

UNIVERSITY OF MINNESOTA
 SOUTHERN RESEARCH AND OUTREACH CENTER
 35838 120th Street
 Waseca, MN 56093-4521
 JANUARY 2015

Date	Air Temp.		HDD	Cumul* HDD	Precip	Cumul Precip.	Snow Depth	Soil Temperatures						Wind	Solar Radiation			
	Max.	Min.						2"		4"		8"				20"	40"	
----- °F -----						in. -----		° F -----						mi.	Langleys			
1	14	-7	61.5	2594.0	-	-	1	22	16	26	24	29	28	34	41	335	188	
2	30	4	48.0	2642.0	-	-	1	28	20	29	25	30	28	34	40	182	133	
3	27	11	46.0	2688.0	-	-	1	27	22	28	26	29	29	34	40	207	63	
4	31	-1	50.0	2738.0	0.21	0.21	3.2	30	22	30	26	30	29	33	40	301	129	
5	18	-15	63.5	2801.5	-	-	3	22	16	26	21	29	26	33	40	234	167	
6	2	-16	72.0	2873.5	0.18	0.39	2.1	20	15	23	21	26	26	33	40	137	92	
7	5	-13	69.0	2942.5	-	-	5	23	20	24	22	26	26	33	40	297	156	
8	6	-12	68.0	3010.5	0.07	0.46	0.8	21	19	24	22	26	25	32	40	275	199	
9	18	-4	58.0	3068.5	0.10	0.56	1.5	23	15	24	20	26	24	32	39	410	91	
10	4	-8	67.0	3135.5	-	-	5	17	12	20	16	24	22	32	39	233	185	
11	22	-1	54.5	3190.0	-	-	5	20	12	21	16	24	22	31	39	168	93	
12	17	-3	58.0	3248.0	-	-	4	20	14	22	18	24	23	30	39	125	112	
13	5	-13	69.0	3317.0	-	-	4	16	7	19	13	23	20	30	39	105	214	
14	18	-8	60.0	3377.0	0.04	0.60	0.6	19	7	20	13	23	20	29	38	259	216	
15	23	16	45.5	3422.5	-	-	4	23	19	24	20	25	23	29	38	190	132	
16	32	16	41.0	3463.5	-	-	3	26	21	26	23	27	25	30	38	132	209	
17	34	17	39.5	3503.0	-	-	3	27	22	27	24	28	26	30	38	208	193	
18	37	24	34.5	3537.5	-	-	2	30	26	29	27	29	28	30	38	246	74	
19	37	23	35.0	3572.5	T		T	2	30	25	30	27	29	28	30	37	116	221
20	39	28	31.5	3604.0	0.02	0.62	T	1	32	26	31	27	30	29	31	37	167	185
21	45	26	29.5	3633.5	0.12	0.74	1.3	1	32	32	31	31	31	30	31	37	156	23
22	27	13	45.0	3678.5	T		0.2	1	32	32	31	31	31	31	37	151	76	
23	28	11	45.5	3724.0	-	-	1	32	29	31	30	31	30	31	37	288	157	
24	35	22	36.5	3760.5	-	-	1	31	27	30	29	30	30	31	37	140	143	
25	40	22	34.0	3794.5	T		T	1	32	27	31	28	31	30	31	37	175	188
26	31	22	38.5	3833.0	T		0.1	1	31	27	31	29	31	30	31	37	202	109
27	42	30	29.0	3862.0	-	-	1	31	29	31	29	32	30	31	37	190	200	
28	35	28	33.5	3895.5	-	-	T	32	31	31	31	31	31	32	37	242	110	
29	34	27	34.5	3930.0	0.01	0.75	-	T	32	32	31	31	31	31	37	264	44	
30	30	10	45.0	3975.0	-	-	-	T	32	21	31	26	31	31	32	37	239	108
31	29	10	45.5	4020.5	-	-	-	T	30	20	29	25	31	29	32	37	196	235
Total	25.6	8.4	1488.0	4020.5	0.75	0.75	9.8		26.5	21.4	27.1	24.2	28.3	27.1			6570	4445
Avg.	17.0								24.0		25.7		27.7		31.5	38.3		
Dept. from Norma	+3.8		-119.0	-18.5	-0.50	-0.50	+0.3		+1.2		+1.5		+2.8		-0.5			-656

* Since Nov. 1, 2014

** Since Jan. 1, 2015

UNIVERSITY OF MINNESOTA
 SOUTHERN RESEARCH AND OUTREACH CENTER
 35838 120th Street
 Waseca, MN 56093-4521
 FEBRUARY 2015

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	30	15	42.5	4063.0	0.08	0.83	1.0	1	29	22	29	25	29	28	32	37	283	61
2	15	-7	61.0	4124.0	0.03	0.86	0.5	1	23	15	25	20	28	22	31	37	271	141
3	11	-8	63.5	4187.5	-		-	1	19	15	21	18	22	20	31	37	186	216
4	16	3	55.5	4243.0	0.16	1.02	2.2	3	22	15	23	18	24	20	30	37	113	77
5	9	-15	68.0	4311.0	-		-	3	24	20	24	22	25	23	30	37	142	247
6	16	-5	59.5	4370.5	-		-	3	23	18	23	21	24	21	29	36	295	253
7	29	15	43.0	4413.5	-		-	2	29	20	26	21	26	22	29	36	173	254
8	39	22	34.5	4448.0	0.06	1.08	-	1	31	23	30	24	29	25	29	36	126	215
9	33	23	37.0	4485.0	-		-	1	31	31	31	30	30	29	30	36	206	171
10	32	22	38.0	4523.0	T		-	T	31	28	31	29	31	30	31	36	154	249
11	35	18	38.5	4561.5	0.09	1.17	0.6	T	30	25	30	28	30	29	31	36	344	38
12	18	-3	57.5	4619.0	-		-	T	29	9	28	15	29	21	31	36	349	275
13	16	-3	58.5	4677.5	-		-	T	25	9	24	14	23	20	30	36	190	249
14	32	2	48.0	4725.5	-		-	T	29	13	27	18	26	21	29	36	323	225
15	6	-1	62.5	4788.0	-		-	T	22	11	22	14	22	18	28	36	263	311
16	10	0	60.0	4848.0	T		0.1	T	20	10	20	14	20	17	27	36	251	142
17	22	3	52.5	4900.5	0.02	1.19	0.4	T	25	11	24	15	23	19	27	36	212	141
18	11	-8	63.5	4964.0	T		0.1	T	23	4	22	10	21	16	26	35	279	261
19	3	-10	68.5	5032.5	-		-	T	18	2	17	7	17	12	25	35	222	269
20	12	-10	64.0	5096.5	0.13	1.32	1.5	1	24	2	20	6	18	12	24	35	206	340
21	27	10	46.5	5143.0	0.01	1.33	0.2	1	25	14	22	15	23	17	24	35	209	139
22	21	-6	57.5	5200.5	-		-	1	28	7	26	12	25	17	26	35	250	225
23	2	-12	70.0	5270.5	-		-	T	22	2	19	7	19	12	25	34	185	345
24	26	-12	58.0	5328.5	-		-	T	23	2	20	7	20	11	23	34	400	357
25	34	12	42.0	5370.5	0.03	1.36	0.5	1	29	18	27	20	25	20	25	34	280	314
26	13	-8	62.5	5433.0	0.14	1.50	1.9	2	22	18	22	20	23	21	26	34	191	220
27	5	-19	72.0	5505.0	-		-	2	23	20	21	20	22	20	26	34	130	382
28	10	-17	68.5	5573.5	-		-	2	23	20	21	20	21	20	26	34	151	386
Total	19.0	0.0	1553.0	5573.5	0.75	1.50	9.0		25.1	14.4	24.1	17.5	24.1	20.1			6384	6503
Avg.	9.5								19.8		20.8		22.1		27.9	35.6		
Dept. from Norma	-9.0		+251.0	+232.5	-0.25	-0.75	0		-4.9		-5.0		-3.7		-2.9			-303

* Since Nov. 1, 2014

** Since Jan. 1, 2015

**UNIVERSITY OF MINNESOTA
SOUTHERN RESEARCH AND OUTREACH CENTER
35838 120th Street
Waseca, MN 56093-4521
March 2015**

Date	Air Temp.		Cumul*		Cumul**			Snow Depth	Soil Temperatures								Wind	Solar Radiation
	Max.	Min.	HDD	HDD	Precip	Precip.	Snow		2"		4"		8"		20"	40"		
	----- °F -----					----- in. -----			----- ° F -----								mi.	Langleys
1	16	-8	61.0	5634.5	-	-	-	2	23	20	23	20	21	19	25	33	288	365
2	27	0	51.5	5686.0	-	-	-	2	25	22	25	22	24	21	26	33	180	359
3	23	-2	54.5	5740.5	0.03	1.53	0.2	2	25	21	25	22	24	22	26	33	241	350
4	28	-3	52.5	5793.0	0.11	1.64	1.2	2	26	19	26	22	25	23	27	33	269	228
5	12	-13	65.5	5858.5	T		T	2	23	15	23	18	24	21	27	33	170	377
6	15	-11	63.0	5921.5	-		-	1	22	14	22	18	22	20	26	33	241	416
7	40	13	38.5	5960.0	-		-	1	30	18	28	20	27	21	26	33	176	383
8	43	27	30.0	5990.0	-		-	T	31	25	30	26	29	26	27	33	189	384
9	49	32	24.5	6014.5	-		-	-	34	31	32	30	30	29	29	33	182	404
10	55	32	21.5	6036.0	-		-	-	40	31	32	31	31	30	29	33	272	390
11	66	29	17.5	6053.5	-		-	-	50	32	36	31	31	31	30	33	164	421
12	55	29	23.0	6076.5	-		-	-	52	32	41	32	31	31	30	33	170	422
13	63	39	14.0	6090.5	-		-	-	49	32	42	32	33	31	31	33	374	276
14	61	29	20.0	6110.5	-		-	-	55	33	47	33	38	32	31	33	187	372
15	62	29	19.5	6130.0	-		-	-	55	32	47	32	38	32	31	33	159	450
16	69	43	9.0	6139.0	-		-	-	52	35	45	34	39	33	31	33	277	299
17	66	28	18.0	6157.0	-		-	-	53	33	47	34	40	34	31	33	318	286
18	44	26	30.0	6187.0	-		-	-	49	33	43	33	37	33	32	33	130	458
19	43	32	27.5	6214.5	0.02	1.66	0.2	-	42	32	38	33	35	32	32	33	124	163
20	50	26	27.0	6241.5	-		-	-	45	32	40	33	36	32	32	33	262	280
21	61	26	21.5	6263.0	-		-	-	53	33	45	33	39	33	32	33	237	416
22	44	27	29.5	6292.5	-		-	-	52	33	46	34	39	34	32	33	233	452
23	34	27	34.5	6327.0	0.81	2.47	7.5	7	33	32	34	32	34	32	32	33	288	67
24	30	27	36.5	6363.5	-		-	6	32	32	32	32	32	32	32	33	255	263
25	34	26	35.0	6398.5	0.12	2.59	0.7	6	32	32	32	32	32	32	32	33	313	308
26	36	25	34.5	6433.0	-		-	5	32	32	32	32	32	32	32	33	276	297
27	33	17	40.0	6473.0	-		-	4	32	32	32	32	32	32	32	33	187	407
28	32	16	41.0	6514.0	-		-	2	32	32	32	32	32	32	32	33	121	506
29	42	22	33.0	6547.0	0.02	2.61	-	T	32	32	32	32	32	32	32	33	347	515
30	52	32	23.0	6570.0	0.02	2.63	-	-	43	32	38	32	35	32	32	33	292	359
31	68	31	15.5	6585.5	-		-	-	57	32	48	32	41	33	32	33	117	400
Total	43.6	21.1	1012.0	6585.5	1.13	2.63	9.8		39.1	28.9	35.3	29.4	32.1	29.3			7039	11073
Avg.	32.4								34.0		32.4		30.7		30.0	33.0		
Dept. from Normal	+1.2		-36.0	+196.5	-1.36	-2.11	-0.4		+2.1		+0.7		+0.4		-2.4			+1316

* Since Nov. 1, 2014

** Since Jan. 1, 2015

66° on the 11th set new Highest Max temp-old record 63° set in 2012,
43° on the 16th set new Highest Min temp-old record 42° set in 1946

**UNIVERSITY OF MINNESOTA
SOUTHERN RESEARCH AND OUTREACH CENTER
35838 120th Street
Waseca, MN 56093-4521
APRIL 2015**

Date	Air Temp.		HDD	Cumul* HDD	Precip	Cumul** Precip.	Snow Depth	Snow Evap	Soil Temperatures								Wind	Solar Radiation
	Max.	Min.							2"		4"		8"		20"	40"		
	° F								Max	Min	Max	Min.	Max.	Min.	° F			
1	65	32	16.5	6602.0	-	-	-	-	60	34	51	36	43	36	33	34	187	518
2	80	45	2.5	6604.5	0.32	2.95	-	-	57	39	51	39	44	39	35	34	377	460
3	65	27	19.0	6623.5	-	-	-	-	59	35	52	37	45	39	36	34	300	497
4	43	26	30.5	6654.0	-	-	-	-	49	32	45	34	40	36	36	34	217	513
5	59	28	21.0	6675.5	0.03	2.98	-	-	56	32	48	34	41	35	35	34	207	486
6	55	36	19.5	6695.0	-	-	-	0.78	54	36	47	38	42	38	36	34	336	369
7	54	36	20.0	6715.0	0.01	2.99	-	-	52	37	47	38	43	38	37	34	349	286
8	40	36	27.0	6742.0	0.36	3.35	-	-	40	37	40	37	40	37	37	34	282	64
9	44	37	24.5	6766.5	0.42	3.77	-	-	44	37	42	37	40	37	37	35	248	135
10	40	33	28.5	6795.0	0.59	4.36	T	-	42	33	40	35	39	36	37	36	241	76
11	53	34	21.5	6816.5	T	-	-	-	54	33	47	34	42	35	37	36	204	427
12	68	35	13.5	6830.0	-	-	-	-	59	34	52	36	45	37	38	36	362	560
13	74	40	8.0	6838.0	0.19	4.55	-	1.14	68	43	59	45	51	43	41	37	387	512
14	63	31	18.0	6856.0	-	-	-	-	65	38	58	42	51	44	43	37	188	595
15	72	35	11.5	6867.5	-	-	-	-	71	38	61	41	53	43	44	38	193	584
16	68	43	9.5	6877.0	-	-	-	-	66	43	59	45	53	46	45	39	288	516
17	72	43	7.5	6884.5	-	-	-	-	75	48	64	50	57	50	47	39	109	385
18	76	43	5.5	6890.0	-	-	-	-	80	48	70	50	60	51	49	40	117	553
19	76	50	2.0	6892.0	0.26	4.81	-	-	73	49	65	52	58	52	50	41	294	399
20	61	37	16.0	6908.0	0.08	4.89	-	1.51	59	41	56	45	54	48	50	42	293	120
21	43	35	26.0	6934.0	0.04	4.93	T	-	45	37	46	40	48	43	48	43	339	183
22	41	30	29.5	6963.5	T	-	T	-	42	34	42	37	43	40	45	43	324	165
23	49	23	29.0	6992.5	-	-	-	-	59	34	52	37	46	39	44	43	245	638
24	56	24	25.0	7017.5	T	-	-	-	68	34	57	37	50	40	44	43	173	637
25	47	41	21.0	7038.5	0.45	5.38	-	-	47	42	46	43	45	44	45	43	344	91
26	56	35	19.5	7058.0	-	-	-	-	54	37	50	40	47	43	45	43	217	332
27	63	36	15.5	7073.5	-	-	-	0.95	70	37	60	40	52	42	45	43	137	640
28	68	37	12.5	7086.0	-	-	-	-	74	40	63	43	55	45	47	43	128	641
29	66	42	11.0	7097.0	-	-	-	-	66	44	60	47	55	48	48	43	149	406
30	68	45	8.5	7105.5	-	-	-	0.66	76	46	66	49	58	50	49	44	188	646
Total	59.5	35.8	519.5	7105.5	2.75	5.38	0.0	5.04	59.5	38.4	53.2	40.6	48.0	41.8			7423	12434
Avg.	47.7								48.9		46.9		44.9					
Dept. from Normal	+1.6		-51.5	+145.5	-0.46	-2.57	-2.7		+2.8		+2.1		-2.5				-1.5	+860

* Since Nov. 1, 2014

** Since Jan. 1, 2015

**UNIVERSITY OF MINNESOTA
SOUTHERN RESEARCH AND OUTREACH CENTER
35838 120TH STREET
WASECA, MINNESOTA 56093-4521
MAY 2015**

Date	Air Temp.		GDU	Cumul.* GDU	Cumul.**			Soil Temperatures								Wind mi.	Solar Radiation Langleys
	Max.	Min.			Precip.	Precip.	Evap.	2"		4"		8"		20"	40"		
	----- ° F -----				----- in. -----			----- ° F -----									
1	69	45	9.5	9.5	-		0.29	76	47	67	50	60	51	51	44	183	610
2	65	44	7.5	17.0	0.10	5.48		58	47	56	49	54	51	51	45	264	233
3	81	47	15.5	32.5	-			79	47	68	49	60	51	51	45	274	599
4	87	51	18.5	51.0	0.26	5.74	0.74	86	52	75	55	64	56	53	45	231	545
5	69	52	10.5	61.5	-			72	51	66	54	61	55	54	46	230	542
6	59	53	6.0	67.5	0.03	5.77		60	51	58	54	56	55	54	47	309	153
7	77	56	16.5	84.0	0.07	5.84		75	55	67	55	61	55	54	47	377	397
8	77	48	13.5	97.5	0.13	5.97		68	54	64	56	61	58	55	47	333	226
9	58	40	4.0	101.5	-			63	46	61	50	58	53	55	48	132	273
10	72	43	11.0	112.5	-			80	46	70	50	62	52	54	48	224	630
11	63	48	6.5	119.0	0.19	6.16	1.19	65	53	62	55	59	56	55	48	332	194
12	49	40	0.0	119.0	0.03	6.19		53	43	55	47	56	50	54	49	365	124
13	58	39	4.0	123.0	-			68	43	61	46	55	49	52	49	218	566
14	71	44	10.5	133.5	0.04	6.23		75	46	66	49	59	51	53	49	347	642
15	57	50	3.5	137.0	0.71	6.94		55	53	55	54	56	54	53	49	254	85
16	66	53	9.5	146.5	-			73	54	66	54	60	54	53	49	139	383
17	79	57	18.0	164.5	0.21	7.15		69	56	66	57	61	56	55	49	318	291
18	72	40	11.0	175.5	0.84	7.99	1.17	70	48	65	52	62	55	56	49	453	311
19	46	36	0.0	175.5	0.01	8.00		55	42	54	45	55	49	55	50	301	329
20	54	37	2.0	177.5	-			64	42	60	45	55	49	53	50	138	533
21	59	40	4.5	182.0	-			63	45	60	48	56	51	53	50	152	337
22	72	40	11.0	193.0	-			79	45	70	48	61	51	53	50	171	710
23	75	47	12.5	205.5	0.01	8.01		84	50	75	53	65	55	55	50	99	663
24	76	55	15.5	221.0	0.01	8.02		74	57	69	59	64	59	57	50	152	336
25	63	59	11.0	232.0	0.77	8.79		62	59	61	59	61	59	57	50	226	107
26	75	56	15.5	247.5	0.03	8.82	0.98	71	58	67	59	63	59	57	51	192	380
27	63	55	9.0	256.5	0.51	9.33		64	56	62	57	61	58	58	51	109	121
28	83	55	19.0	275.5	-			79	56	74	57	66	58	58	52	143	661
29	83	62	22.5	298.0	0.01	9.34		83	59	76	61	69	61	60	52	284	644
30	69	49	9.5	307.5	0.79	10.13		70	55	68	58	66	60	61	52	248	142
31	62	44	6.0	313.5	-		1.21	69	48	67	53	63	57	60	53	247	600
Totals	68.0	47.9	313.5	313.5	4.75	10.13	5.58	69.7	50.5	64.9	52.8	60.3	54.5		48.8	7445	12367
Avg.	58.0							60.1		58.9		57.4		54.8			
Dept. from normal	-0.7		-18.5	-18.5	+0.85	-1.75	-1.94	-0.3		+0.3		+1.6		+1.0			-2012

* Since May 1, 2015 ** Since January 1, 2015

UNIVERSITY OF MINNESOTA
SOUTHERN RESEARCH AND OUTREACH CENTER
35838 120TH STREET
WASECA, MINNESOTA 56093-4521
JUNE 2015

Date	Air Temp.		GDU	Cumul.* GDU	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	64	46	7.0	320.5	-	0.18	74	49	69	53	63	56	59	53	185	586
2	72	48	11.0	331.5	-		84	52	75	55	67	57	59	53	215	721
3	78	55	16.5	348.0	0.07	10.20	83	57	74	59	67	61	60	53	331	595
4	74	56	15.0	363.0	0.15	10.35	71	59	68	60	65	61	61	54	173	252
5	71	57	14.0	377.0	-		78	60	72	60	67	61	61	54	118	359
6	77	61	19.0	396.0	-		90	60	81	62	71	63	62	54	227	682
7	81	62	21.5	417.5	1.49	11.84	83	64	77	65	71	65	63	55	308	518
8	78	58	18.0	435.5	0.34	12.18	83	60	77	63	71	65	64	55	170	461
9	81	60	20.5	456.0	-		81	61	78	63	71	64	64	56	131	634
10	95	62	24.0	480.0	0.23	12.41	95	62	87	64	77	66	65	56	155	671
11	80	60	20.0	500.0	0.12	12.53	89	64	83	67	75	69	67	56	174	682
12	61	57	9.0	509.0	1.12	13.65	65	59	67	61	69	63	66	57	250	102
13	75	57	16.0	525.0	0.05	13.70	82	60	76	61	69	63	64	57	182	596
14	75	62	18.5	543.5	T		78	64	74	66	69	66	65	58	117	310
15	85	67	26.0	569.5			93	66	85	67	76	67	66	58	100	596
16	74	55	14.5	584.0	0.23	13.93	74	58	72	61	71	65	67	58	159	292
17	76	58	17.0	601.0	-		89	58	81	61	73	64	66	58	148	623
18	78	59	18.5	619.5	0.62	14.55	78	61	74	64	71	66	66	59	160	315
19	78	59	18.5	638.0	-		85	61	80	64	72	65	66	59	124	612
20	80	61	20.5	658.5	0.25	14.80	89	62	81	65	74	67	66	59	215	585
21	82	59	20.5	679.0	-		85	65	80	67	74	68	67	59	166	552
22	85	64	24.5	703.5	2.10	16.90	96	65	87	67	78	68	68	60	148	636
23	80	54	17.0	720.5	0.15	17.05	81	71	78	64	73	65	69	60	218	510
24	76	57	16.5	737.0	-		83	72	80	64	73	67	68	60	96	573
25	77	60	18.5	755.5	-		83	63	78	66	73	68	68	61	116	435
26	82	64	23.0	778.5	-		89	64	84	67	77	67	68	61	112	558
27	79	56	17.5	796.0	T		91	65	84	68	76	71	69	61	115	490
28	81	63	22.0	818.0	0.05	17.10	98	65	89	68	79	70	70	61	117	674
29	81	61	21.0	839.0	0.64	17.74	94	67	87	69	78	71	71	62	115	531
30	81	63	22.0	861.0	0.01	17.75	85	66	81	68	76	71	71	62	111	554
Totals	77.9	58.7	547.5	861.0	7.62	17.75	7.31	84.3	62.0	78.6	63.6	72.2	65.3		4956	15705
Avg.	68.3							73.2		71.1		68.8	65.5			
Dept. from normal	-0.2		+9.5	-9.0	+2.93	+1.18	-1.20	+1.4		+1.3		+1.9	+1.7			+75

* Since May 1, 2015 ** Since January 1, 2015

UNIVERSITY OF MINNESOTA
SOUTHERN RESEARCH AND OUTREACH CENTER
35838 120TH STREET
WASECA, MINNESOTA 56093-4521
JULY 2015

Date	Air Temp.		GDU	Cumul.* GDU	Cumul.**			Soil Temperatures								Wind mi.	Solar Radiation Langleys
	Max.	Min.			Precip.	Precip.	Evap.	2"		4"		8"		20"	40"		
	----- ° F -----				----- in. -----			----- ° F -----									
1	76	57	16.5	877.5	T		0.07	87	64	82	67	76	70	70	62	132	552
2	67	49	8.5	886.0	-			73	57	72	60	71	65	69	63	87	231
3	75	51	13.0	899.0	-			89	57	81	60	74	65	68	63	74	586
4	78	54	16.0	915.0	-			92	61	85	64	76	67	69	63	83	603
5	82	60	21.0	936.0	-			94	66	87	68	78	70	70	63	128	571
6	86	64	25.0	961.0	0.84	18.59	0.99	92	68	86	70	78	71	71	63	245	560
7	72	51	11.5	972.5	1.21	19.80	0.21	77	57	75	62	74	67	71	63	163	280
8	68	52	10.0	982.5	-			79	57	75	62	71	66	69	63	105	622
9	73	54	13.5	996.0	-			87	59	80	62	73	65	68	63	84	598
10	79	57	18.0	1014.0	-			96	62	87	65	77	67	69	63	114	682
11	84	65	24.5	1038.5	-			95	68	87	70	79	71	71	63	139	586
12	82	67	24.5	1063.0	-			87	70	83	72	77	73	71	64	181	385
13	87	68	27.0	1090.0	T			98	72	90	73	82	73	72	64	184	546
14	87	68	27.0	1117.0	0.03	19.83	1.18	104	75	95	77	86	77	74	64	114	653
15	84	63	23.5	1140.5	-			102	73	94	76	84	77	75	65	116	640
16	82	65	23.5	1164.0	0.04	19.87		93	73	88	76	82	77	76	65	137	444
17	78	64	21.0	1185.0	0.06	19.93		78	68	76	70	77	72	74	66	132	161
18	90	66	26.0	1211.0	0.48	20.41		104	68	94	70	83	72	74	66	123	677
19	86	57	21.5	1232.5	-			94	68	89	72	82	75	75	66	128	656
20	81	60	20.5	1253.0	-		1.65	97	68	90	71	82	74	75	66	147	675
21	80	55	17.5	1270.5	-			97	68	90	71	82	75	75	67	126	582
22	79	57	18.0	1288.5	-			99	68	91	71	82	74	75	67	63	651
23	81	60	20.5	1309.0	-			99	70	90	73	82	75	75	67	95	591
24	83	63	23.0	1332.0	3.53	23.94		99	71	91	73	82	75	76	67	179	646
25	85	63	24.0	1356.0	0.07	24.01		86	69	83	72	79	74	75	67	149	556
26	85	67	26.0	1382.0	0.19	24.20		91	69	86	71	80	74	75	68	98	593
27	84	69	26.5	1408.5	0.28	24.48	2.04	86	71	82	73	78	75	75	68	115	396
28	84	68	26.0	1434.5	0.62	25.10		83	71	80	73	77	74	74	68	206	389
29	85	58	21.5	1456.0	0.05	25.15		86	63	80	67	76	71	74	68	154	340
30	81	56	18.5	1474.5	-			88	63	82	67	76	70	73	68	193	668
31	84	59	21.5	1496.0	-		1.07	96	64	88	67	79	70	73	68	102	658
Totals	80.9	60.2	635.0	1496.0	7.40	25.15	7.21	91.2	66.4	85.1	69.2	78.5	71.6			4096	16778
Avg.	70.6							78.8		77.2		75.1		72.6			
Dept. from normal	-1.4		-50.0	-29.0	+2.98	+4.16	-0.69	+0.2		+0.5		+1.2	-1.7				+140

* Since May 1, 2015

** Since January 1, 2015

UNIVERSITY OF MINNESOTA
SOUTHERN RESEARCH AND OUTREACH CENTER
35838 120TH STREET
WASECA, MINNESOTA 56093-4521
AUGUST 2015

Date	Air Temp.		GDU	Cumul.* GDU	Cumul.** Precip.	Precip.	Evap.	Soil Temperatures								Wind	Solar Radiation
	Max.	Min.						2"		4"		8"		20"	40"		
	° F							Max.	Min.	Max.	Min.	Max.	Min.	° F			
1	82	59	20.5	1516.5	-		0.53	97	67	89	70	80	73	74	68	98	652
2	86	62	24.0	1540.5	0.03	25.18		101	69	92	72	83	73	75	68	149	642
3	86	52	19.0	1559.5	-		0.56	98	68	91	72	82	75	76	68	158	628
4	78	49	14.0	1573.5	-			96	66	89	70	81	74	76	68	97	652
5	79	53	16.0	1589.5	-			96	66	89	70	80	73	75	68	61	590
6	81	58	19.5	1609.0	-			96	67	89	70	81	73	75	69	88	573
7	80	63	21.5	1630.5	1.31	26.49		81	70	79	72	76	73	75	69	185	247
8	82	66	24.0	1654.5	-			86	69	81	71	77	73	74	69	108	435
9	85	66	25.5	1680.0	1.01	27.50		86	69	81	71	81	72	74	69	112	386
10	84	66	25.0	1705.0	0.02	27.52	1.54	89	69	83	71	78	73	73	69	95	473
11	80	57	18.5	1723.5	-			90	66	85	70	79	73	74	69	99	580
12	81	55	18.0	1741.5	-			94	66	88	69	80	72	74	69	59	605
13	83	58	20.5	1762.0	-			94	67	88	70	80	72	74	69	135	592
14	81	67	24.0	1786.0	-			83	71	81	73	78	74	74	69	132	266
15	89	66	26.0	1812.0	-			97	72	91	73	83	74	75	69	100	566
16	86	67	26.5	1838.5	-			94	73	90	75	83	77	76	69	157	572
17	82	63	22.5	1861.0	0.38	27.90	1.35	86	70	83	72	79	75	76	69	130	228
18	70	61	15.5	1876.5	0.16	28.06		74	65	74	67	75	70	74	69	120	183
19	69	55	12.0	1888.5	1.58	29.64		70	61	69	63	70	67	72	69	142	90
20	65	48	7.5	1896.0	0.05	29.69		69	55	68	59	68	63	70	69	162	234
21	74	48	12.0	1908.0	-			78	55	74	58	70	63	68	69	132	594
22	81	60	20.5	1928.5	-			81	60	78	63	73	65	68	68	249	518
23	82	53	17.5	1946.0	1.00	30.69		82	60	79	63	74	68	69	68	278	430
24	69	47	9.5	1955.5	-		1.46	72	54	70	58	68	63	69	67	224	427
25	69	45	9.5	1965.0	-			75	55	74	57	69	62	67	67	154	560
26	74	44	12.0	1977.0	-			81	59	77	58	71	62	67	67	84	575
27	77	45	13.5	1990.5	-			83	56	79	60	72	64	67	67	75	519
28	76	57	16.5	2007.0	0.21	30.90		76	62	74	64	71	66	68	66	160	305
29	68	57	12.5	2019.5	0.25	31.15		71	61	69	62	68	65	68	66	156	237
30	75	57	16.0	2035.5	-			77	61	73	62	69	64	67	66	76	324
31	78	59	18.5	2054.0	-		0.93	77	61	75	63	70	65	67	66	161	407
Totals	78.5	56.9	558.0	2054.0	6.00	31.15	6.37	84.8	64.2	80.4	66.7	75.8	69.5			4136	14090
Avg.	67.7							74.5		73.6		72.7		72.0			
Dept. from normal	-2.10		-39.0	-68.0	+1.25	+5.41	-0-	-1.0		-0.9		+0.1		+1.1			-85

* Since May 1, 2015 ** Since January 1, 2015

UNIVERSITY OF MINNESOTA
 SOUTHERN RESEARCH AND OUTREACH CENTER
 35838 120TH STREET
 WASECA, MINNESOTA 56093-4521
 SEPTEMBER 2015

Date	Air Temp.		GDU	Cumul.* GDU	Cumul.** Precip.	Evap.	Soil Temperatures						Wind	Solar Radiation			
	Max.	Min.					2"		4"		8"				20"	40"	
----- °F -----				----- in. -----		----- ° F -----						mi.	Langleys				
1	84	66	25.0	2079.0	-	0.18	80	65	78	66	73	67	68	66	149	399	
2	87	67	26.5	2105.5	0.81	31.96	85	66	82	68	76	69	69	66	122	407	
3	86	67	26.5	2132.0	-		83	69	79	70	76	72	70	66	114	418	
4	89	67	26.5	2158.5	-		86	69	84	70	78	71	71	66	130	346	
5	89	72	29.0	2187.5	0.07	32.03	86	72	85	73	80	74	72	66	144	322	
6	89	72	29.0	2216.5	1.02	33.05	81	72	78	73	76	74	73	67	193	195	
7	83	68	25.5	2242.0	1.10	34.15	1.39	78	70	77	71	75	73	72	67	150	144
8	77	62	19.5	2261.5	1.41	35.56	0.12	79	67	76	68	74	71	72	67	104	234
9	79	51	15.0	2276.5	0.02	35.58		79	60	76	62	73	67	71	68	78	377
10	76	52	14.0	2290.5	0.08	35.66		72	59	70	62	69	66	70	68	123	296
11	73	46	11.5	2302.0	-			78	56	74	59	70	64	69	68	114	436
12	65	41	7.5	2309.5	-			68	52	68	56	67	62	67	67	73	341
13	69	41	9.5	2319.0	-			74	52	73	56	68	61	67	67	65	435
14	76	46	13.0	2332.0	-	0.93		77	53	73	57	68	61	66	67	200	457
15	84	58	21.0	2353.0	0.01	35.67		82	59	77	61	71	64	66	66	217	421
16	87	64	25.0	2378.0	0.03	35.70		83	65	78	67	73	68	68	66	298	398
17	87	64	25.0	2403.0	0.84	36.54		82	65	78	67	73	69	69	66	240	339
18	80	53	16.5	2419.5	0.22	36.76		75	59	73	62	72	67	69	66	144	181
19	62	45	6.0	2425.5	0.06	36.82		65	53	65	57	67	61	68	66	99	120
20	70	45	10.0	2435.5	-			74	52	70	56	66	60	66	66	94	430
21	74	51	12.5	2448.0	0.04	36.86	1.37	69	54	66	57	64	60	65	66	178	316
22	82	55	18.5	2466.5	-			77	56	73	58	68	61	64	66	199	409
23	78	64	21.0	2487.5	-			76	64	72	65	68	65	65	65	115	178
24	73	62	17.5	2505.0	0.16	37.02		69	63	68	64	67	65	66	65	112	106
25	78	62	20.0	2525.0	-			73	63	70	64	67	65	66	65	103	181
26	83	56	19.5	2544.5	-			81	60	77	63	70	65	66	65	111	386
27	81	57	19.0	2563.5	-			82	60	77	62	71	64	66	65	136	405
28	84	57	20.5	2584.0	-	0.92		82	60	77	63	71	65	67	65	209	404
29	79	54	16.5	2600.5	-			80	61	76	64	71	67	67	65	127	237
30	67	41	8.5	2609.0	-	0.30		79	53	74	57	69	62	67	65	118	406
Totals	79.0	56.9	555.0	2609.0	5.87	37.02	5.21	77.8	61.0	74.7	63.3	71.0	66.0			4259	9724
Avg.	68.0							69.4		69.0		68.5		68.1			
Dept. from normal	+6.7		+207.0	+139.0	+2.20	+7.61	+0.30	+4.2		+4.1		+4.4		+2.8			-992

* Since May 1, 2015 ** Since January 1, 2015

UNIVERSITY OF MINNESOTA
 SOUTHERN RESEARCH AND OUTREACH CENTER
 35838 120th Street
 Waseca, MN 56093-4521
 OCTOBER 2015

Date	Air Temp.		Cumul*		Precip	Cumul**		Snow Depth	Soil Temperatures						Wind	Solar Radiation		
	Max.	Min.	GDU	GDU		Precip.	Snow		2"		4"		8"				20"	40"
	° F					in.			° F								mi.	Langleys
1	67	40	8.5	2617.5	-				76	52	71	56	66	61	66	65	116	406
2	66	40	8.0	2625.5	-				74	51	69	54	64	59	64	65	140	396
3	64	40	7.0	2632.5	-				72	50	68	53	63	58	63	65	152	400
4	63	40	6.5	2639.0	-				71	49	67	53	62	57	62	64	131	379
5	59	40	4.5	2643.5	-				64	50	62	53	60	57	61	64	85	230
6	66	43	8.0	2651.5	-				74	52	68	54	63	57	61	54	60	291
7	74	42	12.0	2663.5	-				72	53	68	56	64	59	62	63	86	185
8	69	41	9.5	2673.0	0.04	37.06			73	52	68	55	63	58	62	63	163	339
9	70	43	10.0	2683.0	-				70	53	67	56	63	60	62	63	188	242
10	60	40	5.0	2688.0	-				69	49	65	52	62	57	62	63	106	280
11	77	46	13.5	2701.5	-				69	49	65	52	61	56	61	62	324	321
12	88	53	19.5	2721.0	-				77	57	71	58	65	59	61	62	272	346
13	61	38	5.5	2726.5	-				60	48	61	52	63	57	62	62	318	89
14	63	34	6.5	2733.0	-				67	46	63	50	59	55	60	62	129	304
15	69	33	9.5	2742.5	-				69	45	64	49	59	53	59	62	114	339
16	60	32	5.0	2747.5	-				65	44	62	48	58	53	59	62	224	312
17	49	24	FREEZE		-				58	39	56	43	54	49	57	61	154	315
18	57	24			-				62	38	57	42	53	48	56	61	125	331
19	64	40			-				61	45	58	47	54	50	55	60	343	315
20	78	54			-				68	52	64	52	58	53	56	60	266	281
21	76	48			-				68	54	65	55	60	56	57	60	135	235
22	61	32			-				63	45	61	48	59	53	58	59	139	201
23	66	32			0.04	37.10			64	44	61	49	56	52	57	59	158	298
24	59	49			0.25	37.35			55	51	55	53	55	54	57	59	268	38
25	56	32			-				57	40	56	44	55	49	56	59	163	204
26	60	32			-				55	40	54	43	52	48	55	59	152	198
27	63	47			-				56	47	55	49	53	51	54	59	210	135
28	56	46			0.40	37.75			54	47	53	49	52	51	54	58	191	90
29	47	33			0.11	37.86	T	-	49	38	50	41	51	45	53	58	342	39
30	45	39			0.01	37.87			46	39	46	41	47	45	51	58	203	75
31	55	40			0.38	38.25			50	42	49	44	48	46	51	57	273	205
Total	63.5	39.3	138.5	2747.5	1.23	38.25	0.0		64.1	47.1	61.3	50.0	58.1	53.7			5730	7819
Avg.	51.4								55.6		55.6		55.9		58.5	60.9		
Dept. from																		
Norma	+3.2		+118.5	+257.5	-1.44	+6.17	-0.6		+5.8	+5.1	+5.1	+4.1	+4.1				+397	

88° on the 12th set new Highest Max temp-old record 86° set in 1956

**UNIVERSITY OF MINNESOTA
SOUTHERN RESEARCH AND OUTREACH CENTER
35838 120th Street
Waseca, MN 56093-4521
NOVEMBER 2015**

Date	Air Temp.		Cumul*		Cumul**		Snow Depth	Soil Temperatures								Wind	Solar Radiation	
	Max.	Min.	HDD	HDD	Precip	Precip.		2"		4"		8"		20"	40"			
	----- °F-----							----- ° F-----										mi.
1	50	35	22.5	22.5	0.03	38.28		49	38	49	41	49	45	51	57	228	76	
2	62	35	16.5	39.0	-			53	37	50	40	49	44	50	56	118	211	
3	67	43	10.0	49.0	-			59	43	55	45	51	47	51	56	102	222	
4	71	45	7.0	56.0	-			58	44	55	46	52	48	51	56	303	267	
5	61	55	7.0	63.0	0.01	38.29		55	51	55	52	54	52	52	55	364	50	
6	69	40	10.5	73.5	T			60	45	58	48	55	51	53	55	318	120	
7	49	29	26.0	99.5	-			51	37	51	40	50	46	53	55	149	135	
8	51	28	25.5	125.0	-			50	36	48	40	47	44	51	55	204	254	
9	59	38	16.5	141.5	-			52	37	49	40	48	44	50	55	380	251	
10	64	37	14.5	156.0	-			55	40	52	42	49	45	50	55	230	247	
11	62	36	16.0	172.0	-			53	39	50	42	49	45	49	54	236	203	
12	52	37	20.5	192.5	2.30	40.59		48	41	48	43	48	46	49	54	326	45	
13	41	31	29.0	221.5	-			44	35	44	38	46	42	49	54	324	85	
14	44	31	27.5	249.0	-			45	35	43	37	43	40	47	54	186	243	
15	60	34	18.0	267.0	-			48	35	45	36	44	40	46	53	219	205	
16	61	42	13.5	280.5	0.13	40.72		50	39	48	40	47	43	46	53	302	222	
17	51	47	16.0	296.5	0.62	41.34		48	46	48	46	47	47	48	52	360	25	
18	59	50	10.5	307.0	0.39	41.73		53	48	52	48	50	47	48	52	292	20	
19	52	30	24.0	331.0	0.07	41.80		52	36	52	39	50	44	49	52	434	41	
20	37	21	36.0	367.0	-			37	32	39	35	44	39	47	52	372	128	
21	30	16	42.0	409.0	0.04	41.84	0.6	T	33	32	35	34	39	38	45	52	130	41
22	27	13	45.0	454.0	-			T	32	31	34	33	38	37	43	52	182	221
23	29	16	42.5	496.5	-			T	32	31	33	33	37	36	42	51	185	175
24	44	20	33.0	529.5	-			-	32	30	33	32	36	36	41	51	117	204
25	43	30	28.5	558.0	-			-	35	32	34	33	36	36	41	50	328	198
26	51	36	21.5	576.5	T				43	34	41	34	40	36	41	50	242	110
27	36	21	36.5	616.0	0.23	42.07	1.0	T	37	33	38	34	40	37	42	49	279	24
28	25	12	46.5	662.5	-			T	33	29	34	32	37	35	41	49	128	140
29	31	12	43.5	706.0	-			T	32	29	32	32	35	34	40	49	85	197
30	34	26	35.0	741.0	0.16	42.23	1.5	1.0	32	30	32	32	34	34	39	48	124	77
Total	49.1	31.5	741.0	741.0	3.98	42.23	3.1		45.4	36.8	44.6	38.9	44.8	41.9			7247	4437
Avg.	40.3								41.1		41.7		43.4		46.8	52.9		
Dept. from Norma	+7.6		-228.0	-228.0	+1.82	+7.99	-4.7		+5.6		+4.6		+5.4		+3.1			-48

* Since Nov. 1, 2015

** Since Jan. 1, 2015

55° on the 5th set new Highest Min Temp-old record 50° set in 2008

**UNIVERSITY OF MINNESOTA
SOUTHERN RESEARCH AND OUTREACH CENTER
35838 120th Street
Waseca, MN 56093-4521
DECEMBER 2015**

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	33	28	34.5	775.5	0.24	42.47	2.1	3	32	32	33	32	34	34	39	48	238	63
2	30	25	37.5	813.0	0.01	42.48	0.2	3	33	32	33	33	35	34	39	47	126	50
3	35	14	40.5	853.5	-		-	3	33	33	33	33	35	35	39	47	152	84
4	31	12	43.5	897.0	-		-	2	33	33	34	33	35	35	39	47	190	195
5	41	28	30.5	927.5	-		-	T	33	33	34	33	35	35	38	46	300	192
6	42	36	26.0	953.5	-		-	T	34	33	34	33	36	35	38	46	169	126
7	37	30	31.5	985.0	-		-	T	38	33	37	34	37	36	39	46	157	45
8	45	30	27.5	1012.5	-		-	-	40	33	38	34	38	36	40	46	233	135
9	45	29	28.0	1040.5	T		-	-	39	33	38	34	38	36	39	46	147	48
10	46	29	27.5	1068.0	-		-	-	40	33	39	34	39	36	39	45	224	127
11	49	33	24.0	1092.0	0.05	42.53	-	-	42	35	41	37	40	38	40	45	246	81
12	39	33	29.0	1121.0	-		-	-	39	35	39	37	39	38	40	45	171	51
13	40	37	26.5	1147.5	0.28	42.81	-	-	41	37	40	37	40	38	40	45	188	47
14	41	38	25.5	1173.0	0.73	43.54	-	-	41	38	40	39	40	39	41	45	323	25
15	38	32	30.0	1203.0	0.50	44.04	-	-	38	34	39	35	39	37	41	45	277	39
16	42	31	28.5	1231.5	0.23	44.27	-	-	37	34	37	35	37	37	40	45	304	53
17	43	23	32.0	1263.5	0.05	44.32	T	T	38	32	37	33	38	36	40	45	396	44
18	29	15	43.0	1306.5	0.01	44.33	0.3	T	32	29	33	32	36	34	39	45	327	132
19	23	6	50.1	1357.0	0.01	44.34	0.2	T	31	25	32	28	34	33	38	45	228	78
20	36	7	43.5	1400.5	-		-	T	30	25	30	28	33	32	37	45	296	176
21	42	30	29.0	1429.5	T		-	-	32	30	31	30	33	32	37	45	180	86
22	32	27	35.5	1465.0	0.01	44.35	T	-	32	32	32	31	33	33	36	44	147	24
23	36	27	33.5	1498.5	0.12	44.47	-	-	32	31	32	32	33	33	36	44	323	39
24	36	24	35.0	1533.5	0.30	44.77	0.8	T	32	32	32	32	33	33	36	44	273	20
25	29	25	38.0	1571.5	-		-	T	32	32	32	32	33	33	36	43	160	62
26	29	25	38.0	1609.5	0.08	44.85	0.8	1	32	31	32	32	33	33	36	43	240	54
27	31	13	43.0	1652.5	0.02	44.87	0.2	1	32	31	32	32	33	33	36	43	282	35
28	17	6	53.5	1706.0	-		-	1	31	28	32	30	33	32	36	43	174	177
29	22	16	46.0	1752.0	0.73	45.60	6.0	6	30	28	31	30	32	32	36	43	365	35
30	28	21	40.5	1792.5	0.08	45.68	1.5	7	31	30	31	31	32	32	35	43	134	120
31	23	2	52.5	1845.0	-		-	7	31	31	31	31	32	32	35	42	158	88
Total	35.2	23.6	1103.6	1845.0	3.45	45.68	12.1		34.5	31.9	34.5	32.8	35.4	34.6			7128	2531
Avg.	29.4								33.2		33.6		35.0		38.1	44.9		
Dept. from Norma	+11.8		-359.4	-587.0	+1.97	+9.96	-0.9		+5.4		+5.1		+5.1		+2.1			-1408

* Since Nov. 1, 2015

** Since Jan. 1, 2015