



**NOAA**  
**FISHERIES**

# Eastern Bering Sea pollock Update

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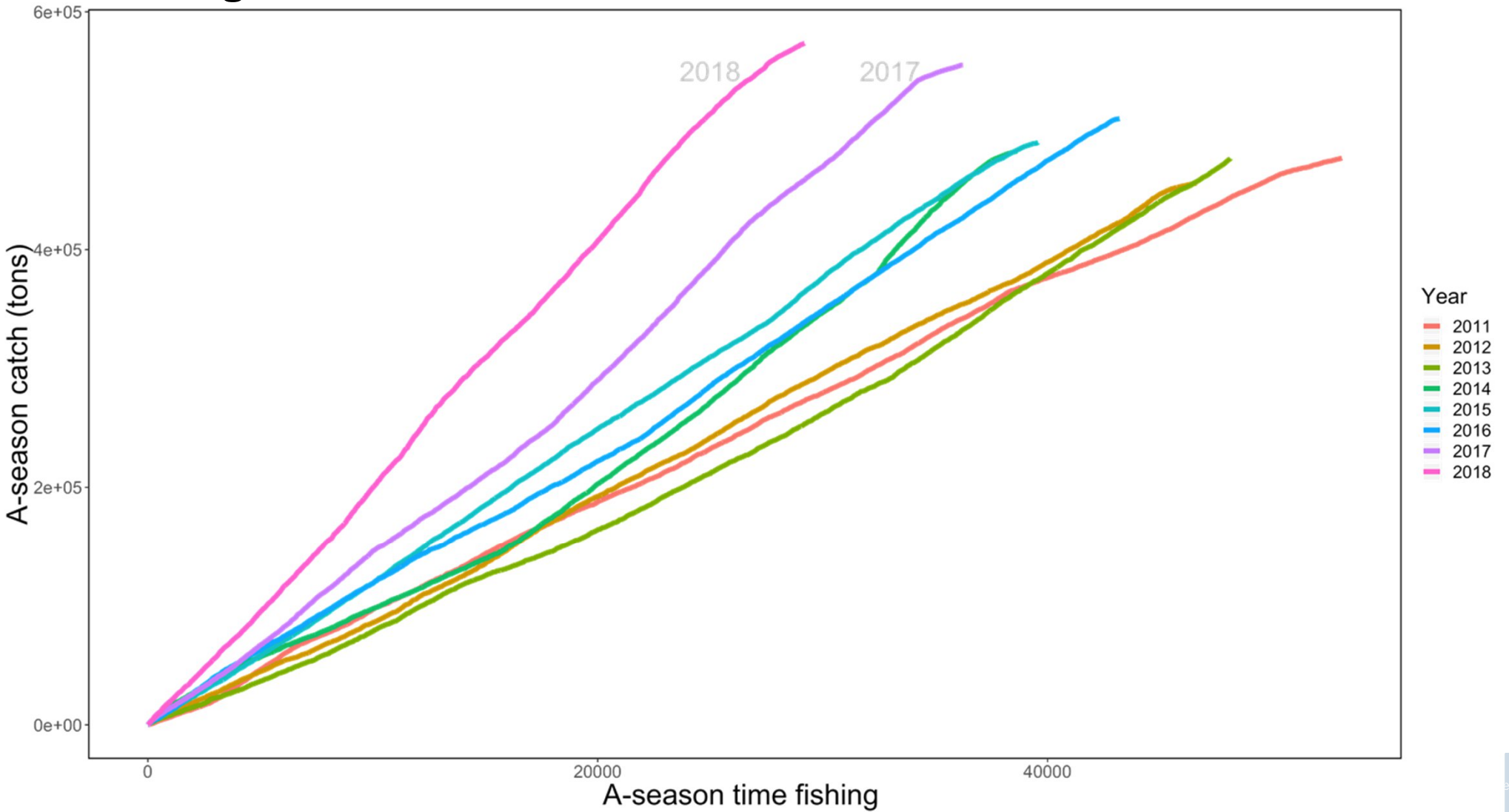
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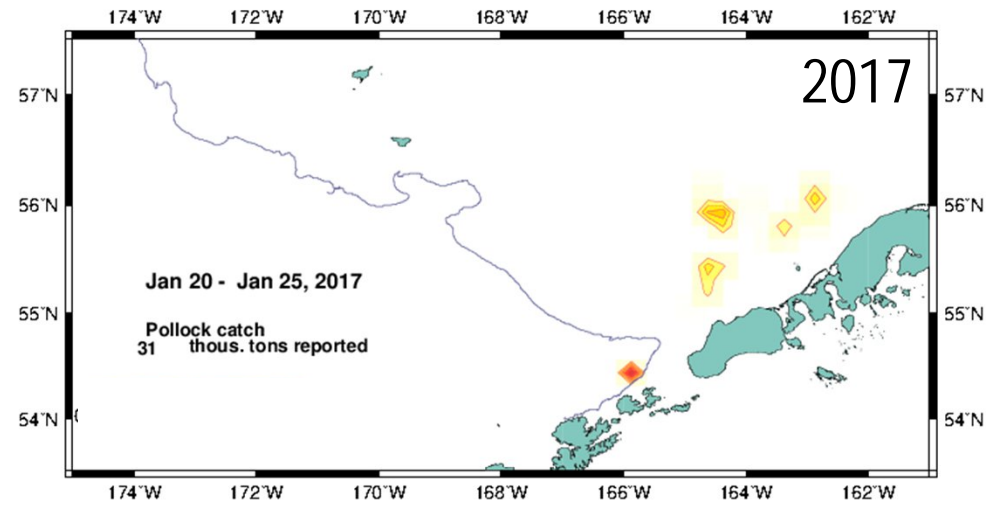
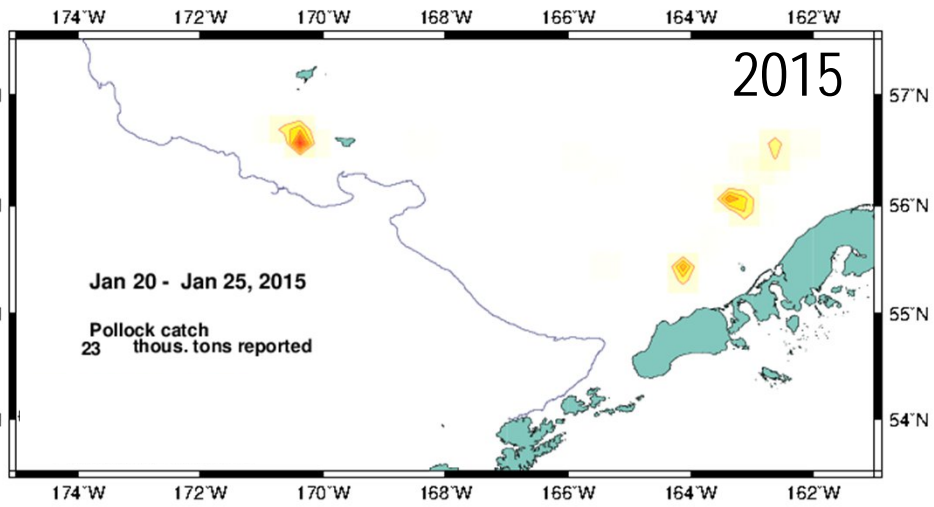
B-season



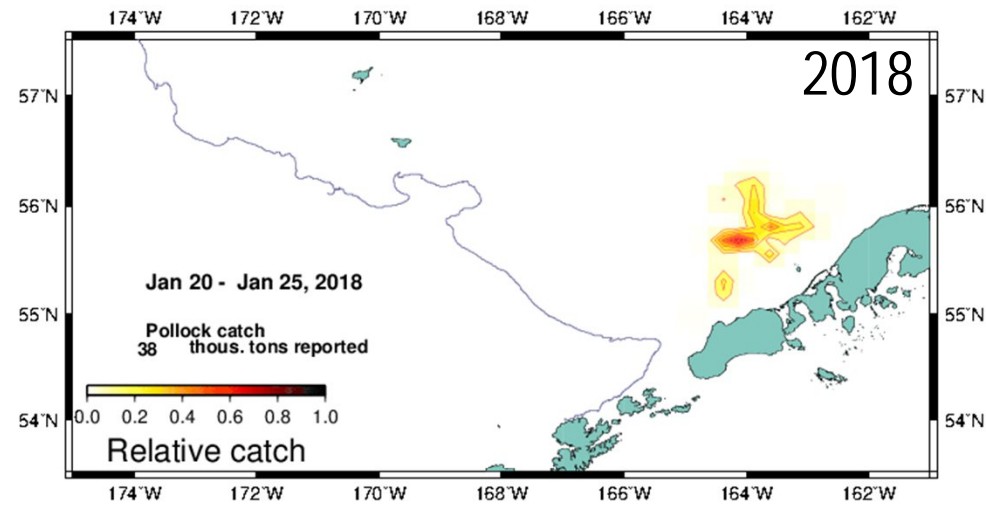
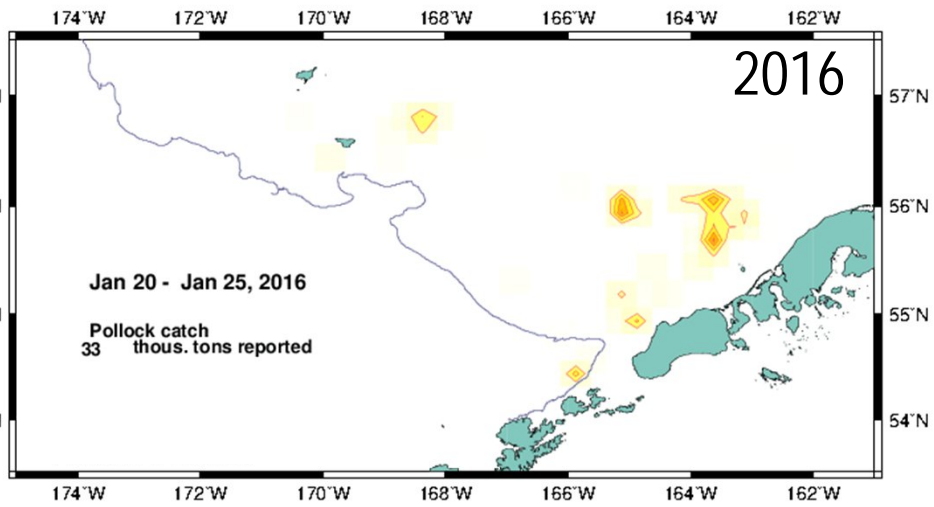
# Fishing conditions

# A-season



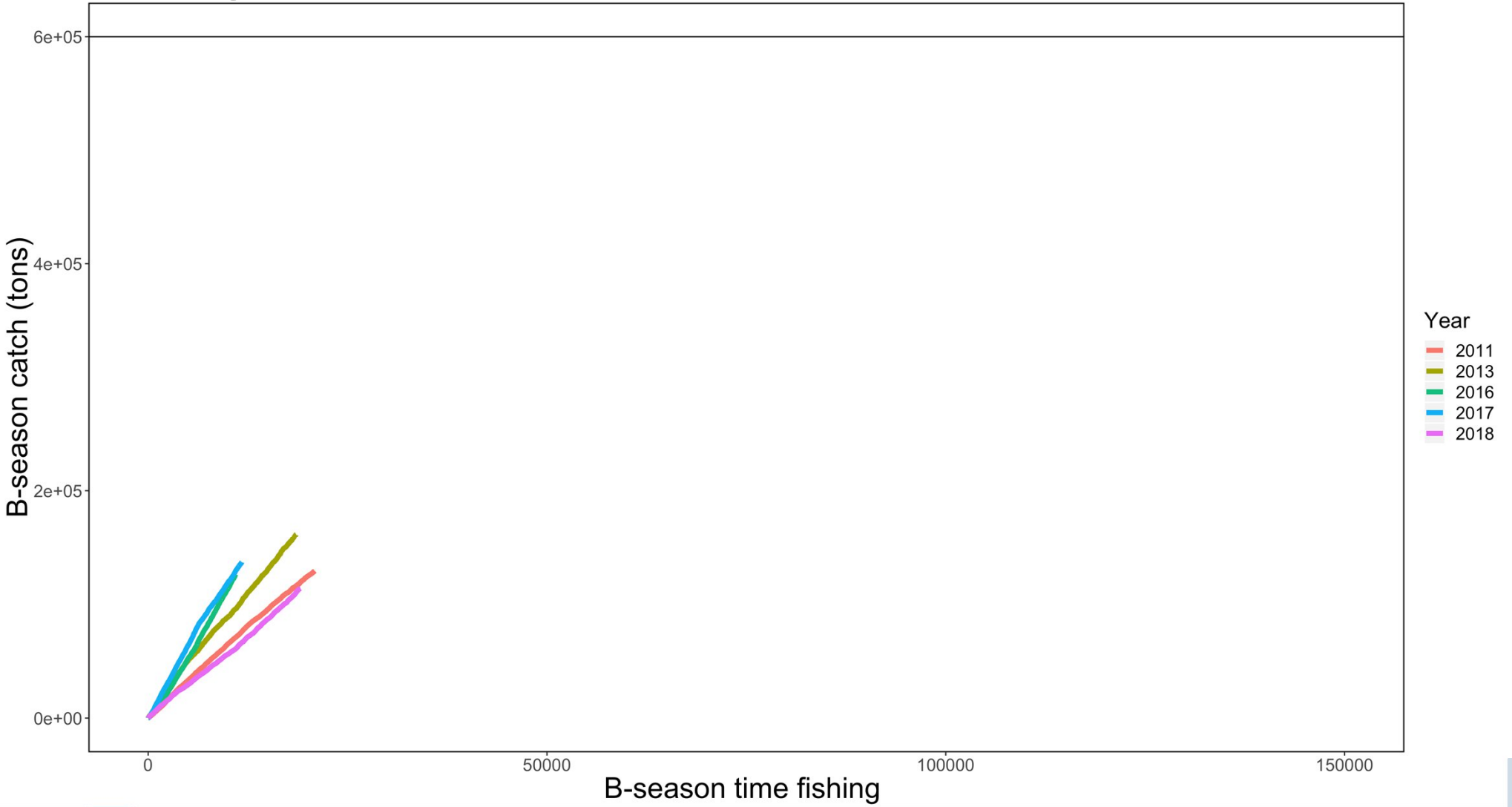


## A-season fishing patterns



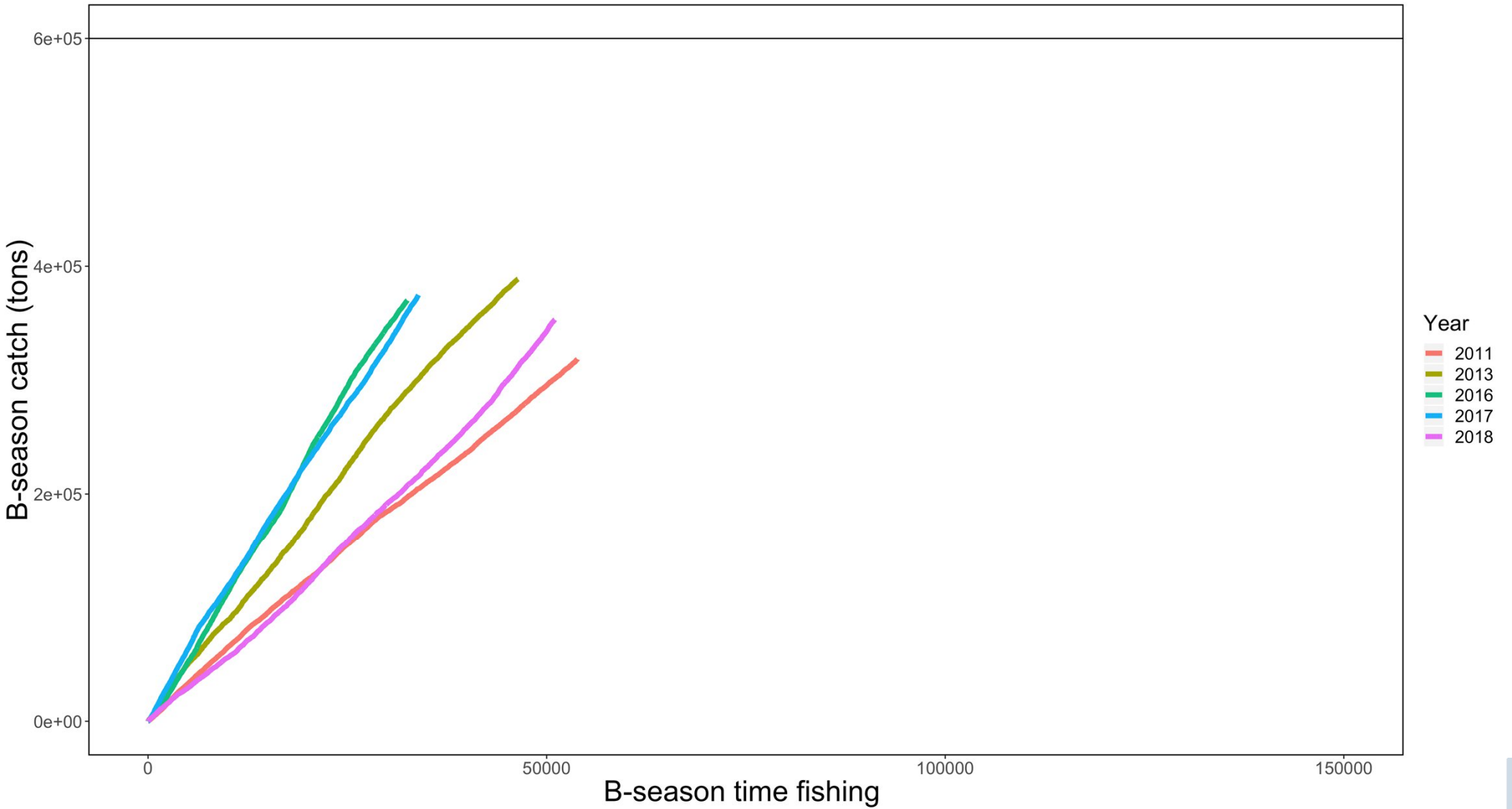
# Fishing conditions

# B-season



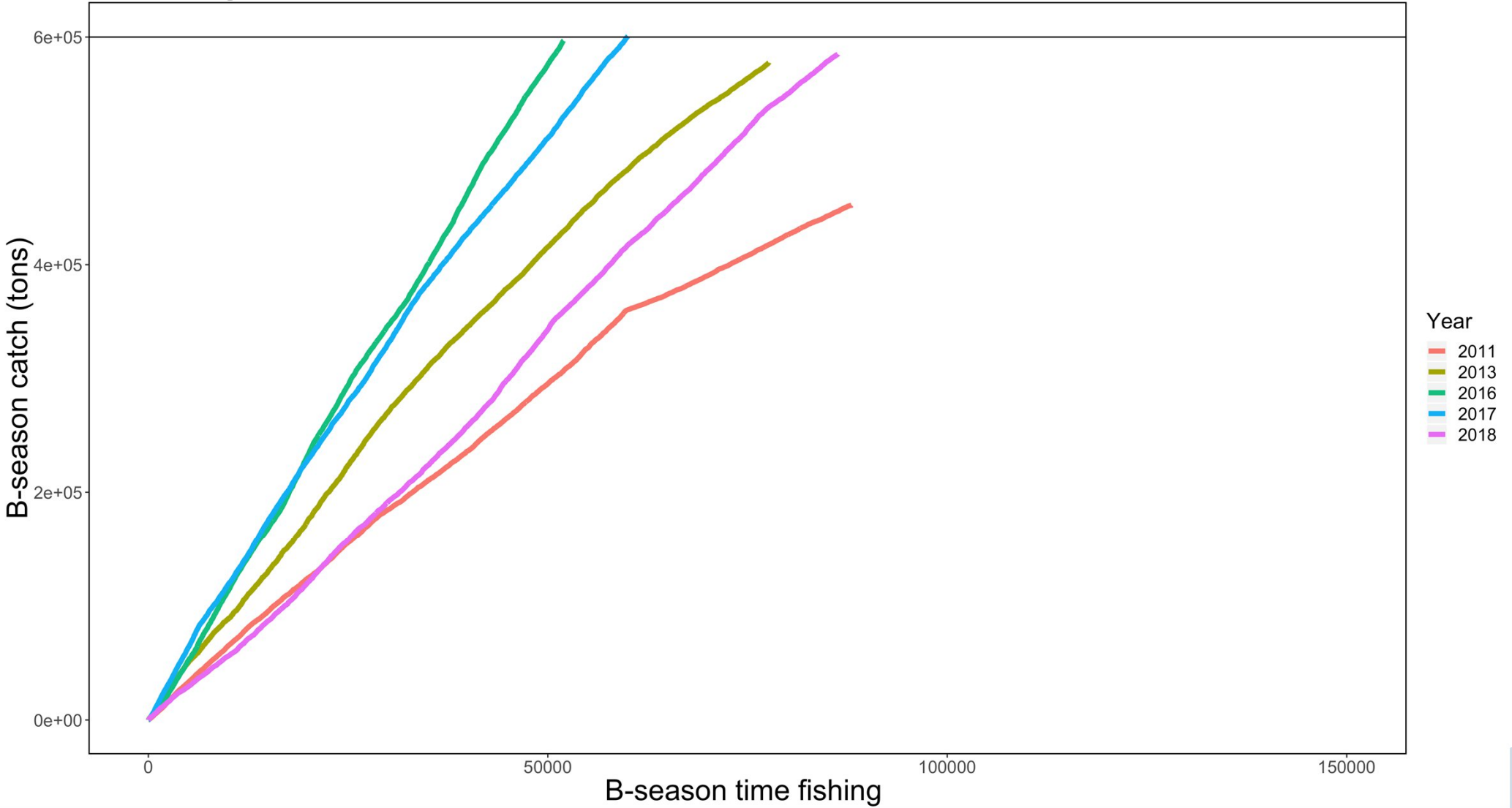
# Fishing conditions

# B-season



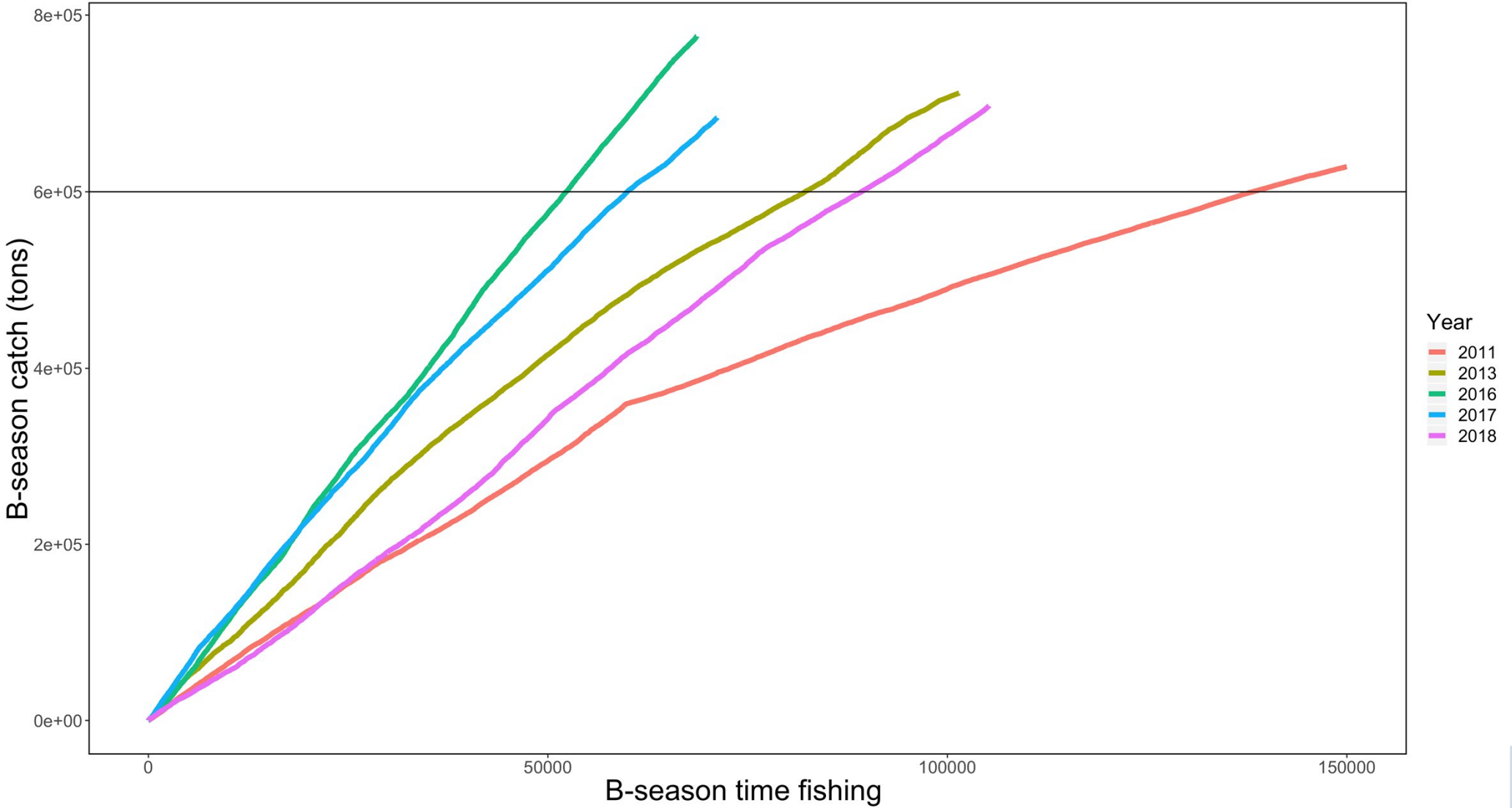
# Fishing conditions

# B-season



# Fishing conditions

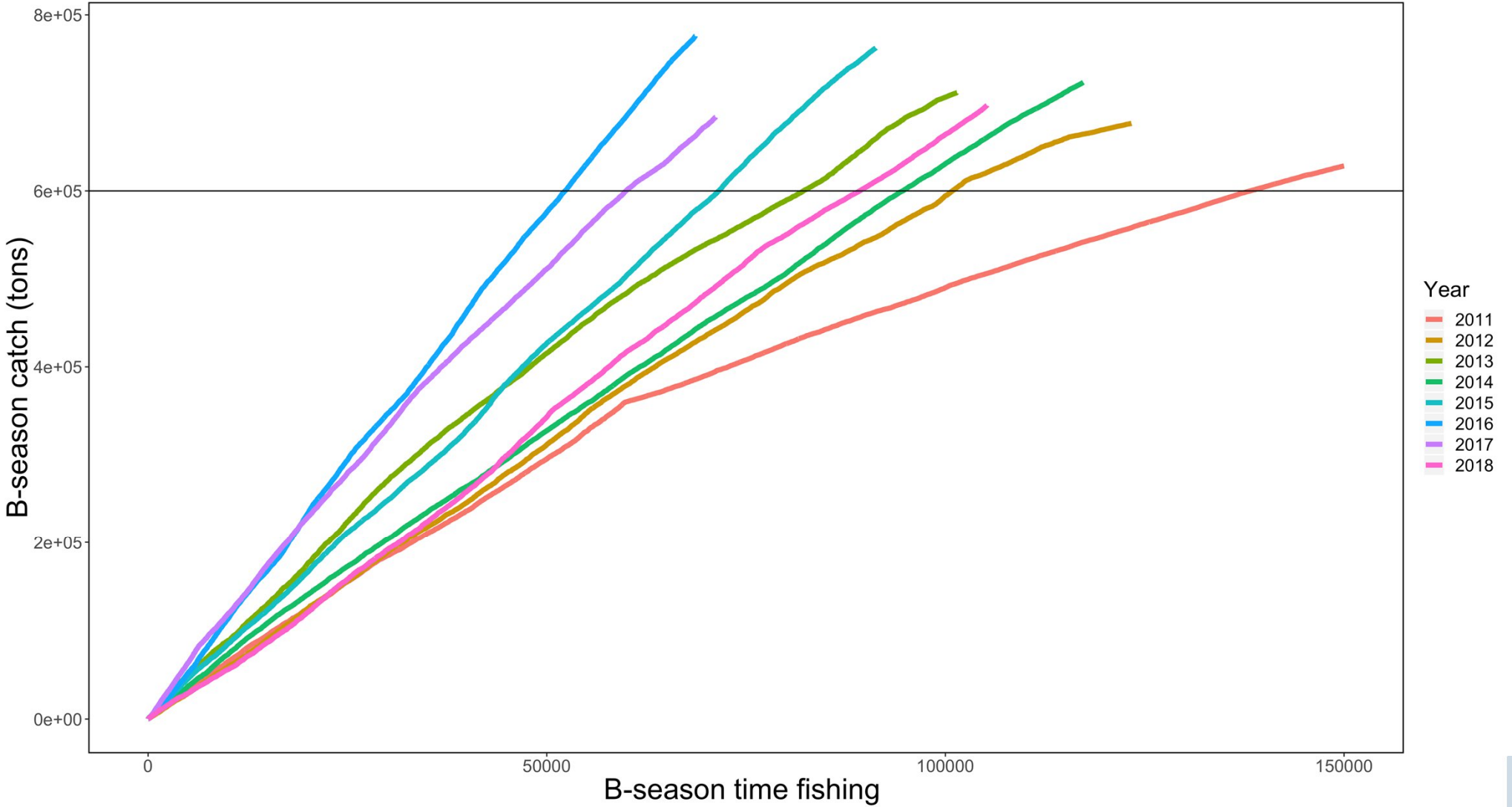
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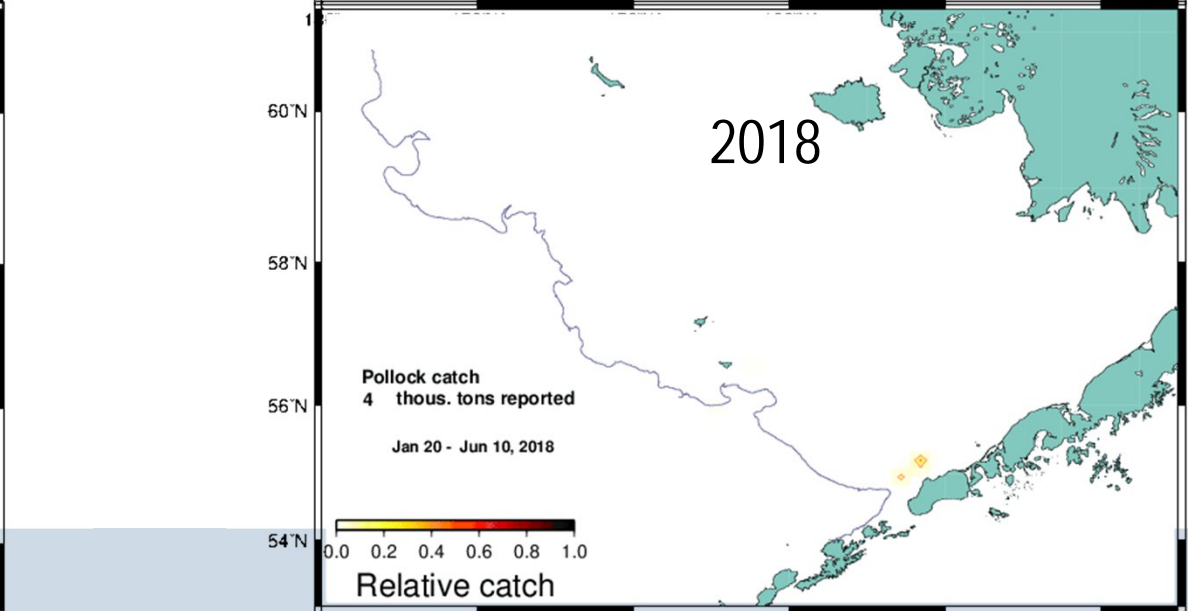
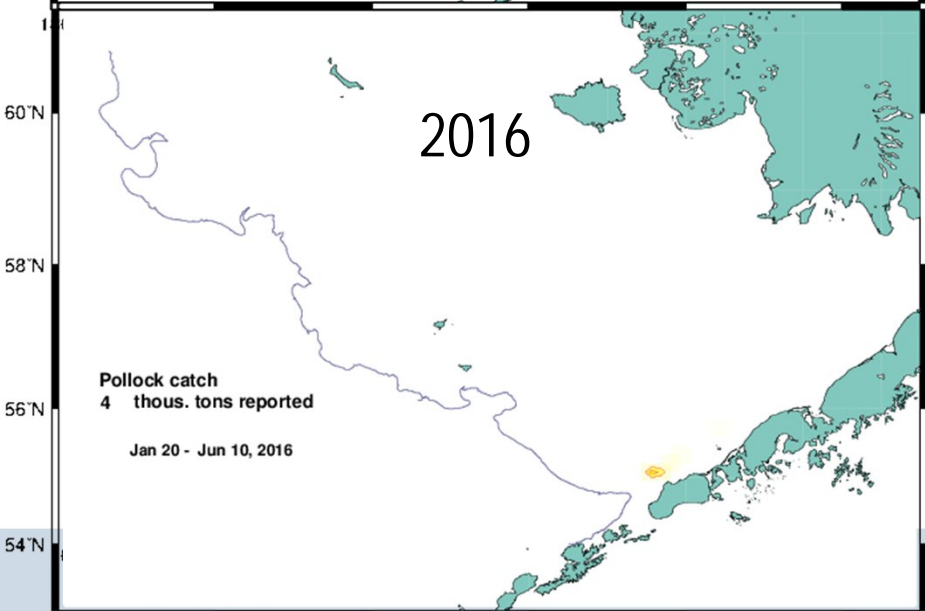
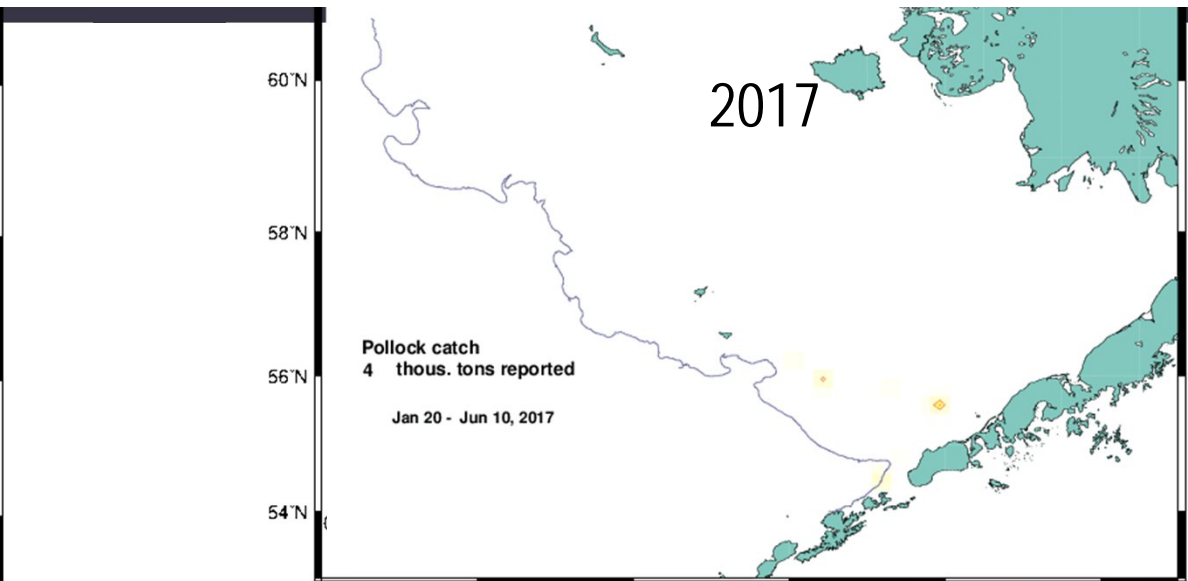
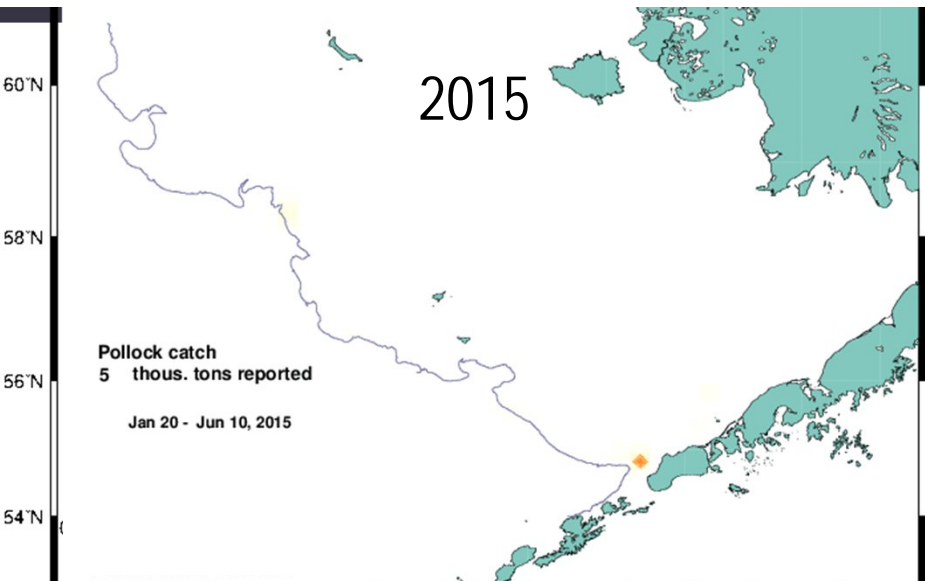




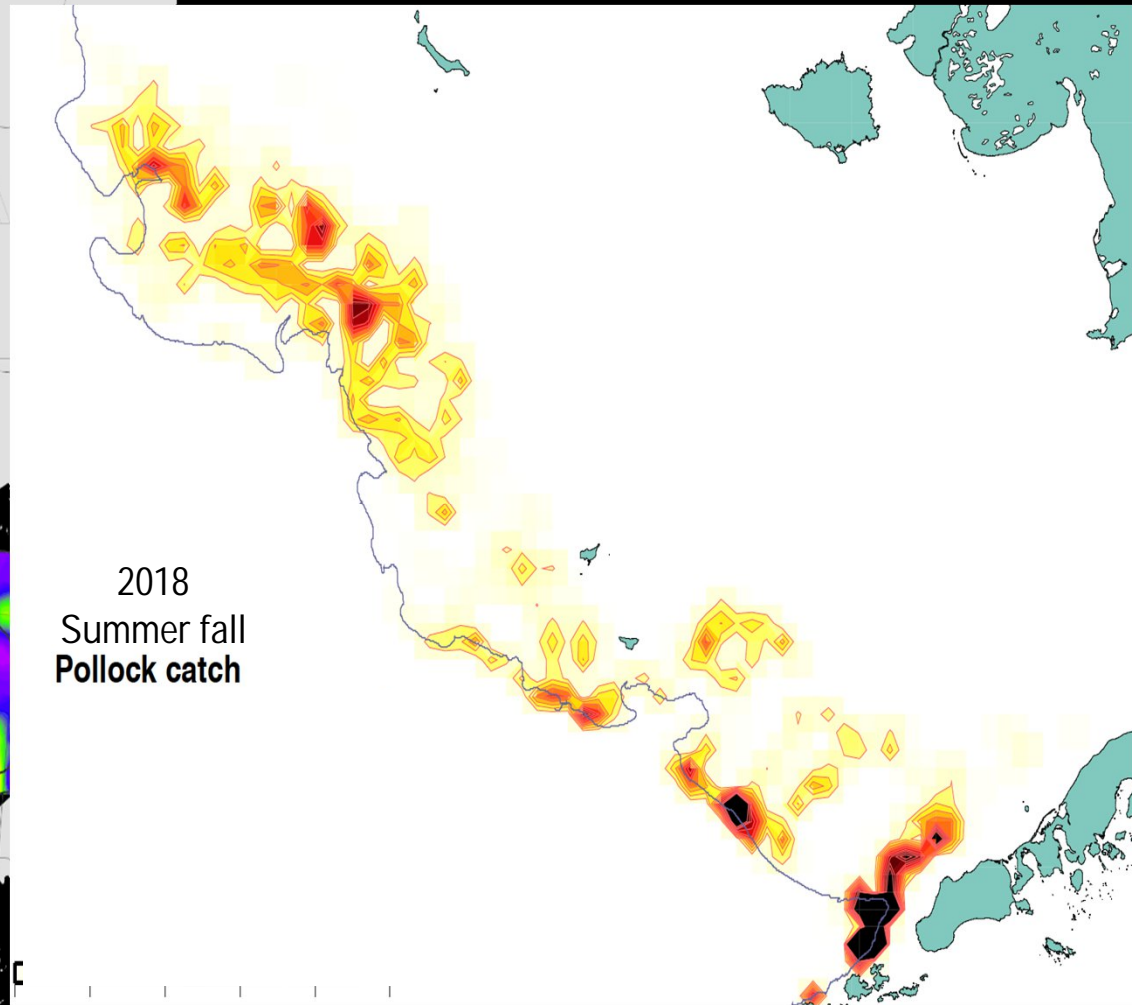
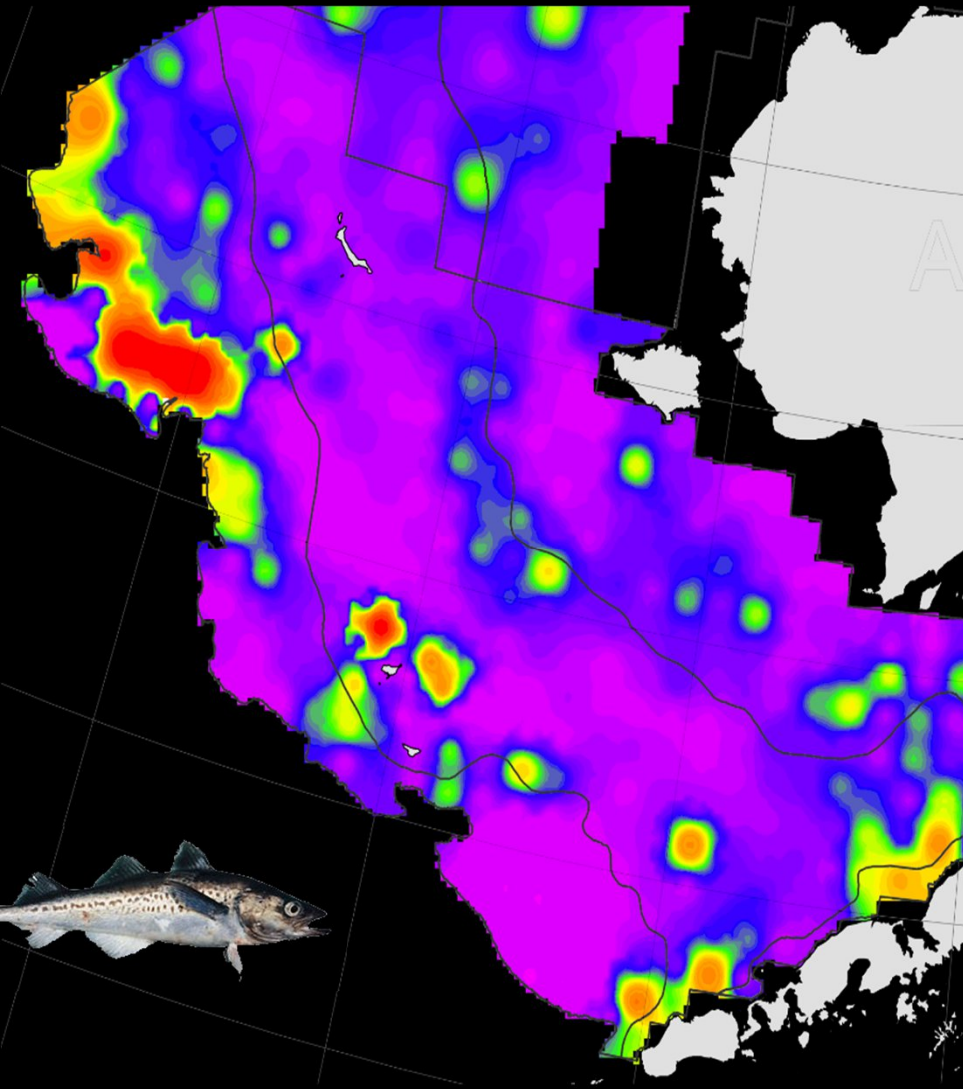
# Fishing conditions

# B-season



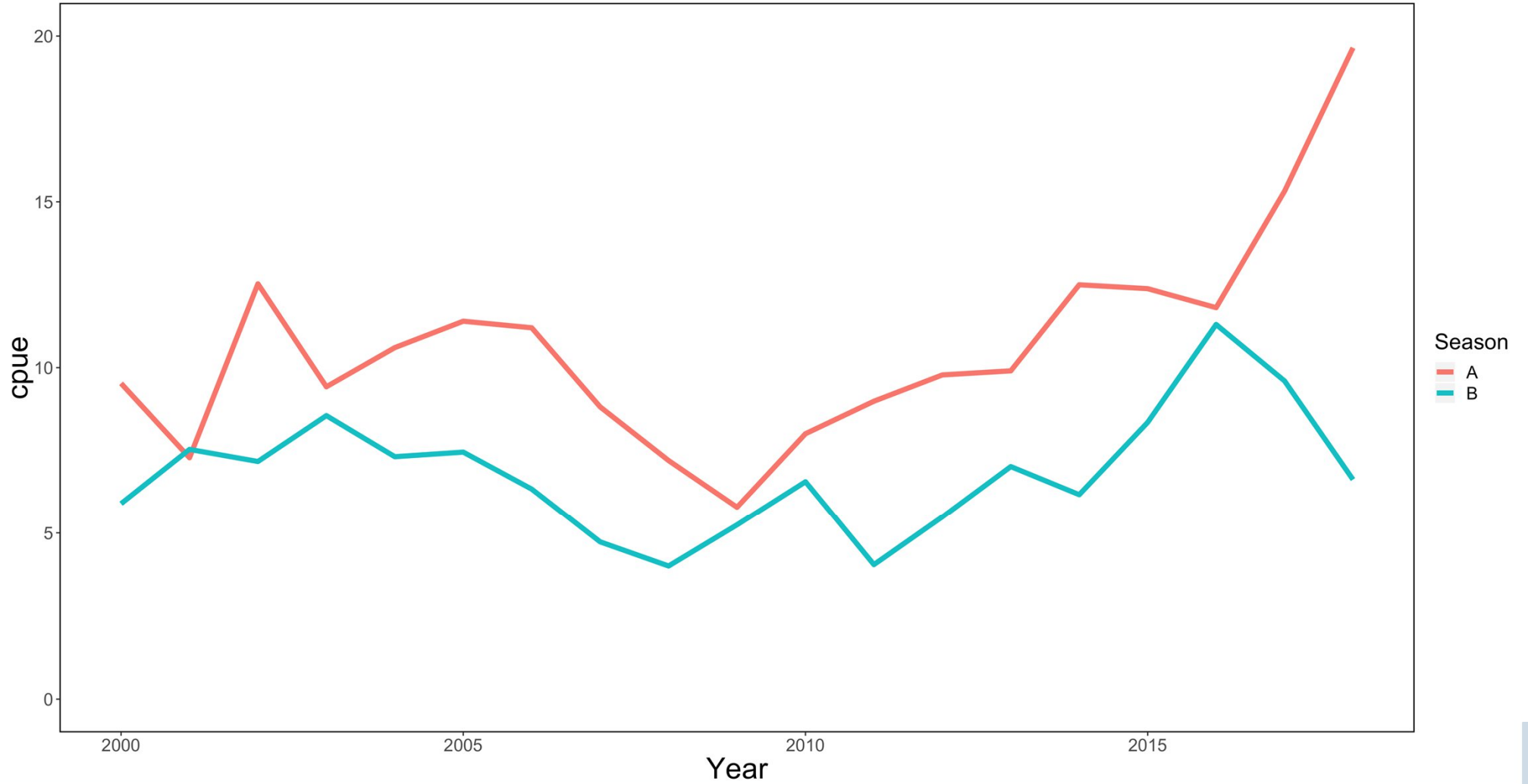


# Pollock distribution, survey vs fishery



# Fishing conditions

A-Season CPUE



## **New data for 2018 assessment**

Bottom trawl (standard)

- Plus NBS?

2 years of AVO

1 year of Acoustic trawl

- Compromised—lag in middle part of survey, missing important area

Options:

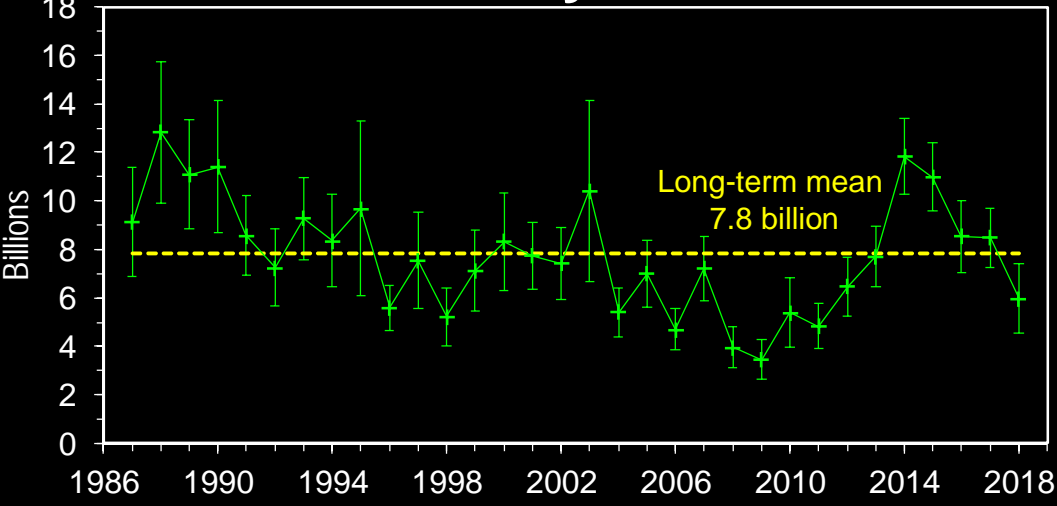
1. Re-district index to identical coverage?
2. Calibrate w/ survey
3. Ignore missing area and inflate variance for 2018

Fishery age and weight compositions (2017)

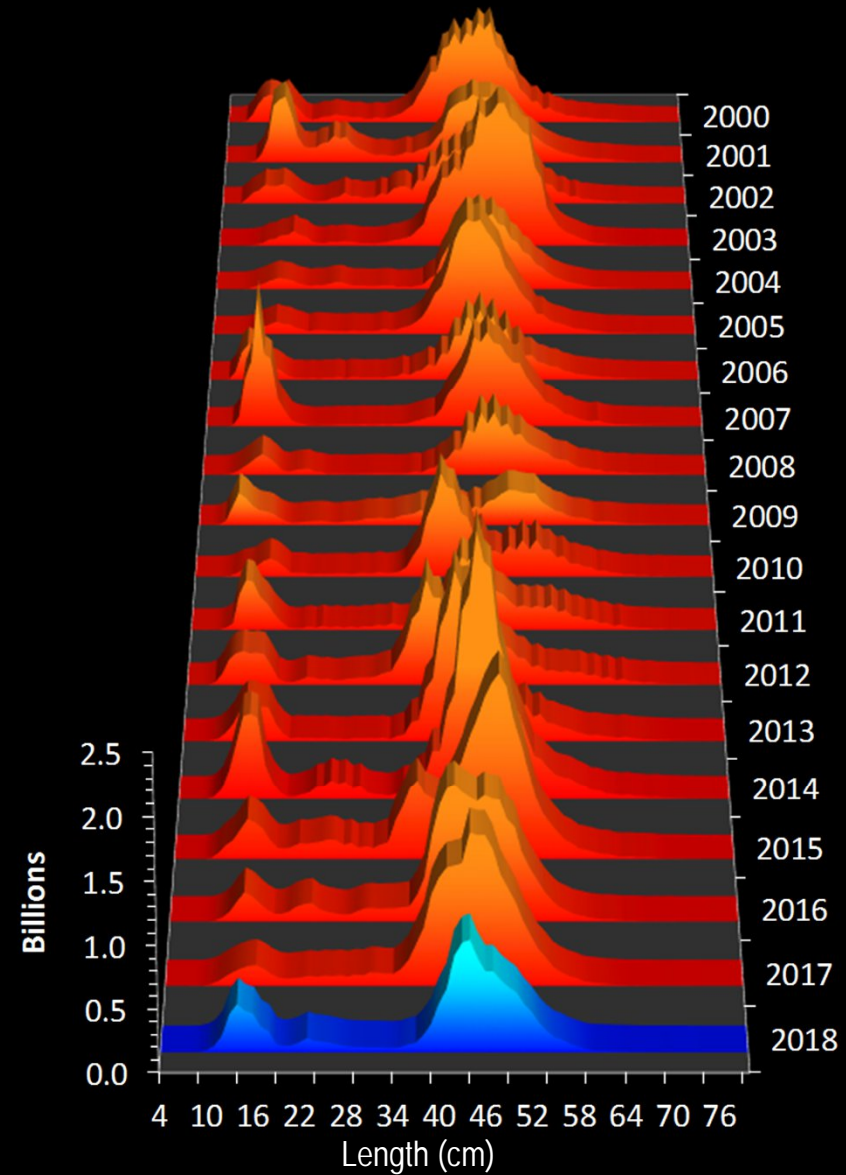
To include projections for 2018+

# Pollock

## Bottom trawl survey



6.0 billion  
**-30%** from 2017 (8.5 billion)

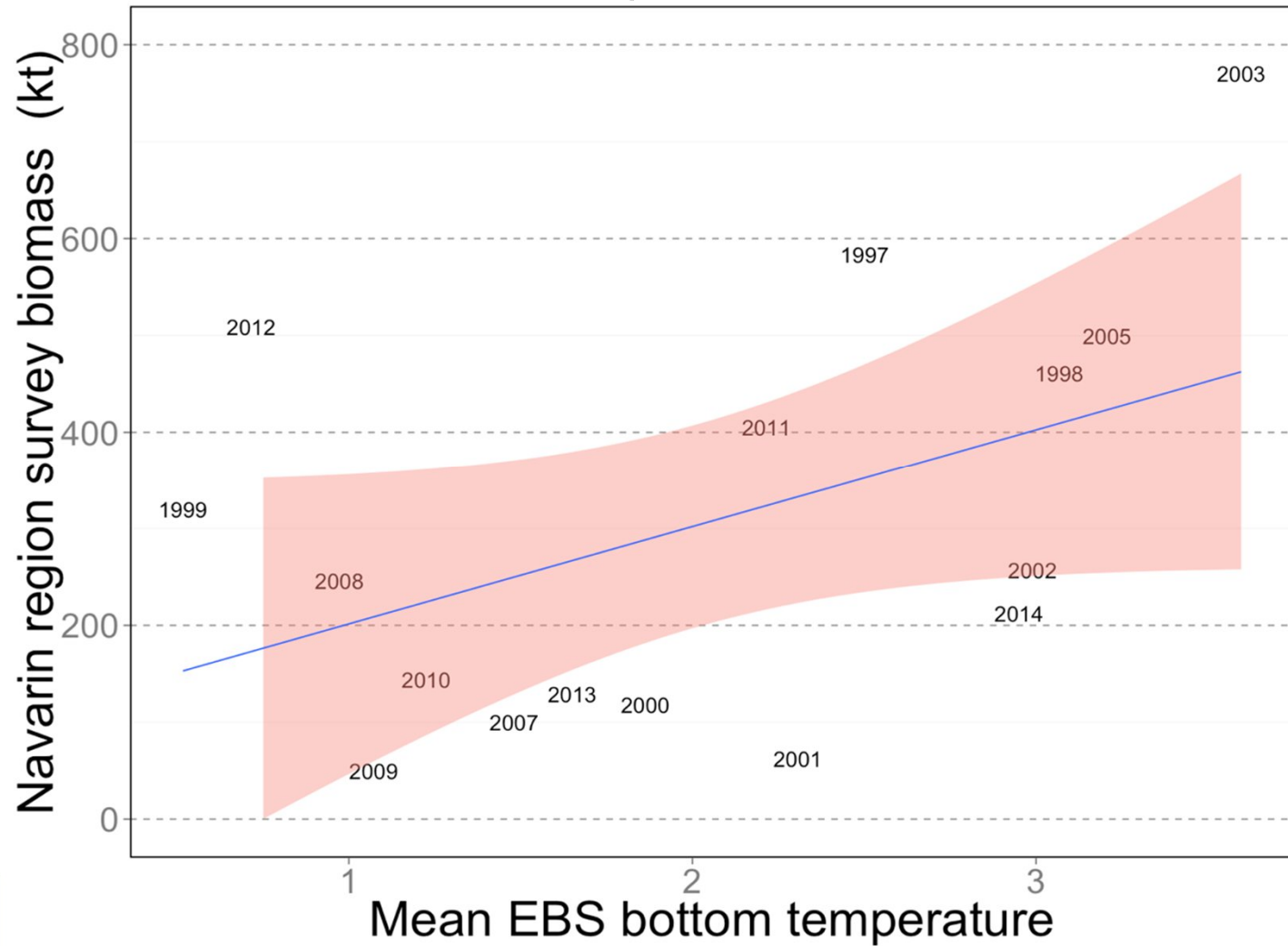


## Assessment plans

- Configuring NBS component
  - Presently modeled as random effect w/o linkage to observations
  - Will explore potential explicit movement

# Pollock movement?

From 2015 EBS pollock assessment

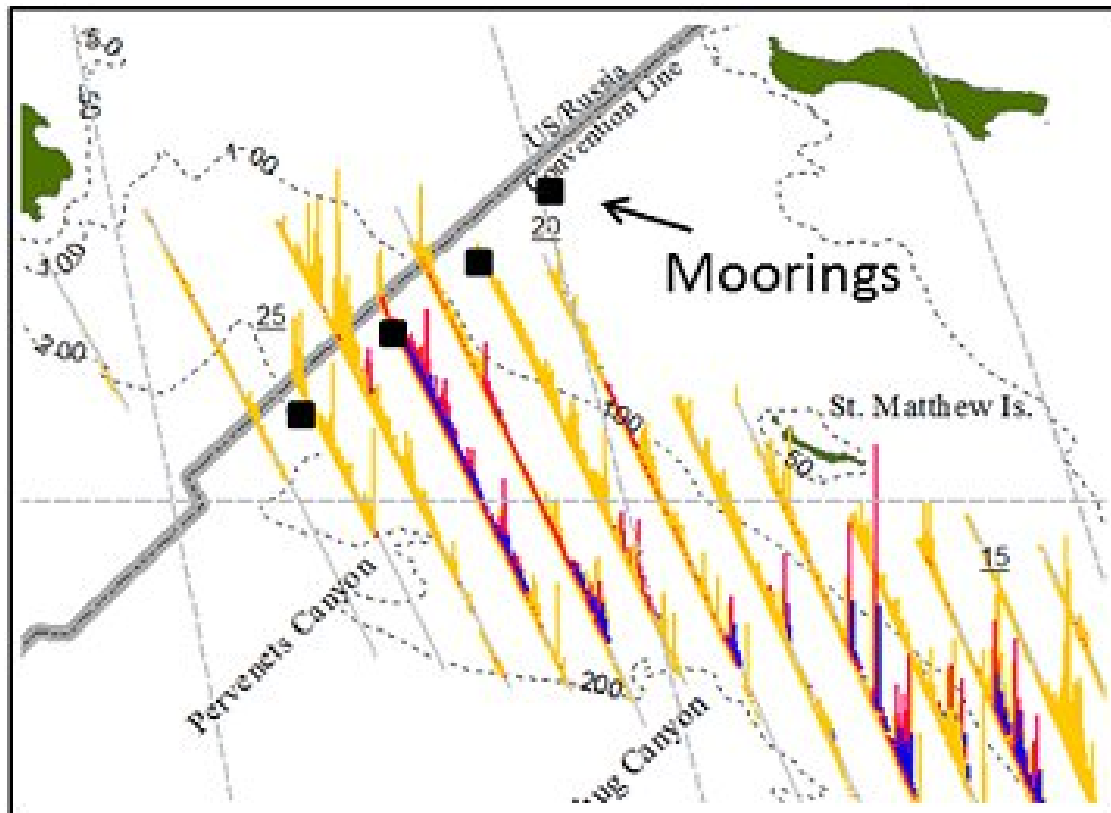


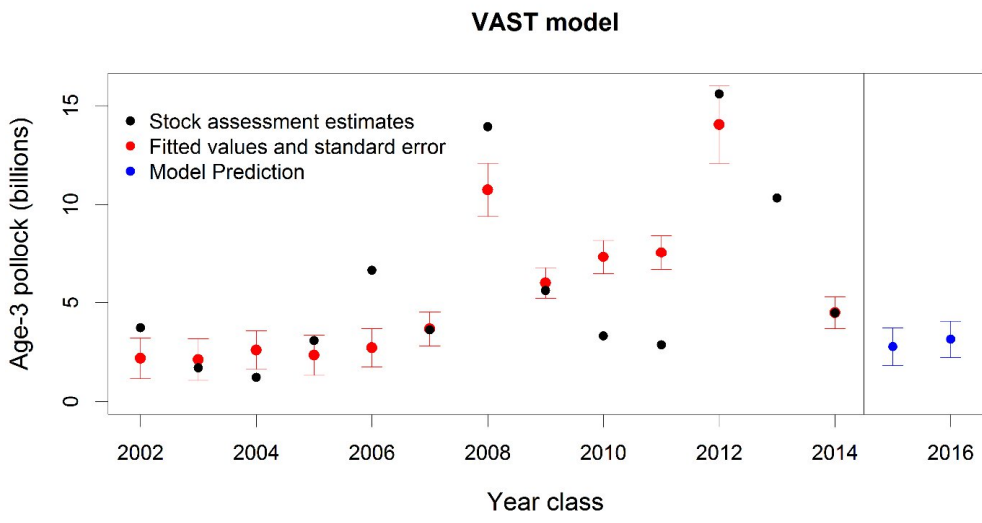


# Monitoring movements of Bering Sea pollock

- ✓ 12 month deployments
  - summer 2019 – 2020
  - summer 2021 – 2022

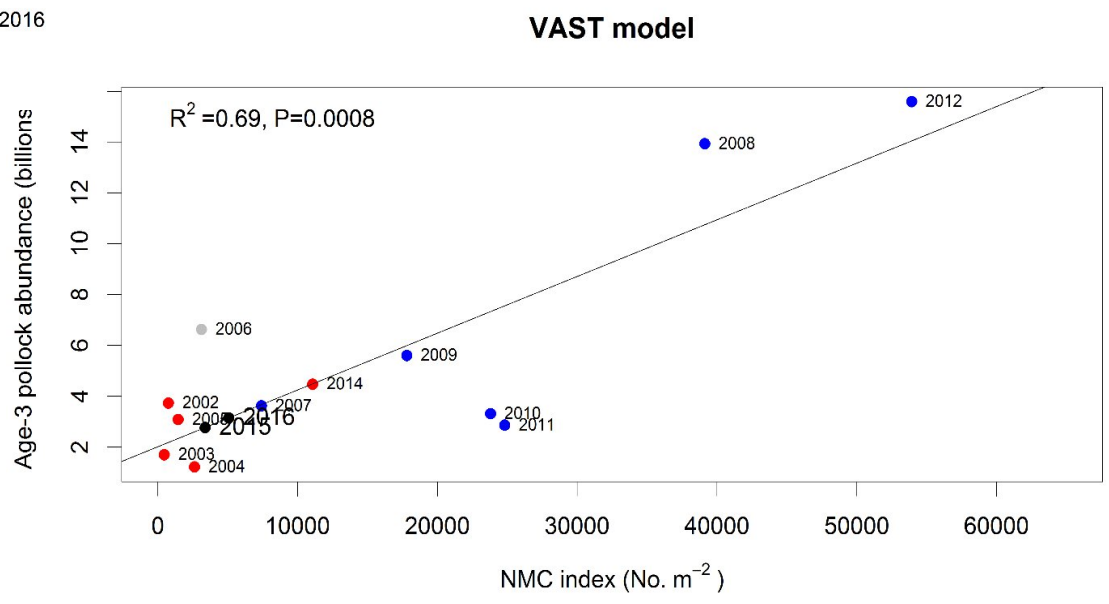
- ✓ Also physical oceanographic data collections





Large copepod abundance (observed and modeled) as an indicator of pollock recruitment to age-3 in the southeastern Bering Sea

Contributed by: Lisa Eisner, Ellen Yasumiishi



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## Plans for multi-species assessment

- Update data