

Geophysical Research Abstracts,  
Vol. 10, EGU2008-A-02918, 2008  
SRef-ID: 1607-7962/gra/EGU2008-A-02918  
EGU General Assembly 2008  
© Author(s) 2008



## **VolcanoSO2.exe: a user friendly program for measuring volcanic SO<sub>2</sub> fluxes with miniature USB2000 spectrometers**

A.J.S. McGonigle (1)

(1) Department of Geography, University of Sheffield, UK (a.mcgonigle@shef.ac.uk / Fax: +44 114 222 7912)

Volcanologists have routinely measured volcanic SO<sub>2</sub> fluxes with UV spectroscopy, in order to diagnose eruptive status for some 30 years. These data, which have formed the mainstay of remotely sensed volcanic gas geochemistry, have been useful in hazard assessment and in constraining the radiative impact of volcanism upon the climate system. Hitherto these observations were made using correlation spectrometers, which have been recently upgraded with considerably smaller, lighter and cheaper compact USB powered CCD array devices (the Ocean Optics USB2000). In order to facilitate the dissemination of the latter units to the international volcanology community a straightforward, freely downloadable computer program (volcanoSO2.exe) has been written, to enable non-spectroscopist volcanologists to make their own volcanic flux measurements. This paper will review the operation of this code.