The 2006 Ubinas Volcano Eruptive process, An Insight from Geophysical data and Image Processing

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The Ubinas volcano located about 90 km of Moquegua city, is one of the main active volcanoes of southern Peru. Twenty three eruptive processes have been registered during the last 500 hundred years, a few of which reported long term ash emissions and reaching IEV 2. On March 27, 2006, the Ubinas started its 24th eruptive process which was characterized by alternating sequences of quiescence and strong vapor and ash emissions. Starting late April 2006, the Geophysical Institute of Peru (IGP) made field campaigns to monitor the associated seismic activity, crustal deformation (GPS, EDM) and gravity around the volcano. The observations were complemented a few weeks later with images taken from a CCD camera located 24 km SW the volcano. We report results of this measurements as well as time evolution of fumaroles heights obtained by automatic digital image processing.