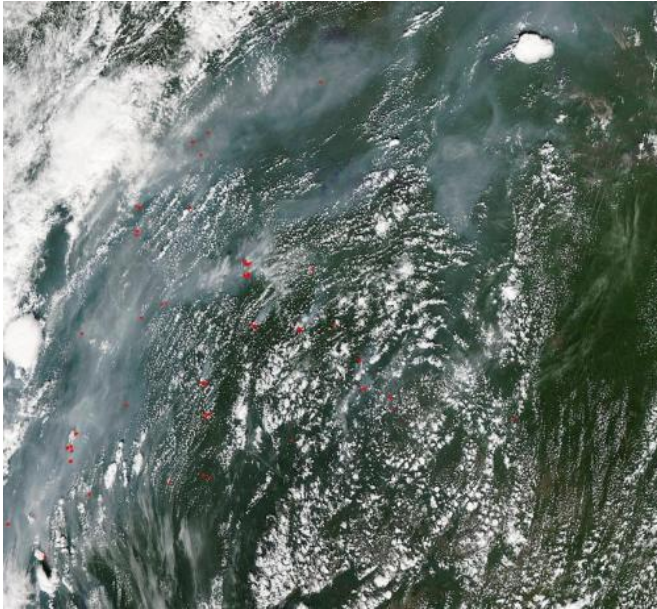


# Wildfires dot central Russia's landscape

10 July 2014



benzene, toluene, styrene, metals and dioxins.

The type and amount of particles and chemicals in smoke varies depending on what is burning, how much oxygen is available, and the burn temperature. Winds carry the smoke to more densely populated areas so all fire can still be deleterious to the health of the population if the smoke reaches more populated area.

Provided by NASA's Goddard Space Flight Center

Credit: Jeff Schmaltz, MODIS Rapid Response Team.  
Caption: NASA/Goddard, Lynn Jenner

This natural-color satellite image was collected by the Moderate Resolution Imaging Spectroradiometer (MODIS) aboard the Aqua satellite on July 10, 2014. Each hot spot, which appears as a red mark, is an area where the thermal detectors on the MODIS instrument recognized temperatures higher than background. When accompanied by plumes of smoke, as in this image, such hot spots are diagnostic for fire.

This area of Russia is extremely remote with little danger coming directly from the fires, although the smoke released by any type of fire (forest, brush, crop, structure, tires, waste or wood burning) is a mixture of particles and chemicals produced by incomplete burning of carbon-containing materials. All smoke contains carbon monoxide, carbon dioxide and particulate matter (PM or soot). Smoke can contain many different chemicals, including aldehydes, acid gases, sulfur dioxide, nitrogen oxides, [polycyclic aromatic hydrocarbons](#) (PAHs),

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