

**UNIVERSITY OF MINNESOTA**  
**SOUTHERN RESEARCH AND OUTREACH CENTER**  
 35838 120th Street  
 Waseca, MN 56093-4521  
**JANUARY 2018**

Date	Air Temp.		HDD	Cumul* HDD	Precip	Cumul**		Snow Depth	Frost Depth	Soil Temperatures						Wind	Solar Radiation		
	Max.	Min.				Precip.	Snow			2"		4"		8"				20"	40"
----- °F -----		----- in. -----										mi.	Langleys						
1	-12	-24	83.0	2585.5	-			4		27	26	28	27	29	29	34	41	125	189
2	-6	-23	79.5	2665.0	-			4	10	26	25	27	26	29	28	34	40	138	188
3	14	-15	65.5	2730.5	0.03	0.03	0.5	4		27	25	27	26	29	28	33	40	313	168
4	2	-9	68.5	2799.0	-			4		26	25	27	26	28	28	33	40	135	177
5	4	-14	70.0	2869.0	-			4		26	25	27	26	28	28	33	40	108	96
6	2	-18	73.0	2942.0	-			4		25	23	26	25	28	27	33	40	93	195
7	17	-11	62.0	3004.0	T			4		25	23	26	24	27	27	33	39	367	185
8	32	12	43.0	3047.0	-			3	15	27	25	28	26	28	27	32	39	199	135
9	35	14	40.5	3087.5	-			3		28	27	28	27	29	28	32	39	159	195
10	39	30	30.5	3118.0	-			2		30	28	30	28	30	29	32	39	378	170
11	36	5	44.5	3162.5	0.05	0.08	0.8	1	15	31	30	31	30	31	30	32	39	273	35
12	6	-13	68.5	3231.0	0.25	0.33	2.5	1		31	24	31	25	31	29	32	39	289	51
13	1	-16	72.5	3303.5	-			1		24	19	25	20	29	26	32	38	142	204
14	4	-16	71.0	3374.5	T		T	1		20	17	20	18	26	24	32	38	128	208
15	19	-2	56.5	3431.0	0.13	0.46	2	3	17	23	17	23	18	25	24	31	38	324	90
16	0	-9	69.5	3500.5	-			2		24	23	25	23	26	25	31	38	261	173
17	4	-8	67.0	3567.5	-			2		24	23	25	25	27	26	30	38	176	173
18	24	4	51.0	3618.5	-			2		25	23	25	24	27	26	30	38	321	211
19	35	18	38.5	3657.0	-			1		27	25	27	25	28	27	30	37	247	197
20	38	20	36.0	3693.0	-			1		28	27	28	27	29	28	31	37	151	127
21	39	21	35.0	3728.0	-			1		29	27	29	28	29	29	31	37	69	128
22	39	25	33.0	3761.0	0.12	0.58	2.5	2	19	31	28	30	28	30	29	31	37	290	134
23	31	16	41.5	3802.5	1.20	1.78	9.5	12		31	31	30	30	31	30	31	37	415	50
24	22	6	51.0	3853.5	-		-	12		31	31	30	30	31	31	31	37	104	197
25	25	19	43.0	3896.5	-		-	11		31	30	30	30	31	31	31	37	200	109
26	42	24	32.0	3928.5	-		-	10		30	30	30	30	31	31	31	37	377	123
27	41	16	36.5	3965.0	-		-	7		31	30	31	30	31	31	32	37	296	224
28	31	11	44.0	4009.0	0.03	1.81	0.8	7		31	31	31	31	31	31	32	37	152	188
29	16	-5	59.5	4068.5	-		-	7	17	31	30	31	31	31	31	32	37	141	153
30	11	-8	63.5	4132.0	-		-	7		30	29	31	30	31	31	32	37	117	247
31	33	4	46.5	4178.5	0.03	1.84	0.3	7		29	29	30	30	31	31	32	37	362	144
<b>Total</b>	20.1	1.7	1676.0	4178.5	1.84	1.84	18.9			27.7	26.0	28.0	26.6	29.1	28.4			6850	4864
<b>Avg.</b>	<b>10.9</b>									<b>26.9</b>		<b>27.3</b>		<b>28.7</b>		<b>31.8</b>	<b>38.2</b>		
ept. from Normal	-2.3		69.0	139.5	0.59	0.59	9.4			4.1		3.1		3.8		-0.2			-237

\* Since Nov. 1, 2017

\*\* Since Jan. 1, 2018

**UNIVERSITY OF MINNESOTA  
SOUTHERN RESEARCH AND OUTREACH CENTER  
35838 120th Street  
Waseca, MN 56093-4521  
FEBRUARY 2018**

Date	Air Temp.		HDD	Cumul* HDD	Precip	Cumul**		Snow Depth	Frost Depth	Soil Temperatures						Wind	Solar Radiation		
	Max.	Min.				Precip.	Snow			2"		4"		8"				20"	40"
--- °F ---			----- in. -----												mi.	Langleys			
1	30	-5	52.5	4231.0	T	1.84	T	7	17	30	29	30	30	31	31	32	37	286	249
2	4	-14	70.0	4301.0	-		-	7		29	27	30	28	31	31	32	37	166	258
3	21	-12	60.5	4361.5	T		T	7		27	27	28	27	31	30	32	37	198	187
4	30	-4	52.0	4413.5	0.08	1.92	0.8	6		28	27	28	28	30	30	32	37	290	121
5	1	-9	69.0	4482.5	-		-	6	15	28	25	28	27	30	29	31	37	194	270
6	10	-21	70.5	4553.0	0.06	1.98	1.5	7		26	25	27	26	29	29	31	37	161	147
7	6	-20	72.0	4625.0	0.01	1.99	0.5	8		26	26	27	27	29	28	31	37	141	214
8	10	-6	63.0	4688.0	-		-	8		27	26	27	27	29	28	31	37	141	289
9	13	-2	59.5	4747.5	0.09	2.08	1.5	9		27	26	28	27	29	29	31	36	149	211
10	6	-10	67.0	4814.5	-		-	9		27	27	28	28	29	29	31	36	131	274
11	7	-11	67.0	4881.5	-		-	9		27	27	28	28	29	29	31	36	143	299
12	12	-13	65.5	4947.0	-		-	8	17	27	27	28	27	29	29	31	36	147	300
13	15	-9	62.0	5009.0	-		-	8		27	26	27	27	29	29	31	36	162	249
14	26	15	44.5	5053.5	-		-	8		28	27	28	27	29	29	31	36	286	277
15	38	21	35.5	5089.0	-		-	6		29	28	29	28	30	29	31	36	247	303
16	35	-5	50.0	5139.0	0.01	2.09	0.2	5		29	29	29	29	30	30	31	36	242	192
17	23	-3	55.0	5194.0	0.04	2.13	0.8	6		29	28	29	28	30	29	31	36	282	322
18	33	9	44.0	5238.0	0.01	2.14	0.2	5		28	28	29	28	29	29	31	36	205	235
19	40	23	33.5	5271.5	T		T	3	17	30	28	30	28	30	29	31	36	343	192
20	24	18	44.0	5315.5	0.06	2.20	0.1	3		30	30	30	30	31	30	31	36	360***	64
21	18	-2	57.0	5372.5	T		T	3		30	28	30	29	31	30	31	36	151***	186
22	17	-1	57.0	5429.5	-		-	3		28	27	29	28	30	29	31	36	223***	276
23	30	15	42.5	5472.0	0.46	2.66	4.0	7		29	27	29	28	29	29	31	36	174	196
24	23	2	52.5	5524.5	-		-	7		29	29	29	29	30	29	31	36	194***	199
25	30	10	45.0	5569.5	0.34	3.00	3.2	9		29	29	29	29	30	30	31	36	261	158
26	24	11	47.5	5617.0	-		-	8	17	29	29	30	29	30	30	31	36	227	368
27	40	16	37.0	5654.0	-		-	6		29	29	30	29	30	30	31	36	240	374
28	45	12	36.5	5690.5	-		-	5		30	29	30	30	30	30	31	36	99	334
<b>Total</b>	<b>21.8</b>	<b>0.2</b>	<b>1512.0</b>	<b>5690.5</b>	<b>1.16</b>	<b>3.00</b>	<b>12.8</b>			<b>28.3</b>	<b>27.5</b>	<b>28.7</b>	<b>28.1</b>	<b>29.8</b>	<b>29.4</b>			<b>4915</b>	<b>6744</b>
<b>Avg.</b>	<b>11.0</b>									<b>27.9</b>		<b>28.4</b>		<b>29.6</b>		<b>31.1</b>	<b>36.3</b>		
ept. from Normal	-7.5		210.0	349.5	0.16	0.75	3.8			3.2		2.6		3.8		0.3			-62

\* Since Nov. 1, 2017

\*\* Since Jan. 1, 2018

\*\*\* Supplemented Wind  
Run from Mankato  
Regional Airport

**UNIVERSITY OF MINNESOTA  
SOUTHERN RESEARCH AND OUTREACH CENTER  
35838 120th Street  
Waseca, MN 56093-4521  
MARCH 2018**

Date	Air Temp.		HDD	Cumul* HDD	Precip	Cumul**		Snow Depth	Frost Depth	Soil Temperatures						Wind mi.	Solar Radiation Langleys	
	Max.	Min.				Precip.	Snow			2"		4"		8"				
	----- °F -----	----- °F -----								Max	Min	Max	Min.	Max.	Min.			20"
1	36	15	39.5	5730.0	-	-	5	17	30	30	31	30	31	30	31	36	103	261
2	33	6	45.5	5775.5	-	-	4		30	30	31	31	31	31	32	36	82	387
3	38	13	39.5	5815.0	-	-	4		30	30	31	30	31	31	32	36	253	312
4	42	33	27.5	5842.5	0.02	3.02	-	3	31	30	31	31	31	31	32	36	392	369
5	44	33	26.5	5869.0	0.07	3.09	-	1	31	31	31	31	31	31	32	36	468	300
6	34	24	36.0	5905.0	0.78	3.87	5.2	5	31	31	31	31	31	31	32	36	212	38
7	31	8	45.5	5950.5	T		T	5	31	31	31	31	31	31	32	36	218	192
8	21	4	52.5	6003.0	-	-	-	4	31	31	31	31	31	31	32	36	110	413
9	24	9	48.5	6051.5	-	-	-	4	31	31	31	31	31	31	32	36	80	420
10	31	17	41.0	6092.5	-	-	-	4	31	31	31	31	31	31	32	36	146	398
11	35	26	34.5	6127.0	0.02	3.89	0.2	4	31	31	31	31	31	31	32	36	16	307
12	33	16	40.5	6167.5	0.01	3.90	-	3	31	31	31	31	31	31	32	36	56	127
13	35	17	39.0	6206.5	-	-	-	3	31	31	31	31	31	31	32	36	85	441
14	32	16	41.0	6247.5	-	-	-	2	31	31	31	31	31	31	32	36	144	441
15	41	23	33.0	6280.5	-	-	-	1	31	30	31	31	31	31	32	36	130	451
16	35	21	37.0	6317.5	-	-	-	1	31	31	31	31	31	31	32	36	236	448
17	34	22	37.0	6354.5	-	-	-	1	31	31	31	31	31	31	32	36	276	331
18	46	24	30.0	6384.5	-	-	-	1	31	31	31	31	31	31	32	36	72	471
19	41	28	30.5	6415.0	-	-	-	T	31	31	31	31	31	31	32	36	115	220
20	40	29	30.5	6445.5	T		T	T	32	31	32	31	31	31	32	36	257	423
21	30	22	39.0	6484.5	0.03	3.93	T	T	32	31	32	32	31	31	32	36	141	211
22	36	24	35.0	6519.5	-	-	-	T	32	32	32	32	31	31	32	36	100	248
23	41	29	30.0	6549.5	-	-	-	T	32	32	32	32	31	31	32	36	163	307
24	40	25	32.5	6582.0	0.12	4.05	1.5	2	32	32	32	32	32	31	32	35	314	218
25	38	26	33.0	6615.0	0.01	4.06	0.2	T	32	32	32	32	32	31	32	35	260	228
26	37	28	32.5	6647.5	0.01	4.07	T	T	32	32	32	32	32	32	32	35	289	369
27	36	31	31.5	6679.0	0.08	4.15	-	T	32	32	32	32	32	32	32	35	198	78
28	41	29	30.0	6709.0	-	-	-	T	32	32	32	32	32	32	32	35	181	295
29	47	23	30.0	6739.0	-	-	-	0	37	32	32	32	32	32	32	36	268	449
30	37	23	35.0	6774.0	-	-	-	-	40	32	32	32	32	32	32	36	177	514
31	42	27	30.5	6804.5	0.01	4.16	-	-	38	32	32	32	32	32	32	36	290	286
<b>Total</b>	<b>36.5</b>	<b>21.6</b>	<b>1114.0</b>	<b>6804.5</b>	<b>1.16</b>	<b>4.16</b>	<b>7.1</b>		<b>31.9</b>	<b>31.2</b>	<b>31.4</b>	<b>31.3</b>	<b>31.3</b>	<b>31.2</b>			<b>5832</b>	<b>9953</b>
<b>Avg.</b>	<b>29.1</b>								<b>31.5</b>		<b>31.3</b>		<b>31.2</b>		<b>32.0</b>	<b>35.8</b>		
Dept. from Normal	-2.1		66.0	415.5	-1.33	-0.58	-3.1		-0.4		-0.4		0.9		-0.4			196

\* Since Nov. 1, 2017

\*\* Since Jan. 1, 2018

UNIVERSITY OF MINNESOTA  
 SOUTHERN RESEARCH AND OUTREACH CENTER  
 35838 120th Street  
 Waseca, MN 56093-4521  
 APRIL 2018

Date	Air Temp.		HDD	Cumul* HDD	Precip	Cumul**		Snow Depth	Evap	Soil Temperatures						Wind	Solar Radiation		
	Max.	Min.				Precip.	Snow			2"		4"		8"				20"	40"
	----- °F -----					----- in. -----				----- ° F -----		Max	Min	Max	Min.			Max.	Min.
1	29	12	44.5	6849.0	T	4.16	T	-		39	32	34	32	32	32	32	36	306	350
2	32	14	42.0	6891.0	-		-	-		32	32	32	32	32	32	32	36	123	507
3	34	25	35.5	6926.5	0.27	4.43	3.5	4		32	32	32	32	32	32	32	36	231	135
4	29	1	50.0	6976.5	0.44	4.87	4.5	5		32	32	32	32	32	32	32	36	218	255
5	25	2	51.5	7028.0	-		-	3		32	32	32	32	32	32	32	36	126	566
6	37	14	39.5	7067.5	0.01	4.88	0.2	1		32	32	32	32	32	32	32	36	239	553
7	20	9	20.0	7118.0	-		-	0		32	32	32	32	32	32	32	36	258	566
8	32	12	32.0	7161.0	-		-	0		32	32	32	32	32	32	33	36	130	558
9	30	16	30.0	7203.0	0.21	5.09	2.3	1		32	32	32	32	32	32	33	36	242	213
10	33	20	38.5	7241.5	-		-	T		32	32	32	32	32	32	33	36	142	422
11	41	27	31.0	7272.5	-		-	T		32	32	32	32	32	32	33	36	154	260
12	43	30	28.5	7301.0	-		-	T		32	32	32	32	32	32	33	36	200	327
13	51	33	23.0	7324.0	0.30	5.39	-	0		35	32	33	32	32	32	33	36	263	399
14	39	28	31.5	7355.5	0.36	5.75	T	0		36	32	34	32	32	32	33	36	555	79
15	29	20	40.5	7396.0	1.35	7.10	8.0	8		32	32	32	32	32	32	33	36	322	116
16	28	18	42.0	7438.0	0.13	7.23	1.0	6		32	32	32	32	32	32	33	36	186	418
17	32	18	40.0	7478.0	-		-	4		32	32	32	32	32	32	33	36	128	483
18	38	24	34.0	7512.0	-		-	3		32	32	32	32	32	32	33	36	186	600
19	33	16	40.5	7552.5	0.45	7.68	3.4	5		32	32	32	32	32	32	33	36	150	164
20	44	20	33.0	7585.5	-		-	3		32	32	32	32	32	32	33	36	72	641
21	46	29	27.5	7613.0	-		-	1		32	32	32	32	32	32	33	36	104	588
22	51	34	22.5	7635.5	-		-	T		32	32	32	32	32	32	33	36	110	315
23	59	38	16.5	7652.0	-		-	0		32	32	32	32	32	32	32	35	146	587
24	68	39	11.5	7663.5	-		-	0		57	32	47	32	38	32	33	35	80	606
25	65	35	15.0	7678.5	-		-	-		56	37	50	39	43	37	36	35	199	493
26	57	36	18.5	7697.0	-		-	-		59	37	52	39	45	39	38	36	122	629
27	63	31	18.0	7715.0	-		-	-		60	41	55	42	47	41	40	37	225	579
28	63	31	18.0	7733.0	-		-	-		60	41	55	43	49	43	42	37	279	561
29	56	35	19.5	7752.5	-		-	-		65	41	59	43	50	44	43	38	151	639
30	69	44	8.5	7761.0	-		-	-		62	43	57	45	51	46	44	39	420	616
<b>Total</b>	42.5	23.7	903.0	7761.0	3.52	7.68	22.9			39.0	33.6	37.2	34.0	35.3	33.9			6067	13225
<b>Avg.</b>	<b>33.1</b>									<b>36.3</b>		<b>35.6</b>		<b>34.6</b>		<b>34.2</b>	<b>36.1</b>		
Dept. from Normal	-13.0		332.0	801.0	0.31	-0.27	20.2			-9.8		-9.2		-7.8		-6.4			1651

\* Since Nov. 1, 2017

\*\* Since Jan. 1, 2018

**UNIVERSITY OF MINNESOTA  
SOUTHERN RESEARCH AND OUTREACH CENTER  
35838 120TH STREET  
WASECA, MINNESOTA 56093-4521  
May 2018**

Date	Air Temp.		GDU	Cumul.* GDU	Precip.	Cumul.**		Soil Temperatures								Wind mi.	Solar Radiation Langleys	
	Max.	Min.				Precip.	Evap.	2"		4"		8"		20"	40"			
	° F					in.		° F										
1	84	55	19.5	19.5	0.11	7.79			66	51	61	51	54	49	46	40	433	418
2	75	48	12.5	32.0	0.89	8.68	0.28		70	55	64	56	57	53	48	40	184	443
3	62	47	6.0	38.0	-				64	52	61	53	53	50	50	41	110	432
4	71	46	10.5	48.5	0.31	8.99			65	52	61	53	56	53	50	42	120	434
5	75	47	12.5	61.0	-				65	61	61	52	56	53	50	43	194	645
6	82	51	16.5	77.5	0.04	9.03			72	67	67	52	59	52	51	44	177	584
7	75	48	12.5	90.0	-		1.26		74	69	69	56	61	55	52	44	190	649
8	84	60	22.0	112.0	-				78	55	71	57	62	56	54	45	251	629
9	67	52	9.5	121.5	1.62	10.65	0.64		62	54	62	55	60	56	55	46	289	63
10	64	48	7.0	128.5	-				61	52	59	54	57	55	54	47	146	195
11	60	42	5.0	133.5	0.92	11.57	0.37		65	49	61	51	57	53	53	47	183	512
12	46	42	0.0	133.5	0.05	11.62			50	47	51	48	53	50	52	48	283	143
13	56	46	3.0	136.5	-				54	47	53	48	52	50	51	48	202	246
14	66	48	8.0	144.5	-		0.28		62	49	59	50	55	50	51	48	106	319
15	69	54	11.5	156.0	0.14	11.76			63	53	60	54	56	53	52	48	131	251
16	77	53	15.0	171.0	-				73	55	67	56	60	55	53	48	121	673
17	84	55	19.5	190.5	-				78	55	72	57	64	56	54	48	130	633
18	86	56	21.0	211.5	-				80	60	74	61	66	60	56	49	219	575
19	85	50	17.5	229.0	-				81	62	75	63	67	62	58	49	288	636
20	61	48	5.5	234.5	-				69	57	67	59	65	61	59	50	300	249
21	67	47	8.5	243.0	-		1.65		70	56	66	58	62	59	58	51	244	388
22	65	56	10.5	253.5	-				68	60	65	61	62	60	58	51	148	235
23	79	57	18.0	271.5	0.14	11.90			78	60	73	61	66	60	58	51	167	466
24	84	62	23.0	294.5	T				82	64	75	65	68	63	60	52	201	482
25	90	66	26.0	320.5	0.01	11.91	0.93		83	67	78	67	70	65	61	52	321	593
26	90	60	23.0	343.5	0.06	11.97			85	67	80	69	72	67	63	53	180	517
27	95	63	24.5	368.0	-				89	67	83	68	74	67	64	53	110	651
28	99	69	27.5	395.5	-		1.10		90	71	85	71	76	70	66	54	204	623
29	101	69	27.5	423.0	0.20	12.17	0.30		91	69	85	71	77	72	67	55	214	466
30	96	66	26.0	449.0	0.47	12.64			86	69	81	70	75	70	67	56	255	488
31	77	60	18.5	467.5	0.32	12.96	0.47		76	66	74	68	71	69	67	56	82	234
<b>Total</b>	<b>76.5</b>	<b>53.9</b>	<b>467.5</b>	<b>467.5</b>	<b>5.28</b>	<b>12.96</b>	<b>7.3</b>		<b>72.6</b>	<b>58.6</b>	<b>68.4</b>	<b>58.5</b>	<b>62.7</b>	<b>58.2</b>			<b>6183</b>	<b>13872</b>
<b>Avg.</b>	<b>65.2</b>								<b>63.5</b>		<b>60.6</b>		<b>60.4</b>		<b>56.1</b>	<b>48.4</b>		
Dept. from Normal																		
	6.5		135.5	135.5	1.35	1.08	-0.24		3.1		2.0		4.6		2.3			-507

\* Since May 1, 2018

\*\* Since Jan. 1, 2018

**UNIVERSITY OF MINNESOTA  
SOUTHERN RESEARCH AND OUTREACH CENTER  
35838 120TH STREET  
WASECA, MINNESOTA 56093-4521  
June 2018**

Date	Air Temp.		GDU	Cumul.* GDU	Precip.	Cumul.**		Soil Temperatures								Wind mi.	Solar Radiation Langleys
	Max.	Min.				Precip.	Evap.	2"		4"		8"		20"	40"		
	° F					in.		Max.	Min.	Max.	Min.	Max.	Min.	° F			
1	85	62	23.5	491.0	-			83	66	79	67	73	68	66	57	133	610
2	87	66	26.0	517.0	-			86	67	82	69	74	69	67	57	289	653
3	71	53	12.0	529.0	0.13	13.09		74	61	73	64	71	66	67	58	191	289
4	70	49	10.0	539.0	-		0.87	77	60	73	63	68	64	65	58	198	552
5	88	56	21.0	560.0	0.03	13.12		83	60	78	63	71	64	65	58	272	648
6	88	65	25.5	585.5	0.05	13.17		88	67	83	68	75	68	66	58	222	664
7	84	61	22.5	608.0	T		1.08	88	70	83	72	76	71	67	58	182	601
8	81	61	21.0	629.0	0.48	13.65		82	68	79	70	74	71	68	59	192	443
9	74	63	18.5	647.5	0.63	14.28		73	65	72	67	71	68	68	59	236	290
10	72	63	17.5	665.0	0.44	14.72	0.50	70	65	70	67	68	67	66	60	226	174
11	70	62	16.0	681.0	T		0.16	70	64	69	65	68	66	65	60	269	239
12	72	62	17.0	698.0	0.57	15.29		69	64	68	65	66	65	65	60	214	156
13	75	52	13.5	711.5	-			73	60	71	63	68	65	64	60	101	263
14	77	58	17.5	729.0	T			79	60	76	63	69	64	64	60	120	647
15	79	62	20.5	749.5	-			78	64	74	65	69	65	65	60	300	426
16	93	69	27.5	777.0	0.86	16.15		80	67	77	68	72	67	65	60	296	468
17	90	70	28.0	805.0	0.12	16.27		79	70	76	70	72	69	67	60	259	330
18	91	71	28.5	833.5	0.72	16.99	1.78	83	72	81	72	74	70	67	60	234	534
19	74	68	21.0	854.5	0.26	17.25		76	70	75	70	73	70	68	60	182	219
20	68	63	15.5	870.0	0.37	17.62		70	66	70	66	70	67	68	61	207	137
21	69	59	14.0	884.0	0.81	18.43	0.50	69	63	69	65	68	66	66	61	260	151
22	68	58	13.0	897.0	0.14	18.57		69	63	68	64	66	65	65	62	162	258
23	80	59	19.5	916.5	-			78	63	76	64	70	64	65	62	77	618
24	78	63	20.5	937.0	-			77	65	77	66	71	67	66	61	97	483
25	75	63	19.0	956.0	0.12	18.69	0.47	72	66	71	67	69	67	66	61	120	205
26	80	65	22.5	978.5	0.03	18.72		80	66	77	67	71	67	66	61	266	557
27	77	61	19.0	997.5	0.02	18.74		80	67	76	68	71	68	67	61	125	353
28	80	62	21.0	1018.5	-			84	68	80	68	73	68	67	61	81	431
29	85	68	26.5	1045.0	-			87	69	83	70	70	68	68	62	214	544
30	95	75	30.5	1075.5	-		1.14	94	74	88	74	79	73	70	62	343	664
<b>Total</b>	<b>79.2</b>	<b>62.3</b>	<b>608.0</b>	<b>1075.5</b>	<b>5.78</b>	<b>18.74</b>	<b>6.5</b>	<b>78.4</b>	<b>65.7</b>	<b>75.8</b>	<b>67.0</b>	<b>71.0</b>	<b>67.2</b>			<b>6068</b>	<b>12607</b>
<b>Avg.</b>	<b>70.8</b>							<b>70.7</b>		<b>69.0</b>		<b>69.1</b>		<b>66.3</b>	<b>59.9</b>		
Dept. from Normal	2.3		70.0	205.50	1.09	2.17	-9.5	-1.1		-0.8		2.2		2.5			-2923

\* Since May 1, 2018

\*\* Since Jan. 1, 2018

UNIVERSITY OF MINNESOTA  
SOUTHERN RESEARCH AND OUTREACH CENTER  
35838 120TH STREET  
WASECA, MINNESOTA 56093-4521  
July 2018

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	86	67	26.5	1102.0	0.50	19.24	0.22	91	72	87	74	79	75	72	62	132	380
2	73	61	17.0	1119.0	0.58	19.82	0.20	77	66	77	69	75	71	71	63	165	438
3	84	65	24.5	1143.5	-	-		83	66	81	68	74	70	70	63	204	686
4	87	66	26.0	1169.5	-	-		87	69	83	71	76	71	70	64	197	552
5	83	69	26.0	1195.5	0.23	20.05		80	72	78	73	75	73	71	64	136	326
6	80	60	20.0	1215.5	-			88	69	84	72	77	73	71	64	142	663
7	81	61	21.0	1236.5	-			90	69	86	71	78	72	71	64	115	676
8	82	64	23.0	1259.5	-			90	71	86	73	78	73	72	64	224	679
9	87	66	26.0	1285.5	-		1.99	92	72	87	74	79	74	73	65	216	681
10	87	60	23.0	1308.5	-			96	75	91	76	82	75	73	65	112	639
11	83	64	23.5	1332.0	T			88	74	85	76	79	76	74	65	113	401
12	90	70	28.0	1360.0	-			93	74	89	76	81	75	74	66	224	605
13	94	68	27.0	1387.0	1.60	21.65	1.31	95	76	91	78	83	78	75	66	175	534
14	78	64	21.0	1408.0	0.26	21.91		80	70	80	73	78	75	76	67	70	272
15	85	66	25.5	1433.5	-			86	70	83	72	78	74	74	67	62	606
16	85	61	23.0	1456.5	-		0.56	90	72	87	74	80	75	74	68	106	585
17	82	62	22.0	1478.5	-			95	72	90	75	81	76	75	68	85	685
18	80	60	20.0	1498.5	-			95	73	90	76	82	76	75	68	89	683
19	82	63	22.5	1521.0	0.08	21.99		91	74	88	77	81	77	76	68	135	571
20	69	63	16.0	1537.0	1.06	23.05	0.85	76	69	78	71	78	72	75	68	190	109
21	78	61	19.5	1556.5	T			77	66	76	69	73	71	73	69	149	324
22	79	61	20.0	1576.5	-			83	66	80	68	75	70	72	68	123	583
23	79	59	19.0	1595.5	-		0.52	90	68	84	70	77	77	72	68	76	596
24	82	56	19.0	1614.5	-			89	71	85	73	79	73	73	68	80	539
25	81	58	19.5	1634.0	-			92	70	88	73	79	74	74	68	85	669
26	79	54	16.5	1650.5	0.07	23.12		80	66	80	70	76	72	74	68	117	317
27	68	50	9.0	1659.5	-			75	64	75	68	73	70	73	68	137	382
28	75	50	12.5	1672.0	-			85	64	81	67	75	69	71	68	75	609
29	79	52	15.5	1687.5	-			87	67	84	69	77	71	72	68	42	598
30	79	54	16.5	1704.0	-		1.29	88	69	84	72	77	72	72	68	47	540
31	81	56	18.5	1722.5	-		0.19	88	69	85	72	78	73	73	68	56	565
<b>Total</b>	<b>81.2</b>	<b>61.0</b>	<b>647.0</b>	<b>1722.5</b>	<b>4.38</b>	<b>23.12</b>	<b>7.1</b>	<b>87.0</b>	<b>69.8</b>	<b>84.0</b>	<b>72.3</b>	<b>77.8</b>	<b>73.3</b>			<b>3879</b>	<b>16493</b>
<b>Avg.</b>	<b>71.1</b>							<b>76.9</b>		<b>75.0</b>		<b>75.6</b>		<b>72.9</b>	<b>66.4</b>		
Dept. from Normal	-0.9		-8.0	197.50	-0.04	2.13	-0.77	-1.7		-1.7		1.7		2.0			-145

\* Since May 1, 2018

\*\* Since Jan. 1, 2018

UNIVERSITY OF MINNESOTA  
SOUTHERN RESEARCH AND OUTREACH CENTER  
35838 120TH STREET  
WASECA, MINNESOTA 56093-4521  
August 2018

Date	Air Temp.		GDU	Cumul.* GDU	Precip.	Cumul.**		Soil Temperatures								Wind mi.	Solar Radiation Langleys
	Max.	Min.				Precip.	Evap.	2"		4"		8"		20"	40"		
	----- °F -----					----- in. -----		----- ° F -----									
1	82	58	20.0	1742.5	T	23.12	0.23	92	71	88	73	80	74	74	68	86	634
2	77	54	15.5	1758.0	0.01	23.13		85	70	83	73	77	74	74	68	135	380
3	72	57	14.5	1772.5	-		0.35	85	70	82	72	76	73	73	68	94	459
4	88	61	23.5	1796.0	-			87	70	84	72	77	72	73	68	187	498
5	77	65	21.0	1817.0	0.60	23.73		76	69	77	71	76	73	73	68	171	201
6	79	65	22.0	1839.0	0.04	23.77	0.53	79	69	77	71	74	72	72	68	126	402
7	81	61	21.0	1860.0	0.07	23.84		83	69	80	71	75	72	72	68	68	417
8	75	58	16.5	1876.5	0.17	24.01		77	65	75	68	72	70	72	68	60	261
9	85	60	22.5	1899.0	-			82	65	80	67	74	69	71	68	135	593
10	85	59	22.0	1921.0	-		0.65	89	70	84	72	77	72	71	68	72	577
11	85	58	21.5	1942.5	-			92	70	86	73	78	73	73	68	50	599
12	83	59	21.0	1963.5	-			88	71	84	73	78	74	73	68	56	474
13	85	63	24.0	1987.5	-		0.60	90	71	85	73	79	74	73	68	107	571
14	87	65	25.5	2013.0	-			92	73	86	75	80	75	74	68	107	585
15	87	66	26.0	2039.0	0.04	24.05		89	74	85	76	80	76	75	68	74	420
16	84	67	25.5	2064.5	-			89	74	85	75	80	76	75	69	95	451
17	79	63	21.0	2085.5	1.50	25.55	0.78	79	69	78	71	77	73	75	69	68	148
18	79	58	18.5	2104.0	-			80	67	78	70	75	72	73	69	52	440
19	83	60	21.5	2125.5	-			82	66	79	69	75	71	72	69	82	503
20	82	63	22.5	2148.0	0.01	25.56	0.34	81	68	79	70	75	71	72	69	105	381
21	74	61	17.5	2165.5	0.06	25.62		73	67	73	68	73	70	72	69	119	135
22	72	48	11.0	2176.5	-			76	61	73	64	71	68	71	69	88	286
23	78	48	14.0	2190.5	-			84	60	78	63	73	67	70	68	86	560
24	76	53	14.5	2205.0	0.02	25.64		80	64	76	67	72	68	70	68	181	444
25	75	60	17.5	2222.5	0.09	25.73		74	66	73	68	71	69	70	68	98	155
26	77	62	19.5	2242.0	T			79	66	75	67	72	68	70	68	78	283
27	79	67	23.0	2265.0	0.18	25.91	0.88	74	68	73	69	71	69	70	68	197	204
28	83	64	23.5	2288.5	1.09	27.00	0.33	77	70	75	71	72	70	70	67	140	260
29	67	48	8.5	2297.0	0.18	27.18		70	59	71	63	71	67	70	67	94	92
30	70	49	10.0	2307.0	-			76	59	72	62	69	65	68	67	78	509
31	75	53	14.0	2321.0	0.73	27.91	0.56	77	60	73	62	69	65	68	67	195	488
<b>Total</b>	<b>79.4</b>	<b>59.1</b>	<b>598.5</b>	<b>2321.0</b>	<b>4.79</b>	<b>27.91</b>	<b>5.25</b>	<b>81.8</b>	<b>67.5</b>	<b>78.9</b>	<b>69.6</b>	<b>74.8</b>	<b>71.0</b>			<b>3284</b>	<b>12410</b>
<b>Avg.</b>	<b>69.3</b>							<b>73.2</b>		<b>72.2</b>		<b>72.9</b>		<b>71.9</b>	<b>68.1</b>		
Dept. from Normal																	
	-0.5		1.5	199.0	0.04	2.17	-1.12	-2.3		-2.3		0.3		1.0			-1765

\* Since May 1, 2018

\*\* Since Jan. 1, 2018



UNIVERSITY OF MINNESOTA  
SOUTHERN RESEARCH AND OUTREACH CENTER  
35838 120TH STREET  
WASECA, MINNESOTA 56093-4521  
SEPTEMBER 2018

Date	Air Temp.		GDU	Cumul.* GDU	Precip.	Cumul.**		Soil Temperatures						Wind	Solar Radiation		
	Max.	Min.				Evap.	2"		4"		8"		20"			40"	
	----- °F -----						Max.	Min.	Max.	Min.	Max.	Min.					----- ° F -----
1	84	66	25.0	2346.0	0.02	27.93	0.32	76	67	74	68	70	68	68	67	178	329
2	83	66	24.5	2370.5	T			80	69	76	69	72	69	69	67	117	266
3	79	67	23.0	2393.5	0.08	28.01	0.17	77	69	74	70	71	69	69	67	110	258
4	75	67	21.0	2414.5	1.06	29.07	0.03	73	69	72	70	71	69	69	67	95	123
5	78	64	21.0	2435.5	5.38	34.45		76	68	74	69	71	70	69	67	113	111
6	70	51	10.5	2446.0	-			73	59	71	63	70	66	69	67	111	274
7	72	51	11.5	2457.5	-			74	58	71	61	68	65	68	67	102	516
8	74	52	13.0	2470.5	-			74	59	70	61	67	64	67	67	108	474
9	72	49	11.0	2481.5	-			77	59	71	61	67	63	66	66	128	492
10	72	49	11.0	2492.5	-	0.80		76	59	71	61	67	63	66	66	121	458
11	78	49	14.0	2506.5	-			80	59	73	62	69	64	66	66	127	454
12	81	59	20.0	2526.5	-			81	64	75	66	70	66	67	66	213	468
13	82	60	21.0	2547.5	-			84	66	77	67	72	68	68	66	167	463
14	84	61	22.5	2570.0	-			83	67	76	68	72	68	68	66	188	426
15	86	68	27.0	2597.0	-			84	71	79	71	74	70	69	66	129	350
16	90	68	27.0	2624.0	-			87	71	81	72	76	71	70	66	134	423
17	88	65	25.5	2649.5	-	1.45		87	73	81	73	76	73	71	66	139	405
18	85	59	22.0	2671.5	0.68	35.13	0.13	82	66	78	68	75	70	72	67	135	242
19	72	60	16.0	2687.5	0.58	35.71	0.22	72	65	71	66	70	68	70	67	127	169
20	67	62	14.5	2702.0	1.56	37.27	0.09	68	65	68	65	68	66	69	67	115	73
21	78	52	15.0	2717.0	1.14	38.41	-	69	62	69	64	67	66	67	67	240	129
22	56	40	3.0	2720.0	-			62	51	64	55	66	60	67	67	148	199
23	67	41	8.5	2728.5	-			65	50	63	54	61	58	64	67	149	435
24	78	50	14.0	2742.5	-	0.42		69	53	66	56	63	59	63	66	177	421
25	77	53	15.0	2757.5	-			71	56	68	59	64	60	63	66	173	336
26	54	40	2.0	2759.5	0.04	38.45		61	51	63	54	64	58	64	65	106	84
27	62	46	6.0	2765.5	-			67	51	63	54	61	58	62	65	193	394
28	64	42	7.0	2772.5	-	0.47		62	53	61	55	60	58	62	64	164	152
29	55	32	2.5	2775.0	-			64	48	60	52	59	56	61	64	111	305
30	50	37	-	2775.0	T	0.14		54	48	54	51	56	54	60	64	119	96
Totals	73.8	54.2	454.0	2775.0	10.54	38.45	4.24	73.6	60.9	70.5	62.8	67.9	64.6			4237	9325
Avg.	<b>64.0</b>							<b>65.7</b>		<b>65.4</b>		<b>66.2</b>		<b>66.8</b>	<b>66.2</b>		
Dept. from Normal	2.7		106.0	305.0	6.87	9.04	-0.67	0.5		0.5		2.1		1.5			-1391

\* Since May 1, 2018

\*\* Since Jan. 1, 2018

**UNIVERSITY OF MINNESOTA**  
**SOUTHERN RESEARCH AND OUTREACH CENTER**  
 35838 120th Street  
 Waseca, MN 56093-4521  
 October 2018

Date	Air Temp.		GDU	Cumul* GDU	Cumul** Precip	Snow Depth	Frost Depth	Soil Temperatures						Wind	Solar Radiation		
	Max.	Min.						2"		4"		8"					
	----- ° F -----							Max	Min	Max	Min.	Max.	Min.			20"	40"
1	54	43		2775.0	-			58	50	56	52	56	54	58	63	119	168
2	49	46			0.34			54	51	54	53	55	54	58	62	101	60
3	67	46			0.18			57	51	56	52	55	54	58	62	159	90
4	83	32			0.14			67	47	64	51	61	55	58	61	285	130
5	48	32			0.48			54	46	54	49	56	52	58	61	145	248
6	51	43			-			53	47	53	49	53	51	56	61	113	86
7	45	41			-			52	47	52	49	53	51	56	60	124	134
8	50	43			0.33			52	47	52	49	52	51	55	60	138	82
9	55	47			0.38			56	50	55	50	54	51	55	59	91	95
10	50	46			0.92			53	50	53	51	53	52	55	59	169	55
11	53	32			0.02		T	54	42	53	45	53	49	54	59	297	125
12	38	24	#		-		T	45	38	46	41	49	45	53	58	175	119
13	43	26			-			48	37	47	40	46	44	51	58	110	253
14	56	32			0.21		1.0 1	49	38	48	41	47	44	50	57	201	207
15	34	29			0.08		1.0 T	42	37	44	39	47	43	50	57	147	56
16	44	28			-			48	37	46	39	44	42	49	56	213	344
17	57	29			-			50	37	47	40	46	42	48	56	172	300
18	49	29			-			49	38	47	40	45	43	48	55	116	337
19	71	34			0.04			53	37	50	40	48	42	48	55	264	322
20	65	37			-			56	43	53	46	50	48	49	54	261	247
21	41	22			-			49	37	48	40	48	44	50	54	179	313
22	59	26			-			49	36	47	39	46	43	49	54	149	308
23	60	24			-			51	37	49	40	46	43	48	54	148	313
24	49	24			-			46	37	48	41	46	44	48	54	85	310
25	56	27			-			46	36	46	39	45	43	48	53	139	223
26	52	41			-			48	43	47	44	47	45	48	53	112	95
27	50	40			0.01			47	44	47	45	47	46	48	53	135	68
28	57	43			0.03			53	46	51	47	49	47	49	53	186	154
29	55	28			-			52	40	50	43	49	46	49	53	162	253
30	55	29			-			51	40	49	42	48	45	49	53	169	217
31	53	28			-			50	40	49	43	48	46	49	53	98	136
<b>Total</b>	<b>53.2</b>	<b>33.9</b>	<b>0.0</b>	<b>2775.0</b>	<b>3.16</b>	<b>41.61</b>	<b>2.0</b>	<b>51.4</b>	<b>42.1</b>	<b>50.4</b>	<b>44.5</b>	<b>49.7</b>	<b>47.1</b>			<b>4962</b>	<b>5848</b>
<b>Avg.</b>	<b>43.5</b>							<b>46.2</b>		<b>47.1</b>		<b>48.4</b>		<b>51.7</b>	<b>56.8</b>		
Dept. from Normal																	
	-4.7		-20.0	285.0	0.49	9.53	1.4	-3.6		-3.4		-2.4		-2.7			-1574

\* Since May 1, 2018

\*\* Since Jan. 1, 2018

**UNIVERSITY OF MINNESOTA  
SOUTHERN RESEARCH AND OUTREACH CENTER  
35838 120th Street  
Waseca, MN 56093-4521  
NOVEMBER 2018**

Date	Air Temp.		HDD	Cumul* HDD	Precip	Cumul**		Snow Depth	Frost Depth	Soil Temperatures						Wind	Solar Radiation		
	Max.	Min.				2"	4"			8"		20"	40"						
	° F									Max	Min			Max.	Min.			° F	
----- ° F -----				----- in. -----										mi.	Langleys				
1	54	27	24.5	24.5	-				-	50	38	48	41	47	45	49	53	91	230
2	54	31	22.5	47.0	-					51	38	48	41	46	44	48	53	119	268
3	46	35	24.5	71.5	T					48	42	47	43	46	45	48	52	124	135
4	45	35	25.0	96.5	0.38	41.99				45	40	45	42	46	44	48	52	205	73
5	37	33	30.0	126.5	0.14	42.13	T			42	39	42	41	44	43	47	52	158	51
6	44	35	25.5	152.0	0.33	42.46				43	39	43	41	44	43	47	52	173	62
7	35	27	34.0	186.0	0.01	42.47	T			42	36	43	38	44	41	46	52	318	51
8	29	19	41.0	227.0	-					36	34	38	36	41	39	45	51	224	71
9	26	15	44.5	271.5	0.04	42.51	0.5	T		34	34	36	35	39	38	44	51	117	117
10	20	1	54.5	326.0	0.02	42.53	0.5	1		34	33	35	34	38	37	43	50	220	174
11	27	0	51.5	377.5	T		0.1	1		33	32	34	34	37	36	42	50	233	109
12	29	13	44.0	421.5	T		T	1	2	33	32	34	34	36	36	41	49	207	64
13	19	1	55.0	476.5	-			1		32	29	34	33	36	35	41	49	187	131
14	23	2	52.5	529.0	-			T		31	28	33	32	35	35	40	48	119	229
15	42	19	35.0	564.0	-			-		31	28	32	32	35	34	39	48	333	226
16	43	24	31.5	595.5	0.01	42.54	T	T		32	30	32	32	35	34	39	48	309	214
17	28	19	41.5	637.0	0.17	42.71	2.2	2		32	32	33	32	35	34	39	47	172	65
18	22	-9	58.5	695.5	-			2		32	32	33	33	35	35	39	47	126	123
19	23	-5	56.0	751.5	-			2	2	32	32	33	33	35	34	38	46	231	205
20	25	1	52.0	803.5	-			2		32	32	33	33	34	34	38	46	184	90
21	32	0	49.0	852.5	-			1		32	31	33	33	34	34	38	46	193	159
22	30	22	39.0	891.5	-			1		32	32	33	33	34	34	38	46	270	132
23	41	26	31.5	923.0	-			T		32	32	33	33	34	34	38	45	353	78
24	44	31	27.5	950.5	0.18	42.89		-		35	32	35	33	35	34	38	45	255	50
25	32	24	37.0	987.5	-			-		35	33	35	34	35	35	38	45	238	30
26	26	14	45.0	1032.5	T		0.1	T	2	33	31	34	33	35	35	38	45	289	84
27	18	9	51.5	1084.0	T		T	-		31	26	33	32	35	34	38	45	205	86
28	23	9	49.0	1133.0	-			-		30	25	32	30	34	33	37	44	148	185
29	24	17	44.5	1177.5	0.06	42.95	0.6	1		29	25	30	29	33	33	37	44	269	57
30	30	23	38.5	1216.0	-			1		30	29	31	30	33	33	37	44	135	91
<b>Total</b>	32.4	16.6	1216.0	1216.0	1.34	42.95	4.0			35.5	32.5	36.2	34.7	37.7	36.8			6205	3640
<b>Avg.</b>	<b>24.5</b>									<b>34.4</b>		<b>36.2</b>		<b>37.3</b>		<b>41.3</b>	<b>48.2</b>		
Dept. from Normal	-8.2		247.0	247.0	-0.82	8.71	-3.9			-1.2		-0.9		-0.8		-2.4			-845

\* Since Nov. 1, 2018

\*\* Since Jan. 1, 2018

**UNIVERSITY OF MINNESOTA  
SOUTHERN RESEARCH AND OUTREACH CENTER  
35838 120th Street  
Waseca, MN 56093-4521  
DECEMBER 2018**

Date	Air Temp.		HDD	Cumul* HDD	Precip	Cumul**		Snow Depth	Frost Depth	Soil Temperatures						Wind	Solar Radiation		
	Max.	Min.				2"	4"			8"		20"	40"						
	° F									Max	Min			Max	Min			° F	
----- ° F -----				----- in. -----										mi.	Langleys				
1	30	27	36.5	1252.5	-		-	1		31	30	31	31	33	33	36	44	226	56
2	32	27	35.5	1288.0	0.65	43.60	5.5	5		31	30	31	31	33	33	36	44	489	27
3	31	24	37.5	1325.5	T		T	5	4	31	31	31	31	33	33	36	43	316	81
4	25	20	42.5	1368.0	-		-	4		31	31	32	31	33	33	36	43	144	64
5	23	16	45.5	1413.5	T		T	4		31	31	32	32	33	33	36	43	199	66
6	25	4	50.5	1464.0	T		T	4		31	31	32	32	33	33	36	43	175	129
7	17	-5	59.0	1523.0	T		T	4		31	31	32	32	33	33	36	43	132	145
8	23	10	48.5	1571.5	T		T	4		31	31	32	32	33	33	36	42	171	88
9	26	14	45.0	1616.5	-		-	4		31	31	32	32	33	33	36	42	217	140
10	24	6	50.0	1666.5	-		-	4	4	31	31	32	32	33	33	36	42	137	175
11	22	7	50.5	1717.0	-		-	4		31	31	32	32	33	33	36	42	113	89
12	26	8	48.0	1765.0	-		-	4		31	30	32	32	33	33	36	42	142	131
13	25	20	42.5	1807.5	-		-	4		31	31	32	32	33	33	36	42	138	68
14	30	20	40.0	1847.5	-		-	4		31	31	32	32	33	33	36	42	95	78
15	33	16	40.5	1888.0	-		-	4		31	31	32	32	33	33	36	42	117	187
16	38	20	36.0	1924.0	-		-	3		31	31	32	32	33	33	36	42	220	184
17	38	14	39.0	1963.0	-		-	3	4	31	31	32	32	33	33	36	41	105	171
18	35	14	40.5	2003.5	-		-	3		31	31	32	32	33	33	36	41	240	179
19	38	32	30.0	2033.5	-		-	2		32	31	32	32	33	33	36	41	200	157
20	39	29	31.0	2064.5	0.02	43.62	-	1		32	31	32	32	33	33	36	41	171	93
21	33	22	37.5	2102.0	T		-	1		32	32	32	32	33	33	36	41	249	30
22	24	21	42.5	2144.5	T		-	1		32	32	32	32	33	33	36	41	162	60
23	31	23	38.0	2182.5	T		-	1		32	32	32	32	33	33	36	41	197	41
24	27	12	45.5	2228.0	T		-	1	4	32	32	32	32	33	33	36	41	192	91
25	27	11	46.0	2274.0	-		-	1		32	31	32	31	33	33	36	41	144	165
26	31	25	37.0	2311.0	-		-	1		31	31	32	31	33	33	35	41	102	40
27	35	26	34.5	2345.5	0.45	44.07	1.2	1		32	31	32	32	33	33	35	41	366	69
28	38	21	35.5	2381.0	0.98	45.05	0.3	T		32	31	32	32	33	33	34	40	268	14
29	21	6	51.5	2432.5	T		T	T		32	30	32	32	33	33	35	40	249	46
30	20	6	52.0	2484.5	T		0.2	T		30	28	32	31	33	33	35	40	304	136
31	34	19	38.5	2523.0	-		-	T	8	30	28	31	31	33	33	35	40	241	146
<b>Total</b>	<b>29.1</b>	<b>16.6</b>	<b>1307.0</b>	<b>2523.0</b>	<b>2.10</b>	<b>45.05</b>	<b>7.2</b>			<b>31.3</b>	<b>30.8</b>	<b>31.9</b>	<b>31.7</b>	<b>33.0</b>	<b>33.0</b>			<b>6221</b>	<b>3146</b>
<b>Avg.</b>	<b>22.8</b>									<b>31.3</b>		<b>32.4</b>		<b>33.0</b>		<b>35.8</b>	<b>41.7</b>		
Dept. from Normal	5.0		-156.0	91.0	0.62	9.33	-5.8			4.5		3.9		3.1		-0.2			-816

\* Since Nov. 1, 2018

\*\* Since Jan. 1, 2018