

Scenario Label Decoder

CF1A to MO2R explained

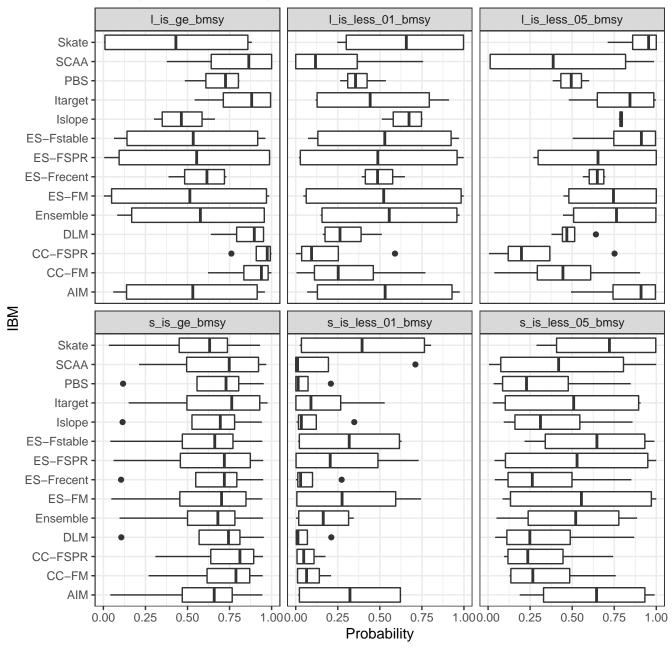
Retrotype: C=catch, M=natural mortality, N=None

 $\label{eq:Fishing} \mbox{F history: F=overfishing then Fmsy, O=Always Overfishing}$

Selblocks: 1 or 2

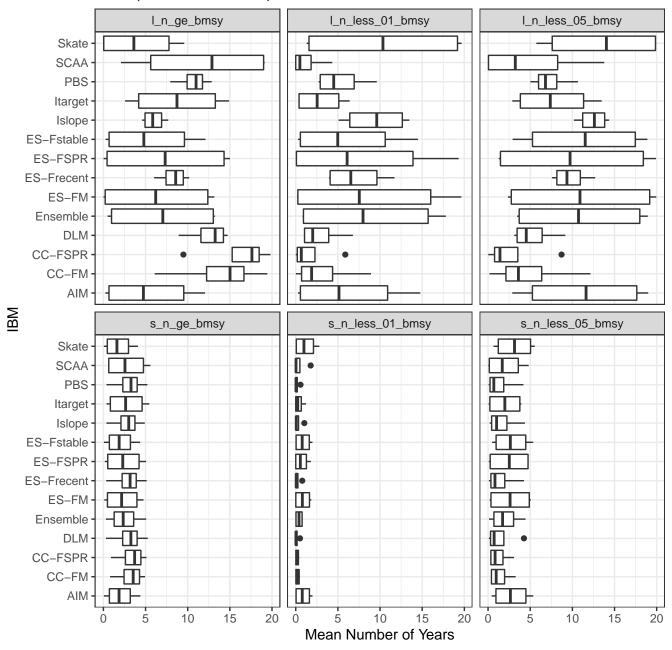
Catch Advice Multiplier: A=1 (applied), R=0.75 (reduced

SSB (SCAA scenarios)



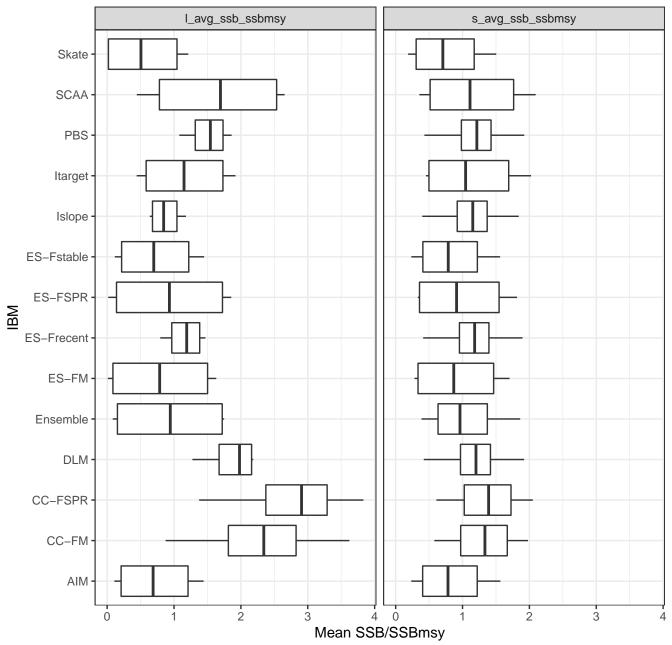
SSB (SCAA scenarios) I_is_ge_bmsy I_is_less_01_bmsy I_is_less_05_bmsy MO1A MF1A CO1A CF1A Scenario s_is_ge_bmsy s_is_less_01_bmsy s_is_less_05_bmsy MO1A MF1A CO1A CF1A 0.25 0.50 0.75 1.000.00 0.00 0.25 0.50 0.75 1.00 0.00 0.25 0.50 0.75 1.00 Probability

SSB (SCAA scenarios)



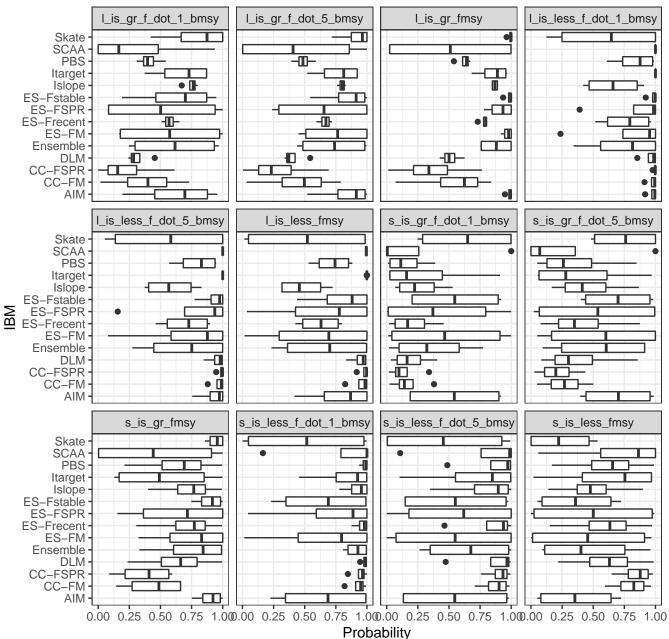
SSB (SCAA scenarios) I_n_ge_bmsy I_n_less_01_bmsy I_n_less_05_bmsy MO1A MF1A CO1A CF1A Scenario s_n_ge_bmsy s_n_less_01_bmsy s_n_less_05_bmsy MO1A MF1A CO1A CF1A 15 10 15 5 10 20 0 5 20 0 5 10 15 20 Mean Number of Years

SSB (SCAA scenarios)



SSB (SCAA scenarios) I_avg_ssb_ssbmsy s_avg_ssb_ssbmsy MO1A -MF1A Scenario CO1A CF1A-0 2 2 3 4 0 3 Mean SSB/SSBmsy

F (SCAA scenarios)



F (SCAA scenarios) I_is_gr_f_dot_1_bmsy I_is_gr_fmsy I_is_less_f_dot_1_bmsy I_is_gr_f_dot_5_bmsy MO1A MF1A CO1A CF1A s_is_gr_f_dot_1_bmsy I_is_less_f_dot_5_bmsy I_is_less_fmsy s_is_gr_f_dot_5_bmsy MO1A Scenario MF1A CO1A CF1A s_is_gr_fmsy s_is_less_f_dot_1_bmsy s_is_less_f_dot_5_bmsy s_is_less_fmsy MO1A MF1A CO1A

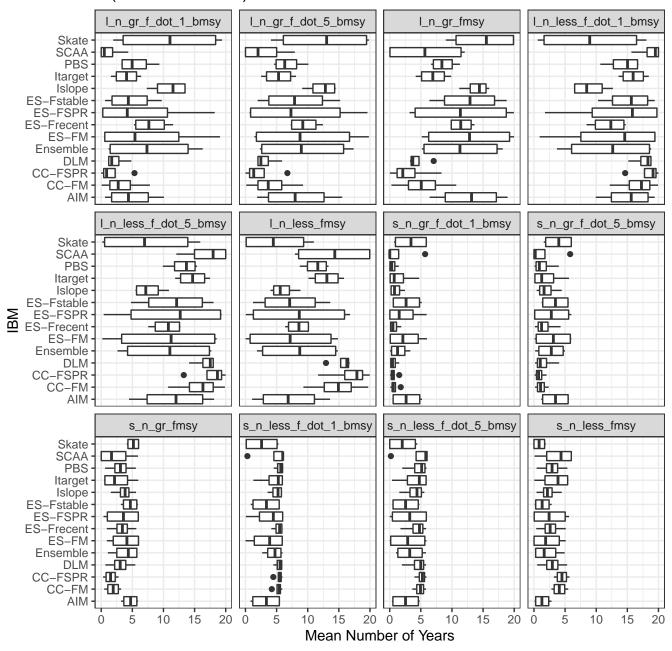
Probability

0.75

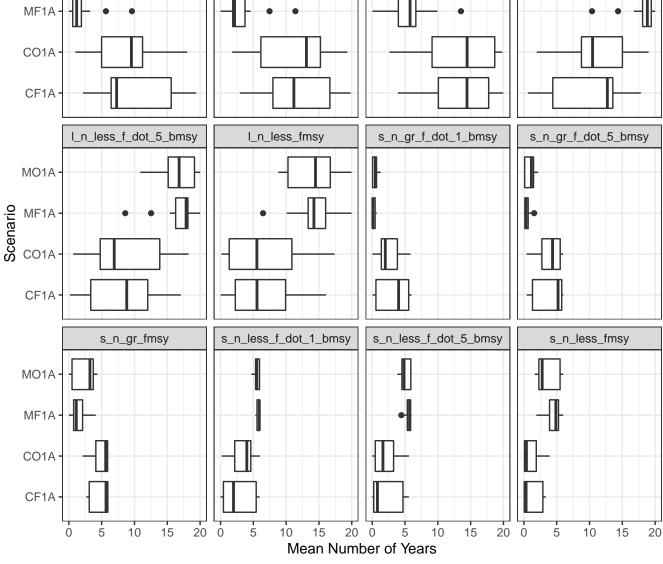
 $0.00 \quad 0.25 \quad 0.50 \quad 0.75 \quad 1.000.00 \quad 0.25 \quad 0.50 \quad 0.75 \quad 1.000.00 \quad 0.25 \quad 0.50 \quad 0.75 \quad 1.000.00 \quad 0.25 \quad 0.50$

CF1A

F (SCAA scenarios)



F (SCAA scenarios) I_n_gr_f_dot_1_bmsy I_n_gr_f_dot_5_bmsy I_n_gr_fmsy I_n_less_f_dot_1_bmsy MO1A MF1A CO1A CF1A I_n_less_f_dot_5_bmsy I_n_less_fmsy s_n_gr_f_dot_1_bmsy s_n_gr_f_dot_5_bmsy MO1A MF1A CO1A CF1A s_n_gr_fmsy s_n_less_f_dot_1_bmsy s_n_less_f_dot_5_bmsy s_n_less_fmsy MO1A MF1A



F (SCAA scenarios) I_avg_f_fmsy s_avg_f_fmsy Skate · SCAA PBS-Itarget -Islope -ES-Fstable -ES-FSPR · IBM ES-Frecent -ES-FM-Ensemble -DLM -CC-FSPR CC-FM-

3

6

9

12

AIM

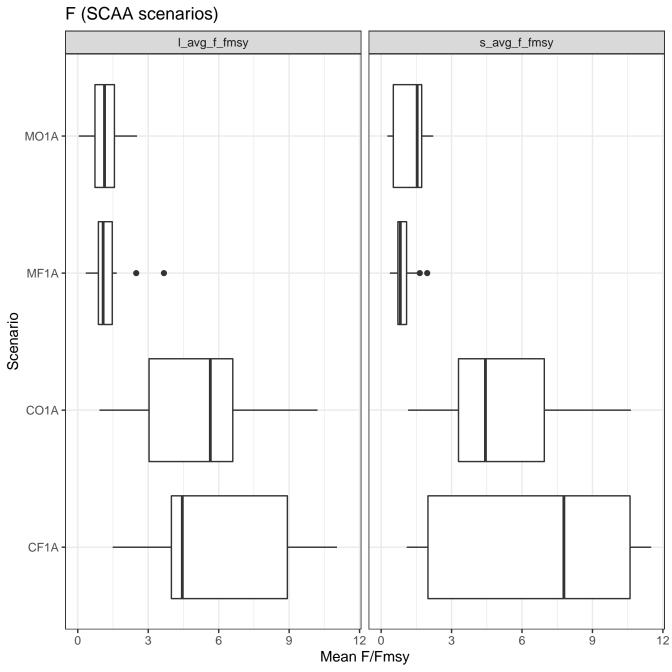
3

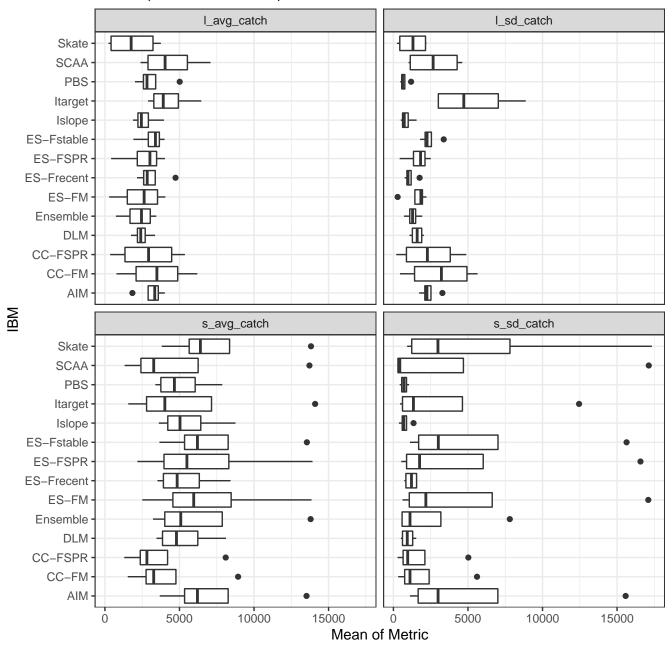
6

9

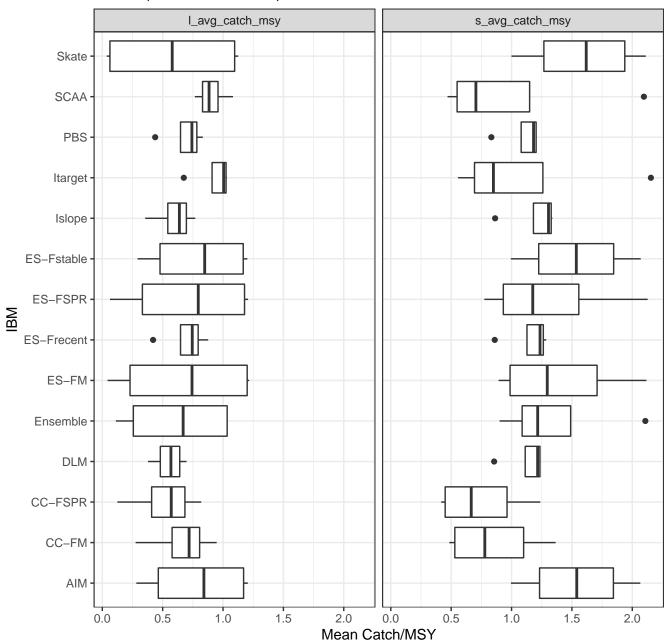
12 0

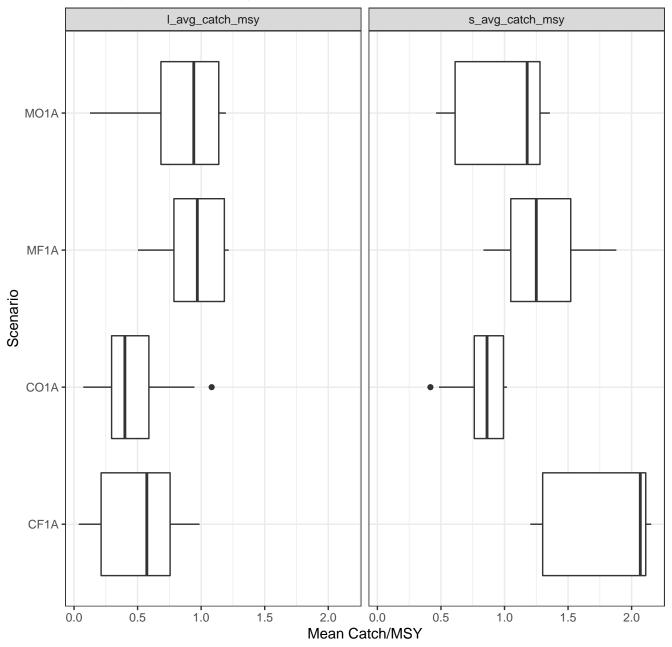
Mean F/Fmsy

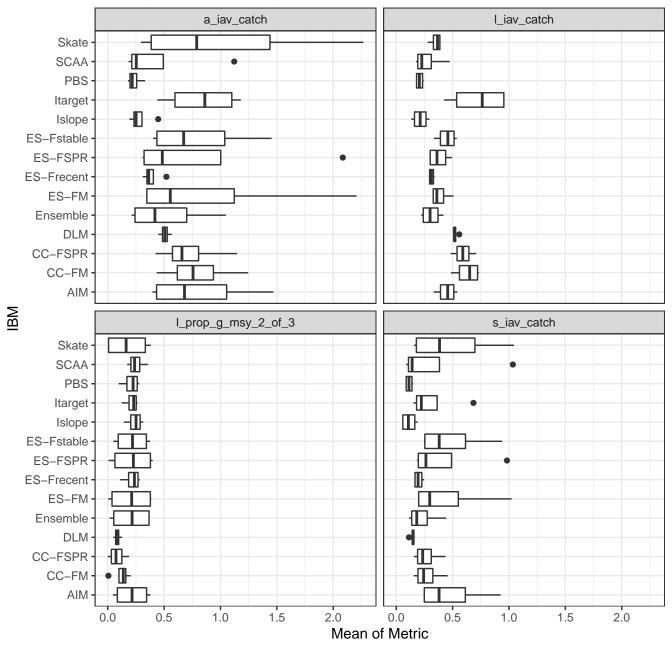




Catch (SCAA scenarios) I_avg_catch I_sd_catch MO1A MF1A CO1A CF1A Scenario s_avg_catch s_sd_catch MO1A MF1A -CO1A CF1A-15000 5000 10000 15000 5000 Ö 10000 Mean of Metric







Catch (SCAA scenarios) a_iav_catch I_iav_catch MO1A MF1A CO1A CF1A Scenario I_prop_g_msy_2_of_3 s_iav_catch MO1A MF1A CO1A CF1A 0.5 0.5 1.0 1.5 2.0 0.0 1.5 0.0 1.0 2.0 Mean of Metric

Long Term (SCAA scenarios) CC-FM AIM CC-FSPR DLM 1.25 1.00 0.75 -0.50 -0.25 -0.00 Ensemble ES-FM ES-Frecent ES-FSPR 1.25 1.00 0.75 -0.50 Mean(Catch/MSY) 0.00-1.25-1.00retro_type Catch ES-Fstable Islope Itarget **PBS** M 0.75 -0.50 -0.25 -0.00 10.00 0.25 0.50 0.75 1.0**0**.00 0.25 0.50 0.75 1.00 **SCAA** Skate 1.25 1.00 -0.75 -0.50 0.25 -0.00 0.00 0.25 0.50 0.75 1.0**0**.00 0.25 0.50 0.75 1.00

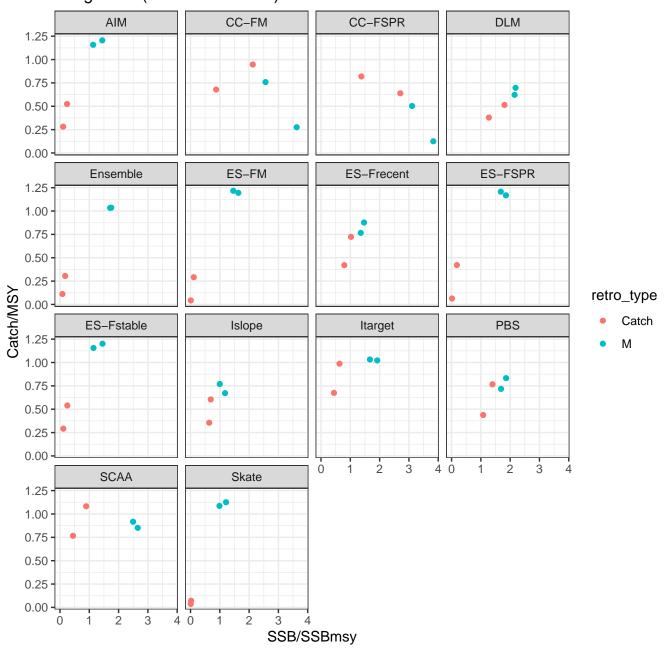
Prob(SSB>=SSBmsy)

Short Term (SCAA scenarios) CC-FM AIM CC-FSPR DLM 2.0 1.5 1.0 0.5 ES-Frecent Ensemble ES-FM **ES-FSPR** 2.0 1.5 Mean(Catch/MSY) retro_type Catch ES-Fstable Islope Itarget **PBS** M 1.5 1.0 0.5 **1**0.00 0.25 0.50 0.75 1.00000 0.25 0.50 0.75 1.00 SCAA Skate 2.0 1.5 1.0 0.5 0.00 0.25 0.50 0.75 1.00000 0.25 0.50 0.75 1.00 Prob(SSB>=SSBmsy)

Long Term (SCAA scenarios) CC-FM AIM CC-FSPR DLM 1.00 -0.75 -0.50 0.25 -0.00 Ensemble ES-FM ES-Frecent ES-FSPR 1.00 0.75 -0.50 0.25 - O.00 - O. retro_type Catch ES-Fstable Islope Itarget **PBS** M 0.75 -0.50 0.25 -0.00]0.00 0.25 0.50 0.75 1.0**0**.00 0.25 0.50 0.75 1.00 **SCAA** Skate 1.00 -0.75 -0.50 -0.25 -0.00 0.00 0.25 0.50 0.75 1.0**0**.00 0.25 0.50 0.75 1.00 Prob(SSB<0.5SSBmsy)

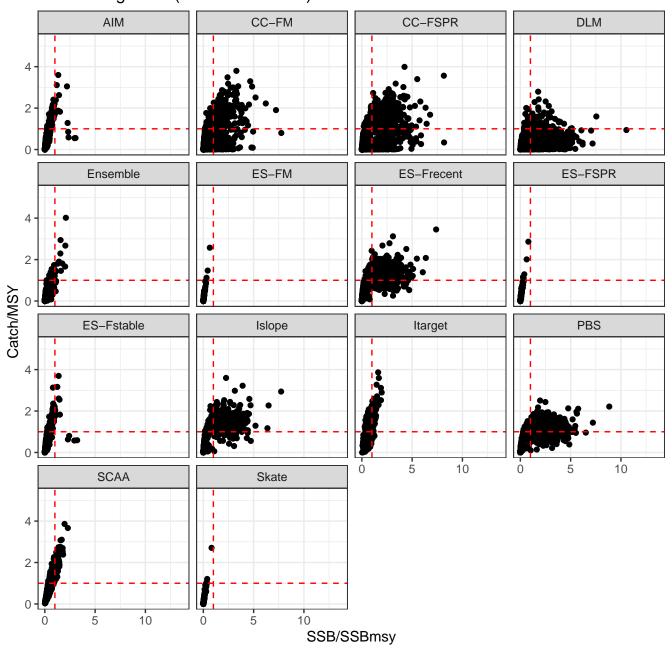
Short Term (SCAA scenarios) CC-FM AIM CC-FSPR DLM 1.00 0.75 -0.50 -0.25 -0.00 Ensemble ES-FM ES-Frecent ES-FSPR 1.00 -0.75 -0.50 -Prob(F×Fmsy) 0.000 - 1.00 1.00 0.75 retro_type Catch ES-Fstable Islope Itarget **PBS** M 0.75 0.50 -0.25 -0.00]0.00 0.25 0.50 0.75 1.0**0**.00 0.25 0.50 0.75 1.00 SCAA Skate 1.00 -0.75 -0.50 -0.25 -0.00 0.00 0.25 0.50 0.75 1.0**0**.00 0.25 0.50 0.75 1.00 Prob(SSB<0.5SSBmsy)

Long Term (SCAA scenarios)

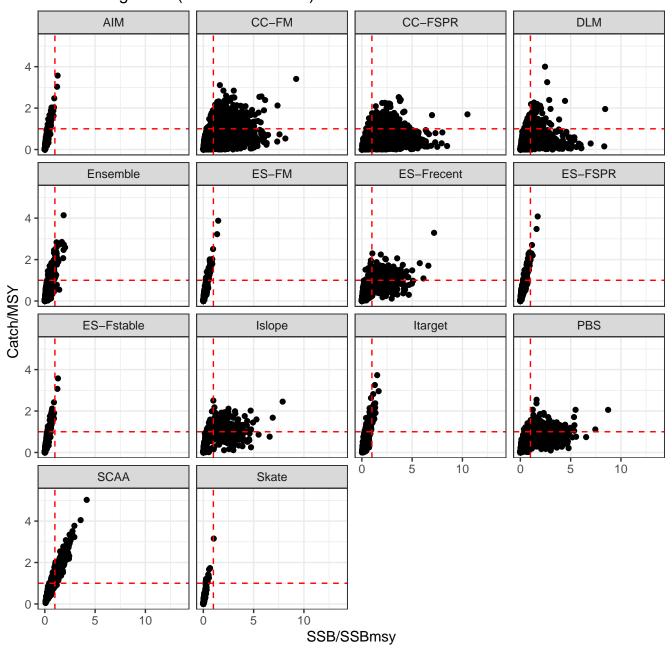


Short Term (SCAA scenarios) CC-FM CC-FSPR AIM DLM 2.0 1.5 1.0 0.5 Ensemble ES-FM ES-Frecent ES-FSPR 2.0 1.5 1.0 Catch/MSY 2.0 retro_type Catch ES-Fstable Islope Itarget **PBS** M 1.5 1.0 0.5 0.5 1.0 1.5 2.0 0.5 1.0 1.5 SCAA Skate 2.0 -1.5 1.0 0.5 0.5 0.5 1.0 1.5 2.0 1.0 1.5 2.0 SSB/SSBmsy

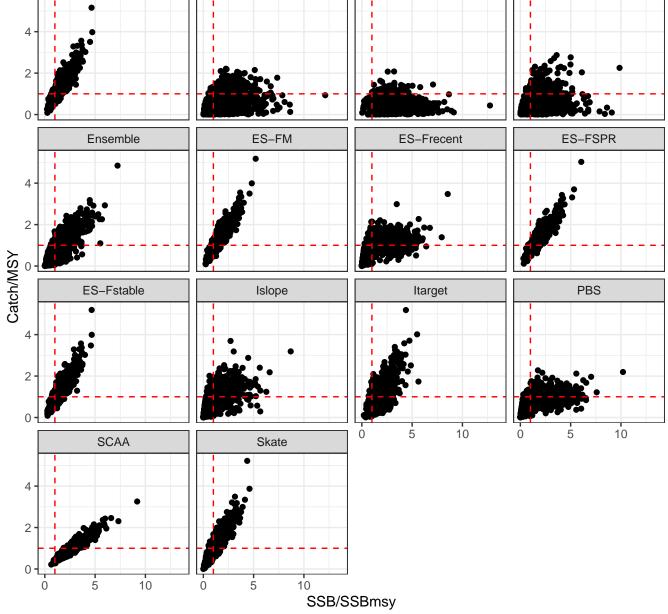
CF1A Long Term (SCAA scenarios)



CO1A Long Term (SCAA scenarios)

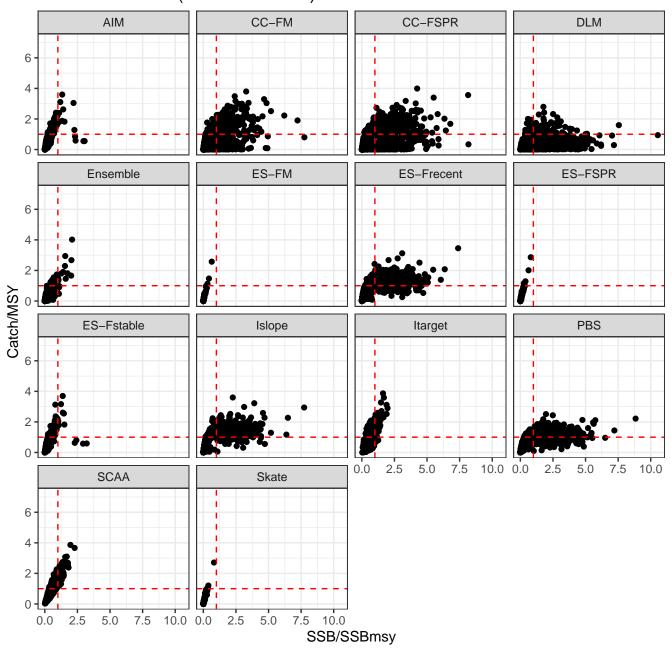


MF1A Long Term (SCAA scenarios) AIM CC-FM CC-FSPR DLM 4 2 ES-FM Ensemble ES-Frecent ES-FSPR 4 2 ES-Fstable Islope Itarget PBS 2

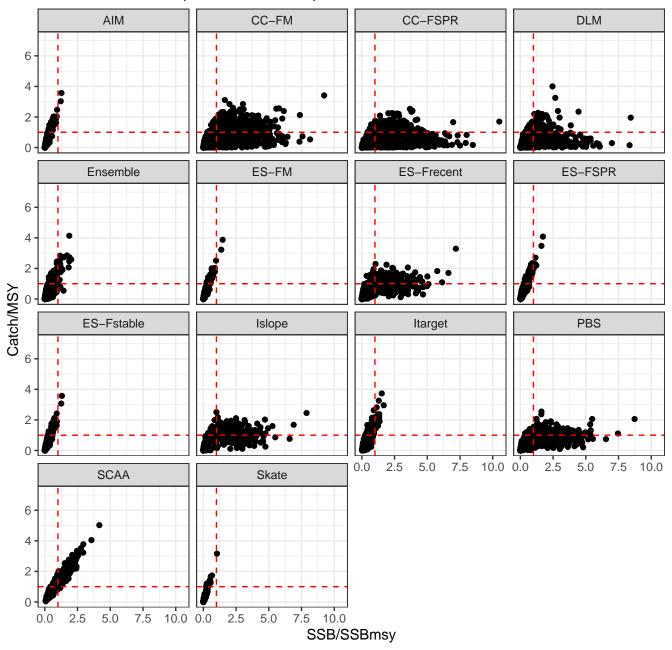


MO1A Long Term (SCAA scenarios) AIM CC-FM CC-FSPR DLM 4 2 ES-FM Ensemble ES-Frecent ES-FSPR 4 2 Catch/MSY ES-Fstable Islope Itarget PBS 2 10 10 5 5 SCAA Skate 2 10 5 5 10 SSB/SSBmsy

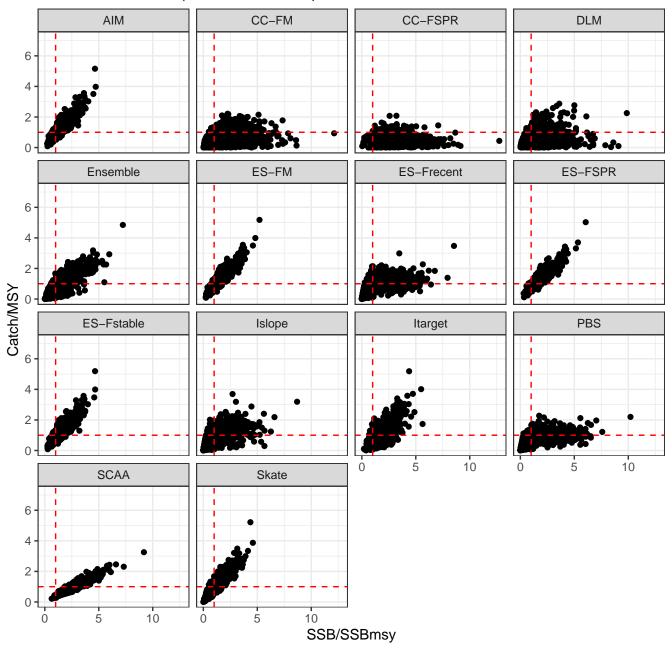
CF1A Short Term (SCAA scenarios)



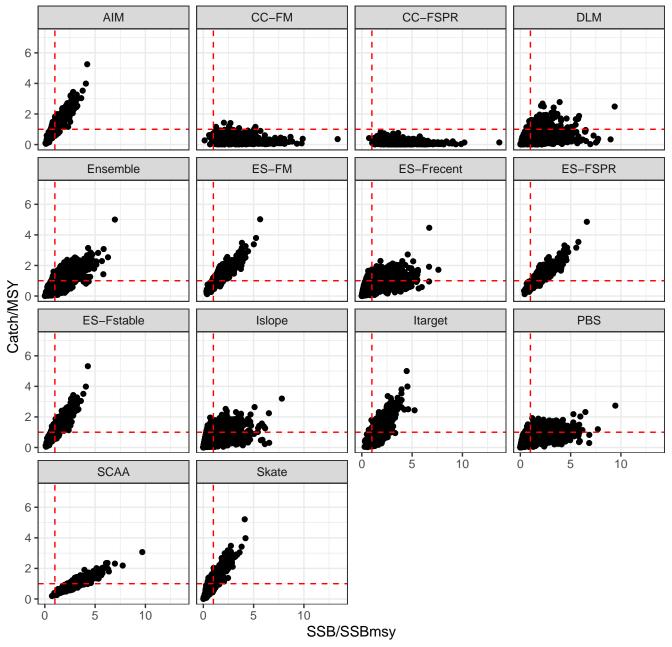
CO1A Short Term (SCAA scenarios)

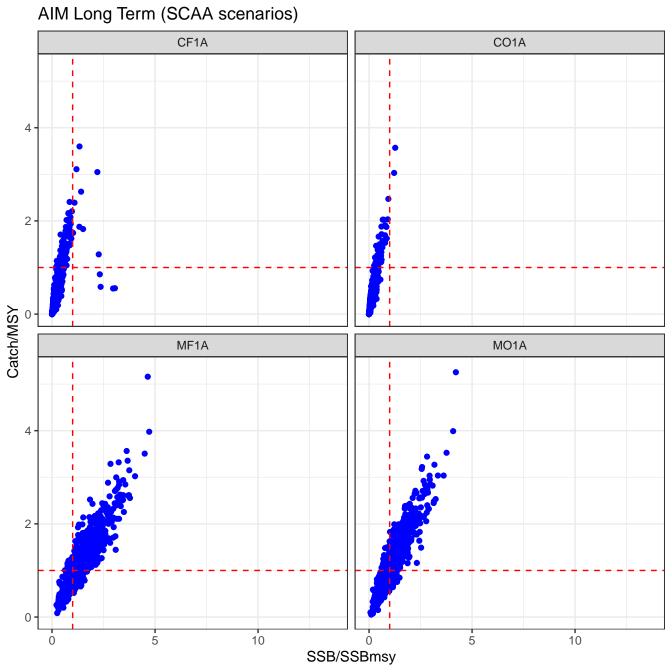


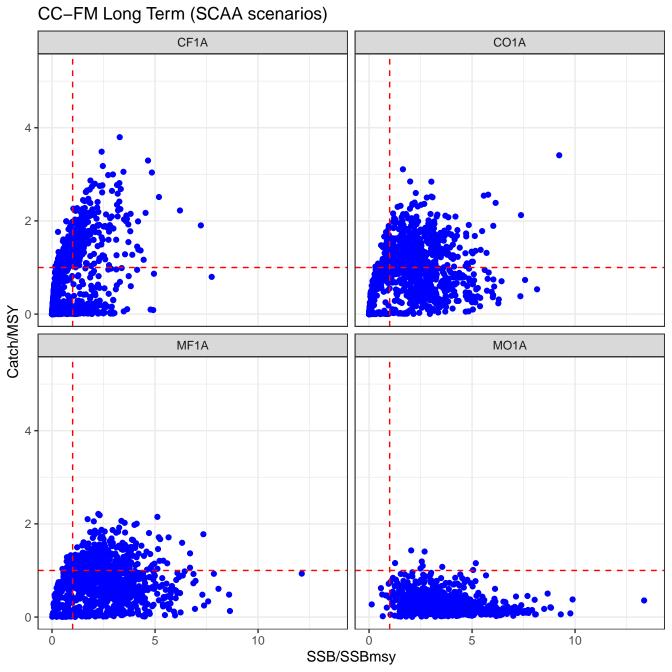
MF1A Short Term (SCAA scenarios)

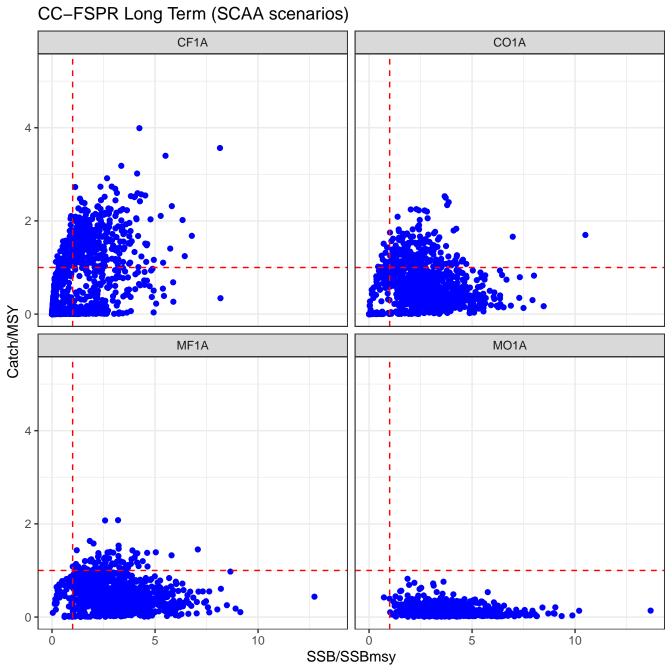


MO1A Short Term (SCAA scenarios)









DLM Long Term (SCAA scenarios) CF1A CO1A 2. Catch/MSY MF1A MO1A 2 10 10 SSB/SSBmsy

Ensemble Long Term (SCAA scenarios) CF1A CO1A 2 Catch/MSY MF1A MO1A 2 10 5 10 SSB/SSBmsy

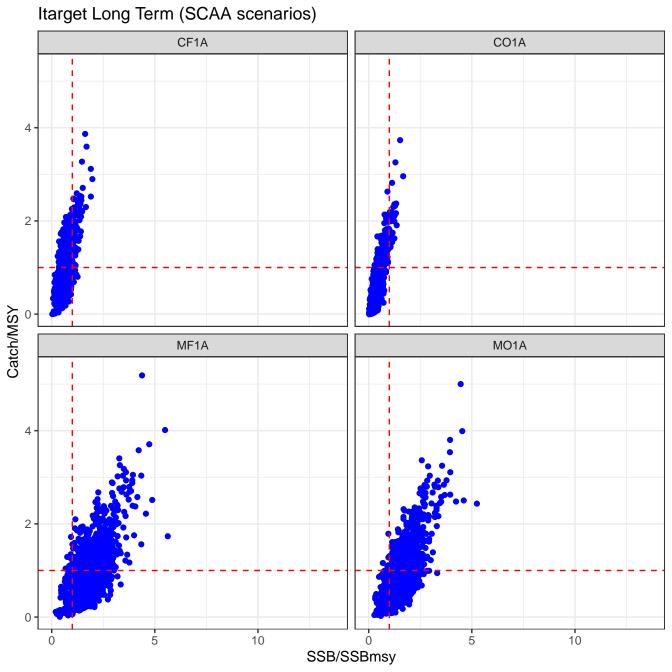
ES-FM Long Term (SCAA scenarios) CF1A CO1A 2. Catch/MSY MF1A MO1A 2 5 10 10 5 SSB/SSBmsy

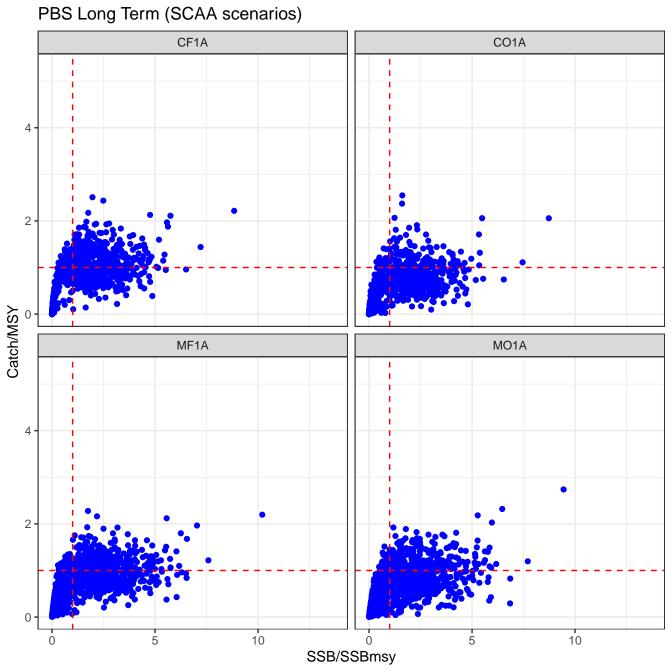
ES-Frecent Long Term (SCAA scenarios) CF1A CO1A 2 -Catch/MSY MF1A MO1A 2 10 10 5 5 SSB/SSBmsy

ES-FSPR Long Term (SCAA scenarios) CF1A CO1A 2. Catch/MSY MF1A MO1A 2 5 10 10 5 SSB/SSBmsy

ES-Fstable Long Term (SCAA scenarios) CF1A CO1A 2 -Catch/MSY MF1A MO1A 2 5 10 10 5 SSB/SSBmsy

Islope Long Term (SCAA scenarios) CF1A CO1A 2. Catch/MSY MF1A MO1A 2 10 10 5 SSB/SSBmsy

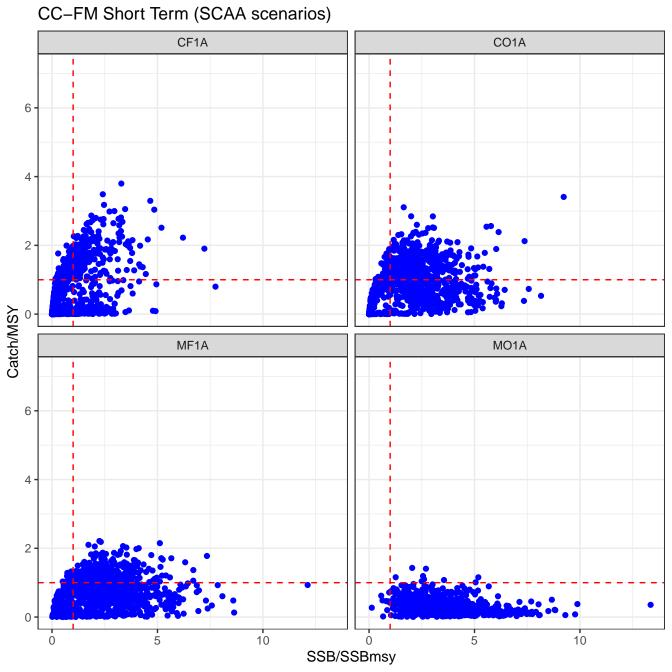




SCAA Long Term (SCAA scenarios) CF1A CO1A 2 -Catch/MSY MF1A MO1A 2 -5 10 10 5 SSB/SSBmsy

Skate Long Term (SCAA scenarios) CF1A CO1A 2. Catch/MSY MF1A MO1A 2 5 10 10 5 SSB/SSBmsy

AIM Short Term (SCAA scenarios) CF1A CO1A 6 -4 2 · Catch/MSY MF1A MO1A 6 4 2 -2 6 8 0 SSB/SSBmsy 2 6



CC-FSPR Short Term (SCAA scenarios) CF1A CO1A 6 4 2. Catch/MSY MF1A MO1A 6 4 2 -10 5 5 10 SSB/SSBmsy

DLM Short Term (SCAA scenarios) CF1A CO1A 6 4 2 · Catch/MSY MF1A MO1A 6 4 2 -0

2.5

5.0

7.5

10.0

2.5

0.0

7.5

10.0

0.0

SSB/SSBmsy

5.0

Ensemble Short Term (SCAA scenarios) CF1A CO1A 6 -4 2 -Catch/MSY MF1A MO1A 6 4 2 -6 8 0 SSB/SSBmsy

ES-FM Short Term (SCAA scenarios) CF1A CO1A 6 -4 2 · Catch/MSY MF1A MO1A 6 4 2 -6 2 ssB/ssBmsy 2

ES-Frecent Short Term (SCAA scenarios) CF1A CO1A 6 -4 2 Catch/MSY MO1A MF1A 6 4 2 -

SSB/SSBmsy

2

2

ES-FSPR Short Term (SCAA scenarios) CF1A CO1A 6 -4 2 · Catch/MSY MF1A MO1A 6 4 2 -2 6 ssB/ssBmsy 2

ES-Fstable Short Term (SCAA scenarios) CF1A CO1A 6 -4 2 -Catch/MSY MF1A MO1A 6 4 2 -6 2 2 8 0 SSB/SSBmsy 6

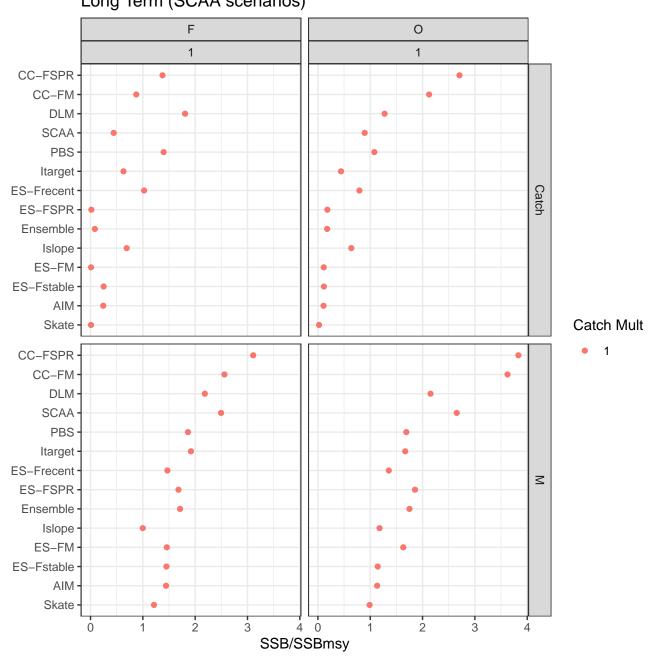
Islope Short Term (SCAA scenarios) CF1A CO1A 6 -4 2 Catch/MSY MF1A MO1A 6 4 2 -5.0 5.0 7.5 2.5 7.5 0.0 0.0 2.5 SSB/SSBmsy

Itarget Short Term (SCAA scenarios) CF1A CO1A 6 -4 2. Catch/MSY MF1A MO1A 6 4 2 -2 6 8 0 SSB/SSBmsy 6

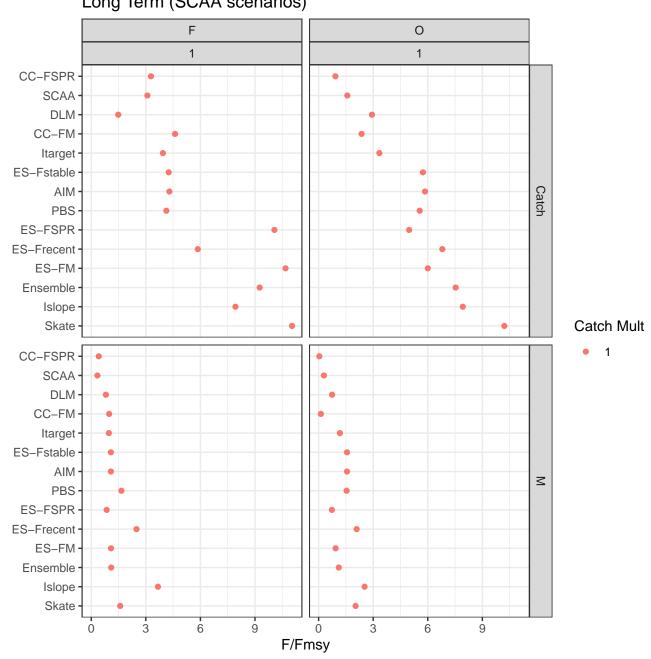
PBS Short Term (SCAA scenarios) CF1A CO1A 6 4 2 Catch/MSY MF1A MO1A 6 4 2 -5.0 2.5 7.5 10.0 0.0 2.5 5.0 7.5 10.0 0.0 SSB/SSBmsy

SCAA Short Term (SCAA scenarios) CF1A CO1A 6 -4 2. Catch/MSY MF1A MO1A 6 4 2 0 -7.5 2.5 5.0 2.5 5.0 7.5 10.0 10.0 0.0 0.0 SSB/SSBmsy

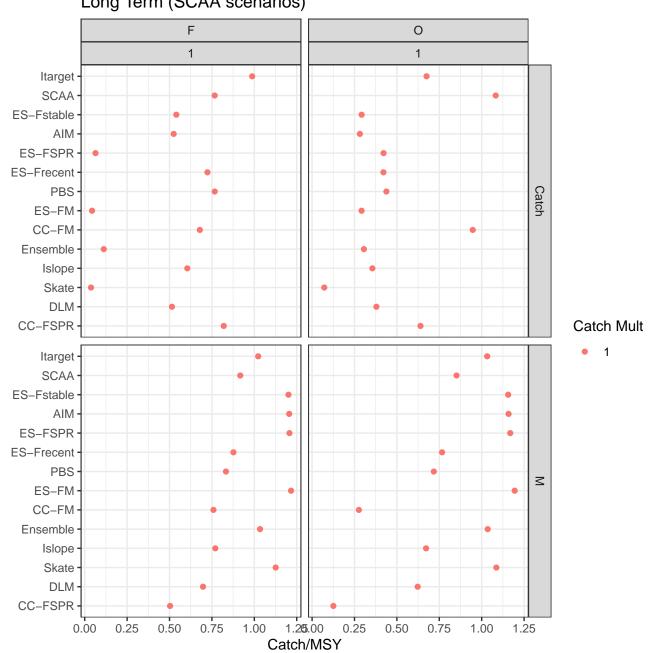
Skate Short Term (SCAA scenarios) CF1A CO1A 6 -4 2 -Catch/MSY MF1A MO1A 6 4 2 -6 2 2 8 0 SSB/SSBmsy 6 Long Term (SCAA scenarios)



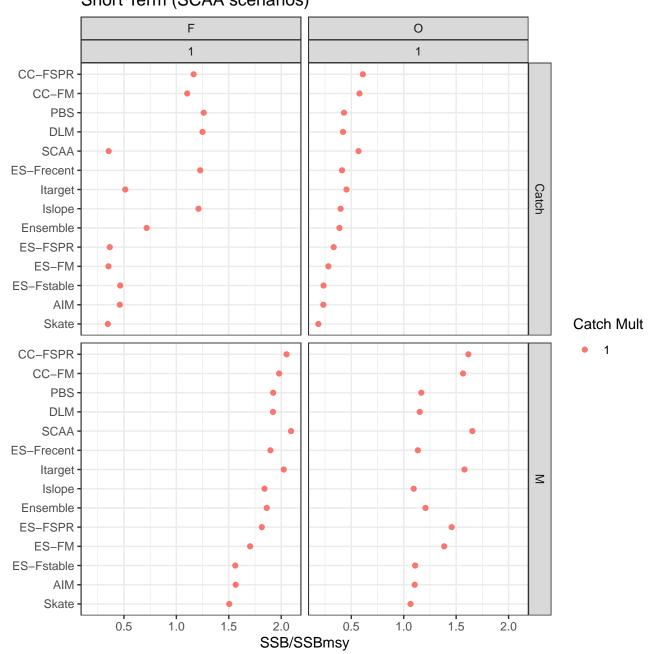
Long Term (SCAA scenarios)



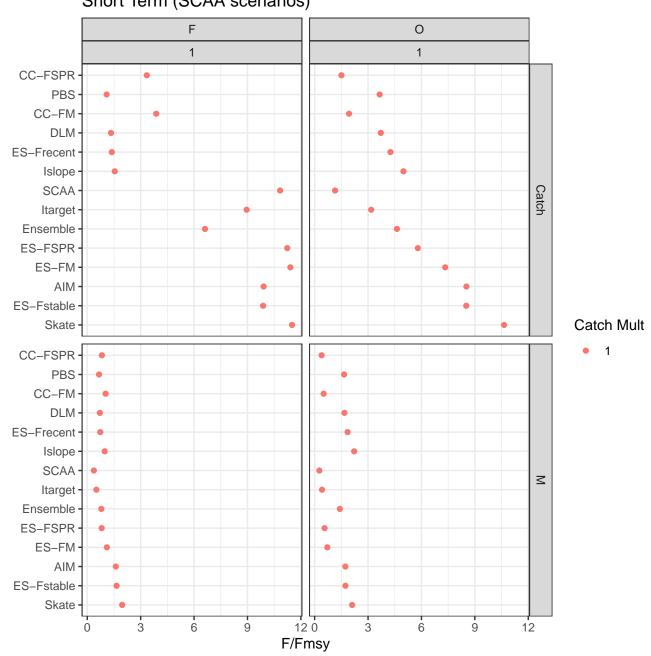
Long Term (SCAA scenarios)



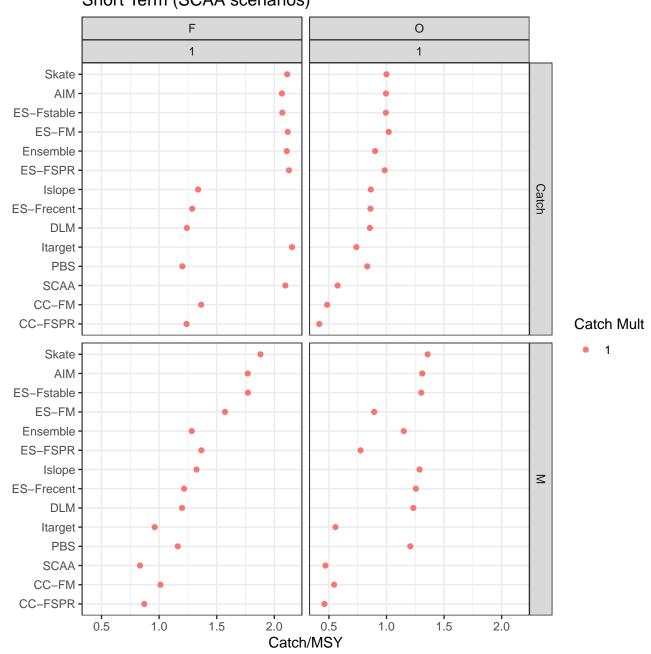
Short Term (SCAA scenarios)



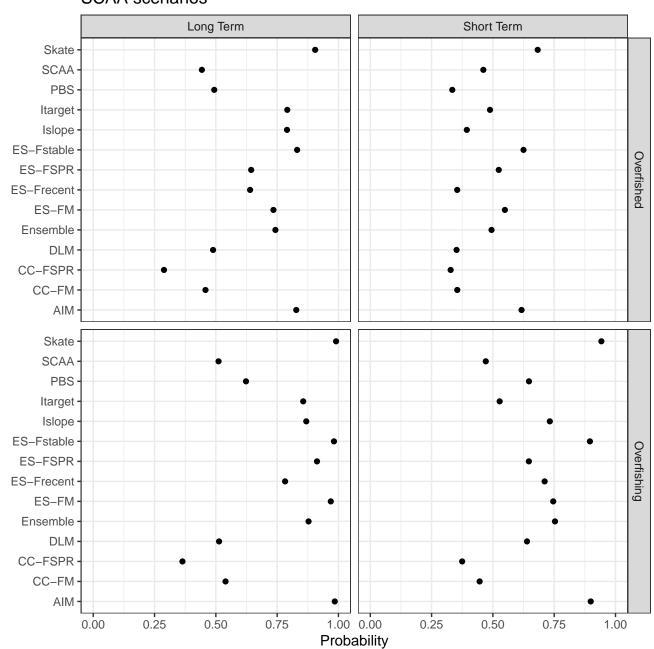
Short Term (SCAA scenarios)



Short Term (SCAA scenarios)



SCAA scenarios



SCAA scenarios

