STATION *(Climatological)* **Spirit Lake** *(River Station, if different)* | MONTH **Jan** | **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	TEMPERATURE: 24 HRS ENDING AT OBSERVATION MIN	TEMPERATURE: AT OBSN	PRECIPITATION: 24 HR AMOUNTS Rain, melted snow, etc. (in and hundredths)	PRECIPITATION: 24 HR AMOUNTS Snow, ice pellets, hail (ins.and tenths)	PRECIPITATION: AT OB Snow, ice pellets, hail ice on ground (in)	PRECIPITATION: 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	-5	-26	M	0.00	0.0	5												
2	-4	-18	-17	0.00	0.0	5	9 – 10 – 11 – NOON ~											
3	15	-17	-2	T	T	5			X									Freezing drizzle, light snow
4	3	-2	-1	0.00	0.0	5												
5	7	-8	-8	0.00	0.0	0												
6	4	-8	-6	0.00	0.0	5												
7	28	-6	M	0.00	0.0	5												
8	31	18	19	0.00	0.0	5												
9	38	17	30	0.00	0.0	3												
10	43	30	34	0.00	0.0	T	7 – 8 – 9 – 10 ~ 11 ~											
11	42	7	7	T	T	T	1 ~ 2 ~ 3 ~ 4 ~ 5 ~ 6 ~ 7 ~ 8 ~ 9 – 10 –	X										Drizzle, light snow
12	7	-10	-10	T	T	T												Light snow showers
13	8	-10	M	0.00	0.0	T												
14	14	3	M	0.00	0.0	T	5 – 6 – 7 – 8 – 9 – 10 – 11 – NOON – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 –											Light snow
15	21	-6	-6	0.04	2.0	2	4 – 5 – 6 – 7 – 8 – 9 – 10 – 11 – NOON – 1 – 2 – 3 – 4 ~ 10 ~ 11 ~											
16	-4	-9	-9	T	T	2	1 ~ 2 ~ 3 ~ 4 ~ 5 ~ 6 ~ 7 ~											
17	7	-11	7	0.00	0.0	2												
18	29	7	17	0.00	0.0	2												
19	40	17	28	0.00	0.0	T												
20	50	27	27	0.00	0.0	0												
21	43	27	32	0.00	0.0	0	9 ~ 10 ~ 11 ~ NOON											
22	34	26	M	0.24	2.1	2	1 ~ 2 ~ 3 ~ 4 ~ 5 ~ 6 ~ 7 – 8 – 9 – 10 – 11 – NOON – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 ~ 10 ~ 11 ~											Heavy snow/blizzard
23	33	21	21	2.31	12.3	14	1 ~ 2 ~ 3 ~ 4 ~ 5 ~ 6 ~ 7 – 8 – 9 – 10 – 11 – NOON – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10 – 11 –											
24	22	20	22	0.00	0.0	14												
25	26	21	21	0.00	0.0	13		X										
26	39	21	39	0.00	0.0	9		X										
27	42	24	24	0.00	0.0	6	11 ~											
28	35	17	M	0.04	2.0	5	1 ~ 2 ~ 3 ~ 4 ~											
29	17	-5	M	0.00	0.0	5												
30	14	-6	14	0.00	0.0	5												
31	35	14	31	0.00	0.0	3	9 – 10 – 11 –											
	23.0	5.6	SUM	2.63	18.4			Fog	Ice pel	Glaze	Thund	Hail	Dam winds					

CHECK BAR (for wire weight) **NORMAL CHECK BAR**

READING	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