Evaluation of Black-, Grey- and White-Box Controllers

Operating Model Conditioning

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22 May, 2018

Operating model to simulate 4 contrasting stocks

- Atlantic bigeye tuna
- Thornback Ray
- Sprat
- Plaice

Life history parameters

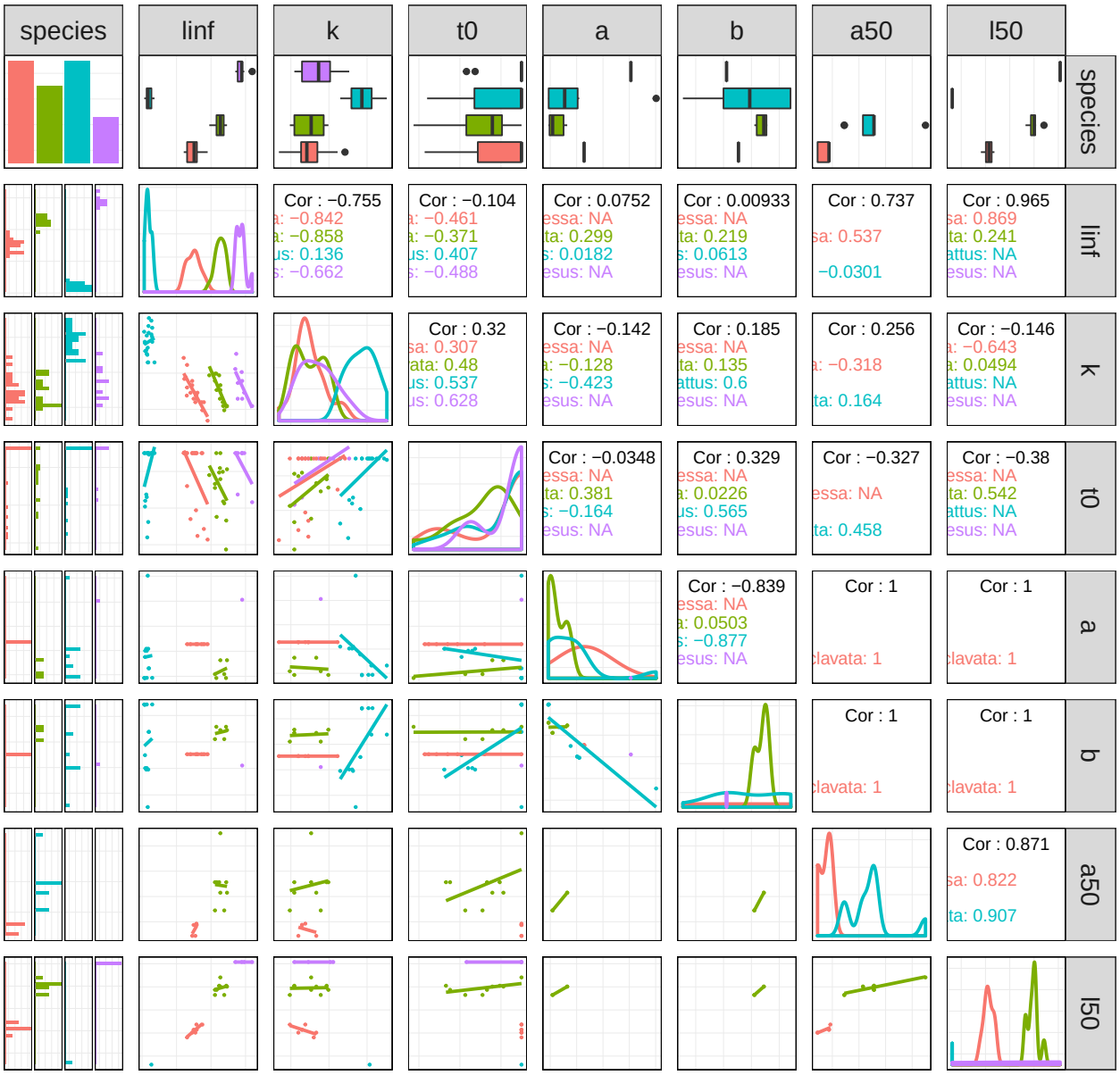

Figure 1 Pairwise scatter plots.

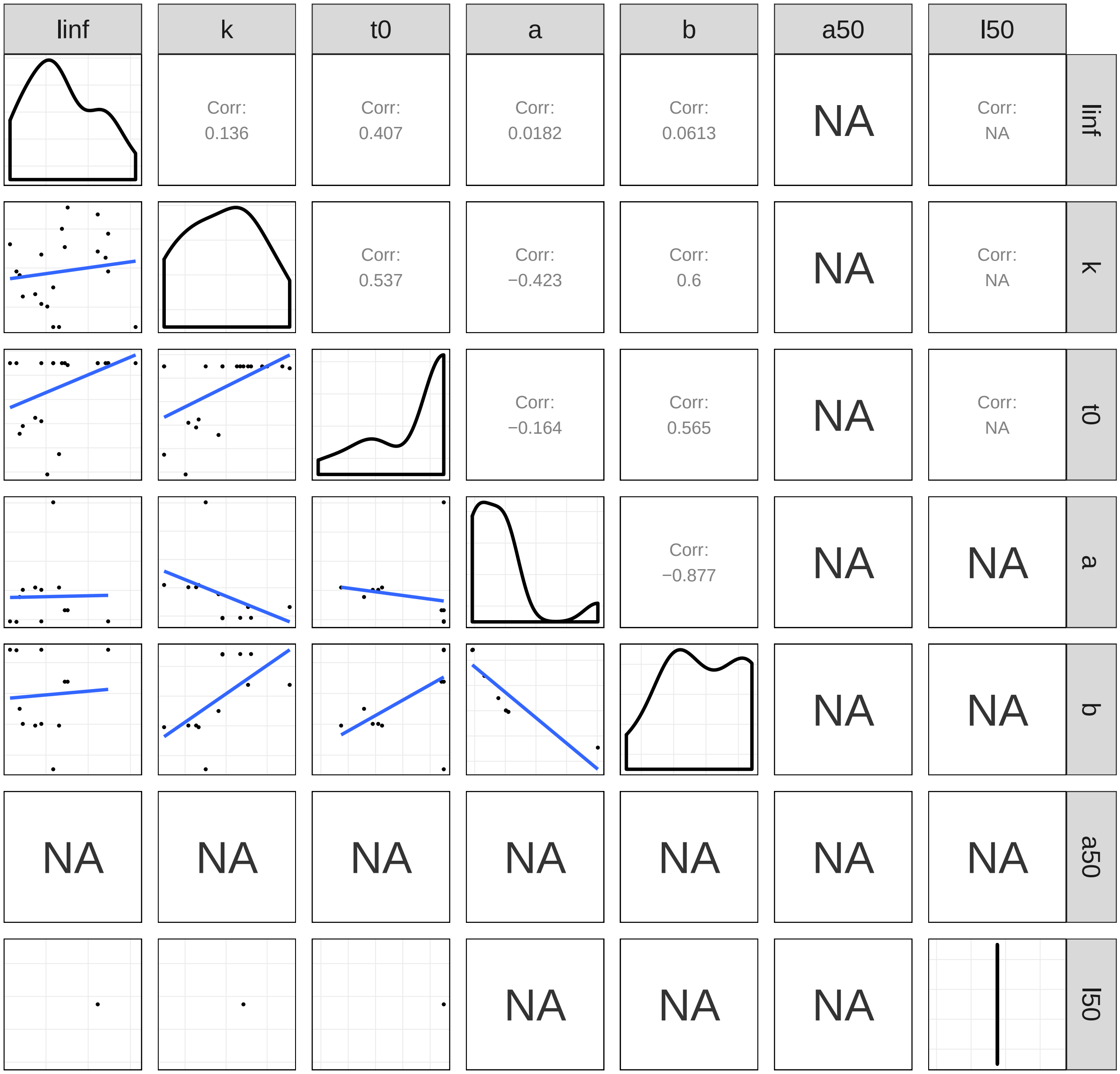

Figure 2 Pairwise scatter plots of sprat life history parameters.

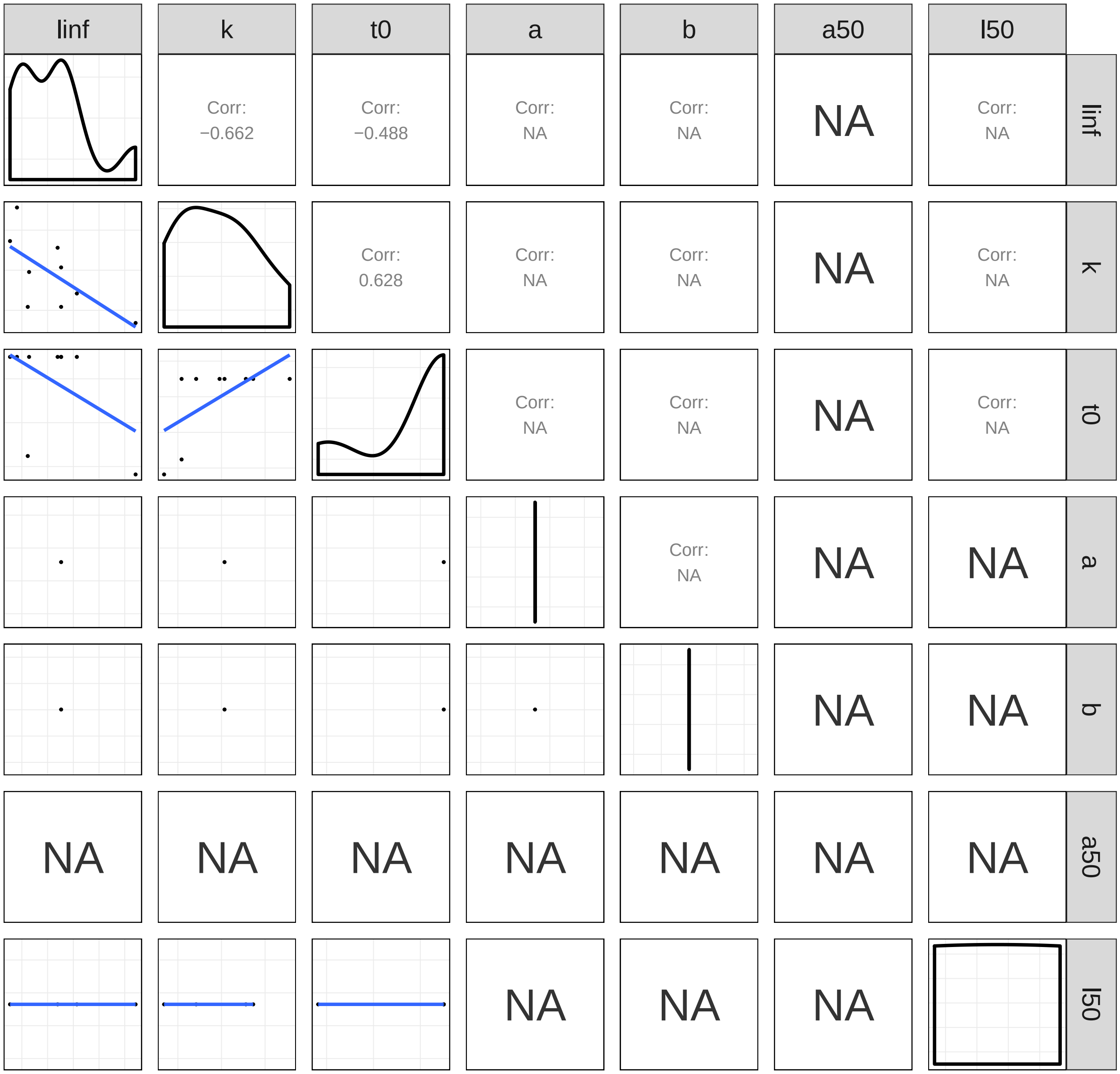

Figure 3 Pairwise scatter plots of bigeye life history parameters.

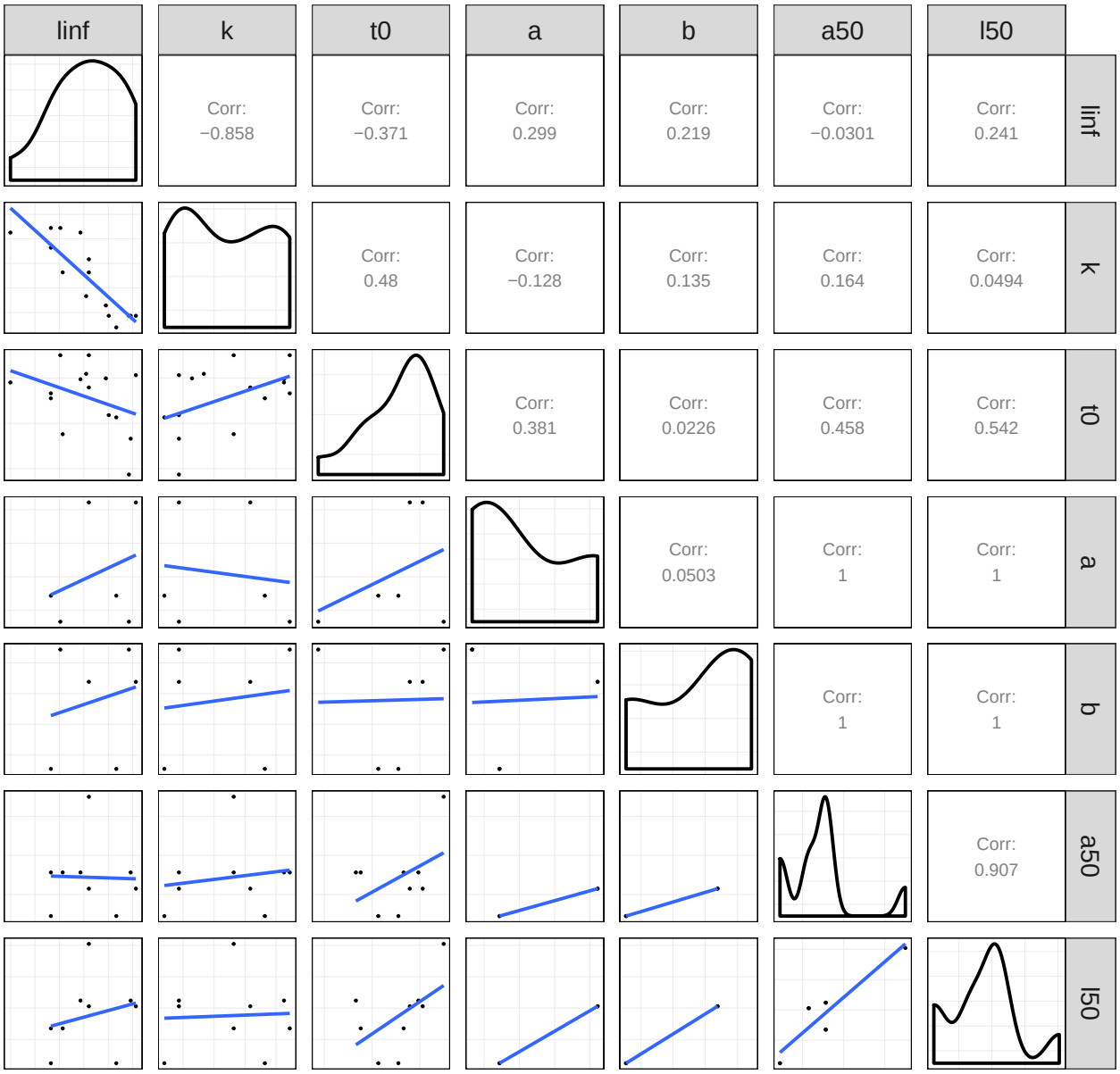

Figure 4 Pairwise scatter plots of thornback ray life history parameters.

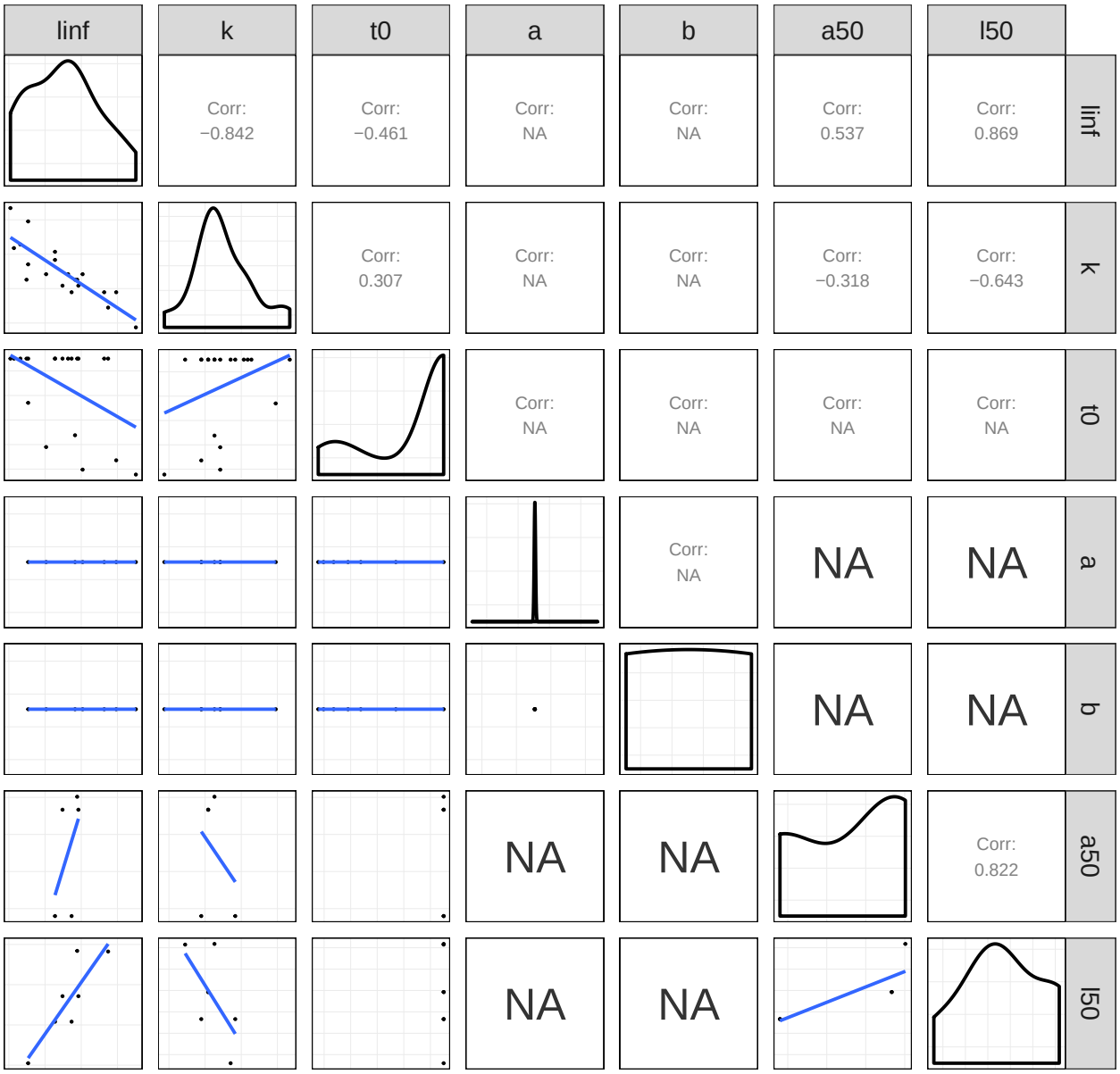

Figure 5 Pairwise scatter plots of plaice life history parameters.

Equilibrium dynamics

The parameters are then used by `lhEql` to simulate the equilibrium dynamics by combining the spawner/yield per recruit relationships with a stock recruiment relationship.

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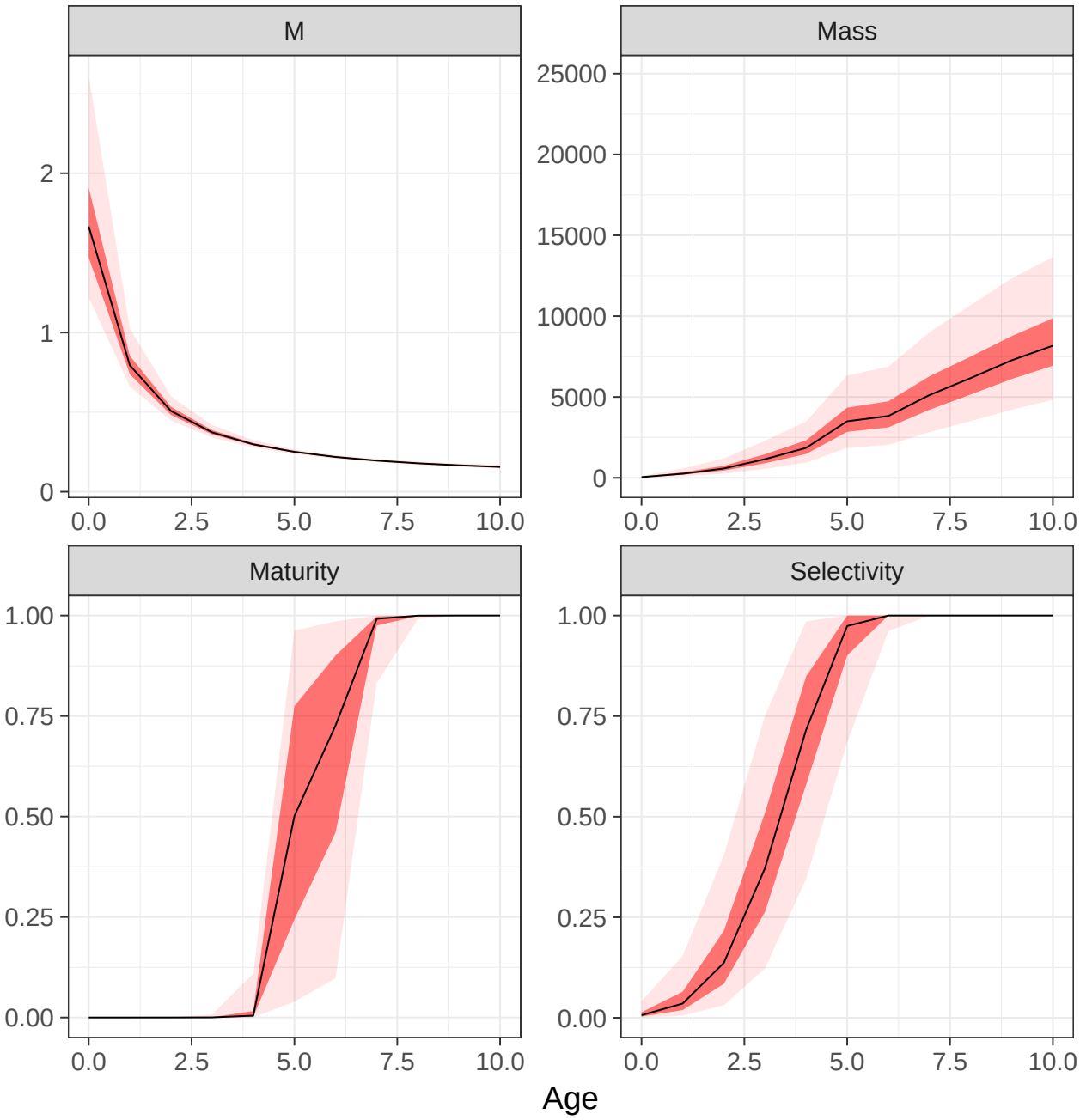

Figure 6 Vectors for thornback ray.

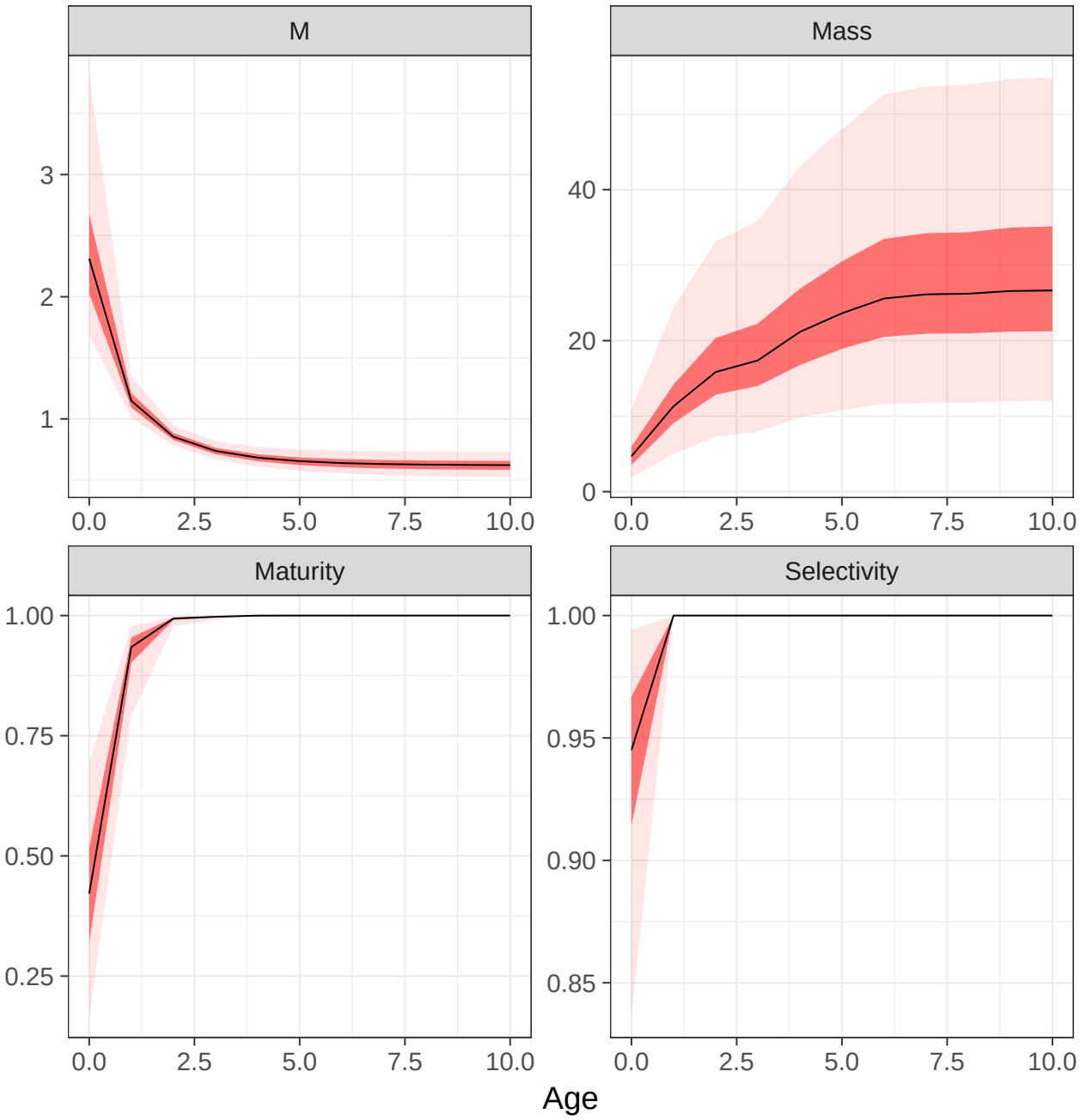

Figure 7 Vectors for sprat.

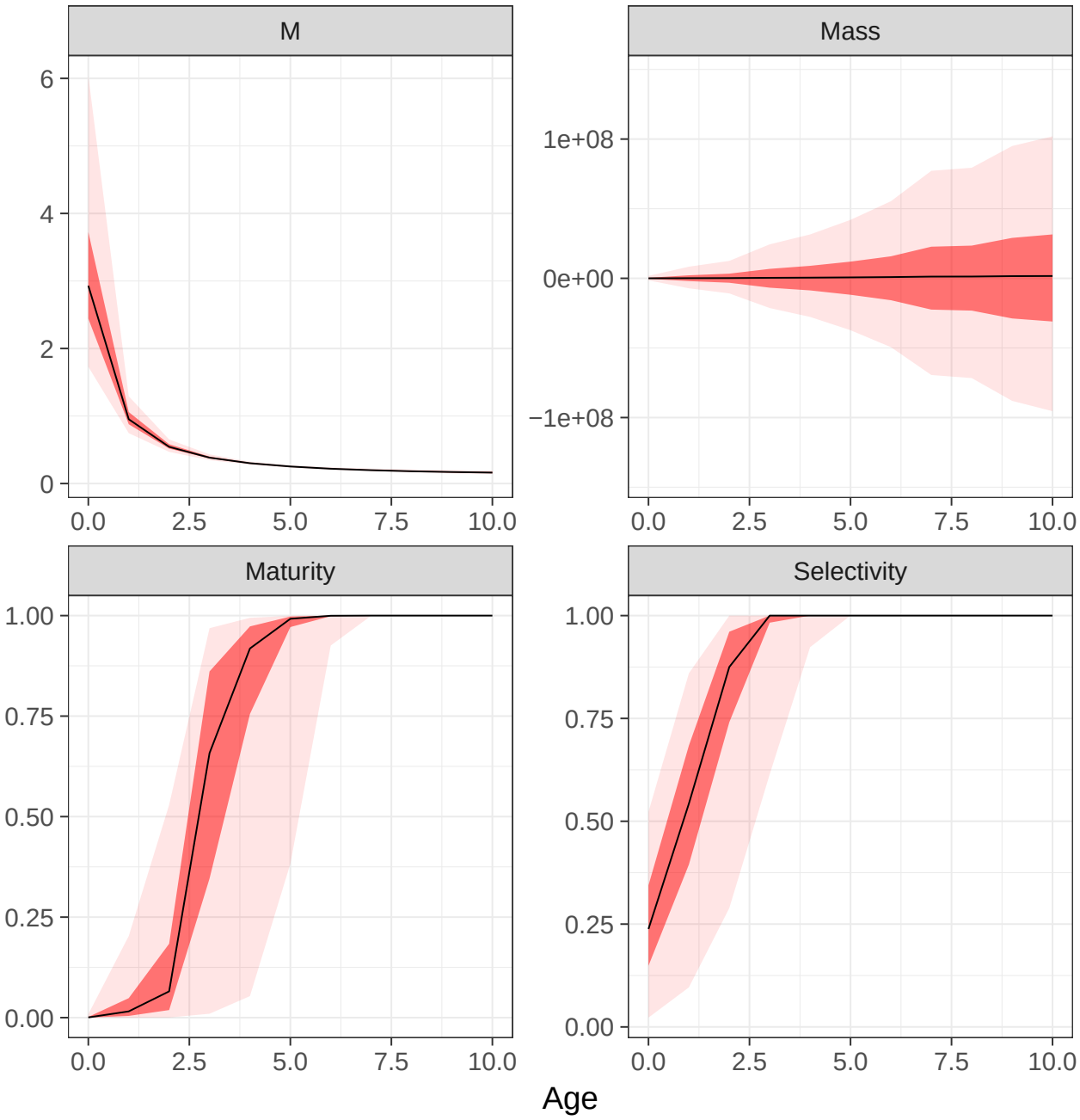

Figure 8 Vectors for bigeye.

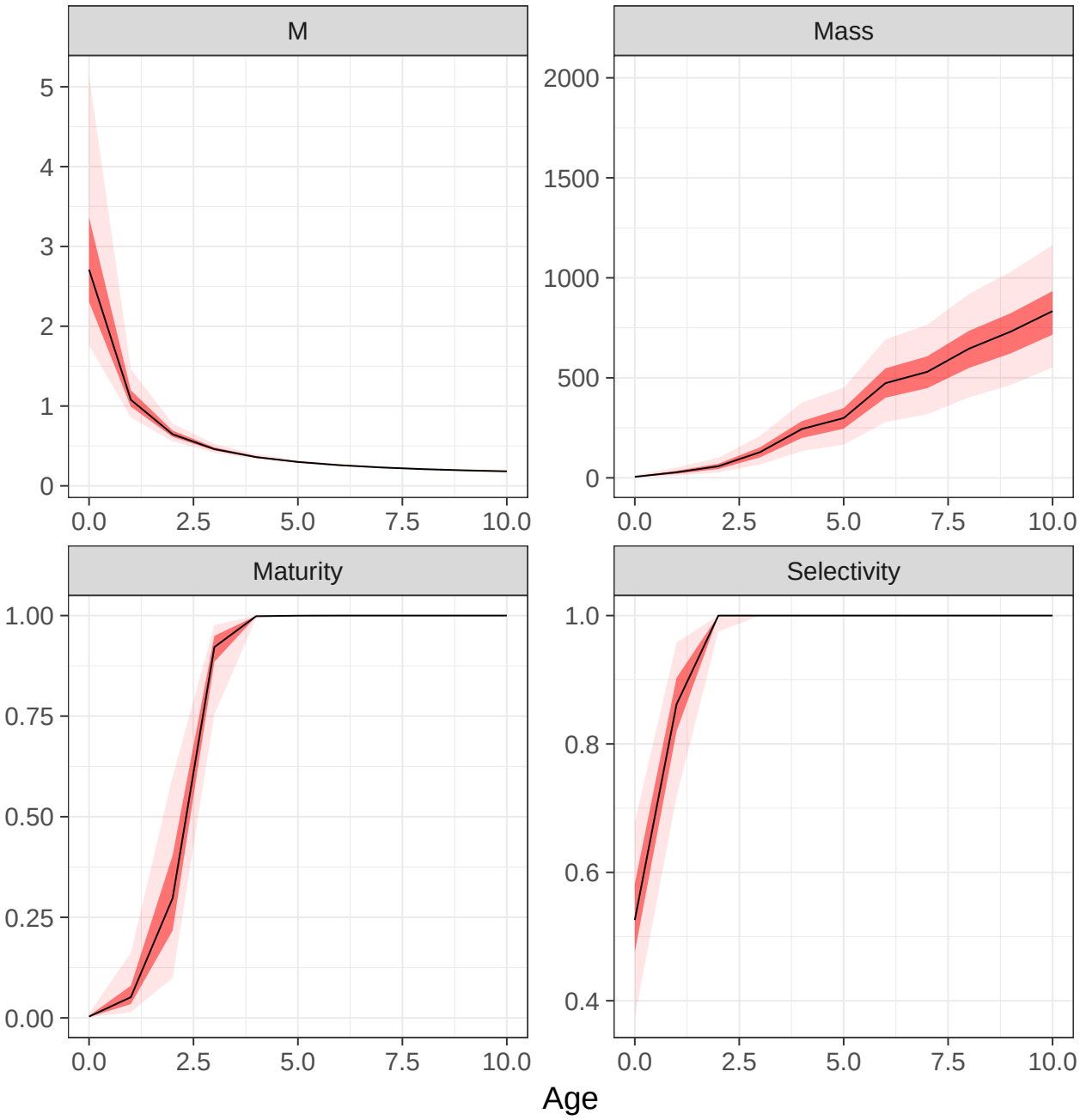

Figure 9 Vectors for Plaice.

Population dynamics

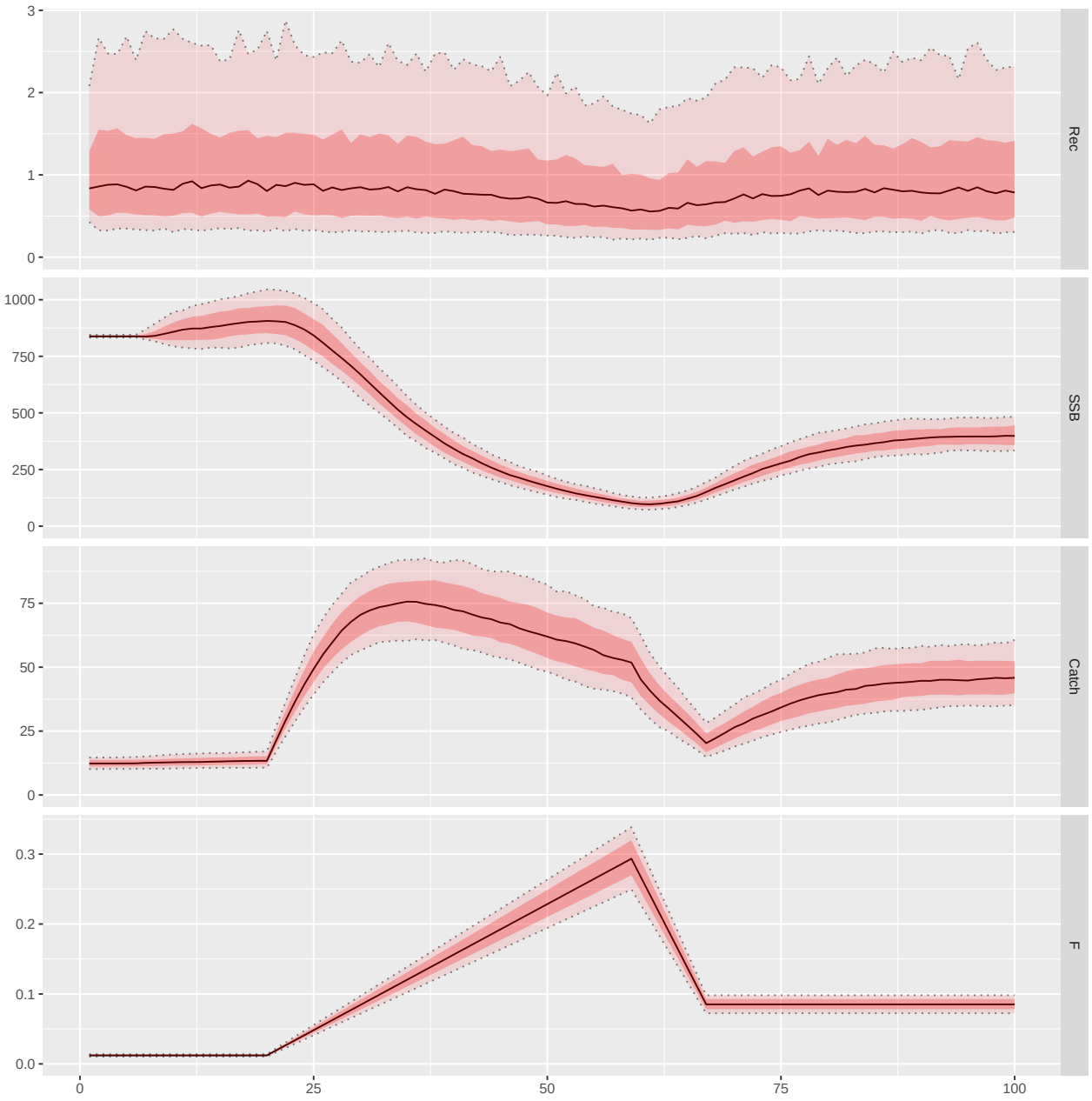

Figure 10 Time series for thornback ray.

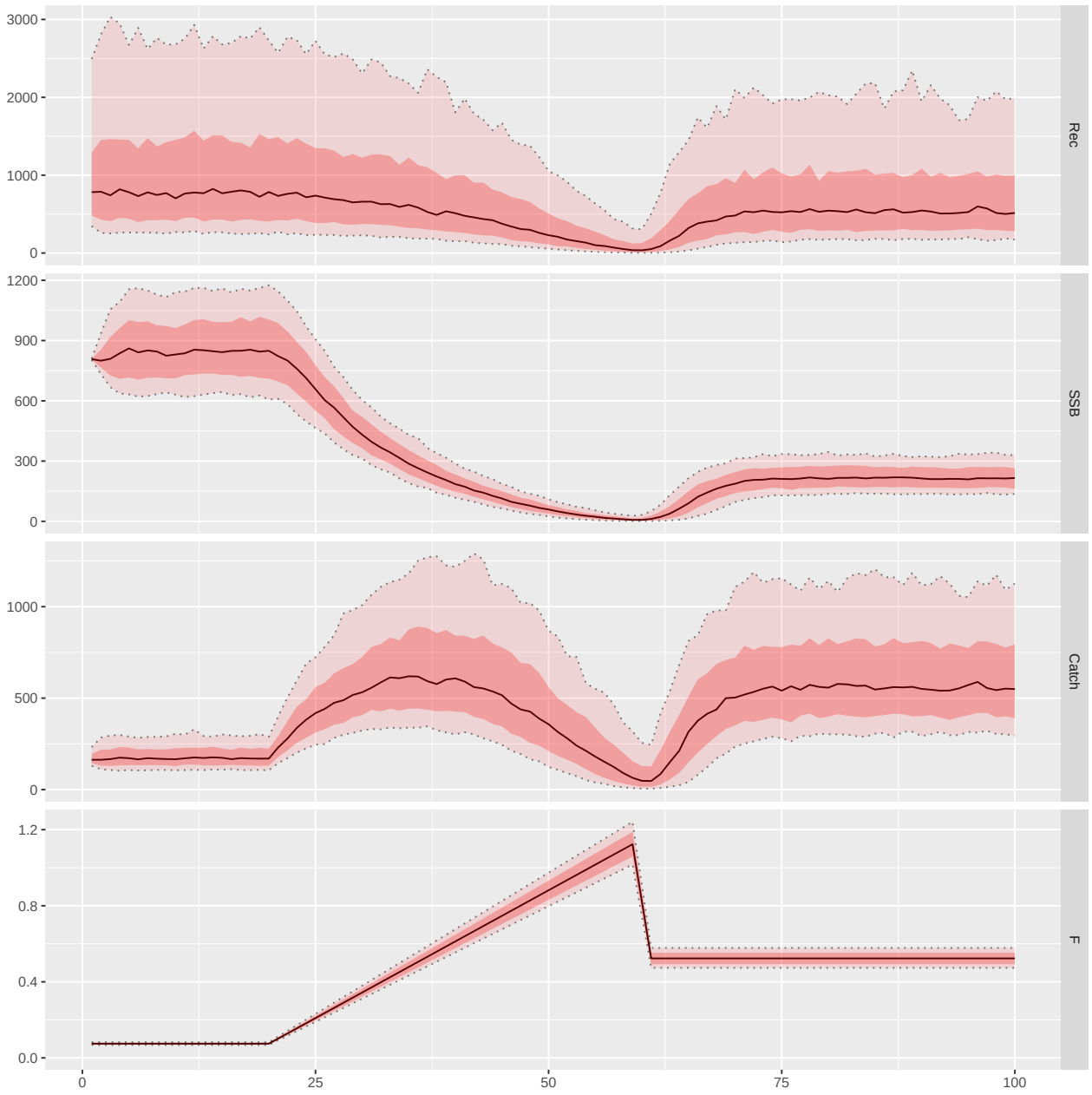

Figure 11 Time series for sprat.

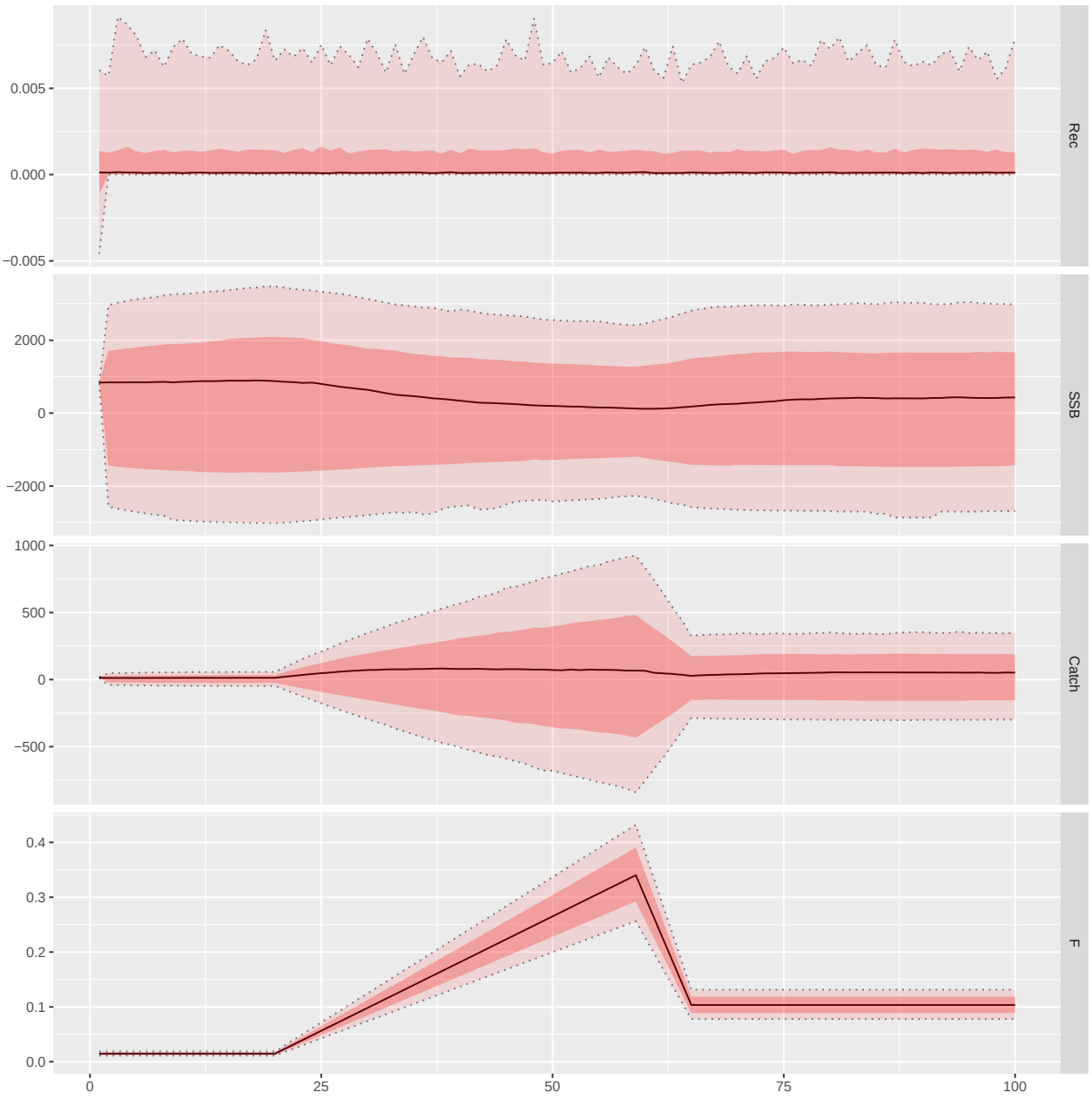

Figure 12 Time series for bigeye.

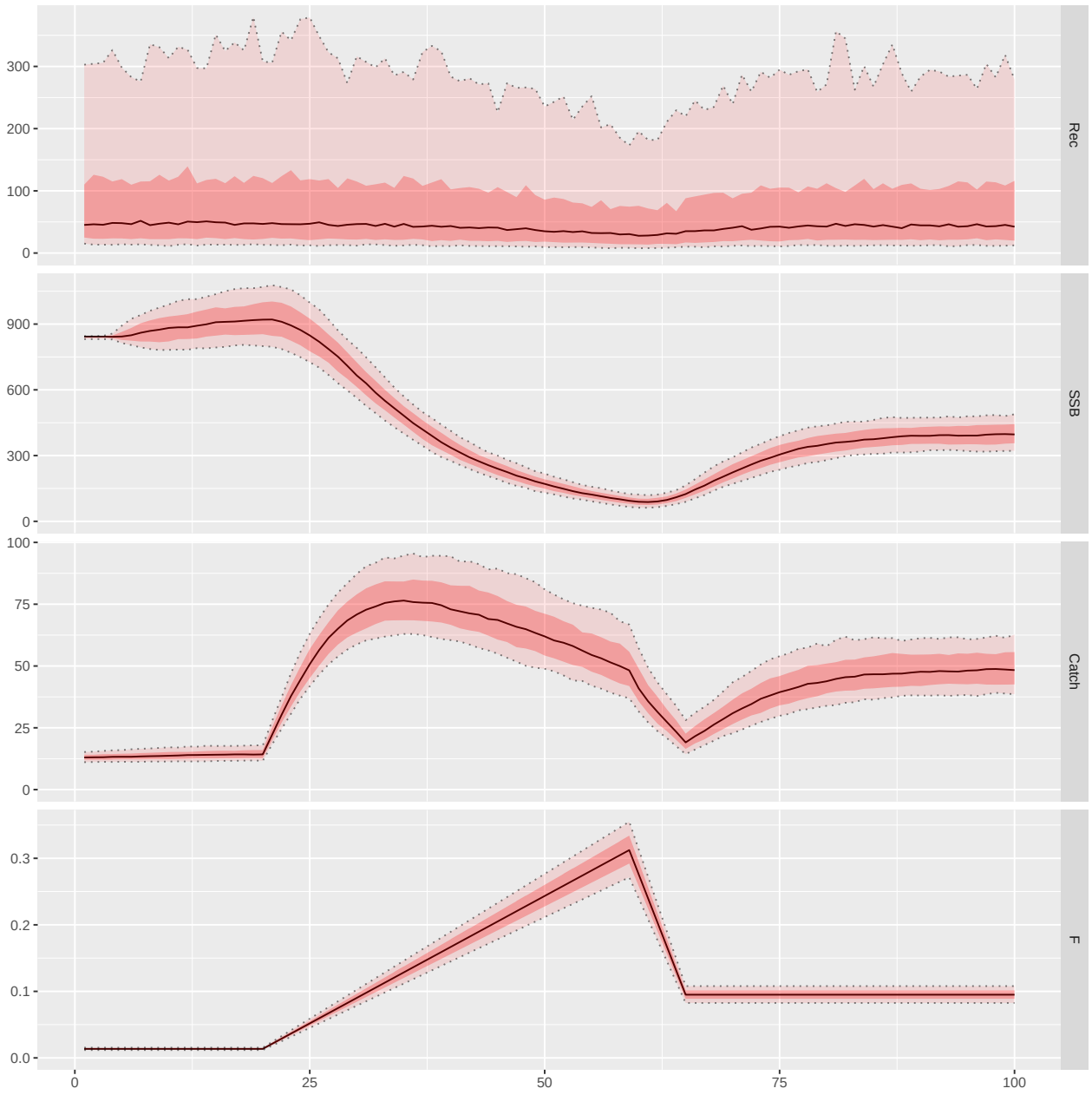

Figure 13 Time series for plaice.