



## **Lava fountains episodes preceding Mt. Etna 2008 eruption and associated ground deformation**

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The 2008 Mount Etna eruption followed a recharge phase begun in 2007 also characterized by occurrence of several lava fountain episodes at the South-East Crater (SEC).

The 2007-08 SEC paroxysms happened from spring 2007 until May 10, 2008, i.e. only 3 days before the eruption onset and caused minor ground deformation recorded by the high precision station of the tilt network.

Tilt changes (until few microradians) indicate a deflation and contraction of a source localized beneath the summital area, accompanying each episode.

We considered tilt signals of the May 10, 2008 episode performing a data inversion using a simple pressure source. We finally discussed the results and their relationship with the inflating long-term pre-eruptive source and seismic signals (LP and tremor).