State-space Research Track Working Group
Meeting #4
Friday, January 7, 2022
1:00PM - 4:00PM

AGENDA

1. Roll Call (5 min)
    a. Tim,
2. Discuss progress on defining simulation studies ([SSRT Meeting 19.11.21 Working document](#)) (45 min)
    a. github repo: https://github.com/timjmiller/SSRTWG
        i. **provide github names here to be collaborator**: timjmiller,
    b. starter definitions
        i. General:
            1. # sims per scenario
        ii. generic fish life history types:
            1. N years?
            2. fishing pattern?
            3. 1 fleet?
            4. 1 survey?
        iii. NAA RE
        iv. selectivity RE
        v. catchability RE
        vi. M RE
        vii. Ecov effects on R
        viii. Ecov effects on M
        ix. Ecov effects on catchability
    c. Example for Statistical behavior of estimates for NAA random effects scenarios
        i. requires becoming familiar with WHAM: Should I do a tutorial on WHAM for next meeting?
        ii. number of sims per scenario?
    d. Small group working session. 2- 4 groups. Define simulations. Could work off of example provided in repo and modify for these. (1 hour)
        i. candidate factors to select:
            1. Environmental effects on R
            2. Environmental effects on M
            3. Environmental effects on catchability
            4. Catch mis-reporting/estimation
            5. Change in M: M estimation
            6. alternative age comp models
            7. Relative sizes of obs and process error variance
            8. log-normal bias correction of observations and process errors

      9. Assumed/estimated observation errors (aggregate catch/index)
    10. Reference point definition (prevailing ocnditions vs. environmental effects)
    11. Diagnostics: conditional vs. unconditional simulation self tests
    12.
3. Review progress of small groups (30 min)
4. Discuss how to synthesize results (20 min):
    a. For simulation studies with few factors and balanced designs, GLM approach considered in IBMWG may work better here?
    b. Approaches for simpler MSE/closed-loop studies?