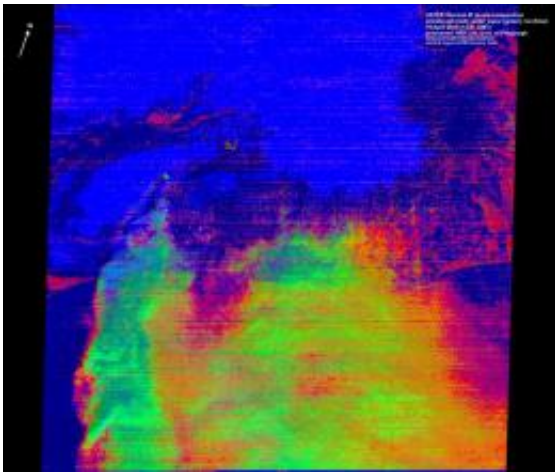


Iceland volcano: Pitt researcher compiles first high-res images; plume receding but internal heat up

April 23 2010



Day time plume compositional image derived from the thermal infrared data.
Image: Michael Ramsey

High-resolution visible and thermal infrared images captured by a joint NASA-Japanese satellite sensor and compiled by University of Pittsburgh volcanologist Michael Ramsey provide the first clear glimpse of the Icelandic volcano Eyjafjallajökull that has disrupted air travel worldwide since it began erupting April 14.

Ramsey, an associate professor in Pitt's Department of Geology and [Planetary Science](#), collected images taken by NASA's Earth-orbiting

Advanced Spaceborne [Thermal Emission](#) and Reflectance Radiometer (ASTER) instrument showing that although the volcano's infamous [ash plume](#) is receding, its internal temperature is rising.

The images are available on Pitt's Web site at <http://www.pitt.edu/~mramsey/data/iceland>. Eyjafjallajökull appears on the left side of the images as a bright spot with a cloud emanating from it.

Ramsey, who is available to comment on the images and Eyjafjallajökull's activity, is a member of the ASTER science team and specializes in remote sensors and visualization as applied to volcanoes. His work with ASTER usually centers on the north Pacific region, but the satellite was redirected to Iceland to help scientists at the Iceland GeoSurvey (ÍSOR) who cannot safely approach the [volcano](#). Ramsey has been sharing the images with colleagues at ÍSOR and volcanologists worldwide.

Unlike standard weather-satellite images, the high-resolution pictures from ASTER can help scientists determine the plume's chemical composition and thickness, the location of lava flows, and the volcano's internal temperature, Ramsey explained. The data can help better monitor the volcano's activity, particularly its worrisome effect on the nearby and much larger volcano Katla, which in the ASTER images is seen as a large off-color area to the right of Eyjafjallajökull. In the past, Katla has erupted every time Eyjafjallajökull has, though the ASTER images so far show no signs of an imminent explosion, Ramsey said.

Provided by University of Pittsburgh

Citation: Iceland volcano: Pitt researcher compiles first high-res images; plume receding but internal heat up (2010, April 23) retrieved 9 April 2024 from

<https://phys.org/news/2010-04-iceland-volcano-pitt-high-res-images.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.