

ERVO 2018

Regional focus central and western Mediterranean

Introduction to research vessels (incl. homeport), fleet schedules, willingness of sharing vessels and equipment, research objectives

12 - June - 2018



 **CSIC**
CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS

 **UTM**
UNIDAD DE TECNOLOGÍA MARINA



1

They are Infrastructure of Public Ownership:

They belong to or are managed by public entities, whether dependent on the General State Administration and / or the Autonomous Communities. In any case, they are financed mostly with public funds



2

Competitive Open Access:

Open to competitive access by users of the entire research community, coming from both the public sector and the private sector



3

They are "Singular", which means they are unique in their kind:

Large equipment & Complex experimental infrastructures that allows observing, analyzing and interpreting phenomena of interest.

Infrastructures necessary to facilitate the access of scientists to natural environments that offer and present unique characteristics for research.



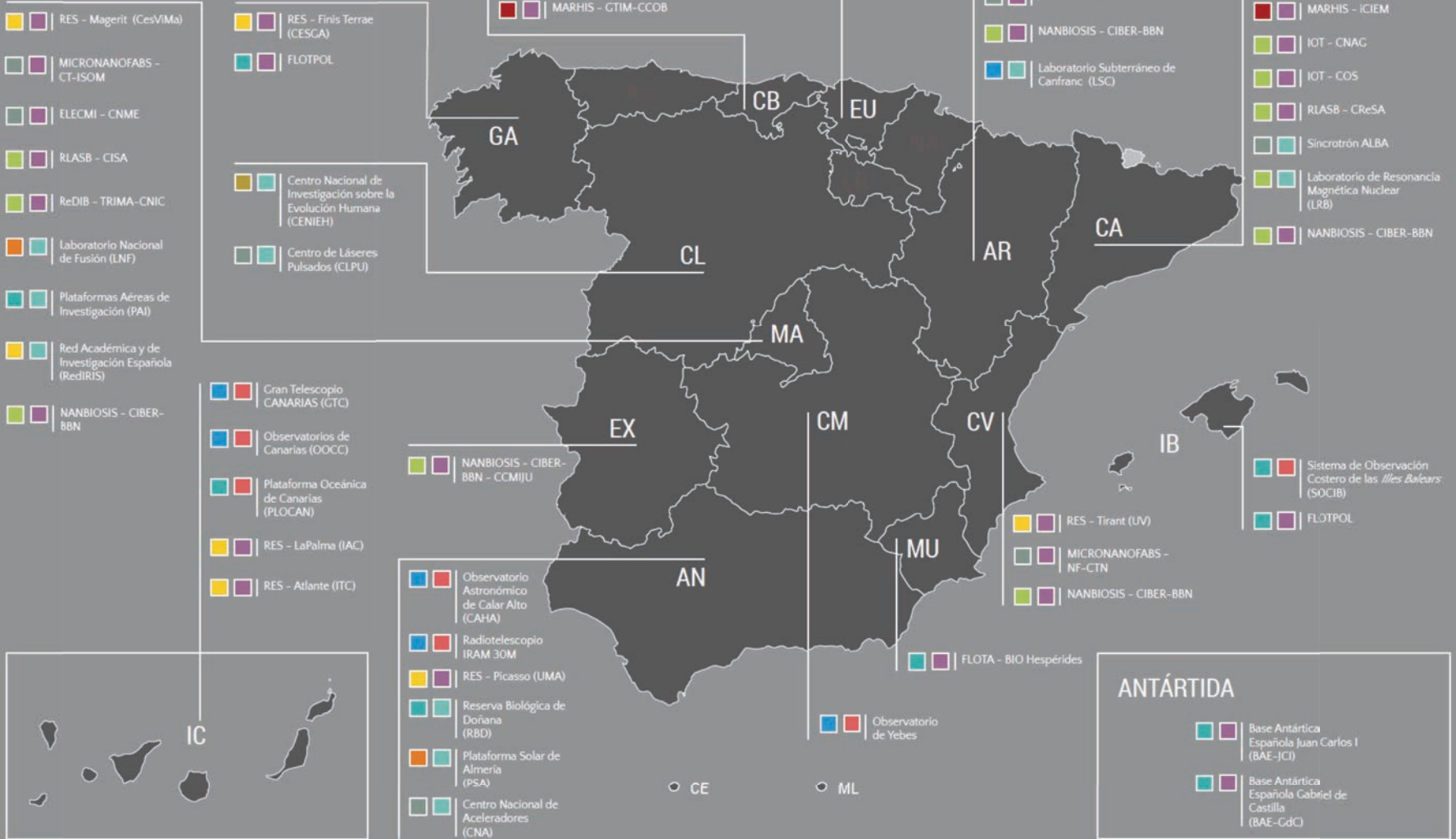


S. S. T. I. Map: Regional Location

ICTS CON LOCALIZACIÓN ÚNICA

ICTS DISTRIBUIDAS

RED DE ICTS





Sea, Life and Earth Sciences

[Spanish Oceanographic Fleet](#)

[Oceanic Platform of the Canary Islands \(PLOCAN\)](#)

[Aerial Research Platforms \(PAI\)](#)

[Biological Reserve of Doñana \(RBD\)](#)

[Coastal Observation System of the Balearic Islands \(SOCIB\)](#)

[Spanish Antarctic Stations \(BAEs\)](#)





SPANISH OCEANOGRAPHIC FLEET

10 Research Vessels:

- 2 Ocean Global (Atlantic, Antarctic, ...)
- 3 Regional (North Atlantic, Cantabric, Mediterranean sea, ...)
- 5 Local (National Coasts)

Type	Vessel	Length (m)	Age	Operator	Base Port
Oceanic	<i>HESPERIDES</i>	82,5	1991	NAVY/CSIC	Cartagena
	<i>SARMIENTO DE GAMBOA</i>	70,5	2006	CSIC	Vigo
Regional	<i>RAMON MARGALEF</i>	46,7	2011	IEO	Vigo
	<i>ANGELES ALVARIÑO</i>	46,7	2012	IEO	Vigo
	<i>GARCIA DEL CID</i>	37,2	1977	CSIC	Vigo
Local	<i>FCO.DE PAULA NAVARRO</i>	30,5	1987	IEO	Palma Mallorca
	<i>SOCIB</i>	24,4	2012	SOCIB	Palma Mallorca
	<i>MYTILUS</i>	24,0	1997	CSIC	Vigo
	<i>JOSE Mª NAVAZ</i>	15,8	1984	IEO	Vigo
	<i>LURA</i>	14,3	1981	IEO	La Coruña

Activity for National Science Program Cruises 2014-17

Dedication to research projects (National Program) in days on different ships (1578 days)

B.O. Sarmiento de Gamboa

B.I.O Hespérides

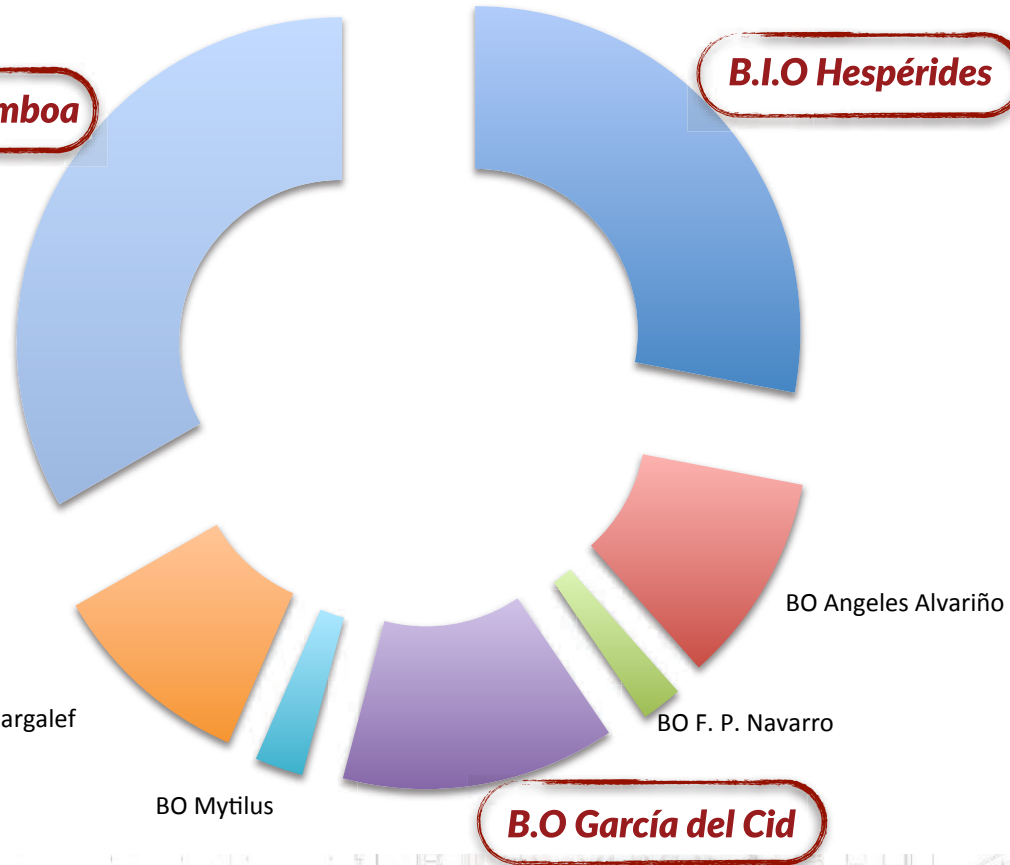
BO R.Margalef

BO Mytilus

B.O García del Cid

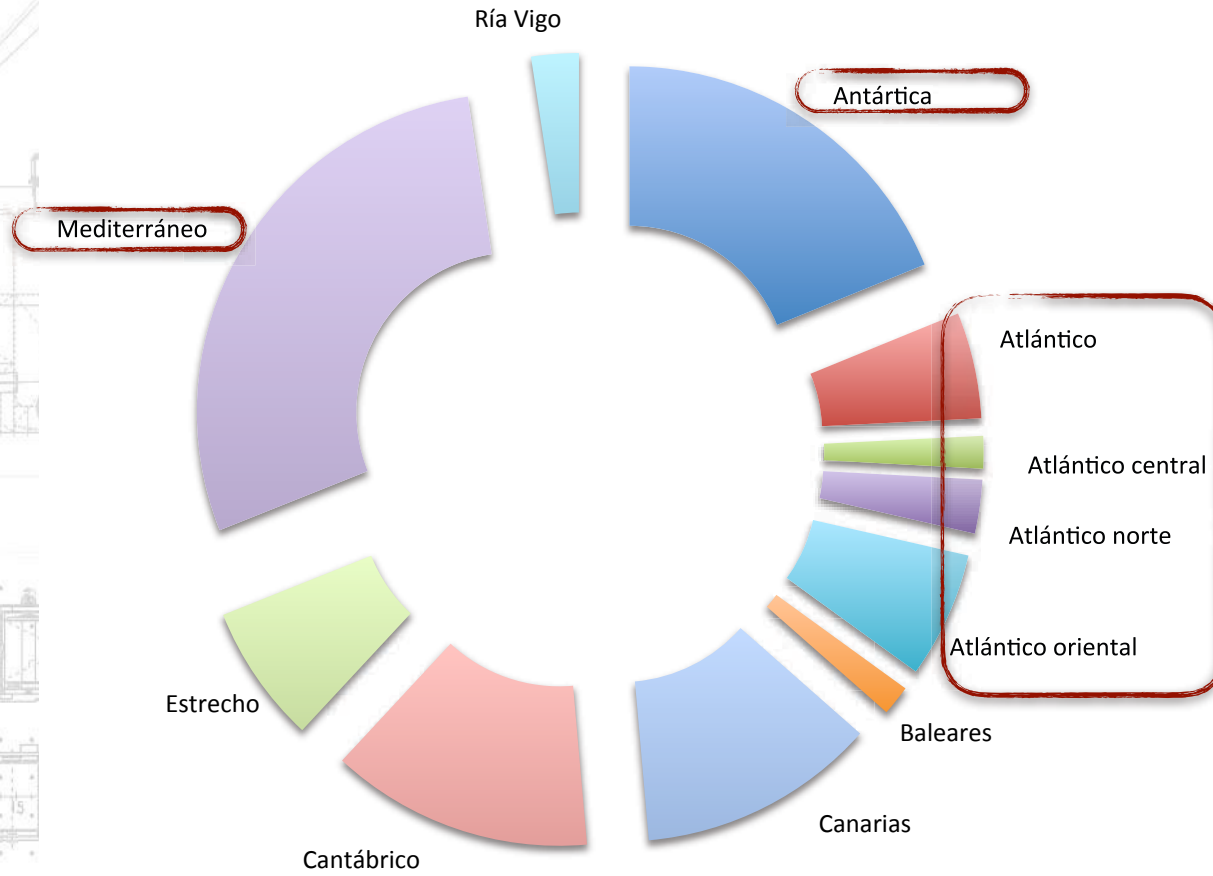
BO F. P. Navarro

BO Angeles Alvariño



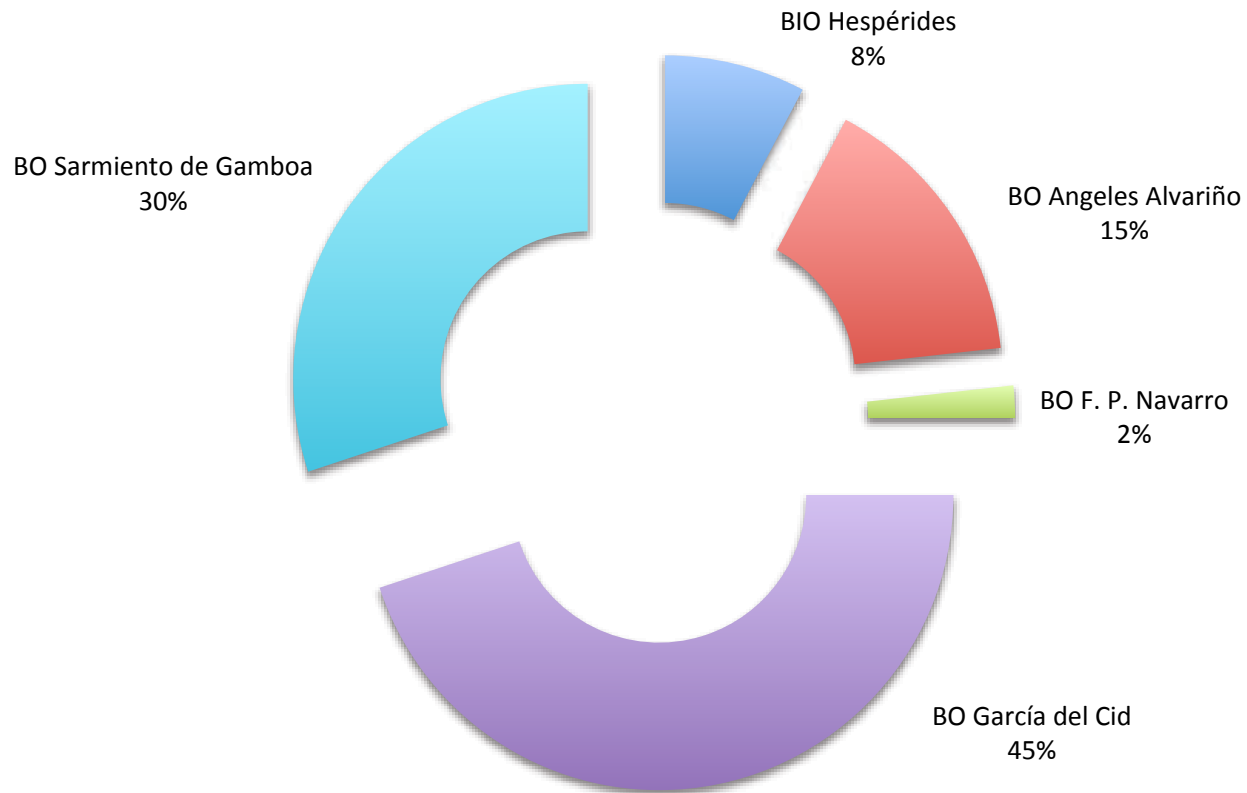
Activity for National Science Program Cruises 2014-17

Dedication by geographical area (1578 days)



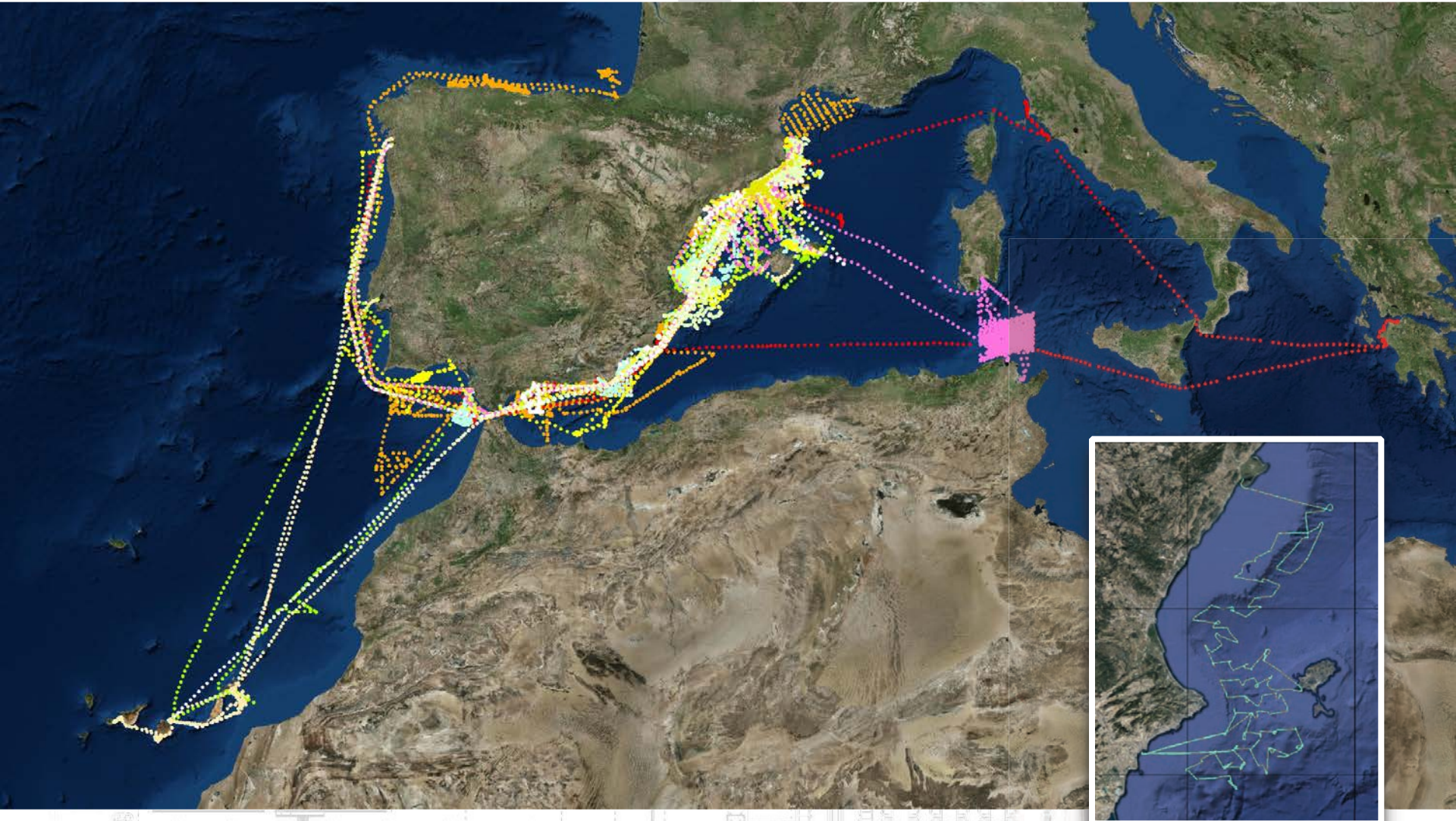
Activity for National Science Program Cruises 2014-17

Dedication at Mediterranean area cruises



SPANISH OCEANOGRAPHIC FLEET

Navigation Tracks R. V. Garcia del Cid (2009-2017)



R/V García del Cid (1977-)



Main principals

<i>Overall length:</i>	37,2 m
<i>Beam:</i>	8,4 m
<i>Draft:</i>	4,71 m
<i>Max. speed:</i>	12 knots
<i>Autonomy:</i>	12 days

Capacity
Crew: 14
Technicians & Scientist: 12



Capabilities



Sampling & Fisheries



Deployments

Standard Oceanographic instrumentation

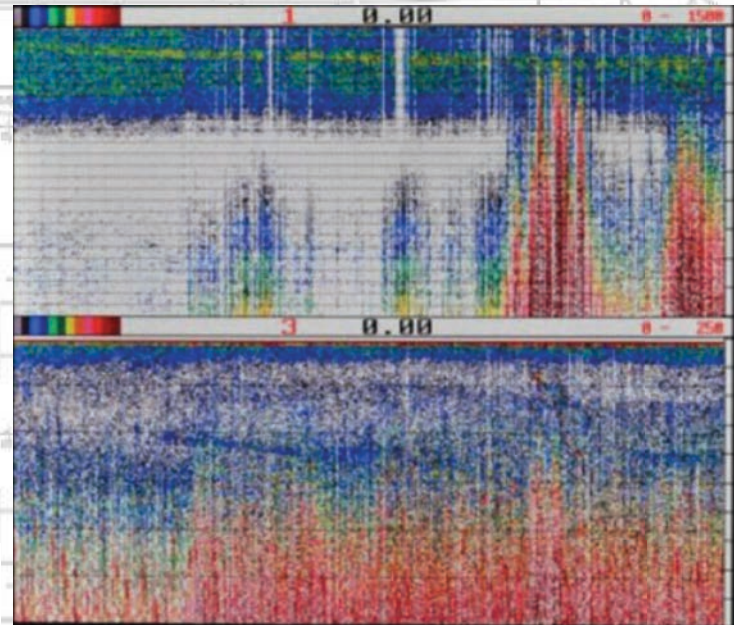
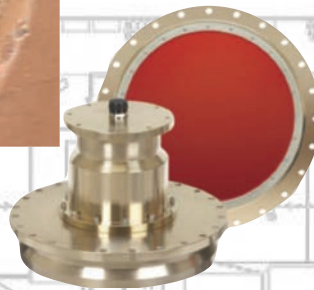


Acoustics

**Multibeam Echosounder
(Seabeam 1050 D)**



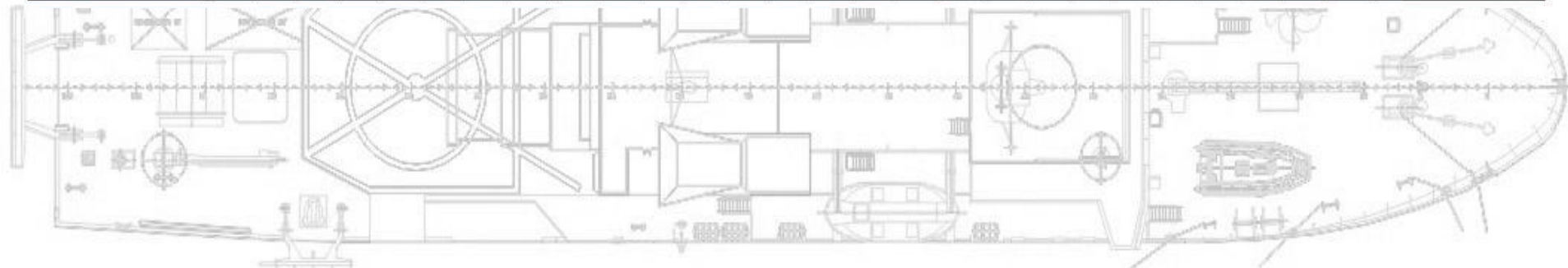
**Acoustic
Doppler Current
Profiler (75 KHz)**



Simrad EK50 (38 - 120 - 200 KHz)

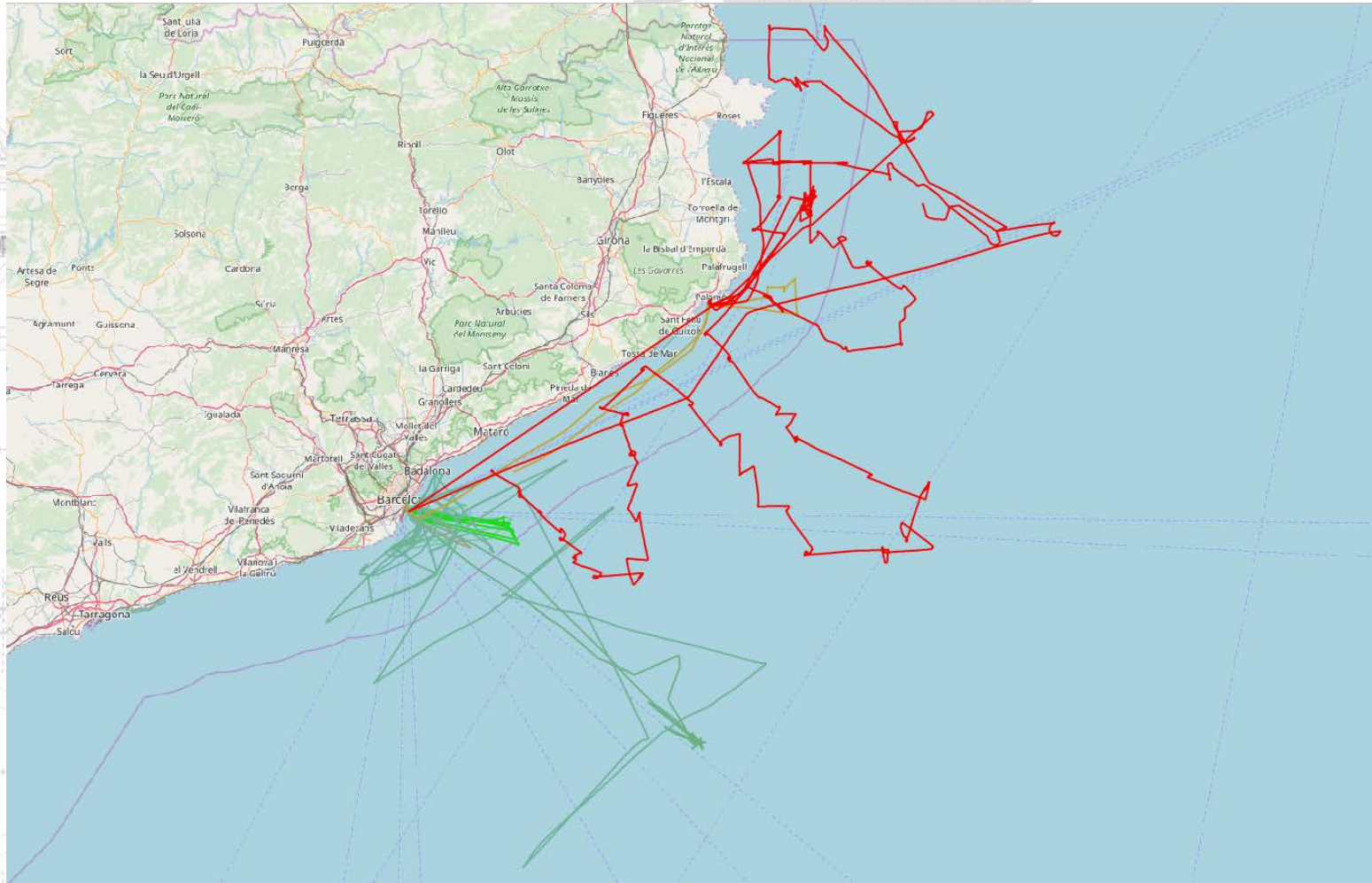
Activity 2017
Calendario 2017 *B/O García del Cid* aprobado 21ª COCSABO v. Dic. 2016

2017	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
ENERO	[Orange background]																															
FEBRERO		BCN	Pere Puig - ABIDES 1 CTM2015-65142-R										BCN	A. Calafat COC-DI-2016-					BCN	A. Sabatés- WINFISH CTM2015-68543-R												
MARZO	A. Sabatés- WINFISH CTM2015-68543-R																		BCN					[Grey background]								
ABRIL	[Orange background]																															
MAYO	[Orange background]																[Grey background]															
JUNIO			BCN	Pere Puig - ABIDES 2 CTM2015-65142-R								BCN	[Grey background]																			
JULIO	[Grey background]																															
AGOSTO	[Orange background]																															
SEPTIEMBRE	[Orange background]											BCN	M. Sala - AMICS CTM2015-65720-R						BCN					Gasol REMEI CTM2015-70340-R								
OCTUBRE	BCN	P.Puig ABIDES 3 CTM2015-65142-R								BCN	[Blue hatched background]					M.A. Mateo COC-DI-2016-13				Málaga	Cózar- MIDAS CTM2016-65720-R											
NOVIEMBRE	Mlg	[Blue hatched background]			BCN	✓	[Grey background]										[Orange background]															
DICIEMBRE	[Orange background]																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	



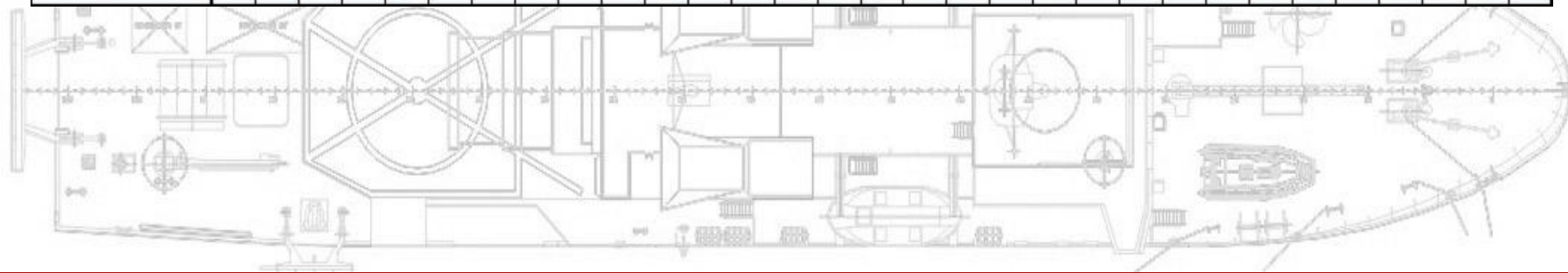
SPANISH OCEANOGRAPHIC FLEET

Navigation Tracks R. V. Garcia del Cid (2017)



Activity 2018
Borrador calendario 2018 B/O García del Cid para aprobación en 22ª COCSABO

2018	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					
ENERO																							Vigo													
FEBRERO	BCN			UB		BCN	Unibarna - UB					BCN	WINFISH - Ana Sabates - CTM2015																							
MARZO	BCN	ABIDES4		BCN																																
ABRIL																																				
MAYO	BCN	PM	Pascual PRE-SWOT-CTM2016-78607-P													PM		MAREMATING-CTM2016-77027-R						PM	BCN											
JUNIO	BCN		ABIDES4 - Puig			BCN															BCN	Huelva		FUGRO		Huelva										
JULIO			Vigo			FRAME 2 - Rodríguez - CTM2015-71766-R buque de apoyo																									BCN					
AGOSTO																																				
SEPTIEMBRE			PM	MAREMATING-CTM2016-77027-R						PM																										
OCTUBRE					BCN	UB - prácticas							BCN																							
NOVIEMBRE																																				
DICIEMBRE																																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					



Singularities

- ***Crew***

- CSIC crew (fixed positions)
- Specific Labor Agreement (Last renewal 10 years ago)
- Very experienced and easy to deal with them at sea.

- ***Management (budget)***

- There is no fixed budget assigned. Depends on the “per day incomes”
- Interesting for its equipment / cost and benefits for service companies (Repsol, Tecnoambiente). Several requests in 2013/17
- Daily rate /cost 4.781 €/ Day (overhead excluded)

- ***Present and Future***

- Important in the Mediterranean area.
- Ship at the end of its useful life (launched 1979). Equipment entering in the obsolescence phase.
- Renewal included in the 18-21 Strategic Plan for S. S. T. I.: SPANISH OCEANOGRAPHIC FLEET

Strategic Plan 2017-2021

● **Global vessels**

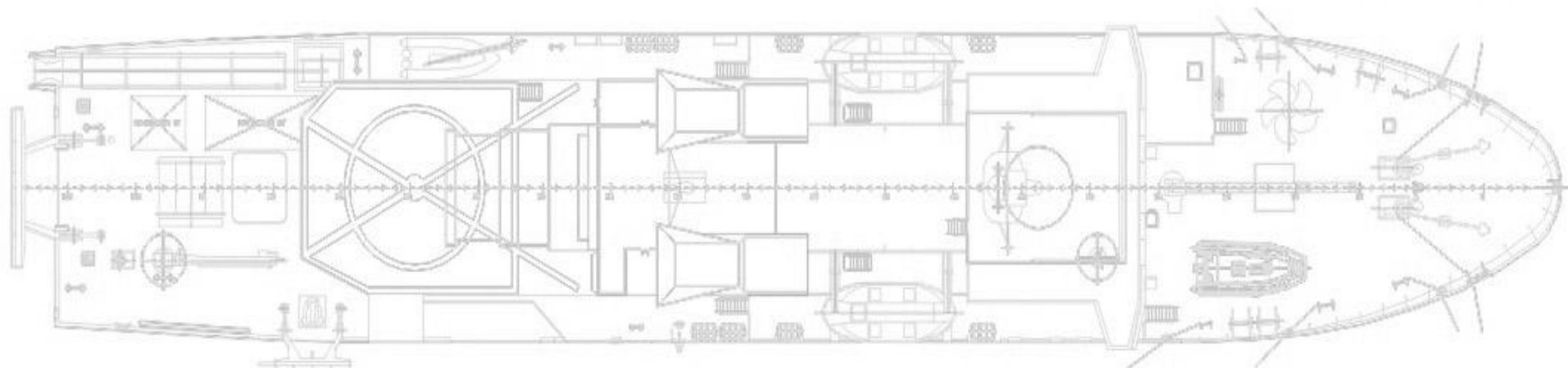
- RV Hesperides replacement (< 5-7 years)
 - One Polar vessel for science ○
 - One Polar vessel for Logistics (Antarctic Stations, Camps & Mobility)

● **Regionals Vessels**

- RV Garcia del Cid replacement (asawc) ○

● **Local Vessels**

- 4 to 5 local vessels



New Vessel?

Overall length	52 m
Breath	12.8 m
Accommodation (scientific)	> 20 pers.
Additional	12 pers.
Hospital	2 pers.
Economical speed	11 kn
Daily consumption V. E.	6240 l /day
Endurance	50 days
Fuel capacity	315.000 l

PERFIL VISTO POR ESTRIBOR

