



## **A Comparison of Climatic Indices for Tourism**

S. Perch-Nielsen

Dept. of Environmental Sciences, ETH Zurich, Switzerland (spn@env.ethz.ch / Fax:  
+41-632-1691 / Phone: +41-632-0415)

Climate is an important resource for the tourism sector, as it co-determines a destination's suitability for different types of activities. For this reason, considerable effort has been put into defining a suitable metric for "favourable climate" from the tourist perspective. Numerous metrics have been developed (Besancenot, 1990), of which particularly the Tourism Climatic Index (Mieczkowski, 1985) has recently been used to analyse effects of climate change on tourism. However, many of these indices have been criticised for not covering all facets of climate relevant for tourism, for being based on monthly instead of daily averages, or for being subjectively derived. As a response, a "second generation" index has been proposed (de Freitas et al., in press).

Do the different indices really vary strongly or do they actually define "favourable climate" quite similarly? The presented study addresses this question by calculating the different indices for a region and comparing the results. As a case study area the European Mediterranean is chosen, as tourism is an essential economic sector in this region. The results show how climatic resources are currently distributed across time and space in the Mediterranean according to the different indices. By means of climate models it is also shown how climate change is projected to affect the Mediterranean and in which regions and seasons the different indices agree on the direction of change (improvement/deterioration).

### References

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