

GAMMAPY as PROTOTYPE for CTA SCIENCE TOOLS

used for the FIRST DATA CHALLANGE



DATA CHALLENGE 1





- ✓ DC1 goals
 - ✓ Familiarize people with the CTA data analysis
 - ✓ Favor tool development ($\gamma \pi$ & ctools)
- ✓ set of un-blinded sky models for simulations can be found here
- ✓ The expected DC1 output is:
 - ✓ a list of requirements (sky models & tools) to be able to quantify CTA capabilities on the main science cases
 - ✓ an assessment of current capabilities of the tools
 - ✓ Reproducible analyses as showing case
- ✓ Data released end of August 2017

DC1 STATUS





- √ 20-30 people involved in DC1 data analysis
- ✓ Results presented at the Orsay CM
 - ✓ Galactic SWG
 - ✓ Cosmic Ray SWG
 - ✓ Extragalactic SWG
 - ✓ Dark Matter SWG
 - ✓ <u>Tools capabilities</u>
- ✓ DC1 is coming to the end:

time to write the closing-out document deadline July 25th

DC1 OUTCOME





From a tool perspective (ignoring comments on the sky models)

- ✓ Compatible results for gammapy and ctools in 1D/2D analyses of not-too-crowed regions
- ✓ Still few issues to be solved in 1D analysis:
 - ✓ Energy binning for 1D spectral analysis
 - ✓ Lightcurves
- ✓ Gammapy still missing 3D analysis
 - → highest priority for this week

GOALS for THIS WEEK





- ✓ Run the first 3D analyses
 - ✓ Roberta for HESS J1702 (mildly extended source in crowed region)
 - ✓ Fabio for RX J1703?? Not mandatory
- ✓ Fix the spectral point computation (GH 1368 & Christoph's talk)
- ✓ Fix the lightcurve class and include LC ULs (see GH 1424)

✓ Release 0.8 and re-run everything with the new release