STATION *(Climatological)* **Spirit Lake** *(River Station, if different)* | MONTH **Nov** | **2018**

STATE **IA** | COUNTY **Dickinson** | RIVER

TIME *(local)* OF OBSERVATION RIVER | TEMPERATURE **07:00** | PRECIPITATION **07:00** | STANDARD TIME IN USE

TYPE OF RIVER GAGE | ELEVATION OF RIVER GAGE ZERO | FLOOD STAGE | NORMAL POOL STAGE

WS FORM B-91 (03-09)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

DATE	TEMPERATURE: 24 HRS ENDING AT OBSERVATION MAX	MIN	AT OBSN	PRECIPITATION: 24 HR AMOUNTS Rain, melted snow, etc. (in and hundredths)	Snow, ice pellets, hail (ins.and tenths)	AT OB Snow, ice pellets, hail ice on ground (in)	Draw a straight line (-------) through hours precipitation was observed, and a wavy line (~~~~~) through hours precipitation probably occurred unobserved — A.M. 1 2 3 4 5 6 7 8 9 10 11 NOON P.M. 1 2 3 4 5 6 7 8 9 10 11	WEATHER (Observation Day) Mark 'X' for all types occurring each day: Fog	Ice pellets	Glaze	Thunder	Hail	Damaging winds	Time of occurrence if different from above	RIVER STAGE: Condition	Gage reading at ___ AM	Tendency	REMARKS (SPECIAL OBSERVATIONS, ETC.)
1	55	32	32	0.00	0.0	0											
2	56	30	39	0.00	0.0	0											
3	49	39	39	0.00	0.0	0	10 ~ 11 ~										
4	43	37	M	0.47	0.0	0	1 ~ 2 ~ 3 ~ 4 ~ 5 ~ 6 ~ 7 ~ 8 – 9 – 10 – 11 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10 ~										Light rain
5	41	36	37	0.00	0.0	0	8 – 9 – 10 – 11 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10 ~ 11 ~										
6	45	35	35	0.43	0.0	0	1 ~ 2 ~										Light rain
7	35	25	25	0.00	0.0	0											
8	32	23	23	0.00	0.0	0	5 – 6 – 7 – 8 – 9 – 10 ~ 11 ~										
9	29	13	13	T	T	T	10 – 11 – 1 – 2 – 3 – 4 –										Light snow
10	20	11	11	T	T	T											Flurries, occasional snow showers
11	22	11	M	0.00	0.0	0											
12	23	13	M	0.00	0.0	0	1 2 3 4 5 6 7 8 9 10 11 1 2 3 4 5 6 7 8 9 10 11										Flurries
13	21	8	8	T	T	0											
14	34	8	23	0.00	0.0	0											
15	46	23	27	0.00	0.0	0											
16	52	24	24	0.00	0.0	0	8 – 9 – 10 – 11 ~										Light snow
17	34	17	17	0.03	T	T	1 ~ 2 ~ 3 ~ 4 ~										Light snow
18	26	17	M	0.00	0.0	T											
19	29	12	M	0.00	0.0	T	5 – 6 – 7 – 8 – 9 – 10 –										Flurries
20	23	8	8	T	0.0	T											
21	38	8	30	0.00	0.0	0											
22	33	30	M	0.00	0.0	0	1 2 3 4 5 6 7 8 9 10 11 1 2 3 4 5 6 7 8 9 10 11										
23	42	33	38	0.00	0.0	0											
24	44	29	30	0.14	0.0	0											
25	34	24	M	0.00	0.0	0	11 ~										Flurries
26	24	9	9	T	T	T	1 ~ 2 ~ 3 ~ 4 ~ 5 ~ 6 ~ 7 – 8 – 9 – 10 – 11 – 1 –										Flurries
27	18	8	8	T	T	0											Snow showers; flurries
28	25	8	19	T	T	T	5 ~ 6 ~ 7 – 8 – 9 – 10 – 11 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 –										Light snow
29	28	19	22	0.06	T	T	10 ~ 11 ~		X	X							Light snow, sleet, freezing drizzle
30	36	22	27	T	0.0	0	1 ~ 2 ~ 3 ~ 4 ~ 5 ~ 6 ~ 7 –	X									Fog with light freezing mist
31																	
	34.6	20.4	SUM	1.13	T		CHECK BAR (for wire weight) NORMAL CHECK BAR	Fog	Ice pel	Glaze	Thund	Hail	Dam winds				

CHECK BAR READING	CHECK BAR DATE

CONDITION OF RIVER AT GAGE

A. Obstructed by rough ice
B. Frozen, but open at gage
C. Upper surface smooth ice
D. Ice gorge above gage
E. Ice gorge below gage
F. Shore ice
G. Floating ice
H. Pool stage

OBSERVER

SUPERVISING OFFICE
FSD Sioux Falls

STATION INDEX NO.
13-7859-01