

Blog Help Files: Hazard Mapping System (HMS) Fire and Smoke Product

The Hazard Mapping System (HMS) Fire and Smoke Product is a map that indicates the location of fires and significant smoke plumes in the Northern Hemisphere. Year-round analysis for Canada and the United States is provided by the NOAA Satellite Analysis Branch (SAB), a part of the Satellite Services Division (SSD). Analysis for Mexico, Central America, Cuba, and the Bahamas is conducted during the fire season (March – June) by the Servicio Meteorológico Nacional de México. Fire information for HMS is derived from the Moderate Resolution Imaging Spectroradiometer (MODIS),* Advanced Very High Resolution Radiometer (AVHRR), Defense Meteorological Satellite Program/Operational Linescan System (DMSP/OLS), and the Geostationary Observational Environmental Satellites (GOES).*

Figure 1 is an example of an HMS map for May 25, 2008. Analysis is made daily at 1 – 11 PM Eastern Time. Countries outlined in green are the focus of the analysis. Red dots are fire “hotspots” identified by satellite fire algorithms. Grey areas indicate major smoke plumes identified by NOAA analysts using GOES visible satellite imagery. NOAA analysts also prepare a Smoke Text product several times per day, which provides more information about the smoke plumes indicated on the HMS map. Figure 2 is an example of the Smoke Text that accompanied Figure 1.

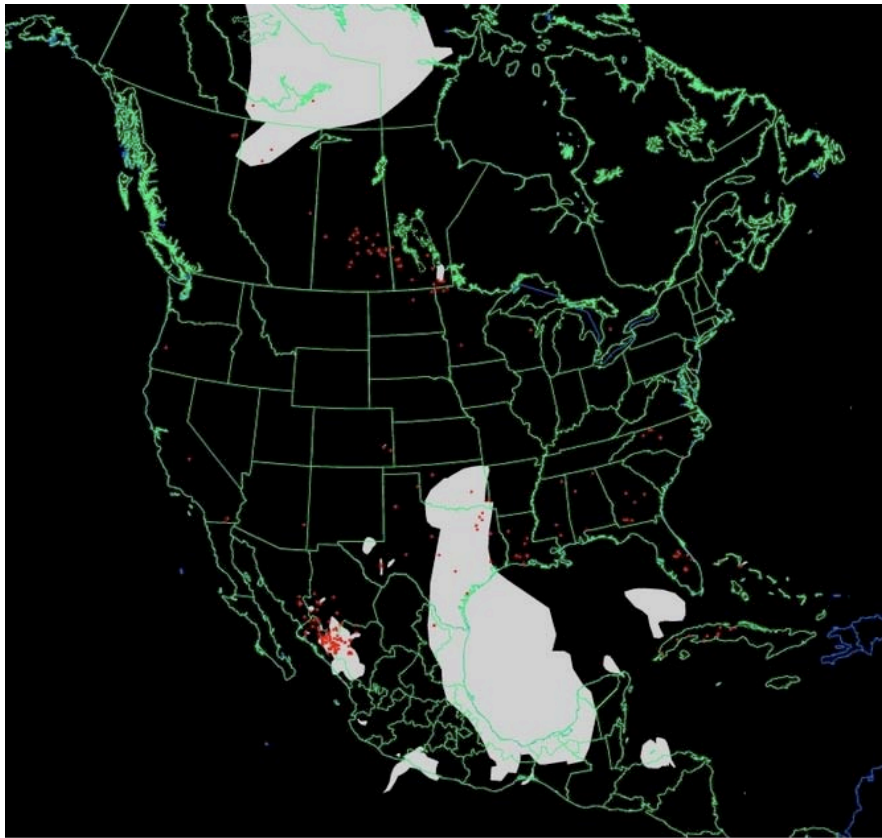


Figure 1. HMS Fire and Smoke Product for May 25, 2008

Sunday, May 25, 2008

**DESCRIPTIVE TEXT NARRATIVE FOR SMOKE/DUST OBSERVED IN SATELLITE IMAGERY
THROUGH 1600Z May 25, 2008**

Northern Canada:

A broad area of smoke was seen covering much of the north central Canada, including northern Alberta, northwest Saskatchewan, eastern Northwest Territories and western Nunavut. The source of this smoke is likely large fires burning in eastern Russia.

Mexico:

An area of thin smoke was seen moving north across western Chihuahua state in Mexico, the result of numerous fires in western Mexico in southwest Chihuahua, western Durango and Sinaloa states.

Ruminski

Figure 2. HMS Smoke Text for May 25, 2008

*For more information about:

- GOES, see the **GOES Imagery Help File**
- MODIS, see the **MODIS True Color Images Help File**