Management of observations and data

(preliminary discussion)

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"Pillars" Science

from Vercellone et al. :

	Name	Туре	Exposure (Hrs)
	Tycho Snr Gal. Center VER J1907 G106.3+2.7 y-Cygni W28 M82 Crab	SNR Diffuse SNR+PWN SNR SNR SNR SNR/MC Starburst PWN	400 260 500 200 500 500 400 300
ı	Geminga	PWN	500
ı	IC 310 M87 Mkn 501 1ES 0229+200	Radio gal Radio gal Blazar Blazar	10-500 10-500 5-500 200-250

To be continuously updated as an example :

LHAASO Sources

OB Clusters

"Pillars" targets

from Vercellone et al. :

	Name	Туре	Exposure (Hrs)	•	Long exposures HE cut-offs
	Tycho Snr	SNR	400		 Morphology
	Gal. Center	Diffuse	260		
	VER J1907	SNR+PWN	500		
	G106.3+2.7	SNR	200	•	Few fields in the first 3 years
65	γ-Cygni	SNR	500		,
	W28	SNR/MC	500		
	M82	Starburst	400	•	Dedicated analysis
	Crab	PWN	300		Dedicated analysis
	Geminga	PWN	500		
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	IC 310	Radio gal	10-500		"Serendipitous" sources
- 1	M87	Radio gal	10-500		
	Mkn 501	Blazar	5-500		
	1ES 0229+200	Blazar	200-250	•	Require dedicated teams

"Pillars" targets - Dedicated teams

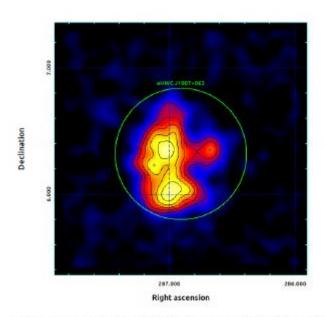


Figure 12: ASTRI Mini-Array 200 hr simulation of the region of the Galactic source 2HWC J1908+063 for energy up to about 200 TeV. The light green circle marks the $\sim 0.52^{\circ}$ HAWC errorbox for E > 56 TeV (see text for details).

- Small team (2-4) people for any target
- MW / Theory Literature → Scientific output

Modeling and simulation before observations

- Proposes targets and observing strategy :
 - exposure
 - observing modes

Perform dedicated analysis

2 levels of scientific publications

- 1) "Pillar" targets lead to Collaboration papers
 - a) Proposed before the observations (\rightarrow observing plan).
 - b) Sign-in procedure open to all the collaboration
 - c) The proposing team has also the responsibility to prepare the Paper
 - d) Members of the proposing team should by recognized in the authorship (corresponding authors, first names...)
 - e) the ASTRI "scientific management" has the responsibility to assure that all possible Science topis are covered by proposed target

- 2) Science Paper
 - a) Proposed at any time to aspo
 - b) Covers "secondary" scientific results (ex. serendipitous sources)
 - c) Sign-in procedure open to members involved in the work