# Kentucky Geological Survey

# September 8, 2017 Southern Mexico (M 8.1) 04:49:21 UTC / 22:49:21 at epicenter University of Kentucky Kentucky Seismic and Strong Motion Network



The Cocos (subducting) and North American (over-riding) tectonic plates converge in a northeast-southwest direction. The M 8.1 earthquake occurred along the boundary between these plates, on a fault plane of at least 200 km in length (right). The land surface in the map below is colored by expected shaking levels.

# **USGS Felt Reports**





### Slip (rupture) along Fault



Rupture	<b>Energy Release</b>
1.0	Max Mr = 9.76e+26 dyne–cm/sec

(http://earthquake.usgs.gov/earthquakes/eventpage/us2000ahv0)

Heavy shaking was experienced along the coast and several deaths have been reported. Light shaking was reported as far away as Mexico City (~600 km)



#### USGS Source Mechanism (Normal faulting on the boundary between the Cocs and North American plates)



# KSSMN Seismograms (~2,500 km away)

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