Summer 2025

Climate Trends and Variations Bulletin

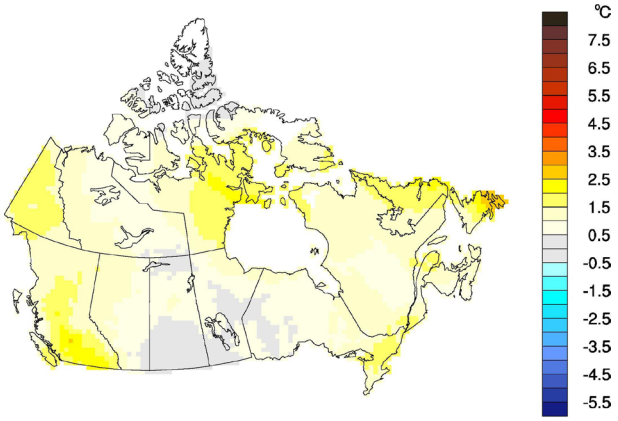
This bulletin summarizes recent climate data and presents it in a historical context. It first examines the national average temperature for the season and then highlights interesting regional temperature information.

Over the past decade, precipitation monitoring technology has evolved, and Environment and Climate Change Canada (ECCC) 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 a temporary hiatus pending the extensive data reconciliation and will resume 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

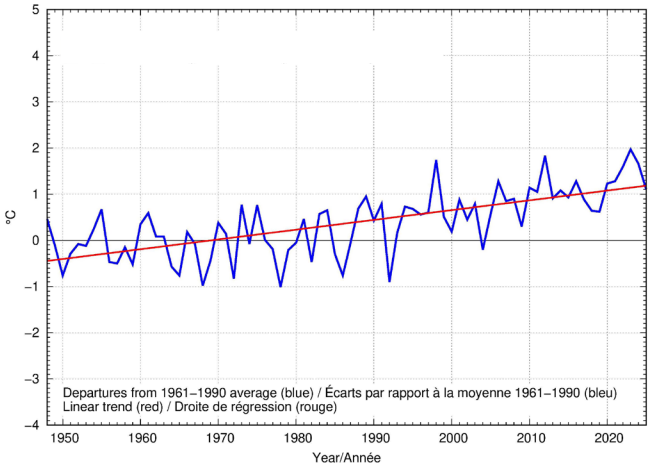
The national average temperature for the summer (June–August) of 2025 was 1.1°C above the baseline average (defined as the mean over the 1961–1990 reference period), based on preliminary data, which was the 11th warmest summer since nationwide recording began in 1948. The warmest summer was 2023 with a temperature of 2.0°C above the baseline average. The coldest summer on record occurred in 1978, when the national average temperature was 1.0°C below the baseline average. The temperature departures map shows that most of Canada experienced temperatures at least 1.0°C above the baseline average, except for regions in Saskatchewan and Manitoba, which recorded temperatures close to the baseline average. Temperature departures greater than 2.0°C above the baseline average were recorded in southern British Columbia, parts of Nunavut, the Yukon, and Newfoundland and Labrador.

Temperature Departures from the 1961–1990 Average – Summer 2025



The time series graph shows that average summer temperatures across the country fluctuated annually over the 1948–2025 period. Apart from 2004, average summer temperatures have remained above the baseline average since 1993. The linear trend indicates that summer temperatures averaged across the nation have warmed by 1.8°C over the past 78 years.

Summer National Temperature Departures and Long-term Trend, 1948–2025

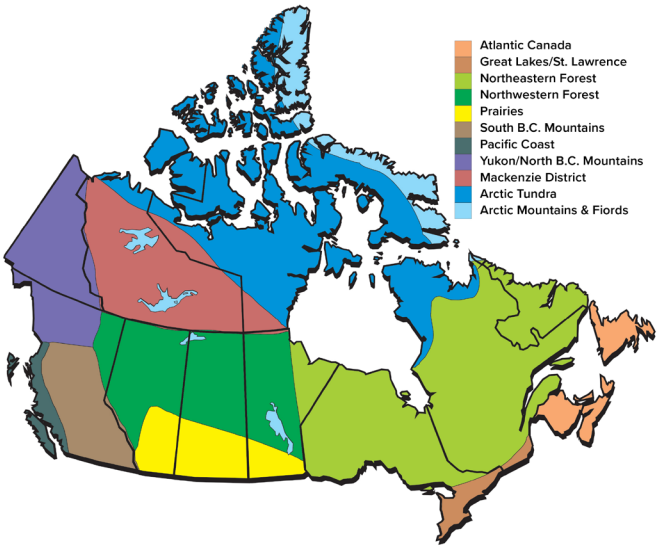


Regional Temperature

Regionally, 4 of the 11 climate regions experienced average summer temperatures that rank among the top 10 warmest since 1948. These regions were Atlantic Canada (5th warmest at 1.5°C above the baseline average); South British Columbia Mountains (9th warmest at 1.7°C above the baseline average); Great Lakes / St. Lawrence region (10th warmest at 1.5°C above the baseline average); and the Yukon / North British Columbia Mountains (10th warmest at 1.5°C above the baseline average). None of the 11 climate regions recorded average summer temperatures in 2025 that ranked among the 10 coolest since 1948. All 11 climate regions exhibited positive trends for summer temperatures over the past 78 years.

The strongest trend was observed in the Mackenzie District (+2.1°C), while the weakest trend was found in the Prairies region (+1.2°C). A table listing regional and national temperature departures and rankings from 1948 to 2025, as well as a table summarizing regional and national trends and extremes, are available upon request at btvc-ctvb@ec.gc.ca.

The Map of Canadian Climate Regions



Cat. No: En81-23E-PDF
ISSN: 2367-9794
EC25124