

Spatio-temporal change in seismicity within the descending plate and along its upper boundary beneath the northeastern Japan arc

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We analyzed spatio-temporal seismicity change in the descending Pacific plate in relation to interplate earthquakes beneath the northeastern Japan arc. After large interplate earthquakes off Sanriku in 1989(M7.1), 1992(M6.9) and 1994(M7.5), the seismicity in the upper plane of the double seismic zone became active while the lower-plane seismicity decreased. However, it is found that the anomalous regions are different among these periods. We also found that the lower-plane seismicity off Fukushima Prefecture became active after these three events.