



The editors of the La Silla News Page would like to welcome readers of the fourth 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 to 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. (P. Bouchet, R. Gredel, C. Lidman)

A New CCD for the B&C Spectrograph on the ESO 1.52-m Telescope

C. LIDMAN

During the beginning of March, a new CCD (#39) was installed at the ESO 1.52-m telescope. This CCD is intended for use with the B&C Spectrograph. The new CCD is a UV-flooded, thinned, Loral CCD and is a 2048×2048 array of 15 micron pixels.

Compared to the old Ford CCD (#24), the new CCD has a five-fold increase in sensitivity at 4000 Å and a two-fold increase in sensitivity at 6000 Å. This large increase in sensitivity is gained at the expense of a slight decrease in the resolution of the instrument, particularly in the blue. This is demonstrated in Table 1 which lists the FWHM (Full Width at Half Maximum) for various spectral lines at different slit widths. With the holographic grating (#32) this translates to a resolution of 2500 at 3700 Å.

The dark current of the new CCD is 5.2 ADU (6.2 electrons) per hour and the read noise is 5.8 ADU. The pixel scale along the slit is 0.82 arc seconds per pixel.

TABLE 1.

Slit width arc sec.	3888 Å		4922 Å		7635 Å	
	#24 (old)	#39 (new)	#24 (old)	#39 (new)	#24 (old)	#39 (new)
1.0	1.64	2.50	1.41	2.27	1.40	1.79
1.5	1.97	2.70	1.67	2.48	1.70	2.01
2.0	2.39	2.99	2.04	2.77	2.09	2.30
2.5	2.83	3.33	2.55	3.10	2.46	2.66
3.0	3.34	3.73	3.04	3.47	2.81	3.09
4.0	4.25	4.51	3.96	4.28	3.68	3.85

The FWHM of chosen spectral lines, as measured in pixels, for various slit widths. The pixel size of the old and new CCDs are identical. Grating #7 was used.

At the time of writing this article, the new CCD has now been in operation for two months. The quality of the UV flood is continually monitored and to date there is no degradation in the efficiency of the CCD nor in the uniformity of the response. With proper care, the UV flood can be maintained for five months or longer, as has been demonstrated by the CES CCD.

The installation of the new CCD has only been possible through the combined efforts of many people both at La Silla and Garching. This includes the CCD group in Garching, in particular S. Deiries and O. Iwert, the optical detector group at La Silla, the 2.2-m team, and C. Ledoux and H. Duerbeck who took all of the initial test observations.

News at the Danish 1.54-m Telescope

J. STORM

The DFOSC CCD Upgrade

In July we will be upgrading the thinned LORAL CCD currently mounted on DFOSC to a UV-sensitive device. This upgrade will be done by Copenhagen University Observatory, who has provided the camera and controller, together with the ESO optical detector team. This upgrade is expected to improve the quantum efficiency (QE) very significantly, not only in the UV but over the full optical wavelength range. The QE of the detector will be very similar to

the one of the chip currently mounted at the Boller and Chivens spectrograph on the ESO 1.52-m telescope, i.e. above 80% QE from 350 nm to 750 nm and above 50% down to 320 nm and up to 850 nm.

The Danish 1.54-m TCS Upgrade

The graphical user interface for the Telescope Control System has also been significantly redesigned, and is now based on one fixed window. The interface is now easier to use and more

transparent than the previous one. New functionality has also been added, including a graphical user interface to the object catalogue handling. We plan to install and commission the new version in the coming months.

The DFOSC Control System Upgrade

At the same time as the TCS upgrade, the Data Acquisition Integrated SYstem (DAISY), developed originally for the Dutch telescope, will be ported to the