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Projections of the future climate potential for different type of tourism in Hungary

Akos Nemeth
Hungarian Meteorological Service, Budapest, Hungary (nemeth.a@met.hu)

The tourism sector is one of Hungary's engines of economic growth, accounting for roughly one-tenth of the gross domestic product (GDP). Therefore, it is of utmost importance get to know how climate change is affecting the tourism industry in Hungary.
The attractiveness of a tourist target area naturally includes the climate of that region. Furthermore the climate is fundamentally defines what type of tourism activity can be practiced in the given region. It can be seen that the mapping of climatic conditions and analysis of the tourism climate potential of the destinations is a key in the tourism sector. By using tourism climatology tools can be shown how was changed the tourism climate potential of a particular area in parallel with climate change.
In this paper the exposure of tourism sector to climate change was quantified by the second generation Climate Index for Tourism (CIT). To determine CIT (for cycling, 3S and urban tourism), calculation of thermal comfort conditions, daily average of cloudiness, daily precipitation sum and daily average of wind speed was required. Multi-year daily average of every meteorological variable were applied for calculation of CIT and then monthly averages were taken from the calculated CIT values. For analysing future changes delta-method was applied, that is, changes between the modelled future outcomes and the past model data were determined and the differences between them were added to the observational data.