Where can I get additional information for my NA added value data products?

Andrew Lipnicky - 2024-03-26 - Archive & Data Retrieval

The fully-calibrated measurement sets include the calibrated science data to allow streamlined reprocessing with the ALMA Pipeline. However, if you would rather start from scratch using the archive products to process your data, detailed instructions are available to help you with that process. These ALMAguides can be found at:

https://casaguides.nrao.edu/index.php/ALMAguides

Starting in Cycle 9, the delivery structure for added-value products has changed. In previous cycles, the continuum + line data was split and concatenated into the delivered calibrated_final.ms, but this measurement set could no longer be used with pipeline tasks, and the spectral window numbering was lost, which made it difficult to compare against the pipeline weblog.

In the new delivery structure, all uid*targets.ms files (which contain non-continuum-subtracted target-only data) are held within calibrated_final/measurement_sets, allowing the use of pipeline tasks and making for easier comparison with your delivered ALMA calibration + imaging pipeline weblog. An equivalent calibrated_final.ms can be created via 'concat' in CASA if this is desired.

The new data delivery structure is as follows:

```
calibrated_final/                    # downloaded as calibrated_final.tgz
    caltables/                           # holds relevant calibration information for
continuum subtraction
        - cont.dat                       # contains the identified continuum ranges
from 'findcont' in the ALMA pipeline
        - uid*SOURCE.uvcont.tbl      # the tables for uv continuum subtraction,
generated from 'uvcontfit'
    measurement_sets/                 # holds all measurement sets
        - uid*targets.ms              # the non-continuum-subtracted
measurement sets, per execution block; no calibrator data
        - scriptForReprocessing.py      # a utility script, described at the link below
        - README                         # an informational file, similar to this article
```

```
qa/                                        # downloaded as
PROJECT_UID.QA2_report.tgz
    - uid*.qa0_report.pdf                  # the per-execution QA0 reports
    - member.uid*.qa2_report.pdf      # the QA2 report for this MOUS


Calibration+Imaging_Weblog/        # the weblog for the ALMA pipeline run for this MOUS


ADMIT/                                     # per source per spw ADMIT value-added
products
                                           # downloaded as
PROJECT_UID_MOUS.ADMIT.tgz
```

An in-depth analysis of the reprocessing script, as well as suggested accompanying workflows compatible with this data structure, can be found at the following link:

https://help.almascience.org/kb/articles/what-can-I-do-with-my-added-value-data-products?

ADMIT products for interferometric observations are an experimental ALMA development project which is designed to look through science images and automatically provide line identification, moment maps, position-velocity diagrams, etc. Please note that ADMIT products are not Quality Assured and line identification is only performed for well-known chemical species. For more information about installing and using ADMIT on your data, please see the ADMIT wiki pages:

http://admit.astro.umd.edu/

To view your ADMIT products, untar the ADMIT delivery, then open the "index.html" file found in each *.admit folder in a browser window just as you would for an ALMA pipeline QA2 weblog. Please note that currently there is a known issue which causes some ADMIT weblogs to be incomplete. Any and all feedback regarding your ADMIT delivery products (for example how good was the line identification, completeness of weblog, ease of use, etc.) is appreciated!

Finally, we would like to recommend to you the services that NRAO can provide to assist you in the analysis of your data. We welcome visits from PIs who would like to rereduce their data from the original raw files, and from PIs who would like advice on how to further interpret and display the images they have received. Financial support for travel costs is available for PIs based in the US. Even if you do not feel you need to visit but have a few questions, we have scientists available to respond to Helpdesk queries.

Tags
delivery

qa2