UC42 Recommendations

The UC has collected the users' opinion about several topics and in general regarding their experience in their use of ESO facilities and interaction with ESO. The UC is glad to report a high level of satisfaction of the community, and acknowledges ESO's efforts to maintain the highest standards. Based on the users' feedback and on the discussions during the UC42 meeting, the UC recommends ESO:

High Priority

UC42.R01: to consider starting the **1-year proprietary period of a normal programme run** at the time that that run is declared completed or terminated (rather than on an OB-per-OB basis, as it is the current practice). The rationale behind this recommendation is to allow successful PIs to be able to analyse and publish their complete datasets without the risk of partial results being published in advance by the community. Explore if this same recommendation can be applied to ALMA, although the UC understands that ESO cannot take a unilateral decision in this respect.

Note: *this recommendation does not apply to large programmes and ESO public surveys.*

UC42.R02: to provide **ALMA** PIs with **calibrated measurement sets** (MS) and keep them for at least a month. This will speed up the process of re-obtaining final science images in the cases that this is necessary.

UC42.R03: to provide the **OPC** a structured feedback form with guiding questions to fill in in order to produce their reports. The aim of this recommendation is to improve the quality and usefulness of the OPC feedback. Some possible questions could be: *Is the programme competitive compared to other works in this area? Can the science goals be achieved with the proposed observations? Is there any scope for discovery and new ideas?*

UC42.R04: to investigate making the **new P1 tool** available to the community before the ETC is integrated to it, in order to speed up the new P1 tool release. Users have been requesting a new P1 tool since several years now. The integration with the ETC will be welcome, but is not urgent. Therefore, the UC considers that the release of the new P1 tool should happen at the earliest possibility, and not produce any extra delay due to the ETC incorporation.

UC42.R05: remote users

* to ensure accessibility to all ESO technical workshops / schools by providing remote access by default;
* to investigate ways to engage remote sites also with the hands-on aspects of workshops, supported via established technologies;

UC42 Recommendations

* to continue organizing ALMA tutorials and schools on data analysis (which include, e.g., combining data from different instruments).

UC42.R06: pipelines

* to investigate ways to engage the community, as well as data centres (e.g., the SPHERE Data Centre) in the distribution of their own pipelines;
* to consider using Python as a wrapper for pipeline recipes.

The goal of this recommendation is that ESO takes the initiative to request third-parties with their own public instrument pipeline software to share the distribution of it on a dedicated ESO webpage. At the very least, ESO should have a list of all this available software on such a webpage, such that users do not have to do their individual search for all the independent software dispersed over the community.

Important with Medium Priority

UC42.R07: to consider the detailed **comments from the users** gathered through the UC Poll (see Appendix to UC report) in the development of the **new P1/P2, pipeline and archive tools.**

Precisely, the UC considers that the release of the new integrated P1/P2 tool has top priority, and should be done as soon as possible, even without waiting for the incorporation of the ETC, in order to speed up its release (see UC42.R04).

The UC acknowledges the importance of the new archive tool release planned for 2018, which is being developed in parallel to the new P1/P2 tools. As we were shown at the UC42 meeting, this new archive tool includes visualization (a feature requested by the users in previous years). However, the UC considers that further development of the archive system beyond the 2018 release is not urgent, and full priority should be given to the release of the new P1/P2 tool as from 2019.

UC42.R08: to continue improving the **ALMA completion rate** for A-ranked and DDT programmes.

UC42.R09: La Silla issues

* to implement eavesdropping at La Silla as early as possible;
* to consider allowing for 3-night runs that share nights between the 3.6m telescope and the NTT;
* to accommodate time-critical observations;

To the UC's understanding, all observations at La Silla are currently in VM for a minimum of three nights. According to the users, this prevents the scheduling of some programmes that require execution with a more flexible time frame.

UC42 Recommendations

* to ensure steady technical support for the user and also, remotely, for the support astronomer, when necessary. The goal of this recommendation is to minimise visitor mode runs being affected by a technical fault for a significant fraction of their time. When these technical faults are unavoidable, then consider compensating PIs for their observing time loss.

UC42.R10: to provide **near-IR filter colour transformations** for all ESO instruments to a common near-IR filter set (any), such that users can combine different instrument data in a more straightforward manner.

UC42.R11: to continue investigating the **sources of bias** in the OPC / ARP grades, and consider applying possible remedies, such as those already tried by other observatories (e.g. placing PI/co-I list at the end of proposals, or hiding list of PI/co-Is overall).

Miscellanea

UC42.R12: to improve the **OPC nomination tool** to enable the UC the visualization and modification of previous nominations.

UC42.R13: to keep the UC informed about the progress on the **implementation of the TAWG's and SDMWG's recommendations**.

UC42.R14: to provide statistics of triggering success and possible future improvements of the **rapid response mode (RRM).**

UC42.R15: to consider communicating, linking and highlighting all future important updates through the **ESO Science Newsletter**. According to the users, this is their preferred and most read ESO means of communication. Also include an yearly summary of the main UC recommendations in the Newsletter.

UC42.R16: to consider enlarging **FORS2's filter set** by including SDSS's filters in the upgrade.

UC42.R17: to consider using a **common metric to quantify image quality** (e.g., seeing, Strehl ratio) for both P1 and P2 in the new integrated P1/P2 system.

UC42 Recommendations

UC42.R18: to try to make the verbosity (log) more informative when a **data reduction pipeline crashes**, such that the user can more easily identify the likely cause of the problem.

UC42.R19: to make clear to users which systems (i.e. EsoRex, Gasgano, etc.) different **instrument pipelines** do (or do not) work on. This information could be collected on the ESO VLT Instrument Pipeline webpage and at the beginning of each corresponding instrument manual.