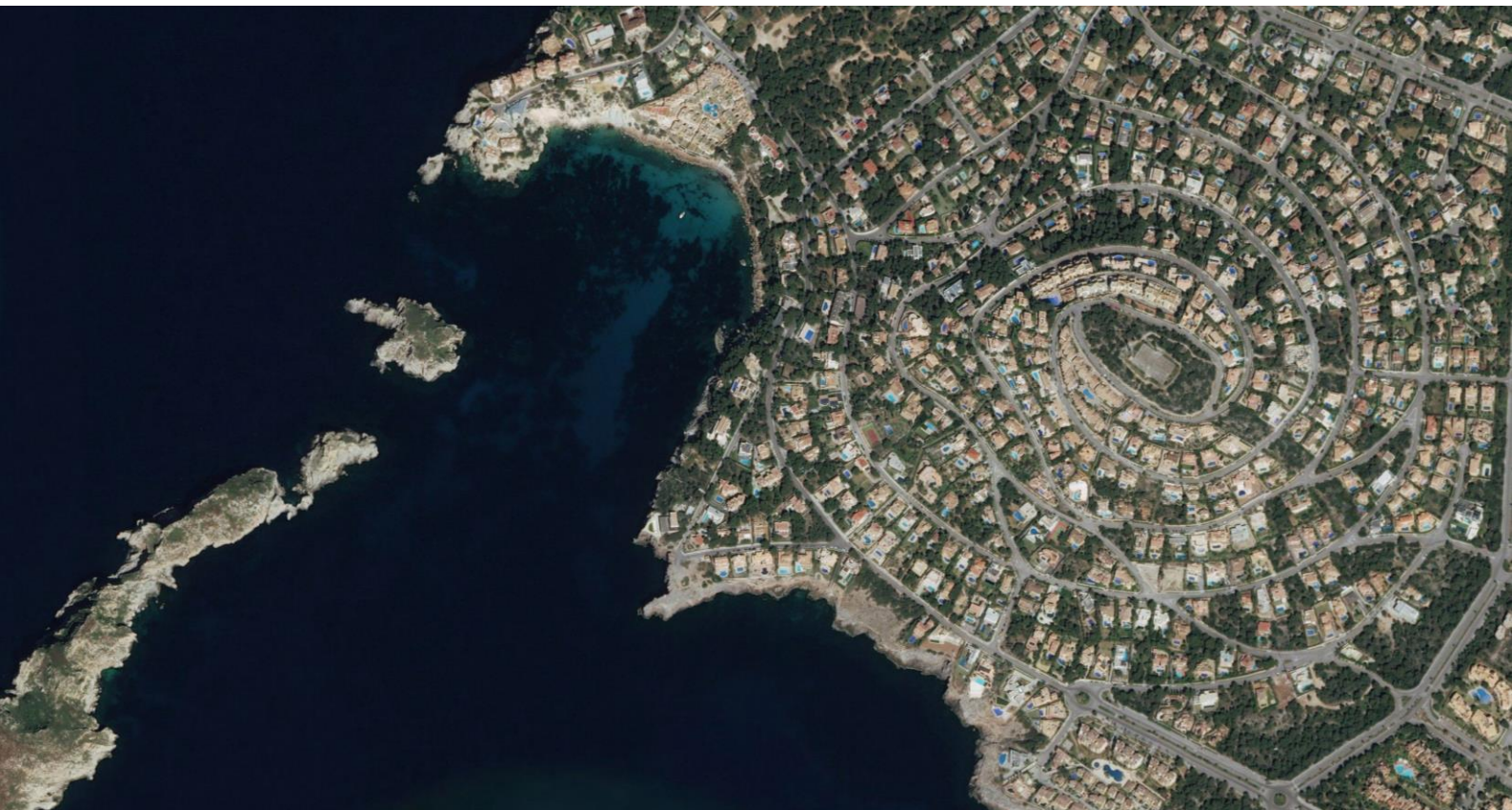


Tourism and the environment

Towards a reporting mechanism in Europe



ANNEX 5. Indicator assessment TOUR003

Most attractive places



Cover design: ETC/ULS

Cover photo: Coastal urbanisation in Mallorca (Spain), © Bing Maps

Layout: Francesc Romagosa (ETC/ULS)

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Indicator name: TOUR003 – Most attractive places

Assessment

Indicator name

TOUR003a - Number of pictures per km²

TOUR003b - Hotspots

TOUR003c - Percentage of area of hotspots by NUTS3

Key policy question

Where are the most attractive places?

Key message

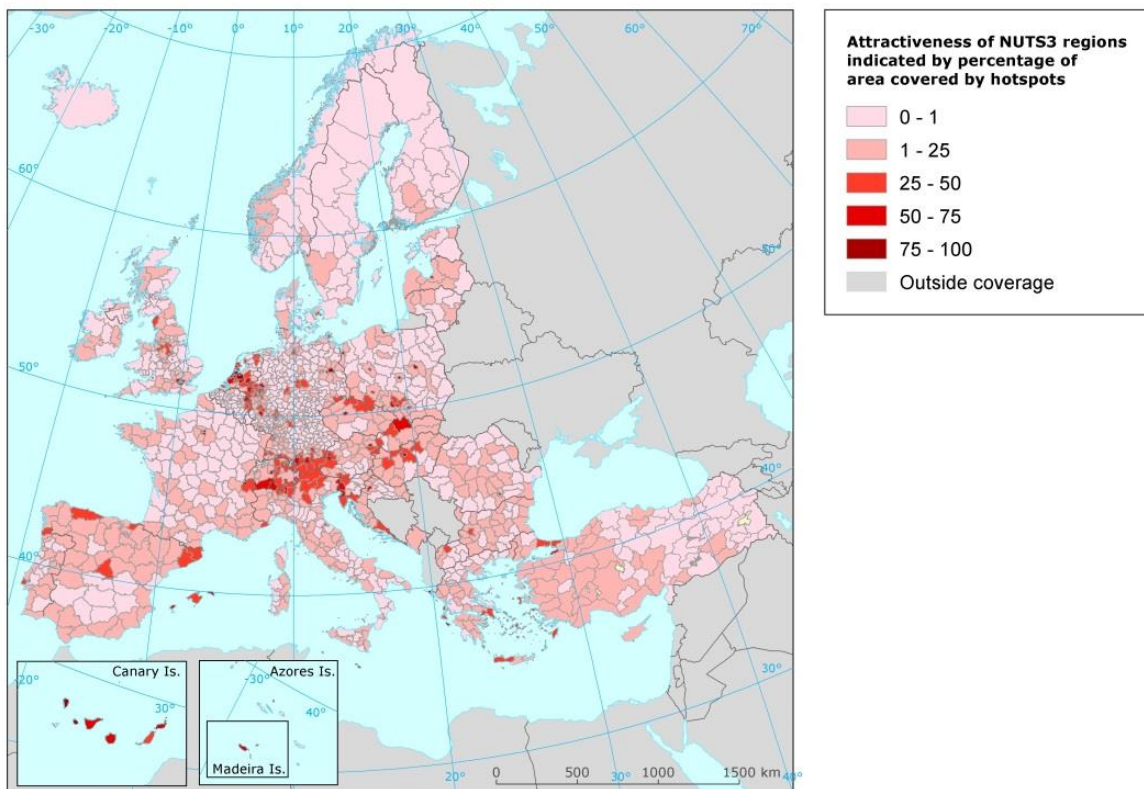
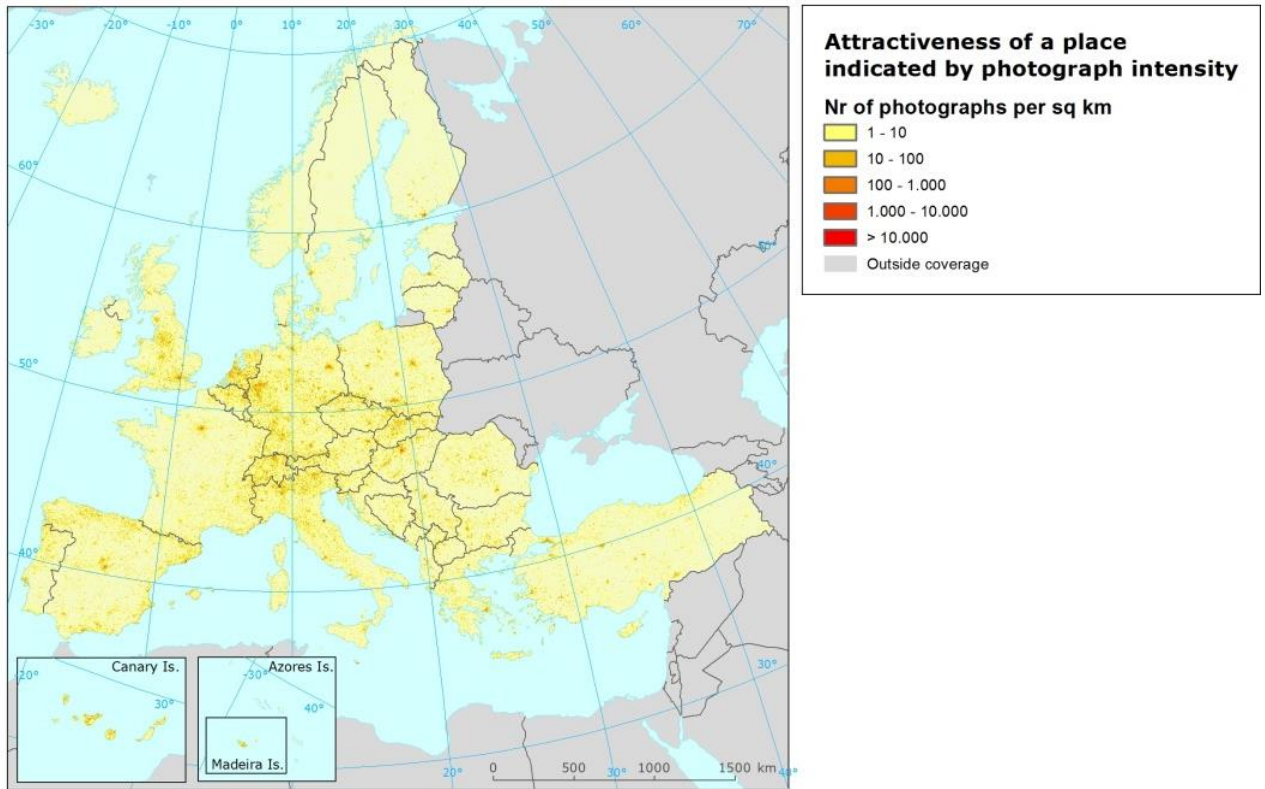
People are attracted by different aspects of tourism destinations, some of them inherent to the place. These include nature, cultural values and aesthetics, but also the possibility to carry out certain leisure activities (e.g. playing golf or hiking). The combination of these elements results in tourism hotspots. Besides traditional statistics (tourist arrivals and overnights), the intangible concept of tourism attractiveness is indicated by spatially locating those places that are more attractive for tourists.

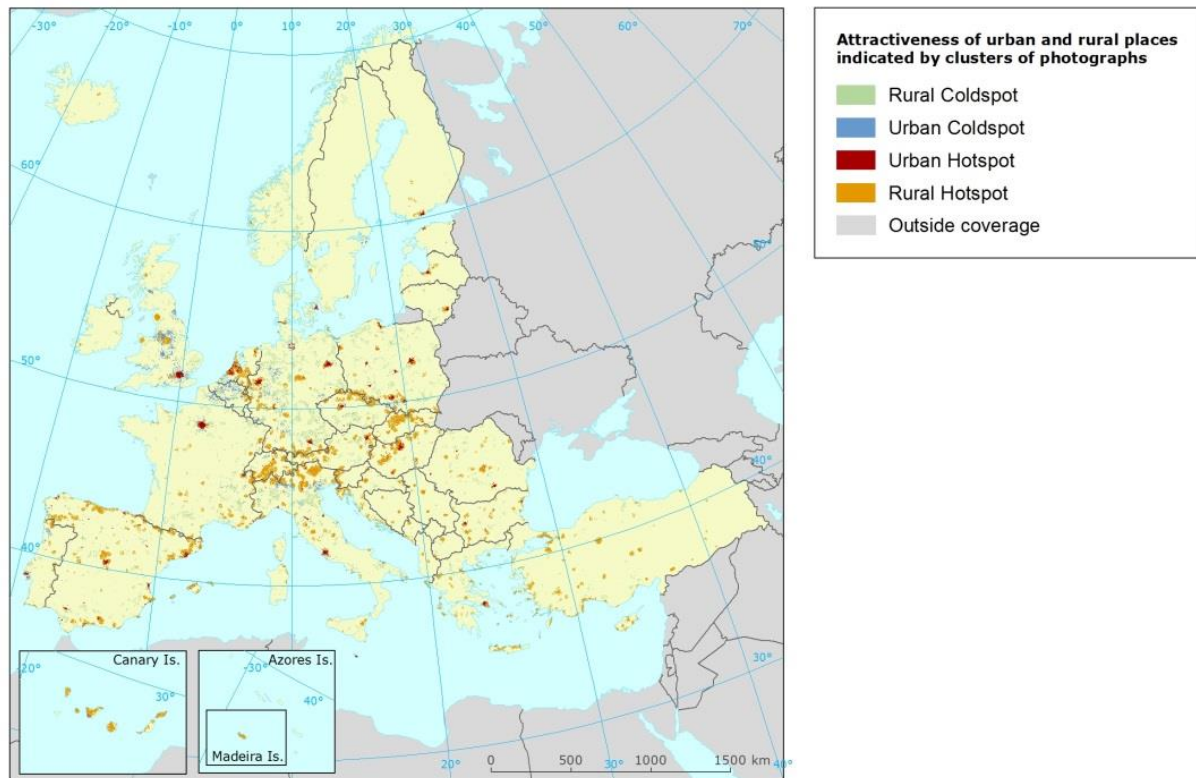
Key assessment

Attractive areas –measured here as the number of pictures posted to social media platforms such as Panoramio per km² – show a spatial pattern in Europe. There is a clear concentration in Central Europe, in particular the fringe that goes from England to northern Italy, crossing Belgium and the Netherlands, the western part of Germany and Switzerland. This is an important economic area, which includes the Alps. Other attractive mountain areas also emerge, such as the Carpathian Mountains or the Pyrenees. In general terms, large metropolitan areas also stand out on the map.

In order to better capture attractiveness, a hotspot indicator has been applied. Hotspots are areas with significantly higher concentrations of pictures posted on social media compared with the rest of the region. Two types of hotspots have been identified: hotspots in cities and hotspots in rural areas. The majority of capital and large cities appear as hotspots. These appear in red on the map. Blue areas reflect coldspots, i.e. spots with fewer pictures posted. Rural hotspots include several regions of the Pyrenees, the Alps and the Carpathian mountain ranges. The interior of the Netherlands is attractive, while Spain, France, Greece and Croatia emerge as having the most attractive coasts. In the case of Italy, the pressure on the coast seems lower.

Finally, a new analysis consisting of calculating the percentage of the regional area covered by the previously mentioned hotspots, has allowed us to identify those NUTS 3 regions that have a major part of their territory considered attractive for tourism. NUTS 3 regions with more than 25% of their territory made up of tourist hotspots are the Netherlands, Austria, Italy or Spain.





Specifications

Indicator definition

Density of pictures uploaded in Panoramio.

DPSIR

D

Rationale

The growth of social media and access to them by most part of the population is generating new sources of information that can provide insights on people's preferences and behaviour. Although the use of social media is still restricted to certain segments of population (technological divide) and not all those using this social media can be considered tourists, there is already some evidence on the potential uses and pitfalls. The number of pictures per NUTS2 region shows a positive correlation with overnights spent (0.73). Therefore, this could be considered a preliminary validation on the relevance on the number of pictures.

Policy context

EC and national policies on tourism and sustainable tourism.

EU regulations regarding coastal and marine ecosystems: Marine Strategy Framework Directive, Habitat Directive

National and sub-national spatial planning regulations

Methodology for indicator calculation

Step 1: Downloading from Panoramio the photos database (accumulated between 2007 and 2016) by different geographical windows within the study area. Single photos details are obtained, including its location (latitude, longitude), owner, title or URL, amongst other.

Step 2: Merging of all photo database in one single file.

Step 3: Converting the photo database into a GIS point layer.

Step 4: Overlaying the photo point layer with the European Reference Grid at 1 km² resolution, in order to obtain the density of photographs (photos per square kilometre).

Step 5: Overlaying the density of photographs with the polygons corresponding to the N2000 sites, in order to add up the total number of photographs within each site and get the maximum density of photographs by km² within each site.

Step 6: Elaboration of a map which combines both the total number of photographs by each site and the maximum number of photographs in one single square kilometre.

Data specifications

Panoramio is a geolocation-oriented photo sharing mashup owned by Google, currently integrated into Google Maps.

Data sets uncertainties

Panoramio was operational until 2016.

Ownership and contacts

ETC/ULS.

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