

3.2 Central Bureau

General activities

The IERS Central Bureau (CB), hosted and funded by Bundesamt für Kartographie und Geodäsie (BKG), organized and documented the IERS Directing Board (DB) Meetings No. 64, April 23, 2017, at Technical University of Vienna, Austria, and No. 65, December 9, 2017, at Hilton New Orleans Riverside Hotel, New Orleans, Louisiana, USA (see Section 3.1 for minutes of these meetings). Between the meetings the CB coordinated the work of the DB.

Members of the CB took also part in the following meetings: European Geosciences Union General Assembly 2017 (including meetings of the GGOS Coordinating Board, the GGOS Bureau of Networks and Observations, the GGOS Standing Committee PLATO, and IAG Commission 1 “Reference Frames”), 23rd Working Meeting of the European VLBI Group for Geodesy and Astrometry (EVGA), ISO Working Week, IAG/GGOS/IERS Unified Analysis Workshop (see Section 4), IAG and IASPEI Joint Scientific Assembly, 2017 ILRS Technical Workshop, SIR-GAS 2017 Symposium, and AGU 2017 Fall Meeting.

IERS components maintain individually about 10 separate web sites. The central IERS site www.iers.org, established by the CB, gives access to all other sites, offers information on the structure of the IERS, its products and publications and provides contact addresses as well as general facts on Earth rotation studies. It contains also electronic versions of IERS publications, as well as link lists for IERS, Earth rotation in general and related fields. Throughout 2017 the web site was continually updated, several new pages and documents were added. New pages include “Other realizations of the International Terrestrial Reference System (ITRS)” and a document on the history of the International Latitude Service. An extended list of meetings related to the work of the IERS was maintained and updated frequently. The CB maintains also the web pages of the IERS working groups. In an internal area, accessible for DB members and IERS Associate Members, all presentations given at IERS DB meetings since 2000 are available, and further documents were added.

The IERS Annual Report 2015 was printed and distributed. The CB edited the IERS Annual Report 2016 and published it online in December 2017. Along with the reports of the IERS components, provided by them, the annual reports contain general information on the IERS assembled by the CB. The CB compiled also summaries of DB meetings and its own report. Starting with the report for 2016, the CB uses \LaTeX instead of InDesign for formatting the IERS annual reports. For this the \LaTeX template was further improved.

Technical support was given in editing the Technical Notes No. 38 (“Analysis and results of ITRF2014”, by Z. Altamimi, P. Rebischung, L.

Métivier, and X. Collilieux) and No. 39 (“IGN best practice for surveying instrument reference points at ITRF co-location sites”, by J.-C. Poyard, with contributions by X. Collilieux, J.-M. Muller, B. Garayt and J. Saunier). Both Technical Notes were published online, printed and distributed to subscribers.

The contribution of IERS to the IAG Reports 2015–2017 was submitted in June 2017 (available online at: <https://iag.dgfi.tum.de/en/iag-publications-position-papers/iag-reports-2017-online/>).

During the year 2017, 27 IERS Messages (Nos. 320–346) were edited and distributed. They include news from the IERS and of general type as well as announcements of conferences.

Address and subscription information have regularly been updated in the IERS user database. There were about 2800 users in 2017 with valid addresses who subscribed to IERS publications for e-mail and regular mail distribution.

Questions from IERS users concerning IERS publications and products as well as Earth rotation and reference frames in general were answered or forwarded to other specialists.

The Director of the CB, Daniela Thaller, chairs the IERS Working Group on SINEX Format and is ex officio member of the other IERS WGs. She also leads, together with Benjamin Männel of GFZ, the GGOS Standing Committee PLATO (Performance Simulations and Architectural Trade-Offs), which is also a Joint Working Group with IAG Sub-Commission 1.1. Wolfgang Dick continued to work in the Control Body for an ISO Geodetic Register Network, which will contain standardized and proved data on reference systems.

IERS Data and Information System (DIS)

The IERS Data and Information System (IERS DIS) is continuously being adapted and extended by new components in order to fulfil the requirements for a modern data management and for the access to the data by the users. Besides routine work like maintenance of the data bases of users, products and web pages, in 2017 further developments of the IERS DIS concentrated on the new system for data management and the development and improvement of interactive tools and graphics.

The implementation of a first draft of the new data management system was tested and improved within a testing environment and processing routines were optimized.

New products and format changes to the EOP C01 series were introduced to the IERS DIS. The IERS Website, the IERS FTP Server and the IERS online tools were updated accordingly.

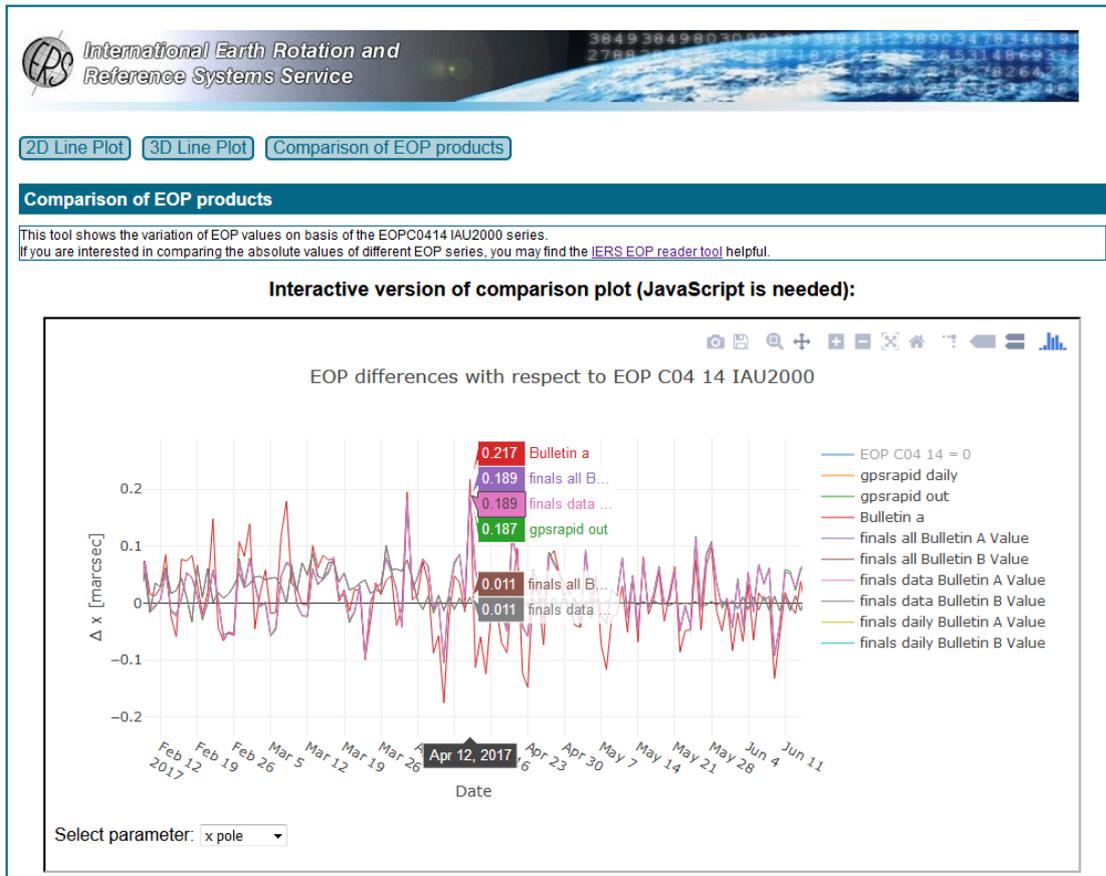


Fig. 1: Example for interactive plots: EOP differences with respect to EOP C04 14 IAU2000 - x pole, for more plots see <https://www.iers.org/plottool>

Further improvements of the IERS DIS included the enhancement of the IERS plot tool with new technologies in order to provide interactive plots.

Staff in 2017

Dr. Daniela Thaller, *Director*
 Sabine Bachmann, *scientist*
 Dr. Wolfgang R. Dick, *scientist*
 Sonja Geist, *technician*
 Sandra Schneider-Leck, *technician*

Publications

Dick, W. R.: How to Talk to the Public About the Leap Second? The Experience of the IERS Central Bureau. In: *The Science of Time 2016. Time in Astronomy & Society, Past, Present and Future*. E. F. Arias, L. Combrinck, P. Gabor, C. Hohenkerk, P. K. Seidelmann (eds.). Cham: Springer International Publishing, 2017, pp. 277–286

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