

## METEOROLOGICAL SERVICE, DOMINION OF CANADA.

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# Monthly Weather Review.

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## INTRODUCTION.

In compiling the present Review the principal data made use of are the telegraph reports of observations received at this office for the purpose of weather forecasting, and reports by mail from voluntary observers and storm signal agents. For the material used in tracing the paths of areas of high and low pressure in the United States, we are indebted to the Chief of the Weather Bureau, Washington, D.C.

## REMARKS UPON THE WEATHER.

The weather of January was characterised by unusually high temperature, much bright sunshine, moderate precipitation, and a preponderance of winds from a southerly direction throughout the greater portion of the country. The comparatively open weather, resulting in the melting of snow over large areas, was a great hindrance to lumbering and other interests, but upon the ranches of the west it was of great benefit to cattle.

In British Columbia the weather was exceptionally fine and bright, whilst the rainfall and temperature were about average, the only exception being at Victoria and Barkerville where the temperature was considerable above average and the precipitation below, and at Agassiz where both were much above average. On Vancouver and the Gulf Islands there were only very light flurries of snow and a number of garden flowers were in bloom, roses being gathered at Victoria on the 17th. At Port Renfrew on the west coast of Vancouver Island ripe strawberries were gathered on the 31st. At Okanagan Mission on the Upper Mainland buttercups were in bloom throughout the month.

The weather over the North-west Territories was phenomenally mild and it was not until the end of the month that any pronounced cold weather set in. The precipitation at all stations, excepting Edmonton and Battlefield, was average or slightly below, rain falling at many places. This mild weather with much bright sunshine quickly melted the snow and although benefiting cattle, which were enabled to graze, was a great hindrance to sleighing.

In Manitoba the weather was almost equally mild with that in the Territories; and the precipitation though varying slightly, was about average, the only marked difference being 1.13 inch above at Barnardo. Temperatures below zero occurred frequently, but they were unimportant until the last few days of the month; upon several days the temperatures exceeded 40° at some stations more especially on or about the 19th. This mild weather caused the snow to melt quickly leaving the ground bare or nearly so in most districts. Throughout the month there was much bright sunshine. Fogs were recorded at three stations.

The mild weather in the last mentioned province also extended to Ontario but in this portion of the country the excess of average was not nearly so great and at a few stations the temperature was normal. The precipitation was generally below average, at a few places however it was a little above. In most districts there was much bright sunshine alternating frequently with cloud and falls of rain or snow, also much wind. Temperatures below zero were almost general but they were nowhere exceptional. In northern districts sleighing was fair throughout the month but in the southern portion of the province there were only several short periods during which sleighing was fair. Fogs occurred at a large number of places, five being reported from each of four stations.

In the province of Quebec the weather though dull was unusually mild, whilst the precipitation, which included some rain, was generally average or above. At Quebec and Father Point, however, the precipitation was slightly below average. With the exception of 27.1 at Chicoutimi the temperatures recorded below zero were quite moderate. The sleighing was not good until after the 20th and at Father Point the ground was bare up to the 26th. At this station the river was almost clear of ice throughout the month.

The weather conditions of New Brunswick were much the same as in Quebec the temperature and precipitation being generally above average, there being much cloud, the changes being frequent and rapid, and much rain falling in place of snow. At some inland stations there were some quite low temperatures, the

observer at Sussex reporting  $-31^{\circ}0$  and at Fredericton  $-23^{\circ}0$ ; at other stations the lowest recorded was  $-18^{\circ}0$  at Chatham. The sleighing was fair up to the 21st, after which the ground was almost bare until nearly the last day of the month, when more snow fell. Fogs were reported from several stations.

In Nova Scotia the temperature and precipitation were also above average, and the weather was very unsettled with frequent falls of rain or snow. Strong winds were very prevalent, and on the 2nd, 12th, 20th, 26th, 29th and 31st severe gales occurred, a velocity of 52 miles being reached at Halifax on the 20th. Temperatures below zero were reported from three stations only; and maximum temperatures above  $50^{\circ}$  were recorded nearly everywhere. There was little sleighing during the month, the snow that fell soon melting.

The weather in Prince Edward Island was much the same as in New Brunswick the changes being frequent and sudden and the temperatures unusually high; the amount of precipitation, however, was below average at Charlottetown. Several storms passed over the province accompanied by snow, or rain. No temperatures below zero were recorded. There was little or no sleighing during the month and on the 31st the ground was bare.—F. F. PAYNE.

### ATMOSPHERIC PRESSURE.

The mean atmospheric pressure was below average in all portions of the Dominion except along the British Columbia Coast and over the eastern portion of Nova Scotia, in both of which localities the average was just about maintained. In Alberta the deficiency amounted to 0.13 of an inch and in the Lower St. Lawrence Valley to .12 of an inch.

### LOW AREAS.

As many as sixteen areas of low pressure were sufficiently well marked to be charted; in fact the greater number were of considerable importance and attended by high winds and gales. Four of the areas passed from the region of the Gulf of Mexico to the Maritime Provinces but the more general track was from the far North-west, over Lake Superior to the Gulf of St. Lawrence.

No. 1 formed over the Lake Region during the 30th and 31st of December and on January 1st it was merged in No. 2 which was passing up the Atlantic Coast. It was attended by strong winds and gales over Ontario, together with a fall of snow which in northern localities was for the most part quite heavy. No. 2 was situated over Florida on the evening of the 31st December and during January 1st, and the earlier part of the 2nd it travelled with great rapidity to and over the Maritime Provinces; at the same time it developed into a severe storm bringing a heavy gale throughout Eastern Canada accompanied by heavy rains in the southern portions and snow in the northern. No. 3 was a shallow depression which moved quickly from the North-west far north over Canada to the Gulf of St. Lawrence. It was attended by a few light scattered snow showers. No. 4 passed over British Columbia on the 5th, the North-west on the 6th, reached Ontario on the 7th and the Maritime Provinces on the 8th. It was an area of considerable energy attended by high winds but by only light precipitation. In the Maritime Provinces it gave a gale very generally. No. 5 was a moderate depression which moved from British Columbia to the Gulf of St. Lawrence between the 7th and 10th. From the Lakes to the Atlantic it was attended by light falls of snow and rain together with moderate gales in the Maritime Provinces. No. 6 was a shallow depression from British Columbia, which passed over the Territories on the 9th, and after giving light snowfalls as far as Lake Superior it became merged on the 11th in No. 7. No. 7 apparently passed from the Mississippi Valley to the Atlantic Coast and thence over Nova Scotia causing strong winds and gales in Canada from the Lower Lakes to the Maritime Provinces together with a fall of snow except in the southern portion of the Maritime Provinces, where it rained heavily. No. 8 caused a moderate fall of snow over Ontario during the 13th night, and on the 14th, and then dispersed; previously it had given light falls of snow in the Territories and Manitoba. No. 9 was apparently subsidiary to No. 8; it travelled between the 15th and 16th with great rapidity as a very shallow depression from the West-south-west states, over the Lower Lakes and St. Lawrence Valley to the Gulf and was attended by light snowfalls from the Lakes to the Maritime Provinces. No. 10 was a shallow depression which travelled from Alberta to Lake Superior between the 17th and 19th and was then merged in No. 11. No. 11 moved northward from the east coast of the Gulf of Mexico to Pennsylvania, thence north-eastward and over Nova Scotia. It developed considerable energy as it progressed and caused strong winds together with rain which in most places was heavy. No. 12 travelled with great rapidity; it was situated in the North Saskatchewan valley on the evening of the 21st and by the evening of the 23rd, had reached the Gulf of St. Lawrence. It was attended by a few light scattered showers only, but was chiefly noticeable for the high west to north winds which immediately followed it. In the Maritime Provinces the force of a gale was generally recorded. No. 13 moved into British Columbia on the 22nd accompanied by fresh gales and heavy rains. Its course was then a little south

of the Boundary Line to the Lake Region where on the 24th and 25th it brought rain turning to snow. It then passed to the New England coast where it was seemingly reinforced by a subsidiary, for a very rapid increase in energy occurred and during the night of the 25th and on the 26th it swept over the Maritime Provinces as a storm of great violence; the barometer dropped to 28.60 inches, rain fell very heavily and heavy gales were everywhere experienced and at the same time a heavy snowstorm was general over the Province of Quebec. No. 14 was a moderate depression which moved into the North Saskatchewan Valley on the 25th and dispersed over the northern portion of the Lower Lake Region on the 29th. In the Georgian Bay region it caused a heavy fall of snow in nearly all localities. No. 15 appeared off the Florida coast on the 27th; it soon proved to be a disturbance of much energy and as it travelled quickly up the United States Atlantic seaboard and over the Maritime Provinces it causes a fresh to heavy gale over Eastern Canada on the 29th accompanied by snow and rain, chiefly the latter. No. 16 travelled from Alberta to the Lake Region between the 28th and 30th attended by light snow except in the Georgian Bay Region where the fall was heavy. After leaving the Lake Region the depression developed greater energy and during the 31st it caused a heavy gale to set in over the Gulf of St. Lawrence and in the Maritime Provinces together with heavy snow and rain.

#### HIGH AREAS.

Eleven areas of high pressure were traced during the month; half of the number travelled far to the northward into the Ottawa and St. Lawrence Valleys the remainder passed southward from the far North-west to the Central and Southern States.

No. 1 was a continuance of No. 11 on the December Chart. It was still centred in the North-west Territories on the morning of the 1st but afterwards it passed southward to the Lower Mississippi Valley and thence to the Middle Atlantic Coast. No. 2 was a moderate high which developed over Alberta on the 3rd and also travelled southward reaching the Middle Atlantic Coast on the 7th. No. 3 appeared in Manitoba on the 7th and travelled quickly over the Lake Superior District to the Ottawa Valley and thence off the New England Coast. During its presence the temperature on the night of the 8th was from 2 to 10 degrees below zero in the Ottawa and St. Lawrence Valleys. No. 4 formed on the night of the 9th in the North Saskatchewan Valley and on the 9th passed eastward and over Manitoba attended by zero weather. During the 10th it travelled quickly from Lake Superior to the Ottawa Valley bringing a rapid fall in temperature from the Lake Region to the Atlantic Coast and at night several degrees below zero were generally recorded in Northern Ontario, and throughout Quebec. No. 5 was a very moderate high which between the 13th and 16th passed over Canada from the North-west Territories to the Maritime Provinces; it was not accompanied by any low temperatures. No. 6 spread quickly over Canada from the Lakes to the Atlantic on the 16th causing a very rapid fall in temperature at night from Eastern Ontario to the Maritime Provinces. No. 7 was seemingly an offshoot of a persistent high at the time covering the Pacific States. It travelled over the Central States to the Middle Atlantic Coast. At the same time there was a sharp rise in pressure on the 20th over the Lake Region, the Ottawa and St. Lawrence Valleys accompanied by a very rapid drop in temperature; at Ottawa the temperature fell forty-four degrees in less than twelve hours. No. 8 was an area of importance which travelled between the 22nd and 24th from the North-west Territories to the Maritime Provinces attended by a short spell of decidedly cold weather more especially in the Ottawa and St. Lawrence Valleys. No. 9 was situated in the North Saskatchewan Valley on the 24th accompanied by decidedly cold weather. It spread quickly eastward together with its accompanying cold weather; its centre meanwhile passed south to the Central States, then to the Atlantic Coast and north-easterly to Nova Scotia and over Newfoundland. No. 10 moved into Alberta on the 26th accompanied by cold weather and on the morning of the 27th the temperature ranged from 6 to 26 degrees below zero from the Rockies to Manitoba; after the 27th the area passed southward to the States bordering on the north shore of the Gulf of Mexico when its attendant cold wave quickly moderated. No. 11 moved into the North Saskatchewan Valley on the night of the 28th. It reached Manitoba on the night of the 31st and over the eastern portion of the Territories and in Manitoba it was attended by very cold weather. Prince Albert recorded 39°.5 degrees below zero, Minnedosa 32° below, Winnipeg 31° below, and Oonikup 40° below

#### WINDS.

In British Columbia the winds were chiefly easterly and southerly. Gales were experienced on several occasions, especially on the 12th, and between the 22nd and 23rd, but the force as a rule was from a light to a moderate breeze. In the North-west Territories and Manitoba the winds were mostly from the southward and the westward; there were from four to five gales and sixteen days on which the force of a fresh to strong breeze was attained. In the Lake Region, the Ottawa Valley and the Upper St. Lawrence Valley the winds were also as a rule southerly and westerly, fresh to strong breezes were very prevalent and the force of a gale was often reached; in fact in the Lake Region there were as many as eight gales. In the Gulf of St. Lawrence and in the Maritime Provinces the westerly direction predominated; there was an unusually large proportion of high winds and no less than nine gales, nearly all of which attained to the force of fresh or

heavy gales. The gales occurred on the 1st, 7th, 10th, 12th, 20th, 23rd, 26th, 29th and 31st. At those stations in the Maritime Provinces where winter navigation is pursued all of the gales were warned except the one on the 7th, but the warning for the storm on the 20th was issued late.

### BRIGHT SUNSHINE.

Bright sunshine was below average in Quebec and the Maritime Provinces, and above average in all the large remaining portion of Canada. Toronto and Kuper Island recorded the greatest amount above average, and Fredericton the largest amount below average.

### TEMPERATURE.

The temperature was above average throughout the Dominion, and to a considerable amount in nearly all localities. In Assiniboia the large excess of 17° was recorded, and the smallest amount, 2° above average, occurred along the shores of Lake Erie.

*The Highest and Lowest Temperature in each Province during January, 1900, were :*

British Columbia,	62°·0 on 27th at Agasiz.	—15°·0 on 28th at Griffin Lake.
North-west Territories,	62°·0 on 18th at Medicine Hat, Knee- hill and Crane Lake.	—40°·0 on 30th at Oonikup.
Manitoba,	47°·8 on 19th at Minnedosa.	—32°·9 on 31st at Brandon.
Ontario,	63°·0 on 10th at Port Hope.	—43°·0 on 1st at White River.
Quebec,	48°·0 on 23rd at St. Agathe.	—27°·1 on 28th at Chicoutimi.
New Brunswick,	52°·0 on 20th at Sussex.	—31°·0 on 1st at Sussex.
Nova Scotia,	55°·0 on 21st at Wolfville.	—12°·0 on 6th at Port Hastings.
Prince Edward Island.	47°·0 on 21st at Hamilton.	0°·3 on 19th at Summerside.

### PRECIPITATION.

The precipitation was above average to a considerable amount in the Maritime Provinces, except in portions of Prince Edward Island, where the average was not reached. Elsewhere throughout the Dominion, except locally, the precipitation was below the average, the greatest discrepancy occurring in British Columbia. The local exceptions were Montreal, nearly two inches above the average, Parry Sound, half an inch above, Minnedosa, Battleford and Edmonton 0·2 inches above. The precipitation over the greater part of Canada was very largely rain, until the latter part of the month, when it was chiefly snow, especially in Ontario and Quebec. On the last day of the month snow covered the Province of Quebec to the depth of from 13 to 30 inches. In Northern New Brunswick there was from 10 to 20 inches, and in Northern Ontario and along the north shore of Lake Superior to the Lake of the Woods, from 10 to 24 inches. In Southern Ontario, and also in Manitoba and the Territories, there was only a light covering for the most part, and in the southern parts of the Maritime Provinces and the Territories, and also over the greater portion of British Columbia, there was none.

### THICKNESS OF ICE.

**NORTH-WEST TERRITORIES AND MANITOBA.**—Battleford, 18 inches; Swift Current, 16 inches; Minnedosa, 24 inches; Elgin, 24 inches; Brandon, 24 inches; Oonikup, 24 inches.

**ONTARIO.**—Port Arthur, 17 inches; White River, 16 inches; Parry Sound, 14 inches; Southampton, 8 inches; Port Stanley, 5 inches; Kingston, 6 inches; Bissett, 12 inches; Midland, 11 inches; Port Hope, 12 inches; Georgetown, 15 inches; Peterboro', 24 inches; Orillia, 14 inches; Lansdowne, 9 inches; Paris, 14 inches; Stouffville, 14 inches; Kinmount, 10 inches; Hamilton, 10 inches; Port Dover, 5 inches; Arden, 17 inches; Ottawa, 12 inches; Durham, 18 inches; Barrie, 8 inches.

**MARITIME PROVINCES.**—Chatham, 12 inches; Charlottetown, 11 inches; Fredericton, 19 inches; Parrsboro', 10 inches; Truro, 13 inches.





ONTARIO.—Con.

Table listing locations in Ontario, Canada, with columns for location name, coordinates, and various data points.

QUEBEC:

Table listing locations in Quebec, Canada, with columns for location name, coordinates, and various data points.





PRECIPITATION AT STATIONS REPORTING RAIN, SNOW, WEATHER, &c., DURING  
JANUARY, 1900.

STATIONS.	RAINFALL.					SNOWFALL.				REMARKS.
	Amount in inches.	Days '01 or Over.	No. of Fair Days.	Heaviest Fall in Month.	Date.	Amount in inches.	No. of Days.	Heaviest Fall in Month.	Date.	
<b>BRITISH COLUMBIA—</b>	in.			in.		in.		in.		
Vancouver.....	6.84	19	12	1.05	11					
Vancouver (2).....	3.74	12	14	1.10	12					
Langley.....	6.83	18	13	1.35	11					
Goldstream Lake.....	10.70	22	9	1.73	12					
Royal Oak.....	5.04	17	14	1.04	11					
Nanaimo.....	7.66	16	15	1.27	5					
Alberni.....	10.73	20	11	1.93	7	3.0	3	1.5	5	1st, Yellow violets out.
Cumberland.....	6.43	11	16	1.15	15	3.5	1	3.5	22	
<b>N. W. TERRITORIES—</b>										
W. Beaver Hills.....	0.21	1	19	0.21	19	6.0	11	3.0	8	
Saltcoats.....	0.00	0	25	—	—	9.0	6	3.0	13-25	
Innisfail.....	0.00	0	25	—	—	2.6	6	1.5	22	
N. E. Beaver Hills.....	0.03	1	27	0.03	18	4.0	2	3.0	3	
Crescent Lake.....	0.00	0	24	—	—	9.1	7	3.2	3	6th, S.W. Chinook.
Coutts.....	0.00	0	28	—	—	2.0	3	1.0	24	4th to 18th. Fine and mild.
<b>MANITOBA—</b>										
Morden.....						14.5	5	12.0	13	
Rapid City.....						10.1	6	4.0	13	
Shoal Lake.....						7.0	5	4.0	13	
Oakbank.....						7.0	8	3.0	11	
Norquay.....						10.8	10	6.0	14	First sleighing on 13th.
Hartney.....						4.0	7	1.0	13	
Turtle Mountain.....						2.0	3	1.0	12	
<b>ONTARIO—</b>										
Jermyn.....	0.10	1	25	0.10	7	29.0	5	7.0	30	
Scarboro'.....	0.88	6	17	0.60	15	17.0	10	5.0	11	
Dutton.....	1.25	1	28	1.25	15	6.0	2	6.0	11	
Emsdale.....	0.39	2	20	0.25	17	15.8	10	4.5	29	
Lansdowne.....	2.51	3	23	2.24	20	10.0	5	4.0	11	
Deer Park.....	0.38	3	20	0.18	10	12.1	8	5.5	11	
Georgetown.....	0.42	7	11	0.15	25	24.2	14	5.6	11	
Goderich.....	1.10	4	20	0.50	23	16.5	8	3.0	1-12	
Midland.....	0.26	2	22	0.21	9	4.0	3	2.0	1	Fog on 17th and 18th.
Parma.....	1.78	2	11	0.93	20	45.0	9	8.0	3-26	
Kitley.....	1.17	2	23	1.00	20	13.5	6	7.0	12	Fog on 19th.
Cherry Valley.....	1.09	3	20	0.48	19	39.0	8	12.0	31	
Wooler.....	1.21	5	20	0.73	20	20.0	8	6.0	30	
Watford.....	1.28	4	—	0.78	16					
Elgin.....	1.64	2	22	1.00	20	29.0	7	6.0	1-12	
Sunshine.....	0.76	3	16	0.63	7	29.0	13	4.0	3-16	
Providence Bay.....	0.22	1	20	0.22	9	25.0	11	8.0	28	
Warton.....	0.60	5	20	0.25	10	24.0	6	10.0	30	24th, Thunder and lightning with snow storm.
Wilton Grove.....	0.70	2	23	0.68	7	19.0	6	6.0	11	
Port Burwell.....	0.88	6	20	0.48	20	5.0	5	3.5	13	
Croydon.....	1.69	4	21	0.90	20	26.0	6	6.0	29	
Huntsville.....	1.45	2	22	0.95	7	14.5	7	3.5	29	
Roblins Mills.....	0.45	2	21	0.35	7	27.0	8	10.0	28	
Aurora.....	0.24	5	17	0.14	24	16.8	10	7.3	11	
Dealtown.....	1.26	8	22	0.43	11	3.5	4	2.5	11	
Orangeville.....	0.84	5	19	0.53	8	17.1	7	8.1	12	
Oliver's Ferry.....	0.65	1	24	0.65	20	7.0	4	5.0	12	
Princeton.....	1.19	9	12	0.95	19	24.0	10	6.0	11	
Lion's Head.....	0.62	3	—	0.33	9					
Ursa.....	0.47	4	19	0.18	7	23.0	8	6.0	11	
Uxbridge.....	0.05	1	24	0.05	7	12.5	5	6.5	11	
Wyoming.....	0.10	1	27	0.10	18	7.0	3	3.0	11-15	
Montague.....	1.60	3	24	1.08	20	11.0	3	6.0	11	
Arden.....	1.79	9	14	0.67	21	20.0	8	6.0	12	
<b>NEW BRUNSWICK—</b>										
Point Esequinac.....	1.03	6	20	0.62	21	18.0	5	4.0	1	
<b>NOVA SCOTIA—</b>										
Port Morien.....	3.79	9	16	1.17	21	7.1	9	3.0	16	
<b>P. E. ISLAND—</b>										
Mount Stewart.....	2.89	4	27	1.34	21	—	—	—	—	
Murray River.....	3.70	—	—	—	—	—	—	—	—	

*Aurora recorded—*

*Where the class of aurora is noted by the observer, it is given (I) being the brightest, (IV) the feeblest in brilliancy.*

1. Gravenhurst, IV ; Savanne.
4. Minnedosa, III ; Hillview, IV ; Savanne, W. Beaver Hills, III ; Red Deer, IV.
5. Battleford, IV ; Minnedosa, II ; Hillview, IV ; Savanne, Cannington Manor.
7. Savanne.
15. Muskowpetung, IV.
18. St. Anne de la Pocatière, III.
19. Barnardo, IV ; Banff, IV ; Calgary, III.
20. Durham, II ; Coldwater, II ; Barnardo, II ; Clontarf, IV ; Battleford, III ; Toronto, II ; Stratford, IV ; Gravenhurst, II ; Cockburn Island, Bancroft, II ; Calvin, Savanne, Lucknow, III ; W. Beaver Hills, II ; Georgetown, IV ; Midland, II ; Huntsville, II ; Red Deer, III ; Pembina Crossing, III.
21. Barnardo, IV ; Cockburn Island ; White River, IV ; Savanne.
22. Hillview, III.
23. Prince Albert, II.
24. Barkerville, IV ; Hillview, III ; W. Beaver Hills, III ; Red Deer, IV ; Pembina Crossing, III.
25. Battleford, III ; Barkerville, IV ; Minnedosa, III ; Hillview, IV ; Savanne, W. Beaver Hills, III ; Red Deer, II ; Pembina Crossing, II.
26. Barkerville, IV ; Minnedosa, III ; Hillview, III ; Pembina Crossing, III.
27. Hillview, IV ; Chicoutimi, Duck Lake, III ; Red Deer, IV ; Truro, IV.
28. Duck Lake, II.
29. Barnardo, IV
30. Savanne ; Red Deer, III.
31. Barnardo, IV ; Savanne.

PROPORTION OF BRIGHT SUNSHINE REGISTERED IN EACH HOUR OF THE DAY DURING WHICH THE SUN WAS ABOVE THE HORIZON IN THE MONTH OF JANUARY, 1900.

	HOURS ENDING															
	5 a.m.	6 a.m.	7 a.m.	8 a.m.	9 a.m.	10 a.m.	11 a.m.	Noon.	1 p.m.	2 p.m.	3 p.m.	4 p.m.	5 p.m.	6 p.m.	7 p.m.	8 p.m.
Victoria.....				0.00	0.14	0.32	0.34	0.37	0.32	0.28	0.24	0.11	0.00			
Kuper Island.....				0.00	S	0.20	0.31	0.34	0.39	0.35	0.37	0.28	0.07			
Agassiz.....				0.00	0.00	0.13	0.28	0.30	0.28	0.32	0.29	0.19	0.00			
Battleford.....				0.06	0.14	0.27	0.42	0.50	0.51	0.47	0.36	0.04	0.00			
Indian Head.....				0.00	0.00	0.09	0.23	0.35	0.50	0.56	0.49	0.14	S			
Brandon.....			0.02	0.29	0.36	0.45	0.50	0.54	0.45	0.39	0.25	0.00	0.00			
Winnipeg.....				0.00	0.30	0.44	0.41	0.47	0.50	0.49	0.48	0.26	0.01			
Durham.....				0.02	0.03	0.06	0.12	0.15	0.14	0.12	0.10	0.06	0.02			
Woodstock.....				0.06	0.17	0.30	0.30	0.34	0.39	0.30	0.27	0.24	0.08			
Toronto.....				S	0.17	0.31	0.39	0.41	0.48	0.43	0.43	0.33	0.13			
Lindsay.....				0.01	0.14	0.20	0.25	0.37	0.34	0.28	0.20	0.15	0.08			
Barrie.....			0.07	0.08	0.19	0.31	0.30	0.30	0.31	0.26	0.20	0.11	0.00			
Kingston.....				0.14	0.34	0.37	0.35	0.37	0.31	0.33	0.35	0.29	0.04			
Ottawa.....				0.02	0.15	0.22	0.33	0.44	0.41	0.30	0.29	0.27	0.04			
Montreal.....				0.00	0.06	0.27	0.35	0.42	0.37	0.35	0.36	0.14	0.00			
Fredericton.....			0.08	0.33	0.35	0.37	0.43	0.41	0.37	0.38	0.36	0.04	0.00			

  

	Victoria.	Kuper Island.	Agassiz.	Battleford.	Indian Head.	Brandon.	Winnipeg.	Durham.	Woodstock.	Toronto.	Lindsay.	Barrie.	Kingston.	Ottawa.	Montreal.	Fredericton.
Mean proportion for month..... (Constant sunshine being 1.)	0.23	0.24	0.21	0.32	0.28	0.37	0.40	0.09	0.26	0.34	0.22	0.22	0.31	0.27	0.30	0.34
Difference from average.....	+ 0.03	+ 0.06	0.00	+ 0.01	+ 0.01	+ 0.04	+ 0.03	—	+ 0.05	+ 0.07	0.05	+ 0.03	+ 0.05	—	0.05	0.06
Maximum daily amount.....	0.84	0.79	0.74	0.90	0.68	0.90	0.84	0.64	0.81	0.84	0.93	0.83	0.96	0.80	0.95	0.91
Date.....	30	30	30	27	30	30	31	6	22	29	8	31	6	27	21	24
No. of days completely clouded.....	9	12	20	9	11	7	10	22	15	9	14	15	13	13	13	14

## FORECASTS FOR JANUARY, 1900.

The forecasts issued by this office at 11 p.m. each night, are posted up at every telegraph station in Canada, and are for the 24 hours beginning at 8 a.m. the following day.

The number of predictions issued during the month was 904. These were divided as follows :—

DISTRICT.	No. Issued.	VERIFIED.			
		No. Fully	No. Partly	No. Not	Percentage
Manitoba.....	88	66	14	8	83·0
Lake Superior.....	82	63	16	3	86·6
Lower Lake Region.....	107	88	14	5	88·8
Georgian Bay.....	102	79	18	5	86·3
Ottawa Valley.....	102	77	15	10	82·8
Upper St. Lawrence.....	99	75	18	6	84·8
Lower St. Lawrence.....	93	76	11	6	87·6
Gulf.....	100	84	9	7	88·5
Maritime Provinces.....	131	102	19	10	85·1
Total.....	904	710	134	60	86·0

In order to obtain the percentage of verification of the predictions, the number partly verified is divided by two and added to the number fully verified, and the result divided by the total number issued.

In ascertaining to what extent the predictions have been verified, the reports from the agents at all observing stations, as well as the telegraphic reports, are used.

The storm warnings and forecasts were issued by Forecast Official B. C. Webber.

R. F. STUPART,  
*Director.*

Meteorological Office, Toronto,  
26th February, 1900.