

Update MoU/Annex Auger/TA

(1) General MoU: OK :-)

(2) Annex: "change of heart" at the last TA EC

Annex #2. Exchange of data for the all-sky study of the small/intermediate/large scale distribution of arrival directions of UHECRs and for probing the origin of the difference in the flux of UHECRs.

The scope of this annex is to specify the data samples and the information to be shared in order to accomplish, at different energy thresholds, the above mentioned studies to complete and expand the analyses in ApJ 2014 794 172 and in GAP2015-091. The latter, co-authored by Auger and TA members, has been distributed within the Telescope Array Collaboration.

Data Samples

Auger sample: SD data, from 1 Jan 2004 to 31 Dec 2013, 6T5 events, $E > 4 \text{ EeV}$, $\theta < 80 \text{ deg}$

Telescope Array sample: SD data, from May 2008 to May 2014, strictest event selection (used in the spectrum analysis), $E > 10^{18.8} \text{ eV}$, $\theta < 55 \text{ deg}$

The following pieces of information per event will be exchanged:

- Local coordinates
- Time
- Equatorial coordinates
- Energy

Moreover, each experiment will provide the effective area and exposure relative to the exchanged sample.

Annex: what has changed

Telescope Array sample: SD data, from May 2008 to May 2014, strictest event selection (cuts used in the spectrum analysis), $E > 10^{18.8}$ eV, $\theta < 55$ deg (angle cut used in the anisotropy analysis)

The following pieces of information per event will be exchanged:

- Local coordinates
- Time
- Equatorial coordinates
- ~~- Energy~~ Energy threshold ($E > 10^{18.8}$, $E > 10^{19}$, $E > 10^{19.75}$ eV)

- **No energy event-by-event will be exchanged**
- **For each event the energy threshold will be specified ($E > 10$ EeV, $E > 57$ EeV)**
- **We deduce that TA agree to exchange data down to a lower energy. KH asked Sagawa clarifications on that.**
- **OK for Sagawa (to be voted again at their next Exec. Comm., in two weeks)**