

T1.5-O1. "Comoro-Islands/Regional seismic Sources and related Effects"

Comoro-Islands defined through the extension and ascension of magma-activity is dated from the oldest-Island 'Mayotte' ≈ 5.4 Ma, 'Moheli' ≈ 2.2 Ma, 'Anjouan' ≈ 1.5 Ma, to Gde-Comore. Located within the Indian Ocean, the Islands are exposed to multiple seismic activities: Magmatic activity can generate earthquakes felt in land; Seismic events are considerable from regional geological characteristics, thus, the tectonic earthquakes case. Assessing Comoro-surrounding seismic events, using IDC capabilities is significant for number of Benefits: -Based on a statistical approach of seismic events recorded within the Volcano-Observatory and the IDC products (Standard-Event-Lists3) from 2000 to 2014, is to insure that weaknesses of local-system-acquisition are tracked. Consequently, from this process, the NDC will develop important mechanisms of managing seismic events. -Subsequently, apart from making an assessment of local-regional seismic events, another aspect regarding natural hazards is tremendous to be considered. Those natural-hazards might be the consequences triggered from such seismic events, likely; - from volcanic earthquakes, explosive eruptions may generate infrasound effects, as well as release of massive ash into the atmosphere; - and from oceanic seismic events ($M_g \approx 6, 7, 8, \dots$) a tsunami may be generated and affect the Islands. These geological hazards investigations reinforce the research aspect of Natural Hazards in Comoros.

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