



ID: P5.2-025

Type: e-Poster

Discussion on Indonesian Tsunami of September 28, 2018

Thursday, July 1, 2021 10:00 AM (15 minutes)

This report presents on the recent tsunami that hit coasts of the Indonesian Island of Central Sulawesi. Indonesia, due to its location has experienced numerous tsunamis in recent times. The 2004 Indian Ocean tsunami is one of the most devastating among them. The latest one on 28th September 2018, at 18:02:44 a strong tsunami accompanied an earthquake of Mw 7.5 and left the state of Central Sulawesi worst affected. The tsunami was quite unprecedented as the quake was spawned by a strike-slip fault (Palu-Koro fault); usually, strike-slip faults displace land horizontally and not vertically and hence do not lead to a tsunami. This suggests that the geological, geographical and tectonic details of the island country are responsible in understanding the causes and mechanisms of earthquakes and tsunamis in the region. Foreshocks (Mw 6.1) and aftershocks (more than 150 in number) activities have also been analyzed. Satellite images of the region shot before and after the event highlight the devastation caused. The details of casualties and other associated damages have been collected from various sources. Various tsunami catalogues from 1500 to date estimates are assembled by causes, maximum magnitudes and water heights observed during the tsunamis as well as total fatalities.

Promotional text

The most disastrous hazards accompanying the earthquake is tsunami. It has often caused widespread devastations leading to serious human, environmental and economic losses. I strongly believe these devastation and losses can be reduced by building resilience.

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Session Classification: T5.2 e-poster session

Track Classification: Theme 5. CTBT in a Global Context: T5.2 - Experience with and Possible Additional Contributions to Issues of Global Concern such as Disaster Risk Mitigation, Climate Change Studies and Sustainable Development Goals