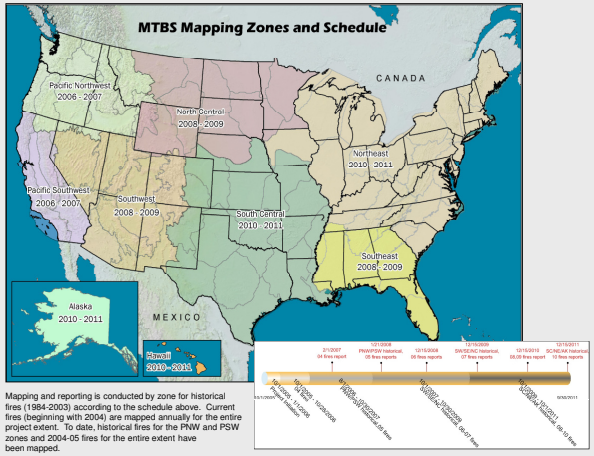
Monitoring Trends in Burn Severity (MTBS)

Historical Fire Severity Data in the Southwestern United States

The Monitoring Trends in Burn Severity project maps the frequency, extent, and magnitude (size and severity) of all large wildland fires in the conterminous United States, Alaska, and Hawaii for the period of 1984 through 2010

Geography and Schedule

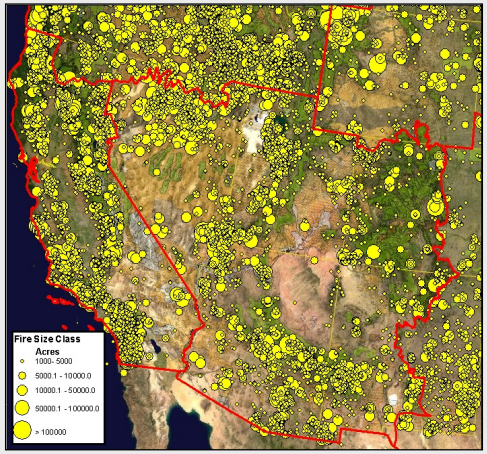


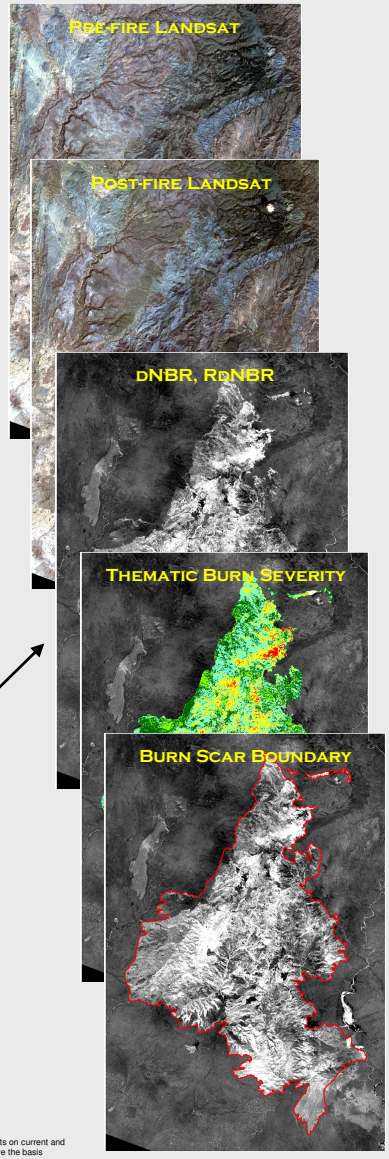
Mapping and reporting is conducted by zone for historical fires (1984-2003) according to the schedule above. Current fires (beginning with 2004) are mapped annually for the entire project extent. To date, historical fires for the PNW and PSW zones and 2004-05 fires for the entire extent have been mapped.

Source

The MTBS project relies on various fire occurrence databases as the primary method of locating fires to be mapped. Federal and State data are compiled, standardized, and filtered to provide information on all reported fires that meet the large fire size criteria for the project (1000 acres in the west, 500 acres in the east). The resulting MTBS fire occurrence database (FOD) is a comprehensive spatial record of most large fires reported in the U.S. since 1984. Anomalies in the source databases have been corrected or discarded in an effort to build a 'clean' fire occurrence record. Links to the source databases have been maintained.

The image to the right illustrates large fires reported for the Pacific Southwest and Southwest mapping zones for the period of 1984-2005. At this stage only fires < 1000 acres have been removed from the FOD. Duplicate records resulting from reporting by multiple agencies are included and must be identified and assigned a primary ID as part of the mapping process. Duplicate records are noted in the final MTBS FOD.





Data Access & Reports

WWW.MTBS.GOV

Data Summaries

MTBS Data Summaries

- Create tabular and graphical summaries from MTBS data
- Provide a quick and customizable way to access results from the MTBS project
- Provide the information requested in few steps, and tabular summaries will be created for online analysis or downloading

Data Download

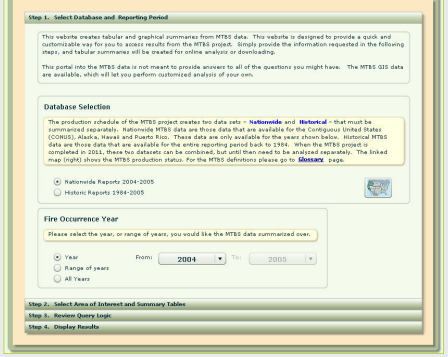
Interactive Data Viewer

- Download of user-specified individual MTBS fire datasets for the United States
- Hosted by the USGS Earth Resources Observation Systems (EROS) Data Center

Aggregated By Geographic Area/Year (Available Jan 2008)

- Download MTBS fire datasets aggregated annually by three geographic areas (eastern/western United States and Alaska)
- Hosted by the USDA Forest Service Remote Sensing Applications Center (RSAC)

Online MTBS Data Summaries



Access to information about the MTBS project as well as burn severity data and reports are available on the project website. Landsat data acquired and processed by the project have been added to the national MRLC archive and are available at no charge. Access to the MTBS Landsat data is through existing data access tools maintained by USGS (glovis.usgs.gov).

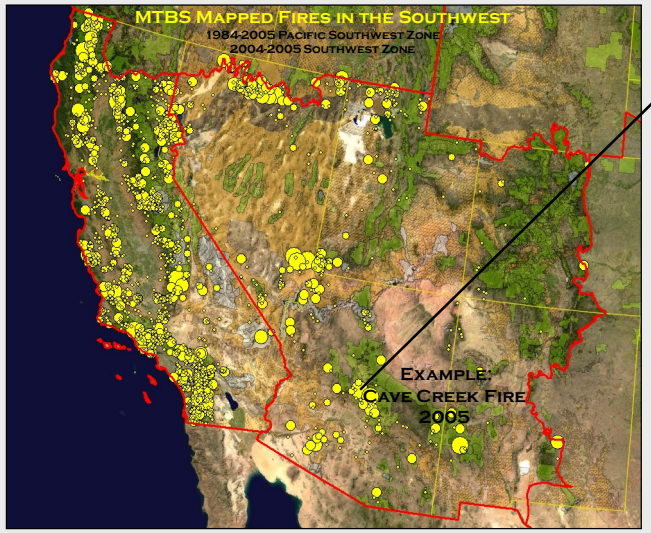
MTBS severity data can be downloaded through either of two access nodes. An interactive browsing application allows the user to select specific areas and periods of interest and is best suited for targeted data access. For spatially and temporally extensive downloads the data are available as spatially aggregated bundles by year for the western U.S., eastern U.S., and Alaska.

In addition to data access a simple summarization tool is available to support user defined queries of the available MTBS data. Fundamental questions about the acres of burn severity by class within States or Geographic Area Coordination Center boundaries and for a period of interest can be quickly answered without having to download and analyze data.

Annual reports will also be available through the website as they are completed. Currently the 2004, 2005*, PNW historical*, and PSW historical* reports can be downloaded. MTBS reports are the primary project-sponsored means of presenting trends and pattern information about the severity data.

*available February 08

Products



The MTBS project generates geospatial and tabular products that include Landsat reflectance data, burn severity layers, standardized fire occurrence data, and annual reports on current and historical trends in burn severity. MTBS burn severity data are produced through the consistent application of published, operational methods. Final burn severity products are the basis for monitoring and trends reporting at a National level. In addition to the final thematic products, the continuous burn severity data (dNBR and RdNBR) are made available to provide the greatest analytical flexibility across scales.

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For the Association of Fire Ecology Regional Conference 2008