

Abstract Submitted
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Correlation Between Underground Radon Gas and Dormant Geological Faults¹ ISRAEL CHAVARRIA, JORGE LOPEZ, University of Texas at El Paso, OSCAR DENA, Universidad Autonoma de Ciudad Juarez, LASZLO SAJOBOHUS, Universidad Simon Bolivar, GERMAN RODRIGUEZ, University of Texas at El Paso — This work studies the concentration of radon in soil around a fault in the East Franklin Mountains in the El Paso area in West Texas. It is found that the in-soil production of radon is correlated to the existence of a fault even if it has not had any recorded activity in recent geological times. This adds to previous observations that link the production of radon to seismic activity, and seems to indicate that in non-active faults the radon production is due mainly to the radioactivity of the top soil and to the transport properties of the medium and not to deeper seismic activity. These results open the possibility of using in-soil radon gas concentrations as an examination tool of dormant faults.

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