Magnitude 7.6 Earthquake - Phillipine Island Region

Friday, August 31, 2012 at 12:47:34 UTC Epicenter: Latitude 10.838°N, 126.704°E

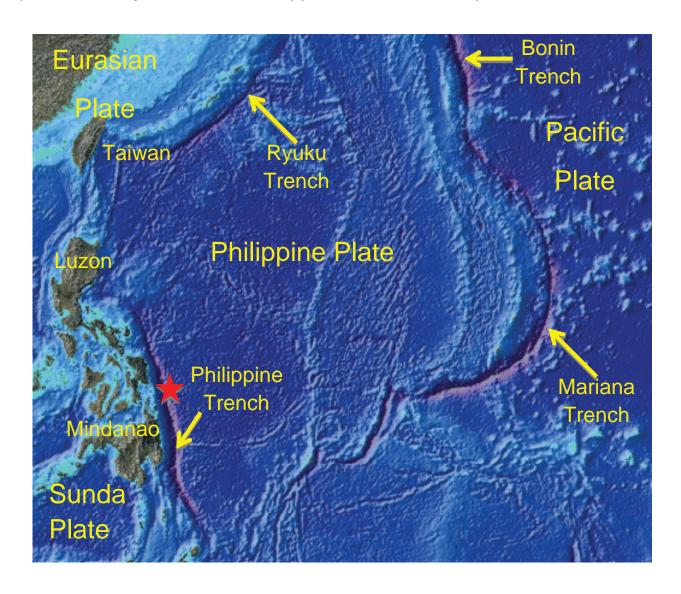
Depth: 34.9 km

## **Earthquake Summary:**

According to the US Geological Survey National Earthquake Information Center, a major earthquake occurred off the east coast of the Philippines in the evening local time 96km (60mi) E of Sulangan, Philippines.

There are reports of minor damage and one death. The earthquake triggered a tsunami warning that was lifted after two hours.

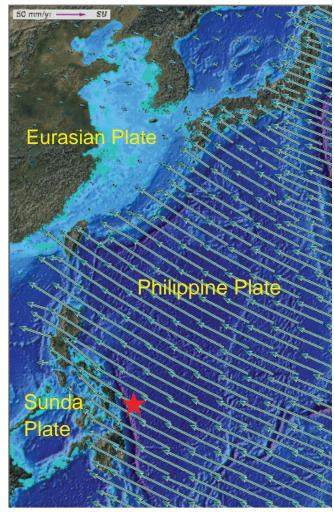
USGS: "This earthquake occurred as a result of reverse faulting within the oceanic lithosphere of the Philippines Sea plate. The preliminary location of the earthquake indicates this is an intraplate event, 50 or more kilometers to the east of the subduction zone plate boundary between the Philippine Sea and Sunda plates."



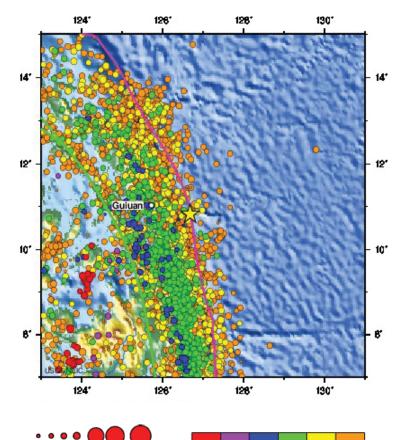


At the latitude of the earthquake, the Philippine Sea plate moves west-northwest at a velocity of approximately 100 mm/yr with respect to the Sunda plate.

The Philippine Sea plate is bordered by the larger Pacific and Eurasia plates and the smaller Sunda plate. The Philippine Sea plate is unusual in that its borders are nearly all zones of plate convergence.



<u>UNAVCO</u>



-300 -150 -70 Depth in km (color)

4567

Magnitude (size)

Historic earthquakes from 1990 to present are shown.

USGS: "While this region of the Philippines experiences moderate-to-large earthquakes fairly frequently, there have been approximately 40 events of M6 and above over the past 40 years, within 250 km of the August 31 2012 earthquake - large events outboard of the subduction zone are unusual. While several moderate-sized events have occurred in this intraplate region, most have been the result of normal faulting within the shallower oceanic lithosphere, rather than deeper reverse faulting like the August 31, 2012 event"