



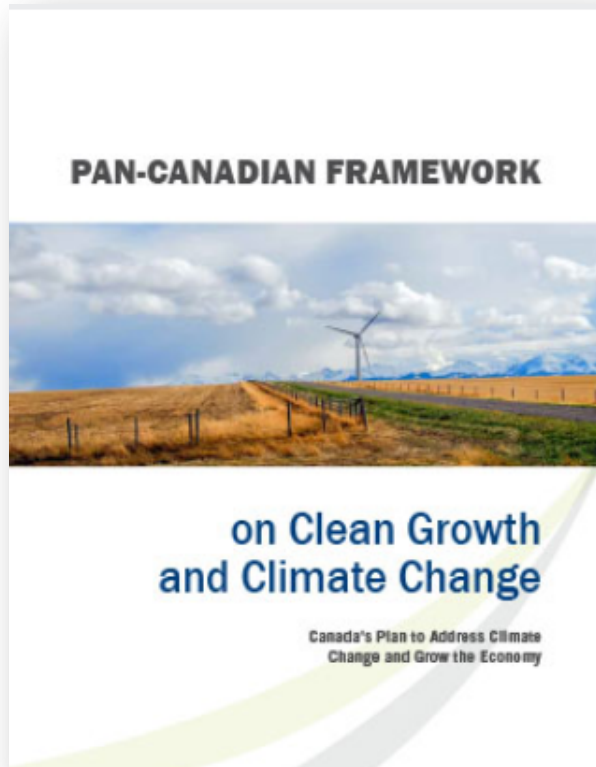
Environment and  
Climate Change Canada

Environnement et  
Changement climatique Canada

Canada

# THE CANADIAN CENTRE FOR CLIMATE SERVICES: CONNECTING CANADIANS WITH CLIMATE INFORMATION

# THE CANADIAN CENTRE FOR CLIMATE SERVICES



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The **Mission** of the CCCS is to provide Canadians with information and support to consider climate change in their decisions

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# THE CANADIAN CENTRE FOR CLIMATE SERVICES

**Adopts a user-centric approach**

**Provides leadership in cross-Canada co-delivery of Climate Services**

**Empowers users to understand and apply climate information in decisions**

**Co-develops new products and tools with partners to support adaptation**

**Increases access to data, tools and information**





# A SUITE OF DATA PORTALS



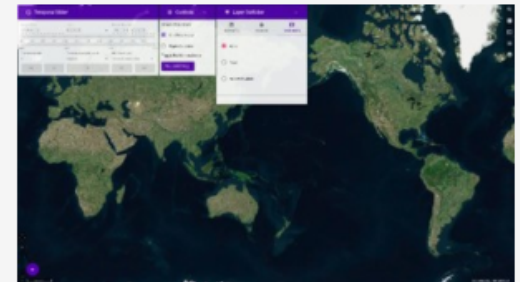
## Climate Atlas of Canada

Start learning about climate change in Canada through mapping and storytelling



## ClimateData.ca

Start exploring case studies and downloading location-based climate data by variable or sector



## Power Analytics and Visualization for Climate Science (PAVICS)

Coming soon!  
Access advanced climate data processing and visualization tools



# CLIMATEDATA.CA

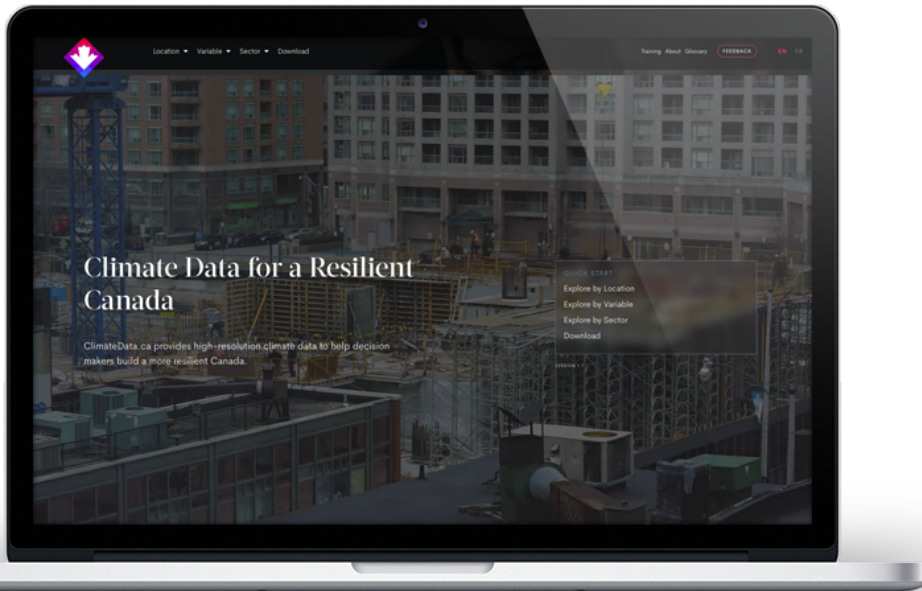
*High-resolution climate data to help decision makers build a more resilient Canada*

## Climate Data

- Climate Data
- 10x10km resolution climate data
- Temperature and precipitation variables and climate indices
- Observed climate normals and daily data download
- IDF curves

## Helpful Resources

- Location-based summaries
- Local and national scale charts and maps
- Ability to compare emission scenarios
- Custom heat wave analysis tool
- Sector modules with tailored case studies
- Training modules



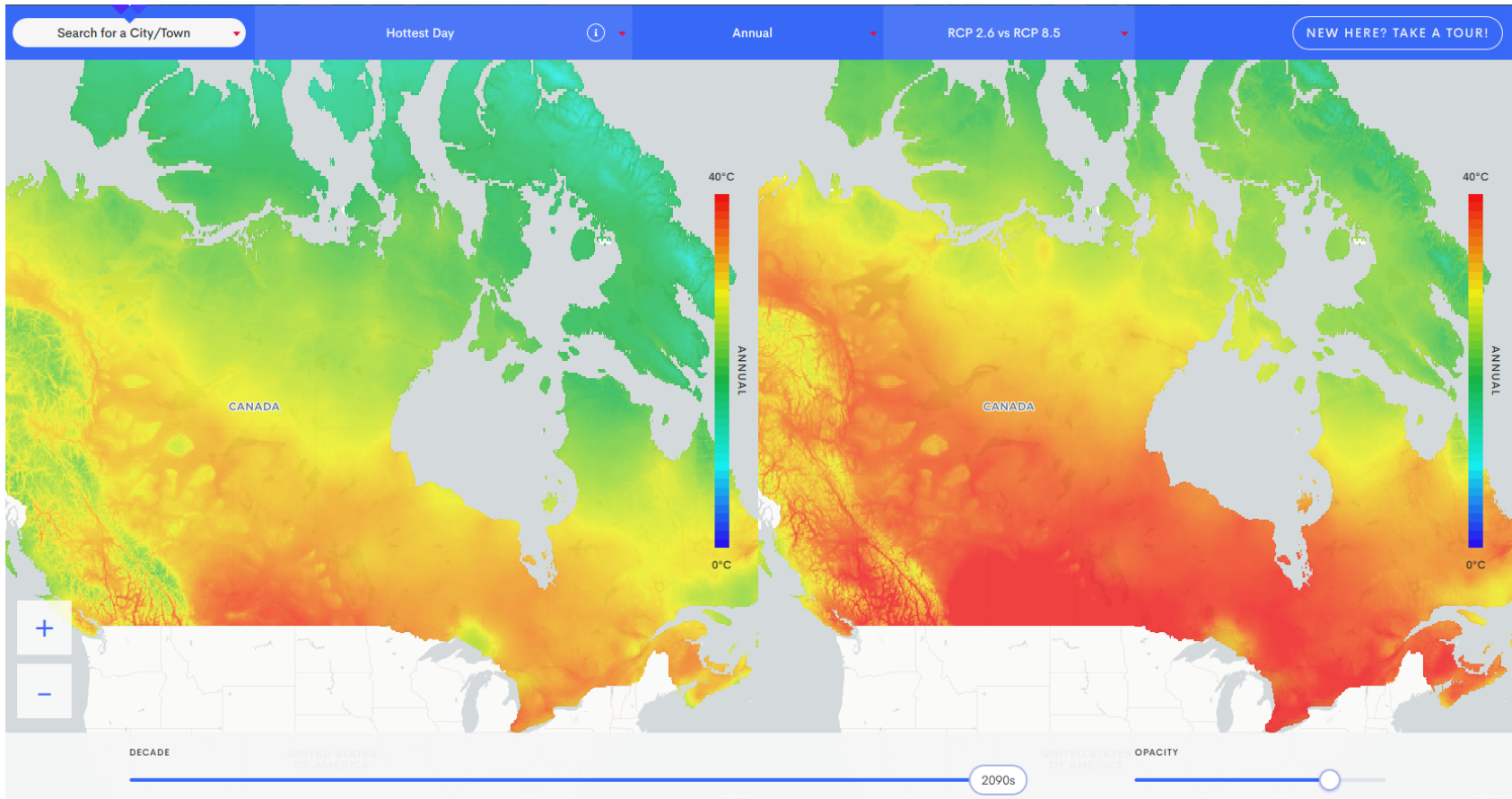
# QUERIES

Search for data by location or variable

- Select a variable, including historical station data and IDF curves
- Select Annual or Month
- Select RCP
- Download Data
- Download chart image
- Adjust time scale to customize output



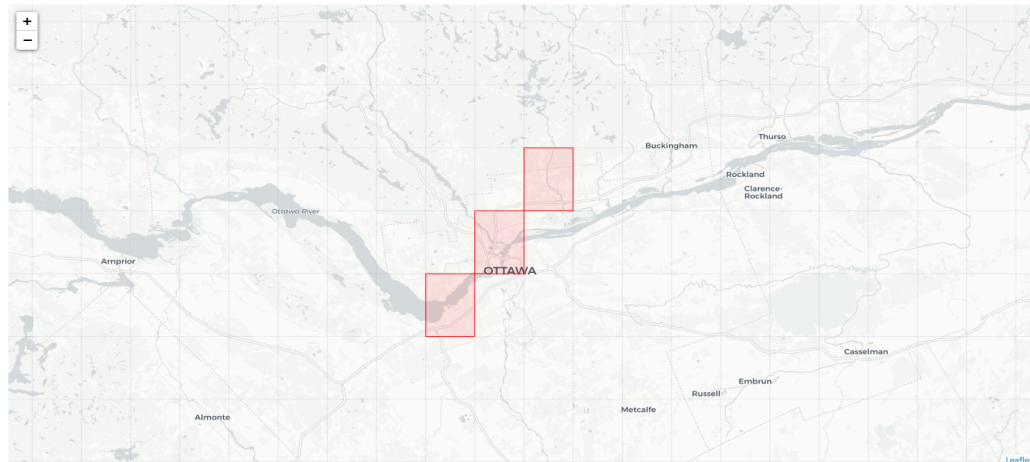
# COMPARING FUTURE EMISSION SCENARIOS





# DOWNLOAD

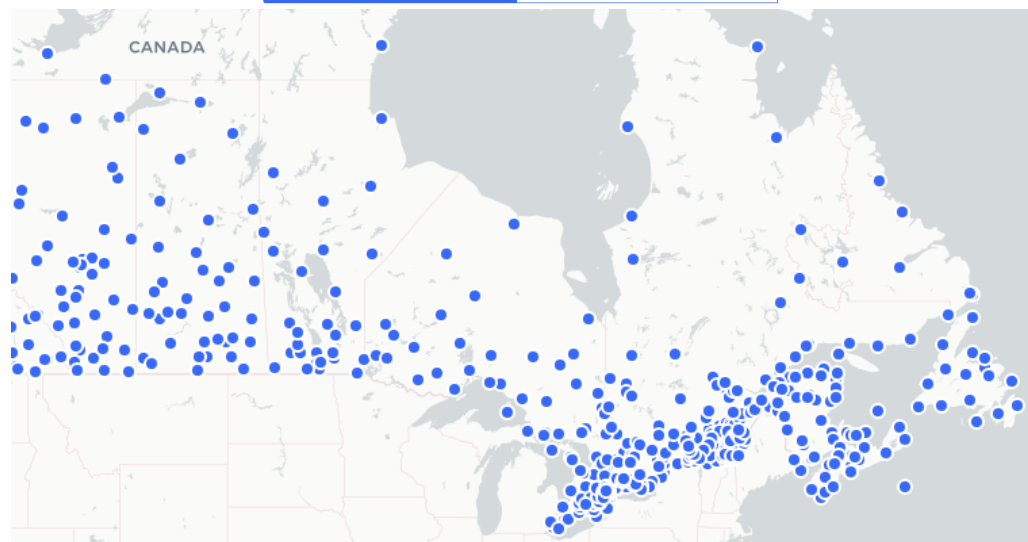
- 25+ monthly and annual indices
- 3 daily variables
- Any ~10x10km grid cell in Canada
- Select multiple grid cells
- ECCC climate station data and IDF Curves



4 Select a data format

CSV

JSON



# ANALYZE PAGE

- Canada has a wide variety of climates and indices needs
- 15 indices to personalize
- Users can choose percentiles, RCPs etc.
- Calculations are done in the background by the site and sent to the user

## 3 CUSTOMIZE VARIABLES

- ☐ Days above Tmax and Tmin
- ☐ Days above Tmax
- ☐ Days above Tmin
- ☐ Days below Tmin
- ☐ Degree Days Above a Threshold
- ☐ Degree Days Below a Threshold
- ☐ Heat Wave
- ☐ Heat Wave Total Duration
- ☐ Heat Wave Frequency
- ☐ Days with a Freeze-Thaw Cycle
- ☐ Cold Spell Days

## Heat Wave Frequency

This analysis returns the number of heat waves, defined as an event where daily minimum temperature >

degrees C and daily maximum temperature >   degrees C over a minimum of  consecutive days

# SECTORS

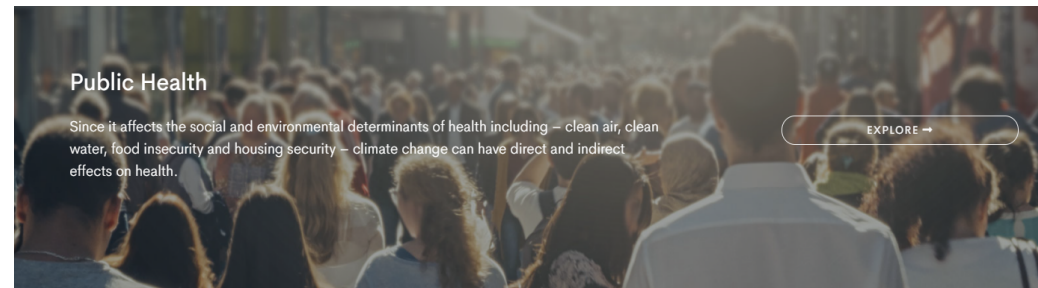
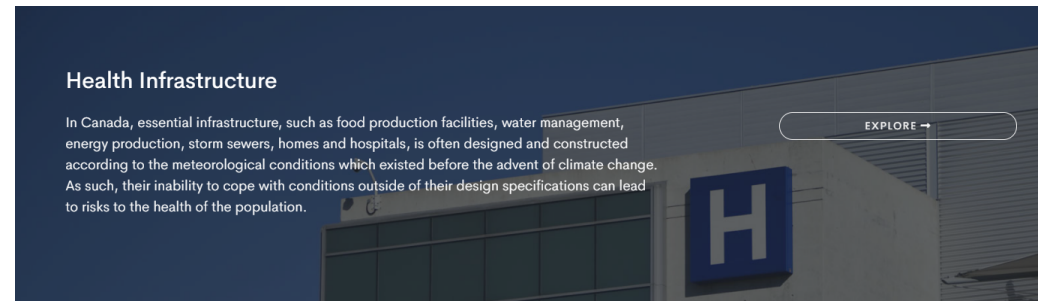
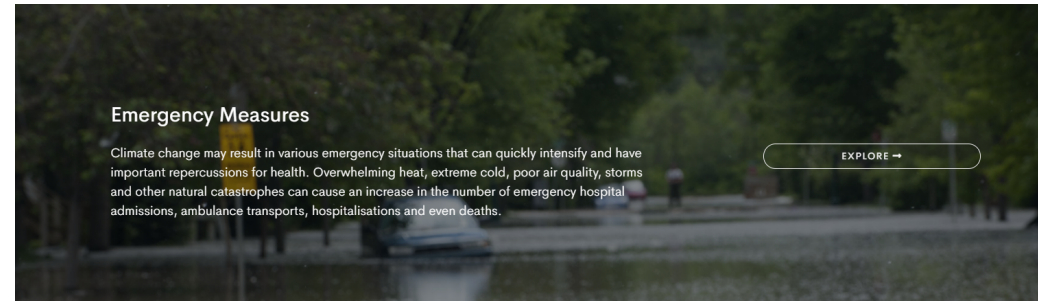
**Examples of how ClimateData.ca's information can be incorporated into adaptation decision making**

## Health Sector

- 3 Case Studies
- Data summarized by health region.

## Upcoming Sectors:

- Agriculture
- Transport
- Bâtiments





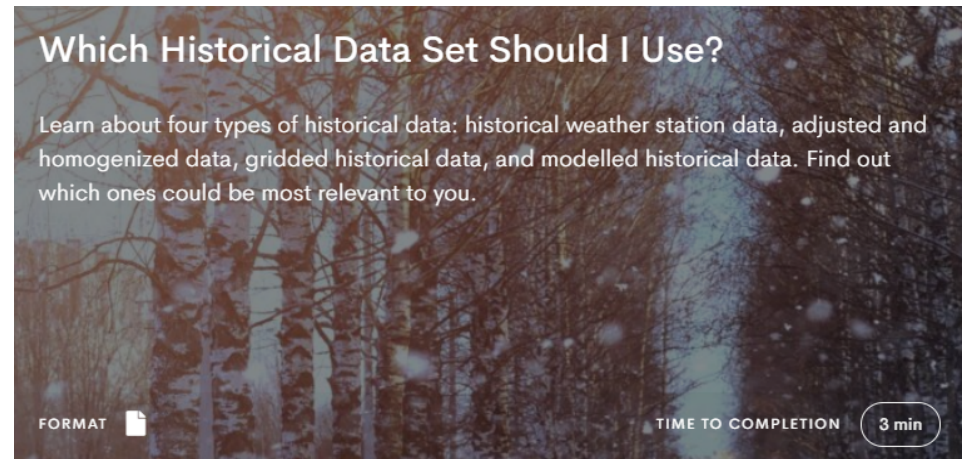
# LEARNING

## Topics:

- Introduction to Climate Information for Decision Making
- Understanding Historical Data
- How to use ClimateData.ca

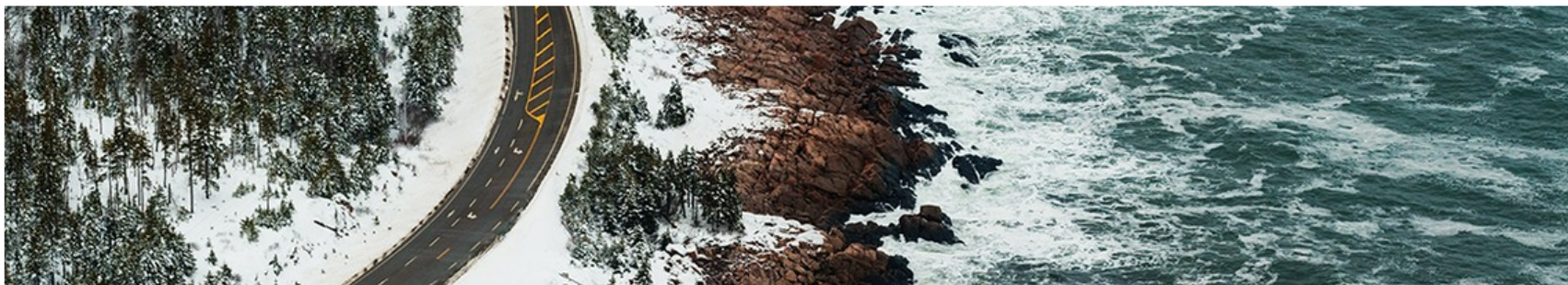
## Training Material :

- Introduces climate information and its role in decision making



# CANADIAN CENTRE FOR CLIMATE SERVICES WEBSITE

## Canadian Centre for Climate Services



### Library of climate resources

Datasets, tools,  
guidance and related  
resources



### Climate information basics

Climate change  
concepts, trends and  
role of climate  
information in  
decision-making



### Climate Services Support Desk

1-833-517-0376  
Get help from our  
climate experts to  
find, understand and  
use climate  
information

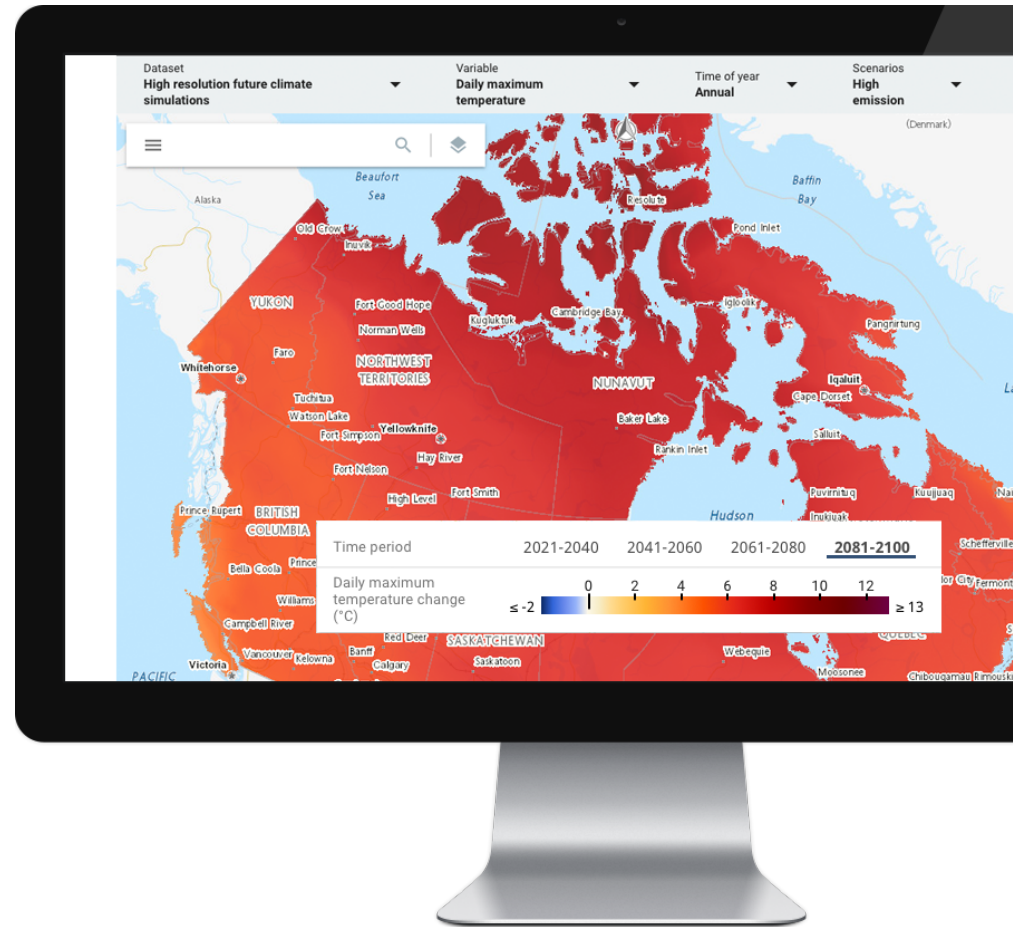


### Display and download climate data

View selected climate  
datasets on maps or  
download data

# CCCS CLIMATE DATA VIEWER

- Choose **historical** or **future** datasets
- Choose from statistically downscaled products or GCM ensembles
- Choose different variables including **temperature** and **precipitation**
- Choose **annual** or **seasons**
- Choose from low, moderate, or high emissions **scenarios**
- **Download** data in a variety of formats



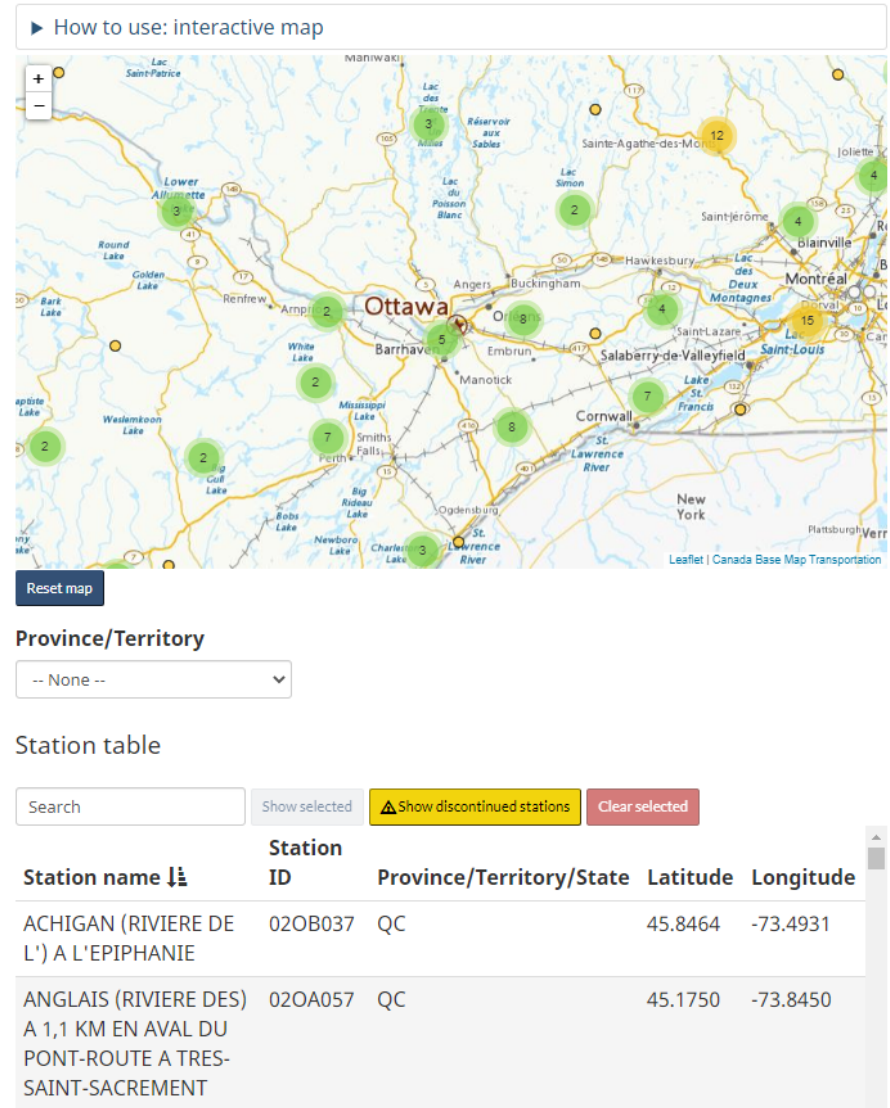


# CLIMATE DATA EXTRACTION TOOL

An interactive map to download ECCC's historical and future climate data

- Choose from **historical data** or **future projections**
- Choose between coarse resolution global climate model outputs or statistically downscaled outputs
- Narrow down our selection by time period, value type, emission scenario and more!
- Data provided by API

► How to use: interactive map



Reset map

Province/Territory

-- None --

Station table

Search Show selected Show discontinued stations Clear selected

Station name ↕	Station ID	Province/Territory/State	Latitude	Longitude
ACHIGAN (RIVIERE DE L') A L'EPIPHANIE	02OB037	QC	45.8464	-73.4931
ANGLAIS (RIVIERE DES) A 1,1 KM EN AVAL DU PONT-ROUTE A TRES-SAINT-SACREMENT	02OA057	QC	45.1750	-73.8450

# LIBRARY OF CLIMATE RESOURCES



## Library of climate resources

Datasets, tools, guidance and related  
resources

- Provides access to **over 300** resources from Canadian and International sources
- **Links** to climate related resources to support adaptation decision-making
- **Keywords** and **Filters** to support exploration

# CLIMATE INFORMATION BASICS

- Helpful information **on climate change concepts**
- **Guidance** on the role of climate information in decision-making
- **Supporting resources** to clarify the field of climate services



## Climate information basics

Climate change concepts, trends and role of climate information in decision-making



# CLIMATE SERVICES SUPPORT DESK



- Helps users find the **right datasets** and **information**
- Provides **guidance** for understanding and using data
- Draws on a **network of experts** to respond to inquiries



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# CONTACT US



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