ID: Type: **Poster**

Study of Coulomb Stress Change, Aftershock Distributions and Earthquake Trigger in South of Bali, Indonesia

Mw 6.4 earthquake hit Bali on 13 October 2011. Strong ground shaking felt in Denpasar, Tabanan, Karangasem and Gianyar. Also felt at many places in Java Island, Lombok Island and Sumbawa Island.
In case of one earthquake might trigger another at nearby stress field, by using rapid calculation of coulomb stress change we analyze aftershock distributions cause by mainshock activity. It has significant correlation between numerous subsequent smaller events after bigger event. Mw 6.4 produce eight coulomb stress change lobus. Mostly aftershock event located on positive value of Coulomb Stress Change between 0.04 to 0.08 bar. Laying North West-South East along fault line. Moreover, positive value of Coulomb Stress Change at North East lobus trigger M 4.3 in early 2013, which is known as silent seismic area before.

Keywords : Coulomb Stress, Aftershock Distribution, Earthquake trigger

Primary author: ASTRA, I Made Kris Adi (Meteorology Climatology and Geophysics Agency)

Presenter: ASTRA, I Made Kris Adi (Meteorology Climatology and Geophysics Agency)

Track Classification: Theme 2: Events and Their Characterization