

Long-term slow slip events beneath the Kyushu Island

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A transient deformation in the Kyushu Island from January to April 2014 was detected by GNSS observation network in Japan. We estimated slip distributions at the plate boundary between the subducting Philippine Sea Plate and the continental plate from that GNSS data. Two slipped areas were estimated beneath the Kyushu Island. The south slip area corresponds to the Hyuga-nada SSE area. The north slip area corresponds to the gap area between the Bungo-channel SSE and the Hyuga-nada SSE, that has not been reported long-term SSE previously. We also found that long-term SSEs occur in the gap area repeatedly before the 2014 event.

Keywords: long-term SSE, Bungo-channel, Hyuga-nada