Crustal Movement and Seismic Activities at Observation Network of Crustal Activities Around the Hyuganada Region of Kyushu

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Two earthquakes occurred with magnitude 6.9 and 6.7 at the central part of Hyuganada Sea, east off Kyushu, on October and December, 1996. Seismic activities and crustal movement before and after these earthquakes are examined by using data at Miyazaki Observatory, DPRI, Kyoto Univ., where 52 km and 19 km respectively apart from the epicenters of each event. Secular variations of continuous strain observations revealed increase in strain rate at 13 months before the occurrence of the first event. The major axis of the principal strain rate is expansion of 2.17E-6/year in north-south direction that is seven times of the value before the appearance of this acceleration of strain accumulation. It is reported about the change after that crustal deformations and the recent earthquake activities of the Hyuganada region, and examined about the one with the relation of the crustal movement and the earthquake activities.