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Abstract	<p>This report presents an overview of the fishery data available from the European Union (EU) fleets operating at SIOFA area updating previous reports to the end of 2023.</p> <p>Information about Catch, CPUE, Data collection, VME and other data of interest are included. All catch and effort data for fishing operations during 2023 will be submitted to SIOFA in accordance with CMM 2023/02.</p> <p>While EU-France did not request any authorisation in 2023 and therefore did not fish in the SIOFA area, EU-Spain conducted fishing activities (one active vessel) have fished in the SIOFA Area.</p> <p>No VME indicator thresholds were triggered during 2023.</p> <p>The report will be made publicly available in perpetuity on the SIOFA website.</p>

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² Documents available only to members invited to closed sessions.

Recommendations

It is recommended that the SC:

- Notes the National Report provided by the EU.
- Notes that the EU has complied with the annual reporting requirements of the SIOFA Scientific Committee.

European Union 2024 annual report on fishing activities in the Southern Indian Ocean Fisheries Agreement Area

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1. Description of fisheries

1.1. Fleet composition

This section includes fleet composition data from the EU Member States active in SIOFA (France and Spain) during the period 2000-2023 as indicated in Tables 1 and 2 respectively for France (2009-2023) and Spain (2000-2023).

Table 1 Summary of EU-France fleet activity in the SIOFA Area

Year	Number of vessels
2009	2
2010	2
2011	2
2012	2
2013	2
2014	1
2015	Interruption
2016	1
2017	1
2018	0
2019	0
2020	0
2021	0
2022	0
2023	0

Two EU-France longliners, less than 25m, have a demersal fishery history in the SIOFA Area, in the Saya de Malha Bank, in addition to their tuna directed activities. There was no request for any authorisation in 2023 and therefore, there was no fishing in the SIOFA area.

One EU-Spain flagged vessel fished using Autoline in the SIOFA Area in 2023. From 2018 to 2021 fishing has taken place in the SE Indian Ocean (Area 7), while in 2020 some fishing hauls have also been located in the Ninety Degrees East Ridge (Area 4).

Information on Table 2 summarizes the fishing periods by gear (trawl, trap, bottom longline and bottom gillnet) conducted by the EU-Spain fleets within the SIOFA Area.

Only bottom longlines have been used from April 2015 up to now, mainly using the Autoline system. In 2018 a second vessel has participated using the bottom Spanish system LL. In 2023 only one vessel has been fishing with Autoline system (290 days at sea).

Table 2 Summary of EU-Spain fleet activity in the SIOFA Area

Year	Number vessels	Fishing period	Gear
2000	1	May - November	Bottom trawl / Midwater trawl
2001	1	October - November	Bottom trawl / Midwater trawl
2003	1	May - June	Bottom longline
2004	2	August - November September - December	Bottom longline
2005	2	August - November January-February & November - December	Bottom longline
2006	2	August - December January & November - December	Bottom longline
2007	2	January - December January-February & December	Bottom longline
2008	2	January - May January - December	Bottom longline
2009	1	January - March	Bottom longline
2013	1	January - December	Gillnet
2014	1	January - December	Gillnet
2015	1	January - December	Gillnet: January-March Bottom longline: April-December
2016	1	January - December	Bottom longline
2017	1	January & May-December	Bottom longline
2018	2	January-February & April-October (1 vessel) May-August (1 vessel)	Bottom longline
2019	1	January-December	Bottom longline
2020	1	January-December	Bottom longline
2021	1	January-December	Bottom longline
2022	1	January-December	Bottom longline
2023	1	January-December	Bottom longline

1.2. Fishing footprint

The fishing footprint of the EU-Spain fleet from 2000 to 2023 is shown in Figure 1 (below), using a 10'x10' grid.

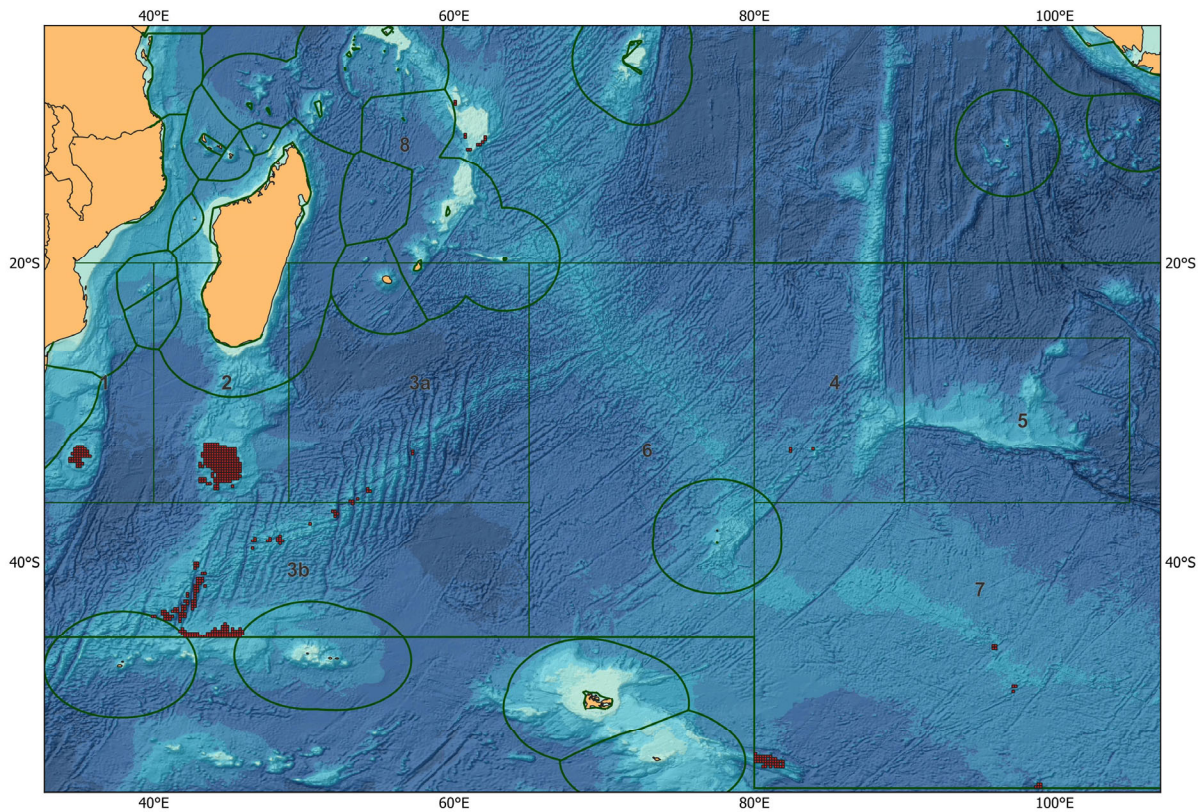


Figure 1 EU-Spain 2003-2023 footprint

2. Catch, Effort and CPUE summaries

2.1. Catch

Historically, the target species of EU fleet operating in SIOFA seamounts were: Alfonsino (*Beryx* spp.); Orange roughy (*Hoplostethus atlanticus*); Wreckfish (*Polyprion* spp.); Portuguese dogfish (*Centroscymnus coelolepis*); Southern boarfish (*Pseudopentaceros richardsoni*); and Patagonian toothfish (*Dissostichus eleginoides*). Within the by-catch species of commercial interest it can be highlighted: the Bluenose warehou (*Hyperoglyphe antarctica*); Blackbelly rosefish (*Helicolenus dactylopterus*); Common mora (*Mora moro*); Oilfish (*Ruvettus pretiosus*); Black cardinal fish (*Epigonus telescopus*); Birdbeak dogfish (*Deania calcea*); Kitefin shark (*Dalatias licha*); Gulper sharks (*Centrophorus* spp); Lanternshark (*Etmopterus* spp); Roudi escolar (*Promethichthys prometheus*); Violet warehou (*Schedophilus velaini*); Oreosomatidae (*Oreosomatidae*) and others. Identification of all deep-seas sharks to the lowest taxonomical level is not possible where no scientific observer is onboard. So far, all Spanish trips have scientific observer on board so it is possible to identify most of the sharks to the species level.

Table 3 shows the catch by year of the 8 most fished species (from 2001 to 2023). Although the vessel usually takes all the catch, there are always some specimens that are discarded. Tables

4 and 5 show the discards of the most retained species and the most discarded species respectively.

Table 3 Retained catch (t) by species*

Year	CYO	SCK	DCA	TOP	RIB	GUP	SHL	WRF	Others	Total
2001	0.0	3.1	0.0	0.0	0.6	0.0	0.0	0.8	27.6	32.0
2003	0.0	0.0	0.0	24.5	0.0	0.0	0.0	0.0	0.0	24.5
2004	419.8	0.0	0.0	1.2	6.6	0.0	0.0	85.8	87.3	600.7
2005	0.0	0.0	0.0	0.0	3.9	0.0	0.0	51.4	94.4	149.7
2007	0.0	0.0	0.0	3.5	2.7	0.0	0.0	2.3	12.7	21.2
2008	293.2	224.7	186.8	0.0	90.2	106.1	0.0	11.1	143.1	1055.1
2009	76.7	74.6	62.5	0.0	5.5	43.6	0.0	0.0	9.9	272.7
2013	316.1	409.9	369.9	0.0	143.2	127.7	0.0	1.1	144.3	1512.2
2014	505.0	341.4	314.5	0.0	159.1	106.1	0.0	0.0	101.2	1527.3
2015	924.9	365.9	290.7	0.0	128.2	133.7	0.0	0.8	54.9	1899.1
2016	1276.6	266.6	130.9	0.0	56.7	74.4	0.0	0.0	35.7	1840.8
2017	519.3	210.6	104.0	139.6	53.7	22.7	74.7	0.0	183.5	1308.2
2018	814.1	323.6	22.3	503.7	24.3	6.9	74.5	0.1	267.3	2036.9
2019	716.2	12.8	0.1	217.7	15.6	4.4	189.2	6.9	134.9	1297.8
2020	442.7	65.1	2.9	188.5	39.4	2.3	78.9	140.1	114.7	1074.6
2021	805.8	41.5	4.1	121.0	72.3	0	41.7	108.1	207.1	1401.6
2022	1059.2	21.4	3.6	157.9	71.6	9.2	195.4	14	133.3	1665.5
2023	608	6.0	1.0	199.9	9.9	0.0	86.3	8.3	122.8	1042.2

*CYO: *Centroscymnus coelolepis*; SCK: *Dalatias licha*, DCA: *Deania calcea*, TOP: *Dissostichus eleginoides*, RIB: *Mora moro*, GUP: *Centrophorus granulosus*, SHL: *Etmopterus spp*, WRF: *Polyprion americanus*.

Table 4 Discarded catch (t) of the main retained species* by year

Year	CYO	SCK	DCA	TOP	RIB	GUP	SHL	WRF	Others	Total
2001	0.0	0.0	0	0	0.0	0	0.0	0.0	3.6	3.6
2004	1.0	0.0	0	0	7.3	0	26.0	0.1	34.2	68.6
2005	0.0	0.0	0	0	0.0	0	0.0	0.0	6.3	6.3
2007	0.1	0.2	0	0	0.0	0	0.9	0.0	4.2	5.4
2017	0.0	0.0	0	0	0.0	0	0.0	0.0	6.1	6.1
2018	0.0	0.0	0	0	0.0	0	0.2	0.0	46.4	46.6
2019	0.0	0.0	0	0	0.0	0	0.0	0.0	6.8	6.8
2020	0.0	0.0	0	0	0.0	0	0.0	0.0	3.9	3.9
2021	0.0	0.0	0	0	0.0	0	0.0	0.0	2.7	2.7
2022	0	0	0	0	0	0	0	0	0	0
2023	0	0	0	0	0	0	0	0	0	0

*CYO: *Centroscymnus coelolepis*; SCK: *Dalatias licha*, DCA: *Deania calcea*, TOP: *Dissostichus eleginoides*, RIB: *Mora moro*, GUP: *Centrophorus granulatus*, SHL: *Etmopterus spp*, WRF: *Polyprion americanus*.

Table 5 Discards (t) by species and year *

Year	GRV	SHL	RFA	ANT	COX	RIB	QUB	PRP	Others	Total
2001	0	0	0	0	0	0	0	0.03	3.57	3.6
2004	0	25.96	0	0.05	3.83	7.3	5.09	3.97	22.38	68.59
2005	0	0	0	0	3.43	0	0	0	2.84	6.27
2007	0	0.86	0	2.11	0.37	0	0	0	2.1	5.44
2017	0	0	5.08	0	0	0	0	0	1.07	6.14
2018	22.53	0.19	12.1	6.63	0.05	0	0	0	5.1	46.61
2019	3.81	0	0.48	0.51	0.2	0	0	0	1.85	6.85
2020	0.01	0	0	1.76	0	0.03	0	0	2.12	3.91
2021	0	0	0	2.56	0.06	0	0	0	0.07	2.7
2022	0	0	0	0	0.03	0	0	0	0	0.03
2023	0	0	0	0	0	0	0	0	0	0

* GRV: *Macrourus* spp; SHL: *Etmopterus* spp; RFA: *Amblyraja taaf*; ANT: *Antimora rostrata*; COX: *Congridae*; RIB: *Mora moro*; QUB: *Squalus blainville*; PRP: *Promethichthys Prometheus*.

2.2. Fishing effort

The fishing effort in 2014 was high although only one vessel using gillnets was operating (Fig. 2). In 2015 the vessel using gillnets replaced the gear to bottom longline Autoline. Effort remained stable in the period 2016-2017 at a level of around 3 200 000 hooks per year (one vessel), increased up to 5 432 000 hooks (two vessels) in 2018, finally decreasing in 2019 and 2020. In 2021 and 2022 the trend is upwards whilst in 2023 there is a decrease in fishing effort below the mean (2015-2023) that is 3 433 000 hooks.

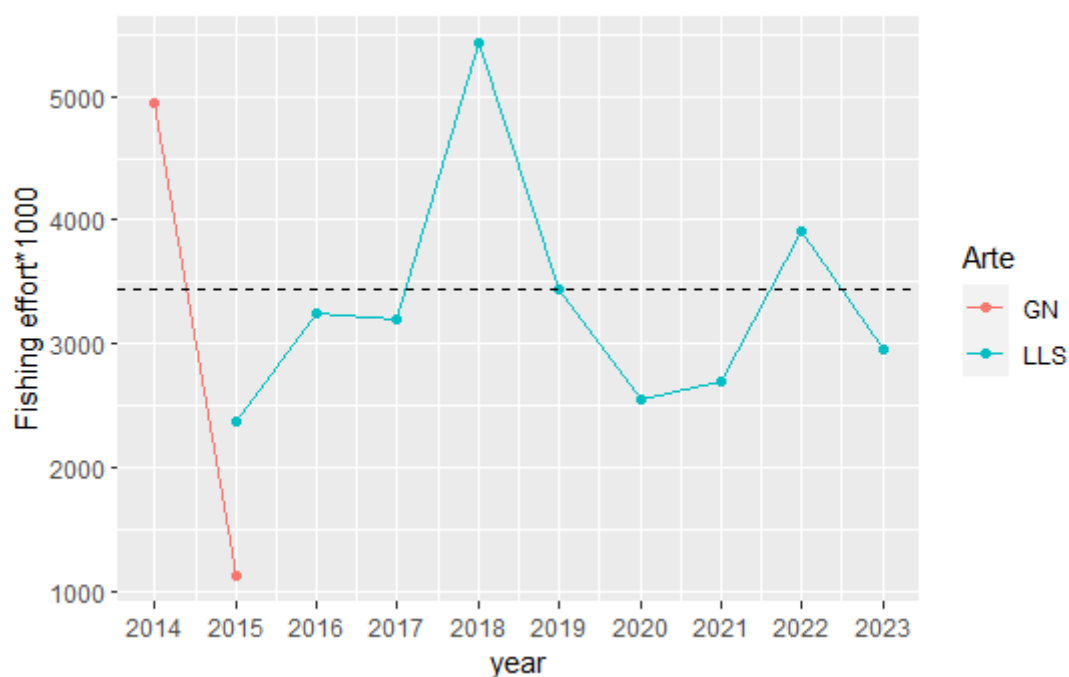


Figure 2 EU-Spain Fishing effort by gear (Bottom Longliners: n° hooks*1000, Gillnets: km) from 2014 to 2023. The black dotted line is the mean effort (2015-2023)

Total effort by year and gear are shown in Tables 6 and 7.

Table 6 Gillnet effort (km) by year and area

Year	2008	2009	2013	2014	2015
Effort *1000hooks	4765	899	5442	4945	1121

Table 7 Bottom Longline effort (n° hooks*1000) by year and area

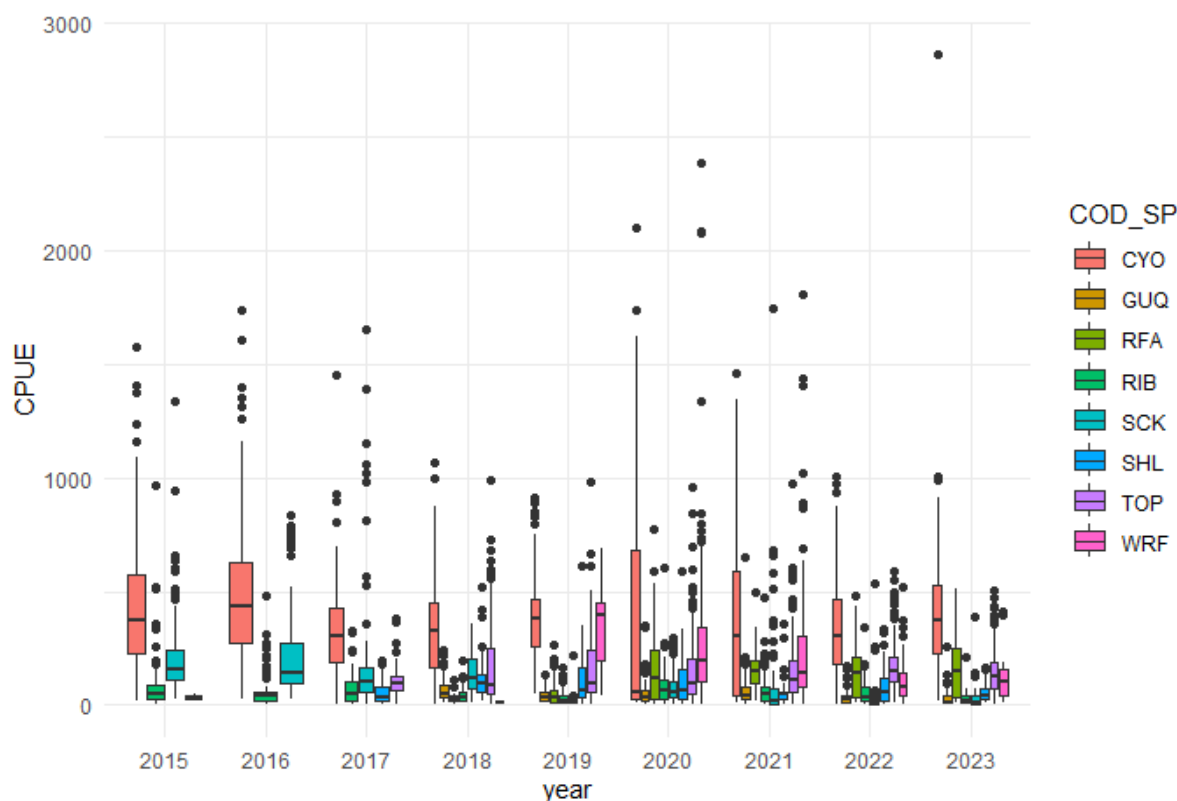
Year	2003	2004	2005	2007	2015	2016	2017	2018	2019	2020	2021	2022	2023
Effort *1000hooks													

Total effort
***1000 hooks** 588 1668 343 135 2370 3238 3197 5432 3436 2551 2691 3903 2957

2.3. Catch per unit effort (CPUE)

Figure 3 presents the CPUE (k/1000 hooks) by year (of the LLS EU-Spain fleet (period 2015-2023)).

In Del Cano rise and Williams ridge the main species caught is the Patagonian toothfish (TOP). In 2023 the highest CPUE has been 506 k/1000 hooks, with the mean CPUE in 2023 141 k/1000 hooks.



*CYO: *Centroscymnus coelolepis*, GUQ: *Centrophorus squamosus*, RFA: *Amblyraja taaf*, RIB: *Mora moro*, SCK: *Dalatias licha*, SHL: *Etmopterus spp*, TOP: *Dissostichus eleginoides*, WRF: *Polyprion americanus*.

Figure 3 CPUE (k/1000 hooks) by year of the EU-Spain LLS fleet (period 2015-2023).

3. Fisheries data collection and research activities

3.1. Data collection

EU data are obtained from different sources: Logbook data (provided to SIOFA in accordance with SIOFA CMM 2023/02), declaration system, records from the master and scientific observation, when available.

Logbook data are provided to SIOFA in accordance with SIOFA CMM 2023/02.

C2 and observer logbook data are collected in an Excel spreadsheet and processed at the IEO (Spanish Institute of Oceanography) for storage in a linked Access database. Analysis and validation of the data are made using R software.

3.2. Toothfish tagging/recaptures

In 2023 *Dissostichus spp* specimens caught have been tagged and released at a rate of at least 5 fish per tonne green weight caught, in agreement with the CMM 2021/15. A minimum overlap statistic between tagged and catch fish of at least 60% apply for tag release.

The tagging is done by the scientific observer with the help of the crew when needed. The tagging protocol is described in the National Report of the European Union presented to SIOFA SC in 2022, SC-07-16.

1651 TOP have been tagged with 14 recaptures in 2023. This would need to be confirmed with the Secretariat, but it is very likely that most of recaptures are from immigrant specimens that were tagged in CCAMLR Convention area, given that 12 of the tag labels are from AUS and 2 from FR.

3.3. Marine mammal interaction

An analysis of the Marine Mammal (MM) interaction with fishing activities targeting Patagonian toothfish was reported to CCAMLR in 2019 (CCAMLR, Gasco et al., 2019).

Odontocete marine mammals have been sighted in two of the three fishing trips with scientific observers in 2022 in the Area 3b.

In the first fishing trip, out of a total of 29 MMs sightings, 7 showed signs of predation of the catch, while in the second one, out of 24 sightings, 9 showed signs of predation. The species observed has always been the sperm whale except on one occasion where one sighting of False killer whale was sighted, with no evidence of predation on the catch.

In two of the three trips that took place in 2023, those targeting toothfish, interactions of MMs with fishing gear were found (in 39 out of 169 sets and 41 out of 212 respectively), the incidence being higher in Del Cano management unit.

3.4. Previous relevant research activities

López-Abellán in 2005 presented a document to CCAMLR regarding a Spanish Patagonian toothfish fishery in the statistical FAO area 51: «Patagonian toothfish in international waters of the Southwest Indian Ocean (statistical area 51)» that has been published in CCAMLR Science, Vol. 12 (2005): 207-214.

An analysis of tag recaptures in the SIOFA convention area from Patagonian toothfish tagged in the CCAMLR Convention area was presented at CCAMLR WG-FSA-18 (Sarralde and Barreiro, 2018).

Also, several analysis of the Patagonian toothfish stock in the SIOFA Area from data collected from observers on board vessels that operated between 2017 and 2019 in SIOFA 51.7 and 57.4

areas have been presented both in SIOFA WG-SERA-19 (Sarralde and Barreiro, 2019) and CCAMLR WG-FSA-19 (Sarralde et al, 2019).

Three documents were submitted to SERAWG and/or the SIOFA Scientific Committee in March 2020 and 2021:

- Gasco N, Tixier P, Massiot-Granier F, Péron C, Selles J, Sarralde R, Soeffker M. 2020. No boundaries for whales interacting with fishing activities targeting Patagonian toothfish. SERAWG-2020.
- Sarralde R, F. Massiot-Granier, J. Selles, Soeffker M. 2020. Preliminary analysis of the Patagonian toothfish fishing data of the Del Cano Rise SIOFA. SERAWG-2020.
- Preliminary Assessment of Bottom Fishing Impact for the EU fisheries in the SIOFA CA - Update (2021) EU-Spain.

The EU submitted the following documents to the Deep water shark working group in 2023 (WSDWS-2023-05, WSDWS-2023-06, WSDWS-2023-07) and to the SERAWG4 about Monitoring, Management and Impact Mitigation in the shark bycatch (SERAWG-04-13).

- Rodríguez-Cabello Cristina, C. González-Pola, F. Sánchez. Tagging deepwater sharks in North Spanish waters. WSDWS-2023-05
- Rodríguez-Cabello Cristina, Roberto Sarralde, Lucía Rueda, José Carlos Báez and Santiago Barreiro. Tagging and sampling protocol for deepwater Sharks. WSDWS-2023-07
- Rueda Lucía, Roberto Sarralde, Cristina Rodríguez-Cabello, José Carlos Báez. Preliminary analysis of the Spanish longline fishery operating in SIOFA. WSDWS-2023-10.

The EU project “Improving scientific advice on deep-water sharks in the SIOFA Area” which is currently being developed aims at improving the understanding of the deep-water sharks’ life history traits through the analysis of biological data and of the molecular identification of specimens sampled by the Spanish vessel in the SIOFA area.

4. VME Thresholds

From 2019, the EU bottom longline fleet is applying the protocols adopted by SIOFA in the CMM 2019-01 (and its successor CMM 2020/01). Previously the fishing vessels followed the rules adopted by their fisheries administration, similar to those applied in SEAFO and CCAMLR in the definition of the VME encounter and thresholds (see SC-06-21 for details).

The annual catch (k) by main VME taxa by year is shown in Table 8. Gorgonians (GGW) and Scleractinians (CSS) are the most abundant taxa.

The maximum encounters (in k) by taxa* and year in a line segment randomly selected for sampling, from the last Spanish surveys (from 2017 to 2023) within the SIOFA agreement area are shown in Table 9.

The threshold of 10 or more VME indicator units by segment has never been reached.

Table 8 VME bycatch (kg) of the main taxa by year*

Year	GGW	CSS	SPO	AXT	ATX	OOY	AJZ	AJH	Others	Total VME
2017	0,53	0	0,64	0,3	0,11	0,12	0	0	0,03	1,73
2018	0,61	1,56	3,41	0	0	0,45	0	0	0	6,04
2019	4,45	4,79	4,49	0	0,47	0	0	0	3,55	17,75
2020	17,82	16,6	4,42	2,67	0,88	0,1	0,4	3,5	2,6	49
2021	15,82	10,06	0,98	4,35	1,45	0,62	1,32	0	2,7	37,3
2022	3,2	1,7	5,16	0,8	1,2	0,15	1,8	0	0,85	14,86
2023	4,32	0,47	2,6	0	0,3	2,1	0	0	0	9,8

Table 9 Maximum bycatch of the main VME taxa(k) by year*

COD_SP	2017	2018	2019	2020	2021	2022	2023
AJH	0	0	0	1,5	0	0	0
AJZ	0	0	0	0,4	0,6	1,8	0
AQZ	0	0	0,1	0,4	0,5	0,35	0
ATX	0,08	0	0,3	0,2	0,6	1	0,3
AXT	0,3	0	0	0,9	0,7	0,8	0
AZE	0	0	0,03	0	0	0	0
BWY	0	0	0	0,01	0	0	0
BZN	0	0	0,04	0,45	0,8	0,4	0
CCH	0	0	0	0	0	0	0
CSS	0	0,47	1,8	1,2	2,5	1	0,21
CWA	0	0	0,1	0	0	0	0
CXX	0	0	1,3	0,02	0,2	0	0

COD_SP	2017	2018	2019	2020	2021	2022	2023
CXY	0	0	0	0	0	0	0
GGW	0,49	0,07	1,67	1,8	3	1,5	0,8
GSS	0	0	0	0	0,4	0	0
HQZ	0	0	0,1	0,01	0,03	0	0
HXY	0,03	0	0,03	0,03	0	0	0
IQO	0	0	0	0	0	0	0,15
NTW	0	0	0,22	0,27	0,1	0	0
OOY	0,05	0,08	0	0,1	0,2	0,15	1,5

* AJH: Anthozoa; AJZ: Alcyonacea; AQZ:Antipatharia; ATX:Actiniaria; AXT: Stylasteridae; AZN: Anthoathecatae; BWY: Bathylasmataceae; BZN:Briozoa; CSS:Scleractinia; CVD:Cidaridae; CWD:Stalked crinoids; DMO: Demospongiae; GGW: Gorgonacea; HQZ: Hydrozoa; HXY: Hexactinellida; NTW: Pennatulacea; OOO: Ophiurida; PFR: Porifera; SZS: Serpulidae; WOR: Polychaeta; ZOT: Zoanthidea

5. Biological sampling and length/age composition of catches

Since 2017 biological and size composition sampling by species are conducted by scientific observers on board the EU-Spanish vessels.

Tables 10 and 11 below show the biological sampling information by species in 2023 and during the period 2017-2023 respectively, when more than 100 specimens have been sampled. Information about sex and maturity is also available. Macrourid length measures are made to the Total length and additionally Anal length.

Table 10 Sampling information by species, number and total length (cm) min, max and mean in 2023

Sp	Scientific_name	Num	min	max	mean
TOP	<i>Dissostichus eleginoides</i>	8033	36	167	83,8
MCH	<i>Macrourus holotrachys</i>	2750	37	105	64,45
RFA	<i>Raja taaf</i>	1393	53	128	84,4
CYO	<i>Centroscymnus coelolepis</i>	1337	64	124	95,85
ETM	<i>Etmopterus granulosus</i>	769	44	85	66,65
ANT	<i>Antimora rostrata</i>	743	38	71	56,9
RIB	<i>Mora moro</i>	502	36	79	56,3

Sp	Scientific_name	Num	min	max	mean
Etm spp1	<i>Etmopterus spp1</i>	483	44	75	60,5
GUQ	<i>Centrophorus squamosus</i>	241	84	146	107,2
WRF	<i>Polyprion americanus</i>	184	61	135	86,5
SHL	<i>Etmopterus spp</i>	140	52	88	70,7
COX	<i>Congridae</i>	115	69	112	84,8

Table 11 Sampling information by species, number and total length (cm) min, max and mean during 2017-2023

Sp	Scientific_name	Num	min	max	mean
TOP	<i>Dissostichus eleginoides</i>	26495	36	188	84,9
CYO	<i>Centroscymnus coelolepis</i>	11239	39	158	94,1
MCH	<i>Macrourus holotrachys</i>	5687	12	105	53,0
ETM	<i>Etmopterus granulosus</i>	4479	2,4	85	64,4
ANT	<i>Antimora rostrata</i>	4282	0	132	57,2
SHL	<i>Etmopterus spp</i>	4231	25	88	62,1
RIB	<i>Mora moro</i>	3455	33	85	58,1
WRF	<i>Polyprion americanus</i>	2386	55	167	91,3
GRV	<i>Macrourus spp</i>	2354	1,5	93	43,6
RFA	<i>Raja taaf</i>	2351	41	145	80,0
RAJ	<i>Rajidae</i>	1600	38	109	60,2
GUQ	<i>Centrophorus squamosus</i>	1525	55	155	108,8
BRF	<i>Helicolenus dactylopterus</i>	602	26	50	36,9
DCA	<i>Deania calcea</i>	602	55	117	92,8
SCK	<i>Dalatias licha</i>	501	51	168	115,3
Etm spp1	<i>Etmopterus spp1</i>	483	44	75	60,5
BYR	<i>Bathyraja irrasa</i>	423	57	100	81,2
GUP	<i>Centrophorus granulosus</i>	347	84	172	117,7

Sp	Scientific_name	Num	min	max	mean
WHA	<i>Polyprion oxygeneios</i>	322	65	148	101,3
SVY	<i>Synaphobranchidae</i>	314	50	136	101,5
HYD	<i>Hydrolagus spp</i>	309	45	147	98,0
BXD	<i>Beryx decadactylus</i>	253	34	62	49,6
CGZ	<i>Conger spp</i>	227	53	102	85,6
ROK	<i>Helicolenus spp</i>	167	25	45	36,8
COX	<i>Congridae</i>	115	69	112	84,8
SDC	<i>Diastobranchus capensis</i>	114	70	128	97,7
SDU	<i>Deania profundorum</i>	109	56	106	87,8

6. Description of data verification mechanisms

Data from the EU fleet are reviewed searching for outliers on catch and effort data; species names; and fishing set position errors. In the periods where scientific observation is available, data from the vessels are contrasted with the observer's data.

Vessels are also controlled through the VMS positioning system.

7. Summary of observer and port sampling programs

Scientific observers have been deployed on board the EU-Spain fishing vessels operating in the region since 2017. Reports on the scientific observations and information on toothfish recaptures were prepared and provided to SIOFA Secretariat. Three fishing trips have taken place in 2023, one straddling the year 2022 and another straddling the year 2024 (the latter is still unfinished).

In 2023 a 100% of the Spanish trips have been covered by an on-board observer.

The scientific observers (Biologist or Marine Science degree) are trained at the *Instituto Español de Oceanografía*, specific training is also adapted for all fleets that are monitored.

No accidental catch data have been collected for birds or marine mammals in 2023.

Bird scare (tori) lines are deployed in most of the setting/hauling (if weather permits).

The EU has no port sampling program for vessels fishing within the SIOFA Area.

8. Relevant social and economic information (optional)

Catches are landed frozen on Mauritius Island.

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