

CLIMATE TRENDS AND VARIATIONS BULLETIN

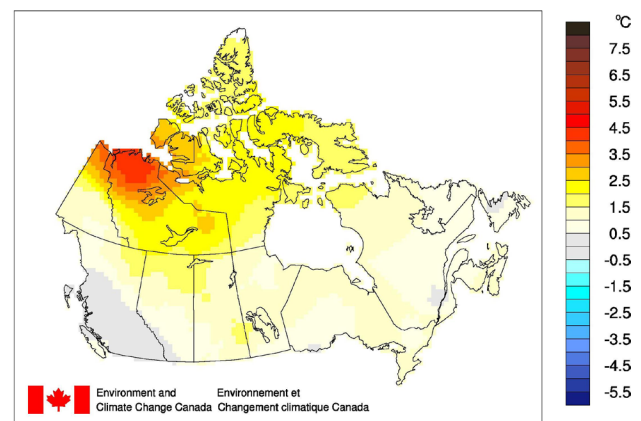
This bulletin summarizes recent climate data and presents it in a historical context. It first examines the national average temperature for the year and then highlights interesting regional temperature information.

Over the past decade, precipitation monitoring technology has evolved and Environment and Climate Change Canada and its partners implemented a transition from manual observations to using automatic precipitation gauges. Extensive data integration is required to link the current precipitation observations to the long term historical manual observations. The update and reporting of historical adjusted precipitation trends and variations will be on temporary hiatus pending the extensive data reconciliation, and resumed thereafter. ECCC remains committed to providing credible climate data to inform adaptation decision making, while ensuring the necessary data reconciliation occurs as monitoring technology evolves.

NATIONAL TEMPERATURE

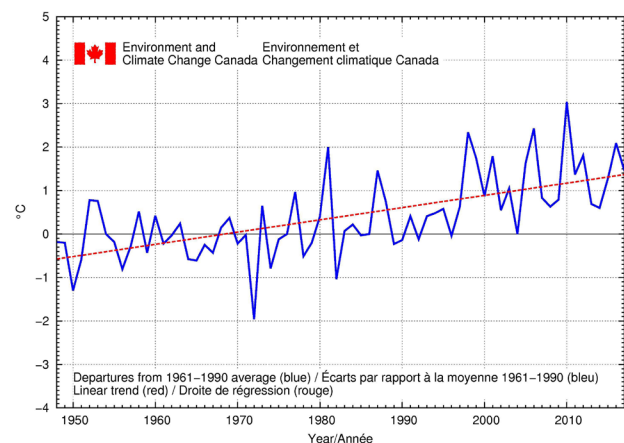
The national average temperature for the year 2017 (January to December) was 1.5°C above the baseline average (defined as the mean over the 1961–1990 reference period), based on preliminary data, which is the 10th warmest observed since nationwide recording began in 1948. The warmest year occurred in 2010, when the national average temperature was 3°C above the baseline average. The coldest year occurred in 1972, when the national average temperature was 2°C below the baseline average. The temperature departures map (below) shows that most of northern Canada as well as parts of British Columbia, Alberta, Saskatchewan, and Manitoba experienced temperatures above the baseline average in 2017. Temperatures were near the baseline average in the remainder of the country.

TEMPERATURE DEPARTURES FROM THE 1961–1990 AVERAGE – ANNUAL 2017



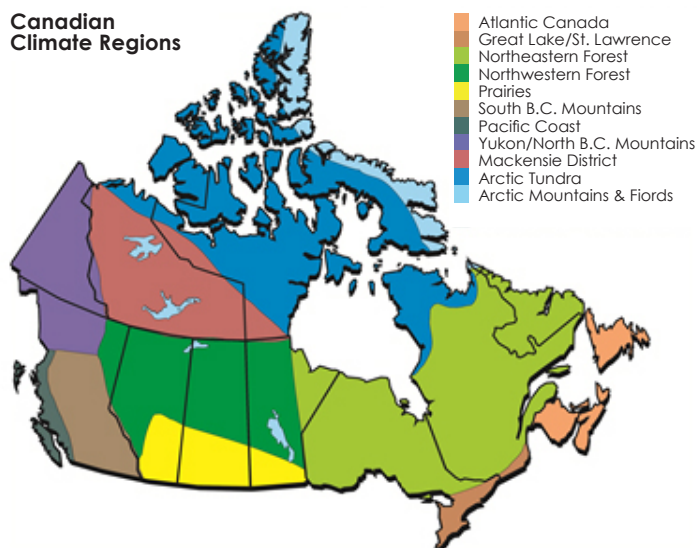
The time series graph shows that averaged annual temperatures across the country have fluctuated from year to year over the 1948–2017 period. The linear trend indicates that annual temperatures averaged across the nation have warmed by 1.8°C over the past 70 years.

ANNUAL NATIONAL TEMPERATURE DEPARTURES AND LONG-TERM TREND, 1948–2017



REGIONAL TEMPERATURE

When examined on a regional basis, the average annual temperatures for 2017 were among the 10 warmest on record since 1948 for two of the eleven climate regions: the Mackenzie District region (6th warmest at 2.5°C above average) and the Arctic Tundra region (7th warmest at 2.2°C above average). None of the eleven climate regions experienced an average annual temperature for 2017 that ranked among the 10 coldest since 1948. All eleven climate regions exhibit positive trends for annual temperatures over the 70 years of record. The strongest regional trend (+2.8°C) is observed in the Mackenzie District region, while the weakest trend (+0.8°C) is found in the Atlantic Canada region. A table listing the regional and national temperature departures and rankings from 1948 to 2017 and a table that summaries regional and national trends and extremes summaries are available on request to ec.bttvc-ctvb.ec@canada.ca.



Cat. No.: En81-23E-PDF

ISSN: 2367-9794

For information regarding reproduction rights, please contact Environment and Climate Change Canada's Public Inquiries Centre at 1-800-668-6767 (in Canada only) or 819-997-2800 or email to ec.enviroinfo.ec@canada.ca.

© Her Majesty the Queen in Right of Canada, represented by the Minister of Environment and Climate Change, 2018

Aussi disponible en français