

## Lg and surface wave (Rg and Love wave) propagation in the area around southwestern Japan

# Takashi Furumura[1], Brian L. N. Kennett[2], Kazuki Koketsu[3]

[1] ERI, Univ. Tokyo, [2] RSES, ANU, [3] Earthq. Res. Inst., Univ. Tokyo

The Rg phase and the fundamental mode of Love waves are very significant for the shallow 2000 Tottori-ken Seibu earthquake and the effect of the slightly lower frequency surface waves would help to explain the discrepancy between the JMA magnitude from regional stations (Mj 7.3) and the moment magnitude from the moment magnitude estimated by teleseismic record (Mw 6.6). Numerical 3D simulation of the 2000 Tottori-ken Seibu earthquake using the subsurface structural model of southwestern Japan demonstrates the generation of the Rg and fundamental mode Love waves from a shallow source and propagate longer distances as a predominant phase in the displacement motion. These phases are suddenly eliminated by propagation into the volcanic area at southern Kyushu.