Shear-wave anisotropy in the aftershock waveforms of the 1997 Northwestern Kagoshima earthquake (2)

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Since the 1997 Northwestern Kagoshima earthquake occurred, Kyushu Univ. has been observing aftershocks at Mt.Sibi(sibi), one of the stations of Kagoshima Univ., using a broadband velocity-type strong motion seismograph. We investigated shear-wave anisotropy on the records obtained at sibi from 28 Mar 1997 to 12 May 1997. We adopted the method maximizing the cross-correlation coefficient between components by rotation and time-shifting of horizontal components of the direct S phase. We found shear-wave anisotropy in this region and most directions of polarization of fast shear-wave are ENE-WSW. This is identical with the strike of pressure axis estimated from the focal mechanism of the main shock. But around the western edge of focal region, they exhibit two directions, NE-SW and NW-SE.