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**ANNUAL REPORT TO THE COMMISSION
PART 1: INFORMATION ON FISHERIES, RESEARCH, AND STATISTICS**

**WCPFC-SC12-AR/CCM-05a
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EUROPEAN UNION



DATOS CIENTÍFICOS DE LA FLOTA ESPAÑOLA DE CERCO PARA EL INFORME ANUAL DEL COMITÉ CIENTÍFICO DE LA COMISIÓN PESQUERA DEL PACÍFICO OCCIDENTAL Y CENTRAL

Introducción

Los datos que se presentan a continuación corresponden a las actividades de investigación realizadas por el Instituto Español de Oceanografía en el ámbito de la Comisión Pesquera del Pacífico Occidental y Central (WCPFC), con el fin de que sean incluidos en el Informe Anual que se debe presentar al Comité Científico de dicha ORP.

La fecha límite para el envío de dicho informe es el 3 de julio de 2016, un mes antes del Comité Científico.

Las estimaciones que se presentan se derivan de campañas de observadores del Acuerdo del Programa Internacional para la Conservación de los Delfines. A pesar de que este acuerdo afecta al área de la Comisión Interamericana del Atún Tropical (CIAT), los buques cerqueros que faenan en el área de ambas ORPs son los mismos, y gran parte de las actividades de los buques en la zona WCPFC cuentan con datos de este programa. En el caso de las mareas no cubiertas por observadores, la información se ha complementado con cuadernos de pesca proporcionados por la Organización de Productores Asociados de Grandes Atuneros Congeladores (OPAGAC), y se ha asumido una tasa similar de descarte y de capturas accesorias.

La información se presenta de acuerdo al formato utilizado en el Informe Anual de años anteriores.

Madrid a 06 Junio de 2016

Instituto Español de Oceanografía

1.- PURSE SEINE

1.1.- Annual catch and effort by primary species in the WCPFC Convention Area.

Fishing vessels operating in the eastern Pacific Ocean have 100% coverage of onboard observers, in line with the Agreement on the International Dolphin Conservation Program (AIDCP). Although this agreement applies to vessels operating in the IATTC Convention Area, the four EC-flagged purse seiners operating in the Pacific Ocean have carried out their activity in both the IATTC and WCPFC Convention Areas during 2015, and observers of the APICD have covered *c.* 91% of the loaded catch in weight in the WCPFC Convention Area. Information from trips not covered by observers of the APICD is obtained from logbooks. Total catches reported by the observers and estimated from logbooks, catches to the east of 150°W and discards of the three main target species during 2015, as well as in previous years, are shown in Table I.

	2015			
	WCPFC	WCPFC east of 150°W	Discards	No. Sets
BET	1529	482	2	
SKJ	30389	8490	356	459
YFT	1290	347	1	

	2014				2013			
	WCPFC	east of 150°W	Discards	No. Sets	WCPFC	east of 150°W	Discards	No. Sets
BET	5591	187	8		8133	242	19	
SKJ	32004	1560	232	655	31596	799	752	665
YFT	2866	154	0		5281	45	7	

	2012				2011			
	WCPFC	east of 150°W	Discards	No. Sets	WCPFC	east of 150°W	Discards	No. Sets
BET	5423	108	18		7367	72	18	
SKJ	20579	257	742	596	27907	507	97	593
YFT	6169	10	30		4177	112	4	

Table I- Total catches (in metric tonnes) of BET, SKJ and YFT from EU purse seiners in the WCPFC convention area, in the WCPFC-CA east of the 150°W meridian, estimated discards and number of sets during the last 5 years.

1.2.- Number of vessels by size

As in previous years, 4 EU-Spain flagged purse seiners fished in the WCPFC-CA in 2015, with gross register tonnages of 1562, 2468, 2502 and 3200 GRT. Tuna are mainly caught by sets on FADs, but also on free schools. Catches are frozen onboard in salt vats. Table II summarizes the number of vessels and total gross register tonnages from the beginning of the fishery in the WCPFC-CA.

Year	GRT	No. vessels
1996	1351	1
1997	1351	1
1998	4419	3
1999	8176	4
2000	6887	4
2001	9172	4
2002	9172	4
2003	10678	5
2004	6532	3
2005	6532	3
2006	6532	3
2007	9732	4
2008	9732	4
2009	9732	4
2010	9732	4
2011	9732	4
2012	9732	4
2013	9732	4
2014	9732	4
2015	9732	4

Table II- Number of EU purse seiners and total gross register tonnage in the WCPFC-CA by year.

1.3.- Fishing patterns

Figure 1 shows the distribution of the catches (5° x 5°) of EU purse seiners in the WCPFC-CA during 2015 and the five previous years.

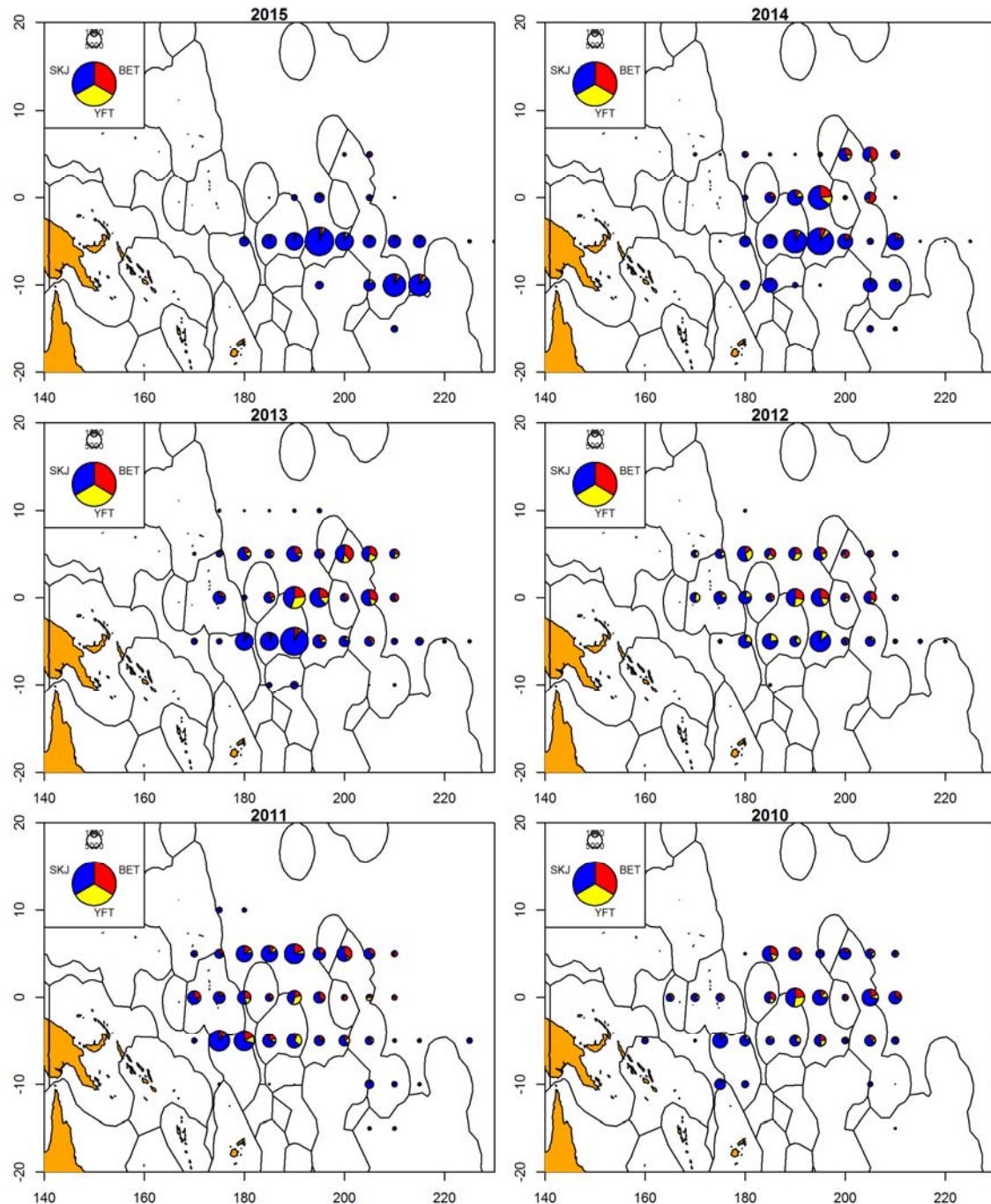


Fig. 1- Distribution of catches by area (5°x5°) and species in 2009-2014.

During 2015, the distribution of the catch has shifted south and east, in relation to previous years. The reported species composition has also varied, with a significant reduction in the percentages of bigeye and yellowfin tuna as compared to 2014, from 13.8 to 4.6% and 7.1 to 3.8%, respectively.

The distribution of the effort follows a similar pattern (Fig. 2), with the effort in 2015 concentrated further south and east than in previous years.

1.4.- Estimated total catches of non-target, associated and dependent species.

Tables III and IV summarize the purse seine bycatch by species in the WCPFC-CA in 2015 and 2014, respectively. In most cases, the observers only record the number of fish of each species per set. The total weight has been estimated by multiplying the number of fish in each size category (small, medium, large) by an average weight for the purse seine fishery provided by the IATTC (N. Vogel, pers. comm.).

7 species account for more than 90% of the bycatch, in terms of weight: Silky shark, blue and black marlins, dolphinfish, wahoo, rainbow runner and triggerfish.

Around 23% of the *Carcharinus falciformis*, the main shark species bycatch of the purse seine fleet, as well as 73% of the *C. longimanus* captured in 2015 was estimated to be released alive.

There is a mandatory Spanish protocol for releasing marine turtles caught by purse seine alive. All turtles involved in fishing operations must be released in the best conditions as soon as possible. In 2015, no marine turtle was involved in purse seine fishing operations within the WCPFC-CA (APICD observer coverage: 90.72% of the total catch in weight). In 2014, 5 interactions were recorded (1 loggerhead, 1 green, 2 leatherback and 1 unidentified). All of them were released unharmed, but one of the leatherback turtles, which showed light injuries.

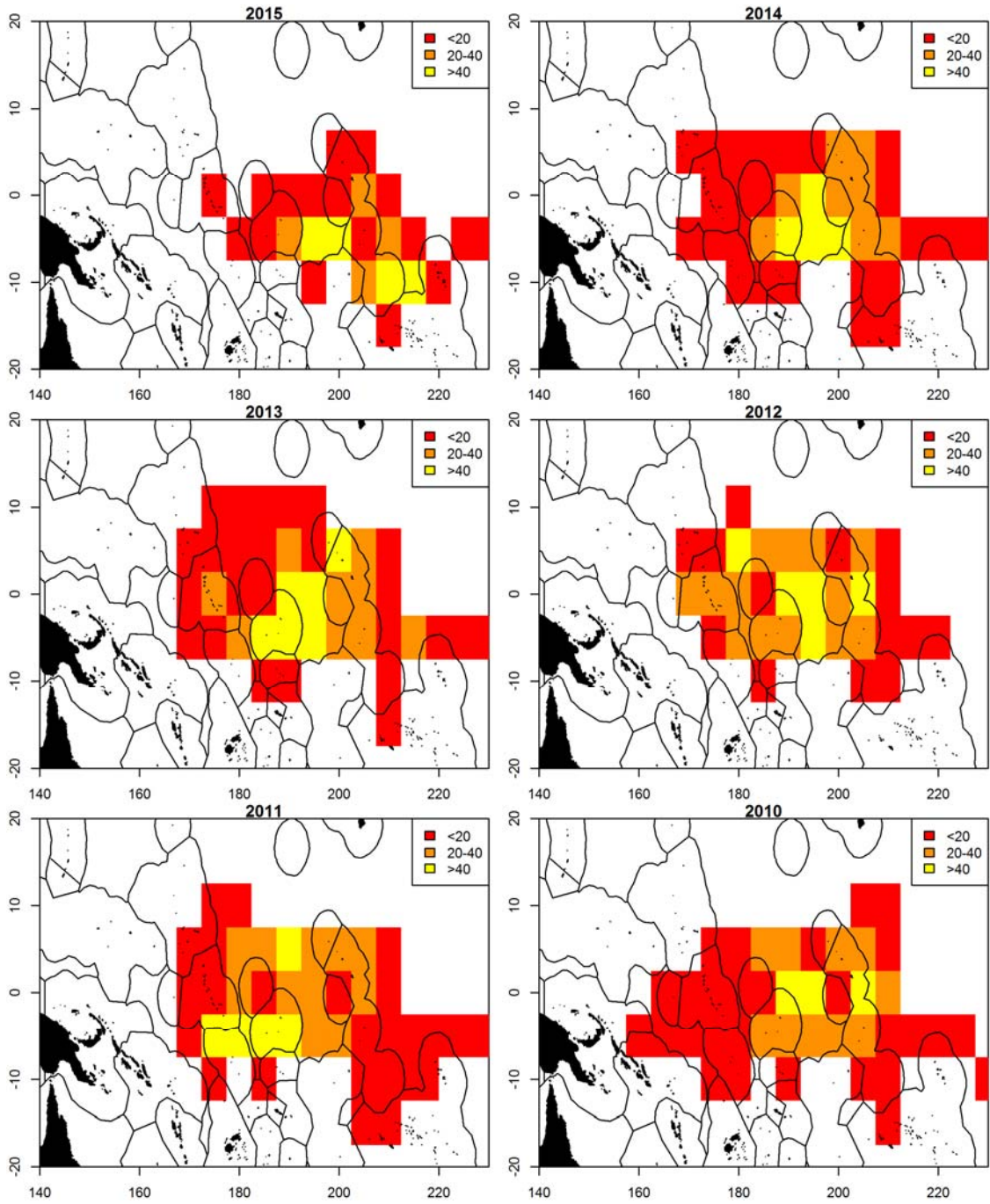


Fig. 2.- Distribution of the purse seine effort, in fishing days, by area (5°x5°) and year.

	Species	WCPFC	East of 150 ° W
BILLFISH	<i>Istiophoridae, Xiphiidae</i>	0.21	0.00
	<i>Istiompax indica</i>	10.91	7.17
	<i>Makaira nigricans</i>	6.69	1.23
	<i>Makaira, Tetrapturus</i>	0.18	0.00
SHARKS & RAYS	<i>Carcharhinus falciformis</i>	22.97	5.65
	<i>Carcharhinus longimanus</i>	0.07	0.03
	<i>Carcharhinus spp.</i>	0.80	0.04
	<i>Isurus oxyrinchus</i>	0.15	0.00
	<i>Manta birostris</i>	1.25	1.25
	<i>Mobula japonica</i>	0.15	0.00
	<i>Mobula spp.</i>	0.19	0.00
	<i>Mobula tarapacana</i>	0.14	0.00
	<i>Mobulidae</i>	0.11	0.08
	<i>Pteroplatytrygon violacea</i>	0.01	0.01
	<i>Sphyrna lewini</i>	0.12	0.00
	<i>Sphyrna spp.</i>	0.22	0.00
	<i>Sphyrna zygaena</i>	0.10	0.10
	Sharks, NEI	0.11	0.04
	OTHER FISH	<i>Acanthocybium solandri</i>	0.96
<i>Aluterus monoceros</i>		0.01	0.01
<i>Aluterus scriptus</i>		<0.01	0.00
<i>Canthidermis maculatus</i>		0.87	0.08
<i>Caranx sexfasciatus</i>		<0.01	<0.01
<i>Caranx spp.</i>		0.01	0.00
<i>Coryphaena hippurus</i>		1.00	0.26
<i>Decapterus macarellus</i>		<0.01	<0.01
<i>Elagatis bipinnulata</i>		2.31	0.61
<i>Kyphosus analogus</i>		<0.01	<0.01
<i>Kyphosus elegans</i>		<0.01	<0.01
<i>Kyphosus spp.</i>		<0.01	<0.01
<i>Lobotes surinamensis</i>		0.02	0.00
<i>Mola mola</i>		1.78	0.30
<i>Pisces</i>		<0.01	0.00
<i>Sectator ocyurus</i>		0.02	0.01
<i>Seriola rivoliana</i>		0.01	0.01
<i>Seriola, Caranx spp.</i>		0.20	0.00
<i>Sphyraena barracuda</i>		0.10	0.05
<i>Uraspis helvola</i>		0.01	<0.01
Others, NEI	0.16	<0.01	

Table III.- Purse seine bycatch in metric tonnes in the WCPFC-CA and in the WCPFC-CA east of meridian 150°W during 2015. These figures have been estimated from the bycatch records of the trips carrying observers of the AIDCP (90.72% of the total catch in weight in the WCPFC-CA), assuming a similar composition of the bycatch in trips without observers onboard.

	Species	WCPFC	East of 150 ° W
BILLFISH	<i>Istiophoridae, Xiphiidae</i>	0.47	0.00
	<i>Istiompax indica</i>	3.96	0.00
	<i>Makaira nigricans</i>	15.95	1.39
	<i>Makaira, Tetrapturus</i>	4.18	0.00
	<i>Tetrapturus angustirostris</i>	0.04	0.00
	<i>Tetrapturus audax</i>	1.31	0.00
	<i>Xiphias gladius</i>	0.05	0.00
SHARKS & RAYS	<i>Carcharhinus falciformis</i>	34.61	1.32
	<i>Carcharhinus longimanus</i>	0.31	0.00
	<i>Carcharhinus spp.</i>	0.06	0.00
	<i>Mobula tarapacana</i>	0.15	0.00
	<i>Mobulidae</i>	0.31	0.08
	<i>Pteroplatytrygon violacea</i>	<0.01	<0.01
	<i>Sphyrna lewini</i>	0.05	0.00
	<i>Sphyrna spp.</i>	0.11	0.00
	<i>Sphyrna zygaena</i>	0.40	0.00
	Sharks, NEI	0.03	0.00
OTHER FISH	<i>Ablennes hians</i>	<0.01	0.00
	<i>Acanthocybium solandri</i>	5.86	0.13
	<i>Aluterus monoceros</i>	0.14	0.09
	<i>Aluterus scriptus</i>	<0.01	<0.01
	<i>Balistidae</i>	0.03	0.02
	<i>Canthidermis maculatus</i>	8.44	0.03
	<i>Caranx sexfasciatus</i>	0.01	0.00
	<i>Caranx spp.</i>	0.02	0.00
	<i>Coryphaena equiselis</i>	0.12	0.00
	<i>Coryphaena hippurus</i>	11.16	1.03
	<i>Decapterus macarellus</i>	0.01	0.00
	<i>Elagatis bipinnulata</i>	6.21	0.07
	<i>Kyphosus analogus</i>	0.01	0.00
	<i>Kyphosus elegans</i>	<0.01	0.00
	<i>Kyphosus spp.</i>	0.01	0.00
	<i>Lobotes surinamensis</i>	<0.01	<0.01
	<i>Mola mola</i>	0.51	0.00
	<i>Naucrates ductor</i>	<0.01	0.00
	<i>Sectator ocyurus</i>	0.13	0.06
	<i>Seriola, Caranx spp.</i>	0.05	<0.01
<i>Sphyraena barracuda</i>	0.19	<0.01	
<i>Uraspis helvola</i>	<0.01	0.00	
Others, NEI	0.22	0.08	

Table IV.- Purse seine bycatch in metric tonnes in the WCPFC-CA and in the WCPFC-CA east of meridian 150°W during 2014. These figures have been estimated from the bycatch records of the trips carrying observers of the AIDCP (82.37% of the total catch in weight in the WCPFC-CA), assuming a similar composition of the bycatch in trips without observers onboard.

3.- RESEARCH AND STATISTICS

90.72% of the catch in the WCPFC-CA, including bycatch, was monitored by IATTC and national program observers of the Agreement on the International Dolphin Conservation Program (AIDCP). Additionally, in keeping with the current CMMs, EU purse seiners fishing in the WCPFC-CA have 100% coverage of ROP observers. These observers also record information on size and species composition, vessel activity, bycatch, etc. However, this information is submitted directly to the Science Service Provider and not reported to the flag State, and is not included in the current report.

2. LONG LINE FISHERY

The Spanish long line fleet is composed by 5 long liners. The activity of the fleet commenced in 2004, and it has been targeting swordfish since then. The data hereby included have been obtained from mandatory electronic logbooks for 2015 activity. All Spanish flagged longliners process the swordfish on board in dressed weight (eliminating the head, viscera and fins) and keep it frozen.

2.1 Annual catch and effort by primary species as well as bycatches and gear in the WCPFC Convention Area

FAO fishing area	VESSEL	ALB	BET	BLM	MLS	YFT	BSH	SMA	SWO
77	ILLA GAVEIRA				130		352	356	759
81	CARMEN TERE	492	35.372	672		8.988	350.951	134.243	489.110
	ECCE HOMO DIVINO		803	8.124	4.237	416	59.529	18.725	61.367
	ECCE HOMO GLORIOSO	24	108	13.100	3.187	941	31.121	16.938	103.322
	ILLA GAVEIRA	441	9.374		14.929		277.592	89.302	254.504
	TRESMARES	83	2.089	13.897	7.234	625	257.924	194.337	413.227
87.1.3	ECCE HOMO DIVINO			219	162			203	6.847
87.1.4	ECCE HOMO DIVINO	28	2.978	3.823	7.948	3.369	83.422	16.633	404.114
	ECCE HOMO GLORIOSO			3.054	2.409	3.704	40.834	6.451	264.060
	ILLA GAVEIRA		5.541		4.789		3.807	916	142.989
	PICO TRESMARES		289	1.305	468	53	414	1.312	34.510
87.2.5	ECCE HOMO DIVINO	22	1.321	490	768		549	276	245
87.2.6	ECCE HOMO DIVINO	14			1.429	1.772	36.084	21.789	48.268
	ECCE HOMO GLORIOSO				150		92.644	40.220	101.624
	ILLA GAVEIRA			219	162		806	73	2.039
Total general (Kg)		1.104	57.875	44.684	47.840	19.868	1.236.029	541.774	2.326.985

Total estimated catches by species in the Pacific Ocean South of the Equator (Kg)

It has to be noted that the catches included the total amount as result of the activity of these vessels in the WCPFC area, overlapping area and IATTC area, since these vessels may operate in the IATTC area.

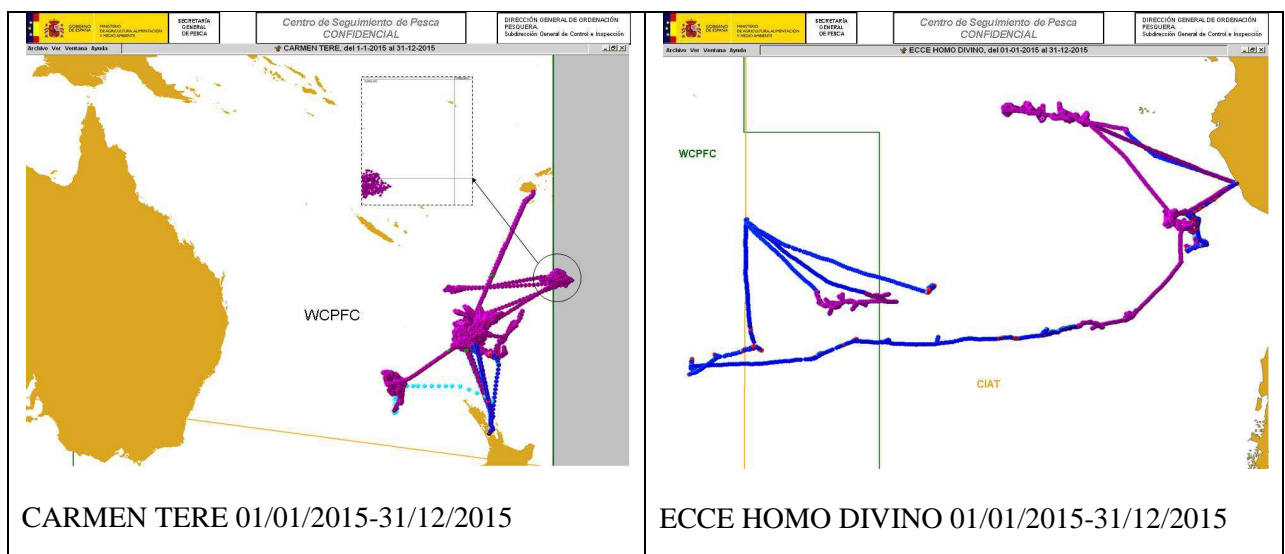
2.2. Number of vessels by gear and size (fleet characteristic)

Gear	LONGLINE
Fleet	SPAIN (EU)
Size class (GRT)	
0-50	0
50-200	1
201-500	4
500+	0
VESSEL NAME	AUTHORIZATION PERIOD
CARMEN TERE	01/01 to 31/12/2015
ECCE HOMO DIVINO	01/01 to 31/12/2015
ECCE HOMO GLORIOSO	01/01 to 31/12/2015
ILLA GAVEIRA	01/01 to 31/12/2015
PICO	01/01 to 31/12/2015
TRESMARES	01/01 to 31/12/2015

2.3. Fishing patterns

Spanish longline vessels in the Western and Central Pacific operate in the temperate area south of 20° south and the mostly work south of 30° south. The port of Papeete (French Polynesia) is the main hub for landings and supply activities, although one vessel uses New Zealand ports for this purpose. Long distances toward south are usually covered before starting fishing activities.

The vessels carry on lengthy trips lasting for 2 to 3 months. The main catches are swordfish and blue shark. They do not caught tropical sensitive shark species such as oceanic whitetip shark, silky shark or whale shark. . They displayed an average of 1157 hooks per vessel in 2015. They usually deploy wire leathers, since catches of blue shark and shorfin mako are significant for this fleet.



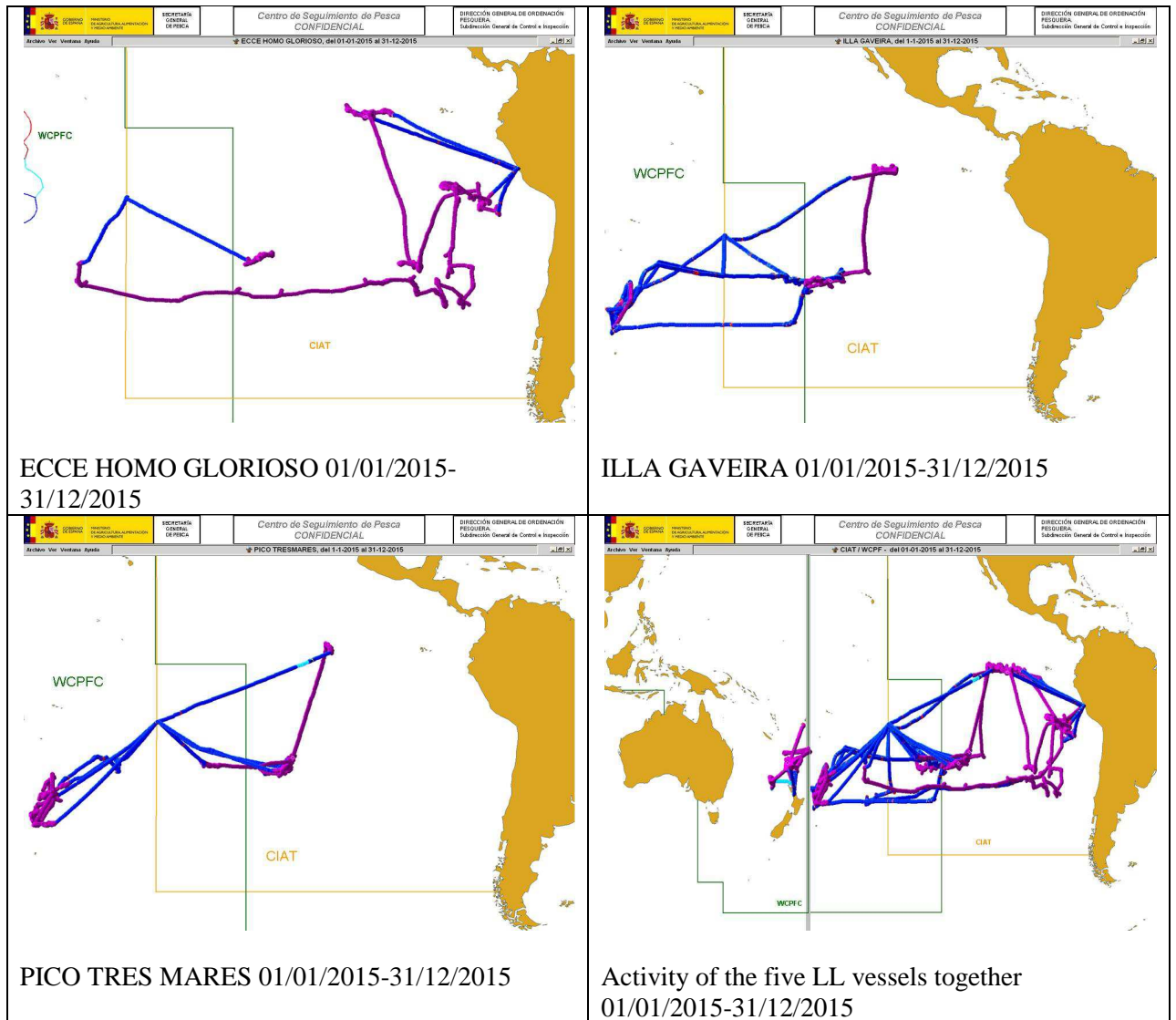


Fig 3. VMS plot for longlines of Spanish flag. The blue points correspond to transits with no fishing activities. Fishing activities are shown in pink.

* Catches for other species (FAL, OCS, MAK (LMA), THR/ALV, POR SPN/SPY, RHN) were not declared.