

## History of Astronomy at the 2000 General Assembly of the International Astronomical Union

Sessions organized by Commission 41 (History of Astronomy) featured on three different days at the 24th General Assembly (GA) of the International Astronomical Union, held in Manchester, England.

### 1 JOINT DISCUSSION 6: APPLIED HISTORICAL ASTRONOMY

JD 6 ran throughout Friday, August 11. Also participating were Commissions 4 (Ephemerides), 19 (Rotation of the Earth) and 20 (Positions and Motions of Minor Planets, Comets and Satellites), and supporting were Division I (Fundamental Astronomy), Division II (The Sun and Heliosphere), and Division III (Planetary System Sciences).

The session was chaired by S Dick and F R Stephenson, and was attended by more than 100 people. They heard papers on: "Babylonian observations" (D Brown), "East Asian observations" (F R Stephenson), "Southern Hemisphere observations" (W Orchiston), "Practical astronomy in Indo-Persian sources" (S M R Ansari), "Early observations and modern ephemerides" (E M Standish), "Secular variation of planetary orbital elements" (Y B Kolensik), "Ancient eclipses and the Earth's rotation" (L V Morrison), "Earth orientation since AD 1600" (D D McCarthy), "Creating modern cometary models using ancient Chinese data" (D K Yeomans), "Historical variability of the interplanetary complex" (M E Bailey), "Early telescopic sunspot records" (D V Hoyt), "Recorded long-period comet fluxes as an indicator of historic astronomical activity" (D W Hughes), "Scientific interpretation of historical auroral records" (D M Willis), and "Remnants of historical supernovae" (D A Green). A final overview was given by W T Sullivan.

Poster papers included: "Exiguus: The Father of the Christian Era" (M Stavinschi), "History of cometary exploration at Kyiv University" (K I Churyumov), "Akademische Sternkarten, Berlin 1830-59" (D Jones), "History of Astronomy in Ukraine" (A Korsun), and "Sunspot records: 1853-1996" (J M Brooke *et al.*).

### 2 SPECIAL SESSION: INVENTORY AND PRESERVATION OF ASTRONOMICAL ARCHIVES, RECORDS, AND ARTIFACTS

The inventory and preservation of archives has been a long-standing concern of Commission 4, and a Special Session was arranged for the morning of Wednesday August 16. One of the purposes of this session was to serve as input to the Working Group on Archives reactivated at this meeting (see 3.7 below), by gaining insight into what is being done in individual countries, where progress is being made thanks to individual and institutional efforts. At the same time, the session was part of an initiative by the International Union of History and Philosophy of Science to encourage preservation and inventory of scientific archives in general.

The session was chaired by S Dick, and was attended by about 50 people. They heard papers on: "The inventory of IAU archives, and the ESO archives" (A Blaauw), "Royal Astronomical Society library and archives" (P Hingley), "Norman Lockyer Observatory archives" (G Wilkins), "'Alidade' and the iconographic base for astronomical archives preserved in France" (S Débarbat and J-P Cressent), "German archives" (W Dick), "Status of the Euler edition and archives" (A Verdun), "Russian archives" (A Gurshtein), "Preservation and digitization of observatory publications" (B Corbin and D Coletti); "Inventory and preservation of archives and historic instruments in Australia and New Zealand" (W Orchiston), "The Nha Il-Seong

Museum of Astronomy" (I-S Nha), and "Archives in India" (S M R Ansari). At the last minute, T Nakamura was unable to attend the GA, but his paper on "Astronomical Archives in Japan" was summarized by I Hasegawa.

A Blaauw pointed out that his inventory of IAU archives (published in 1999) covers only the years 1919-1970, and that efforts should be made to insure that the IAU archives since 1970 are also preserved and inventoried. This problem should be taken up by the Working Group on Archives, as should the general problem of building on this session to insure the world-wide preservation and inventory of archives.

### 3 BUSINESS MEETING OF C41

#### 3.1 General

Commission President, S Dick, called the meeting to order on August 15. W Orchiston and W Dick were appointed Secretaries for the session, and S Débarbat returning officer for the elections, with C Sterken assisting. Of the members on the Organizing Committee, W Dick, A Gurshtein, I-S Nha, W Orchiston and W Sullivan were present, as well as Vice President F R Stephenson and Immediate Past President S M R Ansari; E Proverbio and X Zezong were unable to attend; 24 others were in attendance and apologies were received from B Warner and R Haynes. A moment of silence was observed for members deceased since the last GA, including Olaf Pedersen (1997 December 3), Helen Wright (1997 October 23), Derek Howse (1998 July 28), and Heino Eelsalu (1998 July 26).

#### 3.2 Presidential Report

President Dick reported on highlights of the last triennium. In order to facilitate communication between members, a Commission WEB Site was set up (thanks largely to the efforts of W Dick), and the President issued six *Newsletters* to Commission members and others.

Following up on recommendations at the last GA, the Commission sponsored IAU Colloquium 178 on "Polar Motion: Historical and Scientific Problems", which was held in Cagliari, Sardinia, on 1999 September 27-30. At the time of this GA, the 641-page Proceedings, edited by S Dick, D McCarthy, and B Luzum, had just appeared as Volume 208 in the Astronomical Society of the Pacific's Conference Series.

In conjunction with the U.S. Naval Observatory, the Commission sponsored an around-the-world time ball drop on New Year's Eve to usher in the year 2000, involving 20 sites in eight countries on six continents. The event will be repeated for the beginning of the new millennium on 2001 January.

President Dick invited W Orchiston to report on the new *Journal of Astronomical History and Heritage*, which he and J Perdrix successfully launched following the Kyoto GA. As at 2000 June, five issues had appeared.

President Dick reported that for this GA he and F R Stephenson had organized Joint Discussion 6 (Applied Historical Astronomy) and the Special Session on "Inventory and Preservation of Astronomical Archives, Records and Artifacts".

During the triennium, Commission members continued to carry out research and publish, and highlights of their work are given in the IAU Transactions.

#### 3.3 Election of Officers, New Members, and Consultants

The following officers were elected for the 2000-2003 triennium:

President:	Professor F Richard Stephenson (UK)
Vice-President:	Professor Alex Gurshtein (Russia)
Immediate Past President:	Dr Steven Dick (USA)
Organizing Committee:	Dr Wolfgang Dick (Germany)

Professor Rajesh Kochhar (India)  
 Dr Tsuko Nakamura (Japan)  
 Professor Il-Seong Nha (Korea)  
 Dr Wayne Orchiston (Australia)  
 Professor Woodruff T Sullivan (USA)  
 Professor Brian Warner (S. Africa)

The following new members of the Commission were approved: P Brosche (Germany), M Brück (Scotland), M Chen (China PR), I Chinnici (Italy), B Corbin (USA), T de Jong, H W Duerbeck (Germany), D Green (USA), W-Y Han (Korea), J Hearnshaw (New Zealand), A Heck (France), B Hidayat (Indonesia), M Hirai (Japan), N D Huan (Vietnam), S Hyung (Korea), B Jovanovic (Yugoslavia), F Launay (France), E-H Lee (Korea), K Locher (Switzerland), T Nakamura (Japan), B Pettersen (Norway), T Rafferty (USA), C Ruggles (UK), L Schmadel (Germany), B Soonthornthum (Thailand), H Steinle (Germany), C Sterken (Belgium), W Tobin (New Zealand), A Verdun (Switzerland), H Yamaoka (Japan), G Wilkins (UK), and E Zsoldos (Hungary).

New consultants elected were: J P Cressent (France), L Dalong (China), K-D Herbst (Germany), P Hingley (UK), R Mercier (UK), M Nam (Korea), S R Sarma (India), G Satterthwaite (UK), W Sheehan (USA), and J M Steele (UK). Consultants re-elected were J A Bennett (UK), K Bracher (USA), J Evans (USA), R Freitag (USA), A Jones (USA), E S Kennedy (USA), D A King (Germany), S McCluskey (USA), V N Sharma (India), B G Sidharth (India), J Tenn (USA), B van Dalen (Germany), T R Williams (USA), Y Włodarczyk (Poland), and M Yano (Japan).

Total membership of the Commission, including new members, stands at 179, plus 27 consultants.

### 3.4 Resolutions

On behalf of A Batten, S Dick presented a report relating to the preservation of the sites involved in measuring the Struve arc of the meridian, and their designation as World Heritage Sites, following up a resolution passed at The Hague GA in 1994. The meeting asked S Dick to convey its thanks to A Batten for his continuing efforts.

S Dick also reminded members of the long-standing IAU resolution on the preservation and inventory of archives; the Special Session at this GA was meant to regain momentum on this resolution.

Two new Commission resolutions were then unanimously approved by the meeting:

1) *Recognizing* the historical importance of previous transits of Venus and the numerous transit of Venus expeditions mounted by many countries, and *noting* the rarity of the upcoming transits of 2004 and 2012, Commission 41 *recommends* that the sites of the previous transit of Venus expeditions be inventoried, marked and preserved, as well as instrumentation and documents associated with these expeditions.

2) *Considering* the importance of the contribution of the International Latitude Service to the study of polar motion, Commission 41 *recommends* that concerted efforts be made to preserve the buildings and instruments associated with the observatories of the International Latitude Service and predecessor observatories especially the associated geodetic monuments or pillars. (This resolution derived from IAU Colloquium 178 on "Polar Motion: Historical and Scientific Problems").

### 3.5 The History of Astronomy Programme at the 2003 General Assembly in Sydney

There was general agreement that Commission 41 should seek to be involved in at least one Symposium at the Sydney GA; that it should be the chief sponsor of a Joint Discussion; and that it should hold a range of business, science, and special meetings, some of which should focus on specific subjects, perhaps related to the new Working Groups (see below). It was noted that the transits of Venus would be a particularly timely subject.

### 3.6 C41 and the IUHPS

For many years Commission 41 has been deemed a "Joint Commission" of the IAU and International Union of History and Philosophy of Science, and it was agreed that the two International Unions should continue to co-operate for the benefit of both historians (who predominate in the IUHPS) and astronomers (who predominate in the IAU).

S M R Ansari noted that the IUHPS will meet in Mexico City between 2001 July 8 and 14, and that the programme includes a session on "Astronomical Heritage of non-European Cultural Areas".

### 3.7 Formation of Commission Working Groups

The meeting decided to establish four C41 Working Groups:

Archives (Dr Suzanne Débarbat, France)  
 Astronomical Chronology (Professor Alex Gurshtein, Russia)  
 Historical Instruments (Professor Il-Seong Nha, Korea)  
 Transits of Venus (Dr Wayne Orchiston, Australia)

The name and national affiliation of the chairperson of each WG is given above in brackets. Each WG will have a clearly-defined programme of work leading up to the next GA.

### 3.8 Status of Commission 41

C41 is a Commission that is not attached to any Division. By unanimous vote, the meeting reaffirmed the following statement from the Kyoto GA:

"History of astronomy is a discipline that overarches the entire field of study of the IAU, and therefore should not be confined to one Division. We wish to remain a separate Commission until such time as we can become a separate History of Astronomy Division."

### 3.9 Vote of Thanks

On behalf of Commission members, W Orchiston moved a vote of thanks to S Dick for his sterling efforts as C41 President during the last three years.

Steven J Dick and  
 Wayne Orchiston

