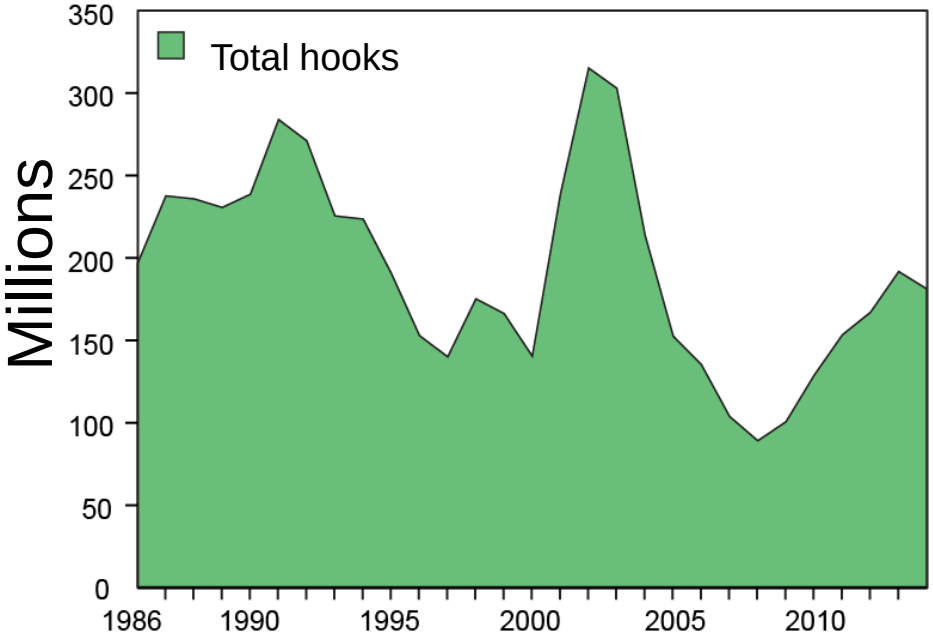
Inter-American Tropical Tuna Commission

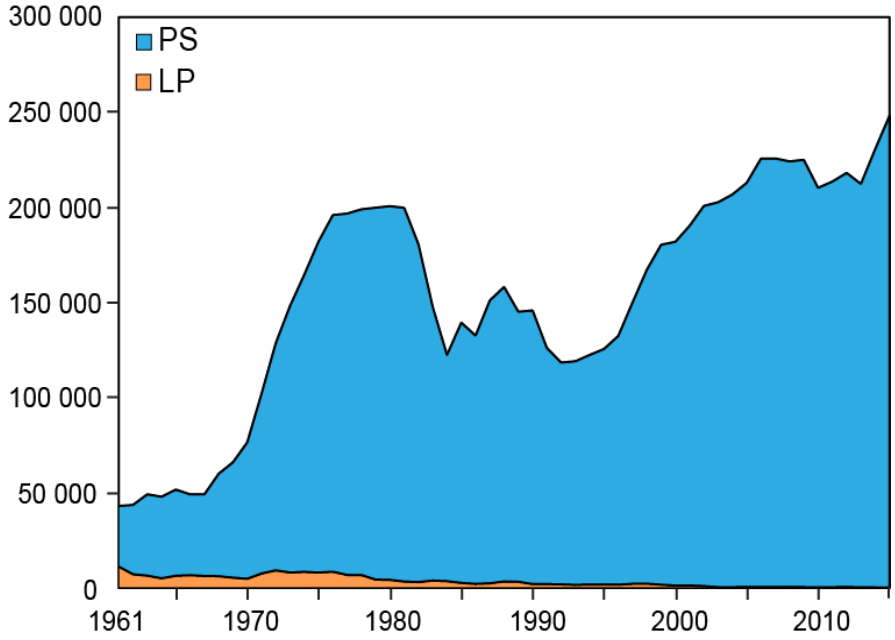
Summary of the fishery and assessments of the major stocks of tunas exploited in the eastern Pacific Ocean in 2015

Fleet capacities

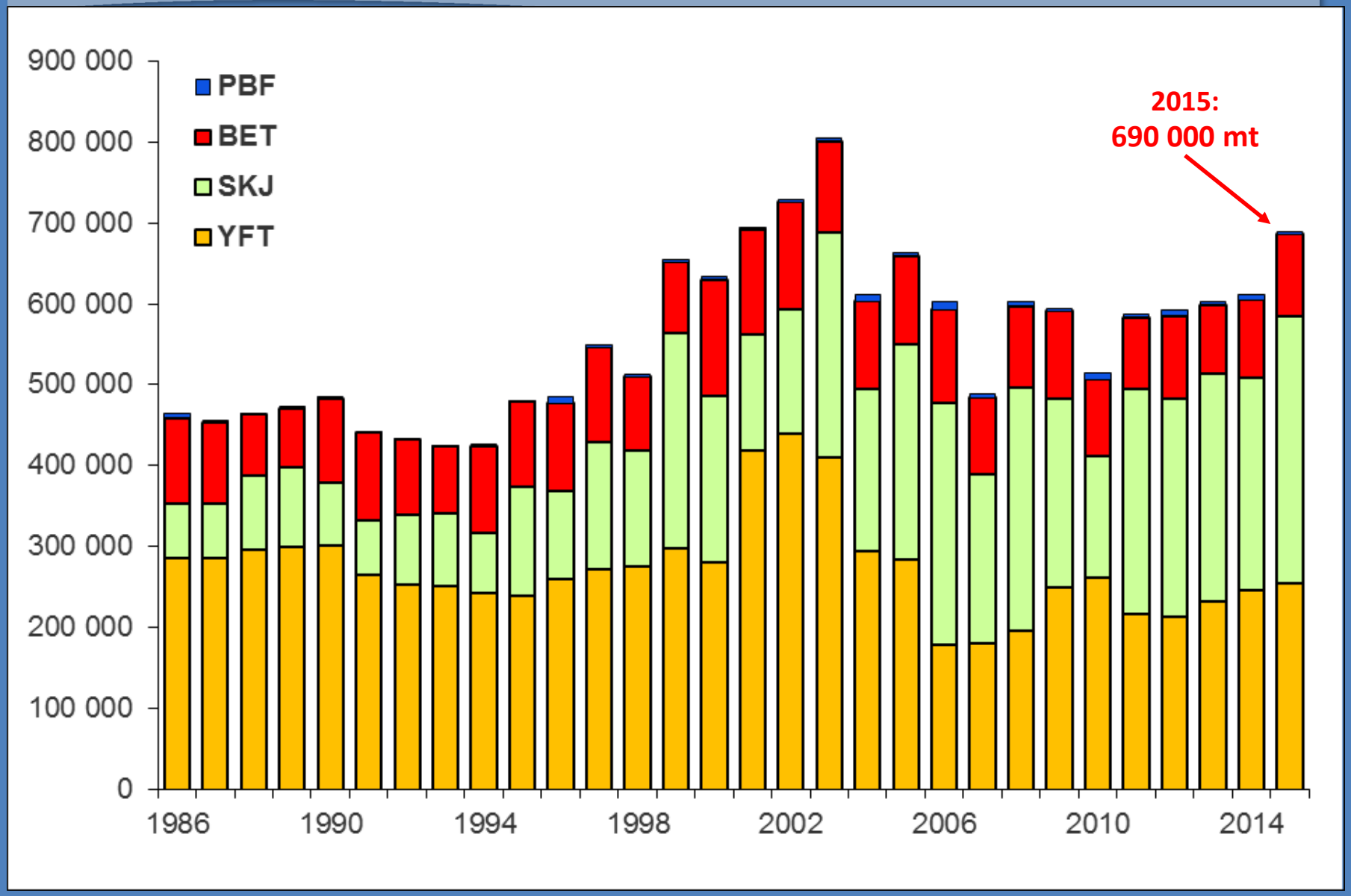
Longline



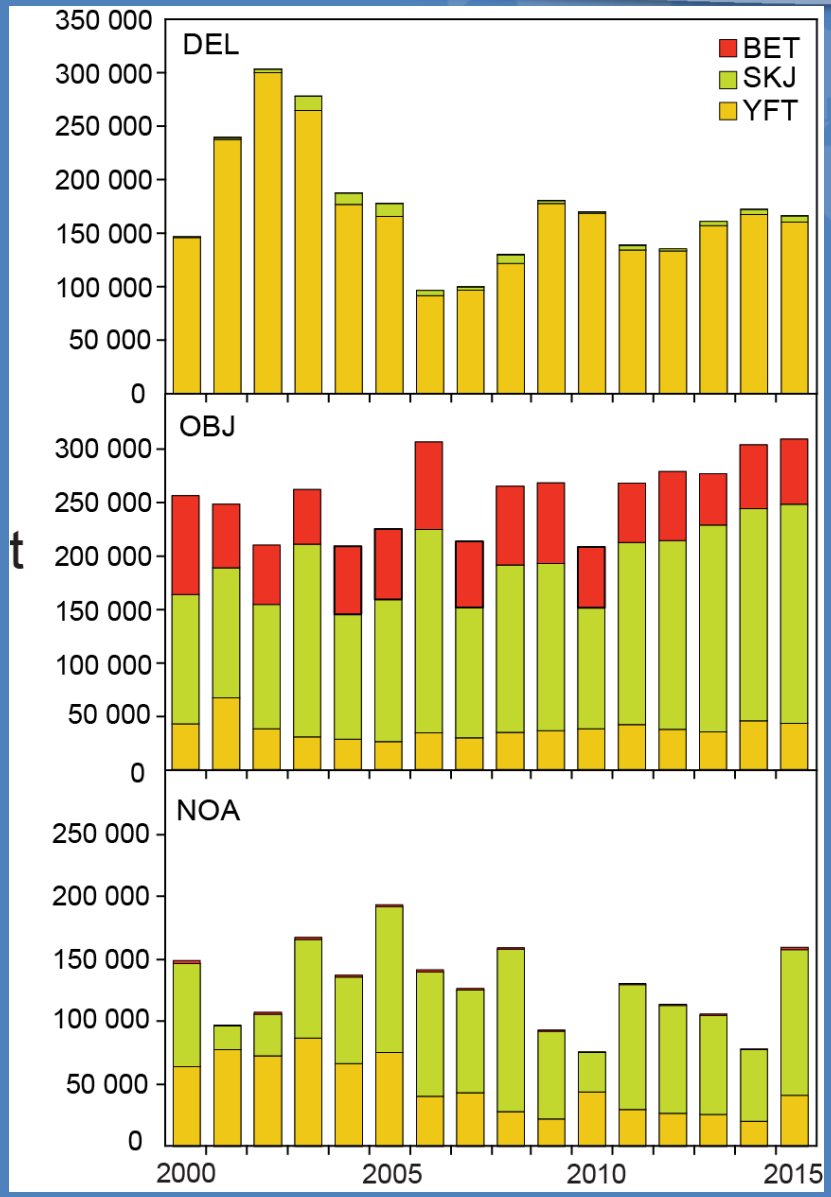
Purse seine



EPO retained catch – all gears

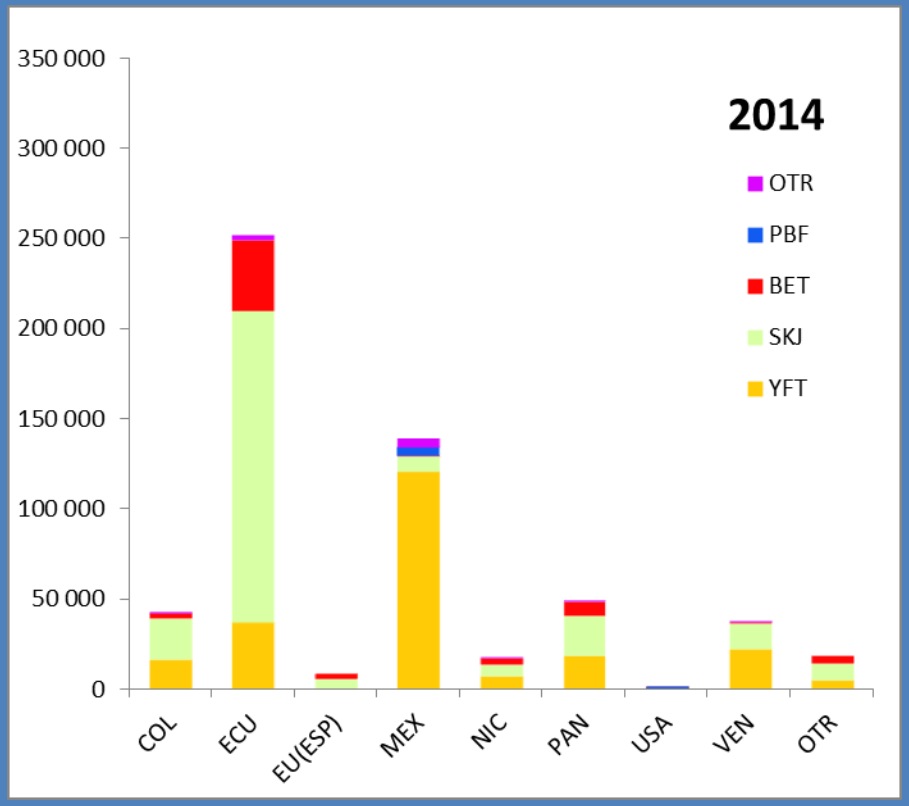


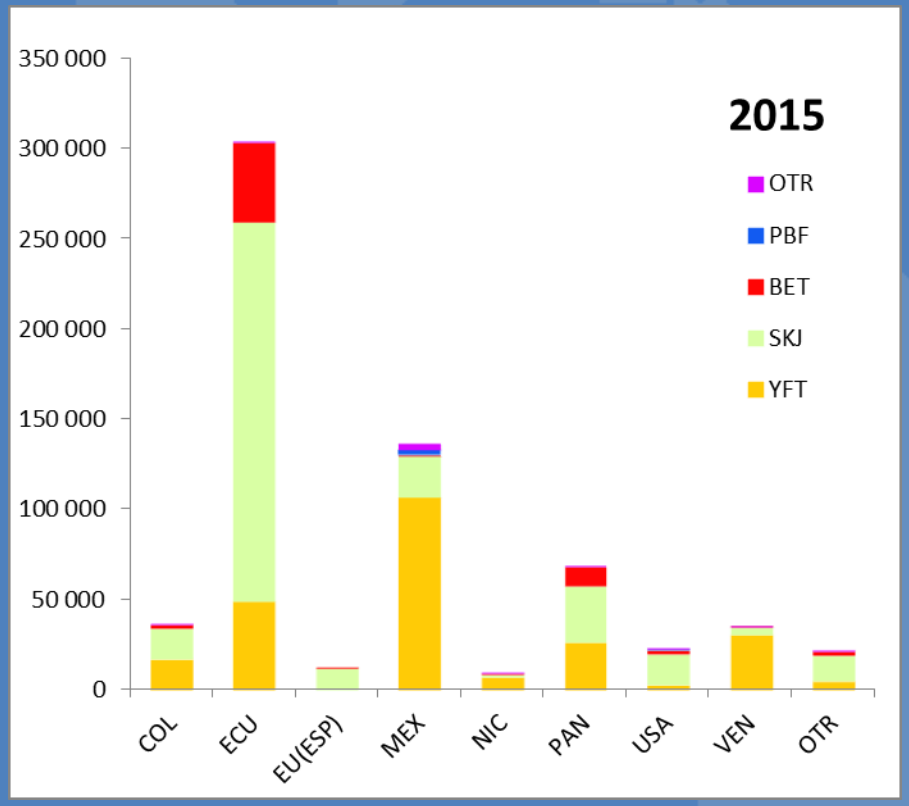
Purse-seine catches of tunas, by species and set type, 2000-2015



EPO PS/LP tuna catches by country – All tuna species

t

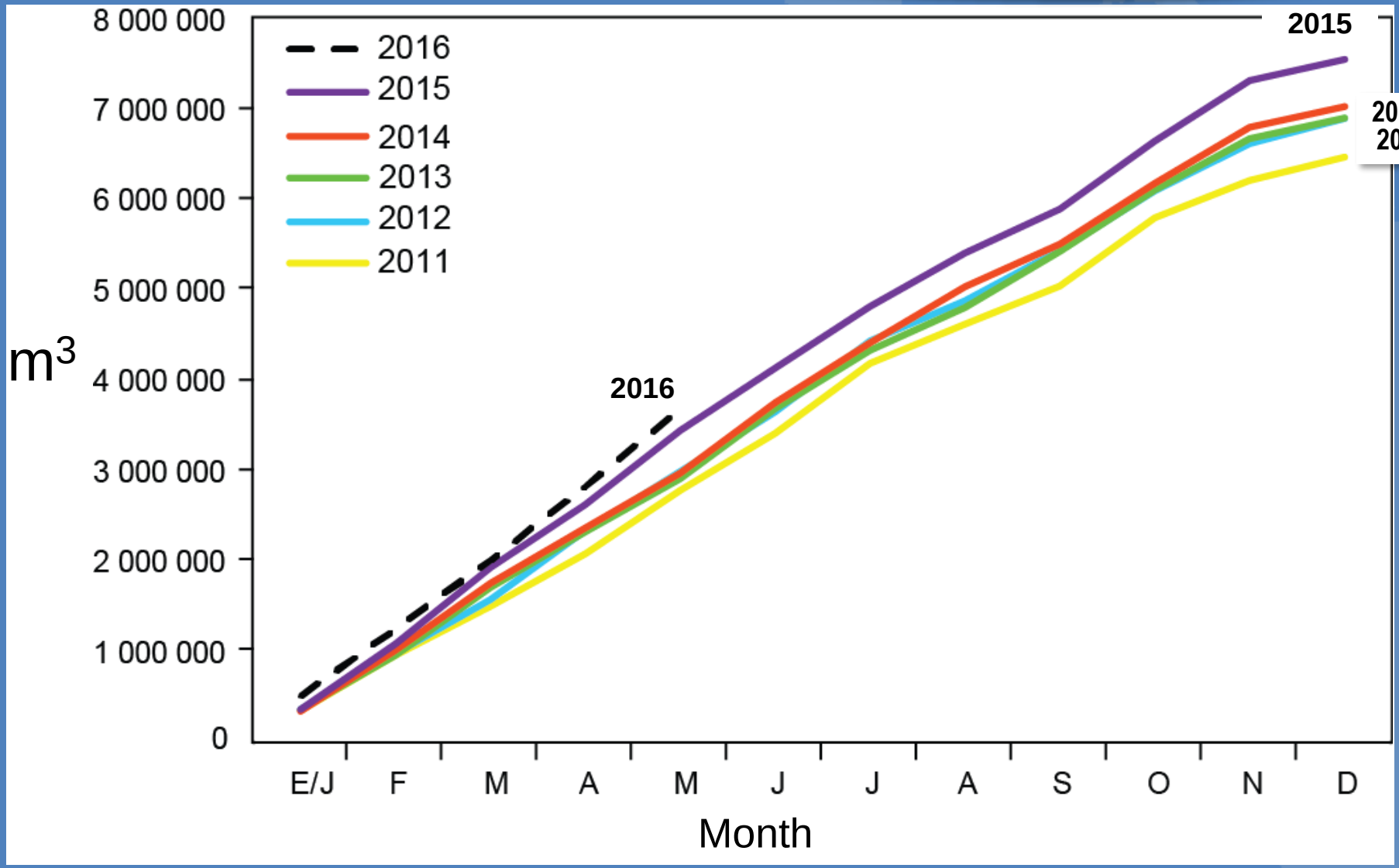




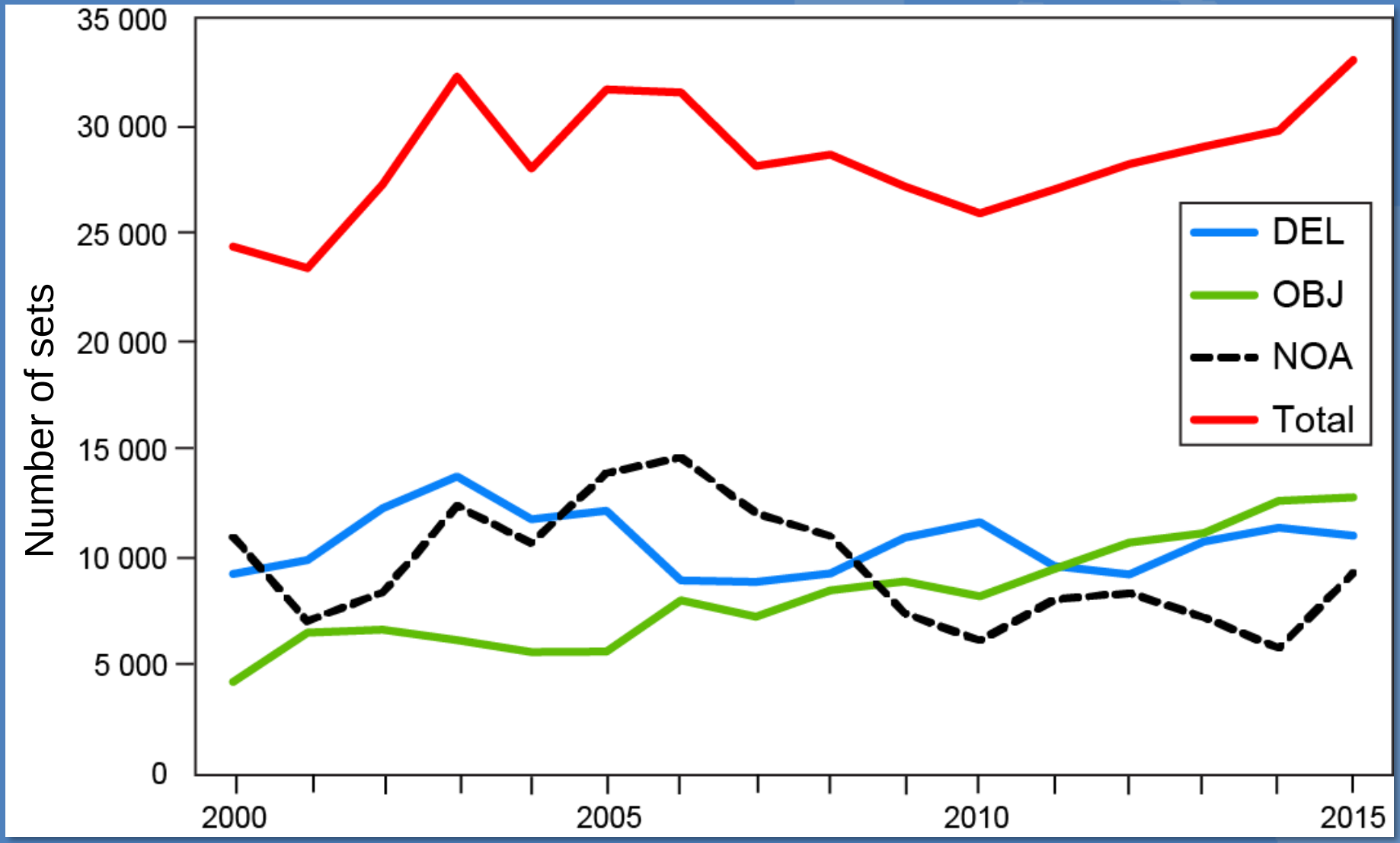
Total catch
568 000 mt

Total catch
645 000 mt

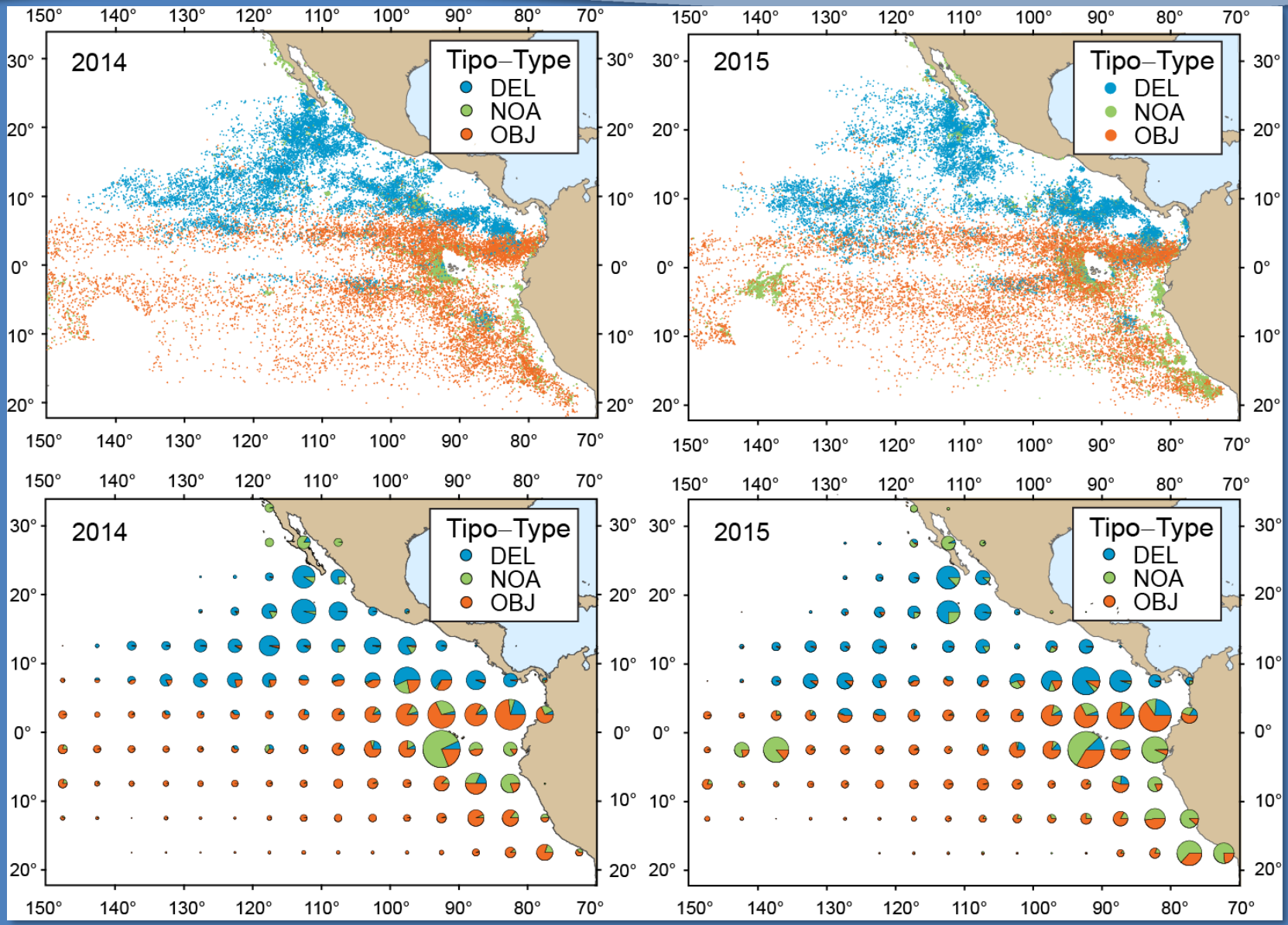
Cumulative capacity at sea



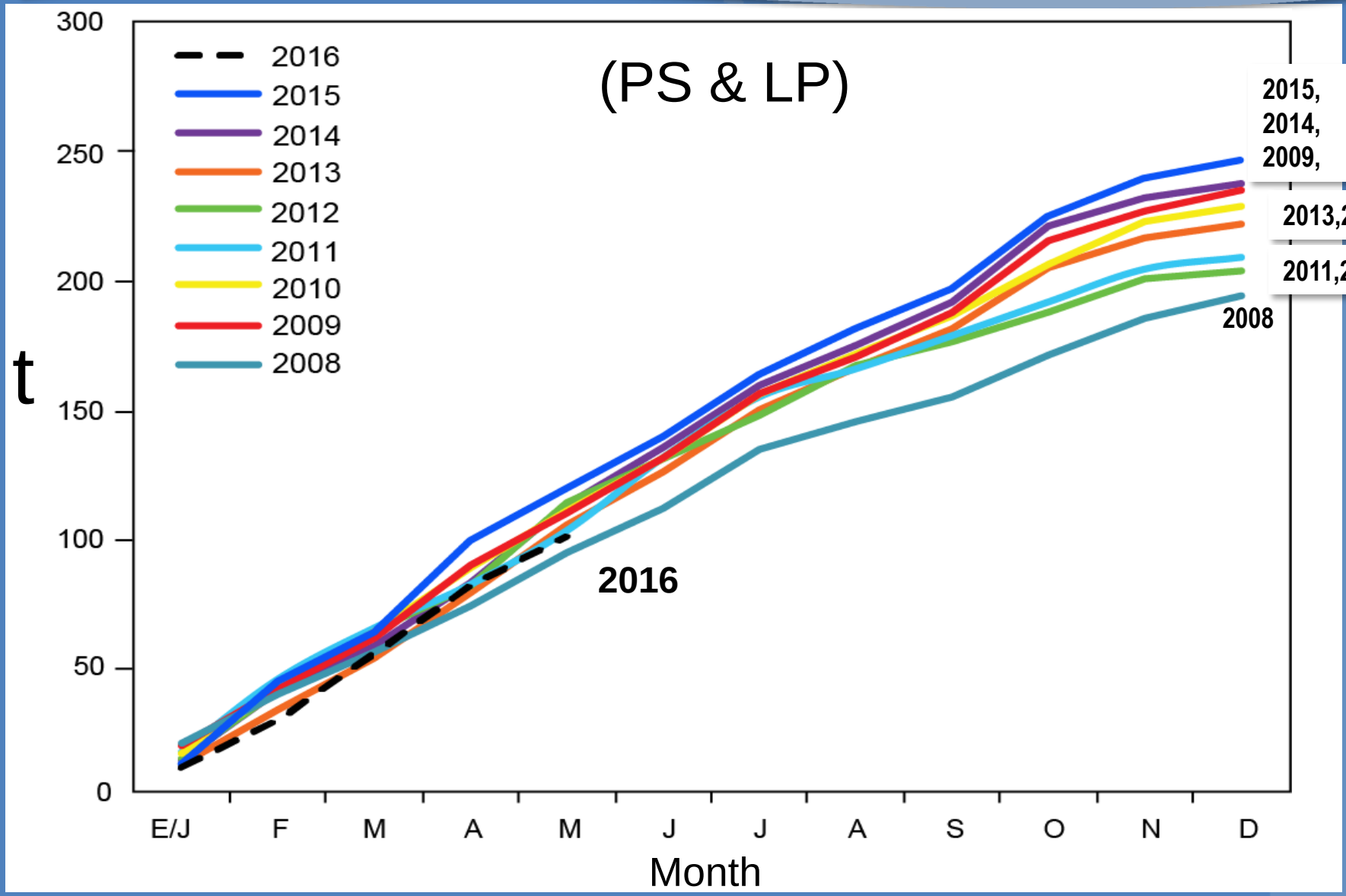
Estimated numbers of sets, by set type



Purse seine set locations by set type – All tuna species

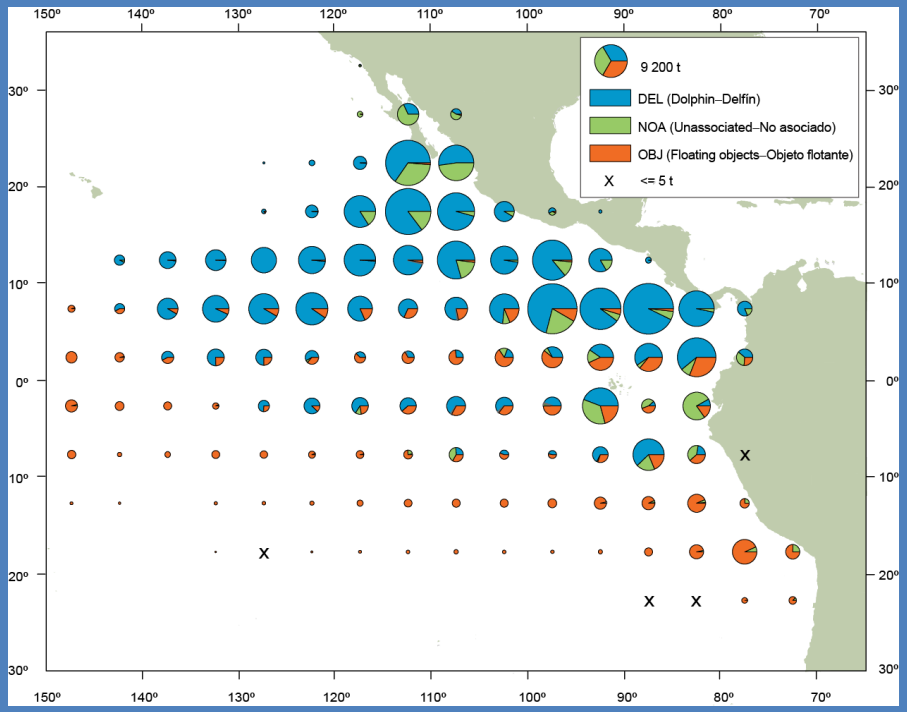


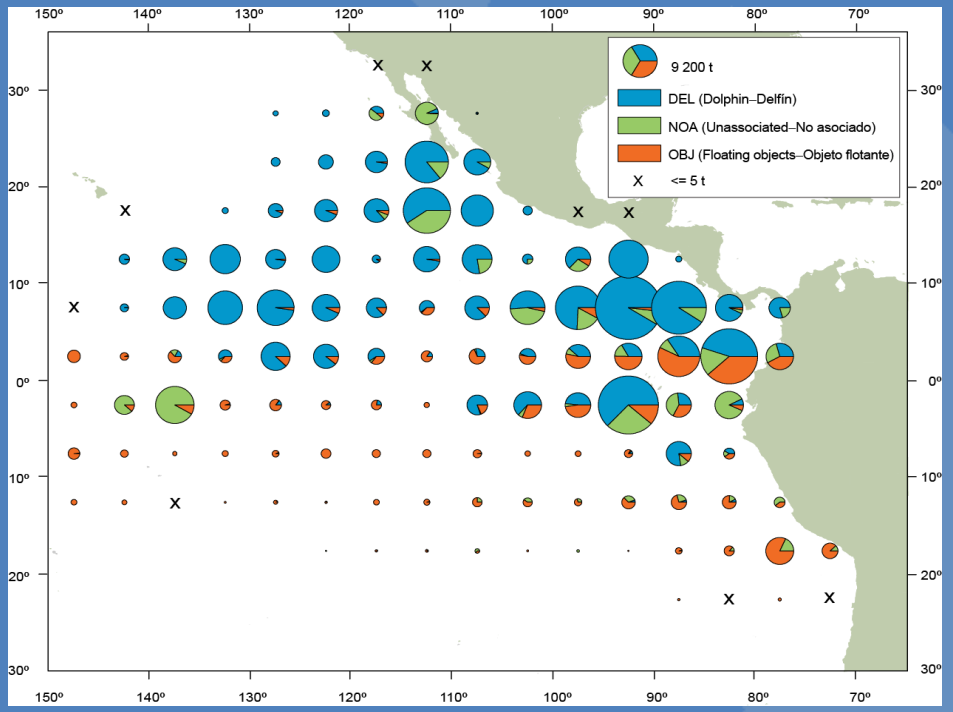
Cumulative catch of YFT



YFT - Distribution of purse-seine catches

Average 2010-2014	2015





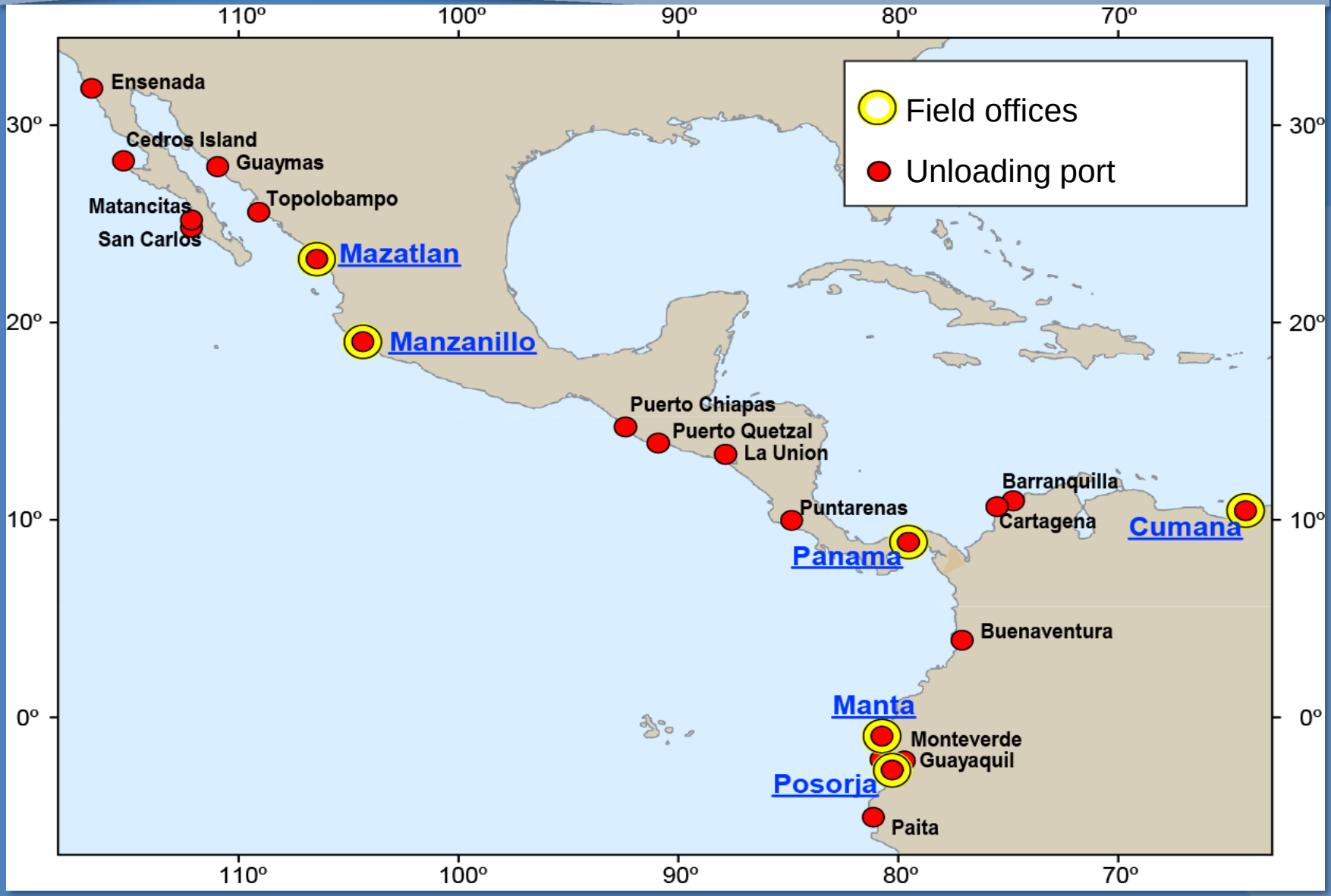
222 000 t

(198 000 to 251 000)

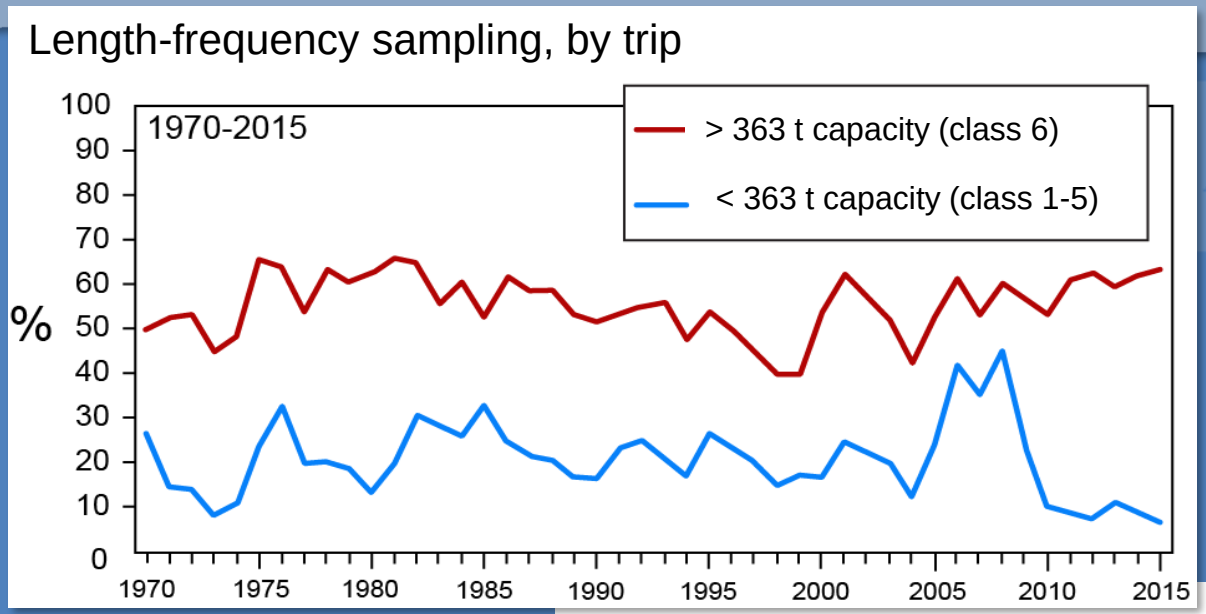
245 000 t

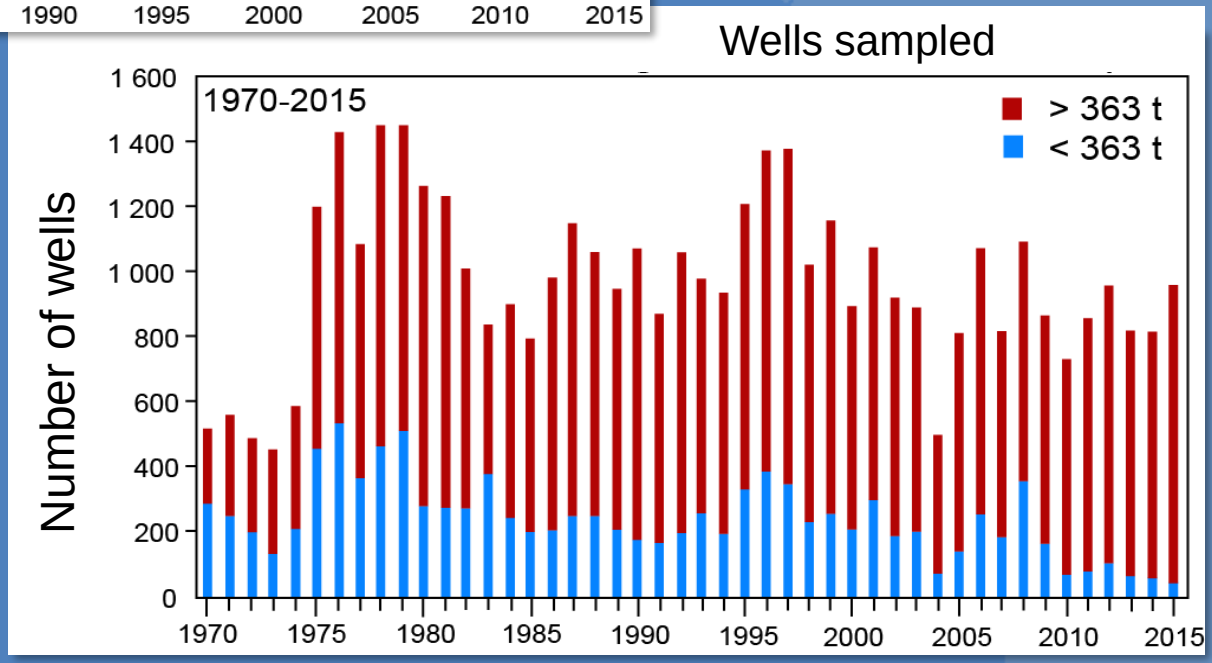
10 % Higher

IATTC field offices

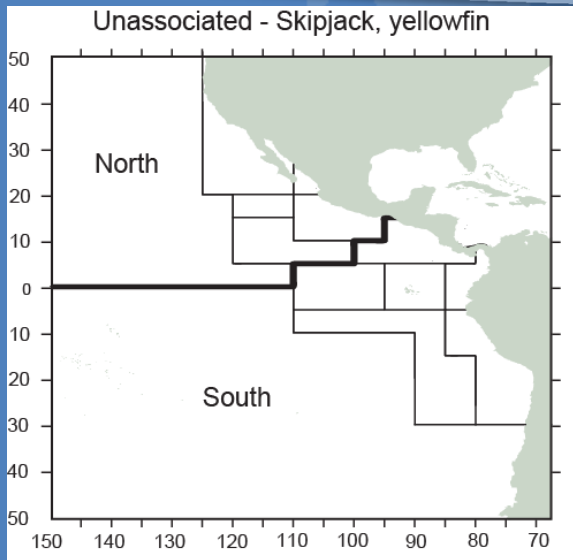


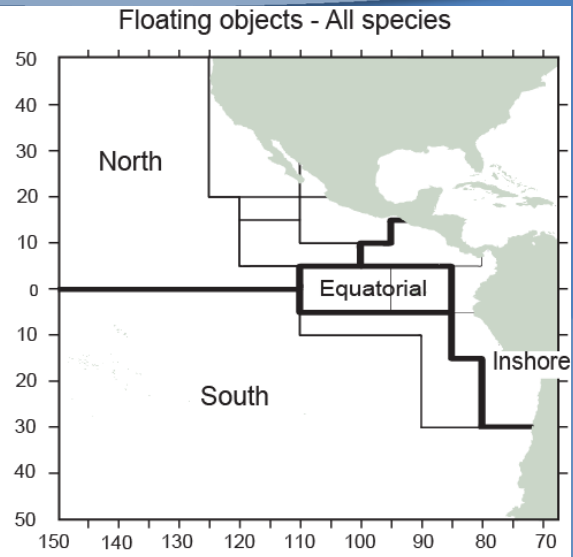
IATTC field offices

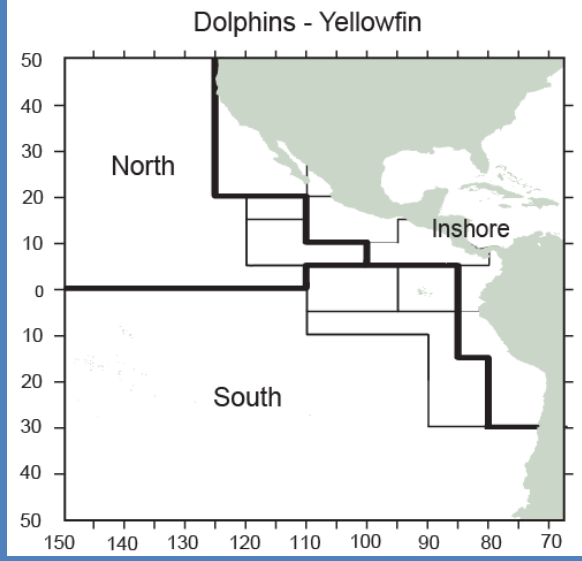


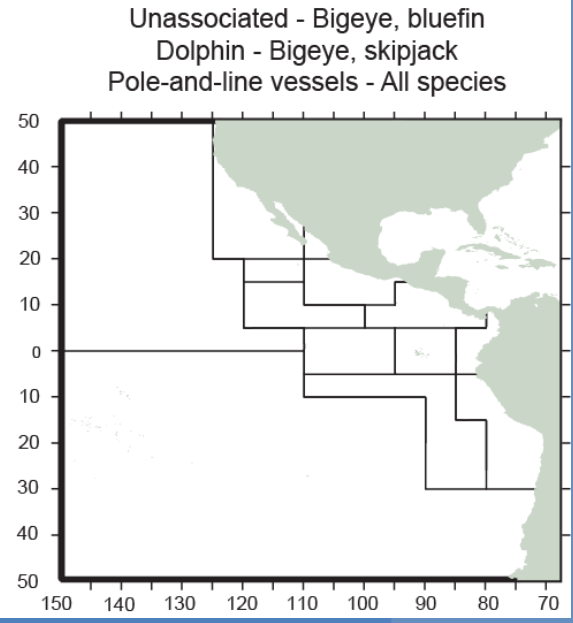


Fisheries defined by the stock assessment



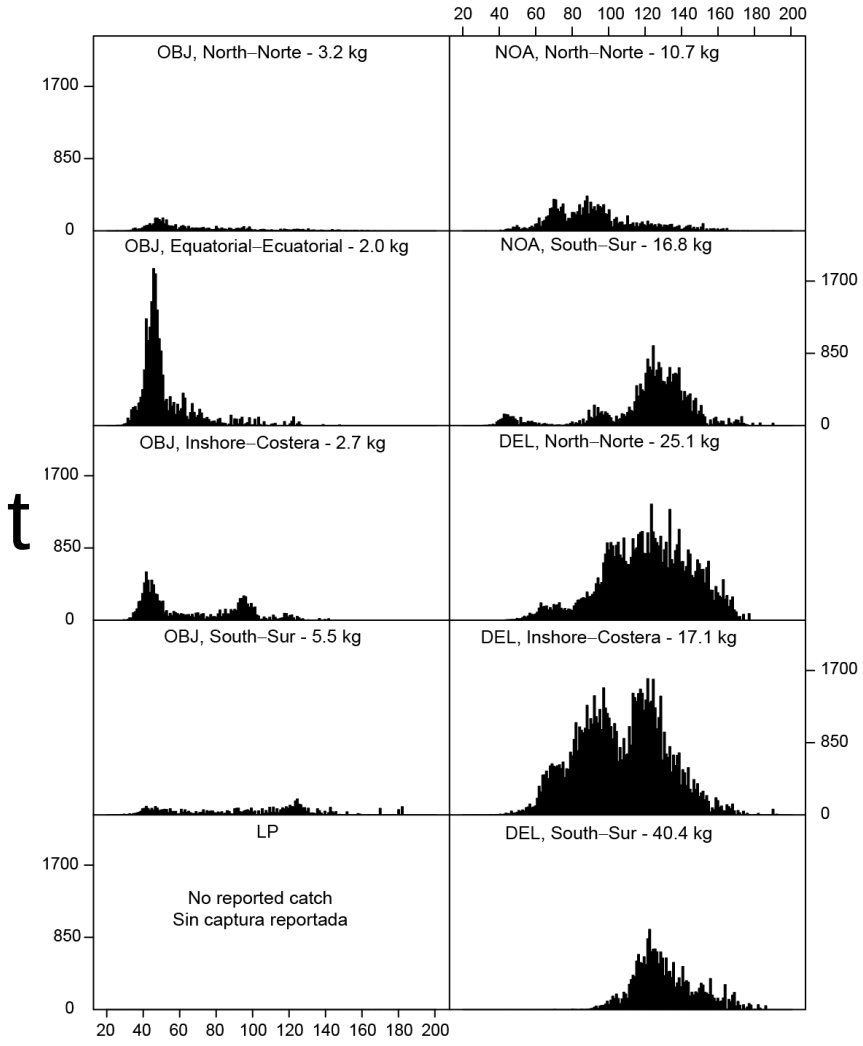




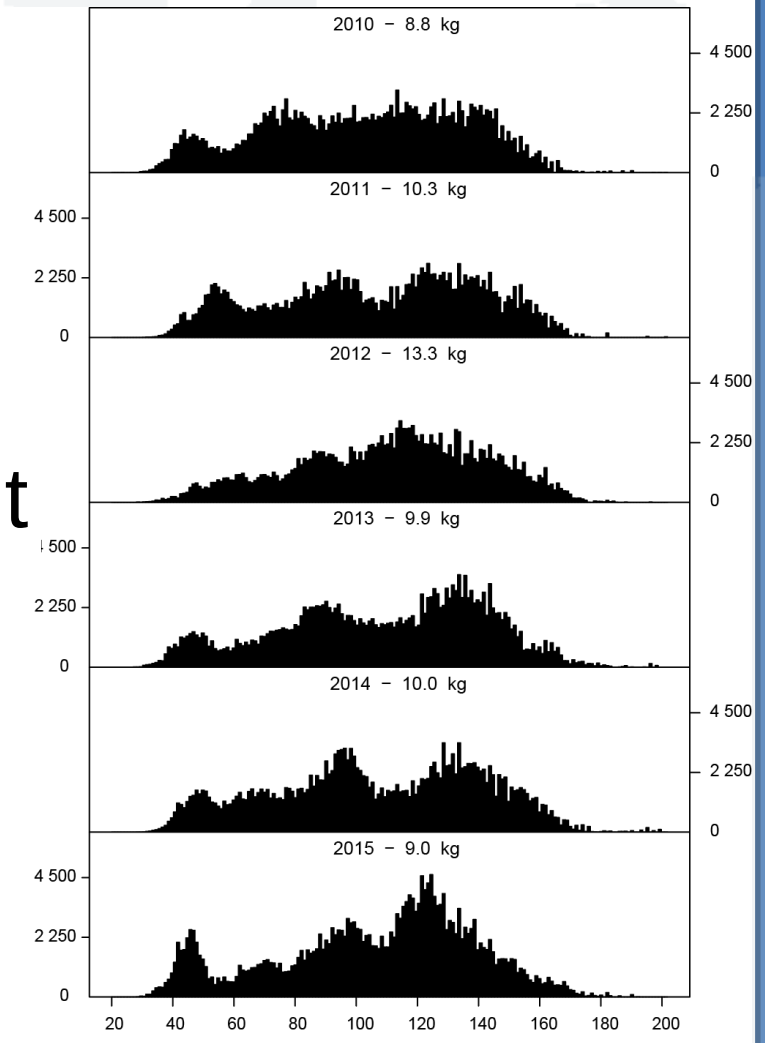


YFT – Length compositions

2015 by Area

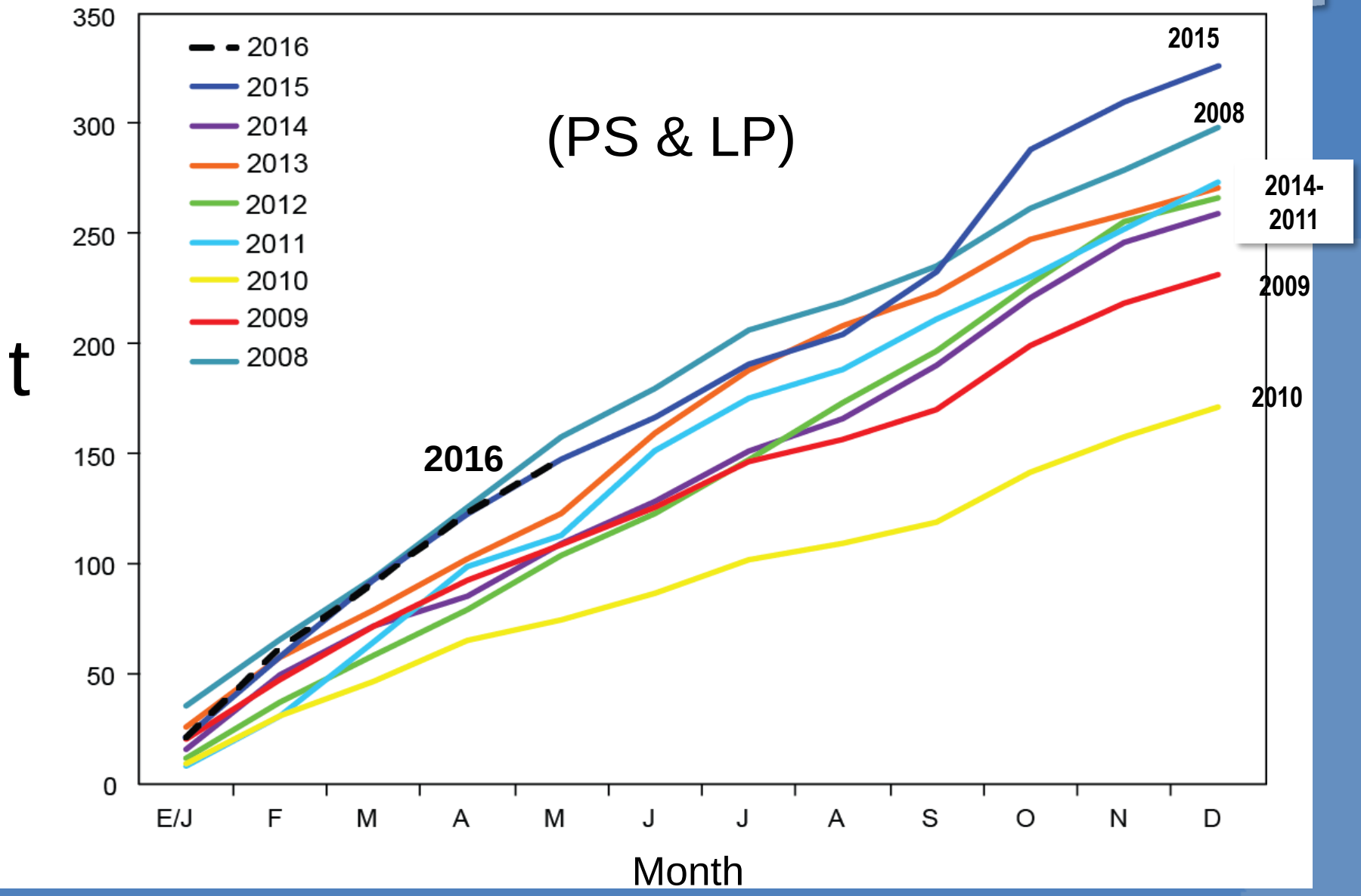


2010- 2015



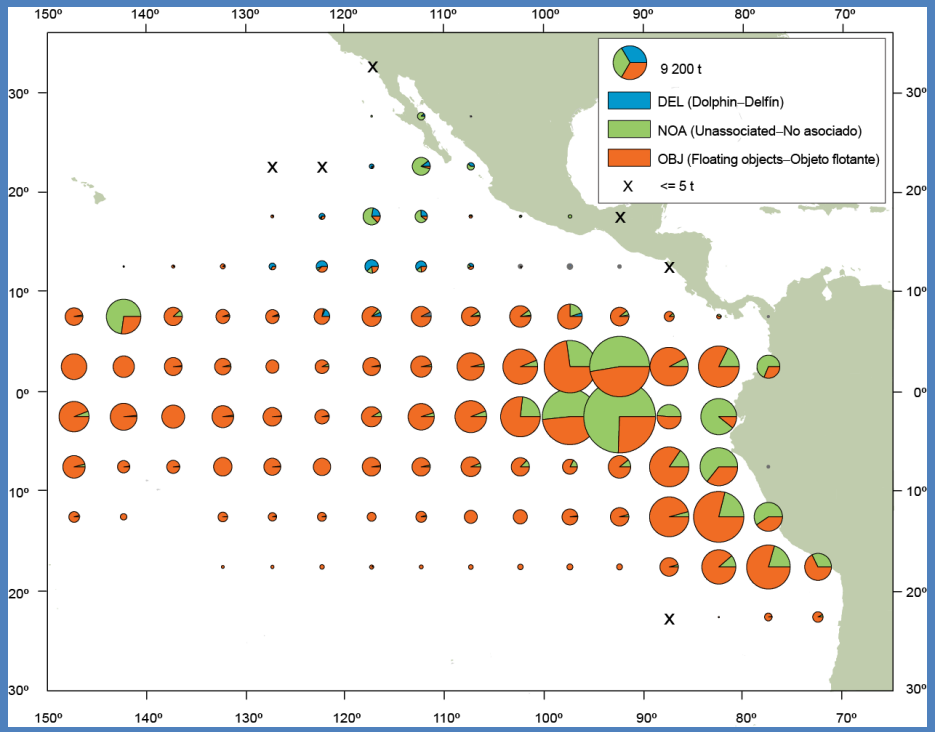
Length (cm)

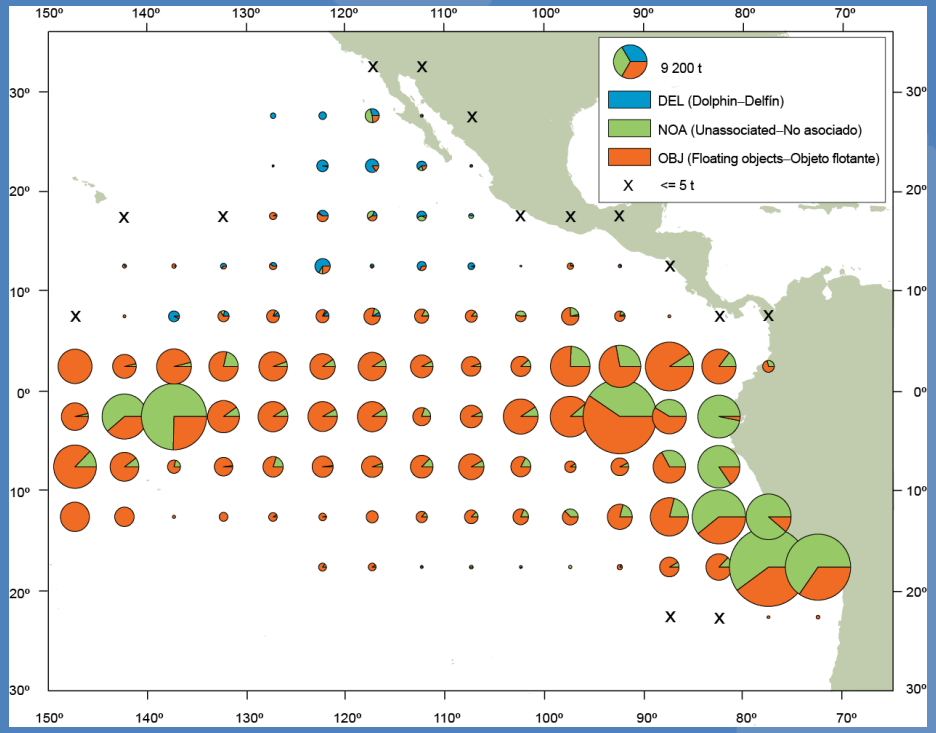
Cumulative catch of SKJ



SKJ - Distribution of purse-seine catches, by set type

Average 2010-2014	2015





246 000 t

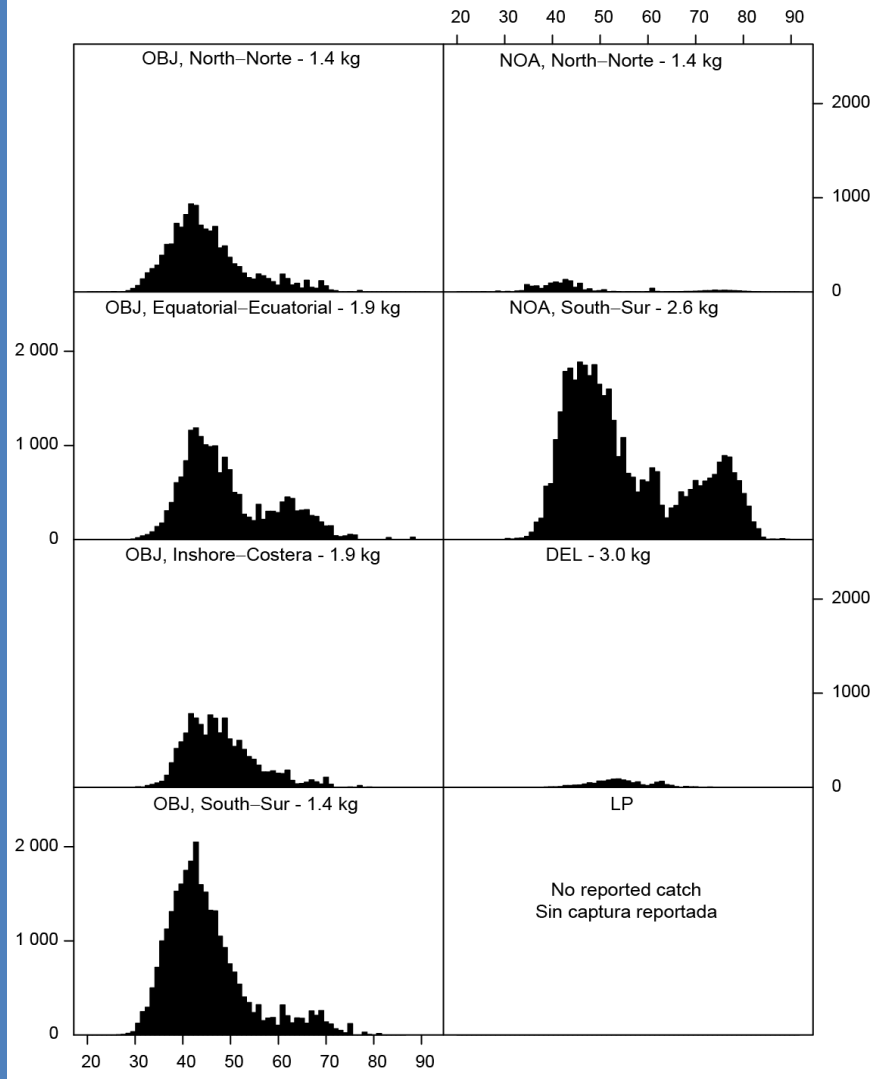
(147 000 to 278 000)

329 000 t

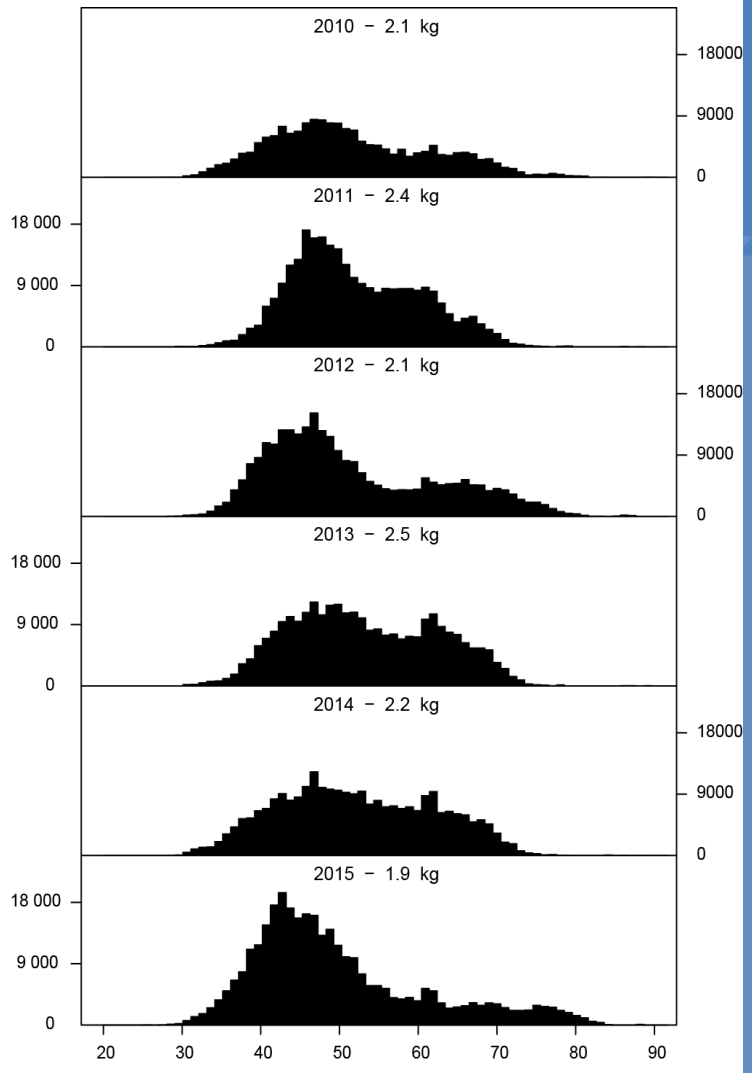
33% Higher

SKJ - Length compositions

2015 by Area

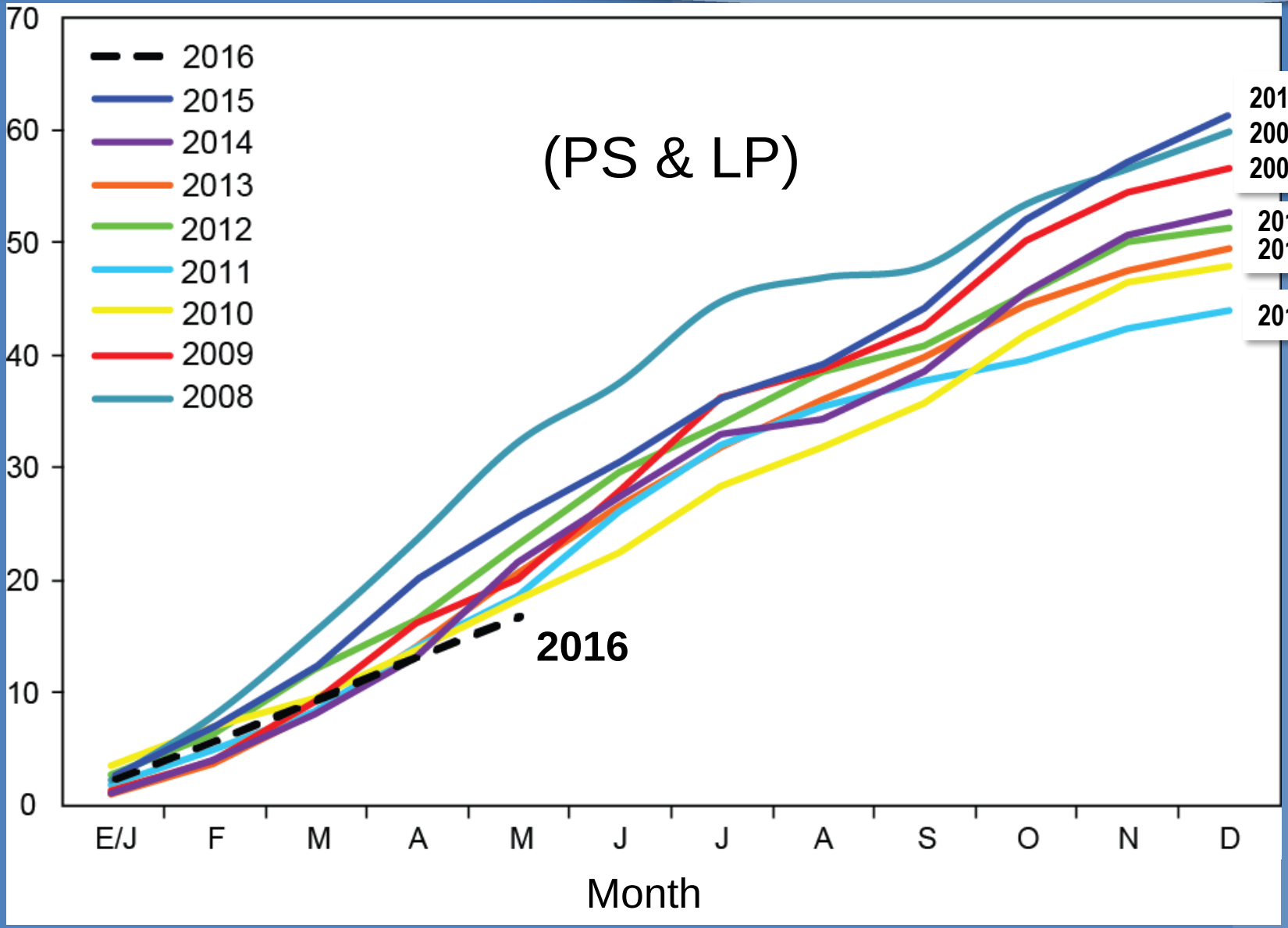


2010 - 2015



Length (cm)

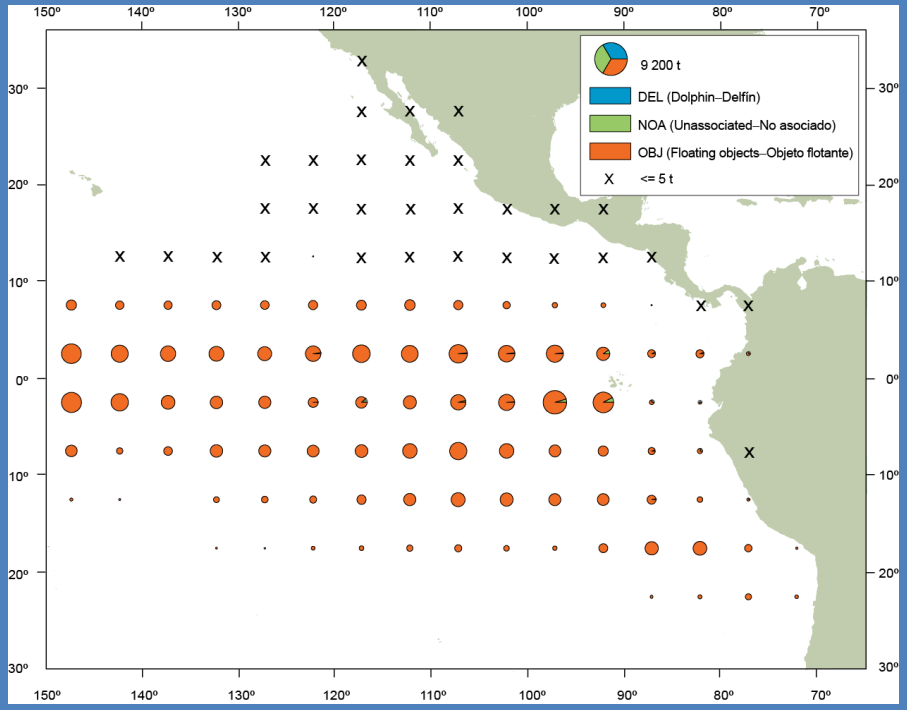
Cumulative catch of BET



t

BET - Distribution of purse-seine catches, by set type

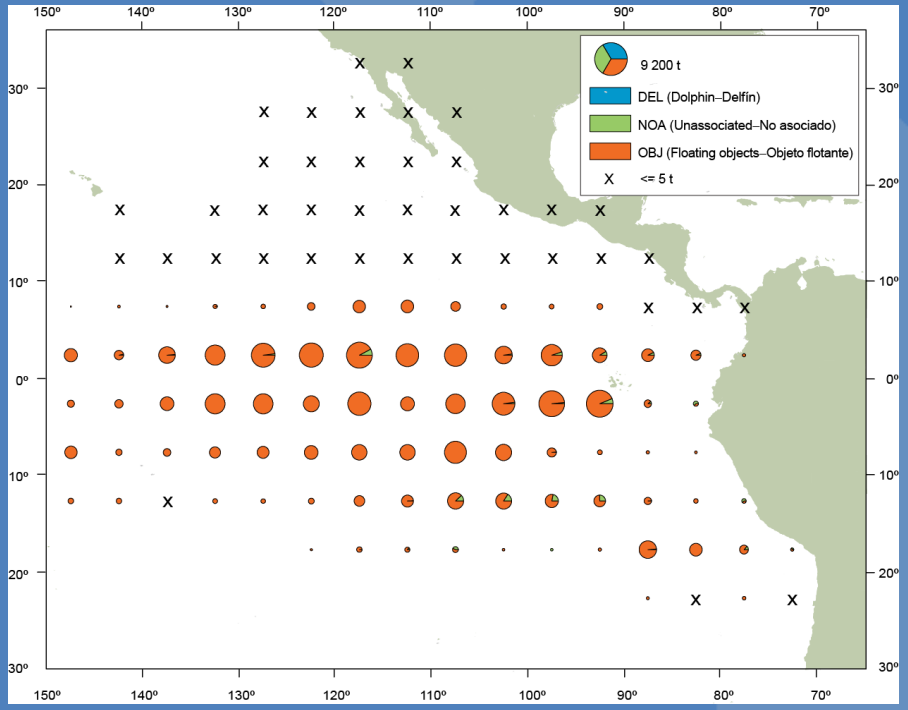
Average 2010-2014



58 000 mt

(49 000 to 66 000)

2015

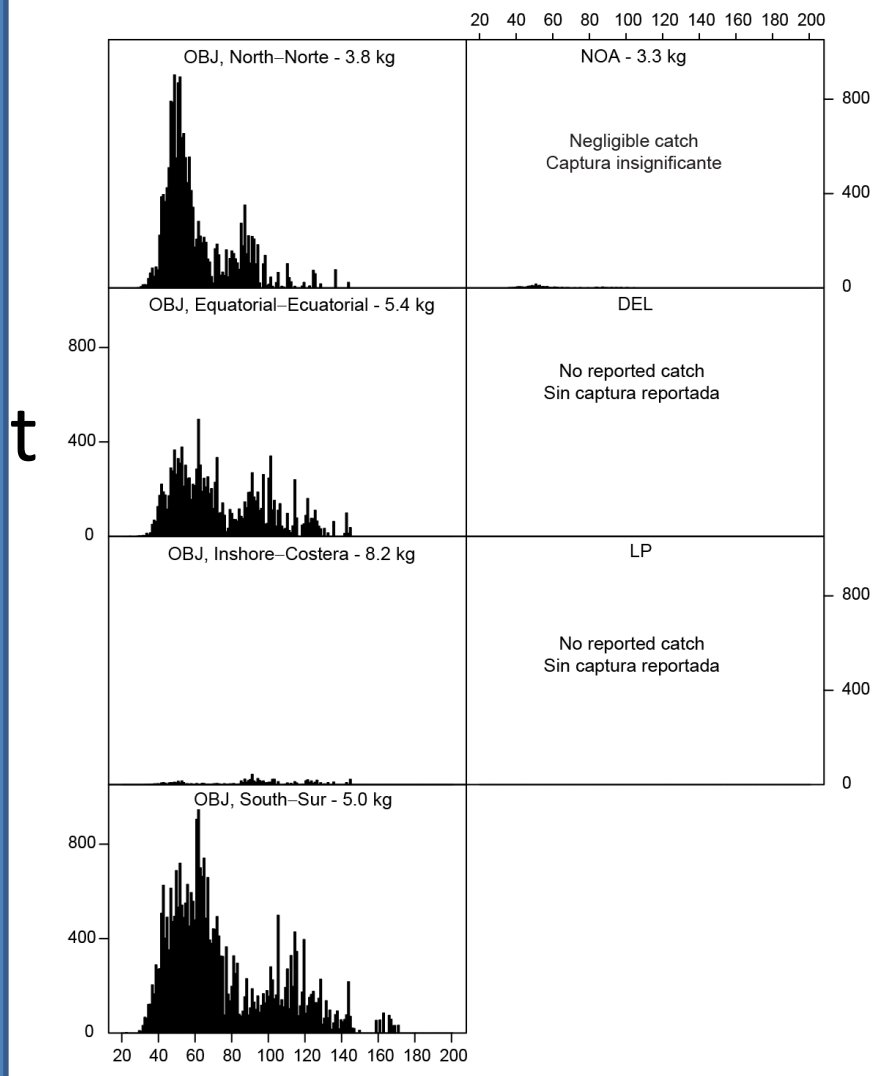


63 000 mt

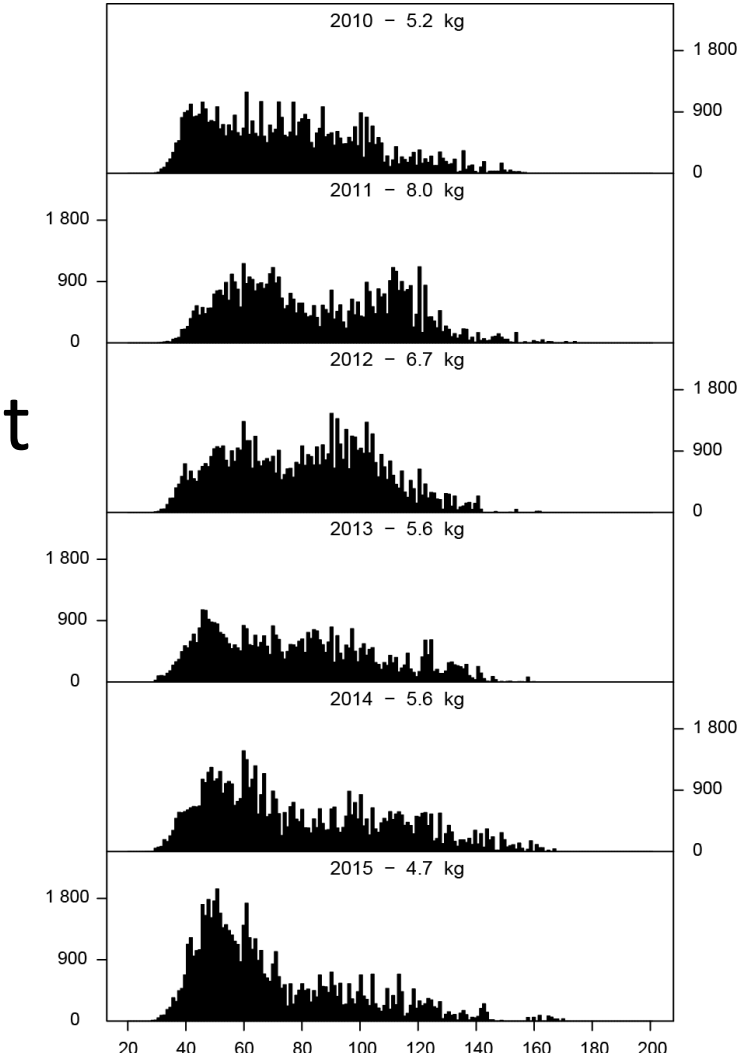
9% Higher

BET - Size compositions

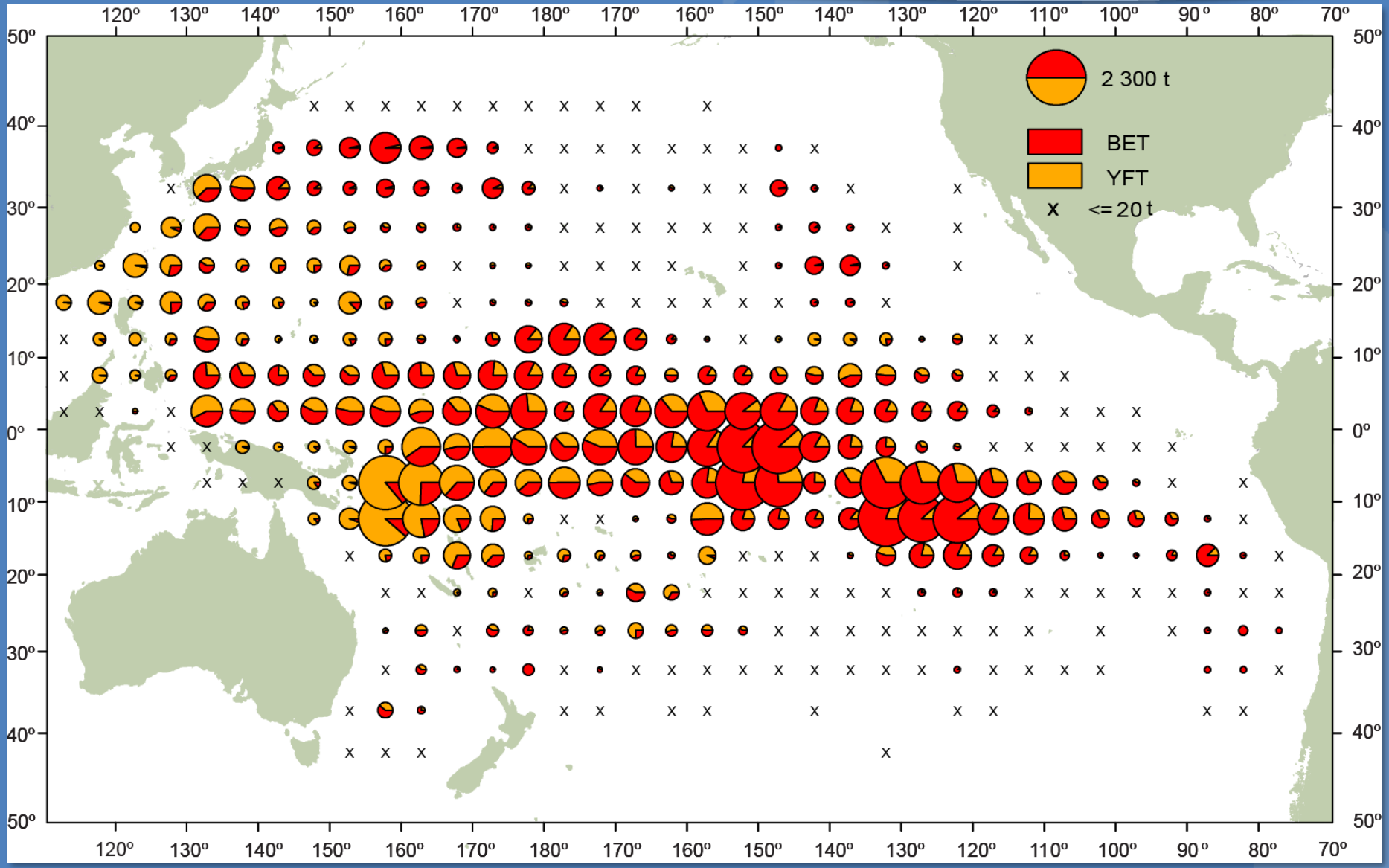
2015 by Area



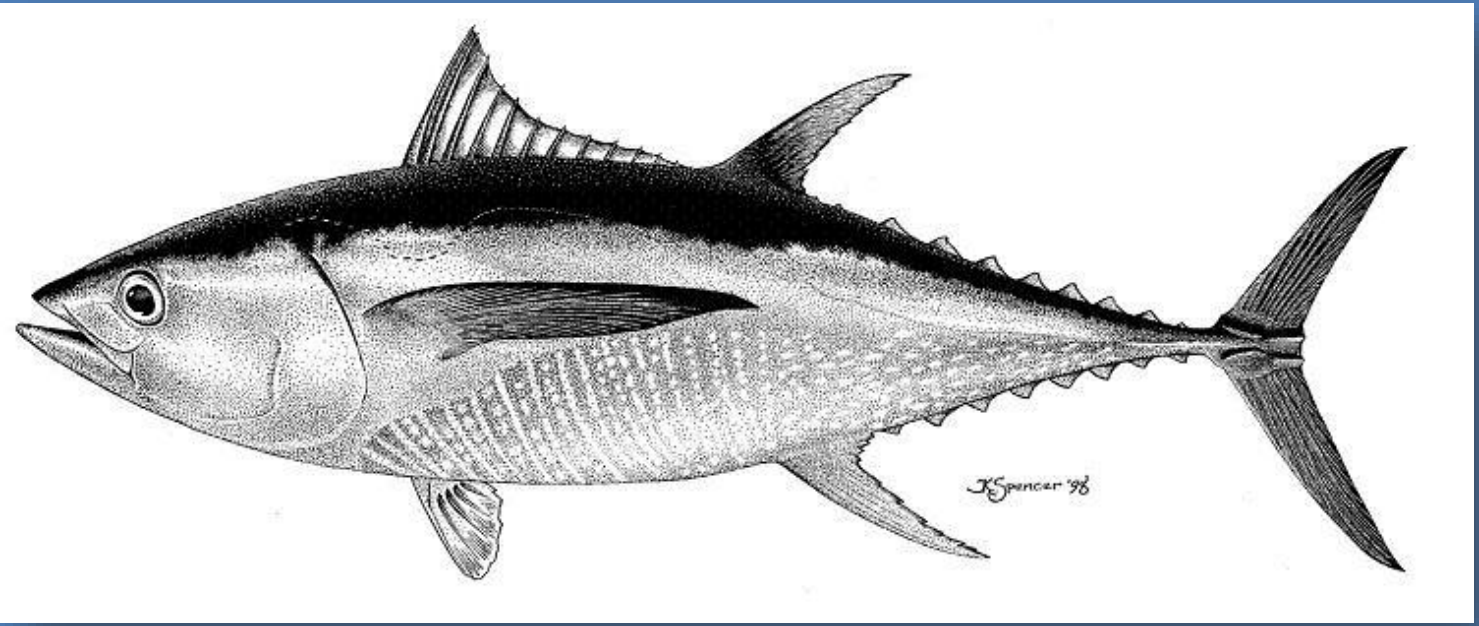
2010 - 2015



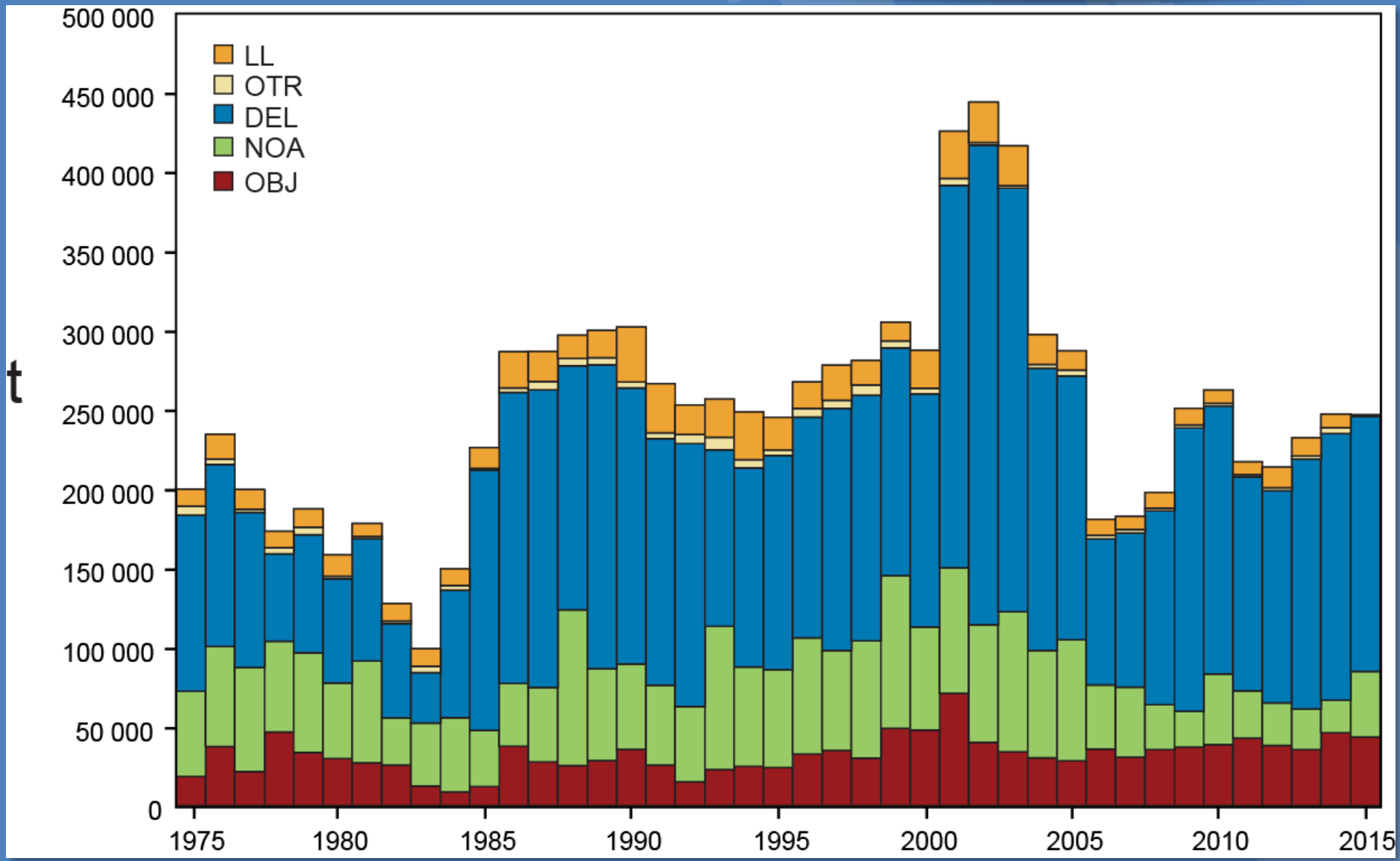
Distribution of BET and YFT Longline catches 2010-2014



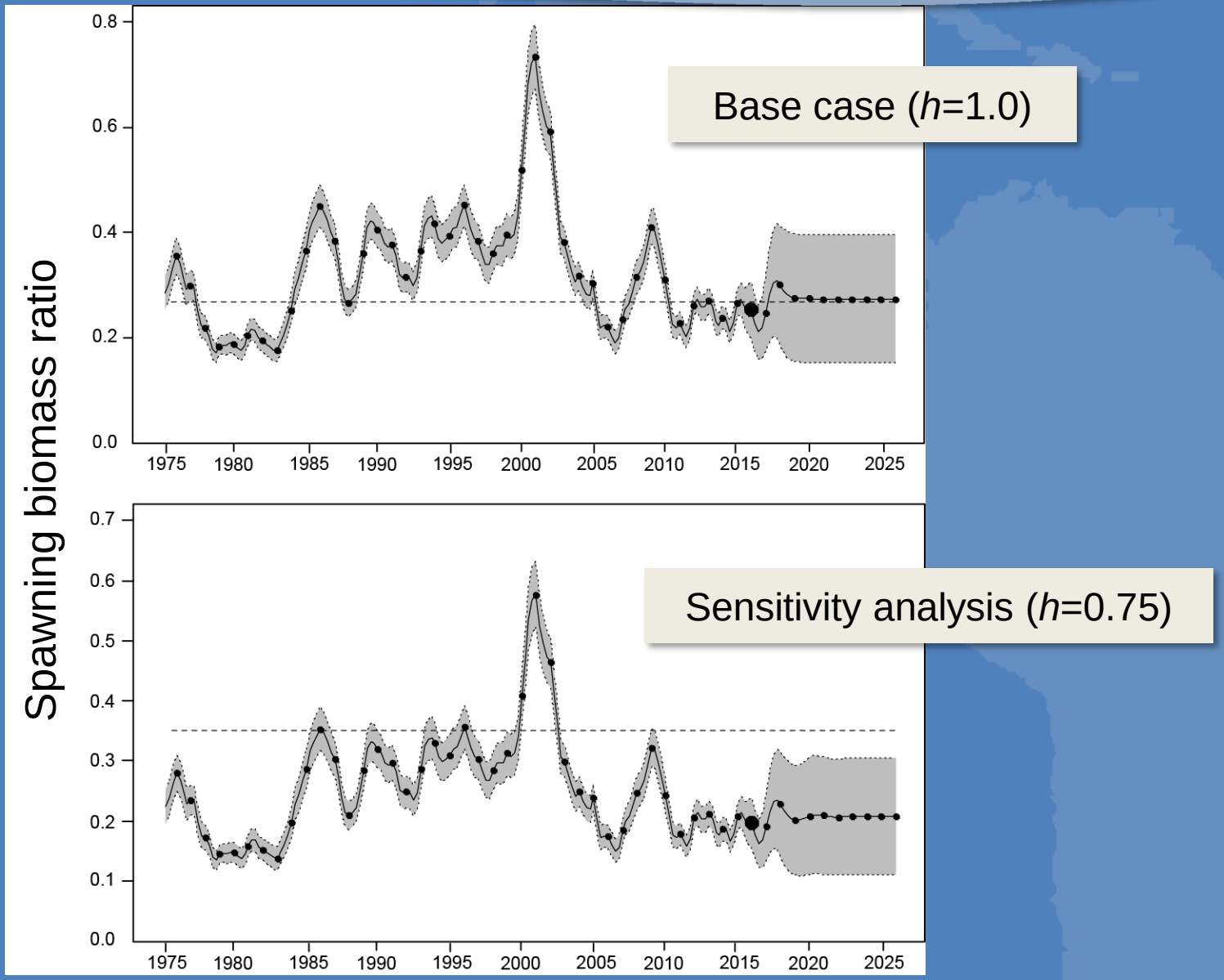
Yellowfin tuna



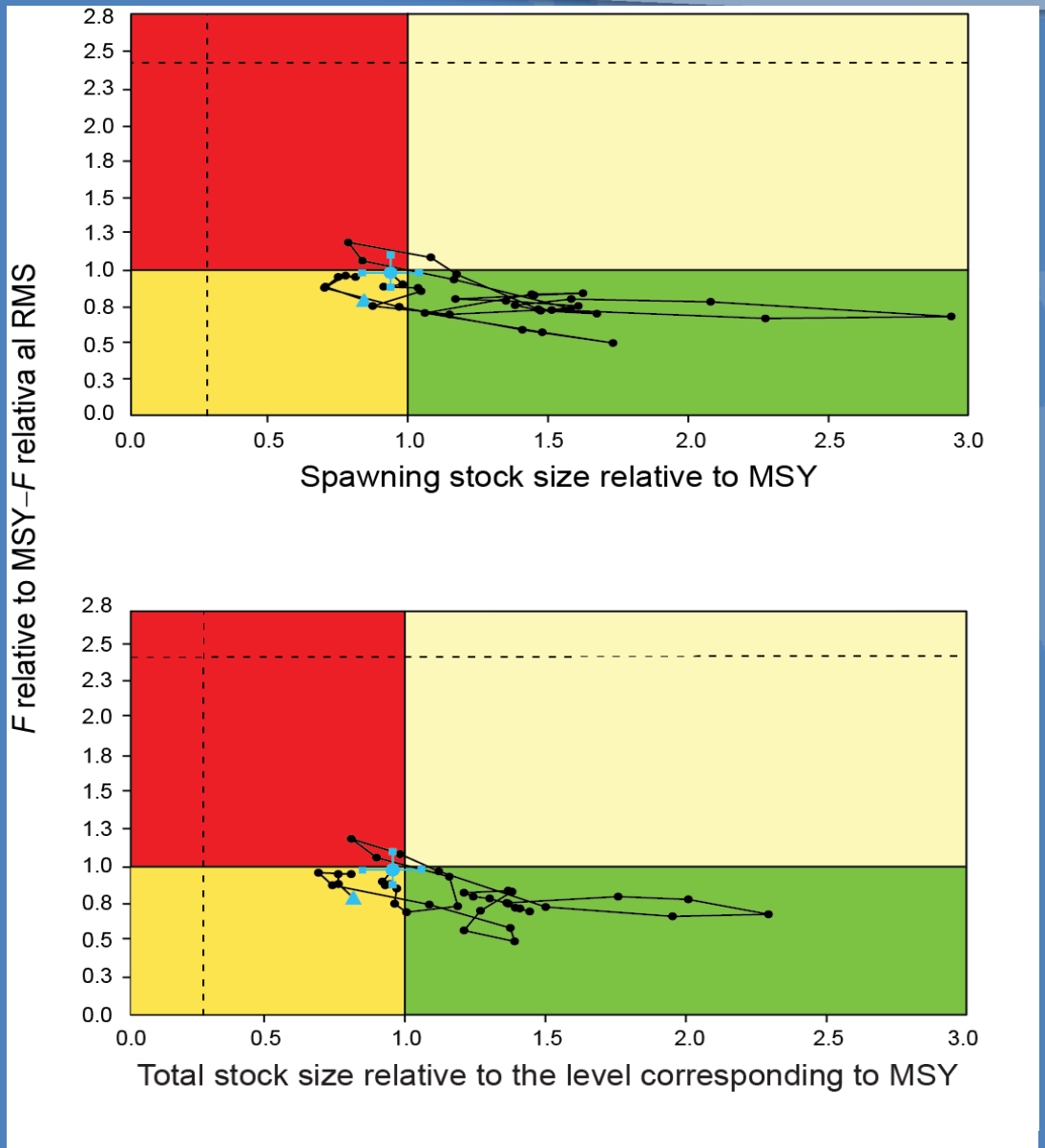
YFT - Catch by gear and type of purse-seine set



Yellowfin Tuna



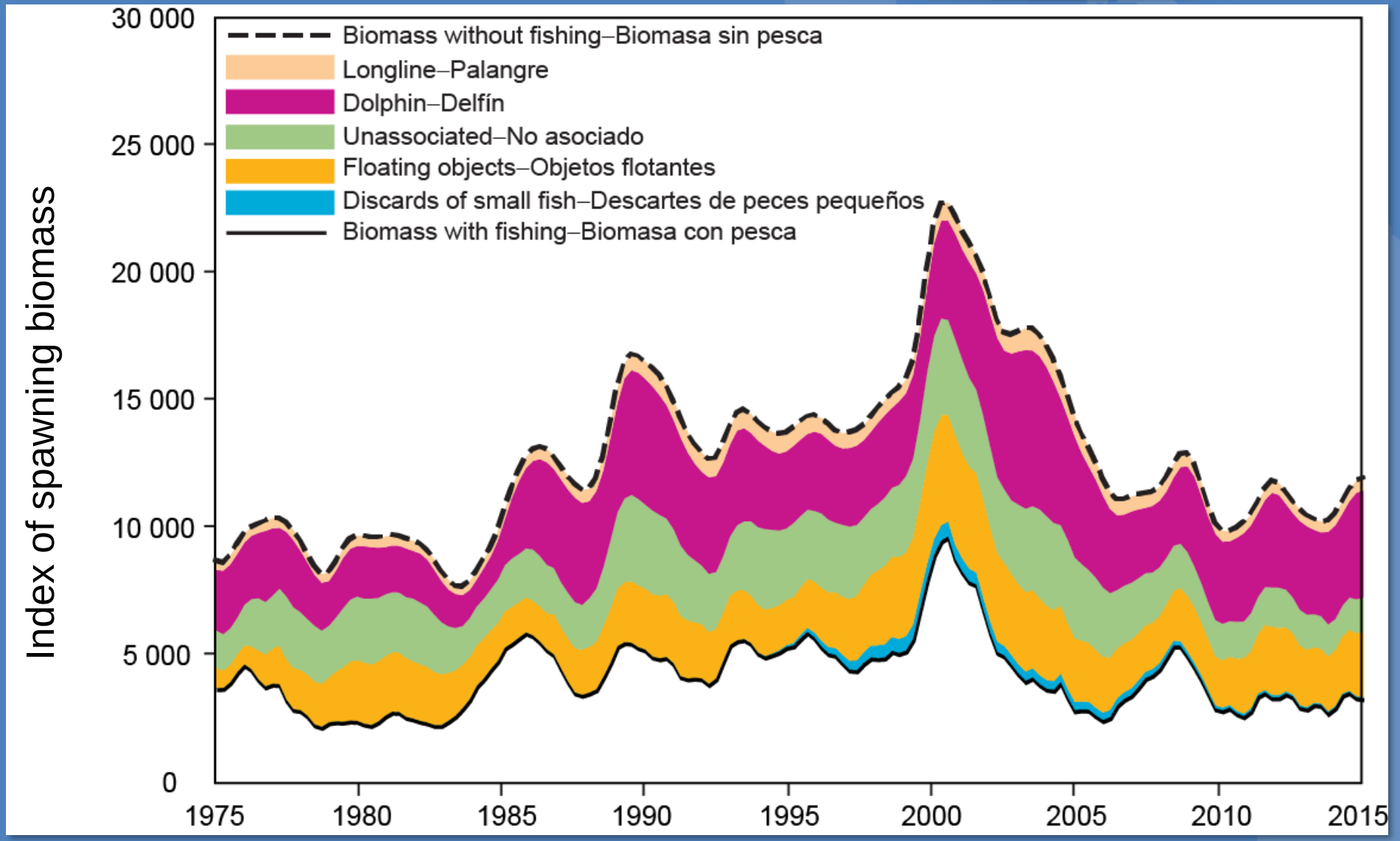
Yellowfin Tuna – Kobe (Phase) plot



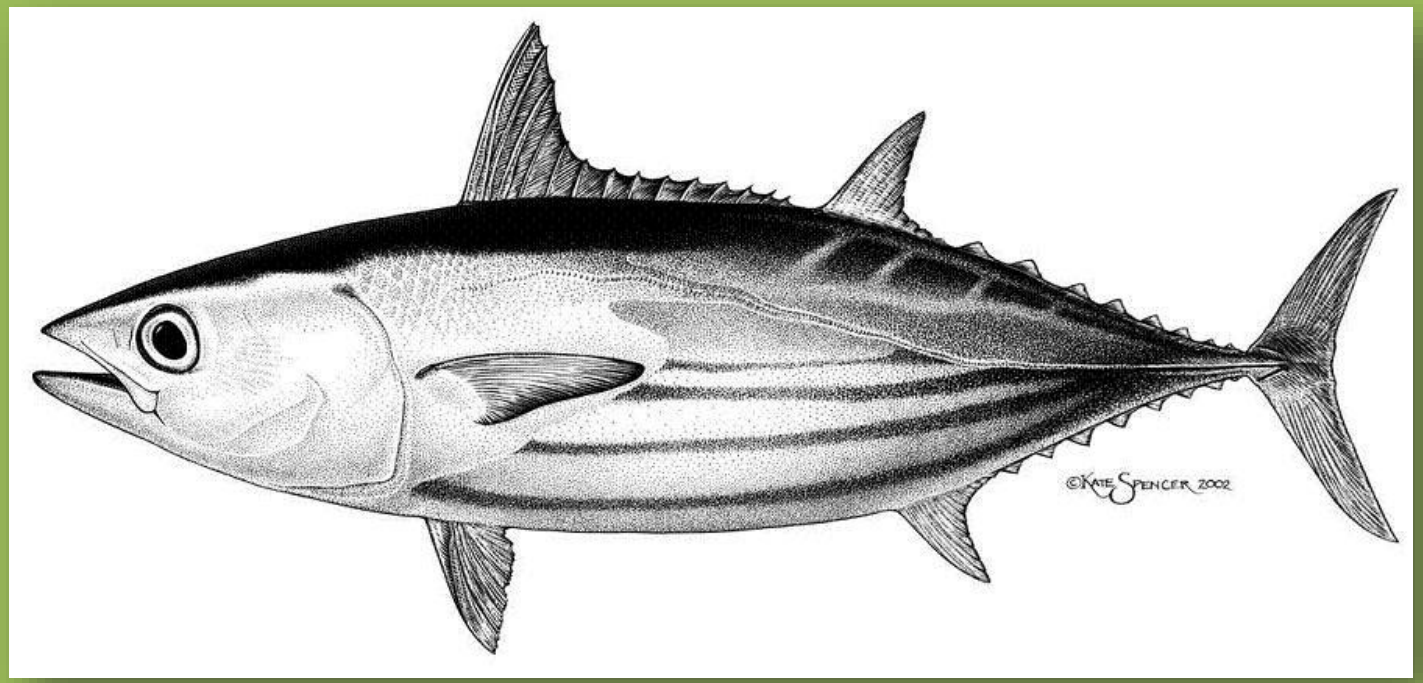
YFT - Maximum Sustainable Yield (MSY)–quantities

	Base case	h = 0.75
MSY(t)	275 841	287 476
C_{recent}/MSY	0.94	0.89
S_{recent}/S_{MSY}	0.95	0.56
F multiplier	1.02	0.65

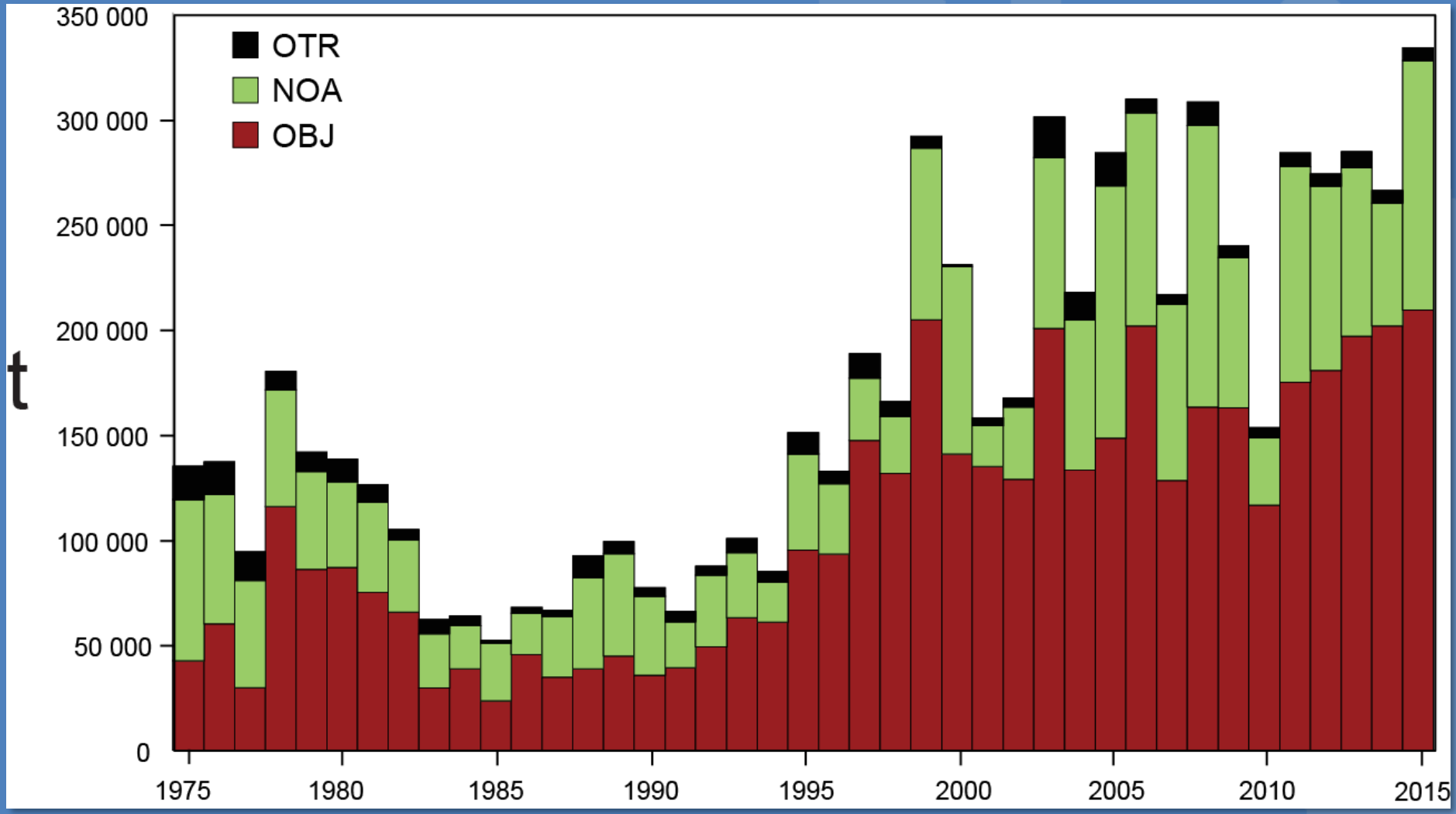
YFT Biomass


Biomass without fishing–Biomasa sin pesca
Longline–Palangre
Dolphin–Delfín
Unassociated–No asociado
Floating objects–Objetos flotantes
Discards of small fish–Descartes de peces pequeños
Biomass with fishing–Biomasa con pesca
Index of spawning biomass
30 000
25 000
20 000
15 000
10 000
5 000
0
1975
1980
1985
1990
1995
2000
2005
2010
2015

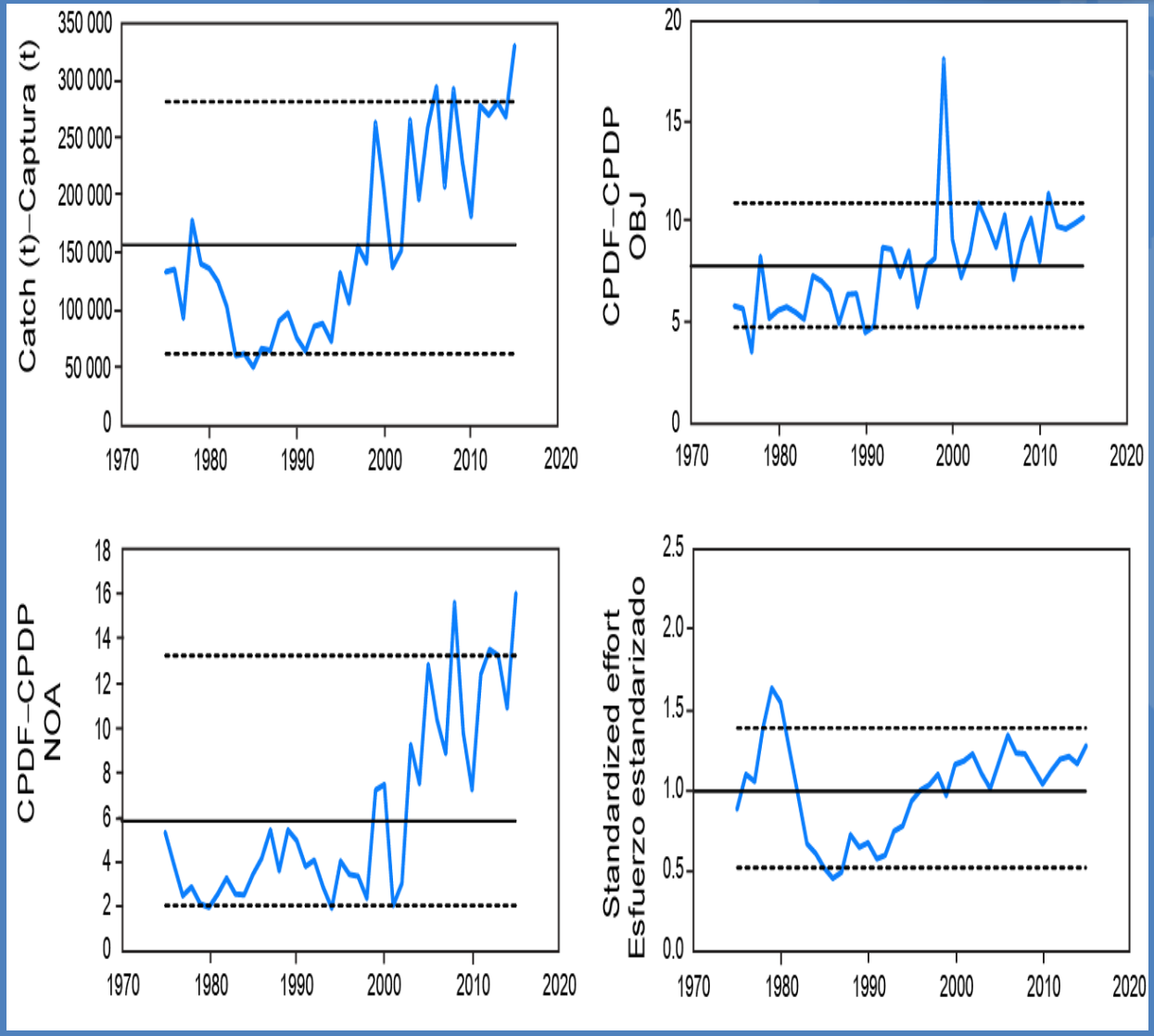
Skipjack tuna



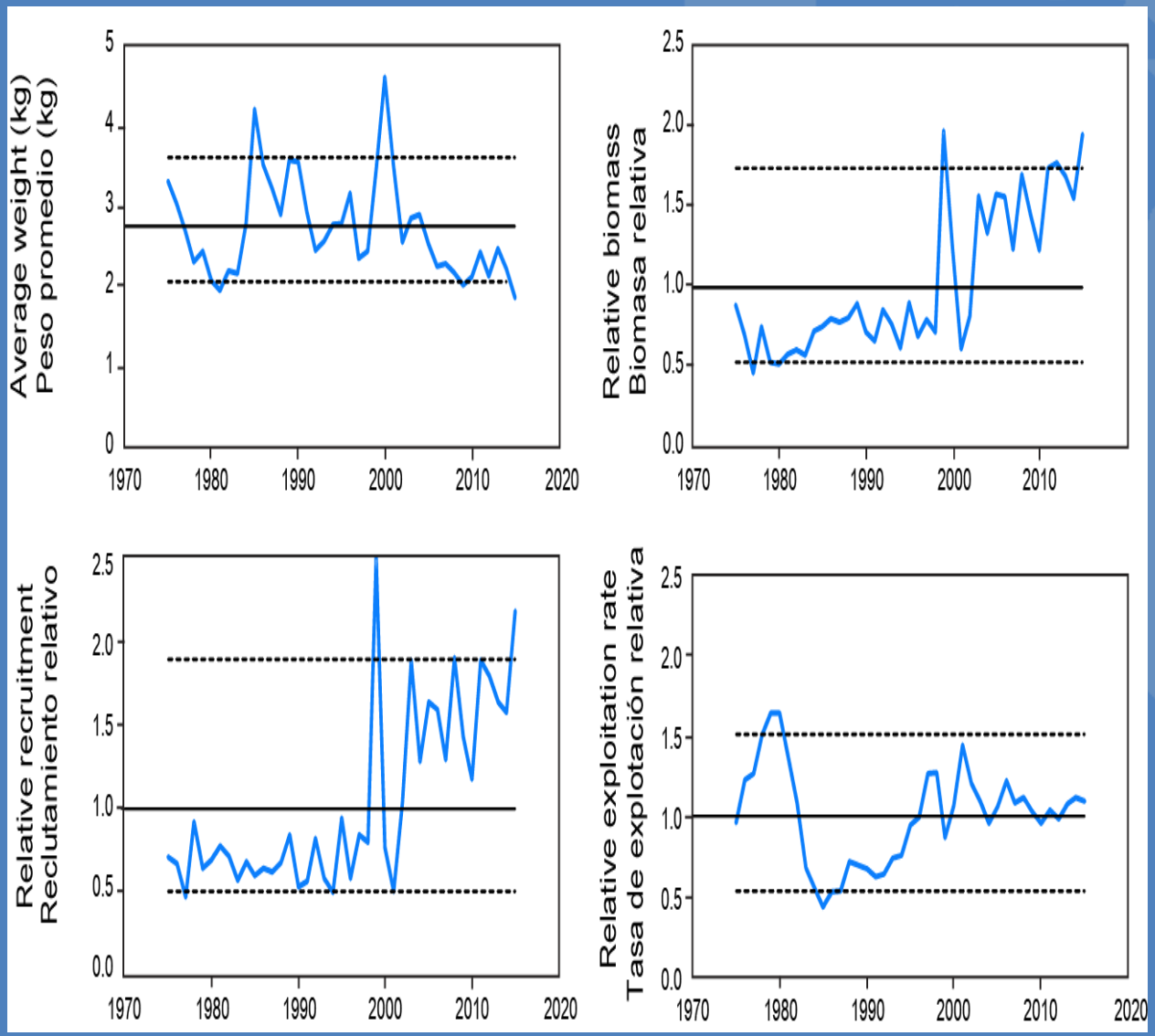
SKJ - Catch by gear and set type



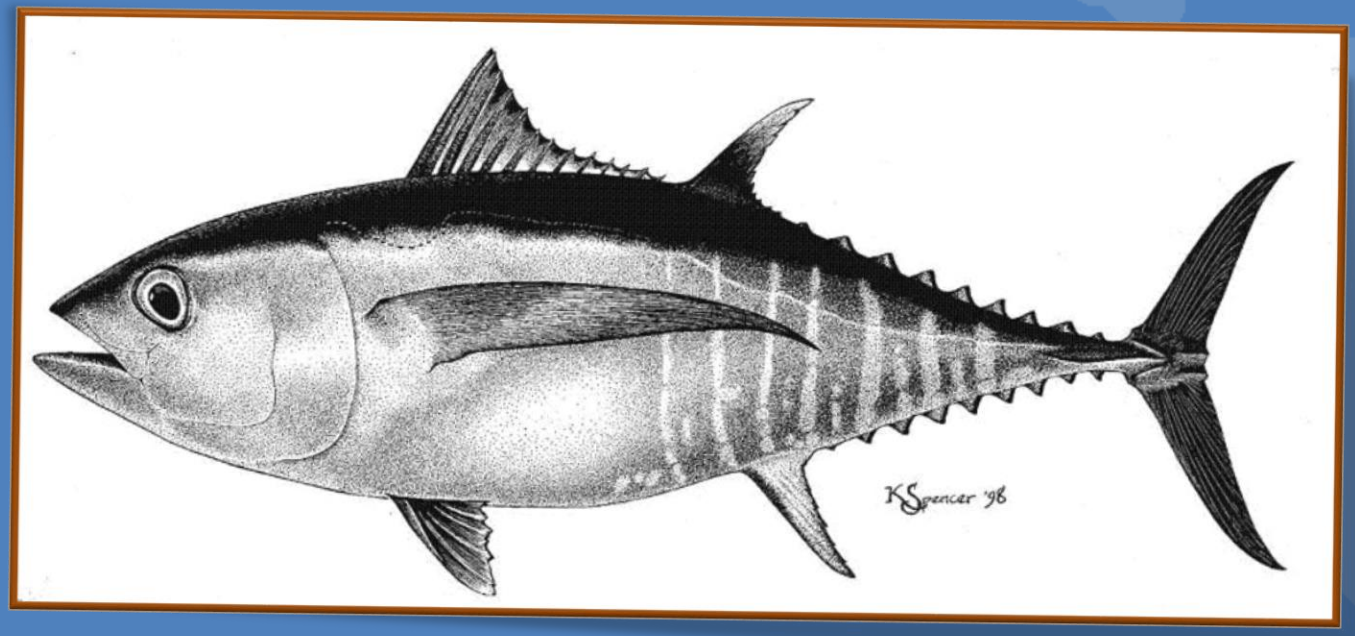
SKJ - Indicators of the stock status



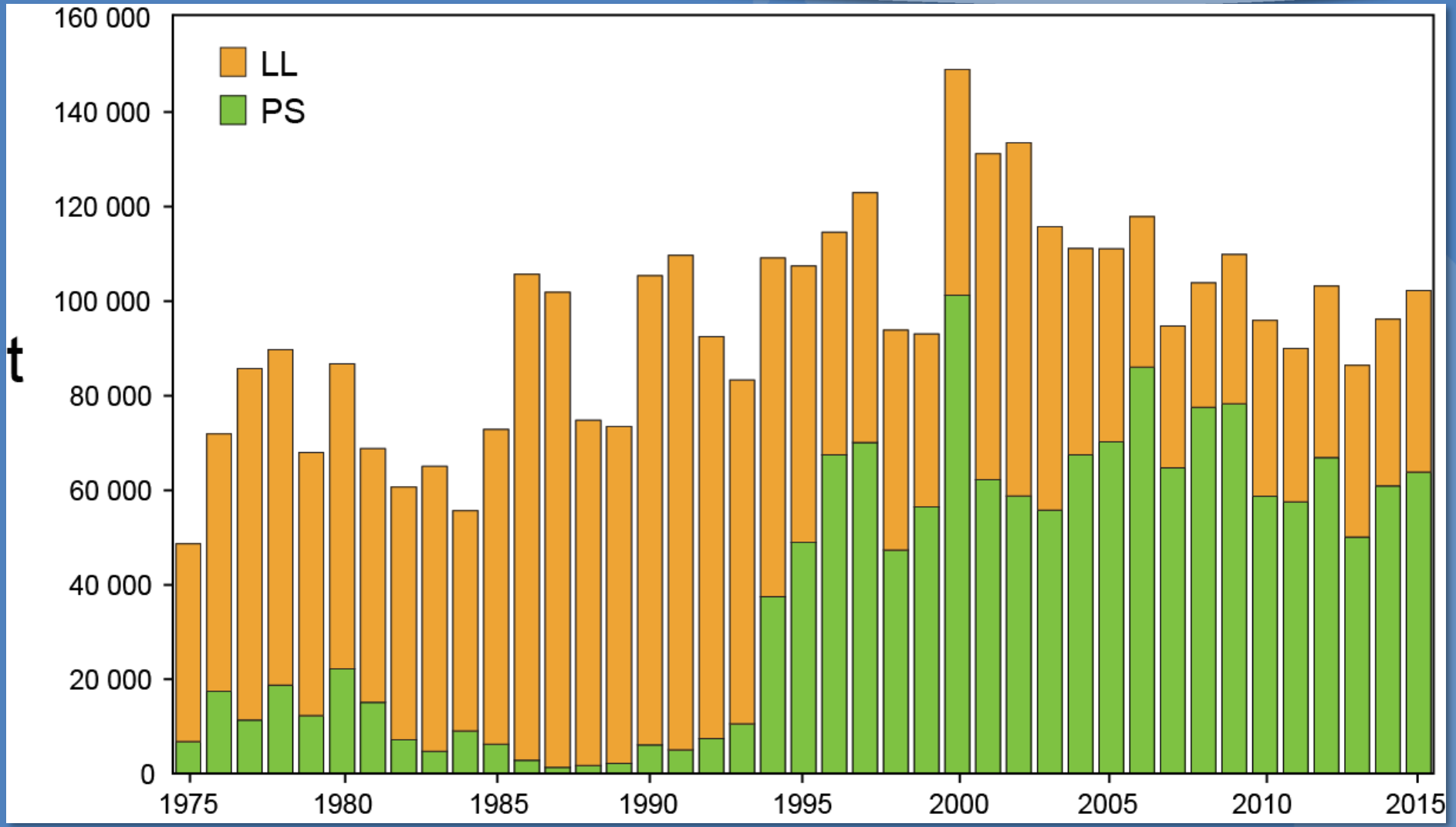
SKJ - Indicators of the stock status



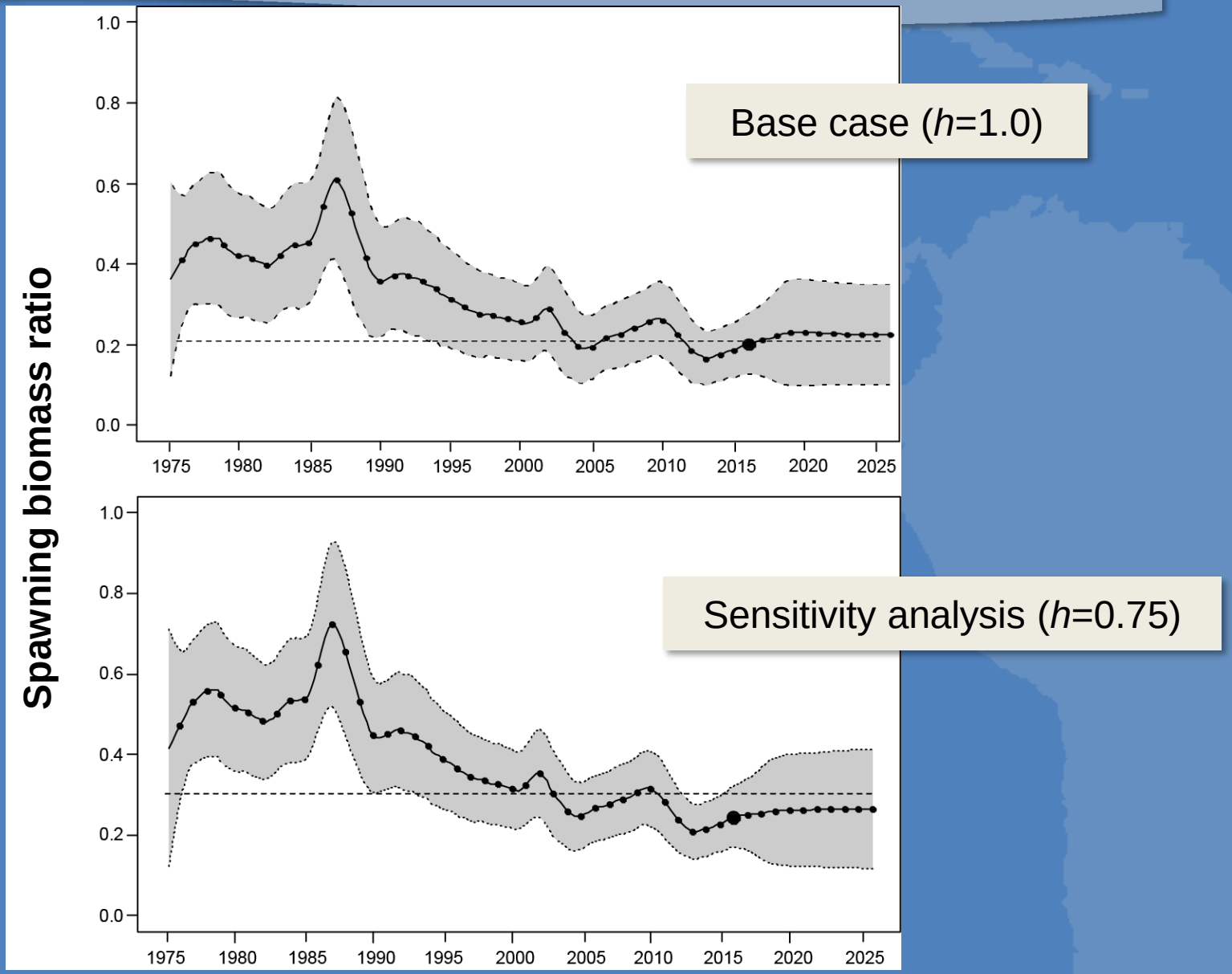
Bigeye tuna



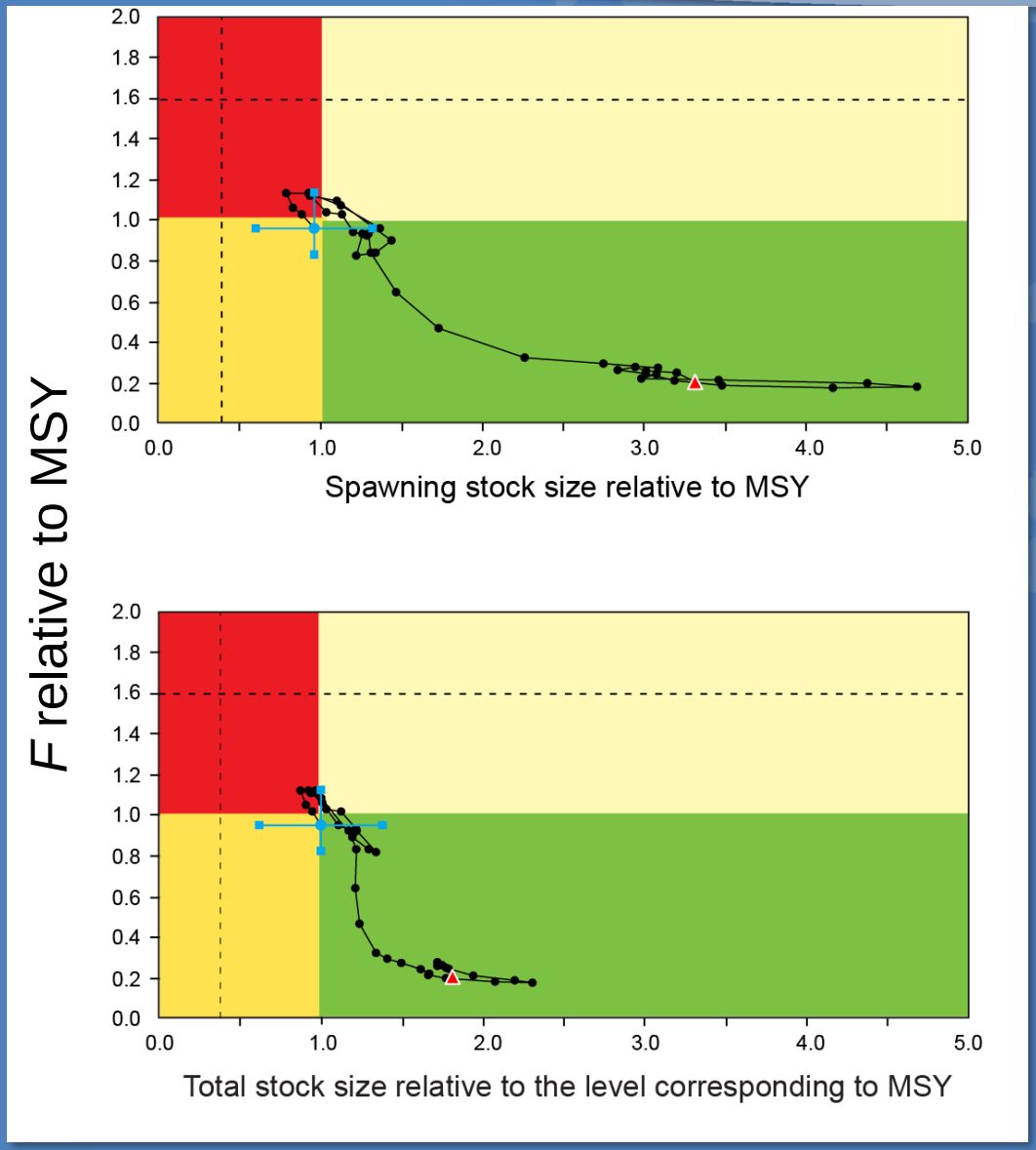
BET - Catch by gear type



Bigeye tuna - Spawning biomass ratio



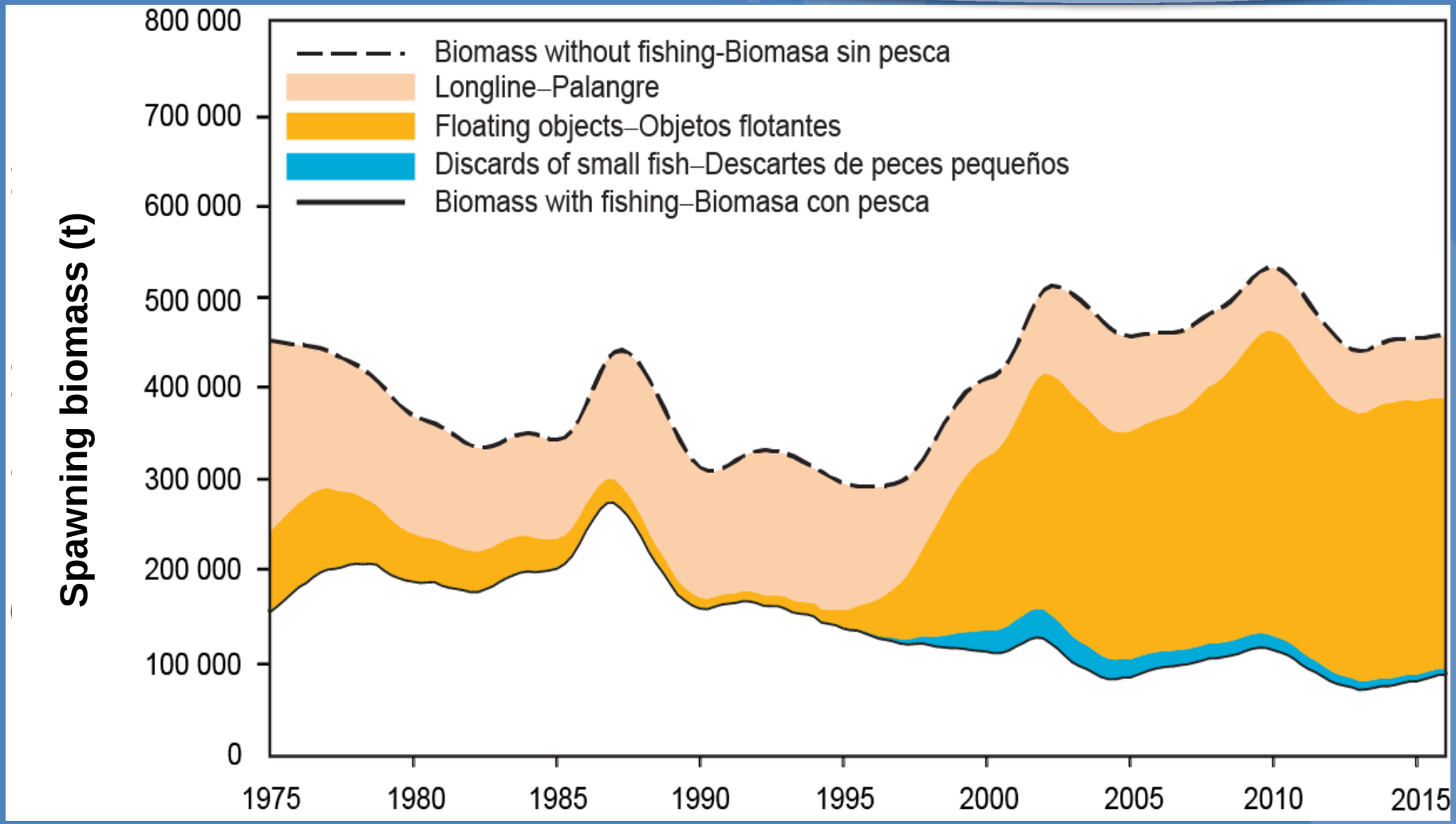
Bigeye tuna – Kobe (phase) plot



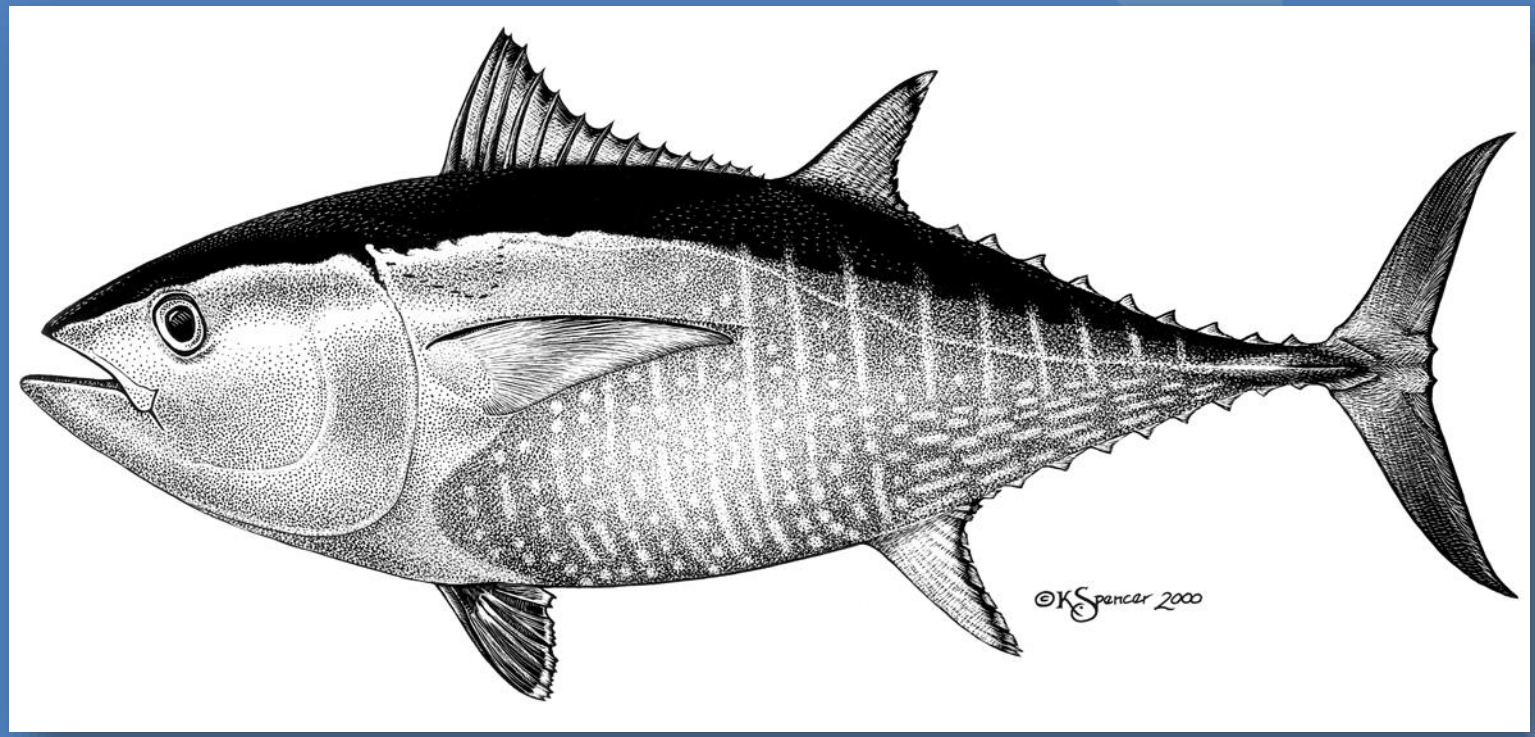
BET - Maximum Sustainable Yield (MSY)–quantities

	Base case	h = 0.75
MSY(t)	107 864	107 595
C_{recent}/MSY	0.97	0.97
S_{recent}/S_{MSY}	0.96	0.81
F multiplier	1.05	0.91

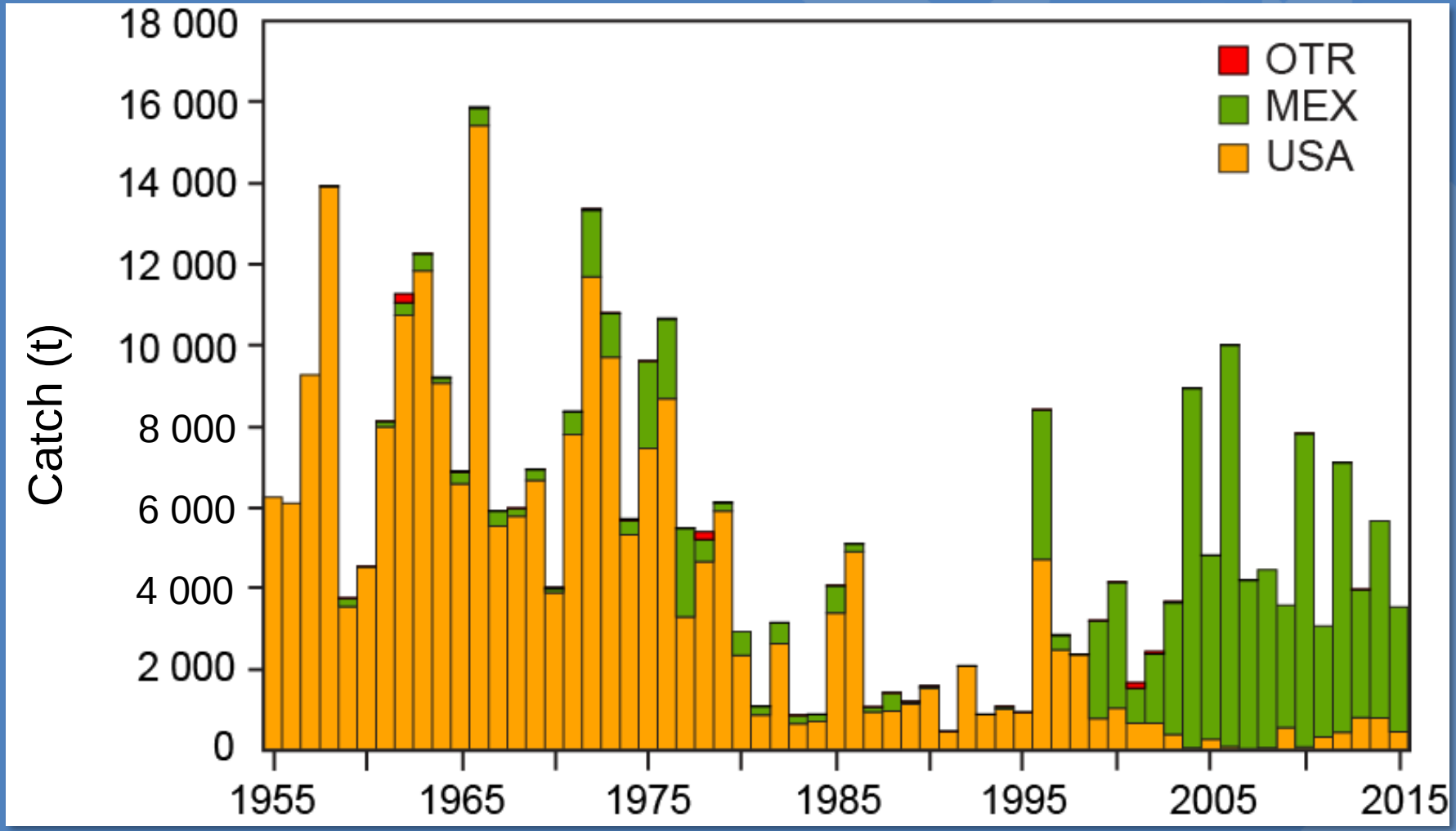
Bigeye tuna – Biomass



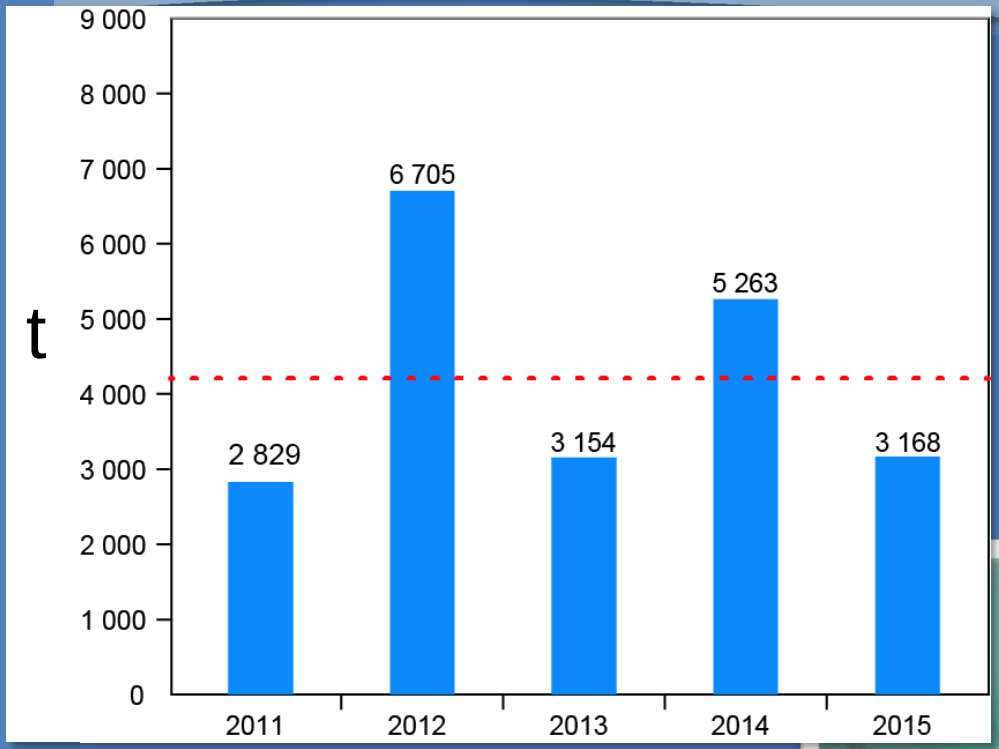
Pacific Bluefin tuna



Pacific bluefin tuna - Catches in the EPO, by flag, 1955-2015



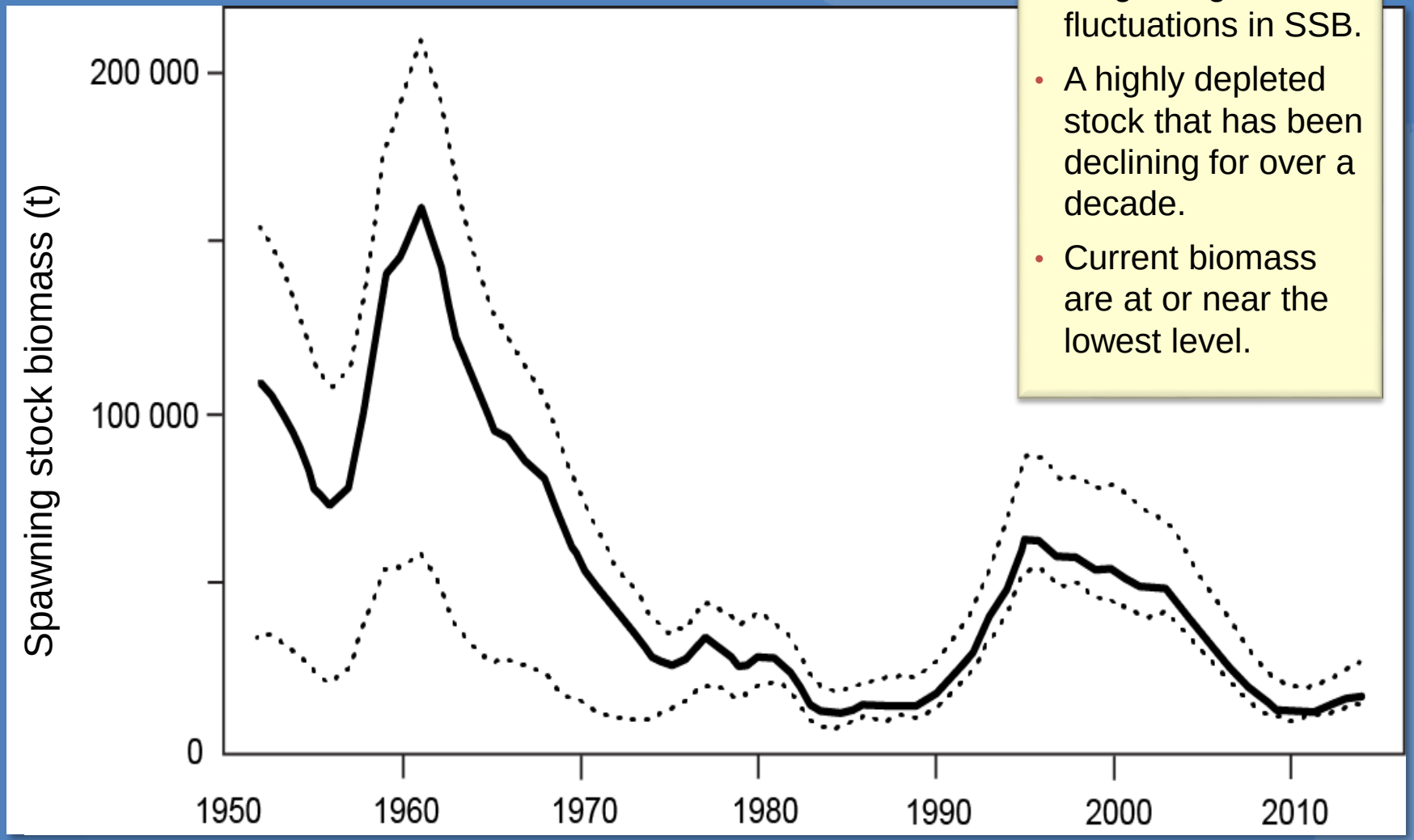
PBF – Purse-seine catches in the EPO



5-year average
4 224 t

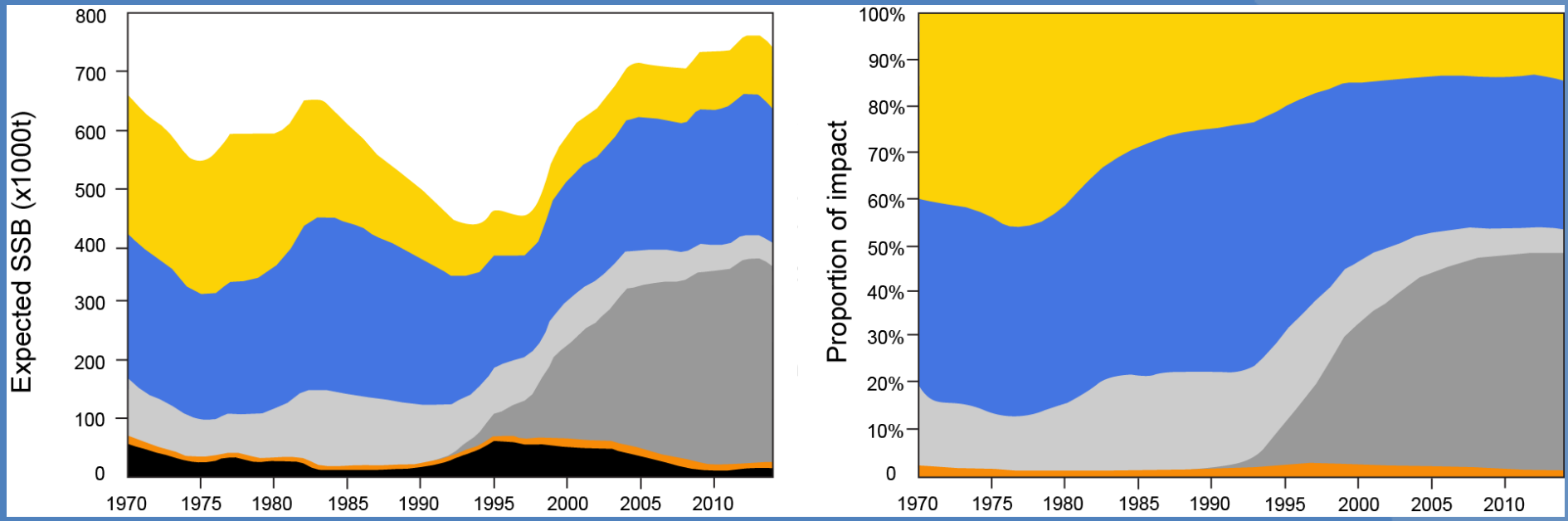
Photo: Dan Fuller, IATTC

PBF - Status of stock: general agreement among models



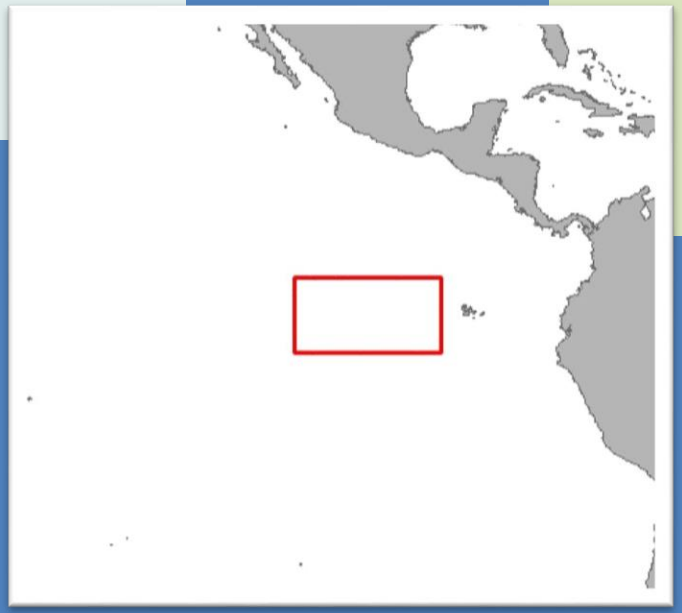
- Large long-term fluctuations in SSB.
- A highly depleted stock that has been declining for over a decade.
- Current biomass are at or near the lowest level.

Impact on Pacific bluefin tuna



Tuna Conservation Resolution (C-13-01) for the EPO

- Applies for 2014-2016
- Purse seine (> 182 mt capacity)
  - Must stop all fishing in the EPO for 62 days each year
  - Closure of offshore area (96° to 110°W and 4°N to 3°S) during 29 Sep to 29 Oct



- Longline catches of bigeye tuna
  - Fixed catch limits for China, Japan, Korea, and Chinese Taipei
  - Catches by other CPCs not to exceed 500 t or their respective catches in 2001, whichever is higher. Applies only to longline vessels >24m

PBF – Conservation Resolution C-14-06 in the EPO

- During 2015 and 2016, in the IATTC Convention Area, total commercial catches of Pacific bluefin tuna by all CPCs shall not exceed 6,600 metric tons
- Any CPC other than Mexico with historical commercial catches of Pacific bluefin in the Convention Area to catch up to 600 metric tons of Pacific bluefin in 2015 and 2016 combined
- Objective of reducing the proportion of fish of less than 30 kg in the catch toward 50% of total catch
- In 2015, each CPC must take meaningful measures to reduce catches of Pacific bluefin tuna by sportfishing vessels

Recommendations by the staff for conservation measures in the EPO, 2016

YELLOWFIN, SKIPJACK, AND BIGEYE TUNAS:

The staff recommends that the closures of the purse-seine fishery for tropical tunas established in Resolution C-13-01 be increased from 62 days to 87 days during 2017-2019, and that all the other provisions of the resolution be maintained as they are.

PACIFIC BLUEFIN TUNA:

The staff recommends to extend the measures established in the current Resolution C-14-06 for two more years and we encourage the WCPFC to adopt additional measures to reduce the catch of adults to in order to reduce the immediate risk of low spawner abundance on recruitment. The IATTC staff will reevaluate bluefin stock status when the ISC working group does another update or full assessment.

QUESTIONS?