The 2014 National Fire Emissions Inventory, version 2 (NFEIv2), was downloaded from the EPA website and compiled into a single dataset. An interactive plotting tool was created to summarize the dataset in various ways. The intention is to show, down to the level of States, Tribes, or counties, the characteristics of NFEIv2 regarding total acres, emissions, temporal variations, the breakdown of wildfire, prescribed, and agricultural burning, and the data sources used to build the inventory. In addition, a meta-data field required for regional haze modeling was added and may be reviewed. Below are instructions for navigating the tools and some initial questions to consider to begin evaluating the NFELv2 results.

Evaluation Tool Instructions

Access the tool here: http://nfei2014.airsci.com/2014_fire_nei_eval
To update the plot,

1. Start with the top row, choosing either States or Tribes. You may choose one or more State/Tribe to compare, and one or more counties. Counties overlapping Tribal lands are provided as an optional organizational tool.
2. Set the X and Y axes, and, if desired, an optional Additional Comparison for each X axis category. Not all combinations are available depending on the X and Y axis chosen.
3. You may download the data visible in the plot by clicking the "Download CSV" button. You may also save the plot graphic by clicking the grey floppy-disk icon to the right of the plot.
4. If the plot stops responding, simply reload the page and start over. It's a good idea to reload the page if you leave it idle for more than a few minutes.

Questions to Consider

1. Natural vs. Anthropogenic Classifications[1]
   a. Compare Natural vs. Anthropogenic by Month, Location and Size Class for your State/Tribe[2]. Are the data consistent with what you'd expect in terms of location, timing, magnitude, and distribution of acres burned? Please document any concerns.
   b. Compare Natural vs. Anthropogenic by FCCS. Are the data consistent with what you'd expect in terms of fuel consumed and emissions magnitude? Are any fuel types represented that should not be or that are significantly over estimated (ignore any that are less 1000 acres). Please document any concerns.

2. Compare Data Sources against acres by Fire Type for your State/Tribe. Refer to the attached Data Source dictionary.
   a. Are the data sources used for your State/Tribe consistent with what was submitted?
   b. Are the data sources used for your State/Tribe representative of available datasets?
   c. Compare data source HMS_2014_no_3 (with no other sources) acres by fire type against other, reconciled data sources (e.g., HMS_2014_no_3 combined with additional sources). Are the HMS-only acres

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[1] NAT/ANTH was assigned by mapping FCCS codes listed in Table 2 here. Remaining events classified by overlaying VCC: Ia–IIa assigned NAT; IIb+ assigned ANTH

[2] Tribal fire associations were done by EPA for WF and RX. Agricultural burns were overlaid with a Tribal Lands layer from the National Map buffered to 1km to account for spatial errors in satellite detection.

redundant with reported events, or do they seem to account for additional, unreported burns in your area? Keep in mind that HMS cannot detect a burn smaller than ~20 acres.
Example: Oregon→All Counties→Data Source→Acres→Wildfire vs. Prescribed vs. Agricultural. There are 209,000 acres of HMS-only prescribed fire acres. Is this reasonable, especially considering that pile burns were removed from reported datasets? Almost half the acres come from SE Oregon where there is a significant amount of unreported rangeland burning.

3. In general, as you explore the data please identify any concerns that may affect the emissions, in terms of timing, magnitude, or location.

Data Sources Dictionary

The date sources listed below are usually represented in various combinations. This is due to the reconciliation process in SMARTFIRE2 that combines and reconciles multiple data sources to attempt to extract the maximum amount of information about each fire.

- **AVHRR; GOES-EAST; GOES-WEST; MODIS**. These are for agricultural data only, and represent the individual satellite platforms that were used to build the 2014 National Agricultural Emissions Inventory.
- **FETS2014_v2; State2014_SupplementAll_correct; wa_state_data.** As a result of the data collected and assessed, fire activity data from 22 states and one Indian Nation (32 individual data sets and FETS data) were included in the 2014 NEI. *ALL PILE BURNS WERE REMOVED FROM THESE DATASETS.*
- **HMS_2014_noag_3**. Hazard Mapping System (HMS) data published by the National Oceanic and Atmospheric Administration (NOAA)were acquired and agricultural fires were removed. See Section 4.11 on agricultural fires for more a description as to what was done and why.
- **ICS_2014_normal; ICS_2014_simple_correct**. Incident Status Summary (ICS-209) Reports in application (.exe) format were acquired via the National Fire and Aviation Management Web Applications website. Upon execution, the application file created a Microsoft Access database containing the fire activity data. Data from two tables in the database were merged and used: the SIT209_HISTORY_INCIDENT_209_REPORTS table contained daily 209 data records for large fires, and the SIT209_HISTORY_INCIDENTS table contained summary data for additional smaller fires.
- **FWS_2014_correct**. U.S. Fish and Wildlife Service (USFWS) fire information data were provided by the USFWS.
- **NASF_2014_2_nonj.** National Association of State Foresters (NASF) fire information data were downloaded from the National Fire and Aviation Management Web Applications website. Only wildfire data were included.
- **FACTS_2014.** Forest Service Activity Tracking System (FACTS) fire information data were supplied by the USFS. Only fuel treatment data were included.
- **GeoMAC_2014_3.** Geospatial Multi-Agency Coordination (GeoMAC) fire perimeter data were downloaded via the USGS GeoMAC wildland fire support website.
- **NFPORS_2014_correct**. U.S. Department of the Interior (DOI) prescribed fire data were extracted from the National Fire Plan Operations and Reporting System (NFPORS) and supplied by the USFS. This is a new data source that was not used in previous efforts. See [ref 1] for more details.