

# Japan Geoscience Union Meeting 2011

(May 22-27 2011 at Makuhari, Chiba, Japan)

©2011. Japan Geoscience Union. All Rights Reserved.



SSS030-P04

Room:Convention Hall

Time:May 24 10:30-13:00

## A trial of the detection of the long-term slow slip events by the strainmeters of JMA in the Tokai region

Kazuhiro Kimura<sup>1\*</sup>, Akio Katsumata<sup>1</sup>, Akio Kobayashi<sup>1</sup>

<sup>1</sup>Meteorological Research Institute

It is not concluded whether the Strainmeters of JMA were able to find the long-term slow slip events that occurred in the Tokai region from 2000 to 2005. It is generally difficult to find a long-term change by the strainmeters, because a long-term trend of the strainmeters is not stable. Kobayashi and Yoshida (2004) pointed out that long-term slow slip events occurred in the Tokai region from 1980 to 1982 and from 1988 to 1990. JMA has been operating the volume strainmeters in the Tokai region since 1976, three long-term slow slip events occurred all over the observation period. JMA installed the Multi-components strainmeters in the Tokai region from 1998 also, One Long-term Slow Slip Events occurred in the observation periods.

From three following viewpoints we investigated whether the strainmeters of JMA were able to find the long-term slow slip events.

1. Whether the trend change due to the three long-term slow slip events can be recognized in the records of the volume strainmeters of JMA.
2. Whether the trend change due to the long-term slow slip events can be recognized in the records of the multi-components strainmeters of JMA.
3. Whether the frequency of short-term SSEs detected by the strainmeter of gamagori were related to the long-term slow slip events.

Keywords: strainmeter, long-term slow slip event