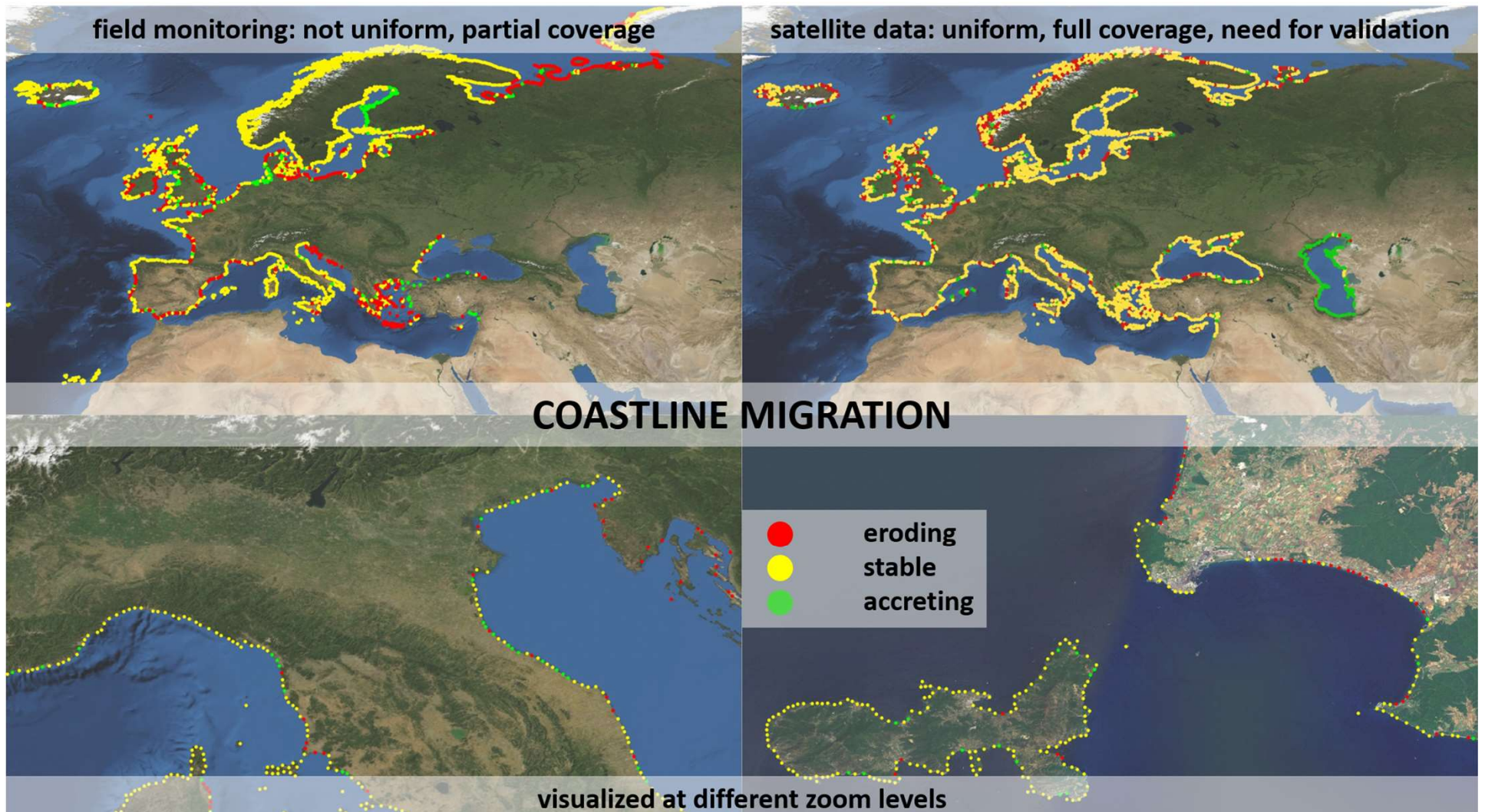
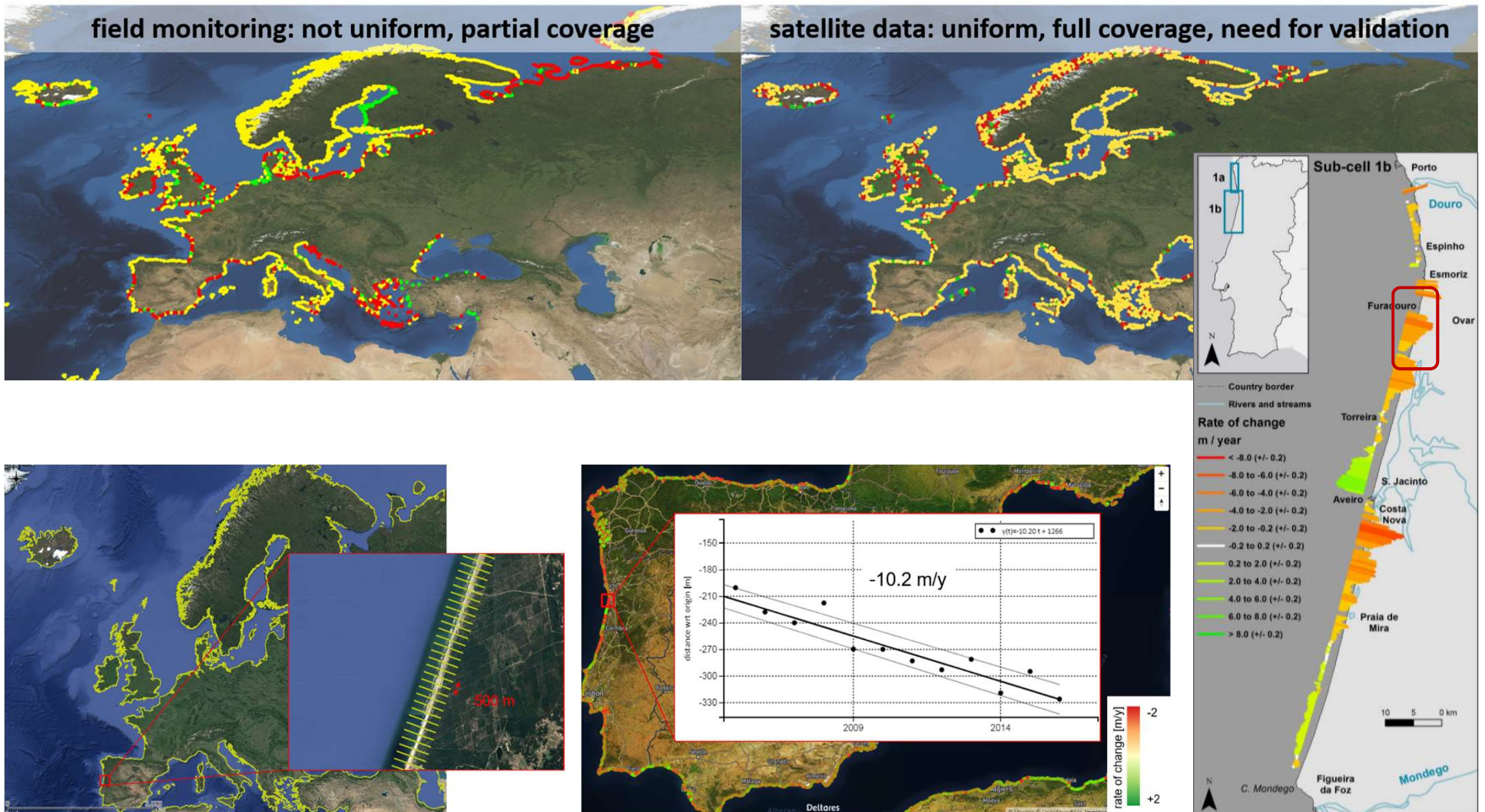


# Two ways to look at the changing coastline





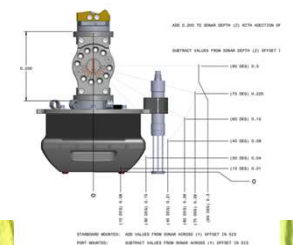
# Comparing and merging the datasets



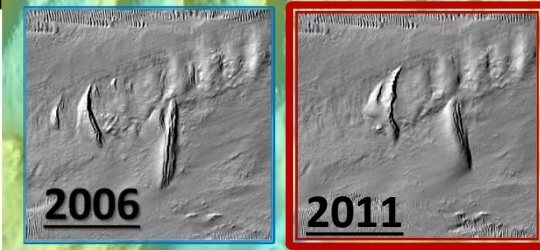
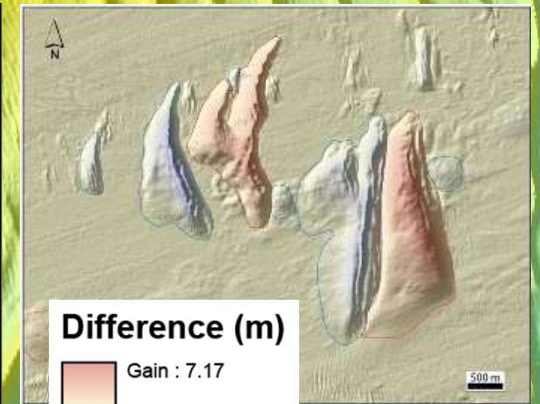
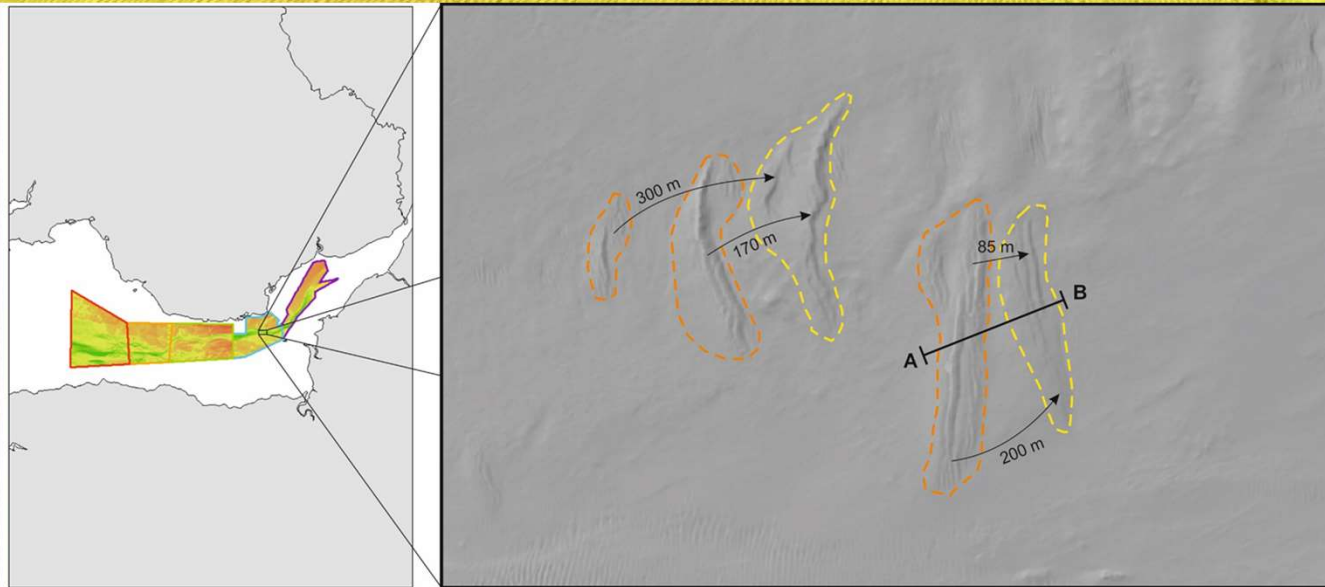




**Portable Shallow Survey System**  
**Multibeam - Kongsberg EM2040P**  
**Seismic – Innomar SES,**  
**Groundtruthing – BTV**



## Mapping mobile bedforms : repeat surveys



**Implications for submarine cable & pipeline protection and stability of foundations post-installation**

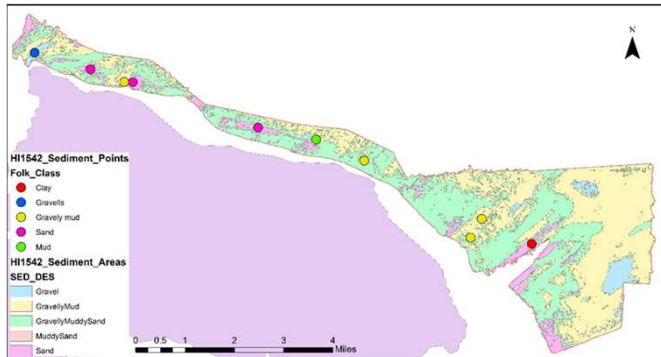
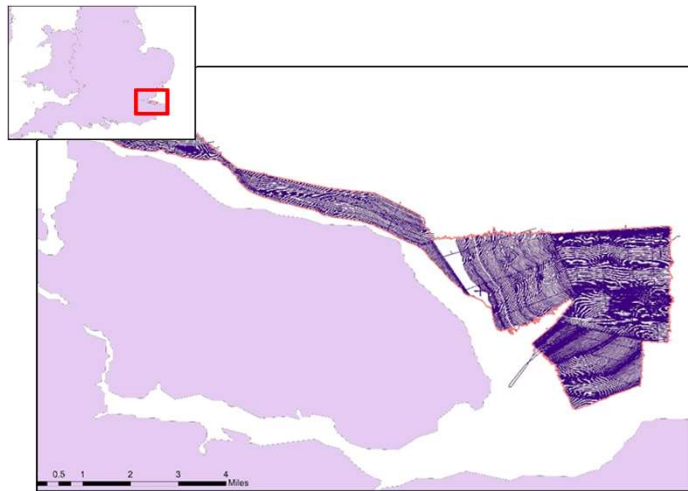
Morphological changes, Migration (m)  
 Area changes (m<sup>2</sup>), Volumetric changes (m<sup>3</sup>)

# EMODnet Geology WP8 «Submerged landscapes»

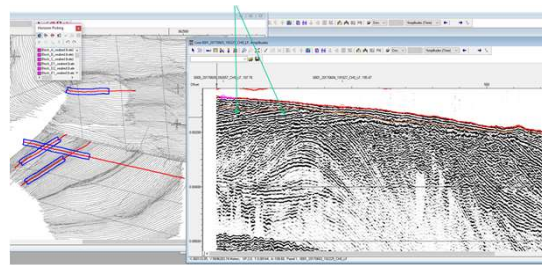
Bridging the onshore-offshore gap: Investigation of unconsolidated sediments using shallow 2D seismic data, Isle of Sheppey, Southern North Sea

Kirstin Johnson<sup>1</sup>, Andres Payo Garcia, Rhys Cooper, Robin Dymind

HI1542 – Civil Hydrography Programme



## Multiple mobile sediment packages



## Further Investigation

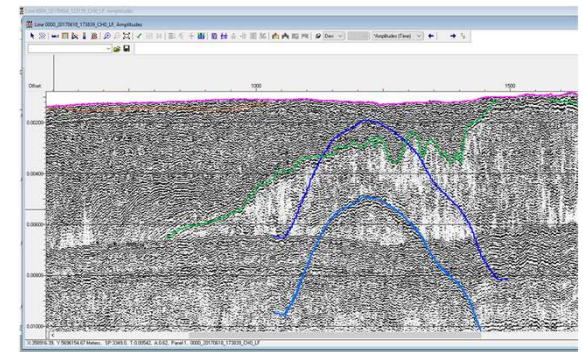
Map and volume of mobile sediment

Map - depth to bedrock/immobile substrate (required for map of mobile sediment and volumes)

Unpacking of various sediment packages

Mapping of various erosive events/horizons

Previous partially mapped “hard surfaces” show channelized/erosive surface

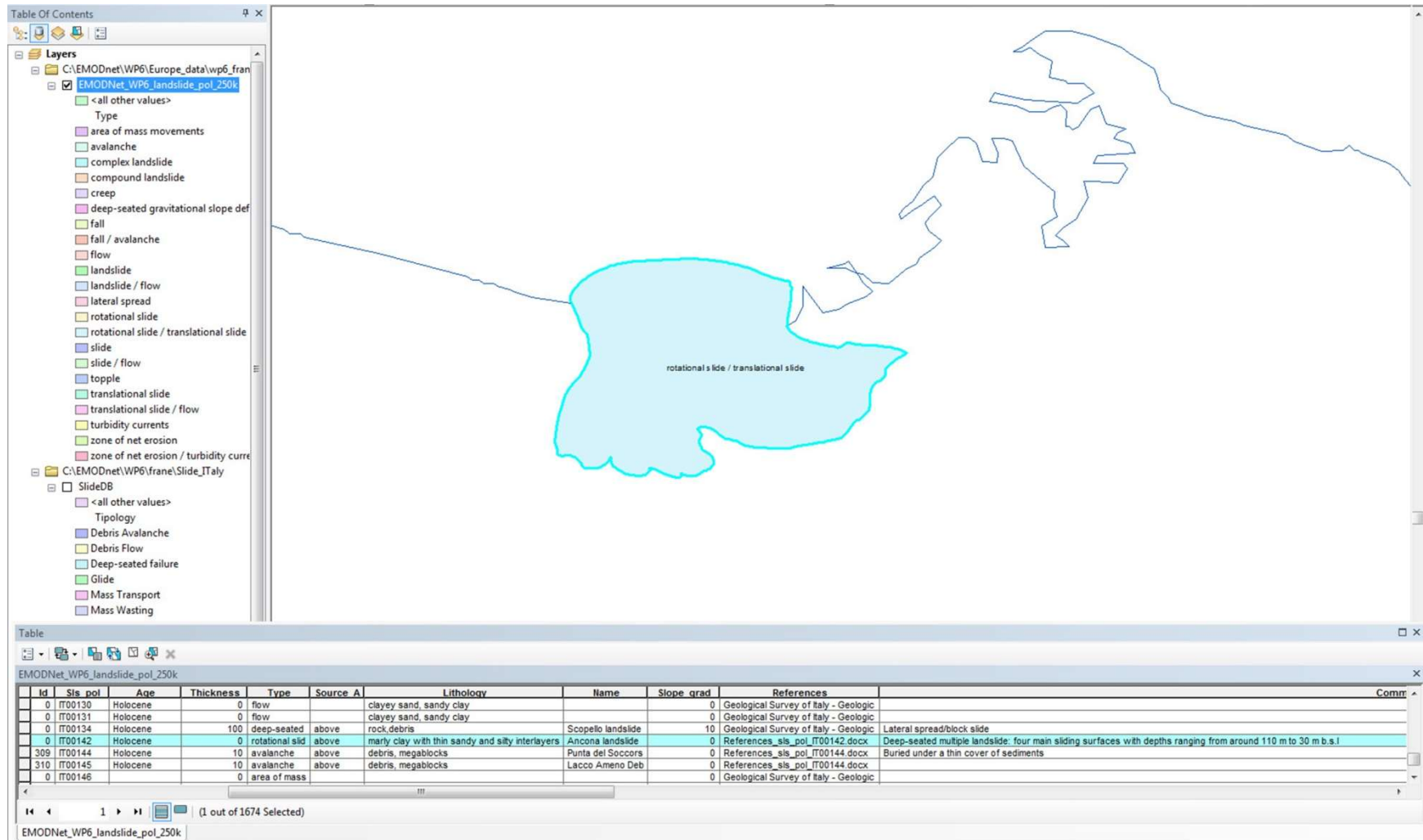


Tromino Survey  
Andres & Gareth Carter  
Inshore- Offshore



## EMODnet Geology WP6 «Geohazards» - Events occurrences located across the coastline

Concerning polygonal features located across the coastline, it was decided to include their emerged portions in order to provide a complete representation of the geological events. The example below shows how the whole extension of the landslide, that do not crop out entirely because they are partly covered by overlying deposits, has been reconstructed.



## EMODnet Geology WP6 «Geohazards» - Events occurrences located across the coastline

The same holds true for volcanic structures emerging as islands. They would have a blank area in the center (that included within the blue outline), if the emerged portion had not been included in the representation of the volcanic structure.

