Combination of Space Geodetic Techniques at the Normal Equation Level

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A Working Group on Combination at the Observation Level was created in the course of 2009 in the framework of IERS.

Its major task is to study methods and advantages of combining techniques at the observation level, searching for optimal strategy to solve for geodetic parameters. At present, different software packages are able to process observations of various techniques and to make the stacking of normal equations. In order to assess the different packages and strategies, a test campaign has been scheduled over three full weeks encompassing the period of the intensive CONT08 VLBI campaign from 12 to 26 August 2008. SINEX files per technique or combined are then intercompared.

The main objectives of this campaign are firstly to establish common processing standards for all techniques in order to guarantee homogeneity and consistency and secondly to compare results of estimated parameters such as EOP, station coordinates and troposphere zenith delays. Preliminary results are presented.