



Status on the pulsar analysis with Gammapy

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Pulsar analysis overview

DL3: event times

Phasing events

Involves phasing terms & delay terms

Done by Tempo2 (C) or PINT (python)(under development)

Phases

Tutorial (done):

Computing phases for the CTA DC1

Adding phase column to a file

Making phasogram

Phasograms

Standard histogram of phases: doesn't need any specific feature

Statistical tests on periodicity

H-test already in PINT

Phase-resolved sky maps

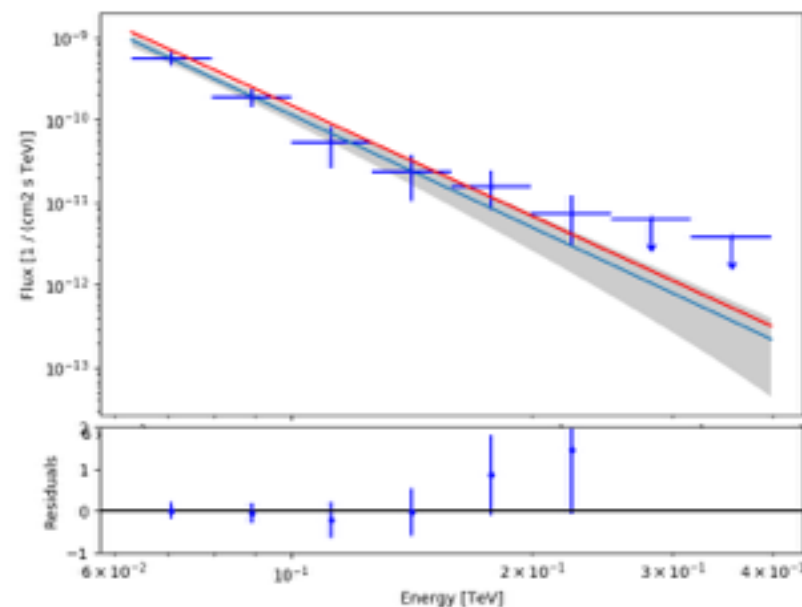
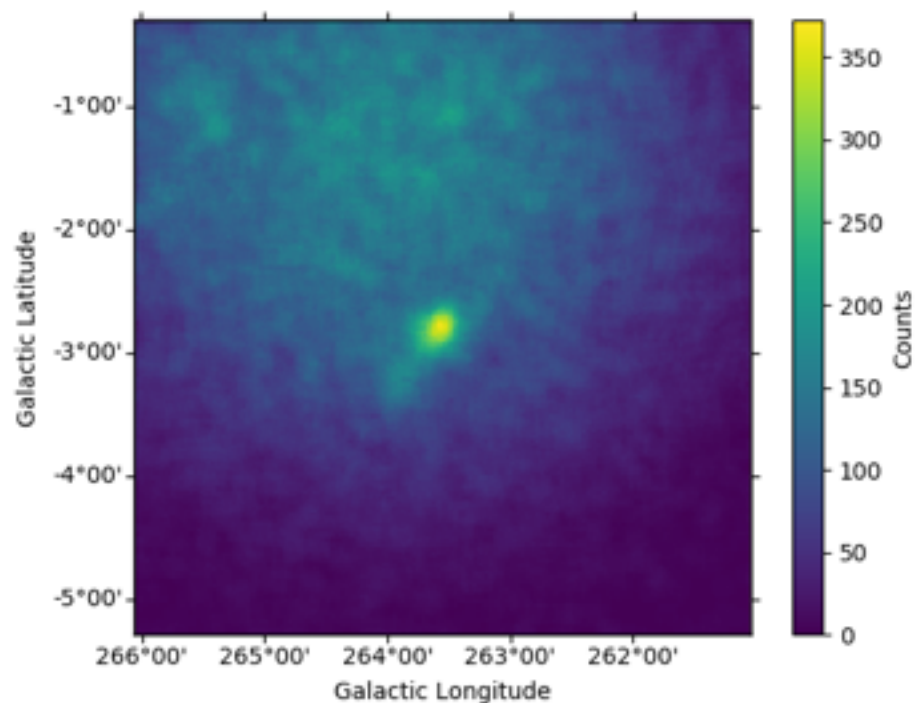
Tutorial (to do)

Phase-resolved spectra

Classes (on-going) + tutorial (to do)

Program for this week: phase-resolved spectra

- ▶ New feature: **PhaseBackgroundEstimator** to estimate the background in the ON-region and in the OFF-phase zone
- ▶ **Needs a test**, a documentation, and some generalization (so far it supports only 1 ON-phase zone and 1 OFF-phase zone)
- ▶ Other new class: a phase-resolved version of SimulationRealBkg (to do)
- ▶ Tutorial on phase-resolved spectra and sky maps (to do)



CTA DC1 Vela
observation $< 2^\circ$ of
offset, angular cut at
 0.2° , phase-resolved
map and spectrum

Thank you !