

Notes on the quality of GEONET coordinate solutions

IMAKIIRE, Tetsuro^{1*} ; KAGAWA, Akira¹ ; HATANAKA, Yuki¹ ; MUNEKANE, Hiroshi¹

¹GSI of Japan

The routine solutions of geodetic coordinate of observation stations of GEONET, the continuous GNSS observation network operated by GSI, are fundamental data for the studies of crustal deformation and tectonics and widely utilized for a variety of purposes. As GEONET data is available freely, researchers can discuss the crustal deformation or tectonics without carrying out GNSS observation or baseline analysis. However, it should be noted that the coordinates provided by GEONET may include errors caused by various noise sources or factors, such as obstruction of observation signals by trees, multipath caused by site environment or un-modeled tropospheric noise. We present results of evaluation the effects of some of the error factors and introduce ways of examining the quality of coordinate solutions done for crustal deformation monitoring by GSI.

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