

Dynamics of air temperature change in the city of Tbilisi in 2004-2024

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Climate change is a significant problem of modern times, which leads to the intensification of natural phenomena and a rapid increase or decrease in temperature. Air temperature is a key characteristic of weather and climate, therefore it is of crucial importance for the existence of life and in general in all areas of human practical activity. The temperature regime and its variability affect humans and the ecosystem as a whole.

The identification of the features of the fluctuations of the average, maximum and minimum values of air temperature plays an important role both for the study of climatic conditions of the past period and for the purpose of determining the nature of their development. In the paper, based on the archival data of the National Environmental Agency for the city of Tbilisi, the features of the temporal variation of this parameter in 2004-2024 were analyzed.

A comparison of air temperature deviation data for the city of Tbilisi for the decades 2004-2014 and 2014-2024 showed that this difference varies annually from 0.82 to 0.98°C. The annual increase in average temperature is 0.85°C; the average maximum is 0.98°C; the average minimum is 0.82°C. The lowest deviation rate is recorded in October, and the highest - in February.