CLEANATLANTIC CONFERENCE

Vigo, 21st June

09.00 – 16.30 h (UTC+2h00, Madrid, Bruselas)

Advances on modelling and mapping marine litter

Silvia Allen-Perkins, Silvia Calvo, Garbiñe Ayensa, Pedro Montero (Intecmar)
 Sara Cloux, José Antonio Moares, Vicente Pérez-Muñuzuri (USC)
 <u>Hilda de Pablo</u>, João Sobrinho, Ramiro Neves (IST)











Objective:

The aim of this WP is to develop sub regional or regional maps of hotspots of floating litter, based on models mapping of circulation of floating masses of marine litter, and identification of hotspots of accumulation on coastal areas and the role of prevailing currents and winds.









1- Conceptual model













3 - Computational model











4 – Results





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Clean Atlantic

Modeling Tool

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Su passive tracers using ourrents in Vigo coastal area, Galicia, Pa The MOHID Lagrangian include • Multi-threaded code, designed • Robust pre-processing, modell The first version of this model was developed during the CleanAtlantic project (EAPA_165/2016) funded by INTERREG Atlantic Area programme	Inom a MOHID operational ag in, among its characteristics: for shared memory machines, ing and post-processing tools;	Ta ir DELIVERABLE 6.: the mai	Annex I: MOHID- INSTALLATION-G POICE Notation to an endor What pattern deserver, and an endor	LAGRANGIAN UIDE Annex II: MOHID-LAGRAN SHORT-GUIDE
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Sources

Land-based



Ocean-based



Domains

Global domain



Regional domain

CLEANATLAN	IIC									
CONFEREN	CE	Advances on modelling and mapping marine litter:								
Vigo, 21st J	une	A Regional Lagrangian Model for Assessing the Dispersion of Floating Macroplastics from Different Source Types over								
09.00 - 16 (UTC+2h00, Modeld, Br	.30 h	the Iberian Peninsula								
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Atlantic Area	ି									

Local domain















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Simulation: 3 years



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http://cleanatlantic.maretec.org/

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European Regional Development Fund

In summary

• With this results, not only the areas most likely to accumulate particles were detected, but also knowing the origin (source) of each of these particles.

_ robust tools to support environmental management

• Marine litter is transporting by currents. They determine the trajectory and fate of marine litter.

the ocean, this does not obey human borders, it simply carries what is deposited in it.

