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Thunderstorm investigations based on the data obtained by the URAGAN muon hodoscope and Doppler weather radar DMRL-C

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Comparison of data obtained by means of two facilities during thunderstorm periods of spring and summer of 2018 has been performed. Muon snapshots (muonographs) and meteorological maps obtained every ten minutes are compared with each other. Distributions of basic parameters describing variations of the muon flux during and before thunderstorms are obtained. Fourier and wavelet analyses of obtained data are performed. Search of possible predictors of thunderstorm is conducted. Results are illustrated by thunderstorm event occurred in Moscow on August 30, 2018.

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