per image using the shift-and-add method and ten iterations of the Lucy image sharpening algorithm. The average instantaneous seeing was of the order of 0.4 arcsec and the resulting final resolution in the image is  $\approx 0.25$ arcsec. In the combination of spatial resolution and sensitivity this image by far surpasses anything available till now. The basic new results on the structure of the near infrared emission of the central 0.25 parsec of the Galaxy emerge already at this early stage of analysis.

First, the IRS16 complex is resolved into about 15 compact sources, most of which may be hot massive stars. Identifications are marked in the figure. Second, we find from repeated exposures a  $K \approx 12.5$  object within  $\approx 0.2$  arcsec of the radio source SgrA\*, whose location and positional uncertainty are marked by the cross in the figure. This source

may represent the long sought-for infrared counterpart of the compact radio source.

We would like to thank the ESO Director General for his vision to admit SHARP at the NTT and the ESO staff at Garching and on La Silla for their excellent professional support and enthusiastic commitment.

# Will La Silla Succumb to the VLT?

S. CRISTIANI, University of Padova, Italy

Concern has spread around the ESO community about the future of La Silla. Seeing the great technical efforts required by the VLT, some people fear that, according to the law of "man-power conservation", the efforts at La Silla will be correspondingly reduced, causing in due time a deterioration of its present quality and diversity. Is this apprehension based on real-life experience or rather on expectations?

An informal round-table discussion took place at La Silla on this subject in mid-August 1991. E. Cappellaro, B. Fort, P. Véron and myself were invited to discuss with the Director General, D. Hofstadt and J. Melnick the fundaments of these apprehensions. If negative or positive changes were noted in the last three, four years, since the VLT decision, what are the major concerns and how can the community safeguard La Silla?

The discussion started with an analysis of the present situation on the mountain, trying to single out its weak points on the basis of the outcome of the Users Committee Meeting held last May. A general consensus expressed concern about the present status of detectors, both optical and infrared, some of which appear to be out of date. The causes of this relatively negative situation were ascribed to the rather large number of CCDs now in operation at La Silla, probably more than at any other observatory in the world, and into the difficulty, at least till a few years ago, of getting modern IR detectors, due to export licence problems. The Director General, responding to a somewhat pessimistic view of P. Véron and B. Fort about the rate of improvement, promised that major efforts will be spent at the ESO Headquarters to replace as fast as possible the bad detectors; in the IR in particular, a Rockwell 256×256 array



that is believed to be one of the best on the market, will be ready at the telescope early next year. Asked by the Director General about the willingness of some European institutes to contribute to a series of standardized CCD cameras for ESO, B. Fort gave a positive answer.

The coming into operation of the NTT has been unanimously reported as a small-scale example of the impact the VLT might have on La Silla operations. In particular, D. Hofstadt lamented the underestimation of the amount of work required at La Silla to make this new telescope ready for common users: three years of heavy work have been necessary. In general it has to be carefully considered that whenever an instrument has been finished in Garching and is delivered at the telescope, a nonnegligible amount of work is still required at the Chilean site to take care of all those more or less important details which have been overlooked.

Some of those present noted that the NTT has also absorbed part of the resources of the Astronomy Support Department, and this has resulted in less assistance at telescopes like the 1.5-m Danish or the 2.2-m.

Due to the pressure of the VLT project, the Director General reported 24 positions at La Silla will be phased out of the existing 140 over the next two and a half years. This reduction will affect proportionally the various departments and, to maintain and improve the La Silla standards, a process of "streamlining" will be necessary. An important part of

OPEAN SOU	THERN OBSERVATORI -A N A L A 4	
A	vailable Telescopes and Auxilia	ary Equipment
		1700
	Infrared Photometer	-1.B.D.
20022	Prime Focus Direct Imaging	
3.6m	MEFOS or OPTOPUS	CCD
	EFOSC 1	/
	CASPEC	
	Fibre Link to CES	
	Landard and the second s	
	- IRSPEC	· 2-D Array
	A Direct Imaging Facility - SUSI	Lean .
0.5m		- CCD
J.SIII	(A/B Option available simultaneously.)	
	Standard Continuation	
	B EMMI High Besolution Echalle	CCD
	right resolution echene	
1	Direct Imaging	CCD
2.2m	EFOSC 2	000
	IRAC	+ 2-D Array
1.52m	Cass, B&C Spectrograph	+ CCD
	_	
1.4m	C Short Camera Blue Red	000
CAT	S Long Camera Blue Red	1000
		• T.B.D.
1m	Infrared Photometer	L
	Single Channel Photometer	PMT
1.54m	DEOSC	+ CCD
Danish		1207.00
90cm	Direct Imaging	+ CCD
Dutch	Direct maging	000
50cm	Color LID Directormator	PMT
Danish -	uvby Hp Photometer	1.101.1.
CRO	Wide Field Comore	CCD Massic
GPU	wide Field Camera	COD Mosaic
	With Prism	Distagraphic Plates
Schmidt	Without Prism	Photographic Plates
	SiS Mixer 1.3mm	Newsyland 100
SEST	SiS Mixer 0.87mm	Narrowband AOS
	0.1 miles 0.0 mm	Broadband AOS
0-01	1 SCDOTIKY 3 UMM	

Note: T.B.D. = Detector To Be Determined.

### Tentative Time-table of Council Sessions and Committee Meetings until end of 1991

November 11-1	2: Scientific Technical
	Committee
November 14-1	5: Finance Committee
November 28–2	9: Observing Programmes Committee
December 2-	6: Council, in Chile

the staff will be moved to Santiago, in the Vitacura premises, with the aim of reducing the number of people on the mountain and to economically support both La Silla and VLT Observatories in the future.

Fewer people on the mountain imply less board and lodging, less transport, fewer administrative requirements, allowing some economies. This of course involves a certain amount of simplification of La Silla: telescopes, like the Bochum and perhaps the ESO 50-cm, will be closed, the number of instrument change-overs will be reduced, the scheduled runs will become longer. Less direct assistance to the astronomers will necessarily imply the preparation of better and more detailed telescope and instrument manuals.

D. Hofstadt illustrated the upgrades already taking place or planned for the next years: the 1.5-m Danish adapter will be renewed; the 90-cm Dutch has a new adapter and a CCD camera; IRAC will be upgraded; the prime focus at the 3.6-m is available for direct imaging (which could then be removed from the 2.2-m); the fibre spectrograph MEFOS will also be installed at the 3.6-m. A possible evolution of the telescopes and auxiliary equipment from now to 1993 and 1996 is shown in three ESO menus (see Figures), according to a document presented by the Director General to the Council. These are illustrations, not, as vet, decisions.1

However, the simplification of the La Silla instrumentation, as remarked by E. Cappellaro, is a very delicate process, especially when the final decisions about the various instruments have to be taken. Many people, for example, would be upset if the B&C spectrograph, the only one allowing certain investigations of galaxy dynamics, is removed from the 2.2-m, others will cry if CASPEC is confined to the ESO 1.5-m, and even J. Melnick disagrees with D.

<sup>&</sup>lt;sup>1</sup> Readers/ESO users are reminded that suggestions and comments are welcome and may influence ESO decisions. Please direct your communications to the Director General.

Hofstadt about removing the direct imaging facility at the 2.2-m. It is obvious that a larger involvement of the community of users in these decisions must be ensured. The importance of playing a leading role in large-scale digitized surveys of the sky was emphasized, to avoid to be confined to a secondary place as may have happened with the ESO Schmidt compared to the UK Schmidt. The DG replied that in this respect the scientific pressure of the ESO astronomers will be the driving factor.

B. Fort suggested that some work on the upgrading of the instruments could be carried out by institutes in Europe. This received a positive echo by the Director General, who explained that the examples of MEFOS and TIMMI are illustrative in this sense and that the main limitations from the ESO side are related to manpower rather than to money. A general consensus was expressed about the importance of transmitting the experience gained in the VLT design to La Silla and to ensure a strong coupling of this project with the La Silla management. The VLT standards will become the La Silla standards: ethernet, VME, UNIX, MIDAS, VxWorks, The people of the VLT project will spend a considerable fraction of their time in Chile: having many short duty trips would simply not work in the case of the VLT, and this will allow the interchange of precious experience.

Finally, concerns were expressed about the future of MIDAS, the standard image-processing system at the telescopes in the VLT era. As remarked also



in the Users Committee last May, although there is a general satisfaction with its improvements, the progress of MIDAS is considered slow compared to IRAF. This fact together with the improvement of reduction facilities at the home institutes, is the probable cause of the decrease in the number of astronomers coming to Garching to use the ESO facilities. The Director General explained that it is not ESO's intention to compete with the much larger manpower available for the development of IRAF/STSDAS. MIDAS will be offered as built-in-house software for off-line reductions of data acquired with ESO telescopes and, with the same core, but with different and more userfriendly interfaces, as data acquisition software. MIDAS is coming into La Silla telescopes' control rooms!

This was more or less the point reached when the round table had to cede to an incipient clear observing night. I hope that the reader could get from this incomplete report enough material to answer the primitive question indicated by the title of this contribution.

## **Visiting Astronomers**

### (October 1, 1991 - April 1, 1992)

Observing time has now been allocated for Period 48 (October 1, 1991 – April 1, 1992). As usual, the demand for telescope time was much greater than the time actually available.

The following list gives the names of the visiting astromomers, by telescope and in chronological order. The complete list, with dates, equipment and programme titles, is available from ESO-Garching.

#### 3.6-m Telescope

Oct. 1991: Mazure et al. (1-014-43K), La Franca/Hawkins/Véron/Andreani, Vettolani et al. (1-019-47K), Crane/Mandolesi/Palazzi/ Wampler, Spite F./Spite M./François, Lennon/Kudritzki/Groth/Gabler, Groth/Kudritzki/Lennon/Humphreys, Testor/Schild.

Nov. 1991: Macchetto/Turnshek/Sparks, Danziger et al. (6-003-45K), Shaver/Böhringer/Ebeling, Miley et al. (2-001-43K), Warren/ Iovino/Shaver, Warren/Hewett, Courvoisier/ Bouchet/Blecha/Orr/Valtaoja, Danziger/ Bouchet/Gouiffes/Lucy/Fransson/Mazzali/ Della Valle, Habing et al. (7-008-47K), Gouiffes/Ögelman/Augusteijn Chincarini/ Buzzoni/Molinari/Cavanna.

Dec. 1991: Soucail/D'Odorico/Fort/Altieri/ Mellier, Lorenz H./Mücket/Müller/Doroshkevich, Giraud/Ellis/Infante/Nottale, Marano/ Cimatti/Mignoli/Zitelli/Zamorani, Møller/ Warren, Dennefeld/Bertin/Boulanger/Moshir, De Boer et al. (3-003-43K) – Wolf, Gratton, De Boer et al. (3-003-43K) – Molaro, Anton/ Seifert.