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SSS031-P05

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Distribution of anisotropic intensity beneath Izu collision zone estimated from S-wave splitting.

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We used velocity seismograms observed around Tanzawa and Hakone regions. At the stations, waveforms are recorded at a sampling rate of 120 Hz. To obtain the splitting parameters, we selected waveforms by following criteria: (a) incident angle less than 40 degree to avoid disturbance of particle motion associated with phase convergence at the surface. (b) focal depth less than 8 km. We apply cross correlation method (e.g., Shih and Meyer, 1990) in order to obtain S-wave splitting parameters. Seismograms are band-pass filtered in 2-8 Hz. The combination of two horizontal (NS and EW) component seismograms are rotated clock wise from north (0 degree) to east (90 degree) by step of 2 degree. For each step, the cross correlation coefficient is calculated between the rotated waveforms. We discard the data whose maximum cross-correlation coefficient is less than 0.8 because of not suitable for our analysis. The errors of splitting parameters are estimated with t-test (Kuo et al., 1994). Data with the 95 % confidence region wider than 0.3 sec in Dt and 30 degree in LSPD are also discarded.

We obtained anisotropic intensities having various range in and around Hakone volcano. At shallow part of Hakone volcano, anisotropic intensity is 2 ~ 5%. These values seem to have temporal variations through large earthquake swarms.

Keywords: anisotropic intensity, Izu collision zone, Hakone