

The interplate coupling in southwest Japan after the postseismic crustal deformation of the earthquakes in Hyuga-nada in 1996

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 distribution of the interplate coupling in southwest Japan. We use the GSI's (Geographical Survey Institute) GPS time series data and we assume that the linear trend of GPS data is representing the surface displacements caused by the interplate coupling. We apply a back-slip model [Savage,1983; Sato and Matsu'ura, 1990; Yoshioka et al., 1993] for the interseismic strain accumulation, which is proceeded by the interplate coupling. We calculate the back-slip distribution on the subduction boundary by a geodetic inversion method based on a minimization of an ABIC [Yabuki and Matsu'ura, 1992].