

## Alberta Smoke Plume Observation data

### Description

The Alberta Smoke Plume Observation Study was a field project conducted by provincial forestry staff in coordination with Natural Resources Canada and Environment and Climate Change Canada to observe and measure smoke plumes from wildland fires in Alberta. The study used hand-held inclinometer measurements and photos taken from forestry lookout towers. Observations of 222 plumes were collected from 21 towers over a six-year period from 2010 to 2015. Observers reported the equilibrium and maximum plume heights based on the plume's final leveling height and the maximum lofting height, respectively. Observations were tabulated at the end of each year and matched to reported fires. Forest fuel types as well as fire sizes at assessment times were reported by the province. Fire weather conditions were obtained from the Canadian Wildland Fire Information System (CWFIS). Assessed fire sizes were adjusted to the appropriate size at plume observation time using elliptical fire-growth projections.

Geographic Extent SW:-122.7 49.46, NE:-107.944 60.055



Time Period From:2010 - To:2015

### Resources

Resource Name	Resource Type	Language	Format
<a href="#">Alberta Smoke Plume Observation data</a>	Dataset	English, French	XLS

### Additional Information

Dataset Identification	
Date	2017 (Publication)
Date Type	Publication
Date	2017 (Creation)
Date Type	Creation
Status	Completed
Maintenance and Update Frequency	Not planned

### Preview Image



### Data Classification

GC Core Subject Thesaurus	Forest fires, Remote sensing
Topic category	Environment

### Metadata Contact

Individual Name	John Little
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Protocol	http
Role	Point of contact

### Data Contact

Individual Name	Peter Englefield
Organization Name	Government of Canada; Natural Resources Canada; Canadian Forest Service /

Use Limitation	Open Government Licence - Canada ( <a href="http://open.canada.ca/en/open-government-licence-canada">http://open.canada.ca/en/open-government-licence-canada</a> )
Access Constraints	License
Use Constraints	Other restrictions
Use Constraints	License End User
Other constraints	Please note, an End-User Agreement is required for accessing these data. Please refer to this agreement for information regarding restrictions of use: <a href="http://cfs.nrcan.gc.ca/common/cwfis/End_User_Agreement_gen_EN.html">http://cfs.nrcan.gc.ca/common/cwfis/End_User_Agreement_gen_EN.html</a>
Spatial representation type	Vector
Metadata language	English
Supplemental Information	<p>The Alberta Smoke Plume Observation Study was conducted to observe and measure the smoke plumes from wildland fires in Alberta. This study used hand-held inclinometer measurements and photos taken at several lookout towers in the province. The plume height data and photos were used to validate plume rise algorithms, which have been incorporated in smoke and air quality prediction models.</p> <p>Please note: an End-User Agreement is required for accessing these data. Please refer to this agreement for information regarding restrictions of use:</p> <p><a href="http://cfs.nrcan.gc.ca/common/cwfis/End_User_Agreement_gen_EN.html">http://cfs.nrcan.gc.ca/common/cwfis/End_User_Agreement_gen_EN.html</a></p> <p>The following paper presents a description and analysis of this database. We encourage users to read it before attempting further analyses.</p> <p>Anderson, K.R.; Pankratz, A.; Mooney, C.; Fleetham, K. 2017. The Alberta Smoke Plume Observations Study. (in preparation)</p>

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Protocol	http
Role	Distributor

#### Distribution Information

##### Distribution format

Name	XLS
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#### Metadata Record

File Identifier	889bf66a-e5d1-42c4-ac97-f791eea2e642
Hierarchy Level	Dataset
Date Stamp	2019-09-09T15:54:27
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	<a href="http://www.epsg-registry.org">http://www.epsg-registry.org</a>