

DETERMINING OF NOVOSIBIRSK REGION REFERENCE STATIONS OFFSETS BY COMPARISON METHOD OF FREE ONLINE GNSS POST-PROCESSING SERVICES

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The advantages of usage of free online GNSS post-processing services are shown. Advantages and disadvantages are described. The results of assessing the accuracy of high-precision positioning by free online services are given on the example of observations of Novosibirsk region reference stations network. The results obtained with using free online post-processing services were compared with the results obtained with using conventional and other positioning methods processed with TBC v.4.0 software. It is shown that the results of 4 out of 6 services are consistent with the reference values of the coordinates at the 2.5 centimeters level and have advantages over the method of separate measurement processing. As a result of the experiment the reference stations network velocities of Novosibirsk region, that after were compared with the results of global models of the earth's surface movement are revealed. These online services are estimated by the results of GNSS measurements performed in other parts of the globe.

Key words: GNSS measurements, free online post-processing services, Post-Processing, Trimble Business Centre, PPP technique, high-precision positioning.

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