

AE33A-3411: Energy spectra of electrons and gamma rays observed in largest Thunderstorm GroundEnhancements (TGEs)

Wednesday, 12 December 2018

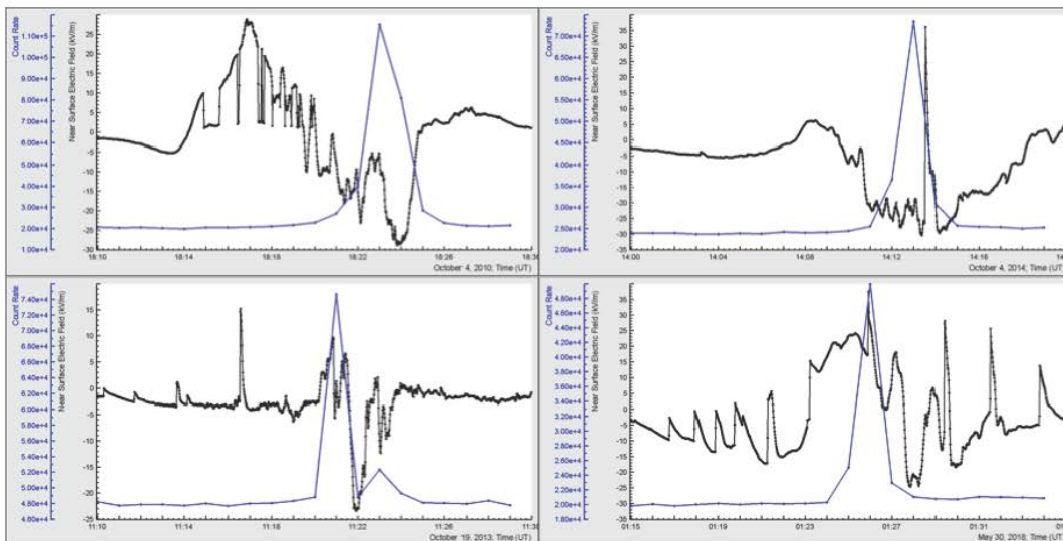
13:40 - 18:00

📍 Convention Ctr - Hall A-C (Poster Hall)

We present differential energy spectra of electrons and gamma rays from 4 largest TGEs observed at Mount Aragats in Armenia during last 10 years. The large area particle spectrometers (4m^2) allows increase the maximal detectable energy well above 50 MeV, that was the maximal energy for the reported spectra obtained by the NaI crystals. Veto system of ASNT detector allows effectively selecting charged particles, thus permitting measuring gamma ray and electron spectra separately.

In this report, we analyze comprehensive observations made on different time scales and energy ranges on the earth's surface. A new model of TGE will be discussed explaining enigmatic processes of high-energy physics in atmosphere (HEPA).

Largest TGEs of Decade: MAKET EFM and 1 cm thick plastic from STAND1 MAKET



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