

Creating autoMAGIC Tarballs

autoMAGIC Workshop Padova

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How to Create a Tarball

- Use `automagic get_fits --tarball_filename=your_filename`
- Searches for data within the cuts configured in the analysis config file and creates a tarball containing
 - All the DL3 files in night-wise directories
 - HDU index file pointing at the corresponding DL3 files
 - Obs index file containing meta information (transmission, cloudiness, etc.)
 - Analysis config file (for documentation and reproducibility reasons)

Advantages of autoMAGIC tarballs

- We store some of the the meta information that we have in our DB in the obs index file
 - Easier to make cuts in gammapy
 - Transmission
 - Cloudiness
 - Zenith angle
 - Etc.

- On DL3, the data only uses little disk space
 - Huge amounts of data can be stored easily

Gammapy Analysis Basics

- Once you have the DL3 files, you can start your Gammapy analysis
 - Either on PIC or locally on your machine
- For this, you should install Gammapy in an environment
 - <https://docs.gammapy.org/dev/getting-started/install.html>
- We want to create a light curve and a spectrum for our Crab Nebula DL3 data now
 - Use energy-dependent θ^2 cuts
- Let's continue in a jupyter notebook!