

## Microearthquake activity in the focal areas of large earthquakes that occurred in the last ~100 years in northeastern Japan

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Areas with high microearthquake activity at present corresponds, in many cases, to the focal areas of the large earthquakes that occurred in the last ~100 years in the northeastern Japan arc. We relocated hypocenters of those microearthquakes based on data obtained by the 1997-1998 Joint Seismic Observation in Tohoku. Relocated hypocenters show that they are distributed along one of the nodal planes of the main shock focal mechanisms. This suggests that the present microearthquake activities are aftershock activities, although their main shocks occurred ~100 years ago. Moreover, this provides the opportunity to identify the fault plane of the large earthquakes that occurred a long time ago.