Da-002 Room: C101

Time: June 26 9:30-9:45

Slow slip events around Hyuga-nada, which are estimated by the inversion analysis of the GPS data

Sou Nishimura[1], Masataka Ando[2], Manabu Hashimoto[3], Shin'ichi Miyazaki[4]

[1] RCEP, DPRI, Kyoto Univ., [2] DPRI, Kyoto Univ., [3] RCEP., DPRI., Kyoto Univ, [4] Research Center, GSI

We estimate the spatial slip distribution of the episodic slow slips and the afterslips of the earthquakes occurred around Hyuga-nada in 1996 to 1997. We use the GSI's (Geographical Survey Institute) GPS time series data and we remove the linear trend of GPS data as well as the long-term noises, which are preventing our analysis for the surface displacements caused by the slow events. We apply a geodetic inversion method using an ABIC [Yabuki and Matsu'ura, 1992] for the estimation of the slip distributions, slip directions, and extent of slow slips on the plate boundary. The estimated slow slips are all comparable to the slip magnitude of the coseismic slips of the two Hyuga-nada earthquakes on Oct. and Dec. in 1996. They occurred at the transition zone on the plate boundary.