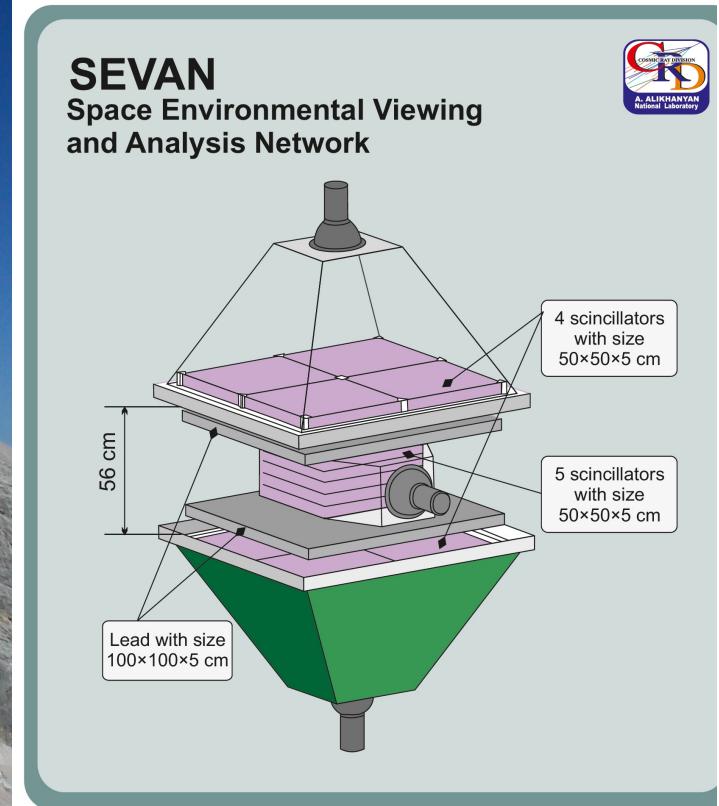


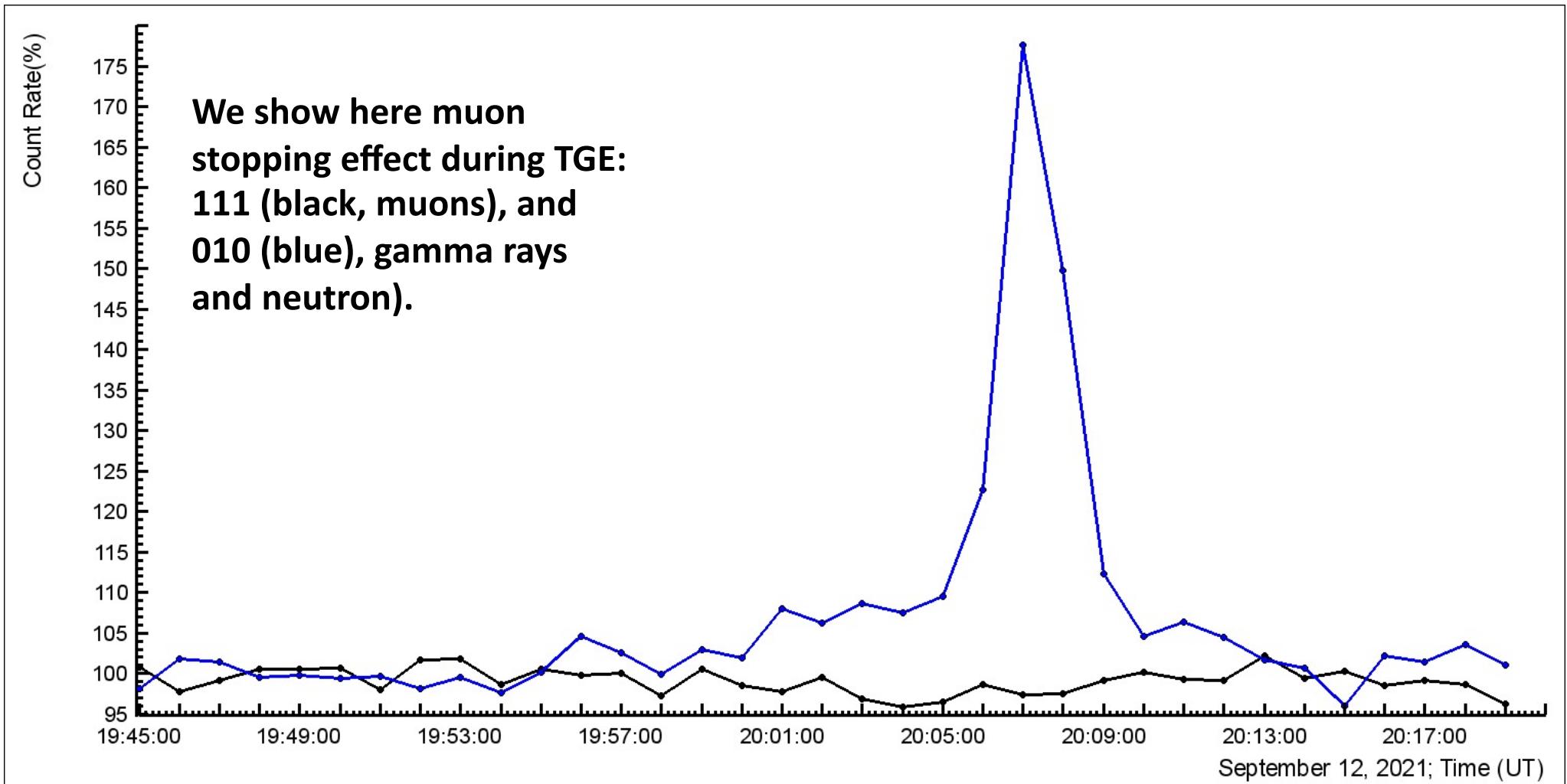
**9 SEVAN units expands to 6 countries and we have additional requests to be considered in 2022. Network data (1 minute time series for 10 years) contains unique information used in current research in host countries**



**Next SEVAN unit will be installed near the top of the Zugspitze (2962 m), a site with a long history of atmospheric research.**



# The largest TGE event registered by SEVAN network in 2021 at Lomnický Stit, Slovakia



# Last papers from SEVAN network

- [1] Chum,J.,Langer,R.,Baše,J.,Kollárik,M.,Strhárský,I.,Diendorfer,G.,etal. (2020). Significant Enhancements of Secondary Cosmic Rays and Electric Field at the High Mountain Peak of Lomnický Štít in High Tatras during Thunderstorms. *Earth Planets Space* 72, 28. doi:10.1186/s40623-020-01155-9
- [2] Chilingarian, A., Karapetyan, T., Zazyan, M., Hovsepyan, G., Sargsyan, B., Nikolova, N., et al. (2021c). Maximum strength of the atmospheric electric field. *Physical Review D*, 103, 043021. <https://doi.org/10.1103/physrevd.103.043021>
- [3] Chilingarian, A., Hovsepyan, G., Karapetyan, G., and Zazyan, M. (2021). Stopping Muon Effect and Estimation of Intracloud Electric Field. *Astroparticle Phys.* 124, 102505. doi:10.1016/j.astropartphys.2020.102505
- [4] Chilingarian, A., Hovsepyan, G., & Zazyan, M. (2021). Muon tomography of charged structures in the atmospheric electric field. *Geophysical Research Letters*, 48, e2021GL094594. <https://doi.org/10.1029/2021GL094594>
- [5] Chum J, Kollárik M, Kolmasová I, Langer R, Rusz J, Saxonbergová D and Strhárský I (2021) Influence of Solar Wind on Secondary Cosmic Rays and Atmospheric Electricity. *Front. Earth Sci.* 9:671801. doi: 10.3389/feart.2021.671801
- [6] A.Chilingarian, Progress of High-Energy Physics in Atmosphere (HEPA) achieved with the implementation of particle physics and nuclear spectroscopy methods, 2021, 37th International Cosmic Ray Conference, DOI: 10.22323/1.395.0366