

Possible stick event beneath the Bungo Channel, northeast region of Kyushu detected by GEONET

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GEONET (GPS Earth Observation Network of Geographical Survey Institute) detected an unusual crustal movement in the Bungo Channel region on October 1998, which suggests a change of state of inter plate coupling. To estimate a displacement caused by this phenomenon, we apply a non-Gaussian trend model on the GPS time series data. This method can estimate step-like changes in time series data without assuming existence of jumps. After this, we found a temporal change which has larger deformation rate during August-November, 1998. This suggests that an event in which an inter plate coupling strengthens occurs. We call this event "stick event".