Extreme Energy Events
Science inside Schools

Update on recent analyses

F. Noferini

INFN

CENTRO RICERCHE ENRICOFERMI

EEE Analysis - 29-10-2026

Ongoing analyses

Previous meetings

30/6 - 1/7 : collaboration meeting

- Vespucci and Norway data analyses update (P. La Rocca)
- Forbush Effect vs latitude (M. Rasà)
- ML for EEE (S. Manti)
- **R&D** (M. Garbini, R. Nania)
- Gas recirculation system (B. Sabiu, D. Hatzifotiadou, R. Zuyeuski)
- POLA-R Efficiency (F. Noferini + F. Nozzoli, E. Ghezzer)

19/2: analysis meeting

- Coincidences with photonic computing (F. Coccetti)
- **Rate vs T (POLA-R)** (O. Pinazza, R. Nania)

Specific contributions in today agenda

Rate vs latitude with POLA-02 in 2022 (A. Vespucci)

A draft for the paper prepared by **Paola and Franco** was circulated this week.

CONGRATULATIONS!!!

Paola already collected comments and she is implementing corrections.

Please, check paper authors and affiliations.

We should circulate the draft as well to our Norwegian colleagues

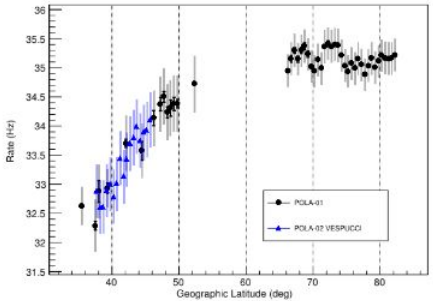


Fig. 7 Cosmic particle rate measured by the POLA-01 (black markers) and POLA-02 (blue markers) detectors as a function of the geographical latitude.

Latitude dependence of the cosmic ray rate from an Italian circumnavigation campaign within the EEE Project

M.Abbrescia[1,2], C.Avanzini[3,4], L.Baldini[3,4], R.Baldini Ferroli[5,b], G.Batignani[3,4], M.Battaglieri[6], E.Bossini[4], F.Carnesecchi[9], D.Cavazza[10], C. Cicalò[8], L.Cifarelli[10,11,12], F.Coccetti [12], E.Coccia[13], A.Corvaglia[14], A,De Caro[15,16,12], D.De Gruttola[15,16,12], S.De Pasquale[15,16,12], L.Galante[17], M.Garbini[12,10], L.E.Ghezzer[24], I.Gnesi[12,18], F.Gramegna[23], E.Gramstad[32], S.Grazzi[6,19], E.S.Haland[32], D.Hatzifotiadou[9,10], P.La Rocca[20,21,12,a], R.Liotino[12], G.Mandaglio[19,21], A.Margotti[10], G.Maron[23], M.N.Mazziotta[2], A.Mulliri[7,8], R.Nania[10,12], F.Noferini[10,12], F.Nozzoli[24], F.Ould-Saada[32], F.Palmonari[11,10], M.Panareo[25,14], M.P.Panetta[14], R.Paoletti[26,4], C.Pellegrino[27], L.Perasso[6], O.Pinazza[10,12,9], C.Pinto[9], S.Pisano[12,5], K.Piscicchia[12], L.Quaglia[17], M.Rasà[20,21,12], F.Riggi[20,21,12,a], G.Righini[28], C.Ripoli[15,16,12], M.Rizzi[2], B.Sabiu[11,10], G.Sartorelli[11,10], E.Scapparone[10], M.Schioppa[29,18], G.Scioli[11,10], A.Scribano[26,4], M.Selvi[10], A.Shtimermann[27], M.Taiuti[30,6], A.Trifirò[19,21], M.Trimarchi[19,21], C.Vistoli[27], L.Votano[31], M.C.S.Williams[9,22], A.Zichichi[12,11,10,9,22,b], R.Zuyeuski[22,9]

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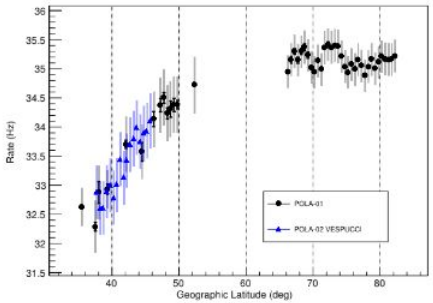


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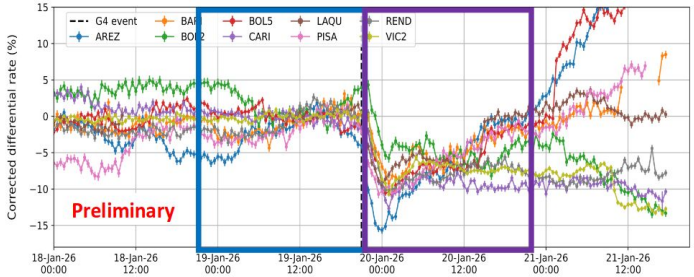
Latitude dependence of the cosmic ray rate from an Italian circumnavigation campaign within the EEE Project

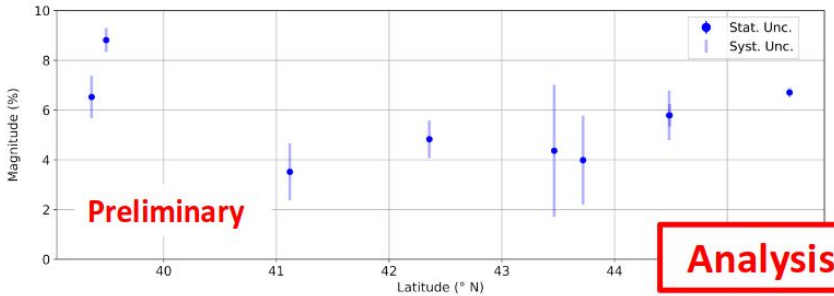
M.Abbre
G.Batign
C. Cicalò
A,De Ca
M.Garbi
S.Grazzi
R.Liotin
A.Mullir
F.Palmo
C.Pellegr
K.Piscic
C.Ripoli
M.Schiop
M.Taiuti
M.C.S.Williams[9,22], A.Zichichi[12,11,10,9,22,b], R.Zuyeuski[22,9]

Next step:
Finalize the work on ovEEErland expedition (2025 data)

Forbush Effect vs latitude (Marika)

poster in CRIS-MAC (Marika), talk in ICHEP (Cristina)



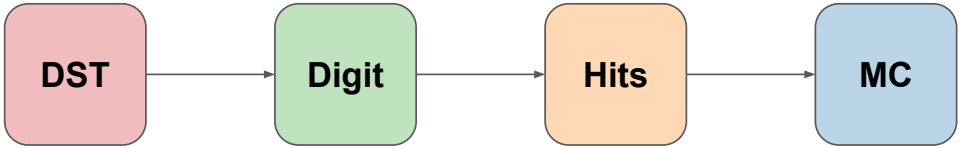


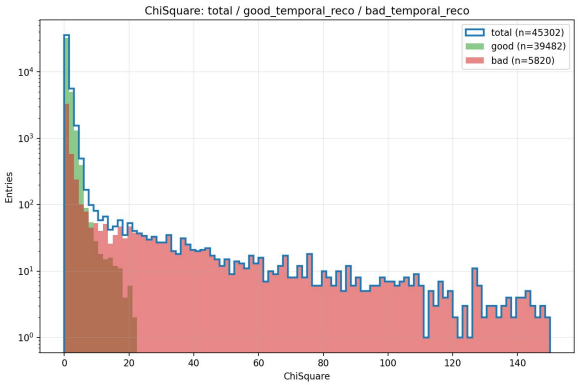
POLA-R data to be added

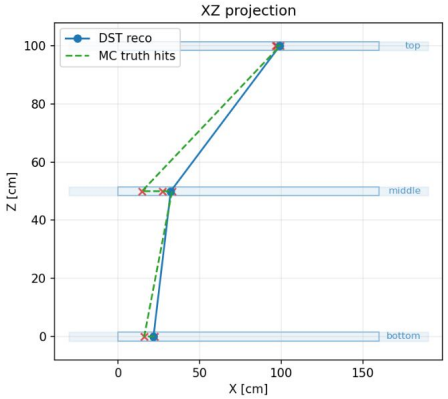
Additional checks on the barometric coefficient are to be done

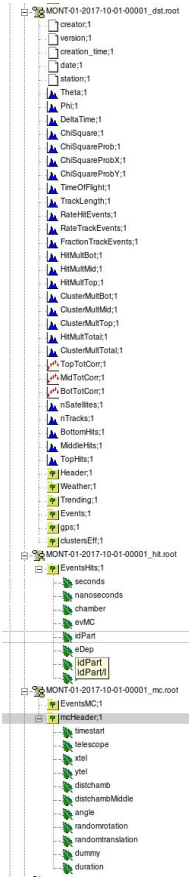
Analysis is ongoing

ML for EEE (Simone)



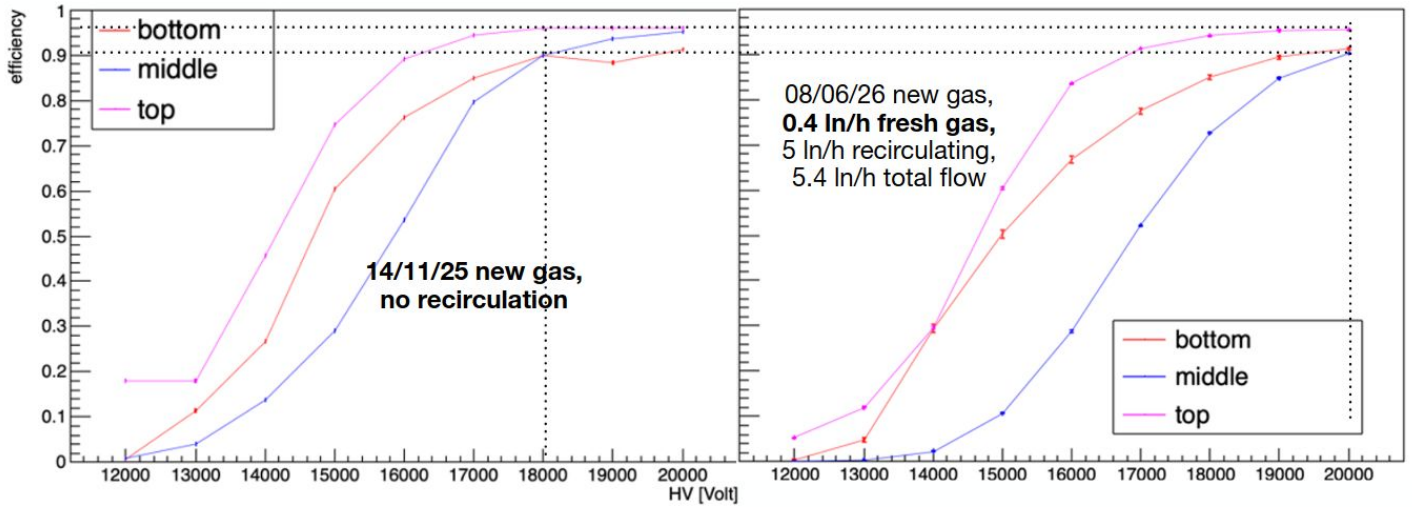






New MC simulations will be analyzed

Gas recirculation system (Bianca, Despina, Roman)



Last update before summer

Specific contributions in agenda



Proposal for the next masterclass based on Ombretta's analysis