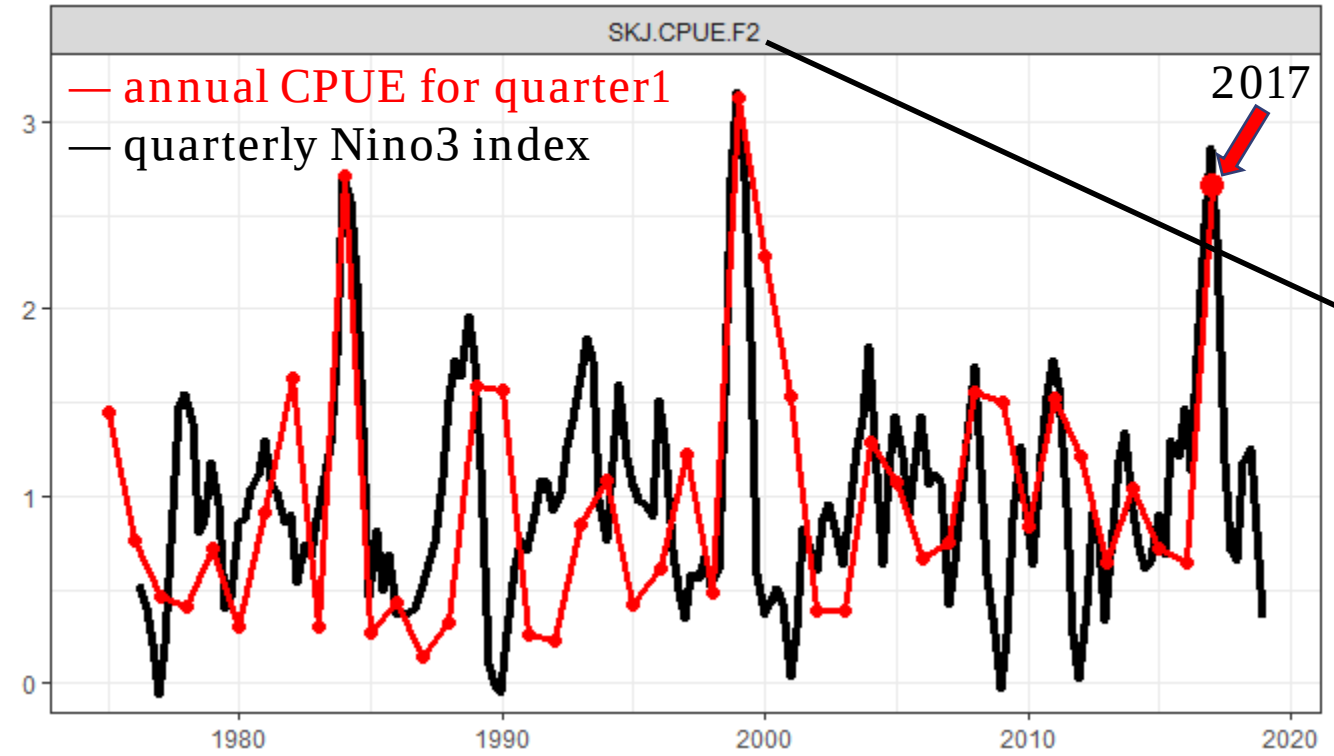
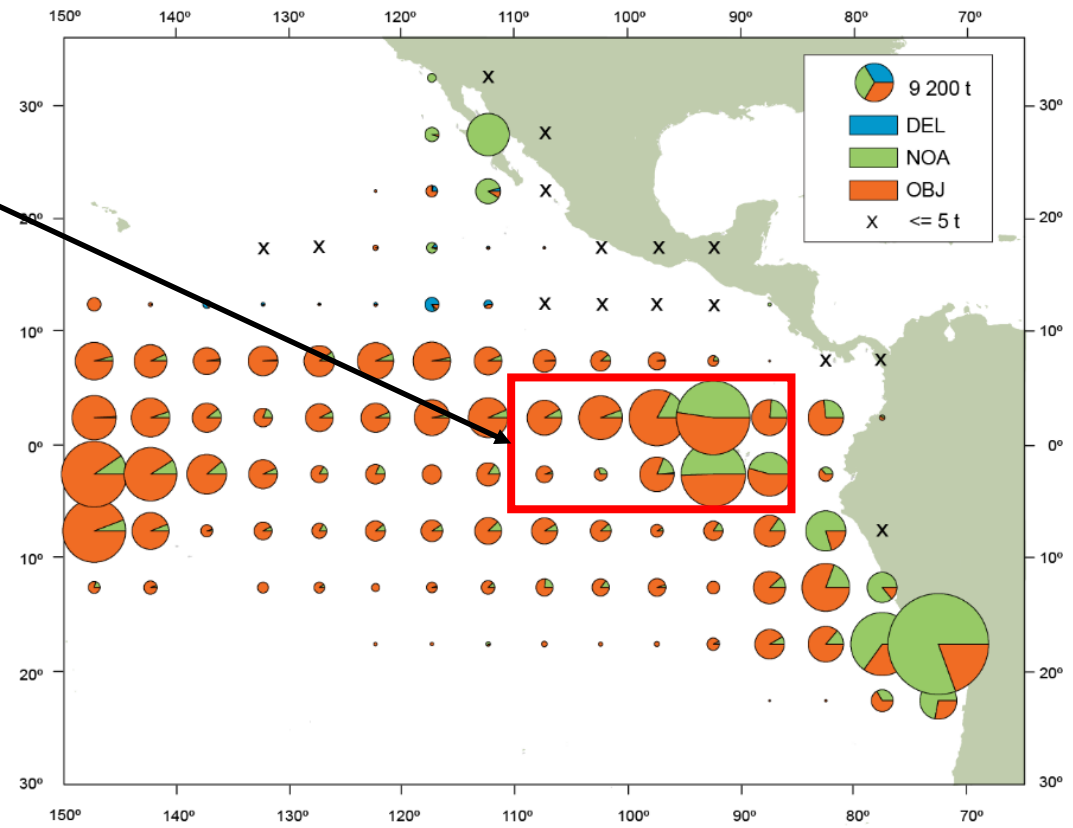
SKJ CPUE was affected by oceanographic conditions



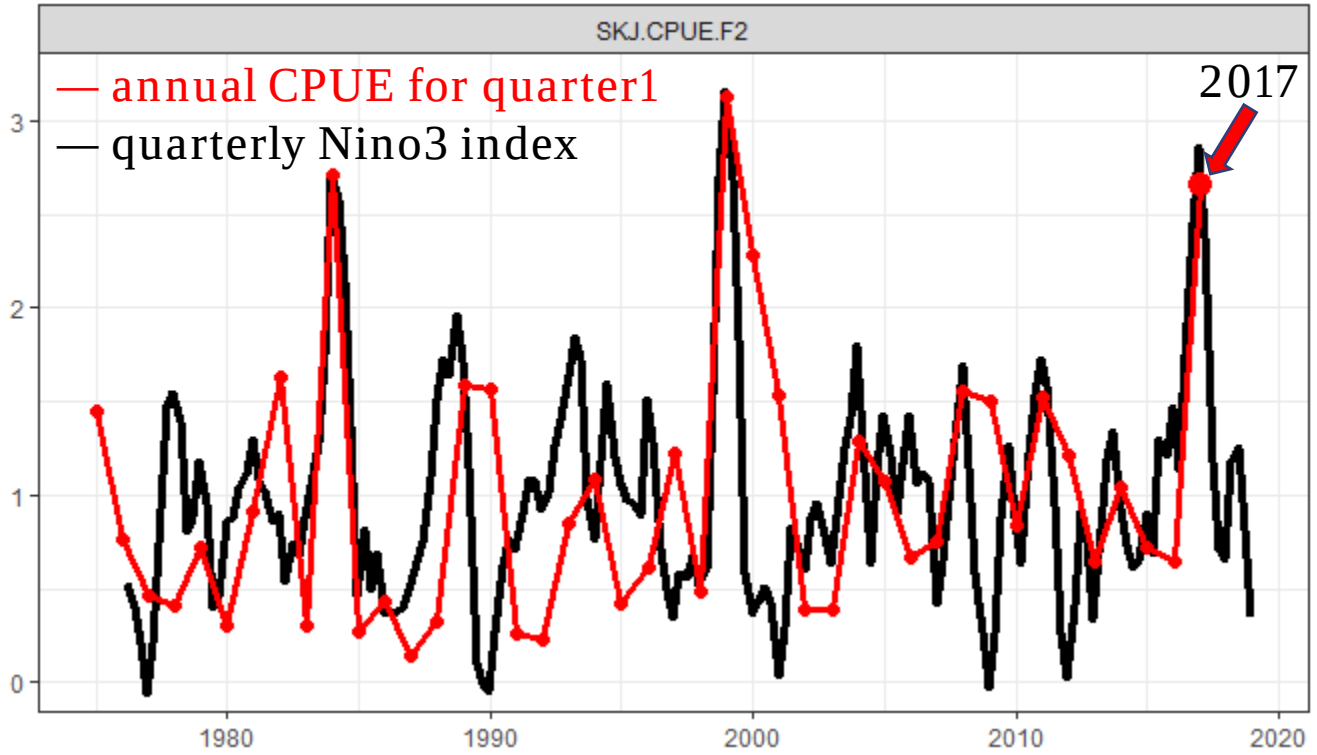
Average (2012-2016) annual purse-seine catches of SKJ by set type (SAC-09-03)



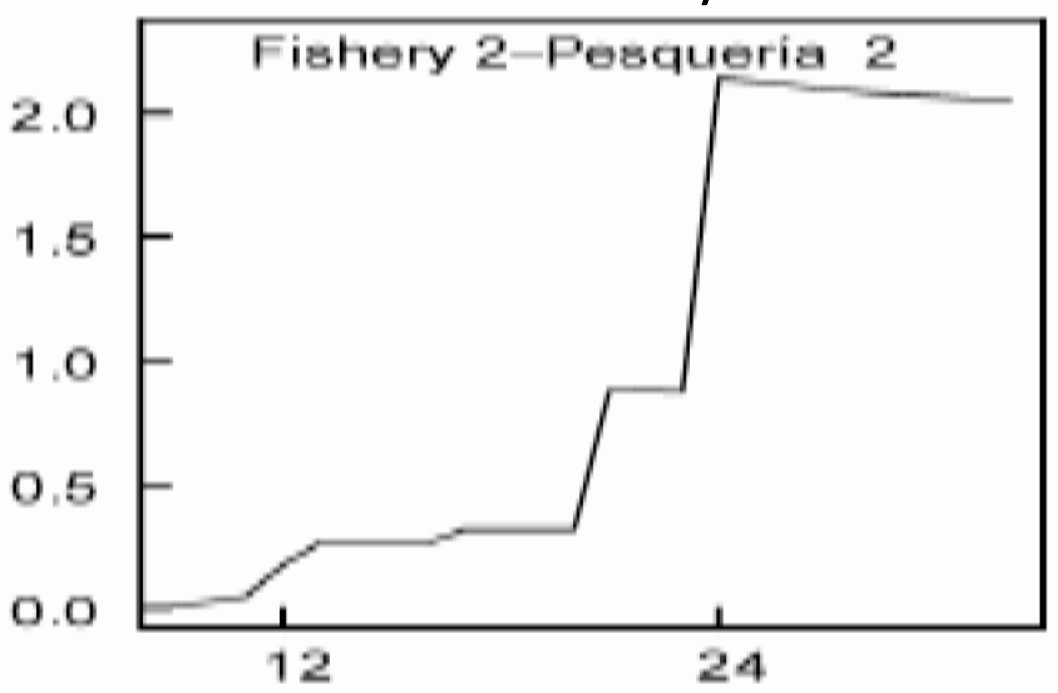
The CPUE for SKJ in region F2 is strongly related to the Nino3 index after shifting the index foreward by ~1.2 years

CIAT
IATTC

El Nino affected SKJ CPUE through recruitment



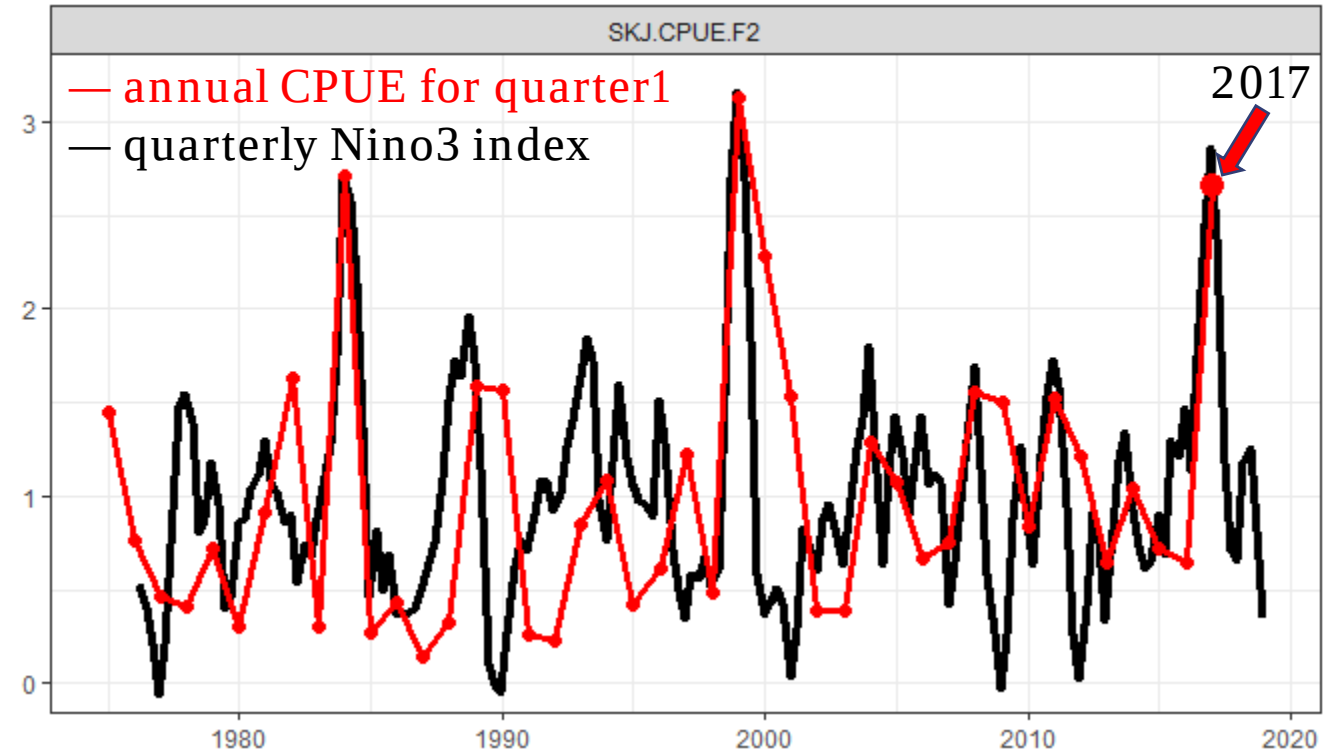
Selectivity



The CPUE for SKJ in region F2 is strongly related to the Nino3 index after shifting the index foreword by ~1.2 year

The lag between Nino3 and CPUE is consistent with the timing of positive selection by the fishery

The decreased in SKJ catch in quarter1 2018 is expected



The CPUE for SKJ in region F2 is strongly related to the Nino3 index after shifting the index foreword by ~1.2 year

- Similar to consequences of the previous two strong El Nino events, the strong El Nino in 2016 led to a large increase in CPUE one year later (2017) and a decrease in CPUE two years later (2018)
- The decreasing rate in CPUE from 2017 to 2018 is mainly affected by fishing mortality rate at age 0-2 (how likely the strong cohort can propagate to 2018) and selectivity at age 2 (how likely the propagated biomass jump can be seen in 2018)