

EGU21-12141

<https://doi.org/10.5194/egusphere-egu21-12141>

EGU General Assembly 2021

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Extended Observations and New Insights of Dynamically Triggered Tremor in Parkfield

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We create an extended catalog of dynamically triggered tremor in the Parkfield region of the San Andreas Fault for teleseismic and regional earthquakes from 2001-2020 with a magnitude threshold of $M > 7$. After selection of clear dynamic triggering episodes, each tremor event is precisely located using a multi station approach. Using this new catalog of triggered tremor, we quantitatively evaluate the conditions under which tremor is triggered. In particular, we study the effect of frequency dependent peak dynamic strain, peak ground velocity, and the incident azimuth of triggering waves. We further try to assess if the triggering potential in the San Andreas Fault evolves as function of time. Finally, we search for differences and similarities (e.g. frequency content, location) between triggered and regular tremor. Our observations provide new insights about the physical conditions necessary for triggering tremor, and in general, on the physical processes generating non-volcanic tremors.