

Seasonal Tourism Spaces and Weather Impacts in Estonia: Study with Mobile Positioning Databases

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We studied the seasonality of tourists' space consumption and weather impacts in Estonia using mobile positioning dataset with roaming data (Ahas et al 2006). Method which uses mobile phone positioning coordinates in space-time movement studies is called in Estonia the social positioning method (Ahas and Mark 2005). The anonymous roaming dataset allowed analysing the distribution of foreigners' country of origin in Estonia with the precision of network cells of mobile operators. Privacy of mobile phone holders was guaranteed according to EU regulation.

We can conclude that seasonality produces very different and sometimes even opposite tourist's space consumption patterns in Estonia. Coastal areas are popular for summer tourism and not very popular in winter; more continental inland areas were more used for winter tourism. Very popular summer tourism areas along Baltic Sea beaches are dominated by one nationality: the Finnish in western Estonia, and the Russians in eastern Estonia. Latvians had higher percentage in Saaremaa and Pärnu during summer and in Otepää and Lake Peipsi in winter. Tourists Space-time movement is also dependent on daily weather patterns. The mobile positioning data has great potential for tourism studies and monitoring, but has a very sensitive nature because of the fear of surveillance.