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Change of crustal deformation around Shizuoka after 3-11

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1. Introduction

2011 March 11 M9.0 occurred off Tohoku district in the Pacific Ocean. It made a large crustal deformation at the occurrence in all over Japan. After the event, still more the after deformation was observed in wide area. Then we research the characteristics of crustal deformation around Shizuoka prefecture using GPS data by GEONET. The softwares MICAP-G developed by MRI, and PAT-ME by K. Nakamura were used for this research.

2. Analysis

Large uplift and subsidence after 3-11 event were observed in Tohoku and north Kanto regions. This deformation pattern was explained by the non-earthquake slip at the deep part of the plate boundary. In Chubu region, uplift pattern was clearly separated by Fossa Magna and it means the deformation occurred in each micro-plate individually. Around Shizuoka prefecture, the longitude change was analysed. Temporal change of stations in Izu peninsula were some different from the ones of stations in Shizuoka prefecture. It means that the long term trend of location in Amurian plate was changed from one of Philippine Sea Plate in late 2012.

We thank A. Kobayashi distribute the correction data of GPS.

Keywords: Tokai earthquake, crustal deformation, after effect

