

Focal mechanism distribution of crustal earthquakes in Shikoku and Chugoku district, and stress provinces

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We determine focal mechanism solutions in Shikoku and Chugoku district using first motion's polarities obtained in Kochi Earthquake Observation, Kochi University.

We used dataset from 1999 - 2007 for shallower events less than 20 km. More than 900 focal mechanism solutions are obtained in Shikoku and Chugoku. Recent newly recognized feature is WSW-ENE compression in southern Chugoku. We confirm this feature.

As an interpretation we propose four stress province model in Shikoku and Chugoku district. Focal mechanism solution. This image shows double shear zones in MTL and Sanin and margin parallel compression in the rest region. These are due to oblique subduction Philippine Sea Plate and/or eastward motion of Amurian Plate.