ALMA Data Products:
What to Expect when Observations are Complete

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Atacama Large Millimeter/submillimeter Array
Karl G. Jansky Very Large Array
Very Long Baseline Array

Data Delivery Summary

When: after observations pass Quality Assurance (QA)

Where: data delivery email, ALMA archive, SnooPI

What: preliminary images, calibration tables, aux info

Why: see Technical Handbook §11, 12, 14 & Appendix C

Quality Assurance

QA0: *during* observations ➤ monitoring of on-the-fly variables [PWV, wind, temp.]

QA1: *between* observations ➤ monitoring of array and calibrator performance

QA2: *after* observations ➤ calibrated products checked [rms, calibration, res.]

QA3: *after* delivery ➤ triggered by PI reporting issues [data, calibration, obs.]

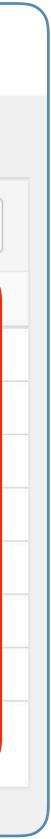**does NOT include incorrect coordinates, insufficient sensitivity, inadequate frequency or spatial resolution, etc.**

SnooPI: Monitoring Project Status

[https://almascience.eso.org/observing/snoopi]

SnooPI: Monitoring Project Status

👍 Project has been submitted (Phase 1)

❌ Rejected at proposal review stage

✳ Approved but SBs not yet prepared

👍 SBs prepared but are not yet in the observing queue

🔴 SBs are in the observing queue but not yet taken

🔺 Some data has been taken

✔️ All the data has been taken

☑️ Completed and delivered
→ **you want to see these**

☑️ Partially completed and all data taken has been delivered

⛔ Project is timed out

✖️ Project cancelled and not observed

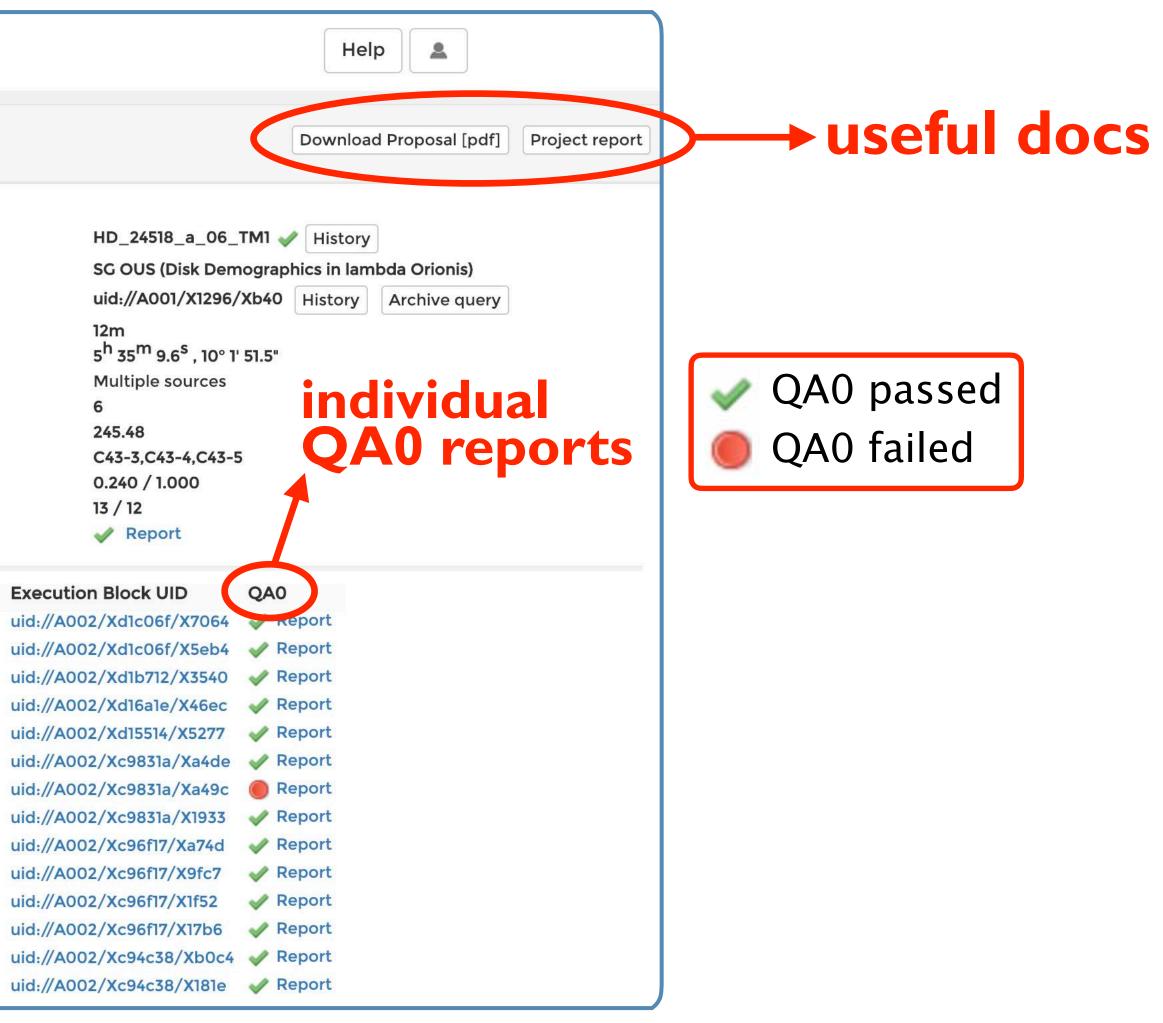↺ Project that are not to be observed

❓ Unknown status

SnooPI: Single Project Status

Data Delivery Email [QA2]

When: after observation set passes QA2

What: instructions for downloading and delegating access,
weblog (calibration + imaging report) and other metadata

Why: triggers start of one-year proprietary period

Where: ALMA archive links (all ALMA users)
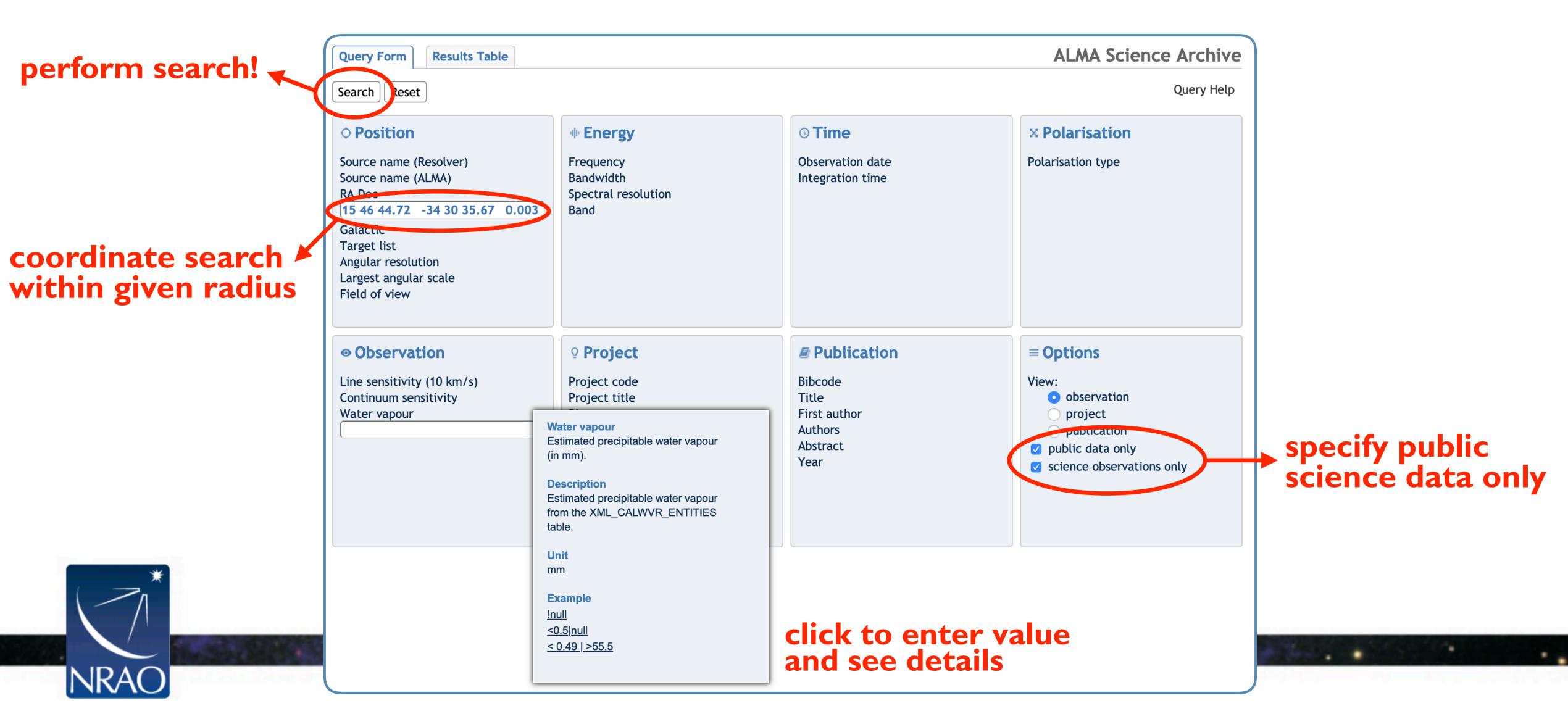temporary link to fully calibrated dataset (only North America)
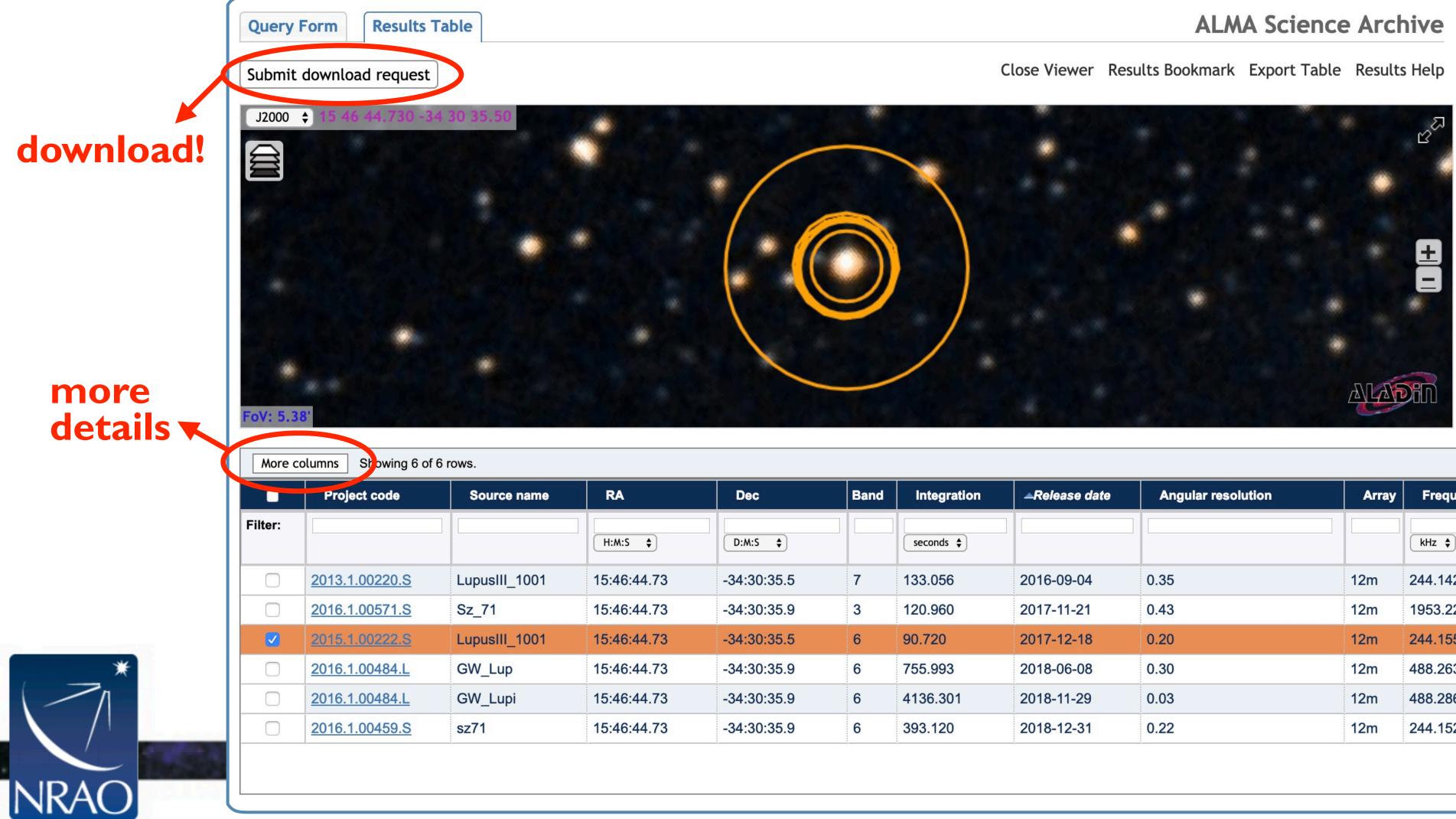
don't forget to download within 30 days!

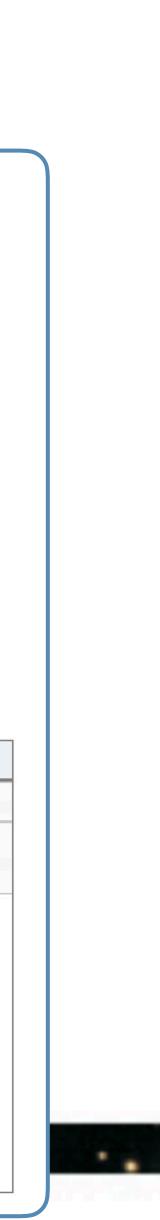# The ALMA Archive

[http://almascience.eso.org//aq/]

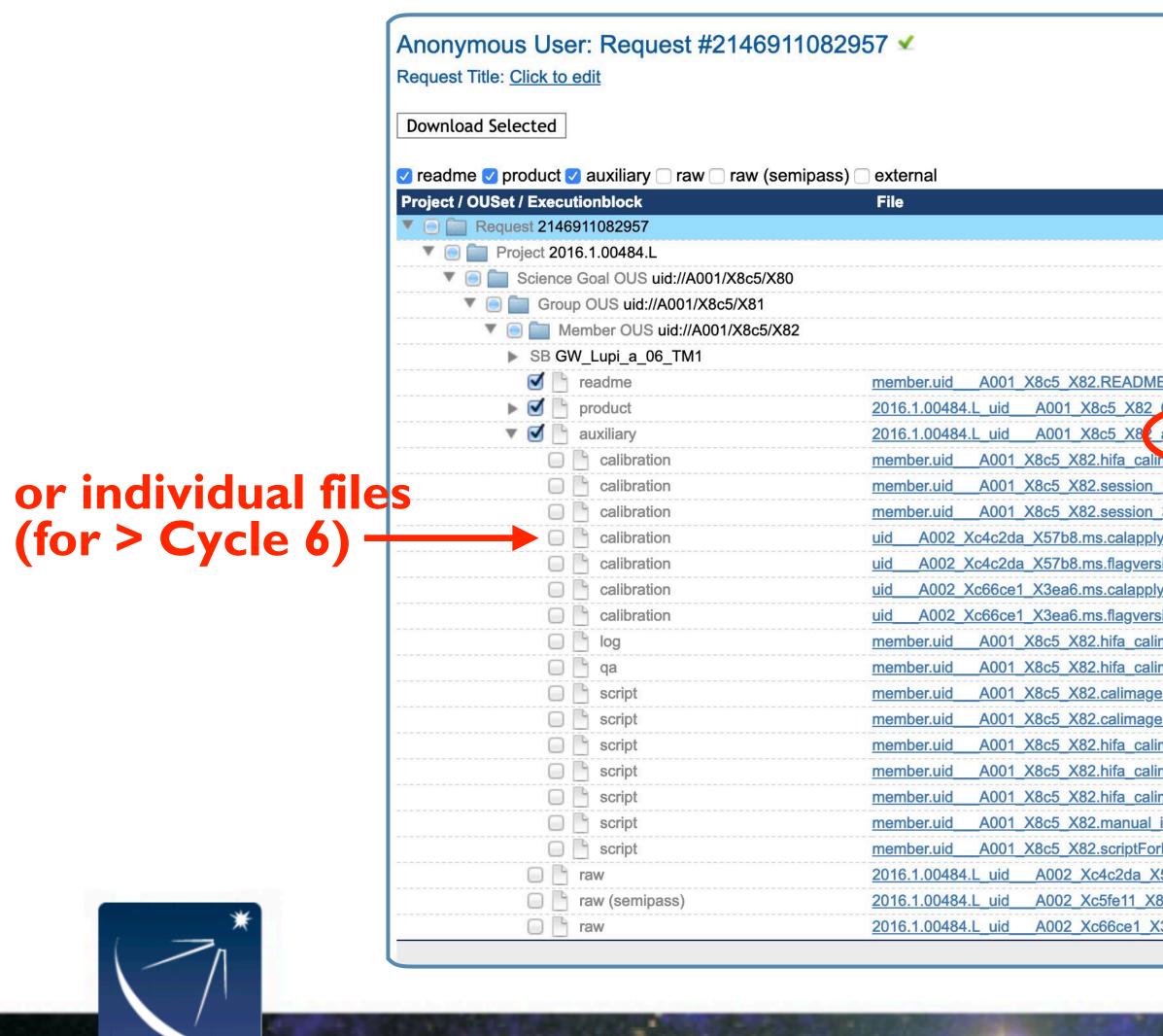perform search!

coordinate search within given radius

specify public science data only

click to enter value and see details

The ALMA Archive

[http://almascience.eso.org//aq/]

Archived Data Products Package

Resources After Data Delivery

ALMA Help Desk
Questions answered within 48 hours
[https://help.almascience.org/]

Documentation
ALMA Primer, Proposer's Guide, Technical Handbook
[https://almascience.nrao.edu/documents-and-tools]

Face-to-Face Visits
Travel for teams to visit NAASC for data reduction/analysis support
[https://science.nrao.edu/facilities/alma/visitors-shortterm]

Student Support
$35k to support (under)graduate student for successful ALMA proposals
[https://science.nrao.edu/opportunities/student-programs/sos]