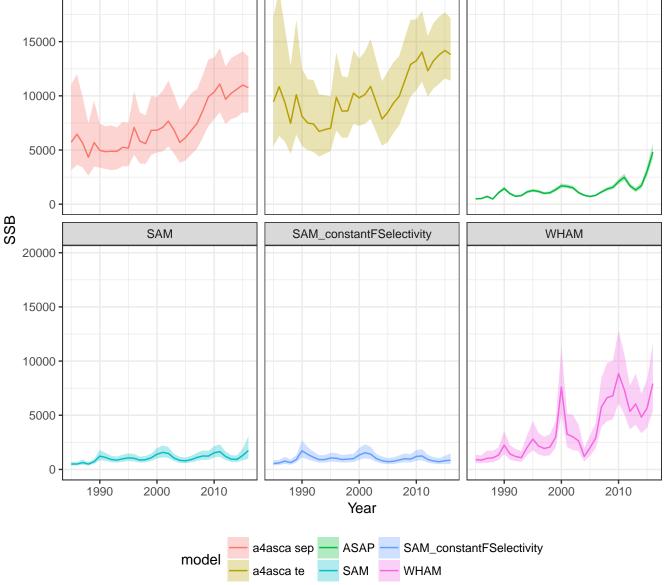
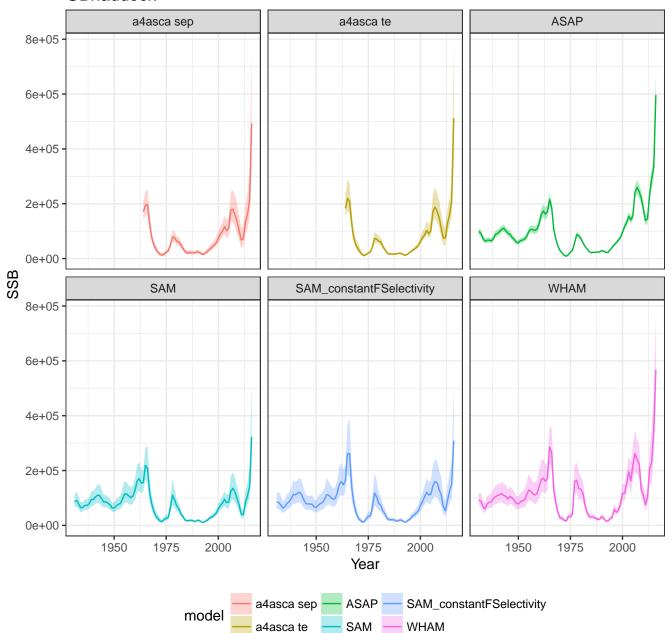
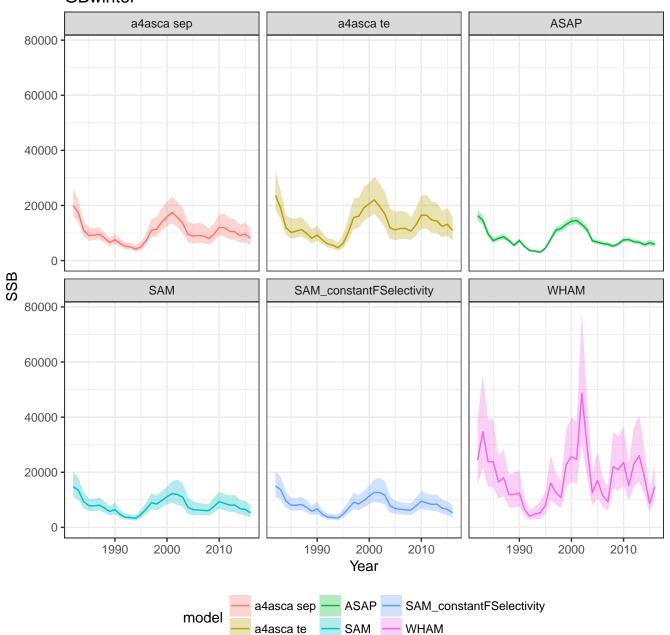
CCGOMyt a4asca te ASAP a4asca sep 20000 0 SAM SAM_constantFSelectivity WHAM



GBhaddock



GBwinter



GOMcod a4asca sep a4asca te **ASAP** 120000 -80000 40000 0 SAM SAM_constantFSelectivity **WHAM** 120000 -80000 -SSB 40000 -0 2000 1990 2010 SAM_useCVs usesCorObsAndCoupleMarginalVari 120000 -80000 -40000 -0 2000 1990 2000 2010 1990 2010 Year a4asca sep **ASAP** SAM_constantFSelectivity SAM_useCVs model

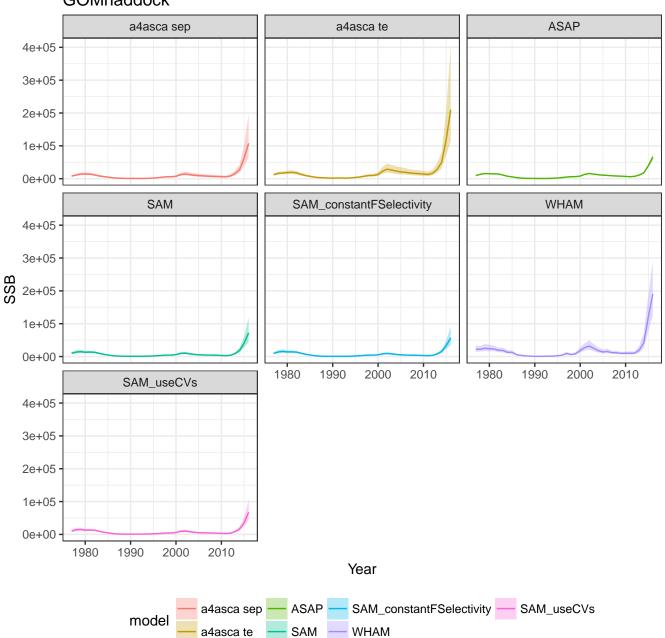
WHAM

SAM

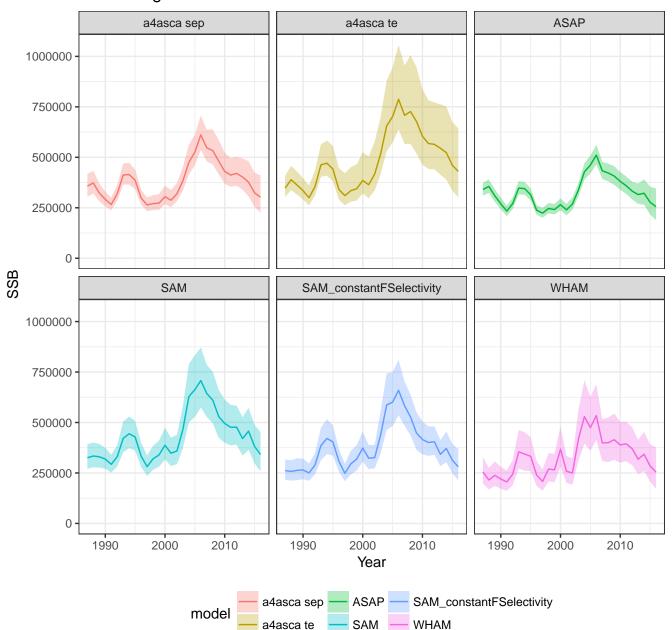
a4asca te

SAM_usesCorObsAndCoupleMarginalVariar

GOMhaddock



ICEherring



NScod a4asca sep a4asca te **ASAP** 4e+05 -3e+05 -2e+05 -1e+05 -0e+00 SSB SAM SAM_constantFSelectivity **WHAM** 4e+05 -3e+05 -2e+05 1e+05 -0e+00 1970 1980 1990 2000 2010 1970 1980 1990 2000 2010 1970 1980 1990 2000 2010 Year a4asca sep **ASAP** SAM_constantFSelectivity model

a4asca te

WHAM

SAM

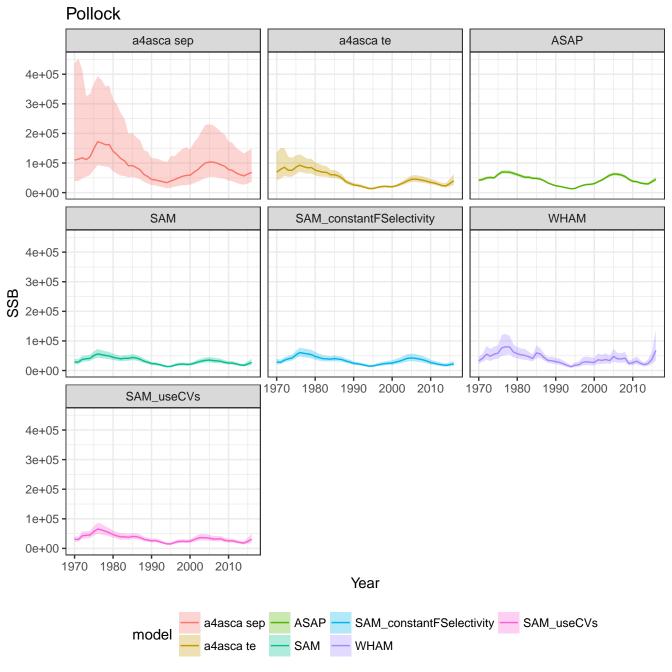
Plaice a4asca sep a4asca te **ASAP** 1.5e+08 -1.0e+08 -5.0e+07 -0.0e+00 SSB SAM SAM_constantFSelectivity **WHAM** 1.5e+08 -1.0e+08 -5.0e+07 -0.0e+00 2000 2010 1980 1990 2000 2010 1980 1990 2000 2010 1980 1990 Year a4asca sep **ASAP** SAM_constantFSelectivity

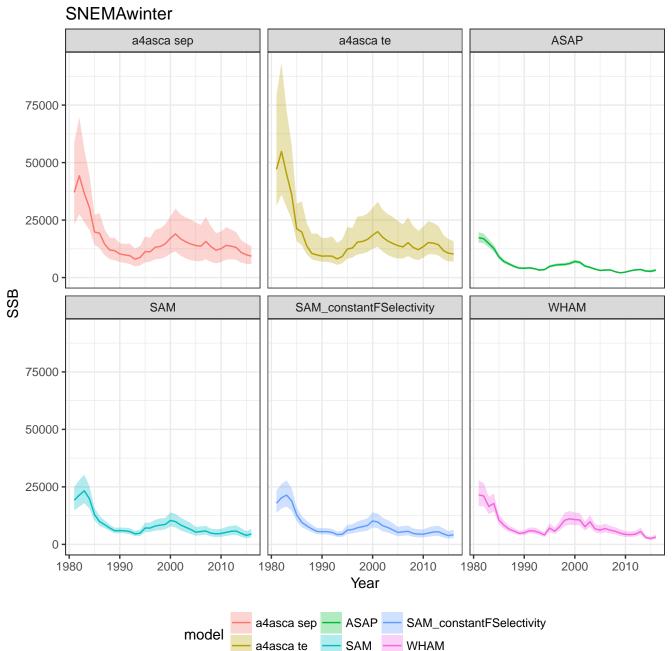
WHAM

SAM

model

a4asca te





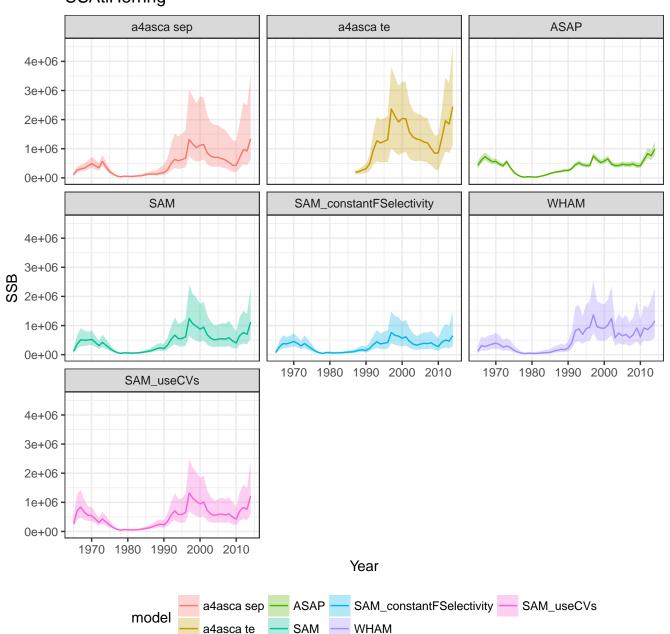
SNEMAYT a4asca sep a4asca te **ASAP** 90000 60000 30000 0 SAM SAM_constantFSelectivity **WHAM** 90000 SSB 60000 30000 0 2010 1980 1990 2000 1980 1990 2000 2010 SAM_useCVs 90000 -60000 30000 0 2000 1980 1990 2010 Year SAM_constantFSelectivity -SAM_useCVs a4asca sep **ASAP** model

WHAM

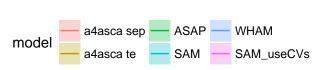
SAM

a4asca te

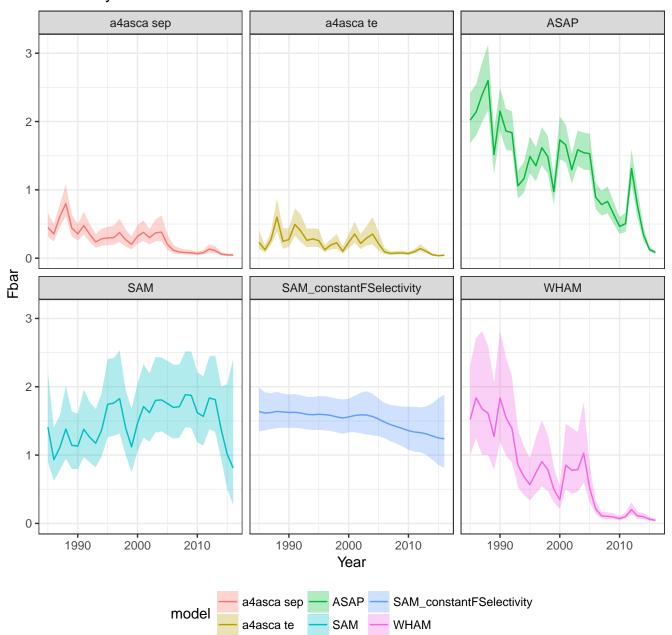
USAtlHerring



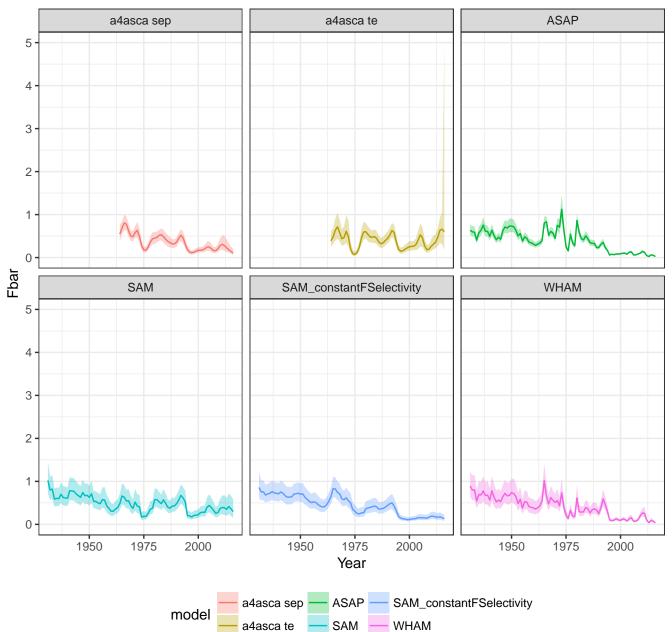
WhiteHake a4asca sep a4asca te **ASAP** SSB SAM **WHAM** SAM_useCVs 30000 -Year



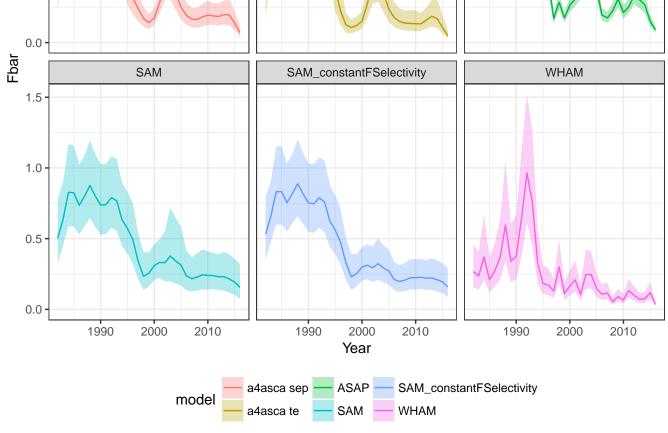
CCGOMyt



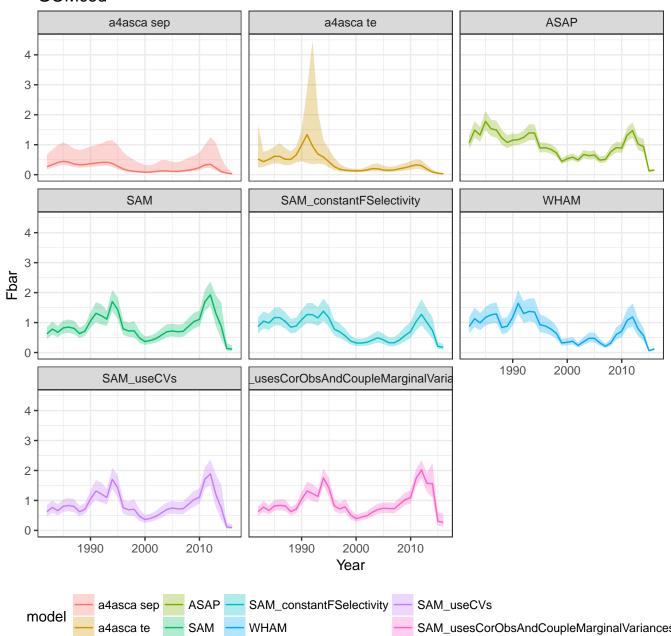
GBhaddock



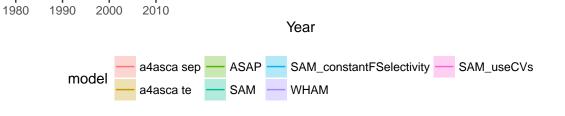
GBwinter a4asca sep a4asca te **ASAP** 1.5 -1.0 0.5 0.0 SAM WHAM SAM_constantFSelectivity 1.5 -1.0 0.5



GOMcod

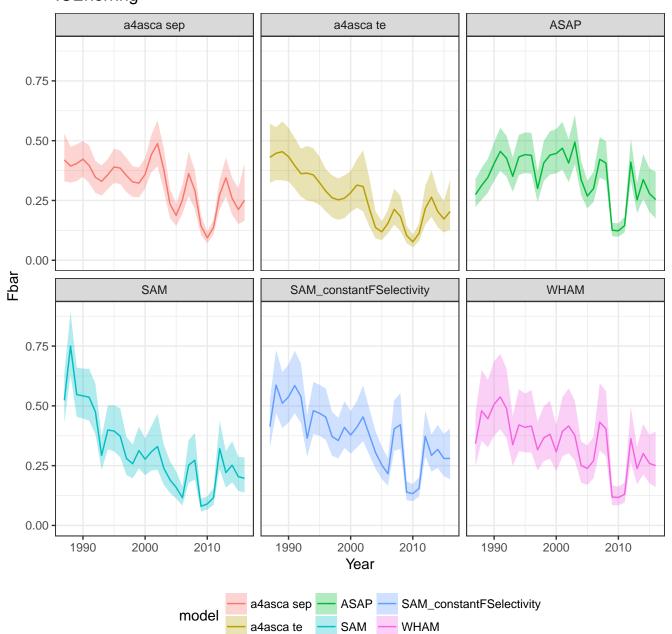


GOMhaddock a4asca sep a4asca te **ASAP** 1.5 -1.0 -0.5 0.0 SAM SAM_constantFSelectivity **WHAM** 1.5 -1.0 0.5 0.0 2000 2010 2010 1980 1990 1980 1990 2000 SAM_useCVs 1.5 -1.0 0.5



0.0

ICEherring

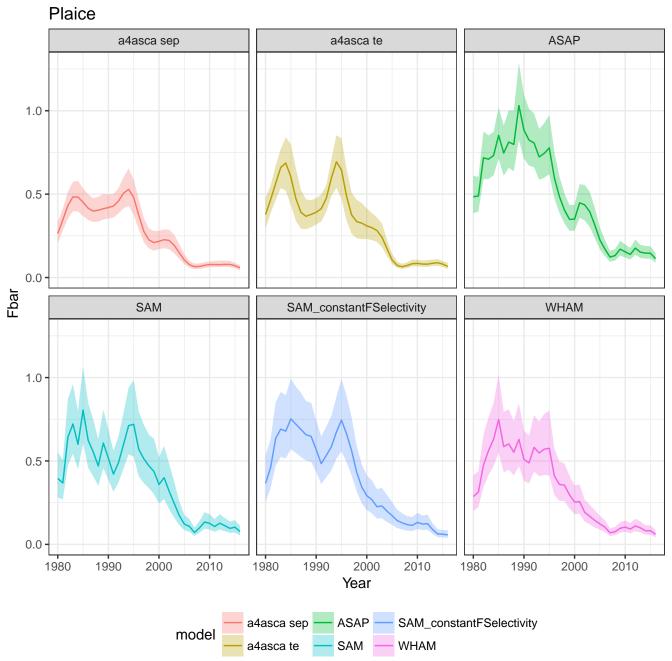


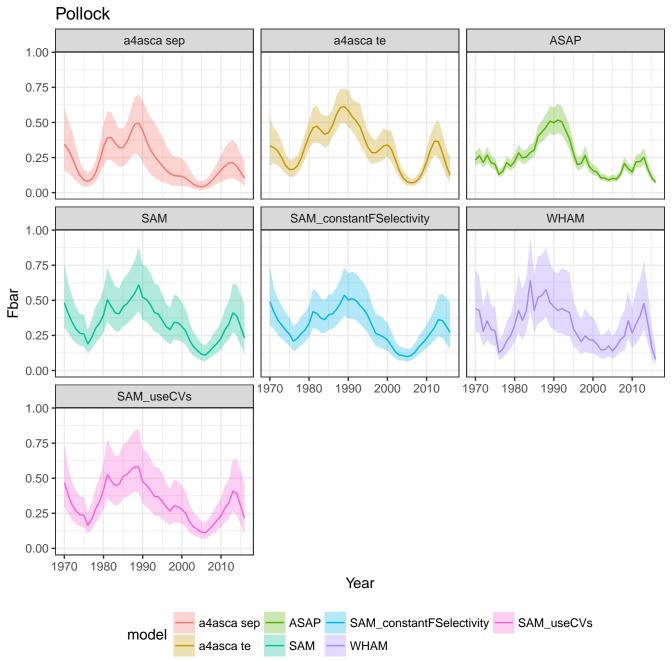
NScod a4asca sep a4asca te **ASAP** 2.0 -1.5 -1.0 -0.5 -0.0 Fbar SAM SAM_constantFSelectivity **WHAM** 2.0 -1.5 1.0 0.5 -0.0 1970 1980 1990 2000 2010 1970 1980 1990 2000 2010 1970 1980 1990 2000 2010 Year a4asca sep **ASAP** SAM_constantFSelectivity model

a4asca te

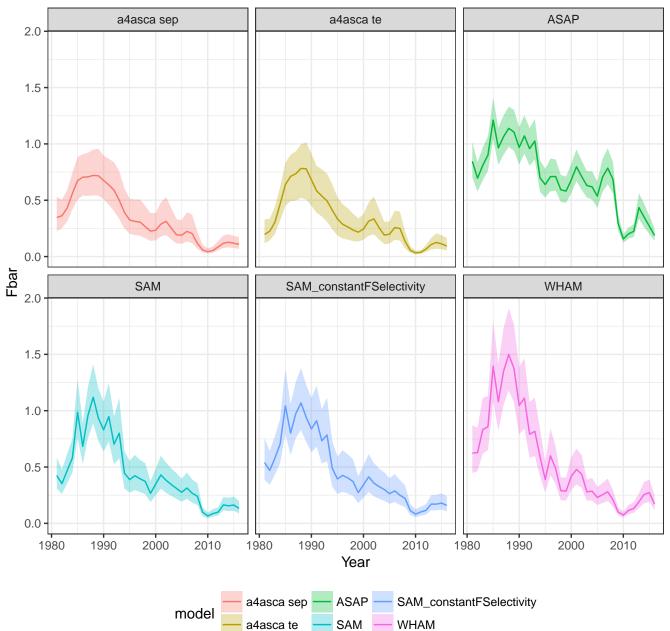
WHAM

SAM

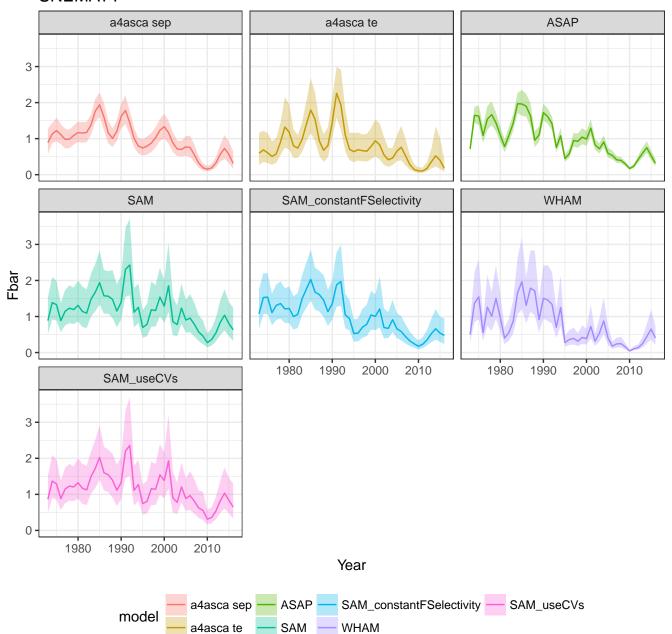




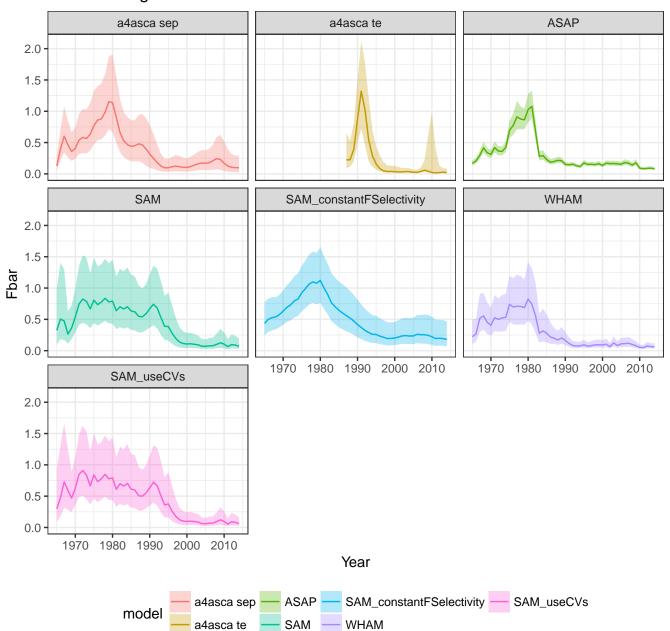
SNEMAwinter



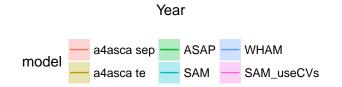
SNEMAYT



USAtlHerring



WhiteHake a4asca sep a4asca te **ASAP** 2.0 -1.5 -1.0 -0.5 -0.0 Fbar SAM SAM_useCVs WHAM 2.0 -1.5 -1.0 0.5



2010

2000

1990

2010

2000

1990

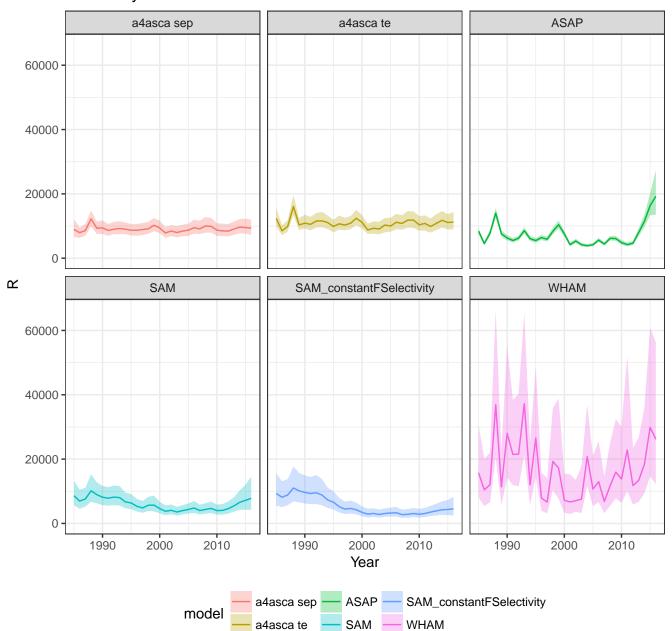
2010

0.0

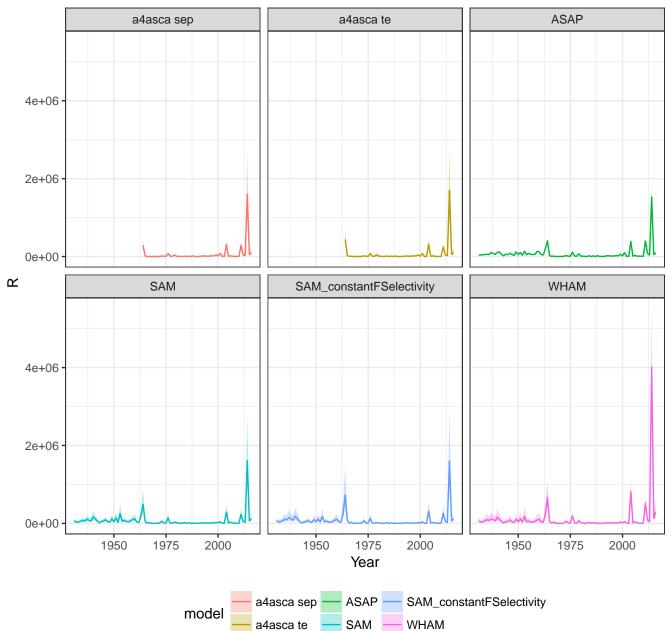
1990

2000

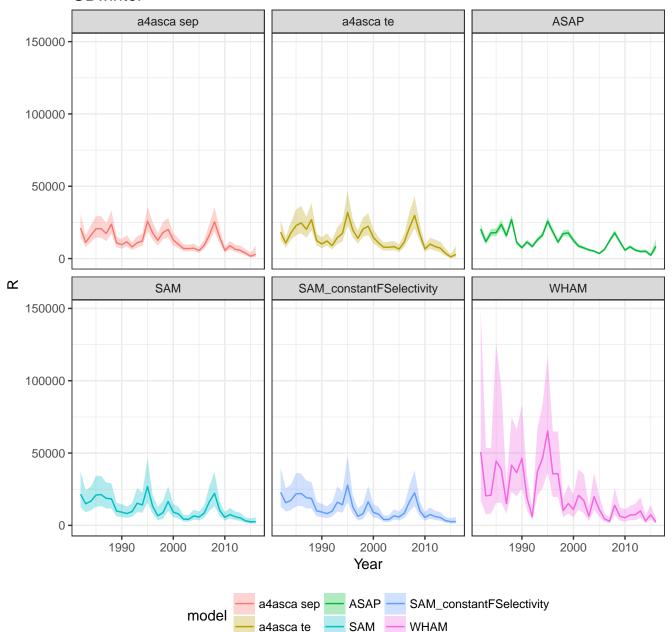
CCGOMyt



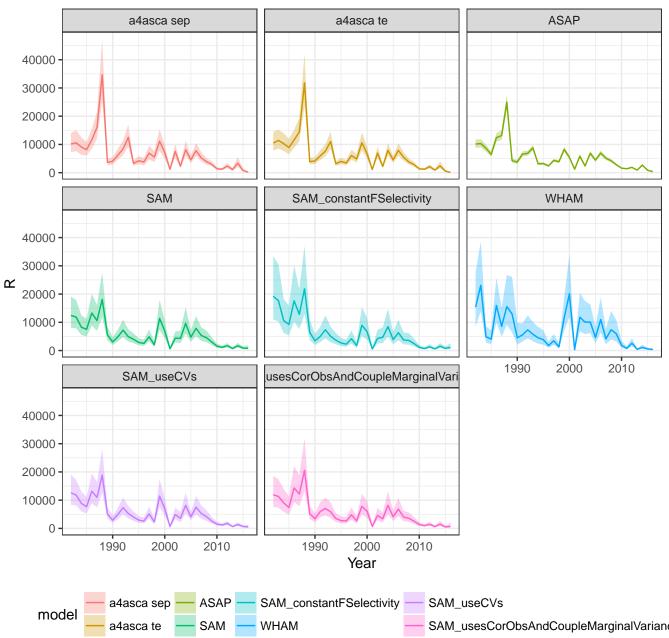
GBhaddock



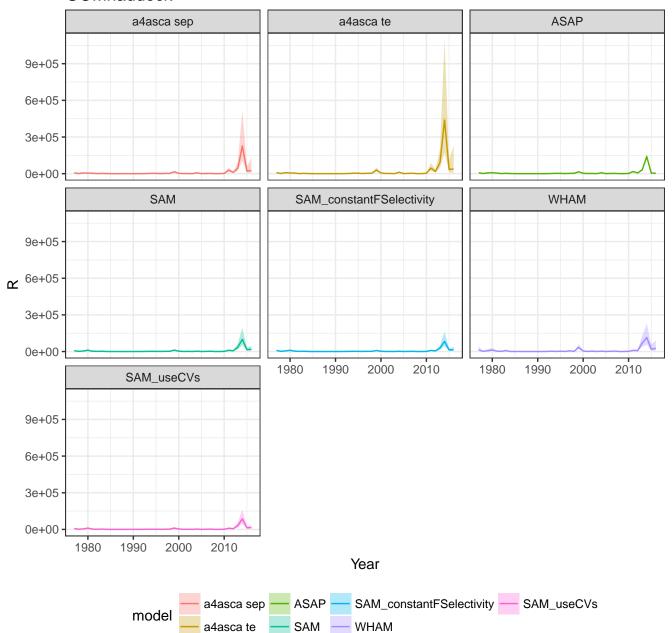
GBwinter



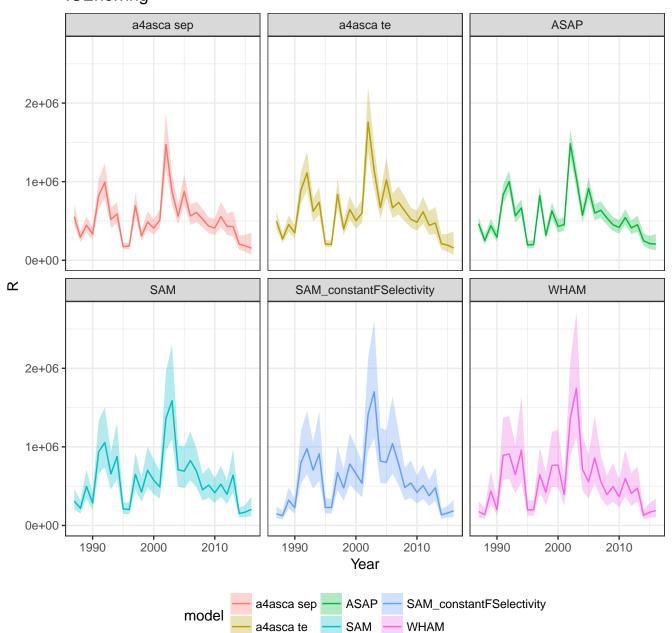
GOMcod

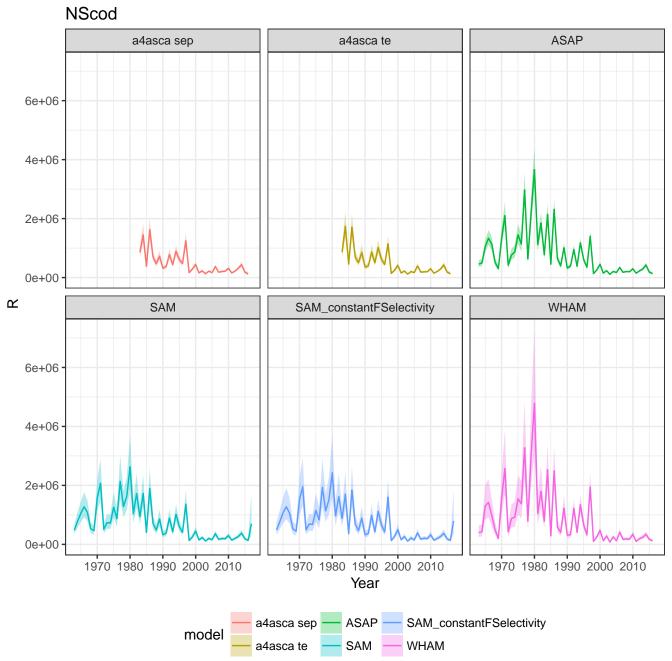


GOMhaddock



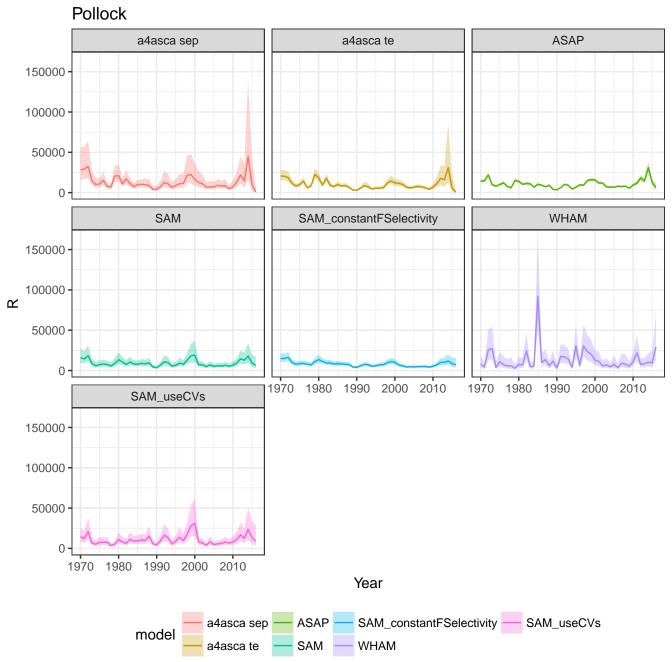
ICEherring



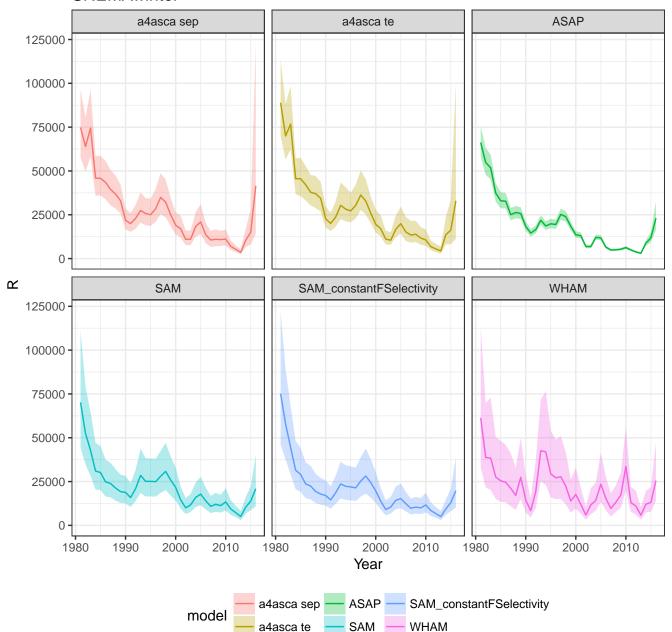


Plaice a4asca sep a4asca te **ASAP** 3e+05 · 2e+05 1e+05 0e+00 \propto SAM SAM_constantFSelectivity **WHAM** 3e+05 2e+05 1e+05 0e+00 1980 1990 2000 2010 1980 1990 2000 2010 1980 1990 2000 2010 Year

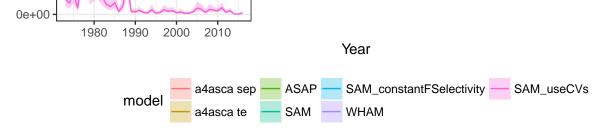




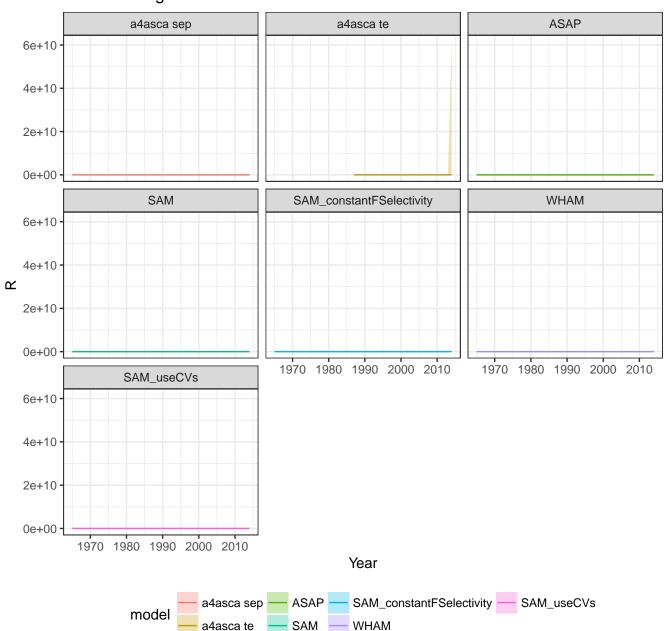
SNEMAwinter



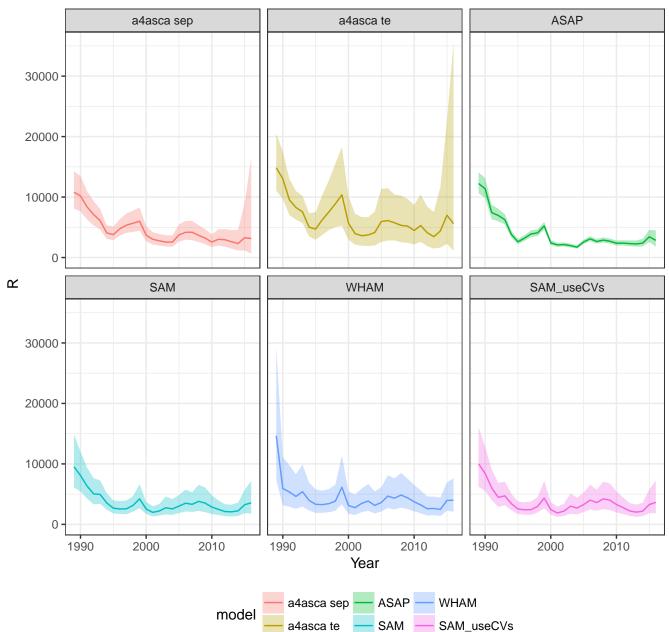
SNEMAYT a4asca sep a4asca te **ASAP** 2e+05 1e+05 -0e+00 SAM SAM_constantFSelectivity **WHAM** 2e+05 \propto 1e+05 0e+00 2010 1980 1990 2000 1980 1990 2000 2010 SAM_useCVs 2e+05 1e+05 0e+00 1980 1990 2000 2010



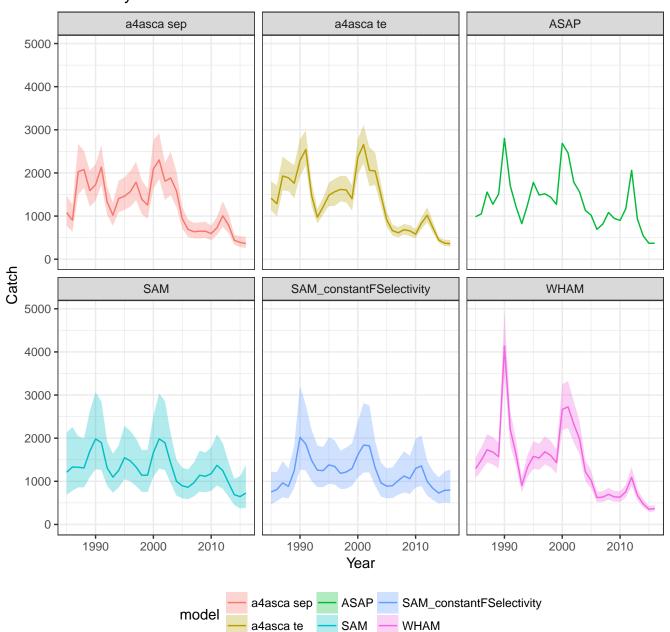
USAtlHerring



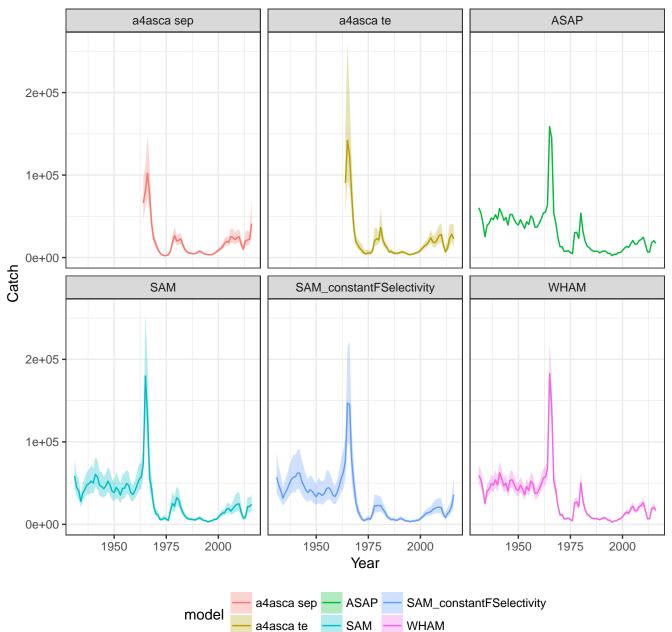
WhiteHake



CCGOMyt



GBhaddock

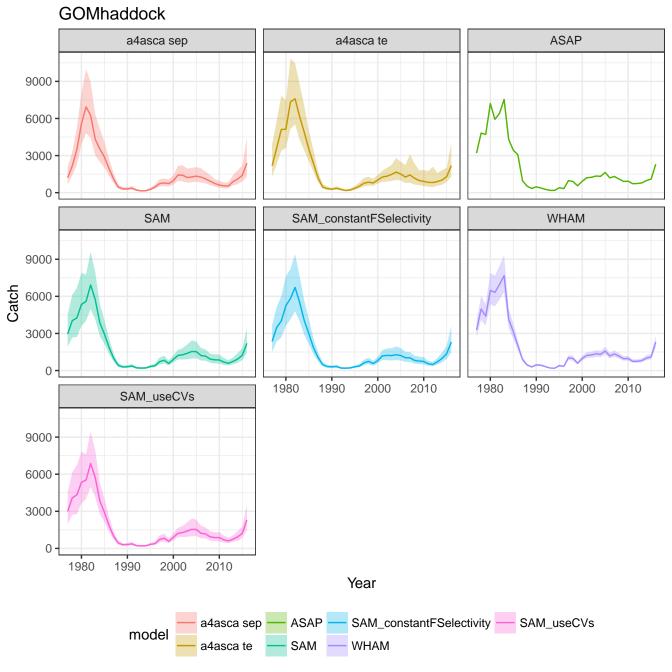


GBwinter a4asca sep a4asca te **ASAP** Catch SAM WHAM SAM_constantFSelectivity

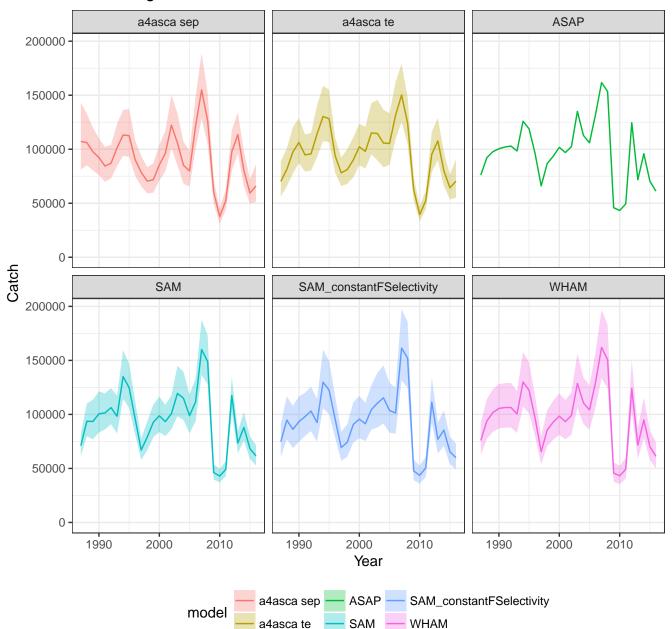


Year

GOMcod a4asca sep a4asca te **ASAP** 30000 20000 10000 0 SAM SAM_constantFSelectivity **WHAM** 30000 20000 10000 0 1990 2000 2010 SAM_useCVs usesCorObsAndCoupleMarginalVari 30000 20000 10000 0 1990 2000 2010 1990 2000 2010 Year a4asca sep **ASAP** SAM_constantFSelectivity SAM_useCVs model **WHAM** SAM_usesCorObsAndCoupleMarginalVarian a4asca te SAM



ICEherring



NScod a4asca sep a4asca te **ASAP** 6e+05 -4e+05 -2e+05 -0e+00 SAM SAM_constantFSelectivity **WHAM** 6e+05 -4e+05 2e+05 0e+00 1970 1980 1990 2000 2010 1970 1980 1990 2000 2010 1970 1980 1990 2000 2010 Year a4asca sep **ASAP** SAM_constantFSelectivity model

a4asca te

WHAM

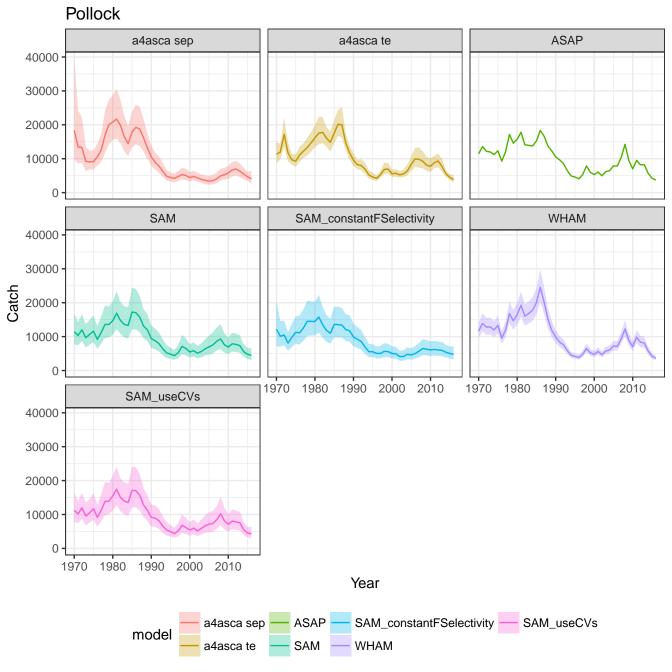
SAM

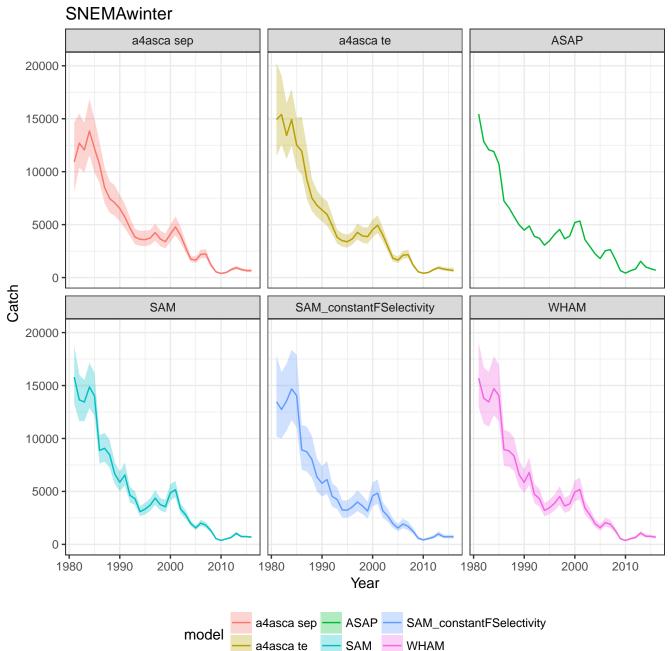
Plaice a4asca sep a4asca te **ASAP** 20000 15000 10000 5000 0 Catch SAM SAM_constantFSelectivity **WHAM** 20000 15000 10000 -5000 0 2000 2010 1980 1990 2000 2010 1980 1990 2010 1980 1990 2000 Year a4asca sep SAM_constantFSelectivity **ASAP** model

a4asca te

SAM

WHAM



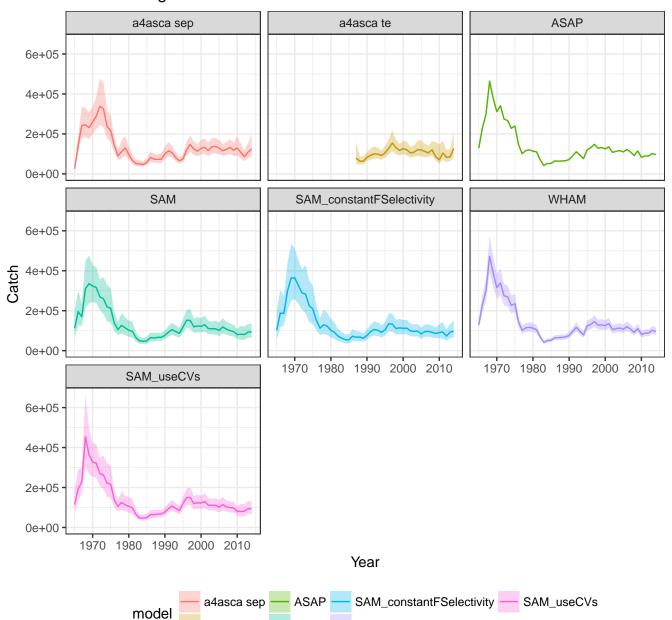


SNEMAYT a4asca sep a4asca te **ASAP** 30000 20000 10000 0 SAM SAM_constantFSelectivity **WHAM** 30000 20000 10000 0 2010 1980 1990 2000 1980 1990 2000 2010 SAM_useCVs 30000 20000 10000 0 2000 1980 1990 2010 Year SAM_constantFSelectivity — SAM_useCVs a4asca sep **ASAP** model WHAM

a4asca te

SAM

USAtlHerring



WHAM

SAM

a4asca te

WhiteHake a4asca sep a4asca te **ASAP** 10000 5000 0 Catch SAM WHAM SAM_useCVs 10000 5000 0 2010 2000 2010 1990 2000 2010 1990 2000 1990 Year a4asca sep ASAP **WHAM** model

SAM

a4asca te

SAM_useCVs