

Annual Report
Working Group on Astronomical Software
Submitted by **R. J. Hanisch, Chair**
7 May 1997

This report covers the period from June 1996 (after the Madison AAS Meeting) through June 1997 (including the Winston-Salem meeting).

As was noted in last year's WGAS report, the popularity of the annual ADASS Conference has led us to discontinue WGAS sessions at AAS meetings. In addition, software developers have a combination of publication venues available to them, from refereed journals (most notably *PASP* and *Experimental Astronomy*) to conference proceedings (ADASS) to informal communications via the WWW. Thus, in consultation with the Publications Board we have also decided to terminate the publication of software technical reports in the *BAAS*.

The WGAS remains in two important capacities: first, to be available as a consulting group to the Society for software-related issues, and second to oversee the evolution of the FITS data format standard. In the first area the WGAS Chair assisted the Executive Office in a review of the proposed MIS software package (April 1997). In the second area the WGAS FITS Committee (chaired by Peter Teuben, Astronomy Department, University of Maryland) has been working on a modification of the FITS format specification for dates.

When FITS was conceived in 1981, its developers did not imagine it would become so successfully established as the global standard for astronomy, or that it would have such a long lifetime. Like many other computer programs and standards, it did not properly anticipate the ambiguity of a date format which allowed only two digits for the specification of the calendar year. The ubiquitous "Year 2000" problem must be solved within FITS as well as within the thousands of data processing programs used world-wide.

The WGAS FITS Committee is currently debating, and will soon vote on, a resolution to modify the format for dates expressed in FITS headers. This affects keywords such as DATE-OBS, which currently assume a format of the form yy-mm-dd for calendar dates. The European FITS Committee has proposed a more general format and associated conventions for specifying the time measurement system (e.g., UTC). At this time the debate seems to be nearing closure. I expect the WGAS FITS Committee to have reached consensus within the next few weeks, at which time the regional FITS committee recommendations will be forwarded to the IAU FITS Committee for approval. Those interested in the subtleties of this issue may be interested in reading the e-mail log at <http://www.astro.umd.edu/~teuben/fits/saf1996/>.

The membership of the WGAS FITS Committee was also brought up to date in this past year. The current membership of the committee is shown in Table 1.

Following the completion of the vote on the Year 2000 issue, Eric Mandel will be replaced by Jonathan McDowell, who will also represent SAO and the AXAF project.

Peter Teuben (Chair)	U. Md.
Steve Allen	Lick Obs.
Daniel Durand	DAO-CADC
Allen Farris	STScI (STSDAS)
Eric Greisen	NRAO
Arne Henden	USNO
Bob Kibrick	Lick Obs.
William Lupton	Keck Obs.
Eric Mandel	SAO (AXAF)
Bob Narron	IPAC
Bill Pence	NASA-GSFC (HEASARC)
Jeff Percival	U. Wis.
Arnold Rots	NASA-GSFC (XTE)
Skip Schaller	U. Ariz.
Barry Schlesinger	NASA-GSFC/H-STX (FITS Support Office)
Randy Thompson	NASA-GSFC (IUE DAC)
Doug Tody	NOAO (IRAF)
Steve Walton	CSU-Northridge (solar)
Archie Warnock	A/WWW Enterprises
Richard A. White	NASA-GSFC (ADF)
Bob Hanisch (ex officio)	STScI (AAS WGAS)
Don Wells (ex officio)	NRAO (IAU FITS Comm.)

Table 1: Members of the AAS WGAS FITS Committee, May 1997.