# Sensitivity computation

**3rd Gammapy-DC TelCon,**
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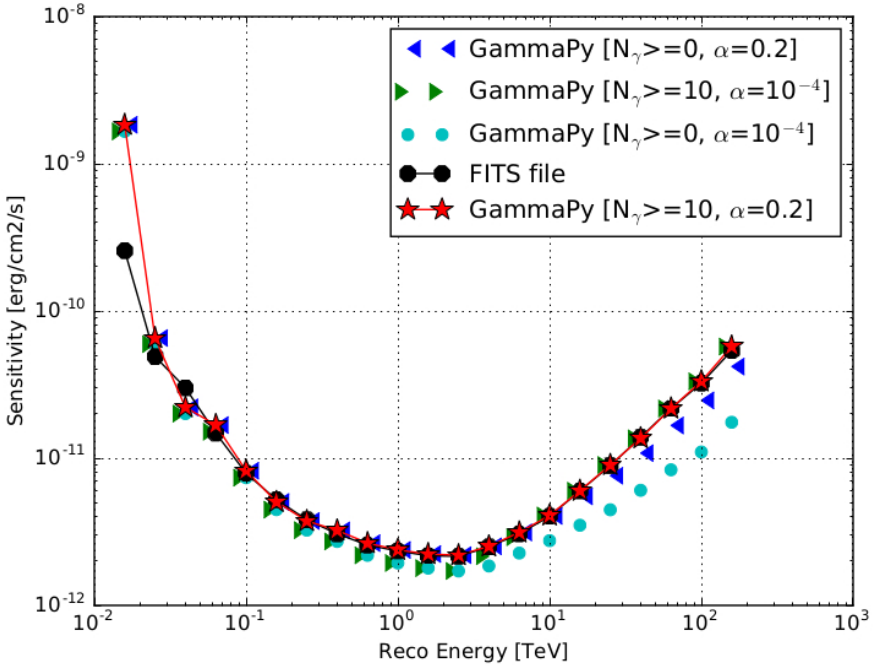
**B. Khélifi**

# Script description

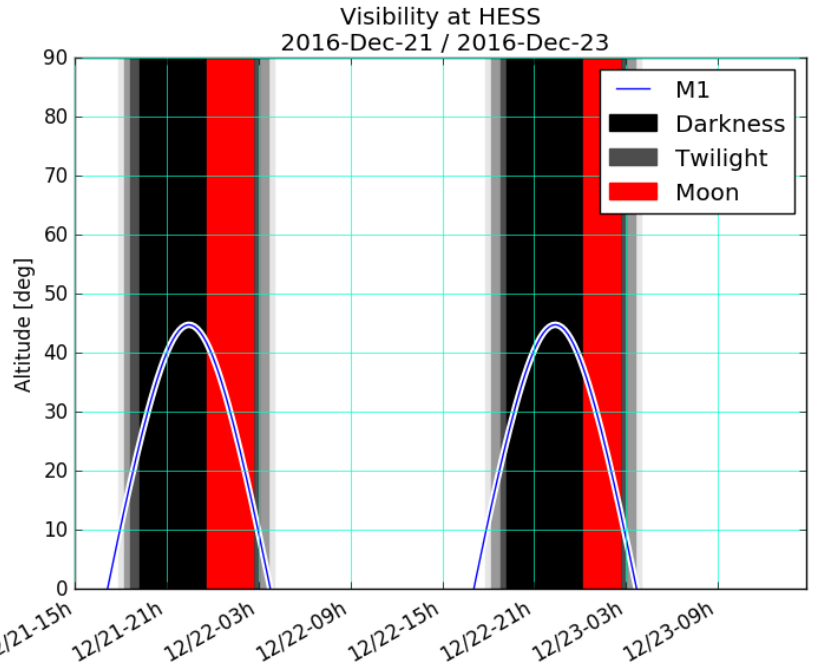
- Goal: compute the point-source sensitivity as defined by CTA
  - Requirement definition:
    Minimal reachable differential flux for a given time, a given significance, a given $\alpha$, a given systematics level and a minimal number of $\gamma$s
  - scripts/cta_sensitivity.py
  - Cross-checked

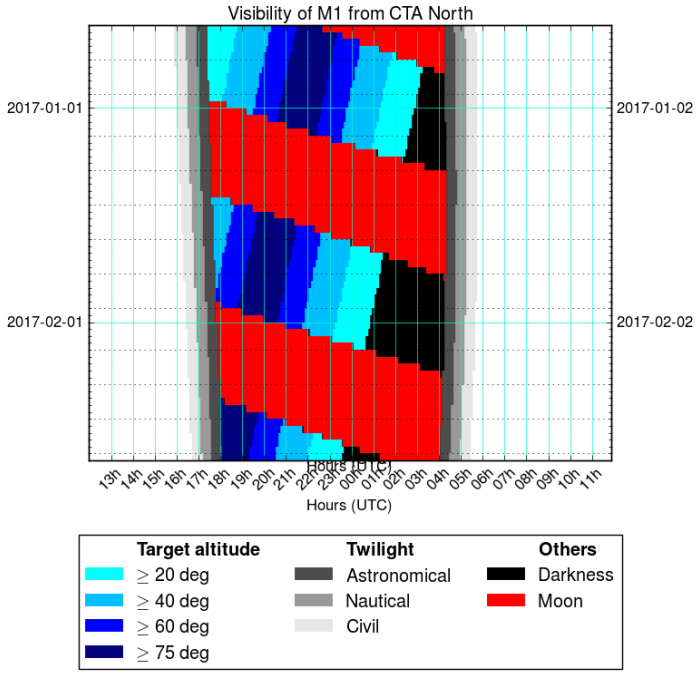



  - ToDo list:
    - extension to extended sources, integral sensitivity
    - Computation for a 3D-analysis

# Development of new tools

- In the context of the Proposal Handling Platform
  - Need more detailed numbers to build observation on a given target
  - Soon in git!!
- Visibility tool
  - Possible outputs: Altitude vs Date, Date vs UTC time



# Development of new tools (2)

- 'Observation Simulation' tool
  - Allow to get numbers and statistics for a simple observation condition
  - 4 modes:
    - 'Sensitivity' plot: Minimum flux versus Time
    - For a fixed spectral shape, Events Statistics versus Time (Ng, Nbkg, s)
    - For a fixed obs. time, Events Statistics versus Flux (Ng, Nbkg, s)
    - For a fixed obs. time and spectral shape, Events Statistics versus Ereco