



SPAIN

NATIONAL REPORT/ ეროვნული ანგარიში

<http://www.armada.mde.es/ihm>.



1. Hydrographic Offices
2. Surveys
3. Charts and updates
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8. Oceanic activities
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Hydrographic Office



This report covers the period
September 2013 - May 2015.

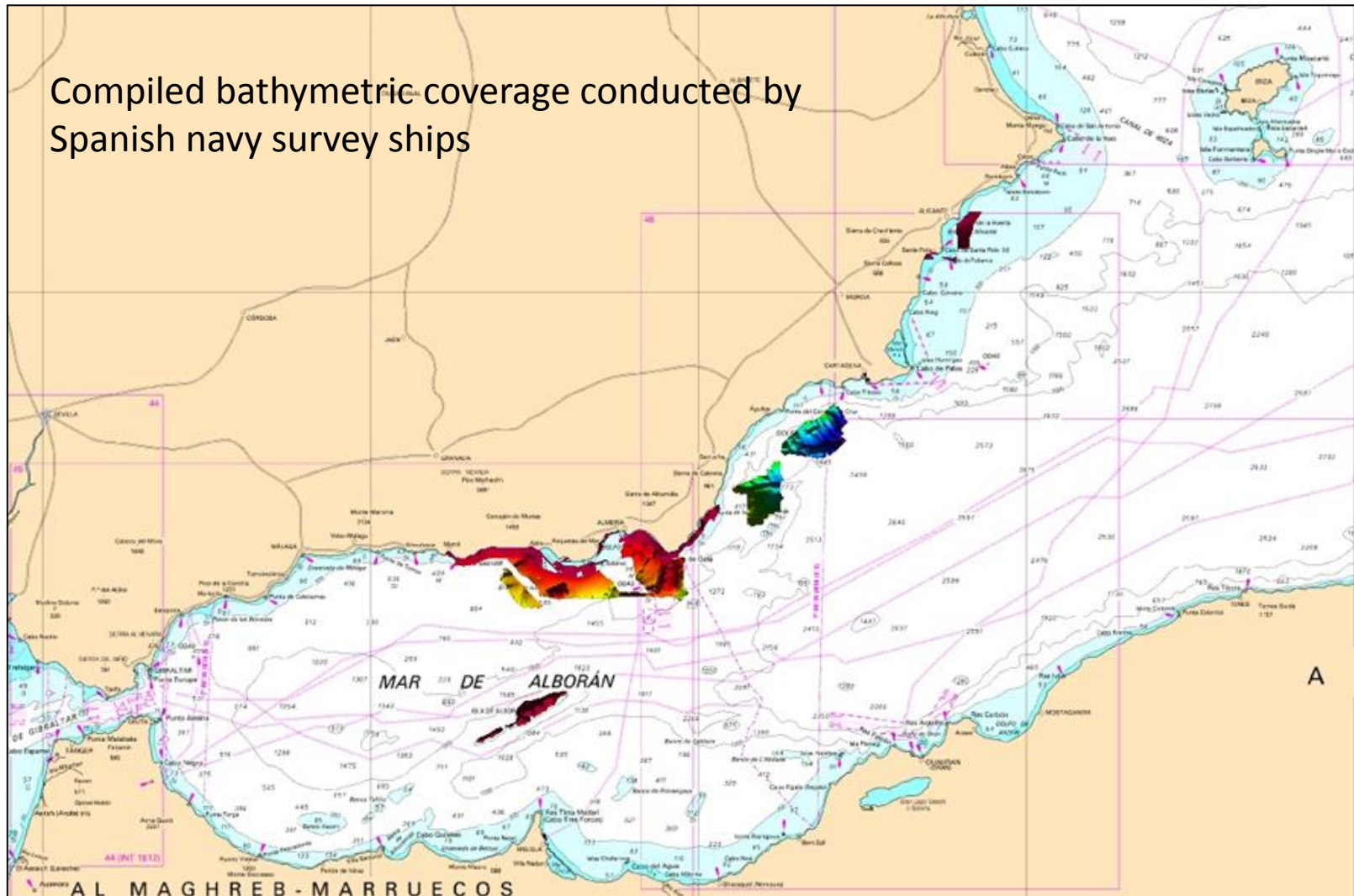


- 97% of Spanish Mediterranean coastal waters up to 200 m deep have already been surveyed
- hydrographic surveys employing:
 - Multibeam Echosounders (MBES)
 - or interferometric Echosounders (Phase Differencing Bathymetric Sonars PDBS).

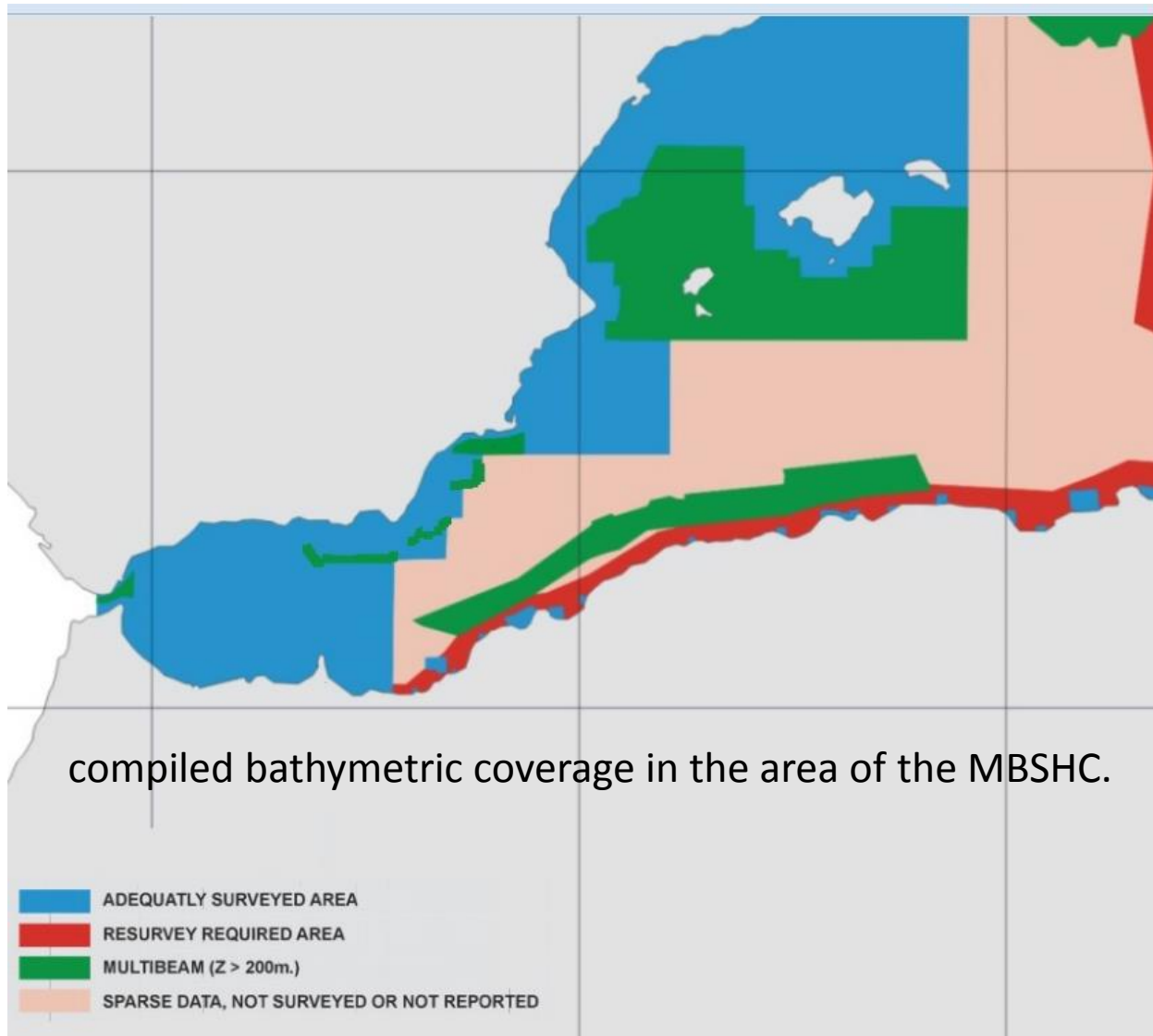
Surveys



Compiled bathymetric coverage conducted by Spanish navy survey ships



Surveys



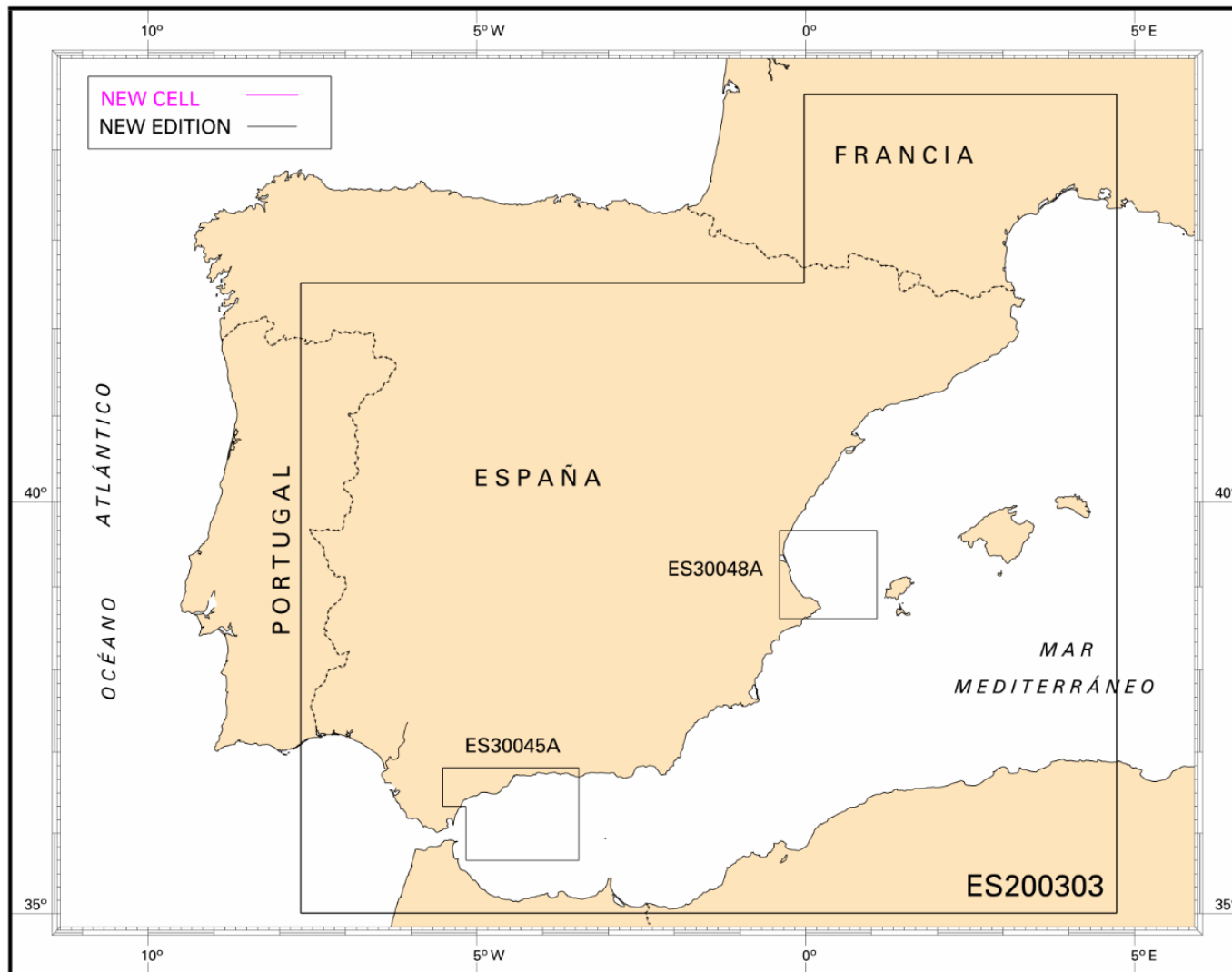
Charts and updates



- 119 ENCs within the area of the MBSHC (out of a total of 231 published for all areas).
- IHM has produced 40 new ENCs, 17 new ENC editions and 314 ENC update's.

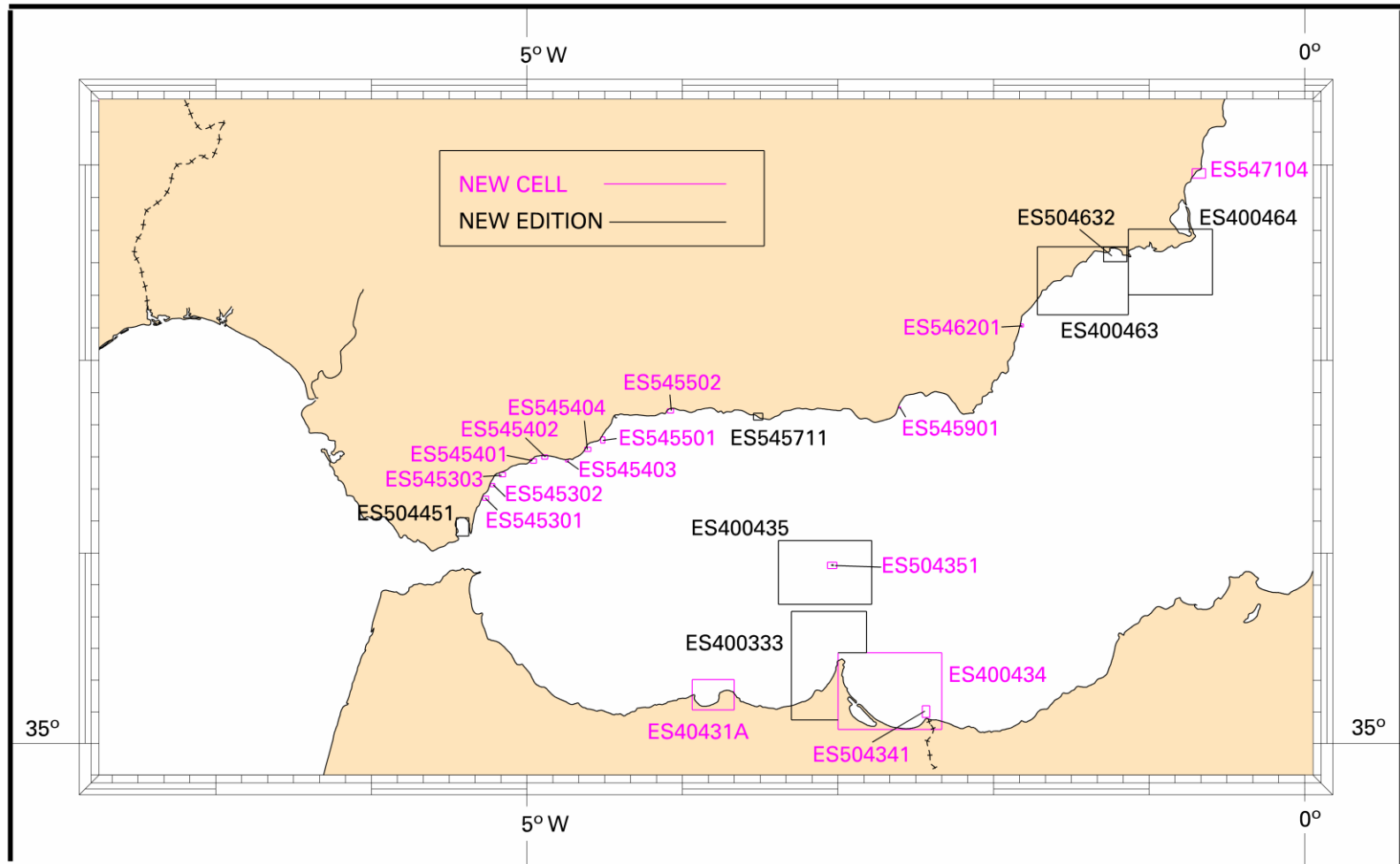
Navigational purpose	Projected	Published
1 - Overview	0	0
2 - General	1	1
3 - Coastal	11	11
4 - Approach	45	45
5 - Harbour	99	62
6 - Berthing	0	0
<u>Total</u>	156	119

Charts and updates



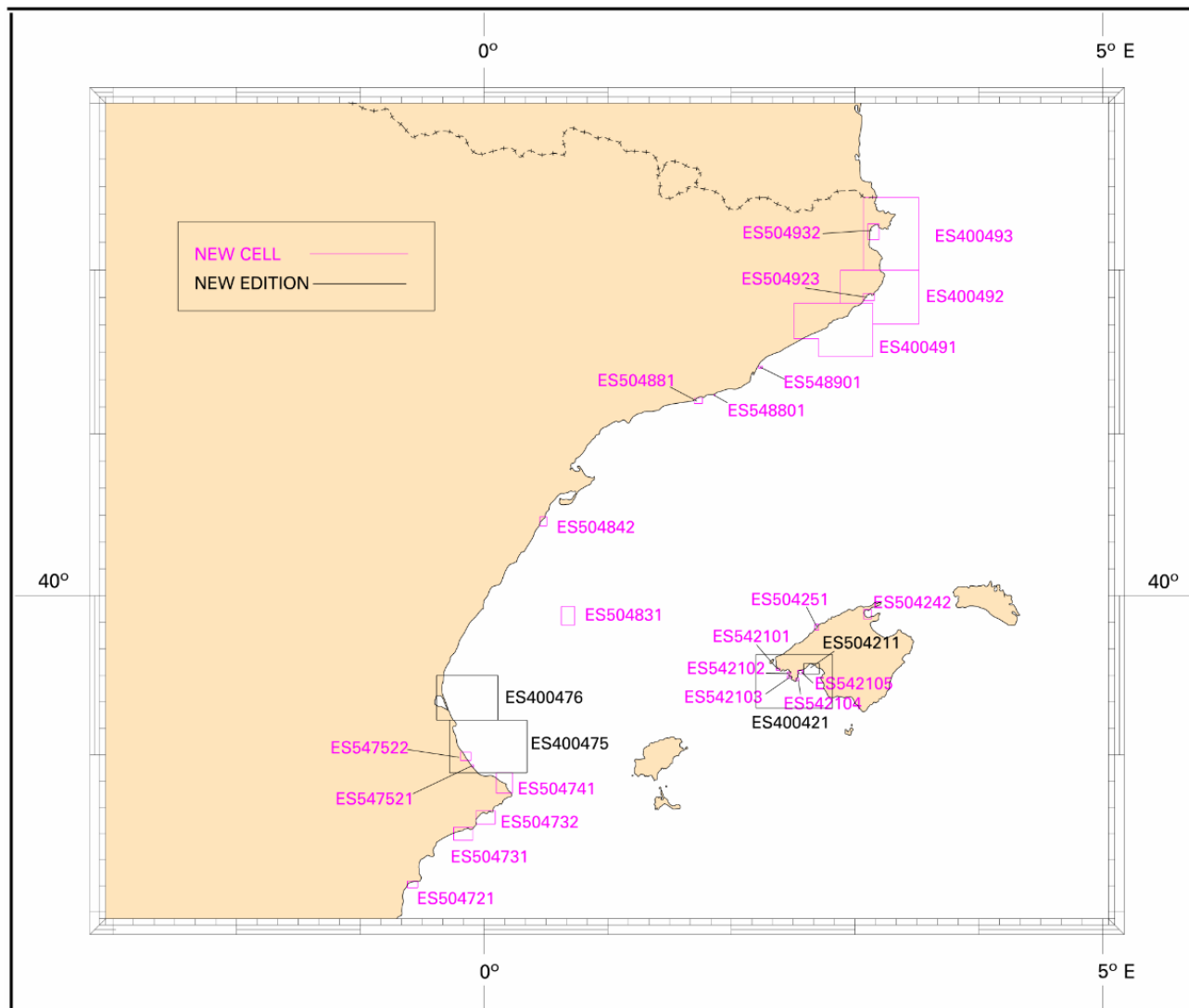
Navigational purpose 2 and 3 ENC production in the MBSHC 2013-2015

Charts and updates



Navigational purpose 4 and 5 ENC production in the MBSHC 2013-2015 Part I

Charts and updates



Navigational purpose 4 and 5 ENC production in the MBSHC 2013-2015 Part II



Status of the production of INT charts assigned to Spain.

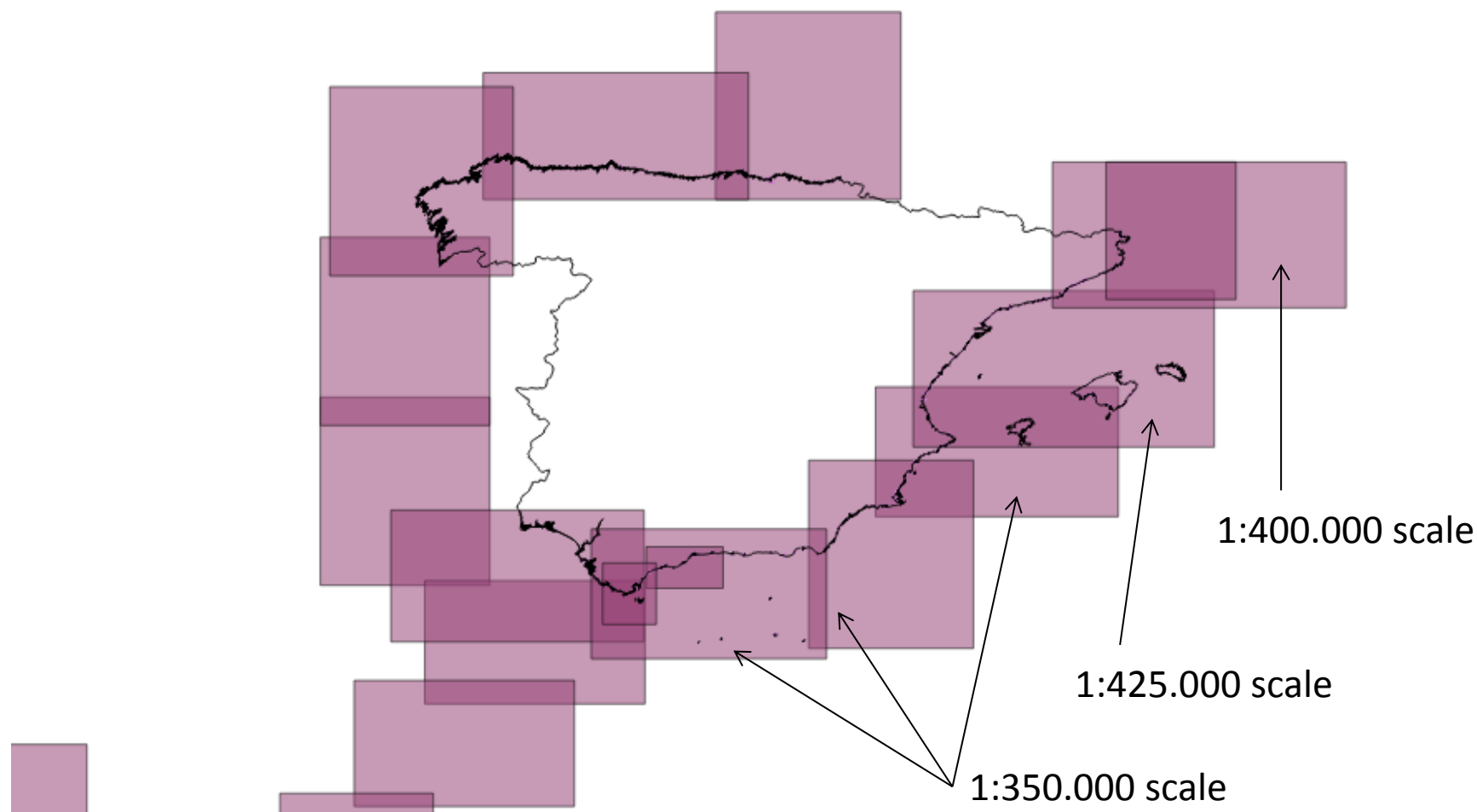
Scale	Assigned	Produced
Small 5.000.000-1.000.000	1	1
Medium 350.0000-100.000	5+1(3104)?	1+4(*)+1(*)
Large 80.000-10.000	18	18
TOTAL	25	25(*)

*They are scheduled to be processed as INT charts whenever a new edition of each one of the aforementioned charts

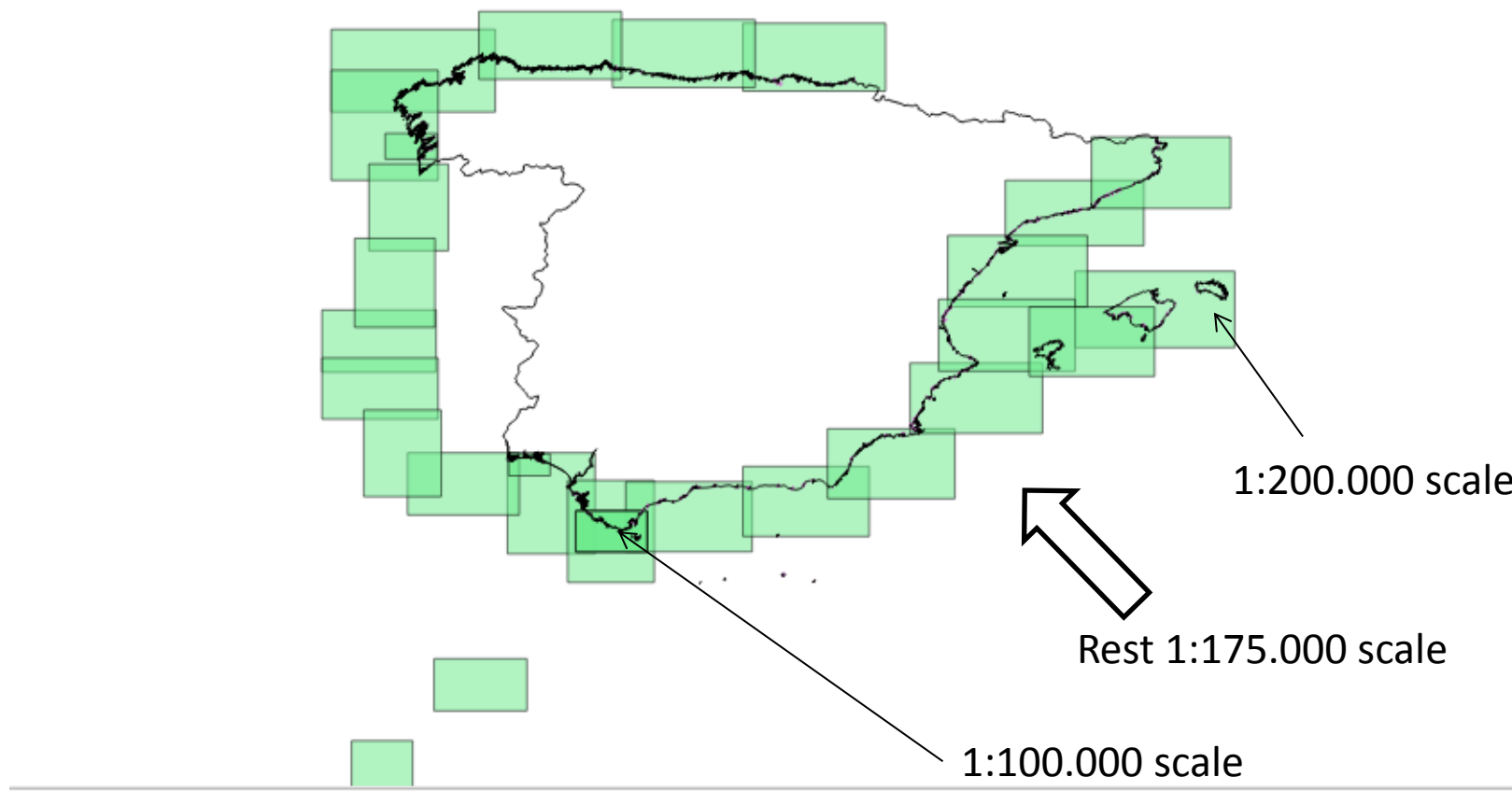


- The boundaries of medium scale INT charts (3102, new proposal 3104 to DZ, 3108, 3110 y 3112) are being modified to adjust to the boundaries of the corresponding national charts (45, 46, 47, 48 y 49).
- They are scheduled to be processed as INT charts whenever a new edition of each one of the aforementioned charts.

Charts and updates: national medium scale



Charts and updates: national medium scale



Charts and updates



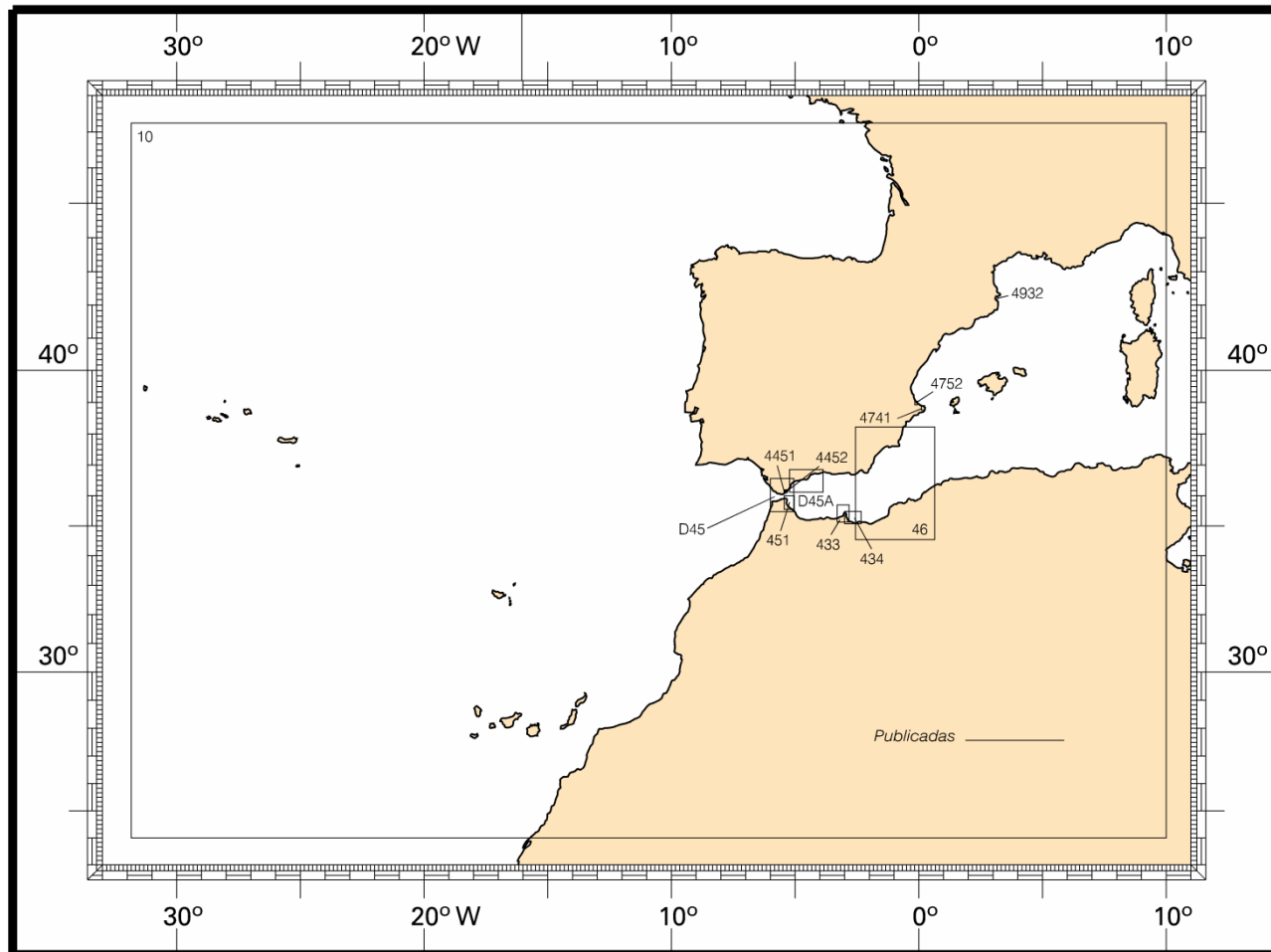
National charts made since the last 18 MBSCH

National No	Title	Edition
10	Europa sur occidental, costa norte occidental de África y archipiélagos de Azores, Madeira y Canarias.	I Dec 2013
46	De cabo de Gata a cabo de las Huertas y de Cabo Milona a Cabo Ivi.	III Oct 2013
433	De punta Betoya a Mar Chica	I Dec 2013
434	De Ras Tleta Madari (cabo Tres Forcas) a río Muluya e islas Chafarinas.	III Dec 2013
451	De punta Loma el Borcho a cabo Mazarí.	I Jun 2015
4451	Puerto de Algeciras.	X Dec 2013
4452	Puertos de La Línea y Gibraltar.	VI Dec 2013
4741	De Ensenada de Jávea al Puerto de Denia	IV May 2014
4752	Puertos de Gandía y Oliva.	I May 2014
4932	Puerto de Roses, Santa Margarita, Empuriabrava y San Pere de Pescador.	III Oct 2014

Charts and updates



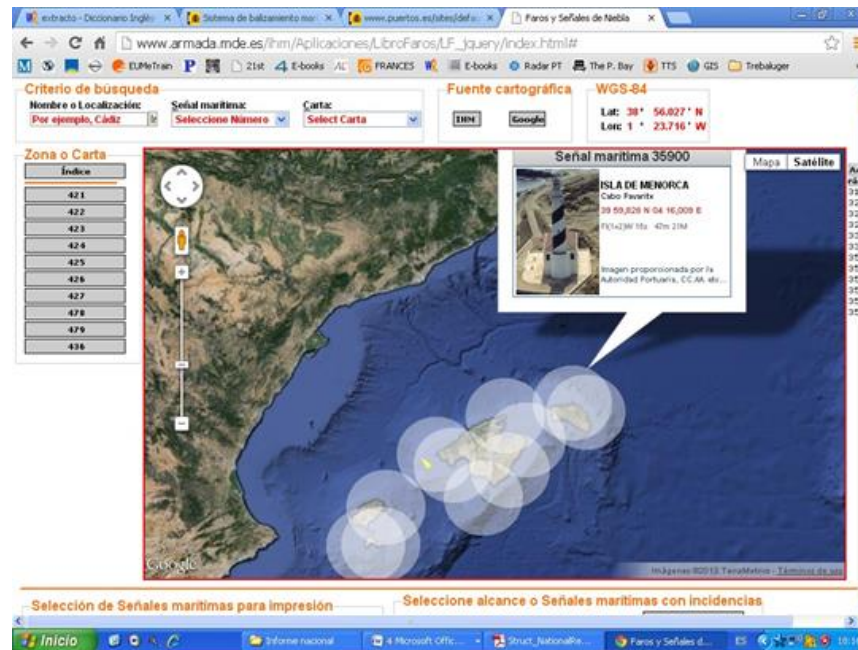
National charts made since the last 18 MBSCH



Publications and updates

IHM has published or updated:

- All (6) the Sailing Directions
- 2 List of lights and fog signal.
 - A digital version of the publication *List of Lights and Fog Signals* is currently available online http://www.armada.mde.es/ihm/Aplicaciones/LibroFaros/LF_query/index.html





- 2 Catalog of Nautical Charts and other publications (2014 and 2015)
- 1 Radiosignal book

A new edition of the publication *INT1* Symbols Abbreviations and Terms Used on Nautical Charts (*5^a Edition*) is scheduled for the fourth quarter of 2015.



- **Coastal Navigational Warnings in Spanish Coasts**

Coordinator: SASEMAR (Spanish National Agency for Maritime Search and Rescue Operations, Ministry of Public Works) is the national Coordinator for coastal and local radio navigational warnings and the National Rescue Co-ordination Centre (CNCS) is located in Madrid.



- **NAVAREA III Navigational Warnings**

Coordinator: Spain is NAVAREA III (Mediterranean and Black Sea) Coordinator.

Report IAW Doc. MBSHC19-6.7 Report of NAVAREA III



- **Report** IAW Doc. MBSHC19-6.4.1. Hydrographic survey status in the MBSHC area



Spanish Hydrographic School, located within the premises of IHM, offers both Category A and B IHO/FIG/ICA hydrography courses:

- Category A: Officers from the Spanish Navy/ Argelia/ Argentina/ Dominican Republic/ Guatemala/ Honduras/ Morocco and Tunisia.
- Category B course: Petty Officers from the Spanish Navy/ Dominican Republic.

Status of bilateral development projects in progress



- Bilateral agreement in progress with Algeria.

Oceanographic activities

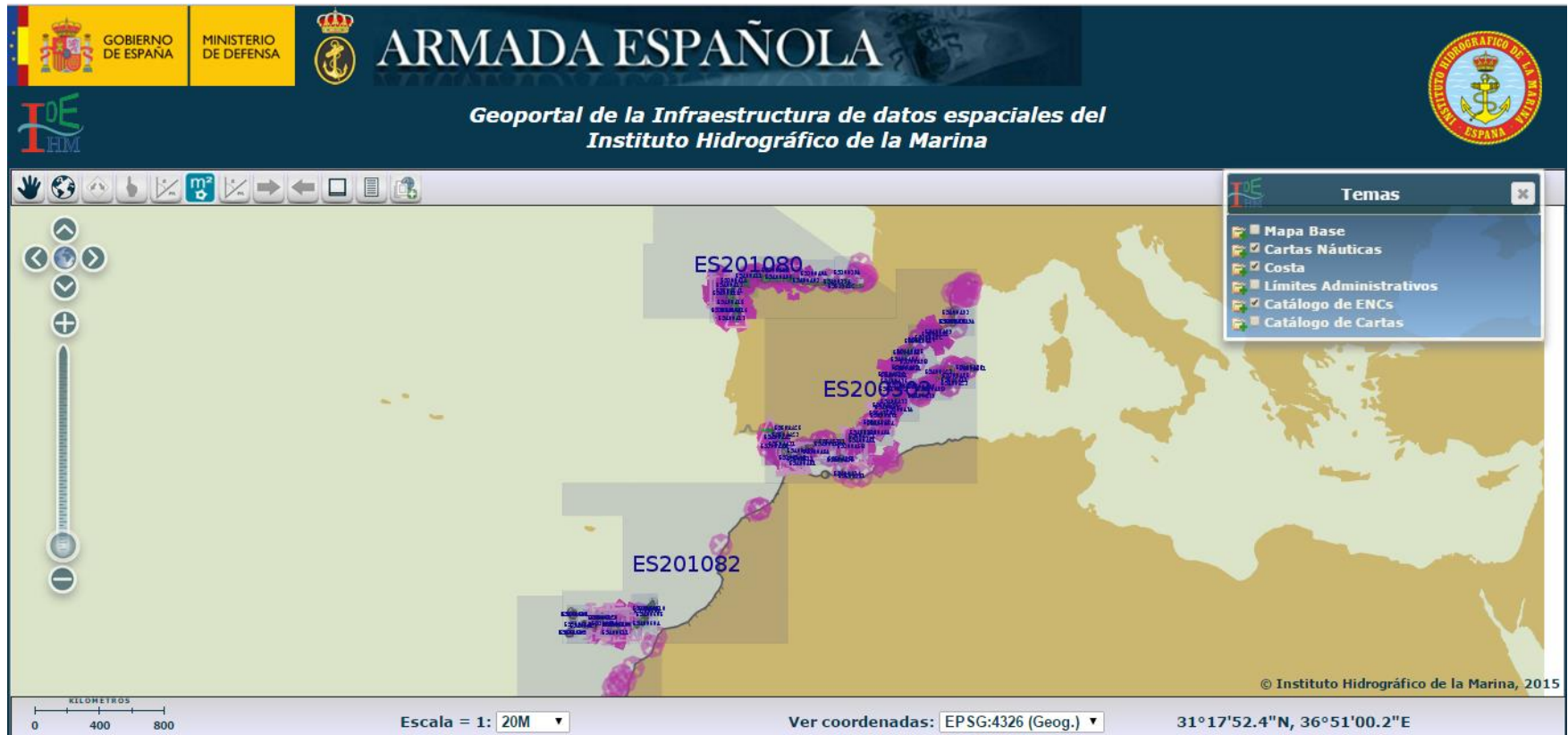


- The main effort of the Oceanographic Section has been focused on making real time tide data available to IHM Hydrographic Commissions.



- IHM is a participant in the GT-IDEA (Working Group on Infrastructure of Spatial Data of Spain), tasked with the integration via internet of geographic data, metadata, services and information produced in Spain.

Others activities/ MSDI progress





Thank you for your attention

ძალიან დიდი მადლობა ყურადღებისთვის



Mapamundi (world map of) de Juan de la Cosa, Cádiz, 1500