Western and Central Pacific Fisheries Commission

SCIENTIFIC COMMITTEE
TWENTY-FIRST REGULAR SESSION

Nuku'alofa, Tonga
13–21 August 2025

Coverage Levels for Operational Data Fields Submitted to the WCPFC

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Paper prepared by

Pacific Community (SPC)
Oceanic Fisheries Programme (OFP)

Contents

1 Introduction

1. SC17 noted that the evaluation on data gaps regarding provision of operational catch and effort data required under the Scientific Data to be Provided by the Commission (SciData) is based on whether the field is included in a data submission, rather than on an evaluation of data quality or completeness. Even if a data field is included in the data submission, it is possible that it may not be completed for each fishing operation, but this level of completeness (coverage) for each data field has not been undertaken to date.

2. The following SC17 recommendation requesting the coverage for each operational data field, is aimed at improving the quality and completeness of the data in the future.

Data gaps of the Commission

> *4. SC17 recommended that the SSP add a new annex to the data gaps paper to include a breakdown of the coverage levels for each operational data field by year and fleet.*

3. This paper provides the latest tables (Tables 2–24) of the estimated coverage of data provided by GEAR, FLEET and YEAR, and the coverage levels for each required operational catch and effort data field by GEAR, FLEET and YEAR. Table 1 provides supplementary information on the format and contents of the tables presented in this paper, although some tables have additional notes for clarity.

Table 1: Notes on the information presented in the tables of this paper

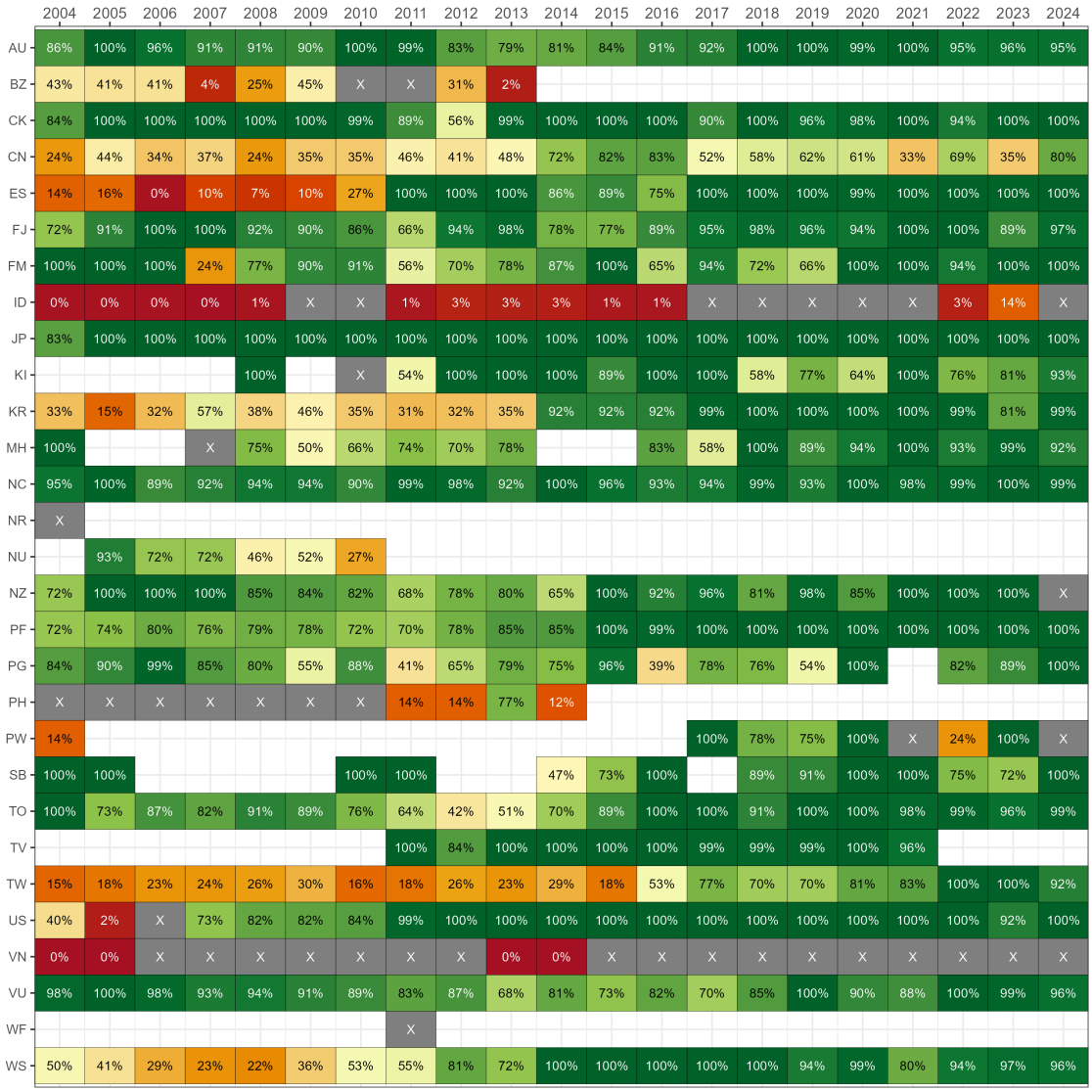
NOTES
White cells indicate years when the fleet was not active
Cells with an 'X' and gray background indicate years when the fleet was active but operational data was not provided or yet to be loaded into the WCPFC databases. For example, (i) some logbook data have been received from Indonesia but coverage is very low (not representative) and key fields are missing so the data have not been loaded, and (ii) logbook data have been received from Vietnam but they are using a national logbook and differentiation between longline and handline has not yet been finalized in the data submitted.
Coverage is represented with a % and colour coded to facilitate an overall visual impression of trends over time for each fleet.
Coverage of operational data is based on the ratio of logbook reported catch of key tuna species[1] to the annual catch estimates. Therefore, coverage estimates reported here could be influenced by several factors including the portion of the annual catch estimates for which logbook data are provided (e.g., Japan doesn't report logbook data for their coastal fleet north of 20N) and by conversion factors from numbers to weight (e.g., in the case of some discard data). To better reflect operational coverage for Japan, the aggregate data for the region south of 20N have been used to compare to the logbook data for the same area.
This evaluation does not consider the special submission of historical operational longline data provided by Japan, Korea, Chinese Taipei and the USA which are specifically used for CPUE standardization analyses. The requirements for these data are different to the requirements under the Scientific Data to be Provided by the Commission and so have not been considered here.
In some cases, the data fields for trip-level departure, return/unloading/transhipment information were not provided, although there is information available within daily records, and/or through VMS data to indicate the trip-level departure/return data fields. These tables represent the coverage when data fields for trip-level departure, return/unloading/transhipment information are provided only.
Data for the most recent year is provisional at this time, and may ne updated as additional data are received and processed.
In 2025, a change was made to the estimation of reporting of mandatory species by each gear, based on probability of encounter. Species that were reported in catches for at least 10% of fishing sets, in any given year, from the time most CCMs were reporting nearly full logbook data (2018), was used as the subset of species to evaluate reporting against. For purse seine that included: bigeye, skipjack, yellowfin, and silky shark; for longline: albacore, bigeye, yellowfin, blue shark, striped marlin, blue marlin, swordfish, shortbill spearfish, and Indo-Pacific sailfish; and for pole-and-line: skipjack and yellowfin. Due to the fact that shortbill spearfish and Indo-Pacific sailfish were only added to the list of key species in the SciData in 2024, they are excluded from the list prior to 2024.
Lastly, several operational data fields were removed from these summaries in 2025 for brevity, as the reporting is 100% for all CCMs and has been for some time. These include: vessel id, activity code, activity date, activity position, hooks set.

4. The WCPFC Scientific Service Provider (SSP) continues to engage with relevant CCMs to resolve some of the gaps presented in these tables.

5. This paper also provides an indication of the frequency of data (i.e. the number of CCMs providing data) for additional fields that are not currently required under the SciData (see Tables 25 and 35).

2 Longline fishery operational data fields

Table 2: Coverage of LONGLINE operational data submitted to the WCPFC [2]



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
AU	86%	100%	96%	91%	91%	90%	100%	99%	83%	79%	81%	84%	91%	92%	100%	100%	99%	100%	95%	96%	95%
BZ	43%	41%	41%	4%	25%	45%	X	X	31%	2%											
CK	84%	100%	100%	100%	100%	100%	99%	89%	56%	99%	100%	100%	100%	90%	100%	96%	98%	100%	94%	100%	100%
CN	24%	44%	34%	37%	24%	35%	35%	46%	41%	48%	72%	82%	83%	52%	58%	62%	61%	33%	69%	35%	80%
ES	14%	16%	0%	10%	7%	10%	27%	100%	100%	100%	86%	89%	75%	100%	100%	100%	99%	100%	100%	100%	100%
FJ	72%	91%	100%	100%	92%	90%	86%	66%	94%	98%	78%	77%	89%	95%	98%	96%	94%	100%	100%	89%	97%
FM	100%	100%	100%	24%	77%	90%	91%	56%	70%	78%	87%	100%	65%	94%	72%	66%	100%	100%	94%	100%	100%
ID	0%	0%	0%	0%	1%	X	X	1%	3%	3%	3%	1%	1%	X	X	X	X	X	3%	14%	X
JP	83%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
KI					100%		X	54%	100%	100%	100%	89%	100%	100%	58%	77%	64%	100%	76%	81%	93%
KR	33%	15%	32%	57%	38%	46%	35%	31%	32%	35%	92%	92%	92%	99%	100%	100%	100%	100%	99%	81%	99%
MH	100%			X	75%	50%	66%	74%	70%	78%			83%	58%	100%	89%	94%	100%	93%	99%	92%
NC	95%	100%	89%	92%	94%	94%	90%	99%	98%	92%	100%	96%	93%	94%	99%	93%	100%	98%	99%	100%	99%
NR	X																				
NU		93%	72%	72%	46%	52%	27%														
NZ	72%	100%	100%	100%	85%	84%	82%	68%	78%	80%	65%	100%	92%	96%	81%	98%	85%	100%	100%	100%	X
PF	72%	74%	80%	76%	79%	78%	72%	70%	78%	85%	85%	100%	99%	100%	100%	100%	100%	100%	100%	100%	100%
PG	84%	90%	99%	85%	80%	55%	88%	41%	65%	79%	75%	96%	39%	78%	76%	54%	100%		82%	89%	100%
PH	X	X	X	X	X	X	X	14%	14%	77%	12%										
PW	14%													100%	78%	75%	100%	X	24%	100%	X
SB	100%	100%					100%	100%			47%	73%	100%		89%	91%	100%	100%	75%	72%	100%
TO	100%	73%	87%	82%	91%	89%	76%	64%	42%	51%	70%	89%	100%	100%	91%	100%	100%	98%	99%	96%	99%
TV								100%	84%	100%	100%	100%	100%	99%	99%	99%	100%	96%			
TW	15%	18%	23%	24%	26%	30%	16%	18%	26%	23%	29%	18%	53%	77%	70%	70%	81%	83%	100%	100%	92%
US	40%	2%	X	73%	82%	82%	84%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	92%	100%
VN	0%	0%	X	X	X	X	X	X	X	0%	0%	X	X	X	X	X	X	X	X	X	X
VU	98%	100%	98%	93%	94%	91%	89%	83%	87%	68%	81%	73%	82%	70%	85%	100%	90%	88%	100%	99%	96%
WF								X													
WS	50%	41%	29%	23%	22%	36%	53%	55%	81%	72%	100%	100%	100%	100%	100%	94%	99%	80%	94%	97%	96%

[2] The coverage of operational data provided has been determined by comparing the total catch in weight of the target species (i.e., ALB, BET, YFT) available in the operational data to the total annual catch estimate of the target species

Table 3: Coverage of levels of the DEPARTURE PORT field - LONGLINE

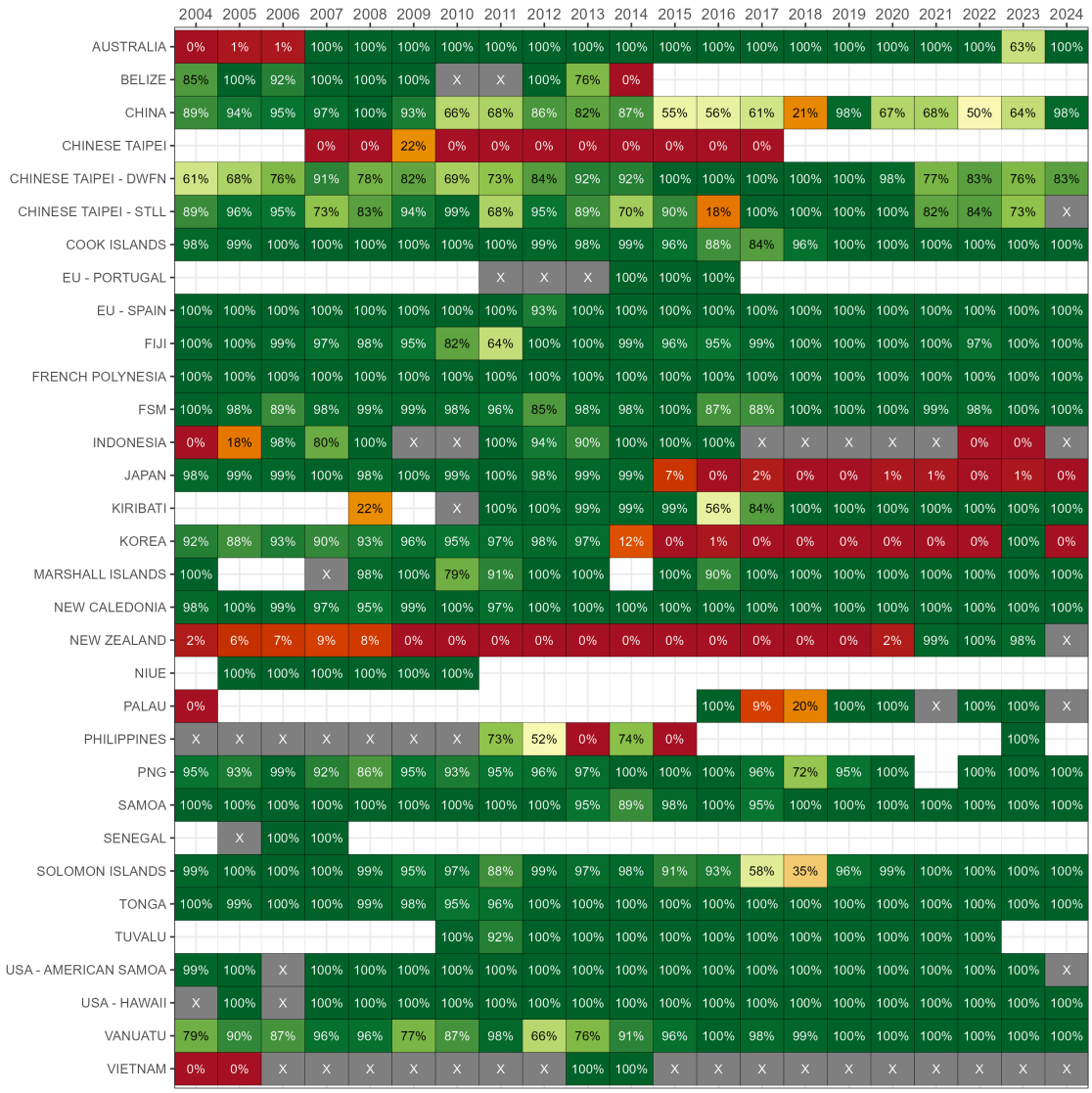
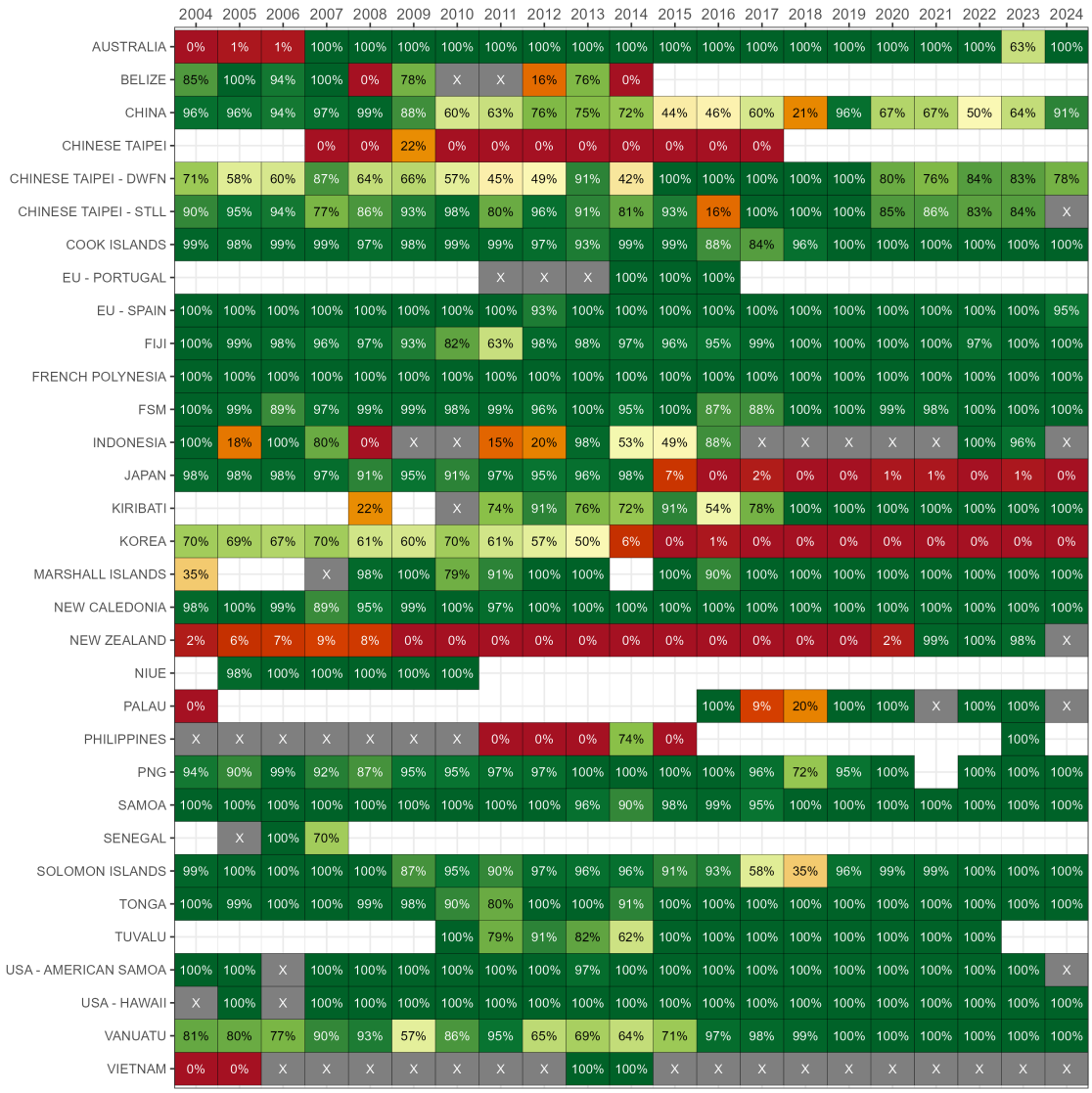


Table 4: Coverage of levels of the RETURN PORT field - LONGLINE



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
AUSTRALIA	0%	1%	1%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	63%	100%
BELIZE	85%	100%	94%	100%	0%	78%	X	X	16%	76%	0%										
CHINA	96%	96%	94%	97%	99%	88%	60%	63%	76%	75%	72%	44%	46%	60%	21%	96%	67%	67%	50%	64%	91%
CHINESE TAIPEI				0%	0%	22%	0%	0%	0%	0%	0%	0%	0%	0%							
CHINESE TAIPEI - DWFN	71%	58%	60%	87%	64%	66%	57%	45%	49%	91%	42%	100%	100%	100%	100%	100%	80%	76%	84%	83%	78%
CHINESE TAIPEI - STLL	90%	95%	94%	77%	86%	93%	98%	80%	96%	91%	81%	93%	16%	100%	100%	100%	85%	86%	83%	84%	X
COOK ISLANDS	99%	98%	99%	99%	97%	98%	99%	99%	97%	93%	99%	99%	88%	84%	96%	100%	100%	100%	100%	100%	100%
EU - PORTUGAL								X	X	X	100%	100%	100%								
EU - SPAIN	100%	100%	100%	100%	100%	100%	100%	100%	93%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	95%
FIJI	100%	99%	98%	96%	97%	93%	82%	63%	98%	98%	97%	96%	95%	99%	100%	100%	100%	100%	97%	100%	100%
FRENCH POLYNESIA	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
FSM	100%	99%	89%	97%	99%	99%	98%	99%	96%	100%	95%	100%	87%	88%	100%	100%	99%	98%	100%	100%	100%
INDONESIA	100%	18%	100%	80%	0%	X	X	15%	20%	98%	53%	49%	88%	X	X	X	X	X	100%	96%	X
JAPAN	98%	98%	98%	97%	91%	95%	91%	97%	95%	96%	98%	7%	0%	2%	0%	0%	1%	1%	0%	1%	0%
KIRIBATI					22%		X	74%	91%	76%	72%	91%	54%	78%	100%	100%	100%	100%	100%	100%	100%
KOREA	70%	69%	67%	70%	61%	60%	70%	61%	57%	50%	6%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
MARSHALL ISLANDS	35%			X	98%	100%	79%	91%	100%	100%		100%	90%	100%	100%	100%	100%	100%	100%	100%	100%
NEW CALEDONIA	98%	100%	99%	89%	95%	99%	100%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
NEW ZEALAND	2%	6%	7%	9%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	99%	100%	98%	X
NIUE		98%	100%	100%	100%	100%	100%														
PALAU	0%												100%	9%	20%	100%	100%	X	100%	100%	X
PHILIPPINES	X	X	X	X	X	X	X	0%	0%	0%	74%	0%								100%	
PNG	94%	90%	99%	92%	87%	95%	95%	97%	97%	100%	100%	100%	100%	96%	72%	95%	100%		100%	100%	100%
SAMOA	100%	100%	100%	100%	100%	100%	100%	100%	100%	96%	90%	98%	99%	95%	100%	100%	100%	100%	100%	100%	100%
SENEGAL		X	100%	70%																	
SOLOMON ISLANDS	99%	100%	100%	100%	100%	87%	95%	90%	97%	96%	96%	91%	93%	58%	35%	96%	99%	99%	100%	100%	100%
TONGA	100%	99%	100%	100%	99%	98%	90%	80%	100%	100%	91%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
TUVALU							100%	79%	91%	82%	62%	100%	100%	100%	100%	100%	100%	100%	100%		
USA - AMERICAN SAMOA	100%	100%	X	100%	100%	100%	100%	100%	100%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	X
USA - HAWAII	X	100%	X	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
VANUATU	81%	80%	77%	90%	93%	57%	86%	95%	65%	69%	64%	71%	97%	98%	99%	100%	100%	100%	100%	100%	100%
VIETNAM	0%	0%	X	X	X	X	X	X	X	100%	100%	X	X	X	X	X	X	X	X	X	X

Table 5: Coverage of levels of the DEPARTURE DATE field - LONGLINE

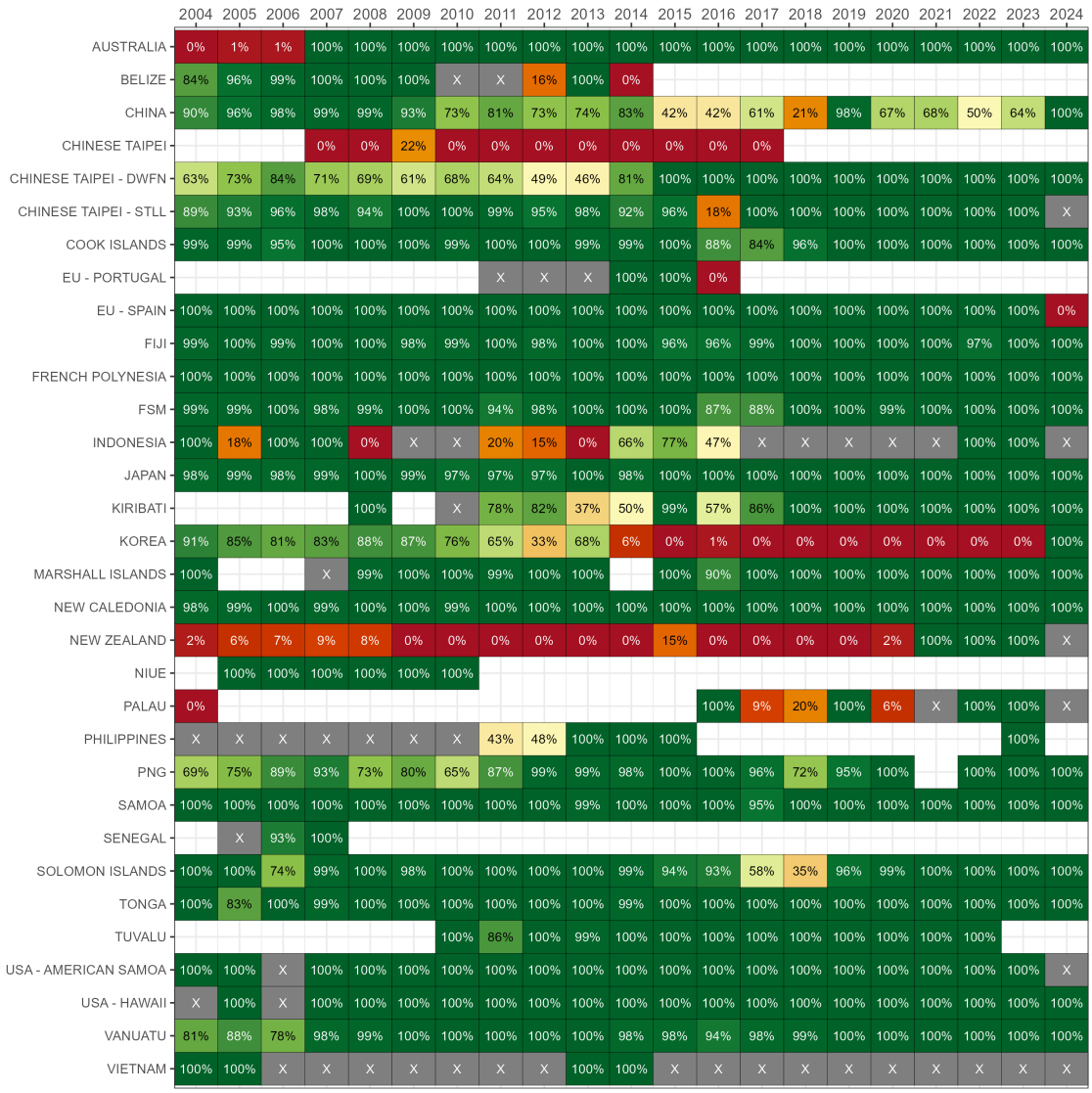


Table 6: Coverage of levels of the RETURN DATE field - LONGLINE

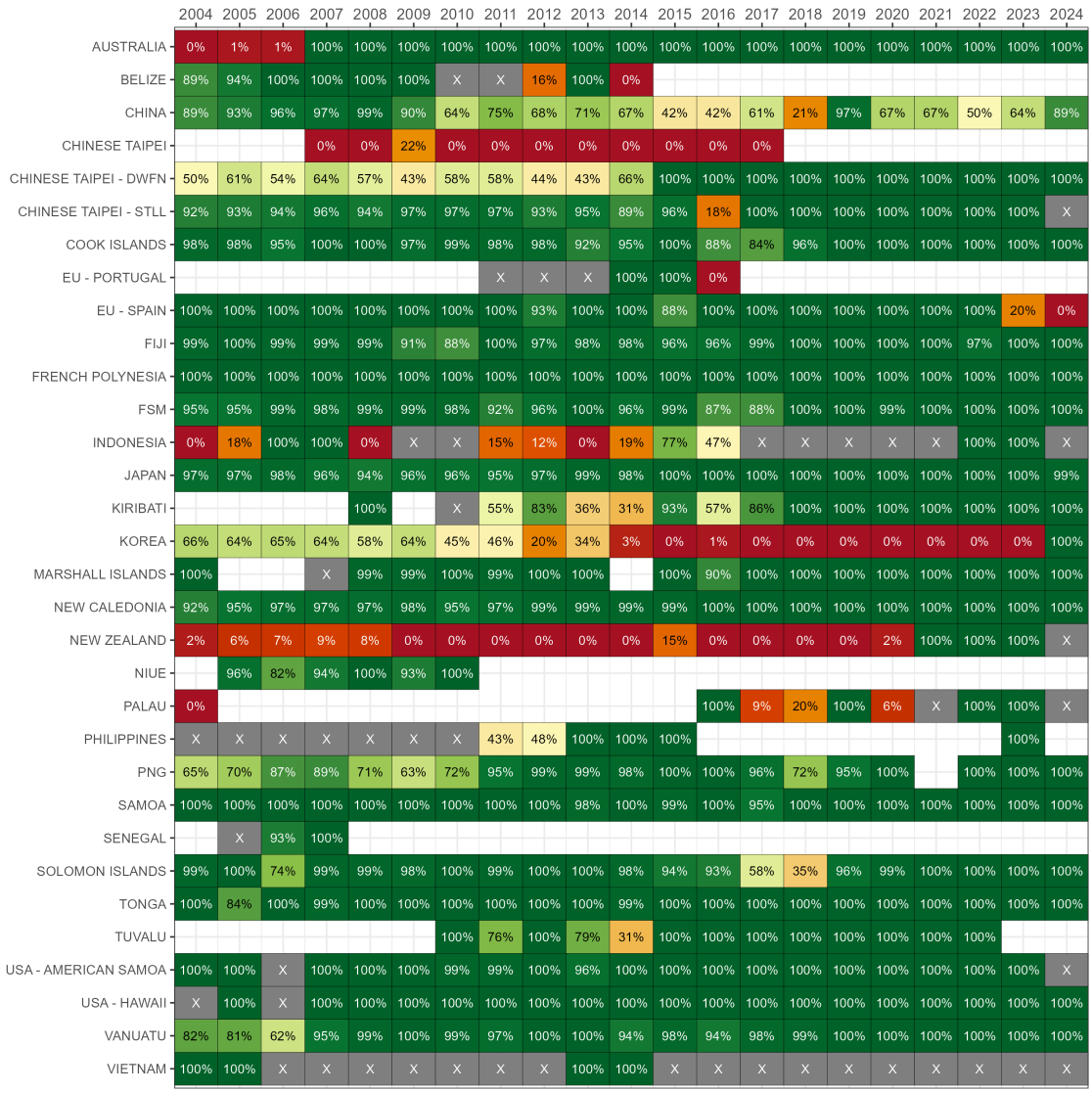
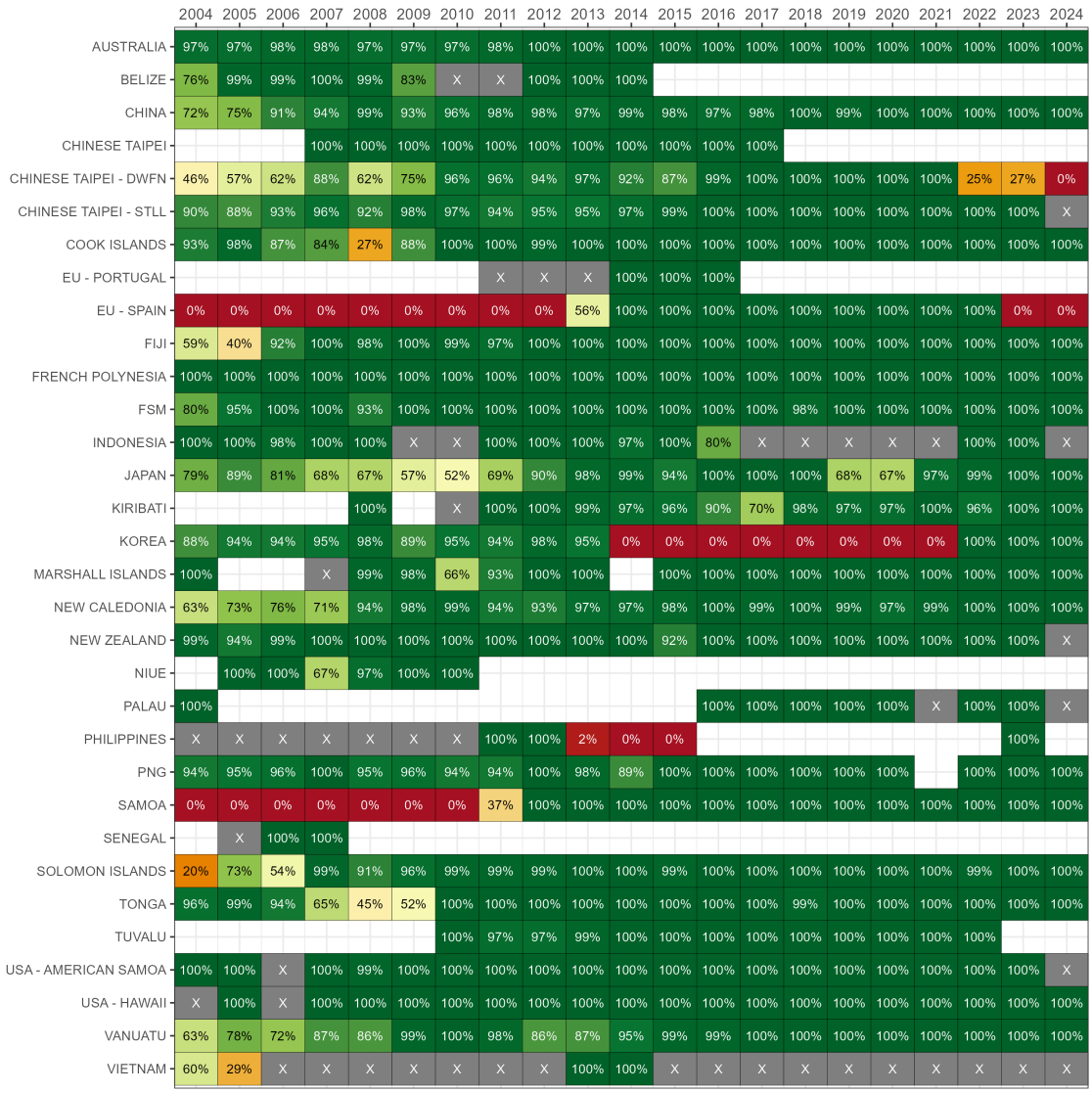


Table 7: Coverage of levels of the SET START TIME field - LONGLINE



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
AUSTRALIA	97%	97%	98%	98%	97%	97%	97%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
BELIZE	76%	99%	99%	100%	99%	83%	X	X	100%	100%	100%										
CHINA	72%	75%	91%	94%	99%	93%	96%	98%	98%	97%	99%	98%	97%	98%	100%	99%	100%	100%	100%	100%	100%
CHINESE TAIPEI				100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%							
CHINESE TAIPEI - DWFN	46%	57%	62%	88%	62%	75%	96%	96%	94%	97%	92%	87%	99%	100%	100%	100%	100%	100%	25%	27%	0%
CHINESE TAIPEI - STLL	90%	88%	93%	96%	92%	98%	97%	94%	95%	95%	97%	99%	100%	100%	100%	100%	100%	100%	100%	100%	X
COOK ISLANDS	93%	98%	87%	84%	27%	88%	100%	100%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
EU - PORTUGAL								X	X	X	100%	100%	100%								
EU - SPAIN	0%	0%	0%	0%	0%	0%	0%	0%	0%	56%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	0%
FIJI	59%	40%	92%	100%	98%	100%	99%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
FRENCH POLYNESIA	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
FSM	80%	95%	100%	100%	93%	100%	100%	100%	100%	100%	100%	100%	100%	100%	98%	100%	100%	100%	100%	100%	100%
INDONESIA	100%	100%	98%	100%	100%	X	X	100%	100%	100%	97%	100%	80%	X	X	X	X	X	100%	100%	X
JAPAN	79%	89%	81%	68%	67%	57%	52%	69%	90%	98%	99%	94%	100%	100%	100%	68%	67%	97%	99%	100%	100%
KIRIBATI					100%		X	100%	100%	99%	97%	96%	90%	70%	98%	97%	97%	100%	96%	100%	100%
KOREA	88%	94%	94%	95%	98%	89%	95%	94%	98%	95%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%
MARSHALL ISLANDS	100%			X	99%	98%	66%	93%	100%	100%		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
NEW CALEDONIA	63%	73%	76%	71%	94%	98%	99%	94%	93%	97%	97%	98%	100%	99%	100%	99%	97%	99%	100%	100%	100%
NEW ZEALAND	99%	94%	99%	100%	100%	100%	100%	100%	100%	100%	100%	92%	100%	100%	100%	100%	100%	100%	100%	100%	X
NIUE		100%	100%	67%	97%	100%	100%														
PALAU	100%												100%	100%	100%	100%	100%	X	100%	100%	X
PHILIPPINES	X	X	X	X	X	X	X	100%	100%	2%	0%	0%								100%	
PNG	94%	95%	96%	100%	95%	96%	94%	94%	100%	98%	89%	100%	100%	100%	100%	100%	100%		100%	100%	100%
SAMOA	0%	0%	0%	0%	0%	0%	0%	37%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SENEGAL		X	100%	100%																	
SOLOMON ISLANDS	20%	73%	54%	99%	91%	96%	99%	99%	99%	100%	100%	99%	100%	100%	100%	100%	100%	100%	99%	100%	100%
TONGA	96%	99%	94%	65%	45%	52%	100%	100%	100%	100%	100%	100%	100%	100%	99%	100%	100%	100%	100%	100%	100%
TUVALU							100%	97%	97%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
USA - AMERICAN SAMOA	100%	100%	X	100%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	X
USA - HAWAII	X	100%	X	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
VANUATU	63%	78%	72%	87%	86%	99%	100%	98%	86%	87%	95%	99%	99%	100%	100%	100%	100%	100%	100%	100%	100%
VIETNAM	60%	29%	X	X	X	X	X	X	X	100%	100%	X	X	X	X	X	X	X	X	X	X

Table 8: Coverage of levels of the HOOKS BETWEEN FLOATS field - LONGLINE

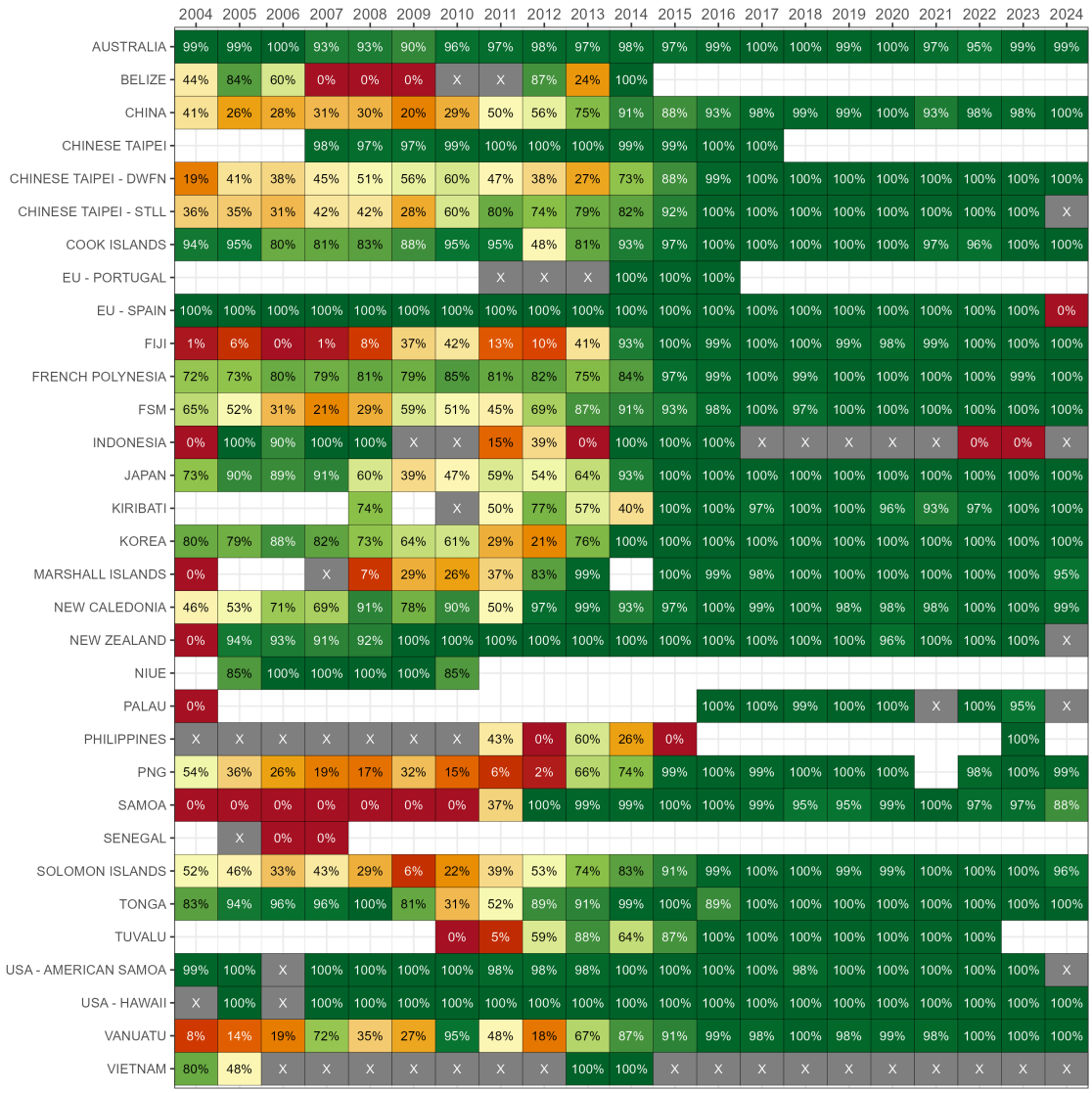
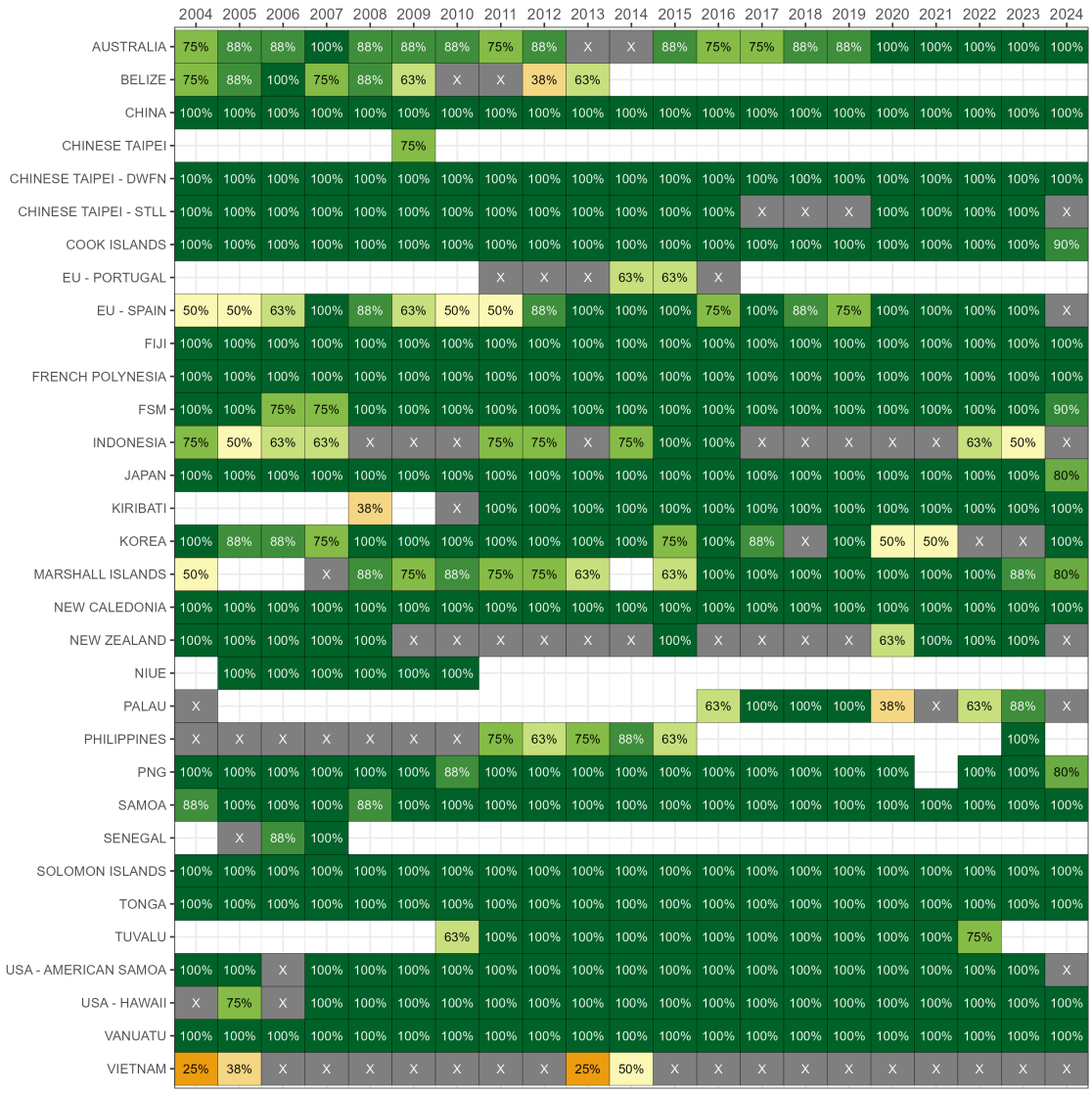
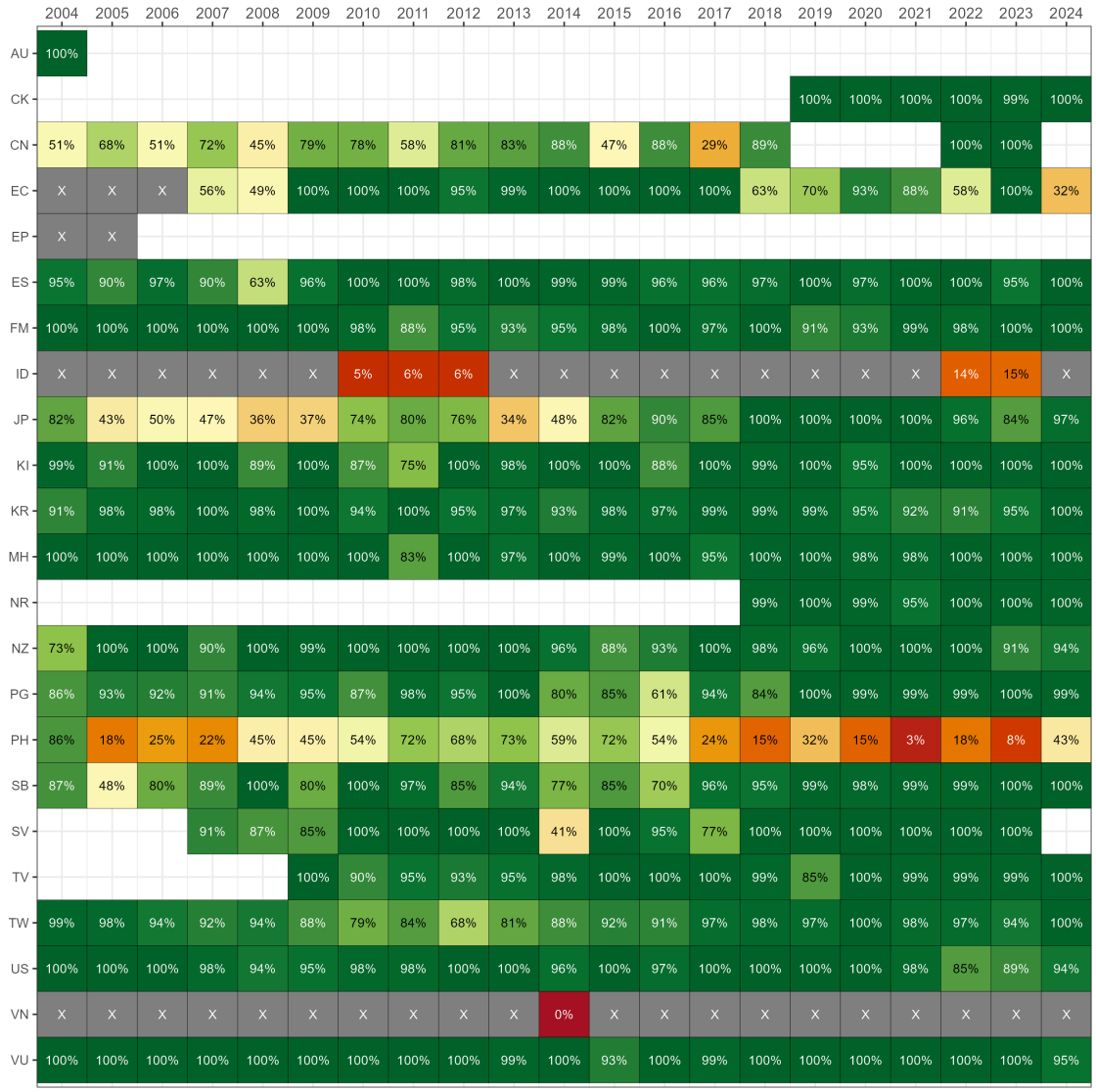


Table 9: Coverage of levels of the KEY SPECIES - LONGLINE



3 Purse seine fishery operational data fields

Table 10: Coverage of PURSE SEINE operational data submitted to the WCPFC



[3]The coverage of operational data provided has been determined by comparing the total catch in weight of the target species available in the operational data, to the total annual catch estimate of the target species [4]The coverage of operational data for Japan is for the tropical fishery only (south of 20°N).

Table 11: Coverage of levels of the DEPARTURE PORT field - PURSE SEINE

Table 12: Coverage of levels of the RETURN PORT field - PURSE SEINE

Table 13: Coverage of levels of the DEPARTURE DATE field - PURSE SEINE

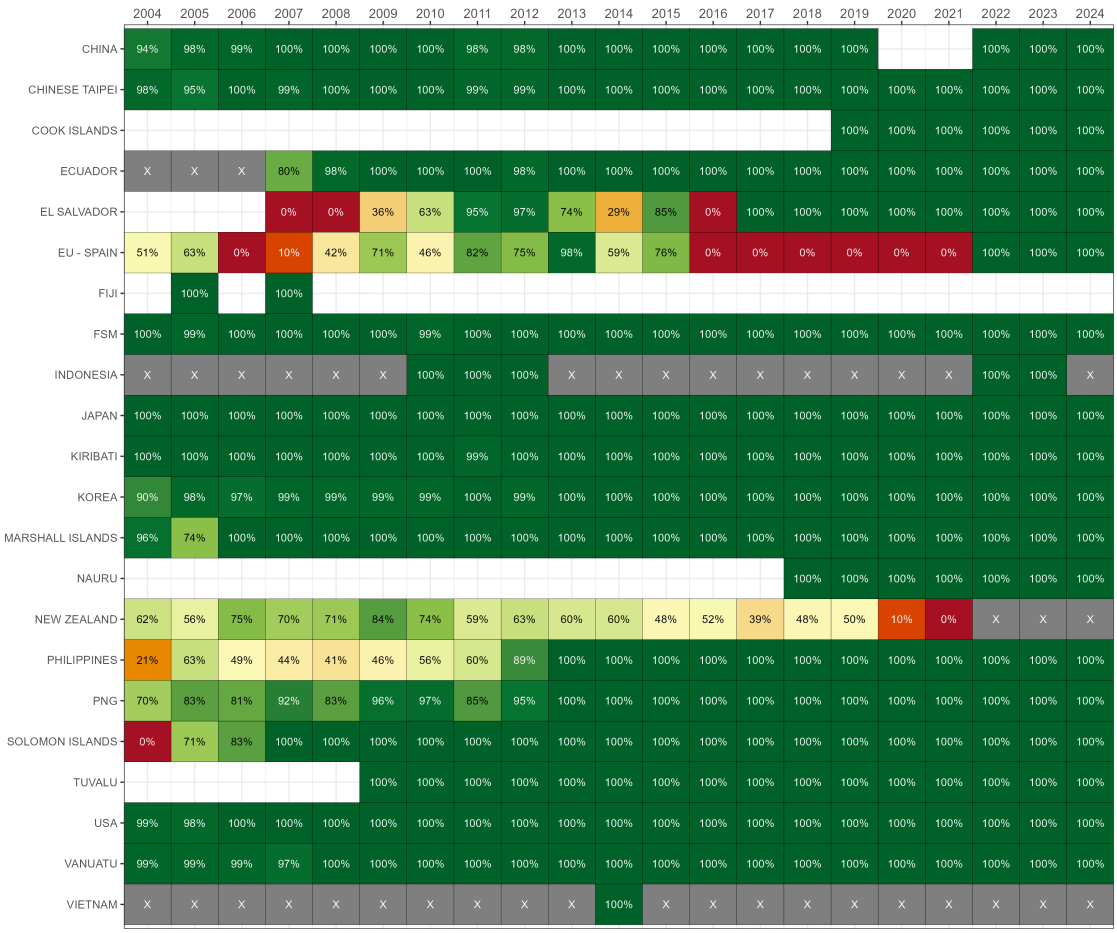


Table 14: Coverage of levels of the RETURN DATE field - PURSE SEINE

Table 15: Coverage of levels of the SET START TIME field - PURSE SEINE

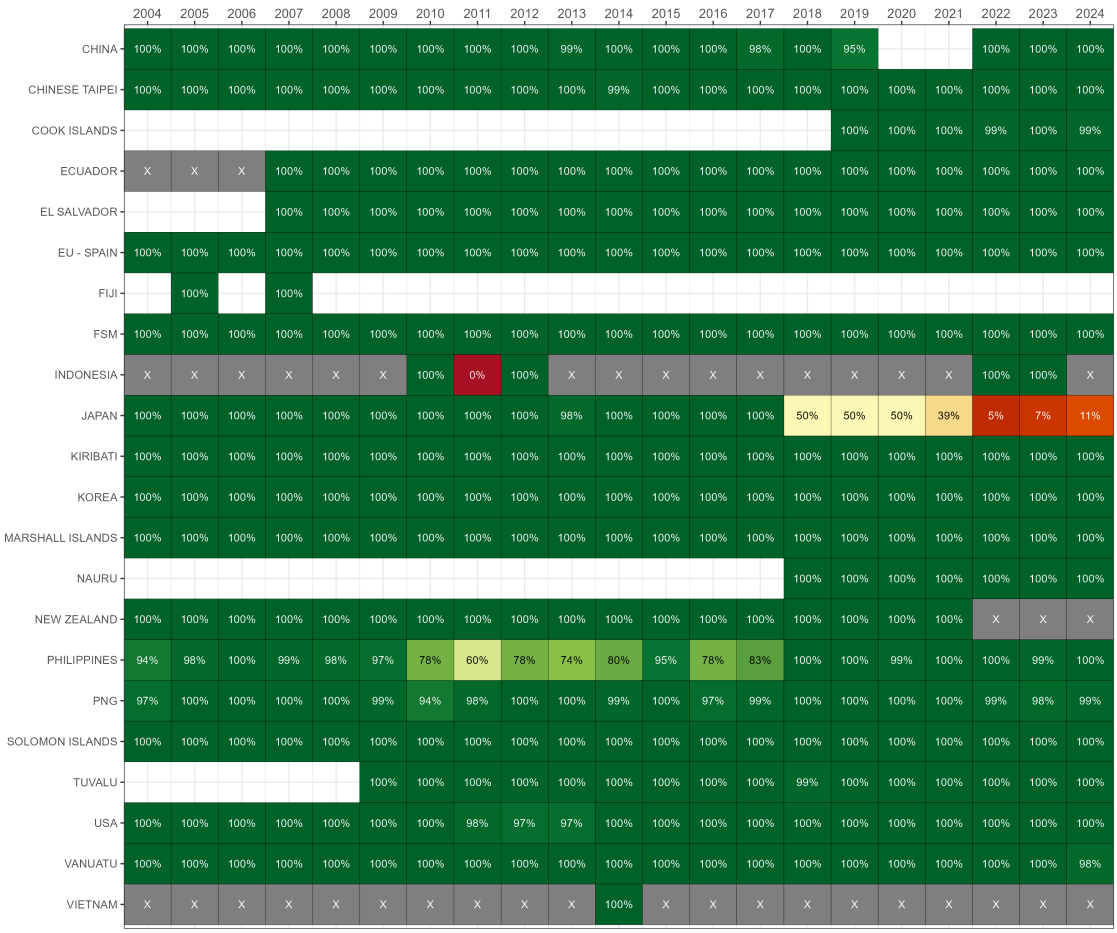


Table 16: Coverage of levels of the SET END TIME field - PURSE SEINE

Table 17: Coverage of levels of the SET TYPE field - PURSE SEINE

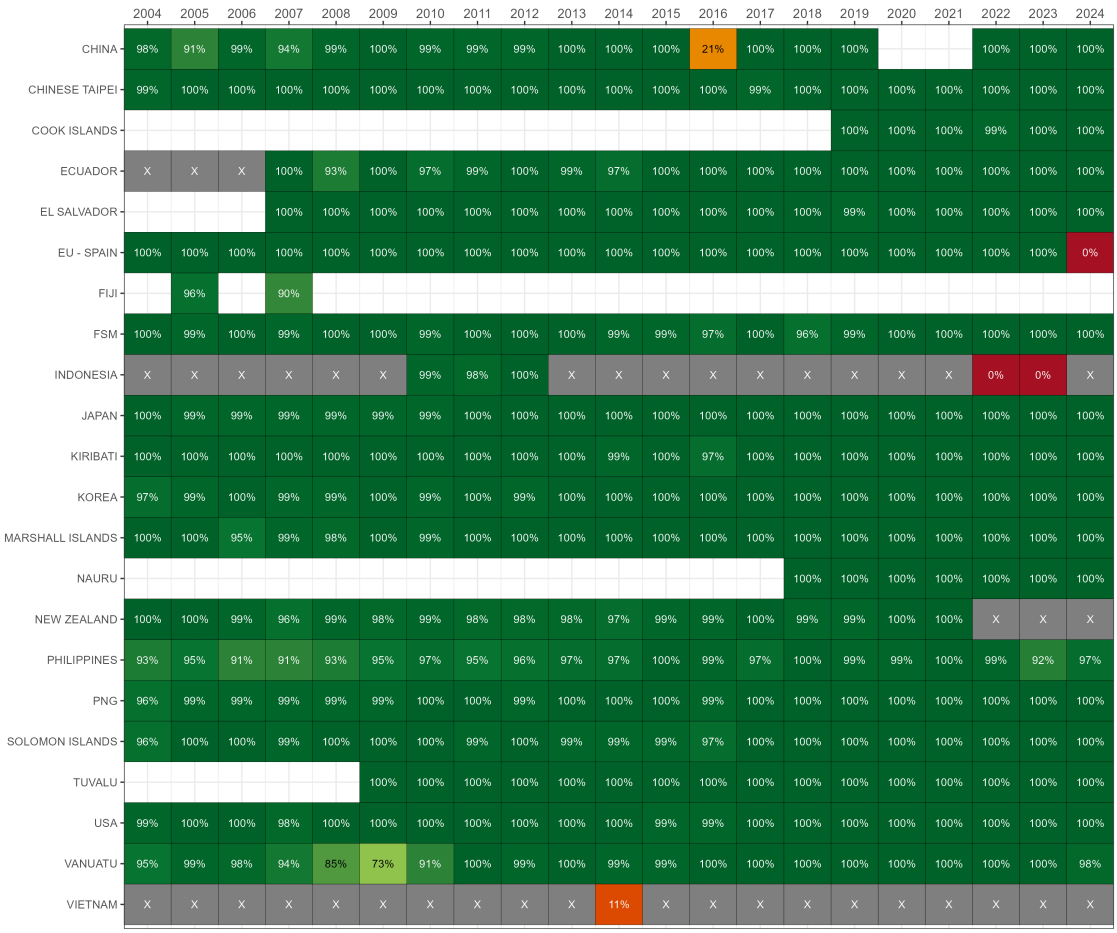
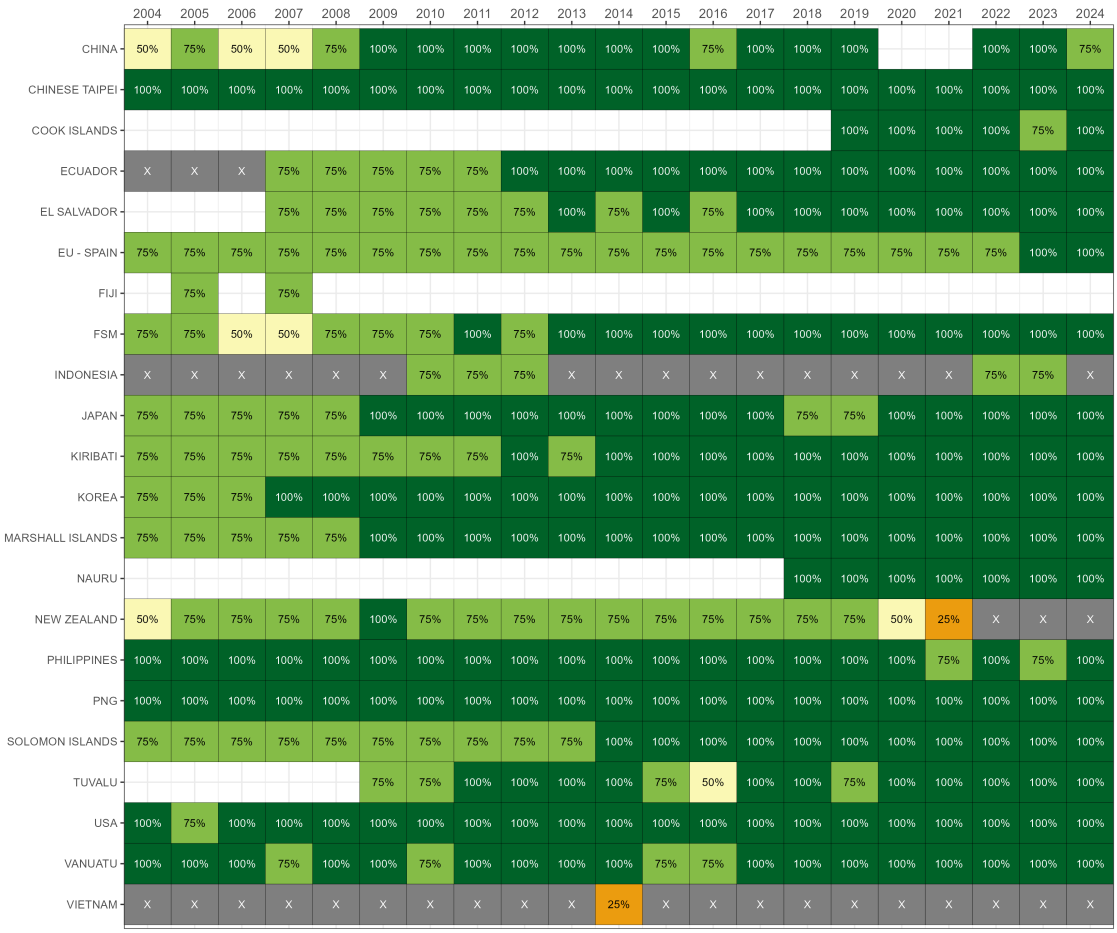


Table 18: Coverage of levels of the KEY SPECIES - PURSE SEINE



4 Pole-and-line fishery operational data fields

Table 19: Coverage of POLE-AND-LINE operational data submitted to the WCPFC [5]

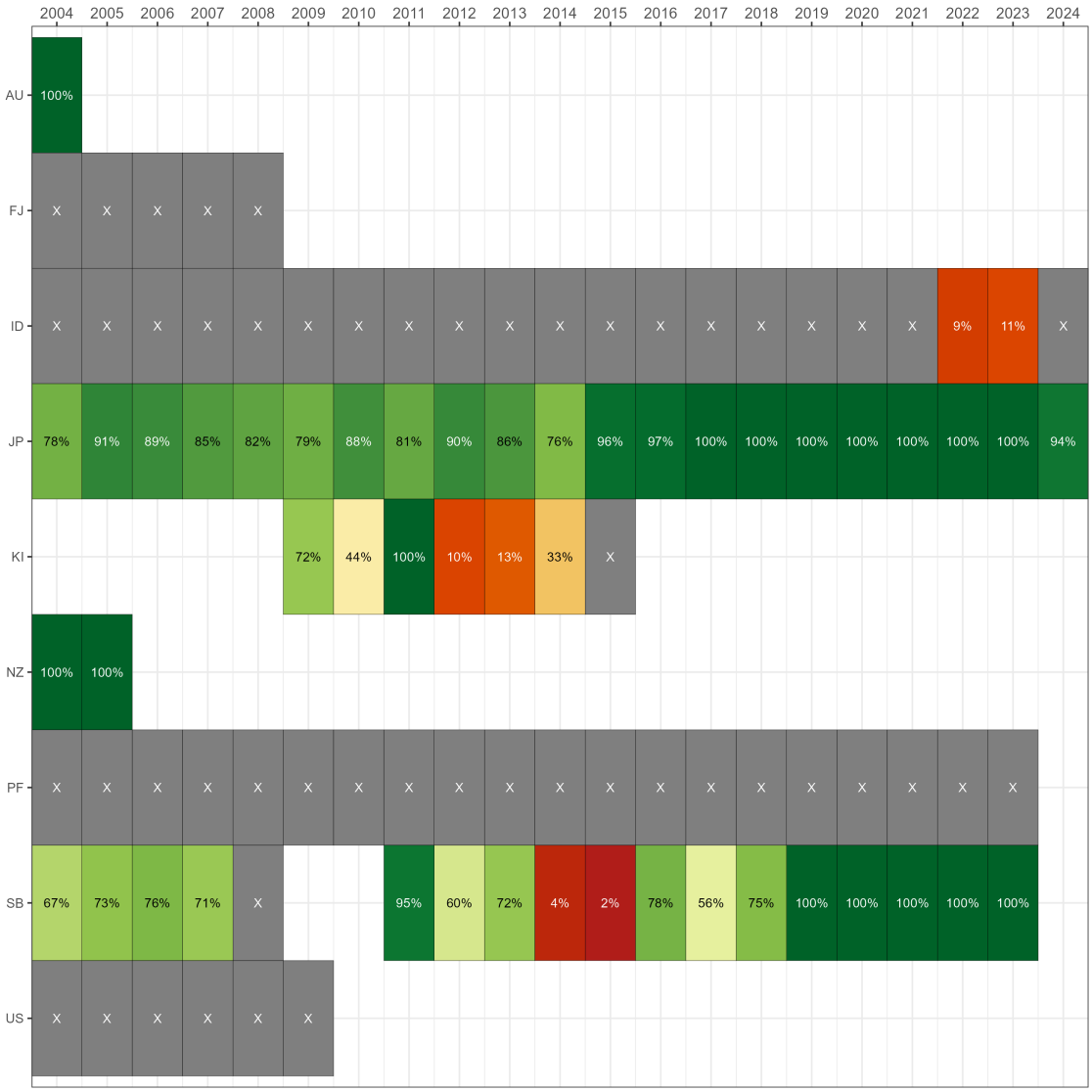


Table 20: Coverage of levels of the DEPARTURE PORT field - POLE-AND-LINE

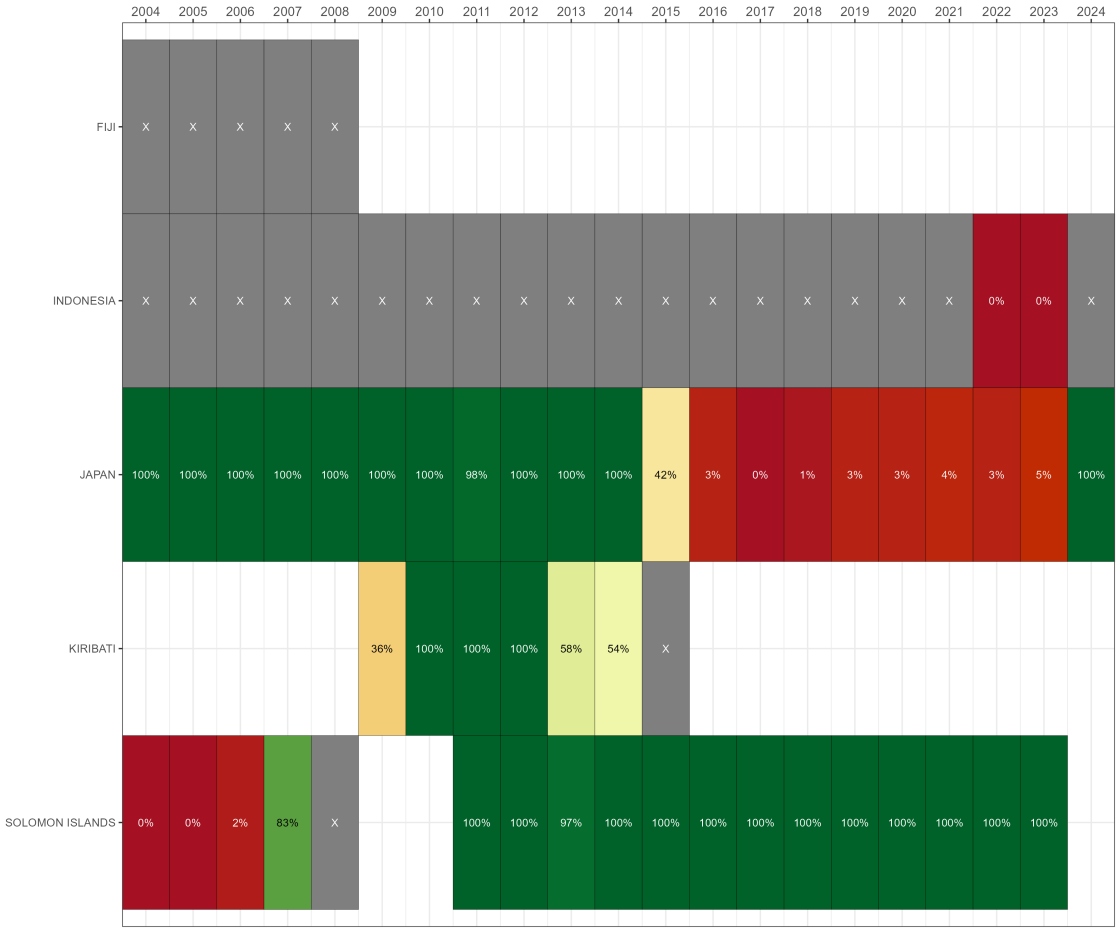


Table 21: Coverage of levels of the RETURN PORT field - POLE-AND-LINE

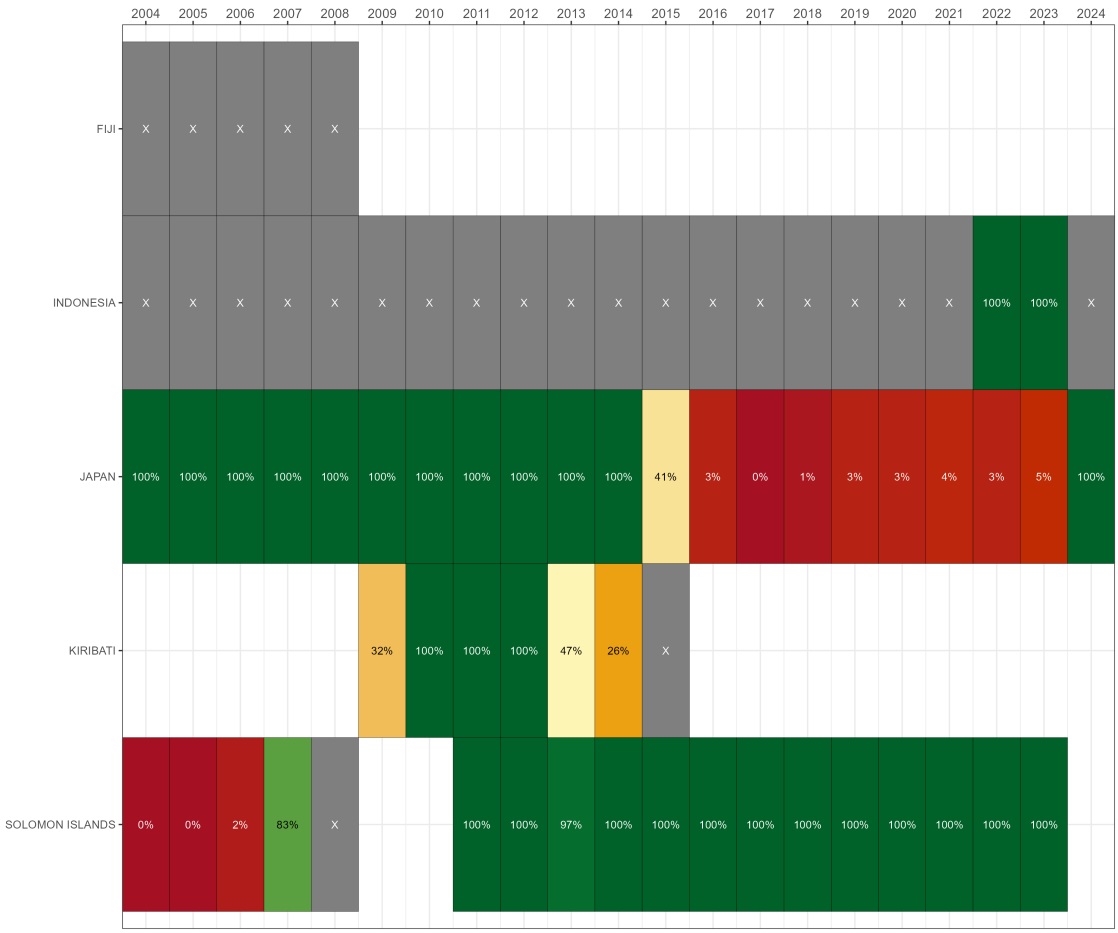


Table 22: Coverage of levels of the DEPARTURE DATE field - POLE-AND-LINE

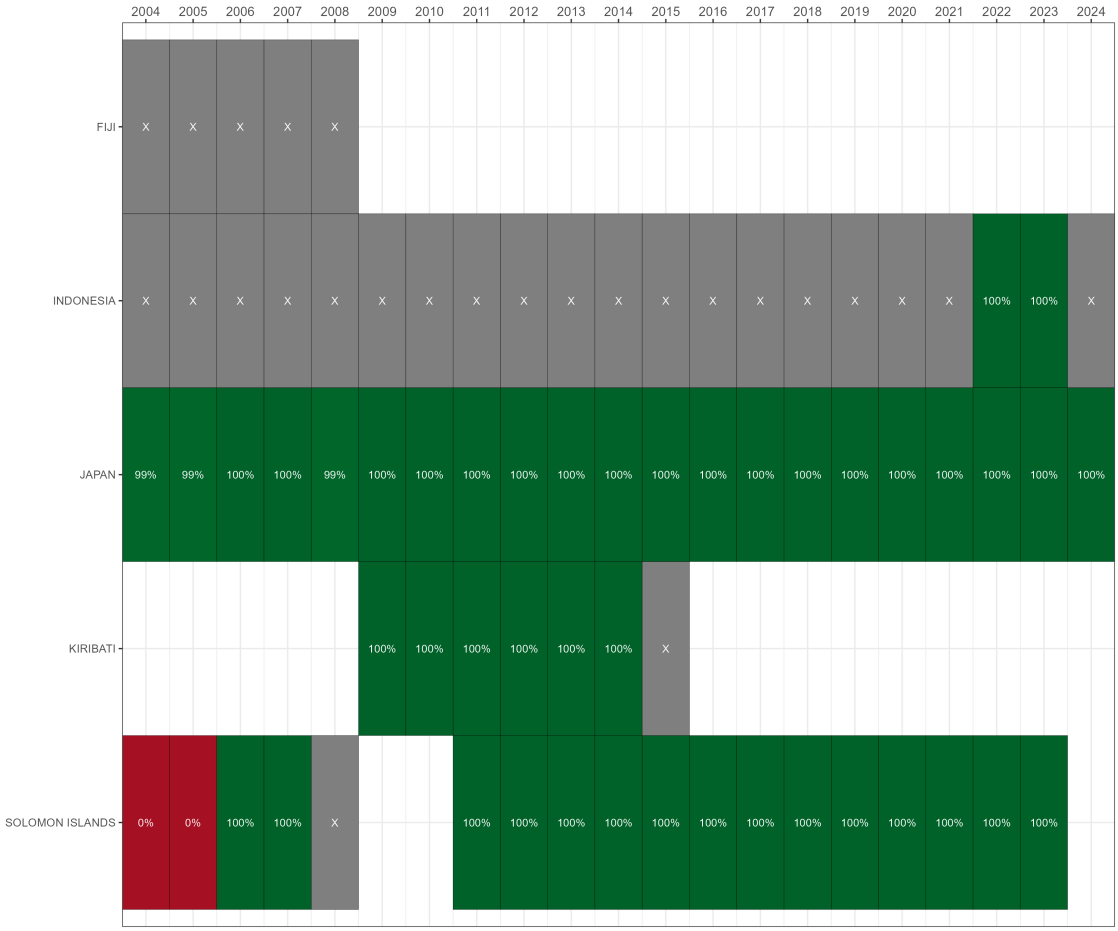


Table 23: Coverage of levels of the RETURN DATE field - POLE-AND-LINE

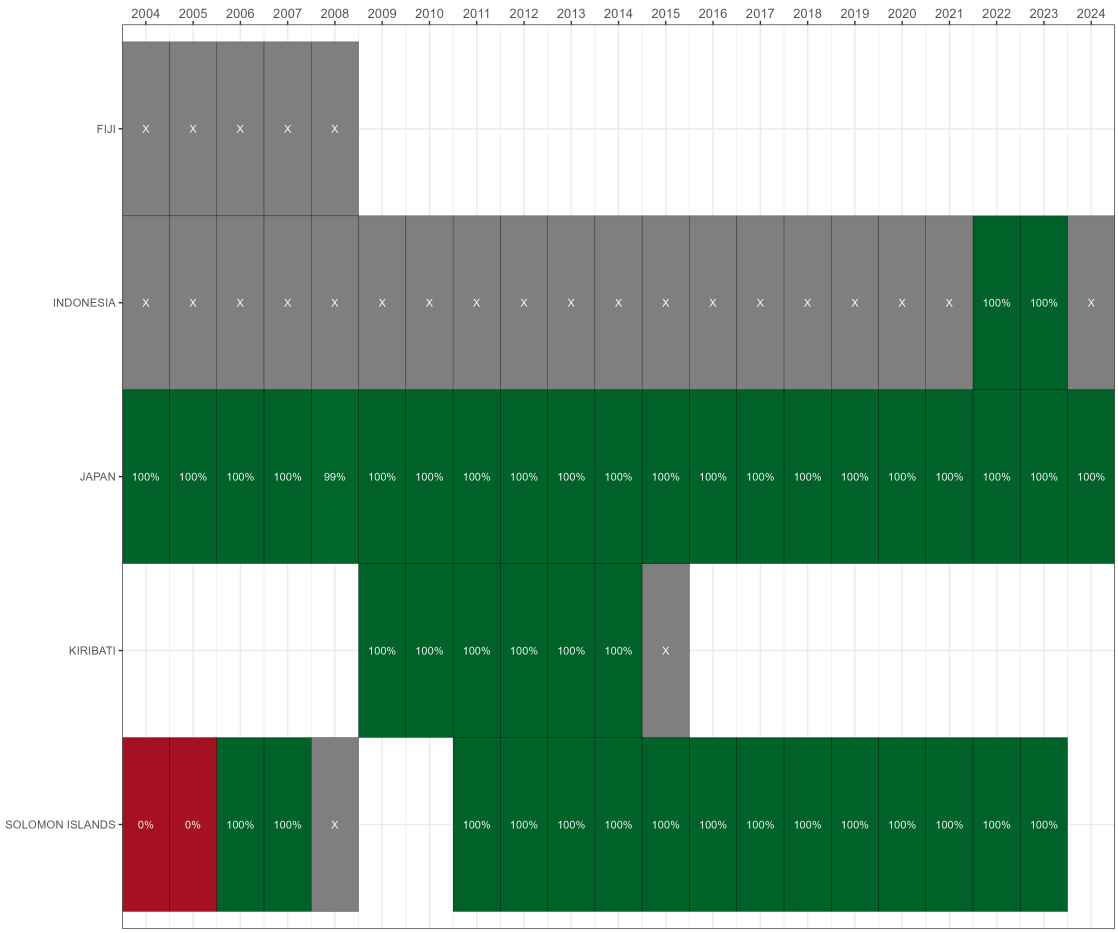
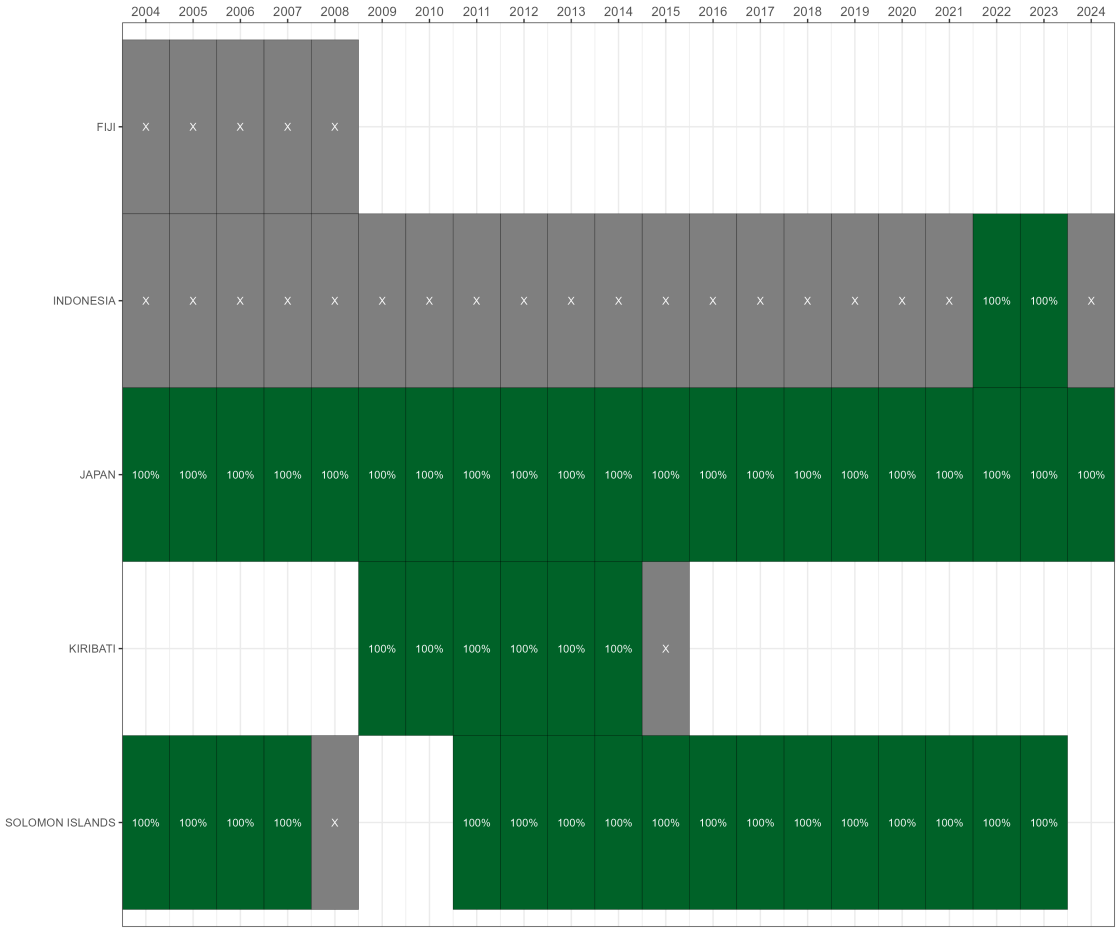


Table 24: Coverage of levels of the KEY SPECIES - POLE-AND-LINE



5 Summary of additional operational fields by gear type

Table 25: Coverage of levels of the BAIT TYPE field - LONGLINE

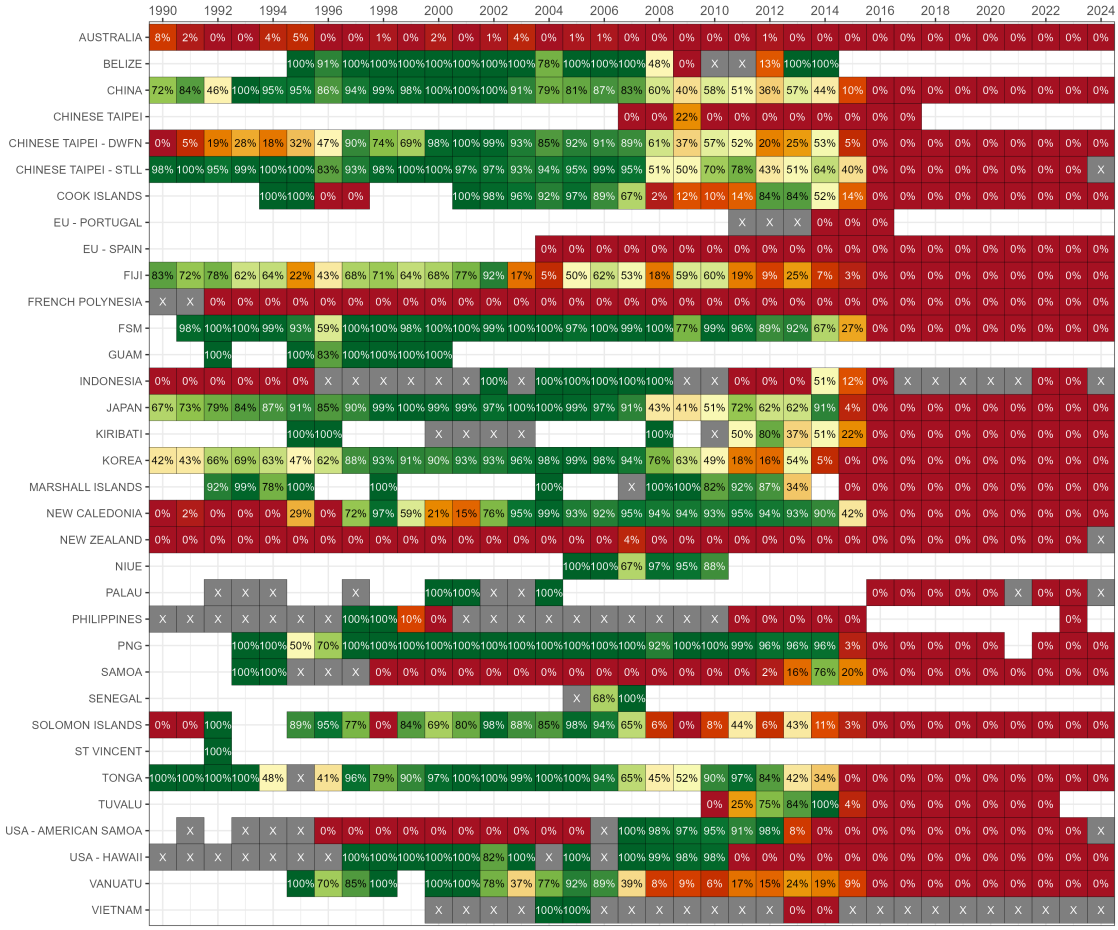


Table 26: Coverage of levels of the NUMBER OF BASKETS field - LONGLINE

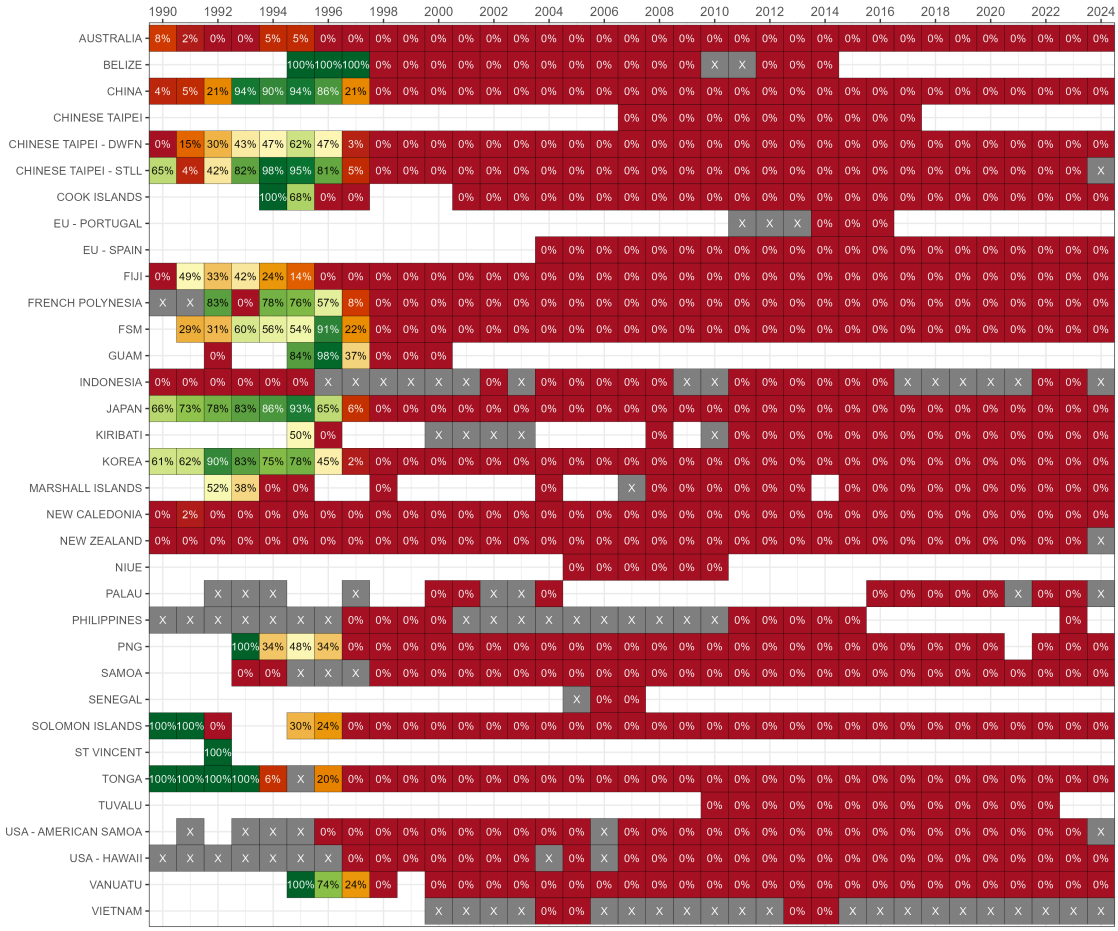


Table 27: Coverage of levels of the BRANCHLINE LENGTH field - LONGLINE

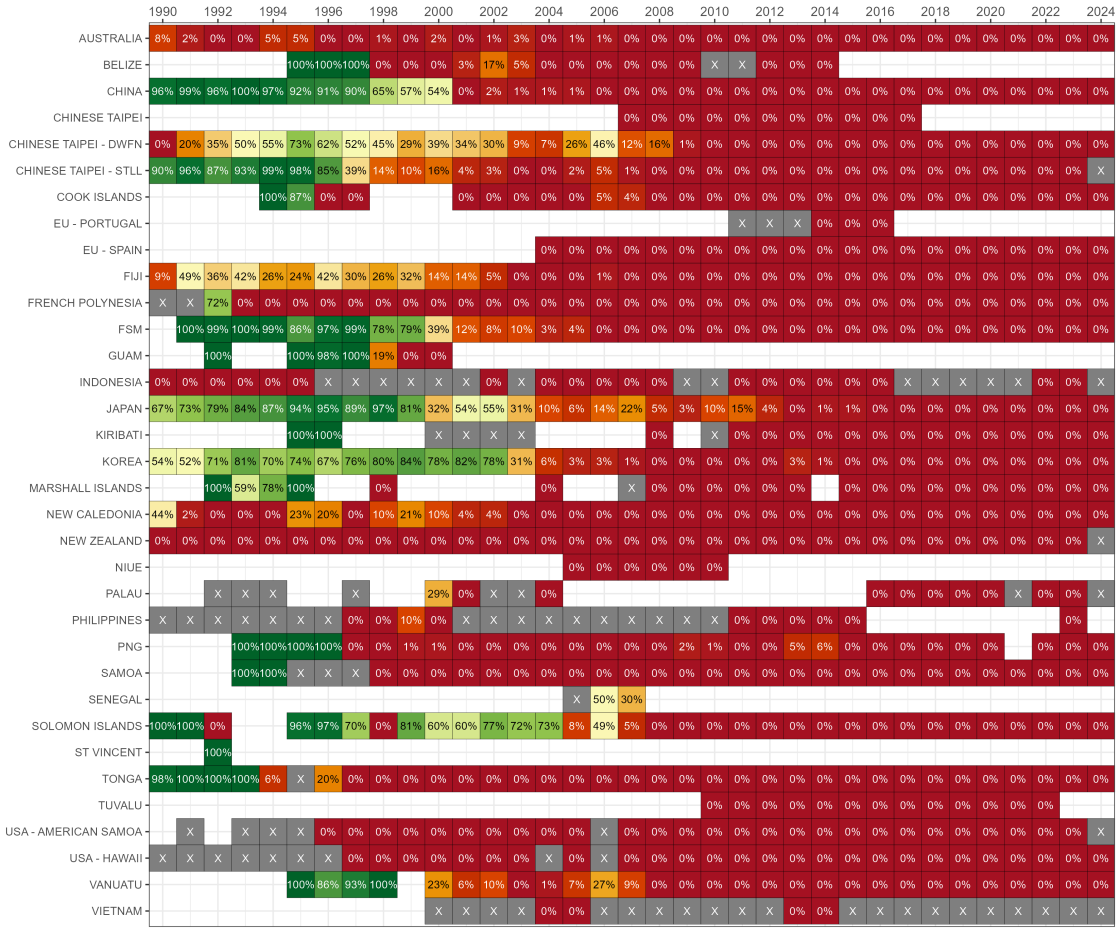


Table 28: Coverage of levels of the CAPTAIN field - LONGLINE

Table 29: Coverage of levels of the CREW NUMBER field - LONGLINE

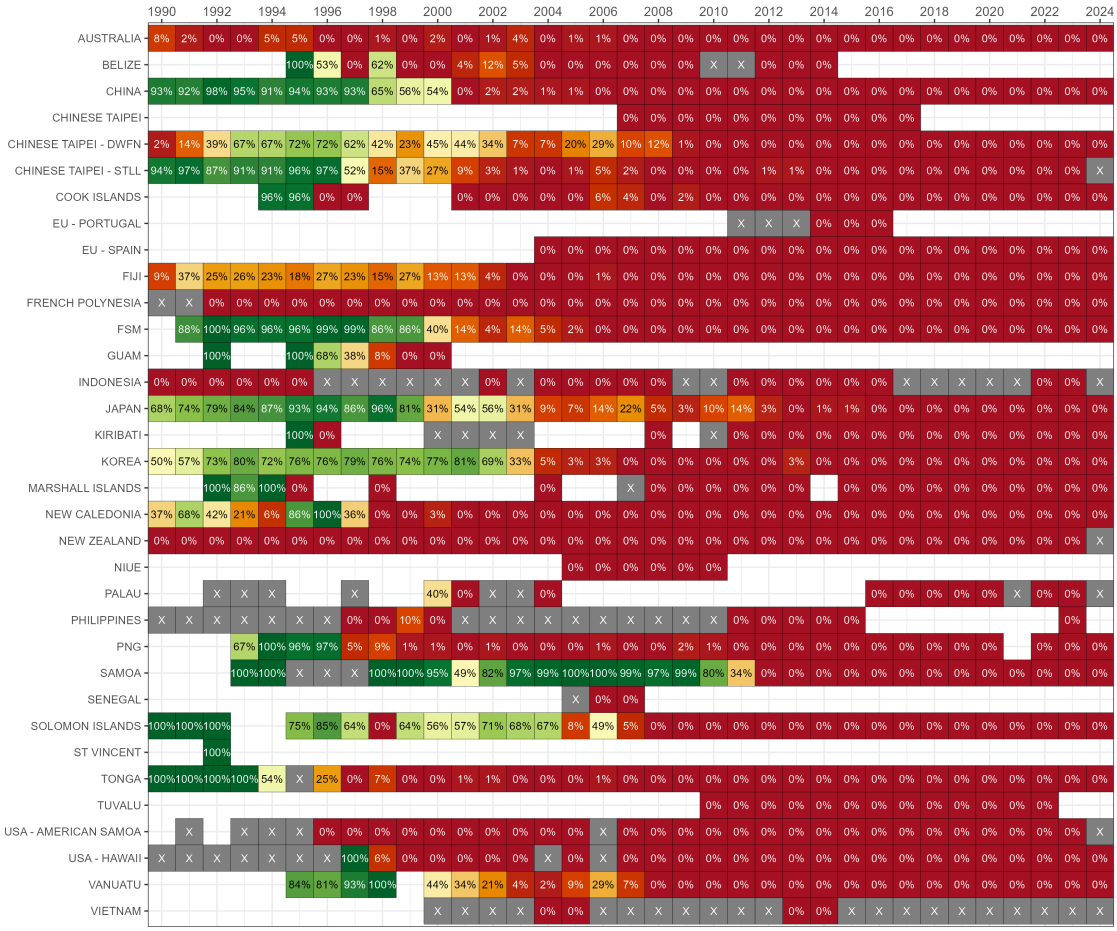


Table 30: Coverage of levels of the DISTANCE BETWEEN FLOATS field - LONGLINE

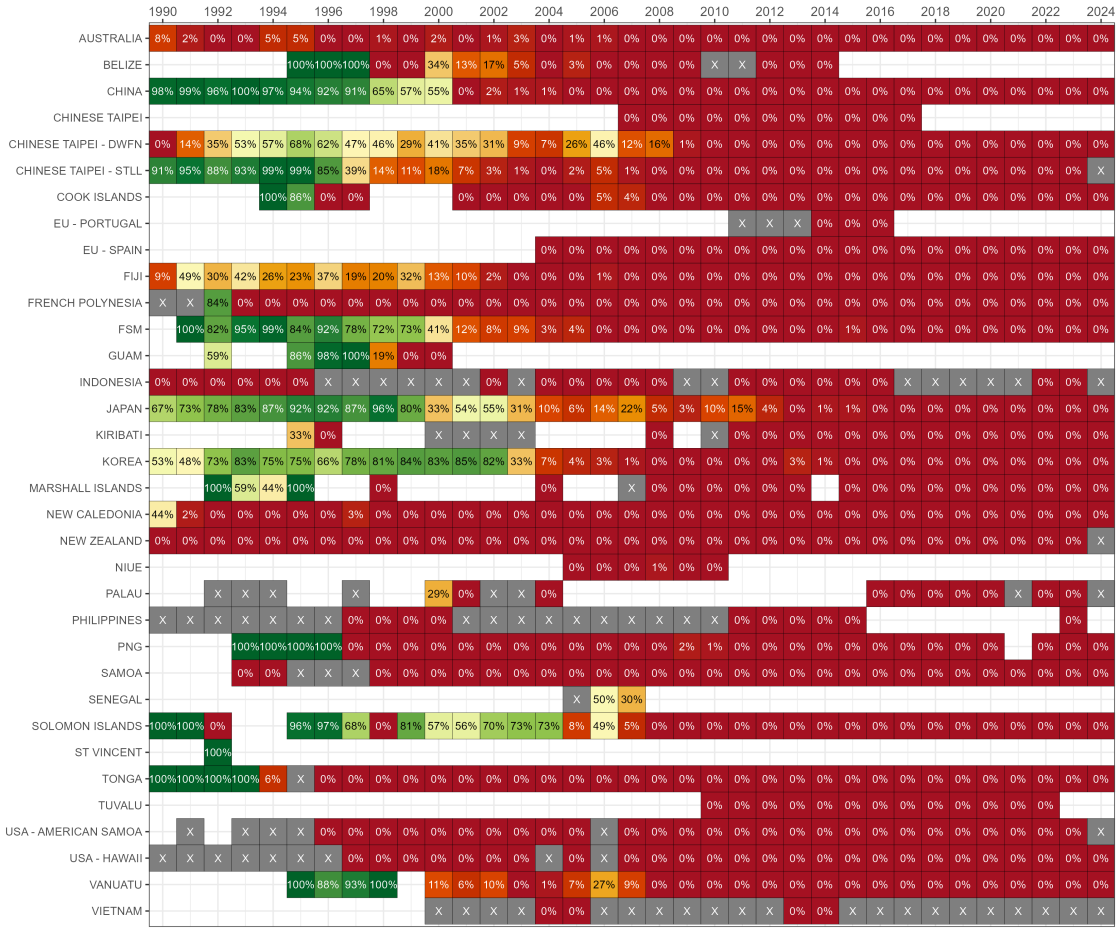


Table 31: Coverage of levels of the FLOATLINE LENGTH field - LONGLINE

Table 32: Coverage of levels of the PERMIT field - LONGLINE

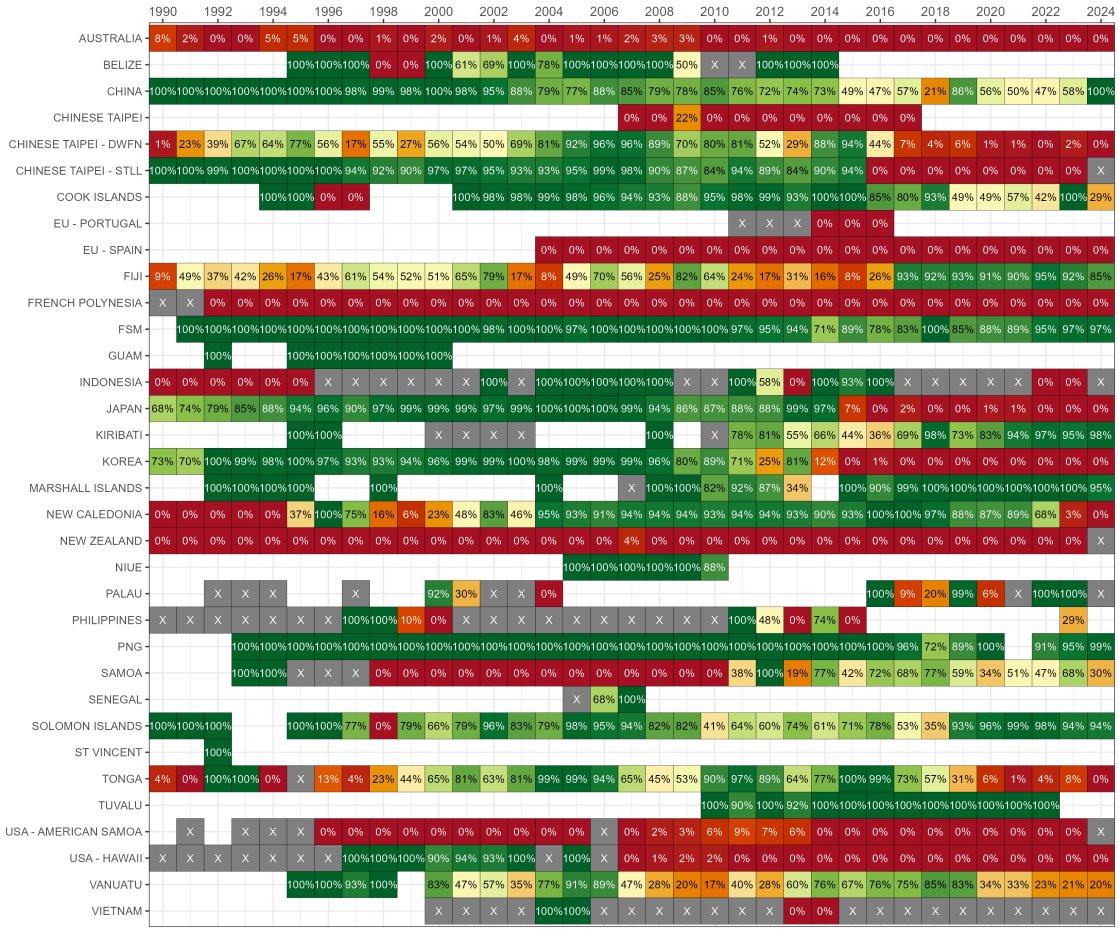


Table 33: Coverage of levels of the SET NUMBER field - LONGLINE

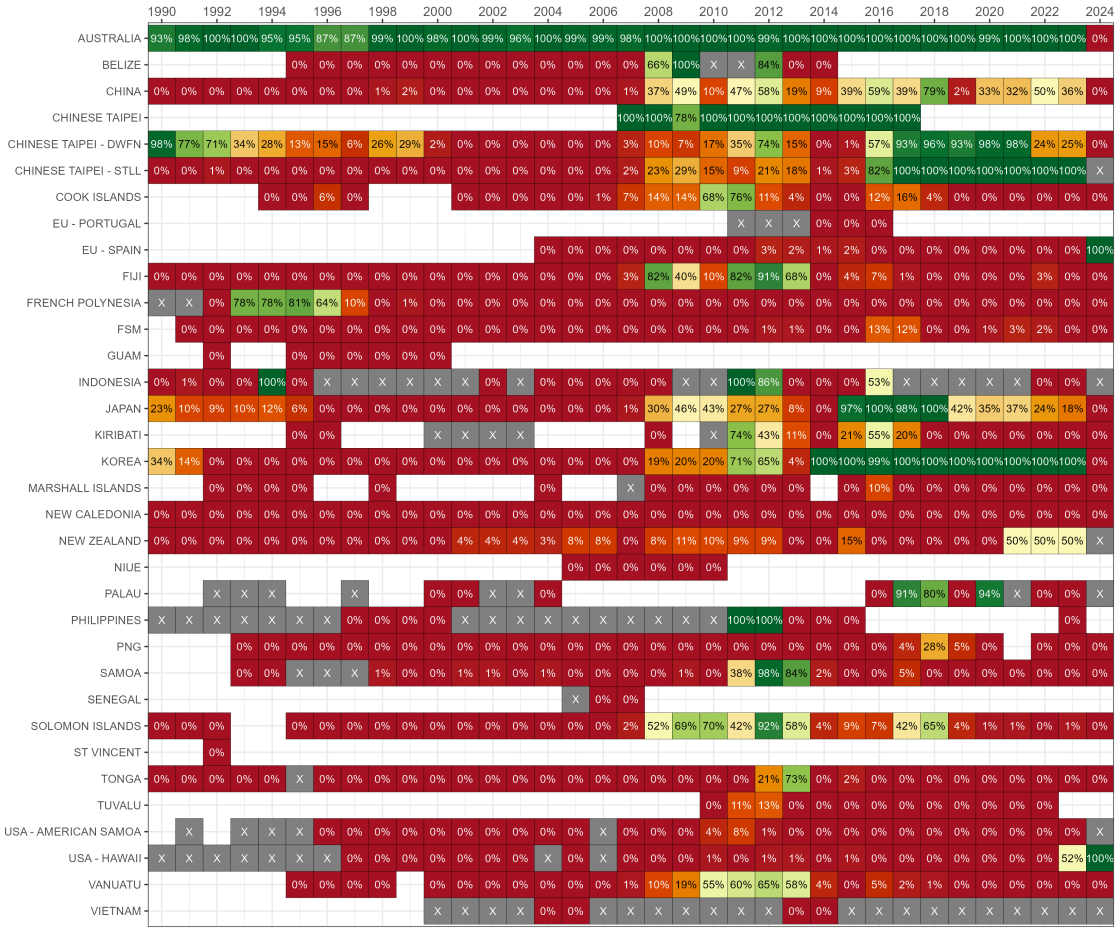


Table 34: Coverage of levels of the TARGET SPECIES field - LONGLINE

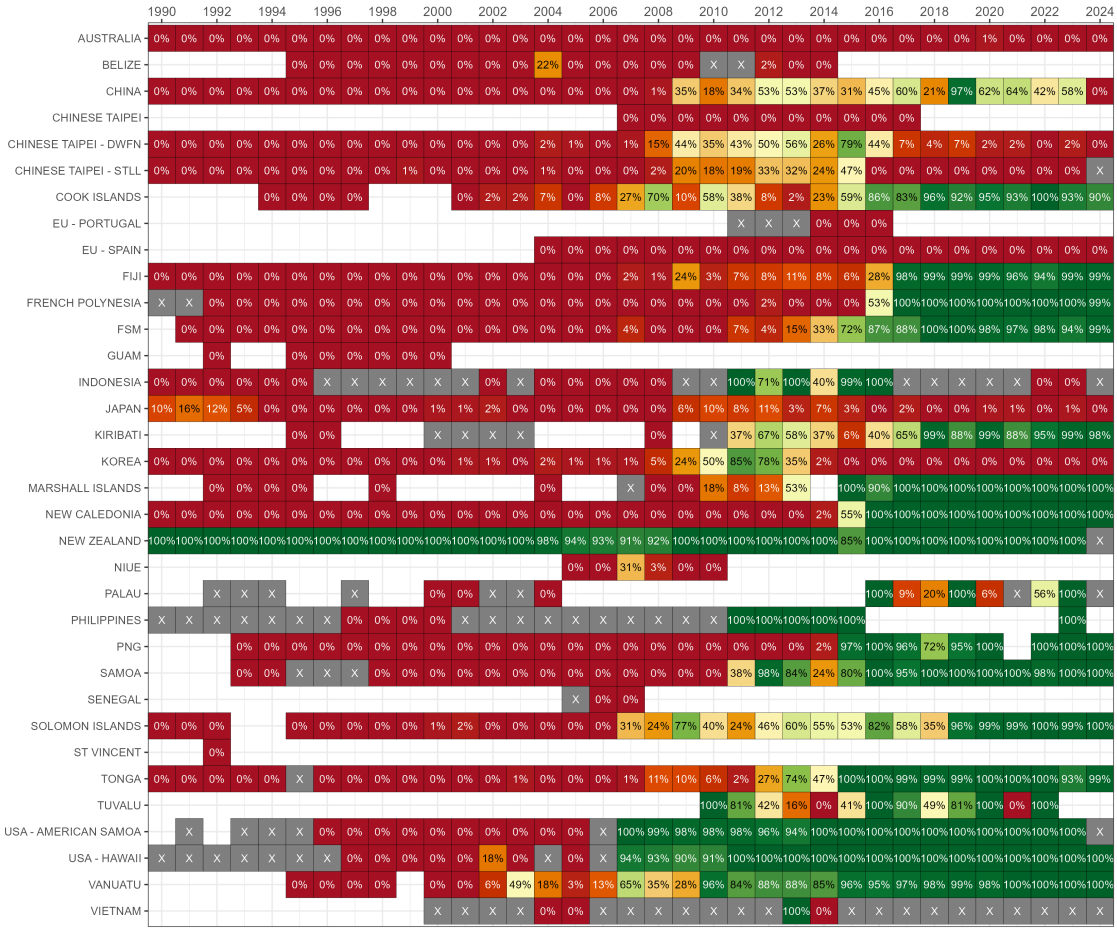


Table 35: Coverage of levels of the WHALE PREDATION field - LONGLINE