Daily Climate Data Report

# Overview

Daily data is derived from two sources of data. The first are Daily Climate Stations producing one or two observations per day of temperature, precipitation. The second are hourly stations (see hourly data sets) that typically produce more weather elements e.g. wind or snow on ground. Only a subset of the total stations is shown due to size limitations. The criteria for station selection are listed as below.

The priorities for inclusion are as follows:

* Station is currently operational
* Stations with long periods of record
* Stations that are co-located with the categories above and supplement the period of record

Table 1: Main Characteristics

|  |  |
| --- | --- |
| Variables | Mean Temperature (°C)  Heating Degree Days (°C)  Cooling Degree Days (°C)  Total Rainfall (mm)  Total Snowfall (cm)  Total Precipitation (mm)  Snow on the Ground (cm)  Direction of Maximum Gust (10s deg)  Speed of Maximum Gust (km/h) |
| Spatial resolution and geographical coverage | Point locations across Canada |
| Time period | 1840 – present |
| Temporal resolution | Daily |

# Data Descriptions

Effective May 14th 2018, DLY02 daily data will be derived from hourly observations for automatic climate weather stations and will no longer be restricted to synoptic observing stations.

The following guidelines can be used to determine the times of observations and the endpoint of the climatological day for temperature and precipitation elements:

For climate stations operating on a 24 hour basis, since July 1, 1961, the climatological day for temperature and precipitation ends at 0600Z of the following day. From June 1, 1957 to June 30, 1961, the climatological day for precipitation and maximum temperature ended at 1200Z of the following day. The climatological day for minimum temperatures ended at 0000Z of the following day. Before June 1, 1957, the climatological day for precipitation and maximum temperature ended at 1230Z of the following day. The climatological day for minimum temperatures ended at 0030Z of the following day.

At locations with no hourly observations, observation times are generally morning and evening. In general, the climatological day for precipitation and maximum temperature ends at the morning observation of the following day. The climatological day for minimum temperatures ends at the afternoon observation of the current day. For sites reporting only once per day, the calendar day rather than climatological day applies. In cases where knowing time-of-observation is critical, the best approach is to check the historical inspection reports for the climate station.

# User Limitation

Limited use software and data product license agreement (<http://climate.weather.gc.ca/prods_servs/attachment1_e.html>)

# 4. Methods

MANOBS Manual of Surface Weather Observations:

<https://www.canada.ca/en/environment-climate-change/services/weather-manuals-documentation/manobs-surface-observations/table-contents.html>

# 5. Contact Information

Climate Services Support Desk

[Info.cccs-ccsc@canada.ca](mailto:Info.cccs-ccsc@canada.ca)

833-517-0376

# 6. Reference

Technical Documentation - Digital Archive of Canadian Climatological Data: <ftp://client_climate@ftp.tor.ec.gc.ca/Pub/Documentation_Technical/>