

U.S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
Comparative snowfall observations.

Station: *No 9* Date *December 1909*

Unmelted snow measurements.

Date	Louver Plain					Estimated depth of snowfall in neighborhood.	Wind (Force. Dir.)	Amount of water from melted snow.
	Snow bin	Snow bin	Plat form	Snow 10' pipe	Snow gage,			
1								
2								
3								
4								
5	7.75	8.0	7.1	Bare	2.9	8.0	16.6 SW	0.875 inches
6	0.10	0.1	T	Bare	T	0.1	9.4 SE	0.61 "
7								
8	0.1	0.2	0.1	Bare	T	0.2	15.0 SW	0.02 "
9								
10	1.9	1.9	1.9	T	1.3	1.9	4.2 SW	0.25 "
11								
12								
13								
14								
15								
16								
17								
18								
19								
20	3.9	3.9	3.8	3.9	2.6	3.9	0.8 NW	0.3 "
21								
22								
23								
24								
25	0.2	0.2	0.2	0.1	T	0.2	1.6 NE	0.02 "
26								
27								
28								
29								
30								
31	11.3	11.3	11.6	11.0	6.8	11.3	1.1 NE	1.7

Sums---

3.175

Observer

Fred. J. Perkins

The snowstorm of Dec. 31 was the continuation of the rainstorm of Dec. 30. During the rainstorm the wind force was (average) 5.4 miles per hour; with the change to snow the wind dropped to 1.1 miles per hour. The first of the snow was necessarily very wet and adhered closely to ~~the~~ metal and wood work, clogging the orifice of the 10' pipe and materially reducing its diameter. The concave network of the louver bin held no snow, but the snow piled on the convex top to the same depth as contained in the bin - viz. 11.3 inches. The wind force increased at the end of the snowstorm, accounting for the extra 0.3 recorded by the platform - being mostly spindrift.

(Over)

- F. J. P.

Wind Velocity — 24 hour Readings (Approximately)

Readings taken on or about 9 a.m. Daily.
Wind gauge dial records to 990 only.

Date	Time between Readings	Dial Reading	Miles in 24 hours — approximately
Last Reading in November		847.0	
From 9.20 a.m. Dec 1. to 9.55 a.m. Dec 2	24 h. 35 m.	15.2	158.2
" 9.55 a.m. Dec 2 to 9.30 a.m. Dec 3	23 h. 35 m.	153.0	137.8
" 9.30 a.m. Dec 3 to 9.30 a.m. Dec 4	24 h.	219.9	66.9
" 9.30 a.m. Dec 4 to 9.45 a.m. Dec 5	24 h. 15 m.	618.4	398.5
" 9.45 a.m. Dec 5 to 9.50 a.m. Dec 6	24 h. 05 m.	755.3	136.9
" 9.50 a.m. Dec 6 to 9.45 a.m. Dec 7	23 h. 55 m.	981.5	226.2
" 9.45 a.m. Dec 7 to 10.05 a.m. Dec 8	24 h. 20 m.	283.9	292.4
" 10.05 a.m. Dec 8 to 10.00 a.m. Dec 9	23 h. 55 m.	644.3	360.4
" 10.00 a.m. Dec 9 to 9.15 a.m. Dec 10	23 h. 15 m.	745.8	101.5
" 9.15 a.m. Dec 10 to 9.15 a.m. Dec 11	24 h.	807.2	61.4
{ From Dec 11 to Dec 17 the observer was with Prof Church on Mount Rose.			
Dial Reading at 9.35 a.m. Dec 18		225.1	
From 9.35 a.m. Dec 18. to 9.40 a.m. Dec 19	24 h. 05 m.	298.1	73.0
From 9.40 a.m. Dec 19 to 9.45 a.m. Dec 20	24 h. 05 m.	317.8	19.7
" 9.45 a.m. Dec 20 to 9.45 a.m. Dec 21	24 h.	364.4	46.6
" 9.45 a.m. Dec 21 to 8.45 a.m. Dec 22	23 h.	406.4	42.0
" 8.45 a.m. Dec 22 to 9.35 a.m. Dec 23	24 h. 50 m.	455.3	48.9
" 9.35 a.m. Dec 23 to 9.30 a.m. Dec 24	23 h. 55 m.	489.7	34.4
" 9.30 a.m. Dec 24 to 10 a.m. Dec 25	24 h 30 m.	540.1	50.4
" 10.00 a.m. Dec 25 to 9.50 a.m. Dec 26	23 h. 50 m.	579.5	39.4
" 9.50 a.m. Dec 26 to 9.50 a.m. Dec 27	24 h.	620.2	40.7
" 9.50 a.m. Dec 27 to 9.25 a.m. Dec 28	23 h. 35 m.	655.7	35.5
" 9.25 a.m. Dec 28 to 9.30 a.m. Dec 29	24 h. 05 m.	681.0	25.3
" 9.30 a.m. Dec 29 to 9.30 a.m. Dec 30	24 h.	722.3	41.3
" 9.30 a.m. Dec 30 to 9.30 a.m. Dec 31	24 h.	851.4	129.1
" 9.30 a.m. Dec 31 to 10.00 a.m. Jan 1	24 h. 30 m.	878.8	27.4

(Over)

U.S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
Comparative snowfall observations.

Station: *No 9* Date *January 1910*

Unmelted snow measurements.

Date	Louver Plain Snow Snow Plat Snow 10' Snow					Estimated depth of snowfall in neighborhood.	miles per hour Wind (Force. Dir.)	Amount of water from melted snow.
	bin	bin	form	scf.	pipe gage,			
1								
2								
3								
4								
5								
6								
7								
8								
9	3.7	3.7	3.5	3.5	3.1	3.7	1.6 NE	0.4 "
10								
11								
12								
13								
14	1.5	1.5	Windswept	—	0.9	1.5	17.7 SW	0.15 "
15	11.1	11.3	13.6	11.0	7.5	11.3	16.8	1.45
16							2.25	
17								
18								
19								
20								
21								
22								
23	5.2	5.3	6.7	—	2.5	5.3	16.5 S	0.7 "
24								
25								
26								
27								
28								
29								
30								
31								

Feb 1 - Snow Scale at Contact Pass reads 5 ft.
 " " at Camp Prather " 1.5 ft.
 " " at Mount Rose Ranch " 1.6 ft.

Sums---

Observer *Fred S. Estlin*

The storm of Jan 15-16 came out of the S.W. During the night of the 15th the wind changed to N.E. and held that direction till the finish at 3 p.m. Jan. 16th. The initial wind force was 16.8 miles per hour, but during the night it dropped to 2.25 - see form on other side of this page. Wherever possible the snow made drifts - back of the ranch house is a drift 5.5 ft. deep. On the platform, snow measurements ranged from 14.2 inches at S.W. corner to 9 inches at N.E. corner; the average of 8 measurements was 13.6 inches. The wire work on the louver bin held very little snow, and on the inside, the N. and S. angle boards held 50 per cent. more than the E. and W.

Storm of Jan. 23-24: In the louver and plain bins the snow piled at the N. ends, - varying from 9 inches at N. to 3 inches at S. ends. On the platform the drift was deeper and diametrically different - varying from 11 inches at S. end to 4 inches at N. end.

(over)

Wind Velocity - 24 hour Readings (Approximately)

Readings made on or about 9 a.m. daily
Wind gauge records to 990 miles only

Date	Hours between Readings	Dial Reading	Miles in 24 hours
Last Reading 10 a.m. Jan 1.		878.8	
From 10 a.m. Jan 1 to 9.45 a.m. Jan 2	23 h. 45 m.	977.1	98.3
" 9.45 a.m. Jan 2 to 9.25 a.m. Jan 3	23 h. 40 m.	41.7	54.6
" 9.25 a.m. Jan 3 to 9.25 a.m. Jan 4	24 h.	144.3	102.6
" 9.25 a.m. Jan 4 to 9.10 a.m. Jan 5	23 h. 45 m.	223.0	78.7
" 9.10 a.m. Jan 5 to 9.10 a.m. Jan 6	24 h.	267.2	44.2
" 9.10 a.m. Jan 6 to 9.15 a.m. Jan 7	24 h. 05 m.	401.2	134.0
" 9.15 a.m. Jan 7 to 9.15 a.m. Jan 8	24 h.	465.5	64.3
" 9.15 a.m. Jan 8 to 9.30 a.m. Jan 9	24 h. 15 m.	541.9	76.4
" 9.30 a.m. Jan 9 to 8.30 a.m. Jan 10	23 h.	578.4	36.5
" 8.30 a.m. Jan 10 to 9.30 a.m. Jan 11	25 h.	600.7	22.3
" 9.30 a.m. Jan 11 to 9.20 a.m. Jan 12	23 h. 50 m.	645.7	45.0
" 9.20 a.m. Jan 12 to 9.20 a.m. Jan 13	24 h.	686.8	41.1
" 9.20 a.m. Jan 13 to 9.20 a.m. Jan 14	24 h.	121.3	424.5
" 9.20 a.m. Jan 14 to 9.30 a.m. Jan 15	24 h. 10 m.	524.7	403.4
" 9.30 a.m. Jan 15 to 9.30 a.m. Jan 16	24 h.	579.0	54.3
" 9.30 a.m. Jan 16 to 9.15 a.m. Jan 17	23 h. 45 m.	632.1	53.7
" 9.15 a.m. Jan 17 to 9.20 a.m. Jan 18	24 h. 05 m.	699.5	66.8
" 9.20 a.m. Jan 18 to 9.30 a.m. Jan 19	24 h. 10 m.	767.0	67.5
" 9.30 a.m. Jan 19 to 9.30 a.m. Jan 20	24 h.	826.4	59.4
" 9.30 a.m. Jan 20 to 9.30 a.m. Jan 21	24 h.	880.8	54.4
" 9.30 a.m. Jan 21 to 9.30 a.m. Jan 22	24 h.	926.1	45.3
" 9.30 a.m. Jan 22 to 9.15 a.m. Jan 23	23 h. 45 m.	968.7	42.6
" 9.15 a.m. Jan 23 to 9.15 a.m. Jan 24	24 h.	374.5	395.8
" 9.15 a.m. Jan 24 to 9.15 a.m. Jan 25	24 h.	491.2	116.7
" 9.15 a.m. Jan 25 to 9.25 a.m. Jan 26	24 h. 10 m.	824.9	333.7
" 9.25 a.m. Jan 26 to 7.30 a.m. Jan 27	22 h. 05 m.	883.2	58.3
" 7.30 a.m. Jan 27 to 9.30 a.m. Jan 28	26 h.	929.6	46.4
" 9.30 a.m. Jan 28 to 9.00 a.m. Jan 29	23 h. 30 m.	968.4	38.8
" 9.00 a.m. Jan 29 to 9.00 a.m. Jan 30	24 h.	60.1	81.7
" 9.00 a.m. Jan 30 to 9.00 a.m. Jan 31	24 h.	97.7	37.6
" 9.00 a.m. Jan 31 to 9.00 a.m. Feb 1	24 h.	320.3	222.6

Fred. J. Collins

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