# Estimation of frictional properties by comparing propagation speed of postseismic slip with numerical simulation results

# Keisuke Ariyoshi[1]; Toru Matsuzawa[2]; Takane Hori[3]; Ryota Hino[2]; Yoshiyuki Kaneda[4]; Akira Hasegawa[2]

[1] DONET (JAMSTEC); [2] RCPEV, Graduate School of Sci., Tohoku Univ.; [3] IFREE, JAMSTEC; [4] JAMSTEC,IFREE,DONET

We have investigated relations between the postseismic slip process, effective normal stress, and friction parameters for a rate- and state-dependent friction (RSF) law using 3-D numerical simulations of a subduction zone. For slowness- and slip-laws, the results show that the postseismic propagation speed largely depends on A(=aZ), where 'a' is a frictional parameter describing the friction law and Z is the effective normal stress. Now we have been simulating other versions such as composite-, PRZ- and so on, to know the possibility of detecting the actual version of the RSF.