

Aftershock Distribution and the Mainshock's Fault Plane by the MJHD Method: Application to the Myanmar Earthquake on November 11, 2012

2012/11/12

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Earthquake Information (USGS)

Origin Time: November 11, 2012 at 01:12:38 UTC

Hypocenter: 95.883°N, 23.014°E, 9.8 km (depth)

Magnitude: $M_w = 6.8$

Data: 'Latest Earthquakes in the World - Past 7 days' by the US Geological Survey

Events Relocated: Mainshock and aftershocks until November 11 18h19m

Method: Modified Joint Hypocenter Determination (MJHD) by Hurukawa and Imoto

Results: Length of aftershock area: 50 km

Fault plane: Nodal plane striking N-S dipping E steeply

Comments: This is an earthquake with right-lateral strike-slip faulting on the Sagaing Fault that is the boundary between the Burma and Sunda plates. (cf. Hurukawa and Phyo, 2011; Hurukawa, Pa Pa, and Shibazaki, 2012)

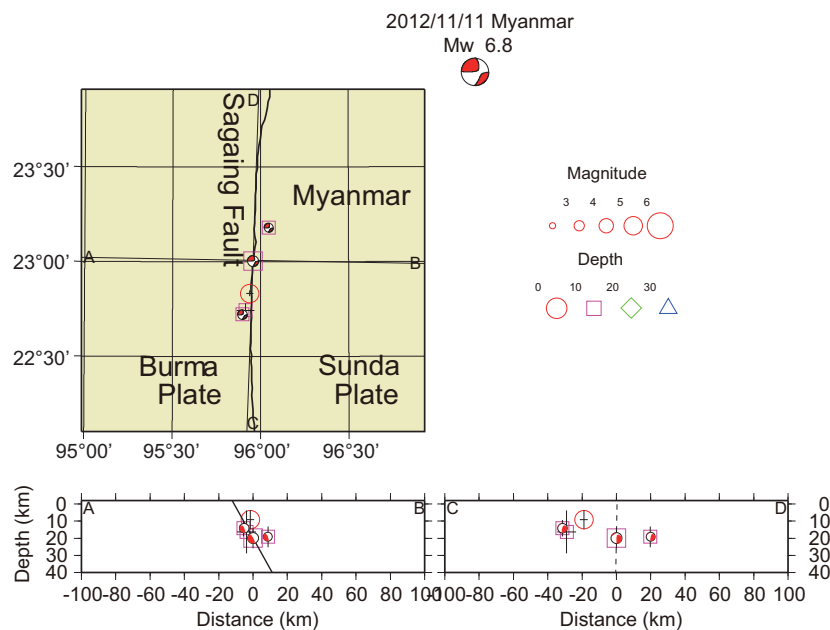


Figure 1. Hypocenters relocated by the MJHD method. Global CMT solution of the mainshock and aftershocks are also shown. Epicentral distribution and two vertical cross sections along A-B and C-D lines, which are perpendicular to strikes of the two nodal planes of the mainshock, are shown. Two nodal planes are shown by lines in cross sections. The nodal plane corresponding to the fault plane is shown by a thick solid line.

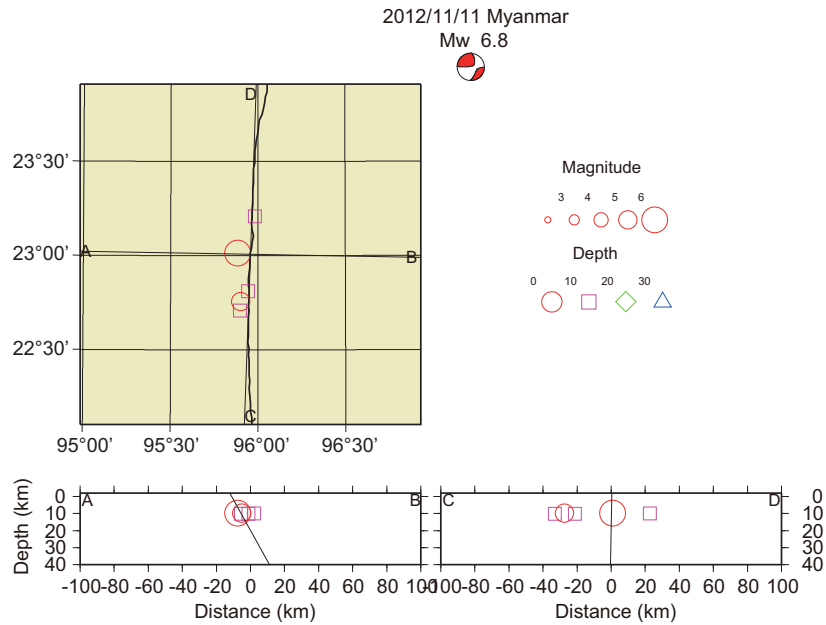


Figure 2. Hypocenters located by the USGS. Two nodal planes of the mainshock are also shown by solid lines in cross sections.

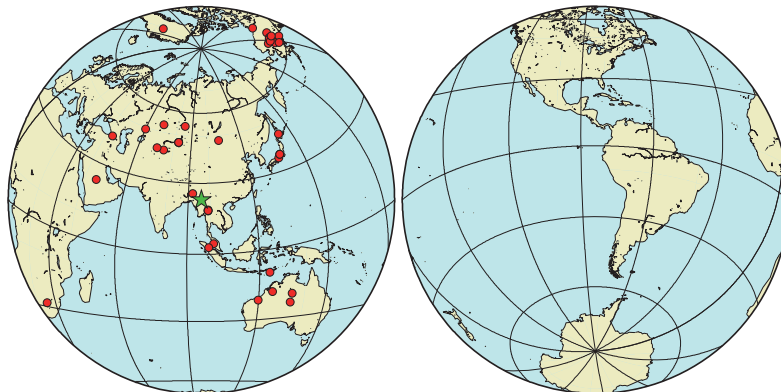


Figure 3. Stations used in relocation.

References

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