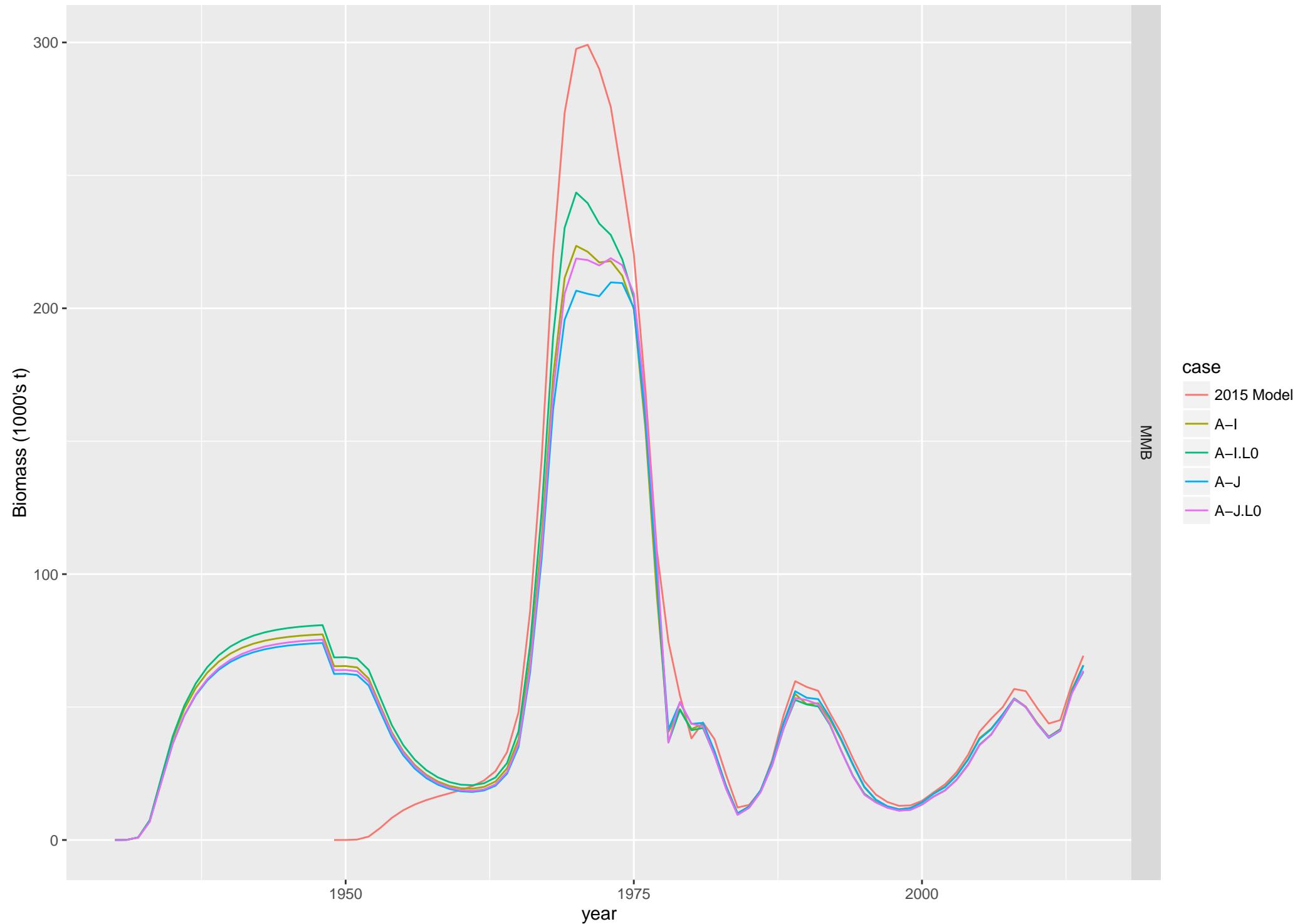


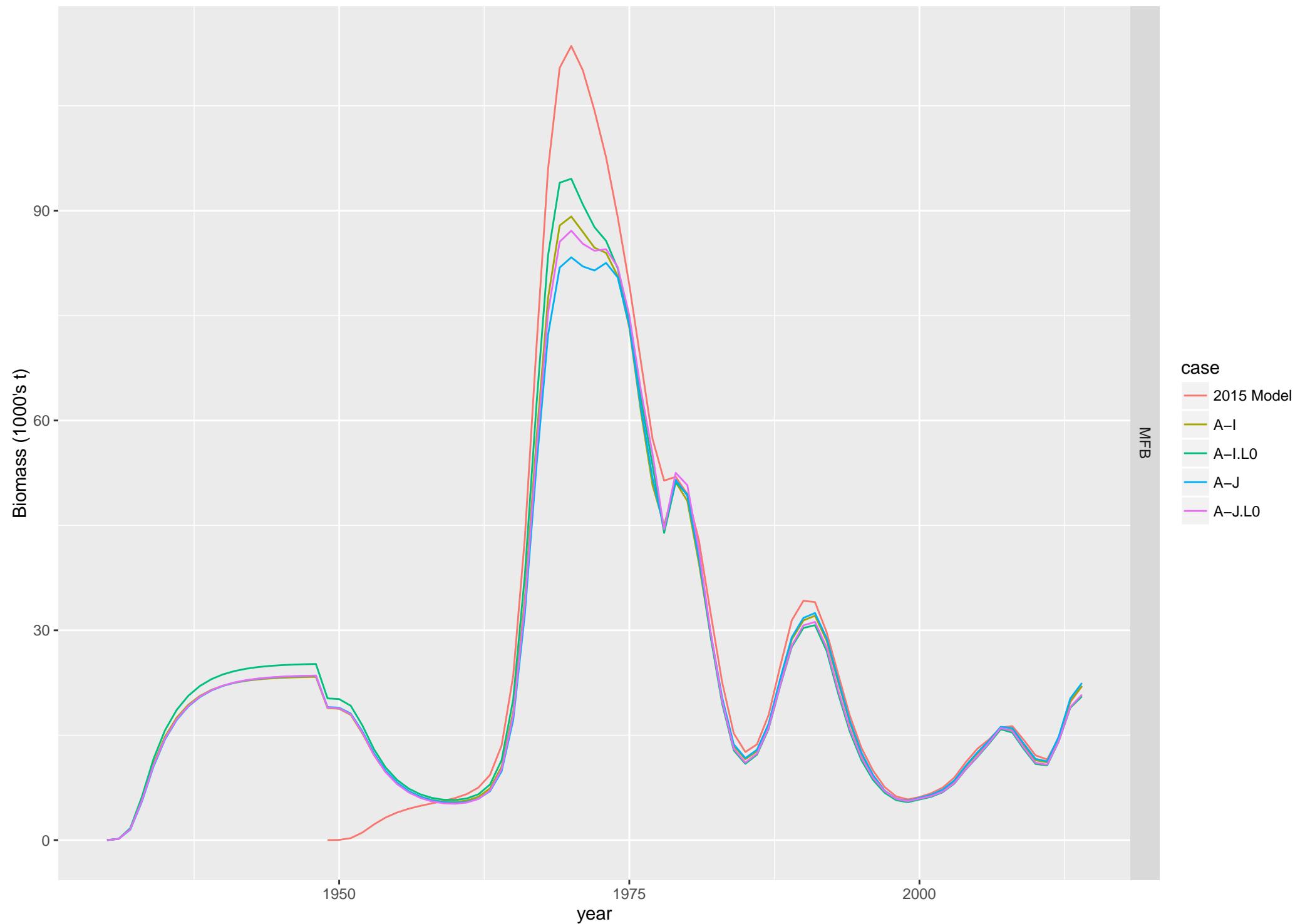
# MMB—at—mating



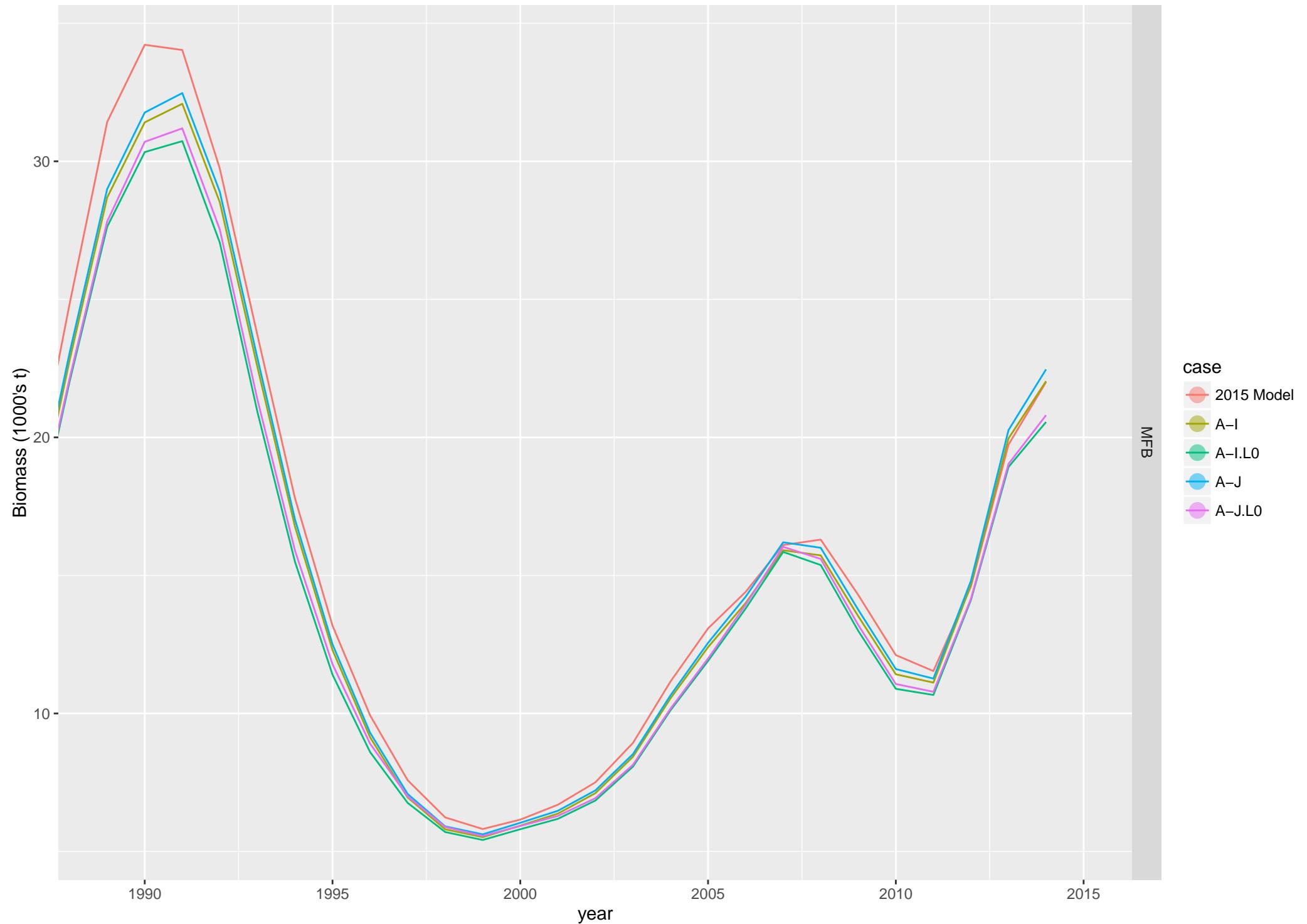
# MMB-at-mating



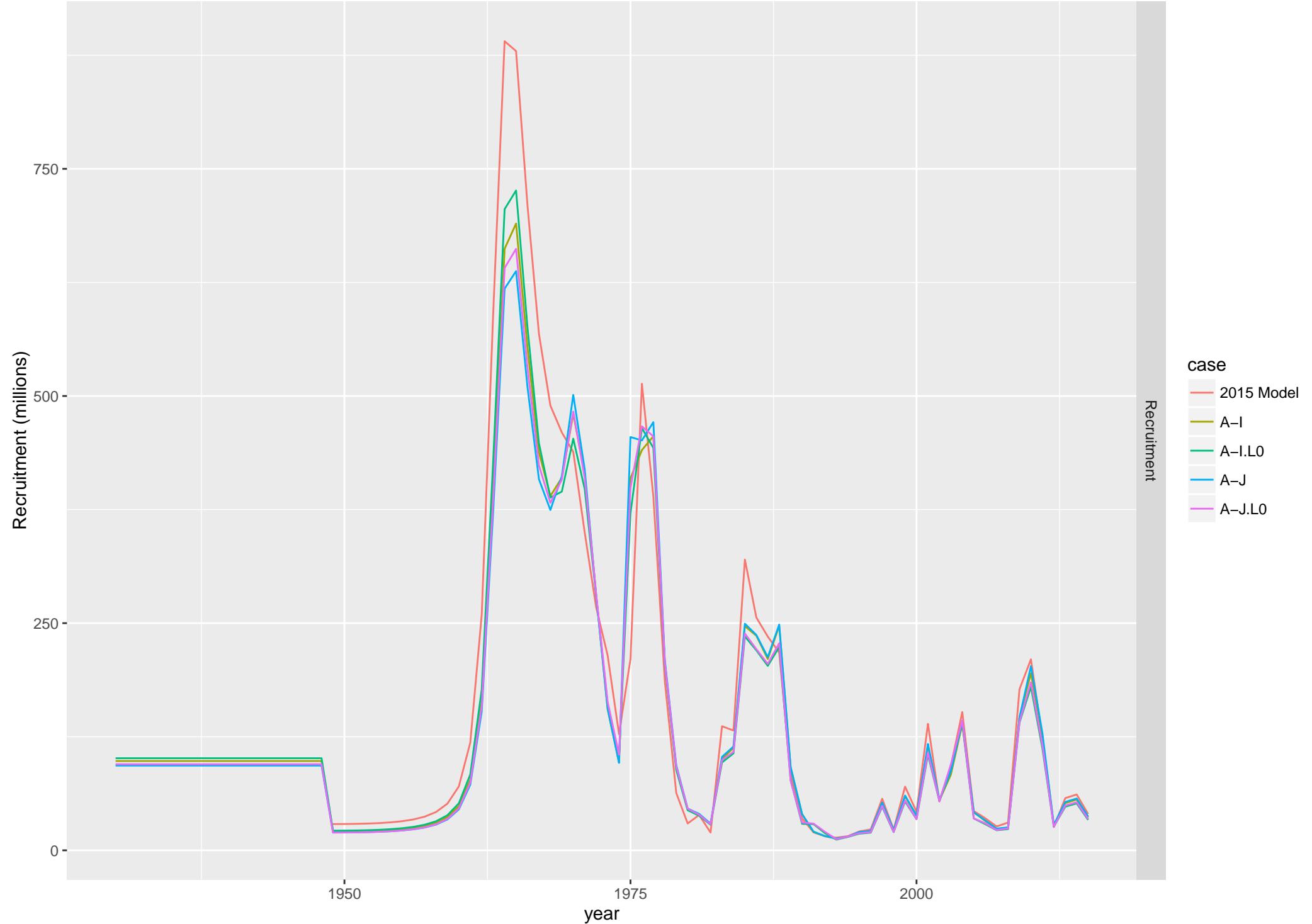
# MFB-at-mating



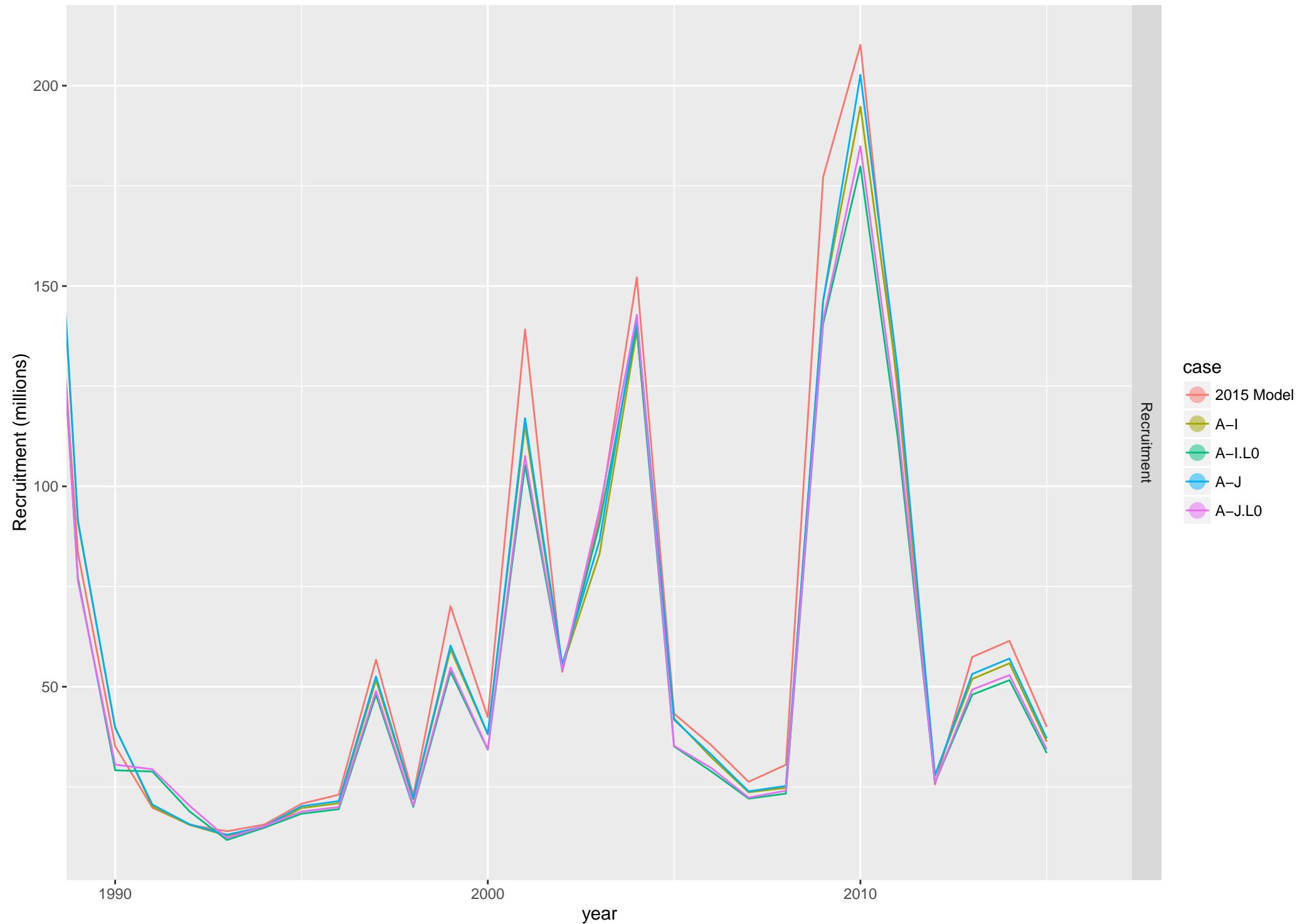
# MFB-at-mating



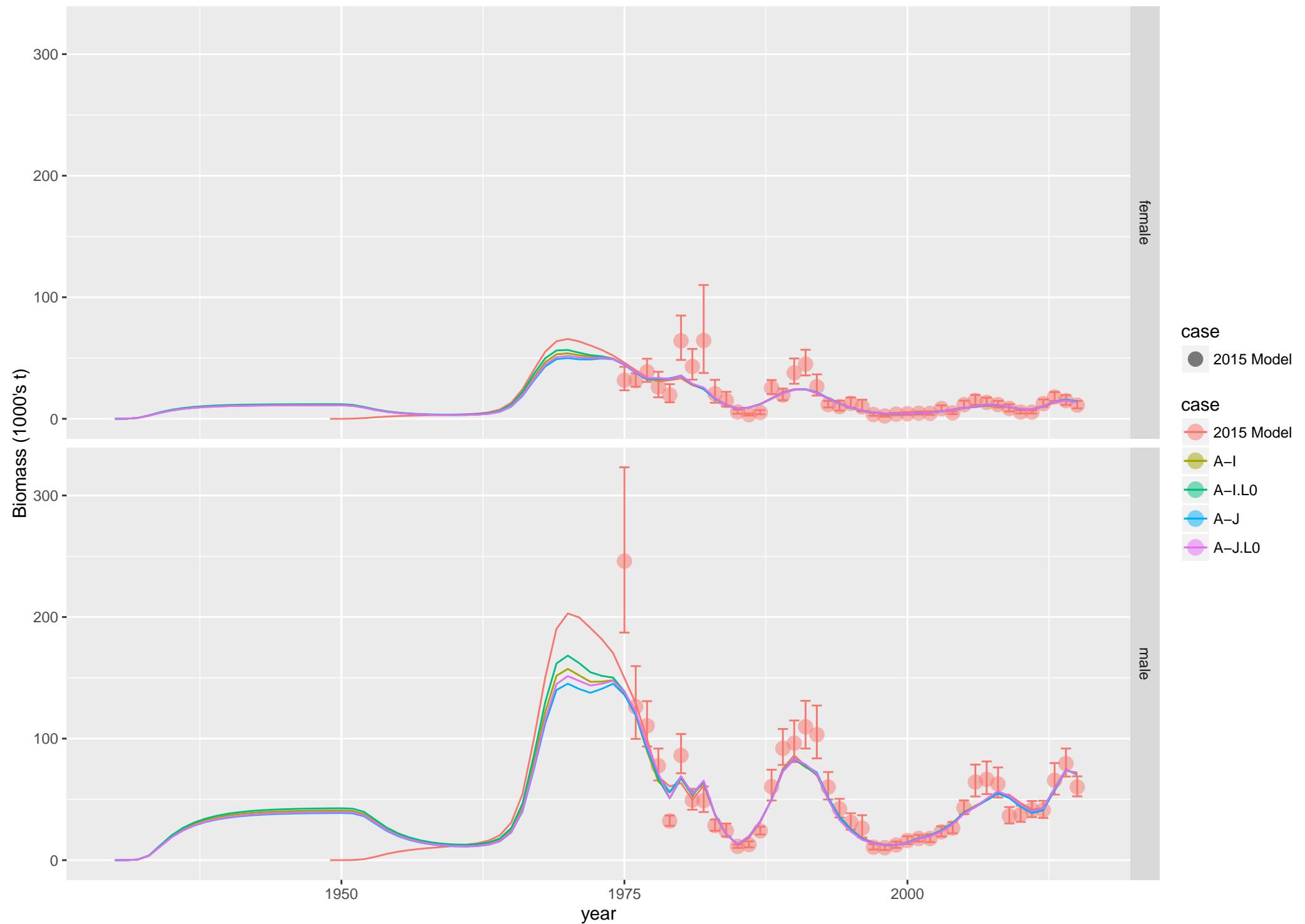
# Male Recruitment



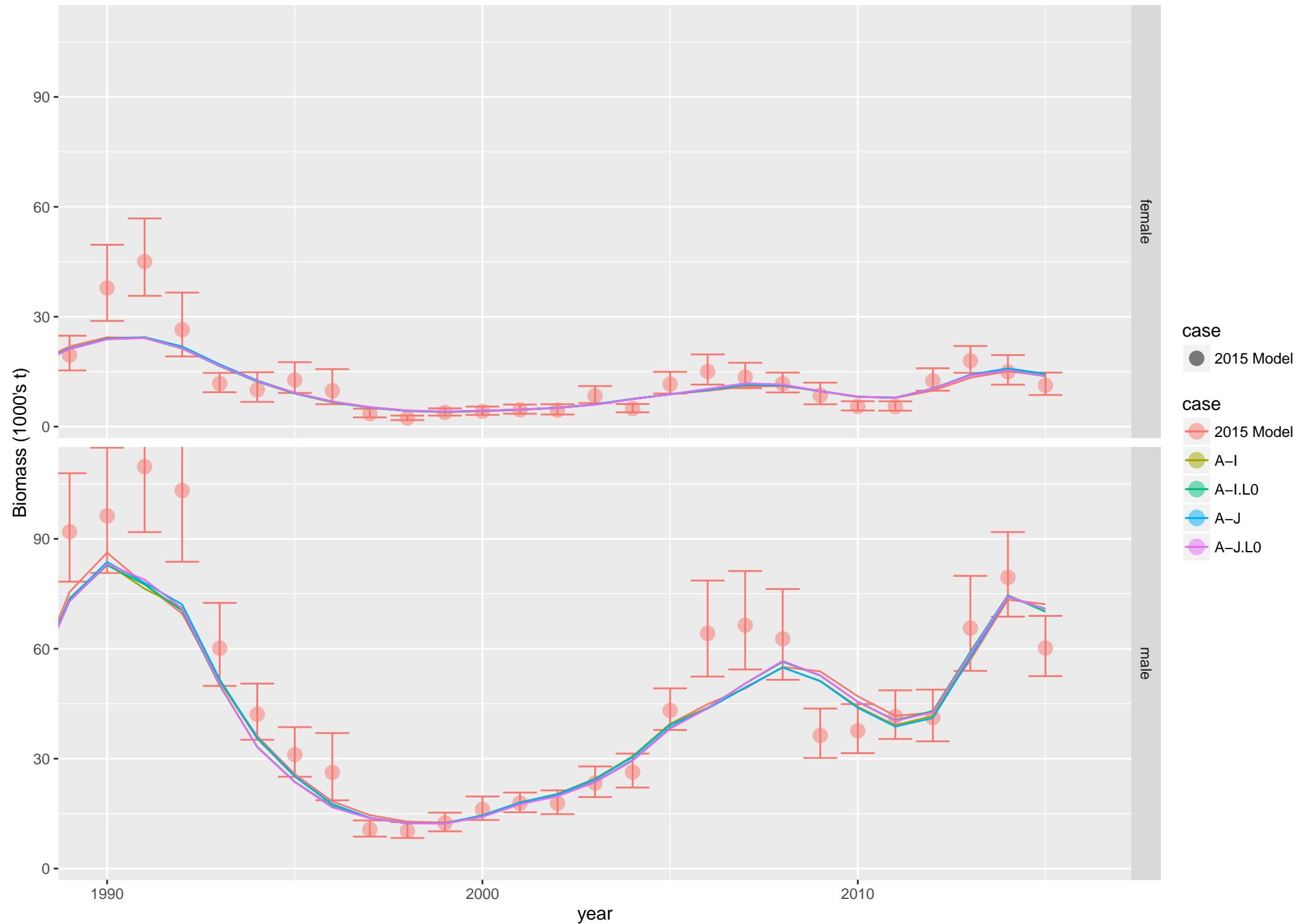
# Male Recruitment



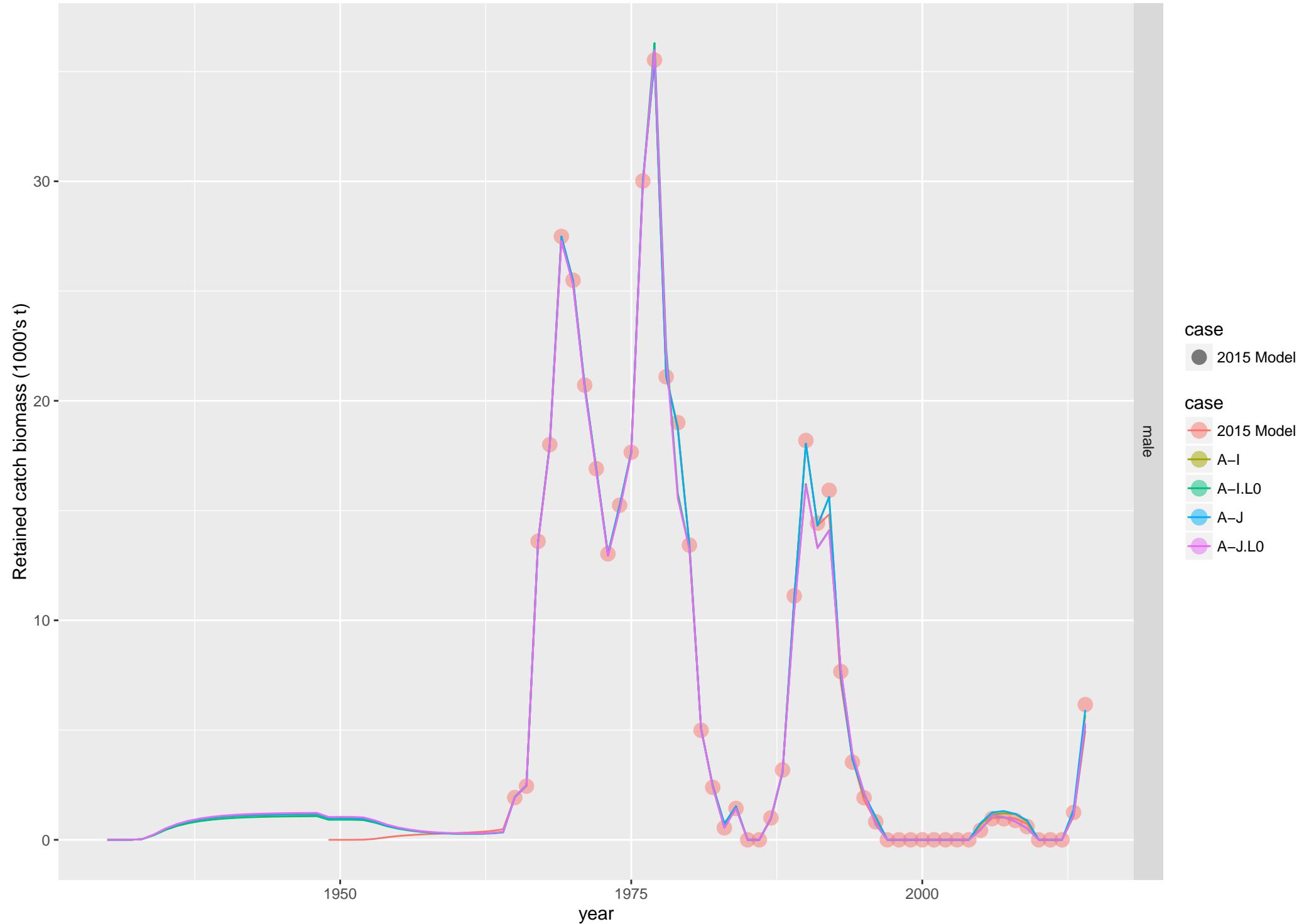
# Mature survey biomass



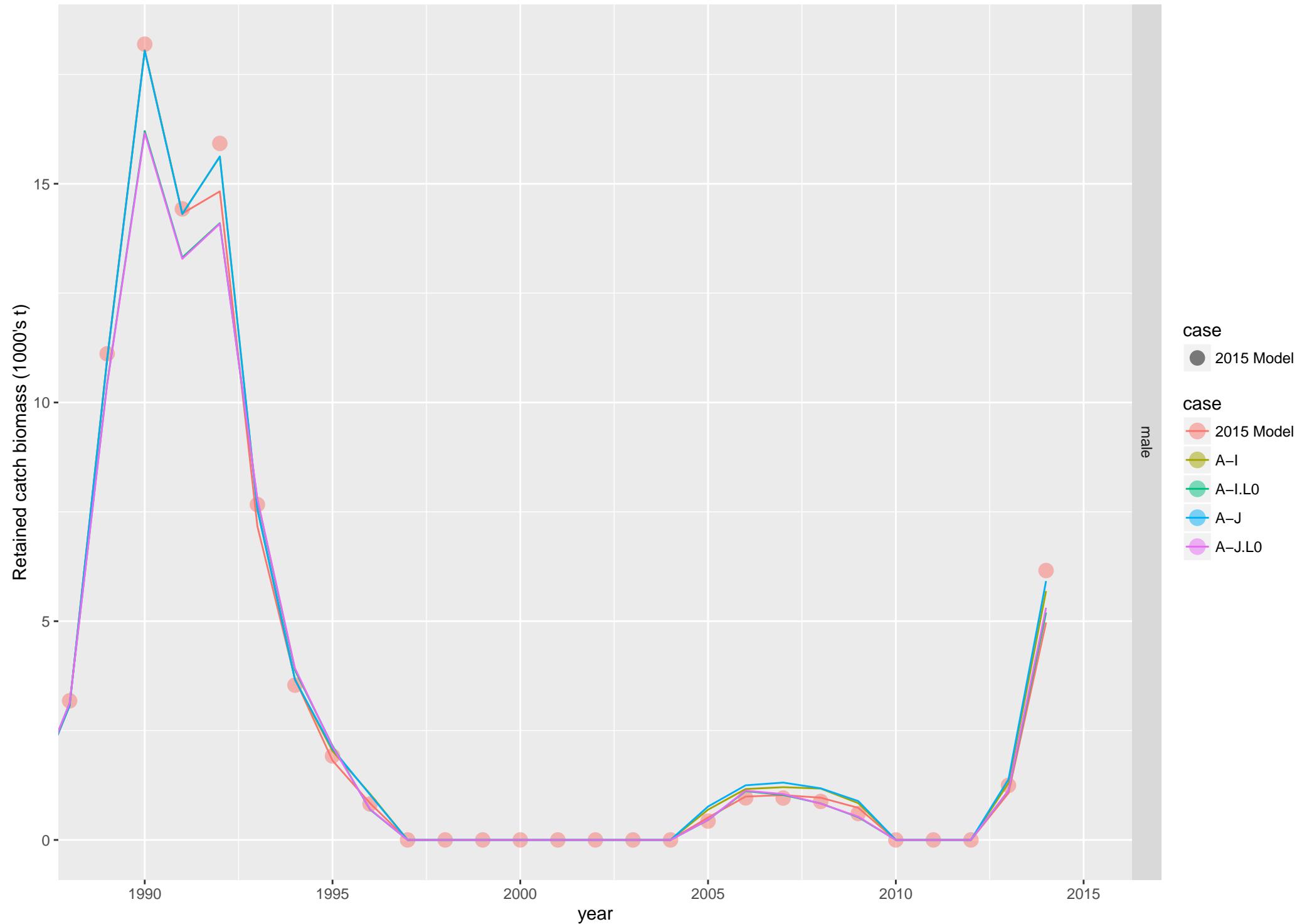
# Mature survey biomass



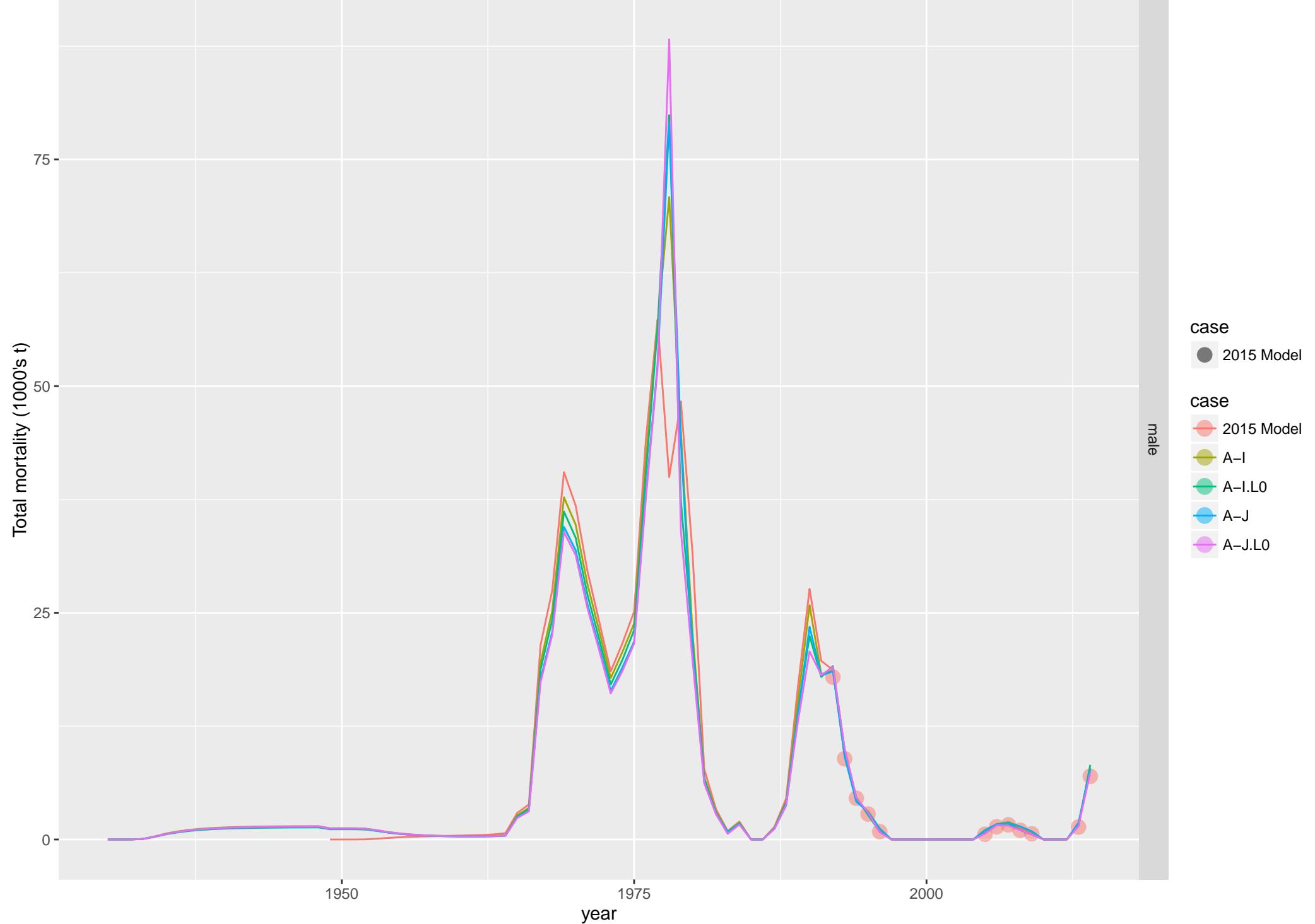
# Retained catch biomass



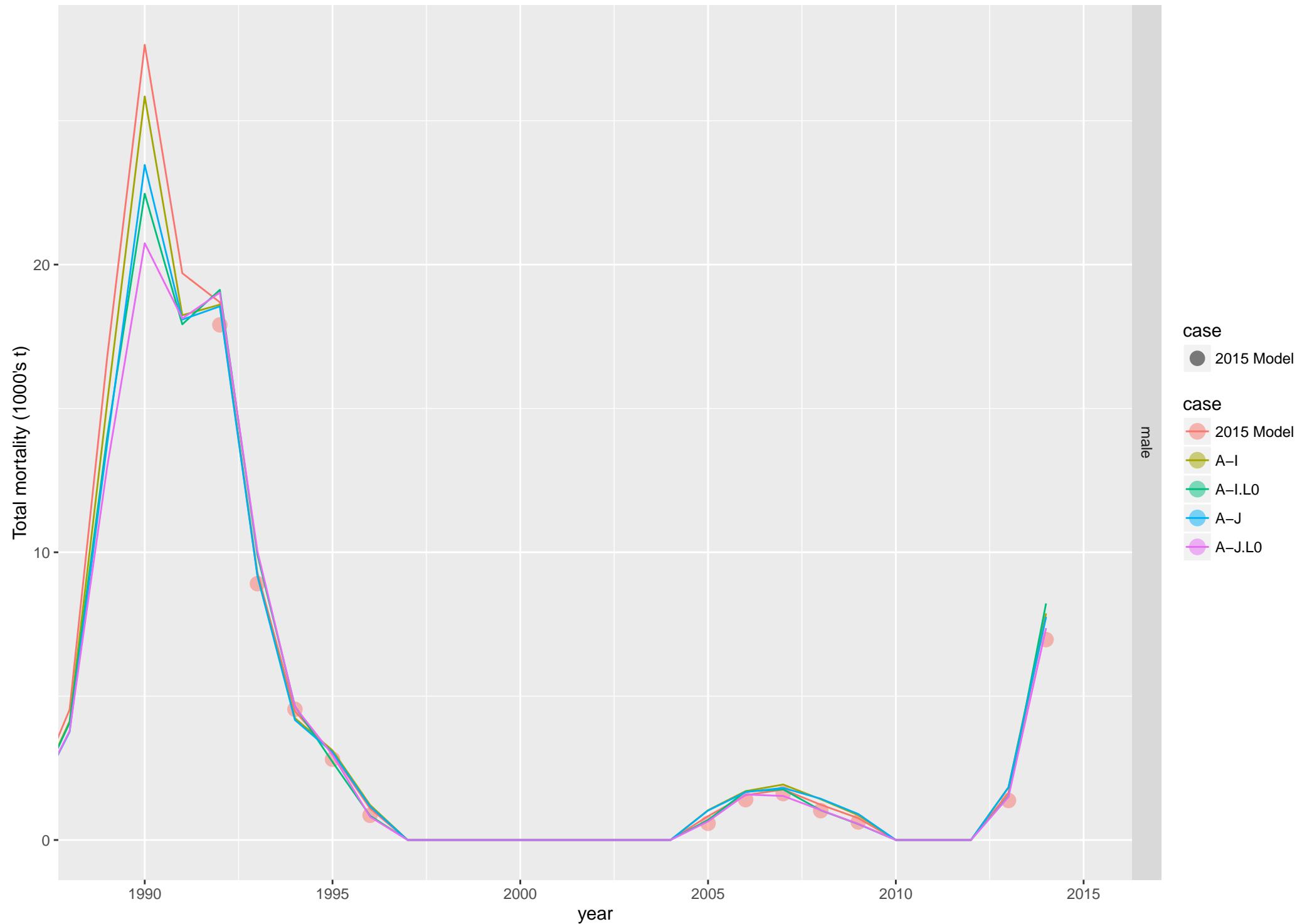
# Retained catch biomass



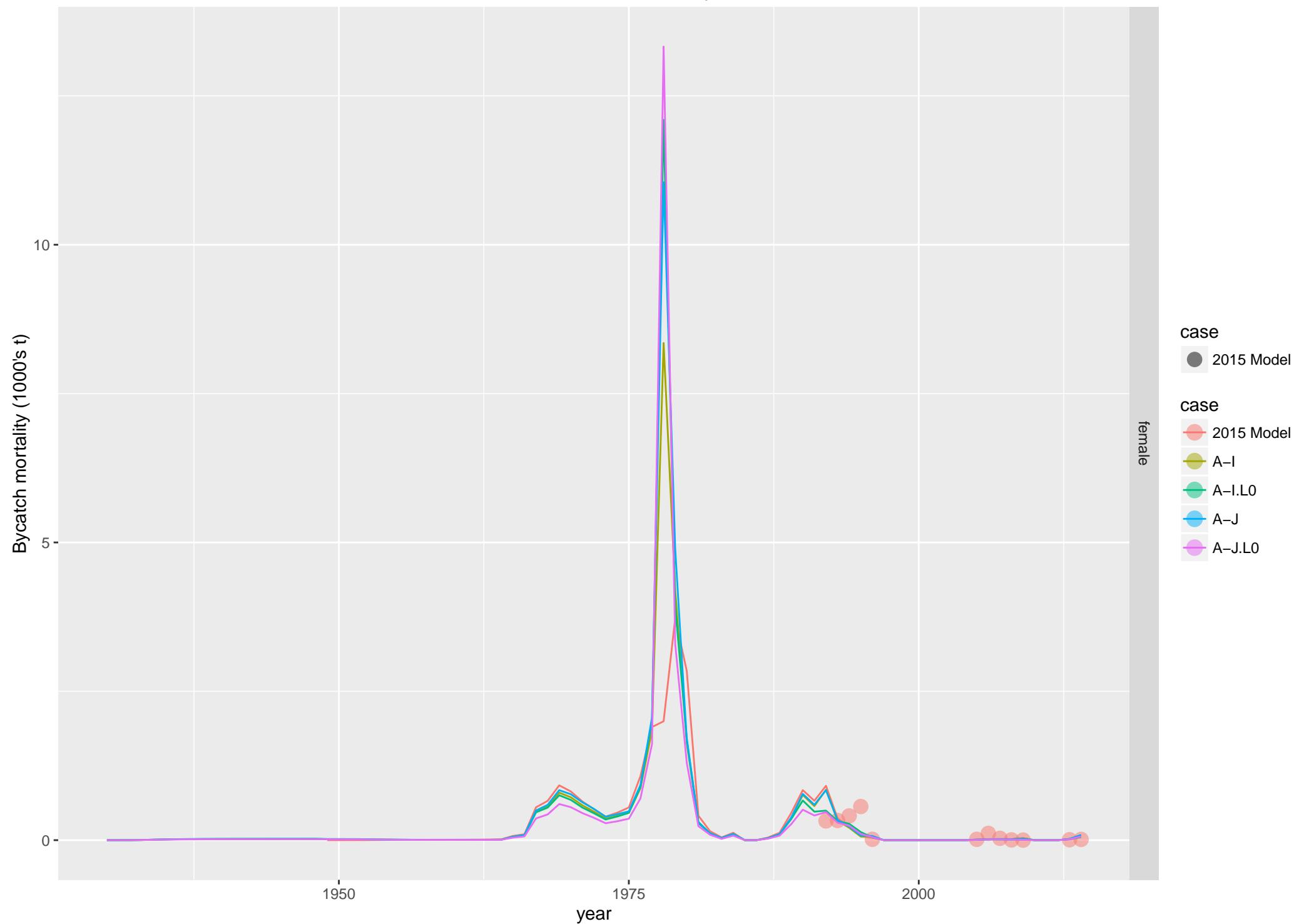
# Males, directed fishery



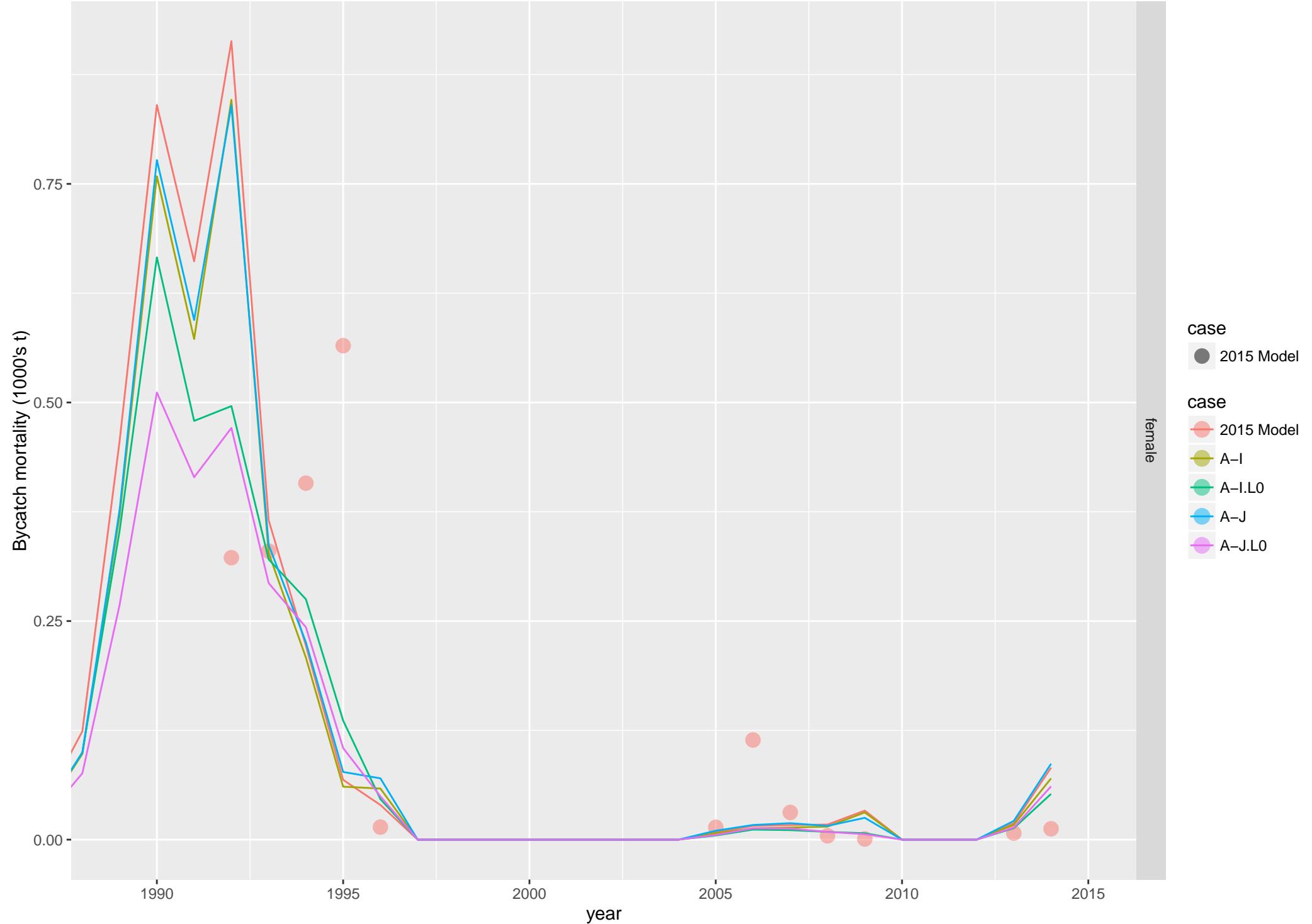
# Males, directed fishery



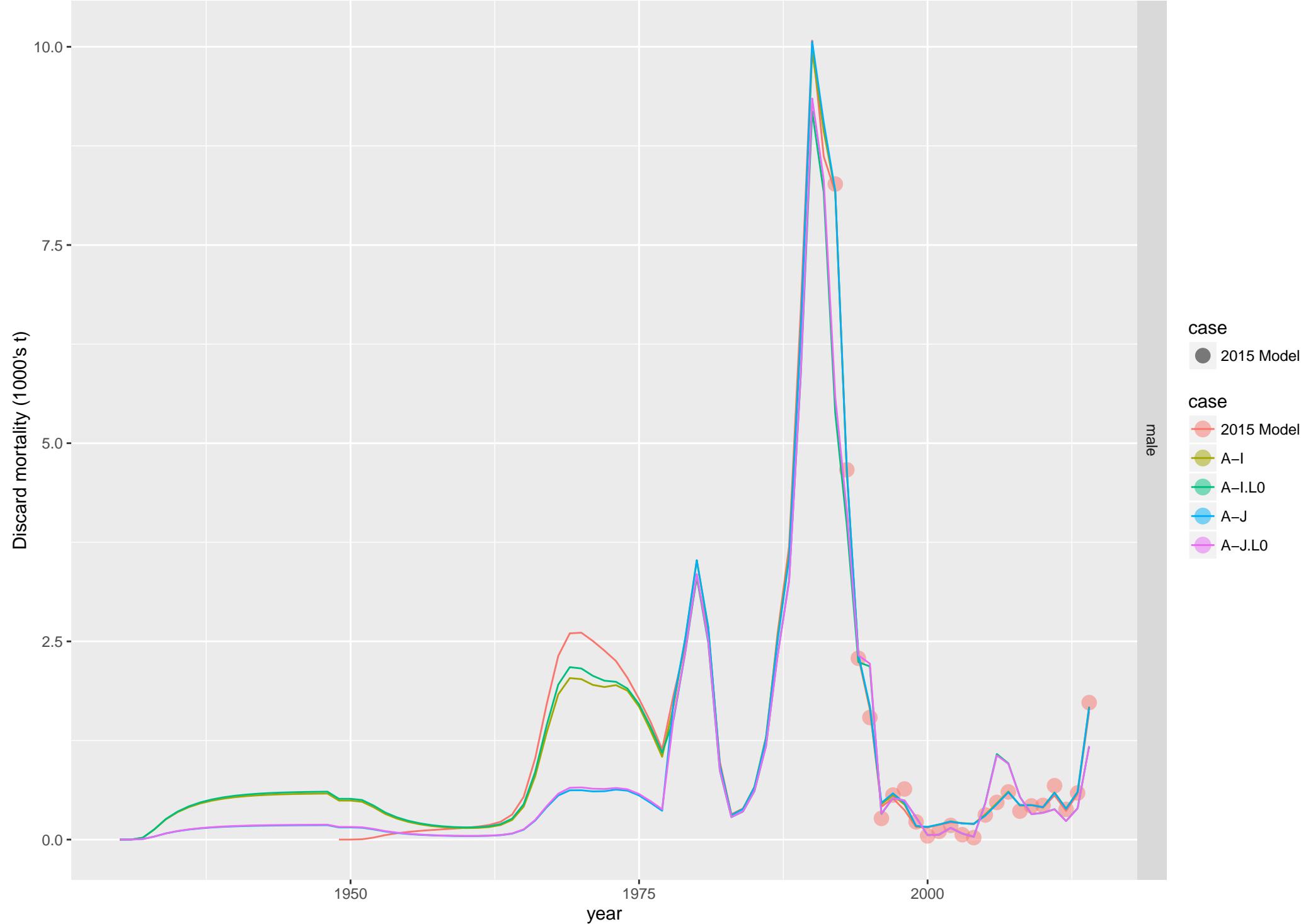
# Females, directed fishery



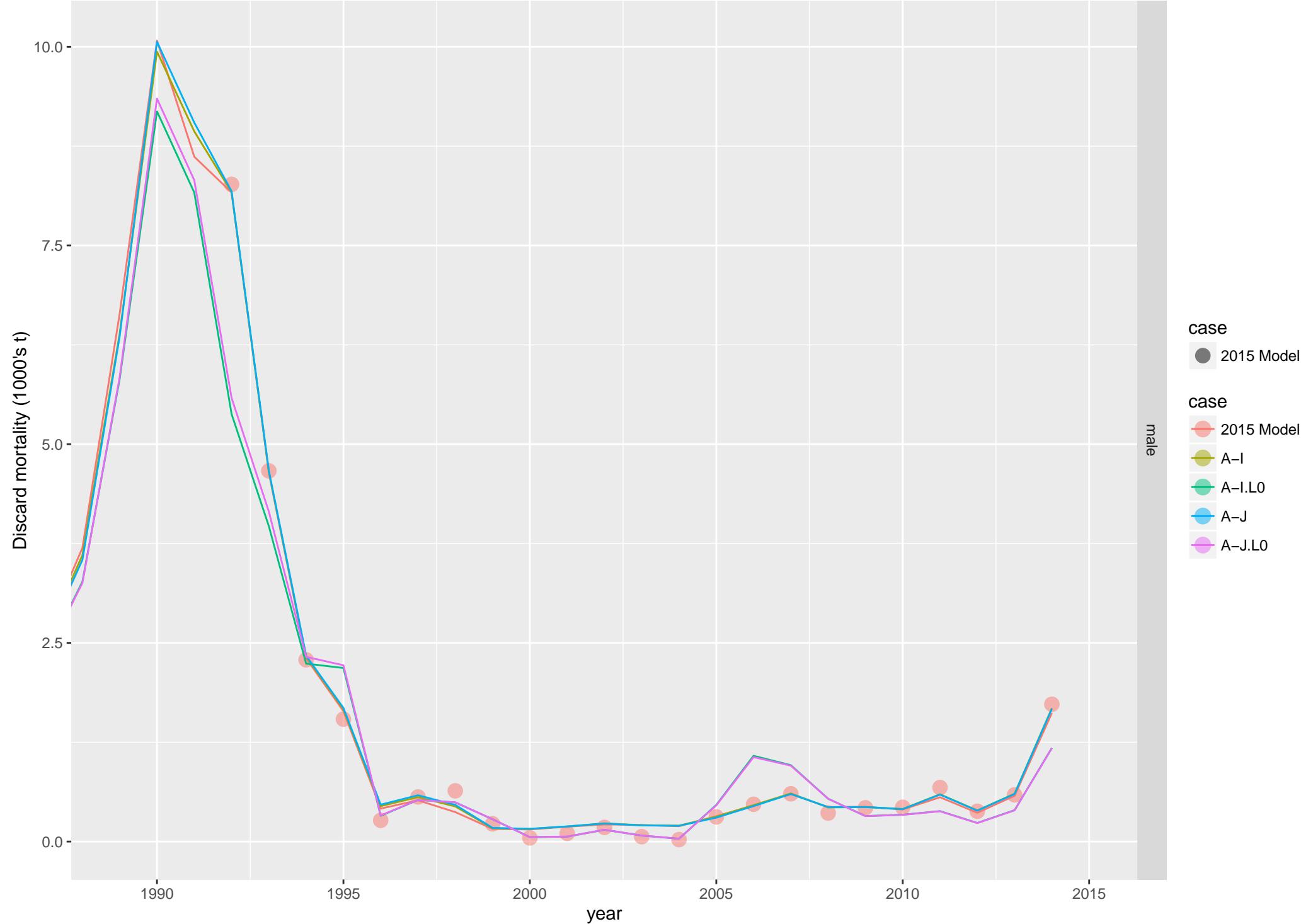
# Females, directed fishery



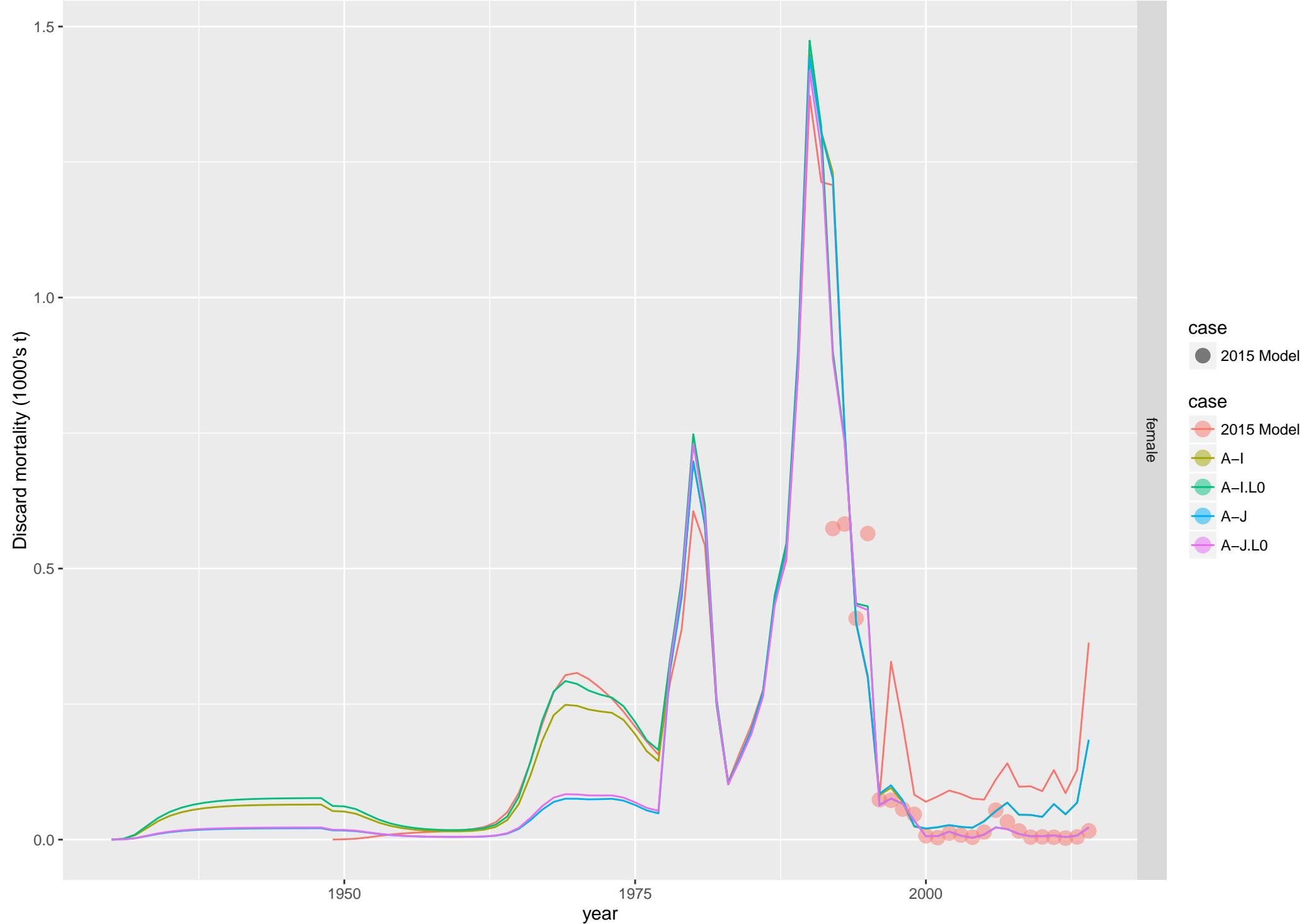
# Males, snow crab fishery bycatch mortality



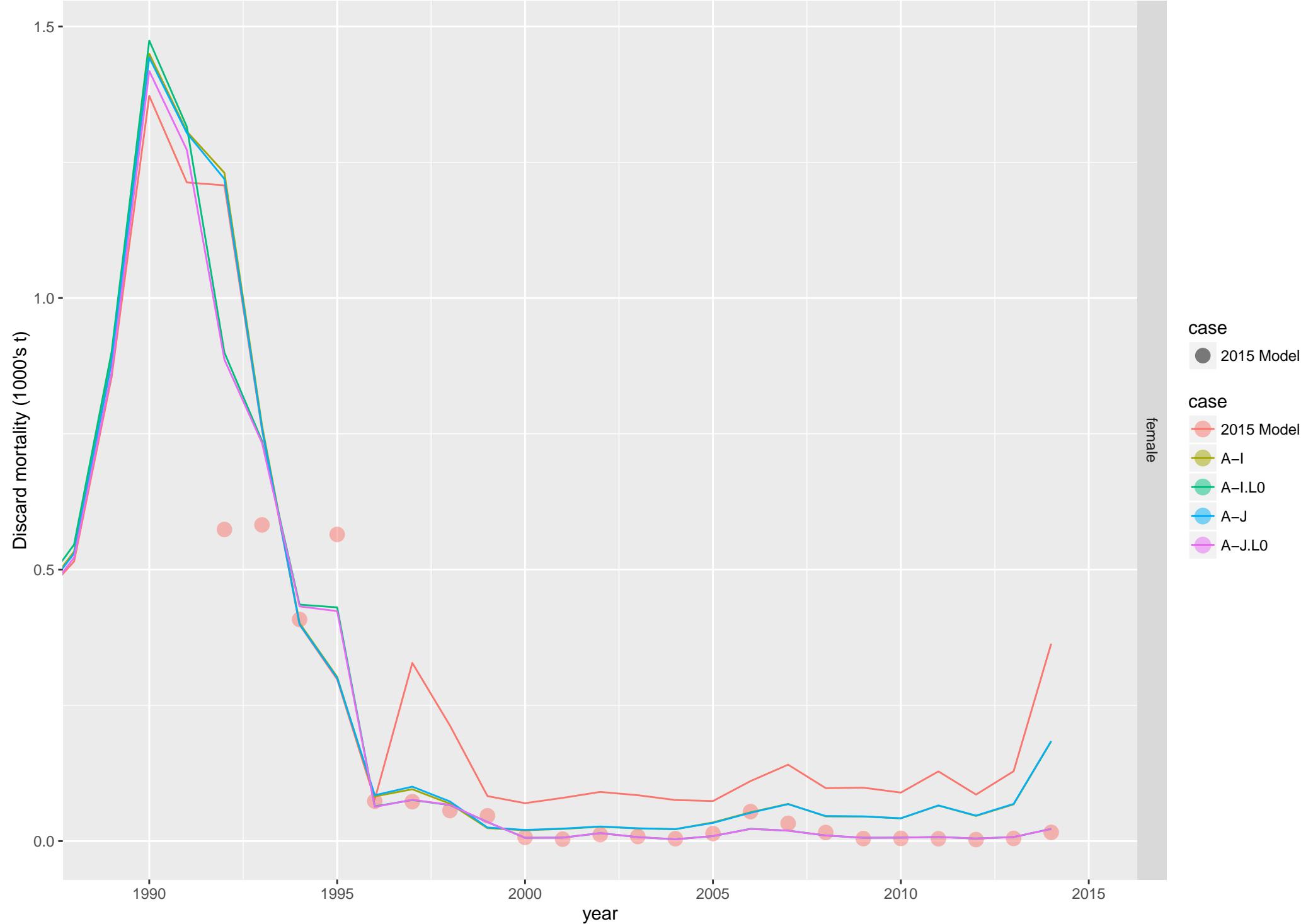
# Males, snow crab fishery bycatch mortality



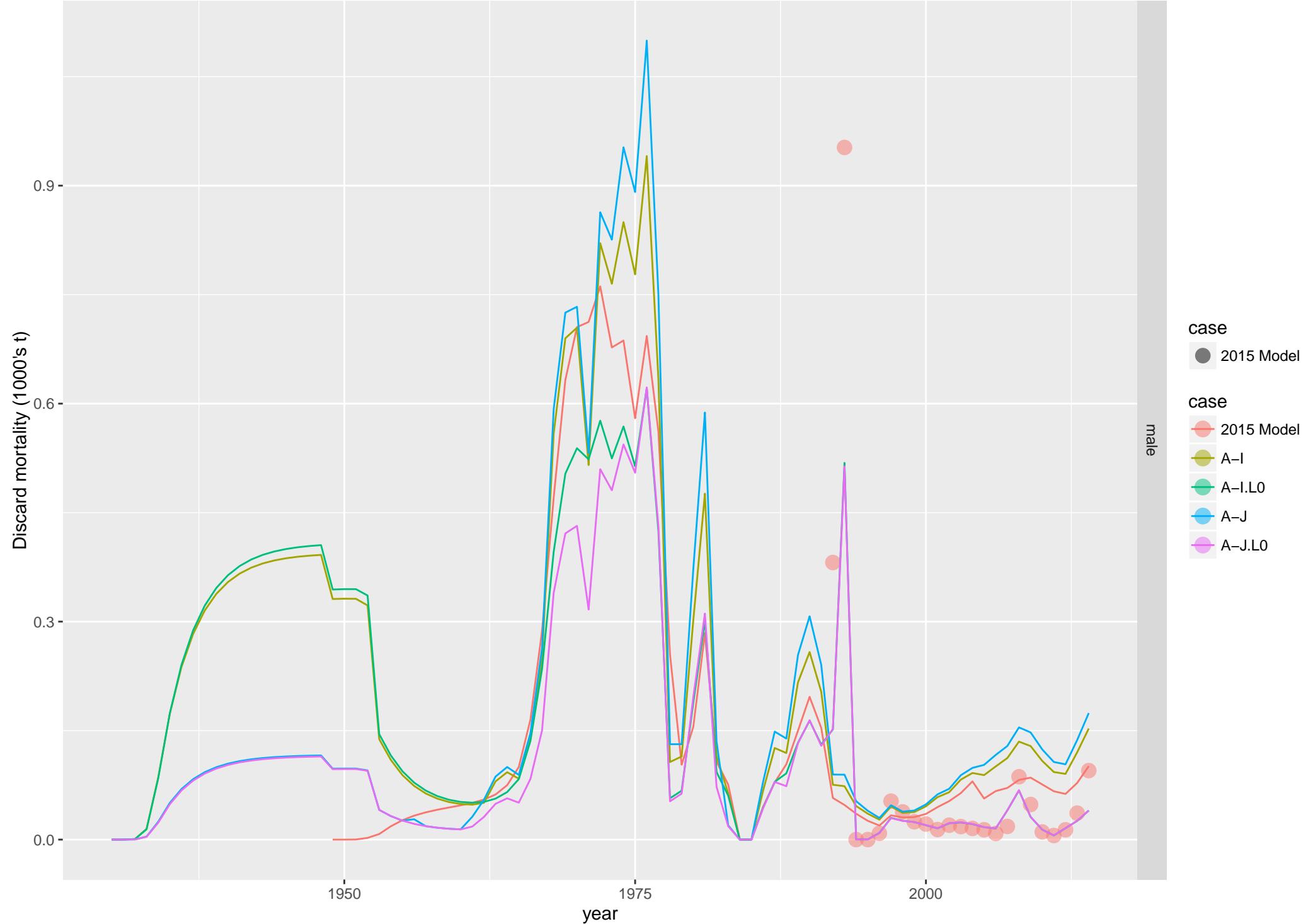
# Females, snow crab fishery bycatch mortality



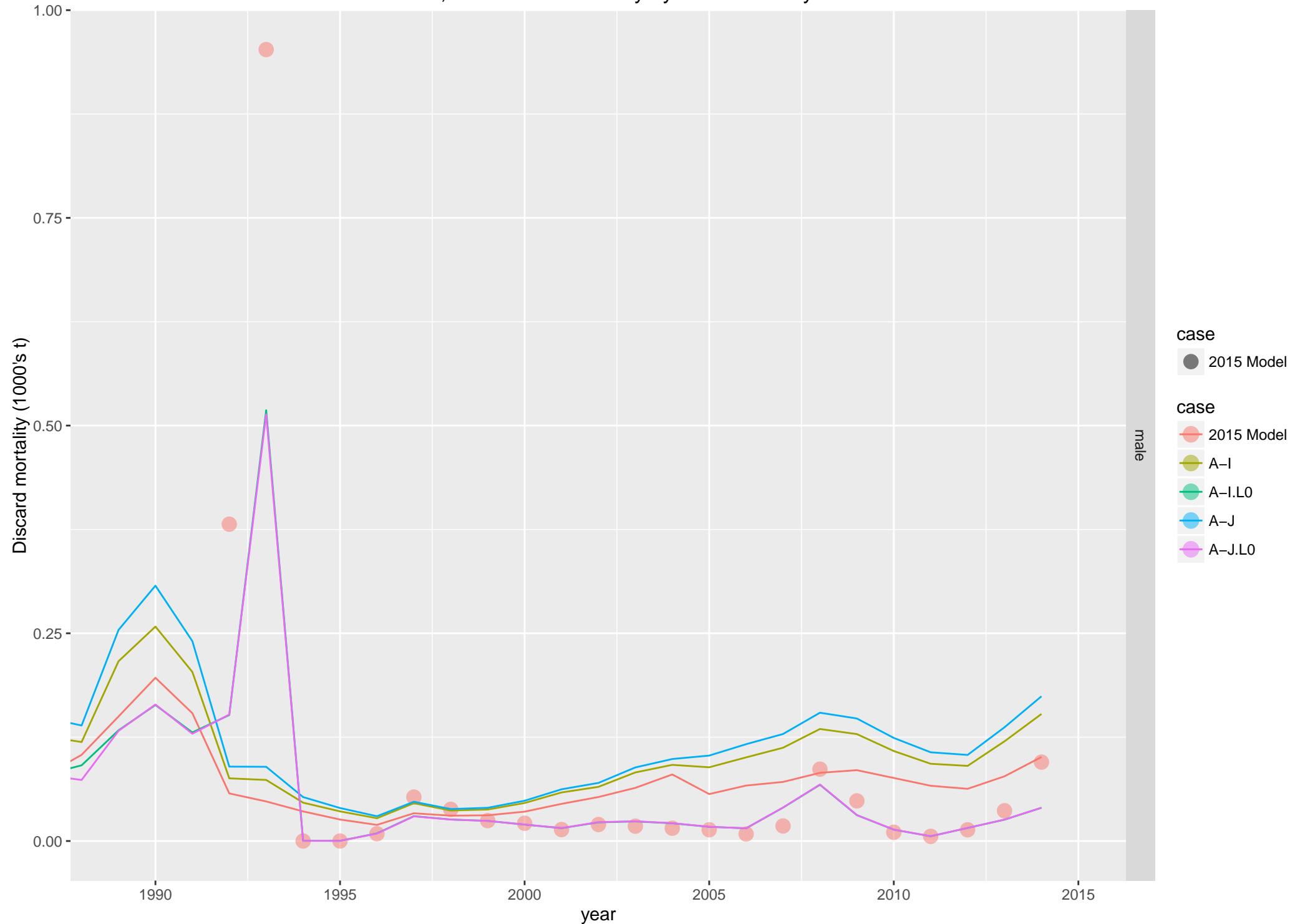
# Females, snow crab fishery bycatch mortality



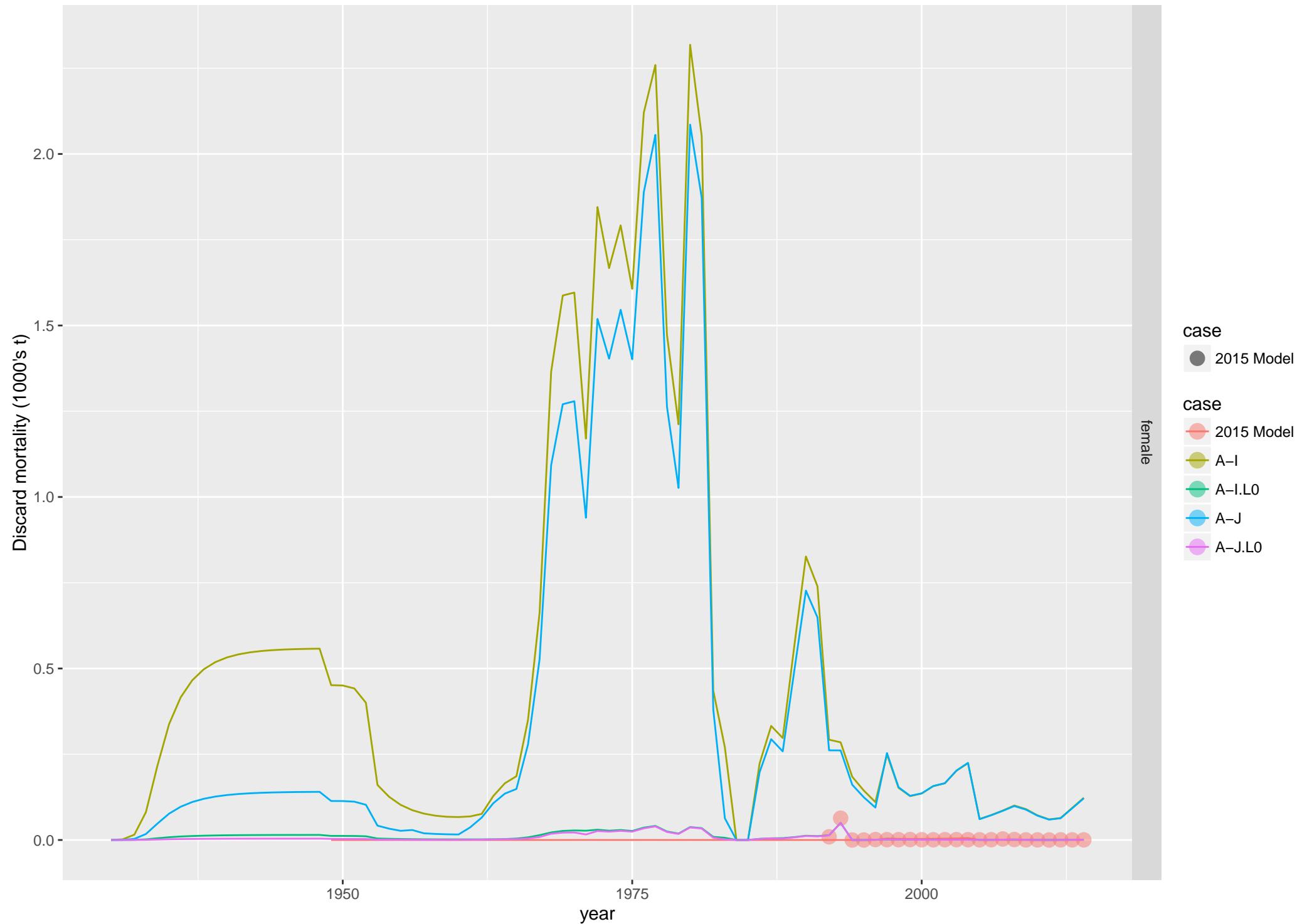
# Males, BBRKC crab fishery bycatch mortality



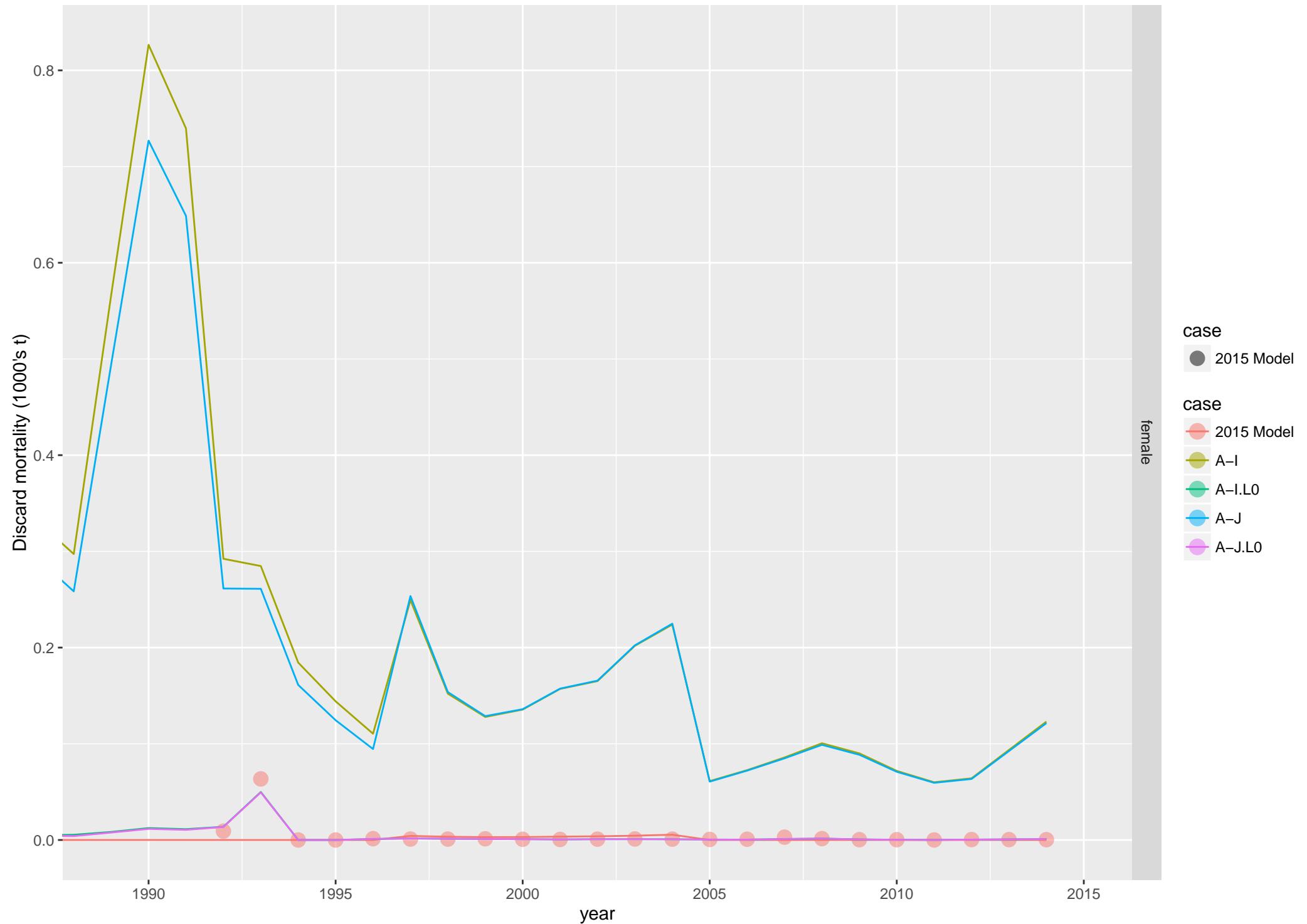
# Males, BBRKC crab fishery bycatch mortality



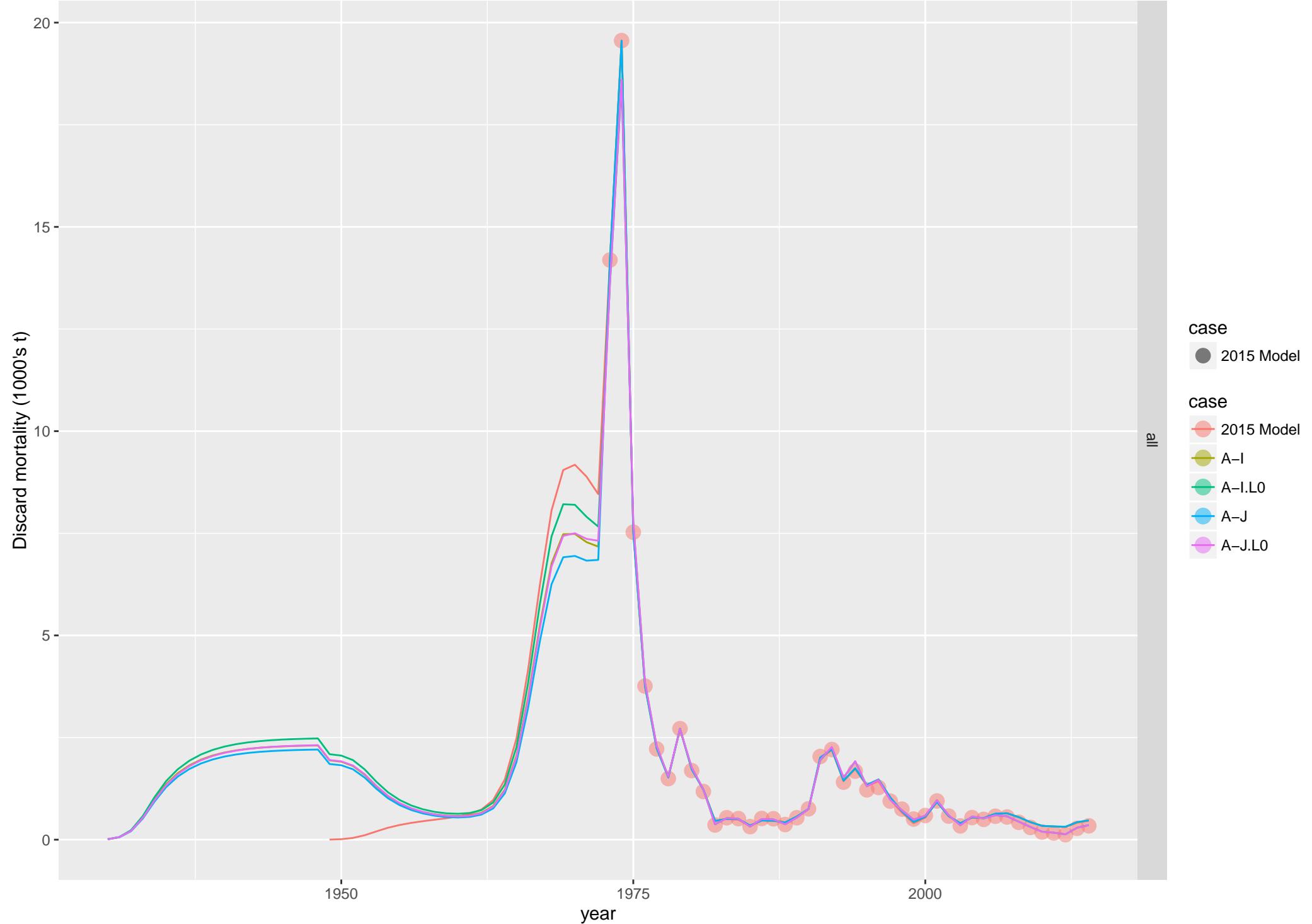
# Females, BBRKC fishery bycatch mortality



# Females, BBRKC fishery bycatch mortality



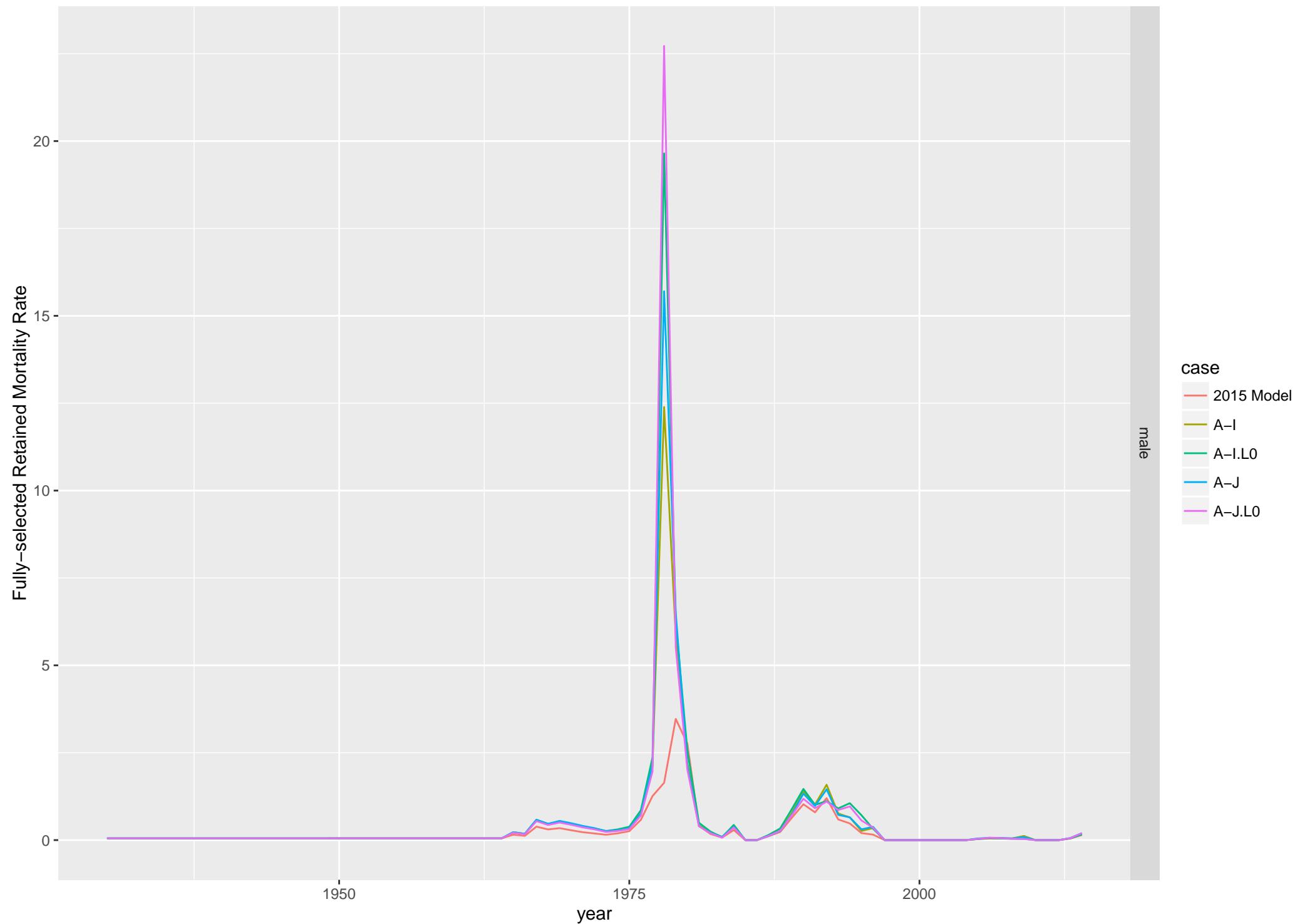
# Groundfish fisheries bycatch mortality



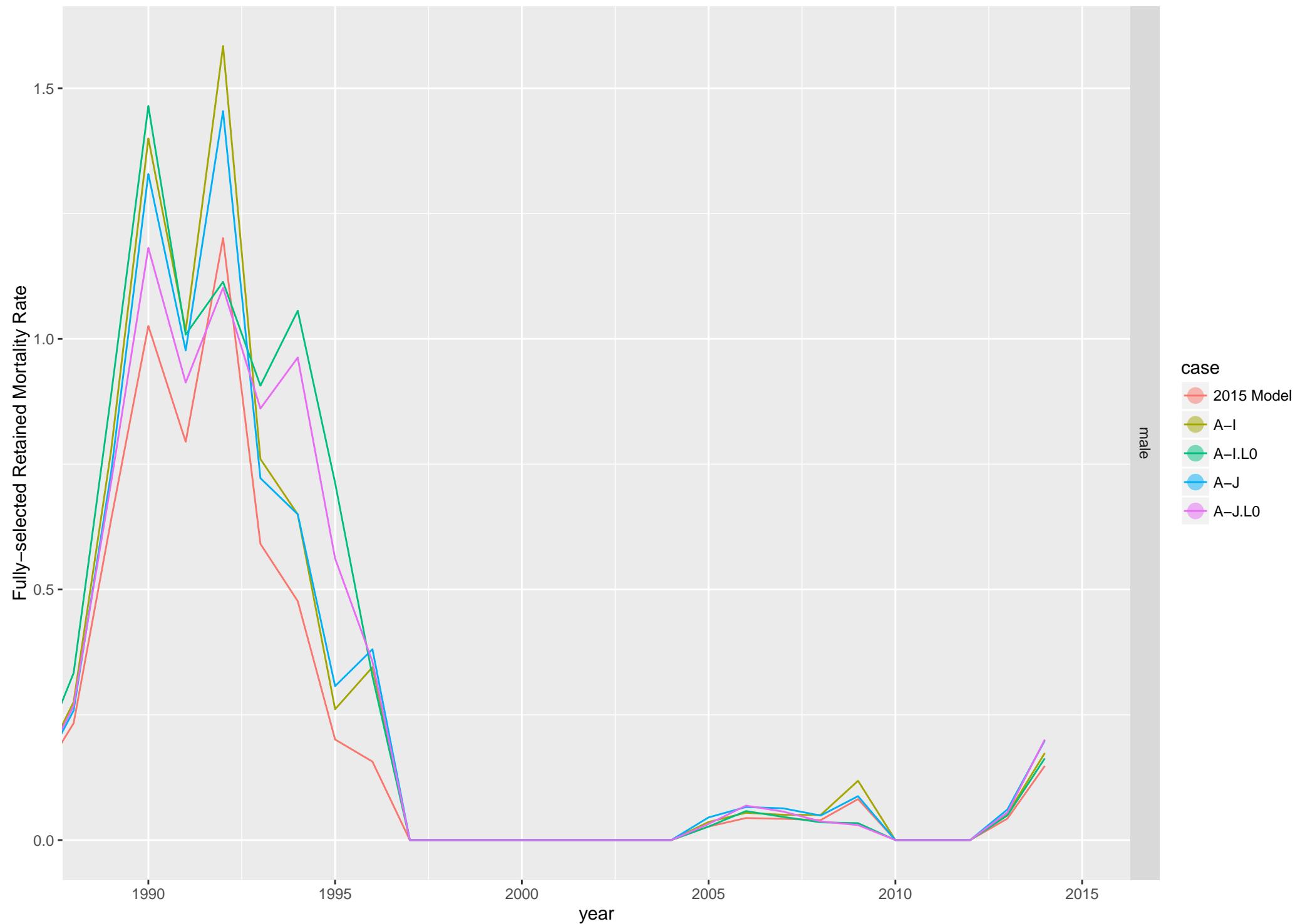
# Groundfish fisheries bycatch mortality



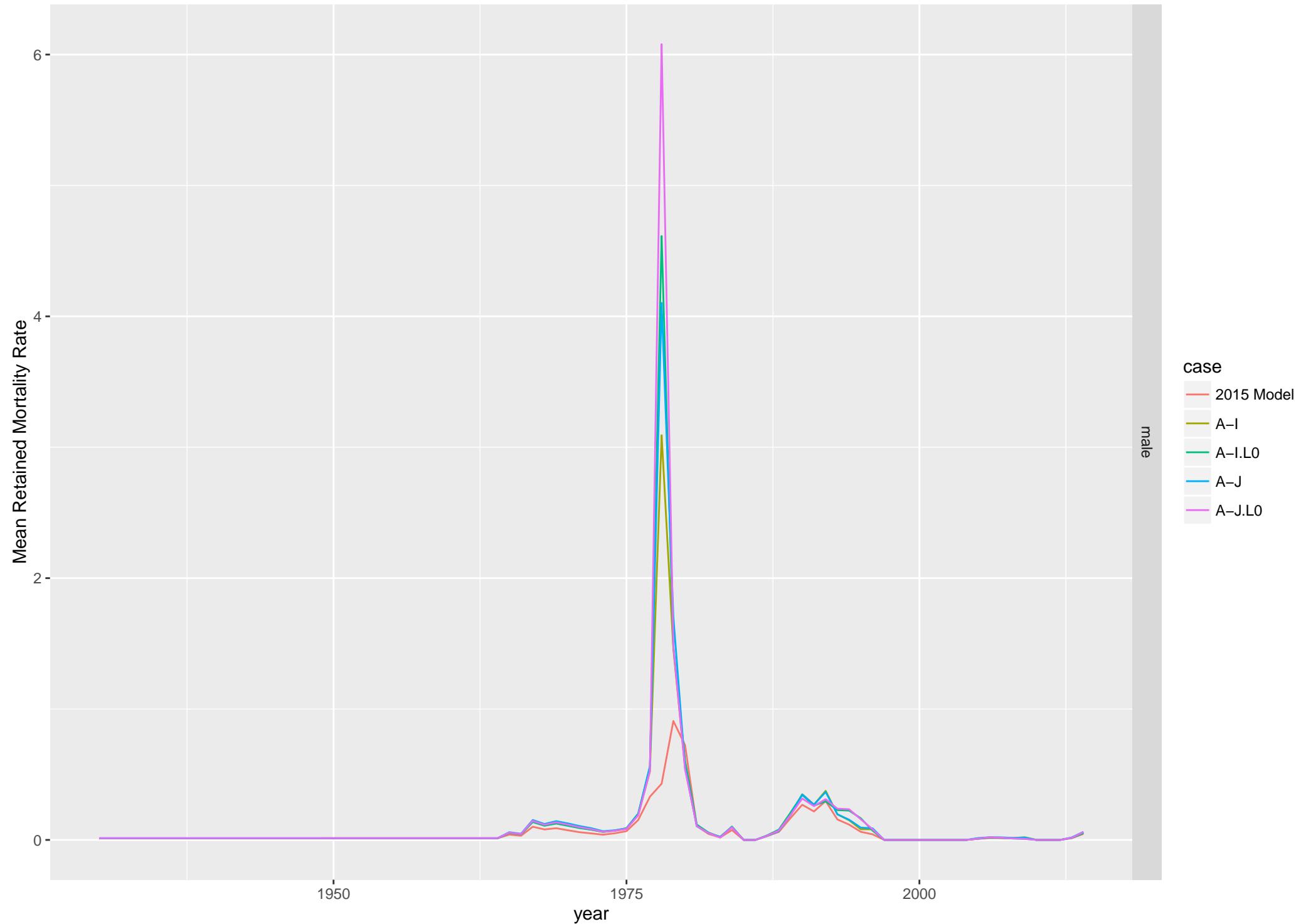
# Males, retained fishing mortality rate



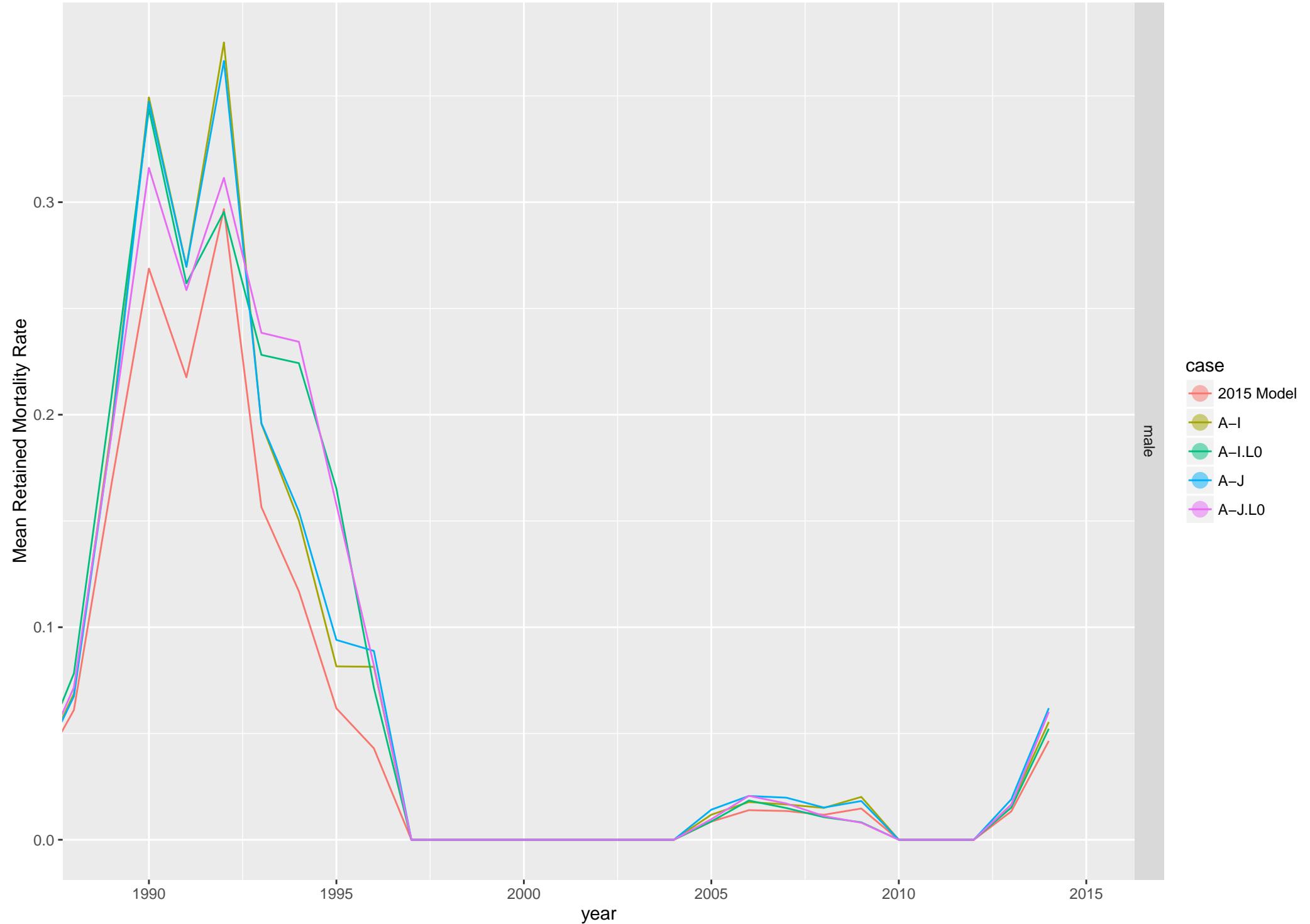
# Males, retained fishing mortality rate



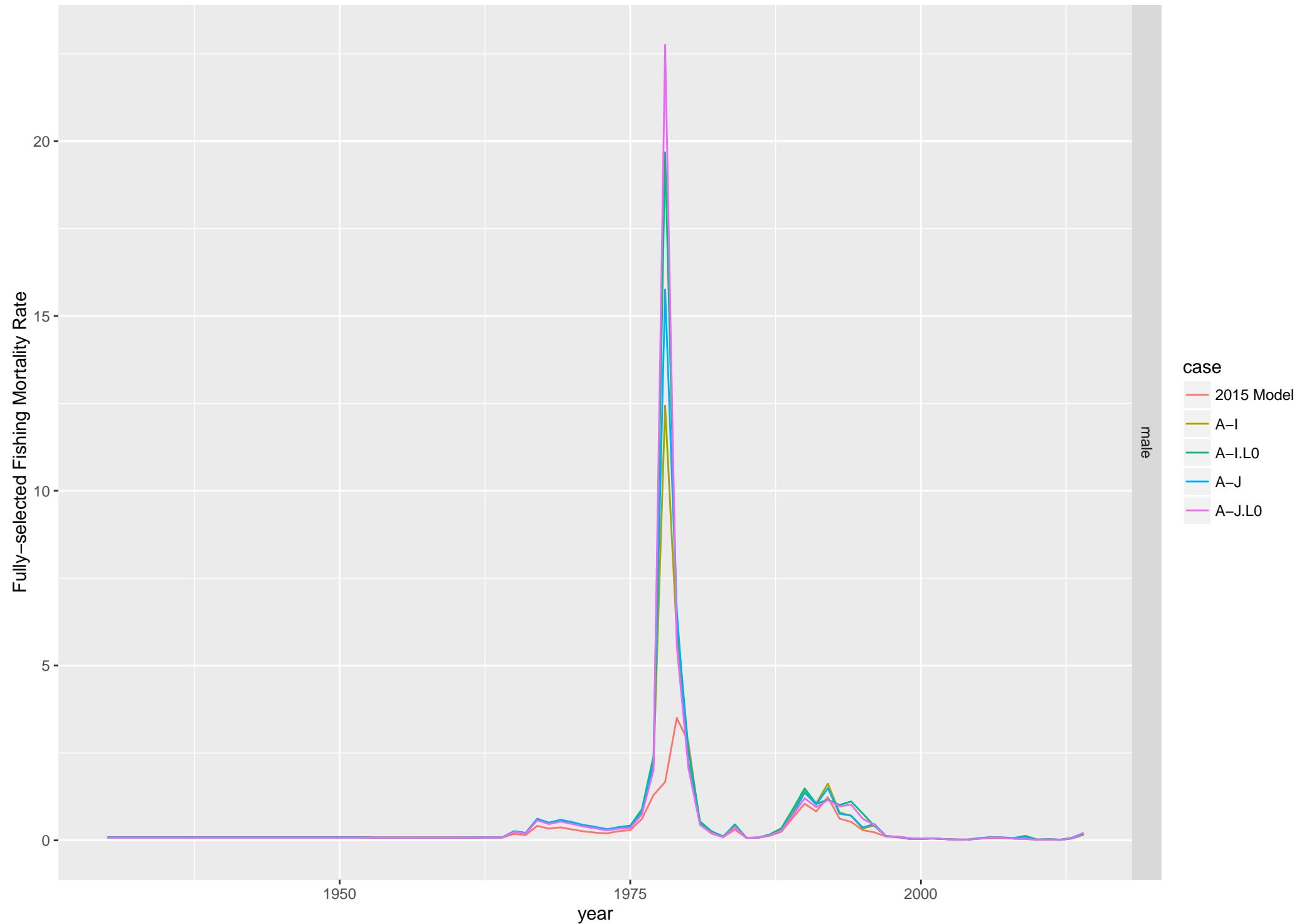
# Males, retained fishing mortality rate



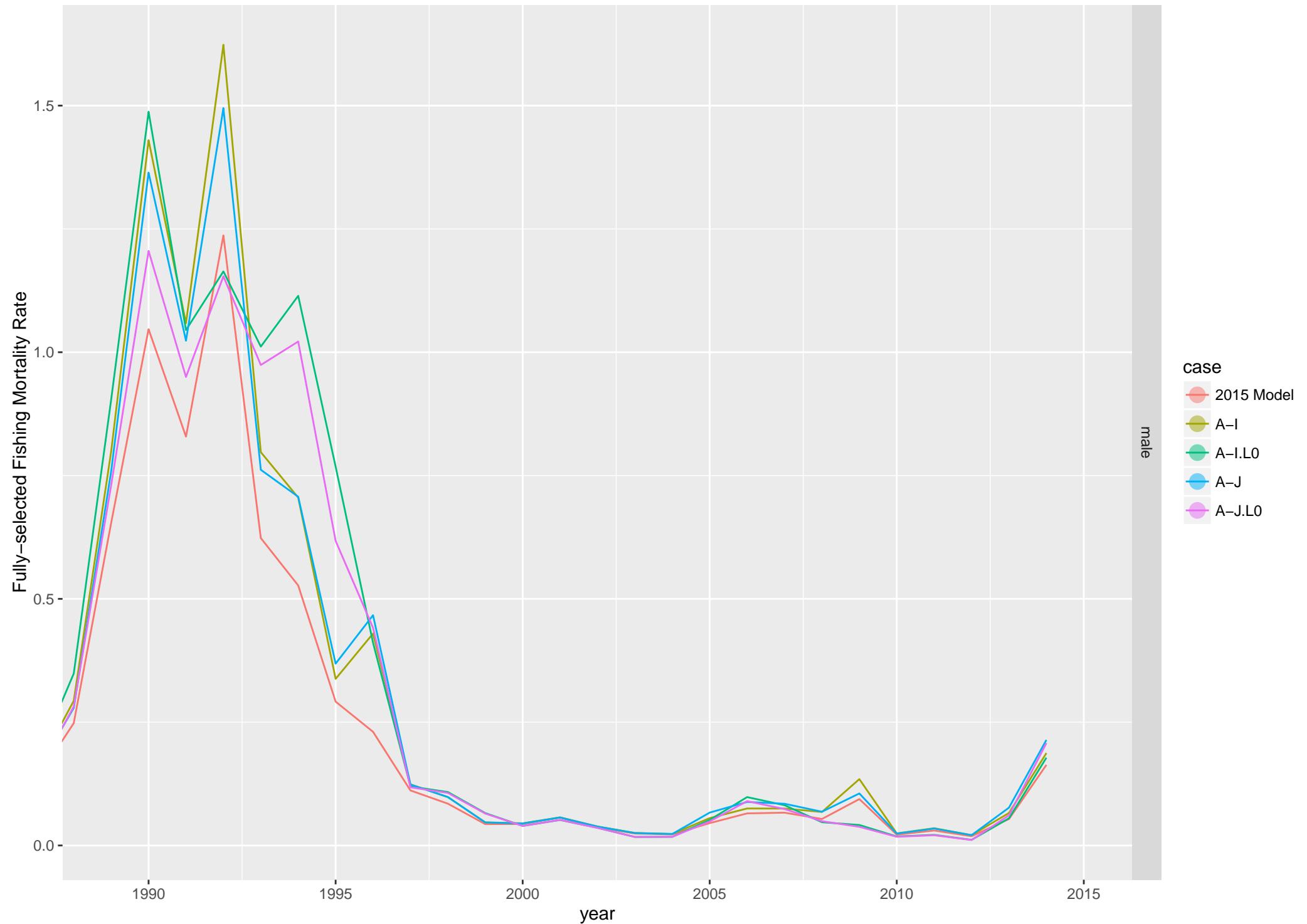
# Males, retained fishing mortality rate



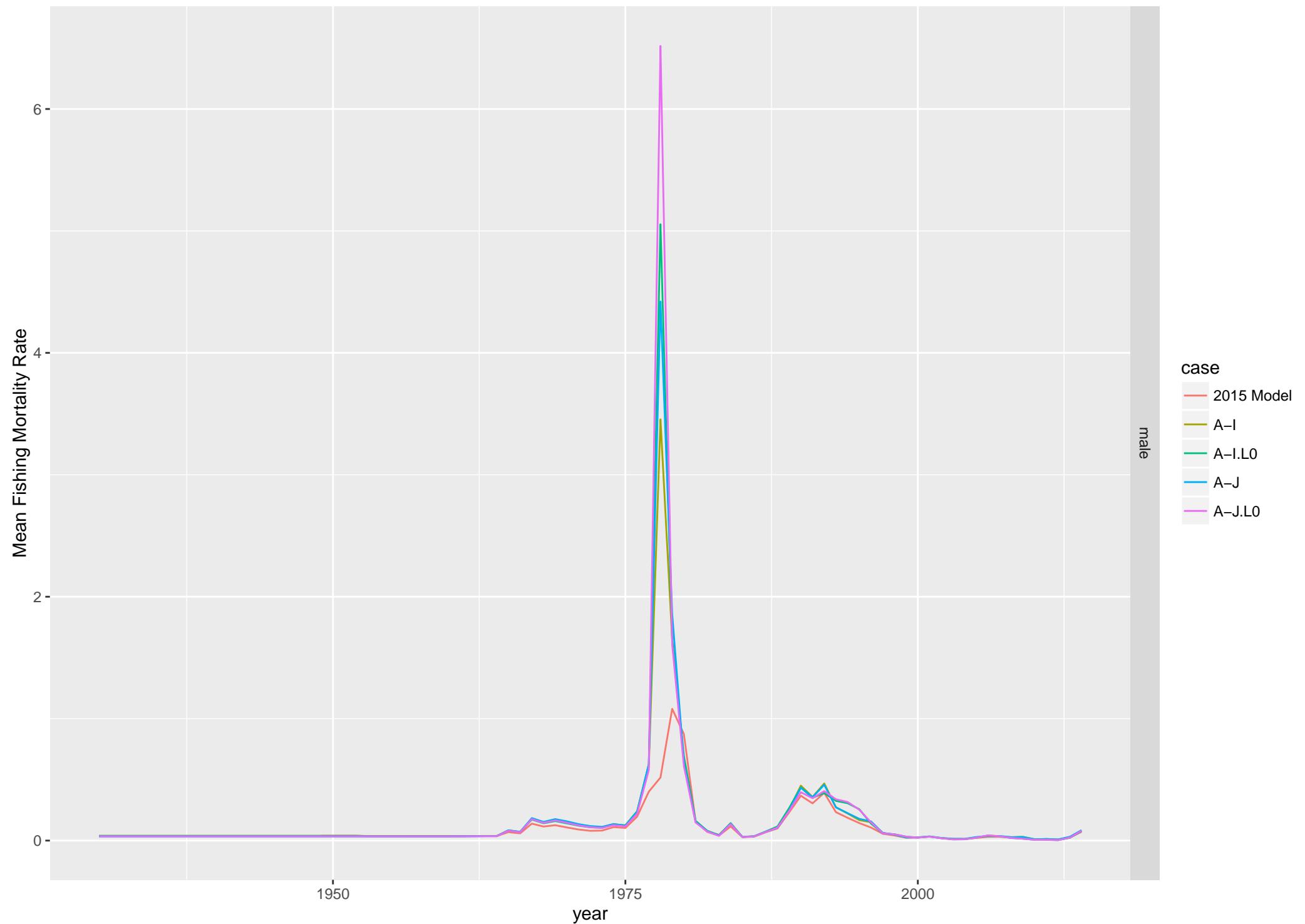
# Males, directed fishery total mortality rate



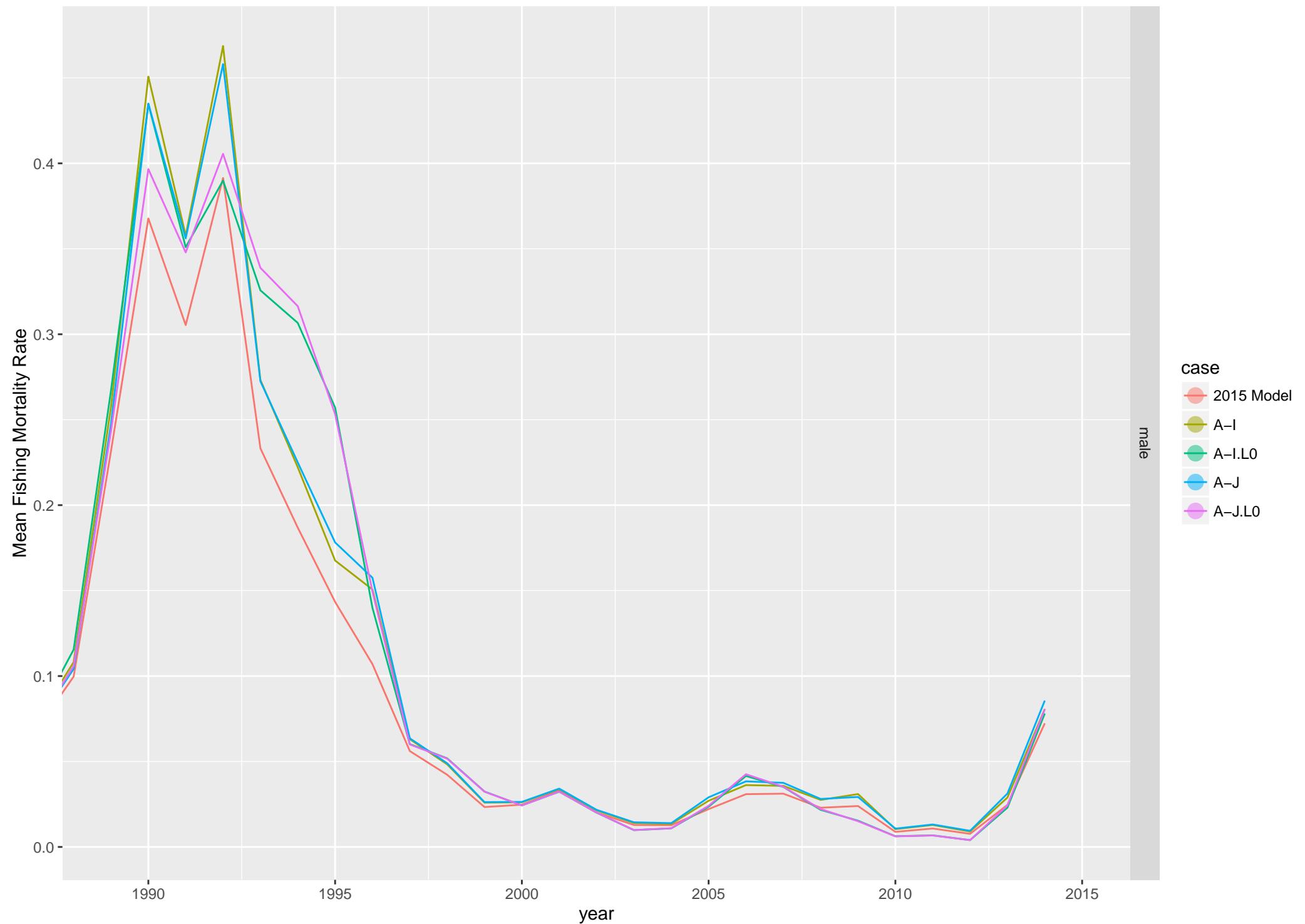
# Males, directed fishery total mortality rate



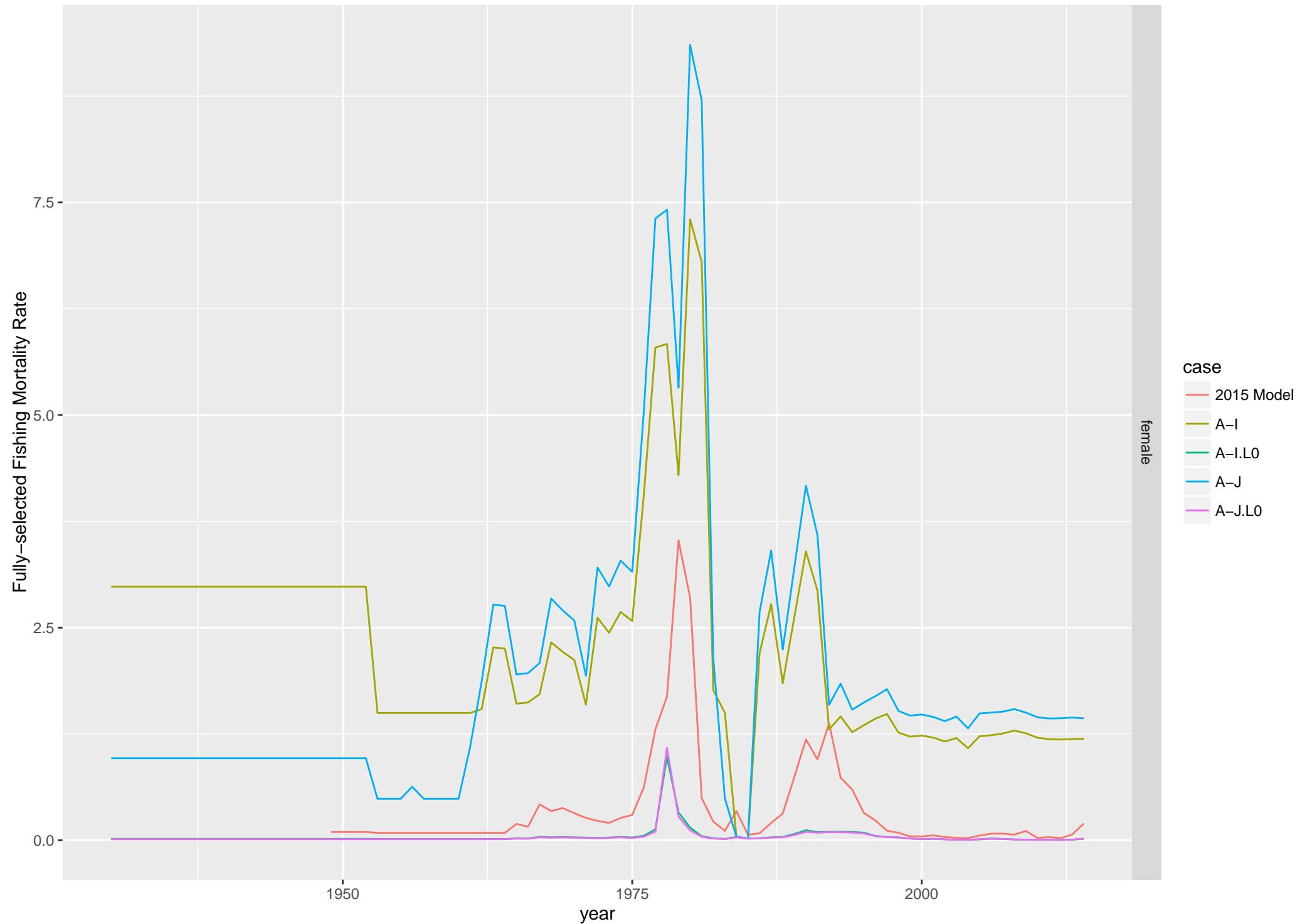
# Males, directed fishery total mortality rate



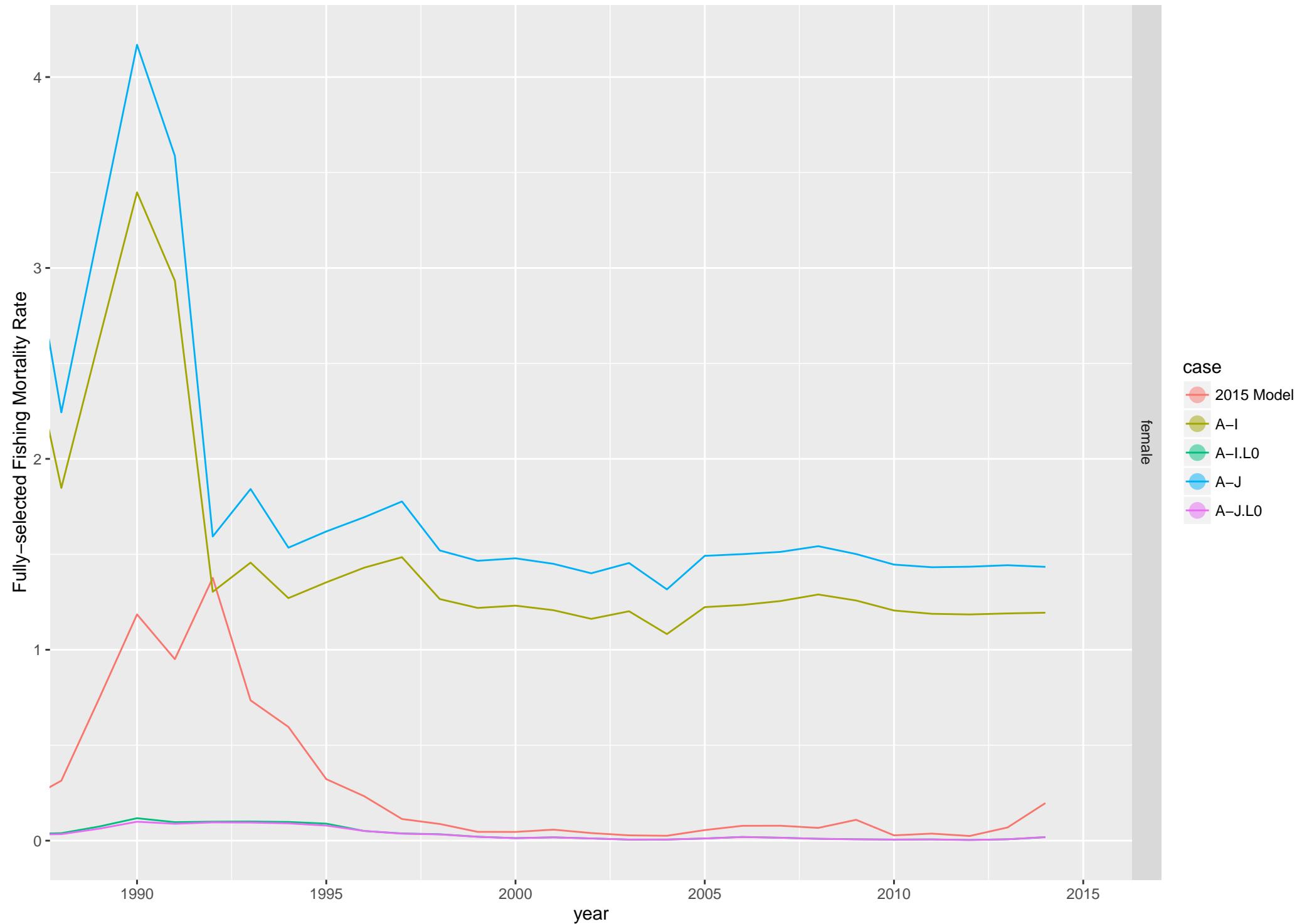
# Males, directed fishery total mortality rate



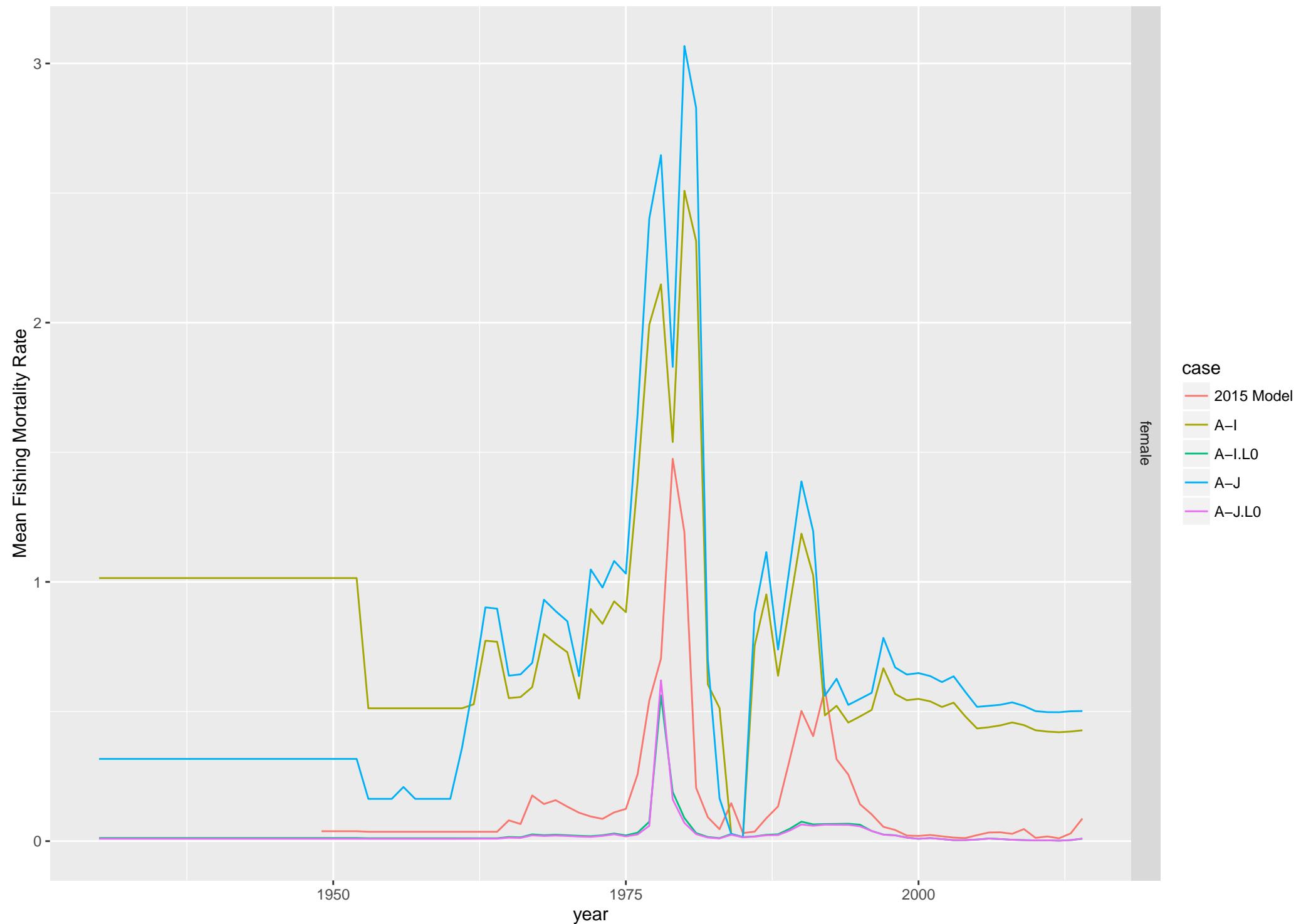
# Females, directed fishery bycatch mortality rate



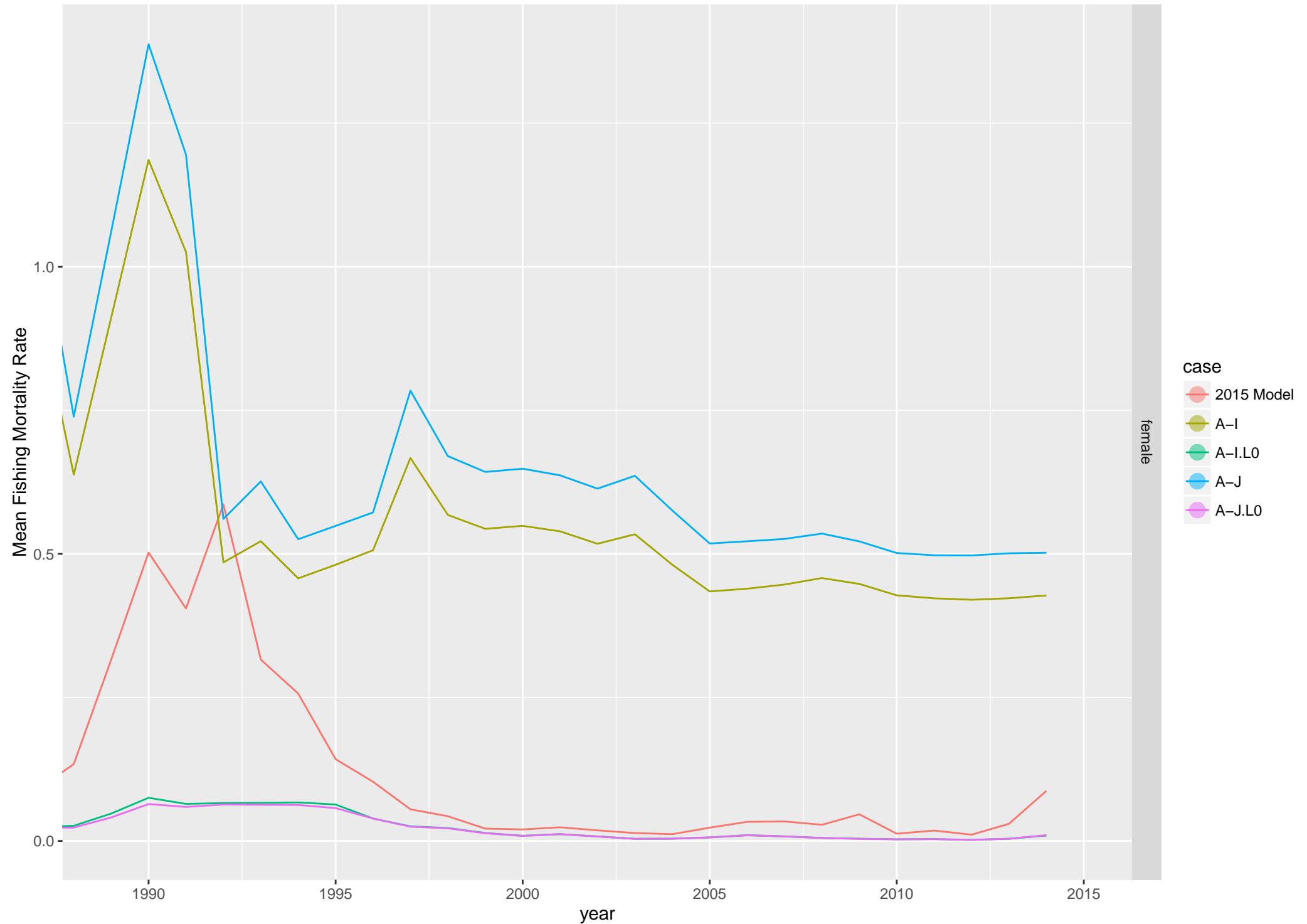
# Females, directed fishery bycatch mortality rate



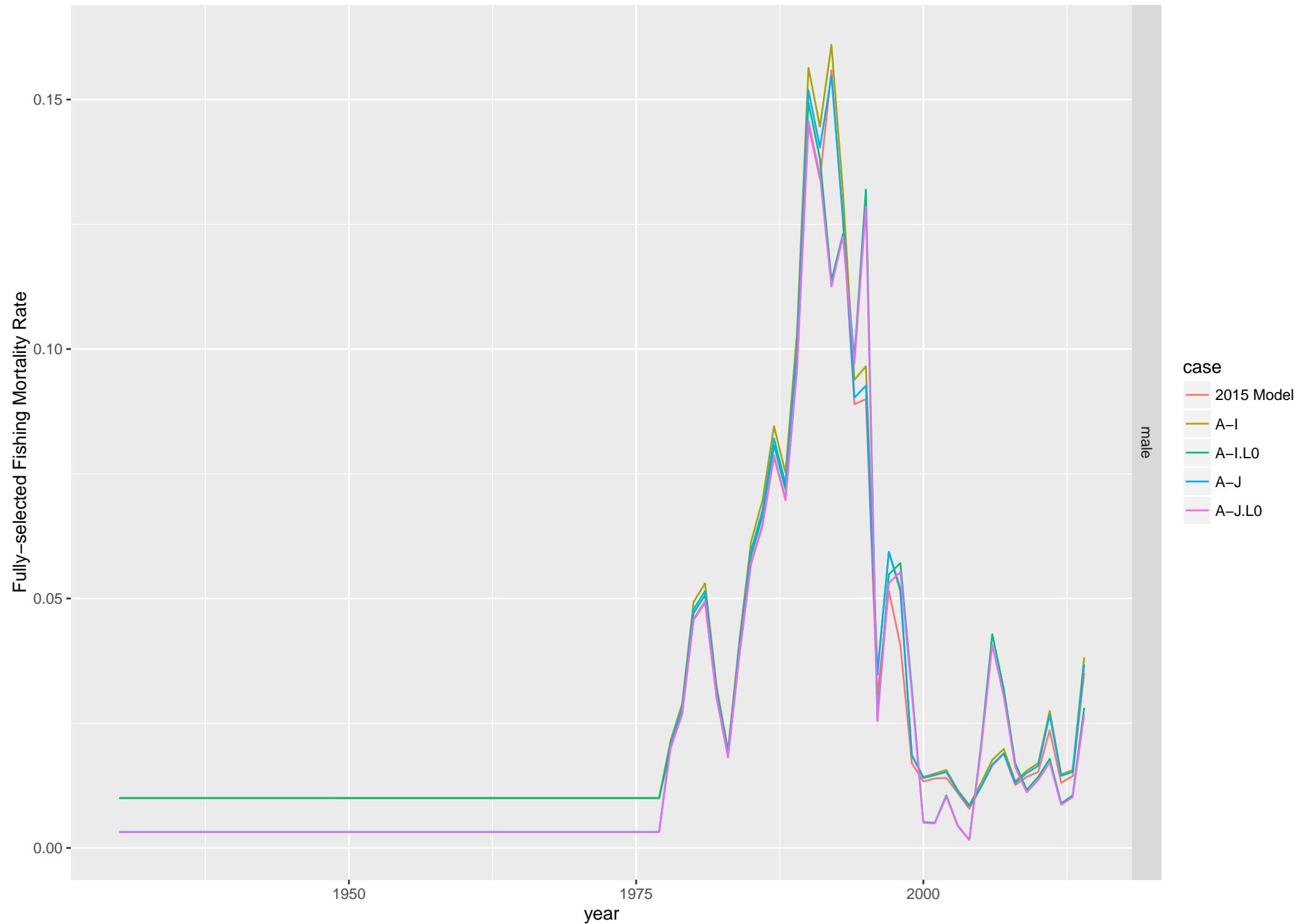
# Females, directed fishery bycatch mortality rate



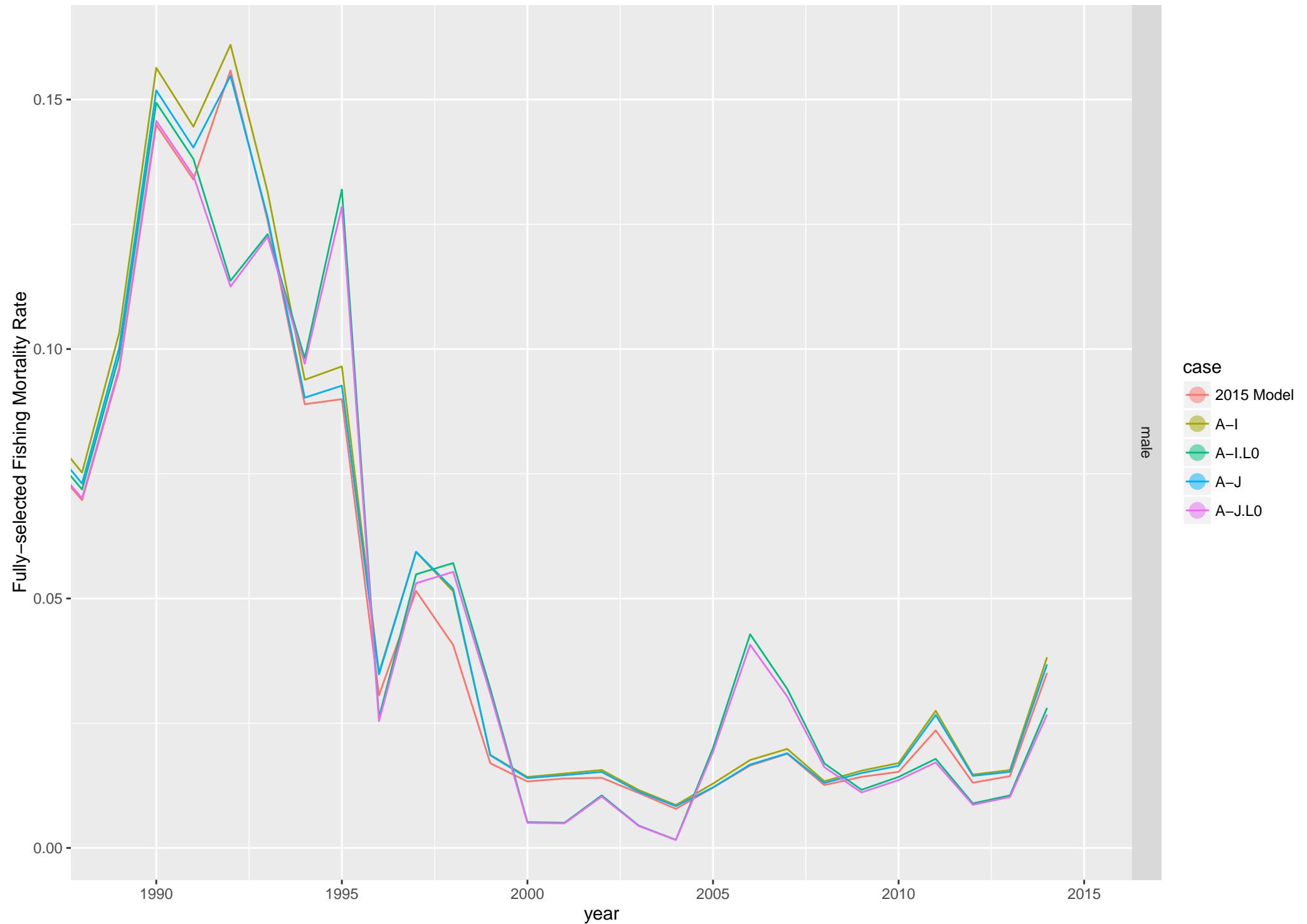
# Females, directed fishery bycatch mortality rate



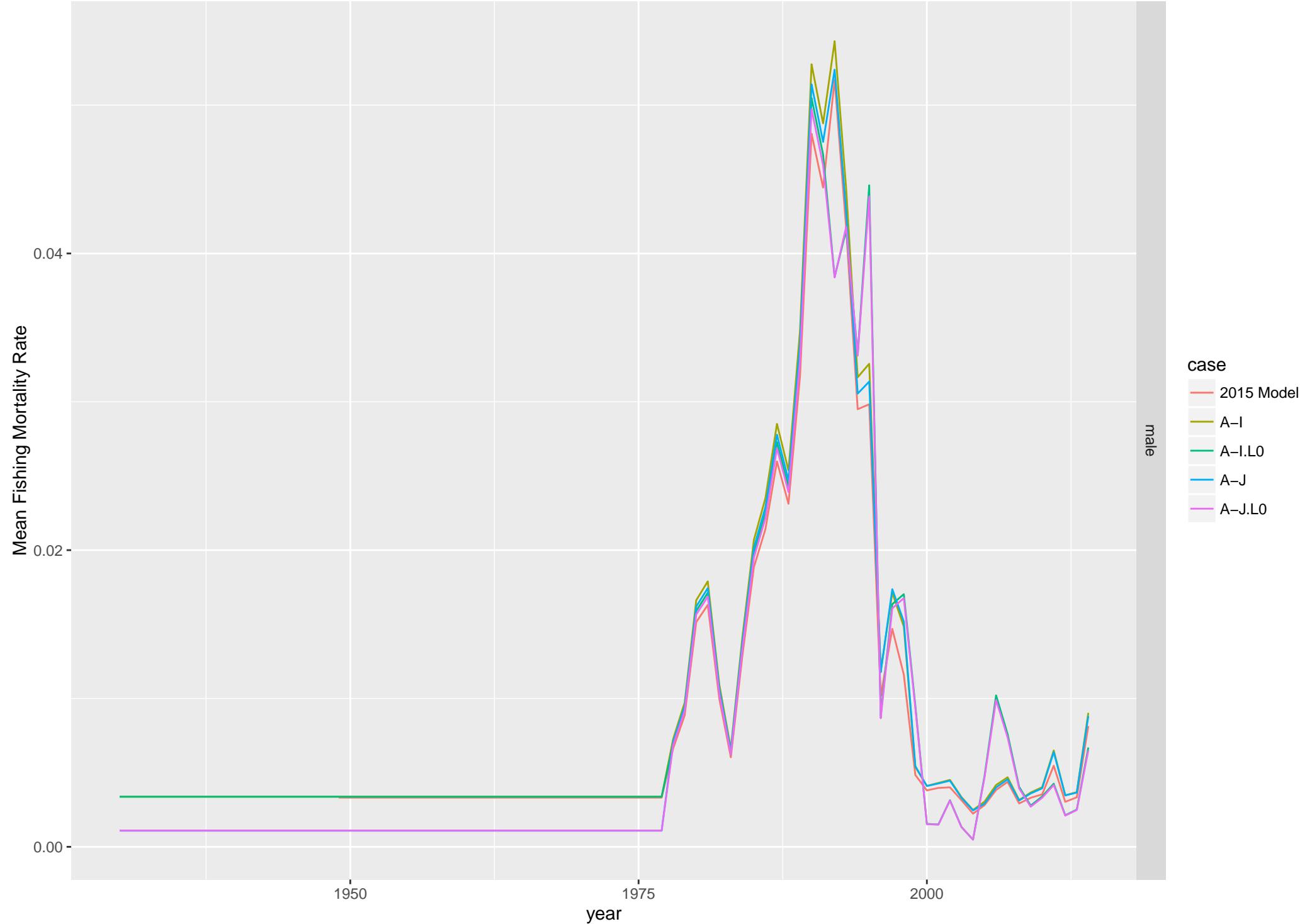
# Snow crab bycatch mortality rate on males



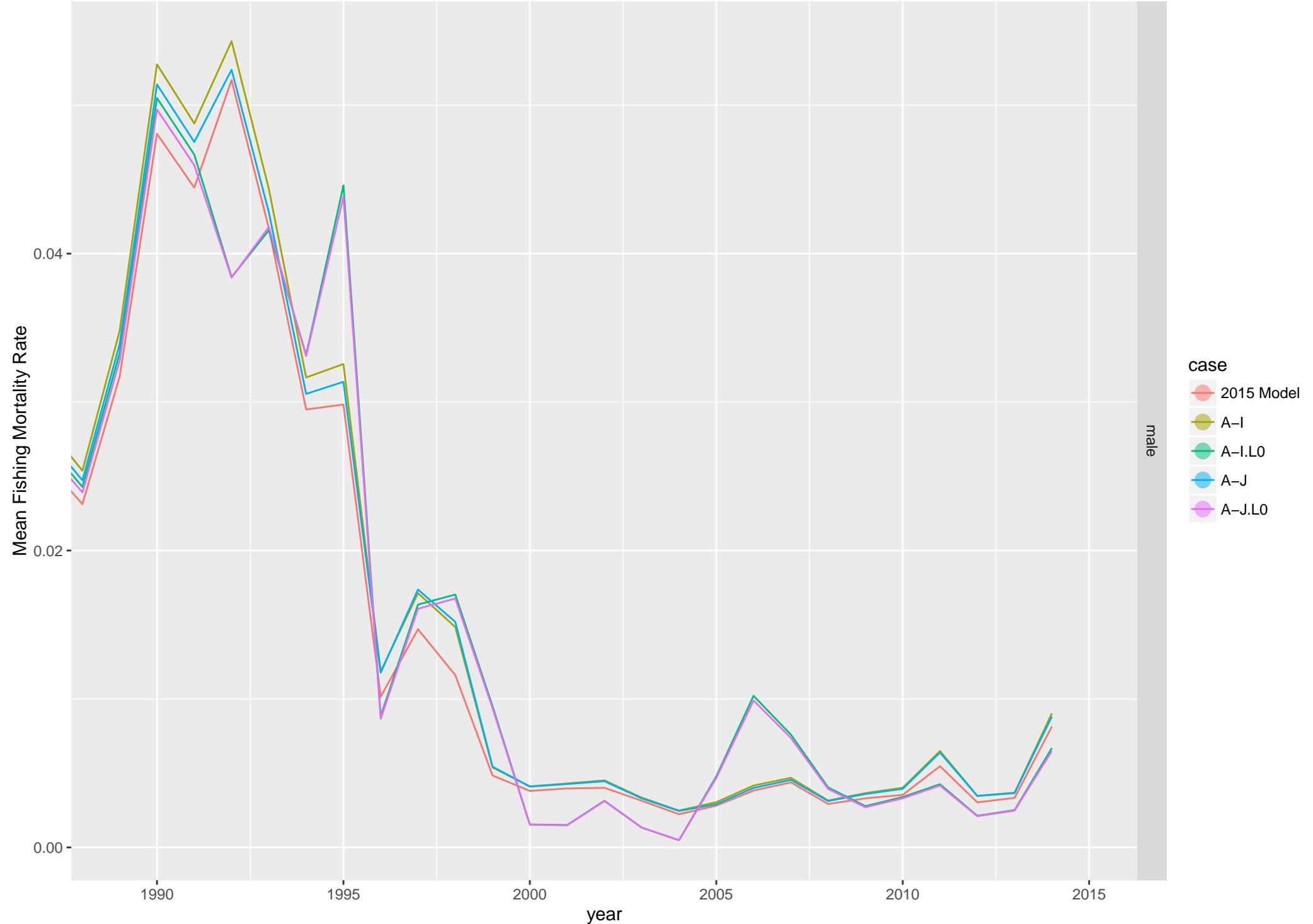
# Snow crab bycatch mortality rate on males



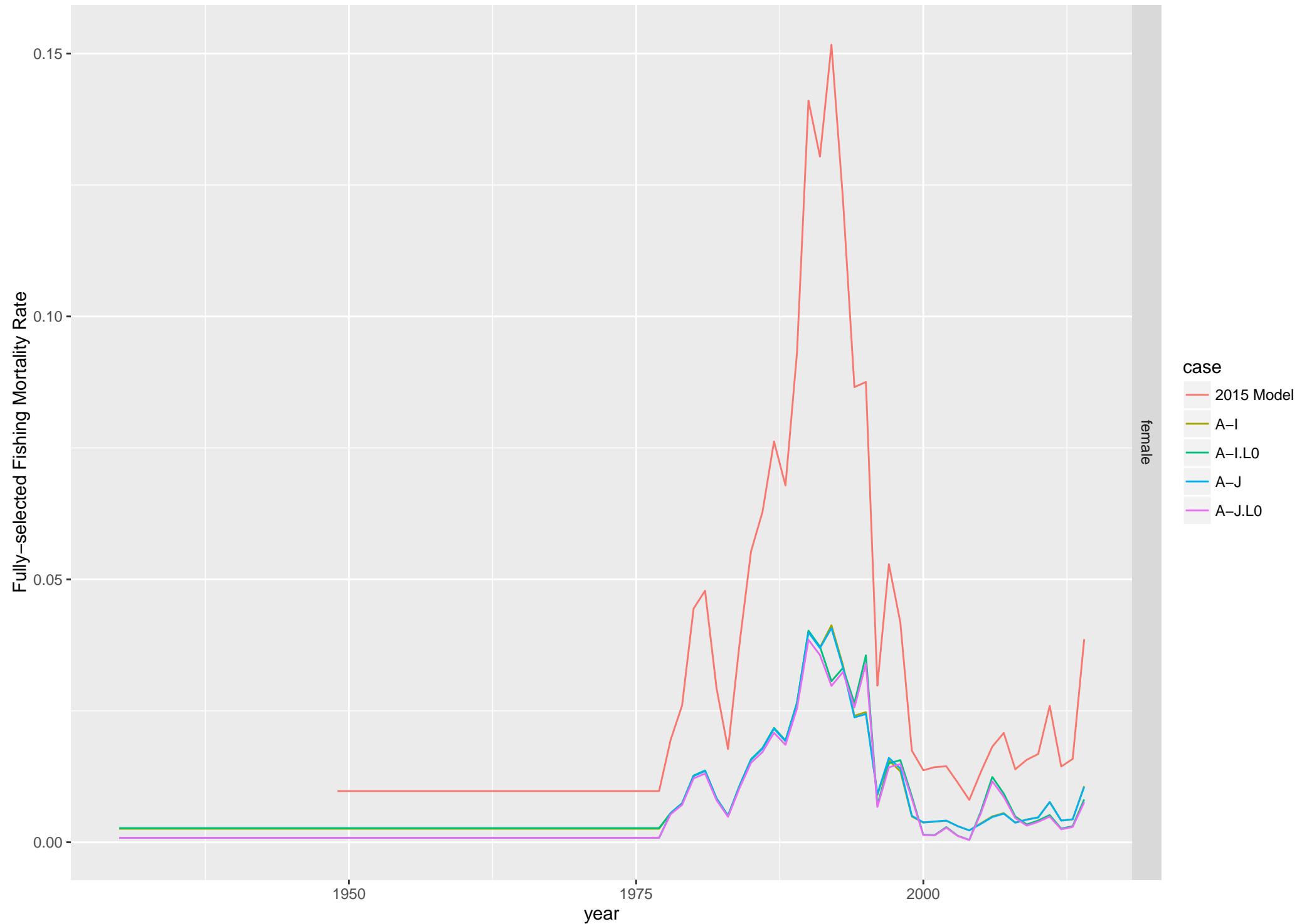
### Snow crab bycatch mortality rate on males



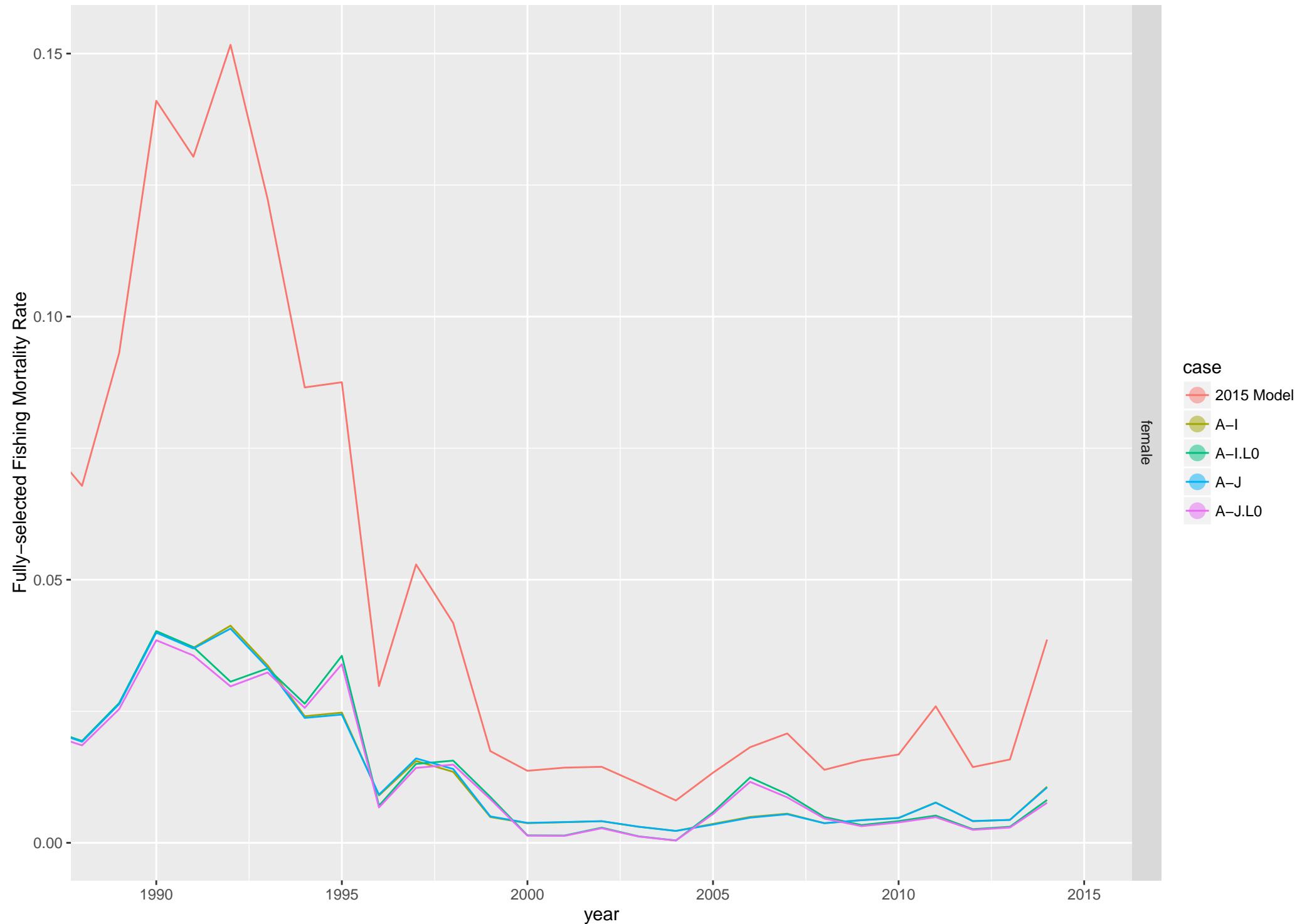
### Snow crab bycatch mortality rate on males



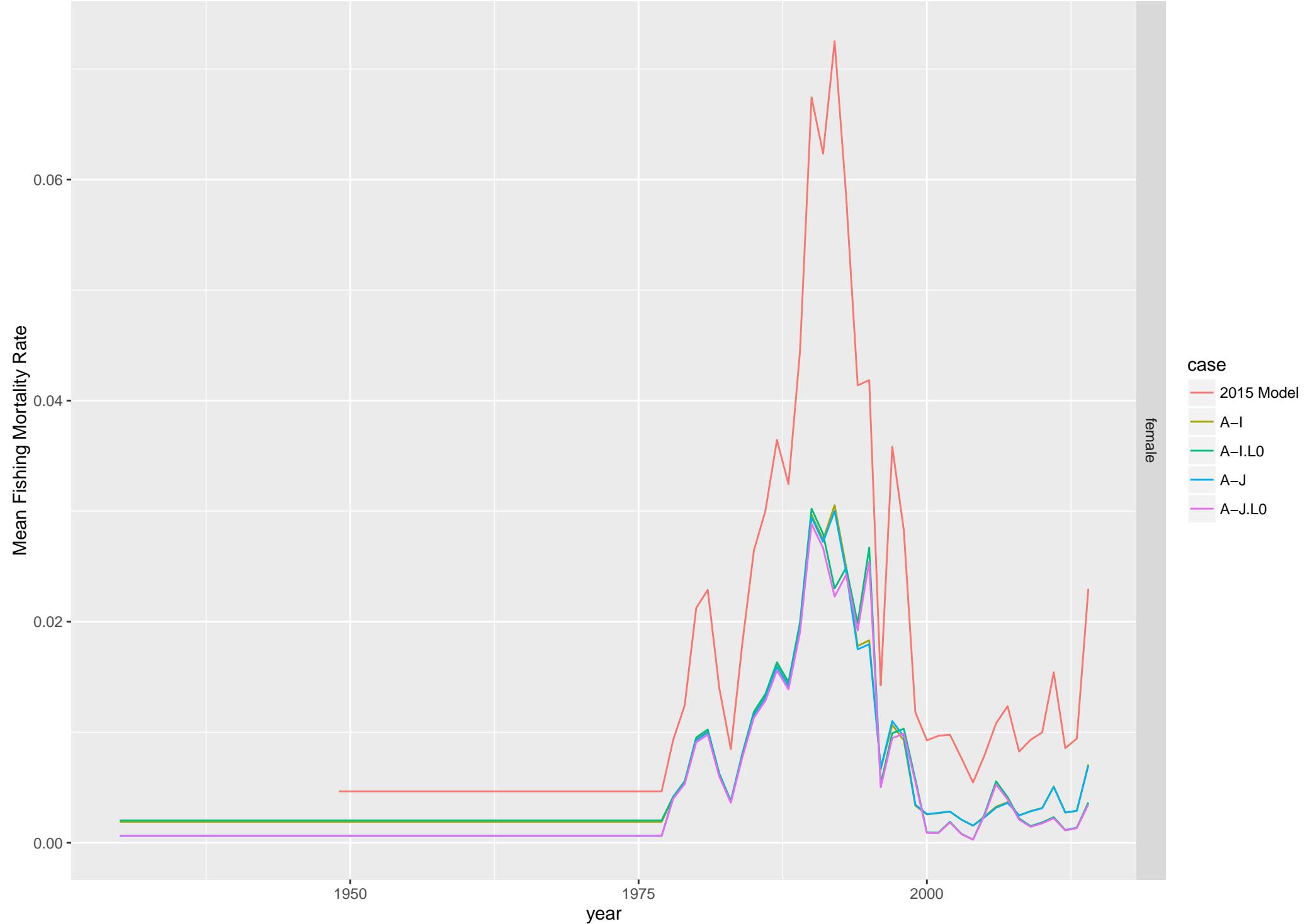
# Snow crab bycatch mortality rate on females



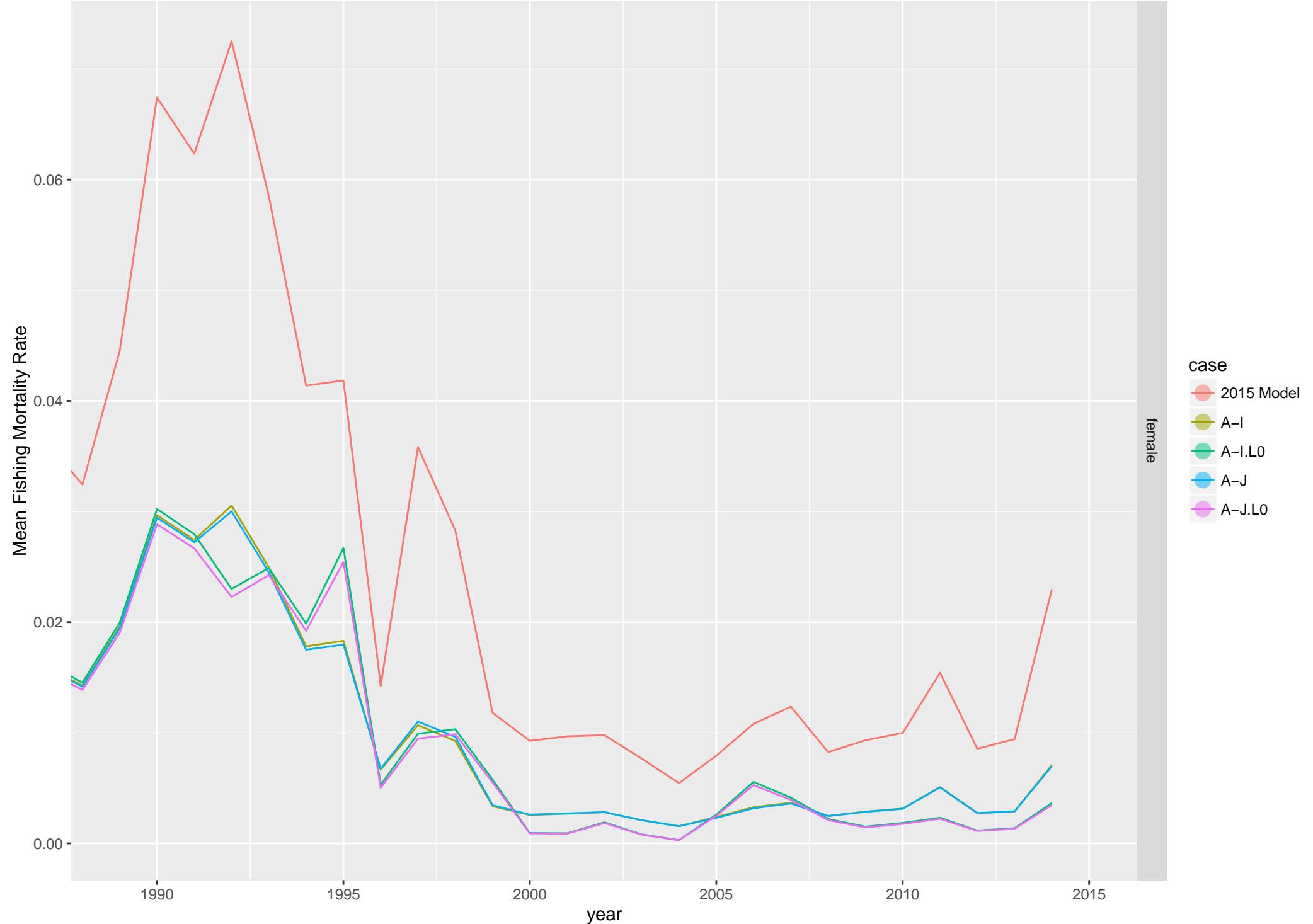
# Snow crab bycatch mortality rate on females



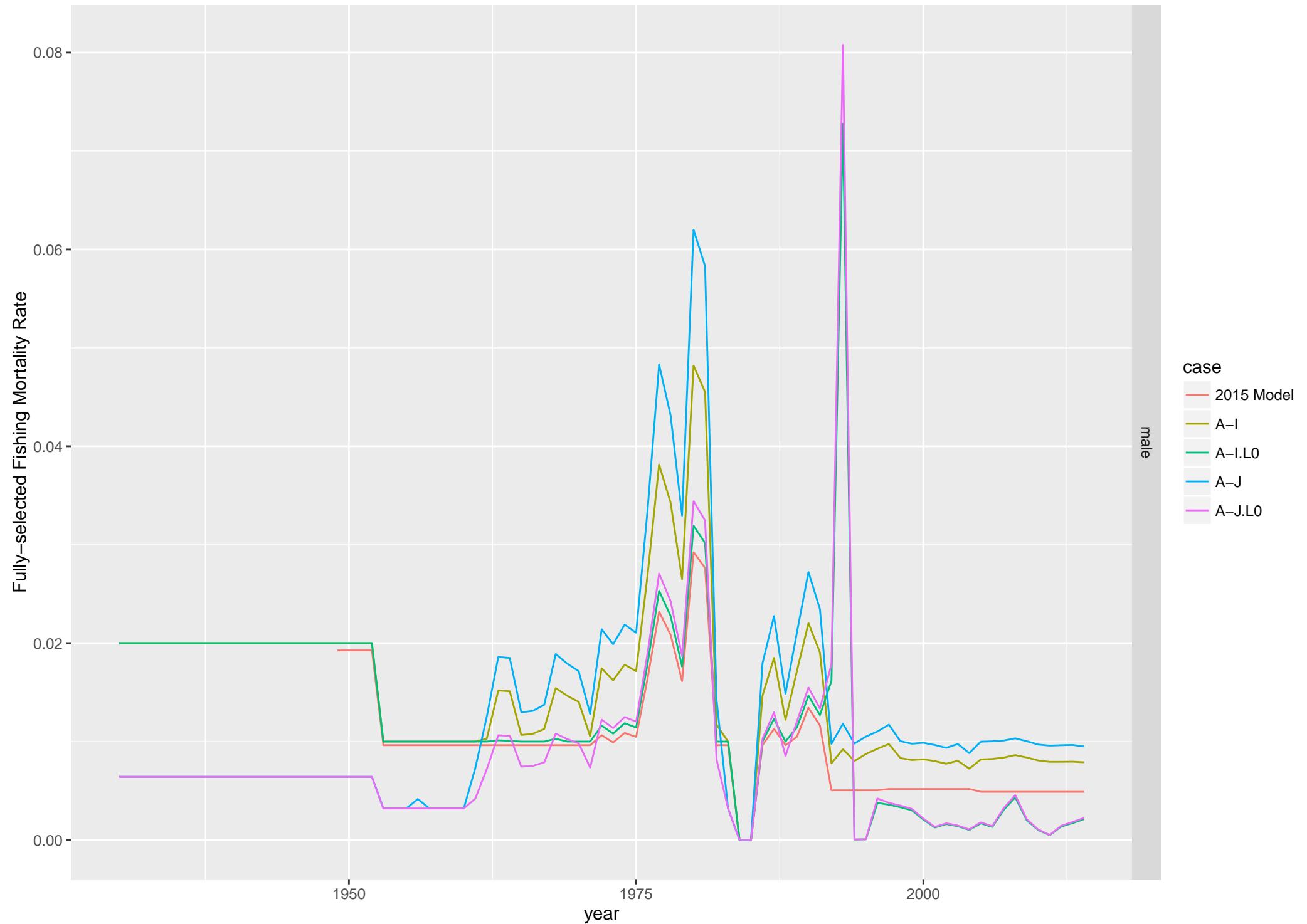
# Snow crab bycatch mortality rate on females



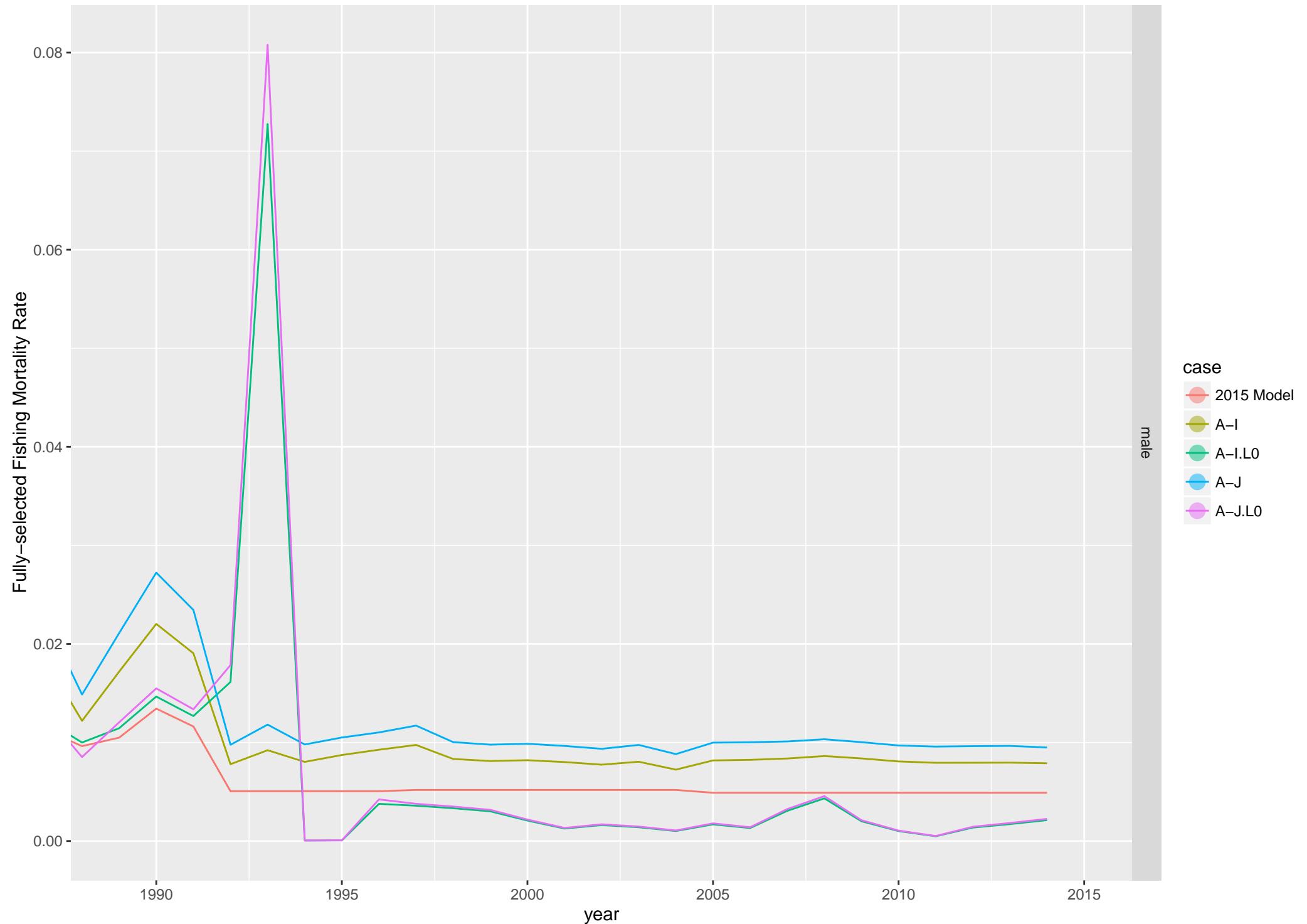
# Snow crab bycatch mortality rate on females



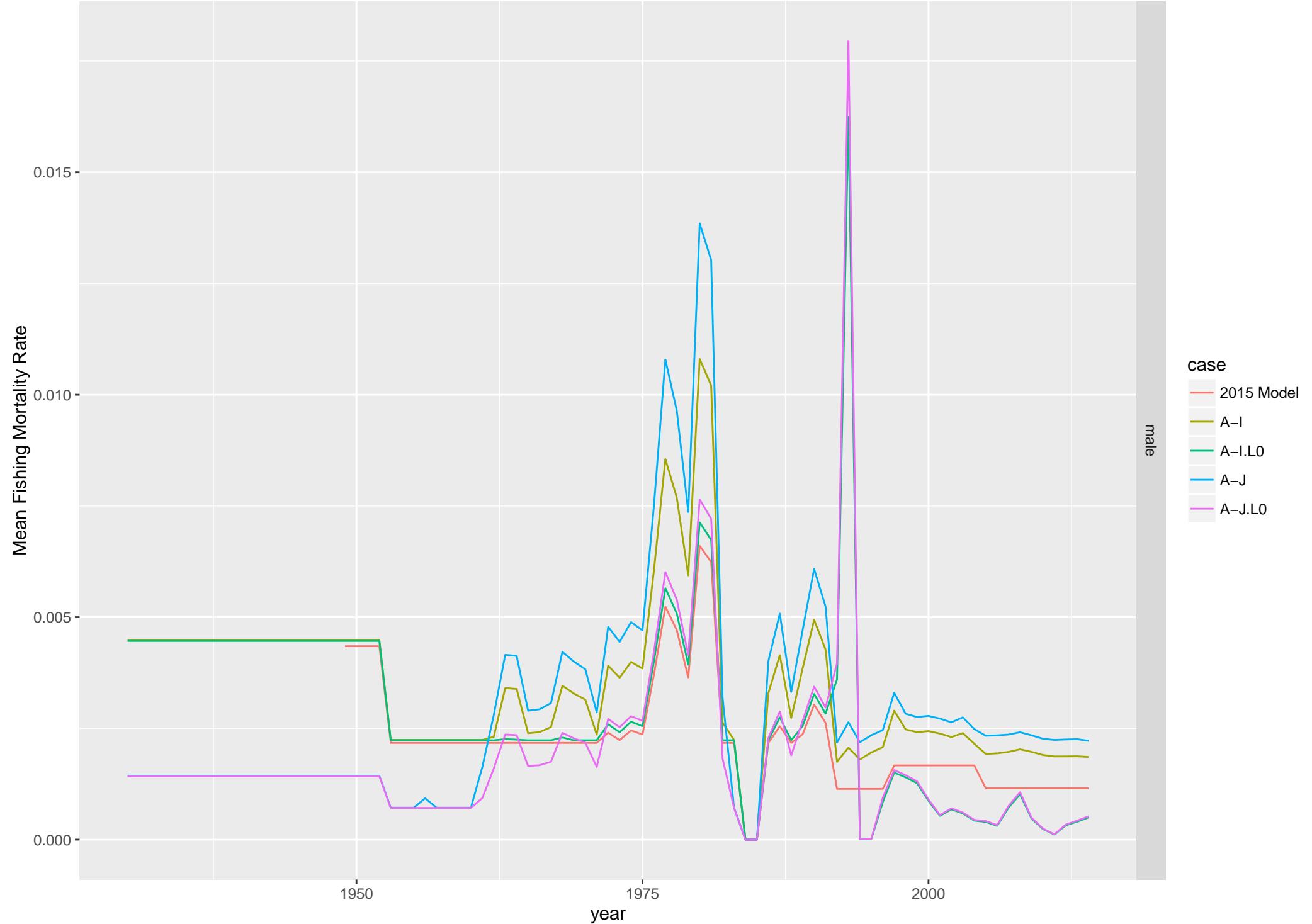
# BBRKC bycatch mortality rate on males



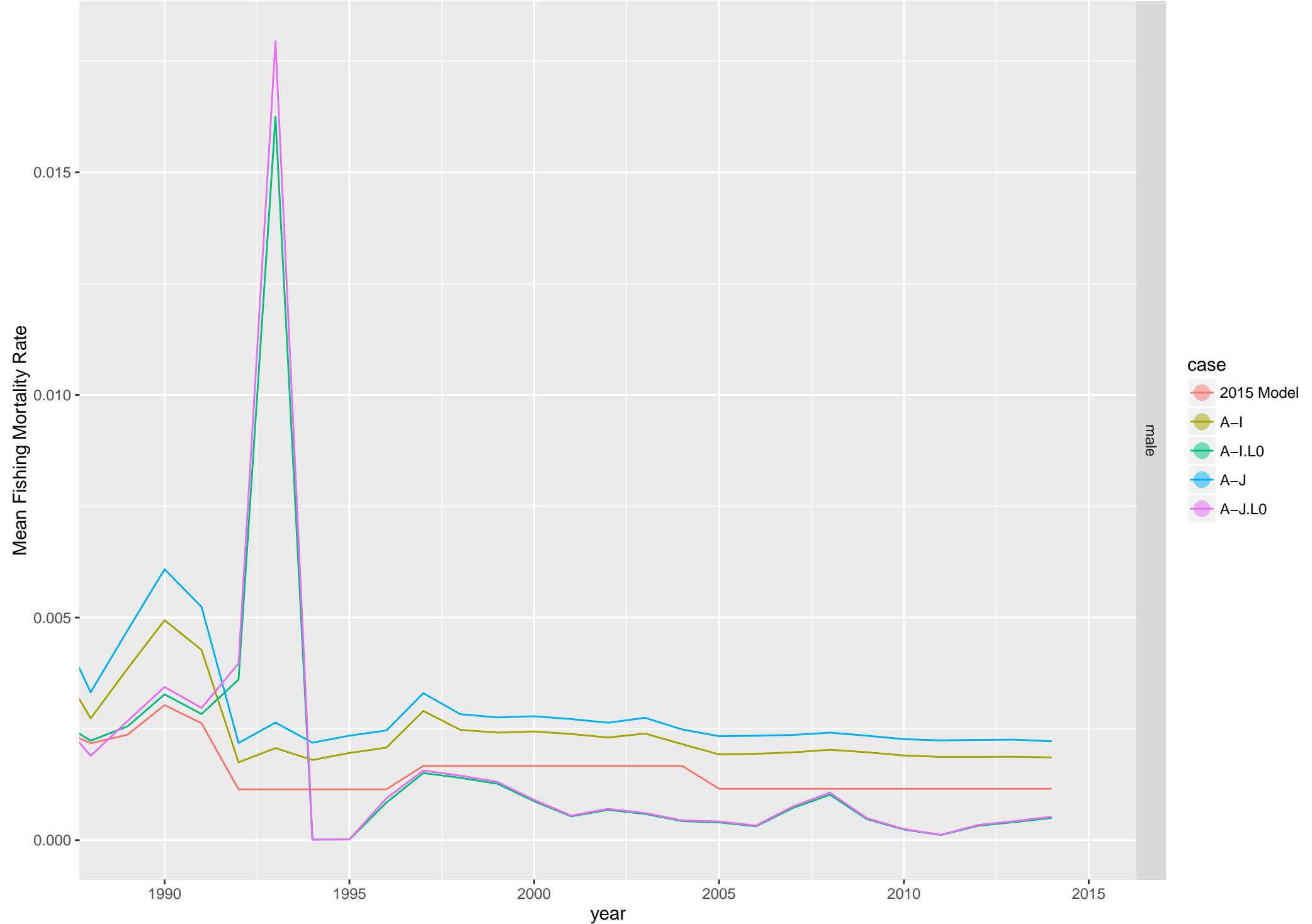
# BBRKC bycatch mortality rate on males



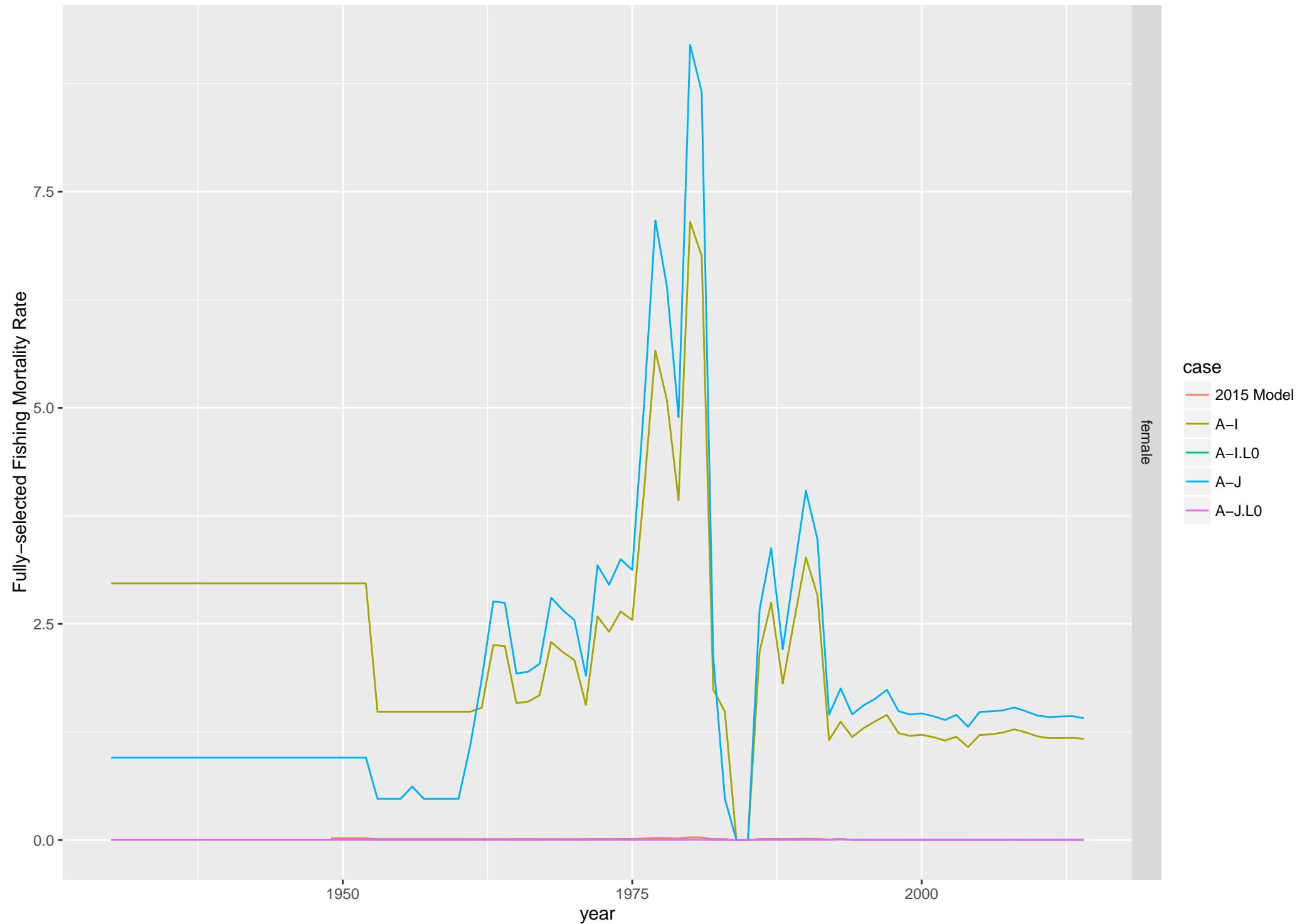
# BBRKC bycatch mortality rate on males



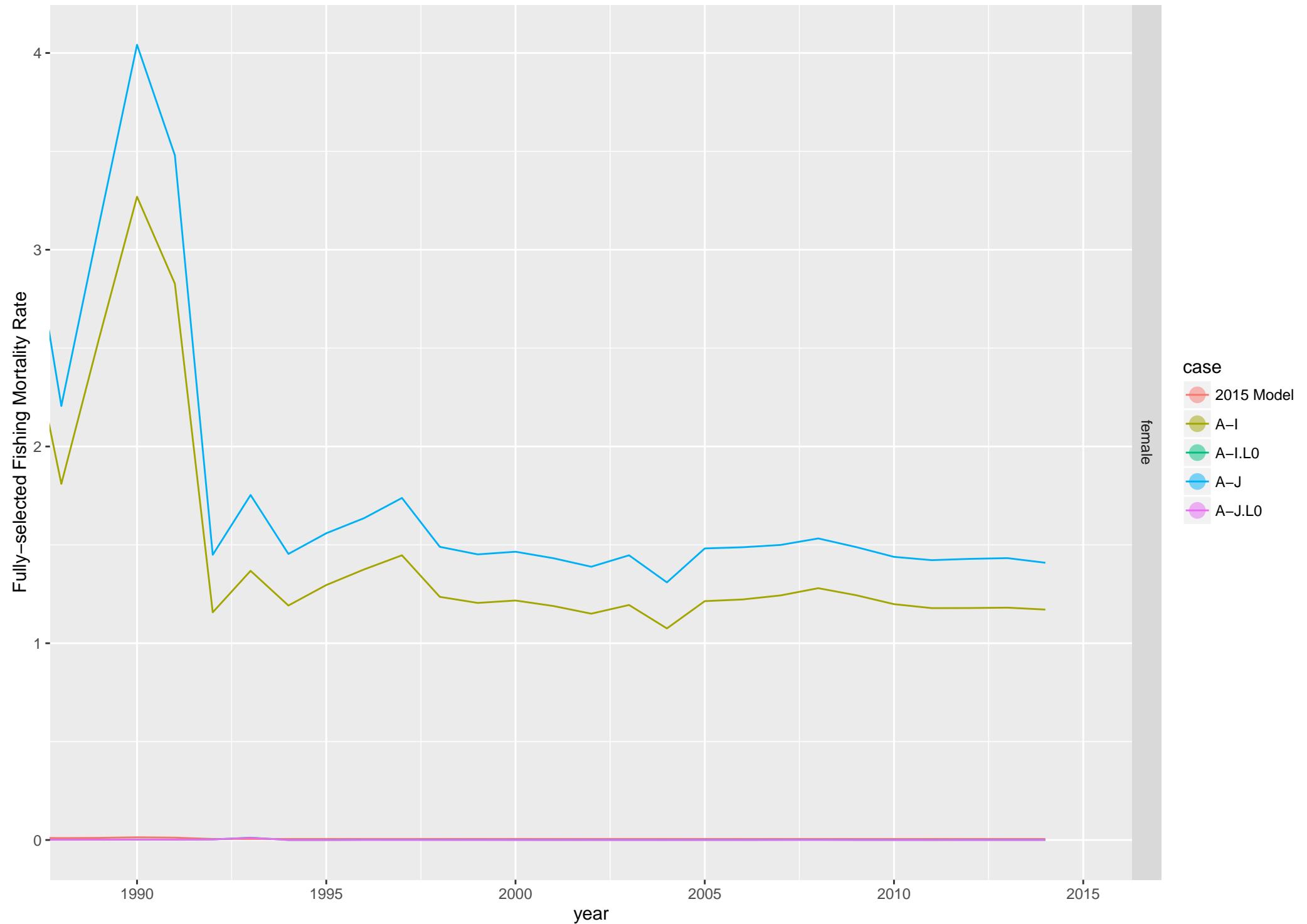
# BBRKC bycatch mortality rate on males



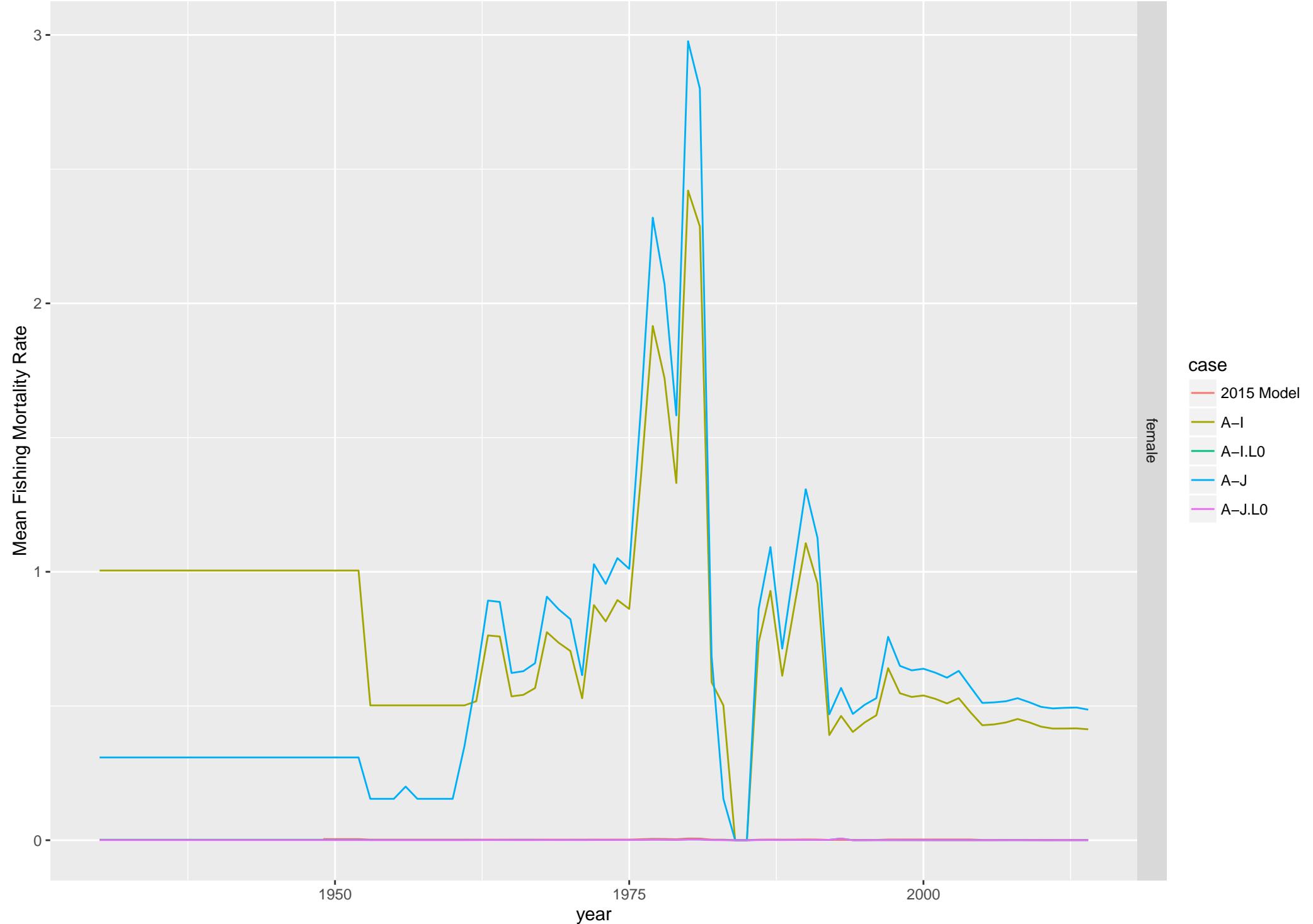
# BBRKC bycatch mortality rate on females



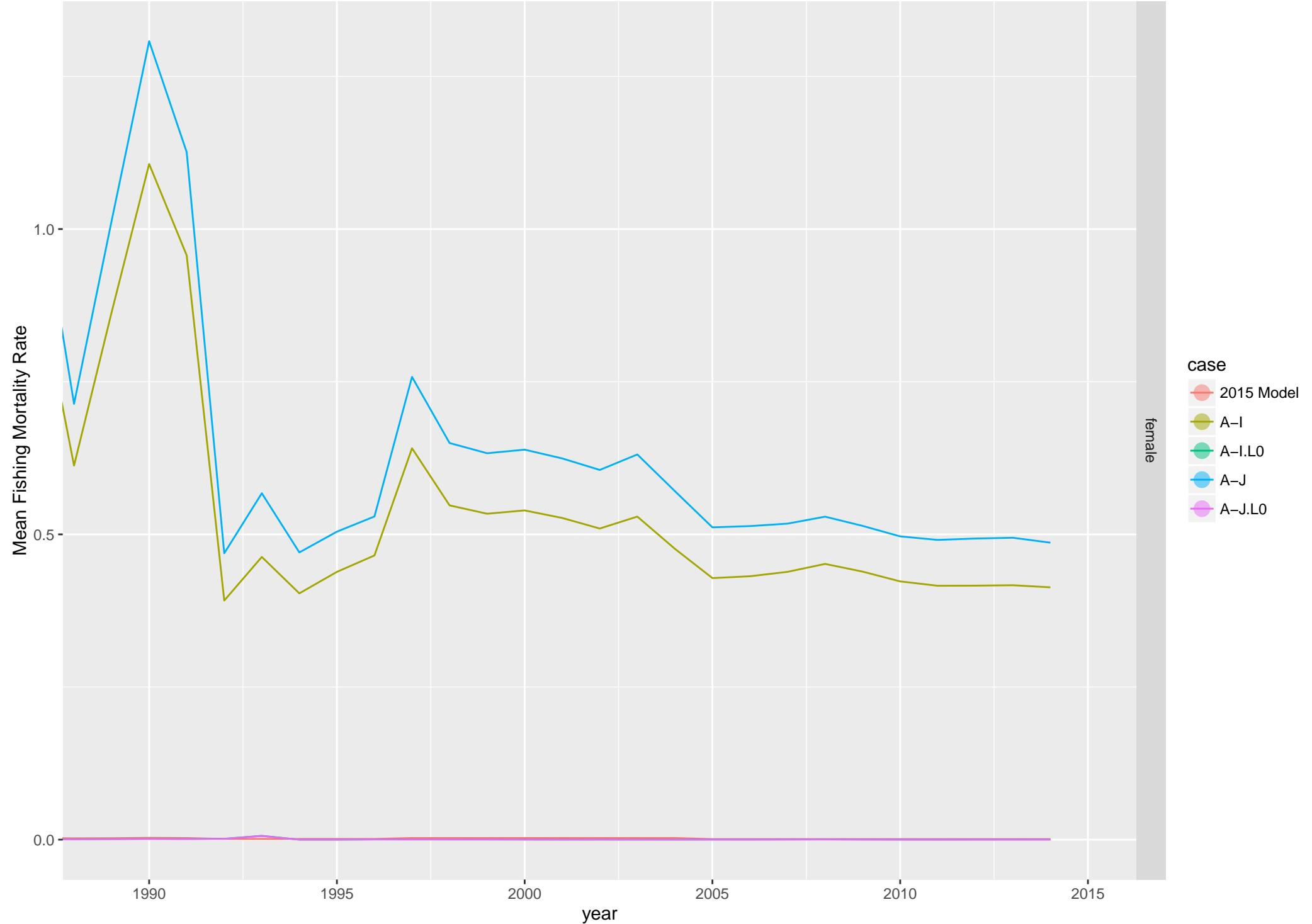
# BBRKC bycatch mortality rate on females



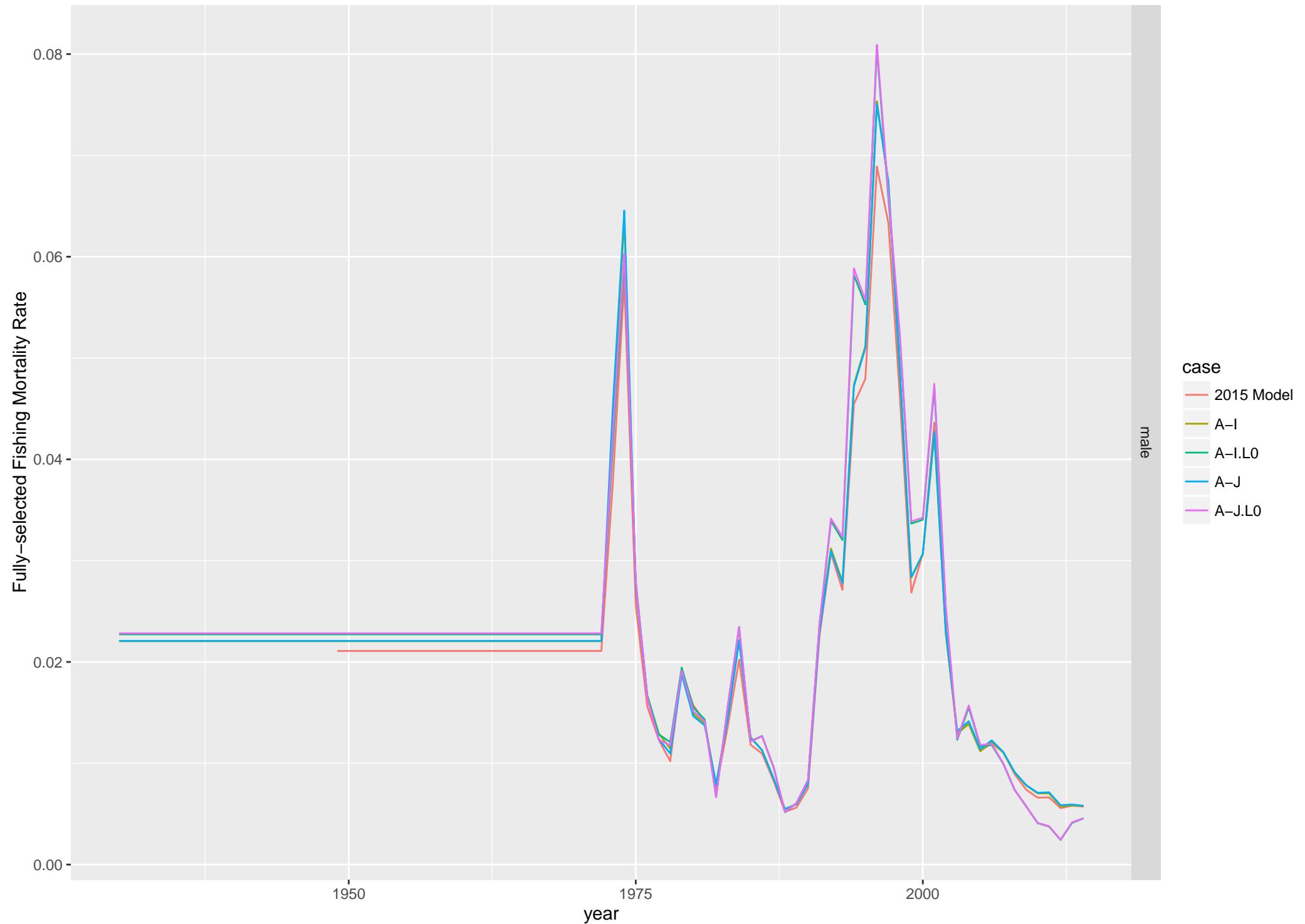
# BBRKC bycatch mortality rate on females



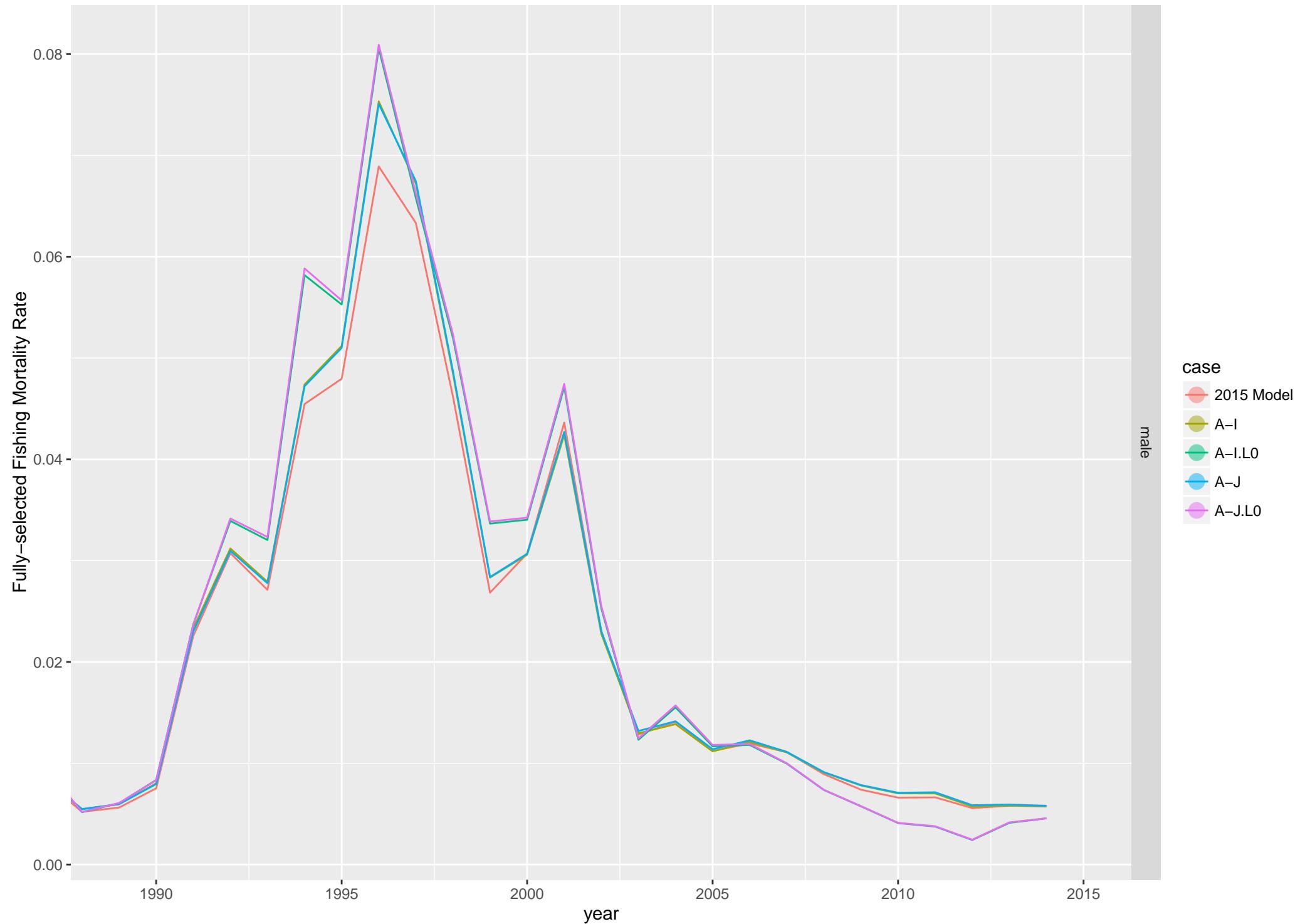
# BBRKC bycatch mortality rate on females



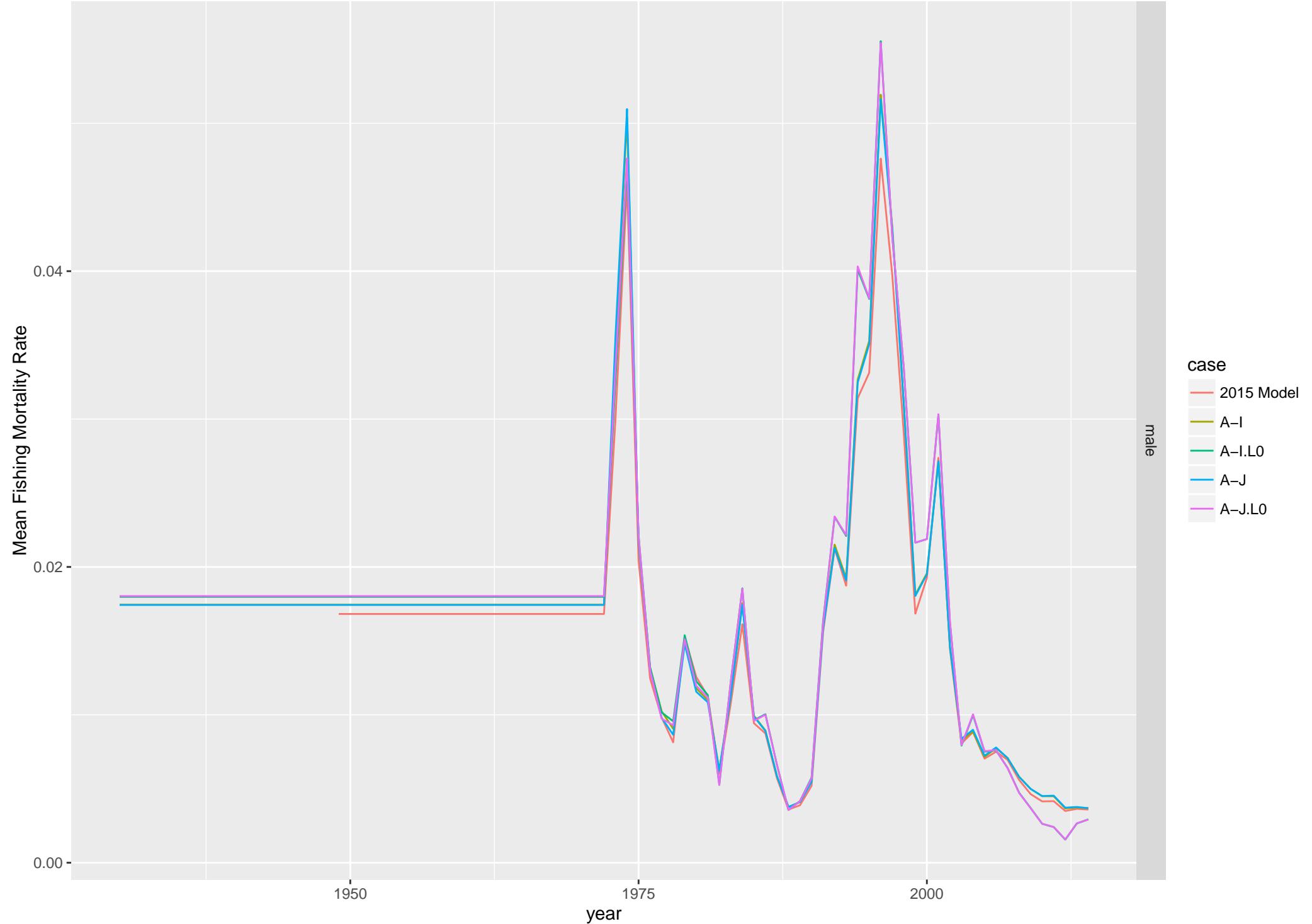
# Groundfish bycatch fishing mortality



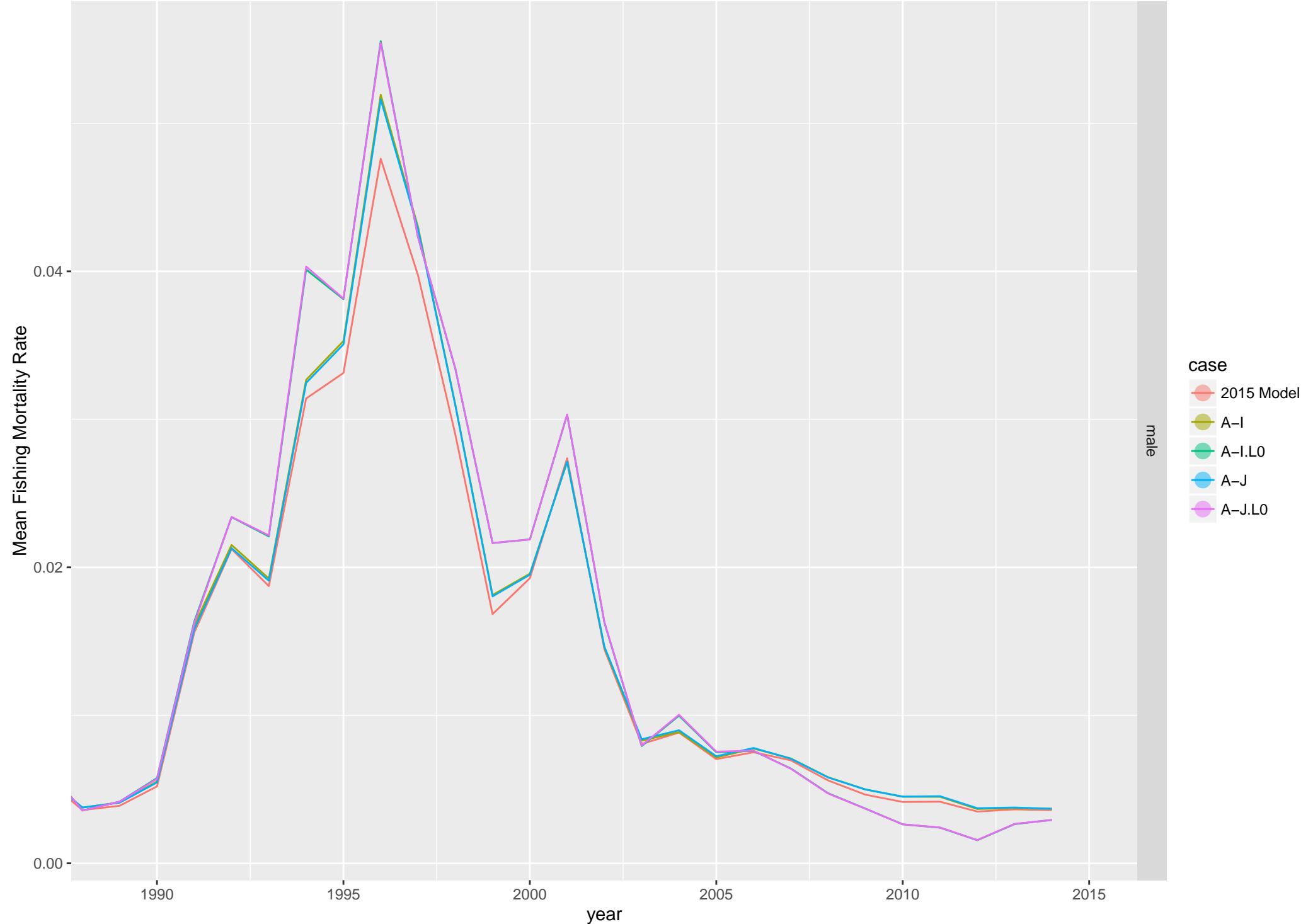
# Groundfish bycatch fishing mortality

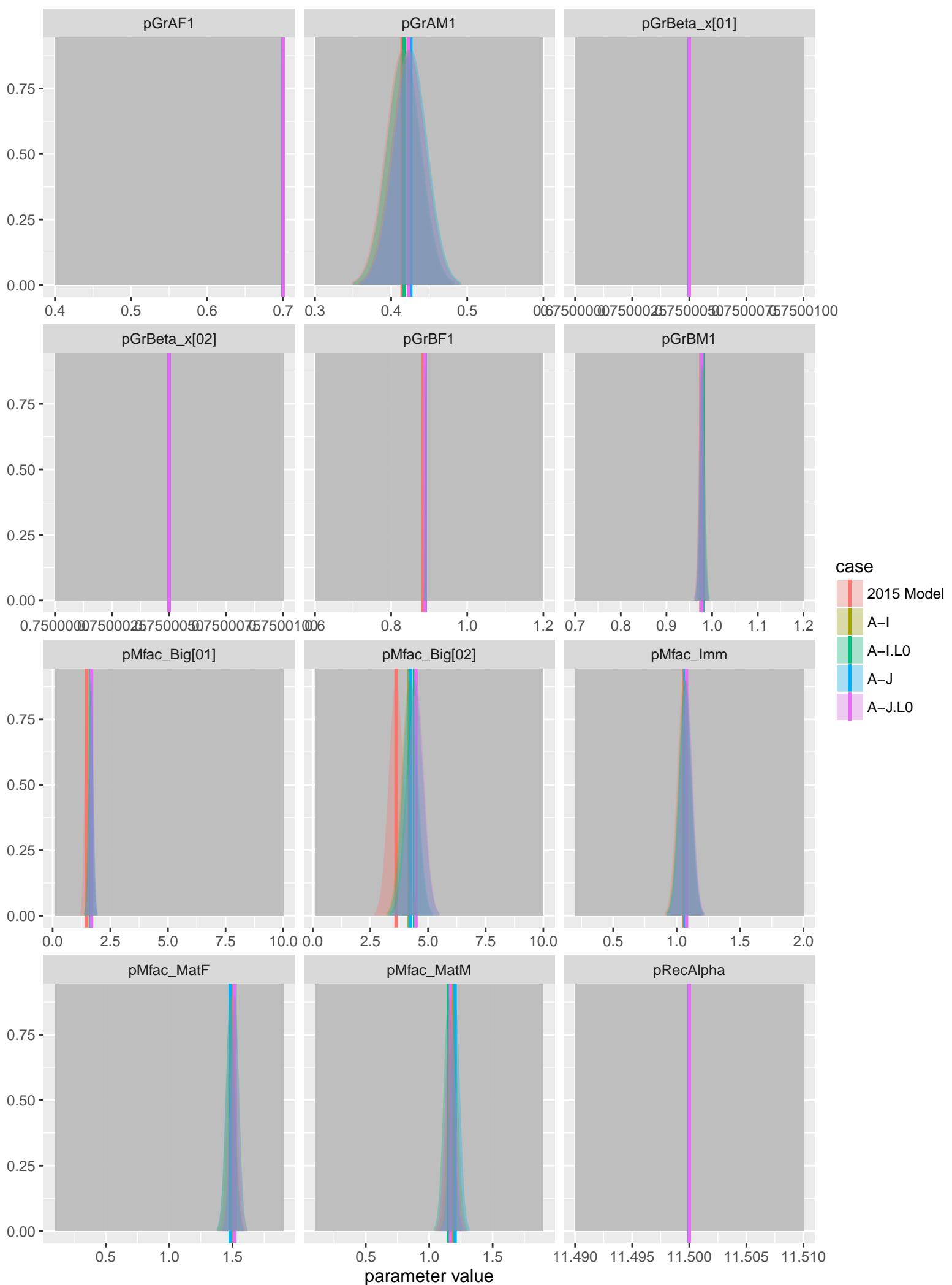


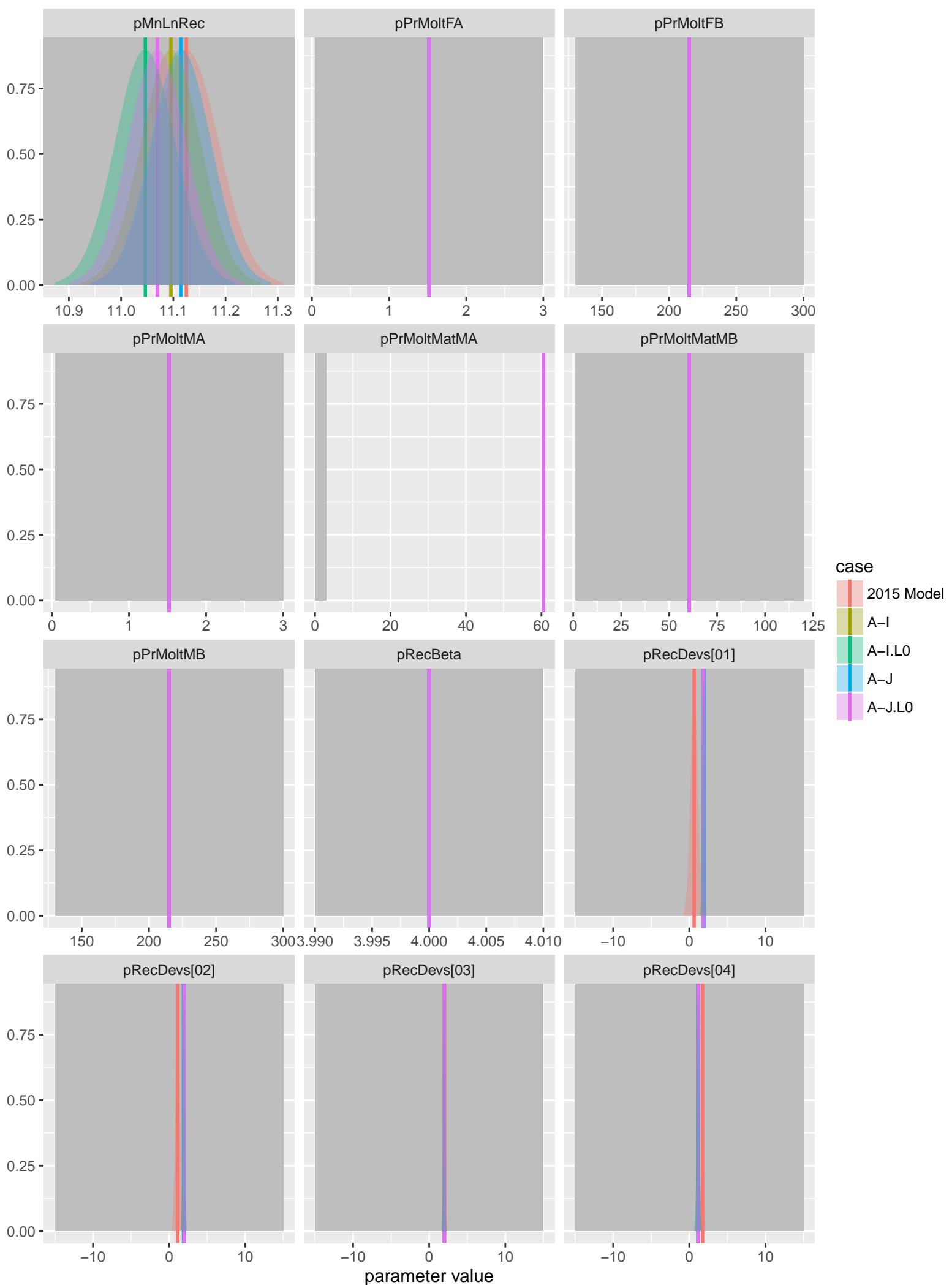
# Groundfish bycatch fishing mortality

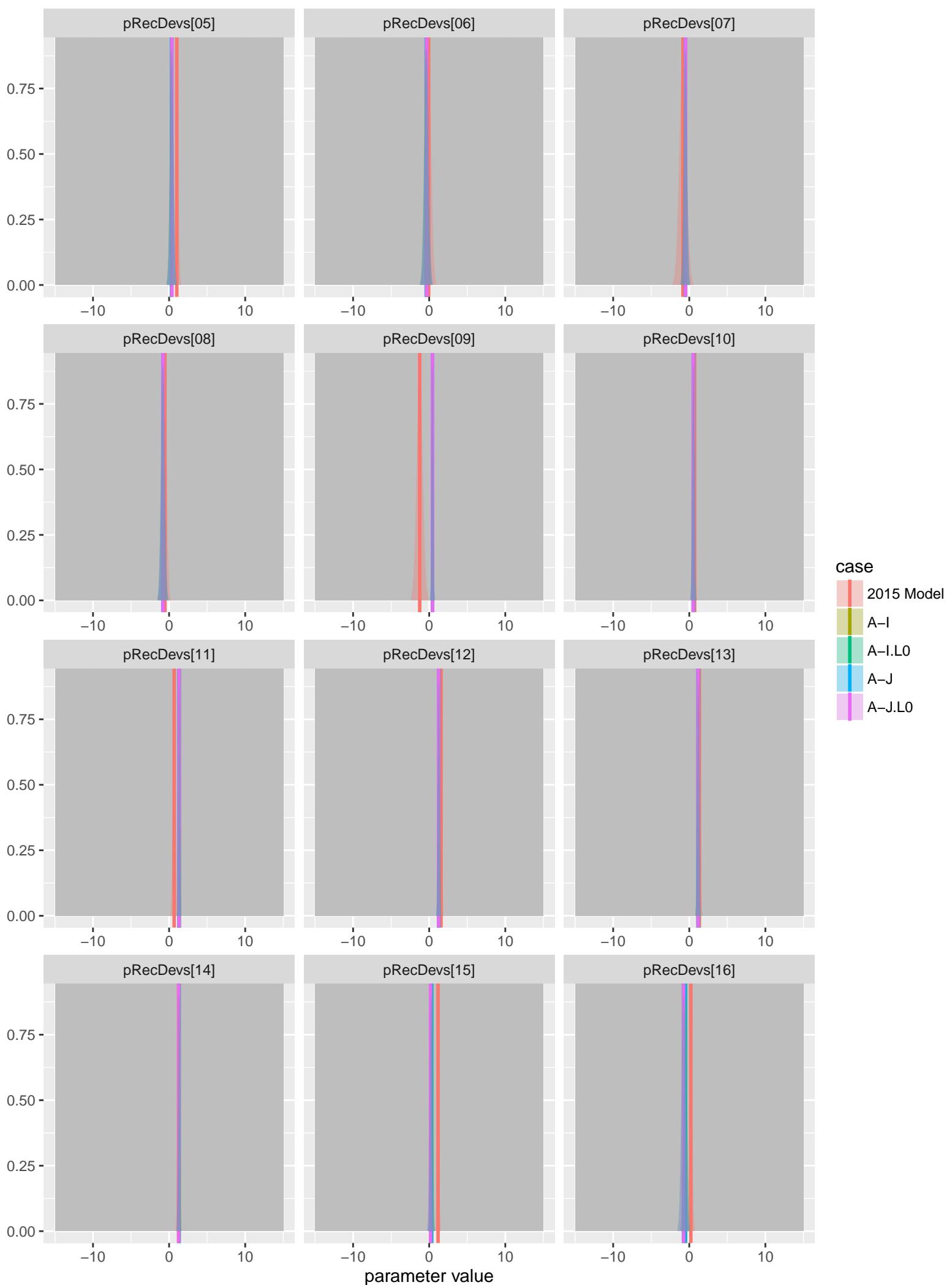


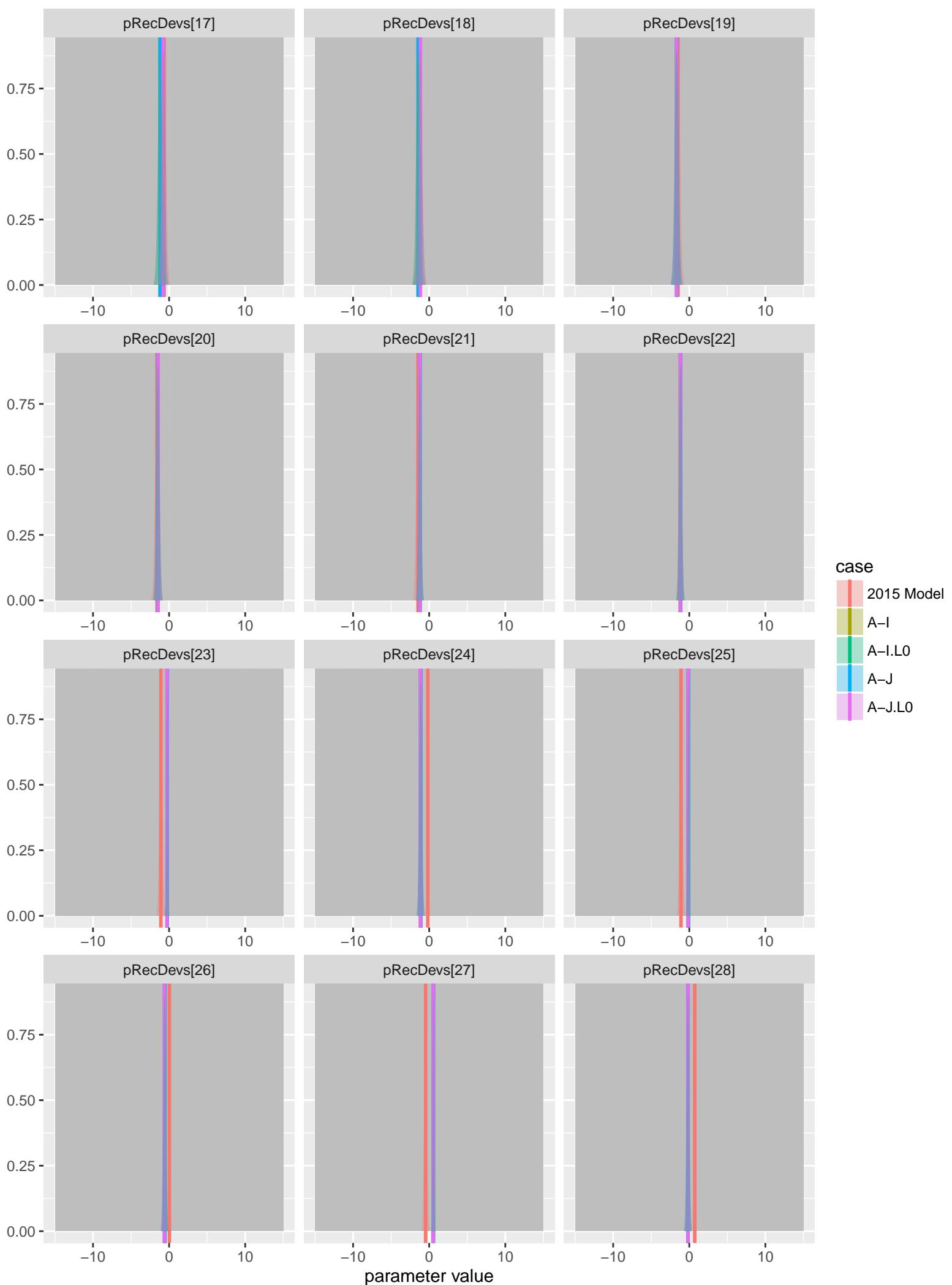
# Groundfish bycatch fishing mortality

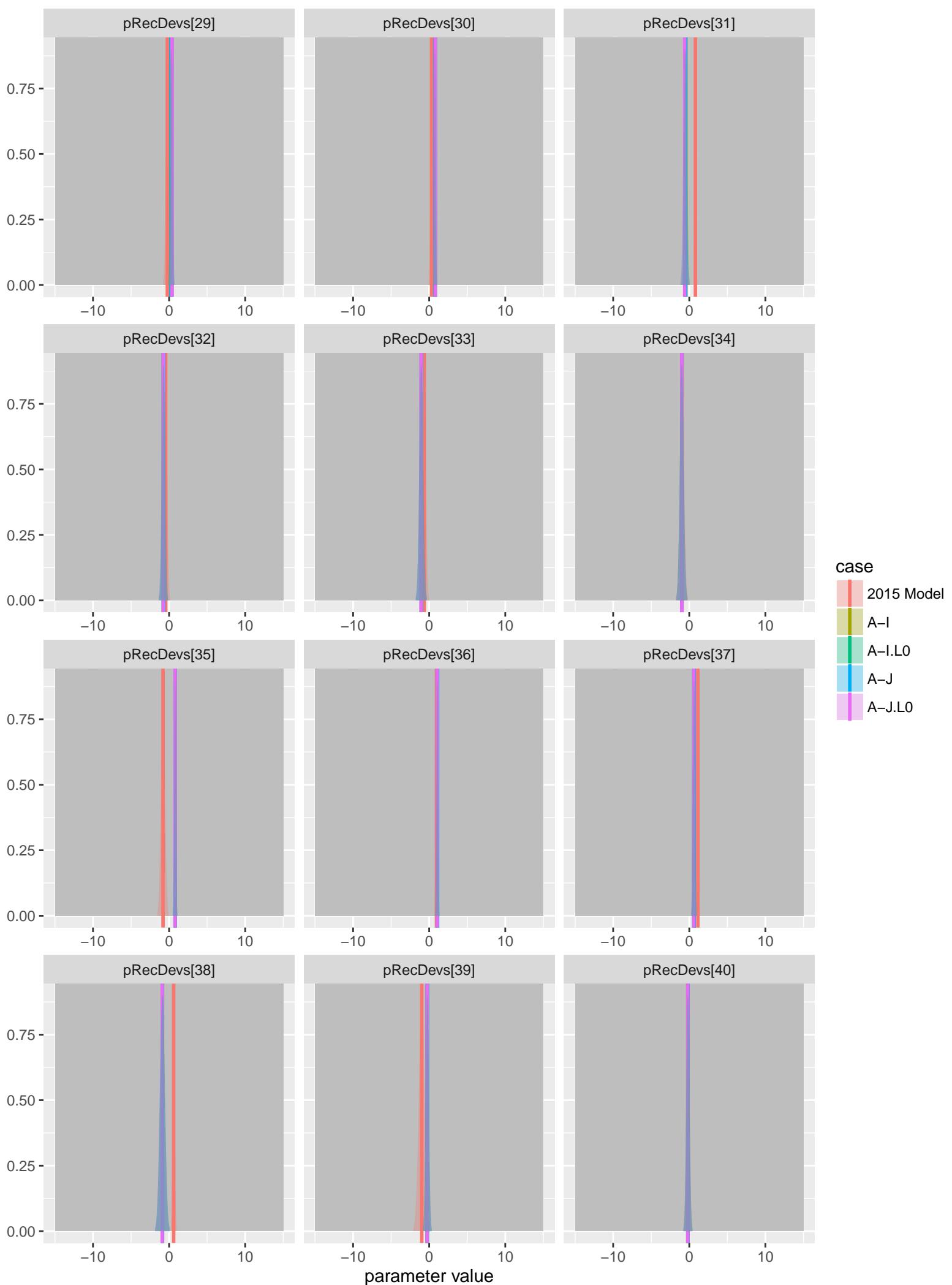


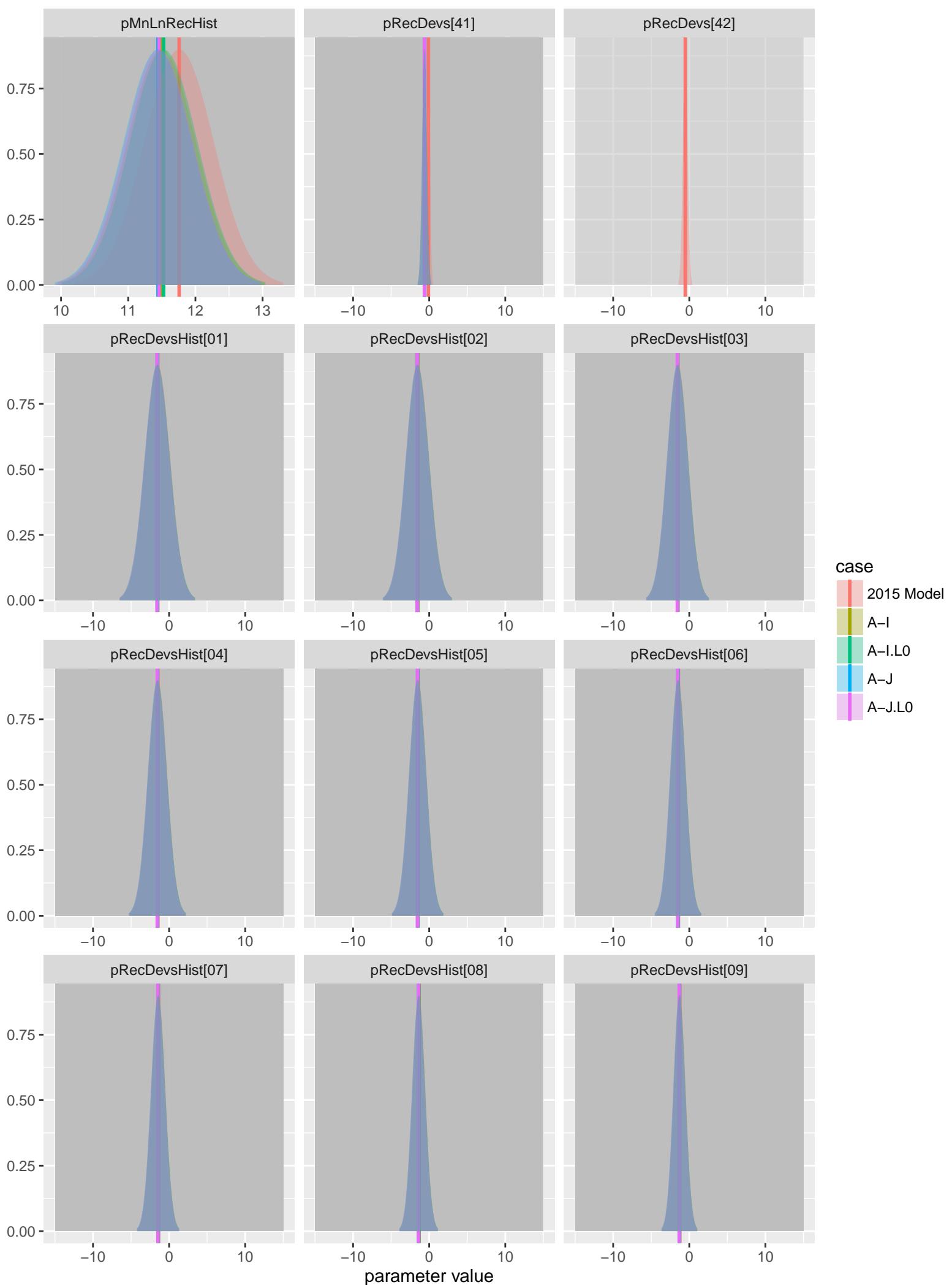


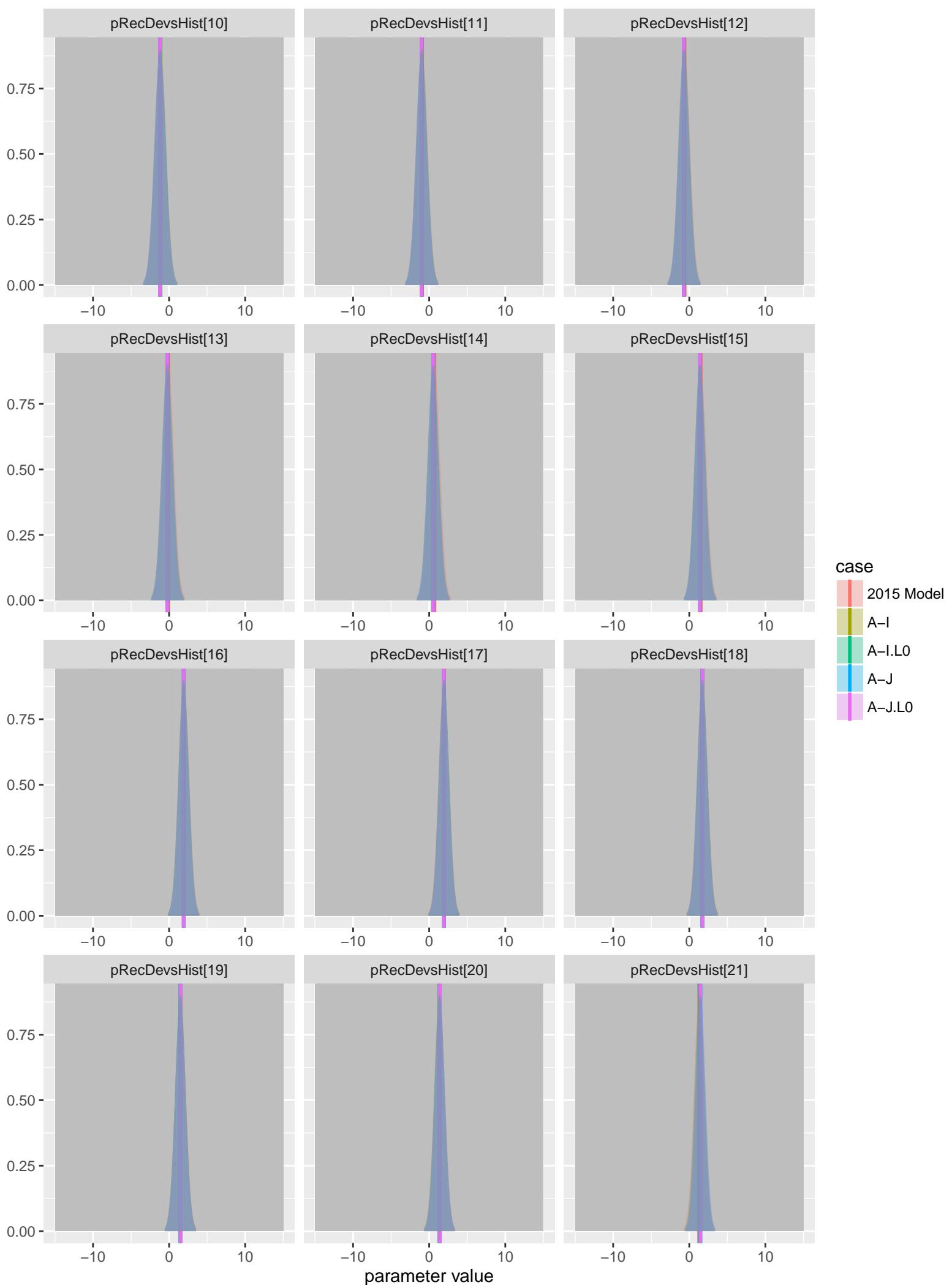


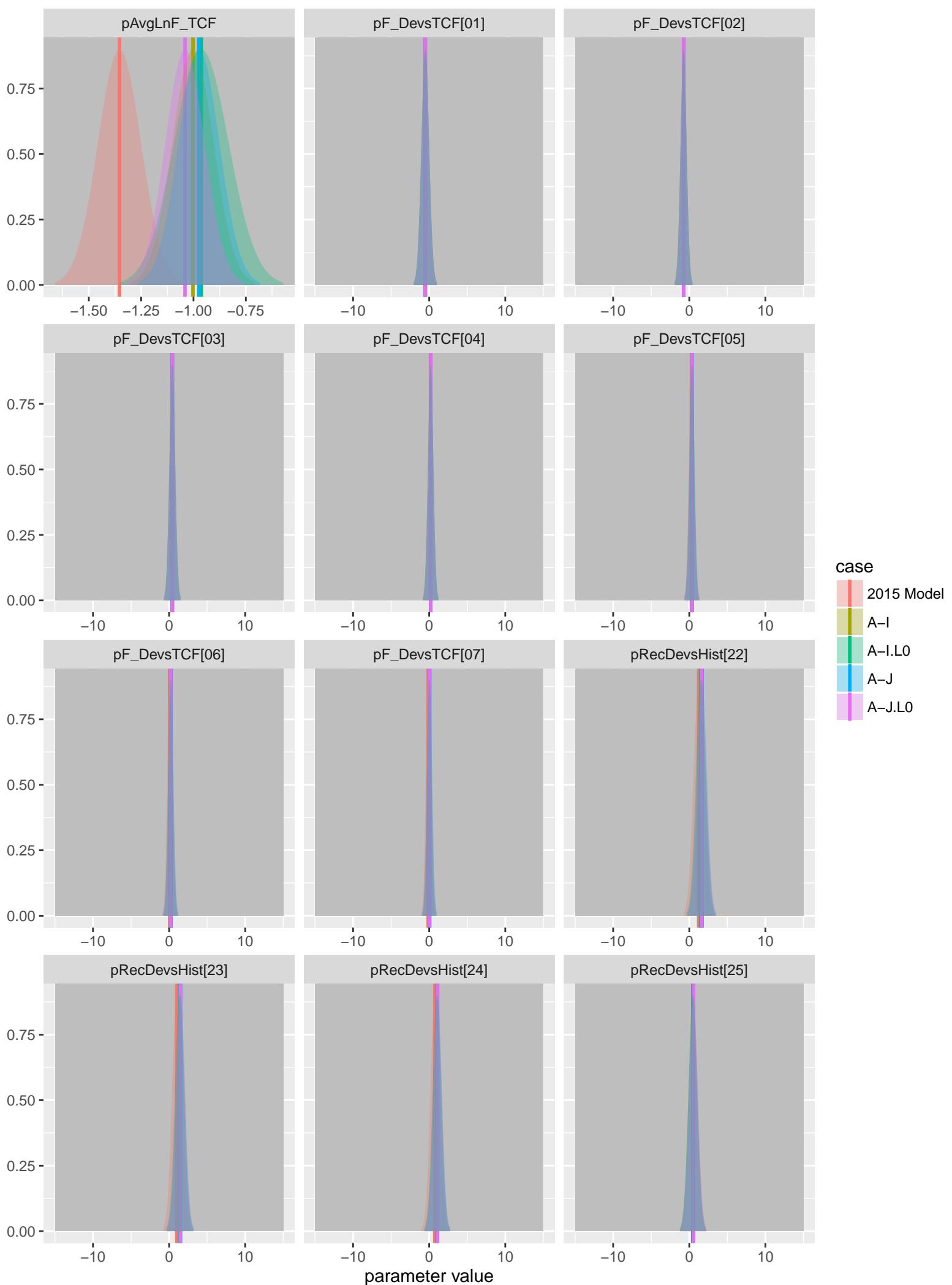


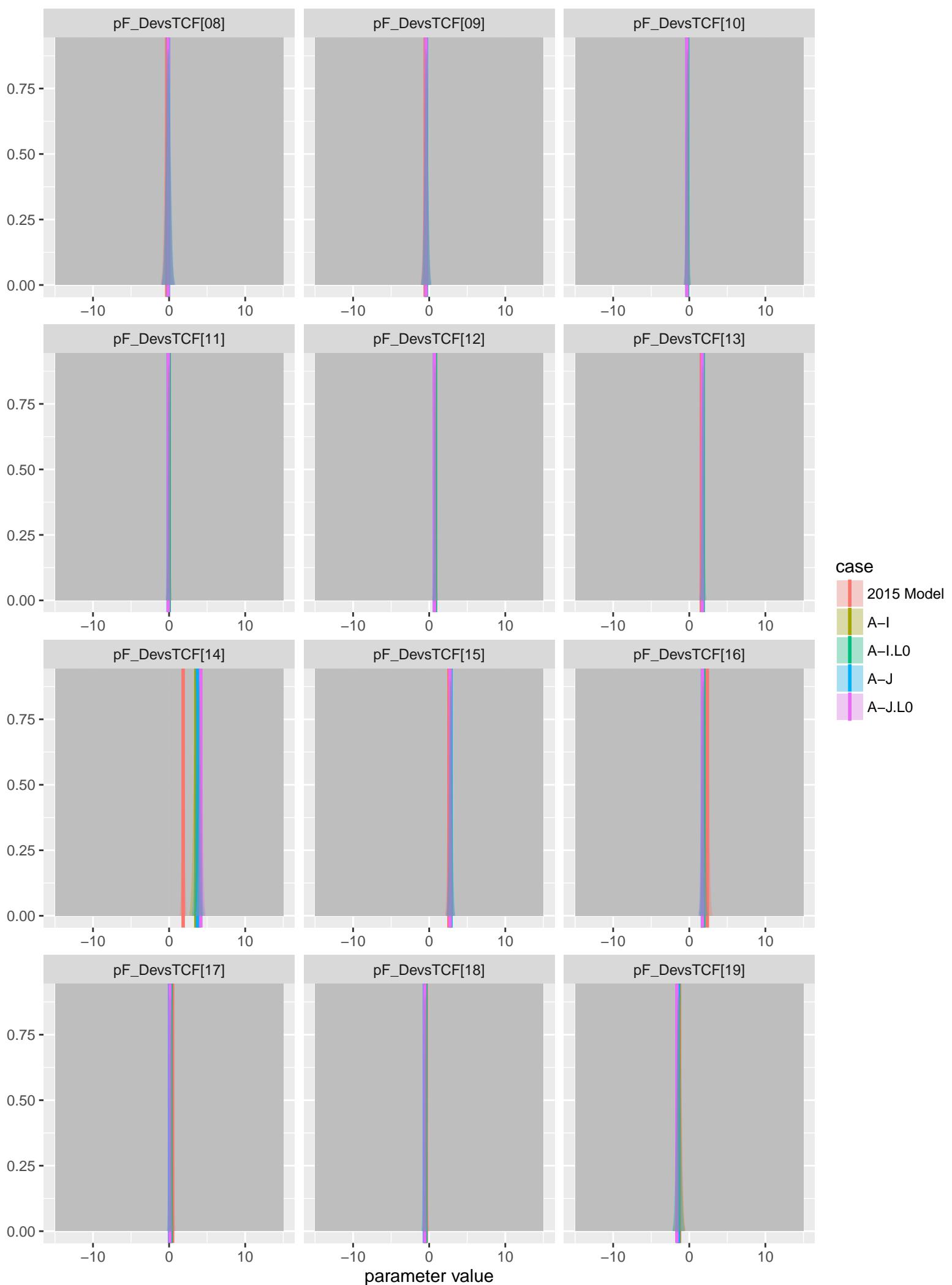


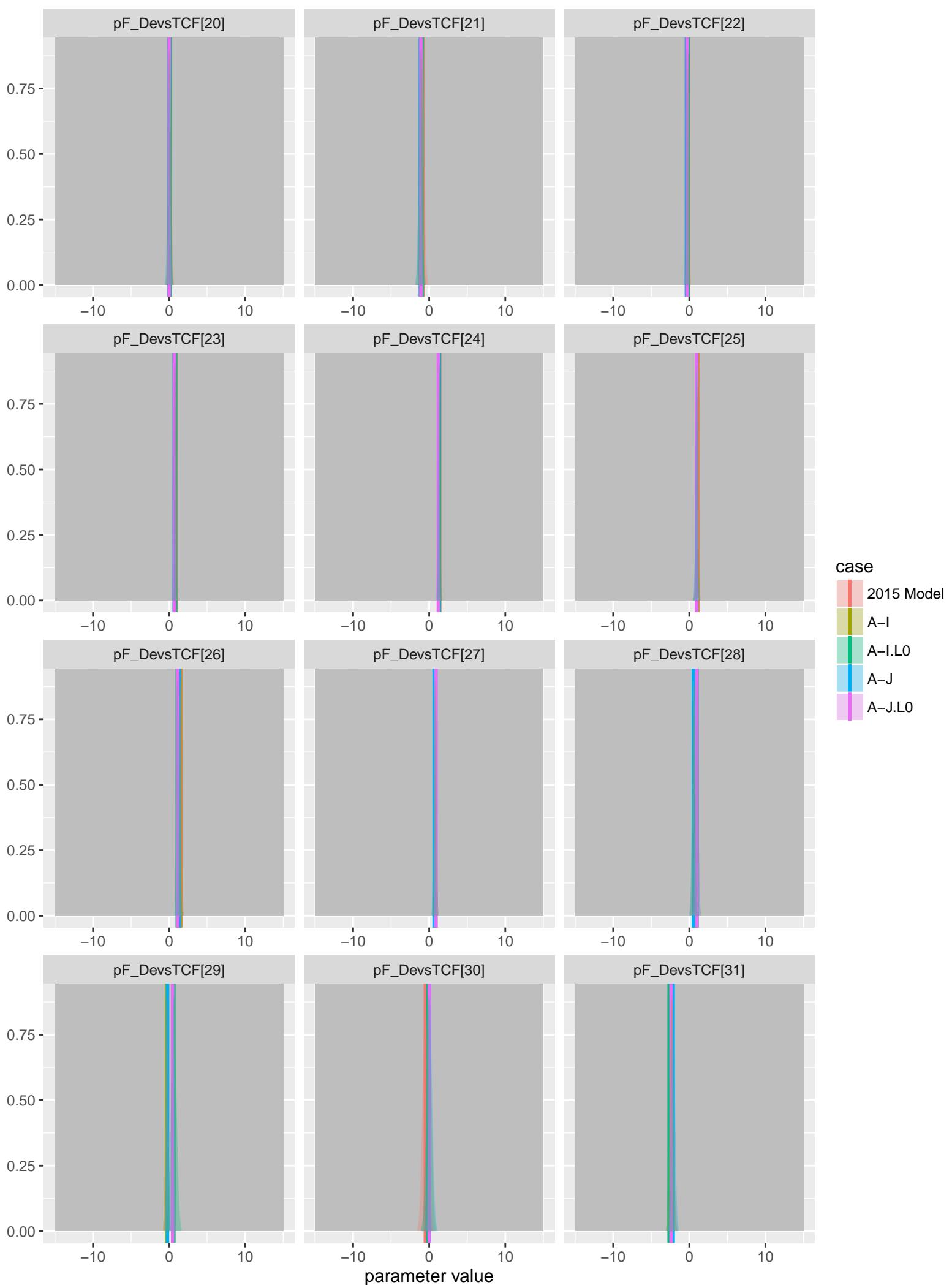


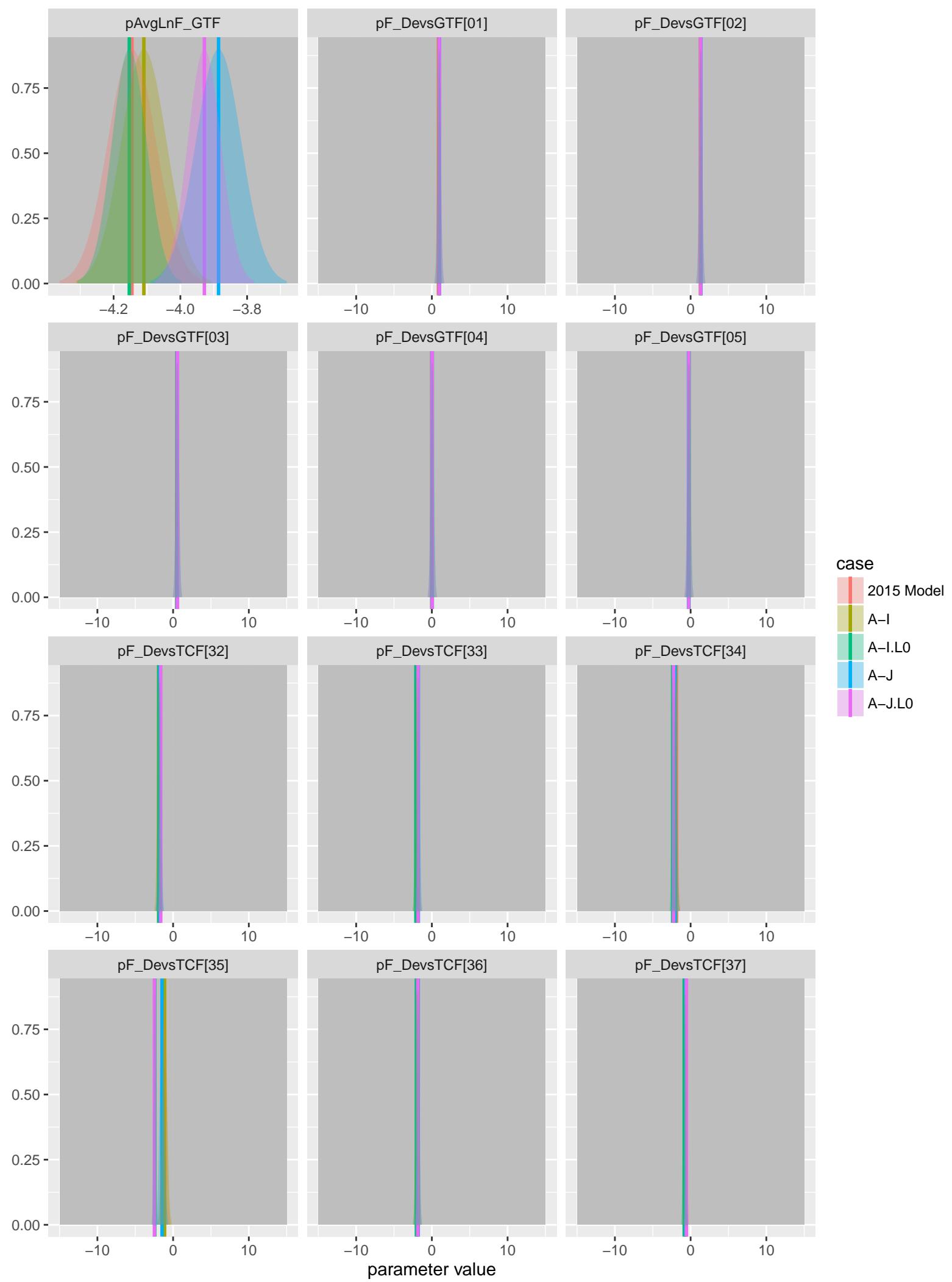


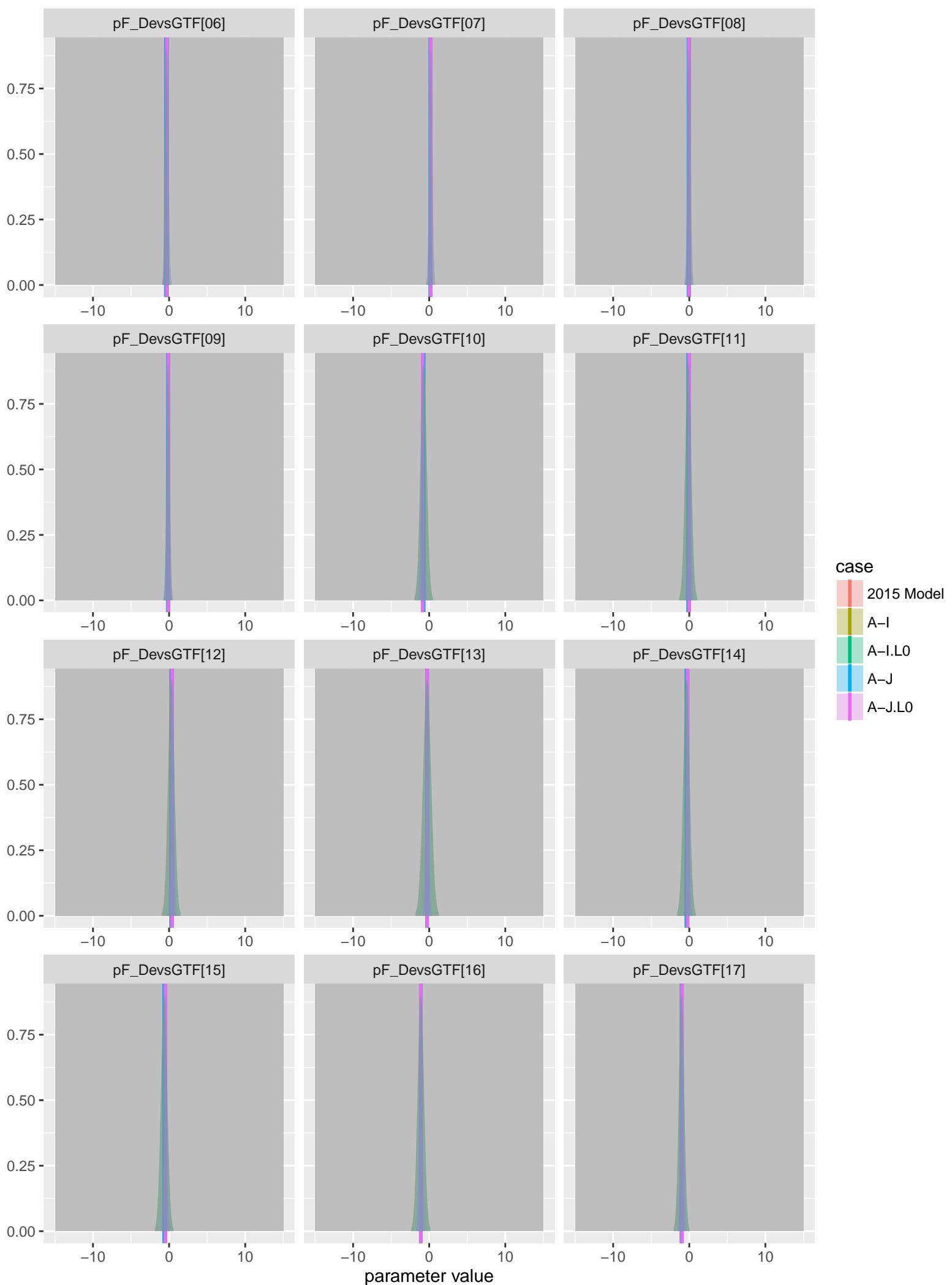


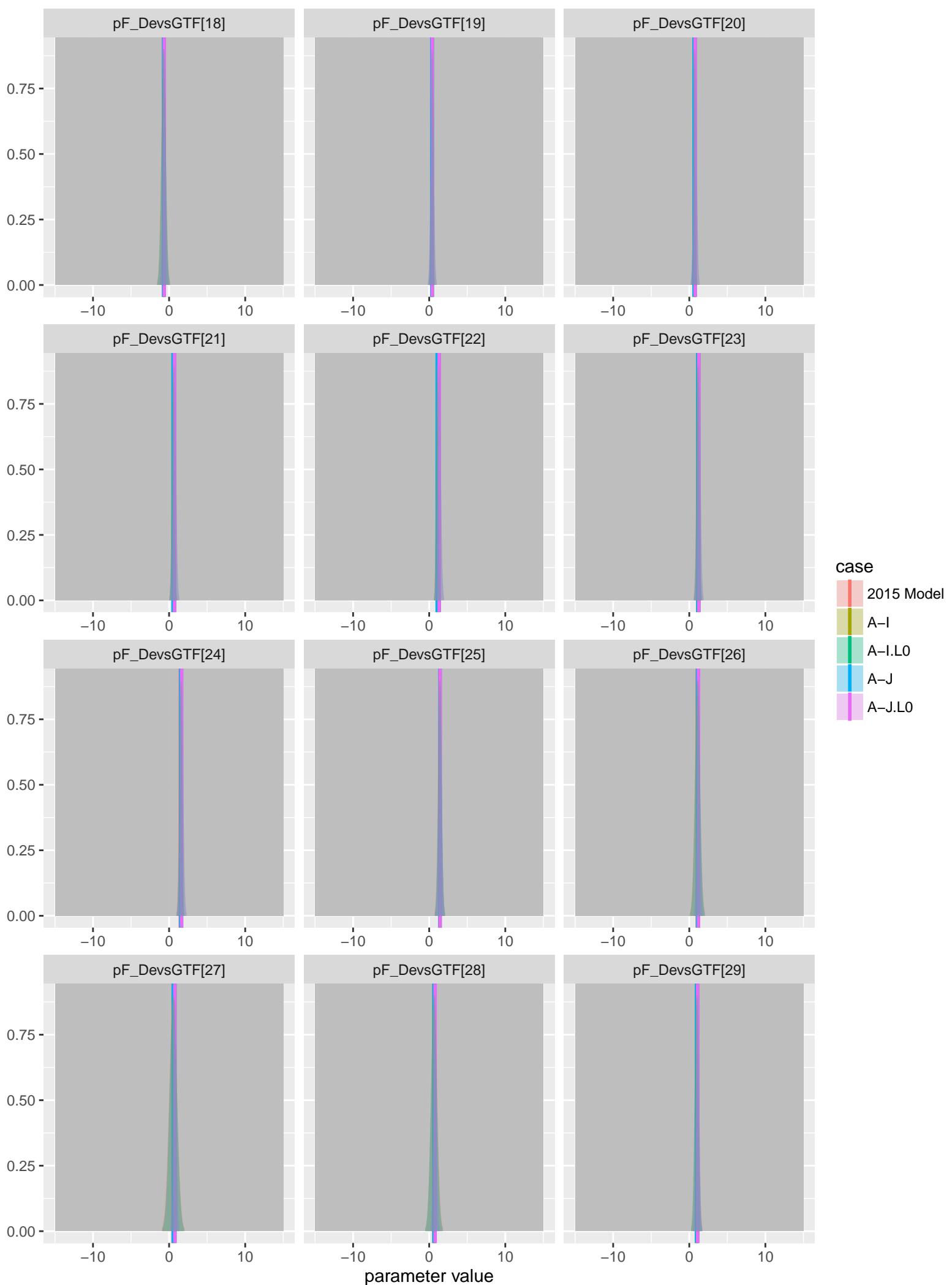


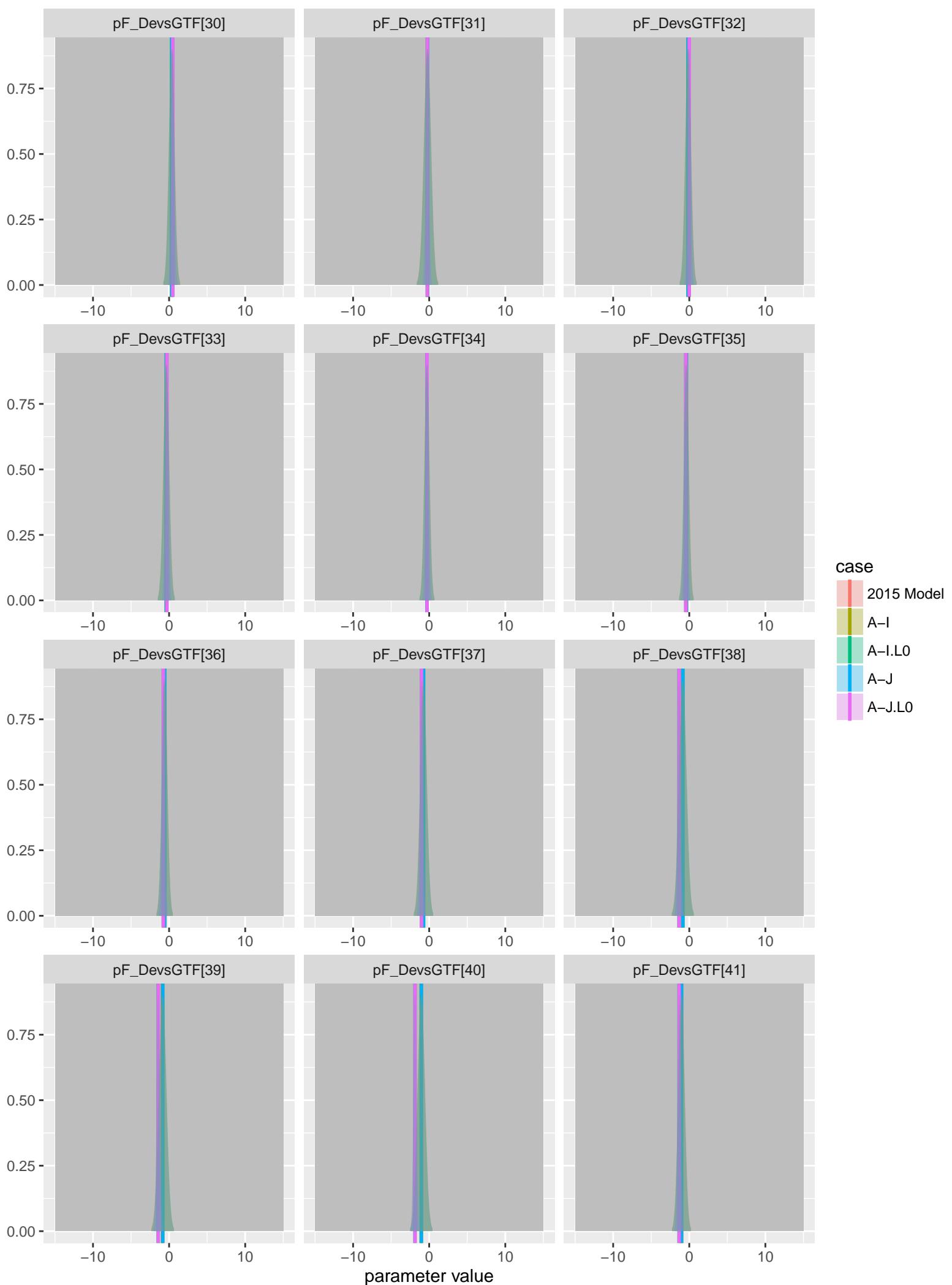


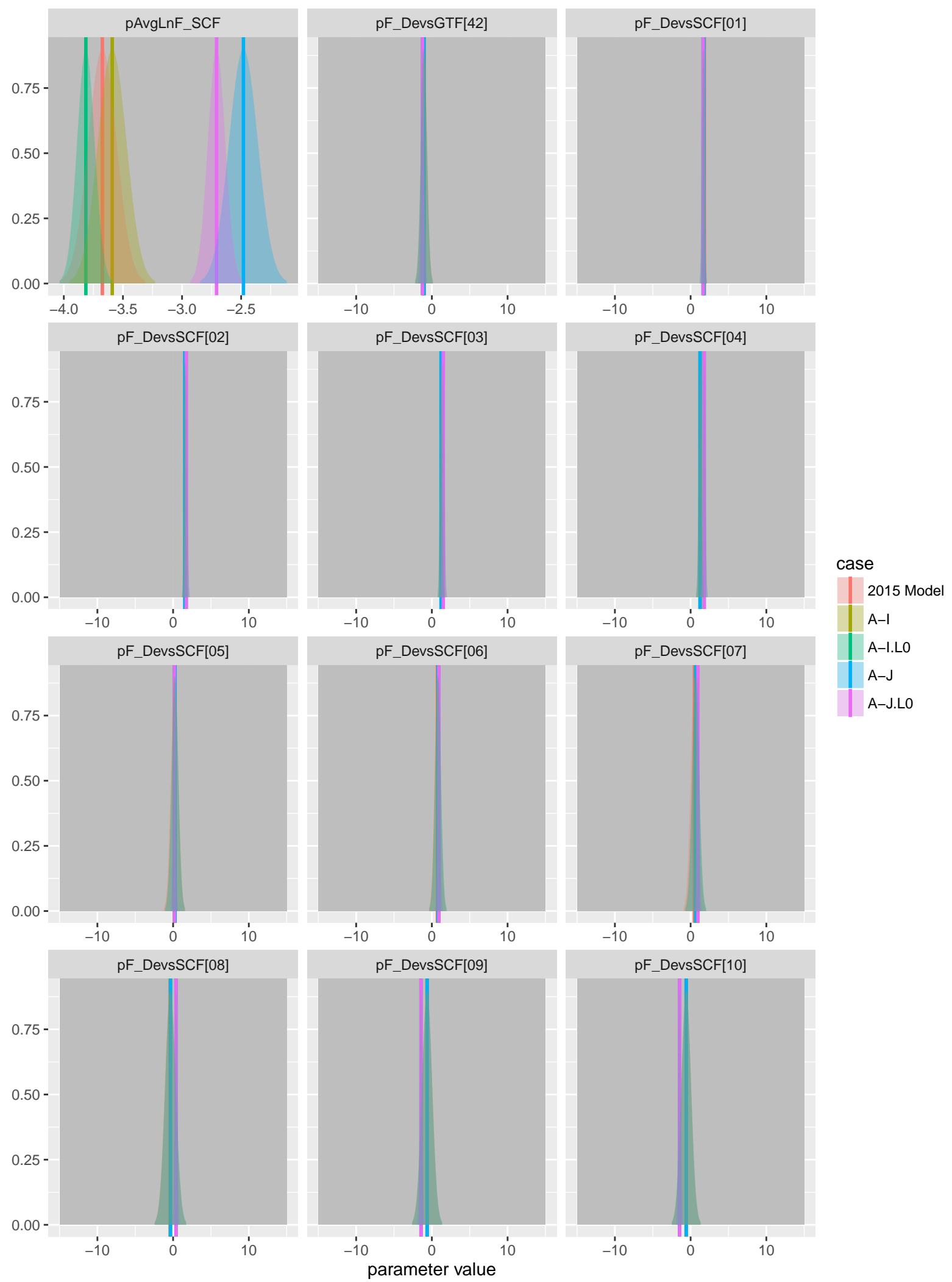


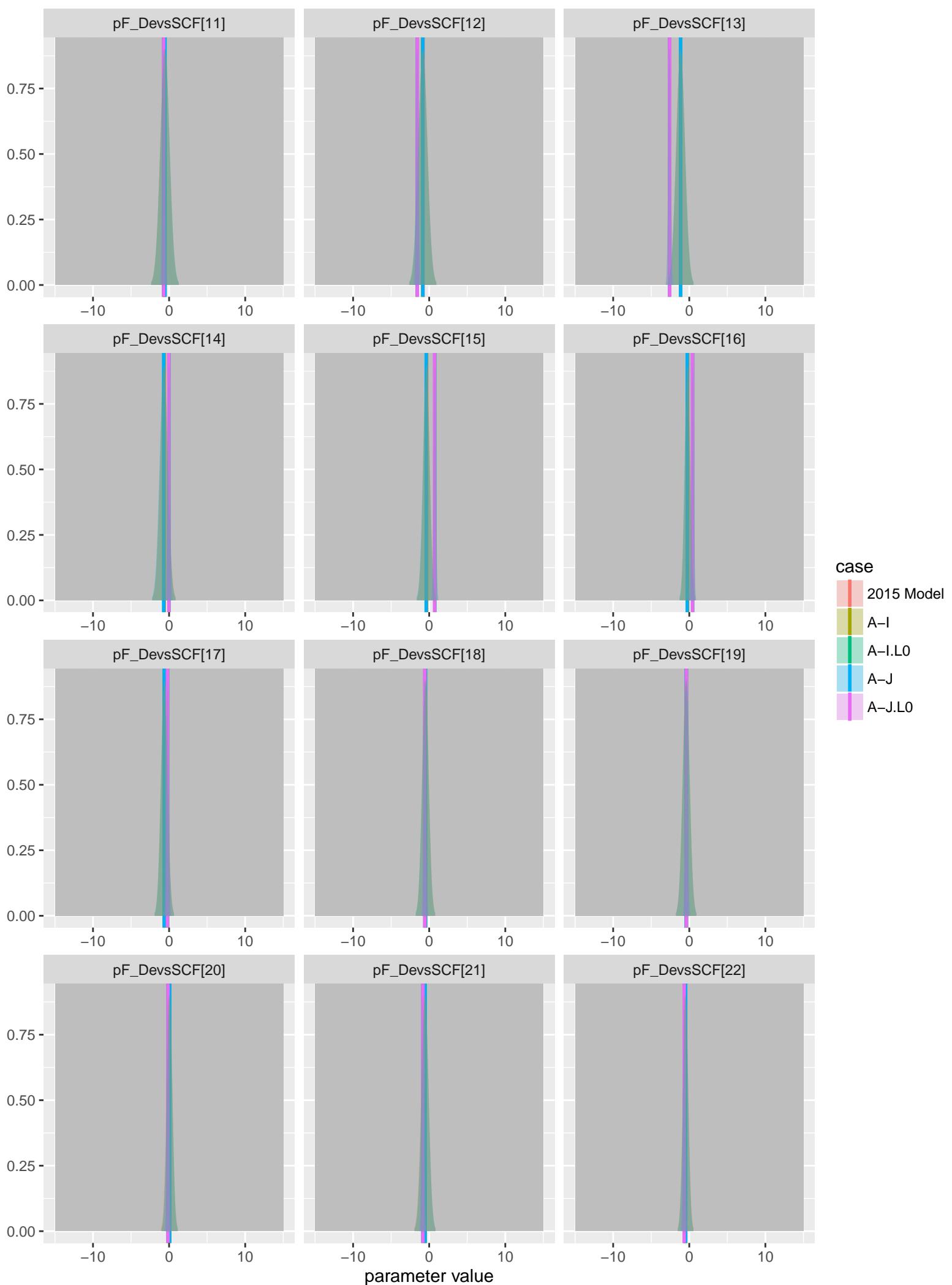


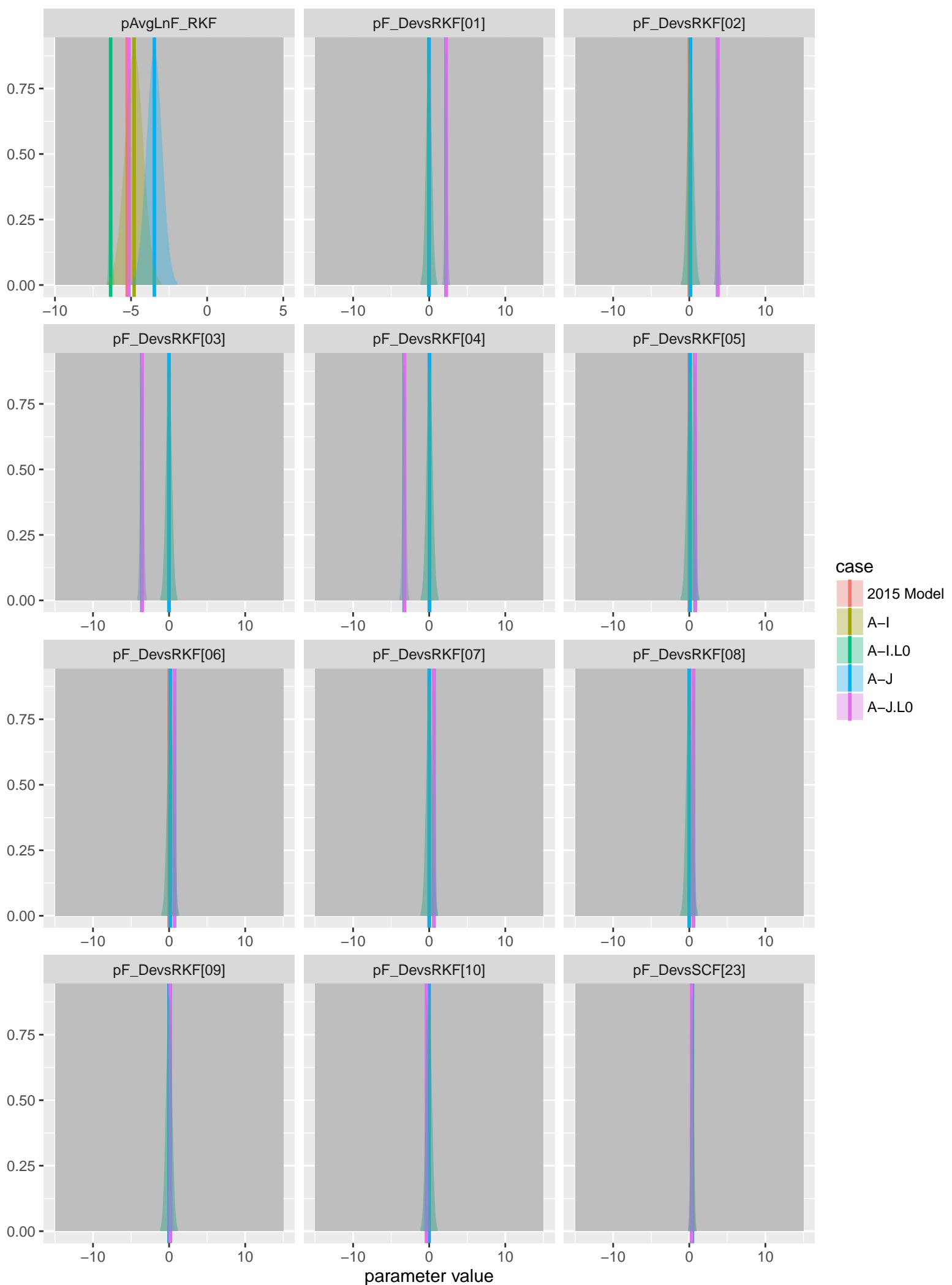


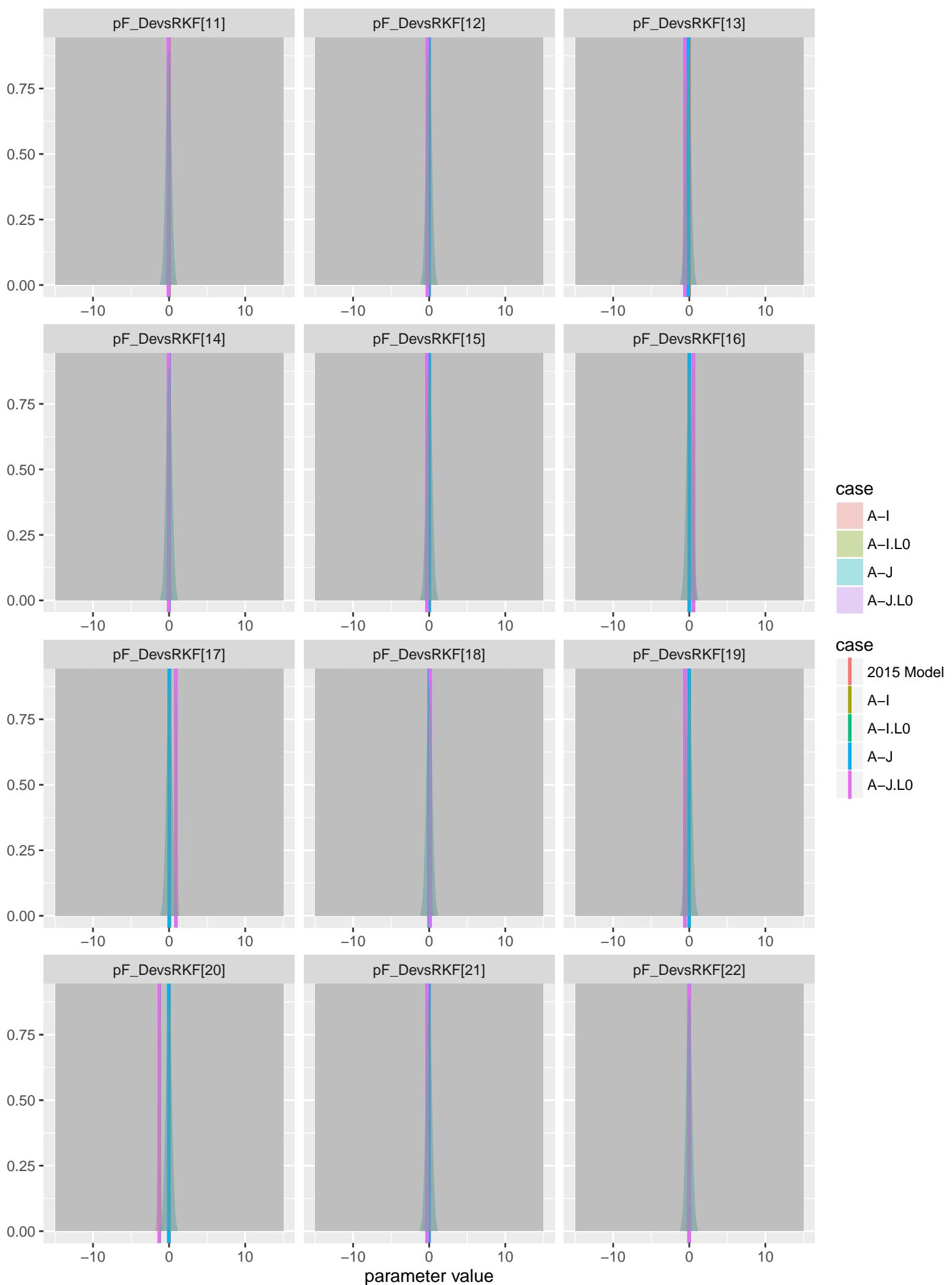


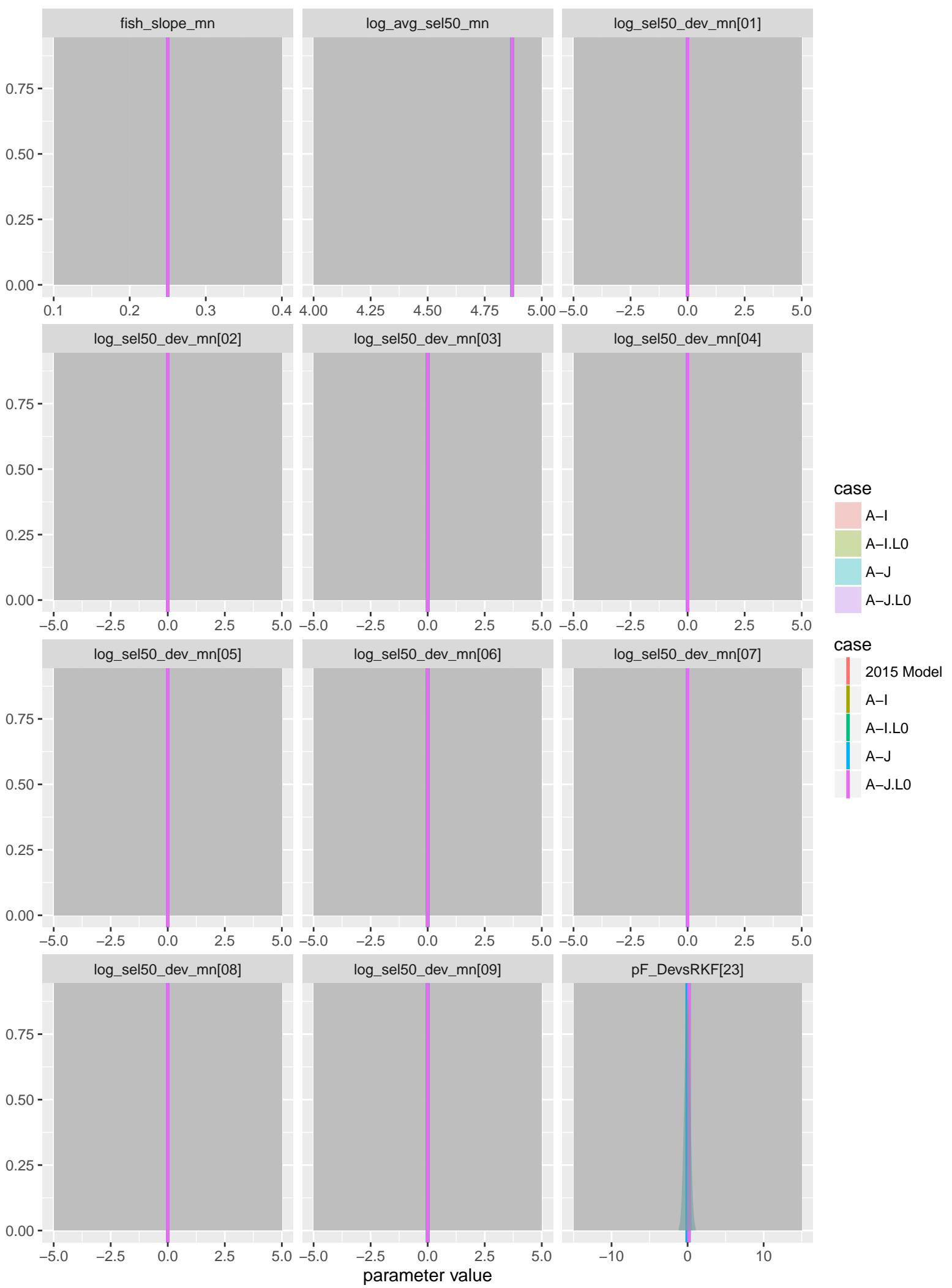


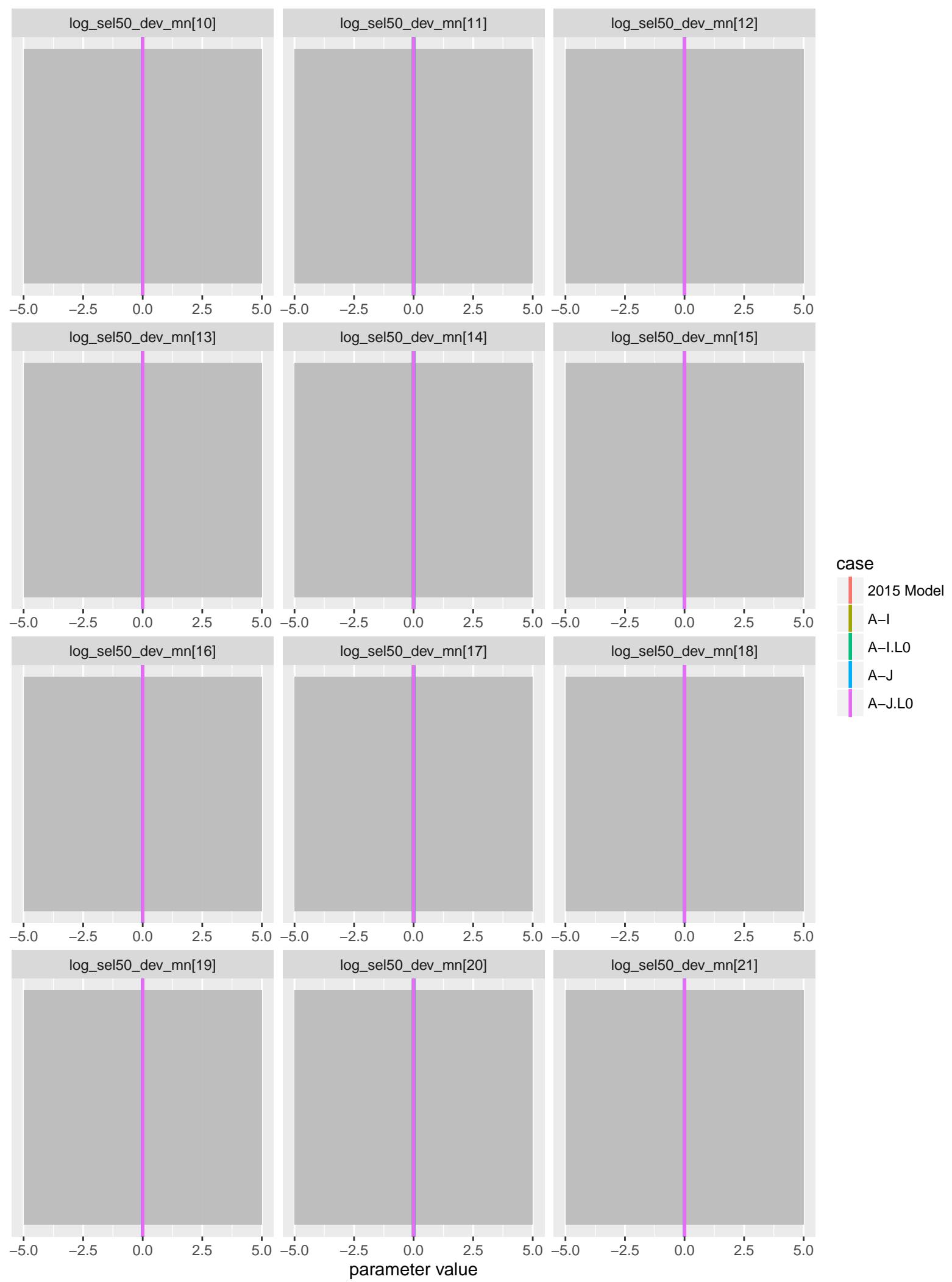


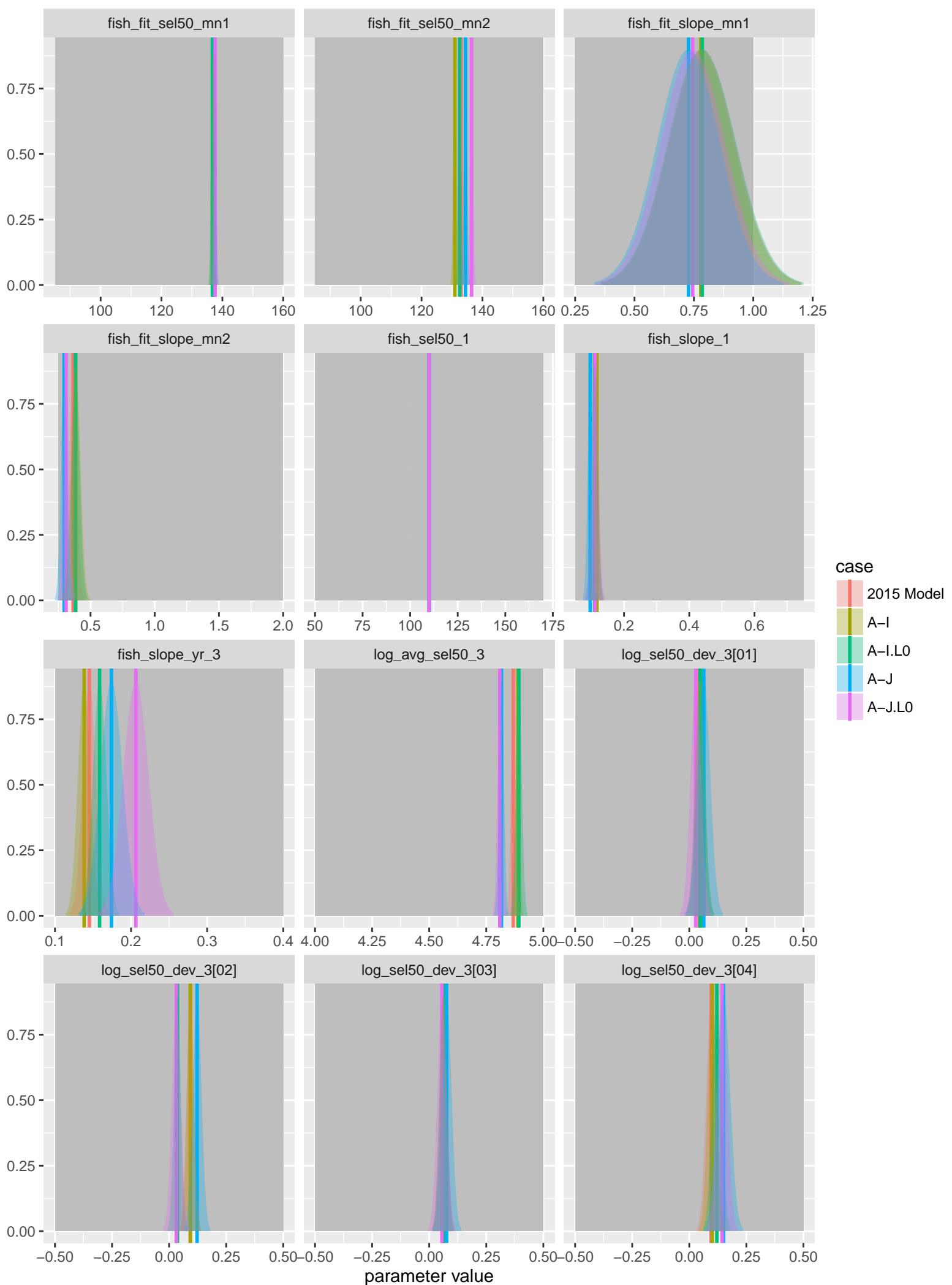


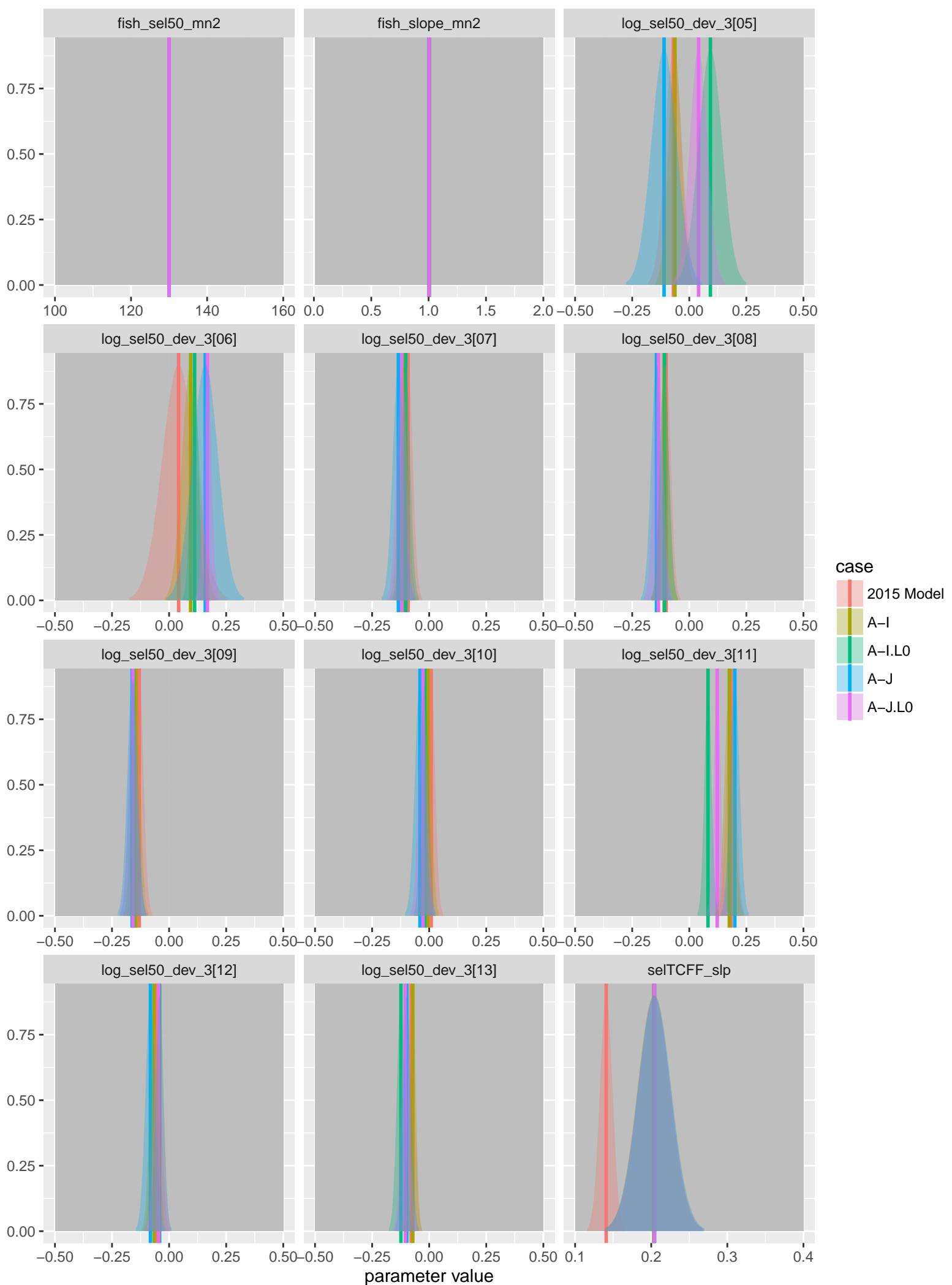


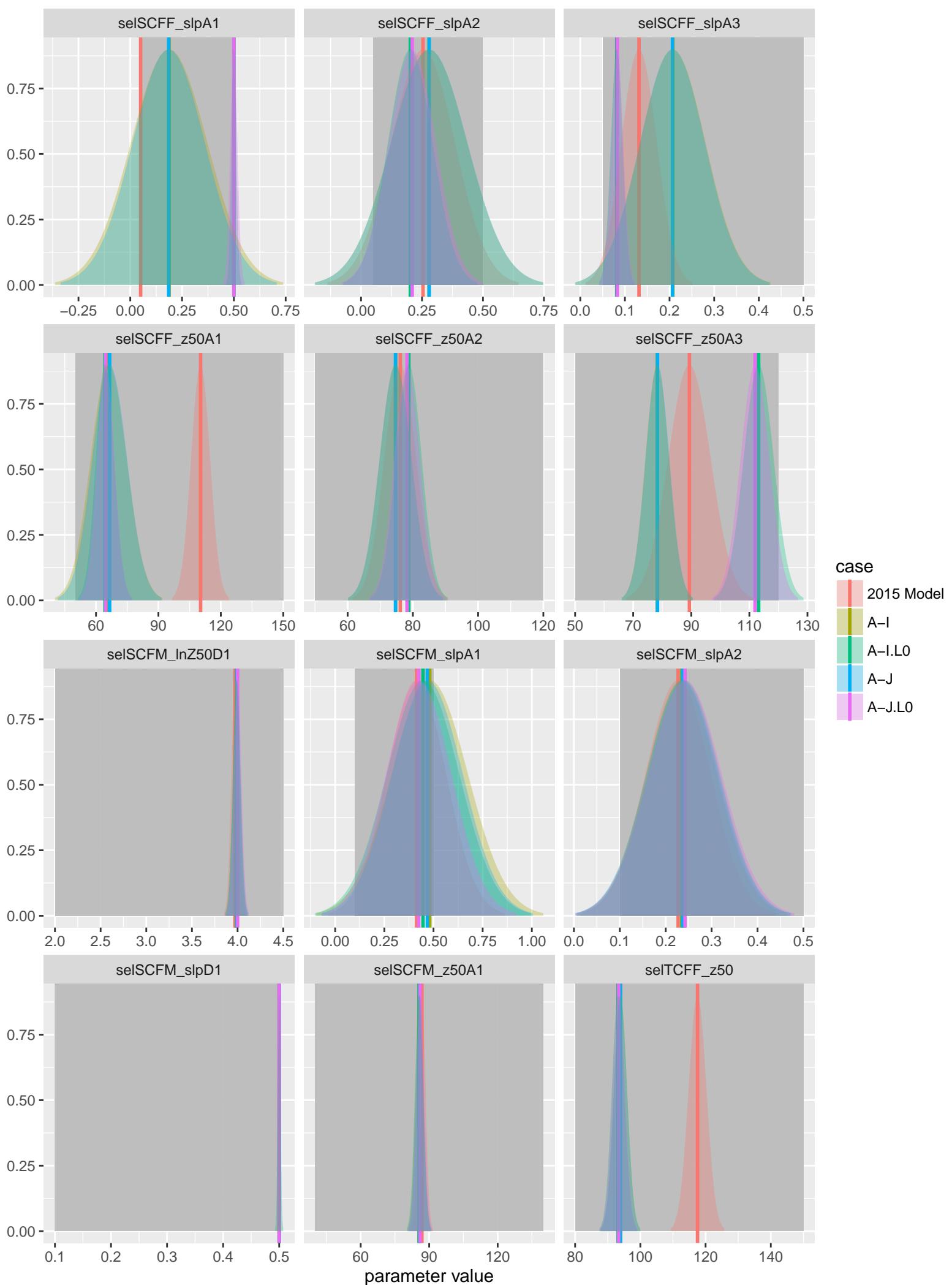


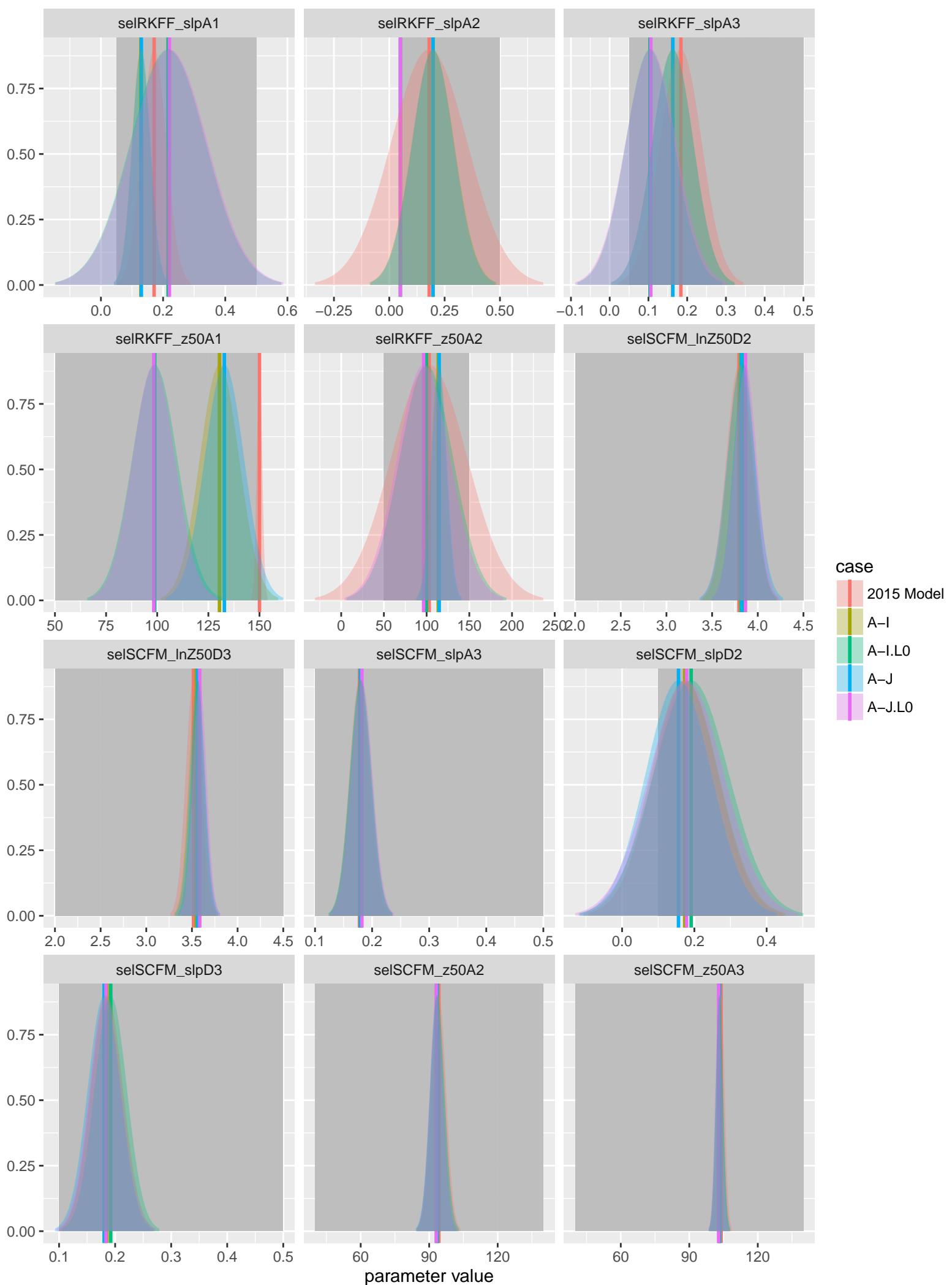


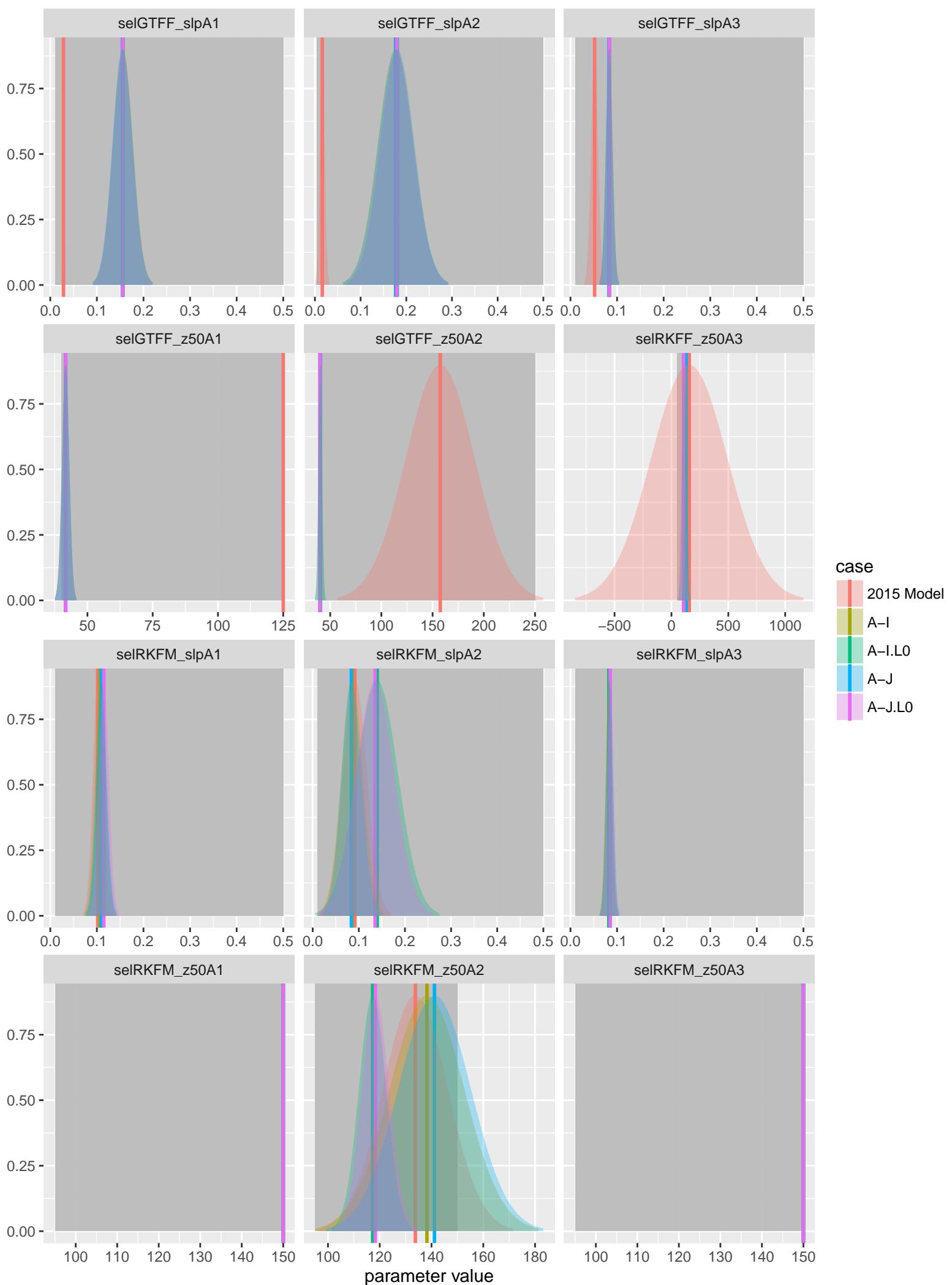


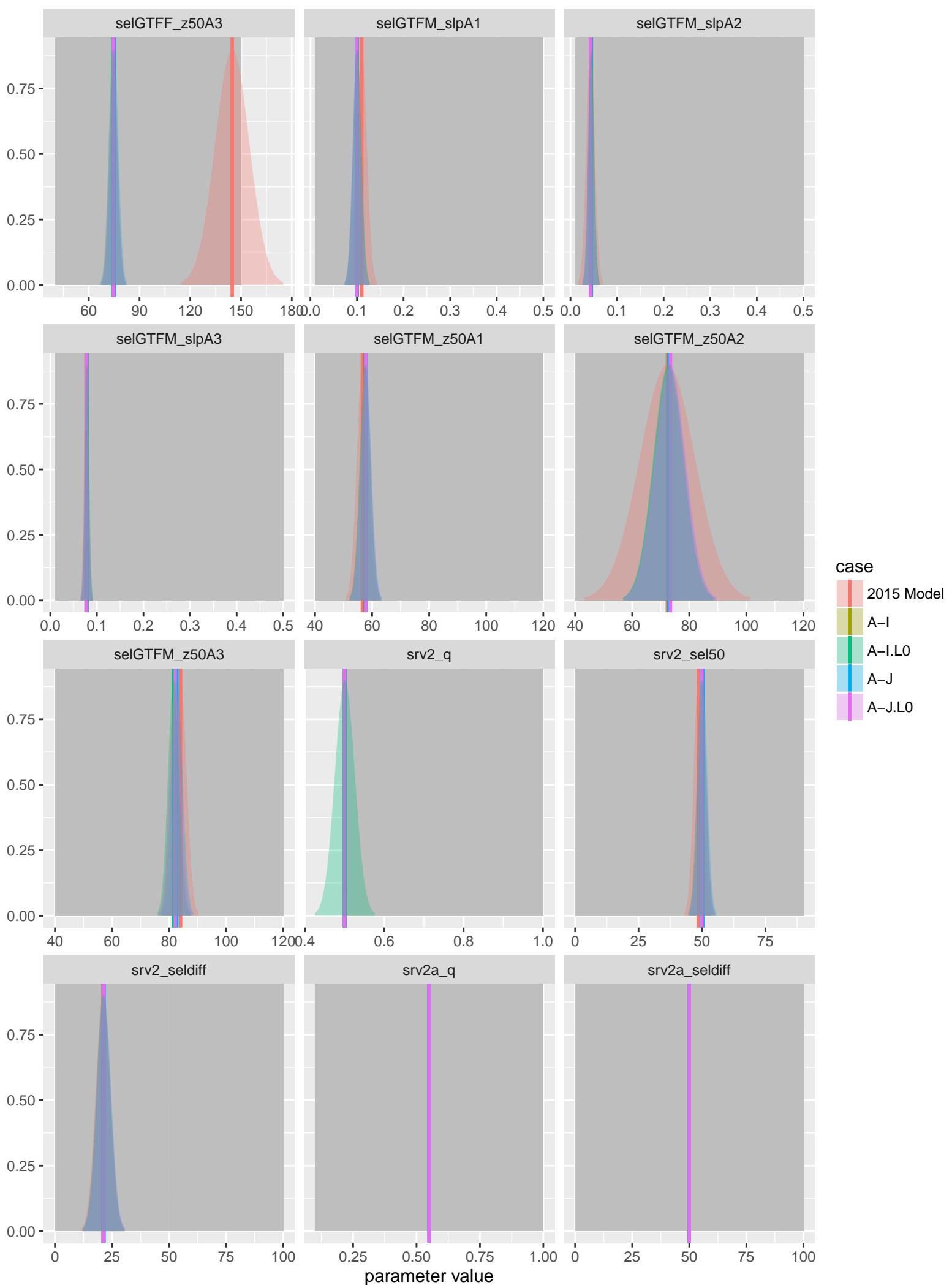


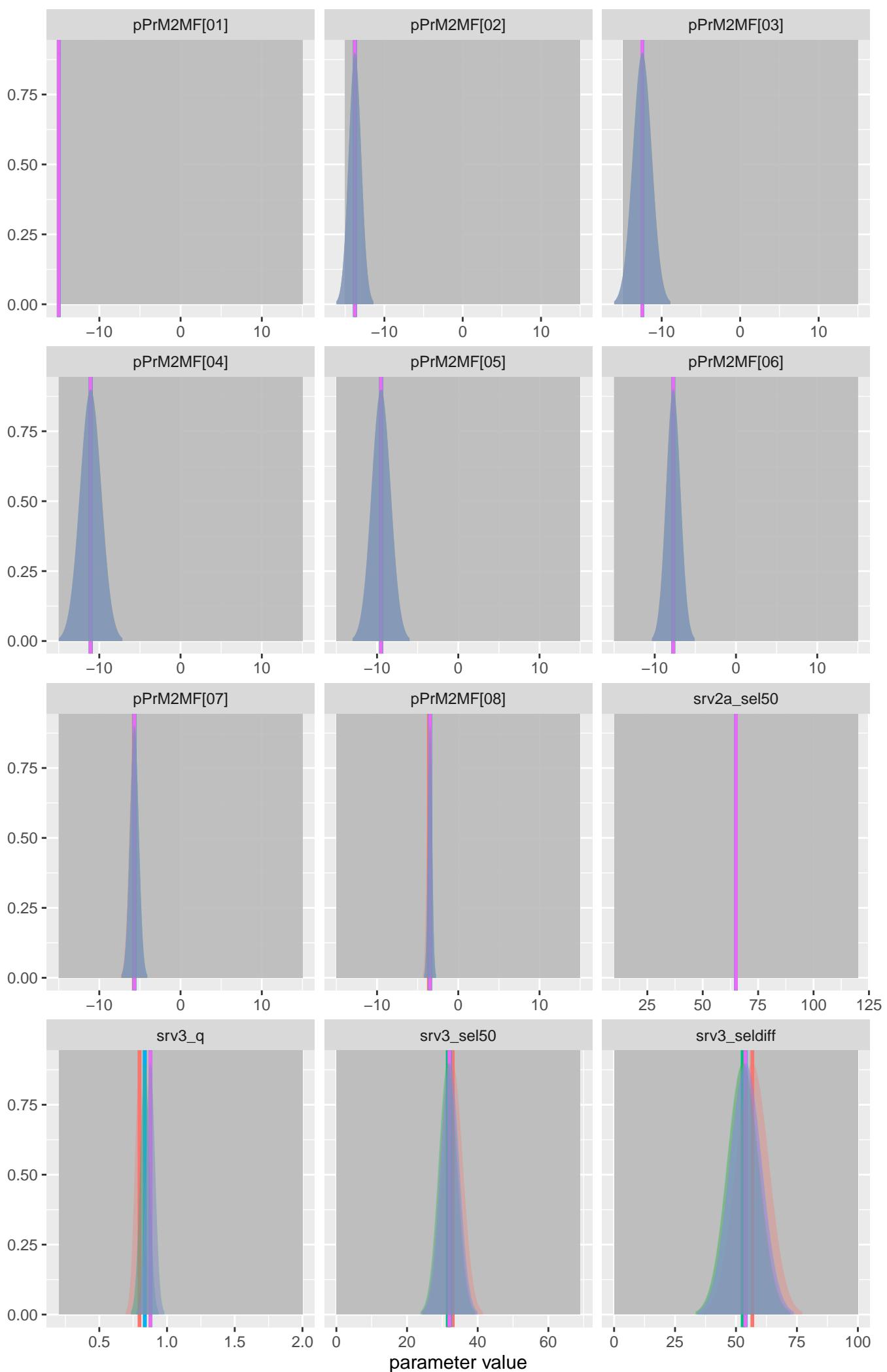


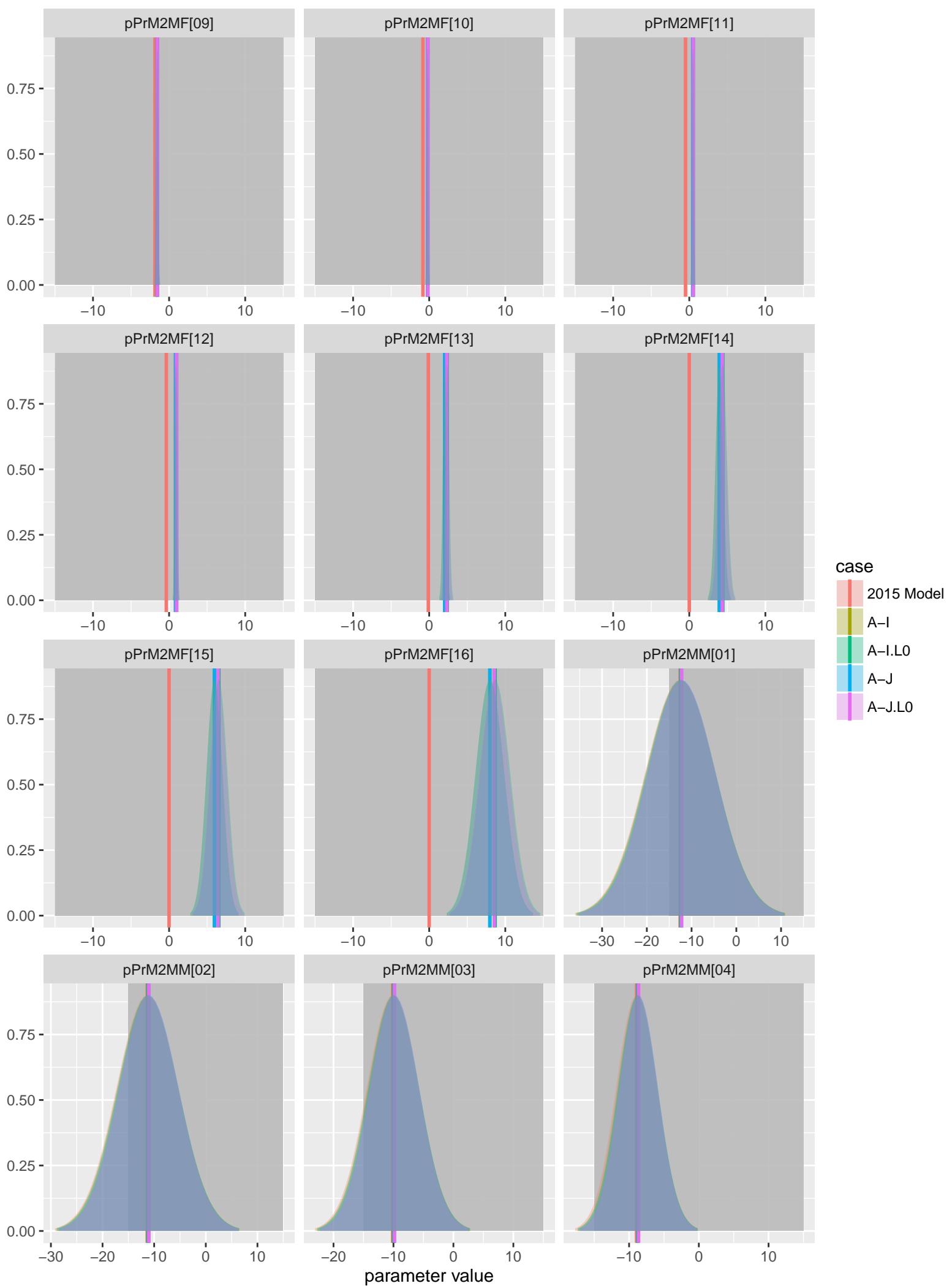


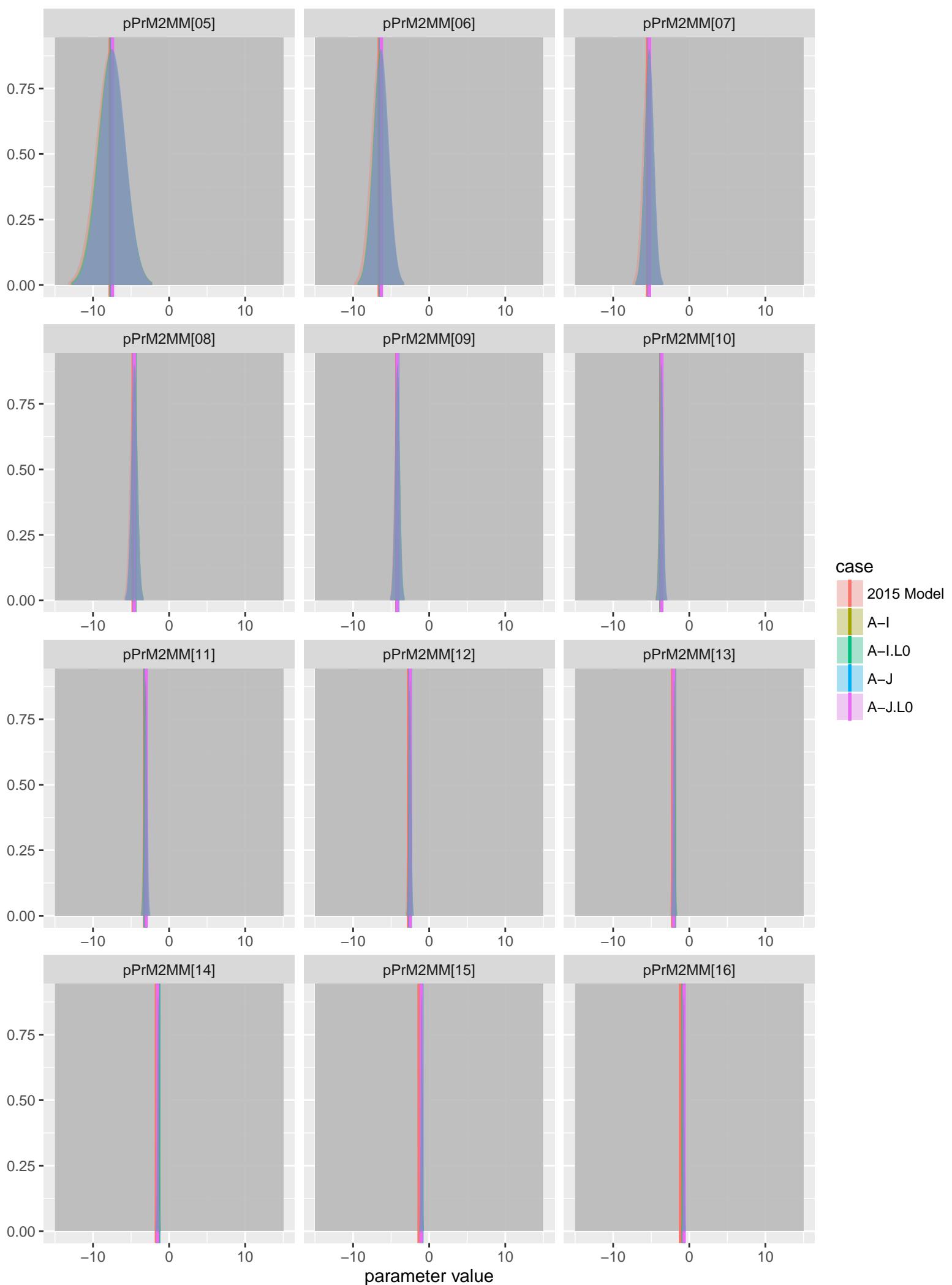


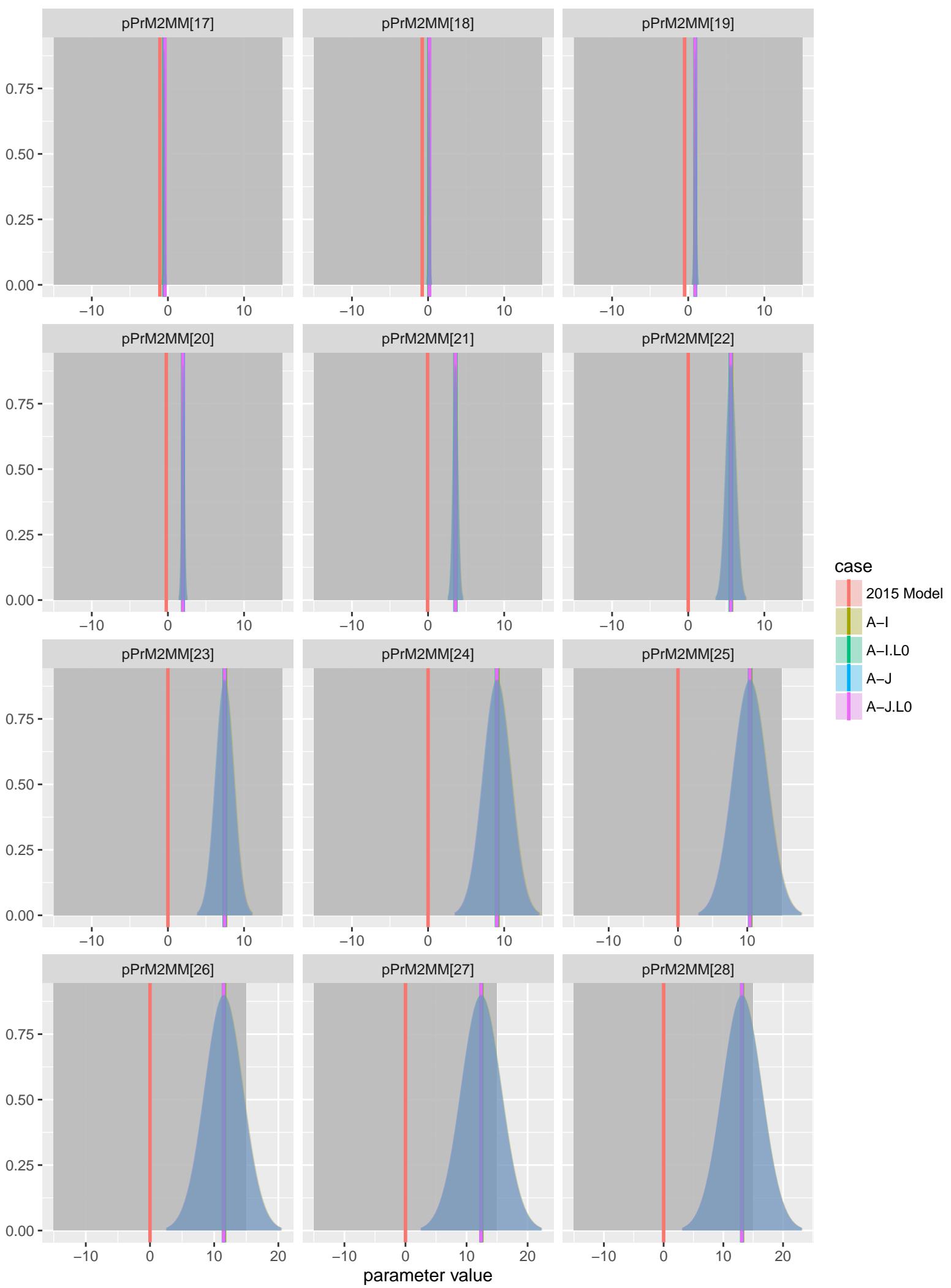


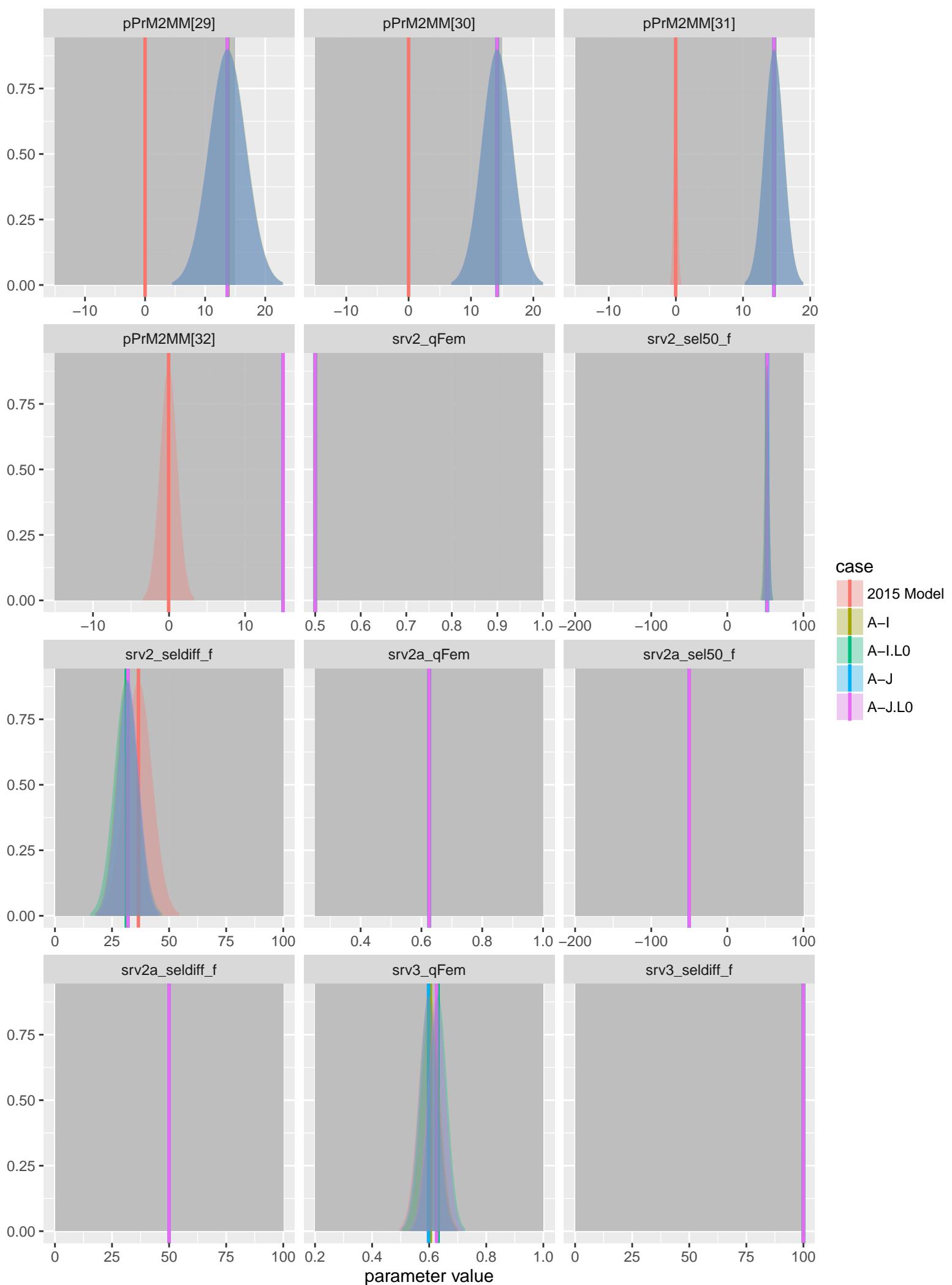


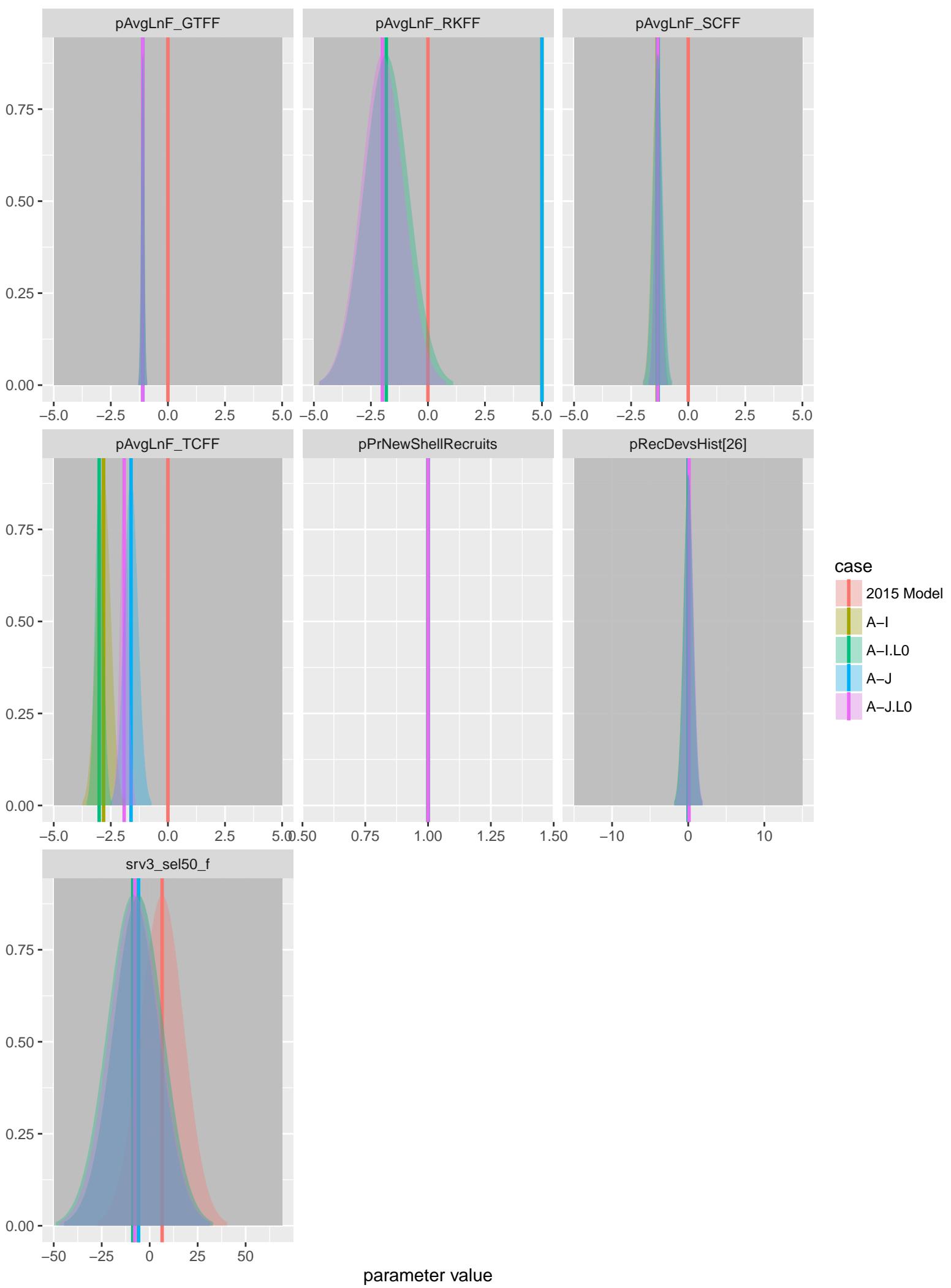




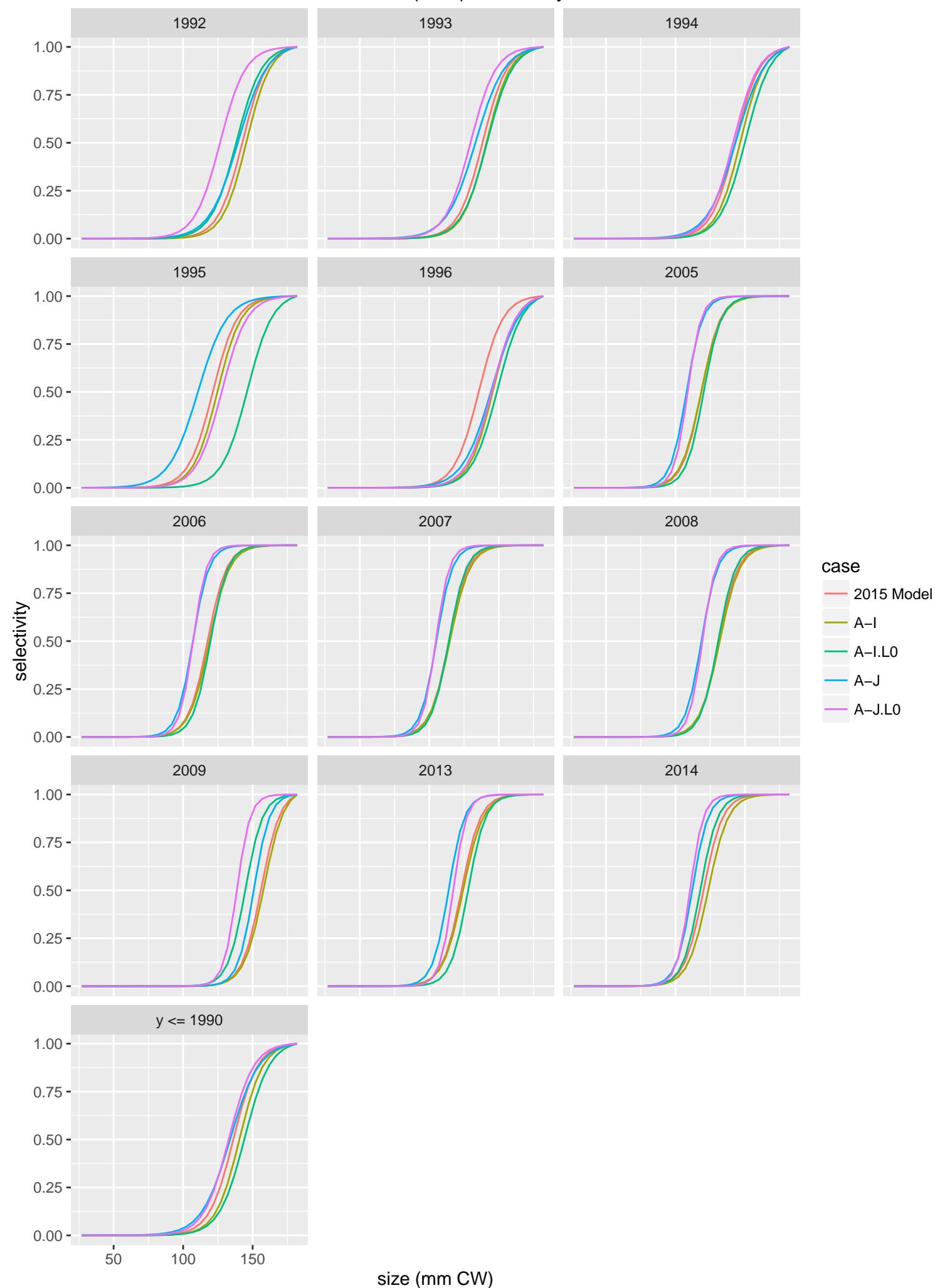




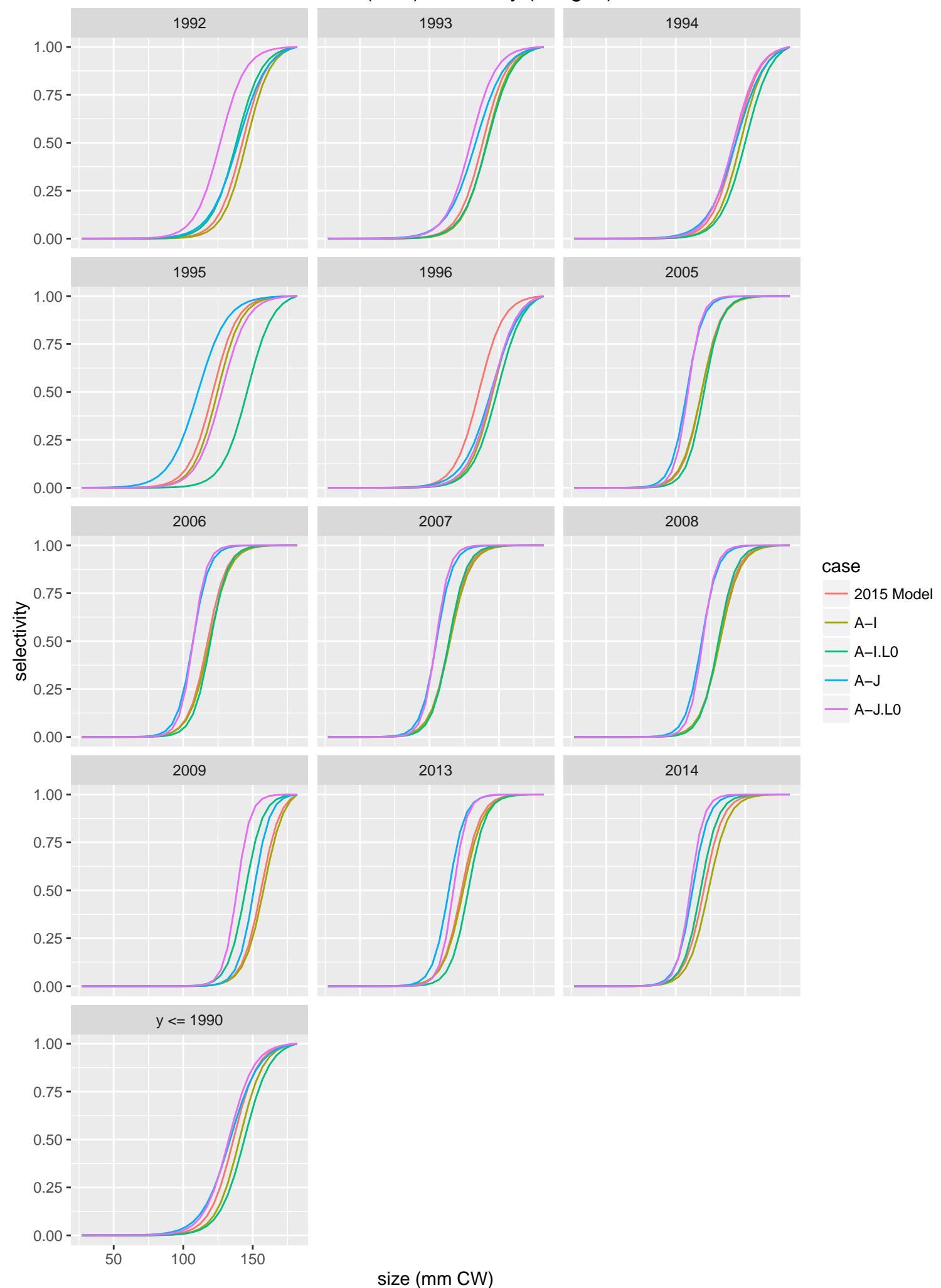




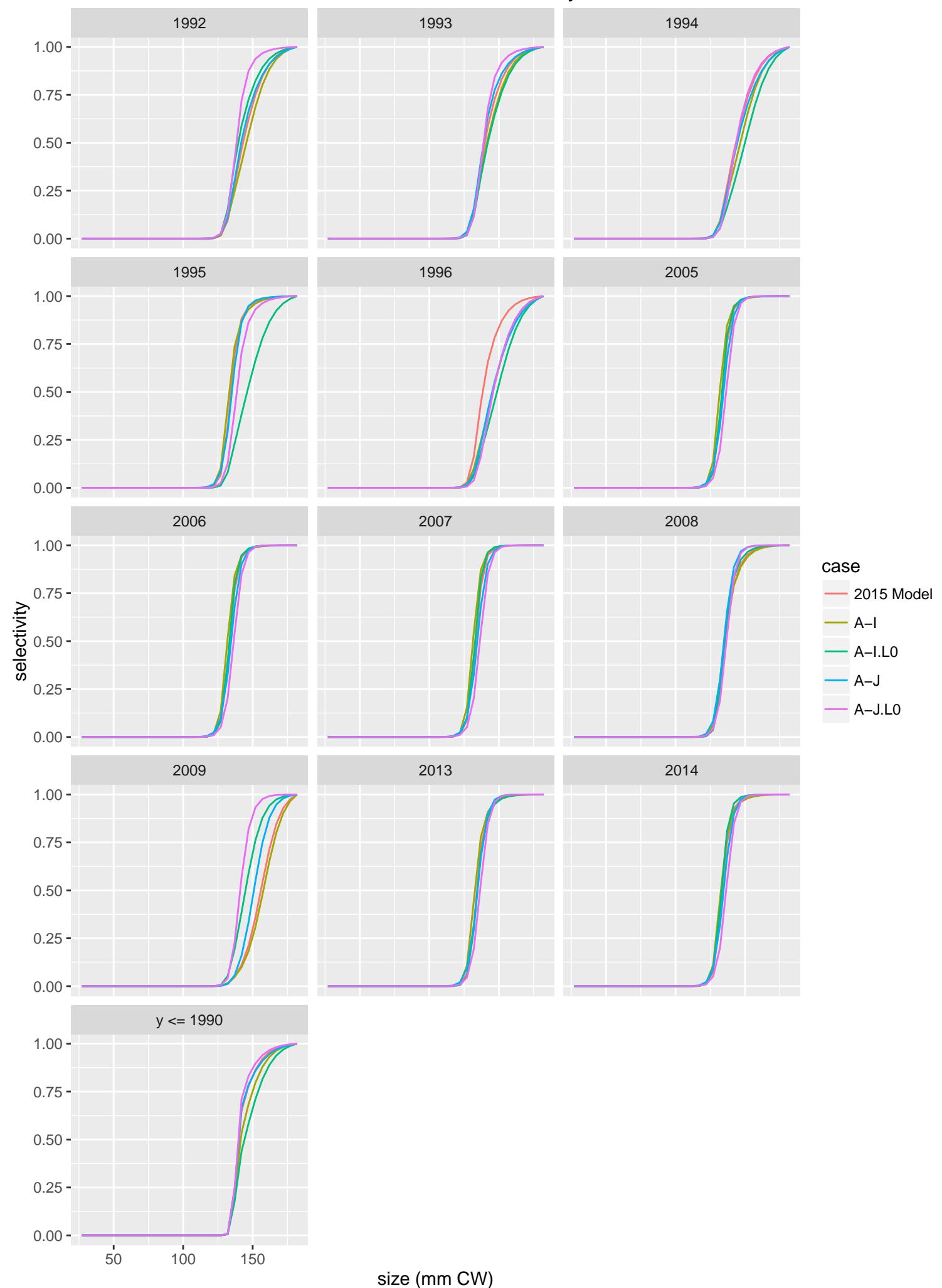
# TCF: male (total) selectivity



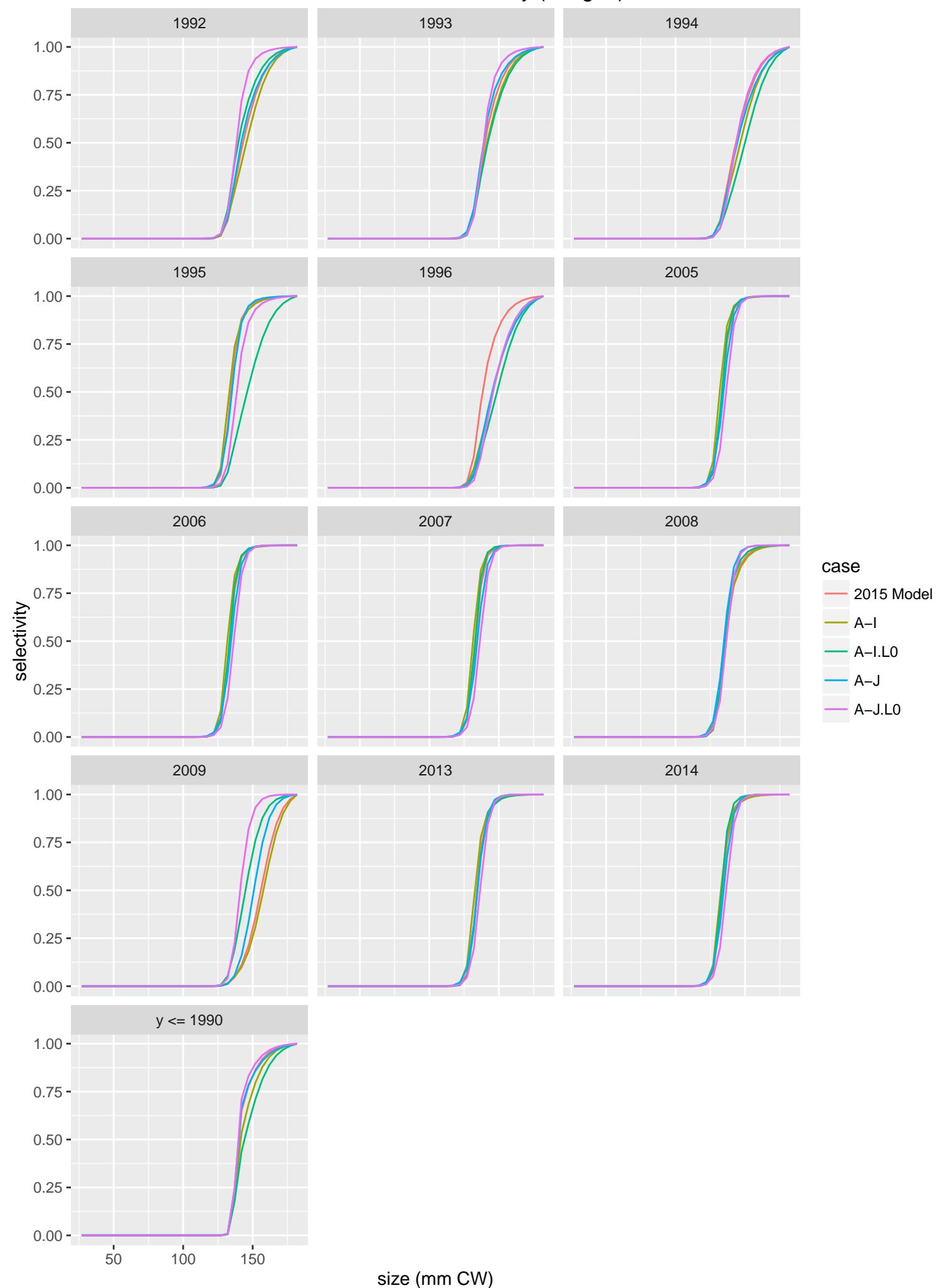
# TCF: male (total) selectivity (dodged)



# TCF: male retained selectivity

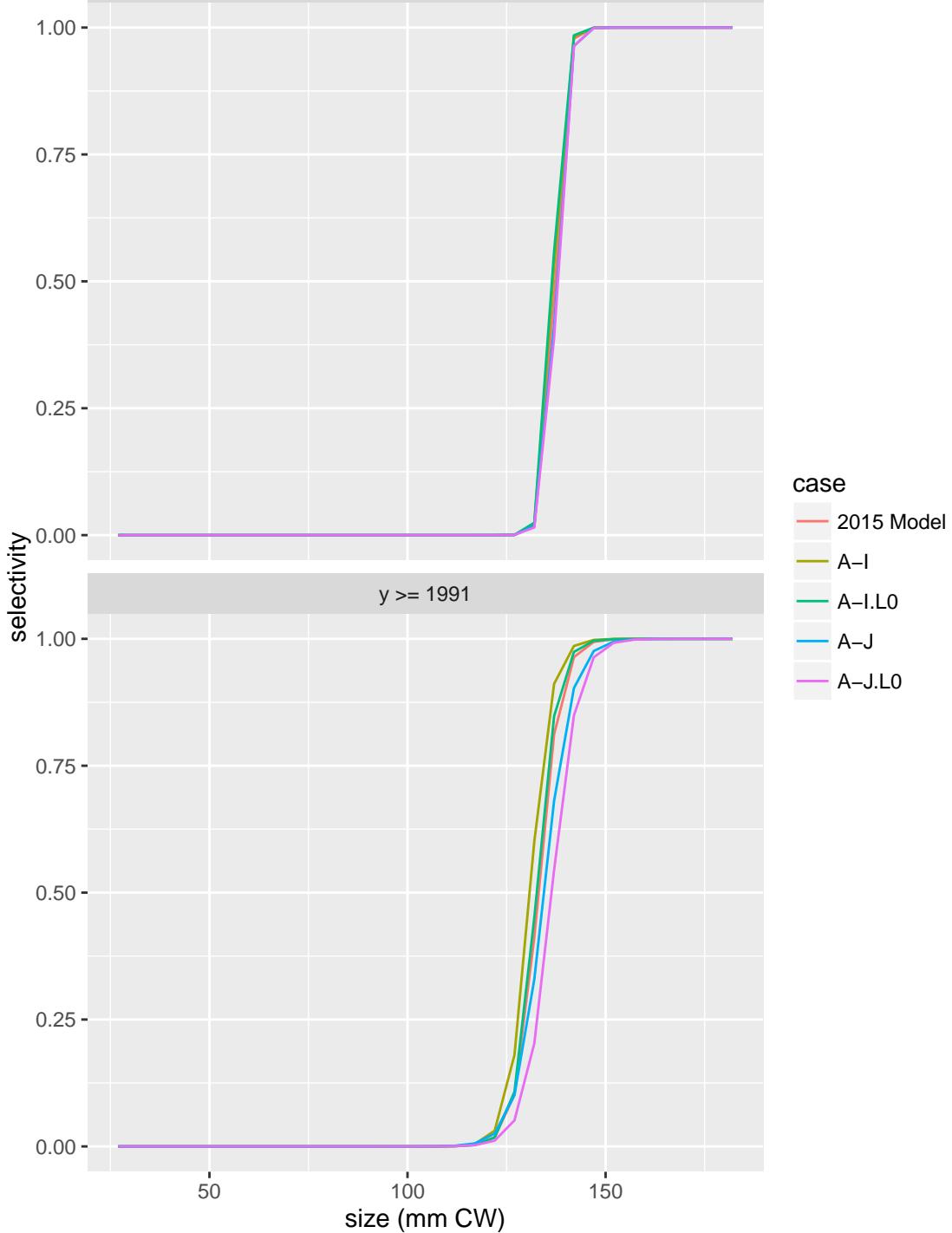


# TCF: male retained selectivity (dodged)



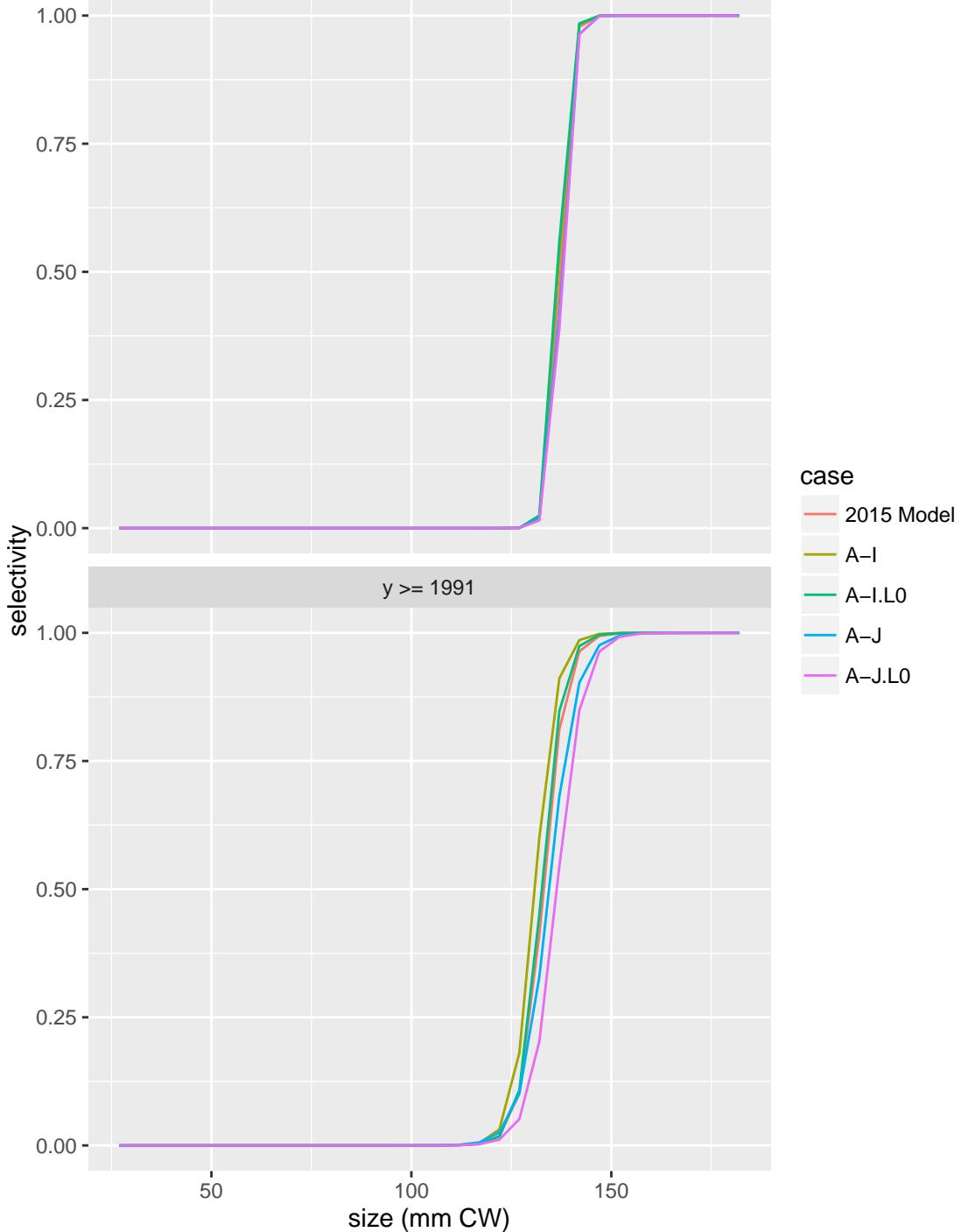
# TCF: male retention functions

$y \leq 1990$



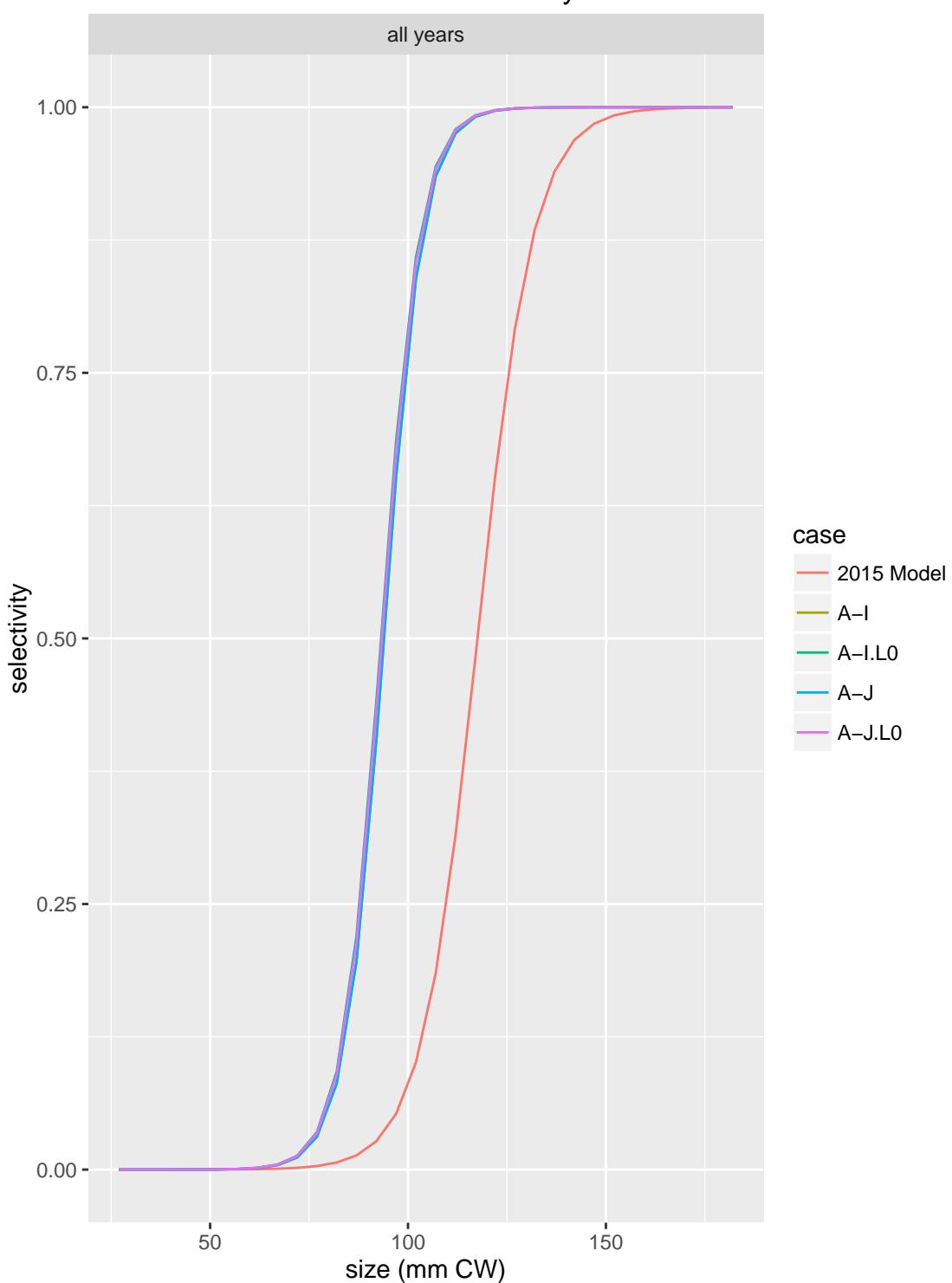
# TCF: male retention functions (dodged)

$y \leq 1990$



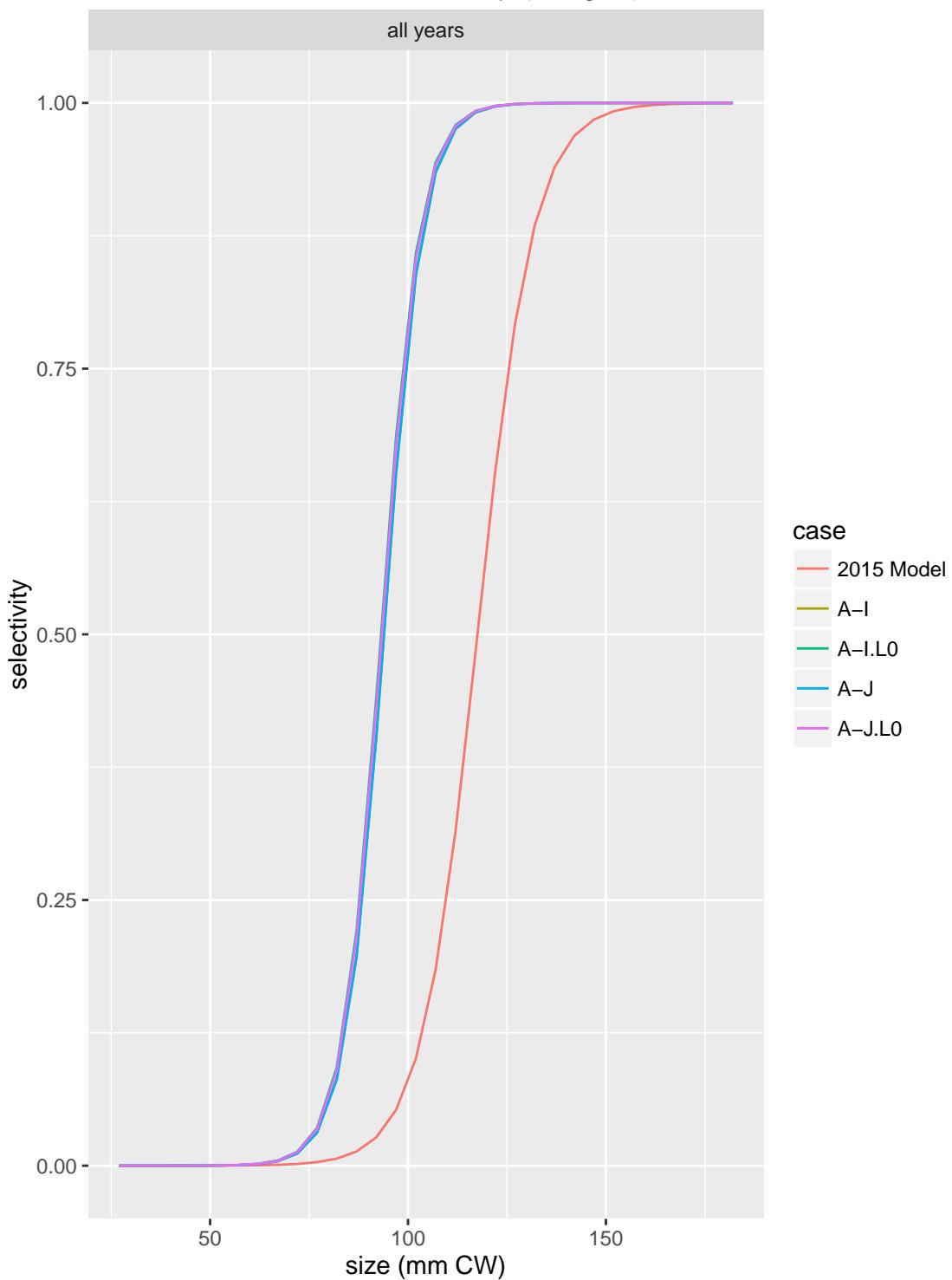
# TCF: female selectivity

all years



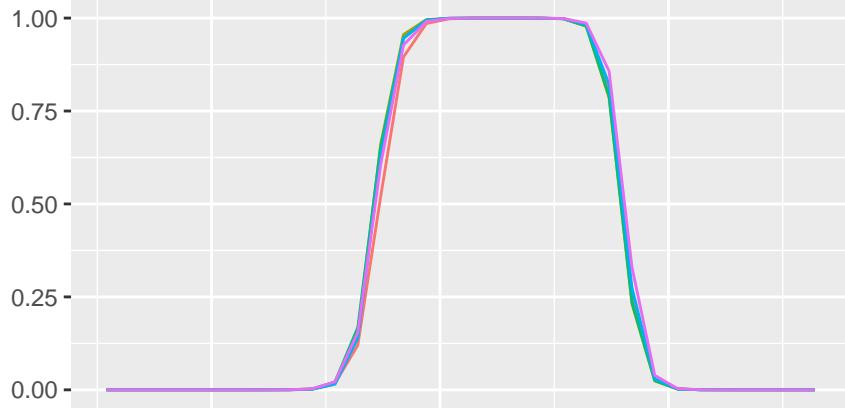
# TCF: female selectivity (dodged)

all years



# SCF: male selectivity

$y \leq 1996$

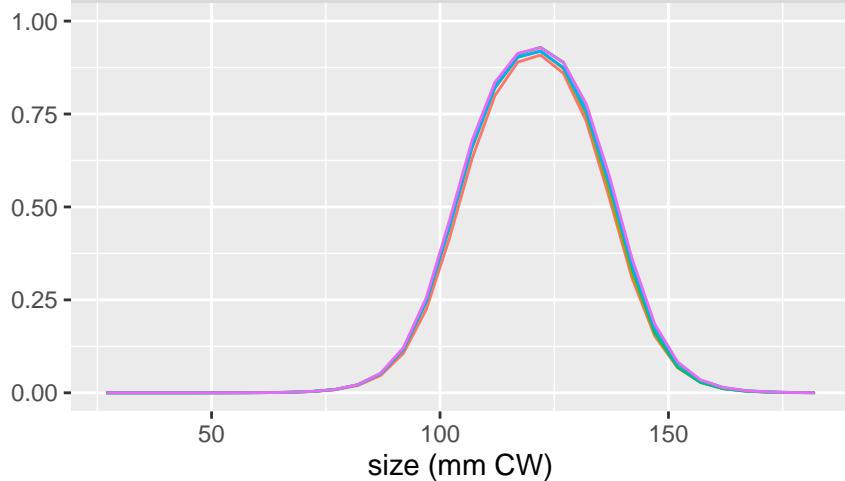


$1997 \leq y \leq 2004$

- case
- 2015 Model
  - A-I
  - A-I.L0
  - A-J
  - A-J.L0

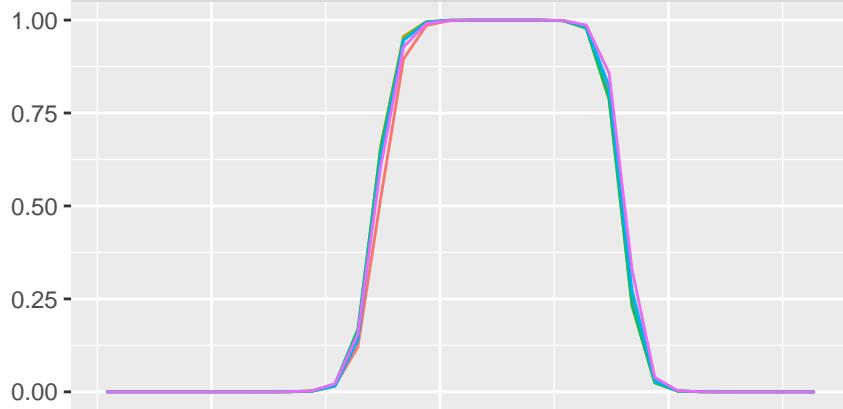
$2005 \leq y$

size (mm CW)

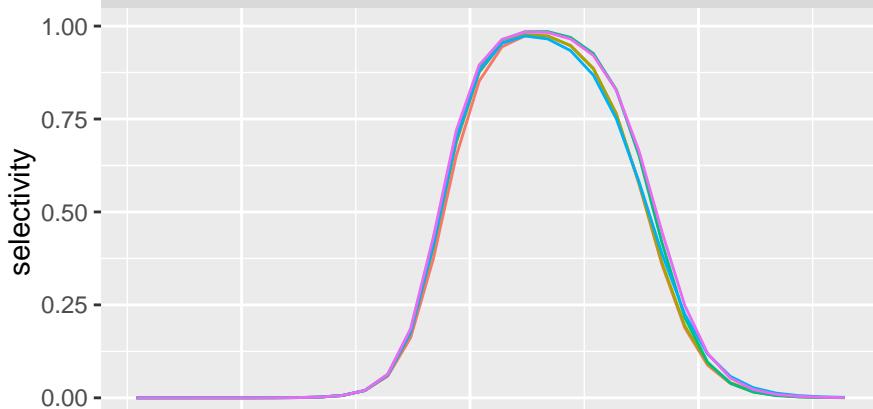


# SCF: male selectivity (dodged)

$y \leq 1996$

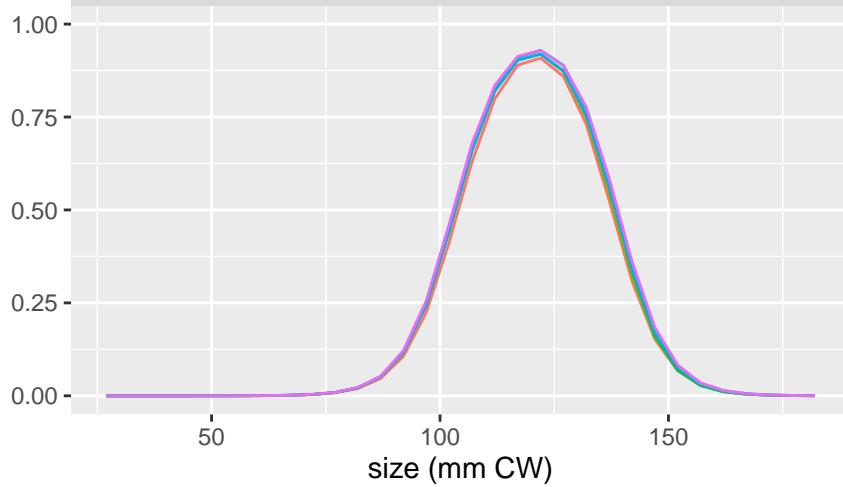


$1997 \leq y \leq 2004$



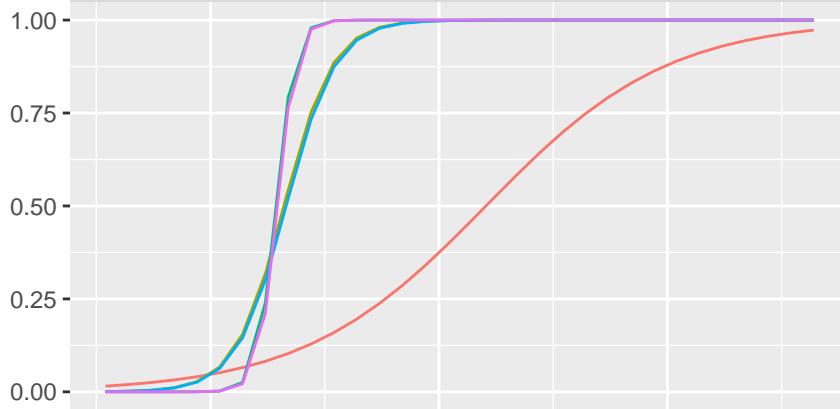
- case
- 2015 Model
  - A-I
  - A-I.L0
  - A-J
  - A-J.L0

$2005 \leq y$

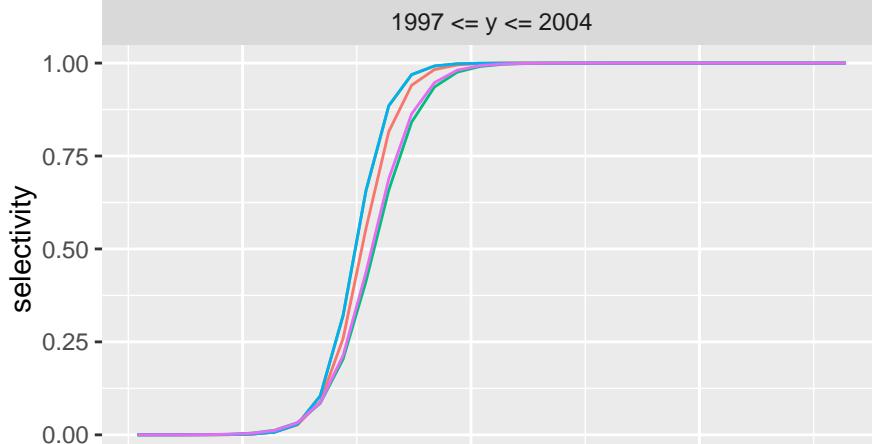


# SCF: female selectivity

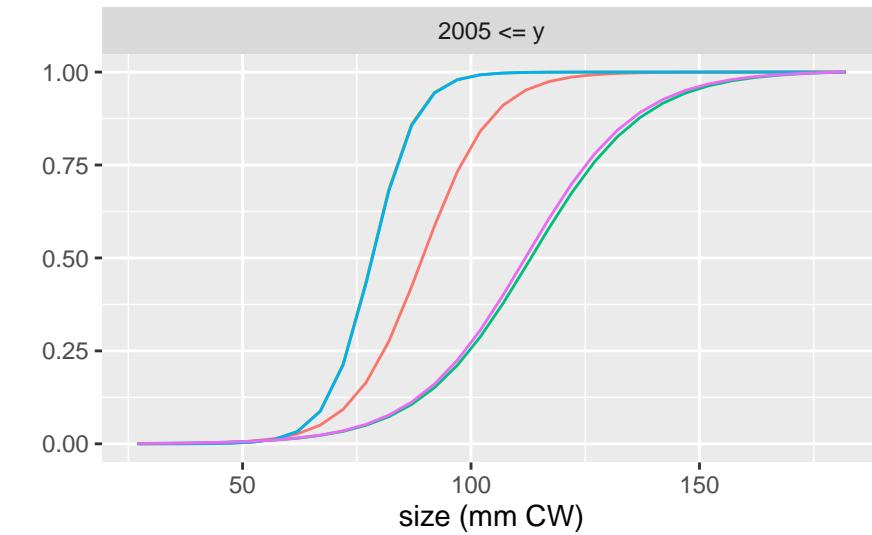
$y \leq 1996$



$1997 \leq y \leq 2004$



$2005 \leq y$

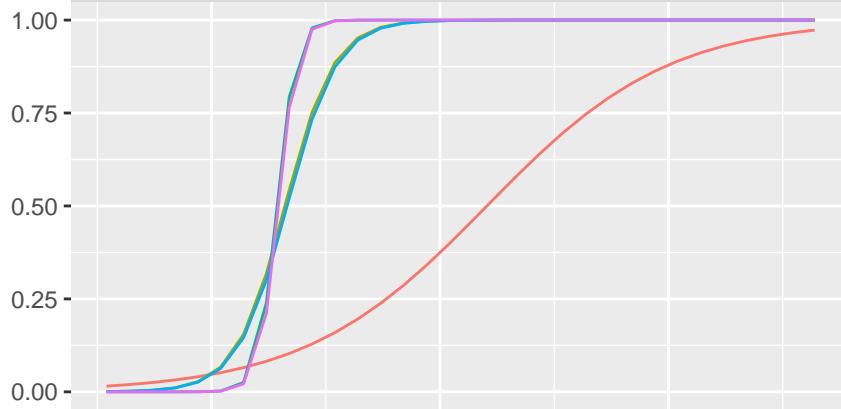


case

- 2015 Model
- A-I
- A-I.L0
- A-J
- A-J.L0

# SCF: female selectivity (dodged)

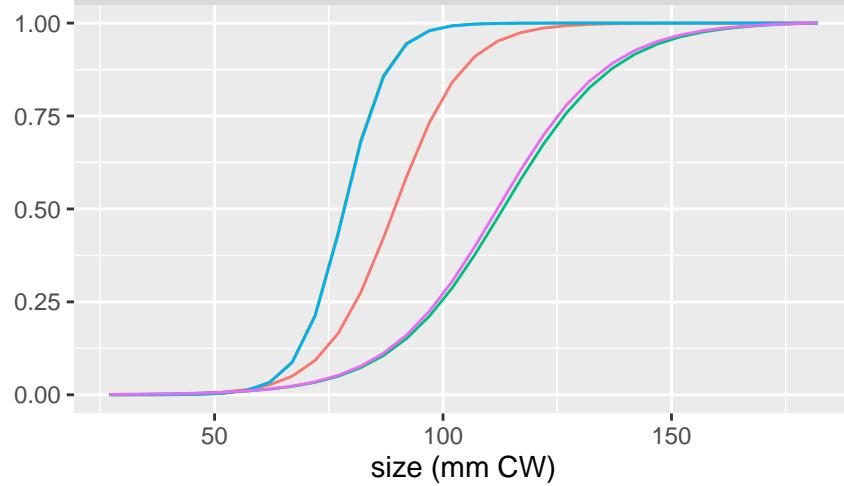
$y \leq 1996$



$1997 \leq y \leq 2004$

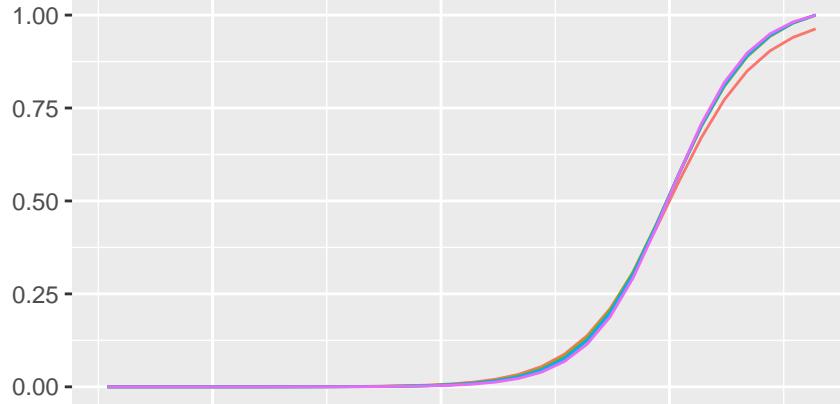
- case
- 2015 Model
  - A-I
  - A-I.L0
  - A-J
  - A-J.L0

$2005 \leq y$



# RKF: male selectivity

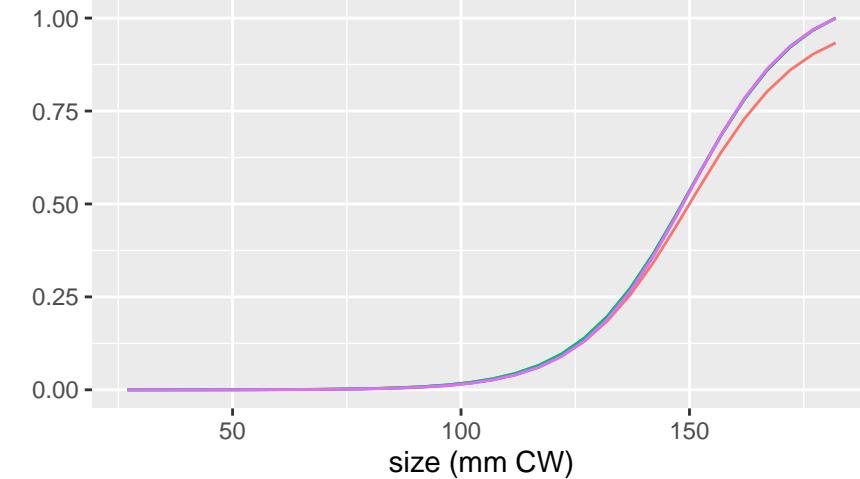
$y \leq 1996$



$1997 \leq y \leq 2004$

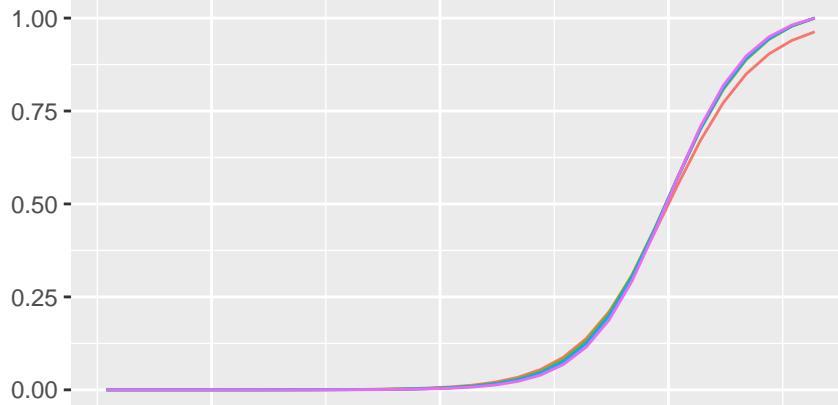
- case
- 2015 Model
  - A-I
  - A-I.L0
  - A-J
  - A-J.L0

$2005 \leq y$

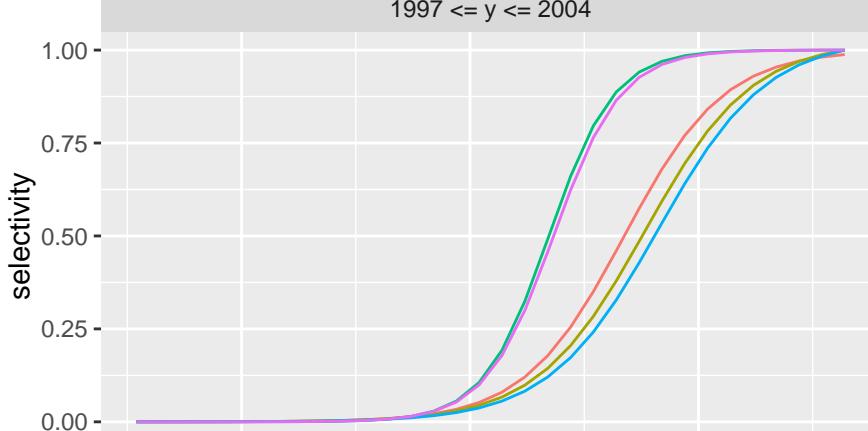


# RKF: male selectivity (dodged)

$y \leq 1996$

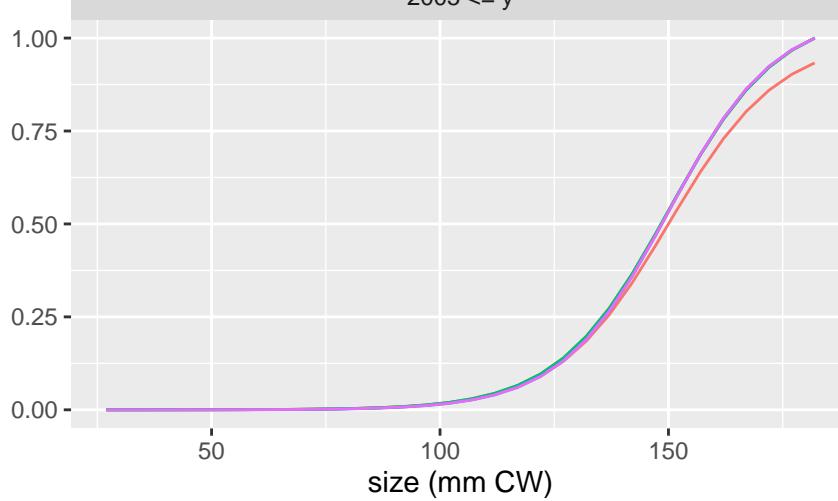


$1997 \leq y \leq 2004$



- case
- 2015 Model
  - A-I
  - A-I.L0
  - A-J
  - A-J.L0

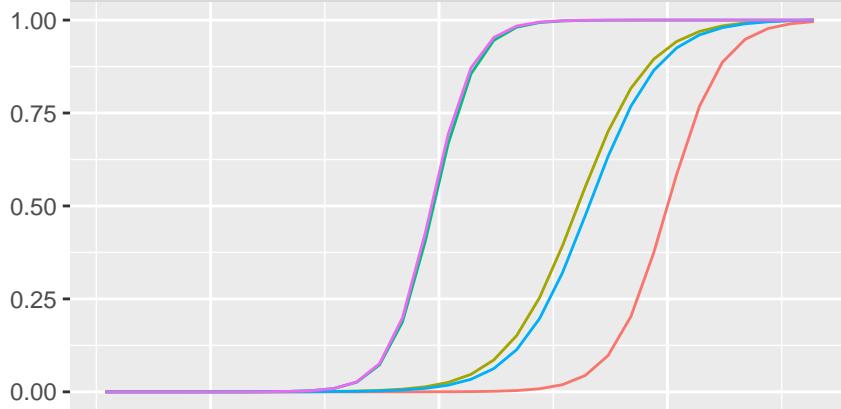
$2005 \leq y$



size (mm CW)

# RKF: female selectivity

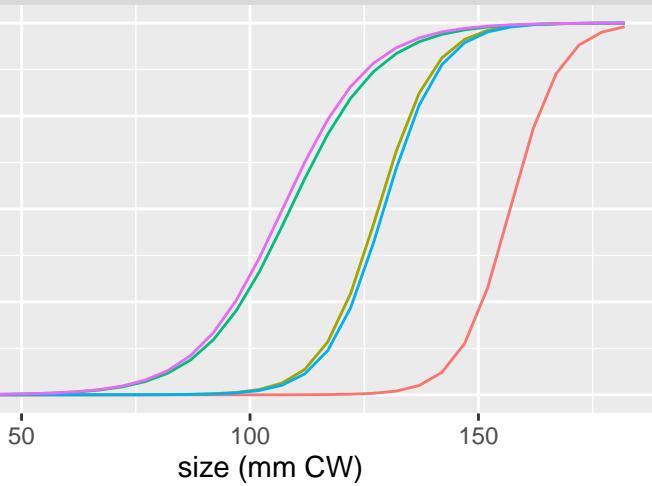
$y \leq 1996$



$1997 \leq y \leq 2004$

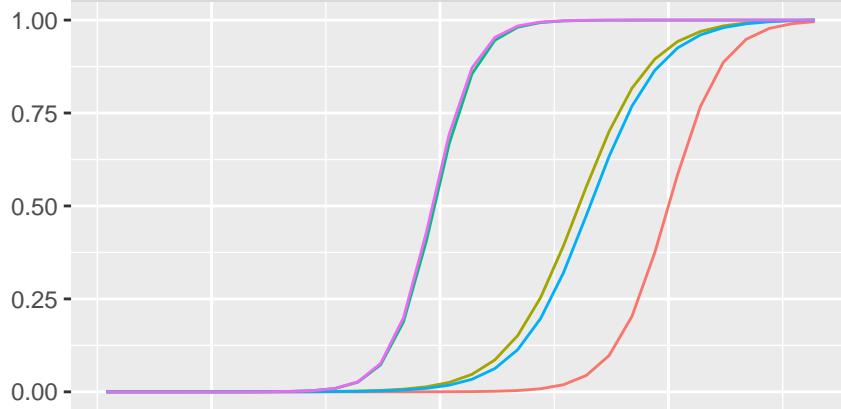
- case
- 2015 Model
  - A-I
  - A-I.L0
  - A-J
  - A-J.L0

$2005 \leq y$



# RKF: female selectivity (dodged)

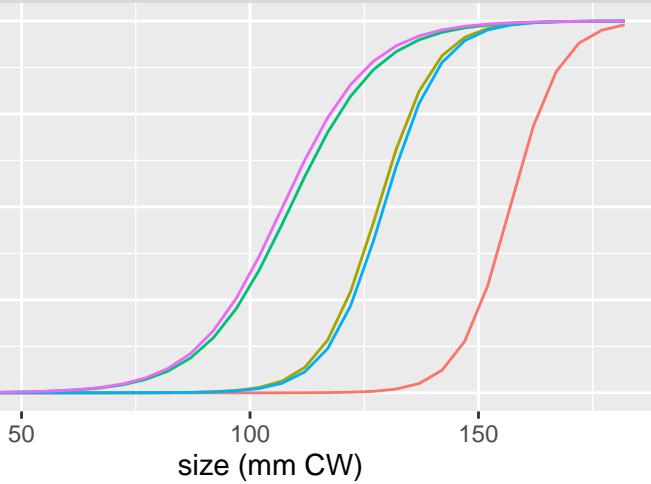
$y \leq 1996$



$1997 \leq y \leq 2004$

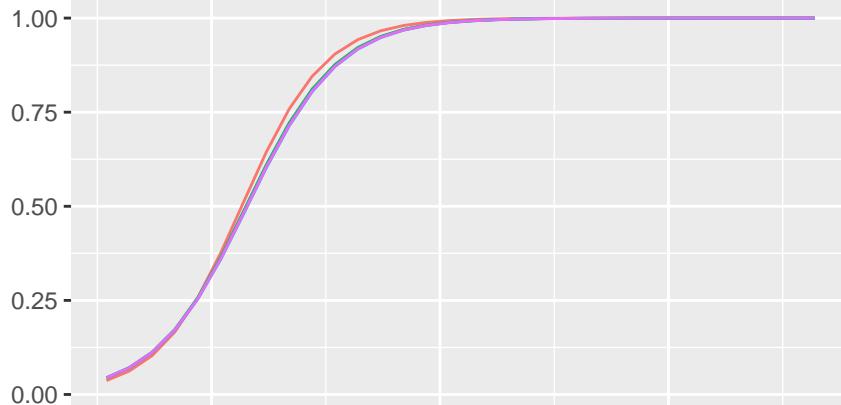
- case
- 2015 Model
  - A-I
  - A-I.L0
  - A-J
  - A-J.L0

$2005 \leq y$

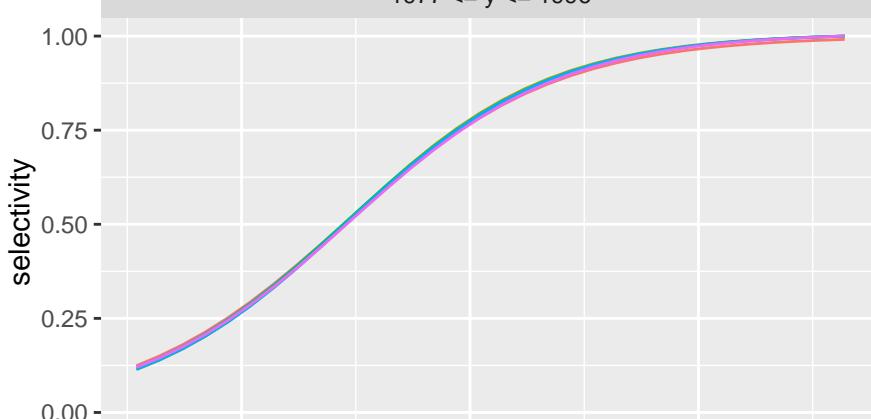


# GTF: male selectivity

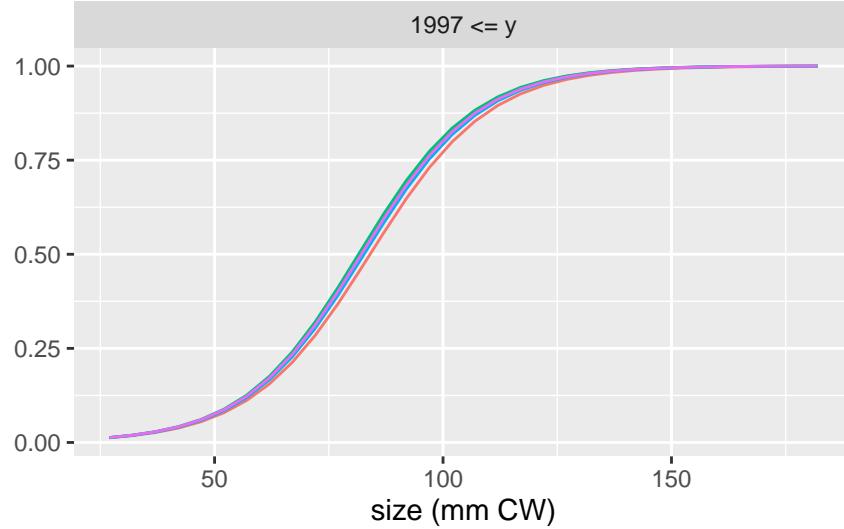
$y \leq 1986$



$1977 \leq y \leq 1996$



$1997 \leq y$

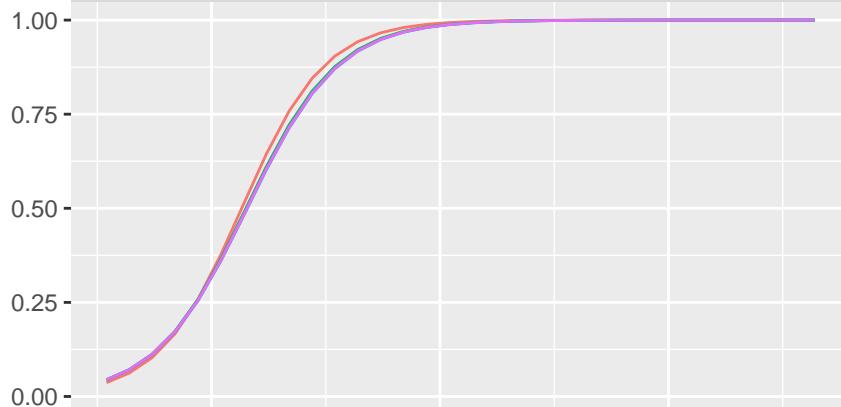


## case

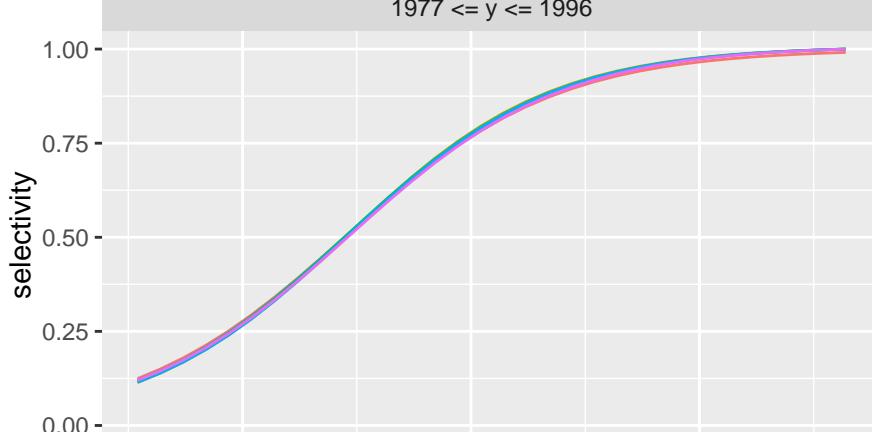
- 2015 Model
- A-I
- A-I.L0
- A-J
- A-J.L0

# GTF: male selectivity (dodged)

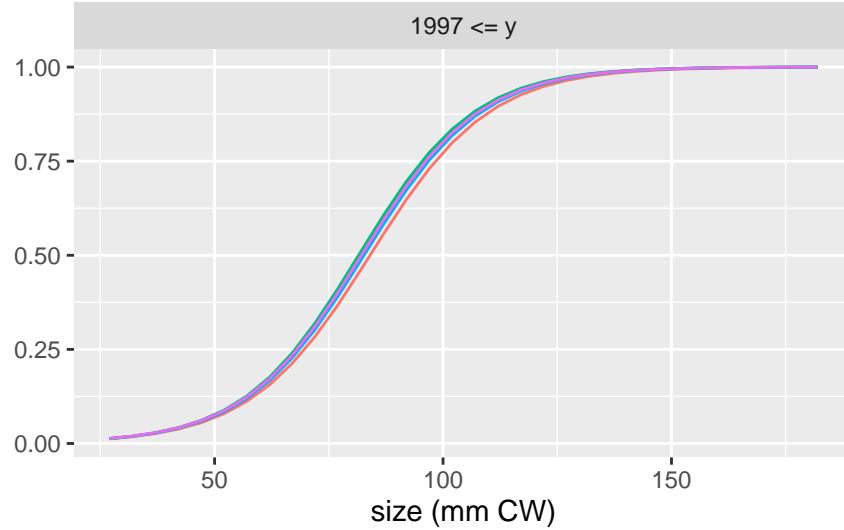
$y \leq 1986$



$1977 \leq y \leq 1996$



$1997 \leq y$

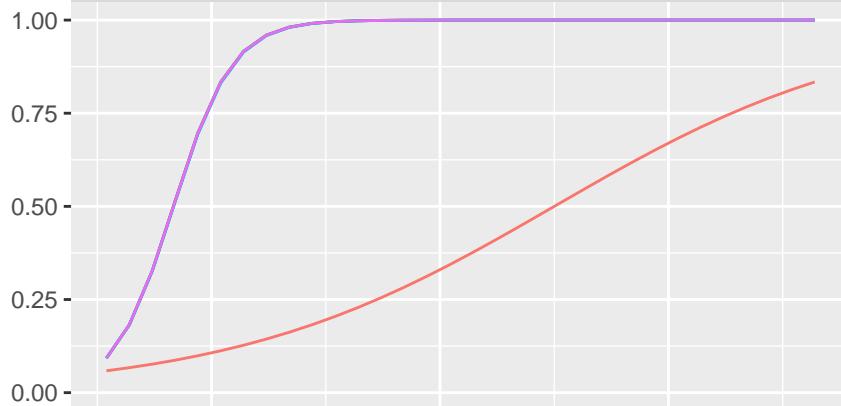


## case

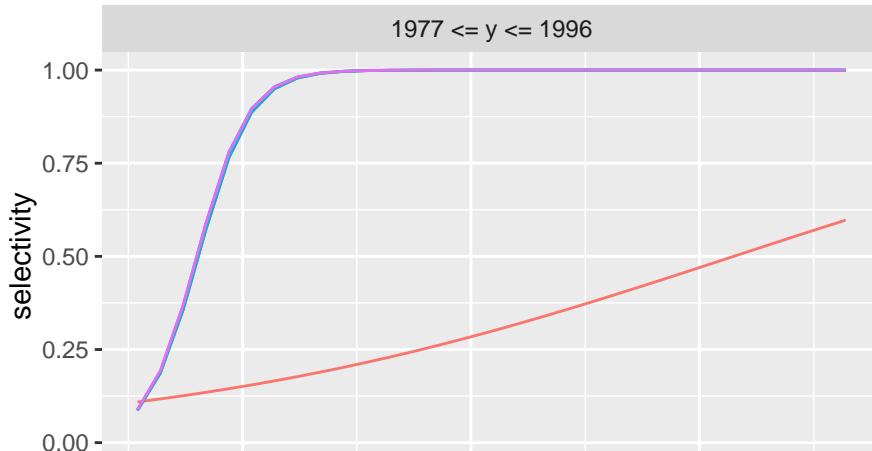
- 2015 Model
- A-I
- A-I.L0
- A-J
- A-J.L0

# GTF: female selectivity

$y \leq 1986$



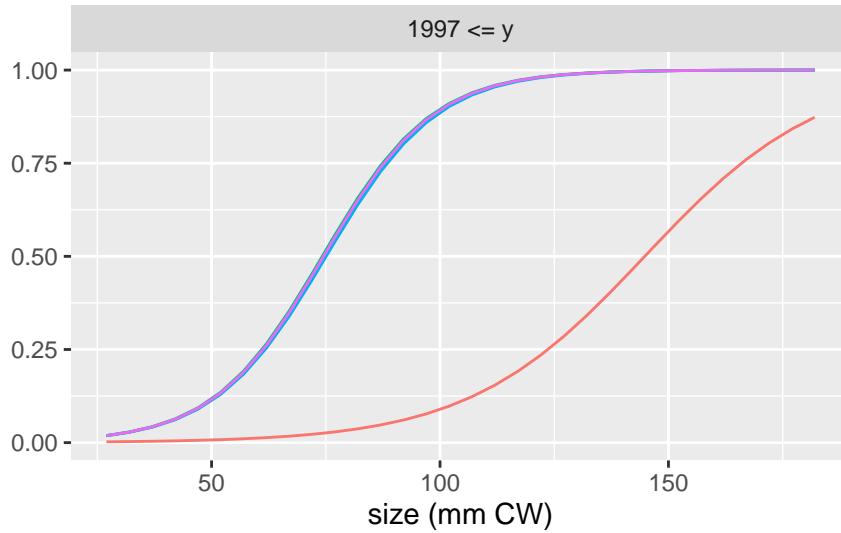
$1977 \leq y \leq 1996$



case

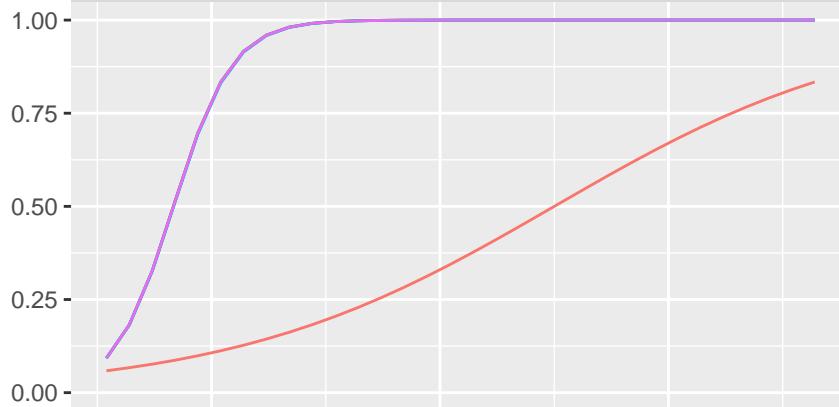
- 2015 Model
- A-I
- A-I.L0
- A-J
- A-J.L0

$1997 \leq y$

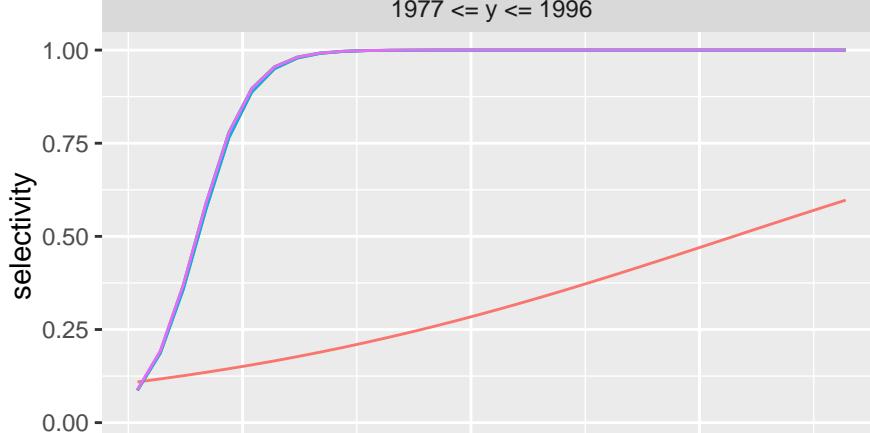


# GTF: female selectivity (dodged)

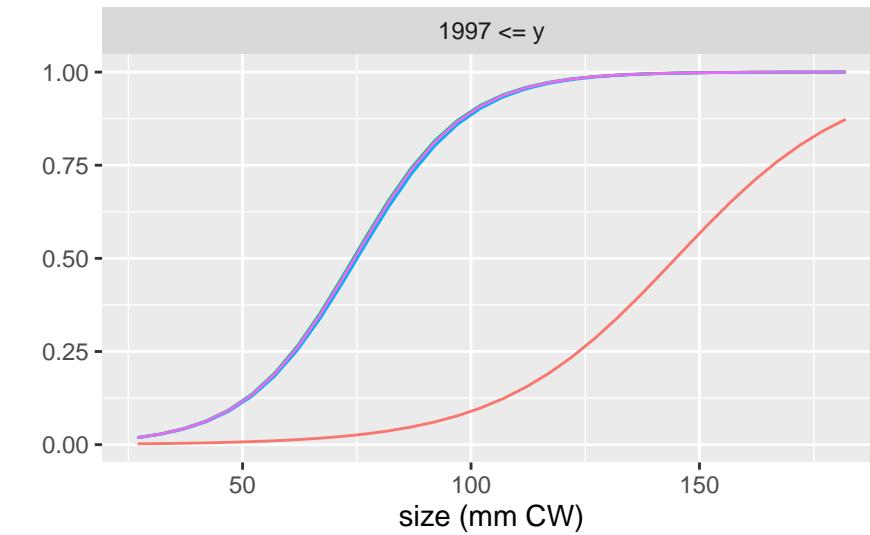
$y \leq 1986$



$1977 \leq y \leq 1996$



$1997 \leq y$

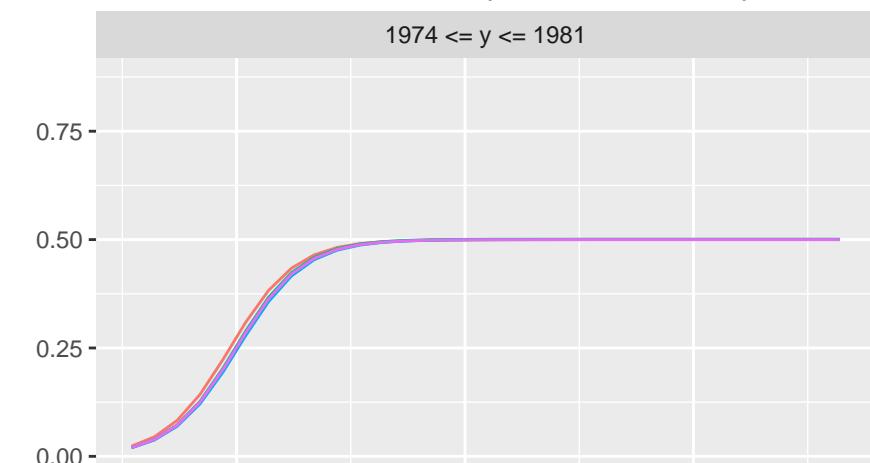


case

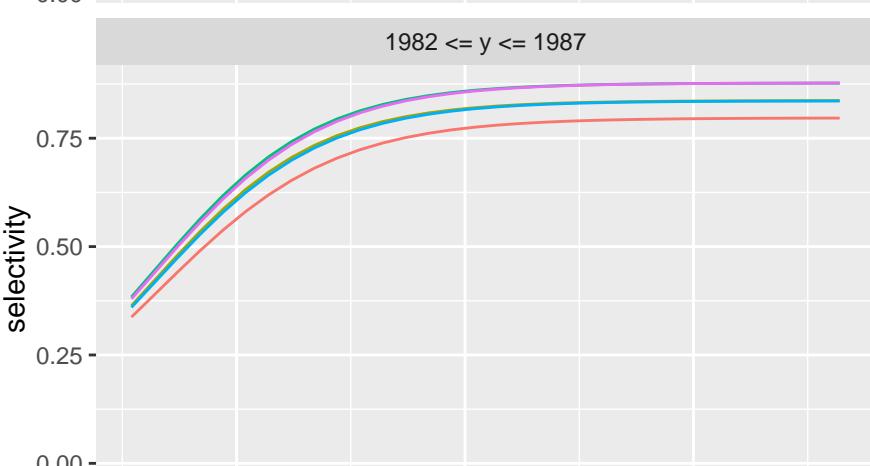
- 2015 Model
- A-I
- A-I.L0
- A-J
- A-J.L0

# NMFS trawl survey: male selectivity

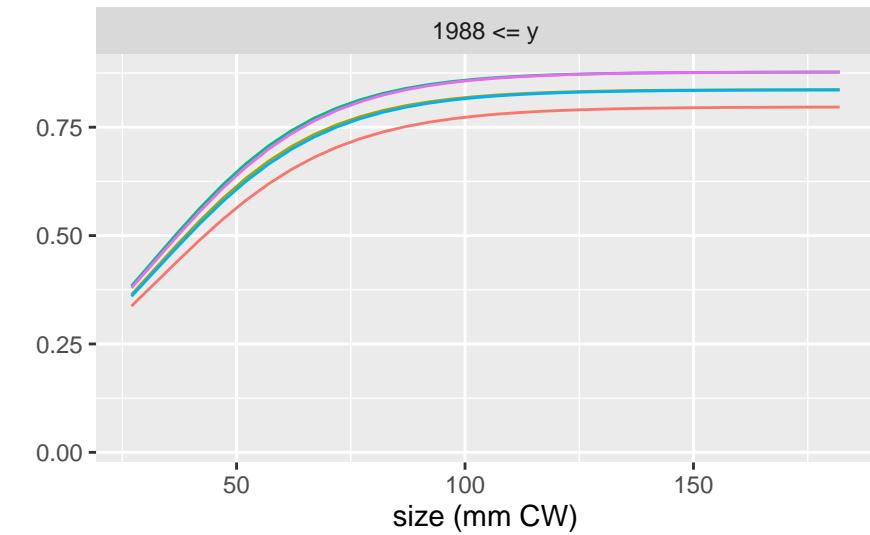
1974 <= y <= 1981



1982 <= y <= 1987



1988 <= y



case

- 2015 Model
- A-I
- A-I.L0
- A-J
- A-J.L0

# NMFS trawl survey: male selectivity (dodged)

1974 <= y <= 1981

0.75  
0.50  
0.25  
0.00

1982 <= y <= 1987

0.75  
0.50  
0.25  
0.00

1988 <= y

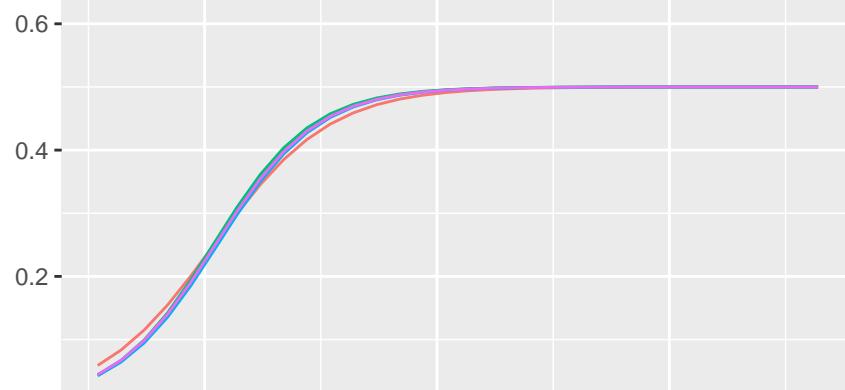
0.75  
0.50  
0.25  
0.00

size (mm CW)

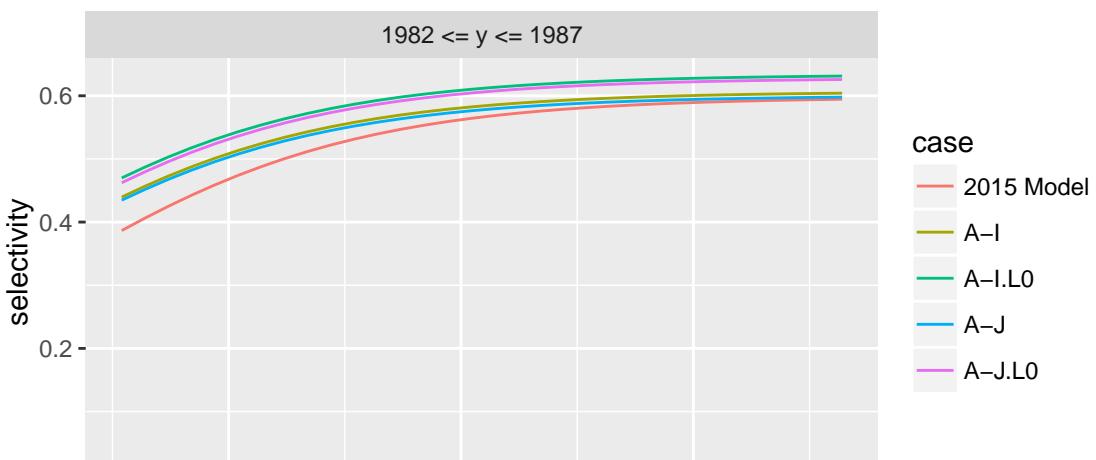
- case
- 2015 Model
  - A-I
  - A-I.L0
  - A-J
  - A-J.L0

# NMFS trawl survey: female selectivity

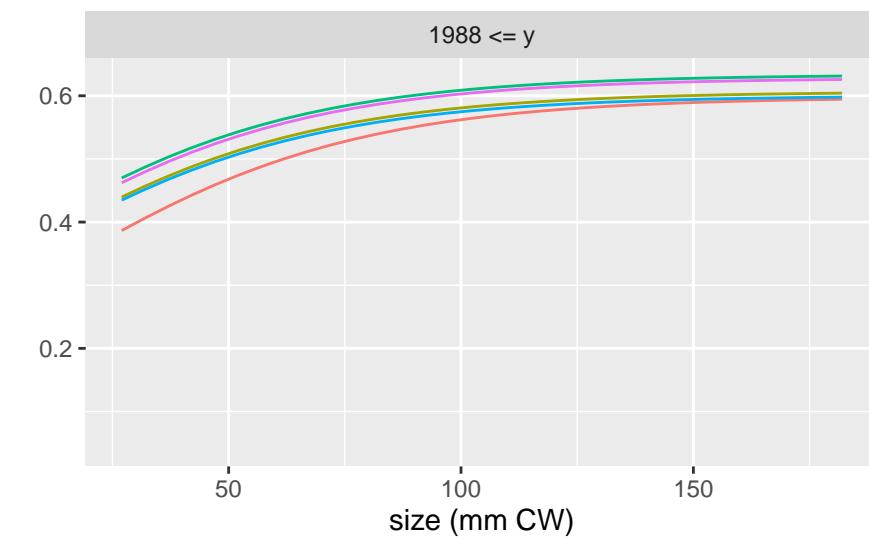
1974 <= y <= 1981



1982 <= y <= 1987



1988 <= y

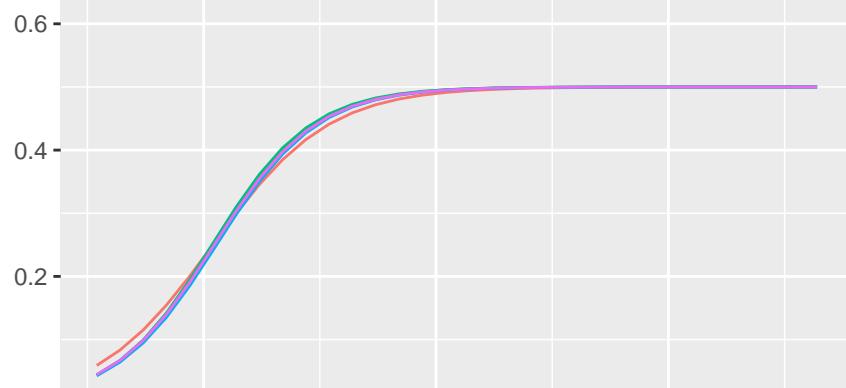


## case

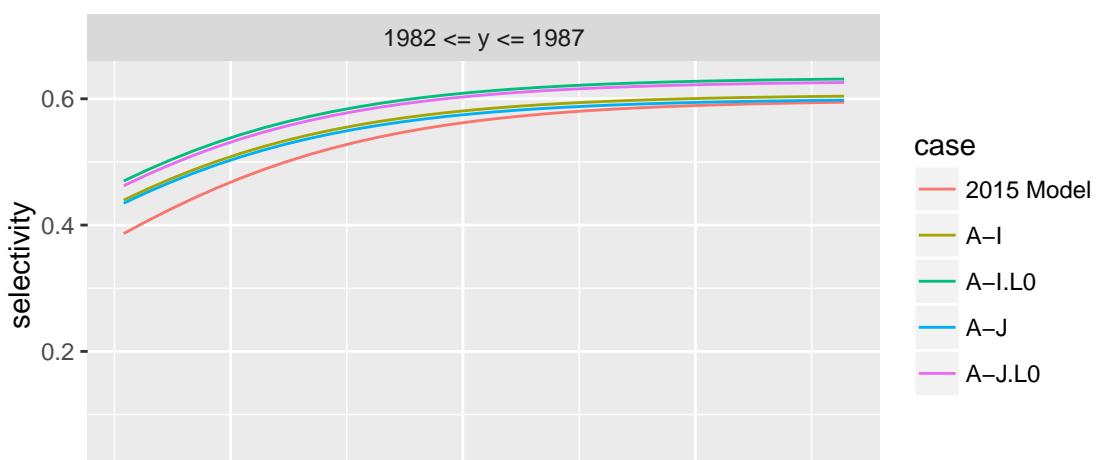
- 2015 Model
- A-I
- A-I.L0
- A-J
- A-J.L0

# NMFS trawl survey: female selectivity (dodged)

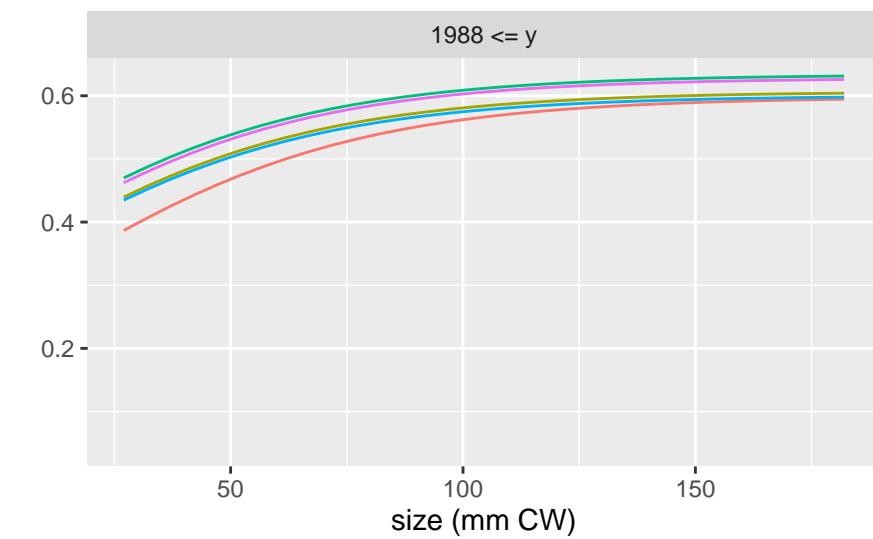
1974 <= y <= 1981



1982 <= y <= 1987



1988 <= y



## case

- 2015 Model
- A-I
- A-I.L0
- A-J
- A-J.L0