Introduction

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Outline

- Organization: we planned to have 2 meeting per month. We opened a doodle to select the best day

- Today topics: Long Distance Correlation and latitude dependence of the cosmic rate

- ICRC: abstract submitted

- List of possible analyses (EEE and Polar) → we are looking for analyzers...

- Some instruction to retrive data...

ICRC

List of submitted abstract:

- P. La Rocca → Long Distance Correlations
- C. Pinto → Outreach
- S. Grazzi → Simulation
- M. Abbrescia → Latest results from Polar

Let's keep us informed in case you need the approval of new plots/results…

List of possible analyses (EEE)

- Efficiency scan: telescope performance
  we perform in the past several efficiency scans and we are going to make a campaign during the RESTART
- Simulation: we recently submitted a paper. There is still work to do…
- Long Distance Correlations → see Paola's update. (can we try to correlate our data with other sources?)
    - https://arxiv.org/pdf/2102.03466.pdf (recent estimate on GZ effect)
- Seasonal effect: it would be nice to repeat the measurements of the seasonal effect with an EEE telescope → volunteers?

List of possible analyses (Polar)

We collected data @Svalbard for more than one year. We have plenty of data to…

- Rate vs latitude → see the other talks…

- characterize detector performance;

- measure seasonal modulation

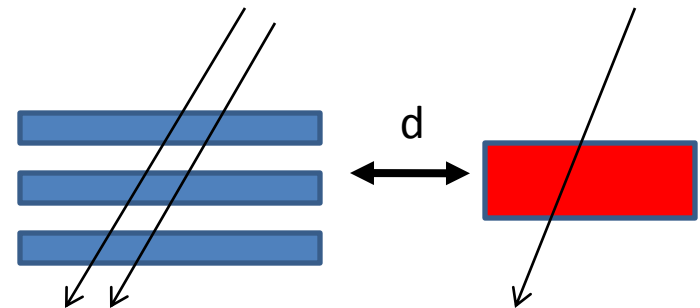- correlate cosmic ray flux with external environment data (CCT tower@Svalbard, CNR)

Combined analyses & more

We could acquire data with an EEE telescope and a polar one (when it will be possible to travel in safe conditions).

In the meanwhile it would be nice to explore what kind of measurements we can do and what is the best setup (e.g. AIS with coincs and multi-tracks?).

Tools: Corsika sims at CNAF

People: we are looking for you…

… is it possible to align EEE det with polar?

How to retrive data

DST (researchers) → available at CNAF → /recon2

Track info data from DST (students) → DATA REQUEST from MONITOR page

Trending (dqmreports)   → 1 day (ROOT and CSV) from monitor page

                                        → more days available at CNAF (next slide)

                                        → rates/pressure/temperature/….

COINCS → available at CNAF → /home/eee/analisi/coincidences/newana

…

Trending data

How to retrive trending data for a large timescale interval:
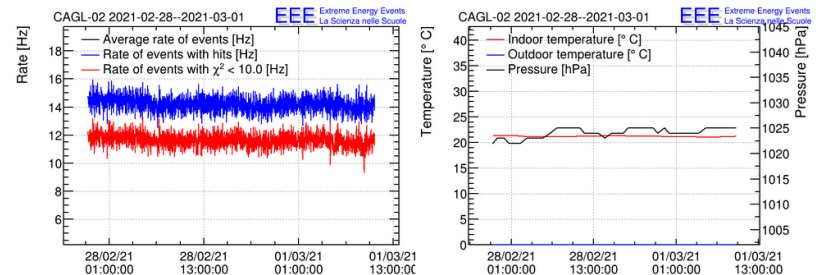
/opt/eee/bin/reportEEE.sh OPT1 OPT2 OPT3 OPT4

OPT1= TEL_ID

OPT2 = END_DATE

OPT3 = N DAYS

OPT4 = OUTPUT DIR

For example:

/opt/eee/bin/reportEEE.sh CAGL-02 2021-03-02 1 /tmp/provarep2

You will get the same as in dqmreport but not limited to one day

https://iatw.cnaf.infn.it/eee/monitor/dqmreport/

EEE DQM summary report