

CLIMATOLOGICAL DATA FOR DECEMBER, 1913

DISTRICT NO. 10, GREAT BASIN.

ALFRED H. THIESSEN, District Editor.

GENERAL SUMMARY.

December was unusually cold in all parts of the district, nearly every station reporting the monthly mean temperature below normal, but there are on record many years when the December temperatures were lower than during the present month. The precipitation averaged somewhat above normal, and the month was much wetter than December, 1912, there being more rainy days, but this did not seem to interfere with outside work.

For the district there was on the average 13 clear days, 8 partly cloudy, 10 cloudy, and 6 rainy days.

TEMPERATURE.

The temperature for the district as a whole averaged 26° or 2.4° below normal. The only portion of the district where the monthly means were not below the normal was the extreme west-central part, where the averages were higher than normal. The local means ranged from 13° at Cokeville, Wyo., to 47.5° at Jean, Nev. The lowest means occurred in the extreme northeastern portion of the district, and the highest in the California and the western and southwestern parts of the Nevada areas. The greatest deficiency was at Woodruff, Utah, whose mean was 13.2°, or 7.7° below normal.

The first two decades were the warmest parts of the month, and at all stations the highest temperature for the month was recorded in that period, except at a few whose highest occurred on the last day. The coldest period extended from the 19th to the 24th, inclusive, when zero temperatures were quite general, and when the majority of stations reported their minimum temperatures.

The highest temperatures for the month in the respective States, or parts of States, were 41° on the 31st at Evanston, Wyo.; 48° on the 14th at Weston, Idaho; 54° on the 13th at Beaver, on the 15th at Cedar City, and on the 31st at Scipio, all in Utah; 65° on the 4th and 5th at Jean, Nev.; 72° on the 7th at Cliff, Oreg.; and 56° on the 12th and other dates at Truckee, Cal.

The lowest temperatures were: -19° on the 22d and 30th at Border and on the 21st at Evanston, both in Wyoming; -12° on the 21st at Grace, Idaho; -21° on

the 21st at Ibapah, Utah; -22° on the 28th and 29th at Tecoma, Nev.; -6° on the 18th at Cliff, Oreg.; and -2° on the 4th at Bridgeport, Cal.

PRECIPITATION.

The precipitation for the district averaged 1.69 inches, or 0.17 inch above normal. The distribution throughout the district was quite uneven, the larger amounts occurring on the western slopes of the Wasatch Mountains, and in the Oregon, California, and northern and western portions of the Nevada areas; and the lesser amounts in the western part of the Utah and eastern part of the Nevada areas.

The greatest monthly excess in precipitation was 1.92 inches at Quinn River Ranch, Nev., whose monthly amount was 2.65 inches; at Jean and Rhyolite, Nev., no rainfall was recorded. The largest monthly amount was 10.29 inches at Marlette Lake, Nev.; and the largest 24-hour amount was 4.67 inches at Tahoe, Cal., on the 31st.

In the Nevada area, while the average precipitation was but 0.17 inch above normal, it was 6 times as much as occurred during December, 1912. Most of the moisture fell on the first few days and during the latter half of the month, the larger amounts occurring toward the close of the month.

More than the normal snowfall occurred in the Utah area during this December, and much more than in the corresponding month of 1912. The snow was well distributed, and only a few correspondents reported a deficiency. Judging from the conditions on the last day of December, it would seem that the prospective water supply was above normal.

The snowfall in the Truckee, Carson, Walker, and Humboldt Basins of the Nevada area was much heavier than during December of the three preceding years. The average amount for the period September 1 to December 31 for the Truckee Basin was 10.7 inches, or 5.6 inches more than for the same period last year; for the Carson Basin, 6.5 inches, or 1.7 inches more than last year; for the Walker Basin, 3.7 inches, or 1.7 inches more than last year; and for the Humboldt Basin, 3.9 inches, or 0.5 inch less than last year. The average amount in all the basins is greater than usual at this season of the year.

TABLE 1.—Climatological data for December, 1913. District No. 10, Great Basin.

Table with columns: Stations, Counties, Elevation, Length of record, Temperature (Mean, Departure from normal, Highest, Date, Lowest, Date, Greatest daily range), Precipitation (Total, Departure from normal, Greatest in 24 hours, Total snowfall), Sky (Number of rainy days, Number of clear days, Number of partly cloudy days, Number of cloudy days), Prevailing wind direction, Observers.

TABLE 1.—Climatological data for December, 1913. District No. 10—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.					Precipitation, in inches.				Sky.			Prevailing wind direction.	Observers.			
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelting.	Number of rainy days, ^a 0.01 inch or more.			Number of clear days.	Number of partly cloudy days.	Number of cloudy days.
<i>Nevada.</i>																				
Austin	Lander	6,594	24														F. O. Bove.			
Battle Mountain	do.	4,843	42	25.5	- 5.4	60	12	- 11	27	62	0.78	- 0.01	0.45	7.5	4	10	15	Southern Pacific Co.		
Beowawe	Eureka	4,905	42	24.7	- 5.1	48	11	- 8	28	36	1.06	+ 0.22	0.65	7.1	3	13	11	Do.		
Carlin	Elko	5,232	42															Do.		
Cherry Creek	White Pine	6,450	5	23.3		49	11	- 10	21	32	0.54		0.10	10.0	7	20	6	J. H. Leishman.		
Clover Valley	Elko	6,000	12	25.2	- 1.5	58	9	- 13	28	46	1.17	- 0.39	0.65	11.0	2	14	9	I. F. Wiseman.		
Columbia	Esmeralda	5,750	6	29.7		53	9		21	32	0.32		0.12	4.0	5	12	11	A. Booth.		
Dry Farm	Elko	5,600	1	23.6		47	11	0	23	32	1.96		0.63	23.0	7			Walfrid Sohlman.		
East Rochester	Humboldt	7,500	0	29.8		49	10	12	21	20	0.84		0.40	7.8	6	16	0	E. B. Mills.		
Elko	Elko	5,432	42	20.2	- 6.9	62	4	- 17	27	52	0.60	- 0.56		8.8	5			Western Pacific Co.		
Eureka	Eureka	6,500	15	26.6	- 4.4	51	11	- 8	21	40	0.23	- 0.86	0.10	11.5	5	11	3	Clay Simms.		
Fallon	Churchill	3,965	19	31.7	- 0.3	62	31	13	5	33	0.30	- 0.39	0.13	1.9	6	12	5	U. S. Experiment Station.		
Fernley	Lyon	4,200	40	28.7	- 1.5	58	31	6	27	35	1.13	+ 0.61	0.36	6.8	7	15	7	Mrs. G. A. Steale.		
Gardnerville	Douglas	4,830	22	32.6	+ 0.4	56	13†	13	4	35	3.16	+ 1.01	2.55	2.0	4			Forest Service.		
Gerlach	Washoe	3,931	0	29.2		64	1	- 5	7	38	0.44		0.21	7.3	5	18	4	Western Pacific Co.		
Geysers	Lincoln	6,055	9	16.3		50	5†	21	28	62	0.70		0.40	7.0	2	8	21	Mrs. J. F. Wambolt.		
Glenbrook	Douglas	6,240	4	30.2		52	7	14	20†	29	5.28		1.50	33.0	13	14	7	C. C. Henninggen.		
Golconda	Humboldt	4,697	34	27.2	- 5.5	55	31	0	27	35	1.07	+ 0.24	0.68	10.7	3	10	10	Southern Pacific Co.		
Hallock	Elko	5,631	20	19.2 ^d	- 4.8	54 ^d	12	- 15 ^d	28	49 ^d	0.85	- 0.31	0.25	8.0	6	14	4	Do.		
Indian Springs	Clark	3,136	0	38.3		57	15	20	21	30	0.20		0.20	2.0	1	24	4	Ira McFarland.		
Jean	do.	2,074	5	47.5		65	4†	23	12	34	0.00		0.00	0	0	22	6	Selt Lake Route.		
Lahontan	Churchill	4,200	1	33.8		59	31	6	19	31	1.61		0.77	9.3	7	14	5	U. S. Reclamation Service.		
Leeland	Nye	2,500	0															Agent T. & T. R. R.		
Lewers Ranch	Washoe	5,500	25	31.6	- 2.4	56	5†	12	21	37	4.10	- 0.02	2.10	16.0	7	6	15	Ross Lewers.		
Lida	Esmeralda	6,037	0	25.4 ^a		49 ^a	7	6 ^a	21	25	0.60		0.43	7.6	2	14	5	L. F. Detwiler.		
Lovelocks	Humboldt	3,977	19															A. P. Tillford.		
McDermitt	do.	4,700	23	28.7	- 3.1	51	7†	- 6	27	33	1.73	+ 0.43	0.36	15.3	9	14	10	F. M. Bullock.		
McGill	White Pine	6,338	22	26.1	- 0.5	51	10	- 5	20†	35	0.87	- 0.38	0.25	6.2	5	9	15	R. E. Middagh.		
Metropolis	Elko	0	0	21.4		43	15	- 9	28	29	1.50		0.80	17.0	6			O. M. Lloyd.		
Millett	Nye	6,002	5	26.0		61	31	- 3	27	47	0.20			2.0	2	15	4	Fred J. Jones.		
Mina	Mineral	4,600	6	32.0		54	12†	8	23	41	1.13		1.00	11.1	3	12	6	Southern Pacific Co.		
Oasis Ranch	Esmeralda	5,106	0	33.6 ^d		63	16†	4	23	57	1.43		0.60	10.0	4	15	8	A. S. Patterson.		
Potts	Nye	6,990	20	22.0	- 2.3	49	8	- 8	18†	40	0.70	+ 0.19	0.40	7.0	3	7	6	Mrs. Maude Potts.		
Quinn River Ranch	Humboldt	4,860	11	22.4 ^a	- 6.5	51 ^a	14	- 10 ^a	24†	43	2.65	+ 1.92	0.76	18.0	8			F. M. Payne.		
Rebel Creek	do.	1	1															E. J. Hyatt.		
Reno	Washoe	4,532	42	33.8	+ 0.1	55	7	17	3	32	3.09	+ 1.42	1.83	9.4	13	11	8	U. S. Weather Bureau.		
Rhyolite	Nye	3,980	0	43.5		70	4	20	21	30	0.00		0.00	0	0	7	11	13	Chas. Krohen.	
Sand Pass	Washoe	4,198	0	33.2 ^a		50 ^a	11	7	27	30	2.00		1.30	6.0	8	11	8	12	Western Pacific Co.	
Searchlight	Clark	3,445	0	42.6 ^a		57 ^a	13	27 ^a	21	22 ^a				0					C. L. Aug. Mahn.	
Soda Lake	Churchill	4,534	6																U. S. Reclamation Service.	
Tecoma	Elko	4,812	35	24.8	- 1.3	60	1†	- 22	28†	76	0.05	- 0.55	0.02	1.7	4	8	14	9	Southern Pacific Co.	
Tonopah	Nye	6,090	8	28.9		46	9	14	21	21	0.29		0.12	4.4	4	9	13	9	U. S. Weather Bureau.	
Well	Elko	5,631			- 2.5			- 12	21†		1.10	- 0.15	0.65	11.5	4	9	16	0	Southern Pacific Co.	
Winnemucca	Humboldt	4,432	34	27.4	- 3.3	54	31	2	27	34	1.84	+ 0.85	0.79	9.4	9	12	4	15	U. S. Weather Bureau.	
Yerington	Lyon	4,375	0	30.6		57	6†	11	5	33	0.55		0.18	3.0	7	16	4	11	High School.	
<i>Oregon.</i>																				
Burns	Harney	4,157	22	26.5	+ 0.9	52	1	- 1	25	38	2.05	+ 0.83	0.54	29.0	5	14	8	9	J. C. Welcome, jr.	
Cliff	Lake	4,300	6	30.2		72	7	- 6	18	60	0.85		0.35	11.0	7	8	13	10	John C. Green.	
Palsley	do.	4,500	10	27.9 ^a		50 ^a	10	10 ^a	9	36 ^a	0.80 ^a		0.74 ^a	2.0 ^a	2 ^a	13 ^a	8 ^a	9 ^a	C. M. Sain.	
Silver Lake	do.	4,700	16	29.4	- 0.4	58	13	4	9	39	1.32	+ 0.20	0.90	1.5	4	13	16	2	G. W. Marvin.	
<i>California.</i>																				
Bridgeport	Mono	6,500	0	26.8		54	11	- 2	4	43	2.34		1.0†	25.7	12	19	6	6	A. F. Scott.	
Cathedral Park	Eldorado	6,400	0	34.4		51	11†	11	23	32	9.93		3.80	51.0	11	10	4	17	3	Carl Fluegge.
Tahoe	Lacoe	6,240	2	28.8		50	6†	5	16	3 ^a	9.71		4.67	30.0	9	13	2	16	w.	
Truckee	Nevada	5,819	41	32.6	+ 3.9	56	12†	8	4	40	4.23	- 0.36	0.80	42.0	12	14	1	16	e.	

^a, ^b, ^c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
^{**} Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
[†] Also on other dates.
^T Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—Daily precipitation for December, 1913. District No. 10, Great Basin.

Stations.	Watershed.	Day of month.																															Total.			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
Wyoming.																																				
Border	Bear	0.18																														0.04	0.82			
Cokeville	do																															0.30	0.69			
Evanston	do	.26	0.22													0.14																	0.93			
Idaho.																																				
Geneva	Bear																															.84	1.22			
Grace	do															0.10																.40	1.30			
Paris	do															.05																.11	0.29			
Weston	do																															.10	0.98			
Utah.																																				
Alpine	G. S. Lake																																.20	1.60		
Beaver	Sevier Lake	T.			0.05																											.25	1.90			
Black Rock	do	T.	T.																														.10	0.10		
Brigham City	G. S. Lake																																.40	2.80		
Burrville	Sevier Lake	.36																														.02	0.04			
Castle Rock	G. S. Lake	.10	.05																													.05	0.90			
Cedar City	Desert	*	.30																															.35	0.89	
Center	do	.05																															.95	1.80		
Clarkston	G. S. Lake																																	.10	1.00	
Corinne	do																																	.40	0.50	
Deseret	Sevier Lake	.13																																.10	0.93	
Elberta	G. S. Lake	.04	.13																															.01	1.45	
Enterprise	Desert			0.38																														.01	0.65	
Erekson	do	.17																																.10	3.70	
Farmlington	G. S. Lake																																	.20	1.99	
Fillmore	Sevier Lake	1.12	.01																														.13	0.70		
Garland	G. S. Lake																																	.09	1.46	
Garrison	Desert	.40																																.09	1.46	
Government Creek	do	.20	.05																																.09	1.46
Granger	G. S. Lake																																		.02	0.24
Grantsville	do	.12																																.02	0.24	
Grouse Creek	Desert																																	.14	1.78	
Heber	G. S. Lake	T.																															.14	1.23		
Henefer	do	.14																															.14	1.64		
Hooper	do																																		.20	0.90
Ibapah	Desert	.10	.15																																.20	1.64
Ibox	do																																		.20	1.64
Isopah	do	.10																																	.20	1.64
Junction	Sevier Lake	.20																																	.20	1.64
Kanosh	do	1.20																																	.20	1.64
Kelton	G. S. Lake																																		.20	1.64
Lemay	Desert						0.05																												.20	1.64
Levan	Sevier Lake	.35																																	.20	1.64
Logan	G. S. Lake																																		.20	1.64
Low	Desert																																		.20	1.64
Lucin	do																																		.20	1.64
Manti	Sevier Lake	.19																																	.20	1.64
Maple Creek	G. S. Lake	.04			T.																														.20	1.64
Marion	do																																		.20	1.64
Marysvale	Sevier Lake																																		.20	1.64
Meadowville	G. S. Lake	*	.17																																.20	1.64
Midlake	do																																		.20	1.64
Midvale	do																																		.20	1.64
Milford	Sevier Lake		.60																																.20	1.64
Millville	G. S. Lake																																		.20	1.64
Mills	Sevier Lake																																		.20	1.64
Minersville	do	.17			.01																														.20	1.64
Modena	Desert	T.	T.	.03																															.20	1.64
Morgan	G. S. Lake	.11																																	.20	1.64
Moron	Sevier Lake	*	.03																																.20	1.64
Mosta	G. S. Lake	T.																																	.20	1.64
Nephi	do																																		.20	1.64
New Castle	Desert																																		.20	1.64
Oak City	Sevier Lake																																		.20	1.64
Ogden	G. S. Lake																																		.20	1.64
Panguitch	Sevier Lake																																		.20	1.64
Park City	G. S. Lake	.30	.08																																.20	1.64
Park Valley	Desert																																		.20	1.64
Parowan	do	1.15																																	.20	1.64
Payson	G. S. Lake	.15																																	.20	1.64
Pelican Point	do																																		.20	1.64
Pineview	do																																		.20	1.64
Pinto	Desert				.51																														.20	1.64
Promotory	G. S. Lake																																		.20	1.64
Provo	do																																			

TABLE 3.—Maximum and minimum temperatures at selected stations for December, 1913. District No. 10, Great Basin.

Table with columns for Date, Burns, Oreg., Nevada (Cherry Creek, Elko, Eureka, Fallon, Gerlach, Jean, McDermitt, Millett, Mina, Reno, Tecoma, Tonopah, Winnemucca), and Max/Min values for each station.

Table with columns for Date, Wyoming (Border, Evanston, Weston, Idaho), Utah (Black Rock, Corinne, Government Creek, Marysvale, Meadowville, Modena, Ogden, Parowan, Provo, Salt Lake City), and Max/Min values for each station.

a, b, c, indicate, respectively, 1, 2, 3, etc., days missing from the record.
** Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.