



## **The 03-09 December 2015 Etna eruption volcanic parameters retrieved using Volcanic Plume Removal procedure on EVER-EST project platform**

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Volcanic eruptions emit large quantities of gas and solid particles into the atmosphere, with significant impact on environment, climate, human health and air traffic.

The EVER-EST project (European Virtual Environment for Research - Earth Science Themes: a solution) is a H2020 project (2015-2018) having as focus the creation of a Virtual Research Environment (VRE) to enhance the ability to interoperate and share knowledge in Earth Science community. Using the VRE, the scientists should be able to collaborate with colleagues located in different parts of the world, to remotely access and share data and research results, to carry out training sessions and discussions, to compare different results and models. Through the VRE, using the Rohub concept ([www.rohub.org](http://www.rohub.org)), the researchers will have the opportunity to reuse data and, above all, algorithms developed by others scientists.

The VPR (Volcanic Plume Removal) procedure, for the retrieval of volcanic ash, ice and SO<sub>2</sub> cloud parameters has been implemented into VRE, for the processing of the MODIS sensor data on board the polar NASA Aqua/Terra satellite platforms.

In this work the VPR procedure, implemented into the VRE platform, is considered to process all the MODIS images collected during one of the biggest lava fountains occurred at Etna volcano after 2011, the 03 - 09 December 2015 eruption.