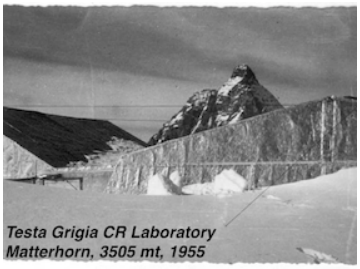

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Correlation of AOT with Relative Frequency of Air Showers with energy 10^15 –10^16 eV by Yakutsk Data.

Tuesday, 6 September 2016 16:30 (1h 45m)

Long-term series of measurement of spectral transparency of the atmosphere (λ = 430 nm) and atmospheric optical thickness (AOT) measured by multimode photometer CE 318 in the region of Yakutsk array are analyzed [1]. Correlation of AOT with intensity of air showers with small energies 1015 –1016 eV is found.
The variability of aerosol composition of the atmosphere during the registration period of the Cherenkov light should be taken into account since it may affect the quality of determining characteristics of air showers [2].

Summary

1. Dyakonov M. N. Knurenko S. P., Kolosov V. A., Sleptsov I. Ye. Optics of the atmosphere, 1991, V. 4, 8, p. 868-873.
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