



TECHNICAL AND COMPLIANCE COMMITTEE

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**CATCH AND EFFORT DATA SUMMARIES TO SUPPORT DISCUSSIONS
ON SWORDFISH CMM**

WCPFC-TCC18-2022-IP10¹
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SPC-OFP

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**SCIENTIFIC COMMITTEE
EIGHTEENTH REGULAR SESSION**

ELECTRONIC MEETING
10 –18 August 2022

**Catch and effort data summaries to support discussions on the
new SWORDFISH CMM**

WCPFC-SC18-2022/MI-IP-11

SPC-OFP¹

¹ Oceanic Fisheries Programme (OFP), Pacific Community (SPC)

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1. Tables

Table 1. Longline SWORDFISH catch in the area north/south of 20°S, WCPFC Area south of the equator.

Source of data: AGGREGATE CATCH DATABASE, 2000–2020; Excludes the Indonesian estimated SWORDFISH catches.

Year	WCPFC Area south of equator (MT)	North of 20°S in the WCPFC Area south of equator		South of 20°S in the WCPFC Area south of equator	
		MT	%	MT	%
2000	5,269	1,926	37%	3,343	63%
2001	5,956	2,182	37%	3,775	63%
2002	7,110	3,073	43%	4,037	57%
2003	6,268	2,799	45%	3,469	55%
2004	7,599	3,656	48%	3,943	52%
2005	6,677	2,357	35%	4,321	65%
2006	8,848	3,367	38%	5,480	62%
2007	9,458	2,941	31%	6,517	69%
2008	8,841	4,138	47%	4,703	53%
2009	7,493	4,280	57%	3,213	43%
2010	6,297	3,461	55%	2,837	45%
2011	8,462	4,971	59%	3,491	41%
2012	8,801	4,907	56%	3,894	44%
2013	8,246	4,603	56%	3,643	44%
2014	8,536	4,795	56%	3,741	44%
2015	8,340	4,292	51%	4,049	49%
2016	6,742	3,481	52%	3,261	48%
2017	6,842	3,873	57%	2,969	43%
2018	7,091	3,951	56%	3,140	44%
2019	5,976	3,260	55%	2,716	45%
2020	5,677	2,726	48%	2,951	52%
2021	5,407	2,277	42%	3,130	58%
Average	7,270	3,514	48%	3,756	52%

Table 2. Proportion of Longline SWORDFISH catch by 10° latitude band in the WCPFC Area south of the equator.

Source of data: AGGREGATE CATCH DATABAS, 2000–2020E; Excludes the Indonesian estimated SWORDFISH catches.

Year	SWORDFISH CATCH - WCPFC Area south of equator									
	METRIC TONNES					%				
	0°-10°S	10°S-20°S	20°S-30°S	30°S-40°S	40°S-50°S	0°-10°S	10°S-20°S	20°S-30°S	30°S-40°S	40°S-50°S
2000	1,506	420	1,686	1,460	197	29%	8%	32%	28%	4%
2001	1,563	618	1,970	1,575	229	26%	10%	33%	26%	4%
2002	2,053	1,020	2,119	1,715	203	29%	14%	30%	24%	3%
2003	1,698	1,101	1,867	1,390	213	27%	18%	30%	22%	3%
2004	2,743	913	1,924	1,835	184	36%	12%	25%	24%	2%
2005	1,604	753	2,853	1,359	109	24%	11%	43%	20%	2%
2006	2,628	739	3,318	2,097	66	30%	8%	37%	24%	1%
2007	2,410	532	3,315	3,144	57	25%	6%	35%	33%	1%
2008	3,225	912	2,112	2,553	38	36%	10%	24%	29%	0%
2009	2,754	1,526	1,459	1,642	112	37%	20%	19%	22%	1%
2010	2,235	1,225	1,256	1,519	62	35%	19%	20%	24%	1%
2011	3,547	1,424	1,442	1,924	125	42%	17%	17%	23%	1%
2012	3,524	1,383	1,527	2,205	161	40%	16%	17%	25%	2%
2013	3,066	1,537	1,659	1,770	215	37%	19%	20%	21%	3%
2014	3,536	1,259	2,054	1,477	210	41%	15%	24%	17%	2%
2015	3,232	1,059	2,243	1,487	319	39%	13%	27%	18%	4%
2016	2,009	1,472	1,582	1,446	234	30%	22%	23%	21%	3%
2017	2,242	1,631	1,619	1,200	150	33%	24%	24%	18%	2%
2018	2,888	1,063	1,448	1,524	169	41%	15%	20%	21%	2%
2019	1,591	1,669	1,289	1,307	120	27%	28%	22%	22%	2%
2020	1,366	1,360	1,361	1,485	105	24%	24%	24%	26%	2%
2021	1,120	1,156	1,869	1,136	125	21%	21%	35%	21%	2%
Average	2,388	1,126	1,908	1,693	155	33%	15%	26%	23%	2%

Table 3. Longline SWORDFISH target/bycatch for EEZs and high seas areas in the WCPFC Area south of the equator

Year	Swordfish catch (MT) in WCPFC South of the equator								
	EEZ				High Seas				Total
	Bycatch	%	Target	%	Bycatch	%	Target	%	
2000	419	8%	2,646	50%	2,204	42%	0	0%	5,269
2001	305	5%	3,214	54%	2,437	41%	0	0%	5,956
2002	361	5%	3,061	43%	3,685	52%	0	0%	7,107
2003	515	8%	2,066	33%	3,685	59%	0	0%	6,265
2004	539	7%	1,881	25%	4,526	59%	730	10%	7,675
2005	467	7%	2,107	32%	2,739	41%	1,358	20%	6,670
2006	465	5%	1,609	18%	3,756	42%	3,107	35%	8,937
2007	574	6%	1,714	18%	2,879	31%	4,217	45%	9,384
2008	437	5%	1,655	17%	4,013	42%	3,410	36%	9,515
2009	505	6%	1,490	19%	4,122	53%	1,721	22%	7,837
2010	564	9%	1,407	22%	3,511	54%	994	15%	6,475
2011	766	9%	1,704	20%	4,554	54%	1,431	17%	8,455
2012	1,068	12%	1,636	18%	4,330	47%	2,131	23%	9,165
2013	848	10%	1,503	18%	4,274	51%	1,780	21%	8,405
2014	712	8%	1,640	19%	4,724	54%	1,680	19%	8,756
2015	600	7%	1,828	21%	4,819	56%	1,337	16%	8,584
2016	694	9%	1,520	20%	3,673	49%	1,651	22%	7,538
2017	610	9%	1,415	21%	3,879	57%	932	14%	6,836
2018	749	11%	1,298	18%	3,944	55%	1,124	16%	7,116
2019	631	11%	1,023	17%	3,137	52%	1,194	20%	5,985
2020	483	8%	820	14%	2,992	52%	1,415	25%	5,710
2021	350	6%	909	17%	2,370	44%	1,778	33%	5,407

Notes:

1. Swordfish target fisheries comprise the EU-Spanish (high seas), Australia (EEZ) and New Zealand (EEZ)
2. Sources of data are annual SWO catch estimates by EEZ adjusted to aggregated SWO catch data provided by CCMs.
3. Includes estimated weight of SWO discards

Table 4. Longline SWORDFISH target/bycatch for EEZs and high seas areas, by broad area

Year	Swordfish catch (MT) in WCPFC South of the equator															
	Area #1				Area #2				Area #3				Area #4			
	EEZ		High Seas		EEZ		High Seas		EEZ		High Seas		EEZ		High Seas	
	Bycatch	Target	Bycatch	Target	Bycatch	Target	Bycatch	Target	Bycatch	Target	Bycatch	Target	Bycatch	Target	Bycatch	Target
2000	171	75	191	0	166	0	1,323	0	60	2,569	645	0	22	2	44	0
2001	112	116	289	0	119	0	1,546	0	59	3,098	549	0	16	0	53	0
2002	134	78	529	0	145	0	2,185	0	55	2,981	793	0	27	3	178	0
2003	116	57	487	0	158	0	1,978	0	64	2,008	623	0	177	0	597	0
2004	118	24	318	0	147	0	3,031	20	73	1,856	718	151	200	0	459	559
2005	110	48	364	0	180	0	1,654	1	70	2,059	594	75	107	0	127	1,282
2006	108	32	249	0	178	0	2,800	0	58	1,577	317	32	121	0	390	3,075
2007	174	22	191	0	284	0	2,265	5	64	1,692	224	107	52	0	199	4,105
2008	119	39	686	0	210	0	3,081	2	65	1,617	187	34	42	0	59	3,373
2009	190	68	1,317	0	217	0	2,424	79	65	1,422	288	138	32	0	92	1,504
2010	207	37	726	0	207	0	2,280	2	93	1,370	427	344	56	0	77	648
2011	280	48	1,011	0	362	0	3,090	0	91	1,656	396	490	33	0	57	941
2012	326	61	918	0	587	0	2,946	0	105	1,575	391	1,264	49	0	75	867
2013	206	54	606	0	527	0	3,203	0	79	1,448	392	963	37	0	72	817
2014	229	36	561	0	384	0	3,584	0	67	1,605	501	759	31	0	77	921
2015	242	28	611	0	257	0	3,152	0	65	1,800	982	1,181	36	0	73	156
2016	147	29	423	0	379	0	2,503	0	114	1,491	651	1,144	54	0	96	507
2017	128	41	477	0	280	0	2,941	0	95	1,374	277	716	108	0	184	216
2018	210	48	347	0	303	0	3,043	0	98	1,250	293	608	138	0	262	516
2019	172	62	298	0	309	0	2,419	0	76	961	179	666	75	0	241	528
2020	68	20	220	0	263	0	2,153	0	78	800	283	937	73	0	336	478
2021	54	32	167	0	192	0	1,830	0	47	877	205	812	56	0	168	966

Refer to the broad areas in the map below for the WCPFC Area south of the equator. The four regions are split by dividing lines at latitude 20S and longitude 175W.

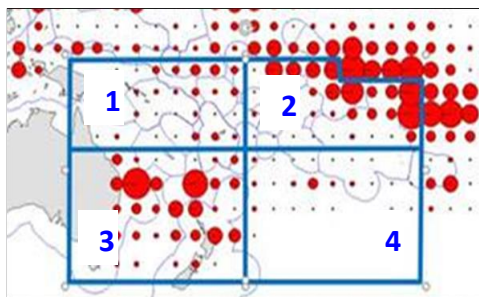


Table 5. Longline SWORDFISH catch by flag in the WCPFC Area south of the equator

flag	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
AMERICAN SAMOA	1	0	0	0	0	8	38	13	7	8	2	12	52	28	25	32	50	56	47	4	2	2
AUSTRALIA	2,696	2,267	2,275	2,039	1,784	1,730	1,136	1,353	1,483	1,315	942	916	1,157	1,062	1,183	1,150	992	1,066	854	729	576	615
BELIZE	3	128	10	417	117	44	23	7	4	2	7	19	10	43	0	0	0	0	0	0	0	0
CHINA	0	0	29	862	582	434	1,210	1,890	2,192	1,661	1,025	1,808	2,280	2,038	2,275	2,037	1,289	1,574	1,481	968	437	479
COOK ISLANDS	0	0	13	164	170	97	98	36	17	11	78	41	140	16	14	18	25	56	44	30	26	12
EU-PORTUGAL												197	222	223	107	177	168	0	0	0	0	0
EU-SPAIN					683	1,244	3,104	4,217	3,410	1,721	994	1,431	2,131	1,780	1,680	1,337	1,651	932	1,123	1,194	1,415	1,778
FIJI	118	115	170	160	261	177	210	86	85	107	90	128	128	128	167	122	141	117	105	118	106	62
FRENCH POLYNESIA	47	79	70	117	86	79	83	68	80	71	80	89	116	128	142	109	101	150	218	170	179	174
FSM													4	7	4	15	38	6	5	51	8	10
JAPAN	914	825	842	581	670	444	371	434	442	503	560	641	675	538	393	357	414	287	357	152	152	131
KIRIBATI	0	0	0	0	0	0	0	0	0	0	0	0	10	10	20	0	9	24	5	37	139	35
NEW CALEDONIA	40	41	46	48	17	12	10	19	15	7	8	10	10	9	14	9	8	22	8	24	9	10
NEW ZEALAND	975	1,027	920	635	538	348	581	392	347	418	535	738	686	777	583	713	755	504	463	264	219	302
NIUE						1	2	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0
PAPUA NEW GUINEA	12	22	22	30	73	98	80	82	81	79	93	125	177	114	114	2	6	6	21	15	0	0
REPUBLIC OF KOREA	1,120	1,100	1,116	636	758	470	388	139	455	505	782	992	985	933	550	433	362	356	634	356	322	322
SAMOA	123	27	14	12	4	1	3	5	6	5	7	5	5	3	4	5	4	16	11	21	27	4
SOLOMON ISLANDS	5	2	3	3	3	0	0	0	0	0	74	10	0	0	202	167	33	0	55	82	95	45
CHINESE TAIPEI	172	473	963	883	1,667	791	828	1,147	1,067	1,152	1,482	1,426	1,471	1,625	1,778	1,517	1,618	1,815	1,425	1,408	1,485	1,108
TONGA	29	44	42	25	10	18	21	31	28	22	26	22	19	26	37	42	39	32	44	33	16	9
TUVALU												10	38	6	3	6	3	12	2	1	1	1
VANUATU	1	5	149	135	704	423	148	140	131	117	200	122	178	316	333	450	213	411	410	189	295	437
WALLIS AND FUTUNA												0	0	0	0	0	0	0	0	0	0	0

Notes

1. Source: Annual catch estimates by EEZ/high seas areas (may differ from aggregate catch/effort data)

Table 6. Longline SWORDFISH catch by EEZ/high seas areas in the WCPFC Area south of the equator

Area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
High Seas	2,303	2,646	3,204	3,703	5,413	3,984	6,132	7,822	7,546	5,481	4,860	6,347	7,415	7,002	6,974	6,233	5,466	5,195	5,273	4,163	4,229	4,250
AMERICAN SAMOA	0	0	0	0	0	2	19	2	1	1	0	3	17	8	5	7	19	30	30	2	1	1
AUSTRALIA	2,499	2,130	2,084	1,773	1,481	1,498	1,030	1,298	1,461	1,293	921	905	1,141	1,028	1,161	1,147	963	1,050	842	725	565	615
COOK ISLANDS		0	13	161	170	94	85	35	16	17	80	69	390	118	91	82	86	71	47	92	44	32
FIJI	107	126	168	123	174	112	133	60	61	74	72	75	72	73	103	89	106	86	87	85	73	44
FRENCH POLYNESIA	117	79	70	116	85	76	79	68	80	71	80	89	116	128	142	109	101	150	218	170	179	174
NEW CALEDONIA	40	41	46	48	17	12	10	19	15	7	8	10	10	9	14	9	8	22	8	24	9	10
NEW ZEALAND	963	1,014	913	634	532	333	571	389	346	418	532	735	686	775	583	713	754	503	463	264	219	302
NIUE			0			1	2	2	0	0	2			3	2	1	0	0	1	3	2	1
PAPUA NEW GUINEA	12	22	22	30	73	98	81	88	84	82	93	128	181	117	141	9	55	58	80	62	15	8
SAMOA	123	27	14	12	4	1	3	5	6	5	7	5	5	3	4	5	3	7	6	10	13	2
SOLOMON ISLANDS	7	5	30	35	56	60	72	108	138	158	169	197	228	212	191	117	98	67	91	94	61	55
TOKELAU									0			7	25	0	13	23	23	23	9	17	27	6
TONGA	29	37	39	21	10	18	20	30	28	22	26	28	78	124	56	60	62	37	45	42	24	15
TUVALU	18	18	24	5	13	25	3	60	7	20	91	25	47	67	42	24	73	50	68	66	5	3
VANUATU	37	9	55	87	98	106	94	76	61	54	45	118	83	143	106	69	100	92	42	28	42	19
WALLIS AND FUTUNA						0						0										

1. Source: Annual catch estimates by EEZ/high seas areas (may differ from aggregate catch/effort data)

2. Figures

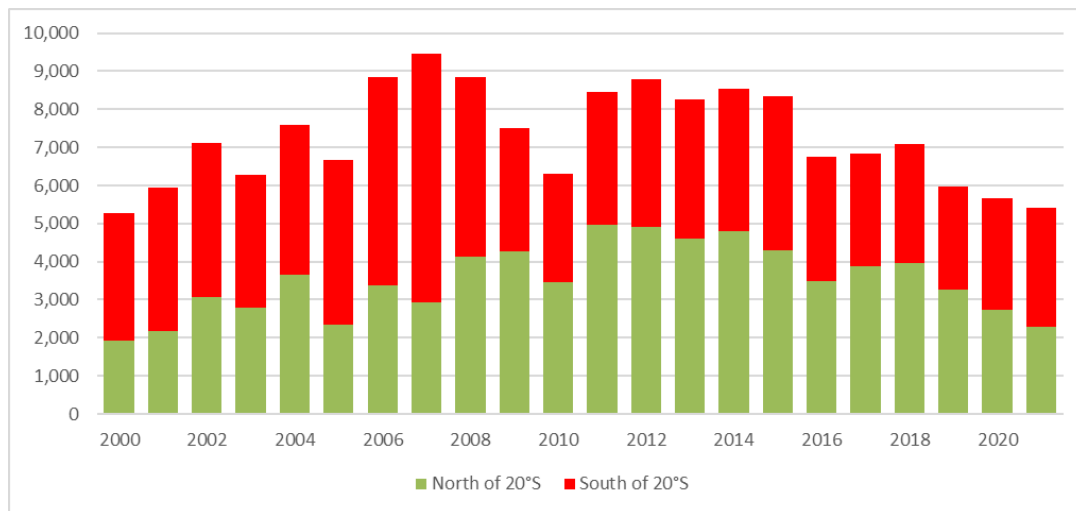


Figure 1. Longline SWORDFISH catch in the area north/south of 20°S, WCPFC Area south of the equator.
(see Table 1 notes)

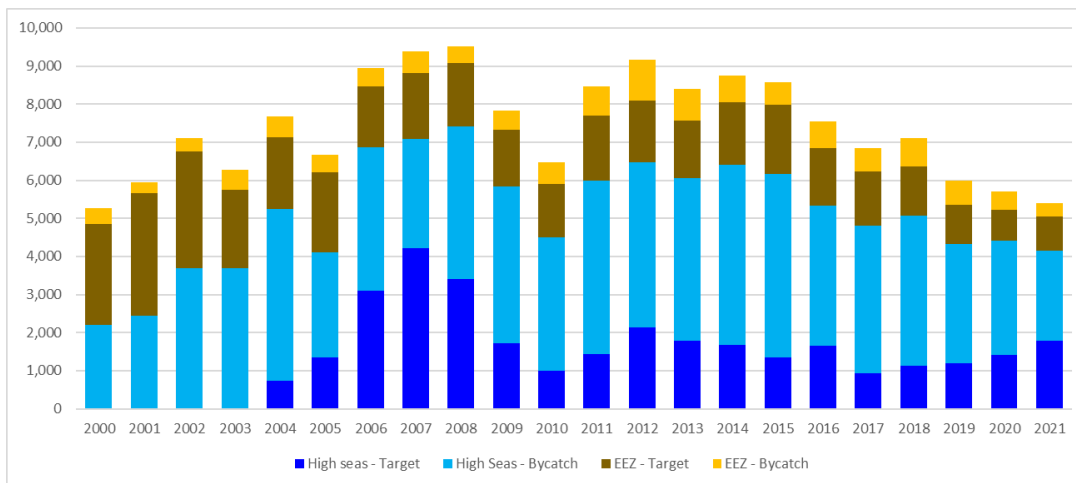


Figure 2. Longline SWORDFISH for EEZs and high seas areas in the WCPFC Area south of the equator
(see Table 3 notes)

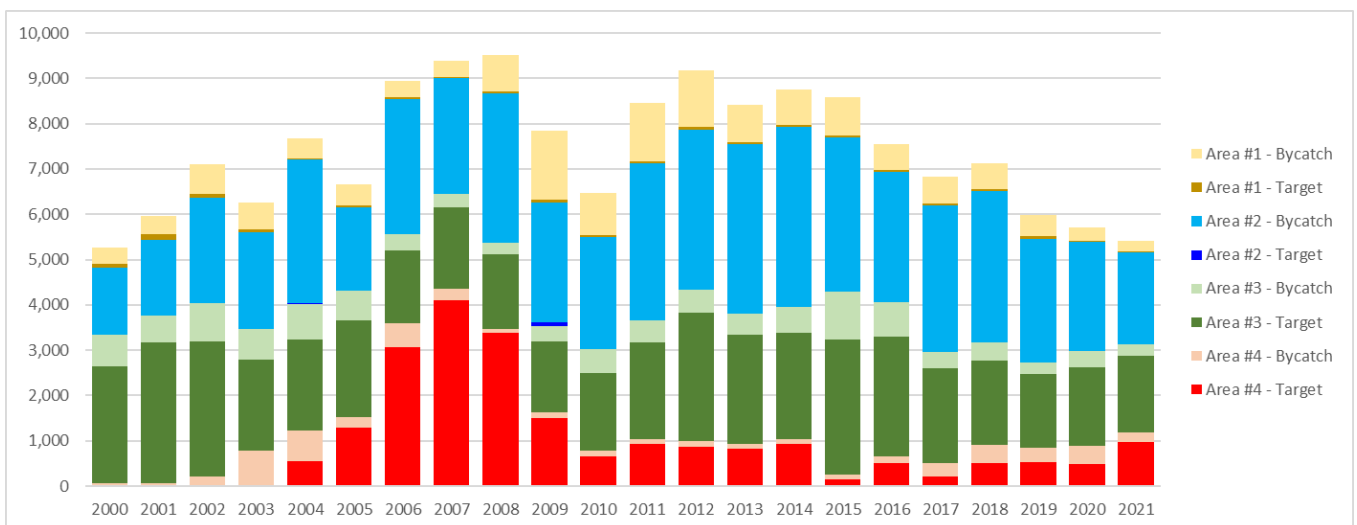


Figure 3. Longline SWORDFISH by broad area in the WCPFC Area south of the equator

(see Table 4 notes and map)

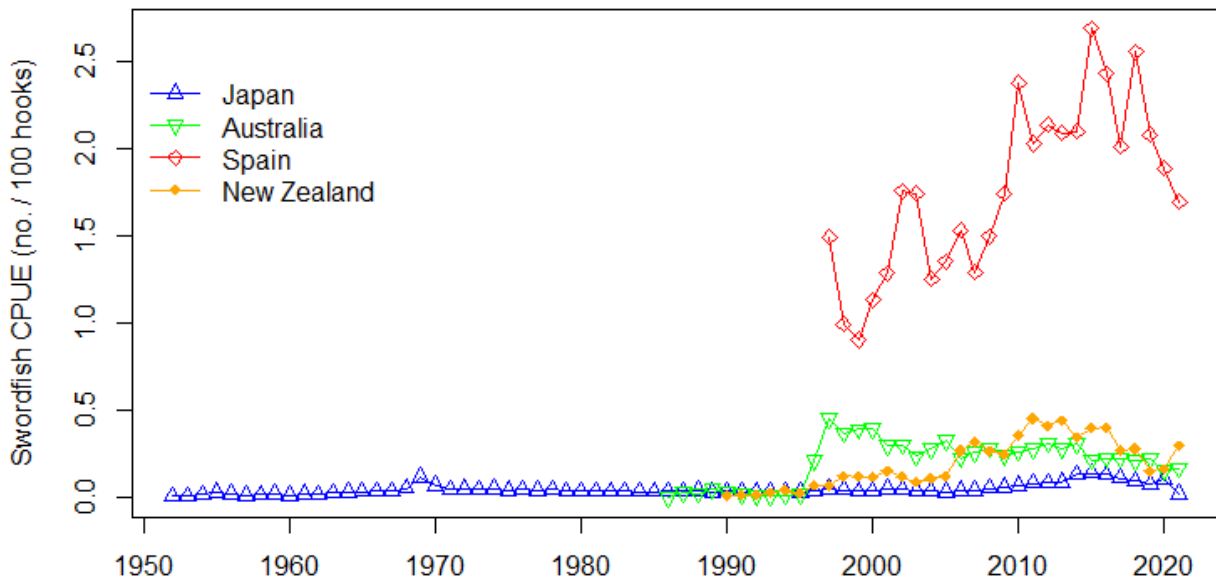


Figure 4. Annual trends in SWORDFISH nominal CPUE for key LONGLINE fleets in the south Pacific Ocean.

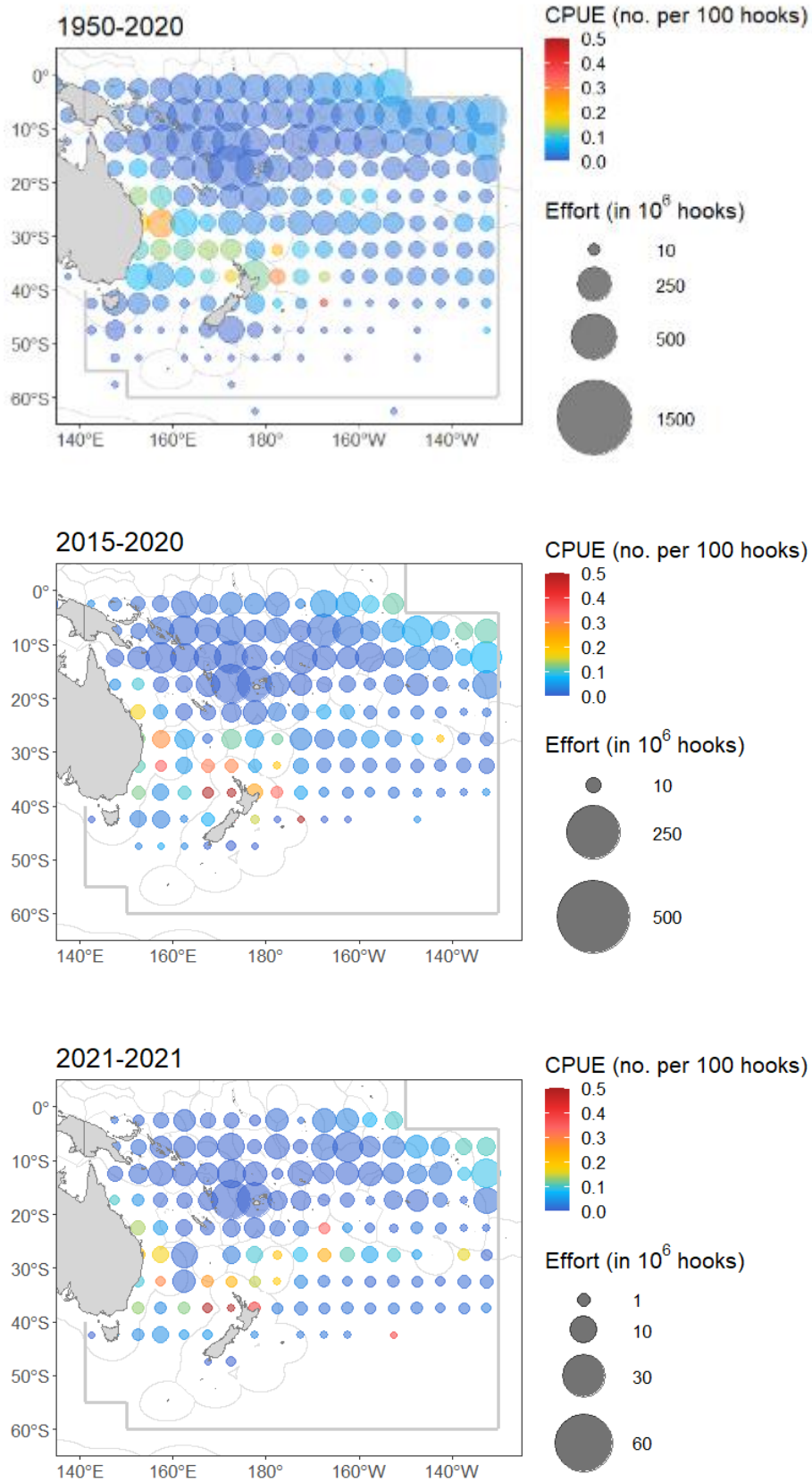


Figure 5. Distribution of South Pacific SWORDFISH longline CPUE and effort for selected periods
 Periods: 1950-2020 (top), 2015-2020 (middle) and 2021 (bottom).

Figure 6 Distribution of South Pacific longline swordfish catch (numbers), by 5-year periods.
 Periods: 1995–1999, 2000–2004, 2005–2009, 2010–2014, 2015–2019, 2020–2021

