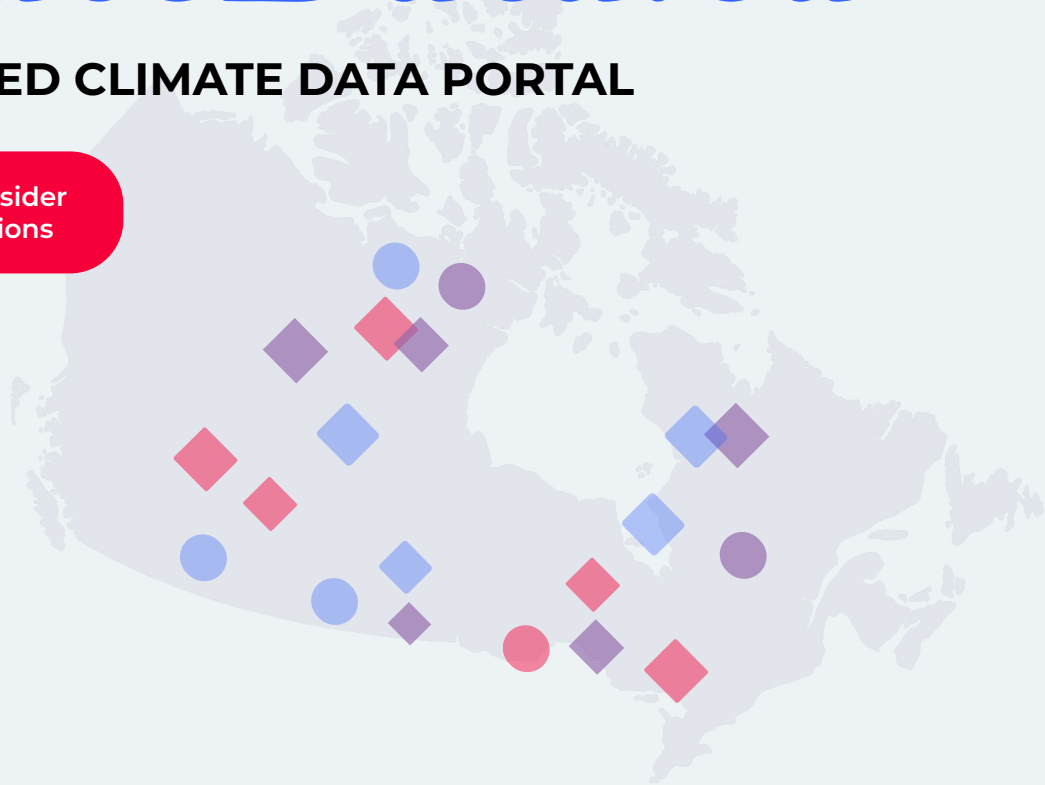# ClimateData.ca

CANADA'S TRUSTED CLIMATE DATA PORTAL

Supporting Canadians to consider climate change in their decisions

Environment and
Climate Change Canada

Environnement et
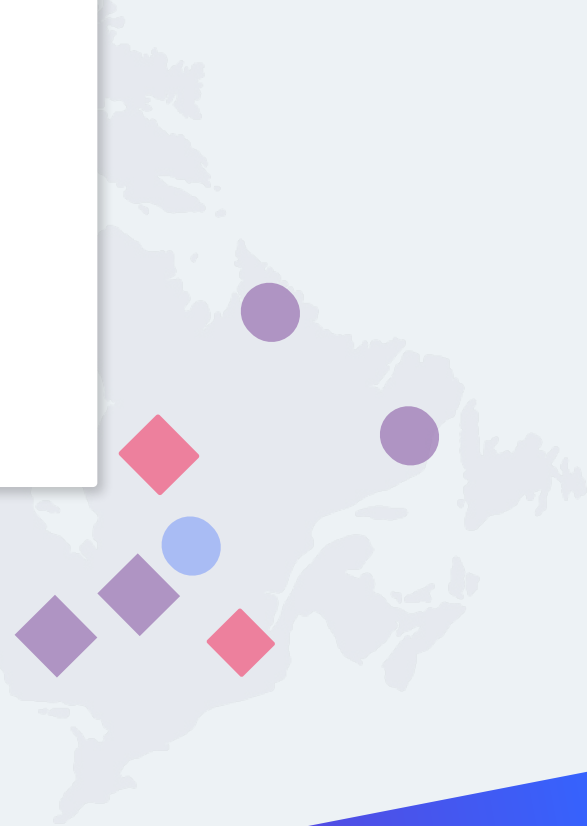Changement climatique Canada

Ouranos

PACIFIC CLIMATE
IMPACTS CONSORTIUM

Prairie
Climate Centre
From Risk to Resilience

ORCCA
CRACO

CLIMAtlantic

CRIM

evolvingweb

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ClimateData.ca
Donneesclimatiques.ca

1. What is ClimateData.ca?

ClimateData.ca provides high-resolution climate data to help decision-makers build a more resilient Canada.

Our goal is to enable Canadians to access and use the most up-to-date climate data through easy-to-use formats and visualizations.

Start building resilience today with the help of this interactive data platform.

ClimateData.ca includes datasets, interactive maps, and guidance material to support adaptation planning.

Canada's climate is changing rapidly. Until global emissions of greenhouse gasses reach net-zero, Canada's climate will continue to warm, and this change will lead to increases in extreme heat and extreme precipitation, changing sea-levels, and further declines in snow and ice cover.

All sectors of society and the economy are impacted by climate changes. Therefore, it is important for Canadians to understand how climate change may impact their lives and livelihoods.

Choose from 125+ datasets

Run custom analysis

Download and visualize data

2. Our Partners

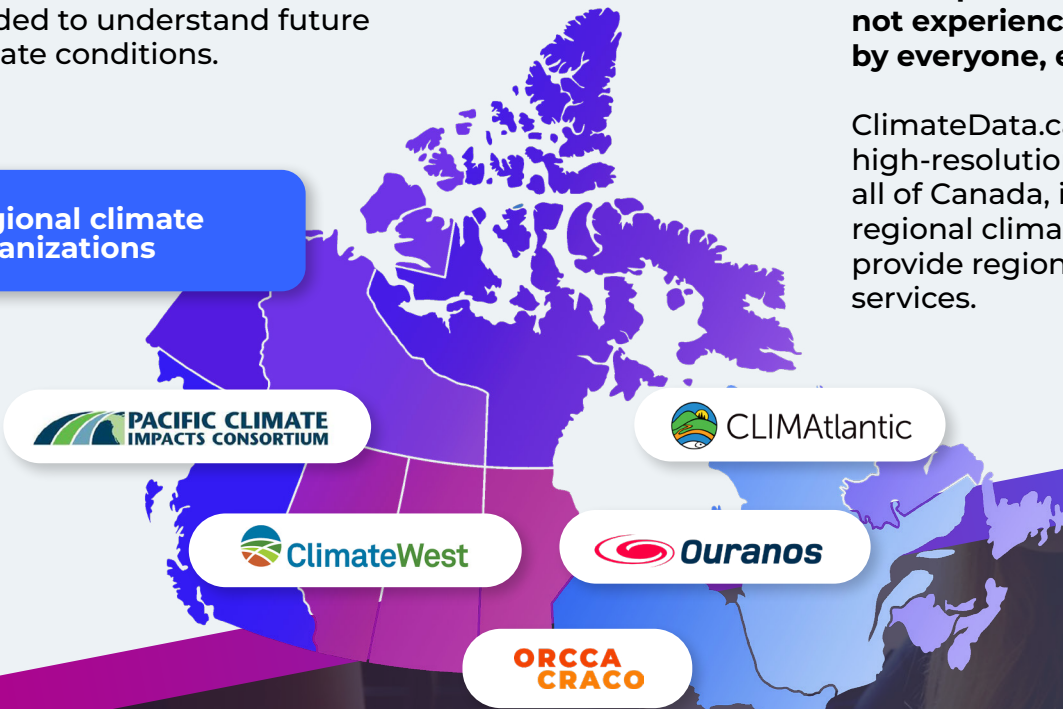## ClimateData.ca is a collaboration between the country's leading climate organizations.

ClimateData.ca builds on the expertise of the federal government and Canada's regional climate organizations to provide decision-makers with the right climate data in the right format.

Canada's National Adaptation Strategy provides a guiding framework for climate adaptation activities across Canada. Online data portals play a key role in informing adaptation by providing access to the information needed to understand future climate conditions.

ClimateData.ca partners

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Environnement et Changement climatique Canada

ORCCA CRACO

Prairie Climate Centre
From Risk to Resilience

Regional climate organizations

The impacts of climate change are not experienced in the same way by everyone, everywhere.

ClimateData.ca not only provides high-resolution climate data for all of Canada, it connects users to regional climate organizations that provide regionally-specific climate services.

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3. Data, Tools, and Apps

ClimateData.ca offers a wide range of resources, historical climate data, future climate projections, and analysis tools.

Through this collaborative portal, Canadians can access country-wide gridded and station-based climate data. Climate model projections and historical data are available to explore, analyse, and download. Explore simulations of past climate and future climate under a range of emissions scenarios.

Visit ClimateData.ca to:

- Explore Canada-wide historical and future climate data
- Compare different future emissions scenarios
- Perform custom data analysis quickly and efficiently

Learn about our data standards by visiting ClimateData.ca

Search, explore, and customize:

- Future climate projections at ~6x10km resolution
- Climate change-scaled Intensity Duration Frequency (IDF) data
- Humidex tool
- Weather station observations
- Fire Weather Projections app
- Sea-level change data
- and more!

Explore a full list of variables available on ClimateData.ca

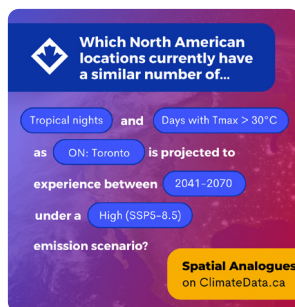**ClimateData.ca**
Donneesclimatiques.ca

4. New and Noteworthy Features

ClimateData.ca is continuously engaging with users, scientists, and researchers to collaboratively develop new tools and features.
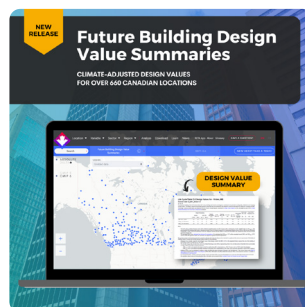
ClimateData.ca is continually updated as scientific projections of climate change evolve and new methods for developing sector-specific climate data products and services emerge.

Here are a few of our latest releases:

Explore cities that are already experiencing one or more climatic conditions of concern.

Spatial analogues are locations where people currently experience climate variables (such as the number of days above 30 °C) that resemble your city's projected future climate.

These one-page PDFs provide tailored, climate-adjusted design values for over 660 Canadian locations.

Each summary provides essential climate design values like wind pressure, snow loads, and temperature extremes, ideal for those who design and construct buildings.

This app provides long-term projections of fire season length and severity.

As fire weather increases (hot, dry, and windy conditions), so too does fire danger. This app helps meet a growing need for accessible and practical fire weather projections.

Subscribe to the ClimateData.ca newsletter for the latest updates

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5. Learning and Guidance

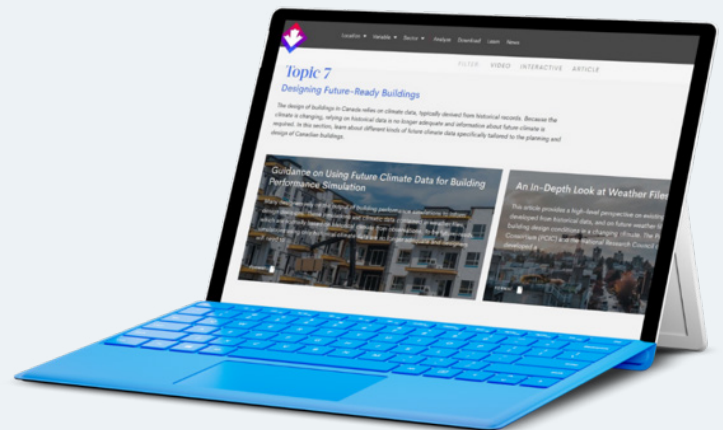**ClimateData.ca also offers learning and guidance material about climate data.**

Too often, datasets are made available without adequate information about what the data mean or how they are meant to be used. ClimateData.ca strives to ensure that data are accessible and useful to everyone.

We make information understandable and useful by developing articles and resources aimed at different levels of subject familiarity. Learn more about the science behind climate data, how to choose and access Canadian climate data, and download pre-made materials for your own training sessions.

Explore Learning Zone materials such as:

- Introduction to climate information
- How to integate climate change into your decision making
- How to use ClimateData.ca
- Understanding historical data

You don't need "climate" in your job title to start building a foundation of climate literacy.

- Read articles related to your region, sector, or area of interest
- Watch videos and learn about available climate variables on ClimateData.ca
- Listen to our podcast pilot to hear how others are incorporating climate data into their work

Have a question? We're here to help.

ClimateData.ca
Donneesclimatiques.ca

6. Use Case Examples

ClimateData.ca aims to inspire adaptation action through case studies, guidance, and tailored training materials for different sectors.

The learning and guidance section of ClimateData.ca provides examples from around the country of actions that Canadians are taking to both understand how climate change affects them and to enact solutions.
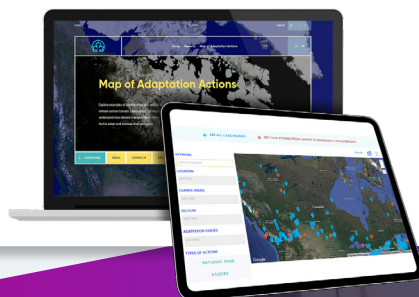

Climate change is complex, and applying climate data requires consideration and care. Explore sector-specific case studies to see how climate data is being used to inform adaptation actions.

Climate data are useful across the spectrum of sectors:

- Health
- Transportation
- Energy
- Buildings
- Agriculture
- and more!

Looking for more inspiration?

Explore case studies available through the **Map of Adaptation Actions**, a searchable, interactive map from the *Canada in a Changing Climate Report*.

Browse the case studies available on ClimateData.ca

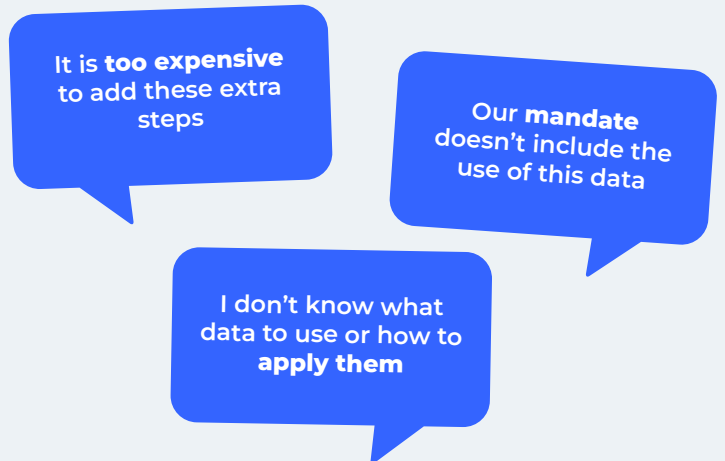## Have a question? Looking for support to use climate data?

We're here to help. If you haven't found the information you're looking for on ClimateData.ca, please contact the Climate Services Support Desk. A Climate Services Support Desk Officer can assist with finding future climate data for specific locations in Canada, help with picking the most relevant data for your needs, and troubleshoot any difficulties accessing and downloading data.

Are you facing barriers to using climate data in your work?

Contact us for support!
Email our Climate Services Support Desk at
ccsc-cccs@ec.gc.ca

Remember, Canada's climate is changing rapidly. All sectors of society and the economy are at risk from climate change. It is important for Canadians to incorporate climate change into their decision-making.

It is **too expensive** to add these extra steps

Our **mandate** doesn't include the use of this data

I don't know what data to use or how to **apply them**

Climate Service Providers are on hand to help you move forward

Stay in touch with ClimateData.ca

Follow ClimateData.ca on social media and join the conversation about building climate resilience in Canada.

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