

**TOWARDS THE ESTABLISHMENT OF
THE ASTRONOMICAL STANDARDS**

Chairperson and Editor: **T. FUKUSHIMA**

Introduction to the Proceedings of Joint Discussion 14 “Toward the establishment of the Astronomical Standards”

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In the following some tens pages, we will present the proceedings of oral presentations at the Joint Discussion 14 (JD14) of the XXIIInd General Assembly of the IAU, which was held on August 22nd, 1994, under the sponsorship of the IAU Commissions 4, 5, 8, 19, 24, and 31.

The major object of this JD was to appeal to the interested members of the IAU with the activity of the IAU Working Group on Astronomical Standards (WGAS) established to standardize the handling of high-precision data in the fields of the fundamental astronomy at the XXIst General Assembly of the IAU in 1991. At that occasion, the following four missions were given to the WGAS so as to prepare the reports on these items;

1. to consider a modern and suitable mechanism to maintain the astronomical system of constants and some additional quantities,
2. to discuss the possibility to collect reasonable basic software procedures,
3. to research the ways to provide the constants and procedures in machine readable form, and
4. to answer some questions arising from the latest adoption of new timescales definitions.

Then four sub-groups were set up and each was assigned to execute one of these tasks. In other words, the JD aimed to provide a platform to discuss the report and proposals from the WGAS how to establish and maintain the Astronomical Standards under the name of the IAU.

Therefore its program was fairly different from those of other JDs. It consisted of presentations of the draft reports from four sub-groups and some related scientific papers plus comments. And much time was spent for discussion and to adopt resolutions to be submitted to the General Assembly of the IAU. Fortunately, the three resolutions submitted from this JD passed and the readers can refer them in the Transactions of the IAU for the XXIIInd General Assembly.

Originally, the four reports of sub-groups were associated with four draft resolutions. During the course of discussion, the resolution proposed from the Sub-Group on Electronic Distribution was merged into that of the Sub-Group on Standard Procedures. Also most of the details of proposed resolutions were moved from the bodies of final resolutions to the reports themselves as their appendices.

Thus we had to enlarge the amounts of reports within the proceedings and to reduce the amount of other contributions to only one page each. I do apologize to their authors for this policy. Instead, the full version of these proceedings were published in the issues Nos. 94-96 of the IAU WGAS Circulars, an electronic newsletter of the WGAS, in the fall of 1994. These and other Circulars are available from the Chair through E-mail.

Please note that the activity of the WGAS did not end. As in the new IAU Resolutions related to the WGAS, the WGAS has been ordered to establish a mechanism to maintain the actual standard sets of constants and softwares under the IAU. Rather, we have started a next big step *Toward the Establishment of Astronomical Standards*.