crease in efficiency in the blue reported before. A possible reason for this apparent decrease is the degradation of the UV-coating of CCD #19 with time, a known phenomenon for this type of CCD.

A full report on the commissioning of the new CCD #40 mounted in EFOSC2 at the ESO-MPI 2.2-m telescope can be found on 2.2-m team WWW pages at the address:

http://www.ls.eso.org/lasilla/Telescopes/2p2T/2p2T.html.

Overhaul and Attempted Upgrade of DFOSC CCD

J. STORM

The DFOSC CCD and dewar spent the month of July in Garching and Copenhagen where the dewar underwent a major overhaul to improve its vacuum capabilities.

It was also planned to replace the CCD (W11-4) with a new LORAL/LESSER platinum flash-gate device in Copenhagen. Unfortunately the new devices which the Copenhagen CCD group had received all suffered from manufacturing defects which appeared after a few thermic cycles of the devices. As a result, none of these devices could be used for the DFOSC camera. Instead the surface of the current CCD was chemically cleaned and another attempt at UV-flooding the device was performed. Unfortunately the UV-flooding did not prove stable and it was necessary to remove the UV-flooding all together. Various possibilities of significantly improving the quantum efficiency of the camera, i.e. acquiring a new CCD, are being investigated. A test report describing the current status of the array is available from the 2p2team web pages:
http://www.ls.eso.org/lasilla/Telescopes/2p2T/2p2T.html

News regarding the replacement of the current CCD will also be posted in the 2p2team news section.

About the Spectroscopic Stability of EFOSC1

S. BENETTI

This report discusses the long-term spectrophotometric stability of EFOSC1. EFOSC1 is a focal reducer attached to the Cassegrain focus of the ESO 3.6-m telescope. It is equipped with CCD #26. An earlier report (see *The Messenger* 83, 12) discusses the photometric stability of EFOSC1.

During thirteen nights covering the period from 1992 to 1996, spectra of several spectrophotometric standards were taken with EFOSC1 and the B300 grism. In order to collect all the light coming from the star, all standards were observed with wide slits (5 or 10 arcsec). The extracted spectra were corrected to unit airmass using the standard atmospheric extinction table for La Silla. From each spectrum, a spectral response curve for the B300 grism was derived. Out of fourteen spectra, twelve were taken under photometric conditions.

During the period from 1993 to 1996, additional spectra of several spectrophotometric standards were taken under photometric conditions with the R300 grism. Response curves for the R300 grism were likewise derived.

The dispersions around the average (zero point) response curve (using only those observations obtained under photometric conditions) for the B300 and R300 grisms were computed. The dispersion around the B300 zero point curve is small, with variations of 8–9% for wavelengths larger than 3800 Å, and a variation of about 12% around 3800 Å. The dispersion for the R300 grism is also small, with a variation of about 8% up to ~ 8500 Å, increasing to 10% around 9000 Å and to 16% towards the very red end of R300 wavelength range. This increasing variation can be understood in terms of the low signal of the observations and the poor sampling of the standard stars at these wavelengths, and to fitting procedures.

In Figure 1, the mean response curves for B300 and R300 are shown. They are respectively the mean of the fourteen B300 and the seven R300 response curves. Before taking the mean, they were normalised with respect to the zero point response curve. For the B300 curves, the normalisation occurs at 5500 Å; for the R300 curves, the normalisation occurs at 6500 Å. After normalisation, the variation of the B300 curves with respect to the mean B300 response curve is much smaller (~ 3%). The dispersion around the mean R300 response curve is also ~ 3%, but increases towards the red end.

In summary, the spectroscopic stability of the system (telescope + EFOSC1 + CCD#26) from 1992 to 1996 has been analysed. No temporal trends have been found. These findings reflect the results published in the EFOSC1 photometric study. Once more EFOSC1 proves its reliability.

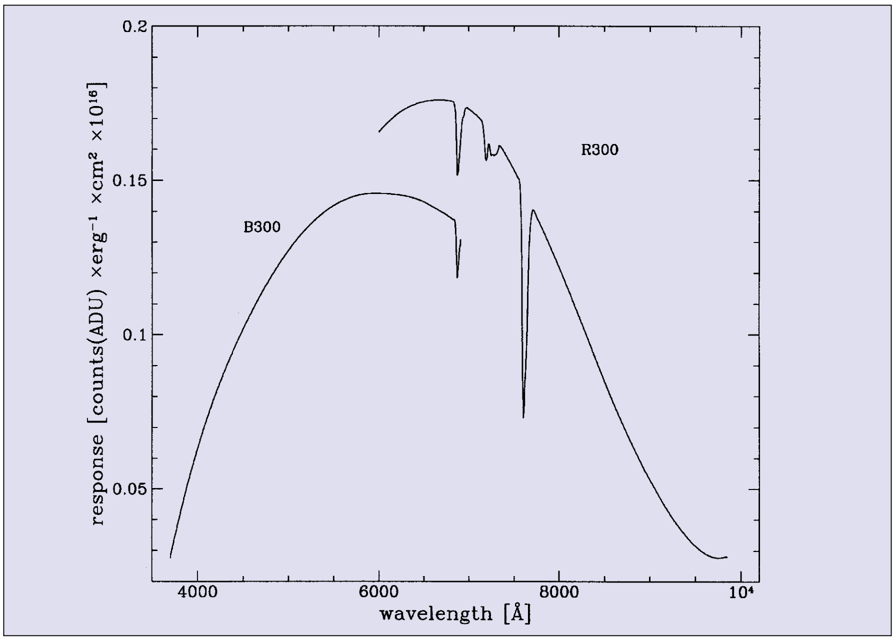

Figure 1: Spectral response curves of 3.6-m telescope + EFOSC1 + CCD#26 for B300 and R300 grisms (the conversion factor for CCD #26 is 4e⁻/ADU). The main atmospheric absorption bands have been tentatively modelled. These curves can be found in the EFOSC1, ESO-La Silla, WWW page (http: //www.ls.eso.org/lasilla/Telescopes/360cat/html/EFOSC1/efosc1.html) as fits files.