If my data were calibrated and imaged in CASA 3.3 and I want to redo it, are there resources to help?

John Hibbard - 2023-11-01 - Historical Articles

ALMA Cycle 0 PI or Science Verification data may have been reduced in an earlier version of CASA. In this case, the scripts that were provided in the original data delivery will most likely not work with later versions of CASA (see the Knowledgebase article How can I tell from the scripts provided as part of the Cycle 0 data products which version of CASA was used?). Rather than reverting to the outdated version of CASA in order to re-run the scripts, we recommend instead the following approaches:

1. The 3.3 scripts themselves are still useful as rough guides though some of the parameters and usage will need to change. If all you want to do is re-image you can start with the fully calibrated data in the data package.

2. There are ALMA CASAguides for Science Verification data for each major release of CASA. Users are urged to consult these guides for the proper steps and syntax for ALMA data reduction. Note, in particular, that calibration tables created for CASA 3.3 are not compatible with later versions of CASA. Therefore the system temperature and water vapor radiometer tables should be regenerated using the tasks gencal and wvrgcal, respectively.

3. Sample TDM (128 channels/SPW) and FDM (3840 channels/SPW) CASA 3.4 calibration scripts are available from the ALMA CASAguides - Processing Cycle 0 data from the ALMA archive.

You could of course install an older version of CASA, which are available from the Obtaining CASA webpage, and make sure you are aware of the particular release documentation available here.

Note: Be aware that there are significant advantages to using the later versions of CASA, as detailed in these related Knowledgebase articles:

Will re-reduction improve the Cycle 0 data products provided by the archive?

Are there significant differences between versions of CASA 3.x that make them incompatible?

[Are there particular advantages to using CASA 3.4 or later for ALMA Cycle 0 data?](#)