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| --- | --- | --- |
| **Variable** | **Description** |  |
| **lat** | Latitude |  |
| **lon** | Longitude |  |
| **rep\_date** | date and time of detection |  |
| **source** | Source |  |
| **sensor** | Sensor |  |
| **satellite** | Satellite |  |
| **agency** | province/territory in which hotspot is located |  |
| **temp** | noon temperature (in degrees) at hotspot location |  |
| **rh** | local noon relative humidity (%) at hotspot location |  |
| **ws** | local noon wind direction (degrees) at hotspot location |  |
| **wd** | local noon wind direction (degrees) at hotspot location |  |
| **pcp** | local noon 24–hour precipitation (mm) at hotspot location |  |
| **ffmc** | Fine Fuel Moisture Code |  |
| **dmc** | Duff Moisture Code |  |
| **dc** | Drought Code |  |
| **isi** | Initial Spread Index |  |
| **bui** | Build-Up Index |  |
| **fwi** | Fire Weather Index |  |
| **fuel** | FBP fuel type at hotspot location | * [C1 - Spruce–Lichen Woodland](https://cwfis.cfs.nrcan.gc.ca/background/fueltypes/c1) * [C2 - Boreal Spruce](https://cwfis.cfs.nrcan.gc.ca/background/fueltypes/c2) * [C3 - Mature Jack or Lodgepole Pine](https://cwfis.cfs.nrcan.gc.ca/background/fueltypes/c3) * [C4 - Immature Jack or Lodgepole Pine](https://cwfis.cfs.nrcan.gc.ca/background/fueltypes/c4) * [C5 - Red and White Pine](https://cwfis.cfs.nrcan.gc.ca/background/fueltypes/c5) * [C6 - Conifer Plantation](https://cwfis.cfs.nrcan.gc.ca/background/fueltypes/c6) * [C7 - Ponderosa Pine–Douglas-Fir](https://cwfis.cfs.nrcan.gc.ca/background/fueltypes/c7) * [D1 - Leafless Aspen](https://cwfis.cfs.nrcan.gc.ca/background/fueltypes/d1) * [S1 - Jack or Lodgepole Pine Slash](https://cwfis.cfs.nrcan.gc.ca/background/fueltypes/s1) * [S2 - White Spruce–Balsam Slash](https://cwfis.cfs.nrcan.gc.ca/background/fueltypes/s2) * [S3 - Coastal Cedar–Hemlock–Douglas-Fir Slash](https://cwfis.cfs.nrcan.gc.ca/background/fueltypes/s3) * [O1 - Grass](https://cwfis.cfs.nrcan.gc.ca/background/fueltypes/o1) * [M1 - Boreal Mixedwood–Leafless](https://cwfis.cfs.nrcan.gc.ca/background/fueltypes/m1) * [M2 - Boreal Mixedwood–Green](https://cwfis.cfs.nrcan.gc.ca/background/fueltypes/m2) * [M3 - Dead Balsam Fir Mixedwood–Leafless](https://cwfis.cfs.nrcan.gc.ca/background/fueltypes/m3) * [M4 - Dead Balsam Fir Mixedwood–Green](https://cwfis.cfs.nrcan.gc.ca/background/fueltypes/m4) |
| **ros** | Rate of Spread (m/min) at hotspot location (modelled) | Rate of Spread (ROS) is the predicted speed of the fire at the front or head of the fire (where the fire moves fastest) and takes into account both crowning and spotting. It is measured in meters per minute and is based on the Fuel Type, Initial Spread Index, Buildup Index, and several fuel-specific parameters such as phenological state (leafless or green) in deciduous trees, crown base height in coniferous trees, and percent curing in grasses. |
| **sfc** | Surface Fuel Consumption (kg/m2) at hotspot location (modelled) |  |
| **tfc** | Total Fuel Consumption (kg/m2) at hotspot location (modelled) |  |
| **bfc** | borfire fuel consumption |  |
| **hfi** | Head Fire Intensity (kW/m) at hotspot location (modelled) | Head Fire Intensity (HFI) is the predicted intensity, or energy output, of the fire at the front or head of the fire. It has become one of the standard gauges by which fire managers estimate the difficulty of controlling a fire and select appropriate suppression methods. It is measured in kilowatts per meter of fire front and is based on the Rate of Spread and the Total Fuel Consumption. |
| **cfb** | Crown Fraction Burned (%)at hotspot location (modelled) | Crown Fraction Burned (CFB) is the predicted fraction of the tree crowns consumed by the fire. It is based on Buildup Index, Foliar Moisture Content, Surface Fuel Consumption, and Rate of Spread.  Fire Type (FT) provides a general description of the fire. It is based on the Crown Fraction Burned (CFB). If the CFB is less than 0.1 (10%), then the fire is a surface fire. If the CFB is 0.9 (90%) or more, the fire is a continuous crown fire. If the CFB is between 0.1 and 0.9, the fire is an intermittent crown fire. |
| **pcuring** | percent curing |  |
| **greenup** | phenological state of deciduous trees (0=leafless, 1=green) |  |
| **elev** | elevation above sea level |  |
| **sfl** |  |  |
| **cfl** |  |  |
| **tfc0** |  |  |
| **ecozone** | ecozone in which hotspot is located | source: http://ecozones.ca/ |
| **sfc0** |  |  |
| **cbh** |  |  |

A close-up of a soil

Description automatically generated

