



MSNoise: a Python Package for Monitoring Seismic Velocity Changes using Ambient Seismic Noise

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We present MSNoise, a complete software suite to compute relative seismic velocity changes under a seismic network, using ambient seismic noise. The whole is written in Python, from the monitoring of data archives, to the production of high quality figures. All steps have been optimized to only compute the necessary steps and to use 'job'-based processing. All steps can be changed by matching the in/outs. MSNoise exposes an API for communication with the data archive and the database.

We present a validation of the software on a dataset acquired during the UnderVolc project on the Piton de la Fournaise Volcano, La Réunion Island, France, for which precursory relative changes of seismic velocity are visible for three eruptions between 2009 and 2011.

MSNoise is available on <http://www.msnoise.org>