What Cycle 10 proposal issues and clarifications should I be aware of before submitting my proposal?

Sarah Wood - 2023-05-09 - General

This Knowledgebase article is a repository for information relevant to submission of Cycle 10 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 10 May 2023 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:**

*Issue affecting some proposals requiring ACA observations*

*Additional issue affecting the Cycle 10 (Phase 1 Patch 1) OT*

In the Cycle 10 (Phase 1 Patch 1) OT, if ‘Standalone ACA’ is selected in the ‘Control and Performance’ panel, integration times are underestimated if the Bandwidth used for Sensitivity (BufS) is set to ‘RepWindowEffectiveChannelWidth’ or to ‘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 in these cases the time estimate will be correct. Single continuum observations or observations requiring the 12-m array are not affected by this problem.

**Updates to the Proposer's guide April 26, 2023, (up to date version is 1.2):**

- The data file associated with Figure 5 ("Estimated available observing time") was updated to contain the Cycle 10 estimates and is available at: [https://almascience.org/images/results.zip](https://almascience.org/images/results.zip)
- Two figure references were corrected, one in Section 4.3.3 (for the effective observing time available per configuration) and one in Section 4.3.4 (for the LST distribution of Cycle 9 requests and allocations).
- A link was added to Section 4.3.1 for [ALMA Memo No. 624](https://almascience.org/images/results.zip)
- The terms "night" and "afternoon" in the caption of Figure 3 had been inadvertently
ALMA Band 1 Capabilities in Cycle 10

As described in the ALMA Cycle 10 Proposer’s Guide, both spectral-line and continuum observations in Band 1 will be available only with the 12-m Array in Cycle 10, from March 2024 onwards. The Observing Tool will not prevent the submission of projects containing Band 1 ACA observations, but Band 1 ACA (7-m Array and Total Power) observations are not technically feasible in this Cycle. Proposals requiring Band 1 ACA observations should therefore not be submitted in Cycle 10. For more information on the Cycle 10 capabilities, please see Section 4.2 of the Proposer’s Guide.

Archive issues:

There is currently an issue that is preventing PIs from downloading their proprietary data using the new (default) Request Handler interface of the ALMA Archive.

However, the data can still be accessed using the following workaround: after clicking Explore and download, click ‘Open legacy Request Handler’ next to Download in the GUI that pops up.

ALMA Cycle 10 Pre-Announcement
Cycle 10 Announcement
Cycle 10 Documentation

<table>
<thead>
<tr>
<th>Date</th>
<th>Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Apr 2023</td>
<td>Release of the ALMA Cycle 10 CfP and Observing Tool, and opening of the archive for proposal submission</td>
</tr>
<tr>
<td>10 May 2023 (15:00 UT)</td>
<td>Proposal submission deadline</td>
</tr>
<tr>
<td>August 2023</td>
<td>Announcement of the outcome of the proposal review process process</td>
</tr>
<tr>
<td>October 2023</td>
<td>Start of Cycle 10 observations</td>
</tr>
</tbody>
</table>

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

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.
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).

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.

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.

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.