- Karovska, M., Nisenson, P., Papaliolios, C., and Standley, C., 1987: IAU Circ., No. 4440.
- Meikle, W.S.P., 1988: Proc. of Astron. Soc. of Australia, in press.
- Meikle, W.S.P., Matcher, S.J., and Morgan, B.L., 1987: *Nature*, **329**, 608.
- Nisenson, P., Papaliolios, C., Karovska, M.,

and Noyes, R., 1987: Astrophys. J., 320, L15.

- Perrier, C., 1986: The Messenger, No. 45, p. 29.
- Perrier, C., Chalabaev, A.A., Mariotti, J.-M., and Bouchet, P., 1987: in ESO Workshop on SN 1987A, ed. I.J. Danziger, Garching, p. 187.

Phinney, E.S., 1988: Nature, 331, 566.

Rees, M., 1987: Nature, 328, 207.

- Renzini, A., 1987: in ESO Workshop on SN 1987A, ed. I.J. Danziger, Garching, p. 295.
- Wampler, E.J., and Richichi, A., 1988: The Messenger, No. 52, p. 14.

Woosley, S.E., 1988: Ap. J., 330, 218.

An Update on the Light Echoes of SN 1987A

The ring shaped light echoes found earlier this year around the supernova SN 1987A in the LMC (The Messenger 52, 13) have been under close monitoring ever since. The picture shows an artificially enhanced image of the rings as observed by H. Pedersen and J. Melnick on the nights 29th through 31st of October 1988, using a CCD camera in the Gascoigne adapter at the prime focus of the 3.6-m telescope. The resolution is 0.58 arcsec per pixel and the seeing was about 1.2 arcsec. In order to enhance the contrast, the photo shows the ratio of averages of five 3-minute exposures in B and V each.

The outer ring has reached a radial distance of about 77 arcsec and the inner ring of about 45 arcsec, very close to the predictions for plane parallel sheets of reflecting material perpendicular to the line of sight. In February the radii measured 52 and 32 arcsec respectively. The most interesting aspect is that the echoes retain their near circular shape. This implies that, at least over the area swept by the echoes since February, the interstellar dust must be highly concentrated into two thin layers located roughly 120 und 320 pc in front of the supernova. The very small deviation from circularity of the rings imposes tight constraints on any inclination and curvature of these sheets of matter, which are likely to belong to the halo of the LMC. M. ROSA



The ESO Schmidt Telescope

The ESO(R) half of the joint ESO/ SERC Survey of the Southern Sky will soon be finished. For more than 90% of the 606 fields, Atlas-quality plates have now been obtained. Reasonably good, but not quite optimal plates are available of another 5% of the fields and only for ~20 fields (3%) has no acceptable plate yet been obtained. The Atlas production in Garching in also nearing the end; 22 shipments out of a total of 24 have been sent to about 200 customers. It is hoped that the last two shipments will become available in the course of 1989. Most of the missing Atlas plates are in the right ascension interval between 20 hours and 4 hours and high priority will be given to the atlas work during the corresponding season (August to December). For the rest of the year, virtually all time is now available for other purposes.

One of the current programmes is the extension of the Quick Blue Survey from declination -20° to the equator. This involves taking about 300 Atlas-quality IIa-O + GG 385 plates, each with 60-minute exposure time. This project pro-

cedes rapidly and more than one quarter of the fields have been covered with excellent plates.

Other Projects now under consideration include retaking the entire QBS, about 15 years after the first survey of this type. This would provide a very good basis for determination of proper motions in the southern sky, even of rather faint stars. The supernova search programme in brighter galaxies might also be re-activated. Other possibilities include deep infrared plates along the galactic plane or very long exposures