

Notes about Downloaded ALMA Data

George Bendo

UK ALMA Regional Centre Node
Jodrell Bank Centre for Astrophysics
The University of Manchester



When the archival data used in this workshop are downloaded and unpacked, the files will be sorted into the following directory structure:

```
2021.1.00499.S
  science_goal.uid___A001_X158f_X79d
  group.uid___A001_X158f_X79e
  member.uid___A001_X158f_X7a1
  calibration
  log
  product
  qa
  raw
  script
```

Most other ALMA data, when unpacked, are organized in a similar way.



The directories contain the following files:

calibration Calibration plots and tables

log Log files

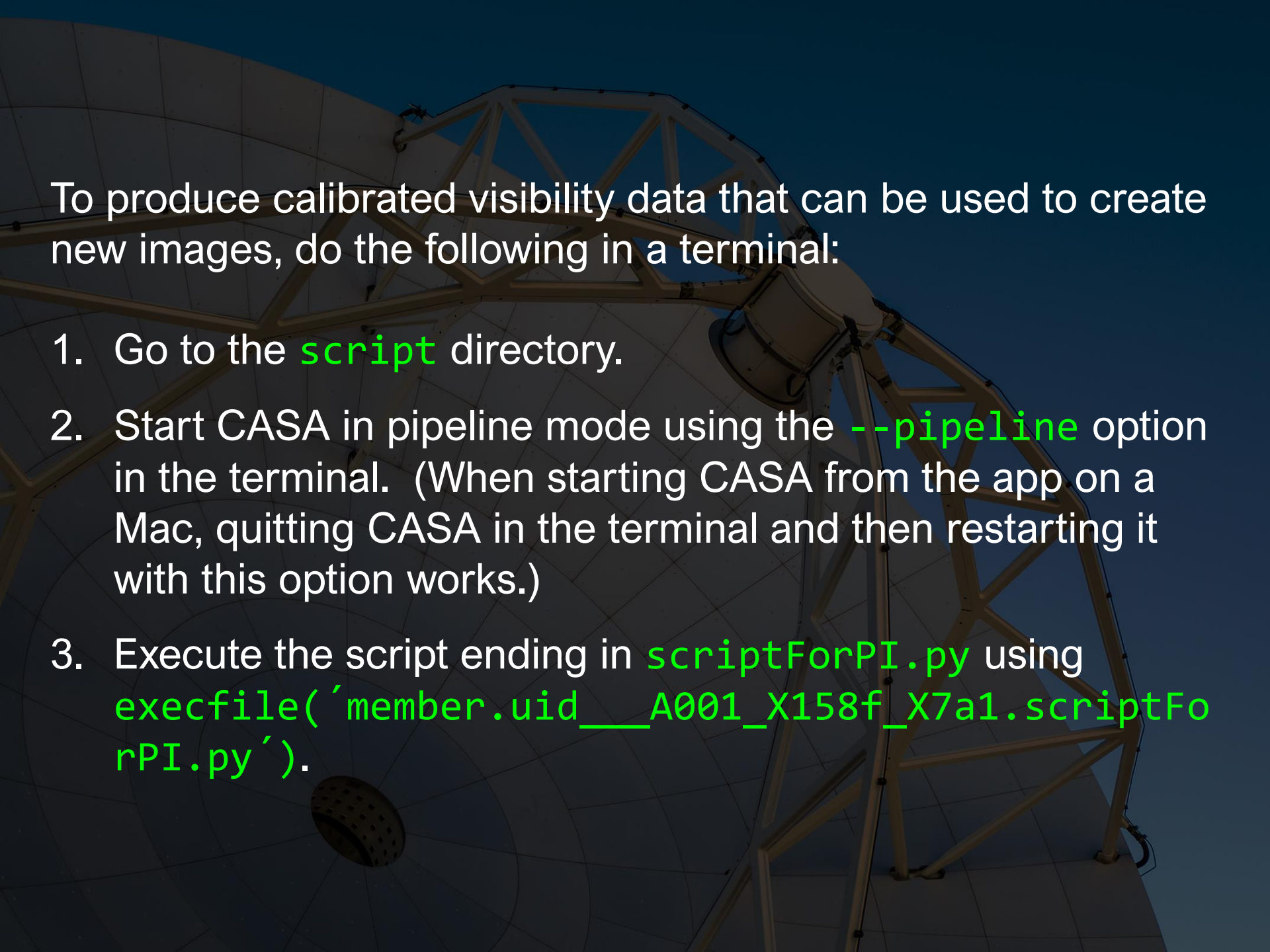
product Fully processed images

qa Quality assurance data

raw Raw data (ASDM format)

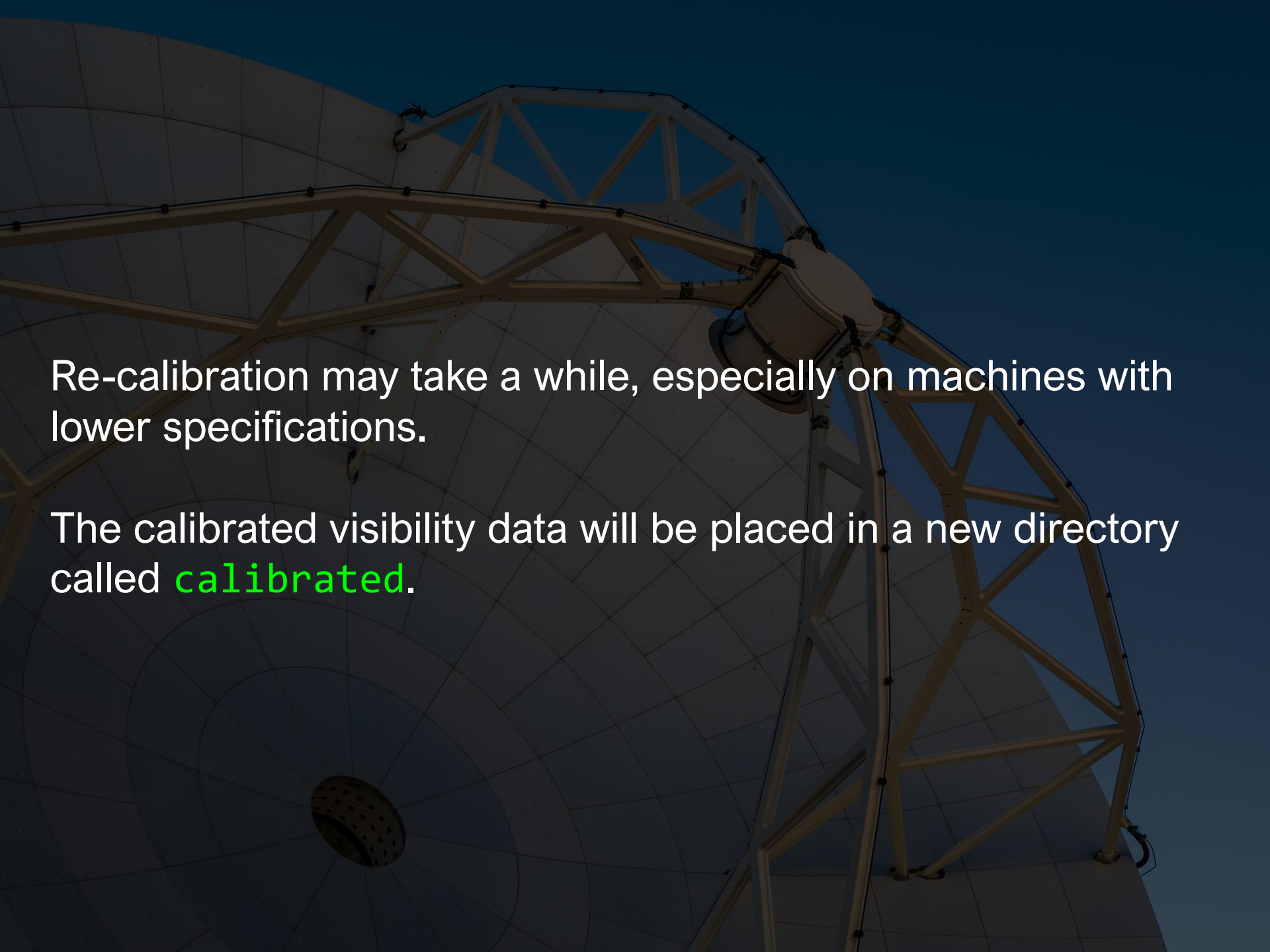
README A text file with information from calibration and imaging as well as general file information

script Data processing scripts



To produce calibrated visibility data that can be used to create new images, do the following in a terminal:

1. Go to the `script` directory.
2. Start CASA in pipeline mode using the `--pipeline` option in the terminal. (When starting CASA from the app on a Mac, quitting CASA in the terminal and then restarting it with this option works.)
3. Execute the script ending in `scriptForPI.py` using `execfile('member.uid___A001_X158f_X7a1.scriptForPI.py')`.

A large satellite dish antenna structure is shown against a dark blue sky. The dish is composed of a complex metal lattice of beams and supports. A large, circular, perforated antenna element is visible in the lower-left quadrant of the dish. The overall scene is dimly lit, suggesting dusk or dawn.

Re-calibration may take a while, especially on machines with lower specifications.

The calibrated visibility data will be placed in a new directory called **calibrated**.