

ALMA Science

Knowledgebase > Archive & Data Retrieval > Where is the Primary Beam Correction information in my delivered data?

Where is the Primary Beam Correction information in my delivered data?

Andrew Lipnicky - 2021-07-21 - Archive & Data Retrieval

The images included in delivery are corrected for the primary beam (PB), i.e. the dependence of the instruments sensitivity on direction within the FOV.

For each image, two files are being delivered:

- a) the PB-corrected image (file name ending in ".pbcor.fits")
- b) the image of the PB which was used in the correction (ending in ".flux.fits")

The image noise was measured in the uncorrected image.

The corrected image (a) was then obtained by dividing the uncorrected image by the PB image (b). The uncorrected image can be recovered using the CASA task `impbcor` in mode "m":

```
impbcor(imagename='image.pbcor.fits', pbimage='image.flux.fits', mode='m',  
outfile='image.recovered')
```

Related KB articles:

[How do I model the ALMA primary beam, and how can I use that model to obtain the sensitivity profile for an image mosaic?](#)

[What primary beam does CASA use for ALMA 12-m antennas? And what is the actual ALMA 12-m antenna primary beam, for that matter?](#)