CWFIS GeoNetwork catalogue (PROD)

National Burned Area Composite

The National Burned Area Composite (NBAC) provides annual maps of burned area polygons using the best-available fire perimeter data collected from the Canadian fire agencies combined with satellite-derived fire data from Natural Resources Canada. The NBAC system was developed to generate the most accurate, comprehensive, and consistent dataset of wildfire perimeters in Canada (Hall et al., 2020). The burned area data also meets the requirements for Canada's reporting commitments on emissions and removals of greenhouse gases. Maps are available for each year back to 1972 and are updated to current year at the end of each wildfire season.

The NBAC is part of the Fire Monitoring, Accounting and Reporting System (FireMARS), jointly developed by the Canada Centre for Mapping and Earth Observation (formerly the Canada Centre for Remote Sensing) of Natural Resources Canada and the Canadian Forest Service. Initially, FireMARS was developed with funding support from the Canadian Space Agency Government Related Initiatives Program through a collaboration of those in fire research, forest carbon accounting and remote sensing.

Data are provided for NBAC from:

• Natural Resources Canada, and

• Provincial, Territorial, and Parks Canada agencies.

The NBAC can be used for spatial and temporal analyses of landscape-scale fire impacts.

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

Identification

Data identification

Citation

Date (Publication)	2026-05-13
Date (Creation)	2026-05-13

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

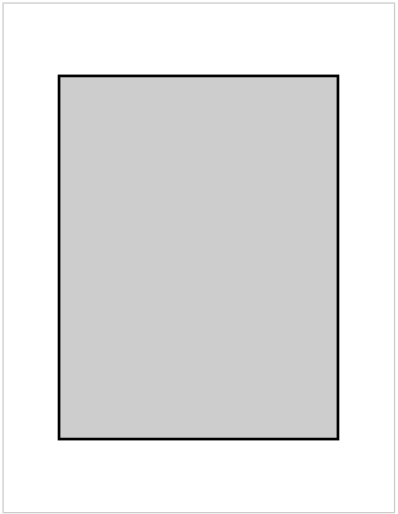
Government of Canada; Natural Resources Canada; Canadian Forest Service - Data Custodian (Data Custodian)
5320-122nd Street, Edmonton, Alberta, T6H 3S5, Canada
780-000-0000

Maintenance and Update Frequency	Annually
Government of Canada Core Subject Thesaurus	• Forest fires
CWFIF Data Themes	• Fire mapping and monitoring
CWFIF Internal Workflow	• wf-sbx • wf-test • wf-prod
Security Classification	Unclassified

Legal constraints

Use Limitation	Open Government Licence - Canada (https://open.canada.ca/en/open-government-licence-canada)
Access Constraints	License
Use Constraints	Other restrictions
Use Constraints	License End User
Other constraints	When using these data for mapping activities and analysis, research, evaluation or display, please acknowledged the source using the following citation: Canadian Forest Service. National Burned Area Composite (NBAC). Natural Resources Canada, Canadian Forest Service, Northern Forestry Centre, Edmonton, Alberta. https://cwfis.cfs.nrcan.gc.ca.
Spatial representation type	Vector
Language	eng; CAN
Topic category	• Environment
Begin Date	1972
End Date	2025

83.11	N	41.68	S	-52.62	E	-141.00	W



Supplemental Information	NBAC is a national product compiled annually since 1972 by the FireMARS system which tracks forest fires for annual estimates of carbon emissions and to help identify National Forest Inventory plots that may have been disturbed by fire. See the FireMARS website at (https://natural-resources.canada.ca/forest-forestry/wildland-fires/fire-monitoring-accounting-reporting-system) and carbon accounting - disturbance monitoring website (https://natural-resources.canada.ca/climate-change/climate-change-impacts-forests/disturbance-monitoring) for additional information. When using these data for mapping activities and analysis, research, evaluation or display, please acknowledged the source using the following citation: Canadian Forest Service. National Burned Area Composite (NBAC). Natural Resources Canada, Canadian Forest Service, Northern Forestry Centre, Edmonton, Alberta. https://cwfis.cfs.nrcan.gc.ca. References: Skakun, R.; Castilla, G.; Jain P. (2024). Mapping wildfires in Canada with Landsat MSS to extend the National Burned Area Composite (NBAC) time series back to 1972. International Journal of Wildland Fire, 33, WF24138. DOI: https://doi.org/10.1071/WF24138 Skakun, R.; Castilla, G.; Metsaranta, J.; Whitman, E.; Rodrigue, S.; Little, J.; Groenewegen, K.; Coyle, M. (2022). Extending the National Burned Area Composite Time Series of Wildfires in Canada. Remote Sensing, 14, 3050. DOI: https://doi.org/10.3390/rs14133050 Skakun, R.S.; Whitman, E.; Little, J.M.; and Parisien, M.-A. (2021). Area burned adjustments to historical wildland fires in Canada. Environmental Research Letters 16 064014. DOI: https://doi.org/10.1088/1748-9326/abfb2c Hall, R.J.; Skakun, R.S.; Metsaranta, J.M.; Landry, R.; Fraser, R.H.; Raymond, D.A.; Gartrell, J.M.; Decker, V. and Little, J.M. (2020). Generating annual estimates of forest fire disturbance in Canada: the National Burned Area Composite. International Journal of Wildland Fire. 10.1071/WF19201. DOI: https://doi.org/10.1071/WF19201

Distribution

Distribution

Distribution format	• SHP (ESRI shapefiles geospatial vector data format) • 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	National Burned Area Composite - Summary stats (XLSX) (HTTPS) Dataset;XLSX;eng,fra
Online Resource	public:nbac (OGC:WMS) API;WMS;fra
Online Resource	public:nbac (OGC:WMS) API;WMS;eng
Online Resource	National Burned Area Composite (HTTP) Web Service;Web App;eng,fra
Online Resource	National Burned Area Composite (HTTP) Web Service;Web App;eng,fra
Online Resource	National Burned Area Composite (HTTP) Web Service;PNG;eng
Online Resource	National Burned Area Composite (HTTPS) Web Service;PNG;fra
Online Resource	NBAC Shapefiles (HTTPS) Dataset;SHP;eng,fra
Online Resource	NBAC CSV (HTTP) Dataset;CSV;eng,fra

Digital transfer options

No information provided.

Digital transfer options

Online Resource	Canadian Wildland Fire Information System - Fire history data explorer (HTTPS) Supporting Document;HTML;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.

Ref. system Reference Systems

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

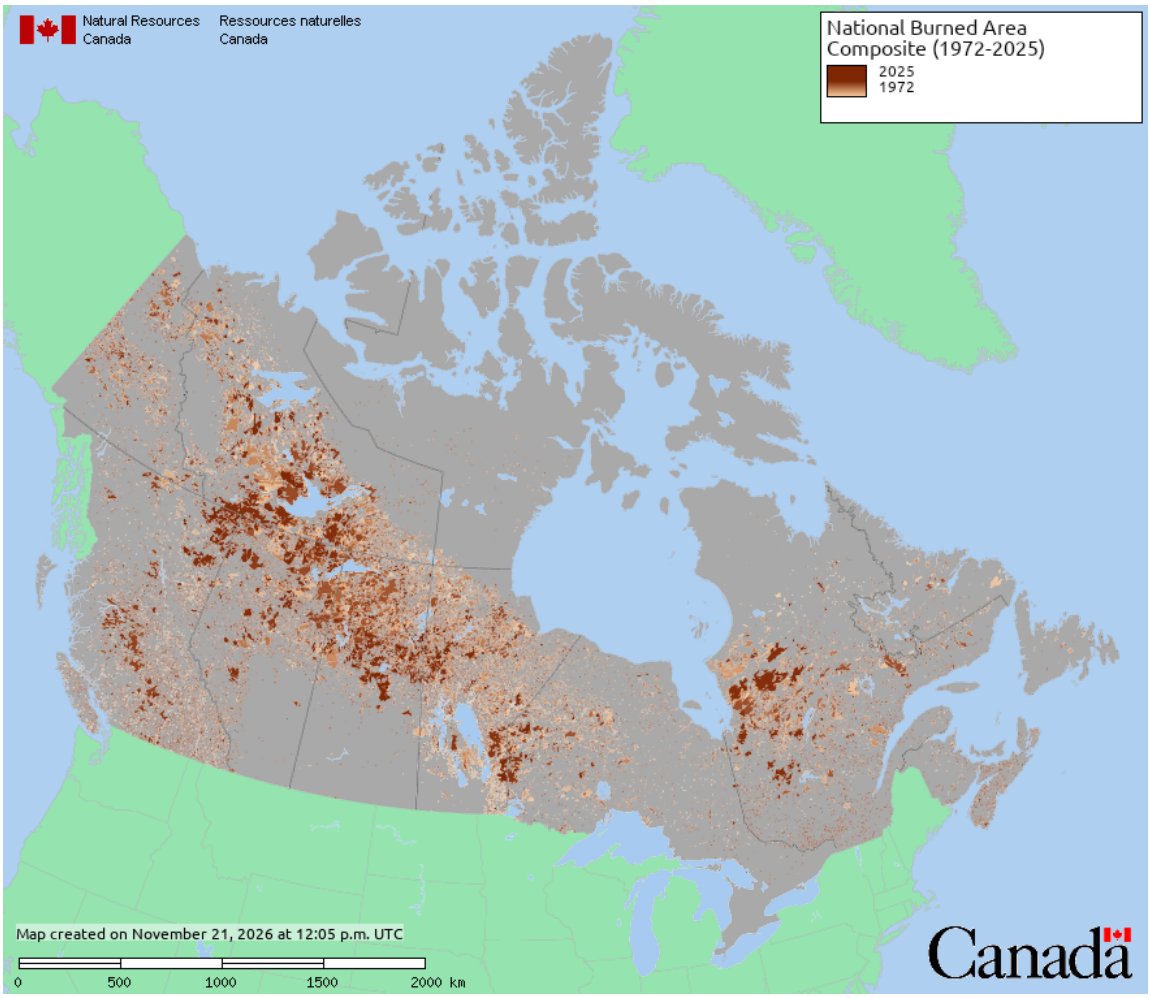
Metadata

Metadata

File Identifier	537a1fd0-698e-4a7b-85a1-e02581ae78b2 XML
Metadata language	eng; CAN
Character set	UTF8
Hierarchy Level	Dataset
Date Stamp	2026-07-16T14:29:13.633Z
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



National Burned Area Composite

Provided by