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

WCPFC- SC19- AR-CCM-03

CHINA

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

National report of China

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Scientific data was provided to the Commission in accordance with the decision relating to the provision of scientific data to the Commission by 30 April 2023	**YES**

SUMMARY

There are two types of tuna fisheries in the WCPFC Convention Areas: longline and purse seine fisheries. In 2022, 336 longliners and 16 purse seiners flying the Chinese flag operated in the WCPFC Convention Areas. The total catch of tuna and tuna-like species by longline fishery and purse seine fishery was estimated to be 44,945 MT and 44,445 MT (including fishing in the EEZs of PIC), respectively. The catch of bigeye tuna, yellowfin tuna, and albacore by the longline fishery was 5,667 MT, 9,560 MT, and 26,437 MT, respectively. The catch of skipjack, yellowfin tuna, and bigeye tuna by the purse seine fishery was estimated at 42,292 MT, 1,950 MT, and 203 MT, respectively. From October 2021 to March 2023, twenty-five (25) scientific observers were trained and dispatched to the Chinese longline vessels in the Pacific Ocean. Fisheries and biological data were collected during the observer trips. The logbook coverage for the longline fishery has been improved, which greatly improves the quality of the data China has collected.

1. Introduction

China has developed its oceanic tuna fisheries in the Pacific Ocean since 1988 and this region is one of the earliest fishing grounds for China's tuna fishery. There are currently two types of tuna fisheries in the WCPFC Convention area: longline (LL) fishery and purse seine (PS) fishery. The catch of four main tuna species (skipjack, yellowfin tuna, bigeye tuna, and albacore) by China in 2004 was 40,165 MT. Catch of the four species hit a historical record of 112,260 MT in 2009 but decreased to 81,938 MT in 2010. It should be noted that the above-mentioned catch does not include the catch from overlapping areas (S4° - S40 °, W130° - W150 °). In 2022, the catch of the four species rebounded to 89,390 MT in the WCPFC Convention Areas.

2. **Annual fisheries information**

2.1 Fleet structure

2.1.1 LL

All the Chinese LL vessels operated on the high seas and EEZs of Pacific Islands Countries (PIC). The number of LL fishing vessels has been increasing since 2000, but has been gradually decreasing recently. Table 1A shows the number of Chinese LL vessels operating in the WCPFC Convention Area in 2018-2022. The number of LL vessels was 364 in 2018, 364 in 2019, 352 in 2020, 341 in 2021 and 340 in 2022.

There are three types of tuna longline vessels, namely regular LL target albacore tuna (RLL), deep-frozen LL target tropical tuna (DFLL), and ice fresh LL vessel target tropical tuna (IFLL). Table 1B shows the China LL vessel information in the convention area in 2022. The number of RLL, IFLL, and DFLL vessels was 270, 22, and 48 respectively in 2022.

2.1.2 PS

Chinese fleet entered the WCPFC tropical purse seine fishery in 2001, and it has become very important for the China tuna fishery. The number of PS vessels maintained a steady level of 12-14 during 2009-2013. Several old purse seine vessels have been replaced by newly built vessels in recent years. In 2022 there are 16 purse seiners flagged China fishing in the WCPFC Convention Area. Table 1 shows the number of Chinese PS vessels operating in the WCPFC Convention area in 2018-2022.

2.2 Annual Catch in the WCPFC Convention area

2.2.1 LL

The total catch by Chinese LL in the WCPFC Convention area from 2018 to 2022 is shown in Table 2. The total catch of tuna and tuna-like species in the longline fishery was 44,945 MT in 2022. The catch mainly consists of ALB, BET, and YFT. In 2022,

the percentages of ALB, BET, and YFT by LL were 58.8%, 12.6%, and 21.3%, respectively.

Table 3 shows the catch of non-target species caught by Chinese LL in the WCPFC Convention Area from 2018 to 2022, mainly including three billfish species (striped marlin, blue marlin, and black marlin) and three shark species (blue shark, shortfin mako, and Oceanic whitetip shark).

2.2.2 PS

The total catch by Chinese PS in the WCPFC Convention area from 2018 to 2022 was shown in Table 2. The catch was 53,716 MT in 2010, increased to 77,551 MT in 2011, then sharply decreased to 49,148 MT in 2012. In 2022, the main catch species by the PS fishery were skipjack and yellowfin tuna. The catch of bigeye tuna (mainly juveniles) was estimated to be 203 MT. The catch of yellowfin tuna was estimated to be 1950 MT. The catch of skipjack was estimated to be 42,292 MT(Table 2).

2.3 Fishing Patterns

2.3.1 LL

The Chinese longline fleet can be divided into two categories: temperate longline targeting albacore tuna and operating mainly in the subtropical and temperate area of the southern hemisphere, and tropical longline (between 23°N - 30°S) targeting bigeye and yellowfin tuna. Tropical longline, accounting for 94% of total hooks in Chinese longline fishery, operated in the Exclusive Economic Zone (EEZ) of Pacific Island Countries and high seas.

2.3.2 PS

The Chinese PS vessels mainly operate in the tropical waters close to the equator area targeting skipjack. Since most of the fishing grounds are located in the EEZs of PICs, these vessels acquire fishing permits through access agreements with PICs, including Papua New Guinea, Marshall Islands, Micronesia, Nauru, Solomon Islands, and Tuvalu.

2.4. Disposal of Catch

Bigeye tuna and yellowfin tuna caught by longline vessels operating in the Exclusive Economic Zone (EEZ) of Pacific Island Countries and on the high seas were exported to Japan's sashimi market. Other species caught as by-catch are sold to the local market of operating ports. Albacore catch was landed at Fiji for the cannery. Catch in the PS fishery was mostly transshipped to Thailand for cannery as well.

3. Research and Statistics

3.1 Observer program

To have a high standard of scientific observer program, scientific observers are rigorously trained for collecting the fishery data of tunas and other pelagic fish stocks, including size-frequency data of all pelagic fishes as well as sea turtle information. Six (6) observers were sent to the Chinese longline vessels on the high seas in 2011, and then eight (8) observers in 2012, nine (9) observers in 2013, six (6) in 2014, eight (8) in 2015, fifteen (15) in 2016, twenty-seven (27) in 2017, twenty-two (22) in 2018, thirty-nine(39) in 2019, twenty-five (25) in 2020 and twenty-five (25) in 2021. In 2022, twenty-five (25) scientific observers were dispatched to the Pacific Ocean (Figure 1). Table 4 presents observer trip information on areas, periods, total hooks and hooks per basket, etc. Table 5 shows the observer coverage information.

3.2 Data collection system

The Ministry of Agriculture and Rural Affairs (MARA) of China, is leading and supervising the data collection of Chinese tuna fisheries. National-wide meetings on tuna data quality have been organized at least once a year in recent years. Participants included managers of tuna fishing companies and tuna-related fishery enterprises. Each vessel of every company engaged in tuna fishing is required to report fishery data (such as catch and effort by species, month, gear, area, etc.) to China Overseas Fisheries Association (COFA). Data coverage of catch and effort is 100%. COFA and Shanghai Ocean University (SHOU) host and maintain the fishery and observer database for the tuna fisheries of China.

Since 2008, each LL vessel is required by the Bureau of Fisheries (BOF) to use a standard logbook which is modified frequently according to the latest applicable CMMs, and return it to SHOU before the end of March following year. The data contained in the logbook are evaluated and audited to ensure good quality for the data collected.

Another important way to collect size data is port sampling. Port-sampling program conducted in domestic ports aims at collecting length data of tunas and other species. Measurement is done when unloading from fishing vessels or in the processing plants.

3.3 Research activities

The scientific papers published in the scientific journal from 2022 to 2023 were as follows:

- Zhang C, Zhou W F, Fan W. Research on fishing ground forecast models of South Pacific yellowfin tuna based on ADASYN and stacking integration, Marine Fisheries, 2022, 1-17(in Chinese)
- Zhang C, Zhou W F, Tang F H, et al. Forecasting models for yellowfin tuna fishing ground in the central and western Pacific based on machine learning, Transactions of the Chinese Society of Agricultural Engineering, 2022,38(15):330-338(in Chinese).

- Guo Y C, He S, Zhang Y. Analysis of operation characteristics of charter vessels in Chinese mainland tuna purse seine fisheries in the Western and Central Pacific Ocean. Fishery Information and Strategy, 2022, 37(2): 94-101 (in Chinese).
- Jiang S, Yang X M, Zhu J F. Analysis of spatial and temporal heterogeneity of the relationship between skipjack tuna fishery and marine environment in the Western and Central Pacific Ocean. Journal of Fishery Sciences of China, 2022,29(5):744-754(in Chinese).
- Wang X, Wang Y X, Liu W J, et al. Catch composition and species diversity of pelagic longline fishing in the tropical Western and Central Pacific Ocean. Journal of Fishery Sciences of China, 2022,9(5):732-743(in Chinese).
- Yang S L, Zhang H, Fan W, et al, Behaviour Impact Analysis of Tuna Purse Seiners in the Western and Central Pacific Based on the BRT and GAM Models. Frontiers in Marine Science, 2022,9:881036.
- Shi X F, Zhang J, Wang X, et al. Reproductive Biology of Yellowfin Tuna (Thunnus albacares) in Tropical Western and Central Pacific Ocean. Fishes, 2022,7(4):162.
- Hou X Y, Ma S Y, Tian Y J, et al. The Effects of Trans-Basin Climate Variability on Skipjack Tuna in the Northwest Pacific Ocean: Causal and Nonstationary. Frontiers in Marine Science, 2022,9:895219.

3.4 Research cruise

According to WCPFC Convention principles "on the need to collect and share data, including information from national research programs"(Article 5) and "The function of promoting the conduct of relevant scientific research and disseminating the results thereof is one of the functions of the Commission" (Article 10), China as a member country has conducted a five-year scientific survey program using its fishery research vessel "Song Hang" with longline as main gear in the WCPFC convention area. The survey will collect fundamental data and conduct experiments to improve the commission's scientific research to support better management advice. This cruise was conducted with the aims of 1) Collecting fishery-independent data including catch and effort and biological data for common species caught by longline; 2) Sampling for the study of the stock structure of target and bycatch species; 3)Assessing the influence of different types of longline hooks and baits on catch rate and survival rate of bycatch species; 4) Investigating the mechanisms of moving and aggregating of main species by incorporating environmental factors, and 5) Conducting tagging and releasing experiments for sharks and other bycatch species when incidentally caught. The survey covered the area in the high sea from 129°97′ E to 138°05′ E and 10°93′ N to 16°02′ N between late August 19th and September 10st in 2022. A total of 22 sets (6162 hooks) were released, and a total of 15 species were recorded in this survey. For more details, our scientists will submit the working papers to the scientific committee and share our new findings and understanding with WCPFC and other CCMs.

4 Implementation of Conservation and Management Measures

4.1 CMM 2009-03

In accordance with CMM 2009-03, the number of fishing vessels for swordfish in the Convention Area south of 20°S was limited to the number in any year during 2000-2005, and the catch of swordfish caught in the Convention Area south of 20°S is limited to the amount caught in any year during the period 2000-2006.

China has no vessels targeting swordfish. The total catch on the swordfish in south of 20°S in 2022 in the Convention Area was 26.90 MT.

4.2 Observer coverage

In accordance with WCPFC 11 decision – para 484(b), CCMs are to compile and include in Annual Report Part 1 to be submitted from 2015 onwards, observer coverage for their longline fleet activity in the previous calendar year. A total of 25 trips were sent observers in 2022, and 6.66% of fishing days were observed in China longline fishery (Table 4 and 5).

4.3 CMM 2009-06

In accordance with CMM 2009-06, CCMs shall report on all transshipment activities (including transshipment activities that occur in ports or EEZs) in Part 1 of its Annual Report. The summary information of transshipment activities of our fishing fleets in 2022 was shown in Table 6.

4.4 CMM 2011-03

In accordance with CMM 2011-03, CCMs shall advise in their Part 1 Annual Report of any instances in which cetaceans have been encircled by the purse seine nets of their flagged vessels.

In 2022, there were no incidents of cetaceans encircled by purse seine nets during the operation of Chinese flagged purse seine vessels.

4.5 CMM 2018-03

In accordance with CMM 2018-03, CCMs shall annually provide to the Commission, in part 1 of their annual reports, all available information on interactions with seabirds reported or collected by observers, including mitigation used, observed and reported species-specific seabird bycatch rates, and numbers, to enable the Scientific Committee to estimate seabird mortality in all fisheries to which the WCPFC Convention applies.

The fisheries authority of China required fishing vessels to take appropriate measures to mitigate incidental catch of seabirds, although China fishing vessels almost operate in the areas between 23°N and 30°S.

Affected by the COVID-19 pandemic, China Overseas Fisheries Association organized a training meeting on the bycatch mitigation of seabirds and sharks online. The

mitigation method was emphasized by experts from SHOU for the industry people, managers, and stakeholders. None of the seabirds was been found by our observers on board, and the information regarding interactions with seabirds reported by observers was shown in Tables 7-9.

4.6 CMM 2006-04

In accordance with CMM 2006-04, CCMs shall report annually to the Commission the catch levels of their fishing vessels that have taken striped marlin as bycatch as well as the number and catch levels of vessels fishing for striped marlin in the Convention Area south of 15°S.

The bycatch of striped marlin in the Convention area south of 15°S in 2022 is 15.56 MT. None of China's fishing vessels targets striped marlin.

4.7 CMM 2015-02

In accordance with CMM 2015-02, CCMs shall report annually to the Commission the annual catch levels taken by each of their fishing vessels that have taken South Pacific albacore, as well as the number of vessels actively fishing for South Pacific albacore, in the Convention area south of 20°S.

The catch of South Pacific albacore in the convention area south of 20°S in 2022 by the China fishery fleet was 6168.2 MT. There were 64 vessels actively fishing on the high sea in the Convention area south of 20°S.

4.8 CMM 2019-03

In accordance with CMM 2019-03, all CCMs shall report annually to the WCPFC Commission all catches of albacore north of the equator and all fishing efforts north of the equator in fisheries directed at albacore.

In 2022, the total catch of north Pacific albacore by the Chinese fishing fleet was 663.4 MT in the north Convention area, and 10 vessels (429 vessel days) targeted at albacore in the North Pacific Ocean. Fishing effort in fishing days for North Pacific albacore was shown in Table 10.

Table 1A Number of Chinese tuna fishing vessels operating in the WCPFC Convention area in 2018-2022

Year	LL	PS	Total
2018	364	15	379
2019	364	15	379
2020	352	14	368
2021	341	16	357
2022	340	16	356

Note: Both LL vessels and PS vessels include chartered vessels

Table 1B China LL vessels operation in Convention Area in 2022

Metric Tons	Regular LL target albacore tuna	Deep Frozen LL target tropical tuna	Ice Fresh LL vessel target tropical tuna
0-50	0	0	0
50-200	44	0	22
200-500	223	8	0
500+	3	40	0
Total	270	48	22

Table 2 Nominal catch of tuna and tuna-like species by the Chinese tuna fishery in the WCPFC Convention area in 2018-2022
（Unit of catch: MT in round weight）

Year	Gear	ALB	BET	YFT	SKJ	SWO	BIL	OTH	Total
2018	LL	21295	8695	9031	0	2567	2024	682	44294
	PS	0	26	172	1775	0	0	0	1973
	Total	21295	8721	9203	1775	2567	2024	682	46267
2019	LL	22679	8644	10010	0	1571	1576	811	45291
	PS	0	28	297	6193	0	0	0	6518
	Total	22679	8672	10307	6193	1571	1576	811	51809
2020	LL	20656	7403	10115	0	1134	1314	734	41356
	PS	0	76	387	6022	0	0	1	6485
	Total	20656	7479	10502	6022	1134	1314	735	47841
2021	LL	16076	5493	9530	0	643	1171	832	33745
	PS	0	103	6037	30016	0	0	0	36156
	Total	16076	5596	15567	30016	643	1171	832	69901
2022	LL	26437	5667	9560	0	498	1015	1651	44828
	PS	0	203	1950	42292	0	0	0	44445
	Total	26437	5870	11510	42292	498	1015	1651	89273

Note: BIL includes striped marlin, blue marlin and black marlin; OTH includes sharks and other species.

Table 3 Catch of non-target species by the Chinese LL tuna fishery in the WCPFC Convention Area from 2018 to 2022
(Unit of catch: MT or individuals)

Species	Billfish (MT)			Sharks(individuals)		
	Striped marlin	Blue marlin	Black marlin	Blue shark	Shortfin mako	Oceanic Whitetip
2018	277	1724	23	/	/	/
2019	190	1375	11	/	/	/
2020	150	1139	24	/	/	/
2021	114	843	74	11173	1046	920
2022	76	894	45	10145	593	557

Table 4 Trip information of Chinese scientific observer deployed in the Pacific Ocean during 2022

Trip	Target	DEPARTURE	RETURN	Fishing days	Total hooks	HPB
1	BET and YFT	2022/11/12	2023/1/11	60	116496	25
2	BET and YFT	2022/11/14	2023/2/17	95	282409	23
3	ALB	2021/12/17	2022/12/19	367	387985	29
4	BET and YFT	2022/7/12	2023/2/17	220	629999	22
5	BET and YFT	2022/10/21	2022/11/10	20	47142	26
6	ALB	2022/10/30	2023/2/27	120	425096	28
7	ALB	2022/1/30	2022/10/12	255	785888	26
8	ALB	2021/10/7	2022/8/31	328	921360	26
9	ALB	2021/11/12	2022/3/12	120	398355	26
10	ALB	2022/2/6	2022/8/20	195	399406	14
11	BET and YFT	2022/7/29	2023/2/27	213	516526	26
12	ALB	2022/6/4	2023/1/4	214	731042	26
13	ALB	2022/1/3	2022/11/8	309	921908	26
14	ALB	2022/12/13	2023/2/25	74	247000	26
15	BET and YFT	2022/12/20	2023/2/28	70	227449	27
16	ALB	2022/11/6	2023/2/9	95	373140	27
17	BET and YFT	2022/11/1	2023/2/17	108	380500	26
18	ALB	2022/12/27	2023/2/18	53	175523	26
19	ALB	2022/10/26	2022/12/26	61	205964	26
20	ALB	2022/4/1	2023/1/16	290	903025	24
21	ALB	2022/11/6	2023/2/24	110	392001	27
22	ALB	2022/7/29	2023/2/27	213	482565	27
23	BET and YFT	2022/9/1	2023/2/28	180	427260	22
24	BET and YFT	2022/11/3	2023/2/28	117	232385	23
25	BET and YFT	2022/11/9	2023/2/28	111	293790	24

Table 5 Summary of longline observer coverage (by days fished) for 2022

CCM fleet	Fishery	Days fished			No. Of hooks			Days at sea			No. Of trips		
		Total est.	Obs.	%	Total est.	Obs.	%	Total est.	Obs.	%	Total est.	Obs.	%
China	Distant-water	42025	2799	6.66									

Table 6 The summary of transshipment operations by fishery of 2022: (1) the total quantities, by weight (M.T.); (2) the number of transshipments

(1)

Offloaded and Received	Transhipment in port, transhipped at sea in areas of national jurisdiction, and transshiped beyond areas of national Jurisdiction	Transhiped inside the Convention Area and Transhipped outside the Convention Area	Caught Inside the convention Area and Caught outside the Convention Area	Product Form	Fishing Gear	Total	BET	YFT	ALB	SKJ	Striped Marlin	SWO	BUM	Shark	BLM	Others
Offloaded	Beyond EEZs	Inside	Inside	Frozen	Longline	1402	92	294	822	0	16	8	0	0	0	171
Offloaded	Beyond EEZs	Inside	Inside	Frozen	Longline	2702	59	514	1925	0	7	9	0	0	0	188
Offloaded	Beyond EEZs	Inside	Inside	Frozen	Longline	612	110	58	381	0	3	17	0	0	0	42
Offloaded	Beyond EEZs	Inside	Outside	Frozen	Longline	1214	157	41	796	0	11	27	0	0	0	181
Offloaded	Beyond EEZs	Outside	Inside	Frozen	Longline	677	10	11	601	0	6	2	0	0	0	48
Offloaded	Beyond EEZs	Outside	Inside	Frozen	Longline	961	90	84	708	0	2	3	0	0	2	72
Offloaded	Beyond EEZs	Outside	Inside	Frozen	Longline	901	203	42	562	0	6	51	0	0	0	38
Offloaded	Beyond EEZs	Outside	Outside	Frozen	Longline	3437	408	91	2407	0	44	90	0	0	2	395
Offloaded	In EEZ	Inside	Inside	Frozen	Longline	None	None	None	None	None	None	None	None	None	None	None
Offloaded	In port	-	-	-	-	None	None	None	None	None	None	None	None	None	None	None
Received	Beyond EEZs	Inside	Inside	Frozen	Longline	2504	248	519	1420	0	16	31	2	0	16	253
Received	Beyond EEZs	Inside	Inside	Frozen	Longline	2702	59	514	1925	0	7	9	0	0	0	188
Received	Beyond EEZs	Inside	Inside	Frozen	Longline	1504	132	70	1070	0	3	38	5	0	14	171
Received	Beyond EEZs	Inside	Outside	Frozen	Longline	1214	157	41	796	0	11	27	0	0	0	181
Received	Beyond EEZs	Outside	Inside	Frozen	Longline	651	10	9	579	0	5	2	0	0	0	46
Received	Beyond EEZs	Outside	Inside	Frozen	Longline	961	90	84	708	0	2	3	0	0	2	72
Received	Beyond EEZs	Outside	Inside	Frozen	Longline	759	175	36	472	0	5	35	0	0	0	36
Received	Beyond EEZs	Outside	Outside	Frozen	Longline	2809	379	86	1856	0	40	79	0	0	0	368
Received	In port	-	-	-	-	None	None	None	None	None	None	None	None	None	None	None

*Catches from both inside and outside of the convention area involved in one transshipment event will be separated into two rows in this table.

(2)

Offloaded and Received	Transhipment in port，transhipped at sea in areas of national jurisdiction, and transshiped beyond areas of national Jurisdiction	Transhiped inside the Convention Area and Transhipped outside the Convention Area	Product Form	Fishing Gear	Number of Transshipments
offloaded	beyond EEZs	inside	Frozen	Longline	176
offloaded	in EEZs	inside	Frozen	Longline	None
offloaded	beyond EEZs	outside	Frozen	Longline	75
offloaded	in port	-	Frozen	Longline	None
received	beyond EEZs	inside	Frozen	Longline	107
received	beyond EEZs	outside	Frozen	Longline	65
received	in port	-	Frozen	Longline	None

Table 7 Effort, observed and estimated seabird captures by fishing year for China

a) South of 30°S

Year	Fishing effort (1000 hooks)				Observed seabird captures	
	Number of vessels	Number of hooks	Observed hooks	% hooks observed	Number	Rate
2018	19	5025	175	3.48	0	0
2019	22	2312	0	0	0	0
2020	26	3121	294	9.42	1	0.003
2021	23	6511	584	8.97	0	0
2022	52	2286	899	39.33	0	0

b) North of 23°N

Year	Fishing effort (1000 hooks)				Observed seabird captures	
	Number of vessels	Number of hooks	Observed hooks	% hooks observed	Number	Rate
2018	10	779	118	15.15	6	0.0508
2019	9	144	12	8.33	0	0
2020	10	745	0	0	0	0
2021	17	959	0	0	0	0
2022	9	183	0	0	0	0

c) 23°N - 30°S

Year	Fishing effort (1000 hooks)				Observed seabird captures	
	Number of vessels	Number of hooks	Observed hooks	% hooks observed	Number	Rate
2018	335	140011	6430	4.59	1	0.00015
2019	339	159311	10040	6.3	6	0.0006
2020	349	152897	10792	7.06	5	0.00046
2021	308	140551	12911	9.19	0	0
2022	263	122494	7850	6.41	0	0

Table 8 Proportion of mitigation types[1] used by the fleet in 2022

	Combination of Mitigation Measures	Proportion of observed effort using mitigation measures			
		South of 30°S	25°S-30°S	25°S to 23°N	North of 23°N
	No mitigation measures	0%	0%	0%	0%
Options required south of 30°S	TL + WB	100%			
Options required 25°S-30°S	TL + WB		100%		
Options required 25°S to 23°N	TL + WB			100%	
Options required north of 23°N	TL + WB				100%
	Totals	100%	100%	100%	100%

[1] TL = tori line, WB = weighted branch lines.

Table 9 The number of observed seabird bycatch of longline fishery by species and by area in 2022

Year	Species	South of 30°	North of 23°N	23°N-30°S
2020	unidentified	0	0	0

Table 10 Average annual fishing effort for 2002-2004 and annual fishing effort for longline from 2018 to 2022 directed at North Pacific albacore.

CCM	Area	Fishery	2002-04 Average		2018		2019		2020		2021		2022	
			No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days
China	N Pacific	LL	10	1250	10	838	10	1249	10	1075	10	295	10	429

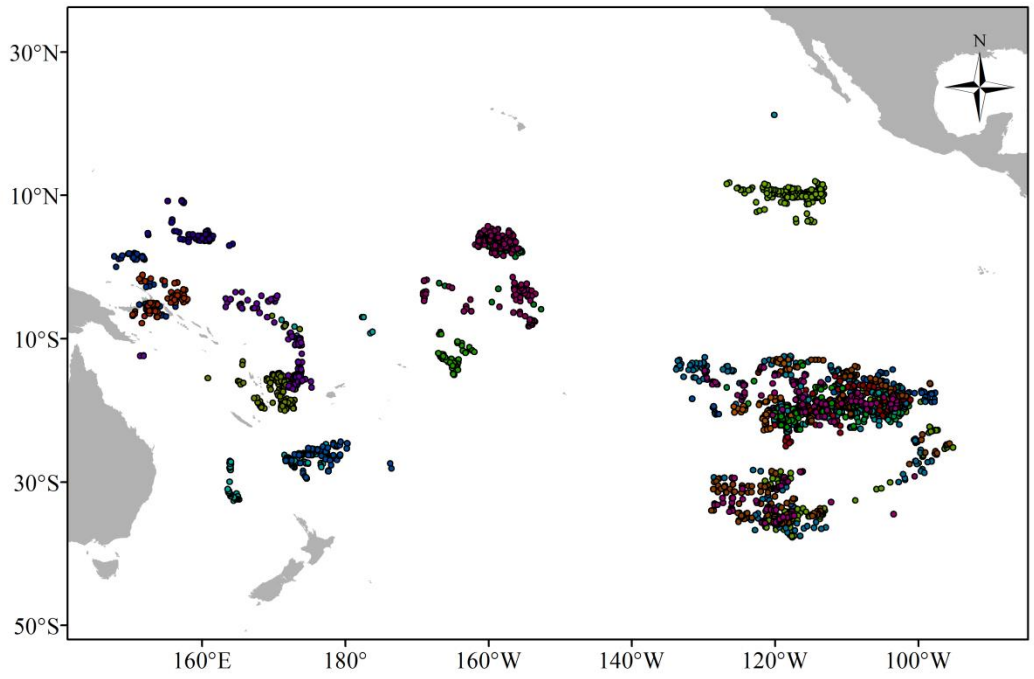

Figure 1 Position of Chinese scientific observer trip during 2022 in the Pacific