



Perceived temperature as an indicator for extreme events

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The perceived temperature (pt) has been proven to be a valuable parameter in order to quantify thermal stress and describe events that have an extreme impact on the human being. The computation of the pt requires the application of a complex thermal balance model that not only depends on the meteorological parameters but also on parameterised biological processes and human perception. But, as the response on thermal stress is highly variable between individuals and in time, the statement about the atmospheric state itself may be blurred. Therefore the question arises if the pt in its capacity as an impact parameter is applicable as a general indicator for extreme events in the meteorological sense.

With REMO simulations of 10 km horizontal resolution first the impact of the climate change is assessed in general. Then the question will be addressed which meteorological extreme events are captured by the pt. And vice versa, which meteorological extreme events (and -parameters) are weakly correlated with extreme values of the pt.