Using the ALMA Archive

- Public and proprietary data are available from the ALMA archive. Public data can be downloaded anonymously.

  https://almascience.nrao.edu/alma-data/archive

- Data format

  Data for a project is delivered to the PI in one or more discrete deliveries. Each delivery corresponds to a related set of observations, and has its own release date. Deliveries are usually split into multiple tar files, **all of which need to be downloaded and untarred in the same directory in order to produce the full data directory tree.**

  The tar files of a delivery contain scripts and logs, calibration tables and representative images, as well as one or more README files.

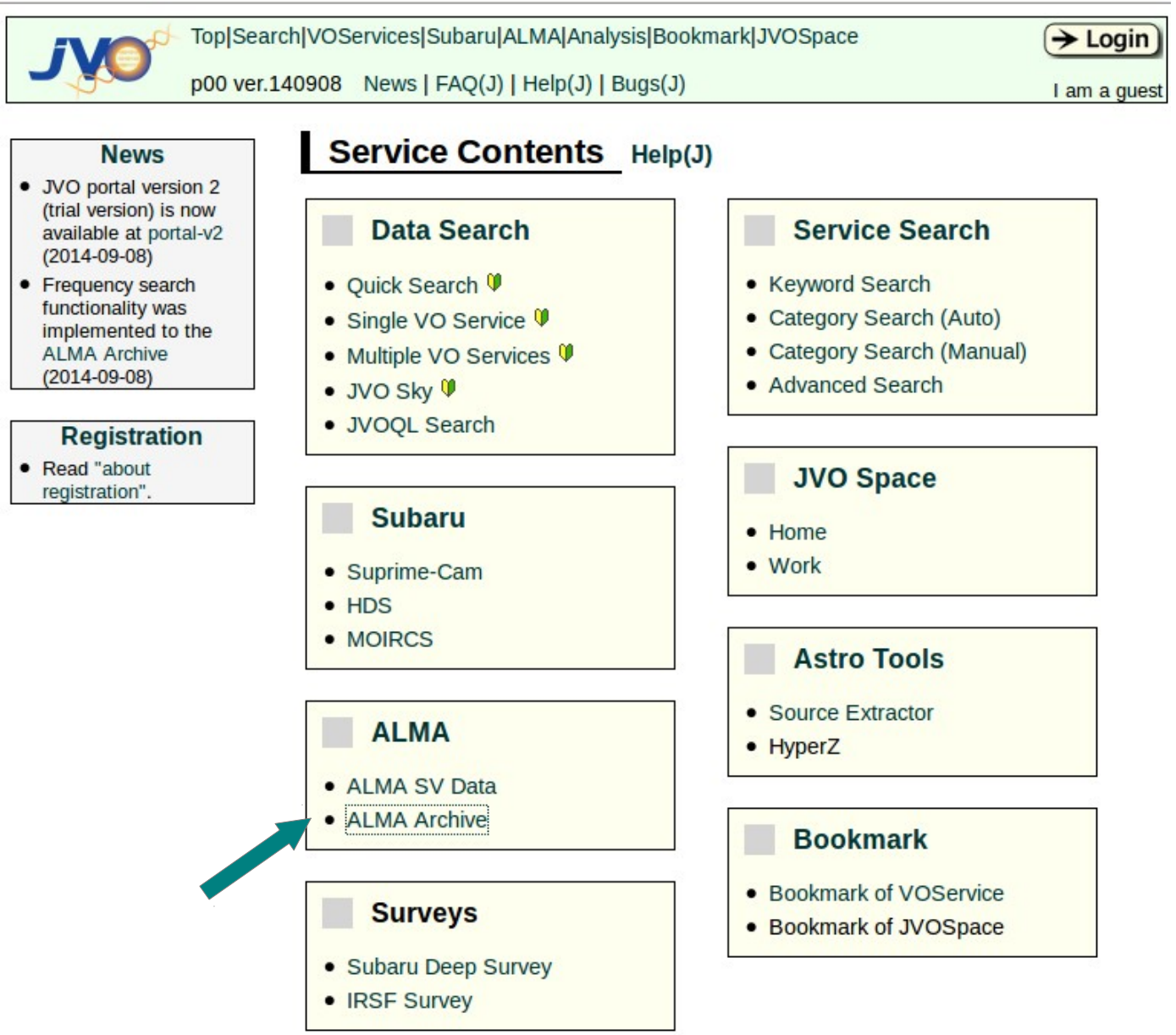
Till date ALMA has observed and archived the following data

- **Science Verification (to be downloaded from a separate link)**
- **Cycle 0**
- **Cycle 1**
- **Cycle 2 –** Observations are being carried out.
- **Cycle 3** – Call for proposals deadline 23rd April

Proprietary data is for **1 year (from release date)**, which means any data ***released*** before 1 year are available to all.

Archive: You can see the images before downloading the data (data files are huge!!)

http://jvo.nao.ac.jp/portal/top-page.do



ALMA Archive

Using the data for publication

The following statement should be included in the acknowledgment of papers using the ALMA datasets obtained from the JVO portal:

"This paper makes use of the following ALMA data: ADS/JAO.ALMA#<Project code>. ALMA is a partnership of ESO (representing its membe with the Republic of Chile. The Joint ALMA Observatory is operated by ESO, AUI/NRAO and NAOJ."

You can find the project code (e.g. 2011.0.01234.S) on the dataset info page where you download the data.

Please also include the following sentence on the title page as a footnote to the title or in the acknowledgment of the paper.

"[Part of] the data are retrieved from the JVO portal (http://jvo.nao.ac.jp/portal) operated by the NAOJ"

Target Name | Project Code | Coords | Frequency | Desktop Viewer

Sort by: (•) target ( ) coordinates Update

#	Target Name	Coords	# of Data
1	113083	10h00m48.054715 +02d01m06.64360	1
2	1374240	10h03m02.530788 +01d42m06.41200	1
3	2dFGRS_S833Z022	04h14m37.481616 -22d48m25.60079	2
4	2MASS_0444+2512	04h44m27.149158 +25d12m16.13999	3
5	2MASS_J04182147+1658470	04h18m21.516406 +16d58m46.33201	2
6	2MASS_J04242321+2650084	04h24m23.265230 +26d50m07.80961	2
7	2MASS_J04314503+2859081	04h31m45.089422 +28d59m07.52881	2
8	2MASS_J04403979+2519061	04h40m39.840674 +25d19m05.46121	2
9	2MASS_J04420548+2522562	04h42m05.533661 +25d22m55.64161	2
10	2MASS_J16124119-1924182	16h12m41.194848 -19d24m18.38621	1
11	2MASS_J16223757-2345508	16h22m37.582966 -23d45m50.93381	1
12	2MASS_J16251469-2456069	16h25m14.698044 -24d56m06.98381	1
13	2MASS_J16275209-2440503	16h27m52.095074 -24d40m50.43461	1
14	30 Doradus	05h38m47.434695 -69d04m42.31289	16
15	47_Tuc_V1	00h24m12.723307 -72d06m40.06922	4
16	47_Tuc_V2	00h24m18.601394 -72d07m59.16601	4
17	47_Tuc_V3	00h25m15.092722 -72d02m54.80701	5

Find your target/ project/ coords etc and click on the name

ALMA Archive : Target Info

Target Name : NGC3256

▷ **Filter by Frequency**

#	dataset id	ra/dec (J2000)	size (arcmin2)	band	freq. range (GHz)	data type	3rd axis	Cube size (XxYxF) ?	image resol (arcsec)	freq. resol (MHz)	obs date	original fits name
1	ALMA01001371	10h27m51.2-43d54m16	2.16x2.16	Band3	112.376 -- 112.502	intensity cube	velocity	432x432x17x1	0.30	7.388	2012-03-27	line_1_1660-1910.fits
2	ALMA01001372	10h27m51.2-43d54m16	2.16x2.16	Band3	112.376 -- 112.502	intensity cube	velocity	432x432x17x1	0.30	7.388	2012-03-27	calibrated.ms.image.line.source4.spw1.chans1660-1910.fits
3	ALMA01001373	10h27m51.2-43d54m16	2.16x2.16	Band3	114.106 -- 114.306	intensity cube	velocity	432x432x27x1	0.30	7.400	2012-03-27	NGC_cal_0_CO.fits
4	ALMA01001374	10h27m51.2-43d54m16	2.16x2.16	Band3	114.106 -- 114.306	intensity cube	velocity	432x432x27x1	0.30	7.400	2012-03-27	calibrated.ms.image.line.source4.spw0.chans2000-2400.fits
5	ALMA01001375	10h27m51.2-43d54m16	2.16x2.16	Band3	112.037 -- 112.177	intensity cube	velocity	432x432x19x1	0.30	7.368	2012-03-27	calibrated.ms.image.line.source4.spw1.chans970-1250.fits
6	ALMA01001376	10h27m51.2-43d54m16	2.16x2.16	Band3	112.037 -- 112.177	intensity cube	velocity	432x432x19x1	0.30	7.368	2012-03-27	line_1_970-1250.fits
7	ALMA01001475	10h27m51.2-43d54m16	0.45x0.45	Band7	353.163 -- 353.841	intensity cube	frequency	360x360x57x1	0.07	11.899	2012-06-04	N3256_b7_HCO+-4-3_clean.image.fits
8	ALMA01001476	10h27m51.2-43d54m16	0.45x0.45	Band7	342.073 -- 343.088	intensity cube	frequency	360x360x88x1	0.07	11.534	2012-06-04	N3256_b7_CO_3-2_clean.image.fits
9	ALMA01001477	10h27m51.2-43d54m16	0.45x0.45	Band7	340.148 -- 355.650	intensity map	frequency	360x360x1x1	0.07	15,501.786	2012-05-21	N3256_b7_cont_smooth_clean.image.fits
10	ALMA01000372	10h27m51.2-43d54m16	1.33x1.33	Band3	113.959 -- 114.393	intensity cube	velocity	200x200x57x1	0.40	7.618	2011-12-29	NGC3256_B3_comp_CO_1-0_clean_cube.fits
11	ALMA01000373	10h27m51.2-43d54m16	1.33x1.33	Band3	114.305 -- 114.313	intensity map	frequency	200x200x1x1	0.40	7.690	2011-12-29	NGC3256_B3_comp_CO_1-0_clean_mom0.fits
12	ALMA01000374	10h27m51.2-43d54m17	1.40x1.40	Band3	99.562 -- 115.000	intensity map	frequency	200x200x1x1	0.42	15,437.000	2011-12-29	NGC3256_B3_comp_cont_smooth.ms_clean.fits
13	ALMA01000375	10h27m51.2-43d54m16	0.47x0.47	Band7	342.062 -- 343.067	intensity cube	velocity	200x200x88x1	0.14	11.428	2012-01-24	N3256_b7_CO_3-2_clean.image.fits
14	ALMA01000376	10h27m51.2-43d54m16	0.47x0.47	Band7	343.045 -- 343.057	intensity map	frequency	200x200x1x1	0.14	11.534	2012-01-24	N3256_B7_CO_3-2_comp_clean.image.mom0.fits
15	ALMA01000377	10h27m51.2-43d54m16	0.47x0.47	Band7	340.157 -- 355.659	intensity map	frequency	200x200x1x1	0.14	15,502.145	2012-01-24	N3256_b7_cont_smooth_clean.image.fits
16	ALMA01000378	10h27m51.2-43d54m16	0.47x0.47	Band7	353.245 -- 353.669	intensity cube	velocity	200x200x36x1	0.14	11.792	2012-01-24	N3256_b7_HCO_4-3_clean.image.fits
17	ALMA01000379	10h27m51.2-43d54m16	0.47x0.47	Band7	353.644 -- 353.656	intensity map	frequency	200x200x1x1	0.14	11.899	2012-01-24	N3256_B7_HCO_4-3_comp_clean.image.mom0.fits

More or less all relevant information about your data are there in the table.

eg. to see the integrated intensity CO 1-0 line image, click on number 11.

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p00 ver.140908 News | FAQ(J) | Help(J) | Bugs(J)

Login

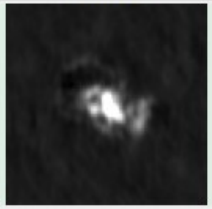
I am a guest

=> Location: Top Page > ALMA > Archive > Target Info > Dataset Info

ALMA Archive : Dataset Info

Summary | Binning Data | Desktop Viewer | Using the data

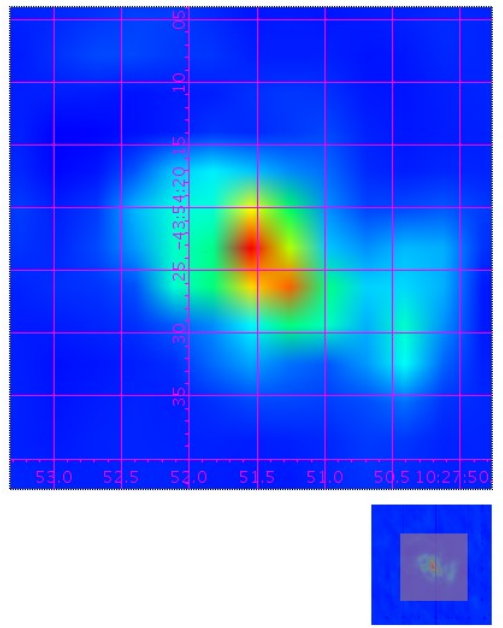
- **Target**: NGC3256
- **Dataset ID**: ALMA01000373
- **Coord. (RA/DEC J2000)**: 10h27m51.2-43d54m16
- **Date of Observations**: 2011-12-29
- **Image Size (arcmin2)**: 1.33x1.33
- **Image Resol. (arcsec)**: 0.40
- **Band Name**: Band3
- **Data Type**: intensity map
- **Freq. Range. (GHz)**: 114.305 -- 114.313
- **Spectrum Resol. (MHz)**: 7.690
- **Cube Pix ?**: 200x200x1x1
- **Original Filename**: NGC3256_B3_comp_CO_1-0_clean_mom0.fits
- **3rd(4th) Axis**: frequency
- **Project Code**: 2011.0.00525.S

data id	image	spect	file size (byte)	Download	Web QL	Readme
ALMA01000373			227,520	Download	Web QL	Readme

Data Information

Data Set ID	Object Name	R.A.	Dec.	Observation Date (UTC)
ALMA01000373	NGC3256	10h27m51.40s	-43d54m18.400s	2012-01-29T18:57:51.001Z

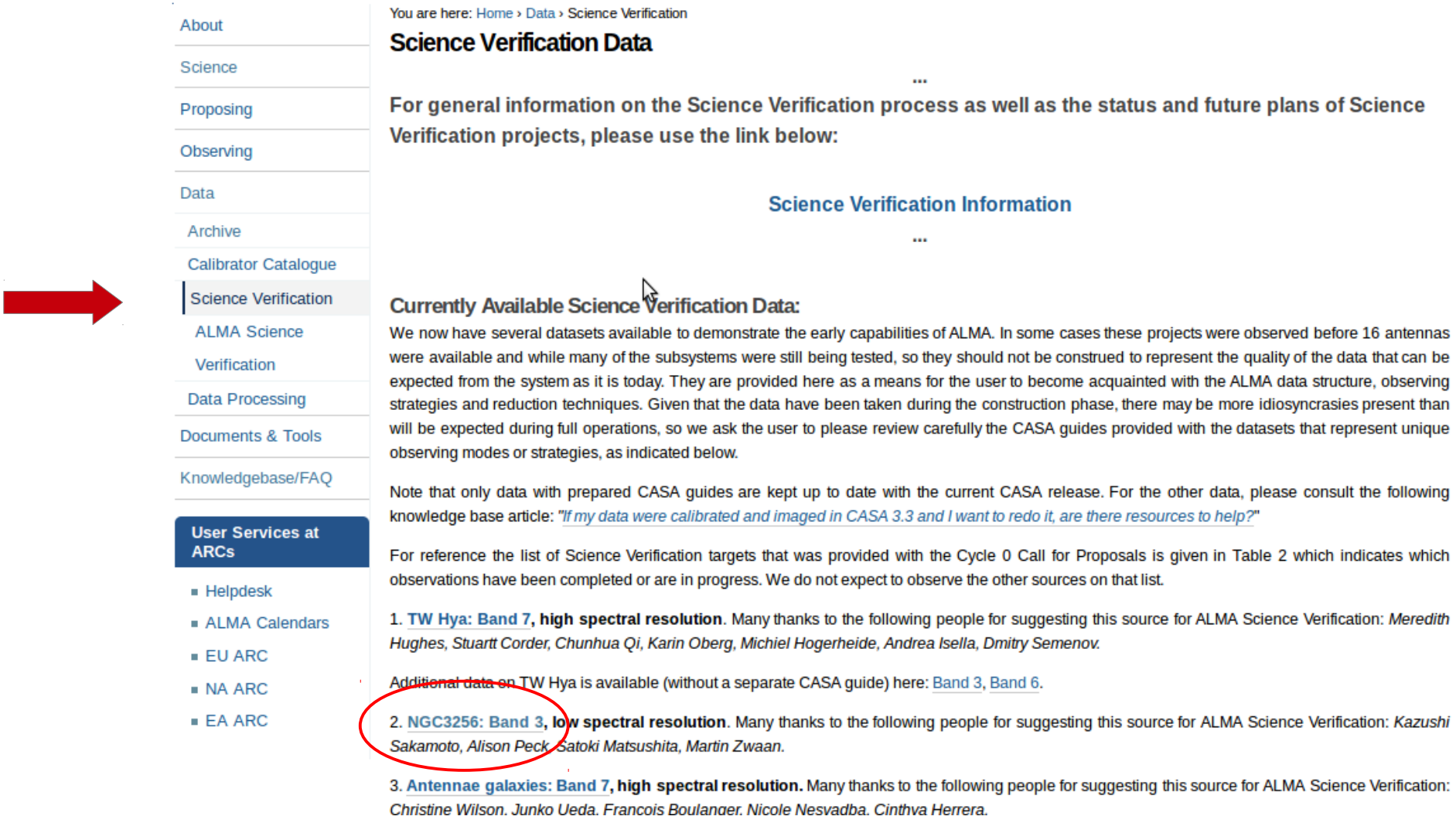
Main | Perspective: Image



Acknowledgement: Results are based on data obtained from the Japanese Virtual Observatory, which is operated by the Astronomy Data Center, National Astronomical Observatory of Japan

To download a Science Verification data. In the ALMA archive page,
Go to: *https://almascience.nrao.edu/alma-data/archive* → **Science Verification**

We will download the data for NGC 3256



You can get more detail about the project by clicking on the link for NGC 3256.

Scroll down to

Using the data for publication

The following statement should be included in the acknowledgment of papers using the datasets listed above:

"The Atacama Large Millimeter/submillimeter Array (ALMA), an international astronomy facility, is a partnership of Europe, North America and East Asia in cooperation with the Republic of Chile. This paper makes use of the following ALMA Science Verification data: ADS/JAO.ALMA#2011.0.00002.SV"

Obtaining the Data

The data products are contained in three downloadable files:

- Uncalibrated data with tables for reduction
- Calibrated data
- Reference images

and can be downloaded here: **NGC3256 ALMA Science Verification Data**

PLEASE make full use of the CASA Guides provided for this data set: **NGC3256 Band 3 CASA Guide** (This link will take you to an external web site, hosting the CASA Guides.)

NOTE: This script was developed in CASA version 3.3. It will not run in later version of CASA. For additional information see the following knowledge base article: "*If my data were calibrated and imaged in CASA 3.3 and I want to redo it, are there resources to help?*".

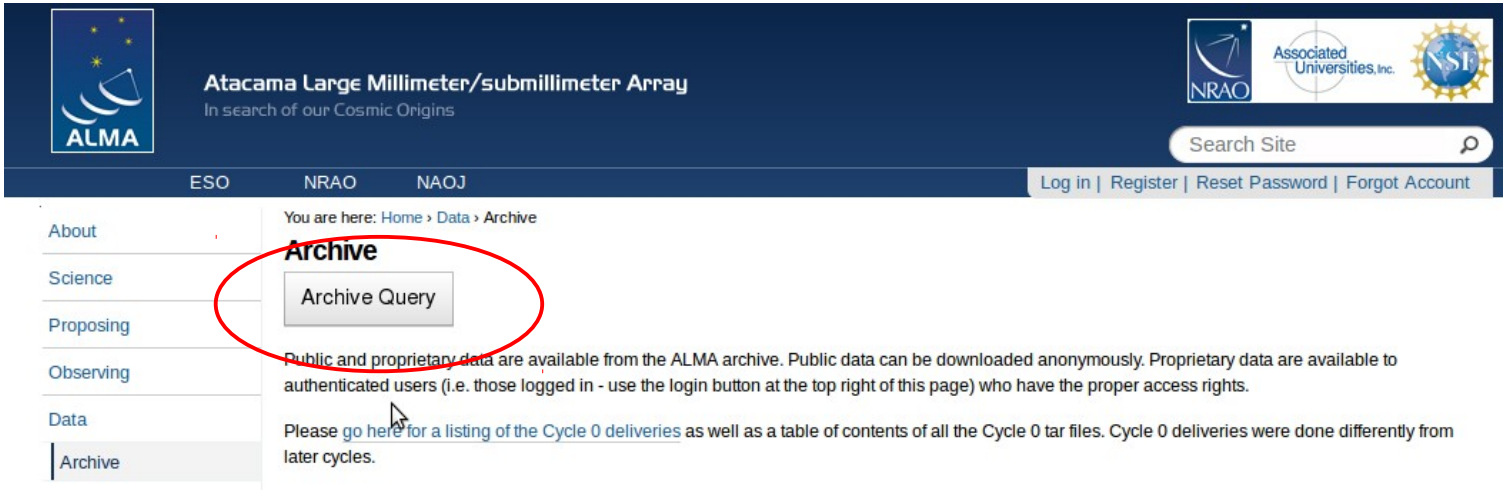
Index of /almadata/sciver/NGC3256

Name	Last modified	Size	Description
Parent Directory		-	
00-README.TXT	01-Jun-2011 11:53	1.4K	
01_NGC3256_Band3_CalibratedData.tgz.torrent	01-Jun-2011 00:18	19K	
01_NGC3256_Band3_ReferenceImages.tgz.torrent	01-Jun-2011 00:18	2.1K	
01_NGC3256_Band3_UnCalibratedMSandTablesForReduction.tgz.torrent	01-Jun-2011 00:18	17K	
NGC3256_Band3_CalibratedData_CASA3.3.tgz	31-May-2011 23:23	482M	
NGC3256_Band3_CalibratedData_CASA4.tgz	09-Nov-2012 05:00	563M	
NGC3256_Band3_ReferenceImages_CASA3.3.tgz	31-May-2011 23:23	5.9M	
NGC3256_Band3_ReferenceImages_CASA4.tgz	09-Nov-2012 05:00	5.9M	
NGC3256_Band3_UnCalibratedMSandTablesForReduction.tgz	31-May-2011 23:27	426M	
NGC3256_Band3_UnCalibratedMSandTablesForReduction/	13-Sep-2011 10:31	-	
cksum_list.txt	18-Aug-2011 15:38	431	
md5sums.txt	12-Feb-2015 13:33	739	

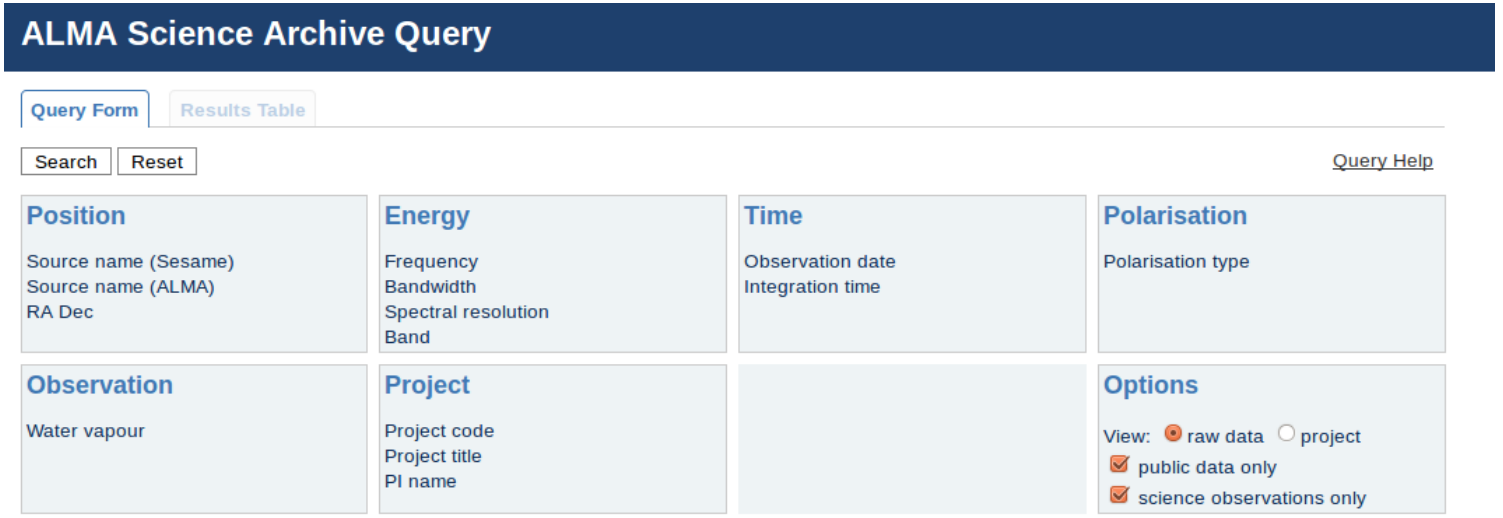
How to get a data set from Archive:

1. Go to

https://almascience.nrao.edu/alma-data/archive

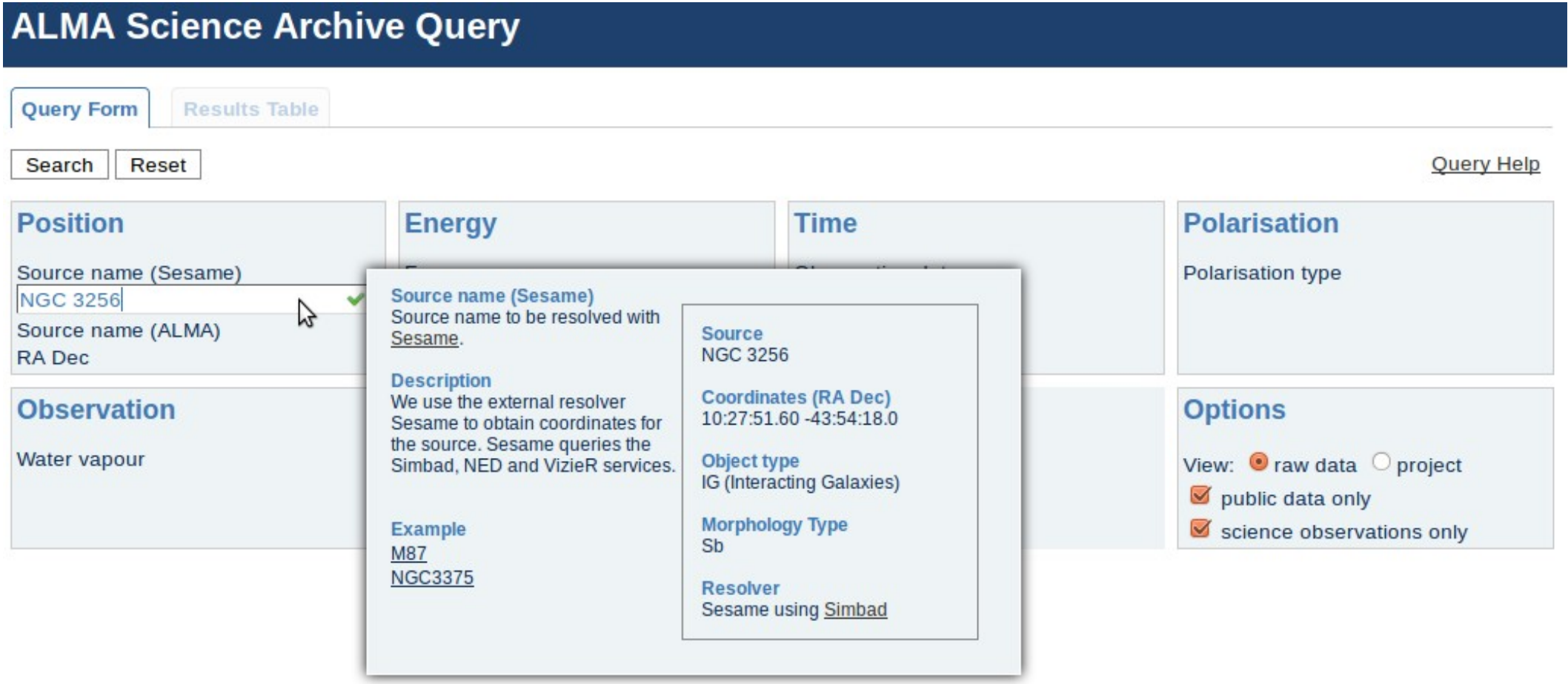


2. Go to Archive Query

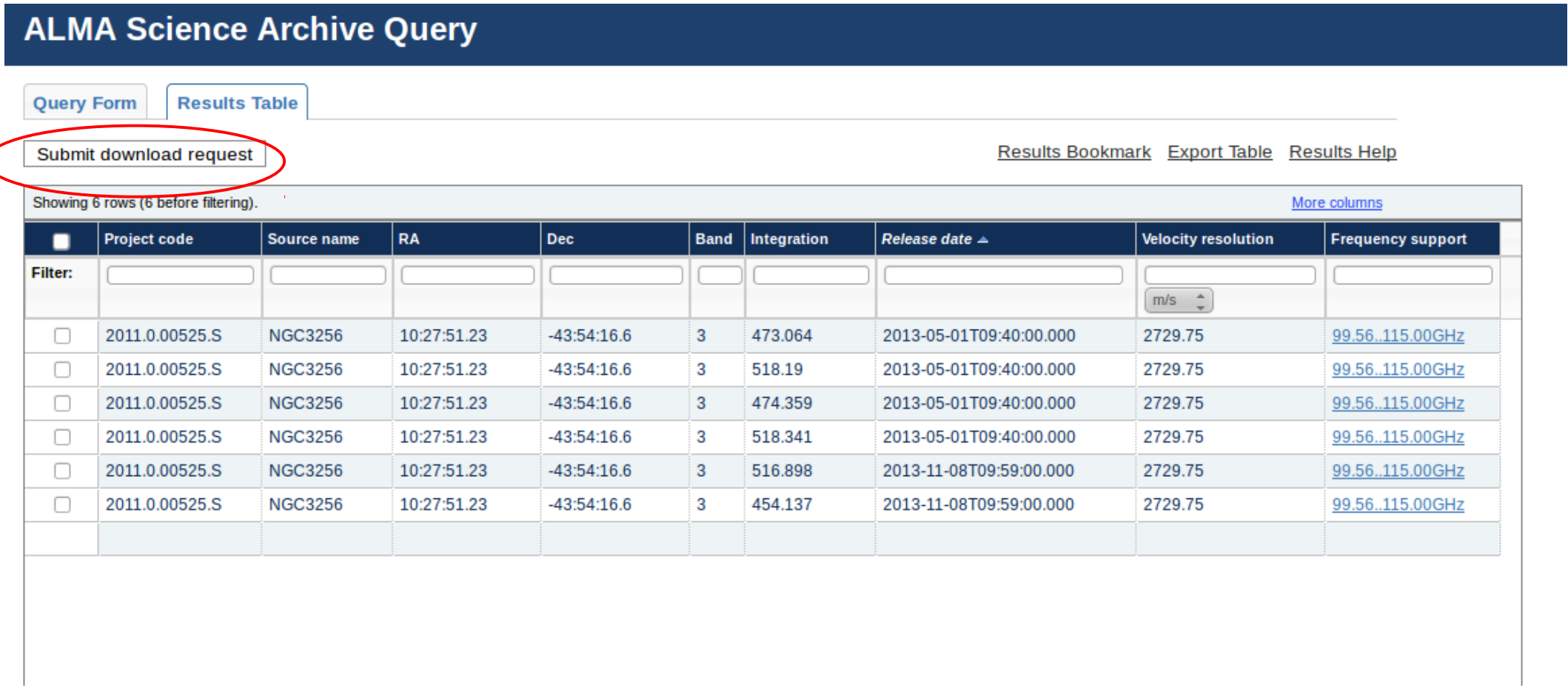


To download Cycle 0 or Cycle 1 data for NGC 3256

In the query form, insert the information you have about the object, in this case I wrote the name of the target: NGC 3256, and then click **Search**

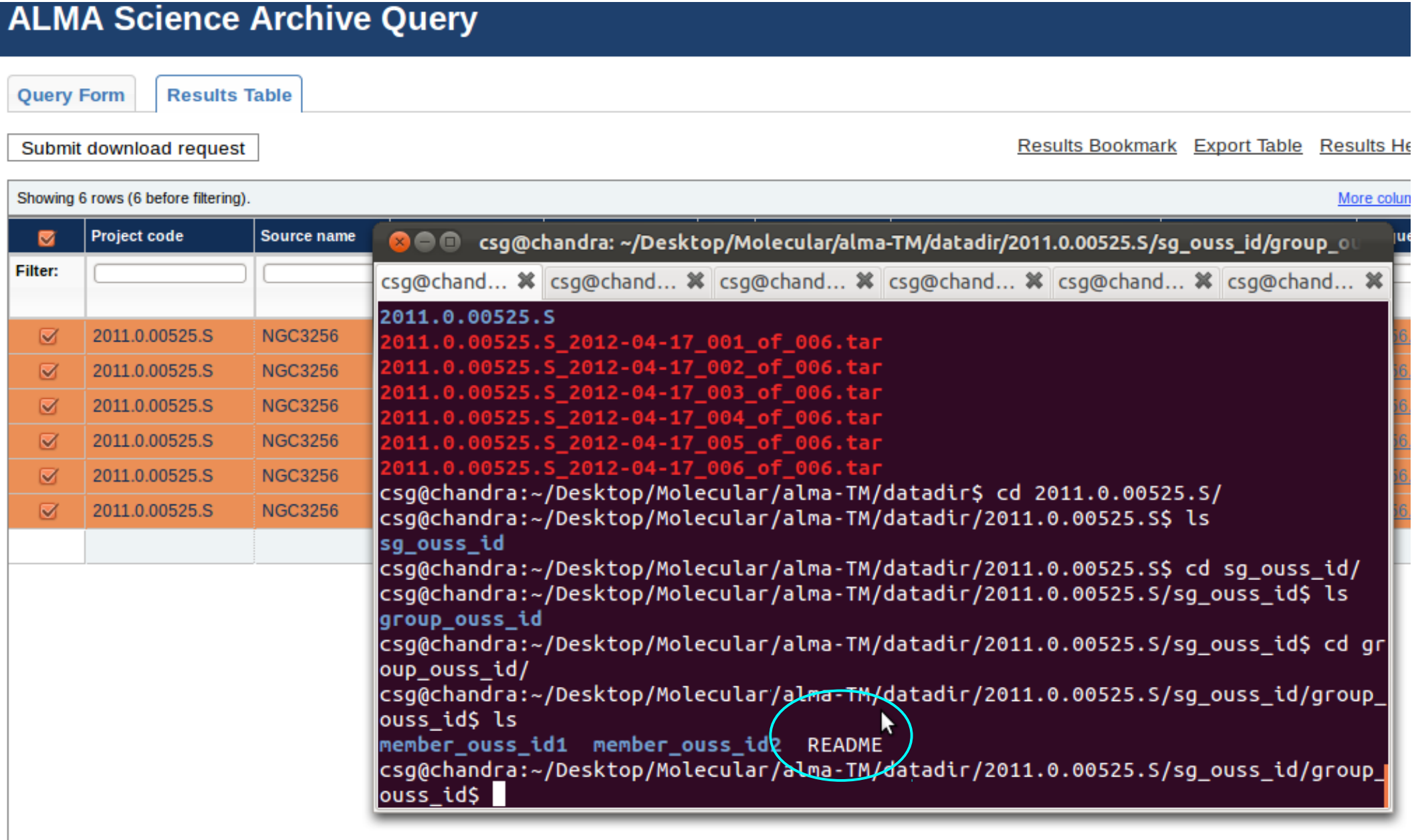


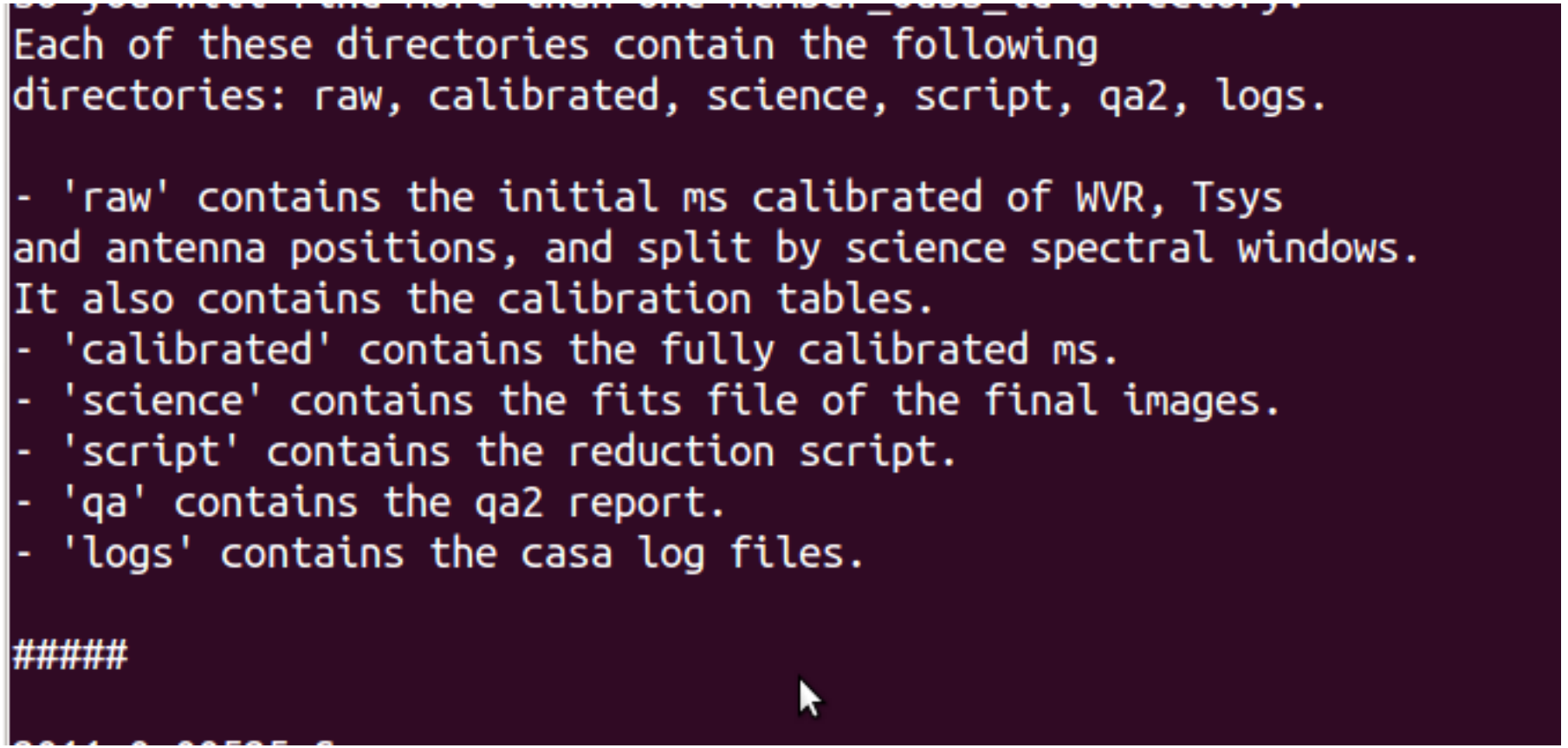
You can place the cursor on each input and learn more about them and also know the format In which the input should be given.



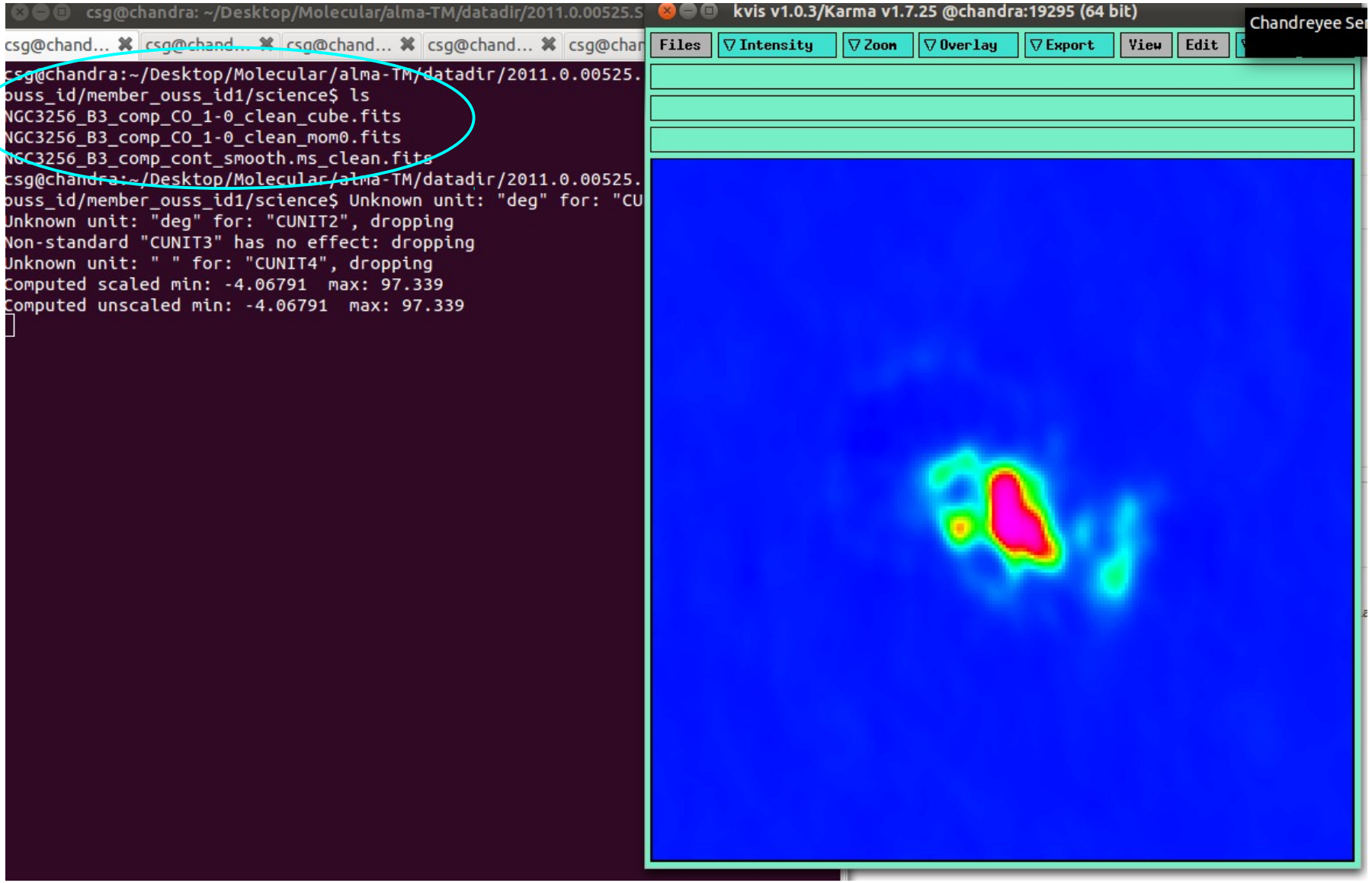
Select the files and “**submit download request**”

“untar” the files and you will find the a directory like 2011.0.0052S. Enter the directory and find the README file which will explain how your data is arranged.





You will find the final product – the images in the **'science'** directory. The directory structure may vary from one cycle to another, but the README file will have all the information.



Here the **'science'** directory has the line and continuum images. This depends on what the PI had asked for. The data will be provided in fits files. If you want to reduce the data you can use the calibrated data in the **'calibrated'** directory.

Slide borrowed from a talk by Mark Lacy on 'Archive and data packaging'.
https://science.nrao.edu/facilities/alma/naasc-workshops/alma_dr/ALMAArchiveWorkshopTalk_Feb12.pdf

Summary

- Lots of good data from SV and publicly available in the ASA, with much more becoming public in the future.
- Data processing and delivery changing as software construction is progressing.
- ALMA data hierarchy is complicated – but for good reasons! Most of the time you will not need to worry about it.

Request #799779618 by Anonymous User ✔

Click to edit

☐ *Include raw* | Select All | Deselect All | Download Selected

Requested Projects / OUSets / Executionblocks

Data entities 1-5 of 5

Project / OUSet / Executionblock	File	Size	Access
☐ Project 2011.0.00525.S			
⊟ ☐ Member OUS uid://A002/X31e326/X26			
	☐ 2011.0.00525.S_2012-04-17_001_of_006.tar	547.3MB	✔
	☐ 2011.0.00525.S_2012-04-17_002_of_006.tar	30.6GB	✔
	☐ 2011.0.00525.S_2012-04-17_003_of_006.tar	1.1GB	✔
	☐ 2011.0.00525.S_2012-04-17_004_of_006.tar	1.3GB	✔
	☐ 2011.0.00525.S_2012-04-17_005_of_006.tar	13.4GB	✔
	☐ 2011.0.00525.S_2012-04-17_006_of_006.tar	1.7GB	✔
⊞ ☐ Member OUS uid://A002/X31e326/X28			
⊞ ☐ Member OUS uid://A002/X391d0b/X196			
⊞ ☐ Member OUS uid://A002/X391d0b/X198			
Data entities 1-5 of 5			*224.4GB*