

Crustal anisotropy in the Tokai region

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In this study, we analyzed shear-wave splitting using 64 waveforms at station INU. The leading shear-wave polarized directions approximately trend ESE-WNW. These directions are approximately consistent with the directions of regional horizontal maximum compressive stress. We suggest that the cause of the crustal anisotropy is the preferred alignment of the cracks controlled by the tectonic stress in the Tokai region. The depth variations in time-delay are not clearly observed. We suggest that the anisotropy exist in the shallower part of the crust. The temporal variations in time-delay are a little observed, but it does not correlate with the temporal variation in seismicity.