Expedition to Aragats 150, August 16, 2023

Figure 1. A. Chilingarian and L. Kozliner: We're again on Aragats and again working on new, exciting physics. The detectors have been checked and tuned, and the experiments have continued.

Figure 2. Mountains are forever. Only Vashapacar is turned over

Figure 3. SKL experimental hall hosting CUBE, STAND3, STAND1 (outside seen in front of the building), NaI spectrometer network, interferometer, and wideband atmospheric discharge registration facilities.

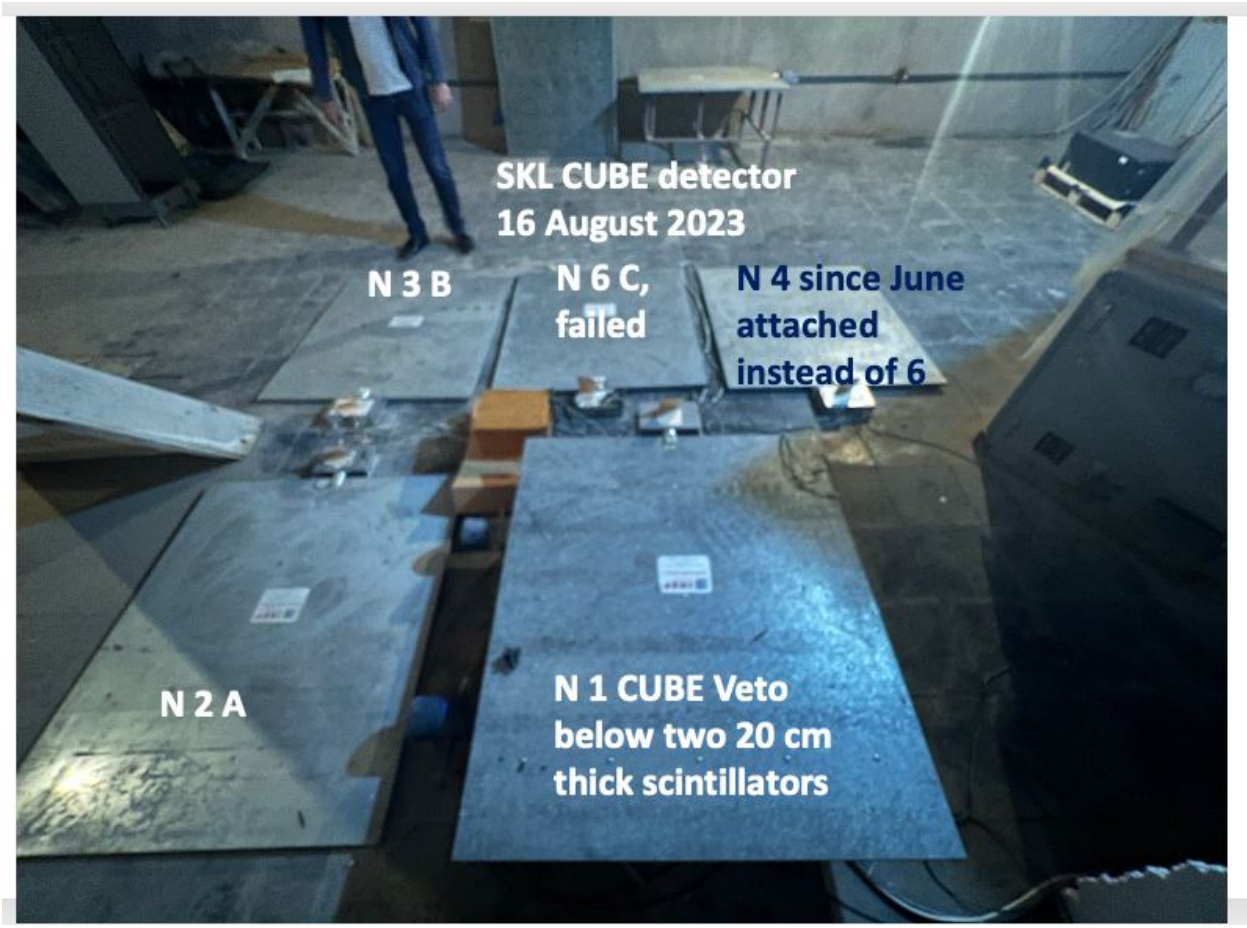

Figure 4. Rearranged CUBE detector registered on May 23, 2023; the largest radiation enhancement exceeded background ten times.

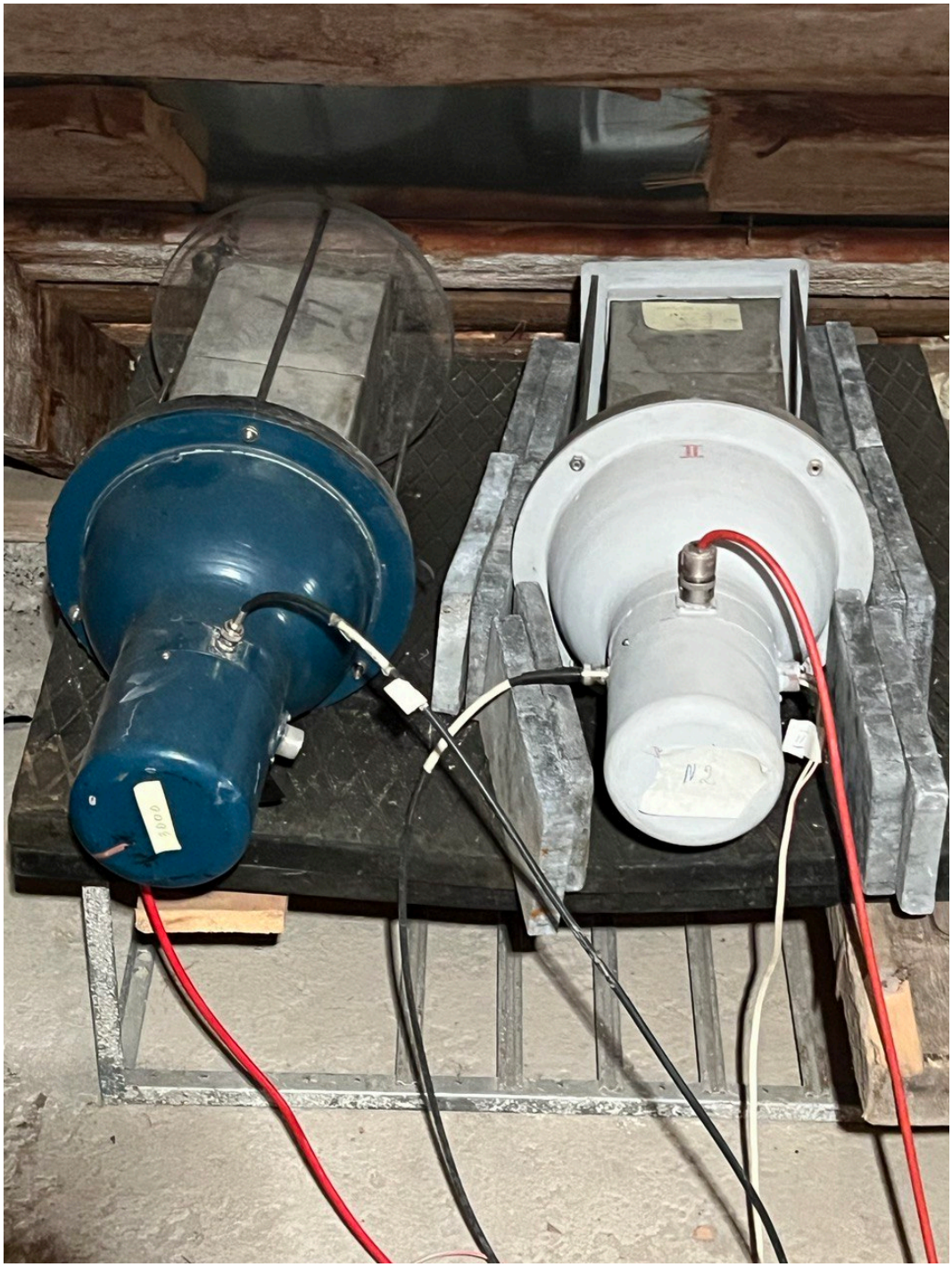

Figure 5. Large NaI spectrometers measure Natural Gamma Radiation(NGR) in an unprecedently large energy range from 0.3 to 50 MeV. The ORTEC's firm spectrometers (the best on the market) measure NGR in the energy range (0.3=3 MeV).

Figure 6. High-frequency oscilloscopes and National Instrument's boards allow synchronizing particle fluxes and atmospheric discharges on nanosecond time scales

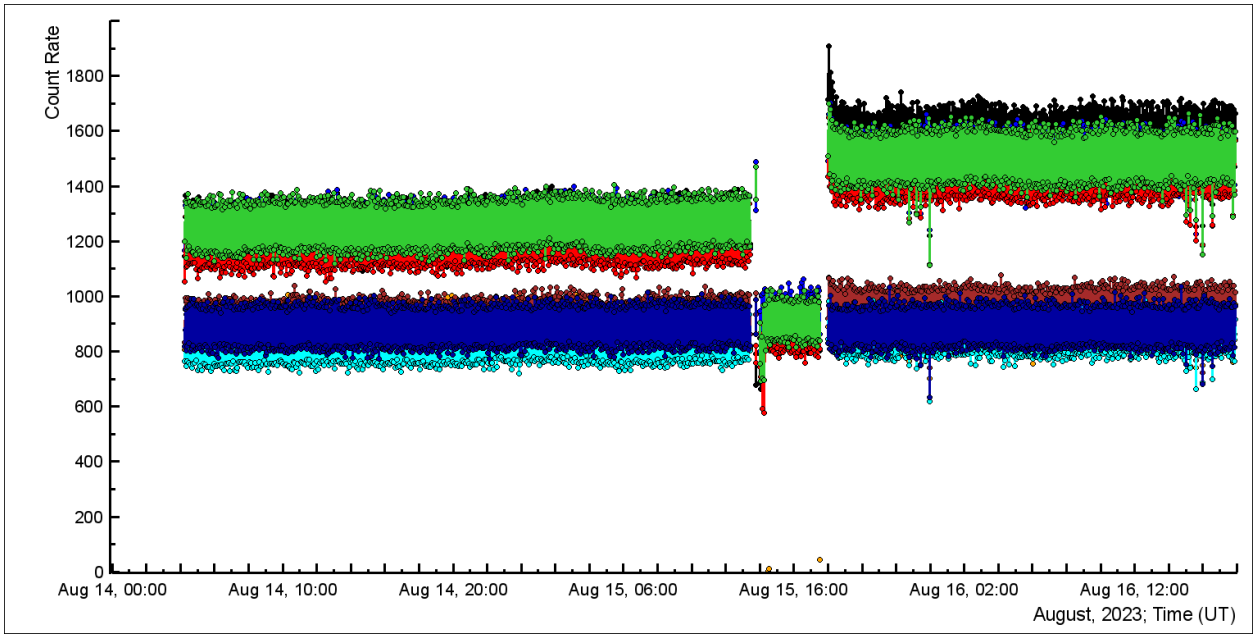

Figure 7. Time series of 8 scintillators of ASNT spectrometer. Precisely tuned scintillators (thanks to B.Sargsyan and G.Gabaryan) will allow measurements of electron and gamma-ray energy spectra of thunderstorm ground enhancements (TGEs), crucial measurement in high-energy atmospheric physics, possible only on Aragats.

Figure 8. A new platform prepared by CRD for installing particle detectors, panoramic cameras, near-surface electric field sensors, and weather stations. CRD will provide electricity, internet, and maintenance for groups worldwide planning advanced experiments in cosmic rays, atmospheric physics, and Space weather.