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Planning for tourism through landscape.

The innovative SPOT-IT tool

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Horizon 2020

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Context and objective

- This paper presents the potential and prospects of incorporating the destination landscape and its features/ parameters into the 'SPOT-IT' tool, developed to support tourism development, planning and management, in the context of the EU H2020 SPOT Project (www.SPOTprojectH2020.eu).
- This GIS-based web tool identifies and evaluates existing and/or potential tourism sites/ attractions, variable infrastructures and actors in destination development; provides their interlinkages as well as their (natural, cultural, social, economic, etc.) attributes; offers the ability to estimate the area's further/ feasible tourism development and capacity, as well as required investment and expected tourism returns/ revenues, etc.
- The overall purpose of this tool is to provide decision support mechanisms for tourism development among all interested and involved parties (local authorities, tourism entrepreneurs, residents etc.), with the capacity to estimate, forecast and regulate tourism flows in space, time, and desirable/ sustainable types of tourism.

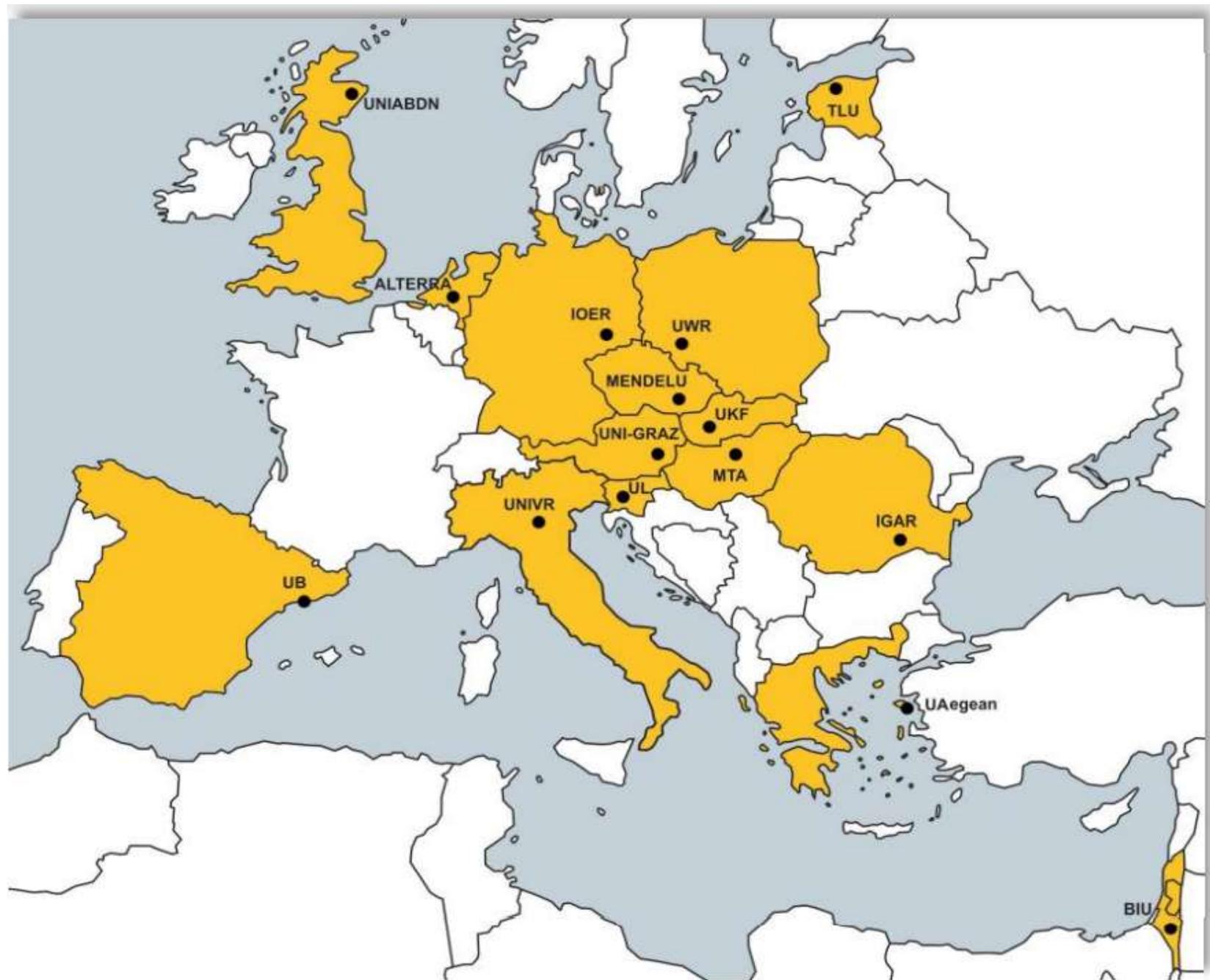
SPOT= «Social and Innovative Platform on Cultural Tourism and its Potential towards Deepening Europeanization»

General focus on cultural tourism and Europeanization, aiming towards sustainable development benefitting host communities and regional economies [<http://www.spotprojecth2020.eu>]

3-year Horizon2020 EU project (1/2020-12/2022), 15 partners/ case studies.

The project's aim was:

- To develop a new approach to understanding and addressing cultural tourism, to reflect patterns of travel in the 21st century,
- To address key cultural tourism challenges,
- To present best practices in cultural tourism, in connection with processes of Europeanization,
- To investigate ways in which cultural tourism can be used to develop social and economic cohesion/ growth and
- To create a new innovation tool to facilitate the development of cultural tourism.



SPOT partners

Mendel University in
Brno, Czech Republic

Bar Ilan University,
Ramat Gan, Israel

Wageningen University
& Research,
Wageningen,
Netherlands

CERS Institute for
Regional Studies, Győr,
Hungary

Institute of Geography
of the Romanian
Academy, Bucharest,
Romania

Tallinn University,
Estonia

Leibniz Institute of
Ecological Urban and
Regional Development,
Dresden, Germany

Institute of Geography
of the Romanian
Academy, Bucharest,
Romania

Karl Franzens
University of Graz,
Austria

University of Aberdeen,
United Kingdom

University of the
Aegean, Greece

Univerzity of Ljubljana,
Slovenia

University of Wrocław,
Poland

University of Verona,
Italy

University of
Barcelona, Spain

Constantine the
Philosopher University,
Nitra, Slovakia

SPOT work packages

WP 1: Collection, analysis and interpretation of quantitative and qualitative cultural tourism data.

WP 2: Investigation and organization of cultural tourism policies, strategies, practices.

WP 3: Development of the new and innovative SPOT-IT tool for cultural tourism.

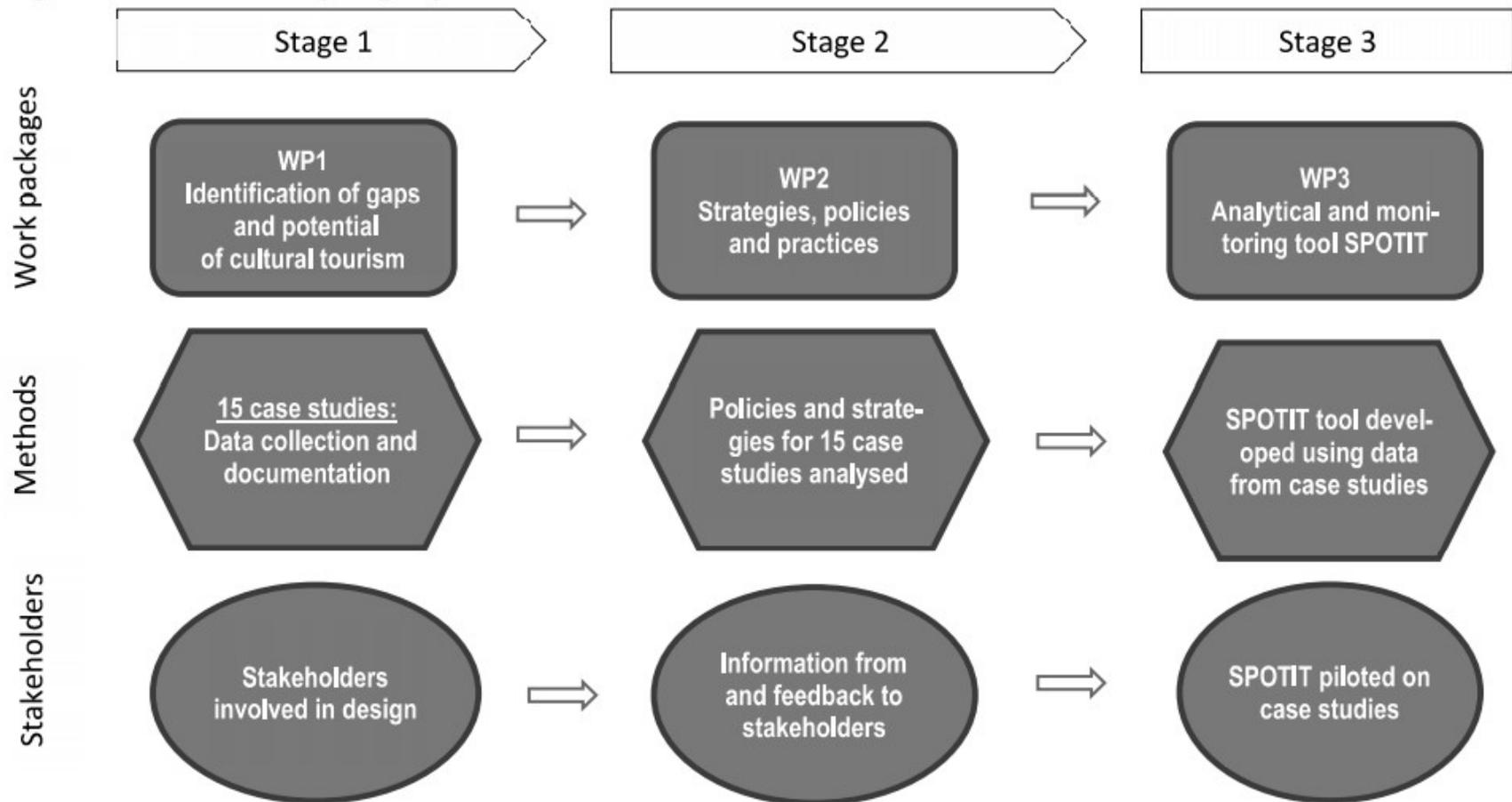
WP 4: Dissemination of the knowledge and research findings of the project.

WP 5: Project management and coordination of actions

WP 6: Ethics requirements

WP3: Development of the new and innovative tool for cultural tourism ('SPOT-IT') methodology

Figure 1. Interlinking of project elements



WP3: Development of the new and innovative tool for cultural tourism ('SPOT-IT')

- Development and implementation of a new and user-friendly innovation tool (SPOT-IT tool), developed by our Israeli partner, Bar-Ilan University.
- Based on GIS, a website was created that integrates interactive maps and other information.
- The aim was to create an interactive platform for exchanging information.
- Different layers of maps contain information related to cultural and natural areas/ landscapes serving as tourism attractions.
- The general purpose of this tool was to provide support to decision mechanisms for the development of cultural tourism attractions.

Our case study: the Cyclades

Research sites: Andros, Santorini, Syros



Description: SE corner of Europe, central Aegean Sea. Island archipelago, Mediterranean climate, dry conditions, low scrub vegetation, tectonism.

Reason for selection: most developed tourist destination, world-renowned for its landscape, cultural heritage and tourism attractions-where culture represents the islands' competitive edge vis-à-vis their competitors.

The cultural heritage of the Cycladic islands= multifold, spanning the whole historical timeline of human existence on earth (prehistory to present), i.e. the Aegean 'traditional architecture' is unique and world-famous (old villages, castle towns, rural structures, dovecots, windmills, etc).

Potential: very significant for the development of all tourism types, but especially for special-interest/ purpose, cultural and alternative tourism, in congruence with the landscape.

The Cyclades case study

1st stage: Collection of maps:

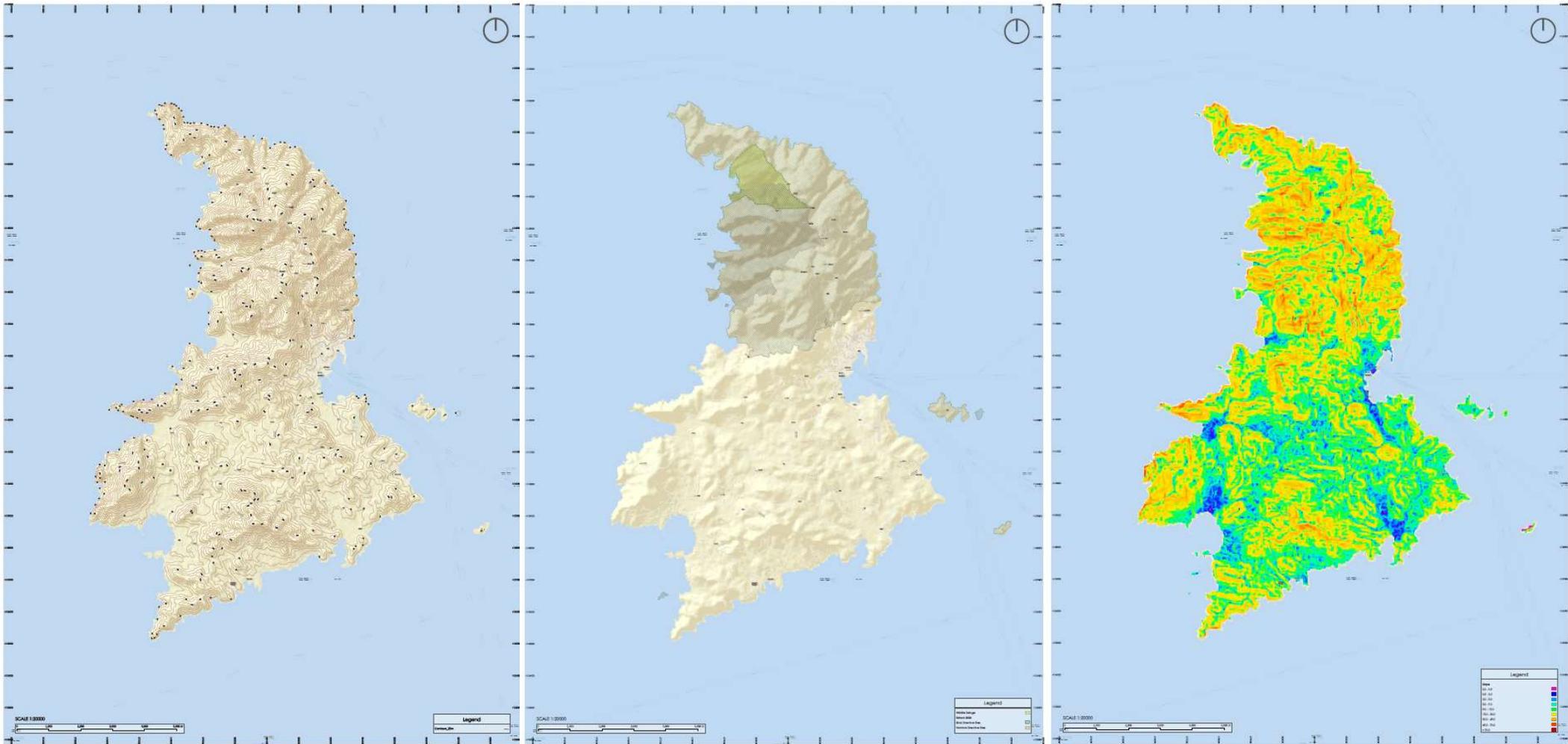
1. Contours/ digital elevation model
2. Wild Refuge and Natura 2000 areas
3. Slope gradient
4. Settlements (traditional protected and non-protected)
5. Roads and paths network
6. Cultural elements (archaeological sites, churches, memorials, museums, etc)
7. Tourism attractions (caves, beaches, sport areas)
8. Hotels, restaurants, tourist offices, etc.
9.

More data can be added to the SPOT-IT tool

2nd stage: Uploading the GIS maps to the SPOT-IT tool platform

3rd stage: Suitability analysis and Visitor prediction analysis

Syros-Physiographic elements

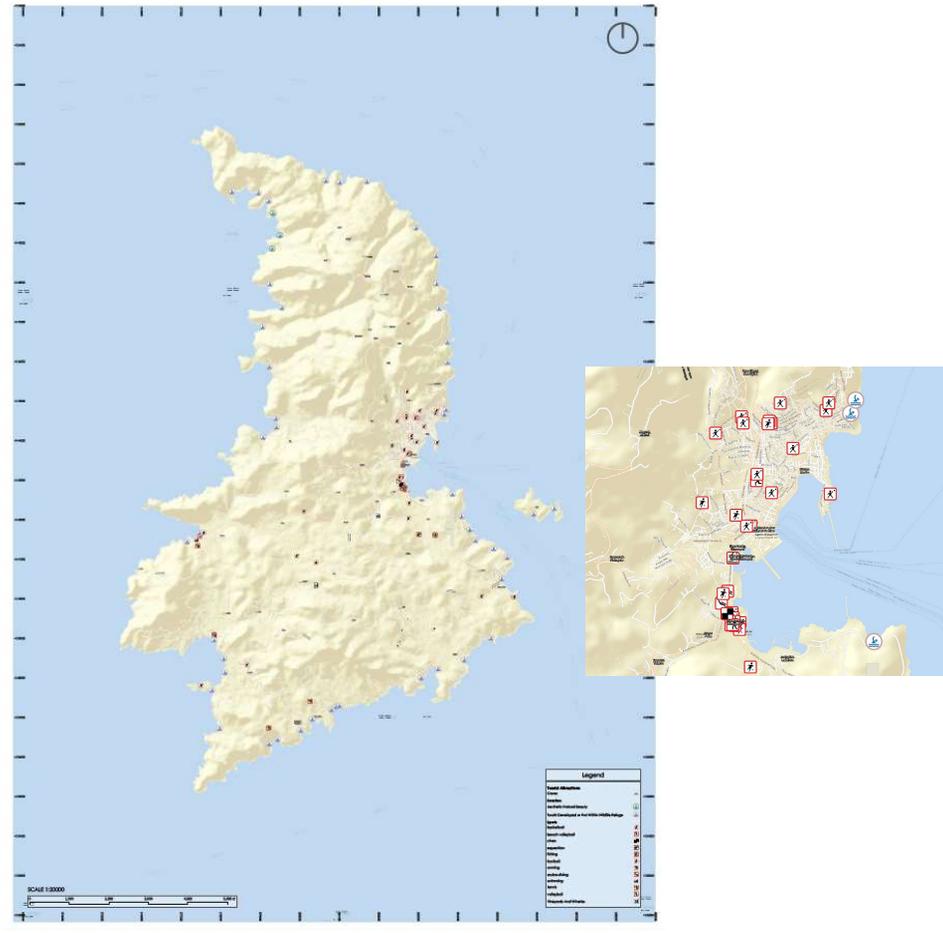


Contour map

Wild Refuge and Natura 2000 map

Slope Gradient map

Syros-Cultural elements



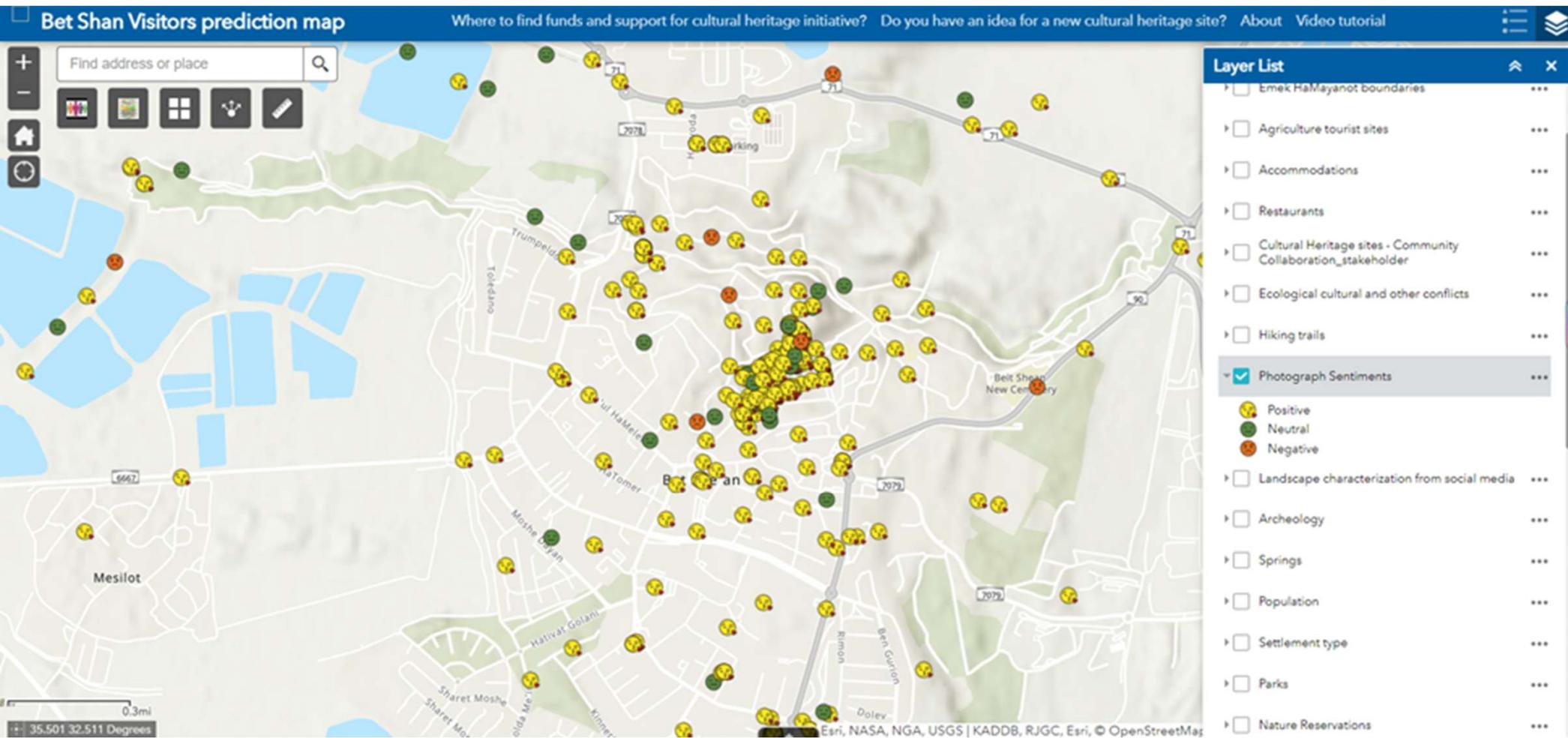
Places of special tourism interest (Beaches, Caves, Sports fields, etc.)



Tourism infrastructures (Restaurants, Hotels 4, 5*, Tourist offices)*

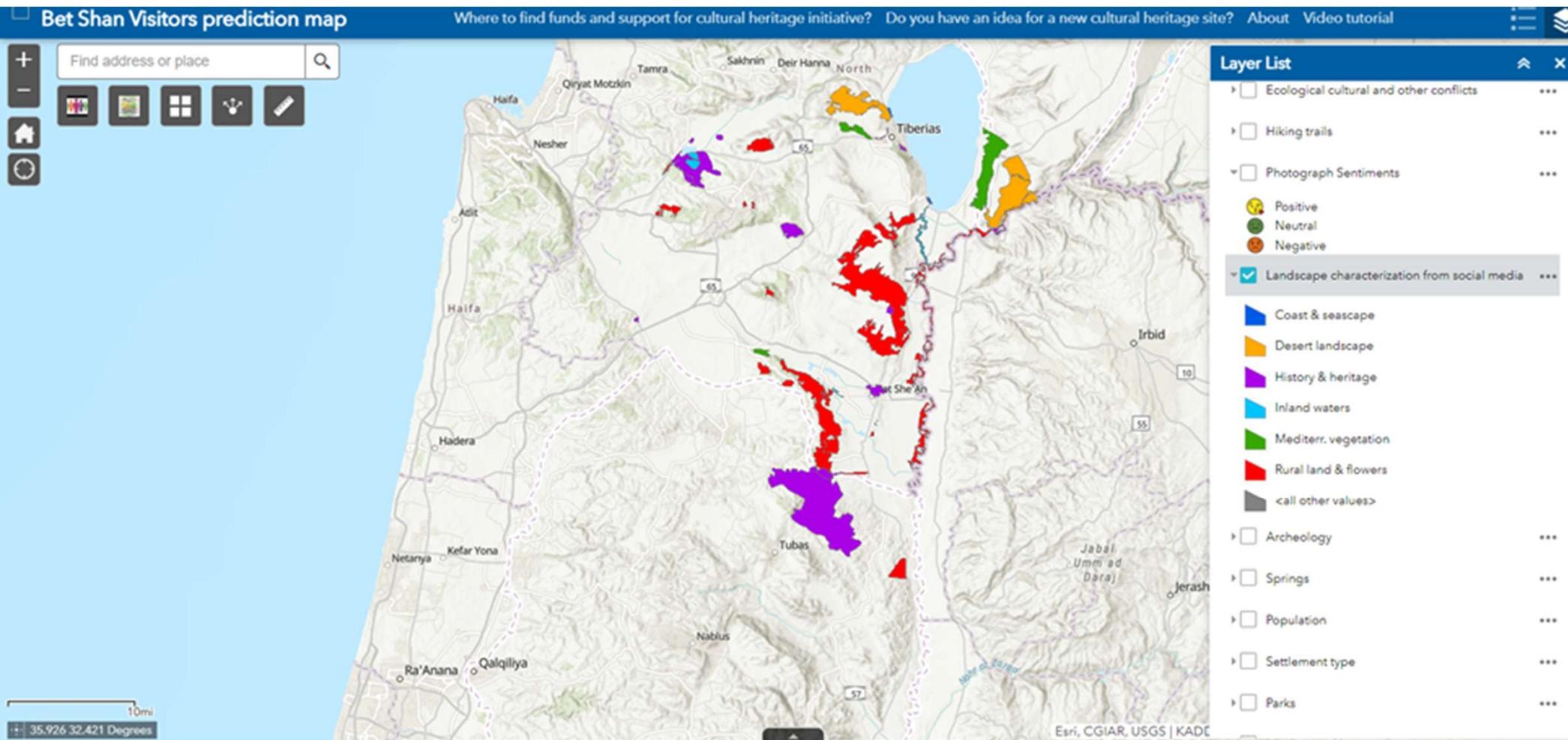
The case of Israel-Bet-Shean area

The sentiment layer (based on Michael Sinclair's sentiment analysis of visual data based on social media)



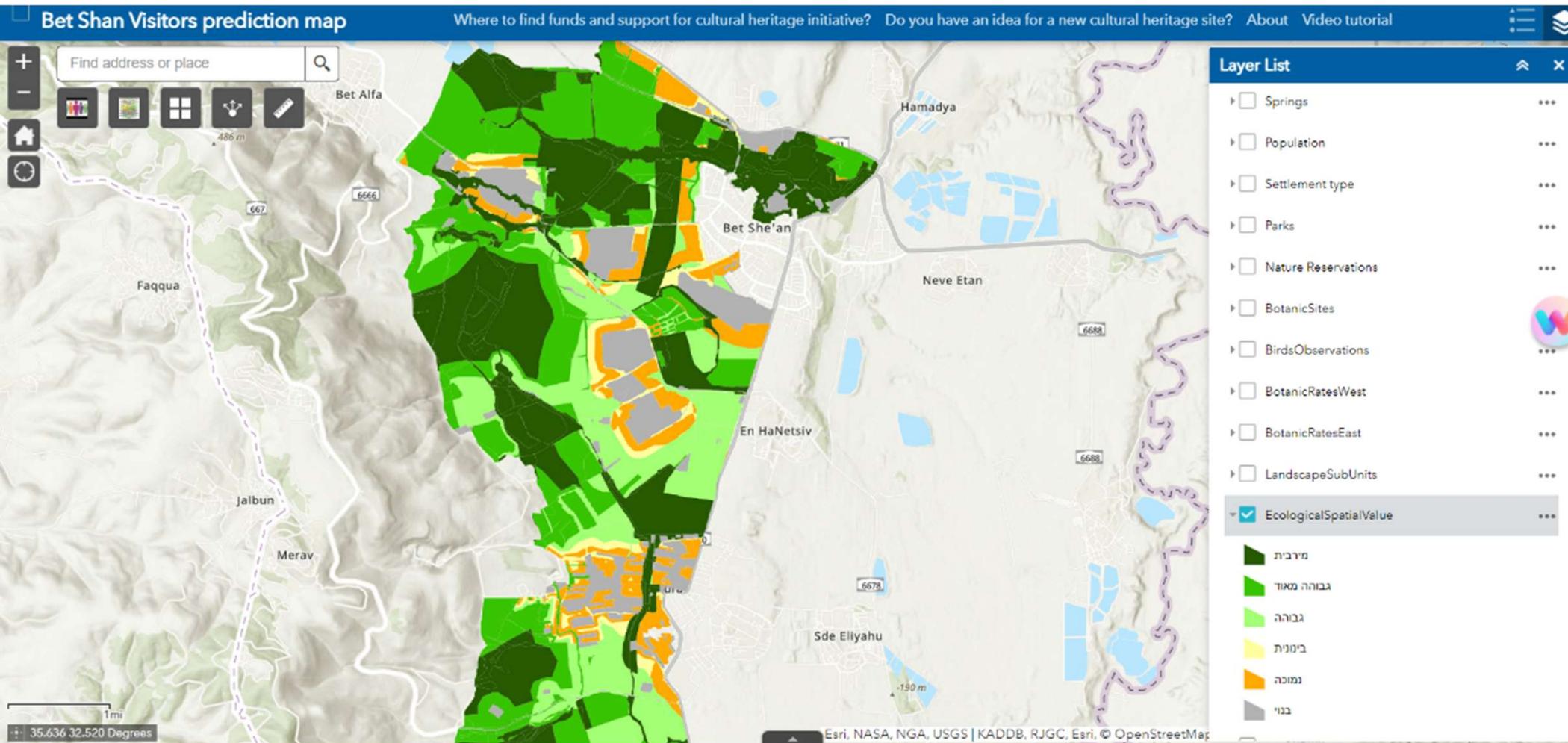
The case of Israel-Bet-Shean area

Landscape characterization layer from social media



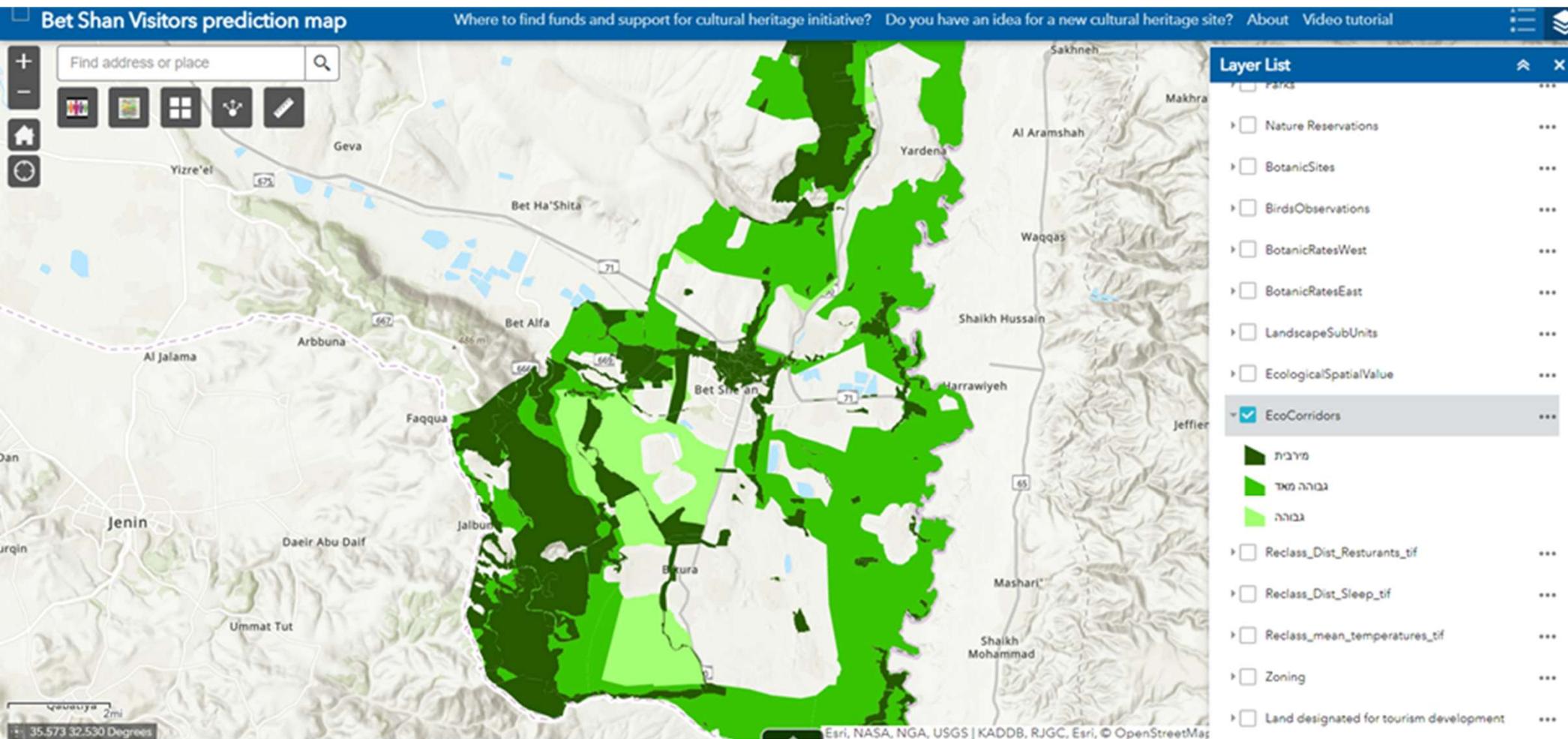
The case of Israel-Bet-Shean area

A layer that indicates ecological sensitivity by pixel area (based on Israeli National survey data). In the legend: dark green represents the highest sensitivity, orange the lowest, and gray stands for built area.



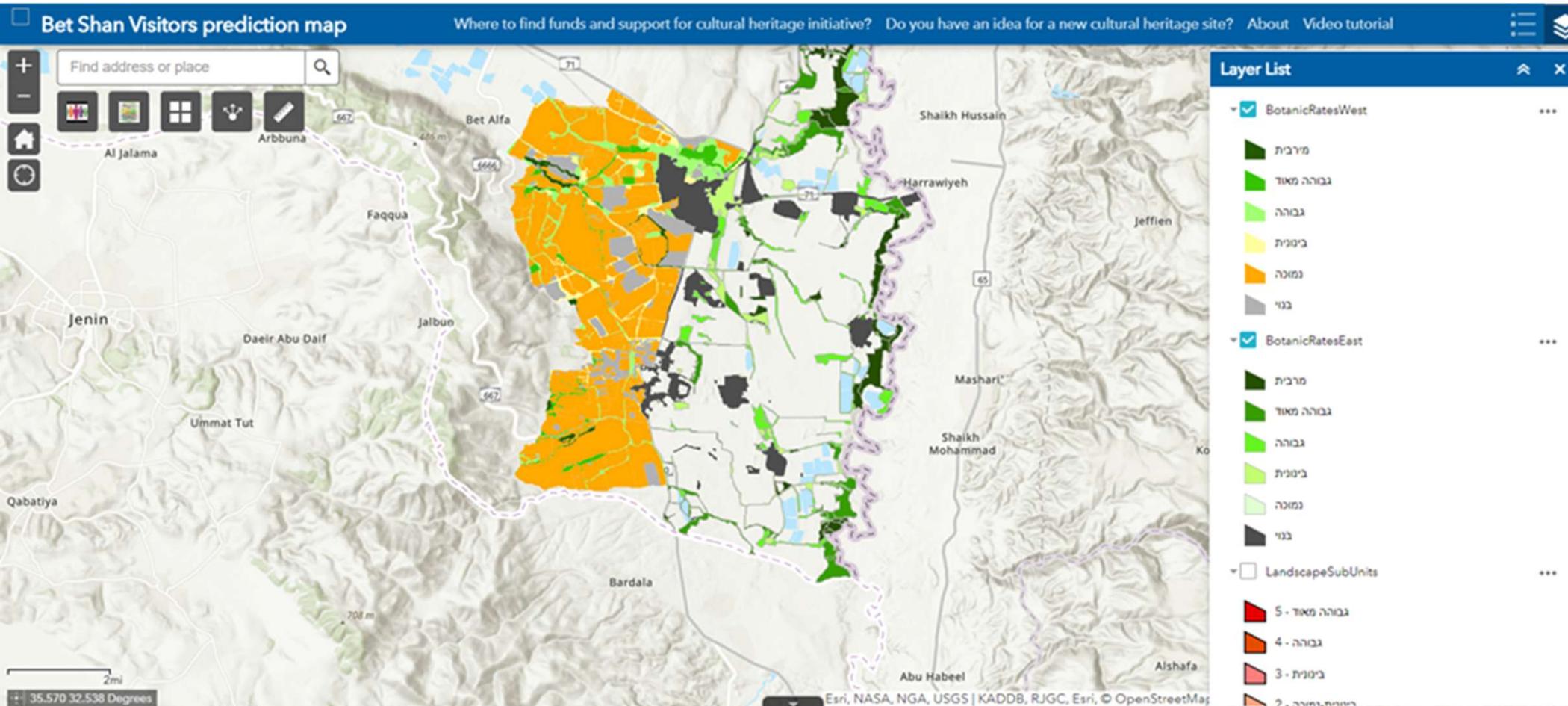
The case of Israel-Bet-Shean area

A layer that indicates the importance of a pixel area as an ecological corridor (based on an Israeli national survey). The darkest green indicates high importance and the brightest green the lowest one.



The case of Israel-Bet-Shean area

The 2 first layers represent the extent to which plants/vegetation in the case study area are considered endangered, based on an Israeli national survey—with darker colors representing high vulnerability and bright colors low vulnerability.



WP3: Development of the new and innovative tool for cultural tourism ('SPOT-IT')

Primarily, the SPOT-IT tool aims to:

- ✓ assess the feasibility of creating or developing points of tourist interest in any given geographical area based on its particular characteristics
- ✓ assess current as well as potential accessibility to these designated points
- ✓ evaluate the overall tourism offer of the surrounding area
- ✓ examine the possibilities of providing a more attractive experience by linking destinations and/or experiences, with economic return/investment
- ✓ estimate the required investment for a specified point of tourist interest
- ✓ predict the number of visitors to the designated attraction (based on previous estimates and reference to other venues/destinations with similar characteristics)
- ✓ estimate potential revenue per visitor

WP3: Development of the new and innovative tool for cultural tourism ('SPOT-IT')

Cultural Heritage sites - Community Collaboration

This application enables community members to share ideas about new potential cultural heritage sites. For more information please visit <http://www.spotprojecth2020.eu>.



Untitled date/time question

Date & Time

suggest a location for the new site:*



Site's theme

What will be the main theme of the site?

Value of interest to tourist from abroad

Local National International

Description*

1000

Files upload

You can upload a document (up to 10 MB) to support your suggestion

Select file (Support: pdf, doc, docx, xls, xlsx, pptx, ppt, txt)

Picture*

Please add a picture of the site

1 Select image file (number of files allowed: 1 - 10)

Name

Enter your full name here (optional)

Email

Enter your email here (optional)

WP3: Development of the new and innovative tool for cultural tourism ('SPOT-IT')

The different integrated information levels of the SPOT-IT tool aim at (cultural) tourism decision-making and accommodate:

- **Businesses.** Facilitate data-driven investment decisions at a destination with high cultural potential, accessibility, tourism infrastructure, etc., also including applications for financial support.
- **Local/regional government.** They provide support to local/regional cultural tourism initiatives, based on their potential economic and social contribution to the region, e.g. maintaining income and employment in the area, strengthening local self-sufficiency, pride and identity, etc.
- **Corporate partnerships.** They provide support in the identification of potential public & private sector partnerships and the development of consortia at the national and European levels.
- **Contribute to policy-making and financial interventions** to support initiatives in disadvantaged areas where cultural tourism potential is considered important but basic infrastructure is lacking.

Conclusively

- SPOT-IT is a flexible tool that can incorporate many sources and types of information adjusted to the needs of its user(s).
- It provides an interactive platform among researchers and the general public.
- It may integrate any number of landscape types, parameters and elements.
- The inclusion of landscape parameters, attributes, and other tourism-related landscape dimensions in such an innovative integrative tool becomes a very promising field for the incorporation of landscape in tourism planning, management and practices.
- Our ongoing study illustrates such a pilot application of the SPOT-IT tool to (cultural) tourism development, incorporating landscape parameters, in the Cyclades, Greece, and specifically in the islands of Andros, Santorini and Syros.