

LHAASO Status

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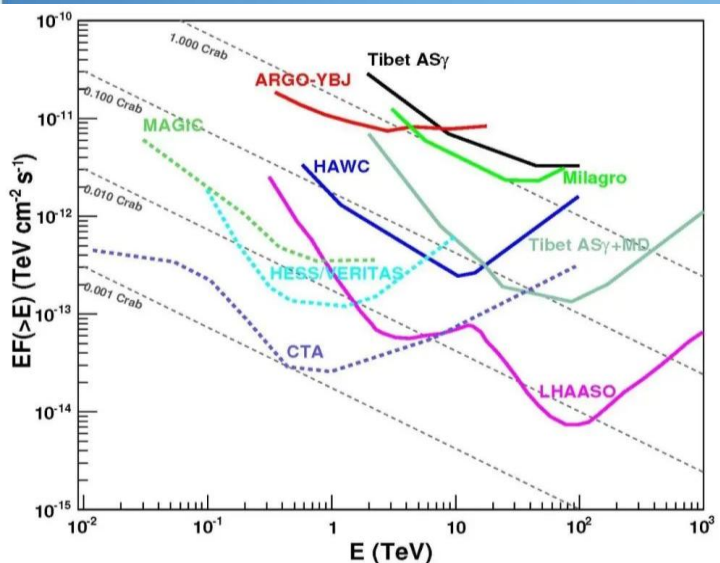
NAOC, CAS

Hybrid Detection of EASs by LHAASO

CATCHING RAYS

China's new observatory will intercept ultra-high-energy γ -ray particles and cosmic rays.

Courtesy: Nature



~25,000 m —



80,000-m² surface-water Cherenkov detector

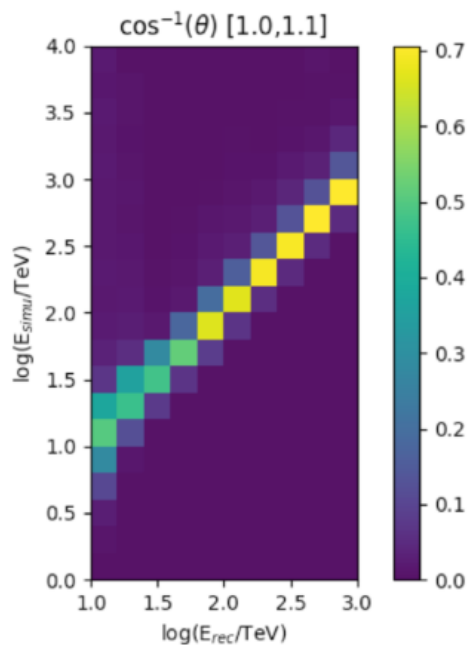
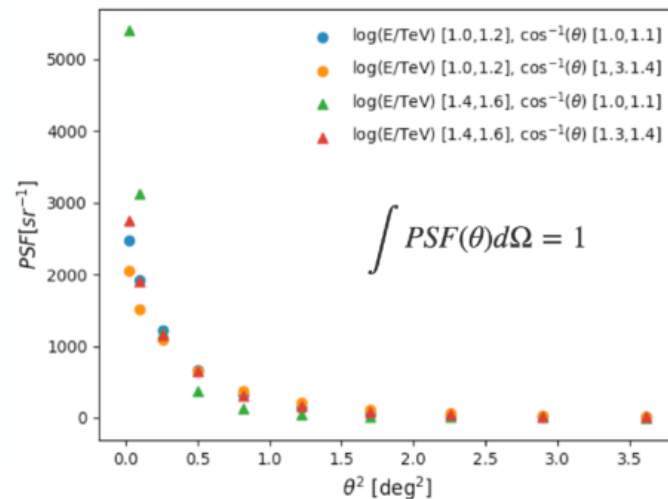
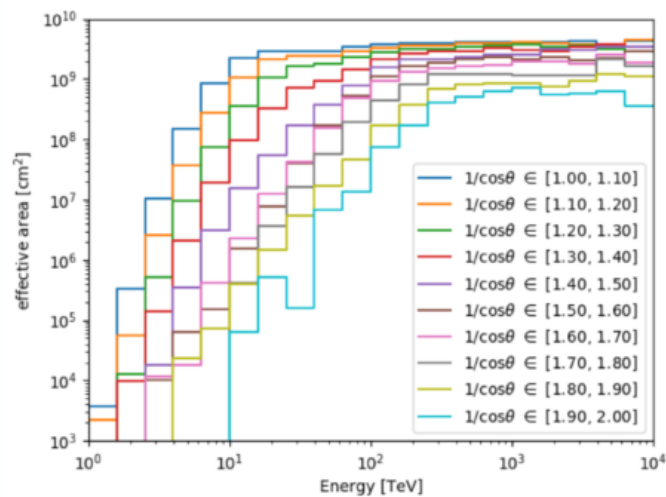
1,171 underground water Cherenkov tanks

4,400 m —

LHAASO data

- ROOT format
- Properties of reconstructed events depend strongly on nHit
- PSF and G/H separation threshold change with nHit
- Energy dispersion change with nHit and zenith

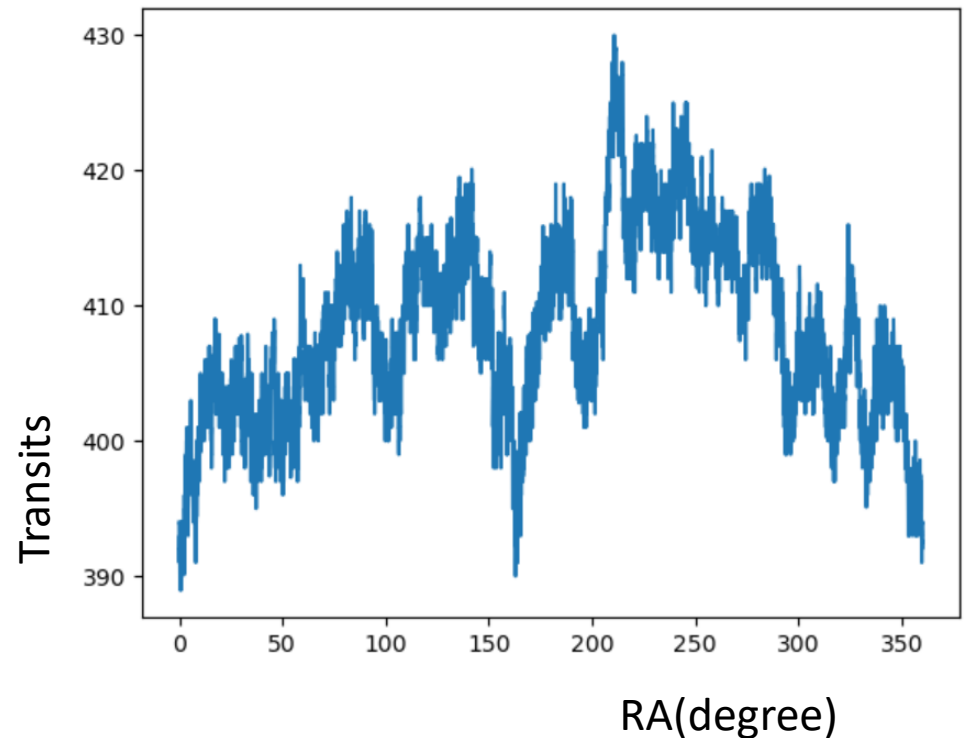
KM2A IRFs from Simulation



Event list and live time

| Event ID | RA | DEC | nHit | Time | Pinccss |
|----------|--------|-------|------|------------------|---------|
| 1 | 212.47 | 6.66 | 405 | 59760.65214 | 0.84 |
| 2 | 224.51 | 12.19 | 181 | 59760.65221 5 | 0.96 |

| Runno | Tstart | Tend |
|--------|------------------|-------------------|
| 146458 | 59760.00 0135 | 59760.00 06217 |
| | | |



How to fill GADF and run with
gammapy?