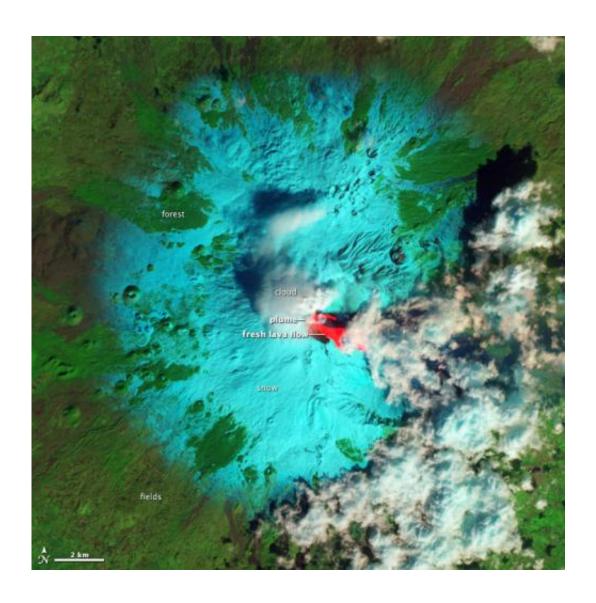


## As seen from space: Mt. Etna boils over

February 22 2013, by Nancy Atkinson



Lava flows on Mt. Etna visible from the The Advanced Land Imager (ALI) on the Earth Observing-1 (EO-1) satellite captured Etna on February 19, 2013. Credit: NASA



Italy's Mount Etna has turned on again, spewing lava and gas in its first big eruption in 2013. The volcano is one of the most active in the world, and is Europe's tallest active volcano, currently standing about 3,329 m (10,922 ft) high.

The volcano has been "simmering" for 10 months, but on February 19 and 20, the famous volcano came to life, providing dramatic visuals from the ground (see the video below) as well as from space, with three outbursts in less than 36 hours. This image from the Advanced Land Imager (ALI) on the Earth Observing-1 (EO-1) satellite captured Etna on February 19 at 9:59 a.m. Central European Time, about 3 hours after the end of the first outbursts.

The false-color image combines shortwave infrared, near infrared, and green light in the red, green, and blue channels of an RGB picture. This combination differentiates the appearance of fresh lava, snow, clouds, and forest.

Fresh lava is bright red—the hot surface emits enough energy to saturate the instrument's shortwave <u>infrared detectors</u>, but is dark in near infrared and green light. Snow is blue-green, because it absorbs shortwave infrared light, but reflects near infrared and green light. Clouds made of <u>water droplets</u> (not ice crystals) reflect all three <u>wavelengths of light</u> similarly, and are white. Forests and other vegetation reflect near infrared more strongly than shortwave infrared and green light, and appear green. Dark gray areas are lightly vegetated lava flows, 30 to 350 years old.

The video from the ground was captured by Klaus Dorschfeldt, a videographer and webmaster at Italy's National Institute of Geophysics and <u>Volcanology</u>.

In an update today on the Italian National Institute of Geophysics and



<u>Vocanology website</u>, a fourth episode of lava fountains was reported. "Like the previous paroxysms, this event produced fountains and lava and an <u>ash cloud</u> that has shifted to the northern sector of the volcano."

If you want to keep updated on what Mt. Etna is doing, there's a <u>webcam</u> where you can watch the eruptions live.

Source: <u>Universe Today</u>

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