
Comisión Interamericana del Atún Tropical-Inter-American Tropical Tuna Commission



Sustainable Fisheries for Tuna in the EPO

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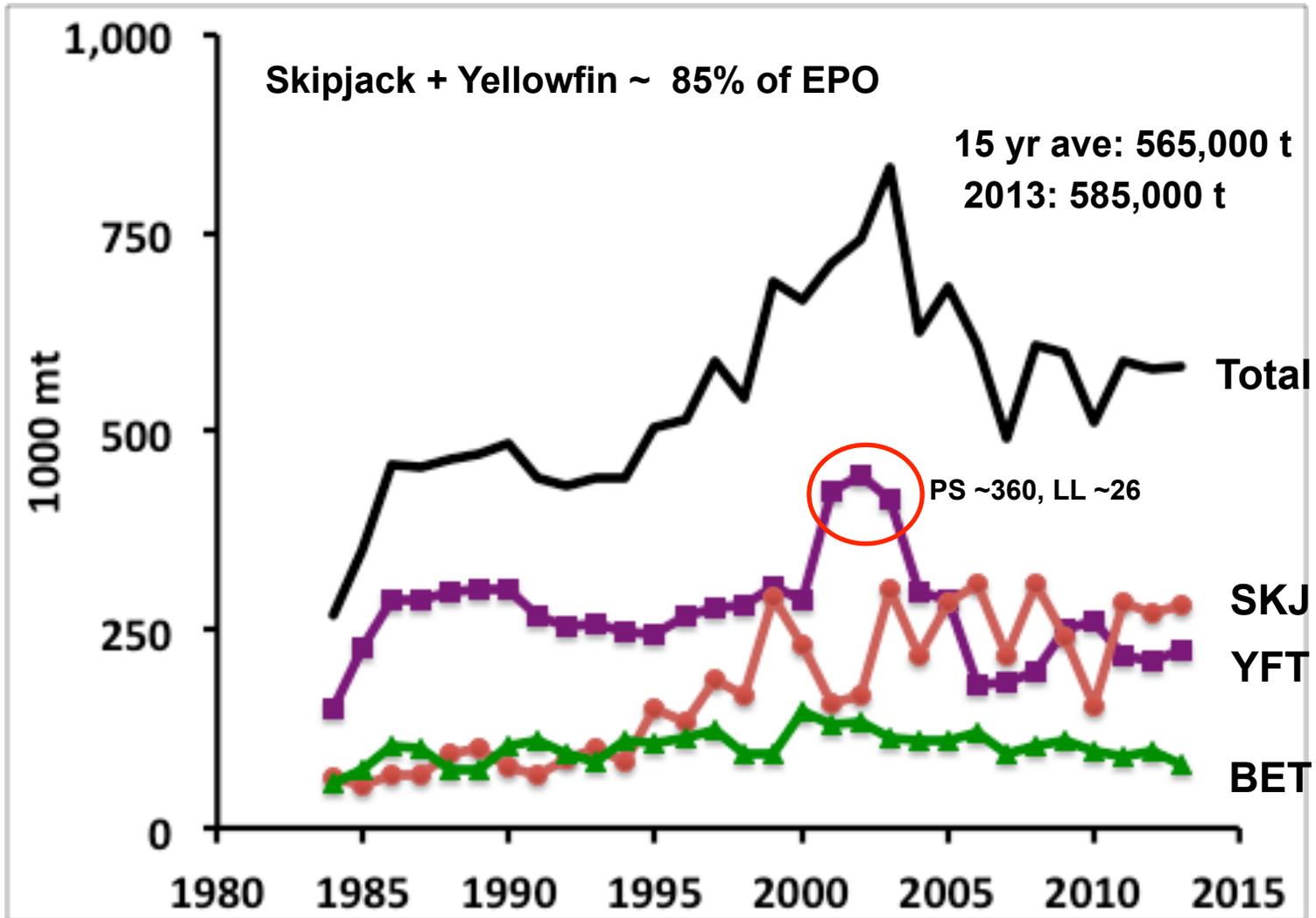
A decorative blue gradient shape in the bottom left corner of the slide.

Topics

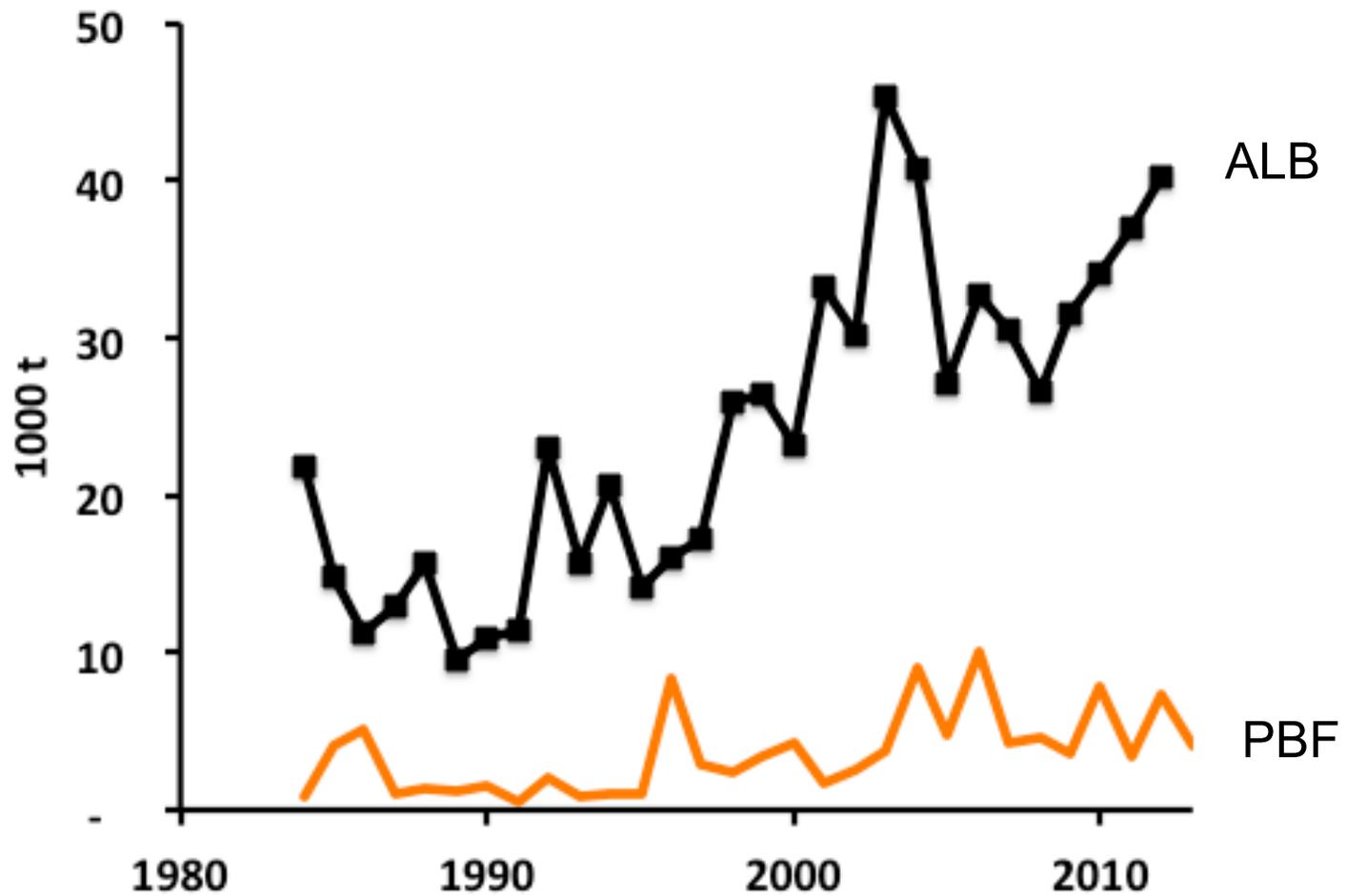
Tuna fishery status & trends

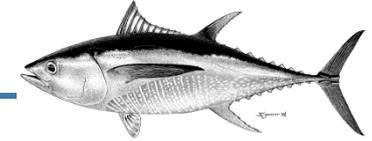
- EPO fisheries →
 - by Species
 - by Gear
- Management → It's People not Fish
 - Status & conservation
 - Fishing effort & areas – current
 - Measures of success
- Bycatch

Catch by Species

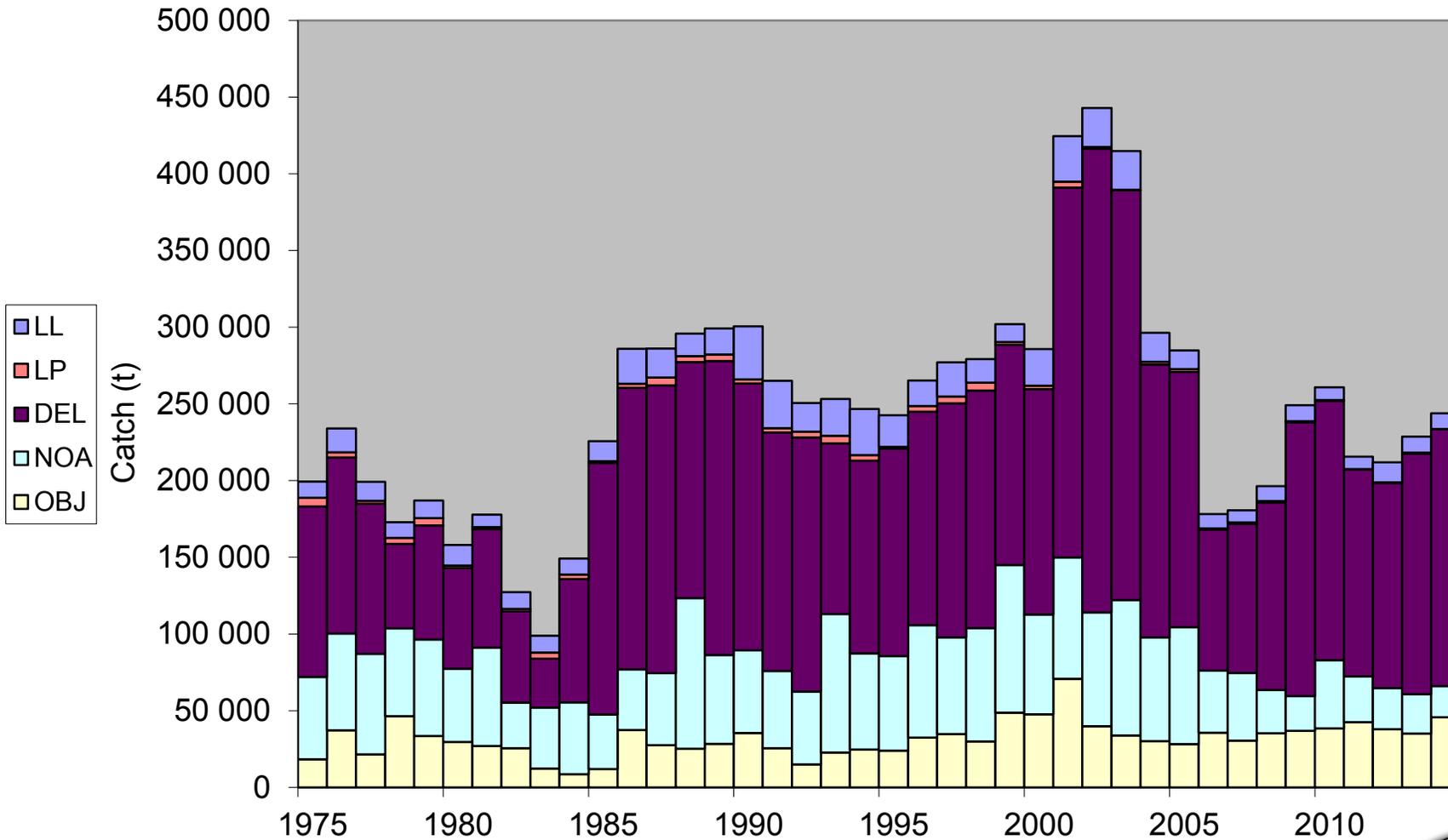


EPO Albacore and Pacific Bluefin

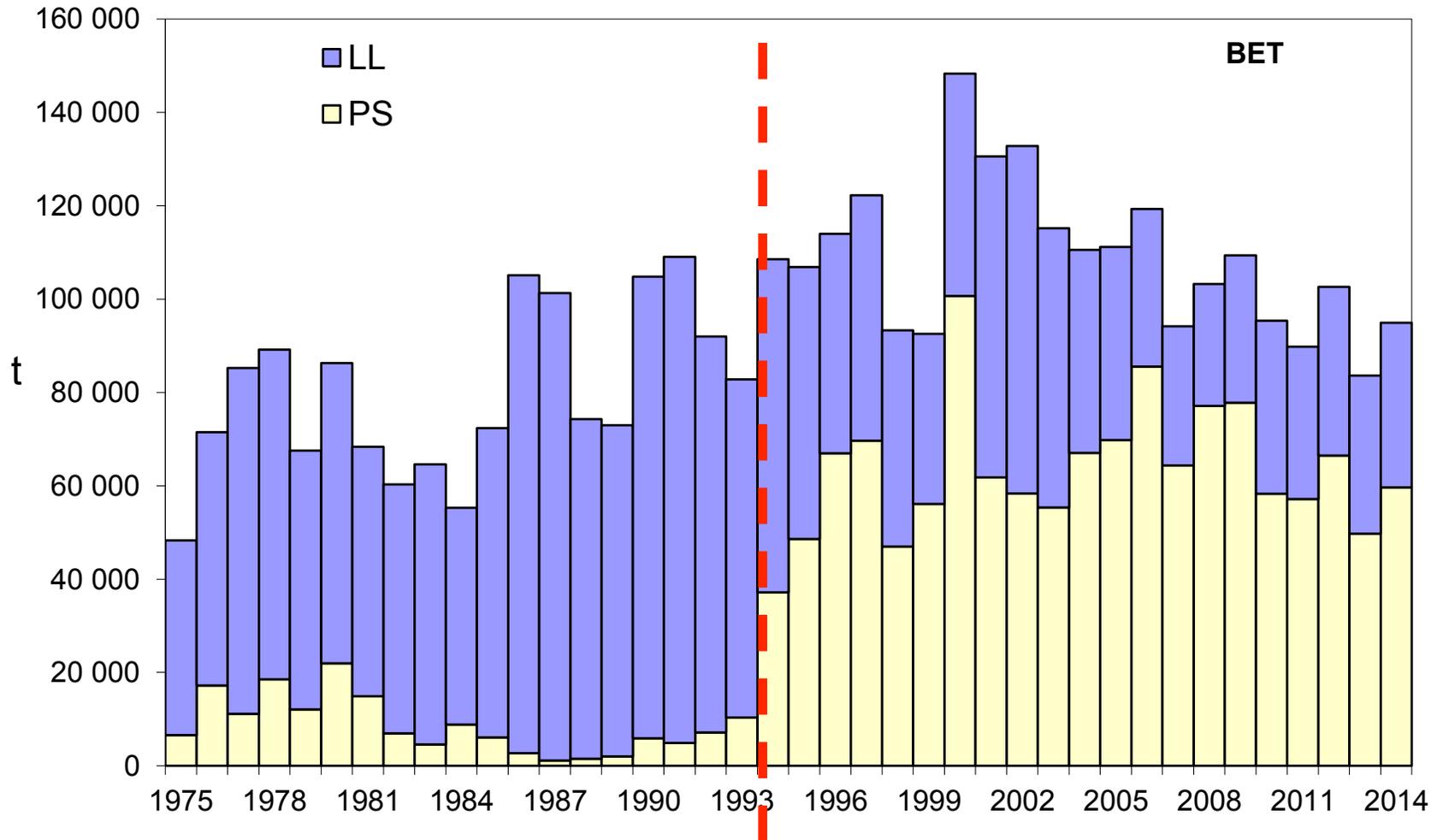




YFT total catches by gear & set type



BET catch by gear



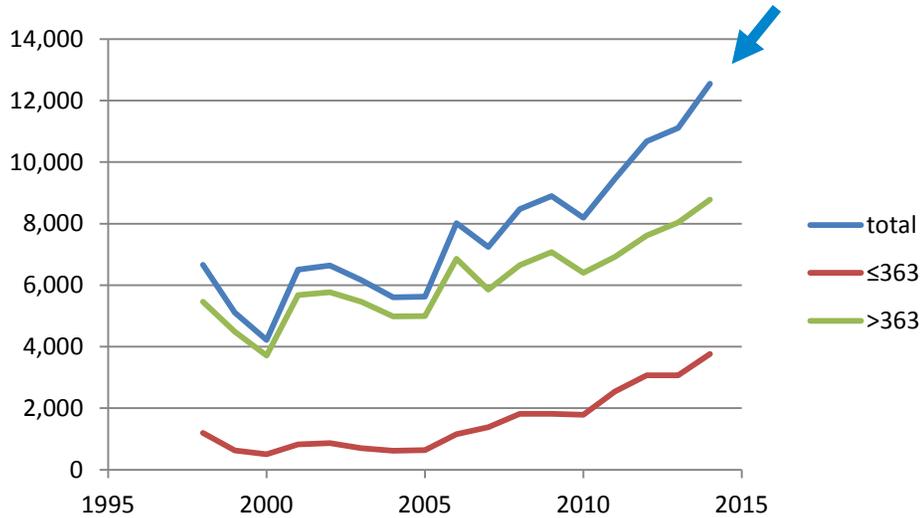
Expansion of FAD fishery



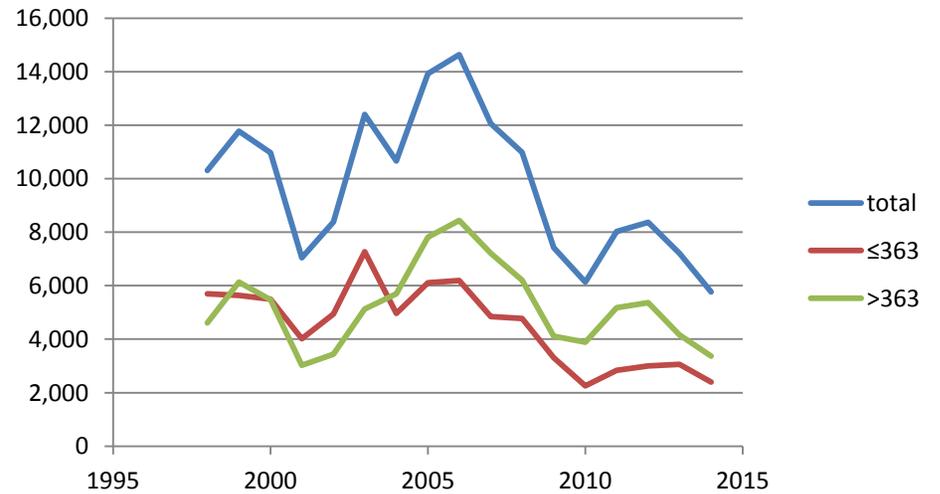


Numbers of sets

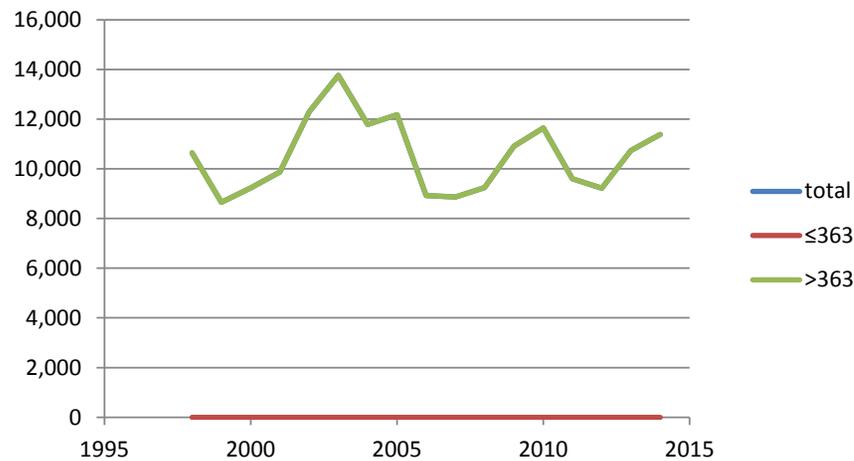
Number of OBJ sets



Number of UNA sets

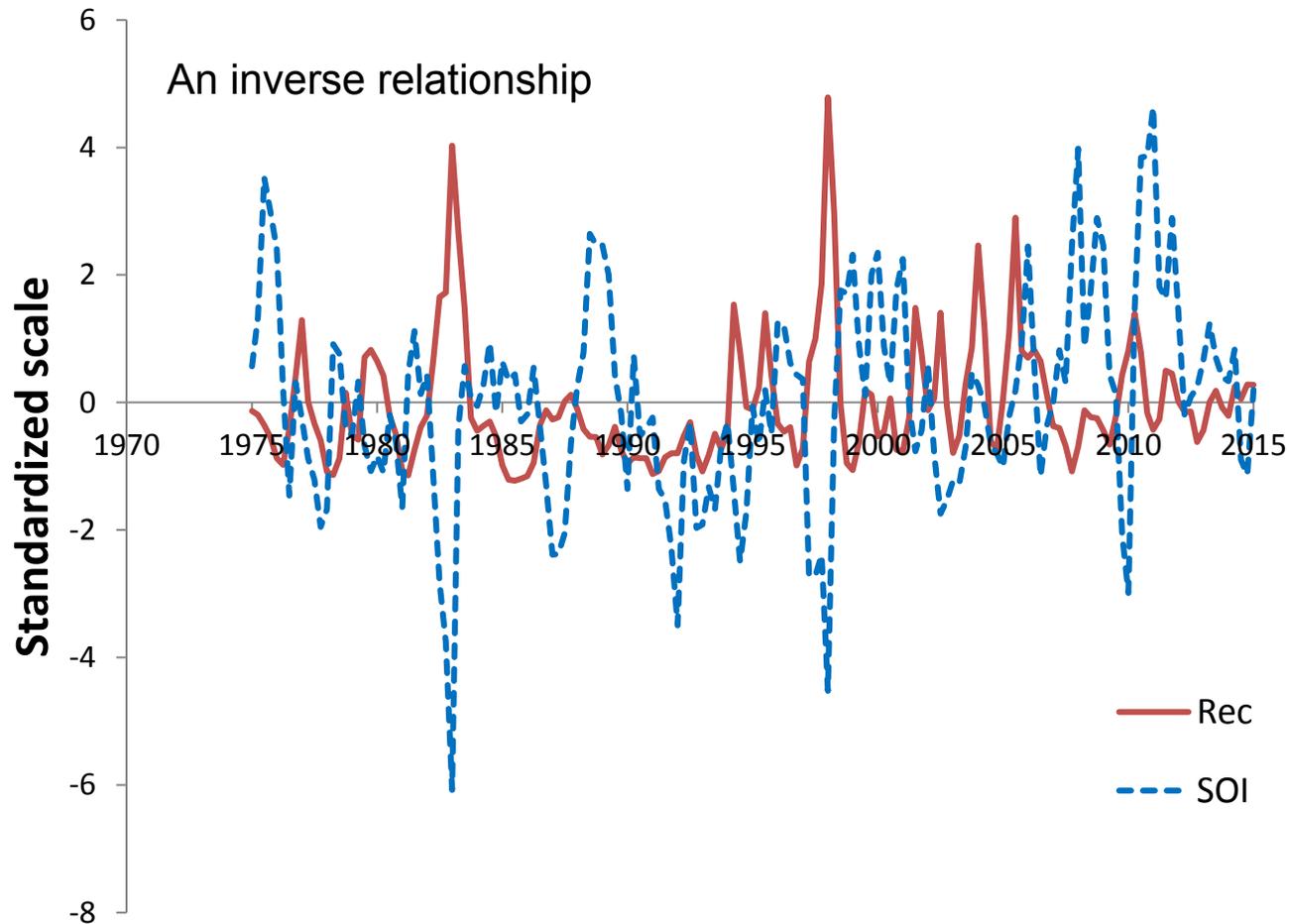


Number of DEL sets



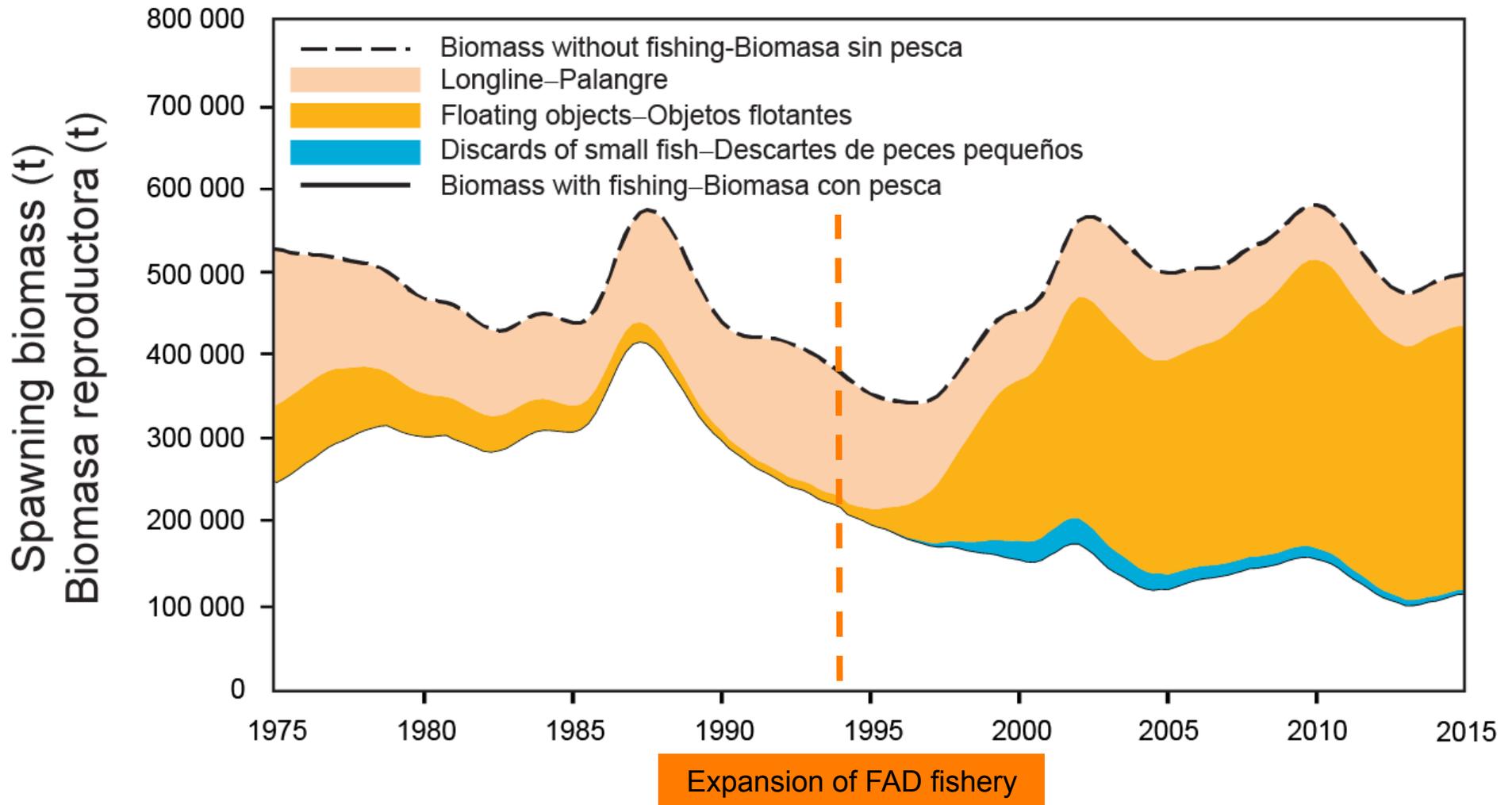
BET Recruitment and environment

Results
(base case)



Fishery impact on BET

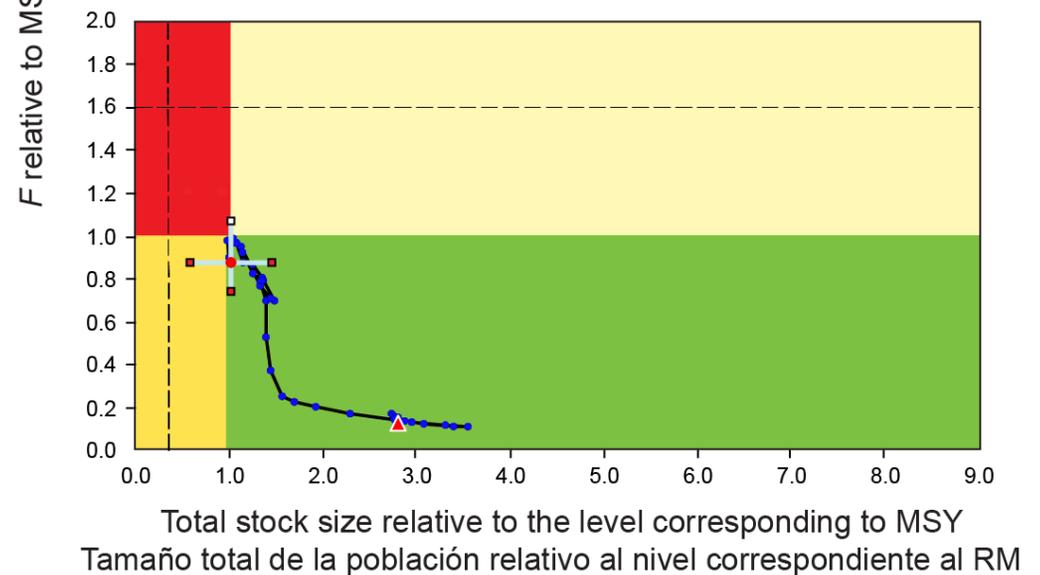
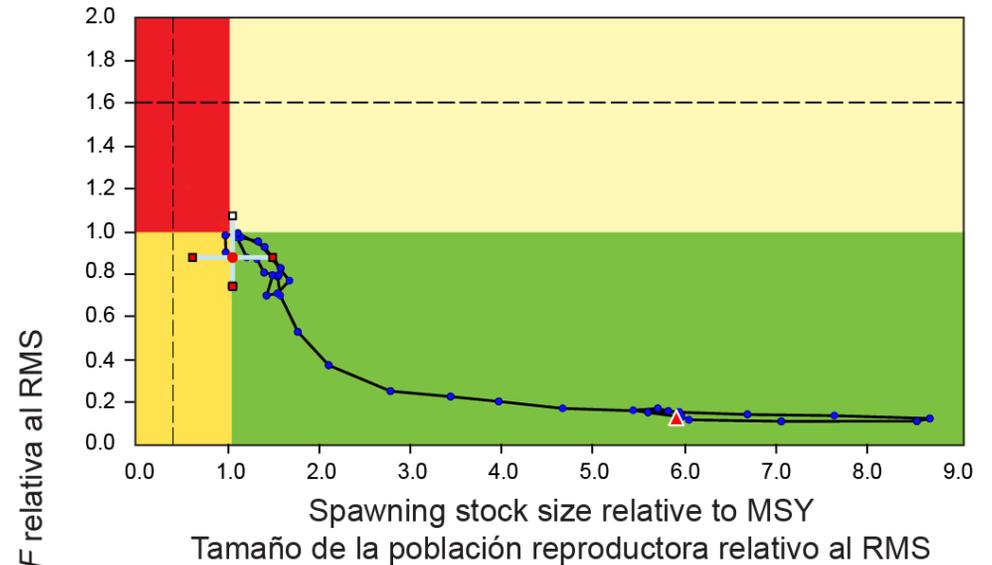
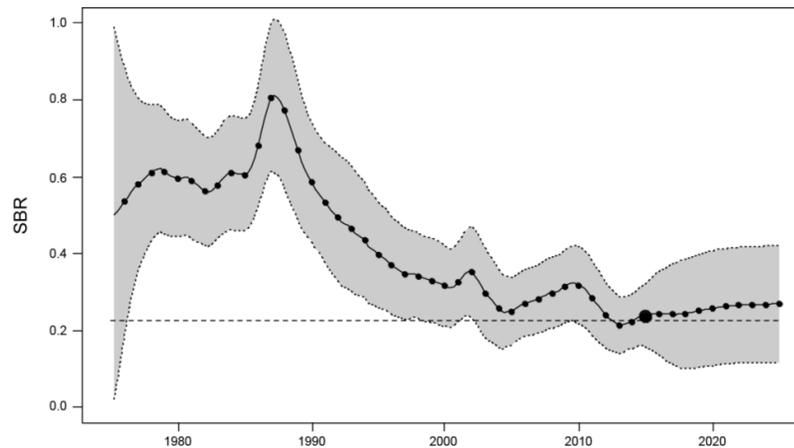
Results
(base case)





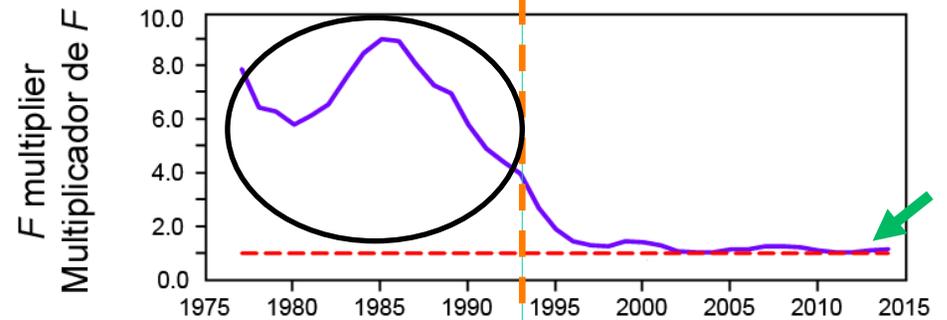
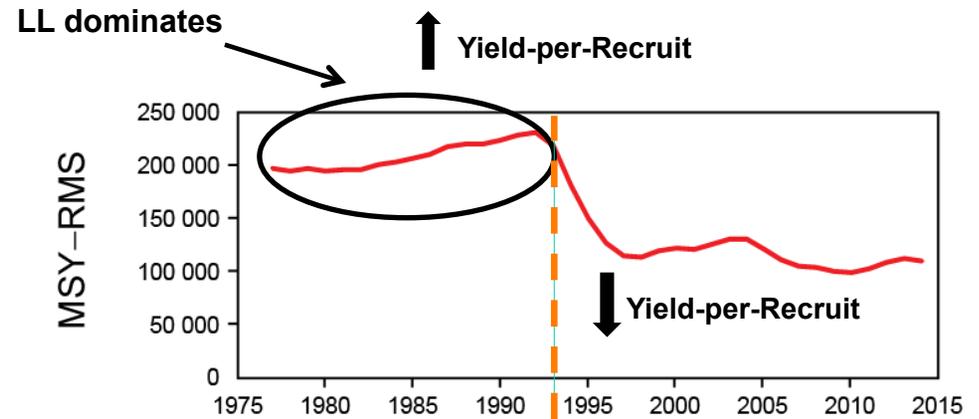
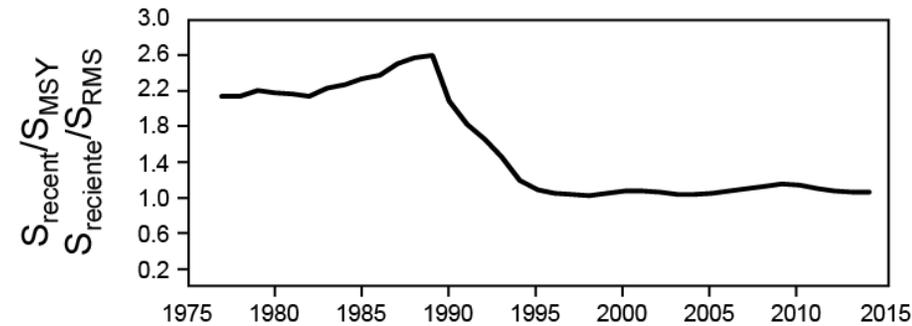
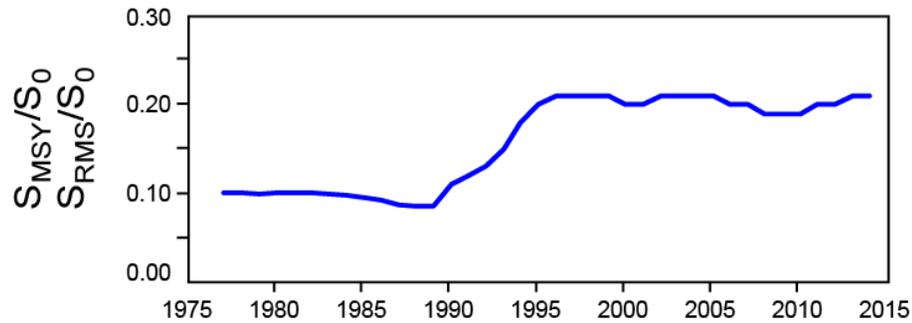
BET Status: MSY = 113,700 t

- Population decline observed since the early 1990s ceased around 2005 after adopting IATTC conservation resolutions
- Recent decline: strong El Nino events (since 2007) => below average R
- Spawning Biomass > MSY level: **not overfished**
- Fishing Mortality Rates < MSY level: **not overfishing: 95% CI overlaps 1**
- F current; R average => stable SBR



BET Time varying indicators

Stock status
(base case)

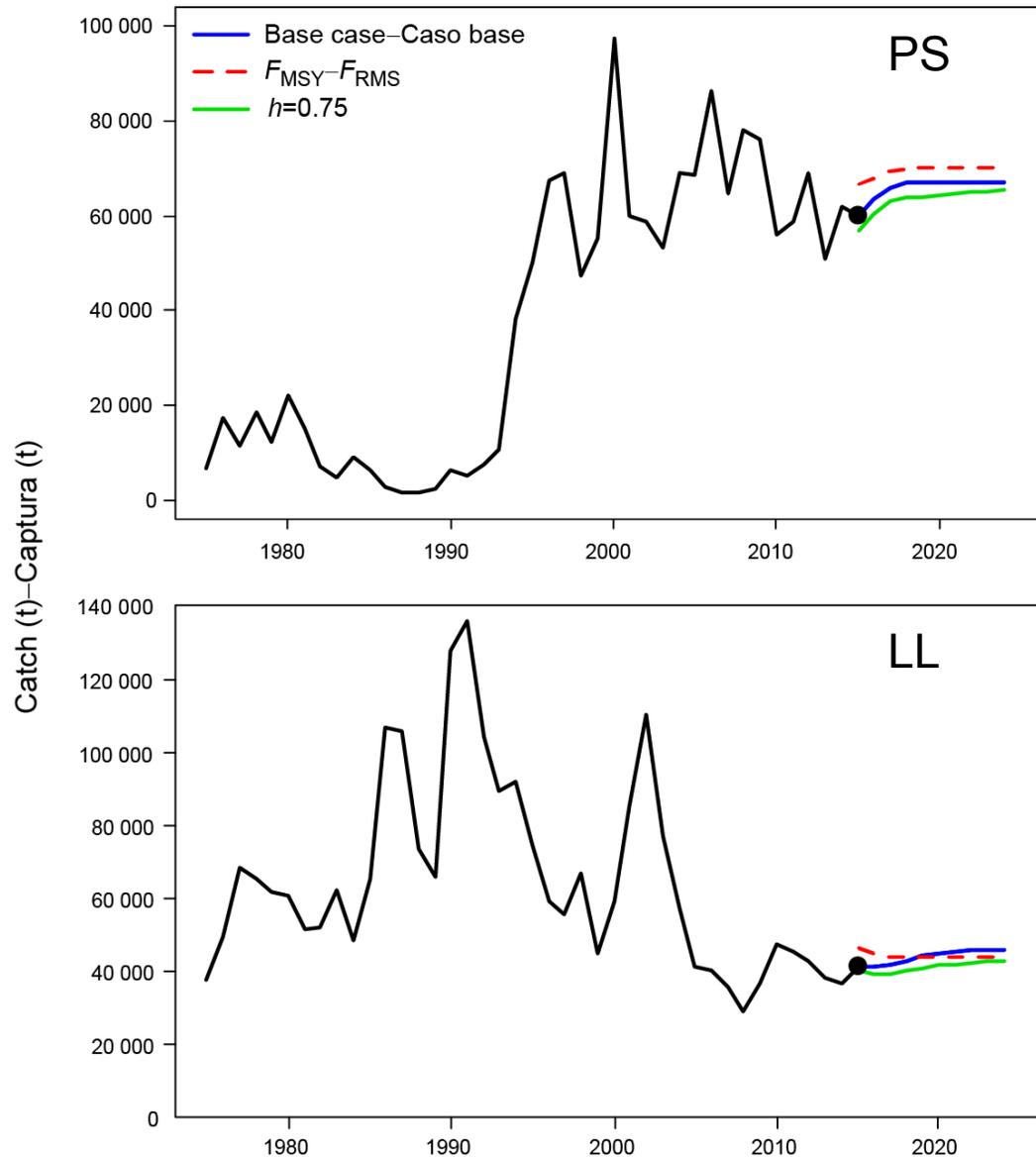


Expansion of FAD fishery

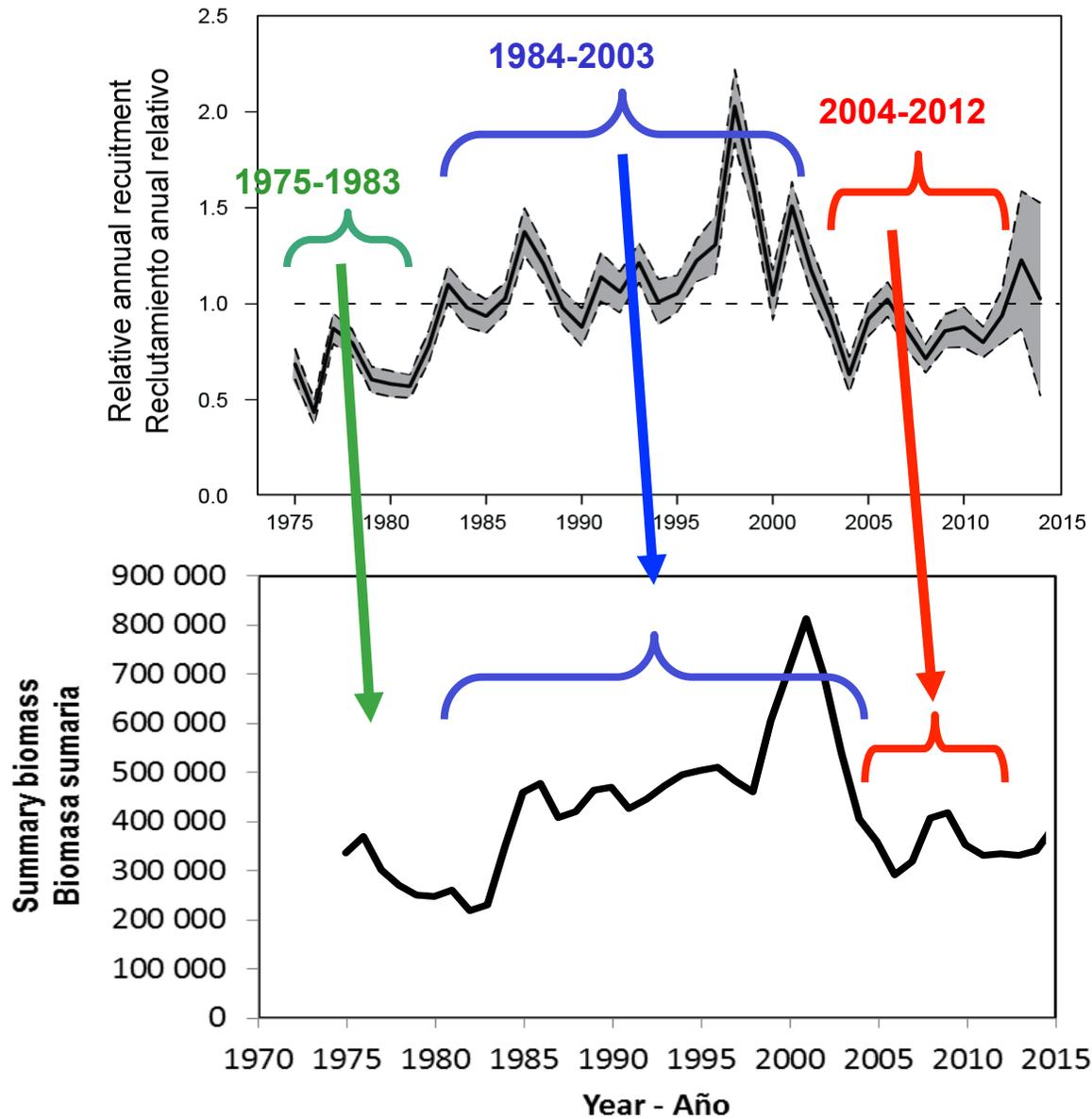
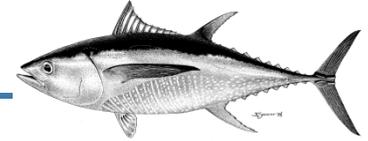


BET Projected catches – *Status quo* (F_{cur})

Projections
(base case)

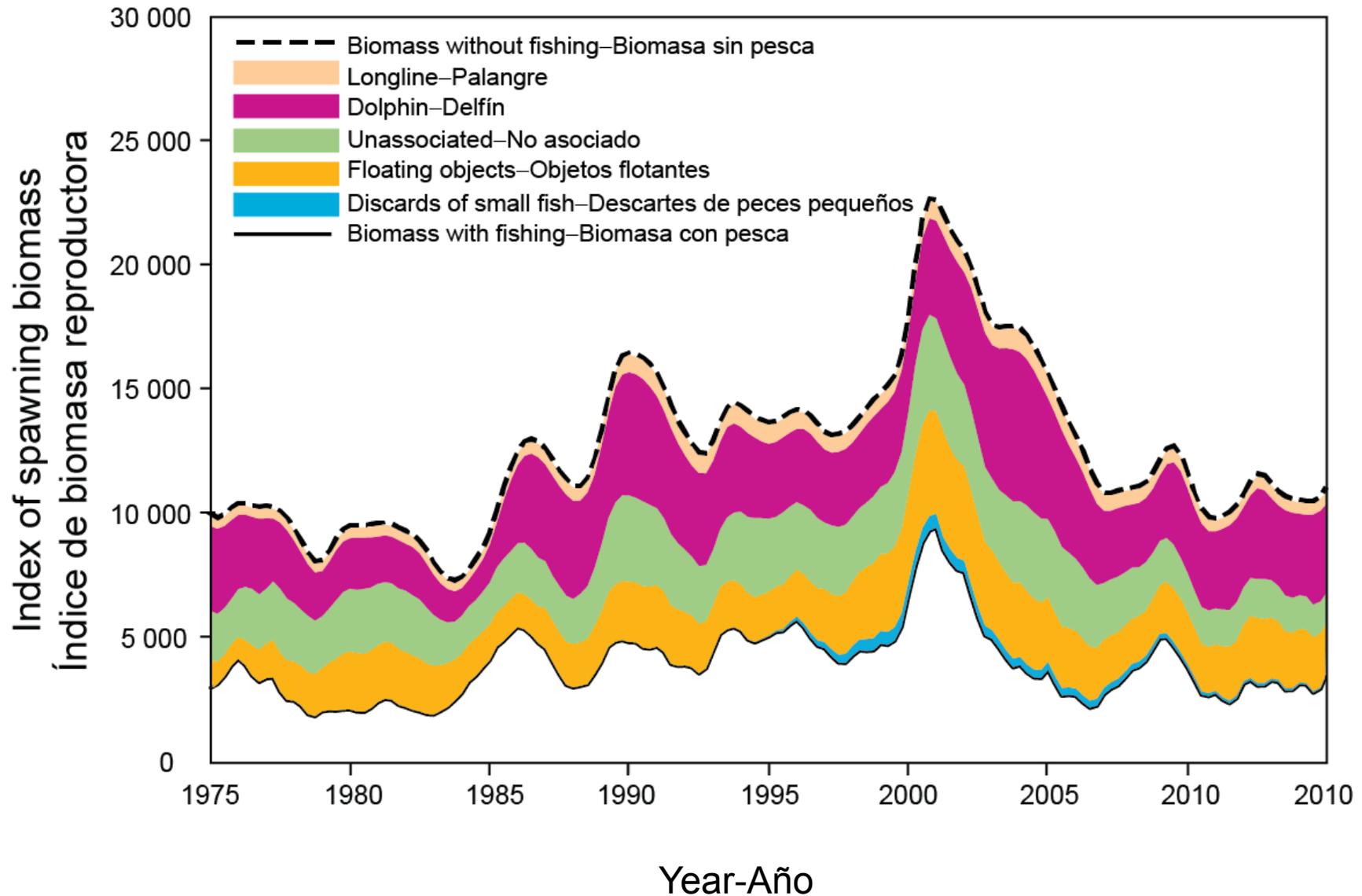
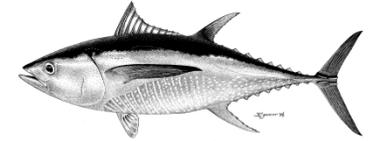


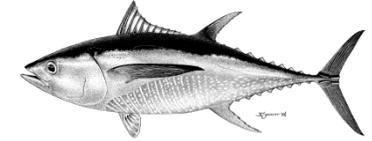
YFT recruitment & biomass



Fishery impact

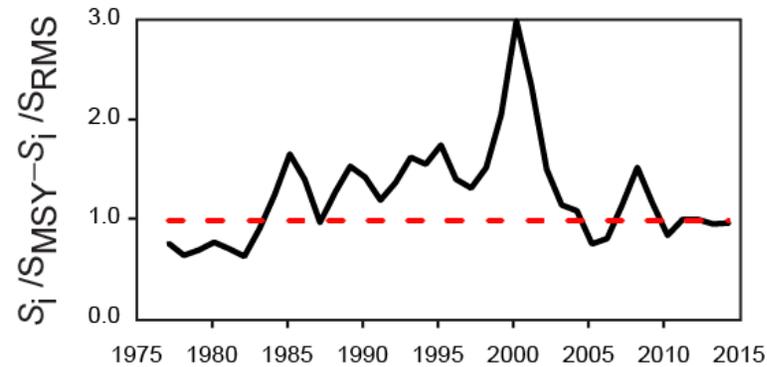
Results - base case



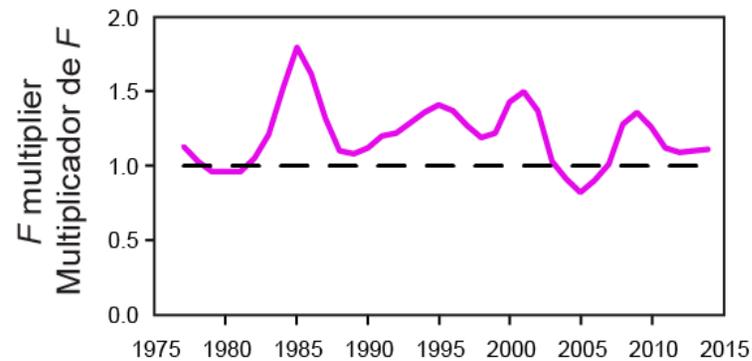


YFT Status: $MSY = 275,000 \text{ t}$

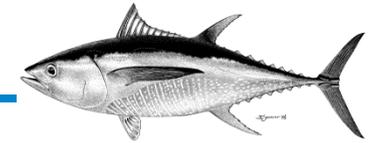
- Spawning Biomass < but \approx MSY level: “slightly” overfished:
95% CI overlaps 1.0



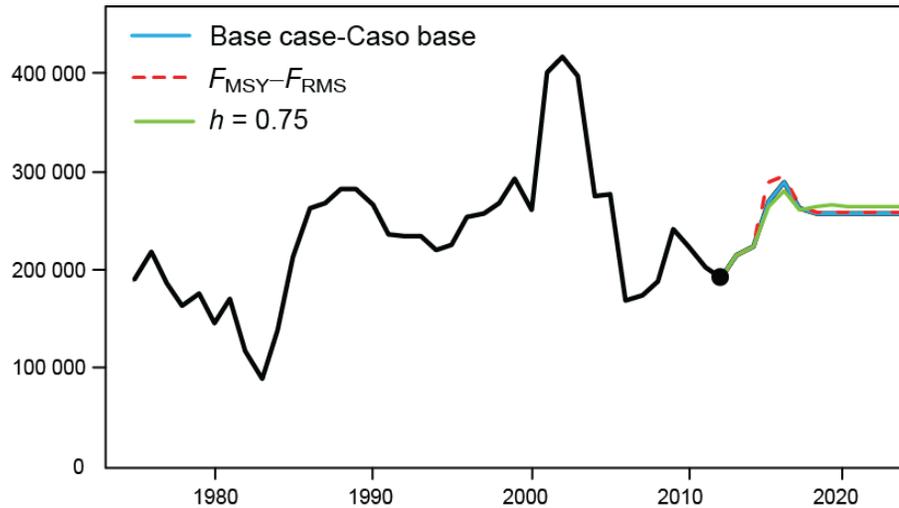
- Fishing Mortality Rates < MSY level: not overfishing



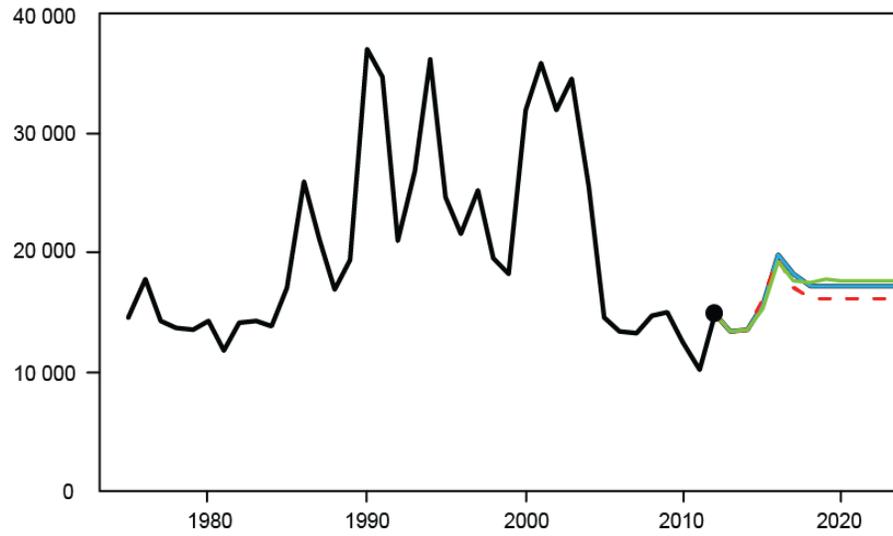
YFT projected catches – *Status quo* (F_{cur})



Catch (t) – Captura (t)



- Base case-Caso base
- - - $F_{MSY} - F_{RMS}$
- $h = 0.75$



Year



SKJ status indicators & status

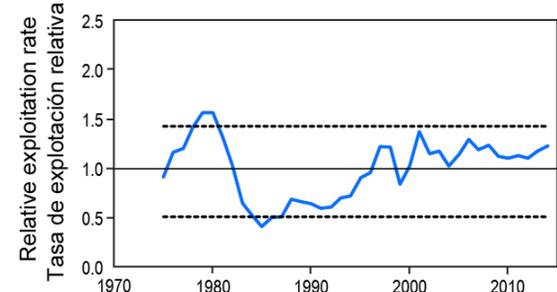
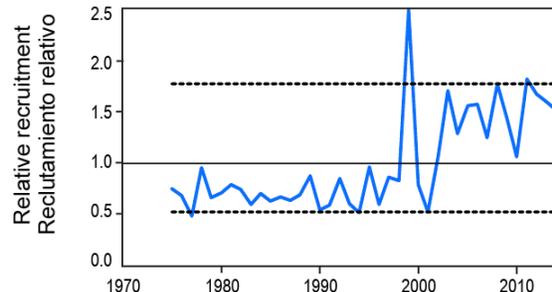
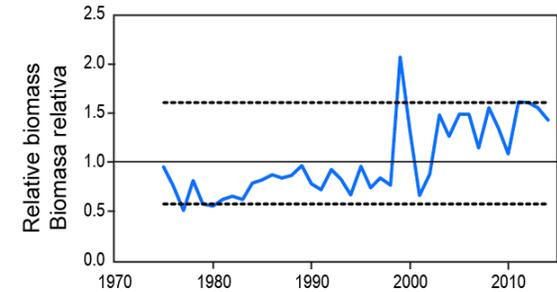
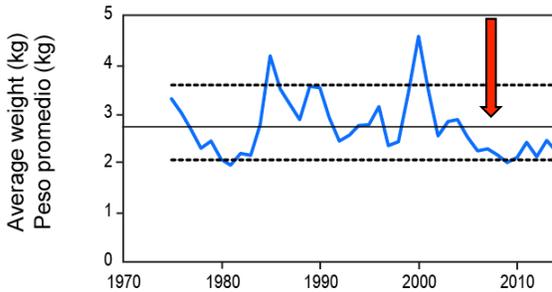
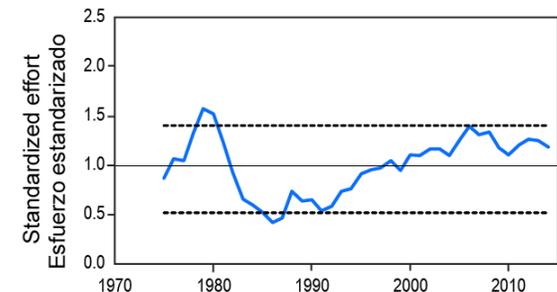
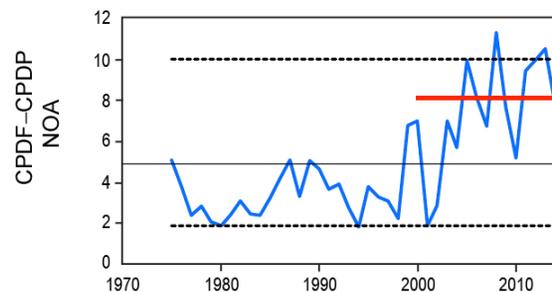
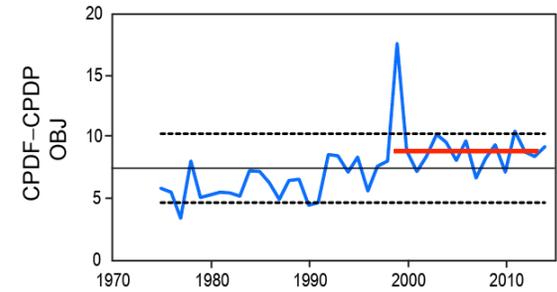
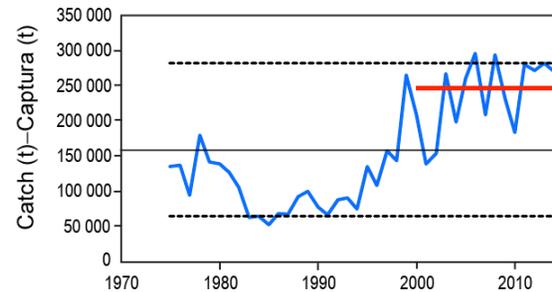


There is uncertainty about the status of skipjack tuna in the EPO.

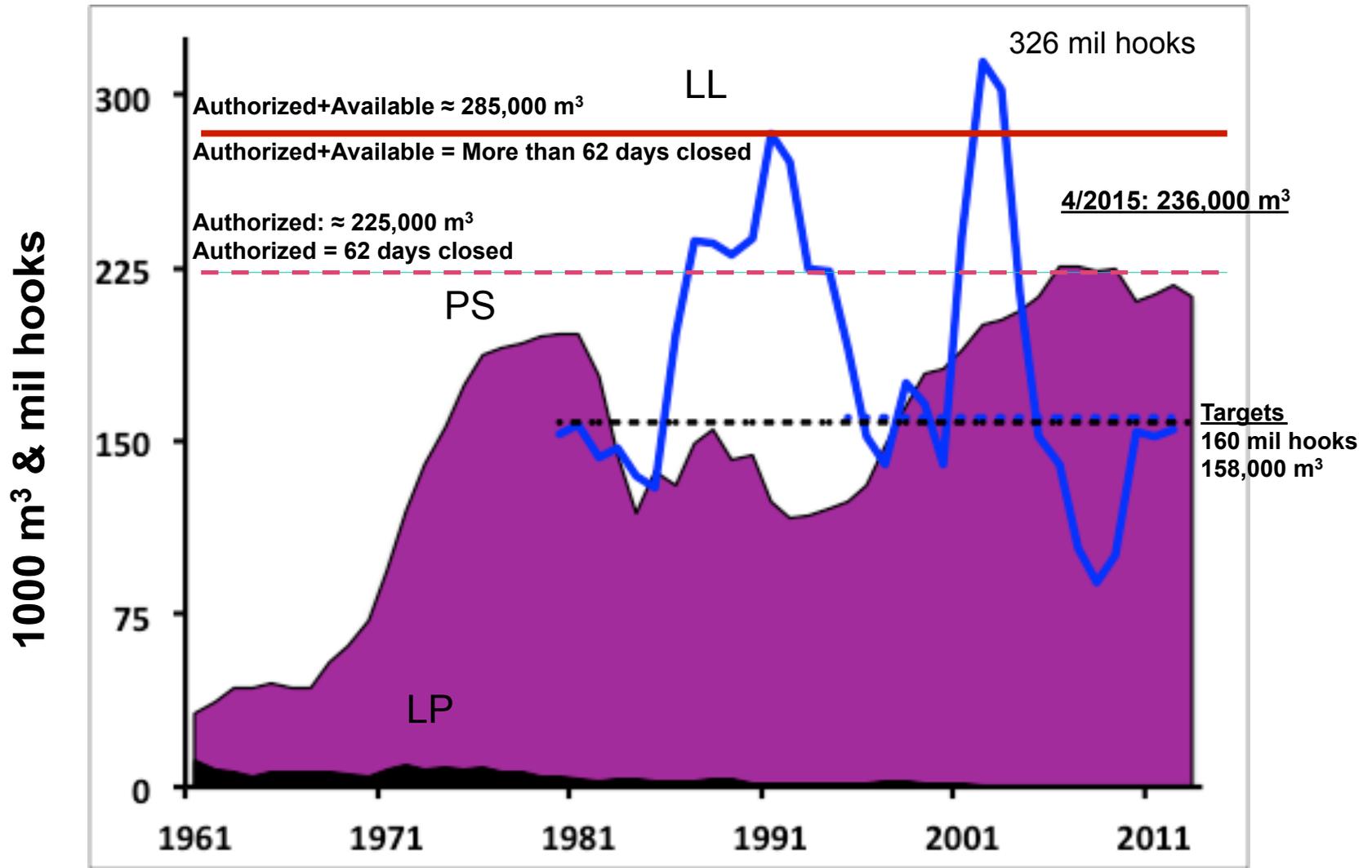
There may be differences in the status of the stock among regions.

There is no evidence that indicates a credible risk to the skipjack stock(s).

No additional management action is needed beyond that for BET.



Threat to stability: Excess capacity

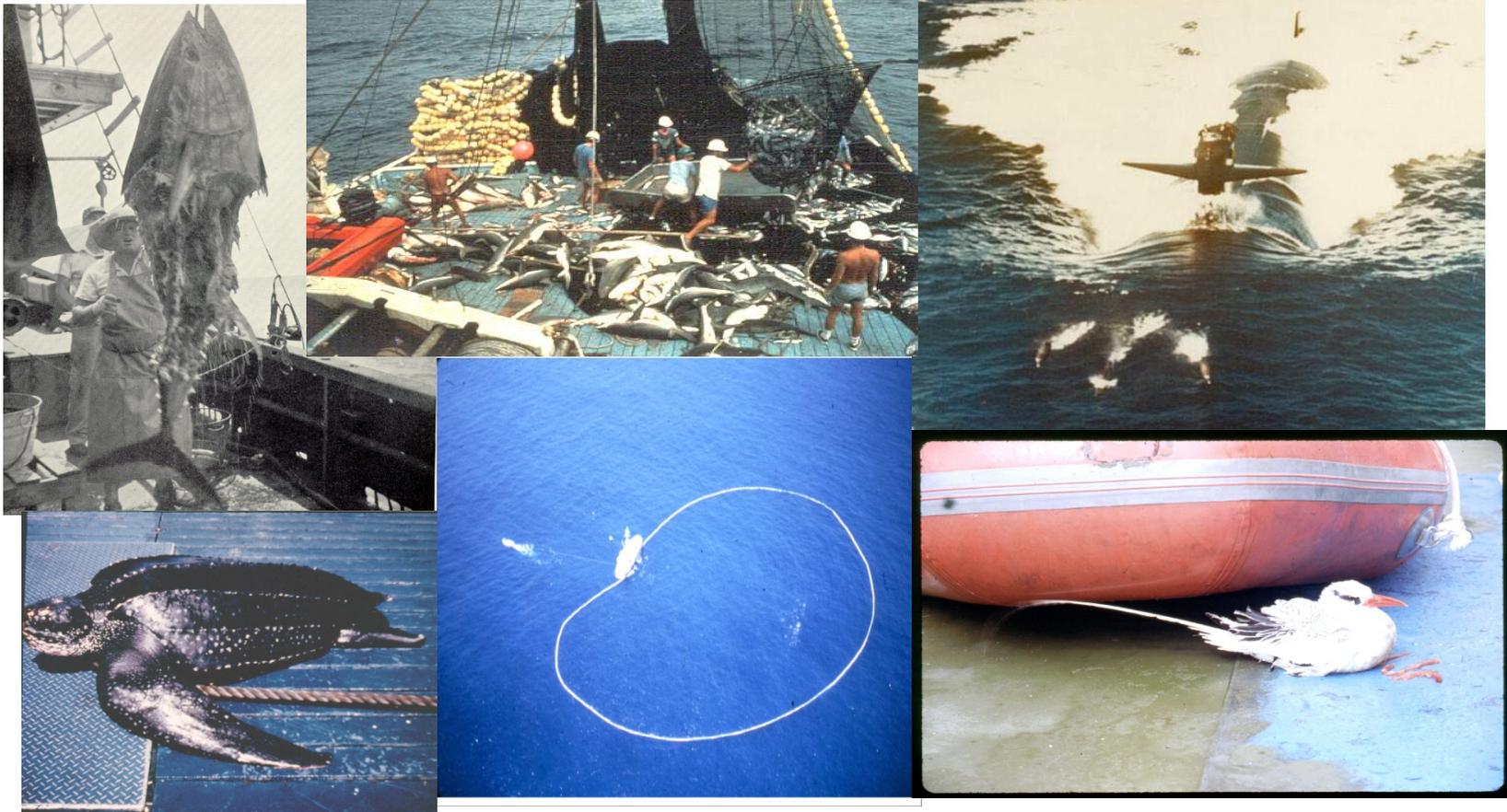


Recommended conservation actions for 2016

- **BIGEYE, SKIPJACK, & YELLOWFIN**
 - **Maintain Resolution C-13-01**
 - 62 day closure
 - Area closure for BET
- **PACIFIC BLUEFIN TUNA**
 - **Maintain Resolution C-14-06**
 - Rebuild stock – Ask WCPFC to adopt similar resolution
 - Total catch \leq 6,600 metric tons
 - Caveats to allow some catch by CPC historical fisheries
 - Coordinate with WCPFC to obtain resolutions with similar impact
- **NORTHERN ALBACORE TUNA**
 - **Maintain Resolution C-13-03**
 - Report all fleets with catch of ALB
 - Report effort of all fleets with catch of ALB
 - Coordinate with WCPFC to obtain resolutions with similar impact

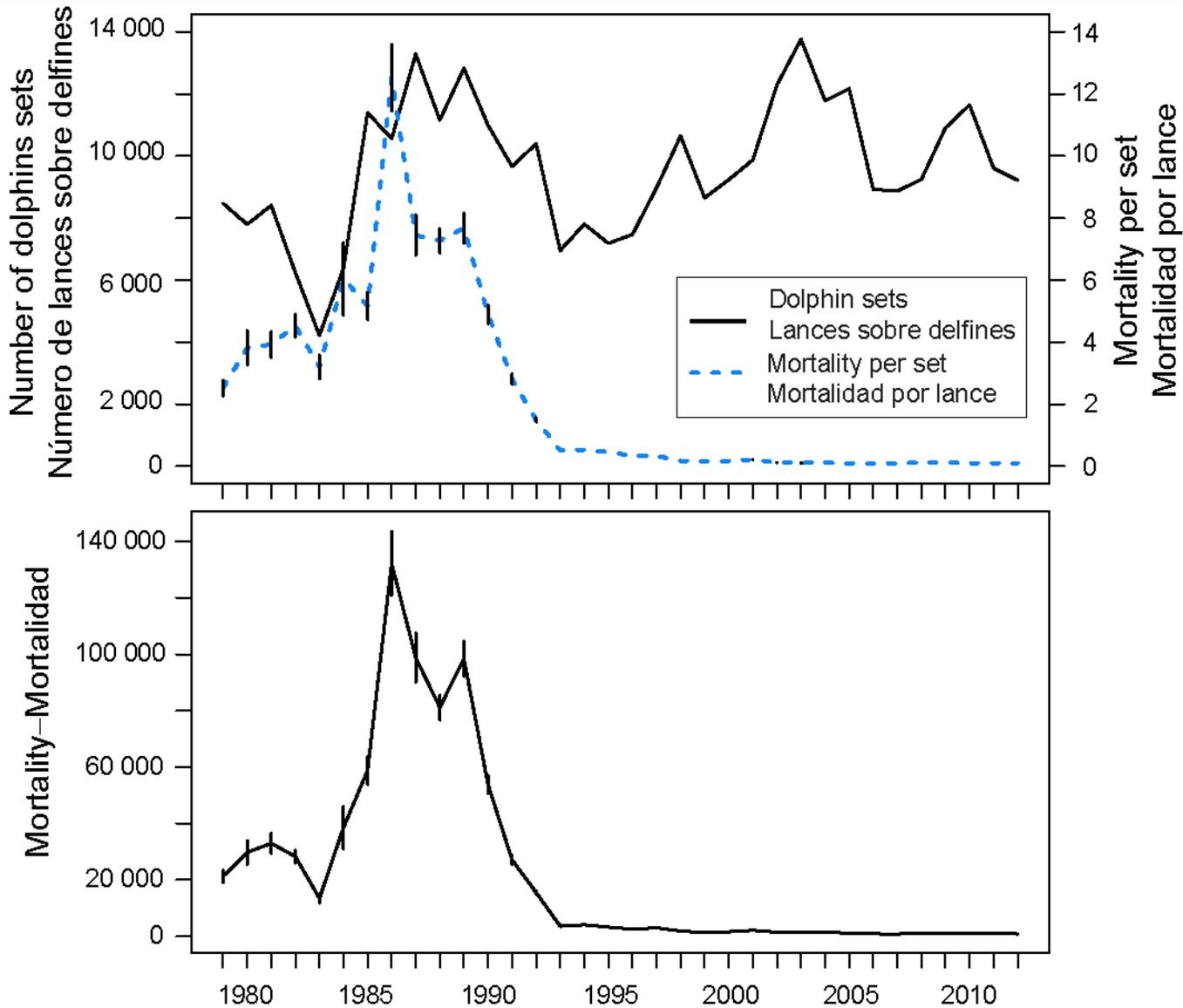


Bycatch and species interactions



Dolphin: A success story

Sets, mortality-per-set, & mortalities

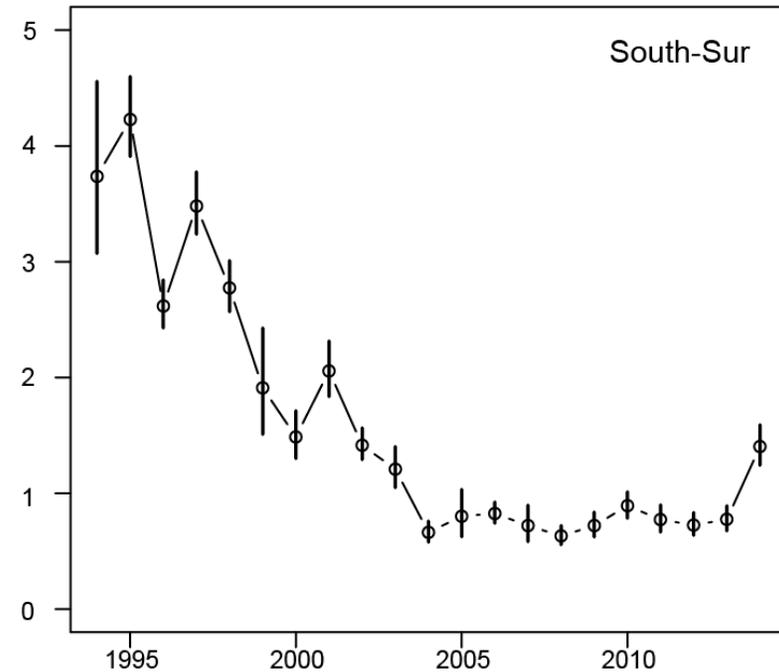
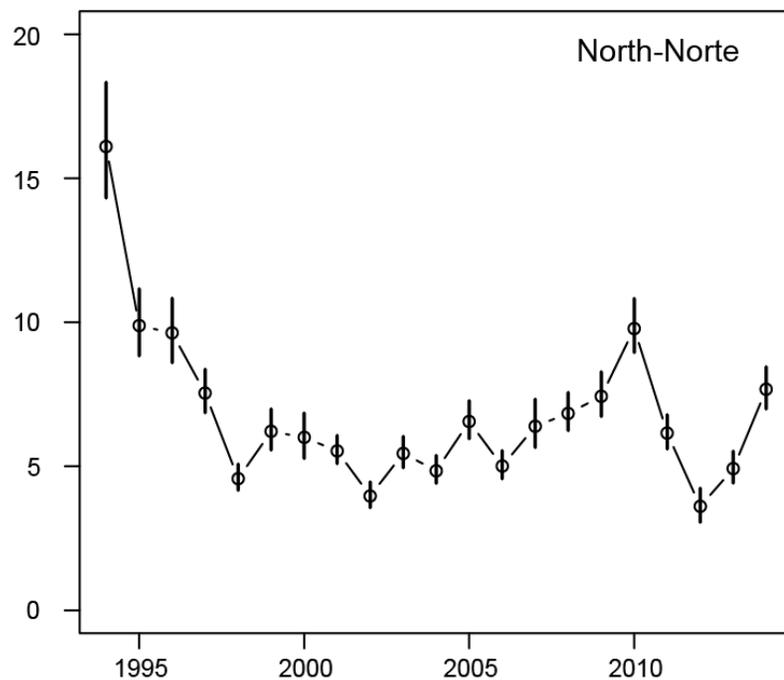




Silky sharks

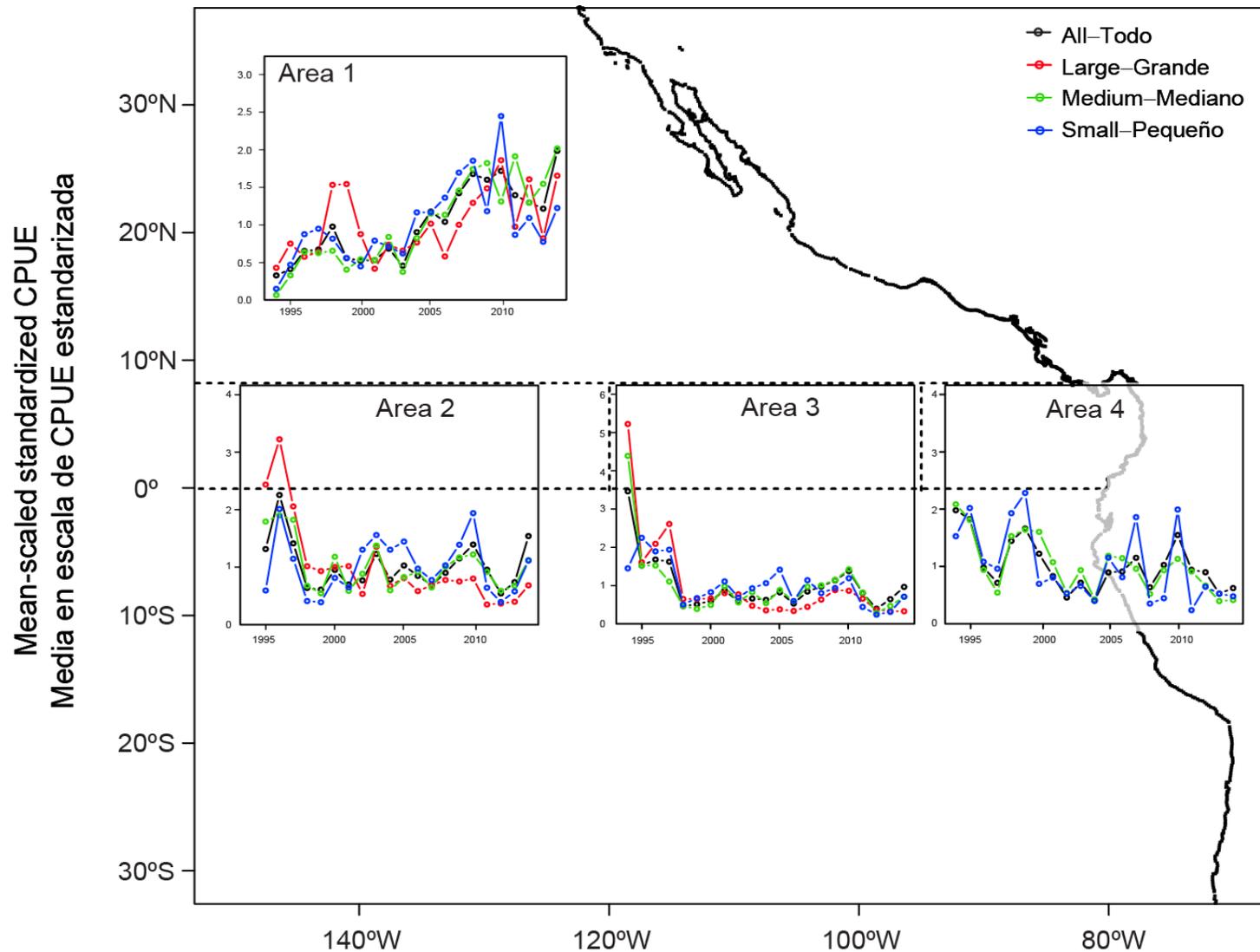
- Stocks depleted to historically low levels
- Recent increases in CPUE should be regarded with caution
 - There have been environmental changes in 2014
 - Increases may reflect increased availability rather than abundance

Standardized CPUE-CPUE estandarizada



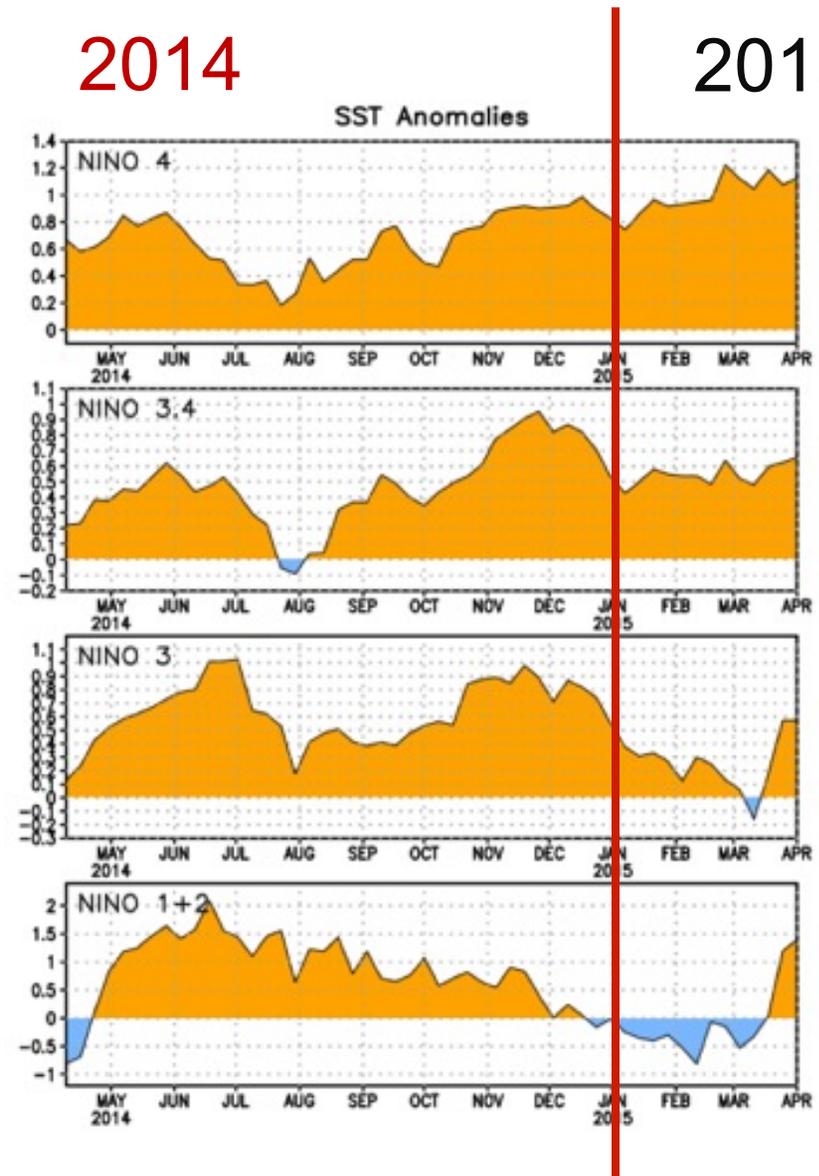
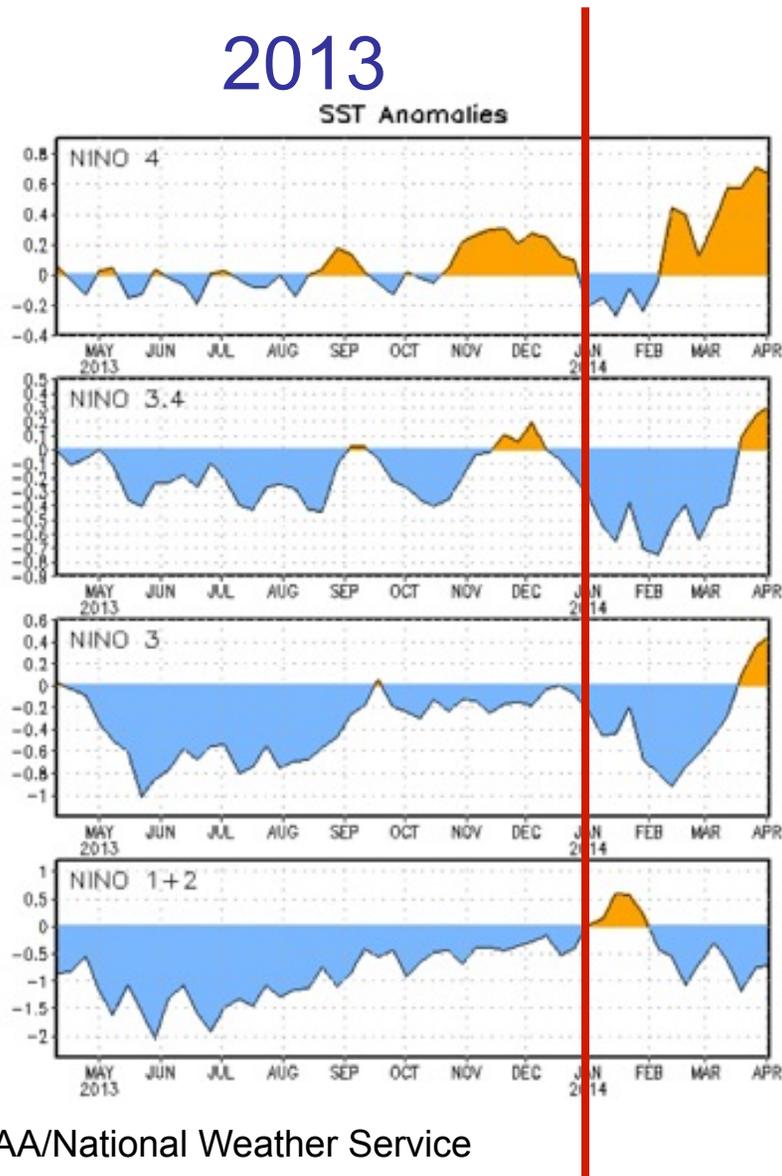


Standardized CPUE OBJ





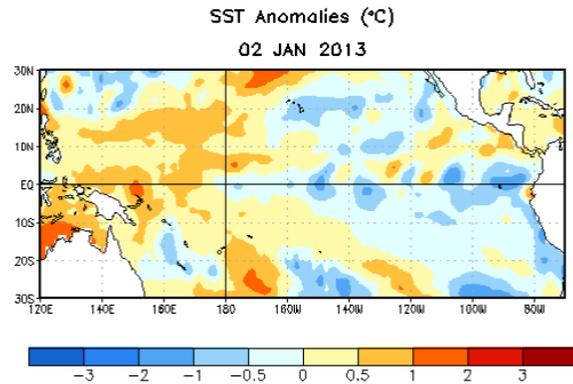
Silky sharks: environmental considerations



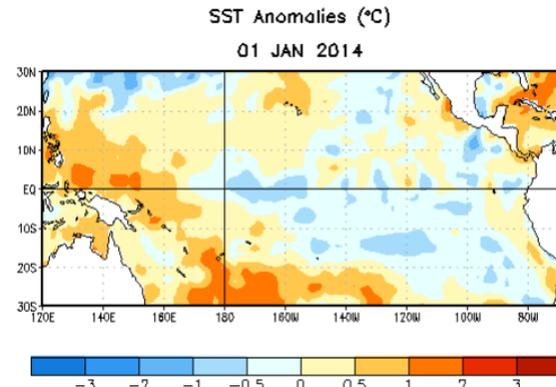


Silky sharks: environmental considerations

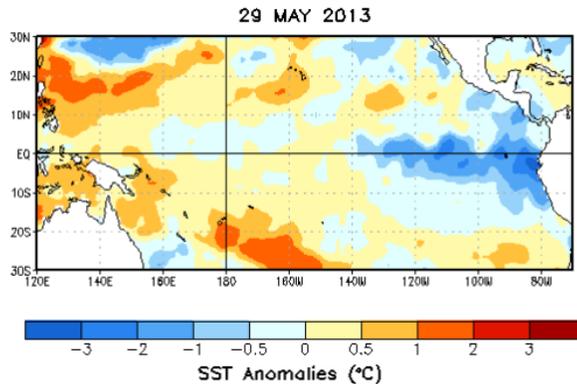
JAN 2013



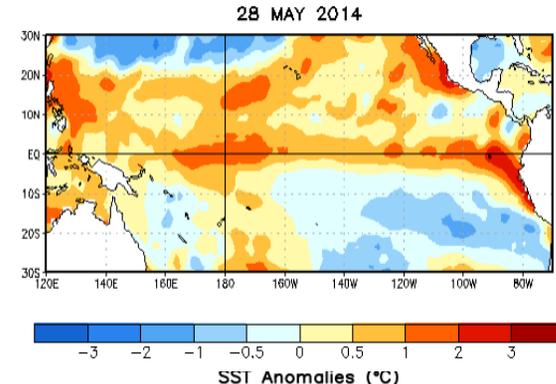
JAN 2014



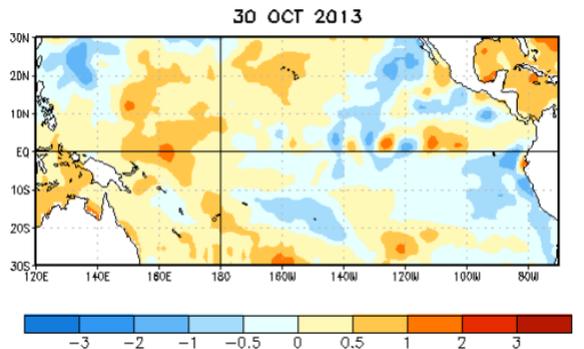
MAY 2013



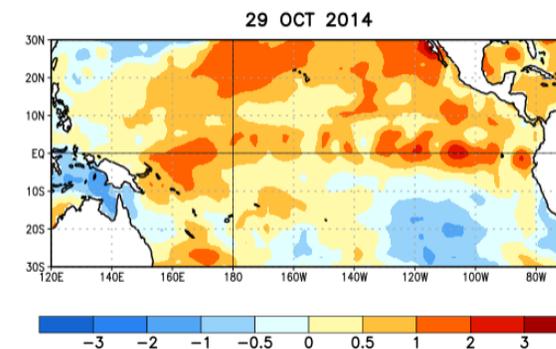
MAY 2014



OCT 2013



OCT 2014



FAD & longline fisheries

Concerns & actions

FADs

- Bycatch
 - BET
 - Whale sharks
 - Other
 - Entanglement
- Unknown impacts on ecosystem
- SKJ: provides access to resource
- Monitor FADs: Resolution C-13-04
 - Number
 - Characteristics
 - Non-entangling

Longlines: monitor & manage



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Thank you