## Rupture Process of the November 11, 2012 north of Shwebo, Myanmar (M 6.8) Earthquake Imaged with Back Projection of Hi-net data.

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A moderate ( $M_w$  6.8) strike-slip earthquake occurred at north of Shwebo, Myanmar on November 11, 2012. Here we used back projection method to trace the rupture process.

## Methods and Data

We applied a back-projection analysis to study the rupture process. The back-projection was done using the same method described in Wang and Mori (2011, 2012).

P waveforms from Hi-net stations were used in a back projection analysis of the rupture for this earthquake. We filtered the Hi-net data (vertical components) from 0.2 to 3.0 Hz for the back projection. The stations in Japan are at distances of about 31 to 45 degrees from the earthquake epicenter. The azimuth is about 55 degrees.



Figure 1. Waveforms recorded in Hi-net, Japan sorted by epicenter distance. Top figure shows the station distribution. Red line indicates the P onset, and green line marks the onset of the largest asperity.

## Results

The results show a bilateral rupture for this earthquake (Figure 2). The rupture first moved to the south and radiated most energy there for about 20 sec. Then the rupture moved to north for another 10 sec. The total duration is about 30 sec. The bottom curve in Figure 2 can be interpreted as source time function.



Figure 2. Rupture process (top) and source time function (bottom).

## Reference

Wang, D. and J. Mori, Rupture Process of the 2011 off the Pacific Coast of Tohoku Earthquake (Mw 9.0) as Imaged with Back-Projection of Teleseismic P-waves, *Earth, Planets and Space, 63,* 603-608, doi:10.5047/eps.2011.05.029, 2011.

Wang, D., J. Mori, and T. Uchide (2012), Supershear rupture on multiple faults for the M<sub>w</sub> 8.6 Off Northern Sumatra, Indonesia earthquake of April 11, 2012, *Geophys. Res. Lett.*, 39, L21307, doi:10.1029/2012GL053622.