

Temperature and Precipitation Data for Typical Stations in the Various Districts—concluded

District and Station	TEMPERATURES (Fahrenheit)						PRECIPITATION		
	Mean Jan.	Mean July	Highest on Record	Lowest on Record	Av. Dates of Freezing Temperatures (32°F or Lower)		Total (All Forms) ¹	Snowfall	Av. Number of Days (All Forms)
					Last in Spring	First in Autumn			
							in.	in.	
Northwest Territories—									
Mackenzie Basin—									
Fort Good Hope.....	-22.0	60.5	95	-69	June 14	Aug. 6	10.52	46.3	97
Fort Simpson.....	-15.8	62.0	97	-69	June 4	Aug. 28	12.92	47.9	118
Hay River.....	-12.2	59.8	96	-62	June 11	Sept. 7	12.59	53.3	99
Barrens—									
Baker Lake.....	-27.2	51.3	82	-58	July 2	Aug. 24	8.21	22.9	95
Chesterfield.....	-24.8	47.9	86	-60	June 30	Sept. 4	10.96	46.5	98
Coppermine.....	-19.4	48.7	90	-58	June 28	Aug. 18	9.22	44.3	114
Arctic Archipelago—									
Clyde.....	-16.6	40.6	71	-50	July 13	July 17	8.07	57.5	87
Eureka.....	-34.0	42.4	67	-63	June 25	Aug. 10	2.40	14.0	48
Frobisher Bay.....	-15.7	46.2	76	-49	July 2	Aug. 22	14.99	80.5	129
Mould Bay.....	-28.4	38.8	60	-63	July 15	July 18	3.17	18.7	74
Resolute.....	-26.3	40.3	65	-61	July 9	July 25	5.36	28.8	95

¹ Total rainfall and one tenth of the total snowfall.

Section 2.—Meteorological Observing Stations

In January 1966, official meteorological observations were taken and recorded at 2,313 weather reporting stations in Canada. There are several different classes of stations ranging from the first-order reporting stations at airports where hourly observations of all aspects of the weather are recorded, to the co-operative observing stations where a volunteer observer makes daily observations of rainfall, snowfall and temperature or precipitation only. While there are vast areas of the country where the weather stations are several hundred miles apart, most of the settled parts of the country are represented by first-order hourly reporting stations every 100 miles or so, and by co-operative climatological observing stations at least every 25 miles.

At most of the 274 first-order synoptic stations complete weather observations are made every six hours and at a large percentage of them only slightly less complete observations for aviation forecasts are made every hour. These weather data, including information on temperature, precipitation, pressure, wind, humidity, cloud and visibility, are sent first by radio and teletype to the different weather offices across the Continent to be used for weather forecasting purposes, and then at each month-end the manuscript reports are sent by mail to Meteorological Branch Headquarters for use in compiling climatic statistics. At 101 of these observing stations, personnel of the Telecommunications Branch of the Department of Transport take weather observations as part of their scheduled duties, and 28 stations are operated in a similar manner by the different Armed Services; 93 stations are operated by Meteorological Branch personnel and the remainder are operated under contract, or by co-operative arrangement with various transportation and communications companies.

Twice daily, at 34 locations throughout the country, complete upper air observations are made from the surface to altitudes upwards to 100,000 feet. Pressure, temperature and humidity measurements are determined by radiosonde instruments carried aloft by balloons and the information reported by radio to the ground receiving stations; winds are