



Entering into the “greenhouse century”: recent Swiss record temperatures comparable to upper temperature quantiles in a greenhouse climate

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Text of Abstract

This paper investigates the recent spate of record-breaking warm seasons that have affected Switzerland in less than a decade and compares the seasonal statistics to those simulated for a “greenhouse-gas” climate by the end of the 21st century. The peaks of minimum and maximum temperatures observed during some the record seasons enter well into the 25% - 75% temperature quantile range for the scenario climate simulated by a set of regional climate models. The anomalously warm seasons allow a “preview” of conditions that may occur with greater frequency in the future. The use of current data as a form of proxy for the future enables an assessment of the possible impacts on the natural and socio-economic environments, and can help in considering possible adaptation strategies to reduce some of the associated risks of climatic change.