

**UNIVERSITY OF MINNESOTA
SOUTHERN RESEARCH AND OUTREACH CENTER
35838 120th Street
Waseca, MN 56093-4521
JANUARY 2011**

Date	Air Temp.		HDD	Cumul* HDD	Precip	Cumul Precip.	Snow Snow	Snow Depth	Soil Temperatures						Wind	Solar Radiation		
	Max.	Min.							2"		4"		8"				20"	40"
----- °F-----						in.		----- ° F-----						mi.	Langleys			
1	20	-1	55.5	2622.0	0.04	0.04	0.2	9	32	32	32	32	32	32	36	40	370	74
2	6	-3	63.5	2685.5	-		-	9	32	32	32	32	32	32	36	40	371	147
3	20	-5	57.5	2743.0	-		-	9	32	32	32	32	32	32	36	40	137	166
4	23	-12	59.5	2802.5	0.04	0.08	1.0	10	32	31	32	32	32	32	36	40	108	86
5	19	-11	61.0	2863.5	-		-	9	31	31	32	32	32	32	36	40	84	194
6	24	6	50.0	2913.5	0.01	0.09	0.3	9	31	31	32	32	32	32	36	40	172	122
7	14	9	53.5	2967.0	T		T	9	31	31	32	32	32	32	36	40	111	169
8	15	0	57.5	3024.5	T		T	8	31	31	32	32	32	32	36	40	255	121
9	9	-11	66.0	3090.5	T		T	8	31	30	32	32	32	31	36	40	62	203
10	16	-8	61.0	3151.5	0.10	0.19	1.5	10	30	30	32	31	31	31	36	40	171	169
11	20	16	47.0	3198.5	0.30	0.49	3.0	12	31	30	31	31	31	31	36	40	221	108
12	20	-1	55.5	3254.0	0.03	0.52	0.5	12	31	31	32	31	31	31	36	40	154	158
13	8	-11	66.5	3320.5	-		-	12	31	31	32	31	31	31	36	40	117	204
14	14	4	56.0	3376.5	-		-	12	31	30	31	31	31	31	36	40	191	124
15	18	6	53.0	3429.5	0.02	0.54	0.5	12	31	30	31	31	31	31	36	40	213	104
16	12	-6	62.0	3491.5	-		-	12	31	30	31	31	31	31	36	40	140	156
17	20	3	53.5	3545.0	0.20	0.74	2.0	13	31	30	31	31	31	31	36	40	302	136
18	26	7	48.5	3593.5	-		-	13	31	30	31	31	31	31	36	39	236	78
19	10	-12	66.0	3659.5	0.03	0.77	0.5	13	31	30	31	31	31	31	36	39	168	178
20	3	-12	69.5	3729.0	-		-	13	31	30	31	31	31	31	36	39	154	205
21	8	-26	74.0	3803.0	-		-	13	30	30	31	31	31	31	36	39	178	225
22	6	-22	73.0	3876.0	0.03	0.80	0.8	14	30	29	31	31	31	30	35	39	194	183
23	0	-21	75.5	3951.5	-		-	14	29	29	31	30	31	30	35	39	104	195
24	14	-19	67.5	4019.0	-		-	14	29	29	30	30	30	30	35	39	303	230
25	30	10	45.0	4064.0	-		-	13	30	29	31	30	31	30	35	39	226	131
26	21	7	51.0	4115.0	-		-	13	30	30	31	31	31	31	35	39	166	226
27	22	15	46.5	4161.5	-		-	13	30	30	31	31	31	31	35	39	216	132
28	30	15	42.5	4204.0	-		-	12	31	30	31	31	31	31	35	39	106	146
29	32	21	38.5	4242.5	-		-	12	31	30	31	31	31	31	35	39	238	149
30	22	6	51.0	4293.5	T		T	12	31	31	31	31	31	31	35	39	191	140
31	20	9	50.5	4344.0	0.26	1.06	2.0	14	31	30	31	31	31	31	35	39	231	183
Total	16.8	-1.5	1777.5	4344.0	1.06	1.06	12.3		30.8	30.3	31.4	31.2	31.3	31.1			5890	4842
Avg.	7.7								30.6		31.3		31.2		35.7	39.5		
Dept. from Norma	-5.5		+170.5	+305.0	-0.19	-0.19	+2.8		+7.8		+7.1		+6.3		+3.7			-259

* Since Nov. 1, 2010

** Since Jan. 1, 2011

UNIVERSITY OF MINNESOTA
 SOUTHERN RESEARCH AND OUTREACH CENTER
 35838 120th Street
 Waseca, MN 56093-4521
 FEBRUARY, 2011

Date	Air Temp.		Cumul*		Cumul**		Snow Depth	Soil Temperatures								Wind	Solar Radiation	
	Max.	Min.	HDD	HDD	Precip	Precip.		2"		4"		8"		20"	40"			
----- °F-----						----- in.-----		----- ° F-----								mi.	Langleys	
1	19	8	51.5	4395.5	0.38	1.44	5.0	17	31	30	31	31	31	31	35	39	305	157
2	12	-4	61.0	4456.5	T		T	16	31	31	31	31	31	31	35	38	365	177
3	1	-11	70.0	4526.5	-		-	16	31	31	31	31	31	31	35	38	219	254
4	16	1	56.5	4583.0	-		-	15	30	30	31	31	31	31	35	38	340	281
5	31	10	44.5	4627.5	0.09	1.53	1.0	16	30	30	31	31	31	31	35	38	178	228
6	26	12	46.0	4673.5	-		-	15	31	30	31	31	31	31	35	38	167	218
7	29	7	47.0	4720.5	0.02	1.55	0.4	16	31	31	31	31	31	31	35	38	207	145
8	7	-19	71.0	4791.5	T		T	16	31	31	31	31	31	31	35	38	179	287
9	-1	-19	75.0	4866.5	-		-	16	31	30	31	31	31	31	35	38	219	289
10	3	-16	71.5	4938.0	-		-	15	30	30	31	31	31	31	35	38	148	308
11	14	-13	64.5	5002.5	-		-	15	30	29	31	30	31	30	35	38	137	299
12	32	9	44.5	5077.0	-		-	15	30	29	31	30	31	30	35	38	181	156
13	35	18	38.5	5085.5	-		-	15	30	30	31	31	31	31	35	38	228	201
14	41	31	29.0	5114.5	-		-	12	31	30	31	31	31	31	34	38	334	300
15	36	28	33.0	5147.5	-		-	11	32	31	31	31	32	31	34	38	242	200
16	38	28	32.0	5179.5	-		-	10	32	32	32	31	32	32	34	38	271	295
17	43	30	28.5	5208.0	0.02	1.57	-	7	32	32	32	32	32	32	34	35	270	249
18	42	21	33.5	5241.5	T		-	5	32	32	32	32	32	32	34	34	303	164
19	26	12	46.0	5287.5	-		-	4	32	32	32	32	32	32	34	36	229	341
20	31	13	43.0	5330.5	0.01	1.58	0.5	5	32	31	32	32	32	31	34	37	225	323
21	27	22	40.5	5371.0	0.50	2.08	6.0	10	31	31	32	32	31	31	34	37	391	90
22	25	8	48.5	5419.5	0.22	2.30	2.0	11	31	31	32	32	31	31	34	37	240	167
23	25	7	49.0	5468.5	-		-	10	31	31	32	31	31	31	34	37	276	299
24	32	7	39.5	5508.0	-		-	9	31	31	32	31	31	31	34	37	273	309
25	20	3	53.5	5561.5	0.03	2.33	0.5	9	31	31	31	31	31	31	34	37	238	224
26	7	-5	64.0	5625.5	T		T	9	32	30	31	31	31	31	34	37	153	352
27	18	-3	57.5	5683.0	0.09	2.42	2.2	11	30	30	31	31	31	31	34	37	106	167
28	27	-7	55.0	5738.0	-		-	10	31	30	31	31	31	31	34	37	154	145
Total	23.6	6.4	1394.0	5738.0	1.36	2.42	17.6		31.0	30.6	31.3	31.1	31.2	31.1			6578	6625
Avg.	15.0								30.8		31.2		31.1		34.5	37.4		
Dept. from Norma	-3.5		+92.0	+397.0	+0.36	+0.17	+8.6		+6.1		+5.4		+5.3		+3.7			-181

* Since Nov. 1, 2010

** Since Jan. 1, 2011

UNIVERSITY OF MINNESOTA
SOUTHERN RESEARCH AND OUTREACH CENTER
35838 120th Street
Waseca, MN 56093-4521
MARCH, 2011

Date	Air Temp.		Cumul*		Cumul**		Snow Depth	Soil Temperatures						Wind	Solar Radiation			
	Max.	Min.	HDD	HDD	Precip	Precip.		2"		4"		8"				20"	40"	
	----- °F -----				----- in. -----			Max Min		Max Min.		Max. Min.						
1	25	1	52.0	5790.0	-	-	9	30	30	31	31	31	31	34	37	207	395	
2	35	-5	50.0	5840.0	-	-	9	31	30	31	31	31	31	34	37	258	385	
3	26	-4	54.0	5894.0	-	-	9	30	29	31	30	31	31	34	37	242	384	
4	36	26	34.0	5928.0	-	-	8	31	29	31	30	31	31	34	37	206	295	
5	30	17	41.5	5969.5	-	-	8	31	31	31	31	31	31	34	37	259	170	
6	24	3	51.5	6021.0	-	-	7	31	29	31	31	31	31	34	37	119	358	
7	29	13	44.0	6065.0	T		T	7	30	29	31	30	31	31	31	167	294	
8	29	23	39.0	6104.0	0.02	2.44	0.2	7	31	30	31	31	31	31	31	183	236	
9	36	29	32.5	6136.5	0.22	2.66	2.0	9	31	31	31	31	31	31	31	270	303	
10	33	22	37.5	6174.0	T		T	8	31	31	31	31	32	31	34	37	249	261
11	26	17	43.5	6217.5	-	-	-	8	31	31	31	31	32	32	34	37	162	265
12	39	16	37.5	6255.0	T		-	8	32	31	32	31	32	32	34	37	288	360
13	17	12	50.5	6305.5	0.01	2.67	0.2	8	32	32	32	32	32	32	34	37	249	270
14	25	9	48.0	6353.5	0.01	2.68	0.1	8	32	32	32	32	32	32	34	37	97	419
15	36	12	41.0	6394.5	-	-	-	7	32	31	32	32	32	32	34	37	211	462
16	39	28	31.5	6426.0	0.01	2.69	-	6	32	32	32	32	32	32	34	37	179	348
17	49	30	25.5	6451.5	-	-	-	2	32	32	32	32	32	32	34	37	273	420
18	45	32	26.5	6478.0	-	-	-	1	32	32	32	32	32	32	34	37	188	328
19	33	25	36.0	6514.0	-	-	-	1	32	32	32	32	32	32	34	37	172	334
20	47	27	28.0	6542.0	0.19	2.88	-	T	32	32	32	32	33	32	34	37	316	397
21	46	34	25.0	6567.0	0.18	3.06	-	T	34	32	32	32	34	32	34	37	225	61
22	42	34	27.0	6594.0	1.04	4.10	-	-	44	32	35	32	39	32	34	37	288	221
23	36	31	31.5	6625.5	0.48	4.58	1.0	1	35	32	35	33	35	34	35	37	439	42
24	31	15	42.0	6667.5	T		T	1	33	32	33	33	34	32	35	37	297	181
25	29	16	42.5	6710.0	-	-	-	T	36	32	34	33	34	32	35	37	127	507
26	35	20	37.5	6747.0	-	-	-	-	44	31	39	32	36	32	35	37	214	453
27	31	21	39.0	6786.5	-	-	-	-	34	30	33	32	33	32	35	37	195	410
28	35	22	36.5	6823.0	-	-	-	-	39	30	36	32	33	32	35	37	205	500
29	37	24	34.5	6857.5	-	-	-	-	44	30	38	32	34	32	35	37	173	494
30	41	23	33.0	6890.5	-	-	-	-	46	31	40	33	38	32	35	37	94	446
31	43	27	30.0	6920.5	-	-	-	-	51	31	43	33	41	33	36	37	107	466
Total	34.4	19.4	1182.5	6920.5	2.16	4.58	3.5		34.4	30.9	33.1	31.7	33.0	31.8			6659	10465
Avg.	26.9								32.7		32.4		32.4		34.3	37.0		
Dept. from																		
Normal	-4.3		+134.5	+531.5	-0.33	-0.16	-6.7		+0.8		+0.7		+2.1		+1.9			+708

* Since Nov. 1, 2010

** Since Jan. 1, 2011

17° on the 13th set new Lowest Max Temp-old record 19° set in 1960

**UNIVERSITY OF MINNESOTA
SOUTHERN RESEARCH AND OUTREACH CENTER
35838 120th Street
Waseca, MN 56093-4521
APRIL, 2011**

Date	Air Temp.		HDD	Cumul* HDD	Precip	Cumul** Precip.	Snow	Snow Depth	Evap	Soil Temperatures						Wind	Solar Radiation		
	Max.	Min.								2"		4"		8"				20"	40"
	° F									Max	Min	Max	Min.	Max.	Min.			° F	
----- ° F -----				----- in. -----						----- ° F -----				mi.	Langleys				
1	47	34	24.5	6945.0	0.19	4.77	-	-		46	34	41	36	41	35	36	37	192	210
2	47	31	26.0	6971.0	-		-	-		49	34	43	36	43	35	37	37	212	319
3	53	32	22.5	6993.5	0.03	4.80	-	-		59	34	49	35	48	35	38	38	256	505
4	66	35	14.5	7008.0	0.03	4.83	T	-		63	40	52	41	53	41	39	38	286	345
5	45	25	30.0	7038.0	T		-	-		51	34	46	37	46	36	40	38	251	340
6	57	31	21.0	7059.0	0.09	4.92	-	-		60	34	50	36	49	36	40	39	164	504
7	57	35	19.0	7078.0	-		-	-		64	39	55	42	54	41	41	39	136	577
8	62	37	15.5	7093.5	-		-	-		59	39	52	42	52	41	42	40	216	434
9	61	41	14.0	7107.5	-		-	-		57	42	52	44	52	43	42	40	234	336
10	69	46	7.5	7115.0	1.62	6.54	-	-		55	47	57	47	54	47	43	40	271	147
11	74	41	7.5	7122.5	0.03	6.57	-	-		66	43	60	47	60	46	45	41	381	320
12	60	35	17.5	7140.0	-		-	-		61	40	55	44	55	43	46	42	178	581
13	68	40	11.0	7151.0	-		-	-		70	40	59	43	59	43	46	42	191	569
14	55	37	19.0	7170.0	0.03	6.60	-	-		57	43	53	46	53	45	46	43	256	229
15	44	35	25.5	7195.5	0.13	6.73	-	-		48	38	47	41	46	40	46	43	434	182
16	46	30	27.0	7222.5	0.48	7.21	2.2	2		45	35	44	38	44	37	45	43	387	175
17	36	31	31.5	7254.0	-		-	T		40	35	40	37	39	36	44	43	288	235
18	46	33	25.5	7279.5	-		-	-		59	35	50	37	48	36	43	43	136	485
19	49	36	22.5	7302.0	0.13	7.34	-	-		56	39	50	41	50	40	43	43	144	339
20	36	32	31.0	7333.0	0.19	7.53	0.4	T		40	35	42	38	41	37	43	43	244	125
21	43	29	29.0	7362.0	0.02	7.55	-	-		47	35	43	37	43	37	43	43	148	224
22	47	33	25.0	7387.0	0.05	7.60	-	-		46	35	43	37	43	36	42	43	252	250
23	45	39	23.0	7410.0	0.09	7.69	-	-		43	39	42	40	42	40	42	43	242	84
24	47	31	26.0	7436.0	0.02	7.71	-	-		48	36	45	39	45	38	42	43	133	172
25	59	34	18.5	7454.5	-		-	-		63	36	53	39	54	38	42	43	89	570
26	62	44	12.0	7466.5	0.88	8.59	-	-		63	39	55	42	55	41	43	43	262	489
27	46	33	25.5	7492.0	0.21	8.8	-	-		50	38	48	41	48	40	44	43	288	187
28	43	33	27.0	7519.0	0.05	8.85	T	-		47	38	45	40	45	39	44	43	194	220
29	53	34	21.5	7540.5	0.03	8.88	-	-		51	36	46	39	47	38	44	43	182	265
30	59	41	15.0	7555.5	0.16	9.04	-	-		53	36	48	39	49	38	43	43	415	389
Total	52.7	34.9	635.0	7555.5	4.46	9.04	2.6		0.00	53.9	37.6	48.8	40.0	48.6	39.3			7062	9807
Avg.	43.8									45.7		44.4		43.9		42.5	41.4		
Dept. from Normal	-2.3		+64.0	+595.5	+1.25	+1.09	-0.1			-0.4		-0.4		+1.5		+1.9			-1767

* Since Nov. 1, 2010

** Since Jan. 1, 2011

36° on the 20th set new Lowest Max temp-old record 38° set in 1928

**UNIVERSITY OF MINNESOTA
SOUTHERN RESEARCH AND OUTREACH CENTER
35838 120TH STREET
WASECA, MINNESOTA 56093-4521
MAY, 2011**

Date	Air Temp.		GDU	Cumul.* GDU	Cumul.**			Soil Temperatures								Wind	Solar Radiation
	Max.	Min.			Precip.	Precip.	Evap.	2"		4"		8"		20"	40"		
	° F				in.	° F								mi.	Langleys		
1	61	32	5.5	5.5	0.02	9.06		58	37	51	41	51	40	44	43	422	289
2	47	32	0.0	5.5	T			50	35	45	38	46	38	44	43	255	319
3	36	26	0.0	5.5	T			42	33	41	36	41	36	44	43	148	181
4	57	33	3.5	9.0	-			64	33	52	36	52	36	43	43	164	680
5	65	42	7.5	16.5	T			65	40	55	41	55	40	44	43	415	633
6	61	36	5.5	22.0	0.02	9.08		64	43	56	46	56	45	45	43	184	427
7	71	47	10.5	32.5	0.36	7.44		70	44	60	46	61	45	46	44	161	497
8	68	51	9.5	42.0	-			69	50	60	52	61	51	47	44	178	461
9	68	53	10.5	52.5	0.57	10.01	1.40	61	51	55	52	56	51	48	45	345	284
10	67	54	10.5	63.0	0.01	10.02		62	52	57	52	57	52	49	45	415	288
11	92	61	23.5	86.5	0.03	10.05		75	56	66	54	67	54	49	46	256	524
12	75	61	18.0	104.5	0.21	10.26		71	59	64	59	65	59	51	46	156	271
13	67	47	8.5	113.0	0.06	10.32		66	50	61	53	62	52	52	47	193	124
14	54	42	2.0	115.0	-			58	46	55	49	55	49	52	47	267	279
15	47	42	0.0	115.0	0.28	10.60		50	43	50	46	50	45	51	48	282	109
16	63	38	6.5	121.5	-		1.11	61	41	55	46	55	44	50	48	310	680
17	66	45	8.0	129.5	-			73	43	61	46	61	45	50	48	203	727
18	67	44	8.5	138.0	-			79	47	64	50	65	48	50	48	172	729
19	72	50	11.0	149.0	-			80	51	67	52	67	51	51	48	205	682
20	73	55	14.0	163.0	0.06	10.66		73	56	65	57	65	56	53	48	250	369
21	70	58	14.0	177.0	0.76	11.42		65	58	61	58	61	58	53	49	291	169
22	74	56	15.0	192.0	0.58	12.00		72	57	65	58	65	58	54	49	246	342
23	71	57	14.0	206.0	0.59	12.59	1.62	69	58	74	58	64	58	55	50	357	363
24	72	58	15.0	221.0	0.05	12.64		74	58	67	58	66	58	55	50	173	415
25	68	52	10.0	231.0	0.13	12.77		70	55	65	58	65	57	56	51	315	329
26	59	45	4.5	235.5	0.10	12.87		58	46	58	50	57	49	56	51	284	181
27	63	46	6.5	242.0	-			73	47	64	50	63	49	55	51	171	711
28	60	51	5.5	247.5	0.20	13.07		61	51	57	53	58	52	54	51	271	238
29	75	51	13.0	260.5	0.24	13.31		72	53	63	53	63	53	54	51	213	512
30	68	58	13.0	273.5	0.38	13.69	1.14	62	55	59	55	59	56	54	51	252	164
31	87	65	25.5	299.0	0.02	13.71	0.23	76	61	68	59	68	59	55	51	418	486
Totals	65.9	48.0	299.0	299.0	4.67	13.71	5.50	65.9	48.7	59.7	50.4	59.3	49.8	50.5	47.3	7972	12463
Avg.	57.0							57.3		55.0		54.5		50.5			
Dept. from normal	-1.7		-45.0	-45.0	+0.74	+1.83	-2.02	-3.1		-3.6		-1.3		-3.3			-1916

* Since May 1, 2011

** Since January 1, 2011

36° on the 3rd ties Lowest Max. temp set in 1954
92° on the 11th ties Highest Max. temp set in 1987

UNIVERSITY OF MINNESOTA
SOUTHERN RESEARCH AND OUTREACH CENTER
35838 120TH STREET
WASECA, MINNESOTA 56093-4521
JUNE, 2011

Date	Air Temp.		GDU	Cumul.* GDU	Precip.	Cumul.** Precip.	Evap.	Soil Temperatures								Wind mi.	Solar Radiation Langleys
	Max.	Min.						2"		4"		8"		20"	40"		
	----- ° F -----							Max.	Min.	Max.	Min.	Max.	Min.	----- ° F -----			
1	75	48	12.5	311.5	-		0.44	83	55	73	59	72	58	56	52	390	702
2	75	56	15.5	327.0	0.01	13.72		85	56	74	59	73	58	57	52	210	582
3	79	65	22.0	349.0	-			79	63	72	64	73	63	58	52	469	458
4	96	61	23.5	372.5	T			86	66	77	66	78	66	59	53	276	465
5	86	63	24.5	397.0	-			95	66	83	67	83	66	61	53	161	713
6	89	68	27.0	424.0	0.08	13.80	1.63	95	68	84	69	82	68	62	54	193	721
7	99	77	31.5	455.5	-			100	72	88	72	87	71	63	55	188	705
8	101	74	30.0	485.5	-			95	76	86	76	85	75	65	56	433	672
9	78	54	16.0	501.5	-			95	67	86	70	85	69	66	57	262	709
10	66	53	9.5	511.0	0.40	14.20		82	60	77	64	75	63	67	57	260	463
11	59	53	6.0	517.0	0.04	14.24		65	58	65	61	64	60	65	58	163	183
12	69	50	9.5	526.5	-			82	58	74	61	70	60	64	58	167	666
13	66	53	9.5	536.0	0.09	14.33	2.09	65	54	64	58	63	57	63	58	175	215
14	76	59	17.5	553.5	-			78	56	71	58	69	57	62	58	315	596
15	75	58	16.5	570.0	2.11	16.44		74	59	69	61	68	60	62	58	302	260
16	72	56	14.0	584.0	0.10	16.54		76	59	69	61	68	60	61	58	144	413
17	81	62	21.5	605.5	-			84	61	76	61	74	61	61	58	189	711
18	85	65	25.0	630.5	0.06	16.60		88	65	78	65	76	65	62	58	201	467
19	72	64	18.0	648.5	0.05	16.65		73	65	71	66	71	66	63	58	116	162
20	80	62	21.0	669.5	0.01	16.66	1.64	92	66	81	66	79	66	64	58	213	579
21	79	62	20.5	690.0	1.43	18.09		82	66	75	67	74	67	64	59	296	359
22	77	64	20.5	710.5	0.15	18.24		74	66	71	67	71	66	65	59	246	376
23	69	54	11.5	722.0	0.57	18.81		72	59	70	62	69	61	64	59	198	181
24	62	51	6.5	728.5	0.02	18.83		66	54	64	58	64	57	64	60	180	233
25	75	57	16.0	744.5	0 ¹ -			78	56	71	58	71	57	63	60	102	595
26	67	57	12.0	756.5	0.04	18.87		66	59	65	61	65	61	63	59	152	153
27	80	63	21.5	778.0	0.03	18.90	1.12	81	61	73	61	73	61	62	59	204	441
28	75	53	14.0	792.0	T			89	61	78	65	76	63	63	59	179	634
29	78	61	19.5	811.5	-			95	63	83	65	80	63	64	59	115	742
30	84	68	26.0	837.5	-		0.92	94	68	83	69	81	68	65	59	283	716
Totals	77.5	59.7	538.5	837.5	5.19	18.90	7.84	82.3	62.1	75.0	63.9	74.0	63.1			6782	14872
Avg.	68.6							72.2		69.5		68.5		62.6	57.1		
Dept. from normal	+0.1		-20.5	-65.5	+0.50	+2.33	-0.67	+0.4		-0.3		+1.6		-1.20			-658

* Since May 1, 2011 ** Since January 1, 2011 99° and 77° on the 7th set new Highest Max temp and Highest Min temp-old records 95° set in 1933 and 69° set in 1987 consecutively
101° and 74° on the 8th set new Highest Max temp and Highest Min temp-old records 96° set in 2004 and 71° set in 1987 consecutively, 96° on the 4th set new Highest Max temp-old record 94° set in 1934

**UNIVERSITY OF MINNESOTA
SOUTHERN RESEARCH AND OUTREACH CENTER
35838 120TH STREET
WASECA, MINNESOTA 56093-4521
JULY, 2011**

Date	Air Temp.		GDU	Cumul.* GDU	Cumul.**			Soil Temperatures								Wind	Solar Radiation
	Max.	Min.			Precip.	Precip.	Evap.	2"		4"		8"		20"	40"		
	° F				in.			° F		Max.	Min.	Max.	Min.	Max.	Min.		
1	95	77	31.5	869.0	-		0.34	97	74	86	73	85	72	66	60	258	574
2	95	64	25.0	894.0	0.50	19.40		102	69	90	73	89	71	68	60	212	635
3	83	61	22.0	916.0	-			91	68	83	71	83	70	69	61	94	716
4	81	59	20.0	936.0	-		0.94	92	68	83	71	82	70	69	62	108	584
5	85	68	26.5	962.5	-			99	69	88	71	87	70	69	62	140	707
6	82	65	23.5	986.0	0.01	19.41		90	70	83	73	82	72	70	63	104	349
7	84	65	24.5	1010.5	-			101	72	89	73	88	72	70	63	105	718
8	86	63	24.5	1035.0	-			101	74	91	76	89	75	71	63	92	675
9	87	71	28.5	1063.5	0.03	19.44		100	76	90	77	89	76	72	64	143	638
10	86	69	27.5	1091.0	0.47	19.91		91	75	85	77	85	76	72	64	243	433
11	87	68	27.0	1118.0	0.82	20.73	0.99	93	73	85	75	86	74	73	65	167	650
12	84	65	24.5	1142.5	0.28	21.01		92	70	85	73	84	72	73	65	134	683
13	74	59	16.5	1159.0	0.01	21.02		80	63	77	67	76	66	72	65	127	294
14	73	62	17.5	1176.5	0.14	21.16		83	64	78	67	78	66	71	66	197	636
15	75	60	17.5	1194.0	0.39	21.55		74	65	72	67	72	67	70	66	217	300
16	78	69	23.5	1217.5	2.50	24.05		76	70	73	70	73	70	69	66	208	135
17	89	75	30.5	1248.0	-			89	71	81	71	81	71	69	66	141	513
18	90	78	32.0	1280.0	-		1.79	92	77	85	76	87	76	70	65	174	533
19	93	79	32.5	1312.5	-			104	78	94	78	93	78	72	66	96	643
20	94	76	31.0	1343.5	-			104	80	94	82	95	81	74	66	184	644
21	92	65	25.5	1369.0	-			102	77	93	80	92	78	75	66	207	664
22	81	67	24.0	1393.0	-			96	76	89	79	89	78	75	67	95	518
23	84	71	27.5	1420.5	-			94	77	88	79	88	78	75	68	128	431
24	87	68	27.0	1447.5	1.72	25.77		95	75	88	77	87	76	75	68	182	453
25	80	59	19.5	1467.0	-		2.04	91	67	84	72	84	70	75	68	98	592
26	85	66	25.5	1492.5	-			96	69	87	72	86	71	75	69	111	654
27	84	69	26.5	1519.0	0.18	25.95		98	74	89	76	89	75	75	69	165	614
28	88	73	29.5	1548.5	0.08	26.03		92	75	85	77	85	77	75	69	86	383
29	85	62	23.5	1572.0	0.08	26.11		89	70	85	74	84	72	75	69	85	356
30	86	68	27.0	1599.0	-			100	70	89	74	89	73	75	69	76	670
31	87	71	28.5	1627.5	-		1.32	100	75	90	77	89	76	75	69	146	620
Totals	85.2	67.5	790.0	1627.5	7.21	26.11	7.42	93.7	72.0	85.8	74.1	85.4	73.2			4523	17015
Avg.	76.3							82.8		80.0		79.3		72.1	65.5		
Dept. from normal	+4.3		+117.0	+51.5	+2.79	+5.12	-0.48	+4.2		+3.3		+5.4		+1.2			+377

* Since May 1, 2011 ** Since January 1, 2011 95° on the 1st tied Highest Max temp record set in 2002, 77° on the 1st set new Highest Min.temp.-old record 75o set in 1958, 95o on the 2nd set new Highest Max temp-old record 93° set in 1949, 78° on the 18th set new Highest Min temp-old record 74° set in 1942, 79° on the 18th set new Highest Min temp-old record 75° set in 1940, 76° on the 20th ties Highest Min temp.

UNIVERSITY OF MINNESOTA
SOUTHERN RESEARCH AND OUTREACH CENTER
35838 120TH STREET
WASECA, MINNESOTA 56093-4521
AUGUST, 2011

Date	Air Temp.		GDU	Cumul.* GDU	Precip.	Cumul.** Precip.	Evap.	Soil Temperatures								Wind	Solar Radiation
	Max.	Min.						2"		4"		8"		20"	40"		
	° F							Max.	Min.	Max.	Min.	Max.	Min.	° F			
1	90	73	29.5	1657.0	-		0.23	104	78	93	79	93	78	76	69	98	595
2	85	74	29.5	1686.5	-			89	78	85	80	85	79	76	69	204	314
3	85	63	24.0	1710.5	-			94	73	88	77	88	75	76	70	147	436
4	83	63	23.0	1733.5	-			101	74	91	77	90	75	76	70	73	655
5	84	65	24.5	1758.0	-			100	75	91	78	90	76	76	70	86	628
6	81	68	24.5	1782.5	-			89	76	85	78	85	77	76	70	87	334
7	85	68	26.5	1809.0	-			97	76	89	78	88	77	76	70	117	522
8	79	62	20.5	1829.5	-		1.34	98	74	89	77	88	75	76	70	103	531
9	82	55	18.5	1848.0	-			93	70	86	74	85	73	76	71	117	419
10	73	51	12.0	1860.0	-			89	66	83	71	81	69	76	71	153	529
11	77	53	15.0	1875.0	-			95	67	86	71	84	69	75	71	69	611
12	80	60	20.0	1895.0	0.30	26.41		95	69	86	72	84	70	75	70	131	609
13	76	59	17.5	1912.5	0.20	26.61		84	67	80	71	79	69	74	70	99	413
14	76	54	15.0	1927.5	0.01	26.62		82	63	77	68	76	66	74	70	99	425
15	80	58	19.0	1945.5	0.01	26.63	1.30	94	64	84	67	83	66	73	70	77	576
16	82	61	21.5	1968.0	-			93	69	84	72	84	71	73	70	151	537
17	80	62	21.0	1989.0	0.02	26.65		91	69	84	72	83	71	73	69	152	498
18	79	56	17.5	2006.5	-			95	69	86	73	85	71	73	69	82	637
19	83	59	21.0	2027.5	-			94	70	85	73	84	71	73	69	113	555
20	82	59	20.5	2048.0	T			95	70	87	74	85	72	74	69	144	557
21	75	51	13.0	2061.0	0.02	26.67		91	66	84	71	83	69	74	69	69	481
22	79	54	16.5	2077.5	-		1.50	94	67	85	70	84	69	73	69	74	600
23	81	64	22.5	2100.0	0.17	26.84		94	68	85	72	84	70	73	69	200	556
24	81	61	21.0	2121.0	-			94	68	85	72	85	72	73	69	145	400
25	75	55	15.0	2136.0	-			94	64	84	67	83	69	73	69	198	540
26	82	60	21.0	2157.0	-			94	70	85	73	84	71	73	69	90	428
27	85	61	23.0	2180.0	-			94	68	86	72	84	70	73	69	141	528
28	76	60	18.0	2198.0	-			94	67	80	70	79	69	73	69	79	407
29	72	56	14.0	2212.0	T		1.38	84	61	75	66	74	64	73	69	58	203
30	79	56	17.5	2229.5	T			90	61	81	65	80	64	72	69	86	547
31	66	63	14.5	2244.0	0.19	27.03	0.17	70	66	72	68	70	67	71	69	143	76
Totals	79.8	60.1	616.5	2244.0	0.92	27.03	5.92	92.4	69.1	84.5	72.5	83.5	71.1			3585	15147
Avg.	70.0							80.8		78.5		77.3		74.1	69.5		
Dept. from normal	+0.2		+5.5	+57.0	-3.83	+1.29	-0.45	+5.3		+4.0		+4.7		+3.2			+972

* Since May 1, 2011 ** Since January 1, 2011

UNIVERSITY OF MINNESOTA
 SOUTHERN RESEARCH AND OUTREACH CENTER
 35838 120TH STREET
 WASECA, MINNESOTA 56093-4521
 SEPTEMBER, 2011

Date	Air Temp.		GDU	Cumul.* GDU	Precip.	Cumul.** Precip.	Evap.	Soil Temperatures						Wind	Solar Radiation		
	Max.	Min.						2"		4"		8"				20"	40"
----- ° F -----								° F -----						mi.	Langleys		
1	83	64	23.5	2267.5	-		0.13	88	66	80	68	79	67	70	69	142	425
2	91	73	29.5	2297.0	0.13	27.16		92	71	85	72	83	71	71	69	164	508
3	76	67	21.5	2318.5	0.09	27.25		79	70	77	72	76	71	71	68	77	144
4	77	50	13.5	2332.0	-			78	58	76	63	75	61	71	68	143	280
5	67	41	8.5	2340.5	-		0.44	78	55	73	61	71	59	70	68	137	431
6	69	44	9.5	2350.0	-			85	56	77	61	75	59	69	68	77	561
7	71	45	10.5	2360.5	-			83	58	75	62	73	60	68	68	91	501
8	74	48	12.0	2372.5	-			85	59	77	63	75	61	68	67	63	528
9	81	54	17.5	2390.0	-			84	60	78	64	75	62	68	67	125	477
10	84	55	19.5	2409.5	-			88	64	81	67	78	65	68	67	81	503
11	85	54	19.5	2429.0	-			90	65	82	68	79	66	69	67	57	491
12	86	58	22.0	2451.0	-		1.23	89	66	82	69	79	67	69	67	108	499
13	88	49	18.0	2469.0	-			86	62	80	67	78	65	70	67	217	483
14	68	43	9.0	2478.0	-			83	59	77	64	74	62	70	67	143	494
15	57	32	3.5	2481.5	-			76	51	72	57	68	55	69	67	149	440
16	59	38		Freeze	-			75	51	69	57	67	55	67	67	91	468
17	56	45			-			65	56	64	58	63	58	66	67	163	207
18	66	49			0.23	27.48		69	56	65	58	64	58	65	66	185	260
19	59	46			0.06	27.54	1.25	61	54	62	57	61	56	65	66	94	72
20	73	48			0.18	27.72		77	54	70	57	68	56	64	65	121	435
21	71	51			0.02	27.74		71	56	67	59	65	58	64	65	340	362
22	55	47			0.04	27.78		60	53	60	55	59	54	63	64	210	126
23	56	37			T			65	49	62	54	60	52	62	64	93	287
24	61	37			-			72	48	66	53	64	51	62	64	96	426
25	62	37			-			70	48	65	53	63	51	61	63	106	410
26	66	45			-		0.91	72	52	66	55	65	54	61	63	136	370
27	66	53			0.01	27.79		66	57	63	59	62	58	61	63	197	158
28	64	51			0.10	27.89		63	56	62	58	61	57	61	62	93	110
29	80	50			T			79	55	71	58	69	57	61	62	80	416
30	66	46			-		0.50	67	53	65	57	64	55	62	62	288	325
Totals	70.6	48.6	237.5	2481.5	0.86	27.89	4.46	76.5	57.3	71.3	60.9	69.8	59.4			4067	11197
Avg.	59.6							66.9		66.1		64.6		66.2	65.9		
Dept. from normal	-1.7		-147.5	-90.5	-2.81	-1.52	-0.45	+1.7		+1.2		+0.5		+0.9			+481

* Since May 1, 2011 ** Since January 1, 2011

UNIVERSITY OF MINNESOTA
SOUTHERN RESEARCH AND OUTREACH CENTER
35838 120th Street
Waseca, MN 56093-4521
OCTOBER, 2011

Date	Air Temp.		Precip	Cumul** Precip.	Snow Snow	Snow Depth	Soil Temperatures						Wind	Solar Radiation		
	Max.	Min.					2"		4"		8"				20"	40"
	° F						Max	Min	Max	Min.	Max.	Min.			° F	
1	63	34	-				71	48	66	53	64	51	61	62	157	432
2	65	34	-				70	47	64	52	62	50	61	62	118	431
3	79	41	-				73	49	66	53	65	52	60	62	130	414
4	81	47	-				74	53	68	56	67	54	60	61	119	400
5	84	50	-				75	54	69	57	68	56	61	61	191	391
6	86	52	-				78	58	72	61	71	60	61	61	164	376
7	81	52	-				75	58	70	60	68	59	62	61	255	377
8	83	64	-				75	62	71	63	70	62	62	61	358	278
9	83	61	T				78	64	73	65	72	65	63	62	222	319
10	82	55	-				79	60	73	63	72	62	64	62	165	346
11	74	50	0.07	27.96			69	56	67	59	67	59	64	62	153	186
12	74	50	-				71	55	67	59	66	58	63	62	167	341
13	61	48	0.27	28.23			63	55	62	59	62	58	63	62	117	72
14	59	43	-				61	50	60	53	59	52	62	62	197	209
15	56	37	-				61	45	59	50	57	49	61	62	256	259
16	60	36	0.03	28.26			63	44	59	49	57	48	60	62	178	322
17	57	31	-				62	42	58	47	56	45	59	61	230	347
18	56	31	-				59	41	55	46	53	45	58	61	185	325
19	43	37	T				48	43	49	47	48	45	57	60	211	81
20	44	31	-				50	39	50	43	49	42	56	60	186	125
21	53	22	-				55	37	52	42	50	40	55	59	155	337
22	62	23	-				56	36	52	41	51	40	54	58	134	318
23	61	37	0.07	28.33			60	41	55	45	54	44	53	58	98	311
24	67	30	-				59	40	55	45	54	44	53	57	149	226
25	66	32	-				59	40	54	44	54	43	53	57	182	272
26	55	39	-				55	46	53	48	53	47	53	57	251	132
27	50	30	-				54	42	52	45	52	44	53	57	95	181
28	51	28	-				55	39	52	43	50	41	53	56	115	296
29	53	20	-				52	35	49	40	49	39	52	56	131	255
30	54	19	-				51	34	48	39	47	38	52	56	199	265
31	46	28	T				48	40	47	44	47	43	51	55	194	84
Total	64.2	38.5	0.44	28.33	0.0		63.2	46.9	59.6	50.7	58.5	49.5			5462	8708
Avg.	51.3						55.0		55.1		54.0		58.1	59.8		
Dept. from																
Norma	+3.1		-2.23	-3.75	-0.6		+5.2		+4.6		+3.2		+3.7			+1286

64° on the 8th set new Highest Min Temp-old record 57° set in 1949

**UNIVERSITY OF MINNESOTA
SOUTHERN RESEARCH AND OUTREACH CENTER
35838 120th Street
Waseca, MN 56093-4521
NOVEMBER, 2011**

Date	Air Temp.		Cumul*		Cumul**		Snow Depth	Soil Temperatures								Wind	Solar Radiation	
	Max.	Min.	HDD	HDD	Precip	Precip.		2"		4"		8"		20"	40"			
	----- °F -----							----- in. -----		----- ° F -----								mi.
1	53	27	25.0	25.0	-	-		53	39	50	43	49	42	51	55	186	267	
2	52	39	19.5	44.5	-	-		52	42	50	44	50	44	51	55	183	136	
3	49	27	27.0	71.5	-	-		49	37	48	41	48	40	51	54	200	85	
4	53	25	26.0	97.5	-	-		52	34	48	39	48	37	50	54	104	273	
5	54	26	25.0	122.5	-	-		48	33	46	38	45	37	50	54	330	249	
6	56	38	18.0	140.5	-	-		51	40	48	42	48	41	49	54	505	215	
7	53	26	25.5	166.0	-	-		53	37	50	42	50	40	49	53	341	202	
8	52	23	27.5	193.5	-	-		51	36	47	40	47	39	49	53	136	256	
9	44	35	25.5	219.0	-	-		45	40	45	42	44	42	49	53	196	83	
10	48	33	24.5	243.5	-	-		49	39	46	42	46	41	49	53	277	201	
11	39	25	33.0	276.5	-	-		45	35	44	38	43	37	48	52	179	126	
12	52	30	24.0	300.5	-	-		48	35	45	38	44	37	48	52	213	232	
13	59	32	19.5	320.0	-	-		48	35	46	38	46	37	47	52	296	177	
14	48	30	26.0	346.0	0.04	28.37	-	47	36	46	40	46	39	47	52	170	100	
15	53	31	23.0	369.0	-	-	-	49	36	46	39	46	39	47	51	192	198	
16	50	18	31.0	400.0	-	-	-	48	31	46	36	45	35	47	51	235	215	
17	38	9	41.5	441.5	-	-	-	42	27	40	32	39	31	47	51	209	225	
18	36	8	43.0	484.5	-	-	-	38	26	36	32	35	31	46	51	241	228	
19	50	27	26.5	511.0	-	-	-	45	33	42	35	42	35	44	50	249	196	
20	32	17	40.5	551.5	0.09	28.46	1.6	1.0	36	32	37	35	36	34	44	50	257	17
21	25	15	45.0	596.5	-	-	-	1.0	34	30	35	33	35	32	44	49	116	135
22	37	24	34.5	631.0	-	-	-		36	31	36	33	36	33	43	49	157	123
23	39	33	29.0	660.0	-	-	-		40	35	39	36	39	35	43	49	111	45
24	52	35	21.5	681.5	-	-	-		47	36	43	38	43	38	43	48	250	173
25	62	38	15.0	696.5	-	-	-		49	36	45	38	46	38	44	48	325	193
26	51	39	20.0	716.5	0.17	28.63	-		47	41	45	42	45	42	44	48	251	57
27	39	32	29.5	746.0	-	-	-		44	35	45	38	45	37	45	48	309	16
28	32	19	39.5	785.5	-	-	-		36	29	38	34	37	32	45	48	165	41
29	36	19	37.5	823.0	-	-	-		34	29	35	33	34	32	44	48	216	145
30	38	16	38.0	861.0	-	-	-		35	26	35	31	34	30	43	48	148	207
Total	46.1	26.5	861.0	861.0	0.30	28.63	1.6		45.0	34.4	43.4	37.7	43.0	36.9			6747	4816
Avg.	36.3								39.7		40.6		40.0		46.7	51.1		
Dept. from Norma	+3.6		-108.0	-108.0	-1.86	-5.61	-6.2		+4.2		+3.5		+2.0		+3.0			+331

* Since Nov. 1, 2011

** Since Jan. 1, 2011

38° on the 25th set new Highest Min. temp-old record 35° set in 2009

**UNIVERSITY OF MINNESOTA
SOUTHERN RESEARCH AND OUTREACH CENTER
35838 120th Street
Waseca, MN 56093-4521
DECEMBER, 2011**

Date	Air Temp.		Cumul*		Cumul**		Snow Depth	Soil Temperatures								Wind	Solar Radiation	
	Max.	Min.	HDD	HDD	Precip	Precip.		2"		4"		8"		20"	40"			
	----- °F-----						----- in.-----		----- ° F-----								mi.	Langleys
1	44	26	30.0	891.0	0.03	28.66	0.4	T	32	27	33	31	33	30	42	48	204	103
2	31	6	46.5	937.5	-		-	T	34	23	34	30	34	29	41	47	151	100
3	34	7	44.5	982.0	-		-	T	30	23	31	29	31	29	41	47	282	199
4	31	22	38.5	1020.5	0.39	29.05	4.6	5	31	29	32	31	32	31	40	46	149	145
5	23	17	45.0	1065.5	-		-	4	32	31	33	32	32	32	40	46	142	48
6	20	12	49.0	1114.5	T		0.4	4	32	32	33	33	32	32	40	46	146	159
7	14	-4	60.0	1174.5	T		T	4	32	31	33	33	33	32	40	45	209	182
8	24	7	49.5	1224.0	-		-	3	32	31	33	32	32	32	39	45	110	138
9	21	-7	58.0	1282.0	-		-	3	31	29	33	32	32	31	39	45	129	162
10	11	-7	63.0	1345.0	-		-	3	30	28	32	31	31	29	39	45	128	192
11	27	8	47.5	1392.5	-		-	2	29	28	31	30	30	29	39	44	307	180
12	37	25	34.0	1426.5	T		-	1	32	29	32	31	31	30	38	44	346	97
13	37	33	30.0	1456.5	T		-	T	32	32	33	32	32	31	38	44	100	25
14	37	33	30.0	1486.5	0.10	29.15	-	-	36	32	35	33	35	32	38	44	174	33
15	40	28	31.0	1517.5	0.52	29.67	T	-	38	34	38	35	38	35	39	44	189	20
16	32	17	40.5	1558.0	-		-	-	34	30	36	33	35	32	39	43	221	54
17	26	15	44.5	1602.5	0.07	29.74	1.3	1	32	30	33	32	32	32	39	43	92	108
18	33	19	39.0	1641.5	T		T	T	32	31	33	32	32	32	39	43	146	130
19	47	26	28.5	1970.0	-		-	-	32	31	33	32	32	32	38	43	214	170
20	31	14	42.5	1712.5	-		-	-	32	27	33	32	32	32	38	43	135	128
21	30	15	42.5	1755.0	-		-	-	31	25	32	30	31	28	38	43	155	173
22	30	21	39.5	1794.5	T		T	-	31	25	31	29	31	28	38	43	182	102
23	27	14	44.5	1839.0	-		-	-	30	23	31	27	30	25	37	43	186	144
24	34	14	41.0	1880.0	-		-	-	30	22	30	26	30	25	37	43	206	65
25	42	20	34.0	1914.0	T		T	-	31	22	30	26	30	25	36	42	252	175
26	41	24	32.5	1946.5	-		-	-	31	27	31	29	31	28	36	42	207	179
27	47	30	26.5	1973.0	-		-	-	31	27	31	29	31	28	36	42	362	145
28	32	20	39.0	2012.0	-		-	-	31	27	31	30	31	29	36	42	178	154
29	40	21	34.5	2046.5	T		-	-	31	27	31	29	31	28	36	41	209	170
30	34	29	33.5	2080.0	0.12	29.86	T	T	31	30	31	31	31	30	36	41	173	59
31	34	28	34.0	2114.0	0.11	29.97	1.0	1	31	31	31	31	31	31	36	41	147	67
Total	32.0	17.2	1253.0	2114.0	1.34	29.97	7.7		31.7	28.2	32.4	30.7	31.9	30.0			5831	3806
Avg.	24.6								30.0		31.6		30.9		38.3	43.8		
Dept. from																		
Norma	+6.8		-210.0	-318.0	-0.14	-5.75	-5.3		+3.2		+3.1		+1.0		+2.3			-156

* Since Nov. 1, 2011

** Since Jan. 1, 2011

47° on the 27th ties Highest Max Temp-old record set in 1959