

Crustal strain rate of the Japanese islands deduced from GPS observation

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We estimate crustal strain rate distribution all over the Japanese islands based on continuous GPS data. The Japanese islands are mainly subject to E-W compressional strain. Plate boundary areas and volcanic areas have significantly large strain. Besides those areas, we find a zone of strain concentration inland Japan, running from Niigata to the Kinki district through the northern Chubu district. Distribution and directivity of this strain concentration zone are consistent with those of active faults and shallow earthquakes, which implies that this strain concentration zone is one of large-scale structures which controls tectonics of the Japanese islands.