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SC-09-05

2023 Annual National Report France OT

Delegation of France Overseas Territories

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| Abstract | |
| <p>This report summarizes and updates fishing activity by France Overseas Territories flagged vessels authorized by the French Government to operate in the Southern Indian Ocean Fisheries Agreement (SIOFA) Area for 2023.</p> <p>This annual report includes the BFIA report, the VME report, the observer program implementation report, and the annual data verification report, according to the circular 2022-03 Annex A.</p> <p>The fishing activity has been very low in 2023, only one longliner vessel operated in the toothfish fishery subarea 3.b (Del Cano management unit) during one cruise for a total of 2 days.</p> <p>No VME indicator thresholds were triggered during 2023.</p> <p>All data presented in this report will be submitted, in May 2024, to the SIOFA secretariat in accordance with CMM-02(2023). They comply with French domestic policy associated with the dissemination of fisheries data and this report does not disclose any non-public domain data within the meaning of SIOFA CMM 2016/03.</p> | |

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² Documents available only to members invited to closed sessions.

Recommendations

It is recommended that the SC:

- 1. Notes the National Report provided by FR-OT.
- 2. Notes that the FR-OT has complied with the annual reporting requirements of the SIOFA Scientific Committee.
- 3. Notes that there has been no change in the fishing fleet and the fishing activities were very low during the previous calendar year. The BFIA does not need to be updated.

2023 Annual National Report France OT

SIOFA 9th Scientific Committee 2024

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Introduction

This report summarises fishing activity by French Overseas Territories flagged vessels in the Southern Indian Ocean Fisheries Agreement (SIOFA) Area. French operators are currently authorised by the French Government to target various species with demersal lines and potting gears. In accordance with CMM-02(2023) (Conservation and Management Measure for the Collection, Reporting, Verification and Exchange of Data related to fishing activities in the Agreement Area) and previous superseded CMMs, French historical logbook data have been provided to the SIOFA Secretariat.

High seas fishing authorization in the SIOFA area are only deliverable to vessels that already hold a license issued by the Prefect, Administrator of the Terres Australes et Antarctiques Françaises (TAAF). Permits are granted for a one year period. Consistent with SIOFA CMM-02(2023), French high-seas fisheries permits require the implementation of vessel monitoring systems, 100% observer coverage for all operations.

Description of fisheries

In 2023, six vessels, from the Southern French Territories, were authorized by the French authorities to fish in the SIOFA area. The fleet includes five longliners and one trawler/potter vessel to target various species with pots, dropline, vertical longlines, automatic longlines and demersal longlines.

The size of vessels is from 55 to 77 meters. The port of registry is “Port-aux-Français”, Kerguelen Islands, (TAAF).

Fleet composition

In 2023, there was no change in the fleet and the French Territories fishing activities in the SIOFA AREA with one active demersal longliner operating in the toothfish fishery subarea 3.b (Table 1) for 2 days during one cruise.

Table 1: The number of French Overseas Territories vessels that actively fished in the SIOFA Area, 2011-2023

| Year | Vessels that actively fished | |
|------|------------------------------|--------|
| | Longliner | Potter |
| 2023 | 1 | 0 |
| 2022 | 1 | 0 |
| 2021 | 1 | 0 |
| 2020 | 2 | 0 |
| 2019 | 1 | 0 |
| 2018 | 0 | 1 |
| 2017 | 2 | 0 |
| 2016 | 0 | 1 |
| 2015 | 2 | 0 |
| 2014 | 2 | 0 |
| 2013 | 2 | 0 |
| 2012 | 2 | 0 |
| 2011 | 2 | 0 |

Catch and effort summaries

Fishing effort

In 2023, there were 5 fishing operations of 2 700 hooks (a total of 13 500 hooks set) between 1 227 and 1 566 meters in 2 days, all in Area 3b (Table 2 and Figure 1).

Table 2: Summary table of longline effort by set (number of line) in the SIOFA areas, 2011-2023.

Blanks: no operations.

| Year | Sub-areas for reporting effort data | | | | | | | | |
|------|-------------------------------------|---|-----|-----|-----|---|---|---|---|
| | 1 | 2 | 3.a | 3.b | 4 | 5 | 6 | 7 | 8 |
| 2023 | | | | 5 | | | | | |
| 2022 | | | | 80 | | | | | |
| 2021 | | | | 54 | | | | | |
| 2020 | | | | 46 | | | | | |
| 2019 | | | | 40 | | | | | |
| 2018 | | | | | 30* | | | | |
| 2017 | | | | 26 | 4 | 3 | | | |
| 2016 | | | | | 12* | | | | |
| 2015 | | | | 66 | | | | | |
| 2014 | | | | 103 | | | | | |
| 2013 | | | | 126 | | | | | |
| 2012 | | | | 88 | | | | | |
| 2011 | | | | 80 | | | | | |

Note: * vertical longline

Table 3: Summary table of trap effort by set (number of trap) in the SIOFA areas, 2011-2023.

Blanks: no operations.

| Year | Sub-areas for reporting effort data | | | | | | | | |
|------|-------------------------------------|---|-----|-----|----|---|---|---|---|
| | 1 | 2 | 3.a | 3.b | 4 | 5 | 6 | 7 | 8 |
| 2023 | | | | | | | | | |
| 2022 | | | | | | | | | |
| 2021 | | | | | | | | | |
| 2020 | | | | | | | | | |
| 2019 | | | | | | | | | |
| 2018 | | | | | 50 | | | | |
| 2017 | | | | | | | | | |
| 2016 | | | | | 40 | | | | |
| 2015 | | | | 20 | | | | | |
| 2014 | | | | | | | | | |
| 2013 | | | | | | | | | |
| 2012 | | | | | | | | | |
| 2011 | | | | | | | | | |

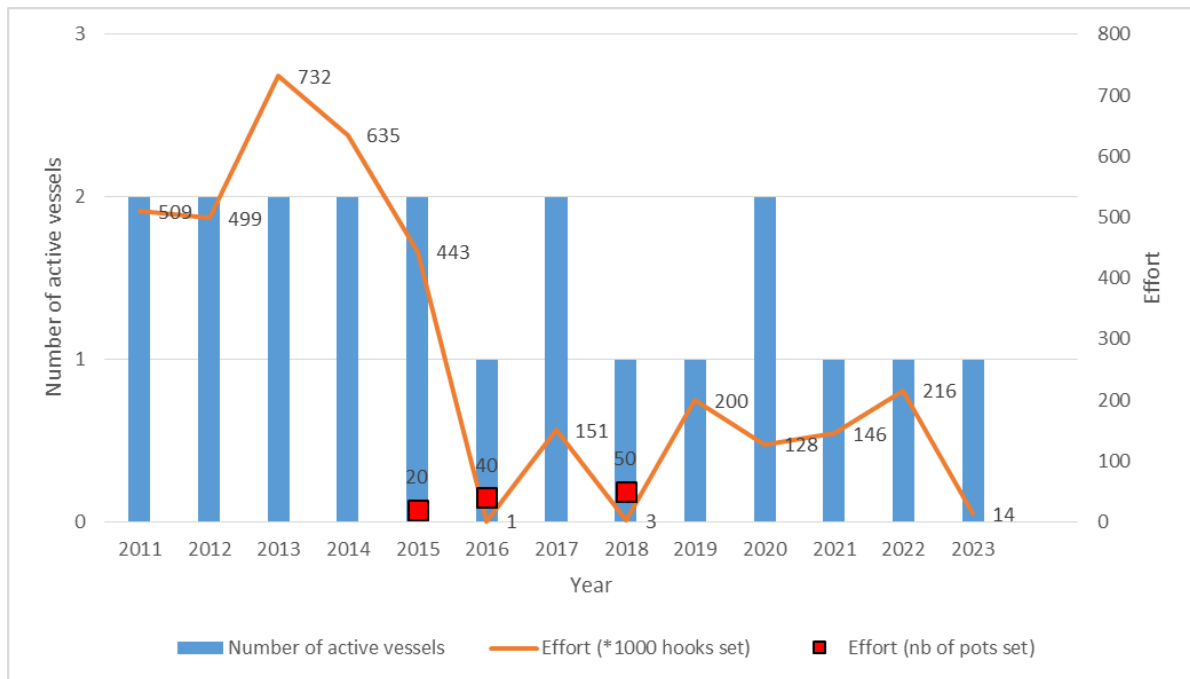


Figure 1 : Effort (number of hooks, number of pots) and number of active vessels in the SIOFA Area, 2011 to 2023

Catch

The main catches (Table 6) for the southern area are the Patagonian Toothfish (TOP), Macrourids (GRV) and *Antimora rostrata* (ANT). Catches include also some *Amblyraja taaf* (RFA) and *Etmopterus sp.* (ETF) and some other species with low catches.

The catches are mainly made with demersal longlines (Table 4). Catches with traps and vertical longlines remain very low (Table 5).

Table 4: Summary table of demersal longline total catches in kilograms, in the SIOFA areas, 2011-2023. Blanks: no operations.

| Year | Sub-areas for reporting catch data | | | | | | | | |
|------|------------------------------------|---|-----|--------|-----|-----|---|---|---|
| | 1 | 2 | 3.a | 3.b | 4 | 5 | 6 | 7 | 8 |
| 2023 | | | | 1 631 | | | | | |
| 2022 | | | | 29 372 | | | | | |
| 2021 | | | | 13 181 | | | | | |
| 2020 | | | | 15 175 | | | | | |
| 2019 | | | | 29 083 | | | | | |
| 2018 | | | | | | | | | |
| 2017 | | | | 25 149 | 282 | 538 | | | |
| 2016 | | | | | | | | | |
| 2015 | | | | 70 521 | | | | | |
| 2014 | | | | 66 765 | | | | | |
| 2013 | | | | 84 620 | | | | | |
| 2012 | | | | 48 427 | | | | | |
| 2011 | | | | 69 990 | | | | | |

Table 5: Summary table of trap and vertical longline total catches in kilograms in the SIOFA areas, 2011-2023. Blanks: no operations.

| Year | Sub-areas for reporting catch data | | | | | | | | |
|------|------------------------------------|---|-----|-----|--------|---|---|---|---|
| | 1 | 2 | 3.a | 3.b | 4 | 5 | 6 | 7 | 8 |
| 2023 | | | | | | | | | |
| 2022 | | | | | | | | | |
| 2021 | | | | | | | | | |
| 2020 | | | | | | | | | |
| 2019 | | | | | | | | | |
| 2018 | | | | | 402,47 | | | | |
| 2017 | | | | | | | | | |
| 2016 | | | | | 97,9 | | | | |
| 2015 | | | | 2,6 | | | | | |
| 2014 | | | | | | | | | |
| 2013 | | | | | | | | | |
| 2012 | | | | | | | | | |
| 2011 | | | | | | | | | |

Table 6: Longline catch (kg) by species for the main target, bycatch, associated and depended species (R-retained and D-discarded) in the SIOFA areas, 2011-2023. The absence of catches is noted '0'. No operations is noted '-'.

| Year | <i>Dissostichus eleginoides</i> | | <i>Macrourus sp</i> | | <i>Antimora rostrata</i> | | <i>Amblyraja taaf</i> | | <i>Etmopterus sp</i> | | Total | |
|------|---------------------------------|----|---------------------|-------|--------------------------|--------|-----------------------|-------|----------------------|-----|--------|--------|
| | R | D | R | D | R | D | R | D | R | D | R | D |
| 2023 | 672 | 0 | 32 | 156 | 0 | 768 | 0 | 4 | 0 | 0 | 704 | 927 |
| 2022 | 11 566 | 41 | 4 303 | 2 260 | 0 | 11 062 | 110 | 29 | 0 | 2 | 15 979 | 13 393 |
| 2021 | 4 497 | 0 | 497 | 833 | 0 | 7 344 | 0 | 10 | 0 | 0 | 4 994 | 8 187 |
| 2020 | 5 210 | 10 | 1 132 | 1 220 | 0 | 7 486 | 0 | 117 | 0 | 0 | 6 342 | 8 833 |
| 2019 | 9 618 | 20 | 5 103 | 3 607 | 21 | 10 192 | 19 | 502 | 0 | 2 | 14 761 | 14 323 |
| 2018 | - | - | - | - | - | - | - | - | - | - | - | - |
| 2017 | 7 610 | 0 | 5 020 | 2 656 | 0 | 9 500 | 0 | 361 | 0 | 469 | 12 630 | 12 986 |
| 2016 | - | - | - | - | - | - | - | - | - | - | - | - |
| 2015 | 17 200 | 60 | 12 300 | 6 700 | 0 | 33 800 | 0 | 400 | 0 | 1 | 29 500 | 40 961 |
| 2014 | 13 500 | 0 | 7 700 | 3 800 | 0 | 37 600 | 0 | 3 900 | 0 | 561 | 21 200 | 45 861 |
| 2013 | 16 000 | 0 | 13 000 | 5 600 | 0 | 44 200 | 0 | 0 | 0 | 582 | 29 000 | 50 382 |
| 2012 | 17 700 | 0 | 3 900 | 2 600 | 1 | 10 900 | 0 | 0 | 0 | 0 | 21 601 | 13 500 |
| 2011 | 22 100 | 0 | 8 800 | 3 500 | 0 | 28 000 | 0 | 0 | 0 | 167 | 30 900 | 31 667 |

Fishery data collection

All the licensed French Territories vessels have a fishing observer on board, covering 100% of fishing activities. The task list is described in WHSOP1-INFO-06-French-Observer-program (Annex 03: Observer's program task list). Data collection occurs at two different levels:

- Skipper level: have to collect all detailed information on fishing events and catches.
- Observer level: independently, fishery observers (covering 100% of gear deployment) collect data on a fourth of the set to monitor catches.

All data are registered on board in a digital logbook and transferred to the MNHN fishing database "PECHEKER". Analysis of the data are made using SQL Developer and R.

Table 7: Details on the scales and resolutions of the fishery data collection

| | longliner data collection items | | | |
|-----------|--|--|--|---|
| Year | tow / set <i>(individual or some aggregation)</i> | time scale <i>(set-tow hauling time, daily, etc.)</i> | spatial scale <i>(tow/set exact position or grid, please provide grid resolution)</i> | species details <i>(any aggregation or species grouping)</i> |
| 2011-2023 | Individual (set by set) | set hauling time | set exact position | species level |

VME Thresholds

The crew must collect and retain all benthic organisms for each segment in numbered buckets, those buckets will be made available for observers. The observers record benthic organisms composition and abundance for each set (Table 10). This information is also recorded in a digital logbook and transferred to the MNHN fishing database "PECHEKER".

No VME indicator thresholds were triggered for the period 2011-2023 (Table 8). The move-on protocol didn't need to be applied.

No interactions with threatened, endangered and protected species were reported in 2023 (Table 9).

Table 8: Threshold levels for encounters with VMEs and move-on protocols for the period 2011-2023

| Gear/fishery | Threshold (kgs) | Move-on protocols |
|--------------|-----------------|-------------------|
| Longline | 0 | None apply |

Table 9: Summary VME Taxa (wet) weight (kg), operations exceeding thresholds and effort in the SIOFA areas, the absence of VME catches is noted '-', the absence of thresholds is noted 0.

| Year | Unit | Sub-areas for reporting catch and effort data | | | | | | | | |
|----------------|---------------|---|---|-----|-----|---|---|---|---|---|
| | | 1 | 2 | 3.a | 3.b | 4 | 5 | 6 | 7 | 8 |
| Year 2011-2023 | Weight (kg) | - | - | - | 0 | 0 | 0 | - | - | - |
| | N° Operations | - | - | - | 0 | 0 | 0 | - | - | - |
| | Effort | - | - | - | 0 | 0 | 0 | - | - | - |

Table 10: VME taxa bycatch quantities from logbooks data in 2023.

| | 2023 | weight (kg) |
|------|------|-------------|
| taxa | CNI | 0,2 |

Biological sampling and length/age composition of catches

Since the beginning, biological and size composition sampling by species is conducted by scientific observers on board the FR-OT vessels (Table 11).

Table 11: Summary numbers of fish sampled* per species for the past five years

| Species (FAO code) | Years | | | | |
|-----------------------|-------------------|--------------------|--------------------|--------------------|------------------|
| | 2019 | 2020 | 2021 | 2022 | 2023 |
| TOP | L/F: 358 BS: 0 | L/F: 245 BS: 10 | L/F: 184 BS: 32 | L/F: 558 BS: 32 | L/F: 10 BS: 0 |
| GRV | L/F: 0 BS: 0 | L/F: 351 BS: 5 | L/F: 72 BS: 3 | L/F: 217 BS: 1 | L/F: 0 BS: 0 |
| ANT | L/F: 79 BS: 0 | L/F: 399 BS: 5 | L/F: 232 BS: 3 | L/F: 280 BS: 1 | L/F: 25 BS: 0 |
| RFA | L/F: 38 BS: 0 | L/F: 218 BS: 0 | L/F: 326 BS: 0 | L/F: 41 BS: 0 | L/F: 0 BS: 0 |
| SDC | L/F: 0 BS: 0 | L/F: 3 BS: 0 | L/F: 0 BS: 1 | L/F: 1 BS: 2 | L/F: 0 BS: 0 |
| CZF | L/F: 0 BS: 0 | L/F: 0 BS: 0 | L/F: 0 BS: 0 | L/F: 0 BS: 1 | L/F: 0 BS: 0 |
| LEV | L/F: 0 BS: 0 | L/F: 0 BS: 5 | L/F: 0 BS: 0 | L/F: 0 BS: 2 | L/F: 0 BS: 0 |
| CVY | L/F: 0 BS: 0 | L/F: 16 BS: 6 | L/F: 0 BS: 0 | L/F: 0 BS: 0 | L/F: 0 BS: 0 |
| SRX | L/F: 0 BS: 0 | L/F: 1 BS: 0 | L/F: 0 BS: 0 | L/F: 0 BS: 0 | L/F: 0 BS: 0 |
| BXD | L/F: 0 BS: 0 | L/F: 0 BS: 0 | L/F: 0 BS: 0 | L/F: 0 BS: 0 | L/F: 0 BS: 0 |
| CHZ | L/F: 0 BS: 0 | L/F: 0 BS: 0 | L/F: 0 BS: 0 | L/F: 0 BS: 0 | L/F: 0 BS: 0 |
| ROK | L/F: 0 BS: 0 | L/F: 0 BS: 0 | L/F: 0 BS: 0 | L/F: 0 BS: 0 | L/F: 0 BS: 0 |
| WHA | L/F: 0 BS: 0 | L/F: 0 BS: 0 | L/F: 0 BS: 0 | L/F: 0 BS: 0 | L/F: 0 BS: 0 |
| WRF | L/F: 0 BS: 0 | L/F: 0 BS: 0 | L/F: 0 BS: 0 | L/F: 0 BS: 0 | L/F: 0 BS: 0 |

* For L/F: length/frequency counts, BS: for complete individual biological sampling

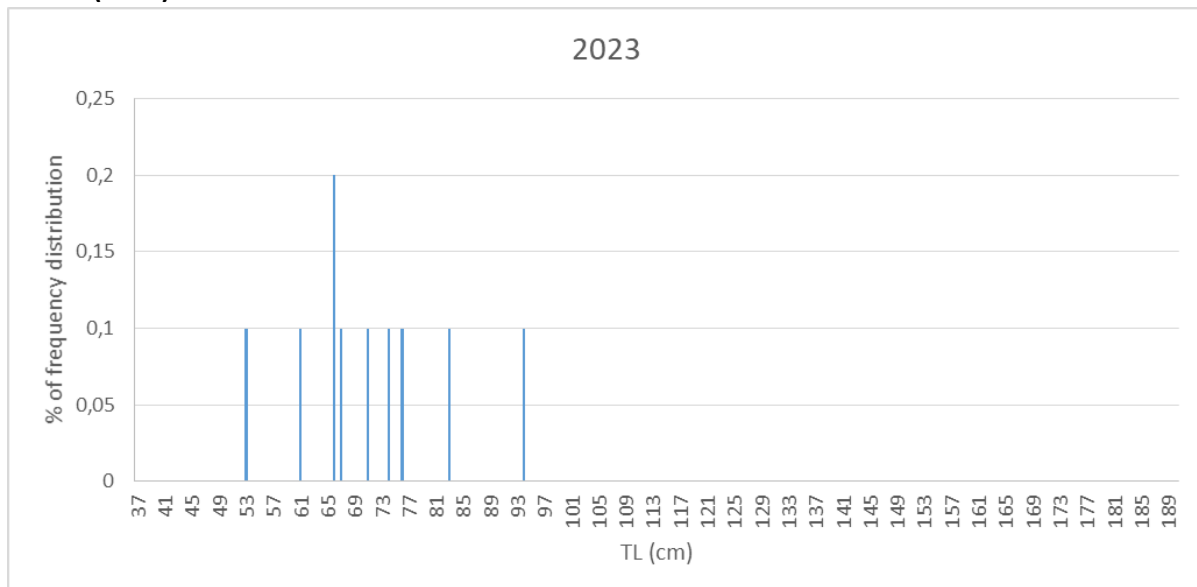
Table 12 below shows the length frequency information of the species in 2023. Information about sex and maturity is also available.

Table 12: Length frequency information by species, number and total length (cm) min, max and mean in 2023

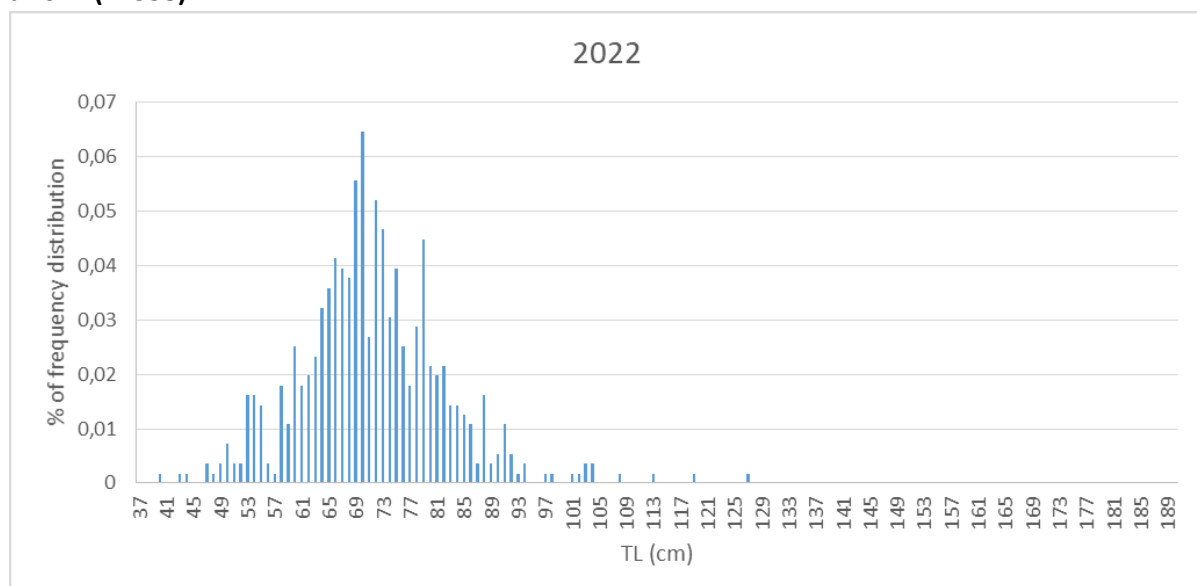
| Species (FAO code) | Num | Min | Max | Mean |
|--------------------|-----|------|-------|-------|
| TOP | 10 | 53 | 94 | 71,1 |
| ANT | 25 | 37,7 | 62,74 | 55,02 |

Length frequencies of *Dissostichus eleginoides* caught by longliner between 2023 and 2021 are presented in Figure 2.

a 2023 (n=10)



b 2022 (n=558)



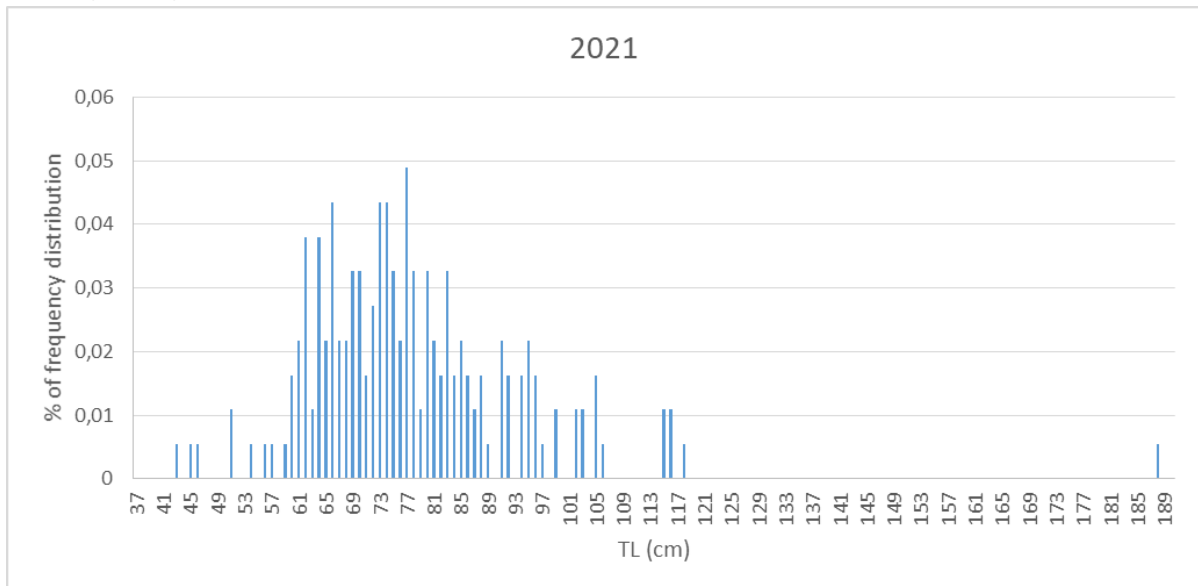
c 2021 (n=184)

Figure 2 : Length frequency of *Dissostichus eleginoides* measured by fishery observers on FR-OT longliner in the SIOFA Area, (a) 2023, (b) 2022 and (c) 2021

Description of data verification mechanisms

All the data verification mechanisms are conducted according to the SIOFA CMM and described in the French BFIA 2018 (SC-03-03(06)) and in info-paper WHSOP1-INFO-06-French-Observer-program.

Position verification through VMS is used by French administration.

The captain and the fishing observer computerize all the data in a digital logbook and send a weekly report.

Data about vessel trip, landing and port sampling are transferred to the administration and the SIOFA secretariat as requested in the CMM.

The fishing observer sends on a weekly-basis the dataset for verification to the MNHN team. During the previous calendar year, no problems were encountered in the data verification.

Summary of observer and port sampling programs

Port sampling program

In order to keep track of the catch: species and area where the fish were caught are reported on every single box containing the fish to be landed for commercial purposes. An independent company of experts based in La Réunion island is tasked to weigh a second time (the first time being on the factory of the ship at sea) all the fish boxes and report the exact weight for each combination of area, species and product. Those data are then used to correct the weights collected at sea. For Patagonian toothfish, an official DCD (Dissostichus Catch Document) from CCAMLR is produced at the scale of each trip and contains all needed information on species, products and areas including SIOFA.

Observer program implementation

The FR-OT observer program is described in info-paper WHSOP1-INFO-06-French-Observer-program. This document describes the French observer program, as updated in October 2021 according to the SIOFA CMM. This report includes summary sections covering: observer training, program design and coverage, type of data collected. During the previous calendar year, no problems were encountered in the observer program implementation.

All the data collected by the observer program are provided to the secretariat as per CMM-02(2023). The observation program follows the guidelines in Annex D, on 'Function and tasks of the scientific observer' and Annex E, on 'Protocol for documenting whale interaction in deep-sea demersal longline fisheries'.

Table 13: Observer program design and coverage summary table for period 2011-2023

| | trips coverage of set (%) | within set/haul coverage (%) | incidental bycatch (bird, mammal) observation coverage (% by set/haul) |
|-----------|---------------------------------|------------------------------------|---|
| longliner | 100 | 100 | 25 % for bird 100 % for mammal |

In 2023, no interactions with seabirds or mammals were recorded by FR-OT vessels (Table 14). In accordance with CMM 2022/13 Mitigation of seabirds bycatch, FR-OT longline vessels operating in the SIOFA Area are required to deploy tori (streamer) lines to deter seabirds. FR-OT requirements are equivalent to or exceed those specified in CMM 2022/13.

Table 14: Reporting of observed bycatch number, 2011-2023

| bycatch | taxon | Long line | Long line | Long line | Long line | Long line | Long line | Long line | Long line | Long line | Long line | Long line | Long line | Long line |
|--------------------------|---------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | | 2023 | 2022 | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 |
| seabirds | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| mammals | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| sharks (not retained) | <i>Centroscymnus sp.</i> | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| | <i>Etmopterus sp.</i> | 0 | 0 | 0 | 0 | 4 | 0 | 456 | 0 | 2 | 853 | 0 | 0 | 0 |
| | <i>Etmopterus viator</i> | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 372 | 0 | 314 |
| | <i>Squalus sp.</i> | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| | <i>Zameus squamulosus</i> | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |

BFIA report

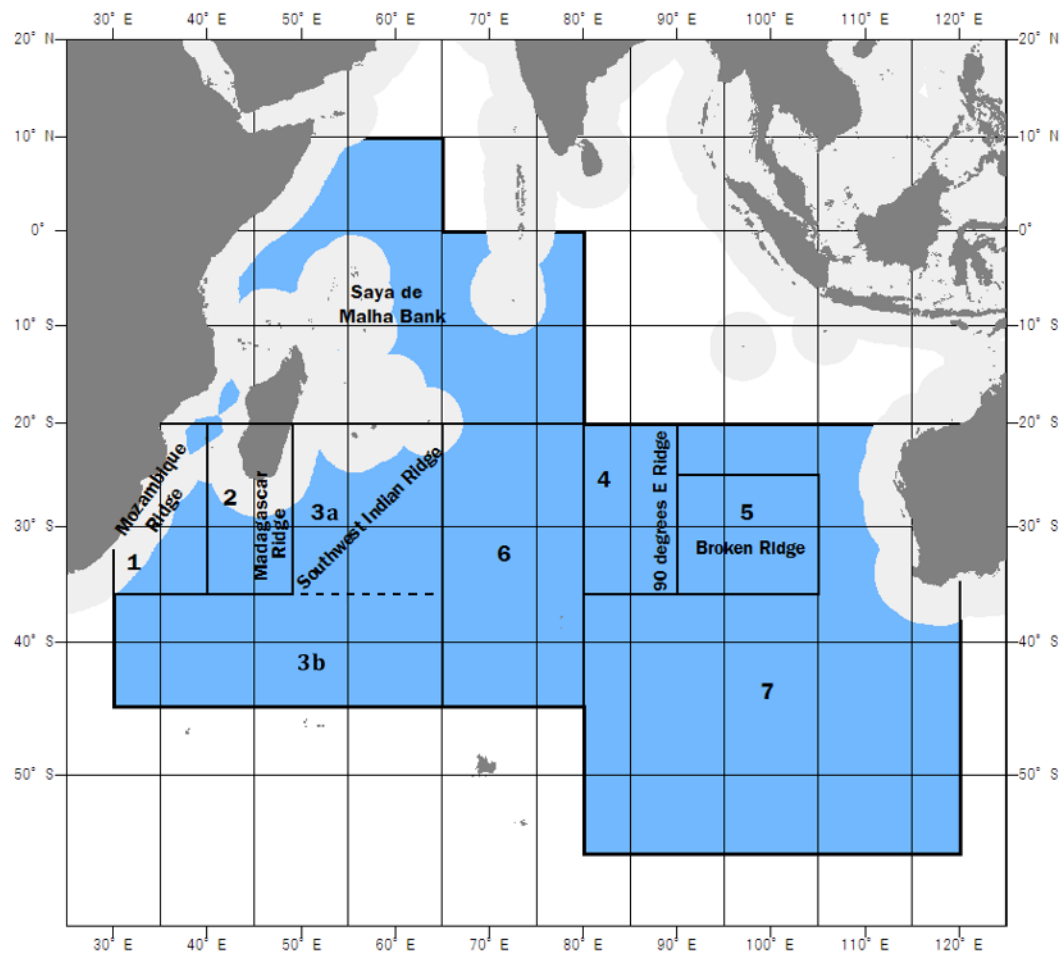
The FR-OT Bottom Fishing Impact assessment has been described in a Working Paper in 2018 (SC-03-03(06)). There has been no change in the fishing fleet and the fishing activities were very low during the previous calendar year. The BFIA does not need to be updated.

The landing and transshipment report is sent to MNHN from the port sampling at the end of the cruise.

Annex I: Sub-areas for reporting catch and effort data

| | Area | Lats | | Longs | |
|----|--------------------------|-------|-------|-------|------|
| | | NS | | E | |
| 1 | Mozambique Ridge | S 20° | S 36° | - | 40° |
| 2 | Madagascar Ridge | S 20° | S 36° | 40° | 49° |
| 3a | Northern SW Indian Ridge | S 20° | S 36° | 49° | 65° |
| 3b | Southern SW Indian Ridge | S 36° | S 45° | 30° | 65° |
| 6 | Mid-Indian Ridge | S 20° | S 45° | 65° | 80° |
| 4 | Ninety Degree East Ridge | S 20° | S 36° | 80° | 90° |
| 5 | Broken Ridge | S 25° | S 36° | 90° | 105° |
| 7 | SE Indian Ocean | S 20° | S 55° | 80° | 120° |
| 8 | North of 20° | N 10° | S 20° | - | 80° |

²Source for Table 1 and Figure 1: Guidelines for submission of annual national reports Rev3.docx



Acknowledgments

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