AAT/PPI 4.3 Series Release Notes

Welcome to the new NRAO archive!

This archive tool provides access to VLA (historical and post-upgrade), ALMA (Cycles 1 and higher), VLBA, and significant fraction of GBT data. Users seeking GBT data not found here should submit a science help desk ticket.

Users seeking ALMA Cycle 0 and/or the full assortment of ALMA image and calibration products should use the ALMA Science Archive (https://almascience.nrao.edu/asax/).

For questions, please contact the science help desk (https://help.nrao.edu) and select the "Data Products" topic.

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Introduction

Additional features this release include:

4.3.0.3

- Improvement to the TAP service
- Metadata additions to the search interface
- Improvements for tracking file ingestion into permanent storage
- Introduction of Full Curation for image product correction
- Bug corrections for observation metadata curation

4.3.0

- Automatic Error Recognition of Ingested Data
 - Missing Scans/BDFs should now be flagged on ingestion
- Improved display of archive ingestion/observation issues
 - Missing Scans/BDFs warnings should now be highlighted in yellow
- Improved Scan Lists
 - o Introduction of pagination
 - Introduction of Spectral Window data for EVLA, ALMA, VLBA, and GMVA
 - Various display improvements and corrections for previously held observation data

Please Note: support of these features will require extensive data reingestion.

- QA Notes for newly ingested non-VLASS Calibrations are available from the Archive
- · QA Notes for newly ingested non-VLASS Images are available from the Archive
- X-band will no longer be listed as an observation band if it was only used for pointing for newly ingested EVLA data
- The Science Helpdesk is now accessible from the Archive
- Curator: NRAO Archive Reingestion System
- VLBI Ingestion Support
 - VLBA/GMVA file ingestion has been standardized to use the manifest driven system in use for other instruments
 - VLBA/GMVA file ingestion will be removed from the Legacy Archive and current AAT/PPI services
 - VLBA/GMVA ingestion is now controlled by AAT/WS via StackStorm
 - this includes:
 - directory monitoring for the difx area
 - directory renaming to reflect ingestion status
 - Workspaces HTCondor based ingestion workflow implementation for VLBA, GMVA and Mark4 data types.

Release Notes - 4.3.0.3 - 2024.05.02

Task

• [WS-2109] - Remove defunct CASA processing properties from CAPO

Story

• [WS-1612] - As a users, I would like to see the number of antennas in TAP search returns

- [WS-1617] As a user, I would like to see max uv-distance in the TAP server returns
- [WS-1764] As a user, I would like to see the number of antennas in the AAT search returns
- [WS-1768] As a user, I want to only see the tt0 images in archive search returns.
- [WS-1770] As a product owner, I need images to be reingested such that the tt0 image is the primary data product
- [WS-2103] As a user, I would like to see updated spectral information in the TAP service

Bug

- [WS-1411] File sizes in TAP database stored as int32 and many overflow
- [WS-2179] ALMA scanlists showing NaN
- [WS-2315] data-query-test not returning observations without SPW info

Release Notes - 4.3.0.2 - 2023.12.21

Story

- [WS-1833] Reingest to exclude pointing bands from eb.band_code
- [WS-2100] As a user, I want positions corrected so that I can search OTF observations
- [WS-2112] As a user, I do not want to see targets in spectral setups that only have SYSTEM_CONFIGURATION intents
- [WS-2170] As a user, I would like the min/max freq columns to be present in the scanlists until metadata reharvesting is complete

Bug

- [WS-1351] Indexing of VLA low band projects
- [WS-1893] As a product owner, I would like existing data to have their metadata updated to support refactored scanlists

Release Notes - 4.3.0.1 - 2023.12.08

Bug

• [WS-2163] - VLBA not ingesting idifits into NGAS

Release Notes - 4.3.0 - 2023.11.30

Story

- [WS-213] As a user I want to see the QA notes for my calibration
- [WS-223] As a user I want to see the QA notes for my imaging products
- [WS-338] As a user I want to know that the QA notes are ingested so I can see them
- [WS-1350] As the product owner, I would like to see ingestion changes to support better scanlist display
- [WS-1355] Automated Error Recognition of Ingested Data
- [WS-1356] Display of archive ingestion/observation issues
- [WS-1362] As a scientist, I would like to see several changes to ingestion to make the scanlist display more useful
- [WS-1391] As a user, I do not want to see a project labeled as containing X-band (or C-band) data if X band (or C-band) was only used for
- [WS-1392] As a data analyst, we need a set of data annotation tools for highlighting problems with the data itself
- [WS-1393] As a data analyst, we need a new type of annotation to label data with notes about the pipeline calibration
- [WS-1407] As a scientist, I would like to see several changes to make the scanlist information more useful
- [WS-1495] As a user, I would like the scanlists to have pagination
- [WS-1571] As a product owner, I want VLBI files treated similarly to other products for ingestion
- [WS-1648] As a scientist, I would like max uv-distance archived when data is ingested
- [WS-1649] As a scientist, I would like the number of antennas to be kept during ingestion
- [WS-1769] As a proj. scientist, I want the primary image data product to be righter
- [WS-1794] As a user, I would like to see changes to VLBA ingestion to support new information in scanlists
- [WS-1802] As a user, I would like a link to the science helpdesk on the archive page
- [WS-1803] As a user, I would like the ALMA scanlists to mirror the refactored EVLA scanlists
- [WS-1805] As a product owner, I want ingest to be able to work with the VLBI manifest changes
- [WS-1806] As a product owner, I want VLBA ingestion to happen automatically
- [WS-1807] As a DA, I want to be able to ingest GMVA files as needed
- [WS-1808] As a product owner, I want a workflow that performs VLBA/GMVA ingestion
- [WS-1840] As a system administrator, I would like automatic cleaning of the NAASC downloads areas
- [WS-1910] As a product owner, I want VLBA Mark4 data placed into NGAS to facilitate current functionality
- [WS-1966] Update AAT's mark4import script for WS taking over VLBA ingestion
- [WS-1976] As a project scientist, I would like some further refinements to the scanlist presentation before deployment
- [WS-2001] As a project scientist, I would like the VLBA and ALMA scanlists to have the same functionality as EVLA

Bug

- [WS-1349] Scan list does not show coordinates between dec= 00 and dec = -1 correctly
- [WS-1810] As a user, viewing scanlists from data within 'username's data' I am taken back to the main page
- [WS-1887] The new archive provides a bad link for info on some data quality notes
- [WS-1919] As a user, I would like local delivery links for MSes and basic downloads to include the full path and not be clickable
- [WS-2085] The observed polarizations do not appear in the VLBA scanlists
- [WS-2110] AUDI test run won't validate (velocity width rejected)

Sub-Task

• [WS-1771] - Alter the logic for selecting the primary vs. ancillary for ingest_envoy manifest creation

Research Request

- [WS-1363] As a product owner, I want a way to ensure that as new fields are added to the archive, we have a method for reingesting existing data to populate those fields
 [WS-1591] - As a developer, I want to understand how the legacy archive performs error recognition
 [WS-1650] - As a developer, I would like a good estimate of the work necessary to support the NRAO archive from Astroquery