How to Use – Historical Data

How do I obtain historical climate data for a specific location in Canada when using the Historical Data tool?

On the *Historical Data* page, you will be presented with three different search methods for locating historical climate data;

1. **Search by Station Name**
2. **Search by Province**
3. **Search by Proximity**

You can find data for any Canadian climate station using any of these three options. Each method is described in detail below:

1. How do I obtain historical climate data for White Rock, British Columbia (BC) by using the "Search by Station Name" function?

The *Historical Data* tool gives you the option of acquiring data for a station by using the name of the station itself. Beside "Name" in the "Search by Station Name" box, enter the name of the location you are searching for (e.g. White Rock). Next, you can specify the time period of the data that you are searching for. Do this by selecting "with data available between _____ to _____", or select and enter "with data on". The default setting selects all data from the year 1840 to the current year. The default time period will generate a large list of stations. The dropdown arrows beside each of the two year options can be used to select a time period in between. If you have a specific date in mind, enter it, and this will decrease the amount of time taken to find the station you are searching for.

The last parameter to set is how many results you would like to display per page. The default is set at 25 but you may change this option to 10, 50 or 100, by clicking on the dropdown list. Once all this information has been selected, click "Search".

Search by Station Name

You will be taken to a page with a list of all the stations that have the criteria that you have specified in your search, if any exist. In this example a list containing 6 stations is generated.

Results for Search by Station Name

All of these stations contain the word "White Rock" and have data available between 1840 and 2014. The stations are listed in alphabetical order so continue through the list until you find the "White Rock Campbell Scientific" station. For this station you must then select a Year, Month, Day and Data Interval. Selecting "Hourly" in the data interval will give you weather conditions for every hour including temperature, humidity and wind information, where available, for a specified day. Selecting "Daily" in the data interval will give you information about the maximum and minimum temperature, amount of precipitation (rain/snow), maximum wind gust and more, where available, for every day of the selected month. Selecting "Monthly" in the data interval will give you the monthly totals for a specified year (this section is often not up-to-date by several months due to a longer quality control process).

In this example we are searching for historical climate data for White Rock, BC, on November 10th, 2004. To determine how far back daily data is available for White Rock in BC, select the "Daily" Data Interval for that station. Then, click on the year dropdown list to see what years of data are available. As you will see, White Rock daily data goes back as far as 1929. Select November, 1929 and press "Go". You will find that on November 10th, 1929 the maximum temperature in White Rock, BC was 11.7°C, the minimum temperature was 2.2°C and there was no precipitation.

Daily Data Report for November 1929

WHITE ROCK CAMPBELL SCIENTIFIC
BRITISH COLUMBIA

Latitude:	49°01'05.000" N	Longitude:	122°47'02.000" W	Elevation:	13.00 m
Climate ID:	1108910	WMO ID:	71785	TC ID:	WWK

Related Data	Additional Search Options	Download Data
Monthly Data (1929)	Nearby Stations with Data Historical Data Search	Daily Data (1929) ◉ CSV ○ XML Download Data Get More Data

← Previous Month   1929 ▾ November ▾ Go   Next Month →

Daily Data Report for November 1929

DAY	Max Temp °C	Min Temp °C	Mean Temp °C	Heat Deg Days	Cool Deg Days	Total Rain mm	Total Snow cm	Total Precip mm	Snow on Grnd cm	Dir of Max Gust 10's deg	Spd of Max Gust km/h
01	10.0	6.7	8.4	9.6	0.0	0.5	0.0	0.5			
02	13.9	5.6	9.8	8.2	0.0	0.0	0.0	0.0			
03	14.4	2.8	8.6	9.4	0.0	0.0	0.0	0.0			
04	11.1	3.9	7.5	10.5	0.0	0.0	0.0	0.0			
05	8.3	3.3	5.8	12.2	0.0	0.0	0.0	0.0			
06	12.8	2.8	7.8	10.2	0.0	0.0	0.0	0.0			
07	11.7	0.6	6.2	11.8	0.0	0.0	0.0	0.0			
08	9.4	0.6	5.0	13.0	0.0	0.0	0.0	0.0			
09	13.9	6.1	10.0	8.0	0.0	6.6	0.0	6.6			
10	11.7	2.2	7.0	11.0	0.0	0.0	0.0	0.0			

Results for White Rock, BC, November 1929

2. How do I obtain historical climate data for White Rock, BC by using the "Search by Province" function?

In the "Search by Province" option, select your province of interest by clicking on the "Province" dropdown list. In the example below, *British Columbia* was chosen. Similar to the "Search by Station Name" function, you are also prompted to enter information about the time period of the data that you are searching for.

Using the same example from above, enter the information and submit your query by clicking on "Search".

Search by Province

A list containing over 370 stations will be generated. All of these stations are within BC and have data available for November 10th, 2004. The stations are listed in alphabetical order, so continue through the list until you find the station, "White Rock Campbell Scientific".

372 locations match your customized search. Confirm the Data Interval and Date for one of the locations listed and click GO to display the data.

Station	Prov.	Data Interval	Year	Month	Day	
VICTORIA HARTLAND CS	BC	Hourly	2004	Nov	10	Go
VICTORIA HIGHLAND	BC	Daily	2004	Nov	10	Go
VICTORIA INT'L A	BC	Hourly	2004	Nov	10	Go
VICTORIA UNIVERSITY CS	BC	Hourly	2004	Nov	10	Go
VIDETTE LAKE SHARPE LAKE	BC	Daily	2004	Nov	10	Go
WARDNER KTNY HATCHERY	BC	Daily	2004	Nov	10	Go
WARFIELD RCS	BC	Hourly	2004	Nov	10	Go
WASA	BC	Daily	2004	Nov	10	Go
WEST VANCOUVER AUT	BC	Hourly	2004	Nov	10	Go
WESTWOLD	BC	Daily	2004	Nov	10	Go
WHISTLER	BC	Hourly	2004	Nov	10	Go
WHISTLER ROUNDHOUSE	BC	Daily	2004	Nov	10	Go
WHITE ROCK CAMPBELL SCIENTIFIC	BC	Hourly	2004	Nov	10	Go
WHITE ROCK OCEAN PARK	BC	Daily	2004	Nov	10	Go
WILLIAM HEAD	BC	Daily	2004	Nov	10	Go
WILLIAMS LAKE A	BC	Hourly	2004	Nov	10	Go

Search by Province Results

Once you have found the "White Rock Campbell Scientific" station, a data interval needs to be set. By using the dropdown menu next to "data interval", select hourly, daily, or monthly. For this example select the "Daily" Data Interval for November 10th, 2004 and press "Go". You will find that on November 10th, 2004 the maximum temperature in White Rock, BC was 14.2°C, the minimum temperature was 5.2°C and there was no precipitation.

Daily Data Report for November 2004

WHITE ROCK CAMPBELL SCIENTIFIC
BRITISH COLUMBIA

Latitude:	49°01'05.000" N	Longitude:	122°47'02.000" W	Elevation:	13.00 m
Climate ID:	1108910	WMO ID:	71785	TC ID:	WWK

Related Data	Additional Search Options	Download Data
Monthly Data (2004)	Nearby Stations with Data	Daily Data (2004) ⦿ CSV ○ XML
	Historical Data Search	[Download Data]
		Get More Data

← Previous Month   [2004 ▾] [November ▾] [Go]   Next Month →

Daily Data Report for November 2004

DAY	Max Temp °C	Min Temp °C	Mean Temp °C	Heat Deg Days	Cool Deg Days	Total Rain mm	Total Snow cm	Total Precip mm	Snow on Grnd cm	Dir of Max Gust 10's deg	Spd of Max Gust km/h
01	7.2	4.0	5.6	12.4	0.0			46.0			
02	10.9	4.5	7.7	10.3	0.0			24.4			
03	10.2	2.5	6.4	11.6	0.0			0.0			
04	9.1	0.3	4.7	13.3	0.0			0.0			
05	10.6	5.7	8.2	9.8	0.0			0.0			
06	9.2	7.2	8.2	9.8	0.0			39.8			
07	12.8	9.0	10.9	7.1	0.0			4.0			
08	12.1	7.8	10.0	8.0	0.0			0.0			
09	11.6	8.1	9.9	8.1	0.0			1.2			
10	14.2	5.2	9.7	8.3	0.0			0.0			

Results for White Rock, BC, November 2004

3. How do I obtain historical climate data for White Rock, BC by using the "Search by Proximity" function?

The final box on the *Historical Data* page, "Search by Proximity" allows you to find stations that are located close to major cities, National parks or a specified set of geographic co-ordinates. To find White Rock, BC, set the distance to 50 "kilometers away from", using the drop down list for the distance and select Vancouver from the

"Select City" dropdown list. Again, a specific date or timeframe can be selected, along with the number of display results per page.

Search by Proximity

The resulting list represents all of the stations that are located within 50 km of Vancouver. The exact geographic co-ordinates used for all cities can be found on the [Geographical Name Search Service of Natural Resources Canada](#). This service was also used to determine the co-ordinates for all other major cities and National parks. The proximity search for Vancouver generates a list of over 250 stations. These stations are ordered by distance within a 50 km range from the closest to the assigned co-ordinates for Vancouver, to the furthest. After searching through many pages of station names, "White Rock Campbell Scientific" can be found however due to the long list of stations this method can be somewhat slow.

If you know the geographic co-ordinates for a location of where you are looking to find the closest nearby station, the "location coordinates" option may prove to be a more efficient method. For White Rock, enter in the co-ordinates of 49°1'N and 122°47'W. By using a distance criteria of 25 km, a list of over 50 stations is generated with "White Rock Campbell Scientific" at the top. Select the data interval and date to view the data for this station.

55 stations found within a search radius of 25 kilometres of (49° 01' 00" N, 122° 47' 00" W). Confirm the Data Interval and Date for one of the locations listed and click GO to display the data.

Station	Prov.	Prox. (km)	Data Interval	Year	Month	Day	
WHITE ROCK CAMPBELL SCIENTIFIC	BC	0.16	Hourly	2014	Apr	10	Go
WHITE ROCK STP	BC	0.22	Daily	2002	Jan	31	Go
SURREY WHITE ROCK	BC	2.32	Daily	1987	Jul	31	Go
WHITE ROCK BREARLEY	BC	3.36	Daily	1970	Sep	30	Go
SURREY SUNNYSIDE	BC	3.96	Daily	1983	Nov	30	Go
KENSINGTON PRAIRIE	BC	5.56	Daily	1978	Jul	31	Go
WHITE ROCK OCEAN PARK	BC	8.34	Daily	2007	Nov	26	Go
LANGLEY CAMPBELL R PK	BC	10.00	Daily	1996	Dec	31	Go
CLOVERDALE CENTRE	BC	10.18	Daily	1966	Jan	31	Go
CLOVERDALE	BC	10.18	Daily	1962	Oct	31	Go

Results for Search by Proximity

A station may also be found if it is located near a National park. This search method is similar to the search by proximity tool for a given city. Instead of selecting a city, use the dropdown list beside "a National Park" and select a park of interest. The distance criteria must also be set, along with a specified date, if desired. A list of all stations located within the specified distance from the National park ranging from the closest to the furthest away will be generated. Similarly to the city search, the location of the park has been predetermined according to Natural Resources Canada. A search using this function can also produce a large output list. The more specific the criteria, the easier it will be to find the data that you are looking for.

The *Historical Data* page is an excellent way to locate any historical climate data that you are searching for. Each search method within this page generates data based on different criteria, but will generate the same resulting information for a station for all three methods. Choosing the most efficient method greatly depends on what information you have to input into the search function.