

ESO, the European Southern Observatory, was created in 1962 to . . . establish and operate an astronomical observatory in the southern hemisphere, equipped with powerful instruments, with the aim of furthering and organizing collaboration in astronomy . . . It is supported by eight countries: Belgium, Denmark, France, Germany, Italy, the Netherlands, Sweden and Switzerland. It operates the La Silla observatory in the Atacama desert, 600 km north of Santiago de Chile, at 2,400 m altitude, where fourteen optical telescopes with diameters up to 3.6 m and a 15-m submillimetre radio telescope (SEST) are now in operation. The 3.5-m New Technology Telescope (NTT) became operational in 1990, and a giant telescope (VLT=Very Large Telescope), consisting of four 8-m telescopes (equivalent aperture = 16 m) is under construction. Eight hundred scientists make proposals each year for the use of the telescopes at La Silla. The ESO Headquarters are located in Garching, near Munich, Germany. It is the scientific-technical and administrative centre of ESO where technical development programmes are carried out to provide the La Silla observatory with the most advanced instruments. There are also extensive facilities which enable the scientists to analyze their data. In Europe ESO employs about 150 international Staff members, Fellows and Associates; at La Silla about 40 and, in addition, 150 local Staff members.

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parable to those measured with the standard photometers.

Table 1: *Sky* background with IRAC/2.2*

Filter	Background	
	ADUs/sec/pix*	mag/arcsec ²
J	1.5	14.5
H	2.8	13.8
K	6.2	13.7
L	19000	2.6

*With the 0.5"/pix scale.

With the new pupil stop the camera can be used efficiently at L with the 0.8"/pix scale using DITs of 0.8–1.0 sec depending on the actual outside temperature. At present the limiting sensitivity is still determined mostly by the poor quality of the Philips array, but the lowering of the background should be considered a first step toward the upgrade of IRAC-1 with a better array which is expected to occur in April–May 1992.

A. MONETI and H. GEMPERLEIN,
ESO, La Silla

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