



## **Space-time accuracies of GPS relative positions of MAGNET data**

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The accuracy of GPS (Global Positioning System) relative positions depends on several factors. Beside base line length and duration of observation session adjustment methodology and used software influence the results. In this paper we analyse observations made in the Marmara Continuous GPS Network (MAGNET) in order to determine how the accuracy of derived relative positions between GPS stations depends on the base line length and the duration of the GPS observing session.

Seven days of GPS observations in the MAGNET collected in 2002 were processed using Bernese 4.2 software. The baselines were processed in the ITRF 2000 reference frame. The base line length varies between 6km and 340 km, the session duration is changing between 4h and 24h.

The dispersion of the independent baselines components is analyzed. The obtained results are discussed concerning the different parameters.