Forecast weather stations (NAEFS)

We define forecast day numbers as starting at Day 0 based on the 00 UTC model runs. Thus the 12 UTC update for the same date has the same day number of 0, and the following day becomes Day 1 of the forecast. The remainder of the forecast days are in reference to Day 0, so a 14-day forecast finishes on Day 13.

Thus, forecast weather data for days 0, 1, and 2 are supplied from 845 NAEFS matrix locations, and for days 3-13 of the forecast through 273 North American Ensemble Forecasting System (NAEFS) locations within Canada. Further information about the NAEFS locations are provided in a separate metadata document.

Weather observations from these locations are used to construct series of weather and fire weather products available on the CWFIS or through the Canadian Wildland Fire Information Framework. (CWFIF).

- Identification
- Distribution
- Quality
- Spatial rep.
- Ref. system Reference Systems
- Content
- Portrayal
- Metadata
- Md. constraints
- Md. maintenance
- Schema info

Identification

Data identification

Citation

Date (Publication)	2026
Date (Creation)	2025-08-25T14:44:00+00:00

Point of contact
Government of Canada; Natural Resources Canada; Canadian Forest Service - Data Owner (Data Owner)
5320-122nd Street, Edmonton, Alberta, T6H 3S5, Canada
780-000-0000

Status	On going

Custodian
Government of Canada; Natural Resources Canada; Canadian Forest Service - Data Custodian (Data Custodian)
5320-122nd Street, Edmonton, Alberta, T6H 3S5, Canada
780-000-0000

Maintenance information

Maintenance and Update Frequency	As needed
Maintenance note	While weather data from NAEFS matrices is gathered twice daily, updates to the locations supplying data are only done if the originating data source changes. This source may be changed in the future as the NAEFS system is nearing its end-of-life.
Government of Canada Core Subject Thesaurus	• Meteorology • Meteorological data • Forest fires
CWFIF Data Themes	• Fire weather • Weather
CWFIF Internal Workflow	• wf-sbx • wf-prod • wf-test

Security Classification	Unclassified

Legal constraints

Use Limitation	Open Government Licence - Canada (https://open.canada.ca/en/open-government-licence-canada)
Use Constraints	Other restrictions
Other constraints	When the Data is displayed, in print, electronically, or otherwise, the source (i.e., Natural Resources Canada) must be acknowledged along with the following citation: Canadian Forest Service. 2026. Canadian Wildland Fire Information System (CWFIS), Natural Resources Canada, Canadian Forest Service, Northern Forestry Centre, Edmonton, Alberta. https://cwfis.cfs.nrcan.gc.ca.

Spatial representation type	Vector
Language	eng
Topic category	• Environment
Begin Date	1970
End Date	2026

82.50	N	23.55	S	144.80	E	-170.22	W



Supplemental Information	While the NAEFS dataset includes locations from across North America, only locations from Canada contribute to Canadian Wildland Fire Information System products. NAEFS location attributes include: location -- Location name. Spaces and punctuation are retained in place names. code -- Integer of width 5 uniquely identifying locations. Locations in Canada begin with 10, those in the United States of America with 20, and those from other nations with other leading digits. pays_country -- 2-letter country abbreviation: Canada = 'CA', United States of America = 'US' ... * Identify the standard system using to name these * province_state -- 2-letter province or state abbreviation. * Identify the standard system using to name these * file_desc -- Naming convention used for incoming data files. These generally take the form of "location_{province_state}_{pays_country}" with spaces in names replaced by underscores (e.g. DANIELS_HARBOUR_NL_CA). wmo_number -- 6-digit World Meteorological Organization station identifier. Many of these end with 0, and the first two digits use the country codes. For example, the Canadian location of Bagotville, QC uses 717270. wmo_code -- 3-letter location identifier in the form of an airport code. For example, the Canadian location of Bagotville, QC uses YBG. timezone_offset -- Difference in time from UTC representing the political time zone. latitude -- Location latitude in decimal degrees. longitude -- Location longitude in decimal degrees. This dataset appears to encompass much of the world, but includes one location in Guam, a territory of the USA. altitude -- Location elevation above sea level in metres. the_geom -- PostGIS geometry encoding for the location in the NRCan Lambert Conformal Conic NAD83 (EPSG 3978) projection.

Distribution

Distribution

Distribution format	• SHP (2) • CSV (1) • WMS (PNG, PNG8, JPEG, GIF, TIFF, TIFF8, GeoTIFF, GeoTIFF8, SVG, PDF, GeoRSS, KML, KMZ, OpenLayers) • WFS (GML2, GML3, Shapefile, JSON, JSONP, CSV)

Publisher

Government of Canada; Natural Resources Canada; Canadian Forest Service - Distributor (Distributor)
5320-122nd Street, Edmonton, Alberta, T6H 3S5, Canada
780-000-0000

Digital transfer options

Online Resource	Forecast weather stations (NAEFS) (HTTP)

	Web Service;Web App;eng,fra
Online Resource	Forecast weather stations (NAEFS) (HTTP) Web Service;Web App;eng,fra
Online Resource	Forecast weather stations (NAEFS) (HTTPS) Web Service;PNG;eng
Online Resource	Forecast weather stations (NAEFS) (HTTPS) Web Service;PNG;fra
Online Resource	public:firewx_naefs (OGC:WMS) API;WMS;eng
Online Resource	public:firewx_naefs (OGC:WMS) API;WMS;fra
Online Resource	Forecast Weather Stations - Shapefile (HTTP) Dataset;SHP;eng,fra
Online Resource	Forecast Weather Stations - CSV (HTTP) Dataset;CSV;eng,fra
Online Resource	Forecast Weather Stations - Dataset Attributes (HTTPS) Dataset;XML;eng,fra

Digital transfer options

No information provided.

Digital transfer options

No information provided.

Digital transfer options

No information provided.

Digital transfer options

No information provided.

Digital transfer options

No information provided.

Ref. system Reference Systems

Reference system identifier	http://www.epsg-registry.org / EPSG:3978 /

Metadata

Metadata

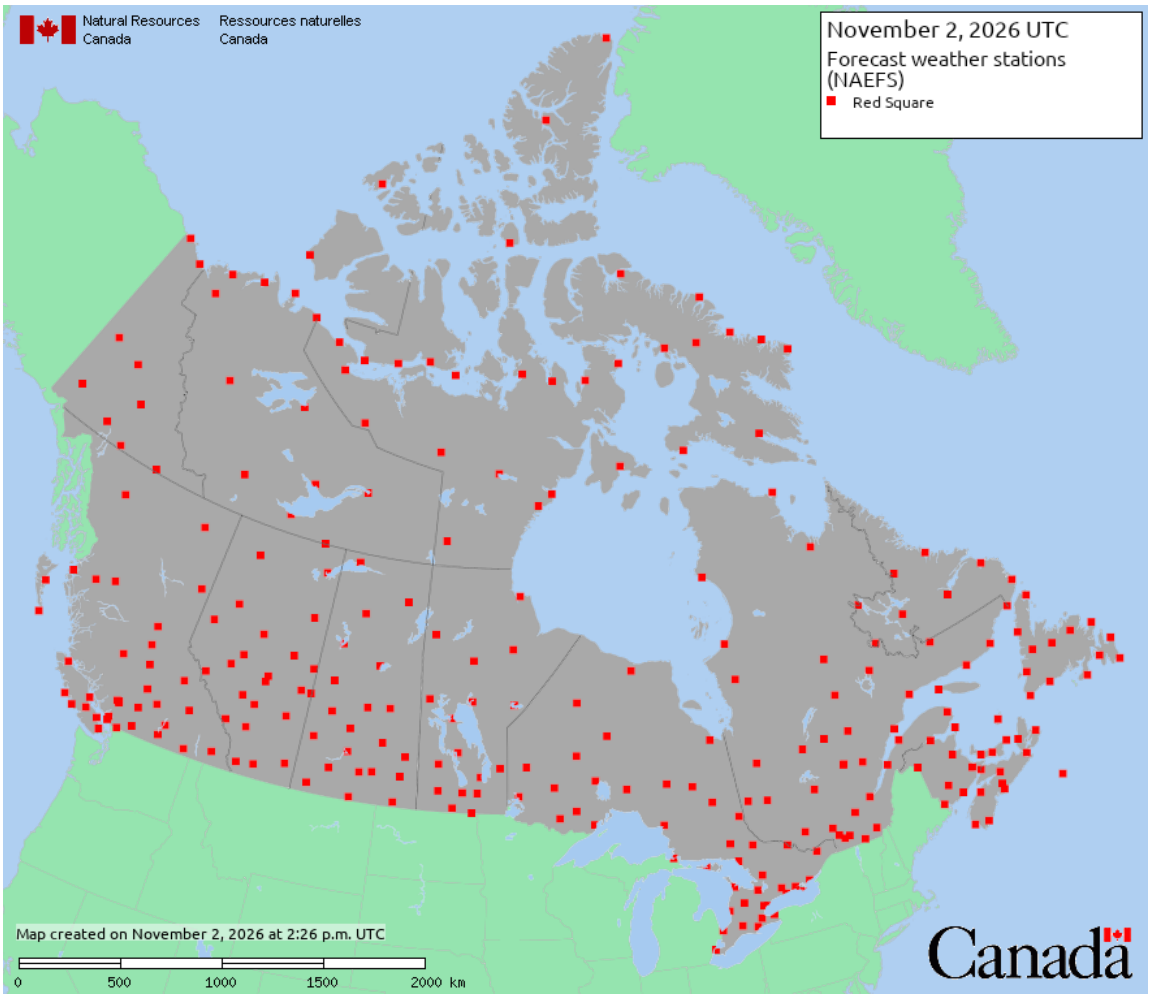
File Identifier	d56516dc-d293-411e-b7ce-2f503bf76c9b XML
Metadata language	eng; CAN
Character set	UTF8
Hierarchy Level	Dataset

Date Stamp	2026-09-03T20:20:33.647Z
Metadata standard name	North American Profile of ISO 19115:2003 - Geographic information - Metadata
Metadata standard version	CAN/CGSB-171.100-2009

Point of contact

Government of Canada; Natural Resources Canada; Canadian Forest Service - Metadata Steward (Metadata Steward)
5320-122nd Street, Edmonton, Alberta, T6H 3S5, Canada
780-000-0000

Overviews



Forecast weather stations (NAEFS)

Provided by