

Mw 6.7 21 July 2021 Panama Fracture Zone Earthquake

Tuesday, 20 June 2023 11:54 (1 minute)

Seismic data collected by the Costa Rican OVSICORI-UNA seismic network is used to study the spatiotemporal seismicity and tectonic, related with the Mw 6.7, 21 July 21:15:07, 2021 earthquake, located in the Panama Fracture Zone, 114 km south of the Burica Peninsula. In this zone the relative motion of the Cocos and Nazca plates, accommodates the stress mainly by right-lateral strike-slip motion along the Panama Fracture System as supported by relocated fore and aftershocks distribution and calculated moment tensor nodal plane of the main event (strike=186°, dip=88°, rake=-152°). The rupture evolution started from south of epicenter, moving north toward mainland, rupturing over 45 km in length and 30 km width, reaching a maximum slip of 0.6 m.

E-mail

rquinter@una.cr

Promotional text

Tectonics, Focal Mechanism, Finite Fault, Costa Rica

Oral preference format

in-person

Primary author: QUINTERO, Ronnie (Observatorio Vulcanológico y Sismológico de Costa Rica, Universidad Nacional (OVSICORI-UNA))

Co-authors: Dr ALVARADO, Guillermo (Instituto Costarricense de Electricidad de Costa Rica); Prof. ZAHRADNIK, Jiri (Faculty of Mathematics and Physics, Charles University, Prague, Czech Republic)

Presenter: QUINTERO, Ronnie (Observatorio Vulcanológico y Sismológico de Costa Rica, Universidad Nacional (OVSICORI-UNA))

Session Classification: Lightning talks: P1.2-2

Track Classification: Theme 1. The Earth as a Complex System: T1.2 The Solid Earth and its Structure