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Wavelet analysis of the near-surface air temperature in Bulgaria

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One of the current problems of our contemporary time is related to changes in the climate of local, as well as global scope. We offer an analysis of long-term time series of meteorological data from different weather stations in Bulgaria. The main portion of the analyzed data are monthly average values of temperature, precipitation, atmospheric pressure, and they can be related to different factors influencing climate change – geological, cosmical, anthropological (generated by human activity)Based on data from Bulgarian meteorological stations, we detected a periodicity in long-term variations of the near-surface air temperature, using wavelet analysis. Bulgaria has a continental climate. Therefore, we compared the results obtained in Bulgaria with the wavelet analysis results obtained in Eastern Siberia. Observational data for Siberia are provided by RIHMI-WDC (http://meteo.ru/data).

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