end of this year, while the complete set of grisms may be available in summer 1993. TIMMI will then provide a long-slit spectroscopic mode with a resolution $\lambda/\Delta\lambda \approx 300$ for a slit length of ≈ 35 arcsec.

As for the other IR systems on La Silla the preprocessor is a selfcontained hardware/software unit which also provides for a reasonable quick-look facility. Nevertheless, data transfer and data storage including more sophisticated on-line analysis of the raw data are required and have to be prepared. Right now TIMMI is operated from a MicroVAX which is made available on loan to ESO from the SAP for the observing runs. But even now all data can be easily transferred (via magnetic mass storage) to MIDAS for off-line analysis.

For operation at longer wavelengths (16.4 to 17.9 μm), a specialized lens is under construction which will be incorporated into the camera. This lens will be a doublet of CdTe with a pixel-scale of 0.45 arcsec/pix. A special antireflection coating will ensure that this mode will be $\approx$ 10 times more efficient as compared to using the standard Germanium camera lenses.

The next test period and a scientific observation period (the scientists of the SAP are entitled to several nights of guaranteed observing as a compensation for their effort) are scheduled for January 1993. ESO will inform the users in the announcement for observing period 52 (Oct. 1993 – March 1994) about how to apply for observing time with TIMMI.

Acknowledgements

We are grateful to all ESO staff in Garching and La Silla who supported us and thus made this first observing run successful. We would, however, like to specifically mention the help of B. Delabre, A. van Dijsseldonk, G. Fischer, M. Meyer, A. Moorwood and A. Silber in Garching and of H. Gemperlein, E. Matamoros, J. Roucher and U. Weilenmann at La Silla.

Fire at the 1-m Telescope!

During the past months, there had been much concern about how well the 1-m telescope dome is able to protect its valuable contents against the external elements. On some occasions, water was actually found in several places in the building after one of the numerous rainstorms this winter. As this might have a very adverse effect on the telescope electronics and optics, a programme to improve the water-impermeability of the dome was duly initiated.

On Sunday, October 25, asphalt had to be put on an area joining the building with the rotating dome. A torch was used in order to heat the asphalt to the appropriate temperature, but unfortunately some flames reached the inner part of the dome, which is covered by a special painting that is very inflammable. In a matter of seconds, all the inner part was on fire. An extinguisher that was ready for use was not of much help due to the great speed with which the fire progressed. The La Silla fire brigade came quickly (this was by the way the first time since its creation that its help was needed) and after a few minutes the situation was under control. Nobody was injured although the toxic gases produced inside the dome prevented people from entering without a mask for several hours.

As soon as possible, a thorough evaluation of the destruction took place. The inside cover of the dome was completely burnt. On November 10 it had already been cleaned and repainted. The cover of the floor suffered a lot, especially from drops of burning dome paint, and must be replaced. The inside crane is unusable. Hopefully, the delicate parts of the electronics and tele-

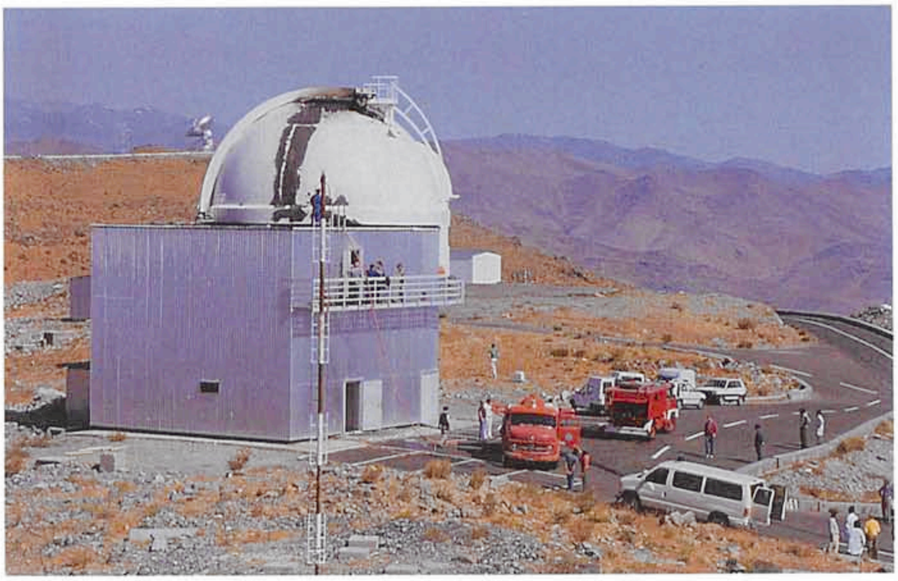

Figure 1: *The 1-metre dome after the fire on October 25, 1992. Photos by H. Barwig, München (who lost all his observing time).*

Acknowledgement

As visiting astronomers directly affected by the fire we would like to make the following remarks;

- Thanks to the quick, careful and efficient action of the ESO fire brigade, our special fiberoptic multicolour photometer (MCCP) was not severely damaged by the fire. After a lot of cleaning work and extensive tests that we were able to perform in the optical lab the next day, the instrument was once again operable.
- Shortly after the fire, the ESO staff members expressed their regret for the incident and immediately tried to obtain one or two extraordinary nights at one of the larger telescopes where our instrument could be used likewise: not an obvious gesture but one which was very welcome for us after the loss of all our observing time. Since it turned out that no test time was available, another observing run was arranged at the 1-m telescope in December.

We would like to thank all the people who made it possible for us still to perform our observations with such a short delay.

H. BARWIG, K.H. MANTEL,
Universitäts-Sternwarte München

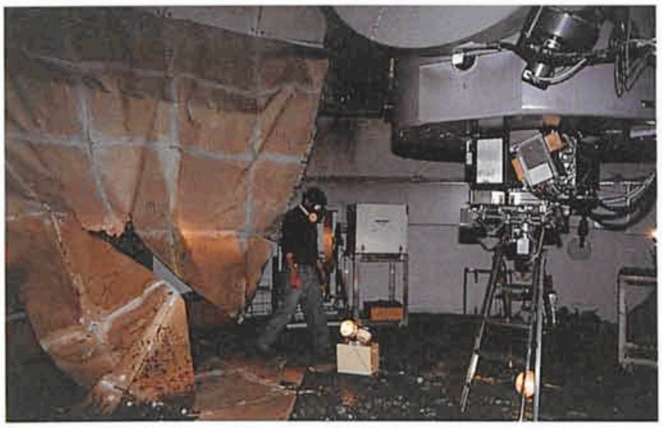

Figure 2: *The inside of the 1-m dome, just after the fire had been extinguished. The 1-m telescope and the multichannel photometer fortunately do not seem to have suffered bad damage. This was later confirmed.*

Figure 3: *On the next day, the cleaning work began. Thanks to a very dedicated effort by ESO staff, this only lasted two weeks and the telescope was again in operation by mid-November.*

scope control system suffered no major damage. The mirrors had to be cleaned; the secondary was realuminized, while it is not necessary to realuminize the primary immediately.

The image quality fortunately did not suffer from this bad experience, as shown by an Antares run conducted on November 6. The instruments on the telescope – a special photometer just installed when the fire started – did not suffer much, although it obviously had to be cleaned very thoroughly.

The La Silla operations and mechanics and construction groups made a tremendous effort to quickly return the telescope to the astronomical community. The normal schedule of observations started again on November 12, following some necessary test nights. *A. SMETTE, ESO-La Silla*

Astronomical Data Handling: Windows of Opportunity and of Challenge

F. MURTAGH, ST-ECF, Garching

It is the destiny of astronomy to become the first all-digital science. [1]

1. Medium and Message

The different sections of this article start up a few windows, in order to view some current developments affecting astronomical storage and retrieval. As an area driven powerfully by collective research efforts, we can only offer a small (but colourful!) palette of what is currently available.

Dusty card decks, screaming paper tape and (soon) cumbersome 9-track magnetic tape reels have given way to storage devices of the sort shown in Figure 1. The reel of 9-track $\frac{1}{2}$-in tape is shown for comparison.

Magnetic media include QIC, Exabyte and DAT cartridges, respectively using 6 mm, 8 mm and 4 mm tape technology.

QIC (referring to "Quarter Inch Cartridge", rather than speed) is similar to 9-track tape in capacity, but several times more compact. This streamer tape storage medium potentially suffers from heat, static build-up, and resultant positioning difficulties. Exabyte and DAT are helical-scan (hence storage-efficient) tape devices. The former is marketed uniquely by Exabyte. Unit costs for these storage media are uniformly low.

Optical media are laser-read and hence less susceptible to mishaps like head-crashes. They also are unhindered in backspacing. Periodic head realignment may however be necessary. Here we will comment on compact disks, optical disks both read-only and read-writable, and optical tapes.

CD-ROMs ("Compact Disks – Read-Only-Memory") are of somewhat better quality than their audio (music) siblings. They are being increasingly used for storage of astronomical catalogues (somewhat disingenuously referred to as "dead data"). The 12-in diameter optical disk shown in Figure 1 is of the sort used for receipt of Hubble Space Telescope archive data in Europe. The storage supported by CD-ROMs is soon to be 4 GB. And what of the near future? We will see widespread usage of erasable, or read-write, optical disks, using magneto-optic (MO) technology. These will, inter alia, come in $3\frac{1}{2}$-in diameter sizes, will cater for 128 MB, and will be attachable to anyone's laptop or notebook. For larger-scale applications,

[1] Larry Smarr, University of Illinois, quoted in *The Economist*, October 17, 1992.