

#### d): Archival and Retrieval of Wide-Field Data

As organizer of the IAU WGWFI's sub-section, 'Archival and Retrieval of Wide-Field Data', I am writing this first newsletter piece to ask our membership for their views on the programs of the sub-section. I regard our challenge as the identification of areas in which IAU-sponsored communication or even collaboration will advance our work, while simultaneously avoiding those topics in which formal structure will contribute little (and may actually inhibit) to good work at individual sites.

One may usefully regard our archival concerns as being motivated by two rather distinct types of data,

1. wide-field pixel data, and
2. catalog data.

At the last Digitised Optical Sky Surveys workshop (Edinburgh, 1991), we heard about a number of programs, both pilot projects and fully developed ones, addressing various aspects of each area.

The active approaches to the matter of wide-field pixel data involve full-plate scans, cutouts of identified images, and image compression on full-plate scans. It seems that each addresses a specific need and will be used by some investigators in the next several years. As the field matures, we may reasonably expect to need to exchange data in these formats; and this raises the issues of standardization. Regrettably, my expectation is that we already have one file format per data type per institution. Perhaps the situation is already too advanced to do much standardization, but if there is sufficient interest, the topic should be explored. As far as I can tell, the only common practice at present is a loose adhesion to FITS (without much thought about the keywords) as an exchange medium.

The storage of catalog data is an area where we are likely to see rapid progress in the next few years. Presently, small catalogs ( $10^5$  to  $10^6$  objects) are well supported with powerful access tools, e.g. the SIMBAD facility, while larger ones ( $10^7$  objects) are supported in accessible but less convenient ways with catalog-specific tools and structures. However, the situation is less clear for the larger catalogs ( $10^8$  to  $10^9$  objects) which are currently under development at several institutions. How are we going to store them? to access them? to distribute them? Several promising ideas in various stages of development were reported at the DOSS workshop. At the minimum, we should use our facilities to give these efforts an appropriate level of informal visibility.

Comments on these topics before the end of February will be especially useful in preparing for the first meeting of the WGWFI's organizing committee in April, 1992. My E-mail addresses are scivax::Lasker (SPAN), lasker@stsci.edu (internet), and lasker@stsci (Bitnet/Earn).

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