

ESO Users Committee No. 42

2018 UC report

This report was prepared by the UC Chair (Olivier Absil) in consultation with the UC Vice-Chair (Karina Caputi), and on behalf of the ESO Users Committee. It summarizes the responses to the UC Poll 2018, for which the individual country fact sheets are appended. Note that the poll was also distributed to ESO PIs outside ESO member states and associated states. Their contribution to the poll is only captured in the overall summary below (no dedicated national fact sheet for those countries). Note that the complete list of comments submitted by the anonymous users through the poll has been compiled in a confidential document ("the Appendix"), to be handed separately to ESO.

Highlights of the survey are a high level of satisfaction with the helpdesks at each stage of the process (from proposal preparation to the data reduction) as well as with the support provided during visitor mode observations. On the contrary, TAC feedback and some aspects of data reduction pipelines are still subject to criticisms. Regarding the Special Topic of this year (ALMA), the main criticisms relate to the delay in the data delivery, and to the fact that data reduction and calibration often need to be repeated. A large majority of ALMA users wish for the continuation of dedicated ALMA support.

General

A total of 697 answers to the UC poll have been collected, among which 504 complete answers. The following statistics are based on these 504 complete answers.

The profiles of the respondents are dominated by professors / research staff (about 40%) and postdocs / non-permanent staff (about 40%). PhD students represent only slightly more than 10% of the poll respondents. All countries are represented, including 32 answers from non-ESO countries (e.g., USA, India, Japan, etc).

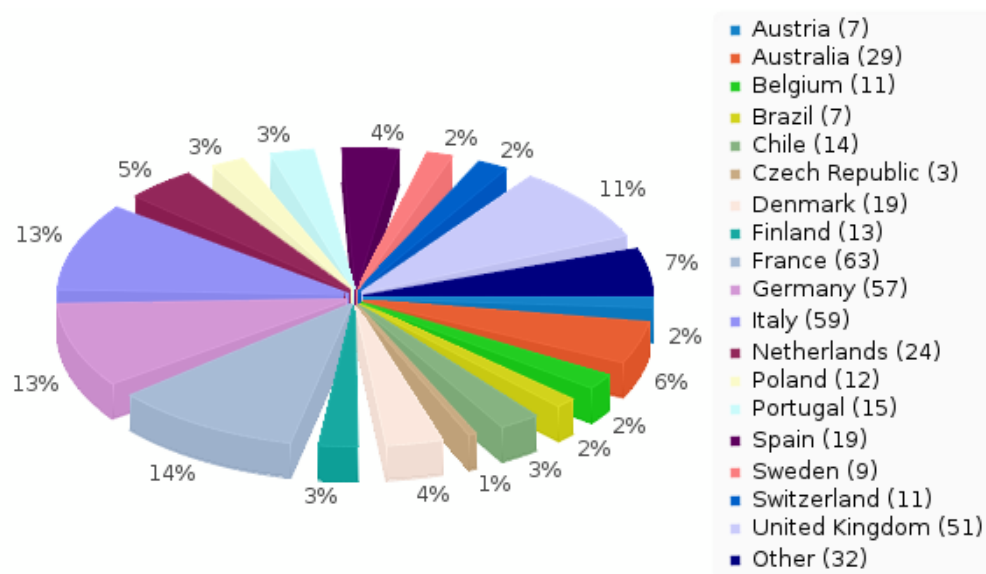


Figure 1: Number of complete answers to the 2018 UC poll as a function of country.

Among the respondents, about 75% have used LSP in periods 98-101, and a little more than 30% have used ALMA in Cycles 3-4-5. Besides ALMA, the most popular instruments are X-SHOOTER (24%), MUSE (19%), UVES (16%) and FORS (15%). Most other instruments have been used by 4% to 8% of respondents, except for a few very weakly represented instruments (CRIRES, MIDI, AMBER, FEROS, WFI).

A specific question on the VLTI and on the current development of European VLTI Expertise Centers was included in the poll. 455 respondents filled that part of the poll. Only 64 of them (14%) have applied for VLTI time in the past. If additional support could be provided by dedicated VLTI Expertise Centers, 118 of them (26%) would consider applying for (more) VLTI time. Among these 118 respondents, 85 have not used the VLTI in the past. The poll therefore suggests that the VLTI user base could be more than doubled thanks to the Expertise Centers.

Special topic: ALMA

A total of 167 respondents are ALMA users, and have filled the section dedicated to this year's Special Topic. The satisfaction with the ALMA TAC feedback is mostly average (35%) or good (32%), with 13% of dissatisfied respondents. The main criticisms relate to the TAC expertise (or lack thereof) and to the "randomness" of the ranking. The huge workload on TAC members is underlined by several respondents. The satisfaction with the consensus report is a bit lower, with 20% of dissatisfied users. Dissatisfaction is mostly related to comments being considered too superficial, inconsistent or contradictory from Cycle to Cycle, or just not to the point.

About 60% of the respondents have worked on Phase 2, and are in large majority satisfied with the support from the contact scientist. The satisfaction with the delivered data products is also relatively good (see Figure 2), with 14% of dissatisfied or very dissatisfied users. Among the reported issues, the long delay in the data delivery and the need to repeat the data reduction and/or calibration can be highlighted, as well as problems with polarization data. More than 60% of the respondents had to repeat or improve the data reduction, but only 18% traveled to an ALMA ARC node to do so. The level of satisfaction with the ALMA ARC node support is (very) high.

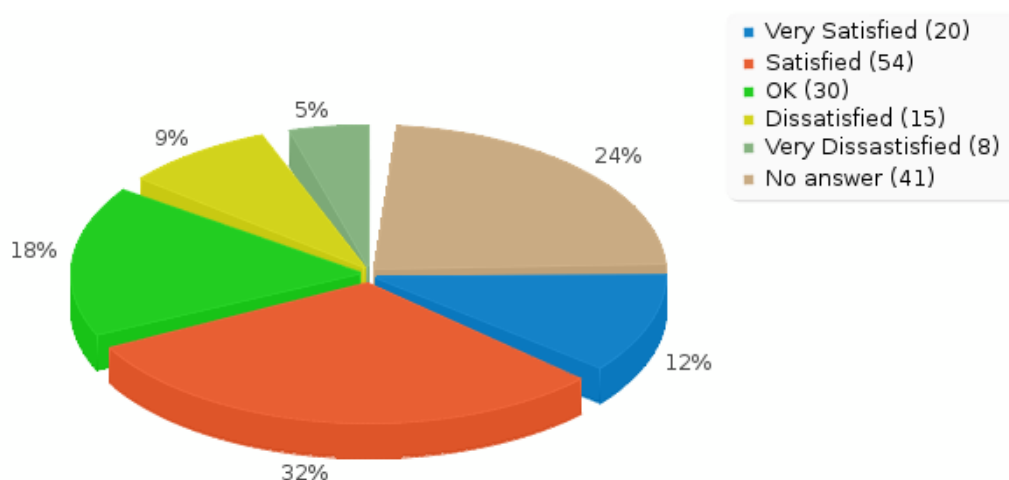


Figure 2: User satisfaction with the ALMA data quality.

A very small percentage of respondents (5%) asked for time-critical ToO observations. Their level of satisfaction with the execution time is low to very low (6 out of 9 respondents are dissatisfied).

About half of the respondents have used the ALMA archive. They are generally satisfied with the archive service (only 11% of users dissatisfied). The comments on the archive are very diverse, ranging from slowness of download to the length of the proprietary period, and including some complaints about the interface. 26 users have suggestions regarding the improvement of the ALMA archive. More details can be found in the national fact sheets, as well as in the Appendix.

While the users' opinion on ALMA becoming a "standard facility" is balanced, a large majority thinks that there is still a need for intensive user support from ESO. About 25% of respondents also feel the need for combined instrument support in the future (e.g., with SKA, VLBI, APEX, ACA, or even VLT/VLTI). Several comments on the ALMA user support, as well as on other ALMA aspects not covered by the poll, are described in the national fact sheets and in the Appendix.

OPC

The satisfaction level regarding the OPC feedback has not evolved since last year, and is still not outstanding (56% satisfied, 28% dissatisfied). As in the case of the ALMA TAC, recurring comments relate to generic, superficial, or inconsistent OPC reports (see national fact sheets and Appendix for details). A total of 170 respondents would be willing to serve in the OPC. Their names will be entered by the national representatives in the OPC nomination database.

Service mode

315 users have obtained observing time in service mode, and about 80% of them have worked on Phase 2. We received many suggestions from the users on how to improve Phase 1 & Phase 2 tools in the future. Many of them are already part of the ESO plans for these new tools. Details can be found in the national fact sheets and in Appendix.

Only a very small number of users are dissatisfied with ESO's communication about the progress of SM observations. Some users complained about not receiving enough information for non-observed OBs.

Visitor mode

103 users have obtained data in visitor mode, among which 75 used the new P2 tool. As usual, the satisfaction with visitor mode is very high (less than 4% of dissatisfied users). The few criticisms relate mostly to the low level of (scientific) support at La Silla, and to the unequal staff knowledge/training level in Paranal. The satisfaction with the new P2 tool is also high (only 5% dissatisfied). One of the main criticisms from the users regarding P2 is the need for network access to prepare OBs, and the associated problems in case of poor Internet connection.

Data reduction

267 respondents have reduced ESO data. They have used various tools to do so, in a rather balanced way as displayed in Figure 3. “Other” pipelines include general tools like IRAF, MIDAS, or GILDAS/CLASS, as well as specific pipelines developed by consortia. The fraction of respondents using Reflex increases when they are not familiar with the instrument, while fully homemade pipelines are favored if the instrument is well known.

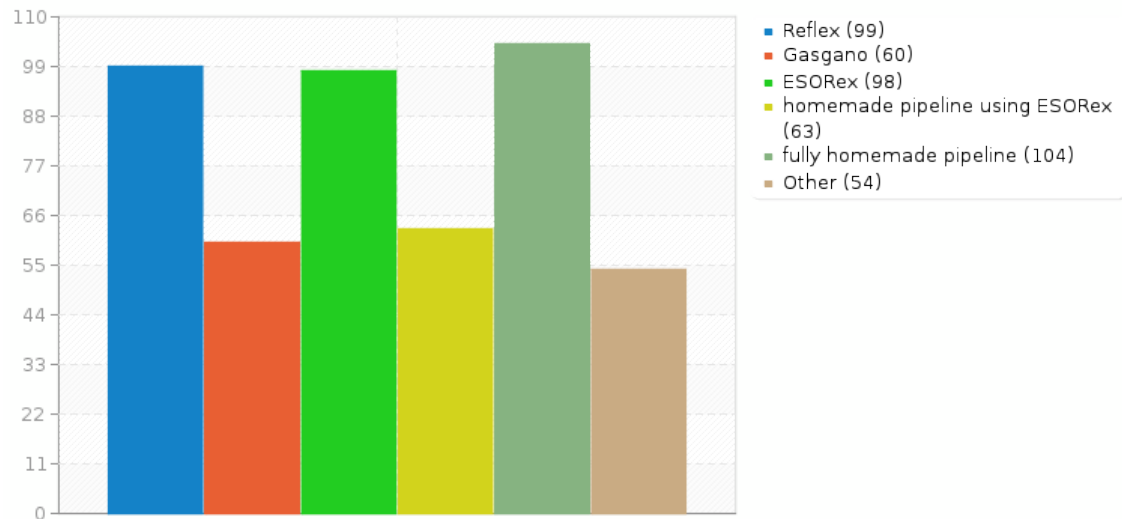


Figure 3: Statistics of tools used to reduce ESO data (number of users).

The level of satisfaction with the ESO pipelines is fair to good, as illustrated in Figure 4. As usual, users have many comments (sometimes very detailed or specific) on pipelines. Among the more general comments, we can highlight the variable level of support for various instruments in ESORex, GASGANO and Reflex, insufficient documentation for some pipelines/instruments, difficulty to install the pipelines, difficulty to assess the quality of the final products (especially regarding calibrations), etc. Some users are confused by the three different ESO tools, and are not sure which one to use for what. Several users wish for more fully reduced (level-3) data products.

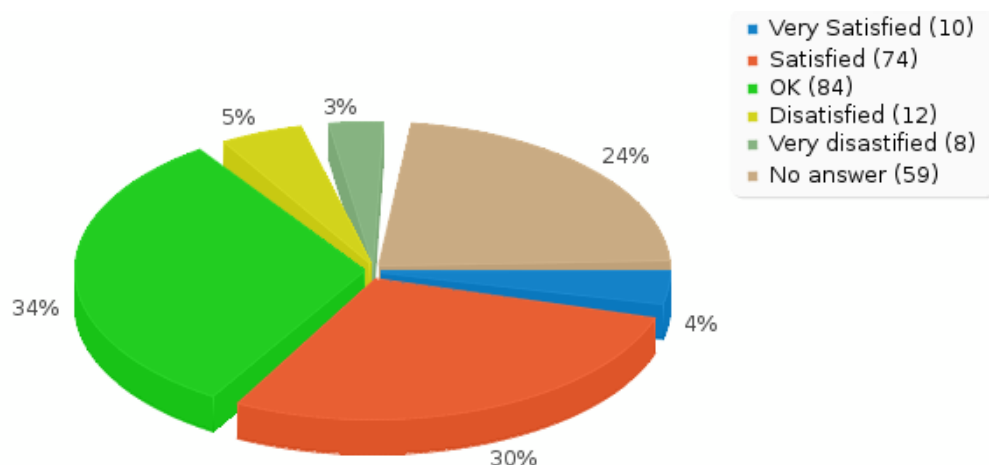


Figure 4: Satisfaction with the ESO pipelines.

More than 50 users suggest further special calibration / reduction steps to be included in the ESO pipelines. These comments are generally detailed and specific, and can be found in the national fact sheets and in the Appendix.

44% of the respondents who have reduced ESO data (i.e., 118 users) have contacted the ESO help desk. About 80% of them found the ESO help desk helpful or very helpful. Less than 8% did not find it helpful.

Archive and phase 3

251 respondents have used the ESO/ALMA archive. The level of satisfaction is high, with only 4% of dissatisfied respondents. A frequent criticism concerns calibration files not always being associated with the downloaded data. Some users are still struggling with the archive interface. Some users would like to have the possibility to query the archive with scripts.

108 respondents have used phase 3 / SAF products in their work. Only two of them were not satisfied with these products (but note that dissatisfied users might just not have used these products, and hence not answered the question). One of the main criticisms about phase 3 products is that the data reduction / data quality is not always optimal, nor easy to assess.

Miscellaneous

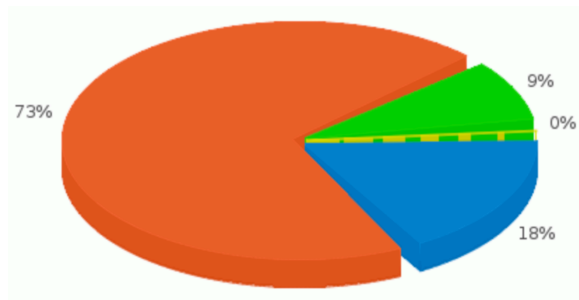
ESO users are generally working under MacOS and Linux (about 50/50). Some rare users work with Windows or Unix (about 5% each).

77 respondents have issued a press release in collaboration with ESO. Their level of satisfaction is generally high or very high. Some complains are however expressed by the users about the editorial line of the press office: too much self-promotion of ESO facilities, and not clear how the choice of subjects is made.

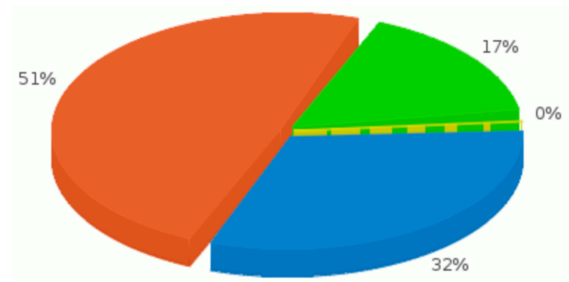
A large majority of respondents would like ESO to consider longer proprietary periods for observing programs spread on a full period, or on more than one period, if that is scientifically justified by the PI in the observing proposal. Some users underline however that it is not in the interest of science in general (nor of ESO) to further extend proprietary periods.

The number of reported issues with the ESO User Portal is very low. The few issues are listed in Appendix.

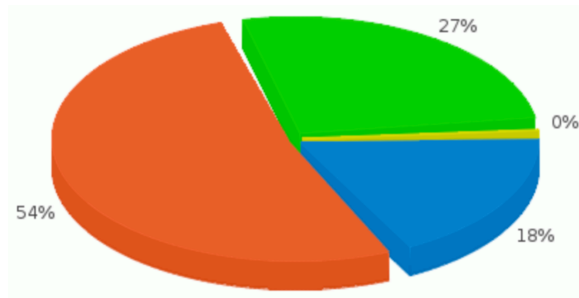
Users tend to read the ESO Science Newsletter and Press Releases more often than the ESO Messenger. The ALMA Newsletter is much less frequently read. Details are given in the pie charts of Figure 5.



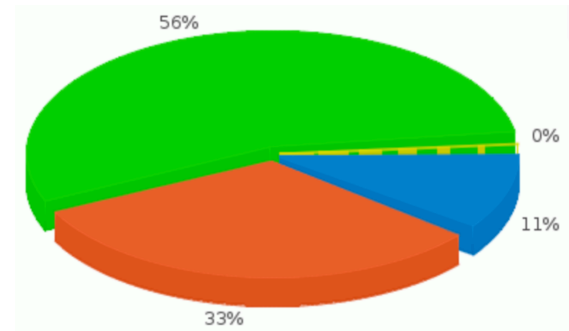
ESO press releases



ESO Science Newsletter



ESO Messenger



ALMA Newsletter

Figure 5: Fraction of users reading various ESO publications (blue = always, red = sometimes, green = never).

FACT SHEET AUSTRIA, ESO USERS COMMITTEE POLL 2018

Prepared by Wolfgang Kausch

SUMMARY:

From the Austrian community eight users participated the poll (3 being Prof./permanent staff, 3 non-permanent research staff, 1 Post-Doc, 1 PhD student). Seven of them were actively involved in PI/Col proposal activity applying for FORS (2), KMOS (1), MUSE (1), NACO (2), UVES (1), X-Shooter (3), HARPS (1), VISTA/VIRCAM (1), and the ALMA facility (1).

ABOUT VLT:

Two have applied for VLT time in the past. Three participants would apply for more VLT time in case additional support in a similar way as the ALMA ARC centres provide, one would not.

ABOUT ALMA:

Two users obtained time as PI/Col in Cycles 3 through 5. The proposal review was considered to be satisfying (1) and OK (1), one user voted for „OK“ for the TAC consensus report. Two users selected „no answer“ for the support of the assigned contact scientist, one was satisfied with the data quality (one no answer). One user repeated/improved the data reduction without specifying the reason. No travels to an ALMA ARC node, no time critical observations. One participant used archival data and was satisfied. One user thinks ALMA is becoming a standard facility. Intensive ESO user support for ALMA is desired by one user, one thinks this is not necessary. No answers on the following ALMA questions.

ABOUT OPC FEEDBACK:

Three users think, the OPC feedback was valuable, four disagree with that. Two agreed to participate in the OPC.

Comment: „very general comments; OPC shall specify which items they mention, e.g. "in Immediate Objective clarify this-and-that", etc.“

ABOUT OBSERVING MODE QUESTIONNAIRE:

Five participants obtained service mode observations, three worked on the Phase 2 preparation. The communication on the progress of SM observations was evaluated as very satisfying (3), satisfying (1) and OK (1). No visitor mode, no answers on the new p2 web tool.

Desired features for the new Phase 2 Tool:

„For offsets/dithering a simulator visualising the pattern would be great.“

„Easier creation of similar OBs for large target lists“

ABOUT DATA REDUCTION:

Six users reduced ESO data. Three used Reflex, one Gasgano, and four applied homemade pipelines. Two participants used Reflex, one Gasgano, one esorex pipeline based home-made, and one fully home-brew pipeline for familiar instruments. For non-familiar instruments two used Reflex, one esorex, and one a fully home-made pipeline.

One user is very satisfied with ESO pipelines, four think, they are „OK“, one is dissatisfied. No comments on their experience, but six think, that there are no special/further steps to be implemented in the pipelines.

Three users contacted the ESO help desk and were very satisfied (two voted „very helpful“, one „helpful“). One user desires „End-to-end pipelines“ pipelines

Three used MacOS, five Linux systems.

ABOUT ARCHIVE:

Six participants have used archival data and voted for very satisfied (1), satisfied (3), OK (1) and dissatisfied (1). One desires a „Quality / Grade“ selection field.

Comment:

„For Public Surveys, in particular, VISTA NIRCAM, the data products available have been mostly unreliable, to the point that the teams behind them do not use the phase 3 data in their publications. This is a problem.“

Three used Phase 3 data and were very satisfied (1), satisfied (1), and OK (1) with the data.

Comment: *„Sometimes not fully clear how the Phase 3 data were processed.“*

ABOUT PROPRIETARY PERIOD:

Four users voted for a prolongation of the proprietary period, when it is scientifically justified, two were against it.

Comment: *„From my experience with space missions, more proprietary does not mean better science, quite the opposite.“*

ABOUT USER PORTAL:

One user had issues with Run-progress and updates.

ABOUT ESO PRESS RELEASE:

One user issued a press release and was satisfied with the ESO system.

The ESO press release is read always by two, sometimes by four, and never by one user.

The Science newsletter is read always by six and sometimes by one user.

The Messenger is read always by three, and sometimes by four users.

The ALMA newsletter is read sometimes by two users.

ESO UC National Fact Sheet for Australia (2018)

Prepared by Caroline Foster

General Summary

The ESO poll received 34 responses from Australia. Requests to fill the poll were sent directly to 146 Australian ESO PIs, Phase 2 delegates and archive users. The poll was also distributed more widely within the community.

Most popular instruments were UVES, XSHOOTER and MUSE, although a total of 18 different instruments were selected. The Australian use ESO tools on MacOS (77%) and Linux/Unix (32%) operating systems.

The majority of Australian users have answered that they are either “very satisfied” or “satisfied” to most questions.

Special topic: ALMA

While ALMA is not part of the Australia limited partnership with ESO, 9 Australian respondents have identified themselves as ALMA users. 8/9 users reported being a PI or Co-I of a successful ALMA proposal and 2 have used archive data. Satisfaction with the ALMA proposal review, consensus report, delivered data products ranged between “very satisfied” and “OK”. Three users reported having to improve the data reduction.

OPC Feedback

71% of Australian users found the OPC feedback was valuable. Salient comments from users on the value of the OPC feedback included:

- “Not enough details are given. Not clear how to improve the proposal,”
- “The feedback is not always helpful and proposal success can vary semester to semester.”

Other comments on the OPC feedback were either neutral or positive.

Phase 1 / 2 tools / user portal

Australian users have made some related comments and suggestions:

- “I don’t understand why it is necessary to include finding charts in p2pp for imaging programs - is the telescope pointing really that unreliable? Having to apply for a waiver especially when we don't even know our targets yet seems unnecessary and took 5 days to approve.”
- “The new AO mode offered with MUSE caused some issues in phase 2 submission that can probably be put down to teething problems.”
- “I keep having to clear my cookies to log in successfully” [to the user portal]

Visitor/Service Mode

A total of 7 Australian users were observers in visitor mode. Satisfaction in the visitor mode experience ranged from “OK” to “very satisfied”. 6 visitor mode observers prepared their OBs with the new p2 tool. All users indicated they are (very) satisfied with p2.

20 users received time in service mode.

Data archive

About half of respondents report having used ESO/ALMA archive data. Most are satisfied with the archive data service, but one user reported being dissatisfied. One user suggested the APEX – Max Plank archive could be more widely accessible,” while another commented that associated calibrations, especially daytime ones, can be hard to find. Other users included very specific and lengthy comments, which cannot be included here.

Data reduction

Half of respondents reported having reduced ESO data using various ESO provided pipeline flavours as well as homebrewed pipelines. The majority used ESORex. Satisfaction with the data reduction pipelines was generally lower than elsewhere in the poll. The distribution of responses covers the range of possible answers and peaks around “OK”, with 3 users reporting being either dissatisfied or very dissatisfied.

Specific comments include:

- “KMOS pipeline is fairly easy to follow the documentation is clear (e.g. making SOFs). The XSHOOTER pipeline is not easy to use and the manual is not a big help.”
- “Lacking guidance (even with manuals) on parameters to use within ESORex lead to the use of a homemade pipeline. Similarly, lacking options to combine observations (such as sky) in specific ways was the other reason.”
- “I haven’t managed to get pipelines or standard products working well enough to justify not writing or modifying my own software.” This user specified that he/she required the following further steps: “Dither subtraction in NACO cube mode with reliable bad pixel identification and correction. This has been a complex problem with NACO (bad quadrant etc). Parallactic angle computation that is accurate after NACO moved telescope.”

Phase 3

20% of poll participants (6) have used Phase 3 products satisfactorily.

Helpdesk

A total of 7 respondents reported having used the ESO helpdesk and finding it mostly helpful.

Proprietary period

Of 19 respondents, 16 think that ESO should consider starting the 1-year proprietary period at the time the last OB of the program is executed if scientifically justified by the PI.

ESO news

Most (~65%) Australian users read ESO press releases, science newsletter and the Messenger “sometimes”. Few (23%) sometimes read the ALMA newsletter.

Other comments from the Australian community

- The call for OPC nominations has received a good response from Australians willing to serve. The UC representative put forward 25 names, and 17 of the 34 poll respondents indicated they would be willing to serve. Our community wants to be well represented on the OPC.
- ESO’s willingness to allow remote attendance to the LPO Users Workshop in March was very well received by Australians. A total of 11 Australian users chose to attend (part of) the workshop remotely via Zoom.

Specific user feedback is pasted below:

- “I thought it was a good effort. As predicted the times made it hard. I only attended the XSHOOTER event. Shame they switched off the mikes after the talk. What they could have done (isn’t hindsight wonderful) was to have a dedicated person to chat with people online attempting to work through the tute. In the future it might be interesting to attempt an ‘all online’ AU focussed training event as an alternative to having them fly out here. My thoughts are that having everyone online would not make for two tiers of participants, and that it could be run during Australian business hours with only the trainers being out of timezone.”
- “I was satisfied with remotely attending the workshop. Voice and video was clear and there was always dedicated time for asking questions. Thanks.”
- The Scientific Organising Committee for the Observational Techniques Workshop in April-May indicated they are very pleased that ESO has agreed to participate by sending 3 “experts”.
- Many Australians (astronomers and government employees) have met with the ESO delegation in February. The ESO delegation organised a panel discussion about diversity in Canberra. A handful of Australian users have asked their representatives on the ESO governing bodies to follow-up on the topic of diversity within ESO. As a response, ESO has agreed to organise a separate meeting in April with Michele Peron for members of the UC who are interested in the topic of diversity. The Australian community would like to encourage and support progressive actions within ESO to improve its diversity and lead change for the community at large.

Belgium fact sheet for ESO Users Committee 2018

Prepared by Olivier Absil

12 Belgium-based ESO users participated to the poll, out of 33 contacted PIs who used ESO facilities during P98-P101 or ALMA in Cycles 4 and 5, and 35 more ESO users who were contacted based on their use of the ESO Archive in 2016-2017. Among the 12 respondents, more than half are postdoc or non-permanent research staff. Only 3 have a permanent position.

The main instruments used by the respondents are **GRAVITY (5 users)**, **PIONIER and SPHERE (4 users)**, UVES and ALMA (3 users each), and then MUSE, VISIR, X-SHOOTER and APEX (2 users each).

Although a significant fraction of the respondents are already VLTI users, **8 out of 12 would consider applying for more VLTI time** if they had help from the VLTI Expertise Centers.

About ALMA

3 respondents are ALMA users, and got time in Cycles 3, 4 or 5. They have **mixed feelings about the quality of the TAC feedback** (ranging from very satisfied to dissatisfied). They are generally **satisfied with the support** they obtained, as well as with the data quality and the data services (archives). None of them travelled to an ARC node, and none of them used the ToO mode. Although they mostly think that ALMA is becoming a standard facility, all of them think that there is **still need for intensive user support from ESO**. One user complains about the appeal procedure, which is considered too slow and bureaucratic (in this case, concerning the repeat in cycle 3 of an incomplete observation from cycle 2).

About OPC

The **satisfaction level about OPC feedback is rather low** this year (only 5 out of 9 answers were positive). One user is happy that the OPC pointed the weaknesses of their proposals, but another one complains that panel members were apparently only looking for reasons to shoot down the proposal (without acknowledging its strengths).

Four new applications to the OPC have been received and added to the ESO data base.

About Phase 2 and service mode

Most users (10/12) worked on Phase 2. All are happy with ESO communication regarding SM runs progress.

Suggestions regarding the new Phase 1&2 tools:

- Pre-filling Phase 2 form with Phase 1 information.
- Computation of LST intervals for interferometry modes.
- Simbad name resolution.
- More intuitive interface (e.g., easy drag-drop of OBs, containers, etc).
- Access to example OBs for main instrument modes.
- Integration of observation status into Phase 2 tool.

About visitor mode

Only 1 (**very satisfied**) visitor, who used the new Phase 2 tool and was very satisfied with it.

About data reduction/pipelines

8 users have reduced data over last 4 periods. **5 of them used Reflex, and 2 used ESORex.** The others used homemade pipelines or consortium pipelines, or sometimes in combination with ESORex. Reflex is more often used when the instrument is not well known. **Satisfaction level is average** (2 satisfied, 2 OK, 1 very dissatisfied). 3 users contacted USD, and were happy with the help provided.

Comments and suggestions:

- SPHERE Reflex pipeline did not produce well-centered output.
- Issues with X-SHOOTER Reflex pipeline due to source faintness and incorrect instrument setup.
- VISIR pipeline has many bugs, not sure if output can be trusted.
- More Reflex tutorials would be helpful.

Potential additions to the pipelines:

- SPHERE: direct imaging detection limits.
- SPHERE: frames centering.
- SPHERE: « SDI stacking »
- Image reconstruction for VLT data.
- « Telluric removal » (no additional information; user of FLAMES, MUSE, X-SHOOTER, UVES)

Suggestions to reduce workload:

- More efficient in solving bugs (user gives example of VISIR pipeline, where proposed solution was generally to disable the buggy step).
- Reflex needs to be tested on more system platforms (problem with recent Fedora version).
- Provide automatically reduced data (phase 3 level) for more instruments.

About archive

4 archive users answered this part. All of them are **satisfied with the archive service.**

Comments and suggestions:

- Associated calibration frames not always complete (which requires additional manual download). This search could be made easier.
- One user suggests to move away from Java, which requires to tinker with security issues, and may not be supported any more in future browser releases.
- Add the ability to search APEX archive for covered frequencies (not just central/LO frequency).

About Phase 3

Only one Phase 3 user. Satisfied, with no suggestion (except to develop it for more instruments).

Miscellaneous

OS almost evenly shared between MacOS and Linux. Only one Windows user.

Two PRs by Belgian users. All very satisfied.

A majority of respondents (46%) would like ESO to consider extending the proprietary period for programs that have long execution periods, if scientifically justified by the PI. One of them comments that this should only be considered for monitoring programs spread onto one year or more.

ESO Newsletter are read by all users at least sometimes. PRs are also largely read, but less frequently than Newsletters. ESO Messenger is read a little less than PRs (balanced mixed between always, sometimes, and never). ALMA Newsletters are read only by a minority.

ESO USERS COMMITTEE POLL 2018

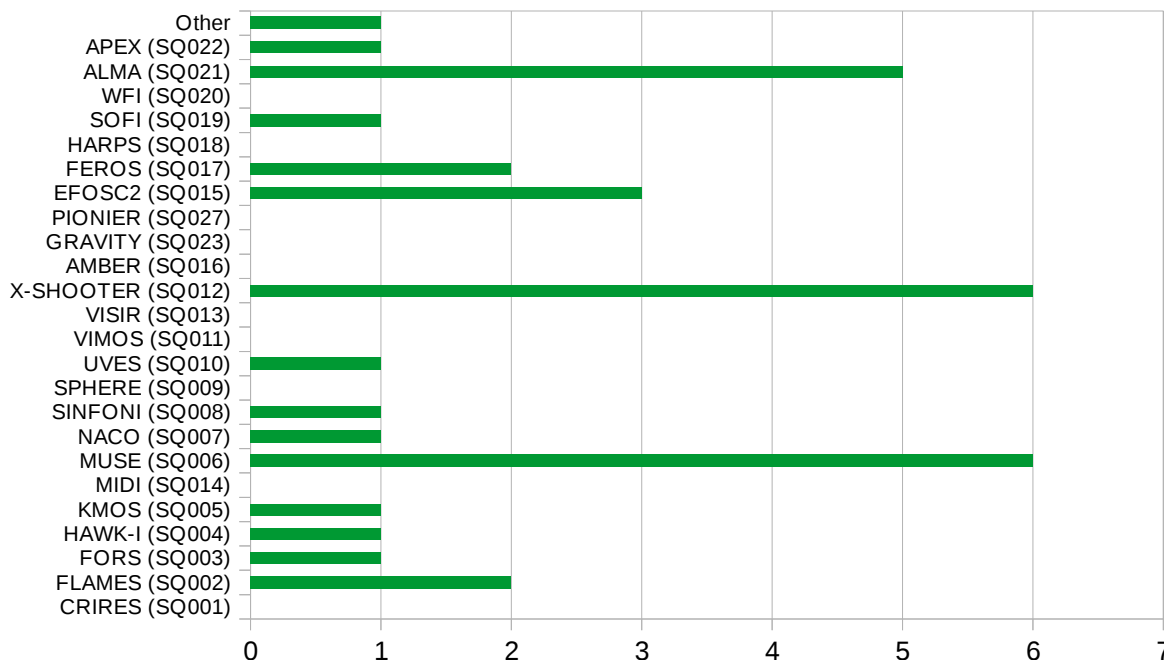
Chile Factsheet

by Sebastian Lopez, April 3, 2018

Overview

Only 14 astronomers affiliated to a Chilean academic institution responded the poll. This is around one quarter of the number of Chilean PIs typically submitting ESO proposals every semester. This number breaks down into 9 Faculty, 3 postdocs and 2 PhD students. It represents around 2% of all (689) submitted responses to this poll (in last UC poll this percentage was 3%). Nine out of 14 respondents have been PI in one of the last 4 periods. My impression is that these relatively low numbers might indicate a certain level of community satisfaction with using ESO facilities.

Instrument Usage



None of the respondents was a VLT user, while 7 were ALMA users (6/7 got time in cycles 3, 4 or 5).

ALMA (special topic)

ALMA TAC and TAC Feedback

Three respondents declared themselves satisfied or very satisfied with the general review process, while 4 others were just OK (3) or dissatisfied (1). Only 2 provided comments. The dissatisfied person commented that *“there are clear biases which are not being investigated (toward certain regions like EA and Chilean generally, and as a function of gender)...”*. The same person is proposing a blind-blind review process and also making public the statistics of panelist's regions and their rankings of different PI's regions. She/he added a concern that the load of proposals is preventing panelists from reading the proposals carefully enough. On the other hand, one of the “OK persons” commented that the feedback lacks information.

My own impression is that those negative comments are not sensibly representative of the Chilean community.

ALMA phase 2 and ALMA support

Five investigators worked in phase 2 and all of them declared to have received enough support from ALMA. However, the question on the “need of intensive user support from ESO” was answered positively by 6 people. This looks somehow contradictory to me. The rest of the questions on data support were not answered.

ALMA data and data reduction

Four respondents declared themselves OK or satisfied with the ALMA data they received, while another one was dissatisfied, and another one “very dissatisfied”. The dissatisfied person commented: *“The ALMA data are not compressed, making downloads take nearly twice as long. ... The products provided are not very uniform or complete...often there are just a few images of example sources, and one needs to reduce the data to generate images of all sources at natural weight resolution.”*. On the other hand, the “very dissatisfied” person complained that *“The liberation of the data product to be downloaded took too much time. The last part of the data was available after several months of the first part of the data which implies an effective proprietary period very short, effectively less than a year.”*

So it seems this last comment pertains the proprietary period, specially when the program execution takes a significant fraction of a year to be completed.

On the data reduction pipeline there is one quite specific comment (*“The pipeline script throws an error with respect to the asdm2MS conversion for some of the data.”*) and another more general one: *“ [the pipeline] is useful for basic things, but often can be improved upon with some effort.”*. The latter comment came from the very unsatisfied person.

ALMA ARC and ALMA archive

No one got face-to-face support. There was one negative comment pertaining the lack of data compression for downloading. This same person is suggesting to have *“quicker access to the raw data that has been taken. more uniformity in the products that are provided to each user.”*

OPC

Eight out of 10 answers were positive about the OPC feedback. The 3 comments that were received seem to have been made by people with past experience in TACs. They go in the line of lowering the load of proposals for primary reviewers, indicating that this will improve the feedback.

Interestingly, 5 people declared to agree with participating in the OPC panels next year, which is encouraging given the well-known load of work of this activity.

Service and visitor mode

Nine and 8 respondents used SM and worked on phase 2, respectively (in the last 4 periods). From the answers and comments that were received the overall feeling is that people are quite satisfied with SM and also with phase 2. One reported serious lag problems when using phase 2 from Santiago (this is not this author's experience, though).

As for visitor mode, there was no negative feedback by any of the VM 3 users.

Data reduction

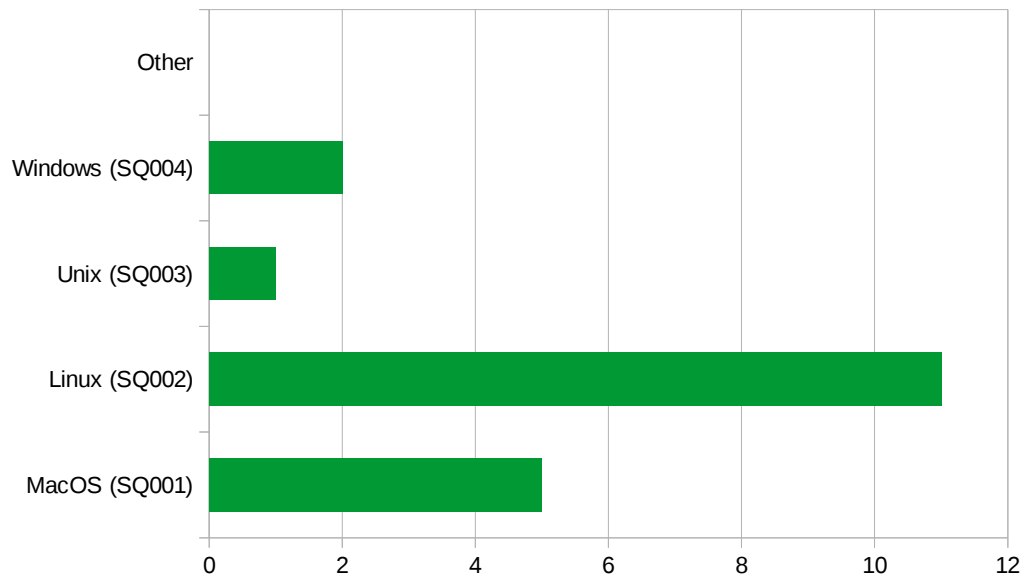
The overall feeling in this respect is also quite positive, judged by the 7 researchers who declared to have reduced ESO data. Gasgano is the less used platform. As for pipeline usage, the overall impression is quite good. There was one comment on (1) the lack of documentation and, more specifically, on (2) quality assessment of MUSE reduced data. I think I would concur with (2).

Finally, none of the respondents contacted the help desk, which is a sign that the system ran smoothly overall.

Archives

The level of satisfaction here is high, ranging from “OK” to “very satisfied”. A few isolated comments pointing out to missing capabilities for downloading data taken with certain instruments (specifically two comments on FEROS and MUSE calibration data “difficult to identify”)

Operating systems



Press releases

Almost no feedback here. Just one researcher participated in PRs.

Proprietary period

Overall consensus that ESO should consider 1-year PP after last OB was executed (might be difficult to implement if program has carry-over status). Three replies did not concur.

Users portal

No problem reported.

The messenger, Newsletters, etc.

Most of the users have read them "sometmes".

Factsheet Czech Republic prepared by Michaela Kraus

Only three (2 researchers and 1 post-doc) of the 39 contacted users completed the poll. All 3 had proposals submitted during the last 4 periods. The requested instruments were FORS, UVES, X-SHOOTER, GRAVITY, and APEX. None of them is an ALMA user.

PROPOSALS – PREPARATION, SUBMISSION, AND OPC FEEDBACK

One user has applied for VLTI time and would consider applying for (more) VLTI time if he/she could receive additional support. Only one user replied to the question concerning OPC feedback and found it not useful. One person agreed to be an OPC panel member, the others did not answer this question. One user commented on the new phase 1/2 tools and proposed to have an automatic transfer of constraints, targets, exposure times, ... from Phase 1 to Phase 2.

FEEDBACK FROM SERVICE MODE OBSERVATIONS

Two users obtained observing time in service mode, have worked on phase 2 preparation, and were very satisfied with the way ESO communicates about the progress of the observing runs. No user was an observer in visitor mode.

PIPELINES

All 3 users have reduced data. When they are familiar with the instrument, two of them use the ESO Reflex, ESORex, and IRAF tools and are (very) satisfied, while the third uses fully homemade pipelines. When they are not familiar, two use ESO Reflex, and the third still uses fully homemade pipelines. One user commented that in the case of FORS, the possibility to fully reduce spectropolarimetric data would be desirable. None contacted ESO help desk, but one user would appreciate if ESO would provide reduced data.

ESO/ALMA ARCHIVE AND PUBLIC DATA SURVEY INCLUDING PHASE 3

2 people used archival data and were (very) satisfied with the services. One person used Phase 3/SAF products and found them OK, mentioning that sometimes the reduced data was not the best possible extraction, and that they were able to obtain a better quality data set using own reduction procedures.

OPERATING SYSTEM AND PRESS RELEASES

All 3 use Linux, 2 of them in addition Windows. None of them issued a press release.

PROPRIETARY PERIODS

One user was in favor of the 1-year proprietary period at the time the last OB of the program is acquired. The others had no opinion.

ESO USER PORTAL

No user had any issues with the ESO User Portal.

NEWSLETTERS

All 3 users read sometimes the ESO Press Release, 2 read sometimes and one always the Science Newsletter, 2 read sometimes and one never the ESO Messenger. The ALMA Newsletter is never read by any of the users that filled the poll.

Fact sheet, Denmark, ESO User committee, 2018

Prepared by Lise Christensen

General summary

From a list of 55 PIs and archive users, 19 people responded to the user survey. Most users are active and submitted proposals as PI or CoI, while 3 users report archive usage only. The responses represent both VLT/La Silla including ALMA + APEX users.

Frequently used instruments are: FORS, MUSE, UVES, X-shooter and ALMA +APEX.

In general, users respond as being 'satisfied' and 'very satisfied' to most questions in the survey.

VLTI specific (VLTI support centre)

No Danish users applied recently for VLTI. If a support facility were available, 4 users would consider applying.

Special topic: ALMA

9 of the 19 respondents are ALMA users, and 7 got time in periods 3,4, or 5.

Feedback from TAC review:

Generally users are satisfied with the feedback (6/9) and 3/9 reply 'OK'

A user remarks that the TAC does not pay attention to users optimal way of using ALMA time.

Feedback from ALMA consensus report:

One user remarks that the report is a summary of the proposal, and does not contain useful information on how to improve the proposal.

ALMA support and data products:

All users (5/10 respondents) are satisfied with the support and data products delivered.

2 users received face-to-face support and were very satisfied.

4 users remark that they needed to re-run data reduction with minor tweakings.

User Remark: One user comments that the continuum subtraction in crowded fields is not great.

ALMA ToO:

Only one user used ToO mode, and was dissatisfied (but did not respond to why).

ALMA archive:

5 users have used the ALMA archive.

User Remark: For ALMA, the frequency support information should be available as rest frequencies. It should also be easier to access that information (currently, it is displayed when hovering the mouse over it).

ALMA expertise:

Only 2/10 users think that ALMA is becoming a 'standard facility' while 6/10 users still think some expertise is necessary. This means that the support provided by ESO and the ARCs is still very much in demand. In particular when it comes to the stage of combined facilities, such as ALMA+SKA+VLA+SMA etc, one user would appreciate the support.

Users Suggestions:

- There should be a tool to check proposal setups for possible duplications, like it was available for e.g. the Herschel Space Observatory. It is currently very difficult and needs to be done all by hand, which is a nightmare for a popular source with lots of existing previous data.
- While many tutorials are/were offered for ALMA, I still did not know how to quickly inspect my first delivered data set (without re-doing the calibration). Maybe there should be more of a simple cookbook for newer users.
- The possibility of ARC node personnel to visit individual institutes for proposal support should be upheld. It is a huge help to all and reminds non-specialists that ALMA is a powerful observatory. And new novices appear all the time.

Service mode time

12 Users report to have obtained time as PI/CoI in the last 4 periods, and 11 of them have worked on Phase2.

Users are satisfied with the communication from ESO side, and appreciate the information provided in the night reports – particularly seeing measurements noted by the night assistants.

Users suggestions for improvements for phase 1+2:

- A more professional template with the phase 1 update. If using latex, then improve the incorporation of figures.
- It would be excellent to see the different options, and the benefits they bring, for the different instrumental setups. In a very compressed way.
- Support for OB import and export in the way P2PP did it: p2 does not currently do that

Visitor mode

Only a single user responded as VM user, and was very satisfied with the professional support at La Silla.

Remarks for the p2 update:

- Not all functions of the all P2PP tool are yet implemented in the P2 web tool, but the interface is promising.
- Is very easy to use. I like it a lot!

ESO data processing

10 DK users responded to having reduced ESO data.

These are the preferred tools, which also correspond to the question of what users are most familiar with:

26% (5 users) use ESOREX

21% (4) Reflex

26% (3) home-made pipeline with ESOREX

16% (2) fully home made pipeline

11% (2) Gasgano

16% (1) other (IRAF, python, GILDAS for APEX, HARP polarimetry pipeline)

When users are not familiar with an instrument, they use:

21% (4 users) Reflex

5% (1) ESOrer

5% (1) python

Pipelines

Statistics: 86% (6/7 users) OK or better.

5 users contacted helpdesk and all reported 'helpful' or 'very helpful' with the assistance.

User comments

- I only reduced data with Reflex once. It was weird at the beginning, and the so-called "manuals" provided by ESO are archaic and not helpful at all. I went to youtube and googled videos from other astronomers explaining how to do things to be able to reproduce it. Something like this, officially from ESO, would be helpful.

- I have used very poorly constructed .fits files where two wavelength intervals were concatenated with a gap in between and different wavelength stepsizes.

User suggestions:

- For X-Shooter: Doing slit loss corrections and creating a combined spectra using the 3 X-Shooter arms

-Separate the spectra into two different .fits files

Improvements for work load:

- Have more concrete examples. The MUSE pipeline user manual is very good and could be used as an example of what to do for the other instruments.

- Give us already reduced data. :D flux versus wavelength and errors. That would be lovely.

- Separate the different wavelength intervals into different .fits files

- ESO should offer a pipeline for VIRCAM

Archival data

11 reported uses of archive data Statistics: 100 % are OK or better

User comments:

- It would be nice to get access to reduced data (when supported) on shorter timescales.

- Naming of files is confusing

- Very useful to be able to compare UKIDSS data with similar SDSS data.

Suggestions for improvements:

- A check that a searched source / coordinates is actually covered by the returned image would be great

- Rest frequencies were actually covered by spectral windows (ALMA)

- make the instrument specific query form return a table (like what is possible from the generic query form)

Phase 3

6 DK users (out of 19) responded to have worked with phase 3. 100% of the users replied as 'OK or better'.

User remark:

X-shooter is not always great for faint sources, especially in the NIR.

Operating systems

The distribution of users' operating systems is:

58% (11 users) MacOS

37% (7) Linux

5% (1) Unix

5% (1) Windows

PR services

Statistics: 2 out of 19 users issued a press release.

One users was 'satisfied', the other 'dissatisfied'

Users remark:

Great service, but always hard to find the balance between what the scientists want to report and how the communicators want to spin the story :)

94% (18/19) read the ESO press releases either 'sometimes' or 'always'

74% (14/19) read the science news letters 'sometimes' or 'always'

63% (12/19) read the ESO Messenger

42% (11/19) read the ALMA Newsletter

Proprietary periods

58% (11 users) say they want the 1 year proprietary period starting at the time the last OB has been executed. But the remarks from the users appear contradictory:

Remarks:

- This would effectively make the propriety periods longer. If anything they should be shorter. Perhaps even much shorter? Perhaps only available to ESO community.

-I am torn. As a PI, it would be very nice, but it will also block some data sets from being available for other people who want to prepare proposals etc.

- For some programme you need the full data set to be able to start analysing your data. In that case it is justified to start the proprietary period when the full set is collected. Still, the need for this would have to be well justified.

- Yes, sometimes your analysis makes no sense until you have the last data

Misc ESO usage – wider discussion in the DK community

We have discussed why there are no SDSS filters at the VLT (and NTT), specifically for FORS2 and EFOSC as well. With the recent advent of the large surveys, such as SDSS and Pan-STARRS, these filters have become widely adopted by many facilities (including the more recent ESO instruments, such as GROND, VST/OmegaCam, the X-shooter acquisition camera).

In the field of transient astronomy, it is becoming more and common to create light curves using the SDSS filters. For this reason, the lack of these filters at both NTT (for ePESSTO) and at the VLT (for FORS2) is a bit unsatisfactory. Transformations between the two systems are

of course possible, but require extra work and always leave systematic / unaccounted sources of error in the process. Absolute calibration has also become easier and easier for the SDSS filter set thanks to the now fairly large coverage from Pan-STARRS over 3/4 of the sky (though, it is probably not as good as the one that can be achieved with Landolt standards, when done properly, in photometric nights). If the choice of SDSS filters would mean to discard the classic Johnson/Cousin system that would be a tough call.

Fact sheet 2018 Finland: prepared by Talvikki Hovatta

We received 17 replies to the poll, which was circulated to the ESO-provided list of PIs and archive users (list of 45 users, out of which many were M.Sc. students using archive data in course work). The replies came mainly from people with a PhD (14 out of 17), and only one of them had not submitted an ESO proposal in the last 4 cycles. 6 of the users identified themselves as ALMA users. The most used instruments were MUSE (8 users), FORS (6 users), and ALMA (6 users). Overall the Finnish users are very satisfied with ESO, but also provided some suggestions for improvement on various aspects, detailed below.

Special topic on ALMA:

- All 6 ALMA users who responded to the poll had obtained observing time in the last 3 cycles.
- They were especially satisfied with the help they had obtained from the ALMA staff in data reduction.
- There was one suggestion to change the review process by not have the ARP meet in person, but to assign a random rank to proposals in quartiles 2 and 3.
- 4 had worked on ALMA Phase 2 and all of them had received enough support from their contact scientist.
- 3 people wrote comments on data quality: 2 reported on problems with a polarization track (presumably the same track) that was split into two EBs and therefore calibration of the second one was not possible. This was then re-calibrated with the help of the contact scientist. One said that all their projects had required additional calibration / imaging, especially the ACA data had required additional flagging / change of reference antenna
- Only 1 user had used ESO archive / public survey data, but found the data quality satisfied and the scriptForPI easy to run. They also wished for continuation for the Arc nodes to support also archive projects.
- **Only 1 out of 4 thought that ALMA is becoming a standard facility, and all 5 who replied still think extensive support from ESO is needed!**
- Only 1 answered to the question on combined support for ALMA + SKA and said yes but said it should be revisited when SKA is actually online.
- Other comments: It would be great to have the capability to do off-axis polarization analysis. For need of simultaneous multifrequency data, either allowing frequency-switching during one EB, or sub-arraying would also be desired.

OPC feedback:

- 13 users responded with 8 thinking the feedback was valuable and 5 who didn't. The ones who were not satisfied reported that the criticism did not make sense, and for another person there was an incorrect technical comment in the feedback.

Service mode time:

- 8 users had received service mode time in the last 4 periods and 7 had worked on Phase 2. Most were satisfied or very satisfied with ESO communications, 3 responded OK.

Wish list for new phase 1 / phase 2 tools:

In P2PP: - copy-paste - undo - import targets (e.g. from SIMBAD or phase 1 proposal) -- typing coordinates manually is prone to errors - finder chart generator (with e.g. DSS/SDSS, like Gemini Observing Tool)

Visitor mode observing:

- 2 users had received visitor mode time.
- 3 had used the p2 tool, one had problems in delegating the p2-tasks.
- One found the visitor run only to be OK, and reported that "La Silla night support was dismal. The TO and support staff were not helpful when we had issues and questions. Other local arrangements worked perfectly."
- Suggestions for improvements included a possibility of sharing nights (half and half) in visitor mode for ESO 3.6 m and NTT.

Data reduction:

- 6 users had reduced ESO data. 3 had used a fully homemade pipeline, 2 had used Reflex, 2 had used Gasgano, and 1 had use ESORex
- When they are familiar with the instrument, they use a fully homemade pipeline (2 users), Reflex (2 users), Gasgano (1 users), ESORex (1 users), homemade pipeline using ESORex (1 user), or IRAF (2 users)
- When they are not familiar with the instrument, they use Reflex (3 users), Gasgano (1 user) or IRAF (1 user)
- Most were satisfied (2 users) or thought ESO pipelines were OK (3 users). They gave the following comments: "At least in my experience, some instrument reduction works with specific software. For instance, Gasgano for SINFONI, Reflex for VIMOS, but using Reflex for SINFONI did not work."
- They gave the following suggestions for additional reduction steps: "Telluric removal and absolute flux calibration for SINFONI."
- 3 users had contacted ESO helpdesk in case of problems with pipelines and found the response very helpful (2) or helpful (1)
- On extra tasks that ESO should do, one requested the following: "Producing fully reduced data (phase 3-like quality) immediately after the observation. I'm not sure if this is too much to ask, but considering all the automation process and computing power nowadays, might be doable at some point."

ESO/ALMA Archives:

- 8 users had used the archives and found it OK or better.
- For archive usage, they wanted to see the possibility select by header keywords (including ESO hierarchical keywords), and also noted that it is not possible to sort the results of the query with a simple click.

Phase 3:

- 3 had used Phase 3 or SAF in their work and found it OK or better. One commented that it was very easy to use.

Proprietary periods

- All who replied (11) answered yes to the question "Should ESO consider starting the 1-year proprietary period at the time the last OB of the program is acquired, if this is scientifically justified by the PI in the observing proposal" .

Other comments from the Finnish users:

- One user had problems with phase 2 delegation in December 2017.

General

French participation rate is double from 2017 (75 users vs 35 in 2017), at 10% of all.
They are employed as permanent staff (60%), post-docs (20%), and Ph. D. students (16%).
The breakdown per facility and instrument is
LaSilla-Paranal: 56% / APEX: 4% / ALMA: 40%
Most popular instruments are ALMA(30)/MUSE(13)/Xshooter(11)/UVES(7)/

VLTI users made 14% of respondents.

About ALMA topic:

Here, 29 users participated as ALMA user:

83% of responders got time in cycle, 3, 4 or 5. 60% have used data from the archive.

+ **Almost all (95%) are satisfied with Phase1** (OK, satisfied or very satisfied). Among the 2 dissatisfied. One suggested allocating more large programs.

+ Regarding to ALMA TAC consensus report: the vast majority (95%) satisfied with the OPC (OK, satisfied or very satisfied). The comments were suggesting a lack of radio expertise.

+ Of the 17 users who worked on phase 2, all were satisfied with the interactions with the contact scientist.

- Only 60% were satisfied with the data products. Some of the comments were “Providing images is a non sense”, “the main issue is the long delay”, “data processed over wrong frequency range of interest”, and “requests to have the calibrated.ms files (takes too long to regenerate them)”

And consequently, 65% had to reprocess the data. But only 6 (20%) of the users traveled to the ALMA regional ARC center. The 6 users were all very satisfied with the support received at the ARC (IRAM-Grenoble).

* Regarding ALMA Target of Opportunity program, there was no feedback

* **Regarding Archival ALMA data quality, no one was very satisfied**, but only 2 users were clearly dissatisfied. Some comments were “Reduction had to be repeated, to improve flagging, phase, flux calibration, frequency range, continuum subtraction issues, Tsys contamination from science target (CO)”

Comments regarding the ALMA archive were “to improve transfer speed, right calibration not easy to find. Proprietary time is too short.” **Suggestions to improve the archive “Break heavy files into subfiles, add a readme file, option to automatically generate the calibrated MS file on ESO servers.”**

* ESO support for ALMA is still required for all users.

* Regarding the need of combined instrument support the responses are unclear at 50/50. Though one user requested support for “ALMA + ACA + TP” or “ALMA + 30m”.

* Any other aspects include “PIs should be able to contact and respond to ESO or JAO directly during Phase 2 and afterwards.” “Active support in exporting data from CASA”

About OPC

Generally, the comments are sometimes not relevant and vary a lot semester per semester. 20 volunteered for the OPC panel.

Regarding the VLTI: “OPC rules seems to prevent imaging programs on the VLTI. Such programs (with 4 AT) require 2 or 3 nights (to have different config) and this time is almost never allocated by the OPC”.

About future Phase1/2 tool

Comments include

- * Better handling of VLTI imaging proposals
- * Option to have proprietary time start after the last OB of the project. Or else, have all the Obs delivered at once.
- * Online ephemeris for moving targets.
- * Seeing not the best metric (e.g. for SPHERE), but quartile system could be better here.
- * to include a SIMBAD coordinate solver.

About current Phase 2/Service Mode services

Among the 28 respondents who have worked with phase2, ALL are satisfied with the phase2 system (OK, satisfied and very satisfied)

Comments include:

“PI often led to interact with too many ESO staff, PI should interact with a limited number of clearly identified persons.”

Only 10% were aware of the new web P2 tool. Comments include:

“p2 is slower than p2pp, p2 is great improvement, issues with loading old Obs.”

80% are satisfied or very satisfied with the way ESO communicates about the progress of SM observations.

About Visitor Mode

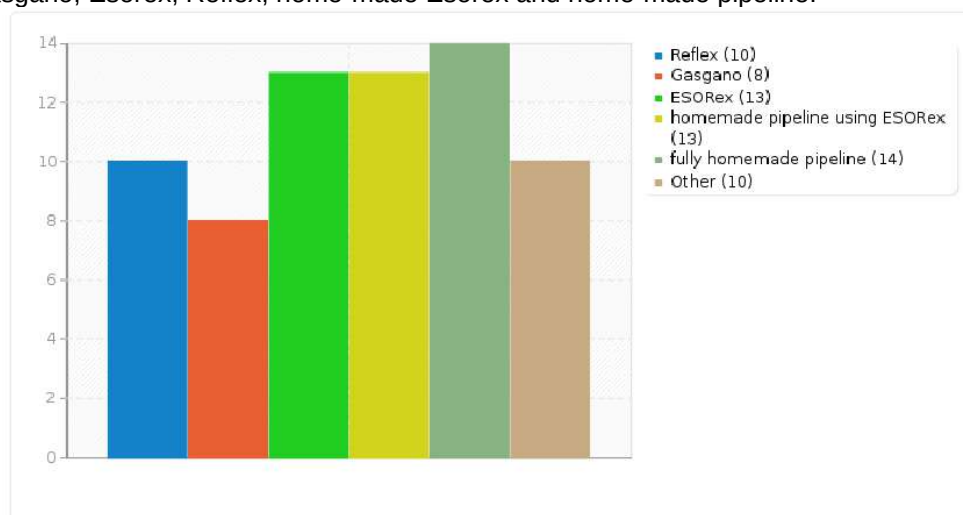
Only 25% of the 63 users were visitors. All are very satisfied, or satisfied with their visitor run.

+ **Generally, the users are very or extremely happy with the staff in Paranal.**

- one commented that “Staff knowledge is very unequal on certain instruments. The training seems to be too brief or not followed enough on UT3.” and another commented that more staff are required.

About Data Reduction

A light majority of users used homemade pipeline for data reduction. But the breakdown is roughly equal between Gasgano, Esorex, Reflex, home-made Esorex and home-made pipeline.



But when the user is fully familiar with the instrument, the majority prefers fully home-made pipelines.

Esorex comes out first when the user is not familiar with the instrument.

Regarding the ESO pipeline, 9 users are satisfied or very satisfied, 8 OK and 1 dissatisfied.

Suggestions for improvements:

- *manuals do not include pipeline/instrumental artifacts, caveats.

- *removal of telluric lines from FLAMES

- *Esorex/reflex capabilities not sufficiently versatile, and performances vary from instruments.

- *Video tutorials presenting the installation and basic usage of ESO pipelines

- * An interesting suggestion is “ESO has many instruments with too few engineers. All pipelines should be on github python-based with possible development from the community”

- * Debugging installation difficult with hard-to-understand error message.

But the majority (30 out of 34) found that no further steps would be required from ESO.

Only 30% contacted ESO, but when they contacted ESO for support, 80% were satisfied or very satisfied.

About Archive

70% of users are satisfied or very satisfied with the ESO/ALMA archive. 30% are OK or dissatisfied. One user commented that the reliability of ALMA archive DQ has been lower than through NRAO.

Suggestions for improvements:

- * For VLTI, users would like to have access to uv visibilities.

- * generate calibrated MS files for ALMA on the remote server

- * better (automatic) recognition of keywords

- * better handling of cross-searchs, and using scripts to interrogate archive.

- * search on DQ

About Phase3

Only 10 out 63 users used phase3. Those who did, 90% are satisfied or dissatisfied.

One user commented on the lack of ergonomy on the various request forms.

Other items

- *Operating systems: 65% MacOS, 54% Linux, Windows 8%

- *PR: 87% of users are satisfied or very satisfied, 15% are OK.

Lots of very positive comments regarding the PR team at ESO.

Two users with rejected PR would like to understand better the rationale.

- * **Several users commented that proprietary time is too short**, and should be increased to 12 or 18months.

On the specific question, 90% (41/44) of users would like to extend the proprietary period. Release data per OB does not make sense. This could optional {selected on the proposal}. Currently, the policy leads to partial or premature results leading to loss of science quality.

* On the ESO User portal: There were only 3 issues reported with the web-letters, 1 with phase2 delegation, 1 with data delegation and 1 with run updates.

* ESO Communication:

Most users read PR 80% (at least sometimes) and only 20% never read them.

Most users read the ESO newsletter (73% sometimes or always) and 27% never read them.

The messenger is read less often (20% always, 45% sometimes) with 33% of users never read it.

The ALMA newsletter is read by 48% of users and 52% never read it.

* Other suggestions:

- ESO should consider “wiki based manuals”

- Also one user commented on improving direct interactions with ALMA staff.

Factsheet 2017: Germany

This report was prepared by Prof. Maria-Rosa Cioni, German representative in the UC since 2015.

The Users Committee survey 2018 was distributed to a list of 522 individual users obtained from the combination of the lists provided by ESO, removing double entries and ESO personal, and those that have left the corresponding institutions (as acknowledged from an automatic reply to an invitation email). The survey was also distributed to members of my own institute (AIP) and to the list of members of the astronomical observatory association (RDS) in Germany.

Only 22 users could not be reached via their indicated emails. In total, at least 500 users shall have successfully received a request to complete the survey. The survey was distributed on 28th February with an indicative closing date of 26th March 2018.

There were 70 users who responded to the survey, about 30% more than in 2017. The majority are non-permanent researchers (staff and postdocs), followed by permanent staff and several PhD students. At least 90% have submitted a proposal as PI or Co-I of the ESO facilities.

The most popular instruments used were: ALMA, MUSE, FORS, UVES, and X-Shooter which received at least 12 proposals each.

VLTI and ALMA

Only 15% of users have ever applied for VLTI time and would also consider to applying in the future if further support is provided by the VLTI community.

Twice as many users have used ALMA and they are overall ok with the ALMA proposal review process. The main criticisms refer to the poor panel feedback (also to successful proposals): the lack of general knowledge, expertise and the suspected conflict of interest, the difference between multiple evaluations in the case of resubmissions, the unconstructive and incoherent comments.

Most of the users who have worked on the ALMA Phase 2 have received support from contact scientists. The quality of the ALMA data products

is at least ok for many users but has required to repeat or improve the data reduction. The main problem appears to be the long delay between obtaining and receiving the data, compared to other instruments/facilities. The data reduction provided by ESO is very useful to non-expert users while expert users need to tailor it to the science case (level of cleaning, number of bands, weak signals, etc.).

ALMA users do not usually travel to an ALMA ARC node. To improve the usage of ALMA archival data users have the following suggestions: to implement a preview facility, to better match the calibration data to the science data, to improve the data download. Despite the long existence of ALMA, users indicate that intensive support is still needed.

Paranal and La Silla telescopes

Half of the users found the OPC feedback useful while the other half indicated that feedback was often subjective, variable between semesters, incoherent with the text of the proposals, and unreasonable. This has significantly got worse across the years I have served in this committee. A large number of users would nevertheless like to participate to the evaluation process.

Two thirds of the successful proposals refer to service mode and users are overall satisfied with the communication on the progress of their observing runs. Visitor-mode users have positively experienced the use of the new p2 web-based tool, whilst suggesting specific improvements. On the other hand, contrary to previous years, several visitor-mode users experienced a lack of training of their support persons.

Two thirds of the users have reduced their data using ESO tools and most of them are satisfied with the results. Only 20% of them used fully homemade pipelines, this has reduced by a half compared to 2017. Homemade pipelines are preferred for experience users. Specific comments on the ESO tools are: the pipelines of decommissioned instruments are not working, the documentation of pipelines and instruments are incomplete, e.g. on multi-mode and old instruments, artefacts remaining in the data after the reduction are not documented, sky-subtraction tools could be more advanced. A revolutionary suggestion was made to convert all ESO pipelines in python with many

modules and minimal library dependencies. Users who asked for help to ESO to reduce their data are generally satisfied with it. Users who used data from the ESO archive (about half of them) are also generally satisfied with the overall data service. Suggested improvements refer to: adding footprints of the instruments, including the VST, allowing for a better automated selection of associated calibration files, allowing for a preview of the reduced data. It is possible that some of these features are already included into the new interface of the ESO archive which may have not been available to the users at the time of their queries.

About one quarter of the users has used Phase3 products and they are overall satisfied with them. To improve this process intermediate-step data products (e.g. Gaia-ESO survey separate reductions, photometric standard star spectra for X-shooter) could also be made available and the cross-match facility could include extended objects.

Most of the users are equally split between using MacOS and Linux operating systems.

Only about 20% of the users engaged in press releases with ESO praising in particular the availability of material at ESO for other media.

About 60% of the users would like the 1-year proprietary period on their ESO data to commence at the time the last OB is successfully observed. Users indicate that this would be most logical and would avoid the publication of piecemeal results, by them and others, diminishing the impact of both a first and final paper on the proposed study. ALMA users wish for an extended, 18 months, proprietary period.

ESO users read more frequently the ESO Science Newsletter compared to ESO press releases and the Messenger.

Several free-format suggestions were made and among them are:

- the availability of visitor mode control room at ESO Garching
- the possibility to update proposal until the expiry date.

Fact sheet ESO Users Committee 2018, ITALY

prepared by Maite Beltrán

67 ESO/ALMA users participated to the poll of which 42 (63%) are Professors/permanent Research staff, 5 (7.5%) non-permanent research staff, 15 (22%) Postdocs, and 5 (7.5%) PhD students. The main instruments used are ALMA (31 users), X-SHOOTER (18 users), FORS (17 users), MUSE (14 users), and UVES (10 users). Only 5 (7.5%) out 67 people have applied for VLTI time.

About VLTI Expertise Centres

Most of the people (37) did not answer this question, 18 (27%) persons would apply for (more) VLTI time if additional support, and 12 (18%) persons would not.

About ALMA

31 people have used ALMA as an instrument, although only 29 recognize themselves as ALMA users: 27 of them (93%) got time as PI/Co-I, and only 2 (7%) did not. Users are satisfied (45%) or very satisfied (14%) with the ALMA proposal review. Three users did not receive enough support from the assigned contact scientist, while 21 did. 10 users (34.5%) have obtained face-to-face support and 16 have not (55%). There were 3 ToO proposals, 2 of the users were dissatisfied. 48% users think that ALMA is becoming a 'standard' facility, 21% not, and 31% did not answer, but 71% thinks that there is still need of intensive User Support

- Specific comments of TAC feedback:

- Very few accepted "long" normal proposals despite users being encouraged to ask for as much time as needed
- Poor quality, generic and non-constructive feedback.
- Consensus report does not reflect the grade assigned
- Observing time assigned not only based on objective scientific merit (some scientific groups seem to be privileged)

- Specific comments on delivered data products:

- 3 very satisfied, 8 satisfied, 7 OK, and 4 dissatisfied
- 17 users (59%) had to repeat the data reduction, 12 did not (41%)
- Continuum subtraction is often not properly done and had to repeat the calibration
- ALMA should provide (even for a short period of time) the calibrated uv data (not the maps)
- Continuum subtraction and self-calibration for dynamic range limited observations need some manual fine-tuning outside the 'standard' data reduction pipeline
- Final datacubes did not include all the OBs
- Inhomogeneity of data products depending on the person who calibrated the data
- Serious delays on the delivery of data products (almost one year after data taken), and on the execution of polarization projects

- Other comments:

- 1 user did not find adequate expert support in the ARC face-to-face support
- Make it possible to search the ALMA archive for different objects with the same query
- A much quicker interaction with user support regarding data analysis
- Support for non-standard observations, (e.g. combining TP+ALMA+ACA or ALMA+APEX)
- more tutorials available online, dealing with tricky cases and non-standard data reduction.

- Very useful if the TAC could also approve partial programs/SBs

About OPC

34 people (54%) satisfied with OPC feedback and 16 (24%) not (13 no answers). 48% of the users would agree to be part of the OPC

- Specific comments on OPC feedback:
 - Too generic and non-constructive
 - Discrepancy between comments and grades
 - Lack of competence or expertise
 - Not indications on how to improve the proposal

About Service Mode

43 people (70.5%) got time as PI/Co-I in SM in the last 4 periods and 18 (29.5%) did not. 70% users worked on SM Phase 2. Many users very satisfied (28%) or satisfied (42%) with the way ESO communicates the progress of observing runs. Some comments: In some cases, programs were accepted but not executed without any word of explanation. Not all the SM observations of the target have been communicated to the proposers.

- Comments and suggestions:
 - More user-friendly tools
 - Web-based utility
 - Integrated chart drawing tool
 - Graphic tool to build up finding charts, with slits or masks on it. An all-in-one tool to build up OBs
 - ETC for spectro-polarimetry
 - GUCT and ECT capable of handling the fast phot mode of HAWK-I (ESO is already working on this)
 - A clearer p2pp tutorial and a python script to make finding charts

About Visitor Mode

There are 10 people (16%) who were visitors in the last 4 periods and 51 (84%) who were not. None of them is dissatisfied with VM observing. Complaints about absence of support astronomers at La Silla. Only 7 users have used the new VM web-based Phase 2 tool and none of them is dissatisfied with it. One user had problems with multiple users accessing with the same (PI) id.

About ESO data reduction

57% of users (34) have reduced ESO data. 24% use fully homemade pipelines, 15% other (including IRAF, MIDAS, REDUCE), 13% Reflex, 12% ESORex, 10.5% Gasgano, and 6% homemade pipeline using ESORex. Most of the people are OK (25%), satisfied (25%), or very satisfied (6.3%) with ESO pipelines (37.5% did not answer). 44% contacted ESO helpdesk, while 56% did not. Most of the users find the helpdesk useful or very useful.

- Comments and suggestions:
 - IR spectroscopic data reductions are not good with available pipeline
 - The pipelines often do not provide the best possible reduced data in terms of S/N, sky subtraction, optimal extraction etc.

- No helpful tutorials are provided for ESOREX pipelines; the installation procedure is not clear.
- Others: sky subtraction and telluric lines cleaning, VST ghosts, improved VST background subtraction, astrometrical calibration, improve the sky correction in VIMOS-IFU, a tool for spectro-polarimetry on FORS, reduced products of spectroscopic observations should provide also original pixels

About ESO/ALMA archive

53.3% have used the archive and most of them are OK (28%), satisfied (56%) or very satisfied (9%) with it.

- Comments and suggestions:
 - Calibration frames are not always available
 - New and old Weather condition archive are not straightforward comparable, so that having data before and after the 1 Apr 2016 can introduce some challenge
 - People argue that ALMA archive is better organized
 - More user friendly
 - Java script for download should be implemented also for web platforms other than Mozilla
 - Access to Public Surveys Data (especially KIDS) too difficult. Copy VIKING website for KIDS survey
 - A more modern web interface needed
 - Provide material and scripts to re-calibrate the data
 - Access ESO archive with cone search or sky crossmatch with topcat

About Phase 3

Only 16 users (27%) have worked on Phase 3 products, only one dissatisfied.

- Comments and suggestions:
 - the provided FITS binary table for 1D spectra are not directly readable with IRAF (only with the SPTABLE external package)
 - make available MUSE cubes with telluric correction done; quality of data reduction not optimal
 - in some case (KiDS, ATLAS, VIKING) not clear the meaning of the fields of the sources lists and the adopted calibration plan.

About Proprietary Time

44 users (75%) agree that ESO should starting the 1-year proprietary period at the time the last OB of the program is acquired, only 5 users (8.5%) disagree, and 10 (17%) do not answer

- Comments:
 - Large programs often have a science goal that can only be achieved when all the observations have been carried out.
 - Too SHORT for ALMA data, given all the issues and complexity
 - ALL data needed to achieve the goals of a proposal, making data public before completion is unfair
 - Automatic, even without PI justification. Partial early public release might compromise the quality of the scientific analysis

Others

- 13 Press releases issued. Feedback very positive (highly professional staff).

Annual UC report for the **Netherlands** prepared by Karina Caputi April 2018

After the unusual situation that produced a very low level of replies to the UC Poll last year, the Dutch participation came back to normal in 2018. This report summarises the replies to the Poll given by **25 members** of the Dutch Astronomical Community (**including 11 ALMA users**). Among these, there are 14 permanent staff members, 3 Postdocs and 5 PhD students. The other 3 members did not fall in any of the given categories, or have not specified their academic status. A total of 22 members have submitted ESO proposals as PI or co-I over the last two years. The split out per instrument, in order of decreasing incidence, is: ALMA (10); X-SHOOTER (7); MUSE (5); NACO, SPHERE (4 each); GRAVITY, KMOS, FLAMES (3 each). Other instruments have had 1 or 0 submitted proposals.

A total of 19 out of 25 (**76%**) Poll participants are **MacOS** users; about a **half** of all participants are (also) **Linux** users.

1) VLT/La Silla/ APEX/ALMA (general):

Phase I:

A total of **76%** (19 out of 25) Poll participants have got **observing time** as PI or co-I over the last two years.

Phase II:

Only **40%** of Poll participants **have worked on Phase 2**.

Progress on SM observing runs:

There is general satisfaction with the ESO reports on SM observing run status.

Visitor Mode (VM):

Only 4 out of 25 (**16%**) of Poll participants have been VM observers. And 3 out of 4 have used p2. All of them are OK or satisfied.

Data Reduction:

A total of 14 out of 25 (**56%**) Poll participants **have reduced ESO data**. Most of them used ESORex, in general with **home-made pipelines** within ESORex; a third of them (also) used Gasgano and/or Reflex.

A **third** of the participants who have done data reduction have used **fully home-made pipelines**.

ESORex is always the favourite tool for data reduction. Among users who know the instrument well, home-made pipelines are also common. Most users are OK or satisfied with the ESO pipelines. However, half of the data reducers consider that there are **further calibration/reduction steps that need to be applied to the data** (as not included in the pipelines) to leave it ready for scientific analysis.

ESO's Helpdesk:

A total of 9 out of 25 (**36%**) Poll participants have consulted ESO's Helpdesk. Basically all of them have found it OK/helpful/very helpful.

ESO Archive/Phase 3:

A total of 16 out of 25 (**64%**) Poll participants have used the ESO/ALMA archive. All except one are OK/satisfied/very satisfied with the Archive data service.

A total of 9 out of 25 (**36%**) Poll participants have used Phase 3/SAF products for their work. All of them are OK/satisfied with it.

ESO Outreach:

A total of 7 out of 25 (**28%**) Poll participants have issued a press release in collaboration with ESO. All of them have been OK/ satisfied/very satisfied.

Data Proprietary Period:

A total of 12 out of 25 (**48%**) Poll participants consider that ESO should start to count the 1-year proprietary period after observing the last OB of a programme. A small percentage (**12%**) disagree with this idea. The rest have not commented on this issue.

Highlight comments:

- * **Data Reduction pipelines:** installation can be time-consuming. Once one makes them work, they mostly work fine. However, some special algorithms necessary to optimise the data reduction are missing from the corresponding instrument pipelines (e.g. KMOS, MUSE).
- * ESORex works well, but lacks proper documentation. Some users find the ESORex display of the whole workflow on a single screen quite inconvenient.
- * For VLT/SPHERE it would be useful to have the possibility of taking flats right after coronagraphic observations (with the coronagraph still in the same place).
- * **ESO Archive:** users find it easy to use in general, but sometimes necessary information is missing, particularly some calibration files. Besides, for SPHERE flats are not automatically downloaded - they have to be retrieved manually.
- * It would be good to have sky visualization of the data available on the archive.
- * **Proprietary period:** counting 1 year after last OB may be beneficial or counter-productive, depending on the programme. For Large Programmes/GTO, this policy will prevent more papers coming out from the community at large, and encourage even longer times for science delivery.

2) Special Topic: ALMA

Among the 25 Dutch Poll participants, 11 are ALMA users and got observing time in cycles 3,4 and/or 5. This makes for **45% of the Poll participants**. (However, only 10 say to have submitted ALMA proposals, which appears a bit contradictory, unless one has submitted as co-I and have understood that only PI proposals counted).

Among the 11 ALMA users, about **45%** thought that the **proposal review** in general was OK, while other **~45%** were satisfied or very satisfied. Only 1 out of 11 users said to be dissatisfied. However, the level of satisfaction for the **TAC consensus report** is somewhat different: **36.5%** are satisfied/very satisfied; **27%** thought that it was OK; and **36.5%** were dissatisfied. Many users (including those who have got time) commented on the **poor quality of TAC reports**, often showing lack of expert knowledge from TAC members.

A total of 8 out of 11 (**73%**) ALMA users have worked on **Phase 2** preparation. All of them consider that they have received sufficient support from their contact scientist (remotely in general; only 2 out of 11 users have travelled to their ARC node).

Only about **55%** of the ALMA users have **commented on their level of satisfaction with the delivered data products**. All of them (except one) said to be satisfied or at least OK. Nevertheless, **64%** said that they **had to repeat their data reduction**.

No ALMA user had time-critical Target-of-Opportunity proposals.

A total of 7 (**55%**) ALMA users have used data from the **ALMA archive**. All except one said to be OK or satisfied with the archive service.

ALMA as 'standard' facility: opinions are mixed - 45% of ALMA users think that ALMA is becoming a standard facility; 36% think that it is not. The rest did not provide an answer.

Need of continuing ALMA/ESO support: **73%** of ALMA users consider that **intensive ESO support is still necessary**.

Only 1 ALMA user (**9%**) manifested the need for combined instrument support (ALMA+ some other instrument).

Highlight comments:

- * TAC reports are usually of poor quality, indicating lack of expertise in TAC members and/or poor proposal reading. A same proposal can be triaged one year and ranked in the top 10% the year after.
- * Some proposals are accepted with significant time reduction, particularly in Galactic panels time is allocated in too small amounts.
- * Reduced data products usually exclude some part of the data and are non-optimal. Data reduction must be repeated by the user. For example, the 'cleaning' option typically excludes sources with low S/N, so these sources are typically missing in the delivered reduced data products.
- * The previous point also implies that the reduced data found in the ALMA archive normally has targets missing.

- * Delivered data quality is very variable and depends on the person who has reduced it.
- * The volumes of recent long-baseline data was too large for the local nodes to handle. This resulted in several-month delays for the data delivery.
- * Insufficient interaction between ESO and ALMA node staff prevents making further progress on observing and calibration procedures.

3) Extra consultation: VLTI

Only 5 out of the 25 (**20%**) Poll participants **have ever applied for VLTI observing time**.

Only 4 out of 25 (**16%**) Poll participants said that they **would consider applying for VLTI time if they could have more user support** for proposal preparation, data reduction, etc.

4) Others:

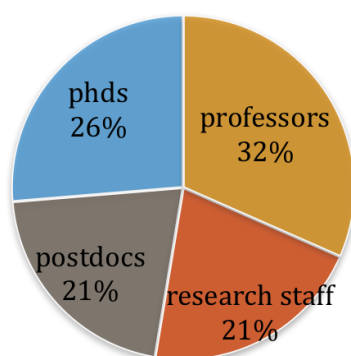
A total of 17 out of 25 (**68%**) Poll participants read the **ESO Science Newsletter and ESO Messenger** at least sometimes. A total of **84%** read the **ESO Press Releases** at least sometimes.

Poland Fact Sheet

Prepared by: Łukasz Wyrzykowski
email: lw@astrouw.edu.pl
2 April 2018



There were **19 responses** to the ESO UC's poll from Poland, however, only **12** were fully completed. This is an **improvement** over previous years (9-10 responses). More than half of the responses came from professors and more senior research staff.



PROPOSALS INVOLVEMENT

16 (84%) were PIs or among main **Co-Is** in La Silla/Paranal proposals, mostly **more senior staff**. **1** was involved in APEX and ALMA proposals. Compared to 2016, there were less people involved in APEX and ALMA in the poll (1 and 2, respectively, in 2016). There were **4** people involved in **VLT** proposals

INSTRUMENTS

Name	Number	Percent
FLAMES	2	11
FORS	3	16
HAWK-I	1	5
UVES	4	21
SINFONI	1	5
Pionier	2	11
X-SHOOTER	5	26
EFOSC2	4	21
FEROS	2	11
SOFI	4	21
VIMOS	1	5
HARPS	4	21
remaining	0	0
Total	33	

The most commonly used instruments were **X-SHOOTER in 5 proposals and UVES, EFOSC2, SOFI, HARPS in 4 proposals**. In total, **19** people were involved in proposals on **33** instruments.

VLBI

4 (21%) people applied for VLT time and other **4** would be more likely to apply for VLT if they received additional support for proposal preparation and analysis.

ALMA

There were **no** ALMA users among Polish astronomers among the responders of the poll.

OPC

4 people said that the OPC feedback on proposals was **valuable** but **8 (42%) said no**. The users mostly complained that the **OPC feedback was very general**. There was one **positive comment**, that the user found the feedback **very useful** as it motivated them to do more studies on the topic. There were **5 people interested in joining OPC** from among research staff and postdocs.

SERVICE MODE and PHASE 1/2

8 (42%) people were PIs or were involved in proposal in Service Mode, and **5** of them **(62%) worked on Phase 2** material. Overall, all **8 people were happy** with the ESO communication on Service Mode, adding that: **“ESO staff were very professional and helpful”**. Comments on SM:

- **Email messages** were citing each other, making a complete mess in the order of emails and the relevant information was really hard to find. E.g., there was an email that there were some changes to the status and somewhere below the actual message from the observer was buried, along with previous messages. More clear system is needed - direct single email with no citations.
- **ToO priority**: scheduling now only allows for 1, 2 or 4 nights priority for ToO requests. This should be allowed as an input field, as some targets have very low time-criticality, of 5 or more nights.

New following features to be included in new Phase1/Phase 2 were suggested:

- *Full templates for Observing Blocks, examples to copy/paste from.*
- *Finder display interface. Target visibility. ETC should give total execution time (+overhead)*
- *Self-consistency between the exposure calculator and the viable choice of the instrumental setup. Currently, the exposure calculator is not sensitive to impossible setups.*

In previous years Polish users complained mostly about the difficulties for the first-time users of Phase 1 and Phase 2 and lack of good manuals. However, this year **there were no complains on the problems of understanding the Phase1/2**. It could mean that, either the users who found it too difficult to apply for time simply did not apply for time, or **Polish users already got enough experience to use Phase1/2 tools**.

VISITOR MODE

6 (32%) Polish users were observing in Visitor Mode, which is a significant increase from last year (1 in 2016). **3** of them used **new p2 tool** and **all were happy**. All 6 VM observers were satisfied, especially about the assistance at the telescope, and all had only positive comments, e.g.,

Being the first time user, I did not know at first how to prepare my calibration blocks and how to put them into the system. The positive aspect was the option to arrive one day/night before and to learn all of that from the more experienced user.

DATA REDUCTIONS

Among **9** people who reduced the data there was a preference for using **Reflex (32%)** and **fully homemade pipelines (32%)**. Others used **Gasgano (16%)**, **ESORex (5%)**. The statistics are **similar** when people are familiar with the instrument, except there is some more preference for homemade pipelines based on **ESORex (10%)**. All are satisfied with the ESO pipelines, however there were some comments on problems encountered:

- *Reflex FORS pipeline has problem with wv calibration, what cause bg subtraction problems. Xshooter pipeline should have implemented molecfit*
- *Reflex does not work properly with FORS2 polarimetry option but at least it produces the mean spectrum correctly.*

Suggestions:

- *Polarimetry, but if FORS2 is due to decommissioned soon, it is probably irrelevant.*
- *An option for having spectra with 0n-merged orders for the UVES instrument*
- *Provide the spectra with non-merged orders for the UVES instrument*

Overall interactions with the help desk were helpful, users provided positive comments, e.g., *"I am happy that now ESO organizes workshops to learn data reduction. My postdoc attended one recently and he was fully satisfied."*

ESO/ALMA ARCHIVE

7 (38%) people used the Archive, all **satisfied** or **very satisfied**. The only complaint/suggestions was that:

- *Archive lacks easy access via web API and scripts.*

PHASE-3

4 (21%) people used Phase3/SAF for their work and were satisfied.

OTHER

3 MacOS, **10** Linux, **1** Unix, **1** Windows users (overlap).

1 people were involved in ESO Press Releases, very satisfied.

About **60%** of users sometimes or always reads **ESO Press Releases**. More people read Science Newsletter and Messenger (**63% and 47%**), just 15% of the responders also read ALMA Newsletter.

85% of people agree to set the **proprietary period to 1 year from the last OB**.

Portugal Fact Sheet — ESO Users Committee 2018

Prepared by Nuno Peixinho

General summary

16 Portuguese-based ESO users participated on this poll, which was circulated to the entire community through the Portuguese Astronomical Society mailing lists. On the previous year only 7 replied. From the 16, only 3 participants are staff, and 6 are PhD students. 2 of the participants did not submit a proposal in the last 2 years.

The main instruments used are **UVES and ALMA (5 users each)** and HARPS (3 users), followed by APEX and KMOS (2 users each) and then FLMAES, FORS, HAWK-I, MUSE, VIMOS, GRAVITY (all with 1 user)

Only **3 participants are already VLT users**, and only one more participant would consider applying if there were additional support.

About ALMA

4 participants (25%) are ALMA users, but one of them did not get time. **50% are unhappy with ALMA TAC feedback**, considering the remarks too vague and some even questioning the adequate expertise on radioastronomy of the TAC members. No ALMA ToO were used.

About OPC

9 consider the OPC feedback as valuable, but 2 consider it is not valuable. Although, the general opinion is that feedback is quite general, and vague, and hard to use for improving the proposal. Negative comments regarding other refused proposals are frequent.

About Phase 2 and service mode

7 participants have worked on Phase 2 (corresponding to 64% of those with awarded time)

Comments/suggestions:

- Online tool for phase 2, not requiring download (which is not compatible with java 9).
- Pre-filling the Phase 2 form with Phase 1 information would be helpful.
- Access to 'example OBs' for major modes of each instrument would be helpful.
- More user-friendly tools for the phase 2, and a human “tutor” for Phase 2.
- Automatic transfer of constraints, targets, exposure times, etc., from Phase 1 to Phase 2.
- All tools should be made to work on MacOS.
- Video tutorials.

About visitor mode

Only **1 participant used visitor mode**, being very persistent on the **need to preserve this option**. The participant was satisfied with the new web-based tool P2, but complains about its speed. More training of the support staff was recommended.

About data reduction/pipelines

9 users have reduced data over the last 2 years periods. **6 used Reflex and 2 used Gasgano**. The others used their own pipelines. **It is hard to assess for the satisfaction level**, but it is not high. 1 is dissatisfied with ESO pipelines, 2 are satisfied and the others do not answer.

Comments/suggestions:

- Manuals are archaic and not helpful
- Pipelines of decommissioned instruments should be kept on running

About archive

11 participants have used data archive. None was dissatisfied.

Comments/suggestions:

- Calibration files are often incomplete
- The need for java on the web browser is regrettable
- Difficulty in finding the actual reduced, final images.
- Interface is not very user friendly
- Naming of files is confusing
- Hubble Legacy Archive works much better!

About Phase 3

7 have used Phase3 products. None was dissatisfied with the process.

Comments/suggestions:

- Interface not easy to navigate on.
- Some lack of documentation.
- The data quality of MUSE data-cubes are not optimal and it can be improved.
- More information about the reduction process of each data-set would be valuable.
- Would be nice to have the possibility to download intermediate step in the reduction.

Miscellaneous

Most of the participants use Linux operating system. Some use MacOS and few use Windows. None uses Unix.

Satisfaction with PR is good, but it is hard to find the balance between what the scientists want to report and how the communicators want to spin the story. One states that the PR department is probably the best working part of ESO.

Regarding the extension of the 1-year proprietary time the opinioso is divided (5 yes, 4 no).

ESO press releases are read a lot. (4 always, 11 sometimes), and ESO Science Newsletter too (5 always, 10 sometimes). On the other hand, ESO Messenger is never read by 1/3 of the participants, and the ALMA Newsletter is never read by 2/3 of them.

Spain fact sheet (2018) prepared by María Rosa Zapatero Osorio.

In 2018 ESO Users Committee survey, 22 replies have been obtained through the web poll from frequent ESO and ALMA/ESO users, which represents 3.2% of all participants to the poll. This year's participation has been significantly higher than in the previous period by a factor of 2; no obvious explanation is found, except for the increasing number of "dissatisfaction" replies received. Of the 22 participants, 19 provided complete responses. The summary of the responses appears next.

- The great majority of the respondents (73%) are permanent staff or postdoctoral fellows working in Spanish institutions. A similar number of non-permanent researchers (13.5%) and PhD students (13.5%) submitted their responses to the poll.
- Nearly all respondents (95.5%) are the Principal Investigators (PIs) or active co-investigators of their proposals. About half (50%) are ALMA users. According to the replies, the second most used ESO instrument within the Spanish community is X-Shooter (36.4%), ranking third are MUSE (27.3%) and FORS (22.7%), then SINFONI (13.6%) and KMOS (13.6%). Other used instruments (with a frequency of less than 10%) are HAWK-I, NACO, SPHERE, UVES, VIMOS, VISIR, GRAVITY, EFOSC2, and APEX. HARPS was not selected in the 2018 ESO UC poll, but it was one of the instruments used by Spanish users in previous years.

VLTI

- A very small fraction of the participants to the poll (9%) are VLTI users, although a significant fraction (31.8%) stated that they would apply for (more) VLTI time should additional support for proposal preparation, data reduction, image reconstruction, and/or analysis of the data be provided.

ALMA (special topic)

- Among the ALMA users respondents, the satisfaction with the ALMA proposal review process and the Time Allocation Committee consensus reports is equally split among the "OK", "dissatisfied", and "very dissatisfied" answers. A summary of the most useful and/or repeated comments follows:
 - To review the proposals without knowing what ALMA region they belong to and the PI's name.
 - To have two "call for ALMA proposals" per year. *This clearly goes against most recent recommendations.*
 - Allocation should be given in sufficient amounts of time for completing programs.
 - Panels should be formed by experts in interferometry.
- Among the ALMA users respondents, 44.4% are satisfied with the ALMA delivered products, while a significant 55.5% are clearly dissatisfied. Very interestingly, 64% of the ALMA users re-reduced their data (which correlates with the dissatisfaction degree with the data products). None (0%) traveled to an ALMA ARC node. Reasons for dissatisfaction are:
 - Significant delays between data acquisition and delivery.
 - Inconsistency in the data products.
- The ESO/ALMA Archive is being used by about 27.3% of the respondents (or 55% of the ALMA users), whose opinions on the services of the ESO/ALMA archive are equally distributed among "OK", "dissatisfied", and "very dissatisfied". The main cause of discontent is slow data transfer. There is a strong claim for ESO continuing its intensive User Support to ALMA.

ESO

- Among the ESO users respondents, 50% found that the OPC feedback on proposals has no value against the 36.4%, who considered the OPC feedbacks to be useful for improving their proposals. The fraction of “happy” and “unhappy” participants in relation to this particular question does not change significantly over the past few years within the Spanish community.
- A total of 5 respondents within the Spanish community expressed their willingness to be members of the panels and the OPC. The Spanish representative of the ESO UC will submit their names to ESO Observing Program Office on due time.
- Among the ESO users respondents, 68.2% did obtain telescope time as a PI or co-investigator and have worked on Phase 2 preparation. Regarding the features of new Phase 1 and Phase 2 tools, some suggestions are listed below:
 - Pre-filling phase 2 with phase 1 information of approved proposals.
 - Graphical visualization of spectral and imaging setups. Graphical tool to create finding charts with slits superimposed.
 - The possibility of modifying/updating/editing the submitted proposal until the deadline, i.e., interactive submission process (the valid version of the proposal is the one existing in the database at the due time).
- The great majority of the participants to the poll (86.4%) obtained their data in queue mode, and only a modest 9% did actually go to the Observatories as visitors. As a result, very few Spanish astronomers (13.5%) have used the new web-based phase 2 tool called “p2”. In principle, the general opinion is that the “p2” is promising, although it still needs some improvement.
- About half of the participants to the poll showed satisfaction with the way ESO communicates the progress of service observations. Only 1 participant declared to be very dissatisfied.
- Half of the respondents (54.5%) reduced ESO data using official pipelines within Reflex, Gasgano and ESORex (Reflex is preferred over Gasgano and ESORex). Only 18.1% of the participants created their own homemade pipelines or reduced their data themselves independently of the ESO pipelines. This fraction is significantly smaller than in previous years. Yet, a significant fraction (about half of the respondents that reduced ESO data) showed some degree of discontent with the pipelines, mostly because of the lack of flexibility and reliability of the pipelines. Also registered are complaints on the difficulty of installing and using the pipelines, and the lack of support for some observing modes (e.g., imaging polarimetry with FORS).
- A significant number of respondents contacted ESO help desk. They are in general satisfied with this service.

ARCHIVES and PHASE 3

- Regarding the ESO/ALMA Archive data services, 59% of the participants to the poll are satisfied.
- Phase 3 does not appear to be popular within the Spanish community since 68.2% of the respondents have never used Phase 3/SAF products for their work. Among those who did use Phase 3, there is a general satisfaction; the only concern is that there is little information on the reduction process of the data.

MISCELLANEOUS

- None of the Spanish participants to the poll uses Windows. On the contrary, Linux, MacOS X, and Unix operative systems are employed by 72.7%, 50% and 9% of the

participants, respectively. The results of the poll clearly indicate that Linux and MacOS X are the most used systems.

- Only 18.2% issued a press release in collaboration with ESO in the last 4 periods with no major concerns.
- A significant fraction of the Spanish respondents (63.6%) support that ESO considers starting the 1-year proprietary period at the time the last observing block of the program is executed satisfactorily. However, it is the general opinion that this must be extremely well justified in the proposal. Only 4.5% of the participants were strongly against this philosophy.
- The great majority of the participants (~80%) frequently read ESO press releases and ESO Science Newsletter, while ESO Messenger is read less frequently. ALMA Newsletter is read by 50% of the respondents.

Fact sheet 2018, Swedish users: Prepared by Sofia Ramstedt

Eleven Swedish users filled out the poll. They are all MacOS, Linux, or Unix users. This is a decrease compared to the last two years, but of the order of the typical participation over longer time. La Silla-Paranal are the most common facilities used by the Swedish participants. One ALMA PI also filled out the poll. Nine participants have submitted proposals as PI. No-one has submitted a VLTI proposal, but two would consider doing so if VLTI support centers similar to the ALMA-ARC nodes were available.

Special topic: ALMA

Two ALMA users filled out the poll. Additional feedback outside has been asked for by the Swedish ALMA users which will be taken into account at the discussions at the UC meeting. Both user who filled out the poll are OK with the ALMA proposal review in general, but one is very dissatisfied with the TAC consensus report without additional comments. There are no additional comments regarding support or data product quality. Neither user redid the ALMA data reduction.

OPC feedback

Three users find that the OPC feedback was useful, four find that it was not, and an additional three users gave no answer. The comments include that more constructive feedback would be appreciated, e.g. what should be clarified in order to improve the proposal.

Service Mode

Eight of the users who filled out the poll were rewarded time in Service Mode and seven worked on Phase 2. Suggestions for the new Phase 1 and 2 tools are to include a interface for making finding charts, and to include scheduling restrictions due to ongoing programs (e.g. GTO). They are in general satisfied with the communications during Service Mode observations.

Visitor Mode

Two users performed observations in Visitor Mode. One used p2 and reports that is was OK. Both users are satisfied or very satisfied with Visitor Mode observing commenting that the Paranal staff is truly dedicated and provided highly valuable support. Some complaints about the support from ESO fellows not being helpful was however given.

Data reduction

Eight users have reduced ESO data, but a relatively large fraction have chosen to do so using homemade tools and also report to be most comfortable using the homemade tools. All, but one very dissatisfied user, are OK or satisfied with the ESO pipelines when they have used them. Additional step asked for is MUSE self-calibration.

ESO/ALMA Archive

Just over half of the users who filled out the poll report that they have used the Archive and find it OK or are Satisfied. Comments are that the calibration frame retrieval is sometimes difficult, and that although the search is "great" the downloading process is confusing. A suggestion for improvement is to enable programmatic access using e.g. python queries.

Phase 3

Two users have used Phase 3/SAF products and are satisfied or OK.

Miscellaneous

- All, but one, agree that ESO should consider starting the proprietary time when the last OB has been required.
- One user report on run-process and update issues with the User Portal.
- The users who filled out the poll sometimes read the ESO publication except the ALMA newsletter.

Swiss fact sheet for ESO Users Committee 2018

Prepared by Miroslava Dessauges

General summary

From a list of 82 ESO and ALMA PIs, Phase 2 delegates, and archive users, 15 responded to the ESO User Poll.

Instrument statistics

FLAMES, SINFONI, UVES, VIMOS, WFI, VST	1 proposer per instrument
KMOS, MUSE, SPHERE, HARPS	2 proposers per instrument
FORS	3 proposers per instrument
X-SHOOTER	4 proposers per instrument
ALMA	6 proposers per instrument
APEX	no proposers

VLTI

None of the 15 participants have applied for VLTI time. However, 3 would do if they could receive additional support.

Specific topic: ALMA

4 of the 15 participants consider themselves as ALMA users, since they got ALMA time in Cycles 3, 4 or 5. The 4 ALMA users are globally “satisfied” by the ALMA TAC feedback, and evaluate the process as “OK” or “satisfying”. However, as for the consensus report, 1 participant is “dissatisfied” (no justification provided). 3 ALMA users worked on Phase 2, 2 replied to be “satisfied” by the contact scientist support as well as by the delivered data products. 2 users had to repeat or improve the data reduction (see comment below). 1 user travelled to the IRAM ALMA ARC node to obtain face-to-face support and was very “satisfied”. Only 1 participant used the ALMA archive, but does not grade this service.

User positive/negative experiences

- For some science goals, the automatic pipeline data reduction was found to fail. In that case, the reduced data did not include all the acquired exposure time.

Only 1 ALMA user thinks that ALMA is becoming a standard facility, while the 3 others think that it is not the case. They all estimate that ALMA users still need of intensive user support from ESO.

Any need of combined instrument support could be an interesting option for 2 ALMA users. One suggestion was to combine ALMA and SKA in the future.

OPC feedback

8 users find the OPC feedback valuable and 5 users do not. Unfortunately, no comments are provided.

OPC panel

8 users agree to be part of the OPC next year. They have provided their names and coordinates.

Service mode (SM) time

7 users got time in Service mode, among them 6 have worked on Phase 2. They all are satisfied by the way ESO communicates about the progress of the SM observing runs.

User comments

- The priority of OBs is not necessarily respected in projects accepted in priority B, which can harm a program if not completed.

User suggestions for the new phase 1/2 tools

- Do things online in a cloud-like system instead of locally.
- Have an auto-backup of OBs that are not “checked-in”.
- Better support of pop-up functionality in the p2pp tool.
- Have a finding chart tool.

Visitor mode (VM) time

2 users got time in Visitor mode. They evaluated their satisfaction of the VM as “ok” and “very satisfactory”.

User positive/negative experiences

- ESO staff members at the observatory are very motivated to help to get good data.

- Specific concern with La Silla Observatory: the too rigid ESO request to have OBs over 3 consecutive nights is not compatible with time critical observations.

Only 1 user has used the p2 tool and is “satisfied” by this tool.

ESO data

6 of the 15 participants have reduced ESO data.

Tools used: Reflex (3 users); Gasgano (1 user); ESORex (2 users); homemade pipeline with ESORex (1 user); fully homemade pipeline (2 users). There is no convergence for a preferred tool for familiar instrument users, and non-familiar users neither. When the instrument is very well known, 2 users prefer Reflex and 2 other fully homemade pipeline.

Data reduction (pipelines)

3 users have expressed their satisfaction with ESO pipelines as “OK” and “satisfied”.

User positive/negative experiences

- It is important to have a homemade pipeline for instrument experts in order to push the performance of the instruments.

ESO helpdesk: contacted by 2 users, who have evaluated their exchange as “very helpful”.

Archival data

4 of the 15 participants have used archival data. They are overall satisfied with the archive.

User positive/negative experiences

- The archive works in a very reliable way.

Phase 3

3 Swiss astronomers have used the Phase 3 output, which they evaluated as “satisfying” (2 astronomers) or “very satisfying” (1 astronomer).

Operating systems

The majority of users run ESO tools on MacOS (9 users), followed by Linux (3 users), and Windows (1 user).

ESO PR service

2 of the 15 participants issued a press release in collaboration with the ESO PR service and have rated the service as “ok” and “satisfying”.

User positive/negative experiences

- For a Nature paper published with an associated AAS press conference, the ESO PR service declined to participate in the release for some reason.

Extension of the 1-year proprietary period

6 of the 15 participants are in favor of an extension of the 1-year proprietary period.

User suggestions

- A good example are planet/substellar companion searches, where the confirmation requires a second epoch observations.
- Transits of exoplanet are time critical observations, where weeks or months can separate the first and last observations. In order to analyze correctly the data and verify the reproducibility, it would be great that the 1-year proprietary period starts at the last OB of the program.

Press-Releases, newsletters, Messenger

ESO PR: always (2 users), sometimes (8 users), never (1 users)

ESO Science Newsletter: always (2), sometimes (7), never (2)

ESO Messenger: always (1), sometimes (7), never (3)

ALMA Newsletter: always (2), sometimes (3), never (6)

United Kingdom Fact Sheet – ESO User Poll 2018

Prepared by Danny Steeghs, University of Warwick

A total of 58 UK-based ESO users completed the 2018 Poll, including 12 partial returns. Participation in the poll was solicited via the astrocommunity mailing list as well as reminder e-mails to recent PIs. About half were completed by permanent staff, and 19% by PhD students.

VLTI

Only 5 users (9%) have applied for VLTI time, and 14 (24%) would consider applying if additional support would be available along the lines of the ALMA ARC. Half of the respondents didn't commit to a yes or no to this question.

ALMA

A considerable fraction (22 respondents = 38%) were ALMA users, with 18 getting time as PI or co-I in Cycles 3-5. Satisfaction with the proposal review remains mixed. Only 1 was dissatisfied, with the majority rating the overall review process and the received consensus reports as *OK* rather than (very) satisfied. 13 respondents worked on ALMA Phase 2 and most (10) were happy with the support provided via the contact scientist.

The delivered data products were generally deemed satisfactory, but the majority of users (15 out of 22) had to perform their own reductions. Comments expressed some concerns about the products, in particular when a README noted non-detections when upon closer inspection, or with a better reduction, a detection was nonetheless made. The concern was that such comments could put off a user from looking more closely.

Three users travelled to an ALMA ARC and were very satisfied with the experience. None of the ALMA respondents noted time-critical ToO programs.

12 users made use of the ALMA archive and were satisfied with their experience. One feature request was the ability to download the reduction scripts separately from pipeline products, to avoid large downloads just for the purpose of getting the script. Also the ability to download all relevant calibration data more easily was suggested.

The majority felt that ALMA continues to need intensive user support, even though it is becoming a more established facility. Its flexibility in offering many specialist modes was noted as one reason. Eight foresee a need for combined instrument support, with ALMA+SKA, ALMA+VLTI and ALMA+APEX mentioned.

General suggestions made noted the key role of the nodes, and suggesting they are closely involved in data processing. Better guidance on the spectral windows was requested. One respondent noted that it seems unnecessary to limit the number of science goals and to not necessarily associate a spectral window with a distinct goal. It was also noted that multi-band data can take a while to be fully obtained, which can lead to the earlier band data becoming public before the full data set is in. Extending the proprietary time, or counting from the date the final set is obtained could avoid this.

OPC

60% considered the OPC feedback valuable, but 21% did not think so and there were a number of comments noting that at times the feedback seemed somewhat random or not consistent. Encouragingly, 28% noted being willing to be considered for the OPC and play their part.

Service mode / Phase 2

74% of respondents have used service mode time and are satisfied with the way progress of service mode programs is communicated. 69% have worked on the necessary Phase 2 materials. Users noted the many versions of p2pp that one needs to install, and in particular that La Silla and Paranal ought to have the exact same tool. Finding chart generation should be made easier. The ability to scale to large programs with many OBs was requested, as this is not efficient at all with p2pp. Several users noted problems with instrument specific programs that are also needed, such as FIMS, VMMPS and KARMA.

Visitor mode

24 respondents (41%) were a visitor mode observer during the last 4 periods and 22 of these were (very) satisfied. 2 noted dissatisfaction with 2 users noting problems caused by a fault in the NTT rotator that took a long time to fix. One user was not able to use their primary instrument at all during a 5-night run, while a 2nd observer complained significant time was lost on top of the fault with EFOSC when trying to use SOFI instead.

19 have used the web-based p2 tool and 16 were (very) satisfied with it. Comments noted a few glitches and bugs, but at the same time that it was an improvement over p2pp,

Suggestions for improvement included support for student observers regardless of run length, being able to discuss the program with the support astronomer before arrival on site, and more efficient processes to deal with contingencies, such as switching to a backup/alternative instrument.

Data reduction

35 respondents have recent experience reducing ESO data, with the majority using ESO provided tools, most commonly ESORex. These are deemed OK-satisfactory. 13 use fully homemade pipelines. Several users noted that error/crash feedback within reflex is poor, not obviously pointing to a cause. Also it was noted that they largely operate as a 'black box' and not providing the user with easy customisation and a good understanding of what is being done to the data. 18 contacted the help desk and only 2 felt that this was not helpful.

Missing steps/requested improvements that were noted included better telluric corrections, better support for certain non-standard modes, better background/sky estimation, support for VLTI, HAWK-I fast mode, VISIR/SAM mode.

Experience with the archive is good, with only 1 dissatisfied respondent. Adding the ability to search by resolution (both spatial and spectral) was noted as well as keywords related to the science/abstract. On the other hand it was noted that too many fields on the archive form can be a bit daunting, and a simple form with the most relevant fields only could be useful.

Phase 3

9 users have used Phase 3 materials, and are largely satisfied. No specific suggestions were noted.

PR

14 respondents issued a press release with ESO, 8 being very satisfied, no one dissatisfied. Comments were positive about the support and skills provided by ESO, with 1 respondent noting that a suggested topic was not accepted by ESO for a PR.

Proprietary time

62% support the extension of the proprietary period to account for when the final OB is acquired, while 9% object. I note here that 29% did not answer/complete this question, so out of those that did, the fraction that said yes was 88%.

Newsletters

The majority of respondents are aware of the various newsletters and most selected they read/consult these '*sometimes*'. Fewer than 20% indicated they never read the messenger or science newsletter. For the ALMA newsletter this was 51%, but likely since non-ALMA users dominated the responses.

General comments

Some dissatisfaction was expressed concerning the progress of the VST surveys and how the EST puts pressure on the PIs to respond to the slow execution of the surveys even though this is caused by operational issues and not the survey teams.

It was also noted that it is desirable that the NTT continues to receive sufficient investment and technical/engineering support.