

# Calibration web services

## Get the best calibration solution available for a target observation ID (experimental!)

e.g. [http://ws.mwatelescope.org/calib/get\\_calfile\\_for\\_obsid?obs\\_id=1120493008](http://ws.mwatelescope.org/calib/get_calfile_for_obsid?obs_id=1120493008)

Where:

- **obs\_id** is an observation ID you wish to calibrate. The `get_calfile_for_obsid` service will search the calibration solution database for the best calibration solution available for this observation. See [MWA ASVO: Calibration Option](#) for some background information on the calibration database and how it is populated.

This service will return:

- On Success:
  - A zip file containing:
    - **cal\_id.bin**: Binary file (in AO-cal format) containing the calibration solution. This can be used in Andre Offringa's `calibrate` and `C otter` tools. Note the filename contains the observation ID of the calibrator observation used.
    - **obs\_id\_flagged\_tiles.txt**: A plain text file listing the `tile_id`'s of tiles that failed to calibrate.
    - **obs\_id\_flags.py**: A simple python script which you can run to apply the calibration solution (in CASA).
    - **obs\_id.metafits**: A `metafits` file, with the calibration solution applied to the data.
- On Error:
  - http status 400 if the `cal_id` is not found in the calibration solution database.
  - http status 500 if an internal error occurred.

Note that this service will only look for calibration observations taken with the same analogue attenuation ('`gain_control_value`') as the observation. If you wish to search for /any/ calibration solution, regardless of analogue attenuation, add the '**any\_gain**' parameter to the URL string - for example, [http://ws.mwatelescope.org/calib/get\\_calfile\\_for\\_obsid?obs\\_id=1120493008&any\\_gain](http://ws.mwatelescope.org/calib/get_calfile_for_obsid?obs_id=1120493008&any_gain)

## Get the calibration solution for a specific calibrator observation ID (experimental!)

e.g. [http://ws.mwatelescope.org/calib/get\\_calfile\\_for\\_calid?cal\\_id=1120493424](http://ws.mwatelescope.org/calib/get_calfile_for_calid?cal_id=1120493424)

Where:

- **cal\_id** is the observation ID of an observation that has been marked as a calibrator observation.

This service will return:

- On Success:
  - A zip file containing:
    - **cal\_id.bin**: Binary file (in AO-cal format) containing the calibration solution. This can be used in Andre Offringa's `calibrate` and `C otter` tools.
    - **cal\_id\_flagged\_tiles.txt**: A plain text file listing the `tile_id`'s of tiles that failed to calibrate.
    - **cal\_id\_flags.py**: A simple python script which you can run to apply the calibration solution (in CASA).
- On Error:
  - http status 400 if the `cal_id` is not found in the calibration solution database.
  - http status 500 if an internal error occurred.