Icing days in the mountainous regions of Georgia

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Global warming is one of the most important ecological and socio-economic issues of modernity and it is manifested in different ways on different continents under various physical-geographical conditions. In Georgia, the nature of climatic change is diverse, due to geographical location and varied natural-climatic conditions of the country, with the majority of natural landscapes and climates observed on the globe.

The change in average values of climatic elements (temperature, precipitations) fails to depict the complex picture of climate change at the present stage and the study of extreme events is of great importance for both individual countries and regions. Therefore, Expert Team on Climate Change Detection and Indices (ETCCDI) of the Commission for Climatology of the World Meteorological Organization (WMO), developed 27 core climate change indices. In recent years, there were carried out some of our research on climate indexes that has expanded our knowledge of climate and climate change in Georgia. One of the interesting climate change indices is icing days annual count when TN (daily maximum) < 0ºC.

Based on the observations of 25 meteorological stations for the period 1936-2013, the statistical structure, intensity, duration and dynamics of icing days in the mountainous regions of Georgia were investigated.

Key words: Icing days, repeatability, decadal rate, intensity.