

classification, and no astronomer in America was then more powerful. Pickering was already the chairman of the Committee on Stellar Photographic magnitudes of the Astrographic Chart Conference, and Hale and his cohorts saw to it that Pickering would hold a similar position, under the auspices of the ISU, for spectral classification. Pickering accordingly attended the 1910 ISU meetings, and indeed chaired the session when spectral classification was discussed. At Mount Wilson, ISU members agreed to expand the scope of their organization. They hoped to minimize conflict with the venerable and powerful *Astronomische Gesellschaft*, and the Astrographic Chart Conference, by limiting their scope to the application of spectroscopic technique to astronomy. Pickering's magnitude committee for the Astrographic Chart Conference remained intact.

The next meeting of the ISU was held in Bonn in 1913, where the resolutions of the 1910 meeting were ratified, making Pickering's Draper classification system the world's provisional standard. By that time, however, the ISU's governing patron, the International Association of Academies, had already been dissipated by growing war clouds in Europe, and after 1913, plans to meet in Rome in 1916, and Cambridge in 1919, were never realized. After the war, the allies and neutrals chose not to revive the International Association of Academies due to its strong Germanic base, and created a new international organization to which new disciplinary entities could adhere and be recognized. Out of this reformation emerged the IAU, very much bearing the likeness of the expanded ISU, with added elements from the Astrographic Chart Conference.

Sources for this talk include correspondence in the Hale Papers (Caltech) and Schlesinger Papers (AIP) microfilm editions, and Pickering Papers (Harvard); the four volumes of the ISU Transactions, edited by Schuster; W. S. Adams, "The History of the International Astronomical Union," *PASP* 61 1949:5-12; and D. H. DeVorkin, "Community and Spectral Classification in Astrophysics: The Acceptance of E.C. Pickering's System in 1910", *Isis* 72 1981:29-49.

INTERNATIONAL SURVEY OF THE SOLAR ACTIVITY UNDER THE LEADERSHIP OF THE IAU

Simone Dumont and Marie-Josèphe Martres, *Observatoire de Paris-Meudon, France*

The second part of the nineteenth century brought some new knowledge about solar activity : the solar undecennial cycle of sunspot number, the prominences at the solar limb and the existence of flares.

The period 1920-1940. At the first GA (Rome 1992), the solar commissions assigned some centers for centralization, compilation and publication of each kind of solar data. For instance, the Arcetri Observatory published spectroscopic images of the Sun limb from 1922 and the Meudon Solar Service, the synoptic maps of the disk from 1919. In 1928, the "Bulletin of character figures for solar phenomena" issued, supported by the IAU and entrusted to the Zürich Observatory. Astronomers and geophysicists were interested in solar-terrestrial relations. It is only in 1932 that the strong relation

between solar flares and terrestrial magnetic storms had obviously appeared. Thanks for the use by several observatories around the World of the spectroheliograph of Mt Wilson Observatory, the observed flares were more and more numerous and a new cooperation started to work in 1934 to search the eruptive phenomena. Those collected data in Meudon were published in the "Bulletin" which became the "Quarterly Bulletin of Solar Activity" in 1938. The cinematographic patrol of limb prominences has begun with spectroheliograph (McMath Hulbert Observatory) and coronagraph (Pic-du-Midi Observatory).

The period 1945-1970. At Zürich GA, in 1948, the commissions had started again the international cooperation to watch the solar activity with, in addition, some new observations : solar corona intensity and radio radiation. The studies of the magnetic fields in the active regions set up. The EC wanted to develop the prediction of the terrestrial phenomena coming from the Sun. For that, ursigrams were diffused giving informations on solar activity and terrestrial events. The organization of the International Geophysical Year (1956-58) has stimulated the cooperation within the frame work of the Inter-Unions. Comprehensive maps of the Sun were published from day to day and "Solar Geophysical Data", an important monthly compilation of data, was issued. After the IGY, the International Quiet Sun Year held up the same organization. We may not forget the decisive supply of the spatial astronomy (rockets and satellites) which began with the IGY and will brought, during the last thirty years, informations about solar radiations, UV, X and Gamma...

Conclusion. The compilation of the data collected on the World scale which began with the twentieth century has been and is still one of the most productive instrument to progress in the solar activity knowledge. At the present time, the World Data Centers (WDC) owing to global informatic treatments are the only one able to produce, almost in real time, the compilations as homogeneous and complete as possible, but without human critical analysis. We have also to deplore present and future closing of some solar ground based observatories, making impossible the survey of the Sun twenty-four hours a day.

Discussion

J.-C. Pecker : In the margin of the "Official" coordination of solar physics, the historians of solar physics should look of course very carefully at the (fascinating !) human relations between solar astronomers : Hale and (or vs.) Deslandres ; and later Lyot and Roberts (as reported in the book "Remembering Walter Roberts", 1993, published by NCAR).

THE 1958 IAU GENERAL ASSEMBLY IN MOSCOW

Alexander Gursthein, *Institute History of Sciences and Techniques, Moscow, Russia*

In 1955 the 9th IAU General Assembly (GA) took place at Dublin. The spirit of friendship, good will and mutual understanding resigned on that astronomical forum. Prof. Boris V. Kukarkin of Moscow University, on behalf of the Soviet Academy of Sciences invited the next 10th IAU GA to hold at Moscow in 1958 and prolonged applauses were a reply for him. The soviet invitation was strongly supported by J.J. Nassau who was a leader of the US National Astronomical Committee. Old reports on Dublin's meeting show some