



A compendium of indicators for target tuna stocks SPC-OFP



WCPFC/SC22-2026/SA-WP-07

22nd Scientific Committee
10-19 August 2026
Apia, Samoa



Introduction

- The “Indicators” paper is an annual SC report tracking a set of indices for the four target tuna stocks.
- Includes short-term (3 year) projections under status quo (2025) catch/effort levels
- Additional report on South Pacific albacore (SA-IP-09) is also produced annually, and some results presented here
- Will present indicators for all four tuna stocks but only data summaries for bigeye and yellowfin as there are new assessments

Indicators

- Catch by gear
- CPUE indices by gear
- Spatial maps of catch, effort and CPUE
- Catch at length/weight by gear type
- Mean weight by gear type
- Stochastic stock projections

Note:

- The indicators presented have remained the same for 15 years
- Their continued reporting was requested at WCPFC 21.
- Their purpose is to illustrate and highlight changes, not explain, how the indicators have varied

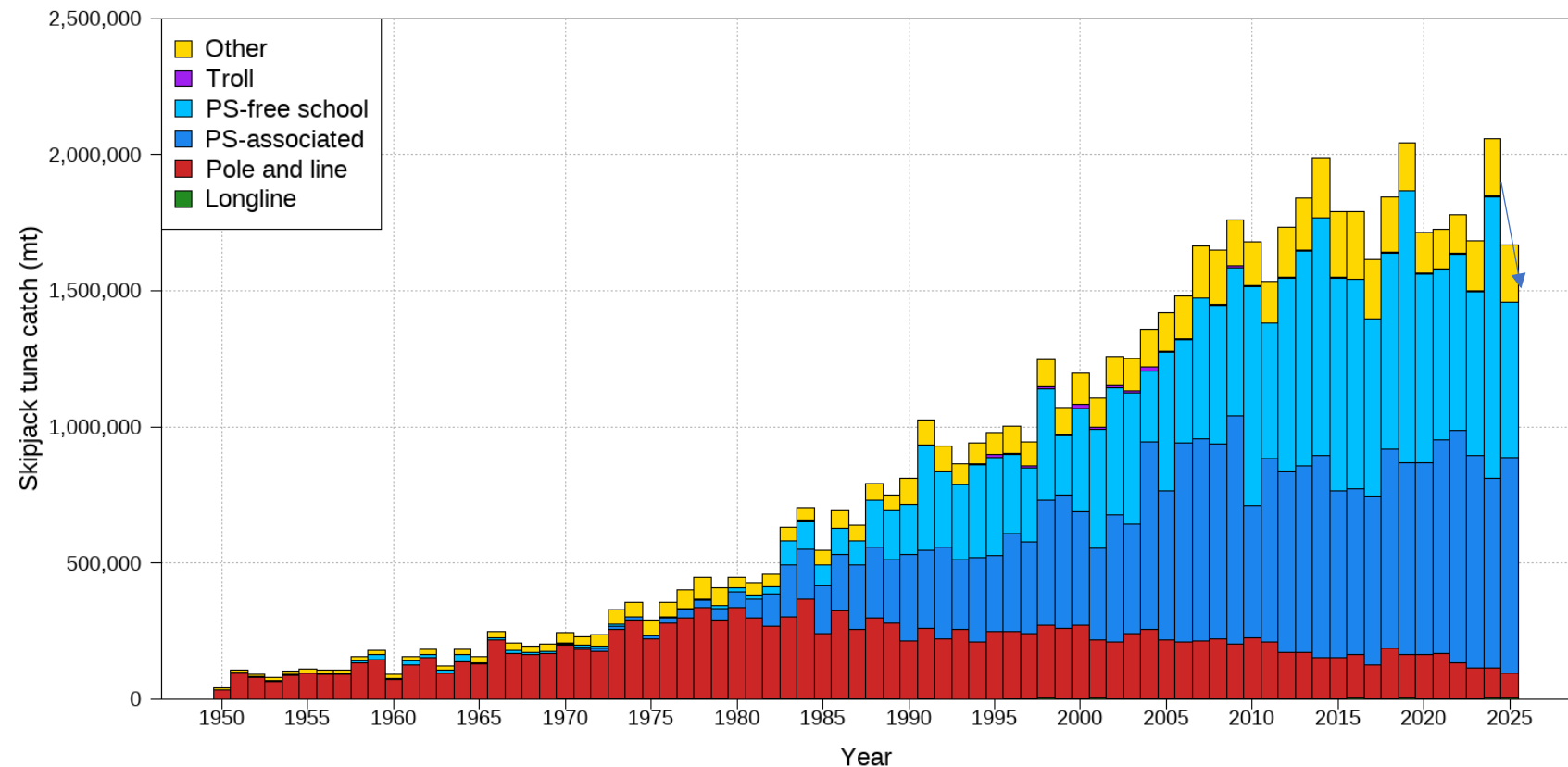
Skipjack – Total catch by gear

Gear	Prop.	Change from	
		2024	2020-24
PS	82%	- 21%	- 8%
PL	5%	- 19%	- 35%
Other	13%	- 3%	+ 24%
All	100%	- 19%	- 7%

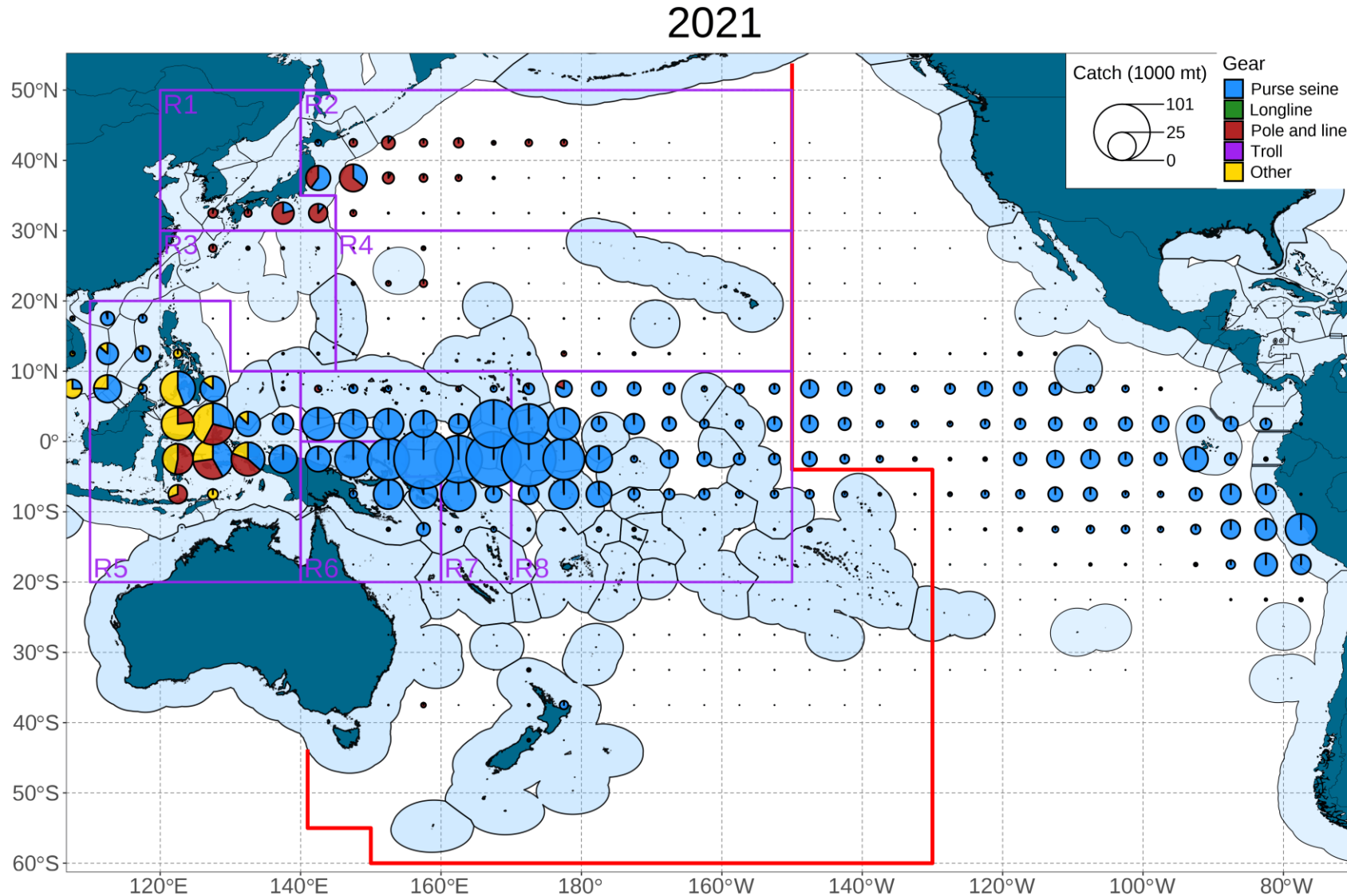
Info of note:

- A relatively stable fishery for 15 years
- Notable change in ratio of free-school vs FAD sets/catch
- Free-school drop, FAD-associated portion increased from 40% to 58%
- 2025 PL lowest in 50 years
- “Other” gear steady but larger %age of total SKJ catch

2025 catch – 1,668,409 (19% drop)

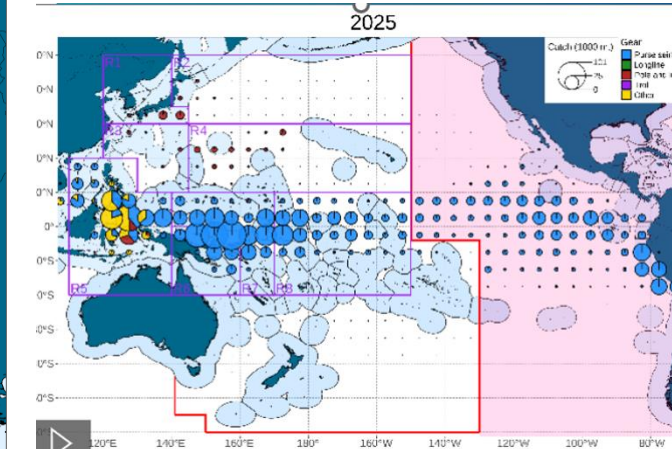


Skipjack – distribution of catch

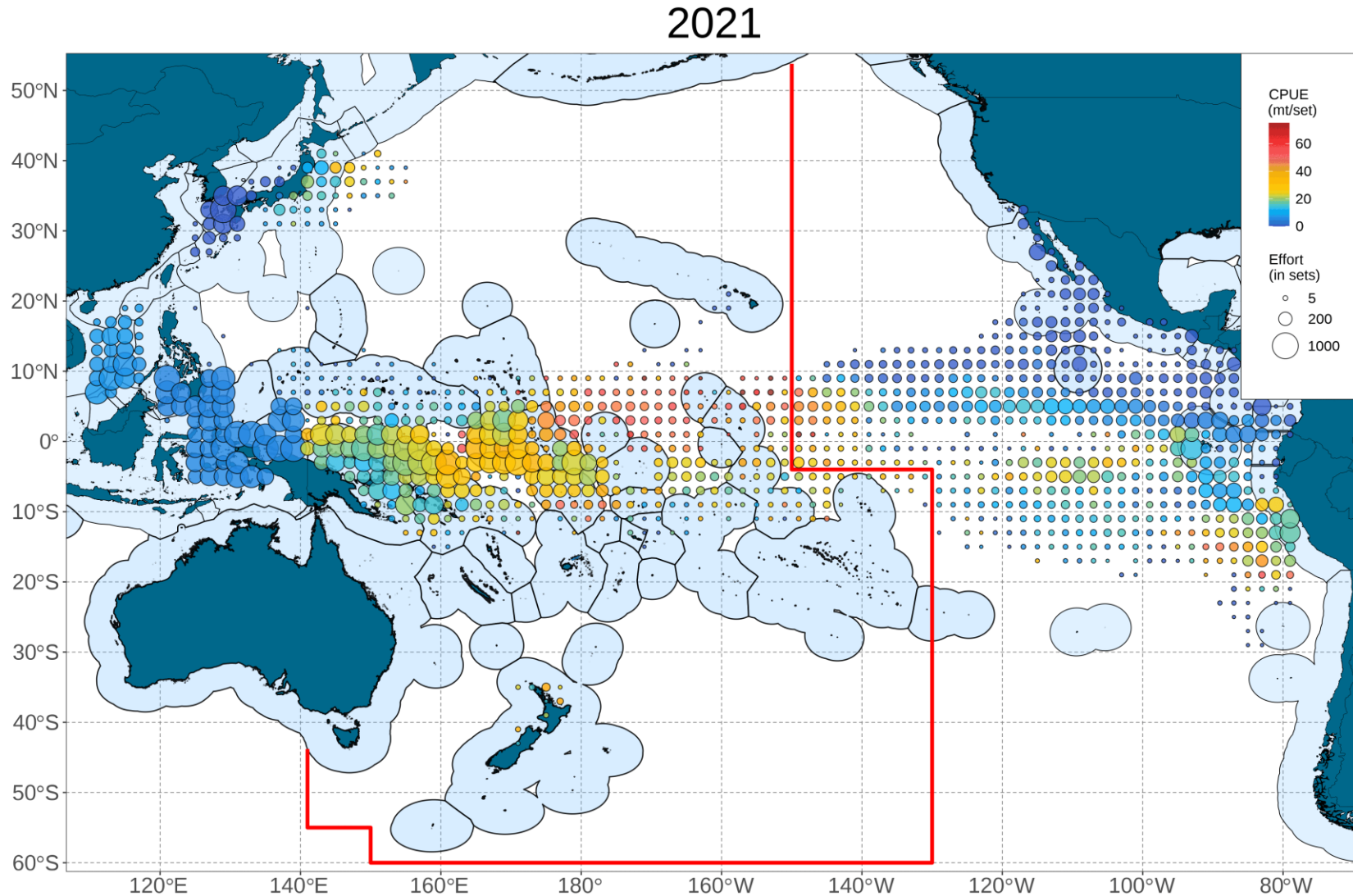


Catch map details:

- 2025 was more a neutral year compared to 2021-22 La Nina or 2023 El Niño
- Pole and line proportion continues decline
- 2025 EPO highlighted in pink because those are 2024 numbers.

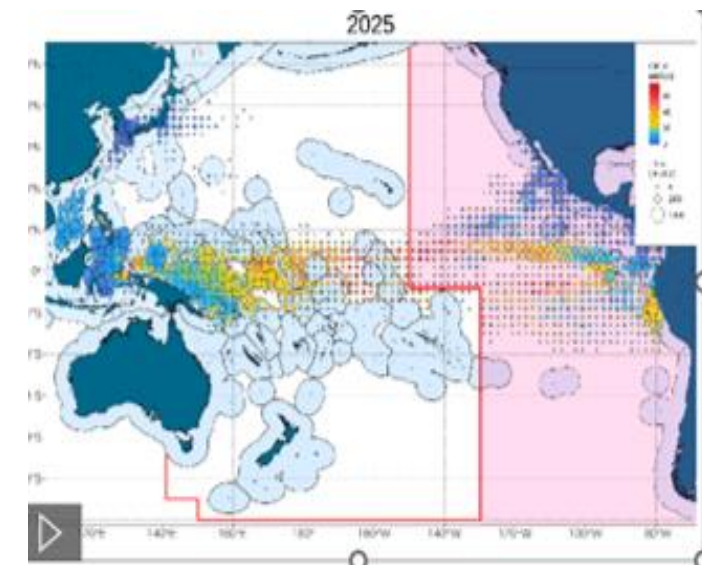


Skipjack – distribution of PS CPUE (mt/set)



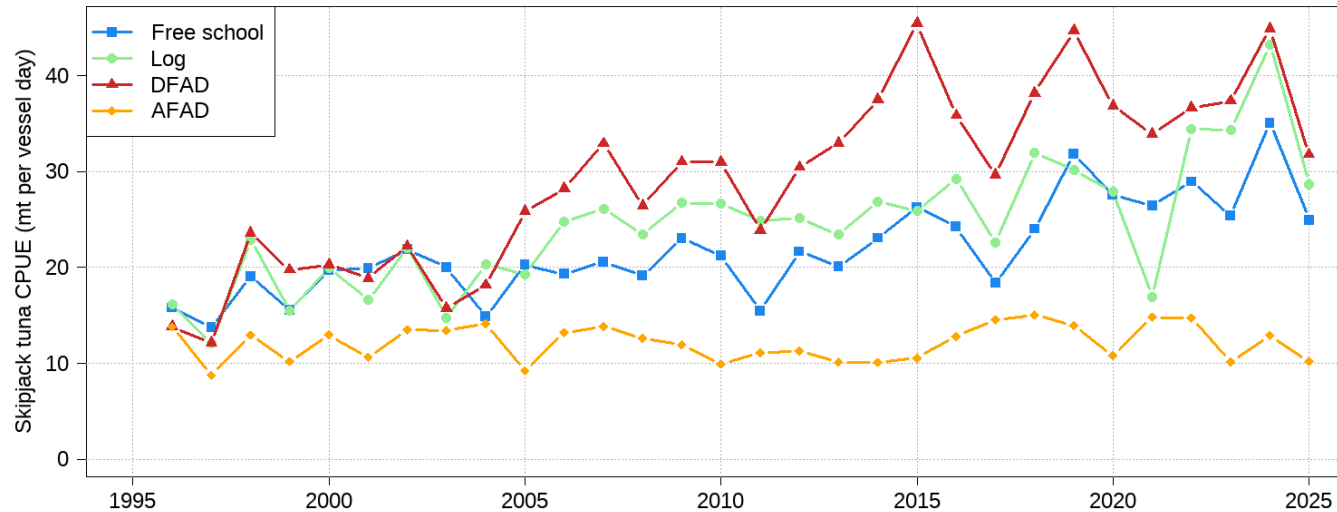
CPUE map details:

- In 2025, highest PS CPUE in HS between Phoenix and Line Islands



Skipjack – CPUE indices (nominal)

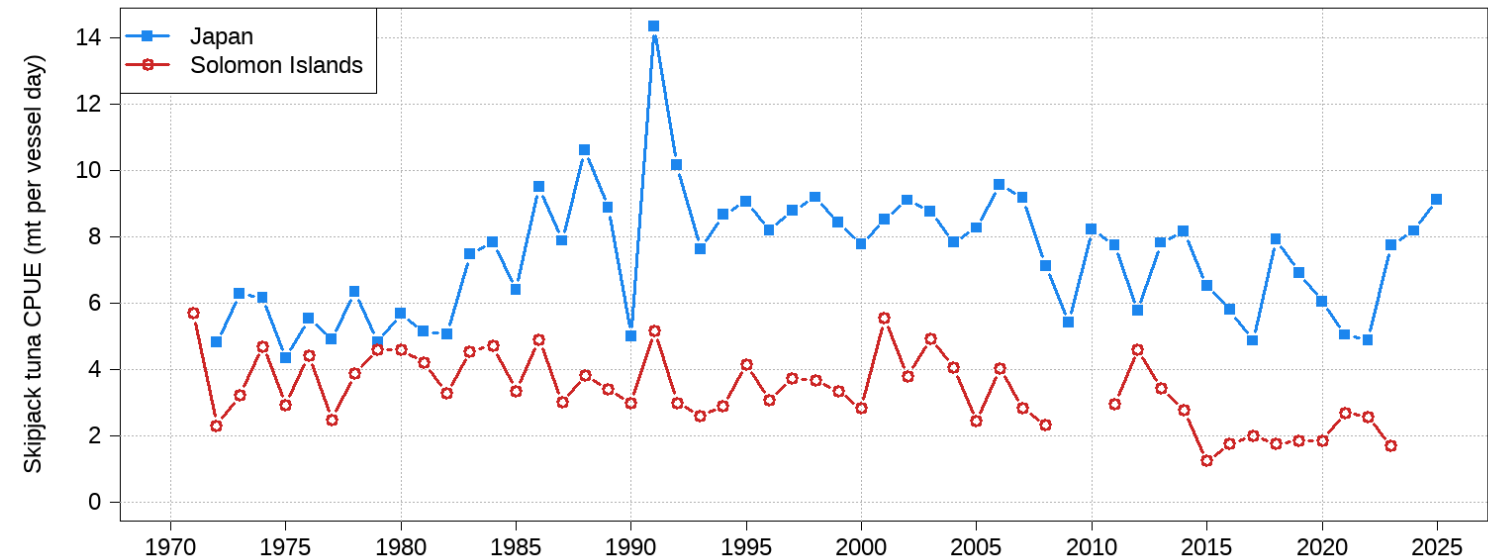
Purse seine



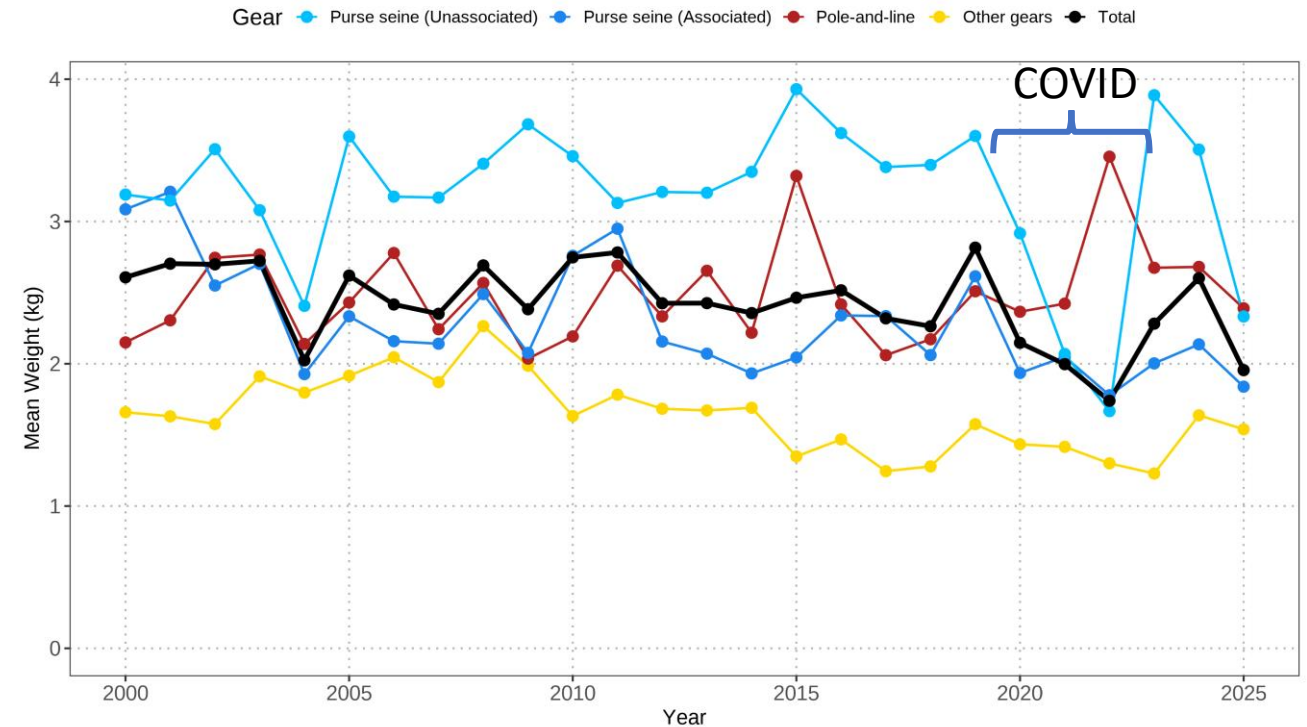
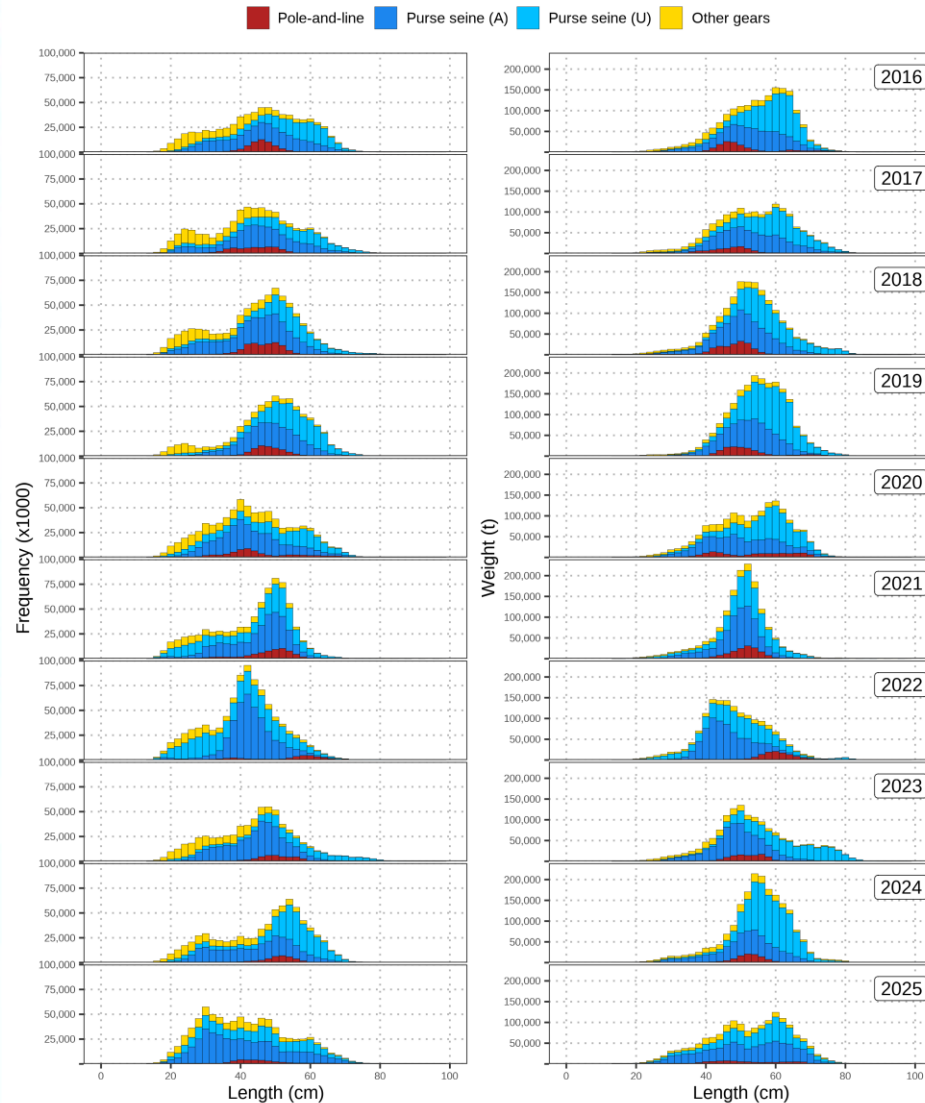
2025 saw a decline from the record levels seen in 2024 levels across all PS set types

Japan PL maintained increased CPUE seen since 2022; Solomon Islands Pole-and-Line fleet ended operations in 2023

Pole-and-line

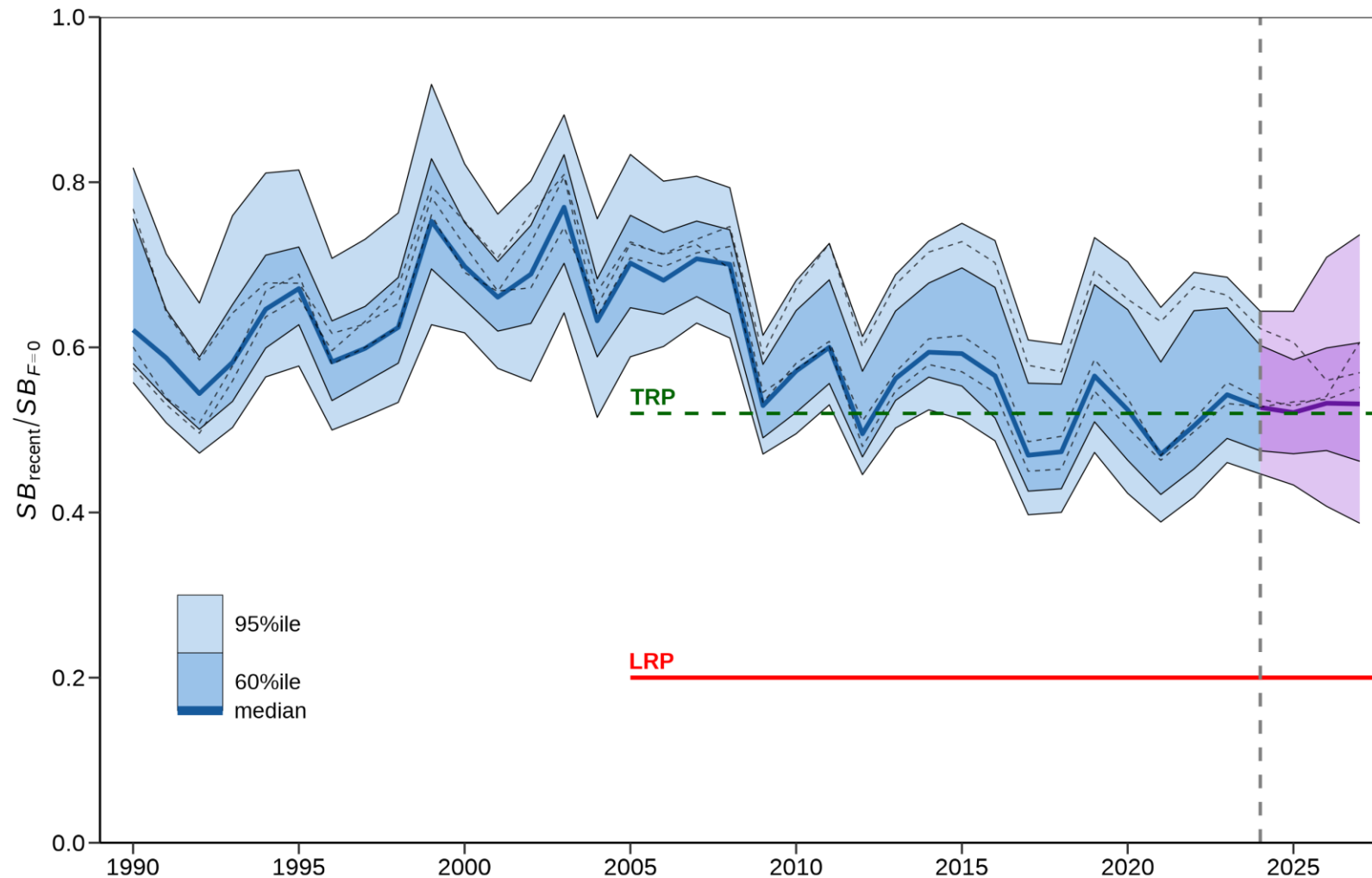


Skipjack – size distribution in catches



- Smaller fish across all gears in 2025 relative to 2024

Skipjack – short term projections



The projections indicate that median WCPFC-CA in 2027 $SB_{2024-2027}/SB_{F=0} = 0.53$

The TRP value, calculated based on the 2025 assessment, is $SB/SB_{F=0} = 0.52$

There is zero risk of overfishing or overfished status in 2027.

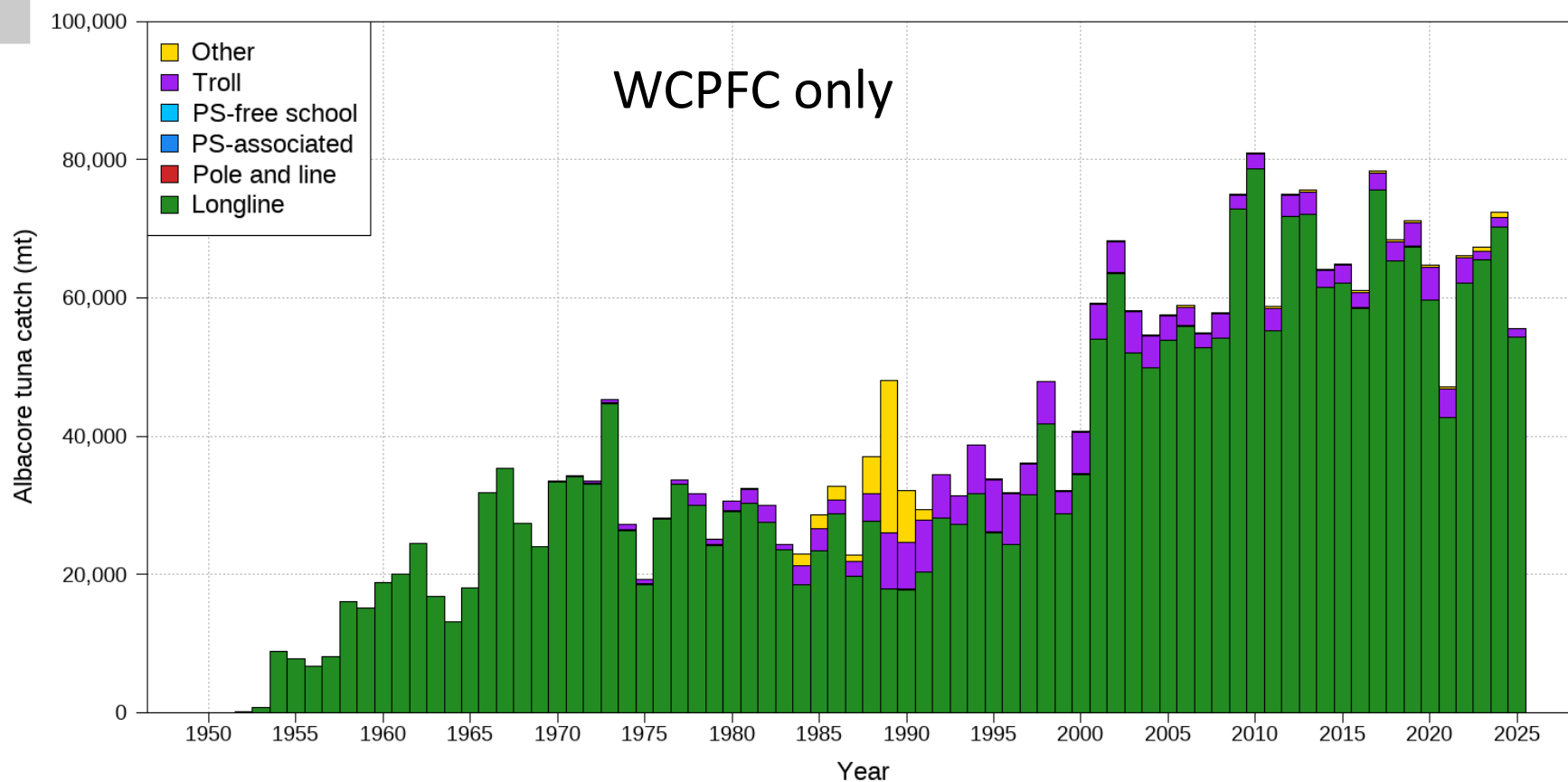
South Pacific albacore – Total catch by gear

Gear	Prop.	Change from	
		2024	2020-24
LL	98%	- 23%	- 10%
Other	2%	- 18%	- 60%
All	100%	- 23%	- 13%

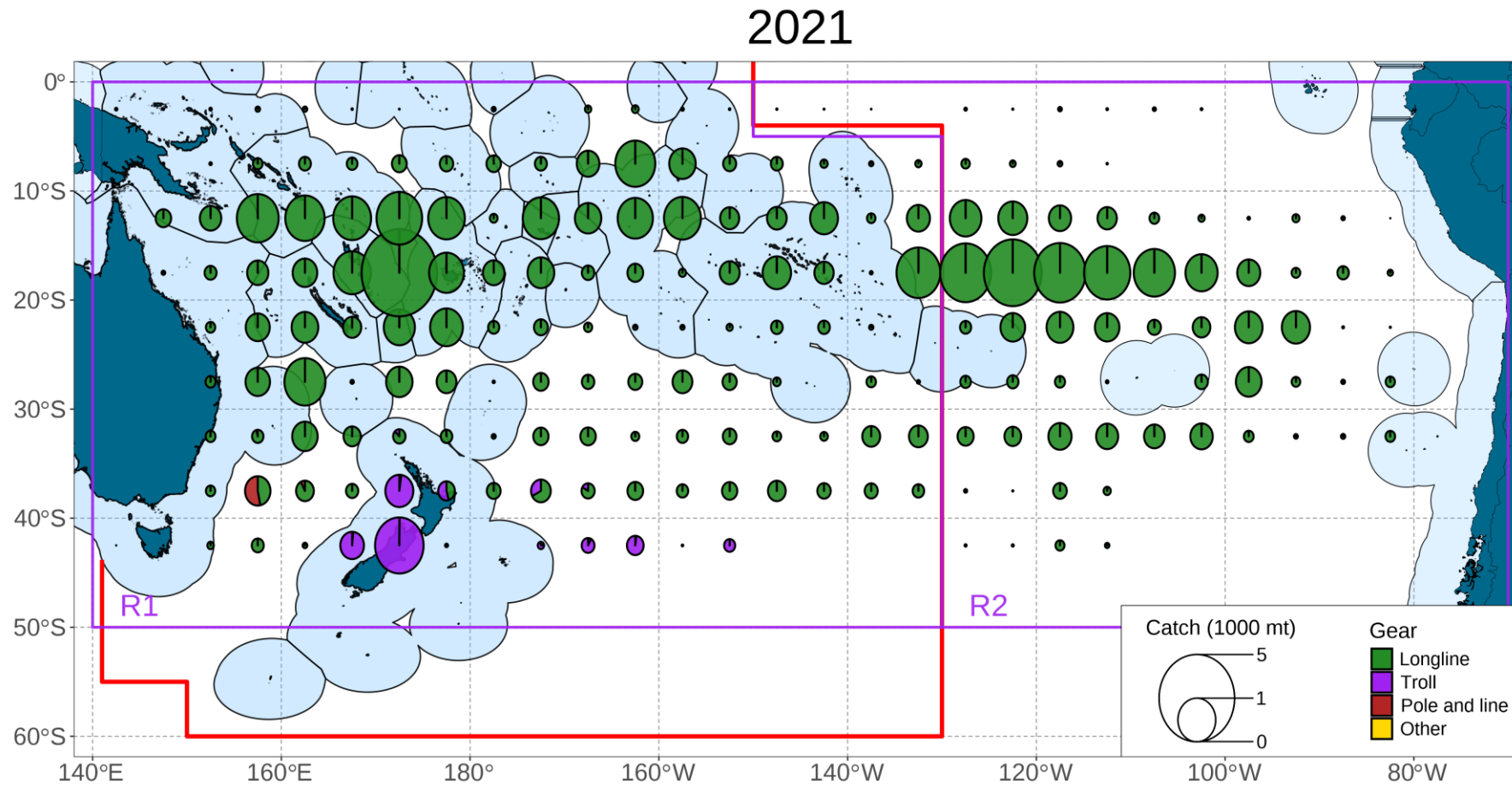
2025 catch – 55,570 t (2nd lowest in 20 yrs)

Info of note:

- These data are WCPFC only
- 2025 SPA catch lowest in 20 years, except for odd year of 2021 when EPO catch was especially high.
- Troll catch 2025 decreased 18% from 2024 and remains much lower than pre-2023

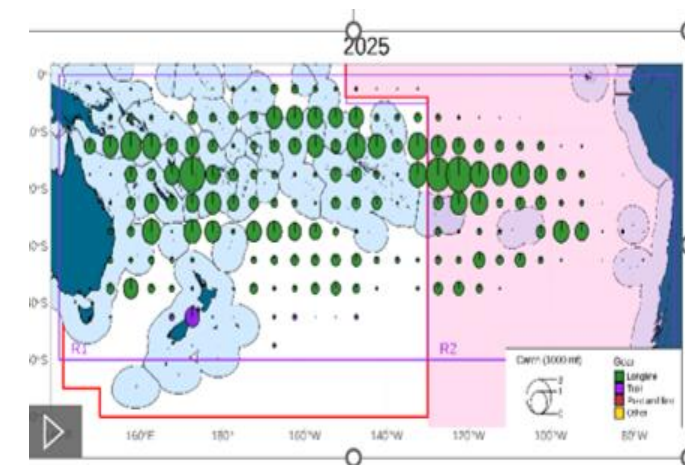


S.Pac. albacore – distribution of catch



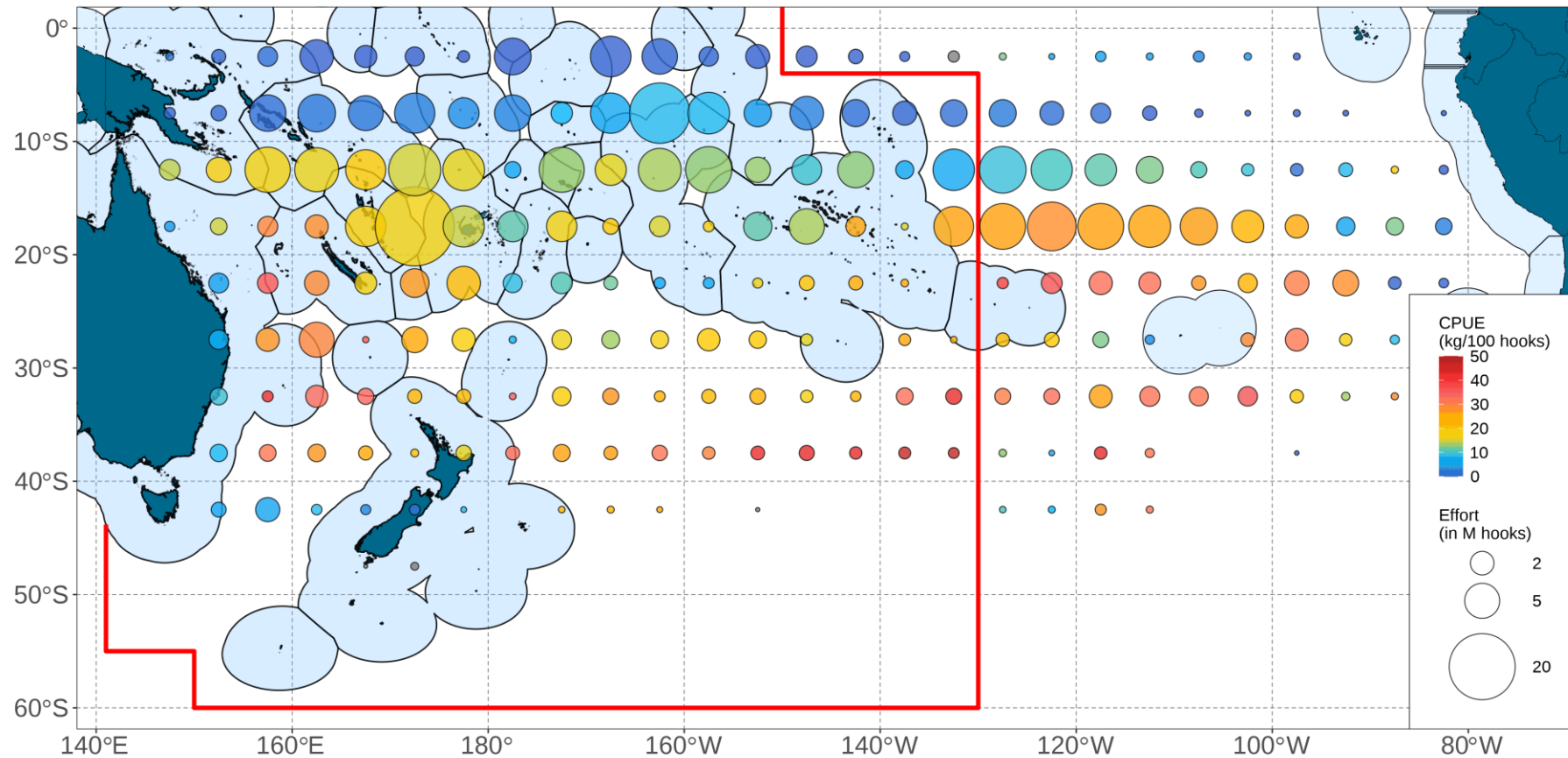
Catch map details:

- Pretty much a general decrease in SPA catches across most of the southern WCPFC-CA
- 2025 – repeats 2024



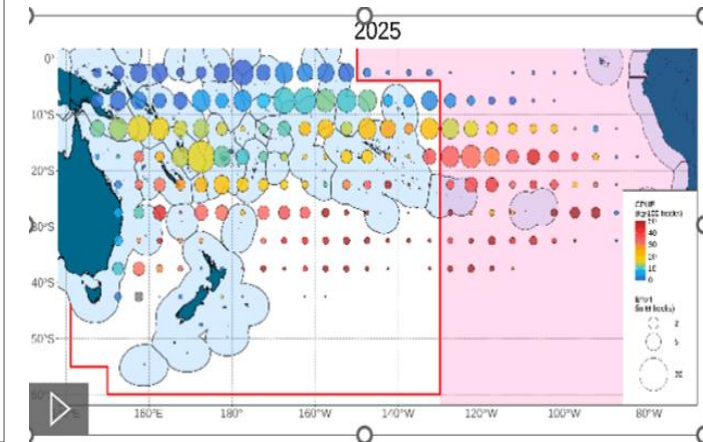
S. Pac. albacore – distribution of LL CPUE

2021



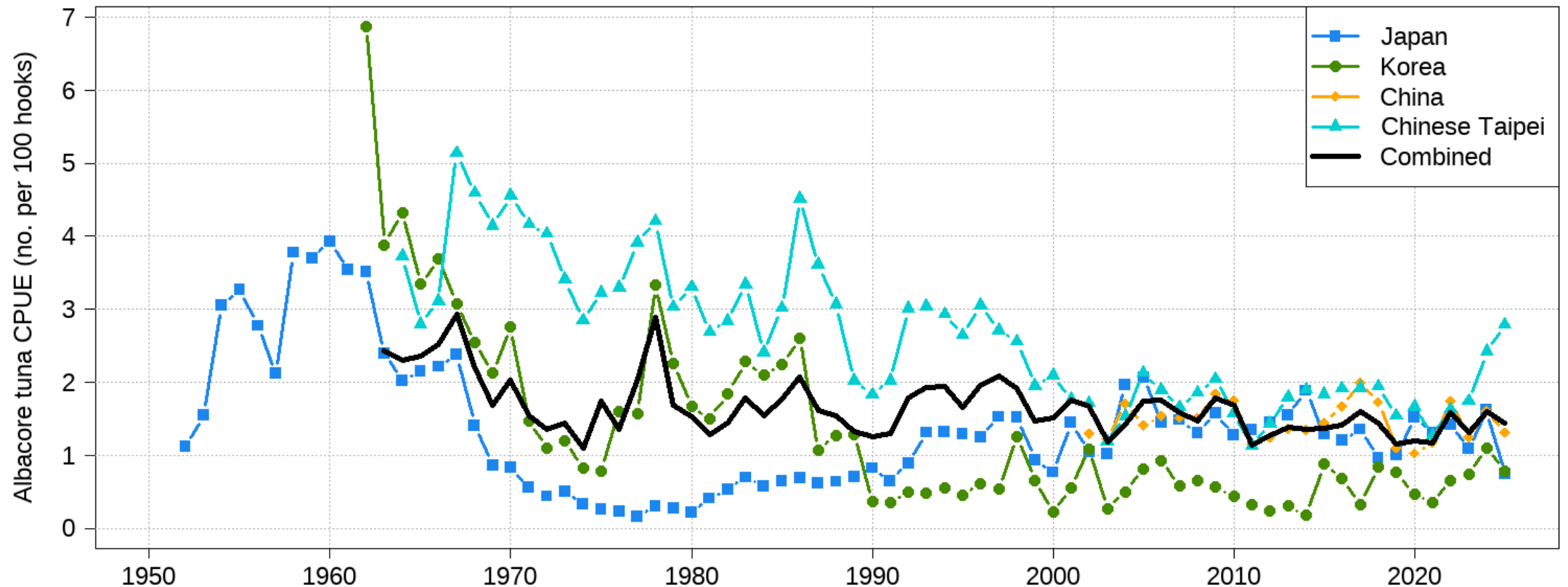
CPUE map details:

- Renewed effort, and decent CPUE, in HS region south of FP

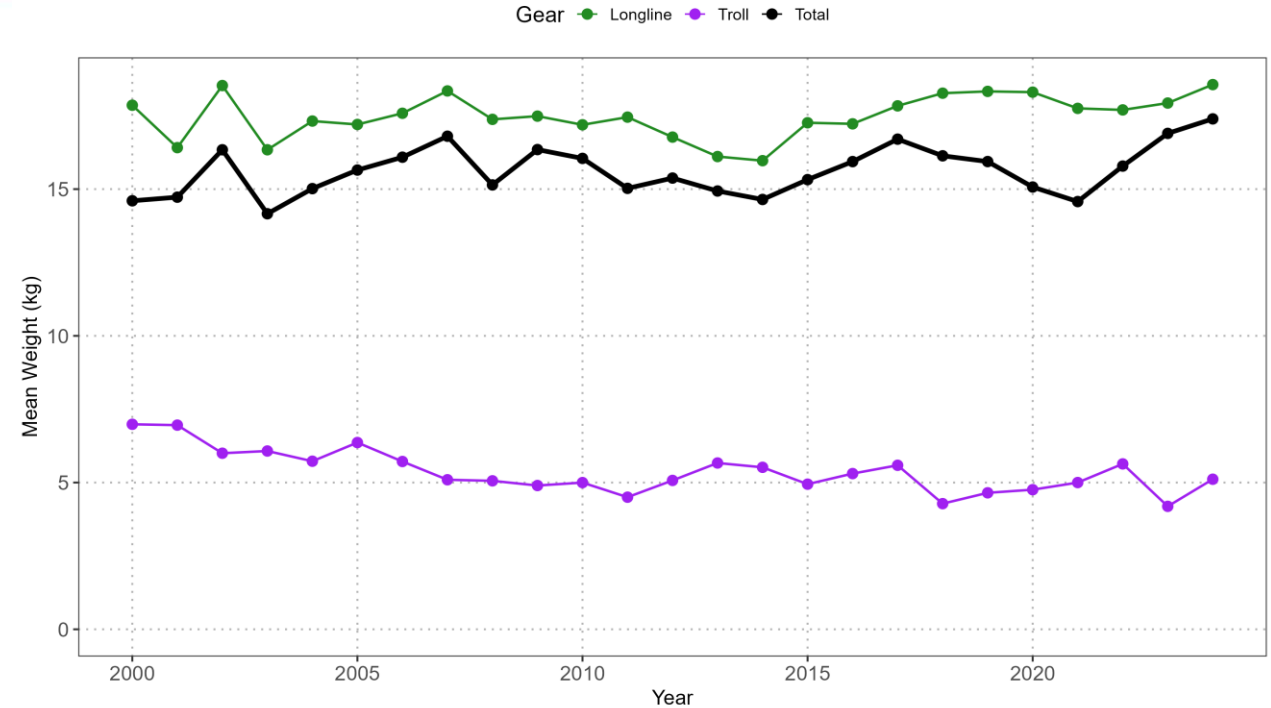
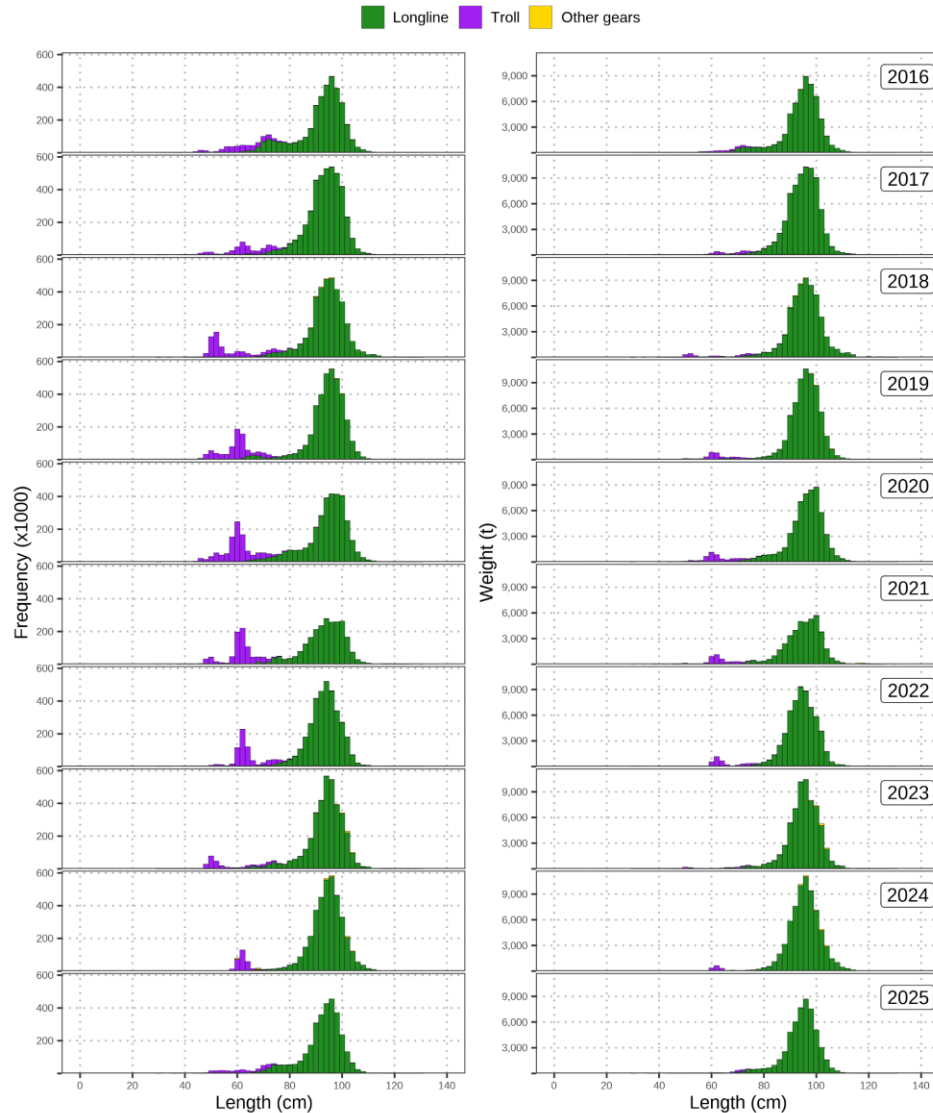


S. Pac. albacore – LL CPUE indices (nominal)

- Strong recent years increase in CPUE Chinese Taipei.
- Overall, stable in recent years, small decline 2024-2025



S.Pac. albacore – size distribution in catches

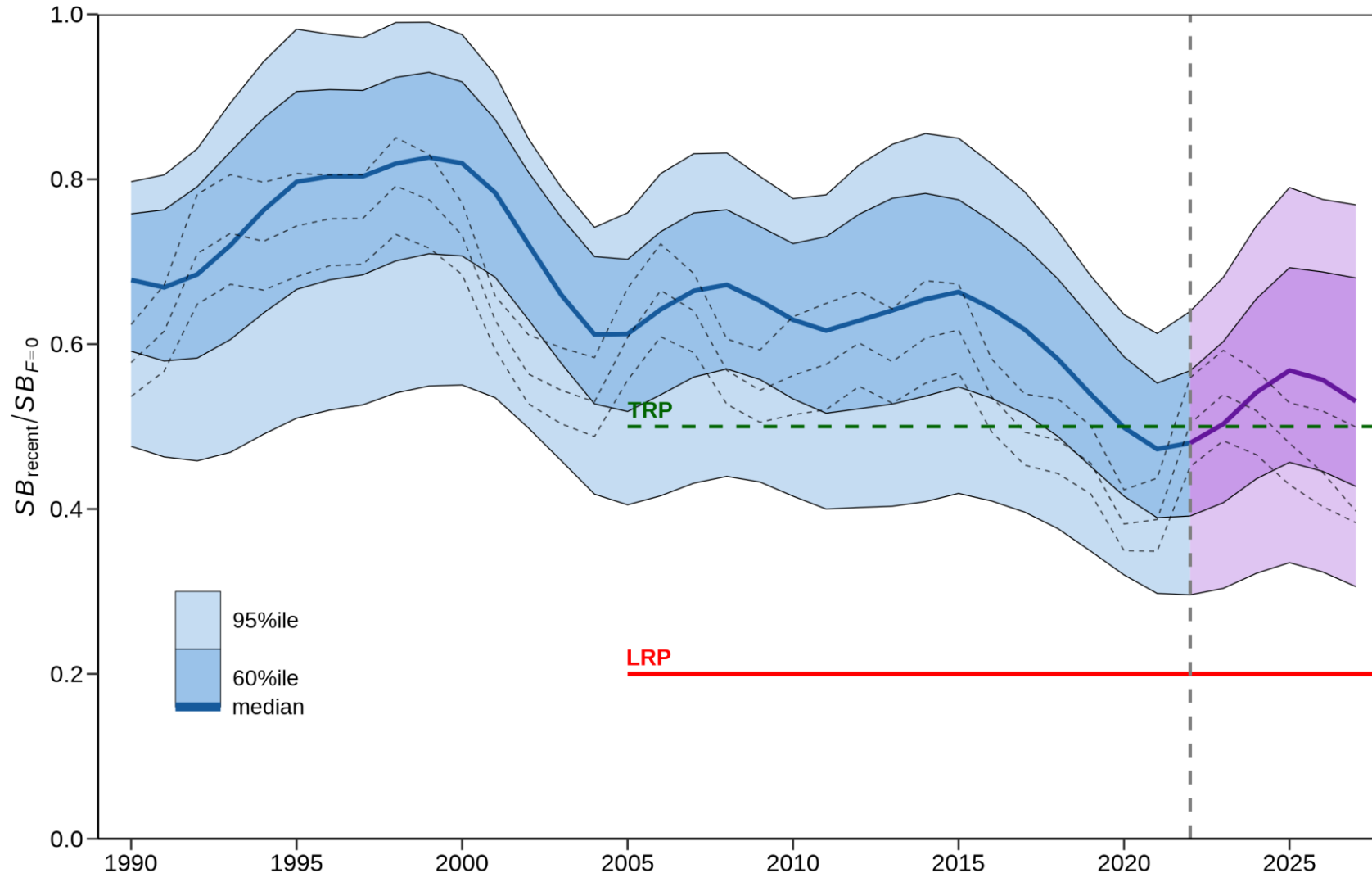


Distribution and mean size of SPA is quite stable over time. Mean weight of LL and weighted average near historical high (since 2000)

Info of note:

- Troll caught albacore much smaller in size

S.Pac. Albacore – short term projections



The projections indicate that median WCPFC-CA in 2027 $SB_{2024-2027}/SB_{F=0} = 0.53$

The TRP value, calculated based on the 2024 assessment, is $SB/SB_{F=0} = 0.50$

There is zero risk of overfishing or overfished status in 2027.

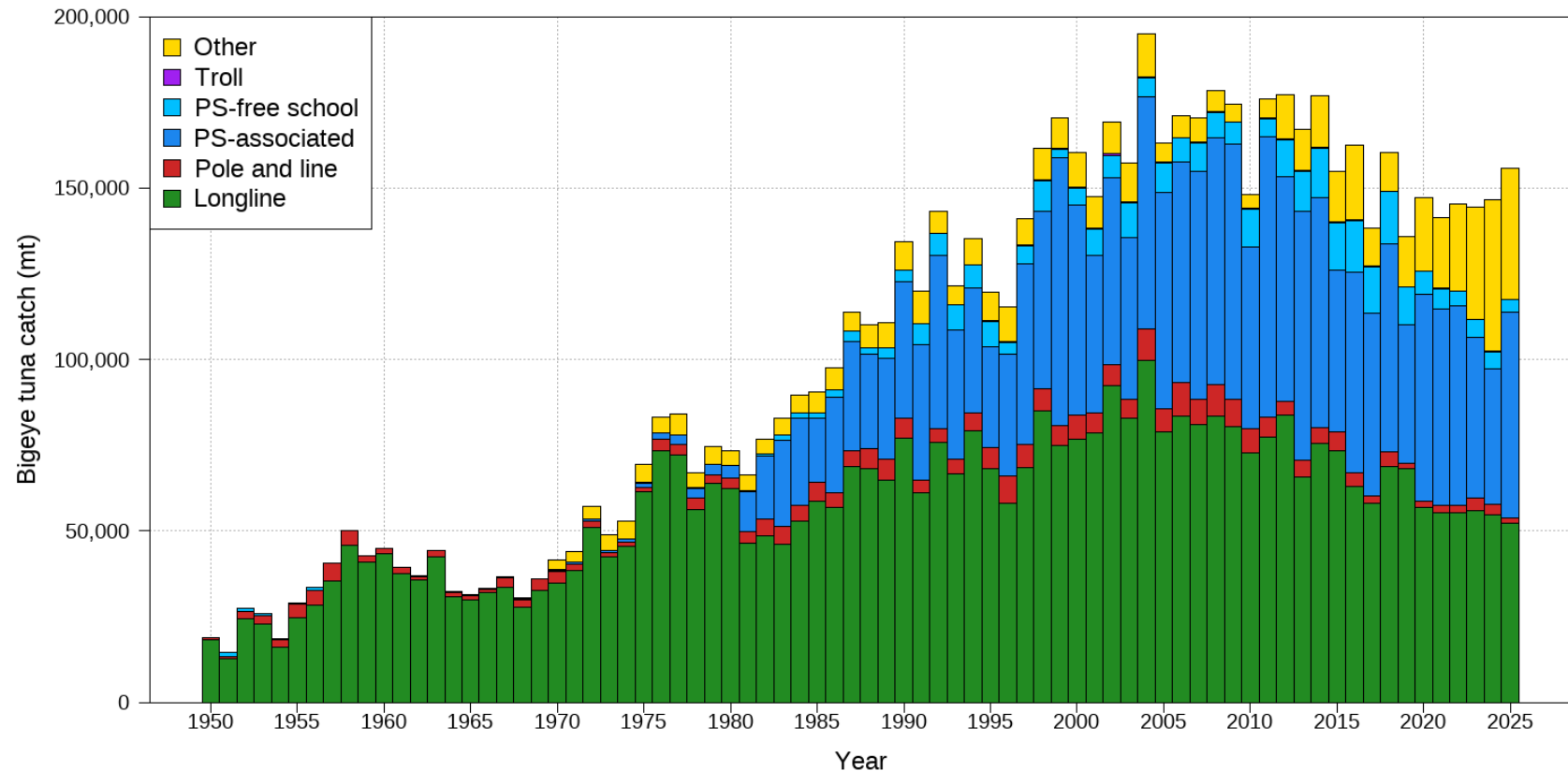
Bigeye – Total catch by gear

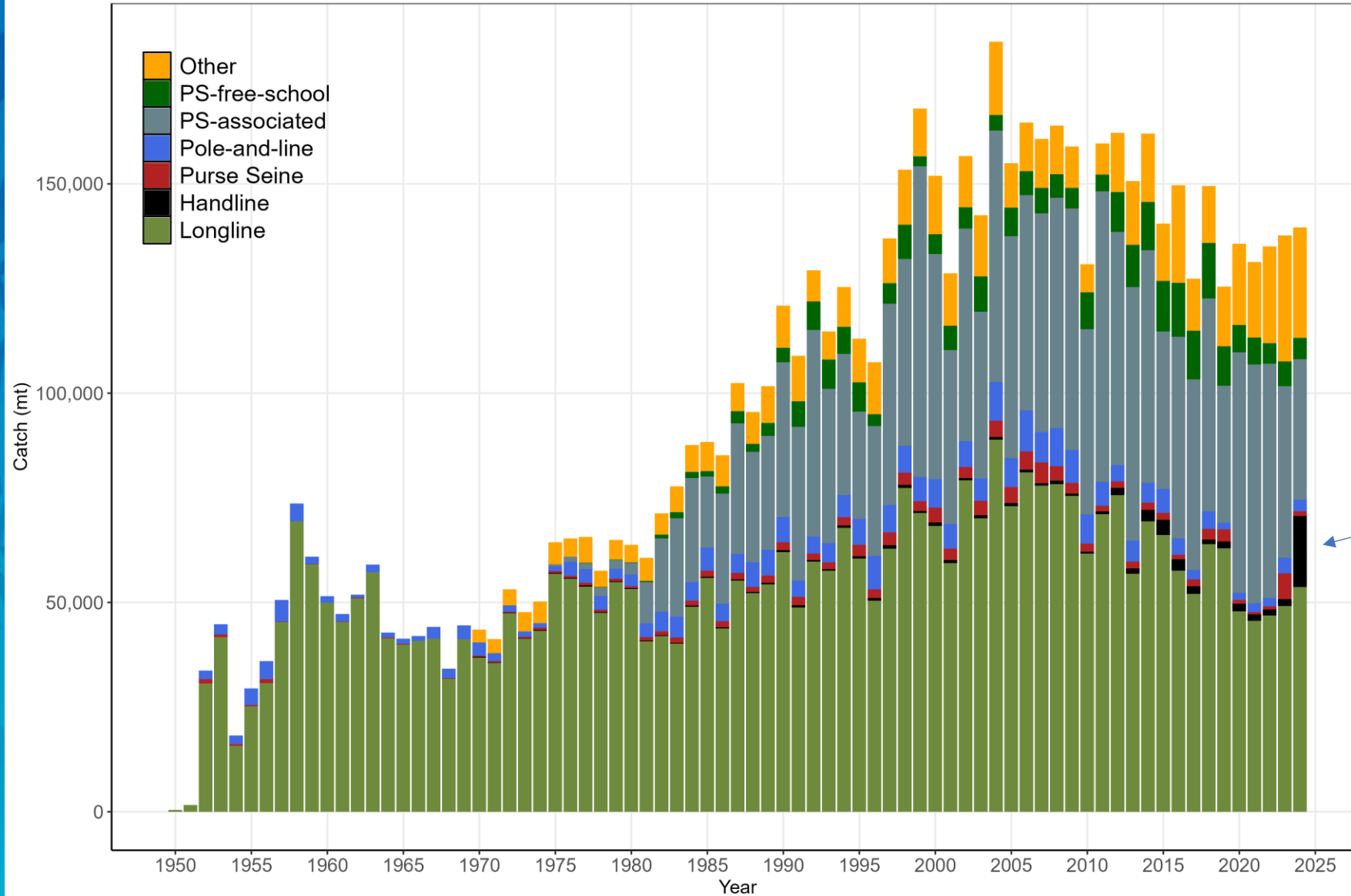
Gear	Prop.	Change from	
		2023	2019-23
PS	41%	+ 43%	+ 10%
LL	33%	- 5%	- 6%
PL	1%	- 38%	- 28%
Other	25%	+ 13%	+ 33%
All	100%	+ 6%	+ 7%

2025 catch – 155,864 t (highest since 2018)

Info of note:

- 2025 increase in PS BET catch reversal of decadal trend
- 'Other' gear catch proportion continues to increase

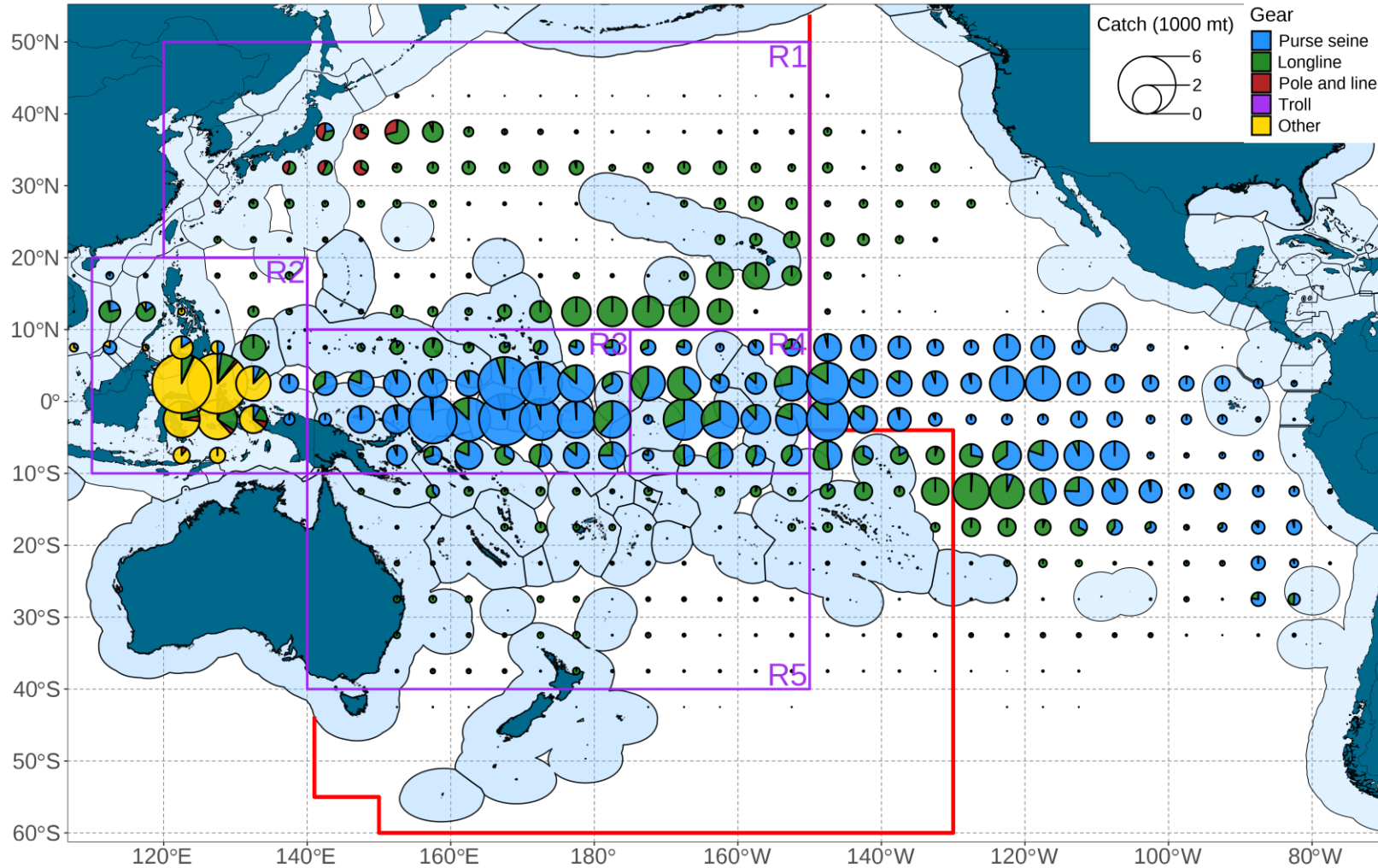




To 2024 with handline

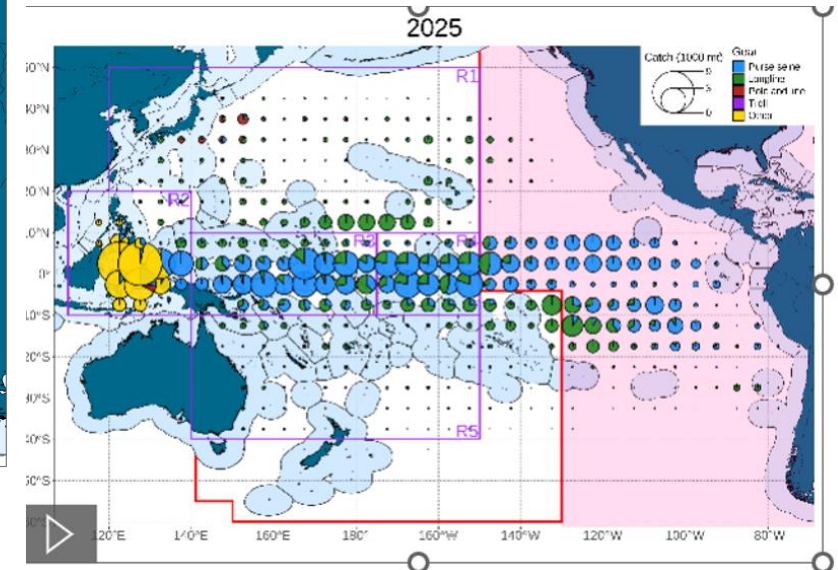
Bigeye – distribution of catch

2021



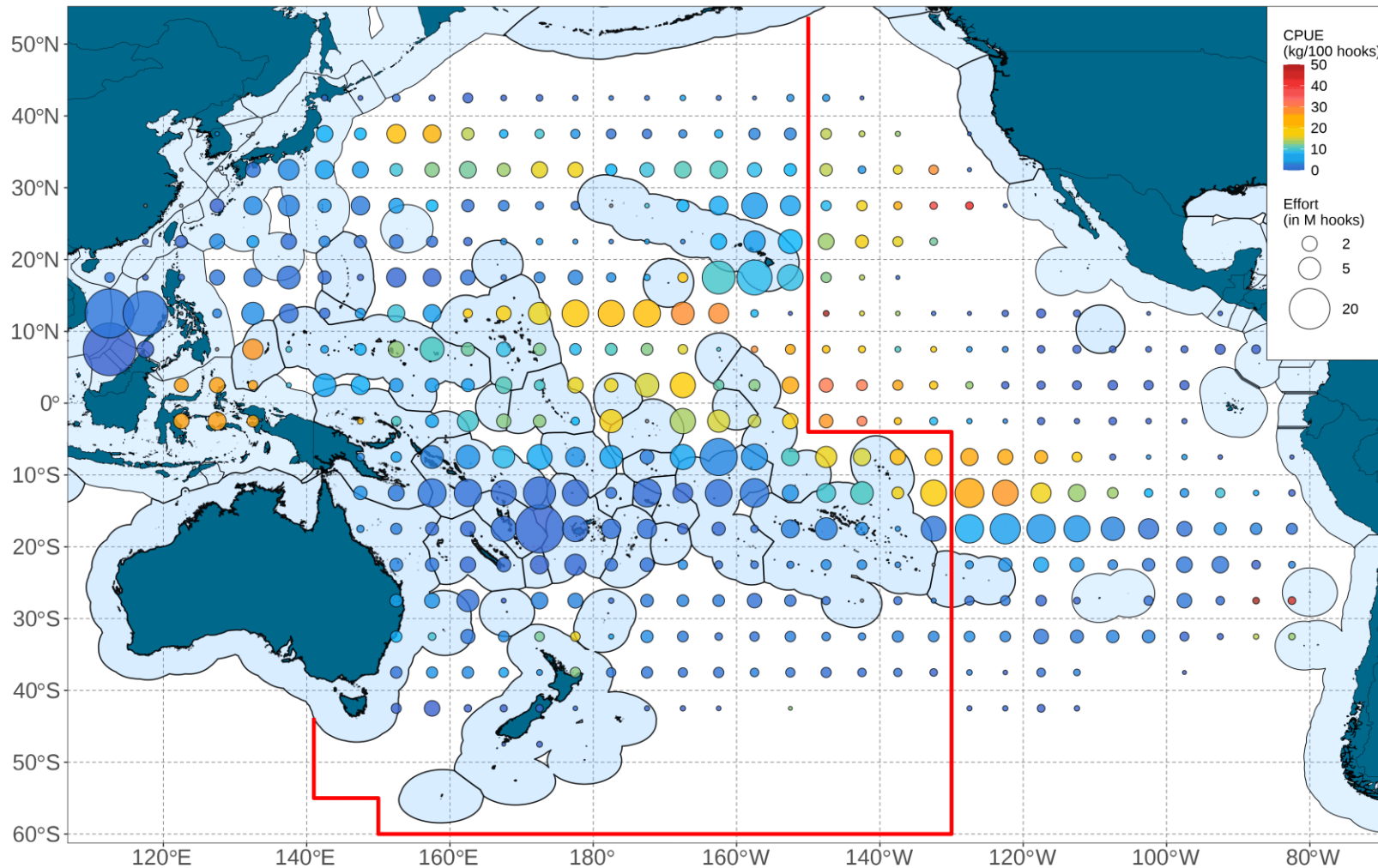
Catch map details:

- Increasing amount of catch in Other fisheries (ID/VN/PH)
- Jump in PS BET pretty much seen across entire equatorial band
- Pole and line proportion continues to decline



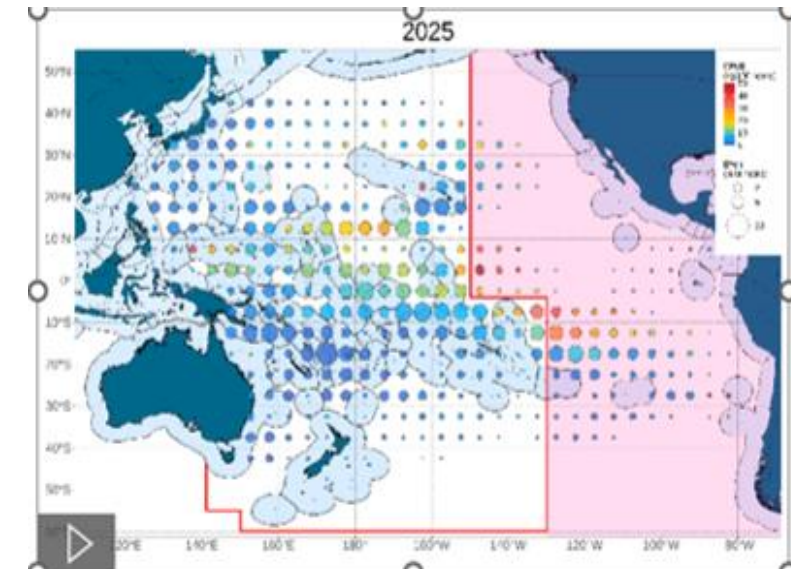
Bigeye – distribution of LL CPUE

2021



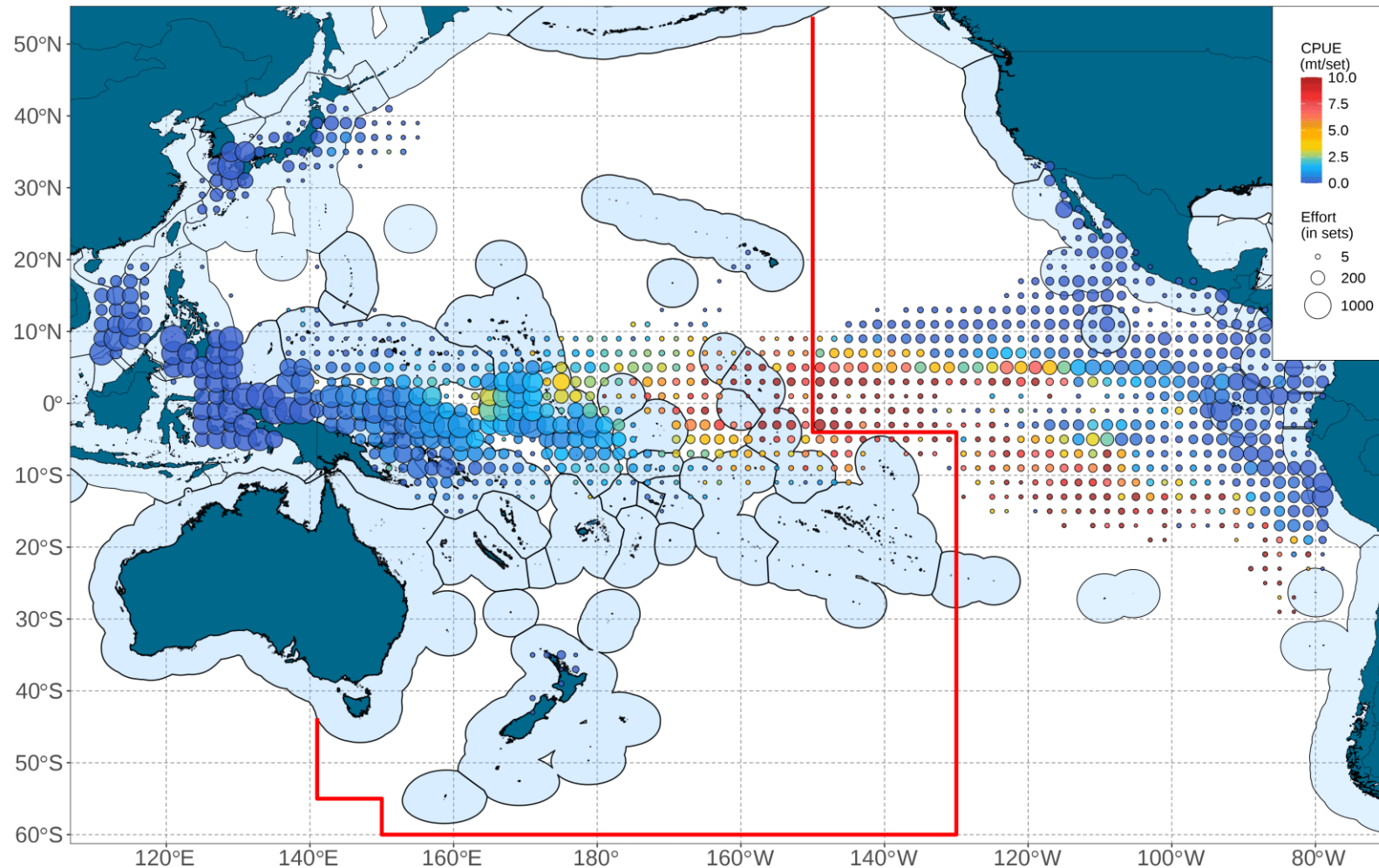
CPUE map details:

- CPUE down across the entire equatorial zone (of the WCPFC-CA)



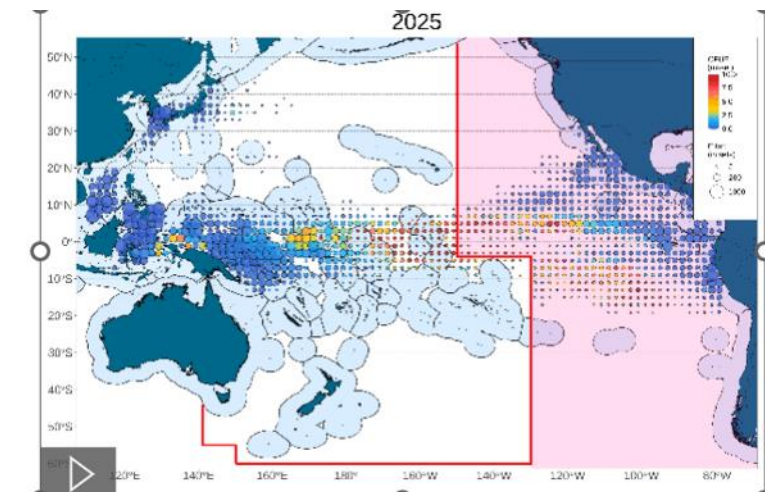
Bigeye – distribution of PS CPUE

2021



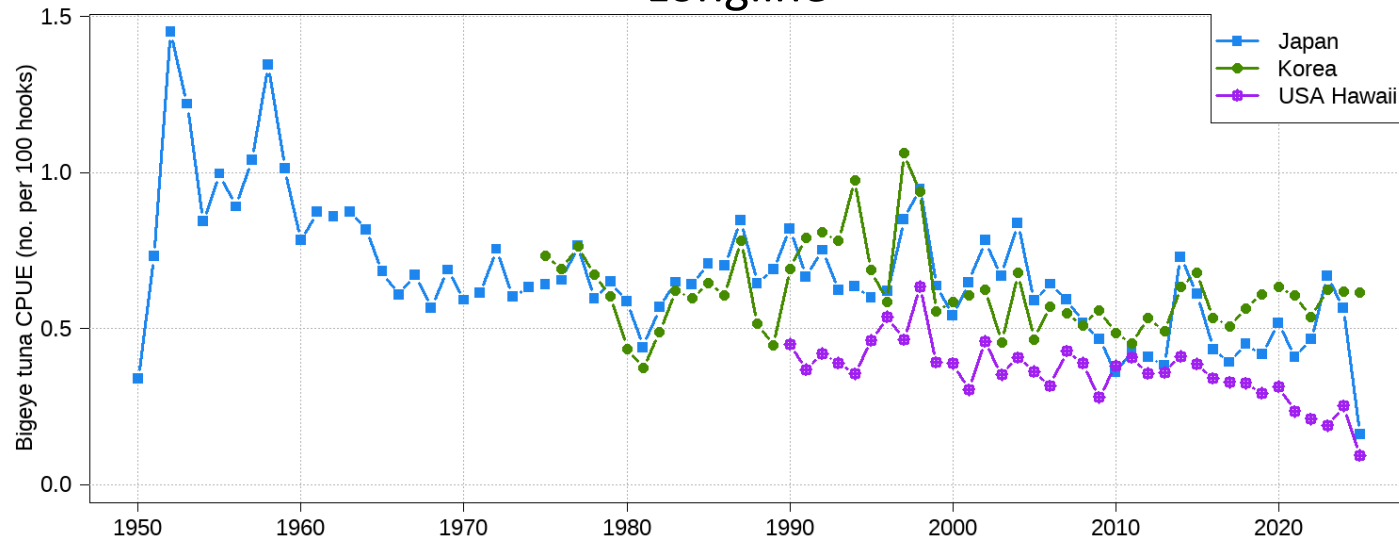
CPUE map details:

- Region between 155°W and 180° have been a bigeye “hotspot” last few years (HS area between KI-PX and KI-LI)
- Increase fishing in that area in 2025



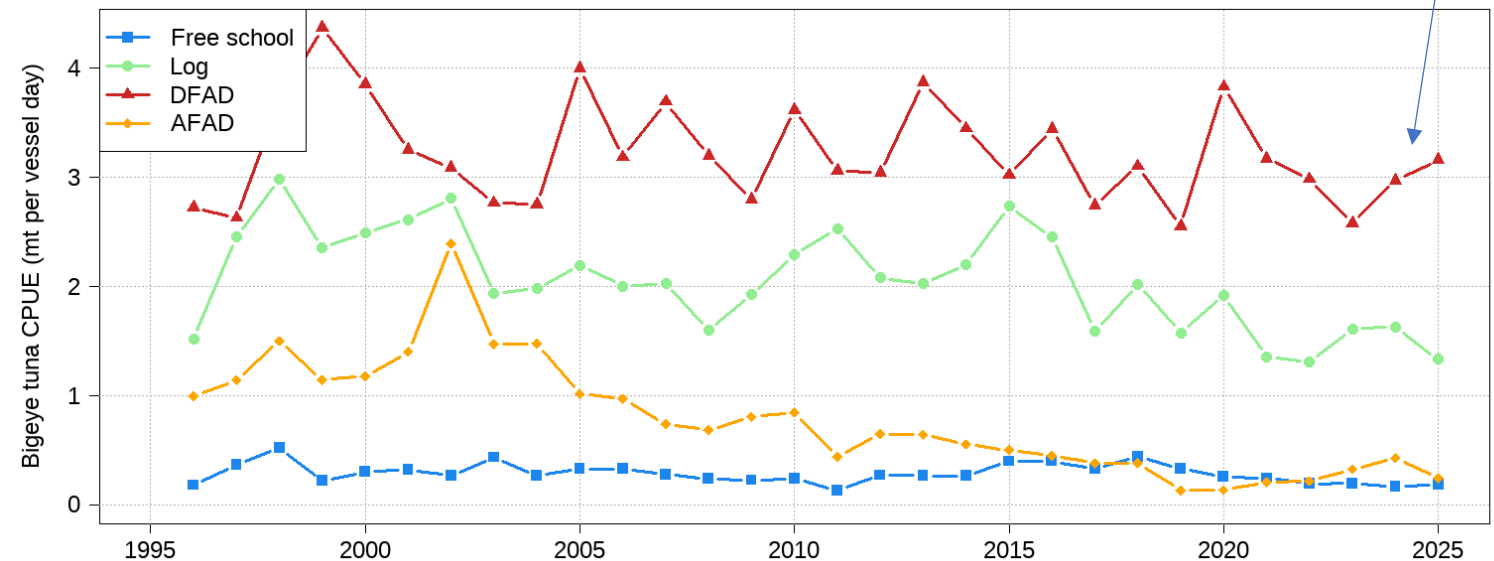
Bigeye – CPUE indices (nominal)

Longline



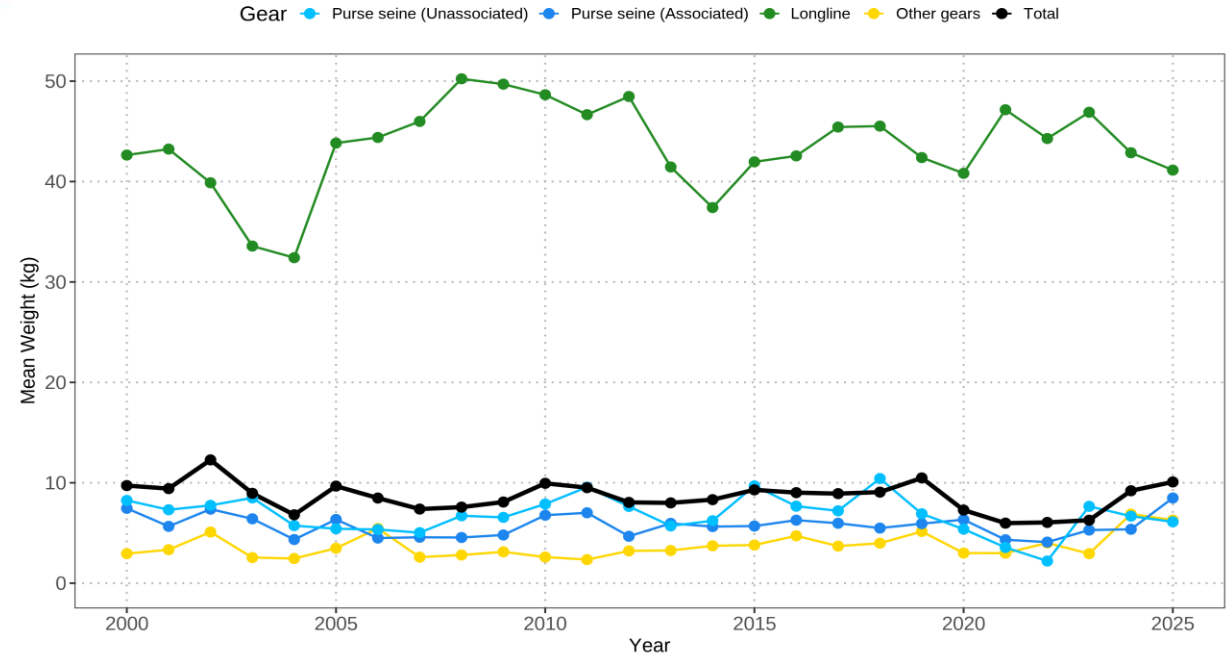
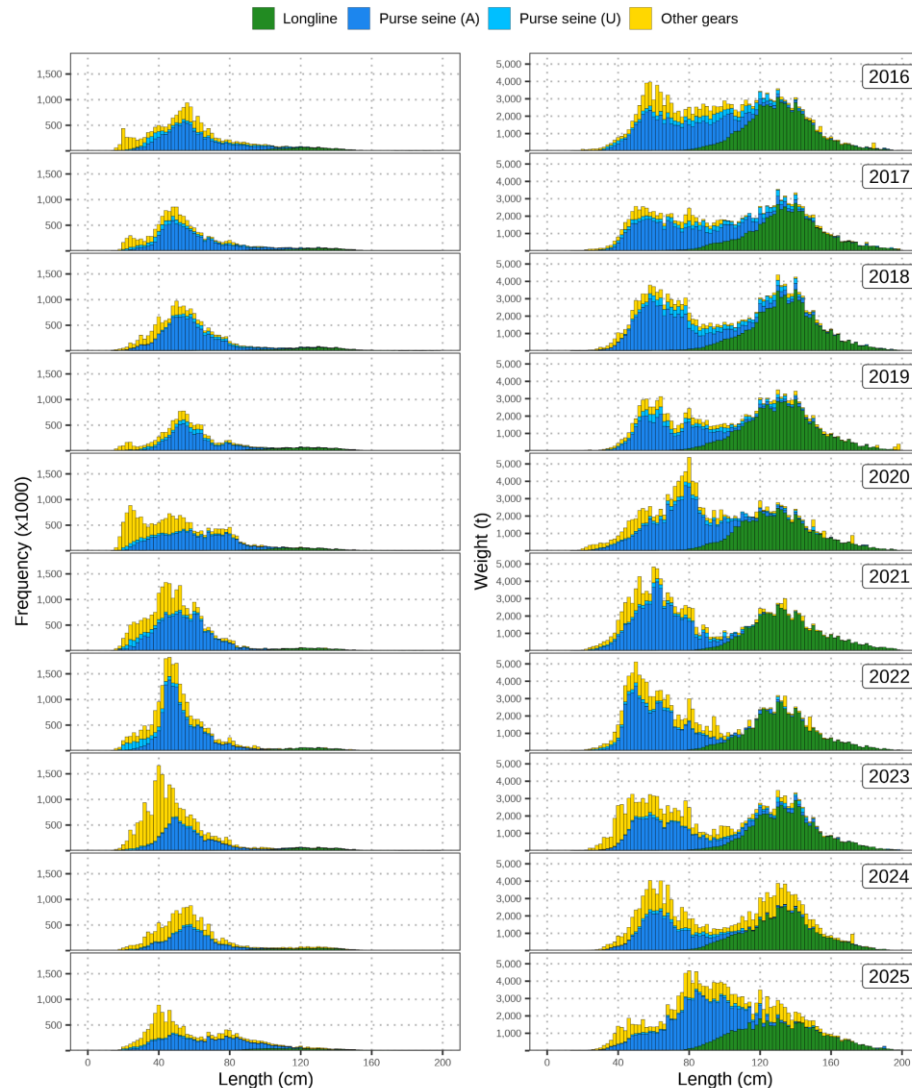
Korea stable, but Japan and USA
Hawai'i decrease in 2025

Purse seine



dFAD CPUE slight increase

Bigeye – size distribution in catches



Info of note:

- Large numbers of small fish taken in IN/PH and FAD PS sets
- By weight, relatively similar amounts of small/large fish comprise catch
- Not much trend in mean weight of bigeye in any of the gears; note the very tiny mean weight of 'other' gear fish
- Associated bigeye about half the mean weight of Unassociated bigeye.

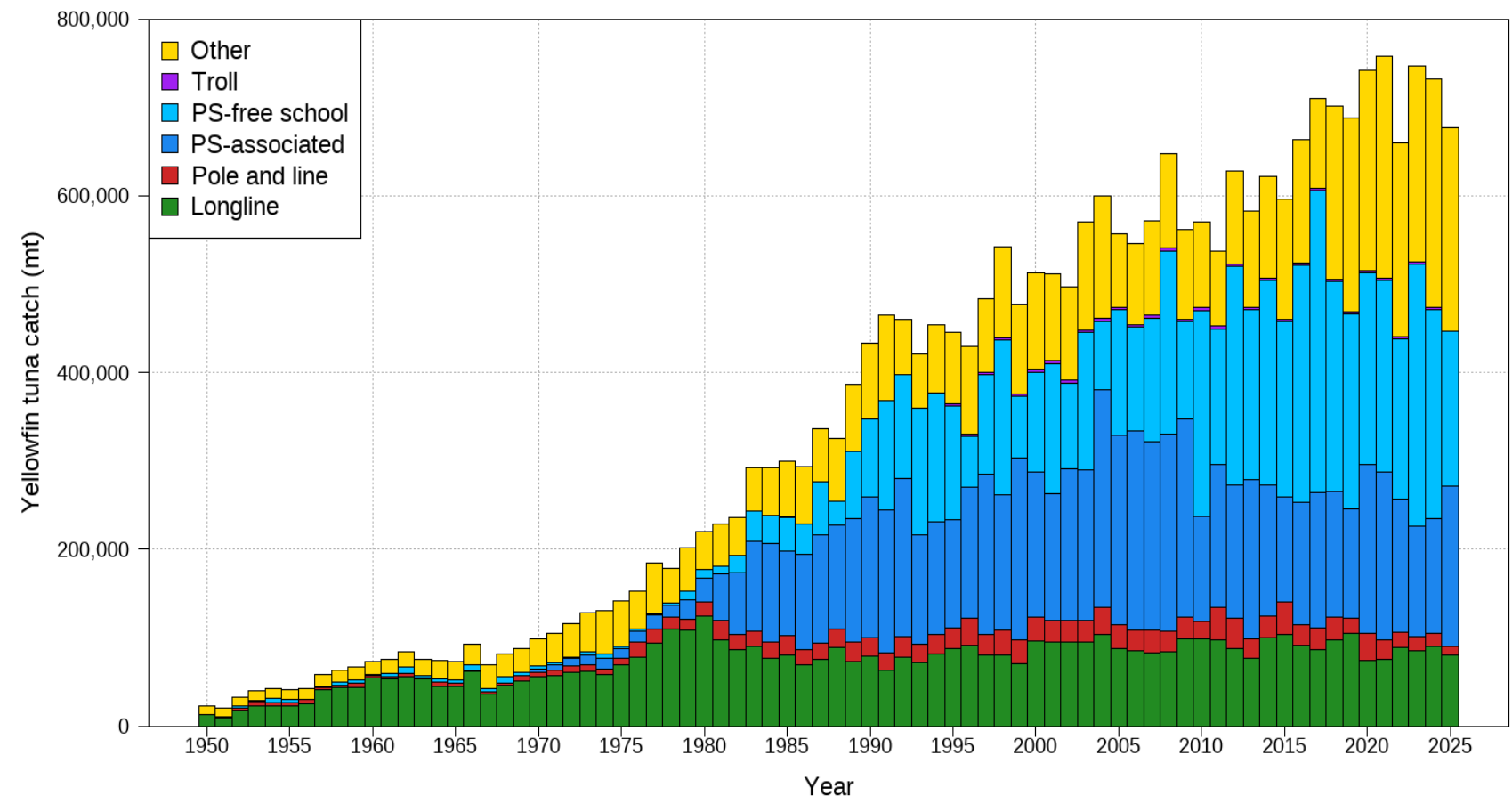
Bigeye – short term projections

A new assessment has been undertaken in 2026, and a final grid is still to be selected by SC, no projections are presented for bigeye here

Yellowfin – Total catch by gear

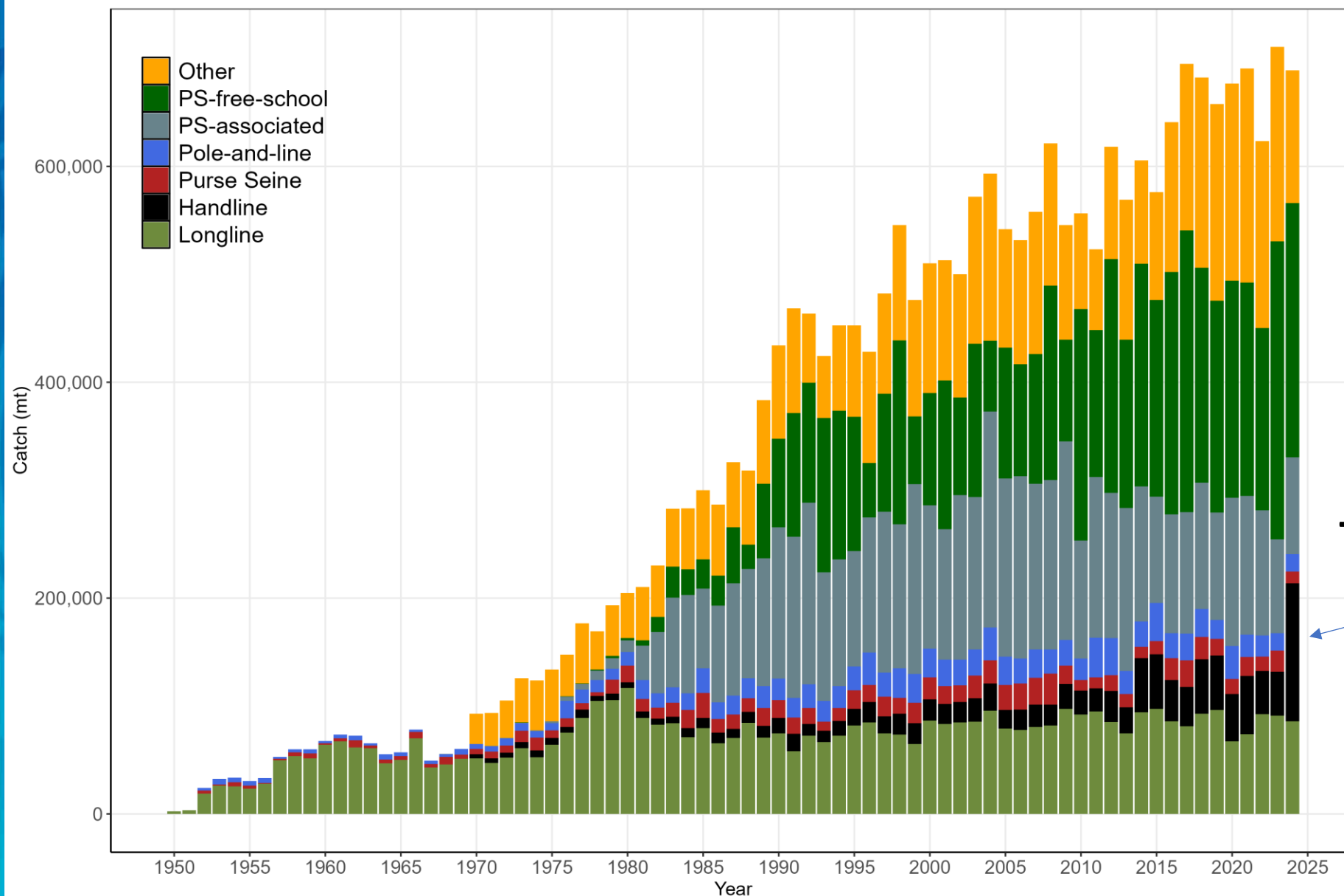
Gear	Prop.	Change from 2023 2019-23	
PS	53%	- 3%	- 8%
LL	12%	- 10%	- 2%
PL	1%	- 37%	- 53%
Other	34%	- 11%	- 2%
All	100%	- 8%	- 7%

2025 catch – 677,123t (now a steady fishery)



Info of note:

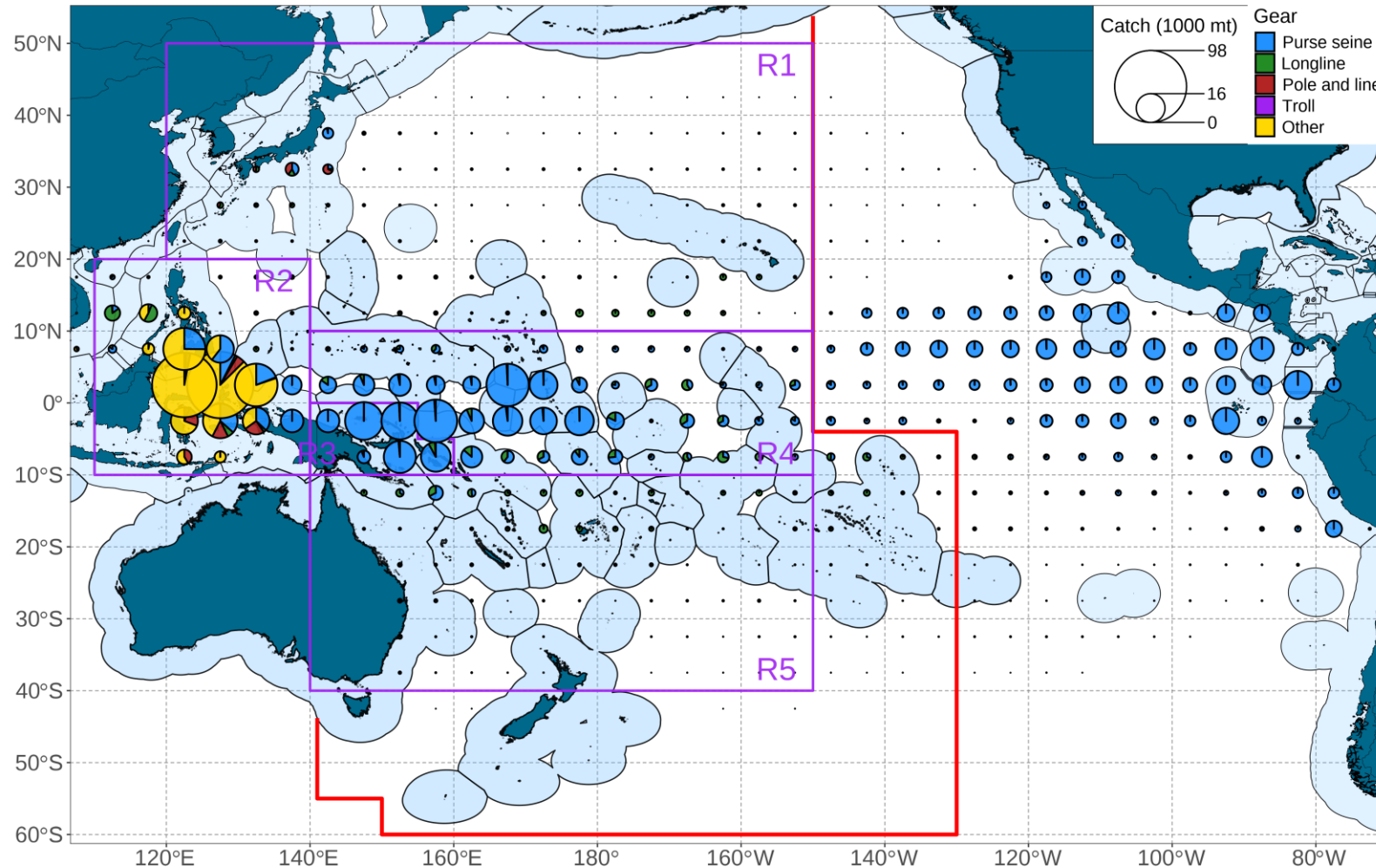
- After decades of increase, recent stability/decline in catches
- Proportion taken by purse seine was lowest since 1997
- Proportion taken by 'other' gears highest on record



To 2024 with handline

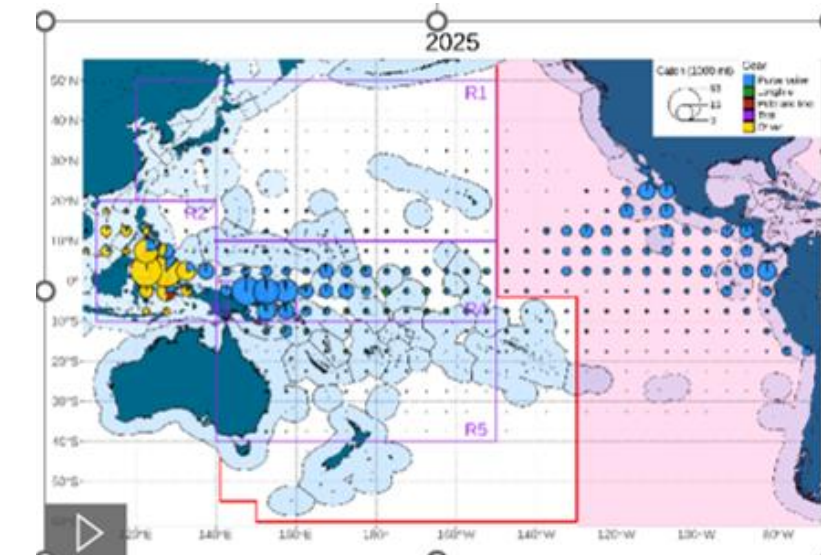
Yellowfin – distribution of catch

2021



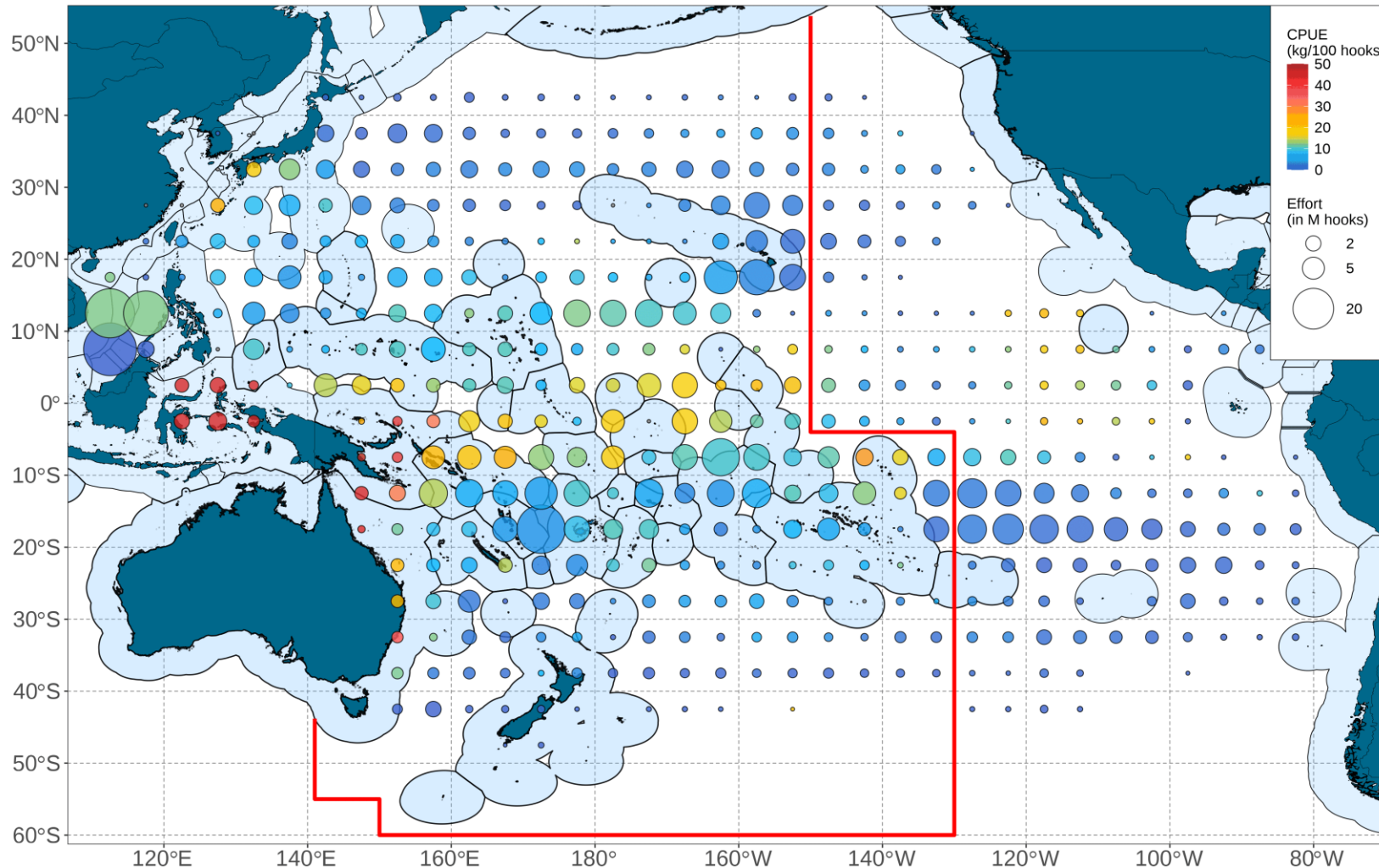
Catch map details:

- Note decrease in YFT catch in assessment Region 4 (170°W to 150°W, around the equator)



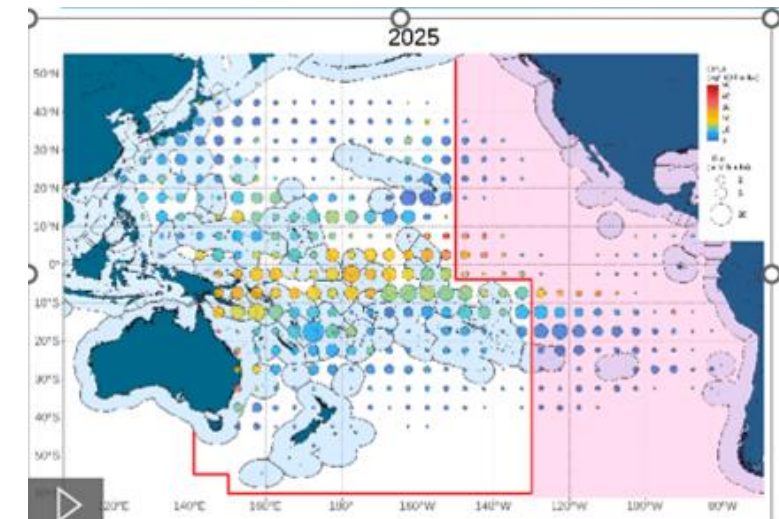
Yellowfin – distribution of LL CPUE

2021



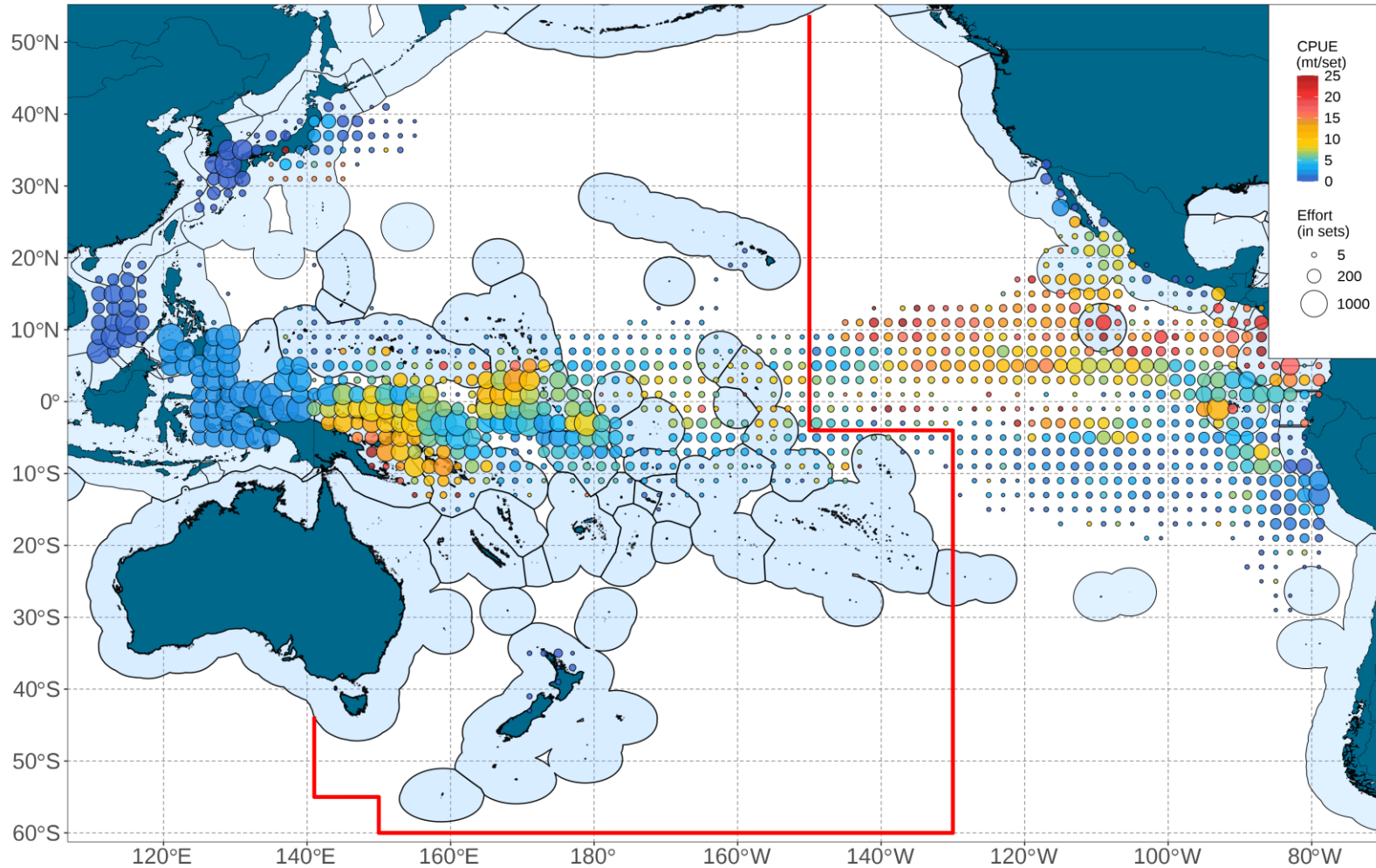
CPUE map details:

- High CPUE region mostly just off PNG and Solomons



Yellowfin – distribution of PS CPUE

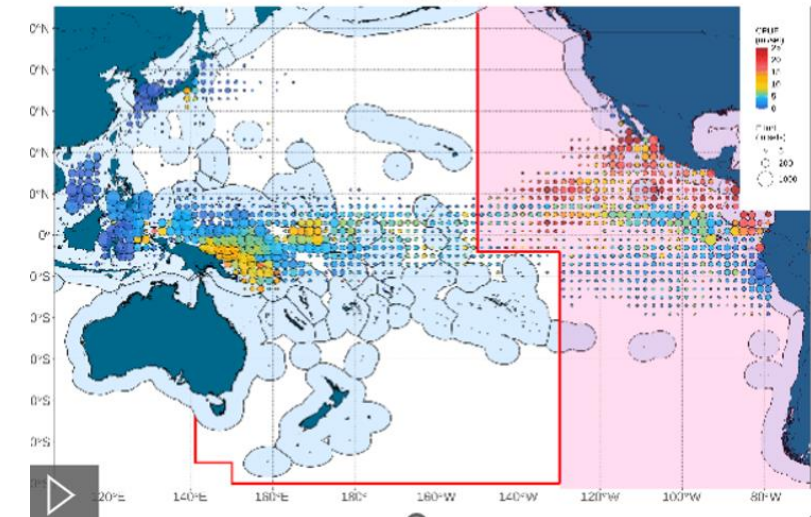
2021



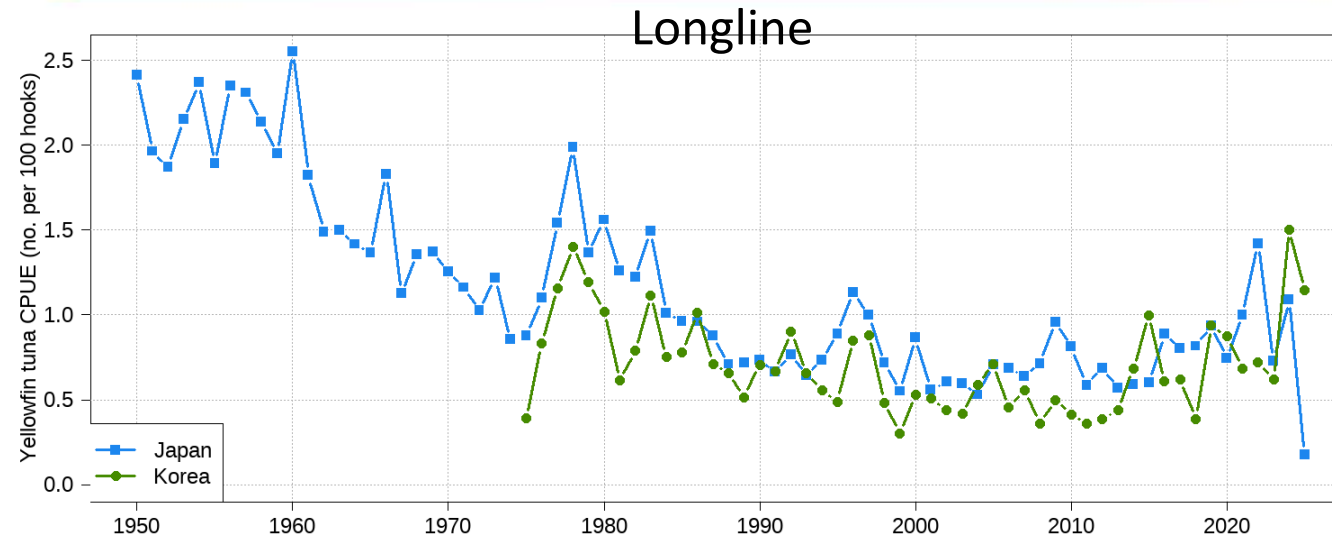
CPUE map details:

- Fragmented locations of high CPUE, mostly now concentrated to west and in HS pocket between TV and KI

2025

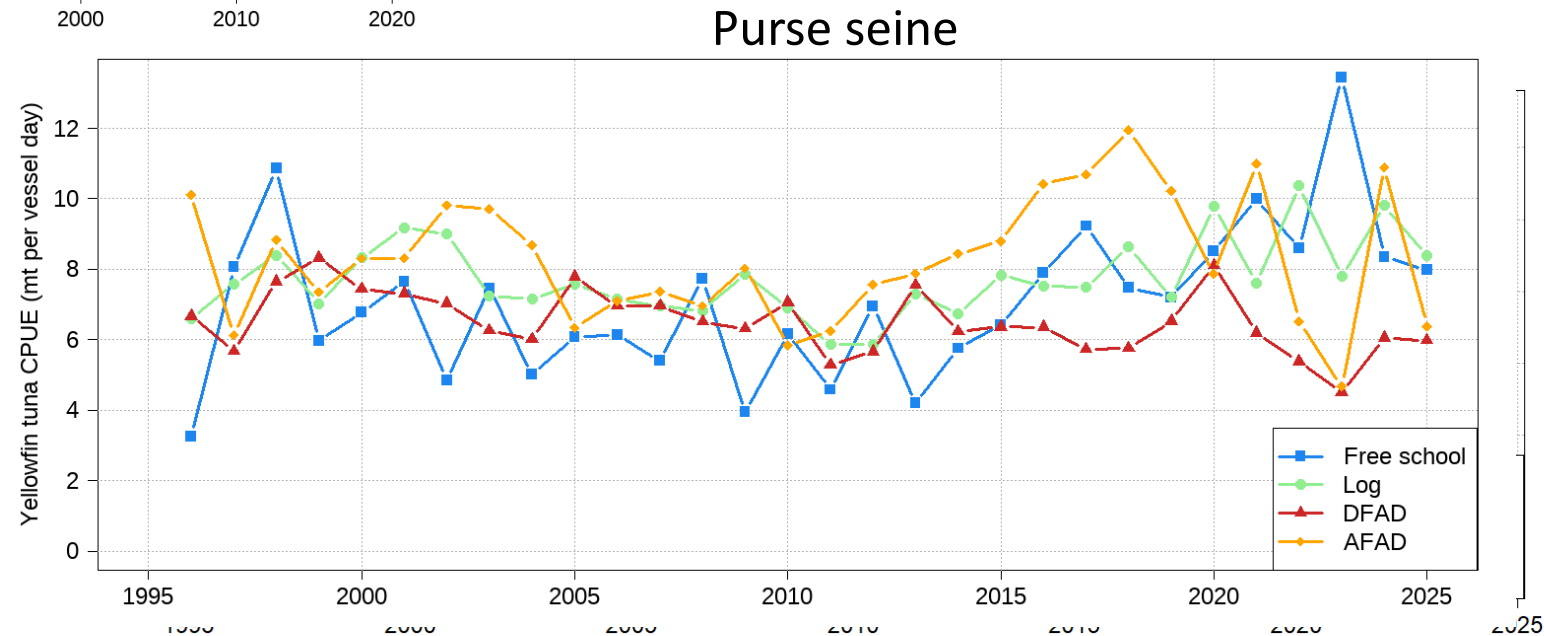


Yellowfin – CPUE indices (nominal)

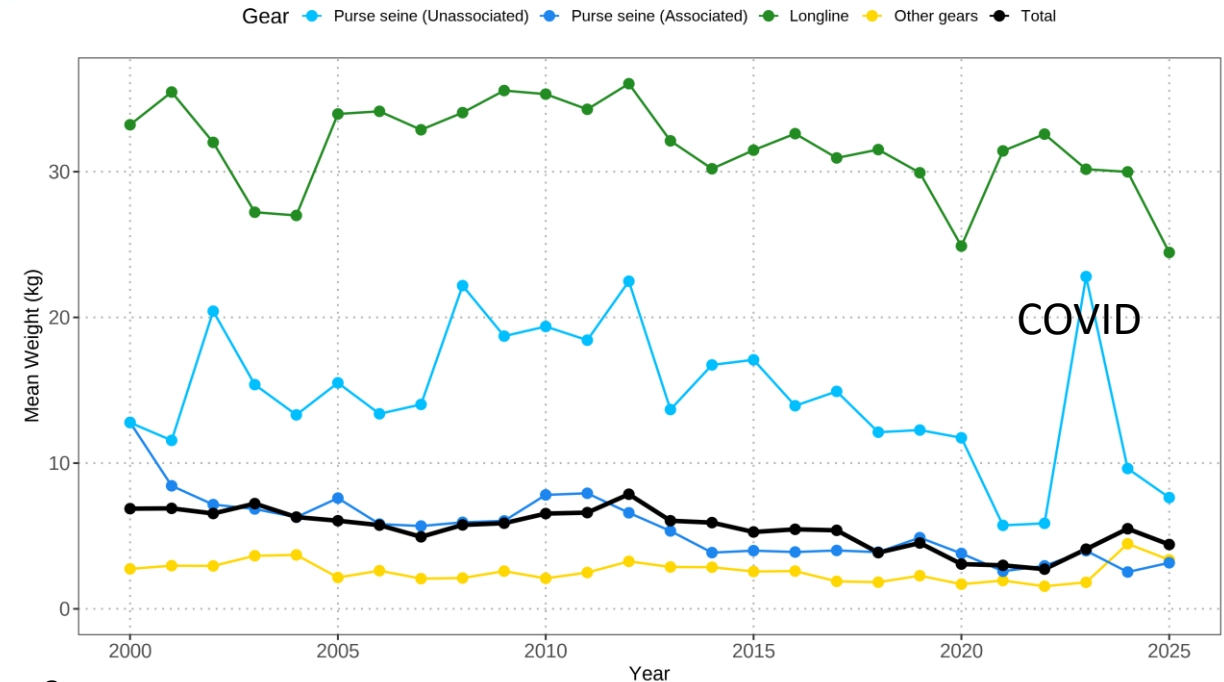
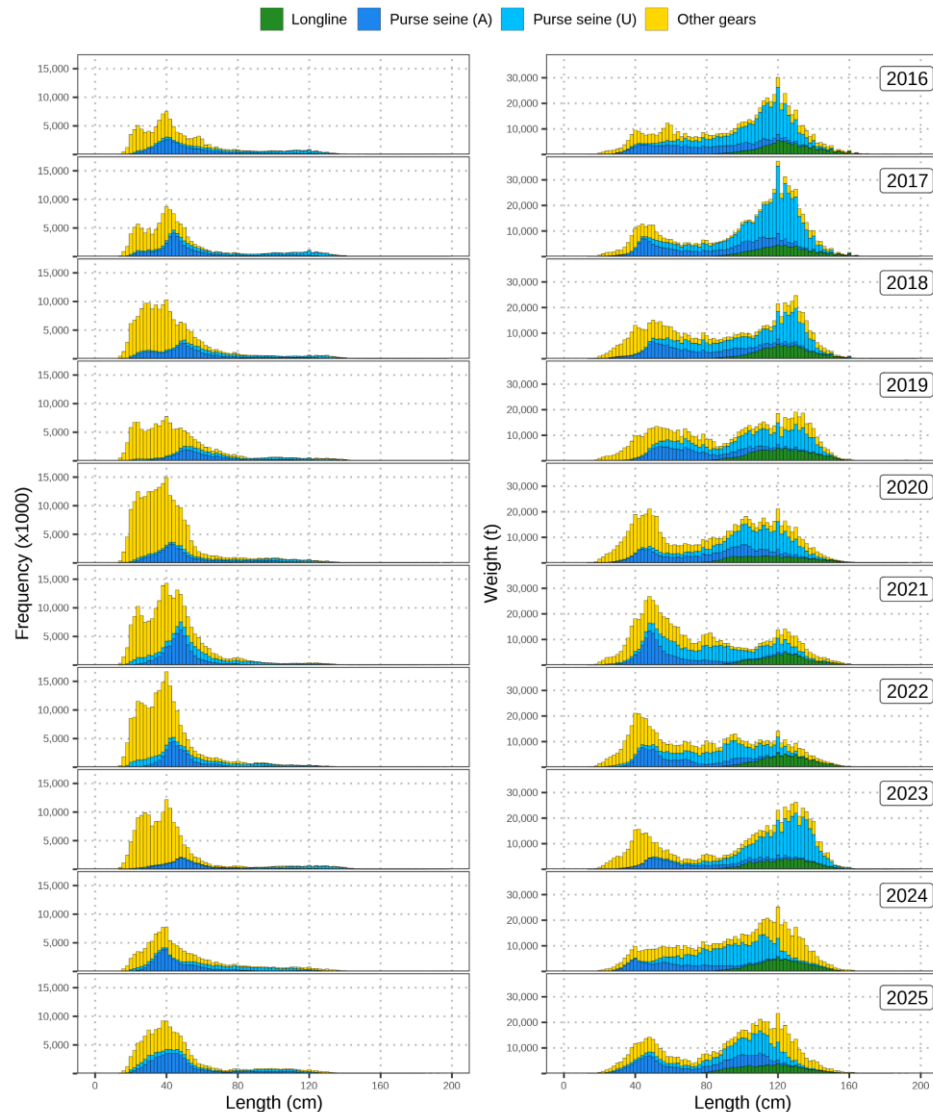


Large 2025 decrease for both the Japanese and Korean fleets

Mostly decreases in 2025



Yellowfin – size distribution in catches



Info of note:

- Large numbers of small fish taken in IN/PH and FAD PS sets
- By weight, relatively similar amounts of small/large fish comprise catch

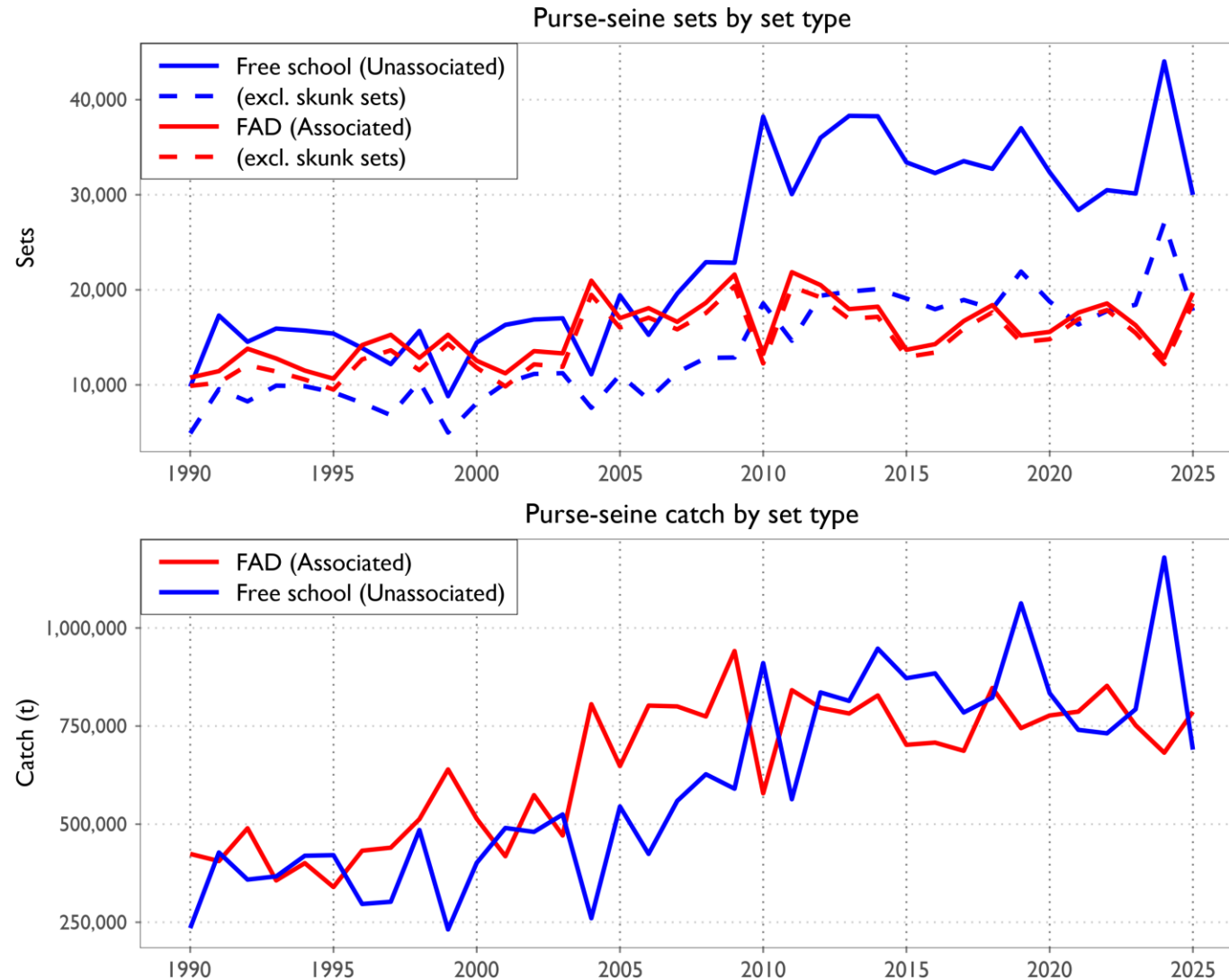
Similar to skipjack, the abnormally low mean weight in 2021-2022 of Free-school (Unassociated) yellowfin may be due to misreporting of set type.

However, note the long-term decline in mean weight of free school yellowfin.

Yellowfin – short term projections

A new assessment has been undertaken in 2026, and a final grid is still to be selected by SC, no projections are presented for yellowfin here

Special note on change in 2025 PS fishing



Unassociated (Free school) — 2024 vs 2025						
Year	Days	Sets	BET (mt)	YFT (mt)	SKJ (mt)	Tuna (mt)
2024	27,108	44,029	4,456	225,972	949,170	1,179,599
2025	20,825	29,984	3,875	166,339	519,706	689,921
% Change	-23%	-32%	-13%	-26%	-45%	-42%
Associated (FAD) — 2024 vs 2025						
Year	Days	Sets	BET (mt)	YFT (mt)	SKJ (mt)	Tuna (mt)
2024	22,380	12,852	34,440	86,886	560,836	682,161
2025	30,012	19,709	56,427	124,819	605,273	786,520
% Change	+34%	+53%	+64%	+44%	+8%	+15%

In summary

- Albacore – continued increase in nominal LL CPUE, except for Chinese fleet, with question regarding operations in HS east of NZ
- Bigeye – catch (mt) was lowest in 30 years
 - Proportion taken in ‘Other’ fisheries highest on record, ID small v large fish handline allocation methods
 - Implications for projections as 2023/24 catch of large or small fish impacts MSY calculations and F/FMSY ratio by end 2026
 - Needs historic corrections
- Yellowfin – Mean size in catch is drifting lower across all gears
- Outlier in mean size of SKJ and YFT during Covid years with reduced/absent observer coverage may be due to misreporting of school association