

Whereas in the previous implementation of AGL the graphics display in MIDAS was controlled by a separate server, in the new version the graphic display and the image display use a common server. This possibility became available by building an additional IDI driver. As a positive side effect the interaction of the user with the graphics window using mouse and keyboard will now be identical to the interaction with the display window. The new driver will also open possibilities to integrate the graphics and display software more on the level of application software. The new IDI driver for AGL was written by L. Fini during his two weeks at ESO in the autumn. We would like to thank him for this effort.

With the introduction of the IDI driver, installation of AGL for MIDAS graphics is now possible on all workstations supporting X11. Since, for the graphics window MIDAS will only use the IDI driver, all the different server options for the various workstation models are no longer needed. Therefore, we have decided to strip the AGL distribution kit of the parts not used by MIDAS and to integrate the stripped version into the MIDAS directory structure. As a result of this, starting from the 89NOV release of MIDAS a separate implementation of the graphics software will not be needed. The complete distribution kit of AGL, if one wants AGL as a stand alone package, is available from the Italian Astronet Group.

### 3. MIDAS Support for GNU Software

MIDAS has been ported to the GNU C-compiler and will now compile without warnings under both UNIX and VMS. This is the first strict ANSI C compiler under which MIDAS has been thoroughly tested and we do not expect problems with other ANSI C compilers.

The major advantage of the GNU C-compiler is that it's free. It was developed by the GNU project which aims to provide high quality UNIX system software free of charge. The final goal is to provide a full implementation of UNIX with all utilities for any 32-bit machine. The man behind the GNU project is Richard Stallman, a former MIT AI-expert, who wants to promote software sharing between programmers and fight against the restriction placed on software preventing others from using it without paying. Other software available from the GNU project today is the 'emacs' editor, a source-level debugger and numerous utilities in beta-release.

In addition, the GNU C-compiler ('gcc') is fast and produces good code. We have made some rudimentary tests on our main development machines,

Sun SPARC-stations and a VAX 8600 running VMS, and have found some interesting results. On the Sun, 'gcc' is virtually as fast as 'cc' when compiling without optimization, but twice as fast when compiling with optimization. The code produced is virtually the same quality, both in terms of code size and execution time. Under VMS, only the execution time of the code produced by 'gcc' has been tested and found to be slightly worse, say 10–20%, than the code produced by the VAX11 C-compiler. For MIDAS, however, this is not a major concern since most of the CPU intensive code is written in FORTRAN 77.

The MIDAS developing team encourages the use of the GNU 'emacs' editor, since it, unlike 'vi' and EDT (and derivatives), runs under both UNIX and VMS and also can emulate both 'vi' and EDT.

How do I get GNU software? The software is available in tar-tape format with anonymous 'ftp' from several sources on the Internet. The latest versions are available from 'pre.ai.mit.edu'. Both tar-tapes and VMS backup tapes are available from 'Free Software Foundation' (address below). They take a nominal distribution fee and only accept orders with payment. However, since the software may be distributed freely, you may acquire it from any source where you may have heard that the software is being installed. The computer science department of your local university may be worth a try. Note that the GNU C-compiler cannot be compiled by the VAX11 C-compiler, so the VMS version

must be obtained in compiled form from a VMS source.

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### 4. Personnel

The Image Processing Group deeply regrets to announce that Daniel Ponz has left the Group to take up a position in ESA. Daniel participated very actively in the MIDAS project from its start in 1981 and developed since then many important packages such as the Table File system and most major spectral reduction packages. We wish him all the best in his new position and will try to minimize the effects for MIDAS of this significant loss.

### 5. MIDAS Hot-Line Service

The following MIDAS support services can be used to obtain help quickly when problems arise:

- EARN: MIDAS @DGAESO51
- SPAN: ESOMC1::MIDAS
- Tlx.: 52828222 eso d, attn.: MIDAS HOT-LINE
- Tel.: +49-89-32006-456

Users are also invited to send us any suggestions or comments. Although we do provide a telephone service we ask users to use it only in urgent cases. To make it easier for us to process the requests properly we ask you, when possible, to submit requests in written form through either electronic networks or telex.

## Manuel Cartes V. (1952–1989)

The departure of Manuel Cartes on September 19th was received with a profound impact at La Silla. Manuel was highly esteemed and appreciated as a colleague and a friend.

He first came to La Silla as a summer student in 1976 and 1977 before joining the ESO staff as a graduated electronics engineer in 1978. Within the electronics section he demonstrated a great enthusiasm and a first rate dedication to his work. He personified a style of commitment which proved to be the base of a successful technical operation. Often Manuel could be seen late at night at the telescopes ready to assist, sparing neither time nor efforts.

In 1982 he went to Europe with the challenge to interface the MPI 2.2-m telescope controls to our environment. It is largely thanks to him that the 2.2-m telescope electronics could be brought in line with our maintenance facilities.

In 1987 he was assigned to the NTT project and started his involvement in Garching. Then came a terrible sickness. At La Silla we had to witness his courageous fight to face this sickness which would eventually overcome his will.

We wish to assure his wife Sylvia, his sons Manuel and Patricio that the memory of his kindness, dedication and friendship will never leave our observatory.

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, the Federal Republic of 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 thirteen optical telescopes with diameters up to 3.6 m and a 15-m submillimetre radio telescope (SEST) are now in operation. A 3.5-m New Technology Telescope (NTT) will become operational soon 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, FRG. 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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## Manuel Cartes V. (1952–1989)

El fallecimiento de Manuel Cartes el día 19 de septiembre causó un profundo impacto en La Silla. Era una persona muy estimada y apreciada por todos, tanto como colega y como amigo.

Sus primeros contactos con la ESO los tuvo en los veranos de 1976 y 1977 cuando realizó su práctica profesional como estudiante universitario. En 1978 pasó a formar parte del personal de planta de la organización como ingeniero civil electrónico. Desde un principio demostró gran entusiasmo y una dedicación total a su trabajo dentro del laboratorio de electrónica. Personificaba un estilo muy propio de compromiso en el cumplimiento de sus obligaciones, estilo que demostró ser el fundamento del éxito en las diversas operaciones técnicas. A menudo se podía ver a Manuel, tarde en algún telescopio, siempre dispuesto a cooperar, sin prestar atención ni al tiempo ni al esfuerzo requeridos.

En 1982 fue enviado a Europa con el desafío de participar en la implementación de la interfase entre el telescopio de 2.2 m del MPI y nuestros sistemas. Gracias, en gran parte, a su trabajo la electrónica del telescopio pudo conectarse en línea con nuestros sistemas de mantención.



En 1987 fue asignado al proyecto del telescopio de nueva tecnología (NTT) y debió dirigirse nuevamente a Garching para participar en dicho proyecto. Luego fue víctima de una terrible enfermedad. En La Silla fuimos testigos de su valiente lucha contra el mal que lo aquejaba, el cual, finalmente, doblegó su voluntad.

Deseamos asegurar a su esposa Silvia y a sus hijos Manuel y Patricio que el recuerdo de su bondad, dedicación y amistad perdurará en nuestro observatorio.

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