

NOAA
FISHERIES

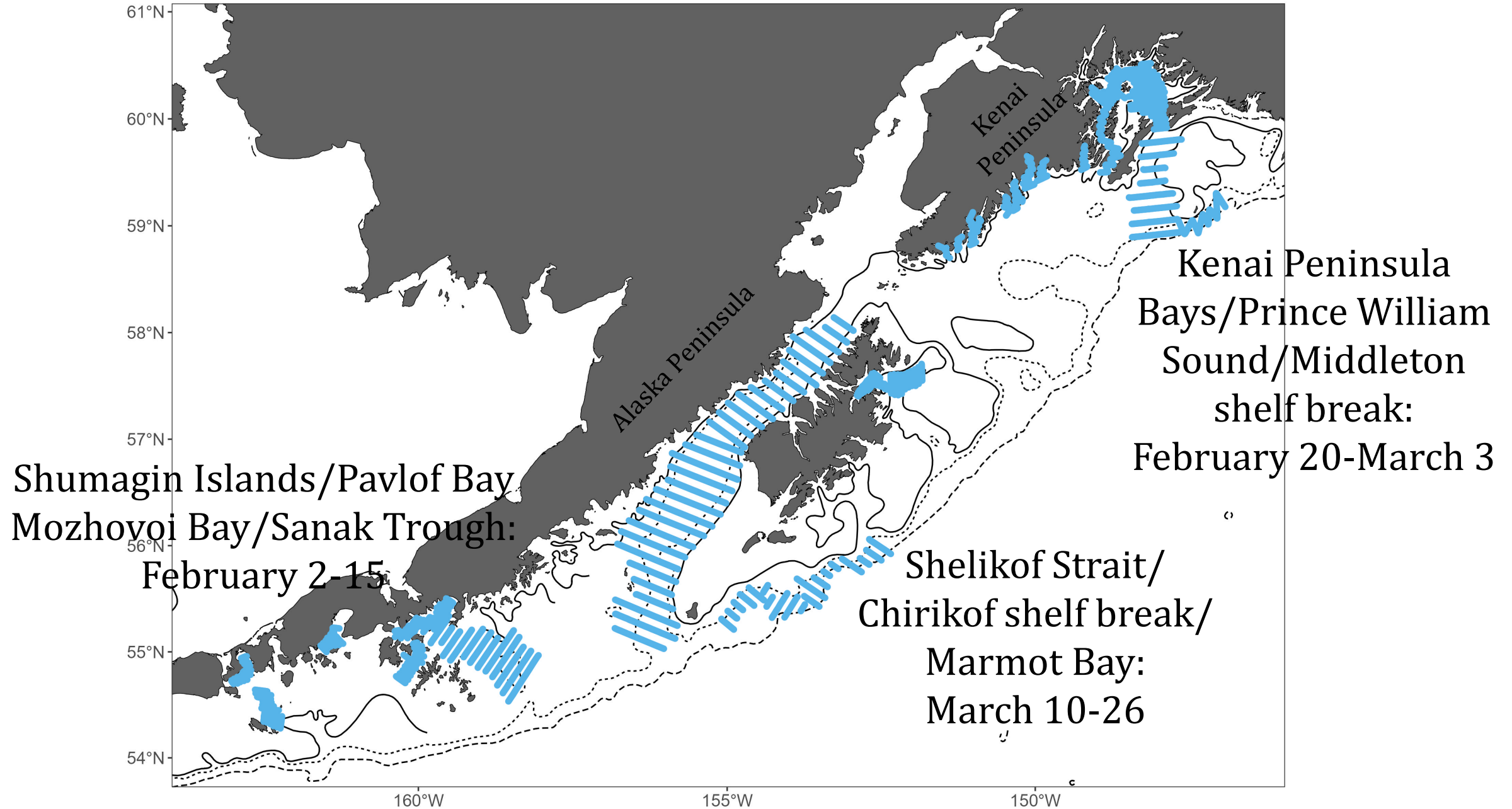
Results of 2025 Winter Pollock Pre-Spawning Acoustic-Trawl Surveys in the Gulf of Alaska

Darin Jones*, Mike Levine, & MACE Staff

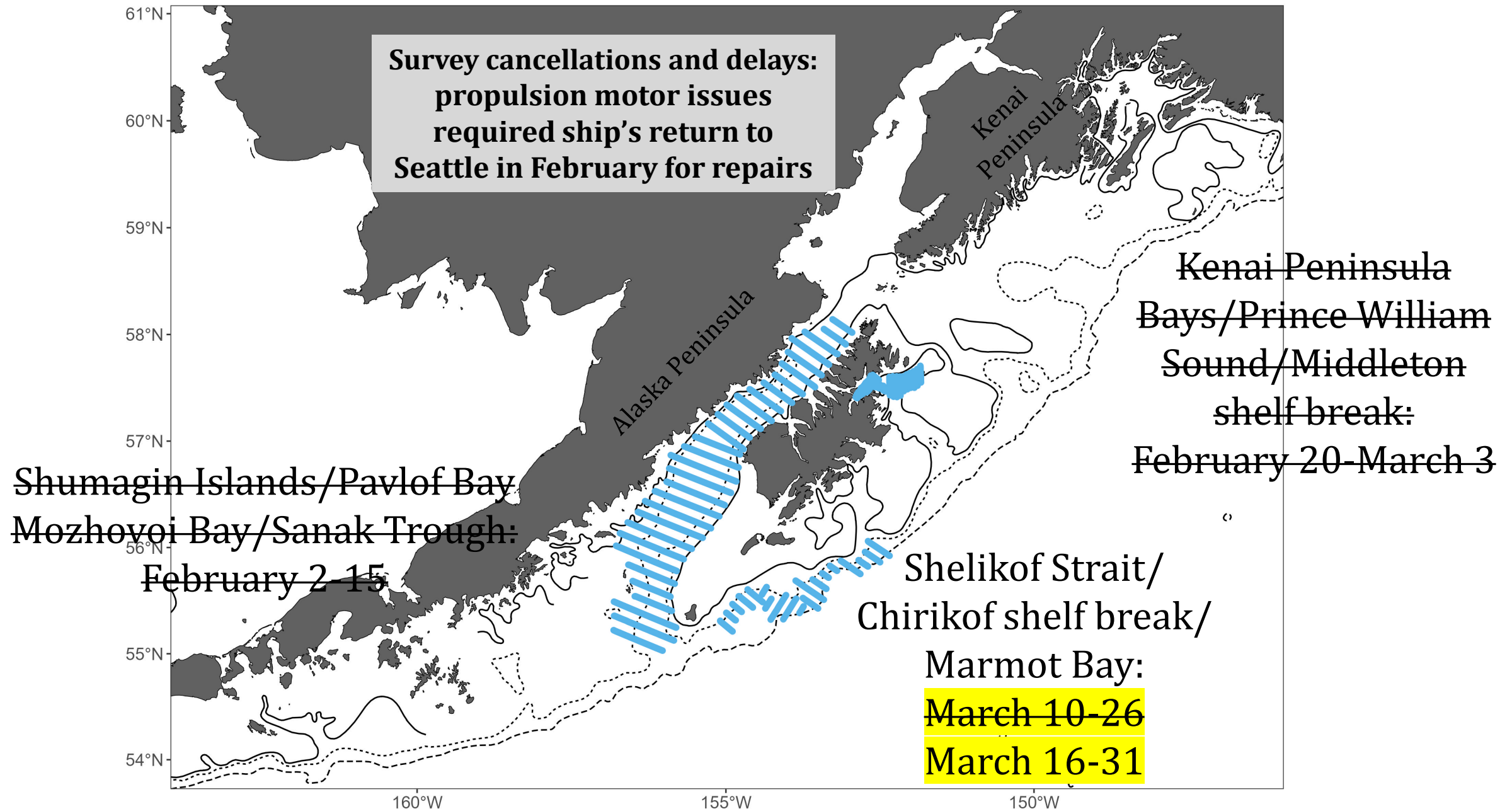
*darin.jones@noaa.gov



2025 Winter GOA AT Survey Plan



2025 Winter GOA AT Survey



Acoustic-Trawl Survey Methods

1,242 nmi of transects

Survey 24 hrs/day

High backscatter “targeted” hauls

Abundance estimates use 38 kHz

- 16 m below surface to 0.5 m above seafloor

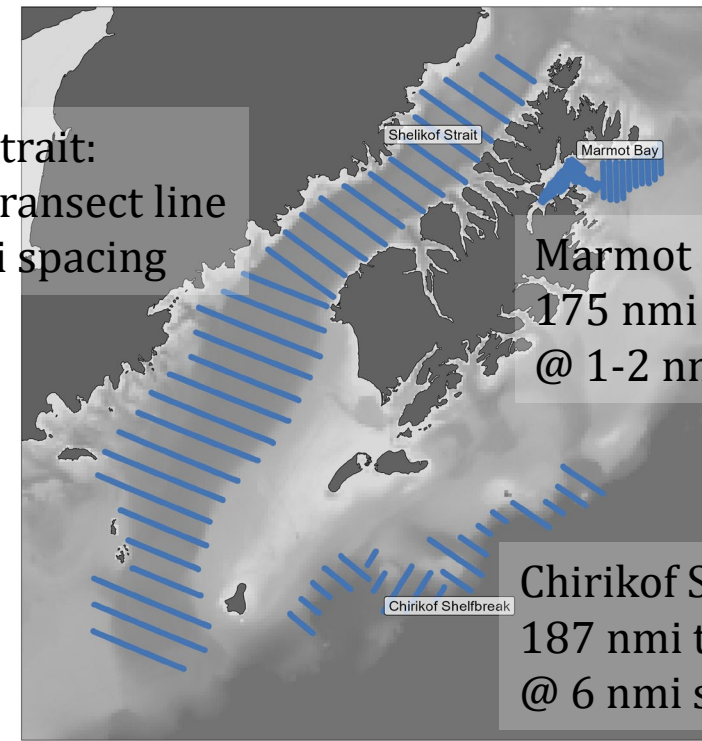
Physical oceanographic data

- Continuous SST from ship's flow-through system
- Temp profile at trawl locations

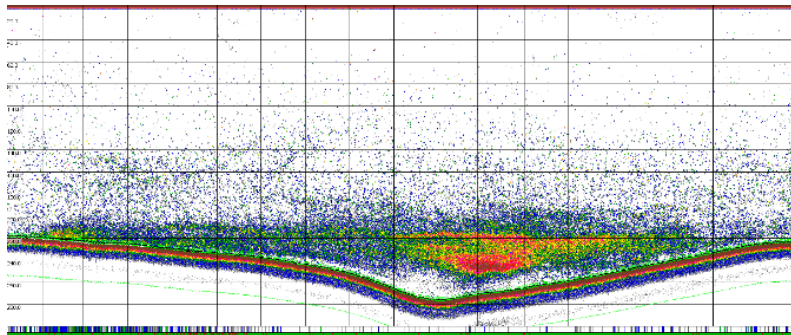
Shelikof Strait:
880 nmi transect line
@ 7.5 nmi spacing

Marmot Bay:
175 nmi transect line
@ 1-2 nmi spacing

Chirikof Shelfbreak:
187 nmi transect line
@ 6 nmi spacing



Acoustic data collection
along parallel transects

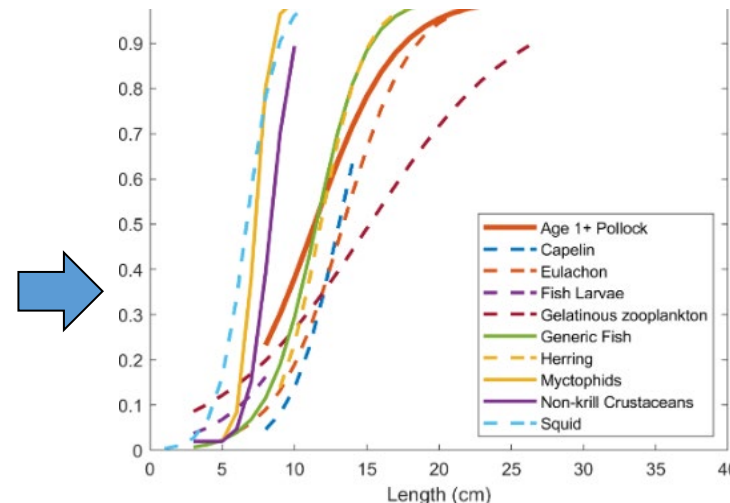


+

Targeted trawls
(species and length composition)



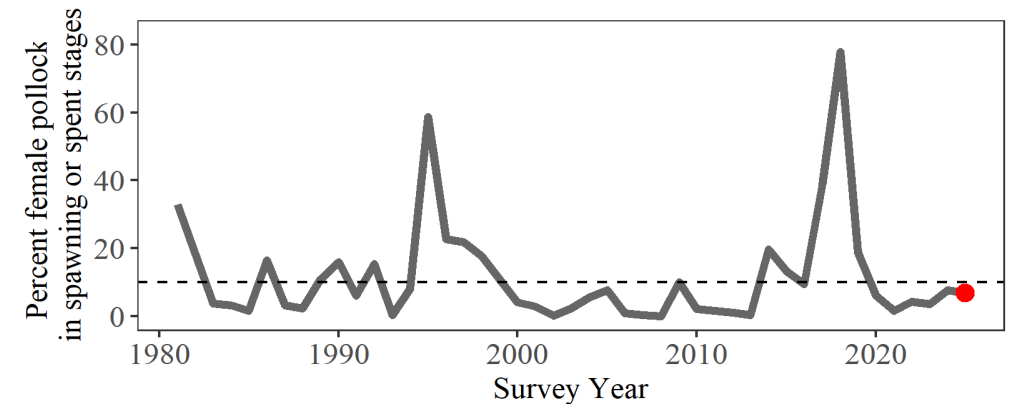
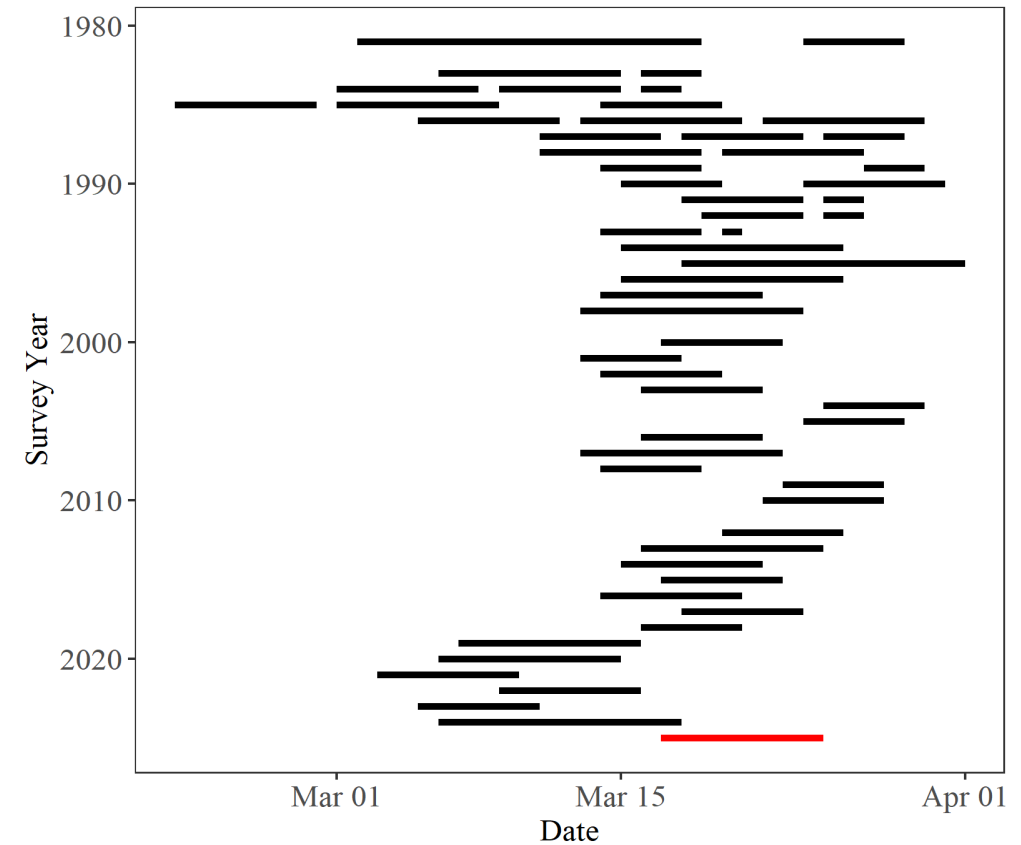
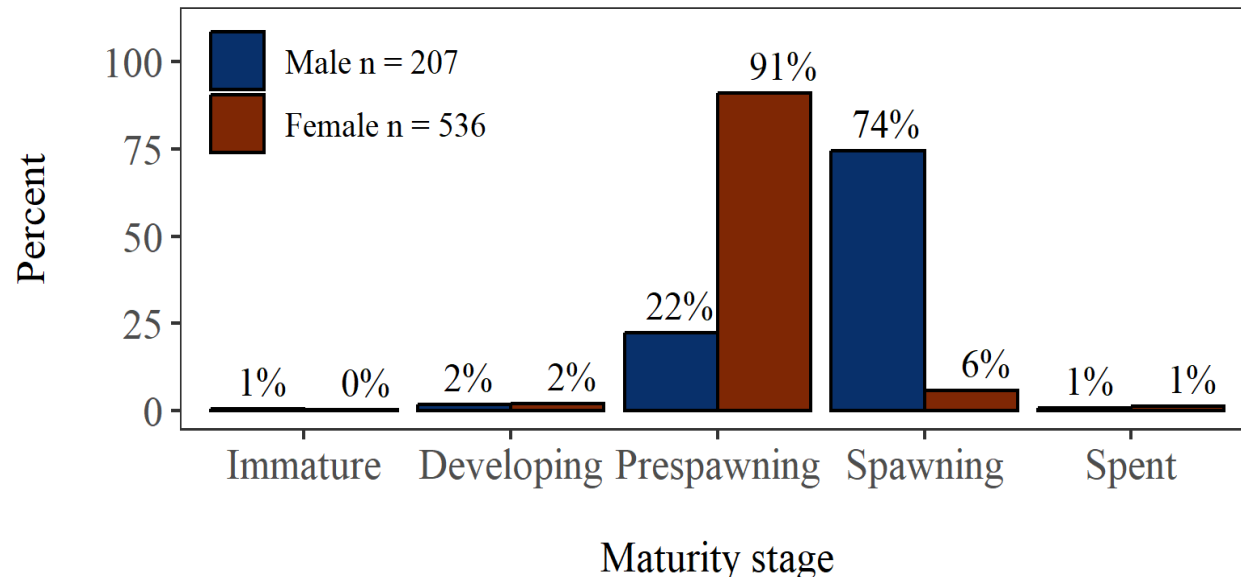
Net Selectivity
(escapement correction)



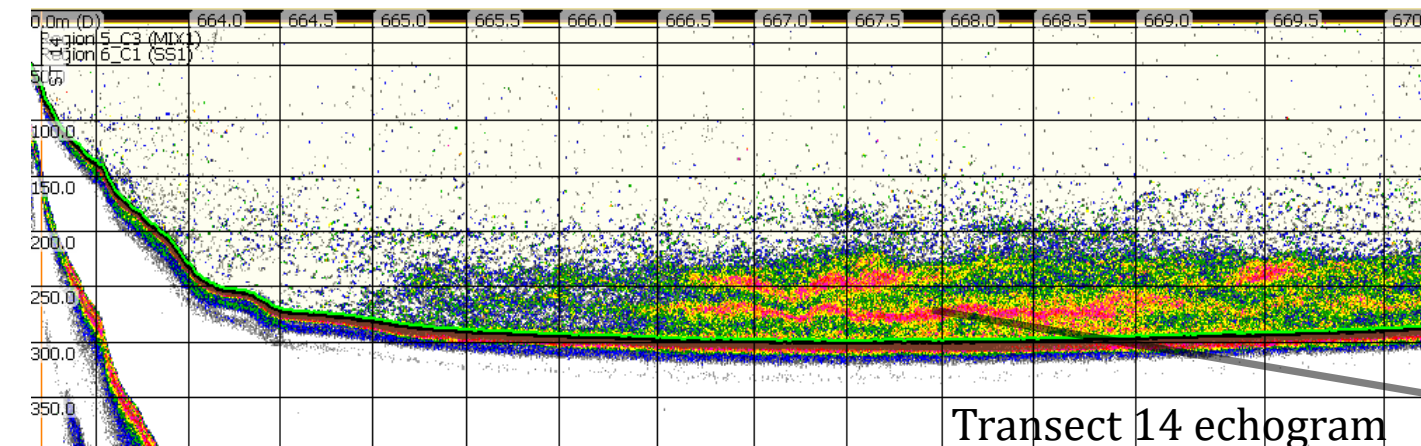
**Survey
estimate**

Shelikof Strait: Survey Timing

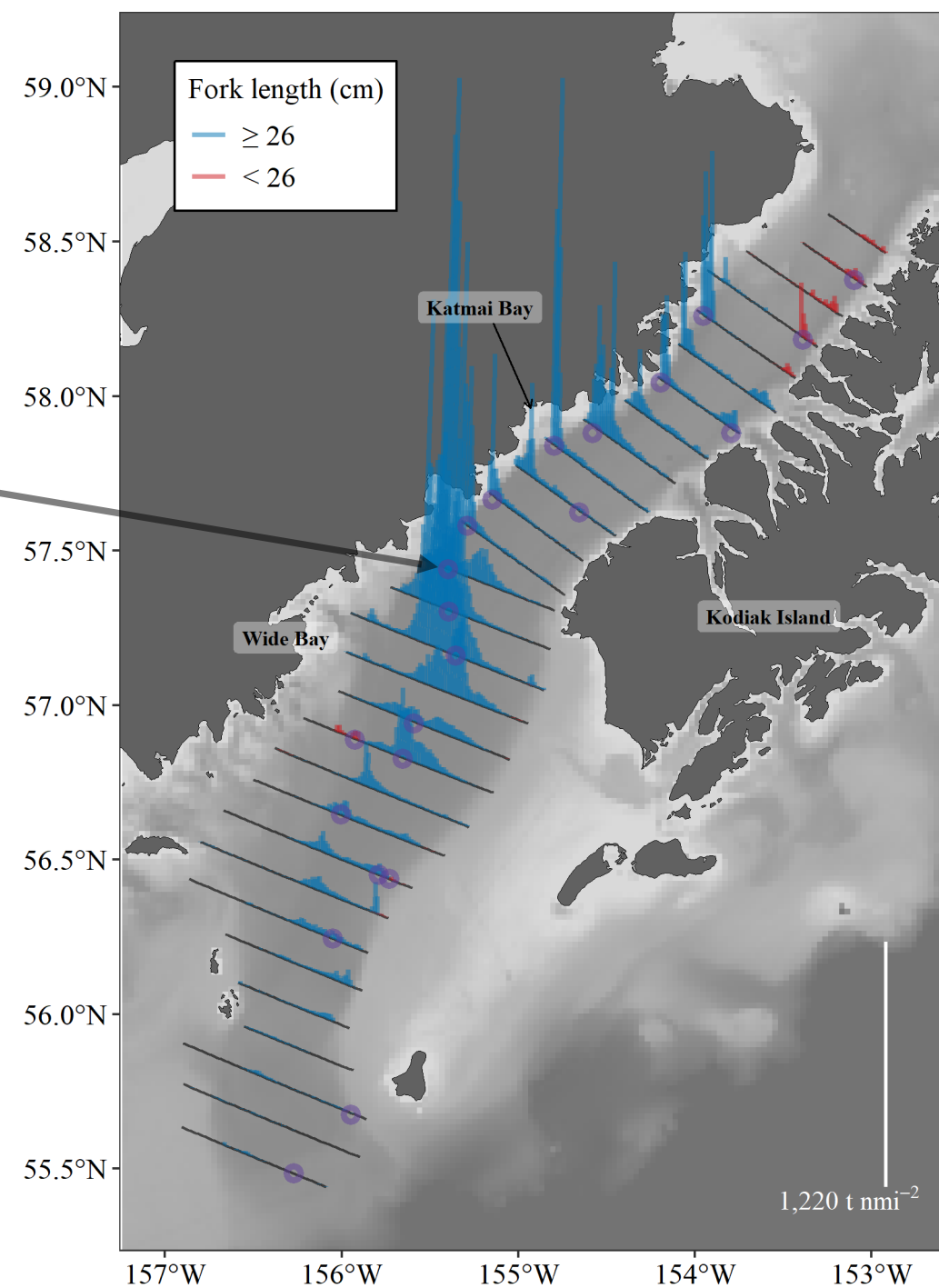
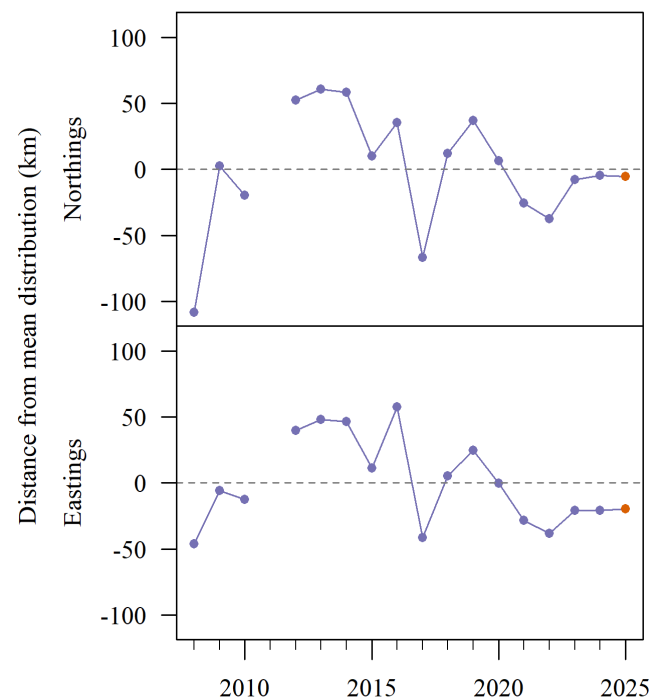
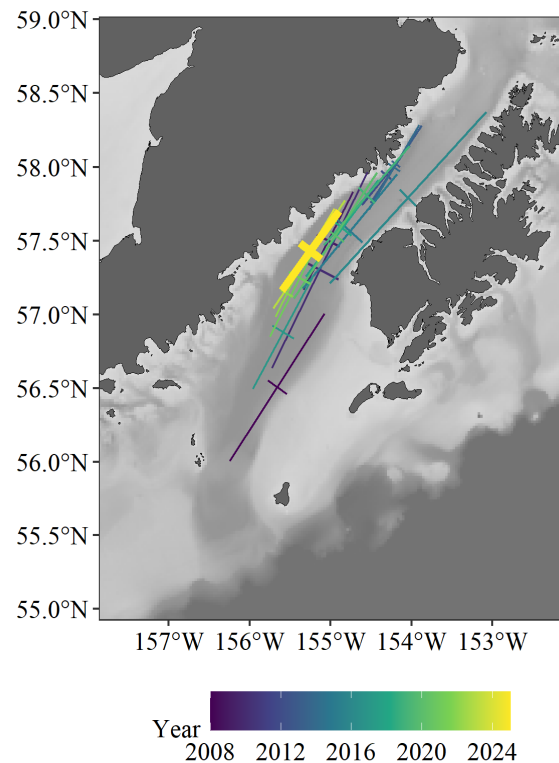
- Survey start moved slightly earlier starting in 2019 due to more females observed in spawning/spent stages
- 7% females >40 cm spawning/spent indicates survey timing was adequate despite delayed start (ideally $\leq 10\%$ spawning/spent)



Shelikof Strait: Distribution

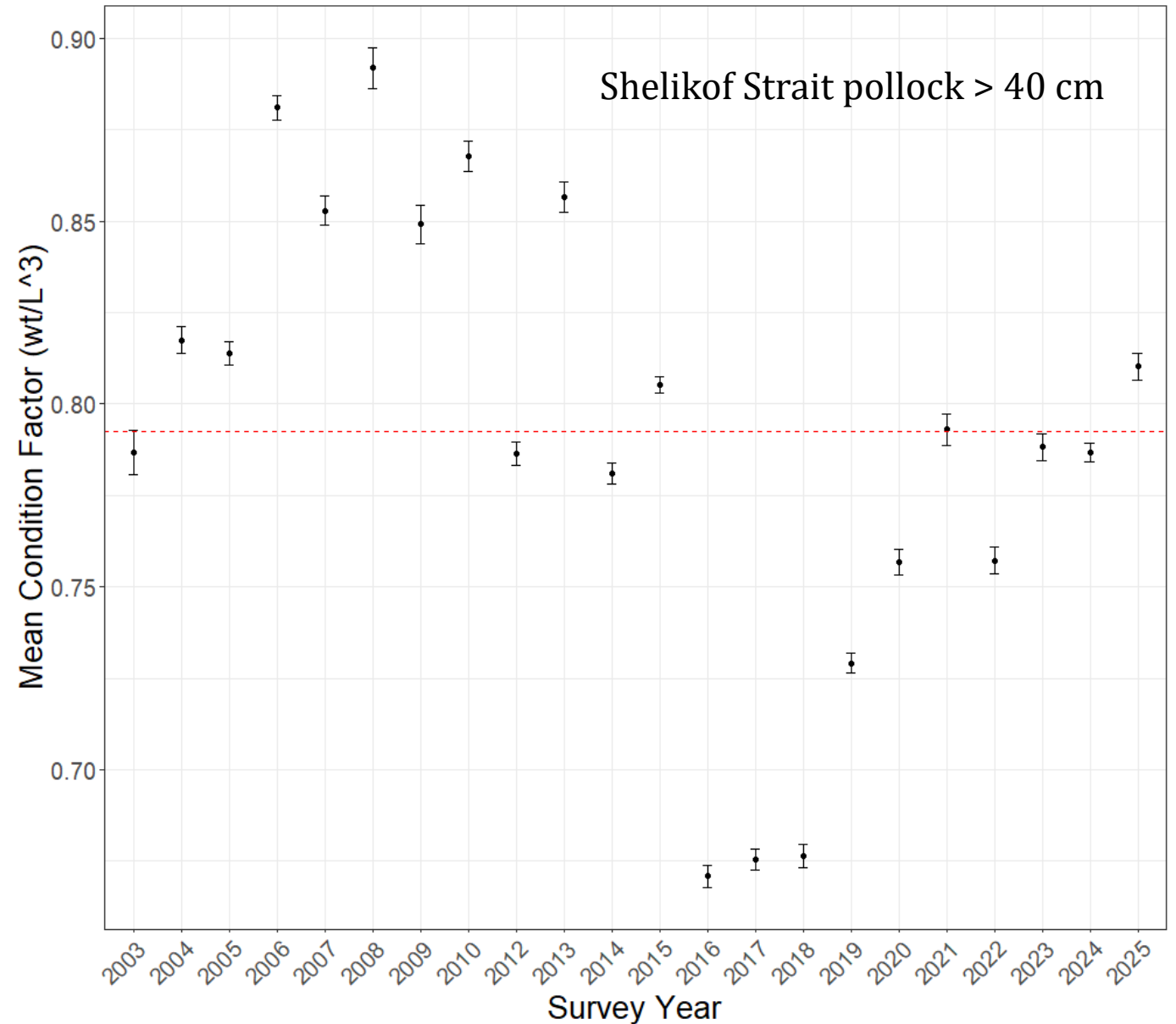
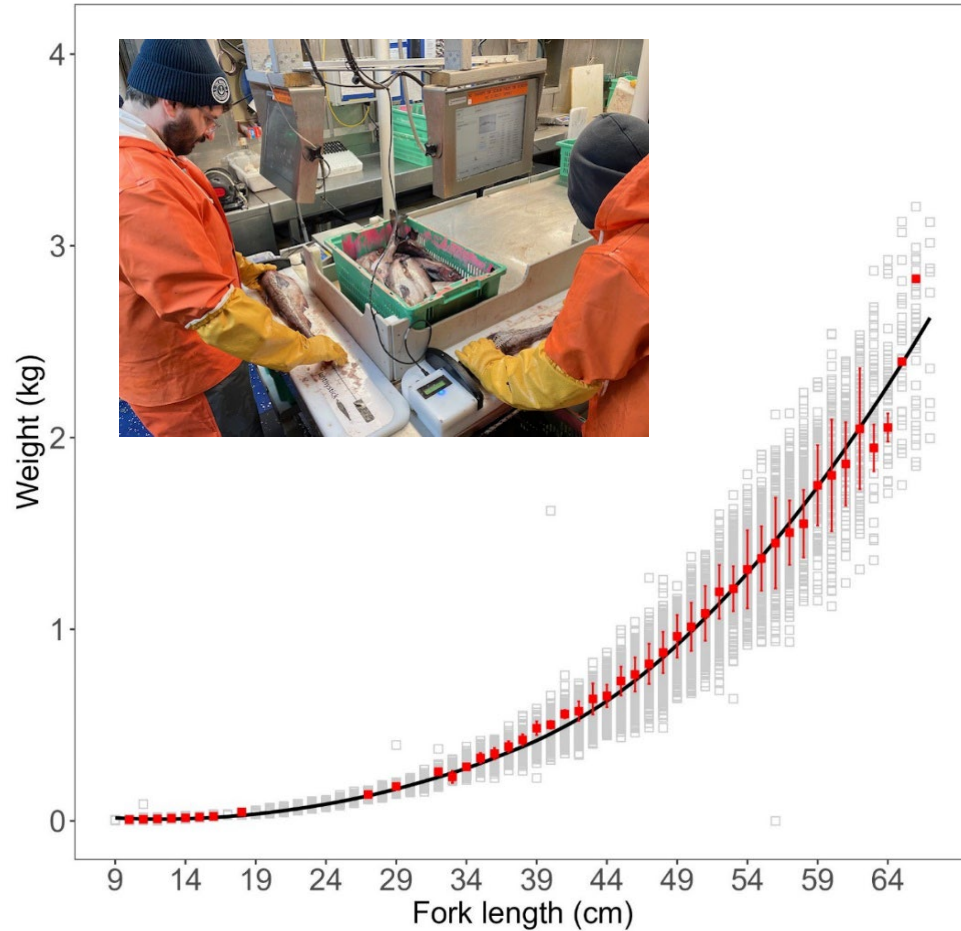


Transect 14 echogram



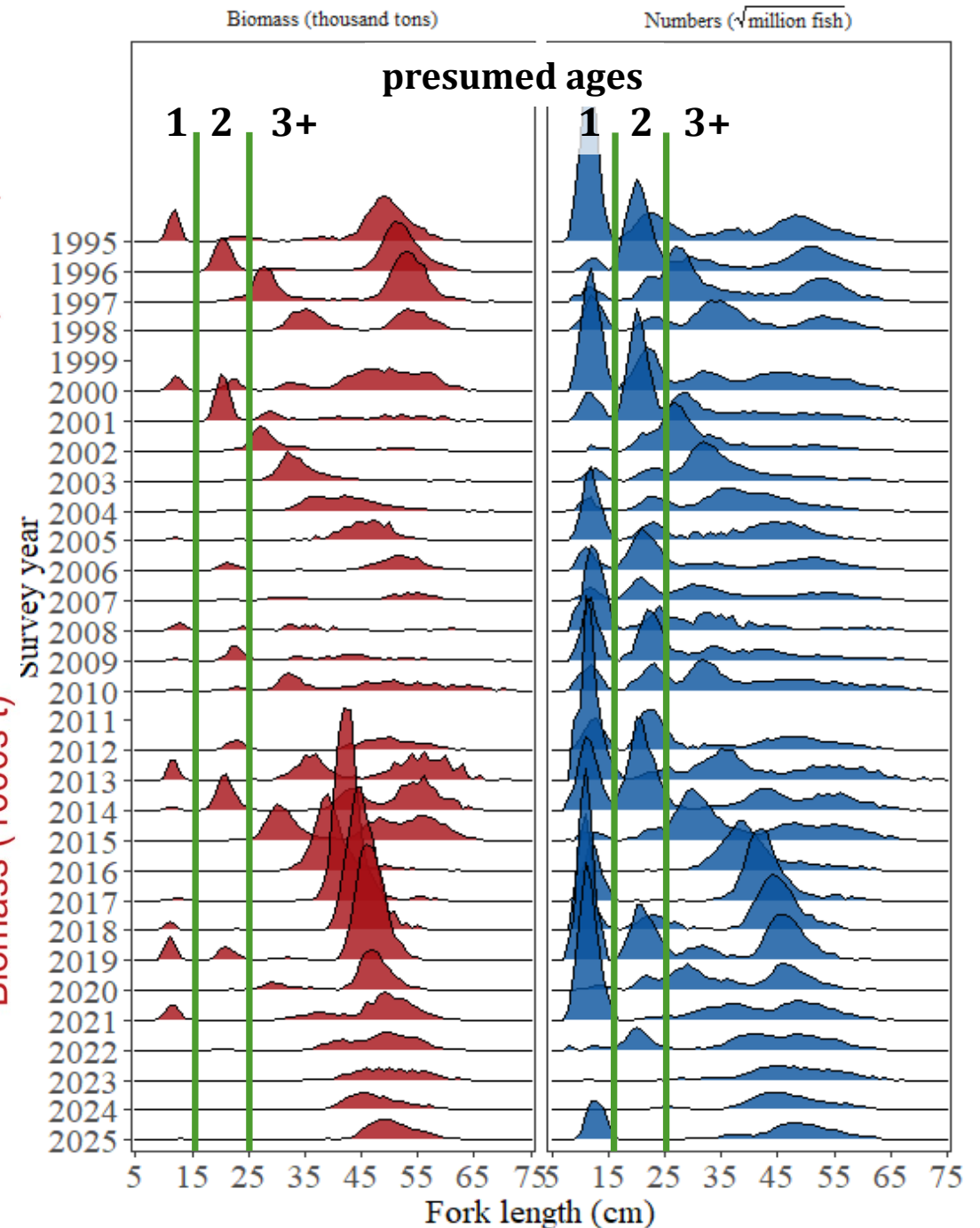
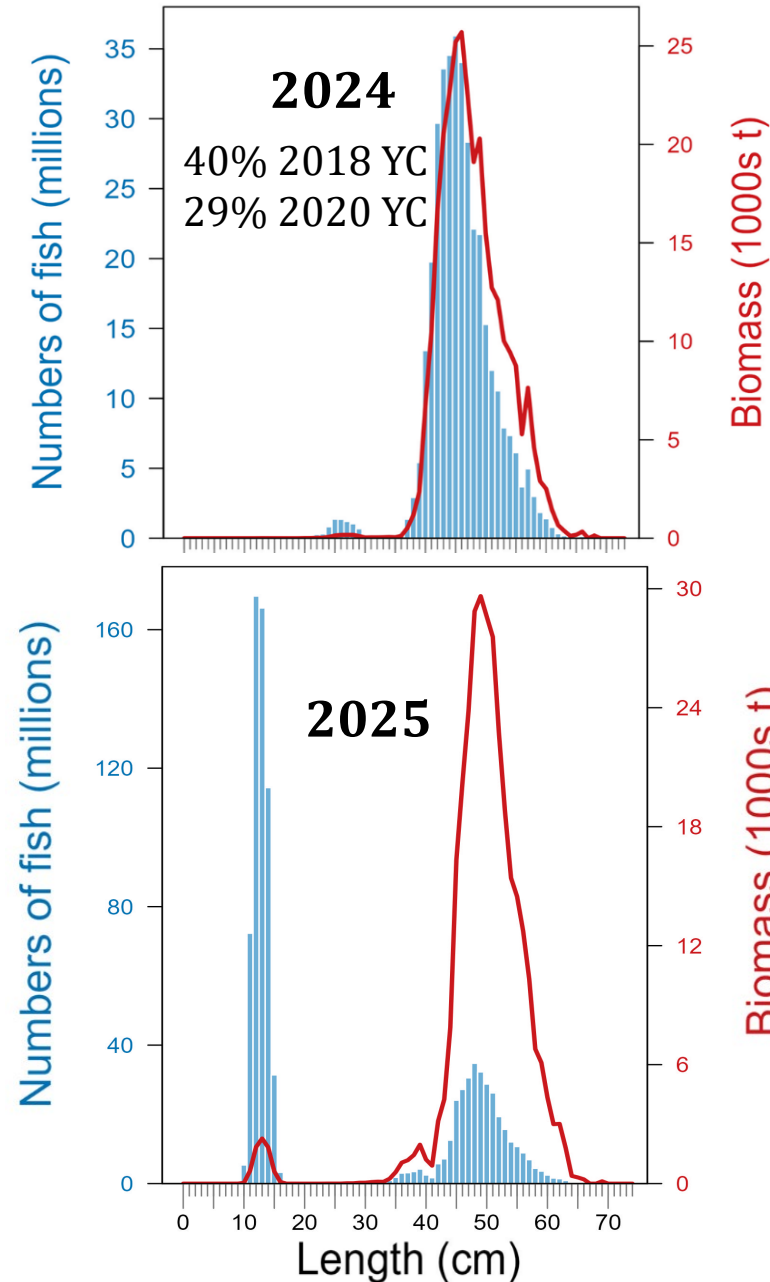
Shelikof Strait: Length/Weight

Grey: measurements since 2008
Black line: average weight at length
Red: 2025

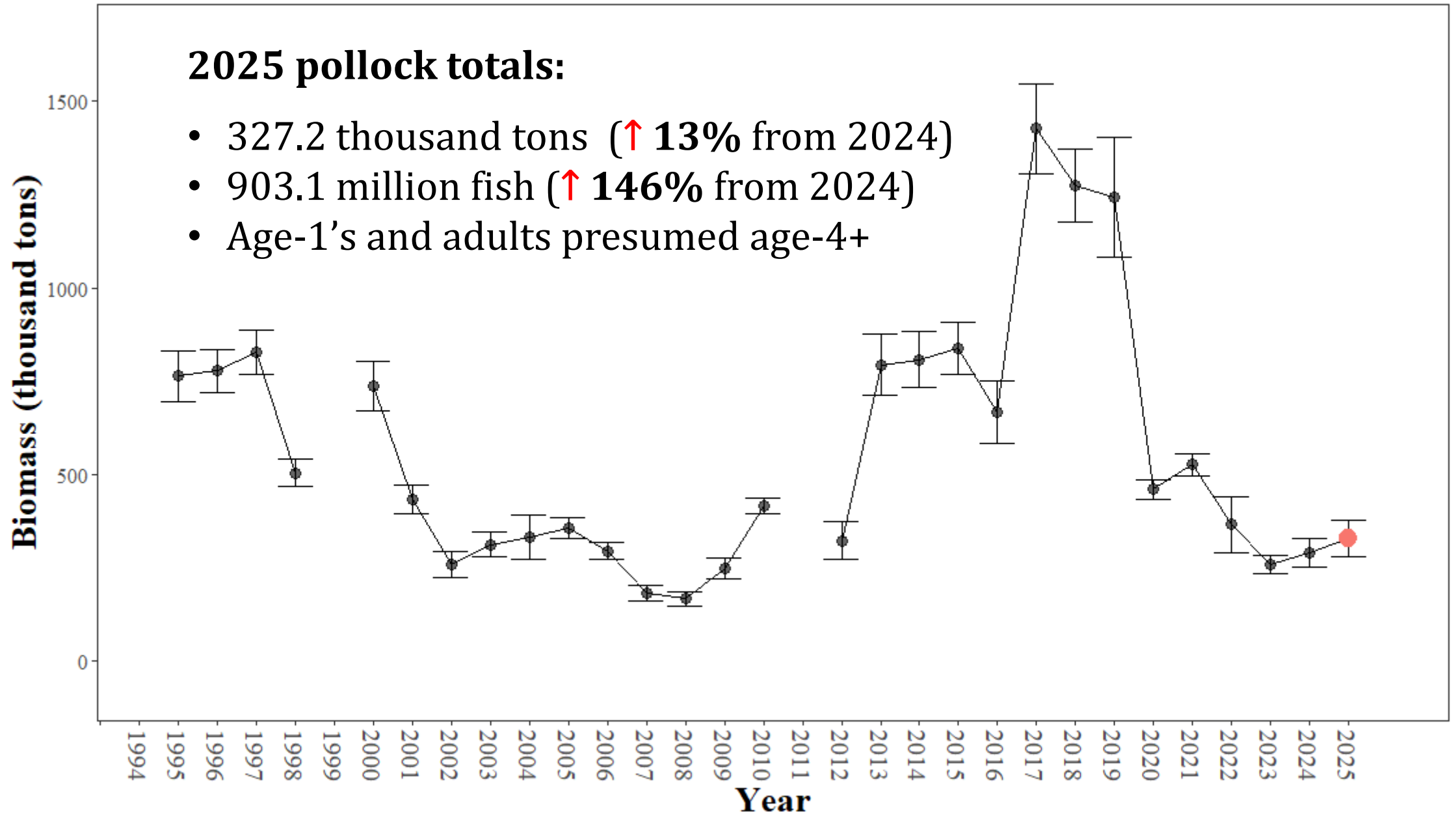


Shelikof Strait: Abundance

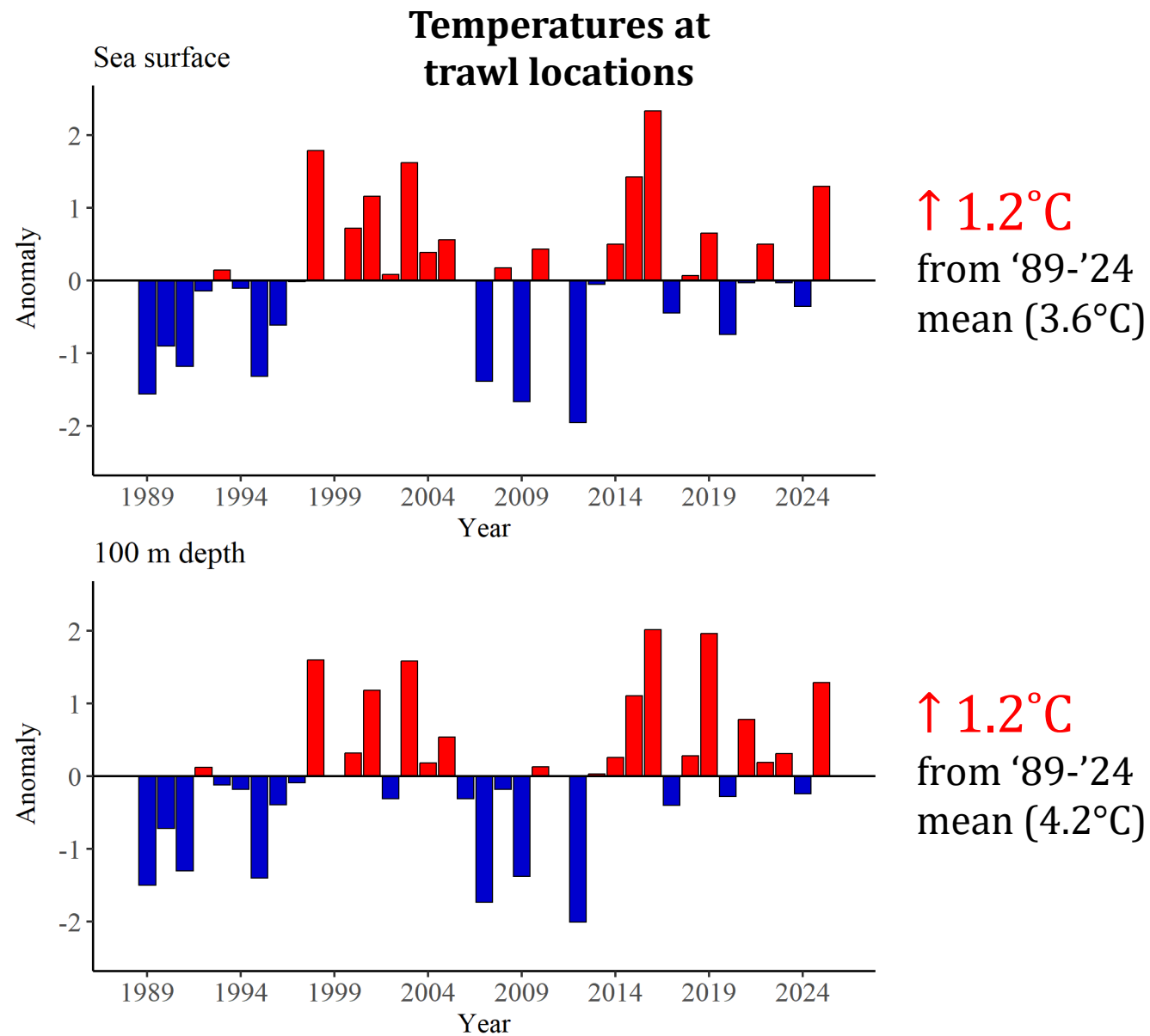
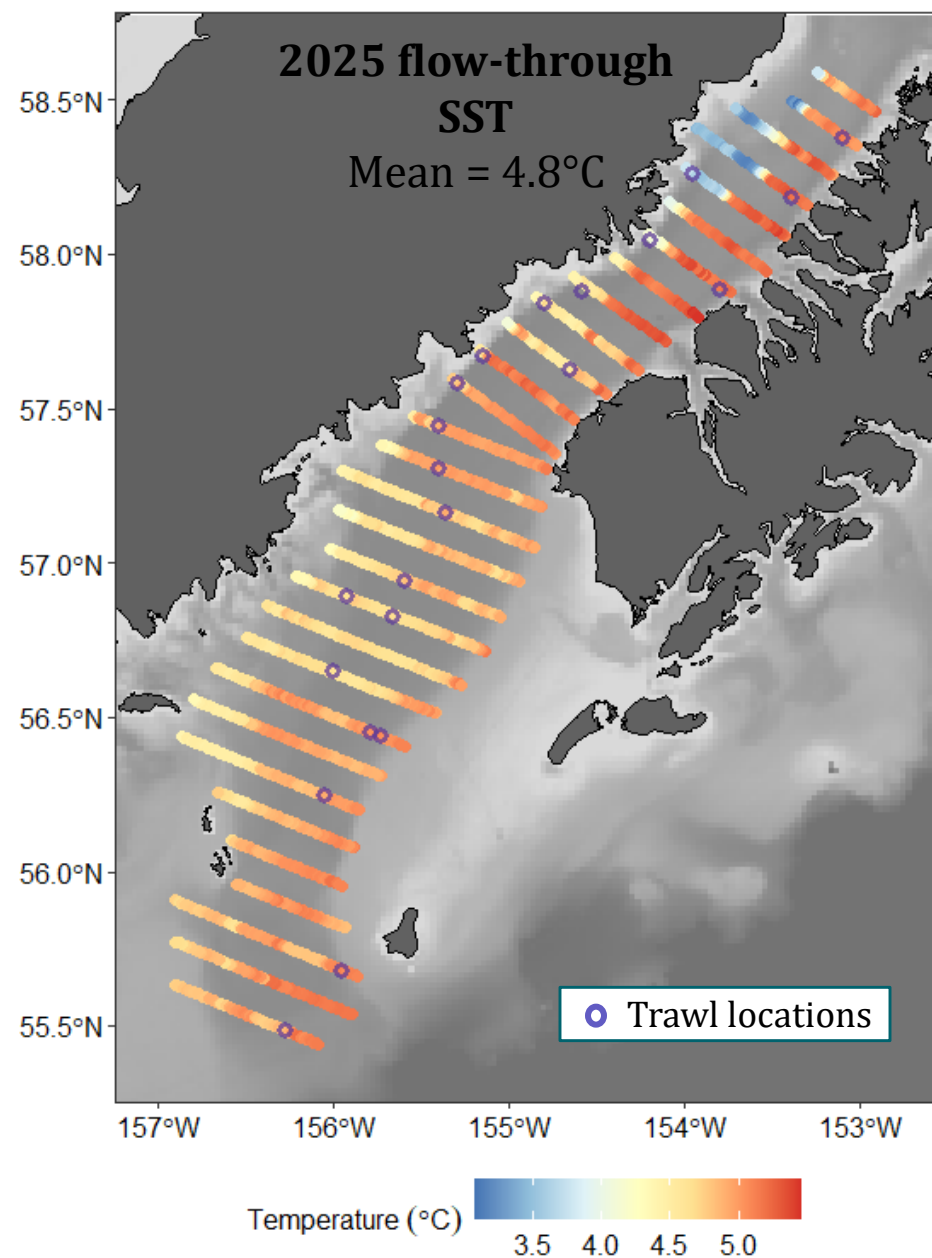
- **2025** adult fish length distribution roughly similar to **2024**
- Age-1 fish seen in **2025**
- Based on the McKelvey Index 2024 year class is a Medium age-1 year class



Shelikof Strait: Biomass

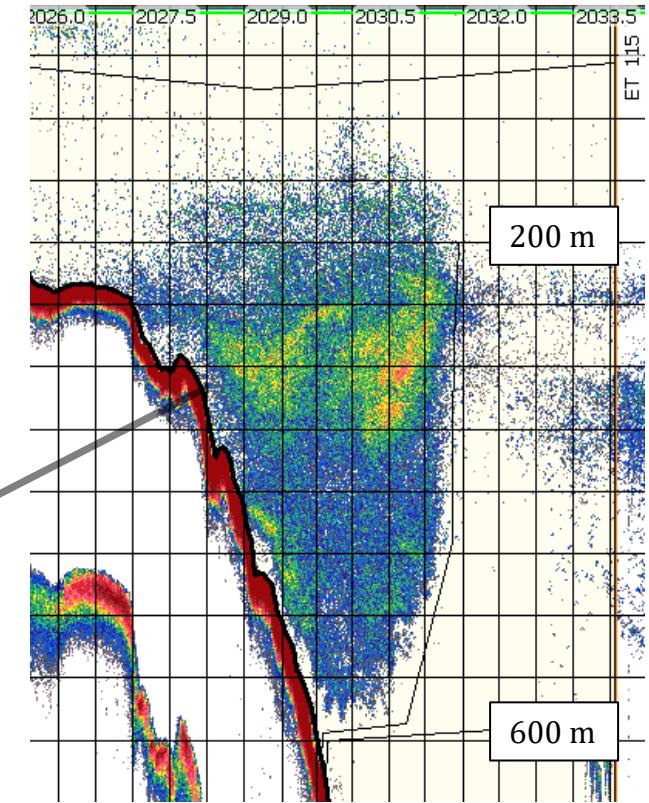
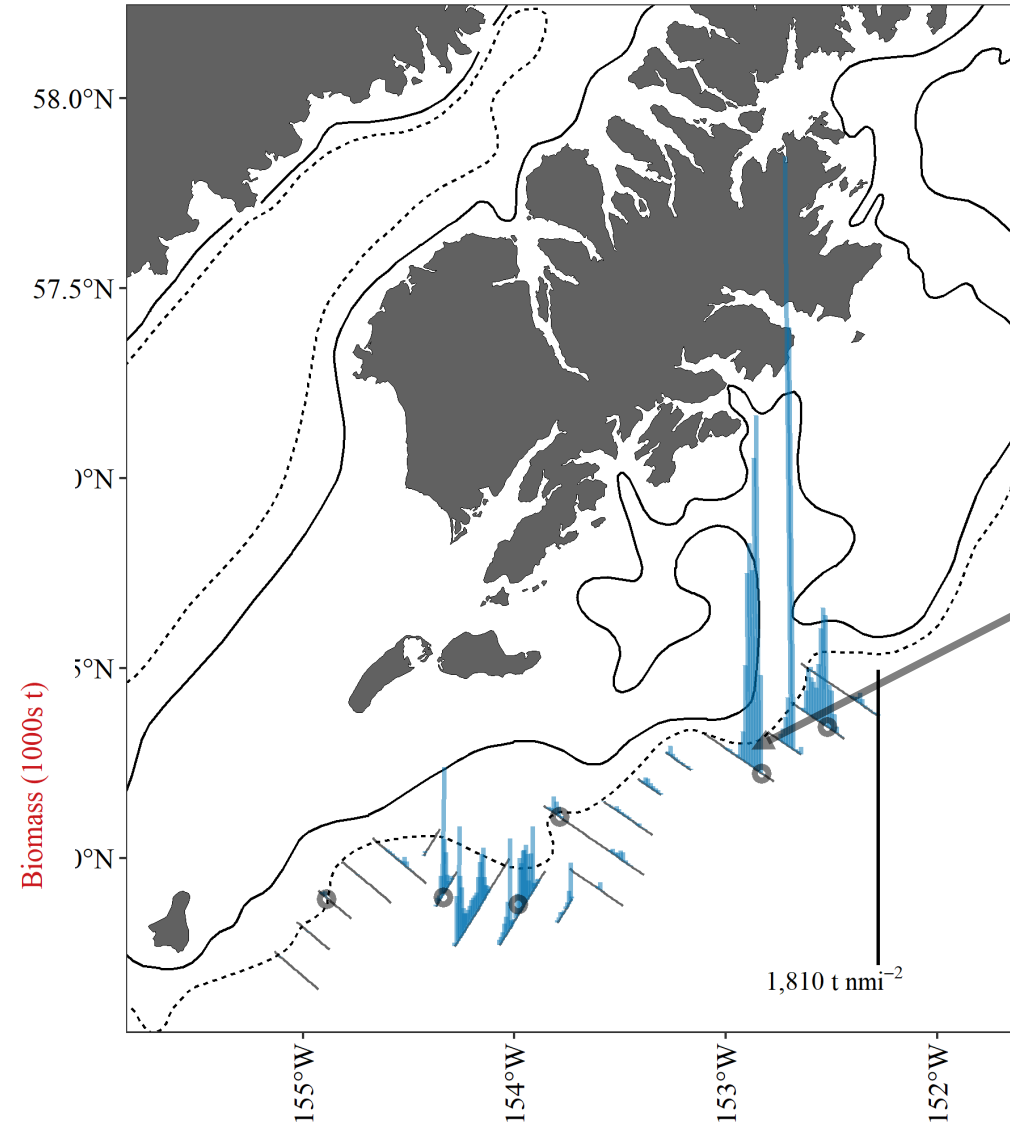
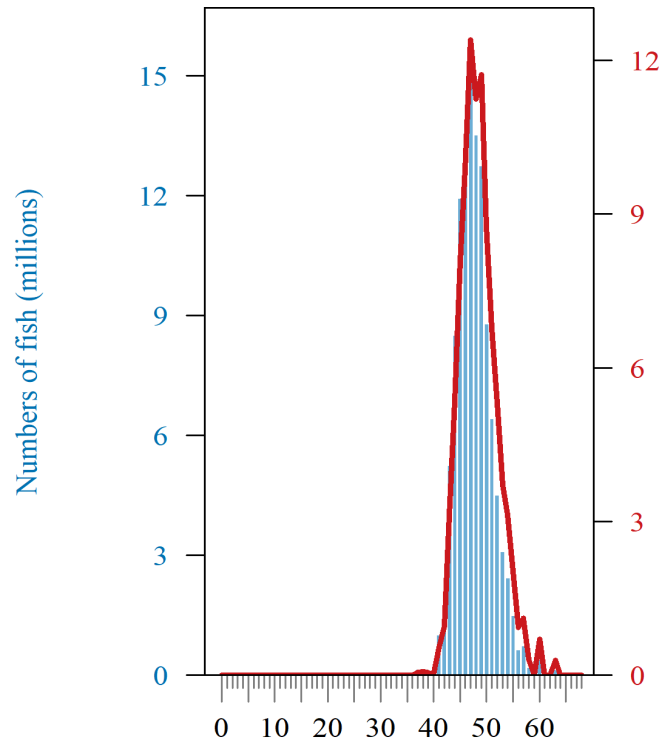


Shelikof Strait: Temperatures

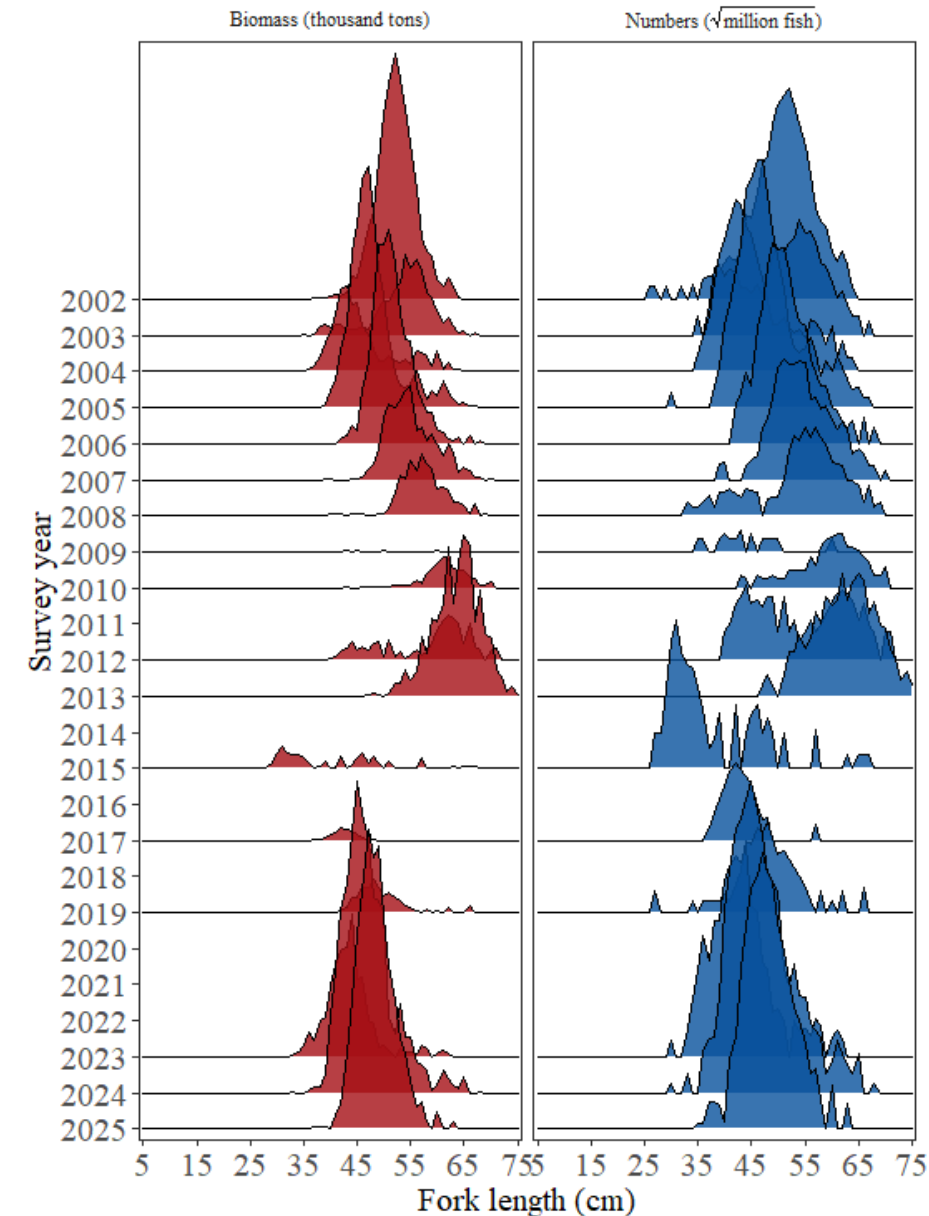


Chirikof Shelfbreak: Distribution and Abundance

- Dense aggregations of pollock mixed with Pacific Ocean perch
- Population presumed age 4+

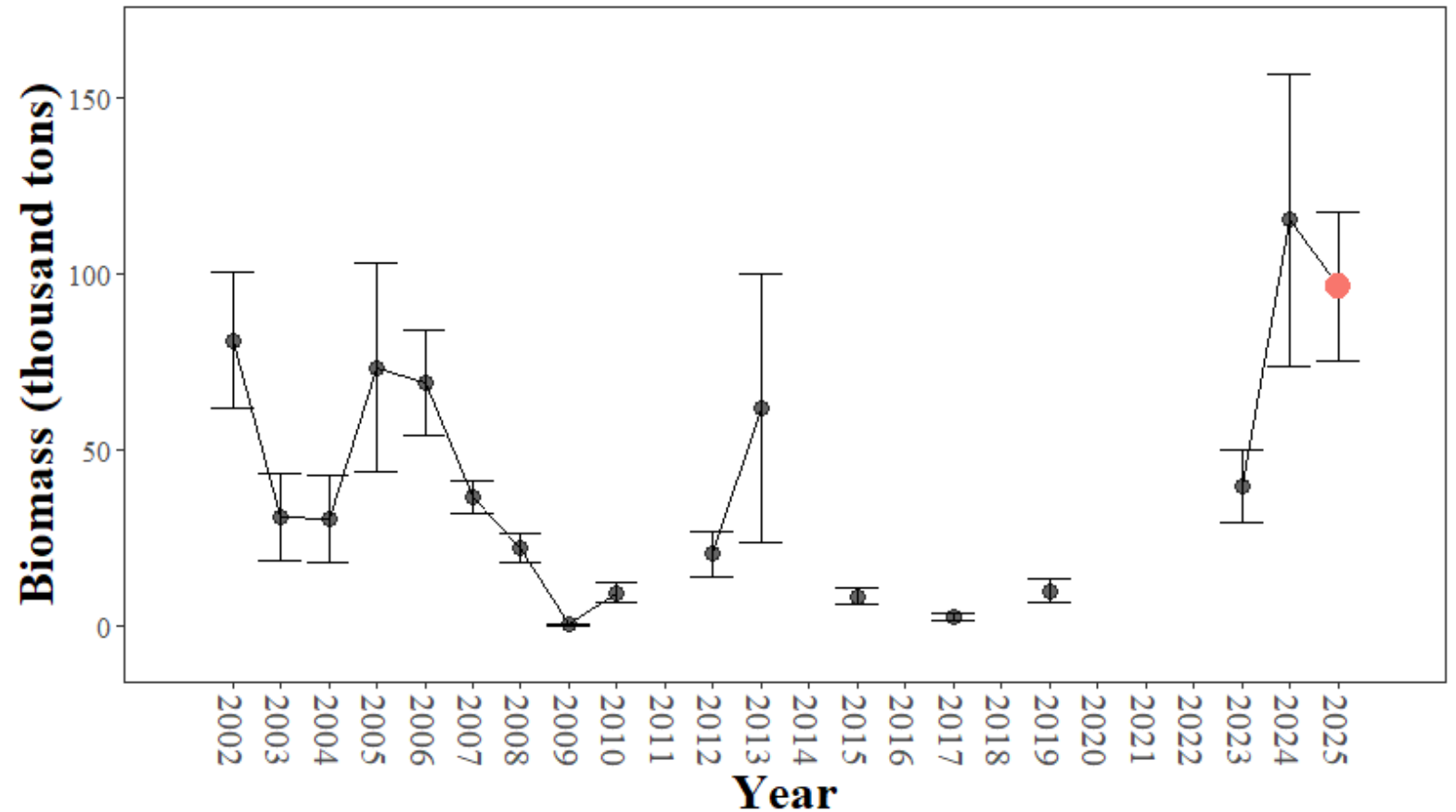


Chirikof Shelfbreak: Abundance



2025 pollock totals:

- 96.5 thousand tons (\downarrow 16% from 2024)
- 113.3 million fish (\downarrow 31% from 2024)
- Majority presumed age-4+

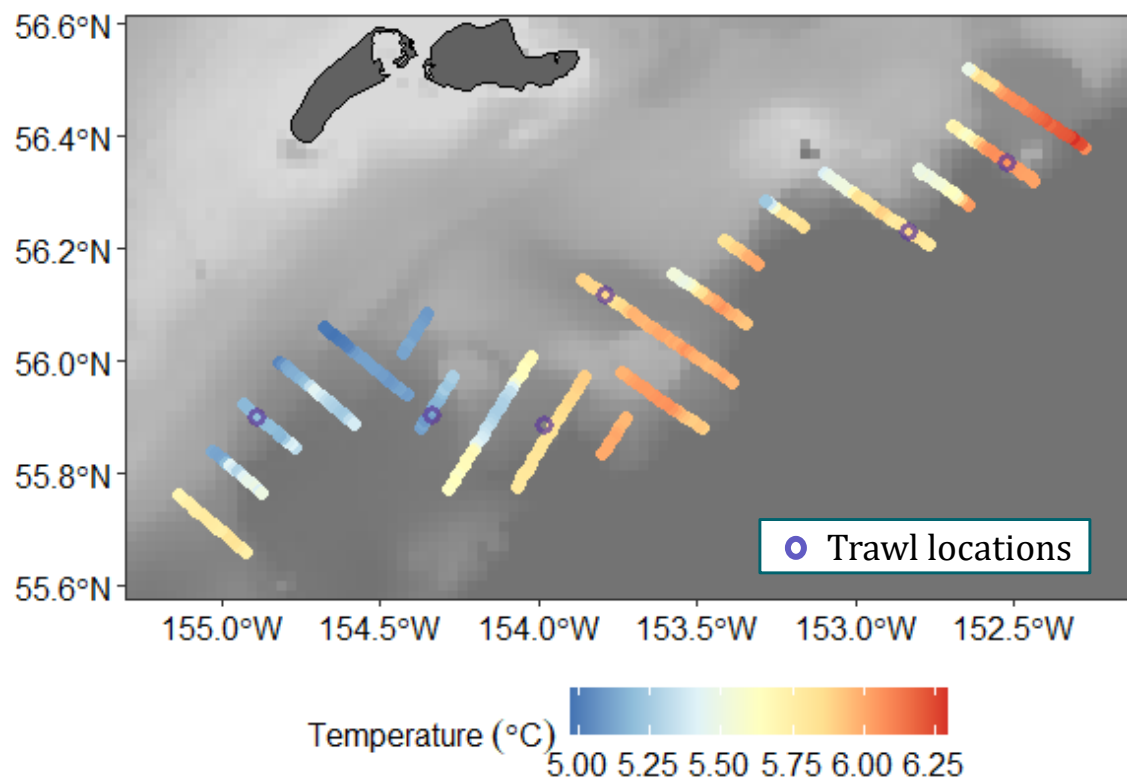


Chirikof Shelfbreak: Temperatures

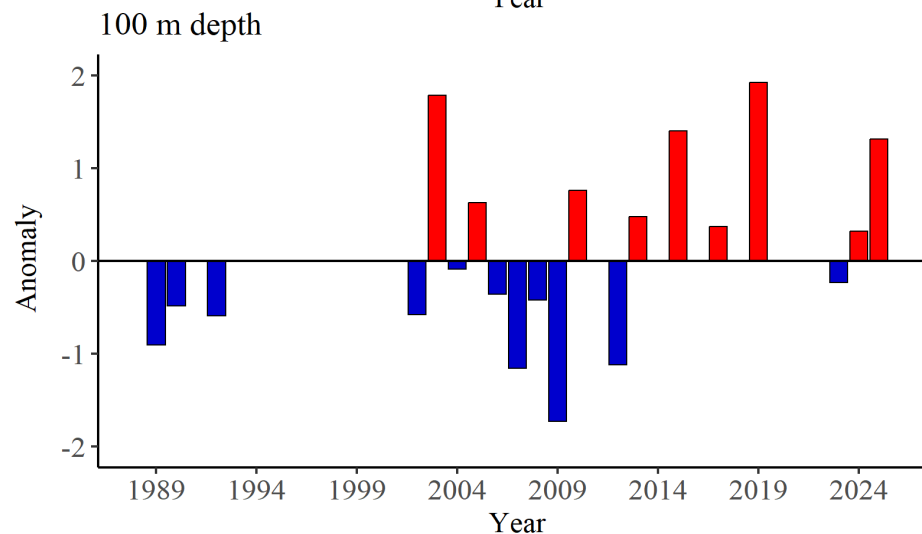
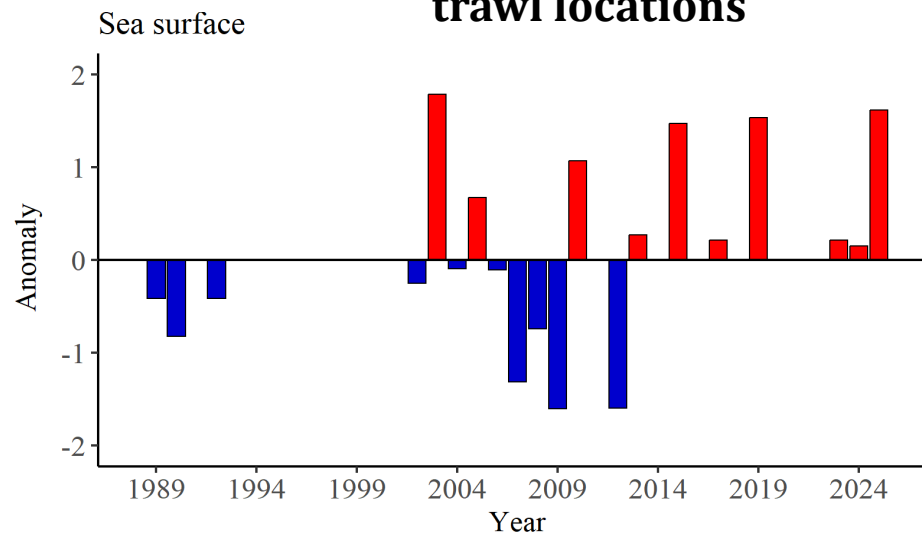
2025 flow-through

SST

Mean = 5.7°C

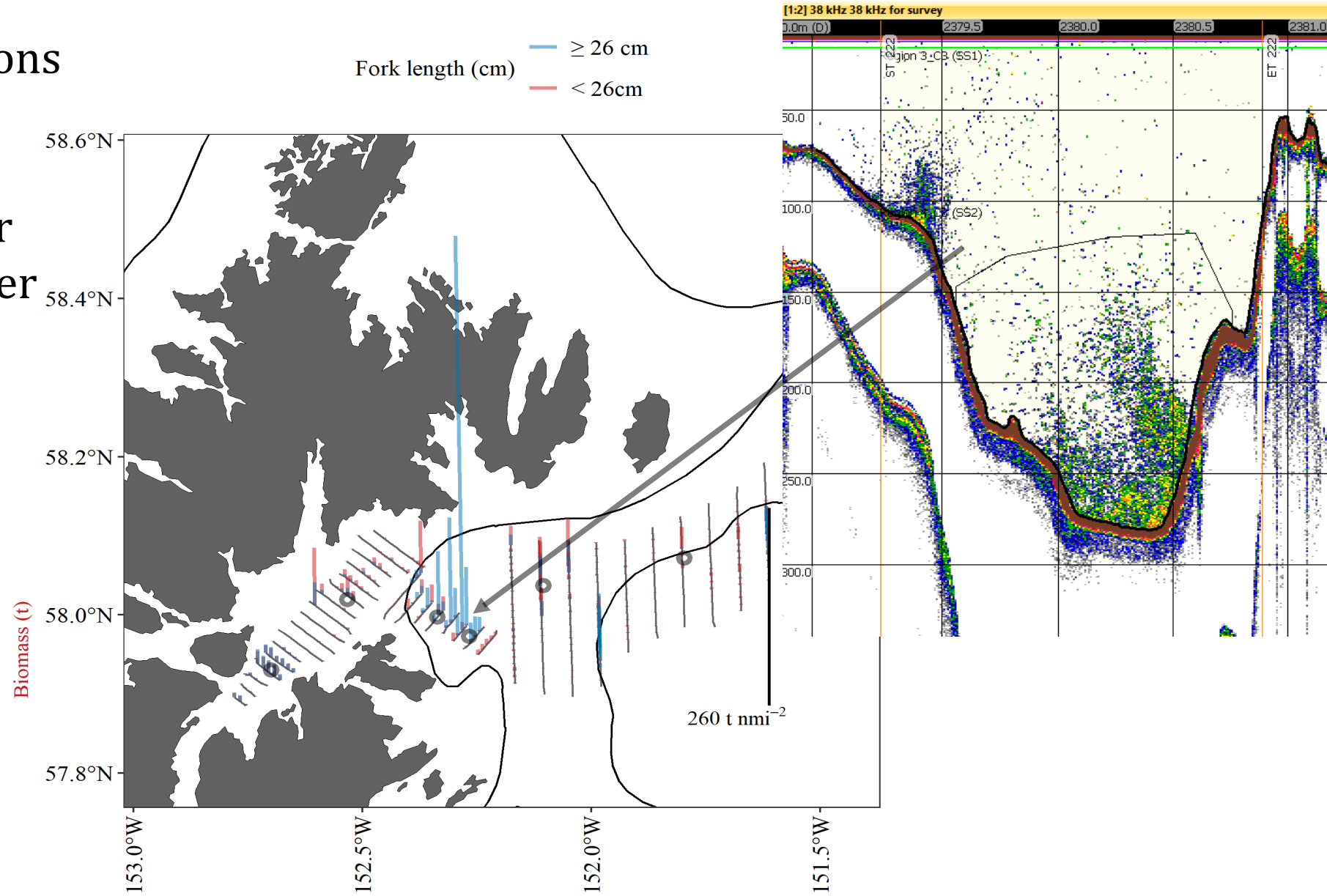
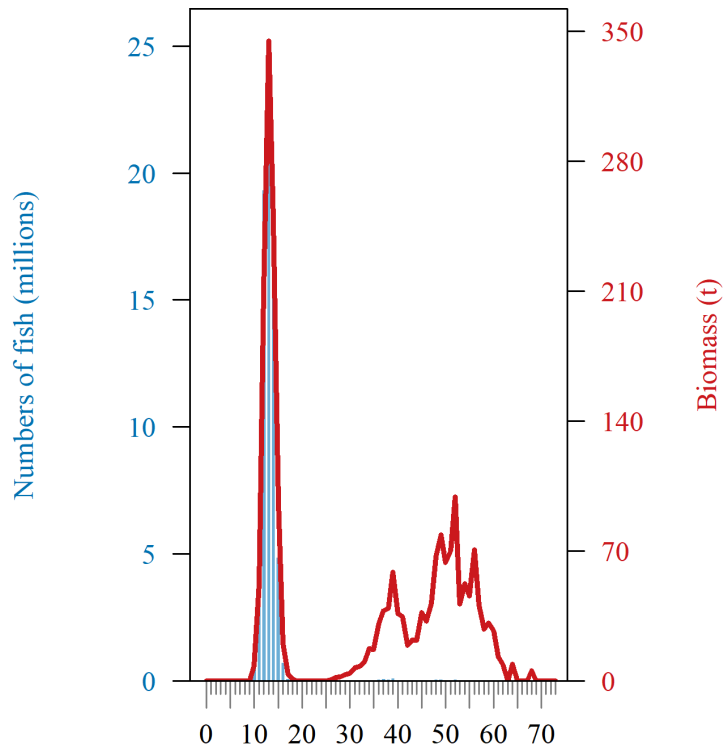


Temperatures at
trawl locations

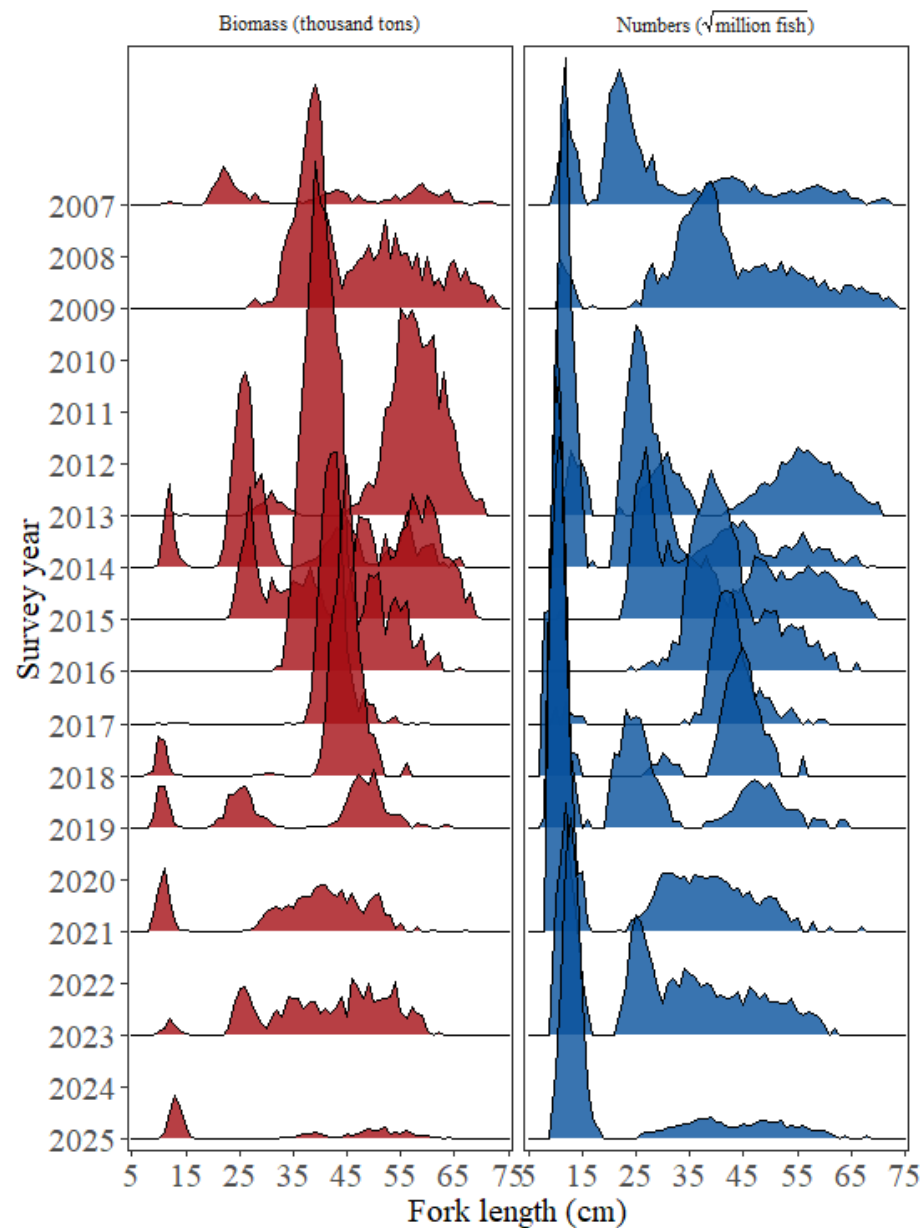


Marmot Bay: Distribution and Abundance

- Sparse adult aggregations in Spruce gulley 58
- Age-1+ pollock in inner and outer areas in upper 100 m 58

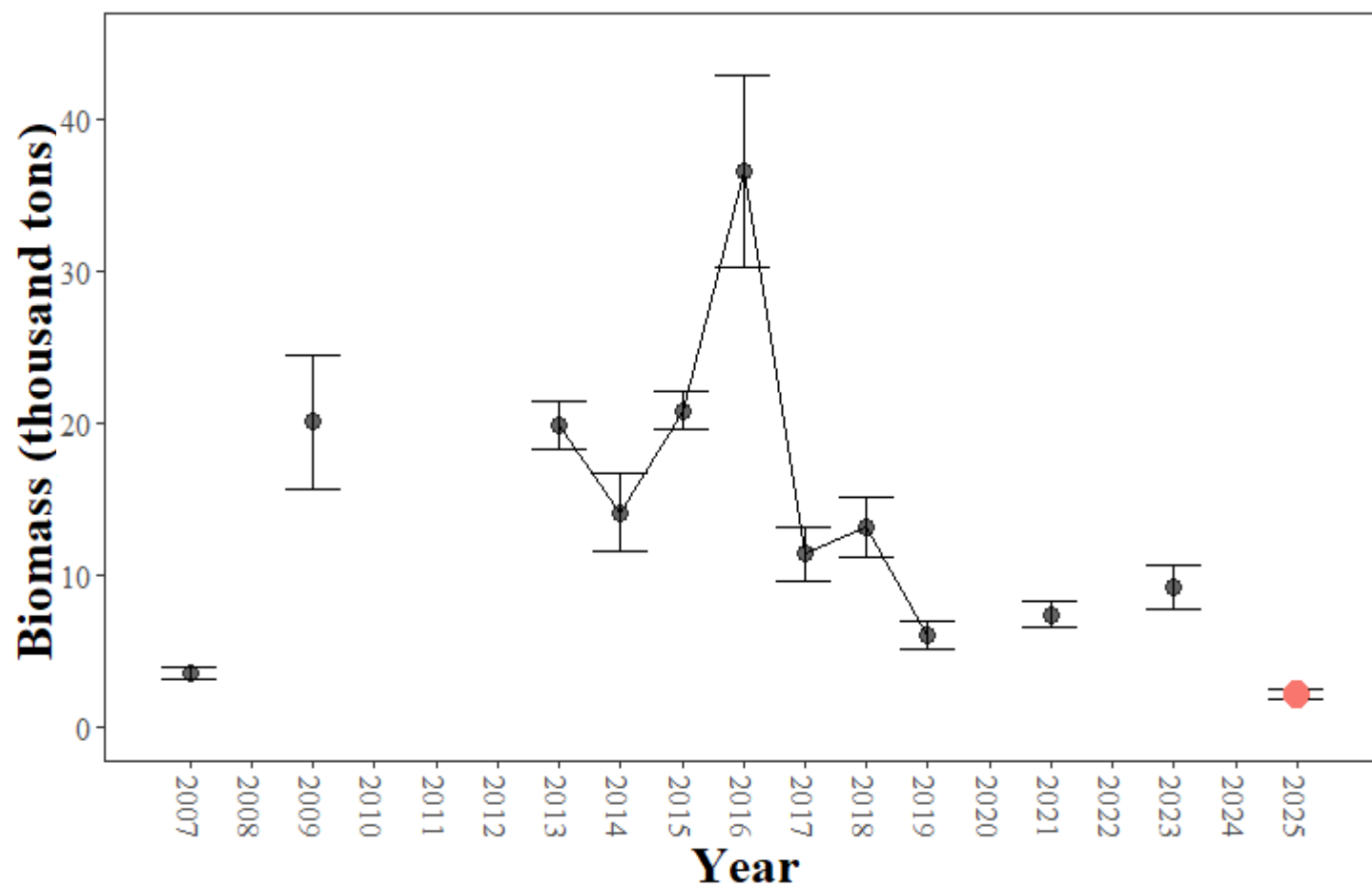


Marmot Bay: Abundance



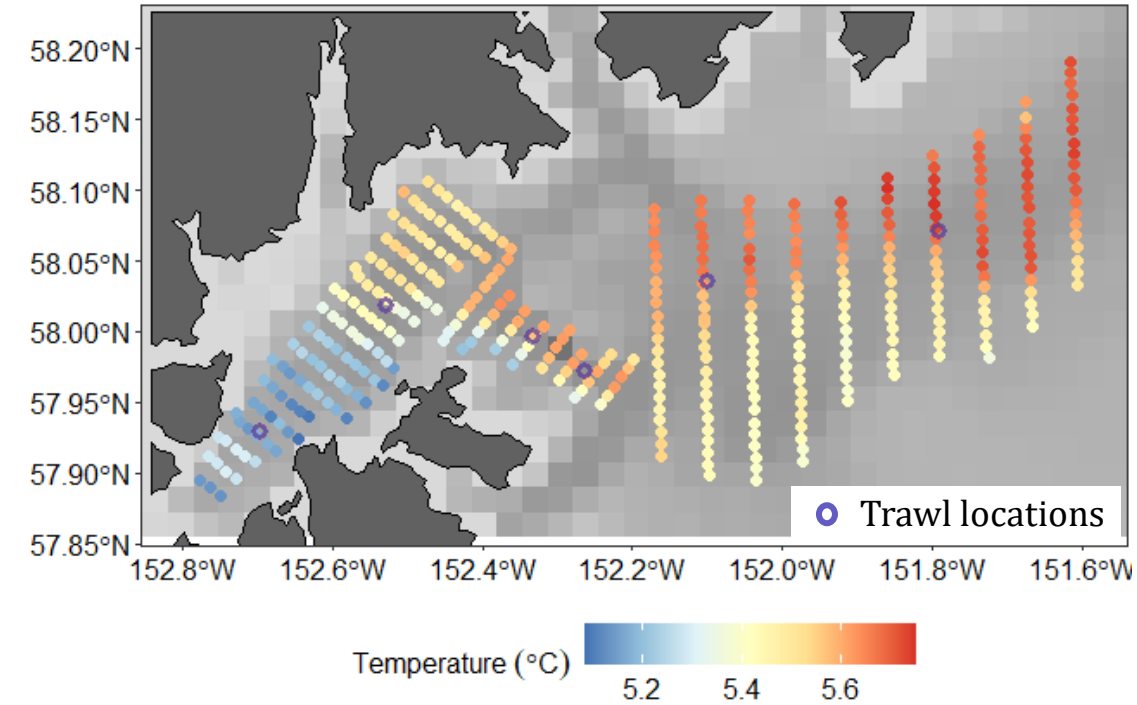
2025 pollock totals:

- 2.2 thousand tons (↓ 76% from 2023)
- 74.6 million fish (↑ 19% from 2023)
- Mix of age-1 and age-3+ fish

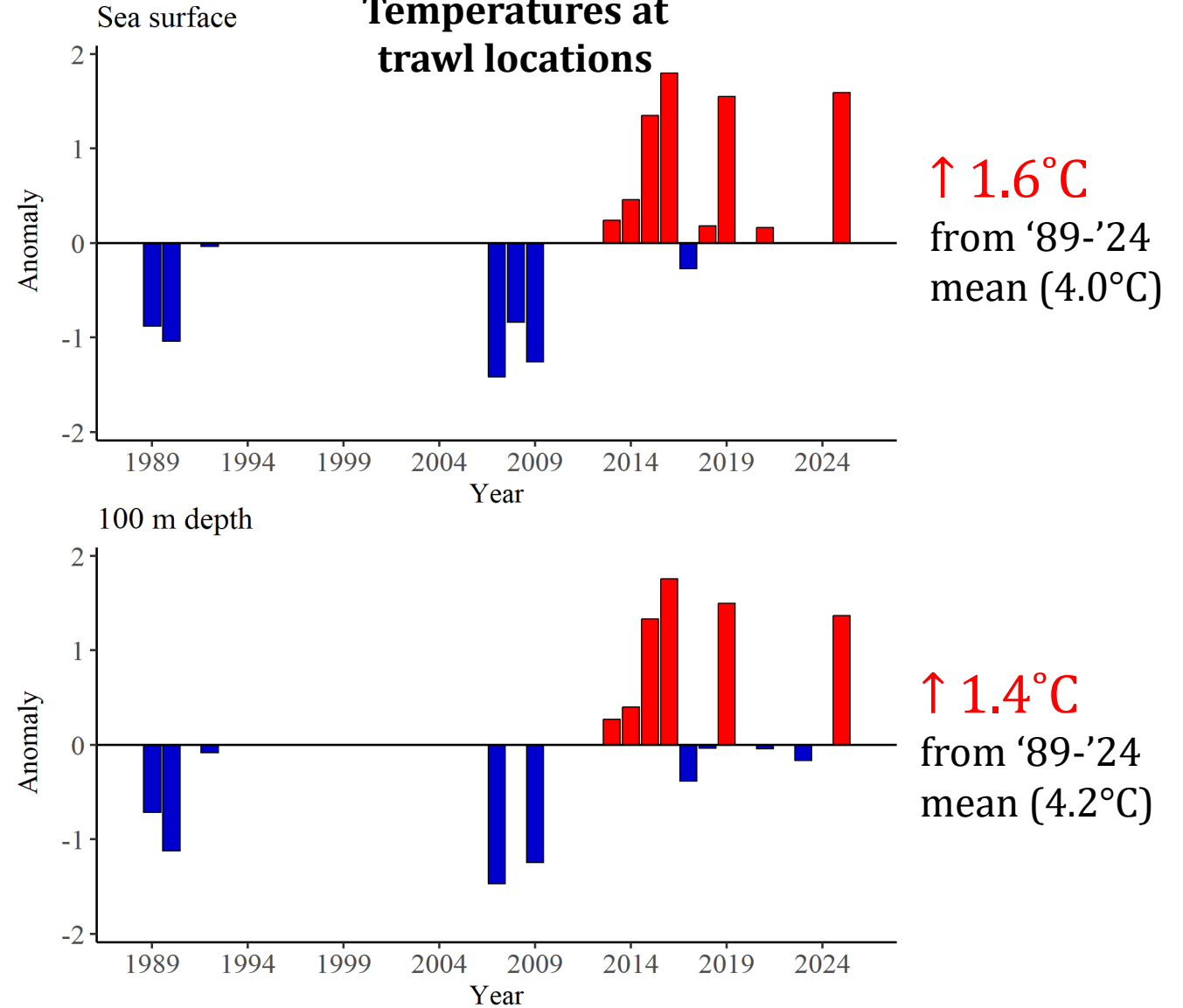


Marmot Bay: Temperatures

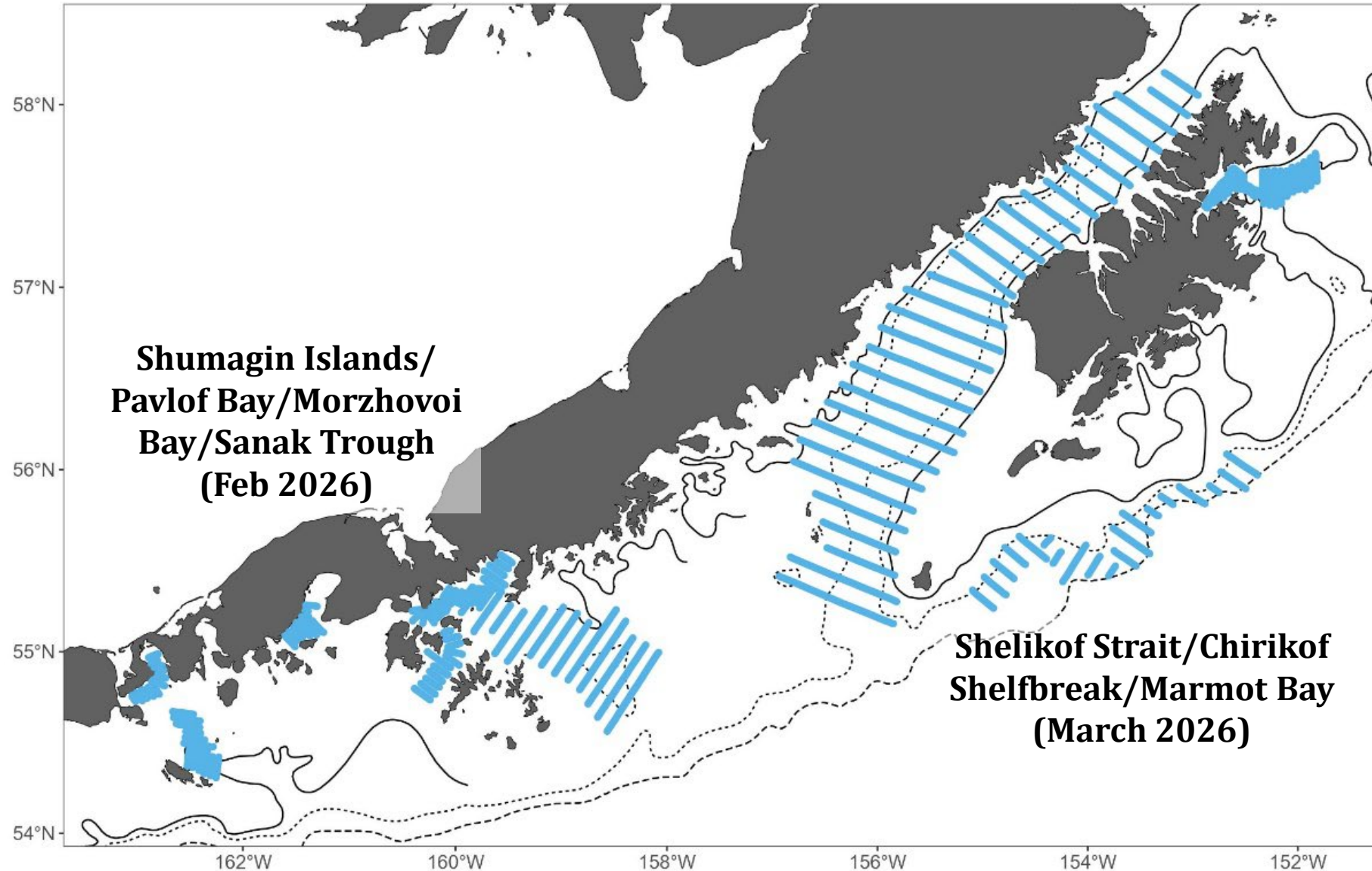
**2025 flow-through
SST**
Mean = 5.5°C



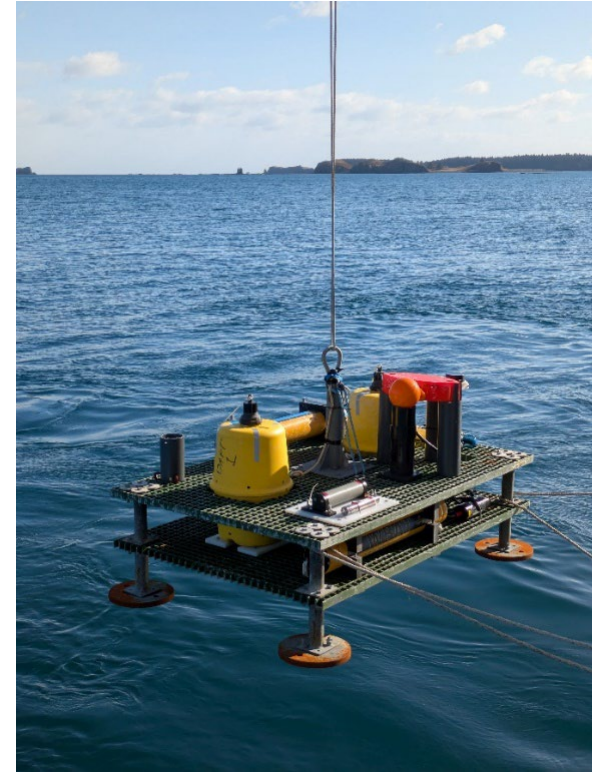
**Temperatures at
trawl locations**



Winter 2026 Survey Plans



Questions?



GOA winter 2025 survey: Darin Jones (darin.jones@noaa.gov)

MACE Program Manager: Sandy Parker-Stetter (sandy.parker-stetter@noaa.gov)