EVENT 1050 0007 1 10/0015 0/0010						
EVENT 1958-2007 and 12/2015-3/2019	TORNADO F4 - WI	DATETIME (Atlantic Standard) 4/15/1958/13:00-14:00	-9.9		-19.5	NOTES
1958 Florida Tornado Outbreak Colfax Tornado Outbreak, 6/4/20:00-23:00, [1st DST]	F4 - WI	6/4/1958/20:00-14:00	-9.9 12.6	-20.4 9.8	12.9	
Collax Tolliado Odibreak, 0/4/20.00-23.00, [1st D31]	F4 - WI	6/4/1958/21:00-22:00	13.8	15.1	10.1	
	F4 - WI	6/4/1958/22:00-23:00	15.4	19.4	7.8	
June 1958 Tornado, [last DST]	F4 - KS	6/10/1958/19:00-20:00	-52.4	-27.1	-39.8	
February 1959 Tornado	F4 - MO and IL	2/10/1959/15:00-17:00	5.6	-2.3	4.5	Averaged
March 1959 Tornado	F4 - TX	3/31/1959/23:00-00:00	-32.9	-32.6	-33.6	Averaged
Pontotoc Tornado, [1st DST]	F4 - OK	5/9/1959/20:00-21:00	13.7	5	7.6	
May 1959 Tornado	F4 - IA	5/10/1959/15:00-16:00	9.2	6	11.9	
Wayne Tornado	F4 - IA	5/20/1959/21:00-22:00	-10.4	-13.3	-6.8	
Wright 1959 Tornado	F4 - MO	9/26/1959/16:00-17:00	-26.3	-25.8	-23.6	
Late-September 1959 Tornado, [last DST]	F4 - KS and OK	9/27/1959/20:00-21:00	-33.2	-36.8	-29	
May 1960 Tornado Outbreak, 5/4-6/1960, [1st DST]	F4 - OK	5/4/1960/22:00-23:00	-6.6	5	-8.1	
	F4 - OK	5/4/1960/23:00-00:00	-4.6	6.8	-6.9	
	F5 - OK	5/5/1960/20:00-21:00	0.6	-2	-7.4	
	F4 - OK	5/5/1960/21:00-22:00	-6.9	-7	-9.2	
Shawnee - Jefferson Tornado Outbreak, 5/19/19:00-20:00, [last DST]	F4 - KS	5/19/1960/19:00-20:00	10.3	7.5	9	
	F4 - KS	5/19/1960/19:00-20:00	10.3	7.5	9	
April 1961 Tornado	F4 - IN and OH	4/25/1961/15:00-16:00	-4.9	-2.2	-5.4	
Le Flore 1961 Tornado, [1st DST]	F4 - OK	5/5/1961/19:00-20:00	6.4	-3.5	2.2	
Early-May 1961 Tornado	F4 - KS and MO	5/7/1961/17:00-18:00	13.3	-1.2	4.1	
Late-May 1961 Tornado	F4 - NE	5/30/1961/19:00-20:00	36.4	9.4	24.4	
<u>Late-June 1961 Tornado</u>	F4 - MT	6/29/1961/19:00-20:00	-33.6	-39.1	-33.5	
September 1961 Tornado	F4 - IA	9/1/1961/20:00-21:00	-43.7	-34.5	-25.6	
Hurricane Carla, [last DST]	F4 - TX	09/12/1961/05:00-06:00	-12.3	-28.8	-21.9	
May 1962 Tornado Outbreak, 5/25-26, [1st DST]	F4 - OK	5/25/1962/20:00-21:00	24.8	31.7	24.1	
	F4 - OK and TX	5/26/1962/22:00-23:00	9.2	17.7	13.5	
	F4 - TX	5/26/1962/22:00-00:00	10.2	20.4	14.4	Averaged
<u>Holt Tornado</u>	F4 - NE	5/29/1962/13:00-14:00	-4.9	-1.6	-1.9	
August 1962 Tornado	F4 - KS	8/6/1962/19:00-20:00	-13.1	-23	-17.8	
September 1962 Tornado Outbreak, 9/16/06:00-07:00, [last DST]	F4 - MN	9/16/1962/06:00-07:00	-12.7	-2.5	-6.9	
	F4 - MN	9/16/1962/06:00-07:00	-12.7	-2.5	-6.9	
<u>Jefferson 1963 Tornado</u>	F4 - AL	3/5/1963/17:00-18:00	6.1	-0.5	2.4	
March 1963 Tornado Outbreak, 3/11/16:00-20:00	F4 - AL	3/11/1963/16:00-17:00	-31.2	-15.3	-17.7	
	F4 - MS	3/11/1963/19:00-20:00	-14.9	-3.3	-12	
Mid-April 1963 Tornado	F4 - IL and IN	4/17/1963/17:00-19:00	10.9	16.6	12.6	Averaged
Late-April 1963 Tornado [DST]	F4 - MS	4/29/1963/19:00-20:00	25.6	19	21.2	
Shelby 1964 Tornado	F4 - AL	1/24/1964/21:00-22:00	-10.6	5.5	-2.7	
Early-March 1964 Tornado	F4 - KY	3/4/1964/13:00-14:00	-58.9	-38.7	-45.2	
Wichita Falls Tornado	F5 - TX	4/3/1964/16:00-17:00	-30.3	-34.4 9.9	-25.7	
1964 Anderson Tornado	F4 - KS F4 - NE	4/12/1964/18:00-19:00	12.1 -13.5	9.9 -21.5	8.7 -12.6	
May 1964 Tornado Outbreak, 5/5/17:00-21:00, [1st DST]	F4 - NE F5 - NE	5/5/1964/17:00-18:00 5/5/1964/20:00-21:00	-13.5 -4.8	-21.5 -22	-12.6	
1064 Michigan Tarnada	F4 - MI	5/8/1964/16:00-18:00	11.6	7	9	Averaged
1964 Michigan Tornado  Fremont Tornado	F4 - IVII	6/22/1964/21:00-18:00	-9.9	-14.6	-12	Averaged
Ozaukee Tornado	F4 - WI	8/22/1964/17:00-19:00	-4.2	-20.6	-5	Averaged
Kossuth Tornado	F4 - IA	8/29/1964/18:00-19:00	7.4	6.7	4.5	Averaged
Lafourche Parish Tornado, [last DST]	F4 - IA	10/3/1964/08:00-09:00	-7.7	-11.1	-6.9	
March 1965 Tornado	F4 - OK and KS	3/16/1965/18:00-20:00	-10.3	-12.8	-9.9	Averaged
Faulkner Tornado	F4 - AR	4/10/1965/20:00-21:00	1.7	1.2	1.6	· · · · · · · · · · · · · · · · · · ·
Palm Sunday Tornado Outbreak, 4/11-12/14:00-01:00	F4 - IA	4/11/1965/14:00-16:00	-3.7	-6	-4.1	Averaged
	F4 - IL	4/11/1965/17:00-18:00	-33.3	-21.6	-24.3	
	F4 - MI	4/11/1965/18:00-20:00	-26.1	-24.3	-20.3	Averaged
	F4 - IN	4/11/1965/19:00-20:00	-24	-21.8	-19.3	<u> </u>
	F4 - IN	4/11/1965/19:00-20:00	-24	-21.8	-19.3	
	F4 - IN and MI	4/11/1965/20:00-21:00	-22	-14.9	-17.8	
	F4 - IN	4/11/1965/20:00-21:00	-22	-14.9	-17.8	
	F4 - IN	4/11/1965/20:00-21:00	-22	-14.9	-17.8	
	F4 - IN	4/11/1965/20:00-21:00	-22	-14.9	-17.8	
	F4 - IN	4/11/1965/20:00-21:00	-22	-14.9	-17.8	
		-	•	•	•	

	F4 - IN	4/11/1965/21:00-22:00	-15.7	-17.8	-16.3	
	F4 - MI	4/11/1965/21:00-22:00	-15.7	-17.8	-16.3	
	F4 - OH	4/11/1965/22:00-23:00	-13.4	-14.4	-13.5	
	F4 - OH	4/11/1965/22:00-23:00	-13.4	-14.4	-13.5	
	F4 - OH	4/11/1965/23:00-00:00	-11	-9.2	-10.6	
	F4 - OH	4/12/1965/00:00-01:00	-13.2	-10.7	-11	
Early-May 1965 Tornado Outbreak, 5/8/19:00-00:00 [1st DST]	F4 - NE	5/8/1965/19:00-20:00	-30.3	-4.7	-19.6	
	F4 - IA	5/8/1965/19:00-20:00	-30.3	-4.7	-19.6	
	F5 - SD	5/8/1965/19:00-21:00	-41.7	-17.7	-27.1	Averaged
	F4 - NE	5/8/1965/20:00-21:00	-53.1	-30.6	-34.6	
	F4 - MN	5/8/1965/21:00-22:00	-60.1	-40.3	-41.3	
	F4 - MN	5/8/1965/21:00-22:00	-60.1	-40.3	-41.3	
	F4 - MN	5/8/1965/22:00-23:00	-42.6	-40.5	-37.9	
		5/8/1965/23:00-00:00				
	F4 - IA		-42.7	-38.4	-34	
	F4 - MN	5/8/1965/23:00-00:00	-42.7	-38.4	-34	
Early-June 1965 Tornado	F4 - TX	6/2/1965/23:00-00:00	-0.3	1.3	1.2	
Yankton-Turner Tornado	F4 - SD	6/7/1965/19:00-20:00	-8.5	-8.3	-7.4	
Late-August 1965 Tornado, [last DST]	F4 - IA	8/26/1965/21:00-22:00	-4.3	4.4	-1.2	
Candlestick Park Tornado	F5 - MS and AL	3/3/1966/19:00-20:00	-25.8	-14.4	-17.1	
Tampa Tornado Family	F4 - FL	4/4/1966/14:00-15:00	-4	-2.6	-1.9	
Late-April 1966 Tornado, [first event in standardized DST]	F4 - OK	4/27/1966/21:00-22:00	15.2	20.4	17.5	
	F5 - KS	6/8/1966/22:00-23:00	-11	6.9	-0.3	
June 1966 Tornado Outbreak, 6/3-12						
	F4 - KS	6/8/1966/23:00-00:00	-9	10.3	-0.4	
	F4 - MN	6/11/1966/20:00-21:00	9.4	11.4	12.3	
October 1966 Tornado, [last DST]	F5 - IA	10/14/1966/15:00-17:00	9.8	0.2	2.6	Averaged
St. Louis Tornado Outbreak, 1/24/16:00-22:00	F4 - MO	1/24/1967/16:00-18:00	-9	-11.2	-9.3	Averaged
	F4 - MO	1/24/1967/20:00-22:00	-10.4	-7.8	-9.5	Averaged
March 1967 Tornado	F4 - AL	3/6/1967/17:00-18:00	-1.4	2.9	1.3	
Oak Lawn Tornado Outbreak, 4/21/17:00-22:00	F4 - MO	4/21/1967/17:00-18:00	-15.8	-1.6	-9.6	
Odk Lawii Tolliado Odibicak, 4/21/17:00-22:00	F4 - IL	4/21/1967/18:00-20:00	-9.1	3.5	-6.1	A
						Averaged
	F4 - IL	4/21/1967/19:00-20:00	-8.5	4.4	-6.2	
	F4 - IL	4/21/1967/19:00-20:00	-8.5	4.4	-6.2	
	F4 - MI	4/21/1967/21:00-22:00	-16.7	-8.3	-9.1	
lowa - Minnesota Tornado Outbreak, 4/30/20:00-23:00, [1st DST]	F4 - IA	4/30/1967/20:00-21:00	23.6	21.1	20.8	
	F4 - IA	4/30/1967/21:00-22:00	26.5	23.9	21.6	
	F4 - MN	4/30/1967/21:00-22:00	26.5	23.9	21.6	
	F4 - MN	4/30/1967/22:00-23:00	25.9	24.3	21.8	
June 1967 Tornado Outbreak, 6/8-14, [last DST]	F4 - IA	6/8/1967/23:00-00:00	-33.3	-33.1	-38.2	
ounc 1997 Fornado Odibredit, 670 14, just BOT	F4 - OK	6/10/1967/22:00-23:00	-20.9	-33.9	-24.9	
	F4 - OK	6/10/1967/23:00-00:00	-19.8	-32.1	-24.9	
O II T I -						
Scott Tornado	F4 - MS	12/2/1967/14:00-15:00	-29.7	-28.4	-23.6	
December 1967 Tornado	F4 - MO	12/21/1967/02:00-03:00	-14.4	-12.4	-14.6	
Early-April 1968 Tornado Outbreak, 4/3-4	F4 - AR	4/3/1968/20:00-21:00	-11.3		-13.8	Bad HON data
	F4 - KY	4/4/1968/01:00-03:00	-30.5		-32	Averaged; Bad HON data
Sebastian Tornado	F4 - AR	4/19/1968/17:00-18:00	16.6	26.8	18.2	
Wheelersburg Tornado Outbreak, 4/23/19:00-23:00	F4 - KY	4/23/1968/19:00-20:00	-5.6	-8.2	-3.7	
	F4 - OH	4/23/1968/19:00-21:00	-9	-11.7	-6.5	Averaged
	F5 - OH	4/23/1968/22:00-23:00	-7.8	-6.7	-7.6	
May 1968 Tornado Outbreak, 5/15-16, [1st DST]	F5 - IA	5/15/1968/17:00-18:00	-9.6	13.2	6.8	
may 1000 Torridad Odibreak, 0/10-10, [15t DOT]	F5 - IA		-3.5	12.3	7.7	Averaged
		5/15/1968/17:00-19:00				Averaged
	F4 - AR	5/15/1968/22:00-23:00	-5.8	2.1	-5.6	
	F4 - AR	5/15/1968/22:00-23:00	-5.8	2.1	-5.6	
<u>Tracy Tornado</u>	F5 - MN	6/13/1968/19:00-20:00	-67.6	-55.5	-58.8	
Marinette Tornado, [last DST]	F4 - WI	8/19/1968/18:00-19:00	0.5	-20.6	-8.2	
Hazlehurst Tornado Outbreak	F4 - MS	1/23/1969/07:00-08:00	4.1	9.7	10.9	
April 1969 Tornado	F4 - AL	4/18/1969/04:00-05:00	-10.6	-24.6	-23.8	
June 1969 Tornado Outbreak, 6/21-24, [1st DST]	F4 - MO	6/22/1969/19:00-20:00	23.8	18.7	20.2	
Sand 1000 Tolliado Calbicali, 0/21-24, [15t DO1]	F4 - MO	6/22/1969/20:00-21:00	21.6	21	20.2	
L L 4000 T	F4 - KS	6/23/1969/18:00-19:00	0.9	17.5	2.3	
July 1969 Tornado	F4 - SD	7/7/1969/19:00-20:00	15	28.8	15.3	<u></u>
1969 Minnesota Tornado Outbreak, [last DST]	F4 - MN	8/6/1969/17:00-18:00		19.2	8.6	SJG bad data

Mid-April 1970 Tornado Outbreak, 4/17-18	F4 - TX	4/17/1970/22:00-00:00	-7.3	-10.1	-8.9	Averaged
	F4 - TX	4/18/1970/00:00-01:00	-9.3	-7.5	-8.9	- · · · · · · · · · · · · · · · · · · ·
	F4 - TX	4/18/1970/00:00-01:00	-9.3	-7.5	-8.9	
	F4 - TX	4/18/1970/03:00-04:00	-5.7	5	-1.3	
Mississippi - Tennessee 1970 Tornado	F4 - MS and TN	4/19/1970/14:00-16:00	-38.3	-24.3	-28	Averaged
Late-April 1970 Tornado, [1st DST]	F4 - TN	4/27/1970/16:00-17:00	-22.4	-3.3	-14	
	F5 - TX		19.3	19.3	16.9	
<u>Lubbock Tornado Outbreak, 5/11-12</u>		5/11/1970/22:00-23:00				
1970 Tornado Outbreak, 6/10-16	F4 - MO	6/12/1970/14:00-15:00	19.8	3.7	10.7	
October 1970 Tornado, [last DST]	F4 - OK	10/5/1970/17:00-18:00	-1.4	1.3	2.2	
Mississippi Delta Tornado Outbreak, 2/21/16:00-23:00	F5 - LA and MS	2/21/1971/16:00-18:00	1	-9.4	-6.1	Averaged
Wildelight Beita Torridge Outbreak, 2/2 // To.00 20.00	F4 - MS					Attenagea
		2/21/1971/18:00-19:00	2.7	-9.2	-4.9	
	F4 - MS	2/21/1971/19:00-20:00	4.5	-5.8	-2.5	
	F4 - TN	2/21/1971/22:00-23:00	4.3	-2.2	1.3	
Bowie Tornado	F4 - TX	3/12/1971/20:00-21:00	-34.4	-7.8	-18.5	
	F4 - AL		-19.4	-9.7	-10.6	
Monroe Tornado		4/23/1971/13:00-14:00				
April 1971 Tornado Outbreak, 4/27/22:00-00:00, [1st DST]	F4 - KY	4/27/1971/22:00-23:00	2.4	3.3	7.5	
	F4 - KY	4/27/1971/23:00-00:00	-4.9	4	5.5	
Early-May 1971 Tornado	F4 - TN	5/7/1971/19:00-20:00	-29.6	-27.6	-26.3	
Hansford Tornado Outbreak, 6/9/19:00-23:00	F4 - TX	6/9/1971/19:00-20:00	6.1	-2.2	1.4	
	F4 - TX	6/9/1971/22:00-00:00	6.4	-1.3	0.4	Averaged
Mid-July 1971 Tornado, [last DST]	F4 - IA	7/12/1971/19:00-20:00	23.7	30.5	23.5	
April 1972 Tornado	F4 - OK	4/19/1972/19:00-20:00	-2.8	-16	-9.9	
Late-April 1972 Tornado, [1st DST]	F4 - KS	4/30/1972/20:00-21:00	-20.1	-9.3	-17.1	
May 1972 Tornado, [IN opted out of DST]	F4 - IN	5/14/1972/13:00-14:00	-17.7	-4.1	-10.5	
Waukegan - North Chicago Tornado Outbreak, [last DST]	F4 - IL	9/28/1972/19:00-20:00	-11.1	16	-3.9	
Early-March 1973 Tornado	F4 - TX	3/10/1973/08:00-09:00	7.6	0.3	2.7	
March 1973 Tornado	F4 - SC	3/31/1973/19:00-20:00	-22.6	-26.9	-27.2	
<u>Frio Tornado</u>	F4 - TX	4/15/1973/19:00-20:00	10.9	-12.1	-5.2	
April 1973 Tornado Outbreak, 4/19-21	F4 - MO	4/19/1973/21:00-22:00	-54.2	-78.6	-49.9	
Typhi 1010 Tomado Odibicak, 4/10 21	F4 - MO	4/20/1973/19:00-20:00	-42.2	-35.9	-32.7	
	F4 - MO	4/21/1973/16:00-17:00	-37.4	-37.7	-34.8	
Early-May 1973 Tornado, [1st DST]	F5 - TX	5/6/1973/21:00-22:00	4.3	14.6	10.7	
DeKalb Tornado	F5 - AL	5/19/1973/20:00-21:00	-12.6	-21.3	-15.1	
Late-May 1973 Tornado Outbreak, 5/24-29	F4 - OK	5/24/1973/16:00-17:00	-4.8	-21.9	-13.5	
Late-May 1973 Tornado Outbreak, 5/24-29						
	F4 - OK	5/26/1973/16:00-17:00	-17.6	-5.6	-7.4	
	F4 - OK	5/26/1973/18:00-19:00	-2.9	0.4	-3.5	
	F4 - AR	5/27/1973/00:00-01:00	-10.9	-0.3	-4.2	
August 1973 Tornado, [last DST]	F4 - NY and MA	8/28/1973/12:00-13:00	-19.8	-3.1	-12.6	
Greenwood Tornado Outbreak	F4 - SC	12/13/1973/15:00-16:00	19.1	7.5	13.3	
1974 Super Outbreak, 4/3-4, [1st DST]	F5 - OH	4/3/1974/14:00-15:00	-25.4	6.7	-20.3	
	F5 - IN	4/3/1974/14:00-15:00	-25.4	6.7	-20.3	
	F5 - IN	4/3/1974/15:00-16:00	-28.6	8.8	-24.8	
	F4 - OH	4/3/1974/16:00-17:00	-33.9	4	-28.2	
	F5 - KY	4/3/1974/16:00-17:00	-33.9	4	-28.2	
	F5 - KY and OH	4/3/1974/17:00-18:00	-26.9	5.7	-17	<u> </u>
	F4 - KY	4/3/1974/17:00-18:00	-26.9	5.7	-17	
	F4 - KY	4/3/1974/17:00-18:00	-26.9	5.7	-17	
	F4 - KY	4/3/1974/17:00-18:00	-26.9	5.7	-17	
	F4 - IN	4/3/1974/17:00-18:00	-26.9	5.7	-17	
	F4 - IN	4/3/1974/17:00-18:00	-26.9	5.7	-17	
	F4 - IN	4/3/1974/17:00-18:00	-26.9	5.7	-17	
	F4 - IN	4/3/1974/17:00-18:00	-26.9	5.7	-17	
	F4 - IN	4/3/1974/17:00-18:00	-26.9	5.7	-17	
	F4 - IN	4/3/1974/17:00-18:00	-26.9	5.7	-17	
	F4 - GA	4/3/1974/17:00-18:00	-26.9	5.7	-17	
	F4 - GA	4/3/1974/17:00-18:00	-26.9	5.7	-17	
						<del> </del>
	F4 - KY	4/3/1974/18:00-20:00	-25.7	-16.8	-21.1	Averaged
	F4 - KY	4/3/1974/19:00-20:00	-22.6	-19.7	-22.9	
	F4 - KY	4/3/1974/19:00-20:00	-22.6	-19.7	-22.9	
	F4 - KY	4/3/1974/20:00-21:00	-29.7	-27.6	-28	<u> </u>
	F4 - KY	4/3/1974/20:00-21:00	-29.7	-27.6	-28	

	F5 - AL	4/3/1974/20:00-21:00	-29.7	-27.6	-28	
	F4 - GA	4/3/1974/20:00-21:00	-29.7	-27.6	-28	
	F4 - TN	4/3/1974/20:00-21:00	-29.7	-27.6	-28	
	F5 - TN	4/3/1974/20:00-21:00	-29.7	-27.6	-28	
	F4 - TN	4/3/1974/20:00-21:00	-29.7	-27.6	-28	
		4/3/1974/20:00-21:00	-29.7	-27.6	-28	
	F4 - NC and GA					
	F4 - KY and TN	4/3/1974/21:00-22:00	-34.7	-39	-33	
	F5 - AL	4/3/1974/21:00-22:00	-34.7	-39	-33	
	F4 - GA	4/3/1974/21:00-22:00	-34.7	-39	-33	
	F4 - TN	4/3/1974/21:00-22:00	-34.7	-39	-33	
	F4 - TN	4/3/1974/21:00-23:00	-23.8	-41.6	-29.9	Averaged
	F5 - AL	4/3/1974/21:00-23:00	-23.8	-41.6	-29.9	Averaged
1974 Great Plains Tornado Outbreak, 6/8/17:00-21:00	F4 - OK	6/8/1974/17:00-19:00	-4	-0.1	1	Averaged
	F4 - KS	6/8/1974/20:00-21:00	7.9	16.6	9.8	
June 1974 Tornado	F4 - IA	6/18/1974/23:00-00:00	-11	-8.1	-7.1	
August 1974 Tornado, [last DST]	F4 - NY and MA	8/28/1973/12:00-13:00	2.8	-14.8	-9.7	
	F4 - MS	1/10/1975/10:00-11:00	-5.5	-10.5	-6.2	
Great Storm of 1975, 1/9-12						
February 1975 Tornado, [1st DST]	F4 - AL	2/23/1975/15:00-16:00	-26.2	-8.7	-21.2	
April 1975 Tornado Outbreak, 4/23/16:00-19:00	F4 - MO	4/23/1975/16:00-17:00	-2.9	-5.4	-6.5	
	F4 - MO	4/23/1975/18:00-19:00	-1.4	-3.2	1.6	
<u>Late-April 1975 Tornado</u>	F4 - MO	4/24/1975/20:00-21:00	0.3	4.7	-2.6	
1975 Omaha Tornado Outbreak, 5/6/15:00-18:00	F4 - NE	5/6/1975/15:00-16:00	-27.8	-27.2	-21.6	
	F4 - NE	5/6/1975/17:00-18:00	-23.6	-24.1	-20.7	
Mid-June 1975 Tornado	F4 - NE	6/18/1975/22:00-23:00	-1.2	2	0.9	
Clay Tornado	F4 - MN	6/28/1975/16:00-17:00	15.5	18.1	16.8	
Late-June 1975 Tornado, [last DST]	F4 - ND	6/29/1975/21:00-22:00	-20.6	-12.3	-13.4	
Oakland Tornado, 3/20/15:00-21:00	F4 - IL	3/20/1976/15:00-16:00	12.6	7	7.3	
<u>Gununa Torridad, 6/26/10.00 21.00</u>	F4 - IN	3/20/1976/17:00-18:00	11.8	5.3	6.3	
	F4 - MI	3/20/1976/20:00-21:00	10.8	13	6.8	
Le Flore Tornado Outbreak, 3/26/16:00-18:00	F4 - OK	3/26/1976/16:00-18:00	-195.8	-149.1	-168.8	Averaged
	F5 - OK	3/26/1976/17:00-18:00	-183.3	-153.2	-164.7	
	F4 - TX	3/26/1976/18:00-19:00	-156.2	-147	-143	
	F4 - MS	3/27/1976/01:00-03:00	-71.1	-97.1	-81.1	Averaged
Late-March Tornado Outbreak, 3/29/16:00-17:00	F4 - MS	3/29/1976/16:00-17:00	-29	-36	-31.9	
	F4 - MS	3/29/1976/16:00-17:00	-29	-36	-31.9	
Barber Tornado	F4 - KS	4/17/1976/03:00-05:00	-10.1	-5.3	-3.3	Averaged
Caddo Tornado	F4 - OK	4/17/1976/06:00-07:00	-4.3	-6.9	-5.3	
April 1976 Tornado	F5 - TX	4/19/1976/19:00-20:00	13.2	6.5	10.2	
Late-May 1976 Tornado, [1st DST]	F4 - TX	5/26/1976/18:00-19:00	-7.6	4.1	-3.3	
June 1976 Tornado	F5 - IA	6/13/1976/16:00-17:00	-10.5	-10.5	-7.5	
Pottawattamie Tornado	F4 - IA	6/26/1976/19:00-20:00	-12.1	-15.5	-8.5	
	F4 - IL					
Late-June 1976 Tornado, [last DST]		6/29/1976/15:00-16:00	0.2	11.7	6.9	
Winston Tornado	F4 - MS	2/23/1977/18:00-19:00	0.5	-6.8	-3	
Early-April 1977 Tornado Outbreak, 4/2/15:00-17:00	F4 - MI	4/2/1977/15:00-16:00	-0.1	2.1	5.9	
	F4 - MI	4/2/1977/16:00-17:00	3.7	6.2	8.5	
Birmingham Tornado Outbreak	F5 - AL	4/4/1977/17:00-18:00	-20.8	-2.2	-9.9	
Early-May 1977 Tornado Outbreak, 5-4/5, [1st DST]	F4 - MO	5/4/1977/18:00-19:00	-26.7	-17.7	-19.9	
	F4 - MO	5/4/1977/19:00-20:00	-22.8	-13.7	-18.6	
	F4 - IA	5/4/1977/20:00-21:00	-18.4	-16	-19.5	
	F4 - IL	5/5/1977/21:00-22:00	-13.9	-14.8	-13.4	
Mid-May 1977 Tornado	F4 - OK and CO	5/18/1977/14:00-16:00	-11.1	-16.8	-12	Averaged
Early-July 1977 Tornado	F4 - NE	7/7/1977/16:00-17:00	-1.9	-6.6	-4.8	
Late-July 1977 Tornado	F4 - WI	7/30/1977/20:00-21:00	-22.9	-33.7	-25.8	
Late-August 1977 Tornado, [last DST]	F4 - WI	8/31/1977/20:00-21:00	18.7	1.2	7.5	
Early-April 1978 Tornado Outbreak, 4/7-8/22:00-02:00	F4 - NE	4/7/1978/22:00-23:00	7.9	7	0.8	
Early-April 1970 Torriado Odibreak, 4/1-0/22.00-02.00		4/8/1978/01:00-02:00		15.4	7.4	
BAIN And ACT Towards Outboards	F4 - NE		7.2			
Mid-April 1977 Tornado Outbreak	F4 - MS	4/17/1977/23:00-00:00	12.5	17.3	14.6	
	F4 - MS	4/18/1977/02:00-03:00	-23.6	-26.2	-19	
Late-April 1978 Tornado, [1st DST]	F4 - OK	4/30/1978/20:00-21:00	-50.4	-27.1	-33.4	
Independence Day 1978 Tornado, [last DST]	F4 - ND	7/4/1978/22:00-23:00	-104.7		-70.6	Bad HON data
Bossier Parish Tornado	F4 - LA	12/3/1978/03:00-05:00	0.9	15	4.4	Averaged

Late-March 1979 Tornado	F4 - MO and IA	3/29/1979/19:00-20:00	0.4	11.9	-1.6	
Red River Valley Tornado Outbreak, 4/10-11	F4 - TX	4/10/1979/17:00-18:00	-13.5	-4.8	-6.2	
	F4 - TX	4/10/1979/19:00-21:00	5.5	0.9	3.1	Averaged
Early-May 1979 Tornado, [1st DST]	F4 - OK	5/2/1979/18:00-19:00	-23.7	-20.2	-21.4	
Pocahontas-Calhoun Tornado	F4 - IA	6/28/1979/20:00-21:00	8.9		9.9	Bad HON data
Late-June 1979 Tornado	F4 - IL	6/29/1979/14:00-15:00	28		16.4	Bad HON data
	F4 - IL			4.4		Dau HON data
Windsor Locks Tornado, [last DST]		10/3/1979/14:00-15:00	14.6	-4.4	5.7	
April 1980 Tornado	F4 - TX	4/2/1980/14:00-15:00	-8.1	-1.2	-0.1	
Early-June Tornado Outbreak, 6/2-3, [1st DST]	F4 - IA	6/2/1980/15:00-16:00		-4.8	-4.5	Bad SJG data
	F4 - PA	6/3/1980/11:00-12:00		-3.3	-8	Bad SJG data
	F4 - NE	6/3/1980/23:00-00:00		1.3	4.1	Bad SJG data
July 1980 Tornado, [last DST]	F4 - IN	7/9/1980/22:00-23:00	0.7	13.5	0.7	
Late-March 1981 Tornado	F4 - IL	3/29/1981/20:00-21:00	-11.8	-28.9	-19.8	
West Bend Tornado Outbreak, 4/3-4	F4 - IL	4/4/1981/00:00-02:00	18.1	-2.7	4.8	Averaged
	F4 - WI	4/4/1981/02:00-03:00	13.1	0.4	6.9	
Late-April 1981 Tornado	F4 - MO	4/22/1981/18:00-20:00	-42.7	-39.1	-38	Averaged
Lamar Tornado, [1st DST]	F4 - TX	5/13/1981/20:00-21:00	1.2	-21.8	-9.6	Avoidged
	F4 - OK					
Mid-May 1981 Tornado		5/17/1981/21:00-22:00	1.2	-26.9	-13.3	
May 1981 Tornado Outbreak, 5/22-23, [last DST]	F4 - OK	5/22/1981/18:00-20:00	-10	-18.3	-14.9	Averaged
March 1982 Tornado	F4 - TX and OK	3/18/1982/01:00-03:00	30.2	32.7	33.7	Averaged
April 1982 Tornado Outbreak, 4/2/17:00-21:00	F5 - OK	4/2/1982/17:00-19:00	-85.7	-67.9	-71.8	Averaged
	F4 - TX	4/2/1982/18:00-19:00	-90.4	-61.3	-75.9	
	F4 - AR	4/2/1982/19:00-20:00	-86.2	-68.2	-61.8	
	F4 - MO	4/2/1982/20:00-21:00	-73.3	-60.4	-52.4	
Marion Tornado Outbreak, [DST]	F4 - IL	5/29/1982/18:00-19:00	-22	-37.7	-27.8	
Christmas Eve Tornado	F4 - AR and MO	12/24/1982/19:00-20:00	-11.6	33.1	1.5	
April 1983 Tornado	F4 - LA	4/1/1983/18:00-19:00	11.0	-12	-19.9	Bad SJG data
	F4 - MN	7/3/1983/14:00-15:00	13.5	8.8	14.8	Dad 500 data
July 1983 Tornado Outbreak,7/3/14:00-22:00, [DST]				1		
	F4 - WI	7/3/1983/21:00-22:00	17.5	13.3	8.8	
December 1983 Tornado	F4 - LA	12/6/1983/03:00-04:00		-35.9	-19.3	Bad SJG data
Mid-March 1984 Tornado Outbreak, 3/15/19:00-22:00	F4 - AR	3/15/1984/19:00-20:00	-1.6	8.1	7.8	
	F4 - AR	3/15/1984/21:00-22:00	17		10.5	Bad HON data
Carolinas 1984 Tornado Outbreak, 3/28/18:00-22:00	F4 - SC	3/28/1984/18:00-19:00	-119.1	-92.6	-85.8	
	F4 - SC	3/28/1984/18:00-19:00	-119.1	-92.6	-85.8	
	F4 - SC	3/28/1984/18:00-19:00	-119.1	-92.6	-85.8	
	F4 - SC	3/28/1984/19:00-20:00	-110.9	-80.6	-81	
	F4 - SC	3/28/1984/19:00-20:00	-110.9	-80.6	-81	
	F4 - SC	3/28/1984/20:00-21:00	-95.3	-72	-66.5	
	F4 - SC	3/28/1984/20:00-21:00	-95.3	-72	-66.5	
Creek-Pawnee Tornado	F4 - OK	4/27/1984/00:00-01:00	-54.1	-90.8	-70.1	
Late-April 1984 Tornado Outbreak, 4/27/11:00-19:00	F4 - OK	4/27/1984/11:00-12:00	-54.8	-38	-39.8	
	F4 - WI	4/27/1984/17:00-18:00	-43.2	-38	-41.4	
	F4 - WI	4/27/1984/18:00-19:00	-33	-27	-31.2	
Mannford - New Prue Tornado Outbreak, [1st DST]	F4 - OK	4/29/1984/11:00-12:00	-44.5	-21.7	-34.4	
Barnevel Tornado Outbreak, 6/7-8, [last DST]	F4 - MO	6/7/1984/19:00-20:00	3.3	-4.2	-3.5	
	F4 - WI	6/8/1984/01:00-02:00	2.2	9	0.1	
Early-May 1985 Tornado Outbreak, 5/10/18:00-21:00, [1st DST]	F4 - KS	5/10/1985/18:00-19:00	18.8		10.1	Bad HON data
	F4 - KS	5/10/1985/20:00-21:00	12.2		11.2	Bad HON data
US - Canada Tornado Outbreak, 5/31/18:00-19:00, [last DST]	F4 - OH and PA	5/31/1985/15:00-17:00	23.4		22.7	Averaged; Bad HON data
	F4 - OH and PA	5/31/1985/16:00-17:00	23.2		23.1	Bad HON data
	F4 - PA	5/31/1985/16:00-17:00	23.2		23.1	Bad HON data
	F4 - OH and PA	5/31/1985/17:00-18:00	27.7		23.1	Bad HON data
	F4 - PA	5/31/1985/17:00-18:00	27.7		23.1	Bad HON data
	F4 - PA	5/31/1985/18:00-19:00	34.3		26.4	Bad HON data
	F4 - PA	5/31/1985/19:00-20:00	37.7		26.4	Bad HON data
March 1986 Tornado Outbreak, 3/10-12	F4 - MS	3/12/1986/15:00-16:00	-3.9	4.6	1.2	
July 1986 Tornado Outbreak, [1st DST]	F4 - NE and IA	7/28/1986/19:00-21:00	-20.1		-20.4	Averaged; Bad HON data
Farrar Tornado, [last DST]	F4 - IA	9/28/1986/18:00-19:00	-6	-11.2	-10	
February 1987 Tornado	F4 - MS	2/28/1987/11:00-12:00	0	-4.4	-1.2	
Sargosa Tornado, [1st DST]	F4 - TX	5/22/1987/21:00-22:00	12.7	9.6	10.8	
Teton - Yellowstone Tornado, [last DST]	F4 - WY	7/21/1987/17:00-19:00	-4.7	-3.4	0	Averaged
-ctori Tellowatorie Torriddo, paat 201]	1 7 771		7.7	1 0.7	·	J. 110.0300

January 1988 Tornado	F4 - MS	1/19/1988/13:00-14:00	-27	-18.4	-21.2	
Raleigh Tornado Outbreak	F4 - NC	11/28/1988/00:00-01:00	19.6	8.2	5.9	
December 1988 Tornado	F4 - TN	12/24/1988/08:00-09:00	-3.1	10.1	7.8	
January 1989 Tornado	F4 - IL and IN	1/7/1989/18:00-20:00	14.5	2.2	10.9	Averaged
						Averaged
May 1989 Tornado Outbreak, 5/5/17:00-20:00, [1st DST]	F4 - NC and SC	5/5/1989/17:00-18:00	-54	-40.9	-44.4	
	F4 - NC	5/5/1989/17:00-19:00	-52	-48.1	-47.5	Averaged
	F4 - NC	5/5/1989/19:00-20:00	-50.4	-70.3	-51.2	
Kinney Tornado	F4 - TX	5/17/1989/01:00-02:00	5.6	-8.6	2	
Late-May 1989 Tornado Outbreak, 5/24/19:00-20:00	F4 - IA	5/24/1989/19:00-20:00	-64.5	-28.7	-50	
	F4 - IA	5/24/1989/19:00-20:00	-64.5	-28.7	-50	
Hardin Grundy Tornada	F4 - IA	5/30/1989/20:00-22:00	1.2	26.5	4.3	Averaged
Hardin-Grundy Tornado						Averaged
1989 Northeastern US Tornado Outbreak, 7/10/12:00-16:00, [last DST]	F4 - NY	7/10/1989/12:00-13:00	4.3	16.5	9.8	
	F4 - CT	7/10/1989/15:00-16:00	0.6	3.5	-2.7	
November 1989 Tornado Outbreak, 11/15-16	F4 - AL	11/15/1989/18:00-19:00	2.7	-10	-2.8	
March 1990 Central US Tornado Outbreak, 3/11-13	F5 - KS	3/13/1990/18:00-19:00	-73	-72.9	-56.4	
	F4 - IA	3/13/1990/18:00-20:00	-74.7	-72.8	-51.6	Averaged
	F4 - NE	3/13/1990/19:00-20:00	-76.3	-72.6	-46.8	
	F5 - KS	3/13/1990/19:00-20:00	-76.3	-72.6	-46.8	
April 1000 Torredo (1et DCT)	F4 - TX		-14.1			
April 1990 Tornado, [1st DST]		4/25/1990/17:00-18:00		-40	-28.8	
Pecos Tornado	F4 - TX	6/1/1990/18:00-19:00	-13.6	-21.7	-7.4	
Lower Ohio Valley Tornado Outbreak, 6/2-3	F4 - IL	6/2/1990/18:00-19:00	7.4	-30.8	-2.5	
	F4 - IN	6/2/1990/18:00-20:00	7.3	-33.5	-3.8	Averaged
	F4 - IL	6/2/1990/19:00-20:00	7.2	-36.2	-5.2	
	F4 - IL and IN	6/2/1990/19:00-20:00	7.2	-36.2	-5.2	
	F4 - IN	6/2/1990/19:00-21:00	8.6	-35.4	-4.5	Averaged
	F4 - IN		10	-33.6	-3.8	Wordged
		6/2/1990/20:00-21:00				
	F4 - IN and OH	6/2/1990/22:00-23:00	11.5	-24.7	-2.5	
Mid-June 1990 Tornado	F4 - NE	6/15/1990/20:00-21:00	-27.7	-31.4	-34.4	
Plainfield Tornado Outbreak, [last DST]	F5 - IL	8/28/1990/16:00-17:00	5.1	-15.5	-7.7	
March 1991 Tornado	F4 - KS	3/26/1991/20:00-21:00	-87.5	-100.1	-92.8	
April 1991 Tornado Outbreak, 4/26-27, [DST]	F5 - KS	4/26/1991/18:00-20:00	-5.3	-24.5	-16.6	Averaged
	F4 - KS	4/26/1991/19:00-20:00	-11.4	-28.5	-20.7	
	F4 - OK	4/26/1991/19:00-20:00	-11.4	-28.5	-20.7	
	F4 - OK	4/26/1991/20:00-21:00	-31.9	-39.3	-27.8	
	F4 - OK	4/26/1991/22:00-23:00	-46.3	-52.4	-35.5	
November 1991 Tornado	F4 - MO	11/29/1991/20:00-21:00	0.6	-5.9	-6.2	
February 1992 Tornado	F4 - OH	2/18/1992/17:00-18:00	25.6	19.3	17.7	
March 1992 Tornado	F4 - MS	3/9/1992/23:00-00:00	12	6.7	7.8	
May 1992 Tornado, [1st DST]	F4 - OK	5/11/1992/17:00-18:00	-92.5	-102.3	-89.2	
	F4 - KS	6/15/1992/20:00-21:00	-10.5	-13.4	-10.4	
Mid-June 1992 Tornado Outbreak, 6/15-16	F4 - KS		-10.5			
		6/15/1992/23:00-00:00	-4.8	-15	-10.5	
	F4 - MN	6/16/1992/18:00-19:00	-4.8 -21.7	-15 2.3	-10.5 -2.8	
	F4 - MN F5 - MN		-4.8	-15	-10.5	
Late-June 1992 Tornado, [last DST]	F4 - MN	6/16/1992/18:00-19:00	-4.8 -21.7	-15 2.3	-10.5 -2.8	
Late-June 1992 Tornado, [last DST]  November 1992 Tornado Outbreak, 11/21-23	F4 - MN F5 - MN	6/16/1992/18:00-19:00 6/16/1992/18:00-19:00	-4.8 -21.7 -21.7	-15 2.3 2.3	-10.5 -2.8 -2.8	
	F4 - MN F5 - MN F4 - TX F4 - TX	6/16/1992/18:00-19:00 6/16/1992/18:00-19:00 6/27/1992/20:00-21:00 11/21/1992/17:00-18:00	-4.8 -21.7 -21.7 16.2	-15 2.3 2.3 18.6 -3.7	-10.5 -2.8 -2.8 9.8 4.9	Averaged
	F4 - MN F5 - MN F4 - TX F4 - TX F4 - MS	6/16/1992/18:00-19:00 6/16/1992/18:00-19:00 6/27/1992/20:00-21:00 11/21/1992/17:00-18:00 11/22/1992/01:00-03:00	-4.8 -21.7 -21.7 16.2 13 20.2	-15 2.3 2.3 18.6 -3.7 29.1	-10.5 -2.8 -2.8 9.8 4.9 28.8	Averaged
	F4 - MN F5 - MN F4 - TX F4 - TX F4 - MS F4 - MS	6/16/1992/18:00-19:00 6/16/1992/18:00-19:00 6/27/1992/20:00-21:00 11/21/1992/17:00-18:00 11/22/1992/01:00-03:00 11/22/1992/02:00-03:00	-4.8 -21.7 -21.7 16.2 13 20.2 20.3	-15 2.3 2.3 18.6 -3.7 29.1 29.6	-10.5 -2.8 -2.8 9.8 4.9 28.8 28.8	Averaged
	F4 - MN F5 - MN F4 - TX F4 - TX F4 - MS F4 - MS F4 - GA	6/16/1992/18:00-19:00 6/16/1992/18:00-19:00 6/27/1992/20:00-21:00 11/21/1992/17:00-18:00 11/22/1992/01:00-03:00 11/22/1992/02:00-03:00 11/22/1992/15:00-16:00	-4.8 -21.7 -21.7 16.2 13 20.2 20.3 -19.5	-15 2.3 2.3 18.6 -3.7 29.1 29.6 -2.1	-10.5 -2.8 -2.8 9.8 4.9 28.8 28.8 -9.4	
	F4 - MN F5 - MN F4 - TX F4 - TX F4 - MS F4 - MS F4 - GA F4 - KY and IN	6/16/1992/18:00-19:00 6/16/1992/18:00-19:00 6/27/1992/20:00-21:00 11/21/1992/17:00-18:00 11/22/1992/01:00-03:00 11/22/1992/02:00-03:00 11/22/1992/15:00-16:00 11/22/1992/16:00-18:00	-4.8 -21.7 -21.7 16.2 13 20.2 20.3 -19.5 -23.9	-15 2.3 2.3 18.6 -3.7 29.1 29.6 -2.1 -7.3	-10.5 -2.8 -2.8 9.8 4.9 28.8 28.8 -9.4 -11	Averaged
	F4 - MN F5 - MN F4 - TX F4 - TX F4 - MS F4 - MS F4 - GA F4 - KY and IN F4 - GA	6/16/1992/18:00-19:00 6/16/1992/18:00-19:00 6/27/1992/20:00-21:00 11/21/1992/17:00-18:00 11/22/1992/01:00-03:00 11/22/1992/02:00-03:00 11/22/1992/15:00-16:00 11/22/1992/16:00-18:00 11/22/1992/20:00-23:00	-4.8 -21.7 -21.7 16.2 13 20.2 20.3 -19.5 -23.9 -54.3	-15 2.3 2.3 18.6 -3.7 29.1 29.6 -2.1 -7.3 -30.5	-10.5 -2.8 -2.8 9.8 4.9 28.8 28.8 -9.4 -11 -27.4	
	F4 - MN F5 - MN F4 - TX F4 - TX F4 - MS F4 - MS F4 - GA F4 - KY and IN	6/16/1992/18:00-19:00 6/16/1992/18:00-19:00 6/27/1992/20:00-21:00 11/21/1992/17:00-18:00 11/22/1992/01:00-03:00 11/22/1992/02:00-03:00 11/22/1992/15:00-16:00 11/22/1992/16:00-18:00	-4.8 -21.7 -21.7 16.2 13 20.2 20.3 -19.5 -23.9	-15 2.3 2.3 18.6 -3.7 29.1 29.6 -2.1 -7.3	-10.5 -2.8 -2.8 9.8 4.9 28.8 28.8 -9.4 -11	
November 1992 Tornado Outbreak, 11/21-23	F4 - MN F5 - MN F4 - TX F4 - TX F4 - MS F4 - MS F4 - GA F4 - KY and IN F4 - GA	6/16/1992/18:00-19:00 6/16/1992/18:00-19:00 6/27/1992/20:00-21:00 11/21/1992/17:00-18:00 11/22/1992/01:00-03:00 11/22/1992/02:00-03:00 11/22/1992/15:00-16:00 11/22/1992/16:00-18:00 11/22/1992/20:00-23:00	-4.8 -21.7 -21.7 16.2 13 20.2 20.3 -19.5 -23.9 -54.3	-15 2.3 2.3 18.6 -3.7 29.1 29.6 -2.1 -7.3 -30.5	-10.5 -2.8 -2.8 9.8 4.9 28.8 28.8 -9.4 -11 -27.4	
November 1992 Tornado Outbreak, 11/21-23  Catoosa Tornado Outbreak, [1st DST]  Early-May 1993 Tornado	F4 - MN F5 - MN F4 - TX F4 - TX F4 - MS F4 - MS F4 - GA F4 - KY and IN F4 - GA F4 - CK	6/16/1992/18:00-19:00 6/16/1992/18:00-19:00 6/27/1992/20:00-21:00 11/21/1992/17:00-18:00 11/22/1992/01:00-03:00 11/22/1992/02:00-03:00 11/22/1992/16:00-16:00 11/22/1992/16:00-18:00 11/22/1992/16:00-20:00 4/24/1993/19:00-20:00 5/5/1993/21:00-22:00	-4.8 -21.7 -21.7 16.2 13 20.2 20.3 -19.5 -23.9 -54.3 22.3 17.5	-15 2.3 2.3 18.6 -3.7 29.1 29.6 -2.1 -7.3 -30.5 34.3 28.9	-10.5 -2.8 -2.8 9.8 4.9 28.8 28.8 -9.4 -11 -27.4 22.9 18.6	
November 1992 Tornado Outbreak, 11/21-23  Catoosa Tornado Outbreak, [1st DST]  Early-May 1993 Tornado  Russel-Osborne Tornado	F4 - MN F5 - MN F4 - TX F4 - TX F4 - MS F4 - MS F4 - GA F4 - KY and IN F4 - GA F4 - OK F4 - KS F4 - KS	6/16/1992/18:00-19:00 6/16/1992/18:00-19:00 6/27/1992/20:00-21:00 11/21/1992/17:00-18:00 11/22/1992/01:00-03:00 11/22/1992/02:00-03:00 11/22/1992/15:00-16:00 11/22/1992/15:00-18:00 11/22/1992/22:00-23:00 4/24/1993/19:00-20:00 5/5/1993/21:00-22:00	-4.8 -21.7 -21.7 16.2 13 20.2 20.3 -19.5 -23.9 -54.3 22.3 17.5 -6.7	-15 2.3 2.3 18.6 -3.7 29.1 29.6 -2.1 -7.3 -30.5 34.3 28.9	-10.5 -2.8 -2.8 9.8 4.9 28.8 28.8 -9.4 -11 -27.4 22.9 18.6 -2.6	
November 1992 Tornado Outbreak, 11/21-23  Catoosa Tornado Outbreak, [1st DST]  Early-May 1993 Tornado	F4 - MN F5 - MN F4 - TX F4 - TX F4 - MS F4 - MS F4 - GA F4 - GA F4 - GA F4 - GA F4 - CK F4 - CK F4 - KS F4 - KS F4 - KS	6/16/1992/18:00-19:00 6/16/1992/18:00-19:00 6/27/1992/20:00-21:00 11/21/1992/17:00-18:00 11/22/1992/01:00-03:00 11/22/1992/02:00-03:00 11/22/1992/15:00-16:00 11/22/1992/15:00-16:00 11/22/1992/16:00-18:00 11/22/1992/16:00-20:00 4/24/1993/19:00-20:00 5/5/1993/21:00-22:00 6/7/1993/17:00-18:00	-4.8 -21.7 -21.7 16.2 13 20.2 20.3 -19.5 -23.9 -54.3 22.3 17.5 -6.7 -16.8	-15 2.3 2.3 18.6 -3.7 29.1 29.6 -2.1 -7.3 -30.5 34.3 28.9 15.1 -20	-10.5 -2.8 -2.8 9.8 4.9 28.8 28.8 -9.4 -11 -27.4 22.9 18.6 -2.6 -17.9	
November 1992 Tornado Outbreak, 11/21-23  Catoosa Tornado Outbreak, [1st DST]  Early-May 1993 Tornado  Russel-Osborne Tornado  June 1993 Tornado Outbreak, 6/7/17:00-18:00	F4 - MN F5 - MN F4 - TX F4 - TX F4 - MS F4 - MS F4 - GA F4 - GA F4 - GA F4 - CA F4 - CA F4 - CS F4 - KS F4 - SD F4 - SD	6/16/1992/18:00-19:00 6/16/1992/18:00-19:00 6/27/1992/20:00-21:00 11/21/1992/17:00-18:00 11/22/1992/01:00-03:00 11/22/1992/02:00-03:00 11/22/1992/15:00-16:00 11/22/1992/16:00-18:00 11/22/1992/16:00-23:00 4/24/1993/19:00-20:00 5/5/1993/21:00-22:00 6/7/1993/17:00-18:00 6/7/1993/17:00-18:00	-4.8 -21.7 -21.7 -16.2 -13 -20.2 -20.3 -19.5 -23.9 -54.3 -22.3 -17.5 -6.7 -16.8 -16.8	-15 2.3 2.3 18.6 -3.7 29.1 29.6 -2.1 -7.3 -30.5 34.3 28.9 15.1 -20 -20	-10.5 -2.8 -2.8 9.8 4.9 28.8 28.8 -9.4 -11 -27.4 22.9 18.6 -2.6 -17.9 -17.9	
November 1992 Tornado Outbreak, 11/21-23  Catoosa Tornado Outbreak, [1st DST] Early-May 1993 Tornado Russel-Osborne Tornado June 1993 Tornado Outbreak, 6/7/17:00-18:00  Virginia Tornado Outbreak, [last DST]	F4 - MN F5 - MN F4 - TX F4 - TX F4 - MS F4 - GA F4 - KY and IN F4 - GA F4 - KS F4 - KS F4 - KS F4 - KS F4 - SD F4 - SD F4 - SD	6/16/1992/18:00-19:00 6/16/1992/18:00-19:00 6/16/1992/18:00-19:00 6/27/1992/20:00-21:00 11/21/1992/07:00-18:00 11/22/1992/07:00-03:00 11/22/1992/07:00-03:00 11/22/1992/15:00-16:00 11/22/1992/16:00-18:00 11/22/1992/16:00-18:00 11/22/1993/19:00-20:00 5/5/1993/19:00-20:00 5/7/1993/17:00-18:00 8/6/1993/17:00-18:00 8/6/1993/17:00-18:00	-4.8 -21.7 -21.7 -21.7 -16.2 13 20.2 20.3 -19.5 -23.9 -54.3 22.3 17.5 -6.7 -16.8 -16.8	-15 23 23 18.6 -3.7 29.1 29.6 -2.1 -7.3 -30.5 34.3 28.9 15.1 -20 -20 -14.2	-10.5 -2.8 -2.8 9.8 4.9 28.8 28.8 -9.4 -11 -27.4 22.9 18.6 -2.6 -17.9 -17.9	Averaged
November 1992 Tornado Outbreak, 11/21-23  Catoosa Tornado Outbreak, [1st DST]  Early-May 1993 Tornado  Russel-Osborne Tornado  June 1993 Tornado Outbreak, 6/7/17:00-18:00	F4 - MN F5 - MN F4 - TX F4 - TX F4 - MS F4 - GA F4 - GA F4 - GA F4 - GA F4 - OK F4 - KS F4 - SD F4 - SD F4 - SD F4 - VA	6/16/1992/18:00-19:00 6/16/1992/18:00-19:00 6/27/1992/20:00-21:00 11/21/1992/17:00-18:00 11/22/1992/01:00-03:00 11/22/1992/02:00-03:00 11/22/1992/15:00-16:00 11/22/1992/16:00-18:00 11/22/1992/16:00-23:00 4/24/1993/19:00-20:00 5/5/1993/21:00-22:00 6/7/1993/17:00-18:00 6/7/1993/17:00-18:00	-4.8 -21.7 -21.7 -16.2 -13 -20.2 -20.3 -19.5 -23.9 -54.3 -22.3 -17.5 -6.7 -16.8 -16.8	-15 2.3 2.3 18.6 -3.7 29.1 29.6 -2.1 -7.3 -30.5 34.3 28.9 15.1 -20 -20	-10.5 -2.8 -2.8 9.8 4.9 28.8 28.8 -9.4 -11 -27.4 22.9 18.6 -2.6 -17.9 -17.9	
November 1992 Tornado Outbreak, 11/21-23  Catoosa Tornado Outbreak, [1st DST] Early-May 1993 Tornado Russel-Osborne Tornado June 1993 Tornado Outbreak, 6/7/17:00-18:00  Virginia Tornado Outbreak, [last DST]	F4 - MN F5 - MN F4 - TX F4 - TX F4 - MS F4 - GA F4 - KY and IN F4 - GA F4 - KS F4 - KS F4 - KS F4 - KS F4 - SD F4 - SD F4 - SD	6/16/1992/18:00-19:00 6/16/1992/18:00-19:00 6/16/1992/18:00-19:00 6/27/1992/20:00-21:00 11/21/1992/07:00-18:00 11/22/1992/07:00-03:00 11/22/1992/07:00-03:00 11/22/1992/15:00-16:00 11/22/1992/16:00-18:00 11/22/1992/16:00-18:00 11/22/1993/19:00-20:00 5/5/1993/19:00-20:00 5/7/1993/17:00-18:00 8/6/1993/17:00-18:00 8/6/1993/17:00-18:00	-4.8 -21.7 -21.7 -21.7 -16.2 13 20.2 20.3 -19.5 -23.9 -54.3 22.3 17.5 -6.7 -16.8 -16.8	-15 23 23 18.6 -3.7 29.1 29.6 -2.1 -7.3 -30.5 34.3 28.9 15.1 -20 -20 -14.2	-10.5 -2.8 -2.8 9.8 4.9 28.8 28.8 -9.4 -11 -27.4 22.9 18.6 -2.6 -17.9 -17.9	Averaged
November 1992 Tornado Outbreak, 11/21-23  Catoosa Tornado Outbreak, [1st DST]  Early-May 1993 Tornado  Russel-Osborne Tornado  June 1993 Tornado Outbreak, 6/7/17:00-18:00  Virginia Tornado Outbreak, [last DST]  March 1994 Tornado Outbreak, 3/27/11:00-13:00	F4 - MN F5 - MN F4 - TX F4 - TX F4 - MS F4 - MS F4 - GA F4 - GA F4 - GA F4 - GA F4 - SD F4 - SA	6/16/1992/18:00-19:00 6/16/1992/18:00-19:00 6/16/1992/18:00-19:00 6/27/1992/20:00-21:00 11/21/1992/17:00-18:00 11/22/1992/01:00-03:00 11/22/1992/02:00-03:00 11/22/1992/16:00-16:00 11/22/1992/16:00-18:00 11/22/1992/22:00-23:00 4/24/1993/19:00-20:00 5/5/1993/21:00-20:00 6/7/1993/17:00-18:00 6/7/1993/17:00-18:00 8/6/1993/11:00-12:00 3/27/1994/11:00-13:00	-4.8 -21.7 -21.7 16.2 13 20.2 20.3 -19.5 -23.9 -54.3 22.3 17.5 -6.7 -16.8 -16.8 -34.6 9.6	-15 2.3 2.3 18.6 -3.7 29.1 29.6 -2.1 -7.3 -30.5 34.3 28.9 15.1 -20 -20 -14.2 -2.6	-10.5 -2.8 -2.8 9.8 4.9 28.8 28.8 -9.4 -11 -27.4 22.9 18.6 -2.6 -17.9 -17.9 -19.8 5.5	Averaged
November 1992 Tornado Outbreak, 11/21-23  Catoosa Tornado Outbreak, [1st DST] Early-May 1993 Tornado Russel-Osborne Tornado June 1993 Tornado Outbreak, 6/7/17:00-18:00  Virginia Tornado Outbreak, [last DST]	F4 - MN F5 - MN F4 - TX F4 - TX F4 - TX F4 - MS F4 - MS F4 - GA F4 - KY and IN F4 - GA F4 - KS F4 - KS F4 - KS F4 - SD F4 - SD F4 - VA F4 - AL F4 - GA F4 - TX	6/16/1992/18:00-19:00 6/16/1992/18:00-19:00 6/16/1992/18:00-19:00 6/27/1992/20:00-21:00 11/21/1992/17:00-18:00 11/22/1992/01:00-03:00 11/22/1992/01:00-03:00 11/22/1992/15:00-16:00 11/22/1992/15:00-18:00 11/22/1992/15:00-20:00 5/7/1993/19:00-20:00 6/7/1993/17:00-18:00 6/7/1993/17:00-18:00 8/6/1993/11:00-13:00 3/27/1994/11:00-13:00 4/25/1994/10:00-11:00	-4.8 -21.7 -21.7 16.2 13 20.2 20.3 -19.5 -23.9 -54.3 27.5 -6.7 -16.8 -16.8 -34.6 9.6 13 3.5	-15 2.3 2.3 18.6 -3.7 29.1 29.6 -2.1 -7.3 -30.5 34.3 28.9 15.1 -20 -20 -14.2 -2.6 -2 -0.5	-10.5 -2.8 -2.8 9.8 4.9 28.8 28.8 -9.4 -11 -27.4 22.9 18.6 -2.6 -17.9 -19.8 5.5 6.6 0.3	Averaged  Averaged
November 1992 Tornado Outbreak, 11/21-23  Catoosa Tornado Outbreak, [1st DST]  Early-May 1993 Tornado  Russel-Osborne Tornado  June 1993 Tornado Outbreak, 6/7/17:00-18:00  Virginia Tornado Outbreak, [last DST]  March 1994 Tornado Outbreak, 3/27/11:00-13:00	F4 - MN F5 - MN F4 - TX F4 - TX F4 - MS F4 - MS F4 - GA F4 - GA F4 - GA F4 - GA F4 - SD F4 - SA	6/16/1992/18:00-19:00 6/16/1992/18:00-19:00 6/76/1992/20:00-21:00 11/21/1992/20:00-21:00 11/22/1992/01:00-03:00 11/22/1992/01:00-03:00 11/22/1992/15:00-16:00 11/22/1992/15:00-16:00 11/22/1992/15:00-20:00 11/22/1992/20:00-20:00 5/5/1993/21:00-20:00 5/7/1993/19:00-18:00 6/7/1993/17:00-18:00 6/7/1993/11:00-12:00 3/27/1994/11:00-13:00 3/27/1994/11:00-13:00	-4.8 -21.7 -21.7 -21.7 -16.2 -13 -20.2 -20.3 -19.5 -23.9 -54.3 -22.3 -17.5 -6.7 -16.8 -16.8 -34.6 -9.6 -13	-15 2.3 2.3 18.6 -3.7 29.1 29.6 -2.1 -7.3 -30.5 34.3 28.9 15.1 -20 -20 -14.2 -2.6 -2	-10.5 -2.8 -2.8 9.8 4.9 28.8 28.8 -9.4 -11 -27.4 22.9 18.6 -2.6 -17.9 -17.9 -19.8 5.5 6.6	Averaged

May 1995 Tornado Outbreak, 5/13/17:00-20:00, [1st DST]	F4 - IL	5/13/1995/17:00-18:00	-33.4	-47.6	-32.9	
	F4 - IL	5/13/1995/18:00-20:00	-42.4	-54.7	-39.2	Averaged
Mid-May 1995 Tornado Outbreak, 5/18/17:00-19:00	F4 - TN	5/18/1995/17:00-19:00	-7.5	-24.7	-15.7	Averaged
Wild-Way 1995 Torriado Odibreak, 5/10/17:00-19:00						Averageu
	F4 - GA	5/18/1995/18:00-19:00	-5.9	-22.4	-14.6	
Late-May 1995 Tornado Outbreak, 5/27/20:00-22:00	F4 - IA	5/27/1995/20:00-21:00	1.8	-5.6	-3.5	
	F4 - IA	5/27/1995/20:00-22:00	0.3	-6.3	-4.8	Averaged
	F4 - IA	5/27/1995/20:00-22:00	0.3	-6.3	-4.8	Averaged
Late May 4005 Towards						7. Workinger
<u>Late-May 1995 Tornado</u>	F4 - MA	5/29/1995/17:00-18:00	9.4	7.4	7.1	
June 1995 Tornado Outbreak, 6/8/17:00-21:00, [last DST]	F4 - TX	6/8/1995/17:00-18:00	24.9	15.1	15.1	
	F4 - TX	6/8/1995/19:00-20:00	26.8	21.5	17.7	
	F4 - TX	6/8/1995/20:00-21:00	21.1	19.7	14.9	
Marian 1005 Tarnada	F4 - SC	11/7/1995/16:00-17:00	-7.1	-5.7	-7.3	
Marion 1995 Tornado						
April 1996 Tornado, [1st DST]	F4 - AR	4/14/1996/20:00-21:00	-56.3	-28.8	-23.5	
Kentucky Tornado Outbreak	F4 - KY	5/28/1996/18:00-19:00	13.6	-2	9.9	
Oakfield Tornado Outbreak, [last DST]	F5 - WI	7/18/1996/20:00-21:00	0.7	4.7	-3.5	
January 1997 Tornado Outbreak, 1/23-25	F4 - TN	1/24/1997/19:00-20:00	4.9	1.7	-0.8	
March 1997 Tornado Outbreak, 2/28-3/1	F4 - AR	3/1/1997/16:00-17:00	-24.5	-26.7	-21.2	
	F4 - AR	3/1/1997/16:00-17:00	-24.5	-26.7	-21.2	
	F4 - AR	3/1/1997/17:00-18:00	-16.9	-23.3	-19.4	
	F4 - AR	3/1/1997/17:00-18:00	-16.9	-23.3	-19.4	
	F4 - AR	3/1/1997/20:00-21:00	-22.1	-23.7	-23.5	
	F4 - TN	3/1/1997/21:00-22:00	-17.9	-25.6	-22.3	
	F4 - TN	3/1/1997/21:00-22:00	-17.9	-25.6	-22.3	
1997 Central Texas Tornado Outbreak, 5/27/16:00-19:00, [DST]	F5 - TX	5/27/1997/16:00-17:00	-51.5	-37	-46.5	
	F4 - TX	5/27/1997/17:00-19:00	-47	-35.5	-44.3	Averaged
Overfee Of Detection to Output						
Comfrey - St. Peter Tornado Outbreak	F4 - MN	3/29/1988/17:00-19:00	-43.35	-41.9	-40.2	Averaged
Early-April 1998 Tornado Outbreak, 4/6-9, [1st DST]	F5 - AL	4/8/1998/19:00-20:00	-1.6	7.6	2.1	
Mid-April 1998 Tornado Outbreak, 4/15-16	F4 - AR	4/16/1998/03:00-05:00	10.4	19.1	18.3	Averaged
	F4 - TN	4/16/1998/17:00-19:00	14.2	19.7	16.3	Averaged
Coldwell Ternada	F4 - NC	5/7/1998/16:00-18:00	-25.6	-16.6	-20.8	
Caldwell Tornado						Averaged
Late-May 1998 Tornado Outbreak and Derecho, 5/30-31	F4 - SD	5/30/1998/21:00-22:00	-18.1	-23.1	-20.5	
Eastern Tornado Outbreak	F4 - PA and MD	6/2/1998/20:00-21:00	-3.9	4.1	0.6	
Mid-June 1998 Tornado, [last DST]	F4 - IN	6/11/1998/18:00-19:00	6.6	7.2	5.5	
Mid-January 1999 Tornado Outbreak, 1/17-18	F4 - MS	1/17/1999/19:00-20:00	7.8	-6.3	3.7	
	F4 - AR					
<u>Late-January 1999 Tornado</u>		1/21/1999/19:00-20:00	9.2	-13.8	-0.8	
Easter Weekend Tornado Outbreak, 4/2-3	F4 - LA	4/3/1999/16:00-18:00	-5	-2.5	1.1	Averaged
April 1999 Tornado Outbreak, 4/8-9, [1st DST]	F4 - IA	4/8/1999/15:00-17:00	9.8	1.3	-0.8	Averaged
	F4 - IA	4/8/1999/16:00-17:00	15.7	-3.7	-1.9	
	F4 - OH	4/9/1999/04:00-05:00				
					2.0	
Oklahoma Tornado Outbreak, 5/2-8			3.9	7.6	2.9	
	F5 - OK	5/3/1999/19:00-20:00	2.1	-30.1	-10	
	F5 - OK F4 - KS					
		5/3/1999/19:00-20:00	2.1	-30.1	-10	
	F4 - KS F4 - OK	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/22:00-23:00	2.1 4.8 3.7	-30.1 -15.7 -9.2	-10 -4.5 -5.6	
	F4 - KS F4 - OK F4 - OK	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/22:00-23:00 5/3/1999/22:00-23:00	2.1 4.8 3.7 3.7	-30.1 -15.7 -9.2 -9.2	-10 -4.5 -5.6 -5.6	
	F4 - KS F4 - OK F4 - OK F4 - TN	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/22:00-23:00 5/3/1999/22:00-23:00 5/5/1999/21:00-22:00	2.1 4.8 3.7 3.7 28	-30.1 -15.7 -9.2 -9.2 27.6	-10 -4.5 -5.6 -5.6 24.4	
Mason 1999 Tornado	F4 - KS F4 - OK F4 - OK F4 - TN F4 - TX	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/22:00-23:00 5/3/1999/22:00-23:00 5/5/1999/21:00-22:00 5/11/1999/19:00-20:00	2.1 4.8 3.7 3.7 28 12.2	-30.1 -15.7 -9.2 -9.2 27.6 21.5	-10 -4.5 -5.6 -5.6 24.4 16.1	
Mason 1999 Tornado Pembina Tornado. [last DST]	F4 - KS F4 - OK F4 - OK F4 - TN	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/22:00-23:00 5/3/1999/22:00-23:00 5/5/1999/21:00-22:00	2.1 4.8 3.7 3.7 28	-30.1 -15.7 -9.2 -9.2 27.6	-10 -4.5 -5.6 -5.6 24.4	
Pembina Tornado, [last DST]	F4 - KS F4 - OK F4 - OK F4 - TN F4 - TX F4 - ND	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/22:00-23:00 5/3/1999/22:00-23:00 5/5/1999/21:00-22:00 5/11/1999/19:00-20:00 6/6/1999/16:00-17:00	2.1 4.8 3.7 3.7 28 12.2 28.2	-30.1 -15.7 -9.2 -9.2 27.6 21.5 22.5	-10 -4.5 -5.6 -5.6 24.4 16.1 20.9	Averaged
Pembina Tornado, [last DST] July 2000 Tornado, [1st DST]	F4 - KS F4 - OK F4 - OK F4 - TN F4 - TX F4 - ND F4 - MN	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/22:00-23:00 5/3/1999/22:00-23:00 5/3/1999/21:00-22:00 5/3/1999/19:00-20:00 6/6/1999/16:00-17:00 7/25/2000/18:00-20:00	2.1 4.8 3.7 3.7 28 12.2 28.2 -5.6	-30.1 -15.7 -9.2 -9.2 27.6 21.5 22.5 -37.6	-10 -4.5 -5.6 -5.6 24.4 16.1 20.9 -18.8	Averaged
Pembina Tornado. [last DST] July 2000 Tornado. [1st DST] September 2000 Tornado. [last DST]	F4 - KS F4 - OK F4 - OK F4 - TN F4 - TX F4 - ND F4 - MN F4 - OH	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/22:00-23:00 5/3/1999/22:00-23:00 5/5/1999/21:00-22:00 5/11/1999/19:00-20:00 6/6/1999/16:00-17:00 7/25/2000/18:00-20:00 9/20/2000/18:00-19:00	2.1 4.8 3.7 3.7 28 12.2 28.2 -5.6 -12.3	-30.1 -15.7 -9.2 -9.2 27.6 21.5 22.5 -37.6 -20.4	-10 -4.5 -5.6 -5.6 24.4 16.1 20.9 -18.8 -21.3	
Pembina Tornado. [last DST] July 2000 Tornado. [lst DST] September 2000 Tornado. [last DST] Tuscaloosa Tornado Outbreak	F4 - KS F4 - OK F4 - OK F4 - TN F4 - TX F4 - ND F4 - MN F4 - OH F4 - AL	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/22:00-23:00 5/3/1999/22:00-23:00 5/5/1999/21:00-22:00 5/11/1999/19:00-20:00 6/6/1999/16:00-17:00 7/25/2000/18:00-20:00 9/20/2000/18:00-19:00 12/16/2000/13:00-15:00	2.1 4.8 3.7 3.7 28 12.2 28.2 -5.6 -12.3 26.5	-30.1 -15.7 -9.2 -9.2 27.6 21.5 22.5 -37.6 -20.4 10.2	-10 -4.5 -5.6 -5.6 24.4 16.1 20.9 -18.8 -21.3	Averaged Averaged
Pembina Tornado. [last DST] July 2000 Tornado. [1st DST] September 2000 Tornado. [last DST]	F4 - KS F4 - OK F4 - OK F4 - TN F4 - TX F4 - ND F4 - MN F4 - OH	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/22:00-23:00 5/3/1999/22:00-23:00 5/5/1999/21:00-22:00 5/11/1999/19:00-20:00 6/6/1999/16:00-17:00 7/25/2000/18:00-20:00 9/20/2000/18:00-19:00	2.1 4.8 3.7 3.7 28 12.2 28.2 -5.6 -12.3	-30.1 -15.7 -9.2 -9.2 27.6 21.5 22.5 -37.6 -20.4	-10 -4.5 -5.6 -5.6 24.4 16.1 20.9 -18.8 -21.3	
Pembina Tornado. [last DST] July 2000 Tornado. [1st DST] September 2000 Tornado. [last DST] Tuscaloosa Tornado Outbreak April 2001 Tornado. [1st DST]	F4 - KS F4 - OK F4 - OK F4 - TN F4 - TX F4 - ND F4 - MN F4 - OH F4 - AL	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/22:00-23:00 5/3/1999/22:00-23:00 5/5/1999/21:00-22:00 5/11/1999/19:00-20:00 6/6/1999/16:00-17:00 7/25/2000/18:00-20:00 9/20/2000/18:00-19:00 12/16/2000/13:00-15:00	2.1 4.8 3.7 3.7 28 12.2 28.2 -5.6 -12.3 26.5	-30.1 -15.7 -9.2 -9.2 27.6 21.5 22.5 -37.6 -20.4 10.2	-10 -4.5 -5.6 -5.6 24.4 16.1 20.9 -18.8 -21.3	
Pembina Tornado. [last DST] July 2000 Tornado. [1st DST] September 2000 Tornado. [last DST] Tuscaloosa Tornado Outbreak April 2001 Tornado, [1st DST] June 2001 Tornado	F4 - KS F4 - OK F4 - OK F4 - TN F4 - TX F4 - ND F4 - MN F4 - OH F4 - AL F4 - KS F4 - NE	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/21:00-23:00 5/3/1999/22:00-23:00 5/3/1999/21:00-22:00 5/11/1999/19:00-20:00 6/6/1999/16:00-17:00 7/25/2000/18:00-20:00 9/20/2000/18:00-20:00 4/21/2001/22:00-23:00 6/13/2001/20:00-21:00	2.1 4.8 3.7 3.7 28 12.2 28.2 -5.6 -12.3 26.5 16.9 -1.2	-30.1 -15.7 -9.2 -9.2 27.6 21.5 22.5 -37.6 -20.4 10.2 15.2 -0.2	-10 -4.5 -5.6 -5.6 24.4 16.1 20.9 -18.8 -21.3 18.1 15.3 -5.2	
Pembina Tornado. [last DST] July 2000 Tornado. [1st DST] September 2000 Tornado. [last DST] Tuscaloosa Tornado Outbreak April 2001 Tornado. [1st DST] June 2001 Tornado September 2001 Tornado Outbreak, [last DST]	F4 - KS F4 - OK F4 - OK F4 - TN F4 - TX F4 - ND F4 - MN F4 - OH F4 - AL F4 - KS F4 - NE F4 - VA	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/22:00-23:00 5/3/1999/22:00-23:00 5/3/1999/21:00-22:00 5/3/1999/19:00-20:00 6/6/1999/16:00-17:00 7/25/2000/18:00-20:00 9/20/2000/18:00-19:00 12/16/2000/13:00-15:00 4/21/2001/22:00-23:00 6/13/2001/20:00-21:00 9/24/2001/14:00-15:00	2.1 4.8 3.7 3.7 28 12.2 28.2 -5.6 -12.3 26.5 16.9 -1.2 5.8	-30.1 -15.7 -9.2 -9.2 27.6 21.5 22.5 -37.6 -20.4 10.2 15.2 -0.2 -18.7	-10 -4.5 -5.6 -5.6 24.4 16.1 20.9 -18.8 -21.3 18.1 15.3 -5.2 -11.5	
Pembina Tornado. [last DST] July 2000 Tornado. [1st DST] September 2000 Tornado. [last DST] Tuscaloosa Tornado Outbreak April 2001 Tornado, [1st DST] June 2001 Tornado	F4 - KS F4 - OK F4 - OK F4 - TN F4 - TX F4 - ND F4 - MN F4 - OH F4 - AL F4 - KS F4 - NE F4 - WA F4 - MS	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/22:00-23:00 5/3/1999/22:00-23:00 5/3/1999/21:00-22:00 5/3/1999/21:00-22:00 5/11/1999/19:00-20:00 6/6/1999/16:00-17:00 7/25/2000/18:00-20:00 9/20/2000/18:00-19:00 12/16/2000/12:00-23:00 6/13/2001/20:00-21:00 9/24/2001/14:00-15:00 11/24/2001/03:00-04:00	2.1 4.8 3.7 3.7 28 12.2 28.2 -5.6 -12.3 26.5 16.9 -1.2 5.8 36.6	-30.1 -15.7 -9.2 -9.2 27.6 21.5 22.5 -37.6 -20.4 10.2 15.2 -0.2 -18.7 35.6	-10 -4.5 -5.6 -5.6 24.4 16.1 20.9 -18.8 -21.3 18.1 15.3 -5.2 -11.5	
Pembina Tornado. [last DST] July 2000 Tornado. [1st DST] September 2000 Tornado. [last DST] Tuscaloosa Tornado Outbreak April 2001 Tornado. [1st DST] June 2001 Tornado September 2001 Tornado Outbreak, [last DST]	F4 - KS F4 - OK F4 - OK F4 - TN F4 - TX F4 - ND F4 - MN F4 - OH F4 - AL F4 - KS F4 - NE F4 - VA F4 - MS F4 - AL	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/22:00-23:00 5/3/1999/22:00-23:00 5/3/1999/21:00-22:00 5/3/1999/19:00-20:00 6/6/1999/16:00-17:00 7/25/2000/18:00-20:00 9/20/2000/18:00-19:00 12/16/2000/13:00-15:00 4/21/2001/22:00-23:00 6/13/2001/20:00-21:00 9/24/2001/14:00-15:00	2.1 4.8 3.7 3.7 28 12.2 28.2 -5.6 -12.3 26.5 16.9 -1.2 5.8	-30.1 -15.7 -9.2 -9.2 27.6 21.5 22.5 -37.6 -20.4 10.2 15.2 -0.2 -18.7	-10 -4.5 -5.6 -5.6 24.4 16.1 20.9 -18.8 -21.3 18.1 15.3 -5.2 -11.5	
Pembina Tornado. [last DST] July 2000 Tornado. [1st DST] September 2000 Tornado. [last DST] Tuscaloosa Tornado Outbreak April 2001 Tornado. [1st DST] June 2001 Tornado September 2001 Tornado Outbreak, [last DST]	F4 - KS F4 - OK F4 - OK F4 - TN F4 - TX F4 - ND F4 - MN F4 - OH F4 - AL F4 - KS F4 - NE F4 - WA F4 - MS	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/22:00-23:00 5/3/1999/22:00-23:00 5/3/1999/21:00-22:00 5/3/1999/21:00-22:00 5/11/1999/19:00-20:00 6/6/1999/16:00-17:00 7/25/2000/18:00-20:00 9/20/2000/18:00-19:00 12/16/2000/12:00-23:00 6/13/2001/20:00-21:00 9/24/2001/14:00-15:00 11/24/2001/03:00-04:00	2.1 4.8 3.7 3.7 28 12.2 28.2 -5.6 -12.3 26.5 16.9 -1.2 5.8 36.6	-30.1 -15.7 -9.2 -9.2 27.6 21.5 22.5 -37.6 -20.4 10.2 15.2 -0.2 -18.7 35.6	-10 -4.5 -5.6 -5.6 24.4 16.1 20.9 -18.8 -21.3 18.1 15.3 -5.2 -11.5	
Pembina Tornado, [last DST] July 2000 Tornado, [1st DST] September 2000 Tornado, [last DST] Tuscaloosa Tornado Outbreak April 2001 Tornado, [last DST] June 2001 Tornado September 2001 Tornado Outbreak, [last DST] November 2001 Tornado Outbreak, 11/23-24	F4 - KS F4 - OK F4 - OK F4 - TN F4 - TX F4 - ND F4 - MN F4 - OH F4 - AL F4 - KS F4 - NE F4 - WA F4 - MS F4 - MS	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/21:00-23:00 5/3/1999/21:00-23:00 5/3/1999/21:00-23:00 5/3/1999/21:00-22:00 5/3/1999/19:00-20:00 6/6/1999/16:00-17:00 7/25/2000/18:00-19:00 12/16/2000/18:00-19:00 12/16/2000/13:00-15:00 4/21/2001/22:00-23:00 6/13/2001/20:00-21:00 9/24/2001/14:00-15:00 11/24/2001/15:00-16:00 11/24/2001/15:00-16:00 11/24/2001/15:00-16:00	2.1 4.8 3.7 28 12.2 28.2 -5.6 -12.3 26.5 16.9 -1.2 5.8 36.6 -188.5 -144.5	-30.1 -15.7 -9.2 -9.2 27.6 21.5 22.5 -37.6 -20.4 10.2 15.2 -0.2 -18.7 35.6 -196.4 -141.4	-10 -4.5 -5.6 -5.6 -24.4 -16.1 -20.9 -18.8 -21.3 -18.1 -5.3 -5.2 -11.5 -15.3 -194.3 -140.5	
Pembina Tornado. [last DST] July 2000 Tornado. [last DST] September 2000 Tornado. [last DST] Tuscaloosa Tornado Outbreak April 2001 Tornado, [1st DST] June 2001 Tornado September 2001 Tornado Outbreak, [last DST] November 2001 Tornado Outbreak, 11/23-24  Carter-Butler Tornado, [1st DST]	F4 - KS F4 - OK F4 - OK F4 - TN F4 - TX F4 - ND F4 - MN F4 - OH F4 - AL F4 - KS F4 - NE F4 - WA F4 - MS	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/21:00-22:00 5/3/1999/22:00-23:00 5/3/1999/22:00-23:00 5/3/1999/21:00-22:00 5/3/1999/21:00-22:00 5/3/1999/19:00-20:00 6/6/1999/16:00-17:00 7/25/2000/18:00-20:00 9/20/2000/18:00-19:00 12/16/2000/13:00-15:00 4/21/2001/12:00-23:00 6/13/2001/20:00-21:00 9/24/2001/14:00-15:00 11/24/2001/15:00-16:00 11/24/2001/15:00-16:00 11/24/2001/19:00-20:00 4/24/2001/17:00-18:00	2.1 4.8 3.7 28 12.2 28.2 -5.6 -12.3 26.5 16.9 -1.2 5.8 36.6 -188.5 -144.5 -6.9	-30.1 -15.7 -9.2 -9.2 27.6 21.5 22.5 -37.6 -20.4 10.2 15.2 -0.2 -18.7 35.6 -196.4 -141.4 -15.9	-10 -4.5 -5.6 -5.6 -24.4 16.1 20.9 -18.8 -21.3 18.1 15.3 -5.2 -11.5 15.3 -194.3 -140.5 -11.4	Averaged
Pembina Tornado. [last DST] July 2000 Tornado. [last DST] September 2000 Tornado. [last DST] Tuscaloosa Tornado Outbreak April 2001 Tornado. [last DST] June 2001 Tornado September 2001 Tornado Outbreak, [last DST] November 2001 Tornado Outbreak, 11/23-24  Carter-Butler Tornado. [1st DST] Midwest to Mid-Atlantic Tornado Outbreak, 4/27-28	F4 - KS F4 - OK F4 - OK F4 - TN F4 - TX F4 - ND F4 - MN F4 - OH F4 - AL F4 - KS F4 - NE F4 - VA F4 - MS F4 - AL F4 - MS F4 - MS F4 - MD F4 - MD F4 - MD F4 - MD	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/21:00-22:00 5/3/1999/22:00-23:00 5/3/1999/21:00-22:00 5/3/1999/21:00-22:00 5/3/1999/19:00-20:00 6/6/1999/16:00-17:00 7/25/2000/18:00-20:00 9/20/2000/18:00-20:00 9/20/2000/18:00-20:00 4/21/2001/22:00-23:00 6/13/2001/20:00-21:00 9/24/2001/14:00-15:00 11/24/2001/15:00-16:00 11/24/2001/15:00-16:00 11/24/2001/15:00-20:00 4/24/2002/17:00-18:00 4/28/2002/18:00-20:00	2.1 4.8 3.7 3.7 28 12.2 28.2 -5.6 -12.3 26.5 16.9 -1.2 5.8 36.6 -188.5 -144.5 -6.9 -5.6	-30.1 -15.7 -9.2 -9.2 27.6 21.5 22.5 -37.6 -20.4 10.2 15.2 -0.2 -18.7 35.6 -196.4 -141.4 -15.9 6.9	-10 -4.5 -5.6 -5.6 -24.4 16.1 20.9 -18.8 -21.3 18.1 15.3 -5.2 -11.5 15.3 -194.3 -140.5 -11.4 -4.5	
Pembina Tornado, [last DST] July 2000 Tornado, [1st DST] September 2000 Tornado, [last DST] Tuscaloosa Tornado Outbreak April 2001 Tornado, [1st DST] June 2001 Tornado September 2001 Tornado Outbreak, [last DST] November 2001 Tornado Outbreak, 11/23-24  Carter-Butler Tornado, [1st DST] Midwest to Mid-Atlantic Tornado Outbreak, 4/27-28 June 2002 Tornado	F4 - KS F4 - OK F4 - OK F4 - TN F4 - TX F4 - ND F4 - MN F4 - OH F4 - AL F4 - KS F4 - NE F4 - MS F4 - AL F4 - MS F4 - MS F4 - MS F4 - MS F4 - MO F4 - MD F4 - SD	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/22:00-23:00 5/3/1999/22:00-23:00 5/3/1999/22:00-23:00 5/3/1999/21:00-22:00 5/3/1999/21:00-22:00 5/3/1999/16:00-17:00 7/25/2000/18:00-20:00 9/20/2000/18:00-19:00 12/16/2000/13:00-15:00 4/21/2001/22:00-23:00 6/13/2001/20:00-21:00 9/24/2001/14:00-15:00 11/24/2001/13:00-04:00 11/24/2001/19:00-20:00 4/24/2001/19:00-20:00 4/24/2002/17:00-18:00 4/28/2002/18:00-20:00 6/23/2002/21:00-22:00	2.1 4.8 3.7 3.7 28 12.2 28.2 -5.6 -12.3 26.5 16.9 -1.2 5.8 36.6 -188.5 -144.5 -6.9 -5.6 1.1	-30.1 -15.7 -9.2 -9.2 27.6 21.5 22.5 -37.6 -20.4 10.2 15.2 -0.2 -18.7 35.6 -196.4 -141.4 -15.9 6.9	-10 -4.5 -5.6 -5.6 -24.4 -16.1 -20.9 -18.8 -21.3 -18.1 -15.3 -5.2 -11.5 -15.3 -194.3 -140.5 -11.4 -4.5 -1.7	Averaged
Pembina Tornado, [last DST] July 2000 Tornado, [1st DST] September 2000 Tornado, [last DST] Tuscaloosa Tornado Outbreak April 2001 Tornado, [1st DST] June 2001 Tornado September 2001 Tornado Outbreak, [last DST] November 2001 Tornado Outbreak, 11/23-24  Carter-Butler Tornado, [1st DST] Midwest to Mid-Atlantic Tornado Outbreak, 4/27-28	F4 - KS F4 - OK F4 - OK F4 - TN F4 - TX F4 - ND F4 - MN F4 - OH F4 - AL F4 - KS F4 - NE F4 - VA F4 - MS F4 - AL F4 - MS F4 - MS F4 - MD F4 - MD F4 - MD F4 - MD	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/21:00-22:00 5/3/1999/22:00-23:00 5/3/1999/21:00-22:00 5/3/1999/21:00-22:00 5/3/1999/19:00-20:00 6/6/1999/16:00-17:00 7/25/2000/18:00-20:00 9/20/2000/18:00-20:00 9/20/2000/18:00-20:00 4/21/2001/22:00-23:00 6/13/2001/20:00-21:00 9/24/2001/14:00-15:00 11/24/2001/15:00-16:00 11/24/2001/15:00-16:00 11/24/2001/15:00-20:00 4/24/2002/17:00-18:00 4/28/2002/18:00-20:00	2.1 4.8 3.7 3.7 28 12.2 28.2 -5.6 -12.3 26.5 16.9 -1.2 5.8 36.6 -188.5 -144.5 -6.9 -5.6	-30.1 -15.7 -9.2 -9.2 27.6 21.5 22.5 -37.6 -20.4 10.2 15.2 -0.2 -18.7 35.6 -196.4 -141.4 -15.9 6.9	-10 -4.5 -5.6 -5.6 -24.4 16.1 20.9 -18.8 -21.3 18.1 15.3 -5.2 -11.5 15.3 -194.3 -140.5 -11.4 -4.5	Averaged
Pembina Tornado, [last DST] July 2000 Tornado, [1st DST] September 2000 Tornado, [last DST] Tuscaloosa Tornado Outbreak April 2001 Tornado, [1st DST] June 2001 Tornado September 2001 Tornado Outbreak, [last DST] November 2001 Tornado Outbreak, [last DST] November 2001 Tornado Outbreak, 11/23-24  Carter-Butler Tornado, [1st DST] Midwest to Mid-Atlantic Tornado Outbreak, 4/27-28 June 2002 Tornado August 2002 Tornado, [last DST]	F4 - KS F4 - OK F4 - OK F4 - TN F4 - TX F4 - ND F4 - MN F4 - OH F4 - AL F4 - KS F4 - NE F4 - VA F4 - MS F4 - AL F4 - MS F4 - MS F4 - MD F4 - MD F4 - MD F4 - ND F4 - ND	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/21:00-22:00 5/3/1999/21:00-22:00 5/3/1999/21:00-22:00 5/3/1999/21:00-22:00 5/3/1999/16:00-17:00 7/25/2000/18:00-19:00 12/16/2000/18:00-19:00 12/16/2000/18:00-19:00 4/21/2001/22:00-23:00 6/13/2001/20:00-21:00 9/24/2001/14:00-15:00 11/24/2001/13:00-04:00 11/24/2001/15:00-16:00 11/24/2001/15:00-16:00 11/24/2001/18:00-20:00 4/28/2002/18:00-20:00 6/23/2002/21:00-22:00 8/11/2002/17:00-18:00	2.1 4.8 3.7 3.7 28 12.2 28.2 -5.6 -12.3 26.5 16.9 -1.2 5.8 36.6 -188.5 -144.5 -6.9 1.1 -2.5	-30.1 -15.7 -9.2 -9.2 27.6 21.5 22.5 -37.6 -20.4 10.2 15.2 -0.2 -18.7 35.6 -196.4 -141.4 -15.9 6.9	-10 -4.5 -5.6 -5.6 -5.6 24.4 16.1 20.9 -18.8 -21.3 18.1 15.3 -5.2 -11.5 15.3 -194.3 -140.5 -11.4 -4.5 -1.7 -12.4	Averaged
Pembina Tornado, [last DST] July 2000 Tornado, [1st DST] September 2000 Tornado, [last DST] Tuscaloosa Tornado Outbreak April 2001 Tornado, [1st DST] June 2001 Tornado September 2001 Tornado Outbreak, [last DST] November 2001 Tornado Outbreak, 11/23-24  Carter-Butler Tornado, [1st DST] Midwest to Mid-Atlantic Tornado Outbreak, 4/27-28 June 2002 Tornado	F4 - KS F4 - OK F4 - OK F4 - TN F4 - TX F4 - ND F4 - MN F4 - OH F4 - AL F4 - KS F4 - NE F4 - MS F4 - AL F4 - MS F4 - MS F4 - MS F4 - MS F4 - MO F4 - MD F4 - SD	5/3/1999/19:00-20:00 5/3/1999/21:00-22:00 5/3/1999/22:00-23:00 5/3/1999/22:00-23:00 5/3/1999/22:00-23:00 5/3/1999/21:00-22:00 5/3/1999/21:00-22:00 5/3/1999/16:00-17:00 7/25/2000/18:00-20:00 9/20/2000/18:00-19:00 12/16/2000/13:00-15:00 4/21/2001/22:00-23:00 6/13/2001/20:00-21:00 9/24/2001/14:00-15:00 11/24/2001/13:00-04:00 11/24/2001/19:00-20:00 4/24/2001/19:00-20:00 4/24/2002/17:00-18:00 4/28/2002/18:00-20:00 6/23/2002/21:00-22:00	2.1 4.8 3.7 3.7 28 12.2 28.2 -5.6 -12.3 26.5 16.9 -1.2 5.8 36.6 -188.5 -144.5 -6.9 -5.6 1.1	-30.1 -15.7 -9.2 -9.2 27.6 21.5 22.5 -37.6 -20.4 10.2 15.2 -0.2 -18.7 35.6 -196.4 -141.4 -15.9 -9.4 -18.6	-10 -4.5 -5.6 -5.6 -24.4 -16.1 -20.9 -18.8 -21.3 -18.1 -15.3 -5.2 -11.5 -15.3 -194.3 -140.5 -11.4 -4.5 -1.7	Averaged

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	F4 - KS and MO	5/4/2003/17:00-18:00	12.6	13.9	8.2	
	F4 - MO	5/4/2003/17:00-18:00	12.6	13.9	8.2	
	F4 - TN	5/4/2003/22:00-23:00	27.8	32.6	17.9	
	F4 - IL	5/6/2003/22:00-23:00	-16.7	-25.9	-15.3	
	F4 - OK	5/8/2003/18:00-19:00	-14.6	-24.5	-21.7	
South Dakota Tornado Outbreak, 6/21-24, [last DST]	F4 - NE	6/23/2003/22:00-23:00	-12.7	-4.7	-13.5	
	F4 - SD	6/24/2003/20:00-21:00	-13.5	-13.5	-19.6	
Harper Tornado, [1st DST]	F4 - KS	5/12/2004/21:00-22:00	18.3	6.1	12.3	
May 2004 Tornado Outbreak, 5/21-31	F4 - NE	5/22/2004/20:00-21:00	16.8	22.2	18.3	
	F4 - MO	5/29/2004/23:00-00:00	2.4	5.8	5	
Roanoke Tornado Outbreak	F4 - IL	7/13/2004/15:00-16:00	-6.5	6.4	-0.6	
Barnes-LaMoure Tornado, [last DST]	F4 - ND	7/18/2004/21:00-22:00	4.7	-4.8	-1.3	
Mid-November 2005 Tornado Outbreak	F4 - KY	11/15/2005/17:00-18:00	1.4	-3.8	-3.9	
March 2006 Tornado	F4 - MO	3/12/2006/23:00-00:00	7	7.2	4.5	
Late-September Tornado Outbreak, 9/21-23, [DST]	F4 - MO and IL	9/22/2006/17:00-18:00	12.6	3.2	8.3	
February - March Tornado Outbreak	F4 - KS	2/28/2007/21:00-22:00	-27.6	-18.6	-16	
- Coldary Maior Formado Odioreak	F4 - AL	3/1/2007/14:00-15:00	-26	-14	-20.5	
	F4 - AL	3/1/2007/15:00-16:00	-22.8	-11.5	-15.8	
May 2007 Tornado Outbreak, 5/3-5, [1st DST]	F4 - KS	5/4/2007/22:00-23:00	-22.6	3.3	-3.3	
	F4 - ND	8/26/2007/21:00-22:00	-0.6	19.1	8.3	
August 2007 Tornado Outbreak, [last DST]	F4 - ND F4 - MS and TN	12/23/2015/18:00-19:00	-2.4	-8.7	-0.5	
December 2015 Tornado Outbreak, 12/23-25						
Late-December 2015 Tornado Outbreak, 12/26-28	F4 - TX	12/26/2015/20:00-21:00	-1.1	-12.9	1.1	
Early-May 2016 Tornado Outbreak, 5/7-10, [1st DST]	F4 - OK	5/9/2016/17:00-18:00	-24.3	-53.1	-25.6	
Late-May 2016 Tornado Outbreak, 5/22-26, [last DST]	F4 - KS	5/25/2016/20:00-21:00	2.9	15.9	9.9	
February - March 2017 Tornado Outbreak, 2/28-3/1	F4 - MO	2/28/2017/21:00-23:00	-352.2	6.7	-69.1	Averaged
April - May 2017 Tornado Outbreak, 4/28-5/1, [DST]	F4 - TX	4/29/2017/18:00-19:00	-123.3	4.2	-114.8	
Early-March 2019 Tornado Outbreak	F4 - AL	3/3/2019/16:00-18:00	-4.5	-9.7	-5.5	Averaged
			-14.32174393	-12.05275938	-12.43487859	
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