

## V.—CLIMATE AND METEOROLOGY.

### THE WEATHER OF CANADA DURING THE YEAR 1916.

Information furnished by the Dominion Meteorological Service, Toronto.

#### JANUARY.

**Temperature.**—The most remarkable feature of the weather of the first month of the year was the extreme cold experienced in British Columbia and the greater portion of the Prairie Provinces. In the lower Fraser valley and on Vancouver Island the mean temperature of the month ranged 8° to 16° lower than the normal January temperature, and over the remainder of the province was from 12° to 25° below the normal. In Alberta the negative departures from normal ranged between 9° and 30°, in Saskatchewan from 10° to 18°. In Manitoba, the mean of the month was from 0° to 12° lower than the normal in the Souris and Assiniboine basins, but over the remainder of the settled areas of the province the defect was smaller. Conditions similar to those in Manitoba obtained in the Kenora and Rainy river districts, but over the remainder of Ontario the month was considerably warmer than usual, the excess over the normal mean ranging from 3° to 11° in the region lying between the Ottawa river and the Great Lakes. In Quebec and the Maritime Provinces, generally, mean temperatures were somewhat higher than normal. In the Mackenzie river basin and the Yukon extreme cold prevailed.

**Precipitation.**—Precipitation was much lighter than normal in British Columbia and the Maritime Provinces, but elsewhere in Canada was unusually heavy—at some places in the Prairie Provinces amounting to four times the normal amount. On the prairie the precipitation was wholly snow, but in Ontario and the Maritime Provinces it was partly rain. In southern Ontario the precipitation was for the most part rain.

**Winds and Bright Sunshine.**—High winds and gales occurred frequently from the Great Lakes to the Gulf. The prevailing direction of the wind was southwest in Ontario and Quebec and northwest in the Maritime Provinces. The amount of bright sunshine was in excess of normal from the Pacific coast to the Rocky Mountains; thence to the Atlantic it was less than normal, considerably so in Saskatchewan.

#### FEBRUARY.

**Temperature.**—In February the temperature remained below the normal in British Columbia, but to a much less marked extent, while the Prairie Provinces experienced a temperature for the most part higher than the normal. From the Lake of the Woods to the Atlantic, negative departures from the normal obtained generally the greatest exceeding 8° and occurring in Quebec. In the Prairie Provinces the change from extreme cold to mild weather occurred very abruptly on the afternoon of the 13th.

**Precipitation.**—The distribution of precipitation was very irregular during this month, especially in British Columbia and the Prairie Provinces, some districts reporting a large excess and others an equally large defect. In Ontario, Quebec and the Maritime Provinces, however, there was more uniformity, nearly all districts reporting a deficiency.

**Winds and Bright Sunshine.**—Over the greater part of the Dominion the prevailing direction of the wind was westerly. Gales and high winds were less frequent in Ontario than was the case in January, but occurred on several days in the Maritime Provinces and Quebec. The duration of bright sunshine was considerably above normal in British Columbia, northern Saskatchewan, eastern Manitoba, and was either normal or slightly less elsewhere.

#### MARCH.

**Temperature.**—In the basins of the Athabasca, Peace and Mackenzie rivers, over the greater part of Manitoba, and from the Lake of the Woods to the Atlantic, the mean temperature was less than the normal by from 3° to 12°, the greatest negative departures occurring in the vicinity of Fort MacMurray and of Abitibi Post, respectively. In Saskatchewan, Alberta and British Columbia, there were large areas with temperatures from 3° to 6° higher than normal. These areas comprised the basins of the North and South Saskatchewan rivers with their