

COMMISSION 5: DOCUMENTATION AND ASTRONOMICAL DATA

(DOCUMENTATION ET DONNEES ASTRONOMIQUES)

PRESIDENT: F. Genova

VICE-PRESIDENT: R.P. Norris

ORGANIZING COMMITTEE: M.S. Bessel, O. Dluhnevskaja, H. Jenkner, O. Malkov, F. Murtagh, K. Nakajima, F. Ochsenbein, W. Pence, M. Schmitz, R. Wielen, Zhao Y.H

1. Business meeting (July 21st, 2003)

Commission 5 activity reports for 2000-2003, prepared by the President, Vice-president and Working Group and Task Force chairs, were presented. Among the highlights:

- the unanimous vote of document NOST_100-2.0 as the new official FITS standard, published in *Astronomy and Astrophysics* in 2001, and the adoption and publication of the two first World Coordinate System papers; a Type C resolution adopting these as IAU standards is published below;
- the submission and subsequent ratification by the General Assembly of a Class B resolution on Public access to Astronomical archives, in the context of international discussion on intellectual property, in particular at ICSU and CODATA;
- the fourth *Library and Information Services in Astronomy* (LISA) conference, successfully held in Prague on July 2-5, 2002;
- the rapid world-wide development of Virtual Observatory projects, which were successfully presented on July 18th, 2003, during Joint Discussion 8: *Large Telescopes and Virtual Observatories: Vision for the future*
- Special Session 3, held on July 18th, 2003, which discussed a new classification for double stars, and proposed a Type C resolution ratified by Commission 5 business meeting as shown below.

The Commission 5 Web site will be transferred to <http://cdsweb.u-strasbg.fr/IAU/>. Commission 5 Working Group reports for 2001-2003 are published on this Web site.

1.1. Structure of the Commission Working Groups and Task Groups

The following structure is proposed for Commission 5 Working Groups and Task Groups:

- Working Group Astronomical Data, Chair R.P. Norris
- Working Group Designations, Chair M. Schmitz
- Working Group Libraries, Co-Chairs U. Grothkopf and F. Murtagh
- Working Group FITS, Chair W.D. Pence, vice-chair F. Ochsenbein

- Working Group Virtual Observatories (previously Virtual Observatories, Data Centres and Networks), Chair TBD. This new Working Group is established to be the IAU point of contact for Virtual Observatory actions, and to discuss and bless standards defined by the International Observatory Alliance.

The Task Force on Preservation and Digitization of Photographic plates, chaired by E. Griffin, may be proposed as a Working Group after discussing its charter, taking advantage of the new flexibility allowing Commissions to propose new Working Groups to approval by Divisions between two General Assembly meetings, and also because the status of Task Forces is unclear under new IAU rules.

Commission 5 is also ready to host again the Working Group on Electronic Publications, presently a Working Group of the Executive Committee, if the IAU Executive decides so.

2. Officers and Organizing Committee

The SOC proposed to the General Assembly is composed of President F. Genova, Vice-President R.P. Norris, and members: M.S. Bessel, O. Dluhnevskaja (past president), H. Jenkner, O. Malkov, F. Murtagh, K. Nakajima, F. Ochsenbein, W.D. Pence, M. Schmitz, R. Wielen, Zhao Y.H..

B. Hauck and G.R. Riegler resigned, and H.R. Dickel (WG Designations) and D.C. III Wells (WG FITS) were replaced by M. Schmitz and W.D. Pence respectively.

Commission 5 expresses its gratitude to the retiring officers for their decisive action for Commission 5 and the Working Groups.

3. Commission membership

Commission 5 welcomes incoming members: J. Bangert (USA), M.R. Calabretta (Australia), G. Eichhorn (USA), A. Golden (Rep. of Ireland), J.L. Hilton (USA), C. Hohenkerk (UK), D. Kovaleva (Russia), L. Michel (France), D. Pourbaix (Belgium), G. Pinigin (Ukraine), R.A. Shaw (USA), S.G. Valeev (Russia).

Consultants play a very important role in Commission 5. The present list is: T. Banks (USA), S. Borde (France), M. Cummins (Canada), S. Datta (India), M. Gomez (Spain), U. Grothkopf (Germany). New consultants from 2003 on: J. Holmquist (USA), K. Robertson (USA) and D. Tody (USA).

4. Activity for the next triennium

The new triennium will take place in a new administrative environment, which should be very favourable for Commission 5 activities. One important evolution is the creation of the new Division XII, *Union-Wide Activities*, which will host Commissions 5, 6, 14, 41, 46, 50. In addition, the new by-laws open the way for more flexibility and responsibilities at Commission level, with e.g. the possibility for Commissions to propose new Working Groups for Division approval between General Assemblies. Commission 5 President takes the action to clarify the status of consultants with the IAU Executive - the issue has already been discussed at the first meeting of Division XII and several Commissions under Division XII stress the important role of consultants, and the need for proper recognition at IAU level. The possibility for Commissions to propose new IAU members should be explored - for instance, it would be very useful that Commission 5 could propose key consultants e.g. from WG Libraries and from the LISA conference organizing committee for full IAU membership.

Important actions for the next triennium will be

- to bring new active members, and to prepare for officer rotation in the future. It is hoped in particular that the development of the Virtual Observatory projects will attract new, younger astronomers to an active role in IAU and Commission 5; this also means that Commission 5 has to be useful and efficient!
- to manage properly interfaces between Working Groups inside Commission 5, and also with Division XII and with other Commissions and Divisions.

The action and evolution of Commission 5 will take into account the evolution of the context, in particular the development of the Virtual Observatory, which is one of the few truly global endeavours of astronomy. Commission 5 Working Groups represent important topics which require a special organisation at international level. There is some inter-dependance between the Working Groups, which will be managed by designation of a few common members and by Commission 5 executive. The President will produce an organigram and publish it on the Web. Commission 5 will not aim at gathering all data-related IAU groups together, but rather to maintain good communication with them. SOC membership will be revised before the next General Assembly, to comply to the maximum number of participants (4-8 persons). This could limit the SOC to Working Group chairpersons. The possibility to grant an “emeritus” status will be explored. Each WG will also revisit its Organizing Committee membership.

Two open questions have to be addressed in the coming years: maintenance of IAU Thesaurus (pointed at as an important resource for astronomy and in particular for the Virtual Observatory during JD8 - which could be under responsibility of WG Libraries); coordination of usage of astronomical units - this is an important issue for the FITS Working Group in particular, and Commission 5 has to participate to actions on-going on that topic in other Divisions.

It is proposed to organize a Joint Discussion on public access to archives at the next General Assembly.

5. Resolutions

Commission 5 supports Resolution B *Public access to astronomical Archives* presented by R.P. Norris and later ratified by the General Assembly.

Two Type C resolutions were ratified by Commission 5 during its business meeting:

- Resolution presented by the FITS Working Group, establishing the World Coordinate System (WCS) as part of the FITS standard
Commission 5,
recognizing the scientific requirement to accurately compare images obtained at different observatories, in different bandpasses, and with different angular resolution,
recommends that all astronomical observatories and computing facilities recognize and support the celestial coordinate World Coordinate System [WCS] standard as described in *Astronomy and Astrophysics* vol.395, pp.1061-1075 and 1077-1122 (2002), in addition to recognizing and supporting the basic FITS standard as described in *Astronomy and Astrophysics* vol.376, pp.359-380 (2001).
- Resolution drafted by Commissions 5 and 26, later ratified by Commissions 8, 42 and 45 and the Working Group on Interferometry, on designating components of binary/multiple star systems
Recognizing
 - a. the increasing synergy of techniques for the investigation of stellar companions blurring the traditional distinction between astrometric, spectroscopic, and photometric binary and multiple stars;

b. the detection of substellar (including planets) as well as stellar components by these techniques, and

c. the need for a simple, unambiguous, flexible, and computer friendly designation scheme for components of binary and multiple star systems,

noting that future ground and space-based telescope projects have the potential to detect both substellar as well as stellar components in increasingly large numbers,

recommends that a uniform designation scheme, based on expansion of the Washington Multiplicity Catalog (WMC) system, be developed during the next 3 years to include all types of components and that this be reviewed in time for its adoption to be considered at General Assembly XXVI.

Acknowledgments. Thanks to Ray Norris who took notes during the meeting

Françoise Genova
President of the Commission

References

FITS papers

Hanisch, R.J., Farris, A., Greises, E.W., Pence, W.D., Schlesinger, B.M., Teuben, P.J., Thompson, R.W., & Warnock, A.III 2001, A&A, 376, 359

Greisen, E.W., & Calabretta, M.R. 2002, A&A, 395, 1061

Calabretta, M.R., & Greisen, E.W. 2002, A&A, 395, 1077

LISA IV

Library and Information Services in Astronomy IV, Emerging and Preserving: Providing Astronomical Information in the Digital Age 2003, ed. B.G. Corbin, E.P. Bryson & M. Wolf (DC: U. S. Naval Observatory)

Virtual Observatory

See e.g. JD8 proceedings and proceedings of the yearly *Astrophysics Data Analysis Systems and Software* conferences, published in ASP Conference Series