Users' Committee

30th Meeting

Garching, April 3 and 4, 2006

ESO Fact Sheets

The fact sheets for the 30th Users' Committee meeting are attached in the following sequence:

- Report from the La Silla Paranal Observatory
- ALMA Progress Report
- Report from VISAS

La Silla Paranal
UC Fact Sheets – April 2006

Paranal site science operations

- VLTI with UTs and ATs is now entering a quasi-routine phase: we are now operating VLTI operations most of the nights (cf VLTI statistics below).
- Rapid Response Mode is up and running; 3 triggers so far.
- Instrument-related public documentation is now updated systematically for each period. Version number is the Period number to avoid confusion.
- The offline workstations (where visitors process their data) replaced from aging HPs to powerful Linux boxes. Both raw and pipeline-reduced data are flowing to these machines. Instrument pipelines are installed on the offline machines, so that the data can be re-reduced tuning parameters and file list.
- Terminals in control room upgraded from XTerms to Linux boxes. Much faster response, no more color or memory restrictions
- Astronomers: 3 staff and 8 fellows started (replacement and new positions); a revised, structured training plan has started aiming at uniform procedure execution, rapid expertise development, and motivation of the staff. Fellow recruitment campaign for 2006 completed: 10 fellows recruited.
- La Silla – Paranal unification proceeding: the Data Handling Groups have been merged; Telescope/Instrument Operators go through inter-site cross-training; tool transfer for better uniformity/compatibility. The specificities of La Silla and Paranal science operations are preserved.
- “Action Remedy” upgrade: much better problem tracking and control. Used for Problems, Actions, DVD for visitors, Targets of Opportunity trigger, End of Mission Reports...
- Coordination VisAs - User Support Deptm - SciOpses - Instrumentation - Quality Control -Archive through weekly meetings; many issues (technical, obs.program...) discussed and solved before they become problems

La Silla Site science operations

- Thin TIO staffing: streamline operations, increase operational efficiency, homogenization across sites

- Re-organization of daily operations, engineers and technicians included in day operations (LN2 re-filling, data backup, telescopes and instrument start-up and set-up)
- LaSilla Instrument Operation Teams (IOTs) established, instrument scientist and instrument engineer analyse and solve problems together
- Major update of SOFI user manual (vers 1.98, 1/3/2006), FEROS user manual f. 2p2 telescope (vers. P77, 23/11/2005), WFI handbook (vers 2.0, 4/5/2005)
- new TIMMI2 user manual released (vers 1.0, 11/11/2005)
- HARPS high efficiency fibre commissioning, mode released for P78
- GROND preparation
- WFI decontamination, quality (flatfield) monitoring improved (8/2005)
- SOFI grism and slit wheel alignment problems, intervention partially successful
- FEROS service mode data delivery via Garching/archive (starting P76)
- TIMMI2 spectropolarimetry commissioning (9/2005 + 1/2006)
- SUSI2 windowing mode restored (1/2006)
- La Silla data analysis and quick look tools release for CES (11/2005) and SOFI (2/2006)
- 3 Next Generation Technical CCDS installed at the NTT (12/2005)
- La Silla Night Report Tool in routine operation, analogue to Paranal tool (3/2006)
- TIO exchange/training to Paranal

APEX site science operations

- The telescope was successfully commissioned and ready for use in July 2005.
- The APEX-2a facility heterodyne receiver (tuning range: 279-381 GHz) was installed and commissioned in July. It has excellent noise characteristics, but produces unstable baselines, which makes observations of weak lines with linewidths larger than 50 km/s difficult. The baseline stability is presently being investigated and the receiver should be improved for observations starting in period 77.
- Science verification observations started on July 14 using APEX-2a and FLASH (a PI heterodyne instrument from MPIfR operating in the 460 and 810 GHz windows, and available to the community through collaboration with MPIfR).
- Observations were carried out from August to December.
- During 2005 observations were made in blocks of three weeks with one week of technical time in between. This will continue in 2006.
- APEX is operated in service mode only, for 10 – 14h/day, mainly during night time. This mode of operations will continue during 2006.
- Data taken during ESO time will be available through the ESO archive.

- Web pages are now available for preparation of proposals (www.apex-telescope.org).
- APEX 2a and FLASH available during 2006.
- LABOCA, the 300-pixel bolometer array operating at 870 microns, will be installed and commissioned during the first half of 2006. A delta call for proposals will be issued.

Status of the instruments

HARPS

- The high efficiency mode “EGGS” has been commissioned and is offered in visitor mode for Period 78. The gain in flux with respect to the HARPS base mode (“HAM”) is 75% at 530nm with a seeing of 0.8". The achievable radial velocity accuracy of the EGGS mode is about 30m/s. A dedicated version of the data reduction pipeline for EGGS is under development by the HARPS consortium.

CES

- The problems with the drift of the pre-disperser have eventually been solved.

EFOSC2

- No news.

TIMMI2

- Interventions: regular maintenance for cryogenics in August was used to overhaul the filter and polarizer unit.
- The polarization mode has been commissioned and characterized in October.
- TIMMI2 will be decommissioned and is not offered anymore in P78.

EMMI

- The punching of the MOS masks has been transferred to the EFOSC punching machine (PuMa).
- The instrument optics has been cleaned from dust.
- The adaptation of the VIMOS/FORS pipeline for EMMI MOS is under investigation.

SOFI

- SOFI required the following interventions:
  - May: new grism wheel installed, collimator serviced.
  - November in parallel to NTT recoating: maintenance of the cryo-cooler system, improvements of the slit and grism alignment. In parallel, software solutions for automatic alignment during the observations have been implemented (a la ISAAC).
- The adaptation of the ISAAC pipeline for SOFI is under investigation.

SUSI2

- The window readout mode had to be decommissioned for Period 77 due to technical problems but has been restored in the meantime.

WFI

- New baffling has been introduced in the adapter, which reduced the light concentration by a factor of two.
- During an uncontrolled warm-up of the instrument, the CCDs were contaminated. A first decontamination was carried out in September, which restored the response of the detectors to within 2% of the original value. Since then the contamination is slowly building up again with a rate of 1% per month at the edges of the mosaic. The effect is closely monitored. A next decontamination session is scheduled for April this year.
- The WFI GRISM cannot be operated with the FEROS adapter. Since this mode for slitless spectroscopy has not been requested for the last periods it will not be offered anymore from Period 78 on.

FEROS

- The long-pending installation of the ADC has not yet been completed because of significant delays in the deliveries by manufacturer. The delivered prisms had to be returned twice being out of transmission and dispersion specifications. The correct prisms were received in January. The installation and commissioning will be scheduled asap.

FORS1

- A new volume phased holographic grism, the 1200B grism, has been offered for FORS1 since P77 and replaces the FORS2 Echelle mode. The 1200g grism has been decommissioned at the same time.
- The yearly instrument maintenance has been carried out during the UT2 recoating.

FORS2

- A new multi-shift HIT mode for simultaneous spectroscopic observations of object + reference with high time resolution has been commissioned and has been offered with a limited number of fixed configurations for Period 77 in Visitor Mode.
- The yearly instrument maintenance has been carried out during the UT1 recoating.

ISAAC

- Interventions: a major intervention was carried out in April to correct for problems accumulated over the period January 2004 - April 2005. Most problems could be corrected. In particular the collimator became operational again. A second smaller intervention was required in May to correct for the pupil misalignment and instability introduced during the first intervention.

- The cryo-cooler has failed two weeks before the planned maintenance during the UT1 recoating (December) and had to be replaced in an emergency intervention.
- The long-standing 50Hz pick-up noise problem has been solved by replacing the AC fans by DC fans in the IRACE detector system.
- The new CPL based ISAAC pipeline will be released to the public for the beginning of Period 77.

UVES

- Interventions: the first overhaul intervention of the preslit functions was carried out in June during the UT2 coating. The servicing increased the reliability of the pre-slit functions (image slicers, iodine cell, calibration mirror) to the original level.
- A stabilized flatfield lamp has been installed in the UVES calibration unit to allow an independent monitoring of the instrument throughput. The corresponding fibre link is planned to be updated in the coming months to cover the full spectral range of UVES.
- A long slit filter set has been installed and characterized. The Halpha, Hbeta, OIII 5007, OIII4363, NII5755, OI6300, SII6724 and HeII4686 filters allow echelle long slit spectroscopy with slit lengths up to 30". The new filters have been offered in visitor mode for P77.

FLAMES

- The yearly decontamination of the GIRAFFE CCD was carried out in May.
- A rotation offset of 0.08 deg for both fiber plates has been determined with UCAC2 fields. The instrument rotator offset has been updated accordingly to 45.08 deg. The FACB guiding has been updated to determine the rotation offset if 4 guide stars available. The information of the rotation offsets is logged for long-term monitoring.
- The GIRAFFE simultaneous calibration mode suffered for several weeks from low flux levels delivered by the ThAr lamp. The nominal flux level has been restored in December.
- The GIRAFFE pipeline will be released to the public for the beginning of Period 77.

VIMOS

- In general, VIMOS has operated with "open shutter efficiencies" comparable to other optical Spectro Imagers like FORS. The technical downtime has stabilized at the 5% level, which appears acceptable from operational considerations but is still high compared the other VLT instruments. With the increased reliability of the instrument, emphasis could be given to improve the instrument stability and to further improve the quality of the obtained data.
- A new flexure compensation system has been installed in all quadrants. Properly tuned, the flexures are reduced to <2 pixel p-p for a 180 deg rotation of the instrument.

- Four new highly efficient VPH HR_RED grisms have been installed in September and were available for the beginning of Period 77. The efficiency has increased up to a factor of 2 w.r.t to the old grisms.
- Beginning of September a major problem with the mask2ccd transformation as distributed with the pre-imaging data was identified in Quadrant 2. To solve the problem without affecting the users a technical template was created to modify the mask-definition files prior to manufacturing.
- As consequence of the hardware interventions and improvements, the constraints of instrument position angle for filter insertion/removal could be removed.
- The VIMOS pipeline has been released to the public in October.

VISIR

- VISIR started science operations with Period 75. VISIR works with a very high operation efficiency comparable to other VLT IR or even VIS instruments at low downtimes.
- The first scheduled maintenance of instrument functions and cryogenics was successfully carried out during UT3 recoating in October.
- During the maintenance intervention improvements in the detector temperatures and stability have been implemented which led to an increased sensitivity of the instrument.
- The chopping accuracy for large chop throws has been improved considerably through upgrades of the telescope control software.
- MR spectroscopy in large parts of the N and Q bands and HR (cross-dispersed) echelle spectroscopy in a large number of lines of astrophysical interest have been made available for Period 77.
- Target acquisition in imager mode for spectroscopy allows now to acquire 10 times fainter targets. This new acquisition mode became available for Period 77.
- The VISIR pipeline has been released to the public in January.
- The procurement of a new filter set has been started. Provision has been made for the installation and characterization of the filters at the end of Period 77.

NACO

- NACO faced repeated and serious problems with its cryogenic system: the contamination of the cryo-cooler cold-heads and the failures of the new compressor model due to overheating. The complete cryo-cooler system had to be replaced (August) and the temperature and performance of the compressors are closely monitored for guarantee reliable operation.
- Problems with chopping and counter-chopping have been encountered, which has led to restrictions on the allowed brightness of the AO star and the maximum allowed chop throw.

- The failure of a position sensor in the NAOS field selector required a major intervention involving the instrument consortium. NACO was out of operation for the period of mid-September to end of October.
- The orientation of the SDI masks was corrected during the June intervention.
- The FPI mode was found non-operational after having not been used for an extended period. Hardware modifications and dedicated test procedures have been implemented to solve this problem.
- For the implementation of the Laser Guide Star (LGS) mode hard- and software upgrades were carried out during the first LGSF commissioning in February. All loops (high order on LGS, tip tilt on a NGS, jitter control on the LGS and trombone focus) were closed for the first time. Several dedicated commissioning runs will follow to optimize and characterize this new mode. The LGS mode is offered for Period 78 in service mode as “seeing improvement” mode.

SINFONI

- The upgrade to the science grade detector was completed for the beginning of Period 75. The Hawaii 2RG (2kx2k) detector provides excellent cosmetics and a gain in efficiencies as expected, i.e., up to a factor of 4 in J band (w.r.t. to engineering grade detector).
- SINFONI started science operation with Period 75 and turned out to be a very efficient AO supported instrument with “shutter open efficiencies” comparable to optical spectrographs like FORS. Also the technical downtime is within the 1-2% regime of the other VLT instruments. The primary source of downtime and overheads was the main grating drive. However, this problem has been solved in earlier this year. An improved spare grating drive has been provided by the consortium.
- Several GTO runs have been carried out during the report period.
- The SINFONI pipeline has been released to the public in October.
- For the implementation of the Laser Guide Star (LGS) mode hard- and software upgrades were carried out during the first LGSF commissioning in February. All loops (high order on LGS, tip tilt on a NGS, jitter control on the LGS and trombone focus) were closed for the first time. Several dedicated commissioning runs will follow to optimize and characterize this new mode. The LGS mode is offered for Period 78 in service mode as “seeing improvement” mode.

MIDI

- The regular maintenance of the cryo-cooler system has been carried out. The intervention was used to reduce the vibrations introduced by the CCC and compressor.
- MIDI has been offered with the ATs for P76.
- Beginning of 2006 problems in the MIDI+AT data quality were detected:
    - Contamination of photometric data because of FoV limitation from AT usage w/o VCMs.

    - Improved data reduction algorithms have been developed to recover the photometric signal from the individual frames.
    - The re-analysis of all P76 data is ongoing.
- The operation of MIDI with the ATs has been moved to delay lines 5 and 6, which are equipped with VCMs. This move requires the use of different but equivalent stations for the ATs.

AMBER

- AMBER has started science operation with 3 UTs with Period 76.
- Stability problems of the instrument alignment have been addressed by several improvements to the hardware. A major improvement is expected from the remanufacturing of critical mechanical supports. The new J-band supports are currently installed and tested. The upgrade of the H and K band will follow.
- The instrument commissioning continued with the UTs and ATs. The new HR-K mode has been offered for Period 78. The instrument overheads were reduced by 25% by the use of IRIS for the acquisition of the three beams and by the optimization of the fringe detection algorithms.
- The instrument performance - in particular the limiting magnitudes - are currently limited by the non-availability of fringe tracking.
- Several GTO runs with 3 UTs have been carried out during the report period.

VISITOR instruments

- The **ULTRACAM** instrument had to very successful visitor runs in Period 75 and 76.
- The scheduled run in Period 76 of the **DAZLE** instrument had to be cancelled for technical reasons on the consortium side.

Instrument activities in the forthcoming 12 months

- Laser Guide Star Facility: installation and commissioning
- NACO & SINFONI commissioning in LGS mode
- CRIRES: installation and commissioning
- AMBER: commissioning with 3 ATs
- VISIR: installation and characterization of new filters
- OMEGACAM

Matters arising from last UC meeting

- **WFI manual update**: http://www.ls.eso.org/docs/2P2-MAN-ESO-90100-0001/2P2-MAN-ESO-90100-0001.pdf
- **FIMS upgrades**: priority has been given to the UC 2003 and 2005 requests for increased interactivity (UC 2003, request 1) and 2) and UC 2005 request). The implementation of the following new features is ongoing: in MXU mode using straight slits, the users will be able to click on a label placed near the slit (which has been placed manually or automatically before) which will launch a pop-up window containing details of the slit (position, width, +ve height, -ve height) which can be edited by hand and then the slit re-drawn or deleted (buttons 'accept', 'apply', 'cancel', 'delete slit'). The UC 2003 request 3) for increased accuracy of the mask alignment on sky will be addressed by adding the possibility to automatically center at the through-slit exposure stage additional reference stars in larger square apertures (as it is done for VIMOS). Both upgrades had been scheduled for delivery for P77. However, due to unexpected problems in FIMS with user-provided preparation images with their reference points of the world coordinate system lying outside the image itself, priority had to be given to the preparation of a fix for this problem. Therefore, the delivery of the above FIMS upgrades had to be postponed for P78.
- **Webpages:** all Paranal instrument webpages have been redone and are presented in a homogenous style with up-to-date contents. A Paranal instrument and telescope news page has been added for quick overview of available instruments in the respective observing periods and for the communication of latest news (http://www.eso.org/paranal/insnews/).

UT1 – Antu

		Total		Breakdown											
				2005										2006	
		P75	P76	Mar.	Apr.	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Instrument usage:															
FORS2	% of Night time	35.3	44.0	41.4	39.7	48.6	20.9	40.9	29.8	31.7	62.6	48.5	27.3	41.6	40.0
ISAAC	% of Night time	55.9	30.8	36.3	54.5	45.1	67.0	51.6	60.8	56.2	26.1	39.1	11.2	39.6	37.9
VLTI	% of Night time	7.4	16.1	0.0	4.1	6.4	12.1	7.5	8.9	5.4	7.5	12.4	26.1	17.0	17.5
UT1 without instrument	% of Night time	1.5	9.1	22.3	1.7	0.0	0.0	0.0	0.5	6.7	3.9	0.0	35.4	1.8	4.6
No operations	% of Night time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Visitors:															
Number of visitor programmes	#	38	26	5	2	10	6	6	10	4	4	5	6	7	4
Average run	Nights	1.8	1.7	1.2	0.9	1.4	1.4	2.4	1.5	3.4	1.8	1.5	1.5	1.7	1.9
Total night time:	Nights	183	151	31	30	31	30	31	31	30	31	30	31	31	28
Distributed as:															
- No operations	% of Night time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Commissioning	% of Night time	0.8	1.4	16.4	0.0	0.0	1.1	0.0	3.7	0.0	0.0	0.0	0.0	0.0	7.0
- Engineering	% of Night time	5.5	11.9	6.1	8.4	3.9	0.3	5.8	4.8	10.1	6.4	4.6	33.5	5.5	9.8
- Available for Science	% of Night time	**82.0**	**86.7**	**77.4**	**91.6**	**96.1**	**28.6**	**94.2**	**91.6**	**89.9**	**93.6**	**95.4**	**66.5**	**94.5**	**83.3**
Distributed as:															
- Visitor mode	% of Night time	36.9	28.2	18.9	5.7	43.9	30.4	46.7	48.8	45.7	23.8	24.8	28.1	37.3	27.0
- Service mode	% of Night time	57.0	58.5	58.5	85.9	52.2	69.6	47.5	42.7	44.3	69.9	70.6	38.5	57.2	56.3
or:															
- Actual science	% of Science time	**86.6**	**90.7**	**80.2**	**77.9**	**87.5**	**87.6**	**84.2**	**92.6**	**90.1**	**94.2**	**86.2**	**88.8**	**95.7**	**88.6**
- Downtime	% of Science time	13.4	9.3	19.8	22.1	12.5	12.4	15.8	7.4	9.9	5.8	13.8	11.2	4.3	11.4
Technical downtime	% of Science time	2.8	3.2	1.7	0.8	4.6	3.1	6.6	0.9	0.9	2.4	2.9	6.7	2.7	1.0
Execution	% of Science time	0.5	0.8	0.3	0.0	1.1	0.8	0.5	0.3	0.4	1.4	0.3	1.9	0.2	0.1
Preparation	% of Science time	0.6	0.5	0.3	0.3	0.9	1.5	0.7	0.2	0.3	0.3	1.1	0.2	0.4	0.5
Miscellaneous	% of Science time	0.1	0.1	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.2	0.0	0.0	0.0
Idle downtime	% of Science time	0.0	0.4	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	2.1	0.0	0.0	0.0
Weather total	% of Science time	9.3	4.4	17.5	21.0	5.9	6.9	7.8	5.9	8.1	1.7	7.1	2.4	1.0	9.7
(1) Clouds	% of Science time	5.8	2.5	2.2	12.5	5.8	4.0	2.0	2.3	8.0	0.0	7.0	0.8	0.8	3.9
Wind	% of Science time	1.2	0.6	5.3	3.6	0.0	0.1	0.6	2.5	0.1	1.7	0.0	0.0	0.0	1.1
Seeing	% of Science time	0.4	0.3	0.0	0.0	0.0	1.3	0.3	0.6	0.0	0.0	1.2	0.0	0.2	0.0
Humidity	% of Science time	1.9	1.1	15.6	7.4	0.0	0.0	3.4	0.7	0.0	0.0	0.0	0.0	0.0	5.3
Dust	% of Science time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Earthquake	% of Science time	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UT2 – Kueyen

		Total		Breakdown											
				2005										2006	
		P75	P76	Mar.	Apr.	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Instrument usage:															
FORS1	% of Night time	30.5	31.5	41.9	19.5	27.5	19.1	31.8	36.6	48.8	14.7	43.2	21.5	49.1	29.2
UVES	% of Night time	37.8	30.4	36.4	47.5	32.8	24.3	41.7	38.8	41.8	53.5	26.8	20.7	18.5	32.7
FLAMES	% of Night time	14.8	23.4	16.0	16.5	20.7	14.1	16.2	17.0	4.5	25.1	23.1	30.1	20.4	18.5
VLTI	% of Night time	11.0	11.4	1.2	16.3	19.0	8.0	10.3	7.3	4.9	4.9	7.0	16.6	11.0	17.7
UT2	% of Night time	5.8	3.2	4.6	0.2	0.0	34.5	0.0	0.3	0.0	1.8	0.0	11.1	1.0	1.9
No operations	% of Night time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Visitors:															
Number of visitor programmes	#	37	22.5	2	2	12	8	4.5	5.5	5	2	4	9	3	4.5
Average run	Nights	1.4	1.9	0.8	0.6	0.9	1.1	2.7	1.4	1.8	3.2	2.0	0.8	1.5	1.9
Total night time:	Nights	183	151	31	30	31	30	31	31	30	31	30	31	31	28
Distributed as:															
- No operations	% of Night time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Commissioning	% of Night time	0.9	2.1	0.0	0.0	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.4
- Engineering	% of Night time	8.4	4.2	5.0	3.0	0.0	35.9	5.3	5.8	0.5	3.0	0.0	11.4	2.2	4.1
- Available for Science	% of Night time	**90.7**	**93.8**	**95.0**	**97.0**	**94.4**	**64.1**	**94.7**	**94.2**	**99.5**	**97.0**	**100.0**	**88.6**	**97.8**	**85.4**
Distributed as:															
- Visitor mode	% of Night time	27.8	23.0	4.9	4.1	38.8	30.6	39.8	24.0	29.3	20.7	27.0	22.0	14.3	30.8
- Service mode	% of Night time	63.8	70.8	90.2	92.9	61.2	33.4	54.9	70.2	70.2	76.3	73.0	66.6	83.4	54.6
or:															
- Actual science		**86.6**	**91.0**	**83.6**	**78.4**	**89.2**	**90.0**	**88.4**	**89.8**	**83.9**	**93.4**	**90.3**	**91.8**	**94.1**	**85.5**
- Downtime	% of Science time	13.4	9.0	16.4	21.6	10.8	10.0	11.6	10.2	16.1	6.6	9.7	8.2	5.9	14.5
Technical downtime	% of Science time	1.9	2.1	1.0	1.3	0.8	3.5	1.4	2.3	1.9	1.1	2.2	2.4	1.6	3.3
Execution	% of Science time	0.6	0.7	1.5	0.1	0.2	0.9	0.5	0.7	1.3	0.9	0.2	0.8	0.6	0.8
Preparation	% of Science time	0.6	0.4	0.6	0.2	0.8	0.5	0.3	0.3	1.2	0.8	0.2	0.3	0.1	0.4
Miscellaneous	% of Science time	0.2	0.1	0.0	0.0	0.3	0.4	0.0	0.3	0.2	0.2	0.0	0.2	0.0	0.0
Idle downtime	% of Science time	0.1	0.6	0.1	0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.1	2.4	0.7	0.0
Weather total	% of Science time	10.0	5.1	13.3	19.6	8.6	4.7	9.4	6.5	11.3	3.7	7.0	2.2	2.8	9.9
(1) Clouds	% of Science time	5.9	2.6	1.8	10.4	6.2	4.7	1.9	2.5	9.6	0.0	6.3	2.2	0.5	3.8
Wind	% of Science time	2.3	0.9	4.2	4.3	2.2	0.6	0.6	2.1	3.7	3.5	0.0	0.0	0.0	1.0
Seeing	% of Science time	0.5	0.3	0.0	0.3	0.2	0.0	2.0	0.8	0.0	0.2	0.6	0.0	0.6	0.0
Humidity	% of Science time	3.3	1.4	11.9	8.3	0.0	0.0	6.8	1.1	3.4	0.0	0.0	0.0	1.8	5.1
Dust	% of Science time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Earthquake	% of Science time	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UT3 – Melipal

		Total		Breakdown											
				2005										2006	
		P75	P76	Mar.	Apr.	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Instrument usage:															
VIMOS	% of Night time	35.7	42.5	53.9	42.0	13.7	23.1	36.4	45.6	53.6	50.6	32.6	35.3	51.7	42.3
VISIR	% of Night time	41.3	32.3	36.8	40.1	11.3	64.3	47.8	47.3	37.3	12.8	37.5	36.1	42.2	33.0
Guest	% of Night time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.7	0.0	0.0	0.0
VLTI	% of Night time	12.8	13.7	7.4	14.9	18.3	12.3	15.8	6.2	9.1	6.2	12.7	20.3	6.2	23.3
UT3 without instrument	% of Night time	0.9	8.5	1.9	3.0	1.2	0.4	0.0	1.0	0.0	30.3	2.5	8.3	0.0	1.4
No operations	% of Night time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Visitors:															
Number of visitor programmes	#	53	33	6	5	18	18.5	6.5	1.5	3.5	1	13	12	3	4
Average run	Nights	1.6	1.4	1.2	1.9	1.2	0.9	2.1	2.8	0.5	1.0	1.1	1.0	2.8	0.9
Total night time:	Nights	183	151	31	30	31	30	31	31	30	31	30	31	31	28
Distributed as:															
- No operations	% of Night time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Commissioning	% of Night time	1.6	2.1	2.8	0.0	3.1	2.6	0.0	3.9	0.0	0.0	0.0	0.0	0.0	10.4
- Engineering	% of Night time	8.1	12.7	8.6	8.4	3.3	1.0	6.5	17.4	11.9	37.5	7.3	9.2	0.4	8.9
- Science	% of Night time	**90.3**	**85.3**	**88.6**	**91.6**	**93.7**	**96.5**	**93.5**	**78.6**	**88.1**	**62.5**	**92.7**	**90.8**	**99.6**	**80.6**
Distributed as:															
- Visitor mode	% of Night time	37.1	26.1	23.3	32.3	70.7	55.6	45.1	13.5	5.6	3.3	45.6	39.0	27.2	15.4
- Service mode	% of Night time	53.2	63.0	65.3	59.2	23.0	40.9	48.5	65.1	82.6	59.2	47.1	51.8	72.4	84.6
Or:															
- Actual science		**83.0**	**89.1**	**76.2**	**70.7**	**89.6**	**89.1**	**84.7**	**86.2**	**77.4**	**92.0**	**85.4**	**90.8**	**90.4**	**87.0**
- Downtime	% of Science time	17.0	10.9	23.8	29.3	10.4	10.9	15.3	13.8	22.6	8.0	14.6	9.2	9.6	13.0
Technical downtime	% of Science time	3.3	4.7	4.7	4.3	0.7	2.9	1.9	5.2	4.6	4.4	7.0	4.5	5.5	2.2
Execution	% of Science time	0.7	1.3	0.2	0.1	0.2	1.2	0.7	0.9	1.0	0.5	5.6	0.3	0.1	0.1
Preparation	% of Science time	0.4	0.6	0.2	0.2	0.4	1.2	0.2	0.3	0.1	0.5	0.0	1.4	0.7	0.6
Miscellaneous	% of Science time	0.1	0.4	0.0	0.1	0.1	0.2	0.2	0.0	0.3	0.0	0.9	0.0	0.8	0.1
Idle downtime	% of Science time	0.5	0.0	2.5	1.1	0.1	0.1	0.0	1.1	0.8	0.0	0.0	0.0	0.0	0.0
Weather total	% of Science time	12.0	3.6	16.2	23.5	8.9	5.3	12.3	6.2	15.7	2.6	0.0	3.0	2.5	10.0
(1) Clouds	% of Science time	7.4	1.4	2.1	11.5	6.3	5.2	6.0	2.8	12.7	0.0	0.0	1.9	1.1	4.1
Wind	% of Science time	2.8	2.2	4.4	4.6	2.4	0.0	0.5	2.6	6.5	2.6	7.6	0.0	0.0	1.0
Seeing	% of Science time	1.1	1.6	1.8	2.1	0.2	0.5	0.8	0.1	2.7	1.3	6.3	0.0	0.6	0.0
Humidity	% of Science time	3.8	1.4	13.0	11.1	0.0	0.0	6.9	0.8	3.9	0.0	0.1	0.0	1.9	4.9
Dust	% of Science time	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0
Earthquake	% of Science time	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0

UT4 – Yepun

		Total		Breakdown											
				2005										2006	
		P75	P76	Mar.	Apr.	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Instrument usage:															
NACO	% of Night time	37.4	40.8	52.1	18.1	74.4	18.2	57.8	37.8	18.0	0.0	45.2	44.3	64.8	49.7
SINFONI	% of Night time	46.2	34.7	41.3	44.3	12.1	63.6	37.8	49.6	69.5	95.2	33.7	21.4	14.8	8.3
NONE	% of Night time			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
VLTI	% of Night time	10.7	12.1	6.2	6.7	12.3	17.6	4.4	10.5	12.5	3.1	11.0	25.9	9.8	10.8
UT4 without instrument	% of Night time	5.7	12.4	0.4	31.0	1.1	0.0	0.0	2.1	0.0	1.7	10.0	8.4	10.6	31.2
No operations	% of Night time	0.1	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Visitors:															
Number of visitor programmes	#	59	30.5	6	8.5	9.5	11	11	10	9	4.5	6.5	7.5	10	2
Average run	Nights	1.2	1.6	2.7	1.2	1.4	0.9	1.3	1.3	1.1	2.7	1.5	1.3	0.9	1.6
Total night time:	Nights	183	151	31	30	31	30	31	31	30	31	30	31	31	28
Distributed as:															
- No operations	% of Night time	0.1	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Commissioning	% of Night time	1.6	9.0	2.2	0.0	2.4	3.6	0.0	3.7	0.0	0.0	4.4	0.0	9.4	31.2
- Engineering	% of Night time	8.8	6.6	6.4	32.0	6.6	2.0	2.0	2.4	7.8	4.2	11.6	12.1	4.8	0.1
- Science	% of Night time	**89.5**	**84.4**	**91.4**	**68.0**	**91.0**	**93.7**	**98.0**	**93.9**	**92.2**	**95.7**	**84.0**	**87.9**	**85.8**	**68.7**
Distributed as:															
- Visitor mode	% of Night time	39.4	28.7	51.4	35.3	43.7	34.6	45.8	42.6	34.3	39.6	33.1	31.0	28.5	11.2
- Service mode	% of Night time	50.1	55.7	40.0	32.7	47.2	59.2	52.1	51.4	57.9	56.1	50.9	56.9	57.4	57.5
or:															
- Actual science		**86.3**	**89.7**	**82.5**	**91.1**	**85.8**	**90.9**	**82.4**	**89.2**	**78.5**	**94.2**	**82.6**	**96.3**	**93.4**	**82.3**
- Downtime	% of Science time	13.7	10.3	17.5	8.9	14.2	9.1	17.6	10.8	21.5	5.8	17.4	3.7	6.6	17.7
Technical downtime	% of Science time	2.9	3.5	1.7	6.3	1.7	1.1	2.4	2.2	3.7	2.8	7.0	1.1	1.4	5.4
Execution	% of Science time	0.6	0.2	2.4	0.3	1.1	0.6	0.9	0.7	0.2	0.3	0.5	0.0	0.0	0.1
Preparation	% of Science time	0.7	0.6	0.4	0.8	0.9	0.5	0.6	0.5	0.6	0.4	0.8	0.4	1.2	0.4
Miscellaneous	% of Science time	0.2	0.2	0.0	0.0	0.3	0.6	0.0	0.1	0.0	0.1	0.0	0.0	1.0	0.0
Idle downtime	% of Science time	0.5	0.1	0.0	0.0	0.0	0.1	0.0	0.0	3.1	0.0	0.0	0.3	0.0	0.0
Weather total	% of Science time	8.8	5.6	13.0	1.5	10.2	6.1	13.7	7.4	13.8	2.3	9.1	2.0	3.0	11.8
(1) Clouds	% of Science time	5.0	3.0	1.8	1.5	6.8	5.4	3.6	2.7	9.8	0.0	8.4	0.9	0.8	4.8
Wind	% of Science time	1.3	0.7	4.3	0.0	0.2	0.0	0.6	2.1	4.9	2.3	0.0	0.0	0.0	1.1
Seeing	% of Science time	1.6	0.7	0.0	0.0	3.2	0.7	2.7	1.9	1.3	0.0	0.9	0.1	2.2	0.2
Humidity	% of Science time	0.9	1.1	11.7	0.0	0.0	0.0	3.3	0.7	1.2	0.0	0.0	0.0	0.0	5.7
Dust	% of Science time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Earthquake	% of Science time	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

VLTI Including both UTs and Ats

		Total		2005	P75						P76			2006	
		P75	P76	Mar.	Apr.	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Instrument usage:															
MIDI	% of Night time	60.6	64.4	100.0	92.9	77.8	67.7	73.8	29.8	21.6	73.0	85.2	54.3	63.4	45.8
AMBER	% of Night time	13.9	17.2	0.0	0.0	22.2	10.4	9.6	28.8	12.6	12.0	0.0	25.9	11.0	36.8
No instrument	% of Night time	10.7	13.8	0.0	0.0	0.0	22.0	0.0	13.1	28.8	4.1	7.5	14.6	25.5	17.4
No operations	% of Night time	14.8	11.7	0.0	7.1	0.0	0.0	16.6	28.3	37.0	10.9	7.5	14.6	25.5	0.0
Visitors:															
Number of visitor programmes	#	14	15		1	5	7	2E-07	2E-07	1	1E-07	1	12	2	0
Average run	Nights	0.6	0.8		0.4	0.9	0.3	-	-	0.9	-	1.8	0.4	0.4	-
Total night time:	Nights	46	101	2	7	9	8	7	8	7	13	14	15	31	28
Distributed as:															
- No operations	% of Night time	14.8	6.6	0.0	7.1	0.0	0.0	16.6	28.3	37.0	10.9	7.5	14.6	0.0	0.0
- Commissioning	% of Night time	9.5	4.4	0.0	0.0	19.2	21.1	0.0	16.7	0.0	0.0	0.0	0.0	0.0	21.9
- Engineering	% of Night time	22.0	15.1	0.0	21.5	3.0	9.4	28.7	25.2	44.5	12.2	13.6	6.8	18.8	24.2
- Science	% of Night time	**56.3**	**70.1**	**100.0**	**71.4**	**77.8**	**69.5**	**54.8**	**29.8**	**34.2**	**77.0**	**78.9**	**78.7**	**62.2**	**53.9**
Distributed as:															
- Visitor mode	% of Night time	16.1	9.1	25.7	5.7	50.1	28.0	0.0	0.0	12.6	0.0	12.8	30.6	2.3	0.0
- Service mode	% of Night time	40.2	61.0	74.3	65.7	27.8	41.4	54.8	29.8	21.6	77.0	66.1	48.0	60.0	53.9
or:															
- Actual science		**72.2**	**70.4**	**90.9**	**30.5**	**83.6**	**82.9**	**83.5**	**90.9**	**62.0**	**58.2**	**70.8**	**75.0**	**78.5**	**69.5**
- Downtime	% of Science time	27.8	29.6	9.1	69.5	16.4	17.1	16.5	9.1	38.0	41.8	29.2	25.0	21.5	30.5
Technical downtime	% of Science time	4.2	8.3	5.4	0.0	2.8	2.6	1.8	2.1	16.0	8.3	7.0	9.8	11.6	4.5
Execution	% of Science time	0.4	1.1	0.0	0.0	0.3	0.0	0.0	0.0	2.4	1.5	0.2	0.4	0.0	3.5
Preparation	% of Science time	0.6	0.3	0.0	0.0	0.0	2.2	1.6	0.0	0.0	0.0	0.2	0.0	0.0	1.3
Miscellaneous	% of Science time	7.3	6.0	3.8	6.0	3.0	6.6	10.6	5.6	12.2	8.8	4.9	10.3	4.9	0.9
Idle downtime	% of Science time	0.8	7.2	0.0	2.3	0.5	0.5	1.5	0.0	0.0	20.3	13.4	0.1	0.1	2.0
Weather total	% of Science time	14.3	6.8	0.0	61.2	9.9	5.2	1.0	1.4	7.4	2.9	3.6	4.3	4.8	18.3
(1) Clouds	% of Science time	7.1	2.6	0.0	40.2	0.0	0.6	0.2	1.4	0.0	0.0	2.5	4.3	0.0	6.3
Wind	% of Science time	2.3	1.4	0.0	0.0	9.2	0.0	0.0	0.0	4.4	2.9	0.0	0.0	0.0	4.3
Seeing	% of Science time	1.7	1.7	0.0	0.8	0.7	4.6	0.8	0.0	2.9	0.0	1.1	2.6	4.8	0.0
Humidity	% of Science time	6.7	1.5	0.0	40.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7
Dust	% of Science time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Earthquake	% of Science time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(1): The total weather downtime can be less than the total of the individual weather losses as some of these can occur simultaneously.

Instrument Statistics

The instrument efficiencies (“shutter open efficiency”, upper row) and technical downtimes (lower row) are reported in the following table as percentage of the available science time.

	P75							P76					
	Apr	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Ave**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Ave**
HARPS	52.8	73.4	81.0	61.0	82.3	75.8	**71.0**	73.3	87.4	71.7	70.0	80.7	**76.6**
	0.4	0.1	0.4	0.1	0.4	0.0	**0.2**	0.7	0.2	0.6	0.0	0.0	**0.3**
CES	81.1	89.3	92.1	-	58.0	-	**80.1**	-	88.2	-	-	95.8	**92.0**
	0.0	0.0	7.4	-	0.0	-	**1.8**	-	0.0	-	-	0.6	**0.3**
EFOSC2	68.5	-	59.0	-	51.9	71.6	**62.7**	74.4	10.4	65.6	30.0	-	**45.1**
	0.0	-	0.3	-	0.0	3.7	**1.0**	0.0	4.3	0.0	0.0	-	**1.1**
TIMMI2	-	-	12.3	40.6	-	-	**26.5**	13.9	-	-	36.7	-	**25.3**
	-	-	0.0	1.4	-	-	**0.7**	5.9	-	-	0.4	-	**3.1**
EMMI	64.4	37.7	56.8	60.3	73.7	60.7	**59.0**	74.4	83.6	63.8	61.1	67.8	**70.1**
	3.3	1.0	1.4	13.5	1.1	1.4	**3.6**	4.7	0.0	0.0	3.1	0.4	**1.6**
SOFI	59.1	51.7	51.8	41.2	51.4	80.6	**56.0**	69.1	0.0	63.5	53.3	70.2	**51.2**
	0.0	0.0	0.0	4.3	1.9	0.0	**1.0**	1.2	0.0	3.5	4.1	1.7	**2.1**
SUSI2	46.1	61.4	-	5.5	-	-	**37.7**	69.3	-	27.0	70.1	50.9	**54.3**
	0.0	4.5	-	41.8	-	-	**15.5**	0.0	-	0.0	0.0	0.0	**0.0**
WFI	49.6	41.3	49.1	54.2	54.8	57.0	**51.0**	46.0	65.6	52.9	55.7	46.5	**53.3**
	1.4	1.9	0.3	0.4	2.7	0.4	**1.2**	5.6	3.1	5.6	0.0	1.3	**3.1**
FEROS	61.2	65.8	59.3	49.4	50.8	74.0	**60.1**	58.1	54.7	67.4	60.8	71.5	**62.5**
	0.2	0.2	2.4	0.0	0.3	1.4	**0.8**	0.9	4.2	0.2	1.3	4.1	**2.1**
ISAAC	57.3	70.3	59.6	53.5	63.1	56.3	**60.0**	69.1	68.1	60.5	69.3	72.2	**67.8**
	1.6	9.4	4.2	10.8	0.8	1.3	**4.7**	2.2	6.8	13.0	1.7	1.4	**5.0**

FORS2	73.7	73.7	77.3	69.1	77.8	80.6	**75.4**	74.3	69.6	82.7	84.6	76.7	**77.6**
	0.0	0.9	0.5	1.7	1.1	0.4	**0.8**	1.9	0.2	3.1	0.5	0.7	**1.3**
FORS1	56.3	72.7	78.3	57.5	60.1	67.6	**65.4**	72.1	69.0	73.7	75.8	66.6	**71.4**
	0.6	0.7	1.3	1.7	3.1	1.7	**1.5**	1.2	1.0	0.6	1.1	1.5	**1.1**
UVES	84.7	79.3	82.9	88.8	74.5	78.5	**81.5**	74.0	80.0	72.4	69.1	74.4	**74.0**
	1.9	0.4	4.1	0.9	0.6	1.5	**1.6**	0.1	2.4	6.2	1.2	0.7	**2.1**
FLAMES	79.0	81.5	83.2	78.8	85.3	77.2	**80.8**	84.5	77.1	70.5	72.9	81.5	**77.3**
	0.7	1.7	1.6	0.6	2.8	2.5	**1.7**	1.6	1.5	0.1	0.8	6.1	**2.0**
VIMOS	46.8	61.0	68.1	67.5	64.3	70.1	**63.0**	67.2	67.0	82.0	57.6	55.8	**65.9**
	8.4	4.4	6.7	0.5	8.2	5.8	**5.7**	3.0	4.7	4.8	8.9	2.2	**4.7**
VISIR	56.1	68.5	55.1	78.8	55.5	57.8	**62.0**	68.9	56.5	96.5	50.9	53.9	**65.3**
	1.1	0.0	1.7	0.6	1.6	1.6	**1.1**	3.0	2.4	6.7	1.8	2.9	**3.4**
NACO	41.8	51.8	40.8	41.9	48.0	47.2	**45.3**	-	40.0	44.3	44.8	34.3	**40.9**
	8.8	0.8	0.0	2.2	3.6	0.0	**2.6**	-	11.2	1.1	1.9	7.0	**5.3**
SINFONI	72.0	68.6	73.4	73.2	62.4	68.4	**69.7**	73.7	72.7	79.6	49.4	45.4	**64.2**
	4.3	1.9	1.4	1.1	1.1	4.8	**2.4**	2.2	2.1	0.7	0.0	1.6	**1.3**
MIDI	7.1	9.4	8.7	8.0	5.5	8.7	**7.9**	8.7	9.5	9.9	10.5	7.4	**8.3**
	0.0	2.8	2.5	1.8	2.1	5.2	**2.4**	9.1	7.0	1.6	5.8	3.9	**6.4**
AMBER	-	-	-	-	-	-	-	16.1	-	10.0	15.5	14.6	**14.1**
	-	-	-	-	-	-	-	0.0	-	27.6	17.5	6.8	**13.0**

This worksheet is taken from the full “eom_P7576.ods”

This page: satisfaction
Next page: run completion

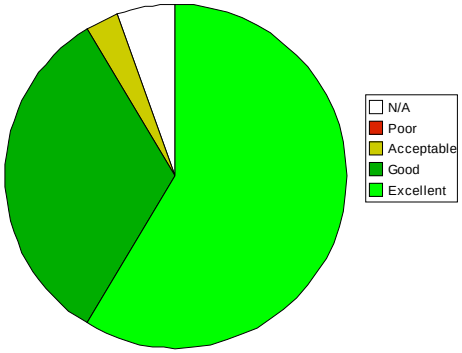
	N/A	Poor	Acceptable	Good	Excellent
Support astronomer and Introduction	5	5	1	17	100
	3.9%	3.9%	0.8%	13.3%	78.1%
Telescope & Instrument Operator	4	0	6	24	94
	3.1%	0.0%	4.7%	18.8%	73.4%
Technical Support	18	4	5	29	72
	14.1%	3.1%	3.9%	22.7%	56.3%
On-line, control room computers	38	11	14	32	33
	29.7%	8.6%	10.9%	25.0%	25.8%
On-line Data Reduction Pipelines	35	7	14	44	28
	27.3%	5.5%	10.9%	34.4%	21.9%
Off-line computers (Residencia)	29	5	4	45	45
	22.7%	3.9%	3.1%	35.2%	35.2%
Documentation about ESO	7	0	4	42	75
	5.5%	0.0%	3.1%	32.8%	58.6%
Documentation about Paranal	5	0	4	41	78
	3.9%	0.0%	3.1%	32.0%	60.9%
Instrument Manuals	8	8	6	42	64
	6.3%	6.3%	4.7%	32.8%	50.0%

This workseet is based on the full “eom_P7576.odf” file

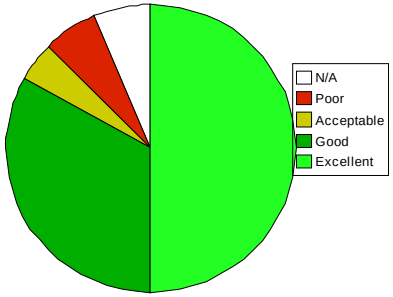
		Percentage of run completion				
	Number of runs	**0**	**25**	**50**	**75**	**100**
ISAAC	10	1	0	3	2	4
		10.0%	0.0%	30.0%	20.0%	40.0%
FORS2	12	0	1	0	2	9
		0.0%	8.3%	0.0%	16.7%	75.0%
FORS1	11	0	1	0	5	5
		0.0%	9.1%	0.0%	45.5%	45.5%
FLAMES	11	0	3	1	2	5
		0.0%	27.3%	9.1%	18.2%	45.5%
UVES	10	0	1	1	4	4
		0.0%	10.0%	10.0%	40.0%	40.0%
VIMOS	3	0	0	1	0	2
		0.0%	0.0%	33.3%	0.0%	66.7%
VISIR	24	2	0	5	5	12
		8.3%	0.0%	20.8%	20.8%	50.0%
SINFONI	10	0	0	1	4	5
		0.0%	0.0%	10.0%	40.0%	50.0%
NACO	14	2	1	2	3	6
		14.3%	7.1%	14.3%	21.4%	42.9%
All UT	**105**	**5**	**7**	**14**	**27**	**52**
		4.8%	**6.7%**	**13.3%**	**25.7%**	**49.5%**
MIDI	15	2	0	1	2	10
		13.3%	0.0%	6.7%	13.3%	66.7%
AMBER	5	2	1	0	2	0
		40.0%	20.0%	0.0%	40.0%	0.0%
All VLTI	**20**	**4**	**1**	**1**	**4**	**10**
		20.0%	**5.0%**	**5.0%**	**20.0%**	**50.0%**
All	***128***	***9***	***8***	***16***	***31***	***64***
		7.0%	***6.3%***	***12.5%***	***24.2%***	***50.0%***

Distributions

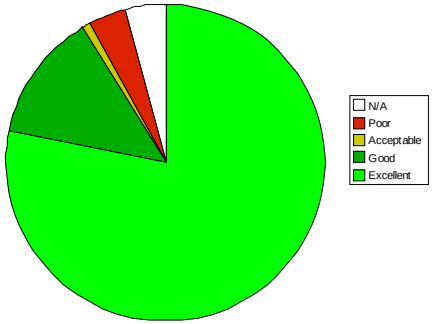
ESO Documentation



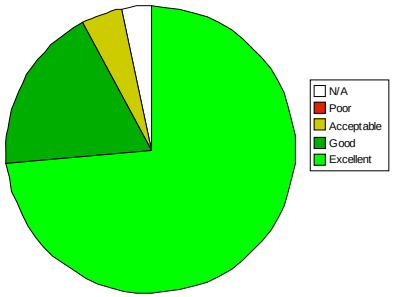
Instrument Documentation



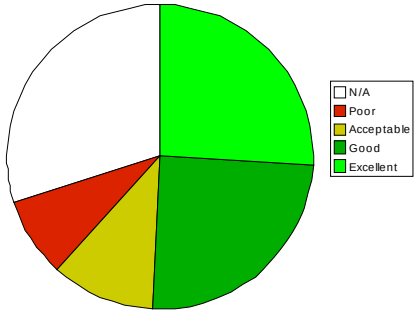
Support Astronomers



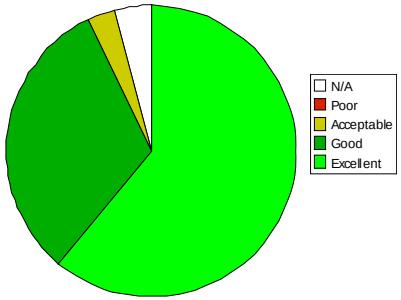
Telescope & Inst. Operators



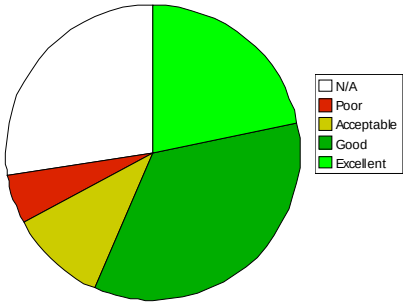
On-line Computers



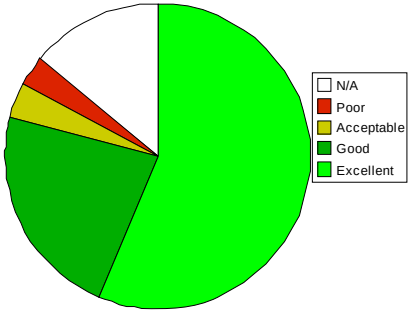
Paranal Documentation



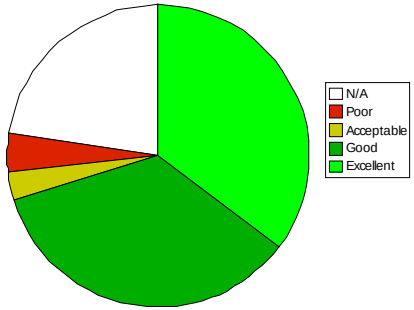
On-line PipeLines



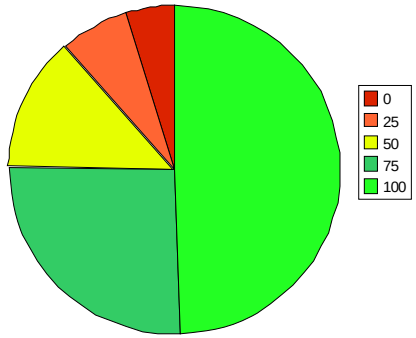
Technical Support



Residencia Computers



UT Run Completion



NTT operations

Distribution of telescope usage

Summary

	P75 (*) [hours]	P75 (*) [%]	P76 (**) [hours]	P76 (**) [%]
EMMI	976	52.1	520	47.4
SUSI2	74	4.0	82	7.5
SOFI	752	40.1	400	36.4
Science time	1629	90.6	927	84.5
Engineering time	245	9.4	171	15.5
Service mode time	340	20.8	119	12.8
Technical downtime:	43.6	2.7	17.8	1.9
Weather downtime:	537	28.6	74.7	6.8

(*) P75: April - September 2005 (**) P76: October 2005 - February 2006

Breakdown

Fraction of available time [%]	4/05	5/05	6/05	7/05	8/05	9/05	10/05	11/05	12/05	1/06	2/06
EMMI	49.9	43.5	45.5	37.3	72.9	68.2	35.5	51.6	42.7	57.8	50.4
SUSI2	6.8	8.1	0.0	7.8	0.0	0.0	18.8	0.5	1.6	6.7	8.2
SOFI	43.3	48.4	54.5	39.1	20.7	31.8	45.7	1.6	55.7	35.5	41.4
Sci. time	90.6	81.1	91.6	81.1	83.9	94.9	93.7	50.4	90.3	92.1	93.2
Eng. time	9.4	18.9	8.4	18.9	16.1	5.1	6.3	49.6	9.7	7.9	6.8
Downtime:											
Technical	1.8	1.0	0.7	10.3	1.4	1.0	2.3	0.0	2.1	3.4	1.0
Weather	14.6	38.3	42.7	12.8	36.7	26.5	17.3	4.4	4.2	3.2	3.9

Users feedback: April 2005 - February 2006

User Satisfaction

	E	G	A	P	N/A
Setup and introduction	21	13			
Telescope Operator	26	8			
Technical Support	24	9			1
On-line computers	11	17	2		4
Off-line computers	5	5	2	1	21
Doc. about ESO	19	13			2
Doc. about La Silla	19	13	1		1
Instrument Manuals	17	16			1

34 end-of-run reports received. E = excellent; G = good; A = acceptable; P = poor;
NA = not applicable.

Visitor Program Completion

	100%	75%	50%	25%	0%
EMMI	9	6	1		1
SUSI2	1	1			
SOFI	6	3	4	1	1

34 end-of-run reports analysed

3.6m operations

Distribution of telescope usage

Summary

	P75 (*) [hours]	P75 (*) [%]	P76 (**) [hours]	P76 (**) [%]
CES	123	6.7	20	1.8
EFOSC2	329	17.8	201	18.3
HARPS	1136	61.5	667	60.7
TIMMI2	182	4.3	154	14.0
VISITOR (CIGALE)	0	0.0	49	4.5
Science time	1605	86.8	864	78.7
Engineering time	243	13.2	233	21.3
Service mode time	186	11.6	58	6.7
Technical downtime:	11.4	0.7	9.9	1.1
Weather downtime:	498	27.0	61.4	5.6

(*) P75: April - September 2005 (**) P76: October 2005 - February 2006

Breakdown

Fraction of available time [%]	4/05	5/05	6/05	7/05	8/05	9/05	10/05	11/05	12/05	1/06	2/06
CES	12.7	11.2	13.4	0.0	1.6	0.0	0.0	1.7	0.0	0.0	7.3
EFOSC2	13.6	0.0	46.7	0.0	19.4	29.2	30.3	14.0	13.0	21.4	11.6
HARPS	73.7	88.8	36.6	47.7	79.0	40.9	34.1	59.7	87.0	44.6	81.1
TIMMI2	0.0	0.0	3.3	52.3	0.0	0.0	35.7	0.0	0.0	30.9	0.0
VISITOR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.5	0.0	0.0	0.0
Sci. time	86.8	100.	83.8	87.0	93.5	60.4	78.7	82.5	83.8	72.3	96.1
Eng. time	13.2	0.0	16.2	13.0	6.5	39.6	21.3	17.5	16.2	27.7	3.9
Downtime:											
Technical	0.3	0.1	1.5	0.9	0.3	1.7	1.1	1.9	0.7	0.2	0.0
Weather	11.2	34.9	39.8	25.6	28.4	18.7	5.6	4.2	3.1	2.2	1.6

Users feedback: April 2005 - February 2006

User Satisfaction

	E	G	A	P	N/A
Setup and introduction	23	1			
Telescope Operator	23	1			
Technical Support	22	1			1
On-line computers	21	3			
Off-line computers	14	2			8
Doc. about ESO	20	3	1		
Doc. about La Silla	22	2			
Instrument Manuals	18	5	1		

24 end-of-run reports received. E = excellent; G = good; A = acceptable; P = poor;
NA = not applicable.

Visitor Program Completion

	100%	75%	50%	25%	0%
CES	1			2	
EFOSC2	2	2			
HARPS	9	3	2		
TIMMI2	1	1		1	

24 end-of-run reports analysed

2.2m operations

Distribution of telescope usage

Summary

	P75 (*) [hours]	P75 (*) [%]	P76 (**) [hours]	P76 (**) [%]
FEROS	961	51.1	451	40.9
GROND	0	0.0	45	4.1
WFI	920	48.9	581	52.6
Science time	1783	94.8	949	85.9
Engineering time	97	5.2	156	14.1
Service mode time	1211	67.9	653	68.8
Technical downtime:	19.0	1.1	23.7	2.5
Weather downtime:	541.2	28.8	72.8	6.6

(*) P75: April - September 2005 (**) P76: October 2005 - February 2006

Breakdown

Fraction of available time [%]	4/05	5/05	6/05	7/05	8/05	9/05	10/05	11/05	12/05	1/06	2/06
FEROS	35.2	49.6	51.6	40.1	56.4	78.5	47.9	34.0	51.5	34.7	35.7
GROND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	3.2	0.0	10.9
WFI	64.8	50.4	48.4	59.9	43.6	21.5	52.1	59.4	32.3	65.3	53.4
Sci. time	88.6	96.9	90.0	100	96.8	96.6	86.4	93.4	80.6	87.6	81.8
Eng. time	11.4	3.1	10.0	0.0	3.2	3.4	13.6	6.6	19.4	12.4	18.2
Downtime:											
Technical	1.1	1.1	1.5	0.2	1.4	1.2	3.7	3.4	2.3	0.5	2.5
Weather	10.5	36.5	38.3	26.0	38.3	20.6	14.7	5.2	3.1	4.3	5.1

Users feedback: April 2005 - February 2006

User Satisfaction

	E	G	A	P	N/A
Setup and introduction	11	2			
Telescope Operator	12		1		
Technical Support	9	3			1
On-line computers	6	5	1		1
Off-line computers	4	2	2		5
Doc. about ESO	9	4			
Doc. about La Silla	9	4			
Instrument Manuals	10	2	1		

13 end-of-run reports received. E = excellent; G = good; A = acceptable; P = poor;
NA = not applicable.

Visitor Program Completion

	100%	75%	50%	25%	0%
FEROS	7	1	1	1	
WFI	1	1	1		

13 end-of-run reports analyzed.

ALMA Fact Sheet for the Users Committee Meeting

April 3 and 4, 2006

Tom Wilson, European Project Scientist

ALMA now in the construction phase. For hardware contracts

1. Antenna contracts for North America, Europe and Japan now in place

2. ESO has placed the contract for the antenna transporters

3. The Operations Support Facility (3 km elevation) building contract will be presented to the ESO Finance Committee at an extraordinary meeting in March

4. The Array Operations Site (5 km) building should be approved by NSF soon.

5. Receivers: Cartridge Preliminary Design Reviews (PDR) were held in 2004. For the Band 7 (0.8 mm) cartridge the Prelimenary Acceptance In-house was held on 14-15 Feb '06. Delivery to the North American Front End Integration Center and Prototype Assembly System is scheduled for late March 2006. Herzberg Institute of Astrophysics is working towards Prototype Assembly Integration for the first Band 3 (3 mm) cartridge, this expected for April/May 2006..

6. Software: The Observe Tool was demonstrated at the Software Requirements Review Committee meeting in Charlottesvilee in Nov. 2006 and at the ALMA Science Review Committee in Jan 2006. This is in a satisfactory state. The off line data reduction package, CASA, is being tested and after the next release will be tested by a wider circle of astronomers.

7. Prototype System Integration: Plans for the tests of interferometry in Socorro New Mexico are scheduled to begin in August 2006. This will be a test of the prototype antennas, front ends, correlator, local oscillator system and software.

8. Reviews: There was a Cost Review (total ALMA, but not the antennas) by an international, independent committee in Garmisch in October 2006, and a Delta Cost Review (Antennas and their impact on the project) in Washington in Jan 2006. Both were very favorable.

9. Rebaselining: This is finished, with a savings of 17 million. None of the reductions affect science capabilities. There are extra costs in the project. These are under discussion. There is an unofficial revised time plan which is under discussion.

10. There are discussions about the details of the integration of the ALMA Compact Array (ACA), i.e. four 12 meter single dishes, and twelve 7 meter dishes, into the bilateral ALMA

Visiting Astronomers Department

Fact sheet – Users' Committee meeting – April 2006

Organisation

- As of March 1, G. Mathys has taken over from J. Alves the post of Head of the Visiting Astronomers Department.
- S. Almagro-García has resigned from ESO; a recruitment procedure towards her replacement is in progress.

Telescope time allocation – Period 77

- 870 Phase 1 proposals received for La Silla and Paranal (including 20 Large Programmes)
  - Paranal: 638 proposals
  - La Silla: 236 proposals
- Pressure factor (requested/available time):

UT1	4.1
UT2	3.8
UT3	2.6
UT4	3.3
3.6m	2.4
NTT	3.3
2.2m	2.8
APEX	2.4

- Distribution by category:

	A	B	C	D
Number of proposals – Paranal	107	138	187	206
Number of proposals – La Silla	30	31	89	87
Number of proposals – total	137	169	276	293
Relative programme length (%)	100	70	55	62

- Distribution by country:

	Number of Proposals (%)	Requested time (%)
Belgium	2.0	3.1
Denmark	1.2	0.9
Finland	1.8	2.1
France	18.6	10.8
Germany	22.6	14.1
Italy	22.1	8.5
Netherlands	4.9	5.7
Portugal	0.1	1.3
Sweden	0.5	1.4
Switzerland	2.9	3.7
UK	12.2	11.8
Chile	3.0	3.5
ESO	4.1	10.6
ESA	0.1	1.1
USA	1.0	9.8
Australia	0.1	1.4
Others	2.8	10.3

- P77 schedule:
  - Of 595 runs above the resource limit, 34 (5.7%) could not be scheduled.
  - But 100 runs below the resource limit with a grade better than 3.0 were scheduled.

Proposal submission – Period 78

Due to the early date of the 2006 UC meeting, this fact sheet had to be prepared before the deadline for submission of Phase 1 proposals for Period 78. Accordingly, preliminary information about the number of proposals received is not available yet for inclusion in this fact sheet, contrary to the usage for previous UC meetings.

OPC

- After consultation with the OPC at its meeting of November 2005, a formal document specifying the terms of reference and the rules of procedure of the OPC has been released. A separate document specifying the rules for dealing with conflicts of interest on the OPC will be ready and implemented for the next meeting at the end of May 2006.
- As of Period 78, members of the OPC and of its panels are selected on scientific excellence. They are appointed by the Director General based on the recommendations of a newly created Nomination Committee for the OPC.
- In reaction to the increase of the number of proposals submitted to Panels C and D, and to the fact that this number is now considerably larger than for Panels A and B, a third, additional subpanel was created in Panel C and D for review and evaluation of Phase 1 proposals from Period 78 on.