Where are my (EVLA) data?

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Atacama Large Millimeter/submillimeter Array
Expanded Very Large Array
Robert C. Byrd Green Bank Telescope
Very Long Baseline Array

The archive tool

https://archive.nrao.edu/

The archive: Basic data retrieval tool

In order to unlock your proprietary data and have access to other archive tools, you must log in to your My.NRAO account.

NRAO Science Data Archive : Basic Search Tool

EVLA, VLA and VLBA Data Products

Instructions on how to download your data : click here

Project (Proposal) Code		The NRAO proposal or observing project id.
Observer :		The observer's name. Case sensitive, partial string searchs best.
Telescope	ALL	You may restrict the search to a single telescope.
Observe Start Date :		Format : yyyy-MMM-dd or yyyy-MMM-dd hh:mm:ss
Observe Stop Date :		Format : yyyy-MMM-dd or yyyy-MMM-dd hh:mm:ss

Query Control Parameters :

Enter Locked Project Access Key :		Unique keywords may be used to unlock proprietary data from individual observing projects. Contact the NRAO Data Analysts for project access keys.
Query Returns :	Download Archive Files	Select 'Download Archive Files' to proceed to the download page, the other options are for browsing.

[Submit Query]   [Clear Form]

Please direct feedback and/or questions concerning this page and its associated search engine to NRAO DAS contact.

Version 5.8.6

The archive tool

- For each observing session, the archive tool allows the observer to view:
  - The logs
  - The scans
  - The SDM-BDF set (listing of the sdm and bdf files)
  - Any data quality issues.

	Archive File	Status	Project	Seg	Project Data Starts	Project Data Stops	File Size	Telescope: config:sub"	Bands	Format	Type	DQ	View Scans	Logs etc.
☐	11A-291.sb4911125.eb4924302.55782.00136674769	locked	11A-291	x	11-Aug-09 00:02:01	11-Aug-09 01:01:45	42.46GB	EVLA:A:0	L	SDMset	raw	OK	Scans	Logs
☐	11A-291.sb4911125.eb4944094.55784.99251239583	locked	11A-291	x	11-Aug-11 23:50:07	11-Aug-13 02:14:44	30.29GB	EVLA:A:0	L	SDMset	raw	OK	Scans	Logs
☐	11A-291.sb4910900.eb4947827.55787.6933925	locked	11A-291	x	11-Aug-14 16:39:27	11-Aug-14 18:39:07	78.96GB	EVLA:A:0	L	SDMset	raw	info	Scans	Logs

Checking the data in the archive tool

The scan listing:

Project	Scan :sub	Source	Cal Code	Start Time	Stop Time	Sys	TOS (sec)	Intrvl (sec)	Scan Intent	Spect Win	Obs_Freq (MHz)	Bandw (MHz)	Polar	Spect chans	Corr Mode	Tele:config :sub:nants	RA(J2000)	DEC(J2000)	Archive File
11A-291	1:1	J1120+1420		11-Aug-09 00:02:01	11-Aug-09 00:02:54	UTC	53.5	1	OBS	CD_0:SW_0 CD_0:SW_1 CD_0:SW_2 CD_0:SW_3 CD_0:SW_4 CD_0:SW_5 CD_0:SW_6 CD_0:SW_7 CD_0:SW_8 CD_0:SW_9 CD_0:SW_10 CD_0:SW_11 CD_0:SW_12 CD_0:SW_13 CD_0:SW_14 CD_0:SW_15	998.000000 1062.000000 1126.000000 1190.000000 1254.000000 1318.000000 1382.000000 1446.000000 1506.000000 1570.000000 1634.000000 1698.000000 1762.000000 1826.000000 1890.000000 1954.000000	64.000 (×16)	RR,LL (×16)	128 (×16)	WIDR (×16)	EVLA:A:1:27	11h20m27.807s	+14d20'54.99"	11A-291.sb4911125.eb4924302.55782.00136674769 uid____evla_bdf_1312848123251.bdf
11A-291	2:1	J1120+1420		11-Aug-09 00:02:54	11-Aug-09 00:03:54	UTC	59.8	1	CAL	CD_0:SW_0 CD_0:SW_1 CD_0:SW_2 CD_0:SW_3 CD_0:SW_4 CD_0:SW_5 CD_0:SW_6 CD_0:SW_7 CD_0:SW_8 CD_0:SW_9 CD_0:SW_10 CD_0:SW_11 CD_0:SW_12 CD_0:SW_13 CD_0:SW_14 CD_0:SW_15	998.000000 1062.000000 1126.000000 1190.000000 1254.000000 1318.000000 1382.000000 1446.000000 1506.000000 1570.000000 1634.000000 1698.000000 1762.000000 1826.000000 1890.000000 1954.000000	64.000 (×16)	RR,LL (×16)	128 (×16)	WIDR (×16)	EVLA:A:1:27	11h20m27.807s	+14d20'54.99"	11A-291.sb4911125.eb4924302.55782.00136674769 uid____evla_bdf_1312848123257.bdf
11A-291	3:1	J1120+1420		11-Aug-09 00:03:54	11-Aug-09 00:05:24	UTC	89.8	1	CAL	CD_0:SW_0 CD_0:SW_1 CD_0:SW_2 CD_0:SW_3 CD_0:SW_4 CD_0:SW_5 CD_0:SW_6 CD_0:SW_7 CD_0:SW_8 CD_0:SW_9 CD_0:SW_10 CD_0:SW_11 CD_0:SW_12 CD_0:SW_13 CD_0:SW_14 CD_0:SW_15	998.000000 1062.000000 1126.000000 1190.000000 1254.000000 1318.000000 1382.000000 1446.000000 1506.000000 1570.000000 1634.000000 1698.000000 1762.000000 1826.000000 1890.000000 1954.000000	64.000 (×16)	RR,LL (×16)	128 (×16)	WIDR (×16)	EVLA:A:1:27	11h20m27.807s	+14d20'54.99"	11A-291.sb4911125.eb4924302.55782.00136674769 uid____evla_bdf_1312848174961.bdf

Loading The Data: The archive tool

- Data formats:
  - SDM-BDF
  - **CASA MS**
  - **AIPS FITS**

EVLA - WIDAR datasets

Choose download data format :
- ⦿ CASA MS
- ○ AIPS FITS
- ○ SDM-BDF dataset (all files)
- ○ SDM tables only (no visibiliites)

Create tar file : ☑ Create MS or SDM tar file

Apply telescope flags : ☑ Apply flags generated during observing

Choose online averaging for CASA MS or AIPS FITS :
- x1   Spectral Averaging (chans)
- 0s   Time Averaging (secs)

Select scans for MS or AIPS FITS : ALL

Auxiliary SDM Tables : ☐ Include verbatim SDM tables in MS

Loading The Data: The archive tool

- If the apply flags option is not checked, the flags are written to a FLAG_CMD MS table. They can later be applied by using the CASA task *flagcmd*.

- If checked, the flags are applied on the data.

- We recommend the application of the online flags. They can be un-applied in CASA if need be.

- For UVFITS, the flags need to be applied, as there will not be a FG table in the resulting file.

Loading The Data: The archive tool

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- The tool allows the observer to average the data in time and/or in frequency.
- It also allows the selection of scans.

Loading The Data: The archive tool

If applying online averaging:

1. Make sure to apply the flags.

2. Averaging in frequency is discouraged as delays can cause coherence loss. We recommend reviewing the data before frequency averaging.

3. Averaging in time should take into account the type of science you would like to do. See the EVLA Observational Status Summary for amplitude loss due to time averaging.

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Loading The Data: The archive tool

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Select scans for MS or AIPS FITS :
`ALL`

Auxiliary SDM Tables : ☐ Include verbatim SDM tables in MS

- A MS is a directory. For downloading through the internet, make sure to ask for a tar file.

Loading The Data: The archive tool
Requesting the data on a hard disk

- NRAO offers a data shipping service using hard disks:
  - when the size of the data is large, or
  - when the user does not have fast enough internet connection.
- This disk-ordering process is done through the archive tool.
- The data will be saved on 1.8 TB disks and shipped to the observer.
- Disk shipment information and policies are posted at
  - https://archive.nrao.edu/archive/hdshipInfo.html
  - https://science.nrao.edu/facilities/evla/data-shipment