News and Views

1. Sky Overlay Maps

The Atlas of Sky Overlay Maps for the Palomar Sky Survey (Dixon, Gearhart, and Schmidtke, the Ohio State Radio Observatory, 1981), has proven to be an extremely valuable tool. Each transparent overlay is customized to an individual survey field and identifies all entries in the Master List of Nonstellar Astronomical Objects (Dixon and Sonneborn, 1980) as well as all SAO stars. Unfortunately, a similar set of overlays has never been produced for the ESO/SRC Sky Survey — primarily because important lists of southern galaxies were not published until later in the 1980s. I intend to initiate a program to create a set of transparencies for the ESO/SRC Atlas, but I first seek input from the astronomical community in the following areas:

1) I would like to determine the need or interest for a set of southern overlays. Are transparencies still a viable medium? Or, should they be totally scrapped in favour of real-time software displays?

2) I would like to identify individuals or institutions that may have plans to undertake a similar project. Perhaps a collaborative effort could be organized.

Please send comments or suggestions to the address below. Thank you.

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2. Eliminating Satellite Trails from Photographic Exposures

An astronomer in New South Wales, Australia, has just finished planning a night's photography with the United Kingdom Schmidt Telescope. He once worried about how many satellite trails would clutter the plates each night, but no longer. Picking up the telephone, he FAXes field coordinates and possible times for four plates to the non-profit Center for Analysis of Satellite Interference with Astronomy (CASIA) in the United States.

At CASIA (pronounced like the first three syllables of Cassiopeia), an analyst receives the message. He enters observatory, plate centers, and times of interest into a dedicated computer. Accessing a data base of orbital elements on over 7000 artificial Earth satellites updated three times a week, in three hours the computer generates a list of culprit satellites predicted to cross the four plate fields. Several satellites are expected to be so faint and moving so fast that they will not even register. One plate scheduled near local midnight will avoid all streaks without further intervention. Two others would show a few trails each, but the times of these satellite passes are noted in order to interrupt the exposures. The fourth region will have to be rescheduled because a high satellite lingers in the field throughout the planned interval.

Since darkness is still many hours away, these findings are EMAILed back to Australia. Included are suggested times when slow-moving satellites are absent from the region in need of rescheduling. Although it means more work for him, the observer does not mind having to close the dark slide for a minute or two every half hour or so. Only once in a great while does an unpredicted

satellite still sneak through. The total plate exposure time remains the same, but now almost every plate is truly 'A'-grade!

This scenario is not some wide-field astronomer's fantasy, but possible now with modern computers and communications. CASIA is completing a proposal to the IAU for beginning operation this fall. If your organization could benefit from such a service, kindly address a letter indicating your interest in CASIA to Dr. Jacqueline Bergeron, IAU-UAI Secretariat, 98 bis Boulevard Arago, F-75014 Paris. A copy to the author would be appreciated.

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3. Morphology of Complexes in the LMC

We have started a project of wide-field imaging in order to study the morphology of complexes and supercomplexes in the LMC, via star-counts and spectral classification, from plates taken with the U.K. Schmidt Telescope. Iso-density contour diagrams, as well as histograms of the distribution of spectral types of their stellar population are in progress. The regions under study are centered at Shapley 'constellations' I, IV, IX and X . Our results will be published shortly.

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