CWFIS GeoNetwork catalogue (PROD)

Rate of Spread

Rate of Spread (ROS) is the predicted speed of the fire at the front or head of the fire (where the fire moves fastest). It is output in metres per minute.

Detailed information is found in the parent document, "Canadian Forest Fire Behaviour Prediction (FBP) System -- Daily Maps", linked above, and in Supplemental Information below.

- 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)	2017-01-01

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

Other citation details	Canadian Forest Service. yyyy. Canadian Wildland Fire Information System (CWFIS), Natural Resources Canada, Canadian Forest Service, Northern Forestry Centre, Edmonton, Alberta. https://cwfis.cfs.nrcan.gc.ca.
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 and Update Frequency	Daily
Government of Canada Core Subject Thesaurus	• Meteorological data • Meteorology • Risk management • Forest fires
CWFIF Internal Workflow	• wf-sbx • wf-prod • wf-test
CWFIF Data Themes	• Fire behaviour
CFWIF Evaluation Method	• Forecast • Analysis
CWFIF Model Method	• FWI 1987
	• Local Noon

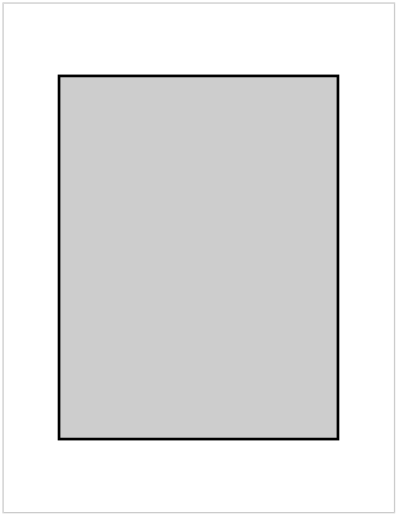
CWFIF Temporal Type **CWFIF Weather Dataset Source**	• Observations • Scribe Meteocode • NAEFS
Security Classification	Unclassified

Legal constraints

Use Limitation	Open Government Licence - Canada (https://open.canada.ca/en/open-government-licence-canada)
Access Constraints	License

Spatial representation type	Grid
Language	eng
Topic category	• Environment
Begin Date	2017
End Date	2026 now

83.12	N	41.67	S	-52.62	E	-141.01	W



Supplemental Information	Rate of Spread (ROS) takes into account both crowning and spotting. It is measured in metres per minute and is based on the Fuel Type, Initial Spread Index, Buildup Index, slope of the land, and several fuel-specific parameters such as phenological state (leafless or green) in deciduous trees, crown base height in coniferous trees (distance above ground that live branches begin), and percent curing (drying) in grasses. Vigorous fires in unstable atmospheric conditions may generate downdrafts or other wind features that increase or create erratic Rates of Spread.

Distribution

Distribution

Distribution format	• WMS (PNG, PNG8, JPEG, GIF, TIFF, TIFF8, GeoTIFF, GeoTIFF8, SVG, PDF, GeoRSS, KML, KMZ, OpenLayers) • TIFF (TIFF)

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	Rate of Spread (HTTPS) Dataset;GeoTIF;eng,fra
Online Resource	Rate of Spread (HTTPS) Web Service;Web App;eng,fra
Online Resource	Rate of Spread (HTTPS) Web Service;PNG;eng
Online Resource	Rate of Spread (HTTP) Web Service;Web App;eng,fra
Online Resource	Rate of Spread (HTTPS) Web Service;PNG;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.

Digital transfer options

Online Resource	public:ros (OGC:WMS) API;WMS;eng
Online Resource	public:ros (OGC:WMS) API;WMS;fra

Quality

Data quality

Hierarchy level	Dataset

Lineage

Source	• Initial Spread Index - FWI1987 • Buildup Index - FWI1987 • Elevation of Canada (250m) • CFFDRS Fire Behaviour Prediction (FBP) Fuel Types 2024 - 100m • CFFDRS Fire Behaviour Prediction (FBP) Fuel Types 2024 - 30m

Ref. system Reference Systems

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

Metadata

Metadata

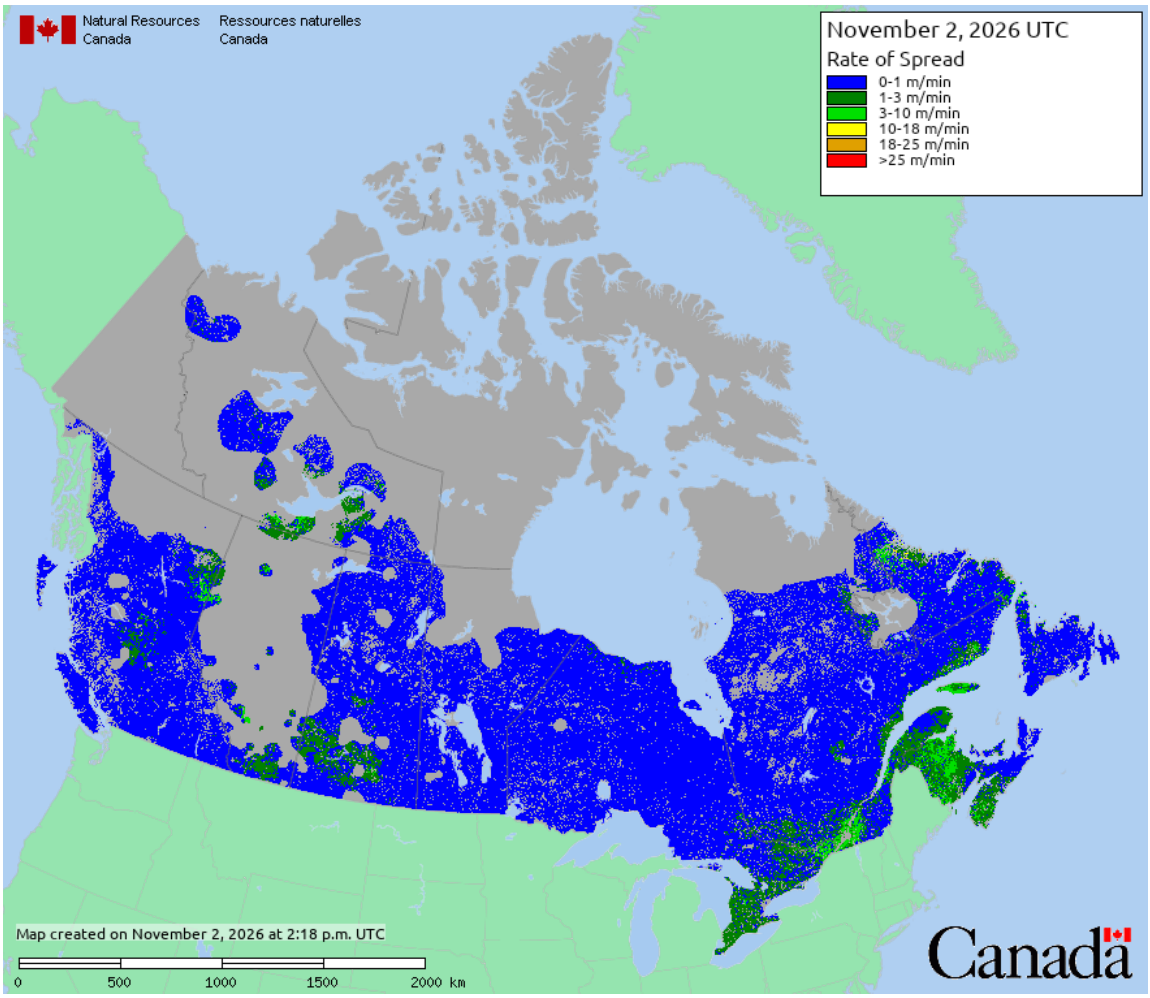
File Identifier	36493f59-b6a8-4c02-b5e9-1cf96a282697 XML
Metadata language	eng; CAN
Character set	UTF8
Parent identifier	Canadian Forest Fire Behaviour Prediction (FBP) System - Daily Maps 12285f32-42ce-463c-9981-f6bd8a8e6b21
Hierarchy Level	Dataset
Date Stamp	2026-07-16T14:30:12.631Z
Metadata standard 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)

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Overviews



Rate of Spread

Provided by