What Cycle 11 proposal issues and clarifications should I be aware of before submitting my proposal?

Sarah Wood - 2024-04-25 - General

This Knowledgebase article is a repository for information relevant to submission of Cycle 11 proposals. These items may affect how users write their proposals or set up their observations in the OT. The content may evolve rapidly as the 25 April 2024 proposal deadline approaches. Items added to this list after its initial deployment will include the date they were added. We encourage all PIs to check back here regularly prior to proposal submission.

Important News Items:

Intermittent technical issue with the source catalog affecting the OT

A technical issue is intermittently affecting the source catalog and thus the OT's ability to find calibrators for projects requiring Band 7 and above. As a result, some proposals may produce validation errors preventing submission or may validate but with an increased observing time. If you experience this problem we recommend to wait a few minutes and try validation and submission again. If the issue persists please contact the helpdesk.

Angular Resolution Adjustments

As described in Section 7.2 of the Cycle 11 Technical Handbook, since Cycle 11 the ALMA OT has been updated to be in better alignment with the scheduling system, taking into account the varying number of antennas in real operations. As such, the PI may notice small differences between the approximate Angular Resolution (AR) values in Table A.1 of the Proposers Guide (which are calculated using the notional C43-X configurations) and the allowable AR values accepted by the ALMA OT. Small AR adjustments for resubmitted proposals may be needed in some cases to allow validation. These will not have any practical effect on the achieved AR, as the ALMA OT is now better aligned with realistic scheduling and operations.

Multiple science targets per Science Goal for VLBI or Phased-Array projects

Starting in Cycle 11, VLBI and Phased Array projects may include multiple sources within a

single Science Goal, provided that all sources are within a 3h span in Right Ascension (there is no restriction on the range in Declination). The OT will not check if there is more than one phasor in place (since one phasor can be suitable for more than one target or not all targets may require passive phasing). If more than one science target requires a phasor to enable passive phasing, it is advised that the PI list any and all necessary phasors in the Calibration Setup. PIs should also justify the choice of phasor(s) an the association between science targets and phasors in the Technical Justification box.

This is provided as an update to Section A.13 in Proposer's Guide and Section 8.11.5 of the Technical Handbook, that still mention the limitation of a single target per SG enforced in past cycles.

Note on continuum imaging in Band 1 with long baseline configurations.

Announcement for early proposal planning for Cycle 11

Cycle 11 Announcement

Cycle 11 Documentation

Date	Milestone
21 March 2024	Release of the ALMA Cycle 11 Call for Proposals and Observing Tool, and opening of the archive for proposal submission
25 April 2024 (15:00 UT)	Proposal submission deadline
October 2024	Start of Cycle 11 observations

Observing Tool Known Issues - Please check this page for updates on OT known issues

Issue	Description
C1_032	Leaving the OT open for days at a time can cause an error upon saving. Saving to another file, closing the OT and re-opening produces a "ZLIB input stream" error i.e. the project is unreadable. This issue is yet to be satisfactorily characterised.
C2_009	Placing spectral windows that are exactly as far apart as they can possibly be can cause an error, the text of which is also misleading.
C6_001	The OT's mosaicing algorithm will not allow an even number of pointings along a single row. A custom mosaic may be used instead.

C8_001	The time estimate dialogue for VLBI and Phased Array Science Goals is not enforcing the three-hour minimum. However, the correct time is shown on the Cover Sheet and will be used by the Proposal Handling Team.
C8_002	When setting the hour of a multiple visit using the time-constraint interface, it may not be possible to select certain values and attempting to do so may cause the OT to freeze. There is no known workaround at present.
C8_003	Sources with different velocities may bring up a validation error relating to 'tuning groups'. Small changes to the source velocity may solve the problem. The first source typically seems to be the problem.
C8_004	For a "simultaneous" 12-m + ACA proposal, the Cover Sheet will show TP time even if the TP Array is not required. However, TP Time will not be charged to the project.
C10_001	When selecting “Simultaneous 12-m and ACA observations” in a project where two different 12-m configurations are required (e.g., C-5 and C-2), the smaller configuration (e.g., C-2) is dropped without any warning.
C10_002	Single continuum full polarization projects may trigger a validation error about exceeding the maximum allowed data rate. At times this problem can be solved by creating a spectral line setup that mimic the single continuum case (same bandwidth, same resolution).
C10_003	In the Cycle 10 OT (Phase 1 Patch 1), if ‘Standalone ACA’ is selected in ‘Control and Performance’, integration times can be underestimated if the Bandwidth used for Sensitivity (BufS) is set to ‘RepWindowEffectiveChannelWidth’ or ‘FinestEffectiveChannelWidth’. PIs should set the BufS to ‘User’ to prevent this miscalculation. Please note that the ‘User’ choice allows you to set a value that is equivalent to either the ‘RepWindowEffectiveChannelWidth’ or the ‘FinestEffectiveChannelWidth’, but the time estimate will be correct. Single continuum observations or observations requiring the 12m array are not affected by this problem.
C10_004	In the correlator configuration section of the Technical Justification in the OT, the effective bandwidth is wrongly displayed as representative spectral window resolution and thus the calculation of the line width / representative spectral window resolution is not correct.
C10_005	In the Technical justification of the proposal pdf, the effective bandwidth rather than the spectral resolution is displayed in the Resolution column of the Spectral Setup summary. The effective bandwidth is also wrongly used in the calculation of the resolution element per FWHM.
C11_001	If the user chooses a source velocity above 298893 km/s with Doppler Type Radio or above 299787 km/s with Doppler Type Relativistic, validation is aborted.