

Archive query requirements

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Archive

-) **User has a fairly small list of parameters to fill in**
How much help to restrict within ranges containing data?
Automatically add 'slop' e.g. to cover field of view, spw width...?
-) **Response is list of data meeting query constraints**
Plus addition metadata
User makes selection of data to request
-) **User downloads data**

Query Form

The screenshot shows a Mozilla Firefox browser window with the URL `almascience.eso.org/aq/`. The page header features the ALMA logo and the text "Atacama Large Millimeter/Submillimeter Array" with the tagline "In search of our Cosmic Origins". Below the header, a breadcrumb trail reads "You are here: Home > ALMA Data > Archive Query". The main heading is "ALMA Science Archive Query".

Navigation tabs include "Query Form" (active) and "Result Table". Below these are "Search" and "Reset" buttons. The form is organized into eight panels:

- Position:** Source name (Sesame), Source name (ALMA), RA Dec, Search radius (input field with value "0:10:00").
- Energy:** Frequency, Bandwidth, Spectral resolution, Band.
- Time:** Observation date, Integration time.
- Polarisation:** Polarisation type.
- Observation:** Water vapour, Scan intent (input field with value "Observe target").
- Project:** Project code, Project Title, PI Name.
- Options:** Results view (radio buttons for "raw data" and "project").

The browser's address bar and system tray are visible at the bottom of the screenshot.

<http://almascience.eso.org/aq/>

Query Form


Applications Places System 🌐 🔊 📧 Tue Jun 11, 10:15 AM 👤 elisabetta 🔌

Alma Science Archive Query - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Alma Science Archive Query +

almascience.eso.org/aq/ 🌟 🔄 🔍 Google 📄 🏠

 **Atacama Large Millimeter/Submillimeter Array**
In search of our Cosmic Origins

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

ALMA Science Archive Query

Query Form **Result Table**

Search **Reset**

Position
Source name (Sesame)
Source name (ALMA)
RA Dec
Search radius
0:10:00

Energy
Frequency
Bandwidth
Spectral resolution
Band

Time
Observation date
Integration time

Polarisation
Polarisation type

Observation
Water vapour
Scan intent
Observe target

Project
Project code
Project Title
PI Name

Options
Results view
 raw data project

Limits

<http://almascience.eso.org/aq/>

Result table

The screenshot shows a web browser window with the URL `almascience.eso.org/qa/`. The page header includes the ALMA logo and the text "Atacama Large Millimeter/Submillimeter Array In search of our Cosmic Origins". Below the header, there are navigation links for "Query Form" and "Result Table", and a "Download data" button. The main content area displays a table of search results, with the first 10 results shown. The table has 13 columns: `project_code`, `SOURCE_NAME`, `RA`, `DEC`, `BAND`, `integration`, `RELEASE_DATE`, `vel_resolution`, `POL_PRODUCTS`, `start_date`, `PI_NAME`, and `PWV`. The results are sorted by `RELEASE_DATE` in descending order. The first row shows a project code of `2011.0.00101.S` and a source name of `GRB021004`. The table is followed by a pagination control showing "Results 1-10 of 2000 (2000 before filtering) sorted by RELEASE_DATE" and a "Show 10 results per page" option.

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

ALMA Science Archive Query

[Query Form](#) [Result Table](#)

[Download data](#)

Results 1-10 of 2000 (2000 before filtering) sorted by **RELEASE_DATE** Show 10 results per page [Previous](#) [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) ... [200](#) [Next](#)

<input type="checkbox"/>	project_code	SOURCE_NAME	RA	DEC	BAND	integration	RELEASE_DATE	vel_resolution	POL_PRODUCTS	start_date	PI_NAME	PWV	«	»
	String	String	Number	Number	Number	Number	String	Number	String	Number	String	Number		
<input type="checkbox"/>	2011.0.00101.S	GRB021004	00:26:54.69	18:55:41.6	7	2659.939	2012-12-06 04:27:58.0	13579.00048142799	I XX YY	2011-11-04 23:49:40	Wang, Wei-Hao	0.94305545		
<input type="checkbox"/>	2011.0.00101.S	GRB021004	00:26:54.69	18:55:41.6	7	2661.105	2012-12-06 04:27:58.0	13579.00048142799	I XX YY	2011-10-22 03:19:02	Wang, Wei-Hao	0.8104666		
<input type="checkbox"/>	2011.0.00131.S	R ScI	01:26:56.33	-32:32:48.4	7	1628.23	2012-12-06 16:08:24.0	432.88111965023796	I XX YY	2011-10-19 05:10:10	Maercker, Matthias	0.3000087		
<input type="checkbox"/>	2011.0.00131.S	R ScI	01:26:56.33	-32:32:48.4	7	1649.074	2012-12-06 16:08:24.0	432.88111965023796	I XX YY	2011-10-03 02:33:57	Maercker, Matthias	1.3598294		
<input type="checkbox"/>	2011.0.00131.S	R ScI	01:26:56.33	-32:32:48.4	7	1708.222	2012-12-06 16:08:24.0	432.88111965023796	I XX YY	2011-10-04 00:16:58	Maercker, Matthias	1.0111763		
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Also.. Project Title, Type

Result table

Applications Places System Tue Jun 11, 10:17 AM elisabetta

Alma Science Archive Query - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Alma Science Archive Query

almascience.eso.org/aq/ Google

Atacama Large Millimeter/Submillimeter Array
In search of our Cosmic Origins

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

ALMA Science Archive Query

[Query](#) [Result Table](#)

Download data

Results 1-10 of 2000 (2000 before filtering) sorted by **RELEASE_DATE** Show 10 results per page Previous 1 2 3 4 5 6 7 8 9 ... 200 Next

<input type="checkbox"/>	project_code	SOURCE_NAME	RA	DEC	BAND	integration	RELEASE_DATE	vel_resolution	POL_PRODUCTS	start_date	PI_NAME	PWV	«	»
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Also.. Project Title, Type

Other items in query and/or result table?

Spatial resolution

e.g. 6 arcsec
Set bounds e.g. $<2*6''$

$\text{sqrt}(B_{maj}*B_{min})$ -
tell user if in factor 2(?) of requested resolution

Additional info: B_{maj} , B_{Min} , BPA

UV distance parameters
median, 1th and 3rd quartiles of the UV distance
distribution → **new task** vis_stat → $\text{sqrt}(U^2xV^2)$

Units? $K\lambda$?

L.A.S.

e.g. 20 arcsec
Set bounds e.g. $>20*0.9''$

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Other items in query and/or result table?

Sensitivity: lower limit in query?
Sensitivity as a function of PB etc.
or a range

Image quality

Map noise (take lowest value from several regions to avoid source)

Per spw? What about cubes covering noisy bits of atmosphere?

Need to warn about dynamic range limitations

Visibility noise

Sidelobe ratio (related to uv coverage, easier to understand)

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Suggestions?

Spatial resolution

e.g. 6 arcsec

Set bounds e.g. $<2 \times 6''$

$\sqrt{B_{maj} \times B_{min}}$?

B_{maj}, B_{Min}, BPA ?

UV distance parameters?

Units? $K\lambda$?

Sensitivity: lower limit in query?
units?

Image quality

Map noise ?

Per spw?

Visibility noise ?--> weights ?

Sidelobe ratio ?

Units?

New task?