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The range and seasonality of the contemporary climatic warming in Polish Tatras

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The purpose of the report is to determine the trends of changes of thermal conditions in the Polish part of Tatra Mountains. The study makes use of the data from the weather stations in Zakopane and on Kasprowy Wierch Mt. from the years 1951-2006, and mainly from 1966-2006. Various thermal characteristics were considered. The purpose of the report is to determine the trends of changes of thermal conditions in the Polish part of Tatra Mountains. The study makes use of the data from the weather stations in Zakopane and on Kasprowy Wierch Mt. from the years 1951-2006, and mainly from 1966-2006. Various thermal characteristics were considered. The purpose of the report is to determine the trends of changes of thermal conditions in the Polish part of Tatra Mountains. The increase of the rate of upward trend of temperature in the Tatras at the end of the 20th century and at the beginning of the 21st century, as well as the change of the seasonal distribution of the warming in comparison with the preceding long-term periods, have been documented.The study makes use of the data from the weather stations in Zakopane and on Kasprowy Wierch Mt. from the years 1951-2006, and mainly from 1966-2006. Various thermal characteristics were considered. In the years 1966-2006 significant trends in the changes of the mean, maximum and minimum temperatures have been observed in the Tatras in summer (respectively, 0.04, 0.05 and 0.03-0.04oC per annum). Certain symptoms of increase of the thermal continentalism have also been observed (increase of the annual amplitude of temperature).Besides, important features of changes in thermal conditions at the turn of the 21st century include an increase in the number of hot days, and even appearance of the very hot days within the foothills of the Tatras, increase of the number of frost days and decrease of the number of ice days in the high mountain part of the Tatras, as well as increase of accumulated heat of the growing season and Besides, important features of changes in thermal conditions at the turn of the 21st century include an increase in the number of hot days, and even appearance of the very hot days within the foothills of the Tatras, increase of the number of frost days and decrease of the number of ice days in the high mountain part of the Tatras, as well as increase of accumulated heat of the growing season and Besides, important features of changes in thermal conditions at the turn of the 21st century include an increase in the number of hot days, and even appearance of the very hot days within the foothills of the Tatras, increase of the number of frost days and decrease of the number of ice days in the high mountain part of the Tatras, as well as increase of accumulated heat of the growing season and Besides, important features of changes in thermal conditions at the turn of the 21st century include an increase in the number of hot days, and even appearance of the very hot days within the foothills of the Tatras, increase of the number of frost days and decrease of the number of ice days in the high mountain part of the Tatras, as well as increase of accumulated heat of the growing season and an increase of daily amplitude of temperature across the entire profile of the Tatras.