

# Downloading VCS data via ASVO

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7 June 2022

# Log into the ASVO MWA site

<https://asvo.mwatelescope.org/>

If you do not already have an account, click Register and follow the prompts.

Otherwise, click Login.



A project to make **MWA telescope** data available to radio astronomers.

In this phase, raw visibility sets are available, with options for calibration, averaging and conversion to measurement sets or uvfits.

## News & Updates

Tweets by @mwa\_asvo

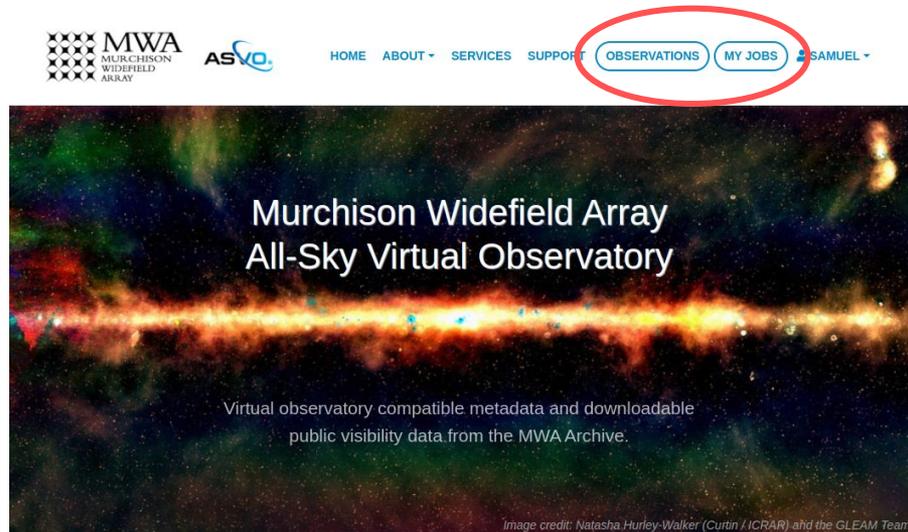
 **MWA ASVO Status Bot**  
@mwa\_asvo

Update: Pawsey have completed some planned maintenance of Banksia and the MWA ASVO is accepting and processing jobs.

# Browse ObsIDs

Once logged in, two new buttons appear:

1. Observations: This is for browsing all MWA observations, and selecting ones for download (see next slide).
2. My Jobs: This is for listing all of your download jobs that are currently in the ASVO job queue, or currently in the process of downloading.



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Update: Pawsey have completed some planned maintenance of Banksia and the MWA ASVO is accepting and processing jobs.

# Searching for ObsIDs to download

After clicking Observations, the left-hand panel is used for searching through MWA observations (of any kind, not just VCS).

MWA MURCHISON WIDEFIELD ARRAY ASVA

HOME ABOUT SERVICES SUPPORT OBSERVATIONS MY JOBS SAMUEL

### Search for Observations

← Hide Search Form

Reset Fields Search

#### Cone Search ICRS (J2000.0)

Cone Right Ascension (deg)

Cone Declination (deg)

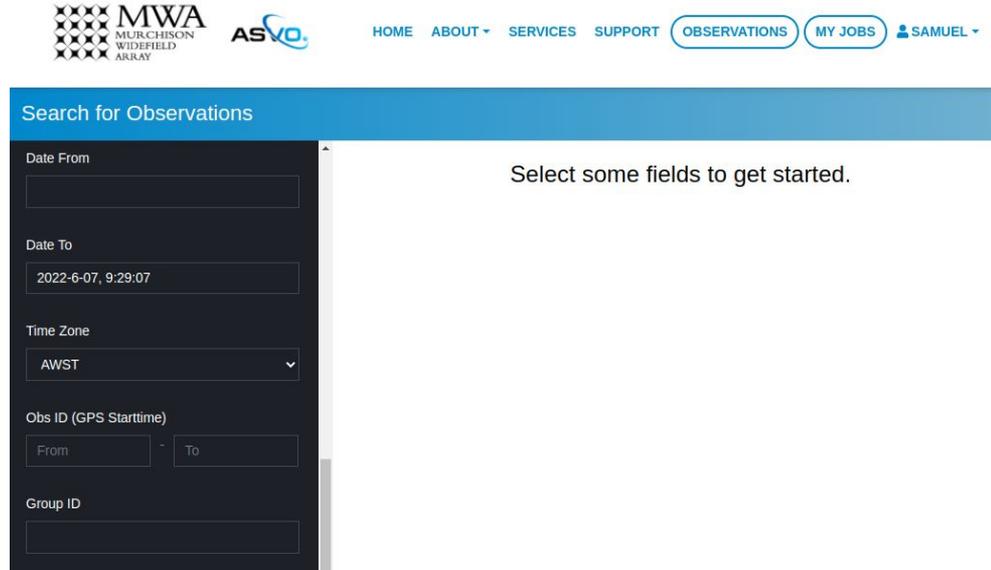
Cone Radius (deg)

Date From

Select some fields to get started.

# Searching for ObsIDs to download

If you already know the ObsID of the observation you want to download, scroll down to the Obs ID (GPS Starttime) field, and put the ObsID into both From and To fields.



The screenshot shows the MWA ASVO Observations search interface. The header includes the MWA logo (Murchison Widefield Array) and the ASVO logo. The navigation menu contains links for HOME, ABOUT, SERVICES, SUPPORT, OBSERVATIONS (highlighted), MY JOBS, and a user profile for SAMUEL. The main content area is titled "Search for Observations" and contains a search form with the following fields:

- Date From:
- Date To:
- Time Zone: - Obs ID (GPS Starttime):  ~
- Group ID:

To the right of the search form, the text "Select some fields to get started." is displayed.

# Searching for ObsIDs to download

If you already know the ObsID of the observation you want to download, scroll down to the Obs ID (GPS Starttime) field, and put the ObsID into both From and To fields.

Also, make sure that the Data Quality field in the OBSERVATION INFO category is set to “Any”.

Click SEARCH.

Search for Observations

Submit Conversion Submit Download Download XML Select All Select None ? 0 rows selected

Obs ID	Project	Group ID	Quality	Data Files	Flags?	UTC Start
1164110416	G0024	1164110416	Processed	0s/3714s	✗	2016-11-25T11:59:59

Hide Search Form

Reset Fields Search

Cone Search ICRS (J2000.0)

Cone Right Ascension (deg)

Cone Declination (deg)

POINTING +

OBSERVATION INFO +

Data Quality Any

Observation Name

# Select the observation

Select the observation to downloading by clicking its ObsID.

The screenshot displays the MWA ASVO Observations web interface. The top navigation bar includes the MWA logo (MURCHISON WIDEFIELD ARRAY), the ASVO logo, and menu items: HOME, ABOUT, SERVICES, SUPPORT, OBSERVATIONS (highlighted), MY JOBS, and a user profile for SAMUEL. Below the navigation is a blue header for "Search for Observations".

On the left, there is a search form with a "Reset Fields" button and a "Search" button. Below the search form, it says "Cone Search ICRS (J2000.0)". There are input fields for "Cone Right Ascension (deg)" and "Cone Declination (deg)".

On the right, there is a table of observations. The table has columns: Obs ID, Project, Group ID, Quality, Data Files, Flags?, and UTC Start. The first row is highlighted with a red circle, indicating the selected observation.

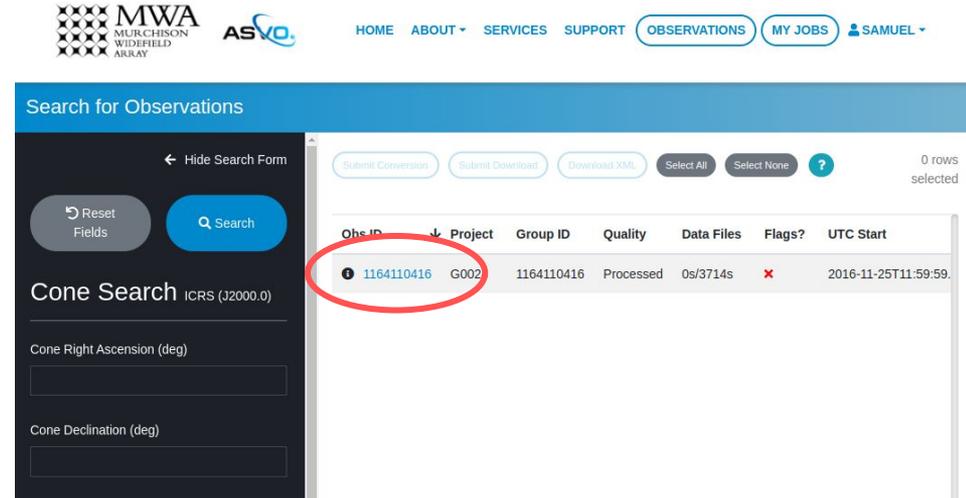
Obs ID	Project	Group ID	Quality	Data Files	Flags?	UTC Start
1164110416	G002	1164110416	Processed	0s/3714s	✖	2016-11-25T11:59:59.

At the top of the table, there are buttons for "Submit Conversion", "Submit Download", "Download XML", "Select All", and "Select None". The text "0 rows selected" is visible in the top right corner.

# Select the observation

Select the observation to downloading by clicking its ObsID.

This will take you to a “New Data Job” form.



The screenshot displays the MWA ASVO Observations web interface. The page header includes the MWA logo (MURCHISON WIDEFIELD ARRAY) and the ASVO logo. Navigation links for HOME, ABOUT, SERVICES, SUPPORT, OBSERVATIONS, and MY JOBS are visible, along with a user profile for SAMUEL. The main content area is titled "Search for Observations" and features a search form on the left and a table of observations on the right. The search form includes a "Reset Fields" button, a "Search" button, and a "Cone Search" section with input fields for "Cone Right Ascension (deg)" and "Cone Declination (deg)". The table of observations has columns for Obs ID, Project, Group ID, Quality, Data Files, Flags?, and UTC Start. The observation with Obs ID 1164110416 is highlighted with a red circle.

Obs ID	Project	Group ID	Quality	Data Files	Flags?	UTC Start
1164110416	G002	1164110416	Processed	0s/3714s	×	2016-11-25T11:59:59.

# Submit the job

Make sure you are on the Voltage Download Job tab (this should be the default).

Choose your Offset (=number of seconds from the beginning of the observation to start downloading from)

Choose the Duration (=number of seconds to download)

Click SUBMIT

The screenshot shows the MWA ASVO web interface. At the top, there are logos for MWA (Murichison Widefield Array) and ASVO, along with navigation links: HOME, ABOUT, SERVICES, SUPPORT, OBSERVATIONS, MY JOBS, and a user profile for SAMUEL. The main content area is titled 'New Data Job' and contains three tabs: 'Visibility Conversion Job', 'Visibility Download Job', and 'Voltage Download Job'. The 'Voltage Download Job' tab is selected and circled in red. Below the tabs is a light blue information box with three bullet points: '> This type of job allows you to download raw MWA voltage data in raw format.', '> This option is only for advanced users as the data is in an MWA-specific raw voltage format.', and '> if you wish to access MWA voltage data, please contact asvo\_support@mwaterlescope.org first.' Below this box are three input fields: 'Observation ID' with the value '1164110416', 'Offset (s)' with a slider set to 0, and 'Duration (s)' which is empty. At the bottom of the form is a blue 'Submit' button, which is also circled in red.

## Record the JobID

After submitting, you will be given a JobID. The requested voltages will be downloaded to

```
/astro/mwavcs/asvo/<jobid>/
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While the voltages are being downloaded, you can find the JobID by going to the My Jobs page.

After the download is complete, there is no way to find the JobID again, except by looking through the folders in /astro/mwavcs/asvo and looking at the ObsIDs in the downloaded filenames.

The files will not count towards your personal disk usage quota, but you are still responsible for removing the voltage files once you have finished processing them.