STOCK STATUS INDICATORS (SSIs) FOR TROPICAL TUNAS IN THE EASTERN PACIFIC OCEAN

IATTC Staff

12ª Reunión del Comité Científico Asesor - 10-14 de mayo de 2021 (por videoconferencia)
12th Meeting of the Scientific Advisory Committee - 10-14 May 2021 (by videoconference)
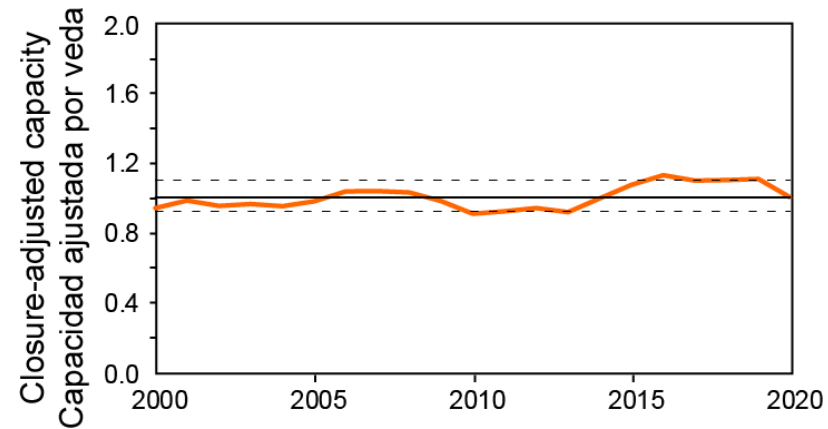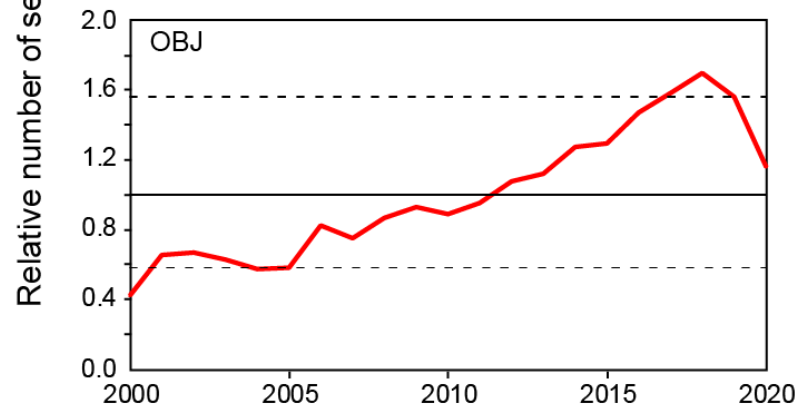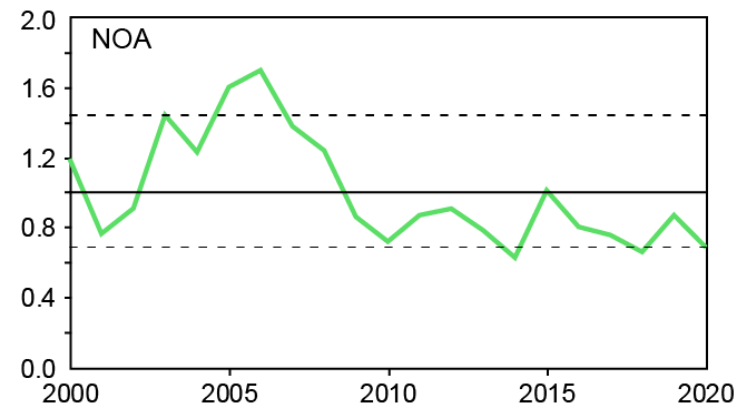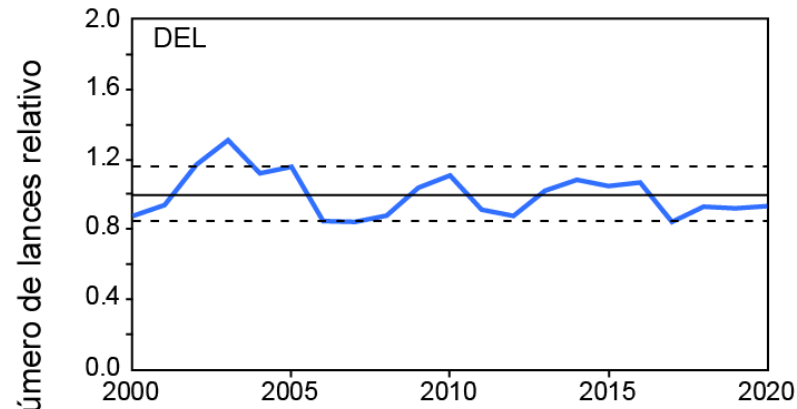
Outline

- Introduction

- Purse seine based indicators

- Longline based indicators

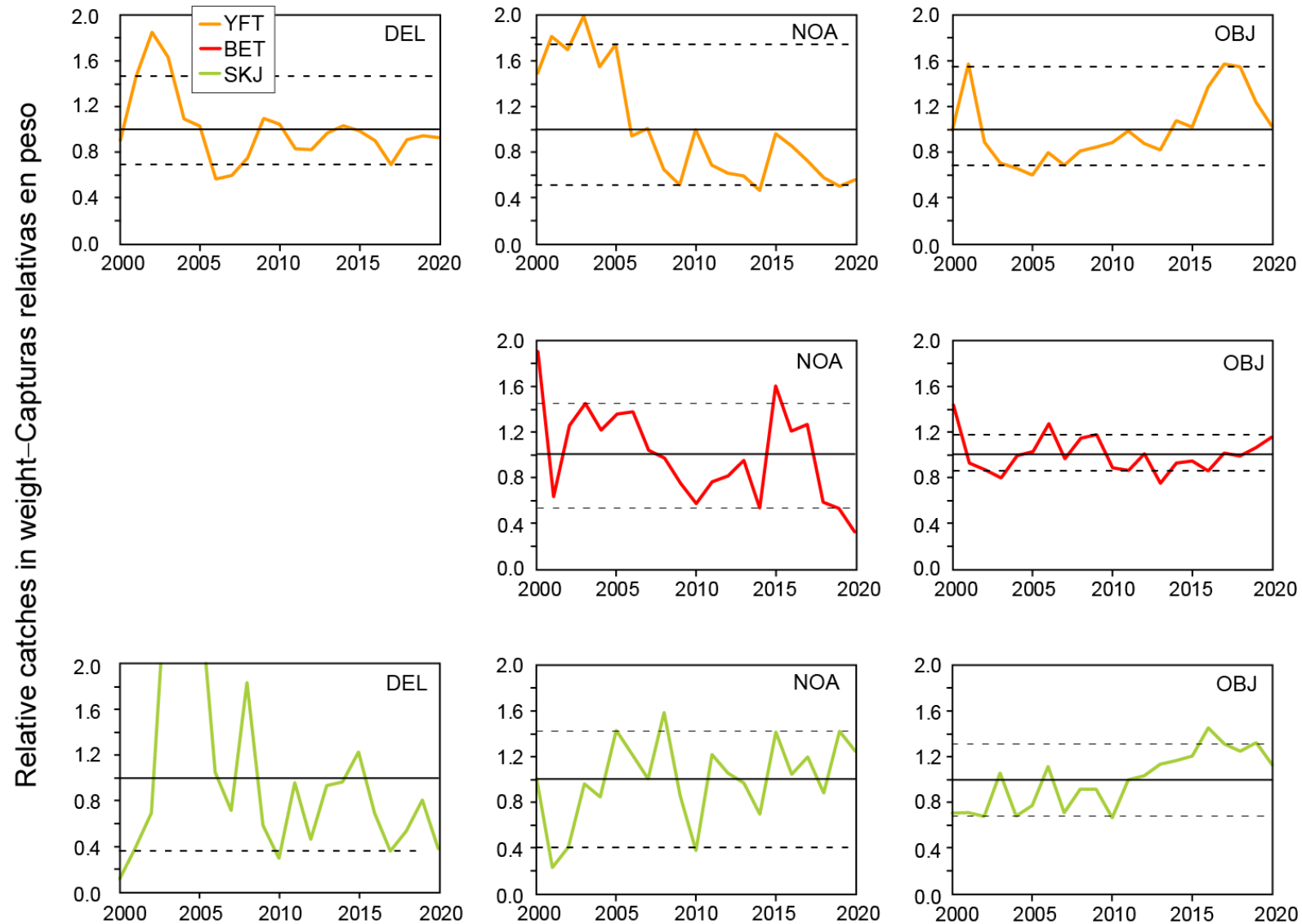- Summary

Introduction

- Data: Purse-seine and longline

- Species: Yellowfin, bigeye, and skipjack

- SSIs:

    - Catch, effort, CPUE, and average length

    - Begin in 2000

        - First year of purse seine species composition sampling

        - After the major offshore expansion of the floating-object fishery

    - Reference levels set at the 10% and 90% percentiles.

- 2020 is an anomalous year due to the COVID pandemic
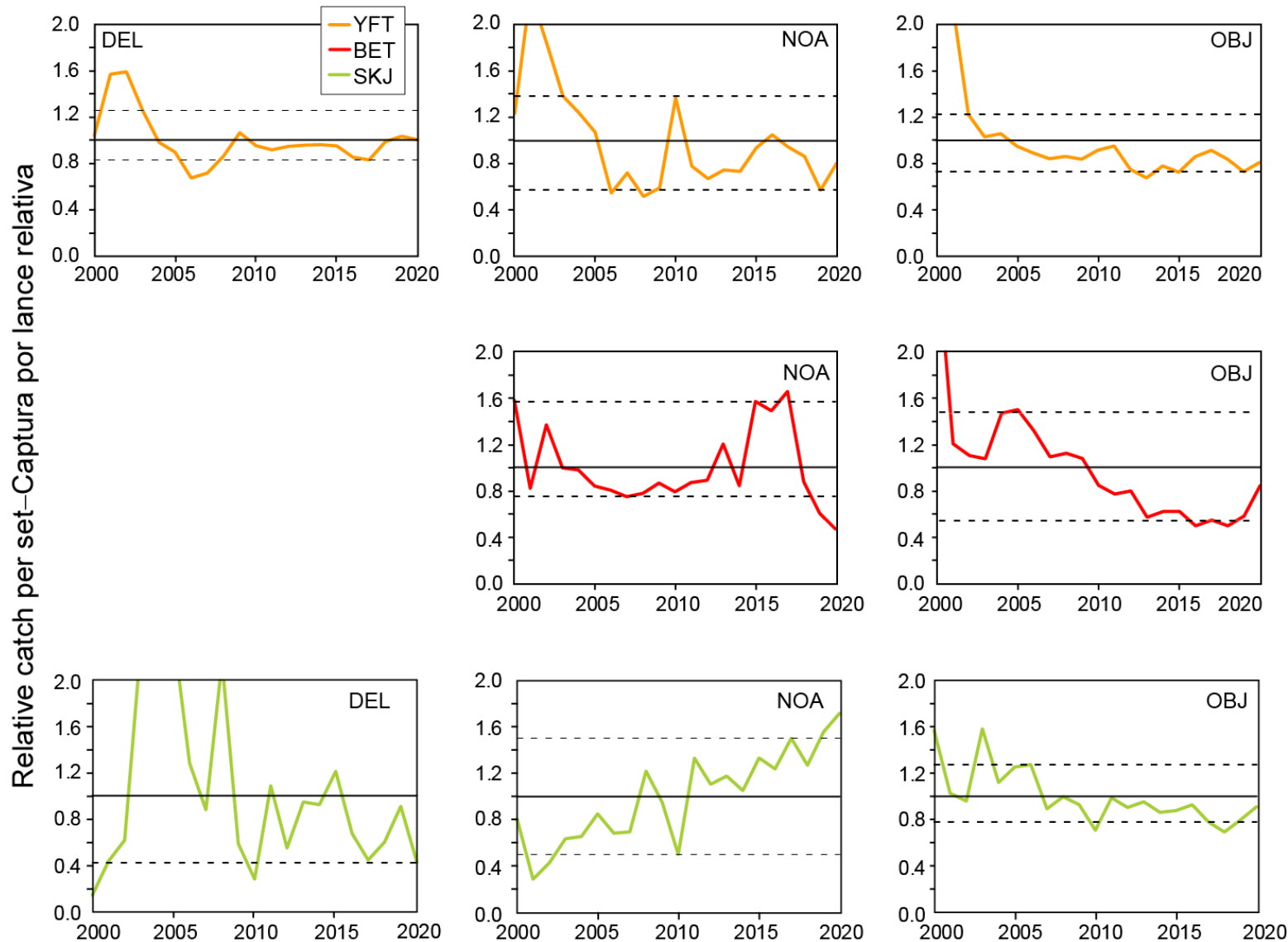
Purse seine: Number of sets by set type

- **Constantly increasing number of floating object sets**
- OBJ sets declined in 2020 due to the COVID pandemic

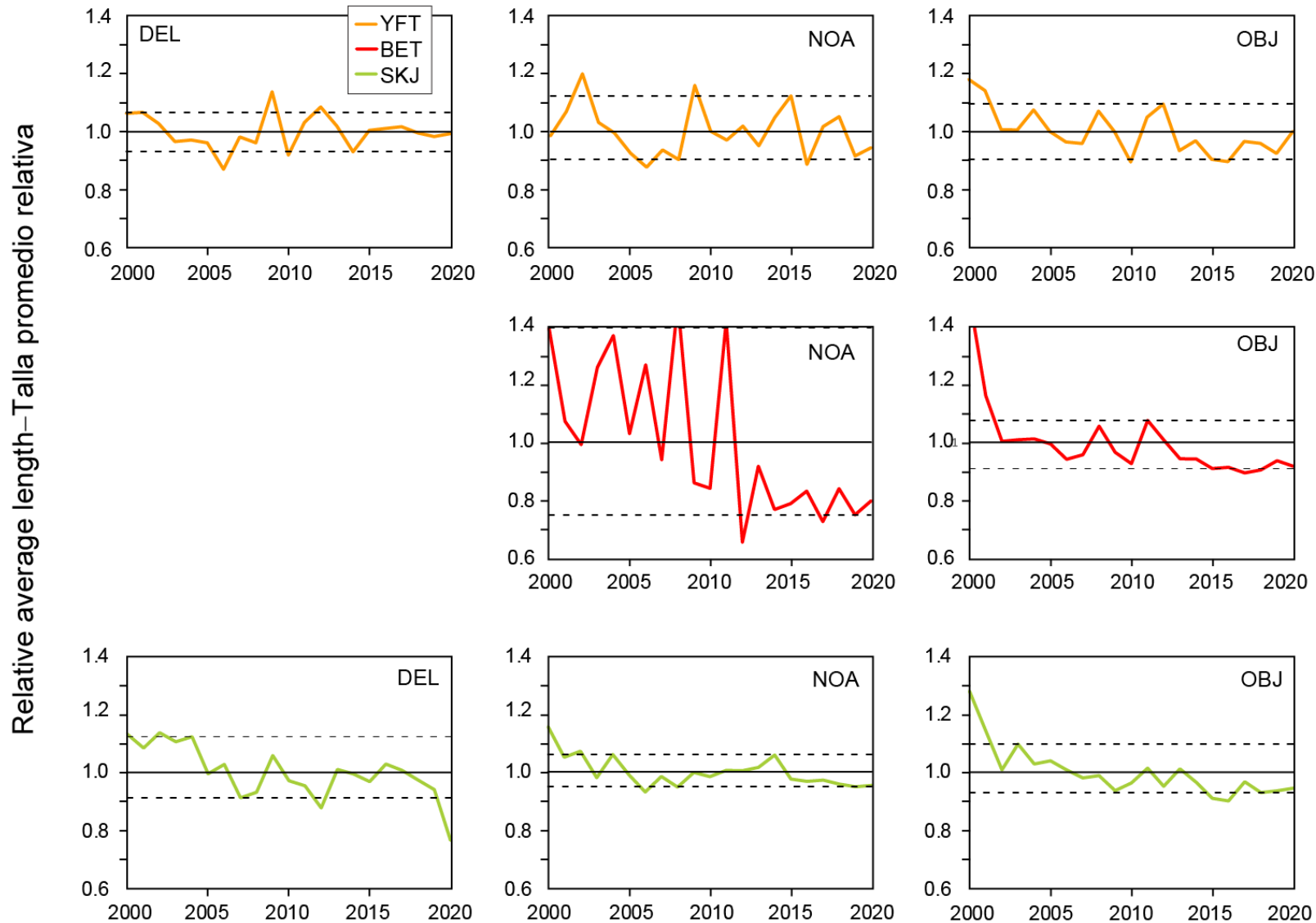# Purse seine: Catch in weight by species and set type

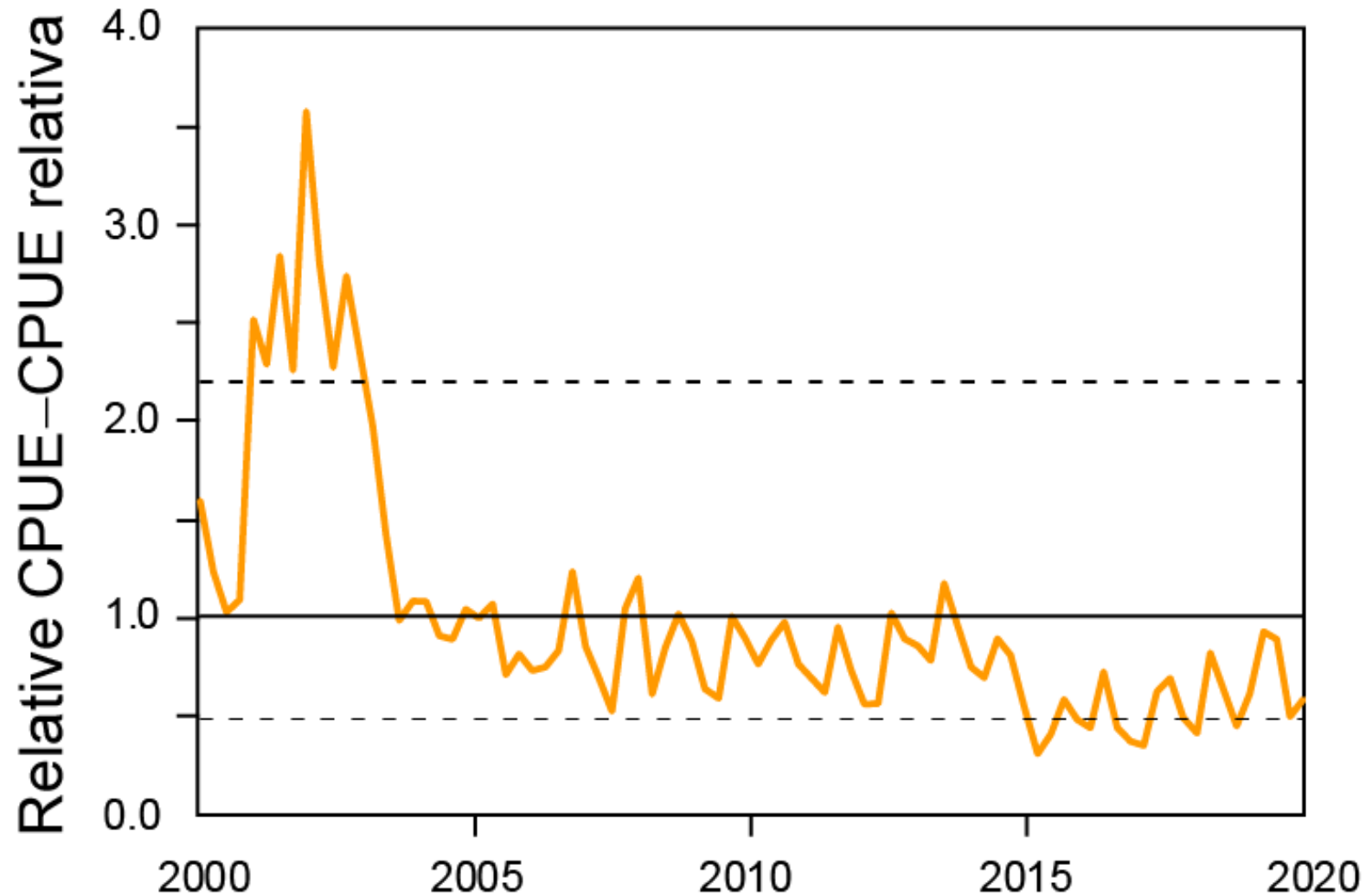- Increase in the catch of YFT and SKJ in the floating object fishery

- A decline in the floating object catch per set for all three species
- Increase in catch per set for SKJ in the unassociated fishery

- A decline in the floating object average length for all three species
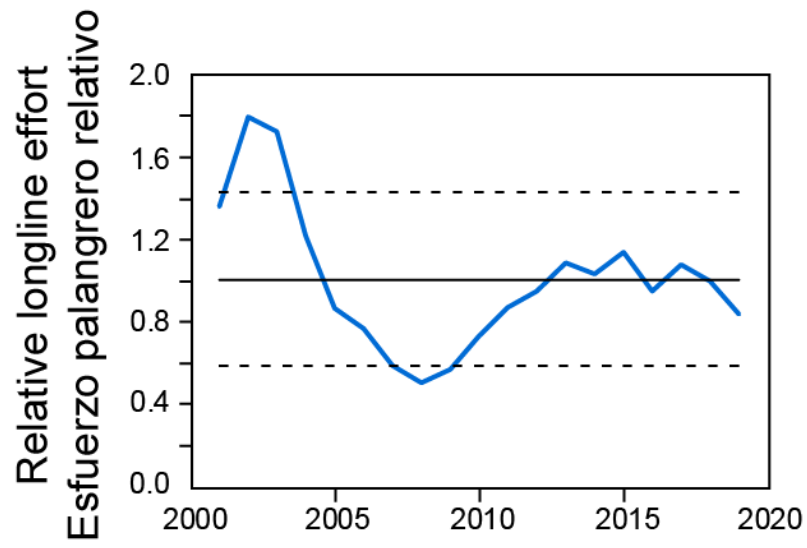- A decline in average length for BET and SKJ in the other set types
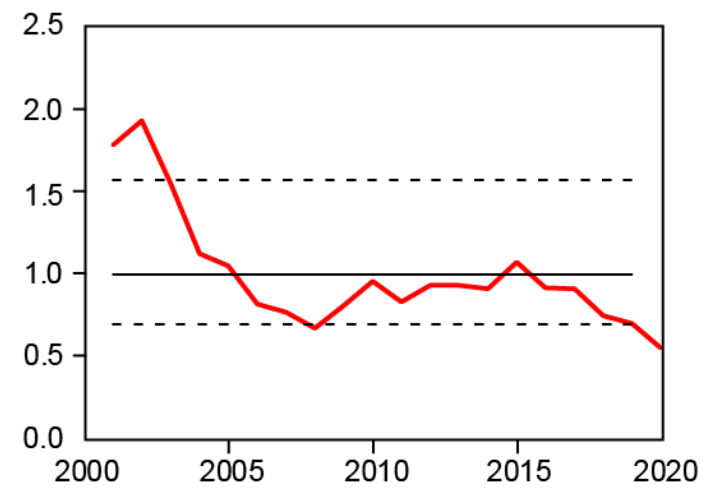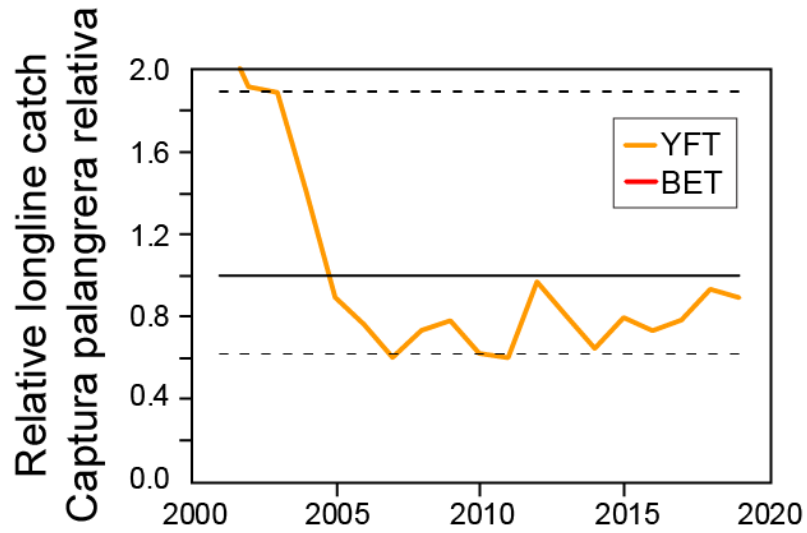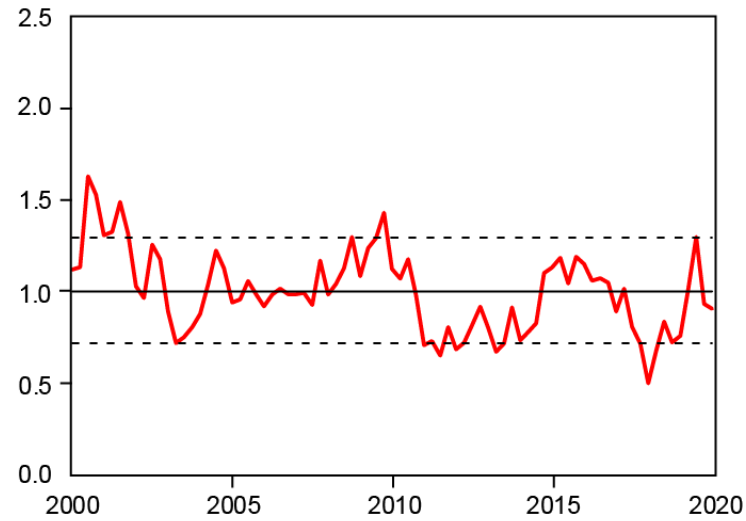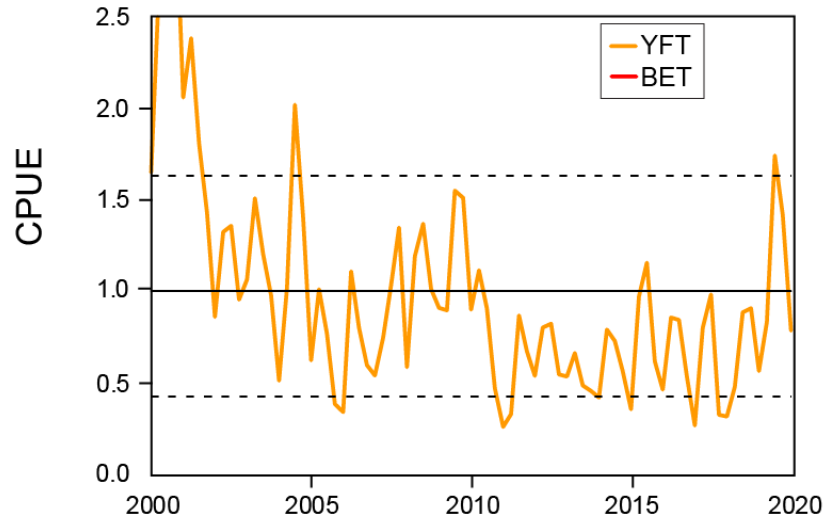
Purse seine: Standardized YFT DEL CPUE

- A decline in standardized catch per day fished of YFT in the dolphin associated fishery
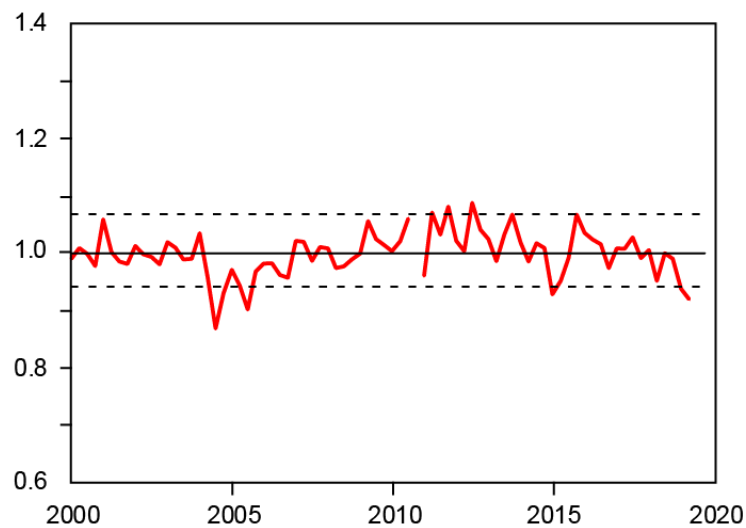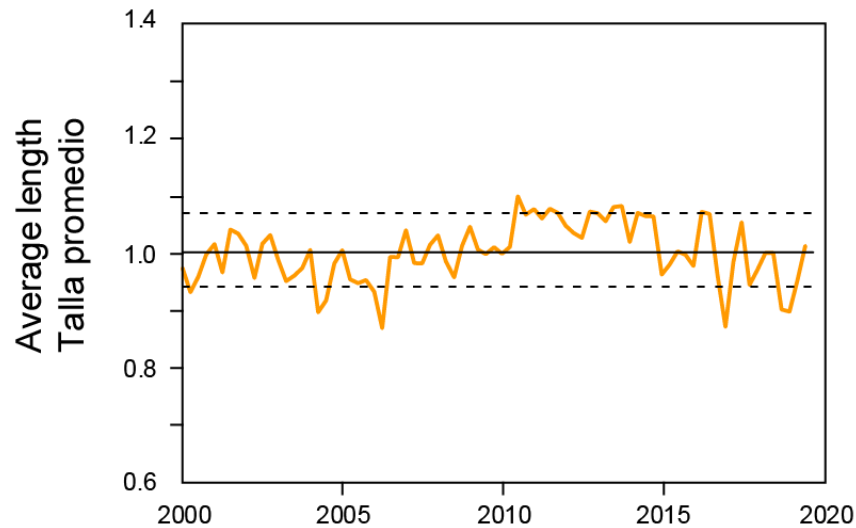
Longline: Catch and effort

Longline: Standardized CPUE and average length

- A decline in standardized YFT and BET CPUE
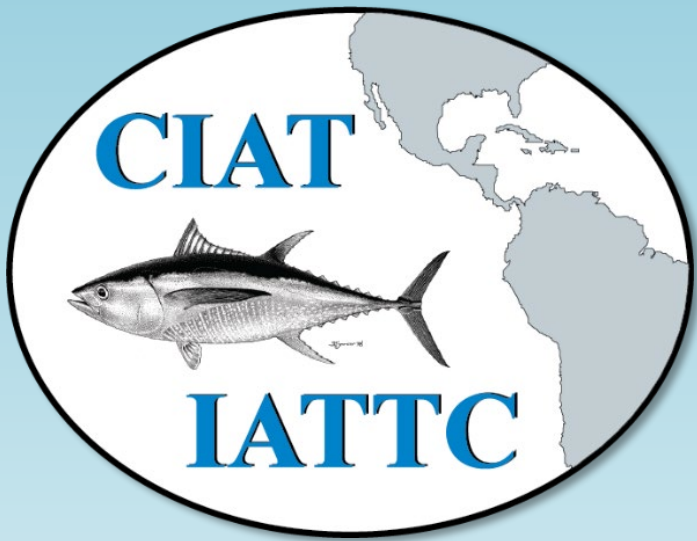- A period of increased YFT and BET average length

Summary

2020 is an anomalous year due to the COVID pandemic and can't be used to interpret long term trends

Most SSIs based on the floating-object fishery suggest that the fishing mortality of all three species has increased

Probably due to the increase in the number of floating-object sets

Questions

Purse seine: Catch in numbers by species and set type