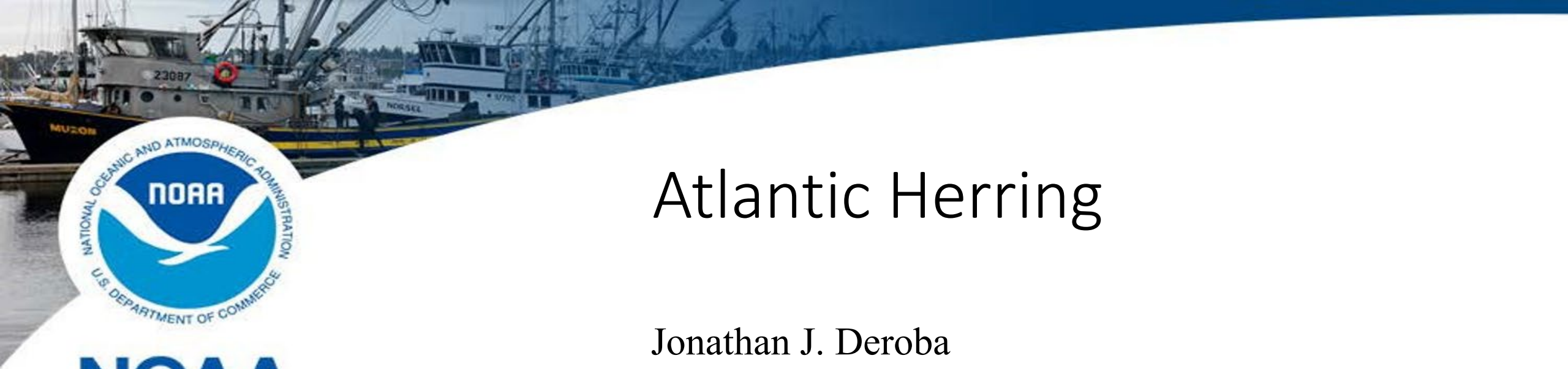


Atlantic Herring

Jonathan J. Deroba
NEFSC
Population Dynamics Branch

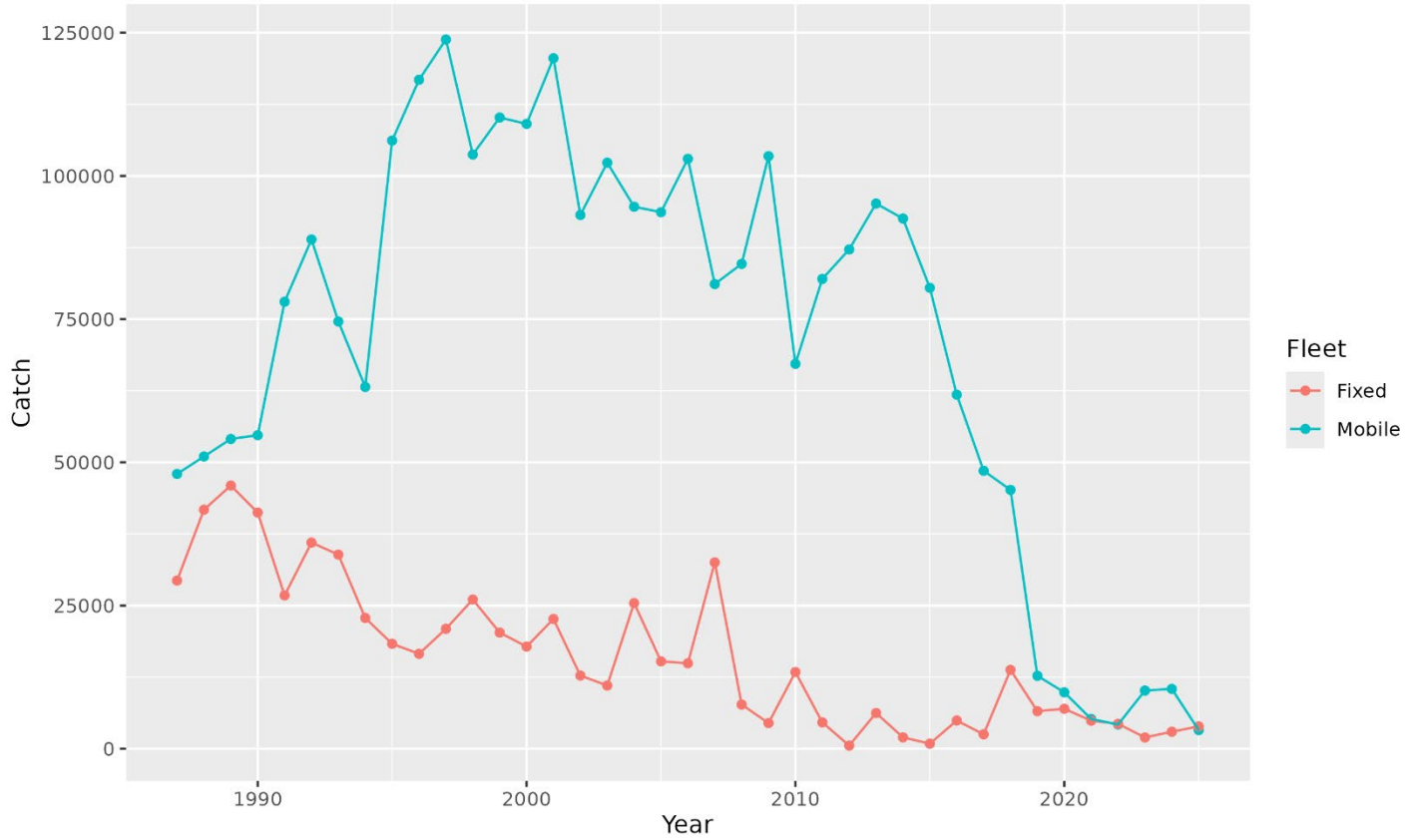
Summary of Management Track Assessment
Meeting of the NE SSC
August 12, 2026

MT Summary

- Assessed using WHAM
  - No structural changes since the RT
  - 1987-2025
  - Two fleets (fixed and mobile gears); fixed catch >90% Canadian
  - Four surveys: spring BTS, fall BTS, summer/shrimp BTS, acoustic time series collected during fall BTS
  - Constant M=0.35
  - No ability to estimate SR relationship; MSY reference points use F40% as proxy
  - Strong correlation among ages in NAA random effects

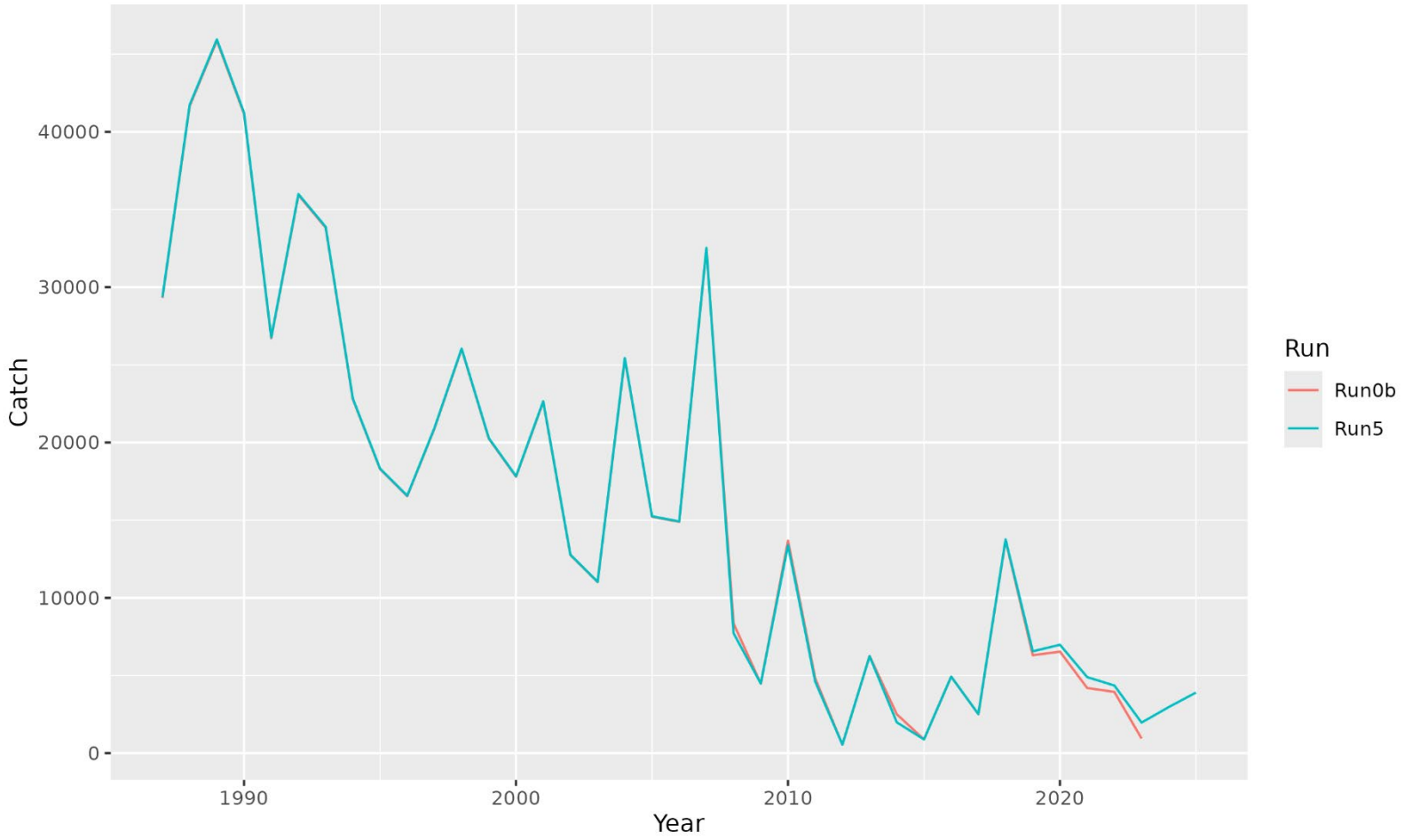
TOR 1: Estimate catch from all sources including landings and discards

- Catch = landings + discards (metric tons)
  - Discards only available since 1996, but generally <1% of landings
  - Used CAMS since 2020



TOR 1: Estimate catch from all sources including landings and discards

- Catch = landings + discards (metric tons)
  - Canada revised their time series, affecting the fixed gear catches



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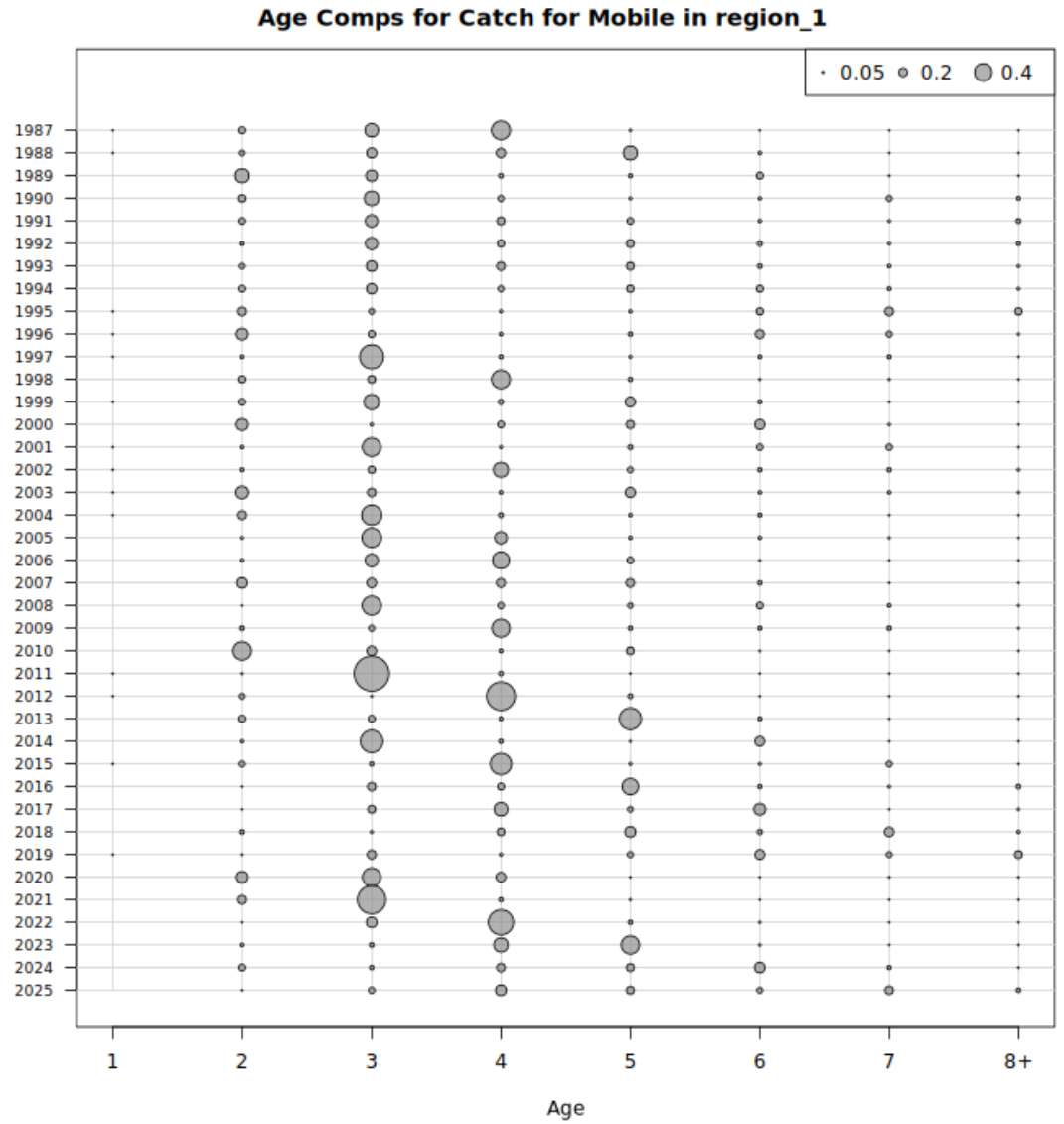

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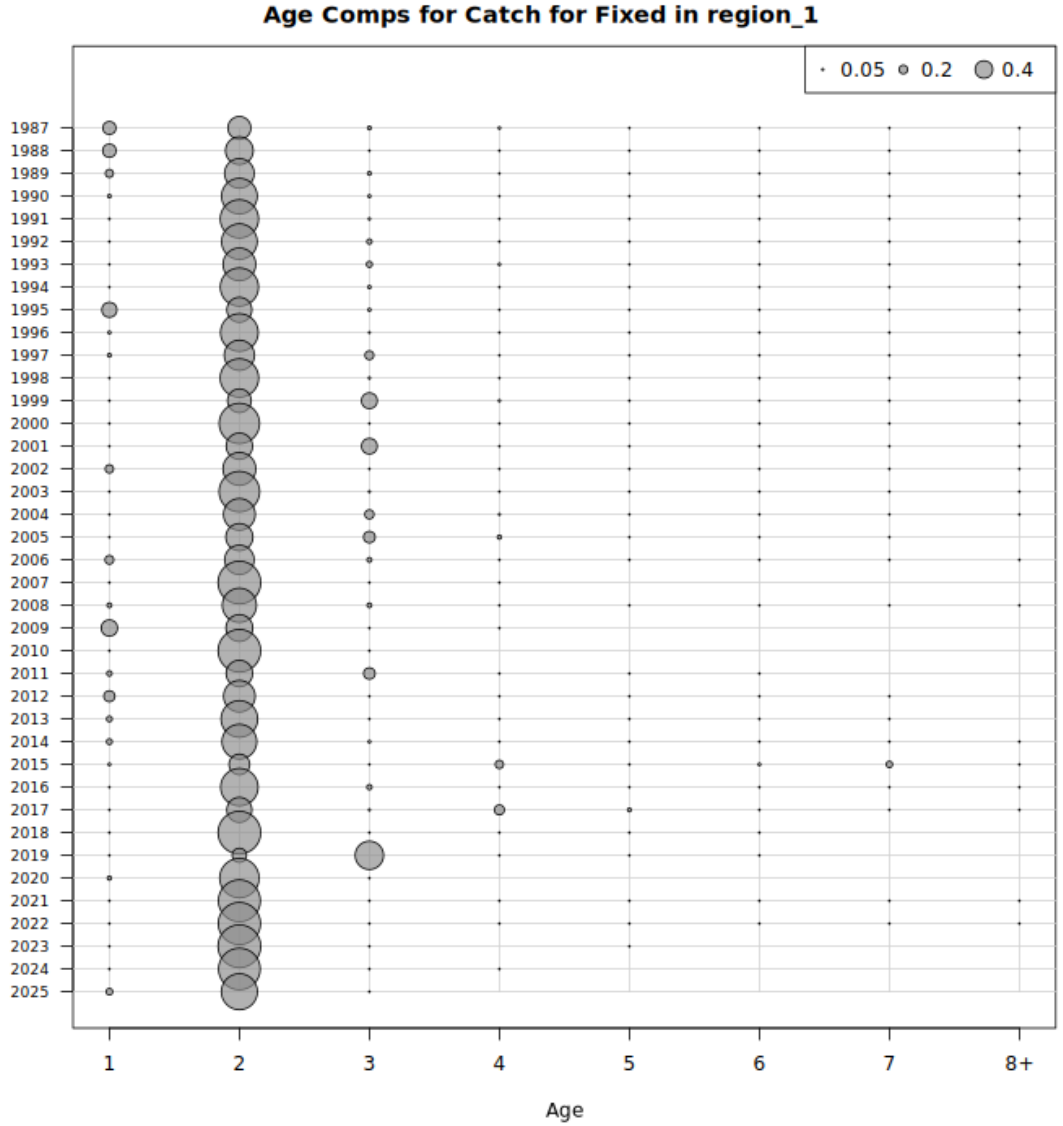
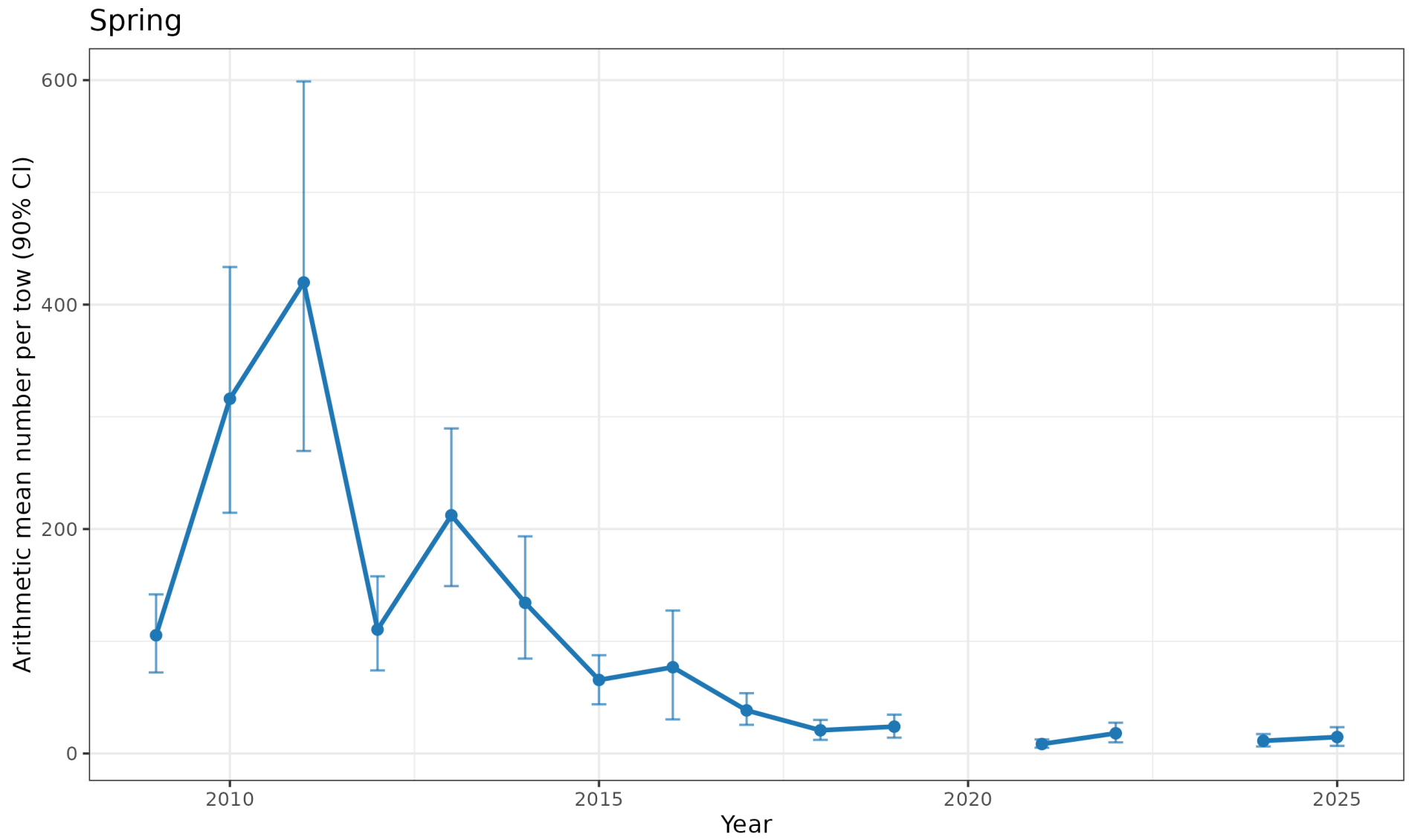


TOR 2: Evaluate indices used in the assessment



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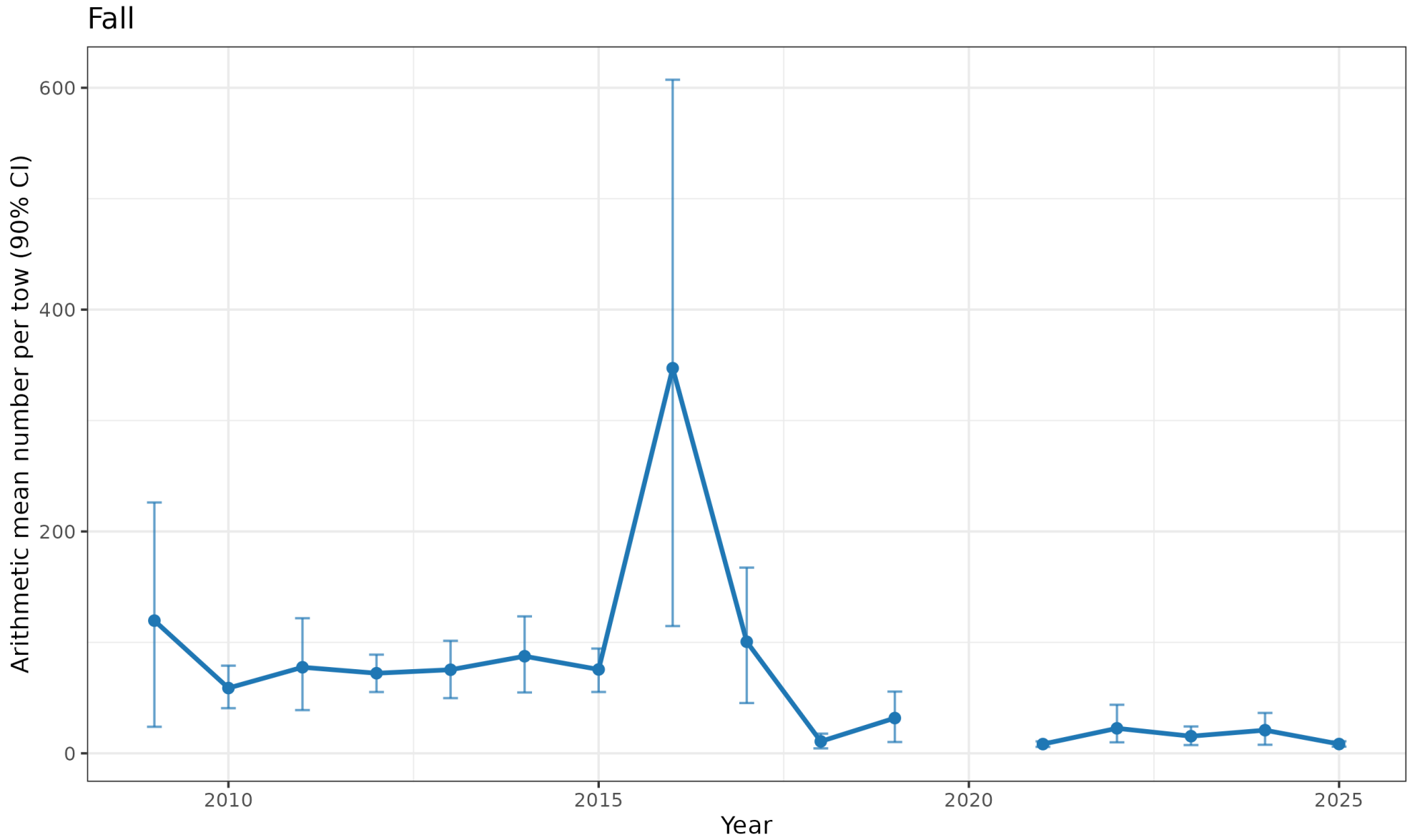

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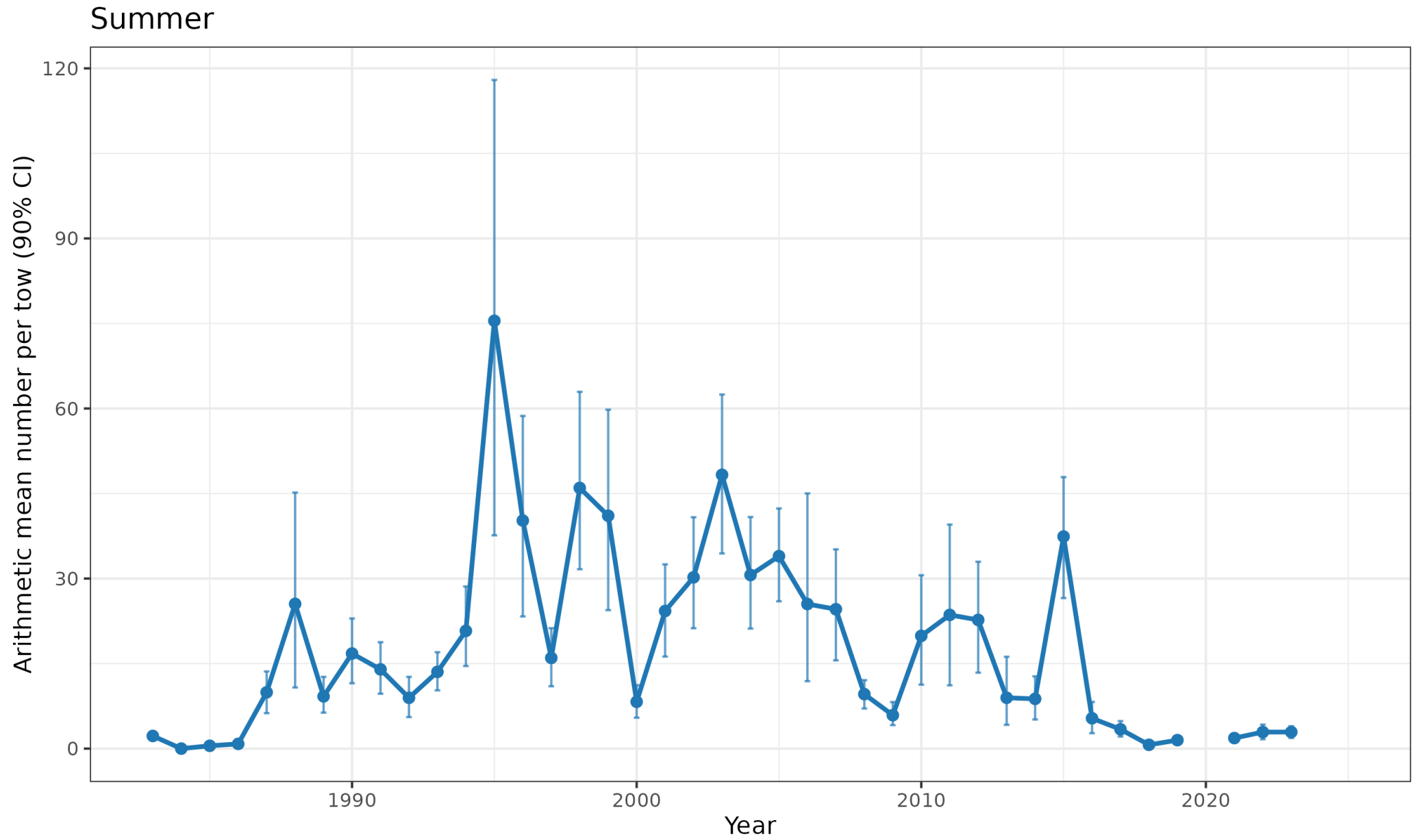

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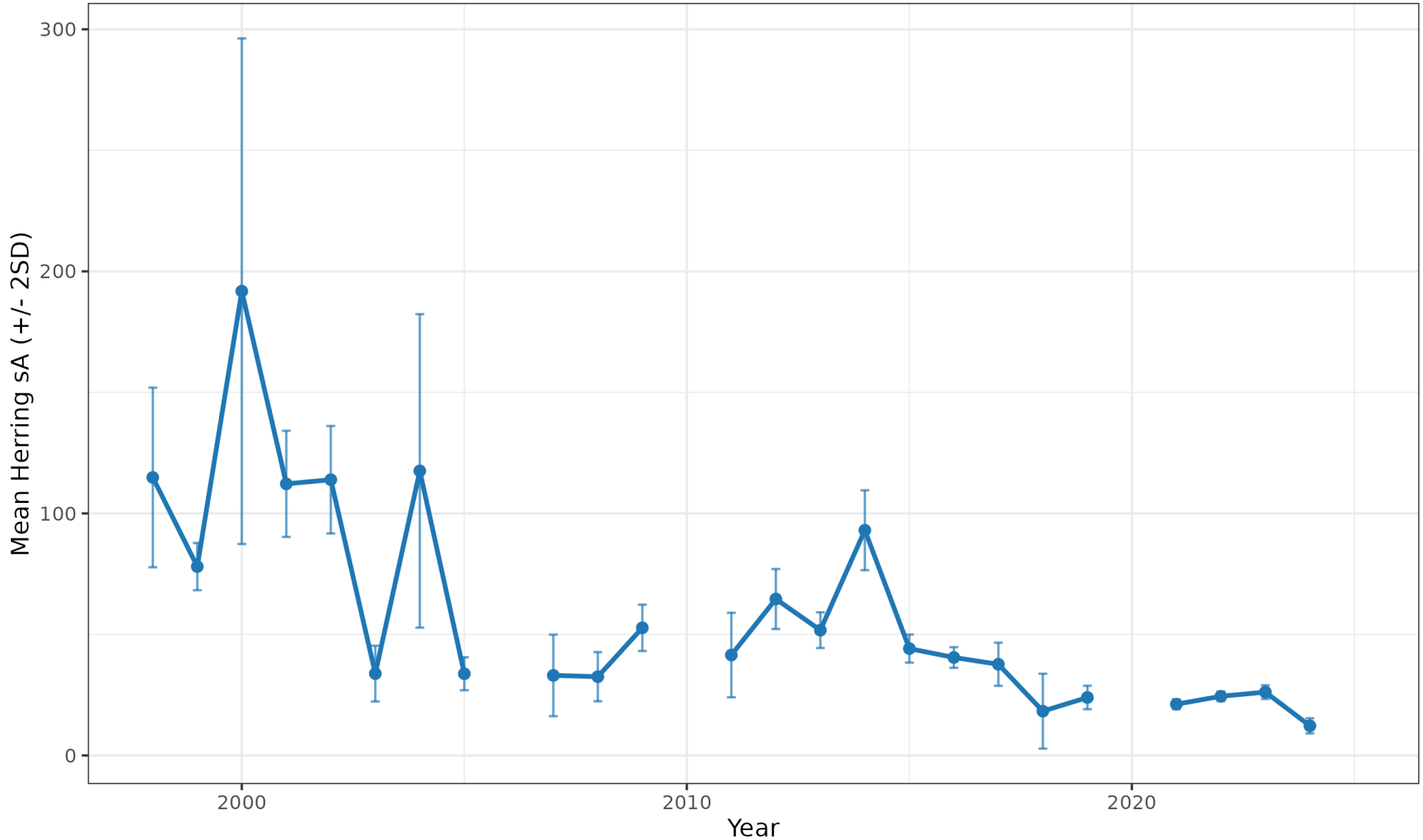
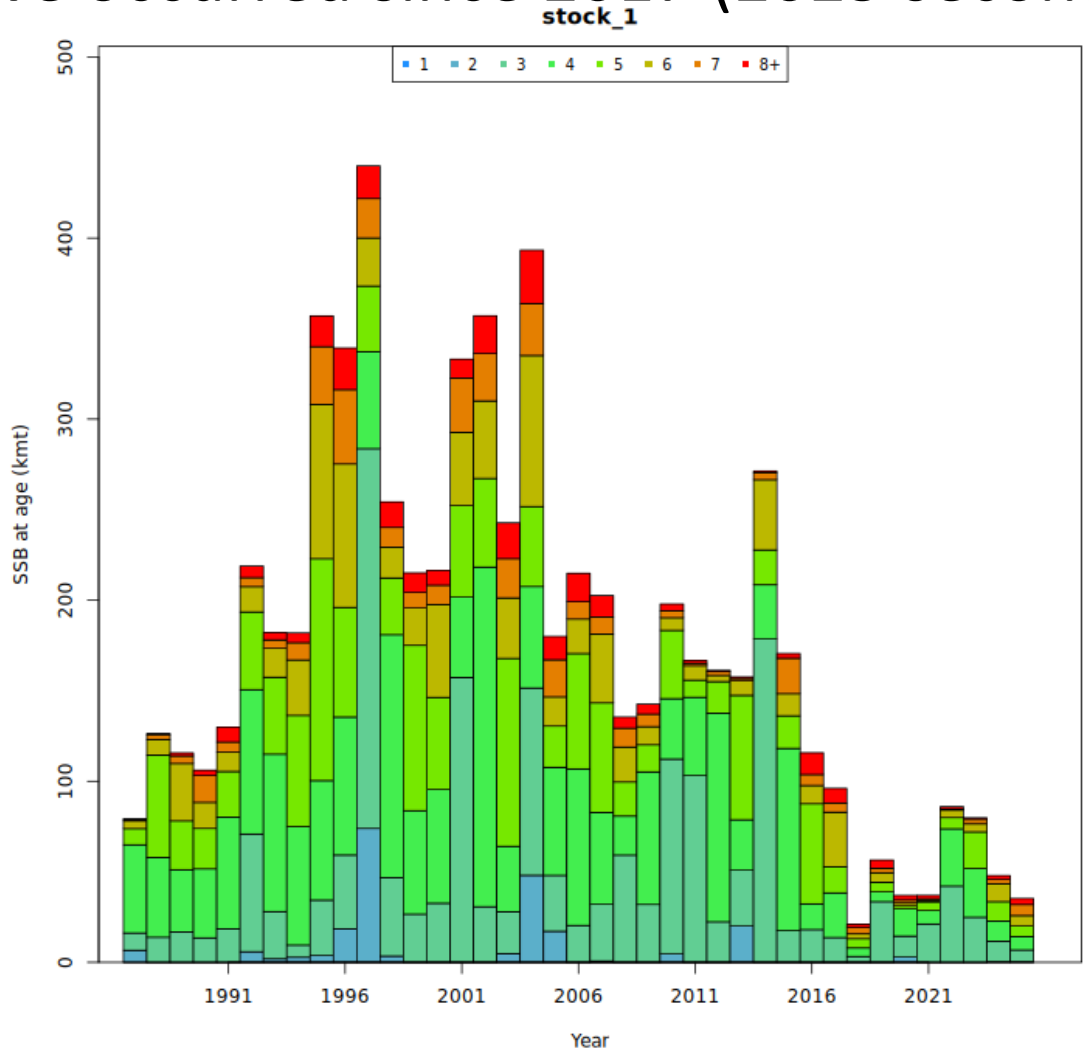


TOR 3: Estimate…

- A few minor changes since the RT that had relatively small effects
  - New WHAM version
  - Added 2 years of data
  - Revised Canadian catch data
  - Changed input ESS
  - Corrected SSB WAA
    - Relatively minor effect on BRPs

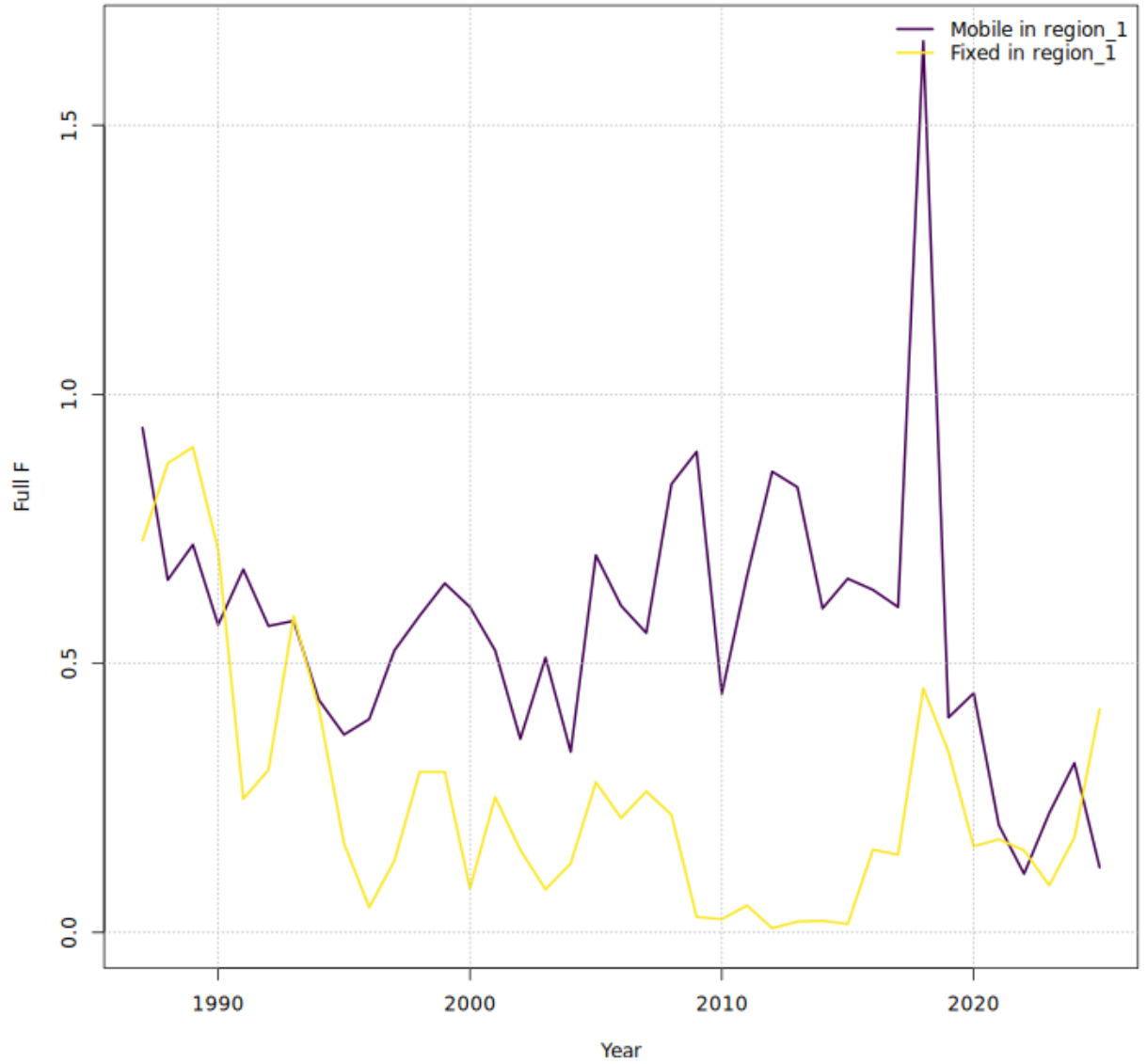
TOR 3: Estimate…

- SSB
- 9 of the 10 lowest have occurred since 2017 (2025 second lowest in the series)



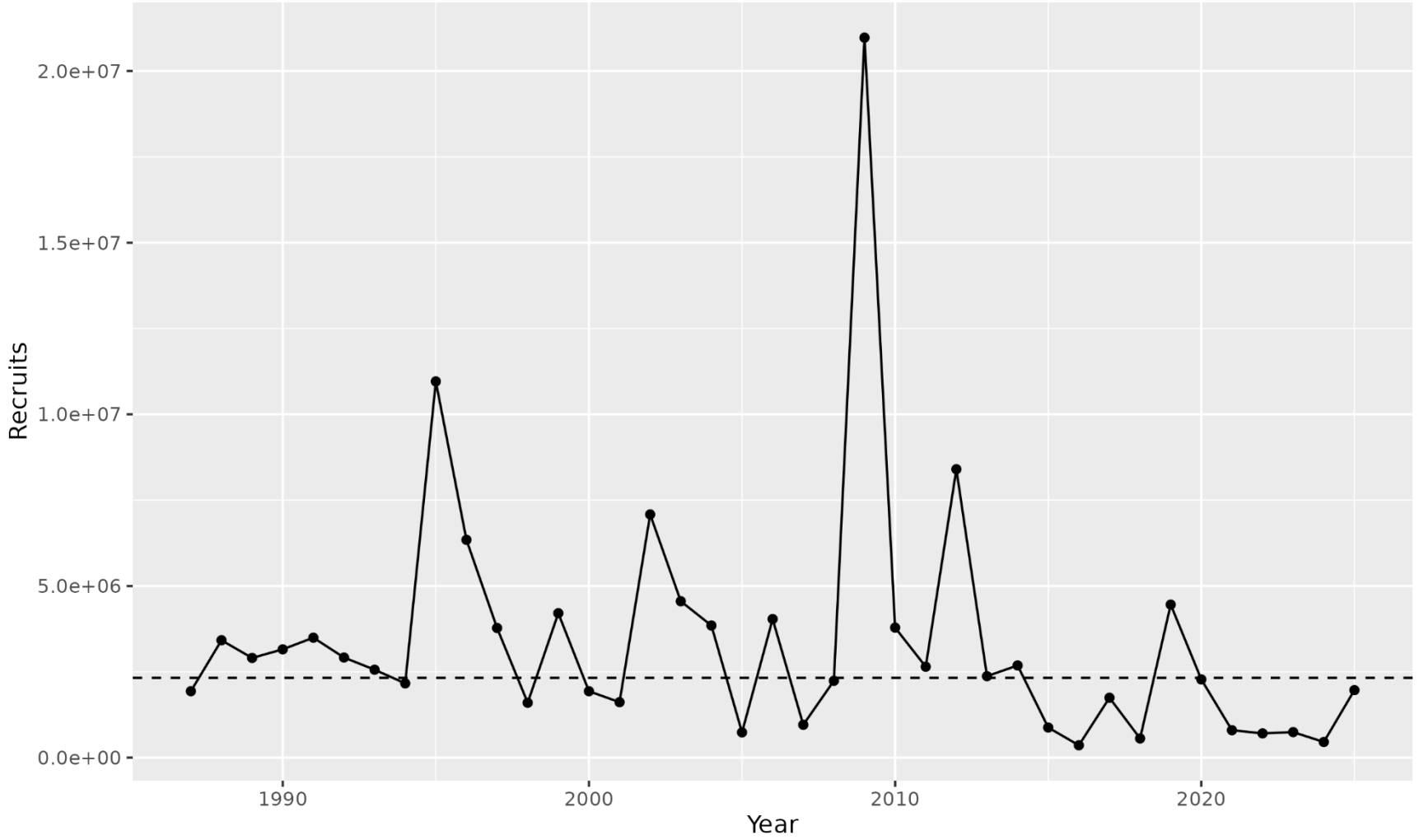
TOR 3: Estimate…

- F



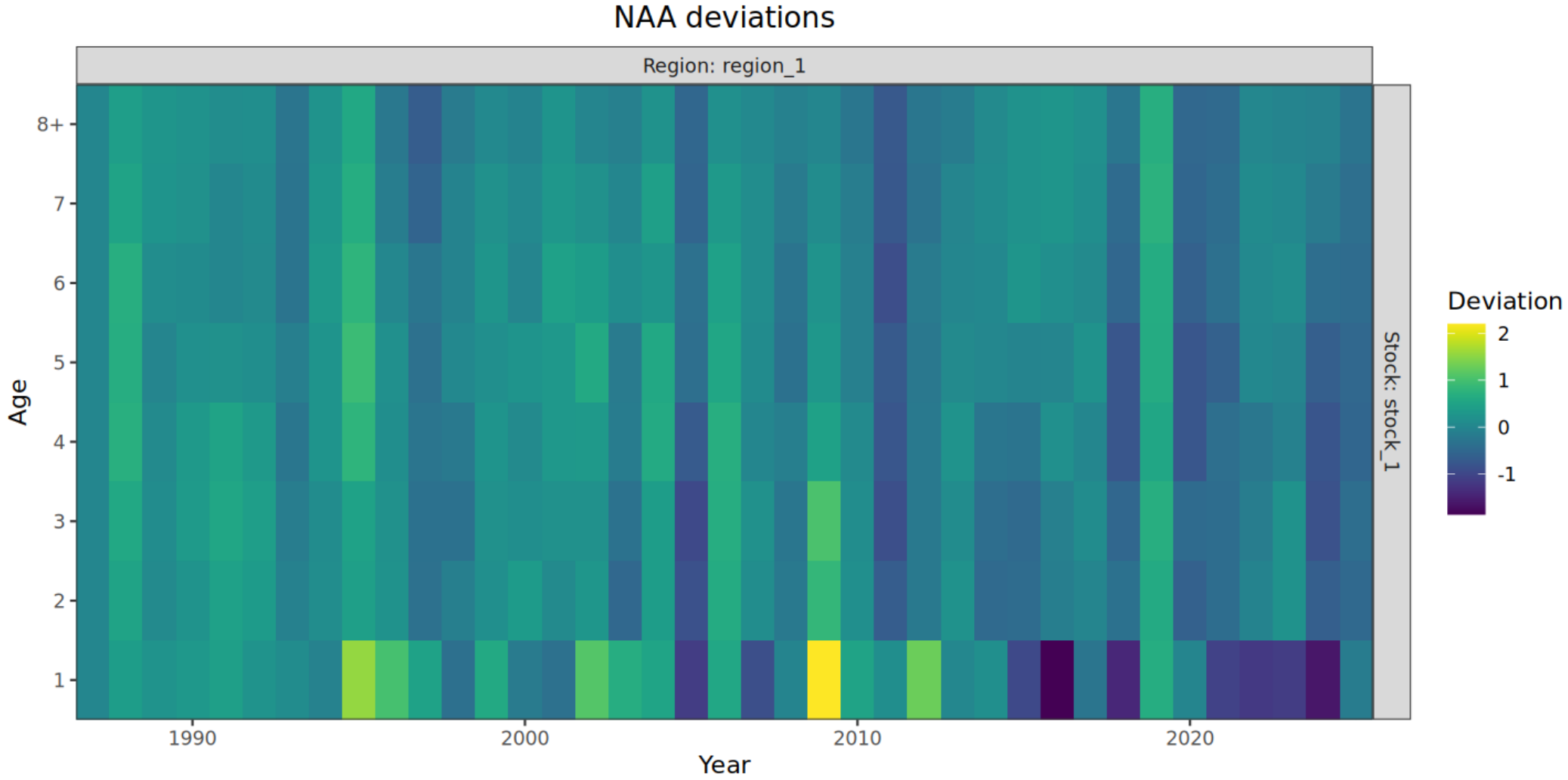
TOR 3: Estimate…

- Recruitment
- 7 of the 10 lowest have occurred since 2015 (2024 was second lowest in the series)



TOR 3: Estimate…

- NAA random effects
- AR(a) correlation = 0.84; no support for AR(y)

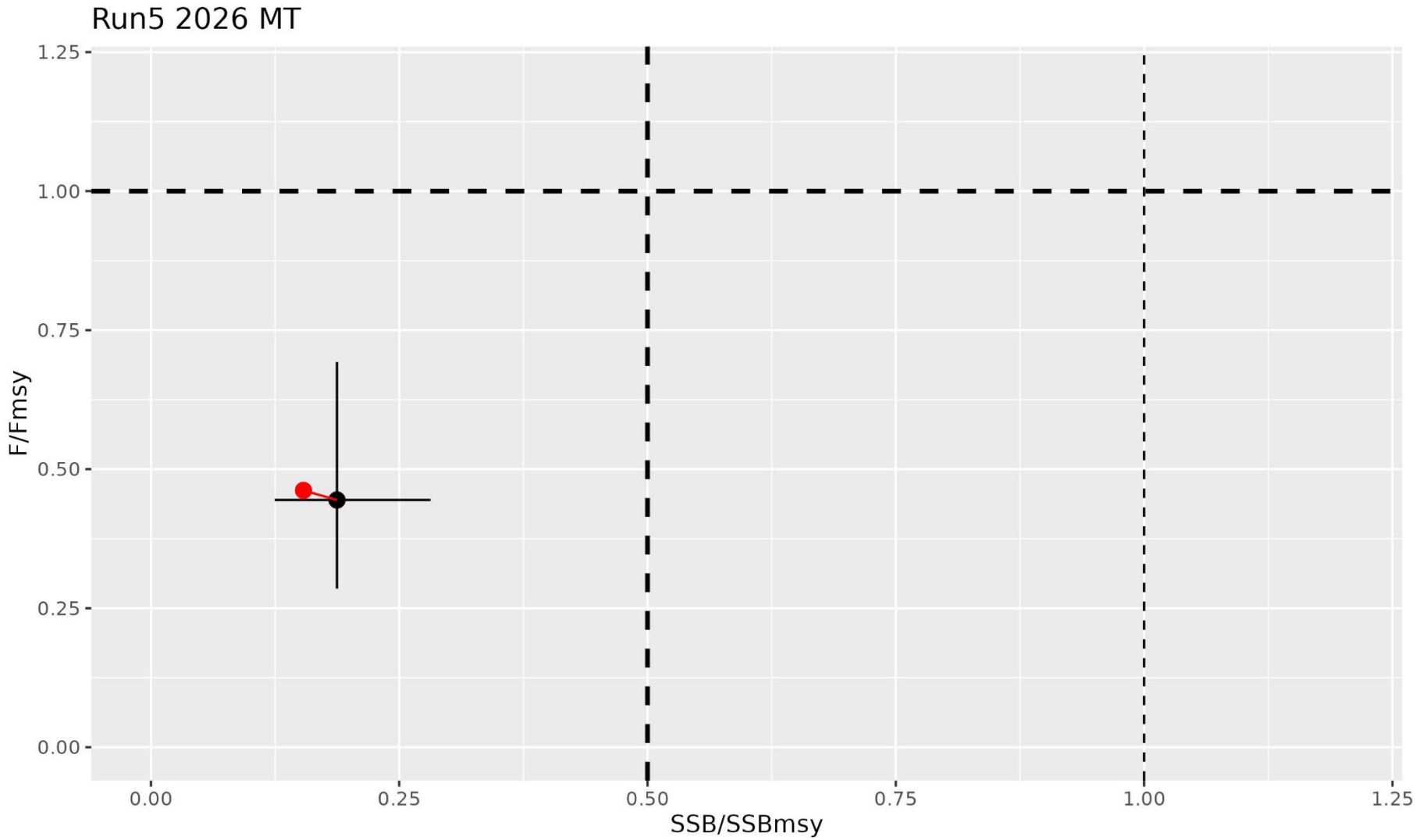


TOR 4: Reference Points

- B40% = 188,214mt (90%CI 123,672-286,439)
- F40% mobile fleet = 0.272 (90%CI 0.224-0.331)
- MSY = 55,211mt
- Terminal year SSB = 35,258mt (90%CI 23,463-52,984)
- Terminal year mobile fleet F = 0.121 (90%CI 0.078-0.189)

TOR 4: Reference Points

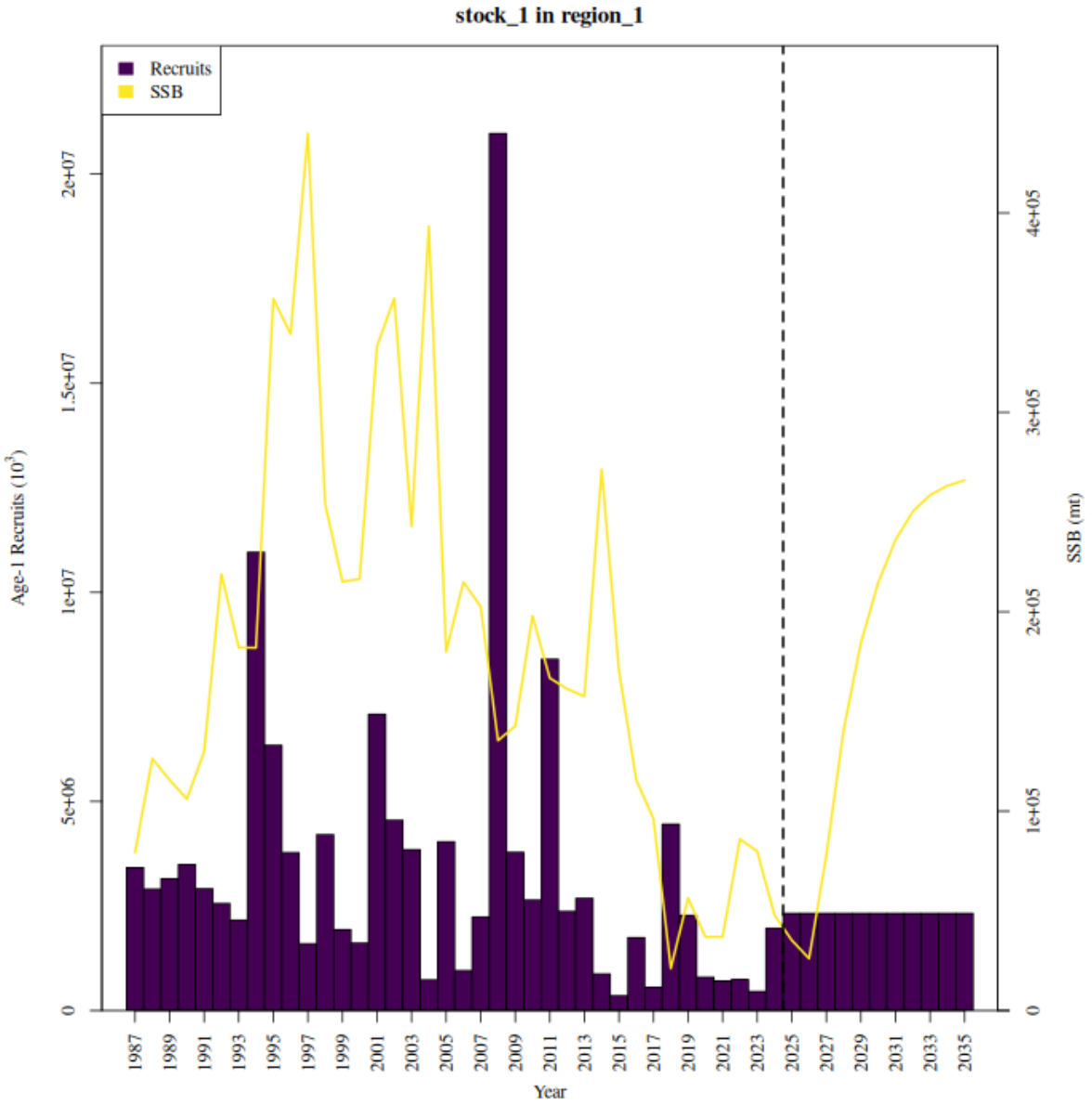
- Stock is overfished; overfishing is not occurring



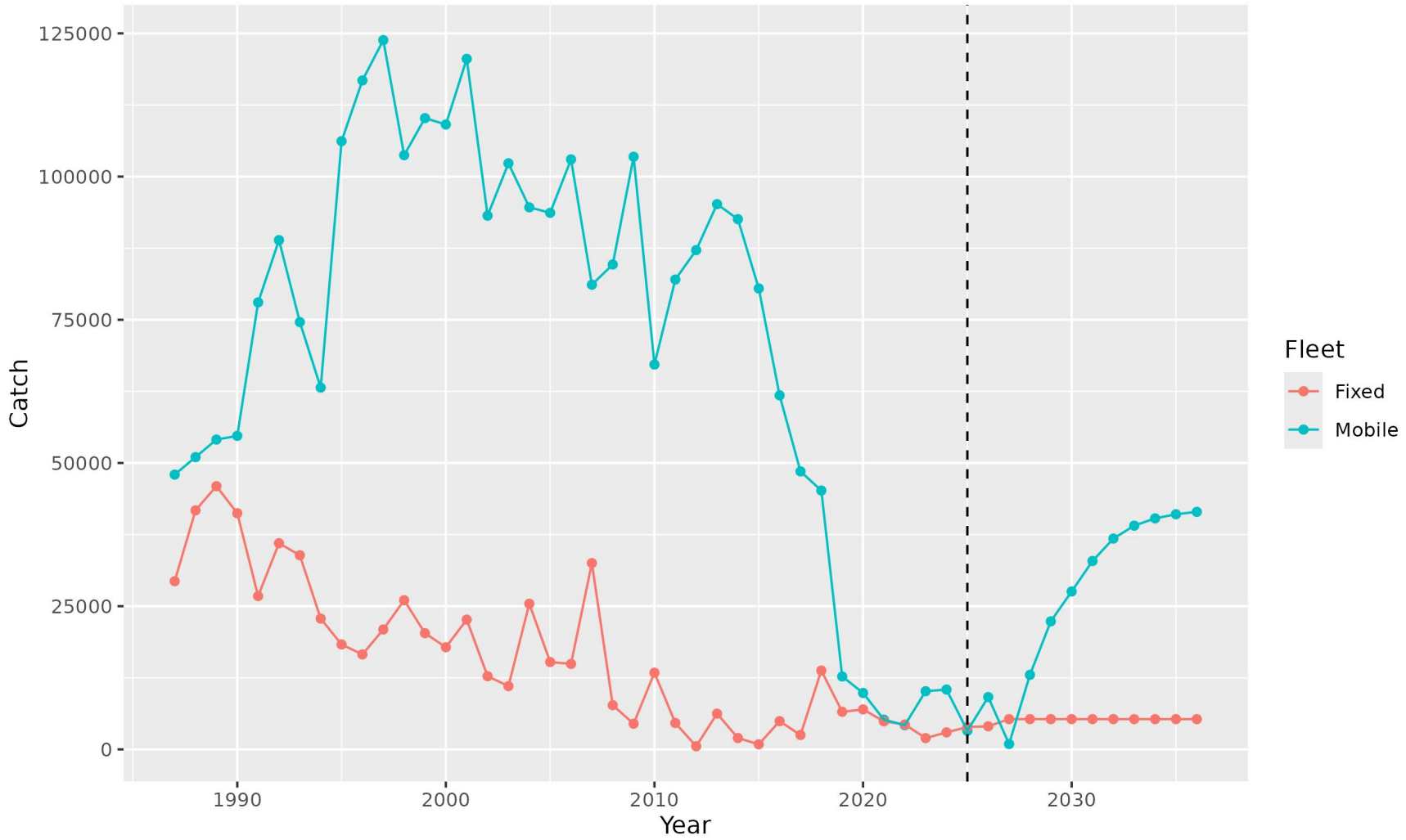
TOR 5: Projections

- No change to RT methods
  - Continue iid recruitment random effect process
  - NAA random effects do not continue (i.e., effectively zero)
  - Mobile fleet catch uses NEFMC ABC control rule
  - Fixed fleet set to recent 10 year average

TOR 5: Projections



TOR 5: Projections



Tor 6 Research Recommendations

- Lots of recommendations from the RT
  - Not a lot of progress given the short time frame since the review
- 10 recommendations identified during this MT and the panel highlighted 2
  - Continue work on the development of the VAST model to integrate state and federal surveys particularly with respect to use of surveys that include information on age-1 fish (ME-NH survey). Development of model-based indices for this stock could also address potential for time varying catchability.
  - Investigate the potential for autocorrelation in annual recruitment, as well as explore covariate(s) aliased in the NAA random effects and determine which is having the most effect on interannual patterns.

Thank you.