



## **Global Combination of the Terrestrial Frame and Earth Orientation Parameters at the Observation Level. Contribution to ITRF2008 realization**

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A new version of ITRF (ITRF2008) is planned and requests combination of the various astro-geodetic techniques over a period of several years.

In the framework of the « Groupe de Recherches de Géodésie Spatiale » GRGS, we are combining normal equations derived from the processing of 4 techniques on a regular basis (GPS, VLBI, SLR and DORIS).

Observations of these techniques are separately processed at different analysis centres of GRGS using the software package GINS-DYNAMO, developed and maintained by (GRGS). The strength of the method is the use of a set of identical up-to-date models and standards in unique software. In the procedure, the datum-free normal equation matrices weekly derived from the analyses of each technique are stacked to derive solutions of station coordinates, and Earth Orientation Parameters (EOP). In this paper, we will first compare our individual results to the international corresponding official combinations, as those delivered by the IGS, IVS, ILRS and IDS. We will then demonstrate how this global combination can contribute to the new ITRF.