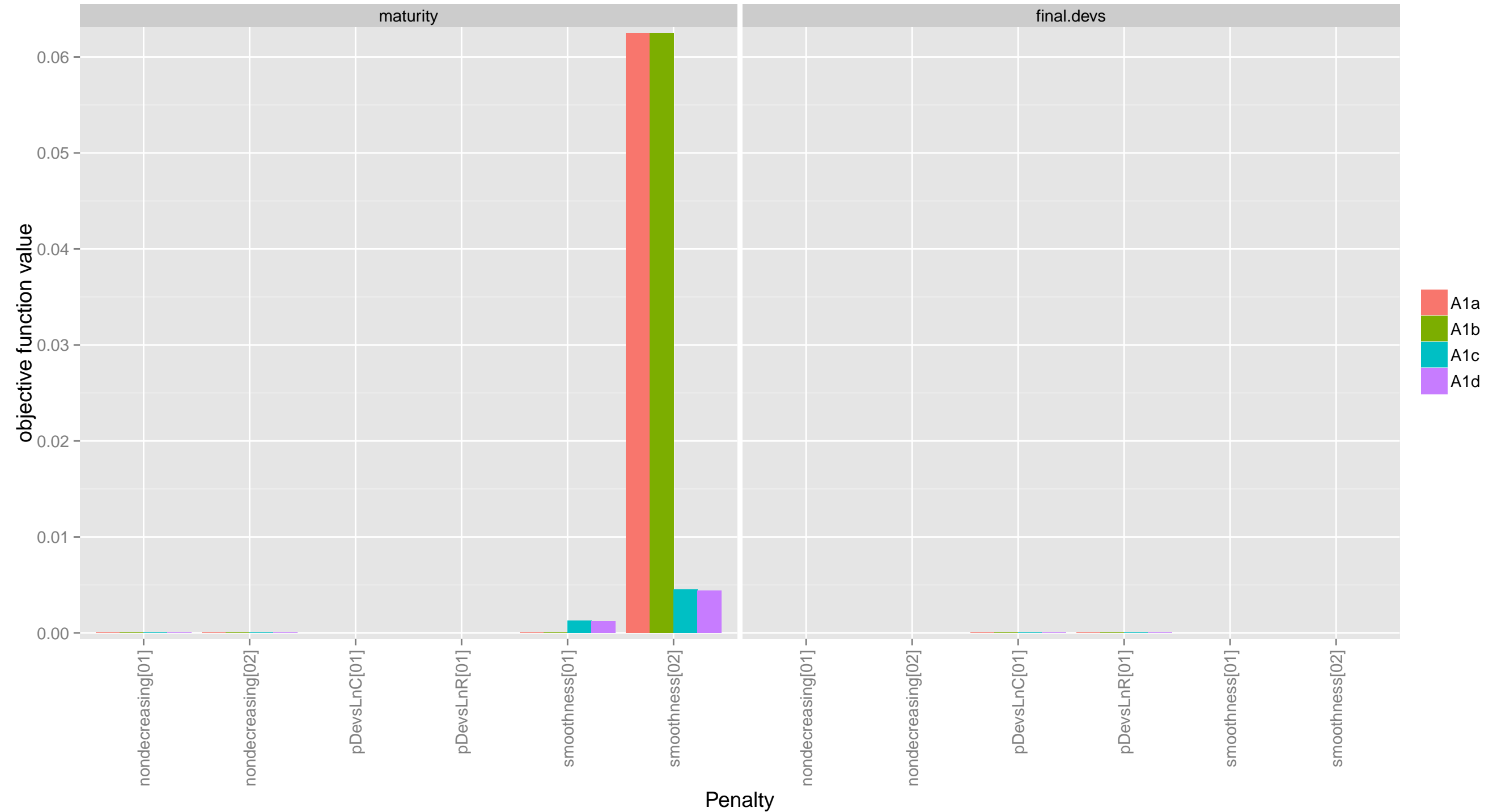
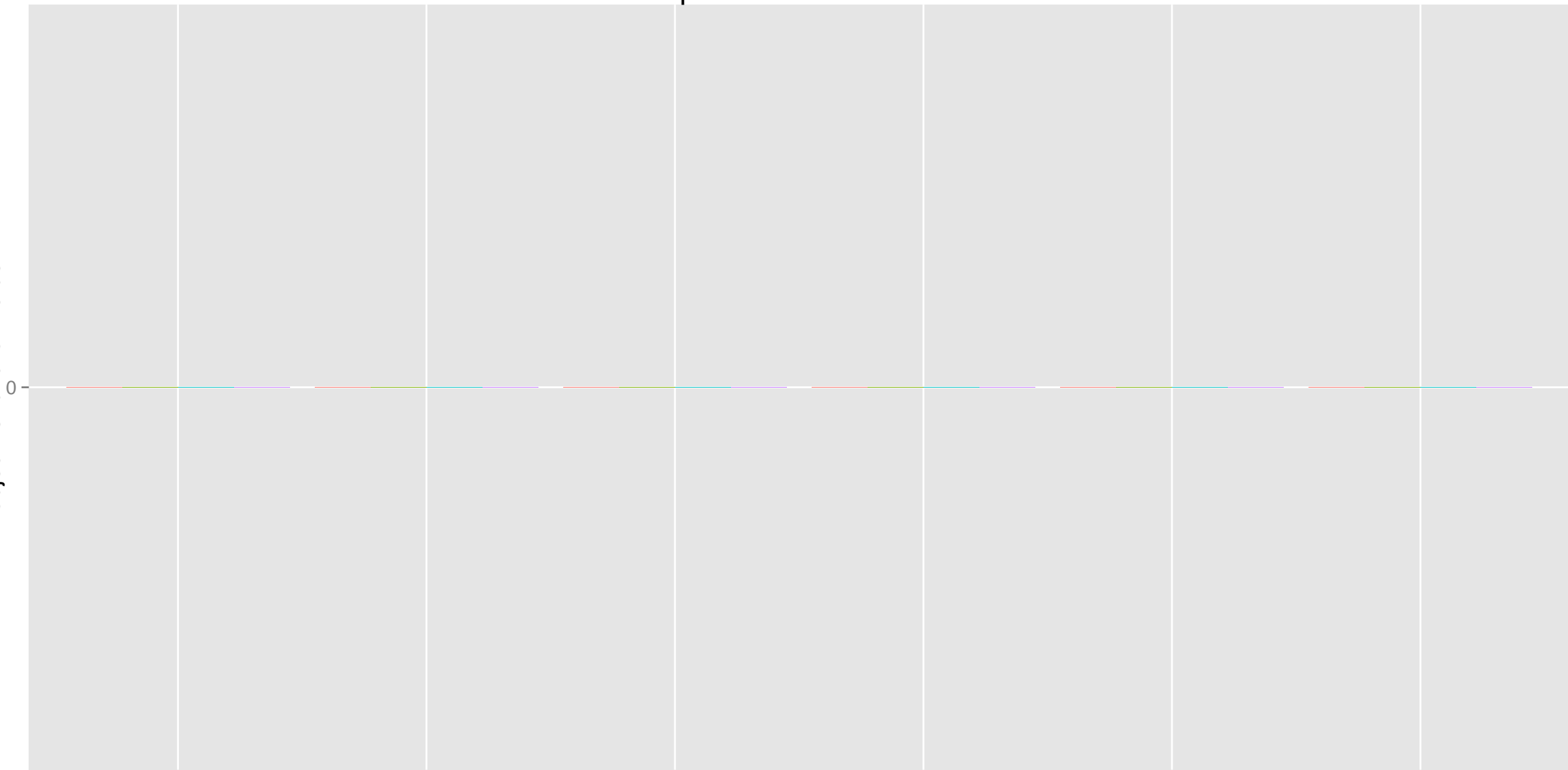


Penalties



priors: recruitment

objective function value



pDevsLnR[01]

pLgtRX[01]

pLnR[01]

pLnRa[01]

pLnRb[01]

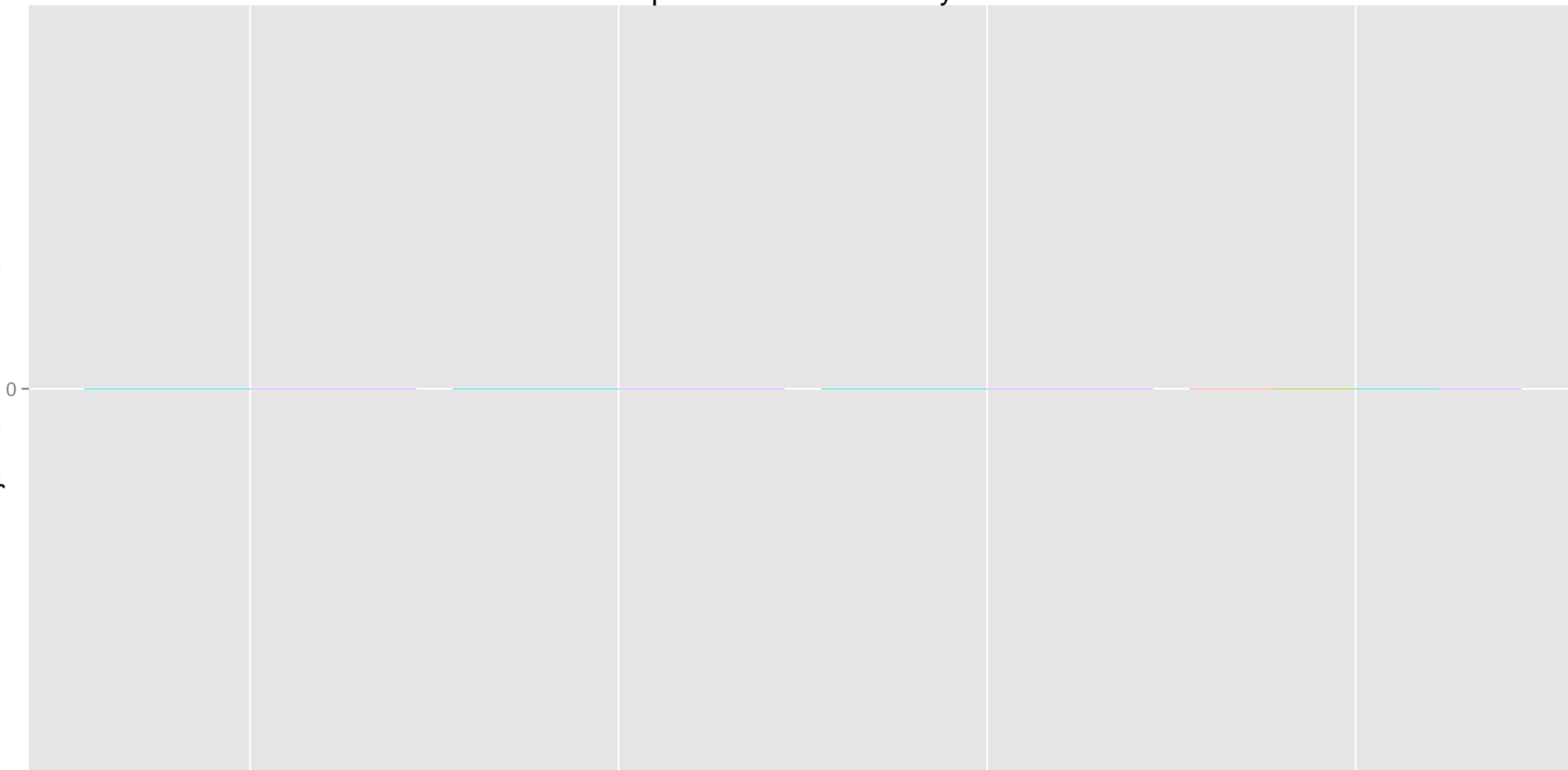
pLnRCV[01]

Parameter

- A1a
- A1b
- A1c
- A1d

priors: natural mortality

objective function value



pLnDMM[01]

pLnDMX[01]

pLnDMXXM[01]

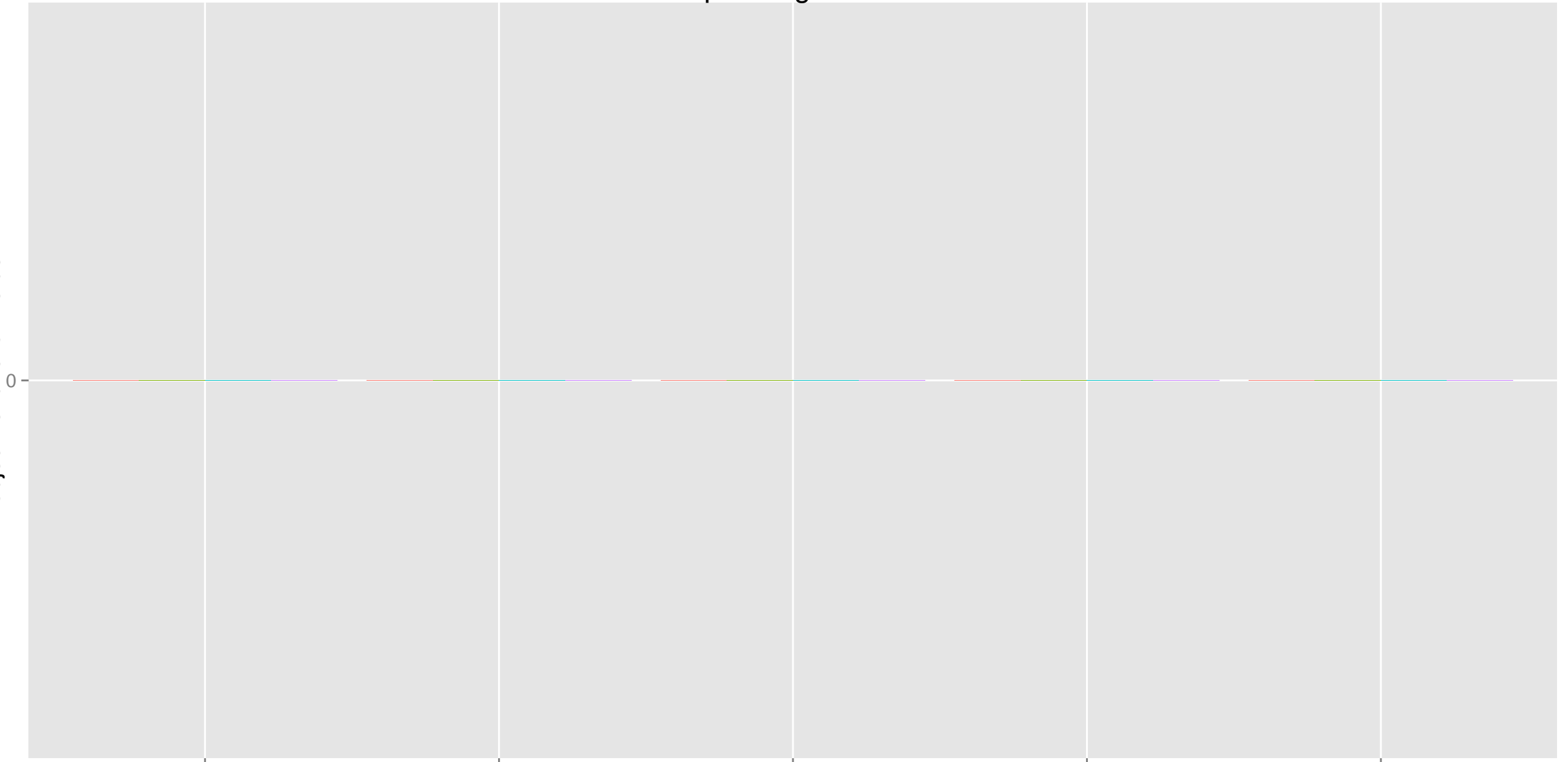
pLnM[01]

Parameter

- A1a
- A1b
- A1c
- A1d

priors: growth

objective function value



- A1a
- A1b
- A1c
- A1d

pLnGrA[01]

pLnGrA[02]

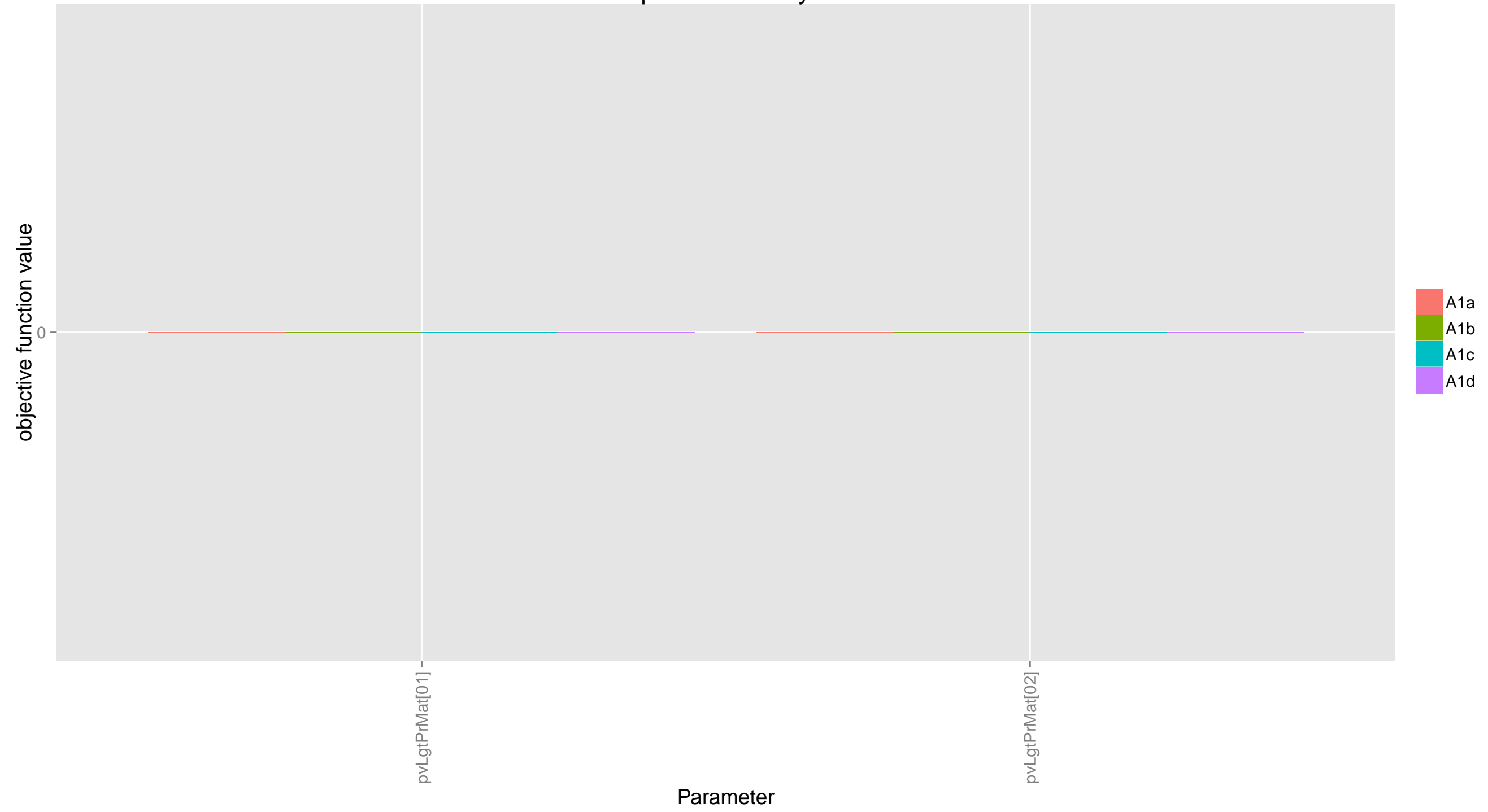
pLnGrB[01]

pLnGrB[02]

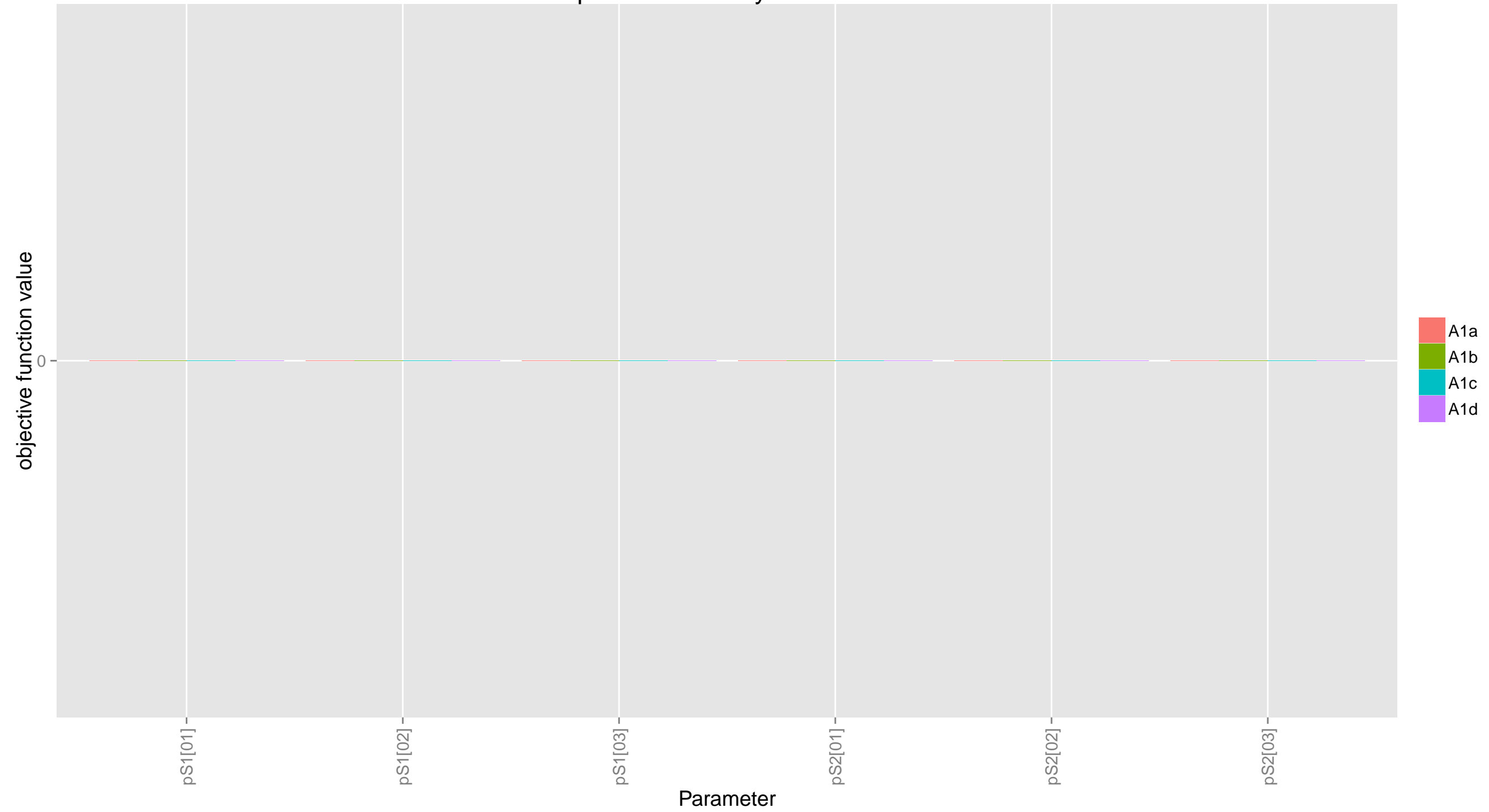
pLnGrBeta[01]

Parameter

priors: maturity

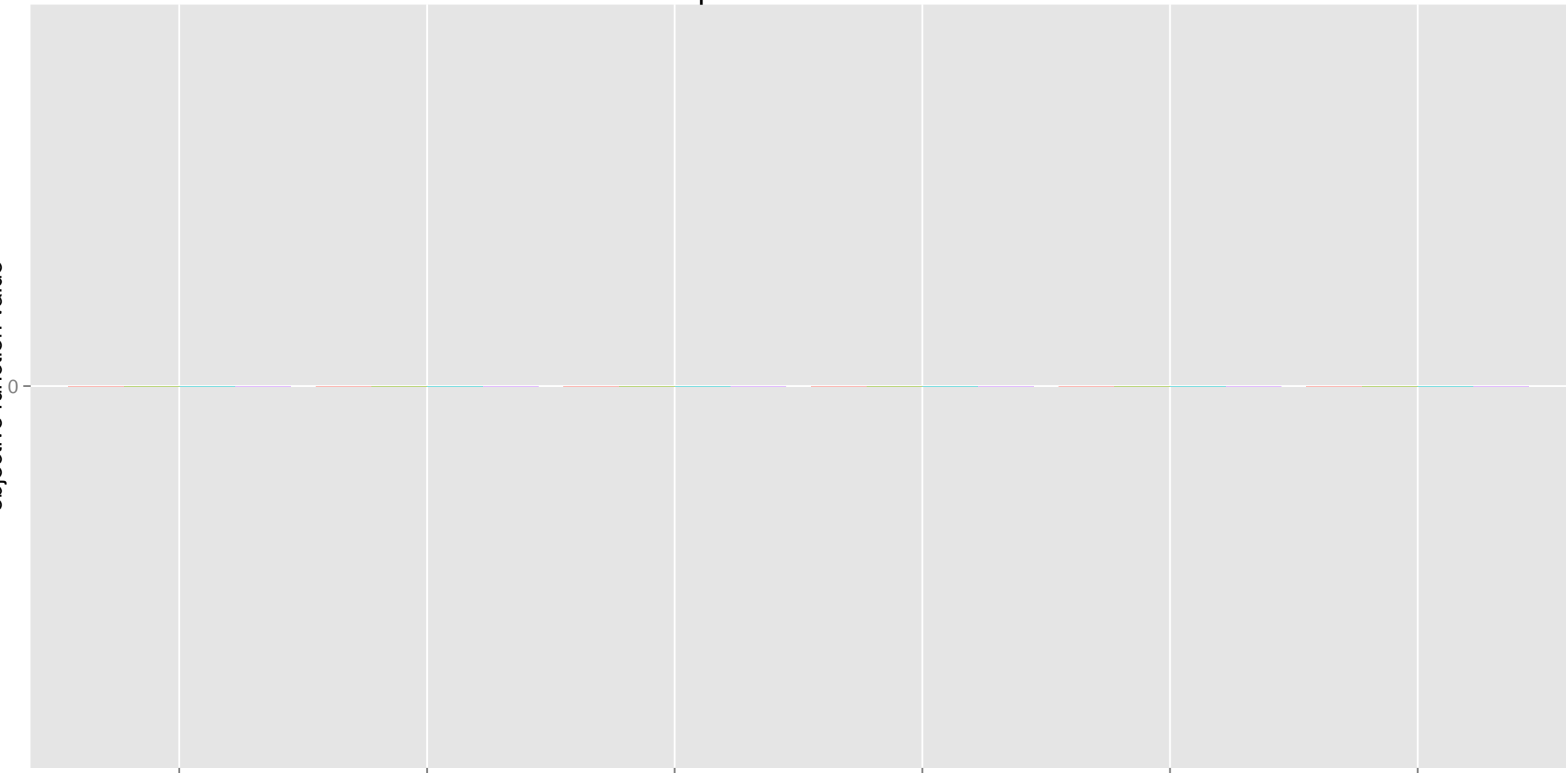


priors: selectivity functions



priors: fisheries

objective function value

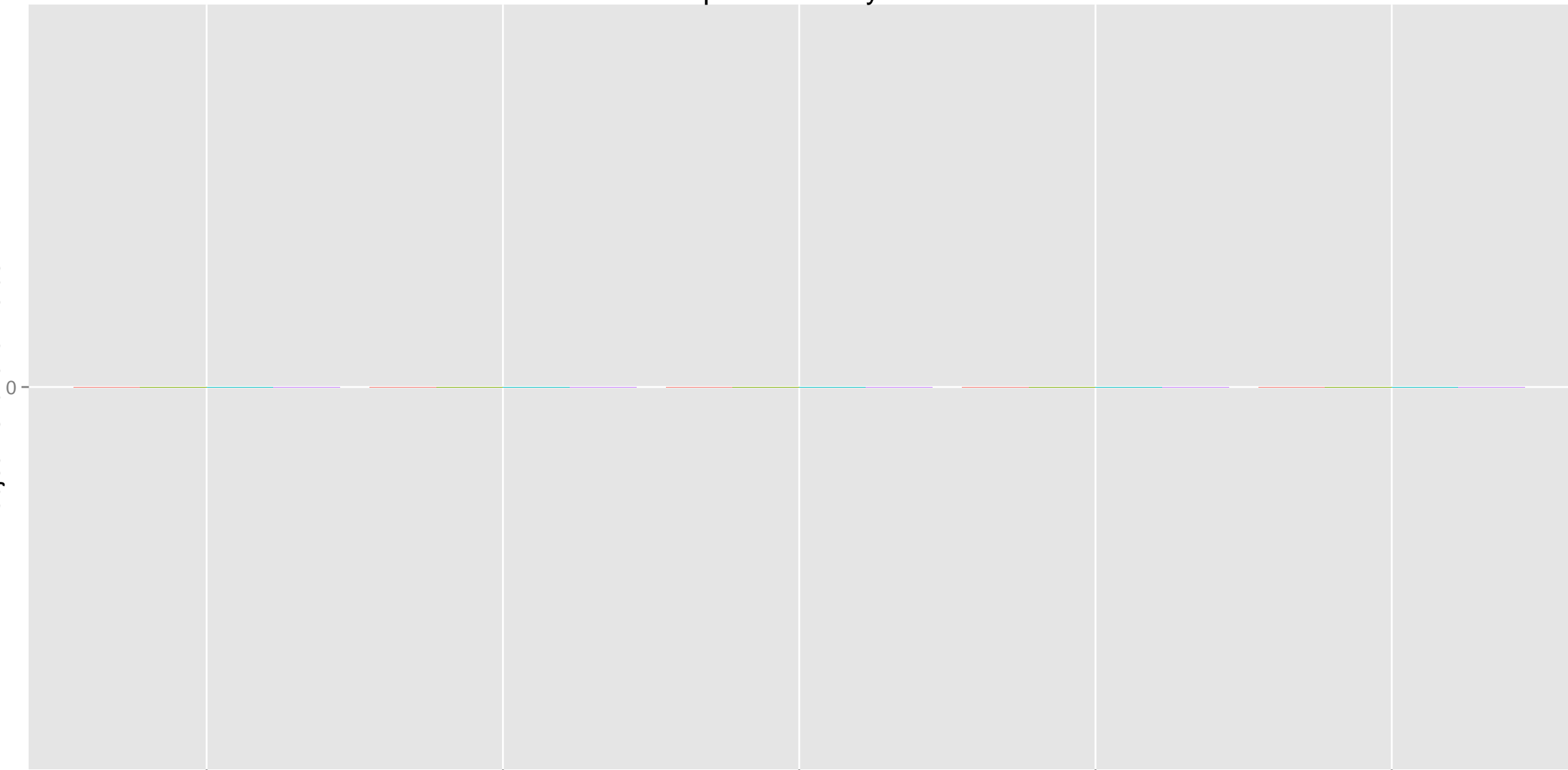


- A1a
- A1b
- A1c
- A1d

Parameter

priors: surveys

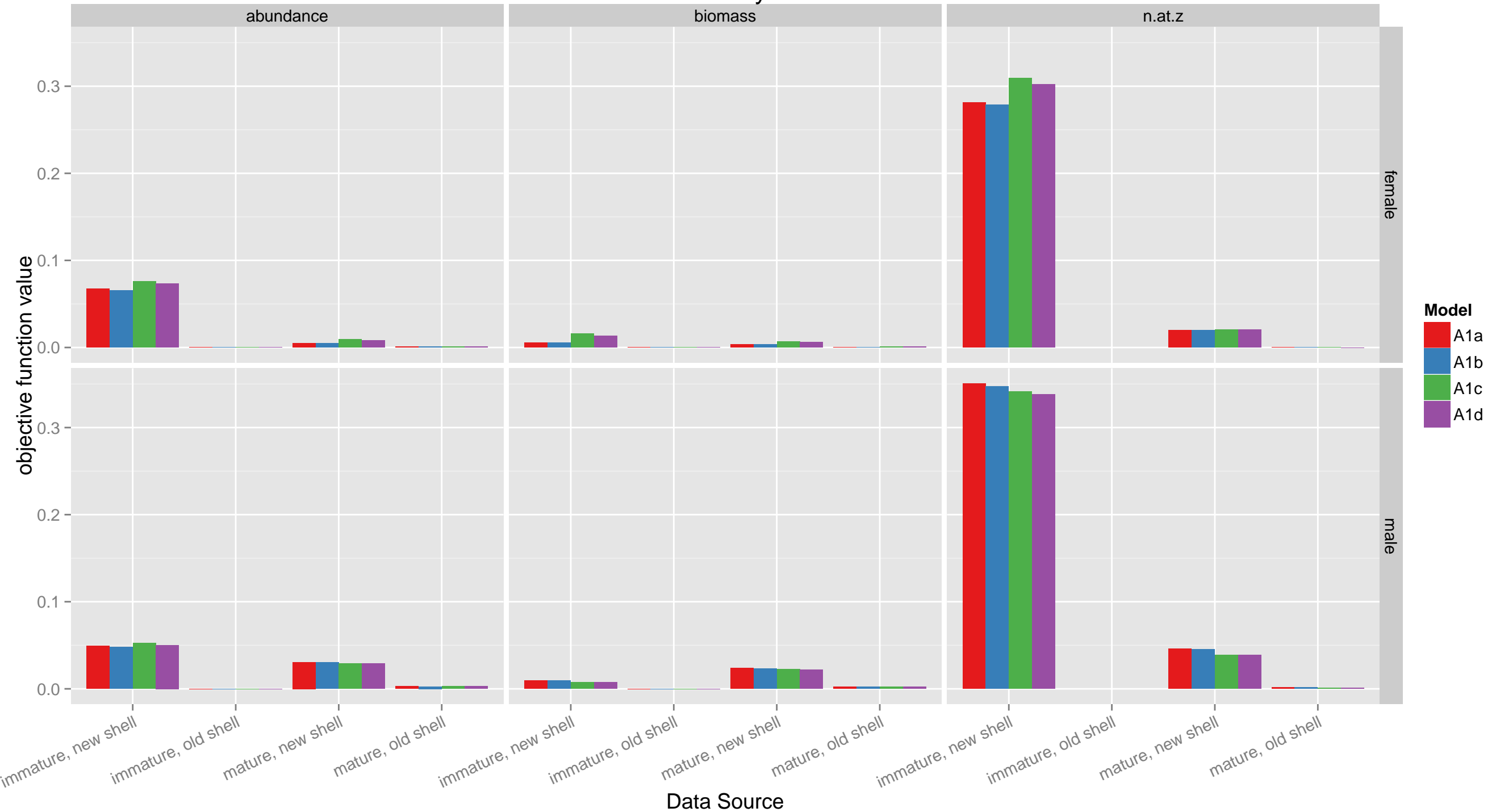
objective function value



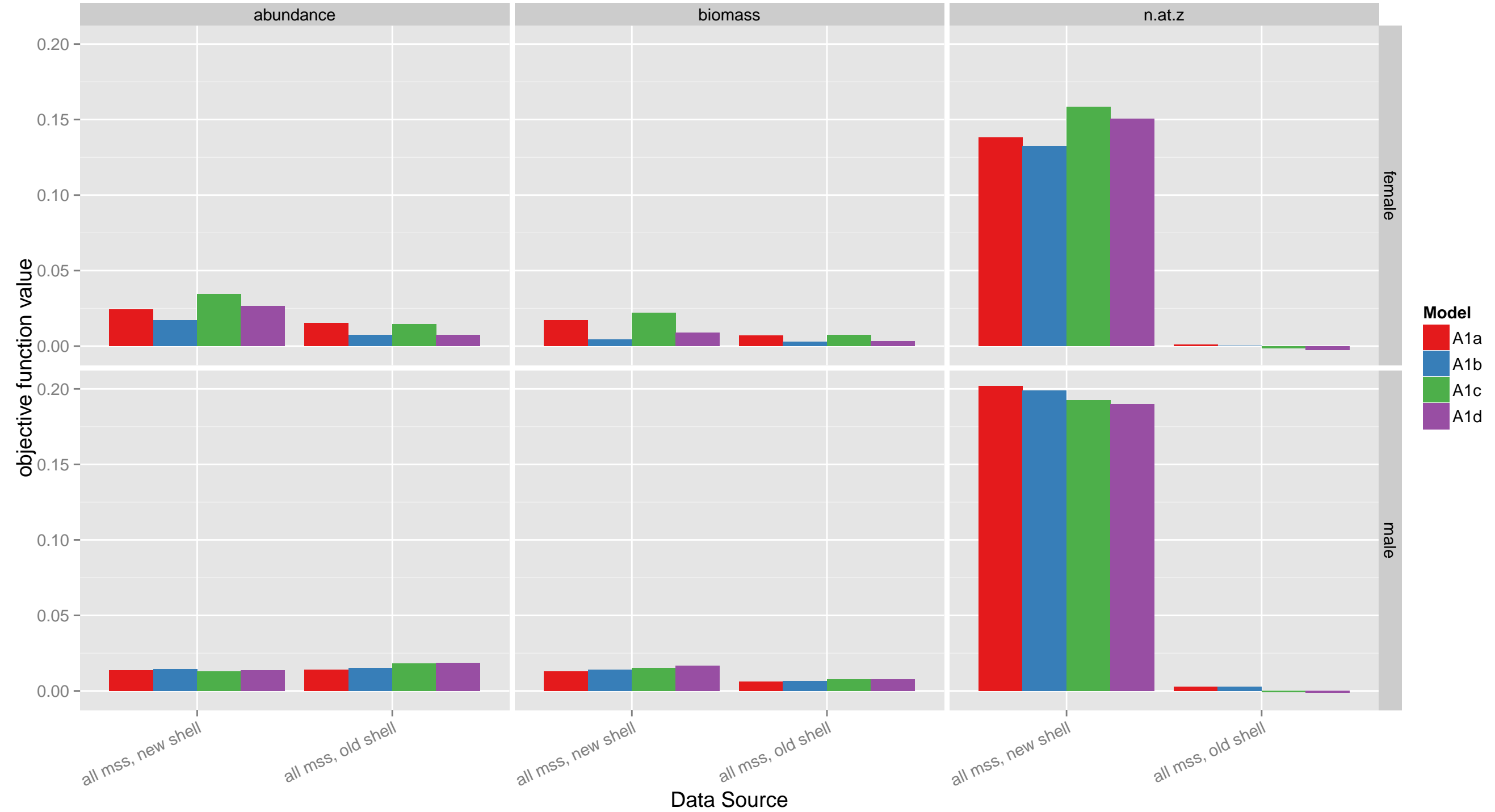
- A1a
- A1b
- A1c
- A1d

Parameter

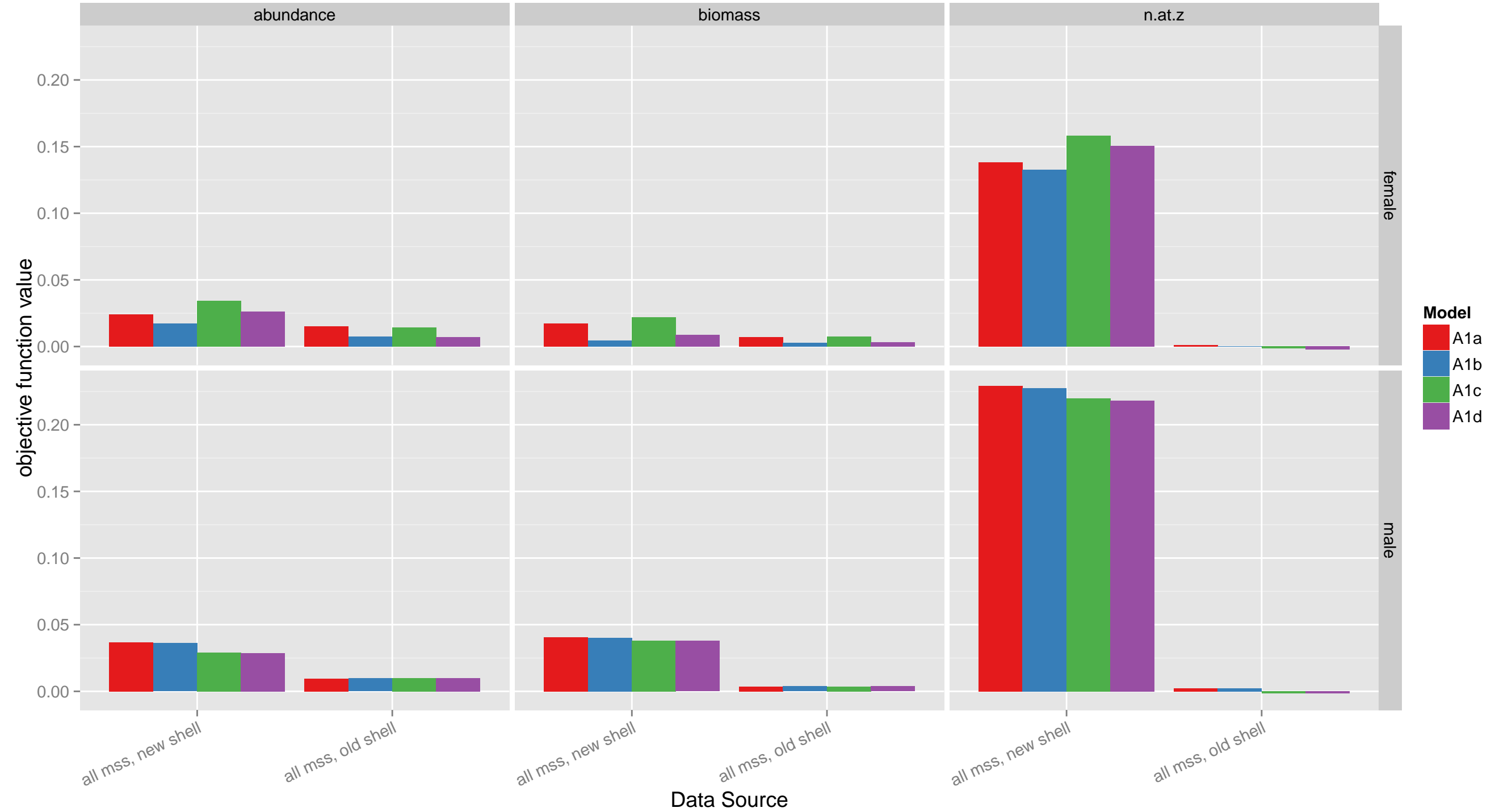
NMFS trawl survey: total catch



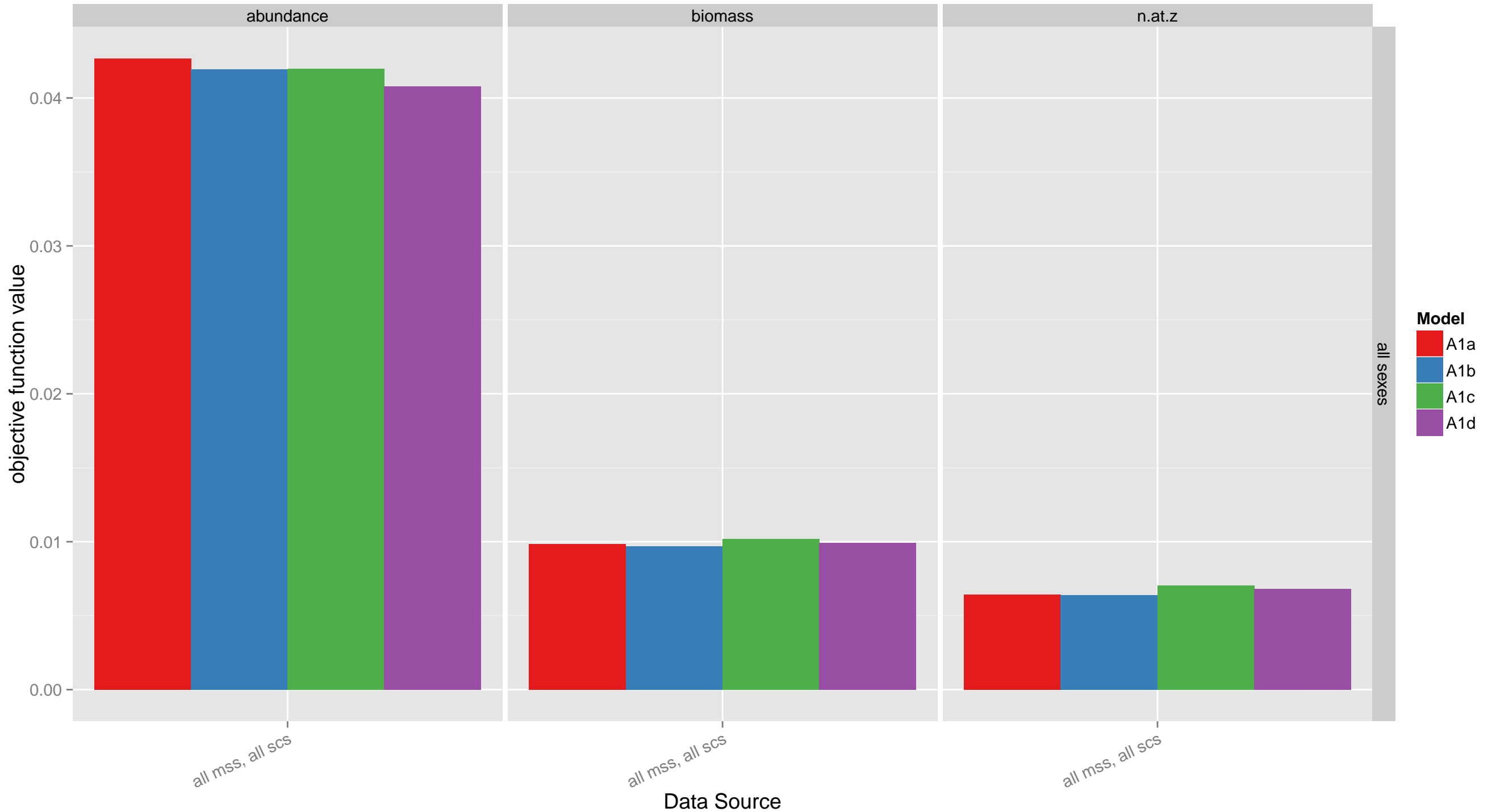
TCF: total catch

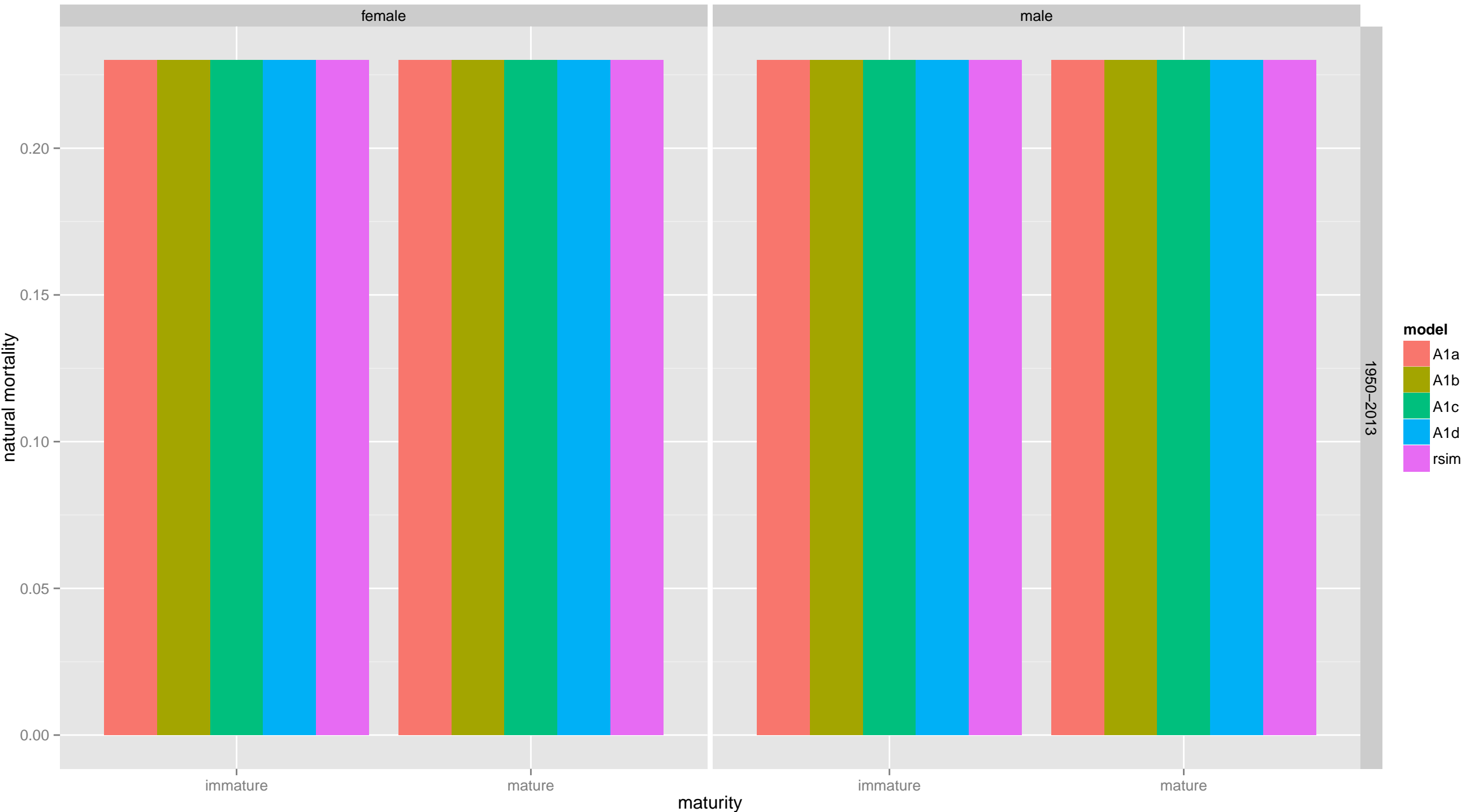


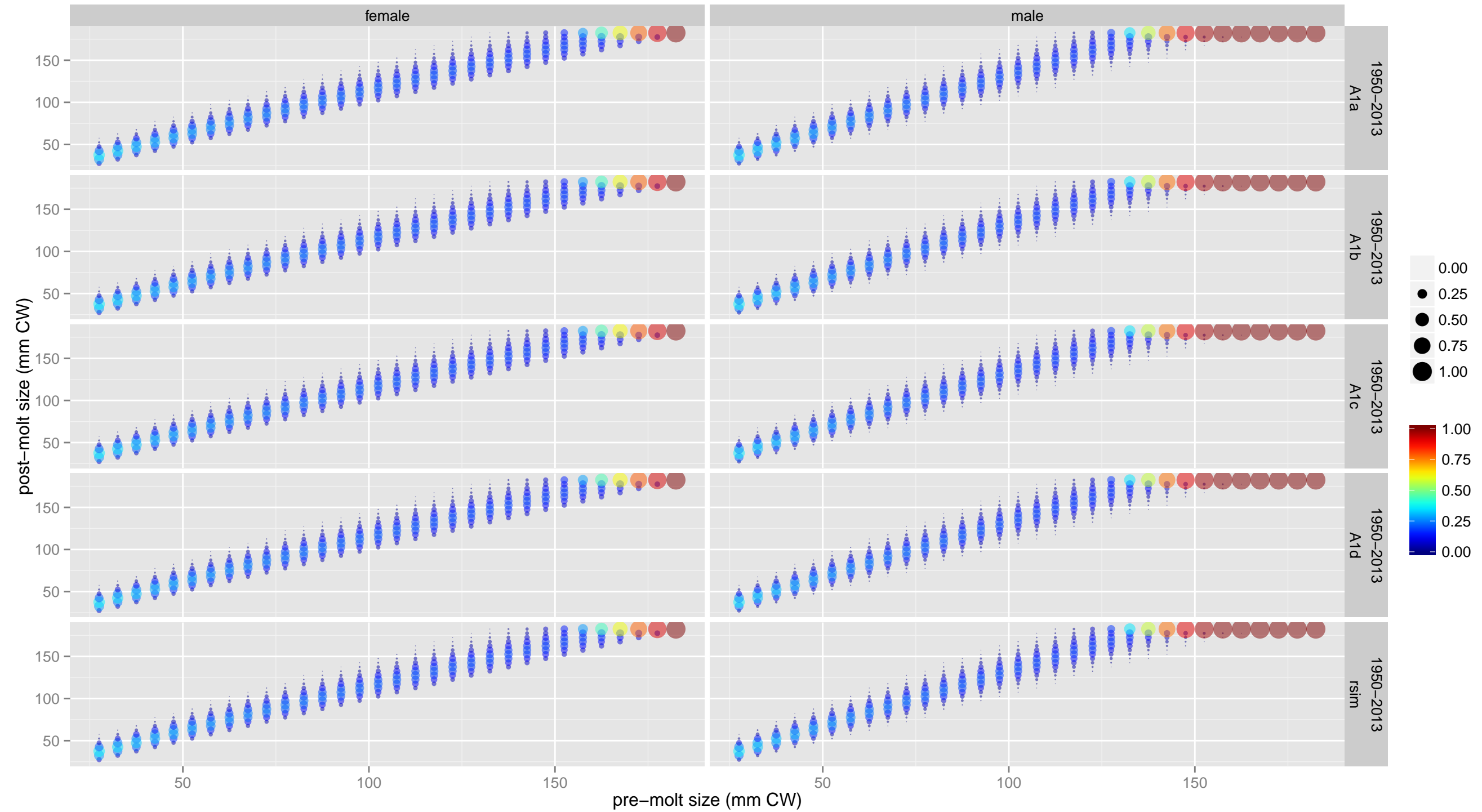
TCF: discard catch

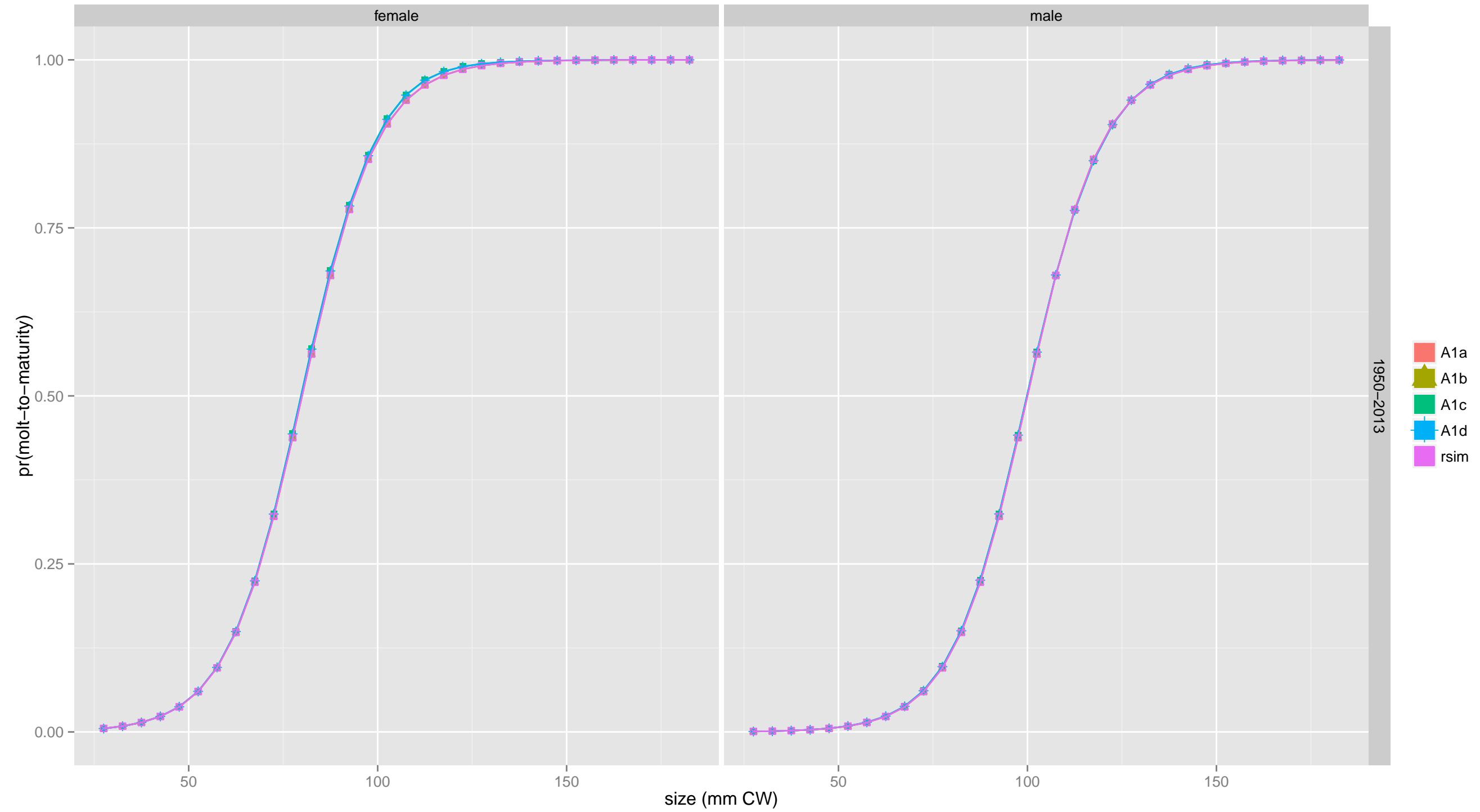


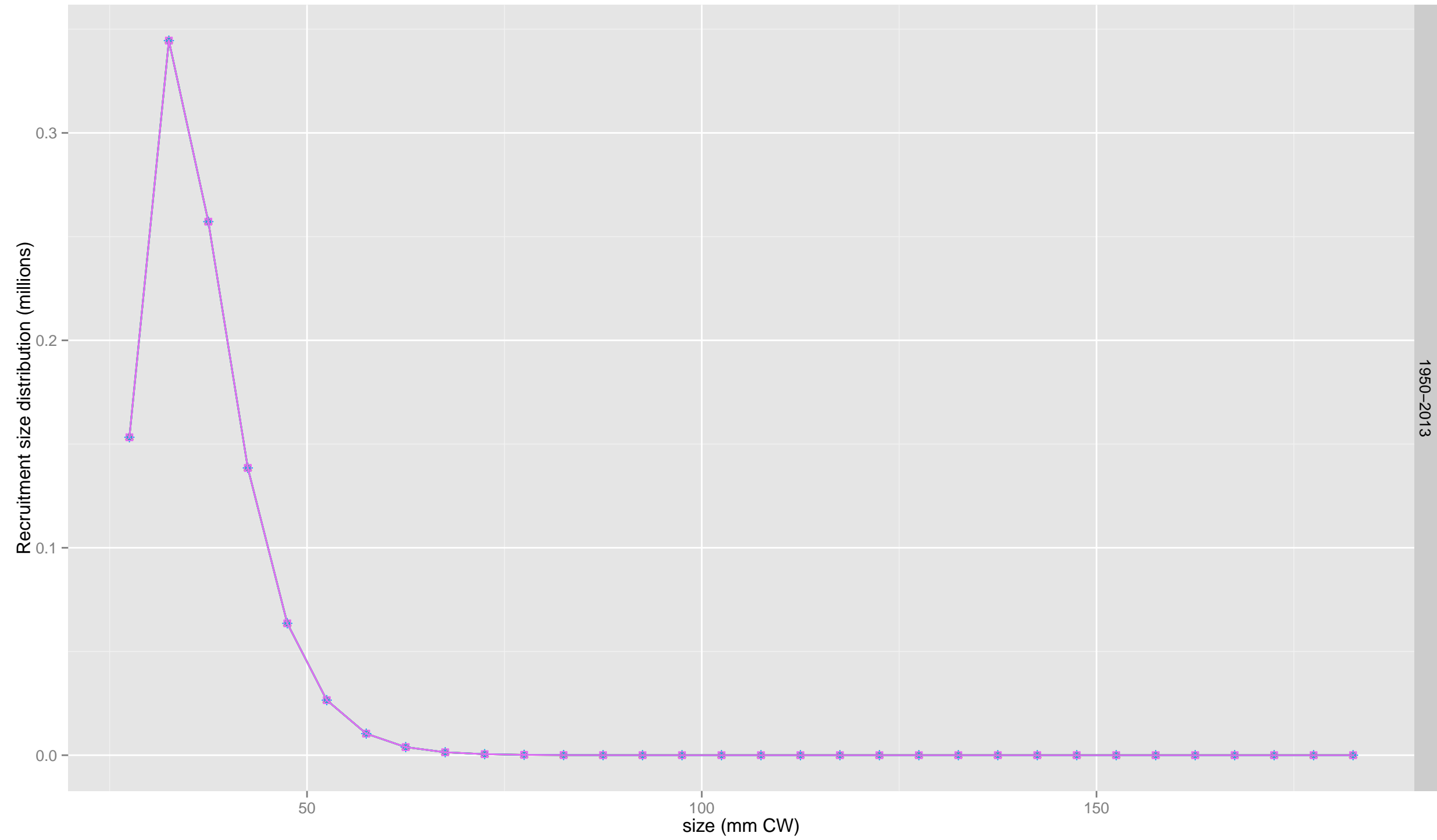
TCF: retained catch





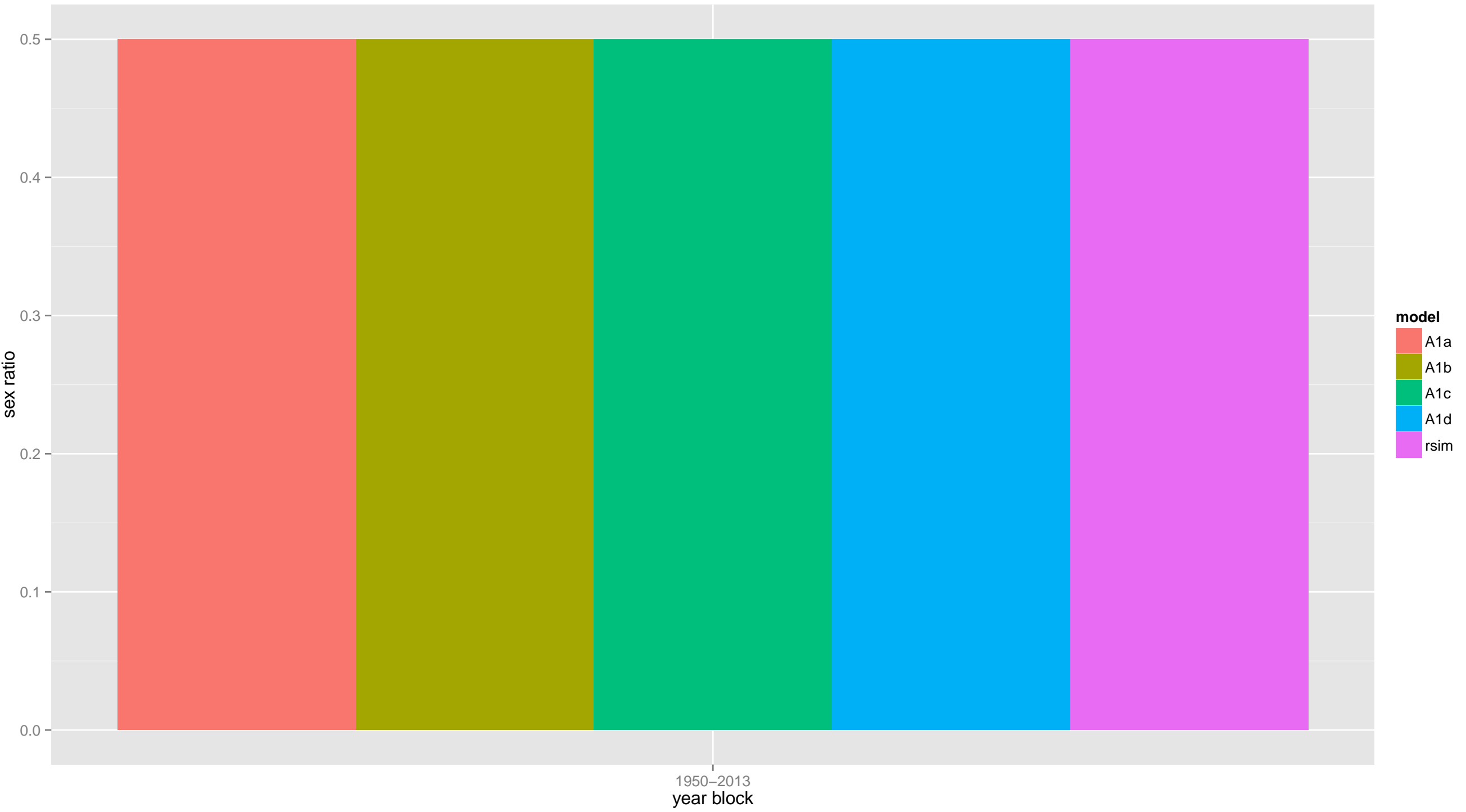


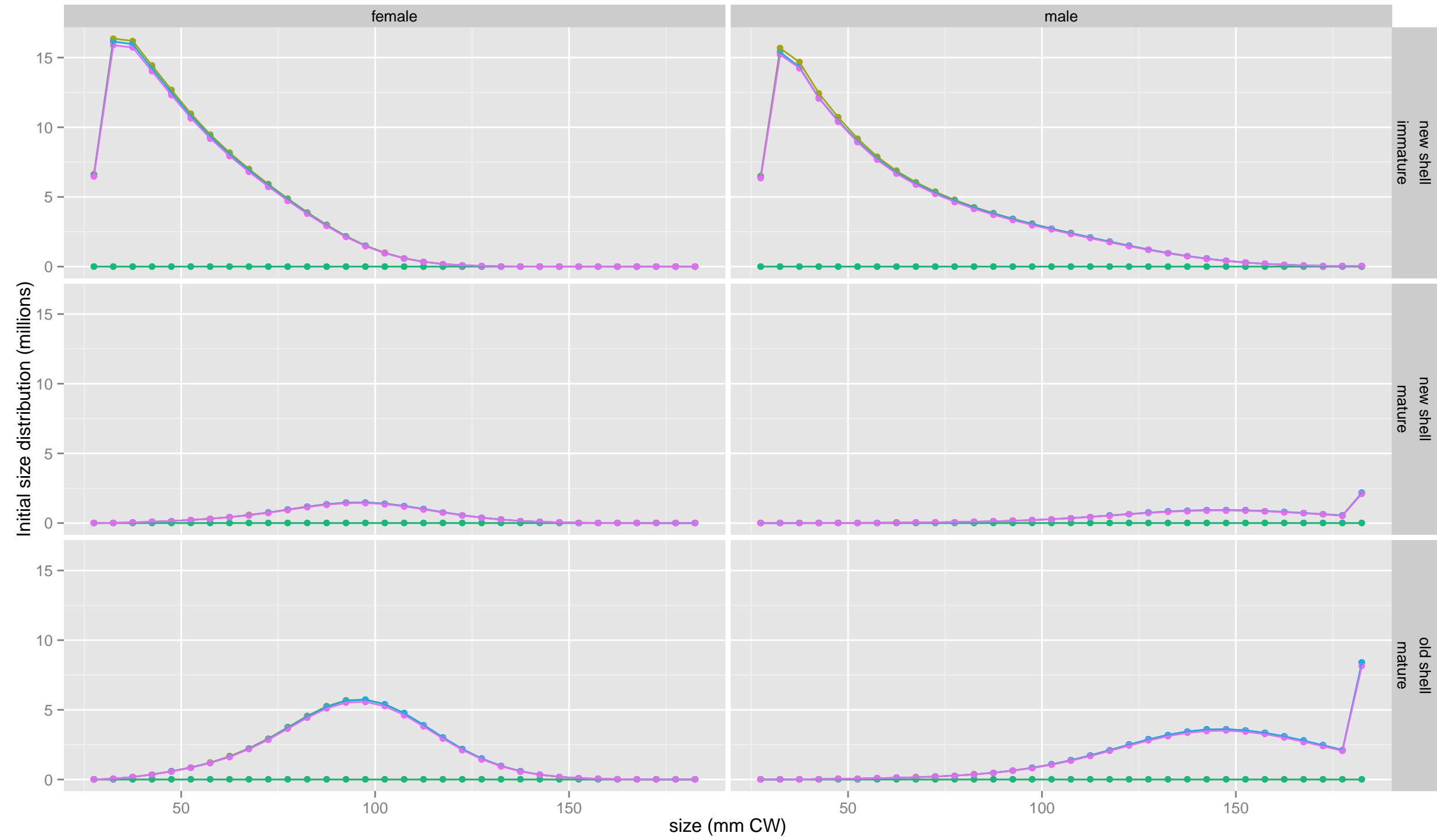


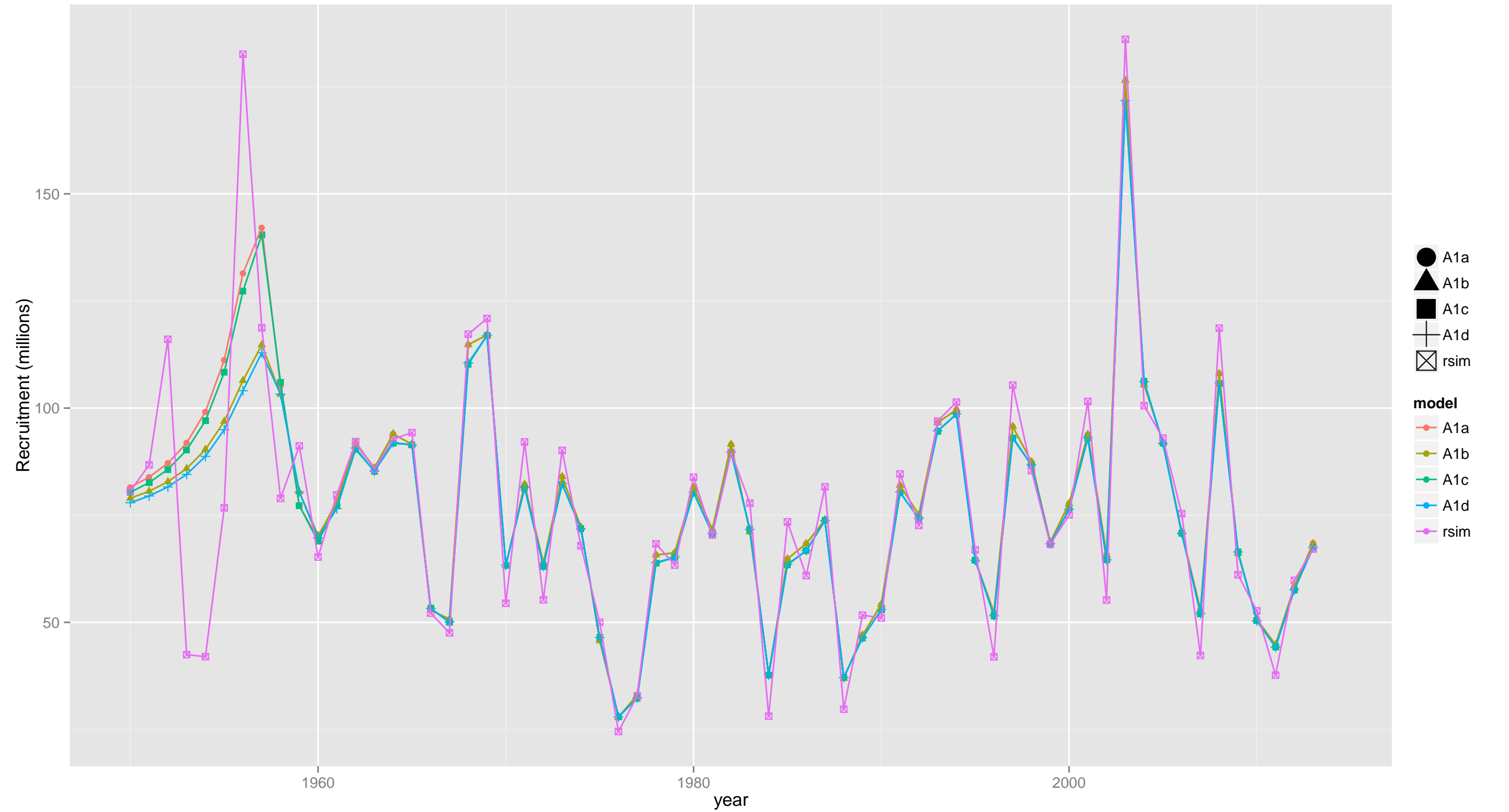


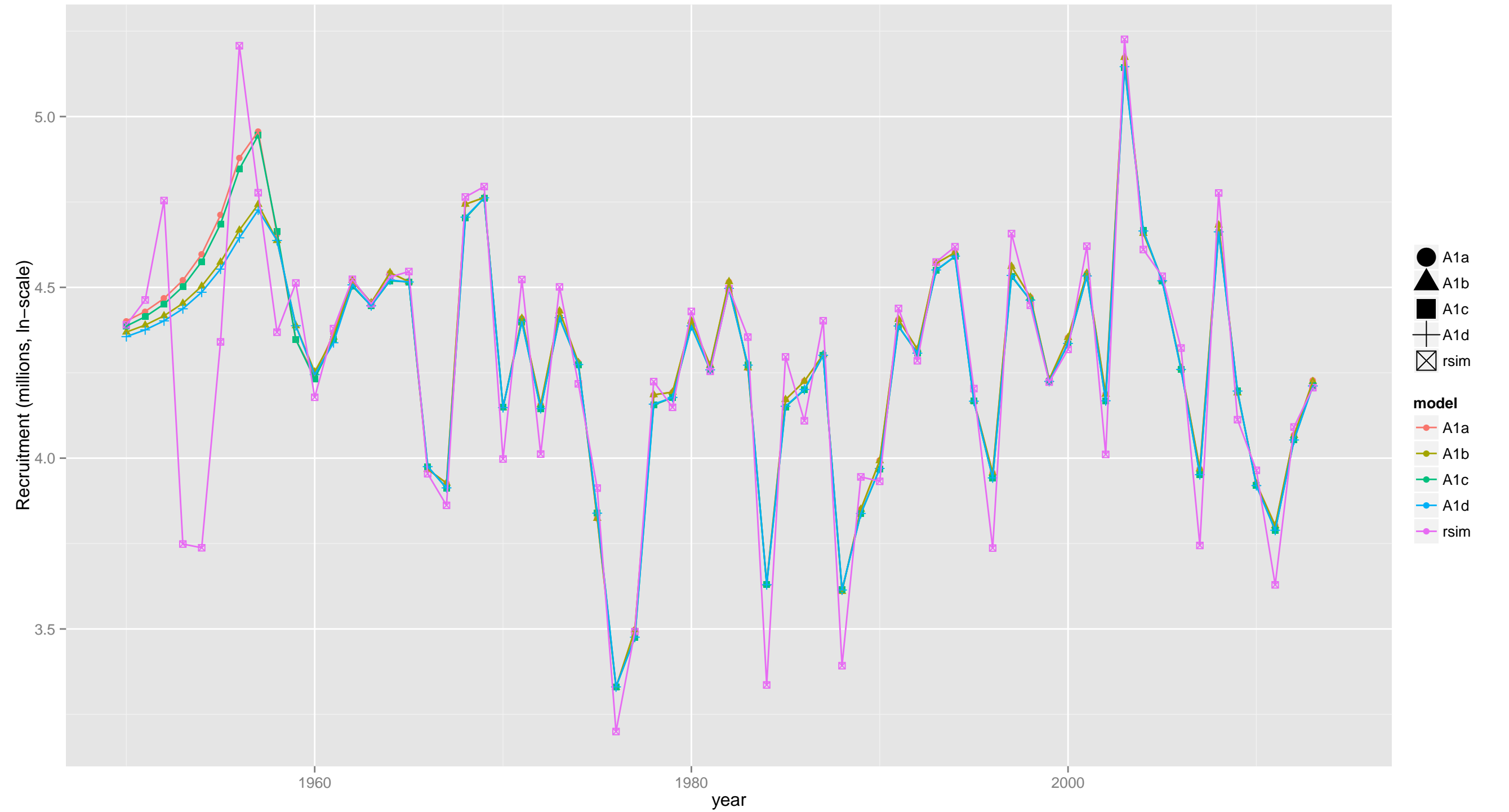
1950-2013

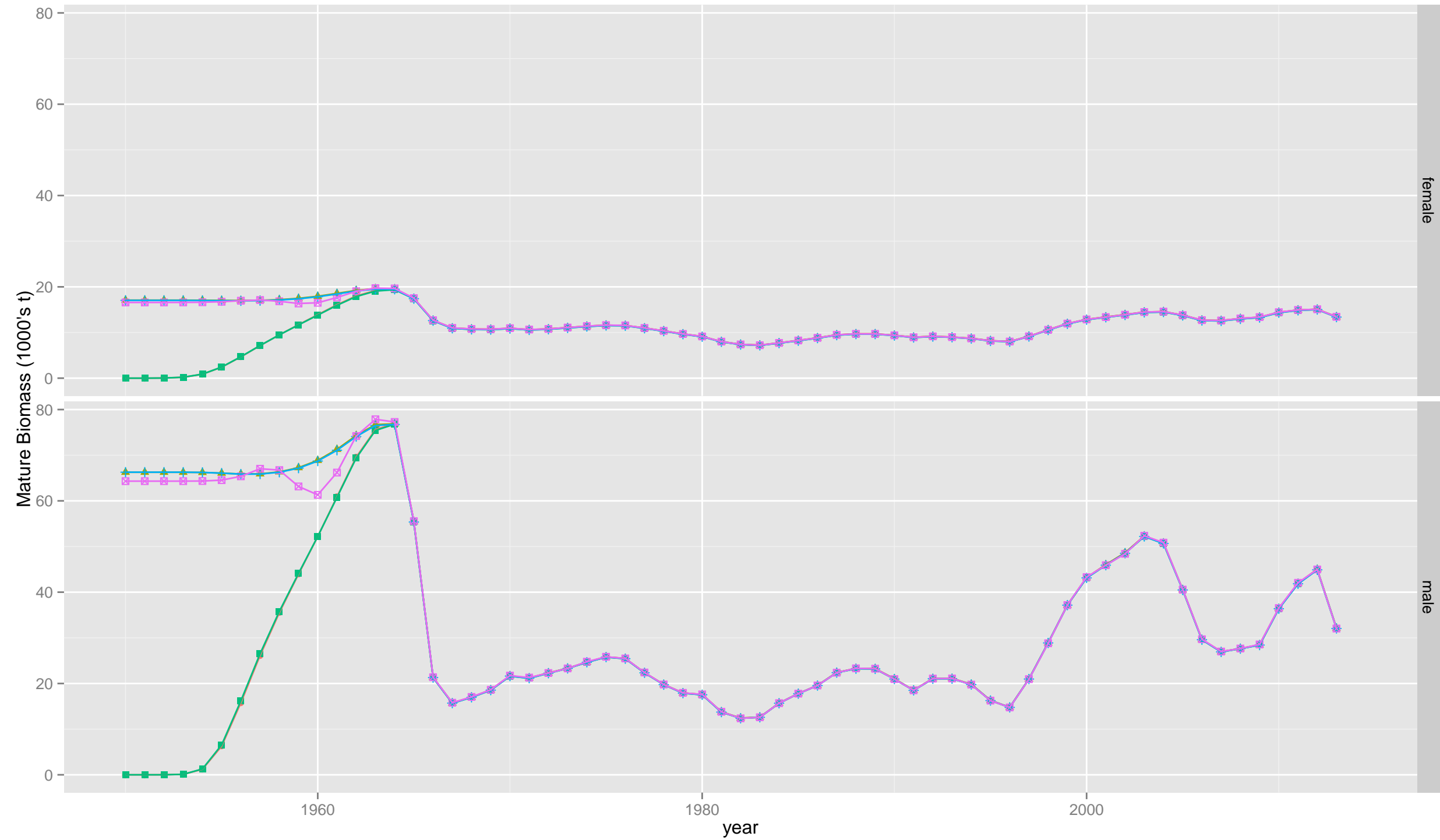
- A1a
- A1b
- A1c
- A1d
- rsim

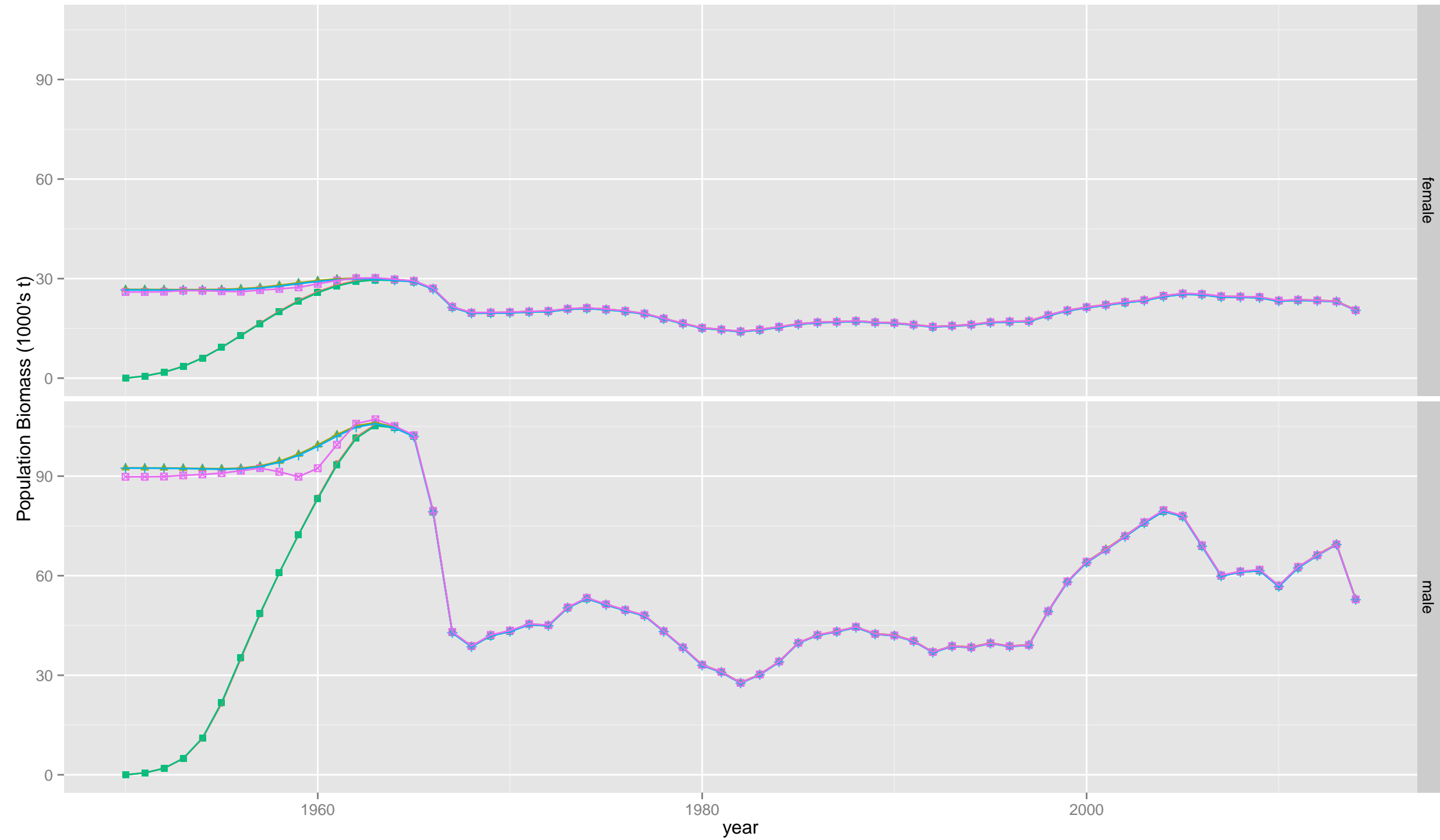


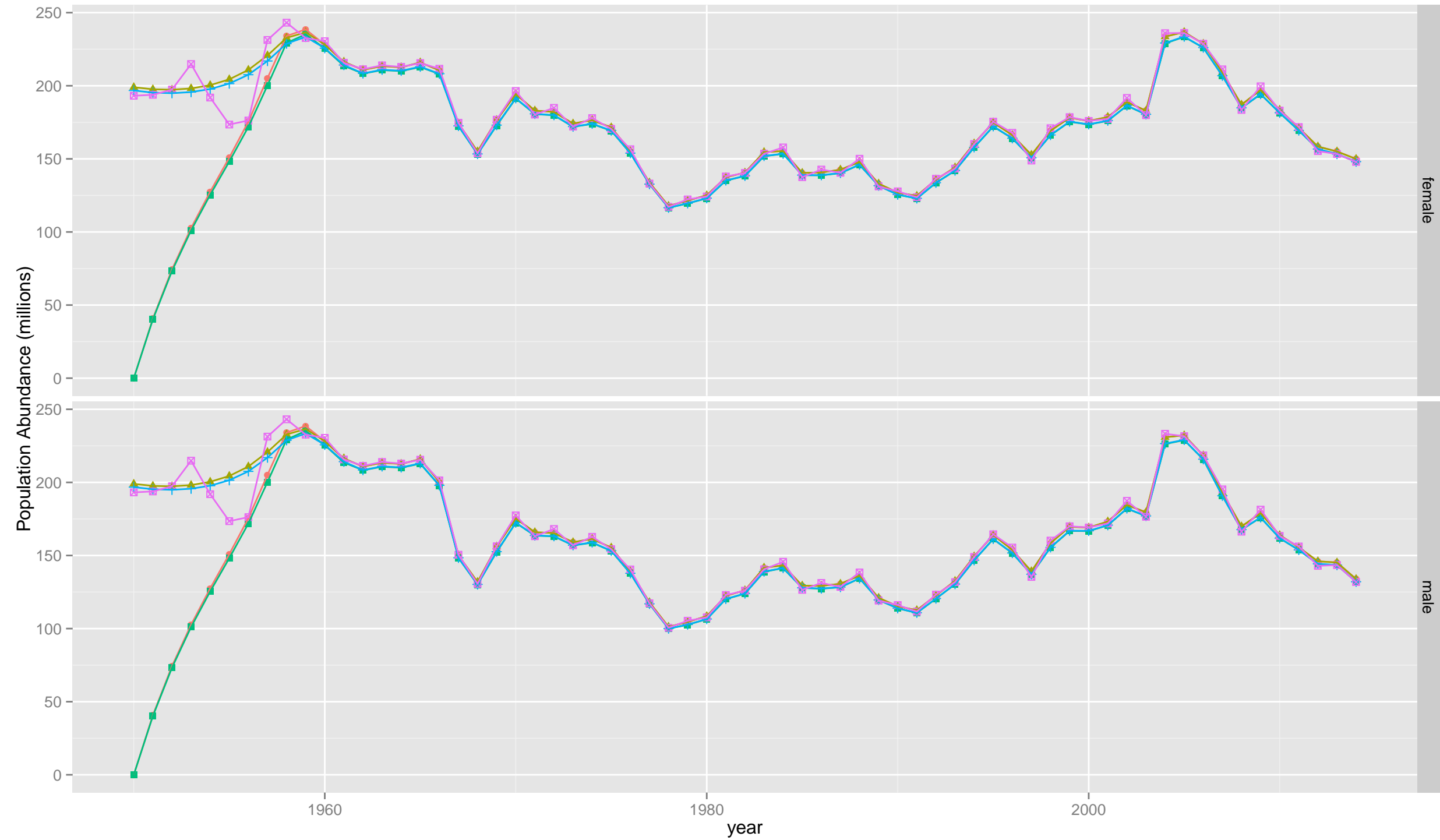


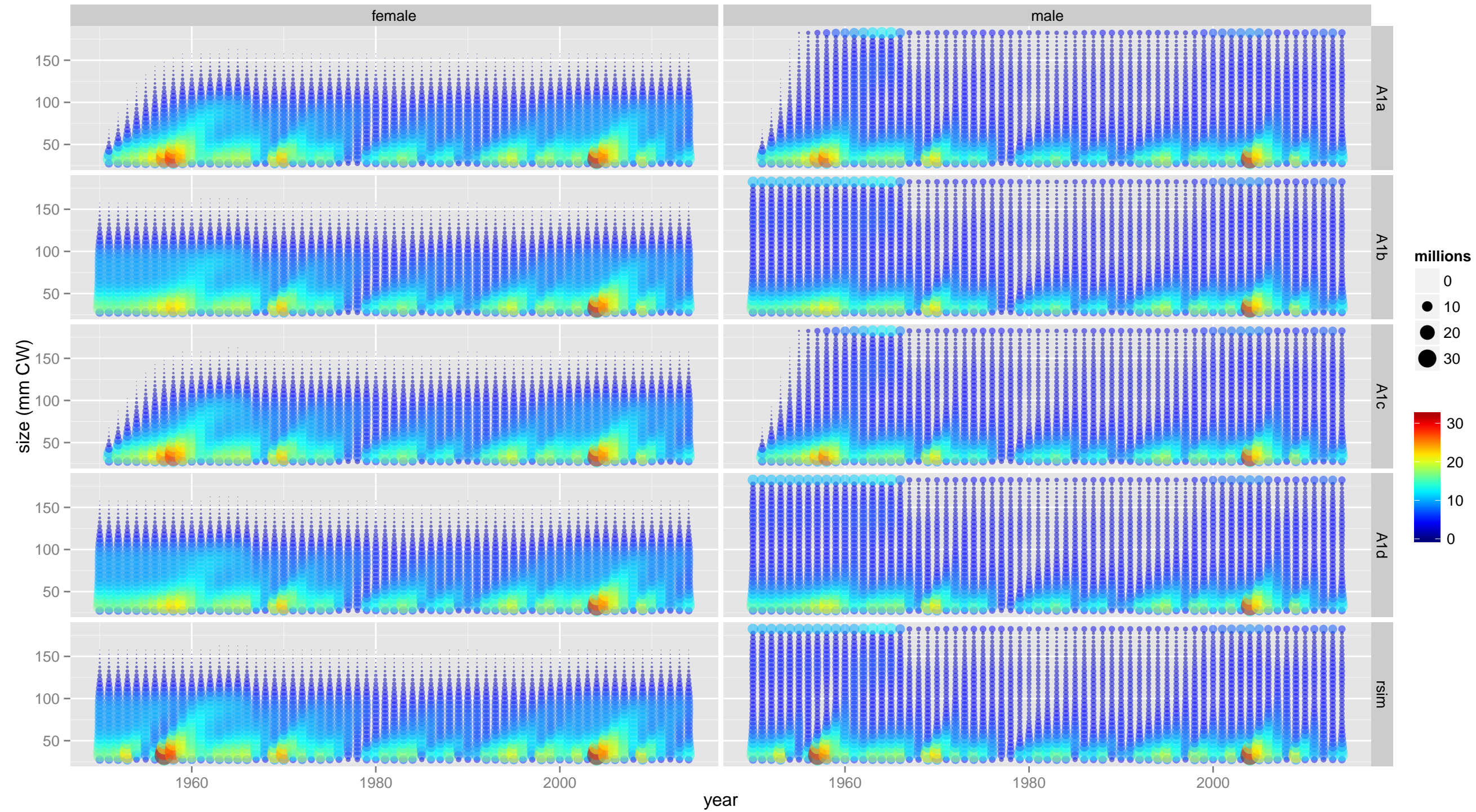


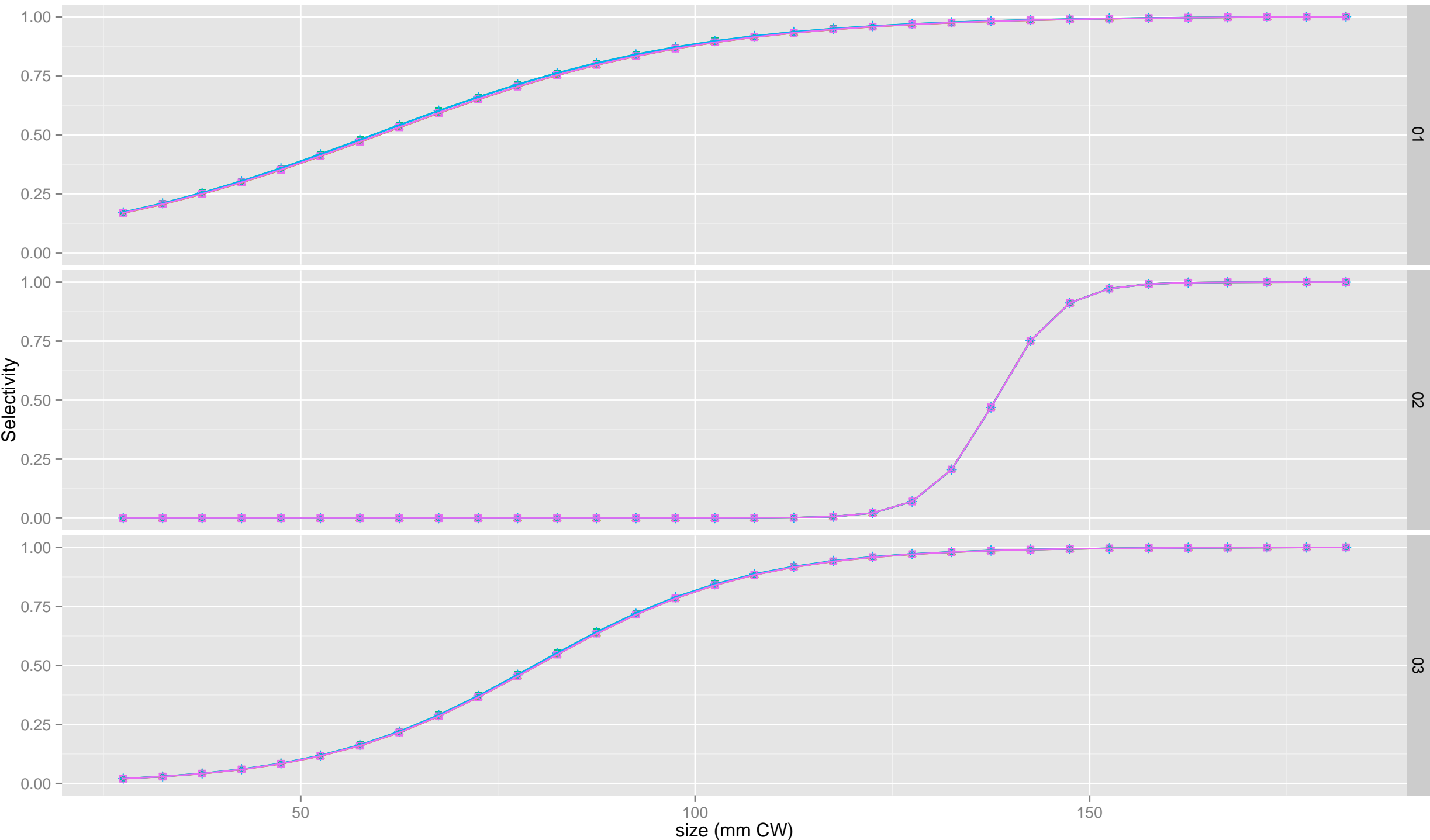






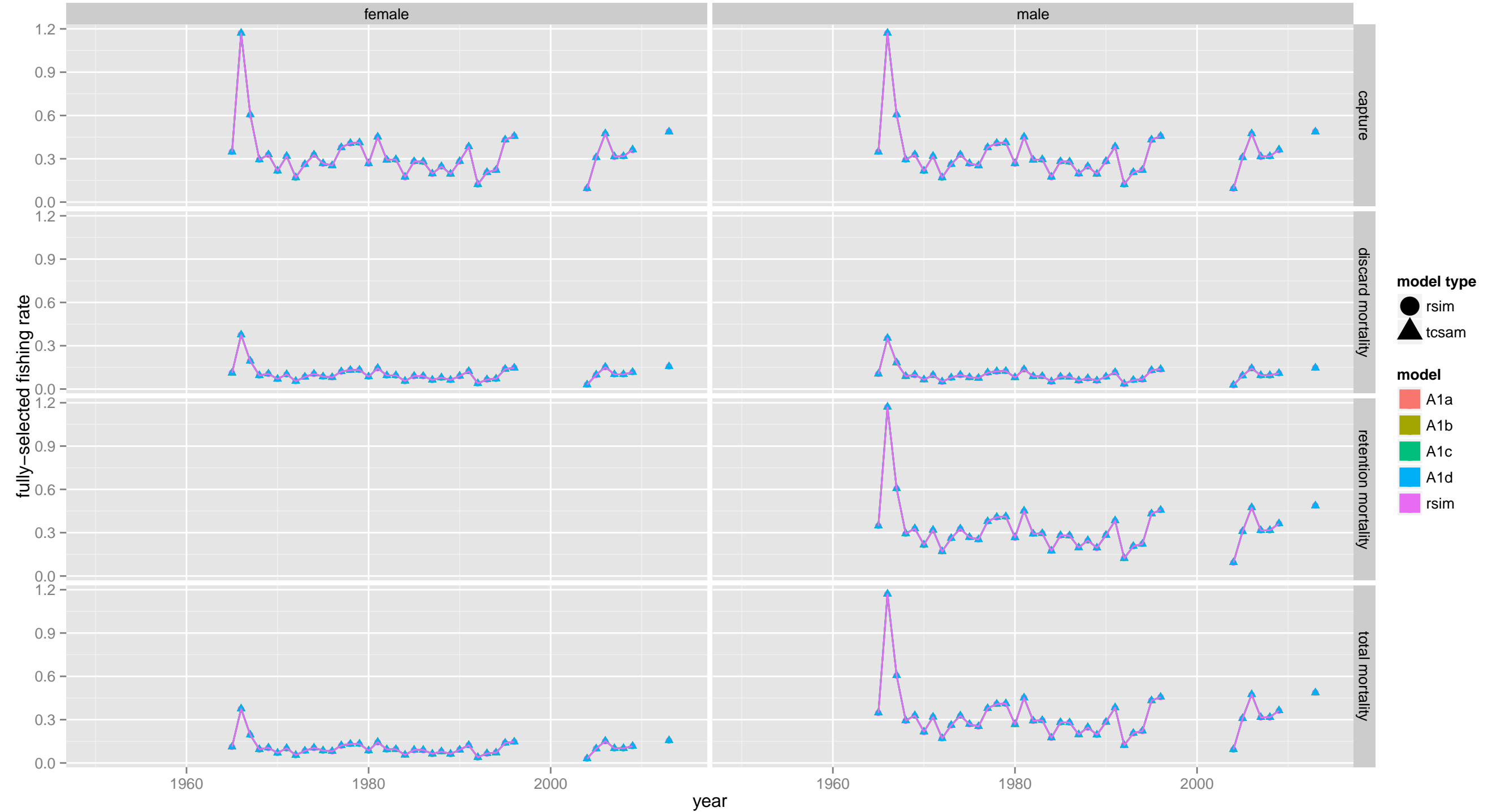




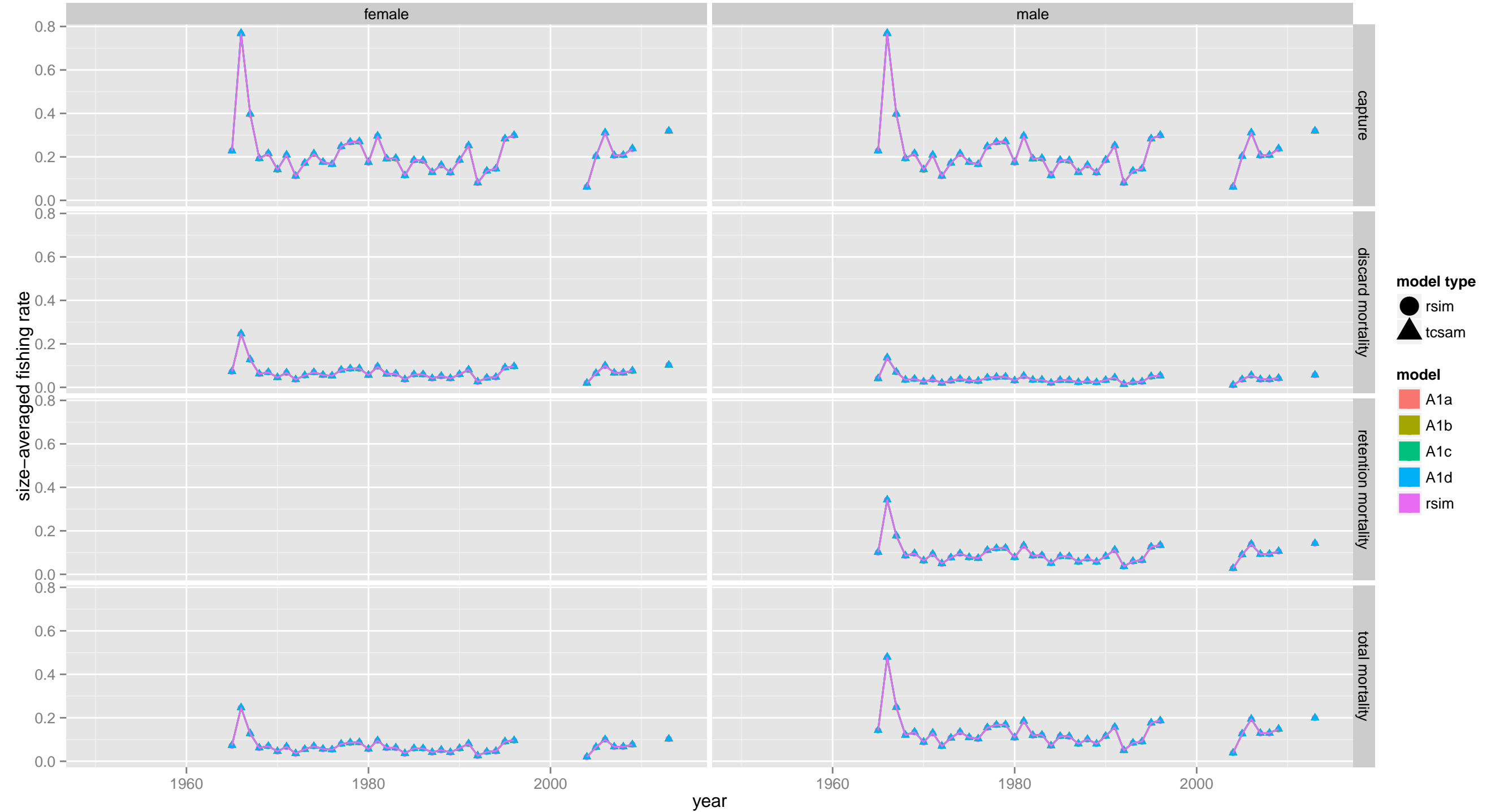


- A1a
- A1b
- A1c
- A1d
- rsim

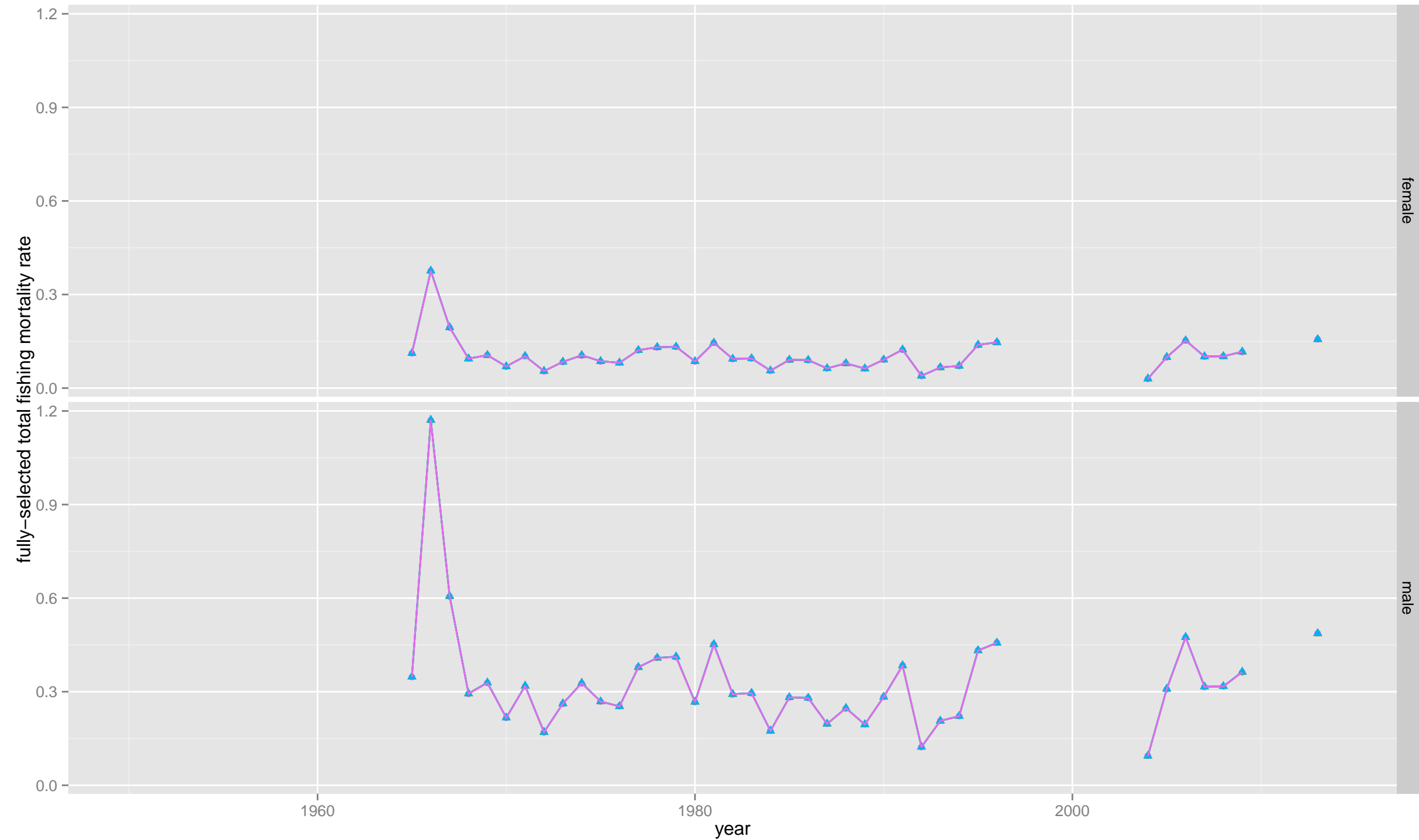
TCF



TCF



all fisheries



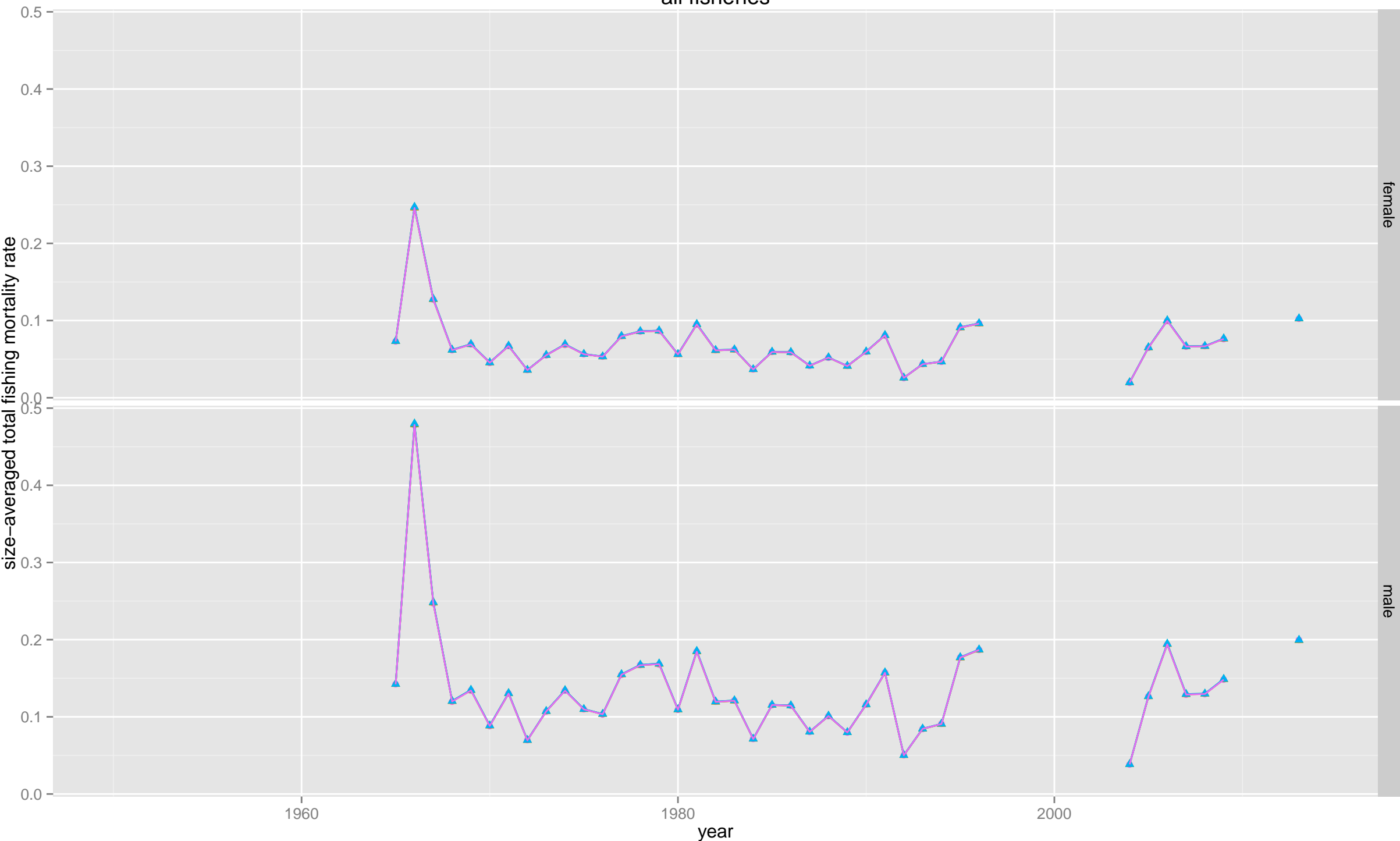
all fisheries

female

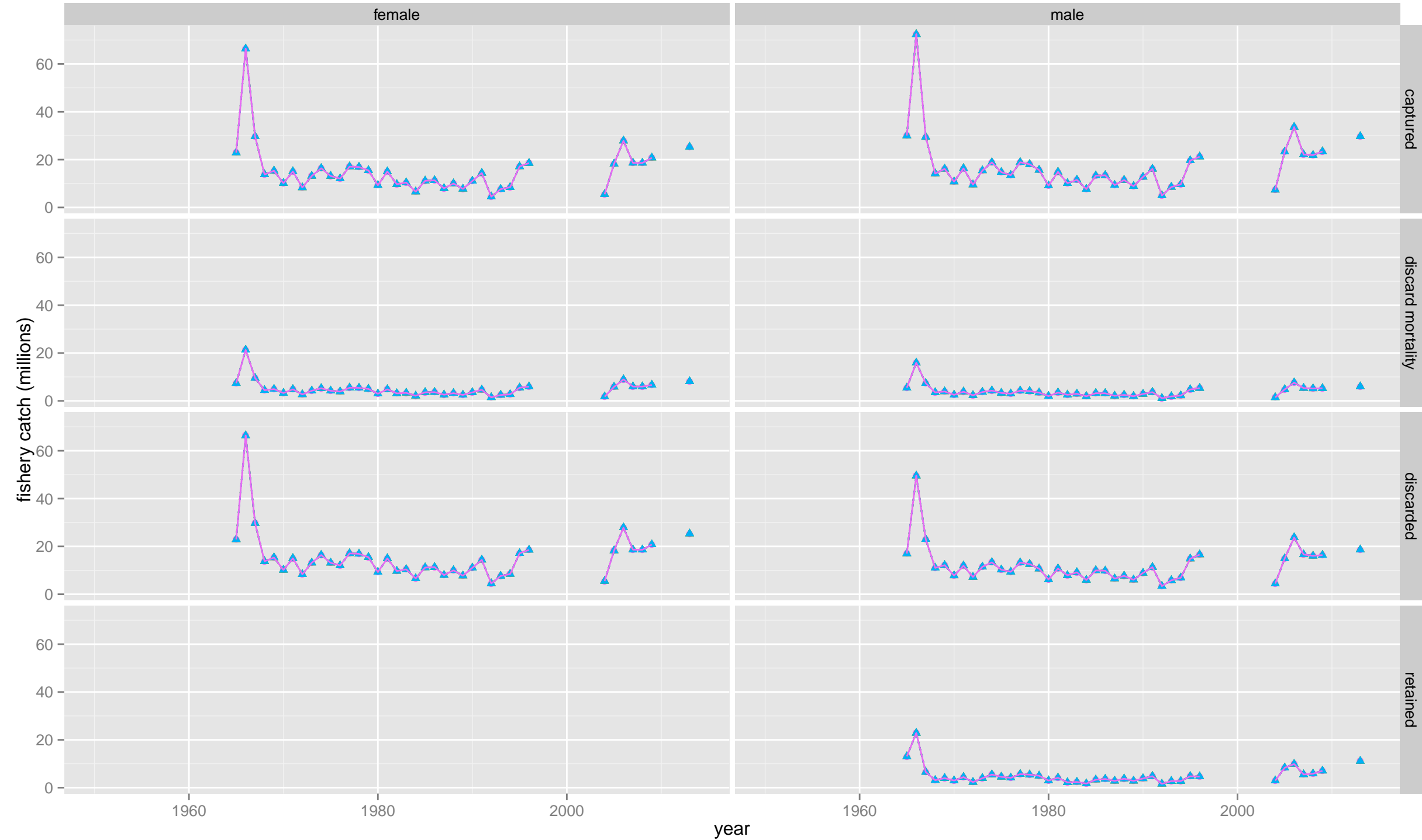
male

model type
● rsim
▲ tcsam

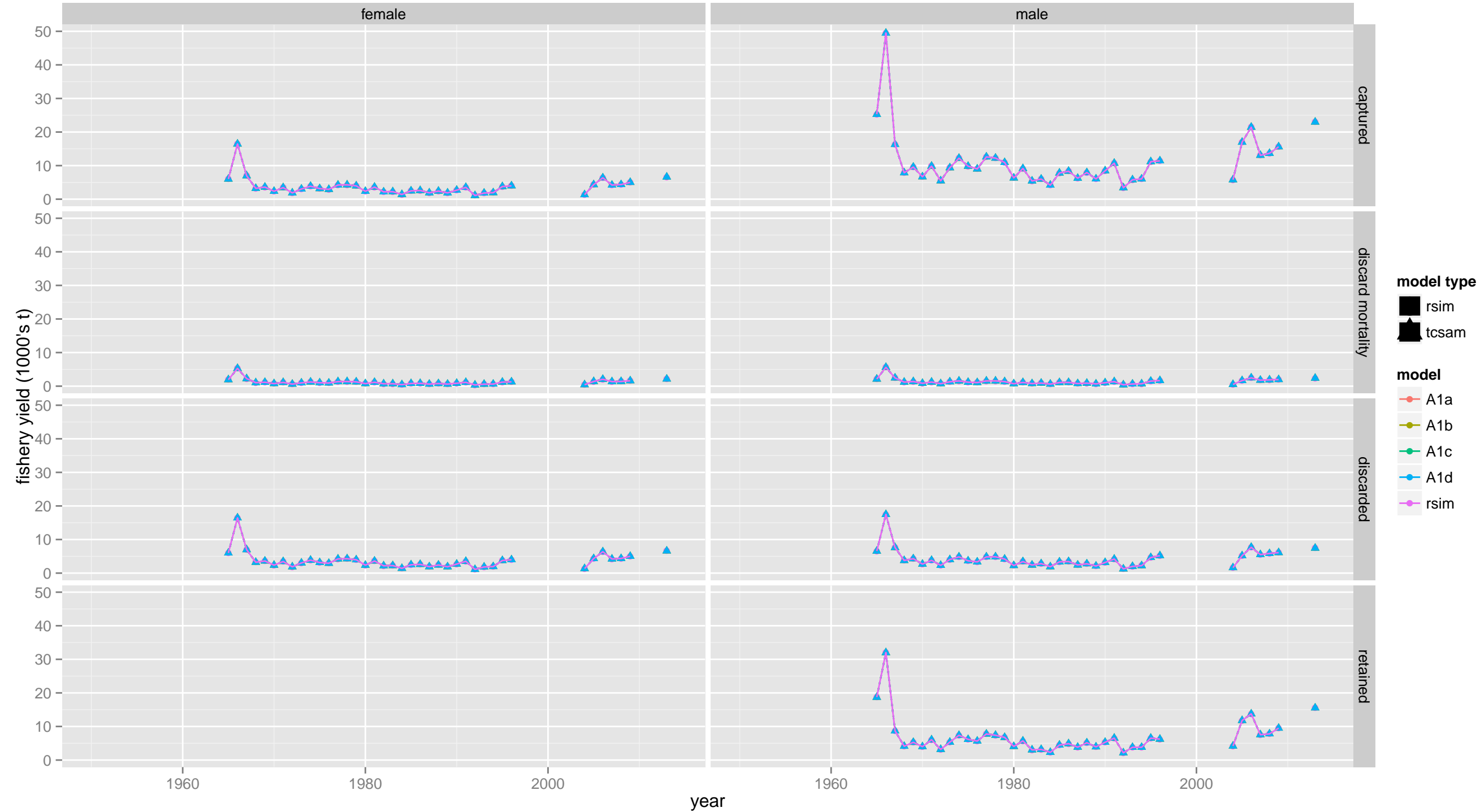
model
■ A1a
■ A1b
■ A1c
■ A1d
■ rsim



TCF



TCF

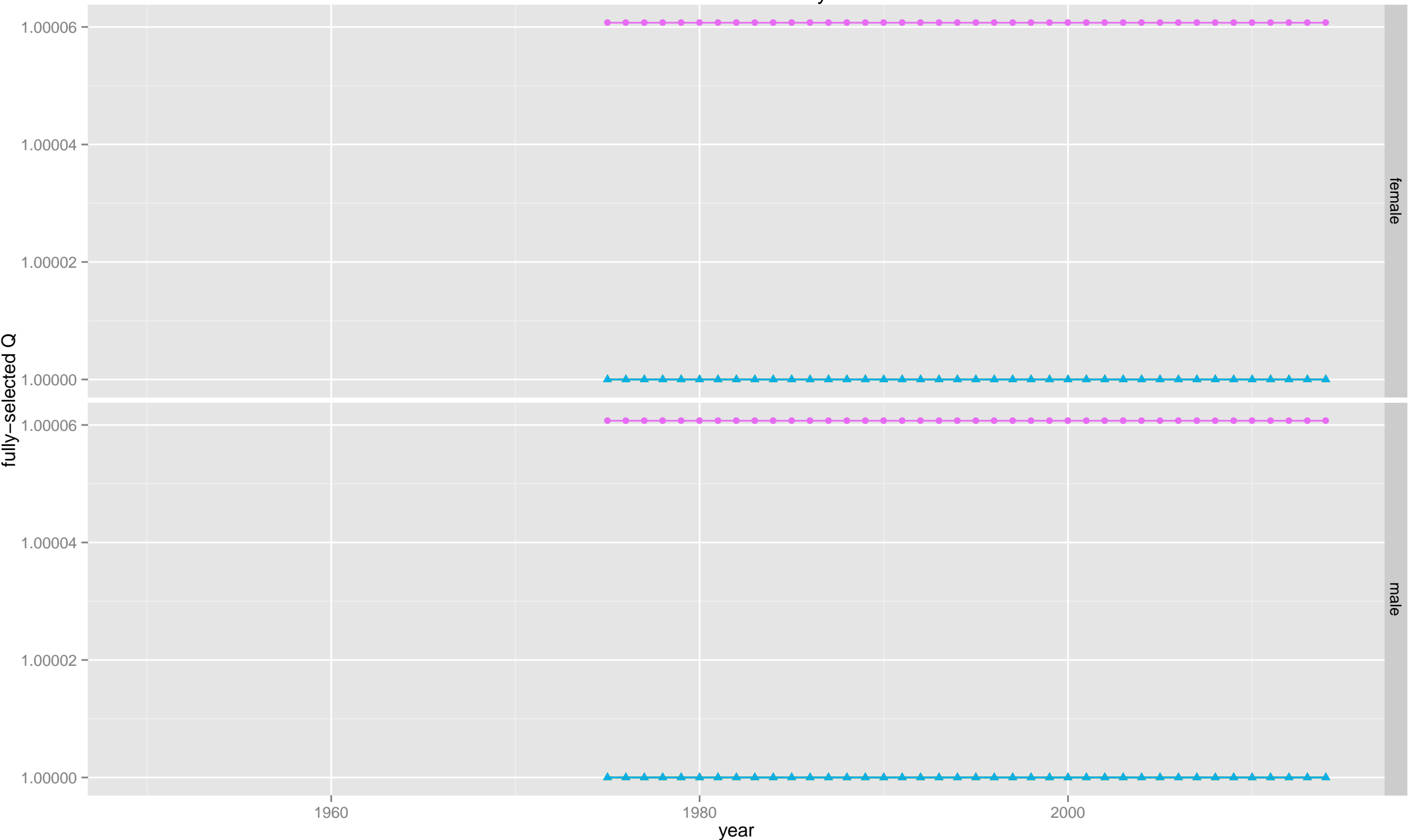


TCF



- model type**
 - rsim
 - tcsam
- model**
 - A1a
 - A1b
 - A1c
 - A1d
 - rsim

NMFS trawl survey



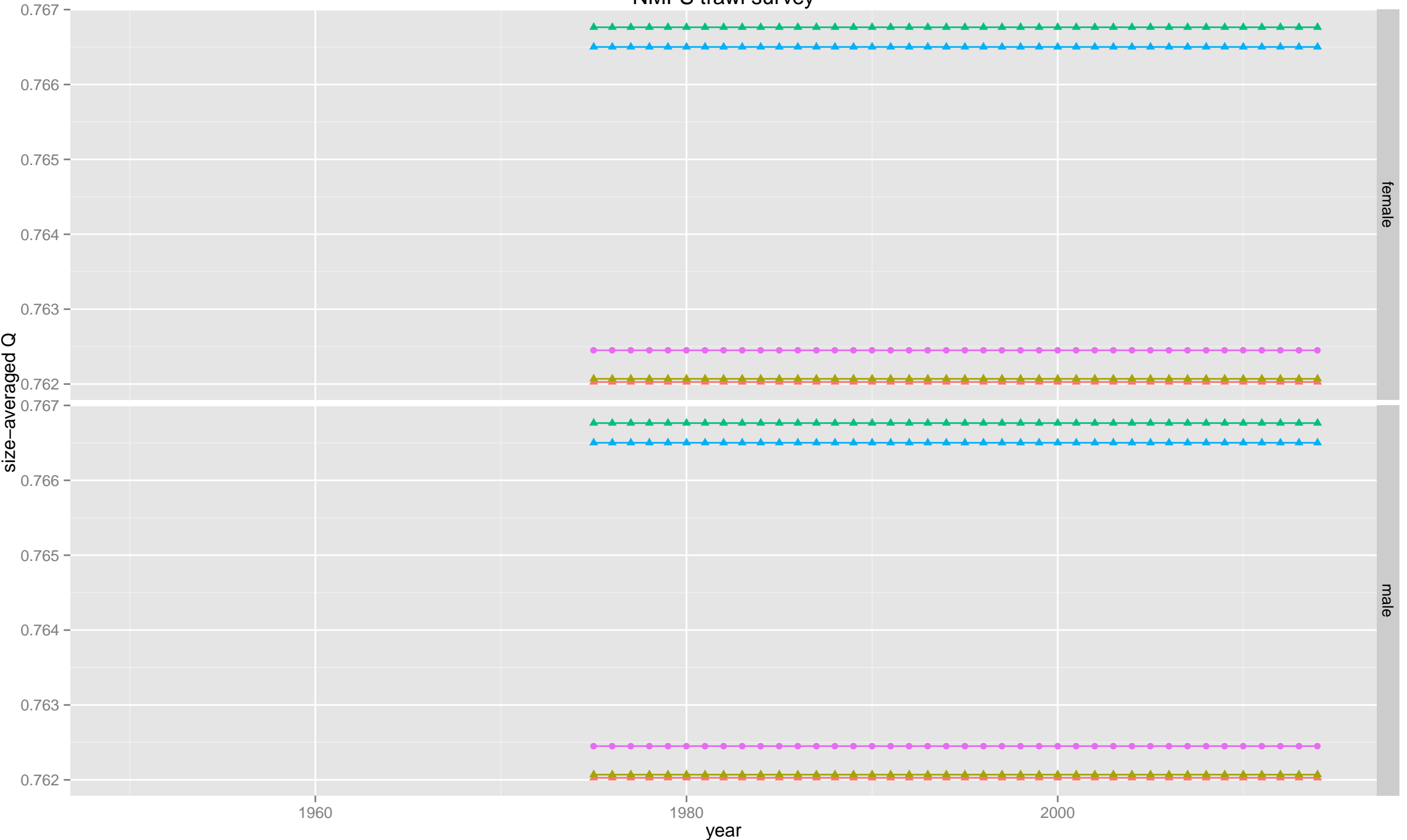
model type

- rsim (circle)
- tcsam (triangle)

model

- A1a (red)
- A1b (olive)
- A1c (green)
- A1d (cyan)
- rsim (magenta)

NMFS trawl survey



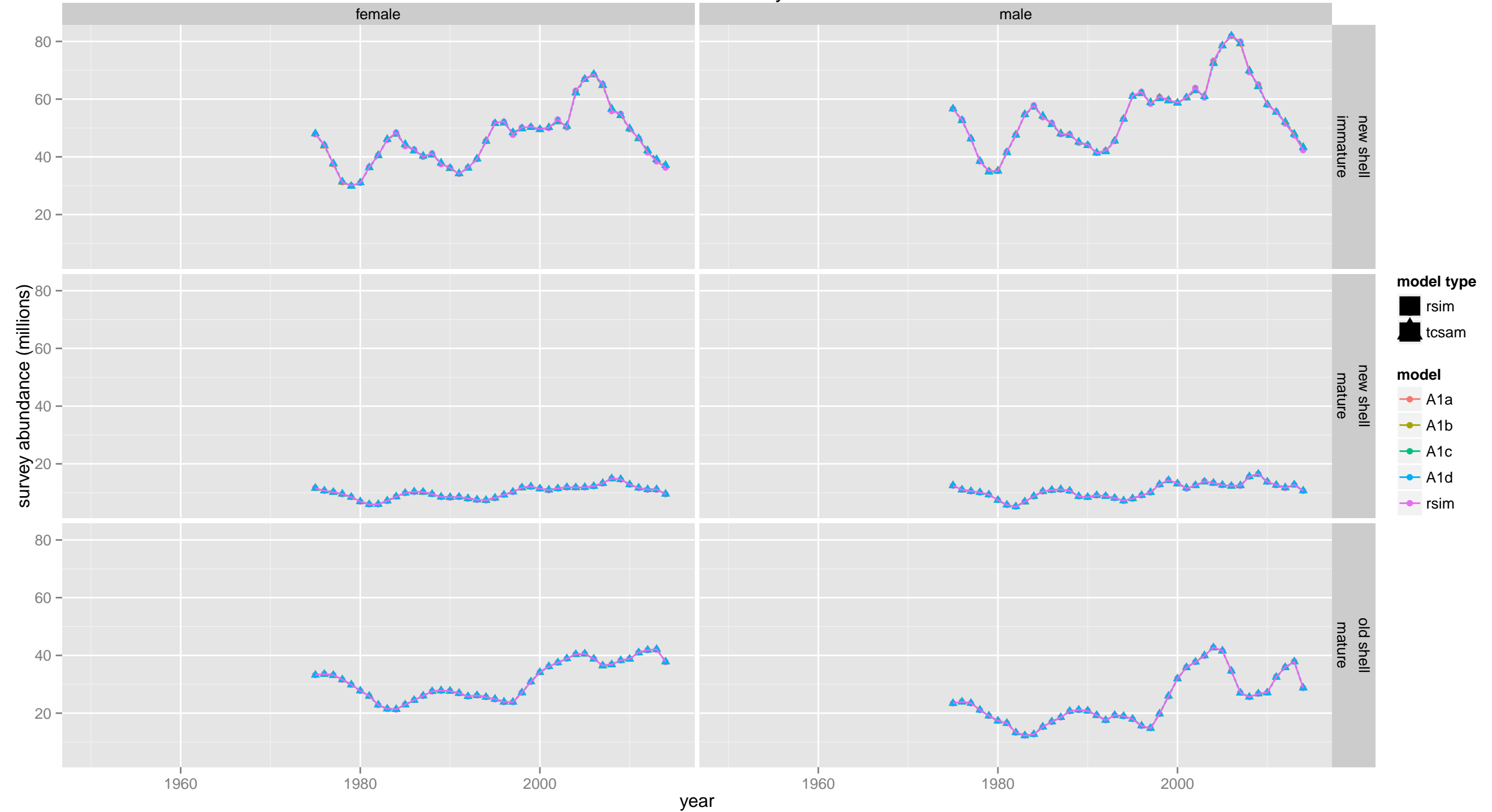
model type

- rsim (circle)
- tcsam (triangle)

model

- A1a (red)
- A1b (yellow)
- A1c (green)
- A1d (blue)
- rsim (magenta)

NMFS trawl survey



NMFS trawl survey

