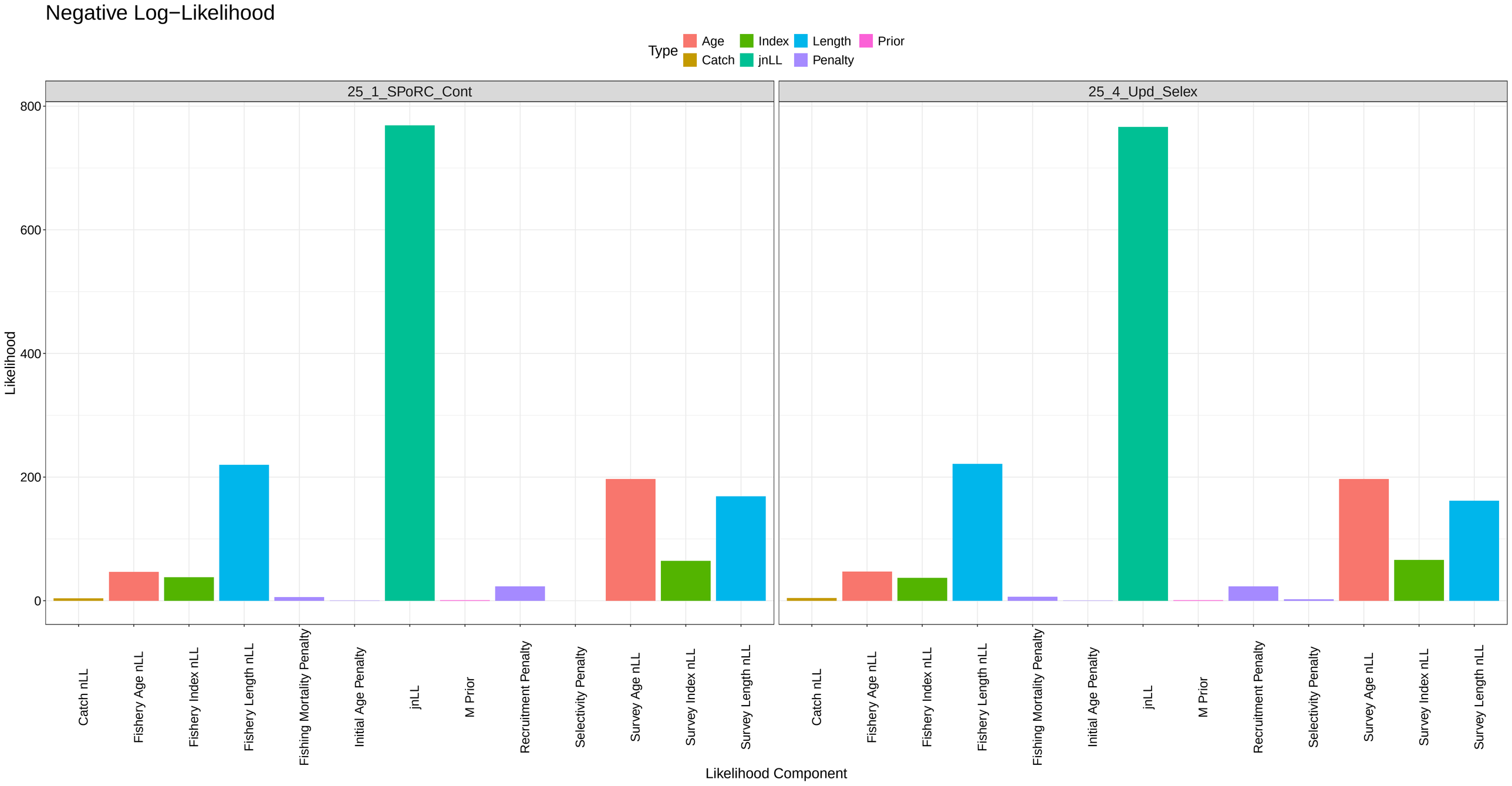
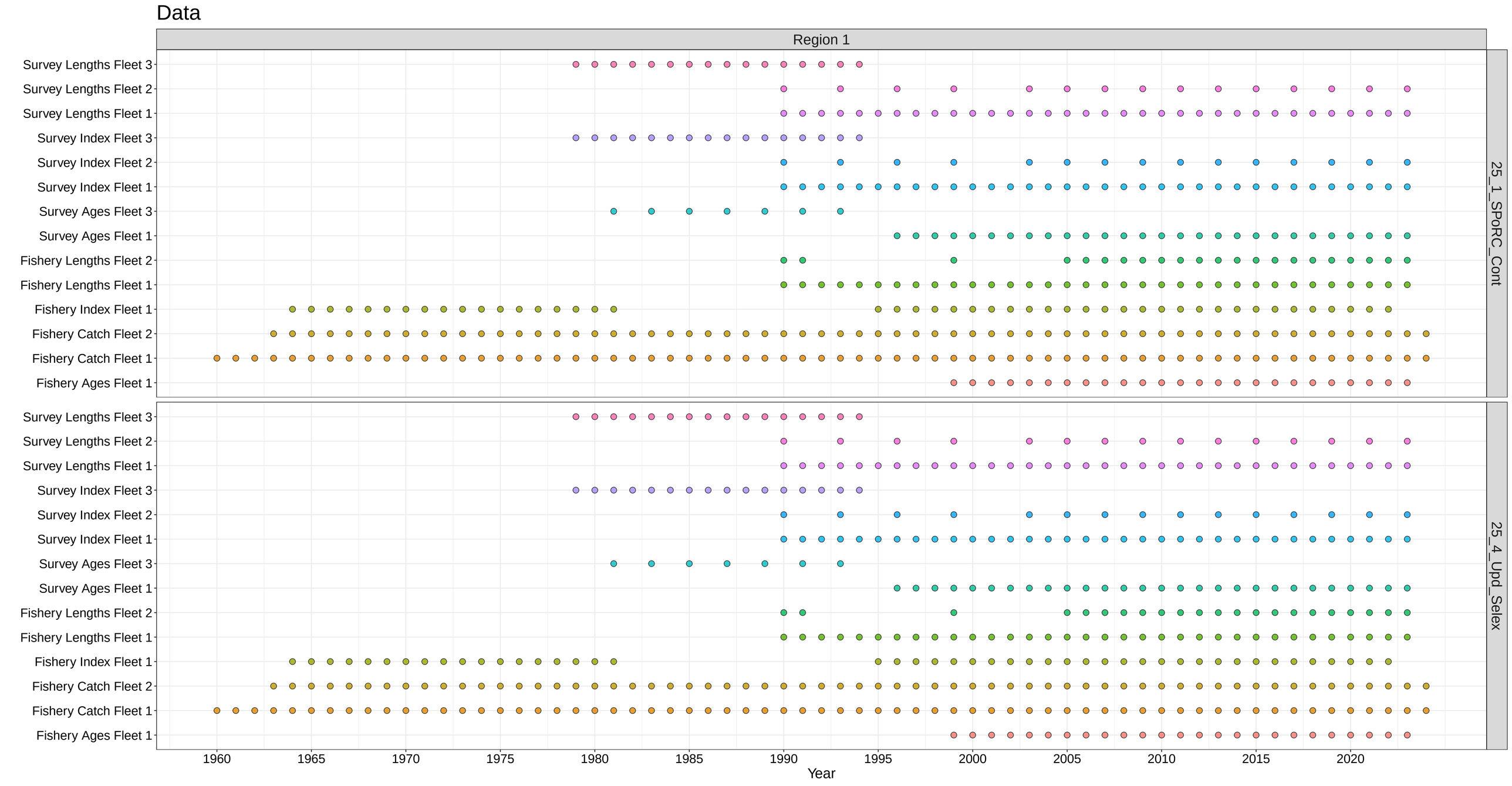
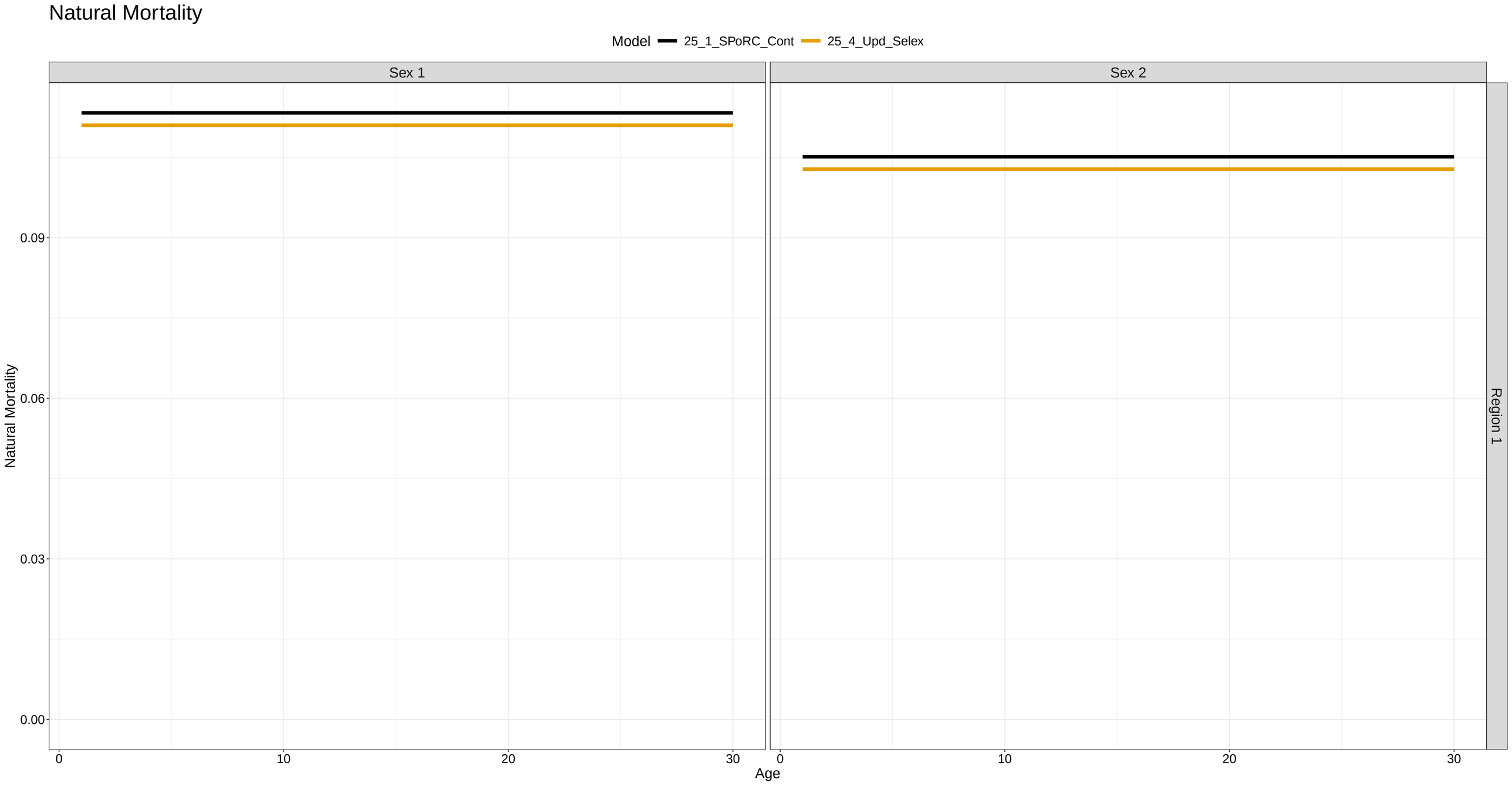
	Model	Region	Terminal_SSB	Terminal_F	Catch_Advice	B_Ref_Pt	F_Ref_Pt	B_over_B_Ref	F_over_F_Ref
1	25_1_SPoRC_Cont	1	189.0804	0.04037044	49.68588	121.0229	0.08593	1.56235	0.46979
2	25_4_Upd_Selex	1	173.3655	0.04385504	45.00124	118.3230	0.08437	1.46519	0.51982

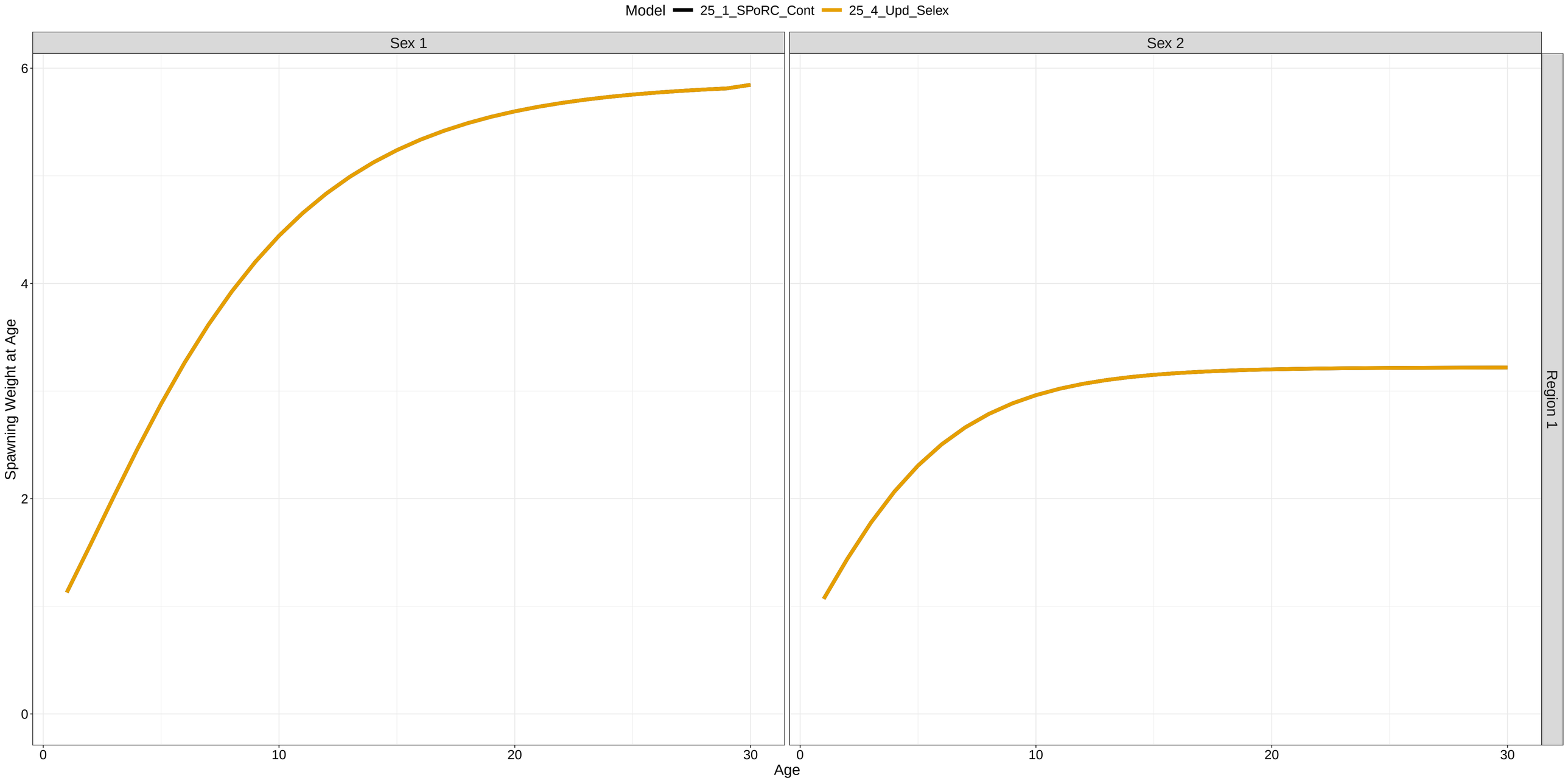
	Model	jnLL	M Prior	Recruitment Penalty	Catch nLL	Fishing Mortality Penalty	Survey Index nLL	Fishery Index nLL	Initial Age Penalty	Survey Age nLL	Fishery Age nLL	Survey Length nLL	Fishery Length nLL	Selectivity Penalty
1	25_1_SPoRC_Cont	768.8210	0.7838709	23.11463	3.688151	6.088752	64.49362	37.72432	0.1631310	197.0703	46.62799	169.0396	220.0267	NA
2	25_4_Upd_Selex	766.4771	0.5465163	23.13318	4.193411	6.134515	66.13810	36.99018	0.2104431	196.8007	46.87685	161.7206	221.2670	2.465497


Negative Log−Likelihood
Type
Age
Index
Length
Prior
Catch
jnLL
Penalty
25_1_SPoRC_Cont
25_4_Upd_Selex
Likelihood
800
600
400
200
0
Catch nLL
Fishery Age nLL
Fishery Index nLL
Fishery Length nLL
Fishing Mortality Penalty
Initial Age Penalty
jnLL
M Prior
Recruitment Penalty
Selectivity Penalty
Survey Age nLL
Survey Index nLL
Survey Length nLL
Likelihood Component

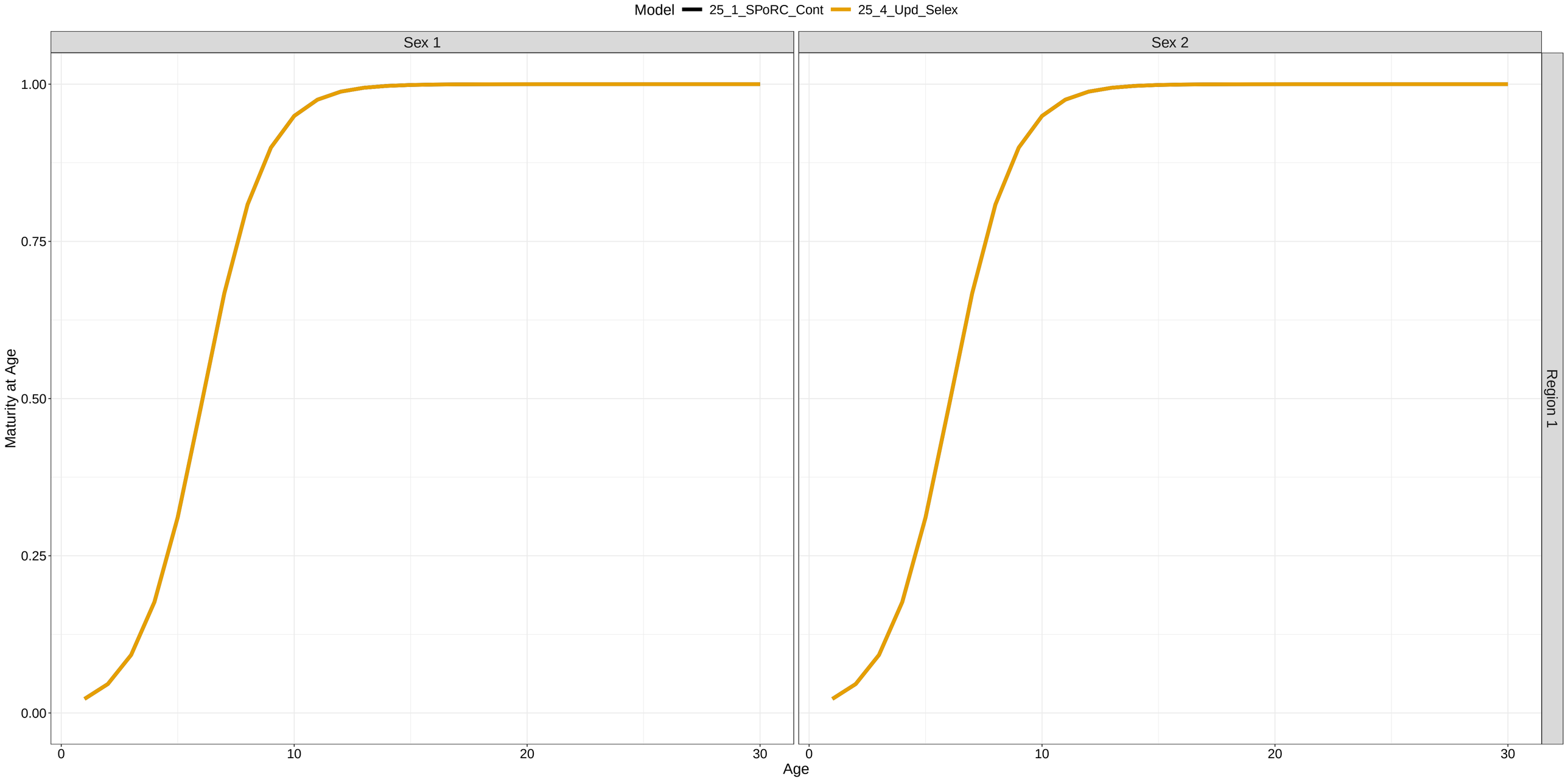

Data
Region 1
Survey Lengths Fleet 3
Survey Lengths Fleet 2
Survey Lengths Fleet 1
Survey Index Fleet 3
Survey Index Fleet 2
Survey Index Fleet 1
Survey Ages Fleet 3
Survey Ages Fleet 1
Fishery Lengths Fleet 2
Fishery Lengths Fleet 1
Fishery Index Fleet 1
Fishery Catch Fleet 2
Fishery Catch Fleet 1
Fishery Ages Fleet 1
25_1_SPoRC_Cont
25_4_Upd_Selex
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
Year


Natural Mortality
Model
25_1_SPoRC_Cont
25_4_Upd_Selex
Sex 1
Sex 2
Region 1
Natural Mortality
0.09
0.06
0.03
0.00
0
10
20
30
Age

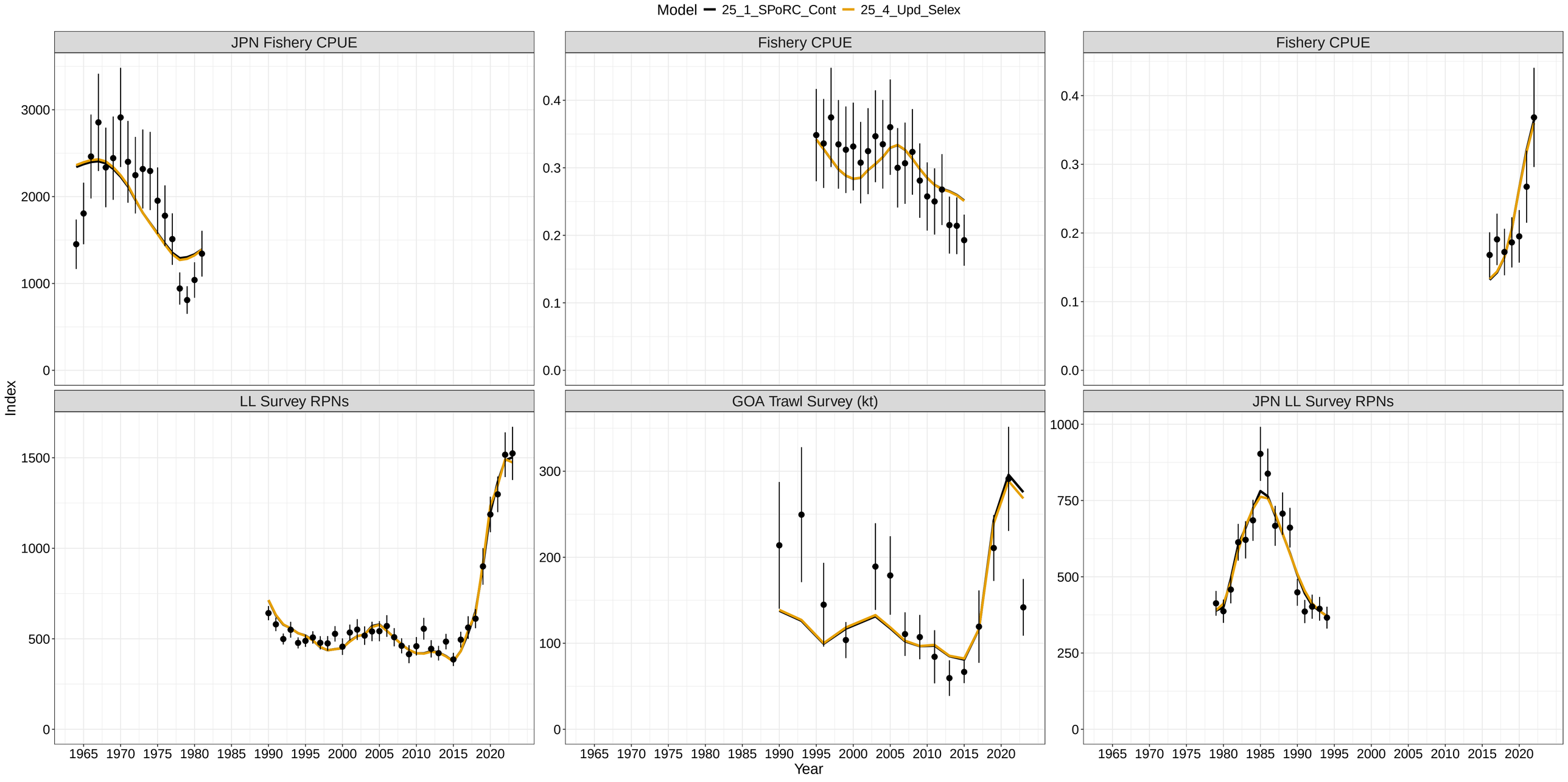
Weight−at−Age

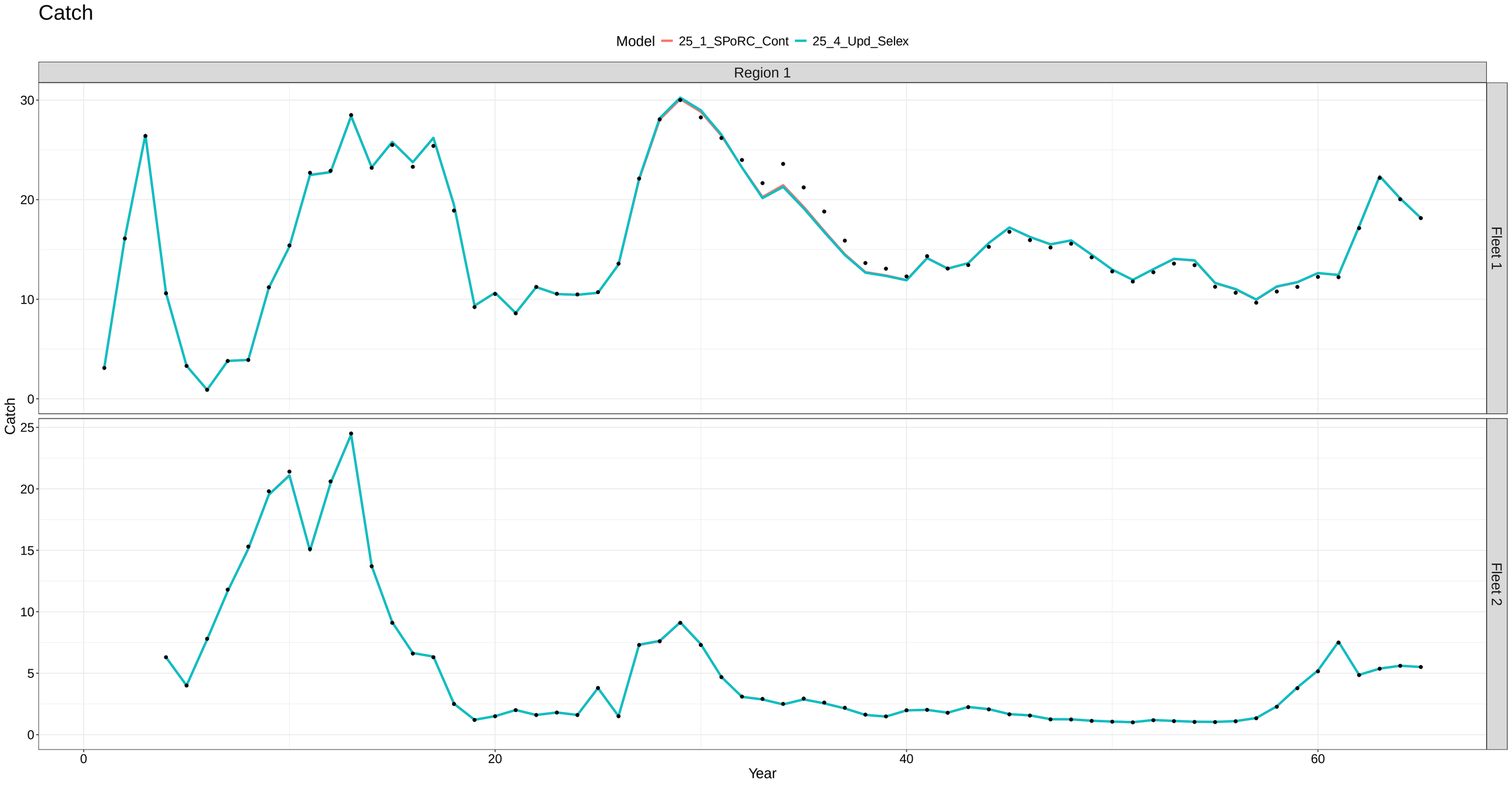


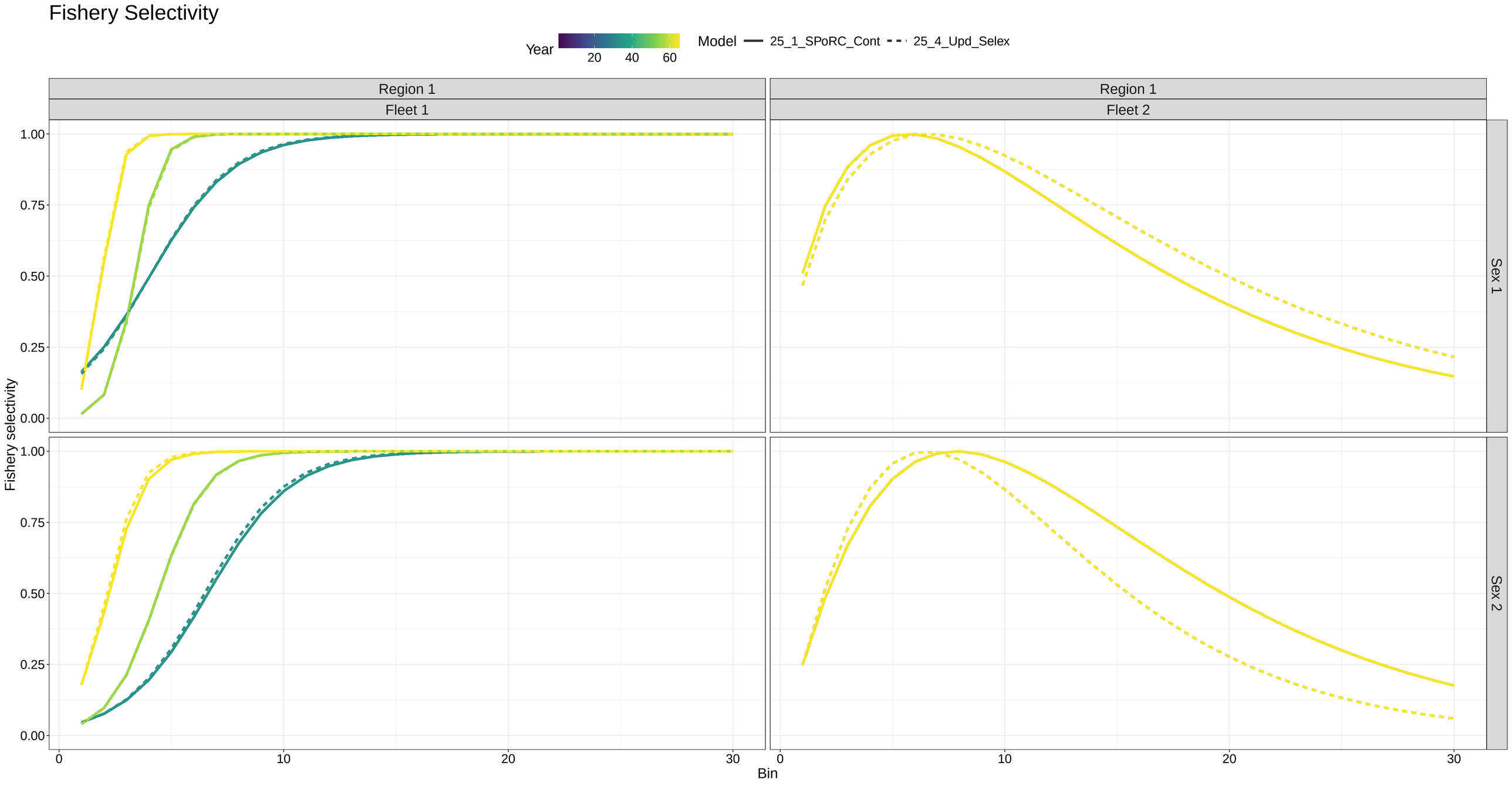
Maturity


Model
25_1_SPoRC_Cont
25_4_Upd_Selex
Sex 1
Sex 2
Region 1
Maturity at Age
1.00
0.75
0.50
0.25
0.00
0
10
20
30
Age

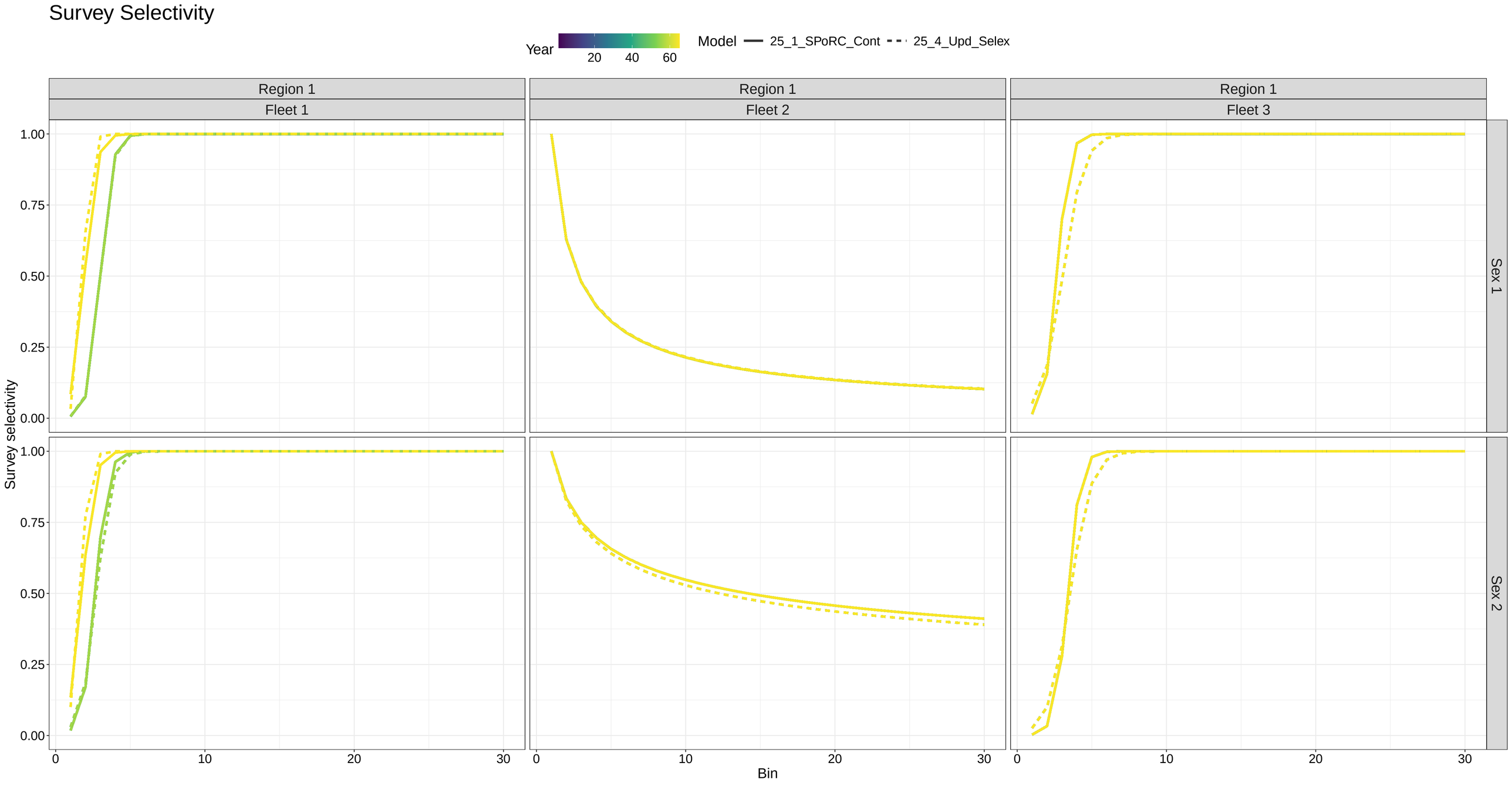
Index Fits


Model 25_1_SPoRC_Cont 25_4_Upd_Selex
JPN Fishery CPUE
Fishery CPUE
Fishery CPUE
LL Survey RPNs
GOA Trawl Survey (kt)
JPN LL Survey RPNs
Index
Year
0
1000
2000
3000
0.0
0.1
0.2
0.3
0.4
500
1000
1500
100
200
300
250
500
750
1000
1965 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015 2020

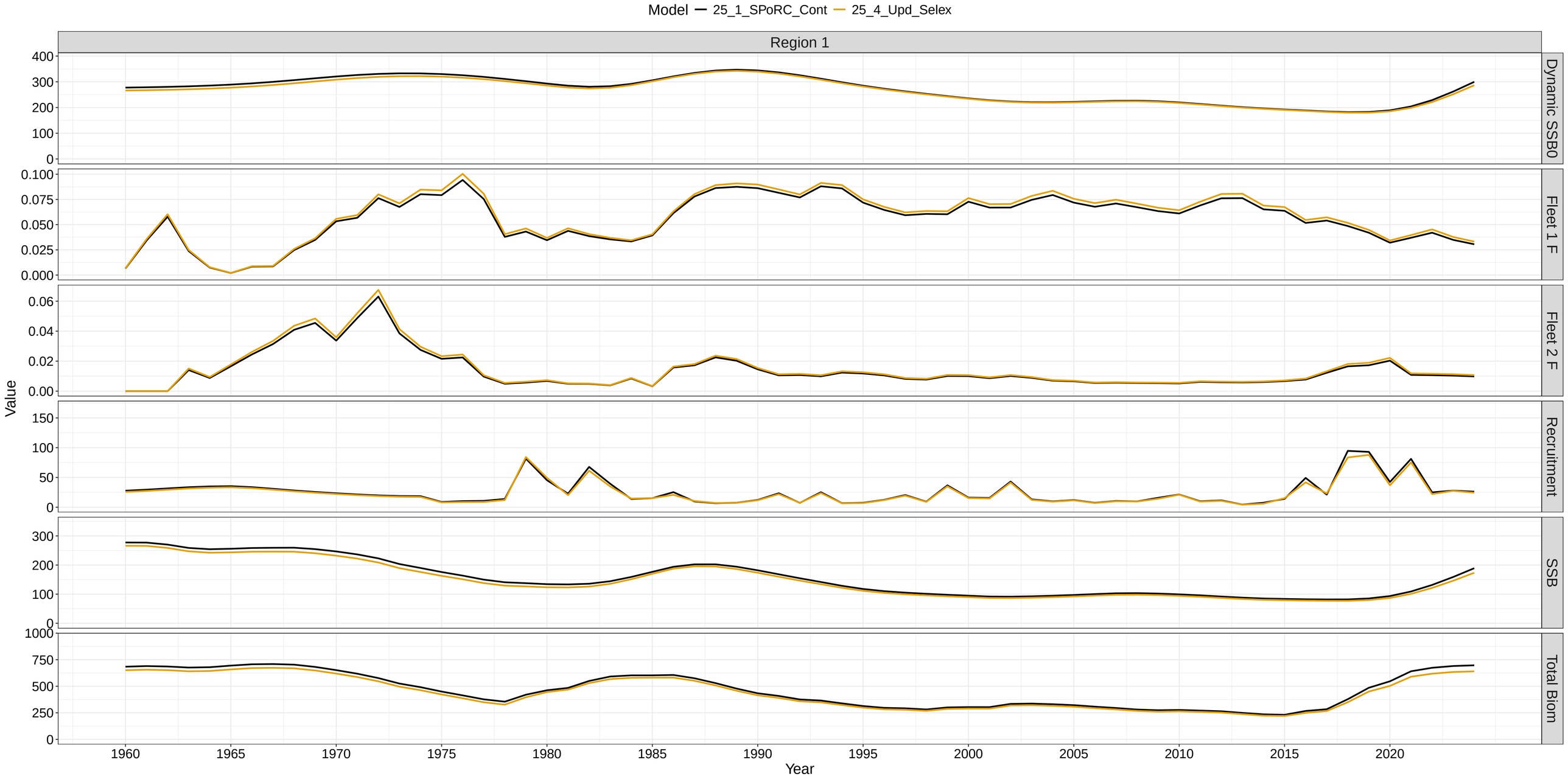

Catch
Model
25_1_SPoRC_Cont
25_4_Upd_Selex
Region 1
Fleet 1
Fleet 2
Catch
Year
0
10
20
30
0
5
10
15
20
25
0
20
40
60


Fishery Selectivity
Year
20
40
60
Model
25_1_SPoRC_Cont
25_4_Upd_Selex
Region 1
Fleet 1
Region 1
Fleet 2
Sex 1
Sex 2
Fishery selectivity
1.00
0.75
0.50
0.25
0.00
0
10
20
30
Bin

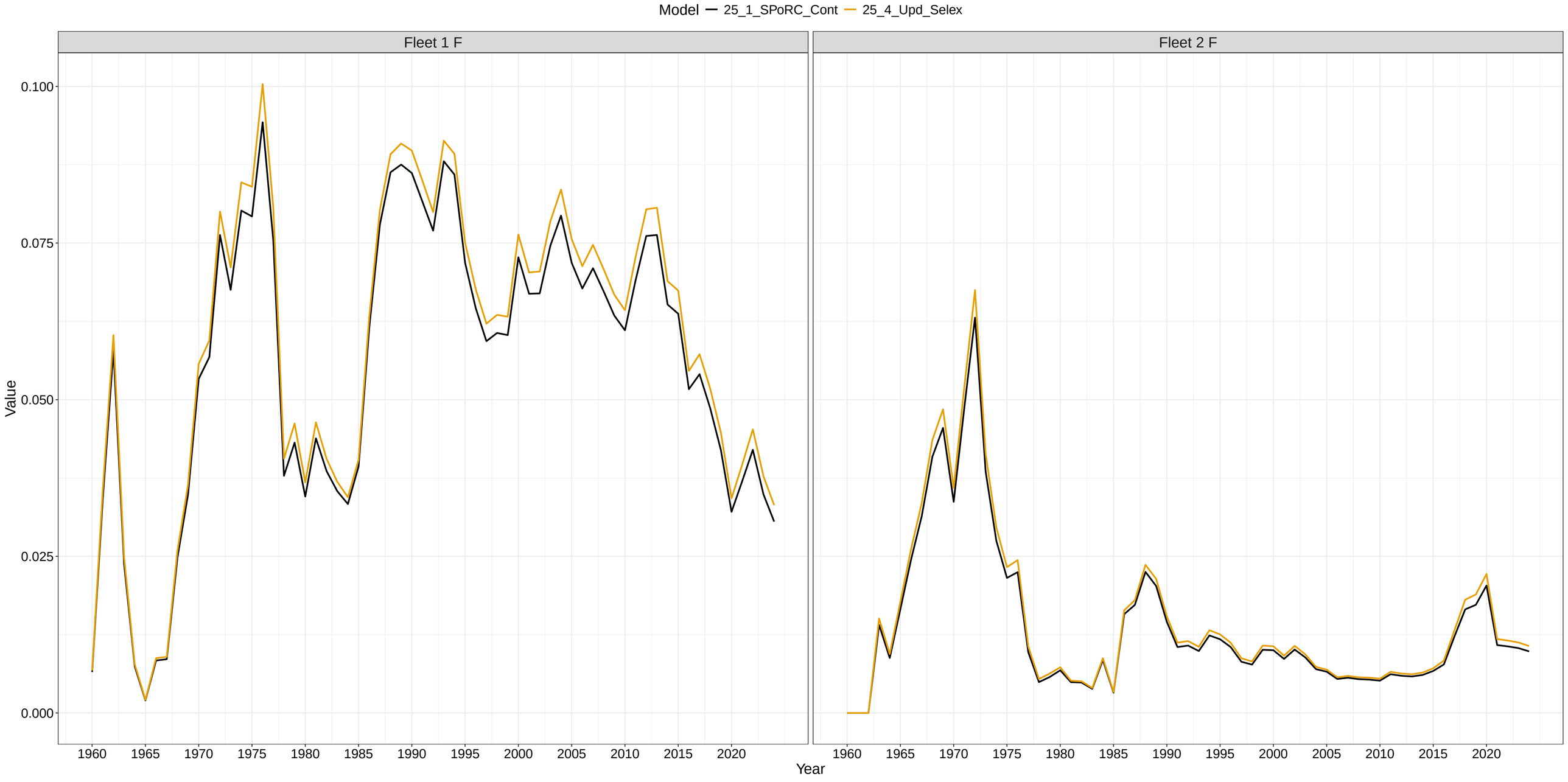
Survey Selectivity

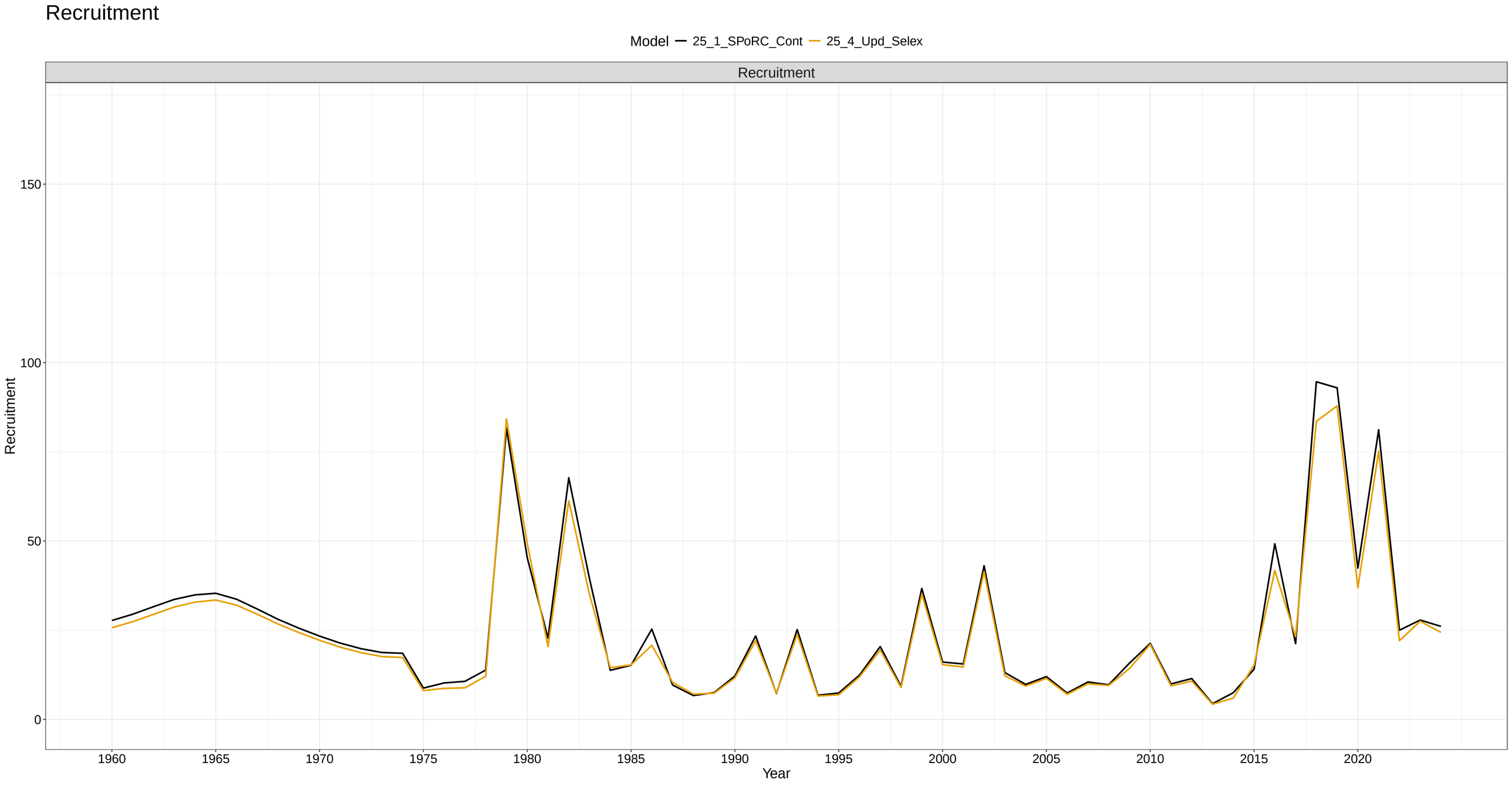


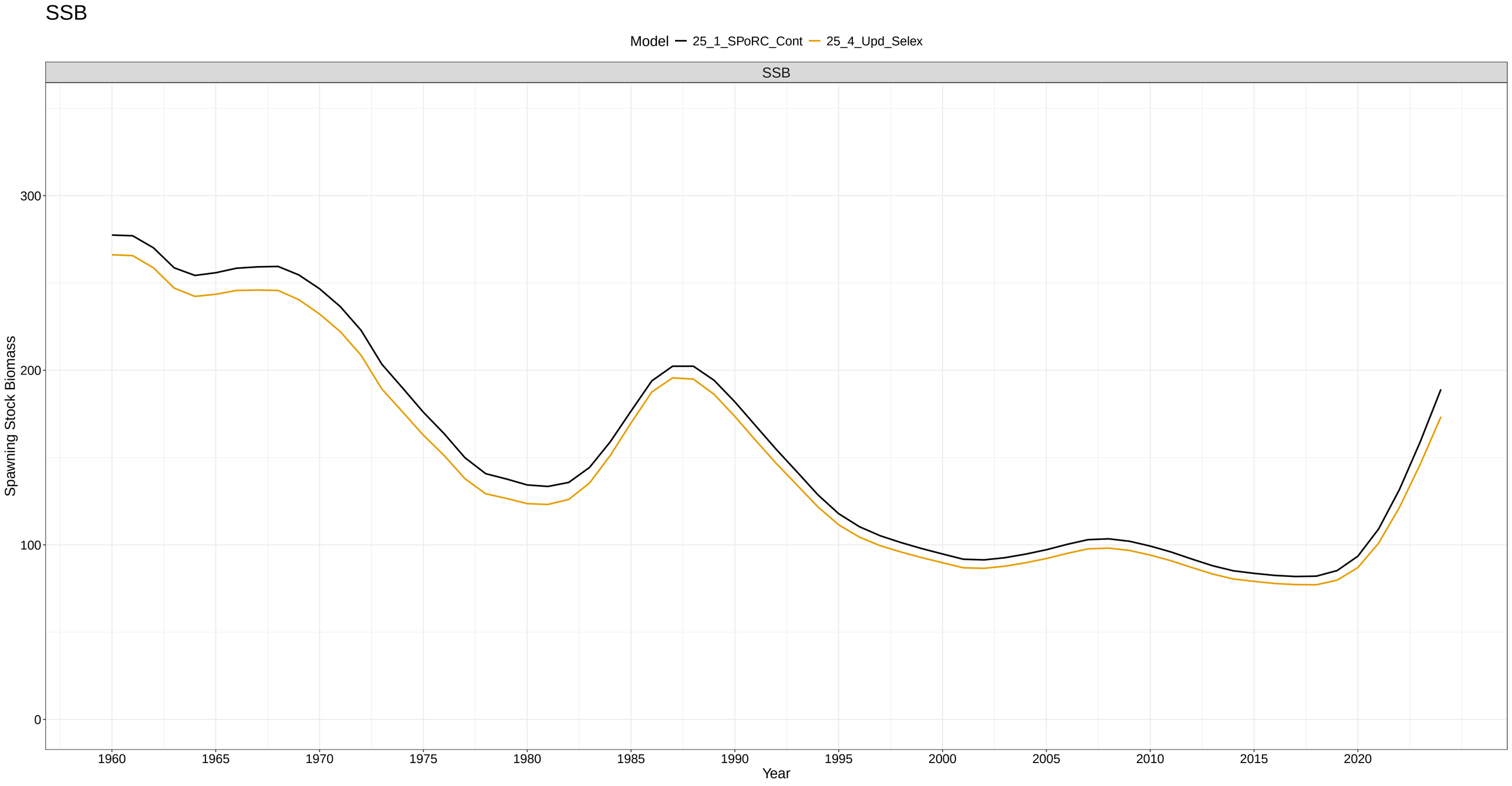
Time Series Plots



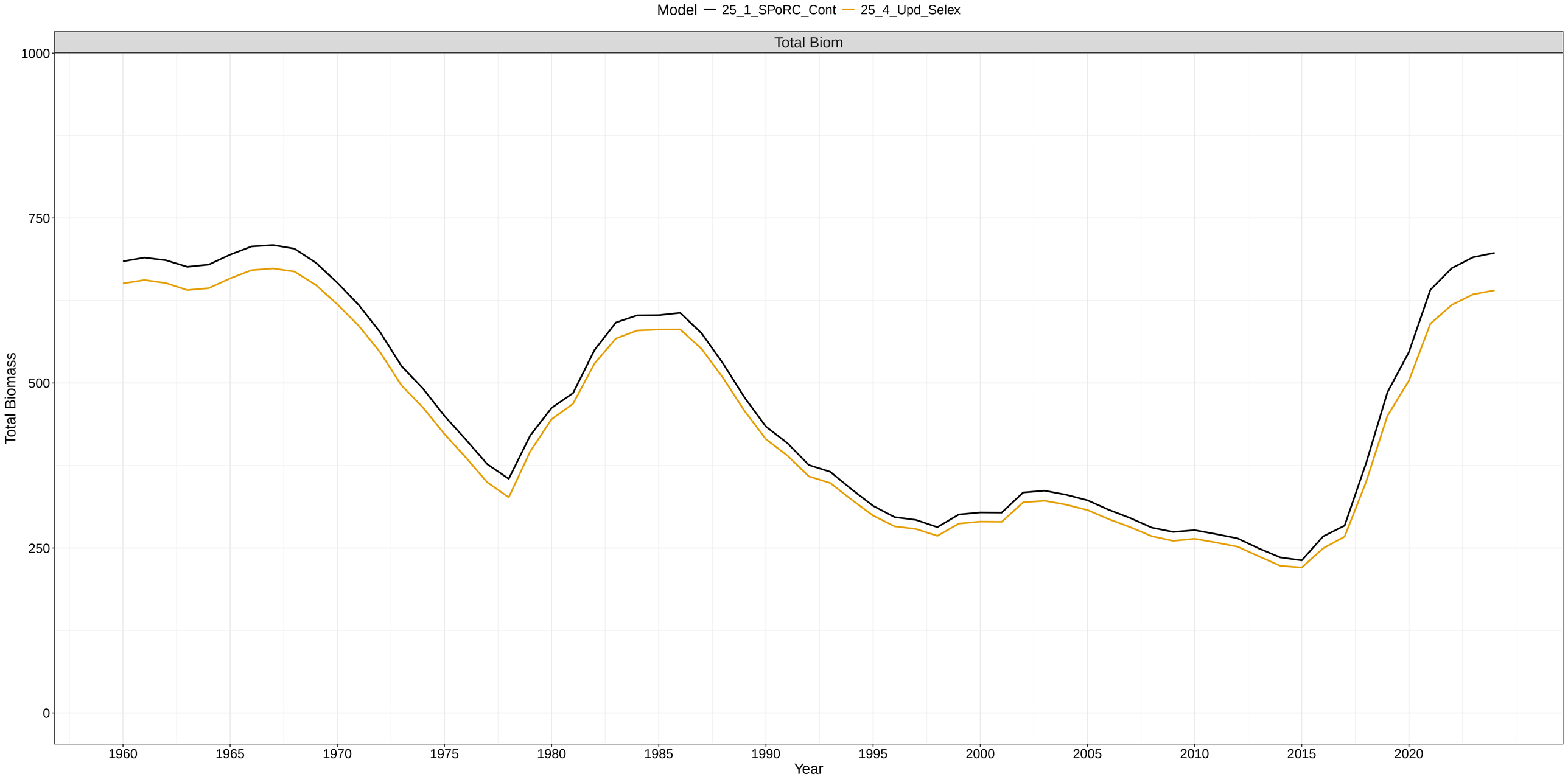
Fishing Mortality



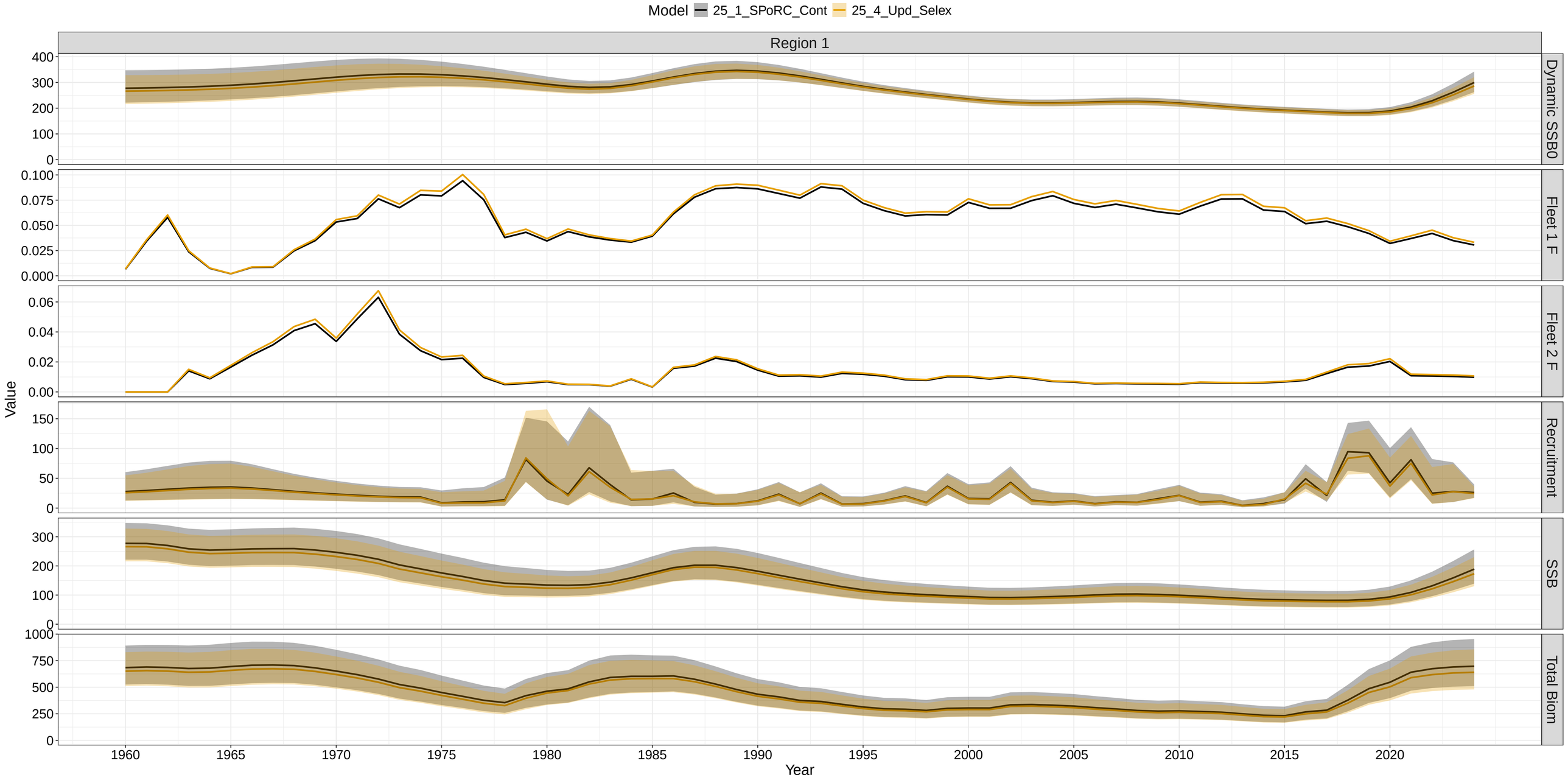

Recruitment
Model
25_1_SPoRC_Cont
25_4_Upd_Selex
Recruitment
Recruitment
150
100
50
0
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
Year


SSB
Model
25_1_SPoRC_Cont
25_4_Upd_Selex
SSB
Spawning Stock Biomass
0
100
200
300
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
Year

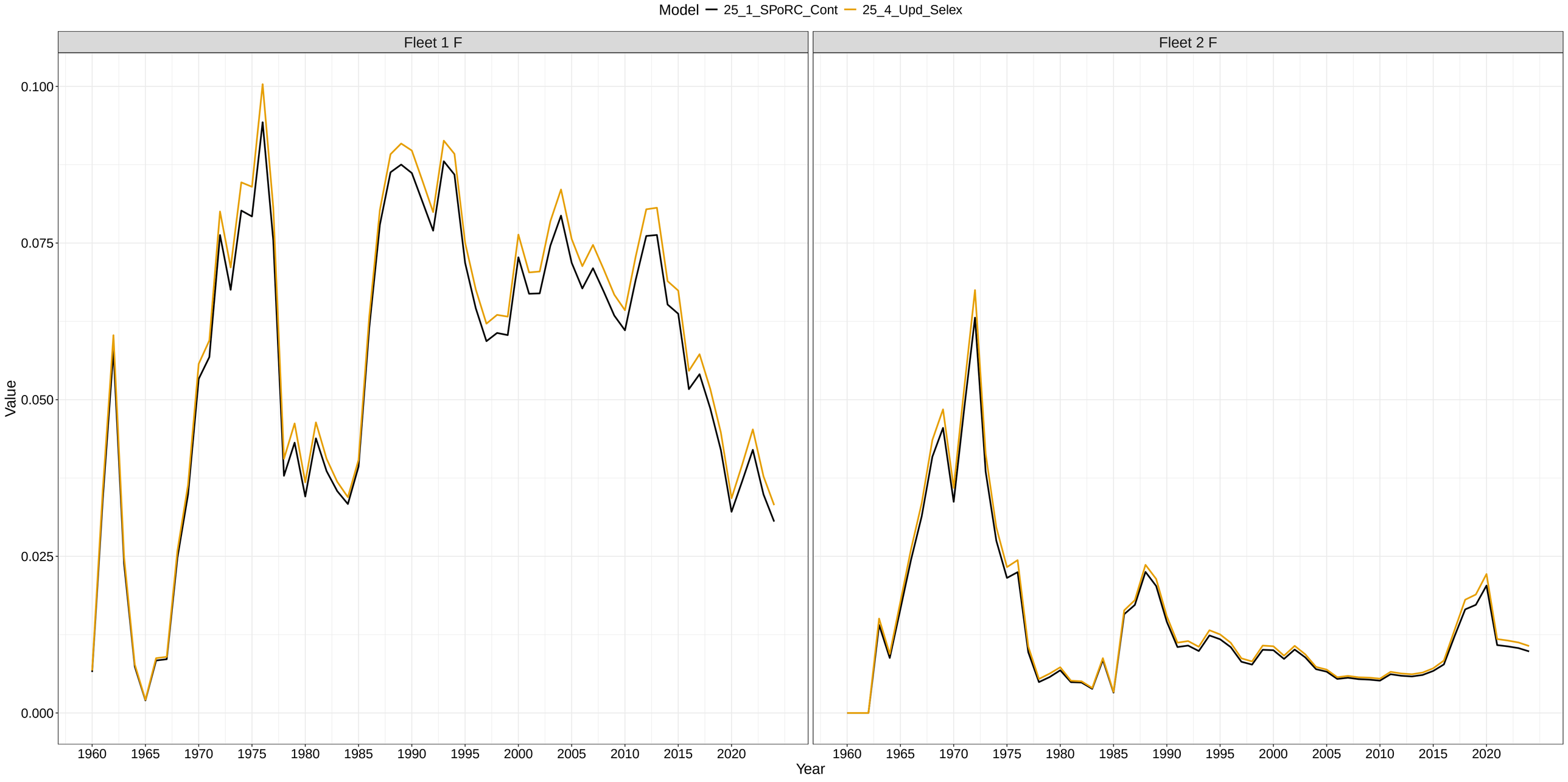
Biomass

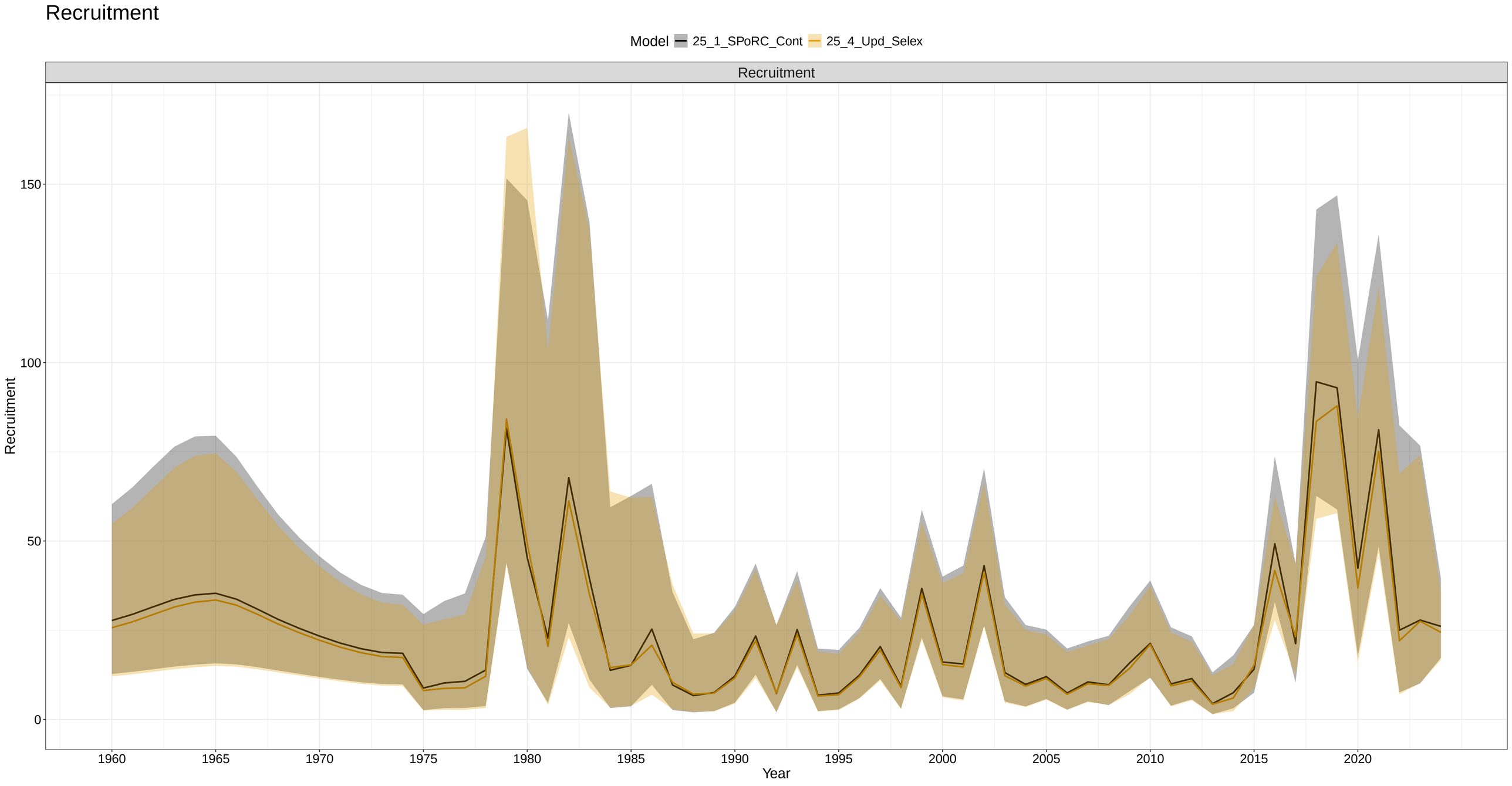

Model
25_1_SPoRC_Cont
25_4_Upd_Selex
Total Biom
1000
750
500
250
0
Total Biomass
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
Year

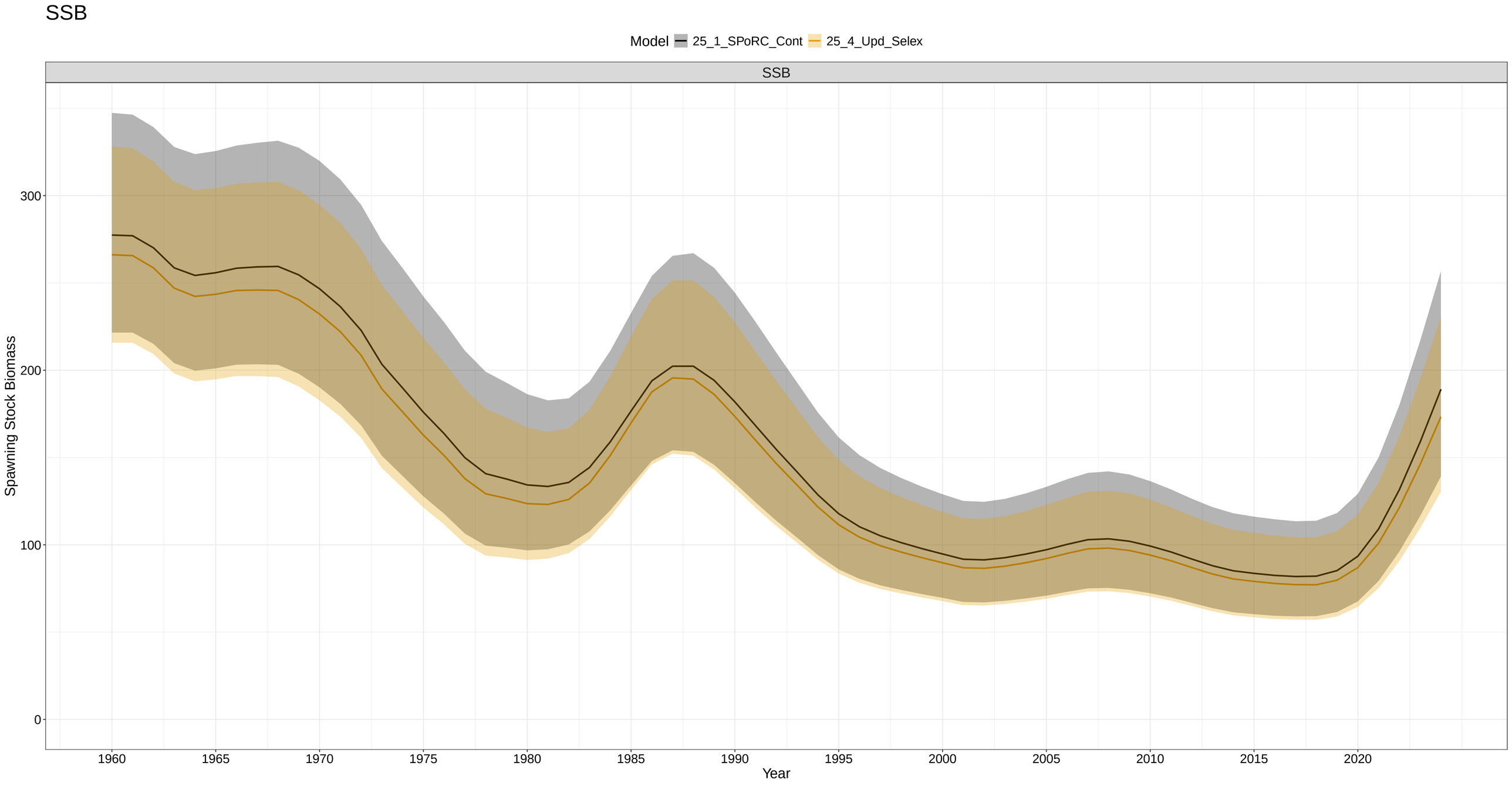
Time Series Plots



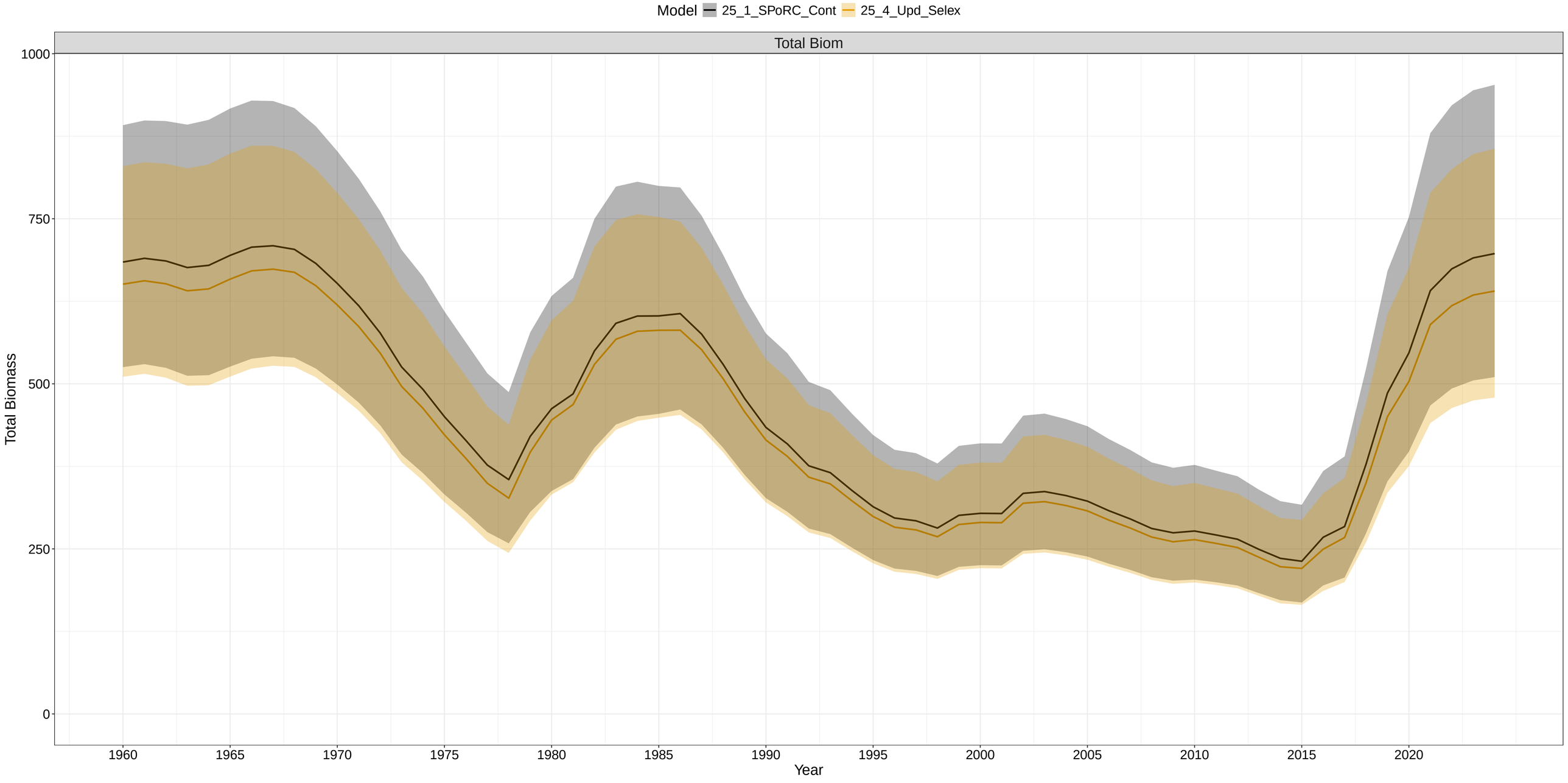
Fishing Mortality




Recruitment
Model
25_1_SPoRC_Cont
25_4_Upd_Selex
Recruitment
Recruitment
150
100
50
0
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
Year


SSB
Model
25_1_SPoRC_Cont
25_4_Upd_Selex
SSB
Spawning Stock Biomass
0
100
200
300
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
Year

Biomass


Model
25_1_SPoRC_Cont
25_4_Upd_Selex
Total Biom
1000
750
500
250
0
Total Biomass
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
Year