

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

2013 SUMMARY

Month	Avg. Air	HDD ^{1/}	GDU ^{2/}	Precip	Snow	Evap. ^{3/}	Avg. Soil Temp.					Solar Radiation Langley's
	Temp. -°F -						2"	4"	8"	20"	40"	
Jan	15.4	1537.0		0.64	1.8		23.4	25.5	27.6	31.7	38.5	4385
Feb	16.6	1356.0		1.39	13.2		23.4	24.7	25.9	29.0	34.5	6183
Mar	23.8	1278.5		3.55	18.9		28.8	28.9	29.4	30.4	34.0	11059
Apr	38.4	797.0		6.20	15.0		38.6	35.5	33.9	32.7	34.1	11170
May	55.4		273.5	6.46	9.9	7.31	56.5	54.4	52.9	50.1	45.2	12139
Jun	67.3		519.0	6.67		6.95	69.2	66.6	64.5	61.1	54.6	13694
Jul	72.0		666.0	5.29		8.47	79.1	76.5	74.3	71.4	64.6	17516
Aug	69.6		598.5	2.07		5.80	77.6	74.8	73.0	70.8	66.4	15235
Sept	64.3		461.5	1.92		4.81	71.2	70.0	69.9	69.7	67.5	11254
Oct	47.5		130.5	3.56	0.0		51.1	51.9	53.1	55.9	59.5	7078
Nov	29.9	1053.0		0.67	3.3		35.2	37.4	39.0	43.0	49.1	4674
Dec	12.4	1631.0		1.25	11.6		25.4	27.3	28.7	33.4	40.9	3830
Year	42.7	7652.5	2649.0	39.67	73.7	33.34	48.3	47.8	47.7	48.3	49.1	118217
Departure ^{4/} from normal	-2.3	+692.5	+157.0	+3.95	+20.9	-1.87	-0.8	-1.1	-1.2	+0.3		-2328

^{1/} Heating degree days based on 65° F. Total and departure excludes May - Sept.

^{2/} Based on the 50° - 86° F range from May 1 to the first fall frost (September 23).

^{3/} Departure from normal based on evaporation from May 1 - September 30 (35.21").

^{4/} Based on 1981-2010 Normal for air temperature, growing degree units (GDU), precipitation, snow, and evaporation. Solar radiation based on 1972-2010 averages .