



Estimation of Interplate Coupling in the Central and Eastern of Java trench from CGPS Observation

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We used three-component surface velocities in the Central and Eastern Java to estimate plate coupling on the subduction interface at the Java subduction zone. The observation period starting from 2009 to 2013 with more than 40 CGPS observation stations. The results show a heterogeneous distribution of interplate coupling from Central to the East of Java trench. Strong coupling at a depth of 10-30 km with rate 3-4 cm/yr is estimated at the south of East Java. The downdip limits of the coupled areas is estimated at 50km. This slip deficit on subduction interface has important implication for seismic hazard of Java Island.