integration of the electronics and optics. The assembly of the instrument is now scheduled for November of this year. The La Silla staff will also adapt the EFOSC1 software to the NTT computer environment. This remarkable effort made possible the introduction of the project in the ESO planning without major disruptions of the projects already on their way in Garching.

Let us now briefly look at the capabilities of EFOSC2. There are two major improvements with respect to EFOSC1: the optically corrected field is about 30 × 30 mm at the detector and the UV transmission of the optics is expected to be significantly better (about 70 % at 3600 Å vs 35 % for EFOSC1). At the CCD, one arcsecond corresponds to 113 μm at the NTT and to 52 μm at the 2.2 m.

Note that because of the optimization for the 2.2 m, EFOSC2 tends to oversample the stellar images (or the slit) at the NTT in average seeing conditions. The actual performance will depend on the detector which will eventually be used. At present we consider three possibilities: a high density RCA (1,024 × 640 pixels, 15 × 15 μm in size), a mosaic of four Thomson CCDs (1,160 × 80 pixels, 23 × 23 μm) and a Thomson THX 31156 (1,024 × 1,024 pixels, 19 × 19 μm). The table summarizes the pixel matching and the available fields for the three detectors. Of these, the RCA CCD is the only one with well tested properties as it is used currently at EFOSC1. The other two are still in the development phase and their performance "in the field" will be known by the beginning of 1989 only.

Pixel Matchings and Fields of View of EFOSC2

	Detector	Pixel size (arcsec)	Field of view (min of arc)
At the NTT			
	HR RCA (2 × 2 binned)	0.26	2.2 × 1.4
	Mosaic 2 × 2	0.20	3.9 × 2.7
	THX 31156	0.17	2.9 × 2.9
At the 2.2 m			
	HR RCA	0.29	4.9 × 3.1
	Mosaic 2 × 2	0.44	8.4 × 5.7
	TH 31156	0.36	6.2 × 6.2

Finally, a few words on the schedule of these projects. It is foreseen to mount EFOSC2 at the NTT in the spring of 1989 and in July of the same year it should become available to visitors for a fraction of the time.

Applicants for observing time in period 43 with EFOSC1 at the 3.6 m will be asked to indicate whether they would consider acceptable to carry out their scientific programme or part of it with EFOSC2. This will leave open to the OPC the possibility to divert a fraction of the programmes to that instrument, thus relieving the present oversubscription rate of the 3.6-m telescope. EMMI and IRSPEC (the latter to be adapted to the other Nasmyth focus of the NTT) are expected to be offered in period 44. When EMMI will be operational, EFOSC2 will be moved to the 2.2 m, where it should be available from period 45. *S. D'ODORICO, ESO*

A Note on Equivalent Widths at the CES

It has come to my attention through my own observation and through discussions with other users of the CES, that there are substantial differences between the equivalent widths measured with the short camera plus CCD and those measured with the long camera plus Reticon. These differences are in the sense that the CCD widths are larger than for the Reticon. These differences appear to be wavelength dependent being larger in the blue and can be as large as 20–30 % around 3880 Å.

Although this is at first sight disturbing, it appears that programmes which compare equivalent widths in the same spectral region have no worries since both detectors have linear output. This is probably due to scattered light in the long camera, but this is not yet proved.

I am interested in further investigating this effect especially with a comparison of data taken with the long camera and both detectors, and in the blue and red regions of the spectrum. Thus I would like to request that CES users send me any information that will help track down the origin of this problem affecting our data. *P. CRANE, ESO*

MIDAS Memo

ESO Image Processing Group

1. Application Developments

A new package for reduction of data from the ESO Infrared Spectrograph, IRSPEC, has been developed in collaboration with M. Tapia. The package is described in more detail in a contribution of this issue of The Messenger. The new software, available as a CONTEXT inside MIDAS, includes a tutorial procedure that can be used as an on-line manual for first time users and also as a test for certifying new installations. This software and the corresponding manual will be released with the 88NOV version of MIDAS!

The package CLOUD, used for the analysis and modelling of interstellar absorption lines, has been substantially upgraded by M. Pierre.

A new project to organize and define the calibration information inside MIDAS has been started in collaboration with L. Johansson.

With the completion of the reduction software for IRSPEC, the first priority project in the area of applications is now the support of EFOSC in its different modes.