



Internal dynamics and eruptive behaviour of Stromboli volcano

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Stromboli is extremely well-known for its fascinating mild-explosive activity, but very poorly for the hazards associated with increase of its activity, such as crater overflows, fissure-fed lava-flows, violent-strombolian explosions, and tsunamogenic landslides. Yet, these phenomena have all been observed during the 3 effusive crisis of the past 13 years (2002-3, 2007, and 2014), reminding us that the volcano is more than just a rhythmic "slug-bursting" volcano. The recent 2014 crisis in particular was closely followed by a wide monitoring network with state-of-the-art geophysical techniques (including infrasonic-, tilt-, seismic-, and thermal-sensors), providing powerful insights into the mechanisms operating within the shallow conduit system. We here present an analysis of the geophysical signals recorded during the months preceding the 2014 effusive crisis and during the crisis itself, and compare them with past events providing a surprising picture of the volcano's internal dynamics and eruptive behaviour.