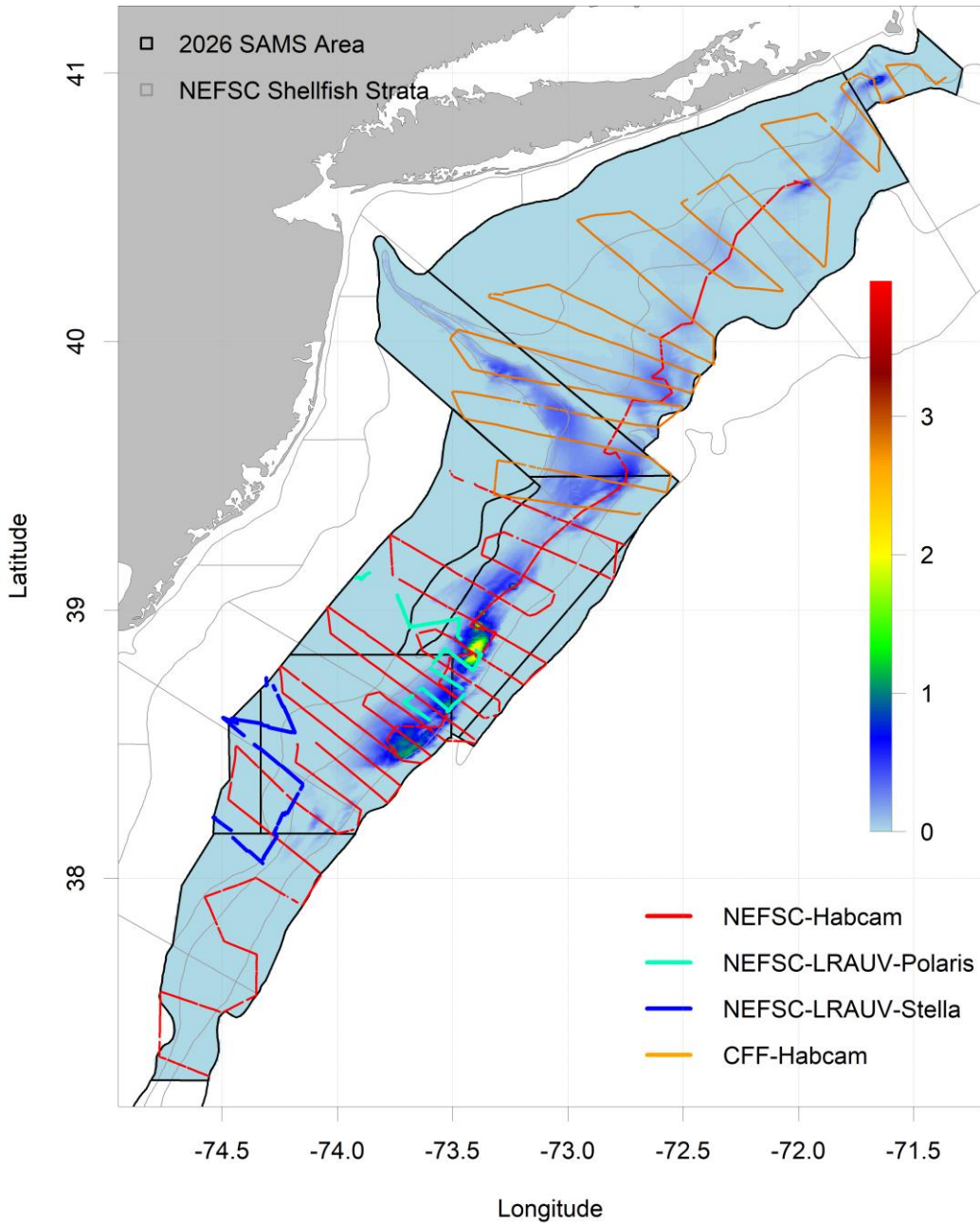


Sea Scallop Stock Status and ACL/OFL for 2027-28

Dvora Hart

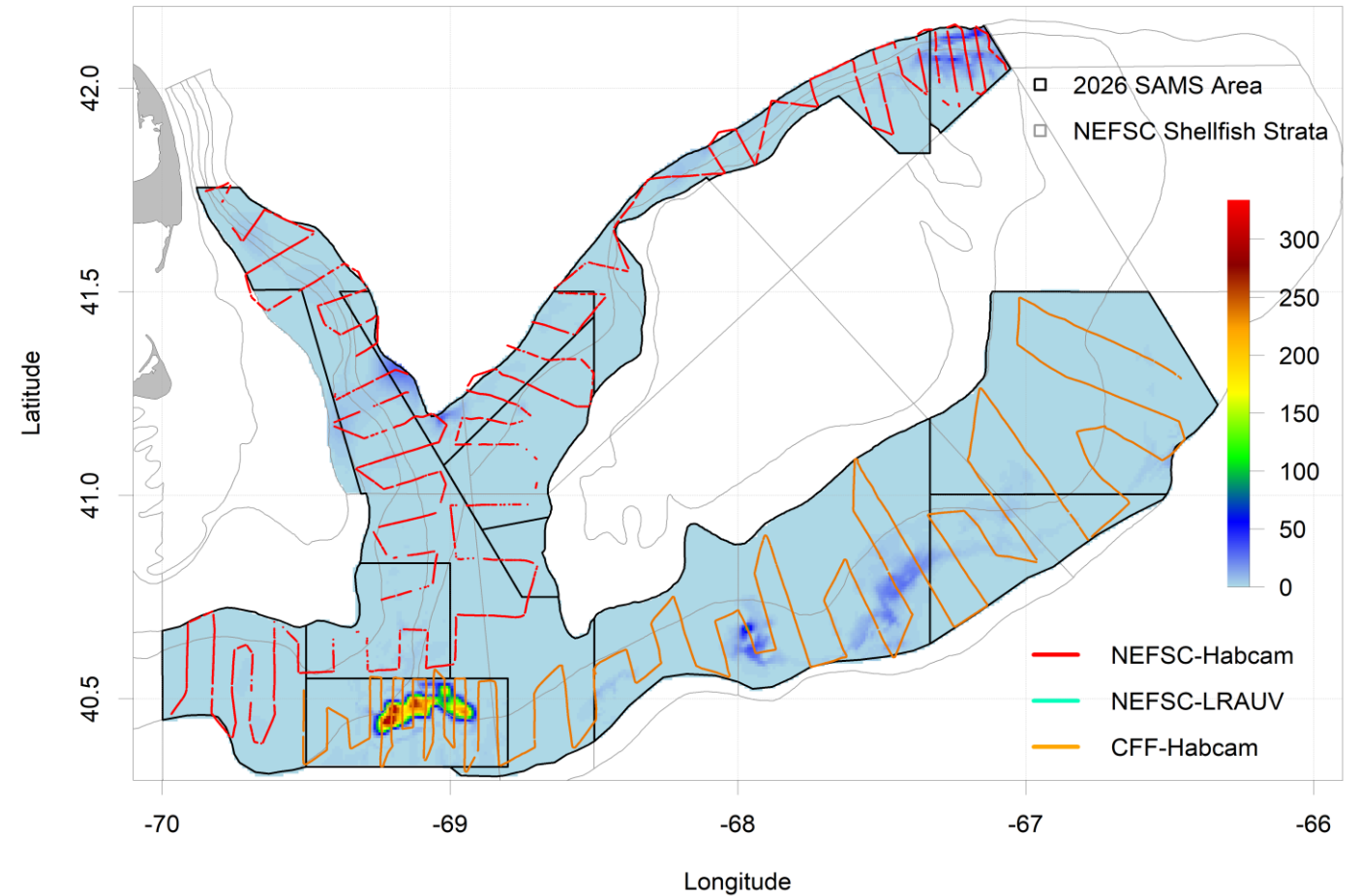
NEFSC, Woods Hole MA

Prediction: # per m2 for 40+ mm scallops

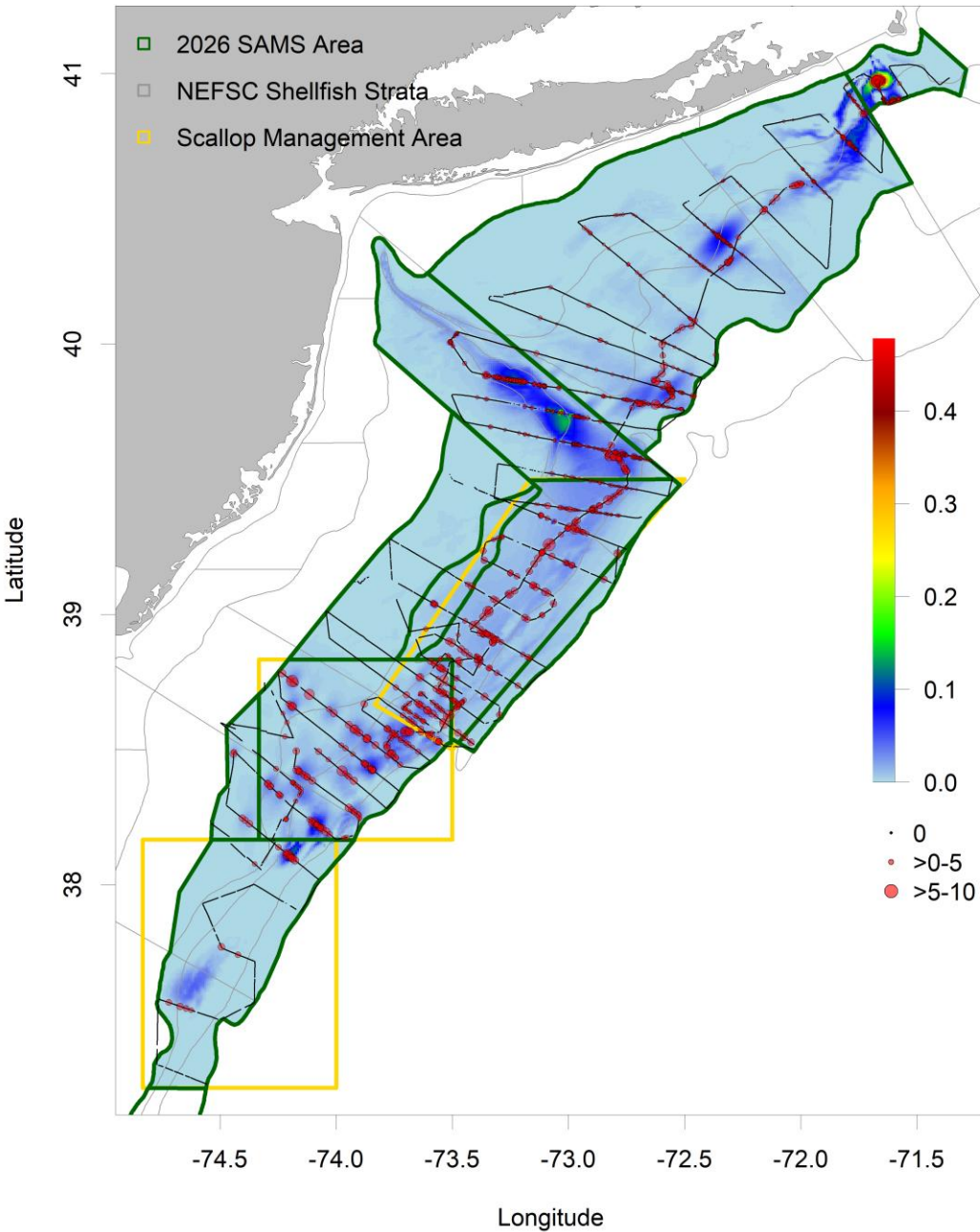


Scallop biomass concentrated in the Mid-Atlantic, the southern Nantucket Lightship and the southern flank of Georges Bank
Biomass remains close to a 25 year low

Prediction: g per m2 for 40+ mm scallops



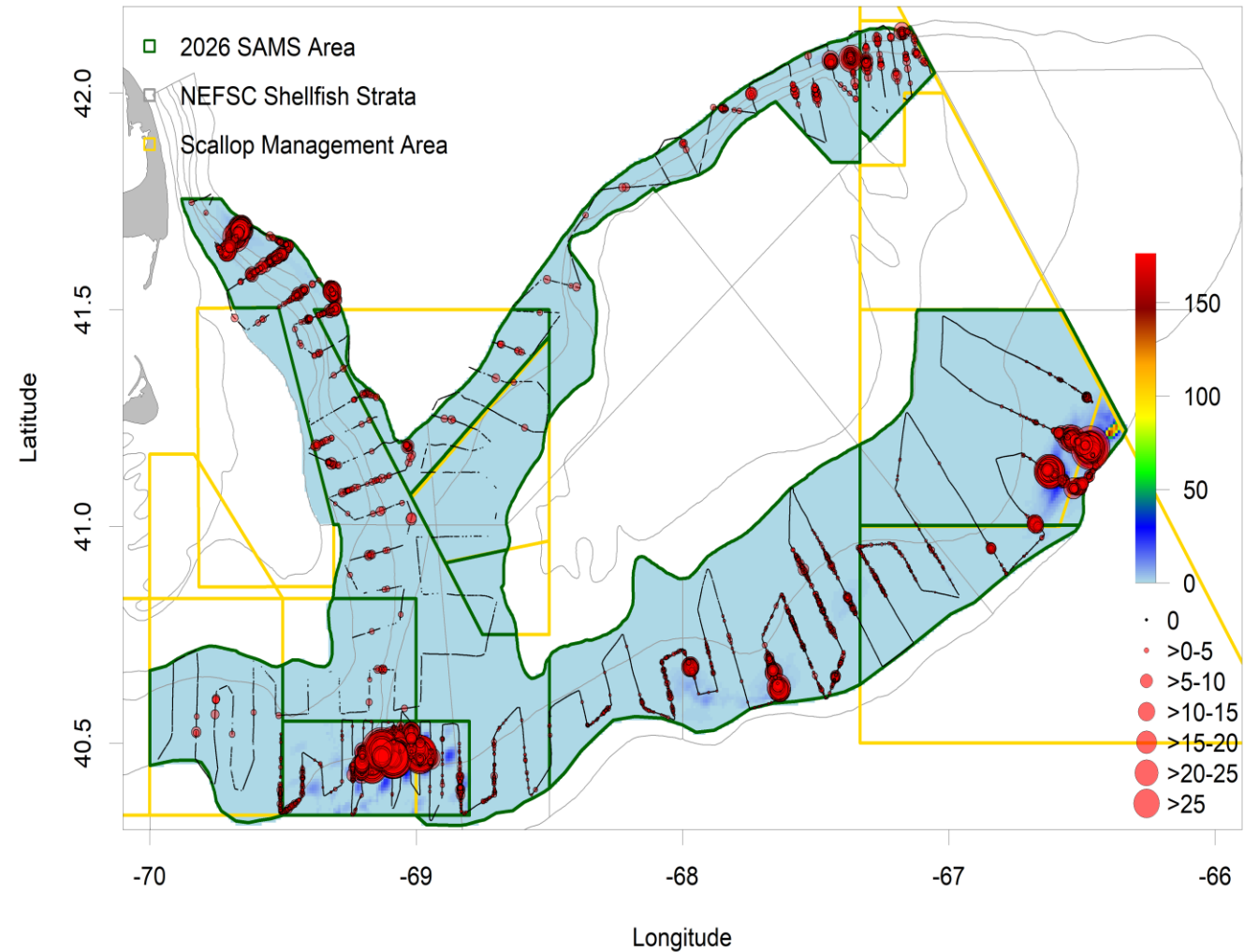
Prediction: # per m2 for 2-year old recruits
Observation: # per m2 for 2-year old recruits



Strong recruitment in Closed Area II South and in the northern Great South Channel

Recruitment in the Mid-Atlantic was below average

Prediction: # per m2 for 2-year old recruits
Observation: # per m2 for 2-year old recruits

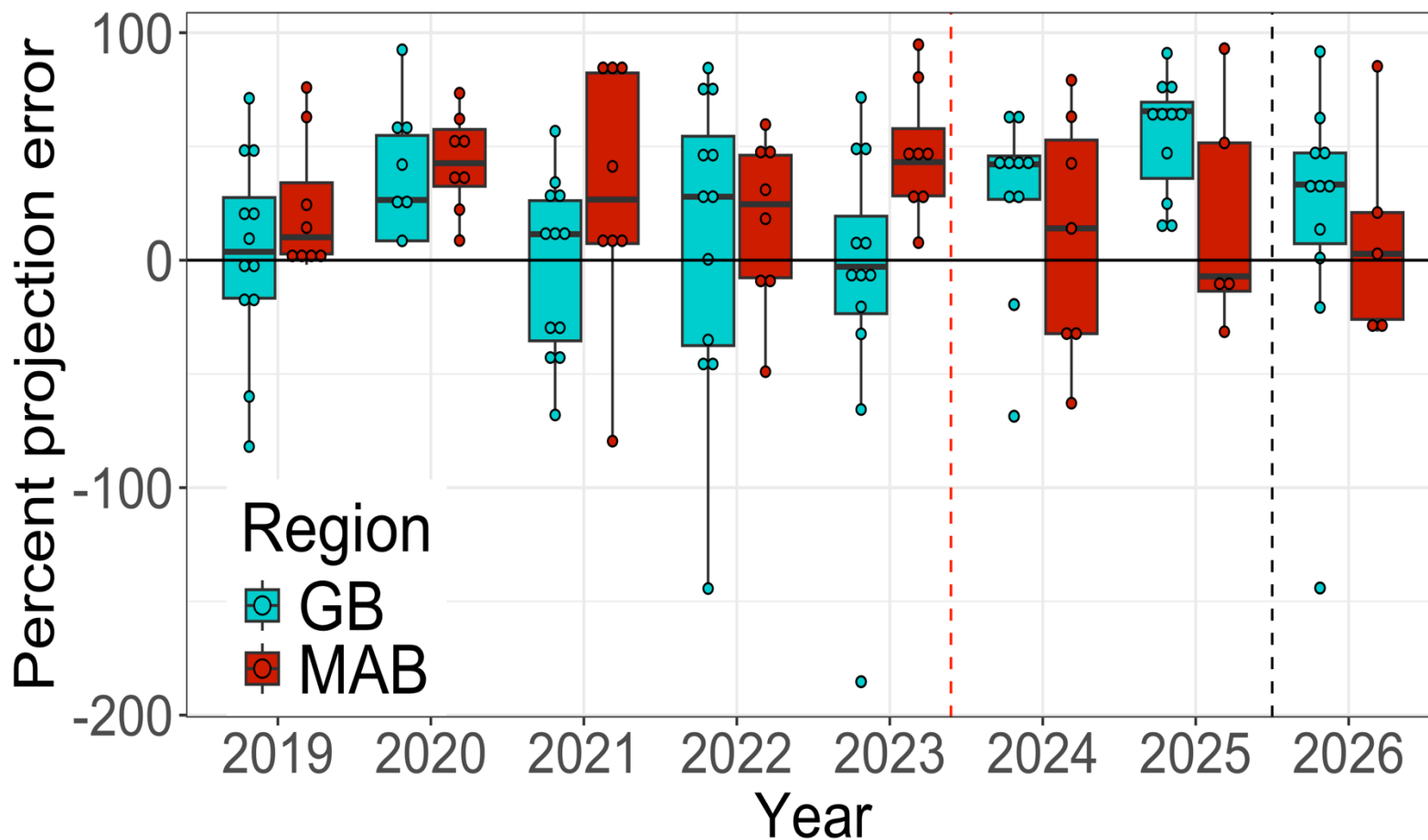


SAMS Model

SAMS (Scallop Area Management Simulator) is a size and area structured projection model used for management since 1999. It is currently configured to track populations in 25 distinct areas in the Mid-Atlantic, Georges Bank and the Gulf of Maine.

It is used to calculate ACL/OFLs, as well as simulate proposed alternatives (including area management such as closures and reopenings). It is initialized to the most recent survey data (currently 2026).

SAMS Model Performance Mid-Atlantic



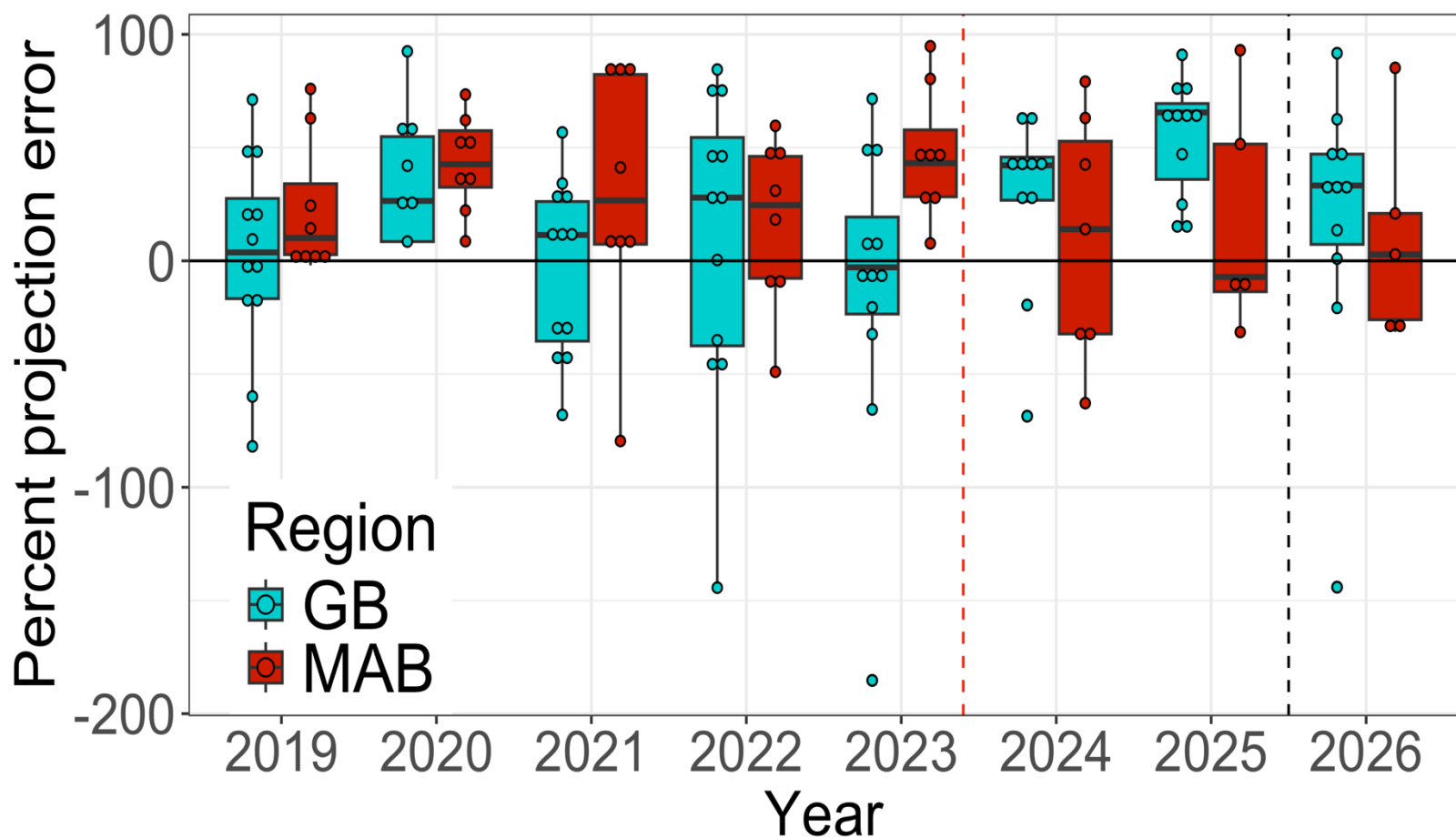
Mid-Atlantic forecasts were generally biased high during 2019-2024.

The 2025 RT observed that recruitment has declined and natural mortality increased in recent years due to e.g., warming bottom temperatures, thus explaining the overestimation.

After increasing M and reducing recruitment based on the RT results, the 2025 SAMS forecast (to 2026) was accurate.

SAMS Model Performance

Georges Bank



Georges Bank forecasts from 2019-2023 tended to be slightly high, but not significantly so.

Consistent with this, the 2025 RT increased Georges Bank M from 0.2 to 0.27.

Georges Bank projections have been overestimates for 2024-2026. This is associated with increased M likely due to *Asterias* predation.

Question: Should M be increased this year in Georges Bank?

What should Georges Bank M be?

Natural mortality in future years may revert to its pre-2024 baseline, or may remain at elevated levels. What should be used as M in the SAMS model?

Option 1. Continue to use $M = 0.27$, and caution managers that GB forecasts may be overestimates (as was done for the Mid-Atlantic).

Option 2. As in option 1, but include sensitivity runs with an elevated M.

Option 3. Increase the estimates of M in SAMS. This is not recommended at this time both because of the uncertainty in this quantity, and because increases in M have implications for reference points etc. Can be considered in the next MT assessment.

Calculation of ACL and OFLs

$F_{MSY} = 0.49$, based on 2025 RT assessment for the combined MA+GB scallop stock

F_{ACL} is defined as the 25th percentile of the F_{MSY} distribution from the SYM reference point model. In other words, fishing at F_{ACL} has a 75% chance of being below the true F_{MSY} . From the 2025 RT assessment, $F_{ACL} = 0.36$ for MA + GB scallops

These calculations do not include GOM scallops. We use $F_{MSY} = 0.36$ and $F_{ACL} = 0.29$ in the GOM, based on the estimates from GB.

The SAMS model was initialized to 2026 survey data, then advanced to 2027 using management specified in Framework 40. Then each area was fished at its ACL or OFL fishing mortality target. For the 2028 OFL, in 2027, each area was fished at its ACL.

Proposed 2027-28 ACL and OFLs

Year	Bms	ExplBms	ACL-Land	ACL-Disc	ACL-Tot	OFL-Land	OFL-Disc	OFL-Tot
2026	80535	38413	12757	2655	15412	16299	3346	19645
2027	110323	43997	13152	3516	16668	16747	4671	21418
2028	118148	42543	13520	3658	17178	17279	4858	22137

All quantities are in metric tons meats