Slow slip event and plate boundary observed by a dense seismic network (MeSo-net)

Shin'ichi Sakai[1]; Keiji Kasahara[2]; Shigeki Nakagawa[3]; Hiroshi Tsuruoka[4]; Shunji Sasaki[4]; Naoshi Hirata[5]; Hisanori Kimura[6]

[1] E.R.I., Univ. of Tokyo; [2] ERI; [3] ERI, the Univ. of Tokyo; [4] ERI, Univ. of Tokyo; [5] ERI, Univ. Tokyo; [6] NIED

Slow slip event (SSE) has occurred at the cycle of five or seven years around the Boso peninsula. Crustal movement was observed by generating SSE and the seismic swarm was occurred at that time in August, 2007. The seismic swarm activity that is accompanied doesn't necessarily occur on a plate boundary though it is thought that SSE is generated on a plate boundary. The seismic wave from the intra-plate earthquake is converted from the S-wave to the P-wave on the plate boundary. The distance between the plate boundary and the hypocenter is clarified by the measurement of this time difference. Then, we examined what location the plate boundary and the seismic activity were by observed the seismic swarm with a dense seismic network (MeSO-net). The correlation of the wave is high because the observation point is deployed at about 3 km intervals, and the identification of the later phase is easy.