



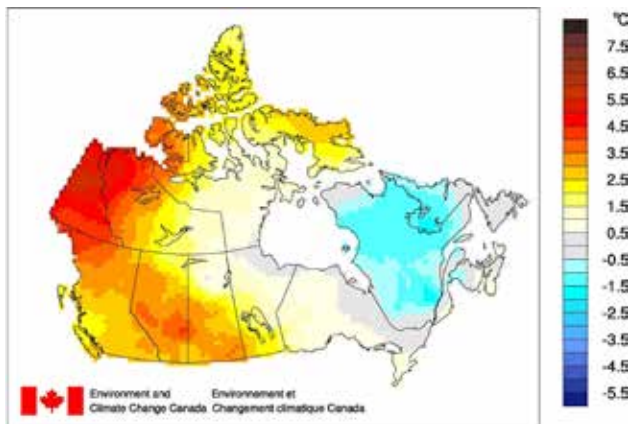
CLIMATE TRENDS AND VARIATIONS BULLETIN

This bulletin summarizes recent climate data and presents it in a historical context. It first examines the national average temperature for the season or year, and then highlights interesting regional temperature information. Precipitation is examined in the same manner.

NATIONAL TEMPERATURE

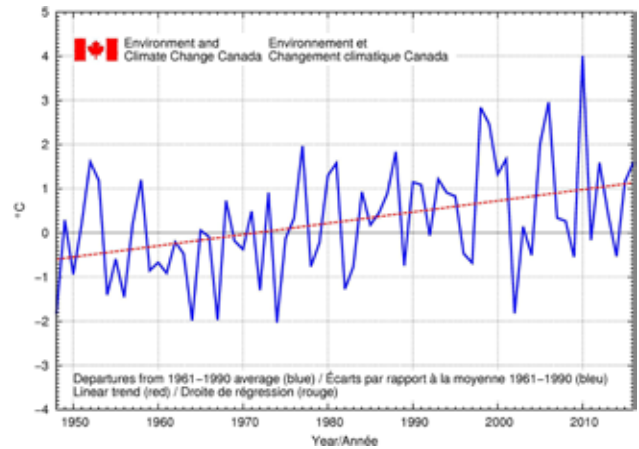
The national average temperature for the spring (March–May) of 2016 was 1.6°C above the baseline average (defined as the mean over the 1961–1990 reference period) which, based on preliminary data, is the 10th warmest spring observed since nationwide recording began in 1948. The warmest spring occurred in 2010, when the national average temperature was 4.0°C above the baseline average. The coldest spring occurred in 1974, when the national average temperature was 2.0°C below the baseline average. The temperature departures map for spring 2016 (below) shows that British Columbia, Alberta, Saskatchewan, western Manitoba, Yukon, western Northwest Territories, and northern Nunavut experienced temperatures more than 2°C above the baseline average. Below average temperatures were mainly recorded in Quebec, Labrador and western New Brunswick.

TEMPERATURE DEPARTURES FROM THE 1961–1990 AVERAGE—SPRING 2016



The time series graph (right column) shows that, when averaged across the country, spring temperatures have fluctuated from year to year over the period 1948–2016. The linear trend indicates that spring temperatures averaged across the nation have warmed by 1.7°C over the past 69 years.

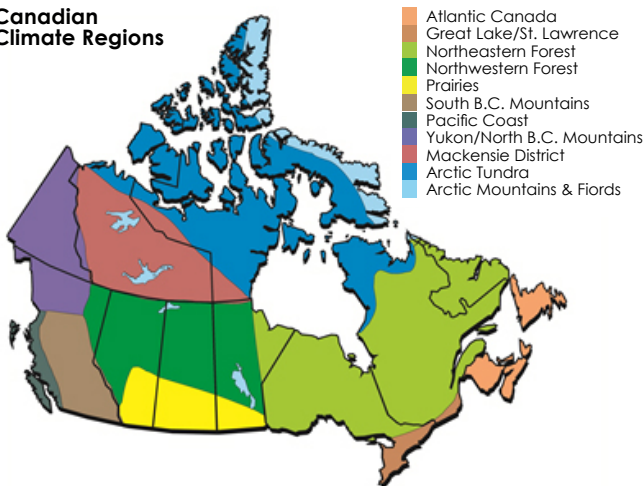
SPRING NATIONAL TEMPERATURE DEPARTURES AND LONG-TERM TREND, 1948–2016



REGIONAL TEMPERATURE

When examined on a regional basis, average spring temperatures for 2016 were the warmest on record since 1948 for four of the eleven climate regions: the Yukon/North B.C. Mountains (4.5°C above average), the Prairies (3.0°C above average), the South B.C. Mountains (2.9°C above average), and the Pacific Coast (2.5°C above average). They were among the 10 warmest for two other climate regions: the Mackenzie District (8th warmest at 2.5°C above average), and the Northwestern Forest (9th warmest at 2.1°C above average). All eleven climate regions exhibit positive trends in spring temperatures over the 69 years of record. The strongest trend is observed in the Mackenzie District region (2.6°C) while the weakest trend (0.8°C) is found in Atlantic Canada. A table listing the regional and national temperature departures and rankings from 1948 to 2016 and a table that summarizes regional and national trends and extremes are available on request to ec.btv-cctv.ec@canada.ca.

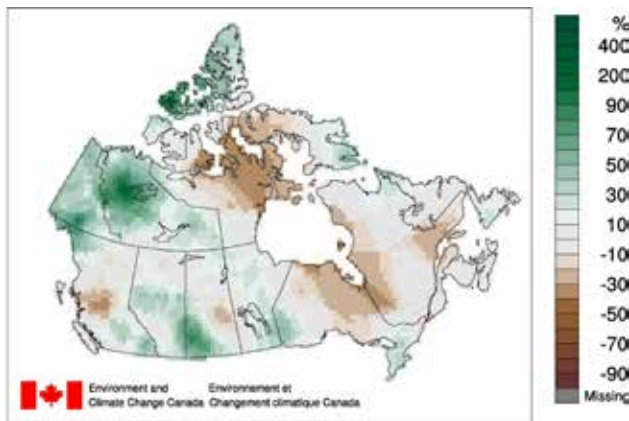
Canadian Climate Regions



NATIONAL PRECIPITATION

The national average precipitation for the spring of 2016 was 8.8% above the baseline average, based on preliminary data, making it the 13th wettest spring since nationwide recording began in 1948. The wettest spring was 1979 (20.4% above the baseline average) and the driest spring was 1956 (27.1% below the baseline average). The precipitation percent departure map for the spring of 2016 (below) shows that conditions were markedly wetter-than-average in the Yukon, Northwest Territories, northern Nunavut, eastern Alberta and southwestern Saskatchewan. Central Nunavut, northern Ontario and small regions in western and eastern Quebec were drier than average.

PRECIPITATION DEPARTURES FROM THE 1961-1990 AVERAGE – SPRING 2016

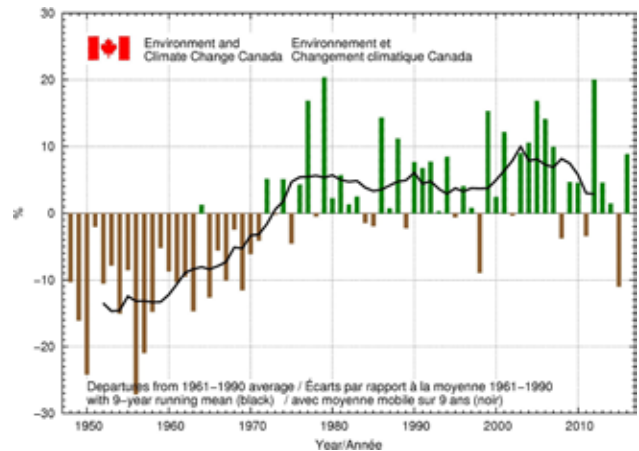


It should be noted that "average" precipitation in northern Canada is generally much less than it is in southern Canada, and hence a percent departure in the north represents much less precipitation than the same percentage in the south. The national precipitation rankings are therefore often skewed

by the northern departures and do not necessarily represent rankings for the volume of water falling on the country.

The precipitation percent departures graph (below) shows that, when averaged across the nation, spring precipitation amounts have tended to be wetter than the 1961–1990 average since the early 1970s.

SPRING NATIONAL PRECIPITATION DEPARTURES WITH NINE-YEAR RUNNING MEAN, 1948–2016



REGIONAL PRECIPITATION

Spring precipitation for 2016 was among the 10 wettest recorded since 1948 in three of the eleven climate regions: North British Columbia/ Yukon (third-wettest at 37.8% above average); the Mackenzie District (fifth-wettest at 33% above average); and the Prairies (tenth-wettest at 26.7% above average). The spring of 2016 was not among the ten driest recorded since 1948 in any of the regions. A table listing the regional and national precipitation departures and rankings from 1948 to 2016 and a table that summarizes regional and national extremes are available on request to ec.btv-cctv.ec@canada.ca.

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