



**SUMMER 2018**

## CLIMATE TRENDS AND VARIATIONS BULLETIN

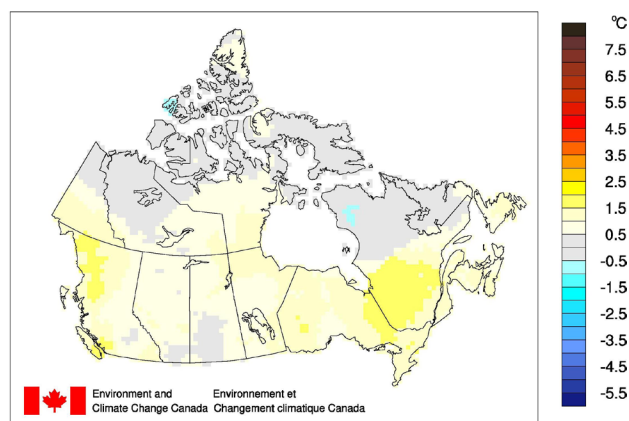
**This bulletin summarizes recent climate data and presents it in a historical context. It first examines the national average temperature for the season and then highlights interesting regional temperature information.**

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 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

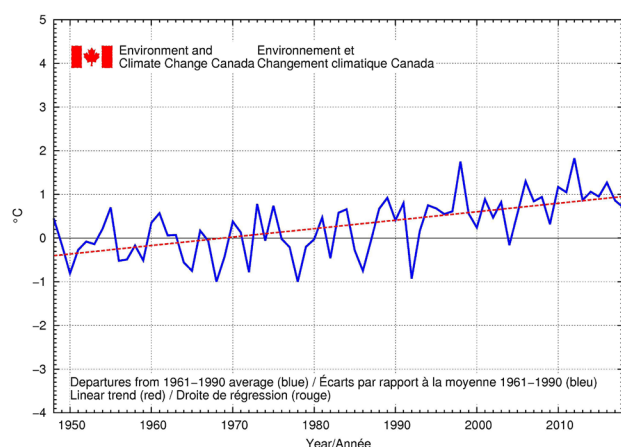
The national average temperature for the summer (June–August) of 2018 was 0.7°C above the baseline average (defined as the mean over the 1961–1990 reference period), based on preliminary data, which is the 21<sup>st</sup> warmest observed since nationwide recording began in 1948. The warmest summer occurred in 2012, when the national average temperature was 1.8°C above the baseline average. The coldest summer occurred in 1978, when the national average temperature was 1.0°C below the baseline average. The temperature departures map (below) shows that parts of British Columbia, Ontario, and Quebec experienced temperatures notably above the baseline average. Summer temperatures were generally near the baseline average in the remainder of the country.

## TEMPERATURE DEPARTURES FROM THE 1961–1990 AVERAGE – SUMMER 2018



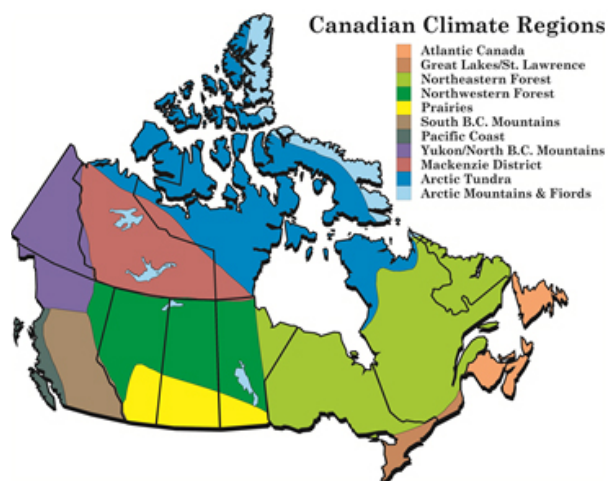
The time series graph (below) shows that averaged summer temperatures across the country have fluctuated from year to year over the 1948–2018 period. The linear trend indicates that summer temperatures averaged across the nation have warmed by 1.5°C over the past 71 years.

## SUMMER NATIONAL TEMPERATURE DEPARTURES AND LONG-TERM TREND, 1948–2018



## REGIONAL TEMPERATURE

When examined on a regional basis, average summer temperatures for 2018 were among the 10 warmest on record since 1948 for three of the eleven climate regions: Atlantic Canada (10<sup>th</sup> warmest at 1.0°C above average), Great Lakes/St. Lawrence (9<sup>th</sup> warmest at 1.3°C above average) and the Pacific Coast (10<sup>th</sup> warmest at 1.2°C above average). None of the eleven climate regions experienced an average summer temperature for 2018 that ranked among the 10 coldest since 1948. All eleven climate regions exhibit positive trends for summer temperatures over the 71 years of record. The strongest trend is observed in the Mackenzie District region (+1.9°C), while the weakest trend (+1.0°C) is found in the Prairies region. A table listing the regional and national temperature departures and rankings from 1948 to 2018 and a table that summarizes regional and national trends and extremes summaries are available on request to [ec.btvb-ctvb.ec@canada.ca](mailto:ec.btvb-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 819-938-3860 or email to [ec.enviroinfo.ec@canada.ca](mailto:ec.enviroinfo.ec@canada.ca).

Photos: © Environment and Climate Change Canada

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

Aussi disponible en français