

## **Characteristic long-term slow slips in the Bungo channel, southwest Japan**

Shinzaburo Ozawa  
Geospatial Information Authority of Japan  
ozawa@gsi.go.jp

The Global Positioning System network in Japan detected a transient in the Bungo channel, Japan, in 2009. Time-dependent analysis shows that an aseismic slip occurred beneath the Bungo channel and southwest Shikoku between May and September 2009. From September 2009 to January 2010, the slip area shifted to southwest Shikoku. The slip was increasing in magnitude and speed and expanding into the Bungo channel since approximately March 2010 to May 2010, followed by a gradual subsidence. The estimated rupture process is similar to those of previous Bungo channel slow slips in that the slip starts in a shallower region and expands into a deeper region with the acceleration of the slip speed. The acceleration period of the current event coincides with a marked increase in the number of low-frequency tremors, as for the 2003 event. The total slip distribution of the current event is similar to that of the previous long-term Bungo slow slips. These similarities indicate that the long-term Bungo slow slips are characteristic slow slips with quasi-periodicity, similar magnitude, and similar slip area.