



Querying the the ALMA Archive

Felix Stoehr
Subsystem Scientist



Outline

- ◆ What is in the archive?
- ◆ What can be queried for?
- ◆ How to query?
- ◆ How to download?
- ◆ Cycle 0 data: where are the FITS files?
- ◆ Which ALMA publications do exist?
- ◆ How can I check for duplications?
- ◆ Where to get Help?
- ◆ Caveats

What is in the archive?

- ◆ All data, as soon as it has passed the first quality control step (QA0) which is done directly after the observation. I.e. **proprietary data** is explicitly included.

- ◆ So far: only **raw data** is shown, therefore
 - ◆ There may be several rows in the result table for the same source with their own integration times.
 - ◆ FITS files are only available for parts of the data, i.e. not for all sources and not for the complete frequency range

What can be queried for?

You are here: [Home](#) > [ALMA Data](#) > Archive Query

ALMA Science Archive Query

Query Form
Result Table

Search
Reset

| | | | |
|---|--|---|---|
| <p>Position</p> <p>Source name (Sesame) Source name (ALMA) RA Dec Search radius <input type="text" value="0:10:00"/></p> | <p>Energy</p> <p>Frequency Bandwidth Spectral resolution Band</p> | <p>Time</p> <p>Observation date Integration time</p> | <p>Polarisation</p> <p>Polarisation type</p> |
| <p>Observation</p> <p>Water vapour Scan intent <input type="text" value="Observe target"/></p> | <p>Project</p> <p>Project code Project Title PI Name</p> | | <p>Options</p> <p>Results view <input checked="" type="radio"/> raw data <input type="radio"/> project</p> <p>Release status <input checked="" type="radio"/> public data <input type="radio"/> all data</p> |

- ◆ <http://almascience.eso.org/aq>
- ◆ Still very limited
- ◆ Only most **relevant** keywords and data shown per default

How to query?

◆ The values in the fields are **AND constraints**

◆ Number fields: Single values, >, <, !=, =, ..

String fields: ~, =, !~, !=, *, ?

See the **tooltips** for examples of the syntax

◆ Proprietary data: “all data”

Calibrator data: “Scan Intent” field

◆ On the results page:

- ◆ Sort

- ◆ Subfilter

- ◆ Show more (or less) columns, reorder

How to download?

- ◆ Authenticated download:
 - ◆ Required for download of proprietary data
 - ◆ Allows to revisit older data requests

- ◆ Anonymous download:
 - ◆ All public data can be downloaded anonymously

- ◆ Download manager:
 - ◆ Convenient for download to the desktop (parallel download, pause, resume, retry)

- ◆ Download request script:
 - ◆ Good for processing environments without webbrowser and/or Java Plugin

Cycle 0 data: where are the FITS files?

- ◆ The Cycle 0 packages contain all data together (raw MS, MS, FITS files, scripts). If only parts of the packages are needed:

almascience.org/alma-data/archive/cycle-0-tarfile-content

- ◆ Going there from the SP:

Data -> Archive -> Delivery List -> content

Which ALMA publications do exist?

- ◆ All publications using ALMA data must reference those data using the official statement (including the data tag)
- ◆ For now, publication information is (only) stored in telbib.eso.org
- ◆ Searching for ALMA publications:
 - ◆ Telescope = “ALMA”
- ◆ Search for publications of a specific project:
 - ◆ Program ID = “2011.0.01234.S”
- ◆ Get the data of an ALMA program referenced in a paper:
 - ◆ Project code = “2011.0.01234.S” and “all data”

How can I check for duplications?

- ◆ Already **observed** data:
 - ◆ Source Name (Resolver) and “all data”

- ◆ Cycle 1 **accepted** sources:
almascience.org/proposing/call-for-proposals/duplications

Where to get Help?

- ◆ almascience.org/alma-data/archive
- ◆ Tooltips
- ◆ In the very near future: “Query Help” and “Results Help”
- ◆ The Helpdesk: help.almascience.org

Any feedback, comments, wishes are welcome!

Caveats

- ◆ Data with release date 2099? These are data that have been delivered but later turned out to be bad. Investigations are ongoing, the proprietary period has been set to a data far into the future
 -
- ◆ For Cycle 0 data, the size indicated of the downloads can be higher than what is really required as files might be counted several times in the list. (Each file is only downloaded once, though)
- ◆ The Download manager may not work with MacOS 10.7