



National Burned Area Composite

Description

The National Burned Area Composite (NBAC) is a GIS database and system that calculates the area of forest burned on a national scale for each year since 1986. The data are used to help estimate carbon emissions in Canada. The burned area is determined by evaluating a number of available sources of data, which use different techniques to map any given fire. The system chooses the best available source of data for each burned area and builds a national composite picture.

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.

Geographic Extent SW:-141.003 41.676, NE:-52.617 83.114

Time Period From:1986 - To:2022

Data Resources

Name	Resource Type	Language	Format
National Burned Area Composite	Dataset	English	SHP
Canadian Wildland Fire Information System	Supporting Document	English, French	HTML
nbac_2022_r12_20230630_metadata	Supporting Document	English	PDF
National Burned Area Composite	Web Service	English	WMS
README_updates.txt	Supporting Document	English	TXT
National Burned Area Composite	Web Service	French	WMS

Additional Information

Dataset Identification

Date	2022-06-30 (Publication)
Date	2022-06-30 (Creation)
Status	On going
Maintenance and Update Frequency	Annually

Data Classification

GC Core Subject Thesaurus	Forest fires
Topic category	Environment

Metadata Contact

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Data Contact

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Use Limitation	Open Government Licence - Canada (http://open.canada.ca/en/open-government-licence-canada)
Access Constraints	License
Use Constraints	Other restrictions
Use Constraints	License End User
Other constraints	<p>When using these data for mapping activities and analysis, research, evaluation or display, please acknowledged the source using the following citation:</p> <p>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.</p>
Spatial representation type	Vector
Metadata language	English
Supplemental Information	<p>NBAC is a national product compiled annually since 1986 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 (http://www.nrcan.gc.ca/forests/fire/13159) and carbon accounting - disturbance monitoring website (http://www.nrcan.gc.ca/forests/climate-change/13109) for additional information.</p> <p>When using these data for mapping activities and analysis, research, evaluation or display, please acknowledged the source using the following citation:</p> <p>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.</p> <p>References:</p> <p>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</p> <p>Skakun, R.S.; Whitman, E.; Little, J.M.; and Parisien, M.-A. (2021). Area burned adjustments to historical wildland fires in Canada. Environmental Research</p>

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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 Information

Distribution format

Name	SHP
Version	ESRI shapefiles geospatial vector data format

Distribution format

Name	WMS
Version	PNG, PNG8, JPEG, GIF, TIFF, TIFF8, GeoTIFF, GeoTIFF8, SVG, PDF, GeoRSS, KML, KMZ, OpenLayers

Distribution format

Name	WFS
Version	GML2, GML3, Shapefile, JSON, JSONP, CSV

Metadata Record

File Identifier	55dc69f3-18e1-4516-9ce9-133a36d06a93
Hierarchy Level	Dataset
Date Stamp	2023-07-06T16:14:19
Metadata language	English (Other language:French)
Character set	UTF8
Metadata standard name	North American Profile of ISO 19115:2003 - Geographic information - Metadata
Metadata standard version	CAN/CGSB-171.100-2009

Reference System Information

Unique resource identifier	EPSG:3978
Codespace	http://www.epsg-registry.org