Management Strategy Evaluator = *User notes (beta ver. 6.0.6.1112)*

Inputs

Input uncertainty Sets inputs use for the perturbation of variables

   Groups

- **CV** Coefficient of variation used for perturbation of biomass
- **Kalman weight** Kalman weight used for perturbation of biomass

   Fleets

- **CV** Coefficient of variation used for perturbation of effort
- **Annual increase in catchability** Amount catchability will increase each year

Input reference levels Sets reference levels for performance evaluation and target fishing mortalities

- **MSY** Uses the results a Maximum Sustainable Yield search to set Biomass limit, Biomass base and F max. for the target fishing mortalities

   Group Evaluation of model runs has not been implemented yet so setting of reference levels has no effect

- **Biomass lower** Lower biomass limit
- **Biomass upper** Upper biomass limit
- **Catch lower** Lower catch limit on a group
- **Catch upper** Upper catch limit on a group

   Fleet

- **Lower** Lower catch limit by a fleet
- **Upper** Upper catch limit by a fleet

Input regulatory Sets inputs used for the fisheries regulations

   Regulatory option Sets how the effort of a fleet will be regulated

- **Max effort** *Not implemented at this time*. Caps the effort of a fleet no matter what regulatory option has been chosen
- **Not used** No regulation will be used for this fleet
- **Effort** *Warning has not been tested or validated.* Effort is regulated by computing target fishing mortality using Biomass limit, Biomass base and F max. from estimated biomass. If target fishing mortality exceeds achieved fishing mortality fishing effort is scaled back.
- **Weakest Stock quota** Quota for the year is computed from Biomass limit, Biomass base and F Max using estimated biomass. Effort is regulated if any catch (landings + discards) on a group exceeds its quota.
- **Strongest stock + discards quota** Quota for the year is computed from Biomass limit, Biomass base and F Max using estimated biomass. Effort is regulated if landings on the strongest stock exceed the quota. Bycatch on other stocks is discarded.