



JUNE 2002

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

MINNEAPOLIS-ST.PAUL, MN

INTERNATIONAL AIRPORT (MSP)

Lat: 44°52' N Long: 93°13' W Elev (Ground): 871 Feet

Time Zone: CENTRAL WBAN: 14922 ISSN #:0198-2745

DATE	TEMPERATURE °F						DEG DAYS BASE 65°		WEATHER	SNOW/ICE ON GND(IN)		PRECIPITATION (INCHES)		PRESSURE (INCHES OF HG)		WIND SPEED = MPH DIR = TENS OF DEGREES								DATE	
	MAXIMUM	MINIMUM	AVERAGE	DEP FROM NORMAL	AVERAGE DEW PT	AVERAGE WET BULB	HEATING	COOLING		0600 LST	1200 LST	2400 LST	2400 LST	AVERAGE STATION	AVERAGE SEA LEVEL	RESULTANT SPEED	RES DIR	AVERAGE SPEED	MAXIMUM						
																			5-SEC		2-MIN				
																			SPEED	DIR	SPEED	DIR			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
01	87	64	76	12	48	60	0	11					0.00	28.89	29.76	6.6	32	9.8	30	01	23	30	01		
02	73	54	64	-1	49	56	1	0	TSRA RA BR				0.31	28.99	29.87	10.7	07	12.4	25	10	22	10	02		
03	57	51	54	-11	51	52	11	0	TS TSRA RA DZ BR				0.45	28.97	29.86	10.0	07	11.0	31	09	24	09	03		
04	56	49	53*	-13	50	51	12	0	RA DZ BR				0.50	29.01	29.91	7.4	36	7.7	28	02	22	04	04		
05	75	46*	61	-5	49	55	4	0	BCFG BR				0.00	29.11	30.01	3.9	25	5.2	18	01	13	31	05		
06	78	52	65	-1	52	59	0	0	TS TSRA				0.43	29.06	29.94	10.7	18	11.5	40	20	33	19	06		
07	85	61	73	6	59	63	0	8	TS RA BR				0.12	28.98	29.86	5.5	16	10.1	35	15	32	14	07		
08	77	62	70	3	64	66	0	5	RA				T	29.07	29.96	4.1	08	6.2	20	04	14	09	08		
09	87	67	77	10	65	69	0	12					0.00	28.98	29.86	13.3	14	13.5	26	15	23	14	09		
10	83	66	75	8	69	71	0	10	TS TSRA GR RA BR				0.70	28.84	29.71	11.6	17	12.5	36	32	29	31	10		
11	77	63	70	3	63	65	0	5	TS RA BR				0.05	28.90	29.78	3.7	35	7.3	30	01	15	04	11		
12	77	61	69	1	58	62	0	4	RA BR				0.18	29.05	29.94	2.1	07	5.4	22	18	17	18	12		
13	71	55	63	-5	54	57	2	0	RA BR				0.16	28.97	29.85	7.3	28	8.1	31	29	23	30	13		
14	77	54	66	-3	52	58	0	1					0.00	28.95	29.84	10.6	35	11.1	29	01	20	32	14		
15	74	56	65	-4	49	56	0	0					0.00	28.97	29.86	8.9	35	9.6	31	03	21	33	15		
16	79	54	67	-2	52	58	0	2	TS RA				0.02	29.00	29.89	2.0	30	6.0	36	33	24	31	16		
17	75	59	67	-2	57	61	0	2					0.00	28.97	29.86	5.6	13	6.8	16	11	13	12	17		
18	83	62	73	4	60	65	0	8	RA				T	28.94	29.82	12.6	14	13.0	28	18	22	17	18		
19	82	69	76	7	67	70	0	11	TS TSRA RA BR				0.37	28.91	29.79	14.8	18	16.2	55*	17	45*	17	19		
20	78	62	70	0	58	63	0	5	TS TSRA RA				0.06	29.30	30.19	5.7	26	7.7	28	30	20	30	20		
21	72	61	67	-3	64	65	0	2	TS TSRA RA BR				2.95	29.35	30.24	6.3	10	9.1	31	33	28	33	21		
22	90	68	79	9	70	73	0	14	BR				0.00	29.15	30.03	11.4	17	12.7	31	17	26	18	22		
23	90	71	81	11	69	73	0	16	TS TSRA RA BR HZ				0.28	29.06	29.94	8.1	18	9.8	21	17	17	18	23		
24	89	69	79	9	67	70	0	14	TS TSRA RA BR HZ				1.54	29.08	29.96	8.0	19	12.7	37	28	32	18	24		
25	89	68	79	9	68	71	0	14	TS TSRA RA				0.18	29.03	29.90	3.4	22	7.8	30	22	25	22	25		
26	83	68	76	6	62	67	0	11	RA				T	28.98	29.86	8.5	34	9.6	26	33	22	32	26		
27	85	65	75	4	64	68	0	10	HZ FU				0.00	29.01	29.89	4.1	34	5.0	24	01	14	32	27		
28	87	68	78	7	67	71	0	13	BR HZ				0.00	29.06	29.94	6.1	17	6.5	17	18	14	18	28		
29	94	73	84	12	70	75	0	19					0.00	29.03	29.90	10.9	18	11.4	26	15	21	17	29		
30	97*	80	89*	17	72	77	0	24					0.00	28.99	29.86	12.9	21	13.1	33	19	24	23	30		
80.2 61.9 71.1 ■■										60.0 64.2 1.0 7.4		< MONTHLY AVERAGES TOTALS->				8.30	29.02	29.90	1.4	18	9.6	<- MONTHLY AVERAGES			
2.7 ■■										<-----DEPARTURE FROM NORMAL----->					3.96	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									
DEGREE DAYS									GREATEST 24-HR PRECIPITATION: 2.96				DATE :20-21				SEA LEVEL PRESSURE				DATE TIME				
MONTHLY									GREATEST 24-HR SNOWFALL:				DATE :				MAXIMUM				: 30.34 21 1153				
SEASON TO DATE									GREATEST SNOW DEPTH:				DATE :				MINIMUM				: 29.63 10 1753				
TOTAL DEPARTURE									NUMBER OF DAYS WITH ➔				MAXIMUM TEMP ≥ 90: 4				MINIMUM TEMP ≤ 32 : 0				PRECIPITATION ≥ 0.01 INCH : 16				
HEATING: 30 -11 6845 -1136													MAXIMUM TEMP ≤ 32 : 0				MINIMUM TEMP ≤ 0 : 0				PRECIPITATION ≥ 0.10 INCH : 13				
COOLING: 221 75 272 81													THUNDERSTORMS : 13				HEAVY FOG : 0				SNOWFALL ≥ 1.0 INCH :				

JUNE 2002
MINNEAPOLIS-ST.PAUL, MN

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

MINNEAPOLIS—ST.PAUL, MN

JUNE 2002

MSP

WBAN # 14922

DATE	FOR HOUR (LST) ENDING AT												DATE	FOR HOUR (LST) ENDING AT												DATE	Sum if Different (See Note)	2400 LST
	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18	19	20	21	22	23	24			Water Equiv.
01													01												01	0.36	0.00	
02													02				0.02	T			0.02	0.03	0.02	0.22	02		0.31	
03													03		T	T		T		T	T	T	0.18	0.01	03		0.45	
04	0.01	0.11	0.05	T	0.01	T	0.01	0.11	0.02	0.22	0.09	0.02	04	0.01	T	T									04		0.50	
05													05												05		0.00	
06													06				T	T	0.02		T	0.03	0.20	0.10	0.10		06	0.43
07	0.10												07												07		0.12	
08							T						08												08		T	
09													09												09		0.00	
10													10										0.52	0.18	10		0.70	
11	0.05			T									11												11		0.05	
12													12				T	T	0.01	0.09	0.03	0.04	0.01		12		0.18	
13													13				0.02				0.14				13		0.16	
14													14												14		0.00	
15													15												15		0.00	
16													16	T	T					0.02	T				16		0.02	
17													17				T								17		0.00	
18													18					T							18		T	
19													19												19		0.37	
20	T	0.02	0.07 0.03	0.26	0.01	T				0.01	0.01	0.01	20						0.01						20		0.06	
21	T	0.07	0.05	0.08	0.04	0.38	0.51	0.10	0.17	0.67	0.44	0.23	21	0.19	0.01	T	0.01								21		2.95	
22													22												22		0.00	
23					0.19	0.07	0.02	T					23												23		0.28	
24								0.42	0.44	0.03			24												24		1.54	
25	0.01	0.05	0.07	0.04	T	T		T					25							T	0.01	0.11	0.26	0.27	0.01		25	0.18
26	T												26												26		T	
27													27												27		0.00	
28													28												28		0.00	
29													29												29		0.00	
30													30												30		0.00	

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.27	.46	.63	.70	.81	.96	1.03	1.06	1.13	1.20	1.33	1.44
Ending Date	21	21	21	21	21	21	21	21	21	21	21	21
Ending Time (Hour/Min)	0954	0955	0956	1001	1004	1019	1033	1052	1113	1133	1203	1231

Date and time are not entered for TRACE amounts.

Note : The sum of the hourly totals is given when it differs from the daily total. NWS does not edit ASOS hourly values but may edit daily and monthly totals. Hourly, daily, and monthly totals are printed as reported by the ASOS site.

* = Extreme for the month (last occurrence if more than one)
T = Trace precipitation amount
+ = also occurs on earlier date
FG+ = Heavy fog, visibility .25 miles or less
BLANK entries denote missing or unreported data

Wind direction is recorded in tens of degrees (2 digits) clockwise from true north. '00' = calm, 'VR' = variable.

Water Equivalent of snow on the ground is reported only when the depth is 2 or more inches.

WEATHER NOTATIONS

MINNEAPOLIS—ST. PAUL, MN
JUNE 2002

Satellite data are used to derive cloudiness above 12,000 feet. Effective Cloud Amount is based on the cloud cover and the transparency of the clouds within the satellite field of view (approx. 31x31 miles).

A Heating (Cooling) Degree Day is the difference between the average daily temperature and 65 degrees F. The HDD season begins July 1, the CDD season begins January 1.

Dew Point is the temperature to which the air must be cooled to achieve 100% relative humidity. Wet Bulb is the temperature the air would have if cooled to saturation at constant pressure by evaporation of water into it.

Snow Depth, Snowfall, and Sunshine data may come from nearby sites that the National Weather Service deems Climatologically representative of this site.

ERRATA – FEB 2002 LCD– Please change pcpn on the following days; Day 18 = 0.05, 19 = 0.14, 21 = 0.02, 26 = 0.02. Monthly Total = 0.41, Dep = $-.38$, and Greatest 24–HR pcpn = 0.14 Date: 19.

OBSERVATIONS AT 3-HOURLY INTERVALS

MINNEAPOLIS-ST. PAUL, MN
JUNE 2002 MSP WBAN # 14922

HOUR (LST)			SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)			SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)			
	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT <small>Okta</small>		VISIBILITY (MILES)	DRY BULB	DEW POINT		WET BULB	SPEED (MPH)	DIRECTION TENS OF DEG	STATION		SEA LEVEL	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)		EFF CLD AMT <small>Okta</small>	VISIBILITY (MILES)	DRY BULB		DEW POINT	WET BULB	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0430 JUN 01						SUNSET: 1951						SUNRISE: 0428 JUN 07						SUNSET: 1956											
03	CLR	NC			10.00	65	51	57	61	5	24	28.86	29.73	03	BKN	130			10.00	62	55	58	78	14	13	29.00	29.89		
06	FEW	NC			10.00	67	53	59	61	8	25	28.87	29.74	06	BKN	130			10.00	62	53	57	73	12	15	29.03	29.92		
09	BKN	250			10.00	79	57	65	47	8	28	28.86	29.73	09	SCT	NC			10.00	69	56	61	63	10	19	29.00	29.89		
12	BKN	250			10.00	87	43	62	21	17	31	28.85	29.72	12	BKN	150			10.00	81	58	67	46	13	23	28.98	29.85		
15	BKN	250			10.00	82	50	63	33	16	36	28.89	29.76	15	BKN	150			10.00	82	57	66	43	8	14	28.93	29.81		
18	BKN	250			10.00	80	44	60	28	10	35	28.91	29.78	18	OVC	060			10.00	74	64	68	71	9	01	28.93	29.81		
21	BKN	130			10.00	75	42	57	31	0	00	28.94	29.81	21	SCT	NC			8.00	67	65	66	93	5	36	28.96	29.84		
24	BKN	150			10.00	69	45	56	42	7	36	28.99	29.86	24	OVC	006			6.00	BR	64	63	63	96	7	01	29.00	29.89	
SUNRISE: 0430 JUN 02						SUNSET: 1952						SUNRISE: 0427 JUN 08						SUNSET: 1956											
03	BKN	150			10.00	65	43	53	45	15	03	28.98	29.85	03	OVC	150			10.00	62	61	61	96	0	00	29.03	29.92		
06	OVC	110			10.00	63	42	52	47	6	02	29.04	29.93	06	OVC	150			10.00	63	60	61	90	0	00	29.08	29.97		
09	OVC	090			10.00	61	48	54	63	9	04	29.03	29.92	09	OVC	100			10.00	65	61	63	87	7	VR	29.09	29.98		
12	BKN	130			10.00	71	49	59	46	13	07	29.00	29.89	12	OVC	150			10.00	72	65	67	79	0	00	29.07	29.96		
15	OVC	075			9.00	67	50	57	55	13	06	28.99	29.88	15	OVC	140			10.00	75	66	69	74	7	05	29.08	29.97		
18	OVC	070			10.00	63	54	58	73	15	11	28.94	29.83	18	BKN	250			10.00	76	68	71	77	12	09	29.06	29.95		
21	OVC	055			10.00	61	55	58	81	14	08	28.96	29.85	21	FEW	NC			10.00	72	67	69	84	8	09	29.08	29.97		
24	OVC	015			5.00	54	53	53	97	18	09	28.93	29.81	24	FEW	NC			10.00	69	65	66	87	12	11	29.08	29.97		
SUNRISE: 0429 JUN 03						SUNSET: 1953						SUNRISE: 0427 JUN 09						SUNSET: 1957											
03	OVC	008			7.00	54	52	53	93	12	08	28.92	29.80	03	SCT	NC			9.00	67	64	65	91	12	11	29.04	29.93		
06	OVC	008			9.00	52	50	51	93	12	05	28.95	29.85	06	OVC	250			7.00	68	60	63	76	14	14	29.02	29.91		
09	OVC	008			10.00	53	49	51	86	12	06	28.97	29.86	09	OVC	200			10.00	74	60	68	74	13	12	29.02	29.91		
12	OVC	010			10.00	54	50	52	87	9	08	28.97	29.87	12	OVC	180			10.00	82	68	73	63	16	14	29.00	29.88		
15	OVC	012			10.00	55	51	53	87	15	09	28.96	29.85	15	BKN	060			10.00	85	66	72	53	17	14	28.94	29.81		
18	OVC	010			8.00	54	51	52	90	14	07	28.98	29.88	18	SCT	NC			10.00	84	66	72	55	15	14	28.90	29.77		
21	OVC	011			5.00	54	52	53	93	6	08	29.00	29.89	21	SCT	NC			10.00	79	65	70	62	15	15	28.92	29.79		
24	OVC	010			6.00	54	53	53	97	7	36	28.96	29.86	24	CLR	NC			10.00	74	64	68	71	9	16	28.92	29.79		
SUNRISE: 0429 JUN 04						SUNSET: 1954						SUNRISE: 0427 JUN 10						SUNSET: 1958											
03	OVC	004			6.00	50	50	50	100	10	03	28.97	29.87	03	FEW	NC			9.00	74	64	68	71	10	17	28.88	29.75		
06	OVC	004			5.00	50	49	49	96	10	02	28.98	29.88	06	SCT	NC			10.00	71	65	67	81	10	15	28.87	29.74		
09	OVC	006			10.00	50	49	49	96	14	36	28.95	29.84	09	OVC	017			10.00	75	69	71	82	13	16	28.87	29.74		
12	OVC	008			8.00	51	49	50	92	7	36	29.00	29.91	12	OVC	028			10.00	81	71	74	72	14	16	28.84	29.71		
15	OVC	013			10.00	54	51	52	90	14	35	29.01	29.92	15	OVC	150			10.00	81	72	75	74	16	17	28.80	29.67		
18	OVC	015			10.00	55	50	52	83	6	34	29.04	29.95	18	OVC	055			10.00	82	72	75	72	15	18	28.76	29.63		
21	FEW	NC			10.00	53	49	51	86	3	32	29.06	29.97	21	SCT	NC			10.00	78	73	75	85	10	18	28.79	29.66		
24	CLR	NC			10.00	49	48	48	97	0	00	29.06	29.97	24	OVC	060			8.00	67	64	65	91	5	06	28.82	29.69		
SUNRISE: 0428 JUN 05						SUNSET: 1954						SUNRISE: 0427 JUN 11						SUNSET: 1958											
03	SCT	NC			7.00	48	47	47	96	0	00	29.08	29.99	03	BKN	070			5.00	BR	67	65	66	93	0	00	28.83	29.70	
06	SCT	NC			7.00	49	47	48	93	6	20	29.12	30.03	06	BKN	250			8.00	63	62	62	97	7	32	28.85	29.72		
09	FEW	NC			10.00	65	53	58	66	10	30	29.14	30.03	09	OVC	011			7.00	65	61	63	87	8	27	28.90	29.78		
12	BKN	250			10.00	72	49	59	44	7	27	29.13	30.03	12	OVC	250			10.00	72	64	67	76	6	28	28.90	29.78		
15	BKN	250			10.00	72	48	59	43	8	29	29.11	30.01	15	BKN	200			10.00	75	64	68	69	10	35	28.90	29.78		
18	SCT	NC			10.00	73	50	60	44	6	28	29.10	29.99	18	FEW	NC			10.00	75	61	66	62	8	03	28.92	29.80		
21	CLR	NC			10.00	68	50	58	53	5	20	29.10	29.99	21	FEW	NC			10.00	71	62	65	73	6	06	28.97	29.85		
24	CLR	NC			10.00	62	49	55	62	5	21	29.11	30.01	24	SCT	NC			10.00	66	61	63	84	8	07	28.99	29.87		
SUNRISE: 0428 JUN 06						SUNSET: 1955						SUNRISE: 0426 JUN 12						SUNSET: 1959											
03	CLR	NC			10.00	59	49	54	69	0	00	29.10	29.99	03	OVC	023			10.00	62	59	60	90	0	00	29.01	29.90		
06	SCT	NC			10.00	59	51	55	75	6	15	29.10	29.99	06	OVC	027			10.00	62	56	59	81	7	08	29.02	29.91		
09	FEW	NC			10.00	69	52	59	55	12	21	29.10	29.99	09	OVC	027			10.00	66	59	62	78	5	06	29.07	29.96		
12	SCT	NC			10.00	75	51	61	43	20	20	29.07	29.96	12	SCT	NC			10.00	73	62	66	69	6	09	29.05	29.94		
15	BKN	150			10.00	77	51	62	40	16	18	29.02	29.91	15	BKN	180			10.00	76	60	66	58	8	03	29.03	29.92		
18	BKN	250			10.00	77	49	61	37	15	16	28.97	29.85	18	OVC	100			10.00	73	51	60	46	10	02	29.02	29.91		
21	BKN	065			10.00	70	53	60	55	16	24	28.99	29.88	21	OVC	045			10.00	63	60	61	90	3	VR	29.07	29.97		
24	OVC	060			5.00	64	56	59	75	8	13	29.10	29.99	24	BKN	150			10.00	62	58	60	86	6	19	29.07	29.96		

OBSERVATIONS AT 3-HOURLY INTERVALS

MINNEAPOLIS-ST. PAUL, MN
JUNE 2002 MSP WBAN # 14922

HOUR (LST)			SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)			SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)			
	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT <small>Okta</small>		VISIBILITY (MILES)	DRY BULB	DEW POINT		WET BULB	SPEED (MPH)	DIRECTION TENS OF DEG	STATION		SEA LEVEL	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)		EFF CLD AMT <small>Okta</small>	VISIBILITY (MILES)	DRY BULB		DEW POINT	WET BULB	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0426					JUN 13	SUNSET: 1959					SUNRISE: 0427					JUN 19	SUNSET: 2002												
03	SCT	NC		10.00		59	57	58	93	0	00	29.00	29.88	03	OVC	040		6.00	TSRA	73	66	68	79	14	19	28.85	29.72		
06	SCT	NC		10.00		59	56	57	90	6	20	28.99	29.88	06	OVC	028		10.00		70	66	67	87	10	16	28.88	29.75		
09	SCT	NC		10.00		65	54	59	68	7	27	28.99	29.87	09	OVC	038		10.00		73	66	68	79	20	18	28.91	29.78		
12	SCT	NC		10.00		68	51	58	55	12	25	28.97	29.86	12	OVC	150		10.00		72	66	68	82	22	18	28.87	29.74		
15	BKN	047		10.00		70	51	59	51	15	27	28.92	29.81	15	OVC	033		10.00		80	68	72	67	20	18	28.91	29.78		
18	BKN	110		10.00		64	52	57	65	8	29	28.94	29.82	18	BKN	250		10.00		82	68	73	63	16	17	28.89	29.77		
21	OVC	070		10.00		57	54	55	90	3	25	28.95	29.83	21	OVC	070		10.00		80	68	72	67	18	18	28.93	29.80		
24	BKN	085		10.00		55	53	54	93	6	30	28.93	29.82	24	BKN	036		10.00		74	71	72	91	9	30	29.06	29.95		
SUNRISE: 0426					JUN 14	SUNSET: 1960					SUNRISE: 0427					JUN 20	SUNSET: 2002												
03	BKN	012		10.00		54	52	53	93	8	34	28.94	29.82	03	OVC	130		10.00		66	62	64	87	7	18	29.16	30.04		
06	OVC	012		10.00		56	52	54	87	13	36	28.97	29.86	06	BKN	250		10.00		64	60	62	87	10	24	29.25	30.14		
09	BKN	027		10.00		62	54	57	75	13	33	29.00	29.88	09	BKN	250		10.00		70	56	62	61	13	30	29.32	30.20		
12	SCT	NC		10.00		70	53	60	55	17	35	28.98	29.86	12	SCT	NC		10.00		75	56	64	52	12	27	29.35	30.24		
15	BKN	095		10.00		74	53	62	48	10	35	28.95	29.84	15	SCT	NC		10.00		78	54	64	43	8	30	29.34	30.23		
18	BKN	095		10.00		76	49	60	39	12	34	28.93	29.81	18	BKN	150		10.00		74	55	63	52	9	28	29.36	30.25		
21	FEW	NC		10.00		68	51	58	55	5	30	28.94	29.82	21	BKN	250		10.00		71	60	64	68	5	24	29.38	30.27		
24	SCT	NC		10.00		64	53	58	68	5	05	28.94	29.82	24	SCT	NC		10.00		68	55	60	63	5	14	29.38	30.27		
SUNRISE: 0426					JUN 15	SUNSET: 2000					SUNRISE: 0427					JUN 21	SUNSET: 2002												
03	CLR	NC		10.00		57	52	54	83	6	28	28.93	29.82	03	OVC	024		3.00	-TSRA BR	63	59	61	87	7	09	29.37	30.26		
06	BKN	200		10.00		59	53	56	81	8	34	28.96	29.84	06	OVC	026		6.00	TSRA BR	63	61	62	93	5	05	29.40	30.29		
09	BKN	200		10.00		65	53	58	66	9	35	28.98	29.86	09	OVC	017		5.00	-RA BR	64	62	63	93	16	10	29.37	30.27		
12	BKN	250		10.00		70	44	56	39	18	34	28.97	29.85	12	OVC	028		4.00	TSRA BR	64	64	64	100	9	16	29.44	30.34		
15	SCT	NC		10.00		71	45	57	39	14	02	28.97	29.85	15	OVC	150		10.00		67	65	66	93	5	15	29.33	30.22		
18	SCT	NC		10.00		72	45	57	38	9	35	28.97	29.86	18	BKN	200		10.00		72	66	68	82	12	09	29.30	30.19		
21	FEW	NC		10.00		67	44	55	44	6	32	29.00	29.88	21	OVC	075		10.00		70	67	68	90	9	10	29.29	30.18		
24	FEW	NC		10.00		60	48	54	65	5	27	29.02	29.91	24	OVC	007		10.00		68	67	67	96	9	13	29.28	30.17		
SUNRISE: 0426					JUN 16	SUNSET: 2001					SUNRISE: 0427					JUN 22	SUNSET: 2003												
03	CLR	NC		10.00		57	49	53	75	0	00	29.01	29.90	03	FEW	NC		4.00	BR	68	67	67	96	7	10	29.23	30.12		
06	FEW	NC		10.00		57	50	53	78	3	22	29.04	29.93	06	OVC	200		4.00	BR	70	68	69	93	9	12	29.23	30.12		
09	FEW	NC		10.00		71	50	59	47	8	31	29.03	29.92	09	BKN	200		10.00		79	72	74	79	10	16	29.22	30.11		
12	BKN	130		10.00		75	48	60	39	12	30	29.00	29.89	12	SCT	NC		10.00		87	73	77	63	17	18	29.16	30.04		
15	BKN	250		10.00		74	52	61	46	7	18	28.96	29.85	15	SCT	NC		10.00		90	70	76	52	20	19	29.11	30.00		
18	SCT	NC		10.00		71	53	61	53	7	08	28.97	29.85	18	SCT	NC		10.00		89	70	76	53	16	19	29.05	29.93		
21	BKN	100		10.00		64	58	60	81	6	08	28.99	29.87	21	FEW	NC		10.00		84	68	73	59	14	18	29.01	29.89		
24	OVC	100		10.00		65	53	58	66	5	22	28.98	29.86	24	BKN	250		10.00		81	67	72	62	10	20	29.05	29.93		
SUNRISE: 0426					JUN 17	SUNSET: 2001					SUNRISE: 0427					JUN 23	SUNSET: 2003												
03	BKN	200		10.00		60	53	56	78	6	13	28.97	29.85	03	BKN	200		10.00		79	66	70	65	13	19	29.02	29.90		
06	OVC	150		10.00		61	56	58	84	5	12	28.98	29.86	06	OVC	050		6.00	HZ	73	68	70	84	8	19	29.09	29.96		
09	BKN	250		10.00		67	56	60	68	8	09	28.98	29.86	09	OVC	200		7.00		72	69	70	91	9	15	29.11	29.99		
12	BKN	150		10.00		70	57	62	64	6	17	29.00	29.88	12	OVC	250		10.00		80	68	72	67	14	19	29.06	29.94		
15	BKN	150		10.00		72	58	63	61	9	16	28.98	29.86	15	BKN	250		10.00		87	71	76	59	6	23	29.06	29.94		
18	SCT	NC		10.00		74	59	65	60	8	15	28.96	29.84	18	BKN	065		10.00		87	75	78	67	10	10	29.03	29.91		
21	BKN	200		10.00		70	57	62	64	7	13	28.98	29.86	21	BKN	130		10.00		85	68	73	57	16	18	29.04	29.92		
24	FEW	NC		10.00		65	55	59	70	9	10	28.99	29.87	24	BKN	150		10.00		80	65	70	60	9	21	29.07	29.95		
SUNRISE: 0426					JUN 18	SUNSET: 2002					SUNRISE: 0428					JUN 24	SUNSET: 2003												
03	FEW	NC		10.00		63	57	59	81	9	12	28.98	29.86	03	SCT	NC		9.00		77	65	69	66	10	17	29.04	29.92		
06	SCT	NC		10.00		64	58	60	81	13	14	29.00	29.88	06	BKN	200		8.00		77	62	68	60	12	22	29.07	29.95		
09	BKN	250		10.00		71	61	65	71	13	14	28.98	29.86	09	OVC	070		6.00	-TSRA BR	70	67	68	90	17	15	29.12	30.00		
12	BKN	250		10.00		80	62	68	54	15	15	28.96	29.84	12	BKN	250		6.00	HZ	77	69	72	77	12	19	29.06	29.94		
15	OVC	200		10.00		83	60	68	46	17	17	28.93	29.80	15	BKN	110		7.00		85	72	76	65	14	18	29.03	29.91		
18	BKN	200		10.00		79	61	68	54	18	14	28.89	29.77	18	BKN	250		10.00		76	64	68	67						

OBSERVATIONS AT 3-HOURLY INTERVALS

MINNEAPOLIS-ST. PAUL, MN
JUNE 2002 MSP WBAN # 14922

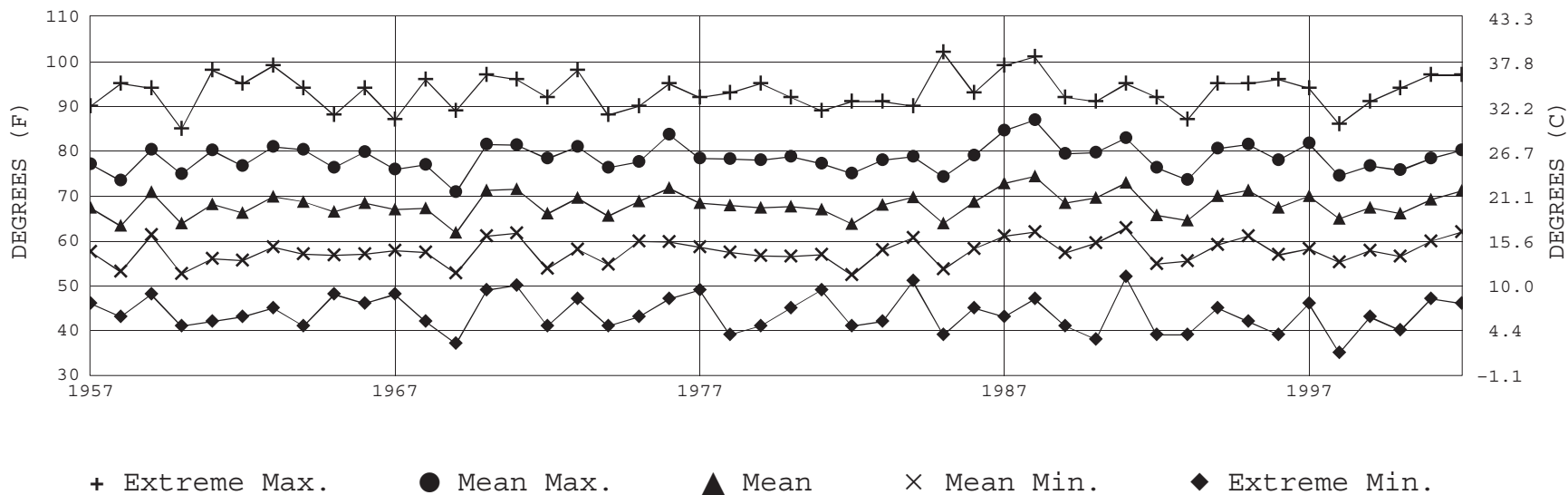
HOUR (LST)			SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)	
	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT Oktas		DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
03	OVC	048			SUNRISE: 0428								
06	BKN	130			TSRA	69	64	66	84	13	20	29.14	30.03
09	BKN	250				69	64	66	84	0	00	28.99	29.87
12	BKN	250				76	66	69	72	5	36	29.08	29.97
15	SCT	NC				83	70	74	65	5	21	29.05	29.93
18	SCT	NC				88	72	77	59	7	20	29.00	29.88
21	BKN	250				88	74	78	63	7	24	28.95	29.82
24	OVC	090			-RA	79	65	70	62	12	01	28.95	29.83
						73	66	68	79	8	12	28.96	29.83
03	BKN	200			SUNRISE: 0428								
06	SCT	NC				70	66	67	87	0	00	28.95	29.82
09	CLR	NC				70	68	69	93	3	30	28.98	29.85
12	FEW	NC				77	62	67	60	12	35	29.00	29.88
15	SCT	NC				80	60	67	51	20	32	29.00	29.87
18	SCT	NC				83	60	68	46	15	35	28.98	29.85
21	FEW	NC				81	58	67	46	14	32	28.96	29.83
24	FEW	NC				75	58	65	55	5	30	29.00	29.88
						71	60	64	68	7	32	29.01	29.90
03	OVC	250			SUNRISE: 0429								
06	OVC	250				66	61	63	84	6	32	29.01	29.90
09	FEW	NC				67	63	64	87	5	33	29.03	29.91
12	SCT	NC				77	66	70	69	5	VR	29.02	29.91
15	SCT	NC				83	65	71	55	9	31	29.00	29.88
18	FEW	NC			HZ FU	84	65	71	53	7	34	29.00	29.88
21	FEW	NC				82	64	70	55	3	36	29.00	29.87
24	CLR	NC				79	65	70	62	3	05	29.00	29.88
						72	67	69	84	0	00	29.03	29.92
03	CLR	NC			SUNRISE: 0429								
06	CLR	NC			HZ	71	65	67	81	3	22	29.04	29.92
09	CLR	NC			BR	70	67	68	90	0	00	29.08	29.97
12	CLR	NC			HZ	77	67	70	71	5	21	29.09	29.97
15	CLR	NC				83	66	72	57	9	18	29.08	29.96
18	FEW	NC				86	64	71	48	8	17	29.05	29.93
21	CLR	NC				85	65	72	51	9	15	29.04	29.92
24	CLR	NC				78	70	73	76	9	14	29.04	29.92
						77	67	70	71	12	17	29.04	29.92
03	CLR	NC			SUNRISE: 0430								
06	BKN	250				76	65	69	69	10	19	29.06	29.94
09	BKN	250				73	66	69	79	9	17	29.09	29.97
12	SCT	NC				80	67	71	64	12	17	29.06	29.94
15	FEW	NC				88	72	77	59	16	16	29.02	29.89
18	CLR	NC				92	74	79	56	14	17	28.99	29.86
21	FEW	NC				93	76	80	58	9	16	28.97	29.84
24	FEW	NC				86	75	78	70	8	15	28.99	29.86
						85	70	75	61	14	22	29.00	29.87
03	FEW	NC			SUNRISE: 0430								
06	SCT	NC				82	69	73	65	12	21	28.99	29.85
09	FEW	NC				80	70	73	71	13	20	29.01	29.89
12	FEW	NC				86	71	76	61	17	20	29.00	29.88
15	CLR	NC				93	72	78	50	16	21	28.99	29.85
18	CLR	NC				97	71	78	43	20	22	28.97	29.83
21	BKN	065				95	73	79	49	12	21	28.97	29.84
24	FEW	NC				90	73	78	58	8	24	29.00	29.87
						87	72	76	61	13	21	29.01	29.88

HOUR (LST)			SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)	
	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT Oktas		DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
					SUNRISE:								
					JUN 31								
					SUNSET:								

3-HOURLY OBSERVATION NOTES
Sky Cover is the amount of the sky obscured. CLR or SKC = 0, FEW = 1/8-2/8, SCT = 3/8-4/8, BKN = 5/8-7/8, OVC = 8/8, VV = Vertical Visibilty = 8/8.
Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet.
NC= No ceiling detected.
& = Original observation contained additional weather elements.
See page 3 for additional notes.

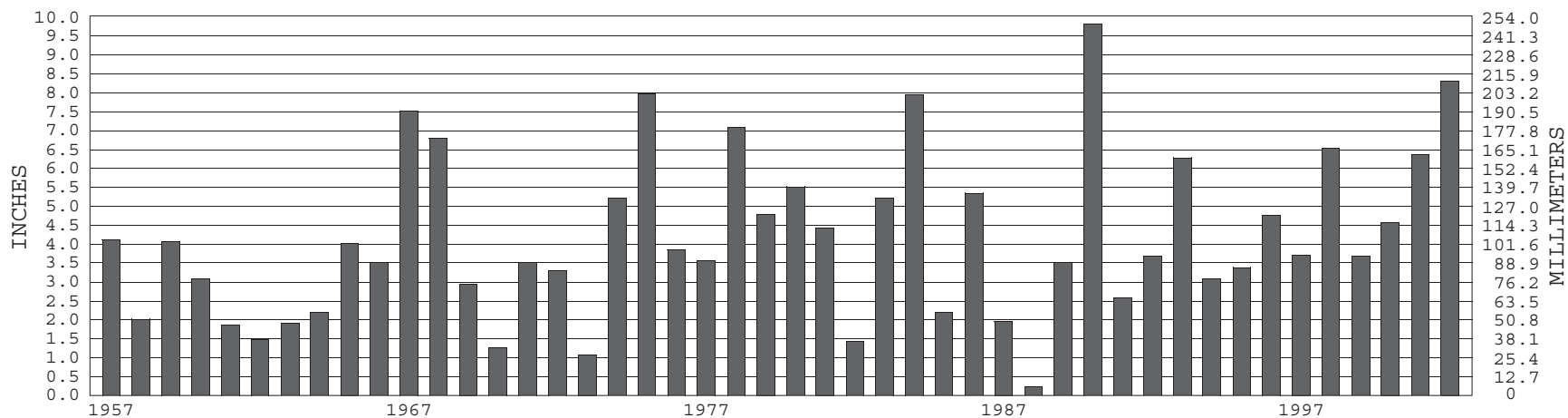
HOUR (LST)	AVERAGES										RESULTANT WIND (MPH)	
	CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (INCHES, HG)		VISIBILITY (MILES)	WIND SPEED (MPH)	SPEED	DIRECTION
							STATION	SEA LEVEL				
01			67	58	62	75	29.02	29.90	9.27	8	2	17
02			66	59	61	79	29.02	29.90	9.23	7	2	15
03			65	58	61	81	29.01	29.90	8.63	7	3	15
04			64	59	61	83	29.02	29.90	9.13	8	2	15
05			64	58	60	84	29.02	29.91	8.57	7	2	13
06			64	59	61	82	29.03	29.92	8.63	8	2	16
07			66	59	62	79	29.04	29.93	8.71	7	1	15
08			68	60	63	77	29.05	29.93	8.95	9	1	21
09			70	60	64	72	29.04	29.93	9.30	10	2	17
10			72	60	65	68	29.04	29.93	9.03	11	3	19
11			74	60	66	64	29.04	29.92	9.60	11	3	20
12			76	60	66	61	29.03	29.91	9.43	12	4	21
13			77	60	66	59	29.02	29.90	9.67	13	3	19
14			78	60	67	58	29.01	29.90	9.63	12	2	22
15			78	60	67	56	29.00	29.89	9.60	12	3	17
16			78	60	67	56	29.00	29.88	9.63	12	3	19
17			77	60	67	58	29.00	29.88	9.60	11	3	13
18			77	60	66	58	28.99	29.88	9.73	11	2	11
19			76	60	66	61	29.00	29.88	9.47	10	4	12
20			74	61	66	66	29.00	29.88	9.27	10	3	15
21			72	61	65	70	29.01	29.89	9.47	8	4	15
22			71	61	65	72	29.02	29.90	9.20	8	4	18
23			70	60	64	73	29.02	29.90	9.13	8	3	18
24			68	60	63	76	29.02	29.91	9.10	8	3	17

MINNEAPOLIS-ST. PAUL, MN JUNE TEMPERATURES



Long-Term (1957-2002) Mean: 68.0 1961-1990 Normal: .0

MINNEAPOLIS-ST. PAUL, MN JUNE PRECIPITATION



Long-Term (1957-2002) Mean Monthly Total: 4.16

1961-1990 Normal: 0.00



JUNE 2002

MINNEAPOLIS—ST. PAUL, MN

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

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