

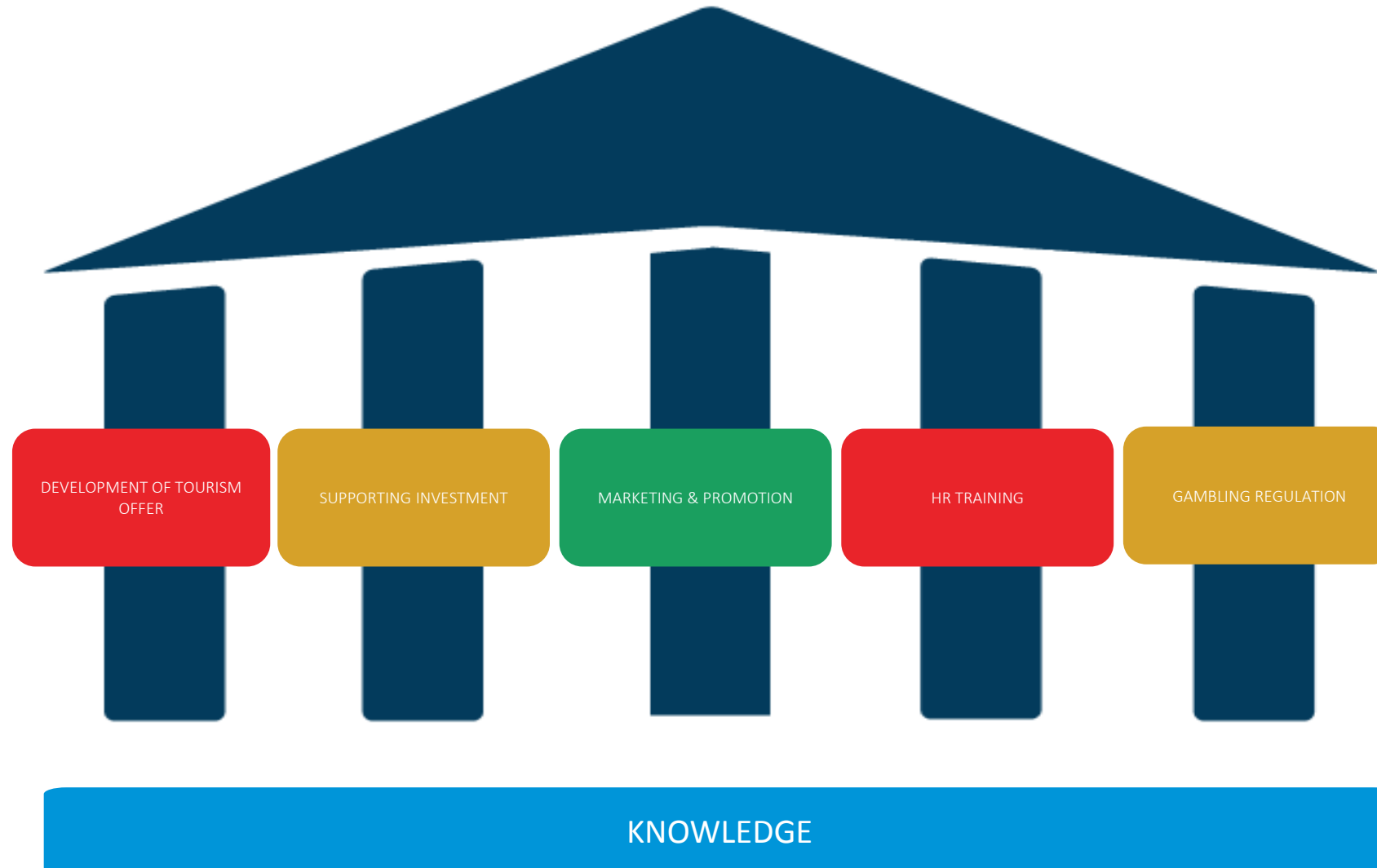
Using mobile and geodata to support crisis management

Sérgio Guerreiro
Turismo de Portugal



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National Tourism Authority



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Portugal police drive fuel trucks as strike bites

13 August 2019



Top Stories

WORLD NEWS AUGUST 10, 2019 / 7:29 PM / A MONTH AGO

Portugal's fuel-tanker drivers vote to go ahead with strike

Catarina Demony

2 MIN READ



LISBON (Reuters) - Portugal's fuel-tanker drivers voted on Saturday to strike from Monday for an indefinite period, raising fears about the impact on the country's tourism-dependent economy during the busy summer season.



Context

August 2019

				Thu	Fri	Sat
				1	2	3
Sun	Mon	Tue	Wed	Thu	Fri	Sat
4	5	6	7	8	9	10
Sun	Mon	Tue	Wed	Thu	Fri	Sat
11	12	13	14	15	16	17
Sun	Mon	Tue	Wed	Thu	Fri	Sat
18	19	20	21	22	23	24
Sun	Mon	Tue	Wed	Thu	Fri	Sat
25	26	27	28	29	30	31

3103k

Hotel Guests

9292k

Overnight Stays

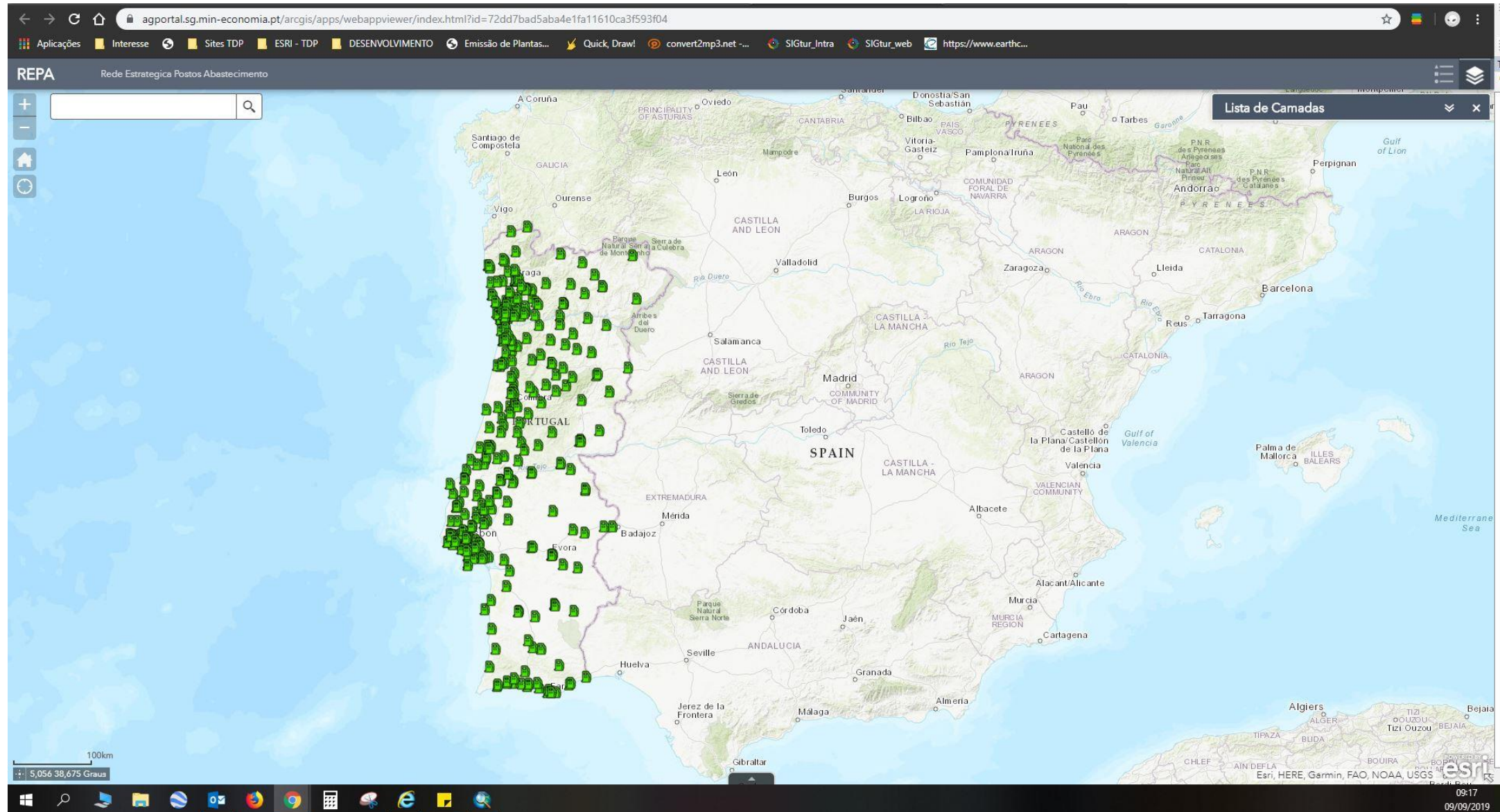
82.1%

Occupancy Rate

Challenge!

**How to minimize the
impacts of the fuel crisis to
the tourism industry?**

Emergency Gas Stations Network



Role of NTO's in Crisis Management?



Project Objectives

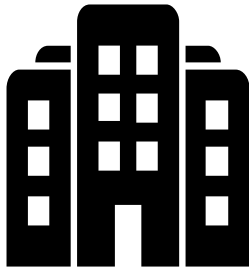
Use big data sources to anticipate impacts of the fuel crisis in the tourism industry

- to provide accurate data to discuss with Homeland Affairs Ministry the definition of the Emergency Gas Stations Network, in order to minimize the impacts for tourists and tourism accommodation
- to identify and quantify gap areas following the definition of the Emergency Gas Stations Network
- to support communication and advisory to tourists and hoteliers on how the best way to mitigate impacts of the crisis

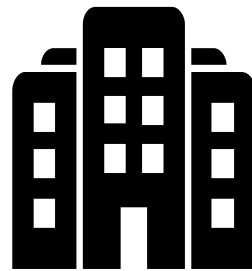
1. Data Sources



Data Sources



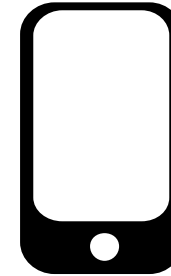
Hotels
(geodata)



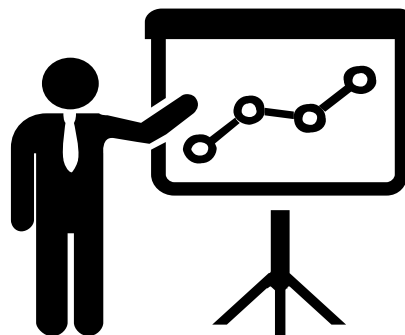
Hotels
(statistics)



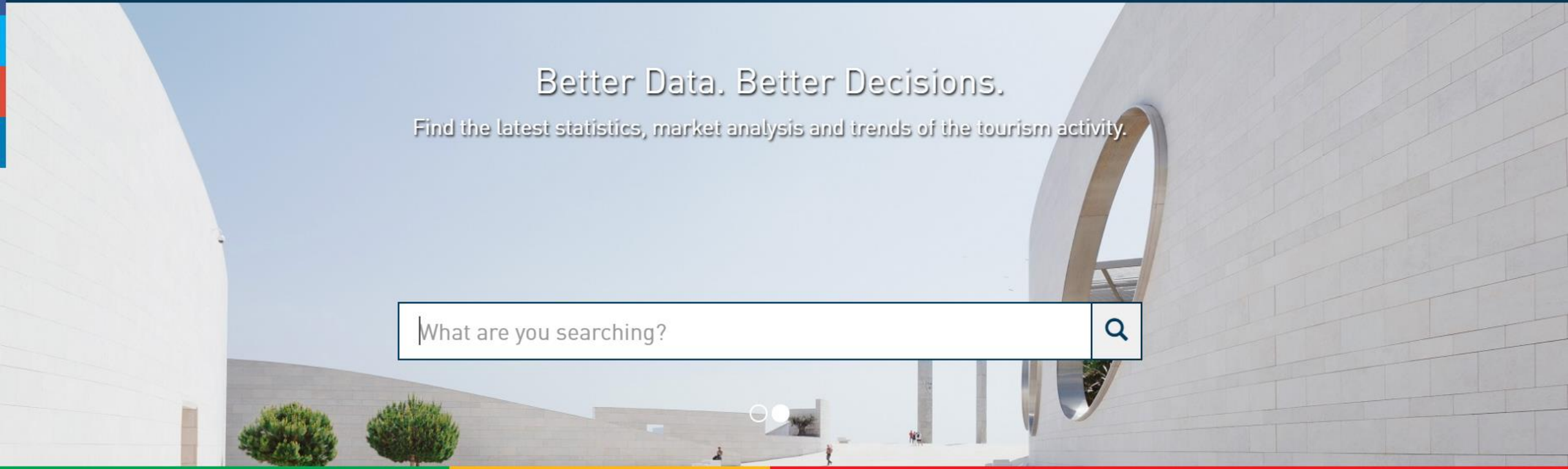
Gas Stations
(geodata)



Mobile Data



Integrated View



Better Data. Better Decisions.

Find the latest statistics, market analysis and trends of the tourism activity.

Overnight Stays

Guests

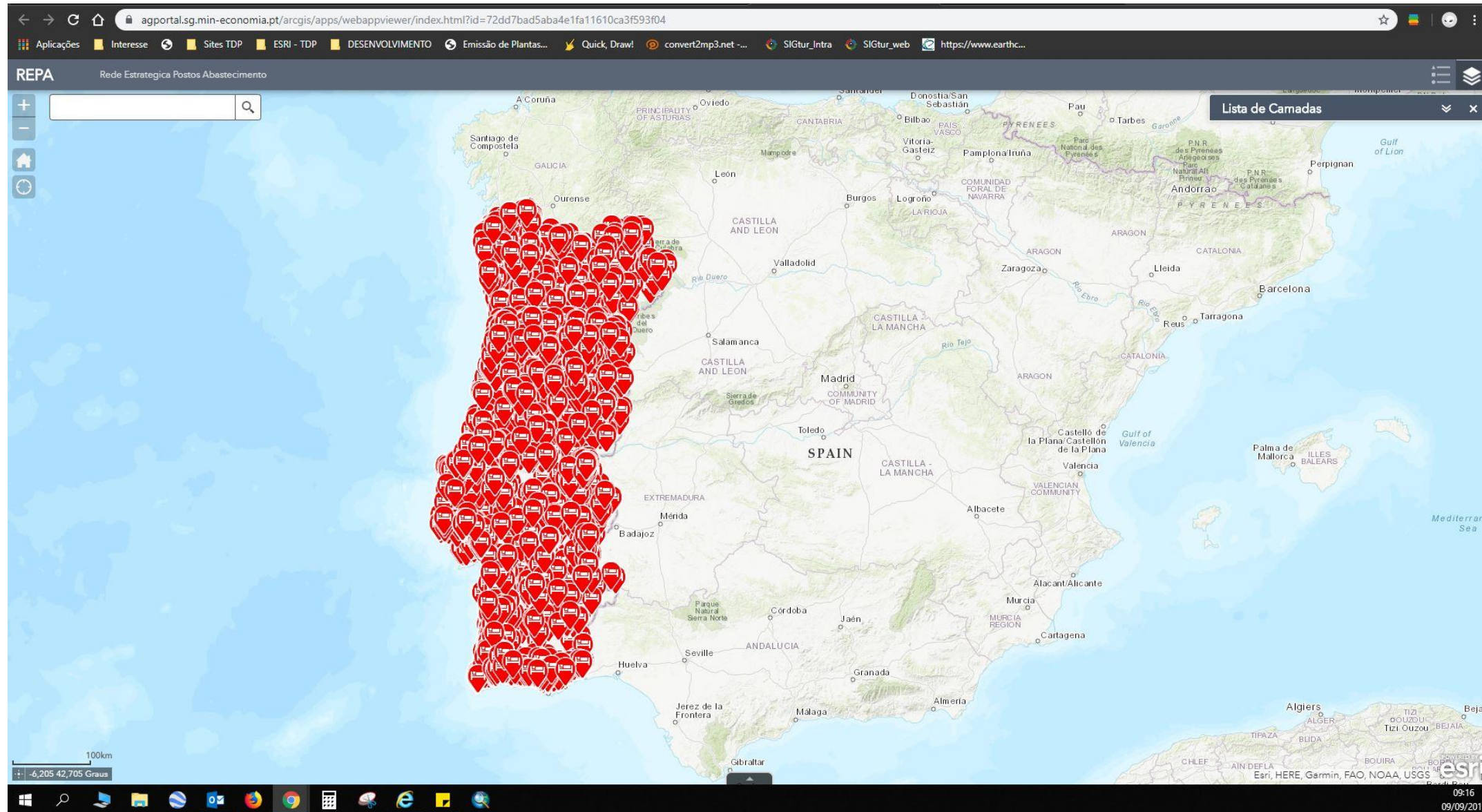
Total Revenue

Tourism Receipts

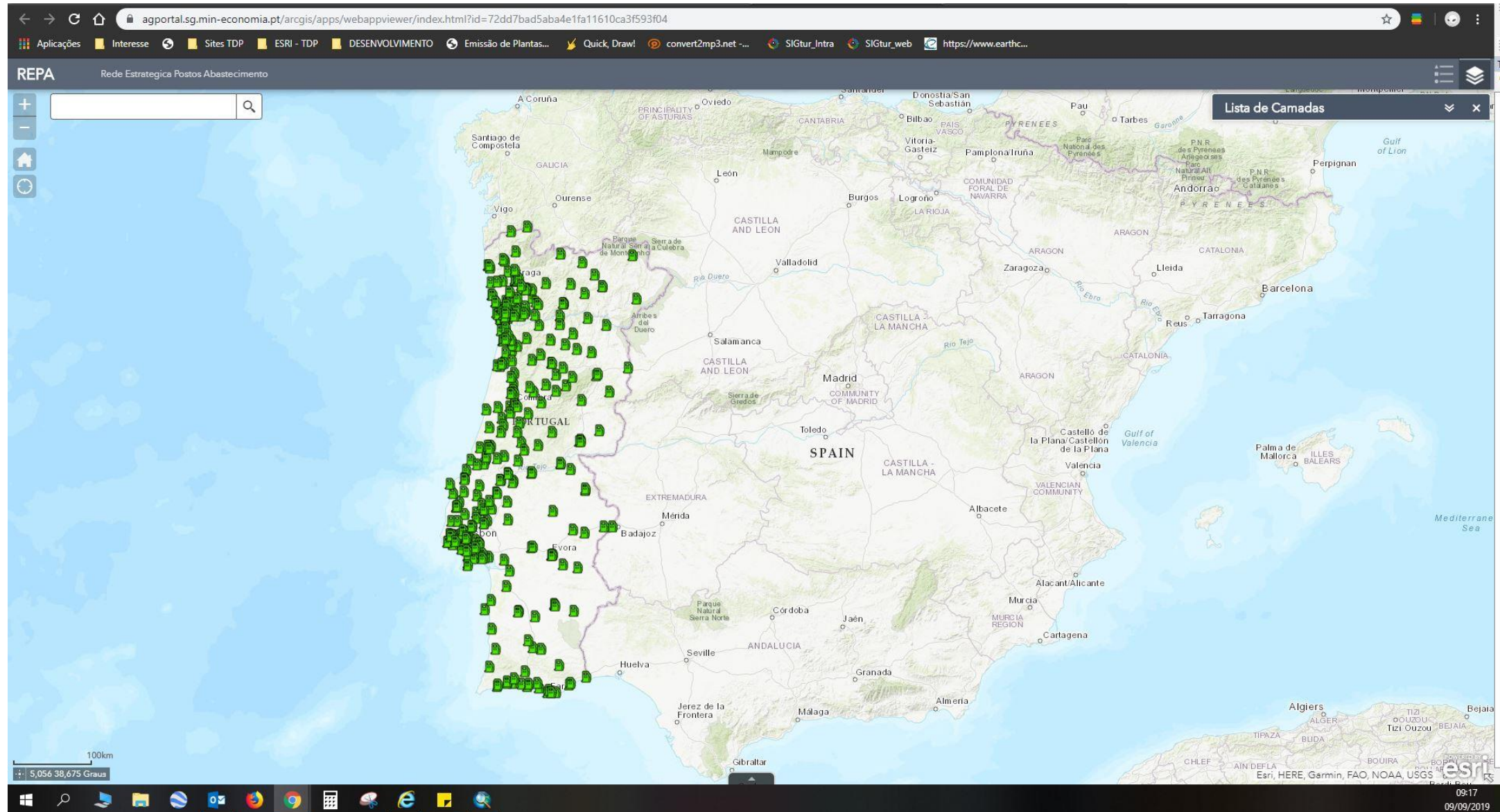
2. Outputs



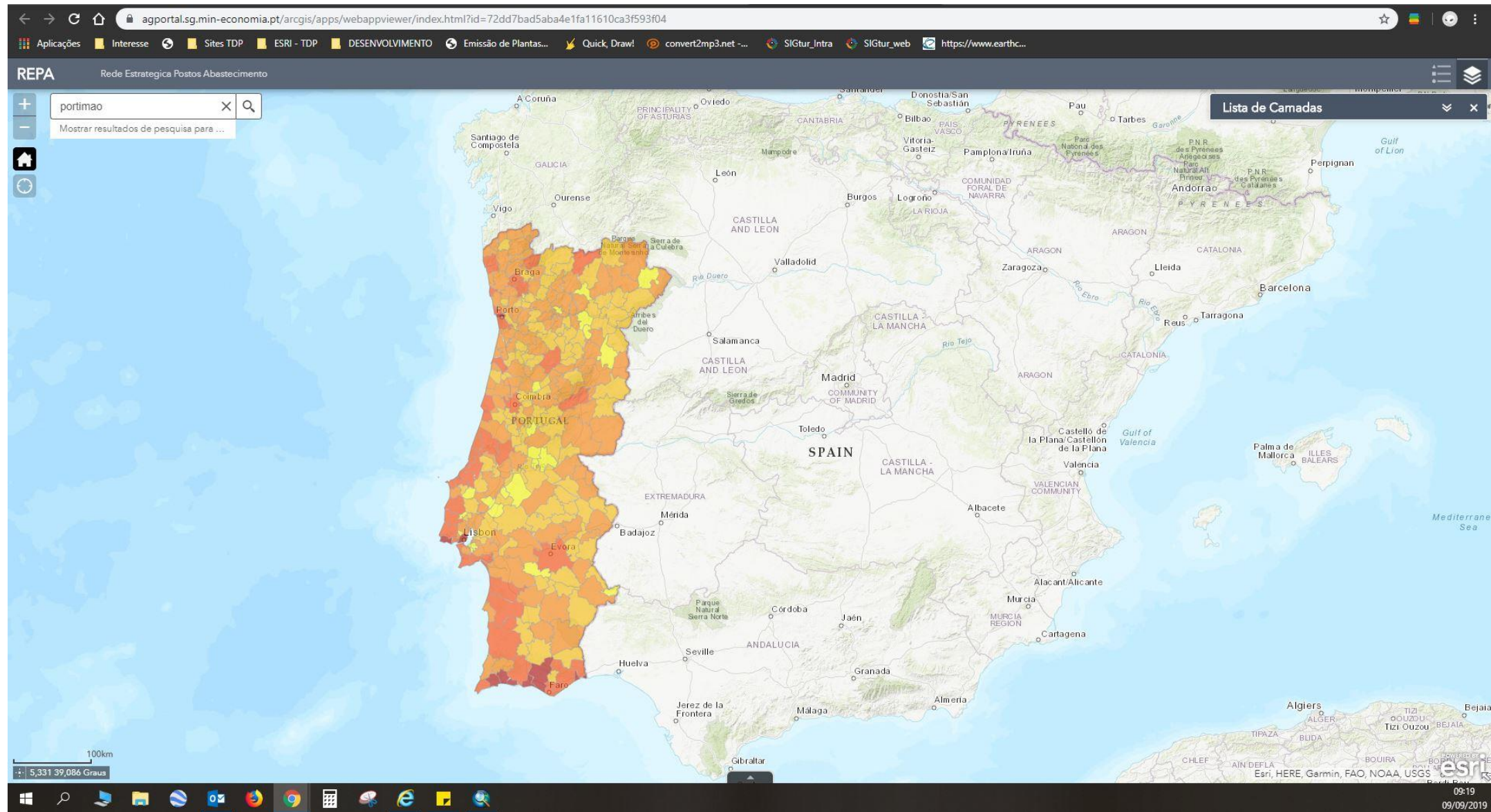
TravelBI GIS: Hotels & Similar Estab.



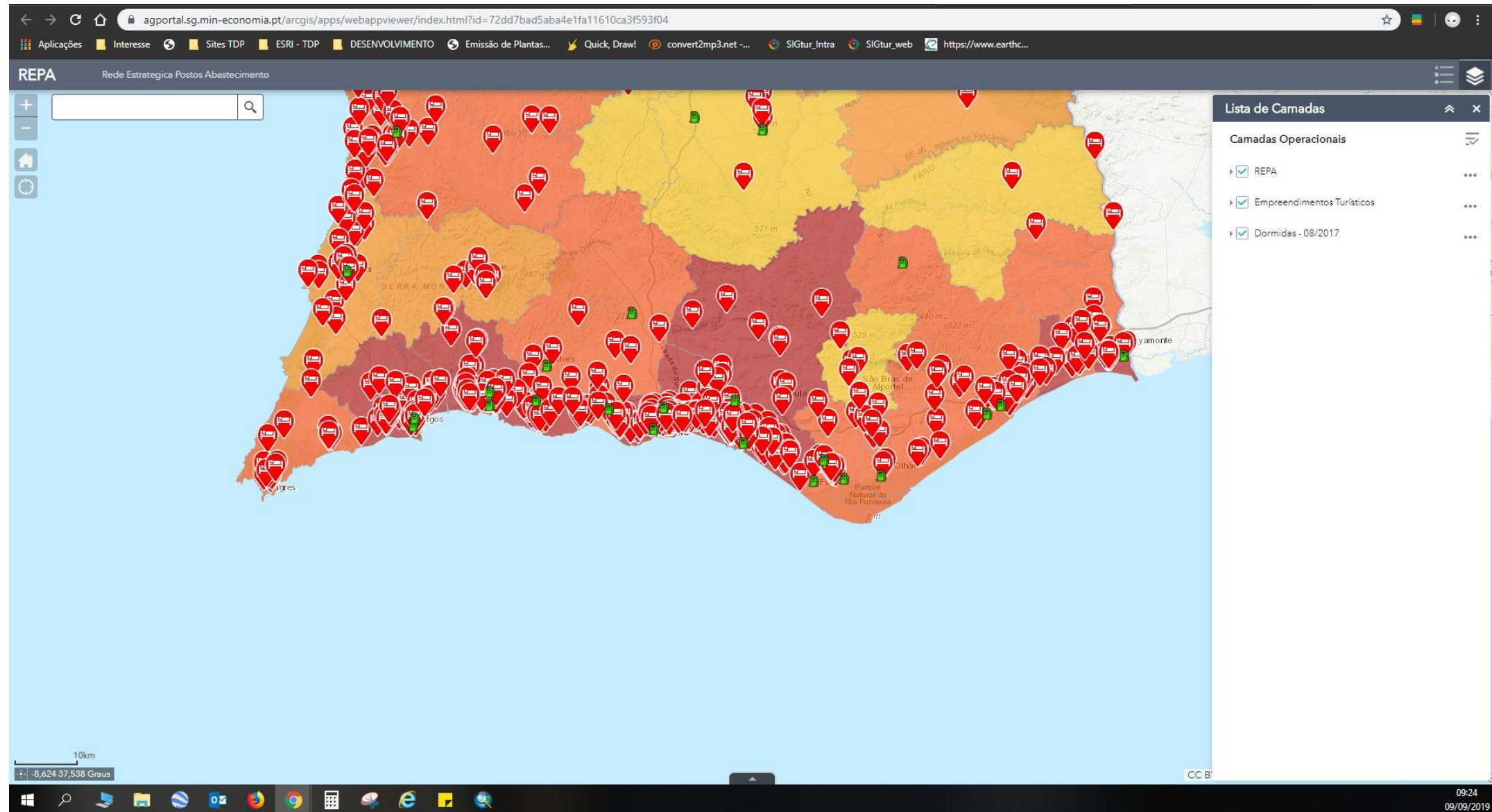
TravelBI GIS: REPA Gas Stations



TravelBI GIS: Overnight stays (Aug'17)



TravelBI GIS: integrated view

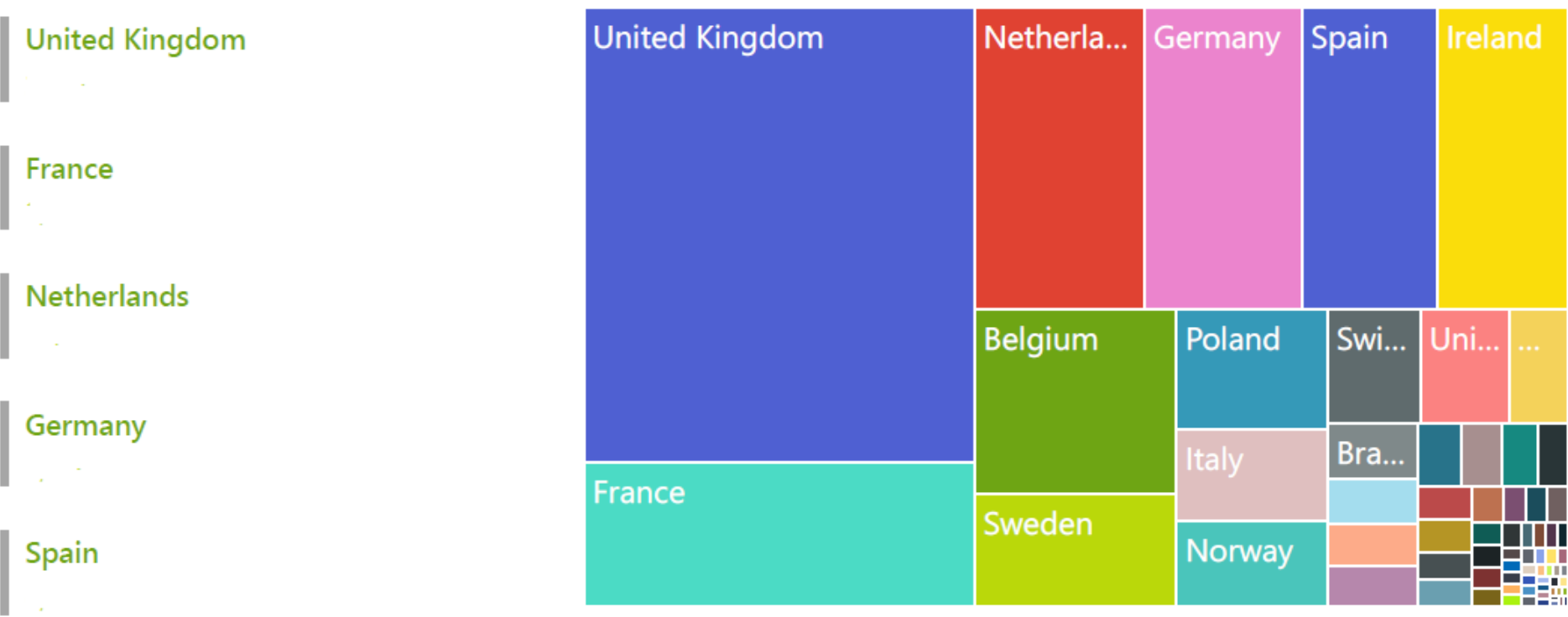


The screenshot displays a web GIS application interface. The browser address bar shows the URL: `agportal.sg.min-economia.pt/arcgis/apps/webappviewer/index.html?id=72dd7bad5aba4e1fa11610ca3f593f04`. The application title is "REPA Rede Estrategica Postos Abastecimento". The map shows a geographical area of Portugal with a color-coded background and numerous red location markers. A search bar is visible in the top left. On the right side, a "Lista de Camadas" (Layers List) panel is open, showing the following layers:

- Camadas Operacionais
 - REPA
 - Empreendimentos Turísticos
 - Dormidas - 08/2017

The bottom of the screen shows a Windows taskbar with various application icons and a system tray displaying the date and time: 09:24 09/09/2019. A scale bar indicates 10km, and the coordinates are -8,624 37,538 Graus.

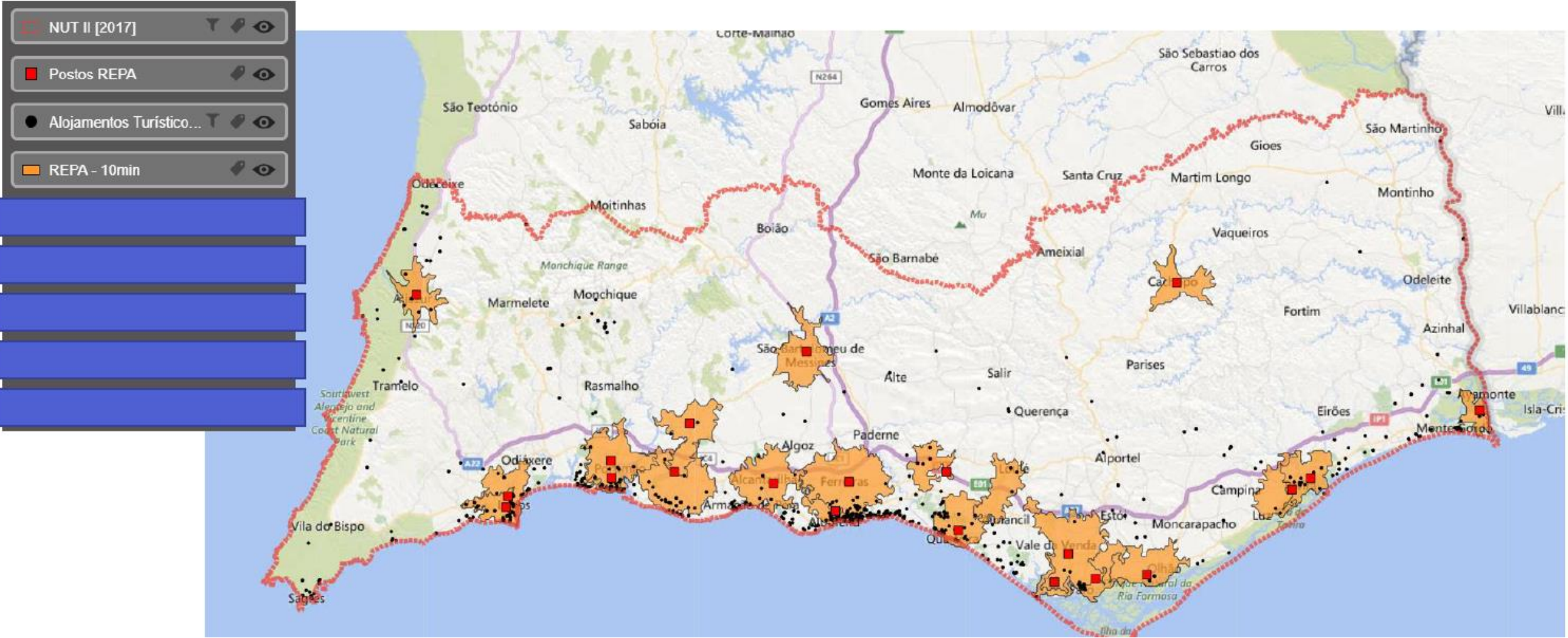
NOS Telecom: tourists 1-15 July 2019



- 01-Jul-19
- 02-Jul-19
- 03-Jul-19
- 04-Jul-19
- 05-Jul-19
- 06-Jul-19
- 07-Jul-19
- 08-Jul-19
- 09-Jul-19
- 10-Jul-19
- 11-Jul-19
- 12-Jul-19
- 13-Jul-19
- 14-Jul-19
- 15-Jul-19

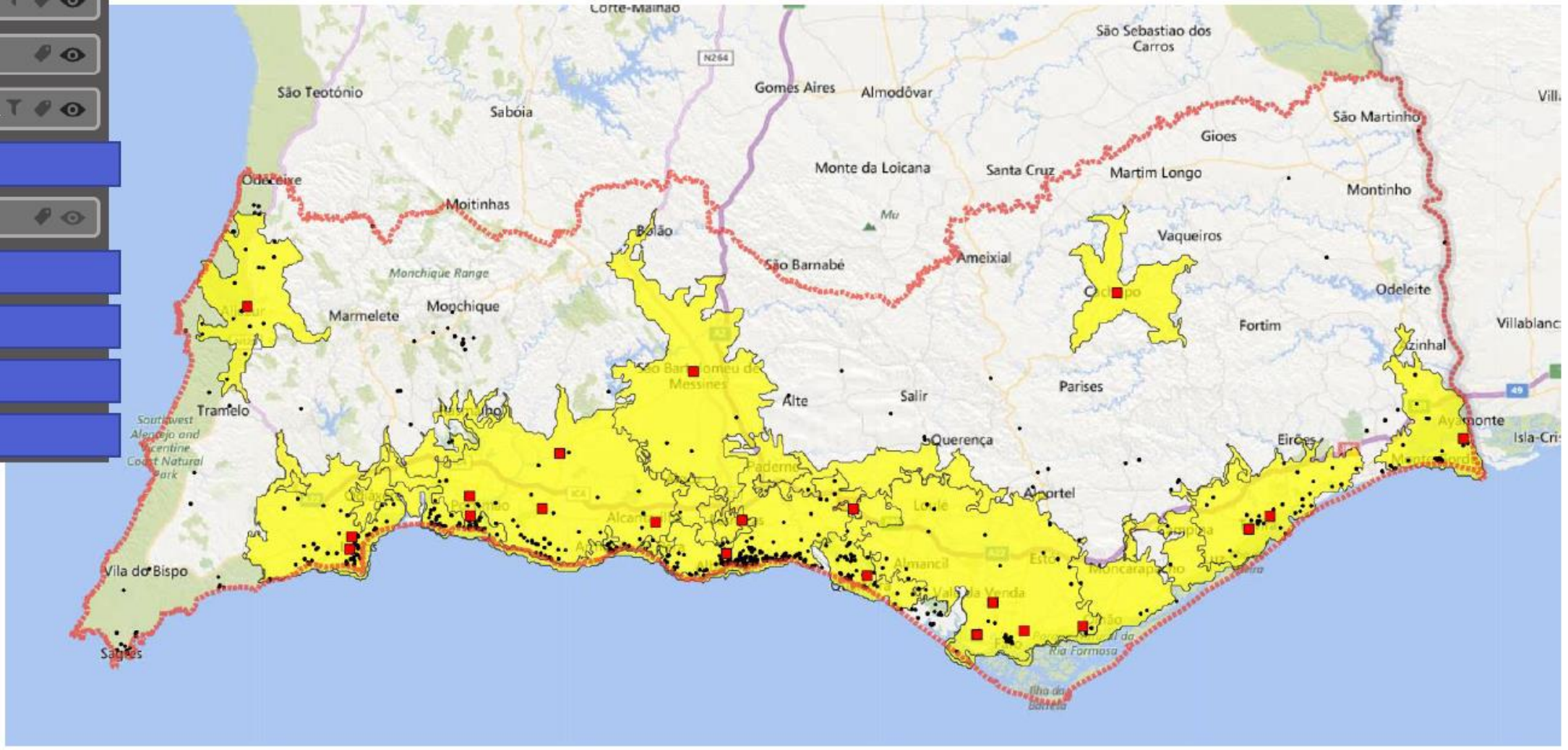
ALBUFEIRA	ALJEZUR	FARO	LAGOS	MONCHIQUE	PORTIMÃO	SILVES	VILA DO BISPO
ALCOUTIM	CASTRO MARIM	LAGOA	LOULÉ	OLHÃO	SÃO BRÁS DE ALPORTEL	TAVIRA	VILA REAL DE SANTO ANTÓNIO

NOS Telecom: drive time from REPA stations

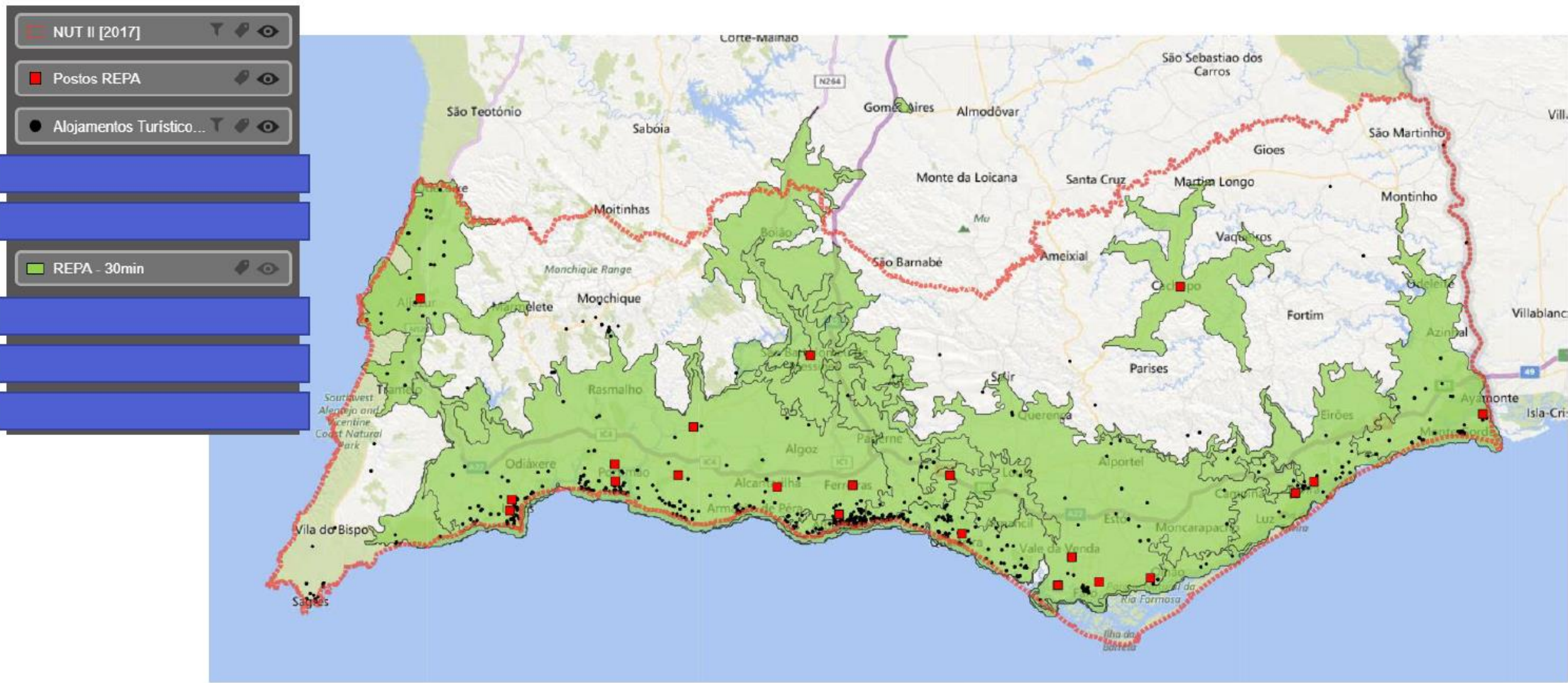


NOS Telecom: drive time from REPA stations

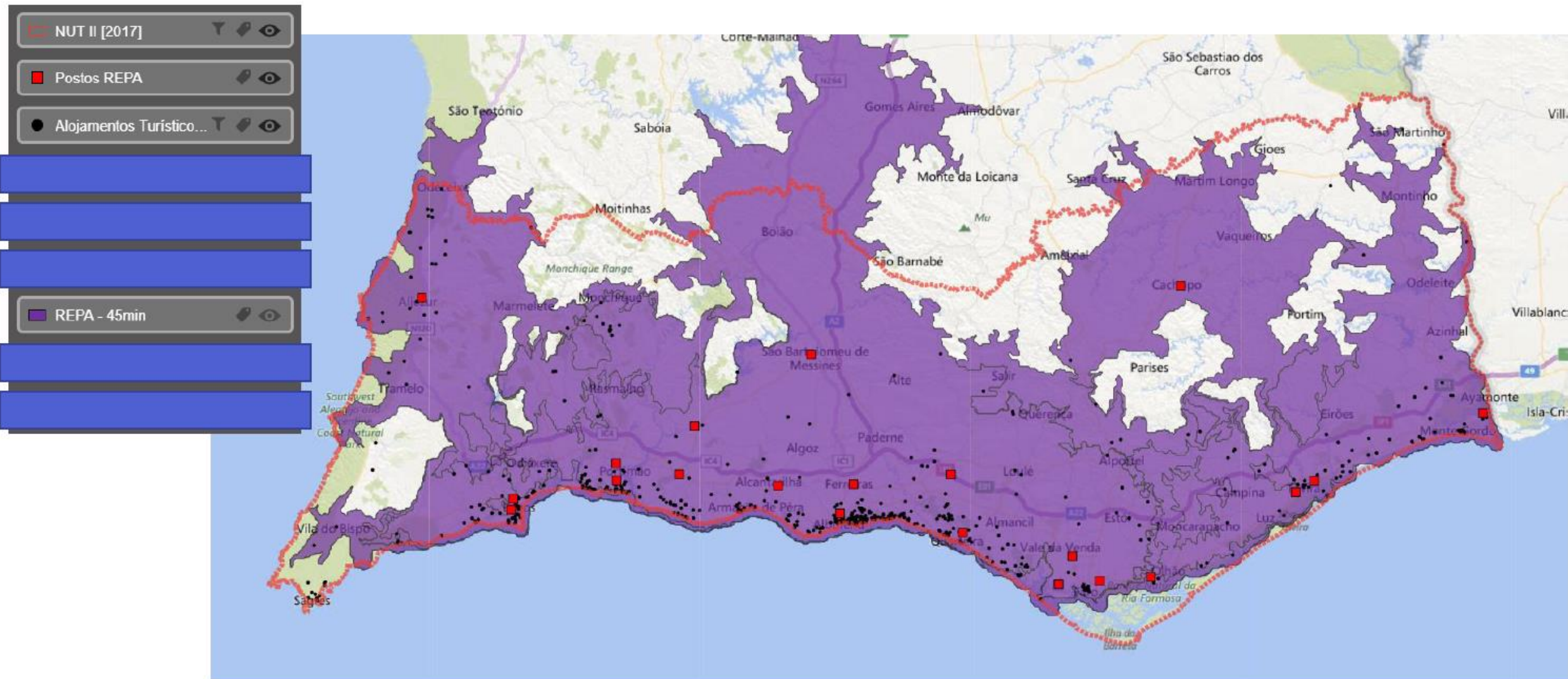
- NUT II [2017]
- Postos REPA
- Alojamentos Turístico...
- REPA - 20min



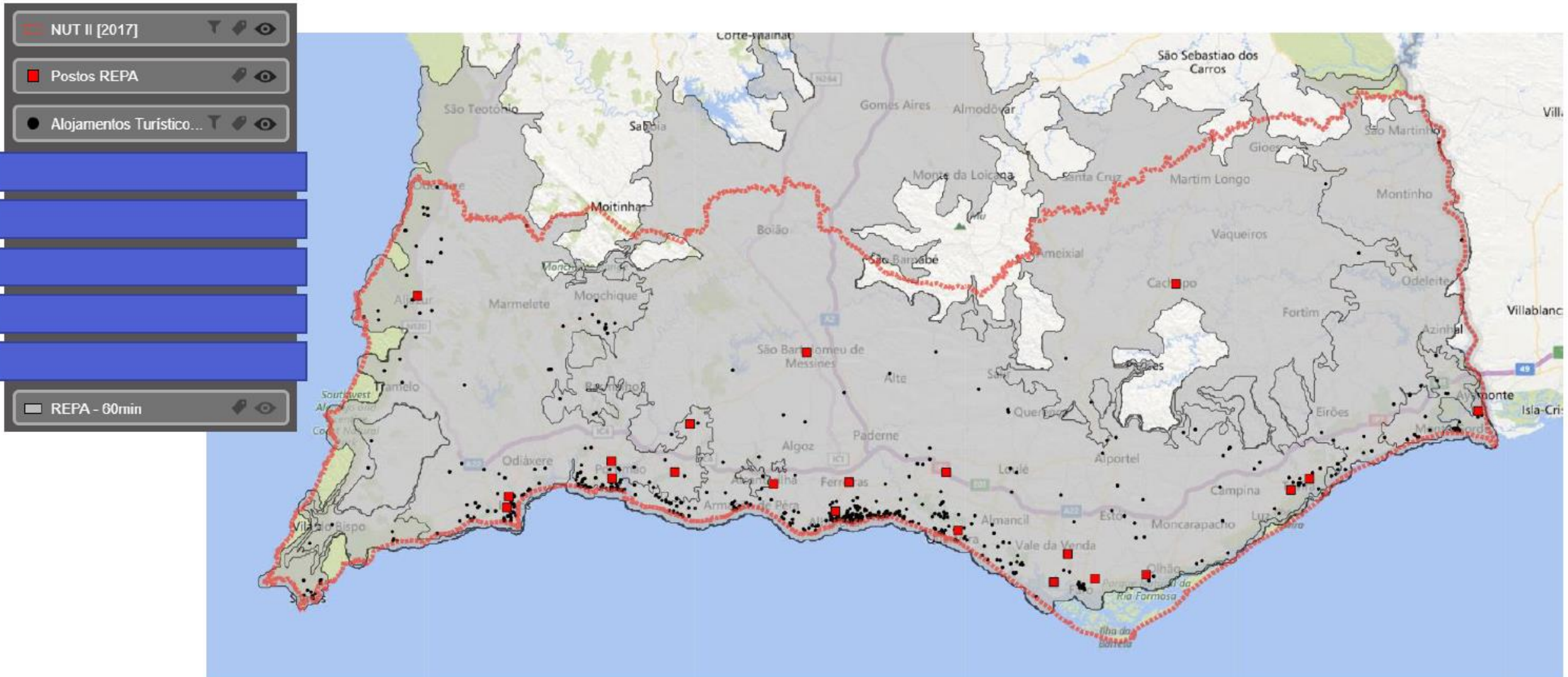
NOS Telecom: drive time from REPA stations



NOS Telecom: drive time from REPA stations



NOS Telecom: drive time from REPA stations



Lessons learned

- leadership and focus – pick the right questions!
- find the right team – data analysts, statisticians, data scientists
- network effect - collaboration is mandatory!
- dealing with stress
- continuous access to data is critical for regular monitoring (cost, skills, ...)
- dealing with “frustration” - invisible work is good

Thank you!

Sérgio Guerreiro | sergio.guerreiro@turismodeportugal.pt



Special thanks to:

Ana Caldeira | Turismo de Portugal

Lisete Vieira | Turismo de Portugal

Luís Mendes | Turismo de Portugal

João Ricardo Moreira | NOS

Tiago Ribeiro | NOS

Raquel Carvalho | NOS