

Supplementary Materials

Effects of Aging Uncertainty on the Estimation of Growth Functions of Major Tuna Species

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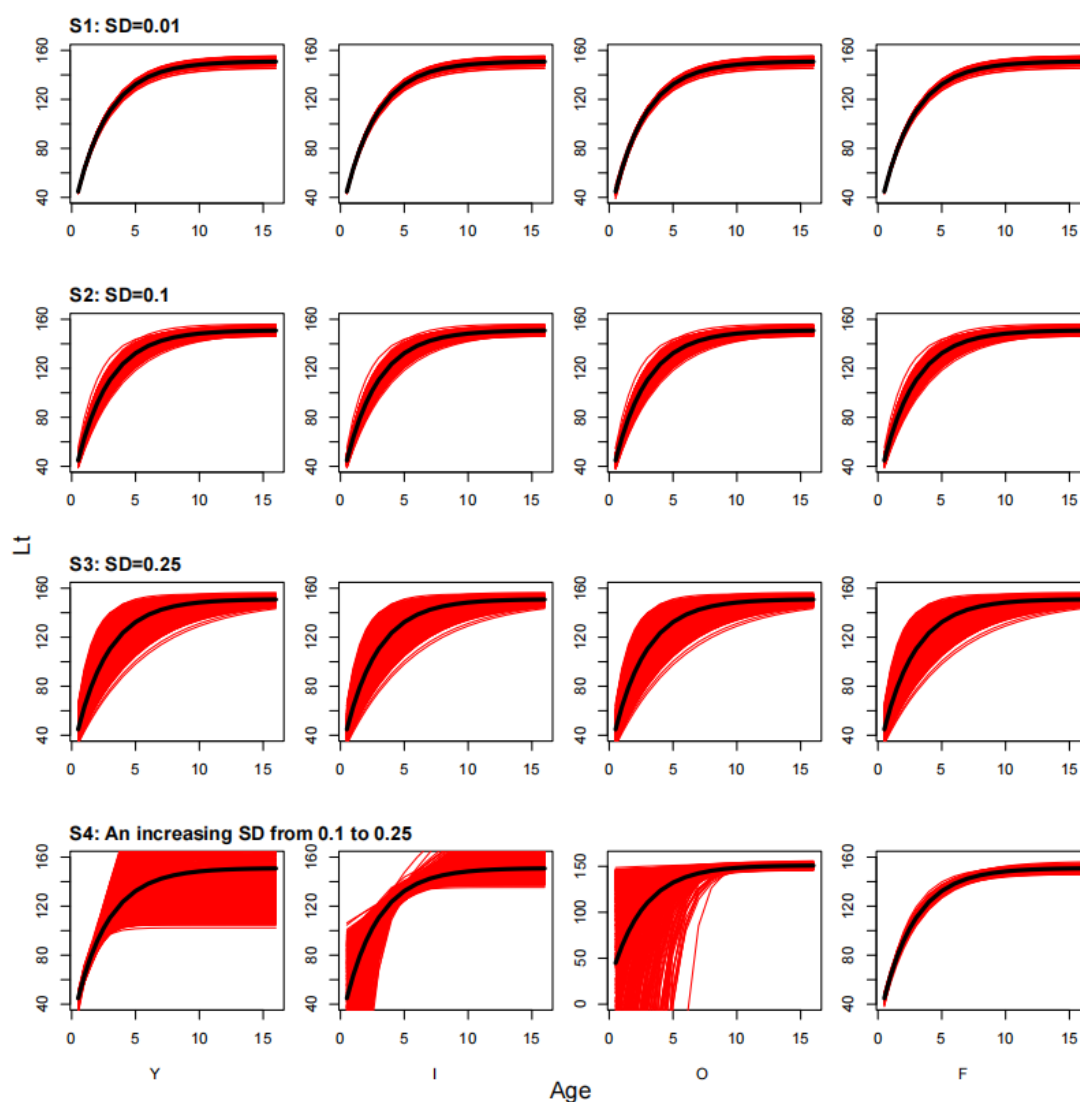


Figure S1. Distributions of estimated growth curve of simulated bigeye tuna.

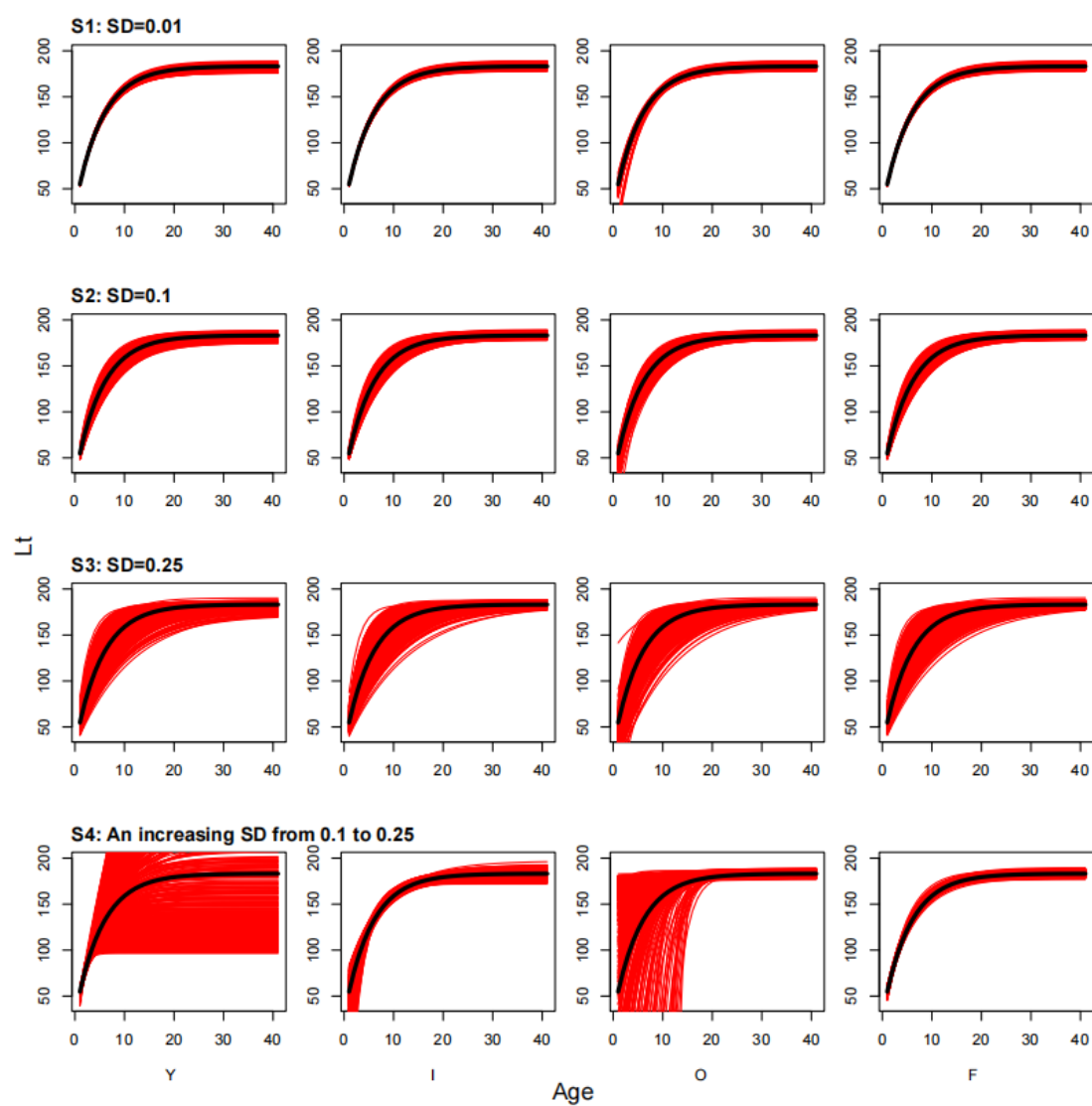


Figure S2. Distributions of estimated growth curve of simulated southern bluefin tuna.

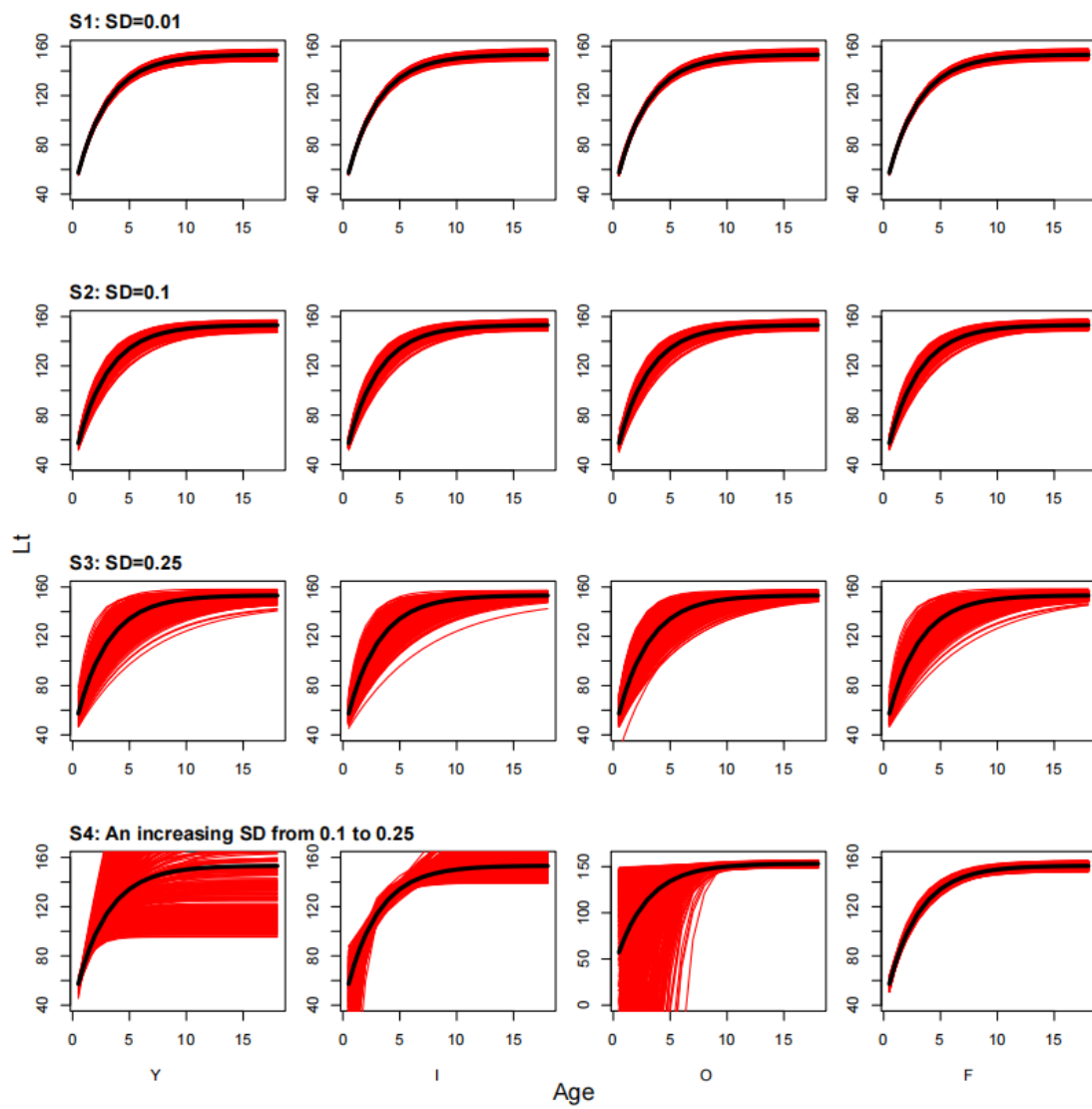


Figure S3. Distributions of estimated growth curve of simulated yellowfin tuna.

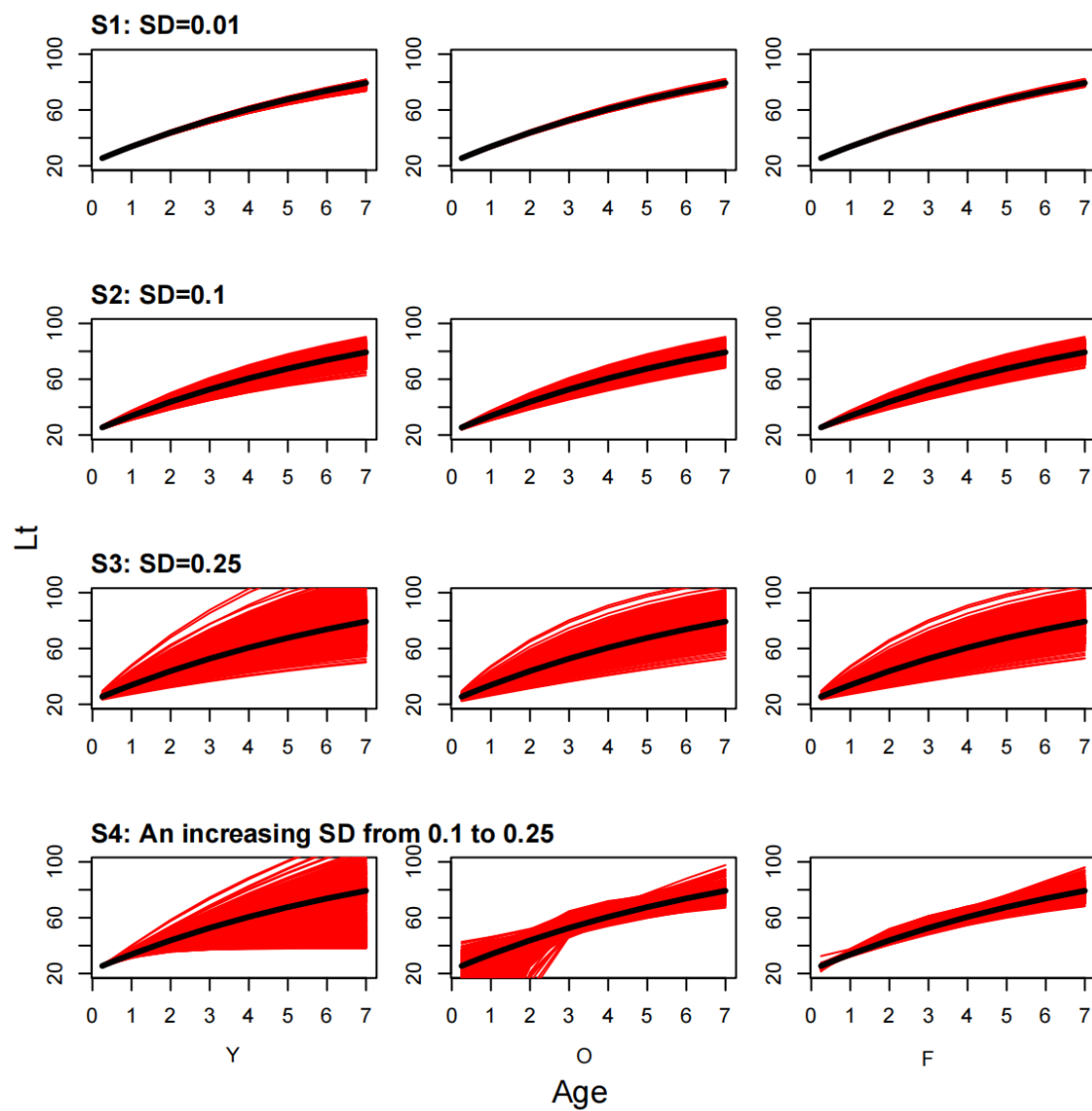


Figure S4. Distributions of estimated growth curve of simulated skipjack tuna.

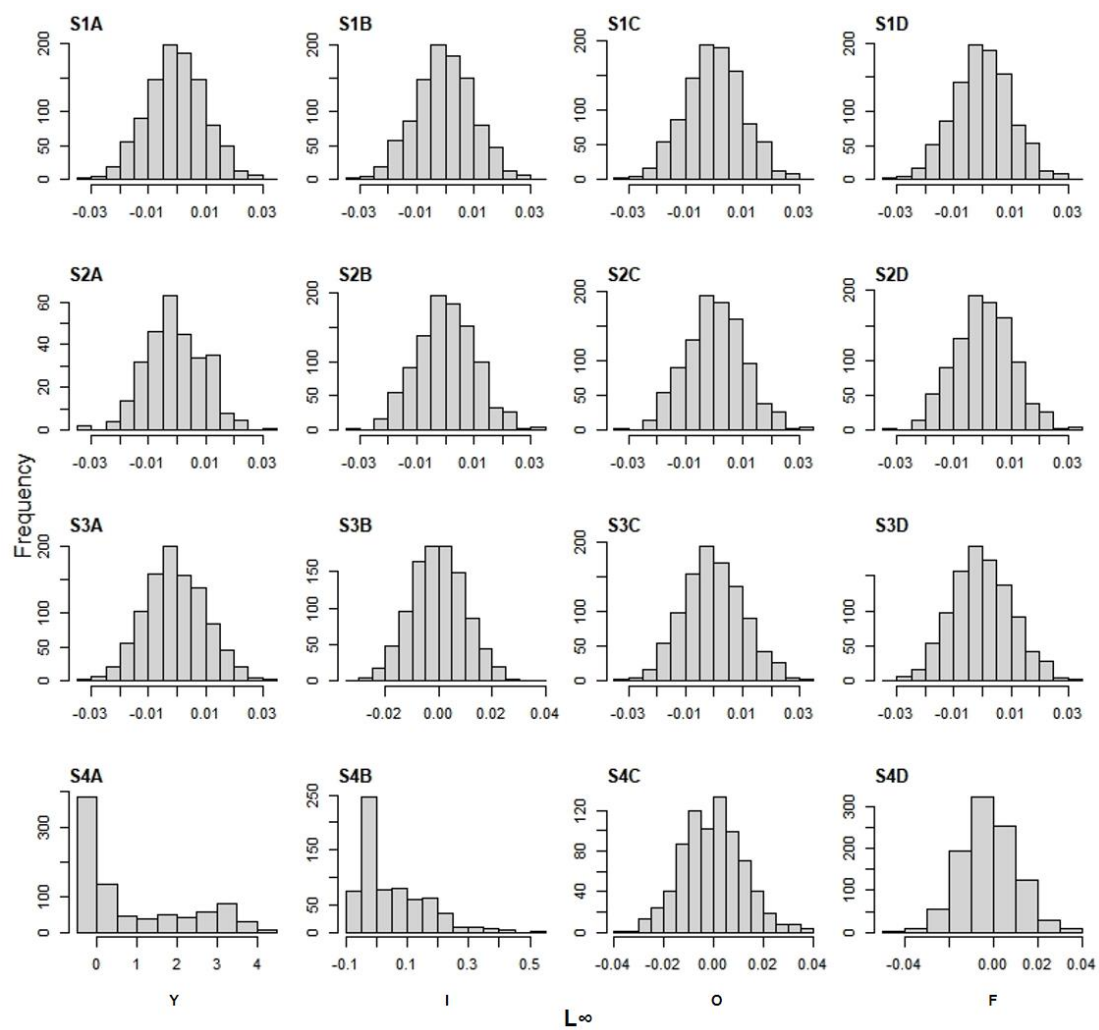


Figure S5. Distributions of estimated relative error of L_{∞} of albacore tuna.

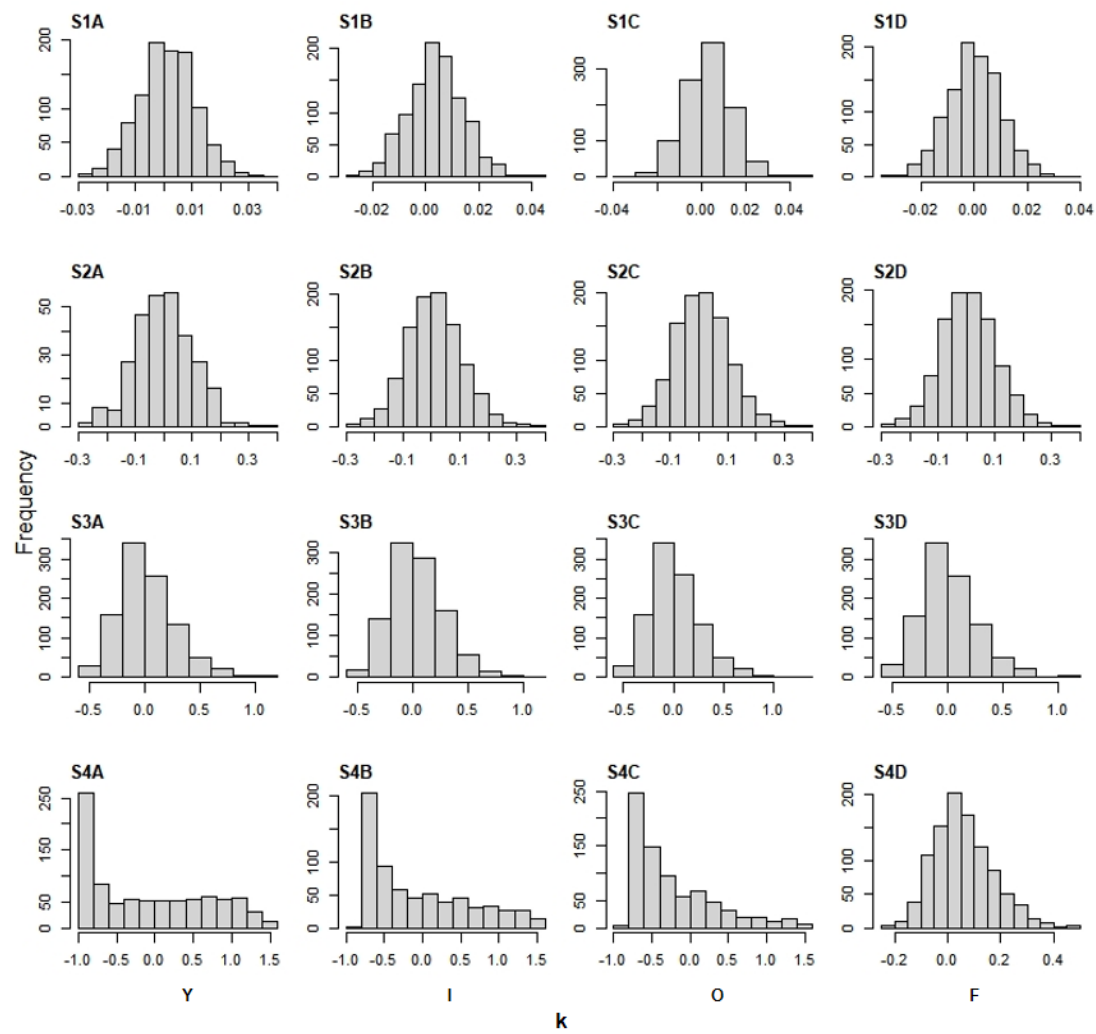


Figure S6. Distributions of estimated relative error of k of albacore tuna.

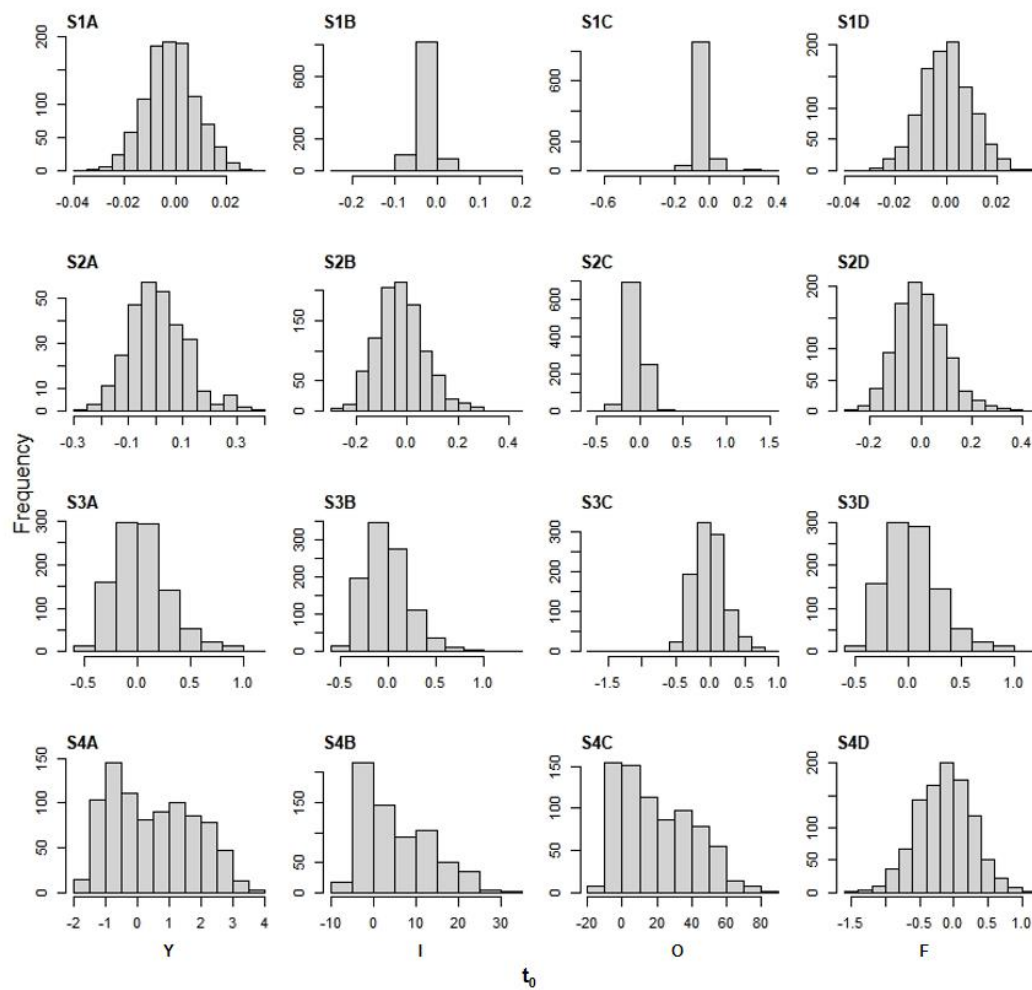


Figure S7. Distributions of estimated relative error of t_0 of albacore tuna.

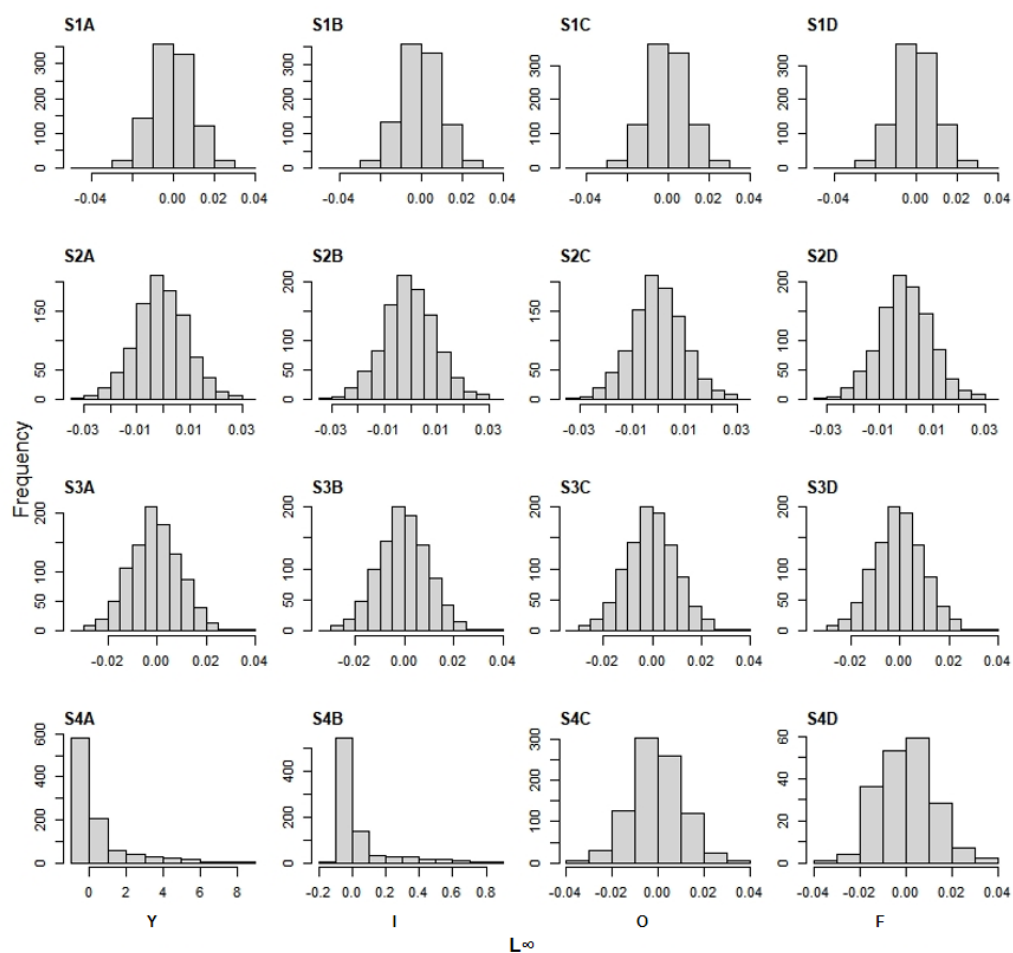


Figure S8. Distributions of estimated relative error of L_{∞} of bigeye tuna.

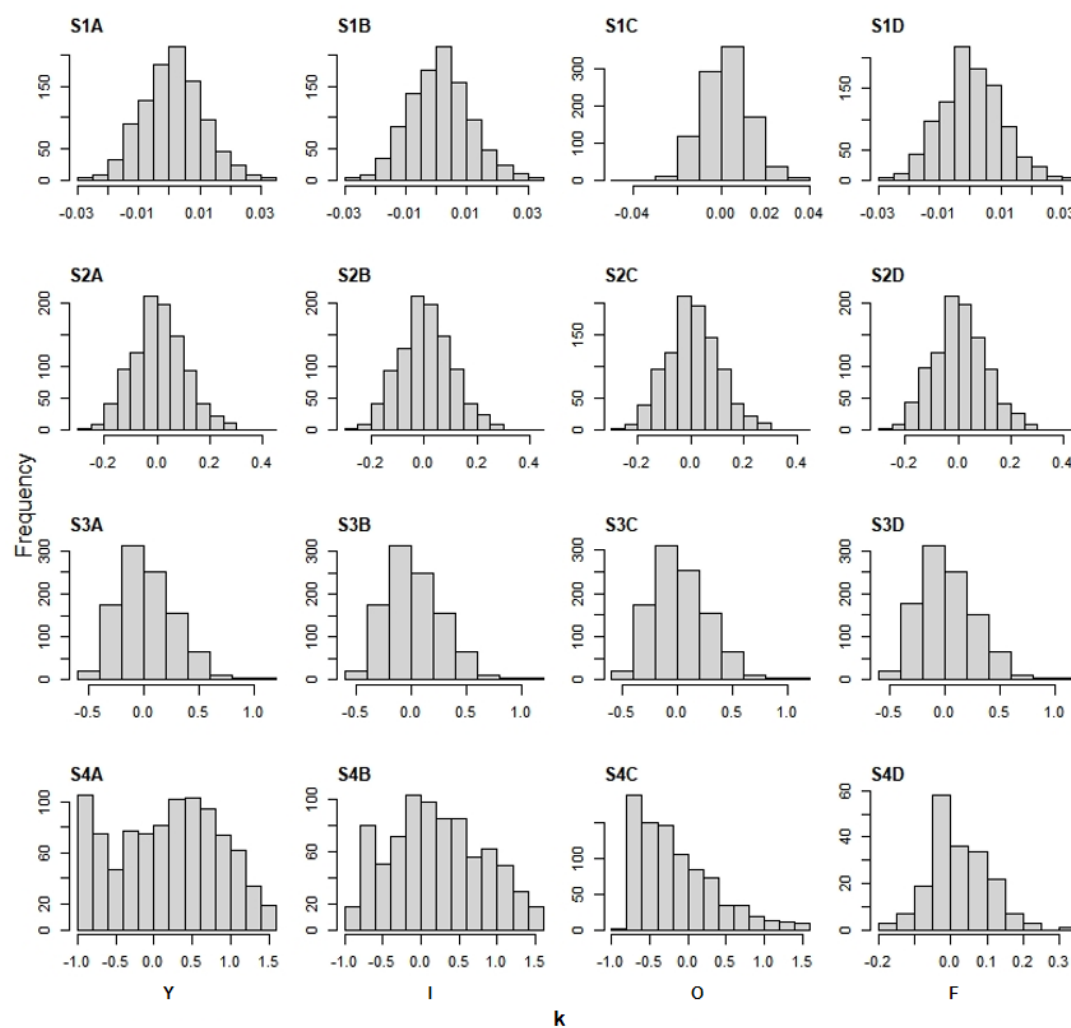


Figure S9. Distributions of estimated relative error of k of bigeye tuna.

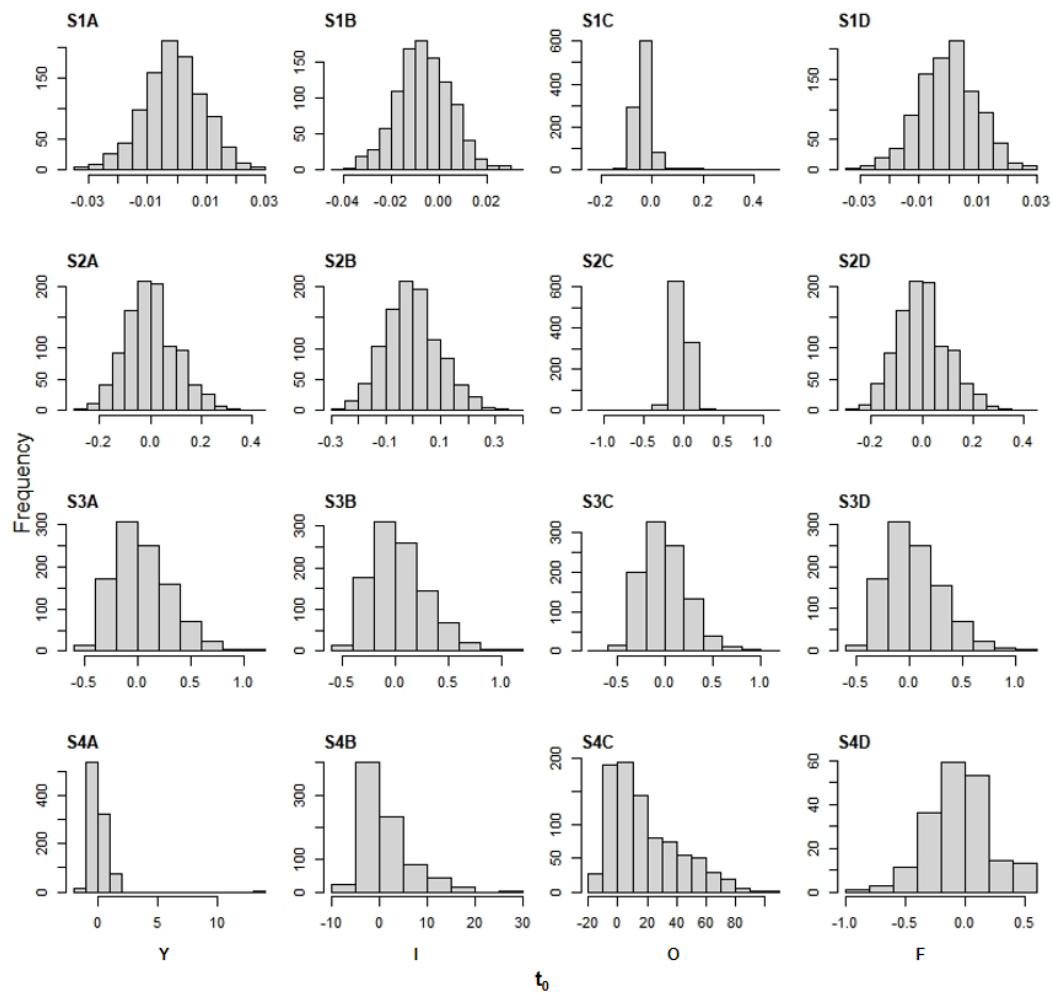


Figure S10. Distributions of estimated relative error of t_0 of bigeye tuna.

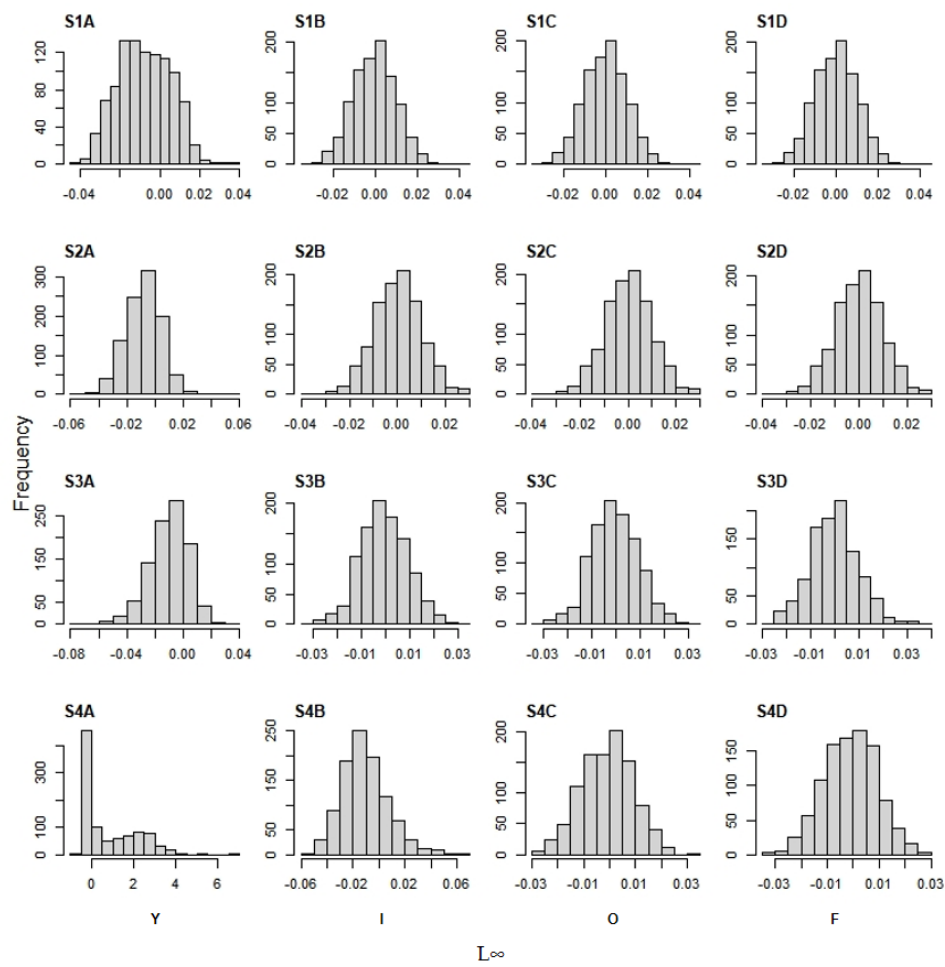


Figure S11. Distributions of estimated relative error of L_{∞} of southern bluefin tuna.

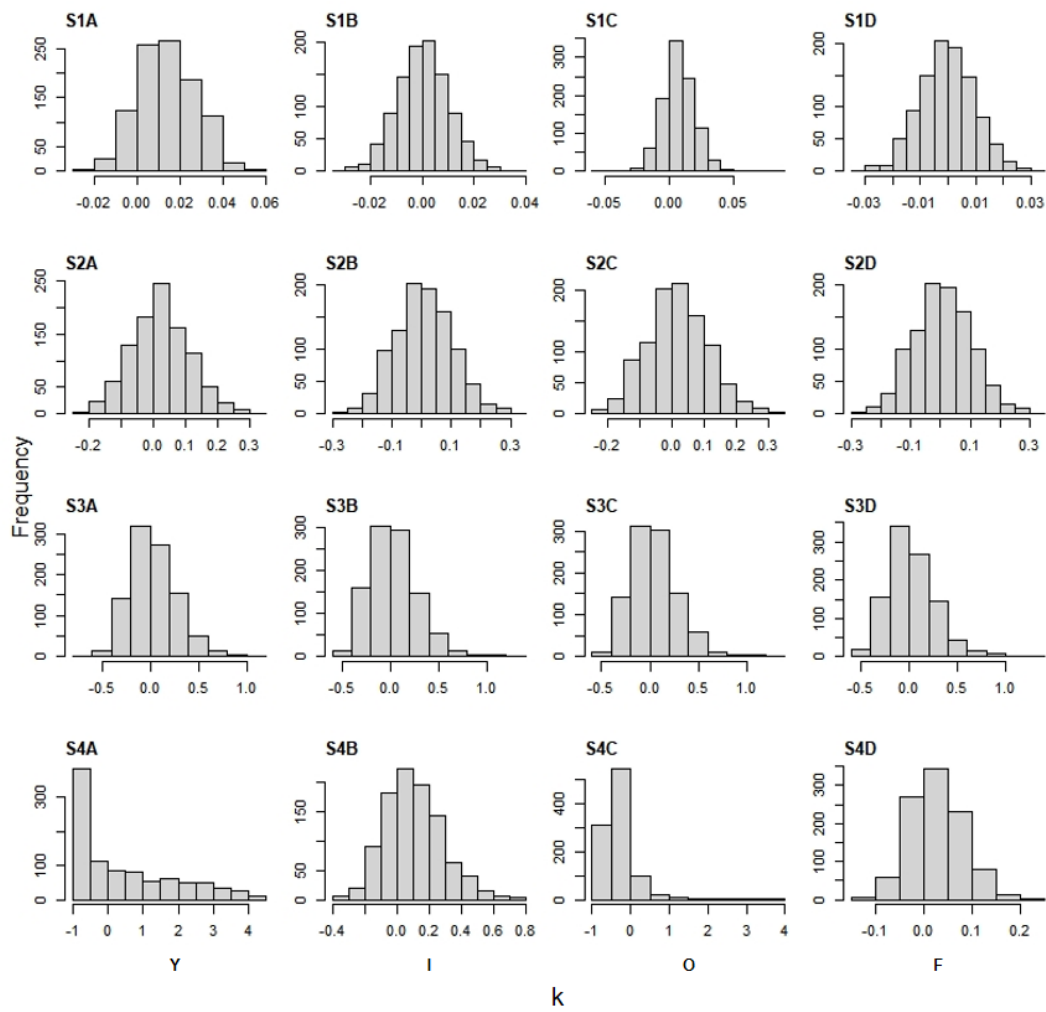


Figure S12. Distributions of estimated relative error of k of southern bluefin tuna.

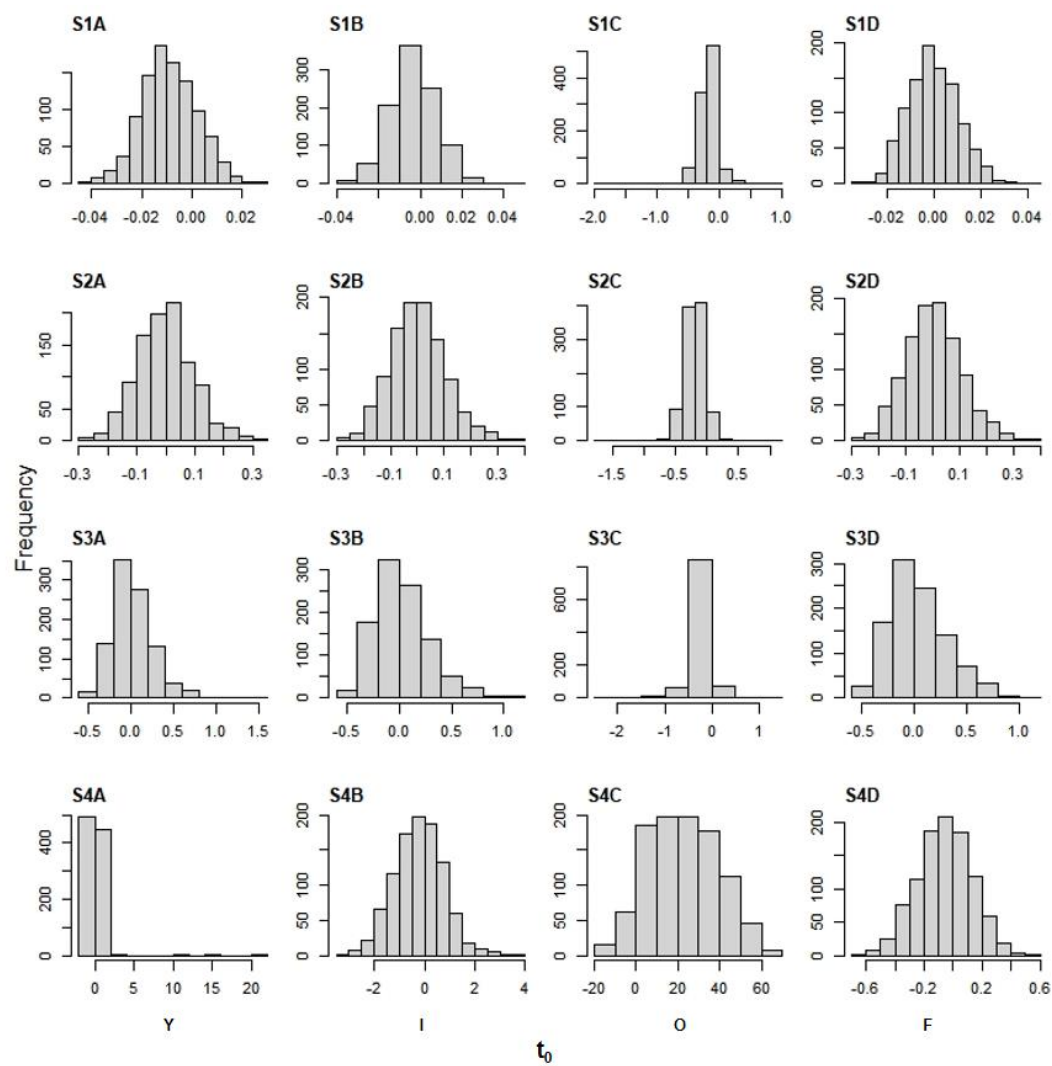


Figure S13. Distributions of estimated relative error of t_0 of southern bluefin tuna.

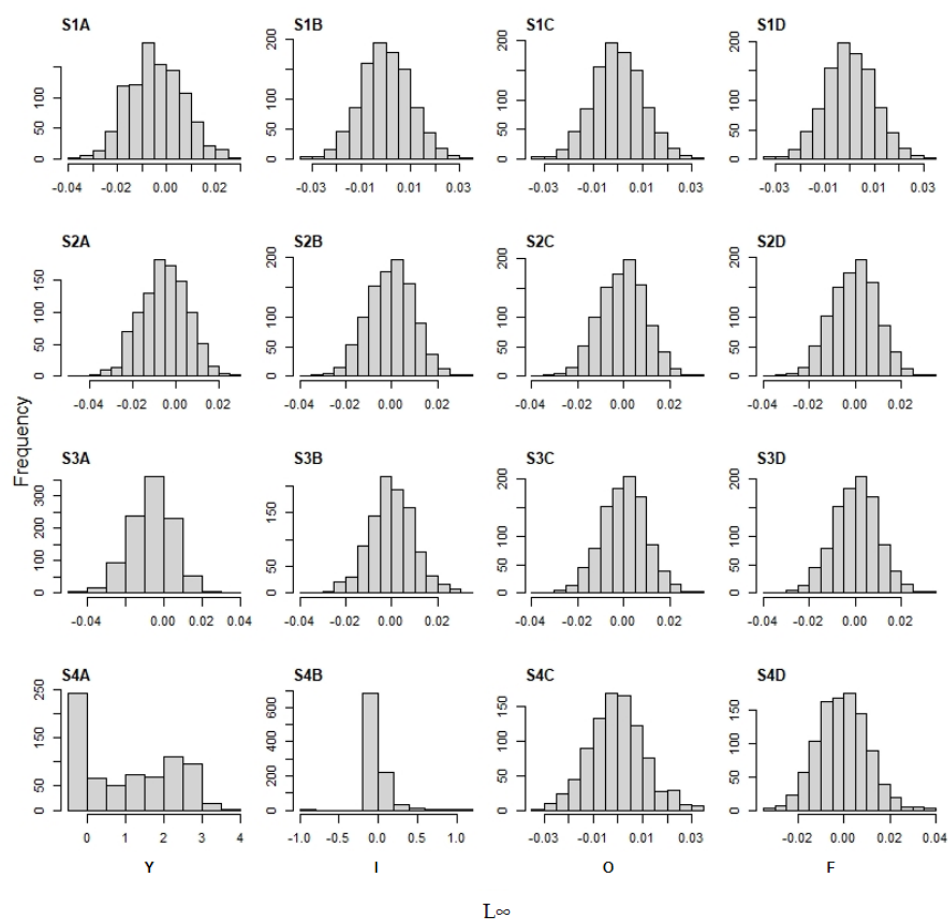


Figure S14. Distributions of estimated relative error of L_{∞} of yellowfin tuna.

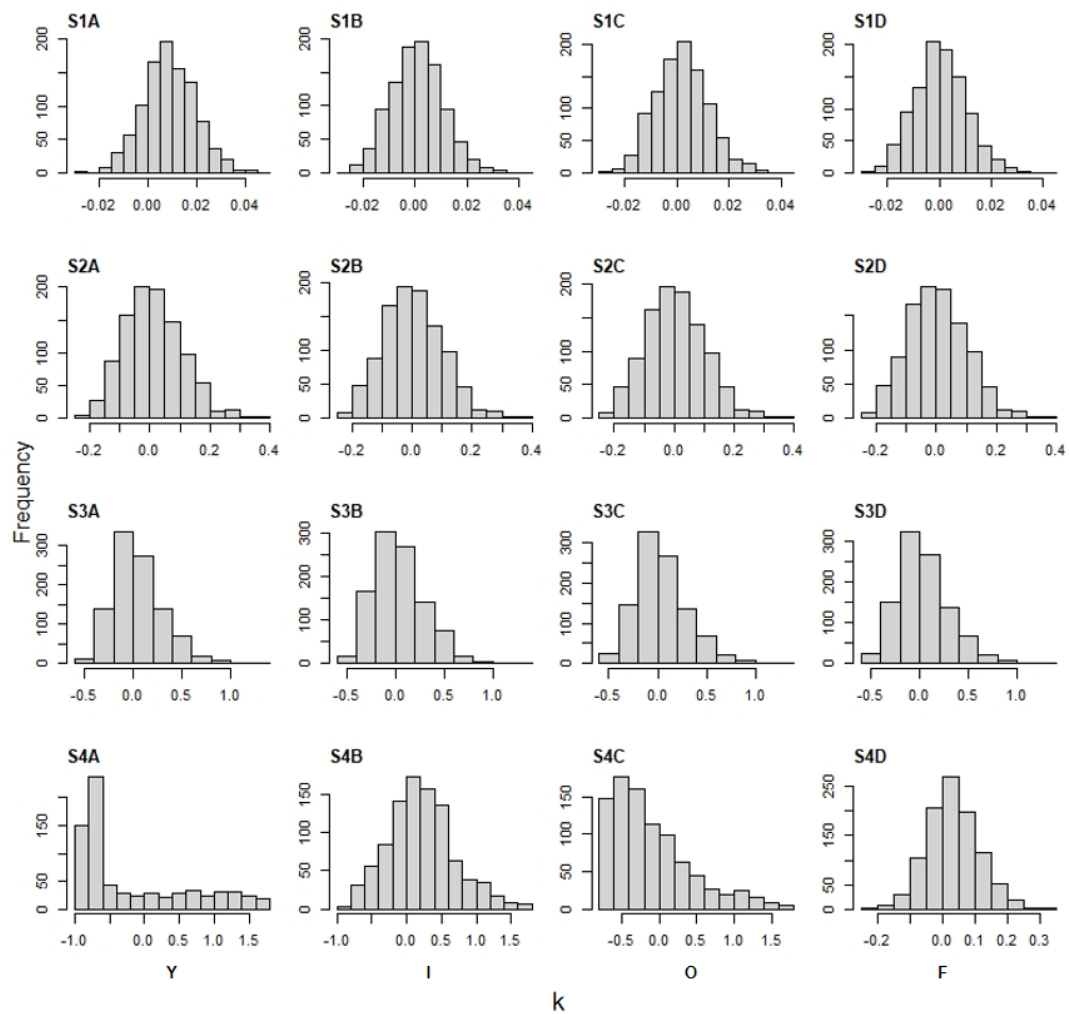


Figure S15. Distributions of estimated relative error of k of yellowfin tuna.

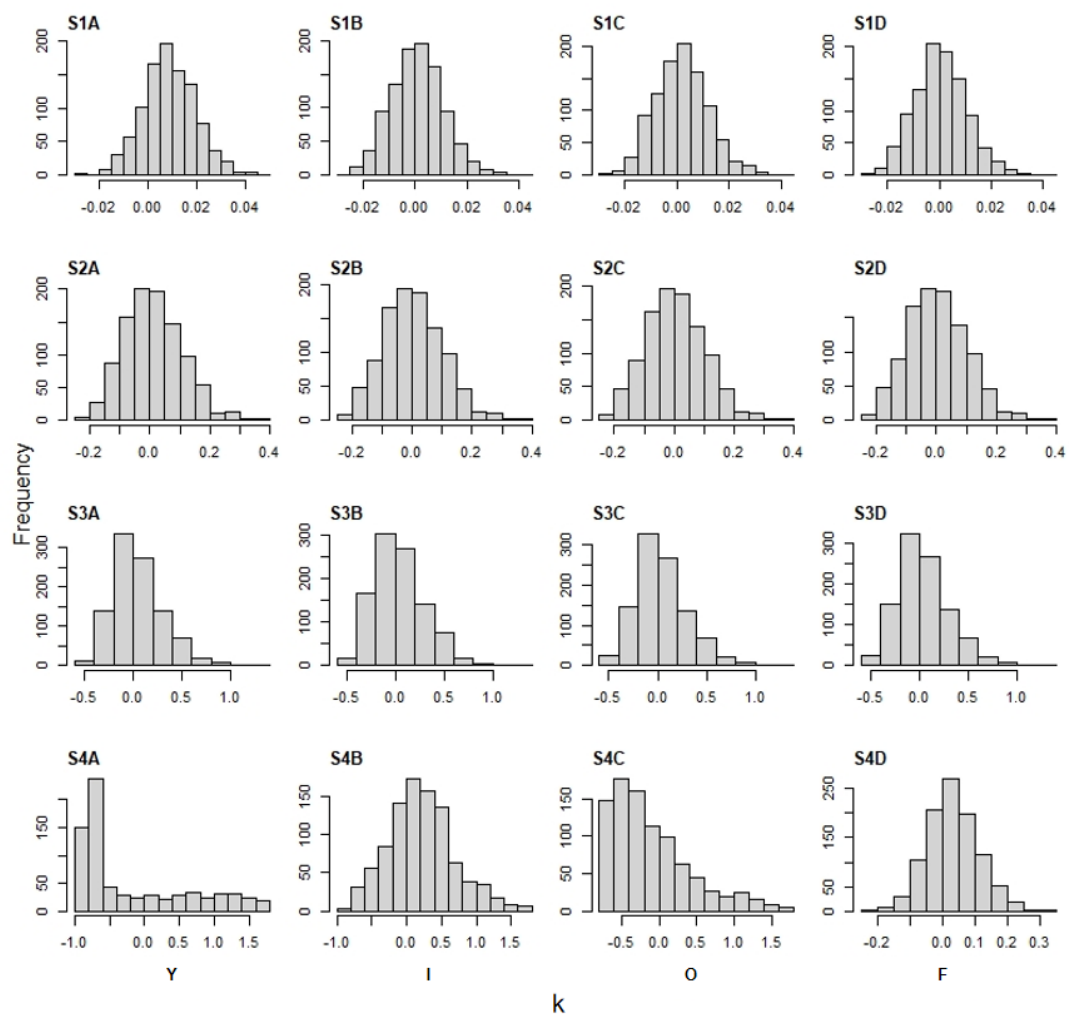


Figure S16. Distributions of estimated relative error of t_0 of yellowfin tuna.

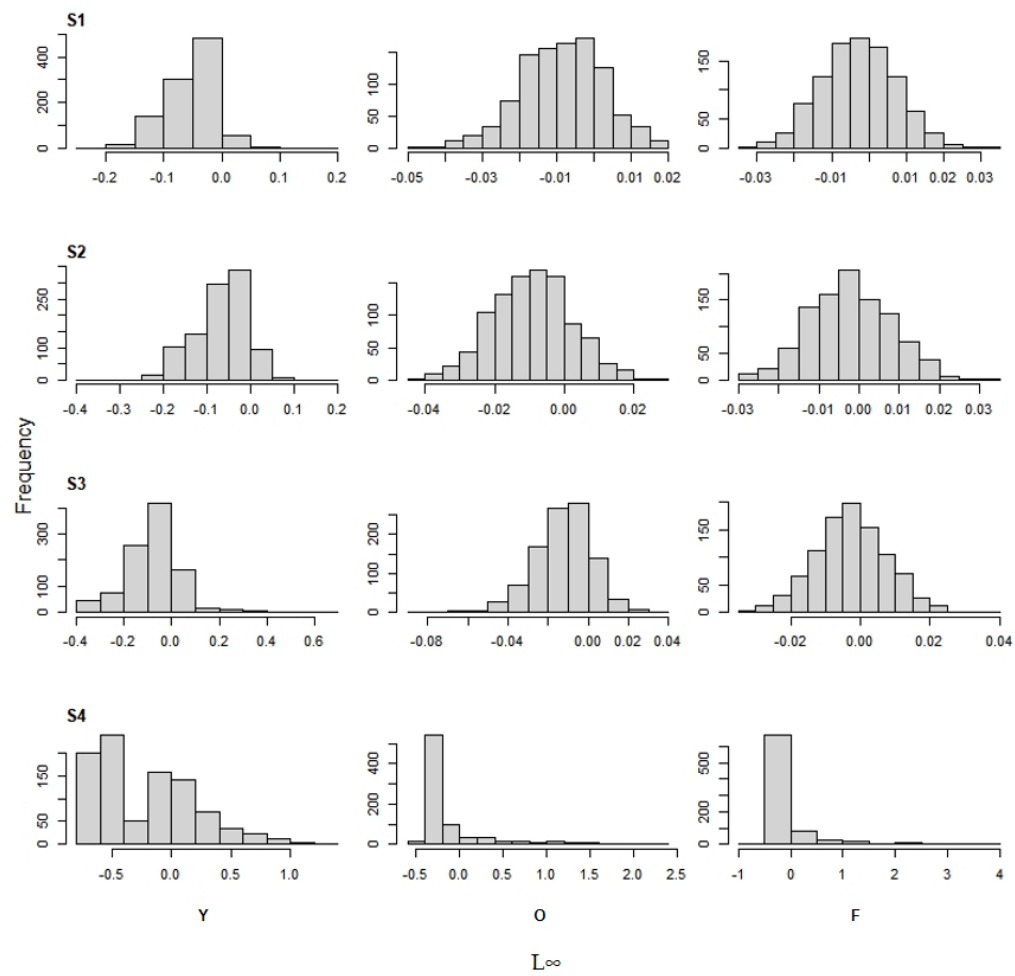


Figure S17. Distributions of estimated relative error of L_{∞} of skipjack tuna.

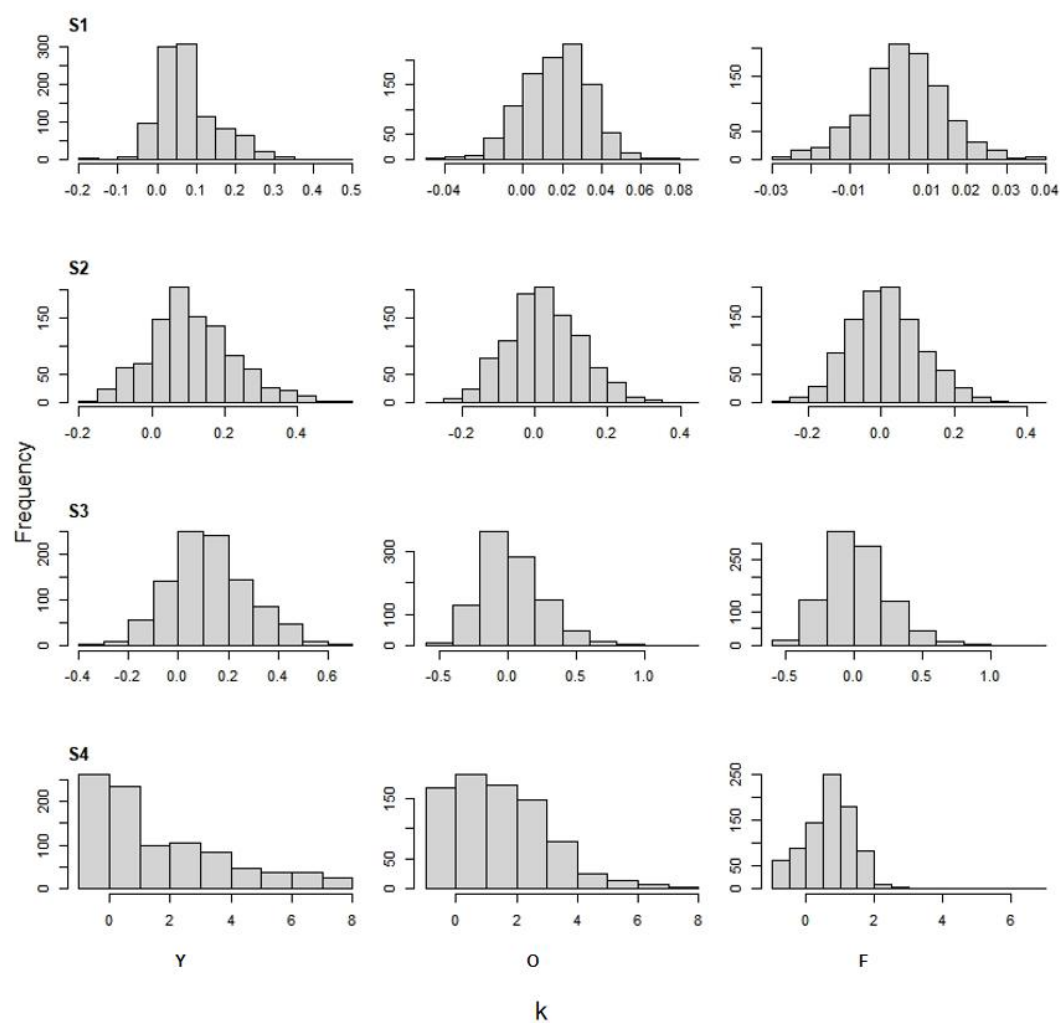


Figure S18. Distributions of estimated relative error of k of skipjack tuna.

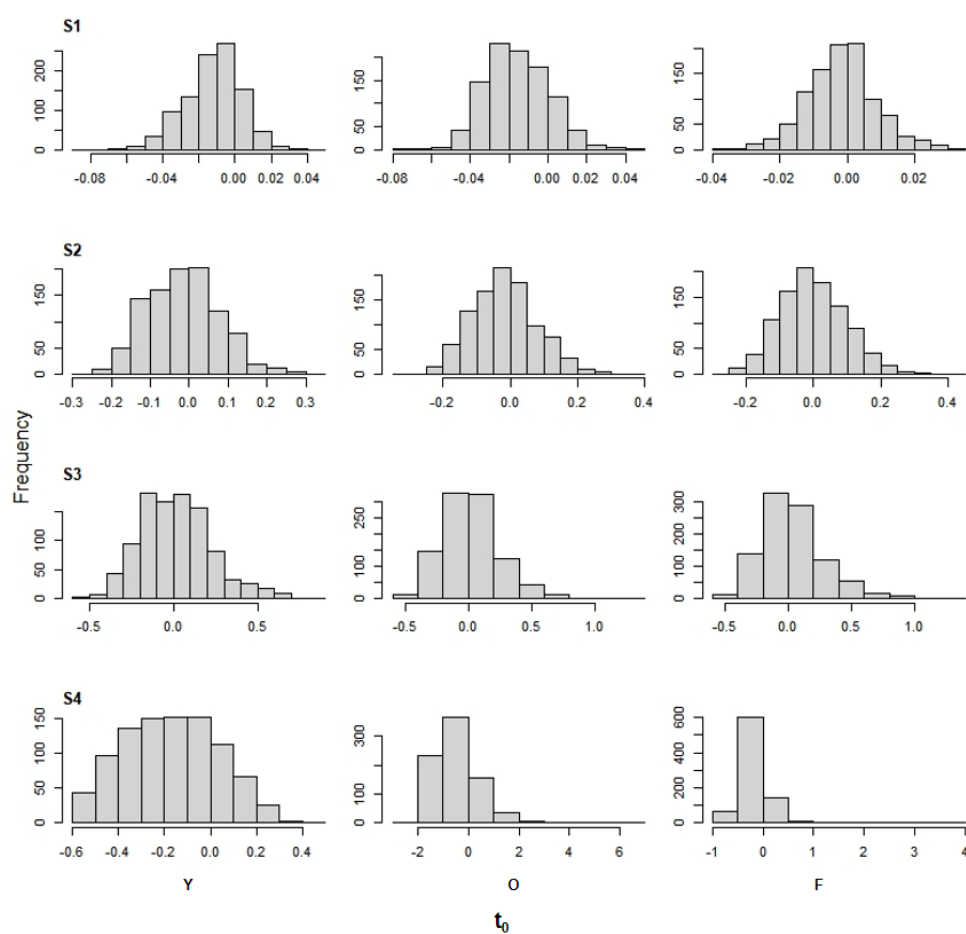


Figure S19. Distributions of estimated relative error of t_0 of skipjack tuna.

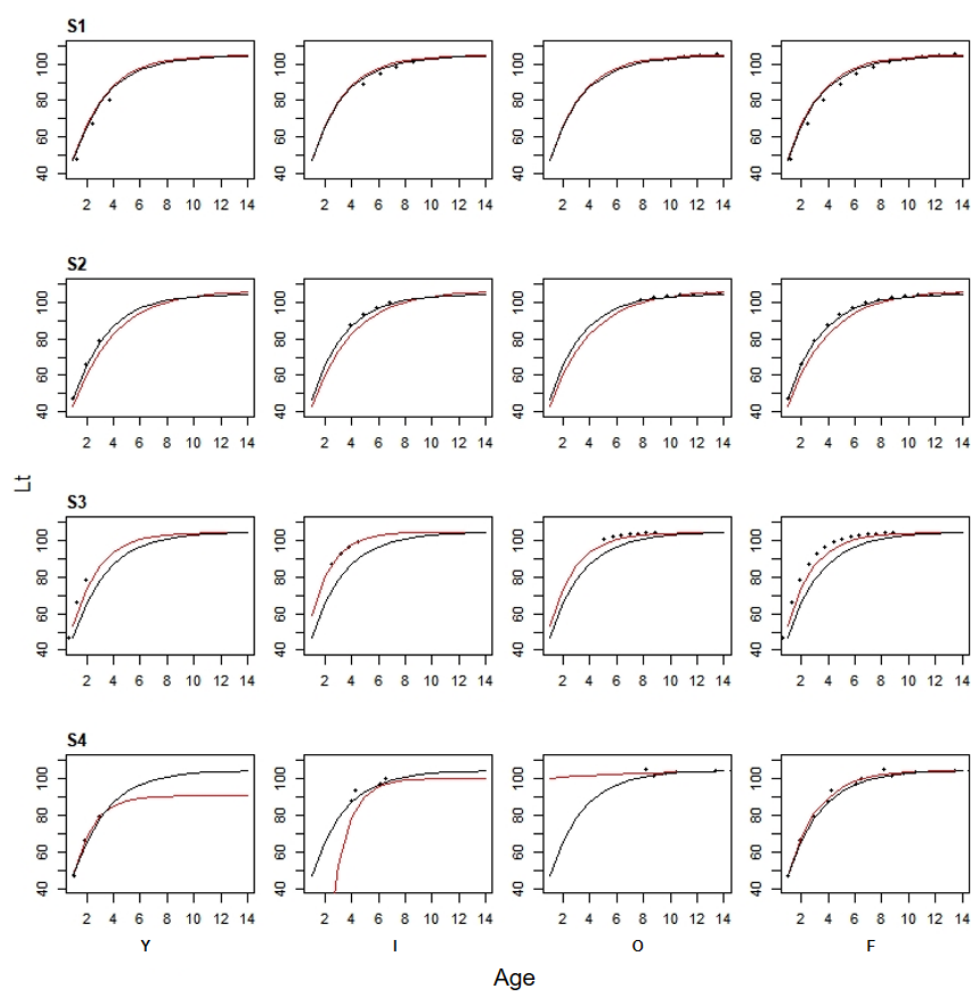


Figure S20. A fitted curve (red line) and actual curve of length-at-age (black line) (black dots are the noise data).

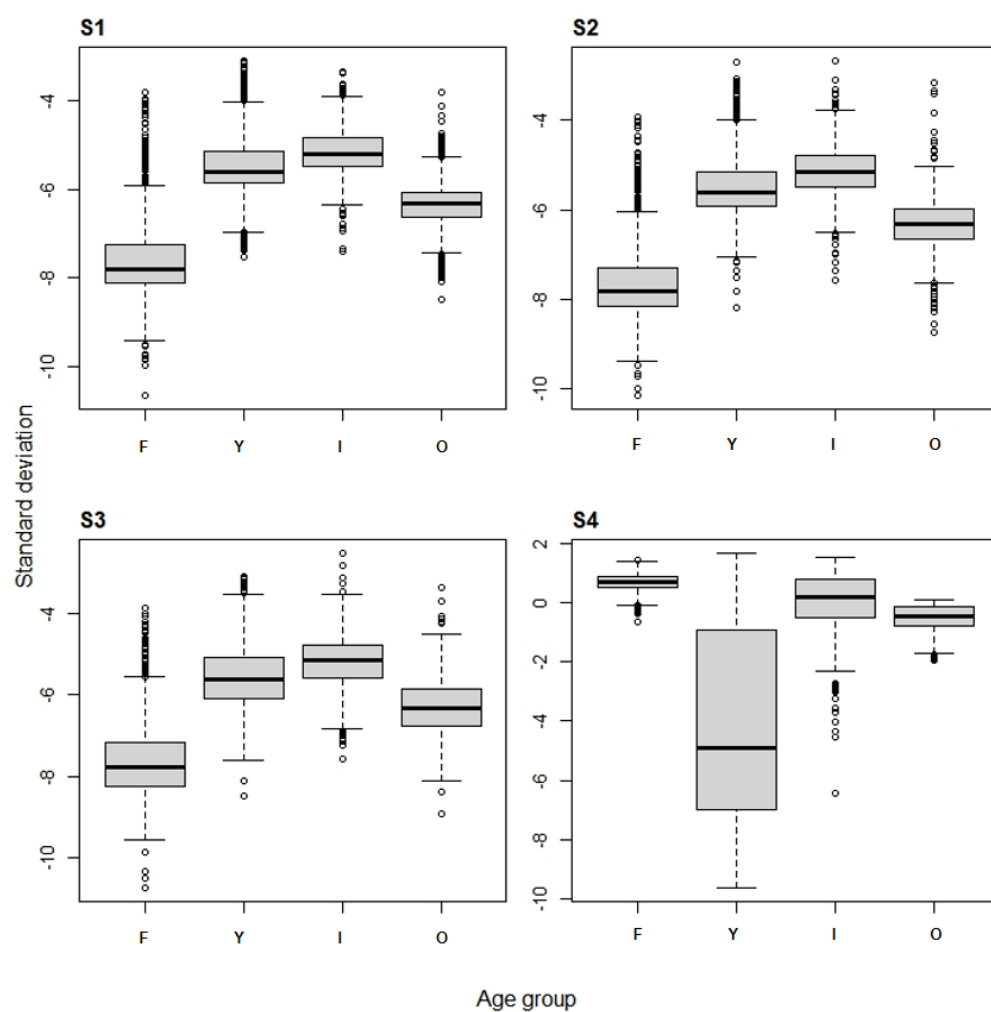


Figure S21. Standard deviation estimated from each model of albacore.

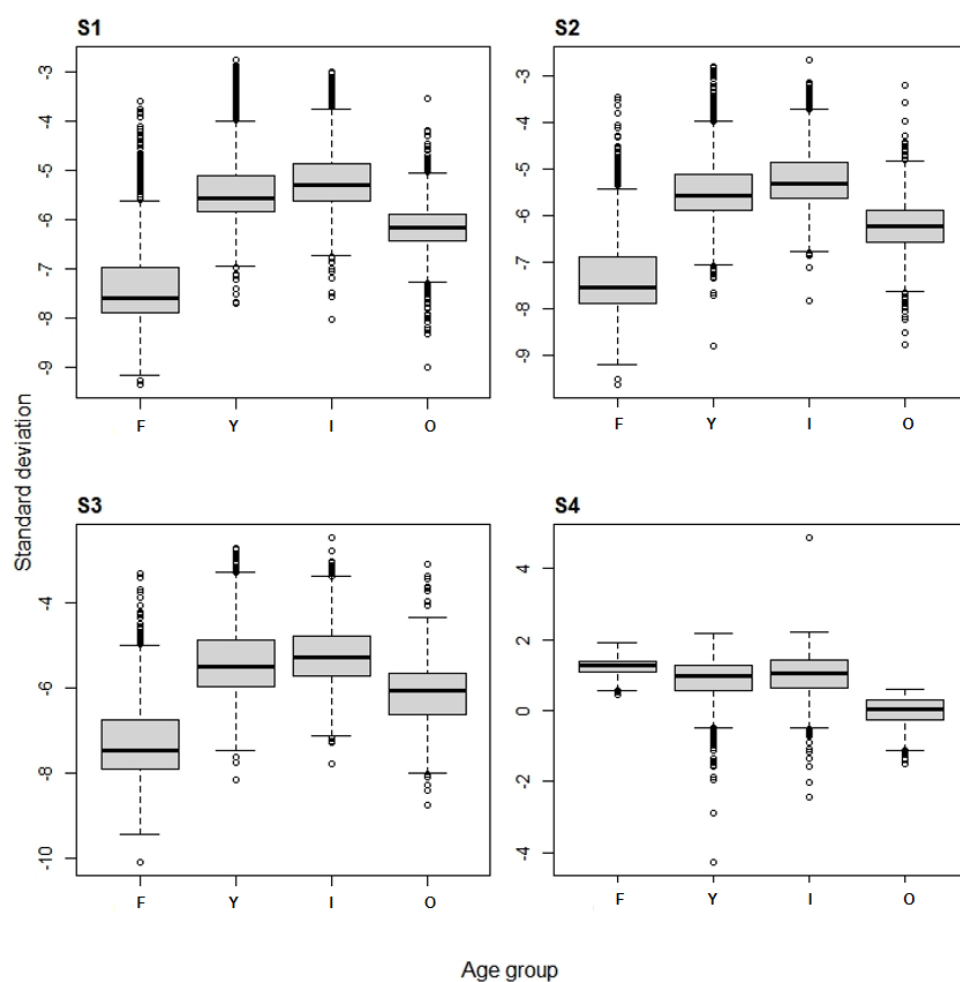


Figure S22. Standard deviation estimated from each model of bigeye tuna.

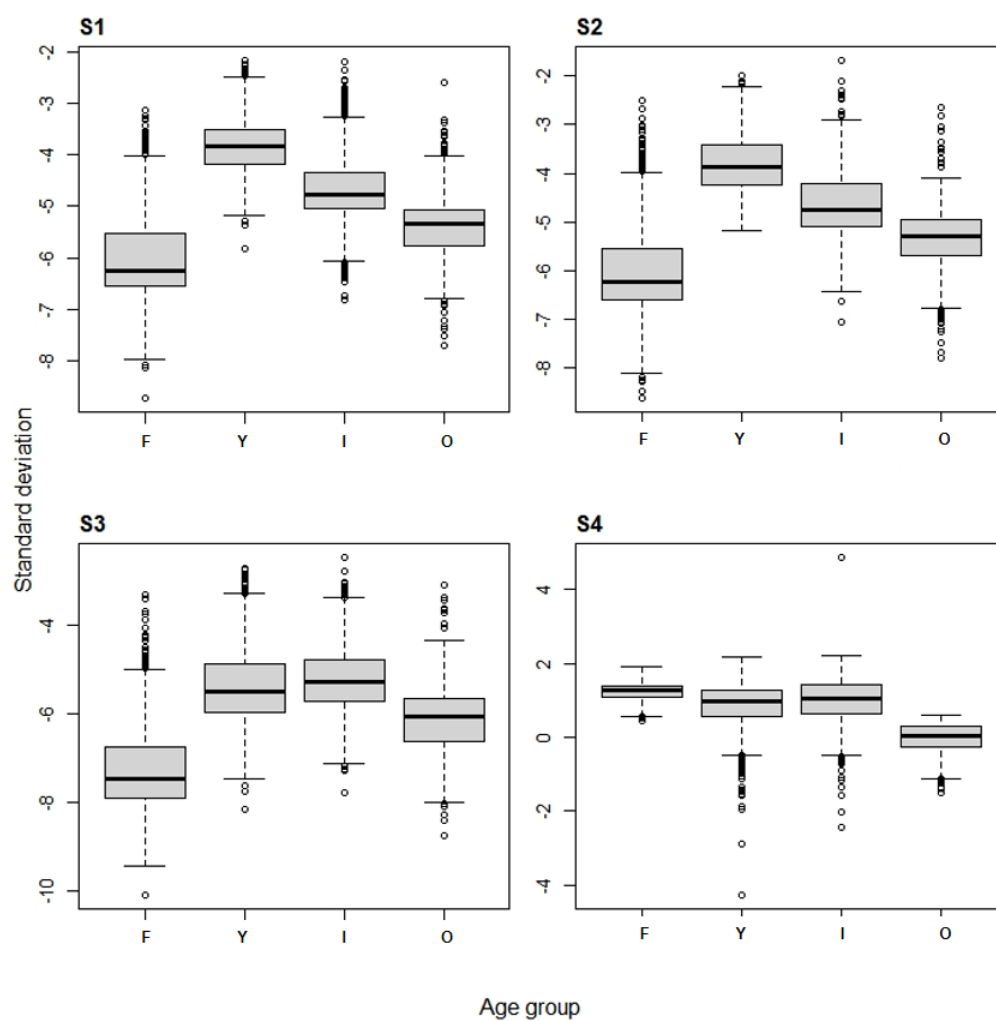


Figure S23. Standard deviation estimated from each model of southern bluefin tuna.

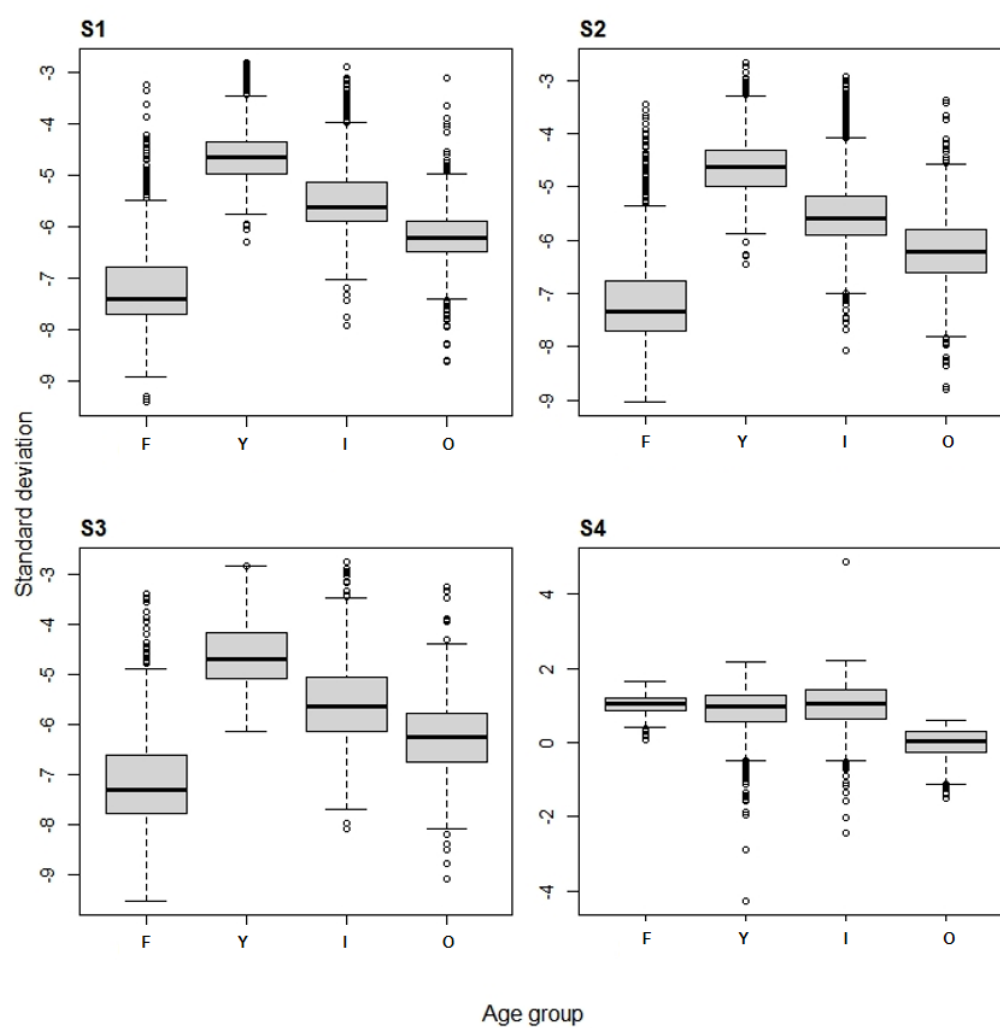


Figure S24. Standard deviation estimated from each model of yellowfin tuna.

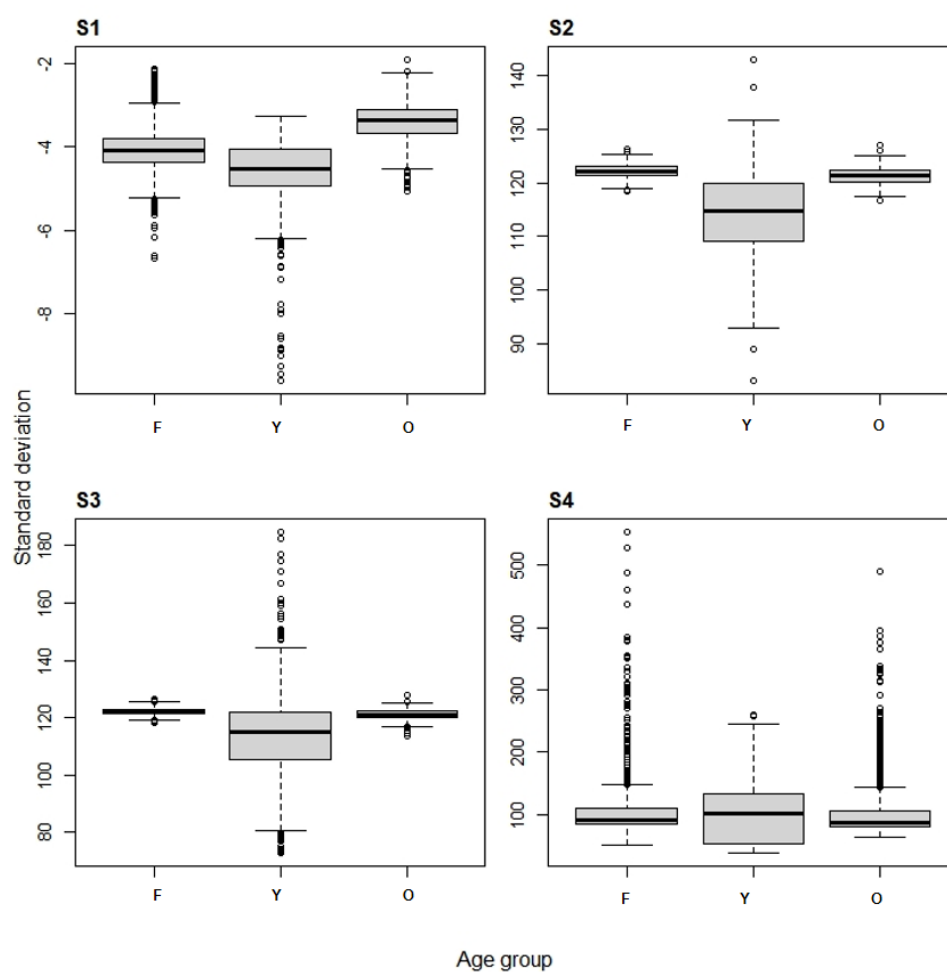


Figure S25. Standard deviation estimated from each model of skipjack tuna.