Multiwavelength Astrophysics Laboratory
Module 5 : radio-VLA (2025)

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Download from Virtuale the dataset : 3C391.tar.gz - if Virtuale is down, use the link: https://drive.google.com/drive/folders/1jllw03dYFqfwM_KogZxpkQVcJxfNuNhr?usp=share_link

Put it in the directory where you wish to work (working from terminal *or* by dragging the file into the desired folder): for example, from terminal (home directory) you can create a directory "VLA-LAB":

```
> mkdir VLA-LAB
```

If the file has been saved to the "Downloads" folder, move it to the working directory and go inside that directory:

```
> cd VLA-LAB
```

and unzip the dataset :

```
> tar -zxvf 3C391.tar.gz
```

(or, if it was already unzipped automatically during the download: tar -xvf 3C391.tar)

→ it creates the file 3C391.ms → this is our dataset!

Now you can start working by launching casa inside the directory that contains the dataset:

```
> casa
```

We will follow the online Tutorials at these links (but see the annotated pdf versions on Virtuale for comments and casa commands tailored to our dataset) :

1. **CALIBRATION**:
https://casaguides.nrao.edu/index.php?title=VLA_Continuum_Tutorial_3C391-CASA5.5.0

2. **IMAGING**:
https://casaguides.nrao.edu/index.php/VLA_CASA_Imaging-CASA6.5.4