



## **Thermal monitoring of Mt. Etna by means of RSTVOLC system**

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Mt. Etna (Italy) is the most active volcano in Europe. It shows frequent eruptions from both summit craters and lateral fissures. Flank eruptions are the most dangerous ones because of their distance from the neighbor populated areas. In this study, we present some recent observations of Mt. Etna thermal activity performed by the RSTVOLC satellite-based system, which monitors Italian volcanoes in near-real time by integrating information provided by AVHRR (Advanced Very High Resolution Radiometer) and MODIS (Moderate Resolution Imaging Spectroradiometer) sensors. The study focuses on thermal activity preceding the opening of a new degassing vent at the Voragine Crater emitting high temperature gas on 7 August 2015 and on recent eruption occurred in December 2018. Results show the important contribution that satellite observations may provide for monitoring active volcanoes even in areas where traditional surveillance systems exist recognizing also subtle phases of thermal unrest which may precede significant eruptions.