

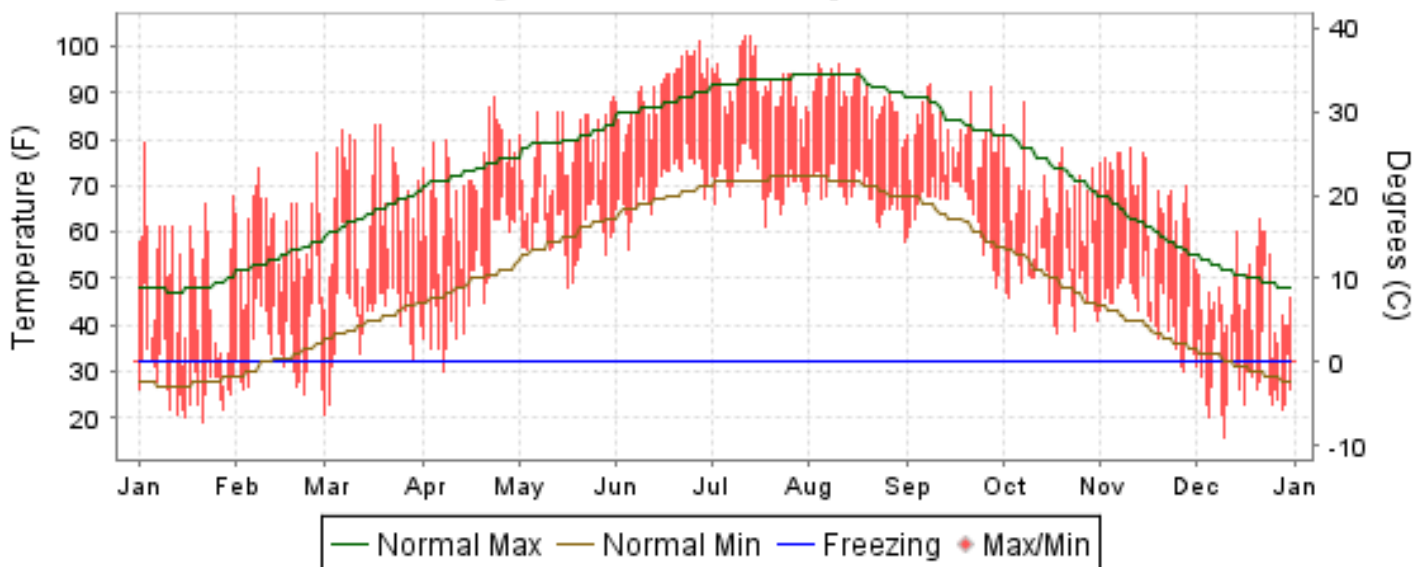


# 2009 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

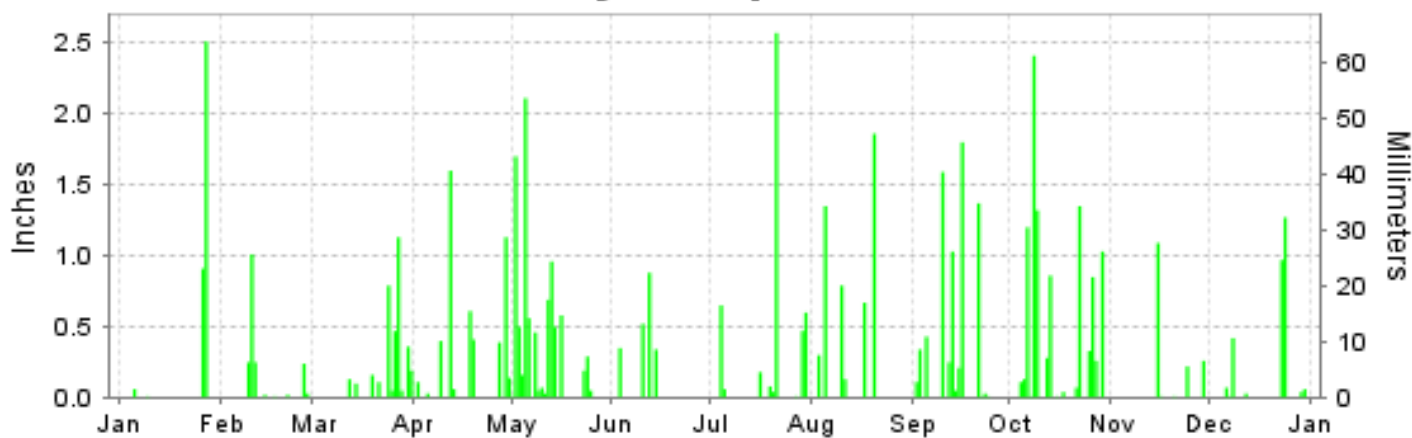
ISSN 0198-0661

## FORT SMITH, ARKANSAS (KFSM)

### Daily Max/Min Temperature



### Daily Precipitation



### Daily Station Pressure



I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC DATA CENTER.

NATIONAL  
OCEANIC AND  
ATMOSPHERIC ADMINISTRATION

NATIONAL  
ENVIRONMENTAL SATELLITE, DATA  
AND INFORMATION SERVICE

NATIONAL  
CLIMATIC DATA CENTER  
ASHEVILLE, NORTH CAROLINA

*Thomas R. Karl*  
DIRECTOR  
NATIONAL CLIMATIC DATA CENTER

# METEOROLOGICAL DATA FOR 2009

## FORT SMITH (KFSM)

LATITUDE: 35° 20'N      LONGITUDE: -94° 21'W      ELEVATION (FT): GRND: 445    BARO: 480      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	50.1	59.2	65.1	71.8	77.0	90.9	91.8	89.2	80.9	67.1	67.5	46.5	71.4	
	HIGHEST DAILY MAXIMUM	79	77	83	89	89	101	102	96	92	88	78	63	102	
	DATE OF OCCURRENCE	03	26	18+	23	31	27	13+	10+	08	08	10	21	JUL 13+	
	MEAN DAILY MINIMUM	28.0	36.2	43.1	49.4	59.8	70.2	70.9	68.4	64.2	49.7	43.8	28.9	51.1	
	LOWEST DAILY MINIMUM	19	25	21	30	48	56	61	58	48	38	30	16	16	
	DATE OF OCCURRENCE	21	22	01	07	17	05	18	31	29	18	27	10	DEC 10	
	AVERAGE DRY BULB	39.1	47.7	54.1	60.6	68.4	80.6	81.4	78.8	72.6	58.4	55.7	37.7	61.3	
	MEAN WET BULB	33.2	41.5	47.3	52.6	62.4	71.3	71.0	70.2	65.6	53.3	49.1	33.8	54.3	
	MEAN DEW POINT	24.3	33.5	39.3	45.2	58.2	66.4	65.7	66.0	61.8	48.8	44.0	27.6	48.4	
	NUMBER OF DAYS WITH:														
	MAXIMUM >= 90°	0	0	0	0	0	19	19	14	4	0	0	0	0	56
	MAXIMUM <= 32°	2	0	0	0	0	0	0	0	0	0	0	0	0	2
MINIMUM <= 32°	27	12	4	1	0	0	0	0	0	0	2	23	69		
MINIMUM <= 0°	0	0	0	0	0	0	0	0	0	0	0	0	0		
H/C	HEATING DEGREE DAYS	797	478	349	186	32	0	0	0	2	216	276	838	3174	
	COOLING DEGREE DAYS	0	1	17	61	145	476	512	436	235	17	1	0	1901	
RH	MEAN (PERCENT)	61	61	60	62	73	64	63	68	73	73	70	70	67	
	HOUR 00 LST	68	69	66	70	81	75	73	80	83	80	80	75	75	
	HOUR 06 LST	70	75	71	77	86	83	82	86	86	84	85	80	80	
	HOUR 12 LST	53	51	52	53	62	52	51	54	61	64	55	61	56	
	HOUR 18 LST	53	51	49	49	62	49	47	54	63	68	62	63	56	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	3	1	2	2	4	1	1	2	1	1	2	3	23	
	THUNDERSTORMS	1	3	8	8	10	4	6	5	3	7	0	1	56	
CLOUDNESS	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.)	29.62	29.60	29.54	29.45	29.47	29.38	29.46	29.51	29.50	29.47	29.59	29.58	29.51	
	MEAN SEA-LEVEL PRESS. (IN.)	30.13	30.10	30.04	29.95	29.96	29.86	29.94	30.00	29.99	29.97	30.08	30.09	30.01	
WINDS	RESULTANT SPEED (MPH)	2.3	1.2	2.1	0.3	1.9	1.0	1.4	1.7	2.7	1.0	0.9	1.8	1.0	
	RES. DIR. (TENS OF DEGS.)	36	03	13	07	07	16	06	08	05	05	32	34	06	
	MEAN SPEED (MPH)	7.6	7.8	9.1	8.7	6.0	5.3	4.9	4.9	5.4	7.2	5.5	7.7	6.7	
	PREVAIL.DIR.(TENS OF DEGS.)	07	07	08	08	08	06	08	06	07	08	05	07	07	
	MAXIMUM 2-MINUTE WIND														
	SPEED (MPH)	28	36	47	35	37	53	32	48	29	32	24	32	53	
	DIR. (TENS OF DEGS.)	32	34	27	28	32	30	28	06	33	31	28	27	30	
	DATE OF OCCURRENCE	13	10	30	10	13	12	04	05	21	08	24	09	JUN 12	
	MAXIMUM 3-SECOND WIND:														
	SPEED (MPH)	32	44	62	44	55	67	44	56	36	39	30	41	67	
DIR. (TENS OF DEGS.)	33	33	26	25	31	30	26	06	32	29	32	28	30		
DATE OF OCCURRENCE	13	10	30	09	13	12	04	05	21	08	25	09	JUN 12		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	3.49	1.83	3.54	4.88	8.91	2.09	4.66	5.10	7.23	10.26	1.59	2.87	56.45	
	GREATEST 24-HOUR (IN.)	2.51	1.26	1.23	1.60	2.67	0.88	2.61	1.86	1.90	3.73	1.10	1.61	3.73	
	DATE OF OCCURRENCE	27	10-11	26-27	12	05-06	12	20-21	20	15-16	08-09	15-16	23-24	OCT 08-09	
	NUMBER OF DAYS WITH:														
	PRECIPITATION 0.01	4	8	11	10	17	4	9	6	13	16	5	8	111	
PRECIPITATION 0.10	0	4	9	8	12	4	5	6	9	12	3	3	75		
PRECIPITATION 1.00	1	1	1	2	2	0	1	2	4	5	1	1	21		
SNOWFALL	SNOW,ICE PELLETS,HAIL														
	TOTAL (IN.)														
	GREATEST 24-HOUR (IN.)														
	DATE OF OCCURRENCE														
	NUMBER OF DAYS WITH:														
SNOWFALL >= 1.0															

# NORMALS, MEANS, AND EXTREMES

## FORT SMITH (KFSM)

LATITUDE:  
35° 20'N

LONGITUDE:  
-94° 21'W

ELEVATION (FT):  
GRND: 445 BARO: 480

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	48.1	54.8	64.2	73.2	80.0	87.7	92.9	92.6	84.9	75.0	61.4	50.9	72.1
	MEAN DAILY MAXIMUM	109	49.2	51.9	63.2	71.9	80.0	86.9	93.0	92.7	84.3	75.1	61.1	51.5	71.7
	HIGHEST DAILY MAXIMUM	64	81	86	94	96	98	105	111	110	109	96	86	82	111
	YEAR OF OCCURRENCE		1952	1962	1974	2006	1951	1953	1954	1964	2000	1963	2006	1951	JUL 1954
	MEAN OF EXTREME MAXS.	109	70.8	75.2	82.7	87.8	91.2	95.8	101.0	100.9	96.2	89.9	79.6	72.5	87.0
	NORMAL DAILY MINIMUM	30	27.8	32.6	40.9	49.0	58.9	67.2	71.4	70.3	62.9	50.5	39.5	31.1	50.2
	MEAN DAILY MINIMUM	109	29.2	31.5	40.9	49.4	59.0	66.4	71.3	70.4	62.2	51.1	39.4	31.9	50.2
	LOWEST DAILY MINIMUM	64	-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.	109	10.9	15.9	22.7	32.3	44.0	55.3	61.9	59.8	45.7	33.1	22.1	14.8	34.9
	NORMAL DRY BULB	30	38.0	43.7	52.6	61.1	69.5	77.5	82.2	81.5	73.9	62.8	50.5	41.0	61.2
	MEAN DRY BULB	109	39.3	41.7	52.0	60.7	69.5	76.7	82.1	81.6	73.3	63.1	50.3	41.7	61.0
	MEAN WET BULB	26	34.3	38.1	45.2	53.4	63.0	70.0	72.8	72.0	65.2	55.4	45.0	36.5	54.2
	MEAN DEW POINT	26	30.8	33.9	40.7	49.3	60.4	67.9	70.4	69.3	62.3	52.0	41.5	33.0	51.0
	NORMAL NO. DAYS WITH:														
MAXIMUM >= 90	30	0.0	0.0	0.1	0.5	2.2	12.7	23.2	22.0	10.3	1.2	0.0	0.0	72.2	
MAXIMUM <= 32	30	3.3	1.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.8	7.0	
MINIMUM <= 32	30	22.6	15.1	6.5	1.0	0.0	0.0	0.0	0.0	0.0	0.8	8.4	18.7	73.1	
MINIMUM <= 0	30	0.2	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	
H/C	NORMAL HEATING DEG. DAYS	30	851	611	409	172	32	1	0	0	23	145	448	745	3437
	NORMAL COOLING DEG. DAYS	30	0	0	8	43	157	364	520	495	275	61	5	1	1929
RH	NORMAL (PERCENT)	30	73	69	65	66	73	74	70	70	72	72	73	74	71
	HOURLY 00 LST	30	78	76	73	76	84	85	82	81	84	83	81	80	80
	HOURLY 06 LST	30	83	82	80	84	89	90	90	90	89	89	85	84	86
	HOURLY 12 LST	30	63	59	54	51	59	59	55	54	56	54	59	63	57
	HOURLY 18 LST	30	63	56	51	49	58	58	54	53	58	58	63	65	57
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 (VISIB <= 1/4 MI)	46	2.8	1.3	1.1	0.8	1.1	1.0	0.8	0.8	1.4	2.3	2.1	2.4	17.9
	THUNDERSTORMS	62	1.3	2.0	4.8	6.6	8.0	7.6	7.0	6.2	4.3	3.4	2.6	1.6	55.4
CLOUDNESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)														
	MIDNIGHT-MIDNIGHT (OKTAS)														
	MEAN NO. DAYS WITH:														
	CLEAR	2	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	29.65	29.61	29.54	29.47	29.46	29.46	29.50	29.51	29.53	29.57	29.60	29.64	29.55
	MEAN SEA-LEVEL PRES. (IN)	26	30.16	30.11	30.03	29.96	29.95	29.94	29.98	29.99	30.01	30.06	30.10	30.15	30.04
WINDS	MEAN SPEED (MPH)	26	7.9	8.3	8.9	8.5	7.2	6.2	5.8	5.8	6.3	6.7	7.5	7.8	7.2
	PREVAIL. DIR. (TENS OF DEGS)	30	07	07	08	09	09	09	08	08	07	07	07	07	07
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	15	43	39	51	45	49	57	53	54	45	51	41	44	57
	DIR. (TENS OF DEGS)		28	24	02	26	30	28	07	31	31	29	28	22	28
	YEAR OF OCCURRENCE		2008	2008	2004	1995	2001	1996	2005	2003	2000	2001	2006	1996	JUN 1996
	MAXIMUM 3-SECOND														
SPEED (MPH)	15	55	49	62	53	59	70	79	67	58	62	66	56	79	
DIR. (TENS OF DEGS)		28	27	26	27	29	02	08	31	32	30	29	22	08	
YEAR OF OCCURRENCE		2008	2001	2009	1995	2001	2008	2005	2003	2008	2001	1998	1996	JUL 2005	
PRECIPITATION	NORMAL (IN)	30	2.37	2.59	3.94	3.91	5.29	4.28	3.19	2.56	3.61	3.94	4.80	3.39	43.87
	MAXIMUM MONTHLY (IN)	64	11.33	7.94	10.53	10.32	13.45	10.40	10.41	7.42	8.96	12.05	14.01	10.09	14.01
	YEAR OF OCCURRENCE		1949	1951	2008	1957	1990	1958	1960	2008	1974	1951	1946	1971	NOV 1946
	MINIMUM MONTHLY (IN)	64	0.20	0.14	0.50	0.56	0.79	0.38	0.08	0.20	0.06	T	0.56	0.27	T
	YEAR OF OCCURRENCE		1986	1947	2007	1989	1970	1954	2001	2000	1956	1964	2007	2007	OCT 1964
	MAXIMUM IN 24 HOURS (IN)	64	5.42	4.45	4.88	5.12	5.56	3.54	7.13	5.09	5.20	6.48	6.91	5.78	7.13
	YEAR OF OCCURRENCE		1949	1985	2008	1964	1982	1999	1960	1971	2008	2007	1973	1971	JUL 1960
	NORMAL NO. DAYS WITH:														
PRECIPITATION >= 0.01	30	7.8	7.3	10.1	9.7	10.9	9.1	6.8	6.6	8.2	8.0	7.9	7.8	100.2	
PRECIPITATION >= 1.00	30	0.5	0.7	0.9	1.1	1.5	1.3	0.9	0.6	1.3	1.3	1.7	1.0	12.8	
SNOWFALL	NORMAL (IN)	30	3.0	1.7	0.6	0.*	0.0	0.0	0.0	0.0	0.0	0.*	0.5	0.9	6.7
	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	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	2.3	

**PRECIPITATION (inches) 2009 FORT SMITH (KFSM)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
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
1999	2.12	1.17	4.78	5.33	8.79	7.75	0.08	0.20	4.03	3.42	1.45	5.01	44.13
2000	1.88	1.12	2.99	2.42	3.55	8.80	1.46	T	3.42	3.37	6.58	3.26	38.85
2001	2.39	7.11	1.23	2.15	8.79	2.31	T	1.88	3.81	3.21	1.98	5.72	40.58
2002	3.79	1.22	8.87	5.94	3.94	3.04	2.53	4.74	1.06	2.05	1.21	5.22	43.61
2003	0.37	3.35	1.98	2.71	3.33	4.18	0.49	2.70	3.24	1.42	4.63	1.83	30.23
2004	2.82	1.75	4.74	6.38	2.27	7.79	7.28	1.27	0.27	6.13	7.88	1.48	50.06
2005	4.91	1.63	2.30	3.13	2.84	2.93	2.20	1.82	6.51	1.23	0.83	0.39	30.72
2006	3.09	0.63	5.31	5.33	6.39	3.57	1.55	2.87	4.69	5.44	8.77	2.62	50.26
2007	6.13	2.52	0.50	4.06	4.49	3.56	5.26	0.98	5.75	8.54	0.56	3.59	45.94
2008	0.59	3.59	10.53	8.05	5.08	7.59	1.29	7.42	8.11	3.65	2.02	3.08	61.00
2009	3.49	1.83	3.54	4.88	8.91	2.09	4.66	5.10	7.23	10.26	1.59	2.87	56.45
POR= 109 YRS	2.51	2.65	3.43	4.14	5.19	3.88	2.98	3.10	3.50	3.66	3.40	2.92	41.36

WBAN : 13964

**AVERAGE TEMPERATURE (°F) 2009 FORT SMITH (KFSM)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
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
1999	42.3	50.6	50.6	62.9	68.8	77.3	82.6	85.0	72.6	63.3	57.4	44.8	63.2
2000	42.6	50.2	55.3	60.0	71.8	74.8	81.8	87.0	76.3	65.9	45.4	31.5	61.9
2001	36.8	44.7	49.0	66.7	70.6	77.7	85.8	84.3	72.3	61.2	56.2	44.5	62.5
2002	41.1	42.1	49.0	64.3	68.4	78.1	82.4	82.0	76.2	60.6	48.6	43.3	61.3
2003	37.5	39.8	52.4	63.1	70.8	74.4	82.6	83.3	71.4	65.1	53.9	43.4	61.5
2004	40.8	41.8	56.8	63.0	71.8	76.3	79.1	77.3	75.3	67.0	54.1	42.2	62.1
2005	43.7	48.8	51.4	62.1	69.2	79.0	82.1	84.6	79.2	64.0	53.8	40.3	63.2
2006	47.7	43.1	55.0	67.4	71.9	77.4	84.2	85.1	71.3	61.0	54.5	47.4	63.8
2007	39.5	42.0	60.6	58.0	71.2	77.7	80.2	85.0	75.9	66.5	53.3	42.4	62.7
2008	39.2	43.8	53.4	60.2	70.0	78.3	83.3	80.5	72.7	62.3	50.1	40.7	61.2
2009	39.1	47.7	54.1	60.6	68.4	80.6	81.4	78.8	72.6	58.4	55.7	37.7	61.3
POR= 109 YRS	39.3	41.7	52.0	60.7	69.5	76.7	82.1	81.6	73.3	63.1	50.3	41.7	61.0

**HEATING DEGREE DAYS (base 65°F) 2009 FORT SMITH (KFSM)**

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
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
1998-99	0	0	0	70	320	674	694	400	436	100	14	0	2708
1999-00	0	0	22	111	228	618	687	429	310	163	18	0	2586
2000-01	0	0	25	92	586	1029	872	561	489	80	16	0	3750
2001-02	0	0	16	154	267	631	734	636	490	105	33	0	3066
2002-03	0	0	0	196	495	665	846	699	380	118	5	0	3404
2003-04	0	0	10	78	355	665	749	668	264	104	31	0	2924
2004-05	0	0	0	47	323	701	653	449	413	114	52	0	2752
2005-06	0	0	1	138	345	758	531	607	325	54	14	0	2773
2006-07	0	0	17	185	317	541	783	635	183	245	6	0	2912
2007-08	0	0	0	92	358	690	801	610	362	173	28	0	3114
2008-09	0	0	0	127	445	747	797	478	349	186	32	0	3161
2009-	0	0	2	216	276	838							

WBAN : 13964

**COOLING DEGREE DAYS (base 65°F) 2009 FORT SMITH (KFSM)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
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
1999	0	5	0	46	139	378	554	622	256	68	4	0	2072
2000	0	3	15	22	236	301	531	691	373	126	5	0	2303
2001	0	3	0	137	196	387	653	603	244	42	8	5	2278
2002	0	0	2	89	148	398	549	535	342	65	7	0	2135
2003	0	0	0	68	196	288	554	575	207	86	28	0	2002
2004	3	0	19	50	250	347	444	387	314	119	2	0	1935
2005	0	0	1	34	189	425	536	614	431	111	15	0	2356
2006	0	0	22	132	236	380	604	632	212	67	9	1	2295
2007	0	0	51	41	207	389	479	626	332	144	13	0	2282
2008	11	0	10	35	189	405	574	487	239	48	6	0	2004
2009	0	1	17	61	145	476	512	436	235	17	1	0	1901

**SNOWFALL (inches) 2009 FORT SMITH (KFSM)**

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
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					
1998-99													
1999-00													
2000-01													
2001-02													
2002-03													
2003-04													
2004-05													
2005-06													
2006-07													
2007-08													
2008-09													
POR= 97 YRS	0.0	0.0	0.0	T	0.2	0.9	2.3	2.1	0.4	T	T	T	5.9

WBAN : 13964

**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 (1971 - 2000). 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. 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.</p>	<p>GENERAL CONTINUED: 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. 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 EIGHTS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER. STATION HISTORY STOPPED WITH THE 2009 ANNUAL. IF YOU NEED HISTORY GO TO "MULTI-NETWORK MEDADATA SYSTEM", URL IS: <a href="https://mi3.ncdc.noaa.gov/mi3qry/login.cfm">https://mi3.ncdc.noaa.gov/mi3qry/login.cfm</a></p> <p><b>NOTE:</b> The "Period of Record:(POR) for all "averages" is based on the "Summary of the Day First Order Station" and "Cooperative Summary of the Day" archives.</p>
--	---

# 2009

## FORT SMITH

### ARKANSAS (KFSM)

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.

**Non-Subscription Request:**

NCDC Customer Services;

Phone: 828-271-4800

Fax: 828-271-4876

Email: [ncdc.orders@noaa.gov](mailto:ncdc.orders@noaa.gov)

OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE \$300

CHANGE SERVICE REQUESTED

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

INQUIRES/COMMENTS CALL: Toll Free (866) 742-3322

Visit our Web Site for other weather data: [www.ncdc.noa.gov](http://www.ncdc.noa.gov)

**For Hard Copy Subscription:**

Price and ordering information: NCDC Subscribing Service Center, 310 State Route 956, Building 300, Rocket Center, WV 26726.