

Annual Report, 2005
Working Group on Astronomical Software

Robert J. Hanisch, Chair
Space Telescope Science Institute

Arnold Rots, WGAS FITS Committee Chair
Smithsonian Astrophysical Observatory/Chandra X-Ray Center

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The primary role of the AAS Working Group on Astronomical Software is to function as the body that serves the North American community in formulating, reviewing, and endorsing modifications to the FITS data format standard. The WGAS FITS Committee (WFC) serves as one of four regional FITS standards committees, operating under the IAU FITS Working Group. Dr. Arnold Rots (SAO/CXC) chairs the WFC. There has been substantial activity in this area in the past year.

The IAU FITS Working Group became firmly established in 2004 and adopted a new set of voting rules covering the procedures in the IAU-FWG itself, as well as the regional committees. Most of this work was prepared by the IAU-FWG Executive Committee, which consists of the Chair and Vice-Chair of the IAU-FWG and the Chairs of the regional committees. A fourth regional committee, covering Australia and New Zealand, was established.

In concert with the other three regional committees, the WGAS FITS Committee voted again on elevating Appendices B.1 (variable length arrays in binary tables) and B.2 (multi-dimensional arrays in binary tables) to full incorporation in the standard. Both were approved by the WFC on February 15, 2002 with 13 yes votes, 0 no votes, and 5 non-responses. The proposals were subsequently voted on, and approved by, the IAU FITS Working Group.

S. Allen (UCO/Lick) and D. Wells are leading efforts to formally reserve FITS MIME (Multipurpose Internet Mail Extension) types with the Internet Engineering Task Force (IETF). MIME types, such as filename extensions .gif, .jpg, .doc, etc., are used so that computers know which programs to use to interpret files. The IETF is the standards body that reviews and approves all MIME type definitions. The WGAS FITS Committee and the IAU FWG have endorsed their efforts and the proposal is in its final stages of becoming a recognized standard – expected in May 2005.

In April 2005 the WFC conducted a thorough review of its membership. Archibald War-nock, William Lupton, Robert Kibrick, and Jeffrey Percival have left the committee and have been thanked for the service they provided to the community during their tenure. It is expected that they will be replaced by two or three new members, resulting in a slightly smaller committee.

Substantial progress has been made in the public discussion of Paper III (“Representations of spectral coordinates in FITS,” by E. Greisen, F. Valdes, M. Calabretta, and S. Allen), which describes spectral dispersion relations. This paper will likely move forward to formal review in the FITS committees in the coming few months.

We wish to acknowledge the decades-long contributions to the FITS standards by Donald C. Wells, who retired from the staff of NRAO in the summer of 2004. Don has long been a staunch supporter of FITS and a prime mover toward technical excellence and political consensus. The WGAS expresses its thanks to Don and wishes him well.