UPDATES ON THE 2019 SEAPODYM REVIEW

(WCPFC PROJECT: 62)

WCPFC-SC21-2025/EB-WP-02

SPC-OFP

SCIENTIFIC COMMITTEE ADVICE

- Note that the reviewer comments provide guidance on the development of SEAPODYM and its application within WCPFC as well as general advice on the modelling frameworks used by WCPFC.

- Note that all recommendations of the 2019 have been considered and adopted as appropriate.
  - Code repository (public), reference manual, R-tools.
  - New data sources.
  - Improvement to parameter estimation.

- Future Review (if desired)
  - Lower and Mid-Trophic Level (prey estimation)
  - Environmental Forcings

SCIENTIFIC COMMITTEE ADVICE

- Development Priorities

  - Code optimisation and parallelisation

  - Inclusion of fishing and natural mortality estimation from conventional tagging data

  - Modelling weight of fish

  - Access to spawning location data (e.g. monitoring of spawning gonad or larval data)

  - Standardisation of environmental forcings preparation pipelines

  - Archival tag integration of vertical behaviour properties

  - Evaluation of the loss in predictive power when downscaling