

## Short-term slow slip event with low-frequency tremor activity in Kii and Aichi region (Jan., 2006)

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The low-frequency tremor activity occurs at about 30km in depth in relation to the sinking crowding of the Philippines sea plate in southwest Japan, and the thing that a short-term slow slip occurs along with it. It moved from Kii peninsula on January 7 to the east part of Aichi Prefecture on January 23, the low-frequency tremor continuously. The feature of this activity is the following points.

(1) It was introduced from the Kii peninsula in the Ise bay, continuously connected with the east part of Aichi Prefecture, and the slight movement activity led.

(2) The slight movement activity in the Ise bay that had not been detected up to now was able to be detected.

(3) It moved from the southwest in the Kii peninsula toward the direction of northeast.

(4) The slight movement activity is also slack in the part where the seismic activity in the Ise bay northern part is a little.

Observed slight movement Obara et al. 2004 is harmonized with the passing speed by the Shikoku west during about 10km/day the passing speed in the slight movement source.

The inclination change was seen with the high sensitivity accelerometer of the disaster prevention department laboratory along with this slight movement activity. The period of the change was delimited from observation tremor seen to the feature to five, and inversion assumed Okada (1992) on a rectangular fault in half infinite homogeneous medium was done based on the change data for each period. As a result, the slow slipping event was able to be presumed to almost the same place as the epicenter position of the slight movement source generated in between synchronization. This shows that there is close relation between the slight movement source and the slow slipping event. The moment magnitude of these five slow slipping events is in the range from 5.4 to 5.9, and five totals are Mw 6.2. Moreover, the size of the amount of slipping is about 5mm~1cm.

These slow slip are actually thought to be continuous movement to five fault planes with the slight movement of dividing. Then, the inclination change by the slow slipping event's having moved was theoretically examined. It was assumed that the slow slipping event had been generated on the Philippines sea plate side, and set a small rectangular fault of 30km in width and 40km in length to almost the same epicenter position as the slight movement of the low frequency activity. The time series of the inclination change actually observed since the amount of the inclination change when this small fault is moved along the equal depth line in the Philippines sea plate is calculated is almost satisfied.