

● B. Fort (Toulouse), L. Vigroux, M. Lachieze-Rey (CEA) A. Pellet (Marseille) and D. Carter (Mt Stromlo) had a successful run in April with the CEA/INAG CCD camera at the F/8 focus, equipped with the focal reducer. The camera was used in this mode for different photometric observations of elliptical galaxies. In particular Fort and Carter were able to detect extremely faint shells around the elliptical galaxies of their program, as shown on the figure. Detection of such shells is of interest to explain the missing mass in the clusters of galaxies.

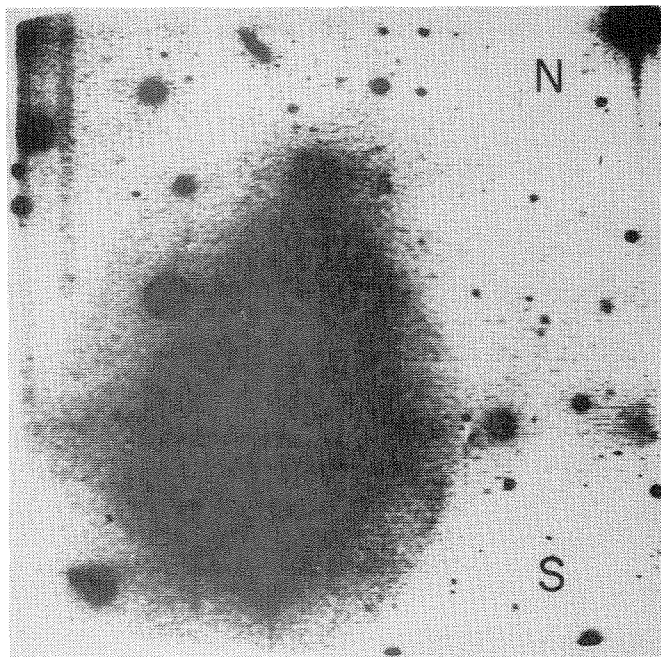
● At 14H25 UT, June 15, Neptune was starting to occult a  $V \approx 11$ , M star in a near-central occultation. This event, observed in the infrared K band, might provide the best opportunity for the detection of a suspected ring around Neptune. A. Brahic and B. Sicardy (Meudon) having enjoined CFHT to make the observation, the prime focus cage was removed and the infrared top end installed for one night. The data acquisition program of the IR photometer was specially modified in order to record the data with the shortest integration time. Finally, J.P. Maillard (CFHT) with E. Becklin and D. Cruikshank (IFA) recorded the full light curve of the event which finished  $12^{\circ}$  above the horizon at sunrise. Starting the observations one hour before the beginning of the immersion not the smallest interruption of light was detected in a signal of high signal-to-noise ratio. We do have to conclude that the last giant planet has no ring!

## ● OBSERVING SERVICE: a first appraisal

As reported in "CFH Information Bulletin" No 8 an Observing Service has been experimented during the first semester of 1983. Half of the principal investigators (PIs) to whom the Service was offered accepted to participate in the experiment, for a total of 15 runs over 40 nights.

After 40 nights of Observing Service, the logistics of the runs' management have been straightforward, due to the relatively small number of assigned nights. The weather statistics during these 40 nights were somewhat worse than the expected 75% clear sky average (4.5 nights were lost to high winds and 7 nights to clouds, leaving 71% clear). The duty cycle of our teams and equipment was also lower than the expected 85% (by some 15%), mostly because some of our observing assistants had to be trained in the process. Thus we were able to accomplish approximately 80% of what we had hoped to do. Nevertheless, all the first priority data requested were obtained, and so were more than half of the second priority items. No one was "clouded out".

● The main goal of the Service - the optimization of telescope use - was met in large part. By combining different programs during the course of single nights, hour angles were minimized and observing was tailored to seeing conditions.



*Image of NGC 2865 through a wide blue filter centered at  $4500\text{\AA}$ , in 20 min exposure, recorded in April with the CEA/INAG CCD camera. This camera includes a RCA chip of  $320 \times 512$  pixels and gives a readout noise of 65e/px. By using the focal reducer at the Cassegrain focus a F/2 beam was produced delivering a field of  $7.3 \times 4.3$  arc min corresponding to a resolution of 0.9 arc sec per pixel. On the picture a first shell can be seen (in S-W direction) with  $M_B$  approximately  $25.5/\text{arc sec}^2$ . In the opposite direction a fainter shell is detectable with  $M_B = 27/\text{arc sec}^2$ .*

### Manpower

Despite its modest scale, the experimental Service has been a rather heavy additional load on our manpower. The part-time availability of our 3rd Telescope Operator (TO) who acted as an Observing Assistant, was a crucial help to the resident astronomers. This, incidentally, provided a valuable opportunity to train our TO's in observing techniques. Instrumentation technicians and research assistants were also called upon to observe when the resident astronomers were not available.

Thus we do not wish to continue the experiment as long as our present resources are not increased. It is clear that the system would be used by a large segment of the community, but its definitive implementation requires additional staff in Waimea. The corresponding increase of the personnel budget would be largely compensated by the reduction in travel costs of the visiting astronomers. The main benefit remains the increased flexibility of telescope time use and the savings in travel time for the "non-visiting" astronomers.

The decision to offer the service on a regular basis must await the results of the final evaluation and the agreement of the Board of Directors and agencies to finance the necessary additional positions for resident observers.