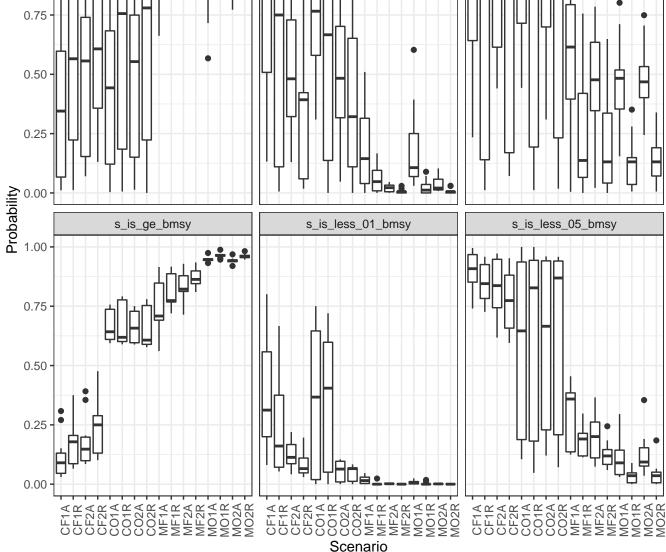


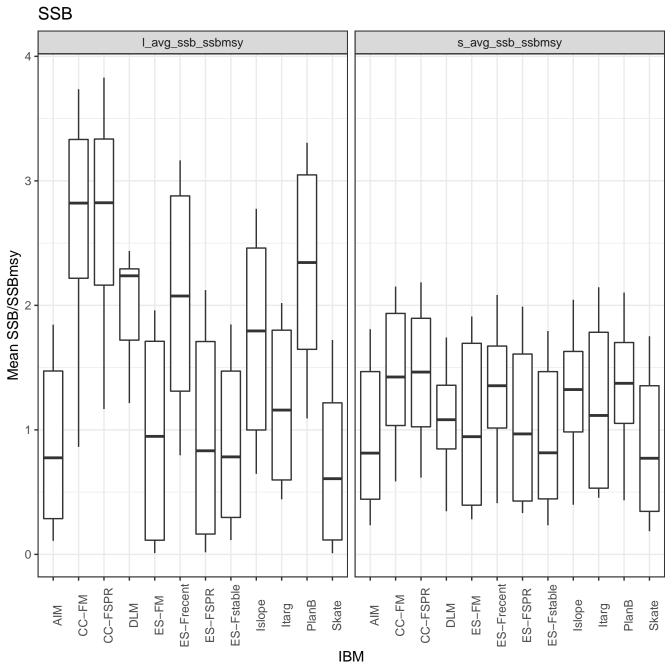
SSB I_is_ge_bmsy I_is_less_01_bmsy I_is_less_05_bmsy 1.00 s_is_ge_bmsy s_is_less_01_bmsy s_is_less_05_bmsy



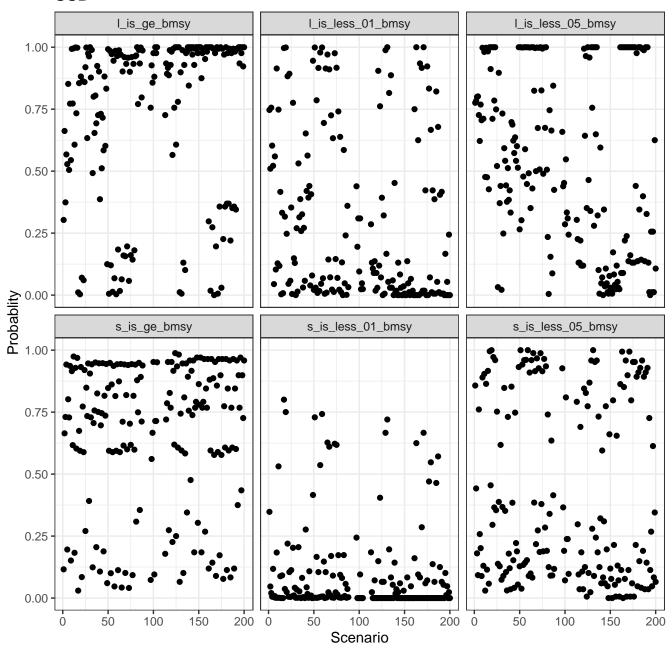
SSB I_n_ge_bmsy I_n_less_01_bmsy I_n_less_05_bmsy 20 -15 -10 5 Mean Number of Years s_n_ge_bmsy s_n_less_01_bmsy s_n_less_05_bmsy 15 10 5 0 M ES-Frecent ES-Frecent ES-Frecent ES-Fstable ES-Fstable ES-Fstable ES-FSPR ES-FSPR ES-FSPR CC-FSPR CC-FSPR CC-FSPR CC-FM ES-FM ES-FM ES-FM CC-FM CC-FM Islope Islope Itarg PlanB DLM Islope Skate PlanB Skate DLM Itarg PlanB Skate DLM AIM Itarg AIM

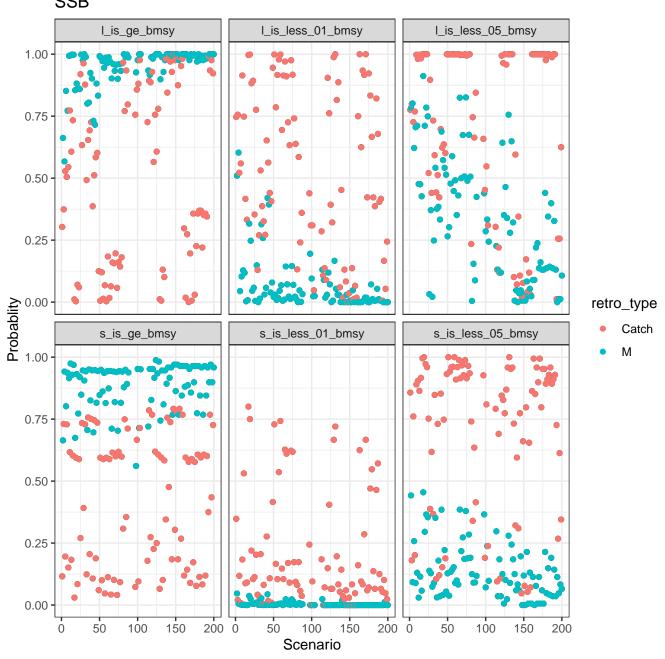
SSB I_n_ge_bmsy I_n_less_01_bmsy I_n_less_05_bmsy 20 -15 10 5 Mean Number of Years s_n_less_01_bmsy s_n_less_05_bmsy s_n_ge_bmsy 20 15 -10 -5 CC51A CCC51R CCC52A CCC52A MMF1A MMF2A MMO2A MO2A

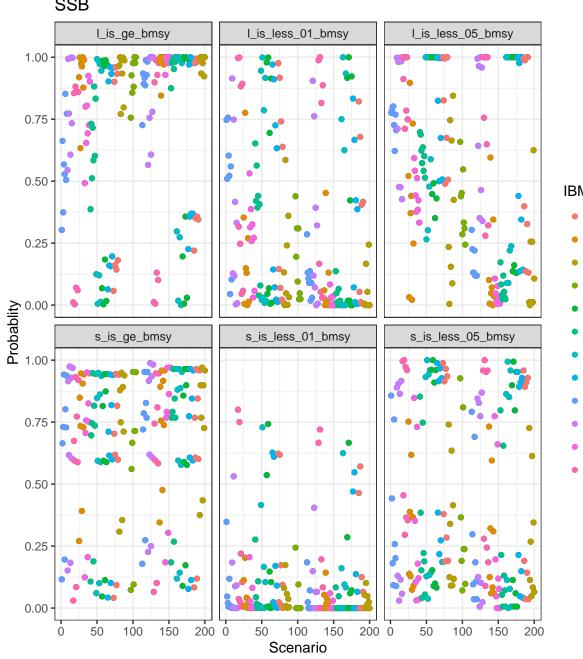
Scenario



SSB I_avg_ssb_ssbmsy s_avg_ssb_ssbmsy 4 3 -Mean SSB/SSBmsy Scenario CF1A C02A CO2R MF1A MF2A MF2R MO1A MO1R C01A CO1R MO1A MO1R MO2A MO2R MF1R C02A CO2R MF2A MF2R CF2R C01A CO1R CF2A CF2R MF1A MF1R CF2A







IBMIab

- AIM
- CC-FM CC-FSPR
- DLM
- ES-FM
- ES-Frecent
- ES-FSPR

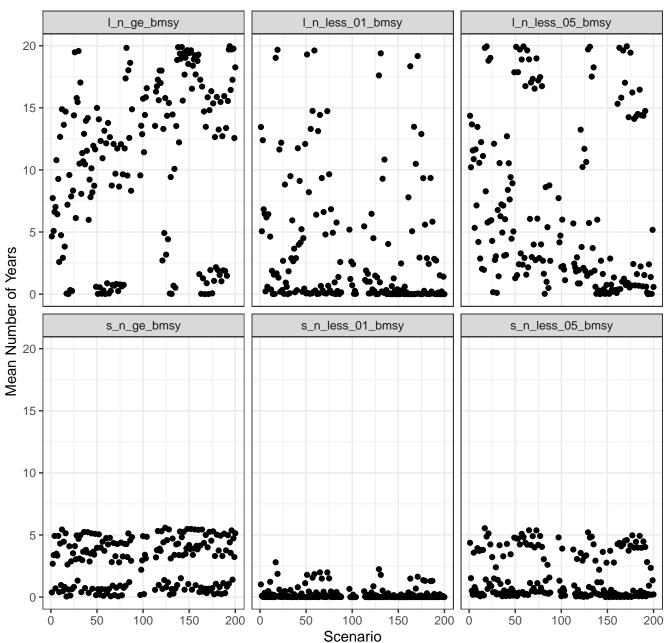
ES-Fstable

- Islope
- Itarg
- PlanB
- Skate

SSB I_is_less_01_bmsy I_is_ge_bmsy I_is_less_05_bmsy 1.00 -0.75 -0.50 -0.25 -Probablity 0.00 co.0 factor(Fhist) 1 s_is_less_01_bmsy s_is_ge_bmsy s_is_less_05_bmsy 2 0.75 0.50 0.25 0.00 100 50 100 150 200 0 50 150 200 0 50 100 150 200 Scenario

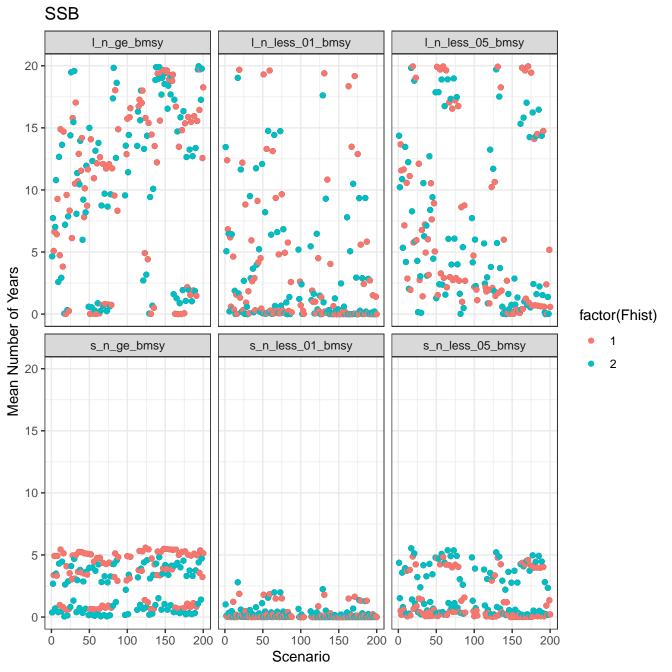
SSB I_is_less_01_bmsy I_is_ge_bmsy l_is_less_05_bmsy 1.00 0.75 -0.50 -0.25 -Probablity 0.00 co.0 factor(n_selblocks) s_is_ge_bmsy s_is_less_01_bmsy s_is_less_05_bmsy 2 0.75 0.50 -0.25 0.00 100 150 200 0 50 100 150 200 0 50 50 100 150 200 Scenario

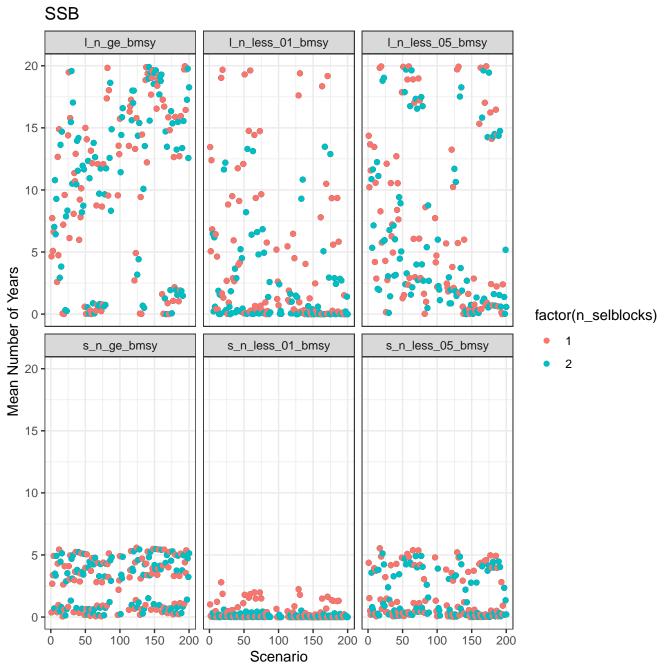
SSB l_is_less_01_bmsy l_is_less_05_bmsy I_is_ge_bmsy 1.00 0.75 -0.50 0.25 -Probablity
0.00 factor(catch.mult) 0.75 s_is_ge_bmsy s_is_less_01_bmsy s_is_less_05_bmsy 1.00 0.75 0.50 0.25 0.00 150 100 200 0 50 100 150 200 0 50 50 100 150 200 Scenario

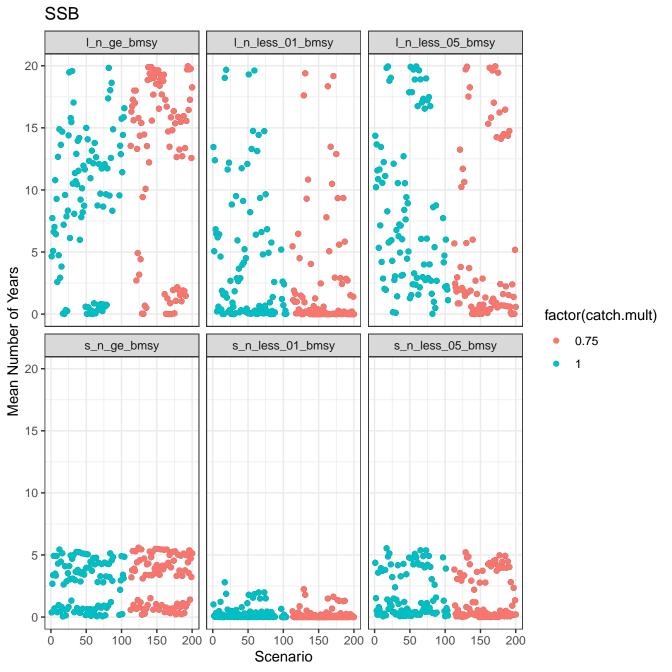


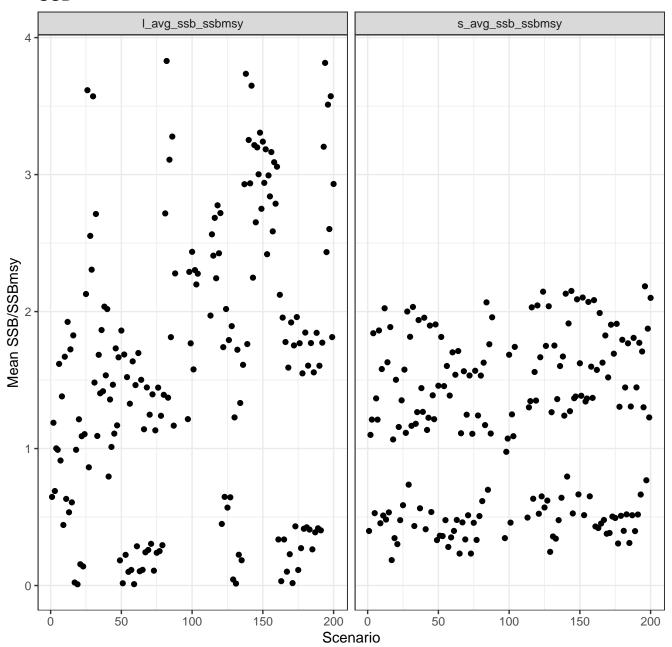
SSB I_n_less_01_bmsy I_n_ge_bmsy I_n_less_05_bmsy 20 -15 -10 -5 -Mean Number of Years retro_type Catch s_n_ge_bmsy s_n_less_01_bmsy s_n_less_05_bmsy M 15 -10 -100 50 100 150 200 0 50 150 200 0 50 100 150 200 Scenario

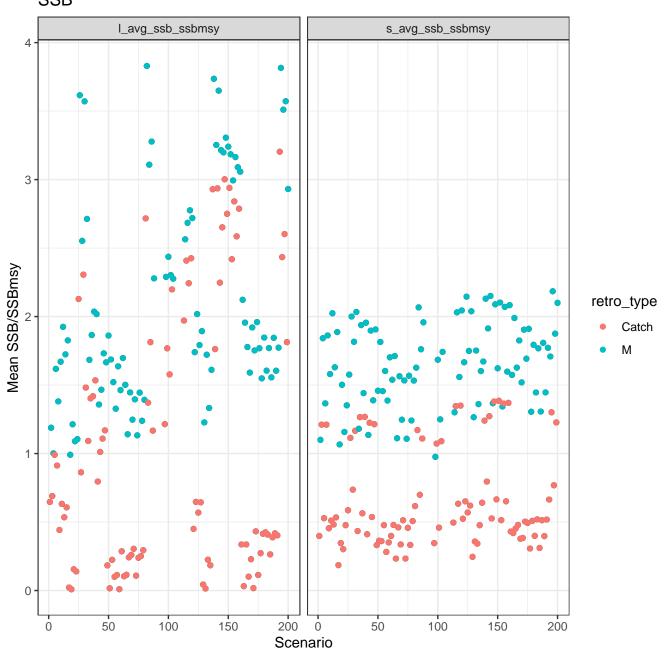
SSB I_n_ge_bmsy I_n_less_01_bmsy I_n_less_05_bmsy 20 -15 -10 -**IBMIab** AIM CC-FM 5 -CC-FSPR Mean Number of Years DLM ES-FM ES-Frecent s_n_ge_bmsy s_n_less_01_bmsy s_n_less_05_bmsy ES-FSPR 20 -ES-Fstable Islope 15 -Itarg PlanB Skate 10 -50 100 150 200 0 50 100 150 200 0 50 100 150 200 Scenario

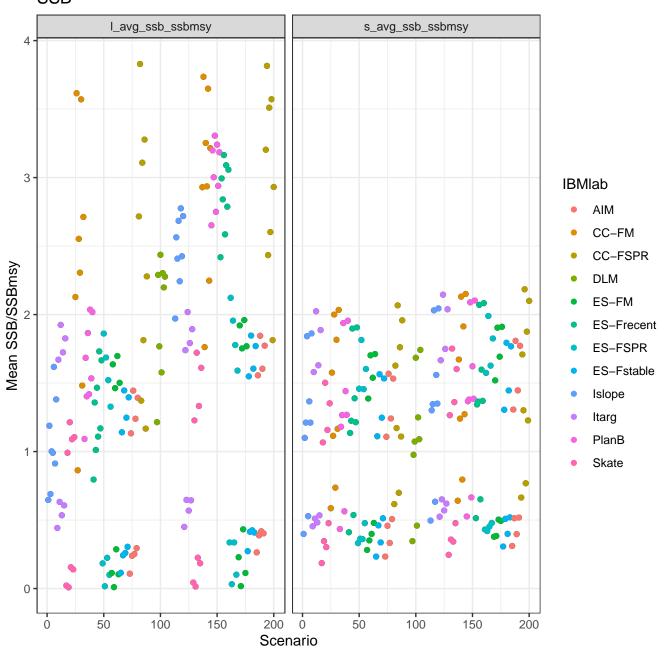


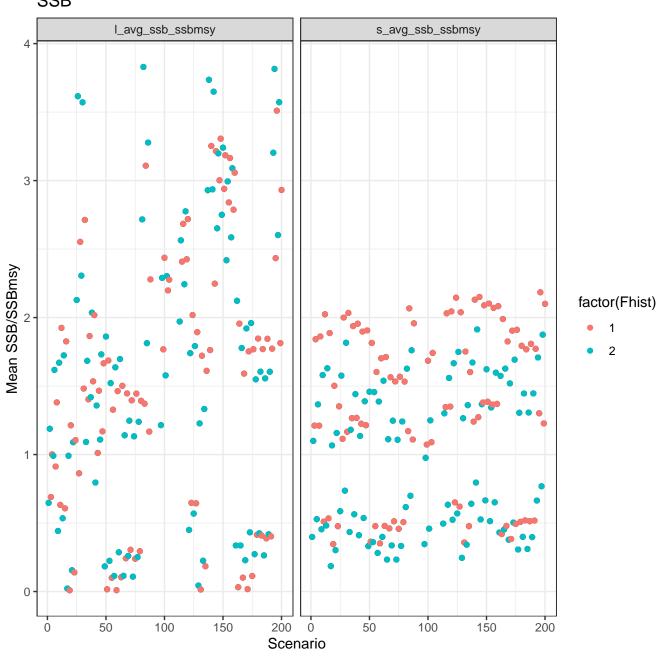


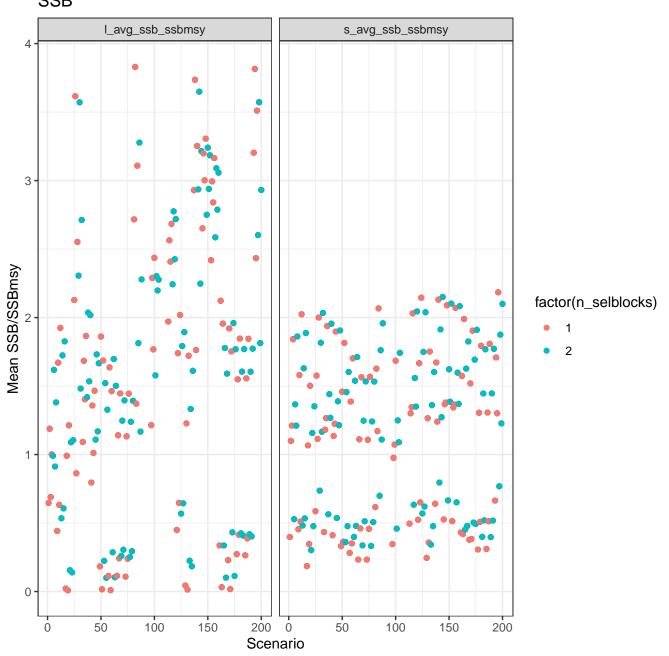


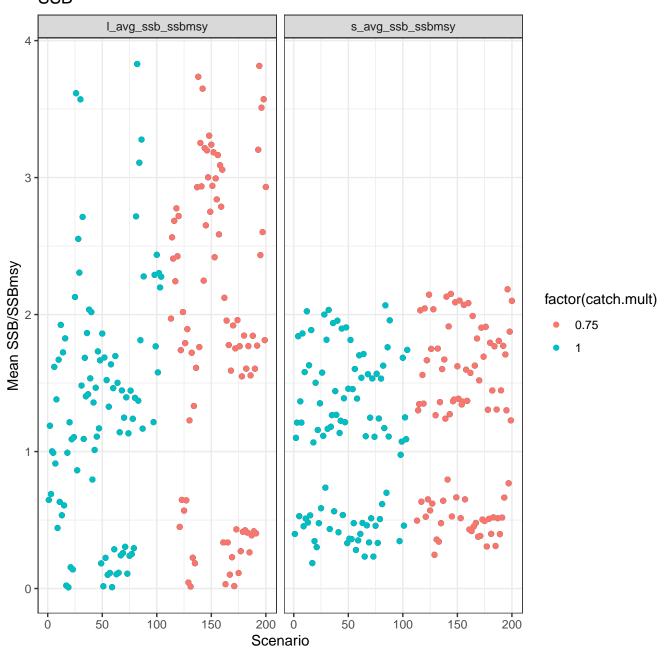


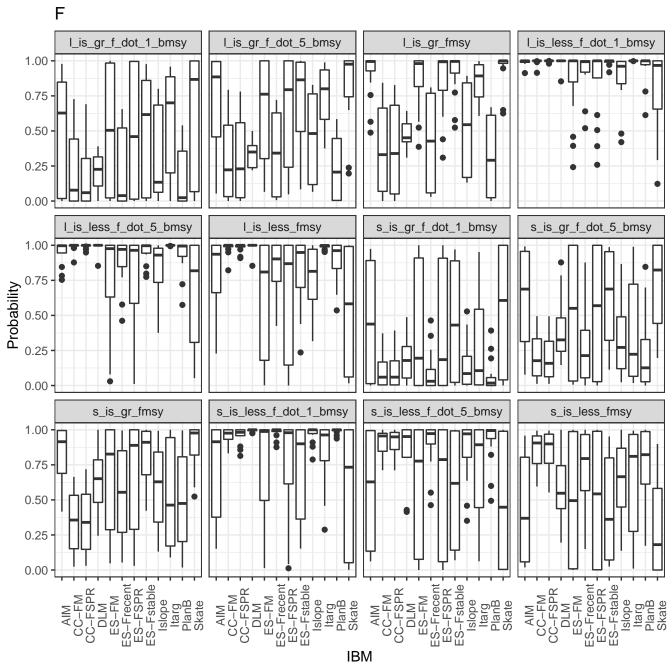


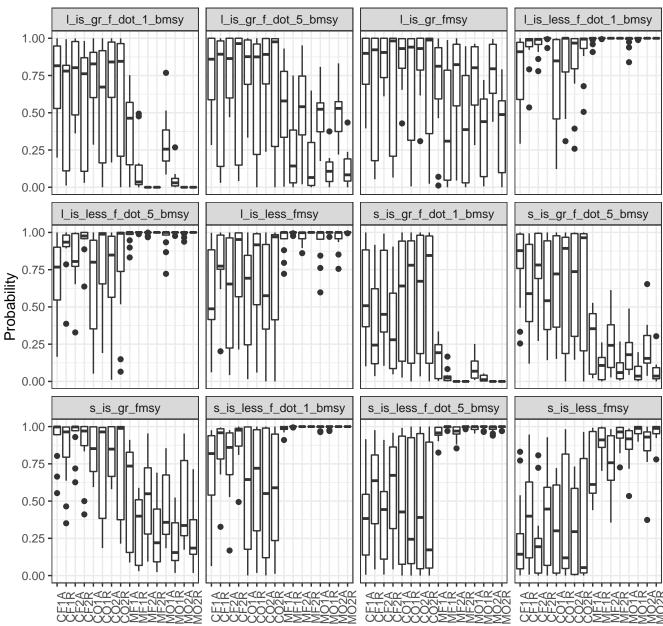






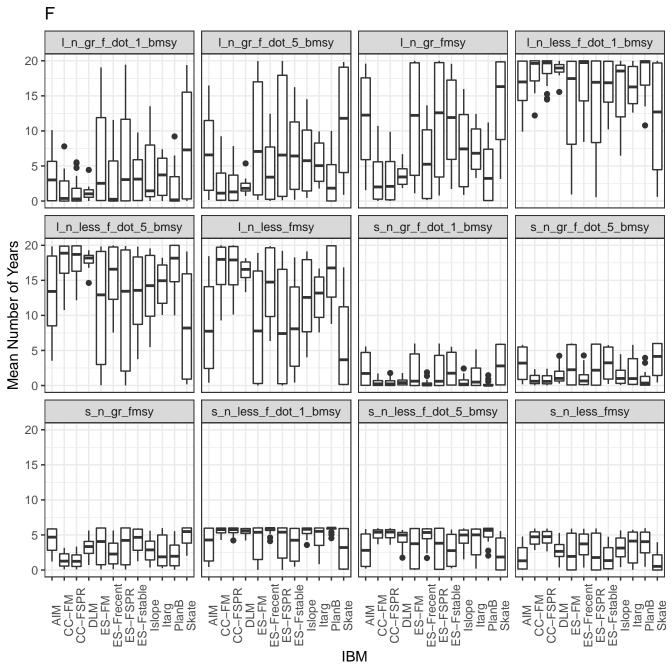


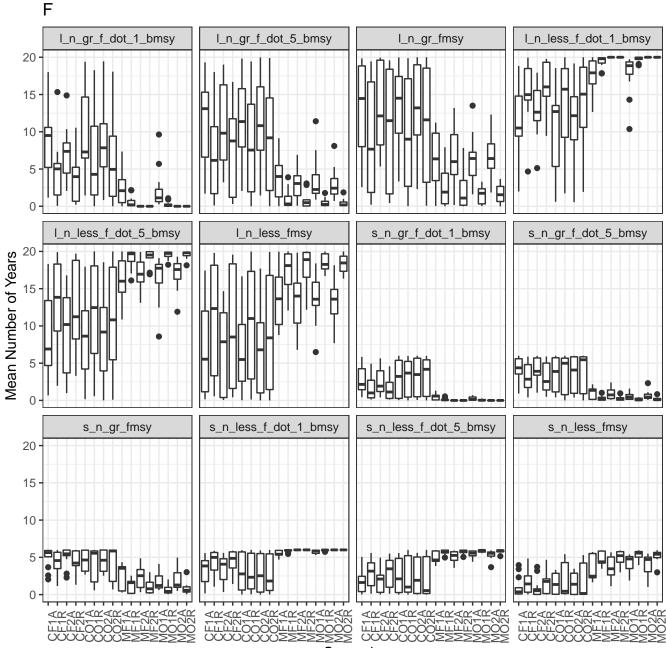




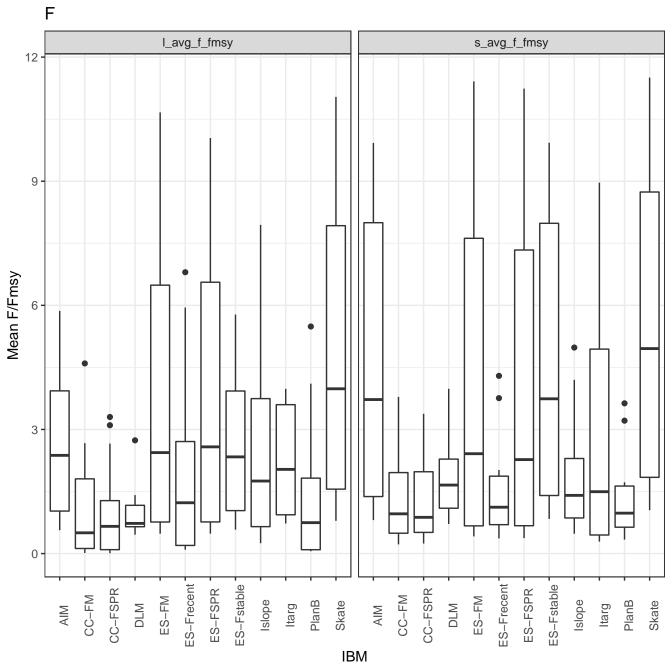
F

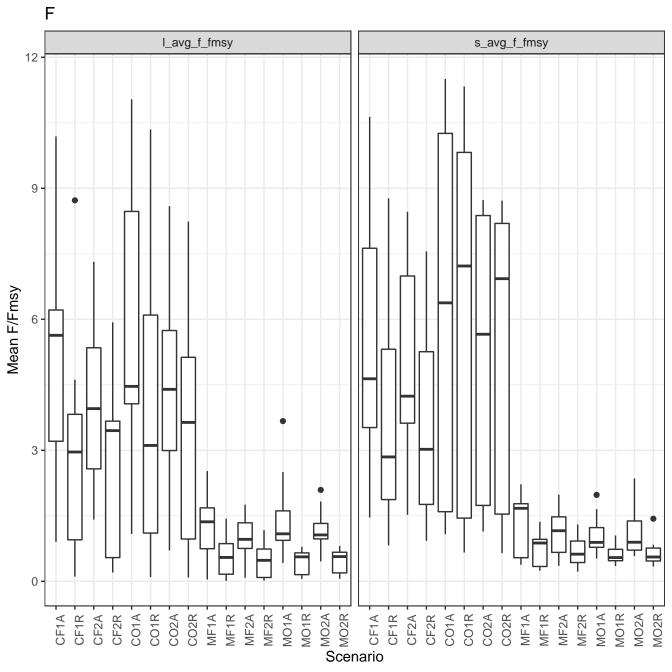
Scenario

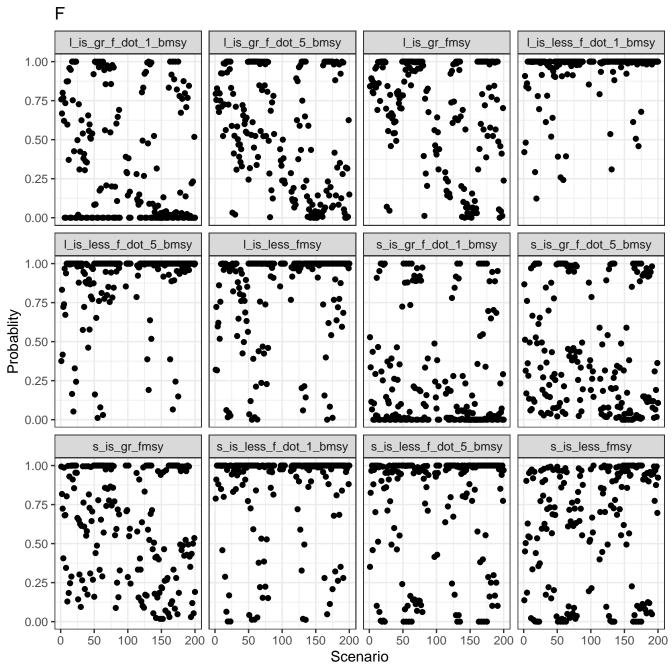


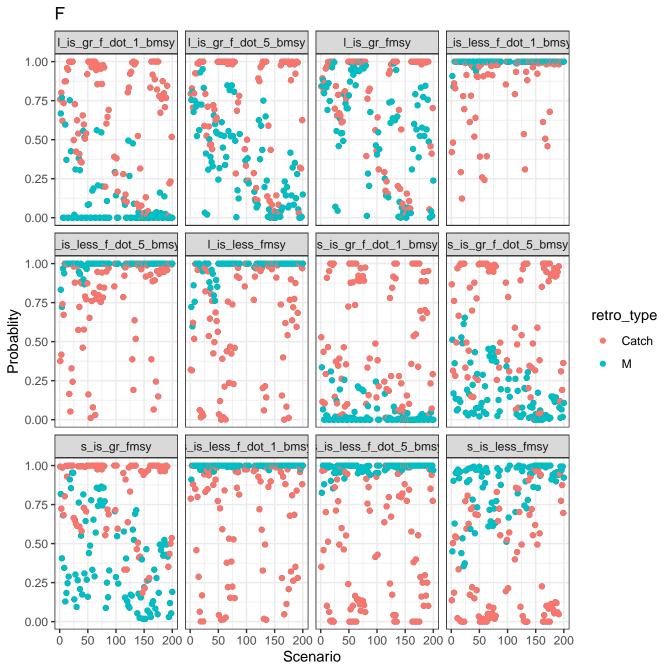


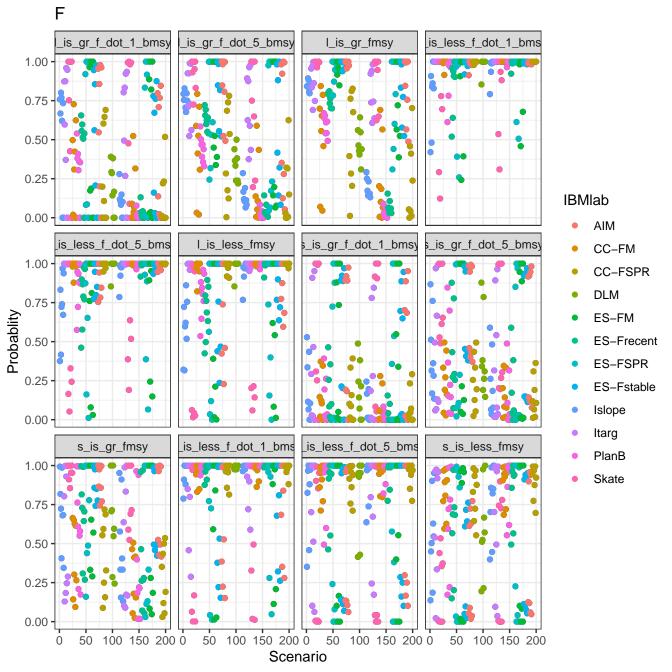
Scenario

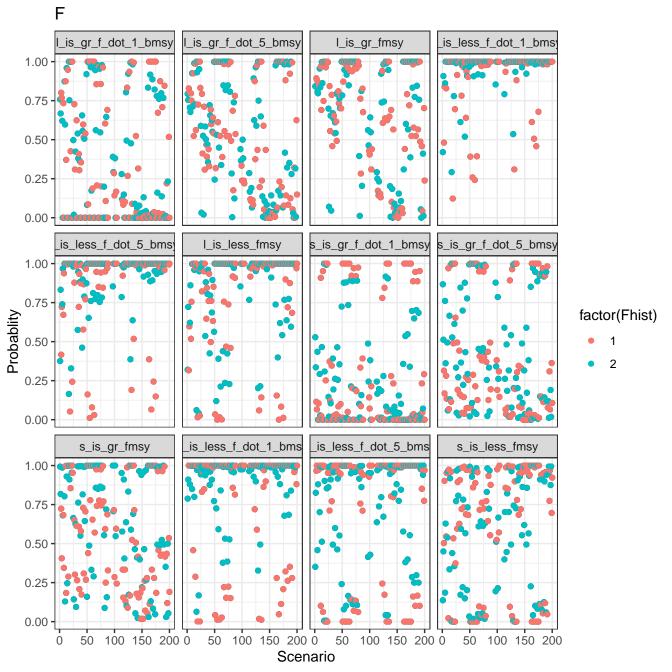


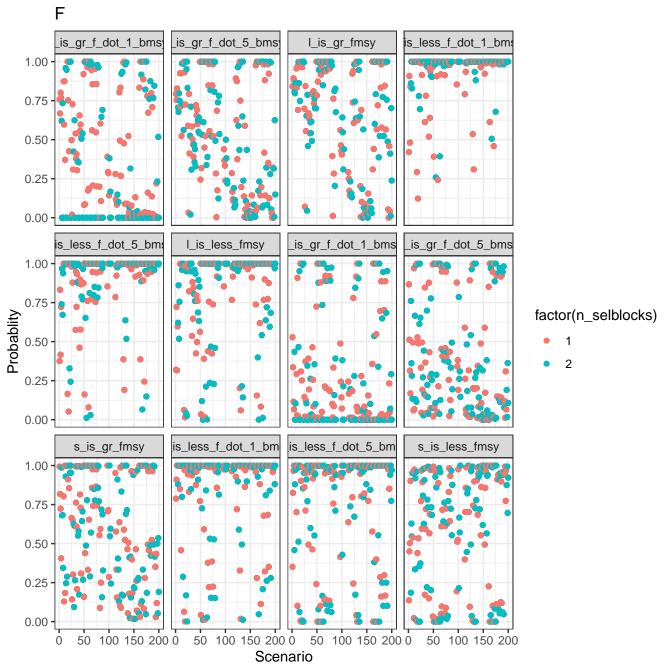


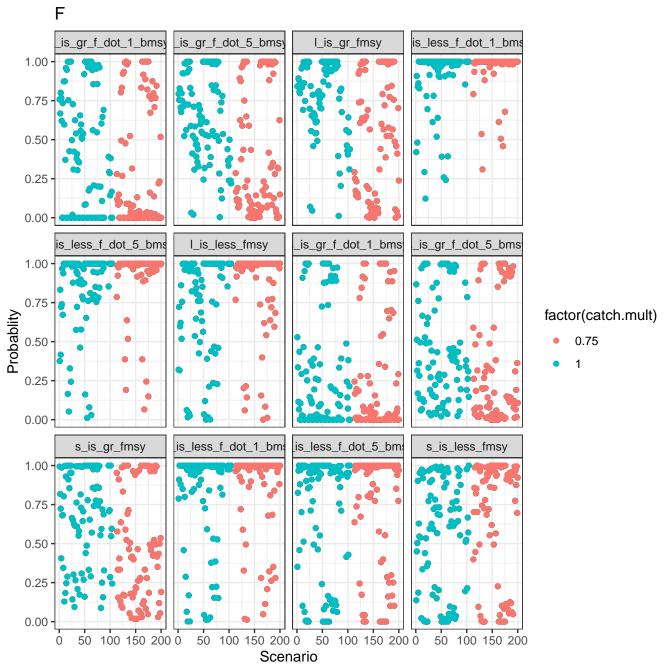




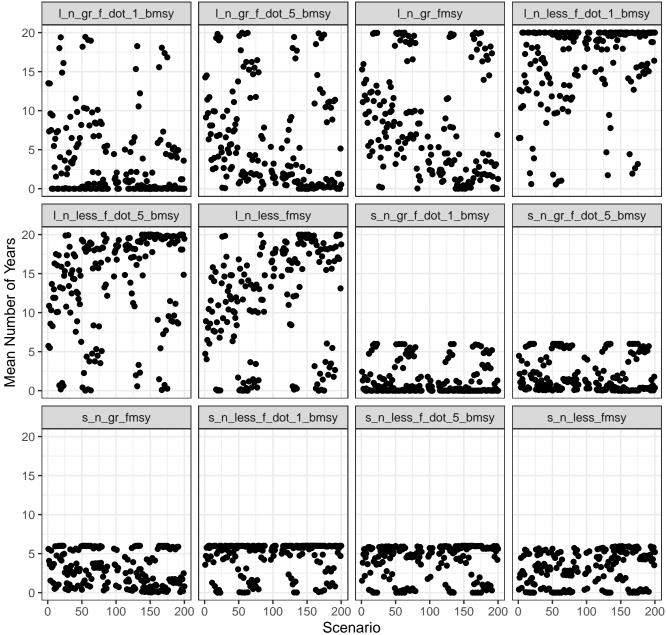


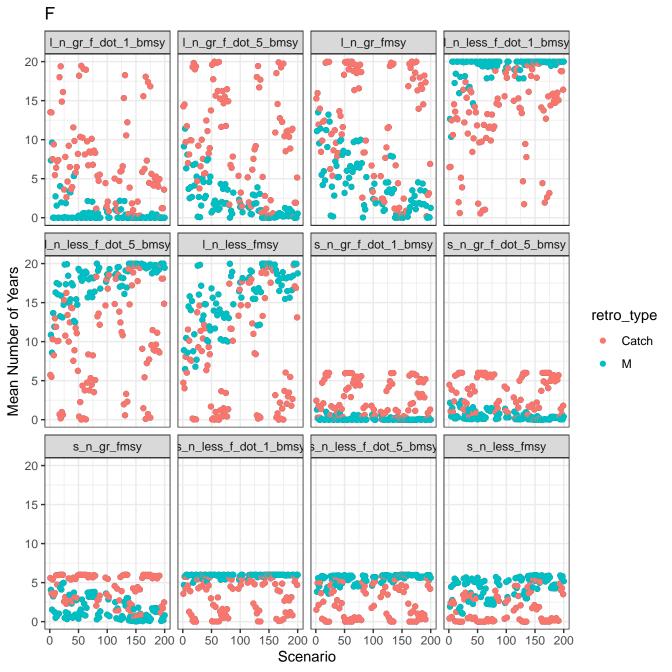


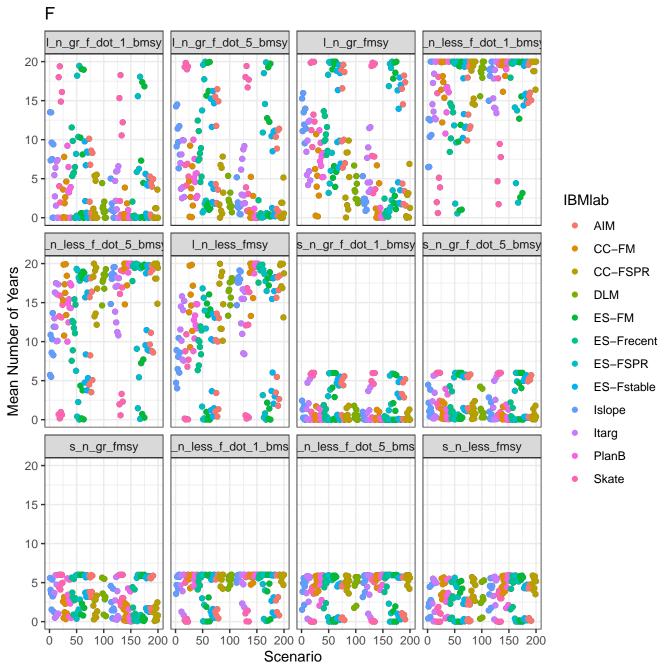


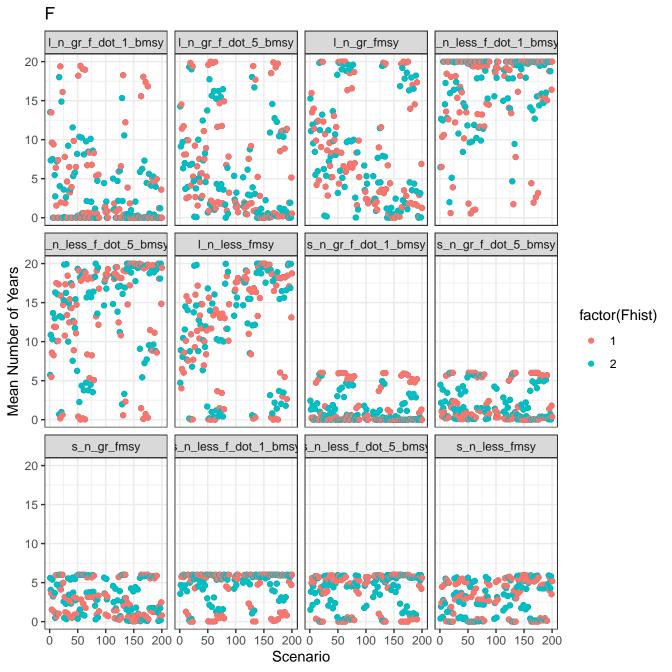


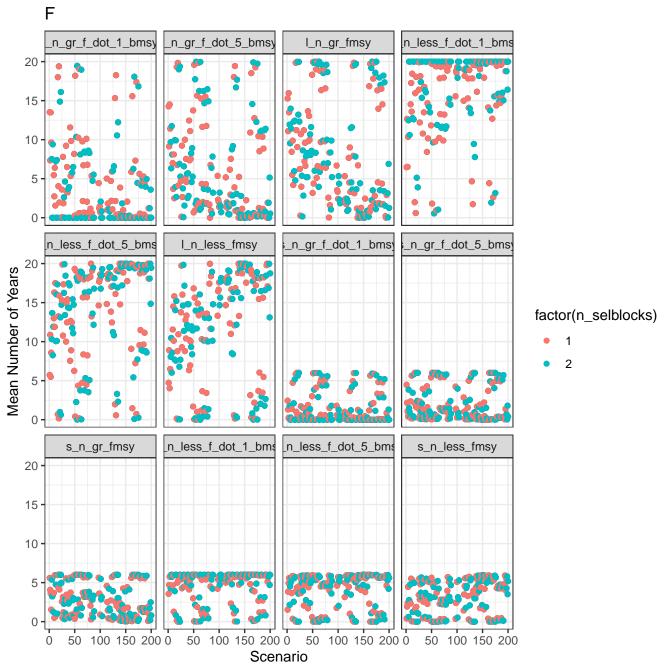


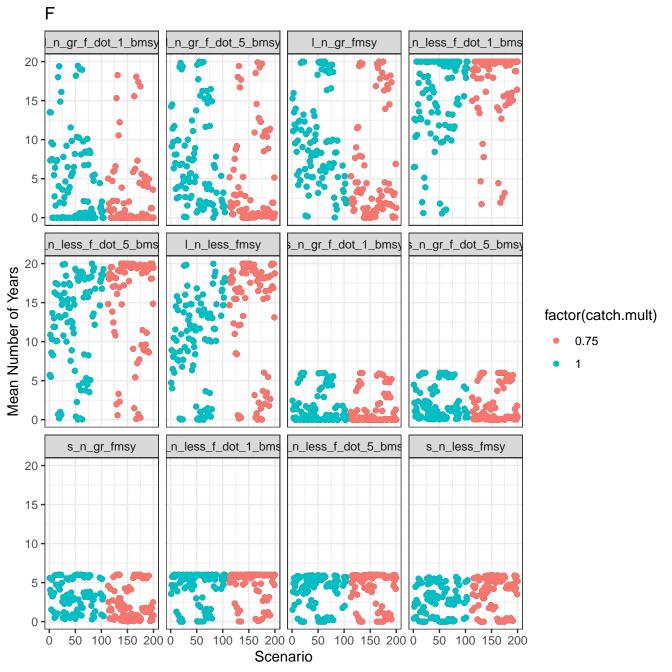


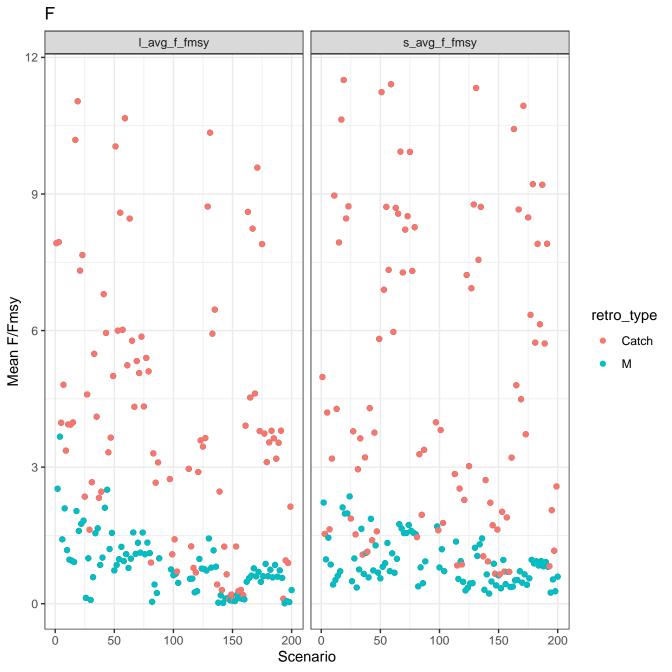


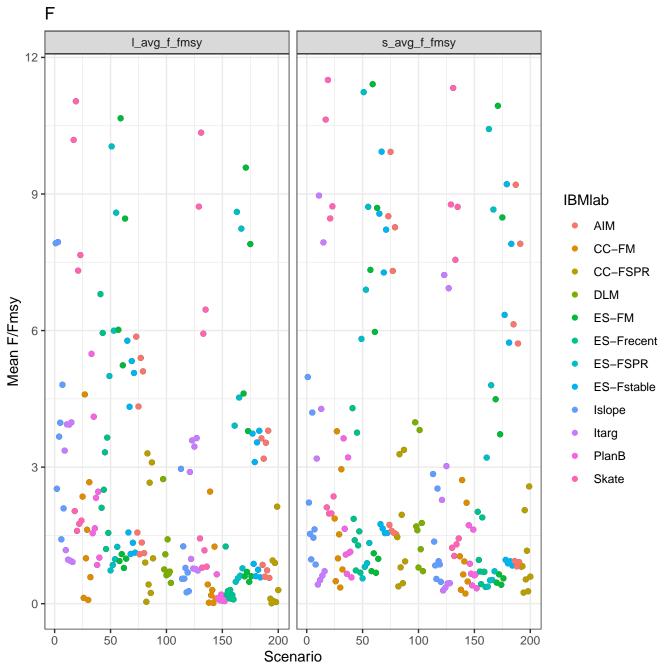


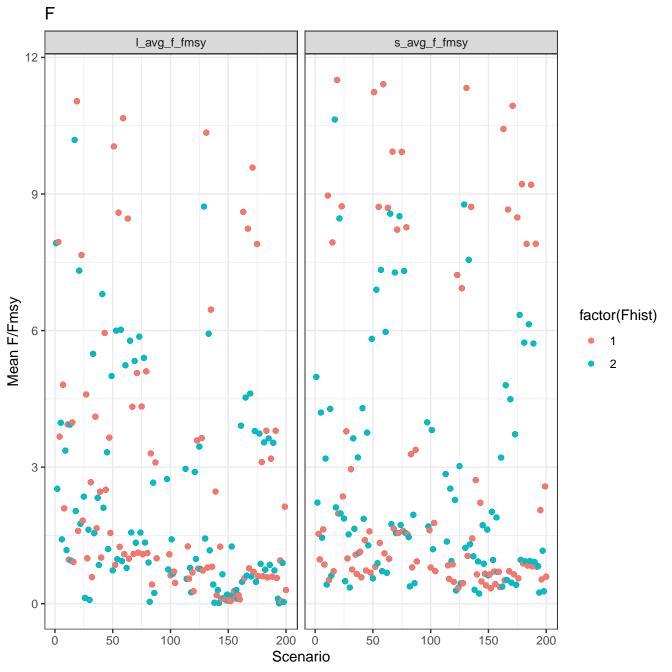


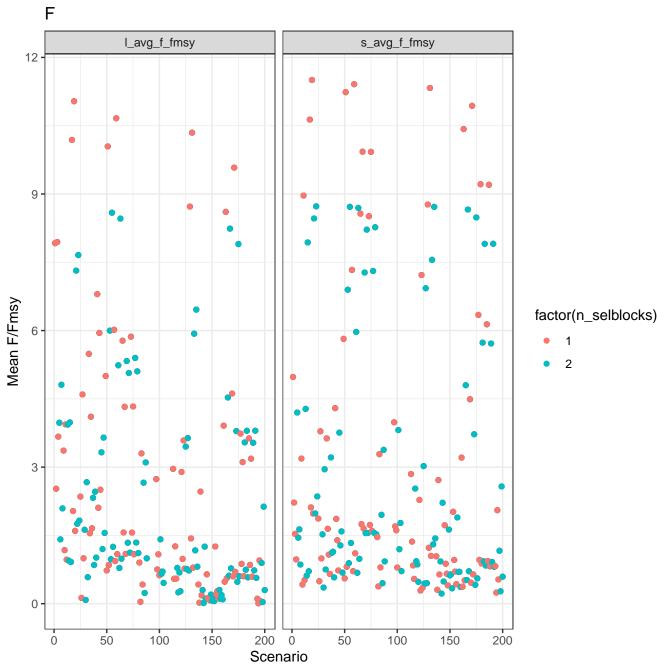


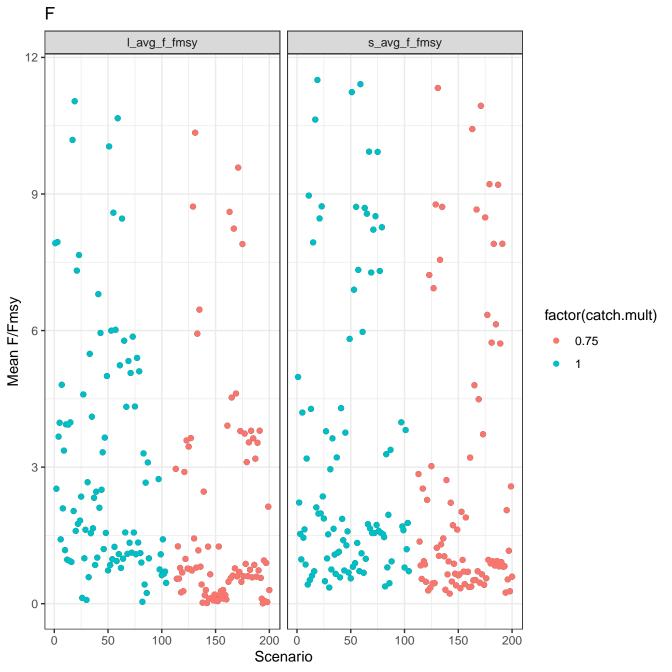


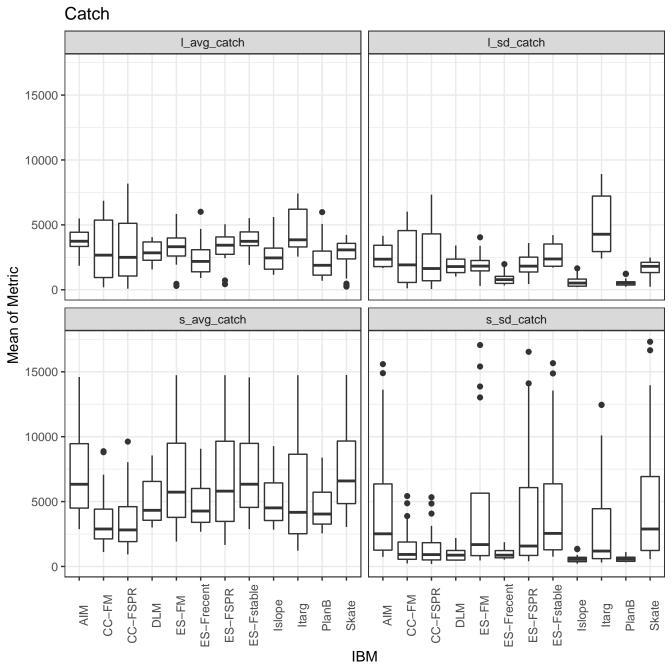


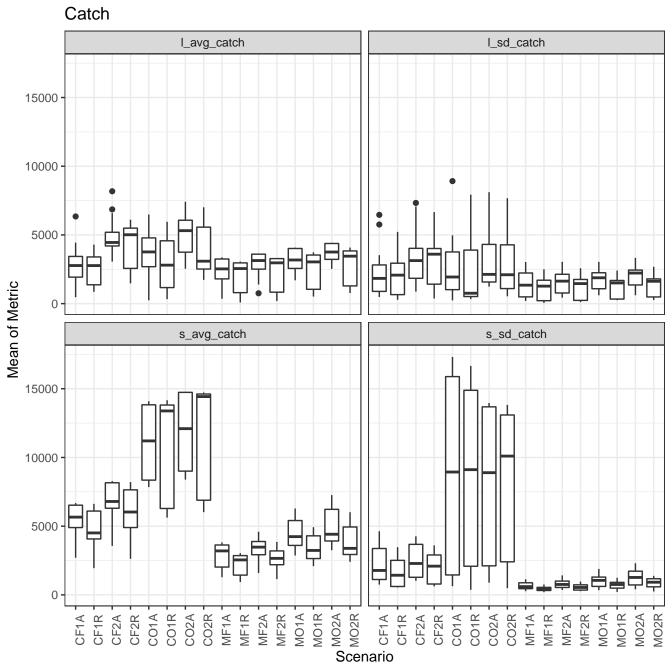


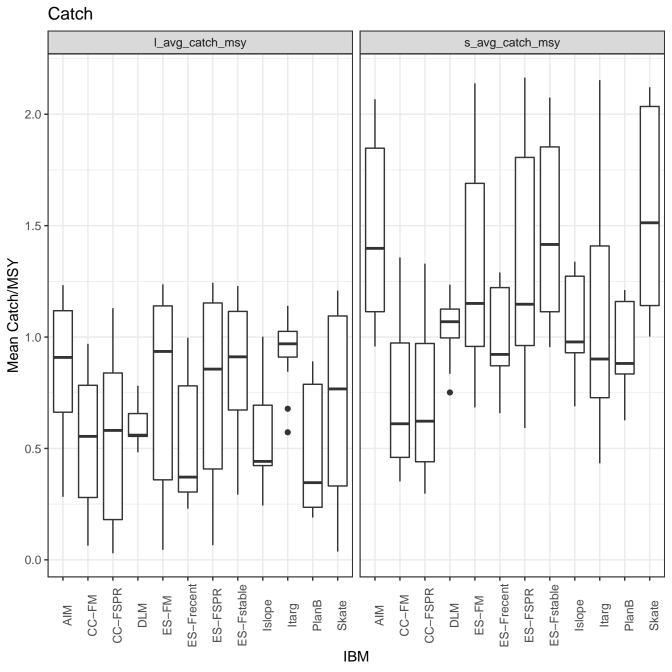


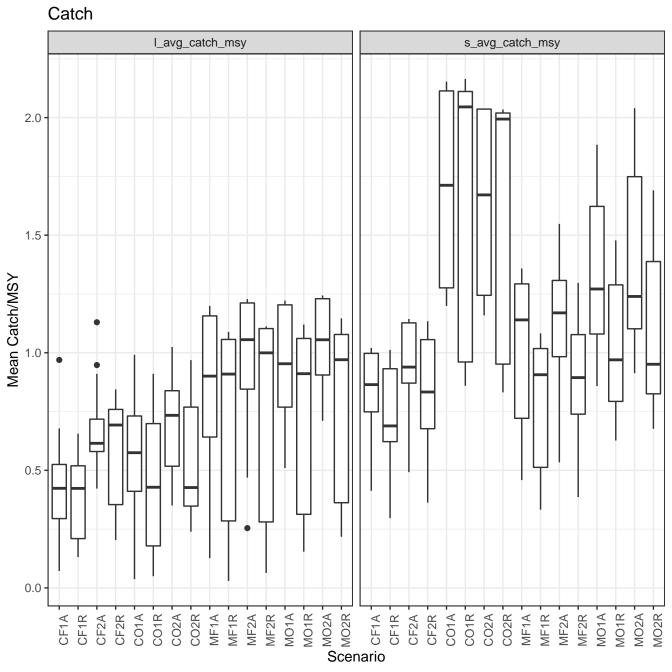


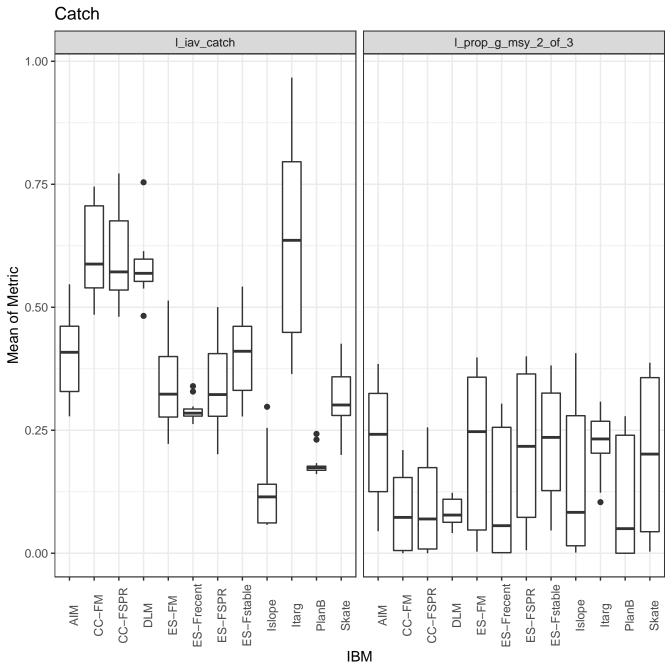


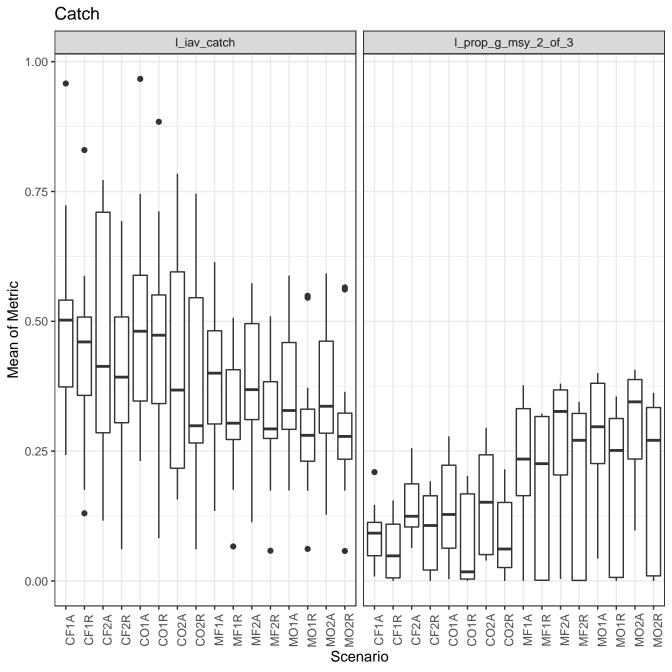


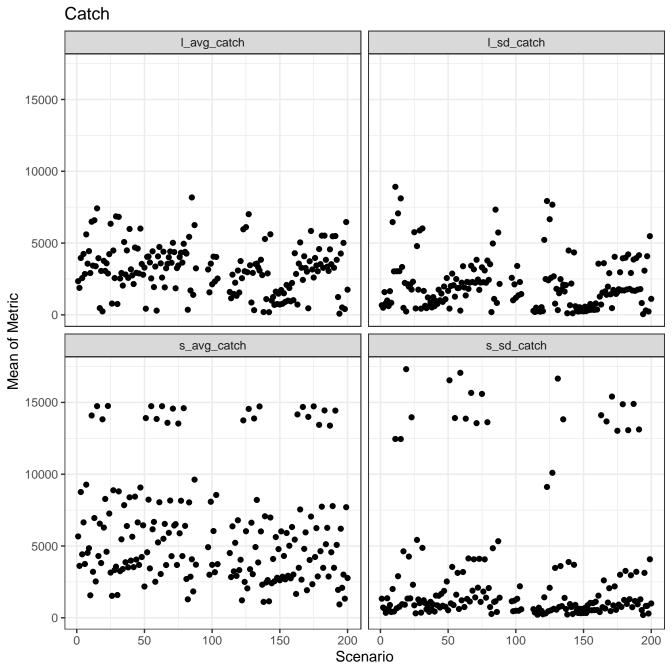


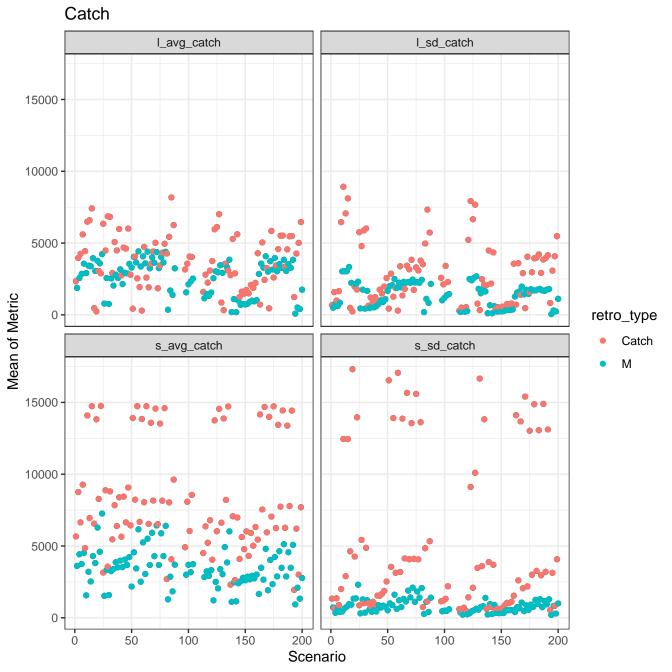




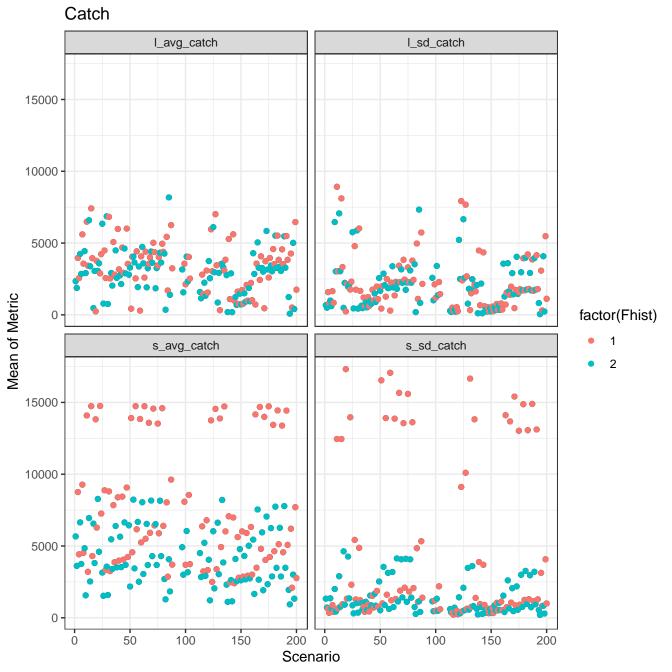


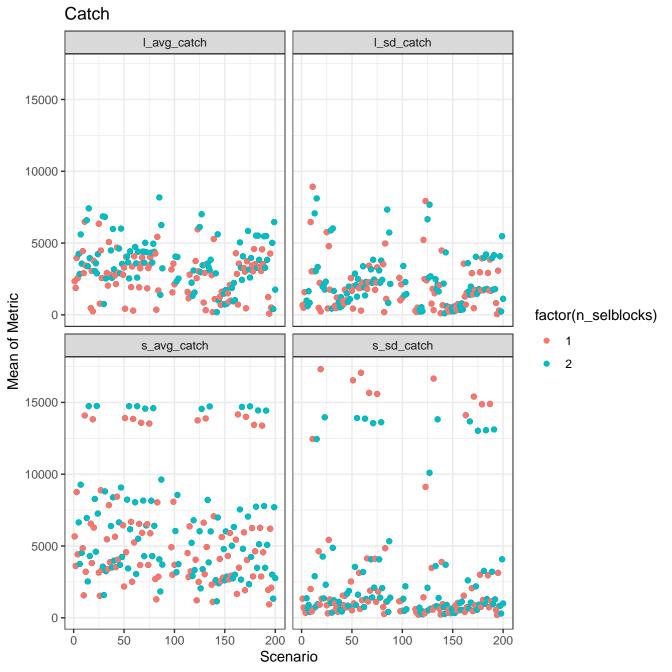


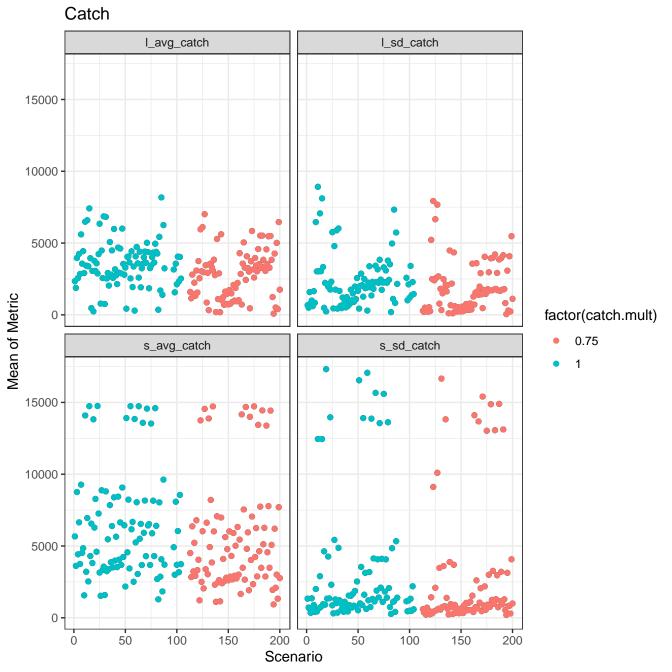




Catch I_avg_catch I_sd_catch 15000 -10000 -**IBMlab** AIM 5000 -CC-FM CC-FSPR DLM Mean of Metric 0 ES-FM ES-Frecent s_sd_catch s_avg_catch ES-FSPR ES-Fstable 15000 -Islope Itarg PlanB 10000 -Skate 5000 0 -50 100 150 50 100 200 150 Ö 200 Scenario







Catch I_avg_catch_msy s_avg_catch_msy 2.0 1.5 -Mean Catch/MSY 1588 0.5 0.0 -200 0 Scenario 50 100 150 50 100 Ö 150 200

Catch I_avg_catch_msy s_avg_catch_msy 2.0 1.5 -Mean Catch/MSY 1588 retro_type Catch М 0.5 0.0 -50 150 100 200 0 Scenario 50 100 150 200

Catch I_avg_catch_msy s_avg_catch_msy 2.0 **IBMlab** AIM 1.5 -CC-FM CC-FSPR Mean Catch/MSY DLM 1588 ES-FM ES-Frecent ES-FSPR ES-Fstable Islope Itarg PlanB Skate 0.5 0.0

200

150

50

Ö

100

150

200

Ö Scenario 50

100

Catch I_avg_catch_msy s_avg_catch_msy 2.0 1.5 -Mean Catch/MSY factor(Fhist) 2 0.5 0.0 -50 50 100 150 200 Ö 100 200 150 Scenario

Catch I_avg_catch_msy s_avg_catch_msy 2.0 1.5 -Mean Catch/MSY factor(n_selblocks) 2 0.5 0.0 -200 0 Scenario 50 100 150 50 150 200 100

Catch I_avg_catch_msy s_avg_catch_msy 2.0 1.5 -Mean Catch/MSY factor(catch.mult) 0.75 0.5 0.0 -50 150 50 100 150 200 Ö 100 200 Scenario

Catch I_iav_catch I_prop_g_msy_2_of_3 1.00 -0.75 -Mean of Metric 0.25 -

> 200 0 Scenario

50

100

150

200

0.00 -

Ö

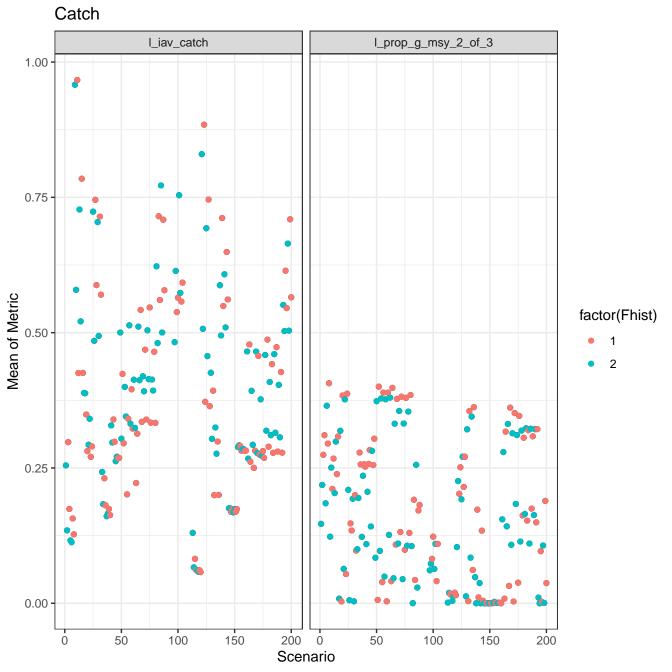
50

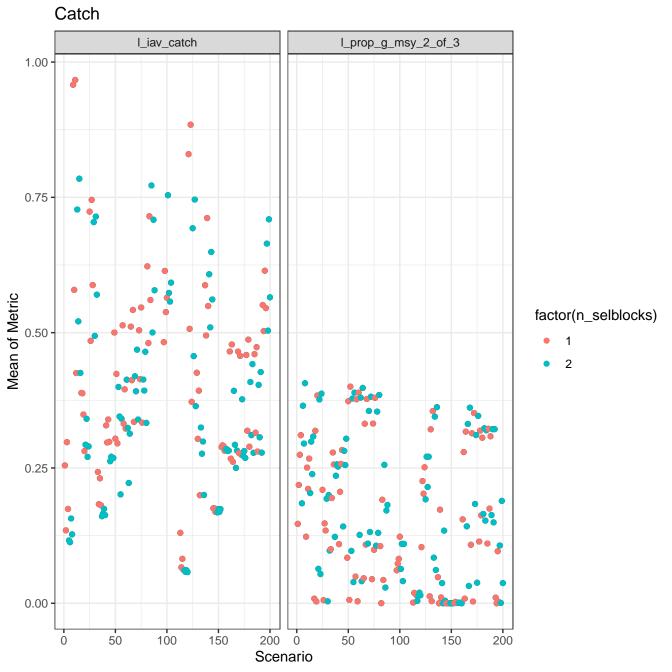
100

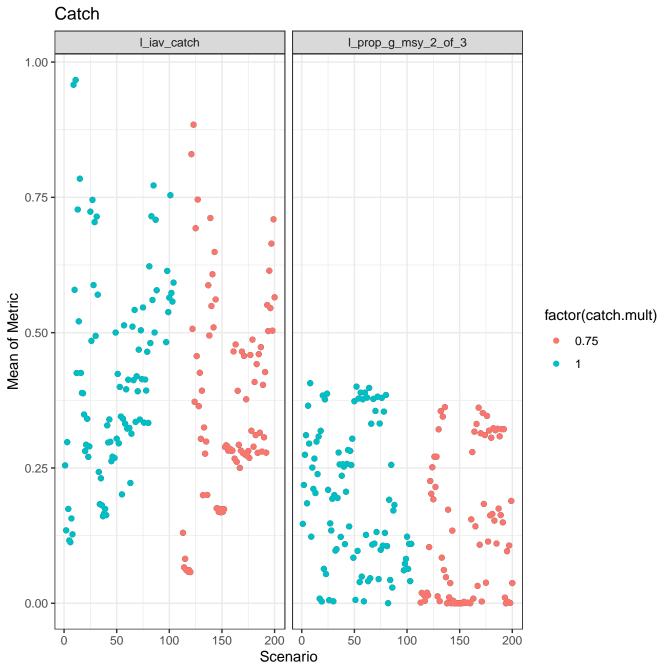
150

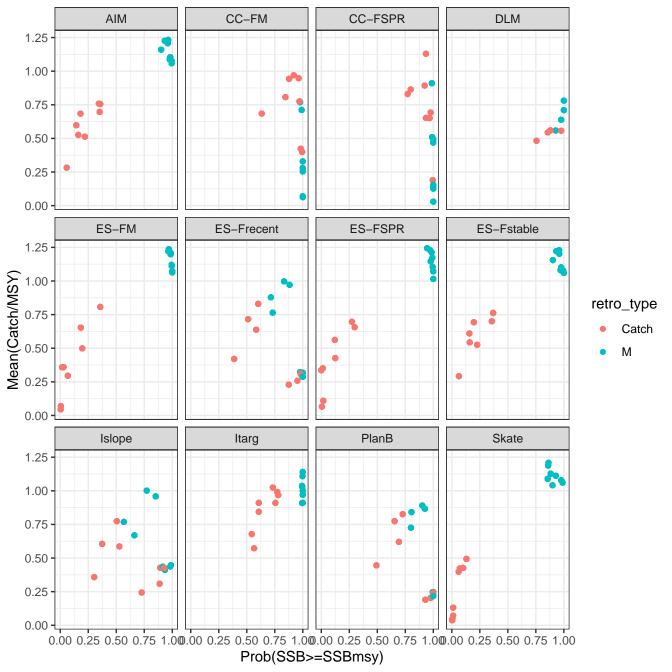
Catch l_iav_catch I_prop_g_msy_2_of_3 1.00 -0.75 -Mean of Metric retro_type 0.50 -Catch М 0.25 -0.00 -50 100 0 50 150 200 100 150 200 Ö Scenario

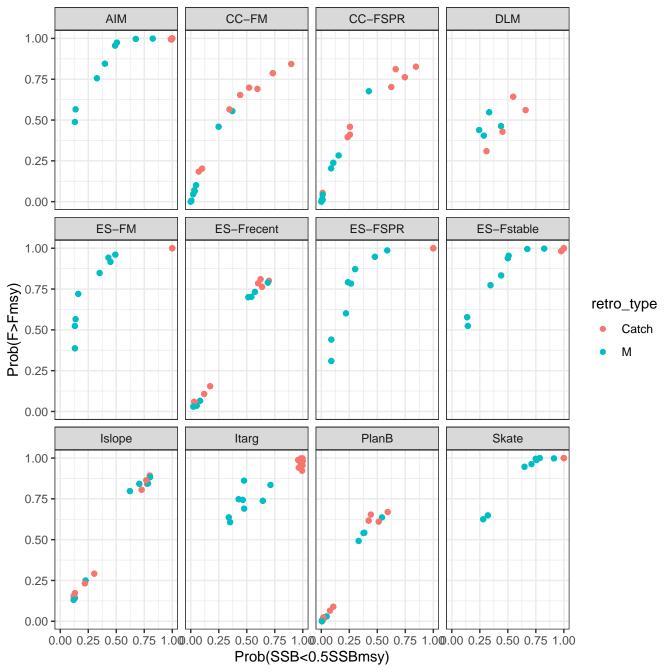
Catch I_iav_catch I_prop_g_msy_2_of_3 1.00 -0.75 -**IBMlab** AIM CC-FM CC-FSPR DLM Mean of Metric ES-FM 0.50 -ES-Frecent ES-FSPR ES-Fstable Islope Itarg PlanB 0.25 -Skate 0.00 -50 200 0 100 150 50 100 200 150 0 Scenario



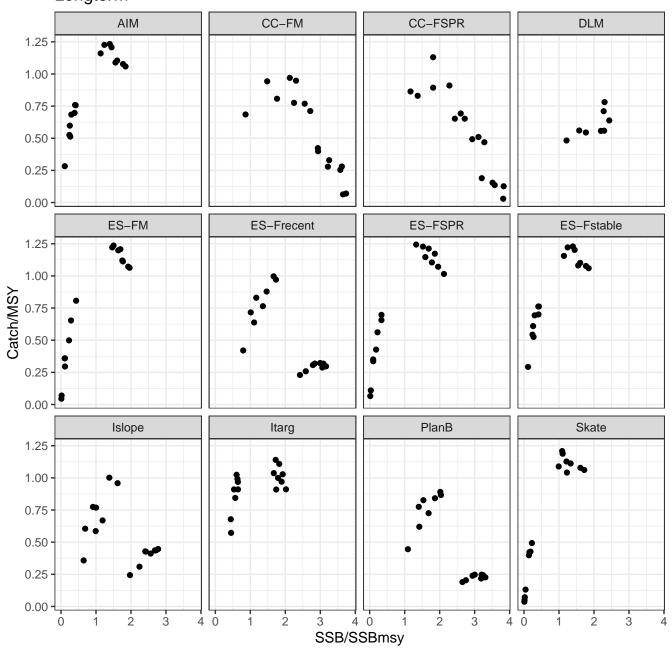








Longterm



CF1A Long Term AIM CC-FM CC-FSPR DLM 2 ES-FM ES-Frecent ES-FSPR ES-Fstable Catch/MSY Islope PlanB Skate Itarg 5 10 10 10 5 10 SSB/SSBmsy

CF1R Long Term AIM CC-FM CC-FSPR ES-FM 4 2 ES-Fstable ES-Frecent ES-FSPR Islope Catch/MSY 2 10 5 PlanB Skate Itarg 4 2 10 5 10 10 5 SSB/SSBmsy

CF2A Long Term AIM CC-FM CC-FSPR DLM 4 ES-FM ES-Frecent ES-FSPR ES-Fstable Catch/MSY 2 Islope PlanB Skate Itarg 10 5 10 10 5 10

SSB/SSBmsy

CF2R Long Term AIM CC-FM CC-FSPR ES-FM 4 2 ES-Fstable ES-Frecent ES-FSPR Islope Catch/MSY 2 10 5 PlanB Skate Itarg 4 2 10 5 10 10 5 SSB/SSBmsy

CO1A Long Term AIM CC-FM CC-FSPR DLM 4 2 ES-FM ES-Frecent ES-FSPR ES-Fstable Catch/MSY Islope PlanB Itarg Skate 4 5 10 10 10 5 5 10

SSB/SSBmsy

CO1R Long Term AIM CC-FM CC-FSPR ES-FM 4 2 ES-Fstable ES-Frecent ES-FSPR Islope Catch/MSY 2 5 10 PlanB Skate Itarg 4 10 5 10 Ö 5 10 5 SSB/SSBmsy

CO2A Long Term AIM CC-FM CC-FSPR DLM 4 ES-FM ES-Frecent ES-FSPR ES-Fstable Catch/MSY Islope PlanB Itarg Skate

10

5

10

SSB/SSBmsy

5

5

10

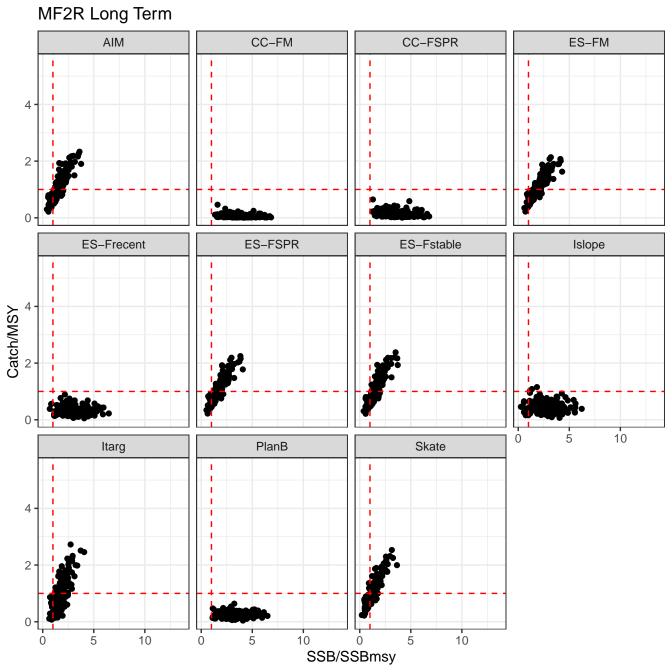
10

CO2R Long Term AIM CC-FM CC-FSPR ES-FM 4 2 ES-FSPR ES-Frecent ES-Fstable Islope Catch/MSY 2 5 10 PlanB Skate Itarg 4 5 10 10 Ö 5 10 5 SSB/SSBmsy

MF1A Long Term AIM CC-FM CC-FSPR DLM 4 2 ES-FM ES-Frecent ES-FSPR ES-Fstable Catch/MSY 2 Islope PlanB Skate Itarg 2 10 5 10 10 5 10 SSB/SSBmsy

MF1R Long Term AIM CC-FM CC-FSPR ES-FM 4 2 ES-Frecent ES-Fstable ES-FSPR Islope Catch/MSY 2 10 5 PlanB Skate Itarg 4 2 10 5 10 5 10 5 SSB/SSBmsy

MF2A Long Term AIM CC-FM CC-FSPR DLM 4 2 ES-FM ES-Frecent ES-FSPR ES-Fstable Catch/MSY 2 Islope PlanB Skate Itarg 4 2 5 10 10 10 10 5 5 SSB/SSBmsy

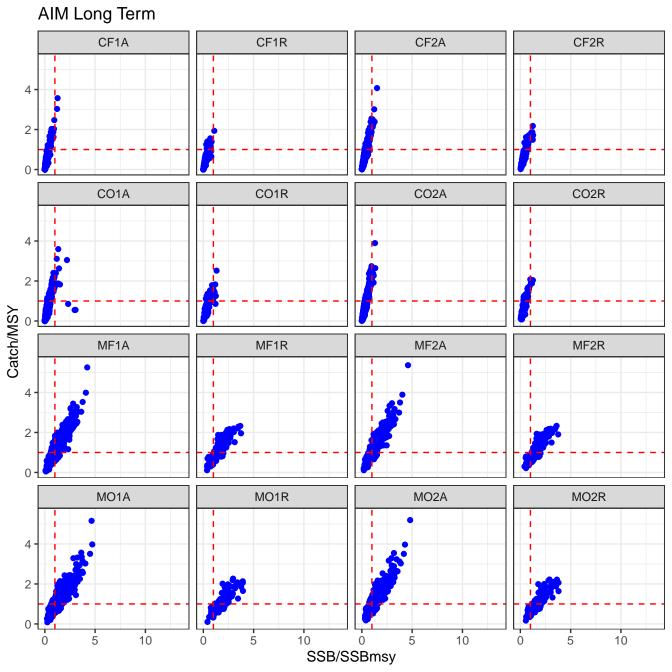


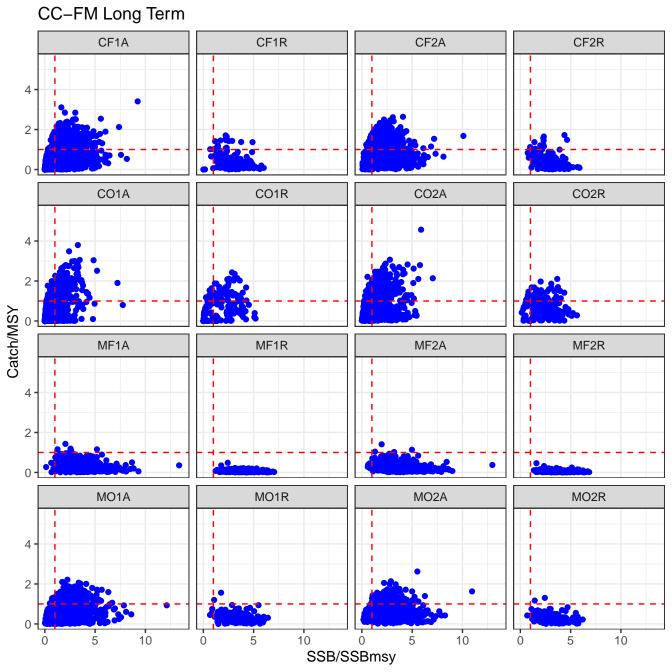
MO1A Long Term AIM CC-FM CC-FSPR DLM 4 2 ES-FM ES-Frecent ES-FSPR ES-Fstable Catch/MSY 2 Islope PlanB Skate Itarg 4 10 5 10 10 10 5 SSB/SSBmsy

MO1R Long Term AIM CC-FM CC-FSPR ES-FM 4 2 ES-FSPR ES-Fstable ES-Frecent Islope Catch/MSY 2 5 10 PlanB Skate Itarg 4 10 5 10 Ö 5 10 5 SSB/SSBmsy

MO2A Long Term AIM CC-FM CC-FSPR DLM 4 2 ES-FM ES-Frecent ES-FSPR ES-Fstable Catch/MSY 2 Islope PlanB Skate Itarg 4 10 5 10 10 10 5 SSB/SSBmsy

MO2R Long Term AIM CC-FM CC-FSPR ES-FM 4 2 ES-FSPR ES-Fstable ES-Frecent Islope Catch/MSY 10 5 PlanB Skate Itarg 2 10 10 5 10 SSB/SSBmsy





CC-FSPR Long Term CF1A CF1R CF2A CF2R 4 2 CO1A CO1R CO2A CO2R 4 2 Catch/MSY MF1A MF1R MF2A MF2R 4 2 MO1A MO1R MO2A MO2R 4 2 5 10 10 10 0 5 10 SSB/SSBmsy

DLM Long Term CF1A CF2A CO1A 4 2 CO2A MF1A MF2A Catch/MSY 10 5 MO1A MO2A 2. 5 10 10 SSB/SSBmsy

ES-FM Long Term CF1A CF1R CF2A CF2R 4 2 CO1A CO1R CO2A CO2R 4 2 Catch/MSY MF1A MF1R MF2R MF2A 4 2 MO1A MO1R MO2A MO2R 4 2 10 5 10 5 10 5 10 5 SSB/SSBmsy

ES-Frecent Long Term CF1A CF1R CF2A CF2R 4 CO1A CO1R CO2A CO2R 4 2 Catch/MSY MF1A MF1R MF2A MF2R 4 2 MO1A MO1R MO2A MO2R 2

10

5

5

0

10

SSB/SSBmsy

10

10

ES-FSPR Long Term CF1A CF1R CF2A CF2R 2 CO1A CO1R CO2A CO2R 4 2 Catch/MSY MF1A MF1R MF2R MF2A 4 2 MO1A MO1R MO2A MO2R 4 2

10

5

5

10

5

10

SSB/SSBmsy

Ö

10

5

ES-Fstable Long Term CF1A CF1R CF2A CF2R 4 2 CO1A CO1R CO2A CO2R 4 2 Catch/MSY MF1R MF1A MF2A MF2R 4 2 MO1A MO1R MO2A MO2R 4 2 10 5 10 10 5 5 10 5 SSB/SSBmsy

Islope Long Term CF1A CF1R CF2A CF2R 4 2 CO1A CO2A CO1R CO2R 4 2 Catch/MSY MF1A MF1R MF2A MF2R 4 2 MO1A MO1R MO2A MO2R 4 2 10 10 10 5 10 5 SSB/SSBmsy

