



Monitoring and assessing the marine macro-litter on the seafloor: **the MEDITS initiative**

Maria Teresa Spedicato



COISPA Tecnologia & Ricerca, Bari, Italy

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THE MEDITS PROJECT

An international bottom trawl survey in the Mediterranean

From 1994.....

Data Collection Regulation/Framework (EU Reg. 199/2008) and more recently the EUMAP program (EU Reg. 1004/2017 and C(2016) 8906

Main aims/targets are to obtain information on:

- ✚ demersal and benthic species in terms of distribution abundance indices;
- ✚ population and community distribution;
- ✚ life history traits of key species;
- ✚ demographic structure of the target species;
- ✚ population and community indicators

...and more recently additional information for Marine Strategy Directive Framework

to now.....



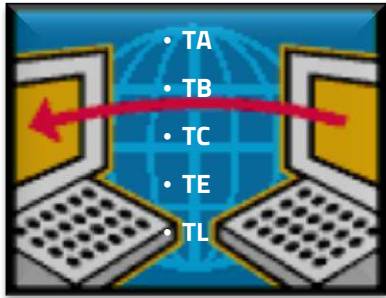
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MEDITS METHODOLOGY

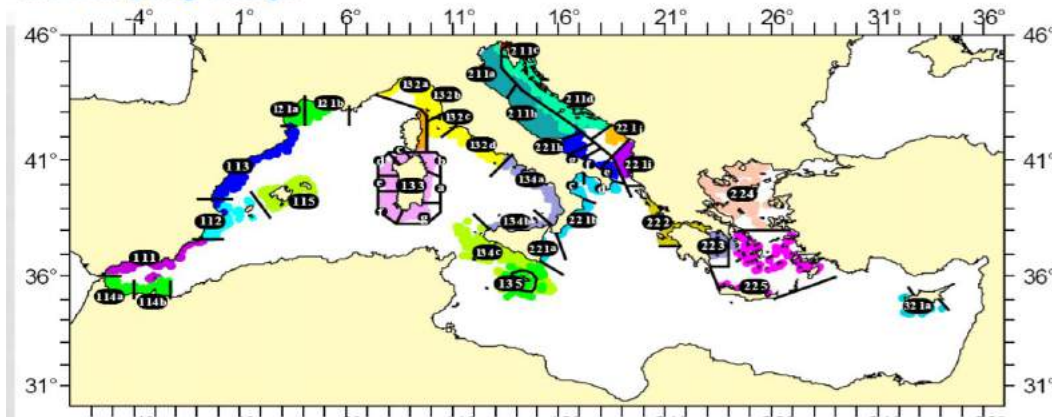
A bottom trawl survey in the Mediterranean, in which all the participants apply **standardized methods** using:

- same gear; same sampling scheme; and same protocols for collecting, storing and analysing data.

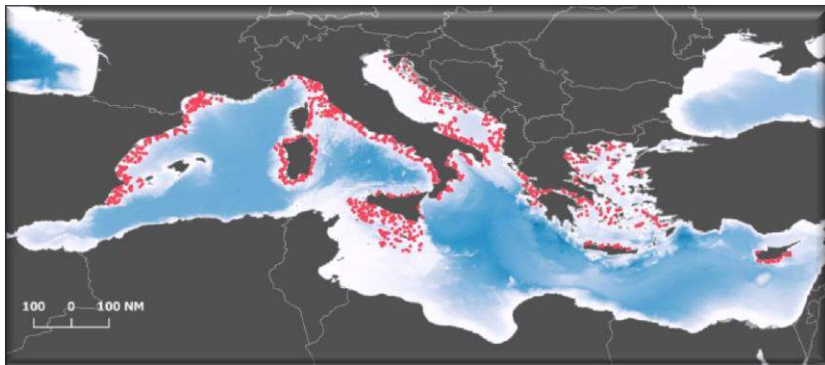


Data exchange format to exchange data within the group and transmitting to the Member States or to the Official Data Calls

The sampling design

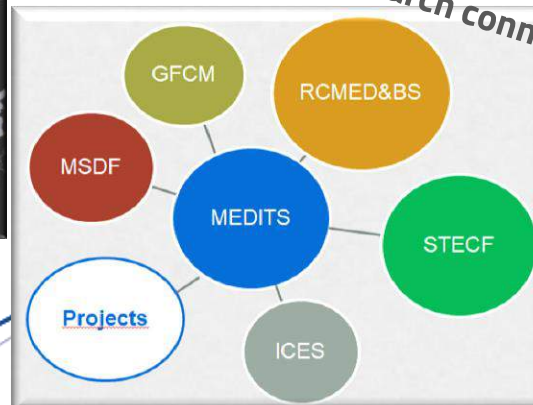


The sampling frame is a stratified random sampling by depth, with haul allocation proportional to the surface of depth strata (bathymetric limits: 10-50m, 51-100, 101-200, 201-500, 501-800) and of the 44 different sub-regions.



546474 km² with 1262 hauls

Institutional and research connectivity



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The MEDITS survey for monitoring marine macro-litter on the seafloor

In 2013 – A Pilot implementation on a voluntary basis started
Collecting data on litter during MEDITS trawl surveys



International bottom trawl survey in the Mediterranean

Campaign: Date: Haul:

TOTAL weight of litter in the haul (kg):

Instruction manual

Version 9

Type of Litter	Weight (kg) (mandatory for category and sub-category)	Number (facultative for subcategory)	Number (mandatory for category)
L0 No litter in the net	<input type="text"/>	<input type="text"/>	<input type="text"/>
L1 Plastic	a. Bags	<input type="text"/>	<input type="text"/>
	b. Bottles	<input type="text"/>	<input type="text"/>
	c. Food wrappers	<input type="text"/>	<input type="text"/>
	d. Sheets (table covers, e.t.c.)	<input type="text"/>	<input type="text"/>
	e. Hard plastic objects (crates, containers, tubes, ash-trays, lids, etc.)	<input type="text"/>	<input type="text"/>
	f. Fishing nets	<input type="text"/>	<input type="text"/>
	g. Fishing lines	<input type="text"/>	<input type="text"/>
	h. Other fishing related (pots, floats, etc.)	<input type="text"/>	<input type="text"/>



2017

andbook. Version n. 9, 2017, MEDITS Working Group : 106 pp.

Protocol presented at CIESM 2013

<http://www.sibm.it/MEDITS%202011/principalemedits.htm>

34 different typologies have been identified in the protocol including:

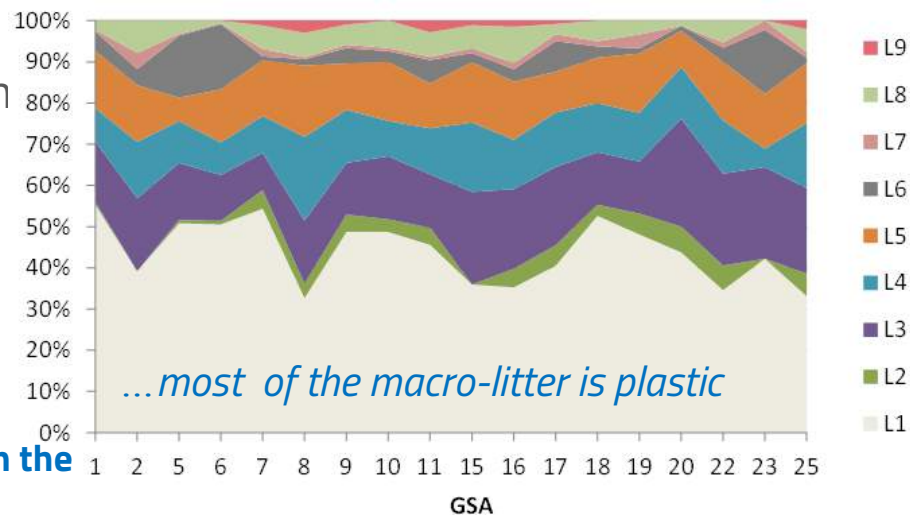
- 9 main categories related to litter material class;
- 27 sub-categories related to source and main litter findings.



Modelling accumulation of macro-litter on the seafloor

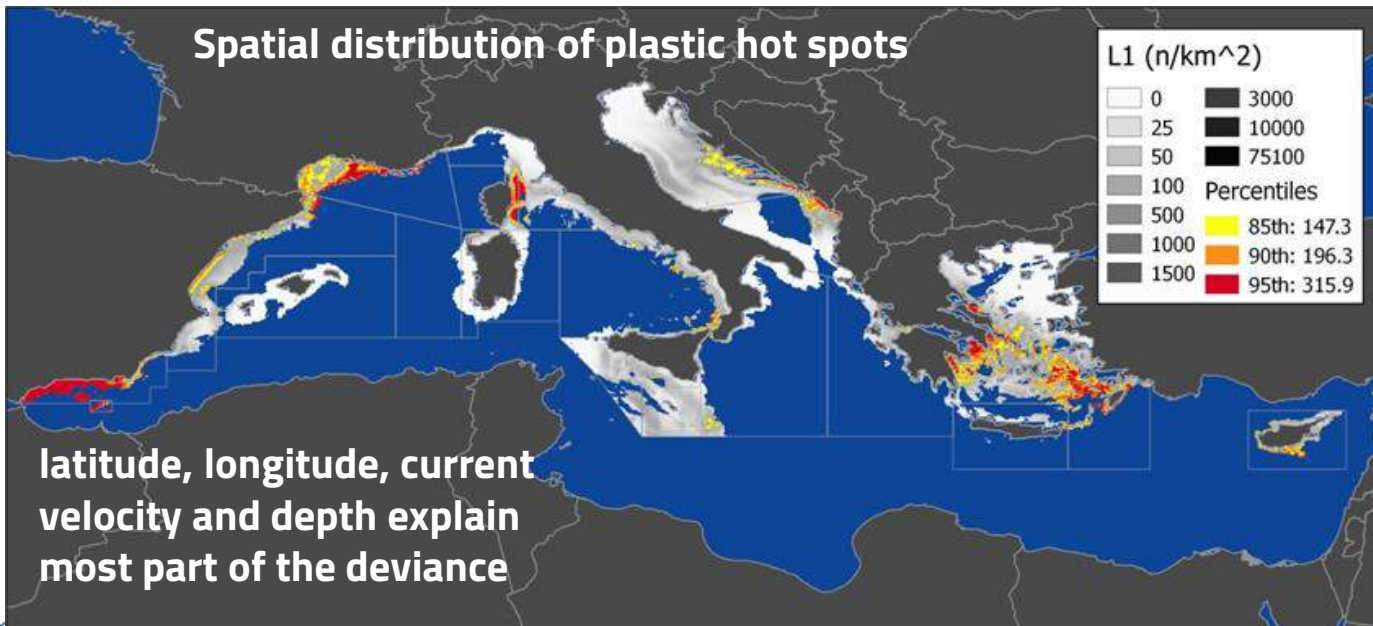
Goals of our study:

- ✚ assess spatial distribution of macro-litter on the seafloor using standard methods;
- ✚ give insight on the main driving factors of **macro-litter accumulation** and identify **hot spots** to provide information for implementing mitigation measures.



Spatial distribution of marine macro-litter on the seafloor in the northern Mediterranean Sea: the MEDITS initiative

M.T. Spedicato, W. Zupa, P. Carbonara, F. Fiorentino, M.C. Follesa, F. Galgani, C. Garcia, A. Jadaud, C. Ioakeimidis, G. Lazarakis, G. Lembo, M. Mandic, P. Maiorano, M. Sartini, F. Serena, A. Cau, A. Esteban, I. Isajlovic, E. Lefkaditou, R. Micallef, I. Thasitis



...in the MEDITS Monograph, Scientia Marina (submitted)

...monitoring on bottoms off southern countries of Mediterranean would be beneficial to increase our knowledge on the macro-litter distribution and modelling

Thanks



COISPA Tecnologia &
Ricerca, Bari, Italy

spedicato@coispa.it

www.coispa.it

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