Head Fire Intensity

Head Fire Intensity (HFI) is the estimated total energy output per second of a metre of a spreading fire at its head (in the direction it is spreading fastest). Because it is strongly related to flame size, it is a standard indicator used in many parts of the world for estimating the difficulty of controlling a fire and selecting appropriate suppression methods. It is measured in kilowatts per metre of firefront.

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	• Forest fires • Risk management • Meteorology • Meteorological data
CWFIF Data Themes	• Fire behaviour
CWFIF Internal Workflow	• wf-sbx • wf-test • wf-prod
CFWIF Evaluation Method	• Analysis • Forecast
CWFIF Model Method	• FWI 1987

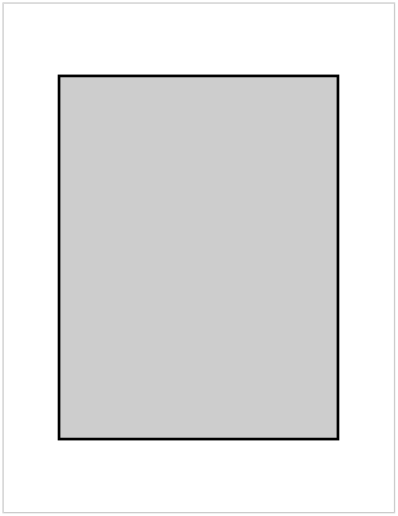
CWFIF Temporal Type	• Local Noon
CWFIF Weather Dataset Source	• Observations • Scribe Meteocode • NAEFS
Security Classification	Unclassified

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	Reference: Beaudoin, A.; Bernier, P. Y.; Guindon, L.; Villemaire, P.: Guo, X.J.; Stinson, G.; Bergeron, T.; Magnussen, S.; Hall, R.J. 2014. Mapping attributes of Canada's forests at moderate resolution through k NN and MODIS imagery. Canadian Journal of Forest Research 44 (5): 521–532.

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	Head Fire Intensity (HTTPS) Dataset;GeoTIF;eng,fra
Online Resource	Head Fire Intensity (HTTPS) Web Service;Web App;eng,fra
Online Resource	Head Fire Intensity (HTTPS) Web Service;PNG;eng
Online Resource	Head Fire Intensity (HTTP) Web Service;Web App;eng,fra
Online Resource	Head Fire Intensity (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:hfi (OGC:WMS) API;WMS;eng
Online Resource	public:hfi (OGC:WMS) API;WMS;fra

Quality

Data quality

Hierarchy level	Dataset

Lineage

Source	• CFFDRS Fire Behaviour Prediction (FBP) Fuel Types 2024 - 100m • Rate of Spread • Total Fuel Consumption • CFFDRS Fire Behaviour Prediction (FBP) Fuel Types 2024 - 30m

Ref. system Reference Systems

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

Metadata

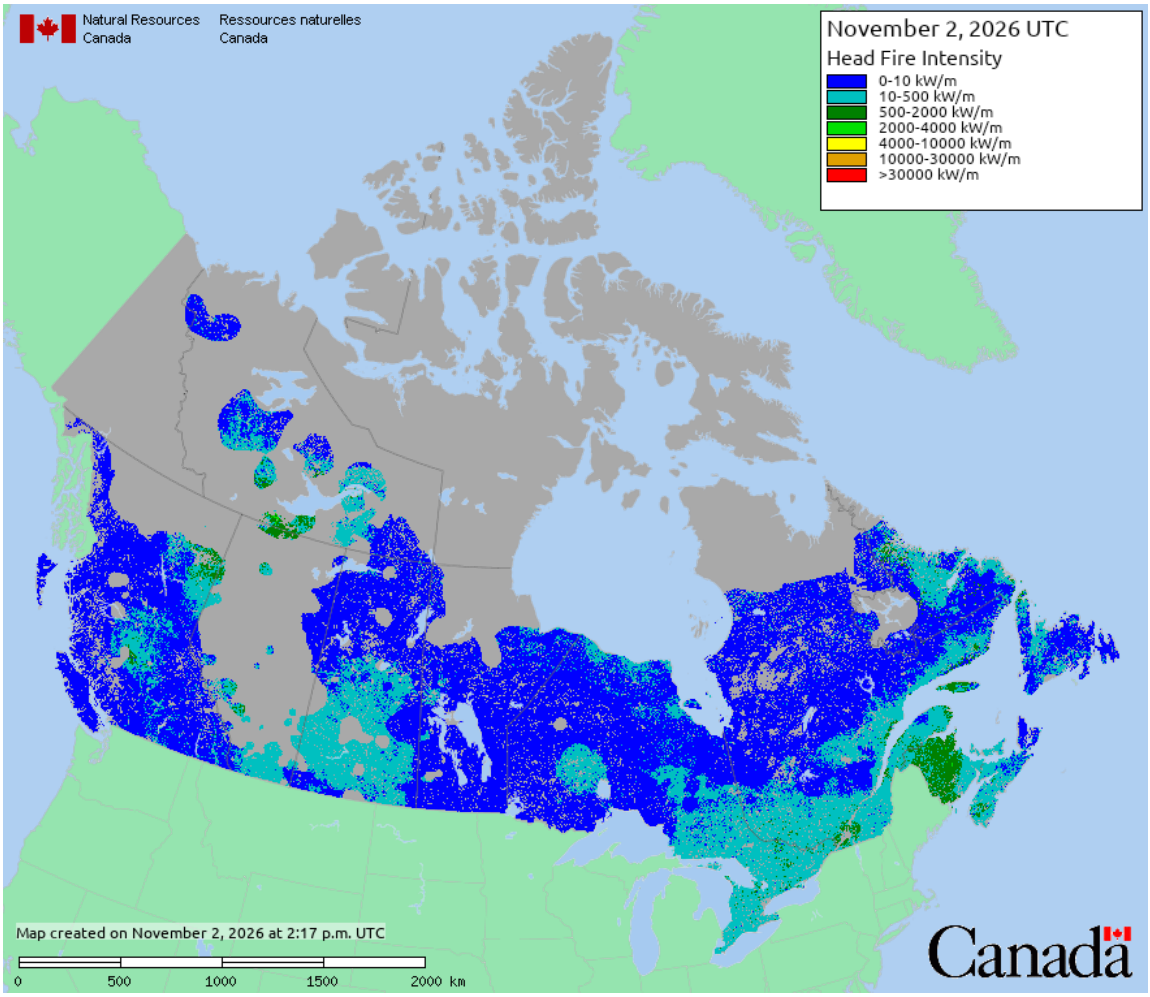
Metadata

File Identifier	5cbe66c6-c2b4-4785-826f-5dd6a4db7651 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	2026-07-16T14:30:03.143Z
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



Head Fire Intensity

Provided by