

South Dakota State University

## Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange

---

Agricultural Experiment Station Agricultural  
Economics Pamphlets

SDSU Agricultural Experiment Station

---

3-1-1957

# Frequencies of Daily Occurrence of Maximum and Minimum Temperatures at Huron, South Dakota Each Week of the Year by Five Degree Intervals Together with Highest and Lowest Temperature Recorded and Standard Deviation of Temperatures Each Week of the Year

Ray F. Pengra

Follow this and additional works at: [http://openprairie.sdstate.edu/agexperimentsta\\_ageconomics](http://openprairie.sdstate.edu/agexperimentsta_ageconomics)

 Part of the [Agricultural Economics Commons](#)

---

### Recommended Citation

Pengra, Ray F., "Frequencies of Daily Occurrence of Maximum and Minimum Temperatures at Huron, South Dakota Each Week of the Year by Five Degree Intervals Together with Highest and Lowest Temperature Recorded and Standard Deviation of Temperatures Each Week of the Year" (1957). *Agricultural Experiment Station Agricultural Economics Pamphlets*. 190.  
[http://openprairie.sdstate.edu/agexperimentsta\\_ageconomics/190](http://openprairie.sdstate.edu/agexperimentsta_ageconomics/190)

This Pamphlet is brought to you for free and open access by the SDSU Agricultural Experiment Station at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in Agricultural Experiment Station Agricultural Economics Pamphlets by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact [michael.biondo@sdstate.edu](mailto:michael.biondo@sdstate.edu).

FREQUENCIES OF DAILY OCCURRENCE OF MAXIMUM AND MINIMUM  
TEMPERATURES AT HURON, SOUTH DAKOTA EACH WEEK OF THE YEAR  
BY FIVE DEGREE INTERVALS TOGETHER WITH HIGHEST AND LOWEST  
TEMPERATURE RECORDED AND STANDARD DEVIATION OF TEMPERATURES  
EACH WEEK OF THE YEAR

Prepared by

Ray F. Pengra

Department of Economics  
South Dakota State College  
Agricultural Experiment Station  
Brookings, South Dakota

630.7  
S. 87.02  
No. 83  
C. 2

#### ACKNOWLEDGMENT

This report was made possible as a result of the cooperative project by the South Dakota Agricultural Experiment Station, the U. S. Weather Bureau and the U. S. Reclamation Service to place South Dakota Weather data on I.B.M. punch cards.

TABLE OF CONTENTS

	Page
Introduction . . . . .	2
Week Numbers With Inclusive Dates . . . . .	3
Map Showing Location of Station . . . . .	4
FREQUENCY WEEKLY DISTRIBUTION OF DAILY MAXIMUM TEMPERATURES FOR HURON, SOUTH DAKOTA, HIGHEST AND LOWEST TEMPERATURE RECORDED AND STANDARD DEVIATION OF DAILY TEMPERATURE	
Week Number 45 through 3 . . . . .	5
Week Number 4 through 14 . . . . .	6
Week Number 15 through 25 . . . . .	7
Week Number 26 through 36 . . . . .	8
Week Number 37 through 44 . . . . .	9
FREQUENCY WEEKLY DISTRIBUTION OF DAILY MINIMUM TEMPERATURES FOR HURON, SOUTH DAKOTA, HIGHEST AND LOWEST TEMPERATURE RECORDED AND STANDARD DEVIATION OF DAILY TEMPERATURE	
Week Number 45 through 3 . . . . .	10
Week Number 4 through 13 . . . . .	11
Week Number 14 through 24 . . . . .	12
Week Number 25 through 35 . . . . .	13
Week Number 36 through 44 . . . . .	14

## INTRODUCTION

Frequencies of daily maximum and minimum temperatures are shown by five degree intervals for each week of the year for Huron, South Dakota, Covering the years 1881 through 1955.

Weeks are numbered starting March 1 in order to have each week over the entire period represent the same calendar dates. For table of week numbers and corresponding calendar dates see page 3.

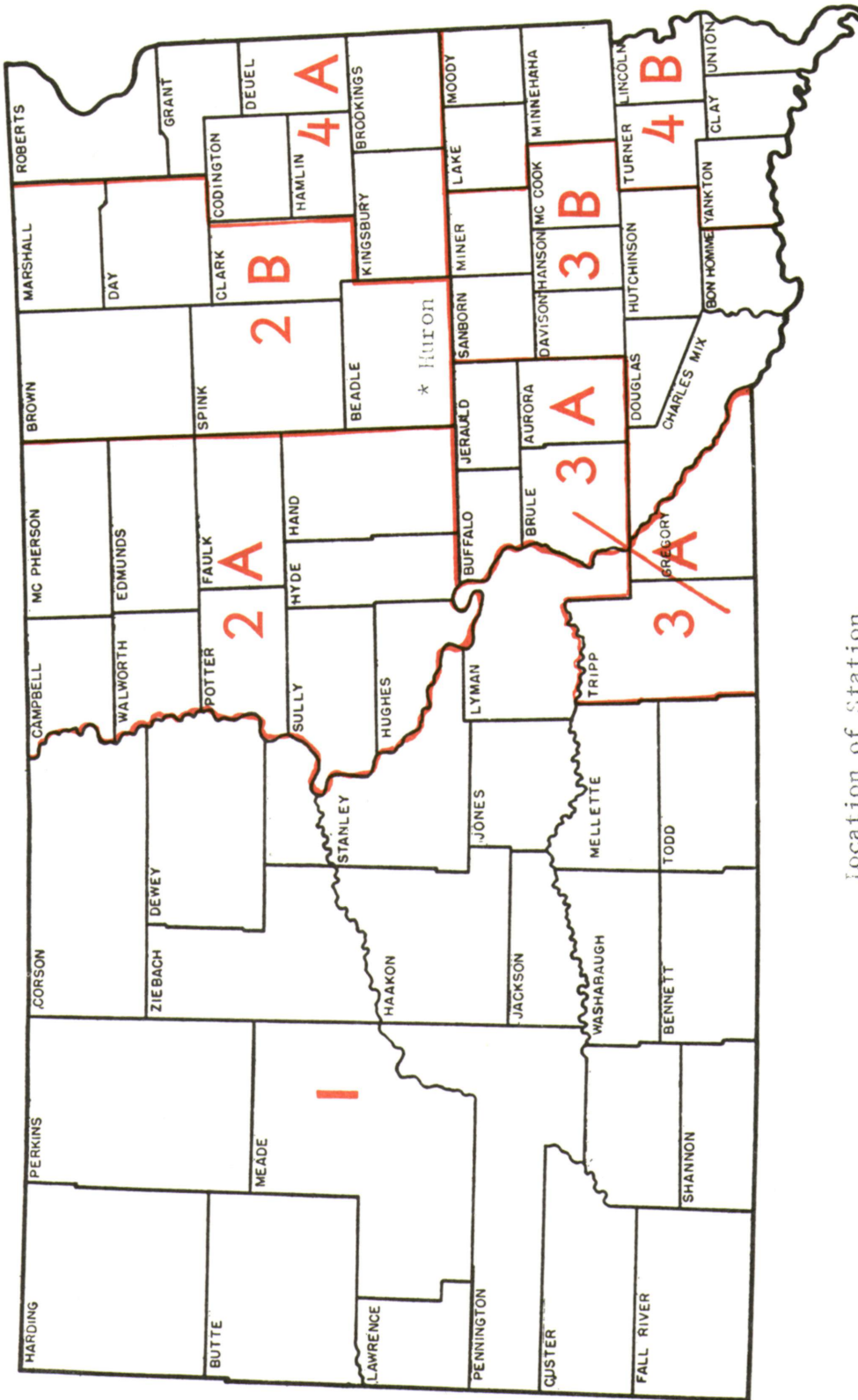
Week 45 includes calendar dates January 3 through January 9 and is shown first in the table in order for the table to present the data approximately in calendar year order.

At the bottom of each page highest and lowest temperatures within each category together with the standard deviation of the daily temperatures are given.

Week Numbers with Inclusive Dates

Week Number	Beginning Date	Ending Date	Week Number	Beginning Date	Ending Date
01	Mar. 1	Mar. 7	28	Sept. 6	Sept. 12
02	Mar. 8	Mar. 14	29	Sept. 13	Sept. 19
03	Mar. 15	Mar. 21	30	Sept. 20	Sept. 26
04	Mar. 22	Mar. 28	31	Sept. 27	Oct. 3
05	Mar. 29	Apr. 4	32	Oct. 4	Oct. 10
06	Apr. 5	Apr. 11	33	Oct. 11	Oct. 17
07	Apr. 12	Apr. 18	34	Oct. 18	Oct. 24
08	Apr. 19	Apr. 25	35	Oct. 25	Oct. 31
09	Apr. 26	May 2	36	Nov. 1	Nov. 7
10	May 3	May 9	37	Nov. 8	Nov. 14
11	May 10	May 16	38	Nov. 15	Nov. 21
12	May 17	May 23	39	Nov. 22	Nov. 28
13	May 24	May 30	40	Nov. 29	Dec. 5
14	May 31	June 6	41	Dec. 6	Dec. 12
15	June 7	June 13	42	Dec. 13	Dec. 19
16	June 14	June 20	43	Dec. 20	Dec. 26
17	June 21	June 27	44	Dec. 27	Jan. 2
18	June 28	July 4	45	Jan. 3	Jan. 9
19	July 5	July 11	46	Jan. 10	Jan. 16
20	July 12	July 18	47	Jan. 17	Jan. 23
21	July 19	July 25	48	Jan. 24	Jan. 30
22	July 26	Aug. 1	49	Jan. 31	Feb. 6
23	Aug. 2	Aug. 8	50	Feb. 7	Feb. 13
24	Aug. 9	Aug. 15	51	Feb. 14	Feb. 20
25	Aug. 16	Aug. 22	52	Feb. 21	Feb. 27
26	Aug. 23	Aug. 29	53	Feb. 28	Feb. 29
27	Aug. 30	Sept. 5			

# SOUTH DAKOTA



Location of Station

FREQUENCY WEEKLY DISTRIBUTION OF DAILY MAXIMUM TEMPERATURES FOR HURON,  
SOUTH DAKOTA, HIGHEST AND LOWEST TEMPERATURE RECORDED AND STANDARD  
DEVIATION OF DAILY TEMPERATURE  
1881-1955

Temperature Intervals	Week Number											
	45	46	47	48	49	50	51	52	1	2	3	
110 - 114												
105 - 109												
100 - 104												
95 - 99												
90 - 94												
85 - 89												
80 - 84												3
75 - 79											1	5
70 - 74							1			2	5	7
65 - 69							3	3	4	16	20	
60 - 64			5	1		4	4	4	10	18	29	
55 - 59	2	3	11	9	4	4	8	15	10	31	30	
50 - 54	5	6	8	15	14	14	12	32	34	40	39	
45 - 49	23	28	30	18	26	18	32	35	46	47	48	
40 - 44	42	37	34	39	32	55	48	57	64	63	81	
35 - 39	73	59	59	41	57	59	70	57	69	66	90	
30 - 34	67	83	55	67	68	68	78	73	80	87	65	
25 - 29	60	64	56	56	57	52	54	61	63	49	37	
20 - 24	52	47	47	60	49	51	54	74	45	40	28	
15 - 19	43	42	35	44	40	52	33	36	35	23	18	
10 - 14	36	43	55	33	50	34	41	32	27	15	8	
5 - 9	35	37	35	36	37	36	28	15	16	4	3	
0 - 4	35	29	36	41	32	24	22	9	6	4		
-5 - -1	20	16	22	33	21	17	16	6		2		
-10 - -6	8	10	12	12	10	16	4	2				
-15 - -11	6	3	9	4	12	5	3					
-20 - -16	4	3	2	2	2	2						
-25 - -21		1										
TOTAL	511	511	511	511	511	511	511	511	511	511	511	
Highest	55	59	64	63	58	61	70	68	74	75	84	
Lowest	-19	-21	-18	-19	-18	-20	-15	-10	3	-3	6	

Std.Dev. 15.30 15.07 16.97 16.46 16.18 15.09 15.36 14.05 13.46 14.32 13.43



FREQUENCY WEEKLY DISTRIBUTION OF DAILY MAXIMUM TEMPERATURES FOR HURON,  
SOUTH DAKOTA, HIGHEST AND LOWEST TEMPERATURE RECORDED AND STANDARD  
DEVIATION OF DAILY TEMPERATURE  
1881-1955

Temperature Intervals	Week Number											
	4	5	6	7	8	9	10	11	12	13	14	
110 - 114												
105 - 109										1		
100 - 104							1		2	1	3	
95 - 99							3	5	4	5	10	
90 - 94			1	1	2	9	13	6	12	17	29	
85 - 89	1	2	3	9	11	18	26	32	33	33	35	
80 - 84	6	10	9	21	23	29	29	38	52	82	68	
75 - 79	9	14	16	28	39	56	41	47	91	96	94	
70 - 74	17	18	38	49	70	54	83	93	93	93	103	
65 - 69	25	24	37	54	80	62	74	89	96	82	77	
60 - 64	29	42	65	58	61	72	83	72	70	58	52	
55 - 59	47	68	69	87	79	58	64	60	30	26	23	
50 - 54	62	49	73	71	62	70	41	43	16	15	16	
45 - 49	62	72	78	62	39	38	28	19	11	2	1	
40 - 44	58	87	58	39	31	30	18	7				
35 - 39	75	55	42	23	13	10	6		1			
30 - 34	52	43	17	5	1	5	1					
25 - 29	23	12	5	4								
20 - 24	28	14										
15 - 19	9	1										
10 - 14												
5 - 9												
0 - 4												
-5 - -1												
-10 - -6												
-15 - -11												
TOTAL	507	511	511	511	511	511	511	511	511	511	511	
Highest	85	89	94	90	90	94	101	98	104	106	101	
Lowest	9	19	26	27	32	31	34	40	36	45	48	
Std.Dev.	11.75	13.50	12.39	12.59	11.98	13.24	12.50	11.22	10.38	9.94	10.16	

FREQUENCY WEEKLY DISTRIBUTION OF DAILY MAXIMUM TEMPERATURES FOR HURON,  
SOUTH DAKOTA, HIGHEST AND LOWEST TEMPERATURE RECORDED AND STANDARD  
DEVIATION OF DAILY TEMPERATURE  
1881-1955

Temperature Intervals	Week Number										
	15	16	17	18	19	20	21	22	23	24	25
110 - 114						1	3	1	1		
105 - 109			4	2	8	5	9	8	2	3	1
100 - 104	3	4	4	10	17	24	27	27	20	15	1
95 - 99	13	21	32	34	51	39	43	57	49	37	34
90 - 94	30	51	65	72	78	90	92	87	81	84	85
85 - 89	52	87	86	116	105	119	116	121	112	117	128
80 - 84	94	102	111	114	129	125	129	115	120	109	118
75 - 79	115	101	104	79	77	67	66	74	88	92	74
70 - 74	100	88	62	57	35	37	26	19	33	40	58
65 - 69	54	33	29	27	16	11	5	9	10	14	15
60 - 64	40	16	13	7	2		2		2	6	4
55 - 59	8	6	1							1	
50 - 54	2	2									
45 - 49											
40 - 44											
35 - 39											
30 - 34											
25 - 29											
20 - 24											
15 - 19											
10 - 14											
5 - 9											
0 - 4											
-5 - -1											
-10 - -6											
-15 - -11											
TOTAL	511	511	511	518	518	518	518	518	518	518	518
Highest	102	104	109	108	109	110	111	110	110	109	105
Lowest	54	52	58	60	62	65	62	65	63	59	62
Std.Dev.	9.09	8.95	8.88	9.33	8.57	8.15	8.24	8.18	8.17	8.47	7.68

FREQUENCY WEEKLY DISTRIBUTION OF DAILY MAXIMUM TEMPERATURES FOR HURON,  
SOUTH DAKOTA, HIGHEST AND LOWEST TEMPERATURE RECORDED AND STANDARD  
DEVIATION OF DAILY TEMPERATURE  
1881-1955

Temperature Intervals	Week Number											
	26	27	28	29	30	31	32	33	34	35	36	
110 - 114												
105 - 109		1	1									
100 - 104	10	10	7	3								
95 - 99	31	33	21	7	8	2	1					
90 - 94	86	74	33	38	25	14	2	2	1			
85 - 89	90	88	63	56	37	25	21	9	3	4		
80 - 84	109	95	84	75	70	67	43	41	19	7		
75 - 79	88	75	79	80	78	84	62	50	35	16	3	
70 - 74	54	68	95	93	86	72	76	58	50	45	29	
65 - 69	29	52	65	76	65	73	88	74	72	53	41	
60 - 64	14	18	38	41	66	76	70	78	69	57	57	
55 - 59	7	4	26	32	34	50	68	71	71	66	84	
50 - 54			6	9	31	36	45	65	70	73	71	
45 - 49				6	16	15	23	41	46	65	69	
40 - 44				1	2	4	17	17	45	61	54	
35 - 39				1			2	10	23	38	44	
30 - 34								2	13	22	43	
25 - 29									1	4	11	
20 - 24										6	9	
15 - 19										1	2	
10 - 14											1	
5 - 9												
0 - 4												
-5 - -1												
-10 - -6												
-15 - -11												
Total	518	518	518	518	518	518	518	518	518	518	518	
Highest	104	105	106	103	99	98	97	92	91	86	77	
Lowest	55	55	50	39	40	43	37	30	25	17	14	
Std. Dev.	9.32	9.80	12.03	10.93	11.74	11.13	11.23	11.88	12.63	13.08	12.50	

FREQUENCY WEEKLY DISTRIBUTION OF DAILY MAXIMUM TEMPERATURES FOR HURON,  
SOUTH DAKOTA, HIGHEST AND LOWEST TEMPERATURE RECORDED AND STANDARD  
DEVIATION OF DAILY TEMPERATURE  
1881-1955

Temperature Intervals	Week Number							
	37	38	39	40	41	42	43	44
110 - 114								
105 - 109								
100 - 104								
95 - 99								
90 - 94								
85 - 89								
80 - 84								
75 - 79	1	1						
70 - 74	10	6	1		1			
65 - 69	24	14	1	1			1	
60 - 64	26	35	10	5	3	3	1	1
55 - 59	54	39	25	14	17	6	6	4
50 - 54	65	54	45	46	26	16	21	8
45 - 49	69	62	63	67	59	44	24	20
40 - 44	73	79	78	71	51	46	56	45
35 - 39	69	72	89	74	68	76	74	59
30 - 34	50	64	70	74	63	73	83	74
25 - 29	41	35	54	59	63	61	68	72
20 - 24	19	21	36	39	51	62	58	59
15 - 19	7	25	23	29	35	39	47	46
10 - 14	5	7	13	14	42	31	27	42
5 - 9	5	4	6	10	18	22	21	28
0 - 4			3	10	11	23	14	24
-5 - -1			1	5	9	9	12	18
-10 - -6					1	7	3	12
-15 - -11							2	3
-20 - -14								1
TOTAL	518	518	518	518	518	518	518	516
Highest	79	75	70	69	71	62	65	62
Lowest	7	6	-2	-5	-9	-10	-14	-17
Std.Dev.	13.34	13.59	12.27	13.36	14.47	14.37	13.72	14.60

FREQUENCY WEEKLY DISTRIBUTION OF DAILY MINIMUM TEMPERATURES FOR HURON,  
SOUTH DAKOTA, HIGHEST AND LOWEST TEMPERATURE RECORDED AND STANDARD  
DEVIATION OF DAILY TEMPERATURE  
1881-1955

Temperature Intervals	Week Number											
	45	46	47	48	49	50	51	52	1	2	3	
85 - 89												
80 - 84												
75 - 79												
70 - 74												
65 - 69												
60 - 64												
55 - 59												
50 - 54												
45 - 49												3
40 - 44									1		2	7
35 - 39				1	1	2	1	5	4	11	29	
30 - 34	5	9	9	7	11	13	12	27	46	62	76	
25 - 29	28	15	27	25	35	41	47	55	87	103	116	
20 - 24	53	42	29	41	51	53	55	63	79	83	78	
15 - 19	53	54	67	31	37	42	54	44	58	63	53	
10 - 14	52	65	46	49	42	51	58	70	54	74	43	
5 - 9	68	68	52	56	49	54	53	66	53	34	39	
0 - 4	50	46	49	65	59	49	62	53	43	34	38	
-5 - -1	45	64	52	54	57	57	50	44	40	15	15	
-10 - -6	43	57	52	51	45	47	44	37	28	17	9	
-15 - -11	38	33	50	49	43	31	33	29	14	8	3	
-20 - -16	37	32	31	53	42	27	24	13	4	4	1	
-25 - -21	21	15	26	19	23	25	12	4	1	1	1	
-30 - -26	11	5	17	8	11	9	5					
-35 - -31	5	3	4	2	4	8	1					
-40 - -36	1	2			1	2						
-45 - -41	1	1										
TOTAL	511	511	511	511	511	511	511	511	511	511	511	511
Highest	33	34	32	35	35	39	38	41	37	41	45	
Lowest	-43	-43	-34	-35	-36	-37	-33	-25	-24	-25	-22	

Std.Dev. 15.48 14.23 15.45 14.69 15.90 16.23 14.76 13.77 13.05 11.93 11.93

FREQUENCY WEEKLY DISTRIBUTION OF DAILY MINIMUM TEMPERATURES FOR HURON,  
SOUTH DAKOTA, HIGHEST AND LOWEST TEMPERATURE RECORDED AND STANDARD  
DEVIATION OF DAILY TEMPERATURE  
1881-1955

Temperature Intervals	Week Number									
	4	5	6	7	8	9	10	11	12	13
85 - 89										
80 - 84										
75 - 79										
70 - 74										2
65 - 69							1	2	3	7
60 - 64					1	1	5	11	22	42
55 - 59			1	2	7	26	37	38	53	71
50 - 54	1	2	5	14	36	39	48	51	113	125
45 - 49	7	3	19	44	56	78	85	96	121	127
40 - 44	17	28	60	72	89	108	104	140	106	75
35 - 39	34	65	76	110	107	102	104	94	56	43
30 - 34	113	140	130	112	122	86	90	60	28	15
25 - 29	110	105	120	92	60	47	31	14	8	3
20 - 24	74	89	62	44	27	21	6	5	1	1
15 - 19	59	30	27	14	5	2				
10 - 14	45	33	8	6	1	1				
5 - 9	26	11	3	1						
0 - 4	8	5								
-5 - -1	9									
-10 - -6	3									
-15 - -11	2									
-20 - -16										
-25 - -21										
-30 - -26										
-35 - -31										
-40 - -36										
-45 - -41										
TOTAL	508	511	511	511	511	511	511	511	511	511
Highest	50	52	57	59	60	63	66	65	66	72
Lowest	-15	0	7	6	13	14	20	20	24	24
Std.Dev.	10.35	8.64	8.12	8.43	8.37	8.74	8.59	8.22	7.81	7.92

FREQUENCY WEEKLY DISTRIBUTION OF DAILY MINIMUM TEMPERATURES FOR HURON,  
SOUTH DAKOTA, HIGHEST AND LOWEST TEMPERATURE RECORDED AND STANDARD  
DEVIATION OF DAILY TEMPERATURE  
1881-1955

Temperature Intervals	Week Number											
	14	15	16	17	18	19	20	21	22	23	24	
85 - 89												
80 - 84						2	1	1				
75 - 79			1	3	2	5	3	10	10	2	6	
70 - 74		1	12	18	35	37	44	37	41	36	19	
65 - 69	18	32	52	57	94	98	89	95	94	86	80	
60 - 64	57	78	117	124	123	142	149	157	158	146	141	
55 - 59	99	110	153	150	137	129	124	125	132	137	143	
50 - 54	123	144	107	109	80	77	87	70	66	78	81	
45 - 49	106	105	51	38	32	24	20	19	15	26	38	
40 - 44	77	32	17	10	12	2	1	4	2	7	9	
35 - 39	27	7	1	1								
30 - 34	4	2		1								1
25 - 29												
20 - 24												
15 - 19												
10 - 14												
5 - 9												
0 - 4												
-5 - -1												
-10 - -6												
-15 - -11												
-20 - -16												
-25 - -21												
-30 - -26												
-35 - -31												
-40 - -36												
-45 - -41												
TOTAL	511	511	511	511	515	516	518	518	518	518	518	
Highest	68	74	76	76	76	82	80	81	79	75	78	
Lowest	31	32	39	32	40	43	41	41	44	42	37	
Std.Dev.	7.58	6.99	6.60	6.75	7.00	6.70	6.49	6.62	6.52	6.60	6.77	

FREQUENCY WEEKLY DISTRIBUTION OF DAILY MINIMUM TEMPERATURES FOR HURON,  
SOUTH DAKOTA, HIGHEST AND LOWEST TEMPERATURE RECORDED AND STANDARD  
DEVIATION OF DAILY TEMPERATURE  
1881-1955

Temperature Intervals	Week Number											
	25	26	27	28	29	30	31	32	33	34	35	
85 - 89												
80 - 84					1							
75 - 79		3		2	1							
70 - 74	15	10	11	9	3							
65 - 69	83	65	61	31	11	8	2					
60 - 64	143	119	78	55	44	15	6	6	2			
55 - 59	123	113	102	99	60	38	36	18	8	4	2	
50 - 54	99	114	119	119	126	101	67	43	32	14	5	
45 - 49	38	56	77	105	111	112	88	80	66	35	16	
40 - 44	13	28	50	57	65	98	130	109	97	71	37	
35 - 39	4	8	15	27	53	86	101	114	117	99	83	
30 - 34		2	5	12	31	42	52	84	97	125	154	
25 - 29				2	11	15	28	43	70	96	99	
20 - 24					1	2	6	14	18	44	71	
15 - 19						1	2	7	7	21	24	
10 - 14									4	7	19	
5 - 9											2	2
0 - 4												5
-5 - -1												
-10 - -6												1
-15 - -11												
-20 - -16												
-25 - -21												
-30 - -26												
-35 - -31												
-40 - -36												
-45 - -41												
TOTAL	518	518	518	518	518	518	518	518	518	518	518	518
Highest	74	76	74	78	80	69	68	61	63	58	56	
Lowest	35	34	31	25	24	19	18	15	13	6	-6	
Std.Dev.	6.83	7.67	8.45	8.73	9.19	8.63	8.53	8.69	8.61	8.61	8.74	



FREQUENCY WEEKLY DISTRIBUTION OF DAILY MINIMUM TEMPERATURES FOR HURON,  
SOUTH DAKOTA, HIGHEST AND LOWEST TEMPERATURE RECORDED AND STANDARD  
DEVIATION OF DAILY TEMPERATURE  
1881-1955

Temperature Intervals	Week Number									
	36	37	38	39	40	41	42	43	44	
85 - 89										
80 - 84										
75 - 79										
70 - 74										
65 - 69										
60 - 64										
55 - 59										
50 - 54	2									
45 - 49	10	1	1		1					
40 - 44	16	9	5							
35 - 39	59	27	21	6	7	5			1	
30 - 34	110	83	67	42	25	21	14	16	11	
25 - 29	144	113	117	82	71	56	38	31	22	
20 - 24	96	101	96	110	110	82	74	65	35	
15 - 19	37	76	72	93	75	71	89	82	45	
10 - 14	28	53	55	65	52	80	67	60	69	
5 - 9	12	28	41	42	60	46	60	57	76	
0 - 4	4	12	26	41	47	48	52	65	60	
-5 - -1		7	8	20	30	45	31	48	68	
-10 - -6		6	9	10	22	29	33	46	49	
-15 - -11		2		4	11	25	27	23	42	
-20 - -16				1	6	5	22	15	16	
-25 - -21						5	9	3	17	
-30 - -26				2			1	4	1	
-35 - -31					1		1	2	5	
-40 - -36										
-45 - -41										
TOTAL	518	518	518	518	518	518	518	518	516	
Highest	51	46	45	39	45	36	34	36	34	
Lowest	0	-14	-9	-28	-32	-23	-31	-34	-34	
Std.Dev.	8.35	9.83	10.31	10.80	12.15	12.83	13.58	13.23	13.72	