

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information
Service

**Summary of Annual Normals
1981-2010**

National Climatic Data Center
Federal Building
151 Patton Avenue
Asheville, North Carolina 28801
www.ncdc.noaa.gov

Station: ROSEAU, MN US

GHCND:USC00217087
Elev: 319 ft. Lat: 48.849° N Lon: 95.768° W

Freeze Data									
Spring Freeze Dates (Month/Day)									
Temp (F)	Probability of later date in spring (through Jul 31) than indicated(*)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	6/11	6/05	6/01	5/30	5/27	5/24	5/21	5/17	5/11
32	6/01	5/28	5/25	5/21	5/17	5/13	5/10	5/05	4/30
28	5/23	5/17	5/13	5/09	5/05	5/02	4/30	4/27	4/22
24	5/13	5/07	5/02	4/30	4/27	4/24	4/20	4/17	4/11
20	5/02	4/27	4/23	4/19	4/16	4/13	4/10	4/07	4/03
16	4/21	4/16	4/12	4/09	4/07	4/05	4/03	3/31	3/27
Fall Freeze Dates (Month/Day)									
Temp (F)	Probability of earlier date in fall (beginning Aug 1) than indicated(*)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	8/28	9/03	9/07	9/11	9/14	9/17	9/19	9/22	9/25
32	9/10	9/16	9/19	9/22	9/24	9/26	9/29	10/01	10/05
28	9/21	9/25	9/28	10/01	10/03	10/05	10/08	10/11	10/16
24	9/30	10/03	10/06	10/09	10/12	10/15	10/18	10/22	10/27
20	10/07	10/11	10/16	10/19	10/22	10/26	10/29	11/01	11/06
16	10/15	10/21	10/26	10/29	11/01	11/03	11/06	11/10	11/15
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	126	120	115	111	107	103	98	92	83
32	147	141	136	131	127	123	119	114	108
28	167	160	155	151	147	143	139	134	127
24	187	180	175	170	166	162	157	152	145
20	208	201	195	190	186	182	177	171	163
16	224	217	212	208	204	200	196	190	182

* Probability of observing a temperature as cold, or colder, later in the spring or earlier in the fall than the indicated date

0/00 Indicates that the probability of occurrence of threshold temperature is less than the indicated probability.

Derived from 1981-2010 serially complete daily data

Complete Documentation available from:
www.ncdc.noaa.gov/oa/climate/normals/usnormals.html