

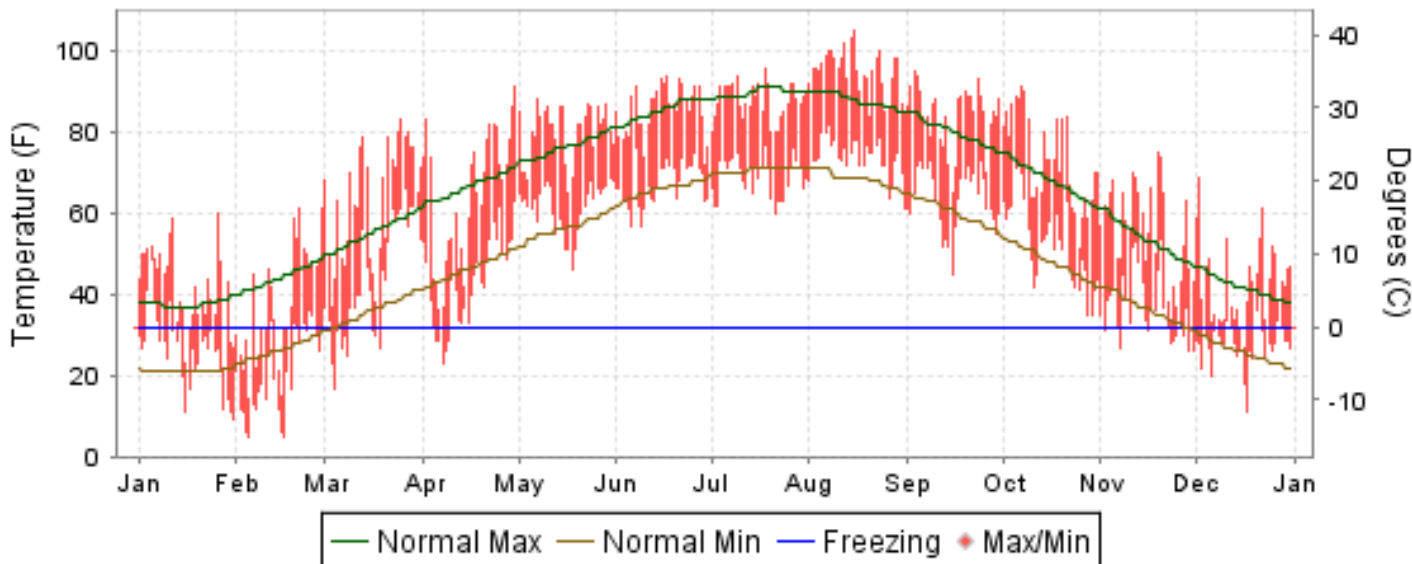


# 2007 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

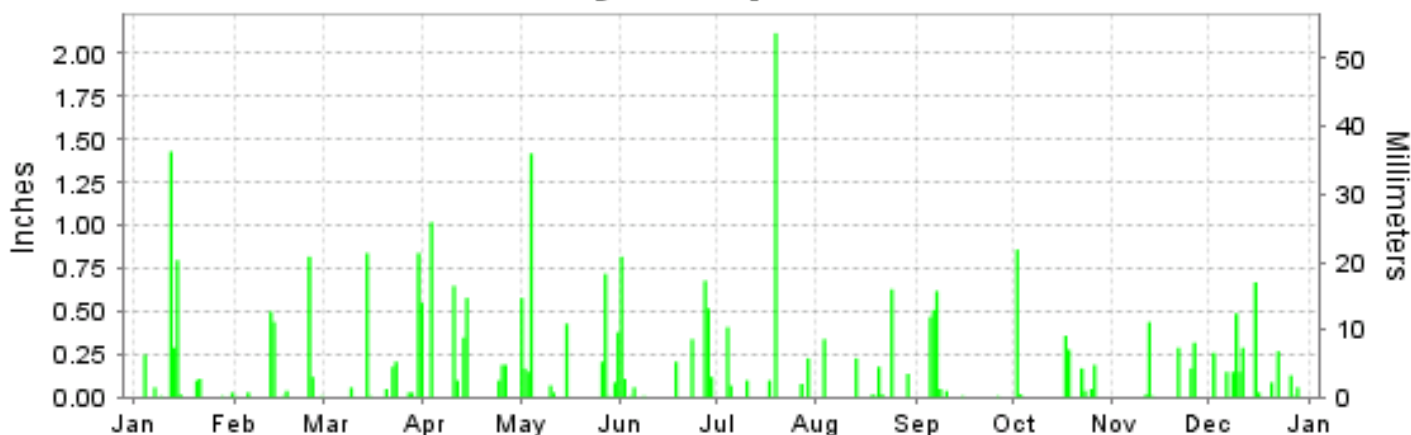
ISSN 0198-2907

## ST LOUIS, MISSOURI (KSTL)

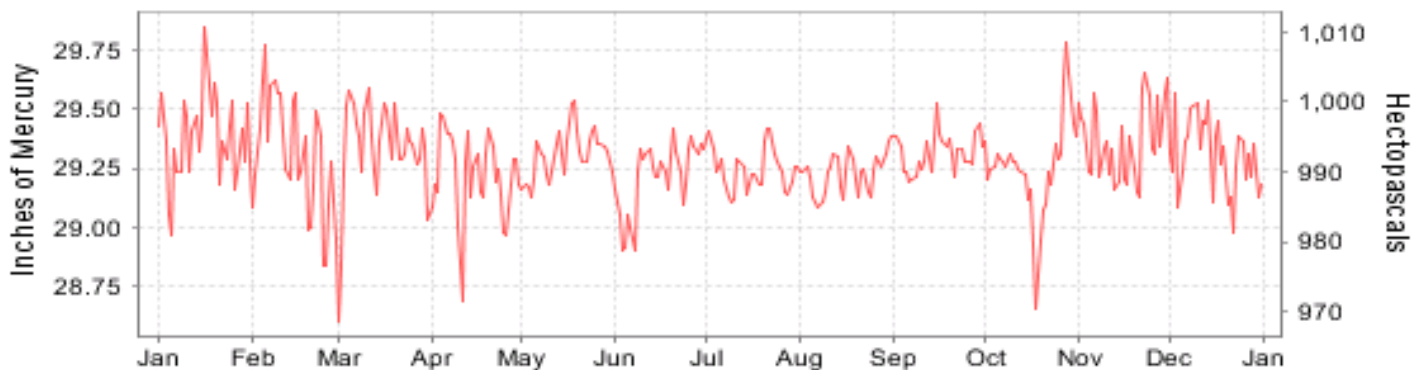
### Daily Max/Min Temperature



### Daily Precipitation



### Daily Station Pressure



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CLIMATIC DATA CENTER  
ASHEVILLE, NORTH CAROLINA

*Thomas R. Karl*  
DIRECTOR  
NATIONAL CLIMATIC DATA CENTER

# METEOROLOGICAL DATA FOR 2007

## ST LOUIS (KSTL)

LATITUDE: 38° 45'N      LONGITUDE: -90° 22'W      ELEVATION (FT): GRND: 654    BARO: 710      TIME ZONE: CENTRAL (UTC -6)      WBAN: 13994

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	41.6	37.7	63.5	64.6	80.1	85.5	87.8	94.9	84.3	73.4	56.1	43.1	67.7	
	HIGHEST DAILY MAXIMUM	60	61	83	91	88	94	96	105	95	91	75	69	105	
	DATE OF OCCURRENCE	26	28+	25	30	07	17	18	15	03	07	19	02	AUG 15	
	MEAN DAILY MINIMUM	26.5	20.9	43.7	43.1	61.6	67.2	68.9	73.9	63.7	52.8	36.8	27.8	48.9	
	LOWEST DAILY MINIMUM	9	5	17	23	46	57	60	61	45	35	26	11	5	
	DATE OF OCCURRENCE	31	16+	04	07	18	09+	21	31	15	29+	30+	17	FEB 16+	
	AVERAGE DRY BULB	34.1	29.3	53.6	53.9	70.9	76.4	78.4	84.4	74.0	63.1	46.5	35.5	58.3	
	MEAN WET BULB	30.7	24.9	47.6	46.4	62.1	67.0	68.3	71.7	63.8	54.9	40.4	32.8	50.9	
	MEAN DEW POINT	24.5	16.1	40.5	37.5	55.9	61.4	62.3	65.4	56.8	48.4	31.8	27.8	44.0	
	NUMBER OF DAYS WITH:														
	MAXIMUM >= 90°	0	0	0	1	0	9	13	26	6	2	0	0	0	57
	MAXIMUM <= 32°	5	13	0	0	0	0	0	0	0	0	0	2	2	20
MINIMUM <= 32°	26	23	9	6	0	0	0	0	0	0	12	27	103		
MINIMUM <= 0°	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/C	HEATING DEGREE DAYS	953	992	385	360	18	0	0	0	15	167	550	908	4348	
	COOLING DEGREE DAYS	0	0	38	32	206	350	422	611	293	113	0	0	2065	
RH	MEAN (PERCENT)	69	61	63	56	62	62	60	56	58	62	59	75	62	
	HOUR 00 LST	73	67	68	62	68	69	69	61	66	70	65	77	68	
	HOUR 06 LST	75	69	74	71	74	76	76	73	76	77	71	81	74	
	HOUR 12 LST	63	55	54	46	55	50	47	45	46	50	48	68	52	
	HOUR 18 LST	65	53	56	46	54	54	49	43	47	54	53	73	54	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	2	1	0	0	1	0	0	0	0	0	0	4	8	
	THUNDERSTORMS	0	0	6	2	6	8	7	7	3	2	3	1	45	
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.)	29.38	29.31	29.33	29.23	29.31	29.22	29.26	29.23	29.31	29.26	29.36	29.31	29.29	
	MEAN SEA-LEVEL PRESS. (IN.)	30.19	30.11	30.09	29.99	30.04	29.94	29.99	29.94	30.05	30.01	30.14	30.10	30.05	
WINDS	RESULTANT SPEED (MPH)	5.5	2.0	2.8	3.6	3.3	1.7	0.5	1.7	2.7	2.2	2.6	1.6	2.0	
	RES. DIR. (TENS OF DEGS.)	26	29	21	27	15	21	22	22	19	21	26	25	24	
	MEAN SPEED (MPH)	10.1	9.9	10.1	10.4	8.1	6.7	6.5	7.0	6.5	8.8	7.9	8.6	8.4	
	PREVAIL.DIR.(TENS OF DEGS.)	30	29	11	31	11	20	07	20	17	18	30	27	30	
	MAXIMUM 2-MINUTE WIND														
	SPEED (MPH)	31	40	40	36	38	36	30	44	30	40	30	38	44	
	DIR. (TENS OF DEGS.)	28	12	25	25	27	23	27	28	20	26	31	27	28	
	DATE OF OCCURRENCE	09	24	01	01	15	01	04	29	05	18	05	23	AUG 29	
	MAXIMUM 5-SECOND WIND:														
	SPEED (MPH)	39	48	52	51	48	60	39	51	39	52	37	47	60	
DIR. (TENS OF DEGS.)	28	12	26	28	23	22	26	31	21	26	21	26	22		
DATE OF OCCURRENCE	09	24	01	12	15	01	04	29	05	18	28	23	JUN 01		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	3.11	1.98	2.80	3.18	4.26	2.88	3.11	1.57	1.71	1.97	1.25	2.75	30.57	
	GREATEST 24-HOUR (IN.)	1.70	0.94	0.85	1.02	1.47	1.17	2.12	0.63	0.98	0.88	0.45	0.70	2.12	
	DATE OF OCCURRENCE	12-13	24-25	14-15	03	03-04	27-28	19	24	05-06	02-03	12-13	15-16	JUL 19	
	NUMBER OF DAYS WITH:														
	PRECIPITATION 0.01	11	9	10	8	12	10	7	8	7	8	6	13	109	
PRECIPITATION 0.10	6	4	5	8	8	7	5	5	3	5	4	9	69		
PRECIPITATION 1.00	1	0	0	1	1	0	1	0	0	0	0	0	4		
SNOWFALL	SNOW,ICE PELLETS,HAIL														
	TOTAL (IN.)	3.7	4.7	0.4	T	0.0	0.0	0.0	0.0	0.0	0.0	T	7.8	16.6	
	GREATEST 24-HOUR (IN.)	2.2	2.7	0.4	T	0.0	0.0	0.0	0.0	0.0	0.0	T	6.9	6.9	
	DATE OF OCCURRENCE	21	13	03	14+							25+	15	DEC 15	
	MAXIMUM SNOW DEPTH (IN.)	3	3	T	0	0	0	0	0	0	0	0	6	6	
	DATE OF OCCURRENCE	21	18+	03									16	DEC 16	
NUMBER OF DAYS WITH:															
SNOWFALL >= 1.0	1	2	0	0	0	0	0	0	0	0	0	1	4		

# NORMALS, MEANS, AND EXTREMES

## ST LOUIS (KSTL)

LATITUDE:  
38 ° 45'N

LONGITUDE:  
-90 ° 22'W

ELEVATION (FT):  
GRND: 654 BARO: 710

TIME ZONE:  
CENTRAL (UTC -6)

WBAN: 13994

	ELEMENT	POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	37.9	44.3	55.4	66.7	76.5	85.3	89.8	87.9	80.1	68.3	53.8	42.0	65.7	
	MEAN DAILY MAXIMUM	62	39.0	44.1	54.4	67.0	76.3	84.9	89.0	87.6	80.3	69.1	54.4	42.8	65.7	
	HIGHEST DAILY MAXIMUM	50	76	85	89	93	94	102	107	107	104	94	85	76	107	
	YEAR OF OCCURRENCE		1970	1972	1985	2002	1996	1988	1980	1984	1984	2006	1989	1970	AUG 1984	
	MEAN OF EXTREME MAXS.	62	64.0	68.5	79.0	86.9	89.5	95.3	98.7	98.4	93.3	86.4	75.2	66.5	83.5	
	NORMAL DAILY MINIMUM	30	21.2	26.5	36.2	46.5	56.6	65.9	70.6	68.6	60.3	48.2	36.7	25.8	46.9	
	MEAN DAILY MINIMUM	62	22.1	26.1	34.7	46.0	55.9	65.2	69.7	67.9	59.5	48.1	36.5	26.6	46.5	
	LOWEST DAILY MINIMUM	50	-18	-12	-5	22	31	43	51	47	36	23	1	-16	-18	
	YEAR OF OCCURRENCE		1985	1996	1960	1975	1976	1969	1972	1986	1974	1976	1964	1989	JAN 1985	
	MEAN OF EXTREME MINS.	62	1.1	6.6	16.3	30.2	40.8	52.4	58.5	56.7	43.9	32.7	19.4	7.0	30.5	
	NORMAL DRY BULB	30	29.6	35.4	45.8	56.6	66.5	75.6	80.2	78.2	70.2	58.3	45.3	33.9	56.3	
	MEAN DRY BULB	62	30.6	35.1	44.5	56.5	66.1	75.2	79.3	77.8	69.9	58.6	45.5	34.7	56.2	
	MEAN WET BULB	24	28.9	32.0	40.1	49.7	59.3	67.1	70.8	69.9	62.2	51.8	41.1	31.8	50.4	
	MEAN DEW POINT	24	24.1	27.0	34.0	43.8	54.4	63.1	67.3	66.5	58.0	46.8	35.9	27.0	45.7	
	NORMAL NO. DAYS WITH: MAXIMUM >= 90	30	0.0	0.0	0.0	0.3	1.3	8.6	15.8	12.2	4.5	0.1	0.0	0.0	42.8	
	MAXIMUM <= 32	30	11.0	6.6	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	6.3	25.7	
	MINIMUM <= 32	30	25.6	19.2	12.2	2.5	*	0.0	0.0	0.0	0.0	1.3	10.2	22.1	93.1	
MINIMUM <= 0	30	1.8	0.6	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	3.2		
H/C	NORMAL HEATING DEG. DAYS	30	1097	844	613	294	79	6	0	1	46	246	583	949	4758	
	NORMAL COOLING DEG. DAYS	30	0	0	7	32	114	316	461	396	196	36	3	0	1561	
RH	NORMAL (PERCENT)	30	75	73	68	64	67	67	68	70	70	69	72	76	70	
	HOURLY 00 LST	30	79	77	74	70	76	77	77	80	79	76	76	79	77	
	HOURLY 06 LST	30	82	83	81	79	83	83	84	87	87	84	82	83	83	
	HOURLY 12 LST	30	69	65	59	55	56	56	56	57	57	56	63	69	60	
	HOURLY 18 LST	30	71	66	59	54	56	56	56	58	59	60	66	73	61	
S	PERCENT POSSIBLE SUNSHINE	37	50	52	54	56	59	66	69	64	63	60	46	43	57	
W/O	MEAN NO. DAYS WITH: HEAVY FOG(VISBY <= 1/4 MI)	44	2.2	1.5	1.1	0.5	0.6	0.3	0.2	0.4	0.5	0.7	0.9	1.9	10.8	
	THUNDERSTORMS	62	0.7	0.9	2.9	5.5	6.7	7.7	6.9	6.2	3.6	2.4	1.7	0.7	45.9	
CLOUDNESS	MEAN: SUNRISE-SUNSET (OKTAS)	48	5.4	5.3	5.4	5.2	5.1	4.8	4.4	4.2	4.1	4.0	4.9	5.3	4.8	
	MIDNIGHT-MIDNIGHT (OKTAS)	32	5.0	5.1	5.1	4.9	4.7	4.3	3.8	3.8	3.9	3.9	4.8	5.1	4.5	
	MEAN NO. DAYS WITH: CLEAR	48	7.3	6.6	6.5	6.9	7.1	7.1	9.3	10.1	11.4	12.3	8.6	7.1	100.3	
	PARTLY CLOUDY	48	6.6	6.5	8.0	8.2	9.5	11.0	11.3	11.1	8.2	7.5	6.6	6.6	101.1	
	CLOUDY	48	17.1	15.1	16.5	14.9	14.4	11.9	10.4	9.8	10.4	11.2	14.9	17.3	163.9	
PR	MEAN STATION PRESSURE(IN)	24	29.47	29.46	29.38	29.31	29.32	29.32	29.35	29.38	29.40	29.42	29.43	29.47	29.39	
	MEAN SEA-LEVEL PRES. (IN)	24	30.14	30.12	30.04	29.96	29.95	29.95	29.98	30.00	30.03	30.06	30.08	30.14	30.04	
WINDS	MEAN SPEED (MPH)	24	10.3	10.2	10.8	10.7	9.3	8.4	7.9	7.4	7.8	8.7	9.9	9.9	9.3	
	PREVAIL.DIR(TENS OF DEGS)	38	31	31	31	31	19	19	25	19	19	17	31	31	31	
	MAXIMUM 2-MINUTE: SPEED (MPH)	11	39	40	40	53	41	43	43	45	41	43	41	38	53	
	DIR. (TENS OF DEGS)		30	12	25	26	29	17	27	31	25	31	24	27	26	
	YEAR OF OCCURRENCE		2005	2007	2007	2006	2000	2002	2004	2005	2005	2001	1998	2007	APR 2006	
	MAXIMUM 5-SECOND SPEED (MPH)	11	46	54	52	70	60	64	55	55	51	52	53	47	70	
	DIR. (TENS OF DEGS)		30	23	26	27	04	17	06	31	26	26	24	26	27	
YEAR OF OCCURRENCE		2005	1999	2007	2006	2004	2002	2006	2005	2005	2007	1998	2007	APR 2006		
PRECIPITATION	NORMAL (IN)	30	2.14	2.28	3.60	3.69	4.11	3.76	3.90	2.98	2.96	2.76	3.71	2.86	38.75	
	MAXIMUM MONTHLY (IN)	50	9.01	4.68	6.67	10.32	12.92	12.35	10.71	6.44	9.16	7.12	9.95	7.82	12.92	
	YEAR OF OCCURRENCE		2005	1986	1978	1994	1995	2003	1981	1970	1993	1984	1985	1982	MAY 1995	
	MINIMUM MONTHLY (IN)	50	0.10	0.25	1.09	0.99	.78	0.44	0.60	0.08	T	0.21	0.44	0.32	T	
	YEAR OF OCCURRENCE		1986	1963	1966	1977	2005	1991	1970	1971	1979	1975	1969	1958	SEP 1979	
	MAXIMUM IN 24 HOURS (IN)	50	3.07	2.60	2.95	4.91	6.55	3.78	3.47	3.17	3.50	2.70	3.71	4.03	6.55	
	YEAR OF OCCURRENCE		2005	1999	1977	1979	1995	2003	1982	1993	1986	1986	1985	1982	MAY 1995	
	NORMAL NO. DAYS WITH: PRECIPITATION >= 0.01	30	9.4	8.2	11.1	11.4	11.3	9.6	8.3	8.1	7.5	8.5	10.1	9.4	112.9	
PRECIPITATION >= 1.00	30	0.3	0.5	0.5	0.6	1.0	1.1	1.2	0.9	0.9	0.6	1.0	0.7	9.3		
SNOWFALL	NORMAL (IN)	30	7.4	4.8	3.3	0.6	0.0	0.0	0.0	0.0	0.0	0.*	1.5	4.9	22.5	
	MAXIMUM MONTHLY (IN)	71	23.9	20.8	22.3	6.5	0.6	0.6	T	T	0.0	0.0	11.3	26.3	26.3	
	YEAR OF OCCURRENCE		1977	1993	1960	1971	1993	1993	1993	1997			1993	1951	1973	DEC 1973
	MAXIMUM IN 24 HOURS (IN)	71	13.9	11.7	10.7	6.1	0.6	T	T	0.0	0.0	T	10.3	12.0	13.9	
	YEAR OF OCCURRENCE		1982	1993	1989	1971	1993	1993	1997			1993	1951	1973	JAN 1982	
	MAXIMUM SNOW DEPTH (IN)	59	13	20	17	6	0	0	0	0	0	0	10	12	20	
	YEAR OF OCCURRENCE		1978	1982	1978	1971							1951	1973	FEB 1982	
NORMAL NO. DAYS WITH: SNOWFALL >= 1.0	30	2.0	1.2	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.5	6.1		

**PRECIPITATION (inches) 2007 ST LOUIS (KSTL)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1978	1.70	1.60	6.67	3.21	3.69	2.39	6.03	0.76	3.10	2.28	4.47	1.81	37.71
1979	1.95	1.48	3.63	7.47	1.62	1.67	3.67	2.26	T	1.81	2.07	1.85	29.48
1980	0.63	1.54	3.98	1.54	3.40	2.19	3.56	2.72	3.12	2.89	1.25	0.66	27.48
1981	0.64	2.18	2.97	3.40	6.79	5.82	10.71	3.31	1.17	3.81	2.71	2.01	45.52
1982	4.90	1.37	2.88	2.55	4.85	5.96	7.91	5.27	5.27	2.30	3.89	7.82	54.97
1983	0.72	0.95	3.54	7.30	6.32	4.32	1.23	2.24	1.24	5.40	7.79	3.75	44.80
1984	0.84	3.43	5.37	6.29	5.19	2.74	0.76	0.64	8.88	7.12	5.50	4.89	51.65
1985	0.53	3.77	5.18	3.60	3.30	9.43	5.23	3.66	0.43	1.96	9.95	3.69	50.73
1986	0.10	4.68	1.22	1.23	2.42	4.43	2.61	2.22	7.99	5.34	1.58	1.06	34.88
1987	1.98	1.40	2.16	1.74	2.00	3.59	5.04	5.56	1.62	1.74	4.09	7.46	38.38
1988	3.30	2.27	4.73	1.15	1.44	1.97	3.02	2.31	1.99	1.86	6.65	3.24	33.93
1989	2.58	1.43	4.53	2.10	4.11	2.34	4.59	3.00	1.69	0.95	0.59	0.69	28.60
1990	1.42	3.53	2.66	3.07	9.59	3.02	3.34	2.84	0.78	4.96	3.36	6.52	45.09
1991	1.52	0.98	3.20	3.27	3.87	0.44	5.18	0.98	2.98	5.70	3.26	2.10	33.48
1992	1.12	1.89	3.45	2.46	1.45	1.19	4.31	3.45	2.98	1.21	6.32	3.66	33.49
1993	3.54	2.75	3.31	6.16	3.94	7.12	5.06	4.78	9.16	2.61	4.85	1.48	54.76
1994	2.09	1.51	1.27	10.32	1.72	2.16	1.42	3.76	1.18	2.85	4.90	1.52	34.70
1995	4.39	1.33	3.19	3.33	12.92	2.96	2.16	4.52	0.74	2.01	1.28	2.85	41.68
1996	3.27	0.52	3.06	7.97	4.34	3.72	6.33	1.57	2.86	2.67	6.50	.86	43.67
1997	2.74	4.14	2.85	2.66	3.05	2.00	1.44	3.36	2.73	2.05	2.36	1.85	31.23
1998	2.88	2.93	6.00	4.63	3.62	6.90	6.39	2.35	1.86	2.51	2.72	0.83	43.62
1999	5.10	3.52	2.40	3.72	2.20	5.26	4.22	1.95	1.09	2.04	0.72	1.84	34.06
2000	1.23	3.11	1.88	1.84	5.84	8.22	2.25	3.64	2.62	2.60	2.79	1.35	37.37
2001	1.12	2.48	1.45	3.01	2.81	3.60	4.00	1.99	2.81	5.50	3.06	3.46	35.29
2002	3.16	0.83	3.67	4.25	7.81	5.26	1.47	4.12	2.44	4.78	1.14	2.02	40.95
2003	0.96	2.00	2.80	4.29	3.97	12.35	2.51	2.54	4.15	2.81	5.34	2.34	46.06
2004	3.97	0.85	4.36	1.94	9.75	0.83	5.52	4.10	0.23	3.21	5.74	1.77	42.27
2005	9.01	1.84	1.47	2.17	0.78	5.10	2.22	3.87	5.30	1.52	3.35	1.22	37.85
2006	1.63	0.46	3.26	2.10	2.88	2.37	2.73	2.27	1.28	3.66	5.25	2.04	29.93
2007	3.11	1.98	2.80	3.18	4.26	2.88	3.11	1.57	1.71	1.97	1.25	2.75	30.57
POR= 62 YRS	2.20	2.12	3.26	3.57	3.98	4.05	3.76	2.95	2.87	2.80	3.18	2.45	37.19

WBAN : 13994

**AVERAGE TEMPERATURE (°F) 2007 ST LOUIS (KSTL)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1978	19.6	21.1	37.9	56.2	63.6	74.4	78.5	76.4	73.1	55.6	47.5	35.0	53.2
1979	16.6	23.1	44.1	52.9	65.5	76.5	79.2	78.4	70.8	59.2	44.5	38.7	54.1
1980	31.4	27.9	41.0	54.5	66.9	75.5	85.0	83.5	72.5	55.9	46.4	36.6	56.4
1981	31.2	36.8	46.7	63.1	60.7	75.7	78.7	76.1	69.2	55.7	48.7	31.1	56.1
1982	22.5	28.6	45.3	51.5	70.7	70.6	79.3	75.2	68.0	58.3	46.3	41.6	54.8
1983	32.3	38.1	44.5	50.3	62.3	75.3	83.5	84.2	72.0	59.7	48.2	20.5	55.9
1984	28.3	40.4	37.1	54.1	63.2	79.5	78.3	80.7	68.2	61.8	44.3	40.7	56.4
1985	22.6	30.5	49.5	60.4	67.6	71.6	79.3	74.7	70.9	61.4	46.5	27.3	55.2
1986	34.9	34.5	49.2	60.8	68.2	78.3	82.8	74.0	73.3	58.3	41.5	35.4	57.6
1987	30.6	40.1	48.6	56.9	72.6	77.9	81.0	78.9	70.5	53.8	49.1	38.0	58.2
1988	29.2	30.5	45.2	57.1	69.0	77.7	81.6	82.7	72.5	53.9	47.2	37.2	57.0
1989	41.2	28.2	45.0	57.7	64.3	74.8	79.3	77.8	67.4	61.3	47.1	24.1	55.7
1990	42.9	41.3	49.8	55.7	63.6	77.2	80.2	77.9	74.1	58.1	52.7	34.7	59.0
1991	29.3	41.7	50.1	61.5	73.0	79.9	80.9	79.7	72.4	60.5	42.4	39.2	59.2
1992	37.0	42.7	48.5	57.8	65.1	73.8	79.0	73.4	69.2	59.4	44.3	35.7	57.2
1993	32.1	31.7	41.5	54.2	66.4	75.1	81.9	80.4	66.4	56.1	43.9	37.2	55.6
1994	26.8	35.0	47.7	57.7	65.0	79.0	79.5	76.6	70.2	61.5	52.1	41.5	57.7
1995	31.1	36.4	49.0	56.8	64.7	75.6	81.3	83.9	68.0	60.9	42.7	33.8	57.0
1996	29.4	37.4	41.0	54.6	68.6	74.6	75.8	77.6	67.2	58.1	39.0	35.5	54.9
1997	26.7	38.1	47.6	50.9	61.7	73.6	80.2	76.0	70.2	59.1	42.0	35.1	55.1
1998	36.4	42.6	43.2	55.3	71.2	75.5	78.9	79.1	75.0	60.2	49.5	37.2	58.7
1999	31.3	42.5	42.8	58.6	66.8	74.9	82.9	76.5	69.7	58.8	52.6	38.3	58.0
2000	33.0	42.9	49.1	55.2	69.0	72.9	77.6	80.4	69.6	61.3	41.3	21.6	56.2
2001	30.5	35.1	41.5	63.1	68.7	74.1	80.7	79.6	68.8	57.7	53.1	39.9	57.7
2002	38.1	39.3	42.8	59.5	63.6	78.0	82.8	80.0	73.4	55.3	44.1	37.5	57.9
2003	28.1	31.4	47.5	58.1	65.1	71.3	79.9	80.8	67.7	60.0	49.3	38.7	56.5
2004	30.9	35.9	49.9	59.3	70.8	74.4	77.9	73.6	71.5	60.2	49.3	36.9	57.6
2005	33.9	40.4	43.9	59.0	66.5	78.8	80.0	80.0	73.9	58.8	48.6	32.0	58.0
2006	42.3	35.3	46.6	62.1	66.2	76.2	82.6	80.1	67.5	55.3	46.9	40.7	58.5
2007	34.1	29.3	53.6	53.9	70.9	76.4	78.4	84.4	74.0	63.1	46.5	35.5	58.3
POR= 62 YRS	30.6	35.1	44.5	56.5	66.1	75.2	79.3	77.8	69.9	58.6	45.5	34.7	56.1

**HEATING DEGREE DAYS (base 65°F) 2007 ST LOUIS (KSTL)**

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1978-79	0	0	24	292	528	923	1496	1167	644	364	80	0	5518
1979-80	0	0	16	223	610	810	1035	1071	740	331	54	0	4890
1980-81	0	0	30	305	553	877	1039	784	569	127	168	0	4452
1981-82	0	0	35	298	483	1048	1308	1015	603	407	9	11	5217
1982-83	0	0	49	261	569	721	1008	745	632	437	117	7	4546
1983-84	0	0	58	192	498	1376	1133	705	860	342	115	0	5279
1984-85	0	0	103	151	616	746	1308	960	487	200	42	10	4623
1985-86	0	0	64	145	550	1159	929	850	506	194	44	0	4441
1986-87	0	11	12	221	699	910	1062	691	501	267	10	0	4384
1987-88	0	0	12	346	490	830	1102	995	610	241	17	3	4646
1988-89	0	0	5	354	528	854	730	1029	625	293	128	4	4550
1989-90	0	0	73	183	536	1261	679	657	496	327	85	9	4306
1990-91	3	0	24	250	375	934	1101	648	474	154	21	0	3984
1991-92	0	0	67	191	674	796	859	642	509	264	95	5	4102
1992-93	0	3	46	204	615	902	1014	927	726	327	52	13	4829
1993-94	0	0	58	292	628	852	1179	833	531	261	84	1	4719
1994-95	0	0	33	155	388	722	1045	794	488	260	88	0	3973
1995-96	0	0	65	167	664	961	1096	797	735	322	67	14	4888
1996-97	0	0	57	235	776	908	1180	746	530	418	142	5	4997
1997-98	0	0	13	271	684	922	880	621	689	293	19	24	4416
1998-99	0	0	1	175	460	859	1038	626	679	214	41	7	4100
1999-00	0	0	41	226	370	826	985	638	490	297	36	8	3917
2000-01	0	0	57	176	709	1338	1063	831	721	154	47	13	5109
2001-02	0	0	50	246	352	772	826	714	683	234	120	0	3997
2002-03	0	0	12	338	620	847	1135	937	536	249	64	27	4765
2003-04	0	0	50	176	470	812	1048	836	466	225	55	0	4138
2004-05	1	4	9	175	460	865	961	681	648	216	82	0	4102
2005-06	0	0	16	243	495	1017	696	826	567	135	95	0	4090
2006-07	0	0	40	344	535	747	953	992	385	360	18	0	4374
2007-	0	0	15	167	550	908							

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**COOLING DEGREE DAYS (base 65°F) 2007 ST LOUIS (KSTL)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1978	0	0	7	17	120	295	426	360	276	10	8	0	1519
1979	0	0	2	9	102	354	446	420	195	50	0	0	1578
1980	0	0	0	23	120	320	626	580	262	31	2	0	1964
1981	0	0	7	77	42	327	431	353	166	13	1	0	1417
1982	0	0	0	7	191	186	453	322	146	63	15	4	1387
1983	0	0	3	3	41	322	578	603	274	36	2	0	1862
1984	0	0	0	24	67	442	423	493	202	57	2	1	1711
1985	0	0	14	70	128	214	451	310	245	43	2	0	1477
1986	0	0	25	75	150	407	561	298	267	21	0	0	1804
1987	0	0	0	32	251	393	501	439	183	5	20	0	1824
1988	0	0	4	10	144	389	521	556	238	16	0	0	1878
1989	0	0	11	80	111	305	450	403	151	75	6	0	1592
1990	0	0	30	55	47	382	480	408	304	41	12	0	1759
1991	0	0	19	56	277	452	498	463	295	58	3	0	2121
1992	0	0	7	54	104	277	440	268	182	36	0	0	1368
1993	0	0	1	9	102	320	529	483	107	23	0	0	1574
1994	0	0	4	48	90	428	453	365	194	53	7	0	1642
1995	0	0	0	22	85	322	510	595	164	47	0	0	1745
1996	0	5	0	16	188	309	342	402	132	25	0	0	1419
1997	0	0	1	1	44	268	477	349	173	99	0	0	1412
1998	0	0	21	7	217	347	439	446	305	33	2	3	1820
1999	0	0	0	28	104	309	563	364	190	37	5	0	1600
2000	0	5	6	8	167	251	398	483	202	69	5	0	1594
2001	0	0	0	106	166	293	492	457	167	29	2	1	1713
2002	0	0	1	75	81	396	560	471	270	43	0	0	1897
2003	0	0	1	49	71	221	470	498	140	29	8	0	1487
2004	0	0	4	60	242	291	408	279	209	31	0	0	1524
2005	0	0	2	41	135	420	473	469	289	55	9	0	1893
2006	0	0	5	54	138	326	556	474	123	50	0	0	1726
2007	0	0	38	32	206	350	422	611	293	113	0	0	2065

**SNOWFALL (inches) 2007 ST LOUIS (KSTL)**

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1978-79	0.0	0.0	0.0	0.0	0.0	1.4	18.4	4.8	2.0	0.0	0.0	0.0	26.6
1979-80	0.0	0.0	0.0	0.0	0.3	T	4.2	7.4	8.7	5.0	0.0	0.0	25.6
1980-81	0.0	0.0	0.0	0.0	8.0	1.1	0.6	8.2	0.2	0.0	0.0	0.0	18.1
1981-82	0.0	0.0	0.0	0.0	T	7.9	16.6	9.0	0.4	2.7	0.0	0.0	36.6
1982-83	0.0	0.0	0.0	0.0	T	T	3.3	0.3	1.4	2.4	0.0	0.0	7.4
1983-84	0.0	0.0	0.0	0.0	T	6.5	2.3	9.9	5.2	0.0	0.0	0.0	23.9
1984-85	0.0	0.0	0.0	0.0	1.7	1.8	5.1	1.3	T	0.0	0.0	0.0	9.9
1985-86	0.0	0.0	0.0	0.0	T	5.7	1.0	6.1	0.2	T	0.0	0.0	13.0
1986-87	0.0	0.0	0.0	0.0	T	T	23.6	0.6	T	0.0	0.0	0.0	24.2
1987-88	0.0	0.0	0.0	0.0	T	7.3	1.4	6.7	2.8	0.0	0.0	0.0	18.2
1988-89	0.0	0.0	0.0	0.0	2.9	5.9	0.1	3.9	11.0	0.0	0.0	0.0	23.8
1989-90	0.0	0.0	0.0	T	T	9.1	0.2	6.9	8.4	T	T	T	24.6
1990-91	0.0	0.0	0.0	0.0	T	13.2	1.9	T	1.7	0.0	0.0	0.0	16.8
1991-92	0.0	0.0	0.0	T	3.9	0.4	3.8	2.3	3.1	0.0	0.0	0.0	13.5
1992-93	0.0	0.0	0.0	0.0	T	0.7	5.5	20.8	3.0	0.3	0.6	T	30.9
1993-94	0.0	0.0	0.0	T	1.6	1.1	5.0	1.0	0.2	1.4	0.0	0.0	10.3
1994-95	0.0	0.0	0.0	0.0	0.0	0.1	3.5	1.6	0.5	T	0.0	0.0	5.7
1995-96	0.0	0.0	0.0	0.0	0.9	7.9	13.4	2.8	1.0	T	0.0	0.0	26.0
1996-97	T	0.0	0.0	T		1.5	13.1	0.8	T	4.2	0.0	0.0	
1997-98	T	0.0	0.0	0.0	2.6	4.1	5.7	0.5	5.9	T	0.2	0.0	19.0
1998-99	0.0	0.0	0.0	0.0	0.0	1.8	12.0	1.5	0.5	T	0.0	0.0	15.8
1999-00	0.0	0.0	0.0	0.0	0.0	0.3	5.0	T	4.8	T	0.0	0.0	10.1
2000-01	0.0	0.0	0.0	0.0	0.0	15.9	0.7	1.6	T	0.4	0.0	0.0	18.6
2001-02	0.0	0.0	0.0	T	0.2	T	6.2	2.6	5.0	0.0	0.0	0.0	14.0
2002-03	0.0	0.0	0.0	0.0	0.2	9.4	7.4	12.7	0.1	T	0.0	0.0	29.8
2003-04	0.0	0.0	0.0	0.0	T	3.3	2.2	1.9	T	0.0	T	0.0	7.4
2004-05	T	0.0	0.0	0.0	1.8	T	7.7	3.2	0.1	0.0	0.0	T	12.8
2005-06	0.0	0.0	0.0	0.0	T	3.8	1.0	3.1	2.6	T	0.0	0.0	10.5
2006-07	0.0	0.0	0.0	0.0	2.3	2.1	3.7	4.7	0.4	T	0.0	0.0	13.2
2007-	0.0	0.0	0.0	0.0	T	7.8							
POR= 63 YRS	T	0.0	0.0	T	1.3	3.7	5.6	4.2	3.6	0.4	T	T	18.8

WBAN : 13994

**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.</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 EIGHTS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER.</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>
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# 2007 ST. LOUIS MISSOURI (KSTL)

St Louis is located at the confluence of the Missouri and Mississippi Rivers and near the geographical center of the United States. Its position in the middle latitudes allows the area to be affected by warm moist air that originates in the Gulf of Mexico, as well as cold air masses that originate in Canada. The alternate invasion of these airmasses produces a wide variety of weather conditions, and allows the region to enjoy a true four-season climate.

During the summer months, air originating from the Gulf of Mexico tends to dominate the area, producing warm and humid conditions. Since 1870, records indicate that temperatures of 90 degrees or higher occur on about 35-40 days per year. Extremely hot days (100 degrees or more) are expected on no more than five days per year.

Winters are brisk and stimulating, but prolonged periods of extremely cold weather are rare. Records show that temperatures drop to zero or below an average of 2 or 3 days per year, and temperatures as cold as 32 degrees or lower occur less than 25 days in most years. Snowfall has averaged a little over 18 inches per winter season, and snowfall of an inch or less is received on 5 to 10 days in most years.

Normal annual precipitation for St. Louis is a little less than 34 inches. The three winter months are the driest, with an average total of about 6 inches of precipitation. The spring months of March through May are normally the wettest with normal total rainfall of just under 10.5 inches. It is not unusual to have extended dry periods of one to two weeks during growing season.

Thunderstorms normally occur on between 40 and 50 days per year. During any year, there are usually a few of these thunderstorms that are severe, and produce large hail and damaging winds. Tornadoes have produced extensive damage and loss of life in the St. Louis area.

# Station Location

# ST LOUIS

LOCATION	Occupied From	Occupied To	Airline Distances and Directions from previous Location	Latitude		Longitude		ELEVATION ABOVE								REMARKS
				NORTH	WEST	SEA LEVEL	GROUND							AUTOMATIC OBSERVING EQUIPMENT *		
						GROUND TEMPERATURE SITE	WIND INSTRUMENT	EXTREME THERMOMETERS	PSYCHROMETER	SUNSHINE SWITCH	TIPPING BUCKET RAIN GAUGE	WEIGHING RAIN GAUGE	8 INCH RAIN GAUGE		HYGROTHERMOMETER	
*NOTES:																
AIRPORT																
6185 Aviation Drive International Airport	1/11/78	06/01/96	app.72 ft SW	38° 45'	90° 22'	535	r20 t20	6	4	7	3 v3	20 s3 v3	3	r4 t4 u4	r. Not moved 1/11/78. s. Moved to field site 5/10/78. Station type changed from WSMO to WSCMO 8/1979. t. Moved to new site 11/19/79. u. Type change 3/23/85. v. Minor move 3/23/85.	
International Aiprot	06/01/96	Present	NA	38° 45'	90° 22'	w707								s	ASOS Commissioned 06/01/96 w. Ground elevation.	

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\* NOTES: For earlier station history see previous editions.