

MICHAEL S. RAMSEY

Biographical Sketch

Department of Geology & Planetary Science
200 SRCC Building
University of Pittsburgh
Pittsburgh, Pennsylvania 15260, U.S.A.

Phone: (412) 624-8772
Fax: (412) 624-3914
E-mail: mramsey@pitt.edu
Web: <http://www.pitt.edu/~mramsey/>



Michael Ramsey is an Associate Professor in the Department of Geology and Planetary Science at the University of Pittsburgh. He earned his Ph.D. in Geosciences from Arizona State University in 1996 and his B.S. in Mechanical Engineering from Drexel University in 1990. In 2000 he relocated to the University of Pittsburgh and formed the Image Visualization and Infrared Spectroscopy (IVIS) Laboratory, which is a state-of-the-art image analysis, infrared spectroscopy, and GPS facility supported over the past decade by more than \$3 million dollars in grants from National Aeronautics and Space Administration (NASA) and the National Science Foundation (NSF). His research interests are quite varied but focus on physical volcanology, eolian dynamics, hazard mitigation, and planetary processes using thermal

infrared imaging analysis, spectroscopy, and remote sensing.

Ramsey's research group consists of two post-doctoral researchers, six graduate and several undergraduate students. He teaches six courses for the Department including lower-level classes such as Natural Disasters and Remote Sensing, as well as graduate-level classes such as Remote Exploration of Mars and Advanced GeoHazards & Risk Management. His work has been featured in local and national newspapers, local television and radio, as well as NPR, CNN, and the Discovery Channel. Professor Ramsey has 35 peer-reviewed papers and over 160 conference abstract publications.

Ramsey was appointed by the NASA Administrator as a member of the Earth Science Subcommittee from 2006-2009. He also serves a science team member on three thermal infrared NASA instruments: the Earth-orbiting Advanced Spaceborne Thermal Emission and Reflectance Radiometer (ASTER), the Mars-orbiting Thermal Emission Imaging System (THEMIS), and the airborne Mineral and Gas Identified (MAGI). Using ASTER data, he is researching explosive volcanic hazards and integrative monitoring in the north around the world. That research also involves NSF funded laboratory studies of the thermal emission of molten materials. Ramsey's Mars-based research is focused on crater, eolian, and volcanic processes using new image processing techniques for enhancing the spatial and thermal resolution of THEMIS data, which allows better mapping of the compositional and thermal variations on the surface.