Detection and analysis of low frequency volcanic tremors from the Mayotte volcanic activity

Poli Piero *1

 1 ISTerre – CNRS : UMR5275 – France

Résumé

We apply a detection approach to LFTs signals that were generated during Mayotte volcanic crisis where it allowed us to detect > 200 LFT occurring with a nearly continuous rate during more than one year of sustained volcanic activity. Furthermore, we observe strong correlation between the LFTs occurrence and the geodetic deformation observed with GPS that in turn is likely related to the slowly emptying magmatic chamber. We then use then the monochromatic character of the LFTs spectra and measure time evolution of its dominant frequency, whose variation is also in agreement with the evolution volume of the magmatic chamber

^{*}Intervenant