

## Annex 1

### Chapter 13: Volcano Seismology (Joachim Wassermann, Jürgen Neuberg)

(Note: New contributions/topics are marked **in red**)

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#### **13.4.5.1 Automatic Classification/Detection**

- Self Organized Maps, Neuronal Networks, Hidden Markov Models, Template Based Pattern recognition

#### **13.4.5.2 Automatic Source Location**

- pick based, waveform or coherency based, amplitude-distance modules etc.

#### **13.4.5.3 Automatic Standard Tools**

- SSAM, RSAM etc.

### **13.5 Interpretations and Source Models**

#### **13.5.1 Volcano seismicity and magma flow models**

#### **13.5.2 Volcano-Tectonic events and the associated stress field**

- regional stress field
- magma induced stress

#### **13.5.2. Low frequency events and swarms**

- resonance models: dykes, conduits and cracks
- trigger: stick slip, magma rupture

#### **13.5.3 Constraints through seismic moment tensor inversions**

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