



Newsletter #1

July 2019

As part of the Coastal Erosion project funded by ESA, the Space for Shore consortium led by i-Sea aims at setting up operational services for coastal erosion monitoring from space. The services, designed by and for end-users, will be applied to most coastal geomorphologies and produced over nine distinct coastal regions within five EU countries.

spaceforshore.eu

@shore_space

A message to our end-user community

You are currently more than 20 end-users from France, Germany, Greece, Portugal and Romania who have joined the Space for Shore end-user community.

We thank you all for your strong involvement and active engagement during the interviews performed by the consortium partners.

With this newsletter and others to follow, we wish to keep you informed on the progress of the project and to give you details about next events and steps where your contribution will be kindly requested.

End-user requirements

Your practices and needs for coastal erosion monitoring were carefully examined. This led to the selection of 22 sites for the deployment of the services prototyped by the consortium. This includes the production of 14 coastal indicators crucial to most of you.

Recent event

The consortium partners met in Milan on May 14th 2019 to introduce the project during the Living Planet Symposium (LPS) organized by ESA.

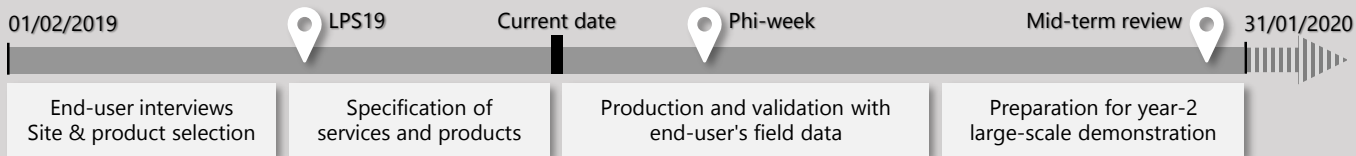


Monitoring the erosion of coastal sand dunes with satellite data is already operational! A successful demo was performed by I-SEA along Cap Ferret spit (SW France)



Sandy shore monitoring at Cap Ferret using two Pléiades images (left) and illustrated with field pictures (right)

Project progress & events



BROCKMANN CONSULT GMBH



TERRASIGNA

HARRIS GEOSPATIAL SOLUTIONS



Universität Hamburg

Kapitech

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End-user community

The first critical step of the Coastal Erosion project was to enroll a community of end-users extensive enough to:

- Characterize current practices of coastal erosion monitoring at European scale
- Assess objectively the needs for new space-based services
- Test the services on most of the coastal geomorphologies found in Europe

The map on the right illustrates the demonstration areas on which the consortium put focus with the logos of the corresponding enrolled end-users.



The community of end-users consists of organizations coming from public sector *i.e.*: national agencies, regional authorities, intermunicipal cooperation bodies, municipalities, coastal observatories, natural site managers and research centers.

End-user requirements

We listed more than 40 indicators mentioned by you as useful for coastal erosion monitoring. Only those of high-priority and/or commonly cited by several end-users from different countries will be addressed first by the consortium. The table below recaps the products that will be produced as per each demonstration area along with the main requirements.

Products	France - AQ	France - NOR	France - PACA	Germany - WS	Germany - BS	Greece - EMT	Greece - PEL	Portugal	Romania	horizontal accuracy (m)	Vertical accuracy (m)	Production frequency (per year)	Before / after storms
Waterline					X	X			X	0.5 - 10		1 - 12	
Middle of swash zone			X							1 - 5		2 - 9	X
Maximum storm swash excursion			X						X	1 - 5		12	X
Dune foot	X	X				X		X		1		0.1 - 4	X
Cliff foot	X	X			X	X	X	X		1 - 10		0.1 - 2	
Cliff apex	X	X			X	X	X			1 - 10		0.1 - 2	
Beach width	X	X	X					X	X	1 - 5		1 - 4	
Submerged sandbar location	X			X				X	X	5 - 10		1 - 12	
Tidal creek characteristics				X						10	0.5	1	
Tidal creek edge erosion				X						10	0.5	1	
Bathymetry	X	X	X			X	X	X	X	5 - 10	0.2 - 1	0.5 - 12	
Seabed cover mapping	X	X								10		2	
Foreshore cover mapping	X			X	X			X		1 - 10		1 - 2	
Land cover mapping		X				X		X	X	1		1 - 2	

Next steps & events

During summer 2019, the consortium members will collect available field data from the end-user community. We thank you in advance to make yourself and your data available.

From September 2019, the first products will be issued and you will be invited to download them for testing.

Then, our 1st collective meeting will be held in Bordeaux (France) on January 14th or 15th 2020. All consortium partners and end-users are invited to attend this event.

Prepare yourself for your stay in Bordeaux!

ESA will be particularly interested to get feedback on how the products and services meet your initial expectations. More information to come in September 2019.