

Multicolor photometry for a few objects suggests that our sample of OH/IR objects are redder than the previously known ones. Some of the sources are up to 100 times fainter at  $2.2 \mu$  than they are at  $3.7 \mu$ . In at least two objects the intensity appears to be still rising even at  $20 \mu$ . Winnberg's OH survey yielded the most sources within  $1/2^\circ$  of the galactic plane. The IR magnitudes and colours plus the local standard-of-rest velocities indicate that the new objects are reddened distant objects, perhaps more luminous on the average than the objects first found by Wilson and Barrett.

At this stage we may divide our research into two parts: the specific and the general study of OH/IR sources. In the specific study we note that the OH survey is statistically complete between  $18^\circ \leq l \leq 50^\circ$  with  $|b| \leq 1^\circ$  and in order to analyse the data the IR observations ought to be as complete as possible: 100 % of all the IR sources, extended wavelength coverage ( $1 \mu$  to  $35 \mu$  from the earth) and increased resolution in both wavelength and time. We have OH and IR

observations at 6-month intervals extending over 18 months and know that the sources vary. The variation (phase and amplitude) contains information about the pumping mechanism, mass loss and the density of the dust cloud surrounding the star. We hope to derive the absolute luminosity, distance and reddening of each system.

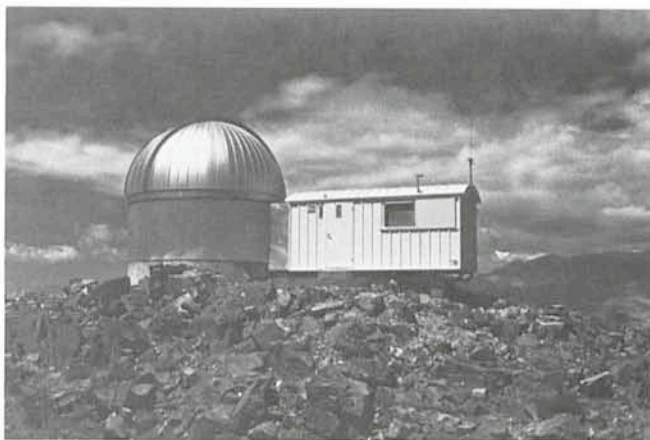
In the general study the OH/IR sources are probes in the study of the dynamics of the Milky Way. We are working with Dutch and German astronomers in identifying the IR counterparts of those high-velocity OH/IR sources found near the galactic centre. This project is complimentary to the one described by Blaauw in the June 1976 issue of the *Messenger*. Combining IR distances with OH radial velocities will allow a detailed study of the gravitational potential and mass distribution of the central part of the Galaxy while the McCormick Areas Programme is a study of the "local" galactic evolution.

## Swiss Astronomers on La Silla

*Last year saw the installation of a Swiss telescope on La Silla and the arrival of the first observers. Here Dr. F. Rufener, of the Geneva Observatory, tells about the telescope and some of the observing programmes which are being carried out:*



The 40 cm Cassegrain telescope of the Geneva Observatory on La Silla. The photoelectric photometer is at the Cassegrain focus.



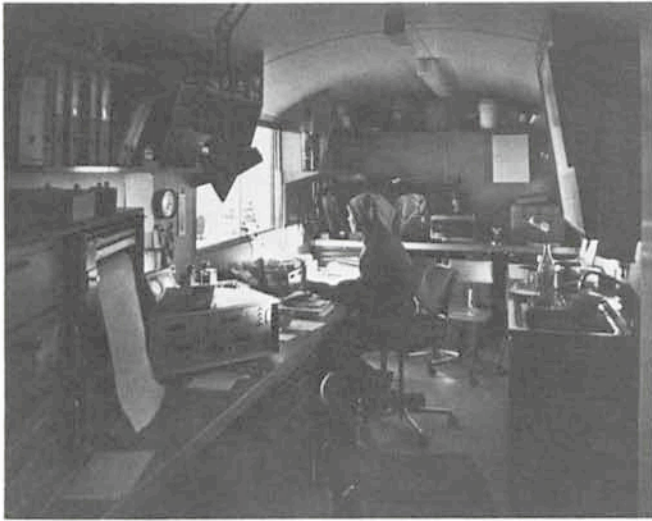
The Geneva Observatory station on La Silla.

Following a convention established in 1974, the Council of ESO has authorized the Geneva Observatory to set up a provisional observing station on La Silla. It has an Ash-dome of 4.60 m diameter which is linked to a working-site hut. This hut was shipped to La Silla as a container and consists of a sheltered observation post, a workbench with emergency repairs equipment and a kitchenette. The dome protects the equatorial table on which a Cassegrain telescope of 40 cm aperture and 7.20 m focal length has been mounted. The controls of the equatorial table allows an accurate setting by the reading of the digital display of the celestial coordinates (right ascension and declination). A special control panel situated near the strip-chart recorder offers the observer off-setting facilities (small-angle displacement of the telescope).

### The Telescope

The telescope is equipped with a classical photoelectric photometer on which UVB  $B_1$   $B_2$   $V_1$   $G$  filters of the photometric system of the Geneva Observatory have been mounted. The acquisition procedure is very simple; measures in direct





Interior view of the working-site hut, with the observation post to the left.

current are made through an amplifier with total counter-reaction and an analogue recording on roll-paper. A calibration device allows to check the dynamics of the sensitivity ranges ( $10^4$ ). Presently, this instrument obtains accurate photometric observations, in seven colours, for stars of magnitude  $4 \leq m_V \leq 10$ . An achromatic attenuator

reduces the flux of the bright stars which may therefore be observed without saturation problems (the magnitude scale is shifted by 4.5 units).

## The Observations

Several astronomical programmes are undertaken and pursued simultaneously. Of great importance is the establishment of a network of standard stars in the southern sky, which must be rigidly tied—in magnitude and in colours—to our standard stars in the northern sky. We also want to complete a variety of stellar samples already observed in the northern hemisphere, e.g. stars in the solar neighbourhood, the brighter stars, O-stars, B-stars of known distances (i.e. in the Scorpius-Centaurus association) and the stars of peculiar chemical composition. Some fields close to the southern galactic pole are observed methodically. We are also interested, in connection with stellar structure studies currently undertaken in Geneva, in having many, very complete and very accurate sequences of open star clusters.

Since the 10th November 1975, when this installation entered into operation, teams of two observers of the Geneva Observatory take turns on La Silla. They carry out the observations and the maintenance of the equipment. Several thousands of the measurements in seven colours have already been obtained and reduced in Geneva. The photometric quality of the site is really remarkable, and the number of clear nights is so high that it can be very tiring even for our best teams!

## Visiting Astronomers

(October 1976—March 1977)

Observing time has now been allocated for period 18 (October 1, 1976 to April 1, 1977). The demand for telescope time was again much greater than the time actually available.

This abbreviated list gives the names of the visiting astronomers, by telescope and in chronological order. The complete list, with dates, equipment and programme titles, is available at request from ESO/Munich.

### 152 cm Spectrographic Telescope

- Oct. 1976: Breysacher/Muller/Schuster/West, Wamsteker, v. d. Heuvel, Maurice.  
 Nov. 1976: Maurice, Seitter, Divan, Chincarini/Materne, Breysacher/Muller/Schuster/West, Pakull.  
 Dec. 1976: Pakull, Westerlund/Olander, Ardeberg/Lyngå/Cullum, Bergwall/Ekman/Lauberts/Westerlund, Denefeld, Materne.  
 Jan. 1977: Materne, Denoyelle, Havlen/Quintana, Breysacher/Muller/Schuster/West, Breysacher/Westerlund, J. P. Swings.  
 Feb. 1977: J. P. Swings, Kohoutek, Alloin, Moffat/Solf/Kohoutek.  
 March 1977: Moffat/Solf/Kohoutek, Ilovaisky, Wamsteker, Gieren, Havlen.

### 100 cm Photometric Telescope

- Oct. 1976: Havlen, Breysacher/Muller/Schuster/West, Mianes/Rousseau/Rebeiro.  
 Nov. 1976: Mianes/Rousseau/Rebeiro, Wamsteker, Crane, Chincarini/Materne, Alcaïno, Crane, Westerlund/Olander.  
 Dec. 1976: Westerlund/Olander, Pakull, Ardeberg, Maitzen, Alcaïno.

- Jan. 1977: Denoyelle, Haug, Wamsteker, Borgman, Wlérick, Adam, Breysacher/Muller/Schuster/West, Tinbergen.  
 Feb. 1977: Tinbergen, Vogt, Kohoutek, Danks, Chevalier  
 March 1977: Chevalier, Wamsteker, Chevalier, Sherwood, Wamsteker, Vogt.

### 50 cm ESO Photometric Telescope

- Oct. 1976: Duerbeck.  
 Nov. 1976: Duerbeck, Seitter, Pakull, Elst.  
 Dec. 1976: Elst, Heck, Vogt, Heck, Vogt.  
 Jan. 1977: Heck, Haug, Borgman, Vogt.  
 Feb. 1977: Knoechel, Vogt, Manfroid, Vogt, Krautter.  
 March 1977: Krautter, Gieren, Ilovaisky.

### Objective Prism Astrograph (GPO)

- Oct. 1976: Blaauw/West, Azzopardi, Heudier, Muller/Schuster/West.  
 Nov. 1976: Pakull, Blaauw/West, Heudier, Muller/Schuster/West.  
 Dec. 1976: Zeuge, Blaauw/West, Zeuge, Giesecking, Heudier.  
 Feb. 1977: Blaauw/West, Giesecking, Muller/Schuster/West.  
 March 1977: Amieux, Denoyelle, Giesecking, Blaauw/West, Muller/Schuster/West.

### 60 cm Bochum Telescope

- Dec. 1976: Hardorp, Oblak.

### 50 cm Danish Telescope

- Jan. 1977: Haug, Kohoutek.  
 Feb. 1977: Kohoutek, Sterken/Jerzykiewicz, Renson.  
 March 1977: Renson.