



Integrating science and education during an international, multi-parametric investigation of volcanic activity at Santiaguito volcano, Guatemala

Yan Lavallée (1), Jeffrey Johnson (2), Benjamin Andrews (3), Rudiger Wolf (4), William Rose (4), Gustavo Chigna (5), and Armand Pineda (6)

(1) Earth, Ocean And Ecological, University of Liverpool, Liverpool, United Kingdom (ylava@liverpool.ac.uk), (2) Department of Geosciences, Boise State University, Boise, Idaho, USA, (3) Department of Mineral Sciences, Smithsonian Institution, Washington, District of Columbia, USA, (4) Geological and Mining Engineering & Sciences, Michigan Technological University, Houghton, USA, (5) Instituto Nacional de Sismología, Vulcanología, Meteorología, e Hidrología (INSIVUMEH), Guatemala City, Guatemala, (6) Guatemala City, Guatemala

In January 2016, we held the first scientific/educational Workshops on Volcanoes (WoV). The workshop took place at Santiaguito volcano - the most active volcano in Guatemala. 69 international scientists of all ages participated in this intensive, multi-parametric investigation of the volcanic activity, which included the deployment of seismometers, tiltmeters, infrasound microphones and mini-DOAS as well as optical, thermographic, UV and FTIR cameras around the active vent. These instruments recorded volcanic activity in concert over a period of 3 to 9 days.

Here we review the research activities and present some of the spectacular observations made through this interdisciplinary efforts. Observations range from high-resolution drone and IR footage of explosions, monitoring of rock falls and quantification of the erupted mass of different gases and ash, as well as morphological changes in the dome caused by recurring explosions (amongst many other volcanic processes). We will discuss the success of such integrative ventures in furthering science frontiers and developing the next generation of geoscientists.