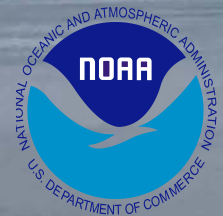
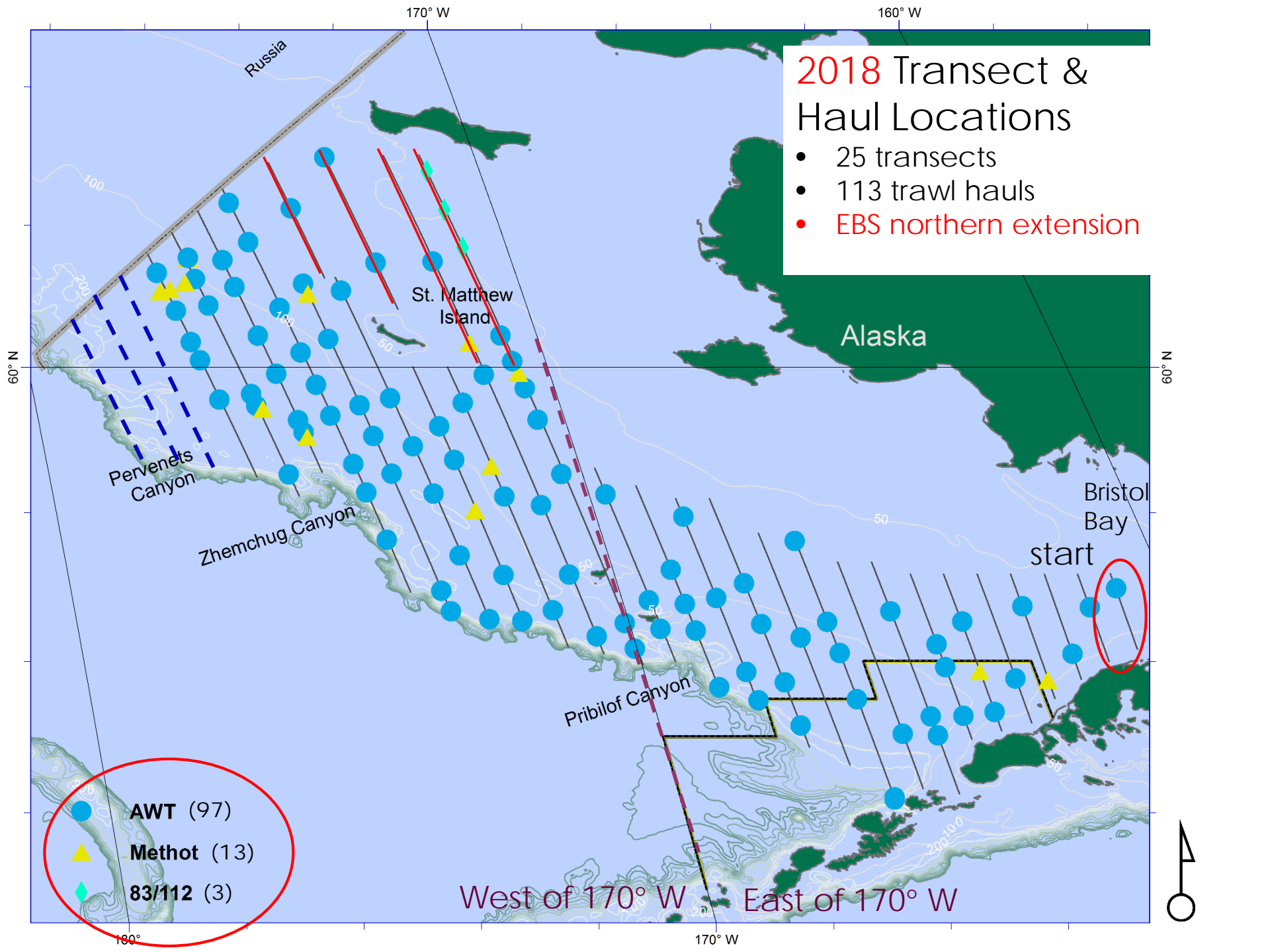


2018 ACOUSTIC-TRAWL SURVEY OF EASTERN BERING SEA SHELF WALLEYE POLLOCK – PRELIMINARY RESULTS

6 June –26 August
NOAA ship *Oscar Dyson*

Abigail McCarthy, Taina Honkalehto
and MACE Program
Alaska Fisheries Science Center





2018 Transect & Haul Locations

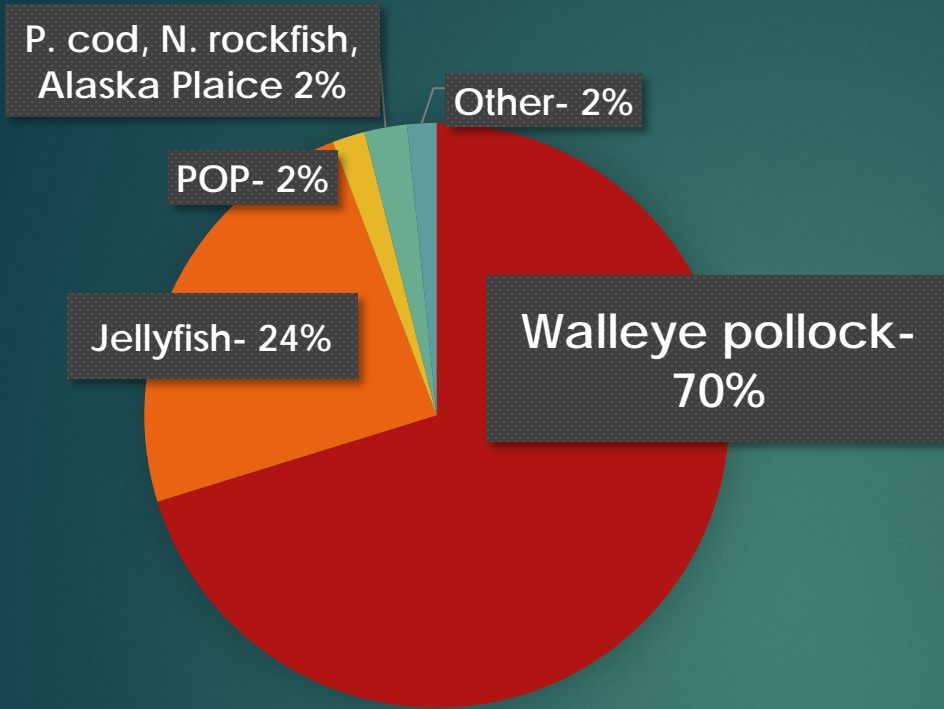
- 25 transects
- 113 trawl hauls
- EBS northern extension

- **AWT** (97)
- ▲ **Methot** (13)
- ◆ **83/112** (3)

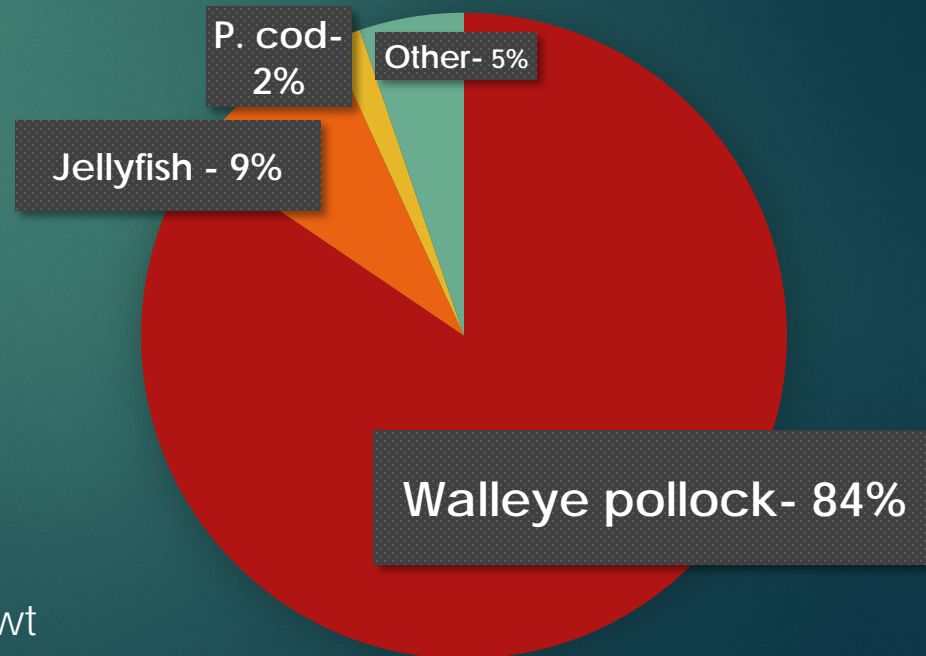
West of 170° W East of 170° W



97 midwater trawls – catch by weight

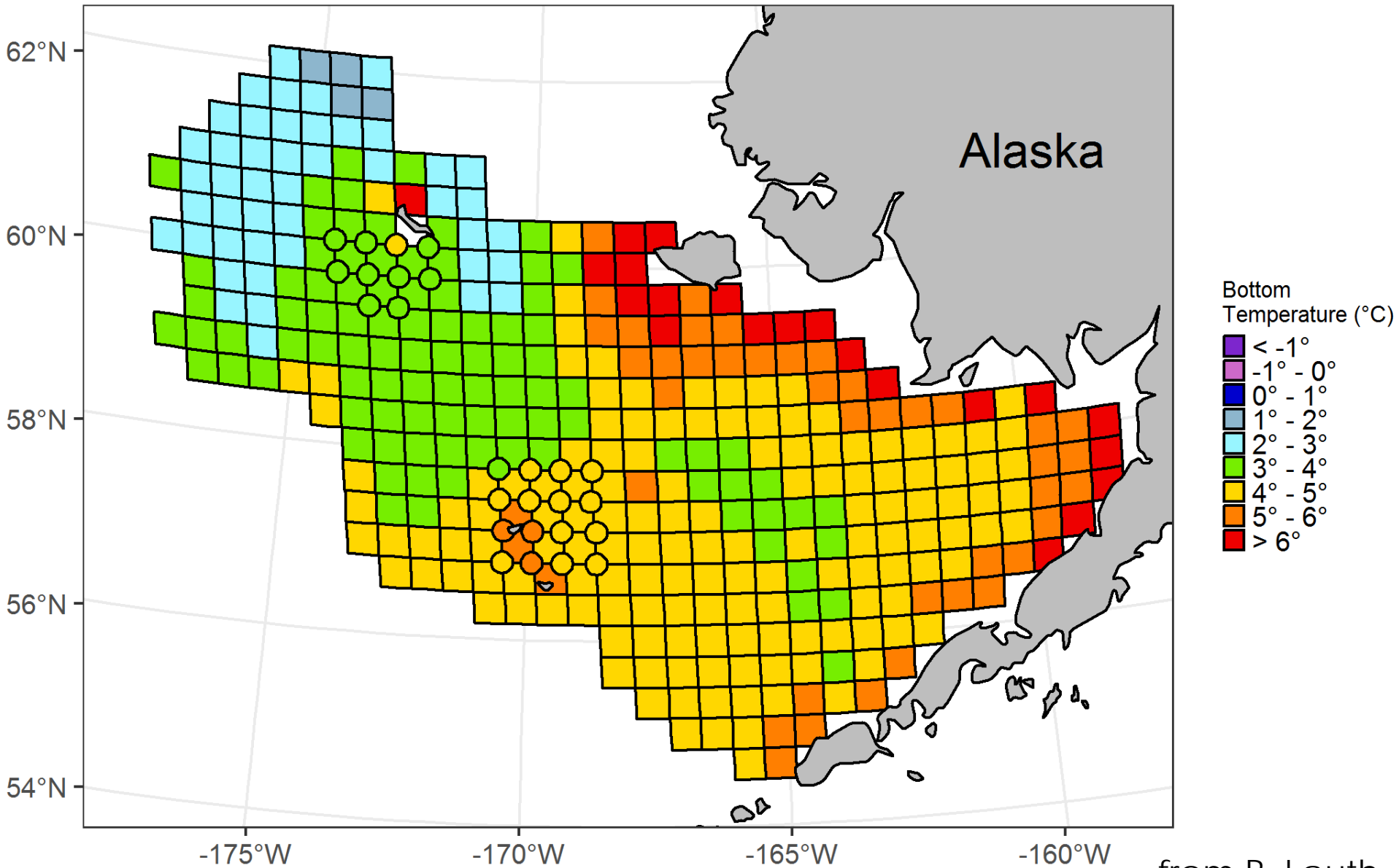


3 bottom trawls – catch by weight



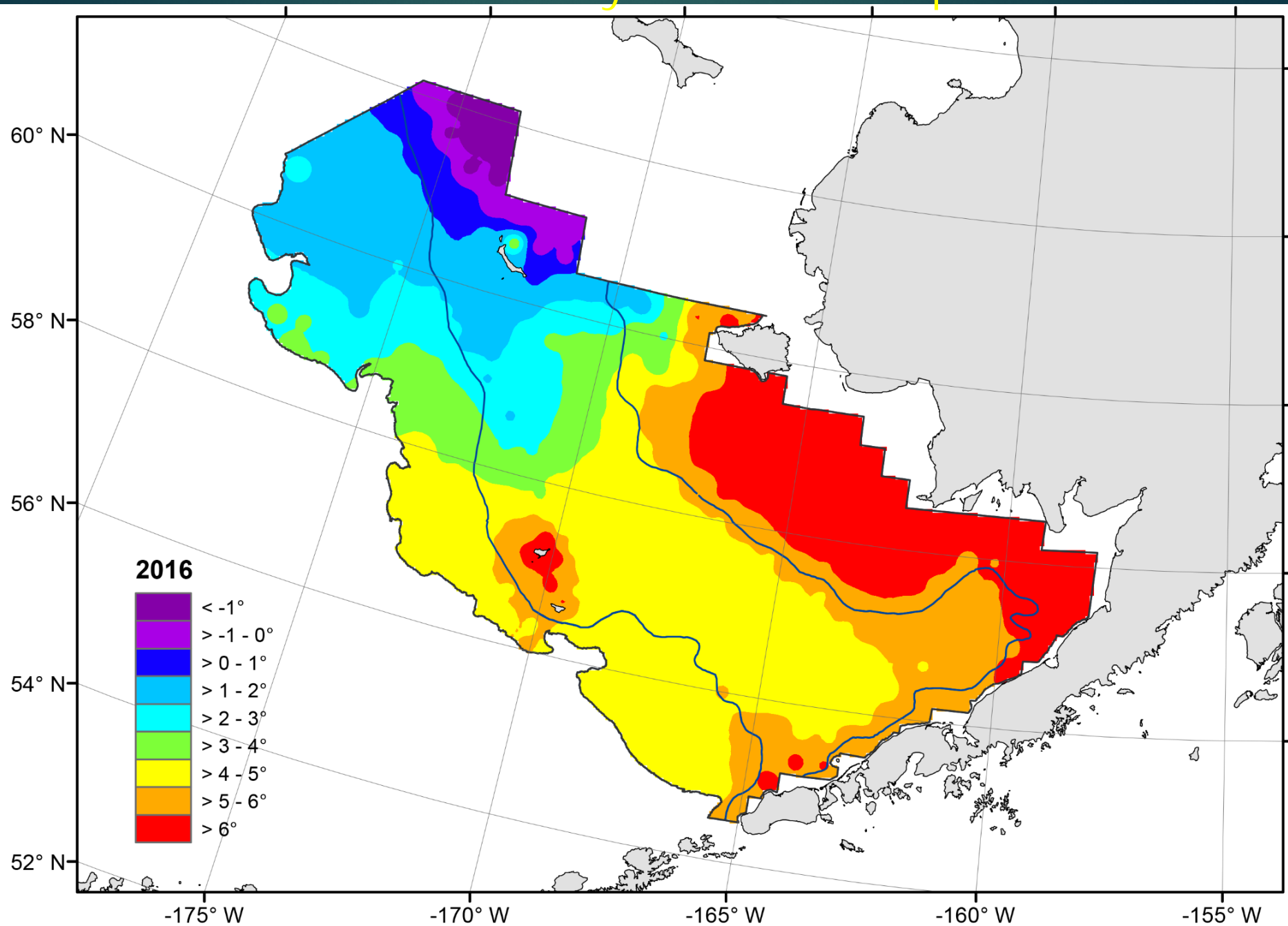
*"other" – long list of species with v. small % wt

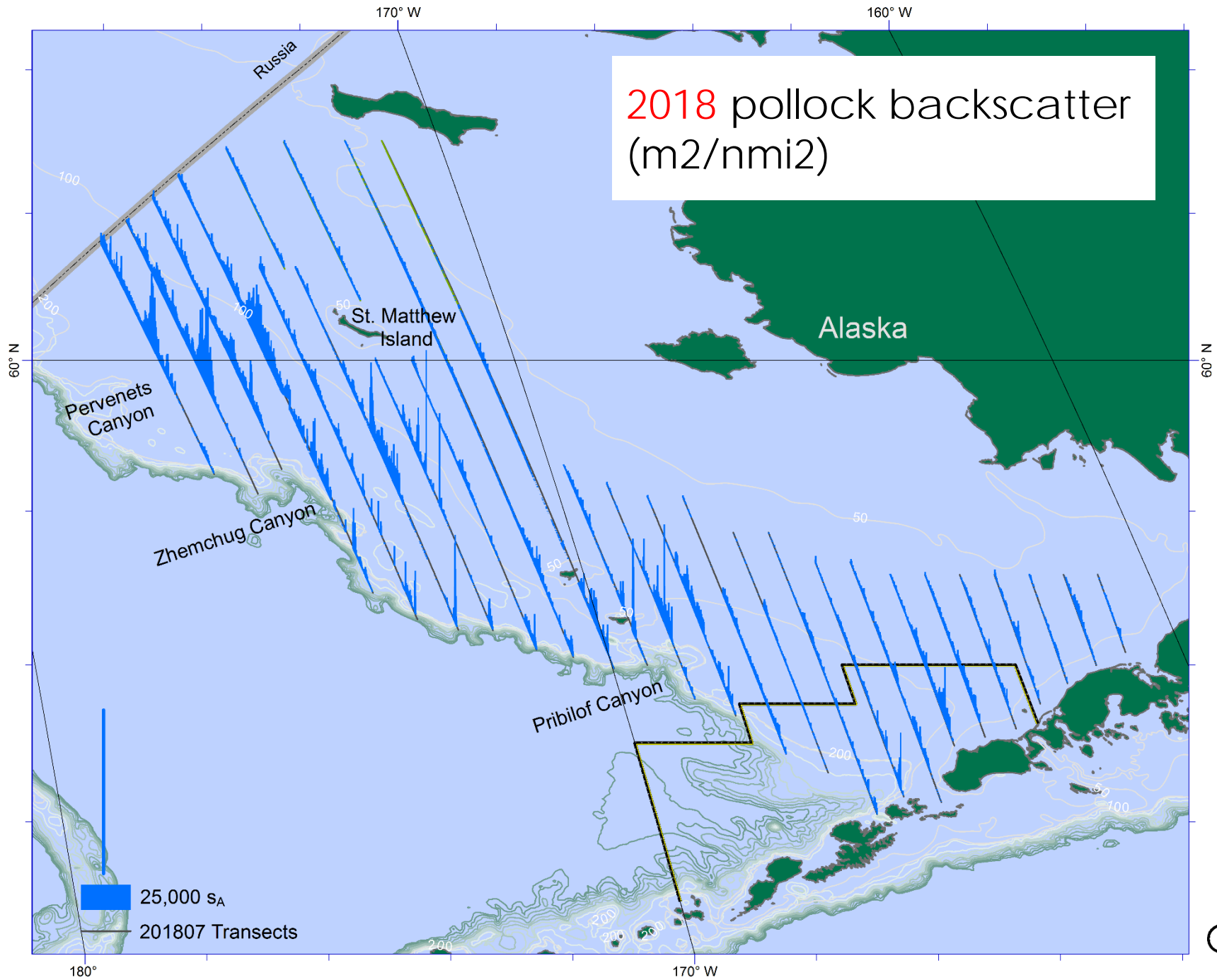
2018 Bottom trawl survey bottom temperatures

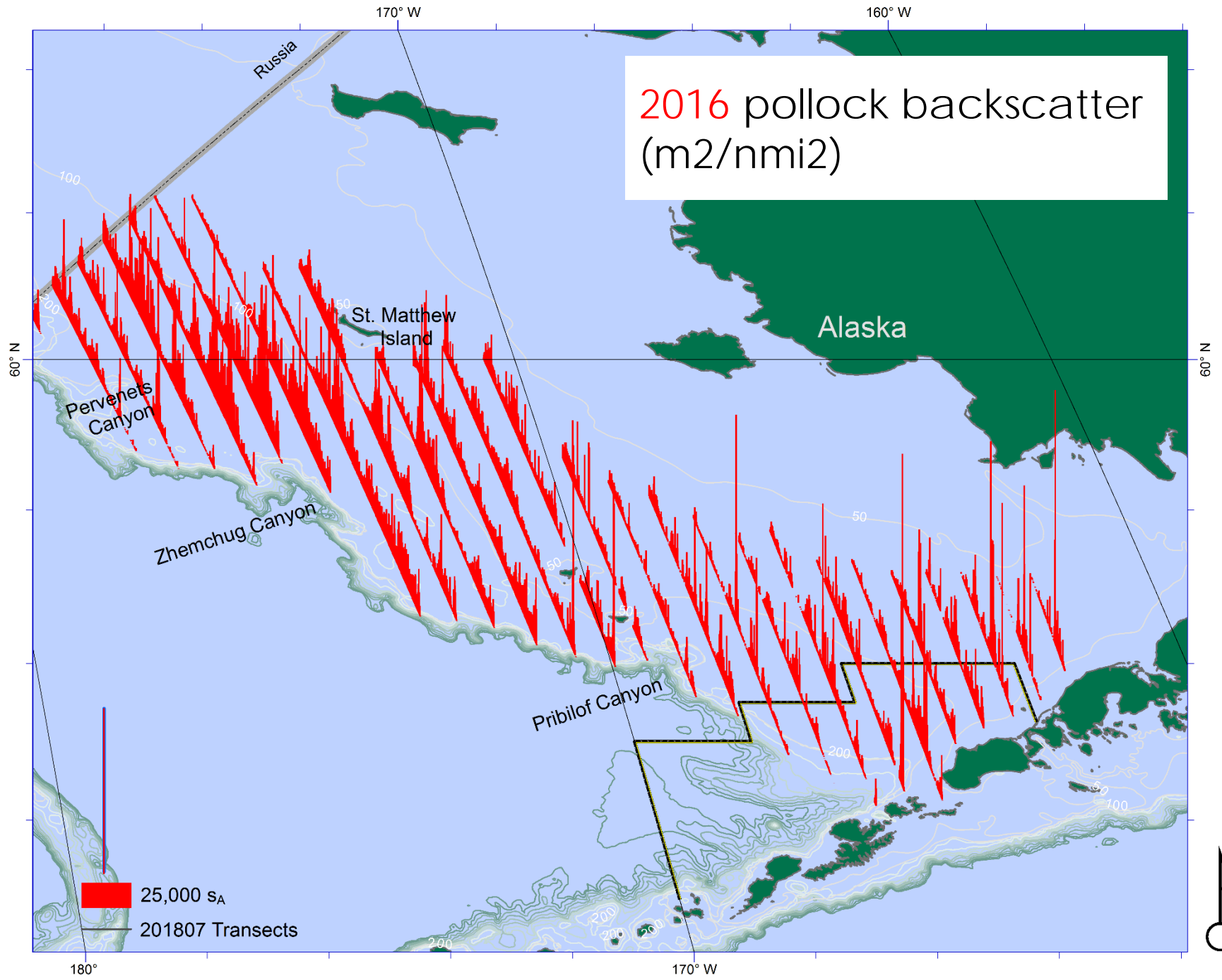


from B. Lauth

2016 Bottom trawl survey bottom temperatures



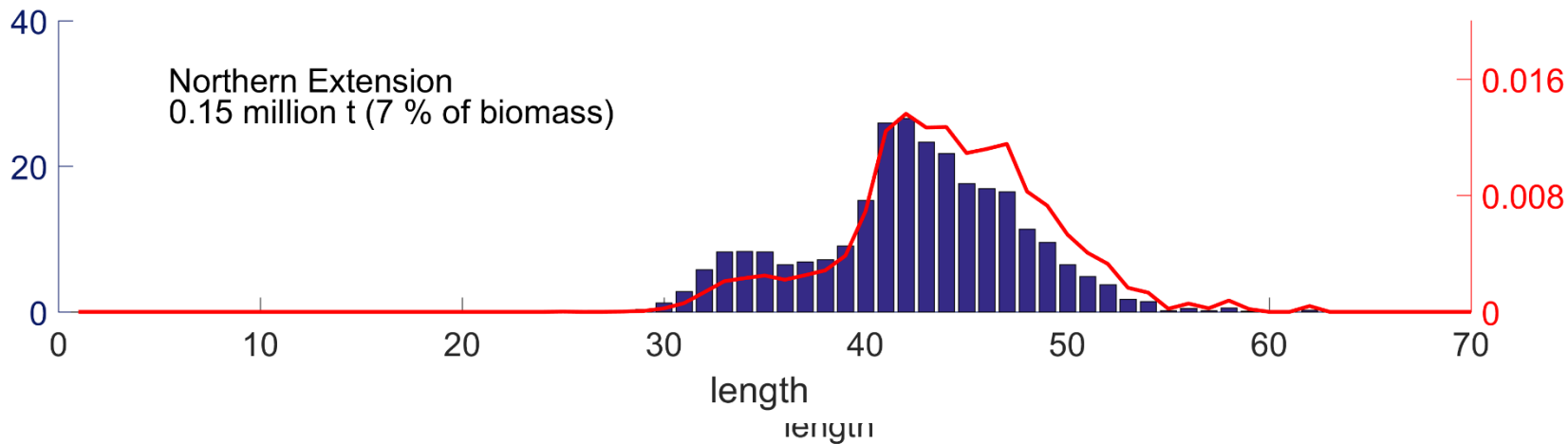
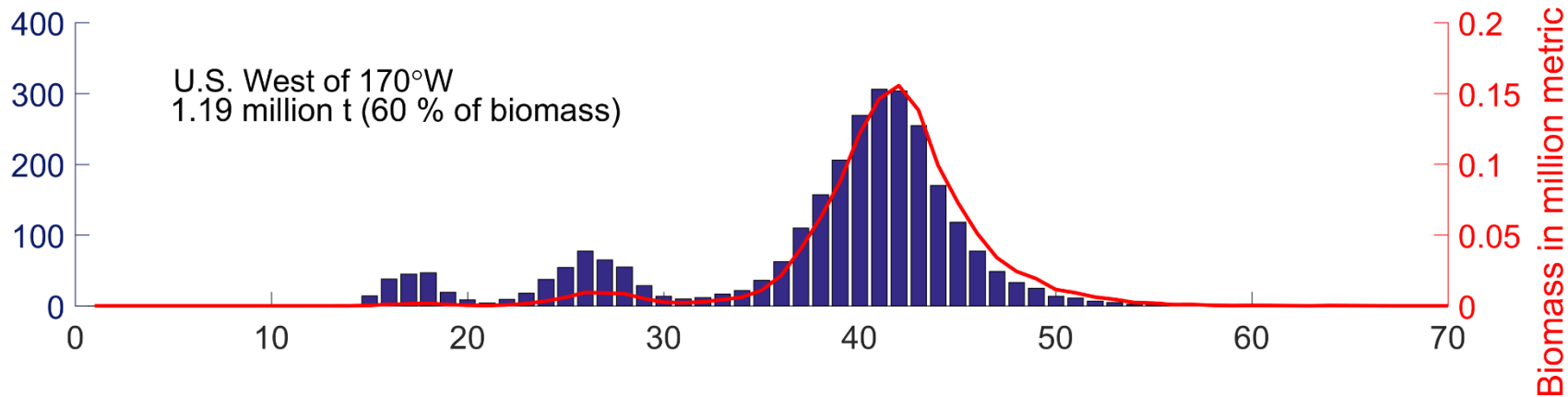
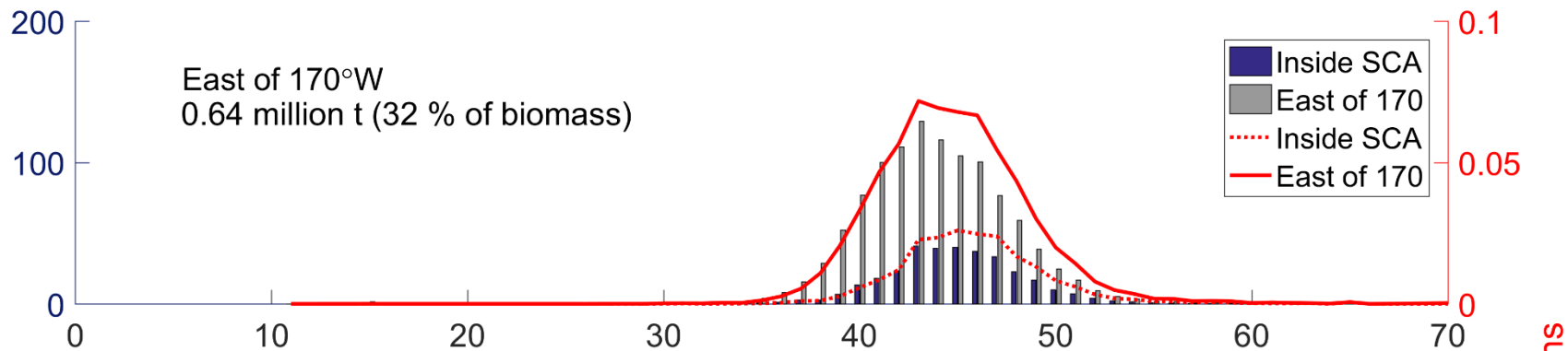




2016 pollock backscatter
(m²/nmi²)

25,000 s_A
201807 Transects

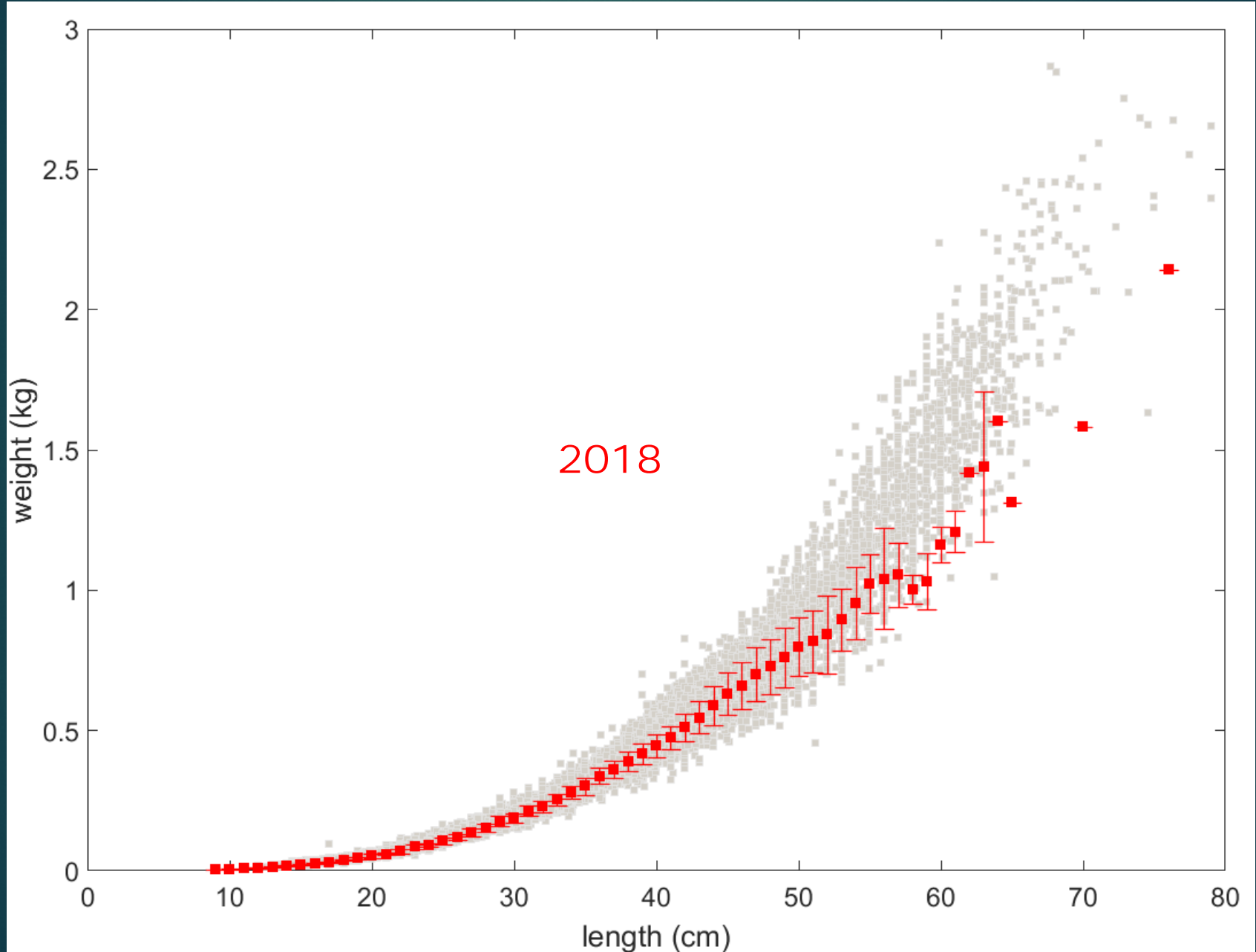




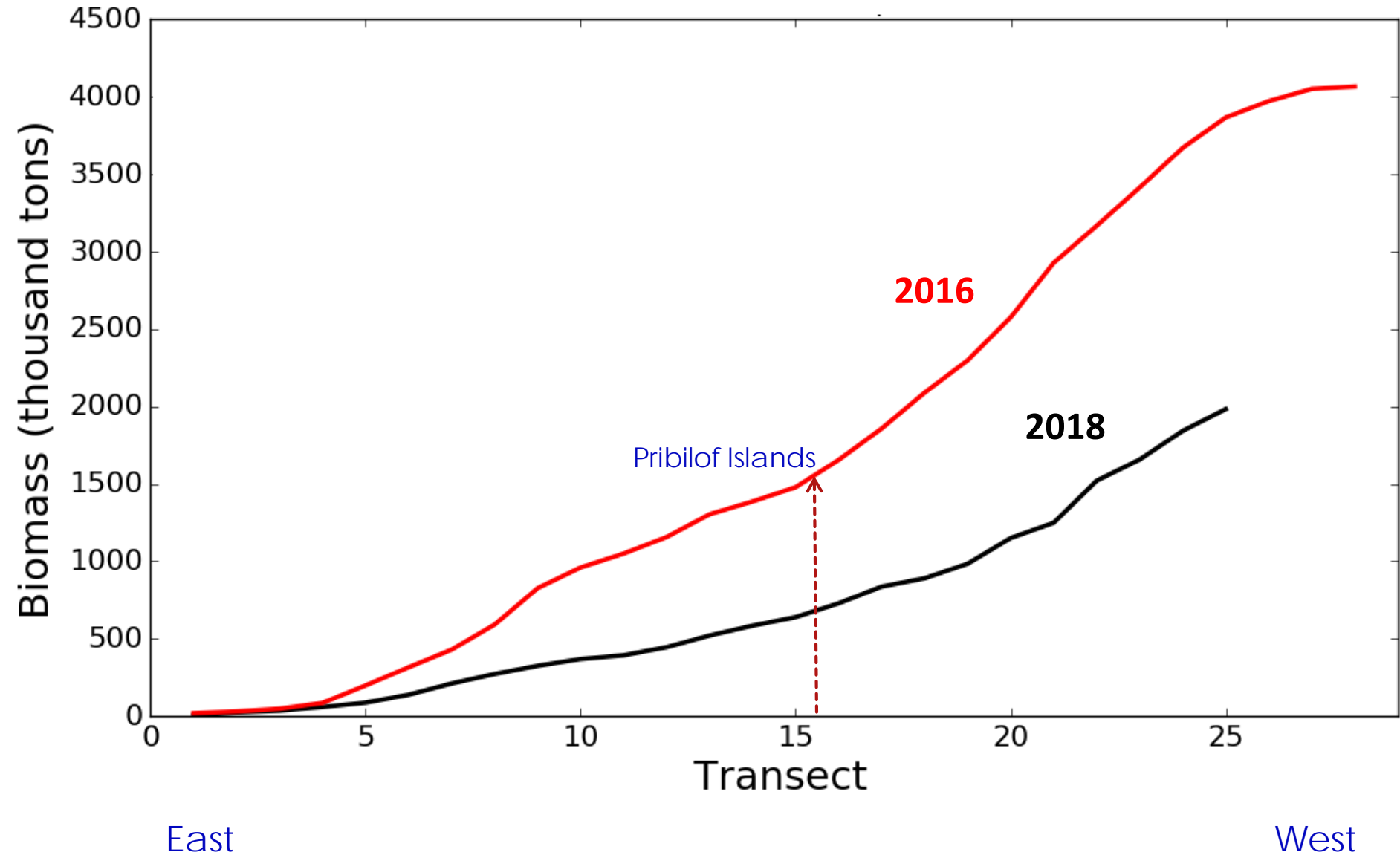
Biomass in million metric tons

length
length

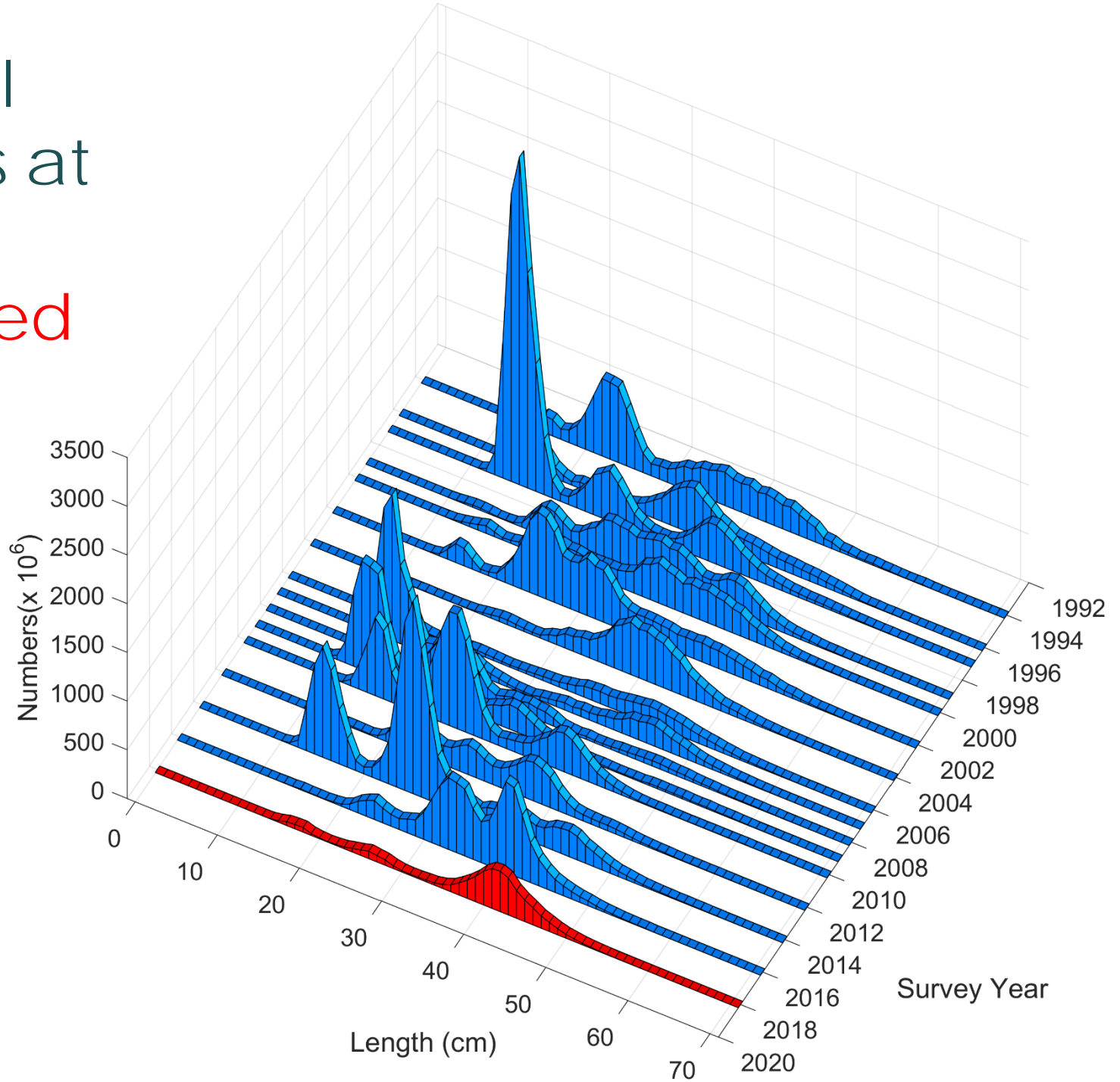
Walleye pollock length – weight relationship



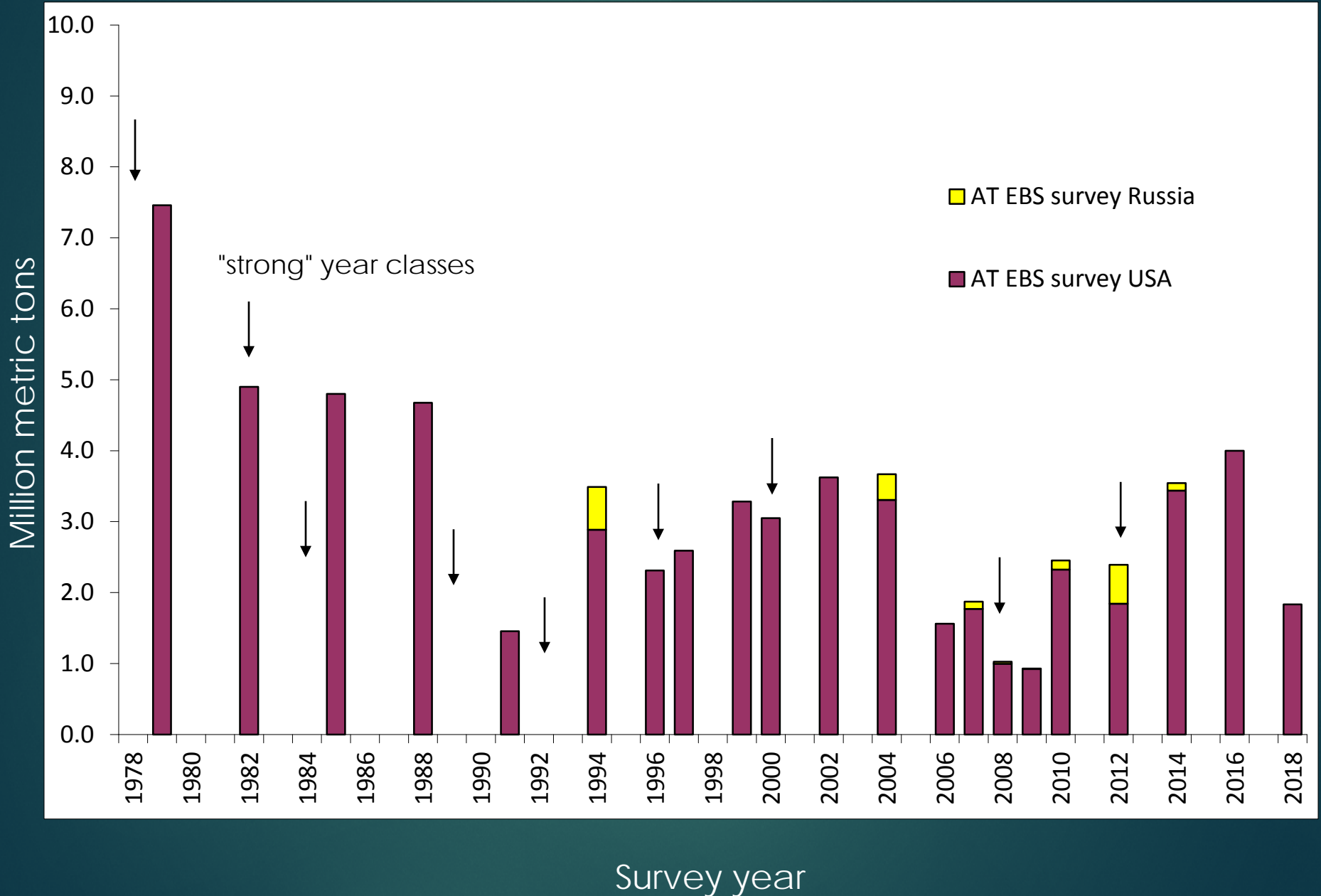
Cumulative biomass by transect 2018 vs. 2016



Historical
numbers at
length-
2018 in red



Acoustic-trawl survey walleye pollock biomass to 3 m off bottom



2018 AT survey preliminary results

- EBS summer shelf waters **very WARM** (warmer than 2014-2016)
- 2018 US EEZ midwater pollock biomass 1.8 million t - less than half of 2016 (4.0 million t)
- Little evidence of strong, incoming year class - just a few Age 1s near US/Russia border
- ~32 % pollock biomass east of 170 ° W in U.S. -- mainly 2012/2013 year classes; age 5 & 6s
- No survey of Russia's Cape Navarin area

Future summer acoustic-trawl surveys

Summer 2019 -- Gulf of Alaska survey
(2018-2019 AVO index to EBS stock assessment)

Summer 2020 – Bering Sea survey



Questions?

AT estimates between 0.5 and 3 meters off bottom

Method for determining near-bottom AT estimates:

- Find catch from closest bottom trawl stations for each EDSU
 Within a max range of 25 nmi, weighted by 1/R distance
- Find proportion of backscatter that is from pollock using fitted coefficient values for each species and catch data
- Use proportion to scale backscatter between 0.5 and 3 meters

Biomass below 3 meters for 2018 is 0.33 million t
(18% increase when included)

