

IAU Commission A3 - Fundamental Standards

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The purpose of this IAU Division A commission is to facilitate advances in astronomy and other fields in science and engineering by developing, implementing, and communicating fundamental IAU-endorsed standards for fundamental astronomy. The Commission currently has 101 members. The main effort has been to develop our website (www.iaufs.org), hosted by the United Kingdom Hydrographic Office (UKHO), to whom we are grateful. Steve Bell of HM Nautical Almanac Office, with the OC's agreement, was formally named as the webmaster, as at UKHO he is actually responsible for all the underlying web support.

During 2016, the website was updated with more information. In the section on "Various Standards ..." there is now a link to a summary covering the 2000-2012 IAU resolutions in the context of reference systems. The section on SI units has changed and there is now a sub-menu at the top of this page, showing what is available. In the next year, there will be more additions and changes. One goal is to update the information on SI units to ensure that it and the IAU main website are in line with the BIPM information on this topic.

We have supported, with a letter of support, the proposed symposium on "Reference Systems and Frames", where Division A is a coordinating division. Currently, the President of Commission A2 (Earth Rotation) is leading this. However, the other co-chairs of the SOC are the Presidents of Commissions A1, A3, and the Chair of the WG on ICRF3. We have also supported a focus meeting on "Understanding historical observations to study transient phenomena", where Division A is a supporting division.

We have been in contact with other standard-setting organizations in order to ensure consistency of standards. Through Robert Heinkelmann we are in communication with the Global Geodetic Observing System (GGOS) Bureau of Products and Standards. I was also contacted by Dr Urs Marti, Chair of the WG on Global Geodetic Reference Frame (GGRF). The WG is working towards bringing consistency to the various parameters and standards used by all. I am sure Commission A3 can assist with this effort.

A joint poster promoting "standards" with working groups Standards Of Fundamental Astronomy (SOFA), Numerical Standards for Fundamental Astronomy (NSFA), Cartographic Coordinates and Rotational Elements (CCRE) was displayed at the Workshop on Understanding the Earth core and nutation at the Royal Observatory of Belgium in September. Acknowledgments and thanks to the Organizing Committee and all those who have helped with the poster and the website.