



## **Past, current, and future research and operational activities of the GRGS ILRS Analysis Center**

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The French “Groupe de Recherche de Géodésie Spatiale (GRGS)” became an official ILRS Analysis Centre (AC) in September 2007, and thus joined the ILRS Analysis Working Group among other official analysis centres. It now delivers routinely products including station positions, Earth Orientation Parameters (EOPs), and other one, after being involved in SLR data processing since the early eighties.

This poster first aims to recall some recent research achievements carried out in the framework of the activities of this AC: Temporal de-correlation method for range biases estimation and its implications in the underlying terrestrial frame scale stability, test of using a loading effect model as an a priori model for estimated station positions, application of Genetic Algorithms for EOP referencing, and gravity field coefficient time series. We give as examples time series of the J2 coefficient, computed over more than 20 years, where variations, to be analyzed by geophysicists, can be linked to mass transfers inside the Earth: post-glacial rebound, 18.6-year tide, and El Niño Southern Oscillation events.

We also provide a review of the operational results obtained during more than one year of life of our AC in comparison with the other AC results, in terms of station positions, EOPs, translations, scale factors, and rotations. And, finally, we briefly give an overview of our future operational activities: “Daily” solutions, historical data, etc.