

1998

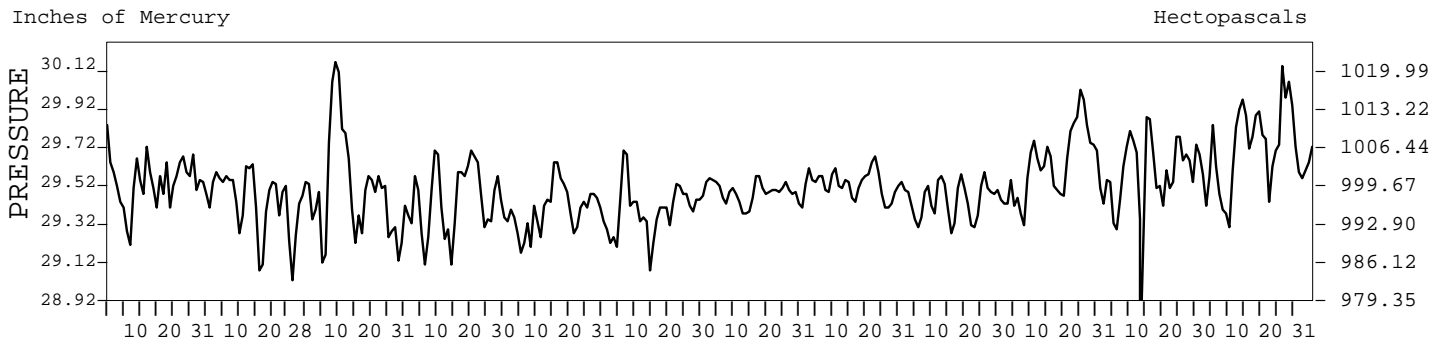
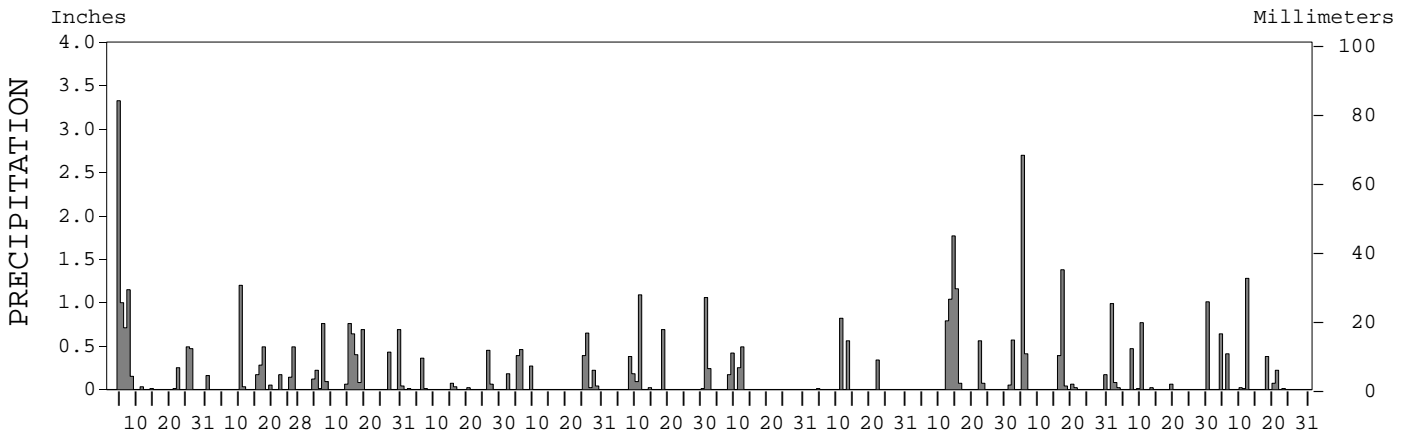
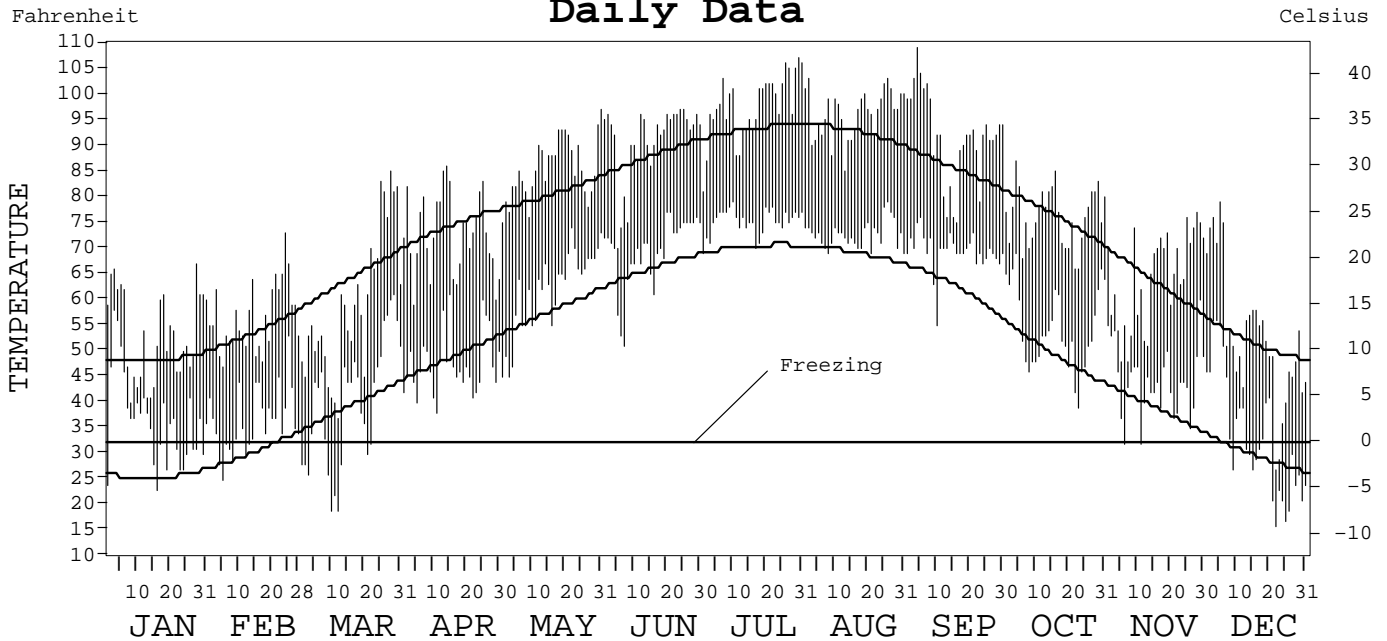
# LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA



ISSN 0198-0610

FORT SMITH,  
ARKANSAS (FSM)

## Daily Data



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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
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# METEOROLOGICAL DATA FOR 1998

## FORT SMITH, AR (FSM)

LATITUDE: 35° 20' 01" N      LONGITUDE: 94° 21' 54" W      ELEVATION (FT): GRND: 447      BARO: 464      TIME ZONE: CENTRAL (UTC+ 6)      WBAN: 13964

	ELEMENT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	53.1	56.6	59.1	72.9	85.4	90.9	97.7	96.2	91.6	76.2	64.2	52.9	74.7	
	HIGHEST DAILY MAXIMUM	67	73	85	86	97	97	107	103	109	87	77	79	109	
	DATE OF OCCURRENCE	28	24	28	14	31	25+	30	26+	04	04	28	05	SEP 04	
	MEAN DAILY MINIMUM	36.5	36.5	40.0	47.4	61.6	69.4	75.2	72.6	69.4	54.2	44.0	33.4	53.4	
	LOWEST DAILY MINIMUM	23	25	19	38	45	51	69	69	55	39	32	16	16	
	DATE OF OCCURRENCE	16	05	12+	11	03+	07	01	31+	10	23	11+	22	DEC 22	
	AVERAGE DRY BULB	44.8	46.6	49.6	60.2	73.5	80.2	86.5	84.4	80.5	65.2	54.1	43.2	64.1	
	MEAN WET BULB	42.2	43.0	45.5	53.6		73.5	76.9			59.8	49.6	39.5		
	MEAN DEW POINT	39.3	39.4	41.0	48.1		70.2	73.4			56.2	45.7	34.7		
	NUMBER OF DAYS WITH:														
	MAXIMUM ≥ 90°	0	0	0	0	8	24	27	29	21	0	0	0	109	
	MAXIMUM ≤ 32°	0	0	0	0	0	0	0	0	0	0	0	2	2	
	MINIMUM ≤ 32°	12	7	10	0	0	0	0	0	0	0	2	17	48	
MINIMUM ≤ 0°	0	0	0	0	0	0	0	0	0	0	0	0	0		
H/C	HEATING DEGREE DAYS	619	509	496	160	10	2	0	0	0	70	320	674	2860	
	COOLING DEGREE DAYS	0	0	25	24	281	467	671	611	473	84	3	3	2642	
RH	MEAN (PERCENT)	84	79	74	68	76	72	69	67	68	77	78	75	74	
	HOUR 06 LST	92	92	86	87	94	89	91	90	86	93	90	88	90	
	HOUR 12 LST	78	70	66	51	62	60	55	55	55	59	65	62	62	
	HOUR 18 LST	77	66	66	51	63	60	53	51	56	67	73	68	63	
	HOUR 24 LST	90	87	79	83	87	82	78	79	78	90	86	82	83	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	4	0	1	0	1	1	0	0	1	2	6	6	22	
	THUNDERSTORMS	3	2	5	6	8	8	6	6	3	5	2	0	54	
CLOUDINESS	SUNRISE-SUNSET: (OKTAS)														
	CEILOMETER (≤ 12,000 FT.)														
	SATELLITE (> 12,000 FT.)														
	MIDNIGHT-MIDNIGHT: (OKTAS)														
	CEILOMETER (≤ 12,000 FT.)														
	SATELLITE (> 12,000 FT.)														
	NUMBER OF DAYS WITH:														
	CLEAR														
	PARTLY CLOUDY														
	CLOUDY														
PR	MEAN STATION PRESS. (IN.)	29.52	29.42	29.48	29.43	29.38	29.38	29.47	29.51	29.42	29.61		29.70		
	MEAN SEA-LEVEL PRESS. (IN.)	30.02	29.91	29.98	29.92		29.86	29.95			30.10		30.21		
WINDS	RESULTANT SPEED (MPH)	1.1	1.5	0.7	2.9	1.3	0.8	0.6	0.9	1.2	1.7	1.1			
	RES. DIR. (TENS OF DEGS.)	04	30	26	27	18	15	25	03	02	07	06			
	MEAN SPEED (MPH)	7.1	6.8	10.0	8.6	6.0	7.4	5.9	6.0	6.1	5.6	6.3	5.9	6.8	
	PREVAIL. DIR. (TENS OF DEGS.)	09	26	09	27	09	16	08	06	09	09	07	09	09	
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)	22	28	41	37	28	34	24	29	30	26	39	28	41	
	DIR. (TENS OF DEGS.)	33	28	26	28	27	25	29	05	33	12	29	34	26	
	DATE OF OCCURRENCE	04	11	27+	06	26+	10	01	11	30+	02	10	29	MAR 27+	
	MAXIMUM 5-SECOND WIND:														
	SPEED (MPH)	31	34	49	43	32	47	31	36	39	32	66	33	66	
DIR. (TENS OF DEGS.)	31	30	26	28	29	24	28	06	33	14	29	20	29		
DATE OF OCCURRENCE	04	11	27	06	25+	10	01	11	30	02	10	06	NOV 10		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	7.76	3.02	4.99	1.01	2.62	2.46	2.63	1.73	5.46	5.79	3.43	3.04	43.94	
	GREATEST 24-HOUR (IN.)	3.33	1.23	1.12	0.51	0.65	1.09	1.06	0.82	2.05	3.11	1.01	1.29	3.33	
	DATE OF OCCURRENCE	04	10-11	15-16	26-27	26	11	01	11	13-14	05-06	30	11-12	JAN 04	
	NUMBER OF DAYS WITH:														
PRECIPITATION ≥ 0.01	12	9	14	8	9	7	6	4	7	10	9	9	104		
PRECIPITATION ≥ 0.10	9	7	9	2	7	4	6	3	5	6	4	5	67		
PRECIPITATION ≥ 1.00	3	1	0	0	0	1	1	0	3	2	1	1	13		
SNOWFALL	SNOW, ICE PELLETS, HAIL:														
	TOTAL (IN.)	0.0	0.0												
	GREATEST 24-HOUR (IN.)	0.0	0.0												
	DATE OF OCCURRENCE														
	MAXIMUM SNOW DEPTH (IN.)	0	0												
	DATE OF OCCURRENCE														
	NUMBER OF DAYS WITH:														
	SNOWFALL ≥ 1.0	0	0												

# NORMALS, MEANS, AND EXTREMES

## FORT SMITH, AR (FSM)

LATITUDE: 35° 20' 01" N      LONGITUDE: 94° 21' 54" W      ELEVATION (FT): GRND: 447      BARO: 464      TIME ZONE: CENTRAL (UTC+ 6)      WBAN: 13964

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	48.3	53.5	64.0	74.1	80.5	87.9	93.0	92.4	85.2	75.7	62.8	51.2	72.4
	MEAN DAILY MAXIMUM	38	48.1	54.1	63.8	73.7	80.5	88.0	93.1	92.2	84.8	75.4	61.9	51.3	72.2
	HIGHEST DAILY MAXIMUM	53	81	86	94	95	98	105	111	110	109	96	86	82	111
	YEAR OF OCCURRENCE		1952	1962	1974	1987	1951	1953	1954	1964	1998	1963	1987	1951	JUL 1954
	MEAN OF EXTREME MAXS.	51	70.3	74.8	83.0	87.7	91.0	96.1	100.8	100.6	96.4	90.0	79.3	72.6	86.9
	NORMAL DAILY MINIMUM	30	25.5	30.2	39.2	48.6	57.7	65.9	70.0	68.8	61.9	48.8	38.4	29.3	48.7
	MEAN DAILY MINIMUM	38	26.5	31.0	39.5	48.6	58.1	66.4	70.4	69.0	61.9	49.2	38.7	30.5	49.1
	LOWEST DAILY MINIMUM	53	-10	-9	7	22	35	47	50	51	33	22	8	-5	-10
	YEAR OF OCCURRENCE		1977	1951	1948	1975	1954	1972	1972	1986	1967	1952	1976	1989	JAN 1977
	MEAN OF EXTREME MINS.	51	10.0	15.0	22.2	32.2	43.7	54.9	61.5	59.0	45.3	32.8	21.5	14.5	34.4
	NORMAL DRY BULB	30	36.9	41.9	51.6	61.4	69.1	76.9	81.5	80.6	73.6	62.3	50.6	40.3	60.6
	MEAN DRY BULB	51	37.9	43.1	51.2	61.2	69.7	77.6	82.1	81.0	73.5	62.6	50.1	41.1	60.9
	MEAN WET BULB	47	33.9	37.8	44.7	53.7	62.6	69.7	72.9	71.5	65.5	55.2	44.6	36.6	54.1
	MEAN DEW POINT	47	27.8	31.5	37.4	47.1	58.3	66.1	69.1	67.6	61.2	50.0	38.7	30.8	48.8
	NORMAL NO. DAYS WITH:														
MAXIMUM ≥ 90°	30	0.0	0.0	0.2	0.8	2.7	13.2	23.3	21.9	10.1	1.9	0.0	0.0	74.1	
MAXIMUM ≤ 32°	30	3.9	1.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*	1.6	7.0	
MINIMUM ≤ 32°	30	24.0	16.8	7.5	1.0	0.0	0.0	0.0	0.0	0.0	0.7	8.3	20.1	78.4	
MINIMUM ≤ 0°	30	0.3	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	
H/C	NORMAL HEATING DEG. DAYS	30	871	647	426	151	36	0	0	0	13	136	432	766	3478
	NORMAL COOLING DEG. DAYS	30	0	0	10	43	164	357	512	484	271	53	0	0	1894
RH	NORMAL (PERCENT)	30	70	68	64	64	71	71	69	69	72	69	70	71	69
	HOUR 06 LST	30	76	75	73	74	83	83	81	81	84	82	80	78	79
	HOUR 12 LST	30	80	80	79	82	88	89	89	89	89	87	84	82	85
	HOUR 18 LST	30	60	57	53	50	57	57	54	53	56	51	56	61	55
	HOUR 24 LST	30	61	55	50	48	55	55	52	52	57	57	62	64	56
S	PERCENT POSSIBLE SUNSHINE	51	49	55	56	61	62	69	73	72	66	65	55	50	61
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	53	2.5	1.5	1.0	0.7	0.9	0.8	0.8	0.8	1.3	2.1	1.7	2.1	16.2
	THUNDERSTORMS	53	1.2	1.8	4.7	6.8	8.2	7.8	7.3	6.5	4.5	3.4	2.8	1.6	56.6
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)	1			4.8			4.0		2.4		3.6		6.4	
	MIDNIGHT-MIDNIGHT (OKTAS)	1			4.8					2.4		2.4			
	MEAN NO. DAYS WITH:														
	CLEAR	1	1.5	3.0	12.0		8.0	11.0	3.0	12.0	7.0	14.0		5.0	
PARTLY CLOUDY	1	1.0	4.0	1.0		2.0	5.0	1.0	1.0	4.0	1.0		3.0		
CLOUDY	1	4.0	2.0	9.0		7.0	7.0		2.0	7.0	4.0		10.0		
PR	MEAN STATION PRESSURE (IN)	26	29.66	29.61	29.50	29.48	29.45	29.47	29.51	29.52	29.55	29.59	29.59	29.65	29.55
	MEAN SEA-LEVEL PRES. (IN)	47	30.16	30.11	30.01	29.97	29.95	29.95	29.98	29.98	30.01	30.07	30.10	30.14	30.04
WINDS	MEAN SPEED (MPH)	33	8.4	8.5	9.4	9.1	7.6	6.8	6.4	6.3	6.6	6.9	7.9	8.1	7.7
	PREVAIL. DIR (TENS OF DEGS)	19	09	09	09	09	09	09	09	09	09	09	09	09	09
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	4	40	36	41	45	36	57	37	29	41	38	39	44	57
	DIR. (TENS OF DEGS)		28	24	26	26	26	28	29	08	03	28	29	22	28
	YEAR OF OCCURRENCE		1996	1996	1998	1995	1995	1996	1995	1995	1996	1995	1998	1996	JUN 1996
	MAXIMUM 5-SECOND:														
SPEED (MPH)	4	51	44	49	53	52	67	51	36	49	47	66	56	67	
DIR. (TENS OF DEGS)		27	25	26	27	24	28	20	06	04	30	29	22	28	
YEAR OF OCCURRENCE		1996	1997	1998	1995	1995	1996	1995	1998	1996	1995	1998	1996	JUN 1996	
PRECIPITATION	NORMAL (IN)	30	1.90	2.60	3.95	3.97	5.24	3.39	2.99	2.92	3.24	3.68	3.99	3.03	40.90
	MAXIMUM MONTHLY (IN)	53	11.33	7.94	8.52	10.32	13.45	10.40	10.41	6.57	8.96	12.05	14.01	10.09	14.01
	YEAR OF OCCURRENCE		1949	1951	1953	1957	1990	1958	1960	1971	1974	1951	1946	1971	NOV 1946
	MINIMUM MONTHLY (IN)	53	0.20	0.14	0.80	0.56	0.79	0.38	0.11	0.44	0.06	T	0.59	0.27	T
	YEAR OF OCCURRENCE		1986	1947	1971	1989	1970	1954	1947	1973	1956	1964	1954	1981	OCT 1964
	MAXIMUM IN 24 HOURS (IN)	53	5.42	4.45	3.62	5.12	5.56	3.48	7.13	5.09	3.95	5.90	6.91	5.78	7.13
	YEAR OF OCCURRENCE		1949	1985	1953	1964	1982	1977	1960	1971	1974	1951	1973	1971	JUL 1960
	NORMAL NO. DAYS WITH:														
PRECIPITATION ≥ 0.01	30	7.1	7.5	9.5	9.8	10.6	8.1	7.2	6.9	8.2	7.2	7.1	7.6	96.8	
PRECIPITATION ≥ 1.00	30	0.4	0.7	1.0	1.1	1.6	1.0	0.9	0.8	1.1	1.2	1.5	0.8	12.1	
SNOWFALL	NORMAL (IN)	30	3.0	2.0	0.8	T	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.1	7.4
	MAXIMUM MONTHLY (IN)	52	13.0	11.5	5.3	T	T	T	0.0	0.0	0.0	T	4.7	7.2	13.0
	YEAR OF OCCURRENCE		1977	1960	1968	1994	1992	1996				1993	1976	1975	JAN 1977
	MAXIMUM IN 24 HOURS (IN)	52	11.0	5.8	5.3	T	T	T	0.0	0.0	0.0	T	4.7	7.1	11.0
	YEAR OF OCCURRENCE		1988	1978	1968	1994	1992	1996				1993	1976	1975	JAN 1988
	MAXIMUM SNOW DEPTH (IN)	46	11	6	3	0	0	0	0	0	0	0	4	4	11
	YEAR OF OCCURRENCE		1988	1960	1989								1976	1963	JAN 1988
NORMAL NO. DAYS WITH:															
SNOWFALL ≥ 1.0	30	0.9	0.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	2.5	

PRECIPITATION (inches) 1998 FORT SMITH, AR (FSM)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1969	2.84	2.87	2.60	3.07	1.99	4.57	1.93	2.37	2.19	9.05	0.62	4.16	38.26
1970	0.75	1.98	3.22	9.42	0.79	3.19	0.97	3.11	7.75	8.41	1.21	1.41	42.21
1971	1.65	2.45	0.80	2.88	4.36	3.20	2.77	6.57	1.35	3.74	2.40	10.09	42.26
1972	0.68	1.01	1.28	2.62	2.33	1.51	4.85	1.13	3.47	6.43	6.63	1.61	33.55
1973	3.56	1.10	8.24	6.80	3.76	7.64	1.53	0.44	5.17	4.39	10.92	3.78	57.33
1974	0.96	1.80	4.09	4.96	1.93	4.68	0.64	6.22	8.96	3.82	4.27	2.33	44.66
1975	2.27	3.71	6.70	2.09	6.91	5.86	2.47	4.91	2.49	0.28	3.15	3.66	44.50
1976	0.33	0.70	4.20	3.77	4.91	4.62	1.29	2.82	2.65	5.39	1.05	1.82	33.55
1977	1.93	1.46	6.29	1.04	2.17	4.17	2.61	2.61	4.63	0.87	3.21	1.30	32.29
1978	2.15	2.66	4.20	1.94	5.16	3.05	0.49	0.47	0.84	0.17	7.12	3.26	31.51
1979	2.67	4.55	5.74	4.80	8.04	4.50	5.75	4.44	0.78	3.90	1.87	2.74	49.78
1980	0.99	0.74	2.98	2.24	4.61	3.20	1.43	0.65	3.16	3.24	1.90	1.32	26.46
1981	1.54	2.68	3.04	2.91	5.46	3.79	7.65	2.17	1.88	6.14	3.00	0.27	40.53
1982	4.15	1.33	1.99	1.27	11.23	4.99	4.81	2.35	0.64	3.50	5.72	6.01	47.99
1983	1.72	1.23	2.08	2.94	5.34	3.22	2.61	2.39	1.82	4.97	4.82	1.92	35.06
1984	0.80	2.60	4.13	2.16	4.70	1.87	3.33	2.00	6.18	11.80	7.33	6.16	53.06
1985	1.65	5.71	7.45	4.44	2.78	2.77	2.03	3.57	3.60	4.88	10.73	0.40	50.01
1986	0.20	3.55	1.80	6.97	5.33	4.36	0.20	5.63	1.84	4.20	2.35	1.21	37.64
1987	2.50	3.45	3.90	1.13	6.46	2.79	2.96	2.83	1.71	2.19	4.70	8.12	42.74
1988	1.62	2.09	5.03	5.57	1.26	1.75	2.32	1.05	5.72	1.46	5.51	1.65	35.03
1989	4.43	5.53	5.99	0.56	10.21	5.51	7.09	2.45	3.47	0.83	0.60	0.74	47.41
1990	5.13	5.95	4.61	8.48	13.45	0.63	2.37	3.60	4.87	3.52	3.77	4.84	61.22
1991	2.21	0.82	3.86	7.43	3.43	1.95	2.65	1.80	4.83	8.84	3.99	4.43	46.24
1992	1.43	1.48	2.26	3.90	5.60	8.33	4.51	2.34	6.91	0.89	5.56	5.46	48.67
1993	4.05	3.10	1.90	7.33	5.31	5.03	0.18	2.57	6.17	4.79	4.26	2.87	47.56
1994	3.46	3.95	2.93	5.27	6.52	3.64	10.38	2.91	0.26	3.23	13.92	3.74	60.21
1995	3.51	0.78	2.20	5.55	6.41	4.44	4.20	0.50	4.00	1.87	2.07	4.21	39.74
1996	3.05	1.35	3.58	5.93	4.41	5.23	7.67	4.38	6.53	3.83	9.18	1.87	57.01
1997	0.56	6.50	4.18	3.62	1.62	6.64	1.06	2.16	1.36	6.31	2.38	4.49	40.88
1998	7.76	3.02	4.99	1.01	2.62	2.46	2.63	1.73	5.46	5.79	3.43	3.04	43.94
POR= 116 YRS	2.48	2.74	3.39	4.15	4.99	3.83	3.19	3.01	3.33	3.40	3.40	2.92	40.83

WBAN : 13964

AVERAGE TEMPERATURE (°F) 1998 FORT SMITH, AR (FSM)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1969	40.7	42.8	45.3	63.7	70.7	76.0	84.6	80.0	74.4	61.9	49.1	41.2	60.9
1970	34.2	43.3	47.8	63.5	71.3	77.1	81.4	84.3	76.9	60.5	48.9	44.2	61.1
1971	39.1	41.6	48.9	59.7	66.4	78.7	80.3	77.9	74.8	66.8	50.4	46.4	60.9
1972	38.9	43.6	52.6	61.7	67.1	77.0	77.8	79.9	75.6	60.8	43.2	36.1	59.5
1973	36.6	40.2	54.6	57.6	65.6	74.7	80.1	79.4	74.5	64.3	54.5	40.1	60.2
1974	38.3	44.5	56.4	60.5	71.7	72.4	81.8	77.2	65.7	62.0	49.5	40.2	60.0
1975	41.6	39.8	46.7	59.1	69.8	75.7	79.5	79.4	68.6	62.4	51.2	40.9	59.6
1976	36.9	50.7	53.7	61.7	63.9	72.8	78.8	77.4	70.3	55.1	42.0	37.8	58.4
1977	26.5	43.3	53.5	63.9	72.5	80.1	82.6	81.8	77.1	61.6	52.3	39.8	61.3
1978	28.0	31.9	47.4	63.0	68.2	76.7	85.1	83.0	78.8	61.9	53.0	39.9	59.7
1979	25.6	33.8	52.3	60.1	66.7	75.0	79.8	78.5	71.5	63.5	45.9	42.2	57.9
1980	40.0	38.3	47.6	58.2	69.1	79.2	85.5	85.6	78.2	60.2	50.3	42.4	61.2
1981	38.2	43.3	51.8	66.9	65.5	79.0	82.0	78.1	72.1	60.4	51.7	39.1	60.7
1982	34.3	39.5	54.3	56.6	70.2	73.0	80.6	81.2	72.2	61.7	50.2	44.7	59.9
1983	38.1	43.6	50.4	54.8	65.5	74.0	81.0	84.1	74.4	64.3	51.4	28.9	59.2
1984	33.3	45.0	48.7	58.1	67.3	78.5	80.6	80.9	71.4	64.4	49.7	48.4	60.5
1985	31.6	37.1	56.7	62.8	69.3	76.4	82.2	81.1	73.8	63.7	53.0	35.2	60.2
1986	41.2	46.0	55.2	63.5	70.2	79.3	84.7	78.3	76.8	62.8	48.0	41.5	62.3
1987	39.6	46.8	52.1	61.6	74.1	78.0	81.0	83.5	72.8	59.7	52.2	43.0	62.0
1988	35.4	42.2	51.6	61.4	70.7	79.8	83.5	84.2	76.1	60.0	51.2	42.4	61.5
1989	42.6	36.2	53.0	62.9	69.3	75.9	79.6	80.3	70.3	63.9	52.5	33.1	60.0
1990	45.1	48.2	54.7	60.4	67.6	80.7	81.9	82.0	77.2	60.8	55.0	39.1	62.7
1991	36.3	47.7	54.8	63.5	73.4	79.0	82.1	80.0	72.6	63.7	46.9	45.4	62.1
1992	41.4	50.1	53.7	61.9	67.4	75.6	80.8	75.9	71.4	63.1	48.1	42.3	61.0
1993	39.3	40.4	49.6	57.8	68.0	77.7	86.7	85.2	72.6	59.3	46.6	43.7	60.6
1994	37.0	43.0	54.5	63.7	68.8	81.9	80.5	78.0	71.7	63.5	54.3	44.1	61.8
1995	40.2	45.0	54.0	59.6	68.2	75.3	81.8	84.4	70.5	61.9	48.4	40.1	60.8
1996	36.8	44.5	45.8	59.8	72.8	77.6	79.8	79.0	70.3	62.1	46.3	44.1	59.9
1997	38.2	46.1	54.8	56.9	67.2	75.5	82.7	79.0	75.0	62.5	48.2	40.5	60.6
1998	44.8	46.6	49.6	60.2	73.5	80.2	86.5	84.4	80.5	65.2	54.1	43.2	64.1
POR= 116 YRS	39.0	42.8	51.8	61.7	69.5	77.8	82.0	81.2	74.5	63.1	50.8	41.9	61.3

HEATING DEGREE DAYS (base 65°F) 1998 FORT SMITH, AR (FSM)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1969-70	0	0	0	182	474	731	951	600	528	112	30	5	3613
1970-71	0	0	10	181	479	639	795	647	495	176	37	0	3459
1971-72	0	0	23	26	441	571	804	616	378	145	36	1	3041
1972-73	1	0	14	176	648	887	873	688	315	258	59	0	3919
1973-74	0	0	9	97	316	764	821	565	304	166	6	1	3049
1974-75	0	0	54	113	465	761	718	699	562	217	10	0	3599
1975-76	0	0	62	141	430	741	863	413	353	123	80	0	3206
1976-77	0	0	20	317	682	837	1186	602	352	88	9	0	4093
1977-78	0	0	0	142	377	773	1143	924	537	113	69	0	4078
1978-79	0	0	0	133	359	771	1215	869	393	175	54	0	3969
1979-80	0	0	8	123	567	699	769	772	531	208	27	0	3704
1980-81	0	0	17	190	441	694	822	600	406	54	61	0	3285
1981-82	0	0	25	184	393	796	941	706	353	270	14	4	3686
1982-83	0	0	28	186	448	625	826	594	443	332	58	3	3543
1983-84	0	0	25	91	419	1113	980	574	496	227	32	0	3957
1984-85	0	0	53	99	461	514	1032	774	281	111	5	1	3331
1985-86	0	0	47	112	364	917	731	529	302	87	13	0	3102
1986-87	0	0	0	121	501	724	779	506	405	168	0	0	3204
1987-88	0	0	3	175	390	675	912	656	414	134	4	0	3363
1988-89	0	0	2	179	411	692	688	797	376	160	52	0	3357
1989-90	0	0	39	126	378	982	611	464	333	180	51	0	3164
1990-91	0	0	12	182	301	794	884	481	324	87	17	0	3082
1991-92	0	0	31	107	541	603	728	429	346	148	51	0	2984
1992-93	0	0	19	96	500	700	790	683	479	230	33	0	3530
1993-94	0	0	12	212	547	653	862	610	330	117	47	0	3390
1994-95	0	0	32	134	324	643	760	552	348	185	40	0	3018
1995-96	0	0	57	128	495	765	868	591	590	177	14	0	3685
1996-97	0	0	21	125	555	639	824	523	314	241	40	0	3282
1997-98	0	0	0	170	498	754	619	509	496	160	10	2	3218
1998-	0	0	0	70	320	674							

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COOLING DEGREE DAYS (base 65°F) 1998 FORT SMITH, AR (FSM)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1969	1	0	0	42	196	338	613	472	290	91	4	0	2047
1970	0	0	2	76	230	376	516	606	374	47	4	0	2231
1971	0	0	2	25	86	416	482	408	321	86	9	0	1835
1972	0	0	0	58	107	369	404	471	338	55	0	0	1802
1973	0	0	0	42	86	297	472	457	299	80	8	0	1741
1974	0	0	43	40	224	231	527	385	82	28	7	0	1567
1975	0	0	3	46	163	327	457	454	175	67	23	0	1715
1976	0	4	9	33	54	239	435	388	187	16	0	0	1365
1977	0	0	0	60	250	460	554	528	367	40	3	0	2262
1978	0	0	0	60	173	357	632	567	419	46	6	0	2260
1979	0	0	7	33	113	307	464	426	207	85	4	0	1646
1980	0	0	0	11	164	434	643	649	419	50	5	0	2375
1981	0	0	0	117	81	430	534	412	245	49	0	0	1868
1982	0	0	27	26	183	252	493	510	249	91	8	2	1841
1983	0	0	0	30	80	281	501	597	313	76	15	0	1893
1984	0	0	2	25	111	412	490	500	253	86	8	6	1893
1985	0	0	27	52	146	351	538	503	317	80	13	0	2027
1986	0	0	6	49	179	435	617	418	359	58	0	0	2121
1987	0	0	10	72	290	398	502	578	243	15	12	0	2120
1988	0	0	6	31	185	450	583	604	344	31	0	0	2234
1989	0	0	13	102	189	332	460	481	205	102	12	0	1896
1990	0	2	22	52	140	480	533	533	386	59	9	0	2216
1991	0	0	17	49	284	426	538	474	266	72	6	4	2136
1992	0	0	1	62	131	323	496	346	218	43	0	2	1622
1993	0	0	9	17	132	387	678	633	247	45	2	0	2150
1994	0	0	9	88	171	514	487	411	238	93	9	0	2020
1995	1	0	15	30	148	316	529	610	230	36	3	0	1918
1996	0	3	1	26	262	387	463	438	188	38	4	1	1811
1997	0	0	2	7	111	322	555	439	306	104	0	0	1846
1998	0	0	25	24	281	467	671	611	473	84	3	3	2642

SNOWFALL (inches) 1998 FORT SMITH, AR (FSM)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1969-70	0.0	0.0	0.0	0.0	T	2.4	5.2	T	0.2	0.0	0.0	0.0	7.8
1970-71	0.0	0.0	0.0	0.0	0.0	0.0	T	0.3	1.6	T	0.0	0.0	1.9
1971-72	0.0	0.0	0.0	0.0	2.8	2.0	0.3	0.5	0.0	0.0	0.0	0.0	5.6
1972-73	0.0	0.0	0.0	0.0	1.7	0.7	4.4	T	0.0	T	0.0	0.0	6.8
1973-74	0.0	0.0	0.0	0.0	0.0	1.8	T	0.3	0.0	0.0	0.0	0.0	2.1
1974-75	0.0	0.0	0.0	0.0	2.0	T	0.0	5.8	1.8	0.0	0.0	0.0	9.6
1975-76	0.0	0.0	0.0	0.0	2.7	7.2	T	0.0	0.0	0.0	0.0	0.0	9.9
1976-77	0.0	0.0	0.0	0.0	4.7	0.0	13.0	T	0.0	0.0	0.0	0.0	17.7
1977-78	0.0	0.0	0.0	0.0	T	T	11.7	10.0	0.2	0.0	0.0	0.0	21.9
1978-79	0.0	0.0	0.0	0.0	0.0	T	11.8	4.4	0.0	0.0	0.0	0.0	16.2
1979-80	0.0	0.0	0.0	0.0	T	0.0	1.0	1.6	0.1	0.0	0.0	0.0	2.7
1980-81	0.0	0.0	0.0	0.0	0.7	0.0	3.2	T	T	0.0	0.0	0.0	3.9
1981-82	0.0	0.0	0.0	0.0	0.0	T	3.6	6.7	3.0	0.0	0.0	0.0	13.3
1982-83	0.0	0.0	0.0	0.0	0.0	0.0	T	1.0	0.0	0.0	0.0	0.0	1.0
1983-84	0.0	0.0	0.0	0.0	T	0.9	1.9	1.8	0.4	0.0	0.0	0.0	5.0
1984-85	0.0	0.0	0.0	0.0	0.0	3.1	8.1	5.0	0.0	0.0	0.0	0.0	16.2
1985-86	0.0	0.0	0.0	0.0	0.0	2.0	0.0	6.1	0.0	0.0	0.0	0.0	8.1
1986-87	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.6	0.4	0.0	0.0	0.0	3.4
1987-88	0.0	0.0	0.0	0.0	0.0	0.5	12.3	T	3.0	0.0	0.0	0.0	15.8
1988-89	0.0	0.0	0.0		0.0	0.5	0.5	0.3	3.3	0.0	T	0.0	
1989-90	0.0	0.0	0.0	0.0	0.0	0.2	T	T	0.0	T	T	0.0	0.2
1990-91	0.0	0.0	0.0	0.0	0.0	5.3	0.0	T	T	T	0.0	0.0	5.3
1991-92	0.0	0.0	0.0	0.0	T	0.0	T	T	T	0.0	T	0.0	T
1992-93	0.0	0.0	0.0	0.0	T	T	T	T	T	T	0.0	0.0	T
1993-94	0.0	0.0	0.0	T	0.2	0.0	2.4	0.7	2.6	T	0.0	0.0	5.9
1994-95	0.0	0.0	0.0	0.0	0.0	T	4.7		0.6	0.0	0.0	0.0	
1995-96	0.0	0.0	0.0	0.0	T	T	0.5	T	T	0.0	0.0	T	0.5
1996-97	0.0	0.0	0.0	0.0	T	T		T	0.0	0.0	0.0	0.0	
1997-98	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0					
1998-													
POR= 52 YRS	0.0	0.0	0.0	T	T	T	2.5	T	T	T	T	0.0	2.5

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REFERENCE NOTES:

<p>PAGE 1: THE TEMPERATURE GRAPH SHOWS NORMAL MAXIMUM AND NORMAL MINIMUM DAILY TEMPERATURES (SOLID CURVES) AND THE ACTUAL DAILY HIGH AND LOW TEMPERATURES (VERTICAL BARS).</p> <p>PAGE 2 AND 3: H/C INDICATES HEATING AND COOLING DEGREE DAYS. RH INDICATES RELATIVE HUMIDITY W/O INDICATES WEATHER AND OBSTRUCTIONS S INDICATES SUNSHINE. PR INDICATES PRESSURE. CLOUDINESS ON PAGE 3 IS THE SUM OF THE CEILOMETER AND SATELLITE DATA NOT TO EXCEED EIGHT EIGHTHS(OKTAS).</p> <p>GENERAL: T INDICATES TRACE PRECIPITATION, AN AMOUNT GREATER THAN ZERO BUT LESS THAN THE LOWEST REPORTABLE VALUE. + INDICATES THE VALUE ALSO OCCURS ON EARLIER DATES. BLANK ENTRIES DENOTE MISSING OR UNREPORTED DATA. NORMALS ARE 30-YEAR AVERAGES (1961 - 1990). ASOS INDICATES AUTOMATED SURFACE OBSERVING SYSTEM. PM INDICATES THE LAST DAY OF THE PREVIOUS MONTH. POR (PERIOD OF RECORD) BEGINS WITH THE JANUARY DATA MONTH AND IS THE NUMBER OF YEARS USED TO COMPUTE THE MEAN. INDIVIDUAL MONTHS WITHIN THE POR MAY BE MISSING. WHEN THE POR FOR A NORMAL IS LESS THAN 30 YEARS, THE NORMAL IS PROVISIONAL AND IS BASED ON THE NUMBER OF YEARS INDICATED. 0.* OR * INDICATES THE VALUE OR MEAN-DAYS-WITH IS BETWEEN 0.00 AND 0.05. CLOUDINESS FOR ASOS STATIONS DIFFERS FROM THE NON-ASOS OBSERVATION TAKEN BY A HUMAN OBSERVER. ASOS STATION CLOUDINESS IS BASED ON TIME-AVERAGED CEILOMETER DATA FOR CLOUDS AT OR BELOW 12,000 FEET AND ON SATELLITE DATA FOR CLOUDS ABOVE 12,000 FEET. THE NUMBER OF DAYS WITH CLEAR, PARTLY CLOUDY, AND CLOUDY CONDITIONS FOR ASOS STATIONS IS THE SUM OF THE CEILOMETER AND SATELLITE DATA FOR THE SUNRISE TO SUNSET PERIOD.</p>	<p>GENERAL CONTINUED: CLEAR INDICATES 0 - 2 OKTAS, PARTLY CLOUDY INDICATES 3 - 6 OKTAS, AND CLOUDY INDICATES 7 OR 8 OKTAS. WHEN AT LEAST ONE OF THE ELEMENTS (CEILOMETER OR SATELLITE) IS MISSING, THE DAILY CLOUDINESS IS NOT COMPUTED. WIND DIRECTION IS RECORDED IN TENS OF DEGREES (2 DIGITS) CLOCKWISE FROM TRUE NORTH. "00" INDICATES CALM. "36" INDICATES TRUE NORTH. RESULTANT WIND IS THE VECTOR AVERAGE OF THE SPEED AND DIRECTION. AVERAGE TEMPERATURE IS THE SUM OF THE MEAN DAILY MAXIMUM AND MINIMUM TEMPERATURE DIVIDED BY 2. SNOWFALL DATA COMPRISE ALL FORMS OF FROZEN PRECIPITATION, INCLUDING HAIL. A HEATING (COOLING) DEGREE DAY IS THE DIFFERENCE BETWEEN THE AVERAGE DAILY TEMPERATURE AND 65° F. DRY BULB IS THE TEMPERATURE OF THE AMBIENT AIR. DEW POINT IS THE TEMPERATURE TO WHICH THE AIR MUST BE COOLED TO ACHIEVE 100 PERCENT RELATIVE HUMIDITY. WET BULB IS THE TEMPERATURE THE AIR WOULD HAVE IF THE MOISTURE CONTENT WAS INCREASED TO 100 PERCENT RELATIVE HUMIDITY.</p> <p>ON JULY 1, 1996, THE NATIONAL WEATHER SERVICE BEGAN USING THE "METAR" OBSERVATION CODE THAT WAS ALREADY EMPLOYED BY MOST OTHER NATIONS OF THE WORLD. THE MOST NOTICEABLE DIFFERENCE IN THIS ANNUAL PUBLICATION WILL BE THE CHANGE IN UNITS FROM TENTHS TO EIGHTHS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER.</p>
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1998  
FORT SMITH,  
ARKANSAS (FSM)

The weather station at Fort Smith, Arkansas, was established on June 1, 1882 by the U. S. Army Signal Service. For the first 63 years, offices were located at several places within a few blocks of each other in downtown Fort Smith. Since 1945 the station has been at the Fort Smith Municipal Airport, about 5 miles southeast of its original location. Fragmentary weather records made by Army Surgeons exist as far back as 1821.

Fort Smith is located on the Arkansas River at its confluence with the Poteau River and at the point where it enters the state from Oklahoma. The river valley is broad and fairly flat, although elevations in the city of Fort Smith range from 390 feet at the river to about 700 feet. Within 20 miles to the north are the Boston Mountains with elevations to about 2,100 feet and about the same distance south are the Ouachita Mountains with a maximum elevation of about 2,600 feet. The general terrain in the area consists of low broken hills separated by creek and river bottom land.

The surrounding terrain has a definite influence on the weather of Fort Smith. Under conditions of light wind, the direction is prevailing northeast throughout the year. When there is a fairly strong inversion these winds may remain northeasterly even though a strong gradient is present. Although infrequent, dense fog will move in from the river to the east and persist longer than would be expected. In the summer this will result in uncomfortably high humidities and in the winter in cooler temperatures than reported at surrounding stations. Summertime temperatures in the mountains to the north are generally several degrees cooler than in the river valley.

Temperature extremes do occur. In summer there is an average of 10 days when the temperature rises to 100 degrees or higher. On the other hand, in about one year in five, the temperature does not reach 100 degrees. Wintertime temperatures rarely fall to zero or below.

Rainfall is well distributed throughout the growing season. January is the driest month, May the wettest. The difference is almost 3 inches, but rainfall is generally adequate for agricultural pursuits. Summer precipitation comes in the form of convective showers. Dry spells occur, but true droughts are infrequent.

Snowfall varies widely from season to season. Although snowfall averages a little over 6 inches, some years go by with no measurable amount being recorded. Ice storms are much more frequent, causing many problems with traffic movement.

Based on the 1951-1980 period, the average first occurrence of 32 degrees Fahrenheit in the fall is October 30 and the average last occurrence in the spring is April 3.

