

Image: NASA's Terra spacecraft images destructive Colby fire East of Los Angeles

January 29 2014



Credit: NASA

(Phys.org) —On Jan. 16, 2014, a wildfire broke out in the mountains above the Los Angeles suburbs of Glendora and Azusa. The fire consumed almost 2,000 acres and destroyed several homes, after starting

from an illegal campfire. With the current drought conditions in Southern California, this year's fire season could extend year-round.

This image, acquired Jan. 23, 2014 from the Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) instrument on NASA's Terra spacecraft, depicts vegetation in shades of red. The burned area is seen as the blue-gray area at the base of the mountains. The image covers an area of 9.3 by 11.2 miles (15 by 18 kilometers), and is located near 34.1 degrees north, 117.9 degrees west.

With its 14 spectral bands from the visible to the thermal infrared wavelength region and its [high spatial resolution](#) of 15 to 90 meters (about 50 to 300 feet), ASTER images Earth to map and monitor the changing surface of our planet. ASTER is one of five Earth-observing instruments launched Dec. 18, 1999, on Terra. The instrument was built by Japan's Ministry of Economy, Trade and Industry. A joint U.S./Japan science team is responsible for validation and calibration of the instrument and data products.

The broad spectral coverage and high spectral resolution of ASTER provides scientists in numerous disciplines with critical information for surface mapping and monitoring of dynamic conditions and temporal change. Example applications are: monitoring glacial advances and retreats; monitoring potentially active volcanoes; identifying crop stress; determining cloud morphology and physical properties; wetlands evaluation; thermal pollution monitoring; [coral reef degradation](#); surface temperature mapping of soils and geology; and measuring [surface heat balance](#).

Provided by NASA

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