citrus County 51 S Gainesville	05	1030EST			0	0	0	0	Thunderstorm Winds

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Nu Pe Killed	mber of rsons I Injured	Esti Da Proper	imated image ty Crops	Character of Storm	November 1992
FLORIDA Cont'o	ì									
Hernando County		ong thundersto	rm winds	downed t	rees ne	ar Inve	rness.			
Hernando Beach	05 A si	1100EST mall tornado t	short ouched do	own briefl	0 y along	0 Hernai	0 ndo Bea	0 ach with	Tornado (F0 n no damage re	
Pasco County 28 NNW Tampa	05	1102EST			0	0	2	0	Thunderstor	•
20 11111 I IIIIpu		ng thundersto	rm winds	downed t	•	-	_			***************************************
Hernando County 38 NNE Tampa	05	1115EST			0	0	1	0	Thunderstor	m Winds
	Stro	ng thundersto	rm winds	downed a	few tr	rees near	r Ridge	Manor	•	
Sumter County North Portion	05 05	1130EST- 1200EST			0	0	2	0	Thunderstor	m Winds
	Stro	ng thundersto	rm winds	downed t	rees an	d power	r lines i	in north	Sumter Count	y.
Pasco County NW Portion	05 05	1300EST- 1315EST			0	0	3	0	Thunderstor	m Winds
	Stro	ng thundersto	rm winds	downed r	numero	us trees	and po	wer lin	es in northwest	Pasco County.
Hillsborough County NW Portion	05	1600EST	short	?	0	0	0	0	Tornado (F0)
,	A sı	mall tornado t	ouched do	own briefl	y in no	rthwest	Hillsbo	orough (County.	
Pinellas County St. Petersburg	05	1700EST			0	0	2	0	Thunderstor	m Winds
D 1 C /	Stro	ng thundersto	rm winds	downed t	rees an	d power	re lines	in St. 1	Petersburg.	
Dade County 12 SSW Miami	09	1140EST	short	?	0	0	1	0	Tornado (F0	•
	A si tract	mall tornado t tor and damag	ouched de	own briefl atched ro	ly at thoof of a	e Coast n open l	Guard out befo	station ore diss	in Richmond lipating.	Heights, lifting a
Sarasota County 37 NW Fort Myers	20	1530EST			0	0	0	0	Waterspout	
	A w	aterspout was	noted abo	out 4 miles	offsho	re of En	glewoo	od. It di	ssipated after a	bout 15 minutes.
Santa Rosa County 11 NE Pensacola	24	0600EST			0	0	2	0	Thunderstor	m Winds
	Stro	ng thundersto	rm winds	downed to	rees in	Bagdad	•			
Escambia County Pensacola	24	0640EST			0	0	0	0	Thunderstor	m Winds(56)
	A th	understorm g ed off part of	ust to 65 the roof o	mph was of a plant	record in Pace	led at the.	e Pens	acola R	egional Airpor	t. Strong winds
Santa Rosa County Milton	24	0700EST	short	?	0	0	2	0	Tornado (F0)
		nall tornado w were downed		ed by sever	ral soui	rces to h	ave tou	iched do	wn briefly near	Milton. Several
Jackson County NW Portion	24	0945EST			0	0	0	0	Thunderstor	m Winds

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yarda)		aber of sons Injured	Dar	nated nage y Crops	November 1992 Character of Storm
FLORIDA Cont'd		ng thjundersto	orm winds	s caused t	the evac	cuation	of port	table cl	assrooms in northwest Jackson
	Cou		in wine.	, causea (,,,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	or por		modicolle in normanical receiption
Jackson County SE Portion	24	1840EST			0	0	0	0	Thunderstorm Winds
	Stro	ng thundersto	rm winds	downed t	rees in	the sou	theast p	art of J	ackson County.
Monroe County Cudjoe Key	26	1215EST			0	0	0	0	Waterspout
•	A w	aterspout was	reported	over Flor	ida Bay	off Cu	idjoe Ko	ey.	
GEORGIA		•	•		•			•	
Chattahoochee County Ft. Benning	y 04	1310EST			0	0	3	?	Thunderstorm Winds
J	High	winds tore	lown larg	e limbs an	id uproc	oted a f	ew sma	ll trees	in and around Ft. Benning.
Muscoee County Columbus	04	1330EST	J		0	0	2	?	Thunderstorm Winds
			limbs we	ere blown	down	, along	with a		power lines. Isolated outages
Sumter County		•							
8 NNE Plains	04	1500EST			0	0	3	?	Thunderstorm Winds
	Scatt Plair	tered trees, la ns. Outages o	arge limbs developed	s and pow	er lines	were (torn dov	wn by t	he winds between Ellaville and
Randolph County Georgetown Cuthbert	12 12	1625EST 1640EST			0	0	?	?	Funnel Cloud Thunderstorm Winds
	Nun	nerous trees v	vere blow	n across U	J.S. Hi	ghway 8	82 at C	uthbert.	
Miller County Countywide	12	1705EST			0	0	3	?	Thunderstorm Winds
	Scat	tered trees wo	ere blown	down ove	er Mille	r Coun	ty.		
Dougherty County Albany	12	1730EST	0.2	50	0	0	5	?	Tornado (F1)
	bedd	ling manufact	uring site	. The fac	ility wa	s heavi	ly dama	aged an	The tornado first struck at a d its contents were strewn over orm and moved northeast.
	air-c	tornado touc conditioning u ado tore down	ınit was to	orn off the	e roof t	here. 🛚	A busin	ess acro	ait the U.S. Post Office. The coss the street was hit next. The
									d. Although the total length of round briefly.
Albany	12	1730EST			0	0	5	?	Thunderstorm Winds
	also wind	tossed some	lumber as parts of A	round. Da Albany to:	amges a re down	it the li i electri	ımberya ical and	ard were I telephe	eds at a lumberyard. The winds e estimated at \$60,000. Strong one lines, along with large tree
Colquitt County Doerun	12	1745EST			0	0	3	?	Thunderstorm Winds
	A fe	w trees were	blown do	wn by str	ong wir	nds.			

٤		
ì		
t		
Ö		
ì		
1		
ĭ		
ĺ		
9		
1		
ľ		
t		
a		
1		
n		
I		
1		
l		
J		
Ĭ		
١		
L		
ľ		
S		
l		
1		
8		
ì		
١		
٨		
V		
1		
9		
2		
ì		
l		
i		
ŧ		
٤		
ľ		
I		
٦		
e		
ï		
٦		
C		
)		
n		
N		
е		
1		
1		
а		
ĺ		

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pers Killed	ber of ons Injured	Estim Dam Property	age	November 1992 Character of Storm
GEORGIA Cont'd	ì								
Worth County Sylvester	12	1830EST			0	0	?	?	Funnel Cloud
Bleckley County Cochran	12	1835EST	1.0	50	0	0	5	?	Tornado (F1)
	A we ware side of distar a res	eak tornado de house and pus of a nearby ret nce away, a ho idential area ings had mino	eveloped a shed a frantail center, couse lost a several blor damages	nd touched ne buildin still under large par locks aways.	d down g at the cr cons t of its y, tree	briefly e site the truction roof and s were	y in Coo nree incl and an and anoth twisted	hran. hes off office ner hon l off b	The tornado demolished a feed its foundation. Stores on west trailer were destroyed. A short ne had damage from debris. In y the winds and several other
	from	ough the torna the warehouse emolished war	e were blo	wn across	o longo Cochi	er doing an. A	g damag 285-gal	ge on ti lon fee	he ground, tin and wood debris der was carried five miles from
Tift County Tifton	12	1900EST			0	0	3	?	Thunderstorm Winds
	Num	erous trees we	ere blown	down in o	lownto	wn Tift	ton.		
Clinch County Homerville	21	1942EST			0	0	?	?	Flash Flood
	Heav close	y rainfall, esti due to localiz	mated at b zed flash f	etween fo looding.	ur and	five inc	ches, fel	l over l	Homerville. A few streets were
Dade County Rising Fawn	22	0950EST- 1010EST	3.5	500	0	0	5	?	Tornado (F1)
	enter	nado develope ed George and d northeast ac	d traveled	long the	east si	de of I	Fox Mo	untain	cross the state line. The storm at Rising Fawn. The tornado ighway 11.
	Nume was r	erous trees we noved off its	re downed foundation	d along the	e path.	A few	homes	sustair	ned damages and a trailer home
Trenton Cloudland Canyon State Park	22 22	1000EST 1005EST			0	0	4?	?	Thunderstorm Winds Hail (.88)
	Scatte	ered trees wer	e blown d	own in Ti	renton.	An ap	artment	house	was damaged by the winds.
Walker County Flintstone	22	1025EST			0	0	4	?	Thunderstorm Winds
	Num	erous trees we	re blown	down and	a barr	was de	estroyed	l by sti	ong winds.
Walker and Catoosa Counties 2.2 NE Rock Springs	22 22	1030EST- 1035EST	1.5	150	0	0	3	?	Tornado (F1)
to 3.7 NE Rock Spri	•	* *	*		٠				•
	torna Coun	do moved into	the south 0 yards of	western co	rner o	f the Cl	hickama	uga Na	e the Walker County line. The ational Military Park in Catoosa in Walker County. Generally
Carroll and Douglas Counties 1 N Roopville to 2 SE Villa Rica	22 22	1100EST- 1130EST	21.0		0	1	5	?	Thunderstorm Winds

		Time	Path	Path	Number of	Estimated	November 1992
Location.	Date	Local/ Standard	Length (Miles)	Width (Yards)	Persons Killed Injured	Damage Property Crops	Character of Storm
LACAUOII	Date	Statituaru	(Miles)	(Talus)	Mika mjarca	Troporty Crops	Character of profits

GEORGIA Cont'd

A strong thunderstorm produced a microburst wind that spanned from the southern portion of Carroll County into western Douglas County. Almost 20 miles of the path length were in Carroll County and about 1 mile was in Douglas County. In Carroll County, over 80 homes, numerous buildings and properties were damaged by the microburst, along with one cow. Extensive damage occurred in Carroll County around Georgia Highway 27. Hundreds of trees were snapped or uprooted along the path into western Douglas County. In Douglas County, several homes were damaged by uprooted trees and the winds.

Western Douglas Polk Counties	and
Cedartown	

22 22	1135EST 1140EST		0	0	?	?	Funnel Cloud Thunderstorm Wind
----------	--------------------	--	---	---	---	---	-----------------------------------

A few limbs and a tree were blown down by winds in Cedartown.

Cobb and
Cherokee Counties 22
4 N Powder Springs 22

22 1144ESTs 22 1234EST 20.0 0.5 0 46 7 ? Tornado (F4)

4 N Powder Sprin to Kennesaw to 1 S Woodstock to Hickory Flats

The strong thunderstorm that produced the microburst wind event in Carroll and Douglas Counties moved northeast and produced a large tornado in western Cobb County. The tornado started north of Powder Springs in a residential area, moved northeast, snaked back to the northwest, and then traveled northeast to Kennesaw. After causing extensive damage in Kennesaw, the tornado entered Cherokee County just south of Woodstock. The storm moved due northeast from Woodstock to Hickory Flats where it dissipated. From the damage path and witnesses, there were occasionally two vortices.

Numerous businesses, homes and other properties were damaged in Cobb County. The tornado damaged or destroyed over 325 residences and businesses in Kennesaw alone. Tractor-trailers were overturned on Interstate 75 by the tornado. Estimated costs were over \$5 million in Cobb County.

The tornado moved into southern Cherokee County near Woodstock and traveled northeast over the area. Several subdivisions had major damages. A church on Georgia Highway 92 was in services when the tornado damaged it; no injuries occurred.

The tornado lifted briefly as it moved northeast to Hickory Flats. At Hickory Flats, more homes and businesses were damaged after the tornado crossed Georgia Highway 140. The storm then dissipated.

At least 200 homes in Cherokee County had varying degrees of damages. Estimated damage costs were over \$2 million dollars, with a large amount of the damages concentrated in an industrial park in Woodstock.

The tornado snaked over a distance of 14.5 miles in Cobb County and 9.5 miles in Cherokee County. The damage path was 20 miles long. The total costs due to this tornado were estimated at over \$7.2 million. About 800 buildings were damaged to some degree and countless trees were downed over the tornado's path. Of the injuries, 34 occurred in Cobb County and 12 people were treated for injuries in Cherokee County. Over 11,000 customers were left without power.

Lumpkin County 3.5 NNE Dahlonega to 5.5 N Dahlonega to 13 NE Dahlonega

22 1310EST-22 1325EST 10.0 0.5 1 7 6 6 Tornado (F3)

A tornado developed north of Dahlonega and first touched down over a field near a church. The tornado traveled northeast to through the Yahoola Valley and then struck a resort ranch. The tornado continued northeast through a heavily wooded area and dissipated at Cedar Mountain.

The majority of the damages occurred at the ranch where 40 structures were damaged or destroyed, including the offices cabins, stables, and lodge. Only the chapel, several hundred yards away from the path, was untouched. Two employees in a two-story building were carried about 65 yards by the tornado. One of the women died of massive head injuries. An employee in another building was carried 300 yards by the tornado.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		nber of rsons Injured	Di	imated amage ty Crops	November 1992 Character of Storm
GEORGIA Cont'd	l								
	caus	nerous trees we ing large losse Union County	es for the	ed along it timber in	s path. dustry.	Large : Debri	stands s from	of hardy the res	woods and pines were destroyed, ort was found more than a mile
•	Dam	age costs wer	e estimate	ed at over	\$2.4 n	nillion.	(F43P)	
Harris County Hamilton 2 S Hamilton	22	1325EST			0	. 0	3	?	Thunderstorm Winds
	Man 27.	y large trees a	and limbs	were dov	vned ar	round H	amilto	n. Larg	ge limbs blocked U.S. Highway
Muscogee County Columbus	22	1339EST			0	0	3	?	Thunderstorm Winds
		ınd Green Isla s were blown		large tree	limbs	were do	owned	near La	ke Oliver. Two flashing traffic
Union County Countywide	22	1345EST			0	0	3	?	Thunderstorm Winds
Towns County Countywide	22	1345EST			0	0	3	?	Thunderstorm Winds
White County Northern White County	22	1400EST			0	0	4	?	Thunderstorm Winds
•	Num	nerous trees an ls.	d power l	ines were	torn de	own ove	r the tl	hree-cou	nty area by strong thunderstorm
	In W	hite County,	a tree wa	s blown d	own or	nto a vel	hicle o	n U.S.	Highway 129.
Spalding County 1 SE Digbey Spalding and	22	1400EST			0	0	?	?	Funnel Cloud
Spalding and Henry Counties 2 WSW Vaughn to Hampton	22	1404EST- 1420EST	10.0	100	0	3	6		Tornado (F2)
·	torna north	ado traveled n	ortheast, g County.	crossed C	leorgia nado cr	Highwossed G	ay 92, Jeorgia	and con Highwa	hted southeast of Digbey. The ntinued across wooded areas of ays 19 and 41 in Henry County ssipating.
	path. Abou	. Extensive da	mage occ s were d	curred out amaged in	side of Spald	Vaughn ing Cou	at thr inty, n	ee hanga ot inclu	ck trailers and houses along the ars that stored vintage airplanes. ding barns and over structures. oles.
		enry County, business. Util						s were d	amaged. A wall was blown out
	Dam	age costs were	e estimate	ed at over	\$2 mil	lion in	Spaldi	ng Coun	ty alone.
Henry County Ola	22	1415EST			0	0	3	?	Thunderstorm Winds
	Scatt		l utillity l	ines were	blown	down i	n Ola,	leaving	about 2,100 customers without
Muscogee and Talbot Counties 2 WNW Box Springs to 1 N Box Springs	22	1435EST- 1440EST	2.0	50	0	0	5	?	Tornado (F1)

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		nber of sons Injured	Estim Dam Property	age	November 1992 Character of Storm
GEORGIA Cont'd	i								
		mall tornado siderable dam						y line	and moved to Box Springs.
	garg	streme northe age roof was ot County.	ast Colun blown of	nbus, nort f. Trees	hwest o were u	of Box S prooted	Springs, at the r	an aut esidend	comobile was damaged after the ce before the storm moved into
	and the	utility lines w	vere down valued at	ed. The over \$100	tornado ,000, v	heavily vas seve	damage rely dan	ed one maged	near U.S. Highway 80. Limbs home and barn along the path. and had to be leveled. At that
Talbot County Countywide	22	1507EST			0	0	4	?	Thunderstorm Winds
	Acro	oss Talbot Co	unty, seve	eral home	s were	damage	d by wi	nds and	d downed trees.
Monroe County Smarr	22 22	1540EST- 1545EST	0.5	50	0	0	. 5	?	Tornado (F0)
	The		royed one	mobile h	nome.	A hous	e and a	nother	ved across a wooded, rural area. trailer were heavily damaged.
	A po	oultry farm, va dential proper	alued at or rty damag	ver \$130,0 e was esti	000, wa mated a	s destro at \$300,	yed as tl 000.	he torn	ado moved toward Interstate 75.
Monroe County Bolingbroke	22	1550EST			0	0	?	?	Funnel Cloud
	A m The	otorist on Int funnel cloud	terstate 47 continued	5 sighted northeast	a funn toward	el cloud l Lake J	l as it ci fuliette.	rossed	the highway near Bolingbroke.
Monroe and Jones Counties 4.7 S Juliette to 1.5 N Round Oak	22	1600EST- 1150EST	6.0	100	0	1	5	6	Tornado (F2)
	down of th of Re down was along	n near Georgi le Jarrell Plar ound Oak. A ned from the destroyed an g with 10 ve	a Highwa Itation and Itation and Itake Ju Itake over Itake another Itake, we	y 87, sout I traveled liette, the to Dames was seve ere damag	h of Jul across tornado Ferry. rely da ged. N	iette. T a heavil o damag In Mo maged. umerou	he torna y wood ed a bui onroe Co In Jon s trees	ido mo ed area ilding a ounty, es Cou and po	ved to Lake Juliette and touched ved into Jones County just north a to Georgia Highway 11, north and a park pavilion. Trees were south of Juliette, a frame house anty, seven houses and trailers, ower lines were downed by the by downed trees.
	stanc	t of the dama is of hardwo erty damages	ods and	pines wei	re desti	royed, c	ausing	large 1	ational Wildlife Refuge. Large losses for the timber industry. 30,000.
Jasper County 9 S Monticello	22	1640EST			0	0	4	?	Thunderstorm Winds
	A ba Jaspe	rn was destro	yed and polumerous	ower poles trees were	s were s e down	napped ed acros	off bysti s power	rong th r lines	understorm winds over southern and traffic was blocked.
Jones County Round Oak	22	1645EST			0	0	4	?	Thunderstorm Winds
	A ba	rn was dama	ged when	trees fell	on it.				

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured	Estimated Damage Property Crops	November 1992 Character of Storm
LIVORIUM		V	(Willes)	(1)		Tropoloy Grops	011111111111111111111111111111111111111
CEOPCIA C	ont ³ d						

GEORGIA Cont'd

Putnam and Greene Counties 10 SSW Eatonton to Meda to White Plains

22 1645EST-1720EST 32.0 0.5 5 86 7 6 Tornado (F4)

A strong tornado developed near the Putnam-Jones county line and traveled northeast for 20 miles across the county before entering Greene County and traveling another 12 miles. The tornado snapped and uprooted numerous trees over the two counties. Large stands of hardwoods and pines were destroyed over the tornado's path, resulting in large losses for the timber industry. In some areas, the path width was almost 1 mile, though the average width was a half mile. Power outages were widespread.

In Putnam County, several residential areas were struck. Extensive damages occurred around U.S. Highway 129 at Georgia Highway 212 and on U.S. Highway 441 south of Eatonton in Putnam County. Traffic was seriously hampered.

The tornado continued northeast across the woods to Lake Oconee. Extensive damages occurred around Georgia Highway 16. Permanent and vacation residences were destroyed at the lake. Five transmission towers were blown down at Wallace Dam.

Putnam County's dairy industry, the state's leader, suffered \$18 million in damages. Four dairies were lost; five were heavily damaged. About 300 cattle were lost.

About 68 homes were totally destroyed; another 109 had varying degrees of damage. Damages to properties were estimated at \$5.4 million. Three deaths occurred at Lake Oconee when a house and a trailer were swept into the lake by the tornado. The younger man died in a mobile home near U.S. Highway 441. Fifty-five injuries occurred. (M52M)(M63P)(F59P)(M31M)

In Greene County, the tornado demolished most of the town of White Plains, population 800. Over the path in Greene County, 66 homes and five businesses were destroyed. One woman died; 31 injuries occurred. About 50 cattle were lost. Damage costs were estimated at about \$4.5 million. (F61M)

Taliaferro County Crawfordville 3 SW Crawfordville 3 N Sharon

22 1725EST 0 0 4 5 Thunderstorm Winds

Numerous trees and powerlines were torn down by strong winds as thunderstorm that produced the tornado in Greene County moved across Taliaferro County. Damages occurred at Interstate 20 southwest of Crawfordville and in town.

As the storm continued northeast toward Wilkes County, large stands of hardwoods and pines were destroyed, causing large losses for the timber industry. Considerable damages occurred near Georgia Highway 47, north of Sharon. About 50 cattle were lost during the storm.

Wilkes County
6.5 SSE Washington 22 1735EST 0 0 ? ? Funnel Cloud

A funnel cloud was sighted around Georgia Highway 80.

A numer cloud was signled around Georgia Fighway 80.

Aonia 22 1740EST-

22 1740EST-1745EST 1.0 50 0 1 5 5 Tornado (F1)

A small tornado developed at Aonia, near U.S. Highway 78, and traveled a mile over the rural area. Two homes were destroyed and several other buildings were damaged. A poultry farm and a hog farm sustained considerable damages. A three-ton bin from one site was carried a quarter-mile away. A woman was injured by debris in the tornado. Numerous power lines were downed.

Large stands of hardwoods and pines were destroyed, causing large losses for the timber industry.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		iber of sons Injured	Da	mated mage ty Crops	November 1992 Character of Storm
				•					
GEORGIA Cont'o	ì			•					
Lincoln County 6 SW Lincolnton to 6 SE Lincolnton	22	1800EST- 1815EST	5.0	50	0	0	5	?	Tornado (F2)
	tied- 20 he were	down mobile l omes had dam	home was ages, mair allen trees	ripped frolly to the The to	om its roofs. rnado r	ties and Damag noved a	d destre e costs	oyed. A were es	outhern Lincoln County. One A barn was destroyed and about timated at \$150,000. Highways , picked up briefly and touched
Carroll County Carrolton	24	0930EST		,	0	0	?	?	Funnel Clouds
Douglas County Douglasville	24	0945EST			0	0	?	?	Funnel Cloud
Early County 3 SW Hilton	24	1015EST			0	0	3	?	Thunderstorm Winds
		erous tree lim down; outages			were do	owned r	near G.	. W. Aı	ndrews Dam. Power lines were
Musogee County Columbus	24	1045EST- 1200EST	•		0	0	3	?	Flash Flood
	Heav wate	y rainfall pro	duced flas was flood	sh floodin ed.	g over	central	Colum	nbus. S	everal cars were stalled in high
Fulton County 5 W Atlanta 10 WNW Atlanta 15 N Atlanta	24	1050EST			0	0	3	?	Thunderstorm Winds
	from	ered trees and just south of blown down	Fulton Co	unty Airr	lowned ort to	by win due wes	ds ove st of A	r 9 NW tlanta H	Atlanta western Fulton County, artsfield Airport . A few limbs
Cobb County Powder Springs Mableton Smyrna	24 24 24	1045EST 1056EST 1100EST			0 0 0	0 0 0	3 ?	?	Thunderstorm Windss Funnel Cloud Funnel Cloud
	A fe	w trees were l	olown dov	vn at Pow	der Sp	rings.			
Worth County 8 NW Sylvester 8 NW Sylvester	24 24	1125EST 1130EST			0	0	3 ?	?	Thunderstorm Winds Funnel Cloud
	In th	-	ommunity	, northwe	st of Sy	-		-	s were uprooted or damaged by
10 SW Sylvester to Sylvester to 1 N Sylvester	24	1125EST- 1135EST	.25	75	0	9	4	?	Tornado (F1)
	A cm	all tomado de	valonad na	or the W	orth_De	mahart	u const	u lina an	d moved northeast to Sulvester

A small tornado developed near the Worth-Dougherty county line and moved northeast to Sylvester. In a rural residential area, the tornado demolished two trailers and caused damages to other nearby structures. Trees, utility poles, and lines were torn down. Nine people were injured. The tornado lifted back into the parent thunderstorm.

The tornado touched the ground again at the high school in Sylvester. The storm damaged some vehicles as it moved across the parking lot, tore down utility poles, and damaged the roof of one portable classroom. The tornado damaged trees in the area near Georgia Highway 33 before lifting.

Damages from the tornado were estimated to cost over \$40,000.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		nber of sons Injured	Estim Dam Property	age	November 1992 Character of Storm
GEORGIA Cont'e	d 24	1155EST			0	0	4	?	Thunderstorm Winds
8 S Sylvester	24	1200EST			0	0	?	?	Funnel Cloud
	the g One	ground or upr	ooted as tl	ie thunder	storm th	nat spaw	med the	tornade	ere snapped about 30 feet above o moved toward Turner County. nall building was pushed off its
	A fu	nnel cloud w	as sighted	south of	Sylvest	er in the	e Anders	son Cit	y community.
Turner County 1 E Coverdale 3 N Ashburn Ashburn	24 24	1200EST 1200EST			0	0	3 4	?	Thunderstorm Winds Thunderstorm Winds
	The Cove	thunderstorn erdale. A fe	n that pro w trees w	duced the ere uproot	tornad ted and	o in Wo utility l	orth Coi ines wer	unty m	noved into Turner County near down.
	dam	and Ashburn aged a few si ges resulted.	, strong torage bui	thundersto Idings. S	rm win	ids dam I trees v	aged se were upi	veral ooted.	homes, destroyed a barn, and Utility lines were torn down;
Tift County Tifton	24	1200EST			0	0	3	?	Thunderstorm Winds
	Stro	ng winds pus	hed seven	al trees ac	ross U.	S. High	way 82.		
Ben Hill County 1 SE Lulaville 6 NE Fitzgerald 8 NE Fitzgerald	24	1215EST	0.1	20	0	0	4	?	Tornado (F0)
	A sn dow	nall tornado d n in three loc	eveloped ations. T	over a spa 'rees were	rsely po snappe	pulated d or up	area nor rooted;	rth of I power	Fitzgerald. The tornado touched lines were downed.
	Two were	barns were de interrupted	lestroyed. for 500 cu	Two trail stomers.	ers, a h	ouse and	d several	sheds	were damaged. Utility services
Carroll County Mt. Zion	25	0700EST			0	0	4	?	Lightning
		itning struck ctures were al			ed to an	aband	oned ho	use an	d started a fire. Four nearby
Muscogee County Columbus	25	0800EST			0	0	3	?	Flash Flood
	Floo 25th	ding develop . Serious str	ed all over eet floodi	Columbu	s after l	neavy ra at least	infall th 40 stree	at start ts and	ed on the 24th persisted into the Interstate 185.
		ty park was f nd the park.	looded. (One home	had wa	ter dam	age and	severa	l cars stalled in the high waters
Fulton County Atlanta	25 25	1000EST- 1500EST	e e		0	0	4	?	Flash Flood
Alpharetta	25 25 25	1045EST- 1500EST		*	0	0	4	· ?	Flash Flood
Cobb County Marietta	25	1045EST-					•		
Gwinnett County	25	1500EST			0	0	4	?	Flash Flood
1 SW Suwanee	25 25	1045EST- 1500EST			0	0	4	?	Flash Flood

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		mber of rsons Injured	D	timated amage rty Crops	November 1992 Character of Storm		
GEORGIA Cont'o	i										
	Very heavy rainfall over metropolitan Atlanta from November 24th through November 25th, produced four to five inches at some locations. At Hartsfield International Airport, a new record was set for November 25th, when 2.43 inches of rain fell.										
	By 1045EST, flooding had begun on several creeks in and around metropolitan Atlanta. Flooding had developed at the Atlanta County Club in Marietta. Flooding was aggravated in Marietta by debris-clogged drains. In Alpharetta, Big Creek was over the 7 feet flood stage and Suwanee Creek in Gwinnett County was over its 7 feet flood stage.										
	Peachtree Creek crested at 18.3 feet about 1330EST. Flood stage is 17 feet. In Atlanta, water entered a few homes adjacent to the creek.										
Henry County 2 SW Hampton	25	1200EST			0	0	4	?	Flash Flood		
	A br Cree		shed out	and a road	was	closed o	due to	flash flo	oding in Henry County at Bear		
Evans County Reidsville	25	1840EST			0	0	?	?	Small Hail		
Bacon County Alma	25	1910EST			0	0	?	?	Funnel Cloud		
	A pi	lot reported a	funnel c	loud over	Alma.						
Appling County 5 NE Baxley	25	1927EST			0	0	?	?	Funnel Cloud		
5 NE Baxicy		reports indic	eated a fin	nel cloud	•						
5 N Baxley	25	1935EST	u 1u,	mor croud	0	0	?	?	Thunderstorm Winds (G50)		
,		ng winds deve	eloped at	Plant Hato	h.	·	•	•	111411401560111 1111145 (050)		
Butts County											
Countywide Pike County	25	2025EST			0	0	4	?	Flash Flood		
Griffin Countywide	25	2150EST			0	0	4	?	Flash Flood		
	road	county roads near Griffin tened by high	were wa	shed out in shed out	Butts by fla	County sh floo	y. In I ding.	Pike Cou Several	nty, three county roads and one bridges on Elkins Creek were		
Muscogee County Columbus	25	2200EST			0	0	4	?	Flash Flood		
Columbus	Floor the a dama	ding develope area around (he park i ues lost i	flooded ag from the c	s in Co ain.	olumbus Bull Cr	again.	Serious	s street flooding redeveloped and nearby golf course and caused mated at over \$10,000 for the		
		Chattahoochection.	e River p	oushed floo	od wat	ers and	debris	over a	walkway at a downtown tourist		
Troup County LaGrange	25	2200EST	e e		0	0	3	?	Flash Flood		
	Floor Geor	ding develope gia Highway	ed over no 219.	ortheast La	Grang	e and a	round (the inters	section of U.S. Highway 27 and		
IDAHO											
Entire State	01- 30				0	0	?	?	Drought		

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		nber of sons Injured	Da	mated mage ty Crops	November 1992
IDAHO Cont'd									
	of th	oite of some h ne Palmer Dro r flows were	ought Seve	erity Index	k and r	l Moun nost of	tains r southe	emained rn Idaho	in the severe drought category remained in extreme drought.
IDZ009-006 Panhandle, West Central Mountains	01	0000MST- 0800MST			0	0	0	0	Early Snow
	The and	mountains tha tobogganing la	t rise up fater in the	rom Boise day. Th	receiv e snow	ed three level in	to five	e inches hone Co	of snow. People were sledding unty was 5,000 feet.
IDZ006 West Central Mountains	02	0600MST			0	0	0	0	Wind (G51)
		ds gusted to 5 n miles WNW							natic Weather Station (RAWS), age.
IDZ012 Upper Snake River Highlands	07- 08	1300MST- 0800MST			0	0	5	0	Heavy Snow
J	Ten	inches of snov	w was bla	med for n	umeroi	us vehic	ular ac	cidents.	
IDZ006 West Central Mountains	08	1500MST- 1800MST			0	?	4	0	Glaze
	abou	it 2 miles soutl	h of the sk	ci area afte	r snow	melted	and th	en froze	and the Bogus Basin Ski Resort into a sheet of ice. Police cars orth of Horseshoe Bend.
IDZ006-011 Central Mountains	08- 09	2100MST- 0700MST			0	0	0	0	Heavy Snow
	Elk (Basi	City and Bogu n ski area rang	s Basin Sk ged from	ci Resort r 16 inches	eported at the	l 6 inche base to	es of n	ew snow hes on t	v. The snow depth at the Bogus op.
IDZ012 Upper Snake River Highlands	09	0500MST- 2100MST			0	?	5	0	Blizzard
Ü	at no	on received 7 on. A wide value roads.	inches of ariety of v	snow wit rehicles, in	th gusti ncludin	ing wine g some	ds redu school	icing vis buses, t	sibility to zero. Schools let out became stuck in the snow or slid
IDZ009 Panhandle	10- 11	2200PST- 0800PST			0	0	0	0	Heavy Snow
	Hayo fresh	den reported 4 snow.	inches of	f new snov	w, and	Schweir	tzer M	ountain	Ski Resort reported 7 inches of
IDZ003 Upper Snake River Valley	16	0600MST- 1000MST			0	?	4	0	Dense Fog
·	Seve	ral fender-ben	ders and	one train-	automo	bile acc	ident v	were bla	med on dense fog in Pocatello.
IDZ009-011-007- 012-003-004 North and East	19- 20	1200MST- 0800MST			3	0	5	0	Heavy Snow
	to eig	ld front, ahead gh inches of sn neast of Burley	iow. Sun	Valley Sk	i Resor	w pressi t receive	are, mo ed 10 i	oved acr nches, a	oss Idaho dumping mainly four nd Pomerelle Mountain ski area

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		nber of sons Injured	Estim Dam Property	age	November 1992 Character of Storm
IDAHO Cont'd									
IDZ009-007- 003-004 Panhandle and Southeast	20	0000MST- 1000MST			0	0	0	0	Heavy Snow
	Five 5,00	e to eight inch 00 feet.	es of snov	w fell at lo	ower ele	evations	; betwee	en eigh	nt and eighteen inches fell above
IDZ003 Upper Snake River Valley	21	0800MST- 2200MST			0	0	0	0	Heavy Snow
	Five	inches of sno	ow fell.						
IDZ009 Panhandle	21	0930PST- 2130PST			0	0	5	6	Heavy Snow
	Five heal were Athe	e repaired. A	t snow br snapping About 3,0	oke limbs, g like tooth 00 custom	, tree to npicks." ners we	ps, and Some re with	toppled utility l out pow	whole ines we er ove	e trees onto utility lines. "Green ere broken again as soon as they ernight between Sand Point and
IDZ011-006-007- 012-004-005-003 Central and South	21- 22	1900MST- 1900MST			0	0	5	0	Heavy Snow
	Eagl	le Mountain i	n the Ov	vyhees, re	ported	24 incl	nes. Sl	ideoffs	owever, Silver City, below War s and fender-bender automobile in Rexburg due to slick roads.
IDZ001 Treasure Valley	21	2000MST- 2400MST			0	0	4	0	High Winds
		ds associated ge in Melba.	with the a	approach o	of a colo	d front l	blew a t	ree do	wn in Kuna and caused a power
IDZ002-003 Magic and Upper Snake Valleys	22	0600MST- 1800MST			0	0	0	0	Heavy Snow
	Fou	r to nine inche	es of snov	w fell.					
IDZ001 Treasure Valley	22	0800MST- 0900MST			0	1	5	0	Glaze
	Snov driv	w and freezing ers slid off of	rain con Interstate	nbined to 1 84 and re	make ro olled ov	ads "ju: er one	st like a or more	sheet of times	of ice" in the Boise area. Three
IDZ005-007 Sun Valley and Southwest Highlands	22	1200MST- 2400MST			0	0	0	0	Heavy Snow
	Seve	en inches of si	now fell.						
IDZ006-011 Central Mountains	22- 23	1800MST- 1800MST			0	0	0	0	Heavy Snow
	Six	to eight inches	s of snow	fell.					
IDZ008 Lewiston Area	23	0000PST- 0500PST			0	0	0	0	Heavy Snow
	Fou	r inches of sno	ow fell.						
IDZ008-009 Panhandle and	23	0500PST- 1700PST			0	0	0	0	Heavy Snow

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		nber of rsons Injured	_ D ₁	imated amage rty Crops	November 1992 Character of Storm		
Location	Dutt	- Canada	(Mileo)	(Taras)	TELLION	211/41/44	Тюры	оторь	Charles of Contra		
IDAHO Cont'd											
Lewiston Area	Five	e inches of s	now fell								
Ski Resorts	24	0800MST			?	?	?	?	Snow Depth		
	The ski resorts of Idaho were looking forward to a profitable season. Reported base and top snow depths in inches were: Pomerelle 150/161, Brundage Mountain 71/105, Schweitzer 47/80, Sun Valley 35/75, Bogus Basin 55/71.										
IDZ001 Treasure Valley	27	1100MST 2130MST			0	?	5	0	Snow		
·	acci beca	Two inches of snow was blamed for about a hundred automobile accidents in Boise. Dozens of accidents occurred between 12:30 p.m. and 2:00 p.m Reportedly, most accidents happened because drivers were following too close or did not allow for the extra distance required to stop at intersections. Interstate 84 was closed between Boise and Mountain Home until 9:30 p.m									
IDZ003 Madison County	29	1900MST			1	0	5	0	Snow		
·	Cold moist air with fog, snow, and low clouds, was trapped in the east end of the Snake River Valley following the passage of a cold front and upper level trough of low pressure. Warm overriding air was associated with local reports of freezing rain. A single-engine aircraft departing Rexburg on a VFR flight plan for Utah at about 7:00 p.m. MST crashed apparently under full power in a residential area near Burton a few minutes after takeoff. (M57V)										
IDZ009 Panhandle	30	0700PST- 1000PST			0	0	?	0	High Winds (G71)		
	The	Silver Mour	ntain ski are	a near Kel	logg re	ported	winds 4	10-55 m	ph with gusts to 82 mph between		
ILLINOIS	5,00	00 and 6,000	feet elevai	ion in asso	ociatioi	i with a	cold 1	ront pa	ssage.		
Southern Illinois											
ZONES 11-15	12	1045CST- 1245CST	•		0	1	5	0	High Winds		
	An intense low pressure area and a strong cold front produced high winds over southern Illinois during the late morning and early afternoon. Winds were 30 to 50 mph with gusts as high as 70 mph. The winds uprooted trees, downed tree limbs, snapped utility poles, and damaged roofs and barns. The Carmi, Illinois airport reported a wind gust to 52 knots. In Sparta in Randolph County, winds caused structural damage to buildings and knocked out numerous windows. Shingles were blown off several homes. At Breese in Clinton County winds broke off large tree limbs and damaged the roof of a house. At DuQuoin in Perry county a man was injured by a falling tree.										
INDIANA											
INZ007-008-011- W Central IN	02- 10				0	0	0	5	Flooding		
									agricultural flood of the season d not yet been harvested.		
Vermillion County	12	0500EST- 0800EST			0	0	5	3	Flash Flood		
	floo	vy rain over ding along F n of Clinton.	eather Cree	ral Indian k in Verm	a durii illion (ng the County.	early r Abou	norning t a doze	of November 12 caused flash in families were evacuated in the		
INZ005 > 009-011- 012-013- Northeast, Central and Southwest IN	12- 20	0800EST- 0800EST			0	0	4	5	Flooding		

		Time	Path	Path	Number of	Estimated	November 1992
		Local/	Length	Width	Persons	Damage	
Location	Date	Standard	(Miles)	(Yards)	Killed Injured	Property Crops	Character of Storm

INDIANA Cont'd

Significant rain fell over Indiana from the 10th to the 12th. Rain of three to nearly six inches fell over much of the state, with the heaviest rain occurring in west central Indiana. Small stream flooding was widespread on the 12th. During the afternoon of the 12th, residents of a mobile home park in Darlington were evacuated because of the rising Sugar Creek. Significant flooding occurred along the Wabash and White Rivers, with the flood crests lasting from 1 to 3 days. Flood waters along these rivers closed most local river roads and several state roads, affected extensive agricultural lands, and surrounded some homes.

INZ010 > 015-South and East Central IN

12 1345EST-1740EST 0 1 5 5 High Winds (G63)

A strong cold front moving across Indiana brought high winds to the southern and east central parts of the state. Wind gusts of 50 to over 70 mph downed trees, broke power and telephone poles, and caused structural damage. Semi-trailers were overturned on Interstate 64 and U.S. Route 41 in southwest Indiana. One man was injured when the storage barn he had taken shelter in collapsed. A bull and cow in another barn were killed when the barn they were in was destroyed. The National Weather Service office in Evansville recorded a wind gust of 72 mph.

Vigo County Pimento

22 1406EST short 45 0 0 4 0 Tornado (F1)

A small tornado touched down briefly and ripped the metal sheeting from several buildings. Damage was estimated at \$25,000.

Greene County 1 W Newberry Monroe County 1.8 WNW Elletsville 3.2 E Stinesville

22 1415EST 0 0 0 0 Hail (1.25)

22 1435EST-1444EST 5.3 880 0 3 5 5 Tornado (F3)

The tornado destroyed 3 houses, 7 mobile homes, and 3 barns. Two houses sustained major damage, 18 houses sustained minor damage, and 1 barn was damaged. The most extensive damage occurred about 2.5 miles north of Elletsville. Minor injuries were sustained by 2 people in a mobile home, and 1 person in a house. 135 acres of corn was also destroyed. Property damage was estimated at \$487,700 and crop damage at \$66,000.

1.5 N Freeman	•
Putnam and	
Montgomery Counties	2
2 WSW Morton 2.7 NNE Parkersbu	
2.7 MME Farkersuu	гg

22 1445EST 0 0 ? 0 Hail (1.75) 22 1450EST-1515EST 12.0 880 0 1 6 6 Tornado (F3)

The tornado moved mostly through open farm country, and hit about 50 separate farms. Numerous houses were damaged with a few being severely damaged or destroyed. Many barns and out buildings were also severely damaged or destroyed. West of Fincastle some dairy calves were killed when the barn they were in collapsed. The tornado also downed numerous trees and telephone poles, and caused extensive damage to the corn crop. About 2000 acres of corn were destroyed. One person was injured in Putnam County. The tornado crossed into Montgomery County at 1506EST about 0.5 miles southeast of Parkersburg. Total crop damage was estimated at \$700,000. Property damage in Putnam County was estimated at \$800,000, with about \$500,000 property damage in Montgomery County.

Morgan County 4 WSW Martinsville 22 3.5 SE Mooresville

1455EST-1520EST 15.0 880 0 0 6 4 Tornado (F3)

The path of the tornado was intermittent. The tornado first touched down near Hindsville. A meat market in Hindsville was damaged, and several trees were blown down in the area. The tornado apparently lifted for a short time west of Martinsville, before touching down again about 1.5 miles

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		mber of rsons Injured	D	timated amage rty Crops	November 1992 Character of Storm			
INDIANA Cont'd												
	thro topp Mai thro occi	northwest of Martinsville. The tornado then followed a path along the White River until it passed through Centerton. Numerous homes in Centerton were damaged, and two power line towers were toppled just south of Centerton. The tornado attained its maximum strength about midway between Martinsville and Centerton, where it was mostly moving through open country. After moving through Centerton the tornado weakened considerably, with only intermittent minor tree damage occurring from north of Centerton to the Five Points area. Crop damage was estimated at \$10,000. Property damage was estimated at 1 million dollars.										
Putnam County Russellville	22	1456EST			0	0	0	0	Hail (1.00)			
Montgomery County 1.2 E Parkersburg 3.3 NE Parkersbury	22	1507EST- 1515EST	2.5	200	0	1	5	3	Tornado (F1)			
	This	s tornado dest	royed a m	obile hom	e, and	caused	seriou	s injury	to the occupant of the home.			
Marion County 8.5 SW Indianapolis	22	1530EST			0	. 0	0	0	Hail (1.00)			
Marion County 5.5 NNE Indianapolis 10 NE Indianapolis 14 NE Indianapolis	22	1545EST- 1604EST	9.0	440	0	0	6	0	Tornado (F3)			
	torn becc 4 m Stau dam at 56 Harr 95 f	ado moved ea oming intermi iles of the to ghton, and L age. A few l oth Street. A rison, large tr foot power po	ast-norther ttent over rnado patl aurel Hal houses we t this loca ees were les shortl	ast for about the final of the	out 5 m 4 miles of the 200 h stroyed was m Boy S fting 1	niles, ar s. The worst d ouses w d. The inor dar scout Ro 4 miles	nd then most e amage vere da tornace nage to bad and s north	turned extensive was to amaged, do weak o roofs: d 59th Seast of	tornado first touched down. The northeast with the damage pathe damage occurred over the first homes on Thornleigh, Winstonwith 24 to 30 sustaining major ened as it crossed Interstate 465 and windows. At Fort Benjamin Street. The tornado also downed downtown Indianapolis. 11,000 at 4 million dollars.			
Shelby County 1 SSE Marietta 2.5 N Shelbyville	22	1605EST- 1627EST	10.0	50	0	0	6	4	Tornado (F3)			
	and final of S Seve torn	a few houses I 6 miles of the Shelbyville. I Beral homes ar	along the ne tornado n this str nd busine	first 4 mil o's path fro etch, 3 ho ss building	es of it om abo ouses, gs sust	ts path. ut 4 mi 5 barns ained d	The n les sou s, and amage.	nost ext ithwest numero . A se	I damage to several outbuildings ensive damage occurred over the of Shelbyville to 2.5 miles north us outbuildings were destroyed mi-truck was overturned as the here was also extensive damage			
Bartholomew County Elizabethtown	22	1610EST			0	0	0	0	Hail (0.88)			
Hamilton and Madison Counties 2.5 SSW Lapel to 1 SE Lapel	22	1620EST- 1625EST	2.0	100	0	0	5	3	Tornado (F2)			
-	SSW and	of Lapel at 1	l622 EST 3. A pole	. In Madi barn was	son Co destroy	unty the	e torna a seco	ido hit a nd barn	o Madison County about 2 miles farm at County Road 400 South was severely damaged. The top corn.			

0 0 3 0

Tornado (F1)

100

Hamilton County 3.9 S Clarksville

22 1623EST

1.0

		Time	Path	Path	Number of	Estimated	November 1992
		Local/	Length	Width	Persons	Damage	
Location	Date	Standard	(Miles)	(Yards)	Killed Injured	Property Crops	Character of Storm

INDIANA Cont'd

The tornado downed trees and power lines south of the Interstate 69 and Route 238 interchange.

Bartholomew and Decatur Counties Grammer 0.5 W Waynesburg

22 1634EST-1645EST 4.9 50 0 0 5 4 Tornado (F2)

The tornado touched down in Grammer and destroyed a 98 x 60 foot commercial building at Grammer Industries. Two other commercial buildings in Grammer suffered moderate to severe damage. In Bartholomew County, the tornado damaged 10 houses and 1 farm building, and destroyed 10 farm buildings. Numerous power poles and trees were also downed, and an apple orchard was damaged. Property damage in Bartholomew County was estimated at \$400,000. The tornado crossed into Decatur County 3.3 miles northeast of Grammer at 1641EST. In Decatur County a barn was destroyed on County Road 850 South west of Waynesburg. Damage in Decatur County was estimated at less than \$50,000.

Decatur County
Westport
Shelby Hancock

Shelby, Hancock and Rush Counties 2 ESE Morristown 1.5 NW Carthage 22 1639EST 0 0 0 0 Hail (0.88)

22 1645EST1700EST 7.5 50 0 0 5 0 Tornado (F2)

The tornado touched down in the extreme northeast corner of Shelby County at 1645 EST and moved NNE. At 1647 EST the tornado crossed into extreme southeast Hancock County, 4.5 miles southeast of Westland. The tornado then crossed into Rush County at 1649 EST, about 4 miles southwest of Carthage. The tornado caused little damage in Shelby County, with a two foot diameter tree being snapped off 20 feet above the ground. In Hancock County, the roof was partly blown off one house, and the roof on another house was damaged. Also, a modular home was blown off its foundation, and a metal barn was destroyed. In Rush County, a barn roof was damaged, another barn was partially blown down, a shed was downed and a porch roof was blown off a house. Numerous trees, some as large as 3 feet in diameter, were also downed about 3 miles WSW of Carthage. During the final 1.5 miles the tornado was on the ground it caused minor tree damage.

Madison County 6 N Anderson

22 1654EST 0.2 65 0 0 4 0 Tornado (F1)

A tornado touched down briefly and ripped the roof off a storage building.

Switzerland County 1 WSW Florence to 1 SE North Landing

22 1705EST-1725EST 9.7 75 0 1 6 0 Tornado (F2)

The tornado crossed into Indiana from Kentucky 1 mile WSW of Florence at 1705 EST. The tornado then moved northeast across Switzerland County and crossed back into Kentucky 1 mile southeast of North Landing at 1725 EST. In Switzerland County 40 residences were damaged with some mobile homes being destroyed. Property damage was estimated at 1 million dollars.

Fayette County 3 S Connersville

Union and Wayne Counties 3.3 SW Liberty 3.3 SW Liberty 2.0 E Boston 22 1720EST 0 0 ? ? Hail (1.75)

22 1735EST1800EST 12.0 200 0 0 6 4 Tornado (F2)

The tornado touched down on the high ground near County Road 250 West between the north end of Brookville Lake and Whitwater Lake. The tornado moved northeast across Whitewater State Park and caused considerable damage to the west and north of Liberty. The roofs were partially ripped from many homes, and several garages vere destroyed in the Norleen Acres and Bill Mar Acres Subdivisions just west of Liberty. Just north of Liberty on County Road 85 N the roof was

		Time	Path	Path	Number of	Estimated		November 1992
		Local/	Length	Width	Persons	Damage		
Location	Date	Standard	(Miles)	(Yards)	Killed Injured	Property Crops	Character of Storm	

INDIANA Cont'd

totally ripped from a farmhouse. The tornado also destroyed 2 mobile homes, 6 barns and numerous outbuildings in Union County. A large number of trees were downed in the county, as the tornado moved through many wooded areas. About 90 acres of corn were also destroyed. The tornado crossed into Wayne County at 1757EST 1 mile SSE Boston. A house near Boston was damaged before the tornado moved into Ohio 2 miles east of Boston at 1800EST. Total crop damage was estimated at \$27,000. There was an estimated \$1.2 million property damage in Union County, and \$15,000 property damage in Wayne County.

Wayne County Boston Jay County Portland

22	1745EST			0	0	0	0	Hail (0.75)
22	1800EST	0.2	6	0	0	4	0	Tornado (F1)

A tornado touched down on the southwest side of Portland and moved over a 0.2 mile path destroying a storage shed, removing the roof of one home, and damaging the roofs of several other homes.

Jay County 4.5 NE Portland

22 1800EST 0 0 4 0 Thunderstorms Winds

Thunderstorm winds took the roof of a barn and farm house at County Road 80 just west of County Road 179. Three hay wagons were also damaged and several horses were injured. Power lines were downed and 70 to 80 people were left without power. The damage was produced by a downburst.

Franklin County

22 1815EST

0 0 0 Hail (0.75)

Three-quarter inch hail covered the ground in the northeast part of the county.

IOWA

IAZ004-006-016-024>026 North central Iowa 04 0600CST-07 1500CST

0 0 3 3 Flood

As has been typical in 1992, the dry conditions of the previous month transitioned into above normal precipitation the following month. Preliminary information provided by State Climatologist Harry Hillaker, Iowa Department of Agriculture and Land Stewardship, indicated that November was the 6th wettest on record. Statewide precipitation amounts totaled around 4.42 inches, or 293% of the normal 1.51 inches. Precipitation was observed somewhere in the state on all but 5 days of the month. The first major rain event occurred on the 1st and 2nd, when a large area of one and half to three inch rains fell over much of the state. Moderate within bank rises occurred on many streams. Portions of the East Fork of the Des Moines River recorded minor flooding. Crests were less than a foot over flood stage. The upper portion of the Iowa River near Roan also exceeded bank full slightly.

IAZ038-045-050 > 053-21 058-061 > 064-27 071 > 078-082 > 089-093 > 099-ILZ004 Southern Half of Iowa

21 0400CST-27 1200CST

0 0 4 4 Flood

Generally speaking, light rain and snow fell in the state until the 20th and 21st when another significant precipitation event took place. One and one half to three inches of rain fell over mainly the east half of the state. Minor flooding was observed in the lower portions of the Grand, Chariton, Wapsipinicon, Skunk, Iowa/Cedar, and Des Moines River basins. Most locations in the middle and upper portions of these basins observed moderate rises or crested just below flood stage. Also, in the lowa City area, Clear Creek and Old Mans Creek exceeded bank full. The flooding event lasted several days due to the saturated condition of the soil. Most of the rivers crested anywhere from 1 to 3 feet over flood stage. The English River at Kalona had a crest of over 5 feet above flood stage. Most of the flooding had ended by Thanksgiving Day. The water level of the Wapsipinicon River at De Witt remained above flood stage into early December as this river is very slow to react.

Location	Date_	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		ber of ions Injured	Estim Dam Property	age	Character of Storm	November 1992
IOWA Cont'd IAZ008 > 011-018-019- 025 > 030-034 > 042- 044 > 054-056 > 064- 070 > 076-080 > 086- 090 > 096-NEZ010- ILZ004 Greater Portion of the southeast	- 25	0300CST- 2300CST			0	0	5	4	Snow Heavy Snow	

The seasons first winter storm developed over the Texas Panhandle and moved through Missouri into northern Illinois. Significant snow fell over a large part of Iowa. Only the northwest third and the far southeast corner were spared. Snowfall amounts ranged from three to nine inches. The heaviest band extended from Creston through Des Moines, Waterloo, and Dubuque. Six to nine inches were common in this band. During the height of the storm, snowfall rates of one to two inches per hour were common. The heaviest reported snowfall was 10.3 inches at Dubuque followed by a 10 inch report at Monona, 9.4 inches in Ankeny and 9.3 inches at the Des Moines Airport. Travel became difficult, with roadways becoming snow packed and ice covered. Most of the side streets were closed in the Dubuque area. Accidents were very numerous and were in the hundreds as people began their Thanksgiving holiday travel. A few highways were closed for a while due to accidents. There were several traffic related fatalities with at least five known traffic deaths. The snow fell with surface temperatures above freezing in most cases. This minimized the drifting problems but caused problems with snow removal as the snow was very wet and heavy. One man died shoveling snow in Denver. Spotty power outages occurred due to the heavy wet snow collecting on power lines and trees. In Des Moines for example, 3700 customers were without power for a period of time. There was some crop damage due to the storm. Nearly one quarter of the states corn crop was still in the fields. The heavy wet snow caused lodging in many areas.

(M??)

KANSAS

Franklin County Near Ottawa

20 1100CST 0 0 3 0 Flood

Flooding from heavy rains closed parts of two roads in Franklin county near Ottawa. A part of Rock Creek Road about a mile west of US Highway 59 was closed as was Jackson Road between Eisenhower Road and US 59. Many low water crossings were also impassable due to the high waters.

SW Kansas County KSZ003-006

24 0615CST 1 0 5 0 Severe Blizzards

A major winter storm and blizzard occurred across southwest Kansas from the early morning on Tuesday, November 24, through the late morning on Wednesday, November 25th. The storm developed in the Texas panhandle on Monday November 23 and moved into central Oklahoma on Tuesday. Heavy snow and blizzard conditions occurred across a large area of southwest Kansas. Snowfall amounts ranged from 17 inches at Liberal to 15 inches at Garden City and Dodge City. Winds as high as 45 MPH were reported across the area. Most roads and highways in the Garden City, Dodge City, Meade, Greensburg, Coldwater and Liberal areas were closed with snowdrifts of two to five feet. Snowdrifts as high as 15 feet were reported in the Hugoton area. Widespread visibilities of 0.25 of a mile or less were also reported from Tuesday afternoon through early Wednesday morning. The first fatality during the storm occurred on Tuesday morning, near Ingalls, when a 31 year old man was killed in a traffic accident. The second fatality occurred Wednesday near Ensign when a man suffered a heart attack while walking from his car. His car had become stuck in the snow. On Thursday morning, the roof of a office supply building in Dodge City collapsed due to the weight of the snow. Estimates from area farmers and feedlot owners indicated that as many as 5,000 head of cattle may have perished during the storm. (M630)

NW Kansas County KSZ001-002

24 0900CST 0 0 3 0 Blizzard

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		nber of sons Injured		imated image ty Crops	November 1992 Character of Storm
KANSAS Cont'd									
	also inch	. Snowfall o es fell in Lar	f three to ne and Ne	eight inche ss countie	es was r s. Win	eported ds gust	from s were	most are	into parts of northwest Kansas eas, although twelve to fourteen 40 mph over parts of the area were blocked by large drifts.
C Kansas County	24	1100CST			0	0	3	2	Winter Storm
	Nov outa repo	ember 25th. ges, closed h orted snowfall	Snowfall ighways a amounts 7 inches,	of five to nd near ze included: Natoma 8	twelve ro visib Bison 1	inches foility in 2.5 inc	ell ove near b hes, O	er most o lizzard o sborne	mber 24th ended by midday of of central Kansas causing power conditions. Some of the heavier 10 inches, Ellis 11 inches, Hays lainville 10 inches, Concordia 3
S Central Kansas Cor KSZ009/KSZ012	unty 24	1800CST			0	0	0	0	Heavy Snow
	thro Cou	ugh late Wed	nesday mo hita, Huto	orning. H	ighway	54 was	closed	west of	area from late Tuesday evening Pratt. Areas to the east of Pratt to six inches of snow but winds
NE Kansas County KSZ013-015	25	1000CST			0	0	0	0	Heavy Snow
	cour 9 in	nties into Nen	naha coun	ty. Heavi	est snov	v fell in	ı Waba	unsee c	parts of Morris and Wabaunsee ounty where Alta Vista reported attered power outages and broke
KENTUCKY									
McCracken County	12	1200CST- 1400CST			0	0	3	0	High Winds
	Stro hom	ng gradient v ne was damag	vinds down	ned trees a	ınd pow	er lines	throu	ghout th	e county. In addition, a mobile
KY002-003	12	1245CST- 1430CST			0	0	4	0	High Winds
	High in N	h winds broke lorthwest and	windows South Ce	and dama	iged out	tbuildin	gs in F	Henderso	on, and uprooted numerous trees
KY004	12	1400EST- 1600EST			1	0	5	0	High Winds
	pow		Hardin Co	unty, 21 y	ear old	Sean Fi	tzsimo	ns was l	ouildings and downed trees and killed when a tree fell on the car
KY007	12	1400EST- 1630EST		•	1	0	5	0	High Winds
	and	ds gusting be	were also	and 70 mp blown do	oh dama wn. In	ged bui	ldings	and hor	nes across the area. Many trees ar old man was killed with tree
KY005	12	1400EST- 1630EST			0	0	5	0	High Winds
	Stro dam	ong winds dar naged when to	naged bui	ldings and walls were	downe blown	d trees	and p	ower lin	les. In Newport, a building was veen 60 and 70 mph.
Henry County Smithfield	22	1620EST	0.5	20	0	0	4	0	Tornado (F0)

		Time Local/	Path Length	Path Width		nber of	Estim Dam		November 1992
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property		Character of Storm
KENTUCKY Con	t'd								
		nall tornado to damaged. An							trailer was destroyed and a barn
Henry County	22	1640EST	3	40	0	0	3	0	Tornado (F0)
	just north were	north of Can heast of Tucke also uprooted	npbellsbur r Station. l. The las	g. Seven A house t touchdow	ral tre was d wn was	es were amaged near Po	blown and a bo ort Roya	down. arn was I and cl	y County. It first touched down The second touchdown was s destroyed. Several large trees lose to the Carroll County Line. were blown down.
Carroll County	22	1652EST- 1750EST	16	60	1	9	6	0	Tornado (F4)
	grou was 62 y destr	nd until crossi an F1 intensit ear old womar royed. Two	ng the Ohy but near n was killed 100-foot in ned and m	nio River : Easterda d. In add high powe	in Nor y the t lition 9 er trans were u	thern Ca ornado i people sfer stru prooted	irroll Co intensifi were in ctures v	ounty. ed to a jured a vere tw	The tornado remained on the For most of its life the tornado n F4. It was in this area that a s many homes and trailers were isted to the ground. One semi-ulation and miscellaneous debris
Owen County	22	1717EST	2	20	0	0	4	0	Tornado (F1)
·	A sn repo	nall tornado to rted but two b	uched do	wn near G a trailer w	iratz an vere de	nd move stroyed.	d to jus	t south	of Owenton. No injuries were
Boone County	22	1725EST	1	20	0	0	3	0	Tornado (F0)
	cross	tornado that o sed the Ohio F only damage v	tiver back	into Boo	ne Cou	om Car inty. T	roll Co he torna	unty in do stay	to Switzerland County Indiana yed on the ground for one mile.
Pendleton County Falmouth	22	1830EST			0	0	0	0	Hail (0.75)
Lewis County	22	1955EST			0	0	3	0	Thunderstorm Winds Hail (0.75)
		s and power l					northe	n porti	ion of the county. In addition,
LOUISIANA									
Caddo Parish Shreveport Airport	01 01	0536CST 0545CST			0	0	?	0	Thunderstorm Winds (G50) Thunderstorm Winds (G50)
Bossier Parish Bossier City	01	0545CST			0	0	?	0	Thunderstorm Winds
•	A lir Serv	ie of thunderst	: Airport (Office. In	0 to 35	mph pr	oduced	60 mpl s blew	n winds at the National Weather down some trees in Shreveport understorms winds.
Vermilion Parish 1.5 E-2.0 E Abbeville	01	1015CST	0.5	20	0	0	4	?	Tornado (F1)
Cameron Parish Grand Chenier	01	1030CST			0	0	?	?	Thunderstorm Winds
Acadia Parish 7 SE Crowley	01	1052CST			0	0	?	?	Thunderstorm Winds
Vermilion Parish Perry	01	1115CST			0	0	?	?	Thunderstorm Winds

	Time	Path	Path	Number of	Estimated	November 1992
•	Local/	Length	Width	Persons	Damage	CI
Location	Date Standard	(Miles)	(Yards)	Killed Injured	Property Crops	Character of Storm

LOUISIANA Cont'd

A line of thunderstorms moving east northeast at 30 mph produced a brief tornado which damaged a utility building and part of a school a few miles east of Abbeville. Straight line winds blew down trees and power lines in Grand Chenier, 7 miles southeast of Crowley and in Perry.

	1100	s and power in	ics III Ola	nu Chem	CI, / III	105 50	шшсаы	t of Clow	ley and in Ferry.
St Martin Parish Cade	01	1210CST	0.5	40	0	0	4	?	Tornado (F2)
	The dam	Sheriff Office aged another n	reported	a brief ne.	tornado	near	Cade	destroyed	a mobile home and heavily
Caddo Parish Greenwood Shreveport	03 03	1410CST 1417CST			0	0	4 ?	0	Thunderstorm Winds (G58) Thunderstorm Winds (G53)
Shreveport	03	1429CST			0	1	?	0	Hail (0.75) Thunderstorm Winds Hail (1.75)
Bossier Parish Barksdale Air Force Base	03	1429CST	,		0	0	?	0	Thunderstorm Winds Hail (1.50)
Caddo Parish Shreveport Downtown Airport Bossier Parish	03	1435CST	1.0	40	0	0	6	0	Tornado (F1)
Barksdale Air Force Base Desoto Parish	03	1440CST	0.5	45	0	0	5	0	Tornado (F1)
13SW Mansfield Caddo Parish	03	1440CST	2.0	80	0	0	0	?	Tornado (F1)
Shreveport Bossier Parish	03	1442CST			0	0	4	0	Thunderstorm Winds
Bossier City	03	1445CST			0	0	4	0	Thunderstorm Winds Hail (1.75)
Desoto Parish 3 NE Pelican Webster Parish	03	1448CST	2.5	90	0	0	4	?	Tornado (F1)
2 W Dixie Inn Bossier Paris	03	1508CST	1.8	45	0	0	4	?	Tornado (F1)
3 NW Haughtonh	03	1512CST			0	0	?	?	Thunderstorm Winds Hail (2.00)
Webster Parish 5 NE Minden Bienville Parish	03	1518CST	1.5	45	0	0	0	?	Tornado (F1)
Jamestown	03	1520CST			0	0	?	?	Thunderstorm Winds (G54) Hail (1.75)
Claiborne Parish 7 SW Homer Bienville Parish	03	1524CST	1.5	40	0	0	4	?	Tornado (F1)
10 W Bryceland Red River Parish	03	1525CST			0	0	0	?	Thunderstorm Winds
6 SE Coushatta	03	1530CST			0	.0	?	?	Thunderstorm Winds Hail (1.75)
Claiborne Parish 5 SW Homer	03	1530CST			0	0	?	?	Thunderstorm Winds Hail (1.75)
Desoto Parish 10 SE Mansfield	03	1532CST			0	0	?	?	Thunderstorm Winds Hail (0.88)
Bienville Parish 6 W Bryceland to 1.5 NE Arcadia	03 03	1532CST- 1545CST	7.0	300	0	0	7	?	Tornado (F3)

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Nurr Pen Killed	nber of sons Injured	Estim Dam Property	age	November 1992 Character of Storm
LOUISIANA Con	t'd			•					
Desoto Parish		4 = 44 = 0 = =					_		
10 E Mansfield Red River Parish	03	1540CST			0	0	0	?	Thunderstorm Winds
4 S Coushatta	03	1541CST			0	0	0	?	Thunderstorm Winds Hail (0.88)
Desoto Parish Oxford	03	1542CST			0	0	?	?	Thunderstorm Winds Hail (1.75)
Red River Parish 4 N Lake End	03	1552CST	1.5	55	0	0	0	?	Tornado (F1)
Sabine Parish 3 E Converse	03	1601CST	1,0	00	0	0	?	?	Thunderstorm Winds
Lincoln Parish	U J	1001051			v	v	•	•	Hail (0.88)
4 N Simsboro	03	1605CST	0.8	40	0	0	0	?	Tornado (F1)
Jackson Parish Jonesboro, Hodge	03	1607CST			0	0	?	?	Thunderstorm Winds Hail (1.75)
Bienville Parish 2 SE Arcadia	03	1610CST			0	0	0	?	Thunderstorm Winds
Jackson Parish 1 E Jonesboro	03	1612CST			0	0	?	?	Thunderstorm Winds Hail (1.00)
Sabine Parish 5 N Many	03	1620CST			0	0	?	?	Thunderstorm Winds
Winn Parish 5 SW Calvin	03	1625CST			0	0	?	?	Thunderstorm Winds
Natchitoches 5 NE Natchitoches	03	1640CST			0	0	4	?	Thunderstorm Winds
Winn Parish 6 N Winnfield	03	1652CST	1.5	30	0	0	0	?	Tornado (F1)
Union Parish 7 W Farmerville	03	1700CST	1.5	55	0	0	5	?	Tornado (F1)
Winn Parish 1 N Sikes	03	1702CST	2.0	65	0	0	5	· ?	Tornado (F1)
Winn Parish 5 E Sikes	03	1702CST	2.0	03	•				` '
Jackson Parish			1.0	00	0	0	?	?	Thunderstorm Winds
8 SE Chatham Union Parish	03	1714CST	1.8	80	0	0	0	?	Tornado (F1)
8 E Farmerville	03	1715CST			0	0	?	?	Thunderstorm Winds Hail (0.88)
Caldwell Parish _Riverton_	03	1735CST			0	0	4	?	Thunderstorm Winds (G58)
Ouachita Parish Bosco	03	1737CST			0	0	?	?	Thunderstorm Winds
Franklin Parish Longview	03	1745CST			0	0	?	?	Thunderstorm Winds
Caldwell Parish		1, 10 001			Ū	•	•	•	Hail (1.00)
3 W Herbert Franklin Parish	03	1754CST	1.0	80	0	0	4	?	Tornado (F1)
Baskin, Bakers 1 E Crowville	03 03	1755CST 1757CST			0	0	?	?	Thunderstorm Winds
Como	03	1810CST			Ö	Ŏ	?	?	Thunderstorm Winds Thunderstorm Winds
Richland Parish Rayville Alto	03 03	1810CST 1820CST			0	0	?	?	Hail (1.75) Thunderstorm Winds Thunderstorm Winds (G58)

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pers Killed	ber of ons Injured	Estin Dan Property	age	November 1992 Character of Storm
LOUISIANA Con	t'd								
W Carroll Parish 5 S Darnell	03	1820CST			0	0	0	0	Thunderstorm Winds Hail (0.75)
Madison Parish 2 E Waverly	03	1822CST			0	0	3	?	Thunderstorm Winds
Morehouse Parish 10 SE Bastrop	03	1825CST			0	0	?	?	Thunderstorm Winds Hail (0.88)
Oak Ridge E Carroll Parish	02	192 <i>EC</i> CT			•	٥	0	0	` ,
6 W Transylvania Tensas Parish	03	1825CST			0	0	?	?	Thunderstorm Winds (G51)
New Light	03	1900CST			0	0	?	?	Thunderstorm Winds Hail (0.88)
Franklin Parish Gilbert	03	1910CST			0	0	?	?	Thunderstorm Winds Hail (1.75)
Tensas Parish Newellton	03	1913CST			0	0	?	?	Thunderstorm Winds Hail (1.00)
Madison Parish Tallulah	03	1915CST			0	0	?	?	Thunderstorm Winds Hail (1.00)

Four separate severe thunderstorms developed rapidly ahead of a line of numerous thunderstorms which formed in extreme northeast Texas and northwest Louisiana. These severe thunderstorms moved northeast about 40 mph producing 15 tornadoes, widespread straight line wind and large hail damage across northwest Louisiana. The paths taken by these severe thunderstorms are as follows: 1) Caddo, Bossier, Webster and Claiborne Parishes; 2) Bienville, Lincoln and Union Parishes; 3) Desoto and Red River Parishes; and 4) Sabine, Natchitoches, Winn and Jackson Parishes. These thunderstorms were later absorbed by the advancing squall line in northeast Louisiana. This merger prolonged the severe weather episode by spawning a tornado in Caldwell Parish. More reports or straight line wind and large hail damage in Richland, Madison, East Carroll, West Carroll, Morehouse and Tensas Parishes. A parish by parish summary follows. Caddo Parish: 70 mph winds damaged a flea market and blew down a large sign at a truck stop near Greenwood. In addition, strong winds blew cars off U.S. Interstate 80 near Greenwood around 1410CST. The National Weather Service Office at Shreveport measured 63 mph wind gusts and penny-size hail at 1417CST. Golf-ball size hail was reported in the Broadmoor section of Shreveport. In addition, numerous large trees were blown down in the central part of Shreveport about 1429CST. One of these trees fell ontop of a 63 year old woman. A tornado destroyed 3 hangars, heavily damaged 3 other hangars, took off the roof of a large building at the Shreveport Downtown Airport around 1435CST. In addition, 21 airplanes were damaged. Losses at the Shreveport Downtown Airport were accessed at \$1,100,000. A roof of a office building near downtown Shreveport was blown off. Numerous trees were blown down at the Shreveport campus of Louisiana State University around 1442CST.

Bossier Parish: 1.50 inch hail fell at the Barksdale Air Force Base at 1429CST. The hail put dents in cars and broke some windshields. A tornado took off the roofs of 4 buildings and blew down numerous trees at the Barksdale Air Force Base at 1440CST. Two B52H bombers and a KC135 tanker received light damage. In Bossier City golf ball-size hail fell and strong winds blew off the roofs of several businesses around 1445CST. Finally, egg-size hail was reported 3 miles northwest of Haughton about 1512CST.

Desoto Parish: A small tornado destroyed many trees in open country about 13 miles southwest of Mansfield at 1440CST. Another tornado demolished 3 barns and uprooted many trees 3 miles northeast of Pelican at 1448CST. Straight line winds blew down many trees 10 miles east of Mansfield about 1540CST. Nickle-size hail fell 10 miles southeast of Mansfield at 1532CST. Finally, golf ball-size hail was observed at Oxford about 1542CST.

Webster Parish: A tornado destroyed numerous trees and blew an unoccupied car around a utility pole 2 miles west of Dixie Inn about 1508CST. Another tornado blew down many trees in a rural area about 5 miles northeast of Minden at 1518CST.

		Time	Path	Path	Number of	Estimated	November 1992
		Local/	Length	Width	Persons	Damage	
Location	Date	Standard	(Miles)	(Yards)	Killed Injured	Property Crops	Character of Storm

LOUISIANA Cont'd

Bienville Parish: 65 mph winds blew down numerous trees and golf ball-size hail was reported in Jamestown at 1520CST. Numerous trees were blown down 10 miles west of Bryceland around 1525CST. A strong tornado began at 1532CST about 6 miles west of Byrceland. This tornado continued northeast on an intermittent path across open country and through the town of Arcadia before ending about 1.5 miles northeast of Arcadia at 1545CST. Most of the \$5,500,000 damage produced by this tornado occured in Arcadia where 12 homes and 2 businesses were completely destroyed. 75 homes sustained moderate to severe damage. Another 35 homes and/or businesses received light damage. Fortunately, there was no one killed or injured by this tornado. Finally, 1.00 inch hail was reported 2 miles southeast of Arcadia at 1610CST.

Claiborne Parish: A tornado destroyed 5 barns, blew a farm trailer into a utility pole and uprooted many trees 7 miles southwest of Homer at 1524CST. Golf ball-size hail fell 5 miles southwest of Homer about 1530CST.

Red River Parish: Large hail fell 6 miles southeast and 4 miles south of Coushatta between 1530CST and 1541CST. A locomotive engineer observed a tornado moving across railroad tracks into a heavily wooded area about 4 miles north of Lake End around 1552CST.

Sabine Parish: Nickle-size hail was observed 3 miles east of Converse at 1601CST. Strong winds blew down numerous trees 5 miles north of Many at 1620CST.

Lincoln Parish: A tornado blew down numerous trees in a rural area about 4 miles north of Simsboro about 1605CST.

Natchitoches Parish: Straight line winds damaged a few barns 5 miles northeast of Natchitoches at 1640CST.

Jackson Parish: A tornado uprooted many trees 8 miles southeast of Chatham at 1714CST. Large hail fell in the Jonesboro area and in Hodge between 1607CST and 1612CST.

Winn Parish: Strong winds blew down many trees 5 miles southwest of Calvin about 1625CST. A small tornado uprooted numerous trees 6 miles north of Winnfield about 1652CST. Another tornado destroyed 5 outbuildings and rolled over a tractor just north of Sikes at 1702CST. Strong winds blew down numerous trees 5 miles east of Sikes at 1710CST.

Union Parish: A tornado partially destroyed two homes, blew down numerous trees, heavily damaged 3 automobiles and destroyed 2 fishing camps 7 miles west of Farmerville around 1700CST. Several trees were blown down and nickle-size hail was reported 8 miles east of Farmerville about 1715CST.

Caldwell Parish: 70 mph winds were measured at a television transmission tower at Riverton about 1735CST. A tornado uprooted numerous trees and destroyed 2 fishing camps 3 miles west of Herbert at 1754CST.

Ouachita Parish: Straight line winds blew down several trees at Bosco around 1737CST.

Franklin Parish: Large hail was reported at Longview and Como between 1745CST and 1810CST. Just east of Crowville between 1755CST and 1757CST, strong winds blew down several trees in Baskin and Bakers. If ball-size hail was reported at Gilbert at 1910CST.

Richland Parish: 70 mph winds blew down numerous trees in Alton and pushed a truck off U.S. Interstate 20 near Rayville between 1810CST-1820CST.

West Carroll Parish: Penny-size hail was reported 5 miles south of Darnell around 1820CST.

East Carroll Parish: 62 mph winds damaged crops 6 miles west of Transylvania at 1825CST.

Madison Parish: Strong winds damaged several outbuildings 2 miles east of Waverly at 1822CST. 1.00 inch hail fell in Tallulah at 1915CST.

Morehouse Parish: Nickle-size hail was reported 10 miles southeast of Bastrop and in Oak Ridge at 1825CST.

Tensas Parish: Large hail was reported in New Light and Newellton between 1900CST and 1913CST.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pers Killed	ber of sons Injured	Estim Dam Property	age	November 1992 Character of Storm
LOUISIANA Con	t'd								
Terrebonne 3 S Chauvin, Cocodrie	04	0350CST			0	0	4	?	Thunderstorm Winds
	south	uster of thunden of Chauvin. Dats in a marin	Thunders	torm wind	theast : Is dam	at 30 m aged a	ph blew few roo	down fs in C	some utility poles about 3 miles ocodrie and blew over a couple
Caddo Parish 3 SE Oil City	12	0220CST			0	0	?	?	Thunderstorm Winds
		ne thunderstori il City.	ns moving	g northeast	at 50	mph bl	ew dow	n sever	al trees about 3 miles southeast
Grant Parish 5 SE Montgomery	12	0500CST	1.5	55	0	0	4	?	Tornado (F2)
	A to	rnado destroye about 5 miles	d a mobile s southeast	home, da of Montg	maged gomery	the roo	ofs of se	veral no	earby homes and uprooted some
Acadia Parish Iota	20	0345CST			0	0	?	?	Thunderstorm Winds
	Acad	lia Parish Civi	l Defense	reports th	at a th	underst	orm ble	w dow	n several trees in Iota.
Terrebonne 4 S Houma	20	0845CST	0.2	25	0	0	3	0	Tornado (F1)
Lafouche Parish Thibodaux	20	0850CST	0.2	25	0	1	4	0	Tornado (F1)
	foun 0850 at the in th comp	dation and ove CST where it e W.F. Lafarg e school parki	erturned a blew a mo ue Elemer ng lot whi arked cars	few boats bile home try Schoo ich the tor s had their	at a me off its loff the nado s	narina. s blocks neir foun showere ows blo	The section. The the thick the thic	cond to cornado s. A tes debris f	d 2 brief tornadoes. The first knocked a mobile home off its rnado struck Thibodaux around knocked 2 portable classrooms acher aid suffered a broken arm from a nearby plumbing supply daux police report that the roof
Beauregard Merryville	21	1805CST			0	0	0	?	Thunderstorm Winds
Sabine Parish 4 S Negreet	21	1820CST			0	0	?	?	Thunderstrom Winds
5 S Florien	21	1820CST			0	0	?	?	Hail (1.00) Thunderstorm Winds
Beauregard Merryville Vernon Parish	21	1822CST			0	2	4	?	Thunderstorm Winds
Slagle to 6 NE Slagle 10 E Leesville	21 21	1912CST 1915CST	6.0	150	0	0	4	?	Tornado (F2) Thunderstorm Winds
Beauregard Longville	21	1930CST			0	0	0	?	Thunderstorm Winds
Calcasieu Parish Westlake	21	1930CST			0	0	0	0	Thunderstorm Winds Hail (0.75)
1 SW Iowa to Jefferson Davis Woodlawn	21 21	1930CST-	6.0	75	0	2		n	
Natchitoches 2 S Chopin	21	2008CST 1940CST	6.0	13	0	0	6 ?	?	Tornado (F3) Thunderstorm Winds

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		iber of sons Injured	Estin Dan Property	nated nage Crops	November 1992 Character of Storm
LOUISIANA Con	t'd								
Allen Parish Elizabeth, Oberlin, Mittie	21	2000CST			0	0	?	?	Thunderstorm Winds
Vernon Parish 1 E Simpson Grant Parish	21	2000CST	•		0	0	?	?	Thunderstorm Winds
Grant Parish 3 NE Pollock Rapides Parish Glenmora	21	2000CST			0	0	?	?	Thunderstorm Winds
	21	2000CST			0	0	?	?	Thunderstorm Winds
Morehouse Parish Mer Rouge	21	2015CST			0	0	3	?	Thunderstorm Winds Hail (0.88)
W Carroll Parish 6 W Oak Grove	21	2030CST			0	0	?	?	Thunderstorm Winds Hail (1.75)
Allen Parish Reaves	21	2030CST			0	0	?	?	Thunderstorm Winds
Evangeline Parish Pine Prairie	21	2040CST			0	0	0	?	Thunderstorm Winds
Acadia Parish Estherwood	21	2046CST			0	0	?	?	Thunderstorm Winds
Rapides Parish Tioga St Landry Parish Opelousas	21	2050CST	0.5	150	0	0	4	?	Tornado (F2)
	21	2105CST			0	0	4	?	Thunderstorm Winds
Vermilion Parish Abbeville	21	2115CST			0	0	?	?	Thunderstorm Winds (G62)
Catahoula Parish Foules	21	2120CST			0	0	?	?	Thunderstorm Winds
Tensas Parish 4 SW Cooter Point	21	2130CST			0	0	?	?	Thunderstrom Winds Hail (1.75)
Iberia Parish Coteau to St Martin Parish 2 E Cade to	21 21	2130CST- 2145CST	15.0	75	0	4	5	?	Tornado (F2)
4 NE Parks Franklin Parish 5 S Griffin Lafayette Parish	21	2140CST			0	0	?	?	Thunderstorm Winds Hail (1.75)
Scott Catahoula Parish	21	2145CST			0	0	4	?	Thunderstorm Winds
Parhams	21	2145CST	0.5	100	0	0	5	5	Tornado (F2)
Concordia Parish Monterey	21	2145CST	3.0	100	0	6	5	5	Torando (F3)
Catahoula Parish Foules to	21	2155CST-	38.0	200	0	11	6	?	Tornado (F3)
Tensas Parish Cooter Point to	21	2215CST-							
Madison Parish 4 SE Tallulah	21	2255CST							
Caldwell Parish 3 SE Columbia	21	2200CST			0	2	4	?	Thunderstorm Winds
Iberia Parish 4 W Jeanerette	21	2200CST			0	1	4	?	Thunderstorm Winds
W Feliciana 8 NE St Francisville to	21 21	2200CST- 2215CST	13.0	100	0	0	5	?	Tornado (F2)

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pers Killed	ber of ons Injured	Estima Dama Property	age	November 1992 Character of Storm
LOUISIANA Cont	'd								
E Feliciana McManus to 2 W Clinton St Mary Parish Franklin	21	2215CST			0	0	3	?	Thunderstorm Winds
Tensas Parish 2 W Goldman to 8 W St Joseph 5 S Newellton E Feliciana Parish	21 21 21	2218CST- 2228CST- 2232CST	16.0	100	0	0	5	?	Tornado (F2)
Wilson to Woodlawn	21 21	2230CST- 2245CST	11.0	75	0	0	4	?	Tornado (F1)
Iberville Parish White Castle	21	2230CST			0	0	?	?	Thunderstorm Winds
E Baton Rouge Parish Baton Rouge	21	2315CST			0	0	?	?	Thunderstorm Winds
Livingston Parish 1 N Watson St Helena Parish	21	2315CST			0	0	?	?	Thunderstorm Winds
Montpelier	21	2320CST			0	0	?	?	Thunderstorm Winds
Jeffersön Parish Kenner	22	0048CST			0	0	?	0	Thunderstorm Winds Hail (0.88)

Several clusters of severe thunderstorms developed rapidly over western and east central Louisiana during the evening of November 21, 1992 ahead of a strong north-south cold front on which a line of numerous thunderstorms had formed. These severe thunderstorms produced ten tornadoes which injured 23 people and damaged several million dollars of property as they moved northeast 35 to 45 mph. The cold front with its associated line of thunderstorms moved east about 30 mph across the state from the west producing numerous additional reports of straight line wind damage and large hail before absorbing the tornadic thunderstorms in east central Louisiana. A damage summary follows.

Beauregard Parish: The sheriff's office reports thunderstorms blew down numerous trees, tore off the roof of a home and injured 2 people in Merryville between 1805CST and 1822CST. Numerous trees were blown down by straight line winds in the Longville area around 1930CST.

Sabine Parish: Thunderstorms produced 1.00 inch hail about 4 miles south of Negreet and blew down some trees at a botanical garden located about 5 miles south of Florien around 1820CST.

Vernon Parish: A tornado blew a mobile home onto a van in the Slagle area while uprooting many trees around 1912CST. Numerous trees were blown down about 10 miles east of Leesville at 1915CST and just east of Simpson by 2000CST.

Calcasieu Parish to Jefferson Davis Parish: Dime-size hail fell in Westlake about 1930CST. A strong tornado moved along an intermittent path that began just southwest of Iowa in Calcasieu Parish around 1930CST. The tornado continued northeast through Iowa by 1950CST where it destroyed 5 homes, damaged 14 homes and 4 businesses including an outlet mall. The outlet mall had part of its roof torn off and several I-beams twisted. The outlet mall sustained some \$100,000 in damage. The tornado crossed Interstate 10 where it caused a 3 car accident. Fortunately, only 2 people received minor injuries in Iowa. The tornado then continued into rural Jefferson Davis Parish before ending in Woodlawn where it destroyed 1 home and damaged 4 other homes according to the Red Cross damage survey report.

Natchitoches Parish: Numerous trees were blown down a couple miles south of Chopin at 1940CST.

Grant Parish: Thunderstorm winds blew down power lines a few miles northeast of Pollock by 2000CST.

Rapides Parish: Beauregard Electric Company said thunderstorm winds blew down some utility poles and power lines near Glenmora about 2000CST. The Rapides Parish Emergency Management Director said a tornado damaged a few homes and uprooted some trees in Tioga around 2050CST.

Morehouse Parish: Thunderstorm winds damaged a barn, blew down some trees and produced nickle-size hail in Mer Rouge about 2015CST.

	Time	Path	Path	Number of	Estimated	November 1992
	Local/	Length	Width	Persons	Damage	
Location	Date Standard	(Miles)	(Yards)	Killed Injured	Property Crops	Character of Storm

LOUISIANA Cont'd

West Carroll Parish: A storm spotter said that thunderstorm winds blew down several trees and produced golf ball-size hail 6 miles west of Oak Grove around 2030CST.

Allen Parish: Beauregard Electric Company reports that thunderstorm winds blew down numerous trees and powerlines near Elizabeth, Oberlin, Mittie and Reaves between 2000CST-2030CST.

Evangeline Parish: The sheriff's office reports that thunderstorm winds blew down many trees near Pine Prairie about 2040CST.

Acadia Parish: Beauregard Electric Company reports that thunderstorm winds blew down numerous trees and power lines near Estherwood around 2046CST.

St Landry Parish: The sheriff's office reported thunderstorm winds blew off the roof of a barn just southwest of Opelousas and took off the roof of a mobile home just north of Opelousas about 2105CST.

Vermilion Parish: The sheriff's office reports thunderstorms produced 75 mph gusts in Abbeville at 2115CST.

Tensas Parish: Golf ball-size hail fell 4 miles southwest of Cooter Point at 2130CST. A tornado blew down many trees a couple of miles west of Goldman around 2218CST. The tornado continued north northeast across open country before destroying 3 barns and heavily damaging 4 buildings 8 miles west of St Joseph at 2228CST. The tornado heavily damaged 5 homes and destroyed several outbuildings about 5 miles south of Newellton about 2232CST.

Catahoula Parish: The sheriff's office reports thunderstorm winds blew down numerous trees near Foules about 2120CST. A tornado destroyed 18 mobile homes, damaged 2 homes and uprooted numerous trees in Parhams around 2145CST. The Catahoula Emergency Management Director estimated property damage in the Parhams area at \$369,000; around \$200,000 damage was done to timber.

Catahoula Parish to Tensas Parish to Madison Parish: A tornado moving rapidly northeast on an intermittent path began in extreme northeast Catahoula Parish in Foules where it destroyed 12 mobile homes, a church and damaged 3 single family homes. The Catahoula Emergency Management Office said the tornado did an estimated \$318,000 to property in the Foules area. In addition, 3 people were injured in Foules around 2155CST. The tornado moved into rural Tensas Parish and struck the town of Cooter Point where it destroyed a mobile home, partially destroyed 8 homes and injured 6 people around 2215CST. The tornado continued rapidly northeast across the northern part of Tensas Parish before entering rural Madison Parish where it destroyed 2 mobile homes and 3 barns. Heavily damaged 2 homes and injured 2 people 4 miles southeast of Tallulah about 2255CST.

Concordia Parish: A tornado injured 6 people, destroyed 2 homes, a mobile home and took off the roof of a barn in Monterey around 2145CST. The Concordia Parish Emergency Management Director estimated property damage in the Monterey area was around \$128,000; damage to timber was about \$200,000.

Iberia Parish to St Martin Parish: A tornado injured 1 person and destroyed 3 mobile homes in Couteau around 2130CST according to the Iberia Parish Emergency Management Director. The tornado crossed over into St Martin Parish and continued rapidly northeast on a intermittent path that extended from a couple miles west of St Martinville through Parks about 2145CST before ending about 4 miles northeast of Parks. The tornado destroyed several outbuildings 2 miles west of St Martinville about 2140CST. In the Parks area, the tornado destroyed 3 mobile homes and heavily damaged 3 other mobile homes while injuring 3 people around 2145CST. Finally, strong thunderstorm winds blew over a mobile home injuring a woman and took off the tin roof of a grocery store 4 miles west of Jeanerette about 2200CST.

Franklin Parish: Golf ball-size hail fell 5 miles south of Griffin at 2140CST.

Lafayette Parish: The sheriff's office reports that thunderstorm winds blew over a mobile home and took down power lines in Scott at 2145CST.

Caldwell Parish: Thunderstorm winds rolled over a mobile home, injuring 2 people about 3 miles southeast of Columbia at 2200CST.

		Time	Path	Path	Number of	Estimated	No	ovember 1992
		Local/	Length	Width	Persons	· Damage		
Location	Date	Standard	(Miles)	(Yards)	Killed Injured	Property Crops	Character of Storm	

LOUISIANA Cont'd

St Mary Parish: Thunderstorm winds destroyed a garage in Franklin about 2215CST.

West Feliciana Parish to East Feliciana Parish: Two tornadoes moved through this area. The first one began in a rural area about 8 miles northeast of St Francisville about 2200CST. The tornado moved east-northeast into East Felicana Parish where it passed through McManus before ending a couple of miles west of Clinton around 2215CST. According to the Red Cross, the tornado destroyed 4 mobile homes, 2 single family homes and several greenhouses in McManus. The second tornado began in Wilson about 2230CST and moved rapidly east-northeast before ending in Woodlawn. The Red Cross said the tornado destroyed a home in Wilson and damaged a few other homes in Woodlawn.

Iberville Parish: Thunderstorm winds blew down power lines in White Castle about 2230CST according to the sheriff's office.

East Baton Rouge Parish: Thunderstorm winds blew down a few trees in the south part of Baton Rouge about 2315CST.

Livingston Parish: Thunderstorm winds blew down a few trees on top of a home just north of Watson at 2315CST.

St Helena Parish: The sheriff's office reports thunderstorm winds blew down power lines in Montpelier around 2320CST.

Jefferson Parish: Kenner police report nickle-size hail fell around 0048CST.

Lafayette Parish Carenco	23	2120CST	0	0	0	0	Thunderstorm Winds Hail (0.75)
Vermilion Parish Kaplan	23	2125CST	0	0	0	0	Thunderstorm Winds Hail (0.75)

Scattered thunderstorms moving northeast about 35 mph produced dime-size hail in Carenco and Kaplan.

St Tammany Parish Slidell

24 0245CST-24 0445CST 0 0 4 0 Flash Flood

Scattered thunderstorms moving northeast about 35 mph produced about 4.7 inches at the Weather Service Forecast Office in Slidell. Slidell police reports some businesses along Front Street were inundated with flood waters. Police report some homes were flooded in the south part of Slidell.

Plaquemines Parish Empire

24 0800CST 0 0 3 0 Lightning

Lightning struck an storage tank near Empire setting about 240 barrels of oil on fire.

MAINE

MEZ007-008-010 13 0345EST-011 13 0700EST 0 0 ? 0 South Central Maine

An intense storm that moved from Indiana into Michigan and Ontario, Canada caused a warm front to move north across New England. This pattern produced high winds over south central Maine. Wind toppled a tree onto a residence at Main street in Monmouth, Maine causing \$15,000 to \$20,000 worth of damage. Also, a wind blown tree did damage to a home on Barter Road in Rockland - damage unknown. At 0430EST, winds gusted to 59 miles per hour at Portland, and at 0530EST winds gusted to 48 miles per hour at Augusta.

High Winds

Time Path Path Number of Estimated November 1992

Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

DISTRICT OF COLUMBIA

None reported.

MARYLAND

MDZALL

13 0000EST-0500EST

0 0 4 0 High Winds

A strong cold front brought light to moderate rain to the state followed by strong winds during the early morning hours Friday morning. Damage was mainly trees and tree limbs falling on power lines knocking them down. Thousands of people across the state were without electricity for a short period of time. Damage was more widespread over the western part of the state and spotty over the eastern part. Some minor property damage was reported.

Prince Georges County Silver Hill

23 0300EST 1.03 0 0 0 6 0 Tornado (F1)

A tornado touched down in Silver Hill on the Smithsonian Institutes Garber Facility. It traveled Northeast across the facility and broke trees in its path, blew a number of 12 by 15 foot doors down, destroyed part of the roof of a large building, and pushed a tractor trailer truck into an adjacent building. The tornado left the facility continuing northeast where it damaged the roof of a store and damaged electric company power poles, transformers and other equipment. Total damage was estimated at \$1,500,000.

MASSACHUSETTS

MAZALL Statewide 13 0000EST-0730EST

0 0 ? 0 High Winds

A period of high south winds progressed eastward across the state during the early morning hours. The strongest winds lasted about 2 hours beginning around midnight in the extreme west portion and reached Cape Cod around 0500EST. Isolated power outages were reported with the most numerous occurring in the southeast portion of the state. Some peak gusts from National Weather Service sites included: Worcester, 46 MPH at 0257EST; Blue Hill Observatory at Milton, 77 MPH at 0412EST, 0419EST and 0428EST; Boston, 53 MPH at 0408EST; and Chatham, 54 MPH at 0735EST. Other reports from the Cape Cod area included a gust to 58 MPH at the Otis Air Force Base and the Buzzards Bay entrance tower around 0500EST.

MICHIGAN

MIZ001 > 083 All Michigan 01- 1800EST-02 1800EST

0 0 3 0 High Winds

East winds sustained 20 to 40 mph over the entire state of Michigan from Sunday evening through Monday evening. Winds gusted to between 50 and 60 mph in many locations during this time. The highest reported wind speed was 69 mph, which was recorded at mid span on the Mackinac Bridge around 1100EST on Monday, November 02. The anemometer that recorded that wind speed is 200 feet above the surface of the water. A wind gust to 55 mph was recorded at the Mason County Airport at 0200EST on Monday, November 02. Many other locations along the lake shore areas record wind gusts around 60 mph. The strong winds were a result of very large pressure gradient between a large high pressure system over east central Canada and deep low pressure system moving northward through the Central Plains. The high moved slowly eastward from northeastern Ontario Sunday evening, to north central Quebec Monday morning. At the same time, a deep low pressure system moved northward from southern Kansas Sunday morning to east central lowa by mid morning Monday. Then the storm moved northward to extreme western Lake Superior by Tuesday morning. The strong winds resulted in power lines and tree limbs being blown down over many parts of Michigan. The hardest hit areas were over Northern Lower Michigan near Lakes Michigan and Lake Huron. Some towns were without power for several days. Mackinac Island lost power completely during the storm and could not be reached by boast due to strong winds and high waves. In St. Ignace, beside power lines and tree limbs being blown down, a 70 foot section of the Star Line dock was destroyed. In the town of Ludington, a home and van suffered damage when a large limb fell on both of them. Many towns in northern Lower Michigan and eastern Upper Michigan had minor damage to roofs from shingles being blown off or by falling tree limbs.

Time Path Path Number of Estimated November 1992
Local/ Length Width Persons Damage
Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

MICHIGAN Cont'd

Also there were several reports of large tourist signs being damaged or blown down due to the high winds.

MIZ073-074-076 > 080 01-Western Upper 02 Michigan

01- 2200EST-02 1200EST

0 0 0 0 Snow

Snow began falling over western Upper Michigan, just before midnight on the Sunday, then continued, heavy at times until around noon on Monday. Snowfalls of three to five inches were common over north central and western Upper Michigan. The Keweenaw Peninsula had only one to two inches of snow, and areas over south central Upper Michigan, near Lake Michigan had almost all rain. Marquette reported 6.5 inches, which was the maximum snowfall report from this storm in the state of Michigan. Also, Bergland Dam, in southwest Ontonagon County, reported about six inches. This was the same storm that caused so many wind problems across the rest of Michigan. However, over the rest of Michigan, the precipitation fell as rain. Rainfall was heavy, generally one to two inches of rain fell over most of Lower Michigan and eastern Upper Michigan but no flooding was reported.

MIZ073-077-078 Western Upper Michigan 04- 0400EST-06 0800EST

0 0 0 Heavy Lake Effect Snow

Heavy Lake Effect snow fell over western Gogebic, extreme southwest Ontonagon and eastern Marquette Counties. The heavy snow accumulated to around eight inches near Marquette. Near Ramsay, which is just east of Ironwood in western Gogebic county, eight inches was also reported. Bergland Dam's 7.2 inches was maximum snowfall in Ontonagon County. Over the rest of southwest Ontonagon County, five to seven inches of snow fell. Snowfall over the remainder of Ontonagon county was three inches or less. Winds were from the northwest between 10 and 20 mph with temperatures mostly in the mid to upper 20s. The rest Marquette and Gogebic counties, plus the other four counties of western Upper Michigan near Lake Superior had from one to two inches of snow. No significant problems or damage was reported as a result of this event.

MIZ073-074-077 > 079 Western Upper Michigan

12- 1200EST-13 1200EST

0 0 0 Heavy Snow

Heavy snow fell over Marquette, southern Baraga, Gogebic, and Iron Counties from the early afternoon hours of Thursday, November 12, until the late morning hours of Friday, November 13th. In these counties, six to eight inches of snow was common, however, Stambaugh, which is in south central Iron County, reported 10 inches of new snow from this storm. As in the previous storm, the Keweenaw Peninsula and areas of south central Upper Michigan near Lake Michigan's north shore had little or no snow during this event. The storm that caused this heavy snow moved northeast from extreme southwest Lower Michigan during the mid morning hours of Thursday, November 12th, to northern Lake Huron by mid evening of Thursday. By then, the storms central pressure had fallen to 986 mb. By Friday morning, the storm was moving into western Quebec and the central pressure had deepened to 969 mb. The snow, as in the previous storm, did not result in any significant damage or major traffic problems.

MIZ001 > 083 Entire State 12- 1800EST-13 0600EST

0 0 4 0 High Winds

Strong winds resulted from the deep low pressure system that moved northeastward across Michigan from Thursday morning, November 12th, until the early morning hours of Friday, November 13th. During this time, winds gusted between 40 and 60 mph in many locations. On the Mackinaw Bridge, winds gusted as high as 58 mph. At 0355 on the Morning of Friday, the 13th, the back section of a double-bottom semitrailer flipped over as it crossed the bridge. The driver was not injured in the incident. Across the rest of Michigan, the damage caused by the high winds was mostly limited to power outages. Consumers Power and Detroit Edison reported that a total of 12,000 customer lost power during the storm. Consumer power said most of there customers that lost power were over the northwest part of Lower Michigan. About one thousand customers lost power over the Upper Peninsula. In the Flint area, were winds gusted to near 50 mph, 2000 customers lost power on the north side of the city.

		Time	Path	Path	Number of	Estimated	November 1992
T	D.4.	Local	Length	Width	Persons	Damage	Olas Assacia Consum
Location	Date	Standard	(Miles)	(Yards)	Killed Injured	Property Crops	Character of Storm

MICHIGAN Cont'd

Wayne County Garden City

12- 2200EST-14 0500EST 0 0 0 Flood/ Flash Flood

The Middle River Rouge rose above its flood stage of 7.0 feet at 10:00 p.m. on the 12th. It crested at 8.7 feet, 1.7 feet above flood stage, around 11:00 a.m. on the 13th. The river was back below flood stage by 5:00 a.m. on the 14th. No damage was reported. This flooding resulted from the same storm the caused the heavy snow over Western Upper Michigan. The rain move into Southern Lower Michigan by 10 p.m. on the 11th. The rain spread over all of Lower Michigan by 7:00 a.m. on the 12th. Then the rain continued, heavy at times until just before 11 p.m. on the 12th. The heaviest rainfalls were over East Central and Southeast Lower Michigan were 1.2 to 1.7 inches of rain fell.

Lenawee County Tecumseh

13- 0100EST-15 1000EST 0 0 0 0 Flood/ Flash Flood

The River Raisin, at Tecumseh, rose above its flood stage of 9.0 feet at 1:00 a.m. on the 13th, cresting at 11.5 feet, 2.5 feet above flood stage, around 100 a.m. on the 14th. The river was back below flood stage by 10:00 a.m. on the 15th. No damage was reported. This flooding resulted from the same storm the caused the heavy snow over Western Upper Michigan. The rain move into Southern Lower Michigan by 10 p.m. on the 11th. Then the rain spread over all of Lower Michigan by 7:00 a.m. on the 12th. The rain continued, heavy at times until just before 11 p.m. on the 12th. The heaviest rainfalls were over East Central and Southeast Lower Michigan were 1.2 to 1.7 inches of rain fell.

Genesee County Davison

13 0200EST-1600EST 0 0 0 0 Flood/ Flash Flood

A daily rainfall record was broken on November 12, when 1.35 inches of rain fell at Flint. The heavy rain was enough to swell many streams to flood stage. Kearsley Creek exceeded its flood stage of 8 feet at 2:00 a.m., cresting near 8.5 feet at 10:00 a.m.. No property damage was reported.

Wayne County Detroit

13 1200EST-1500EST 0 0 0 0 Flood/ Flash Flood

The Rouge River, at Detroit, rose above its flood stage of 15.0 feet at noon on the 13th, then crested at 15.5 feet, .5 feet above flood stage, around 2:00 p.m. on the 13th. The river was back below flood stage by 3:00 p.m. on the 13th. No damage was reported. This flooding resulted from the same storm the caused the heavy snow over Western Upper Michigan and caused between 1.2 and 1.7 inches of rain over Southeast Lower Michigan.

MIZ003-010-047-052-058-059-063-069 > 072 Eastern Upper Northwest and Southwest Lower Michigan 13- 1200EST-14 1200EST 0 0 0 0 Lake Effect and Heavy Snow

Once the synoptic snowfall event ended, as the storms center moved far away from Michigan, the lake effect part of the storm developed. In this Lake Effect event, due to a more northerly component on the low level winds over Upper Michigan, the heavy snow was over the northeast part of Upper Michigan. Western Upper Michigan did get some lake effect snow too, but this was on the light side, mostly in the one to three inch range. Over eastern Upper Michigan, snowfalls in Alger, Luce and Chippewa county ranged from two to three inches in the more southern areas of this counties, to the seven to nine inch range near Lake Superior. Saute Ste Marie reported a

November 1992 Path Width (Yards) Number of Estimated Local/ Standar Persons Killed Injured Damage Property Crops Location Character of Storm MICHIGAN Cont'd storm total of 9.4 inches of snowfall for the entire event. Over Lower Michigan, the heavy snows were not near the Lake Michigan shore, but inland, over the higher terrain areas. Most of Otsego, Crawford west and central Kalkaska, and central Wexford County reported seven to ten inches. Over southwest Lower Michigan, an east to west band of heavy snow extended westward across Allegan and Barry counties. In this area, five to seven inches of snow was reported. Most of the rest of Northwest, Central and Southwest Lower Michigan had from less than an inch to around three inches. There was an isolated report of 4.5 inches of snow in Hillsdale county, which is in South Central Lower Michigan, near the Ohio and Indiana boarders. There were numerous reports of traffic accidents due to icy roads. Over the entire state, 19 people died in traffic accidents as a result of icy or snow covered roads. Lenawee County Adrian 1400EST-1300EST Flood/ Flash Flood The River Raisin, at Adrian, rose above its flood stage of 11.0 feet at 2:00 p.m. on the 13th, cresting at 12.5 feet, 1.5 feet above flood stage, around 5:00 p.m. on the 14th. The river was back below flood stage by 1:00 p.m. on the 16th. No damage was reported. This flooding resulted from the same storm the caused the heavy snow over Western Upper Michigan and caused between 1.2 and 1.7 inches of rain over southeast Lower Michigan. Lenawee County Blissfield 1700EST-17 1800EST Flood/ Flash Flood The River Raisin, at Blissfield, rose above its flood stage of 677 feet MSL at 5:00 p.m. on the 13th, cresting at 679 feet, 2 feet above flood stage, around 3:00 a.m. on the 15th. The river was back below flood stage by 6:00 p.m. on the 17th. No damage was reported. This flooding resulted from the same storm the caused the heavy snow over Western Upper Michigan and caused between 1.2 and 1.7 inches of rain over southeast Lower Michigan. Washtenaw County Saline 22 1900EST 3 Thunderstorm winds Trees and power poles blown down in the down town area of Saline. **Oakland County** 22 1908EST 3 Rochester Lighting Lighting struck the fire departments radio tower, this in turn knocked out the 9-1-1 emergency service and several computer terminals. It took about an hour to get all the systems back up and running again. **Oakland County** Rochester 1945EST 22 Lighting Lightning stuck the Sacred Hart Catholic Church, causing very heavy damage. Repairs were estimated to cost around \$800,000. It took until 3:30 a.m. on the morning of the 23rd to get the fire under control. **Genesee County** 22 **2000EST** Countywide Lightning Frequent lightning caused 30 separate power outages, which affected 2,020 customers in the Flint area. The storm also produced pea-size hail and up to 1.5 inches of rain in three hours. Lenawee County Tecumseh 1130EST-24 2200EST Flood/

Rainfalls of between and 0.70 and 1.70 inches fell over most of central and southern Lower Michigan during the evening hours of the 22rd. Most of this fell from a line of thunderstorms that

Flash Flood

Location	Time Path Path Number of Estimated November 1992 Local/ Length Width Persons Damage Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm
MICHIGAN Con	nt'd
	moved west to east across the state between 1730EST and 2000EST. This caused the Raisin River to rise above flood stage at Tecumseh around 11:30 a.m. on the 23rd. The river crested at 9.1 feet, only .1 feet above flood stage, at 8:00 a.m. on the 24th. The river fell below flood stage by 10 p.m. on the 24th. No damage was reported.
MIZ073-080-081 South Central Upper Michigan	25- 2200EST- 26 0800EST 0 0 0 Heavy Snow
	Heavy wet snow began falling over Dickinson, Memominee, extreme western Delta, and extreme souther Marquette Counties just before midnight on Wednesday, November 25. The heavy wet snow gradually tapered off just after sunrise Thursday morning, November 26. Snowfall over these areas was uniform around 6 inches. Most of central Upper Michigan, from the Lake Superior Shore near Saute Ste Marie, west to near Marquette one to four inches. The four inch area was over eastern Marquette and western Alger Counties. No major problem were reported as a result of this event.
MINNESOTA	
MNZ002 > 018 Northeast- Central	01 0700CST- 03 1700CST 0 0 ? 0 Heavy Snow
	A slow moving snowstorm developed over the southern plains states and moved northeast through Iowa, Minnesota, and Wisconsin from early on the 1st until late afternoon on the 3rd. Heavy, we snow in excess of six inches fell across most of the state. Many area schools were either closed or started late on the 2nd and 3rd. Approximately 23,000 people in the Twin Cities were withou power during the height of the storm. Seven people were killed and at least 40 people were injured in traffic accidents due to snow or ice covered roads. The arrowhead of Minnesota was especially hard hit by strong winds and snow as the storm intensified near the Great Lakes. Seventy mile perhour winds threw huge waves crashing over rock walls that were 130 feet high. Part of the lake wall near the Duluth Convention Center was damaged. Several businesses in the Duluth and Grand Marais areas were flooded by the high waves. Snowfall in excess of 6 inches occurred east and north of a line from Warroad to Browns Valley, Sanborn and Rosemount. Amounts in excess of one foot (12 inches) fell from International Falls, Tower, Mora and Duluth. The highest reported snowfall occurred at the National Weather Service Office in Duluth with 16.1 inches.
MNZ013-014 Central	18 1500CST- 18 2300CST 0 0 0 Heavy Snow
	A 10 mile wide band of heavy snow fell across central parts of Minnesota. Six to eight inches of snow fell from near New London, Paynesville and Cold Spring.
MNZ019 Southeast	25 1600CST- 26 0400CST 0 0 0 Heavy Snow
	A major winter storm tracked across western sections of Illinois to northeast Wisconsin clipping the extreme southeast corner of Minnesota with heavy snow. Snowfall in excess of 6 inches fell south of a line from near Le Roy to Preston and Caledonia. The greatest amount was reported at Mable with 8 inches.
MISSISSIPPI	
Newton County	01 1800CST 0 0 5 0 Thunderstorm Winds
	Two commercial buildings and one home were damaged one mile west of Newton. Several trees were blown down in Decatur.
Jackson County Latimer	03 0500CST 0 0 5 0 Thunderstorm Winds
	A mobile home was rolled over and 2 houses were damaged. One of the houses had a portion of the roof blown off.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		nber of sons Injured	Da	imated umage ty Crops	November 1992 Character of Storm
Levocycoventy of	49.9								
MISSISSIPPI Con	ıt'd	,							
Yazoo County 5 SW Benton	03	2020CST			0	0	2	0	Thunderstorm Winds
	Seve	eral trees were	blown de	own and b	locked	the roa	d.		
Holmes County Picken	03	2025CST			0	0	2	0	Thunderstorm Winds
	A fe	ew trees and se	everal pov	ver lines b	olown d	lown.			
Madison County 4 W Camerson	03	2030CST			0	0	2	0	Thunderstorm Winds
	Seve	eral trees were	blown de	own.					
Lauderdale County Meridian	04	0135CST			0	0	0	0	Thunderstorm Winds (G52)
	Sixt	y mph winds v	vere repo	rted in the	wester	rn porti	on of l	Meridian	
Wilkinson County 1 S Whitaker to 2 S Centreville	21	2130CST	4.0	100	0	0	5	0	Tornado (F1)
	One were	mobile home of destroyed an	was comp d numero	letely dest us trees w	royed a ere blo	ınd seve wn dov	ral oth vn.	er home	s were damaged. Several barns
Pike County Progess	21	2225CST			0	0	2	0	Thunderstorm Winds
	Seve	eral trees and l	large limb	s were blo	own do	wn.			
Amite County 3 SE Brookside	21	2227CST			0	0	4	0	Thunderstorm Winds
		nerous trees ar aged.	d power	lines were	blown	down.	Two	mobile l	nomes and one house were also
Walthall County 2 W Tylertown	21	2230CST			0	0	2	0	Thunderstorm Winds
	Seve	eral trees were	blown do	own.					
Lincoln and Copiah Counties	21	2250CST- 2305CST	16.0	440	0	0	5	0	Tornado (F2)
Countries	The			-					through the city of Brookhaven.
	Ther hom	n the tornado	moved in	to Copiah	Count	y just s	outh c	of Wesso	on and lifted at Wesson. Four nsive damage occurred to trees
Copiah County 1 NE Sardis to 2 SW HOpewell	21	2315CST- 2324CST	9.0	440	0	0	5	0	Tornado (F1)
	One down		stroyed a	nd severa	other	s were	damag	ged. Nu	merous trees were also blown
Lawrence County Tilton	21	2315CST			0	0	2	0	Thunderstorm Winds
	Seve	ral trees were	blown do	own.					
Jefferson Davis and Covington Counties	21- 22	2323CST- 0005CST	27.0	880	0	105	7	0	Tornado (F3)

	Time	Path	Path	Number of	Estimated	November 1992
	Local		Width	Persons	Damage	
Location	Date Standa	rd (Miles)	(Yards)	Killed Injure	d Property Crops	Character of Storm

MISSISSIPPI Cont'd

This tornado touched down 8 miles southwest of Carson. Then it moved northeast and exited the county at 2345 along Highway 84, 2 miles east-southeast of Mount Carmel. The tornado then moved to a point 4 miles southwest of Mount Olive at 2355 and began to turn more northeasterly. It continued through the town of Mount Olive and lifted 2 miles northeast of town at 0005.

Within Jefferson Davis County, a total of 14 homes were destroyed in addition to numerous downed trees. Five people were injured. As the tornado moved along Highway 35, several well built homes were destroyed. In the Mount Olive community, 32 homes were destroyed and 55 others were damaged with over 100 people injured.

Copiah, Simpson, Rankin, Scott, Leake, Attala and Choctaw Counties

21 2327CST-22 0201CST 128.0 880 12 122 7 0 Tornado (F4)

The tornado first touched down in northeast Copiah County 1 mile north of Hopewell and moved northeast across extreme northwest Simpson County. At 2337CST the tornado moved into Rankin County, passing 1 mile southeast of Florence. The tornado moved through the southwest city limits of Brandon at 2353CST and continued northeast exiting the county 7 miles east of Sandhill at 0019CST. Then it moved into extreme northwest Scott County and into Leake County just north of Ludlow at 0027CST. It continued across Leake County passing 6 miles west of Carthage and exited the county 1.5 miles north of Barnes at 0056CST. It then continued through Attala County passing 10 miles east of Kosciusko and exited the county 2 miles east of McCool at 0125CST. The tornado continued across Choctaw County passing through the town of Weir at 0132CST, and began to slow its forward speed before dissipating 4 miles southwest of Mathiston at 0201CST.

As the tornado moved across Copiah, Simpson, and extreme southwest Rankin Counties, it blew down many trees. The tornado then moved through a mobile home park in the south side of Florence. There it destroyed several mobile homes and damaged several other residences. Two people were killed in one of the mobile homes in Florence. The tornado then moved toward Brandon. It struck another mobile home park where it destroyed 30 mobile homes and killed 4 people and injured many more. As the tornado moved through the south and east sides of Brandon it damaged or destroyed many more houses and mobile homes. It completely leveled a large, well built, brick home in the East Haven subdivision and killed 4 people. In Rankin County a total of 60 homes were destroyed, over 500 homes were damaged, 10 people were killed, and 98 were injured. In Scott County most of the damage was to trees and power lines. There were several houses damaged around Ludlow. In Leake County the tornado destroyed 3 homes and damaged 9 others. It also destroyed 26 chicken houses and several farm buildings. One death occurred in Leake County in a mobile home in the Pine Tree Community, west of Carthage. In Attala County 36 homes were destroyed or severely damaged. Twelve people were injured. In Choctaw County 101 homes were destroyed or severely damaged. Twelve people were injured. In Choctaw County 101 homes were damaged or destroyed. One person was killed in a mobile home in Weir and 12 others were injured. In all these counties timber damage was extensive. The tornado appeared to reach its maximum strength in Brandon where it was rated F4, but it had much F3 damage all along the path. (M50M)(F04M)(F30M)(F31M)(F39M)(M07H)(M42H)(M10H)(M07H)(F68M)(M05M) (F58M)

Sharkey County 2 N Valley Park to 2 SW Holly Bluff

21 2330CST 10.0 440 0 4 5 0 Tornado (F1)

One mobile home destroyed and one house partially damaged. Tornado moved through Delta National Forest and damaged numerous trees. Several vehicles were also damaged.

Smith, Jasper and Newton Counties

22 0014CST-0114CST 40.0 1760 0 20 7 0 Tornado (F4)

The tornado initially touched down 2 miles southeast of Mize and moved northeast through the Sylvarena community. The tornado then moved into Jasper County at 0044CST 2 miles north of the town of Ted. It continued across the northeast corner of Jasper County through Bienville National Forest and crossed into Smith County four miles northwest of Baxter at 0103CST. The tornado lifted on the southern city limits of Newton at 0114CST.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		mber of ersons I Injured	D	timated amage rty Crops	November 1992 Character of Storm
MISSISSIPPI Con	nt'd								
	area and dest dan	s. In Smith C 1 large chure troyed and 21	County, I h was de houses a le home v	5 people wemolished. nd 2 mobilished. was destro	ere inj Withi ile hom yed, ar	ured wit in Jaspe es were id 1 con	thin Sy r Cour dama nmerci	Ivarena ity, 3 h ged. Ir al build	oved through mainly uninhabited. Over 90 homes were destroyed ouses and 4 mobile homes were n Newton County, 6 homes were ling was destroyed. Timber loss of Forest.
Newton County Decatur	22	0105CST			0	0	0	0	Hail (0.75)
Newton and Neshoba Counties	22	0122CST 0135CST	9.0	200	0	0	5	0	Tornado (F1)
Little Rock to 2 N I	House			٠					
	dan	o mobile home nage, most of nerous trees an	which o	ccurred in	the to	own of	ained r House	najor da . A ch	amage and 16 houses had minor nurch received roof damage and
Lauderdale County Meridian	22	0130CST			0	0	4	0	Thunderstorm Winds
	Sev	eral houses su	stained ro	oof damag	e.				
Webster and Chickasaw Counties 1 SW Clarkson to 3 W Woodland	22	0214CST- 0225CST	9.0	200	2	0	5	0	Tornado (F1)
3 W Woodiand	The addi	tornado destritional homes	royed a s were seri	small woo ously dam	od fram aged al	e home	in C	larkson erous d	killing the 2 occupants. Four owned trees. (M67H)(F75H)
Newton County Newton	22	0215CST		•	0	0	5	0	Thunderstorm Winds
	One				-	-	-	_	aged. Several trees, power lines,
Kemper and Noxubee Counties 3 NW Dekalb to 6 E Macon	22	0215CST- 0255CST	27.0	880	1	1	5	0	Tornado (F2)
									al mobile homes were damaged. st west of Wahalak. (F91H)
Chickasaw County 5 SW Houston to 3 W Houston	22	0231CST- 237CST	4.0	100	0	0	4	0	Tornado (F0)
•	Seve	eral trees were	blown d	lown.					
Chickasaw County 5 SSW Houlka to 2 N Houlka	22	0245CST- 0254CST	7.0	100	0	2	5	0	Tornado (F1)
	The	tornado destro	oyed 4 m	obile home	es injur	ing 2 pe	eople,	10 home	es were damaged and a barn was ged by flying debris.
Noxubee County 3 E McLeod to 2 NE Bigbee	22	0245CST- 0310CST	15.0	440	0	and 2 ca	irs wei	e dama	Tornado (F2)
Valley									

Seventeen frame homes sustained major damage, 6 mobile homes were destroyed, 2 mobile homes had major damage and considerable tree damage occurred.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		aber of sons Injured	Estimated Damage I Property Crops		November 1992 Character of Storm
MISSISSIPPI Con	ıt'd								
Kemper County 3 NE Daleville to 2 NNW Giles	22	0245CST 0320CST	23.0	880	0	0	5	0	Tornado (F2)
		eral mobile hor e also uproote		destroyed	and sev	eral ho	uses re	ceived n	najor damage. Many large trees
Monroe County	22	0245CST			0	0	2	0	Thunderstorm Winds
•	Seve	eral trees were	blown de	own acros	s north	ern port	ion of	the cou	nty.
Lauderdale County 9 SE Meridian	22	0320CST	2.0	100	0	0	3	0	Tornado (F0)
	Seve	eral trees and	power lin	es were bl	own do	wn.			
MISSOURI									
Pettis County 10W Sedalia	20 20	1430CST- 1500CST			1	0	0	0	Flooding
	Low	ıfall from seve water bridges	across so	me roads	were cl	all stre	ıcludin	become	e full or rise out of their banks. Highway #127 north of Lamont. while deer hunting. (M150)
Morgan County	20	1 <i>2</i> 00.00m			•			•	T71 1'
2 W Gravois Mills	20 Com	1500CST	المحمداء مم	dua ta O O	0 Frank av	0 5ton	0	0	Flooding
Callaway County	Cou	nty Route J w	as closed	due to 2-3	i lect o	water	OVEI A	i IUW-wa	ner bridge.
3 SW Mokane	22	1830CST			0	0	0	0	Flooding
	U.S. wate	Highway #9er on the Miss	4, between ouri River	n Tebbets r.	and M	okane,	was u	nderwate	er and impassable due to rising
St.Louis County	24 25	1000CST- 1830CST			0	0	4	0	Flooding
	Man feet	y county road deep covered	s were clo Aubuchor	osed due to n Road in	o floodi North (ng on ti County	he Mis and O	ssouri an Id Teleg	d Meramec Rivers. Water two raph Road in South County.
MONTANA									
MTZ003,004	02 03	0900MST- 1800MST			0	0	0	0	Heavy Snow
	Six t		hes of sno	ow fell in	the Hig	hwood,	Little	Belt, Si	nowy and Judith Mountains and
MTZ003	10 11	1600MST- 0300MST			0	0	0	0	High Winds (G69)
	The	wind 11 miles	west of	Dupuyer r	eached	79 mpl	1.		
MTZ003	27	1400MST- 1800MST			0	0	0	0	High Winds (G67)
	The	wind 11 miles	west of	Dupuyer r	eached	77 mpl	1.		
MTZ003	29 30	1600MST- 1700MST			0	0	4	0	High Winds (G86)
		winds hit mu teau, 70 mph						h 11 mil	es west of Dupuyer, 77 mph at
MTZ00,006,007	30	0600MST- 1200MST			0	0	5	0	High Winds (G70)

	Die	Time Local/	Path Length	Path Width	Pe	mber of	D	timated amage	November 1	992		
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Prope	rty Crops	Character of Storm			
MONTANA Cont	-		22									
		oof was blow lowton.	n off a	store in]	Ennis a	and two	semi	-trucks	were blown off the road i	near		
NEBRASKA												
NEZ001-002-005-	23	1200MST-										
011 Panhandle and	24	1600MST			0	0	?.	?	Heavy Snow			
North Central Nebras	ka											
		rted at Dalton		w fell ove	r the p	anhandl	e and	north ce	entral Nebraska, with 13 in	ches		
NEZ017 > 019 South Central Nebraska	24 25	0100CST- 1600CST			0	0	?	?	Heavy Snow			
	Six	to nine inches	of snow	fell over s	outh c	entral N	ebrasl	ca.				
NEVADA												
NVZ003 Extreme Western Nevada	22	0200PST- 0600PST			0	0	0	0	High Winds			
	High winds were reported throughout the Reno area. The strongest winds occurred on Windy Hill in southwest Reno. Between 0300PST and 0400PST, several gusts over 65 mph were reported including separate gusts to 75 mph and 80 mph.											
NVZ005 Northwest Nevada	27	0730PST- 1200PST			1	?	?	0	Freezing Rain			
	Inter Win	rstate 80 fron	n Golcor Icdermitt.	ida Summ Most of	it to :	15 miles	s west	t of Wi	s traffic accidents. Ice covennemucca and U.S. #95 files west of Winnemucca w	from		
NEW HAMPSHIF	RE		•									
NHZ003-004-005 006 Central and	13 13	0100EST- 0700EST			0	0	?	0	High Wind			
Southern New												
Hampshire	to m New	ove north acro	oss New	England.	This p	oattern p	roduce	ed high '	rio, Canada caused a warm f winds over central and south ng in numerous power out	hern		
NEW JERSEY, N	orth	ern										
NJZ005-007-015 Northeast New Jersey	12 13	2200EST- 0100EST			0	0	?	0	High Wind			
	nigh area.	t hours. Wind Several hom	ls gusting es were	g to nearly damaged b	70 Ml y thes	PH down e downe	ned nu od tree	merous s. Nun	oss Pennsylvania during the trees and power lines across the erous cars were also damage power for several hours.	the		
Bergen County Lodi	23	0730EST- 1500EST			0	0	?	0	Flood			
	A co Sadd	ouple of inche lle River in Lo	s of rain odi.	during a	relativ	ely shor	t time	lead to	some minor flooding along	the		

Number of Persons Killed Injured Estimated Damage Property Crops

Character of Storm

November 1992

Path Width (Yards)

Path Length (Miles)

Time Local/ Standard

Date

Location

NEW JERSEY, S	outh						,		
PAZ-00W West Portion Southern New Jersey	12 13	2300EST- 0600EST	0	0	3	0	High Wind		
	High gust	h winds ahead of and just behind a s were measured at 58 MPH in Cl	cold herry	front bi Hill.	rought d	lown m	nany large tree limbs. The wind		
NEW MEXICO									
NMZ002-004	10 11	2100MST- 1100MST	0	0	0	0	Heavy Snow		
	mou in n Coo Gase	vinter storm developed over the Grept through northern New Mexico intains by late on the 10th, and encany areas, including Cuba (Sandounty). In the higher mountain locon (Mora County) reported a foot the afternoon of the 11th prior to the	on the ded by eval Co ecation of ne	e 11th. / noon (o.), Lal is, Red w snow	Heavy on the lacke Malo River Light	y snow 11th. H bya (Co (Taos (snow)	began in some of the northern Four to eight inches of snow fell olfax County), and Ocate (Mora County) received 14 inches and		
NMZ004-005-006- 007-008-009-012	20 21	1200MST- 1200MST	0	0	0	0	Heavy Snow		
	storn and Mou repo was How 0600 near the inch (Col Cou	trong storm plunged from the Pacifim's center moved southeast across exiting the Southeast Plains at miduntains. Snow amounts were most orted over a foot and a half. In Albrecorded by the NWS office at ever, 8 to 13 inches fell across OMST on the 21st. Many vehicle across allowing for mostly state was U.S. Highway #87 betwees at Golden (Santa Fe County); (Ifax County) and Clines Corners (Inty) and Cloudcroft (Otero County Moines (Union County).	the stadday of the stadday of the stadday of the said the earth of the said	ate, passon the 2 ween 4 que, ab rport be stern h ts occur roads a laton ar les at S lice Cou	sing over 21st. The and 8 cout 5 in etween alf of the country of the country and no clay and and party); 5	er centra he heave inches, iches (ho 0000M he city Albuque losures, ton. Co eark (Be inches	al New Mexico early on the 21st viest snow fell near the Central although Sandia Peak Ski Area alf the average annual snowfall) ST and 0500MST on the 21st. in a 15 hour period ending at erque but temperatures remained. The only major road closed in other snow amounts included: 9 ernalillo County), Lake Maloya at Ramon and Ruidoso (Lincoln		
NEW YORK, Eas	tern								
Western Mohawk Valley and Adirondacks	05 06	1500EST- 0200EST	0	0	4	0	Snow		
	dum in th	rough of low pressure moved into ping the seasons first snowfall acrue area with 3 inches reported at Lo dents.	oss pa	ırts of t	he area	. Gene	erally 1 to 3 inches of snow fell		
NYZ006-009 > 012- -019-020 NYZ007-008-018	12 13 12	1800EST- 0530EST 1800EST-	0	3	6	0	High Winds		
	A ve of N men down In S wind injuring the state of the st	1300EST ery strong cold front pushed throughovember. This was one of the mory. In all over 30,000 customened. Numerous homes and vehicle aint Lawrence County the Hermondows blown out and part of the gyred when the mobile home they wered in Fonda when a tree was bloaded 62 knots at Massena, 55 knot	nost wars were also n-Dekymnasi ere in own o	videspre re left vo sustain Lalb Ce ium roc was toj nto a c	ead and without ned dan ntral So of remoppled or ar. So	damag power nage as chool si ved. I ff its fo me pea	as trees, poles and wires were trees collapsed on top of them. ustained extensive damage with n Oppenheim, two people were bundation. Another person was ak wind gusts during the event		

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		nber of rsons Injured	De	imated image ty Crops	November 1992 Character of Storm
• •				· · · · · · · · · · · · · · · · · · ·					
NEW YORK, East	tern	Cont'd							
Adirondacks South	17 17	0000EST- 1000EST			0	0	6	0	Snow
	Yorl	k. Snowfall	amounts o erne, and	f 2 to 5 inc East Jewet	hes we t. Hu	re comi ndreds o	mon th	rougho lents w	season to much of eastern New ut the area with 4 inches reported ere reported throughout the area er.
Herkimer, Montgomery & Schenectady County	23 23	0400EST- 1700EST			0	0	5	0	Flood
	inch flood Cou Crui	es of rain a ding along th nty Commun	cross much ne Mohawl nity Colleg St. Johnsv	h of easte k River bet e and in the	rn Nev ween I Stock	v York Little Fa ade area	. The alls and a of Sch	rainfal Canajo renectao	on the 23rd dumping one to two ll was enough to cause lowland pharie and also near Schenectady dy. Flooding also occurred along ner where a hydroelectric power
Saint Lawrence and Champlain Valley	23	1200EST- 2000EST			0	0	4	0	Snow
	chan	ler air funne iging the rai lting in num	in over to	snow. F	rom O	New Yo gdensb	ork beh	nind a l Ellenb	ow pressure system on the 23rd urg, 2 to 4 inches of snow fell
NEW YORK, Coa	stal								
NYZ0SE Southeast New York	12 13	2200EST- 0300EST			0	0	?	0	High Wind
	nigh area	it hours. Wi . Several ho	nds gustin mes were	g to nearly damaged l	70 m	ph down e down	ned nu ed tree	merous s. Nu	cross Pennsylvania during the late trees and power lines across the merous cars were also damaged, power for several hours.
NEW YORK, Wes	stern	1							
NYZ022 Chautauqua County	02	1700EST			0	0	4	0	High Winds
·	flow with 59 n trees was blow	developed of the downslo oph was reco s closed a po also reported	over the wo ope flow for orded in Do rtion of Ro I in Dunki onsidered	estern south rom the hil unkirk. Th oute #5 in ' rk, Broctor a complete	hern tie ls to ca le high Westfie and R	er of Ne use free winds u eld. Da ipley.	w Yorl quent want uprooted mage to 4 75-ya	k. The yind guard trees to home ard con-	New England, a strong southeast tight pressure gradient combined sts over 40 mph. A peak gust of and downed power lines. Fallen is and automobiles by fallen trees crete wall under construction was by-50 foot galvanized steel silo
NYZ003 NYZ022 NYZ001 NYZ022	12 12 12 12	1803EST 2230EST 2237EST 2300EST			0 0 0	0 0 2 0	4 5 5 4	0 0 0	High Winds High Winds High Winds Flood
Chautauqua County NYZ001	12	2300EST			0	0	4	0	Flood
Erie County NYZ002 NYZ003 NYZ021 NYZ004 NYZ005	12 12 12 13 13	2324EST 2330EST 2335EST 0015EST 0150EST			0 0 0 0	0 0 1 0 0	5 5 5 5 5	0 0 0 0	High Winds High Winds High Winds High Winds High Winds

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		nber of sons Injured	Estim Dam Property	age	No Character of Storm	vember 1992
NEW YORK,	Western	Cont'd								
NYZ004 Jefferson County	13	0500EST			0	0	4	0	Flood	

An intensifying low pressure system moved from Illinois to southern Ontario on Thursday the 12th. Southerly winds on the east side of the low increased over western New York during the late afternoon and evening hours. Sustained wind speeds between 50 and 55 mph were recorded at Buffalo Airport. Wind gusts peaked at 73 mph at Buffalo, 72 mph at Niagara Falls, 67 mph at Rochester, and 58 mph at Syracuse. The high winds downed power lines leaving an estimated 100,000 to 150,000 customers without power across the region. Storefront windows were reported blown in Oakfield, Rochester, and Perry. The damaging winds downed trees and limbs. Structural damage from downed trees was reported in Lockport, Springville, Lily Dale, Hornell, Williamsville, Sunset Bay, Elba and Rochester. Two persons were injured (one in Batavia and one in Niagara Falls) when they were struck by tree limbs which had crashed through the windshields of their autos.

The Peace Bridge, which crosses the Niagara River and links Buffalo, New York with Fort Erie, Ontario, was closed for nearly seven hours after high winds toppled two trailers as they crossed the span. One of the trailers fell onto two cars. No one was injured in that accident however. Another tractor-semitraiter was overturned on Route #63 in Covington. The driver of that vehicle was injured and taken to a local hospital. A mobile home in LeRoy was destroyed and a 15,000 bushel grain bin collapsed in Batavia. Both the Greater Canandaigua Civic Center and the Finger Lakes Racquet and Fitness Club in Canandaigua lost their bubble domes when the wind shredded the fabric coverings and collapsed the air filled structures. The damages at both facilities were estimated near \$50,000 each. Due to downed trees and power outages, schools and businesses were closed Friday the 13th in Lancaster, Warsaw, Whitesville, Salamanca, Gowanda, Perrysburg, Dayton and South Dayton.

The strong southwest winds caused the water at the eastern end of Lake Erie to rise and produce flooding along the shores of Chautauqua and Erie Counties. The water level in Lake Erie rose three feet in a half hour. The residents of Hoover Beach in Hamburg had to be evacuated. In Dunkirk, Lake Front Boulevard was closed and was littered with flotsam and large chunks of blacktop that were torn up by the force of the waves. The Chadwick Bay Marina, also in Dunkirk, sustained severe damage. Nearly all of the boats had been removed for the season, however several floating docks were mangled by the storm.

The strong southwest winds had a similar effect on Lake Ontario. Flooding was reported at Chaumont Bay in Jefferson County.

NYZ001 Erie County	13	2300EST	0	0	3	0	Heavy Snow
NYZ022 Chautauqua County	13	2300EST	0	0	3	0	Heavy Snow
NYZ004	14	0600EST	0	0	3	0	Heavy Snow
Jefferson and Oswego Counties	14	0900ESt	0	0	3	Ŏ	Heavy Snow
NYZ001 Erie County	14	2300EST	0	0	3	0	Heavy Snow
NYZ022 Chautauqua County	14	2300EST	0	0	3	0	Heavy Snow
NYZ001 Erie County	15	2300EST	0	0	3	0	Heavy Snow
NYZ004 Oswego County	15	2300EST	0	0	3	0	Heavy Snow
NYZ022 Chautauqua County	15	2300EST	0	0	3	0	Heavy Snow
NYZ005 Onondaga County	16	0200EST	0	0	3	0	Heavy Snow

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		mber of rsons Injured	_ D	timated amage rty Crops	November 1992 Character of Storm
NEW YORK, We	stern	Cont'd							
	the : which 25". Cou Cou	relatively war ch persisted ar - Sherman, C inty; 16"- Ca	m waters nd meandd hautauqua arthage, J exico, Os	of Lakes I ered over a County; efferson C wego Cou	Erie and the area 23"-(County; anty;	d Ontar is to the Colden, 12"-l 10"-Os	io. The lee of Erie (Mayvill	e flow p the lake County; le, Chau	persisted for several days across produced lake effect snow squalls es. Reported snowfalls included: 18"-Chaffee and Boston, Erie stauqua County, and Eden, Erie of County; and 8"-Evans, Erie
NORTH CAROL	INA								
Tyrrell County 5 SW Columbia	04	1500EST	0.1	10	0	0	0	0	Tornado (F0)
	Tree	e damage occi	arred in C	ross Land	ling.				, ,
	on t	m unstable ai the 4th clashe adoes occurre	d with a	warm from	nt over	the Co	oastal I	Plain of	and off the Gulf Stream Atlantic North Carolina. Several small
Cumberland County 13 S Fayetteville	04	1615EST	0.2	10	0	0	0	0	Tornado (F0)
•		s small tornad			_	-			, ,
Johnston County 4 N Selma	0.4	1./15ECT	A 4	20	•	^	·	0	M
4 N Sema	04 Dan	1625EST nage occurred	0.4 to 2 vehi	20 icles and 1	0 Lhouse	0	3	0	Tornado (F1)
Scotland County	Dun	imgo occurrou	W Z VOII	olos alla 1	nouse	•			
12 N Laurinburg	04	1715EST	0.4	20	0	0	2	0	Tornado (F0)
T. 1 0 .	Min	or damage oc	curred to	3 houses	and tre	es were	blowr	down.	
Hoke County Fort Bragg	04	1738EST	0.2	10	0	0	0	0	Tornado (F0)
Moore County 3 S Vass	04	1745EST	0.5	20	0	1	5	0	Thunderstorm Winds
	dow	or damage occ n in a microbu overturned.	ırst type r	attern. O	ne of th	ie mobi	le hom	ng and p es was l	ine trees were twisted and blown ifted atop two others and another
Cumberland County	04	1849EST	0.2	10	Λ	Δ	Δ	Λ	Towns do (EN)
9 NE Fayetteville Harnett County 2 S Erwin	04	1855EST	0.2	10	0	0	0 3	0	Tornado (F0)
2 S Erwin			0.3	20				0 he were	Tornado (F1) broken and twisted off trees.
Johnston County	Dan	mgc occurred	to two or	iilis aliu U	no nou	sc. La	ige iiii	os were	bloach and twisted on ties.
10 S Smithfield	04	1915EST	0.3	20	0	0	0	0	Tornado (F1)
	The arou	tornado left wind and trees w	vell define were twis	ed semi-cir ted down.	rcle tre	nches i	n a hay	field.	Hay rolls were lifted and blown
Hertford County 8 SW Winton	04	1930EST	1.5	100	0	0	5	0	Tornado (F1)
		tornado dama							ite 461 between Union and Saint
Wayne County 2 S Goldsboro 1 W Goldsboro	04 04	2000EST 2015EST	0.2 2.0	10 30	0	0	0 5	0	Tornado (F0) Tornado (F1)

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		nber of rsons Injured	De	imated amage ty Crops	November 1992 Character of Storm			
NORTH CAROLI	NA (Cont'd										
		e mobile hom Foldsboro.	es were d	amaged,	1 tobac	co barr	n destro	oyed and	d several trees blown down west			
Buncombe and Madison Counties Scratted Locations	22	1410EST			0	0	0	0	High Wind			
	Stro	ng winds blow	ing acros	s the mou	ntains	blew d	own an	d dama	ged trees.			
	On the 22nd and 23rd, an intense low pressure system moved up the Ohio River Valley. A strong cold front extended from the low southward to the Gulf of Mexico. Warm, humid air flowed northward ahead of the front helping to produce strong thunderstorms. This weather system had a history of severe weather events as it tracked eastward across the South toward North Carolina.											
Watauga, Ashe, Aver and Mitchell Counties	y 22	2100EST			0	0	0	0	Flash Floods			
	Floo	oding blocked	numerous	roads in	the aff	ected co	ounties	, but pr	operty damage was negligible.			
Cleveland County 3 W Fallston to 5 N Fallston	22	2215EST- 2223EST	5.0	500	0	0	4	0	Tornado (F1)			
	One mobile home and 3 outbuildings were destroyed and 10 other homes damaged with total damages estimated at \$30,000.											
Cotoha and	dam	ages estimated	at \$30,0	00.								
Catawba and Iredell Counties 2 SE Clarmont to 1 SW Harmony	22 22	2240EST- 2310EST	26.0	800	0	0	5	0	Tornado (F1) Thunderstorm Winds			
	dam dam the p	nties. In Cata aged with tota age though the path reached Ir	wba Cour il damage ere were in redell Cour ries, but \$	nty, two pestimated ndications nty a mor	people l at \$20 of a side well-	were in 40,000, mall to defined	njured, . Most rnado e l tornad	2 home t was obspeciall lo path v	in a continuous path across two es destroyed, and 9 homes were observed as microburst type wind y east of Clarmont. By the time was observed. In Iredell County, ith 3 homes being destroyed and			
Lincoln County Denver	22	2250EST			0	0	0	0	Thunderstorm Winds			
Davie County 10 NW Mocksville	22	2315EST			0	0	0 -	0	Thunderstorm Winds			
Rowan County Landis	22	2320EST			0	0	0	0	Thunderstorm Winds			
Yadkin and Stokes Counties Courtney to 4 S Danbury	22 23	2320EST- 0010EST	31.0	800	0	13	5	0	Tornado (F1)			
	In Yadkin County, this tornado injured one person, destroyed 1 home and damaged 15 others totalling \$185,000 worth of property damage. In Stokes County, most damage occurred in two subdivisions near the city of King. Twelve people were injured, 10 homes were destroyed and another 134 homes damaged. Total damages were estimated to exceed two million dollars in Stokes County.											
Forsyth County Winston-Salem	22	2350EST			0	0	0	0	Thunderstorm Winds (G70)			
Chatham County 2 S Siler City	23	0012EST			0	0	0	0	Hail (0.75)			

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pers Killed	ber of ons Injured	Estima Dama Property	ige	November 1992 Character of Storm
NODTH CADOLD	NTA 4	~~~41d							
NORTH CAROLI	NA U	ont a							
Guilford County 6 S Greensboro	23	0055EST			0	0	0	0	Thunderstorm Winds
Orange County 3 W Hillsborough to 3 NE Hillsborough	23	0220EST- 0230EST	5.5	1200	2	10	5	0	Tornado (F3)
	This	violent tornad	o ripped	through w	estern	and no	rthern se	ections	of Hillsborough, including the

more densely populated Fairview subdivision. The tornado reached its greatest intensity with a damage path nearly .75 mile wide along Highway 70 west of the city. Here, a two-year old boy and 53-year old man died. The damage path then narrowed to about 200 yards in Fairview. Ten other people were injured with 53 homes and one business destroyed, 109 homes and another business damaged. Property damage was estimated at two million dollars. (M53M)(M02P)

Harnett, Johnston, Wilson, Edgecombe, Martin, Bertie, Chowan, Perquimans, and Pasquotank Counties 3 N Coats to 3 NE Elizabeth City

0410EST-23 0725EST

160.0 100

0

5

Tornado (F3)

A tornado touched down in eastern Harnett County and continued for three hours and fifteen minutes tracking 160 miles through eight other counties in northeastern North Carolina. Up to this time, this is the longest tornado track on record in North Carolina. The tornado appeared to reach its greatest intensity, a strong F3, near the beginning over eastern Harnett and Johnston Counties. Because the tornado moved across large open fields and in unpopulated rural areas, especially further east along the path, a continuous path was difficult to conclude until signs of scouring of the ground and broken trees along the way could be viewed from the air and upon close examination on the ground. on the ground.

Harnett County had 5 homes destroyed, another 23 damaged and 10 people injured. Property damage amounted to about \$950,000. In Johnston County, the tornado moved through Wilson's Mills at about 0440EST. Twelve people were injured in the county, 22 homes and 1 business were destroyed, another 35 homes and 1 business were damaged. Damages to property were estimated at close to two million dollars. The tornado crossed into Wilson County shortly after 0500EST tracked mostly across form lands and proceed just courts of Wilson. Damages to property 0500EST, tracked mostly across farm lands and passed just south of Wilson. Damages to property were estimated at \$100,000 with one house being destroyed and another damaged.

An amateur radio operator spotted the tornado as it moved into Edgecombe County at 0525EST. There, it skirted the towns of Macclesfield and Pinetops. Two people were injured and 32 homes were damaged with estimated property damages of \$150,000. In Martin County, the tornado injured 9 people, destroyed 9 homes, and damaged another 25 leading to property damages of around \$190,000. The storm skirted Highway 142 near the towns of Hassell and Hamilton at around 1600EST. In Bertie County, the tornado moved through the county seet of Windsor at around 0600EST. In Bertie County, the tornado moved through the county seat of Windsor at around 0625EST. Eighteen homes were damaged and property damages were estimated at \$160,000.

The storm continued across rural and forested areas of Chowan and Perquimans Counties. In addition to free damage, 2 houses received minor damage, and 4 chicken houses were destroyed in Chowan County in its final phase, the tornado hit the Elizabeth City area in Pasquotank County at around 7:20 AM EST. A school bus carrying students was hurled 75 yards injuring 21 people. Three homes were destroyed and another 42 damaged with total damages estimated at 10se to one million dollars. The tornado lifted and dissipated at the storm crossed the Pasquotank River on the eastern border of the county.

Harnett County Rutherford County Lake Lure

25 1500EST Hail (0.75) 25 2300EST Mud Slide

Heavy rain caused mudslides on Highway 64.

NORTH DAKOTA

NDZ012-015-

part of northeast North Dakota 1800CST-2400CST 0 **Heavy Snow**

Storm Data and Unusual Weather Phenomena Number of Persons November 1992 Path Width Estimated Damage perty Crops Local Length (Miles) Standard (Yards) Injured Property NORTH DAKOTA Cont'd Between six and eight inches of snow fell over a part of northeast North Dakota on the evening of the 9th. This heavy snow fell over Ramsey, Nelson, Pembina and Cavalier counties. In the city of Devils Lake; two and a half inches of snow fell between 2000CST and 2030CST. The snow prevented the harvest of the remaining sunflower crop in the area. **OHIO** Williams County 0300EST-Stryker 03-0 0 06 2200EST Flood The Tiffin River flooded. The river crested at a stage of 11.9 feet at 1000EST on November 5th. Flood stage is 11 feet. OHZALL 1600EST-**2200EST Entire State** 1 6 **High Winds** High winds associated with a strong cold front moved across Ohio from west to east. The strongest winds at any spot lasted about 2 hours. Gusts were observed to at least 76 mph. Thousands of trees were destroyed, roughly 75,000 residences and businesses lost power, and numerous structures such as mobile homes and garages were destroyed. A man was killed by a falling tree branch in Zanesville. (M77V) **Huron County** 1600EST-Milan 12-2300EST 14 3 Flood The Huron River went above the flood stage of 14 feet. Crest was 20.6 feet and occurred at 1800EST on November 13th. Damage was relatively minor. **Marion County** 1730EST-La Rue 12-14 **2000EST** 0 1 0 Flood The Scioto River exceeded the flood stage of 11 feet. Crest was 13.1 feet at noon on November 13th. Minor flooding occurred. **Cuyahoga County** 1824EST-Countywide 12 2130EST 0 5 Flash Flood Medina County 1824EST-Countywide 12 2130EST 5 Flash Flood Heavy rains caused considerable flooding of streets and small streams. 1900EST-Stryker 18 1400EST 1

Williams County

The Tiffin River flooded. Flood stage is 11 feet, and the river crested at 13.5 feet at 1300EST on November 14th. Only low lands near the river were flooded.

Sandusky County Woodville

0100EST-13-14 1730EST

0 1 Flood

Minor flooding occurred along the Portage River. Flood stage is 9 feet and the river crested at 10.8 feet at 0500EST on November 14th.

Hancock County **Findlay**

0330EST-13-2200EST 14

2 0 Flood

The Blanchard River went above the flood stage of 10 feet. Crest was at 11.2 feet and occurred at 1600EST on November 13th. Damage was minor.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		nber of sons Injured	D	timated amage rty Crops	November 1992
OHIO Cont'd									
Wyandot County Upper Sandusky	13- 14	0600EST- 2000EST			0	0	2	0	Flood
		Sandusky Rember 13th.				of 13 f	eet. T	he river	crested at 13.9 feet at 1900 EST
Lucas County Waterville	13	0630EST- 1900EST			0	0	0	0	Flood
		Maumee R	iver went	above the	flood s	stage of	9 fee	et. Cres	t was 9.2 feet and occurred at
Defiance County Defiance	13- 15	0900EST- 1000EST			0	0	2	0	Flood
		Maumee Riv November 14				of 10 f	eet. C	rest was	11.3 feet and came at 0700EST
Marion County Prospect	13- 17	1530EST- 2330EST		5	0	0	2	0	Flood
	The Nov	Scioto River ember 15th,	r exceeded	the flood	stage of	9 feet.	The	river cre	sted at 11.4 feet at 0300EST on
Williams County Montpelier	13- 16	1630EST- 2100EST	•	P	0	0	1	0	Flood
	The	Saint Joseph 300EST on 1	ı River wei November	nt above th	ne flood	stage o	of 12 f	eet. Cre	st was at 13.1 feet and occurred
OHZ003 East Lakeshore	13- 14	2000EST- 0700EST		11411. 110	0	0	4	0	Heavy Snow
	Snov Ash	w squalls oc tabula and L	curred. Bake Count	y the time ies.	the sn	ow was	over,	six to e	ight inches had accumulated in
Henry County Napoleon	14	0830EST- 2300EST			0	0	0	0	Flood
Sandrales County	The	Maumee Ri	ver reache	the floor	i stage	of 12 fe	æt.		
Sandusky County Fremont	14	1000EST- 1400EST			0	0	0	0	Flood
	The noon		iver went	above the	flood s	tage of	10 fe	et. Cres	t was 10.1 feet and occurred at
OHZ003 East Lakeshore	14- 15	2100EST- 1500EST			0	0	4	0	Heavy Snow
	Snov	w squalls pr mulations of	roduced fa f 18 inches	irly wides	spread	accumu	lations	s of six	to twelve inches and isolated
OHZ002 Central Lakeshore	15	0300EST- 1000EST			0	0	4	0	Heavy Snow
	Snov Lora		oduced acc	umulations					northern parts of Cuyahoga and

		Time Local/	Path Length	Path Width		nber of	Esti Da	mated mage	November 1992
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Propert	y Crops	Character of Storm
OHIO Cont'd									•
Cuyahoga County Countywide	22	1544EST- 1945EST			0	0	4	0	Flash Flood
Lake County Countywide	22	1544EST- 1945EST			0	0	4	0	Flash Flood
Lorain County Countywide	22	1544EST- 1945EST			0	0	4	0	Flash Flood
Medina County Countywide	22	1544EST-							
Ashtabula County		1945EST			0	0	4	0	Flash Flood
Countywide Geauga County	22	1617EST- 1945EST			0	0	4	0	Flash Flood
Countywide County	22	1617EST- 1945EST			0	0	4	0	Flash Flood
	Heav	vy rains cause	d flooding	g of roads	and sn	nall stre	ams.		
Preble and Darke Counties Campbellstorn to Arcanum	22	1800EST- 1828EST	20	500	0	21	7	0	Tornado (F3)
	Dark were far t	te Counties no minor, but al	orth of We bout 30 b	st Manche uildings w	ester an ere des	d finall stroyed	y termi and ap	nated in proxima	Arcanum. Most of the injuries tely another 130 damaged. By fell as far as 25 miles to the
Brown County 3 W Mount Orab	22	1815EST	1	60	0	0	6	0	Tornado (F1)
5 W Would Olab		rnado destroye	_		-				, ,
Shelby County	71 10	Indo domoy	oo or nou	ing dumm	500 5 1	noone n	OHIOS	and io	atounames.
Fort Laramie Miami County	22	1852EST			0	0	1	0	Hail (1.00)
West Milton Shelby County	22	1906EST			0	0	2	0	Hail (1.75)
Anna to Sidney Miami County	22	1912EST			0	0	4	0	Thunderstorm Winds
Southwest area Highland County	22	1935EST			0 -	0	4	0	Thunderstorm Winds
Mowrystown Montgomery County	22	1940EST			0	0	3	0	Hail (2.75)
New Lebanon	22	1944EST			0	0	4	0	Thunderstorm Winds
Miami County Fletcher Forestte County	22	1945EST			0	0	4	0	Thunderstorm Winds
Fayette County Washington CH	22	2000EST			0	0	1	0	Hail (0.75)
Highland County Hillsboro	22	2000EST			0	0	3	0	Thunderstorm Winds Hail (1.75)
Ross County South Salem	22	2025EST			0	0	2	0	Hail (1.75)
	Thur barns	nderstorms do s. Large hail	wned tree stripped t	s and pow he paint o	er line off cars	s and al in Hills	so cau sboro.	sed som	e damage to structures such as

S		
0		
ľ		
n		
1		
L		
J;		
tz		
1		
ε		
ır		
1		
d		
U		
J		
١		
u		
K		
S		
u		
а		
ı		
2		
V		
V		
е		
ć		
I		
I		
)(
e		
ľ		
d		
n		
E		
1		
٦		
0		
n		
е		
ij		
1		
a		
i		

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pen Killed	ber of ions Injured	Dar	nated nage y Crops	November 1992 Character of Storm
OHIO Cont'd									
Huron County Milan	22- 23	2100EST- 1200EST			0	0	1	0	Flood
	The Nove	Huron River ember 23rd, c	went aboausing on	ve the flo	ood sta problen	ge of 1 as.	14 feet	. It cr	ested at 15.6 feet at 0500EST
Sandusky County Fremont	22	2100EST			0	0	1	Ó	Hail (0.75)
Erie County Countywide	22- 23	2115EST- 0015EST			0	0	4	0	Flash Flood
Richland County Bellville Knox County	22	2140EST			0	0	1	0	Hail (0.75)
5 NE Fredericktown	22	2145EST			0	0	1	0	Hail (0.75)
Cuyahoga County Countywide	22- 23	2235EST- 0130EST			0	0	4	0	Flash Flood
Medina County Countywide	22	2235EST- 0130EST			0	0	4	0	Flash Flood
		nderstorms pro l streams.	oduced son	ne dime-s	ized ha	il, but	mainly	caused	problems by flooding roads and
Williams County Stryker	23- 27	0700EST- 2300EST			0	0	1	0	Flood
	The on N	Tiffin River e lovember 25th	xceeded t	he flood s	stage of nfined	f 11 fee to low	t. Cre lands n	st was ear the	12.3 feet and came at 1300EST river.
Marion County La Rue	23- 24	0900EST- 1500EST			0	0	1	0	Flood
	The 11.8	Scioto River v feet at 1800E	went abov ST on No	e the floo evember 2	d stage 3rd.	of 11 f	feet. P	roblems	s were minor as river crested at
Sandusky County Woodville	2 3-	2238EST-			0	0	0	0	Flood
		Portage Rive EST on Nove			lood st	age of	9 feet.	Crest	was 9.2 feet and occurred at
Williams County Montpelier	24- 27	0100EST- 0630EST			0	0	1	0	Flood
	The		River exc mber 25th	eeded the	flood	stage o	of 12 f	-	ne river crested at 13.1 feet at
Lucas County Waterville	24- 25	0730EST- 0700EST			0	0	0	0	Flood
	The		r flooded.	Flood st	age is 9	et, a		-	rested at 9.3 feet at 1100EST on
OKLAHOMA									
Love County 5 NW Leon	01	0000CST			0	0	?	?	Thunderstorm Winds (G52)

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pen Killed	ber of sons Injured	D	imated amage rty Crops	November 1992 Character of Storm
OKLAHOMA Cor	ıt'd								
Johnston County 3.5 W Wapanucka	01	0010CST			0	0	?	· ?	Thunderstorm Winds (G52)
Wagoner County Wagoner	01	0015CST			0	0	?	?	Thunderstorm Winds (G61)
Mc Intosh County Checotah	01	0015CST			0	0	?	?	Thunderstorm Winds
Cherokee County Scraper	01	0020CST			0	0	?	?	Hail (0.75)
Coal County Lehigh	01	0030CST			0	0	?	?	Thunderstorm Winds
Atoka County Tushka	01	0030CST			0	0	?	?	Hail (0.75)
	of the Wag	he 1st across	eastern a imerous t	ınd southe	rn Okla	ahoma.	Thu	nderstori	ed into the early morning hours m winds gusted to 70 MPH at h. Severe thunderstorm winds
Cotton County 2 S Hulen	10	0004CST			0	0	?	?	Flash Flood
Stephens and Entire Counties	10	0037CST			0	0	?	?	Flash Flood
	Flas				of Hul	en and a			s roadways in Stephens County,
Comanche County Lawton	10	1522CST			0	0	?	?	Hail (1.00)
Tillman County 2 S Frederick	10	1610CST			0	0	? ·	?	Hail (1.00)
Caddo County Cogar	10	1631CST			0	0	?	?	Hail (0.5)
Tillman County 2 E Loveland	10	1631CST			0	0	?	?	Hail (0.75)
	Isola Okla	ated serve th ahoma.	understori	ns produc	ed dim	e- to q	uarter	-size hai	l across portions of southwest
Caddo County 1.5 Cogar	10	1700CST			?	?	0	0	Hail (0.75)
Wilarger County Odell	10	1800CST			0	0	?	?	Hail (0.75)
	A se	evere thunder	storm pro	duced dim	e-size h	ail near	Odel	1.	
Cleveland County Norman	10	2057CST			0	0	?	?	Flash Flood
Tillman County 15 E Frederick	10	2118CST			0	0	?	?	Hail (1.75)
Tillman County 5 S Tipton	10	2200CST			0	0	?	?	Flash Flood
Comanche County 2 N Hulen	11	0013CST			0	0	?	?	Flash Flood
Stephens County Marlow	11	0125CST			0	0	?	?	Flash Flood
Cleveland, McClain Pottawatomie	11	0200CST-			0	0	?	?	Flash Flood
Seminole Counties Tillman County	**	0800CST			•	•	•	•	******* *******************************
4 N Grandfield	11	0305CST			0	0	?	?	Flash Flood

A isolated severe thunderstorm produced golf ball-size hail 15 miles east of Frederick during the evening hours of the 11th and heavy thunderstorms across portions of central and southwest Oklahoma during the evening hours of the 10th into the morning hours of the 11th. In Norman, the Norman Regional Hospital Emergency Room was flooded by water from the heavy rains and

	Time	Path	Path	Number of	Estimated	November 1992
	Local/	Length	Width	Persons	Damage	
Location	Date Standard	(Miles)	(Yards)	Killed Injured	Property Crops	Character of Storm

OKLAHOMA Cont'd

Highway 36. Four miles north of Grandfield was impassible due to water from Red Creek flowing over the highway. Rainfall of five to eight inches caused widespread flooding of creeks and roadways across Cleveland, Mc Clain, Pottawatomie and Seminole Counties. A mans car was swept off a flooded roadway 4 miles south of Maud. Roadways were also flooded south of Tipton, 2 miles north of Hulen, and at Marlow. Rainfall totals were 9.32 inches for 24 hours at Grandfield, 8.06 inches at Trousdale, 7.68 inches at Marlow and 5.04 inches at Lindsay.

Oklahoma County
Jones Oklahoma County
Luther
Okmulgee County
Okmulgee County 5 NNW Okmulgee Wagoner County 2 E Coweta
2 E Coweta

11	1313CST	0	0	?	?	Hail (0.75)
11	1330CST	0	0	?	?	Hail (0.88)
11	1445CST	0	0	?	?	Hail (0.88)
11	1535CST	0	0	?	?	Hail (0.75)

Isolated severe thunderstorm produced large hail across Oklahoma County with dime-size hail being reported at Jones and nickel-size hail at Luther. In Eastern Oklahoma an isolated severe thunderstorm developed in Okmulgee County and moved northeast into Wagoner County. Nickel-size hail covered the ground 5 miles north northwest of Okmulgee and dime-size hail fell 2 miles east of Coweta.

Coal County Coalgate

22 0300CST 0 0 3 ? Lightning

Lightning struck the Coalgate City Hall and damaged the city's automated telephone system and police and fire dispatch radio.

Zones 01 02 03 04

24 0200CST-25 1400CST 0 0 3 0 Heavy Snow

A major winter storm blasted through the Oklahoma Panhandle and extreme northwest Oklahoma. The storm was accompanied by strong northerly winds, which at times produced near blizzard conditions. The heavy snow, along with blowing snow contributed to reduced visibilities and white-out conditions in many areas. Snow drifts of 4 to 6 feet were common in the Panhandle, with 8 foot drifts reported in Beaver County and some areas in northwest Oklahoma reporting 10 to 15 foot drifts. Snow plow trucks which were abandoned were buried and lost for several days under the drifts. Many roads were impassable and along Oklahoma Highway 3 from Elmwood to Slapout. 125 cars were abandoned and most farm houses sheltered 2 or 3 families who had abandoned their cars on the highway. Wind chills of 10 to 20 degrees below zero were registered. By the early afternoon the snow had ended leaving snowfall amounts ranging from four to six inches in the western Oklahoma Panhandle to nearly 1 foot in the eastern Oklahoma Panhandle and far northwest Oklahoma. Laverne reported 19 inches of snow.

OREGON ORZ001-004

21 0400PST-1600PST

? ? ? 4 High Winds

A major winter storm moved through Oregon in the morning and afternoon bringing high winds to the entire coast and northern interior valleys. The highest reported wind speeds were along the coast. Near Coos Bay winds estimated at 80-100 mph blew the roof off of a house at 2pm. Other reported coastal wind speeds were 58 with a gust to 75 mph at Sea Lion Caves in the afternoon; 60 mph at Gold Beach in the morning; 40-50 with a gust to 71 mph near Tillamook in the afternoon; 57 mph at Seaside at 6am; and 48 with a gust to 62 mph at Yaquina Bay near Newport in the late morning. In the Willamette Valley winds of 37 mph gusting to 45 mph in Eugene blew trees down that damaged a house, van, and car in separate incidents. Other areas in the Willamette Valley reported 48-51 mph winds in the morning hours.

PENNSYLVANIA, Eastern

PAZ-00E 12- 1700EST-Eastern 13 0600EST 0 0 4 0 High Winds Pennsyvania

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		nber of sons Injured	_ Da	mated mage ty Crops	Character of St	November 1992
LI VALOUE	Duto	Ummuru	(Males)	(24445)	111110	20,90.40	1.000.	y 0.0ps		
PENNSYLVANIA	, Eas	stern Cont	'd							
	Som mph and were blow over	ne of the higher at Wilkes-Bautility lines we off some burn off some f	er wind guarre Scrant were down ildings in lag poles on in Irish	usts reported ton Airpor in spots all York. A and traffic	ed wer t, 60 n ll acros tobacc signs	e: 65 m nph at I ss Easte so shed in cons	iph at S ancastern Peni was blo structio	State Co er and l nsylvan own do on areas	ollege, York New Holland ia. Portions wn near Lan along the tu	st behind the front. and Coatesville, 61. Trees, tree limbs of roofs and siding caster. Flags were impike were blown a came down on an
PAC-133 York County	23	0415EST- 1100EST			0	0	4	0	Flash Floo	o d
	its b Else	oanks in a run	al area (D county, ju	over Tow st west of	nship) York	northwin West	est of ` Mancl	York. hester T	Several road ownship, the	vago Creek to leave s had to be closed. e heavy rain caused
PAC-071 Lancaster County	23	0800EST- 1130EST			0	0	1	0	Flash Floo	d
	Caus Littl at th road	ed feeder stre le Chickees C le intersection	ams to lea reek which of Route	ive their b h passes th 72 and Fri	anks. Irough Iitville	The flo the Mo Pike.	oding v unt Joy A coup	was on area. le of au	small feeder Four feet of stomobiles sta	early morning hours streams and on the water was reported alled on the flooded sements that had to
PENNSYLVANIA	, We	estern								
Beaver County N Beaver	12	2030EST	0	0	0	0	0	0	High Wine	is
	Beav	ver Falls recon	rded a nor	onvectiv	e wind	d gust to	o 66 m	ph.		
Fayette County Uniontown	12	2100EST	0	0	0	0	0	0	High Wind	ds
	Tree	s were downe	ed in Unio	ntown from	m non	convec	tive wi	nd gust		
Westmoreland	12	2120EST	0	0	0	0	0	0	High Wind	ls
County	Man	y trees and po	owerlines	down.						
Allegheny County		,								
3 N Pittsburg	12	2120EST	0	0	0	0	0	0	High Wind	ls
	Gust	t to 64 mph at	Sewickle	y.						
Pittsburg	12	2124EST	0	0	0	0	0	0	High Wind	ls
	Gust	to 62 mph at	Pittsburg	h Internati	onal A	irport.				
Westmoreland 12 NW Greensburg	12	2125EST	0	0	0	0	0	0	High Wind	ls
	Tree	down and tra	ınsfomer o	on fire in l	Murray	sville.				
Allegheny County 13 SE Pittsburg	12	2125EST	0	0	0	0	0	0	High Wind	ls
	Gust	to 60 mph in	Bethel Pa	ark.						
Westmoreland Latrobe	12	2130EST	0	0	0	0	0	0	High Wind	ls ·
	Tree	s and powerli	nes down	in Latrobe	.					

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		ber of sons Injured	Dan	nated nage / Crops	November 1992 Character of Storm
Location	Duce	Duumaid	(MIKS)	(Taras)	Killou	Injured	Troperty	Стора	Character of Gorin
PENNSYLVANIA,	We	stern Cont	'd						
Erie County	12	2133EST	0	0	0	0	0	۵	Ulah Winda
13 S, 20 SW Erie	12 Guet		•			-		0 75 mml	High Winds
Joffanson County	12	2146EST	O A	0	0 0	0	0 0	73 mpr	n. Trees and powerlines down.
Jefferson County			•		-	•	U	U	High Winds
Allachana Canada	Gust	to 58 mph at	Dubois r	light Serv	ice Sta	tion.			
Allegheny County 3 N Pittsburg	12	2147EST	0	0	0	0	0	0	High Winds
	Gust	to 68 mph at	Sewickle	у.					
MC Kean County 21 SW Smethport	12	2209EST	0	0	0	0	0	0	High Winds
·	Tree	s and powerli	nes down	in Kane.					•
Warren County 8 W Warren 7 NE Warren	12	2209EST	0	0	0	0	0	0	High Winds
	Tree	s and powerli	nes down	Youngsvil	le, Sca	ındia ar	d Nort	h Warr	en.
Westmoreland County	12	2215EST	0	0	0	0	0	0	High Winds
	Tree	s and powerli	nes down	between I	rwinan	d New	Kensin	gton.	
Butler County	12	2222EST	0	0	0	0	0	0	High Winds
	Wide	espread damag	ge with tre	es and po	werlin	es dowr	1.		
Erie County	12	2223EST	0	0	0	0	0	0	High Winds
	Gust	of 58 mph at	Erie Inte	rnational A	Airport	•			
Jefferson County	12	2234EST	0	0	0	0	0	0	High Winds
	Gust	of 61 Mph at	Dubois I	Flight Serv	ice Sta	tion.			
MC Kean County			_	_	_	_	_		
13 NW Smethport	12	2243EST	0	0	0	0	0	0	High Winds
		to 60 mph at							
Washington County 9 SW Washington	12	2245EST	0	0	0	0	0	0	High Winds
	Larg	e trees down	in Claysv	ille.					
Erie County	14	0430EST	0	0	0	0	0	0	Heavy Snow
	Law		d northea	st had 7 t	o 10 i	nches c	of snow	. Erie	, Girard and Waterford 6 to 8
Erie County	14	0700EST	0	0	0	0	0	0	Heavy Snow
	Lake	inches of sno eshore east of ville, 7 inches	the airpo	ort; and al	ong th	Airpor le lakes	t; 10 to shore w	o 12 in rest of	ches along the immediate Erie the airport 6 to 8 inches. At
Erie County	15	0645EST	0	0	0	0	0	0	Heavy Snow
		t to 10 inches erford 14 to 1:			At E	irie Inte	rnation	al Airp	ort 13 to 14 inches in the city.
RHODE ISLAND									
RIZALL Statewide	13	0300EST- 0530EST			0	0	?	0	High Winds

		Time	Path	Path	Number of	Estimated	November 1992
		Local/	Length	Width	Persons	Damage	
Location	Date	Standard	Length (Miles)	(Yards)	Killed Injured	Property Crops	Character of Storm

RHODE ISLAND Cont'd

A period of high south winds caused scattered power outages as a result of falling trees and tree limbs. The strongest winds occurred between 3 AM and 5:30 AM with a peak gust to 54 MPH recorded at the Providence NWS office at 0429EST.

SOUTH CAROLINA

Saluda and Newberry

McCormick, Edgefield, Saluda, Newberry 22 Counties 22 5 SSW Plum Branch to 3 E Pomaria	1800EST- 2000EST	62.0	400	1	9	6	6	Tornado (F3)
--	---------------------	------	-----	---	---	---	---	--------------

There was an outbreak of four tornadoes probably from 2 different cells. This first tornado crossed into South Carolina from Georgia. As it skipped along its path, it varied in intensity from F0 to F3. Rather than a straight path, the tornado followed a north-northeasterly path to about 3 NW Saluda, where it turned and proceeded northeast. It was rated at F3 when it destroyed a home, killing one occupant and injuring another. The home was located near the intersection of S.C. Highway #395 and Secondary Road #56. This storm also damaged large areas of woodlands in and around the Sumter National Forest. Some of the damage caused by this storm includes numerous downed trees along the damage path, at least two homes received damage in McCormick County, at least one home received damage in Edgefield County, several homes in Saluda County (between the storm described next and this storm, Saluda County had 14 homes destroyed, 9 mobile homes destroyed and 5 businesses destroyed), and at least two homes were damaged in Newberry County. Additionally, at least 20 mobile homes were damaged, at least one of which was completely destroyed in Newberry County. Some other damage includes throwing a car and truck that were parked inside a garage into a nearby field, and moving an A-frame house off its foundation at 8 SSE Prosperity.(M81P)

Counties 4 NW Johnston to 8 SSE Prosperity	22 22	1900EST- 2015EST	30.0	550	0	?	6	6	Tornado (F2)	
	as to	how many w	ere injui	red in each	h torna with it:	do. Tl s bend	his torna occurria	ado, lik ng abou	otal of nine injuries. It is uncle the one described immediant 4 ENE Saluda, where it turn above.	itely
Fairfield County										

6.5 WNW Winnsboro	22 Tree	2045EST		?	0	0	?	?	Tornado (F0)
Fairfield County 2.7 W Ridgeway to 1.7 NNW Ridgeway	22	2112EST	2.7	?	0	0	?	?	Tornado (F1)

A tornado touched down near the intersection of S.C. Highway #34 and Interstate Highway #77, blowing cars off Interstate #77 and trees and power lines onto both highways. The storm also knocked out power to Ridgeway. Considerable tree damage occurred as well as significant damage to one house.

Greenville County Northern Portions	22	2130EST	0	0	?	0	Thunderstorm Winds
Spartanburg County Boiling Springs	22	2140EST	0	0	?	0	Hail (0.75)
	This	storm is described after the Cher	okee C	County 6	entry.		
Kershaw County 7 S Kershaw	22	2140EST	0	0	?	?	Hail (1.00)

Golf-ball sized hail reported.

· · · · · · · · · · · · · · · · · · ·				-					
•	5 .	Time Local/	Path Length (Miles)	Path Width	Pe	nber of	Di	imated unage	November 1992
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Propei	ty Crops	Character of Storm
SOUTH CAROLI	NA (Cont'd							
Cherokee County Near Chesnee	22	2200EST			0	0	3	0	Thunderstorm Winds
	Caro nort befo	olina, gradua hern Greenvi	illy gainin ille County nto North	g strength y. This sta Carolina.	i. One orm cor	storm tinued	became to prod	e domir uce ver	noved into the upstate of South hant and marginally severe over y high winds and some large hail owned trees with some shingles
Beaufort County 1 NE Chelsea	24	1515EST			0	0	?	0	Thunderstorm Winds
	Nun	d damage or nerous trees red off its for	were dow	ong S.C. m, several	Highw homes	ay #17 damag	0 near ged due	the Be to fall	aufort-Jasper County boundary. ing trees, and one mobile home
SCZ001-004 Mountains, Foothills &	25- 26				0	0	?	0	Heavy Rain
Piedmont	Pers heav	sistent heavy n	rains caus d a numbe	ed gradual er of accid	rises o	n area s Thank	streams esgiving	but no	real flooding was observed. The ists.
Kershaw County 2 S Kershaw	25	2320EST			0	0	?	?	Thunderstorm Winds
	Seve	eral trees 18-	20 inches	in diamet	er were	blown	down	along U	.S. Highway #521.
SOUTH DAKOTA								J	,
SDZ001 > 005-007- 010 > 012-015 > 020 All SD except Southwest Plains	01- 04	0000CST- 1200CST			0	0	4	3	Heavy Snow
Southwest Flams	x 60 the nort repo inch cent	sed numerous 0 foot structure storm system heentral and ported elsewheres at Eureka	s minor tra tre being b m loosene northeast re. Some l, 14 inch east South	offic accided with in Mand the sur South Dall of the modes near Sur Sur Sur Sur Sur Sur Sur Sur Sur Su	ents and idison poports. cota and re signi ummit,	furthe artially The the noting ficant sand 12	r delayer collaps greatest orthern mowfall .6 inch	ed the fased whe amour Black Hair reporters at R	est Plains. The snow and slush all harvest in many areas. A 116 in the rain, snow, and wind from its of over a foot occurred in Hills with generally 3 to 7 inches ted were 25.2 inches at Lead, 15 oscoe. Some amounts in south inches at Winner and Bonesteel,
SDZ004-005- 011-012	18- 19	1800CST- 2400CST			0	0	0	0	Heavy Snow
Northeast SD	inch		ton and Si						h Dakota. Amounts included 9 les at DeSmet, and 6 inches near
SDZ001-006>010- 013>015 Southwest SD	22- 25	2100MST- 0600MST	•		0	0	0	0	Heavy Snow
Southwest SD	exce	eral three to ept up to a fo ead, and 6 in	ot of snov	w fell in tl	he north	ern Bla	ack Hil	ls. Sno	into south central South Dakota wfall reports included 12 inches
TENNESSEE									
Dyer County Fowlkes	12	1100CST			0	0	3	0	High Winds
	A ca	arport was da	maged and	d a storage	shed w	all was	blown	out. Se	everal small trees were uprooted.
Hardeman County Bolivar	12	1200CST			0	0	3	0	High Winds

		Time Local/	Path Length	Path Width		mber of		timated amage	November 1992
Location	Date	Standard	(Miles)	(Yards)	Killed	l Injured	Prope	amage rty Crops	Character of Storm
TENNESSEE Con	nt'd								
		o carś were da	maged w	hen a tree	W2C 11	nrooted	and fe	ll on to	n of them
Rutherford County Murfreesboro	12	1330CST	iniaged w	non a tro	0	0	2	0	High Winds
	A la	arge tree limb	was blow	n down.					
Bedford County Shelbyville	12	1400CST			0	0	3	0	High Winds
	A b	eauty shop los	st part of	its roof an	ıd som	e siding			
Unicoi County	20	2200CST			0	0	3	0	High Winds
Erwin	A tr	ree blew down	and dam	aged a car	r.				
Fayette County LaGrange	22	0310CST			0	0	3	0	Thunderstorm Winds (G40)
	Two	o women were	trapped	in a car af	fter a t	ree blew	on to	p of it.	
Hardeman County Bolivar Toone	22	0350CST	15	75	1	3	4	0	Tornado (F1)
	dest	ornado tracke royed. Numer tornado tipped	ous trees	and severa	al powe	er lines v	Toone were k	e. Abo nocked	ut 30 homes were damaged or down. One boy was killed when
Crockett County Alamo	22	0600CST			0	0	3	0	Thunderstorm Winds (G35)
	A u	tility building	was dama	aged. Tw	o trees	were k	nocked	l down a	as well.
Sumner County Gallatin	22	0720CST			0	0	3	0	Thunderstorm Winds
	A h	ouse received	damage t	o its roof	and pa	rt of its	siding		•
Sumner County Portland	22	0730CST			. 0	0	4	0	Thunderstorm Winds
		arn, a canopy			eral p	ower lin	ies wei	re blowr	down.
Hamilton County S of Chattanooga	22	0910CST			0	0	0	0	Hail (1.75)
		f ball-sized hai	il was rep	orted.					
Hamilton County Chattanooga	22	0925CST			0	0	2	0	Thunderstorm Winds
		es and power l county.	ines were	knocked	down i	in Chatt	anooga	as well	as throughout the remainder of
Meigs County S. Meigs County E. Meigs County	22	0950CST			0	0	2	0	Thunderstorm Winds
	Seve	eral trees were	knocked	down.					
Bradley County Chattanooga	22	1000CST			0	0	2	0	Thunderstorm Winds
	Seve	eral trees were	knocked	down.					
Bradley County NE of Cleveland & Charleston	22	1015CST			0	0	3	0	Flash Flooding

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		ber of sons Injured	Dau	mated mage y Crops	November 1992
TENNESSEE Con	t'd								
									le were stranded at a church just in Charleston.
Meigs County Decatur	22	1030CST			0	0	3	0	Flash Flooding
	Seve	ral streets we	re damag	ed due to	flash fl	ooding.			
McMinn County Etowah	22	1030CST			0	0	2	0	Thunderstorm Winds
	Seve	ral trees and	power lin	es were kı	nocked	down.			•
Knox County Knoxville	22	1130CST			0	0	2	0	Minor Flooding
	Seve	ral streets had	d some m	inor flood	ing.				
TEXAS, Panhandl	le								
ZONES 01 > 06	21	0400CST- 1800CST			0	0	0	0	Heavy Snow
	dumj three hour Num	ped heavy sno to six inch c period. Th	ow across ategory. ne snow of accidents	most secti All zones caused clo were caus	ons of had locosure of sed by t	the regi ations the f U.S. The heav	on. Sr hat reco Highy	nowfall a eived at vay #60	ne Texas Panhandle. The storm amounts generally ranged in the least four inch amounts in a 12 or just southwest of Hereford. It is serious injuries were reported.
ZONES 01 > 06	24- 25	0200 CST- 0800 CST			3	0	6	0	Heavy Snow
	accor morn snow areas pede was were Forti drifti Inter road 24th suffe By the inches (F18)	mpanied by s ning of the 24 v, along and b s. Early on the strian whose v killed when a involved in unately, no si ing of the sno state 40 across ways were all this vehicle ared a massive the morning o	trong non th, four to lowing some 24th, a vehicle had truck sli a chain-rignificant ow. Snow so closed to also be the art att of the 25th hwest Te	therly wire or six inch ow contril vehicle or d become d across seaction ac injuries or drifts of as Panham. A third came strar ack due to the snow	ids, whees of significant to a Intersistrande now-pacident courred 4 to 6 dle was person ided all overex y taper	ich at the control of	imes plaineas plaineas plaineas de visible in Old snow. ads interested in Oldham for mund oldham erstate n wind eaving	oroducedly faller allities at tham Co Minute to the vend lane snow a namon, ruch of 2 and 40. A chills of snowfa	Panhandles. The storm was blizzard conditions. By midnacross the region. The heavy and white-out conditions in many punty struck and killed a woman as later the driver of that vehicle chicle. Two hundered vehicles of Interstate #40 in Amarillo. In a strong winds contributed to making many roads impassable. Ath, and sections of other majority, during the afternoon of the strong the person sought safety, he of 10 to 20 degrees below zero. Il amounts ranging from 4 to 6 he northeast Texas Panhandle.
TEXAS, Northern									
•	Nove whice Data	h had develop	with thun ped on a c	derstorms Iryline cor	in prog ntinued	gress ac moving	ross N eastw	orth Te	xas, as a line of thunderstorms oss the area (see October Storm
Denton County	0.4	0000000			•	•	•		PM 1
Denton Roanoke	01 01	0003CST 0010CST		•	0	0	? 3	?	Thunderstorm Winds (G61) Thunderstorm Winds
m ~	At R	oanoke, stron	ig winds l	olew powe	r lines	down.			
Tarrant County 2 N Keller	01	0013CST	_	,	0	0	4	?	Thunderstorm Winds
	Stron	ig winds dest	royed two	mobile h	omes a	nd seven	rai cari	oorts.	Trees were uprooted.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		nber of sons Injured	Da	mated mage	November 1992 Character of Storm
2,000 and 1			(Name of	(1442)				<u> </u>	
TEXAS, Northern	Con	ıt'd							
Dallas County Coppell Richardson Richardson	01 01 01	0013CST 0034CST 0044CST			0 0 0	0 0 0	? 3 ?	?	Thunderstorm Winds (G61) Thunderstorm Winds Hail (1.75)
	At R	lichardson, sti	rong wind	s uprooted	d 18-inc	ch diam	eter tr	es, cau	sing roads to be blocked.
Grayson County Tioga Sherman	01 01	0017CST 0025CST			0	0	?	?	Thunderstorm Winds (G52) Thunderstorm Winds
	At S	herman, stron	ng winds d	lowned a	few pov	wer line	s.		
Ellis County Maypearl	01	0030CST			0	0	3	?	Thunderstorm Winds (G52)
Fannin County 8 NW Bonham	01	0055CST			0	0	?	?	Thunderstorm Winds (G61)
	Betv	veen Ravenna	& Mulbe	rry, stron	g winds	did da	mage t	o trees	and power lines.
Collin County Celina	01	0100CST			0.	0	3	?	Thunderstorm Winds
	Stro	ng winds unro	oofed a po	rtion of a	home.				
Hunt County Greenville Cash	01 01 At C	0120CST 0125CST Greenville, stro	short ong thunde	narrow erstorm w	0 0 inds do	0 1 wned tr	4 5 ees and	? ? i power	Thunderstorm Winds Tornado (F0) lines, and damaged some roofs.
	their	Cash (10 south roofs remove red with a lace	ed, and o	ne house	also ha	d one o	utside	wall to	lines, and damaged some roofs. Eight houses had portions of rn off. One man was seriously
Panola County Beckville Carthage	01 01	0528CST 0530CST			0 0 0	0 0 0	3 3 ?	?	Thunderstorm Winds Thunderstorm Winds Lightning
	At B	eckville, stror	ng winds b n, and ligl	olew sever	al trees	down i	ipon a ages.	house.	At Carthage, strong winds blew
Harrison County					_		_	_	
3 N Elysian Fields	01	0530CST			0	0	3	?	Thunderstorm Winds
	Stro	ng winds blev	v numerou	is trees do	own.				
Shelby County Timpson	01	0535CST			0	0	3	?	Thunderstorm Winds (G50)
•	Stro	ng winds blev	v several t	rees down	n, two o	of which	h fell ı	ipon hoi	uses, damaging their roofs.
Panola County								-	
1 N De Berry 2 N Deadwood	03 03	1345CST 1345CST			0	0	? 3	?	Hail (1.00) Thunderstorm Winds (G56)
2.11.200,000	03	1355CST			Ŏ	Ŏ	?	?	Hail (1.75)
	At 1	N De Berry,	strong w	inds blew	trees d	own.			
Nacogdoches County Nacogdoches Harrison County	03	1400CST			0	0	?	?	Hail (1.75)
4 N Elysian Fields Waskom	03 03	1400CST 1418CST			0	0	?	?	Hail (1.75) Hail (1.00)
Shelby County									Thunderstorm Winds (G56)
10 SW Center Center	03 03	1420CST 1422CST			0	0	?	?	Hail (1.75) Hail (1.50)

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		ber of sons Injured		mated mage ty Crops	November 1992
TEXAS, Northern	Con	ıt'd	•						
8 SE Center 3 S Huxley	03 03	1430CST 1548CST	short	narrow	0	0	?	?	Tornado (F0) Thunderstorm Winds (G61)
	brief	tly in open cou	untry. B	etween Sh	elbyvil	le and	Huxley	/Bay, a	Center, a tornado touched down t 1544CST, strong winds blew several boats to be capsized.
Angelina County Zavalla Sabina County	03	1500CST			0	0	?	?	Hail (1.00)
Sabine County Brookeland	03	1615CST			0	0	?	?	Hail (1.75)
Rusk County Goodsprings	12	0130CST		-	0	0	?	?	Thunderstorm Winds
	Stro	ng thunderstor	m winds l	blew trees	and b	ranches	down	over roa	ads across the county.
Gregg County Longview	12	0145CST			0	0	3	?	Thunderstorm Winds (G52)
	A L	ongview, stron	g winds o	downed tre	es and	power	lines.		
Harrison County Marshall Karnack 3 W	12 12	0200CST- 0205CST			0	0	?	?	Thunderstorm Winds
	Stroi Karn		m winds o	lowned tre down near	es and Highv	power vay #43	line in		ll around 0200CST. At 3 W of
Panola County	40	0004.00			•	•	_	•	
Grand Bluff	12	0201CST			0	0	? . 1imaa	?	Thunderstorm Winds
Houston County	SHOI	ng thunderstor	m wmus (nowned tre	es and	power	imes.		
21W Crockett 8W Crockett 2NE Crockett	19 19 19	1600CST 1610CST 1620CST			0	0	? 4 3	?	Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds
	At 2: High demo	1 West of Croc 1 #7 and Sate I	High #21 obile hom	around 16 es at 1610	00CST CST.	'. At 8 Trees a	olew tre West	of Crock arport v	n across the intersection of State cett, strong thunderstorm winds were also damaged about .75 of
Bell County Killeen	19	0800CST- 1100CST			0	0	?	?	Flash Flooding
	Stree	et flooding was	reported	in the sou	ıthem	sections	s of Ki	lleen.	
Bell County Bell	19	1100CST- 1300CST			0	0	?	?	Flash Flooding
	Floo Hark		rted on F looding v	M 439 bet vas also re	ween	FM 227	1 and	Dunns (Canyon Road, just northeast of
McLennan County McLennan	19	1100CST- 1400CST			0	0	?	?	Flash Flooding
	Stree Road	t flooding was I north of Elm	reported Mott wa	in China s also clos	Spring ed brie	on FM fly.			ar Rock Creek Road. Meixner
Shelby County 4 E Mount Enterprise	21	1730CST			0	0	3	?	Thunderstorm Winds Hail (1.00)
-	At 4	E Mount Ente	rprise, ni	ckle-size h	ail was	report	ed. St	rong wii	nds blew down numerous trees.

November 1992 Path Width (Yards) Time Path Number of Estimated Persons Killed Injured Damage Property Crops Character of Storm Date Standard Location TEXAS, Northern Cont'd **Angelina County** 21 1700CST 0 3 ? Thunderstorm Winds Huntington At Huntington (10 southeast Lufkin), strong thunderstorm winds uprooted trees, blew away carports, and downed power lines. **Angelina County** 3 E Lufkin 0530CST 22 Lightning On Highway #103 East, 3 East of Lufkin, lightning knocked power out for 1500 custormers and radio station KYKS. Grayson County 2 NW Van Alstyne 23 1450CST Tornado (F0) short At 2 Northwest of Van Alstyne, a brief (cold core) tornado flipped over a boat, demolished a carport, flung a motor home against a tree, and stripped a barn of most of its sheet metal roofing, hurling the pieces for hundreds of feet north. Camp County Pittsburgh 0 Thunderstorm Winds 24 1720CST At Pittsburgh, strong winds tore parts of the roof from three metal buildings belong to the Camp County Building Supply on US Highway #271. TEXAS, Southern Nacogdoches County 03 1400CST Nacogdoches 0 Hail (1.75) Golf ball-size hail was reported in Nacogdoches and Shady Grove, by the City Police. **Angelina County** Zavalla 1500CST Hail (1.00) Quarter-size hail was reported in Zavalla, by the Sheriffs Office. **Jasper County** 5 S Brookeland 1615CST Hail (1.75) Golf ball-size hail was reported in the north part of Jasper County along Highway 96 south of Brookeland. Kleberg and SRN Kleberg Counties 10 2100CST 5 Flash Flood Heavy rains over the area caused flooding problems in the central and southern parts of the County. The County Sheriff reported several homes on the west side of Riviera flooded. Low-water crossing and some FM roads were closed in the south part of the County. Some roads did not reopen until the afternoon of the 11th. Jefferson County 0500CST 30 2 Beaumont 11 .3 Tornado (F0) Damage from a tornado was reported on the north side of the City. A carport roof was blown off, trees, fences and power lines were downed. Val Verde County Comstock 2245CST Hail (0.75) A Deputy Sheriff reported dime-size hail in Comstock. Atascosa County County Wide 19 0930CST-2200CST Flash Flood General rainfall amounts averaged four to five inches across the County. Several roads and lowwater crossing were closed through the day.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		aber of sons Injured	Da	nated nage y Crops	November 1992 Character of Storm
		_	<u>-</u>						
TEXAS, Southern	Con	ıt'd							
Wilson County County Wide	19- 20	0930CST- 0100CST			0	0	5	0	Flash Flood
	Rain repo by h	fall amounts a rted. Low-wa elicopter from	everaged in their crossing their hon	five inchesing through the between	s acros h out to Poth a	s the C he Cou and Kos	ounty v nty wer sciusko.	vith iso re close One h	lated amounts near eight inches d. A family had to be rescued ome in Floresville was flooded.
Wharton County Pierce	19	1500CST	.1	30	0	0	3	0	Tornado (F1)
	Texa Piero	s Department ce. Power lin	of Public es were k	Safety tr nocked do	ooper wn.	reporte	d a torr	nado on	Highway 59, 3 miles north of
Wharton County Crescant	19	1515CST	.1	20	0	0	3	0	Tornado (F1)
	Texa	s Department	of Public	Safety re	ported	a barn	damage	ed near	Crescant.
Wharton County Spanish Camp	19	1525CST	.10	30	0	0	3	0	Tornado (F1)
	Texa few	s Department outbuildings h	of Public ad roof d	Safety tro	oper r	eported	a torna	do on F	FM 102 near Spanish Camp. A
Cameron County 7 S Rio Hondo	10	1 <i>6</i> 10000			0	0	2	2	Thursdonetown Winds
/ S Kiu Holido			rm winds	knocked	0 down a	0 sheda	2 and upr	2 ooted a	Thunderstorm Winds few trees. A parked car was
n a .	turne	ed around.							-
Bexar County San Antonio	19	2115CST			0	0	3	0	Flash Flood
	Seve	ral low-water	crossing	were barri	icaded	across 1	he City	do to	flooding.
Wharton County 6 NW Wharton 6 NW Pierce 2 SW Wharton	21 21 21	1330CST 1340CST 1415CST	0.5 1.0 1.0	100 100 100	0 0 0	0 0	4 5 4	0 0	Tornado (F1) Tornado (F1) Tornado (F1)
	the h	November 21 1	tornado ou	utbreak. I	Emerge	ncy ma	nageme	ent offic	e thunderstorms at the onset of cials reported that several barns rnado destroyed a vacant house.
Fort Bend County 5 E Fulshear to 2 SE Katy	21	1420CST	4.0	200	0	6	7	0	Tornado (F2)
·	throu consi	igh the Kelliv iderable roof a sment were th	vood subd and windo arough aea	livision. w damage rial and g	Over 1 c. A feround s	.00 hor w struc surveys	nes in tures h by Na	the 300 ad outer tional V	road and moved north-northeast 0-5000 sq foot range received r walls fail. Track and damage Veather Service and emergency ion of this tornado.)
Harris County 2 SE Katy to 5 E Cypress	21	1428CST	21.0	200	0	5	7	0	Tornado (F2)
V E	The	1420CST Fort	Bend co	unty torna	do con	tinued	NNE in	to Harr	is County near Katy producing

mainly roof damage to residential and commercial buildings. The tornado caused considerable damage to West Side Airport, a major general aviation facility. About one dozen small aircraft were heavily damaged or destroyed along with a hanger. This tornado was captured on amateur video which showed a spectacular rotating wall cloud and at times a multiple vortex character. The entire track was surveyed by air by National Weather Service personnel. Damage assessment was provided by emergency management officials.

									,
	_	Time Local/	Path Length (Miles)	Bath Width	Per	nber of	_ Da	mated mage	November 1992
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Proper	ty Crops	Character of Storm
TEXAS, Southern	Con	nt'd							
Fort Bend County 2 N Richmond	21	1440CST	1.0	200	0	0	6	0	Tornado (F1)
2 A Richmond	A to	ornado touche	ed down	in the P	ecan G	Frove sto 78 ho	ubdivis omes.	ion no	rth of Richmond. Emergency ck was surveyed by air by NWS
Fort Bend County 10 SE Richmond	21	1445CST	1.0	200	0	0	5	0	Tornado (F1)
	Tho	ergency mana mpsons. Num he Fort Bend	nerous lar	ge trees a	lso wer	la bai e dama;	rn and ged. A	severa serial su	al outbuildings destroyed near arvey of the track was conducted
Brazoria County 4 S Hobby Airport	21	1510CST	0.5	200	0	0	5	0	Tornado (F1)
	A to dam for (ornado touched age to a half d continuation o	down in lozen hon this torn	Brazoria nes in the lado.)	County northe	just şo	outh of on of P	the Har earland	ris County line and caused roof . (See Harris County 1512CST
Harris County 3 S Hobby Airport	21	1512CST	2.0	200	0	0	5	0	Tornado (F1)
	Hob obse	by Airport. I	t lifted le le contrac	ss than 2 ct observe	miles fi er at th	rom the	runwa	ys and	continued moving NNE toward was reported in a urgent special was primarily to the roofs of
Harris County									
13 NE Intercontinen Airport Houston to 17 NE Intercontinen	21	1520CST irport Housto	4.0 on	300	0	0	7	0	Tornado (F3)
	golf man	course comm	nunity ale	ong Luce the dama:	Bayou	ı then	continu	ied into	n and moved northeast through a b Liberty County. Emergency See Liberty County 1527CST for
Harris County 2 SSW Downtown	21	1520CST	12.0	200	0	6	7	0	Tornado (F2)
Houston to 13 SSE Intercontine	ntal A	Airport Houst	on						
	A to S. I Ama Den buile	ornado touchec lighway 59, l azingly, no on ver Harbour s	d down or Interstate e was kill section of d damage	45, Intered or seri Houston From	state 10 ously ir 's near this tor) and I njured. east sid nado.	nterstat Six mi le. Ov Natio	te 610, nor inju er 500 nal W	and moved northeast across U. all heavily travelled highways. uries were to people living in the residences and 100 commercial eather Service and emergency of ground.
Harris County Interstate 10 Relivery 8 to	21	1527CST	20.0	1800	0	15	8	0	Tornado (F4)

The most violent of the tornadoes to occur in this outbreak touched down at the intersection of Interstate 10 and Beltway 8 in the Channelview area. The same supercell storm that produced the tornado near Hobby airport spawned this tornado. About a mile north of touchdown the tornado widened to a little over one mile diameter and increased to F4. After about a mile the tornado reduced to about 200 yards and F2 and stayed that way into Liberty County. Over 200 homes were destroyed and up to 1000 damaged from this tornado. the low number of injuries and no fatalities was truly amazing given the intensity and size of the tornado. The track and damage was surveyed extensively from the air and on the ground by NWS and Haag engineering personnel as well as emergency management officials. (See Liberty County 1556CST for continuation of this tornado.)

Beltway 8 to 8 SW Dayton

		Time Local/	Path	Path Width		mber of	Esti	mated mage	November 1992
Location	Date	Standard	Length (Miles)	(Yards)	Killed		Proper	ty Crops	Character of Storm
TEXAS, Southern	1 Con	ıt'd							
Liberty County									
17 NE Intercontiner Airport Houston to 3 E Romayor		1527CST	28.0	300	0	1	6	0	Tornado (F3)
	throu of C (tota	ugh northern l lleveland and I of 32 miles	Liberty Co in the tov) tornado	ounty. Da vn of "Ho finally e	mage to oot and nded.	resider Holler The tra	ntial pro ", just o ck was	operty of least of I	nued on a long northeast track courred in Tarkington, southeast Romayor, where this long track ed by air by National Weather y management officials.
Liberty County 8 SW Dayton to 2 NNW Dayton	21 1	549CST	10.0	200	0	1	5	0	Tornado (F1)
·	The The west both grou	tornado that l tornado tracke of Dayton Harris and L nd by NWS I	hit Channed over m One person berty con personnel.	el view costly oper on receive inties was	ontinue n land b d mino s 30 mi	d north ut seve r injuri les. Th	least int ral farm es. Th us tracl	to Liber is and me e total I c was su	ty County just north of US 90, tobile homes were damaged just ength of the tornado track from the air and on the
Brazoria County Alvin	21	1600CST			0	0	3	0	Thunderstorm Winds
	Eme wind	rgency manag	gement of	ficials rep	orted d	amage	to a ho		Alvin from strong thunderstorm
Polk County 10 SE Livingston	21	1612CST	2.0	200	0	0	4	0	Tornado (F2)
	Eme soutl	rgency manag hern Polk Cou	gement of inty.	ficials re	ported	trees d	own an	d two	barns destroyed near Segno in
Harris County 18 ESE Intercontine	21 ental A	1615CST Airport Houst	2.0 ton	200	0	0	4	0	Tornado (F1)
	10. that	Emergency m	anagemen long track	t officials red tornac	reporte io near	ed mino downto	r damag own Ho	ge to sev uston al	U.S. Highway 90 and Interstate eral homes. The thunderstorms so produced this tornado. (See
Liberty County 8 SW Dayton	21	1626CST	2.0	200	0	0	4	0	Tornado (F1)
	beformana over milli	re dissipating igement offici 2800 building	. Damag als. The ogs damage	ge was converall ested, 450 of	onfined timate o f which	to mo f dama were d	stly far ges for a lestroye	m outb all twelv d with o	perty County for about 2 miles uildings, based on emergency re tornadoes in the outbreak was sollar amounts in excess of 100 as many may not have sought
Chambers County Mont Belvieu	21	1630CST			0	0	0	2	Thunderstorm Winds
MIONE DON'TOU		damages to	treec was	renorted			•		
Nacogdoches County	WILL	i daniagos to	ucs was	reported	m the r	OWII O	y inc i	once De	partment.
Nacogdoches County	21	1645CST			0	0	0	2	Thunderstorm Winds
	Trees	s were reporte	ed blown	down in t	he sout	hwest p	oart of t	he City	of Nacogdoches.
Galveston County Santa Fe La Marque Texas City	21 21 21	1637CST 1640CST 1645CST	.1	10	0 0 0	0 0 0	0 2 5	0 0 2	Thunderstorm Winds (G55) Thunderstorm Winds Tornado (F0)
	Wind	gusts to 63 i	mph were	recorded	at Sant	a Fe.	Wind d	amage t	o several signs was reported in

Wind gusts to 63 mph were recorded at Santa Fe. Wind damage to several signs was reported in La Marque. Trees were uprooted, the Police Departments radio antenna was blown down and windows were blown out of building in Texas City.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		nber of rsons Injured	Da	mated mage cy Crops	November 1992 Character of Storm
TEXAS, Southern	Con	ıt'd							
Chambers County Anahuac	21	1715CST			0	0	4	3	Thunderstorm Winds
	Win	d damage to	several ro	of and tre	es was	reported	l by th	e local	Emergency Manager.
Jasper County Buna	21	1800CST	.5	40	0	0	5	3	Tornado (F1)
									ew roofs were tore off and many r lines were down in the area.
San Jacinto County Point Blank	24 Pub	0820CST lic report of	golf ball-s	ize hail so	0 uth and	0 I west o	0 f Point	0 Blank.	Hail (1.50)
Polk County From Onalaska to Camden	24 24	0846CST 0846CST			0	0	0	0	Thunderstorm Winds Hail (1.50)
	She	riff Departme	ent reports	golf ball-	size ha	il and tr	ees do	wn betw	een Onalaska and Camden.
TEXAS, Western									
Midland Co. 10 SW Midland 9 SW Midland	21 21	0240 CST 0245 CST			0	0	0	0	Thunderstorm Winds (G52) Thunderstorm Winds (G50)
	oper	nicroburst m rations person ne NWS Offi	mel report	oss the so ed wind go	uthern ists to 6	portion 60 miles	of M an hou	idland r, while	International Airport. Airport winds reached 58 miles an hour
South Plains Zones 07 08	24	0020 CST 1030 CST	-		0	0	4	0	Heavy Snow
	resu inch	llted in heavy ies were repo	snow over ted from	er northeri Muleshoe	ı portic to Silv	ons of the erton. S	ie Sout Several	h Plains traffic	norning of the 24th. The storm is. Snowfall totals of four to six accidents resulted from the slick table to the weather.
UTAH									
UTZ010-	01- 02	0800MST- 1100MST			0	0	0	0	Heavy Snow
	A m	oist northwe ounts were ar	st flow ove ound 18 ii	er northerr nches.	utah l	brought	heavy	snow to	the northwest mountains. Most
UTZ002-	02	1130MST- 1400MST	•		0	0	0	0	High Winds
	very	old front mo strong and g ion of the no	gusty north	west wind	ls. The	stronge	st wind	ds were	g hours. Behind the front were confined to the extreme western
UTZ010-	19- 20	1830MST- 1700MST			0	0	0	0	Heavy Snow
UTZ001-002- 003-	19- 20	2200MST- 1000MST	-		0	0	0	0	Heavy Snow
UTZ006-007- 013-	20	0100MST- 1200MST	•		0	0	0	0	Heavy Snow
UTZ012-	20	0800MST 1600MST			0	0	0	0	Heavy Snow

		Time	Path	Path	Number of	Estimated	November 1992
		Local/	Length	Width	Persons	Damage	
Location	Date	Standard	Length (Miles)	(Yards)	Killed Injured	Property Crops	Character of Storm

UTAH Cont'd

A cold front and a cold, deep upper low brought heavy snow to most of the state. The heavy snow began in the northwest mountains and valleys then gradually worked its way south and east. The heaviest amounts were reported in the northwest portion of the state. This was due to the lake effect provided by the Great Salt Lake and orographics by the Wasatch Mountains. Because of the lake effect and orographics, there was a great variability in the amounts reported. Amounts in the valleys ranged from 4 to 13 inches while the bench areas next to the mountains received 10 to 18 inches. The mountains mostly received 13 to 26 inches with a few areas picking up 10 to 12 inches. As a result of the snowfall and slippery roads, there were numerous minor accidents. However, there was no significant damage to vehicles or major injuries reported. Snow amounts in the east central and southwest valleys ranged from 3 to 6 inches. Only the northeast portion of zone six was affected by the heavy snow.

UTZ010-	22- 23	1130MST- 2000MST	·	•	0	0	0	0	Heavy Snow
UTZ001-002- 003-	22- 23	1130MST- 1000MST			0	0	0	0	Heavy Snow
UTZ006-	22	1400MST- 2000MST			0	0	0	0	Heavy Snow

Another cold front and a cold, deep upper low brought snow to most of Utah. However, this time the heavy snow snowfall was confined to the northwest and west central portions of the state. The valley locations in northwest Utah received 4 to 12 inches while the bench areas next to the Wasatch Mountains picked up 10 to 21 inches. Snowfall in the northern mountains was phenomenal. Most locations picked up 10 to 26 inches. However, favored locations in the northwest mountains received 37 to 54 inches. In fact, Alta ski resort set a new 24 hour state snowfall record. Alta received 45 inches beginning at 11:30MST Sunday. Because of the heavy amount of snow that fell in such a short period of time, a small avalanche occurred in the canyon leading up to Alta. The avalanche caused no damage. Again the snowfall and slippery roads caused numerous minor accidents in the urban areas of northwest Utah. These accidents involved fender benders, and vehicles sliding off roadways. The northeast portion of zone six received 4 inches of snow.

VERMONT

VTZALL 12 2000EST- 13 0530EST 0 0	6	0	High Winds
--------------------------------------	---	---	------------

A very strong cold front moved through Vermont early on the morning of the 13th bringing damaging winds to most of the state. In all over 16,000 customers were left without power as fallen trees and tree limbs downed power lines and power poles. Damage to vehicles and homes was also scattered throughout the state. Addison and Rutland Counties appeared to have been the hardest hit.

Southern Vermont 17 0200EST-17 1000EST 0 0 5

An Alberta Clipper brought the first widespread snowfall of the season to southern Vermont on the 17th. Snowfall amounts range from 2 to 4 inches with 4 inches reported at Danby and Pownal. Numerous accidents were reported throughout the area as amny motorists were caught unprepared for the onset of winter.

0

Snow

VIRGINIA

Smyth County 02 1030EST 0 0 ? 0 High wind

High wind broke a wooden railroad crossing gate, toppled a church steeple, ripped off a garage door and blew down numerous trees.

Warren County 12 1630EST-Browntown 1700EST 0 0 4 0 High Winds

High winds did spotty damage in the county. The most significant damage was to a double-wide mobile home and its porch. The roof of the porch and its supports were ripped off and tossed over the house. About 15 minutes later the roof of the trailer was peeled off.

Landin	Data	Time Local/	Path Length	Path Width	Pe	nber of	D:	imated amage	November 1992
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Proper	rty Crops	Character of Storm
VIRGINIA Cont'e	d								
Greene County	12	1800EST			0	0	3	0	High Winds Minor Flooding
	Tree floo	es were knock ding which fl	ed down b ooded son	y powerfu ne roads, o	l winds especia	s and mo lly in th	derate e Stan	to occas ardsville	sionally heavy rain caused minor area.
Henrico, Chesterfield Counties City of Richmond	12 12 12	1830EST 1830EST 1830EST			0 0 0	0 0 0	?	0 0 0	High Winds High Winds High Winds
Only of Incimiona	High	h winds knocl	ked down	tree limbs	and p	ower lin	es in p	parts of	these areas.
Nelson County	23 23	0021EST 0040EST-			0	0	0	0	Hail (1.75)
	Inter area west	0145EST nse thundersto s. In the Mo t sections of t t of Crabtree	ntebello a he county	nd Tyro a	reas 1.	.75 inch	hail f	ell for 3	Flash Flood at lead to flash flooding in some to 5 minutes. In the north and o mudslides closed Highway 56
Rockbridge County	23	0052EST- 0145EST			0	0	0	0	Flash Flood
	easte	nderstorms preern sections of es 700 and 66	of the cou	nty. Strea	ıms an	n in less d creeks	than s	three hor flowed t	urs and caused flash flooding in heir banks covering portions of
Greene County	23	0100EST- 0300EST			0	0	0	0	Minor flooding
	Seve which	eral thunderstoch caused son	orms move	ed through g of low a	the sa	me parts	of the	e county	producing periods of heavy rain
Greene County 1 SW Quinque to 2 N Quinque	23	0105EST- 0109EST	3.0 35	0	0	4	0	Torn	ado (F1)
to 2 11 Quinque	Quii trees	nque on route	633, when ortheast, a	e it blew of cross rout	out wir	ıdows ar	ıd dam	naged 2 h	own about 1 mile southwest of nouses as well as knocking down stroyed a house trailer, damaged
Madison County Shiffletts Corner	23	0110EST	0.5	17	0	0	4	0	Tornado (F0)
COLINCI	A to		d down bi	iefly in S	hifflett	s Corner	r at ro	ute 231	where it partially unroofed two
Culpeper County	23	0115EST			0	0	0	0	Flash Flood
	Thu parts	nderstorms pr s of the count	oduced he	avy rain v	vhich l	ead to b	rief flo	ooding o	f roads and low areas in several
Greene County Ruckersville	23	0120EST			0	0	5	0	Thunderstorm Winds
	A th	understorm p under constri	roduced da action.	amaging w	inds th	at knocl	ced do	wn A 32	foot high cinder block wall that
Madison County	23	0125EST			0	0	0	0	Minor Flooding
	Thu	nderstorms pr	oduced he	avy rain fo	or over	an hour	that le	ead to mi	inor flooding of low lying areas.
Culpeper County	23	0130EST			0	0	5	0	Thunderstorm Winds
	Thu hour off a	nderstorms pr rs as they mov as well as par	roduced da ved throug ts of two	maging w h. A carp parns. No	inds in ort was imerou	the Mt. s ripped s trees a	Pony from a and po	and Inle a house, wer line	t areas during the early morning the tops of three silos were torn s were knocked down.

									November 1992				
Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		nber of sons Injured	Da	mated mage ty Crops	November 1992 Character of Storm				
VIRGINIA Cont'd	i												
Madison County Rochelle Wolftown Criglersville	23 23 23	0130EST 0130EST 0140EST			0 0 0	0 0 0	2 2 2	0 0 0	Thunderstorm Winds Thunderstorm Winds Thunderstorm Winds				
	Pow coun	erful thunders ity. The dama	storms pr ige was n	oduced sp nostly tree	ootty da s, pow	amage t er poles	to seve and li	ral loca nes beir	ations scattered throughout the ag knocked down.				
Farquier County	23 23	0145EST 0200EST			0	0	5 0	0 0	Thunderstorm Winds Flash Flood				
	smal conf	I streams which ined to the Bea	ch covere aleton are	d some se	condar	y roads.	. The	thunder	storm wind damage was mostly				
Augusta County	23	0200EST			0	0	0	0	Minor Flooding				
		•	area cau	sed low a	reas to	becom	e flood	ded, wh	ich closed several roads in the				
King William County West Point	23	0400EST			0	0	4	0	Thunderstorm Winds				
	Seve	ral buildings v	were dam	aged and	a few t	rees we	re kno	cked do	wn by thunderstorm winds.				
Charles City County	23	0400EST 0404EST	2.0	25	0	0	4	0	Tornado (F1)				
	It kn destr	ocked down a oyed 3 metal	nd uproo sheds, lig	ted a few ghtly dam:	trees as	s it mov	ed nor	theast d	oing minimal damage. Then it				
WASHINGTON													
Pacific County Clatsop County	01	1615PST			0	2	4	0	High Winds				
Oregon	Rive home	r. Strong cros e as it headed	cold front sswinds g south ac	t caused s justing at a cross Meg	trong g 45 to 50 gler Bri	usty wi) miles : dge on	nds to an hou U.S.	develop r were r Highway	at the mouth of the Columbia responsible for toppling a motor y #101. Two passengers were				
Northeast WA WAZ006	sion County thelle thelle thelle thelle 23 0130EST 0 0 0 2 0 Thunderstorm Winds glersville 23 0140EST 0 0 0 2 0 Thunderstorm Winds glersville 23 0140EST 0 0 0 2 0 Thunderstorm Winds Powerful thunderstorms produced spotty damage to several locations scattered throughout the county. The damage was mostly trees, power poles and lines being knocked down. uier County 23 0145EST 0 0 0 5 0 Thunderstorm Winds 23 0200EST 0 0 0 0 0 Flash Flood Thunderstorms produced damaging wind and heavy rain that caused brief flash flooding of some small streams which covered some secondary roads. The thunderstorm wind damage was mostly confined to the Bealeton area where numerous trees and power lines were down and an abandoned saw mill was flattened. State County 23 0200EST 0 0 0 0 Minor Flooding Heavy rain in the area caused low areas to become flooded, which closed several roads in the county. William 23 0400EST 0 0 0 4 0 Thunderstorm Winds Several buildings were damaged and a few trees were knocked down by thunderstorm winds. Seles City 123 0400EST 20 0 0 4 0 Tornado (F1) A tornado touched down in the western part of the county near Turkey Island Creek and Route 5. It knocked down and uprooted a few trees as it moved northeast doing minimal damage. Then it destroyed 3 metal sheds, lightly damaged a house and car and knocked down numerous trees, all in the vicinity of Route 604. SHINGTON ic County op County op County op County op County of I 1615PST 0 2 4 0 High Winds The passage of a cold front caused strong gusty winds to develop at the mouth of the Columbia River. Strong crosswinds gusting at 45 to 50 miles an hour were responsible for toppling a motor home as it headed south across Megler Bridge on U.S. Highway #101. Two passengers were injured. The first significant snowfall of the winter in northeast Washington deposited several inches in the city of Spokane. Numerous minor traffic accidents occurred. Tree limbs laden with snow fell on power lines causing scattered power outages in and around Spokane.												
WAZ006	city	of Spokane. N	Numerous	minor tra	affic acc	cidents (occurre	ed. Trea	e limbs laden with snow fell on				
WEST VIRGINIA	-		-	-				-					
WVZ001 > 006, 009 > 011		1800EST- 0130EST			0	1	4	0	High Winds				
	with limb movi and t A cir The	the front, a st s fell on pow ing vehicles we rapped in a vender block wa Parkersburg p	rengthen er lines, ere dama hicle for Il was top olice rep	ing storm disrupting ged by fal a short tin opled. Th orted a tre	system g electr ling tre ne by a ne wall ee fell o	was lift icity to e brancl fallen to was paronto a r	ting no about hes. A ree. A resident	ortheast (13,000 Fairmo flat stor school u tial hom	frontal passage. In conjunction through the Great Lakes. Tree customers. Both parked and ont motorist was slightly injured re roof in Keyser was damaged. Inder construction near Elkins. The and damaged its roof. State				

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		mber of rsons	D	timated amage rty Crops	November 1992 Character of Storm
WEST VIRGINIA	Coi	nt'd							
	Cha	rleston, 58 m	iph at 203	3EST in F	arkers	burg, 4	3 mph	at 2043	ngton, 49 mph at 1924EST in EST in Morgantown, 59 mph at hh at 0036EST in Martinsburg.
WISCONSIN							_		
WIZ001-003- Far Northwest Wisconsin	01- 02	Evening- Afternoon			0	0	?	0	Heavy Snow
	pow	nowstorm dro ver lines were on Springs (D	damaged	by the wet	heavy	snow.	Snow a	amounts	vest Wisconsin. Some trees and included 6 inches at Gordon and county).
WIZ002- Vilas County	13	Late Morn Night	ing-		0	0	?	0	Heavy Snow
	Hea cou	vy snow squanty. Hurley i	alls from I measured	Lake Supe 11.8 inche	rior des	eposited low.	i almos	t a foot	of snow across northwest Vilas
WIZ005-007-008- 010-011-014-015- 018-	25- 26	Late After Early Mor			0	0	?	0	Heavy Snow
Southwest, Central & Northeast Wiscor	ısin								
	sout Sno (Jun	thwest, centra w measureme	l and nor ints inclu- ind 8 inch	theast Wis ded 10 inc	consin	. Numo Wauto	erous ti oma (V	raffic ac Vaushara	ing from 4 to 10 inches across cidents resulted from the snow. a county), 9 inches in Mauston Vestby (Vernon county) and Port
WYOMING		•	• •						
WYZ001-008-009	02	0400MST- 1600MST			0	0	0	0	Heavy Snow
	was	to two feet of collected in to orted 4 to 6 in	he mount	ains near J	from G acksor	rand T with t	arghee his sam	ski area e storm	during the day. A foot of snow. The west entrance to the park
WYZ050	02- 03	2000MST- 0600MST			0	0	0	0	Heavy Snow
	Mot	vinter storm untains. The Horns.	brought u rangers re	p to 40 i	nches to 14 ii	of sno nches v	w in a vas mos	few pl st gener	aces of the northern Big Horn al in the higher elevations of the
WYZ022-059	02- 03	2230MST- 0800MST			0	0	0	0	Heavy Snow
	Ove at C	r 7 inches of asper Mounta	snow was ain near th	collected a	at the (Casper	airport	during	the night. More snow was noted
WYZ071-072-073	03	0840MST- 1340MST			0	0	0	0	Heavy Snow
	Fou	r to six inches town of Chey	s of snow enne.	fell in ext	reme s	outheas	t Wyon	ning du	ring the day. This area included
WYZ067	03	1650MST- 1920MST			0	0	0	0	Blizzard
									miles an hour to the mountains frequently near zero.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pers Killed	ber of ons Injured	Dau	mated mage y Crops	November 1992 Character of Storm
WYOMING Cont	'd								
WYZ065	05	1230MST- 0400MST			0	0	0	0	High Winds
		i gusts were to morning.	o 55 miles	s an hour	at Arli	ngton o	n Inte	rstate 80	near Elk Mountain during the
WYZ065	07	1100MST- 1530MST			0	0	0	0	High Winds
	Wind and	ls gusting to 6 Rawlins.	4 miles an	hour we	ге героі	rted fro	m Arli	ngton on	Interstate 80 between Laramie
WYZ029-030	20	0100MST- 1040MST			į 0	0	0	0	Heavy Snow
	A Pa morr	cific storm broing. This inc	ought 4 to ludes the	5 inches town of I	of snov Evansto	w to the n.	south	west cor	ner of Wyoming early Tuesday
WYZ060-061-062	20	1000MST- 1745MST			0	0	0	0	Heavy Snow
	Near	ly one half a	foot of sno	ow was co	ollected	by late	aftern	oon in a	and around Douglas.
WYZ023	22- 23	1800MST- 0040MST			0	0	0	0	Heavy Snow
	A sto	orm moving in	from the	west bro	ught 6	to 8 inc	hes of	snow to	Star Valley during the night.
WYZ004-005-016- 014-017	22- 23	2000MST- 0600MST			0	0	0	0	Heavy Snow
	press	o 7 inches of sure covered V mopolis.	snow wa Vyoming.	s collecte Six to 7	ed alon inches	g the e were i	ast slo reporte	pes of t d from	he mountains as a strong low Meeteetse and 4 to 5 inches in
WYZ012-013	22- 23	2135MST- 1000MST			0	0	0	0	Heavy Snow
		ope flow broug eaths or injuri			w to the	Lande	r airpo	rt throu	gh the night and morning hours.
WYZ051-057-021- 022-059	22- 23	2300MST- 1130MST			0	0	0	0	Heavy Snow
	Mou	despread wint ntains and sou s of Wyoming	th to the (orought 6 Casper are	to 7 in ea. Les	ches of ss than	new s 6 inch	now to t es of sno	he east slopes of the Big Horn ow was common to the eastern
WYZ067-071-072	23	0618MST- 1400MST			0	0	0	0	Heavy Snow
	Some snow	e nine and one were noted to	half inch	nes of sno of Cheye	w was nne. N	recorde	ed at the	ne Cheyo juries no	enne airport. Less amounts of oted.
WYZ022-063-064- 065-066-067-059-071	30	1500MST- 2045MST			0	0	0	0	High Winds
AI ASKA Norther	A will Larai to 65	ind gust of 90 mie. A wind	0 miles ar gust to 80	n hour w) miles ar	as repo	rted fro vas rep	om nea orted 2	ar the si 20 miles	ing the afternoon and evening. ummit between Cheyenne and west of Cheyenne. Winds 50 No reported damage.

ALASKA, Northern

None reported.

	D.,	Time Local/	Path Length (Miles)	Path Width	Per	nber of	_ Da	imated umage	November 1992
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Proper	ty Crops	Character of Storm
ALASKA, Southe	rn								
Pribilofs Kodiak Island Bristol Bay	07				0	?	?	?	High Winds
	A latto al	rge low and f l areas. The	rontal syst strongest	em movin reported a	g east a gust wa	cross t s 69 m	he Beri ph at C	ng Sea Cape Ne	brought 60 to 70 mph wind gusts wenham.
South Central Alaska	08				0	0	?	?	High Winds
	brou Ancl of ra	ght 75 mph horage to Pal	wind gu mer. In th rted at Co	sts throug ie 24 hour	h Turr period	nagain endins	Arm a at 030	nd alo OAST (eastward moving frontal system ng the eastern mountains from on the 9th, more than 2.50 inches ational Airport Recorded a peak
Pribilofs	08	1041AST			0	0	0	?	Thunderstorm
	of sr weat imm	now pellets, a her station.	about 0.25 Then at 10	inch in d 141AST th	iameter is cell	began produc	falling ed a sin	from a	ver 40 years. At 1040AST a fall a cumulus cloud just south of the bke of lightning, followed almost ed at St. Paul was on the 21st of
Anchorage	08	1145AST			2	1	0	?	Avalanche
South Control	The Thre wet	slide occurre e, a mountai	d at 1145, n in Chuga atop a lay	AST as 3 ich Sate Pa er of drye	of the ark. T	4 peop he 8th	le were provide	crossii d perfe	tain on Sunday, killing two men. ng a gully on their way up Peak ct avalanche conditions. Heavy, ppes. Strong winds added to the
South Central Alaska, Central Gulf Coast Copper River Basin	09				?	?	?	?	Heavy Snow High Winds
	morr 50 m the n with inchedines 1,20	ning. Glenna nph. Thomp northern Susion a water eques. Total sno were again of	illen repor son Pass re na Valley, ivalent an w accumu levastated	ted wind a eported 3 Valdez nount from lation in the by trees d	gusts to feet of received n 0900, ne Anch tropping	54 mp new si 1 7.20 AST Si lorage g onto	oh. The now and inches ounday to area rai them fr	e central d over a of snow so 0900 nged from the	nce William Sound late Monday Il Gulf Coast reported gusts over a foot of new snow had fallen in AST Monday, the 9th, of 2.62 om four to twelve inches. Power weight of the wet snow. About st of them in the Matanuska and
South Central	22	1200AST			0	0	yes	?	High Winds
	at 15 gradi storn Anch Peak off si signs resul	500AST. When the control became of along the control became of along the control became of the control became	ith a ridge established nountains ed between Anchorag widesprea ed across to of power to	e of high from Cor of south co 80 and 1 e Internati d across s the south about 10	pressur dova to entral 2 00 mpl onal Ai outh ar and eas	e acro Bristo Alaska L. For Irport v L. Gast L	ss the old Bay. Wind the Richa was 48 in Ancho is of the	Copper The re Is gusts rdson r nph. N rage. city.	River Basin, a strong pressure esult was a strong Chinook wind along the upper hillside of east ecorded a peak gust of 85 mph. Minor roof damage, due to blown Damage to commercial business Downed trees and electric lines side, south Anchorage and Eagle
Pribilofs Alaska Peninsula	23-		-		Λ	Λ	ก	A	Different
	24 A str 60 m	ong low near ph. The res	the end oult was ne	f the Alasl ar blizzaro	0 (a Peni d condi	0 nsula p tions a	? roduced nd wind	? I north I chills	Blizzard west winds gusts between 50 and to 20 below.

	Time Local/	Path Length	Path Width	Number of Persons	Estimated Damage	November 1992
Location	Date Standard	Length (Miles)	(Yards)	Killed Injured	Property Crops	Character of Storm

ALASKA, Southern Cont'd

Bristol Bay

28 1730AST

? ? ? Coastal Flood High Wind

Low pressure that formed just south of Dutch Harbor on the afternoon of the 27th deepened to 959 mb and moved to near Sand Point by 0300AST on the 28th. From this point the storm took a sharp turn to the north northwest and moved to Cape Newenham by 1500AST on the 28th with a central pressure of 962 mb. At 0618AST Cold Bay recorded a peak wind gust of 66 mph. Sustained winds were measured at 53 mph from the west southwest. 50 to 60 mph winds occurred over Bristol Bay with King Salmon reporting a peak gust of 55 mph at 1222AST. By 2100AST the low had moved to near Kipuk. One of the highest tides of the season, 21.5 ft, combined with a 5-8 ft storm surge and the period of strongest winds to create the worst flooding in the community of Togiak since 1964. Togiak police first noticed water and blocks of sea ice coming over the seawall at 1730AST which then subsided at 2015AST. The entire village was flooded. Two foot deep water was reported in homes at the back of the village which is .25 mile from the beach. The Togiak fisheries cannery across the bay was also damaged. Damage estimates in Togiak ranged between \$500,000 and \$600,000. Little or no other damage occurred in Bristol Bay.

ALASKA, Southeastern

AKZ014-015-016 03 Southern and Coastal southeast Alaska: Eastern

morningevening

0 0 ?

0 High Wind

southeast Alaska; Eastern Gulf Coast A o

A deep low moved over the southern Gulf of Alaska sending a vigorous occluded front through the panhandle and the eastern Gulf Coast. A very tight pressure gradient resulted, producing strong and gusty winds throughout southeastern Alaska and the eastern Gulf Coast; accompanied by moderate rain throughout much of the area. Sustained winds of around 40 knots with gusts close to 60 knots were reported in much of panhandle throughout the day, before the front weakened and moved north into Canada.

AKZ012 > 016 Southern, Coastal, and Central Southeast Alaska and Lynn Canal-Glacier Bay;

Eastern Gulf Coast 09

Afternoon-Evening

0 0 ?

High Wind

0

A strong low moved into the cebntra Gulf of Alaska, producing a strong southerly flow over the southeast Alaska and the eastern Gulf Coast. Sustained winds of 40 knots and gust to 60 knots were observed in southeast Alaska. No reports of injuries or damage were received.

AKZ012 Lynn Canal-Glacier Bay

13- Late afternoon-14 Early morning

0 0 0

High Wind

A strong low developed in the south-central Gulf of Alaska and moved northeast to the eastern Gulf Coast, while high pressure persisted over the Yukon. This allowed cooler northerly winds to prevail over the northern panhandle, while moist air aloft was moving over the southeast Alaska from the south. Snowfall in the central panhandle were light, two to four inches, before turning to rain; but Lynn Canal-Glacier Bay had amounts quite a bit higher, Haines reporting eight inches, before the snow had turned to rain.

AKZ013 > 015 Central, Southern, and Coastal Southeast Alaska

23- Afternoon-24 Afternoon

0 0 0 High Wind

A strong front moved east across the Gulf of Alaska while high pressure prevailed over western British Columbia. As the front moved slowly eastward toward the panhandle, strong southeasterly winds were reported over much of panhandle, with sustained winds near 40 mph and gusts as high as 60 mph in some locations. As the front weakened and moved onshore of southeastern Alaska, a low developed along the front in the southeastern Gulf of Alaska, which contributed to the continuation of the high wind episode over the area, mainly southern portions of the panhandle for a prolonged period.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		mber of rsons Injured	Da	imated image ty_Crops	November 1992 Character of Storm
ALASKA, Southe	easter	n Cont'd							
AKZ014 Southern Southeast	16	Faulu	. 		Δ	Λ	Λ	0	YY:_L XX:J
Alaska	26 Δ d <i>i</i>	Early morn	-	st Pacific	U moved	0 north t	0 brewo	0 southea	High Wind st Alaska while a high pressure
	ridge ahea knot	e remained so d of the low h s. The low h	tationary were repo ad weake	over weste orted in sou ned as it m	ern Brit otheaste oved n	ish Col rn Alas orth ove	umbia. ka with r the P	Strong Metlak anhandl	g and gusty southeasterly winds atla Harbor winds peaking at 57 e, and winds were not as strong, es or damages due to this storm.
HAWAII									
Hawaii	19	0930HST			0	0	3	0	Flash Flood
	Min	or flooding fi	om heavy	y showers	in the (Glenwoo	od and	Volcano	areas.
Hawaii	19	1130HST			0	0	4	0	Flash Flood
		or flooding in	the Hilo	and Puna	distric	ts.			•
Oahu	26	0800HST- 1500HST			0	0	5	0	Flash Flood
	Heav	vy rainfall alc	ong windy	ward Oahu	causes	floodin	g mair	ıly north	of Kaneohe.
Maui	26- 27	midnight			0	0	6	0	Flash Flood
	Inter	nse rainfalls o	ver the s	lopes of H	aleakal	a cause	severe	floodin	g in the Hana area.
Hawaii	29	1400HST			0	0	5	0	Flash Flood
	Heav flood	y rains over ling througho	the Big out the isla	Island of I and.	Hawaii	during	much	of the d	ay cause scattered mostly light
PACIFIC									
Guam	02	1800UTC			0	0	5	0	Typhoon Elsie
	Max	noon Elsie mo imum winds (reported.	oves north 70 mph w	westward ith gusts to	along a 90 mp	path ta h over s	king th outher	e center n portion	about 40 miles south of Guam. n of island. Only minor damage
Northern Marshalls	17	1200UTC			?	?	?	?	Typhoon Gay
	Typh	noon Gay mo	ves westv	vard throug	gh the	northern	Mars	hall Isla	nds.
Guam	23	0000UTC			0	1	6	0	Typhoon Gay
	Typh with	noon Gay mov gusts to near	ves westw 120 mph	rard across . Modera	Guam te dam	accomp age to h	anied bomes a	y maxii and over	num sustained winds of 80 mph head wires.
Guam	18	0600UTC			0	0	5	0	Typhoon Hunt
	Typh north mino	of the island	ves west I. Maxin	-northwest num winds	across about	the area	a with	the cent amage t	er passing about 10 to 15 miles o homes and infrastructure was
PUERTO RICO									
PRZ001	04	0000AST- 0800AST			0	0	6	0	Flash Flood
	produ River that v	to seven included extensive overflowed went out of the	e flooding its banks neir banks	g across the and put 5 f s were Mar	an Juan e city and feet of warding	n Metro nd affec water to and Jos	politar ted aro the ad efina C	Area dund a thi jacent ar creeks, a	luring the early morning hours lousand families. Puerto Nuevo reas of the river. Other streams and Piedras River. There were and Catano. Main roads and

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Num Pers Killed	ber of ons Injured	Estim Dam Property	age	November 1992 Character of Storm
PUERTO RICO C	ont'	d							
	high areas	ways were also without electr	flooded	for severa	l hour: nages v	s makin vere arc	g traffi ound 2	c hection	c. Downed trees and poles left dollars.
Loiza	05	0800AST			0	0	2	0	Coastal Flooding
	High	swells caused	sea wate	r to go ac	ross ad	jacent 1	road in	Pinone	s making it intransitable.
Maricao	21	1700AST			0	0	2	0	Mudslide
	A m		road in B	arrio Indi	era lef	t isolate	ed arou	nd 30	families until removal process
Loiza, Carolina, Luquillo	22- 25	1100AST- 1100AST			0	0	3	0	Coastal Flooding
	destr	swells of aro oyed. There we eriously affect	vere other	eet covere sectors in	d road Luquil	that g lo wher	oes three water	ough P reache	inones. Part of that road was d residences although they were
PRZ001-005	27	1100AST			0	0	4	0	Flash Flood Thunderstorm Winds
	of A in Ca	guas Buenas w	vere affec er a bridge	ted by thue and Cruz	inderste creek	orm wii in Toa	nds and Alta als	familio o overt	rteen houses in the municipality es had to be relocated. A creek lowed. There were fallen trees ity.
PRZ001- 002-005	29- 30	2030AST- 0800AST			0	0	3	0	Flash Flood
	since impa	midnight. Gu	ırabo Riv ciano Riv	er overflor er at Gura	wed an abo we	d made ent out	one bri	idge as	as much as three inches of rain well as roads 941, 921 and 181 Munoz Rivera and there were
VIRGIN ISLANDS	S								
St. Thomas	1830	AST			0	0	0	0	Urban Flooding
	Near areas	ly two inches of of poor drain	of rain flo	oded the n	orther	n part o	f the is	land. T	here were standing water along

STORM DAMAGE CATAGORIES

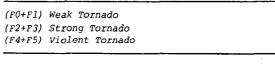
REFERENCE NOTES

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.
	\$5,000 to \$50,000	0	Includes heavy sleet storm.
5	\$50,000 to \$500,000	#	Freezing drizzle and freezing
6	\$500,000 to \$5 Million		rain, commonly known as glaze.
	\$5 Million to \$50 Million	<i>‡</i>	Report incomplete.
	\$50 Million to \$500 Million	#	Report not received.
9	\$500 Million to \$5 Billion	o/c	Indicates Crop Damage amount is
			included in the value given for
			property damage.

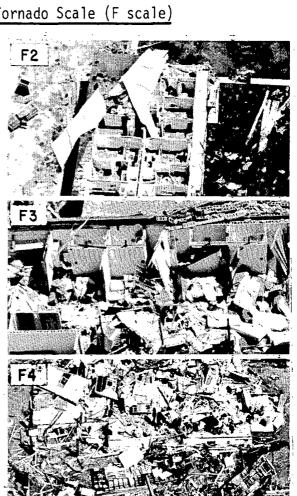
When reports are not received or are incomplete, the Storm Summary National Death and Injury totals may also be incomplete.

Definition of Fujita Tornado Scale (F scale)

- (FO) 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.

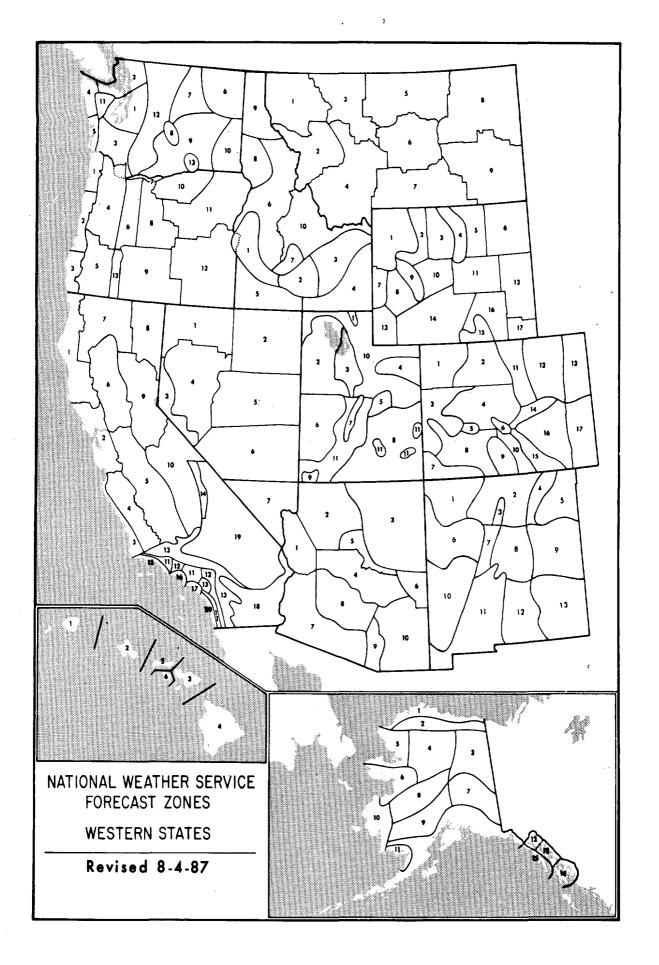


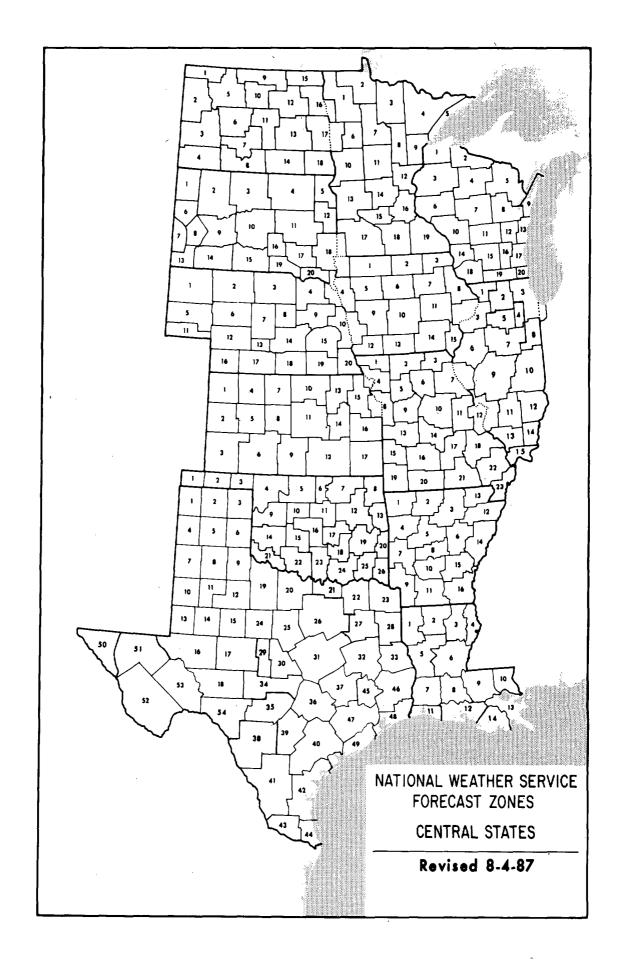
From J. Atmos. Sci., August 1981, p. 1517-1519



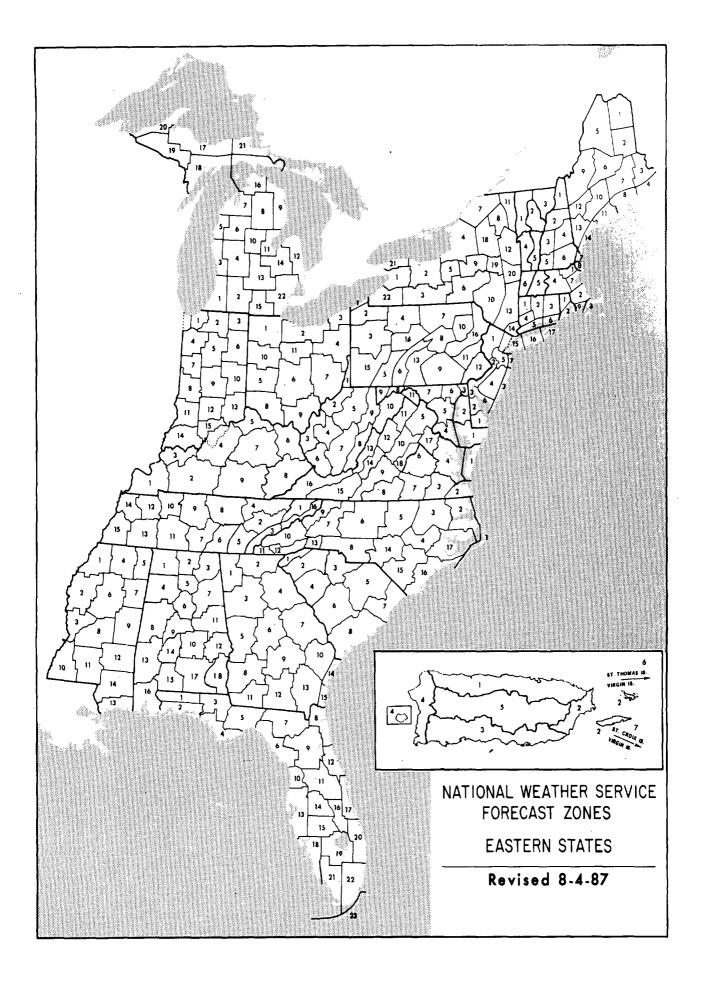
	,	,	,	,		,		,			,		,												,		
ТҮРЕ	ALABAMA	ARIZONA	ARKANSAS	CALIFORNIA	COLORADO	COMMETTICOL	DELAWARE	FLORIDA	GEORGIA	IDAHO	LLLINOIS	INDIANA	IOWA	KANSAS	KENTUCKY	LOUISIANA	MAINE	MARYLAND & DC	MASSACHUSETIS	MICHIGAN	MINNESOTA	MISSISSIPPI	MISSOURI	MONTANA	NEBRASKA	POPCHZ	ZEZ HAMPOHHRE
TORNADOES Number Days Deaths Injuries Property Damage Crop Damage NAIL	17 40 54 7							540040	153 153 7			1510676			411960	30 5 0 24 ?		110000				15 15 269 0					
Deaths Injuries Property Damage Crop Damage THUNDERSTORM												00??				00??											
Deaths Injuries Property Damage Crop Damage	015?		0000					0060	0165			0040				066?				0030		0010					
HIGH WINDS Deaths Injuries Property Damage Crop Damage				00?0	0030	00?0	0000			0040	0150	0155		,	NO.00		0000		00?0	0040		0050		0050			00?0
LIGHTNING Deaths Injuries Property Damage Crop Damage									0040							0030				0060							
FLASH FLOODS Deaths Injuries Property Damage Crop Damage	00??								0000			0053				0040											
FLOODS Deaths Injuries Property Damage Crop Damage												0045	0055										100				
HEAVY SNOWSTORMS AND BLIZZARDS a Deaths Injuries Property Damage Crop Damage					2100					3066			0054	1 052							0000				00??		
ICE STORMS # Deaths Injuries Property Damage Crop Damage					-					-			7	-												1 ??	
HURRICANES AND TROPICAL STORMS Deaths Injuries																											
Property Damage Crop Damage ALL OTHERS Deaths Injuries Property Damage Crop Damage		00?0				0040				4																	
Property Damage Crop Damage		8				6				60																	

								21	UK	IVI	5 U	MN	/IAI	KY										N	OVEN	BER	199
TYPE	Amoome Emz	OO-XMX CHZ	XXOX KEE	NORTH CAROLINA	NORTH DAKOTA	OHIO	OKLAHOMA	OREGOZ	PENNSYLVANIA	RHODE ISLAND	SOUTH CAROLINA	SOUTH DAKOTA	TEXNESSEE	TEXAS	UTAH	VERMONT	VIRGINIA	JANHIZGHOZ	WEST VIRGINIA	₩-wcozw-z	WYOMING	ALASKA	HAWAII	PACIFIC	PUERTO RICO	VIRGIN ISLANDS	NATIONAL DEATHS
TORNADOES	7,-	0			Ő								_	Г	0	_	_				0	#				0	
Number Days Deaths Injuries Property Damage Crop Damage				163.267.0		21 0					411966		113740	21 0 35 0			31 00 04 0										26 650
HAIL																											
Deaths Injuries Property Damage Crop Damage						0030					00??																
THUNDERSTORM WINDS																											
Deaths Injuries Property Damage Crop Damage				0 5 0		0050					00770		0040	0050			0050	!							0040		8
HIGH WINDS																											
Deaths Injuries Property Damage Crop Damage	0000		0360			1 6		0040	0040	0020			0000			0000	0040	0240	0 1 4 0								3 9
LIGHTNING				;																							
Deaths Injuries Property Damage Crop Damage							0030																				
FLASH FLOODS																											
Deaths Injuries Property Damage Crop Damage						050			0040				0010										000		0000		
FLOODS																											
Deaths Injuries Property Damage Crop Damage	00?0		0050			0050																			0000		ð
HEAVY SNOWSTORMS AND BLIZZARDS @																											
Deaths Injuries Property Damage Crop Damage						0040	00000					00413		3000				00?0		00?0		:			-		10
ICE STORMS #									,																		
Deaths Injuries Property Damage Crop Damage										:																	1 ?
HURRICANES AND TROPICAL STORMS													Ì														
Deaths Injuries Property Damage Crop Damage																								0160			
ALL OTHERS																											
Deaths Injuries Property Damage Crop Damage		,	0000													0050								•	0000		4





Ţ



CLIMATE PUBLICATIONS AVAILABLE FROM THE NATIONAL CLIMATIC DATA CENTER, ASHEVILLE, N.C.

Phone (704) 259-0682 or (704) CLIMATE

A WORLD OF INFORMATION!

For.

- *Industry
- *Research & Development
- * Public Utilities
- * Governmental Agencies
- * Attornevs
- * Construction
- * Consultants
- * Insurance Companies
- * Colleges & Universities
- * Solar Energy

STORM DATA

Monthly issue presents a chronological listing, by states, of occurrences of storms and unusual weather phenomena, together with data on the paths of individual storms, deaths, injuries, and estimated property damage, and a brief narrative description of each event. A new section in the bulletin entitled "OUTSTANDING STORMS OF THE MONTH" highlights severe weather and includes descriptive photographs of storms, their tracks, and analyzed maps. The December issue includes annual summaries of tornadoes and lightning and North Atlantic tropical cyclones.

LOCAL CLIMATOLOGICAL DATA

Published monthly for each firstorder station. Presents daily maximum
and minimum temperatures, degree day
data, precipitation, station pressures,
wind statistics, sunshine and sky cover
data, as well as 3-hourly data for certain
parameters. An annual issue is available
summarizing monthly data and including
up to 40 years record, and featuring a
narrative climatological summary and
history of the station.

HOURLY PRECIPITATION DATA

Monthly issue presents daily, hourly and maximum short duration data for the recording gage stations for each state except Alaska. The annual issue tabulates monthly and annual totals, and annual maximum precipitation data by selected time categories.



CLIMATOLOGICAL DATA

Published monthly for each state. Gives daily temperature and precipitation records, and monthly averages and totals, with departures from normal when available. Also derived statistics such as heating and cooling degree days, counts of days equaling or exceeding given temperature and precipitation thresholds, extremes, etc., are published for cooperative and first-order stations. Evaporation and soil temperature data are given for reporting stations. Seasonal snowfall, heating and cooling degree day tables included in selected tables. Annual summary also available.

COMPARATIVE CLIMATIC DATA

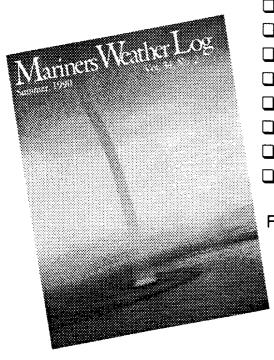
Presents tables of monthly and annual averages, totals or extreme climate conditions for approximately 300 major population centers. This publication is particularly helpful for comparing temperature, rainfall, snowfall, wind velocities, sunshine, cloudiness and relative humidities for the principal cities. The cities are listed alphabetically by state in two sections: observed data and climatological normals. This is an annual publication.

MONTHLY CLIMATIC DATA FOR THE WORLD

Contains monthly means of temperature, pressure, prescipitation, vapor pressure and sunshine for about 2,500 surface data stations worldwide. Also contains monthly mean upper air temperatures, dew point depressions and wind velocities for ten standard levels.

To change your address, please return a copy of the mailing label along with your new address to: National Climatic Data Center (Subscription Service).

Mariners Weather Log Serving the maritime community



- ☐ Comprehensive coverage of storms.
- ☐ Typhoon and Hurricane information.
- ☐ Unusual weather phenomena at sea.
- ☐ Selected gale and wave observations.
- ☐ Storm tracks and weather–related casualties.
- ☐ History of marine weather and marine lore.
- ☐ Lighthouse features by Elinor DeWire
- ☐ Sea photography and radio tips.

For sample copy and subscription form write:

User Services Branch
National Oceanographic Data Center
NOAA
Washington, DC 20235

Inquiries/Comments Call: (704) 271-4800

National Climatic Data Center Federal Building 37 Battery Park Avenue Asheville, NC 28801-2733

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300
ADDRESS CORRECTION REQUESTED

BULK RATE
POSTAGE & FEES PAID
United States Department of Commerce
NOAA Permit No. G-19