

1997 Annual Summaries

National Oceanic and Atmospheric Administration
National Environmental Satellite Data Information Service
National Climatic Data Center

FLOOD/FLASH FLOOD



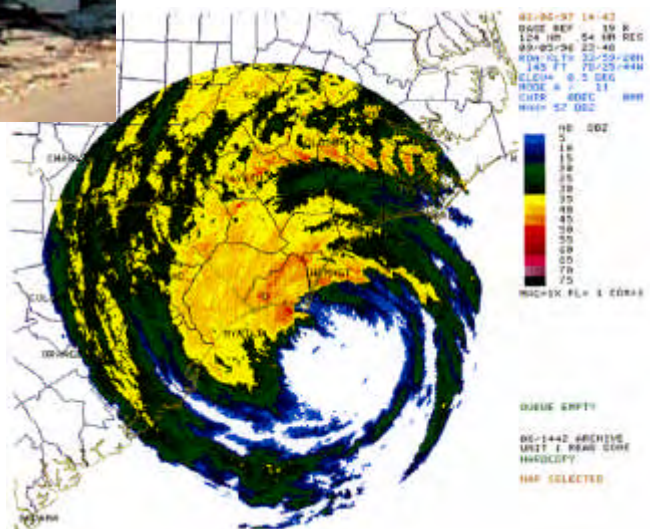
Lightning



Tornado



Hurricane



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Flood/Flash Flood

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All summaries are compiled from information contained in the Storm Data Publication.

Sources include the Storm Data Publication, the National Weather Service's Office of Meteorology and Office of Hydrology, Suitland, MD. and the National Hurricane Center, Miami, FL.

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Flood/Flash Flood Fatalities - 1940 through 1997 United States, Puerto Rico and the Virgin Islands

Stuart Hinson, National Climatic Data Center

There have been 6390 Flood/Flash Flood fatalities since 1940, which produces a 58 year average of 110. In 1997, there were 117 Flood/Flash Flood related fatalities, 14 less than 1996 and 7 more than the annual national average.

Some notable flood/flash flood events:

May 31, 1889 – The Johnstown Flood claimed 2,209 lives when the South Fork Dam on the Little Conemaugh River was breached. Heavy rainfall contributed to the erosion of the earthen dam wall, which was 75 feet high and 900 feet long. Eventual failure of the dam occurred resulting in a wall of water (35-40 feet) to move through Johnstown. The lake was over 2 miles long, 1 mile wide and up to 100 feet deep. The flood resulted in 1600 homes lost, 280 businesses destroyed, and an estimated \$17 million in property damage.

In August 1969 – 114 fatalities occurred in Western Virginia during floods associated with Hurricane Camille.

On June 9-10, 1972 – 237 fatalities occurred in Eastern South Dakota during flash floods.

On August 1, 1976 – Thunderstorms in the Rocky Mountains near Estes Park, Colorado, sent a 19-foot wall of water down the Big Thompson Canyon, killing 140 people.

September 12, 1977 – 16 inches of rain fell in the Kansas City metropolitan area, causing a flash flood that killed 25 people and caused an estimated \$90 Million dollars property damage.

On June 14, 1990 – In Shadyside, Ohio, 4 inches of rain fell in less than 2 hours resulting in a flash flood that caused 26 fatalities.

December 1991 – January 1992 - Up to 17 inches of rain fell in South-central Texas causing wide-spread river flooding on the Guadalupe, Brazos, Trinity, and Colorado Rivers accounting for 15 fatalities.

Summer 1993 – Persistent rains in the Mississippi River Valley caused major flooding of the Mississippi River and many of its tributaries. The floods resulted in 52 fatalities and an estimated \$20 billion in damage. Nearly 50,000 homes were damaged or destroyed and more than 15 million acres of farmland were affected

July 1994 – Tropical Storm Alberto's torrential rainfall caused floods in central Georgia killing 32.

January - March of 1995 – Much of California experienced periods of heavy precipitation, causing floods which resulted in over \$3 billion in damages and 27 fatalities.

January 18-19, 1996 – Large amounts of rain coupled with a rapidly melting snowpack resulted in flash floods that caused 30 deaths in the Northeast and Mid-Atlantic US.

March 1-7, 1997 – Flooding of the Ohio River resulted in 33 deaths in the Ohio Valley.

57 Year List of Flood/Flash Flood Fatalities

1940	60	1969	445
1941	47	1970	131
1942	68	1971	68
1943	107	1972	555
1944	33	1973	178
1945	91	1974	111
1946	28	1975	127
1947	55	1976	193
1948	62	1977	210
1949	48	1978	125
1950	93	1979	121
1951	51	1980	82
1952	54	1981	84
1953	40	1982	155
1954	55	1983	204
1955	302	1984	126
1956	42	1985	166
1957	82	1986	94
1958	47	1987	70
1959	25	1988	31
1960	169	1989	85
1961	93	1990	142
1962	53	1991	61
1963	41	1992	62
1964	142	1993	103
1965	188	1994	91
1966	56	1995	80
1967	53	1996	131
1968	57	1997	117

1997 fatalities by state:

TX	20	FL	2
AZ	20	ND	2
KY	16	NM	2
CO	9	OK	2
CA	8	AR	1
MO	5	IA	1
OH	5	IL	1
WV	5	IN	1
TN	4	LA	1
NC	3	PR	1
NV	3	UT	1
PA	3	WA	1

Total 117

1997 fatalities by locations:

39%	vehicle
38%	in or near a waterway
4%	permanent home
6%	mobile home
2%	boats or boating
8%	unknown/other
3%	camping

National Summary of Lightning, 1997

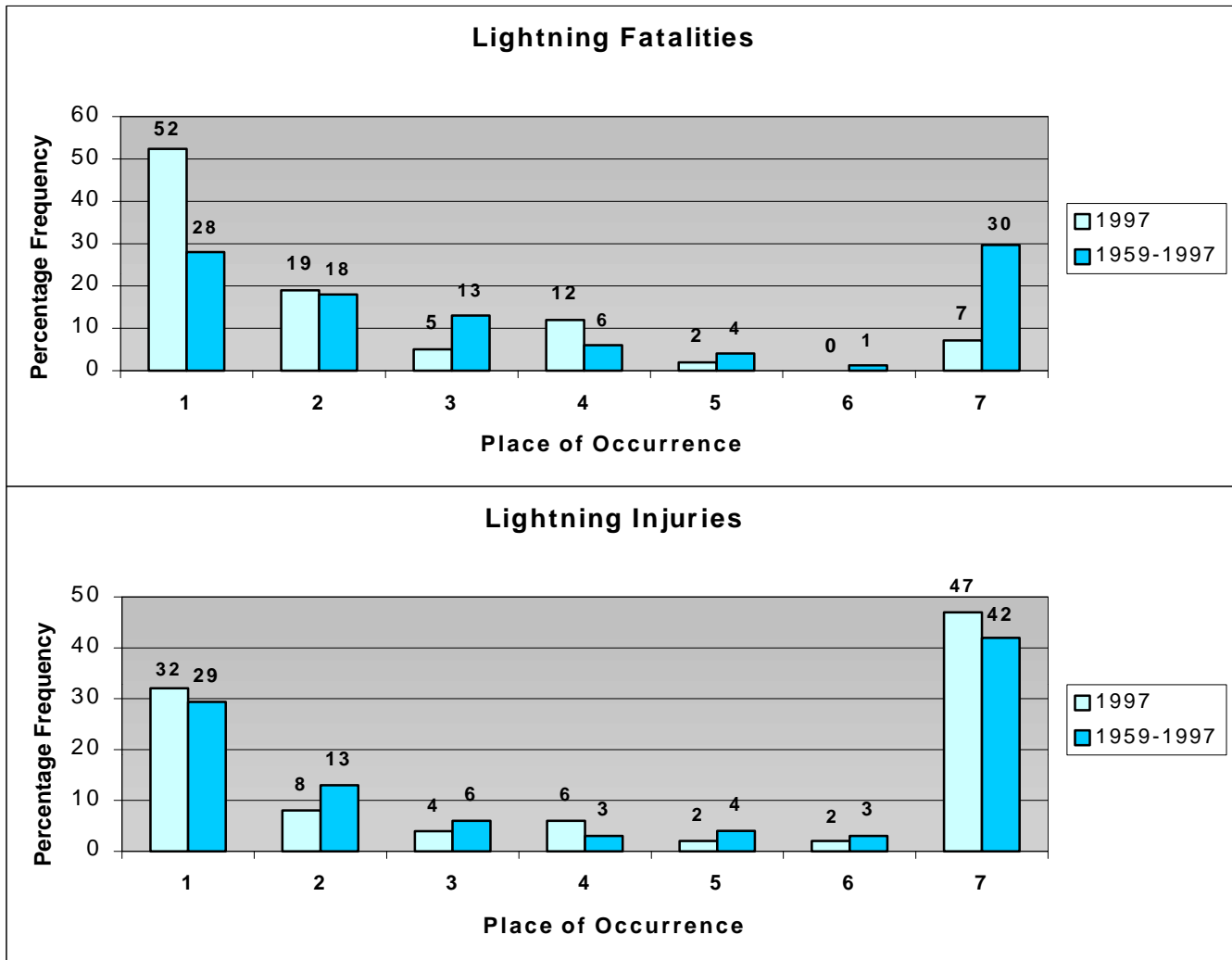
Stuart Hinson and William Angel

National Oceanic and Atmospheric Administration

National Environmental, Satellite, Data and Information Service

National Climatic Data Center, Asheville, NC

There were 42 deaths contributed to lightning in 1997, 10 less than 1996, which is 53% below the annual national average of 90. A 46% increase of deaths in open areas such as parks and fields was reported while there was a 76% decrease in various/other unknown locations. This is most likely due to the increased accuracy in the definition of death/injury locations. There were 306 injuries reported in 1997, 10% above the annual average of 280. In 1997, Florida ranked number 1 in both lightning deaths with 8 (19%) and injuries with 55 (17.9%).



Place of Occurrence:

1. Open fields, ball fields, parks, etc.
2. Under trees
3. Boating, fishing, water related, etc.
4. Farming, construction, near heavy machinery, etc.
5. Golf courses
6. On telephones, radios, electronics, etc.
7. Various other/unknown



TOTAL LIGHTNING DEATHS BY STATE AND NATION FOR YEAR 1997



STATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
ALABAMA	0	0	0	0	1	0	0	0	0	0	0	0	1
ALASKA	0	0	0	0	0	0	0	0	0	0	0	0	0
ARIZONA	0	0	0	0	2	0	0	0	0	0	0	0	2
ARKANSAS	0	0	0	0	0	1	1	1	0	0	0	0	3
CALIFORNIA	0	0	0	0	0	0	0	0	0	0	0	0	0
COLORADO	0	0	0	0	0	1	3	1	0	0	0	0	5
CONNECTICUT	0	0	0	0	0	1	0	0	0	0	0	0	1
DELAWARE	0	0	0	0	0	0	0	0	0	0	0	0	0
DISTRICT OF COLUMBIA	0	0	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	0	0	0	1	0	2	2	2	1	0	0	0	8
GEORGIA	0	0	0	0	0	0	0	0	1	0	0	0	1
HAWAII	0	0	0	0	0	0	0	0	0	0	0	0	0
IDAHO	0	0	0	0	0	1	0	0	0	0	0	0	1
ILLINOIS	0	0	0	0	0	1	0	0	0	0	0	0	1
INDIANA	0	0	0	0	0	0	0	0	0	0	0	0	0
IOWA	0	0	0	0	0	0	0	0	0	0	0	0	0
KANSAS	0	0	0	0	0	0	0	0	0	0	0	0	0
KENTUCKY	0	0	0	0	0	0	0	0	0	0	0	0	0
LOUISIANA	0	0	0	0	0	0	0	0	0	0	0	0	0
MAINE	0	0	0	0	0	0	0	0	0	0	0	0	0
MARYLAND	0	0	0	0	0	0	0	0	0	0	0	0	0
MASSACHUSETTS	0	0	0	0	0	0	0	0	0	0	0	0	0
MICHIGAN	0	0	0	0	0	0	0	0	0	0	0	0	0
MINNESOTA	0	0	0	0	0	0	0	0	0	0	0	0	0
MISSISSIPPI	0	0	0	0	0	0	0	0	0	0	0	0	0
MISSOURI	0	0	0	0	0	0	0	0	0	0	0	0	0
MONTANA	0	0	0	0	0	0	0	0	0	0	0	0	0
NEBRASKA	0	0	0	0	0	0	0	1	0	0	0	0	1
NEVADA	0	0	0	0	0	0	0	0	0	0	0	0	0
NEW HAMPSHIRE	0	0	0	0	0	0	0	0	0	0	0	0	0
NEW JERSEY	0	0	0	0	1	0	0	0	0	0	0	0	1
NEW MEXICO	0	0	0	0	1	0	0	1	0	0	0	0	2
NEW YORK	0	0	0	0	0	0	0	0	0	0	0	0	0
NORTH CAROLINA	0	0	0	0	0	0	0	0	0	0	0	0	0
NORTH DAKOTA	0	0	0	0	0	0	1	0	0	0	0	0	1
OHIO	0	0	0	0	0	0	0	0	0	0	0	0	0
OKLAHOMA	0	0	0	0	0	0	1	1	0	0	0	0	2
OREGON	0	0	0	0	1	0	0	0	0	0	0	0	1
PENNSYLVANIA	0	0	0	0	0	0	1	0	0	0	0	0	1
PUERTO RICO	0	0	0	0	0	0	0	0	0	0	0	0	0
RHODE ISLAND	0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTH CAROLINA	0	0	0	0	0	0	0	0	1	0	0	0	1
SOUTH DAKOTA	0	0	0	0	0	0	0	0	0	0	0	0	0
TENNESSEE	0	0	0	0	0	0	0	0	0	0	0	0	0
TEXAS	0	1	0	0	0	0	1	0	1	0	0	0	3
UTAH	0	0	0	0	0	0	1	0	0	0	0	0	1
VERMONT	0	0	0	0	0	0	0	0	0	0	0	0	0
VIRGINIA	0	0	0	0	0	0	1	0	0	0	0	0	1
WASHINGTON	0	0	0	0	0	0	0	0	0	0	0	0	0
WEST VIRGINIA	0	0	0	0	0	0	0	1	0	0	0	0	1
WISCONSIN	0	0	0	0	0	3	0	0	0	0	0	0	3
WYOMING	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL: UNITED STATES	0	1	0	1	6	10	12	8	4	0	0	0	42



TOTAL LIGHTNING INJURIES BY STATE AND NATION FOR YEAR 1997



STATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
ALABAMA	1	0	5	1	0	2	3	0	0	2	0	0	14
ALASKA	0	0	0	0	0	0	0	0	0	0	0	0	0
ARIZONA	0	0	0	0	0	0	0	2	4	0	0	0	6
ARKANSAS	0	0	0	0	0	12	3	1	0	0	0	0	16
CALIFORNIA	0	0	0	0	0	0	2	3	0	0	0	0	5
COLORADO	0	0	0	0	0	8	2	1	0	0	0	0	11
CONNECTICUT	0	0	0	0	0	0	1	1	0	0	0	0	2
DELAWARE	0	0	0	0	0	0	0	0	0	0	0	0	0
DISTRICT OF COLUMBIA	0	0	0	0	0	0	0	0	0	0	0	0	0
FLORIDA	0	0	0	0	1	9	19	13	11	2	0	0	55
GEORGIA	0	0	0	0	0	0	1	0	1	0	0	0	2
HAWAII	0	0	0	0	0	0	0	1	0	0	1	0	2
IDAHO	0	0	0	0	0	0	0	0	0	0	0	0	0
ILLINOIS	0	0	0	0	0	0	1	0	2	0	0	0	3
INDIANA	0	0	0	0	0	0	0	0	0	0	0	0	0
IOWA	0	0	0	0	0	0	1	0	0	0	0	0	1
KANSAS	0	0	0	0	0	0	3	1	0	0	0	0	4
KENTUCKY	0	0	1	2	0	1	0	0	0	0	0	0	4
LOUISIANA	1	0	0	3	2	1	0	0	0	6	1	0	14
MAINE	0	10	0	0	0	1	0	4	0	0	0	0	15
MARYLAND	0	0	1	0	0	5	0	2	0	0	0	0	8
MASSACHUSETTS	0	0	0	0	0	3	4	4	0	0	0	0	11
MICHIGAN	0	0	0	1	0	9	2	0	1	0	0	0	13
MINNESOTA	0	0	0	0	0	0	0	0	0	0	0	0	0
MISSISSIPPI	0	0	0	0	0	1	0	0	0	1	0	0	2
MISSOURI	0	0	0	0	0	1	0	0	0	0	0	0	1
MONTANA	0	0	0	0	0	0	0	0	0	0	0	0	0
NEBRASKA	0	0	0	0	0	1	0	0	0	0	0	0	1
NEVADA	0	0	0	0	1	0	0	0	0	0	0	0	1
NEW HAMPSHIRE	0	0	0	0	0	0	2	0	0	0	0	0	2
NEW JERSEY	0	0	0	0	0	0	1	0	0	0	0	0	1
NEW MEXICO	0	0	0	0	0	0	6	4	1	0	0	0	11
NEW YORK	0	0	0	0	2	6	2	0	0	0	0	0	10
NORTH CAROLINA	0	0	0	0	0	1	4	2	0	0	0	0	7
NORTH DAKOTA	0	0	0	0	0	1	2	2	0	0	0	0	5
OHIO	0	0	0	0	1	0	0	0	0	0	0	0	1
OKLAHOMA	0	0	0	0	0	0	3	0	0	0	0	0	3
OREGON	0	0	0	0	0	0	0	0	0	0	0	0	0
PENNSYLVANIA	0	0	0	0	0	0	9	1	0	0	0	0	10
PUERTO RICO	0	0	0	0	0	0	0	0	0	0	0	0	0
RHODE ISLAND	0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTH CAROLINA	0	0	0	0	0	1	1	1	0	0	0	0	3
SOUTH DAKOTA	0	0	0	0	0	0	0	0	0	0	0	0	0
TENNESSEE	0	2	0	0	0	0	0	0	0	0	0	0	2
TEXAS	1	0	0	0	1	2	24	1	3	0	2	0	34
UTAH	0	0	0	0	0	0	2	0	0	0	0	0	2
VERMONT	0	0	0	0	0	0	0	0	0	0	0	0	0
VIRGINIA	0	0	0	0	0	2	3	3	0	0	0	0	8
WASHINGTON	0	0	0	1	0	0	2	1	0	0	0	0	4
WEST VIRGINIA	0	0	0	0	0	1	0	0	0	0	0	0	1
WISCONSIN	0	0	0	0	0	1	6	0	1	0	0	0	8
WYOMING	0	0	0	0	0	0	0	0	3	0	0	0	3
TOTAL: UNITED STATES	3	12	7	8	8	69	109	48	27	11	4	0	306



TOTAL LIGHTNING DEATHS BY STATE AND NATION FOR PERIOD 1959-1997



STATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
ALABAMA	0	0	0	3	2	10	10	7	1	1	0	0	34
ALASKA	0	0	0	0	0	0	0	0	0	0	0	0	0
ARIZONA	0	0	0	0	4	0	7	7	9	1	0	0	28
ARKANSAS	0	0	8	0	2	14	18	13	4	0	0	0	59
CALIFORNIA	0	0	0	0	0	2	3	1	5	0	0	0	11
COLORADO	0	0	0	2	1	12	25	12	6	1	0	0	59
CONNECTICUT	0	0	0	0	0	2	3	2	0	0	0	0	7
DELAWARE	0	0	0	0	3	1	2	3	0	0	0	0	9
DISTRICT OF COLUMBIA	0	0	0	0	0	2	1	1	0	0	0	0	4
FLORIDA	0	0	1	5	8	42	63	52	31	2	0	0	204
GEORGIA	0	0	1	1	4	10	16	9	2	1	0	0	44
HAWAII	0	0	0	0	0	0	0	0	0	0	0	0	0
IDAHO	0	0	0	0	0	4	2	1	1	0	0	0	8
ILLINOIS	0	0	0	2	3	15	8	12	4	1	0	0	45
INDIANA	0	0	1	1	3	10	7	10	4	2	0	0	38
IOWA	0	0	0	1	5	10	2	11	1	2	0	0	32
KANSAS	0	0	0	3	3	6	7	1	1	1	2	0	24
KENTUCKY	0	0	0	2	3	9	9	6	12	0	0	0	41
LOUISIANA	1	0	0	4	5	13	21	3	11	0	2	2	62
MAINE	0	0	0	0	0	1	3	4	0	3	0	0	11
MARYLAND	0	0	0	0	2	2	6	6	2	1	0	81	100
MASSACHUSETTS	0	0	0	0	1	3	1	5	1	0	0	0	11
MICHIGAN	0	0	0	1	2	12	20	14	5	0	0	0	54
MINNESOTA	0	0	0	1	2	8	6	10	2	1	0	0	30
MISSISSIPPI	0	0	3	1	5	7	18	7	5	0	0	0	46
MISSOURI	0	0	4	0	7	16	8	7	1	1	0	0	44
MONTANA	0	0	0	0	0	3	6	0	0	0	0	0	9
NEBRASKA	0	0	0	0	1	8	5	6	3	0	0	0	23
NEVADA	0	0	0	0	1	1	0	1	1	0	0	0	4
NEW HAMPSHIRE	0	0	0	0	0	0	0	0	0	0	0	0	0
NEW JERSEY	0	0	0	1	2	2	6	6	5	0	0	0	22
NEW MEXICO	0	0	0	0	3	6	13	26	2	0	0	0	50
NEW YORK	0	0	0	0	4	10	35	18	4	2	0	0	73
NORTH CAROLINA	0	1	2	0	5	11	25	19	4	0	0	0	67
NORTH DAKOTA	0	0	0	0	0	3	3	1	0	0	0	0	7
OHIO	0	0	0	2	5	12	20	13	8	2	2	0	64
OKLAHOMA	1	0	0	2	6	8	7	15	10	2	0	0	51
OREGON	0	0	0	0	1	0	0	0	2	0	0	0	3
PENNSYLVANIA	0	0	0	1	1	10	21	13	7	1	0	0	54
PUERTO RICO	0	0	0	0	0	0	2	6	0	0	0	0	8
RHODE ISLAND	0	0	0	0	0	0	1	0	2	0	0	0	3
SOUTH CAROLINA	0	0	1	0	3	4	12	9	8	0	0	0	37
SOUTH DAKOTA	0	0	0	0	4	1	2	1	2	2	0	0	12
TENNESSEE	0	1	0	5	7	22	15	11	12	2	1	0	76
TEXAS	0	1	1	9	14	11	23	14	10	2	0	0	85
UTAH	0	0	0	1	0	4	4	5	4	0	0	0	18
VERMONT	0	0	0	0	0	1	1	2	0	0	0	0	4
VIRGINIA	0	0	0	0	1	4	7	4	3	0	0	0	19
WASHINGTON	0	0	0	1	0	1	1	0	1	0	0	0	4
WEST VIRGINIA	0	0	0	0	3	4	5	4	1	0	0	0	17
WISCONSIN	0	0	1	1	0	7	6	11	2	0	0	1	29
WYOMING	0	0	0	0	0	4	4	4	2	0	0	0	14
TOTAL: UNITED STATES	2	3	23	50	126	348	490	393	201	31	7	84	1758



TOTAL LIGHTNING INJURIES BY STATE AND NATION FOR PERIOD 1959-1997



STATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
ALABAMA	1	2	11	2	8	13	58	25	4	4	0	0	128
ALASKA	0	0	0	0	0	0	1	1	0	0	0	0	2
ARIZONA	0	1	0	0	4	4	7	31	21	3	1	0	72
ARKANSAS	1	0	2	6	6	24	19	38	7	0	0	1	104
CALIFORNIA	0	0	4	1	0	0	8	8	13	1	1	0	36
COLORADO	0	0	0	2	18	65	62	59	14	3	0	0	223
CONNECTICUT	0	1	2	1	1	2	16	6	6	3	0	0	38
DELAWARE	0	0	0	0	7	6	2	0	0	0	0	0	15
DISTRICT OF COLUMBIA	0	0	0	0	0	2	0	1	0	0	1	0	4
FLORIDA	0	1	12	20	31	119	228	150	134	38	1	1	735
GEORGIA	2	0	3	3	19	43	73	31	4	5	0	1	184
HAWAII	0	1	0	0	0	0	0	4	0	0	3	0	8
IDAHO	0	0	0	0	0	16	8	10	3	1	0	0	38
ILLINOIS	0	1	0	1	9	30	26	49	27	6	0	0	149
INDIANA	0	0	2	1	15	17	35	22	8	0	0	0	100
IOWA	0	0	0	3	10	27	13	11	6	1	0	0	71
KANSAS	0	0	5	4	6	13	30	17	25	2	1	0	103
KENTUCKY	0	0	1	2	11	16	41	13	8	0	0	0	92
LOUISIANA	2	0	4	5	15	18	30	19	9	7	2	2	113
MAINE	0	10	0	0	2	12	22	17	0	0	1	0	64
MARYLAND	1	0	1	0	4	15	21	21	4	3	0	0	70
MASSACHUSETTS	0	0	0	0	11	39	58	54	26	0	0	1	189
MICHIGAN	0	0	2	7	12	74	105	64	26	6	0	0	296
MINNESOTA	0	0	1	0	9	11	22	17	2	3	0	0	65
MISSISSIPPI	1	0	4	2	8	5	45	16	8	3	7	1	100
MISSOURI	0	1	1	9	4	14	6	17	8	1	4	0	65
MONTANA	0	0	0	0	0	8	4	2	0	0	0	0	14
NEBRASKA	0	0	0	2	13	7	8	11	3	0	0	0	44
NEVADA	0	0	0	0	3	2	3	1	1	0	0	0	10
NEW HAMPSHIRE	0	0	0	0	0	2	31	9	0	0	0	0	42
NEW JERSEY	0	0	0	0	1	2	16	8	17	0	0	0	44
NEW MEXICO	0	0	0	0	3	12	50	53	5	1	0	0	124
NEW YORK	0	0	0	0	12	41	81	107	23	4	1	0	269
NORTH CAROLINA	0	2	19	4	15	59	89	87	22	2	1	0	300
NORTH DAKOTA	0	0	0	0	1	1	6	3	2	0	0	0	13
OHIO	0	0	2	4	30	45	56	94	51	4	12	0	298
OKLAHOMA	1	0	1	6	12	22	26	33	21	18	6	2	148
OREGON	0	0	0	0	1	0	0	8	1	0	0	0	10
PENNSYLVANIA	1	1	0	0	19	91	94	34	45	3	0	0	288
PUERTO RICO	0	0	0	0	0	0	0	0	0	0	0	0	0
RHODE ISLAND	0	0	0	0	0	3	1	9	3	0	1	0	17
SOUTH CAROLINA	0	0	0	2	11	13	43	25	16	0	1	0	111
SOUTH DAKOTA	0	0	0	1	3	9	11	5	1	2	0	0	32
TENNESSEE	1	3	1	25	29	14	63	30	9	5	1	0	181
TEXAS	2	2	4	6	21	38	45	32	38	5	3	0	196
UTAH	0	0	0	1	7	16	8	12	7	0	0	0	51
VERMONT	0	0	0	0	0	4	3	2	0	0	0	0	9
VIRGINIA	0	0	1	4	6	16	62	21	9	0	0	0	119
WASHINGTON	0	0	0	1	0	12	3	6	0	0	1	1	24
WEST VIRGINIA	0	0	0	10	1	4	40	27	0	1	0	0	83
WISCONSIN	0	1	0	2	1	36	40	36	7	3	0	0	126
WYOMING	0	0	0	1	2	13	9	8	8	0	0	0	41
TOTAL: UNITED STATES	13	27	83	138	401	1055	1728	1364	652	138	49	10	5658



NATIONAL TOTAL LIGHTNING DEATHS BY YEAR FOR PERIOD 1959-1997



YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
1959	0	0	0	1	8	13	27	11	10	5	0	0	75
1960	0	0	0	2	0	19	12	8	7	0	0	0	48
1961	0	0	0	1	1	18	25	8	8	0	0	0	61
1962	0	0	0	1	4	7	14	16	5	1	0	0	48
1963	0	0	4	1	2	26	16	12	7	1	0	81*	150
1964	0	0	9	2	2	8	10	10	7	1	0	0	49
1965	0	0	2	3	6	19	16	9	2	0	0	0	57
1966	0	0	1	0	0	7	12	10	7	2	0	0	39
1967	0	0	1	1	1	6	10	6	1	0	0	1	27
1968	0	0	0	0	4	10	14	12	7	3	0	1	51
1969	0	0	0	3	2	6	15	6	11	3	0	0	46
1970	0	0	0	0	7	14	12	5	11	1	0	0	50
1971	0	0	1	0	4	16	15	9	17	0	0	0	62
1972	0	0	1	1	2	14	14	19	0	0	0	0	51
1973	0	1	0	1	4	10	17	7	7	2	1	0	50
1974	0	1	0	5	4	16	18	10	3	0	1	0	58
1975	0	0	1	0	2	8	16	5	5	1	0	0	38
1976	0	0	0	1	4	5	9	10	3	2	0	0	34
1977	0	0	0	1	4	8	7	31	8	0	0	0	59
1978	0	0	0	0	0	9	16	15	3	1	0	0	44
1979	0	0	0	0	4	0	7	7	4	2	0	0	24
1980	0	0	0	0	3	9	14	11	2	0	0	0	39
1981	0	0	0	4	2	9	4	15	5	0	1	0	40
1982	1	0	0	1	1	4	11	12	2	1	0	0	33
1983	0	0	1	2	2	6	15	16	5	1	1	0	49
1984	0	0	0	1	3	5	12	6	5	0	1	0	33
1985	0	0	0	2	5	7	13	3	4	0	0	0	34
1986	0	0	0	2	4	4	9	11	2	0	0	0	32
1987	0	0	0	0	6	6	15	7	0	1	0	0	35
1988	0	0	0	0	3	2	9	12	1	1	2	0	30
1989	0	0	0	1	5	3	4	7	2	1	0	0	23
1990	0	0	2	0	2	9	10	7	9	0	0	0	39
1991	0	0	0	1	2	6	13	11	3	0	0	0	36
1992	0	0	0	2	1	3	6	8	5	0	0	0	25
1993	0	0	0	0	5	2	4	5	4	0	0	0	20
1994	0	0	0	1	4	3	13	6	4	1	0	0	32
1995	0	0	0	4	4	3	16	9	7	0	0	0	43
1996	1	0	0	4	3	18	8	13	4	0	0	1	52
1997	0	1	0	1	6	10	12	8	4	0	0	0	42
TOTAL	2	3	23	50	126	348	490	393	201	31	7	84	1758
MEAN	0	0	1	1	3	9	13	10	5	1	0	2	45

* ON DECEMBER 8, 1963 THE CRASH OF A JETLINER KILLING 81 PEOPLE NEAR ELKIN, MARYLAND, WAS ATTRIBUTED TO LIGHTNING BY THE CIVIL AERONAUTICS BOARD INVESTIGATORS.



NATIONAL TOTAL LIGHTNING INJURIES BY YEAR FOR PERIOD 1959-1997

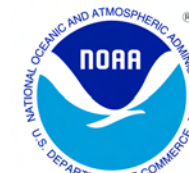


YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
1959	0	0	0	1	14	31	40	26	18	3	1	0	134
1960	0	0	0	2	0	29	11	27	13	6	3	0	91
1961	0	0	5	1	8	40	48	35	26	1	1	1	166
1962	0	0	0	1	8	13	48	20	5	5	0	0	100
1963	0	0	0	1	6	54	22	27	18	1	0	0	129
1964	0	0	7	3	2	11	31	33	7	0	1	0	95
1965	1	2	0	0	8	28	29	31	14	0	0	0	113
1966	0	1	0	0	2	22	25	28	12	1	0	0	91
1967	0	0	0	1	5	20	22	8	3	1	0	1	61
1968	0	0	1	0	8	26	48	28	11	9	1	0	132
1969	0	0	0	4	6	29	19	14	6	0	0	1	79
1970	0	0	1	0	13	30	35	23	33	4	1	0	140
1971	0	1	0	0	6	34	30	28	17	1	1	0	118
1972	0	0	4	4	6	16	20	34	3	2	1	0	90
1973	0	0	9	1	7	11	24	38	23	9	1	0	123
1974	1	2	0	2	1	15	28	25	9	1	0	0	84
1975	0	0	0	0	9	10	49	24	22	1	0	0	115
1976	0	1	0	4	6	19	27	29	3	1	0	1	91
1977	0	0	0	0	5	19	26	46	41	0	1	0	138
1978	0	0	0	1	2	19	28	20	39	5	0	0	114
1979	0	0	2	4	9	9	27	22	4	2	0	0	79
1980	0	1	1	8	4	25	29	102	16	0	0	0	186
1981	0	0	1	4	19	23	80	39	5	1	12	0	184
1982	1	0	2	3	4	8	12	16	8	4	4	1	63
1983	0	0	23	3	11	8	43	73	12	30	0	0	203
1984	0	0	1	4	5	26	57	22	40	0	1	0	156
1985	0	0	0	2	33	38	29	24	23	0	0	0	149
1986	0	2	4	1	9	24	43	25	11	1	0	0	120
1987	0	0	0	4	11	31	49	60	31	2	1	1	190
1988	0	0	0	1	16	7	69	47	2	4	0	0	146
1989	0	0	4	5	10	26	83	35	6	4	2	0	175
1990	0	0	2	2	8	20	64	31	24	1	0	0	152
1991	0	0	0	9	12	52	61	48	24	1	0	0	207
1992	0	0	2	4	30	8	50	37	24	6	0	0	161
1993	1	0	0	1	9	45	55	23	11	1	0	1	147
1994	0	1	0	21	27	33	96	69	23	13	4	1	288
1995	4	1	3	16	18	25	96	50	17	0	3	0	233
1996	2	3	4	12	36	102	66	49	21	6	6	2	309
1997	3	12	7	8	8	69	109	48	27	11	4	0	306
TOTAL	13	27	83	138	401	1055	1728	1364	652	138	49	10	5658
MEAN	0	1	2	4	10	27	44	35	17	4	1	0	145



LIGHTNING DEATHS BY STATE, RANK, AND LOCATION OF OCCURRENCE

1959-1997



1997

STATE	RANK	OPEN FIELDS, BALL PARKS AND OPEN SPACES		UNDER TREES		BOATING, FISHING AND WATER RELATED		NEAR TRACTORS HEAVY ROAD EQUIPMENT		GOLF COURSES		AT TELEPHONES		VARIOUS OTHER AND UNKNOWN LOCATIONS		OPEN FIELDS, BALL PARKS AND OPEN SPACES		UNDER TREES		BOATING, FISHING AND WATER RELATED		NEAR TRACTORS HEAVY ROAD EQUIPMENT		GOLF COURSES		AT TELEPHONES		VARIOUS OTHER AND UNKNOWN LOCATIONS		
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	
ALABAMA	22	7	21	11	32	7	21	0	0	0	0	0	0	9	26	0	0	0	0	1	100	0	0	0	0	0	0	0	0	0
ALASKA	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ARIZONA	26	14	50	2	7	1	4	0	0	3	11	2	7	6	21	2	100	0	0	0	0	0	0	0	0	0	0	0	0	
ARKANSAS	10	20	34	10	17	2	3	4	7	2	3	0	0	21	36	2	67	0	0	0	0	1	33	0	0	0	0	0	0	
CALIFORNIA	37	1	9	3	27	1	9	2	18	0	0	0	0	4	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
COLORADO	9	27	46	12	20	2	3	0	0	5	8	0	0	13	22	3	60	1	20	0	0	0	0	0	0	0	0	1	20	
CONNECTICUT	43	2	29	0	0	0	0	0	0	1	14	0	0	4	57	0	0	0	0	0	0	0	0	0	0	0	0	1	100	
DELAWARE	39	4	44	0	0	3	33	0	0	0	0	0	0	2	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DIST OF COLUMBIA	47	1	25	2	50	0	0	0	0	1	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FLORIDA	1	56	27	28	14	47	23	16	8	8	4	0	0	49	24	3	38	2	25	0	0	1	13	1	13	0	0	1	13	
GEORGIA	18	17	39	8	18	7	16	0	0	2	5	1	2	9	20	1	100	0	0	0	0	0	0	0	0	0	0	0	0	
HAWAII	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
IDAHO	41	1	13	1	13	1	13	4	50	1	13	0	0	0	0	0	0	0	0	0	1	100	0	0	0	0	0	0	0	
ILLINOIS	16	12	27	11	24	2	4	3	7	3	7	1	2	13	29	0	0	1	100	0	0	0	0	0	0	0	0	0	0	
INDIANA	20	8	21	15	39	1	3	3	8	0	0	0	0	11	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
IOWA	23	6	19	1	3	1	3	5	16	1	3	0	0	18	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
KANSAS	27	9	38	0	0	4	17	3	13	0	0	0	0	8	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
KENTUCKY	19	9	22	4	10	2	5	2	5	2	5	1	2	21	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LOUISIANA	8	4	6	22	35	14	23	6	10	0	0	0	0	16	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MAINE	36	0	0	0	0	5	45	0	0	0	0	0	0	6	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MARYLAND	2	5	5	2	2	10	10	1	1	0	0	0	0	82	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MASSACHUSETTS	35	2	18	1	9	0	0	0	0	1	9	1	9	6	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MICHIGAN	12	13	24	15	28	7	13	1	2	6	11	2	4	10	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MINNESOTA	24	12	40	6	20	3	10	3	10	2	7	1	3	3	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MISSISSIPPI	15	15	33	11	24	5	11	4	9	0	0	0	0	11	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MISSOURI	17	9	20	9	20	8	18	2	5	2	5	1	2	13	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MONTANA	38	4	44	1	11	0	0	3	33	0	0	0	0	1	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NEBRASKA	28	10	43	2	9	2	9	5	22	0	0	0	0	4	17	1	100	0	0	0	0	0	0	0	0	0	0	0	0	
NEVADA	46	0	0	0	0	0	0	0	0	1	25	0	0	3	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NEW HAMPSHIRE	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NEW JERSEY	29	8	36	4	18	3	14	0	0	2	9	0	0	5	23	0	0	1	100	0	0	0	0	0	0	0	0	0	0	
NEW MEXICO	14	25	50	6	12	3	6	0	0	0	0	2	4	14	28	1	50	1	50	0	0	0	0	0	0	0	0	0	0	
NEW YORK	5	10	14	16	22	9	12	3	4	4	5	0	0	31	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NORTH CAROLINA	6	10	15	10	15	7	10	4	6	2	3	0	0	34	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NORTH DAKOTA	42	2	29	0	0	0	0	3	43	0	0	0	0	2	29	0	0	0	0	0	0	1	100	0	0	0	0	0	0	

* ON DECEMBER 8, 1963 THE CRASH OF A JETLINER KILLING 81 PEOPLE NEAR ELKIN, MARYLAND, WAS ATTRIBUTED TO LIGHTNING BY THE CIVIL AERONAUTICS BOARD INVESTIGATORS.



LIGHTNING DEATHS BY STATE, RANK, AND LOCATION OF OCCURRENCE

1959-1997



1997

STATE	RANK	OPEN FIELDS, BALL PARKS AND OPEN SPACES		UNDER TREES		BOATING, FISHING AND WATER RELATED		NEAR TRACTORS HEAVY ROAD EQUIPMENT		GOLF COURSES		AT TELEPHONES		VARIOUS OTHER AND UNKNOWN LOCATIONS		OPEN FIELDS, BALL PARKS AND OPEN SPACES		UNDER TREES		BOATING, FISHING AND WATER RELATED		NEAR TRACTORS HEAVY ROAD EQUIPMENT		GOLF COURSES		AT TELEPHONES		VARIOUS OTHER AND UNKNOWN LOCATIONS		
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	
OHIO	7	17	27	7	11	8	13	6	9	6	9	1	2	19	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OKLAHOMA	13	20	39	3	6	13	25	4	8	0	0	2	4	9	18	2	100	0	0	0	0	0	0	0	0	0	0	0	0	
OREGON	49	1	33	1	33	0	0	0	0	0	0	0	0	1	33	1	100	0	0	0	0	0	0	0	0	0	0	0	0	
PENNSYLVANIA	11	21	39	4	7	1	2	1	2	3	6	0	0	24	44	1	100	0	0	0	0	0	0	0	0	0	0	0	0	
PUERTO RICO	40	3	38	2	25	1	13	0	0	0	0	0	0	2	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
RHODE ISLAND	48	0	0	0	0	0	0	0	0	0	0	0	0	3	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SOUTH CAROLINA	21	6	16	10	27	6	16	6	16	1	3	1	3	7	19	0	0	1	100	0	0	0	0	0	0	0	0	0	0	
SOUTH DAKOTA	34	2	17	1	8	2	17	5	42	1	8	0	0	1	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TENNESSEE	4	18	24	21	28	4	5	4	5	5	7	1	1	23	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TEXAS	3	28	33	15	18	13	15	10	12	3	4	0	0	16	19	1	33	0	0	1	33	1	33	0	0	0	0	0	0	
UTAH	31	8	44	6	33	0	0	1	6	0	0	0	0	3	17	1	100	0	0	0	0	0	0	0	0	0	0	0	0	
VERMONT	45	1	25	1	25	0	0	0	0	0	0	0	0	2	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
VIRGINIA	30	7	37	3	16	0	0	1	5	1	5	0	0	7	37	1	100	0	0	0	0	0	0	0	0	0	0	0	0	
WASHINGTON	44	2	50	1	25	0	0	1	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
WEST VIRGINIA	32	4	24	6	35	1	6	1	6	0	0	0	0	5	29	0	0	0	0	0	0	0	0	0	0	0	1	100		
WISCONSIN	25	10	34	2	7	6	21	2	7	2	7	0	0	7	24	2	67	1	33	0	0	0	0	0	0	0	0	0	0	
WYOMING	33	9	64	0	0	2	14	0	0	0	0	0	0	3	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
UNITED STATES	0	480	27	296	17	214	12	119	7	71	4	17	1	561	32	22	52	8	19	2	5	5	12	1	2	0	0	4	10	

National Summary of Tornadoes, 1997

Stuart Hinson and William Angel

National Oceanic and Atmospheric Administration

National Environmental, Satellite, Data and Information Service

National Climatic Data Center, Asheville, NC

There were 1148 tornadoes reported in 1997. This is 30% above the national average of 808. The national average figure is computed over a 47-year period from 1950 – 1997. There has been a steady increase in the number of confirmed tornadoes due to recent advances in technology and meteorological instrumentation. Tornadoes were the direct cause of 67 fatalities and 1033 injuries. Texas and Arkansas accounted for 55 of the 67 fatalities (82%). Texas had 29 (43%) and Arkansas had 26 (39%).

TABLE I LOCATION OF KILLER TORNADOES

State	Date	Time	Zone	County Name	Length (miles)	Width (yards)	F-Scale	Injured	Deaths
KY	01/04/97	11:55 PM	EST	CLINTON	0.3	100	1	2	1
AL	01/24/97	05:00 PM	CST	TUSCALOOSA	10.0	200	2	10	1
AR	02/20/97	07:59 PM	CST	LOGAN	5.0	100	1	3	1
MS	03/01/97	01:00 AM	CST	PONTOTOC	15.0	400	1	4	1
AR	03/01/97	02:20 PM	CST	CLARK	27.0	1056	4	100	6
AR	03/01/97	03:25 PM	CST	JACKSON	8.5	1056	2	30	2
AR	03/01/97	03:25 PM	CST	SALINE	14.0	1408	4	40	10
AR	03/01/97	03:41 PM	CST	PULASKI	11.0	1408	4	180	5
AR	03/01/97	03:42 PM	CST	JACKSON	23.0	880	2	30	1
AR	03/01/97	04:45 PM	CST	GREENE	15.0	200	3	5	1
KY	03/28/97	07:04 PM	EST	HART	9.0	1200	3	14	1
KY	03/28/97	08:15 PM	EST	METCALFE	15.0	200	2	6	1
TX	04/10/97	08:35 PM	CST	CROSBY	0.2	50	1	1	1
GA	05/02/97	06:40 PM	EST	WALKER	10.0	100	1	3	1
TX	05/27/97	02:40 PM	CST	WILLIAMSON	5.1	650	5	12	27
TX	05/27/97	03:50 PM	CST	TRAVIS	5.6	440	4	5	1
MI	07/02/97	03:45 PM	EST	GENESEE	1.7	1500	3	1	1
MI	07/02/97	04:32 PM	EST	OAKLAND	0.3	25	1	0	1
ND	07/23/97	06:26 PM	CST	RENVILLE	0.2	30	2	2	1
SC	07/23/97	10:53 PM	EST	LEXINGTON	3.5	200	2	6	1
PA	08/16/97	02:10 PM	EST	SULLIVAN	0.5	50	1	0	1
MN	09/18/97	05:15 PM	CST	MORRISON	9.0	800	3	1	1

TABLE II NEW MONTHLY RECORDS (SINCE 1953)

Month	State	Record # of Tornadoes	Previous Record (Year)
January	Tennessee	15	4 (1957)
March	Arkansas	33	19(1961)
March	Kentucky	24	5(1964)
March	Tennessee	18	12(1952)
April	Florida	29	13(1975)
May	California	4	3(1995)
May	Idaho	4	3(1991)
May	Washington	4	2(1964)
June	Nevada	2	1(1989)
June	Wyoming	16	14(1979)
July	Michigan	15	13(1974)
July	Minnesota	28	21(1995)
July	South Carolina	7	3(1962)
July	Washington	4	2(1978)
August	Washington	4	1(1980)

TABLE II NEW MONTHLY RECORDS (SINCE 1953) Cont'd

Month	State	Record # of Tornadoes	Previous Record (Year)
September	Oregon	9	1(1975)
October	Colorado	13	5(1994)
October	Florida	24	17(1993)
October	Georgia	9	7(1989)
October	New Mexico	4	3(1958)

TABLE III NEW ANNUAL RECORDS (SINCE 1953)

State	Record # of Tornadoes	Previous Record (Year)
Florida	115	97 (1975)
Kentucky	39	34 (1974)
Oregon	14	5 (1991)
Washington	14	4 (1989)

TABLE IV STATE-TO-STATE BORDER CROSSINGS

Date	Time	State		State
04/21/96	10:12 PM CST	Oklahoma	into	Arkansas
05/17/96	5:06 PM CST	South Dakota	into	Minnesota
07/19/96	2:24 PM EST	Maryland	into	Virginia
07/19/96	2:50 PM EST	Maryland	into	Virginia

More detailed information about tornado activity can be obtained from the monthly Storm Data publications. The annual tornado statistics from 1950 – 1997 have been compiled by the Storm Prediction Center (SPC), formerly know as the National Severe Storms Forecast Center (NSSFC), and the National Climatic Data Center (NCDC). The statistics in raw format are available in various media types. For more information regarding raw data, please contact the National Climatic Data Center at (704) 271-4800.

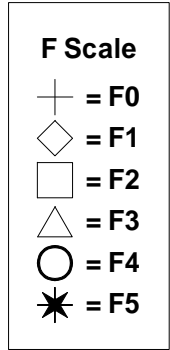
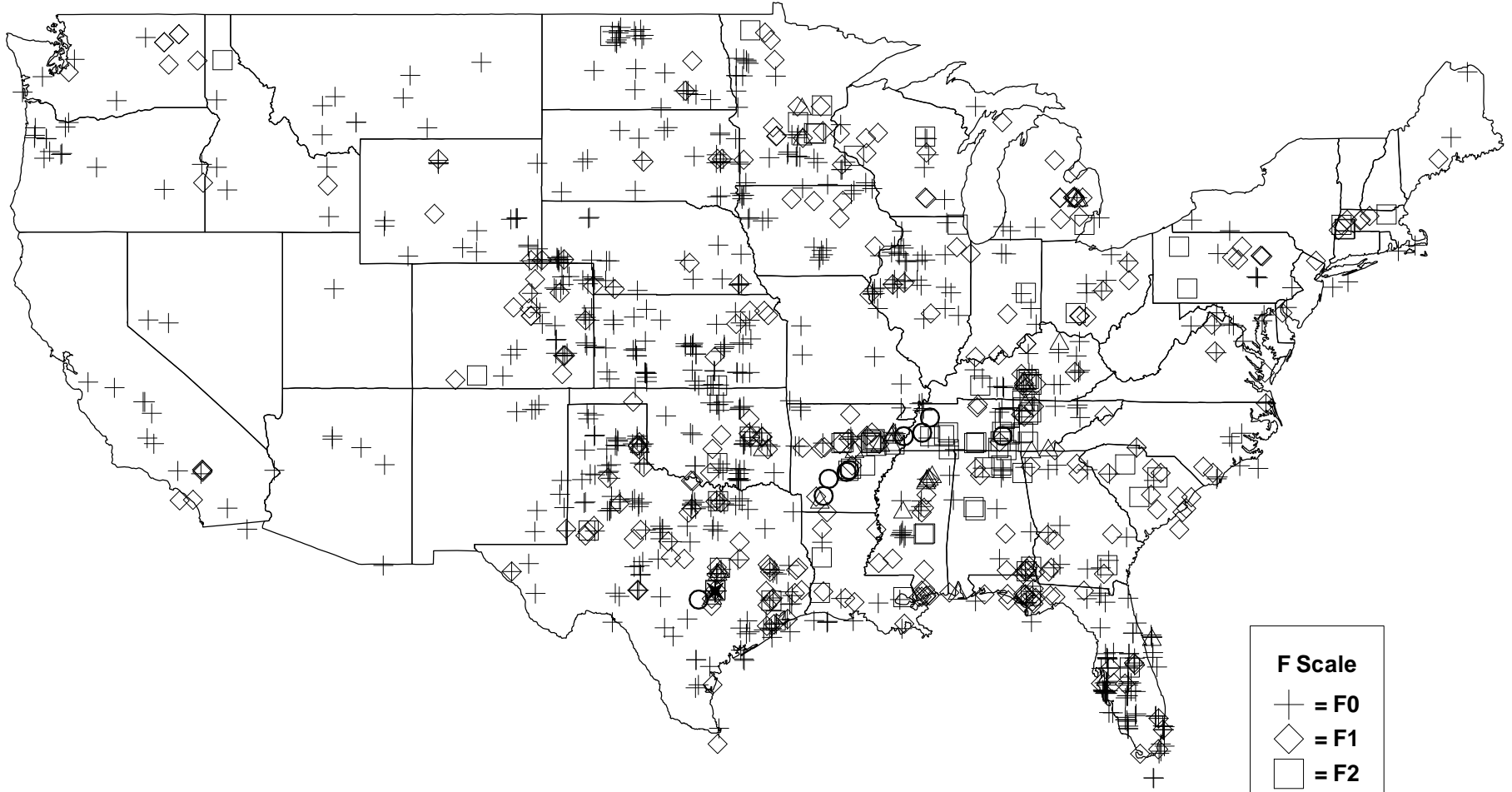
Definition of the Fujita Tornado Scale *

- (F0) Gale Tornado (40 - 72 mph): Light Damage
Some damage to chimneys; break branches off trees; push over shallow-rooted trees; damage sign boards.
- (F1) Moderate Tornado (73 – 112 mph): Moderate Damage
The lower limit (73 mph) is the beginning of hurricane wind speed; peel surface off roofs; mobile homes pushed off foundations or overturned; moving auto pushed off the road.
- (F2) Significant Tornado (112 – 157 mph): Considerable Damage
Roofs torn off frame houses; mobile home demolished; boxcars pushed over; large trees snapped or uprooted; light-objects missiles are generated.
- (F3) Severe Tornado (158 – 206 mph): Severe Damage
Roof and some walls are torn off well-constructed houses; trains overturned; most trees in forest uprooted; heavy cars are lifted off ground and thrown.
- (F4) Devastating Tornado (207 – 260 mph): Devastating Damage
Well-constructed houses are leveled; structures with weak foundations are blown off some distance; cars thrown and large missiles generated.
- (F5) Incredible Tornado (261 – 318 mph): Incredible Damage
Strong frame houses are lifted off foundations and carried a considerable distance to disintegrate; automobile-sized missiles fly through the air in excess of 100 meters; trees debarked. Incredible phenomenon will occur.
- (F6 +) (319 – Mach 1, the speed of sound) The maximum wind speed of tornadoes is not expected to reach the F6 wind speeds.

- F0 – F1 Weak Tornado
F2 – F3 Strong Tornado
F4 – F5 Violent Tornado

* From *J. Atmos. Sci.*, August 1981, p.1517 – 1519

1997 Confirmed Tornadoes



F Scale	F0	F1	F2	F3	F4	F5	Total
Number	743	281	85	29	9	1	1148



TORNADO SUMMARY BY STATE AND NATION, 1997

LOCATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
ALABAMA													
NUMBER	6	1	0	1	6	1	3	0	0	7	2	3	30
DAYS	6	1	0	1	5	1	3	0	0	6	2	3	28
DEATHS	1	0	0	0	0	0	0	0	0	0	0	0	1
INJURIES	11	0	0	10	13	1	0	0	0	2	0	10	47
ARIZONA													
NUMBER	0	0	0	2	0	0	0	1	1	1	0	0	5
DAYS	0	0	0	2	0	0	0	1	1	1	0	0	5
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	0	0	0	0
ARKANSAS													
NUMBER	0	1	33	2	4	1	0	2	0	1	1	0	45
DAYS	0	1	12	2	4	1	0	1	0	1	1	0	23
DEATHS	0	1	25	0	0	0	0	0	0	0	0	0	26
INJURIES	0	3	426	0	0	0	0	0	0	0	0	0	429
CALIFORNIA													
NUMBER	1	1	1	0	4	1	1	1	1	0	4	2	17
DAYS	1	1	1	0	4	1	1	1	1	0	4	2	17
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	0	0	0	0
COLORADO													
NUMBER	0	0	0	0	2	24	4	4	0	13	0	0	47
DAYS	0	0	0	0	2	18	3	4	0	7	0	0	34
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	6	0	0	6
FLORIDA													
NUMBER	12	1	1	29	8	12	12	5	1	24	5	5	115
DAYS	8	1	1	10	8	11	12	5	1	14	5	5	81
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	4	0	0	2	14	1	0	0	0	8	32	18	79
GEORGIA													
NUMBER	1	1	3	5	1	0	0	0	0	9	2	0	22
DAYS	1	1	3	5	1	0	0	0	0	7	2	0	20
DEATHS	0	0	0	0	1	0	0	0	0	0	0	0	1
INJURIES	4	0	1	6	3	0	0	0	0	1	0	0	15
IDAHO													
NUMBER	0	0	0	1	4	1	0	0	0	0	0	0	6
DAYS	0	0	0	1	4	1	0	0	0	0	0	0	6
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	0	0	0	0
ILLINOIS													
NUMBER	0	0	0	20	5	1	4	2	0	0	0	0	32
DAYS	0	0	0	6	5	1	3	2	0	0	0	0	17
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	3	0	0	2	0	0	0	0	0	5
INDIANA													
NUMBER	0	0	3	1	3	1	3	4	0	0	0	0	15
DAYS	0	0	2	1	2	1	3	3	0	0	0	0	12
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	2	0	0	0	0	0	0	0	2
IOWA													
NUMBER	0	0	0	6	5	2	8	4	0	0	0	0	25
DAYS	0	0	0	2	4	2	4	4	0	0	0	0	16
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	0	0	0	0
KANSAS													
NUMBER	0	0	0	2	37	4	7	7	0	7	0	0	64
DAYS	0	0	0	2	11	4	5	6	0	5	0	0	33
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	3	0	0	0	0	0	3
KENTUCKY													
NUMBER	3	0	24	0	0	9	2	1	0	0	0	0	39
DAYS	3	0	13	0	0	6	2	1	0	0	0	0	25
DEATHS	1	0	2	0	0	0	0	0	0	0	0	0	3
INJURIES	4	0	28	0	0	4	0	0	0	0	0	0	36
LOUISIANA													
NUMBER	2	0	0	3	6	0	0	0	0	4	4	0	19
DAYS	2	0	0	3	6	0	0	0	0	4	3	0	18
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	1	0	0	0	0	0	0	0	0	4	44	0	49

* CORRECTED FOR BOUNDARY-CROSSING TORNADOES
& TORNADO DAYS FOR COUNTRY AS A WHOLE



TORNADO SUMMARY BY STATE AND NATION, 1997

LOCATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
MAINE													
NUMBER	0	0	0	0	0	1	1	1	0	0	0	0	3
DAYS	0	0	0	0	0	1	1	1	0	0	0	0	3
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	0	0	0	0
MARYLAND													
NUMBER	0	0	2	0	1	1	0	0	0	0	0	0	4
DAYS	0	0	2	0	1	1	0	0	0	0	0	0	4
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	0	0	0	0
MASSACHUSETTS													
NUMBER	0	0	0	0	0	0	6	2	0	0	0	0	8
DAYS	0	0	0	0	0	0	3	2	0	0	0	0	5
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	0	0	0	0
MICHIGAN													
NUMBER	0	0	0	0	0	1	15	1	0	1	0	0	18
DAYS	0	0	0	0	0	1	10	1	0	1	0	0	13
DEATHS	0	0	0	0	0	0	2	0	0	0	0	0	2
INJURIES	0	0	0	0	0	0	98	0	0	0	0	0	98
MINNESOTA													
NUMBER	0	0	0	0	0	8	28	5	5	1	0	0	47
DAYS	0	0	0	0	0	6	15	4	5	1	0	0	31
DEATHS	0	0	0	0	0	0	0	0	1	0	0	0	1
INJURIES	0	0	0	0	0	1	0	0	1	0	0	0	2
MISSISSIPPI													
NUMBER	4	6	7	0	8	0	0	0	0	6	3	0	34
DAYS	4	2	2	0	6	0	0	0	0	4	2	0	20
DEATHS	0	0	1	0	0	0	0	0	0	0	0	0	1
INJURIES	2	1	21	0	0	0	0	0	0	7	2	0	33
MISSOURI													
NUMBER	0	0	0	2	3	4	3	0	0	0	0	0	12
DAYS	0	0	0	2	3	2	3	0	0	0	0	0	10
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	1	0	0	0	0	0	0	0	0	1
MONTANA													
NUMBER	0	0	0	0	0	3	5	0	1	0	0	0	9
DAYS	0	0	0	0	0	3	4	0	1	0	0	0	8
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	0	0	0	0
NEBRASKA													
NUMBER	0	0	0	1	6	11	3	10	0	0	0	0	31
DAYS	0	0	0	1	3	8	2	7	0	0	0	0	21
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	0	0	0	0
NEVADA													
NUMBER	0	0	0	0	0	2	0	0	0	0	0	0	2
DAYS	0	0	0	0	0	2	0	0	0	0	0	0	2
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	0	0	0	0
NEW HAMPSHIRE													
NUMBER	0	0	0	0	0	0	2	0	0	0	0	0	2
DAYS	0	0	0	0	0	0	2	0	0	0	0	0	2
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	1	0	0	0	0	0	1
NEW JERSEY													
NUMBER	0	0	0	0	0	0	0	1	1	0	0	0	2
DAYS	0	0	0	0	0	0	0	1	1	0	0	0	2
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	0	0	0	0
NEW MEXICO													
NUMBER	0	0	0	0	6	0	0	0	0	4	0	1	11
DAYS	0	0	0	0	6	0	0	0	0	1	0	1	8
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	0	0	0	0
NEW YORK													
NUMBER	0	0	0	0	0	1	4	0	1	0	0	0	6
DAYS	0	0	0	0	0	1	3	0	1	0	0	0	5
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	0	0	0	0

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TORNADO SUMMARY BY STATE AND NATION, 1997

LOCATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
NORTH CAROLINA													
NUMBER	0	1	0	1	1	1	4	0	0	2	0	0	10
DAYS	0	1	0	1	1	1	3	0	0	1	0	0	8
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	1	0	0	1
NORTH DAKOTA													
NUMBER	0	0	0	0	0	8	14	9	0	0	0	0	31
DAYS	0	0	0	0	0	5	9	3	0	0	0	0	17
DEATHS	0	0	0	0	0	0	1	0	0	0	0	0	1
INJURIES	0	0	0	0	0	0	2	0	0	0	0	0	2
OHIO													
NUMBER	1	0	0	0	3	0	5	6	0	0	0	0	15
DAYS	1	0	0	0	1	0	5	6	0	0	0	0	13
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	0	0	0	0
OKLAHOMA													
NUMBER	0	1	1	1	43	5	1	1	2	2	0	0	57
DAYS	0	1	1	1	18	2	1	1	1	2	0	0	28
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	3	2	0	0	0	0	0	0	5
OREGON													
NUMBER	0	0	0	2	1	2	0	0	9	0	0	0	14
DAYS	0	0	0	2	1	2	0	0	7	0	0	0	12
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	0	0	0	0
PENNSYLVANIA													
NUMBER	0	0	0	0	1	0	6	5	1	0	1	0	14
DAYS	0	0	0	0	1	0	4	3	1	0	1	0	10
DEATHS	0	0	0	0	0	0	0	1	0	0	0	0	1
INJURIES	0	0	0	0	0	0	0	3	0	0	0	0	3
SOUTH CAROLINA													
NUMBER	0	4	2	3	0	0	7	0	1	0	0	0	17
DAYS	0	4	1	3	0	0	7	0	1	0	0	0	16
DEATHS	0	0	0	0	0	0	1	0	0	0	0	0	1
INJURIES	0	0	0	3	0	0	8	0	0	0	0	0	11
SOUTH DAKOTA													
NUMBER	0	0	0	0	0	12	13	2	2	1	0	0	30
DAYS	0	0	0	0	0	7	9	2	1	1	0	0	20
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	0	0	0	0
TENNESSEE													
NUMBER	13	0	18	0	2	2	1	0	0	0	0	0	36
DAYS	8	0	8	0	2	2	1	0	0	0	0	0	21
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	30	0	113	0	0	0	0	0	0	0	0	0	143
TEXAS													
NUMBER	7	6	7	31	60	52	3	3	1	18	3	0	191
DAYS	4	4	6	15	43	32	3	3	1	7	3	0	121
DEATHS	0	0	0	1	28	0	0	0	0	0	0	0	29
INJURIES	4	0	0	1	34	14	3	0	0	4	0	0	60
UTAH													
NUMBER	0	0	0	1	0	0	0	0	0	0	0	0	1
DAYS	0	0	0	1	0	0	0	0	0	0	0	0	1
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	0	0	0	0
VIRGINIA													
NUMBER	0	0	0	0	1	4	2	0	3	0	0	0	10
DAYS	0	0	0	0	1	2	1	0	2	0	0	0	6
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	0	0	0	0
WASHINGTON													
NUMBER	0	0	0	0	4	0	4	4	1	0	0	1	14
DAYS	0	0	0	0	3	0	1	4	1	0	0	1	10
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	0	0	0	0
WEST VIRGINIA													
NUMBER	0	0	0	0	0	1	0	0	0	0	0	0	1
DAYS	0	0	0	0	0	1	0	0	0	0	0	0	1
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	0	0	0	0

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TORNADO SUMMARY BY STATE AND NATION, 1997

LOCATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
WISCONSIN													
NUMBER	0	0	0	0	0	2	11	0	1	0	0	0	14
DAYS	0	0	0	0	0	2	10	0	1	0	0	0	13
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	2	0	0	0	0	0	2
WYOMING													
NUMBER	0	0	0	0	0	16	7	3	0	0	0	0	26
DAYS	0	0	0	0	0	14	5	3	0	0	0	0	22
DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
INJURIES	0	0	0	0	0	0	0	0	0	0	0	0	0
UNITED STATES													
NUMBER	50	23	102	114	225	194*	189*	84	32	101*	25	12	1148*
DAYS	10	6	13	16	27	29	30	26	12	12	8	7	196
DEATHS	2	1	28	1	29	0	4	1	1	0	0	0	67
INJURIES	60	4	589	26	69	23	119	3	1	33	78	28	1033

* CORRECTED FOR BOUNDARY-CROSSING TORNADOES
& TORNADO DAYS FOR COUNTRY AS A WHOLE



NATIONS SUMMARY OF TORNADOS, TORNAO DAYS AND DEATHS BY MONTH AND ANNUAL, 1953-1997



YEAR	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE			JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER			ANNUAL		
	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS			
1953	14	6	0	16	3	3	40	10	24	47	16	34	94	21	161	111	24	244	31	19	0	24	15	0	5	4	0	6	4	0	12	6	0	21	8	49	421	136	515
1954	2	1	0	17	9	2	63	13	10	112	22	3	101	22	9	107	26	5	45	23	0	49	21	1	21	10	3	14	8	2	2	2	0	17	3	1	550	160	36
1955	3	2	0	4	3	0	43	15	5	99	18	7	147	26	103	154	28	2	49	21	5	33	18	0	15	8	2	23	7	1	20	4	1	3	2	0	593	152	126
1956	2	2	0	47	12	8	31	7	1	85	15	67	79	24	4	65	21	0	91	26	1	43	20	2	16	10	0	29	8	0	7	6	0	9	4	0	504	155	83
1957	17	3	13	5	3	0	38	7	1	216	21	29	227	26	87	147	25	14	55	19	0	20	14	0	17	10	2	18	11	2	58	11	25	38	4	19	856	154	192
1958	12	7	0	20	5	13	15	10	0	76	19	4	68	21	0	127	27	42	121	30	1	46	20	1	24	14	1	9	6	4	45	6	0	1	1	0	564	166	66
1959	16	2	3	20	5	21	43	11	9	30	12	1	226	28	8	73	25	2	63	24	0	38	18	0	58	15	14	24	10	0	11	4	0	2	2	0	604	156	58
1960	9	4	0	28	10	0	28	10	0	70	20	7	201	26	34	124	27	3	43	22	0	47	23	1	22	13	0	18	10	1	25	6	0	1	1	0	616	172	46
1961	1	1	0	31	8	0	124	17	7	74	19	3	137	25	23	107	23	2	77	27	0	27	16	0	53	16	15	14	5	0	36	7	1	16	5	0	697	169	51
1962	12	3	1	25	7	0	37	9	17	41	8	1	200	22	3	171	29	0	78	26	0	51	21	6	24	11	0	11	10	0	5	4	0	2	2	0	657	152	28
1963	15	5	1	6	3	0	48	12	8	84	14	16	71	21	1	91	23	0	62	26	0	26	13	2	33	13	3	13	5	0	15	6	0	0	0	0	464	141	31
1964	14	3	10	2	2	0	36	11	6	157	23	15	135	20	16	136	24	0	63	23	0	79	23	2	25	10	0	22	4	22	17	8	0	18	5	2	704	156	73
1965	21	11	0	32	4	0	34	9	2	129	20	267	275	25	17	147	28	6	86	26	0	61	23	1	64	21	0	16	4	1	34	6	5	7	4	0	906	181	299
1966	1	1	0	28	5	0	12	6	58	80	20	12	98	17	0	126	28	19	100	27	3	58	21	0	22	13	0	29	6	6	20	3	0	11	3	0	585	150	98
1967	39	4	7	8	5	0	42	14	3	149	18	73	116	25	3	210	28	6	90	25	1	28	16	2	139	16	5	36	7	4	8	5	0	61	10	10	926	173	114
1968	5	3	0	7	3	0	28	8	0	102	15	40	145	26	72	136	27	11	56	22	2	66	23	2	25	14	0	14	9	0	44	12	3	32	9	1	660	171	131
1969	3	1	32	5	5	0	8	2	1	68	15	2	145	25	4	137	28	7	99	27	0	69	21	19	20	11	0	26	10	0	5	3	0	23	7	1	608	155	66
1970	9	5	0	16	3	0	25	12	2	117	16	29	88	19	26	134	24	6	81	26	3	55	21	0	54	20	0	50	13	6	10	4	0	14	8	0	653	171	72
1971	18	7	1	83	12	131	40	13	2	75	14	11	166	24	7	199	28	1	100	30	1	50	21	0	47	15	0	38	12	0	16	7	0	56	9	2	888	192	156
1972	33	10	5	7	4	0	69	17	0	96	20	16	140	27	0	114	25	2	115	29	0	59	23	2	49	19	0	34	10	0	17	4	2	8	6	0	741	194	27
1973	33	7	1	10	4	0	80	16	17	150	22	10	250	26	35	224	26	2	80	26	0	51	23	4	69	22	3	25	11	0	81	11	12	49	12	3	1102	206	87
1974	24	8	2	23	9	0	36	12	1	269	22	313	144	28	10	194	26	31	59	19	0	107	26	0	25	11	0	45	10	4	13	8	0	8	5	0	947	184	361
1975	52	7	12	45	12	7	84	16	12	108	20	13	188	30	5	196	28	6	79	26	2	60	25	2	34	17	0	12	7	0	40	8	0	22	8	1	920	204	60
1976	12	5	0	37	6	5	180	18	21	113	23	1	155	24	8	169	26	3	84	28	2	38	18	1	35	15	3	11	5	0	0	0	1	1	0	835	169	44	
1977	5	4	0	17	3	2	64	15	0	88	15	26	228	29	4	132	27	0	99	27	1	82	26	6	65	21	1	25	5	1	24	10	0	23	7	2	852	189	43
1978	23	7	2	6	3	0	17	8	0	107	17	4	213	27	7	148	28	17	143	30	11	65	24	1	20	10	6	7	5	0	9	5	0	30	9	5	788	173	53
1979	16	9	0	4	3	0	53	13	1	120	17	58	112	23	2	150	24	8	132	30	1	127	27	5	68	19	2	47	12	7	21	8	0	2	1	0	852	186	84
1980	5	4	0	11	9	0	41	15	2	137	16	4	203	25	8	217	30	7	95	26	5	73	27	0	37	14	1	43	7	1	3	2	0	1	1	0	866	176	28
1981	3	3	0	25	5	2	33	13	1	84	18	13	187	24	0	223	29	8	98	27	0	64	22	0	26	16	0	32	12	0	7	5	0	1	1	0	783	175	24
1982	18	8	1	3	2	0	60	15	6	150	20	30	327	28	14	198	30	4	95	29	0	34	15	0	38	12	2	9	4	0	19	6	0	95	13	7	1046	182	64
1983	13	2	2	41	7	1	71	21	0	65	15	6	249	26	14	178	27	2	99	27	4	76	21	0	20	15	0	12	5	0	49	11	0	58	13	5	931	190	34
1984	1	1	0	27	4	0	73	15	64	176	22	33	169	27	6	242	25	14	72	21	0	47	20	0	17	12	0	49	12	4	30	5	1	4	2	0	907	166	122
1985	2	2	0	7	4	0	38	12	2	134	19	5	182	28	78	82	24	3	51	19	0	108	26	3	40	16	0	18	8	0	19	8	3	3	2	0	684	168	94
1986	0	0	0	30	11	2	75	9	6	84	17	2	173	25	1	134	25	0	88	24	3	67	23	1	65	17	0	26	7	0	17	8	0	5	2	0	764	168	15
1987	6	3	0	19	4	6	38	11	1	20	8	1	126	25	31	132	29	2	163	28	0	63	24	1	19	10	0	1	1	0	55	5	11	14	3	6	656	151	59
1988	17	3	5	4	3	0	28	10	1	58	16	4	132	24	3	63	21	0	103	23	0	61	13	3	76	16	1	19	8	0	121	13	14	20	6	1	702	156	32
1989	15	6	0	18	3	0	44	14	1	82	13	0	234	28	9	253	27	5	59	19	0	36	20	0	31	12	0	30	7	4	58	10	31	3	1	0	856	160	50
1990	11	7	0	57	10	1	88	8	3	108	17	0	243	27	5	335	28	11	106	26	0	60	22	29	45	15	0	35	9	2	18	5	0	35	7	2	1133	181	53
1991	29	6	1	11	5	0	159	16	13	206	20	21	335	30	0	216	30	1	65	22	1	46	17	0	26	16	0	22	9	0	20	5	2	3	3	0	1132	179	39
1992	15	6	0	29	9	0	55	17	5	53	11	0	137	21	0	400	29	1	214	30	0	115	22	3	82	17	0	34	10	4	149	14	26	20	9	0	1298	195	39



NATIONS SUMMARY OF TORNADOS, TORNADO DAYS AND DEATHS BY MONTH AND ANNUAL, 1953-1997



YEAR	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE			JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER			ANNUAL		
	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS	NUMBER	DAYS	DEATHS			
1993	17	8	0	34	7	3	49	11	5	85	15	10	179	26	2	316	27	1	242	31	0	112	26	6	65	17	2	55	9	4	19	6	0	6	3	0	1176	186	33
1994	13	5	0	9	7	0	61	12	40	206	23	12	161	27	0	236	29	3	155	27	3	120	24	4	30	17	0	51	15	0	42	10	7	4	3	0	1082	199	69
1995	36	9	3	7	4	6	49	11	0	130	17	1	394	28	16	219	25	0	163	28	0	53	22	0	19	11	0	74	11	1	79	5	2	19	7	1	1235	178	30
1996	35	10	1	14	5	1	71	10	6	178	16	12	236	29	1	128	27	0	204	28	1	72	24	0	101	20	0	68	10	0	55	8	3	15	7	1	1173	194	26
1997	50	10	2	23	6	1	102	13	28	114	16	1	225	27	29	194	29	0	189	30	4	84	26	1	32	12	1	101	12	0	25	8	0	12	7	0	1148	196	67
POR	697	221	105	918	256	215	2453	544	392	4932	780	1217	32	80	217	7595	1194	501	4442	1149	55	2750	954	111	1818	643	67	1295	370	81	1380	298	149	793	226	119	37065	7767	3878
MEAN	15	5	2	20	6	5	55	12	9	110	17	27	179	25	19	169	27	11	99	26	1	61	21	2	40	14	1	29	8	2	31	7	3	18	5	3	824	173	86



TORNADOES, TORNADO DAYS AND DEATHS BY STATE AND NATION 1953-1997



STATE	TORNADOES							DAYS		DEATHS		
	TOTAL	AVERAGE	GREATEST	YEAR	LEAST	YEAR	PER # 10,000 Sq.Mi.	TOTAL	AVERAGE	TOTAL	AVERAGE	PER # 10,000 Sq.Mi.
ALABAMA	1001	22	45	1983+	5	1956	4.26	521	12	288	6	56
ALASKA	1	0	1	1959	0	1989+	.00	1	0	0	0	0
ARIZONA	181	4	17	1972	0	1965	.36	141	3	3	0	0
ARKANSAS	944	21	78	1982	2	1987+	3.95	437	10	215	5	40
CALIFORNIA	279	6	22	1996+	0	1968+	.38	195	4	0	0	0
COLORADO	1391	31	98	1996+	1	1959	2.97	683	15	2	0	0
CONNECTICUT	62	1	8	1973	0	1988+	2.00	55	1	4	0	8
DELAWARE	54	1	6	1992	0	1987+	4.86	43	1	2	0	10
DISTRICT OF COLUMBIA	1	0	1	1995	0		.0		1	0	0	
FLORIDA	2326	52	115	1997	10	1956	8.88	1445	32	89	2	15
GEORGIA	950	21	52	1994	2	1987	3.57	503	11	110	2	19
HAWAII	27	1	4	1971	0	1987+	1.55	23	1	0	0	0
IDAHO	137	3	11	1991+	0	1977+	.36	111	2	0	0	0
ILLINOIS	1350	30	107	1974	4	1953	5.32	581	13	179	4	32
INDIANA	966	21	49	1990	4	1984	5.79	443	10	221	5	61
IOWA	1469	33	71	1990	7	1956	5.87	641	14	60	1	11
KANSAS	2255	50	116	1991	14	1976	6.08	924	21	190	4	23
KENTUCKY	485	11	39	1997	0	1953	2.72	251	6	107	2	26
LOUISIANA	1154	26	79	1992	3	1955	5.36	654	15	105	2	22
MAINE	87	2	11	1971	0	1987+	.60	77	2	1	0	0
MARYLAND	210	5	24	1995	0	1988+	4.73	123	3	2	0	2
MASSACHUSETTS	139	3	12	1958	0	1988+	3.63	98	2	102	2	124
MICHIGAN	758	17	39	1974	2	1959	2.92	430	10	238	5	41
MINNESOTA	966	21	47	1993+	5	1988+	2.50	499	11	82	2	10
MISSISSIPPI	1138	25	62	1988	1	1979	5.24	546	12	370	8	78
MISSOURI	1249	28	79	1973	6	1987+	4.02	555	12	137	3	20
MONTANA	274	6	30	1991	0	1974+	.41	193	4	1	0	0
NEBRASKA	1826	41	88	1990	10	1966	5.31	799	18	51	1	7
NEVADA	53	1	8	1987	0	1985+	.09	48	1	0	0	0
NEW HAMPSHIRE	74	2	9	1963	0	1987+	2.15	65	1	0	0	0
NEW JERSEY	120	3	17	1989	0	1984+	3.83	91	2	0	0	0
NEW MEXICO	438	10	31	1991	0	1953	.82	314	7	3	0	0
NEW YORK	276	6	25	1992	0	1953	1.21	190	4	21	0	4
NORTH CAROLINA	716	16	54	1996	2	1970	3.04	394	9	82	2	16
NORTH DAKOTA	879	20	52	1976	2	1961	2.83	465	10	22	0	3
OHIO	683	15	61	1992	0	1988	3.64	350	8	171	4	41
OKLAHOMA	2445	54	107	1957	17	1988	7.72	961	21	213	5	30
OREGON	69	2	14	1997	0	1988+	.21	61	1	0	0	0
PENNSYLVANIA	506	11	33	1985+	0	1959	2.43	297	7	78	2	17
PUERTO RICO	11	0	2	1979	0	1989+	.00	10	0	0	0	0
RHODE ISLAND	8	0	3	1986	0	1988+	.00	7	0	0	0	0
SOUTH CAROLINA	538	12	54	1995	1	1986+	3.86	311	7	46	1	15
SOUTH DAKOTA	1262	28	85	1993	1	1958	3.63	557	12	8	0	1
TENNESSEE	582	13	44	1974	1	1987+	3.08	299	7	97	2	23
TEXAS	6141	136	232	1967+	32	1953	5.09	2270	50	487	11	18
UTAH	84	2	6	1984+	0	1989+	.24	72	2	0	0	0
VERMONT	32	1	5	1962	0	1985+	1.04	29	1	0	0	0
VIRGINIA	341	8	28	1993	1	1982+	1.96	204	5	23	1	6
VIRGIN ISLANDS	2	0	1	1979+	0	1989+	.00	2	0	0	0	0
WASHINGTON	71	2	14	1997	0	1988+	.29	59	1	6	0	1
WEST VIRGINIA	88	2	6	1980+	0	1988+	.83	68	2	2	0	1
WISCONSIN	894	20	43	1980	3	1953	3.63	449	10	83	2	15
WYOMING	477	11	42	1977	0	1970	1.12	317	7	2	0	0
PACIFIC ISLANDS	2	0	1	1981+	0	1989+	.00	2	0	0	0	0
UNITED STATES	38235*	850	1298	1992	421	1953	2.36	7963&	177	3903	87	11

+ ALSO IN EARLIER YEAR(S).
* CORRECTED FOR BOUNDARY-CROSSING TORNADOES.
& TORNADOES DAYS FOR COUNTRY AS A WHOLE.

MEAN ANNUAL TORNADOES PER
10,000 SQUARE MILES.
' NUMBER OF DEATHS PER
10,000 SQUARE MILES.



NATIONAL TORNADOES, TORNADO DAYS, DEATHS AND RESULTING LOSSES BY YEARS, 1916 - 1997



YEAR	NUMBER TORNADOES	TORNADO DAYS	TOTAL DEATHS	MOST DEATHS IN SINGLE TORNADO	TOTAL PROPERTY LOSSES \$	PROPERTY LOSS FREQUENCY *		
						CATEGORY 5	CATEGORY 6	CATEGORY 7 AND OVER
1916	90	36	150	30	6	7	1	0
1917	121	38	551	101	7	21	9	0
1918	81	45	136	36	7	20	5	0
1919	64	35	206	59	7	10	2	0
1920	87	50	499	87	7	14	10	0
1921	105	55	202	61	7	22	3	0
1922	108	64	135	16	7	27	5	0
1923	102	59	110	23	6	21	1	0
1924	130	57	376	85	7	26	11	1
1925	119	65	794	689	7	34	2	1
1926	111	57	144	23	6	28	0	0
1927	163	62	540	92	7	42	9	1
1928	203	79	95	14	7	40	7	0
1929	197	74	274	40	7	48	4	0
1930	192	72	179	41	7	38	6	0
1931	94	57	36	6	6	14	1	0
1932	151	67	394	37	7	23	1	1
1933	258	96	362	34	7	46	9	0
1934	147	77	47	6	6	10	3	0
1935	180	77	71	11	6	29	0	0
1936	151	71	552	216	7	17	5	1
1937	147	75	29	5	6	24	0	0
1938	213	76	183	32	7	29	6	0
1939	152	75	91	27	7	21	3	0
1940	124	62	65	18	7	13	2	0
1941	118	57	53	25	6	24	1	0
1942	167	66	384	65	7	42	10	0
1943	152	61	58	5	7	28	8	0
1944	169	68	275	100	7	50	9	0
1945	121	66	210	69	7	21	10	1
1946	106	65	78	15	7	29	7	0
1947	165	78	313	169	7	46	7	1
1948	183	68	139	33	7	62	11	2
1949	249	80	211	58	7	54	13	0
1950	200	88	70	18	7	47	9	0
1951	262	113	34	6	7	35	11	2
1952	240	98	229	57	7	53	19	0
1953	421	136	515	116	8	63	18	7
1954	550	160	36	6	7	63	8	1
1955	593	152	126	80	7	74	13	1
1956	504	155	83	25	7	83	24	1
1957	856	154	192	44	8	129	26	3
1958	564	166	66	19	7	70	8	1
1959	604	156	58	21	7	70	4	1
1960	616	172	46	16	7	65	11	1
1961	697	169	51	16	7	103	21	1
1962	657	152	28	17	7	51	10	0
1963	464	141	31	5	7	77	15	1
1964	704	156	73	22	7	113	17	5
1965	906	181	299	44	8	126	30	11
1966	585	150	98	58	8	79	13	4
1967	926	173	114	33	8	125	33	8
1968	660	171	131	34	8	82	26	6
1969	608	155	66	32	8	98	16	3
1970	653	171	72	26	8	97	24	6
1971	888	192	156	58	8	71	30	5
1972	741	194	27	6	8	100	28	1
1973	1102	206	87	7	9	219	67	9
1974	947	184	361	34	9	166	82	25
1975	920	204	60	9	9	189	31	11

NOTE:-THE ABOVE ESTIMATED LOSSES ARE BASED ON VALUES AT TIME OF OCCURRENCE.
MEAN WAS DERIVED FROM DATA FOR PERIOD 1953-1992.

\$ STORM DAMAGES IN CATEGORIES:

- | | |
|--------------------------------|----------------------------------|
| 5. \$50,000 TO \$500,000 | 8. \$50 MILLION TO \$500 MILLION |
| 6. \$500,000 TO \$5 MILLION | 9. \$500 MILLION AND OVER |
| 7. \$5 MILLION TO \$50 MILLION | |

* NUMBER OF TIMES PROPERTY LOSSES REPORTED IN STORM DATA IN CATEGORIESS 5, 6, 7 AND OVER.

Annual Hurricane Summary - 1997

Name	Type	Dates	Max. Winds	Min. Pressure	Areas Affected	Fatalities		Injured	Damage
						US	Other		
Unnamed	Sub-Tropical Storm	6/1-6/2	45 knots (52 mph)	1003 mb (29.29 inches Hg)	None Atlantic Ocean	0	0	0	0
Ana	Tropical Storm	6/30-7/4	40 knots (46 mph)	1000 mb (29.53 inches Hg)	None Atlantic Ocean	0	0	0	0
Bill	Hurricane Category 1	7/11-7/13	65 knots (75 mph)	986 mb (29.12 inches Hg)	None Atlantic Ocean	0	0	0	0
Claudette	Tropical Storm	7/13-7/16	40 knots (46 mph)	1003 mb (29.62 inches Hg)	None Atlantic Ocean	0	0	0	0
Danny	Hurricane Category 1	7/16-7/26	70 knots (81 mph)	984 mb (29.06 inches Hg)	Southeast US (LA, MS, AL, FL, NC, SC, VA)	1	0	?	858.8M
Erika	Hurricane Category 3	9/3-9/15	110 knots (127 mph)	946 mb (27.94 inches Hg)	Northern Lesser Antilles	0	0	?	0
Fabian	Tropical Storm	10/4-10/8	35 knots (40 mph)	1004 mb (29.65 inches Hg)	Lesser Antilles	0	0	0	0
Grace	Tropical Storm	10/16-10/17	40 knots (46 mph)	999 mb (29.5 inches Hg)	None Atlantic Ocean	0	0	0	0
Totals						1	0	0	858.8M

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