

## Focal mechanism distribution around Hiuchi-nada and Takanawa Pen. regions

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Northward dipping Median Tectonic Line (MTL) in Shikoku was proposed from shallow to deep part of the crust by reflection experiment. Micro earthquakes distribution also shows northward dipping feature. We determined focal mechanism solutions of microearthquake with 10-20km depth to estimate stress field around this northward dipping structure. We obtained 33 focal mechanisms. Most of these are strike slip type with WNW-ESE, NW-SE P-axes. Preliminary result of stress tensor inversion shows strike slip type stress field with compression axis NW-SE.

We would like to apply this stress field recognition to the occurrence of the Large Earthquake along MTL in Shikoku. For the northward dipping structure, shear and normal stress are not preferably oriented. Lower friction condition is required to initiate seismic faulting. For pure strike-slip with large dip angle, it is strange that why GPS modelling requires northward dipping structure. It may show pure strike-slip fault is now yet well formed in deeper part. To discuss occurrence of large earthquakes along MTL physically, we need geometry of existing faults, stress field, and difference of fault reactivation and fault initiation.