

The effect of snowfall on the solution of GEONET (2)

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The routine solutions of geodetic coordinate of observation stations of GEONET, F3 solution, 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. One of the significant error sources is the effect of snowfall, especially the stuck of the snow on the radome of GEONET sites. We reported that the effect of heavy snow fall on the February 2014 caused notable perturbation on the GEONET solution in Yamanashi prefecture, on the 2014 fall meeting of the Geodetic Society of Japan. We investigated other GEONET sites on same date and those sites on other heavy-snowy days with abnormal F3 solution. We will report how snowfall affected the GEONET solution on those cases, combining the GEONET solutions and the meteorological data in time series.

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