sions of our current process, but the development of a higher level QC process will be more challenging.

Last Words: Other DFO Services

In this article, we have focused on our main role: quality control for the VLT data flow. To close, we briefly outline the other services DFO provides to the ESO user community.

As mentioned above, the VLT QC revolves around calibration data. Most quantitative QC is done using calibration products, e.g. dispersion solutions or master flat fields. It is the responsibility of DFO Garching to produce such calibration products and then re-use them in a number of ways. Calibration products are ingested into the ESO Science Archive; they are included in the standard data packages produced for Service Mode users; they are used within the on-line DFS Pipeline system on Paranal; and they are used to produce science data products for Service Modes users.

Another important DFO service is processed Service Mode science data. Science data are only processed when an appropriate pipeline is available. Science pipeline data products are delivered with the understanding that they may not be publication quality in all cases. However, these products can be very useful for making the initial assessment of science data quality and for providing guidance on how to process the delivered science data for a specific application.

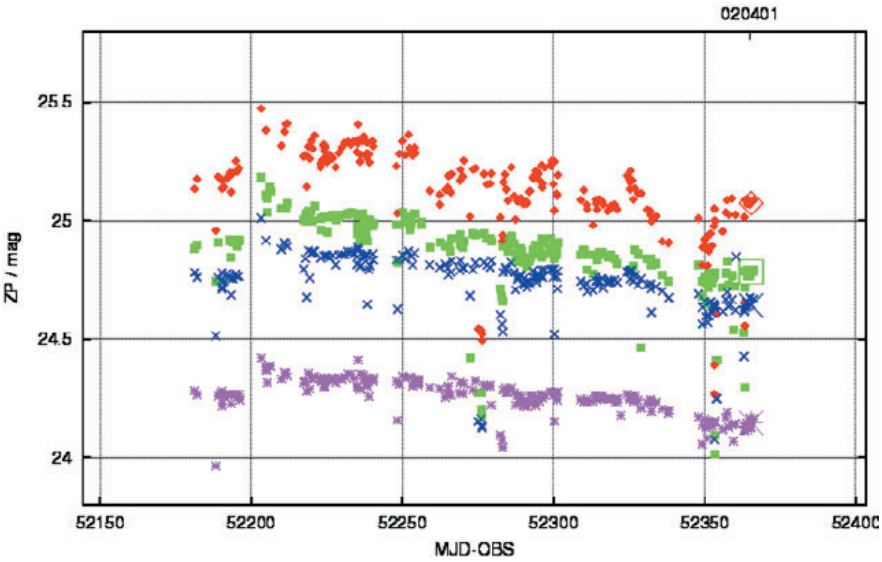


Figure 8. ISAAC photometric zeropoints for Period 68, in photometric bands Js (green squares), J (red diamonds), H (blue crosses), and K (asterisks). Horizontal axis is Julian Date of observation (MJD-OBS), vertical axis is zeropoint in magnitudes. Last civil date of observation on the plot is 2002-04-01.

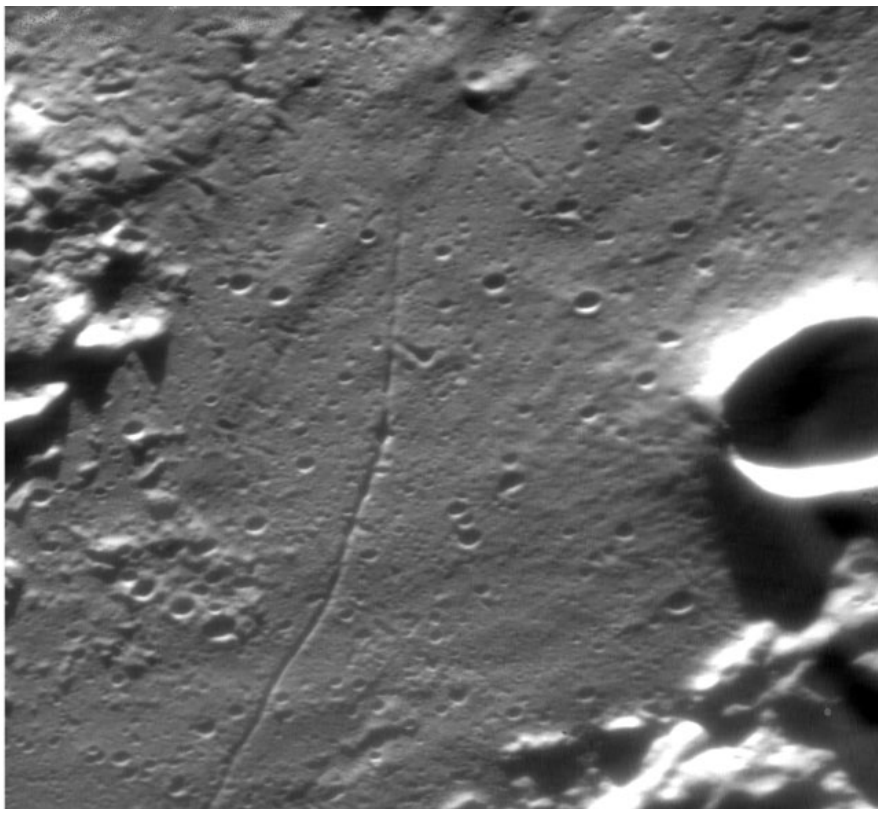
When a Service Mode run is completed, DFO creates and delivers a standard data package to the run Principal Investigator. This data package contains all the raw science and calibration data, pipeline science and calibration products when available, and a variety of supporting listings and reports. Technical support (e.g. media manufacturing) is provided by the ESO Science Archive team.

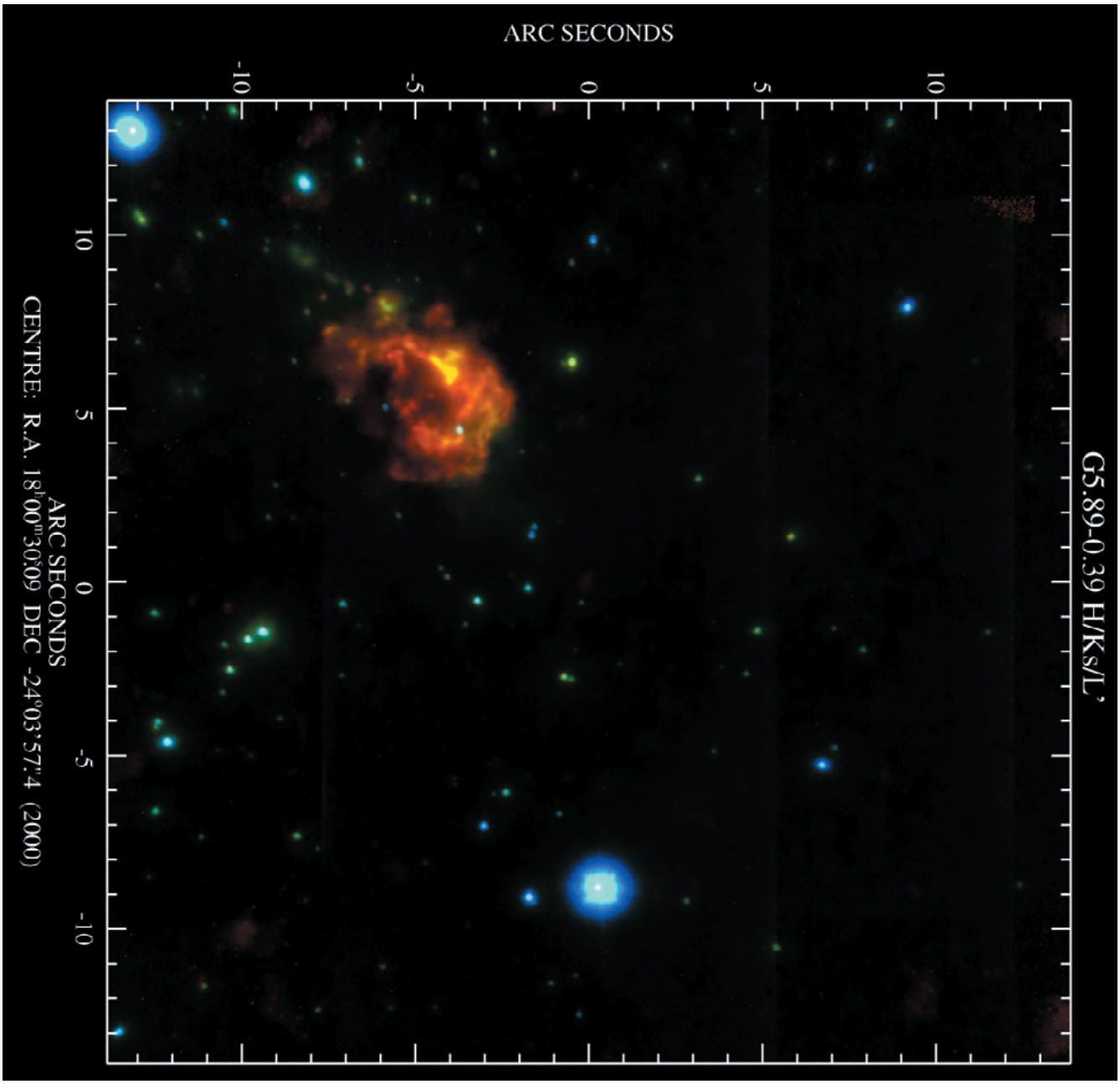
Last but not least, DFO maintains extensive documentation about what we do and how we do it, on our QC Web pages: http://www.eso.org/qc/. Our detailed descriptions of how science and calibration data are processed using the current generation pipelines may be particularly interesting to users.

Acknowledgements. The QC process described here is the result of the joint work of the QC Garching team which is constituted, apart from the authors, by Wolfgang Hummel, Roberto Mignani, Paola Sartoretti, and Burkhard Wolff. We also thank our past DFO colleagues Paola Amico, Ferdinando Patat, and Bruno Leibundgut, and all our PSO colleagues, especially Andreas Kaufer.

Recent NAOS-CONICA Images

Walking on the Moon: *The ability of NAOS to do wavefront sensing on extended objects was once again demonstrated by closing the AO loop on the peak of a sunlit lunar mountain. This image was obtained with CONICA through a 2.3 micron narrow-band filter and shows details down to 0.1 arcsec (which corresponds to a ground-resolution of 175 metres, quite comparable to the resolution obtained from lunar orbit with the NIR camera aboard the Clementine spacecraft). The NACO image covers a region of about 45 × 45 km.*
(Picture credit: Eric Gendron and the NAOS and CONICA consortia.)





NAOS/CONICA composite colour HKsL' image of the Ultra-compact HII region G5.89-0.39. The diffraction limited image nicely resolves the filamentary structure of the dust shell, which is most prominent in the L' band. At the distance of G5.89-0.39 of 2.6 kpc, the diffraction limited resolution of 60mas in Ks corresponds to 150 A.U. (Picture credit: Markus Feldt and the CONICA and NAOS consortia.)

News from La Silla

L. GERMANY, ESO

FEROS News:

In preparation for moving of FEROS to the 2.2m, a FEROS maintenance mission was completed in February 2002. The old efficiency of FEROS+telescope was confirmed (around 16%), but it was discovered that the sky fiber throughput had subtantially degraded with time. We re-adjusted the orientation of the sky fiber+microlens inside the fiber head, so that its beam overlapped that of the object fiber at the distance of the secondary mirror. This operation successfully restored the sky fiber throughput to the levels achieved during the original commissioning of FEROS. The sky fiber now receives almost 90% as much light as the object fiber over most of the spectral range.

WFI News:

For users of the WFI, we now have available bad-pixel masks and the fringing pattern for the Ic/Iwp filter. You can retrieve these images, learn how they were made and how to use them at the following websites:

Fringing Pattern:
http://www.ls.eso.org/lasilla/Telescopes/2p2T/E2p2M/WFI/CalPlan/fringing/

Bad Pixel Masks:
http://www.ls.eso.org/lasilla/Telescopes/2p2T/E2p2M/WFI/CalPlan/BADPIX/