NOAA FISHERIES

NEFSC
Woods Hole, MA

The WHAM: Woods Hole Assessment Model

Operating model mode

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Underlying assumed values

- These are not given in the "basic_info" to prepare_wham_om_input
  - But they can be specified in the object produced by it prior to passing it to fit_wham
- Items as produced by prepare_wham_om_input
  - data$units_indices = 1 (biomass)
  - data$units_index_paa = 2 (numbers)
  - data$q_lower = 0, data$q_upper = 1000 (bounds on q)
  - data$age_comp_model_fleets = 1, data$age_comp_model_indices = 1 (multinomial)
  - data$selpars_lower = 0, data$selpars_upper = data$n_ages (bounds for logistic selectivity parameters)
  - data$Fbar_ages = 1:data$n_ages (F at all ages used to produce "Fbar")
  - data$bias_correct_pe = 0 (do not bias correct log-normal process errors)

Underlying assumed values

- (Continued)Items as produced by prepare_wham_om_input
  - data$bias_correct_pe = 0 (do not bias correct log-normal process errors)
  - data$bias_correct_pe = 0 (do not bias correct log-normal observation errors)
  - data$simulate_state = rep(1,4) (simulate all process errors)
  - data$simulate_data = rep(1,3) (simulate all types of observations)
  - data$simulate_period = rep(1,2) (simulate both base period and projection/feedback period)
  - data$percentSPR = 40 (percent SPR to use to generate SPR-based ref. points)
  - data$XSPR_R_opt = 3 (use annual R to generate annual SSB(X%SPR))
  - data$XSPR_R_avg_yrs = 1:data$n_years_model (years to average R for SSB(X%SPR) if data$XSPR_R_opt = 2 or 4