

**IDS Analysis Coordinator plans
related to the IERS combination projects:
Combination Pilot Project, ITRF2004, IERS 200x**

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Current status

The IDS contribution that was proposed in response to the call for proposals for the CPP consists in the combination of series of unconstrained TRF+EOP solutions from two or more IDS Analysis Centers. This is a joint activity of the Analysis Coordinator at IGN/LAREG (M. Feissel-Vernier, K. Le Bail) and the Central Bureau at CLS (J.-J. Valette). The combination software is CATREF, with technical advice from Z. Altamimi.

These activities are still in the development phase. Their products are intended to be suitable for the various IERS combination projects. Until they become operational, some individual IDS analysis centers are expected to participate directly in the IERS projects.

To date, one analysis center (IGN-JPL) is regularly producing weekly solutions, a second one is starting to do so (LEGOS-CLS). A third center is expected to contribute (Geoscience Australia).

Comparison/validation software with a set of statistical tests is being completed. It was already applied to IGN-JPL and LEGOS-CLS solutions on the basis of time series of the following:

- weekly Sinex files with unconstrained TRFs (with or without EOPs),
- coordinates of the TRF origin (geocenter) and scale wrt ITRF2000,
- station coordinates in a common reference frame.

Combinations will be performed only when three solutions are available and the major systematic differences are understood.

Analysis Coordination 2005 plans relevant to IERS projects

- Validation process to be operated regularly at IGN/LAREG on whatever solution becomes available.

- Study of systematic differences between solutions, at IGN/LAREG and CLS, in collaboration with the Analysis Centers.

- TRF+EOP combination performed at CLS as soon as data are available and understood.

- Development at IGN/LAREG of a combination software extended to Doris orbits.