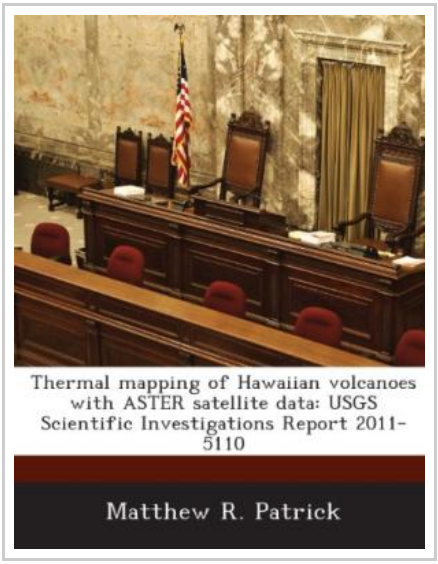

Thermal Mapping of Hawaiian Volcanoes with Aster Satellite Data: Usgs Scientific Investigations Report 2011-5110 (Paperback)

By Matthew R Patrick

Bibliogov, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.Thermal mapping of volcanoes is important to determine baseline thermal behavior in order to judge future thermal activity that may precede an eruption. We used cloud-free kinetic temperature images from the ASTER (Advanced Spaceborne Thermal Emission and Reflection Radiometer) sensor obtained between 2000 and 2010 to produce thermal maps for all five subaerial volcanoes in Hawai i that have had eruptions in the Holocene (K lauea, Mauna Loa, Hual lai, Mauna Kea, and Haleakal). We stacked the images to provide time-averaged thermal maps, as well as to analyze temperature trends through time. Thermal areas are conspicuous at the summits and rift zones of K lauea and Mauna Loa, and the summit calderas of these volcanoes contain obvious arcuate, concentric linear thermal areas that probably result from channeling of rising gas along buried, historical intracaldera scarps. The only significant change in thermal activity noted in the study period is the opening of the Halema uma u vent at K lauea s summit in 2008. Several small thermal anomalies are coincident with pit craters on Hual lai. We suspect...

Reviews

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A very awesome book with perfect and lucid reasons. It really is basic but shocks within the 50 percent of the book. Its been designed in an exceptionally easy way and is particularly merely right after i finished reading this ebook where in fact changed me, change the way i think.

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