

# COASTAL EROSION from Space webinar

Opening Session  
*Olivier Arino*

22 January 2021

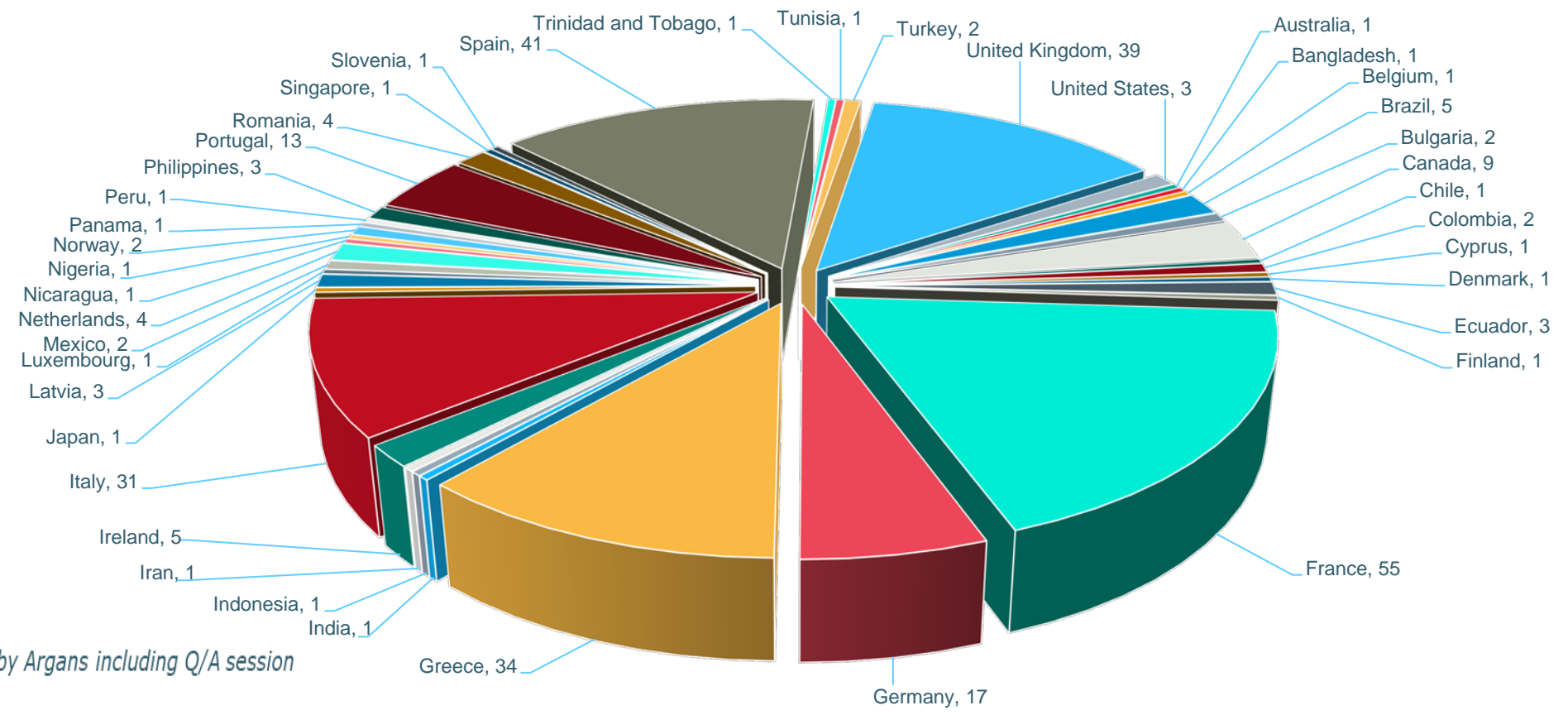


- ✓ EOEP-5 Coastal Erosion 1: i-Sea (1.5M€)
  - 'Space for Shore' | KO: 1-Feb-2019 → FR: 21-Jan-2021
  
- ✓ EOEP-5 Coastal Erosion 2: ARGANS (1.5 M€)
  - 'Coastal Erosion from Space' | KO: 3-Apr-2019 → FR: 20-Jan-2021
  
- ✓ EOEP-5 Open Call Coastal Charting: ARGANS (150 K€)
  - *'Thirty years of Satellite Derived Bathymetry - The charting tool that Hydrographers can no longer ignore'*

*Jean Laporte, Henri Dolou, Joseph Avis and Olivier Arino*

publication [https://iho.int/uploads/user/pubs/ihreview\\_P1/IHR\\_November2020.pdf](https://iho.int/uploads/user/pubs/ihreview_P1/IHR_November2020.pdf)

299 registered participants from 41 Countries [<https://coastalerosionwebinar2021.esa.int/>]



**Agenda**

- 09:30 to 10:00: Opening by ESA
- 10:00 to 11:00: Final presentation consortium led by Argans including Q/A session
- 11:00 to 11:30 coffee break
- 11:30 to 12:30 Final presentation consortium led by i-Sea including Q/A session
- 12:30 to 13:00 Closure by ESA

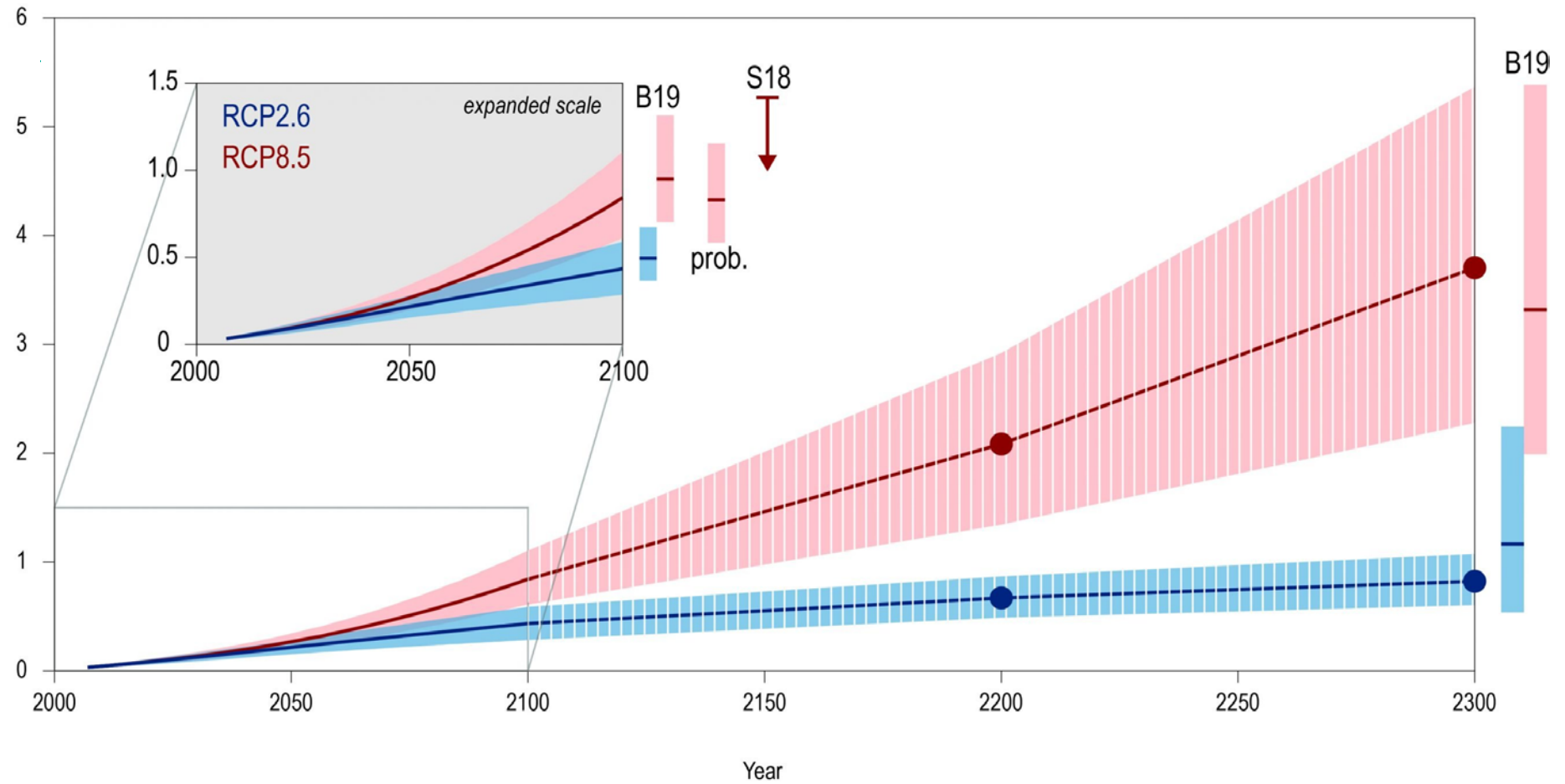


## IPCC Special Report on the Ocean and Cryosphere in a Changing Climate

### Chapter 4: Sea Level Rise and Implications for Low-Lying Islands, Coasts and Communities

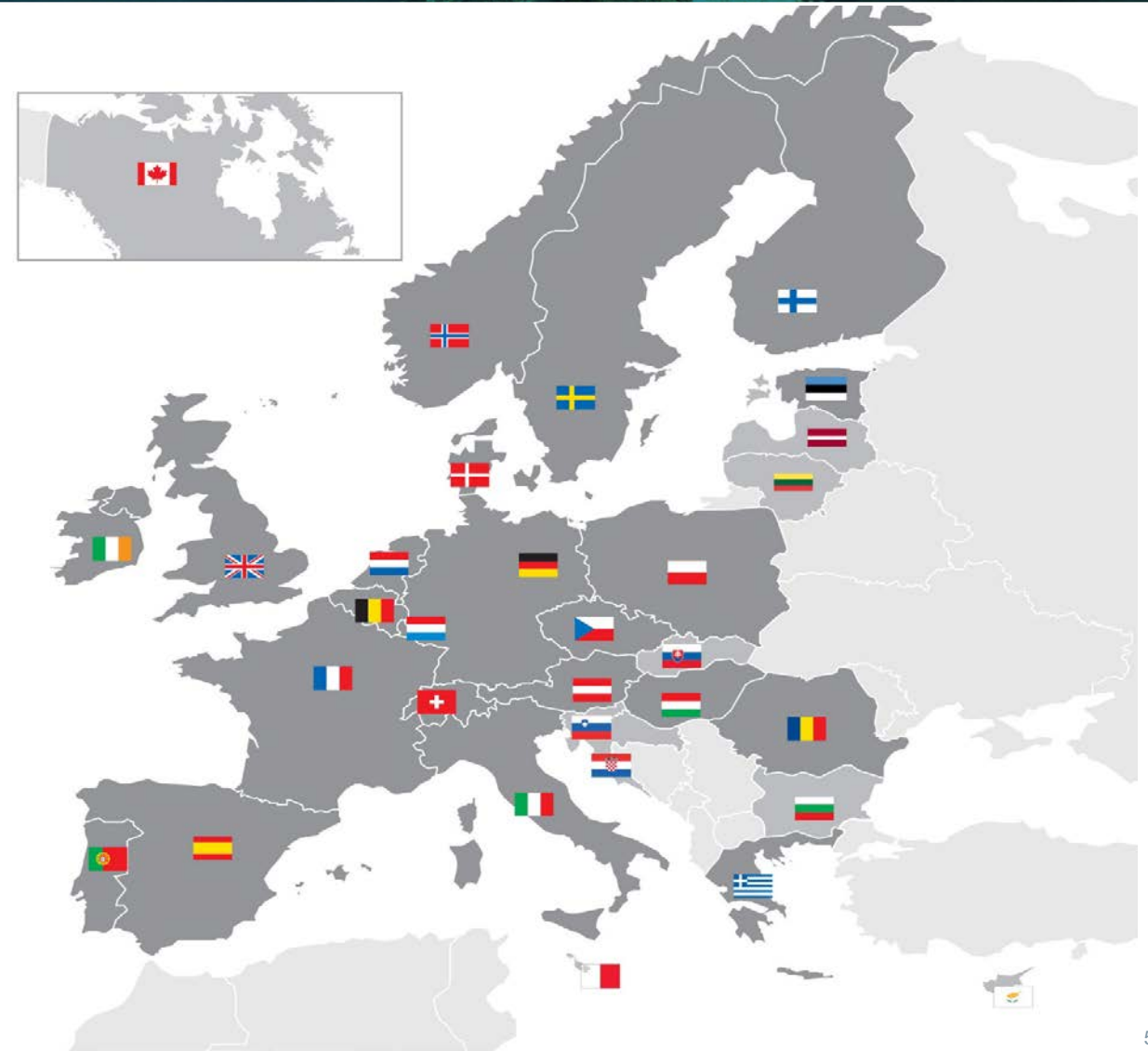


Global mean sea level (m)





Country	Coastline [km]
Norway	25148
Greece	13676
United Kingdom	12429
Italy	7782
Spain	4963
France	4853
Denmark	4605
Estonia	3794
Sweden	3218
Germany	2389
Portugal	1793
Ireland	1448
Finland	1250
Poland	491
The Netherlands	451
Romania	225
Belgium	66



The scope of the Coastal Erosion project is the development and demonstration of innovative EO products that will be used by users communities responsible to monitor and control this process.

While maintaining the openness of the scope and domains of innovation, the Coastal Erosion project shall develop innovative approaches that best exploit the novel observational capabilities of the S-1 and S-2 constellations.

### Cardinal Requirement

The Coastal Erosion project shall analyse the Erosion of a minimum of 1000 linear km of coast split into, at least, 3 different ESA member states and provide the best products suited to end user requirements over the past 25 year.

The Coastal Erosion project shall be structured along two consecutive phases of similar duration:

Phase 1: Requirement engineering, technical specifications and product development (up to 12 months)

Phase 2: Product validation, pilot service demonstration and roll-out analysis (up to 12 months)

The duration of the Coastal Erosion project shall be planned to be performed in a maximum of 24 months.

With regard to the Coastal Erosion activity, the European Space Agency has started two contracts with the following phasing:

### Kick Off meetings

‘Space for Shore’ with i-Sea (FR) and sub-contractors. The consortium will work with public authorities in five additional Member States (*France, Germany, Romania, Portugal, Greece*) on 1 February 2019

‘Coastal Erosion from Space’ with ARGANS (UK) and sub-contractors. The consortium will work with users from four Participating States (*United Kingdom, Ireland, Spain, Canada*) on 3 April 2019

### Mid Term Review meetings

with i-Sea Bordeaux 15<sup>th</sup> January 2020

with ARGANS Nice 24<sup>th</sup> January 2020

### Final Presentations

with ARGANS remotely 20<sup>th</sup> January 2021

with i-Sea remotely 21<sup>st</sup> January 2021

The access to ESA Third Party Missions VHR data have been granted to the two projects by the European Space Agency



## France

- ✓ Coast of the New Aquitaine
- ✓ Coast of Normandy
- ✓ Provence-Alpes-Côte d'Azur Region

## Greece

- ✓ Eastern Macedonia & Thrace
- ✓ Peloponnese

## Germany

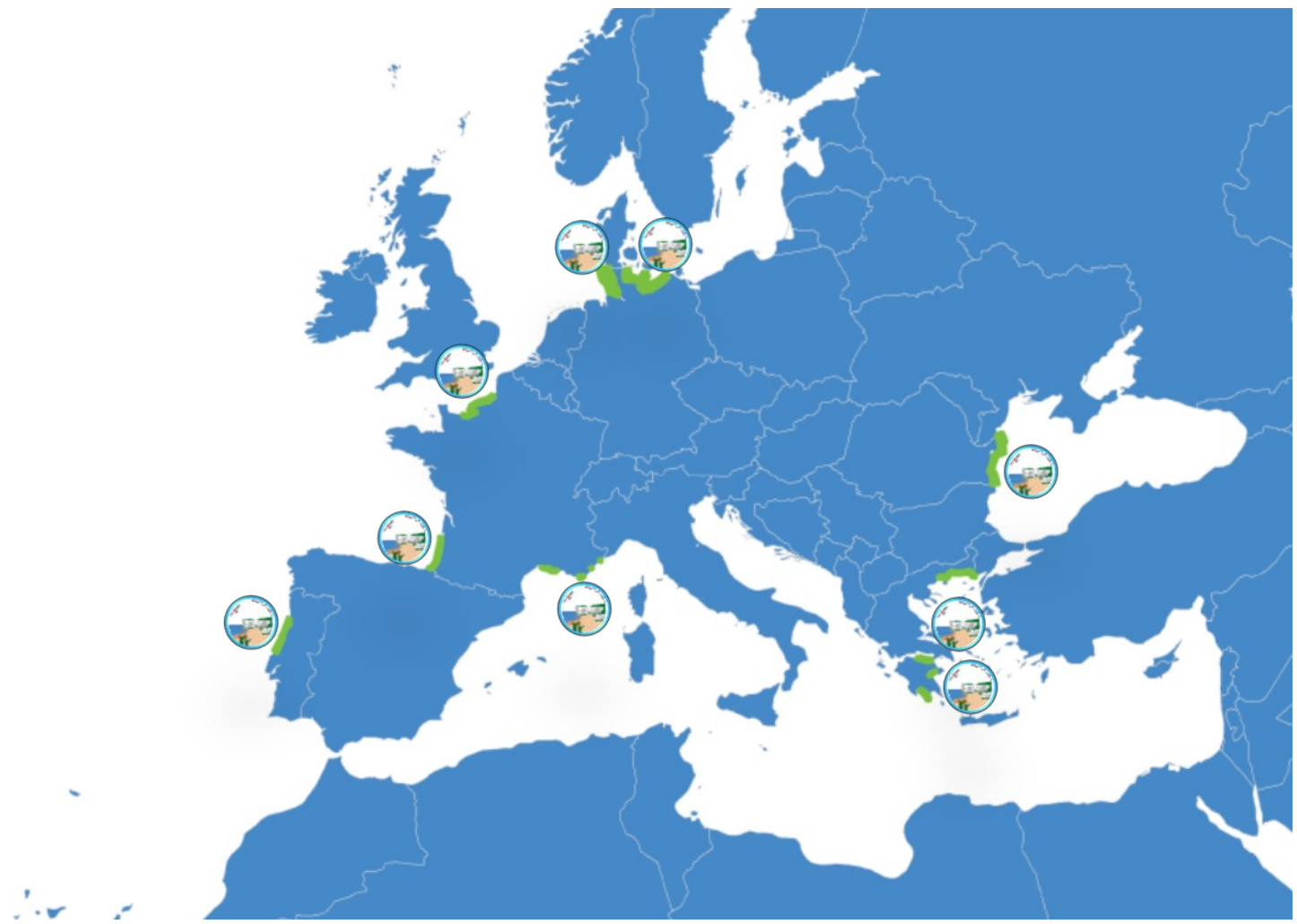
- ✓ North Sea
- ✓ Baltic Sea

## Portugal

- ✓ Northwest coast

## Romania

- ✓ Romanian Coast





### United Kingdom

- ✓ Kent
- ✓ Chesil Beach
- ✓ Start Bay
- ✓ Perranporth
- ✓ Spurn Head to Hunstanton

### Ireland

- ✓ Dublin Bay
- ✓ Ravens Point and Rosslare
- ✓ Waterford Estuary
- ✓ Cork Harbour
- ✓ Smerwick Harbour and Brandon Bay

### Spain

- ✓ Barcelona and Tordera Delta
- ✓ San Sebastian
- ✓ El Puntal de Santander
- ✓ Salinas
- ✓ Port of Castellón and Port of Sagunt
- ✓ Cadiz and Mazagón Beach
- ✓ Las Canteras (Canaries)
- ✓ Maspalomas (Canaries)

### Canada

- ✓ Pointe au Loup
- ✓ Pointe aux Outardes
- ✓ Longue Pointe de Mingan

