Geophysical Research Abstracts, Vol. 7, 09100, 2005
SRef-ID: 1607-7962/gra/EGU05-A-09100

The first results of infrasound array in Kalimantan: an original approach for an automatic bulletin of volcanic activity in Indonesia

J. Guilbert (1), P.J. Prih Harjadi (2), T. Heritier (1) and A. Lepichon (1)

(1) Commissariat à l'Energie Atomique, Laboratoire de Détection et de Géophysique, France,(2) Badan Meteorologi dan Geofisika , Jl Angkasa 1 No.2, Kemayoran, Jakarta Pusat, Indonesia

The infrasound technology has already shown a unique low-level detectability for the detection of volcanic activity as ash clouds or explosions. This kind of detection and characterization of the volcanic activity is very important for a country like Indonesia where the volcanoes are aligned along more than 5000km of the arc of subduction. Due to the mutual experience and knowledge on meteorological observations, infrasound observation and modelling, the BMG (Indonesia) and the CEA (France) have decided to cooperate to validate this technology. The central position the Kalimantan Island (Borneo) was identified as the best area to monitor with a good resolution in azimuth all the Indonesian volcanoes. The PMCC bulletins of detection will be presented. These detections are crossed with the available reports of volcanic activity of Indonesia and Philippine. The detectability is clearly proved. In parallel, these infrasonic observations will be used to improve the atmospheric model of wind.