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Minnesota Extension Service  
University of Minnesota

**Data From:**

Becker  
Crookston  
Grand Rapids  
Lamberton  
Morris  
Rosemount  
St. Paul  
Staples  
Waseca

# **C.A.W.A.P.\***

**1985 Crop Season  
Climatic Data  
University of Minnesota  
Agricultural Experiment Station  
Research Locations**

**\*University of Minnesota Cooperative  
Agricultural Weather Advisory Program**

**Mark W. Seeley and Gregory J. Spoden  
Department of Soil Science**

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UNIVERSITY OF MINNESOTA AGRICULTURAL EXPERIMENT STATION  
1985 CROP SEASON CLIMATIC DATA

The following data characterize the environmental conditions during the 1985 crop season at nine research sites of the University of Minnesota Agricultural Experiment Station. These data were collected using standard sets of manual and electronic instrumentation placed in the field in such a way as to represent the general environment at each research location. Efforts were made to standardize instrument types, placement, orientation, and frequency of readings such that valid comparisons between locations could be made.

The following list of codes describe the types of environmental measurements made at each location and listed on subsequent pages:

CODE	DESCRIPTION
MAX AIR TEMP	maximum air temperature in degrees Celsius from a sheltered thermistor placed 1.5 meters above the ground.
MIN AIR TEMP	minimum air temperature in degrees Celsius from a sheltered thermistor placed 1.5 meters above the ground.
PRE	total precipitation in millimeters from a standard National Weather Service stick gauge.
PAN	total evaporation in millimeters from a standard National Weather Service evaporation pan.
SOL	solar energy flux density, or incident shortwave radiation received on a horizontal surface, expressed as kilowatt-hours/square meter (kWhr/m ).
RH MAX	maximum relative humidity (%).
RH MIN	minimum relative humidity (%).
ACCUM D.D.	accumulated degree days above a specified base temperature value (4.44, 7.22, 10, or 10/30 degrees C).
SOIL MAX TEMP	soil maximum temperature in degrees Celsius at noted depth (5, 10, or 20 cm) under bare surface conditions.
SOIL MIN TEMP	soil minimum temperature in degrees Celsius at noted depth (5, 10, or 20 cm) under bare surface conditions.
WIND SPD	mean wind speed at a height of 3 meters, expressed as meters per second (m/sec).
VECT MAG	vector wind speed (from the dominant direction at a height of 3 meters). This can be considered as a trajectory speed for airborne materials or organisms. Expressed as m/sec.

VEC DIR            dominant wind direction or trajectory in degrees (0 to 360).  
Measured at a height of 3 meters.

VEC STAD           standard deviation in wind direction, expressed in degrees.

LF WET            an index for the occurrence and duration of leaf wetness  
caused by formation of dew, fog, or precipitation. This  
index will range from 0 to 100. A value of 0 indicates  
dryness throughout the day, while a value of 100 indicates  
a wet surface all day. Thus, a value of 50 would indicate  
that wetness persisted for half of the day, or 12 hours.  
This sensor was placed at a height of 0.5 meters.

VAP PR            mean vapor pressure, or partial pressure due to the presence  
of water vapor in the air. Expressed as kilopascals (kPa)  
and measured at a height of 1.5 meters.

VAP PRES DEF     vapor pressure deficit, or the difference between mean vapor  
pressure (e) and the total vapor pressure possible (es) if  
the air were saturated at the mean ambient temperature.  
Expressed as kilopascals (kPa) and measured at 1.5 meters.

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Monthly temperatures, precipitation, and degree days, including departures from normal, are summarized in Tables 1 through 6. Figures 1 through 9 illustrate daily maximum and minimum temperatures from the 1985 growing season along with the 30 year temperature normals. Daily observations at each location for the period April 1 through October 31 follow on subsequent pages. Monthly means or totals for each type of measurement are shown following the end of the month. Missing values are noted and may be due to a number of problems related to instrument installation, malfunction of the data logging equipment, or transmission error during computer processing. An asterick is used following dates when data shown represent manual observations recorded from standard National Weather Service instruments which differed in some way from the standard set of electronic instruments used to make measurements on most dates. Data marked by an asterick also differ in the time of observation. At Rosemount and St Paul, observations were made at 5 pm each day. All other sites recorded manual observations at 8 am. For dates shown without an asterick, electronic measurements were made and summarized as means or totals on a midnight to midnight basis. Other discrepancies and inconsistencies in the data are explained in the notes on page 4.

This publication is intended to provide researchers with sufficient environmental data to interpret field responses of crops, livestock and pests. Undoubtedly, there are many other applications of these data. Since the major objective is to provide a data source for researchers, all measurements are expressed in standard scientific units. For conversion factors to other units of measure or for questions related to interpretations of biological responses to these environmental characteristics, users can call the extension climatology office.

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Personnel	Location
Mel Wiens/Shelly Notch/Roxanne Lundeen	Staples
Bill Connelly/Glenn Titrud	Becker
Elaine Anderson	Rosemount
Vernon Ferch/Pat Kelly/Arielle Balak	Waseca
Tony Strasser/Ramona Creighton	Lamberton
Sam Evans/Jean Spohr/Gregg Regimbal	Morris
Russ Seiverson/Julie Hamre/John Lamb	Crookston
Jim Anderson/Joe Rust	Grand Rapids
Climatology Staff of the Soil Science Dept.	St Paul

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## NOTES

1. Temperature and degree day normals shown in Tables 1, 3, 4, 5, and 6 were corrected for bias due to time of observation and represent values based on a midnight to midnight observation cycle. They are likely to differ from those published by the National Climatic Data Center.
2. Temperature, degree day, and precipitation normals were derived from records for the 1951 to 1980 period unless otherwise noted.
3. Because of relatively brief record histories at Staples, Becker, St Paul, and Lambertson, means from nearby locations, or shorter term averages were used in calculating departures from normal.
4. Except for St Paul and Rosemount, all sites recorded precipitation data at 8 am. These precipitation values were lagged one day such that they represent moisture conditions on the correct date.
5. Except for St Paul, where pan evaporation was recorded daily at 5 pm, all sites measured pan evaporation at 8 am. These data were lagged one day since the majority of evaporation occurred on the previous calendar date.
6. Daily evaporation measurements were not always taken at Becker, Staples, and Rosemount. For selected periods, total evaporation was equally divided among the number of days between measurements, or daily estimates were made using solar radiation data, temperature data, or other pan evaporation data.
7. Following the last date in each month, a monthly summary is shown for each measurement using means (MN) or totals (TOT). An M indicates missing or insufficient data.
8. Periodic missing data generally indicate instrument failure. For dates marked by an asterick, some of the following sensors were used: air temperatures were measured using standard mercury and alcohol max/min thermometers; solar radiation was measured using either an Eppley pyranometer or a Yellow Springs Instrument Quantum Sensor; soil temperatures were taken by using either Palmer max/min thermometers or thermocouples; and mean wind speed was taken from a totalizing anemometer at 0.5 meter height.
9. Except for the base 10/30 degree C method, all degree days were calculated in the following manner:  
$$[(T_{\max} + T_{\min})/2] - B = \text{daily degree days}$$
where B represents a base temperature value of 4.44, 7.22, or 10 degrees C. For the base 10/30 degree C method, minimum temperatures below 10 degrees and maximum temperatures above 30 degrees are ignored and reset to 10 and 30, respectively to calculate daily values. Thus, for a day with a minimum temperature of 8 degrees C and a maximum of 32 degrees C, the daily degree days would be 10 ( $[30 + 10/2] - 10$ ).
10. Extraordinary pan evaporation values in excess of 10 mm may be due to measurement error, or splash loss caused by strong winds, intense rainfall, or hail.

TABLE 1.

MEAN MONTHLY TEMPERATURE AND DEPARTURE FROM NORMAL  
(DEGREES CELSIUS)

	APR	MAY	JUN	JUL	AUG	SEP	OCT
BECKER DEP. (1)	8.6 +1.4	15.9 +2.6	17.0 -1.4	22.0 +1.0	17.9 -1.7	13.5 -0.7	8.5 +0.2
CROOKSTON DEP.	8.0 +3.3	15.4 +3.2	15.2 -2.4	19.6 -0.7	18.0 -1.5	12.0 -1.8	6.8 -2.7
GRAND RAPIDS DEP.	7.0 +2.9	14.2 +4.2	14.6 -0.6	19.1 +0.3	16.6 -0.8	12.0 +0.1	6.3 -0.2
LAMBERTON DEP. (2)	11.4 +3.9	17.3 +2.8	18.6 -1.5	21.6 -0.5	18.8 -1.8	14.5 -0.9	7.9 -1.8
MORRIS DEP.	9.2 +2.9	16.3 +2.9	16.9 -2.0	20.7 -0.5	18.2 -2.0	13.7 -0.7	7.0 -1.2
ROSEMOUNT DEP.	11.0 +5.5	16.8 +3.5	18.1 -0.6	22.7 +1.4	18.6 -0.8	15.5 +0.8	8.3 -0.5
ST. PAUL DEP. (3)	11.5 +3.7	17.8 +3.1	18.5 -1.6	22.5 +0.4	19.3 -2.2	15.8 0.0	9.3 -0.5
STAPLES DEP. (4)	7.0 +1.8	14.8 +2.5	15.1 -2.6	19.1 -1.3	16.2 -3.1	12.1 -1.3	6.4 -1.0
WASECA DEP.	10.7 +3.8	17.4 +3.9	18.2 -1.0	21.5 +0.2	18.4 -1.6	15.0 +0.1	8.4 -1.4

- (1) DEPARTURE FROM ST. CLOUD NORMALS  
(2) DEPARTURE FROM SPRINGFIELD NORMALS  
(3) DEPARTURE FROM MINNEAPOLIS/ST. PAUL INTNL. AIRPORT NORMALS  
(4) DEPARTURE FROM WADENA NORMALS

(TEMPERATURE NORMALS IN THIS TABLE HAVE BEEN CORRECTED FOR TIME OF OBSERVATION AND MAY THEREFORE DIFFER FROM THOSE PUBLISHED BY THE NATIONAL CLIMATIC CENTER.)

TABLE 2.

TOTAL MONTHLY PRECIPITATION AND DEPARTURE FROM NORMAL  
(MILLIMETERS)

	APR	MAY	JUN	JUL	AUG	SEP	OCT	
BECKER DEP. (1)	M M	70.36 -22.10	132.59 +20.58	93.23 -0.75	144.26 +33.01	225.04 +151.63	45.72 -4.06	
CROOKSTON DEP.		16.75 -18.56	120.91 +65.03	59.17 -32.52	71.37 -9.15	109.47 +32.25	39.37 +4.06	40.39 +5.08
GRAND RAPIDS DEP.		108.45 +57.90	164.33 +84.07	100.83 +4.56	97.53 -7.12	76.95 -8.90	107.18 +31.23	43.43 -7.88
LAMBERTON DEP. (2)		103.38 +39.63	116.35 +34.82	105.40 +19.04	57.91 -37.85	164.33 +100.07	157.50 +86.63	45.98 -12.95
MORRIS DEP.		54.36 -7.87	163.58 +75.18	76.19 -23.12	62.99 -20.58	117.83 +38.33	85.06 +36.55	37.29 -9.70
ROSEMOUNT DEP.		36.58 -25.90	100.08 +6.35	80.01 -41.15	50.80 -40.13	143.76 +34.79	129.80 +49.28	99.31 +42.92
ST. PAUL DEP. (3)		45.22 -16.51	112.51 +21.32	95.27 -16.23	89.41 -1.52	105.40 +8.12	151.64 +74.17	85.09 +23.88
STAPLES DEP. (4)		54.36 -8.63	161.27 +84.82	137.66 +25.90	120.13 +19.04	80.00 -7.38	96.28 +33.29	25.14 -20.58
WASECA DEP.		51.56 -15.50	45.97 -49.53	65.02 -48.77	63.75 -38.36	132.33 +30.73	140.84 +55.50	65.28 +12.19

- (1) DEPARTURE FROM ELK RIVER NORMALS  
 (2) DEPARTURE FROM 1960 - 1982 AVERAGE  
 (3) DEPARTURE FROM 1961 - 1980 AVERAGE  
 (4) DEPARTURE FROM WADENA NORMALS



TABLE 3.

TOTAL DEGREE DAYS (BASE 4.44) AND DEPARTURE FROM NORMAL  
(DEGREES CELSIUS)

	APR	MAY	JUN	JUL	AUG	SEP	OCT
BECKER DEP. (1)	169 +71	355 +81	376 -41	543 +30	416 -54	273 -17	132 -12
CROOKSTON DEP.	134 +58	338 +94	322 -71	469 -23	418 -47	226 -46	93 -29
GRAND RAPIDS DEP.	109 +48	302 +90	303 -49	453 +7	378 -22	230 +6	76 -28
LAMBERTON DEP. (2)	215 +97	398 +87	423 -46	531 -14	444 -56	304 -30	115 -61
MORRIS DEP.	157 +54	369 +89	375 -57	502 -19	426 -61	279 -20	90 -51
ROSEMOUNT DEP.	212 +110	381 +103	409 -20	565 +44	437 -40	332 +27	121 -37
ST. PAUL DEP. (3)	224 +92	413 +93	421 -47	558 -12	460 -67	340 0	153 -27
STAPLES DEP. (4)	110 +31	320 +71	318 -82	455 -39	364 -96	233 -33	76 -49
WASECA DEP.	209 +106	399 +106	411 -31	527 +4	431 -48	317 +4	128 -32

- (1) DEPARTURE FROM ST. CLOUD NORMALS  
(2) DEPARTURE FROM SPRINGFIELD NORMALS  
(3) DEPARTURE FROM MINNEAPOLIS/ST. PAUL INTNL. AIRPORT NORMALS  
(4) DEPARTURE FROM WADENA NORMALS

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TABLE 4.

TOTAL DEGREE DAYS (BASE 7.22) AND DEPARTURE FROM NORMAL  
(DEGREES CELSIUS)

	APR	MAY	JUN	JUL	AUG	SEP	OCT
BECKER DEP. (1)	120 +66	269 +76	293 -40	457 +30	330 -54	203 -5	70 -17
CROOKSTON DEP.	84 +43	252 +84	238 -73	383 -23	332 -47	159 -33	36 -37
GRAND RAPIDS DEP.	66 +36	215 +74	220 -49	367 +7	291 -23	161 +16	26 -32
LAMBERTON DEP. (2)	152 +87	312 +85	340 -46	445 -14	358 -56	230 -20	53 -58
MORRIS DEP.	101 +42	283 +82	291 -58	416 -18	340 -61	207 -10	37 -48
ROSEMOUNT DEP.	150 +92	295 +97	325 -20	479 +44	351 -40	255 +33	58 -41
ST. PAUL DEP. (3)	160 +80	327 +90	337 -48	472 -12	374 -67	264 +7	83 -33
STAPLES DEP. (4)	62 +21	234 +64	235 -81	369 -38	277 -97	165 -21	25 -48
WASECA DEP.	150 +95	313 +103	328 -31	441 +4	345 -48	245 +14	62 -37

- (1) DEPARTURE FROM ST. CLOUD NORMALS  
 (2) DEPARTURE FROM SPRINGFIELD NORMALS  
 (3) DEPARTURE FROM MINNEAPOLIS/ST. PAUL INTNL. AIRPORT NORMALS  
 (4) DEPARTURE FROM WADENA NORMALS

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TABLE 5.

TOTAL DEGREE DAYS (BASE 10) AND DEPARTURE FROM NORMAL  
(DEGREES CELSIUS)

	APR	MAY	JUN	JUL	AUG	SEP	OCT
BECKER DEP. (1)	78 +52	182 +59	210 -41	371 +30	244 -54	143 +11	28 -18
CROOKSTON DEP.	47 +29	167 +63	158 -69	297 -23	246 -46	102 -18	12 -25
GRAND RAPIDS DEP.	39 +27	132 +49	139 -48	280 +6	205 -23	104 +25	6 -20
LAMBERTON DEP. (2)	97 +67	226 +77	257 -46	359 +14	272 -30	167 +34	15 -49
MORRIS DEP.	57 +28	196 +66	209 -57	330 -18	253 -63	148 +6	9 -36
ROSEMOUNT DEP.	96 +69	208 +81	242 -20	393 +45	265 -40	185 +44	21 -34
ST. PAUL DEP. (3)	108 +66	241 +80	254 -48	386 -12	288 -67	196 -18	31 -35
STAPLES DEP. (4)	30 +14	148 +43	155 -78	283 -38	191 -97	107 -7	5 -32
WASECA DEP.	102 +78	227 +93	244 -31	355 +4	259 -49	181 +31	17 -37

- (1) DEPARTURE FROM ST. CLOUD NORMALS  
 (2) DEPARTURE FROM SPRINGFIELD NORMALS  
 (3) DEPARTURE FROM MINNEAPOLIS/ST. PAUL INTNL. AIRPORT NORMALS  
 (4) DEPARTURE FROM WADENA NORMALS

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TABLE 6.

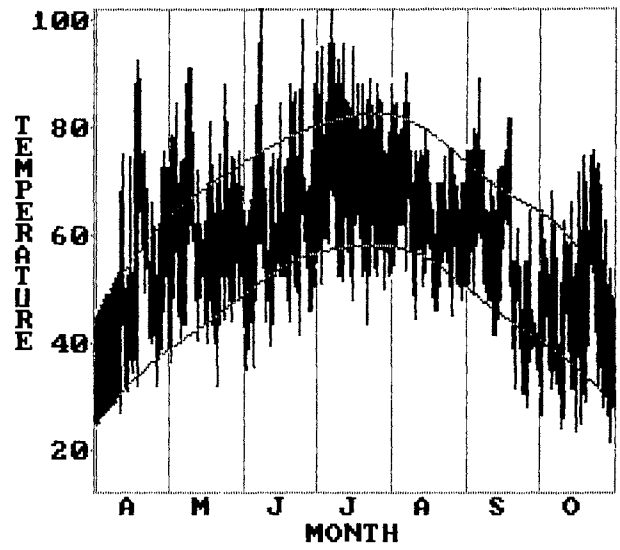
TOTAL DEGREE DAYS (BASE 10/30) AND DEPARTURE FROM NORMAL  
(DEGREES CELSIUS)

	APR	MAY	JUN	JUL	AUG	SEP	OCT
BECKER DEP. (1)	110 +59	218 +66	225 -31	347 +8	249 -50	161 +2	99 +24
CROOKSTON DEP.	88 +49	205 +70	186 -50	299 -21	254 -40	123 -27	54 -11
GRAND RAPIDS DEP.	74 +42	176 +62	176 -26	284 +8	217 -20	129 +12	47 -7
LAMBERTON DEP. (2)	131 +72	238 +62	255 -48	353 -15	277 -49	179 -10	73 -21
MORRIS DEP.	102 +49	220 +62	220 -50	326 -20	260 -55	158 -10	60 -13
ROSEMOUNT DEP.	138 +85	237 +81	249 -17	376 -1	267 -38	205 +36	74 -10
ST. PAUL DEP. (3)	143 +74	253 +69	255 -47	379 -8	288 -61	212 +15	83 -13
STAPLES DEP. (4)	70 +30	189 +53	183 -58	288 -32	207 -83	127 -18	55 -10
WASECA DEP.	130 +78	241 +78	247 -30	347 -2	265 -43	191 +17	70 -15

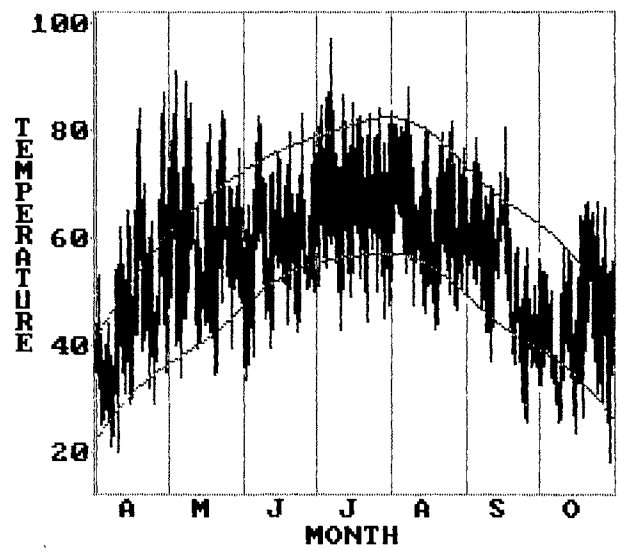
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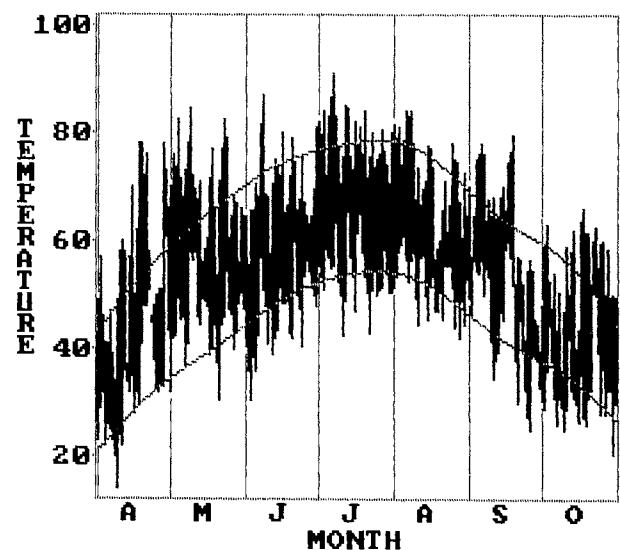
BECKER  
1985  
MAX, MIN  
TEMPS  
US.  
NORMAL

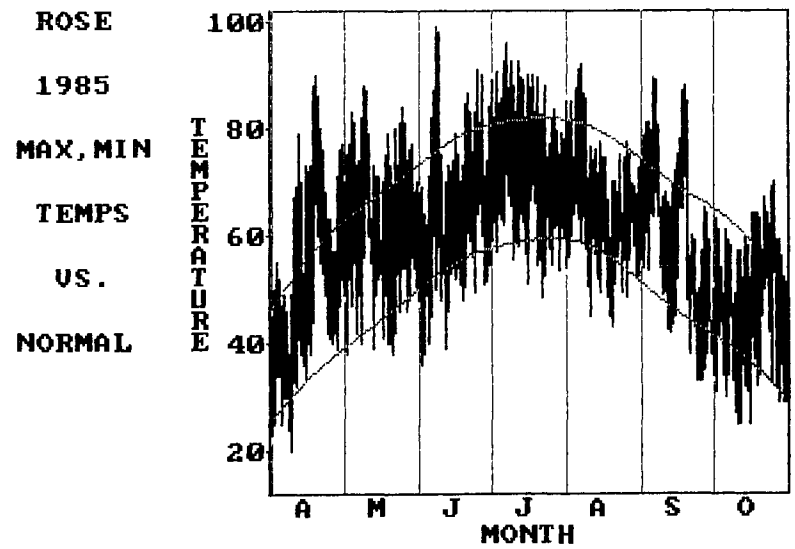
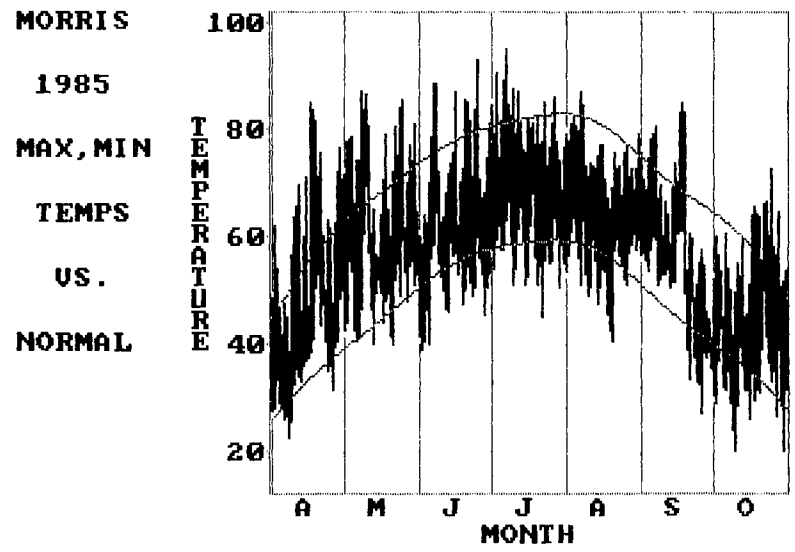
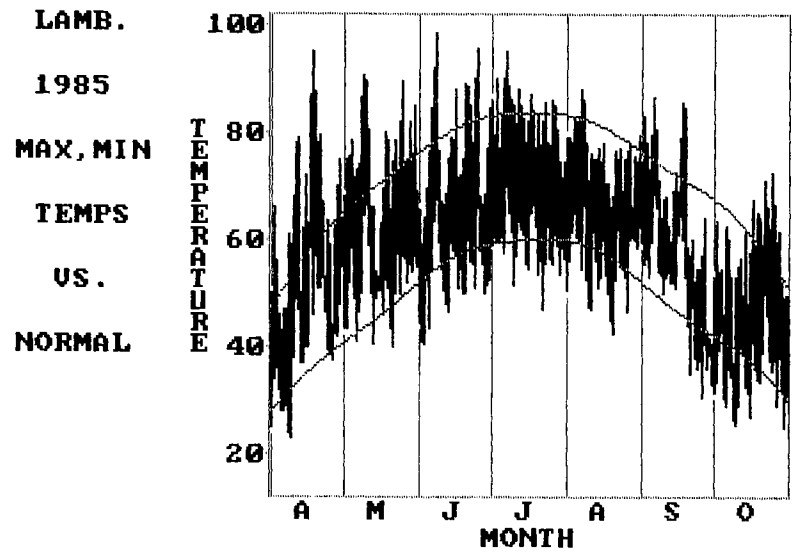


CRKSTON  
1985  
MAX, MIN  
TEMPS  
US.  
NORMAL



GRD RAP  
1985  
MAX, MIN  
TEMPS  
US.  
NORMAL





ST. PAUL 100

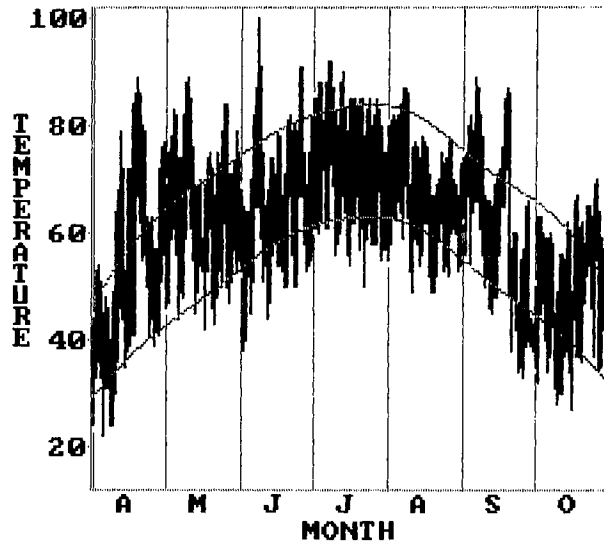
1985

MAX, MIN

TEMPS

US.

NORMAL



STAPLES 100

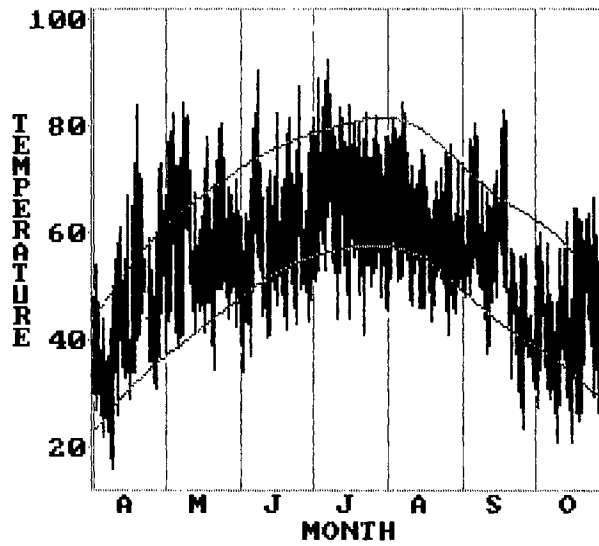
1985

MAX, MIN

TEMPS

US.

NORMAL



WASECA 100

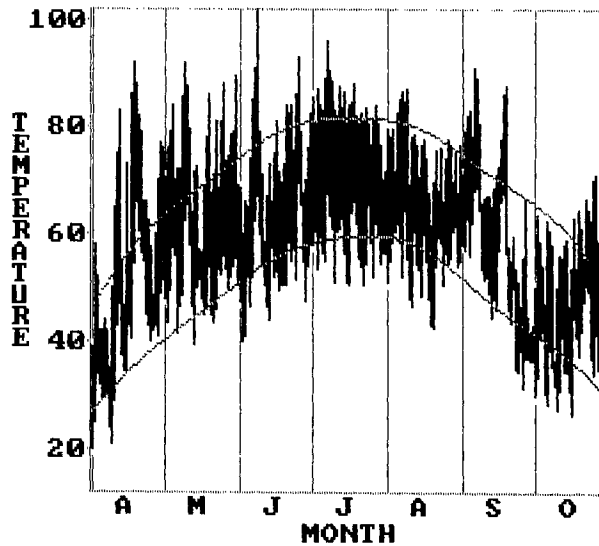
1985

MAX, MIN

TEMPS

US.

NORMAL











B E C K E R

DATE	MAX AIR TEMP	MIN AIR TEMP	PRE	PAN	SOL	RH MAX	RH MIN	ACCM D.D.	ACCM D.D.	MAX SOIL TEMP 5CM	MIN SOIL TEMP 5CM	MAX SOIL TEMP 10CM	MIN SOIL TEMP 10CM	WIND SPD	VECT MAG	VEC DIR	VEC STD	LF WT	VAP PR	VAP PRES DEF
10/ 1/85	11.6	0.1	0.00	2.29	4.08	90	46	1228	1311	16.6	1.9	12.3	4.1	3.03	1.53	326	57	0	0.61	0.27
10/ 2/85	18.2	-2.9	0.00	2.50	3.60	91	60	1228	1315	16.8	0.4	12.9	2.0	3.70	2.15	47	52	50	0.84	0.30
10/ 3/85	15.1	4.1	0.00	1.02	2.32	89	68	1228	1317	14.8	4.8	13.1	6.6	2.34	1.11	5	59	53	0.91	0.26
10/ 4/85	13.1	7.2	10.16	2.54	2.20	88	58	1228	1319	13.3	7.6	14.3	7.9	5.00	3.11	319	50	39	0.88	0.29
10/ 5/85	11.5	1.7	0.00	2.54	2.39	89	63	1228	1319	13.0	4.2	11.9	5.3	3.44	1.70	322	58	1	0.73	0.23
10/ 6/85	20.2	-0.2	0.00	2.79	3.89	92	45	1228	1325	21.9	2.0	15.8	2.9	2.44	1.45	316	52	18	0.79	0.38
10/ 7/85	17.1	1.7	13.21	2.29	2.29	100	59	1228	1328	17.4	4.2	13.1	5.1	2.93	1.98	47	46	61	1.01	0.17
10/ 8/85	13.1	0.4	0.00	2.03	1.37	100	71	1228	1330	12.4	4.6	10.7	5.4	3.78	2.47	297	48	29	0.93	0.12
10/ 9/85	4.2	-0.8	0.00	0.76	0.50	89	73	1228	1330	8.1	1.9	7.9	2.9	2.04	1.41	316	45	5	0.54	0.14
10/10/85	10.5	-4.5	0.00	2.03	4.05	92	45	1228	1330	16.9	-0.1	12.8	0.5	1.50	0.96	332	48	15	0.52	0.26
10/11/85	17.1	-3.2	7.37	1.02	3.56	100	47	1228	1333	17.5	0.4	12.9	0.7	2.12	0.78	52	64	30	0.71	0.35
10/12/85	14.6	7.6	10.41	0.76	0.94	100	85	1229	1336	16.5	9.2	13.2	9.3	2.52	1.58	301	49	62	1.20	0.10
10/13/85	14.5	3.5	2.03	1.02	1.13	100	85	1229	1338	14.8	3.6	12.5	5.4	1.80	1.47	325	35	72	1.05	0.09
10/14/85	18.9	-0.3	0.00	3.30	3.66	100	33	1229	1342	19.0	1.8	15.6	3.5	2.33	1.63	293	44	45	0.81	0.54
10/15/85	11.1	-0.3	2.54	2.03	1.43	95	59	1229	1343	14.6	0.9	11.8	4.1	1.70	1.14	325	47	54	0.67	0.15
10/16/85	12.4	-4.8	0.00	3.56	3.41	92	49	1229	1344	16.2	0.3	12.0	0.6	1.98	0.77	30	63	4	0.62	0.24
10/17/85	21.9	3.0	0.00	1.78	1.76	95	62	1232	1350	20.9	4.5	16.2	5.4	4.24	1.92	327	60	9	1.27	0.39
10/18/85	16.0	-3.9	0.00	1.52	2.05	96	51	1232	1353	15.3	0.5	13.1	4.2	1.16	0.66	342	53	37	0.76	0.32
10/19/85	23.6	-0.7	0.00	1.78	4.07	95	31	1233	1360	21.2	1.9	17.0	4.2	1.14	0.64	16	54	45	0.75	0.56
10/20/85	21.0	-1.5	0.00	1.52	3.80	92	50	1233	1365	19.3	0.5	17.3	4.1	1.35	0.73	68	55	52	0.87	0.36
10/21/85	15.9	4.1	0.00	1.02	0.62	100	84	1233	1368	17.0	5.5	13.3	5.6	2.38	2.19	358	23	13	1.41	0.08
10/22/85	23.6	12.6	0.00	2.29	1.43	100	77	1241	1376	20.6	12.7	17.9	12.1	4.81	2.26	37	59	4	1.86	0.19
10/23/85	24.3	11.8	0.00	3.56	3.63	100	46	1249	1384	27.3	11.9	23.5	12.3	4.29	1.88	12	61	1	1.68	0.52
10/24/85	22.4	5.6	0.00	4.32	3.91	85	23	1253	1391	23.6	5.9	20.2	9.2	3.44	2.30	2	47	0	0.77	0.80
10/25/85	22.7	-0.2	0.00	3.05	2.70	86	35	1255	1397	17.6	4.2	14.4	5.4	3.88	2.53	62	48	8	0.76	0.73
10/26/85	20.6	1.9	0.00	3.05	2.81	85	31	1256	1402	18.2	6.5	15.1	7.7	3.55	2.14	5	51	0	0.79	0.69
10/27/85	12.9	-2.3	0.00	3.05	3.11	77	29	1256	1404	14.5	1.7	11.9	4.1	1.15	0.62	354	55	0	0.45	0.45
10/28/85	16.9	-0.9	0.00	4.32	2.94	78	23	1256	1407	12.8	1.6	10.2	4.1	3.50	1.49	27	61	0	0.53	0.55
10/29/85	10.3	-2.9	0.00	0.51	1.19	89	64	1256	1407	10.3	1.6	7.8	4.1	2.59	1.89	335	42	32	0.70	0.21
10/30/85	12.0	-5.7	0.00	2.54	3.20	88	52	1256	1408	11.9	-0.8	9.3	0.4	1.51	0.81	16	55	33	0.55	0.20
10/31/85	9.2	-2.3	0.00	0.51	1.99	88	64	1256	1408	10.3	-0.2	7.7	0.4	1.34	0.52	73	63	21	0.60	0.17
MONTHLY	MEAN	MEAN	TOTAL	TOTAL	MEAN	MN.	MN.	TOTL	TOT	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MN.	MN.	MN	MEAN	MEAN
	16.0	0.9	45.72	67.30	2.58	93	54	28	99	16.5	3.4	13.5	4.8	2.68	1.54	181	52	26	0.86	0.33







C R O O K S T O N

DATE	MAX AIR TEMP	MIN AIR TEMP	PRE	PAN	SOL	RH MAX	RH MIN	ACCM D.D.	ACCM D.D.	MAX SOIL TEMP 10CM	MIN SOIL TEMP 10CM	MAX SOIL TEMP 20CM	MIN SOIL TEMP 20CM	WIND SPD	VECT MAG	VEC DIR	VEC STD	LF WT	VAP PR	VAP PRES DEF	
10/ 1/85	13.3	0.2	0.00		M	4.23	75	29	1910	1448	8.9	5.6	8.7	7.2	2.57	2.08	290	35	0	0.50	0.45
10/ 2/85	12.0	0.2	1.52		M	1.90	91	59	1911	1448	7.9	5.5	8.3	7.0	3.87	3.28	189	32	27	0.69	0.27
10/ 3/85	12.0	2.3	5.08		M	1.48	92	74	1914	1448	8.1	5.7	8.3	7.1	1.74	1.06	167	50	69	0.90	0.15
10/ 4/85	11.8	4.3	0.00		M	2.86	92	65	1918	1449	8.6	7.1	8.7	8.0	5.13	4.52	337	28	38	0.91	0.17
10/ 5/85	8.7	4.0	0.00		M	1.72	87	61	1920	1449	7.8	6.6	8.5	7.7	3.42	1.12	319	66	8	0.70	0.20
10/ 6/85	10.1	1.2	0.00		M	2.56	90	68	1921	1449	7.7	5.7	8.0	7.1	3.33	1.33	309	63	1	0.70	0.20
10/ 7/85	3.5	0.5	20.07		M	0.27	93	86	1921	1449	6.8	4.6	7.8	6.0	2.02	1.43	61	44	73	0.66	0.06
10/ 8/85	3.4	-1.5	2.54		M	1.06	92	86	1921	1449	4.6	3.1	6.0	4.9	5.20	4.53	335	29	63	0.58	0.08
10/ 9/85	0.7	-3.6	0.00		M	2.10	91	77	1921	1449	4.3	2.4	5.1	4.2	2.33	2.11	299	25	16	0.45	0.08
10/10/85	9.9	-3.4	0.00		M	3.60	90	66	1921	1449	5.5	2.4	5.6	4.0	4.17	3.81	190	24	0	0.60	0.16
10/11/85	14.8	0.8	7.37		M	3.36	91	61	1924	1449	7.4	3.3	6.9	4.6	3.81	1.84	155	58	5	0.81	0.26
10/12/85	10.9	4.9	0.00		M	1.35	92	83	1927	1450	8.1	6.4	7.8	6.8	2.26	1.58	260	44	46	0.95	0.12
10/13/85	14.0	4.0	0.00		M	3.48	90	46	1932	1452	8.6	5.6	8.1	6.6	3.51	3.14	251	27	0	0.81	0.29
10/14/85	13.0	1.1	0.00		M	2.52	91	66	1935	1452	7.2	4.6	7.6	6.1	4.24	2.23	256	56	9	0.71	0.17
10/15/85	5.6	-2.9	0.00		M	3.27	92	52	1935	1452	5.8	3.2	6.7	5.1	2.34	2.07	317	28	19	0.49	0.19
10/16/85	6.9	-4.7	0.00		M	1.93	93	62	1935	1452	4.8	2.6	5.8	4.4	3.27	2.62	147	36	6	0.53	0.17
10/17/85	11.4	0.6	0.00		M	2.38	89	57	1936	1452	6.7	4.1	6.5	5.1	3.62	0.99	267	69	7	0.79	0.23
10/18/85	17.8	0.5	0.00		M	3.44	87	33	1941	1454	7.7	3.5	7.0	4.9	2.94	0.42	226	75	5	0.68	0.45
10/19/85	17.4	-3.1	0.00		M	3.36	91	25	1944	1454	7.1	3.0	6.7	4.7	2.71	1.86	151	45	20	0.54	0.59
10/20/85	18.8	3.9	0.00		M	3.29	72	39	1951	1458	8.3	4.6	7.6	5.7	5.70	3.73	164	48	0	0.72	0.64
10/21/85	19.1	7.1	0.00		M	3.11	89	62	1959	1464	9.6	6.1	8.7	6.8	6.47	4.01	153	50	0	1.09	0.31
10/22/85	17.2	11.2	0.00		M	0.48	87	78	1969	1471	10.3	8.6	9.8	8.6	7.34	4.07	121	54	0	1.37	0.26
10/23/85	18.1	5.3	0.25		M	2.70	89	38	1976	1475	10.7	8.6	10.0	9.1	5.80	3.19	224	54	12	1.00	0.45
10/24/85	15.5	2.9	0.00		M	3.19	86	29	1981	1477	9.3	6.7	9.6	8.0	4.68	4.32	270	23	0	0.65	0.48
10/25/85	19.2	-0.4	0.00		M	2.57	83	29	1986	1479	8.7	4.9	8.4	6.5	4.05	3.09	170	39	0	0.69	0.58
10/26/85	12.6	0.5	0.00		M	2.91	82	19	1988	1479	8.5	6.4	8.5	7.8	4.26	3.30	308	38	0	M	M
10/27/85	13.4	-1.6	0.00		M	2.61	77	24	1990	1479	7.8	5.1	7.8	6.5	3.05	2.37	160	38	0	0.45	0.51
10/28/85	18.6	5.5	0.00		M	2.69	56	42	1997	1484	9.1	5.5	8.6	6.6	7.27	6.80	167	21	0	0.71	0.72
10/29/85	11.8	-3.7	0.00		M	2.85	91	42	1997	1484	8.5	5.3	8.6	7.1	3.62	2.06	325	53	10	0.58	0.40
10/30/85	11.9	-7.7	0.00		M	2.93	92	21	1997	1484	6.0	2.8	7.1	4.9	4.21	4.06	175	15	0	0.40	0.39
10/31/85	13.2	1.4	3.56		M	1.63	92	48	2000	1484	6.6	3.9	6.7	5.3	3.99	3.32	176	33	32	0.75	0.25
MONTHLY	MEAN	MEAN	TOTAL	TOTAL	MEAN	MN.	MN.	TOTL	TOT	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MN.	MN.	MN	MEAN	MEAN	
	12.5	1.0	40.39	M	2.51	87	53	93	36	7.6	4.9	7.7	6.3	3.96	2.78	224	42	15	M	M	

GRAND RAPIDS

Table with columns: DATE, MAX AIR TEMP, MIN AIR TEMP, PRE, PAN, SOL, RH MAX, RH MIN, ACCM D.D., ACCM BASE, MAX SOIL TEMP, MIN SOIL TEMP, MAX SOIL TEMP, MIN SOIL TEMP, WIND SPD, VECT MAG, VEC DIR, VEC STD, LF WT, VAP PR, VAP PRES DEF. Rows include dates from 4/1/85 to 4/30/85 with various meteorological values.

MONTHLY summary row: MEAN 13.3, MEAN 0.6, TOTAL 108.45, TOTAL M, MEAN M, MN M, MN M, TOTL 109, TOT 39, MEAN M, MEAN M, MEAN M, MEAN M, MEAN M, MEAN M, MN M, MN M, MN M, MEAN M, MEAN M.

Table with columns: DATE, MAX AIR TEMP, MIN AIR TEMP, PRE, PAN, SOL, RH MAX, RH MIN, ACCM D.D., ACCM BASE, MAX SOIL TEMP, MIN SOIL TEMP, MAX SOIL TEMP, MIN SOIL TEMP, WIND SPD, VECT MAG, VEC DIR, VEC STD, LF WT, VAP PR, VAP PRES DEF. Rows include dates from 5/1/85 to 5/31/85 with various meteorological values.

MONTHLY summary row: MEAN 20.9, MEAN 7.5, TOTAL 164.33, TOTAL M, MEAN 5.41, MN 93, MN 45, TOTL 302, TOT 132, MEAN 20.7, MEAN 10.6, MEAN 16.0, MEAN 11.5, MEAN 2.17, MEAN 2.14, MN 3, MN 8, MN 28, MEAN M, MEAN M.







GRAND RAPIDS

DATE	MAX AIR TEMP	MIN AIR TEMP	PRE	PAN	SOL	RH MAX	RH MIN	ACCM D.D.	ACCM D.D.	MAX SOIL TEMP	MIN SOIL TEMP	MAX SOIL TEMP	MIN SOIL TEMP	WIND SPD	VECT MAG	VEC DIR	VEC STD	LF WT	VAP PR	VAP DEF	PRES
								4.44	10	10CM	10CM	20CM	20CM								
10/ 1/85	8.9	-0.9	0.00		M	2.01	90	54	1774	899	8.6	3.5	7.1	4.9	1.57	1.46	19	21	60	M	M
10/ 2/85	15.4	-1.6	1.27		M	3.57	90	50	1777	899	11.4	2.7	8.4	4.3	1.99	1.80	29	25	21	M	M
10/ 3/85	17.4	2.3	0.00		M	3.31	90	43	1782	899	14.1	5.5	10.2	6.5	1.18	0.97	46	34	22	M	M
10/ 4/85	11.4	7.0	0.00		M	2.31	85	66	1787	899	11.1	7.9	9.5	8.1	3.60	3.27	120	25	0	M	M
10/ 5/85	8.6	3.3	0.00		M	1.86	85	71	1788	899	9.7	6.3	8.6	7.1	2.51	2.25	209	26	10	M	M
10/ 6/85	12.3	-0.4	0.00		M	2.95	90	57	1790	899	11.9	5.3	8.9	6.2	1.75	0.89	216	57	4	M	M
10/ 7/85	6.4	-3.2	25.15		M	0.72	91	86	1790	899	5.7	3.1	7.5	5.0	3.65	2.03	130	54	61	M	M
10/ 8/85	10.2	-0.5	0.00		M	1.06	89	75	1790	899	8.7	4.0	7.3	5.3	2.73	1.54	52	54	48	M	M
10/ 9/85	2.1	-1.5	0.00		M	1.72	80	68	1790	899	6.6	2.7	5.8	4.1	1.87	1.46	16	38	0	M	M
10/10/85	8.4	-4.0	0.00		M	4.36	88	45	1790	899	10.8	2.3	7.1	3.5	1.11	0.72	4	48	0	M	M
10/11/85	15.1	-1.6	10.92		M	3.94	86	33	1793	899	11.8	2.4	7.7	3.7	1.84	0.66	41	65	0	M	M
10/12/85	9.9	5.5	1.27		M	0.67	90	52	1796	899	9.5	6.8	7.6	6.4	2.09	0.81	27	63	53	M	M
10/13/85	14.4	0.4	0.00		M	2.31	89	40	1799	899	11.5	5.4	8.5	6.2	1.29	0.74	34	53	39	M	M
10/14/85	16.7	-0.6	0.00		M	4.00	90	28	1802	899	12.4	3.0	8.5	4.6	2.30	1.52	53	47	41	M	M
10/15/85	4.5	-1.0	0.00		M	2.07	87	50	1802	899	7.1	3.1	7.6	4.7	1.86	1.24	302	47	0	M	M
10/16/85	6.4	-3.0	0.00		M	3.01	83	45	1802	899	7.9	2.1	5.7	3.4	1.76	0.42	212	71	0	M	M
10/17/85	17.5	2.1	0.00		M	2.18	88	57	1808	899	10.7	3.1	7.6	3.9	2.57	0.77	36	68	7	M	M
10/18/85	18.8	-2.5	0.00		M	3.90	90	33	1811	899	12.6	2.6	8.2	3.9	1.22	0.99	62	35	15	M	M
10/19/85	16.4	-3.3	0.00		M	3.87	90	23	1814	899	12.3	2.7	8.1	4.2	1.08	0.53	94	58	21	M	M
10/20/85	16.3	-0.6	0.00		M	3.73	85	37	1817	899	12.1	2.7	8.0	4.2	2.05	0.80	94	63	0	M	M
10/21/85	11.0	0.3	0.00		M	0.74	89	73	1818	899	8.3	3.4	6.9	4.6	2.12	1.03	189	58	15	M	M
10/22/85	15.7	10.5	2.03		M	1.23	86	73	1827	902	12.0	8.3	9.4	6.9	4.93	3.98	120	36	5	M	M
10/23/85	17.1	10.0	0.00		M	3.23	86	40	1836	906	15.3	9.2	11.5	9.4	2.86	1.24	124	61	11	M	M
10/24/85	12.8	4.2	0.00		M	3.51	85	37	1840	906	12.3	6.4	9.7	7.5	2.00	1.08	213	55	0	M	M
10/25/85	15.3	-2.1	0.00		M	1.76	90	34	1842	906	9.3	3.3	7.9	5.2	1.83	1.00	204	55	17	M	M
10/26/85	15.5	2.6	0.00		M	3.07	85	19	1847	906	12.7	5.7	9.1	6.3	1.87	0.75	171	63	0	M	M
10/27/85	10.1	-2.2	0.00		M	2.47	84	39	1847	906	9.7	2.9	7.3	4.6	0.92	0.26	60	68	0	M	M
10/28/85	14.8	0.2	0.00		M	3.07	70	24	1850	906	10.8	2.7	7.5	4.2	3.98	3.23	82	35	0	M	M
10/29/85	9.8	0.2	2.79		M	1.11	88	50	1850	906	9.3	3.8	7.4	5.7	2.10	1.05	130	57	16	M	M
10/30/85	10.1	-6.5	0.00		M	3.27	91	32	1850	906	8.3	1.8	5.7	3.3	1.50	0.58	115	53	0	M	M
10/31/85	9.6	-1.2	0.00		M	1.68	92	57	1850	906	8.0	2.4	5.3	3.2	2.17	0.97	334	60	42	M	M
MONTHLY	MEAN	MEAN	TOTAL	TOTAL	MEAN	MN.	MN.	TOTL	TOT	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MN.	MN.	MN	MEAN	MEAN	
	12.2	0.4	43.43	M	2.54	87	48	76	7	10.4	4.1	7.9	5.2	2.14	1.29	114	50	16	M	M	







L A M B E R T O N

DATE	MAX AIR TEMP	MIN AIR TEMP	PRE	PAN	SOL	RH	RH	ACCM	ACCM	MAX	MIN	MAX	MIN	WIND	VECT	VEC	VEC	LF	VAP	VAP	
						MAX	MIN	D.D.	D.D.	SOIL	SOIL	SOIL	SOIL	SPD	MAG	DIR	STD	WT	PR	DEF	
						10	1030	10CM	10CM	10CM	10CM	20CM	20CM								
10/ 1/85	11.8	-0.2	2.54		M	4.21	89	43	1377	1435	11.5	4.0	9.8	6.7	2.76	2.48	262	26	28	0.60	0.29
10/ 2/85	17.4	0.9	0.00	3.81		3.14	88	57	1377	1439	11.3	4.5	10.1	7.0	3.70	3.42	206	22	30	0.88	0.32
10/ 3/85	12.2	4.1	0.00		M	0.89	88	78	1377	1440	9.7	6.1	9.8	8.2	1.75	0.54	201	67	93	0.93	0.15
10/ 4/85	12.6	6.2	22.86		M	2.40	88	62	1377	1441	11.7	8.3	10.5	9.2	6.87	6.41	319	21	37	0.88	0.26
10/ 5/85	7.9	-0.9	0.00	3.81		2.03	89	61	1377	1441	8.8	5.7	9.8	8.2	4.15	3.90	312	20	11	0.66	0.24
10/ 6/85	17.0	-1.7	0.00		M	3.69	89	39	1377	1445	12.5	3.6	10.1	6.5	2.14	1.56	274	42	7	0.68	0.46
10/ 7/85	15.6	2.1	0.00		M	1.54	88	63	1377	1447	10.3	6.1	9.8	8.0	4.08	3.56	122	29	48	0.95	0.25
10/ 8/85	11.7	1.4	4.32		M	2.15	87	65	1377	1448	10.3	6.1	9.9	8.7	4.72	3.96	291	32	14	0.76	0.22
10/ 9/85	2.9	-3.0	0.00		M	1.42	89	68	1377	1448	6.8	3.7	8.7	6.4	2.42	2.09	339	30	10	0.48	0.13
10/10/85	11.6	-3.6	0.00		M	4.04	90	43	1377	1449	11.1	2.6	8.6	5.2	1.12	0.76	220	46	18	0.51	0.27
10/11/85	12.7	-1.6	0.00		M	2.34	89	52	1377	1450	9.1	3.1	8.4	5.7	2.88	2.53	134	28	64	0.74	0.27
10/12/85	13.6	4.5	14.48		M	1.66	88	75	1377	1452	11.5	8.2	10.2	8.4	2.96	2.04	245	45	63	1.02	0.21
10/13/85	9.8	3.8	0.00		M	0.77	87	85	1377	1452	9.3	6.4	9.6	8.0	1.83	1.43	258	38	M	0.87	0.14
10/14/85	16.6	0.4	1.78		M	3.98	88	32	1377	1456	11.9	4.6	9.7	7.0	3.03	2.78	243	23	43	0.70	0.50
10/15/85	8.8	-0.1	0.00		M	1.81	88	73	1377	1456	9.3	4.6	9.0	6.9	2.32	0.88	15	64	42	0.69	0.14
10/16/85	14.2	-2.9	0.00		M	3.43	88	54	1377	1458	10.3	3.4	8.7	6.1	3.09	2.66	140	30	31	0.71	0.31
10/17/85	19.9	5.1	0.00		M	2.54	78	52	1380	1463	13.6	7.7	10.8	8.2	4.96	3.75	213	40	0	1.03	0.56
10/18/85	15.1	2.2	0.00		M	1.37	87	44	1380	1465	11.2	6.6	10.1	8.2	0.85	0.28	247	66	31	0.74	0.33
10/19/85	18.4	1.2	0.00		M	3.75	87	38	1380	1469	14.0	4.9	10.6	7.1	1.73	0.34	7	73	40	0.73	0.45
10/20/85	17.9	0.8	0.00		M	3.76	87	50	1380	1473	13.9	4.8	10.7	7.2	1.79	1.54	131	30	56	0.82	0.39
10/21/85	15.0	4.0	0.00		M	1.84	87	72	1380	1476	12.4	7.4	10.6	8.5	2.50	2.30	158	23	45	1.02	0.24
10/22/85	21.7	10.0	0.00		M	2.28	86	62	1386	1482	15.6	9.9	12.6	10.1	5.03	4.71	156	20	9	1.39	0.43
10/23/85	18.8	7.9	0.00		M	2.72	84	39	1389	1486	15.1	10.3	12.8	11.2	3.14	2.87	214	24	0	0.99	0.57
10/24/85	16.7	3.0	0.00		M	3.73	71	24	1389	1489	14.1	7.4	11.8	9.5	3.71	3.47	270	21	0	0.62	0.67
10/25/85	22.6	2.1	0.00		M	2.99	79	36	1391	1496	14.8	6.0	11.8	8.2	5.11	4.89	198	17	0	0.77	0.86
10/26/85	19.3	3.1	0.00		M	2.74	85	41	1392	1500	14.9	9.1	12.7	10.8	4.79	2.22	275	59	5	0.92	0.62
10/27/85	15.4	-1.6	0.00		M	3.37	84	19	1392	1503	13.1	5.2	11.3	8.1	1.98	0.87	171	61	0	0.46	0.54
10/28/85	16.5	3.4	0.00		M	2.15	58	29	1392	1506	12.9	6.8	10.9	8.5	4.18	3.97	170	18	0	0.54	0.80
10/29/85	11.1	-0.2	0.00		M	1.47	86	48	1392	1507	10.5	5.9	10.3	8.6	4.36	1.52	283	65	16	0.68	0.33
10/30/85	9.5	-3.8	0.00		M	2.46	88	70	1392	1507	9.1	2.4	8.6	5.7	2.19	0.44	296	72	48	0.59	0.14
10/31/85	9.7	-1.1	0.00		M	2.23	88	67	1392	1507	8.8	3.1	7.7	5.5	2.21	1.77	138	36	59	0.68	0.17
MONTHLY	MEAN	MEAN	TOTAL	TOTAL	MEAN	MN.	MN.	TOTL	TOT	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MN.	MN.	MN.	MN.	MEAN	MEAN
	14.3	1.5	45.98		M	2.55	85	53	15	73	11.6	5.8	10.2	7.8	3.17	2.45	210	38	30	0.77	0.36









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DATE	MAX AIR TEMP	MIN AIR TEMP	PRE	PAN	SOL	RH MAX	RH MIN	ACCM D.D.	ACCM D.D.	MAX SOIL TEMP	MIN SOIL TEMP	MAX SOIL TEMP	MIN SOIL TEMP	WIND SPD	VECT MAG	VEC DIR	VEC STD	LF WT	VAP PR	VAP PRES	DEF
								4.44	1030	10CM	10CM	20CM	20CM								
10/ 1/85	11.3	-0.9	0.00	2.54	4.50	87	43	2108	1287	10.1	3.7	8.1	5.6	3.57	2.93	277	34	37	0.56	0.29	
10/ 2/85	15.6	-1.6	0.00	1.78	3.15	86	59	2111	1290	10.0	2.9	8.0	5.1	3.32	2.44	191	42	5	0.78	0.27	
10/ 3/85	13.6	2.9	6.35	1.27	1.59	87	66	2114	1292	9.4	5.2	8.2	6.5	2.15	1.75	180	35	38	0.90	0.24	
10/ 4/85	11.9	6.1	0.00	0.51	2.66	86	64	2119	1293	10.1	7.6	8.9	7.8	6.58	6.21	337	19	29	0.87	0.25	
10/ 5/85	7.4	0.1	0.00	4.32	1.73	86	64	2119	1293	8.1	5.4	8.3	7.0	4.59	4.17	314	24	7	0.65	0.22	
10/ 6/85	15.7	-0.1	0.00	2.79	3.96	87	46	2122	1295	10.6	3.7	8.3	5.5	3.32	1.75	296	56	28	0.70	0.33	
10/ 7/85	12.2	1.8	1.78	1.52	1.45	86	66	2125	1297	8.7	5.4	7.8	6.3	6.18	5.54	108	26	30	0.86	0.22	
10/ 8/85	9.9	-1.6	0.00	1.02	1.63	86	69	2125	1297	8.7	4.1	8.0	6.3	6.08	5.07	296	33	27	0.65	0.16	
10/ 9/85	5.2	-4.3	0.00	0.76	2.92	86	56	2125	1297	7.0	2.5	6.3	4.4	3.05	2.79	344	24	0	0.44	0.16	
10/10/85	9.9	-6.6	0.00	3.05	4.24	88	47	2125	1297	7.2	1.6	5.6	3.5	2.14	1.67	176	38	4	0.47	0.24	
10/11/85	12.9	-2.1	22.10	3.05	3.05	87	53	2126	1298	7.8	2.0	6.3	3.7	3.93	3.55	140	25	27	0.67	0.29	
10/12/85	11.5	4.2	0.51	0.51	1.22	86	80	2129	1299	9.4	6.7	7.9	6.3	3.30	1.14	258	66	58	0.92	0.19	
10/13/85	15.6	2.6	0.00	4.32	2.49	85	44	2134	1302	9.6	4.9	7.7	5.9	2.29	1.68	258	42	55	0.78	0.28	
10/14/85	7.2	-0.2	0.20	3.80	3.98	85	39	2134	1302	9.7	3.0	7.4	4.8	3.70	2.50	255	46	46	0.68	0.42	
10/15/85	7.6	-0.3	5.84	M	1.90	86	67	2134	1302	7.1	3.3	7.1	4.8	2.07	1.40	318	46	41	0.58	0.14	
10/16/85	10.6	-3.3	0.00	M	3.60	87	61	2134	1302	7.2	2.2	5.7	3.8	4.04	3.36	138	33	4	0.62	0.24	
10/17/85	17.7	1.5	0.00	M	3.49	82	42	2139	1306	10.7	5.2	7.8	5.3	4.81	1.90	217	63	1	0.90	0.42	
10/18/85	18.7	-1.2	0.00	M	3.69	86	42	2143	1310	9.8	2.8	7.3	4.5	1.77	1.08	179	51	53	0.71	0.40	
10/19/85	17.9	-0.1	0.00	M	3.88	85	27	2148	1314	10.0	3.0	7.2	4.7	1.89	1.44	107	39	42	0.63	0.50	
10/20/85	17.5	-0.5	0.00	M	3.70	86	42	2152	1318	9.8	2.8	7.2	4.4	3.26	3.00	143	23	30	0.76	0.40	
10/21/85	13.0	3.9	0.00	M	1.74	86	78	2156	1319	9.3	4.8	7.7	5.6	4.95	4.72	161	17	35	0.97	0.22	
10/22/85	18.9	9.9	0.51	M	0.83	85	71	2166	1324	11.7	8.5	9.7	7.7	7.72	7.57	152	11	4	1.31	0.35	
10/23/85	19.3	5.3	0.00	M	3.51	86	35	2174	1328	12.9	8.4	10.1	8.7	4.18	3.67	226	28	11	0.94	0.55	
10/24/85	15.6	2.4	0.00	M	3.63	77	32	2178	1331	10.7	6.0	9.4	7.2	4.93	4.63	277	20	0	0.64	0.54	
10/25/85	22.5	0.6	0.00	M	3.32	84	41	2185	1337	11.2	4.5	8.6	5.9	3.76	3.13	176	33	0	0.84	0.63	
10/26/85	14.6	1.8	0.00	M	3.19	85	26	2189	1340	10.6	5.7	8.5	7.1	3.62	2.18	340	51	33	0.70	0.48	
10/27/85	13.6	-3.1	0.00	M	3.16	82	27	2190	1341	8.3	2.9	7.5	4.9	3.01	1.88	150	50	0	0.45	0.48	
10/28/85	18.1	3.8	0.00	M	2.33	57	43	2196	1345	9.4	4.3	7.4	5.4	7.44	7.30	156	11	0	0.63	0.68	
10/29/85	10.3	-2.0	0.00	M	2.28	84	52	2196	1346	8.8	4.5	7.4	6.4	4.82	1.32	346	69	13	0.66	0.34	
10/30/85	10.7	-6.6	0.00	M	3.35	87	45	2196	1346	6.4	1.9	6.4	3.8	2.81	1.88	144	47	6	0.53	0.23	
10/31/85	11.9	-0.3	0.00	M	3.14	86	57	2198	1347	7.2	2.2	5.5	3.7	4.56	4.45	141	13	57	0.65	0.21	
MONTHLY	MEAN	MEAN	TOTAL	TOTAL	MEAN	MN.	MN.	TOTL	TOT	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MN.	MN.	MN	MEAN	MEAN	
	13.5	0.4	37.29	M	2.88	84	51	90	60	9.3	4.2	7.7	5.6	3.99	3.16	219	36	23	0.72	0.33	

ROSEMOUNT

DATE	MAX AIR TEMP	MIN AIR TEMP	PRE	PAN	SOL	RH MAX	RH MIN	ACCM D.D. BASE 10	ACCM D.D. BASE 1030	MAX SOIL TEMP 10CM	MIN SOIL TEMP 10CM	MAX SOIL TEMP 20CM	MIN SOIL TEMP 20CM	WIND SPD	VECT MAG	VEC DIR	VEC STD	LF WT	VAP PR	VAP PRES DEF
4/ 1/85	* 7.2	-5.0	0.00		M	M	M	0	0	M	M	M	M	M	M	M	M	M	M	M
4/ 2/85	* 10.0	-3.9	0.00		M	M	M	0	0	M	M	M	M	M	M	M	M	M	M	M
4/ 3/85	* 12.8	1.1	0.00		M	M	M	0	1	M	M	M	M	M	M	M	M	M	M	M
4/ 4/85	* 11.1	1.1	0.00		M	M	M	0	2	M	M	M	M	M	M	M	M	M	M	M
4/ 5/85	* 8.3	-3.9	0.00		M	M	M	0	2	M	M	M	M	M	M	M	M	M	M	M
4/ 6/85	* 9.4	-1.1	0.00		M	M	M	0	2	M	M	M	M	M	M	M	M	M	M	M
4/ 7/85	* 7.8	-1.1	0.00		M	M	M	0	2	M	M	M	M	M	M	M	M	M	M	M
4/ 8/85	* 3.3	-4.4	0.00		M	M	M	0	2	M	M	M	M	M	M	M	M	M	M	M
4/ 9/85	* 9.4	-6.7	0.00		M	M	M	0	2	M	M	M	M	M	M	M	M	M	M	M
4/10/85	* 19.4	0.6	0.00		M	M	M	0	7	M	M	M	M	M	M	M	M	M	M	M
4/11/85	* 20.6	0.0	0.00		M	M	M	0	12	M	M	M	M	M	M	M	M	M	M	M
4/12/85	* 26.1	5.0	0.00		M	M	M	6	20	M	M	M	M	M	M	M	M	M	M	M
4/13/85	* 21.1	3.3	6.35		M	M	M	8	26	M	M	M	M	M	M	M	M	M	M	M
4/14/85	* 11.7	2.2	1.27		M	M	M	8	26	M	M	M	M	M	M	M	M	M	M	M
4/15/85	* 22.8	0.6	0.00		M	M	M	10	33	M	M	M	M	M	M	M	M	M	M	M
4/16/85	* 22.2	4.4	0.00		M	M	M	13	39	M	M	M	M	M	M	M	M	M	M	M
4/17/85	* 22.8	3.3	0.00		M	M	M	16	45	M	M	M	M	M	M	M	M	M	M	M
4/18/85	* 31.1	6.7	0.00		M	M	M	25	55	M	M	M	M	M	M	M	M	M	M	M
4/19/85	* 32.2	18.9	0.00		M	M	M	41	70	M	M	M	M	M	M	M	M	M	M	M
4/20/85	* 30.0	15.6	0.00		M	M	M	53	83	M	M	M	M	M	M	M	M	M	M	M
4/21/85	* 26.7	12.8	7.11		M	M	M	63	92	M	M	M	M	M	M	M	M	M	M	M
4/22/85	* 24.4	11.7	18.80		M	M	M	71	100	M	M	M	M	M	M	M	M	M	M	M
4/23/85	* 20.0	9.4	3.05		M	M	M	76	105	M	M	M	M	M	M	M	M	M	M	M
4/24/85	* 17.2	5.6	0.00		M	M	M	77	109	M	M	M	M	M	M	M	M	M	M	M
4/25/85	* 17.2	5.0	0.00		M	M	M	78	113	M	M	M	M	M	M	M	M	M	M	M
4/26/85	* 13.9	4.4	0.00		M	M	M	78	114	M	M	M	M	M	M	M	M	M	M	M
4/27/85	* 13.9	5.6	0.00		M	M	M	78	116	M	M	M	M	M	M	M	M	M	M	M
4/28/85	* 21.7	3.9	0.00		M	M	M	81	122	M	M	M	M	M	M	M	M	M	M	M
4/29/85	* 24.4	8.3	0.00		M	M	M	88	129	M	M	M	M	M	M	M	M	M	M	M
4/30/85	* 25.0	11.1	0.00	3.56	M	M	M	96	138	M	M	M	M	M	M	M	M	M	M	M

MONTHLY	MEAN 18.1	MEAN 3.8	TOTAL 36.58	TOTAL M	MEAN M	MN. M	MN. M	TOTL 96	TOT 138	MEAN M	MEAN M	MEAN M	MEAN M	MEAN M	MEAN M	MN. M	MN. M	MN. M	MEAN M	MEAN M
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5/ 1/85	* 21.1	9.4	0.00	7.62	M	M	M	101	143	M	M	M	M	M	M	M	M	M	M	M
5/ 2/85	* 23.9	3.3	0.00	5.59	M	M	M	104	150	M	M	M	M	M	M	M	M	M	M	M
5/ 3/85	* 25.0	11.1	0.00	9.14	M	M	M	112	158	M	M	M	M	M	M	M	M	M	M	M
5/ 4/85	* 28.3	8.3	0.00	9.65	M	M	M	121	167	M	M	M	M	M	M	M	M	M	M	M
5/ 5/85	* 27.2	12.8	0.00	9.65	M	M	M	131	177	M	M	M	M	M	M	M	M	M	M	M
5/ 6/85	* 22.8	5.6	0.00	9.65	M	M	M	135	184	M	M	M	M	M	M	M	M	M	M	M
5/ 7/85	* 23.3	9.4	0.00	7.62	M	M	M	141	190	M	M	M	M	M	M	M	M	M	M	M
5/ 8/85	* 27.8	4.4	0.00	7.87	M	M	M	147	199	M	M	M	M	M	M	M	M	M	M	M
5/ 9/85	* 31.1	13.3	13.21	M	M	M	M	160	211	M	M	M	M	M	M	M	M	M	M	M
5/10/85	* 30.6	19.4	0.00	7.62	M	M	M	175	226	M	M	M	M	M	M	M	M	M	M	M
5/11/85	* 26.1	15.6	0.00	7.62	M	M	M	186	236	M	M	M	M	M	M	M	M	M	M	M
5/12/85	* 17.2	12.8	0.00	7.62	M	M	M	191	241	M	M	M	M	M	M	M	M	M	M	M
5/13/85	* 22.8	3.9	0.00	7.62	M	M	M	194	248	M	M	M	M	M	M	M	M	M	M	M
5/14/85	* 21.7	9.4	7.37	2.03	M	M	M	199	254	M	M	M	M	M	M	M	M	M	M	M
5/15/85	* 21.7	11.1	5.08	2.79	M	M	M	206	260	M	M	M	M	M	M	M	M	M	M	M
5/16/85	* 15.0	11.7	5.33	2.54	M	M	M	209	263	M	M	M	M	M	M	M	M	M	M	M
5/17/85	* 21.1	5.0	0.00	2.79	M	M	M	212	269	M	M	M	M	M	M	M	M	M	M	M
5/18/85	* 23.9	9.4	0.00	7.62	M	M	M	219	276	M	M	M	M	M	M	M	M	M	M	M
5/19/85	* 26.1	4.4	0.00	7.62	M	M	M	224	284	M	M	M	M	M	M	M	M	M	M	M
5/20/85	* 22.8	4.4	0.00	7.62	M	M	M	228	290	M	M	M	M	M	M	M	M	M	M	M
5/21/85	* 20.6	3.3	0.00	5.33	M	M	M	230	296	M	M	M	M	M	M	M	M	M	M	M
5/22/85	* 26.7	5.6	0.00	6.10	M	M	M	236	304	M	M	M	M	M	M	M	M	M	M	M
5/23/85	* 22.8	11.7	8.89	6.10	M	M	M	243	311	M	M	M	M	M	M	M	M	M	M	M
5/24/85	* 27.2	7.8	0.00	1.78	M	M	M	251	320	M	M	M	M	M	M	M	M	M	M	M
5/25/85	* 28.9	12.2	0.00	6.35	M	M	M	261	330	M	M	M	M	M	M	M	M	M	M	M
5/26/85	* 27.2	12.2	0.00	6.35	M	M	M	271	340	M	M	M	M	M	M	M	M	M	M	M
5/27/85	* 23.3	7.8	0.00	6.35	M	M	M	276	347	M	M	M	M	M	M	M	M	M	M	M
5/28/85	* 24.4	8.9	0.00	6.35	M	M	M	283	354	M	M	M	M	M	M	M	M	M	M	M
5/29/85	* 25.0	13.3	2.54	4.57	M	M	M	292	363	M	M	M	M	M	M	M	M	M	M	M
5/30/85	* 20.0	12.2	0.00	4.57	M	M	M	298	369	M	M	M	M	M	M	M	M	M	M	M
5/31/85	* 21.1	10.0	57.66	M	M	M	M	304	375	M	M	M	M	M	M	M	M	M	M	M

MONTHLY	MEAN 24.1	MEAN 9.4	TOTAL 100.08	TOTAL M	MEAN M	MN. M	MN. M	TOTL 208	TOT 237	MEAN M	MEAN M	MEAN M	MEAN M	MEAN M	MEAN M	MN. M	MN. M	MN. M	MEAN M	MEAN M
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ROSEMOUNT

DATE	MAX AIR TEMP	MIN AIR TEMP	PRE	PAN	SOL	RH MAX	RH MIN	ACCM D.D.	ACCM D.D.	MAX SOIL TEMP 10CM	MIN SOIL TEMP 10CM	MAX SOIL TEMP 20CM	MIN SOIL TEMP 20CM	WIND SPD	VECT MAG	VEC DIR	VEC STD	LF WT	VAP PR	PRES DEF
10/ 1/85	* 10.0	1.1	2.03		M	M	M	M	1388	1472	M	M	M	M	M	M	M	M	M	M
10/ 2/85	* 17.2	-0.6	0.00		M	M	M	M	1388	1476	M	M	M	M	M	M	M	M	M	M
10/ 3/85	* 16.1	5.0	0.00		M	M	M	M	1388	1479	M	M	M	M	M	M	M	M	M	M
10/ 4/85	* 12.2	6.7	59.18		M	M	M	M	1388	1480	M	M	M	M	M	M	M	M	M	M
10/ 5/85	* 9.4	1.1	0.00		M	M	M	M	1388	1480	M	M	M	M	M	M	M	M	M	M
10/ 6/85	* 16.1	-1.1	0.00		M	M	M	M	1388	1483	M	M	M	M	M	M	M	M	M	M
10/ 7/85	* 15.0	1.1	0.00		M	M	M	M	1388	1485	M	M	M	M	M	M	M	M	M	M
10/ 8/85	* 14.4	7.2	12.19		M	M	M	M	1389	1487	M	M	M	M	M	M	M	M	M	M
10/ 9/85	* 8.3	0.6	0.00		M	M	M	M	1389	1487	M	M	M	M	M	M	M	M	M	M
10/10/85	* 9.4	-2.8	0.00		M	M	M	M	1389	1487	M	M	M	M	M	M	M	M	M	M
10/11/85	* 13.9	-3.9	0.00		M	M	M	M	1389	1489	M	M	M	M	M	M	M	M	M	M
10/12/85	* 13.9	-3.9	15.75		M	M	M	M	1389	1491	M	M	M	M	M	M	M	M	M	M
10/13/85	* 11.1	2.2	0.00		M	M	M	M	1389	1492	M	M	M	M	M	M	M	M	M	M
10/14/85	* 15.6	0.0	0.00		M	M	M	M	1389	1495	M	M	M	M	M	M	M	M	M	M
10/15/85	* 14.4	-0.6	7.62		M	M	M	M	1389	1497	M	M	M	M	M	M	M	M	M	M
10/16/85	* 11.1	-3.9	0.00		M	M	M	M	1389	1497	M	M	M	M	M	M	M	M	M	M
10/17/85	* 17.8	5.0	0.00		M	M	M	M	1391	1501	M	M	M	M	M	M	M	M	M	M
10/18/85	* 17.8	2.8	0.00		M	M	M	M	1391	1505	M	M	M	M	M	M	M	M	M	M
10/19/85	* 17.8	0.0	0.00		M	M	M	M	1391	1509	M	M	M	M	M	M	M	M	M	M
10/20/85	* 17.2	1.1	0.00		M	M	M	M	1391	1513	M	M	M	M	M	M	M	M	M	M
10/21/85	* 13.9	7.2	0.00		M	M	M	M	1391	1515	M	M	M	M	M	M	M	M	M	M
10/22/85	* 19.4	10.0	0.00		M	M	M	M	1396	1519	M	M	M	M	M	M	M	M	M	M
10/23/85	* 17.8	11.1	2.54		M	M	M	M	1401	1524	M	M	M	M	M	M	M	M	M	M
10/24/85	* 16.7	5.6	0.00		M	M	M	M	1402	1527	M	M	M	M	M	M	M	M	M	M
10/25/85	* 20.6	0.6	0.00		M	M	M	M	1402	1532	M	M	M	M	M	M	M	M	M	M
10/26/85	* 21.1	11.7	0.00		M	M	M	M	1409	1539	M	M	M	M	M	M	M	M	M	M
10/27/85	* 15.0	0.0	0.00		M	M	M	M	1409	1541	M	M	M	M	M	M	M	M	M	M
10/28/85	* 15.0	-1.7	0.00		M	M	M	M	1409	1544	M	M	M	M	M	M	M	M	M	M
10/29/85	* 13.3	2.2	0.00		M	M	M	M	1409	1546	M	M	M	M	M	M	M	M	M	M
10/30/85	* 11.1	-1.7	0.00		M	M	M	M	1409	1546	M	M	M	M	M	M	M	M	M	M
10/31/85	* 10.6	-1.7	0.00		M	M	M	M	1409	1546	M	M	M	M	M	M	M	M	M	M
MONTHLY	MEAN 14.6	MEAN 2.0	TOTAL 99.31	TOTAL M	MEAN M	MN. M	MN. M	TOTL 21	TOT 74	MEAN M	MEAN M	MEAN M	MEAN M	MEAN M	MEAN M	MN. M	MN. M	MN. M	MEAN M	MEAN M









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DATE	MAX AIR TEMP	MIN AIR TEMP	PRE	PAN	SOL	RH MAX	RH MIN	ACCM D.D.	ACCM D.D.	MAX SOIL TEMP	MIN SOIL TEMP	MAX SOIL TEMP	MIN SOIL TEMP	WIND SPD	VECT MAG	VEC DIR	VEC STD	LF WT	VAP PR	VAP PRES	VAP DEF
10/ 1/85	* 10.0	1.7	1.27	2.79	3.92	M	M	1472	1530	11.1	5.6	M	M	2.79	M	M	M	M	M	M	M
10/ 2/85	* 17.2	0.0	0.00	2.29	3.71	M	M	1472	1533	11.7	4.4	M	M	1.45	M	M	M	M	M	M	M
10/ 3/85	* 17.2	7.2	0.00	2.03	2.74	M	M	1474	1537	13.9	8.3	M	M	1.79	M	M	M	M	M	M	M
10/ 4/85	* 15.6	8.3	44.45	M	0.94	M	M	1476	1540	11.1	8.3	M	M	2.66	M	M	M	M	M	M	M
10/ 5/85	* 15.0	4.4	0.25	4.83	2.40	M	M	1476	1542	10.0	6.7	M	M	4.15	M	M	M	M	M	M	M
10/ 6/85	* 15.0	1.1	0.00	2.03	3.88	M	M	1476	1545	M	M	M	M	1.71	M	M	M	M	M	M	M
10/ 7/85	* 15.6	2.8	1.27	1.52	M	M	M	1476	1547	M	M	M	M	2.05	M	M	M	M	M	M	M
10/ 8/85	* 14.4	6.1	13.97	4.83	1.15	M	M	1477	1550	M	M	M	M	3.07	M	M	M	M	M	M	M
10/ 9/85	* 7.2	-0.6	0.00	1.78	1.00	M	M	1477	1550	M	M	M	M	2.16	M	M	M	M	M	M	M
10/10/85	* 9.4	-2.2	0.00	0.76	3.43	M	M	1477	1550	M	M	M	M	0.84	M	M	M	M	M	M	M
10/11/85	* 13.3	-1.1	0.00	M	3.66	M	M	1477	1551	M	M	M	M	0.82	M	M	M	M	M	M	M
10/12/85	* 13.3	-1.1	15.75	M	0.85	M	M	1477	1553	M	M	M	M	1.99	M	M	M	M	M	M	M
10/13/85	* 12.8	2.8	0.76	M	1.06	M	M	1477	1554	M	M	M	M	1.16	M	M	M	M	M	M	M
10/14/85	* 16.7	3.3	0.00	M	3.67	M	M	1477	1558	M	M	M	M	1.29	M	M	M	M	M	M	M
10/15/85	* 15.6	1.1	4.32	M	1.03	M	M	1477	1561	M	M	M	M	1.51	M	M	M	M	M	M	M
10/16/85	* 9.4	-2.8	0.00	M	3.59	M	M	1477	1561	M	M	M	M	1.06	M	M	M	M	M	M	M
10/17/85	* 18.9	6.7	0.51	M	0.92	M	M	1479	1565	M	M	M	M	2.78	M	M	M	M	M	M	M
10/18/85	* 19.4	2.8	0.00	M	1.87	M	M	1481	1570	M	M	M	M	0.45	M	M	M	M	M	M	M
10/19/85	* 16.1	2.8	0.00	M	3.31	M	M	1481	1573	M	M	M	M	0.56	M	M	M	M	M	M	M
10/20/85	* 16.7	2.2	0.00	M	3.80	M	M	1481	1576	M	M	M	M	0.76	M	M	M	M	M	M	M
10/21/85	* 14.4	8.3	0.00	M	1.21	M	M	1482	1578	M	M	M	M	1.36	M	M	M	M	M	M	M
10/22/85	* 18.3	11.1	0.00	M	1.05	M	M	1487	1583	M	M	M	M	2.61	M	M	M	M	M	M	M
10/23/85	* 18.3	12.2	1.27	M	3.17	M	M	1492	1588	M	M	M	M	3.60	M	M	M	M	M	M	M
10/24/85	* 17.2	7.8	0.00	M	3.60	M	M	1494	1592	M	M	M	M	2.53	M	M	M	M	M	M	M
10/25/85	* 20.6	2.8	0.00	M	2.55	M	M	1496	1597	M	M	M	M	1.83	M	M	M	M	M	M	M
10/26/85	* 21.1	12.8	0.00	M	3.27	M	M	1503	1604	M	M	M	M	2.76	M	M	M	M	M	M	M
10/27/85	* 17.8	1.1	0.00	M	3.21	M	M	1503	1608	M	M	M	M	1.49	M	M	M	M	M	M	M
10/28/85	* 15.0	1.7	0.00	M	3.02	M	M	1503	1611	M	M	M	M	1.47	M	M	M	M	M	M	M
10/29/85	* 13.9	5.6	1.27	M	1.88	M	M	1503	1612	M	M	M	M	2.66	M	M	M	M	M	M	M
10/30/85	* 10.0	0.0	0.00	M	2.15	M	M	1503	1612	M	M	M	M	1.68	M	M	M	M	M	M	M
10/31/85	* 10.6	1.1	0.00	M	2.22	M	M	1503	1613	M	M	M	M	1.38	M	M	M	M	M	M	M
MONTHLY	MEAN	MEAN	TOTAL	TOTAL	MEAN	MN.	MN.	TOTL	TOT	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MN.	MN.	MN	MEAN	MEAN	
	15.0	3.5	85.09	M	M	M	M	31	83	M	M	M	M	1.88	M	M	M	M	M	M	M







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DATE	MAX AIR TEMP	MIN AIR TEMP	PRE	PAN	SOL	RH	RH	ACCM	ACCM	MAX	MIN	MAX	MIN	WIND	VECT	VEC	VEC	LF	VAP	VAP	
						MAX	MIN	D.D.	D.D.	SOIL	SOIL	SOIL	SOIL	SPD	MAG	DIR	STD	WT	PR	PRES	DEF
						BASE		BASE		TEMP		TEMP									
						10		1030		10CM		10CM									
10/ 1/85	10.0	-0.6	0.00	7.11	3.54	88	46	914	1064	9.5	6.9	9.3	6.4	3.57	3.35	283	20	26	0.58	0.24	
10/ 2/85	14.3	-2.5	0.00	3.81	2.80	89	67	914	1066	9.1	5.8	9.0	5.1	2.77	2.47	190	27	21	0.76	0.24	
10/ 3/85	15.6	1.4	0.00	1.02	2.28	88	61	914	1069	9.7	6.9	9.6	6.4	1.81	1.32	191	42	32	0.89	0.29	
10/ 4/85	12.4	7.1	0.00	4.06	2.32	86	59	914	1070	9.6	8.2	9.4	7.8	6.07	5.67	341	21	6	0.84	0.29	
10/ 5/85	8.0	1.6	0.00	2.03	1.55	81	67	914	1070	8.7	7.6	8.4	7.2	4.83	4.64	313	16	0	0.66	0.22	
10/ 6/85	14.5	-0.6	0.00	2.54	4.06	88	47	914	1072	10.5	6.5	10.5	6.0	2.96	2.11	283	43	8	0.64	0.32	
10/ 7/85	9.2	-1.7	9.14	0.51	1.39	88	69	914	1072	8.1	6.5	7.8	6.0	4.06	3.80	95	20	79	0.69	0.13	
10/ 8/85	8.4	-0.6	0.00	1.52	1.26	86	74	914	1072	8.4	6.2	8.1	5.6	5.88	4.64	274	37	35	0.66	0.15	
10/ 9/85	5.3	-3.1	0.00	1.52	2.70	84	56	914	1072	7.7	5.1	7.6	4.6	3.45	3.14	318	24	0	0.44	0.17	
10/10/85	8.3	-6.0	0.00	2.03	4.24	88	47	914	1072	8.0	4.4	7.8	3.8	2.09	1.54	221	41	5	0.44	0.23	
10/11/85	13.9	-2.1	13.97	2.79	3.55	87	46	914	1074	8.2	4.5	8.2	4.0	3.18	2.78	154	29	30	0.63	0.37	
10/12/85	9.9	3.6	0.51	1.27	0.91	87	82	914	1074	8.3	7.0	8.1	6.7	3.29	1.31	252	63	71	0.84	0.15	
10/13/85	14.0	2.5	0.00	1.27	2.33	85	50	914	1076	8.7	6.5	8.6	6.1	2.39	2.24	264	20	45	0.77	0.28	
10/14/85	16.8	-1.4	0.00	2.54	3.90	87	35	914	1079	8.9	5.3	8.9	4.7	4.09	3.11	255	40	32	0.65	0.45	
10/15/85	6.7	-2.9	0.00	2.54	3.07	87	45	914	1079	8.1	5.5	8.0	5.0	2.22	1.94	311	29	36	0.47	0.21	
10/16/85	8.7	-6.0	0.00	2.54	2.84	87	50	914	1079	6.3	4.0	6.1	3.4	2.52	2.16	139	31	4	0.48	0.24	
10/17/85	18.2	0.7	0.00	3.05	2.83	82	60	914	1084	8.7	5.4	8.7	4.9	5.37	3.25	211	51	7	0.88	0.39	
10/18/85	18.2	-2.9	0.00	1.78	3.77	88	37	914	1088	9.0	4.7	9.1	4.1	2.31	1.48	252	49	24	0.64	0.51	
10/19/85	17.0	-3.9	0.00	1.78	3.82	88	22	914	1091	8.9	4.7	8.9	4.1	1.04	0.39	89	64	41	0.52	0.49	
10/20/85	16.6	-3.0	0.00	1.78	3.65	88	38	914	1094	8.5	4.4	8.5	3.8	2.20	2.06	157	20	21	0.64	0.42	
10/21/85	14.7	1.9	0.00	5.33	2.72	87	66	914	1097	8.7	5.3	8.7	4.9	3.82	3.63	157	18	44	0.90	0.24	
10/22/85	16.9	9.5	1.52	0.51	1.09	85	74	917	1100	9.7	8.0	9.5	7.8	6.84	6.65	152	13	3	1.23	0.31	
10/23/85	17.4	6.7	0.00	6.10	3.06	84	45	919	1104	10.7	8.7	10.7	8.4	5.04	4.45	211	28	4	1.01	0.46	
10/24/85	14.2	3.9	0.00	3.05	3.51	80	37	919	1106	10.1	7.2	10.0	6.7	4.65	4.40	274	19	0	0.65	0.49	
10/25/85	19.3	-1.4	0.00	3.05	2.99	87	34	919	1111	9.6	5.9	9.6	5.4	2.48	2.26	167	24	13	0.70	0.54	
10/26/85	15.4	1.4	0.00	3.05	3.22	87	18	919	1113	9.9	7.0	9.9	6.6	3.27	2.80	318	31	41	0.62	0.53	
10/27/85	12.6	-3.0	0.00	3.05	3.07	79	25	919	1115	8.7	5.3	8.6	4.7	0.75	0.29	181	63	0	0.43	0.43	
10/28/85	15.5	0.1	0.00	2.29	2.22	73	38	919	1117	8.2	5.5	8.1	4.9	5.07	4.92	157	14	0	0.54	0.63	
10/29/85	10.9	0.3	0.00	2.29	1.72	84	46	919	1118	8.1	6.1	8.0	5.6	4.20	0.85	281	72	19	0.64	0.38	
10/30/85	10.7	-7.4	0.00	2.29	3.27	88	31	919	1118	7.2	4.0	7.2	3.4	1.42	0.80	145	53	18	0.44	0.28	
10/31/85	11.3	-1.7	0.00	M	2.87	87	M	919	1119	7.4	4.5	7.4	4.0	3.02	2.71	140	26	56	0.61	0.21	
MONTHLY	MEAN	MEAN	TOTAL	TOTAL	MEAN	MN.	MN.	TOTL	TOT	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MN.	MN.	MN	MEAN	MEAN	
	13.1	-0.3	25.14	M	2.79	86	M	5	55	8.8	5.9	8.7	5.4	3.44	2.81	219	34	23	0.67	0.33	









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DATE	MAX AIR TEMP	MIN AIR TEMP	PRE	PAN	SOL	RH MAX	RH MIN	ACCM D.D. BASE 10	ACCM D.D. BASE 1030	MAX SOIL TEMP 10CM	MIN SOIL TEMP 10CM	MAX SOIL TEMP 20CM	MIN SOIL TEMP 20CM	WIND SPD	VECT MAG	VEC DIR	VEC STD	LF WT	VAP PR	VAP PRES DEF
10/ 1/85	10.1	-1.2	0.00	2.54	3.56	88	47	1368	1421	8.9	4.6	8.6	7.1	3.74	2.95	266	37	23	0.59	0.24
10/ 2/85	17.5	0.9	0.00	3.56	4.23	85	49	1368	1425	11.3	5.0	9.7	6.9	4.54	4.20	192	22	0	0.84	0.47
10/ 3/85	14.8	4.9	21.59	4.57	1.87	87	72	1368	1427	11.2	7.8	10.2	8.8	2.35	1.32	153	54	60	1.00	0.22
10/ 4/85	12.2	5.6	15.24	M	1.02	87	63	1368	1428	10.3	8.3	10.2	9.3	7.62	6.61	314	30	47	0.86	0.25
10/ 5/85	8.5	-0.7	0.00	1.52	1.87	87	61	1368	1428	8.5	6.2	9.3	8.2	4.90	4.64	306	18	7	0.68	0.21
10/ 6/85	16.9	-1.8	0.00	2.54	3.95	87	42	1368	1432	10.2	4.1	8.9	6.4	2.52	1.63	246	48	43	0.66	0.38
10/ 7/85	15.9	3.6	8.13	5.08	1.77	85	60	1368	1435	9.9	5.9	9.2	7.3	5.56	4.66	125	33	28	0.94	0.32
10/ 8/85	14.5	1.9	0.00	2.54	1.92	85	66	1368	1437	10.4	7.5	9.8	9.1	5.35	3.42	270	49	7	0.88	0.29
10/ 9/85	2.6	-0.1	3.05	1.78	0.88	86	74	1368	1437	7.5	5.0	9.1	7.1	2.91	2.67	335	23	40	0.54	0.11
10/10/85	9.9	-2.4	0.00	1.27	4.08	88	46	1368	1437	9.1	3.6	7.8	5.6	1.31	0.77	323	52	27	0.52	0.26
10/11/85	13.4	-0.5	12.70	2.54	2.88	87	51	1368	1439	9.0	3.8	8.0	5.8	3.48	3.28	126	19	15	0.72	0.33
10/12/85	13.1	5.1	0.00	0.76	1.09	86	77	1368	1440	10.8	8.3	9.6	8.0	3.35	2.19	246	48	61	1.02	0.22
10/13/85	14.3	1.4	1.27	1.52	1.95	86	64	1368	1442	10.1	6.5	9.4	7.8	1.67	0.82	296	58	76	0.79	0.21
10/14/85	15.0	1.5	0.00	2.29	2.94	84	38	1368	1445	10.8	6.7	9.5	7.9	2.12	1.89	227	27	49	0.72	0.38
10/15/85	8.2	-0.5	0.00	1.27	1.75	86	69	1368	1445	8.3	5.3	9.1	7.1	2.08	0.64	0	67	57	0.64	0.14
10/16/85	12.0	-3.1	0.00	1.02	3.29	86	52	1368	1446	8.0	3.7	7.7	5.8	2.97	2.44	149	34	18	0.64	0.29
10/17/85	17.3	7.0	3.05	2.54	0.70	85	67	1370	1449	10.7	7.0	9.2	7.3	4.58	4.09	184	27	17	1.11	0.38
10/18/85	12.1	5.1	0.00	0.76	1.17	85	58	1370	1450	10.5	8.2	9.4	8.5	1.60	1.30	37	35	49	0.87	0.27
10/19/85	18.2	3.0	0.00	2.54	3.76	84	43	1370	1455	11.3	6.2	9.6	7.6	2.35	2.02	55	30	7	1.08	0.22
10/20/85	16.2	5.5	0.00	2.54	2.93	83	56	1371	1458	11.7	7.2	9.9	8.1	3.30	3.09	112	20	0	0.91	0.40
10/21/85	13.1	8.6	0.00	0.25	0.92	87	80	1372	1459	11.5	9.7	10.3	9.5	2.63	2.51	145	18	31	1.08	0.22
10/22/85	19.1	10.2	0.00	3.05	2.08	85	70	1377	1464	13.7	10.3	11.6	10.0	6.59	6.41	153	13	7	1.31	0.33
10/23/85	18.2	9.6	0.00	3.56	3.45	84	42	1381	1468	15.4	12.2	12.9	11.6	4.75	3.81	204	36	2	0.70	0.75
10/24/85	17.0	2.7	0.00	4.06	3.77	82	22	1381	1471	13.2	9.3	12.3	10.3	3.75	3.16	272	32	0	0.66	0.62
10/25/85	21.2	1.1	0.00	4.57	2.77	79	31	1382	1477	12.6	6.5	11.0	8.5	4.21	4.06	19	15	0	0.70	0.75
10/26/85	21.6	5.3	0.00	3.56	2.86	74	43	1385	1483	15.1	10.7	12.5	10.5	4.73	2.19	258	59	0	0.97	0.70
10/27/85	14.8	1.6	0.00	2.54	3.53	69	23	1385	1485	12.2	7.4	12.0	9.2	2.05	1.10	58	55	0	0.46	0.61
10/28/85	14.9	2.6	0.00	3.30	2.68	68	32	1385	1488	11.1	6.5	10.4	8.3	4.68	4.49	148	16	0	0.55	0.60
10/29/85	13.3	4.2	0.00	2.29	2.02	83	57	1385	1489	10.8	7.4	9.8	8.5	4.55	0.15	43	80	1	0.76	0.30
10/30/85	12.2	0.6	0.00	1.02	2.62	87	64	1385	1490	10.7	6.2	9.6	7.8	3.27	2.26	57	45	34	0.73	0.21
10/31/85	10.1	1.6	0.25	M	2.21	87	63	1385	1491	9.6	5.8	9.1	7.4	3.44	3.19	105	22	37	0.71	0.23
MONTHLY	MEAN	MEAN	TOTAL	TOTAL	MEAN	MN.	MN.	TOTL	TOT	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MN.	MN.	MN	MEAN	MEAN
	14.1																			

