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Long-term variations in main characteristics of the hydrometeorological Volga basin regime

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Abstract

Investigations of long-term variations in annual precipitation totals and mean air temperature in the Volga basin, the Volga runoff, the Caspian Sea level, and the three forms of atmospheric circulation according to the Vangengeim-Girs classification are discussed. High- and low-frequency variations in the series of hydrometeorological variables are studied and the linear trends are estimated. Correlation between precipitation, the Volga runoff, and the Caspian Sea level are analyzed. The role of circulation in the variability of precipitation amount and the Volga runoff is shown.