

## Temporal and spatial changes of annual variation pattern of GEONET coordinate data (2)

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It was reported that annual variation pattern of coordinate data which had been obtained from the GSI's nationwide GPS observation network (GEONET) was systematically changed in 2000. This study reports the result that was examined about the annual pattern in 2002.

First, trend which consists of linear-, annual- and semiannual form was fitted to the coordinates data from January 1998 to December 1999 (Period 1) and next, coefficients of linear-, annual- and semiannual terms of fitting curve to the residual data obtained by subtracting the trend were evaluated from November 2000 to October 2001 (Period 2) and from November 2001 to October 2002 (Period 3), respectively. As for a regional distribution, coefficient of NS-component and EW-component linearly depend on latitude and longitude of the observation station, respectively, in both period 2 and period 3. Spatial change rate of annual-term of NS-component increased from 0.1 to 0.4 mm/degrees and semiannual one decreased from 0.2 to 0.0 mm/degrees. The rate of EW-component changed a little.

The change of the annual pattern which was found after 2000 doesn't mean the fact to have switched over from some stable pattern to another and may be to mean the fact that the unstable pattern which is different every year became conspicuous.