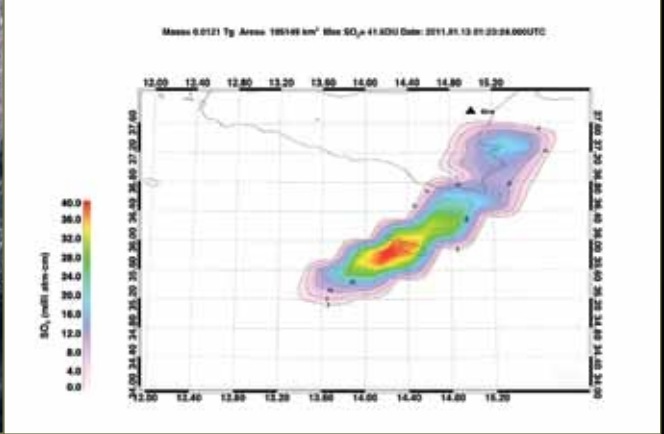


Volcanoes from space

The distribution of volcanoes across the Earth's surface tells us about the underlying pattern of tectonic plates. Much can be learned about volcanoes by observing them from orbiting spacecraft.

Etna



A plume of ash and gas rises from Etna, on Sicily, off the 'toe' of Italy. Photographed on 11 January 2011 by NASA's Terra satellite.

NASA's EOS-AQUA satellite uses infra-red measurements to analyse atmospheric gases. This map shows the concentration of sulphur dioxide in Etna's plume.

Vesuvius



Vesuvius, the volcano that destroyed Pompeii in AD79, dominates the bay of Naples, Italy. This night view shows how close people live to the active volcano.

ASTER is an instrument that detects thermal (infra-red) emissions and reflections from the ground. Different land surfaces show up as different colours.



Sarychev

Sarychev Peak in the far east of Russia erupted on 12 June 2009. Observers on the International Space Station saw how the plume of ash and gas pushed aside the cloud layer above.



Olympus Mons

The biggest volcano in the solar system is Olympus Mons, on Mars. This photograph, taken by ESA's Mars Express, shows the six calderas which make up its summit.