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Climatic tendencies in Spain and its impacts on tourism

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Tourism is an important sector of the Spanish economy and climate is an important influential factor for tourism. We examined the climatic tendencies of the last 60 years in Spain using observing data of the Spanish Meteorological Agency and evaluated its potential and factual impact on tourism in Spain. We focused on the changes in the frequency of inconvenient weather and climatic characteristics. The most frequent problem in Spain is the too high temperatures in summer. Number of days with daily maximum temperature above 30.5°C was calculated to characterise objectively the variability of heat stress. Other thresholds chosen are the daily mean wind speed of 7 m/s, monthly precipitation total of 60 mm and 10 wet days per month. The choice of these thresholds is based on earlier studies about climate impacts on tourism. Tourism activity was evaluated by the hotel nights spent in various Spanish provinces between 1999 and 2010.

The results show that temperature has generally increased in Spain during the last 60 years and the number of unpleasantly warm days also increased. There is little systematic change can be proven in the other climatic characteristics. The frequent occurrence of high summer temperatures results in an irregular seasonal cycle in the tourism activity in the interior of the Iberian Peninsula, i.e. two peaks can be observed in late spring and autumn, while the mid-summer activity is relatively low. In contrast, July and August are the busiest months in the Mediterranean areas and in the Canaries, which fact shows that the preferences of beach tourism differ from other tourist activities.