

Utilization of the Auxiliary Seismic Station APG (AS37) for the Analysis of Seismicity Induced by Tropical Depressions Eta and Iota in the Karst Region of Northern Guatemala



Robin Yani-Quiyuch, Diego Castro, Erwin Quiroa, Fredy Monterroso Instituto Nacional de Sismología, Vulcanología, Meteorología e Hidrología (INSIVUMEH)

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- The epicentral area, dominated by carbonate rocks, hosts a complex karst system.
 Seismicity was likely triggered by direct hydraulic connection and pore fluid diffusion,
 evidenced by the timing of rainfall and earthquakes.
- Frequency-domain correlation analysis indicates activation of multiple cracks or faults in a tectonically predisposed setting, posing significant seismic hazard.
- This is the first instrumental record of such meteorologically induced seismicity in Guatemalan karst environments.

