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## **Implementation of GLONASS observation data into a global GNSS solution**

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In the recent years many efforts have been made to make the Russian satellite navigation system GLONASS more attractive for scientific applications. Precise GLONASS orbits at the 10-cm level and satellite clocks are routinely provided by the International GNSS Service (IGS). The number of IGS sites that are equipped with combined GLONASS/GPS receivers has increased to more than fifty stations. Unfortunately only half of these stations are globally distributed, the majority is concentrated in Europe. In this study we investigated the impact of the inclusion of available GLONASS observation data in a global GNSS solution. The selected observation network consists of 118 IGS sites, of which 25 track GPS and GLONASS satellites. The considered observation periods are the gps-weeks 1369/70 and 1404/5 in 2006. We derived station coordinates in daily and weekly solutions from GPS only and from combined GPS/GLONASS observations. The individual network solutions are examined for virtual station movements, resulting from the combined approach. Moreover the coordinate repeatabilities of the two scenarios and Earth rotation parameters which are estimated with hourly resolution in the weekly solutions are compared.