

Geophysical Research Abstracts,
Vol. 10, EGU2008-A-04203, 2008
SRef-ID: 1607-7962/gra/EGU2008-A-04203
EGU General Assembly 2008
© Author(s) 2008



An assessment of current EOS sensors in monitoring volcanic activity and details of improvements required in the features of future infra-red satellite sensors for volcanic observation.

M. Blackett and M. Wooster

Department of Geography, King's College, London, WC2R 2LS (matthew.blackett@kcl.ac.uk / Phone: 0207 848 1204)

Early in the 21st century, NASA launched a number of new sensors as part of the Earth Observing System (EOS). At the time of launch there was much optimism that these new sensors possessed features which would provide accurate and useful data in terms of monitoring volcanic activity. Following an extensive examination of infrared imagery acquired from such sensors (namely ASTER and MODIS), it appears that these sensors are not well suited for making volcanological observations for a variety of reasons and fall short of this expectations. Based on these findings, which are detailed with examples, possible improvements to the features of future sensors are suggested. These, it is envisaged, would overcome many of the issues associated with ASTER and MODIS and therefore allow for the provision of more reliable and accurate infrared observations of volcanic surfaces.