



Comisión Interamericana del Atún Tropical
Inter-American Tropical Tuna Commission



Current management at IATTC based on a
“Best Stock Assessment” approach

1st IATTC Tropical Tuna MSE Workshop, San Diego, California (USA), December 9-10, 2019

Topics

- Antigua Convention: Objective
- Other management objectives
- Tropical Tuna fishery management in the IATTC
 - Harvest Control Rule and Reference Points
 - Implementation of Harvest Control Rule
 - Other management measures
- Management Strategies
- Conclusions

Antigua Convention: Objective

ARTICLE II. OBJECTIVE

The objective of this Convention is to ensure the long-term conservation and sustainable use of the fish stocks covered by this Convention, in accordance with the relevant rules of international law.

... ensure the long-term **conservation** and **sustainable use** of the fish...

- Maintain or restore the populations of harvested species at levels of abundance which can produce the **Maximum Sustainable Yield (MSY)**
- Apply the **Precautionary Approach**:

“...be more cautious when information is uncertain, unreliable or inadequate. The absence of adequate scientific information shall not be used as a reason for postponing or failing to take conservation and management measures.”



Other objectives (explicit or implicit)

- Maintain healthy fishing resources and viable industries
- Objectives:
 - Vary among stakeholders and countries
 - May change over time
 - May be in conflict

Tropical Tuna management in the IATTC



Harvest Control Rule Implementation

- Limited entry for new purse-sein vessels
- Fishing Capacity should remain constant
- Recommendations of IATTC Scientific Staff to implement Harvest Control Rule using a time closure of the fishery (vessels can choose among two periods)
- Duration of closure calculated using an F multiplier from the stock assessments of YFT and BET, can be adjusted given changes in fleet capacity.

Harvest Control Rule Implementation

- “Corralito”: spatial closure (Sep. 29 to Oct. 29)
- Equivalent to 3 closure days for all EPO (SAC-05-16)



Figure 1. Closure area

Harvest Control Rule Implementation

- Longline catch quotas by CPC



Other measures

- Fishing on FADs
- Total retention

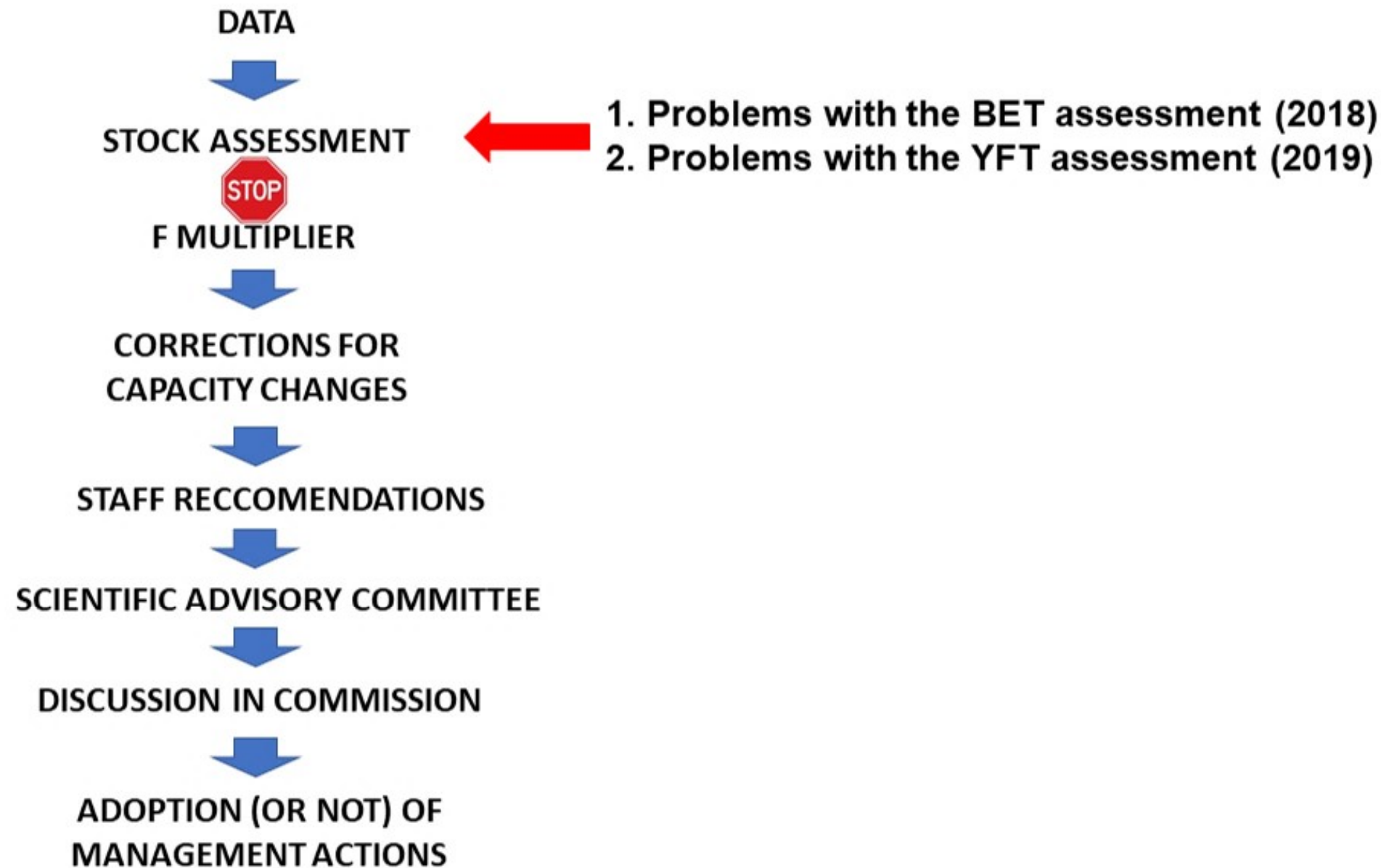


Relationship with Management Strategies

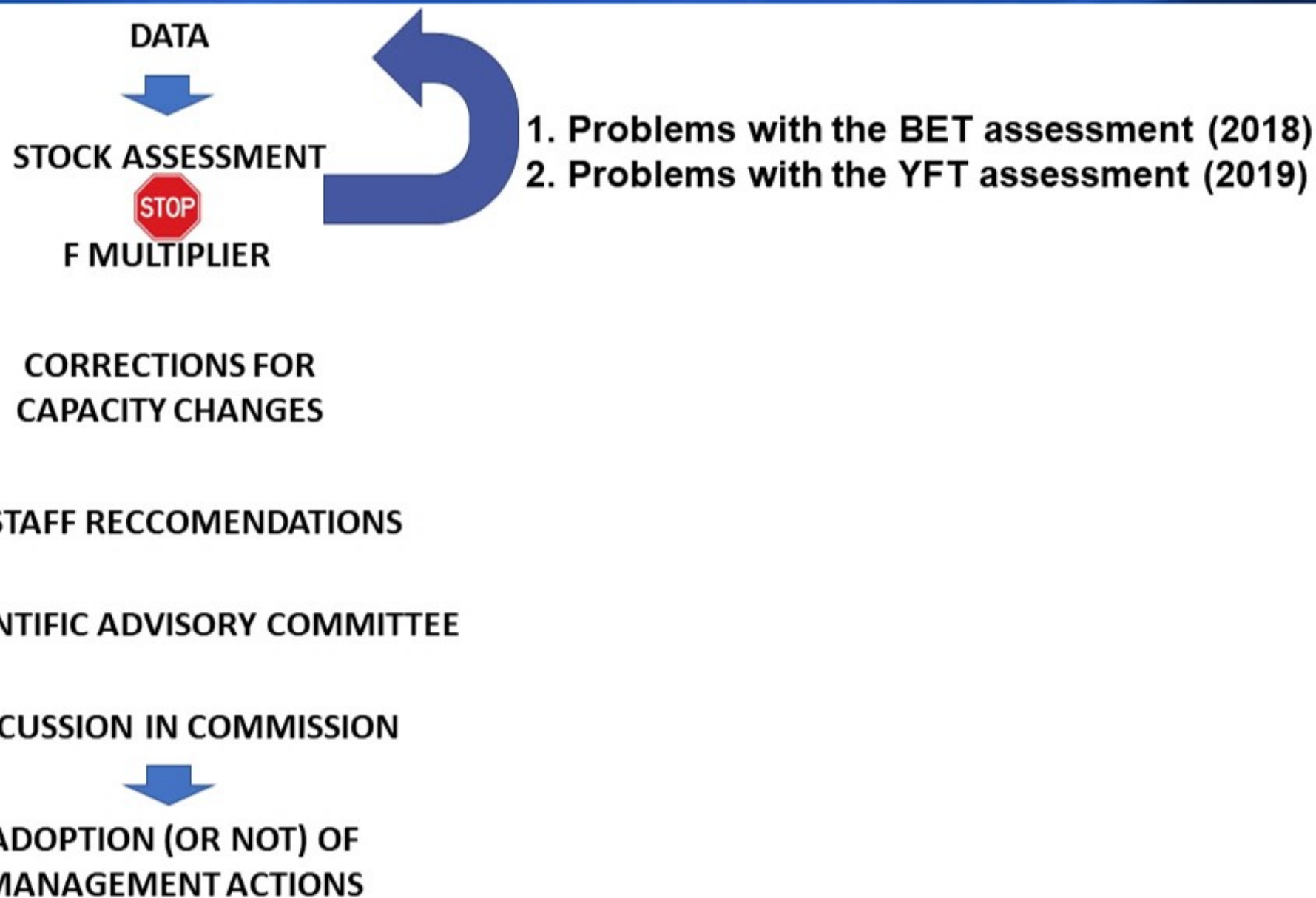
Is the combination of **pre-agreed data**, **specific analyses** applied to those data and the harvest control rule used to determine **management measures** based on the results of those analyses
(Punt et al 2016)

- In the IATTC context, data and analyses change as new research is conducted
- Management measures (e.g. closures) and other management actions can change in their implementation from year to year.
- Therefore, although there are elements of a Management Strategy in the IATTC, those elements could be defined and improved towards a more defined strategy, along with alternatives.

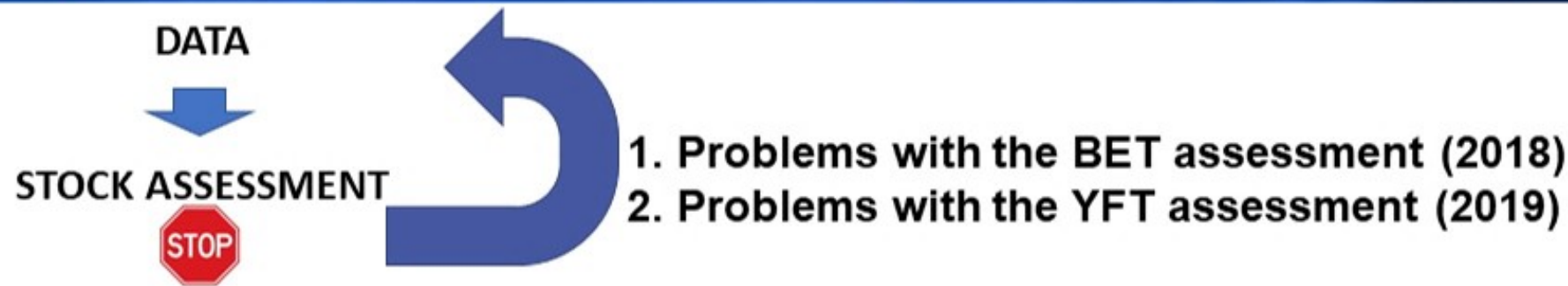
Tropical Tuna management in the IATTC



Tropical Tuna management in the IATTC

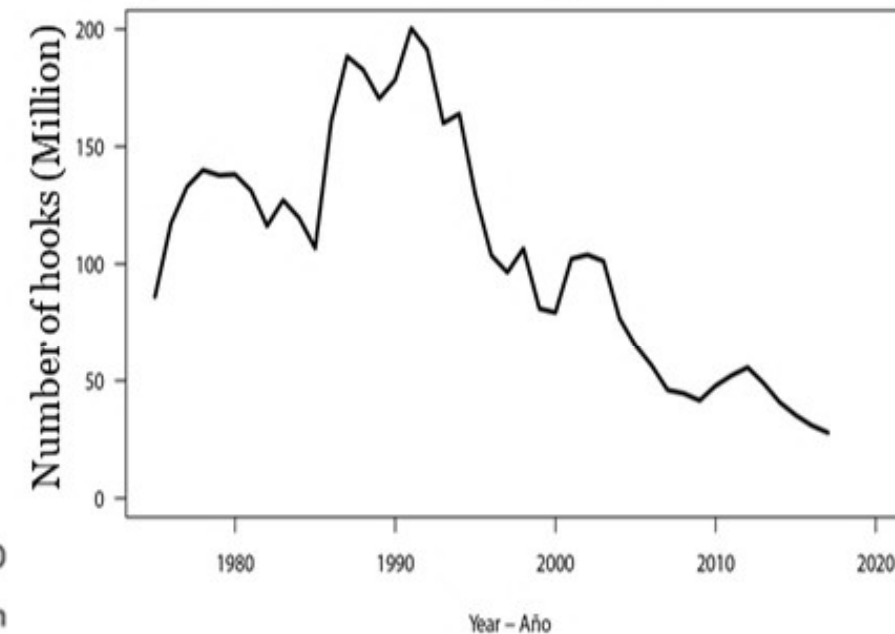
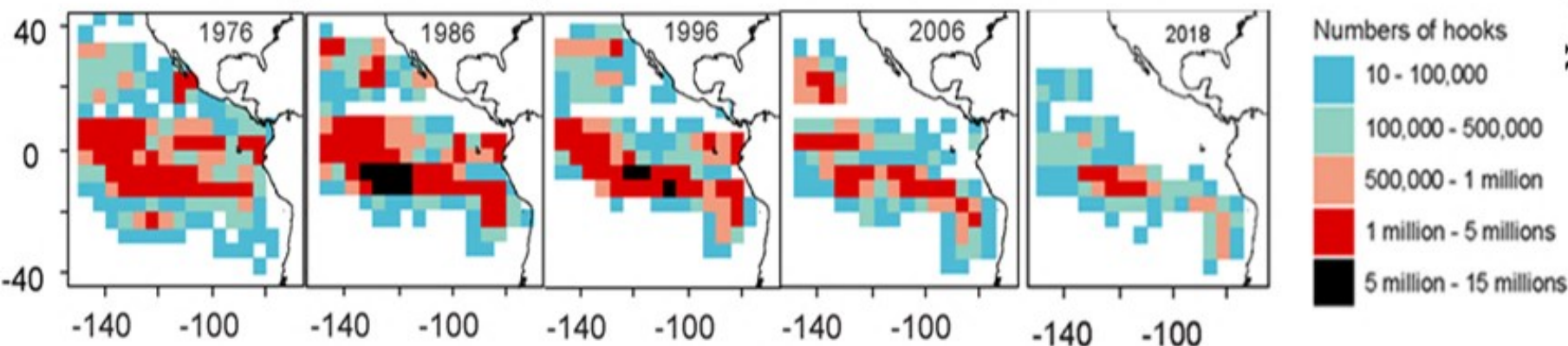


Tropical Tuna management in the IATTC



- BET and YFT assessments in the EPO depend on Japanese longline CPUE to estimate trends and status of stocks.
- There has been a decrease of longline fishing.

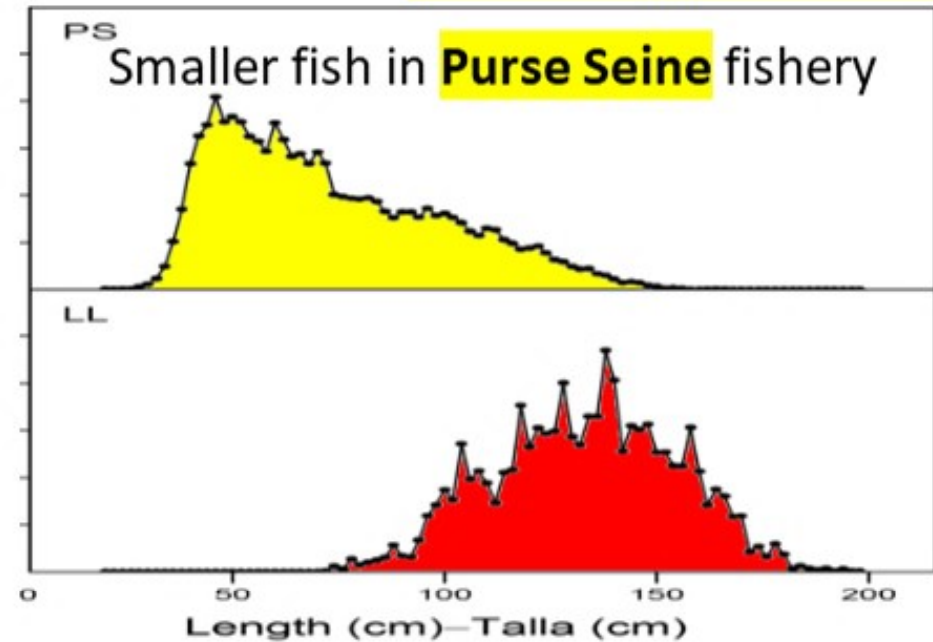
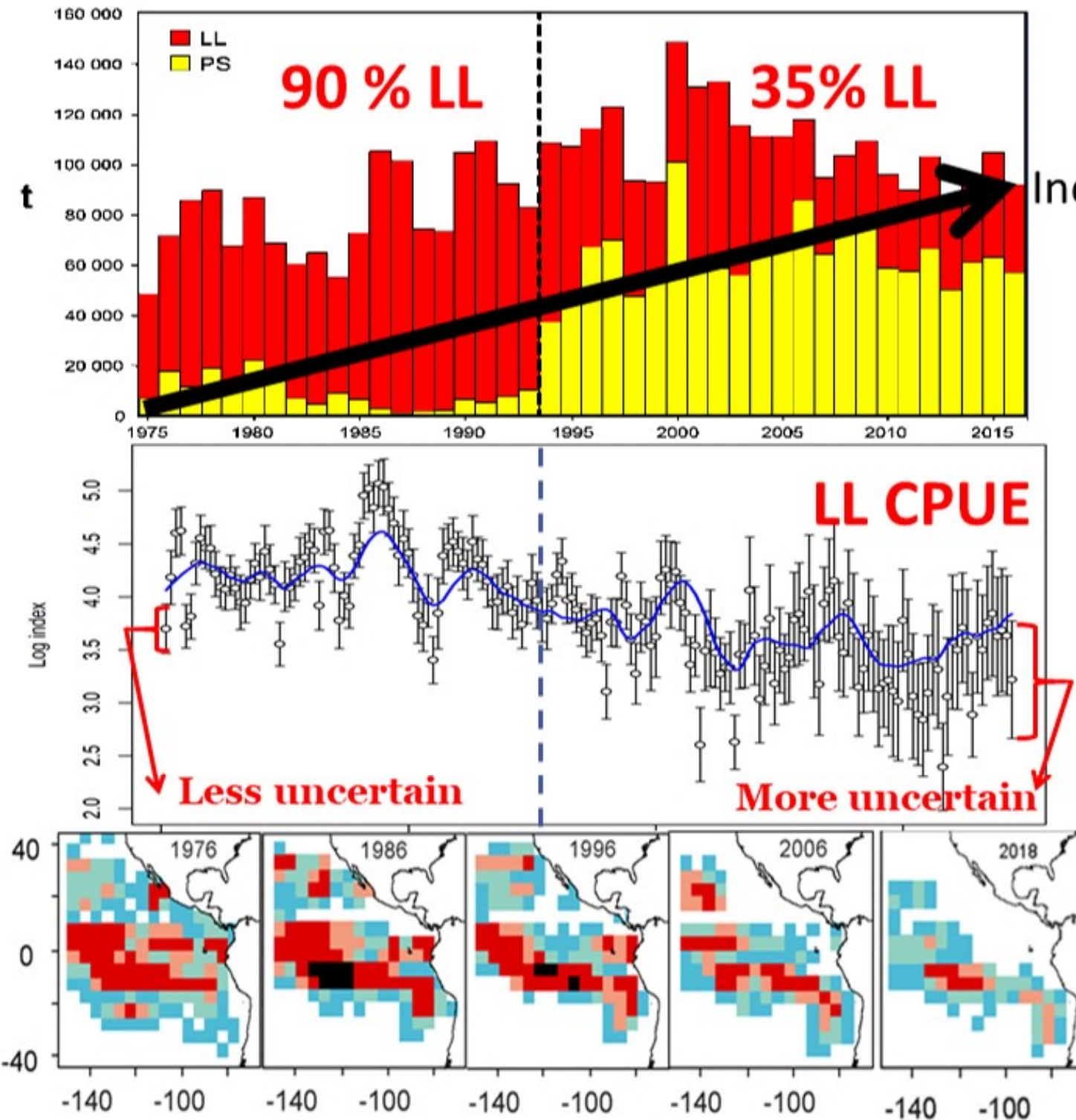
Longline spatial contraction



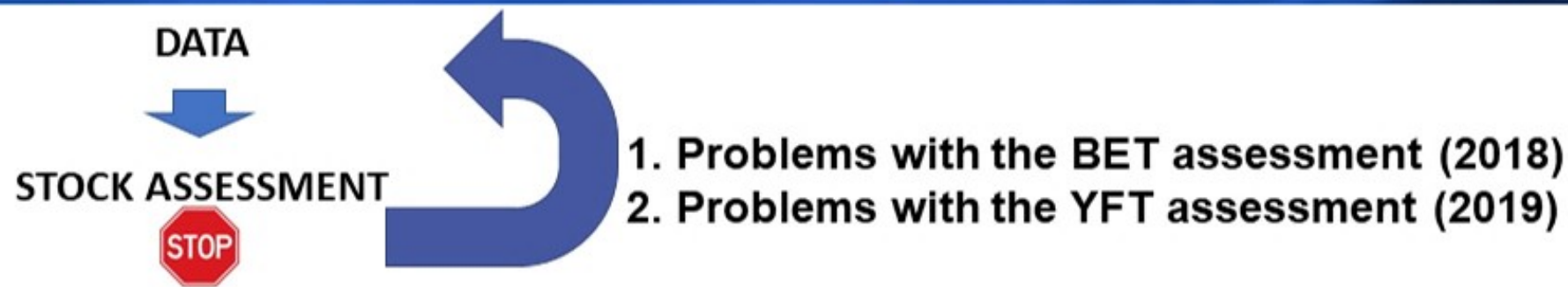
Decrease in Longline (Bigeye tuna)

Increased **TOTAL** catch

Expansion of **Purse Seine**



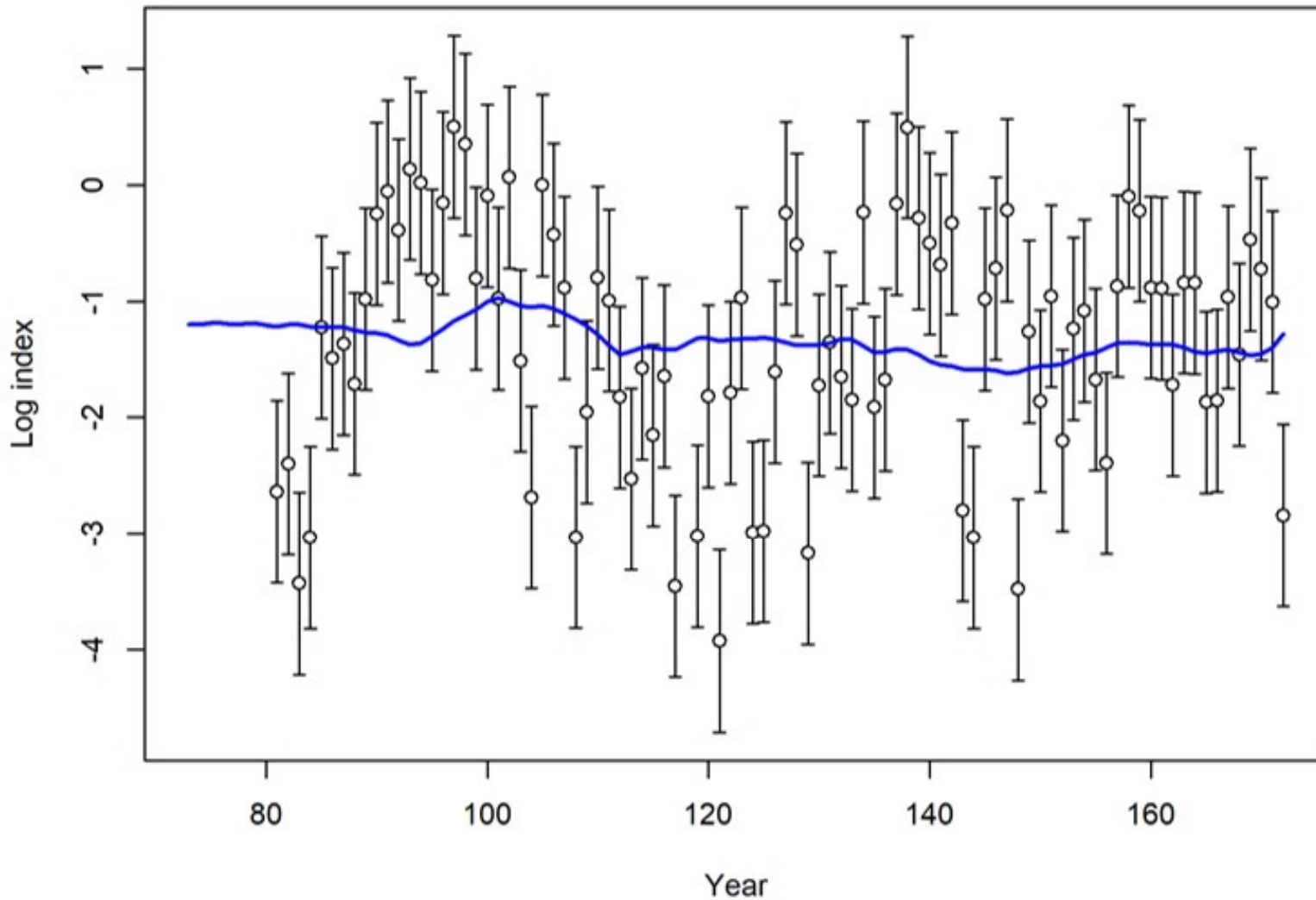
Tropical Tuna management in the IATTC



- BET and YFT assessments in the EPO depend on Japanese longline CPUE to estimate trends and status of stocks. There has been a decrease of longline fishing.
- Increase of **purse seine** fishing on FADs, but:
 - No reliable standardized FAD CPUE,
 - Lack of additional information about FADs,
 - No standard measure of effort for FADs.

Purse-seine CPUE on FADs for BET

No reliable standardized FAD CPUE, lack of additional information about FADs, no standard measure of effort for FADs.



Conclusions

“Best assessment” approach

- Current IATTC management depends on stock assessment
- There are no stock assessments for SKJ tuna
- Stock assessment can have problems:
Bigeye (2018) and yellowfin tunas (2019)

Management Strategies

- IATTC adopted elements of a management strategy for tropical tunas
- Only general objectives adopted
- Complex management: several measures in addition to closures, not clear how to include these measures and alternatives in an MSE

CIAT IATTC

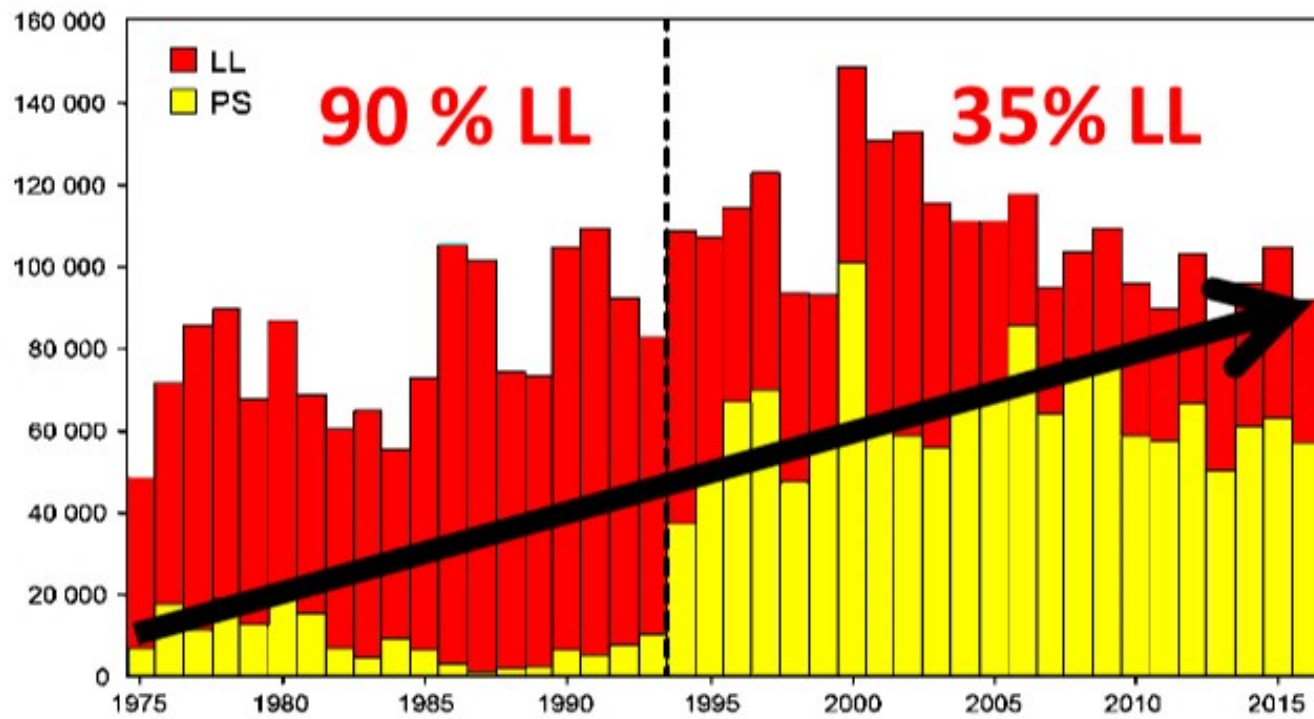


Questions?



Expansion of FADs (Bigeye tuna)

Expansion of **Purse Seine** fishery
Increased **TOTAL** catch



Smaller fish in **Purse Seine** fishery

