of the detector in the EMMI red arm and at the edge of the field of the NTT. The small differences both in the coefficients and the d_{80} values at the edge of the EMMI detector between the corrected and a perfectly aligned NTT will be virtually undetectable. Therefore, for all practical purposes, the NTT can now be regarded as a perfectly aligned telescope. The improved optical quality of the NTT has been confirmed by subsequent observers.

Reference

[1] Collimation of Fast Wide-Field Telescopes, McLeod, B.A., 1996, *PASP* **108**, 217–219.

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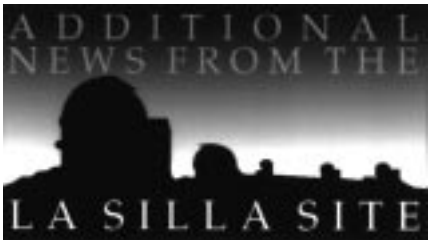

The La Silla News Page

The editors of the La Silla News Page would like to welcome readers of the tenth edition of a page devoted to reporting on technical updates and observational achievements at La Silla. We would like this page to inform the astronomical community of changes made to telescopes, instruments, operations, and of instrumental performances that cannot be reported conveniently elsewhere. Contributions and inquiries to this page from the community are most welcome. (R. Gredel, C. Lidman)

CES Very Long Camera Installed

M. KÜRSTER, ESO, Chile

After a general overhaul of the Coudé Echelle Spectrometer (CES), its new Very Long Camera was successfully installed between April 9 and 20. It consists of a new f/12.5 camera mirror that was mounted in the frame of the old scanner mirror and an x-y table on new pillars which hold a new 45° folding mirror and the CCD mount. The new Very Long Camera was jointly built by Uppsala Astronomical Observatory (optics) and the University of Liège (mechanics). It replaces the previous Long Camera (f/4.7) which was decommissioned.

During a first series of test measurements with the thorium-argon lamp, resolving powers of R = 235,000 were obtained at different wavelengths. At this resolving power the sampling was determined to be ≈ 2.45 pixels/FWHM.

The Very Long Camera will be commissioned during May 14–20 together with the new fibre link to the Cassegrain focus of the 3.6-m telescope and image slicers built by ESO Garching (optics) and ESO La Silla (mechanics). A sliding carriage with housings for up to four different image slicers has already been installed. The slit unit was also integrated on this sledge. The weeks before the commissioning will see the installation of the fibre in the Cassegrain adapter, and the installation of the fibre exit unit in the CES pre-slit area. The latter unit will be movable (with very accurate repositioning capabilities) to permit the continued use of the CAT telescope with the CES.

Improving Image Quality at the Danish 1.54-m Telescope

J. BREWER, ESO, La Silla
J. ANDERSEN, Copenhagen University Observatory, Denmark

The image quality achieved at a telescope depends on many factors, not the least of which is the thermal environment of the dome, telescope, and mirror. During the daytime, the dome, telescope and mirror heat up; at night this heat is released, causing air turbulence which degrades the seeing by causing the starlight to be diffracted along different paths. As part of the seeing improvement campaign at the major La Silla telescopes, it has been decided to address these problems also at the Danish 1.54-m telescope, which was once known for its excellent images (e.g. *The Messenger* No. 17, p. 14, 1979).

After a lengthy period of measurements and analysis by Danish and ESO staff (in particular M.I. Andersen and A. Gilliotte), it was concluded that both charge diffusion effects in the (thinned Loral 2K) CCD and thermal problems near the mirror and in the dome and building were responsible for the currently observed image degradation. Considering that the contract between ESO and Copenhagen University on the operation of the telescope had been extended for a ten-year period from 1996, a substantial investment in reducing daytime heating of the dome, telescope and mirror was found justified.

There are two ways to address this problem. One solution is to estimate the nighttime temperature and to maintain the dome, telescope and mirror at this temperature during the daytime by use of a cooling system. The other solution is to increase the natural ventilation in the