High nitrogen dioxide levels from Arizona's Yarnell Hill Fire
2 July 2013

This June 29, 2013 image from the OMI, or Ozone Monitoring Instrument aboard NASA's Aura satellite shows nitrogen dioxide (NO2) levels in Arizona pertaining to three large fires. The highest levels of NO2, which is produced by combustion, were from the Yarnell Hill fire (dark red and brown).

NO2 concentration is given as the number of molecules in a cubic centimeter. The highest NO2 concentration values (8-9 x 10^15) indicated that this strong fire was burning a large amount of combustible material and thus generating a large amount of NO2 in a small area.

The image was created with the NASA Geospatial Interactive Online Visualization and Analysis Infrastructure (Giovanni), hosted by the Goddard Earth Sciences Data and Information Services Center at NASA's Goddard Space Flight Center in Greenbelt, Md.

The Yarnell Hill Fire is located near 34.225 latitude and -112.791 longitude, about 1.5 miles west of Yarnell, Ariz. The multi-agency Incident Information System website noted that the fire began from a lightning strike on Friday, June 28th, 2013. The fire has consumed 8,374 acres. Currently, the towns of Yarnell and Peeples Valley under evacuation.

Provided by NASA's Goddard Space Flight Center

Credit: NASA/OMI/Giovanni/James Acker