STATUS OF IOTC DATABASES FOR BILLFISH SPECIES

IOTC Secretariat

Abstract

This document reviews the status of the information available on billfishes in the databases at the IOTC Secretariat as of March 2006. It covers data on nominal catches, catch-and-effort, and size-frequency data.

Catch trends (Nominal Catch Database)

Swordfish (SWO)

Swordfish (Annex I: Table 1, Chart 1) are caught mainly using drifting longlines (95%) and gillnets (5%) (**Chart 1**). Swordfish were mainly by-catch of industrial longline fisheries before the early 1990's with catches slightly increasing from 1950 to 1990 proportionally to the increase in the catches of target species (tropical and temperate tunas).

The catches of swordfish markedly increased after 1990 to a peak of 35,000 tonnes in 1998, the year in which the maximum catch for the species was recorded. Current catch levels are around 30,000 t. The change in target species from tunas to swordfish by part of the Taiwanese fleet along with the development of longline fisheries in Australia, Reunion island, Seychelles and Mauritius and the arrival of longline fleets from the Atlantic Ocean (Portugal, Spain and other fleets operating under various flags [1]), all targeting swordfish, are the main reasons for this dramatic increase.

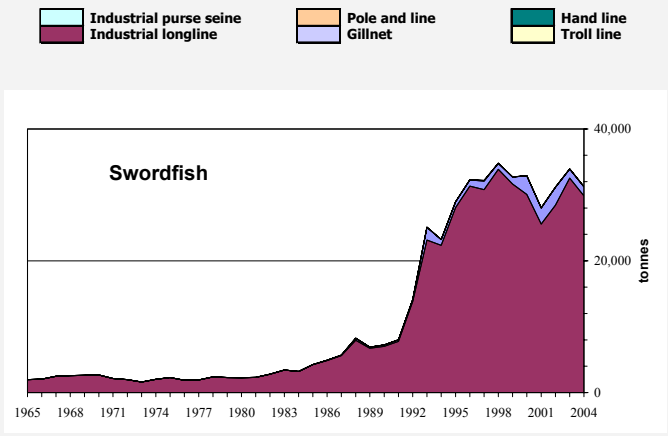


Chart 1: Catches of Swordfish per gear and year recorded in the IOTC Database (1965-2004)

[1] Uruguay, Senegal, Guinea, etc.

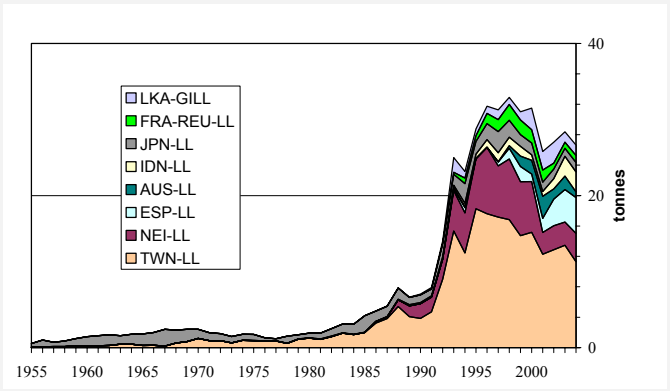


Chart 2: Catches of Swordfish by fleet recorded in the IOTC Database (1955-2004)

Longliners from **Taiwan,China** have been operating in the Indian Ocean since 1954,with catches of swordfish rarely higher than 1,000 tonnes until 1978. Swordfish catches increased gradually from 1,000 in 1978 to 5,000 tonnes in 1991. The catches by the Taiwanese fleet increased dramatically during the 1990's to over 12,000 t per year as the species was increasingly targeted by the fleet.. After a peak of 18,000 t recorded in 1995, catches dropped to 11,000 t in 2004 (C**hart 2**).

Around 4,000 t of swordfish have been recorded in recent years by a fleet of deep-freezing and fresh tuna longliners operating under flags of non-reporting countries (**NEI**) (C**hart 2**).

The catches of Swordfish of industrial longliners from **Japan** (C**hart 2**) increased proportionally to those of yellowfin tuna, target species of this fleet during the first years of the fishery, to remain quite stable until the early 1990's. The average catches amounted 1,500 tonnes during the last two decades and catches over 2,500 tonnes were recorded in 1994 and 1997.

In Sri Lanka, swordfish catches have fluctuated between 1,000 and 3,000 t over the last decade (C**hart 2**). These are taken mostly by boats that use a combination of drifting gillnet and longlines. This said, the first results from the sampling conducted by NARA[2] with the support of the IOTC-OFCF[3] Project in different locations in Sri Lanka appear to indicate that the historical catches of this species were highly overestimated, possibly by as much as two or three times higher than those that really occurred.

The catches of Indonesian fresh-tuna longliners operating in Indian Ocean waters have also been increasing in recent years, with current catches around 2,500 t. It is, however, likely that the catches recorded for years before 2003 are lower than those that really occurred.

[2] National Aquatic Resources and Development Agency of Sri Lanka

[3] Overseas Fisheries Cooperation Foundation of Japan

During the last decade, several domestic longline fisheries targeting swordfish started to operate in Reunion (**France**), **Australia**, **the Seychelles** and more recently **Mauritius.**

Spanish and Portuguese longliners coming from the Atlantic Ocean have been operating since the early 90s with current catches exceeding the 5,000 t.

The catches of swordfish by longliners from the **Republic of Korea**, recorded since 1965, have not exceeded 1,000 t. The highest catch, 800 t, was recorded in 1978 (C**hart 2)**.

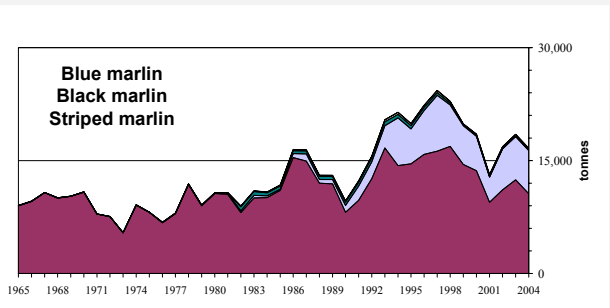
Marlins: Blue Marlin (BUM), Black Marlin (BLM) and Striped Marlin (MLS)

Marlins (Annex I: Table 1, Charts 17-19) are caught mainly under drifting longlines (70%) and gillnets (20%) with remaining catches recorded under troll and hand lines (**Chart 3**). These species are the by-catch of industrial and artisanal fisheries, being targeted only by some sport fisheries in the region. The catches of blue marlin are typically close to twice that of black marlin and striped marlin combined.

Catch trends for marlins are variable; however, this may reflect the level of reporting. The catches of marlins under drifting longlines have been more or less stable over time with the largest catches recorded in 1998 (17,000 tonnes), as it is the case with the swordfish. Current catches are around 11,000 tonnes. Catches under drifting longlines have been recorded under Taiwan, Japan fleets and, recently, Indonesia and several NEI fleets.

The catches of marlins in Sri Lanka have been high since the mid-1980's as a result of the development of a fishery using a combination of drifting gillnets and longlines. The highest catch (5,500 t) was recorded in 1997, while current catches are around 4,000 t.

However, as it is the case with swordfish recorded for this country, the catches of marlins might be higher than those that really occurred.



C**hart 3:** Catches of Blue Marlin, Black Marlin and Striped Marlin combined per gear and year recorded in the IOTC Database (1965-2004)

The reason why the catches of marlins dropped in recent years is not fully known.

Indo-Pacific Sailfish (SFA) and Shortbill Spearfish (SSP)

Indo-Pacific Sailfish represent 99% of the data available for this group (Annex I: Table 1, Chart 20-21), this species is caught mainly under gillnets (80%) with remaining catches recorded under troll and hand lines (10%), longlines (7%) or other gears (**Chart 4**). All

catches of Shortbill Spearfish are recorded under drifting longlines, although this species is probably bycatch of other artisanal fisheries and mislabelled or reported aggregated.

The catches of sailfish have greatly increased since the mid-1980's in response to the development of the gillnet / longline fishery in Sri Lanka.

Current catches are around the 22,000 t. The catches of both sailfish and shortbill spearfish under drifting longlines do not show any specific trends over the years. However, catches of these species are probably underreported due to both species being of little commercial value.

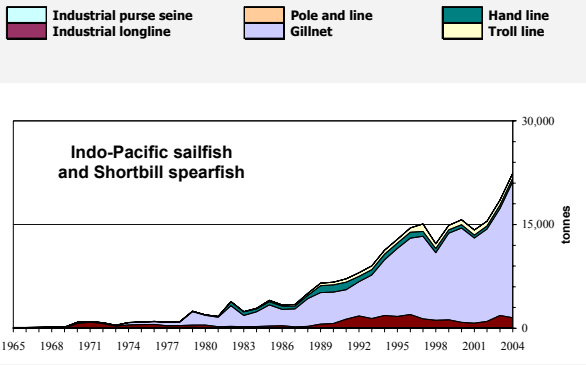


Chart 4: Catches of Indo-Pacific Sailfish and Shortbill Spearfish per gear and year recorded in the IOTC Database (1965-2004)

Revision of the IOTC databases

The Secretariat has conducted several reviews of the NC database since 2004. These revisions did not lead to important changes in the estimates of catches of billfish. The differences between the catches recorded in the IOTC database (DB06) and those estimated for the Working Party (WP06) originate mainly after a review conducted at the IOTC Secretariat which assigned the catches (previously not available by species in the IOTC database) to particular species (Chart 11). Details about this review were presented to a previous meeting of the WPB (IOTC-2004-WPB-04-INFO1). The revised catches of sailfish and marlins obtained after the review are much higher than those existing in the IOTC database.

Chart 5: Swordfish catch estimates (t) in 2006 *versus* catch estimates in 2004 and data from IOTC data base (1950-2004)

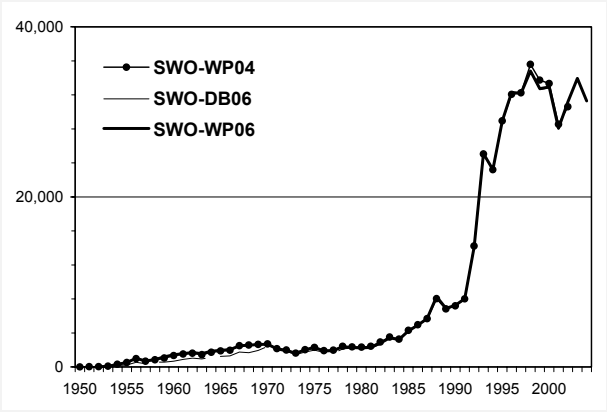


Chart 6: Sailfish catch estimates (t) in 2006 *versus* catch estimates in 2004 and data from IOTC data base (1950-2004)

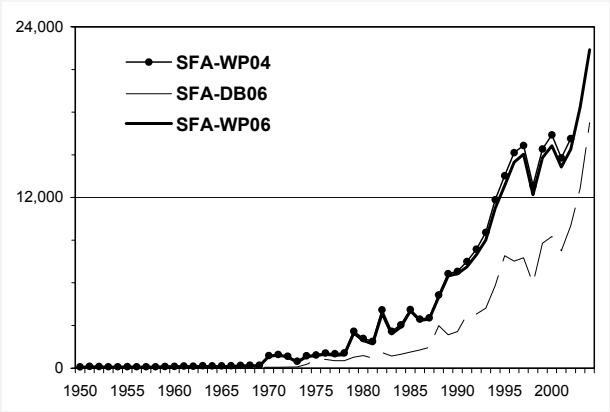


Chart 7: Blue Marlin catch estimates (t) in 2006 *versus* catch estimates in 2004 and data from IOTC data base (1950-2004)

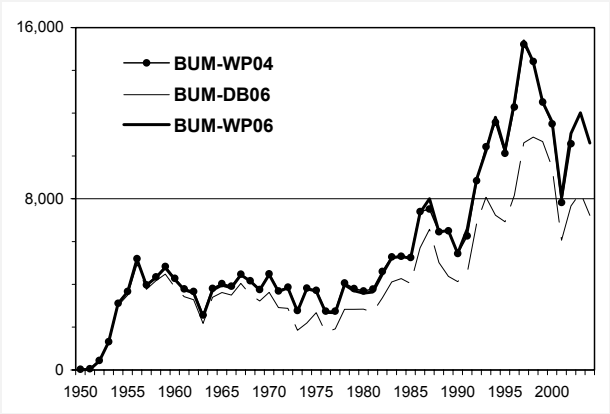


Chart 8: Black Marlin catch estimates (t) in 2006 *versus* catch estimates in 2004 and data from IOTC data base (1950-2004)

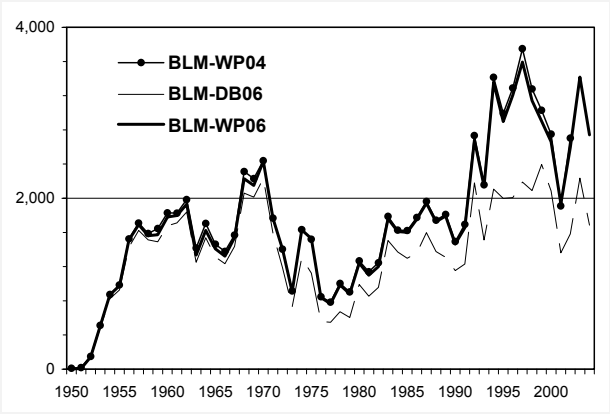


Chart 9: Striped Marlin catch estimates (t) in 2006 *versus* catch estimates in 2004 and data from IOTC data base (1950-2004)

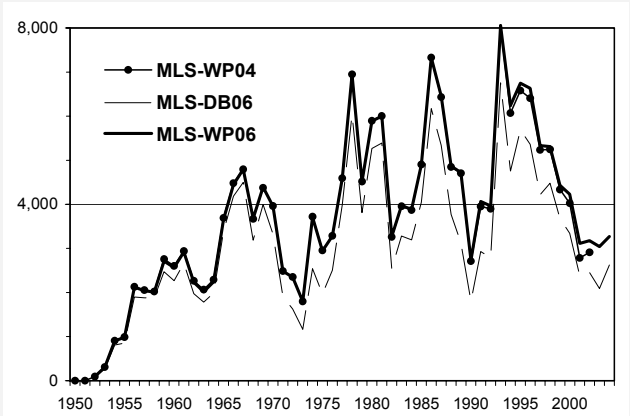


Chart 10: Shortbill spearfish catch estimates (t) in 2006 *versus* catch estimates in 2004 and data from IOTC data base (1950-2004)

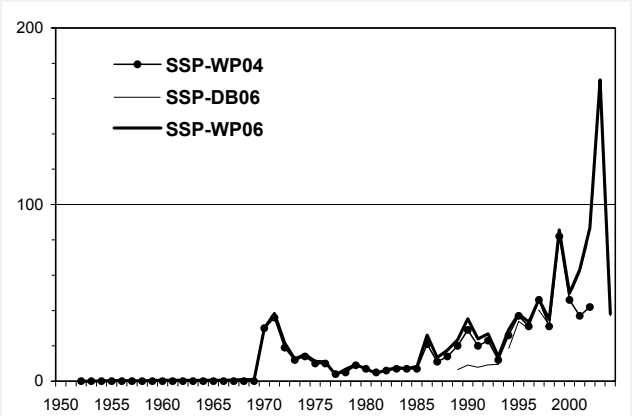
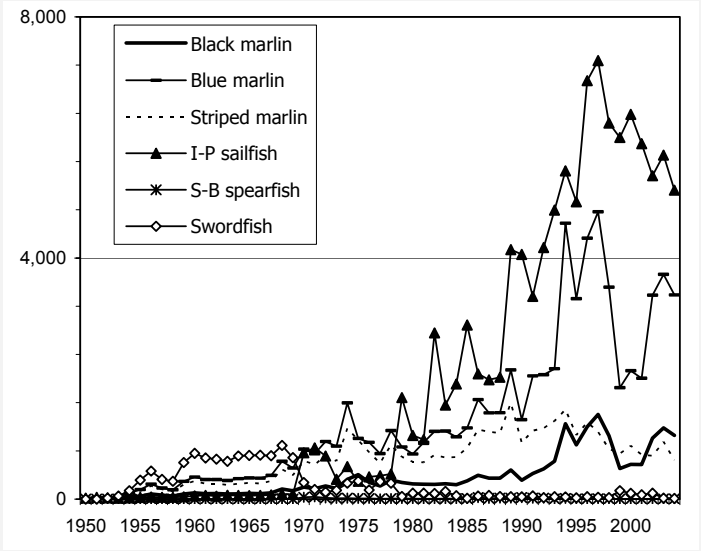


Chart 11: Disaggregated catches in 2006 : difference between the total catch disaggregated in 2006 and data from IOTC data base in 2006 (1950-2004)



Data Availability and Data Quality

Uncertainty may occur with catches estimated for:

- **Sri Lankan gillnet (and longline) fishery**: The magnitude of the discrepancies between the catch estimates produced in Sri Lanka are of concern. The catches of billfish recorded in the IOTC database are similar to those used by the last Working Party. However, recent information received indicates that the catches of all species might be higher than those actually harvested. The results of the first year NARA-IOTC/OFCF monitoring appear to also confirm this. It is therefore likely that the catches of billfish in Sri Lanka are two or three times lower than those recorded in the IOTC database. The data collected so far through this scheme are, unfortunately, still incomplete thus, at this stage, the secretariat is not able to correct the estimates for these and other species.
- **Estimation of catches per species:** The catches of marlins, sailfish and shortbill spearfish are usually not reported at all or not reported per species (bycatch) and therefore are usually estimated by the Secretariat. This process involves the estimation of catches amounting to as much as the 40% of the total catches estimated for the species in recent years (Chart 12). The changes in the catches referred mostly to sailfish and, to a lesser extent, to marlins.

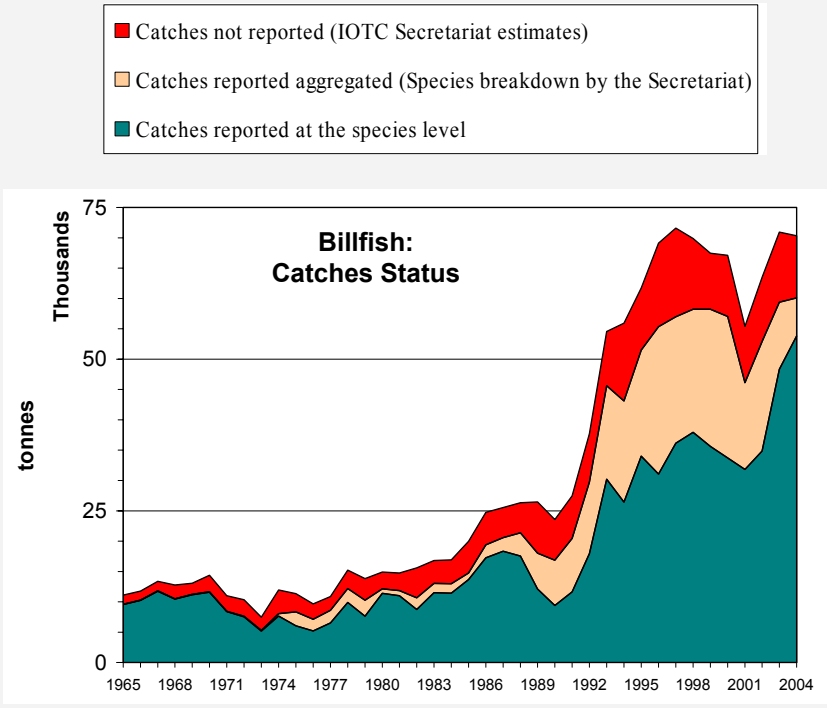


Chart 12: Proportion of the total catches (NC) of billfishes that needed to be estimated by the IOTC Secretariat

- **Mozambique and Tanzania:** Swordfish and Indo-Pacific sailfish catches reported by Mozambique between 1983 and 2002 have been erased from the IOTC Database to avoid double counting as the data refer to foreign fleets operating in the EEZ and therefore are reported by other parties.. This might also be the case with the catches of swordfish and other billfish species recorded under drifting longlines in Tanzania.
- **Fresh tuna longliners based in Indonesia**: The data collected since June 2002 as part of the IOTC/OFCF Project has allowed the estimation of catches of longline vessels based in Indonesia for 2003-04. The new catch estimates differ from those obtained by using the previous catch estimation procedure (CSIRO-RIMF sampling, noting that this program was focused on Southern bluefin tuna). Therefore, the catch series is expected to change for years prior to 2003, in which not all catches of billfish were accounted for..
- **Other fresh tuna longline fleets**: Although the catches of fresh tuna longline ships based in different ports of the Indian Ocean were re-estimated from data coming from past or recent sampling schemes, the accuracy of the catch estimates are still uncertain, especially in the cases where fleets operating from ports not covered by these schemes, or catches are estimated on the basis of historical data.
- **Deep-freezing longline fleets**: The Secretariat revised catches for 1992-2004 using new information collected during 2005. However, the catches are still uncertain due to the many assumptions made in estimating the total catches and species breakdown. A dramatic decrease in the number of vessels operating under flags of non-reporting countries has been recorded since 2001. The reason for this decrease is not fully known

and a further revision of the catch estimates may occur as more information become available.

Swordfish (SWO)[4]

Nominal Catch Data

The nominal catch data series of swordfish (SWO) is considered almost complete since 1970. The fleets catching most swordfish have been reporting catch statistics since that year, with the only exception being catches of non-reporting fleets (recorded as NEI- in the IOTC Database), and these have always been estimated by the Secretariat.

The quality of the catches estimated for NEI fleets is believed to be poor due to a paucity information available on their activities (only the total number of vessels operating per year is available in most cases). The catches of several fresh tuna longline fleets operating in the Indian Ocean (Indonesia, Thailand, Malaysia, Sri Lanka and Maldives) are also uncertain in years prior to 1992. However, these are thought to be more accurate in recent years due to the implementation of sampling programs in some of these countries to monitor the activities of fresh tuna longliners.

Catch and Effort Data

Catch and effort data are fully or almost fully available up to the early 1990s but only partially available since then (**Chart 13**), due to the almost complete lack of catch and effort records from NEI fleets and Sri Lanka gillnet/longline fishery since 1992.

The effort statistics are believed to be of fair quality for most of the fleets for which long catches series are available, with the exception of Korea. The use of data from Korea is, therefore, not recommended.

Size Frequency Data

Size frequency data from the longline fisheries are available from 1970 (Japan) and 1980 (Taiwan,China). In recent years, the number of specimens measured on Japanese longliners is very low in relation to the total catch, and has been decreasing year by year. The size-frequency statistics available from Korea are incomplete, which invalidates their use. Size data are also partially available for longline fleets that have been targeting swordfish since the early 1990's (Reunion, Spain, Seychelles, South Africa and Mauritius). The recovery of size data from port sampling regarding fresh tuna longline fleets operating in Phuket, Penang, Sri Lanka and, Indonesia, continued in 2004 and 2005, with many swordfish specimens measured.

Size data is also available for the gillnet/longline fishery in Sri Lanka from 1988 to 2004.

In general, the amount of catch for which size data for the species are available is high (**Chart 13**); however, the numbers of specimens measured per strata are low.

[4] See Table 1 and Chart 1 in Annex I and Data Catalogues (Swordfish) in Annex II

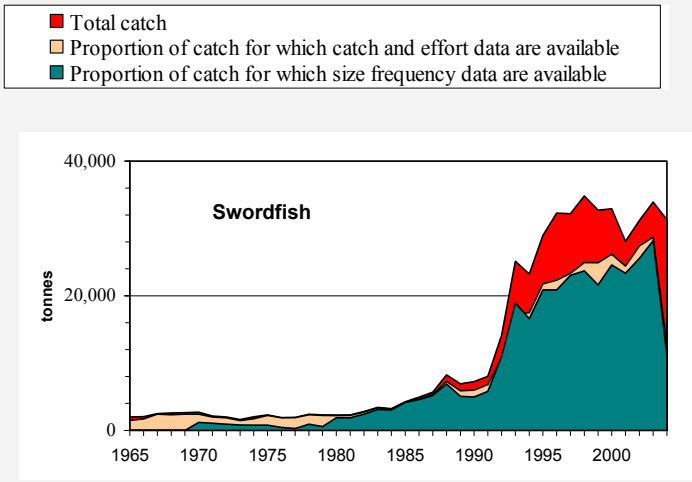


Chart 13: Proportion of the total catch (NC) of swordfish for which catch and effort data (CE) or size frequency data (SF) are available

Blue Marlin (BLZ), Black Marlin (BLM) and Striped Marlin (MLS)[5]

Nominal Catch Data

The fleets catching most of the blue marlin[6] (BUM), black marlin (BLM) and striped marlin (MLS) have usually reported nominal catches by species but these are considered incomplete. Marlins are usually not recorded by species (MARL for the three marlins together or BIL/BILL for marlins and other billfish together or TUX for billfish and tuna species together), or simply not recorded at all. The Secretariat has, in these cases, been trying to estimate or assign the catches of these species but this has not always been possible due to there being little information available on species making up the bycatch of the longline, gillnet or other fisheries. Furthermore, the catches of these species by non-reporting fleets or fresh tuna longline vessels in Indonesia, so far estimated by the Secretariat, are also considered important.

The quality of the catch estimates for non-reporting fleets are thought to be very poor. The levels of catches of several fresh tuna longline fleets operating in the Indian Ocean (Indonesia, Thailand, Malaysia, Sri Lanka and Maldives) are also uncertain. The implementation of sampling programs to monitor the activities of these fleets has reduced this uncertainty, although the identification of marlin species through port sampling is sometimes difficult[7].

The catches estimates of marlins for the gillnet and longline fisheries of Sri Lanka are uncertain.

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[5] See Table 1 and Chart 2 in Annex I and Data Catalogues (Marlins) in Annex II

[6] Note that the (Atlantic) blue marlin and the Indo-Pacific blue marlin, previously considered as separate species are currently considered a single species [Blue marlin (BUM)]

[7] Specimens of blue marlin and striped marlin are usually unloaded processed (headed and tailed), which makes it difficult to identify the species

Catch and Effort Data

Catch and effort data are fully or almost fully available up to the early 1990s but only partially available since then (**Chart 14**), due to the almost complete lack of catch and effort records from NEI fleets and Sri Lanka gillnet/longline fishery since 1992 (catches per species being not available or unreliable).

The effort statistics are thought to be of fair quality for most of the longline fleets for which long catches series are available, with the exception of Korea. The use of data from Korea is, therefore, not recommended. The catch and effort statistics available for the Taiwanese drifting gillnet fishery (1987-91) are also considered to be of fair quality.

Size Frequency Data

The amount of size frequency data available for marlin species is low with only regular reports from Japan (longline) and very partial reports from Taiwan,China (longline) and Sri Lanka (gillnet/longline). Some data are also available from port sampling (Sampling Programs) in recent years.

In general, the amount of catch for which size data for the species are available has been decreasing since the early 1990's (**Chart 14**) and the numbers of specimens measured per strata are considered to be very low. The quality of this dataset is, therefore, believed to be poor.

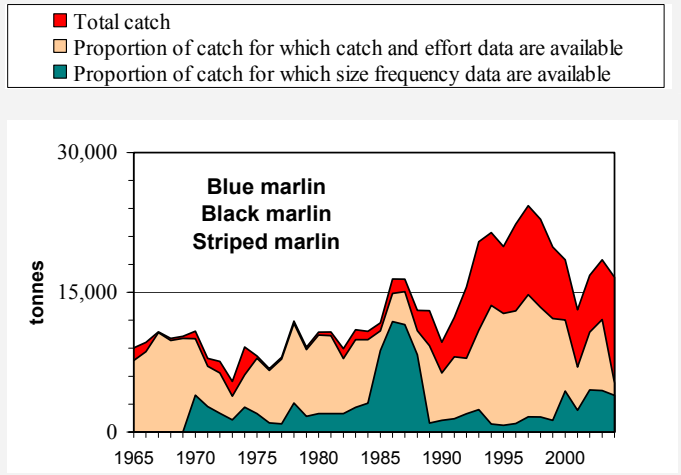


Chart 14: Proportion of the total catch (NC) of blue, black and striped marlins for which catch and effort data (CE) or size frequency data (SF) are available

Indo-Pacific Sailfish (SFA) and Shortbill Spearfish (SSP)[8]

Nominal Catch Data

Catches of Indo-Pacific sailfish or shortbill spearfish are usually missing from the reports. When reported, these species are usually aggregated with other billfish (BIL/BILL) or with tunas (TUX). The catch series is, therefore, considered very incomplete. Almost no catches are available for these species before 1970.

The catches estimates of these species for the gillnet and longline fisheries of Sri Lanka are uncertain. Gillnet catches recorded for other countries did not usually include detailed catches of these species. The same applies to longline and other fisheries catching them.

[8] See Table 1 and Chart 3 in Annex I and Data Catalogues (SFA and SSP) in Annex II

Catch and Effort Data

The amount of catch and effort data available for Indo-Pacific sailfish or shortbill spearfish from both gillnet and longline fisheries has been very low (**Chart 15**), especially since the mid-1980's. Catch and effort data are only available from 1986 for the gillnet/longline fishery in Sri Lanka while being very scarce for other gillnet or line fisheries. For the longline fisheries, only Japan has reported statistics of the species over time. The lack of catch and effort data from all fisheries in recent years is of concern, especially taking into account the dramatic increase in the catches recorded for these species since the mid-1980's.

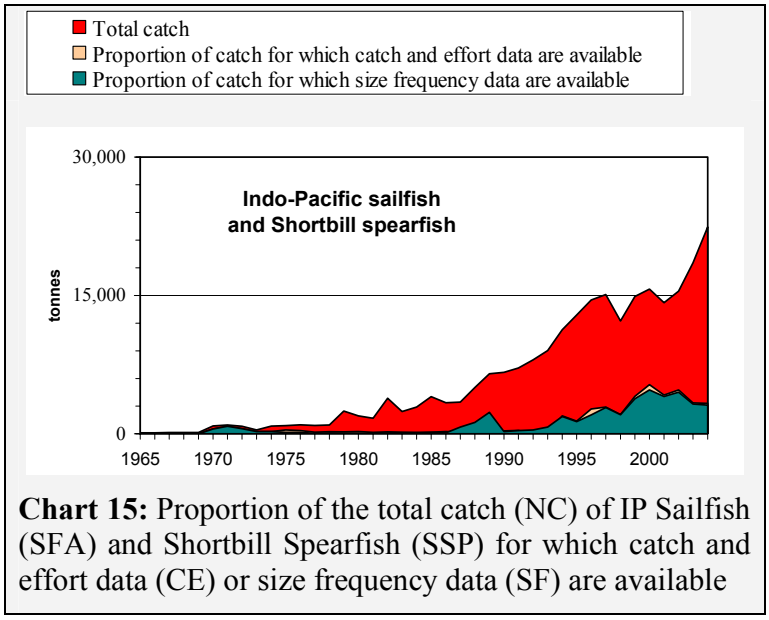


Chart 15: Proportion of the total catch (NC) of IP Sailfish (SFA) and Shortbill Spearfish (SSP) for which catch and effort data (CE) or size frequency data (SF) are available

Size Frequency Data

The amount of size frequency data available for Indo-Pacific sailfish or shortbill spearfish has been low over time with only regular reports from Japan (longline) and partial reports from Sri Lanka (gillnet/longline). Some data is also available from port sampling (Sampling Programs) in recent years.

The lack of size frequency data from most fisheries in recent years is of concern (**Chart 15**).

Estimation of catches of non-reporting fleets

The estimates of catches of non reporting fleets were updated in 2005 thanks to new information available during the year:

Fresh tuna longline: The catches of fresh tuna longliners were estimated according to the port where the different fleets were based. Most of the catches estimated are from Indonesian-owned or Taiwanese-owned longliners according to the information available.

- **Indonesia**: The catches of Indonesian vessels during 2002-04 were estimated from the information collected through the multilateral catch

monitoring program in Indonesia. Changes in the total catches and species composition are expected in the future for years before 2002.

- **Thailand**: The catches of fresh tuna longliners from Taiwan,China and Indonesia in Phuket were estimated according to the data collected through the AFRDEC (Andaman Sea Fisheries Research and Development Centre)-OFCF (Overseas Fisheries Cooperation Foundation of Japan)-IOTC Sampling Program.
- **Malaysia and Singapore**: The catches of fresh tuna longliners based in Malaysia and Singapore were estimated on the basis of previous data recorded (IPTP Sampling Program), new estimates from FRI (Fisheries Research Institute of Penang) and vessel activity in Singapore (Jurong), available since 1992.
- **Sri Lanka**: The catches of fresh tuna longliners unloading to processing plants in Sri Lanka were estimated on the basis of previous data collected by NARA (National Aquatic Resources Research and Development Agency) in Colombo and estimates from Phuket and Penang sampling.
- **Maldives:** The catches of fresh tuna longliners were estimated by using information from other landing places and data available on vessels operating in Maldives (Marine Research Center).

Deep-freezing longline - NEI: The catches of large longliners from several non-reporting countries were estimated according to the number of vessels estimated from the IOTC vessel record and the catches of Taiwanese longliners, on the assumption that most of the vessels operate as the longliners from Taiwan,China. The collection of new information regarding these non-reporting fleets during the last year, especially concerning the number and characteristics of longliners operating, led to revised catches being estimated. A decrease in the number of vessel recorded since 1999 led to a dramatic decrease in the total catches estimate for NEI. The reason for this decrease in the number of vessels (and catches) operating in the Indian Ocean is not fully explained. Nevertheless, this decrease is somewhat proportional to an increase in the number of vessels recorded operating under flags of reporting countries, such as Philippines and the Seychelles.

Data related issues for billfish species

The following **problem areas** relating to the data for billfishes have been identified:

- Large differences between the catches of Korean longliners reported as Nominal catch and catch and effort.
- Poor knowledge of the catches, effort and size-frequency from fresh tuna longline vessels, especially from Taiwan,China and several non-reporting fleets (1985-1992).
- Poor knowledge of the catches, effort and size-frequency from non-reporting fleets of deep-freezing tuna longliners, especially since the mid-1980's.
- Lack of accurate catch, effort and size-frequency data for the Indonesian longline fishery (1973-1995).

- Poor knowledge of the catches, effort and size-frequency data for gillnet and other artisanal fisheries, especially the gillnet/longline fishery in Sri Lanka.

Improvements to the data available for billfishes have taken place in a number of areas. These include:

- Receipt of catch and effort data for the Taiwanese longline fishery (1990-92)
- New size frequency data for swordfish from the Taiwanese longline fleet for 1980-2003: Resulting in the Secretariat constructingt catch-at-size tables for swordfishu.
- Disaggregation of catch data: Revisions have been conducted at the IOTC Secretariat aiming at assigning the catches to species in the IOTC database.
- An improved Vessel Record: More information has been obtained on the number and type of vessels operating under flags of non-reporting parties. This information comes mostly from various licensing schemes in the Indian Ocean and has become an important element in the estimation of the catches of non reporting fleets.
- Improved estimation of catches of non-reporting fleets: The collection of historical and current information on the landings of small fresh tuna longliners in ports in the Indian Ocean has improved the accuracy of earlier estimates. The more complete Vessel Record also permitted the estimation by flag of the catches of deep-freezing longliners.
- IOTC/OFCF sampling programmes: The collection of information on the activities of fresh tuna longliners landing in Thailand and Indonesia has continued during 2005. This has led to more complete and accurate estimates of catches of these fleets. Other valuable data collected in the scope of these programmes refer to length frequencies which will allow length-length, length-weight and weight-length relationships to be established.
- Plan of Action in Sri Lanka: A multi-lateral cooperation between NARA (National Aquatic Resources Research and Development Agency), OFCF (Overseas Fisheries Cooperation Foundation of Japan)-IOTC was initiated in 2005. The objective of this Project is to strengthen data collection and processing systems on Sri Lankan tuna and billfish fisheries (Gillnet and longline Fishery (Offshore Fishery) and longline Fishery for large Yellowfin Tuna (Coastal Fishery) so as to allow producing more accurate effort and catch estimates per area and species and increase the amount of size frequency data collected for tropical tuna and billfish species in Sri Lanka. The first results from this program suggest that the catches of billfish recorded in the IOTC database in recent years for these species are much higher than those that actually occurred.

Annex I:
Nominal Catch Data (IOTC Database)

Table 1: Total Catches of Black Marlin (BLM), Blue Marlin (BUM), Striped Marlin (MLS), Indo-Pacific Sailfish (SFA), Short-bill Spearfish (SSP) and Swordfish (SWO) in the Indian Ocean for the period 1955-2004 (in thousand of metric tonnes)

SWO

Gear	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
Purse Seine																									
Baitboat																0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Longline	0.5	1.0	0.7	0.9	1.2	1.4	1.6	1.7	1.6	1.9	2.0	2.0	2.5	2.6	2.6	2.7	2.1	2.0	1.6	2.0	2.3	1.9	1.9	2.4	2.3
Gillnet																									
Hand Line																									
Troll Line																0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Other																									
Total	*1*	*1*	*1*	*1*	*1*	*1*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*3*	*3*	*3*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*

Gear	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04
Purse Seine																									
Baitboat	0.0																								
Longline	2.3	2.3	2.8	3.4	3.2	4.2	4.9	5.6	7.9	6.7	7.0	7.8	13.8	23.1	22.3	28.1	31.3	30.8	33.9	31.6	30.1	25.6	28.4	32.5	29.9
Gillnet							0.1	0.1	0.3	0.2	0.2	0.3	0.3	1.9	0.9	0.9	1.0	1.3	0.9	1.1	2.8	2.4	2.7	1.4	1.4
Hand Line					0.0							0.0						0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Troll Line	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
Other																									
Total	*2*	*2*	*3*	*3*	*3*	*4*	*5*	*6*	*8*	*7*	*7*	*8*	*14*	*25*	*23*	*29*	*32*	*32*	*35*	*33*	*33*	*28*	*31*	*34*	*31*

BUM

Gear	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
Purse Seine																									
Baitboat																0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Longline	3.7	5.2	3.9	4.3	4.8	4.2	3.7	3.6	2.5	3.7	3.9	3.8	4.4	4.1	3.7	4.4	3.6	3.8	2.7	3.8	3.7	2.7	2.6	3.9	3.6
Gillnet																									0.0
Hand Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Troll Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other																									
Total	*4*	*5*	*4*	*4*	*5*	*4*	*4*	*4*	*2*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*3*	*4*	*4*	*3*	*3*	*4*	*4*

Gear	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04
Purse Seine																									
Baitboat	0.0																								
Longline	3.5	3.5	3.9	4.6	4.8	4.7	6.6	6.8	5.7	5.7	4.4	4.7	6.8	7.6	6.7	6.4	7.8	9.5	10.1	8.6	8.1	5.5	6.9	7.7	6.3
Gillnet		0.1	0.2	0.3	0.2	0.1	0.4	0.8	0.4	0.4	0.7	1.4	1.6	2.2	4.7	3.4	4.3	5.5	4.0	3.8	3.4	2.5	4.0	4.2	4.2
Hand Line	0.1	0.1	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.1
Troll Line	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
Other																									
Total	*4*	*4*	*4*	*5*	*5*	*5*	*7*	*8*	*6*	*7*	*5*	*7*	*9*	*10*	*12*	*10*	*12*	*15*	*14*	*13*	*12*	*8*	*11*	*12*	*11*

BLM

Gear	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
Purse Seine																									
Baitboat																0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Longline	1.0	1.5	1.7	1.6	1.6	1.8	1.8	1.9	1.3	1.6	1.4	1.3	1.5	2.2	2.1	2.4	1.8	1.4	0.9	1.6	1.5	0.8	0.7	1.0	0.8
Gillnet																									0.0
Hand Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Troll Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other																									
Total	*1*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*1*	*2*	*1*	*1*	*2*	*2*	*2*	*2*	*2*	*1*	*1*	*2*	*2*	*1*	*1*	*1*	*1*

Gear	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04
Purse Seine																									
Baitboat	0.0																								
Longline	1.2	1.0	1.0	1.5	1.4	1.4	1.5	1.7	1.5	1.5	1.1	1.1	2.0	1.3	1.6	1.6	1.6	1.6	1.7	1.7	1.6	1.1	1.2	2.0	1.3
Gillnet		0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.5	0.6	1.5	1.0	1.3	1.7	1.3	1.2	1.0	0.7	1.2	1.3	1.3
Hand Line	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Troll Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
Other																									
Total	*1*	*1*	*1*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*1*	*2*	*3*	*2*	*3*	*3*	*3*	*4*	*3*	*3*	*3*	*2*	*3*	*3*	*3*

MLS

Gear	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
Purse Seine																									
Baitboat																0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Longline	1.0	2.1	2.0	2.0	2.7	2.6	2.9	2.2	2.0	2.2	3.7	4.4	4.8	3.7	4.4	4.0	2.5	2.3	1.8	3.7	2.9	3.3	4.6	6.9	4.5
Gillnet																									0.0
Hand Line																									
Troll Line																0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Other																									
Total	*1*	*2*	*2*	*2*	*3*	*3*	*3*	*2*	*2*	*2*	*4*	*4*	*5*	*4*	*4*	*4*	*2*	*2*	*2*	*4*	*3*	*3*	*5*	*7*	*5*

Gear	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04
Purse Seine																									
Baitboat	0.0																								
Longline	5.9	6.0	3.3	3.9	3.9	4.9	7.3	6.4	4.8	4.7	2.7	3.9	3.8	7.9	6.0	6.5	6.4	5.1	5.1	4.2	4.0	2.9	2.9	2.8	3.0
Gillnet		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Hand Line								0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Troll Line	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0
Other																									
Total	*6*	*6*	*3*	*4*	*4*	*5*	*7*	*6*	*5*	*5*	*3*	*4*	*4*	*8*	*6*	*7*	*7*	*5*	*5*	*4*	*4*	*3*	*3*	*3*	*3*

SFA

Gear	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
Purse Seine																									0.0
Baitboat																0.1		0.0		0.1	0.0	0.1	0.1	0.1	0.1
Longline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.8	0.6	0.3	0.4	0.5	0.5	0.2	0.3	0.3
Gillnet	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.4	0.5	0.5	1.9
Hand Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Troll Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other																									
Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*1*	*1*	*0*	*1*	*1*	*1*	*1*	*1*	*2*

Gear	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04
Purse Seine		0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Baitboat	0.1																								
Longline	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.6	0.6	1.3	1.7	1.4	1.8	1.7	1.9	1.3	1.1	1.1	0.8	0.6	0.9	1.6	1.5
Gillnet	1.4	1.4	3.0	1.6	2.1	3.1	2.4	2.6	4.0	4.6	4.5	4.3	5.0	6.3	8.1	9.8	11.1	12.0	9.8	12.5	13.6	12.3	13.4	15.5	19.7
Hand Line	0.1	0.1	0.6	0.5	0.4	0.5	0.5	0.4	0.5	1.0	1.1	1.1	0.8	0.8	0.8	0.8	0.9	0.7	0.6	0.5	0.5	0.4	0.4	0.5	0.5
Troll Line	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	1.1	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Other		0.0	0.0	0.0	0.0			0.0	0.0	0.0			0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	*2*	*2*	*4*	*2*	*3*	*4*	*3*	*3*	*5*	*6*	*7*	*7*	*8*	*9*	*11*	*13*	*14*	*15*	*12*	*15*	*16*	*14*	*15*	*18*	*22*

SSP

Gear	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
Purse Seine																									
Baitboat																									
Longline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gillnet																									
Hand Line																									
Troll Line																									
Other																									
Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

Gear	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04
Purse Seine																									
Baitboat																									
Longline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.2	0.0
Gillnet																									
Hand Line												0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Troll Line				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other																									
Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

Table 2: Catches of Swordfish (SWO) in the Indian Ocean for the period 1955-2004 (in thousand of metric tonnes)

Gear	Fleet	AvC	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04
Baitboat	Tanzania																	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0																									
Longline	Taiwan,China	13.0	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.5	0.5	0.3	0.3	0.2	0.6	0.8	1.2	0.9	0.9	0.6	1.0	0.9	0.9	0.9	0.6	1.1	1.3	1.1	1.5	1.9	1.7	2.0	3.2	3.8	5.4	4.1	3.8	4.7	9.0	15.3	12.5	18.3	17.6	17.2	16.8	14.7	15.2	12.3	12.9	13.5	11.3
	Spain	3.1																																							0.2	0.7	0.0	0.0	0.5	1.4	2.0	1.0	1.9	3.5	4.3	4.7
	NEI-Deep-freezing	3.1																															0.0	0.2	0.2	0.8	0.6	0.8	0.9	1.4	4.2	3.6	5.4	7.7	5.5	7.0	6.2	5.8	2.1	1.9	2.4	3.1
	Australia	1.7																																			0.0		0.0	0.0	0.2	0.1	0.1	0.0	0.0	0.3	1.4	1.8	2.9	1.3	1.8	0.7
	Indonesia	1.6																				0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.5	0.5	1.0	1.2	1.1	1.3	0.7	0.6	1.3	2.6	2.6
	Japan	1.3	0.5	0.9	0.6	0.7	0.9	1.2	1.3	1.4	1.1	1.3	1.5	1.7	2.2	1.7	1.6	1.2	1.1	0.9	0.8	0.8	0.8	0.4	0.3	0.9	0.6	0.6	0.8	1.0	1.2	1.3	2.2	1.3	1.4	1.5	1.0	1.0	0.9	1.7	1.4	2.6	1.7	2.1	2.8	2.2	1.5	1.6	1.2	1.3	1.1	1.2
	France-Reunion	1.2																																					0.0	0.1	0.3	0.7	0.8	1.3	1.6	2.1	1.9	1.7	1.6	0.8	0.8	0.9
	Seychelles	0.9																																									0.0	0.1	0.2	0.2	0.3	0.5	0.7	0.6	1.4	1.1
	NEI-Fresh Tuna	0.8																																			0.5	0.7	0.6	0.7	0.7	1.1	0.9	0.9	1.1	1.0	0.9	0.9	0.7	1.3	0.6	0.6
	Portugal	0.7																																											0.1	0.2	0.2	0.6	0.8	0.9	1.0
	China	0.5																																									0.1	0.2	0.3	0.1	0.4	0.4	0.3	0.4	0.8	0.7
	South Africa	0.5																																										0.0	0.4	0.1	0.0	0.3	0.9	0.8	0.2
	Mauritius	0.3																																									0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.5
	Guinea	0.3																																														0.0	0.5	0.5	0.5
	Uruguay	0.1																																														0.1	0.5		
	Korea, Republic of	0.1											0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.1	0.1	0.3	0.5	0.6	0.7	0.8	0.6	0.3	0.4	0.3	0.3	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.2	0.1	0.0	0.1	0.0	0.0	0.1	0.3
	Senegal	0.1																																																0.2	0.1
	Thailand	0.0																																														0.0	0.0	0.0	0.0	0.0
	Iran, Islamic Republic	0.0																																									0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
	India	0.0																													0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Malaysia	0.0																																															0.0	0.0		
	France-Territories	0.0																																												0.6	0.3		0.0	0.0	0.0	0.0
	Oman	0.0																																																	0.0
	Maldives	0.0																																															0.0	0.0	0.0
	NEI-Indonesia Fresh Tuna																																	0.0		0.1	0.3	0.4	0.4	0.5	0.4	0.5	0.3	0.1	0.1	0.0	0.0					
	Soviet Union											0.1	0.2	0.0	0.0	0.1	0.0	0.1					0.0			0.0					0.0			0.0	0.1		0.0															
	Kenya																											0.0	0.0	0.0	0.0																						
Gillnet	Sri Lanka	2.2																																0.0	0.0	0.0	0.0	0.1	0.2	0.3	1.9	0.9	0.9	1.0	1.3	0.9	1.1	2.8	2.4	2.7	1.4	1.4
	Taiwan,China																																	0.0	0.1	0.3	0.1	0.1	0.1												
Hand Line	France-Reunion	0.0																																												0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Australia	0.0																																												0.0			0.0		
	Seychelles	0.0																																											0.1	0.0	0.0	0.0	0.0	0.0	0.0
	South Africa	0.0																													0.0								0.0							0.0			0.0	0.0
Troll Line	France-Reunion	0.0																																							0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
	Kenya	0.0																														0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Tanzania	0.0																0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gear	Fleet	AvC	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04

Chart 16: Catches of Swordfish (SWO) in the Indian Ocean for the period 1955-2004

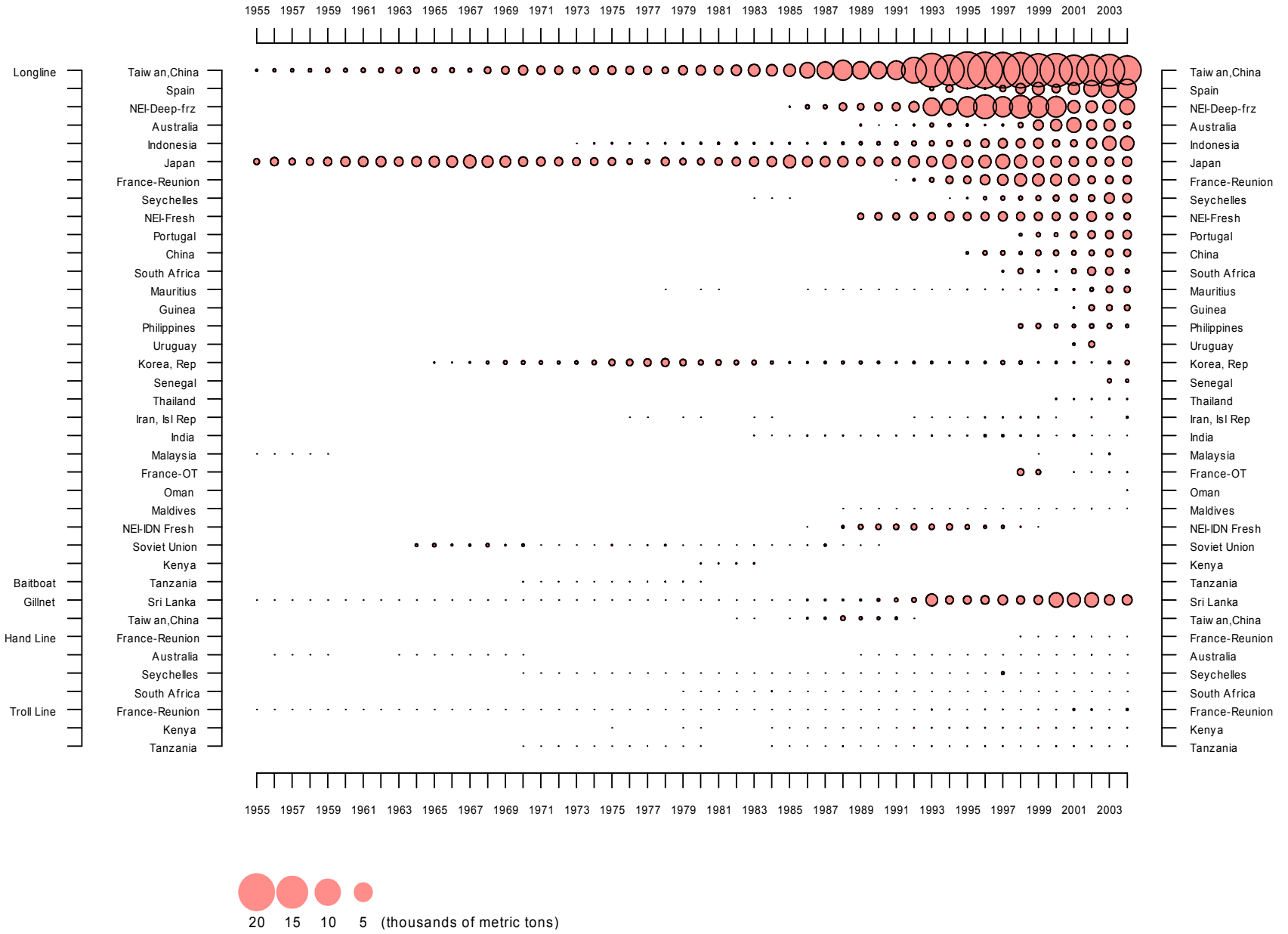


Table 3: Catches of Black Marlin (BLM) in the Indian Ocean for the period 1955-2004 (in thousand of metric tonnes)

Gear	Fleet	AvC	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04
Baitboat	Tanzania																	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0																								
Longline	Indonesia	0.5																			0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.5	0.4	0.5	0.3	0.3	0.5	0.9	0.5
	Taiwan,China	0.4	0.1	0.2	0.4	0.5	0.5	0.3	0.5	0.3	0.4	0.4	0.3	0.2	0.2	0.6	0.9	1.3	0.9	0.9	0.5	0.9	0.7	0.3	0.3	0.2	0.2	0.5	0.4	0.3	0.7	0.5	0.7	0.8	1.0	0.8	0.7	0.3	0.5	1.1	0.4	0.5	0.6	0.4	0.4	0.5	0.4	0.6	0.3	0.3	0.6	0.2
	NEI-Fresh Tuna	0.2																															0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2
	Japan	0.1	0.9	1.3	1.3	1.1	1.1	1.5	1.3	1.6	0.9	1.2	1.1	1.1	1.3	1.6	1.3	1.1	0.7	0.3	0.2	0.4	0.4	0.2	0.1	0.4	0.2	0.2	0.3	0.3	0.4	0.6	0.5	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1
	NEI-Deep-freezing	0.1																															0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.0
	Korea, Republic of	0.1											0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.4	0.3	0.3	0.4	0.4	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	China	0.0																																								0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
	France-Reunion	0.0																																					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Seychelles	0.0																													0.0	0.0	0.0								0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Iran, Islamic Republic	0.0																																								0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
	Mauritius	0.0																																0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Malaysia	0.0																																														0.0	0.0		
	Thailand	0.0																																														0.0	0.0	0.0	0.0	0.0
	Guinea	0.0																																															0.0	0.0	0.0	0.0
	India	0.0																													0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	South Africa	0.0																																														0.0	0.0	0.0	0.0	0.0
	Oman	0.0																																																		0.0
	Spain	0.0																																0.0	0.0	0.0			0.0	0.0											0.0	0.0	0.0
	Maldives	0.0																																																0.0	0.0	0.0
	Portugal	0.0																																																0.0		0.0	
	Uruguay	0.0																																																0.0	0.0	
	Australia	0.0																																		0.0								0.0						0.0		
	Pakistan																																					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
	France-Territories																																												0.0	0.0						
	NEI-Indonesia Fresh Tuna																																	0.0		0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0					
	Soviet Union											0.0	0.0	0.0	0.0	0.0	0.0	0.0					0.0		0.0	0.0	0.0				0.0			0.0	0.0		0.0															
	Kenya																											0.0	0.0	0.0	0.0																						
Gillnet	Sri Lanka	0.8																																0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.5	1.3	0.9	1.1	1.4	1.0	1.0	0.8	0.4	1.0	1.0	1.0
	India	0.3																			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.3
	Indonesia	0.0																			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Malaysia																										0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	0.0									
	Taiwan,China																																		0.0	0.0	0.0	0.0	0.0														
Hand Line	France-Reunion	0.0																																											0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	India	0.0																															0.0					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Sri Lanka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
	France-Territories	0.0																																													0.0	0.0	0.0	0.0	0.0	0.0
	South Africa	0.0																													0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Troll Line	India	0.0																																					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0
	Kenya	0.0																					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Tanzania	0.0																0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	France-Reunion	0.0																																							0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			
	United Arab Emirates	0.0																													0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	France-Territories	0.0																																												0.0	0.0	0.0	0.0	0.0	0.0
	Malaysia																										0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0					0.0	0.0		0.0						
	Sri Lanka		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0				
	Seychelles																															0.0																				
Gear	Fleet	AvC	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04

Chart 17: Catches of Black Marlin (BLM) in the Indian Ocean for the period 1955-2004

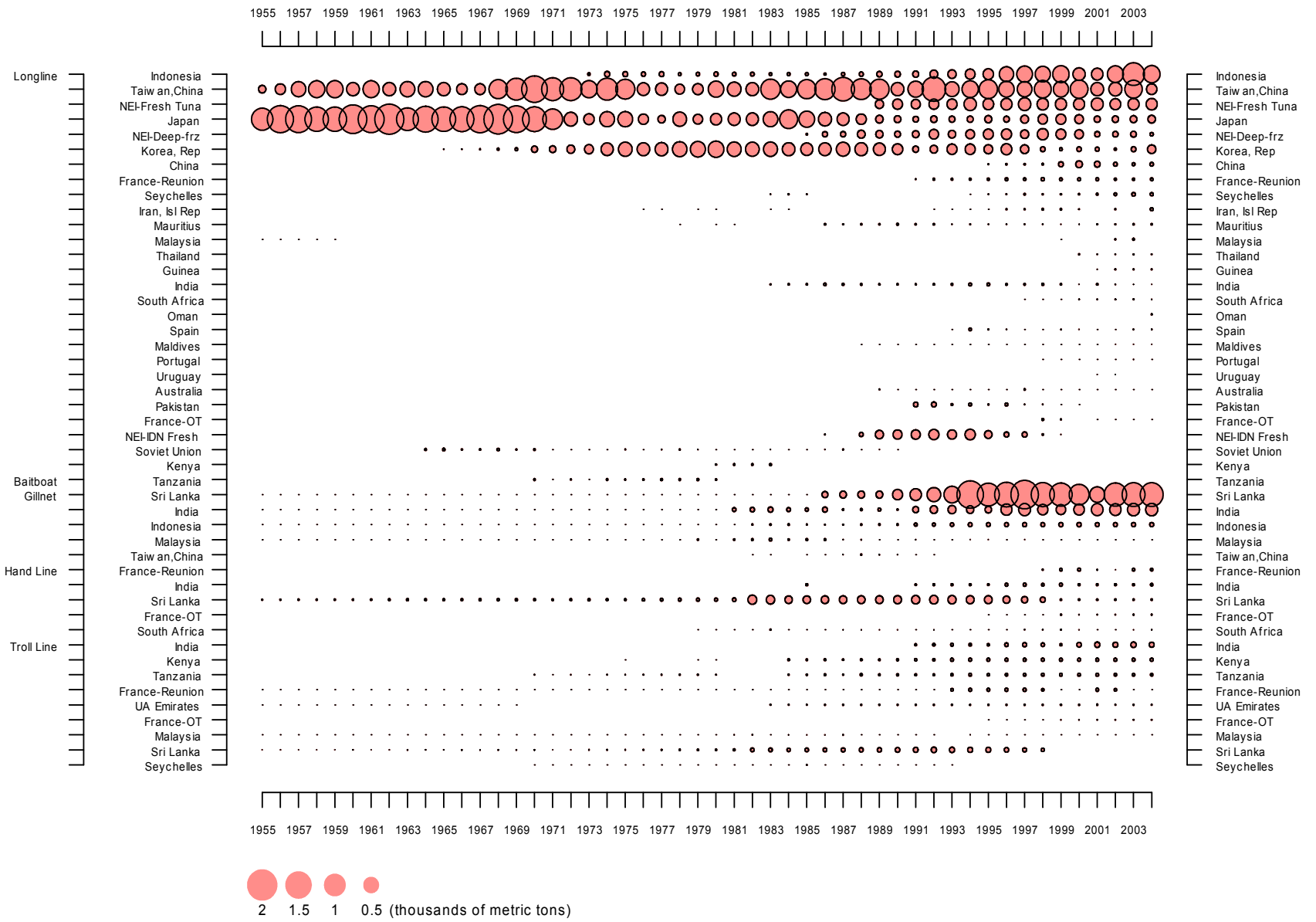


Table 4: Catches of Blue Marlin (BUM) in the Indian Ocean for the period 1955-2004 (in thousand of metric tonnes)

Gear	Fleet	AvC	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04
Baitboat	Tanzania																	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0																									
Longline	Taiwan,China	2.9	0.1	0.2	0.1	0.2	0.4	0.3	0.3	0.4	0.6	0.7	0.4	0.3	0.7	1.6	1.7	2.8	2.3	2.3	1.3	1.3	1.6	1.0	1.0	1.3	1.5	1.4	1.3	1.4	1.7	2.3	2.1	3.7	4.3	2.9	2.7	1.3	2.0	3.2	3.9	1.7	2.4	2.3	3.4	4.1	3.1	3.6	2.5	2.7	3.4	2.6
	Indonesia	1.9																			0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.2	0.3	0.3	0.3	0.6	0.6	0.9	1.0	1.9	2.3	2.1	2.5	1.4	1.2	2.4	2.5	2.2
	NEI-Fresh Tuna	0.6																																			0.3	0.5	0.4	0.5	0.5	0.7	0.6	0.6	0.7	0.6	0.6	0.5	0.6	0.7	0.8	0.4
	Japan	0.6	3.5	5.0	3.8	4.1	4.4	3.9	3.4	3.1	1.9	3.0	3.4	3.5	3.6	2.4	1.9	1.3	1.0	0.9	0.6	0.9	0.7	0.3	0.3	0.9	0.4	0.6	0.8	1.1	1.6	1.5	1.5	1.2	0.9	0.8	0.4	0.3	0.2	0.3	0.3	0.6	0.4	0.6	1.2	1.2	0.8	1.0	0.4	0.5	0.3	0.6
	NEI-Deep-freezing	0.5																															0.0	0.2	0.2	0.4	0.4	0.3	0.4	0.5	1.0	0.5	0.7	1.0	1.1	1.7	1.3	1.2	0.4	0.4	0.4	0.2
	China	0.1																																									0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.1	0.1
	Korea, Republic of	0.1											0.0	0.0	0.0	0.0	0.1	0.4	0.4	0.6	0.8	1.5	1.4	1.3	1.3	1.6	1.7	1.3	1.2	1.2	1.1	0.9	1.0	1.3	1.2	1.2	1.0	0.9	0.3	0.5	0.4	1.0	0.6	1.1	0.6	0.2	0.0	0.2	0.1	0.0	0.0	0.1
	Seychelles	0.1																													0.0	0.0	0.0									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
	France-Reunion	0.0																																					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Philippines	0.0																																												0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
	Malaysia	0.0																																														0.0	0.0			
	Uruguay	0.0																																														0.0	0.0			
	Guinea	0.0																																														0.0	0.0	0.0	0.0	0.0
	South Africa	0.0																																												0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Thailand	0.0																																														0.0	0.0	0.0	0.0	0.0	0.0
	Spain	0.0																																													0.0	0.0	0.0		0.0	0.0
	India	0.0																													0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Mauritius	0.0																																0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
	Senegal	0.0																																																	0.0	0.0
	Oman	0.0																																																		0.0
	Maldives	0.0																																																	0.0	0.0	0.0
	Portugal	0.0																																																0.0		0.0	
	Australia	0.0																																		0.0						0.0	0.0	0.0		0.0						
	Pakistan																																					0.2	0.2	0.0	0.1	0.0	0.1	0.0	0.0							
	France-Territories																																												0.0	0.0							
	NEI-Indonesia Fresh Tuna																																	0.0		0.2	0.6	0.8	0.8	0.9	0.8	1.0	0.5	0.2	0.2	0.0	0.0							
	Soviet Union											0.0	0.1	0.0	0.0	0.1	0.0	0.0					0.0		0.0	0.0	0.0					0.0	0.0		0.0	0.0	0.0																	
Gillnet	Sri Lanka	2.4																																0.2	0.2	0.3	0.3	0.6	0.7	1.0	1.4	3.9	2.7	3.1	4.2	3.0	2.8	2.2	1.2	2.8	2.9	2.9
	India	0.7																											0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.2	0.3	0.4	0.3	0.2	0.7	0.8	0.6	0.5	0.6	0.8	0.7	0.8	0.8
	Indonesia	0.5																												0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5
	Malaysia																										0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0				0.0	0.0		0.0							
	Taiwan,China																																		0.5	0.0	0.0	0.0	0.2														
Hand Line	India	0.0																															0.0					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Sri Lanka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0
	France-Reunion	0.0																																												0.0	0.0	0.0	0.0	0.0	0.0
	France-Territories	0.0																																												0.0	0.0	0.0	0.0	0.0	0.0
	UK-Territories	0.0																																														0.0	0.0	0.0	0.0
	South Africa	0.0																													0.0								0.0	0.0				0.0		0.0	0.0		0.0	0.0
Troll Line	India	0.1																																					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
	Kenya	0.0																															0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Tanzania	0.0																0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	France-Reunion	0.0																																																0.0	0.0	0.0	
	United Arab Emirates	0.0																													0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	France-Territories	0.0																																																0.0	0.0	0.0	0.0	0.0	0.0
	Australia	0.0																																																	0.0			
	Malaysia																									0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0			0.0	0.0		0.0							
	Sri Lanka		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0					
Gear	Fleet	AvC	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04

Chart 18: Catches of Blue Marlin (BUM) in the Indian Ocean for the period 1955-2004

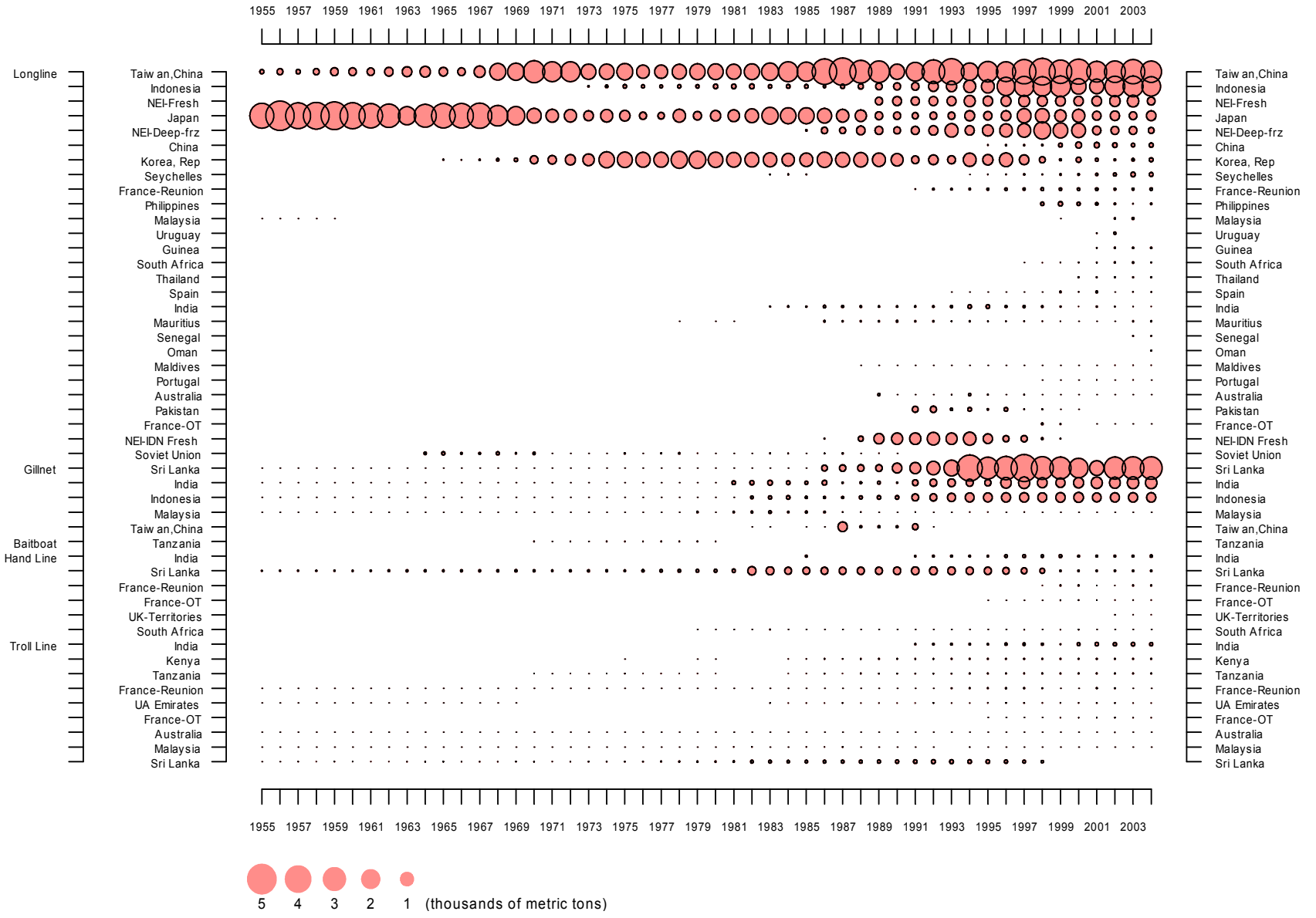


Table 5: Catches of Striped Marlin (MLS) in the Indian Ocean for the period 1955-2004 (in thousand of metric tonnes)

Gear	Fleet	AvC	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04
Baitboat	Tanzania																	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0																								
Longline	Taiwan,China	1.8	0.1	0.1	0.1	0.2	0.5	0.3	0.3	0.2	0.6	0.7	0.4	0.3	0.3	1.1	2.0	2.0	1.1	1.1	0.7	1.3	1.3	2.1	3.2	4.0	2.4	3.9	4.4	1.9	2.6	2.1	3.1	4.8	4.4	3.0	2.7	1.0	2.3	2.1	5.2	3.1	3.8	3.0	2.4	2.5	2.0	1.8	1.5	1.7	2.0	2.2
	NEI-Fresh Tuna	0.4																																			0.3	0.5	0.4	0.5	0.5	0.7	0.5	0.6	0.7	0.6	0.5	0.5	0.5	0.4	0.2	0.1
	NEI-Deep-freezing	0.3																															0.0	0.3	0.2	0.4	0.4	0.2	0.4	0.3	1.4	0.9	1.1	1.3	0.8	1.1	0.8	0.7	0.3	0.2	0.2	0.2
	Indonesia	0.2																			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.1	0.2
	Japan	0.2	0.9	2.0	1.9	1.8	2.3	2.2	2.6	2.0	1.5	1.6	3.2	4.1	4.4	2.6	2.4	1.6	1.0	0.8	0.5	1.4	0.9	0.5	0.5	1.8	1.1	1.1	0.9	0.6	0.6	1.0	1.0	1.0	0.7	0.3	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.3	0.4	0.3	0.3	0.3	0.1	0.1	0.1	0.1
	China	0.1																																									0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.1	0.1
	Seychelles	0.0																													0.0	0.0	0.0										0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
	Korea, Republic of	0.0											0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.5	0.6	1.1	0.6	0.6	0.8	1.1	0.9	0.8	0.7	0.7	0.7	0.7	0.8	1.1	1.1	1.0	0.9	0.7	0.3	0.4	0.4	0.7	0.5	0.8	0.4	0.1	0.0	0.1	0.0	0.0	0.0	0.1
	France-Reunion	0.0																																				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Philippines	0.0																																											0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
	Spain	0.0																																												0.0	0.0		0.0	0.0	0.0
	Guinea	0.0																																														0.0	0.0	0.0	0.0	0.0
	India	0.0																													0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Mauritius	0.0																																0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Thailand	0.0																																														0.0	0.0	0.0	0.0	0.0
	Malaysia	0.0																																															0.0	0.0		
	Australia	0.0																																			0.1		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0		0.0	0.0	0.0
	South Africa	0.0																																														0.0	0.0	0.0	0.0	0.0
	Maldives	0.0																																																0.0	0.0	0.0
	Oman	0.0																																																	0.0
	Portugal	0.0																																															0.0		0.0	
	Uruguay	0.0																																															0.0	0.0		
	Pakistan																																					0.2	0.2	0.0	0.1	0.0	0.1	0.0	0.0							
	France-Territories																																													0.0	0.0						
	NEI-Indonesia Fresh Tuna																																0.0		0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0						
	Soviet Union											0.0	0.0	0.0	0.0	0.0	0.0	0.0					0.0		0.0	0.0	0.0				0.0			0.0	0.0	0.0																		
Gillnet	Indonesia	0.2																												0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	Sri Lanka	0.0																																0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	India	0.0																											0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Malaysia																										0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	0.0		0.0								
	Taiwan,China																																		0.0	0.0	0.0	0.0	0.0															
Hand Line	France-Reunion	0.0																																												0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	France-Territories	0.0																																												0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	South Africa	0.0																																	0.0			0.0	0.0	0.0				0.0	0.0	0.0	0.0			0.0	0.0	0.0
	India	0.0																																				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Troll Line	Tanzania	0.0																0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Kenya	0.0																														0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	India	0.0																																				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	France-Reunion	0.0																																							0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		
	United Arab Emirates	0.0																													0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	France-Territories	0.0																																												0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gear	Fleet	AvC	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04

Chart 19: Catches of Striped Marlin (MLS) in the Indian Ocean for the period 1955-2004

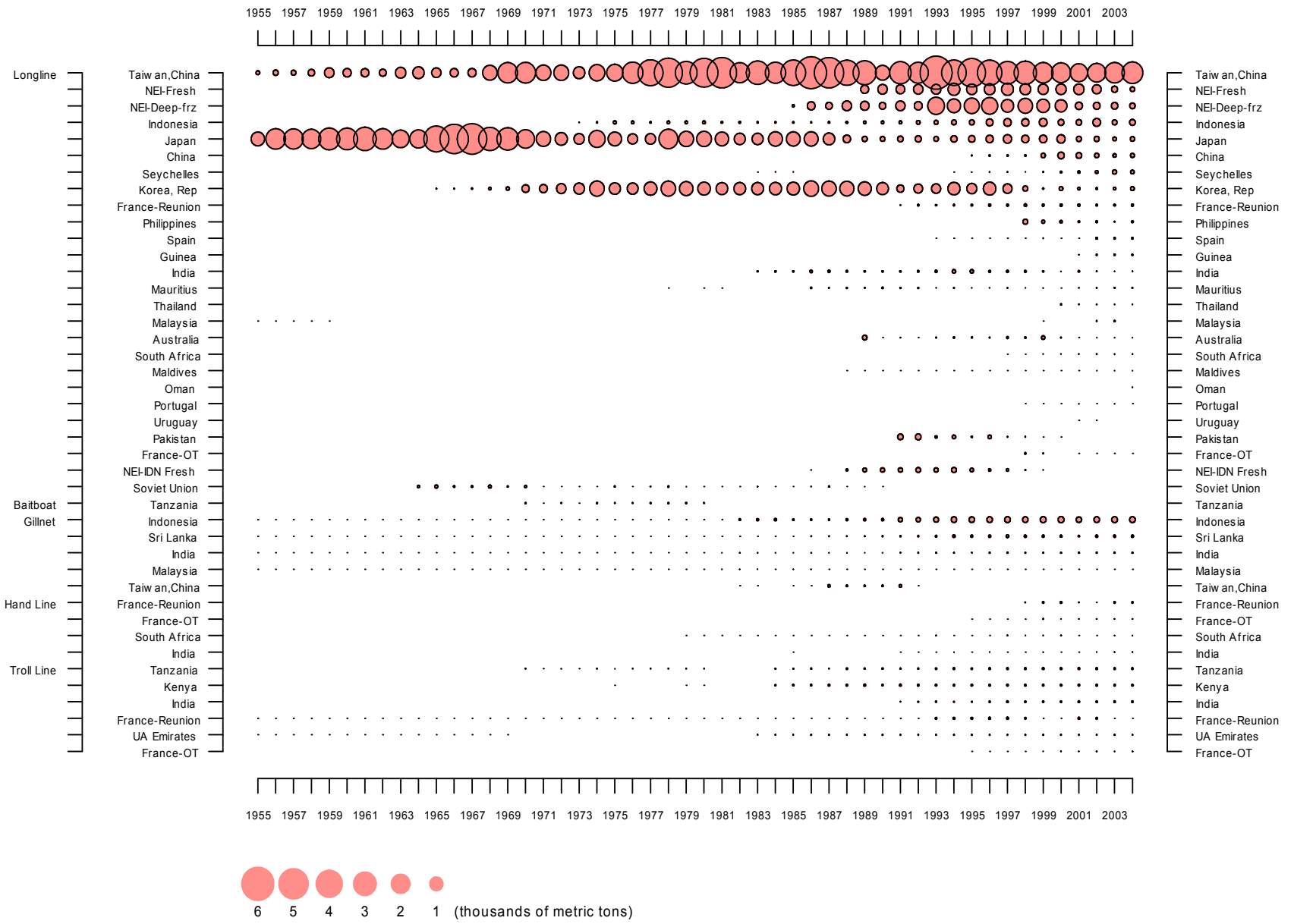


Table 6: Catches of Indo-Pacific Sailfish (SFA) in the Indian Ocean for the period 1955-2004 (in thousand of metric tonnes)

Gear	Fleet	AvC	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04
Purse Seine	India	0.0																											0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Saudi Arabia	0.0																											0.0	0.0	0.0	0.0			0.0	0.0	0.0			0.0	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	0.0
	Malaysia																										0.0		0.0	0.0		0.0	0.1	0.0		0.0			0.0			0.0	0.0		0.0							
Baitboat	Tanzania																	0.1		0.0		0.1	0.0	0.1	0.1	0.1	0.1	0.1																								
Longline	Indonesia	0.7																			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.5	0.6	0.6	0.7	0.4	0.3	0.5	1.3	1.2
	Japan	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.8	0.5	0.2	0.2	0.1	0.2	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1
	NEI-Fresh Tuna	0.1																																			0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	
	Taiwan,China	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
	Spain	0.0																																								0.0			0.0	0.0	0.0	0.0		0.0	0.0	0.0
	France-Reunion	0.0																																							0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	NEI-Deep-freezing	0.0																															0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Seychelles	0.0																													0.0	0.0	0.0											0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	China	0.0																																									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	India	0.0																													0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Korea, Republic of	0.0											0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Iran, Islamic Republic	0.0																						0.1	0.0		0.1	0.1																0.0	0.0	0.0	0.0			0.0		0.0
	Thailand	0.0																																														0.0	0.0	0.0	0.0	0.0
	Portugal	0.0																																												0.0			0.0		0.0	
	South Africa	0.0																																													0.0				0.0	0.0
	Mauritius	0.0																																0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	Maldives	0.0																																																0.0	0.0	0.0
	Guinea	0.0																																																0.0	0.0	0.0
	France-Territories	0.0																																												0.0	0.0		0.0	0.0	0.0	0.0
	Uruguay	0.0																																															0.0	0.0		
	Saudi Arabia	0.0																											0.0	0.0	0.0	0.0			0.0	0.0	0.0			0.0	0.0	0.0			0.0				0.0	0.0	0.0	0.0
	Australia	0.0																																			0.0								0.0	0.0	0.0			0.0		
	Pakistan																																						0.7	1.0	0.7	0.9	0.9	1.0	0.0	0.0	0.0					
	NEI-Indonesia Fresh Tuna																																	0.0		0.0	0.2	0.2	0.2	0.2	0.2	0.3	0.1	0.1	0.1	0.0	0.0					
	Soviet Union											0.0	0.0	0.0	0.0	0.0	0.0	0.0					0.0		0.0	0.0	0.0				0.0			0.0	0.0		0.0															
	Kenya																												0.0	0.0	0.0																					
Gillnet	Iran, Islamic Republic	6.0																											0.0				0.0	0.0	0.0				0.2	0.2	0.7	1.1	3.6	2.3	2.3	1.8	3.2	3.1	3.2	4.3	7.3	12.1
	Sri Lanka	3.8																																0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.7	1.8	1.3	2.0	2.7	1.9	3.6	4.6	3.9	4.4	3.1	3.1
	India	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												0.5	1.8	0.7	1.2	0.7	0.8	0.7	0.7	0.9	1.0	0.8	1.2	1.4	1.2	0.9	2.6	3.0	2.3	2.0	2.4	3.0	2.8	3.1	2.6
	Pakistan	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.9	0.1	0.2	0.2	0.1	1.6	0.6	0.7	1.1	2.2	1.9	2.2	1.9	2.2	2.8	2.7	2.7	2.2	2.3	2.4	2.2	1.1	1.0	1.0	1.0
	Tanzania	0.6																0.1		0.0		0.1	0.0	0.1	0.1	0.1	0.2	0.0	0.2	0.5	0.2	0.2	0.2	0.3	0.1	0.3	0.2	0.3	0.2	0.2	0.4	0.6	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.5
	United Arab Emirates	0.2																													0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1
	Oman	0.2	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.1	0.4	0.3	0.3	0.8	1.6	0.8	0.7	0.2	0.7	0.5	0.3	0.6	0.6	0.9	0.5	0.4	0.3	0.1	0.1	0.1	0.1
	Kenya	0.1																											0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Indonesia	0.1																												0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Saudi Arabia	0.0																											0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Eritrea	0.0																																									0.0		0.0			0.0	0.0	0.0	0.0	0.0
	Malaysia																										0.0		0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0			0.0			0.0	0.0		0.0							
	Taiwan,China																																	0.0	0.0	0.0	0.0	0.0	0.0													
Hand Line	Comoros	0.2																																			0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
	Tanzania	0.1																									0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	India	0.1																															0.0						0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1
	Kenya	0.0																											0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	France-Territories	0.0																																									0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
	Sri Lanka	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.3	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0
	France-Reunion	0.0																																												0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Seychelles	0.0																																0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Saudi Arabia	0.0																											0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	South Africa	0.0																													0.0		0.0		0.0	0.0			0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	UK-Territories	0.0																																																0.0	0.0	0.0
Troll Line	Mauritius	0.3																														0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	India	0.1																																					0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
	Comoros	0.1																																			0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Kenya	0.1																														0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Tanzania	0.1																0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	United Arab Emirates	0.0																													0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	France-Territories	0.0																																									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	France-Reunion	0.0																																							0.0	0.0	0.0	0.0	0.0						0.0	0.0
	Saudi Arabia	0.0																											0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Australia	0.0																																												0.0				0.0		
	Malaysia																										0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0			0.0	0.0		0.0							
	Sri Lanka		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
	Seychelles																																0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
Other	Saudi Arabia	0.0																											0.0	0.0	0.0	0.0			0.0	0.0	0.0			0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gear	Fleet	AvC	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04

Chart 20: Catches of Indo-Pacific Sailfish (SFA) in the Indian Ocean for the period 1955-2004

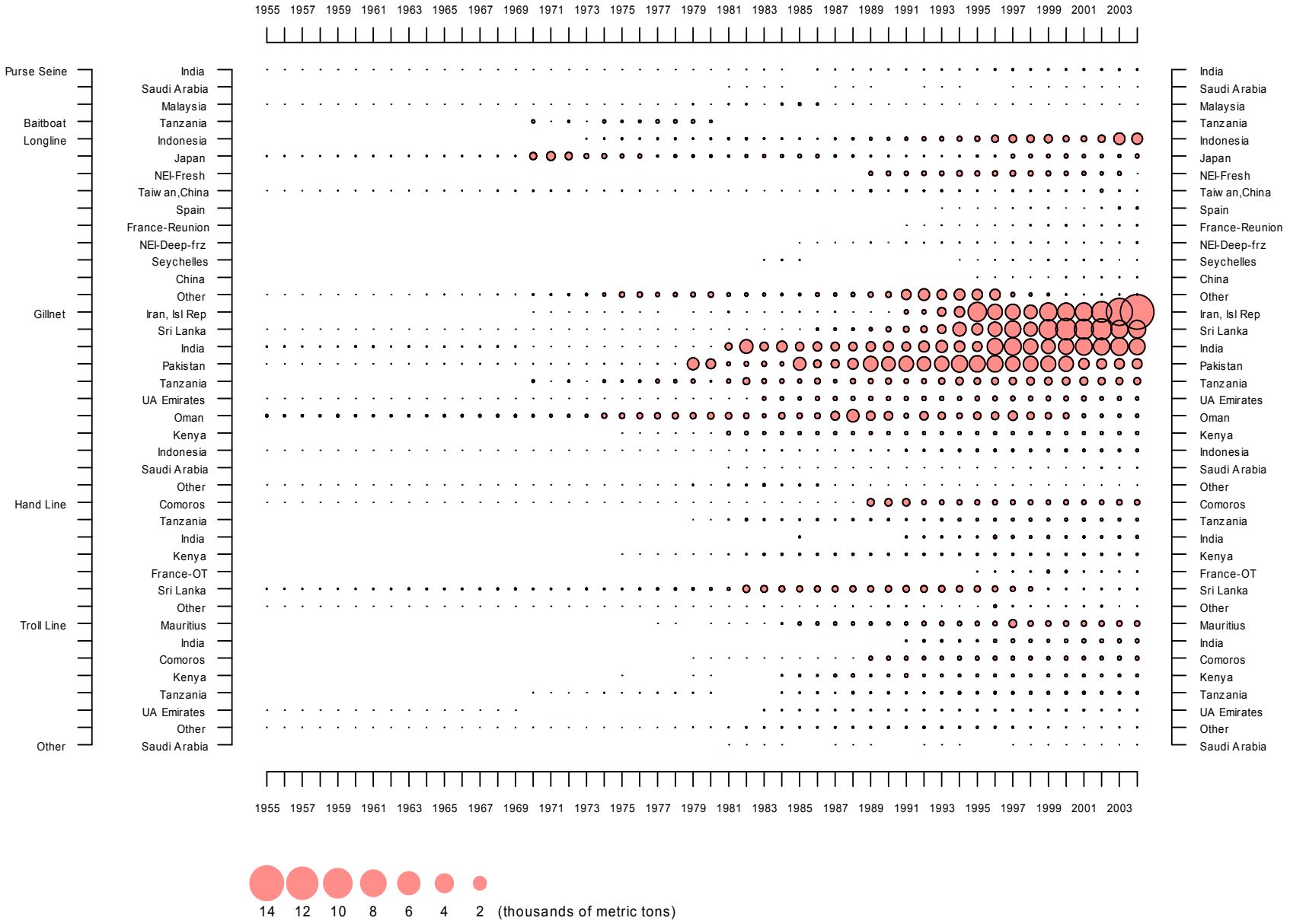
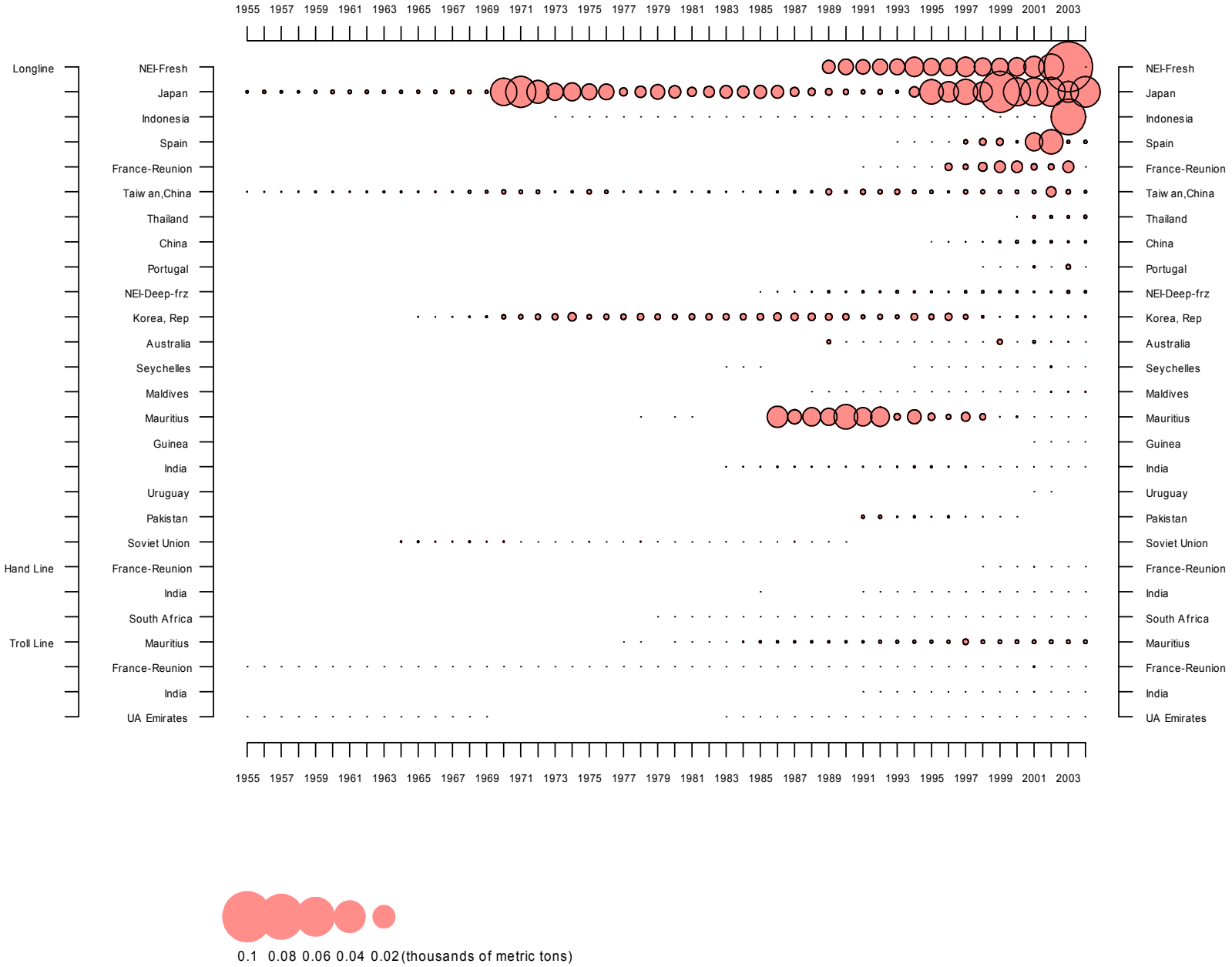


Table 7: Catches of Short-bill Spearfish (SSP) in the Indian Ocean for the period 1955-2004 (in thousand of metric tonnes)

Gear	Fleet	AvC	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04
Longline	NEI-Fresh Tuna	0.0																																			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
	Japan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
	Indonesia	0.0																																																	0.0	
	Spain	0.0																																											0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	France-Reunion	0.0																																										0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Taiwan,China	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Thailand	0.0																																														0.0	0.0	0.0	0.0	0.0
	China	0.0																																								0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Portugal	0.0																																														0.0		0.0	
	NEI-Deep-freezing	0.0																															0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Korea, Republic of	0.0											0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Australia	0.0																																			0.0								0.0		0.0		0.0	0.0	0.0	
	Seychelles	0.0																																																0.0	0.0	0.0
	Maldives	0.0																																																0.0	0.0	0.0
	Mauritius	0.0																																0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
	Guinea	0.0																																																0.0	0.0	0.0
	India	0.0																													0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0			0.0
	Uruguay	0.0																																															0.0	0.0		
	Pakistan																																						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
	Soviet Union											0.0	0.0	0.0	0.0	0.0	0.0	0.0					0.0		0.0	0.0	0.0				0.0			0.0	0.0		0.0															
Hand Line	France-Reunion	0.0																																															0.0			
	India	0.0																																					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	South Africa	0.0																																					0.0	0.0											0.0	0.0
Troll Line	Mauritius	0.0																														0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	France-Reunion	0.0																																															0.0			
	India	0.0																																					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	United Arab Emirates	0.0																													0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gear	Fleet	AvC	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04

Chart 21: Catches of Short Bill Spearfish (SSP) in the Indian Ocean for the period 1955-2004



Annex II:
Data Catalogues

Nominal Catch
Catch and Effort
Size Frequency
(IOTC Database)

Data Catalogues

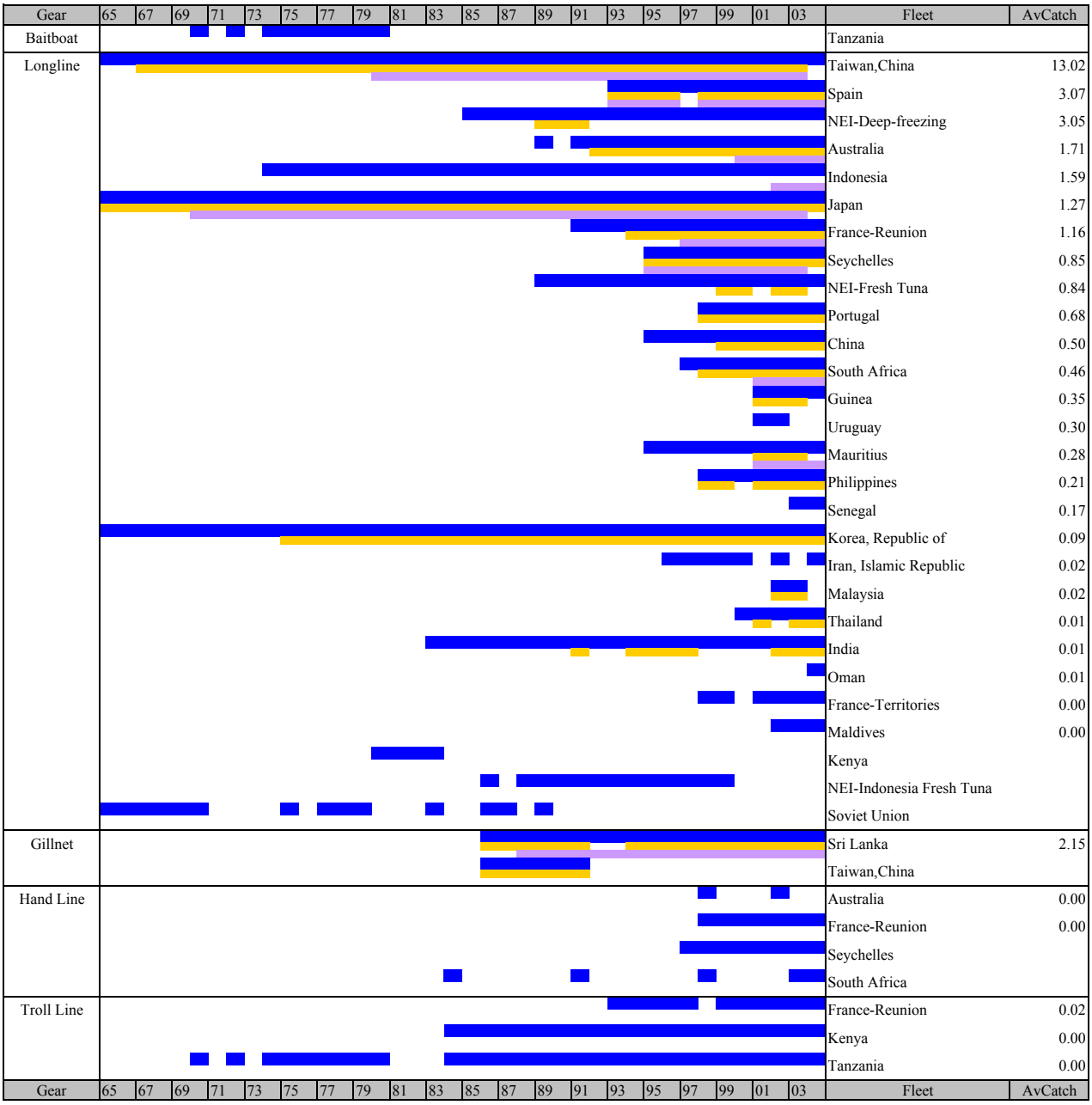
1/ Availability

(Availability of Nominal Catches, Catch and Effort and Size Frequency Statistics in the IOTC databases)

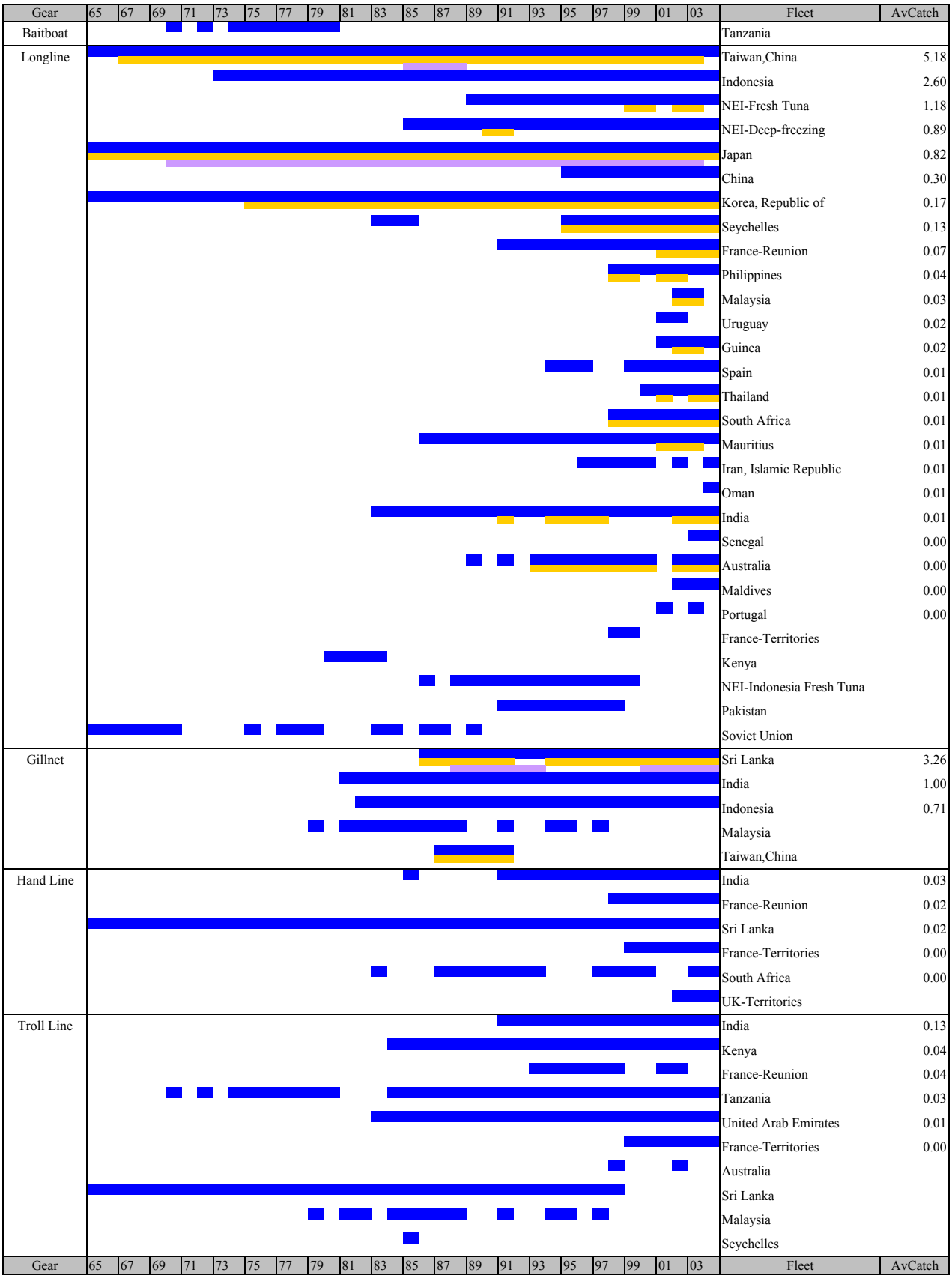
Leyend: SpC Mean catches of the Species for the last five years

Nominal catches available
Catch and Effort data available
Size frequency data available

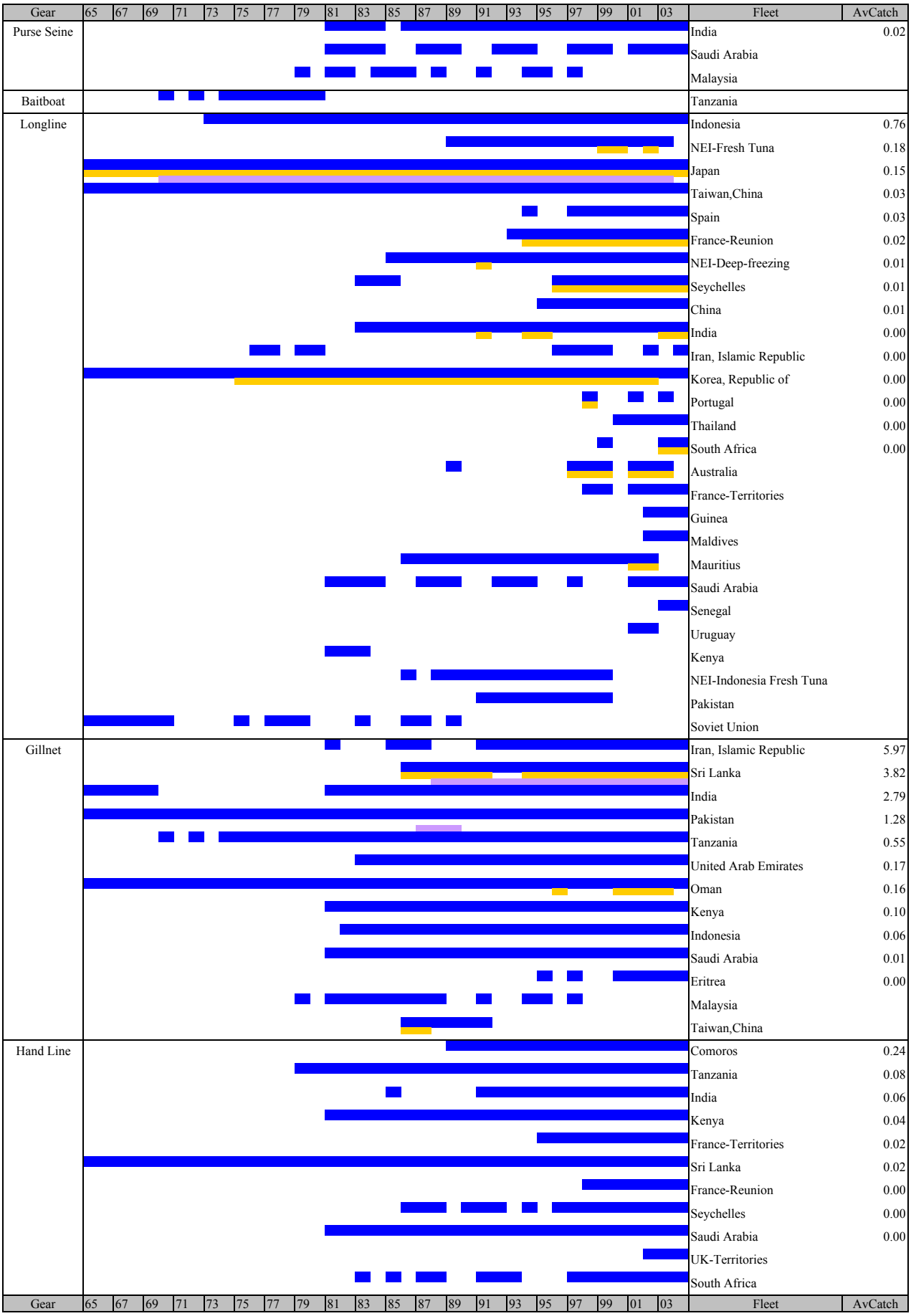
Swordfish


Gear
65 67 69 71 73 75 77 79 81 83 85 87 89 91 93 95 97 99 01 03
Fleet
AvCatch
Baitboat
Tanzania
Longline
Taiwan,China 13.02
Spain 3.07
NEI-Deep-freezing 3.05
Australia 1.71
Indonesia 1.59
Japan 1.27
France-Reunion 1.16
Seychelles 0.85
NEI-Fresh Tuna 0.84
Portugal 0.68
China 0.50
South Africa 0.46
Guinea 0.35
Uruguay 0.30
Mauritius 0.28
Philippines 0.21
Senegal 0.17
Korea, Republic of 0.09
Iran, Islamic Republic 0.02
Malaysia 0.02
Thailand 0.01
India 0.01
Oman 0.01
France-Territories 0.00
Maldives 0.00
Kenya
NEI-Indonesia Fresh Tuna
Soviet Union
Gillnet
Sri Lanka 2.15
Taiwan,China
Hand Line
Australia 0.00
France-Reunion 0.00
Seychelles
South Africa
Troll Line
France-Reunion 0.02
Kenya 0.00
Tanzania 0.00
Gear
65 67 69 71 73 75 77 79 81 83 85 87 89 91 93 95 97 99 01 03
Fleet
AvCatch

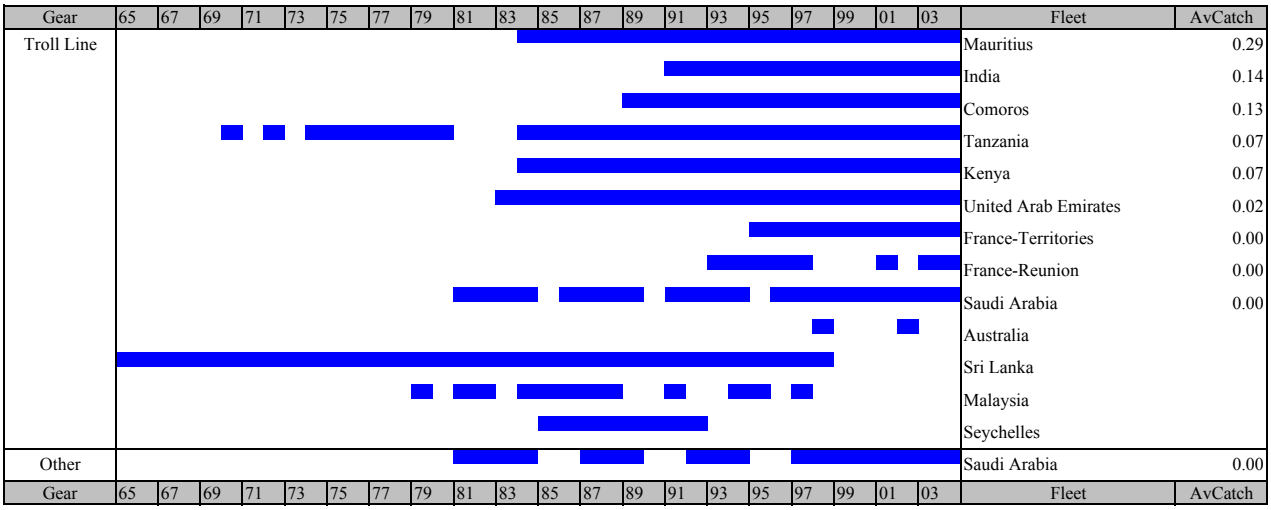
Marlins not elsewhere included



Indo-Pacific sailfish and Shortbill spearfish (I)



Indo-Pacific sailfish and Shortbill spearfish (II)



Data Catalogues

2/ Quality

(Quality of the statistics held in the Nominal Catches, Catch and Effort and Size Frequency databases)

Nominal Catches Database: The higher or lower quality of each individual record (strata) was assigned depending on whether the catches reported (or estimated) in that strata (Country-RepCountry-Year-Gear-Area-Species-Source) were thought to accurately represent the actual catches occurred in the strata concerned.

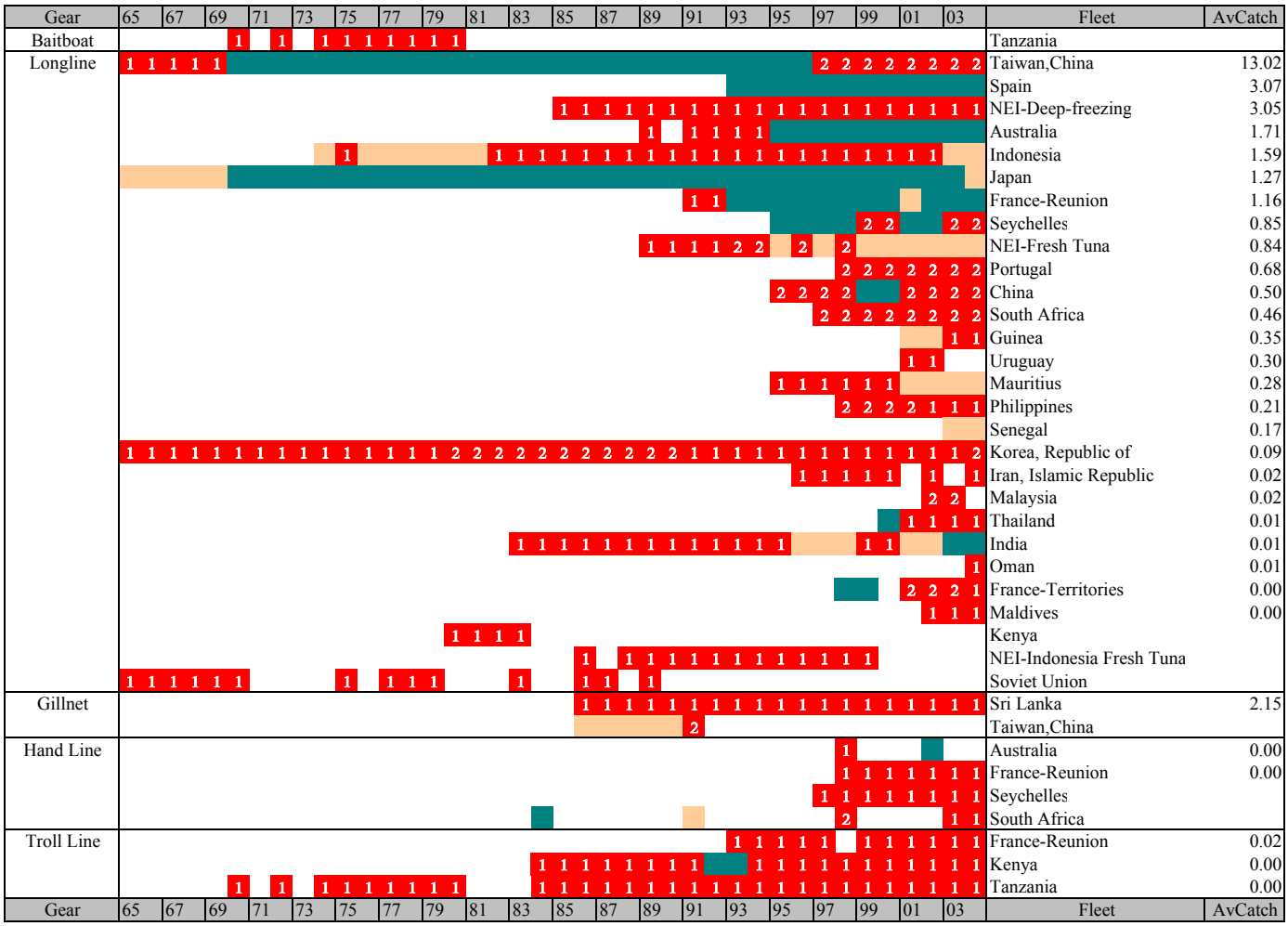
Catch and Effort Database: The higher or lower quality of each individual record (strata) was assigned depending on whether the catches reported (or estimated) in that strata (Country-RepCountry-Year-Gear-Area-Species-Source) were thought representative of the total catches occurred in the strata concerned.

Size Frequency Database: The higher or lower quality of each individual record (strata) was assigned depending on whether the specimens sampled in that strata (Country-RepCountry-Year-Gear-Area-Species-Source) were thought representative of all specimens caught in the strata concerned.

Leyend:	SpC	Mean catches of the Species for the last five years
	1	Poor quality
	2	Unknown quality
		Fair quality
		Good quality

Swordfish (I)

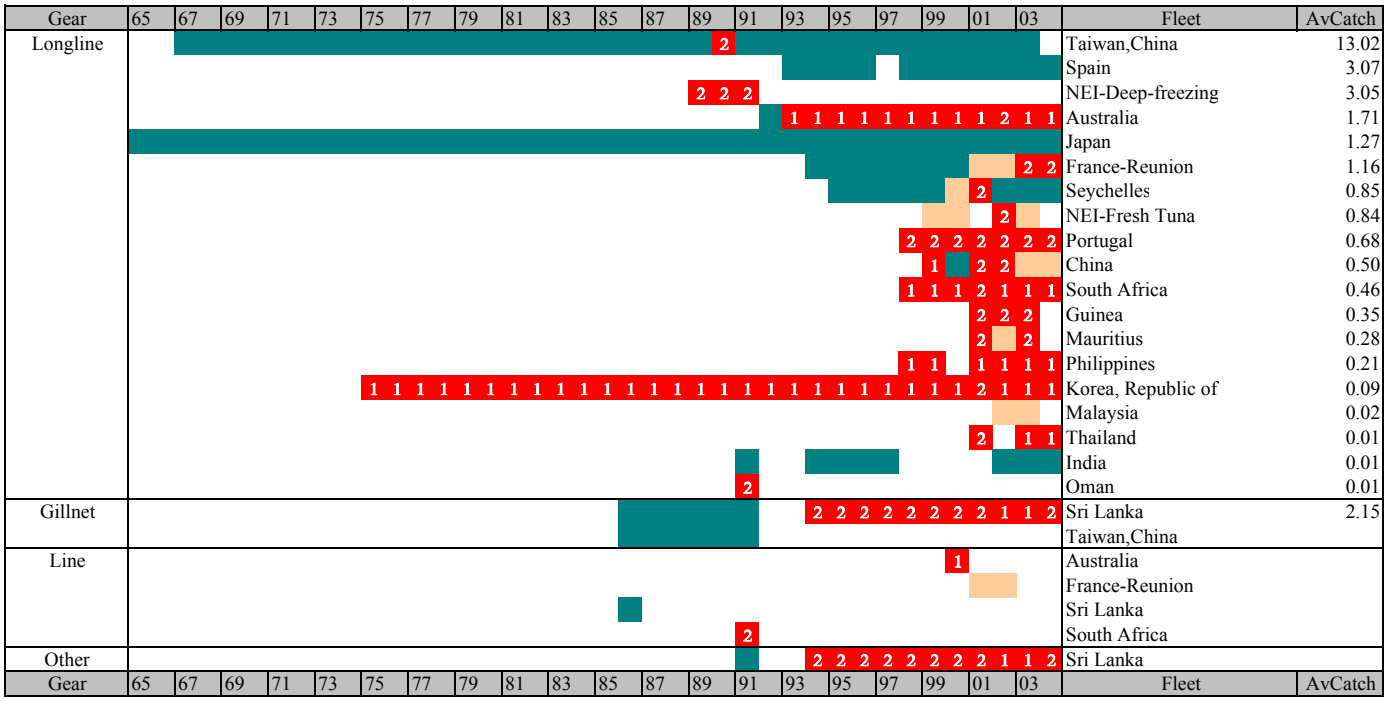
Nominal Catches



Gear	65	67	69	71	73	75	77	79	81	83	85	87	89	91	93	95	97	99	01	03	Fleet	AvCatch
Baitboat			1		1		1	1	1	1	1	1									Tanzania	
Longline	1	1	1	1	1												2	2	2	2	Taiwan,China	13.02
																					Spain	3.07
											1	1	1	1	1	1	1	1	1	1	NEI-Deep-freezing	3.05
													1	1	1	1	1	1	1	1	Australia	1.71
						1			1	1	1	1	1	1	1	1	1	1	1	1	Indonesia	1.59
																					Japan	1.27
														1	1						France-Reunion	1.16
																		2	2	2	Seychelles	0.85
													1	1	1	1	2	2	2		NEI-Fresh Tuna	0.84
																	2	2	2	2	Portugal	0.68
																2	2	2	2	2	China	0.50
																	2	2	2	2	South Africa	0.46
																			1	1	Guinea	0.35
																			1	1	Uruguay	0.30
																1	1	1	1	1	Mauritius	0.28
																	2	2	2	1	Philippines	0.21
																					Senegal	0.17
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Korea, Republic of	0.09
																	1	1	1	1	Iran, Islamic Republic	0.02
																			2	2	Malaysia	0.02
																		1	1	1	Thailand	0.01
										1	1	1	1	1	1	1	1				India	0.01
																				1	Oman	0.01
																			2	2	France-Territories	0.00
																			1	1	Maldives	0.00
								1	1	1											Kenya	
											1	1	1	1	1	1	1	1			NEI-Indonesia Fresh Tuna	
	1	1	1	1	1	1			1		1	1	1								Soviet Union	
Gillnet											1	1	1	1	1	1	1	1	1	1	Sri Lanka	2.15
														2							Taiwan,China	
Hand Line																	1				Australia	0.00
																	1	1	1	1	France-Reunion	0.00
																1	1	1	1	1	Seychelles	
																	2			1	South Africa	
Troll Line															1	1	1	1	1	1	France-Reunion	0.02
											1	1	1	1	1	1	1	1	1	1	Kenya	0.00
			1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Tanzania	0.00
Gear	65	67	69	71	73	75	77	79	81	83	85	87	89	91	93	95	97	99	01	03	Fleet	AvCatch

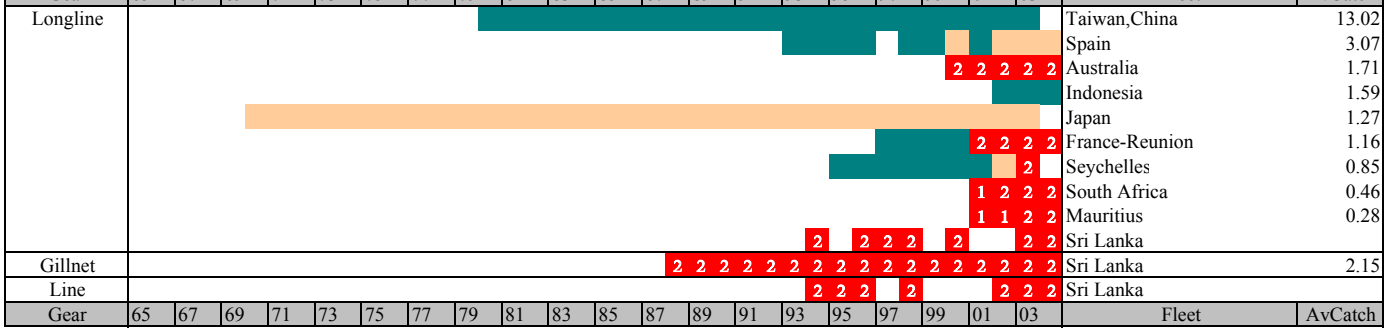
Swordfish (II)

Catch And Effort Statistics



Gear	65	67	69	71	73	75	77	79	81	83	85	87	89	91	93	95	97	99	01	03	Fleet	AvCatch
Longline																					Taiwan,China	13.02
																					Spain	3.07
																					NEI-Deep-freezing	3.05
																					Australia	1.71
																					Japan	1.27
																					France-Reunion	1.16
																					Seychelles	0.85
																					NEI-Fresh Tuna	0.84
																					Portugal	0.68
																					China	0.50
																					South Africa	0.46
																					Guinea	0.35
																					Mauritius	0.28
																					Philippines	0.21
																					Korea, Republic of	0.09
																					Malaysia	0.02
																					Thailand	0.01
																					India	0.01
																					Oman	0.01
Gillnet																					Sri Lanka	2.15
																					Taiwan,China	
Line																					Australia	
																					France-Reunion	
																					Sri Lanka	
																					South Africa	
Other																					Sri Lanka	
Gear	65	67	69	71	73	75	77	79	81	83	85	87	89	91	93	95	97	99	01	03	Fleet	AvCatch

Size Frequency Statistics



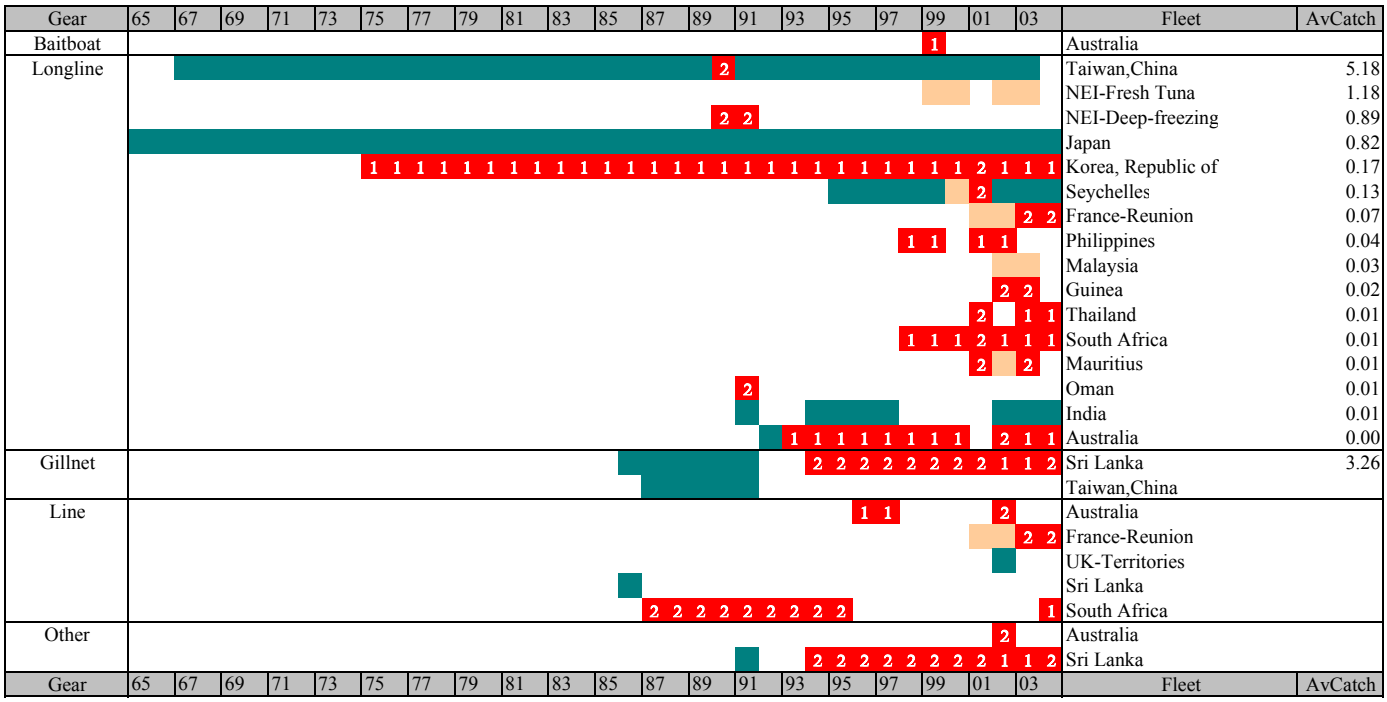
Gear	65	67	69	71	73	75	77	79	81	83	85	87	89	91	93	95	97	99	01	03	Fleet	AvCatch
Longline																					Taiwan,China	13.02
																					Spain	3.07
																					Australia	1.71
																					Indonesia	1.59
																					Japan	1.27
																					France-Reunion	1.16
																					Seychelles	0.85
																					South Africa	0.46
																					Mauritius	0.28
																					Sri Lanka	
Gillnet																					Sri Lanka	2.15
Line																					Sri Lanka	
Gear	65	67	69	71	73	75	77	79	81	83	85	87	89	91	93	95	97	99	01	03	Fleet	AvCatch

Marlins not elsewhere included (I)

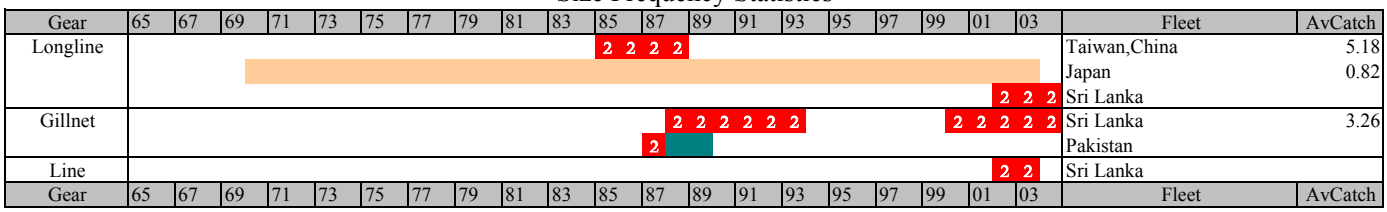
Nominal Catches

Marlins not elsewhere included (II)

Catch And Effort Statistics

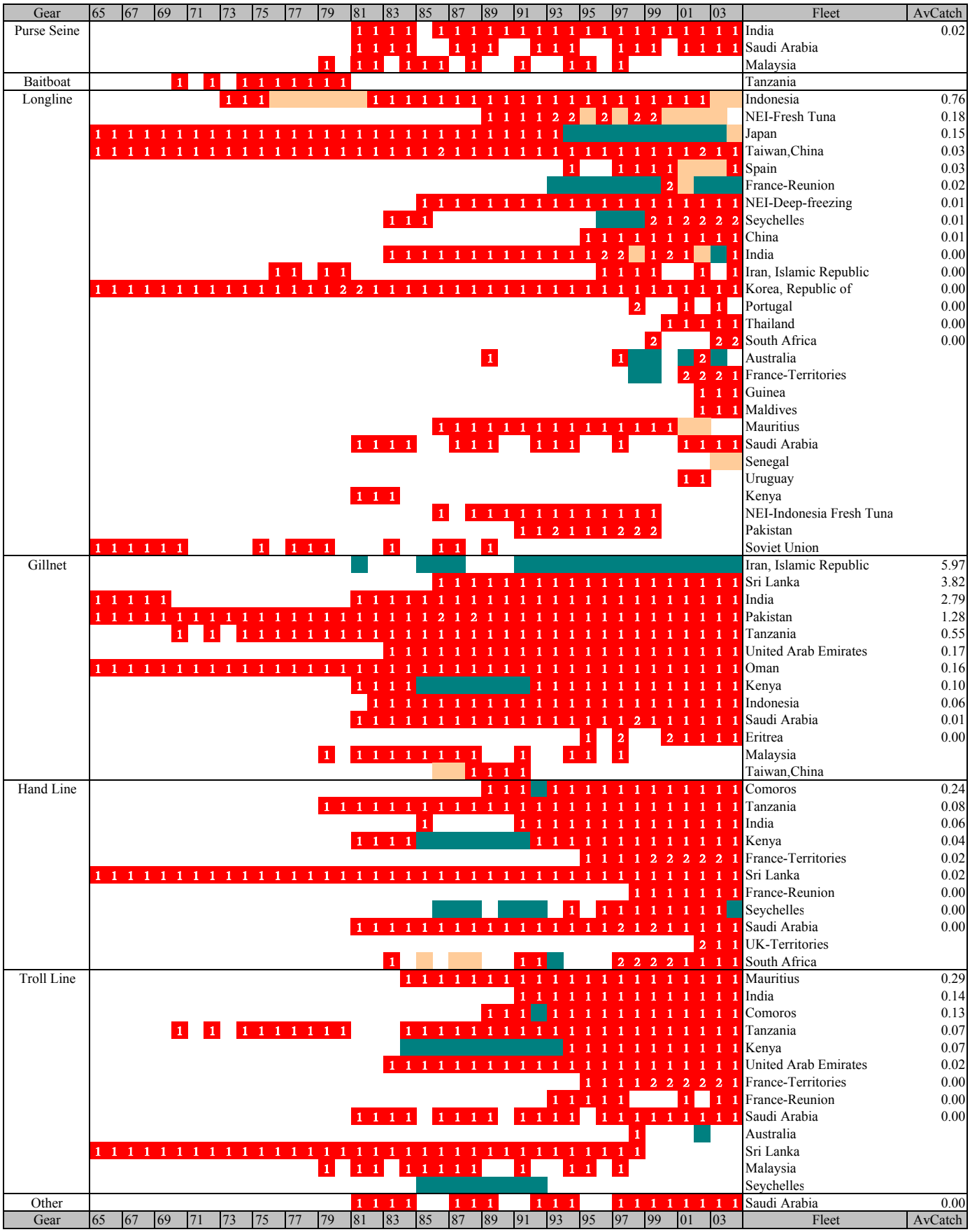


Size Frequency Statistics



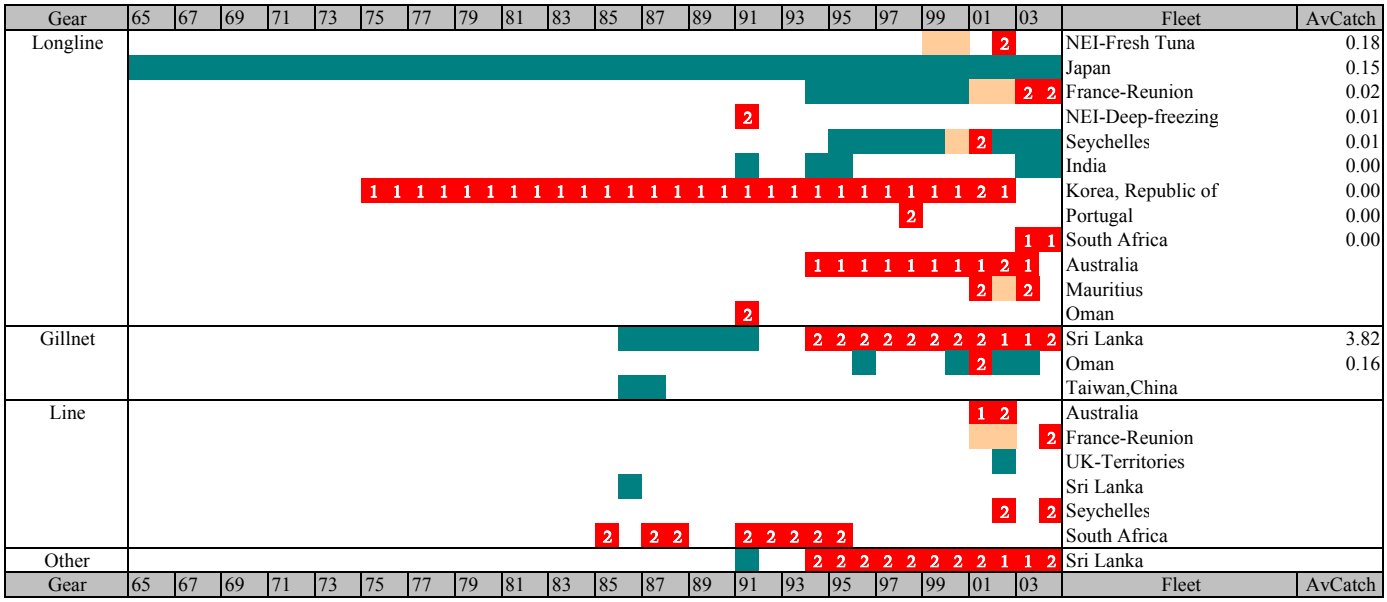
Indo-Pacific sailfish and Shortbill spearfish (I)

Nominal Catches



Indo-Pacific sailfish and Shortbill spearfish (II)

Catch And Effort Statistics



Size Frequency Statistics