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Impact of Anthropogenic Climate Change on Hail in Eastern Georgia

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Abstract : Modern anthropogenic changes in climate can affect the microphysical and electrical properties of clouds, such as the conditions that cause intense hail and lightning. At the same time, the effect of the impact largely depends on the physical-geographical conditions and the ecological situation. It should be noted that the growth of anthropogenic pollution in the atmosphere has a significant impact on the dynamics of hail processes. For the statistical analysis of the number of hail days against the background of modern climate change, the average number of hail days at the stations according to decades was used, which allows to weaken short-term fluctuations and reveal long-term changes. In order to determine the dynamics of hail days in Eastern Georgia, the observation data of some meteorological stations from 1951-2000 were analyzed. In total, the data of 41 meteorological stations of Eastern Georgia about hail for the period of 1961-2018 have been processed.

 $\textbf{Keywords:} \ climate, \ meteorology \ phenomena, \ anthropocenic \ influence, \ hail$

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