

Annotated list of useful fire and weather websites

Weather and upper air soundings	
Current weather, forecasts, radar, satellite, alerts, air quality, deterministic (RDPS, GDPS) and ensemble forecasts, monthly and seasonal forecasts, snow depth, upper air analyses, FireWork (smoke prediction), aviation conditions, etc.), as well as past weather archives and GRIB2 numerical model data.	http://weather.gc.ca/
University of Wyoming Atmospheric Soundings. View tephigrams and raw data collected from upper air soundings worldwide.	weather.uwyo.edu/upperair/sounding.html
Canadian Meteorological Centre forecast bulletins (text)	http://kamala.cod.edu/offers/CWAO/fxcn01.chunk.html
Bulletin focusing on prairies and arctic	http://kamala.cod.edu/Canada/latest_focn45.CWWG.html
Weather and upper air sounding forecasts	
Skew T sounding forecasts (for a limited number of layers) for select global locations	http://www.weatheronline.co.uk/cgi-bin/expertcharts?LANG=en&MENU=0000000000&CONT=namk&MODELL=modtemps&MODELLTYP=4&BASE=-&VAR=pslv&HH=12&ZOOM=0&ARCHIV=0&RES=0&WMO=71123&PERIOD
Variety of upper air forecast products for the contiguous US and part of Canada	http://www.pivotalweather.com/model.php
Forecasted windgrams for western Canada Only	http://www.canadarasp.com/windgrams/?region=9&location=9&plotType=0
Satellites	
GOES (geostationary satellite) Loops. There are numerous satellite loops available on this website. Real-time GOES loops (Band 2) can be used to view wildfire activity. Dark colours are cool, light colours are warm, bright white is hot (likely a hotspot/wildfire). Note: The new interactive web application, <u>SLIDER</u> has every pixel of real-time GOES-16 and Himawari-8 imagery.	http://rammb.cira.colostate.edu/dev/lindsey/loops/
Real-time GOES Satellite imagery	http://www.aos.wisc.edu/weather/wx_obs/Satellite.html
Worldview. Interactively browse (and download) global, full-resolution satellite imagery. Most of the 400+ products are updated within three hours of observation, supporting time-critical application areas such as wildfire management, air quality measurements, and flood monitoring.	https://worldview.earthdata.nasa.gov/
MODIS land (temperature, albedo, LAI, ET, etc.) products from ORNL. Provides either a series of GeoTIFFs or a nice time series for points.	http://daac.ornl.gov/cgi-bin/MODIS/GLBVIZ_1_Glb/modis_subset_order_global_col5.pl
Subsets images for browsing the visual data easily and rapidly (best	https://earthdata.nasa.gov/data/near

for looking for smoke plumes). Option to download subset images.	-real-time-data/rapid-response/modis-subsets
The FIRMS database for active and archived hotspots and fire radiative energy (MODIS and VIIRS).	https://earthdata.nasa.gov/data/near-real-time-data/firms/active-fire-data
MISR archived dataset of satellite-derived smoke plume heights. Click on MISR Plume Height Project or MISR Plume Height Project 2 on the left menu.	http://www-misr.jpl.nasa.gov/getData/accessData/
Google Earth and fire data	
Click on the AFM KML Bundle and it will launch Google Earth. You can select what satellites you wish to use.	https://fsapps.nwcg.gov/afm/google-earth.php?sensor=modis&extent=canada
Composite tools – good for daily, monthly, seasonal or annual analyses	
Plot daily composites (averages) of the mean or anomalies (mean - total mean) of variables from the NCEP/NCAR Reanalysis and other datasets. Long term means (climatologies) are based on 1981-2010. Data is available from Jan 1948 to Aug 29, 2017 for most variables.	http://www.esrl.noaa.gov/psd/data/composites/day/
Plot seasonal composites (averages) of the mean or anomalies (mean - total mean) of variables from the NCEP reanalysis and other datasets. NCEP data is available from Jan 1948 to Jul 2017 (other datasets have different time ranges). Note the climatology used for the anomaly and long term mean plots is currently 1981-2010 to match the new climate normal time period.	http://www.esrl.noaa.gov/psd/cgi-bin/data/composites/printpage.pl
Analyse climate data	https://climexp.knmi.nl/start.cgi?id=someone@somewhere
Model forecast animations.	http://meteocentre.com/numerical-weather-prediction/map-animation.php?mod=gfs&run=00&stn=PNM&mode=latest&map=na&lang=en
Global maps from GHCN v3 data. Create surface temperature anomaly or trend maps.	https://data.giss.nasa.gov/gistemp/maps/
Radar	
Canadian Historical Weather Radar. Useful for tracking storms and precipitation. Also has links to how to use the product and information about radar images.	http://climate.weather.gc.ca/radar/index_e.html
Radar coverage of the US and southern Canada.	http://www.intellicast.com/National/Radar/Current.aspx?location=default&region=MSY
USA radar composite archives. Useful for tracking storms and precipitation	http://www2.mmm.ucar.edu/imagearchive/
Jet stream analysis	
Build animations of archived jet stream analyses.	http://squall.sfsu.edu/scripts/jet_big_archloop.html
Real-time Lightning	
Live lightning maps.	http://en.blitzortung.org/live_lightning_maps.php

Need a quick forecast for a remote area?	
Includes an option to output data formatted as a Prometheus weather stream.	http://spotwx.com/
Model forecast visualizations	
View interactive maps of forecasted (ECMWF or GFS) maps of wind, cloud, temperature, precipitation, pressure, etc.	https://www.windy.com/
	https://earth.nullschool.net
	https://earth.nullschool.net/about.html
Fire weather, behaviour, and management sites	
Daily, weekly, and monthly (with seasonal trends) wildfire potential outlooks.	https://www.predictiveservices.nifc.gov/
North American Seasonal Fire Assessment and Outlook (August, September and October 2017)	https://www.predictiveservices.nifc.gov/outlooks/NA_Outlook.pdf
Canadian Wildland Fire Information System creates daily fire weather and fire behavior maps year-round and hot spot maps throughout the forest fire season, generally between May and September.	http://cwfis.cfs.nrcan.gc.ca/home
Global Fire EWS 10 day and monthly fire weather forecasts	http://canadawildfire.ualberta.ca/gfews/
Canadian (CIFFC) annual reports of fire activity and current situation.	http://www.cifc.ca/
Yukon wildfire status maps and general information.	http://www.community.gov.yk.ca/protectiveservices/fire-maps.html
British Columbia wildfire status maps, information, fire bans/restrictions, fire danger, statistics.	http://www2.gov.bc.ca/gov/content/safety/wildfire-status
Northwest Territories wildfire status maps, smoke reports, and fire bans.	http://www.enr.gov.nt.ca/en/services/fire-update
Alberta wildfire status maps, fire advisories/restrictions/bans, fire behaviour, situations reports, data and statistics.	http://wildfire.alberta.ca/wildfire-status/default.aspx
Saskatchewan wildfire status maps, fire danger, fire bans, smoke and air quality.	http://www.saskatchewan.ca/fire#utm_campaign=q2_2015&utm_medium=short&utm_source=%2Ffire
Manitoba wildfire status maps, situation reports, general information.	https://www.gov.mb.ca/wildfire/index.html
Ontario wildfire status maps.	https://www.ontario.ca/page/forest-fires
Quebec wildfire status maps, and fire danger.	https://www.sopfeu.qc.ca/en/report-on-fire-situation/maps
New Brunswick Wildfire status maps and information.	http://www.gnb.ca/Public/Fire-Feu/
Nova Scotia fire danger.	https://novascotia.ca/natr/forestprotection/wildfire/
Prince Edward Island fire weather.	https://www.princeedwardisland.ca/en/service/check-fire-weather-index-online
Newfoundland and Labrador wildfire status maps, fire hazards maps.	http://www.faa.gov.nl.ca/forestry/forest_fires/

Weather map archives	
	http://archive.atmos.colostate.edu
	http://www.wpc.ncep.noaa.gov/archives/web_pages/sfc/sfc_archive.php
Archived surface weather maps back to 1899	http://www.lib.noaa.gov/collections/imgdocmaps/synoptic_weather_maps_northern_hemisphere.html
Online courses of interest	
Utah State University's Wildland Fire Management and Planning course and schedule.	http://ocw.usu.edu/Forest_Range_and_Wildlife_Sciences/Wildland_Fire_Management_and_Planning/index.html http://ocw.usu.edu/Forest_Range_and_Wildlife_Sciences/Wildland_Fire_Management_and_Planning/Schedule.html
MetEd is a free collection of hundreds of training resources intended for the geoscience community.	https://www.meted.ucar.edu/training_detail.php
Other	
EL Nino update	http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/
Archives	http://dd.weather.gc.ca/
Global precipitation data set	http://www.gloh2o.org/