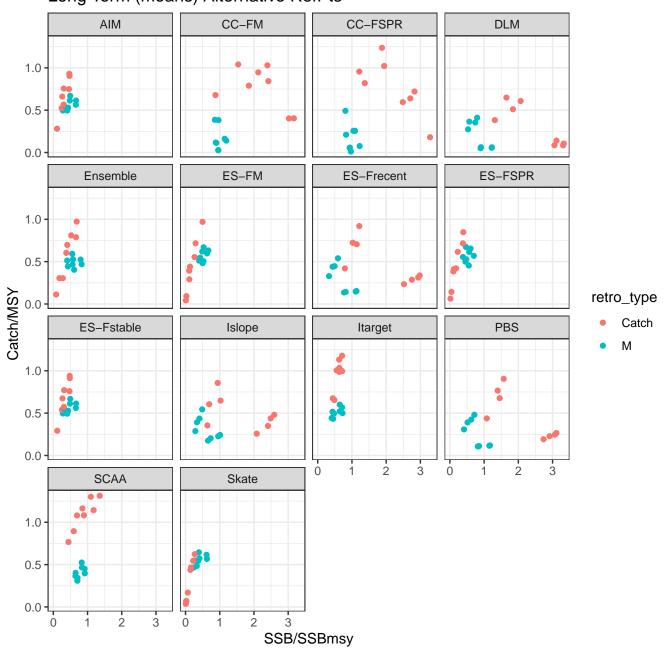


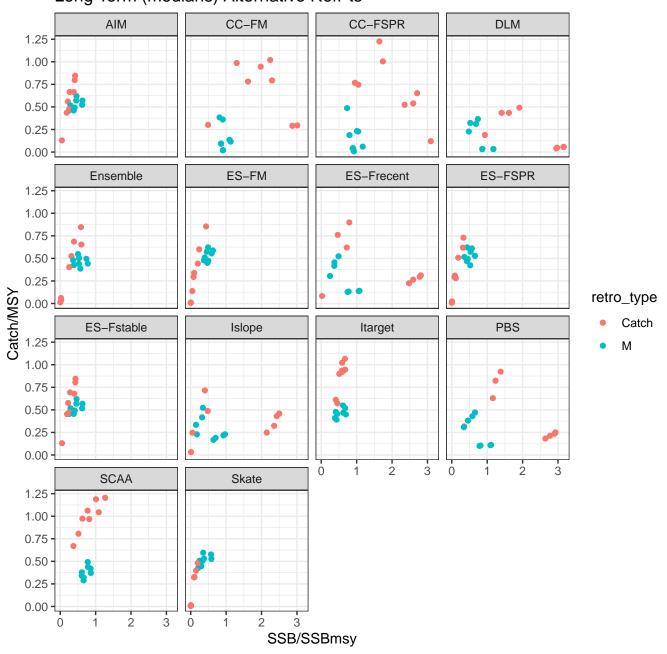
Long Term (means) CC-FM DLM AIM CC-FSPR 1.25 1.00 -0.75 0.50 -0.25 0.00 Ensemble ES-FM **ES-Frecent** ES-FSPR 1.25 -1.00 -0.75 -0.50 -0.25 Catch/MSY retro\_type 0.00 Catch ES-Fstable Islope Itarget **PBS** 1.25 Μ 1.00 0.75 0.50 -0.25 0.00 4 2 3 Ö 2 3 Ö SCAA Skate 1.25 -1.00 -0.75 -0.50 0.25 -0.00 4 2 3 0 2 3 0 1 SSB/SSBmsy

Long Term (medians) CC-FM CC-FSPR DLM AIM 1.2 0.9 0.6 0.3 0.0 ES-FM ES-Frecent Ensemble ES-FSPR 1.2 0.9 0.6 0.3 Catch/MSY retro\_type Catch ES-Fstable Islope Itarget **PBS** 1.2 Μ 0.9 0.6 0.3 0.0 0 2 3 2 3 Ö 1 SCAA Skate 1.2 0.9 0.6 0.3 0.0 0 2 3 0 2 3 1 1 SSB/SSBmsy

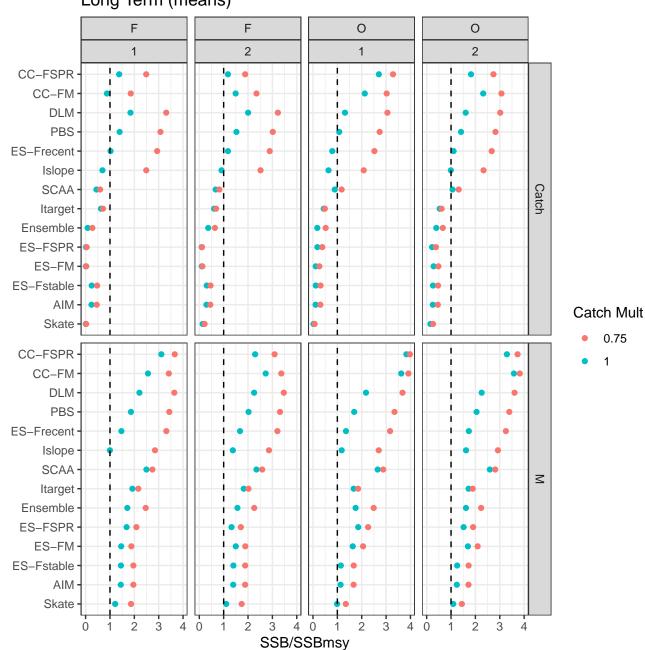
Long Term (means) Alternative RefPts



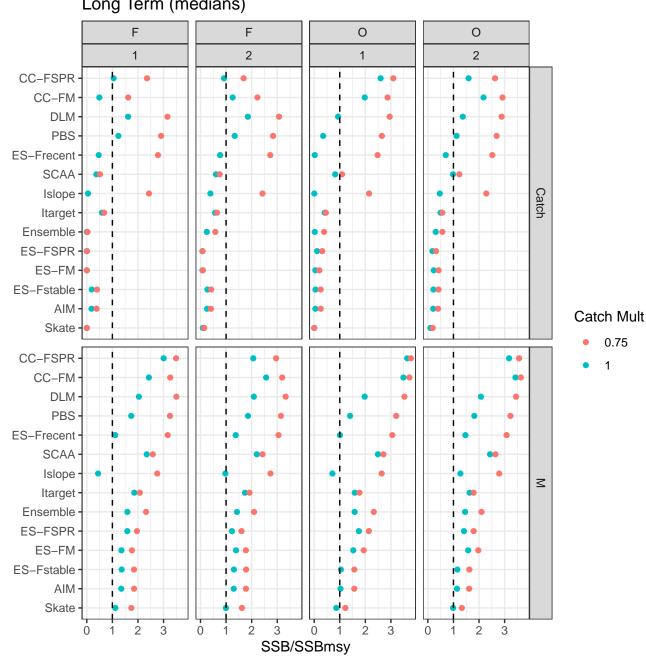
Long Term (medians) Alternative RefPts



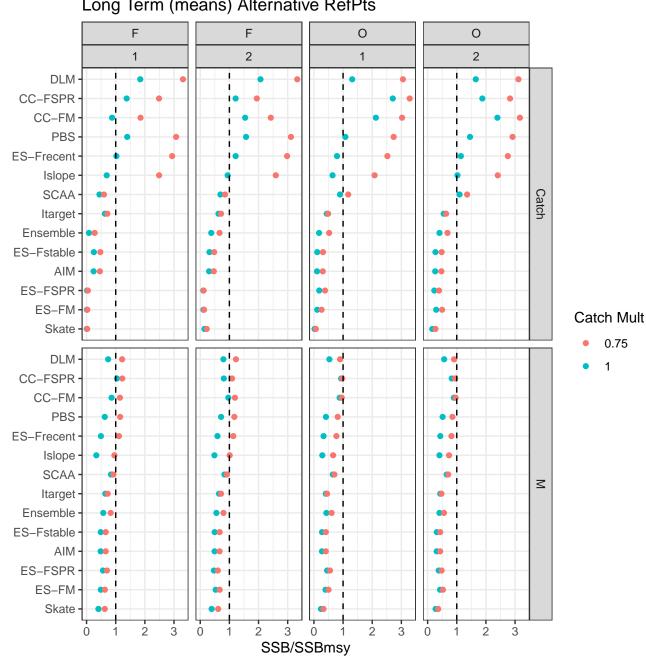
Long Term (means)



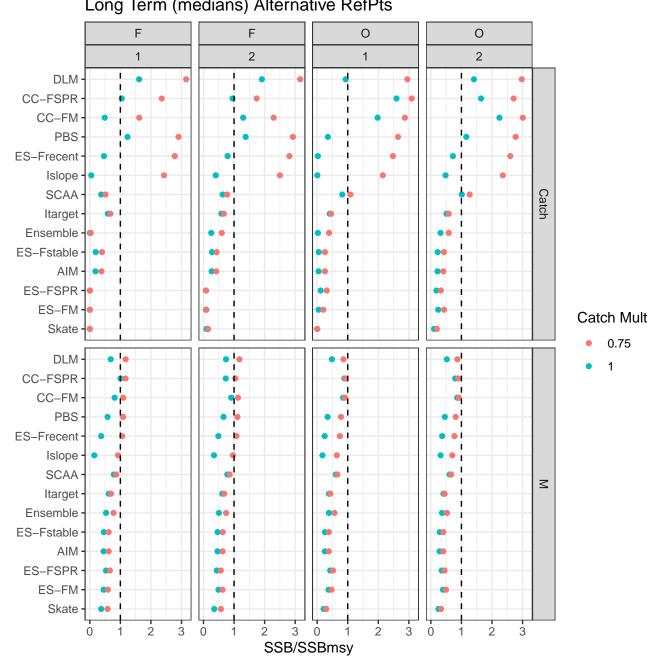
Long Term (medians)



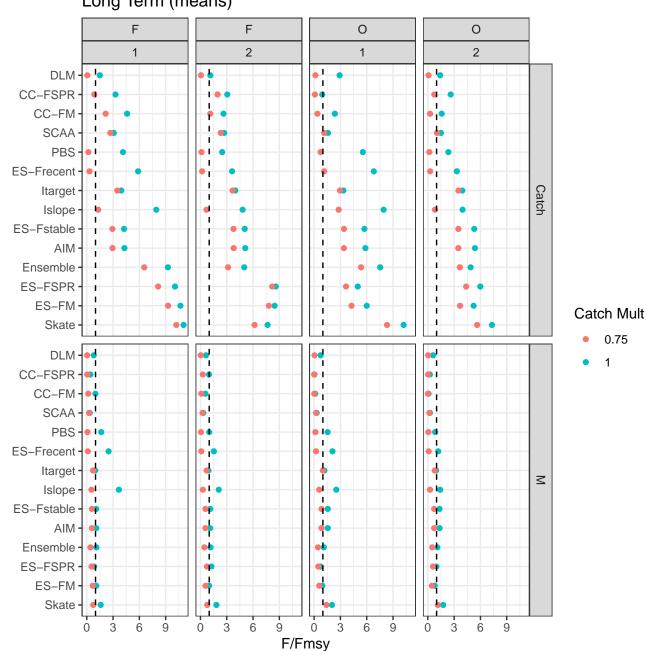
Long Term (means) Alternative RefPts



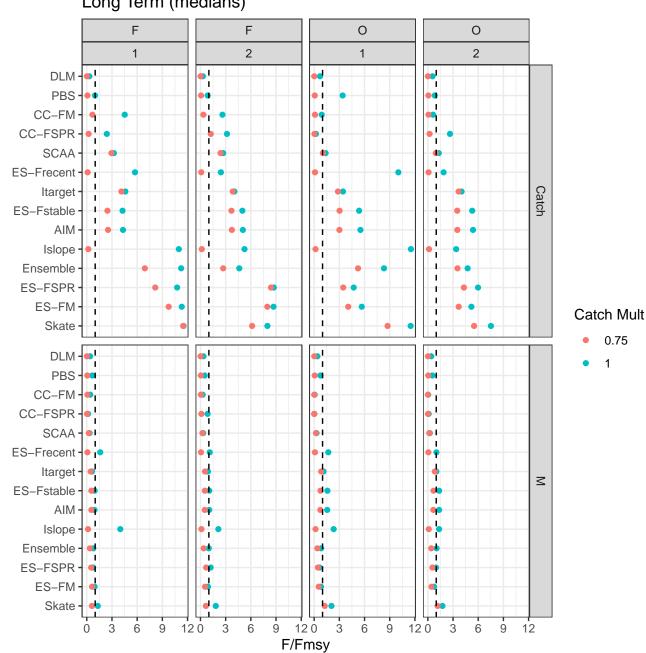
Long Term (medians) Alternative RefPts



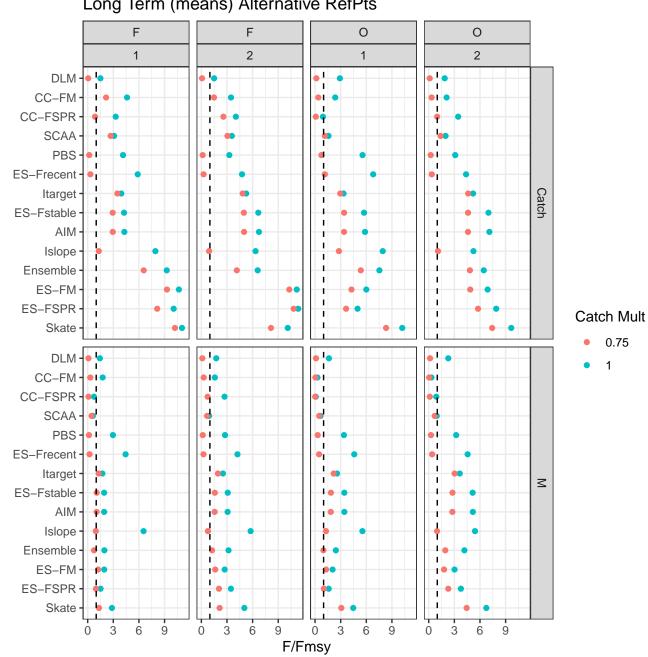
Long Term (means)



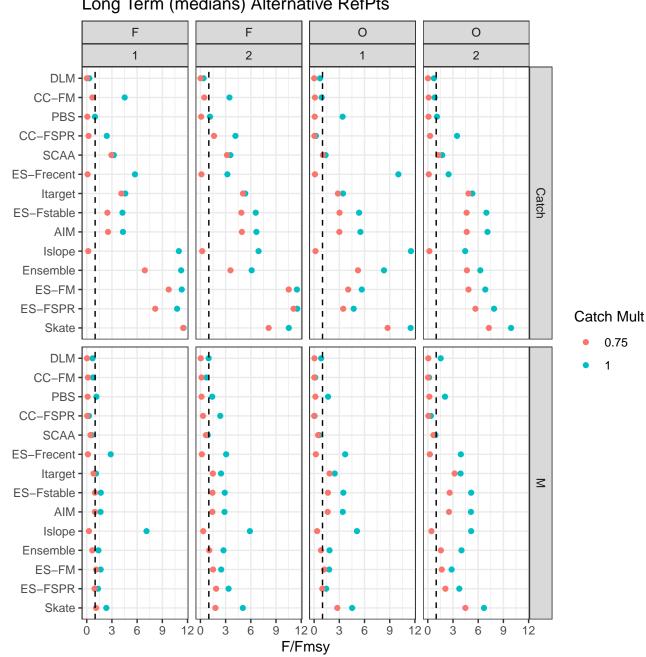
Long Term (medians)



Long Term (means) Alternative RefPts

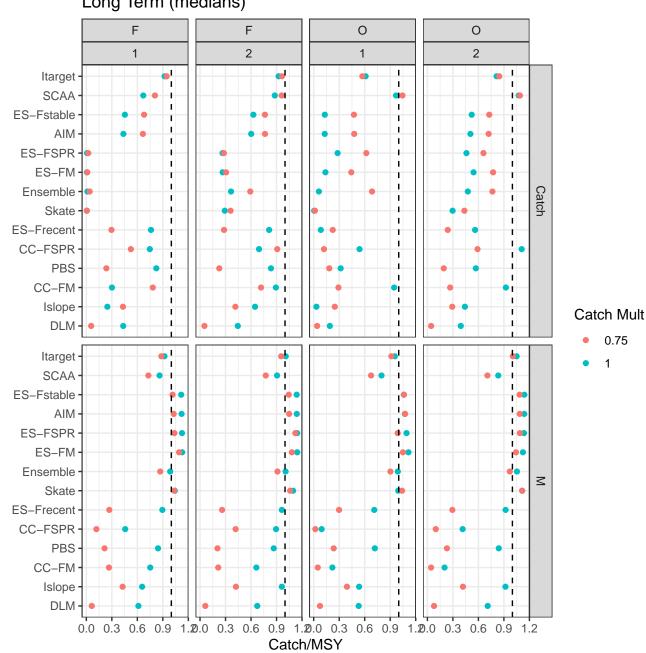


## Long Term (medians) Alternative RefPts

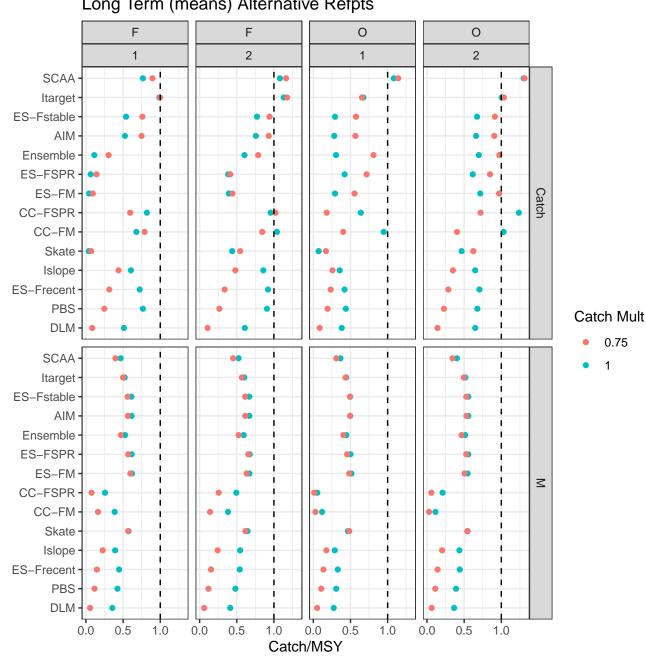


Long Term (means) F F 0 0 1 2 2 Itarget -SCAA ES-Fstable AIM · ES-FSPR -ES-FM-Ensemble Catch Skate -Islope CC-FSPR ES-Frecent CC-FM PBS Catch Mult DLM 0.75 Itarget -1 SCAA ES-Fstable AIM ES-FSPR ES-FM Ensemble ≤ Skate Islope CC-FSPR ES-Frecent CC-FM PBS DLM · Catch/MSY

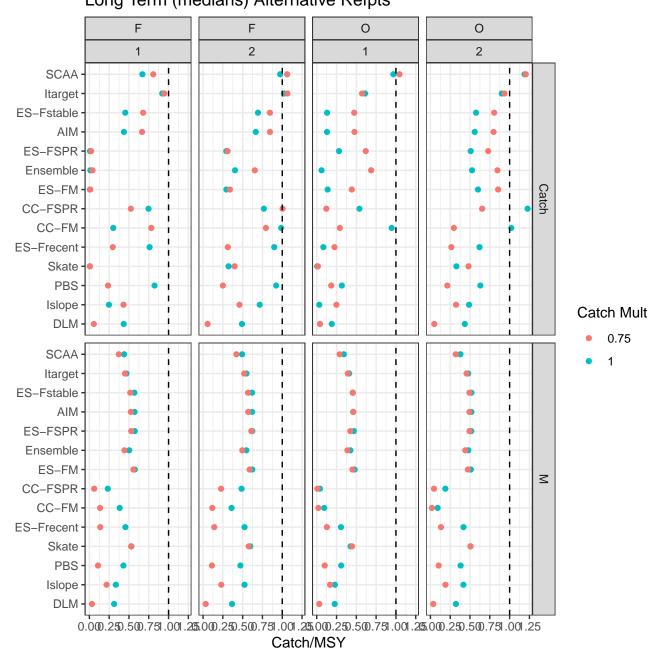
Long Term (medians)



Long Term (means) Alternative Refpts



## Long Term (medians) Alternative Refpts

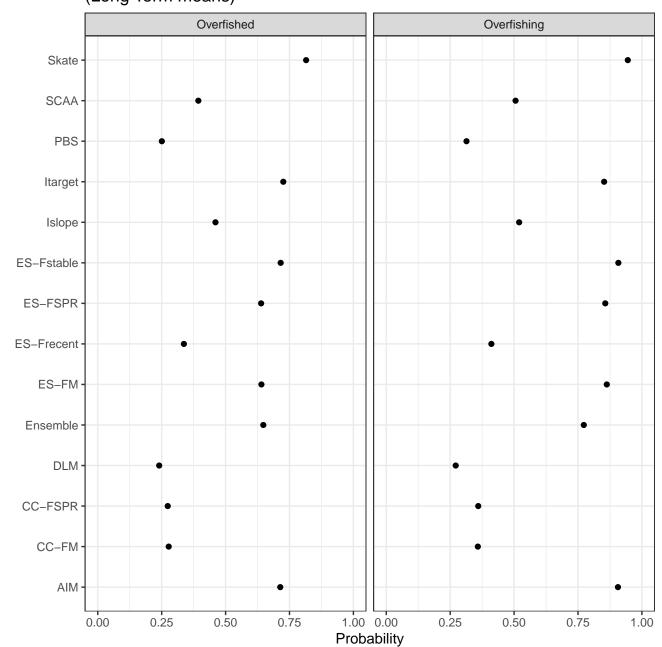


All Years (means) F F 0 0 1 2 2 Skate -Itarget · CC-FM-CC-FSPR ES-FM ES-FSPR Catch ES-Fstable AIM: DLM · Ensemble SCAA-ES-Frecent -PBS-Catch Mult Islope -0.75 Skate -1 Itarget · CC-FM CC-FSPR ES-FM-ES-FSPR -ES-Fstable -≤ AIM -DLM -Ensemble · SCAA-ES-Frecent · PBS-Islope -0.0 0.5 1.0 1.5 2.0 0.0 0.5 1.0 1.5 2.0 0.0 0.5 1.0 1.5 2.0 0.0 0.5 1.0 1.5 2.0

IAV Catch

All Years (medians) F F 0 0 1 2 2 Skate -ES-FM Itarget -ES-FSPR CC-FM · CC-FSPR Catch ES-Fstable AIM SCAA Ensemble DLM -ES-Frecent -PBS-Catch Mult Islope -0.75 Skate -1 ES-FM-Itarget -ES-FSPR CC-FM CC-FSPR ES-Fstable ≤ AIM -SCAA -Ensemble DLM -ES-Frecent -PBS-Islope -0.0 0.5 1.0 1.5 2.0 0.0 0.5 1.0 1.5 2.0 0.0 0.5 1.0 1.5 2.0 0.0 0.5 1.0 1.5 2.0 IAV Catch

(Long Term means)



CF1A Long Term AIM CC-FM CC-FSPR DLM 4 2 Ensemble ES-FM ES-Frecent ES-FSPR 2 Catch/MSY ES-Fstable Islope Itarget PBS 4 2 10 10 5 5 SCAA Skate 4 2 10 10 5 5 SSB/SSBmsy