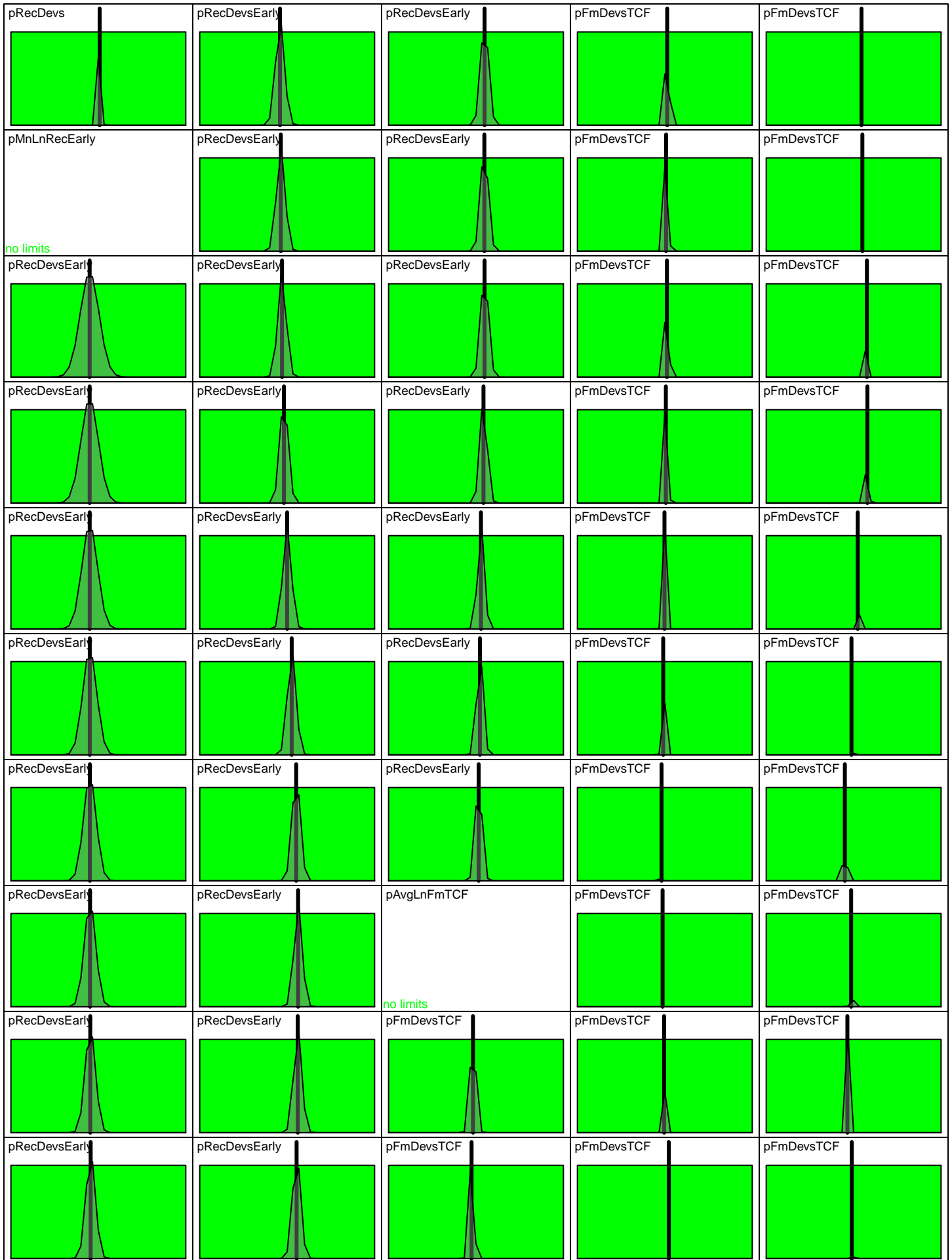
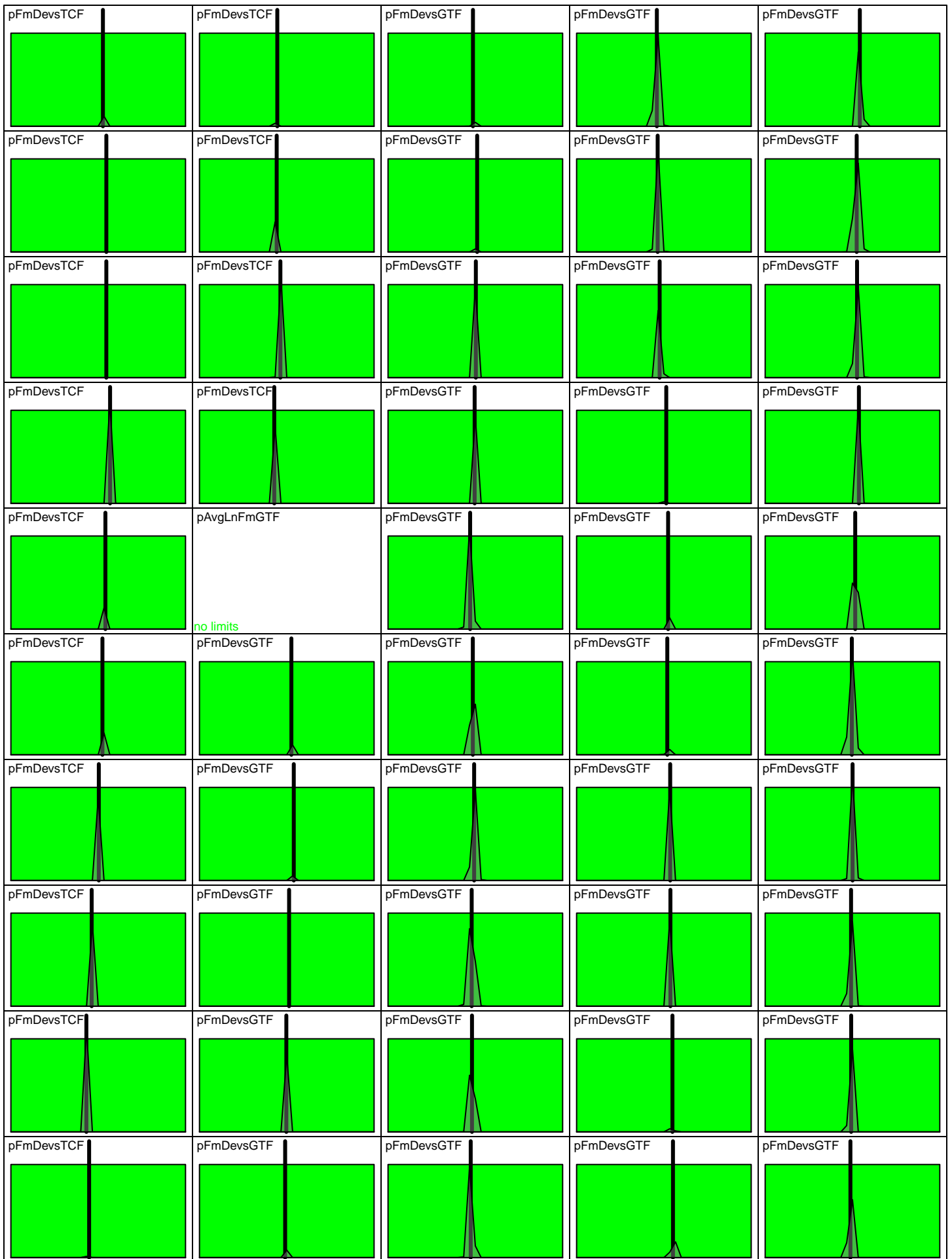
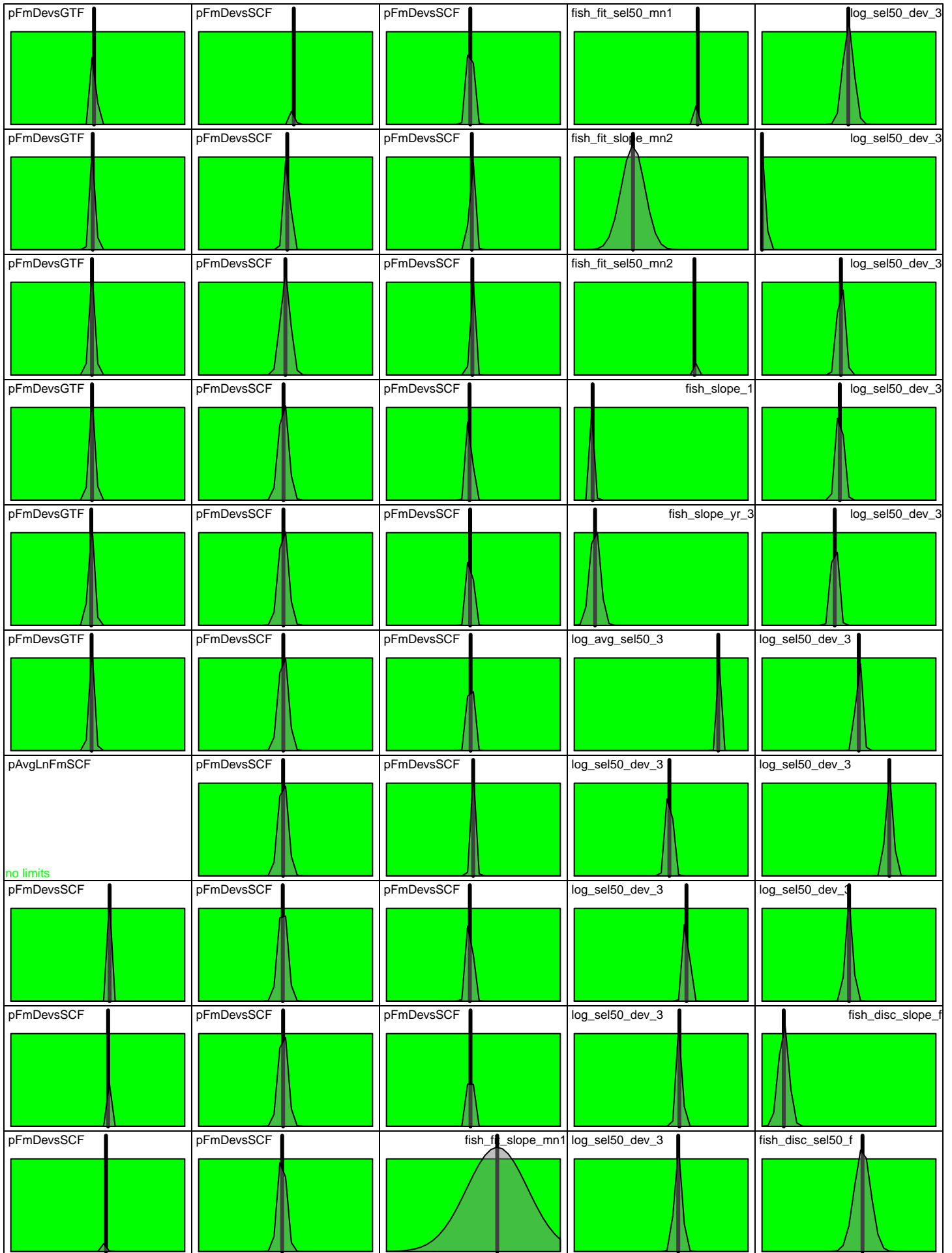
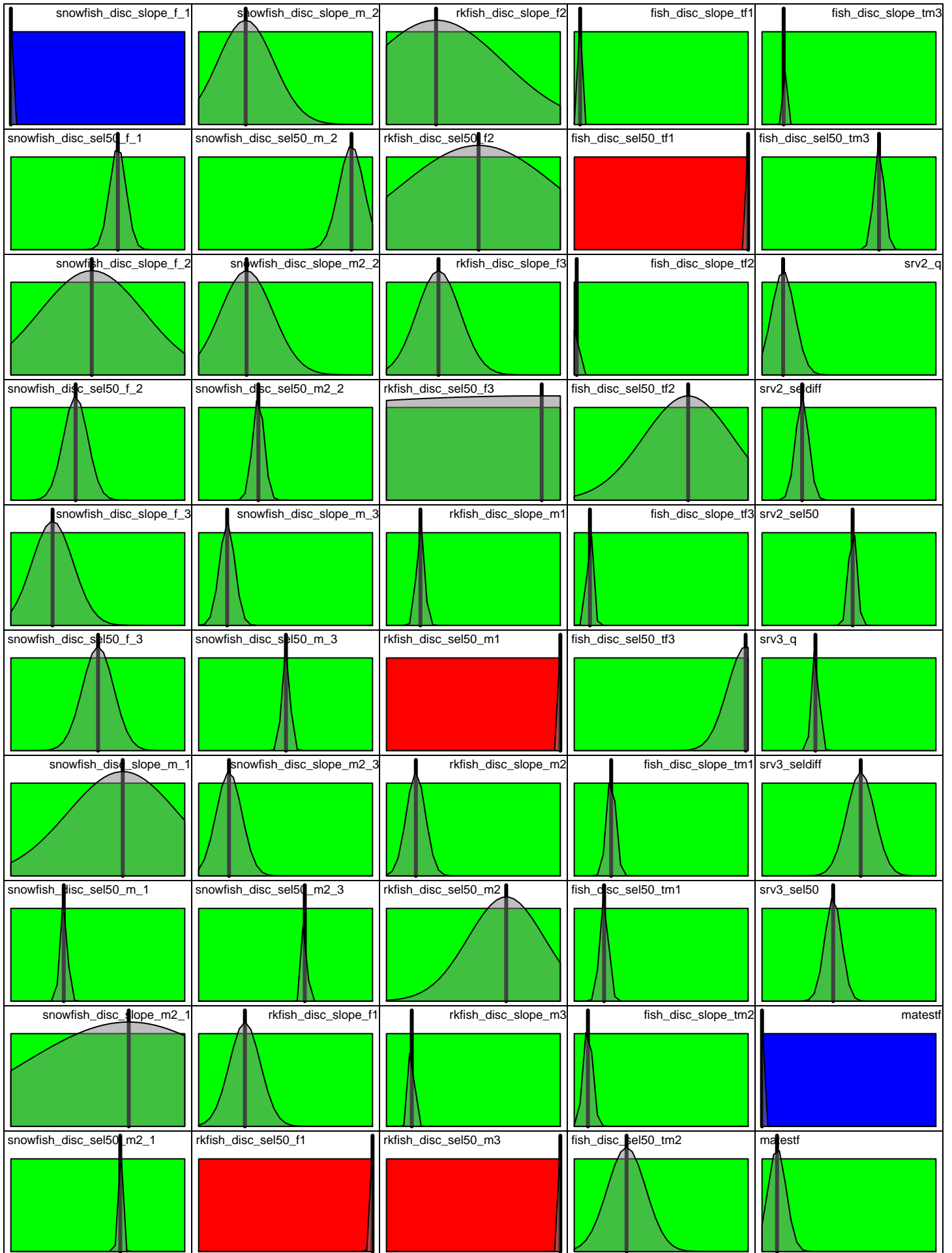


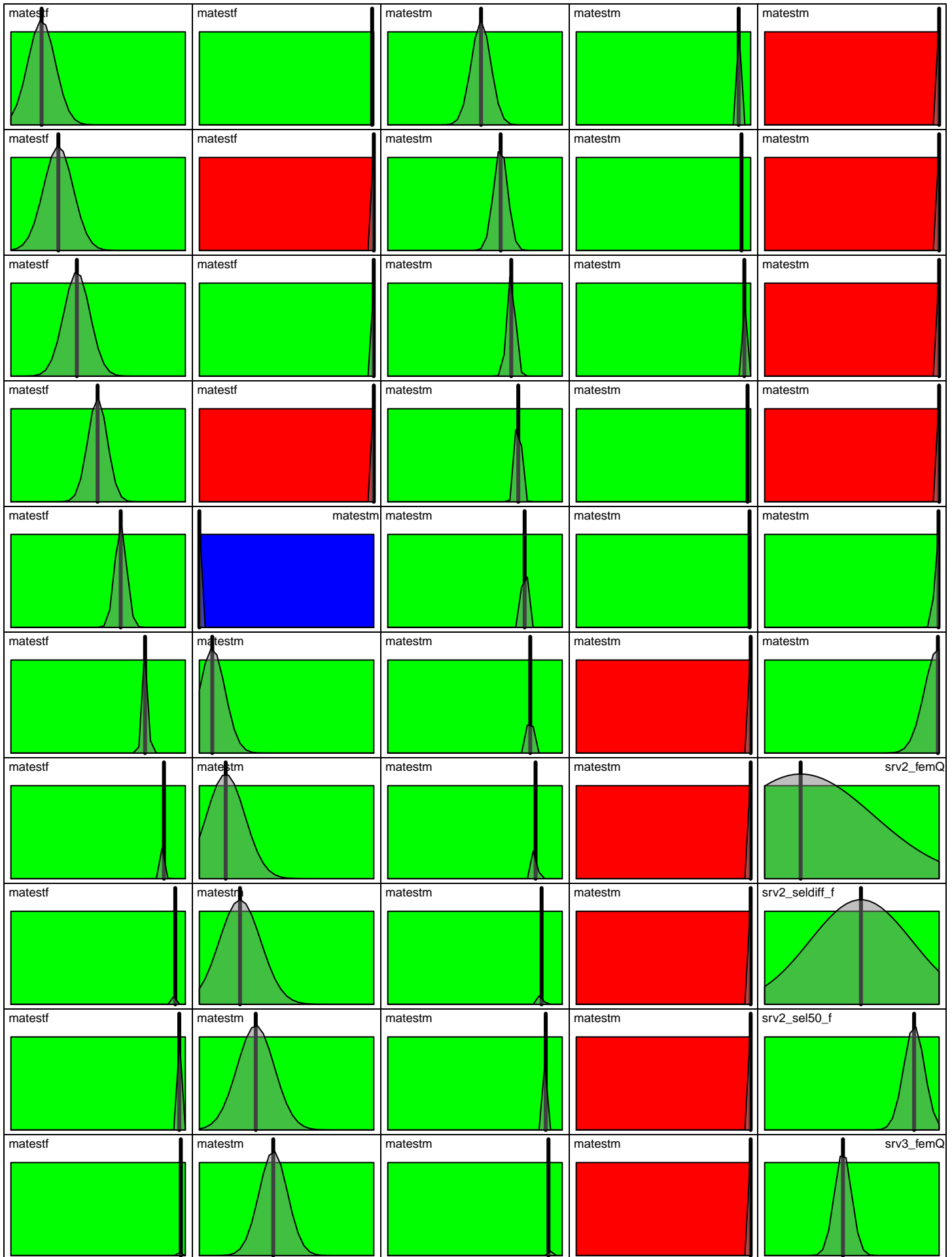
no limits

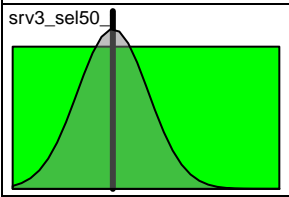




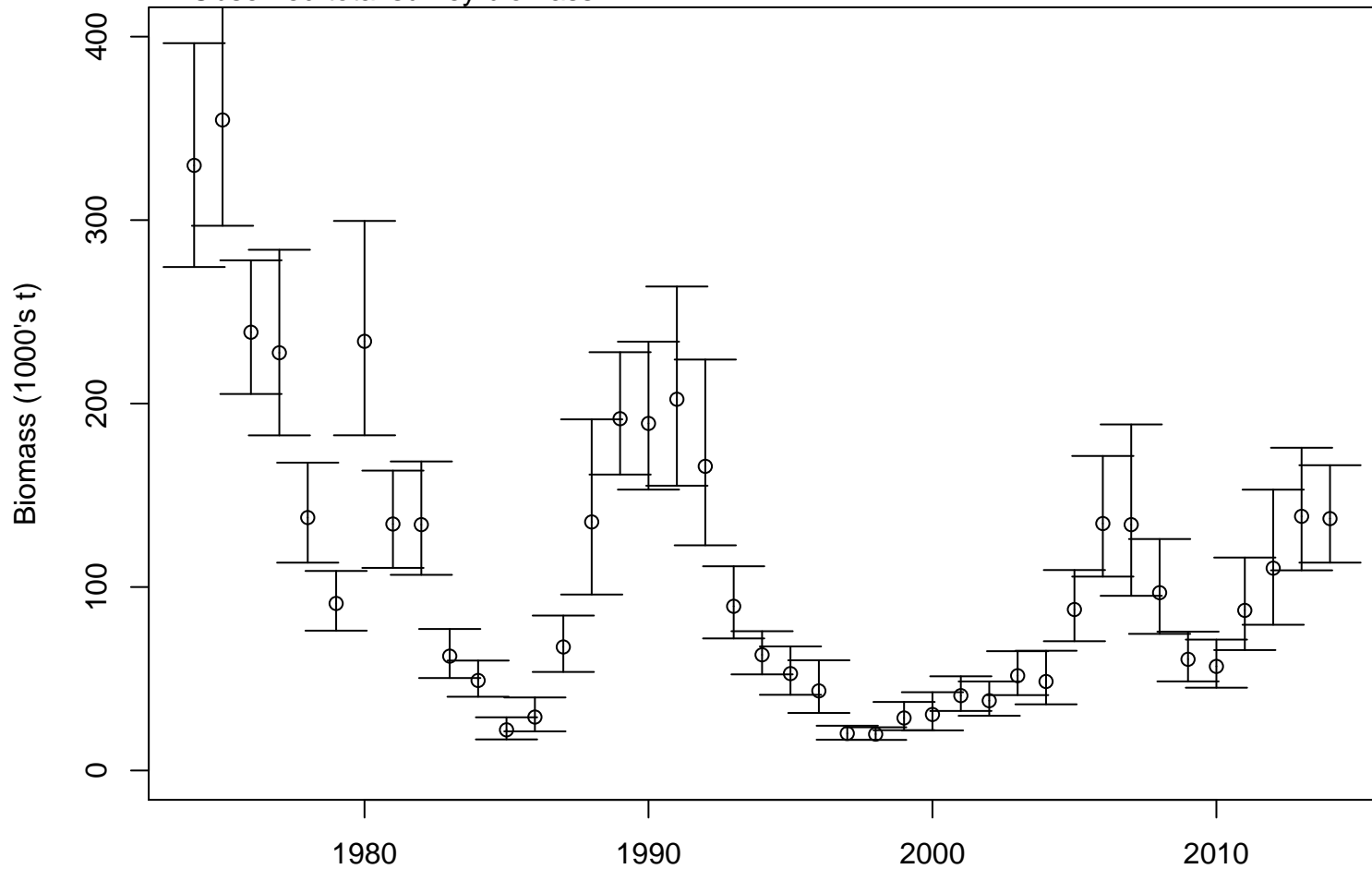




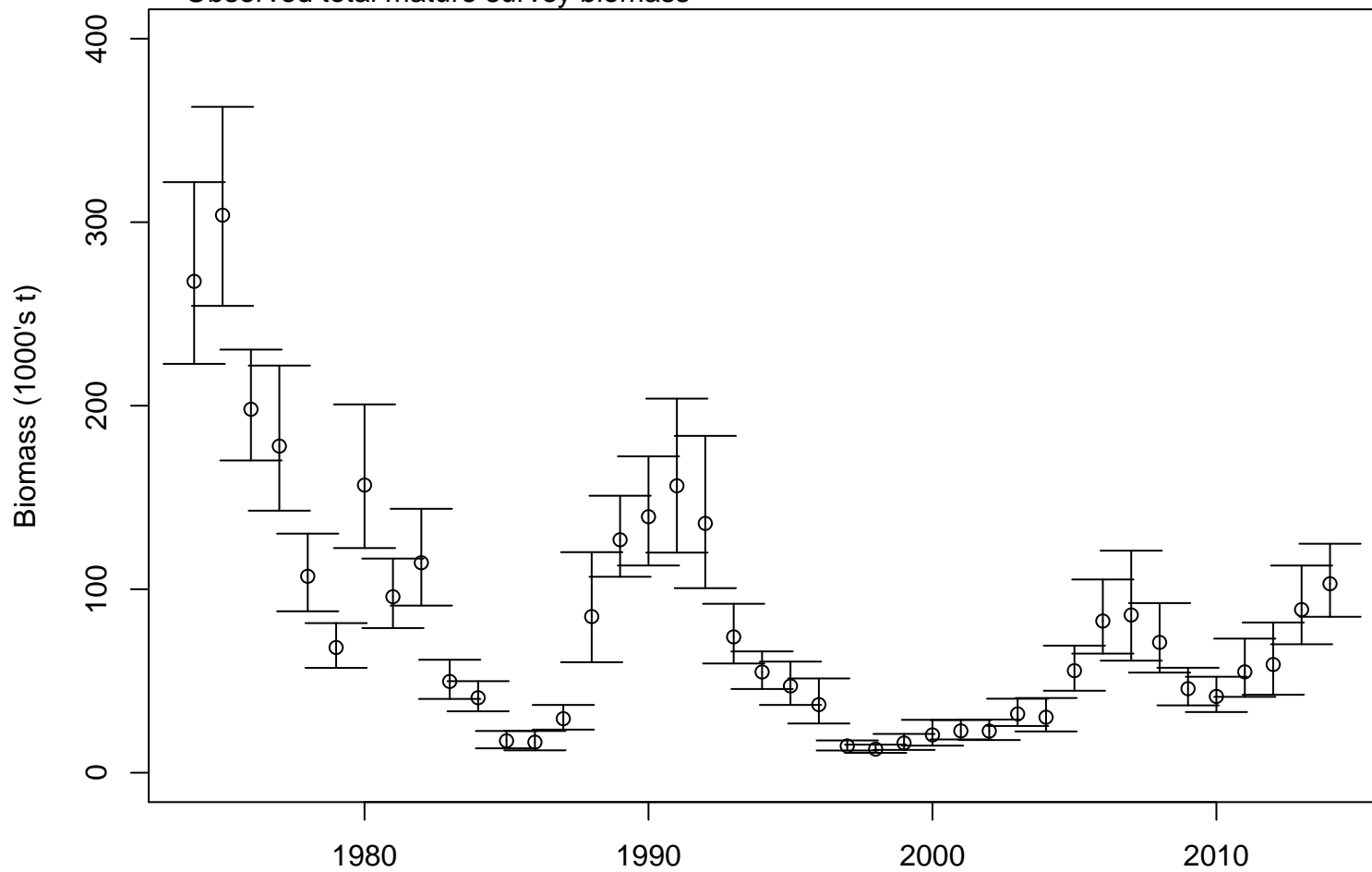




Observed total survey biomass

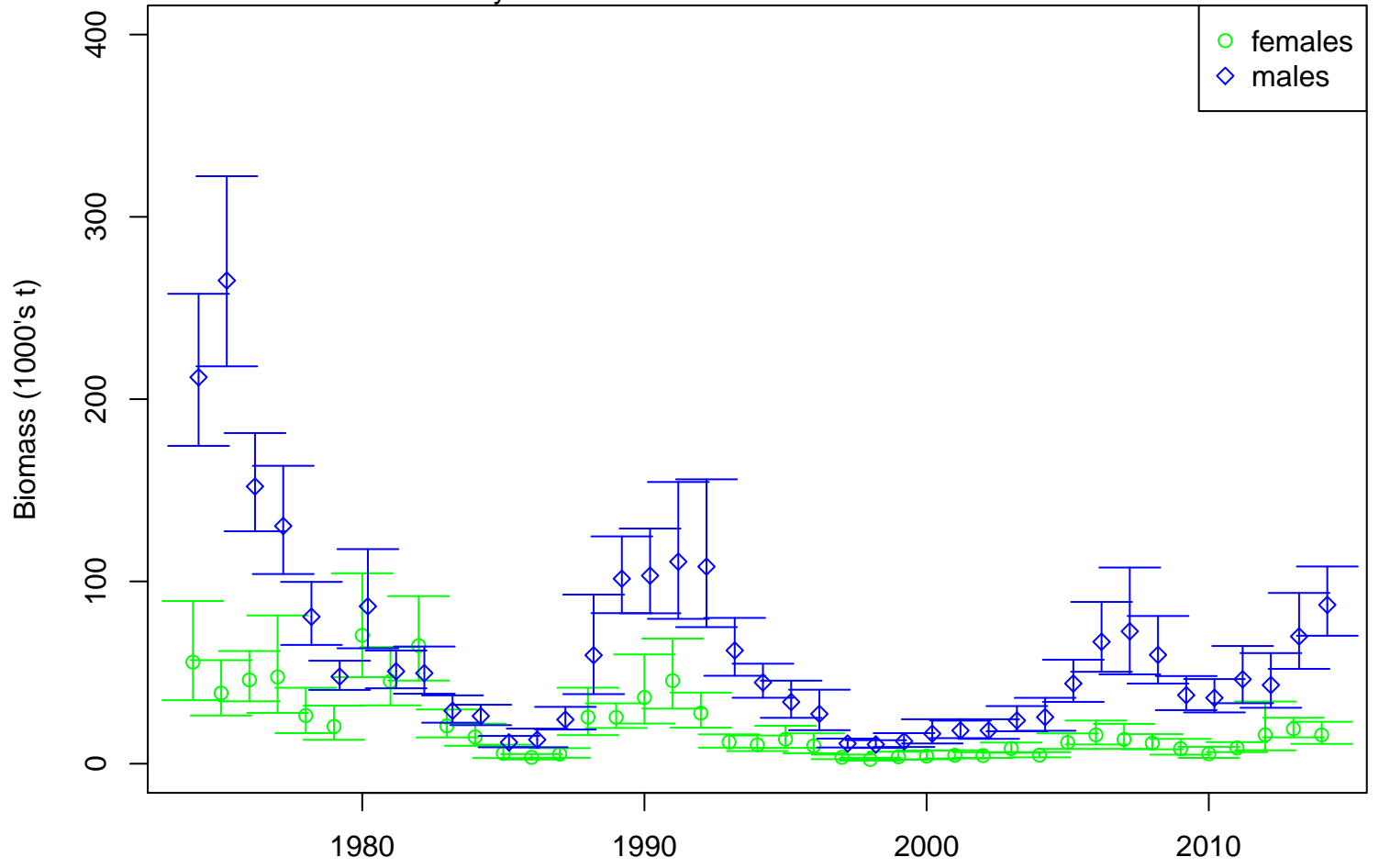


Observed total mature survey biomass

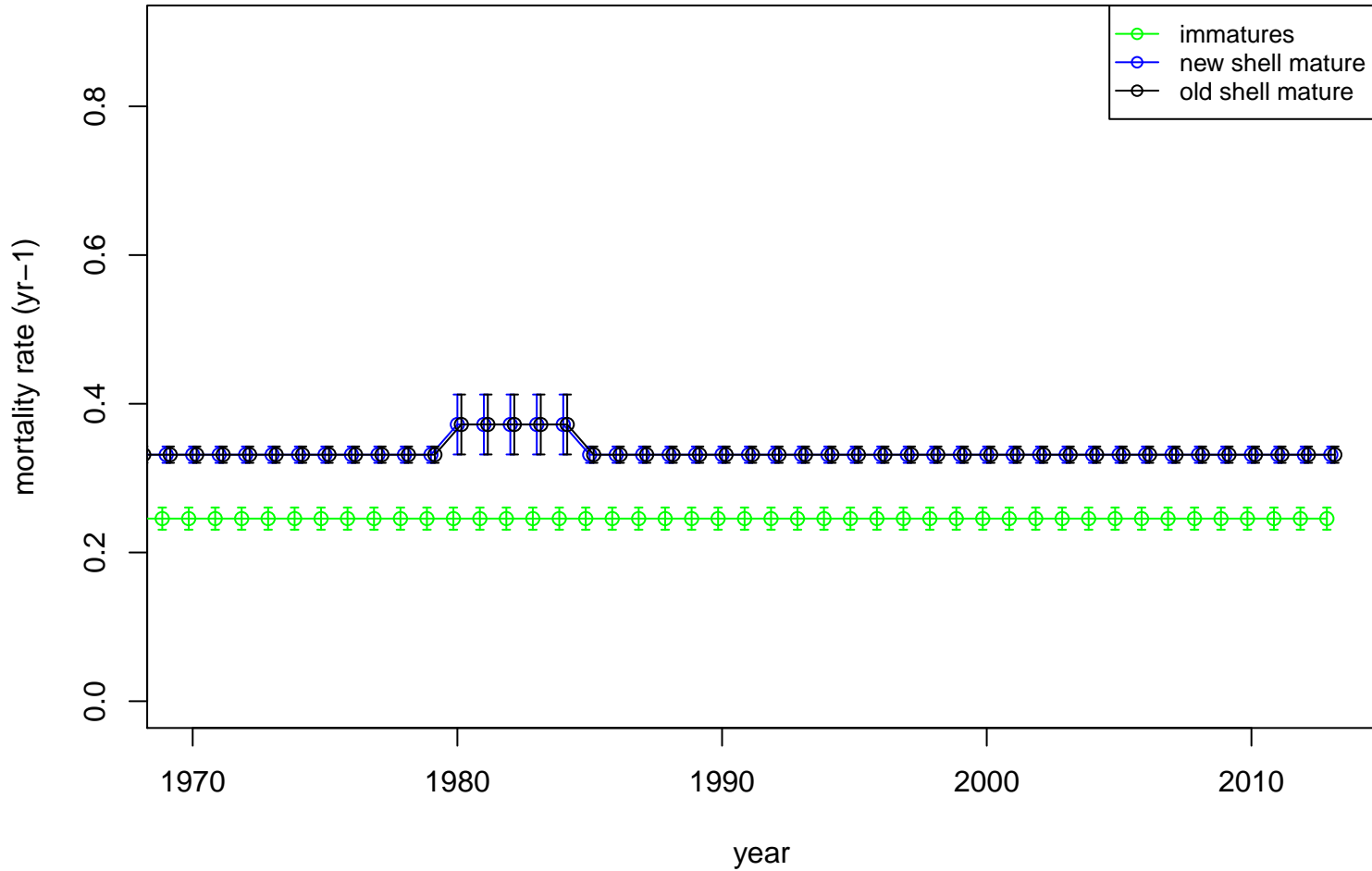




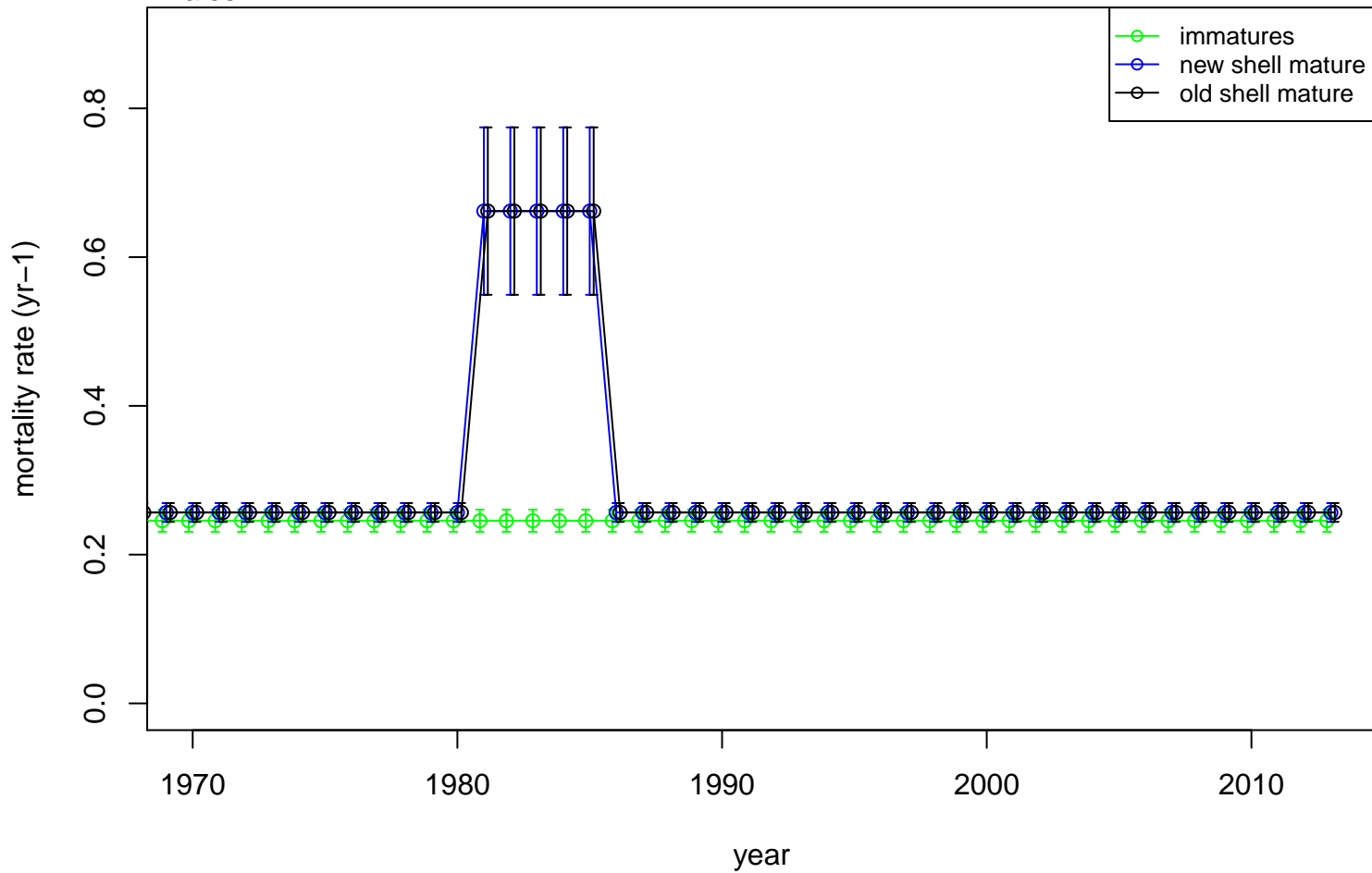
Observed mature survey biomass



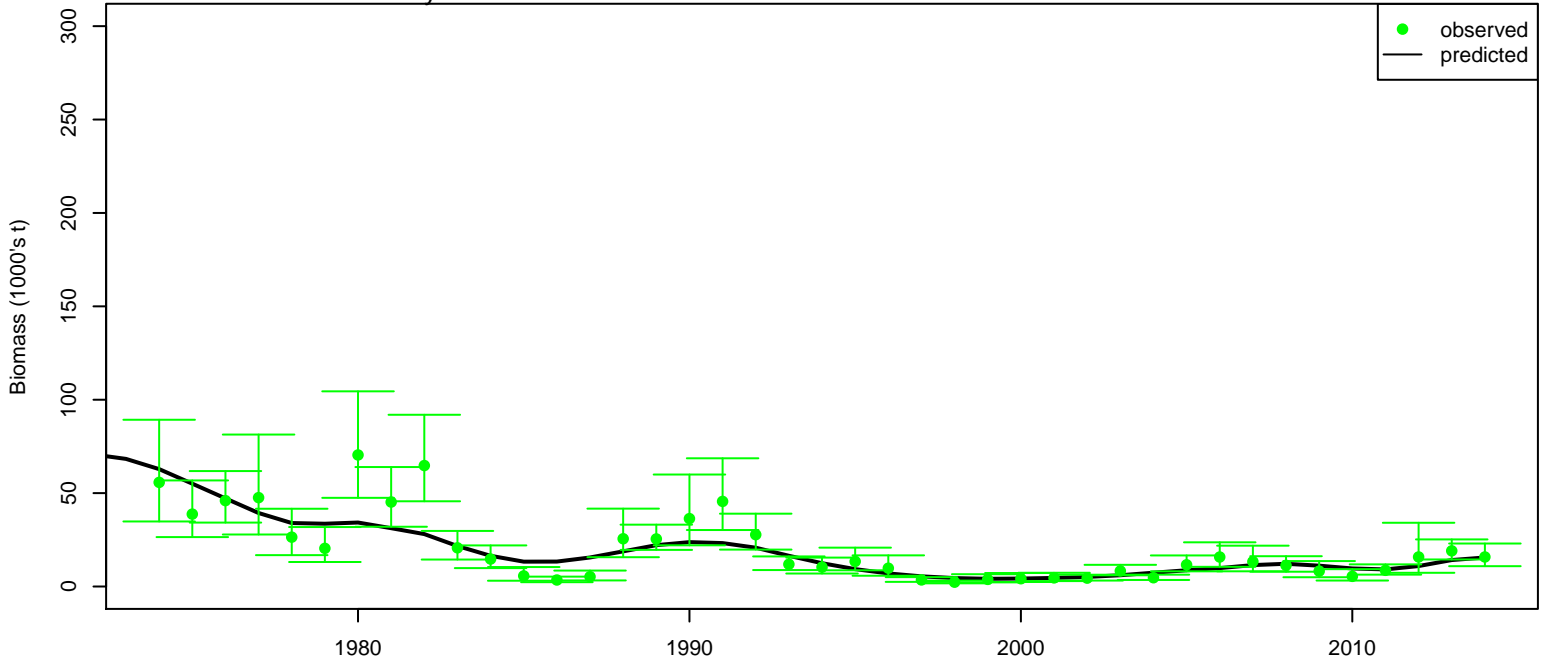
### Females



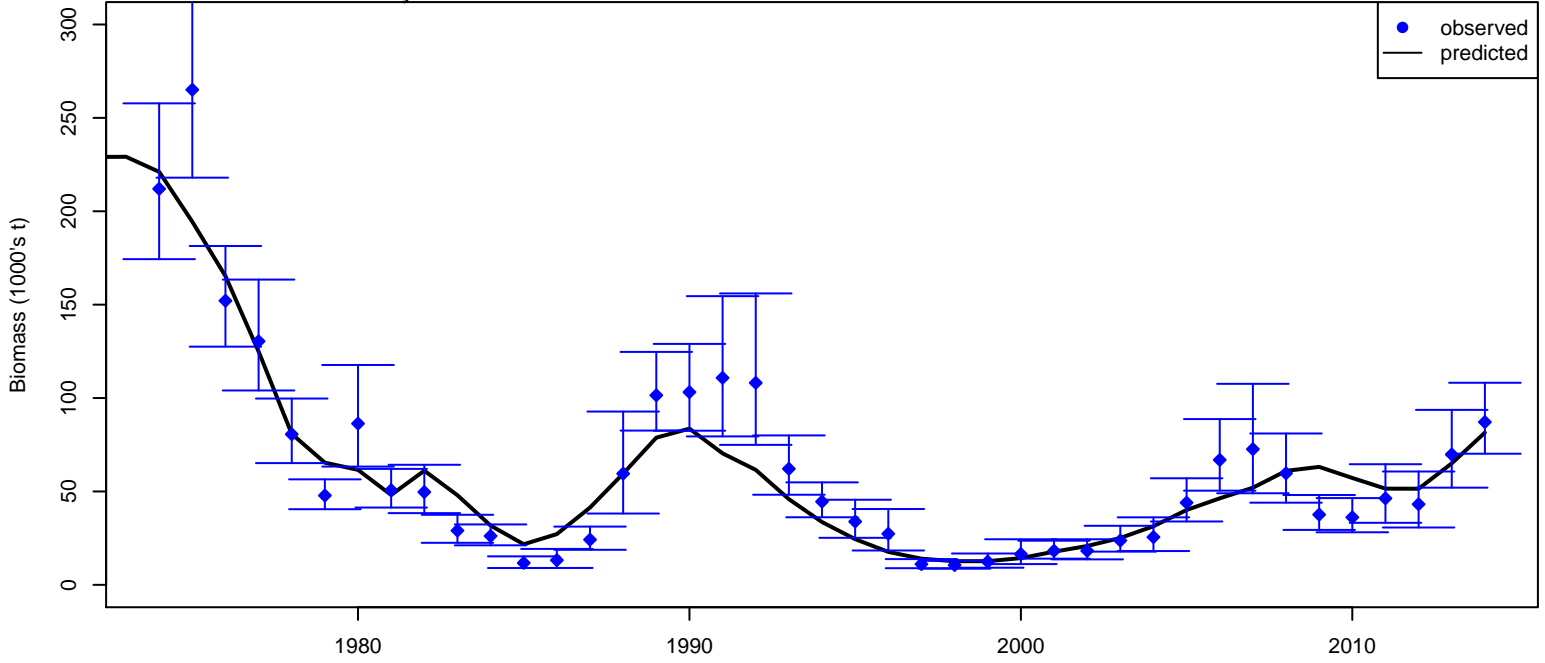
### Males



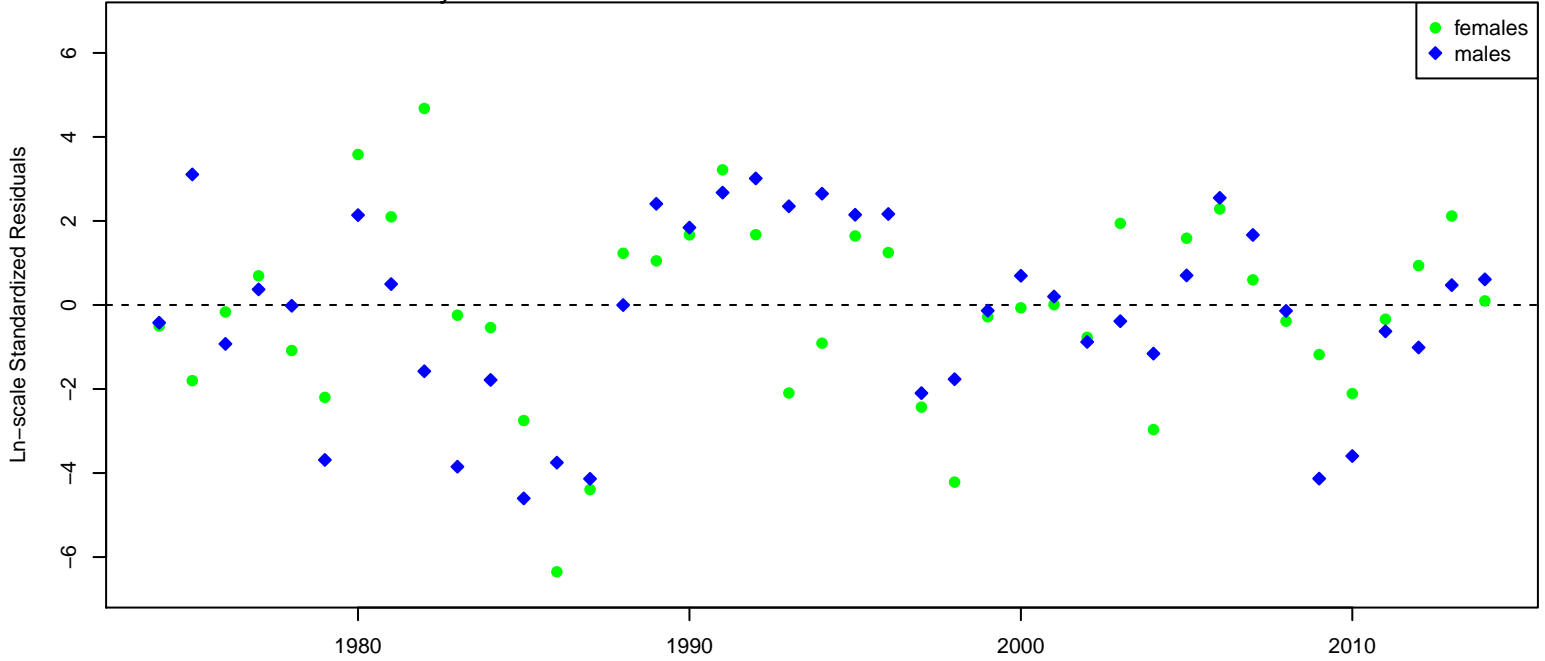
Mature female survey biomass



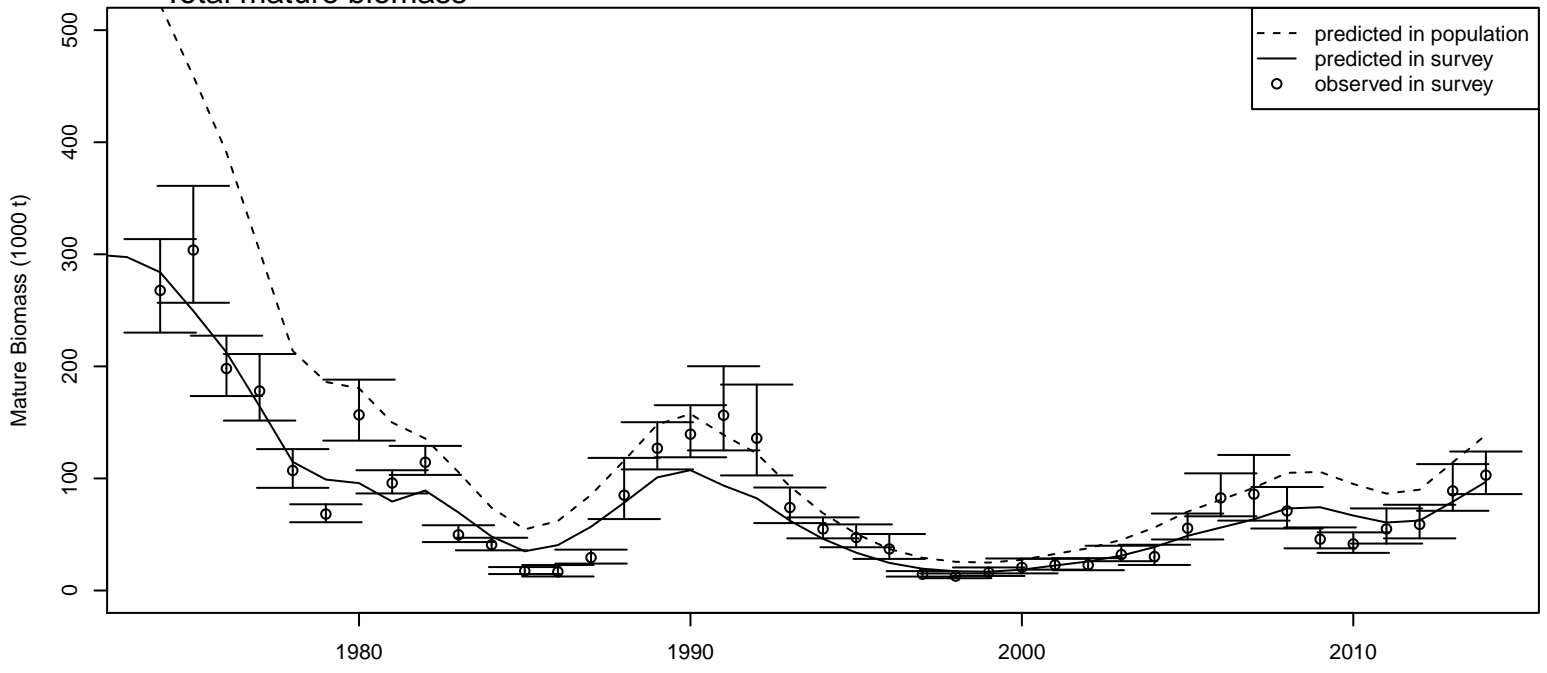
Mature male survey biomass



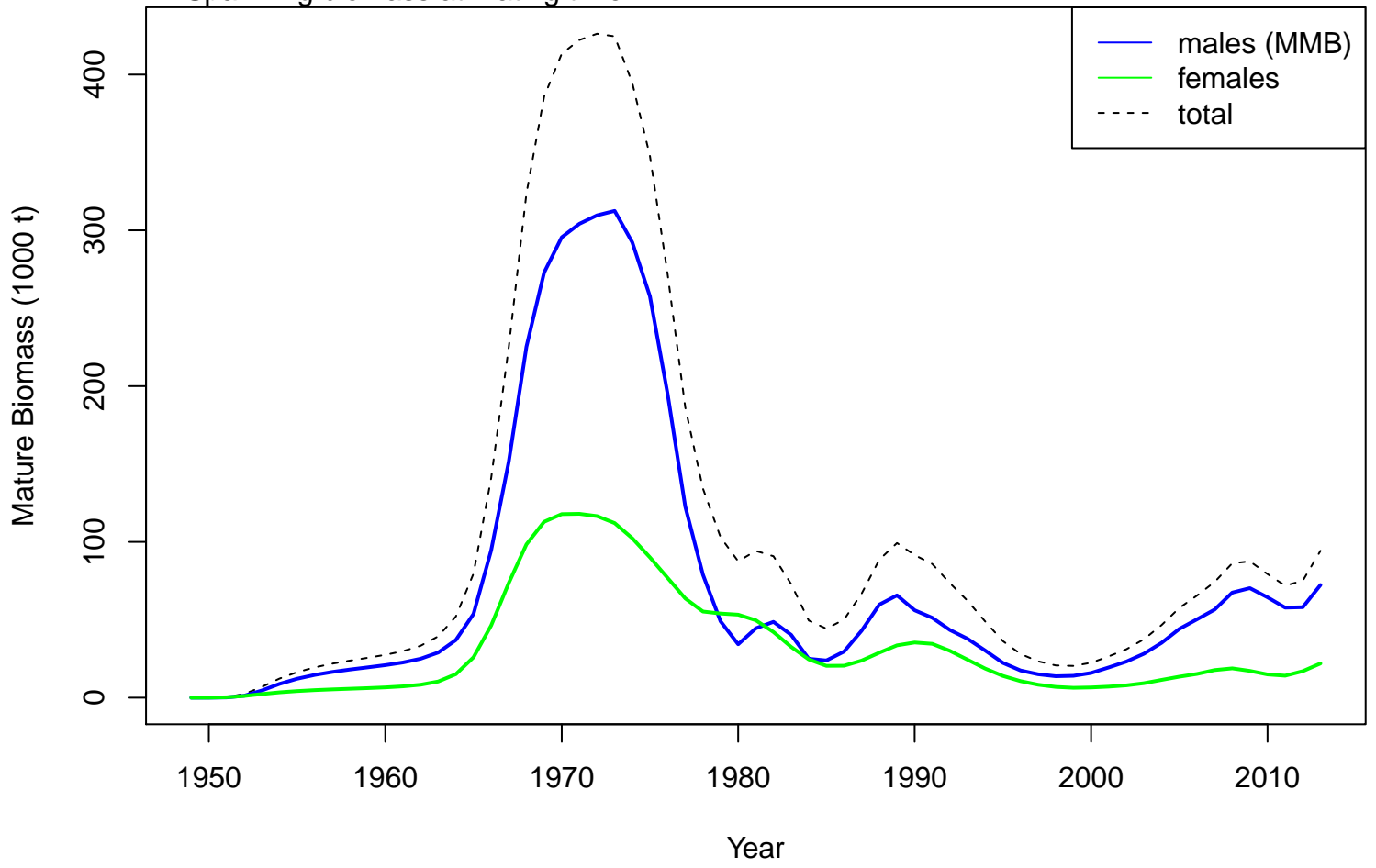
Fits to mature survey biomass



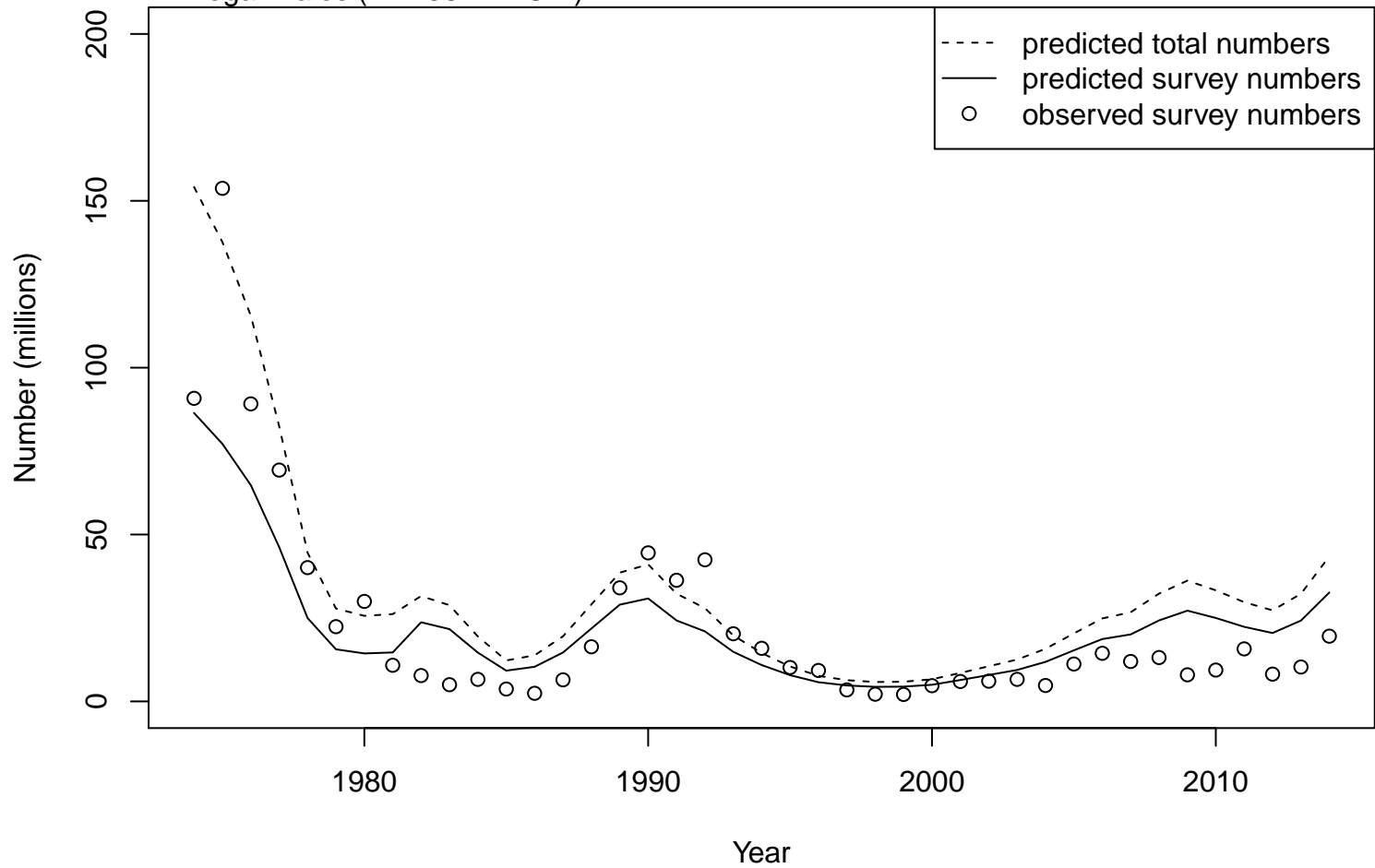
# Total mature biomass



Spawning biomass at mating time

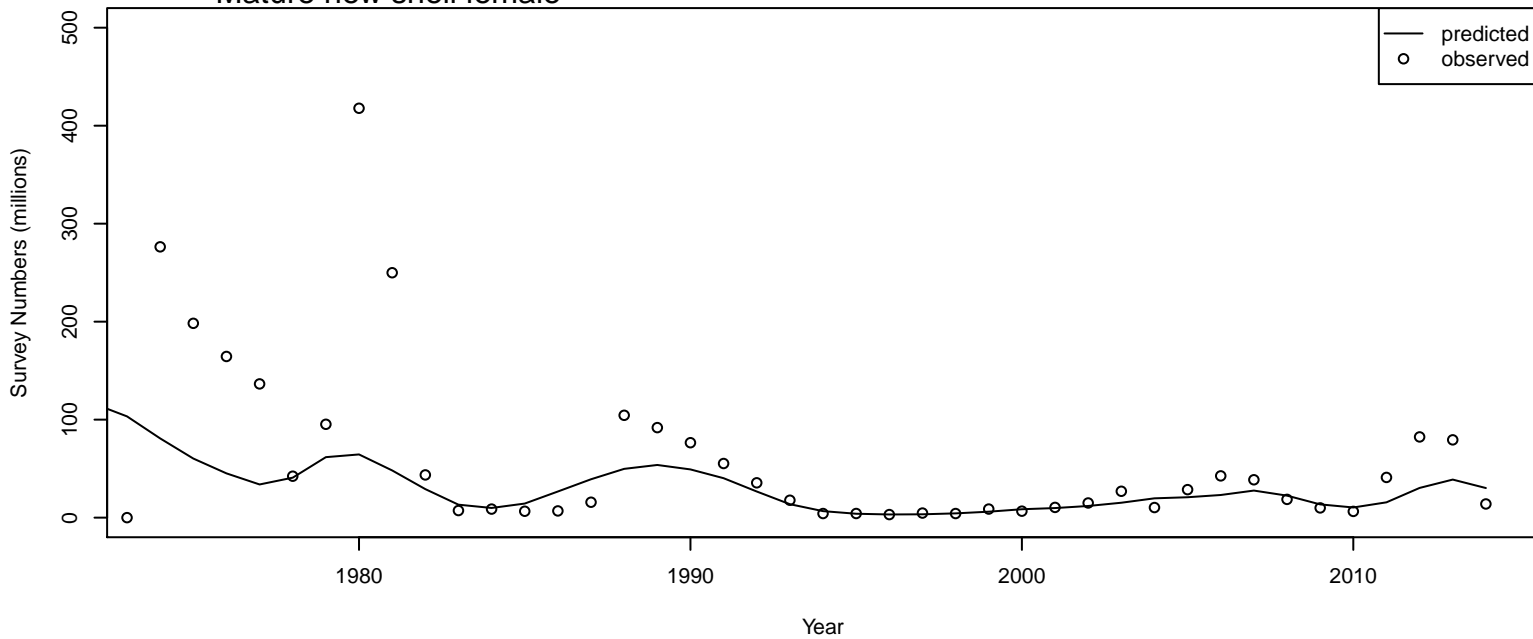


Legal males ( $\geq 138$  mm CW)

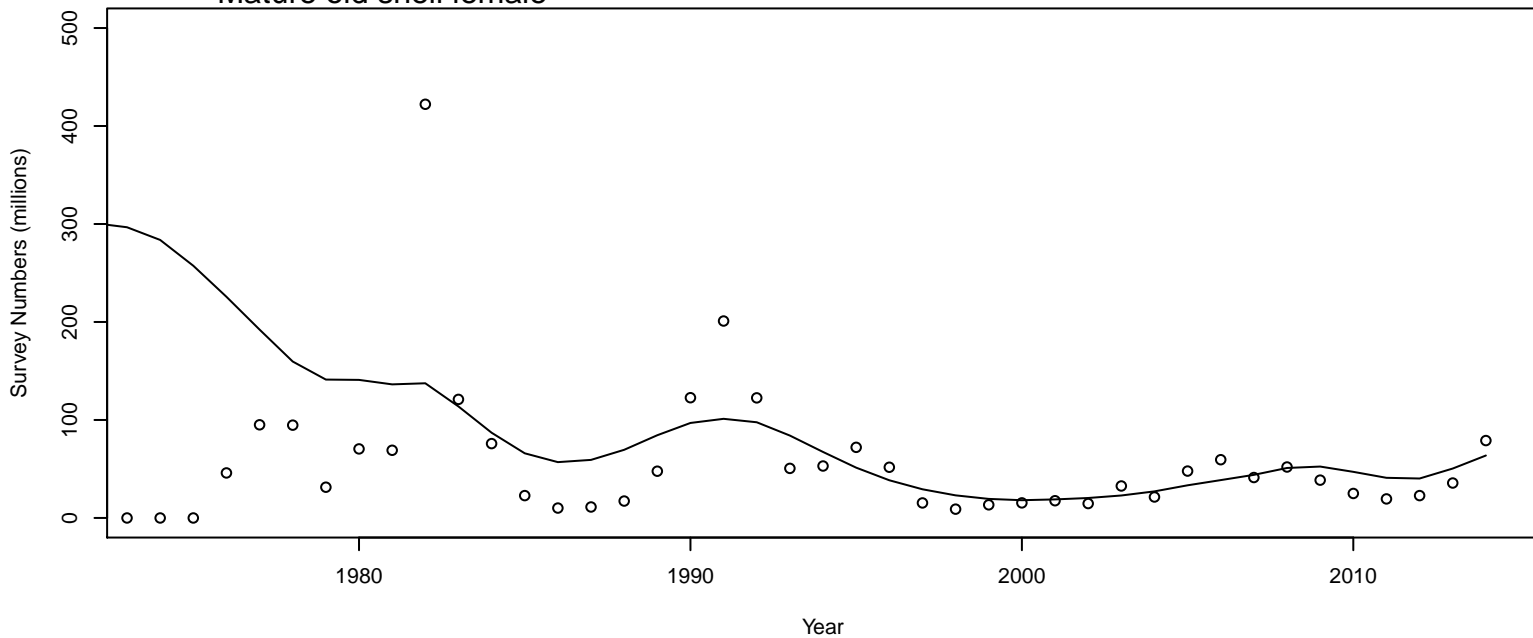




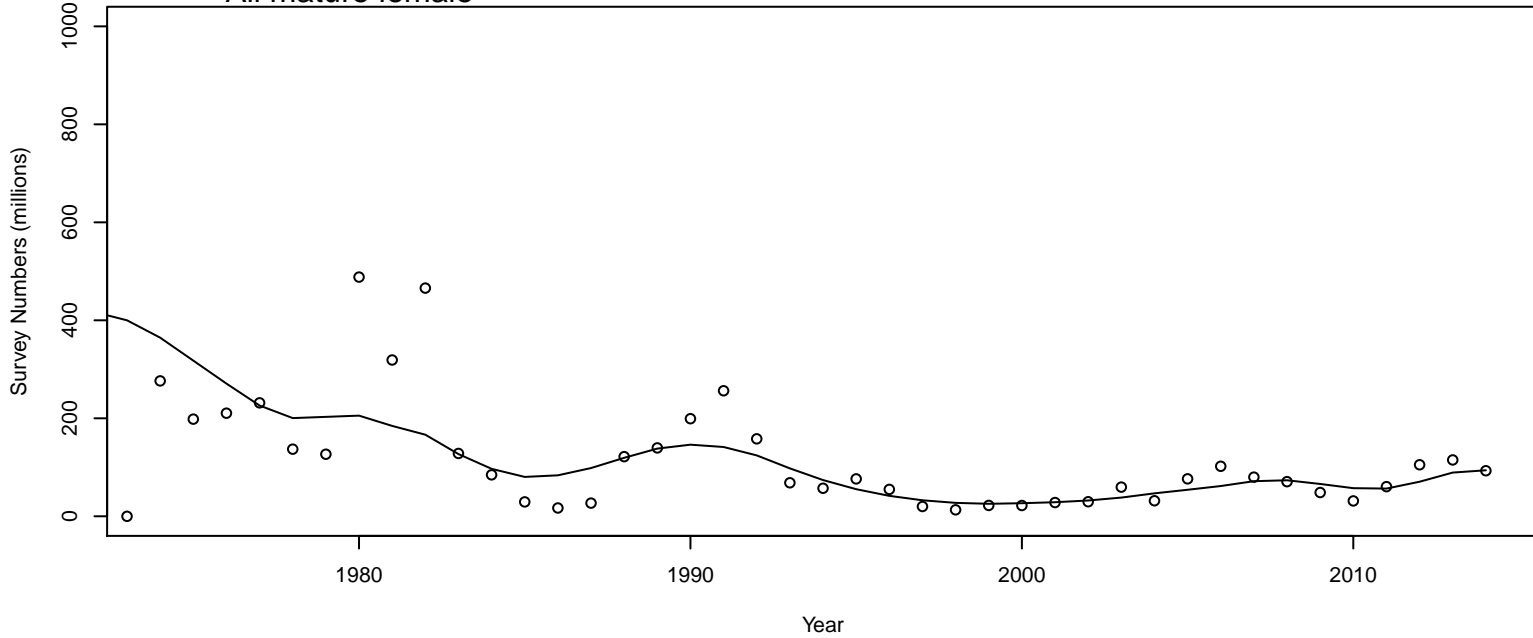
Mature new shell female



Mature old shell female

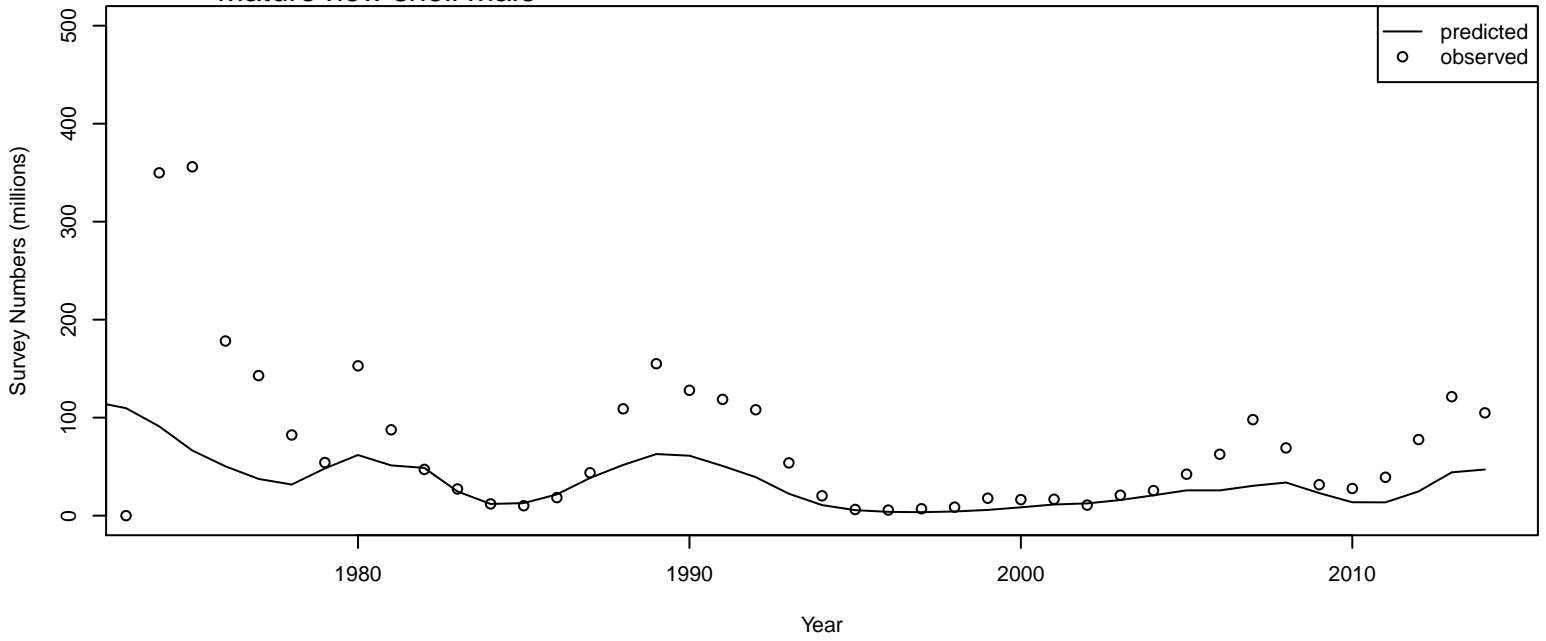


All mature female

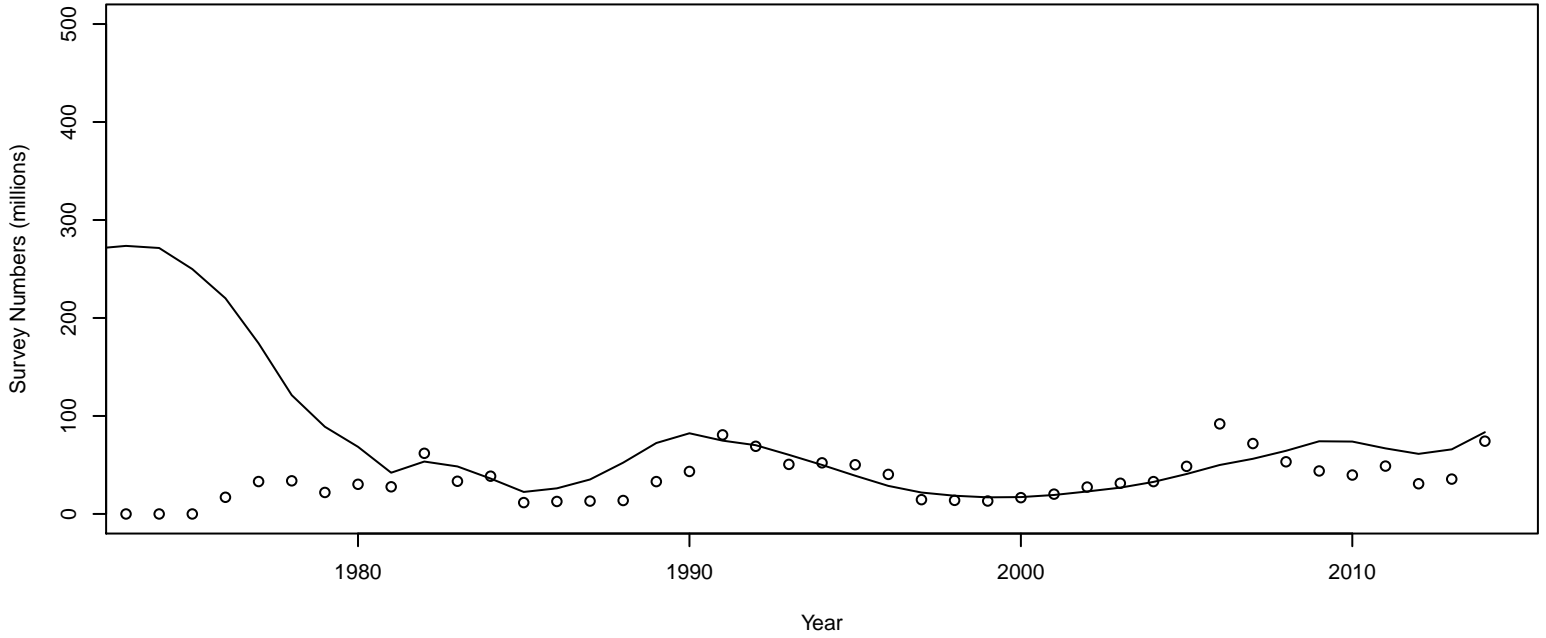




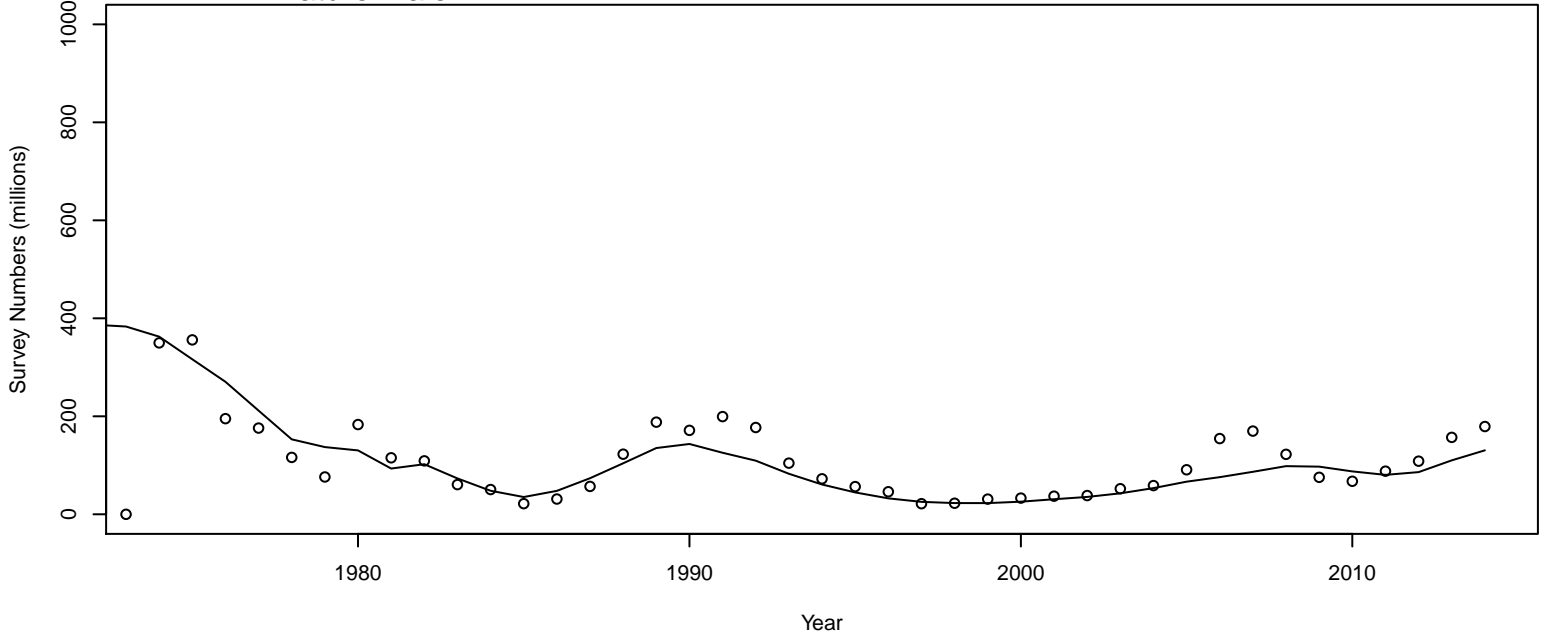
Mature new shell male

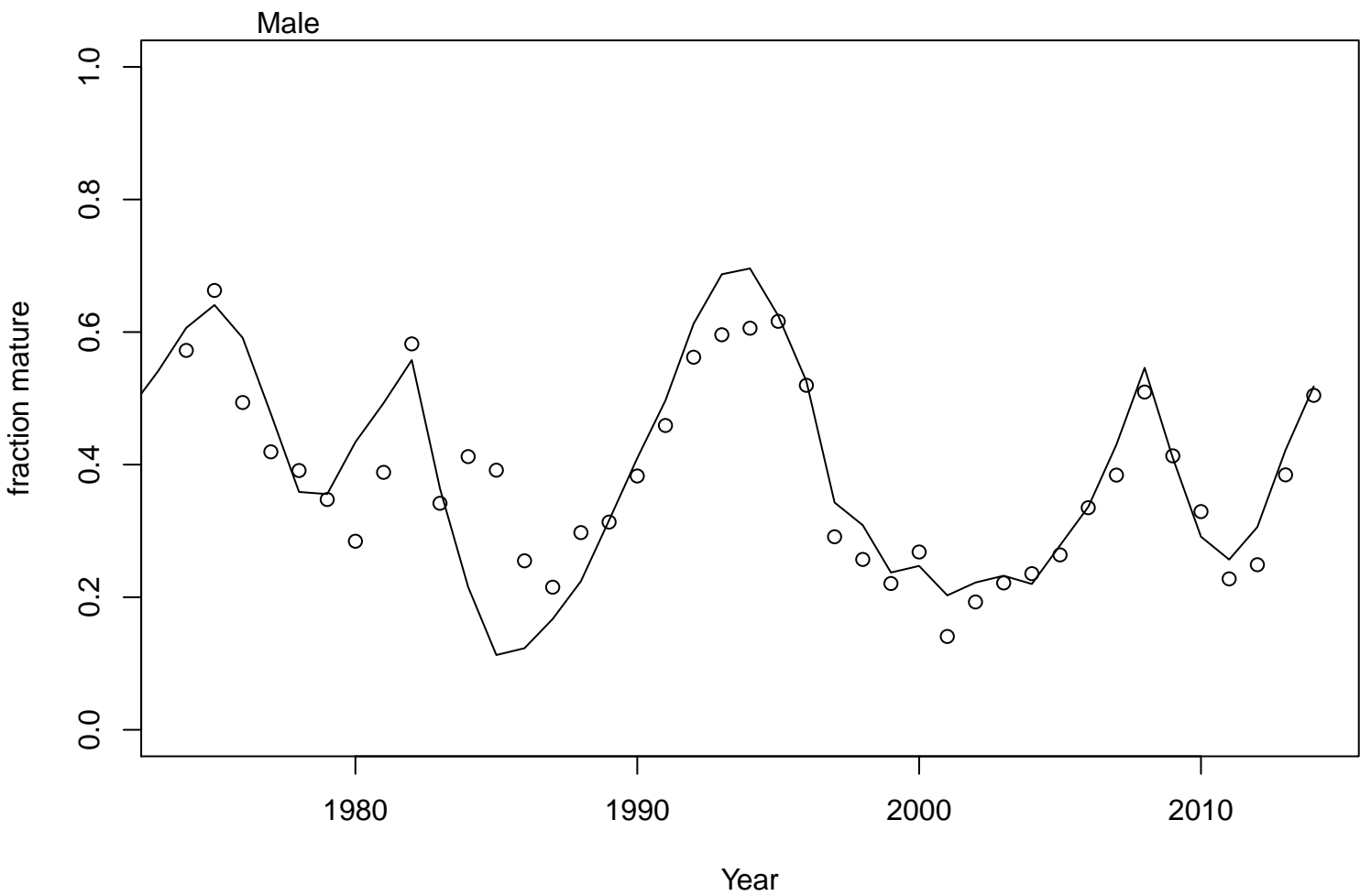


Mature old shell male

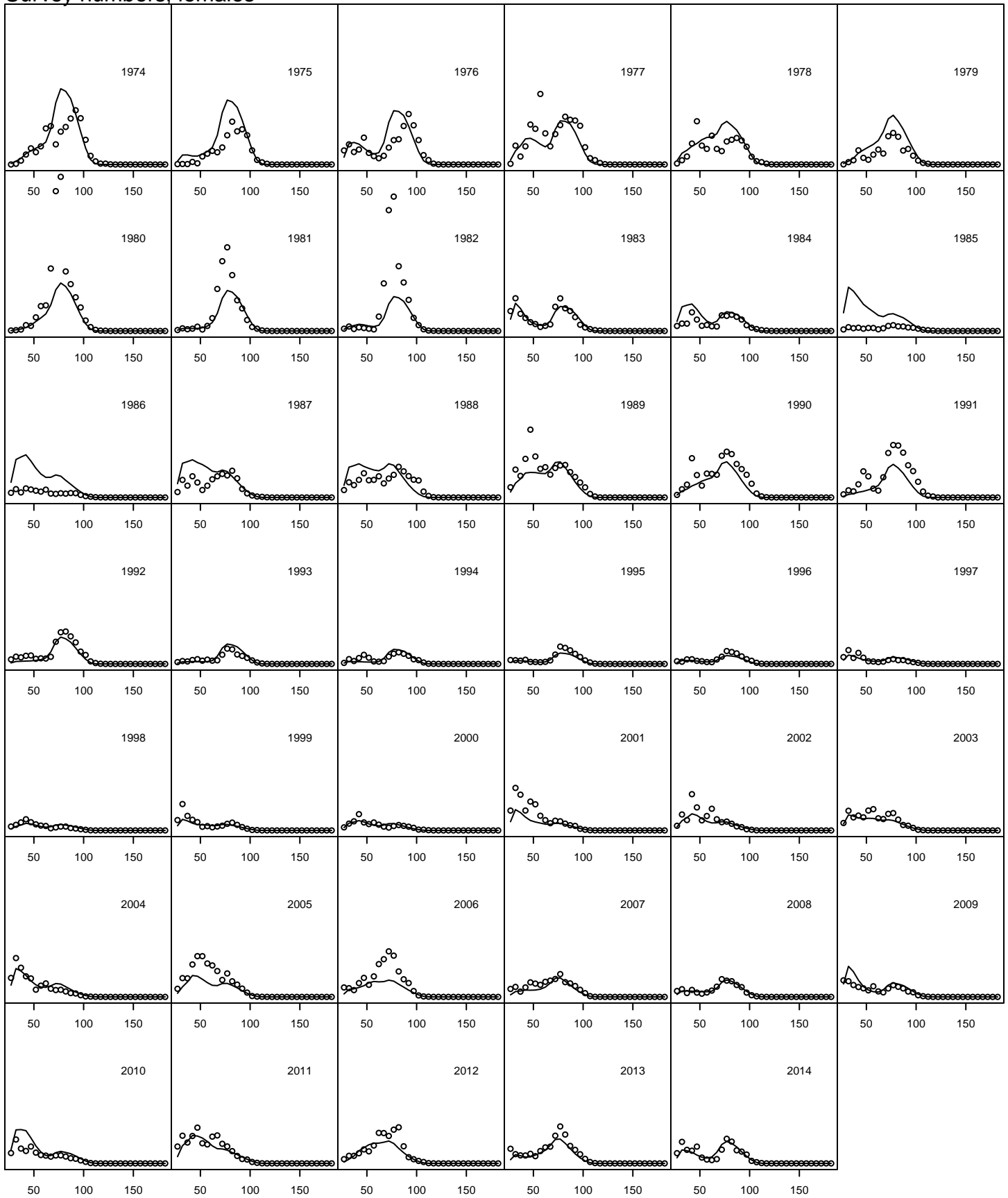


All mature male

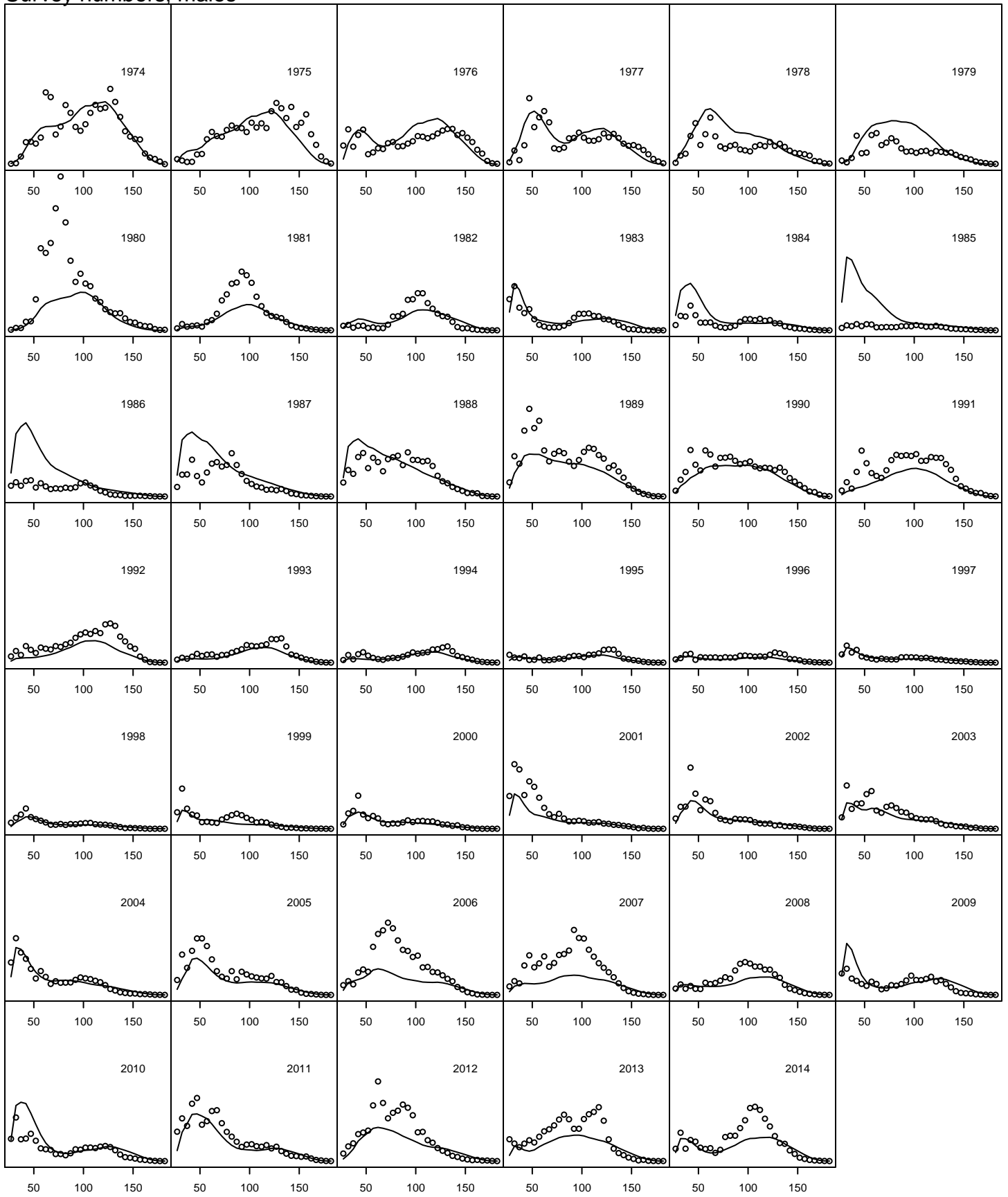




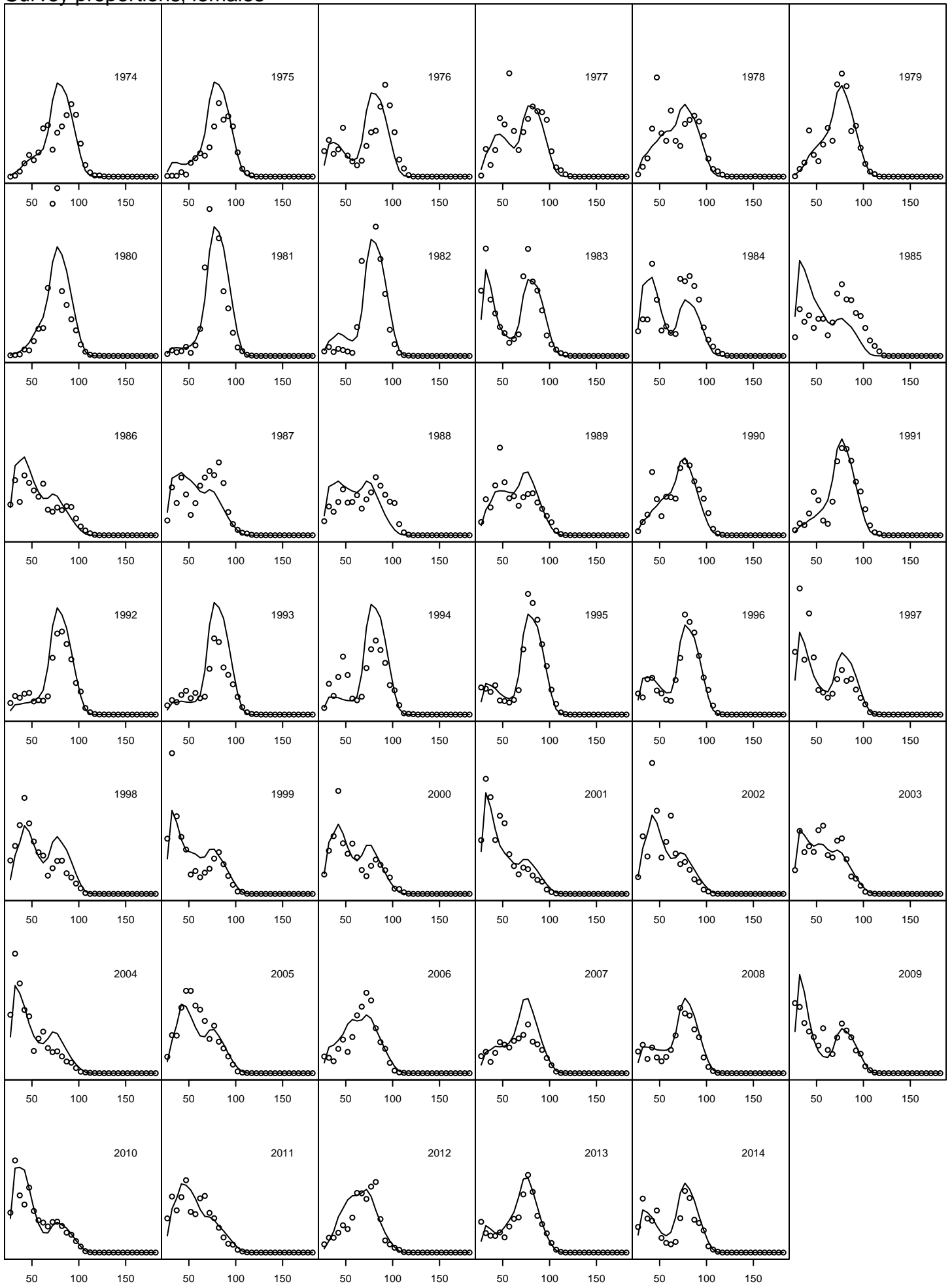
# Survey numbers, females



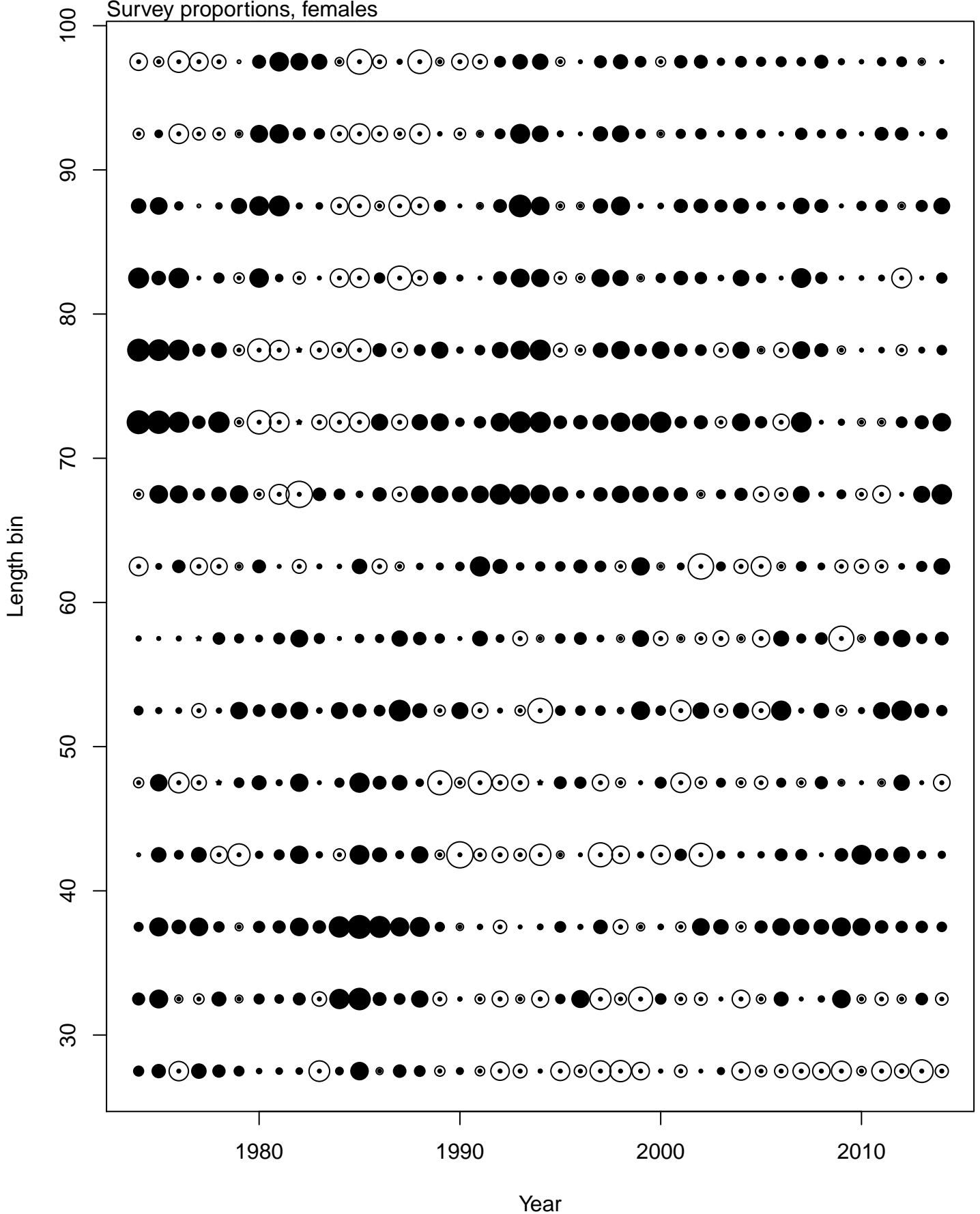
# Survey numbers, males



# Survey proportions, females

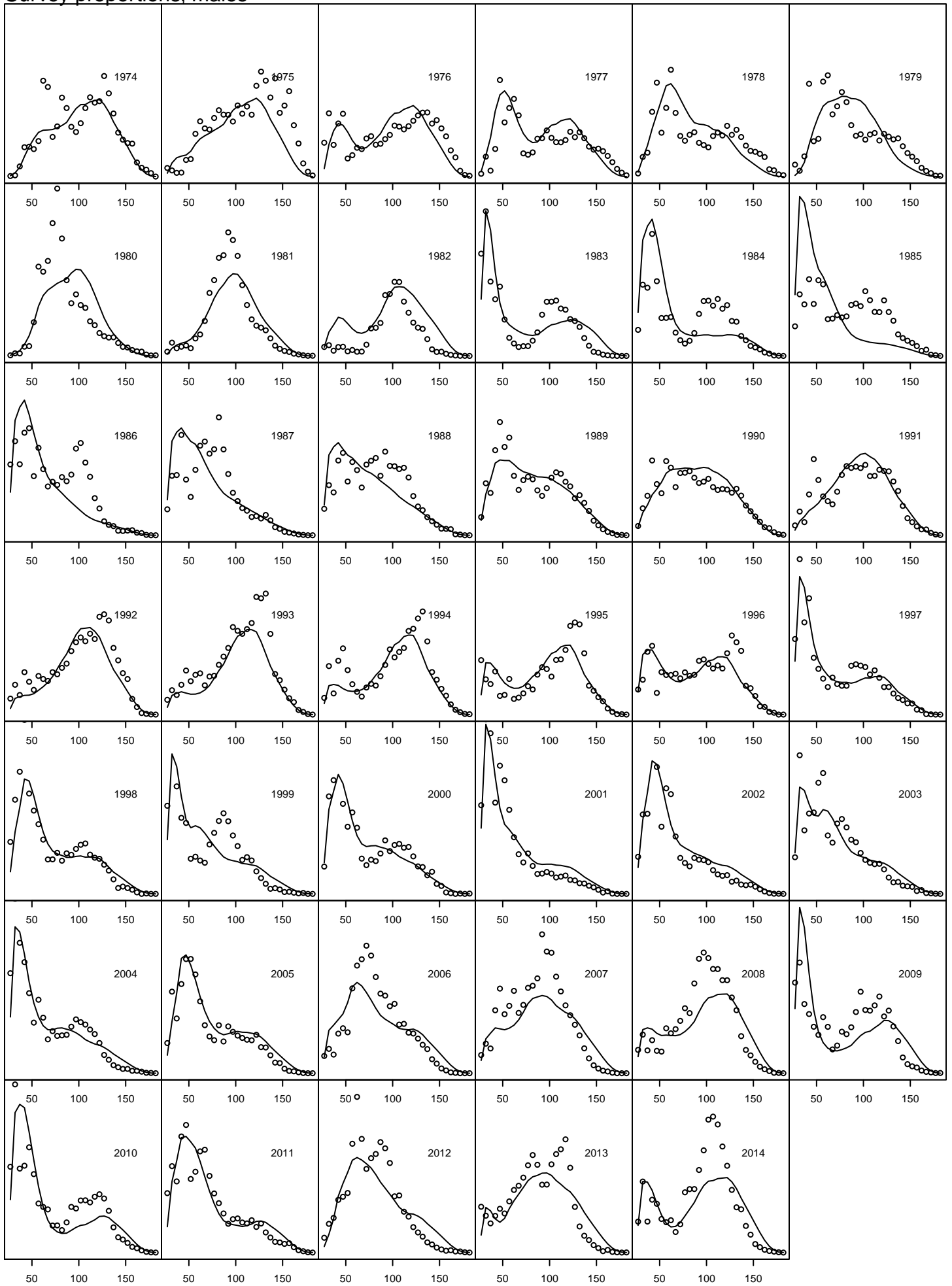


Survey proportions, females

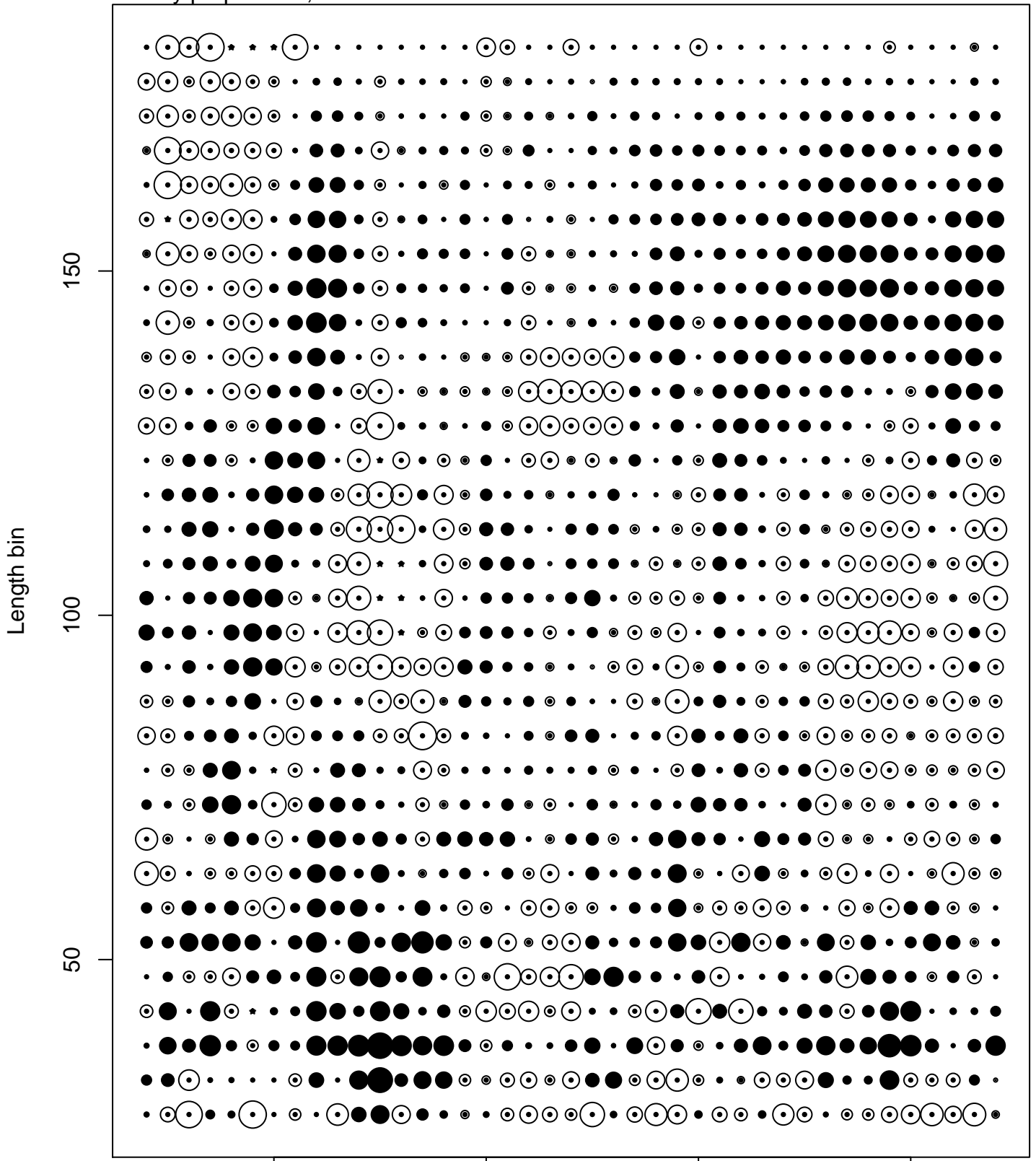


Standardized Pearson Residual Range -2.216 2.958

# Survey proportions, males



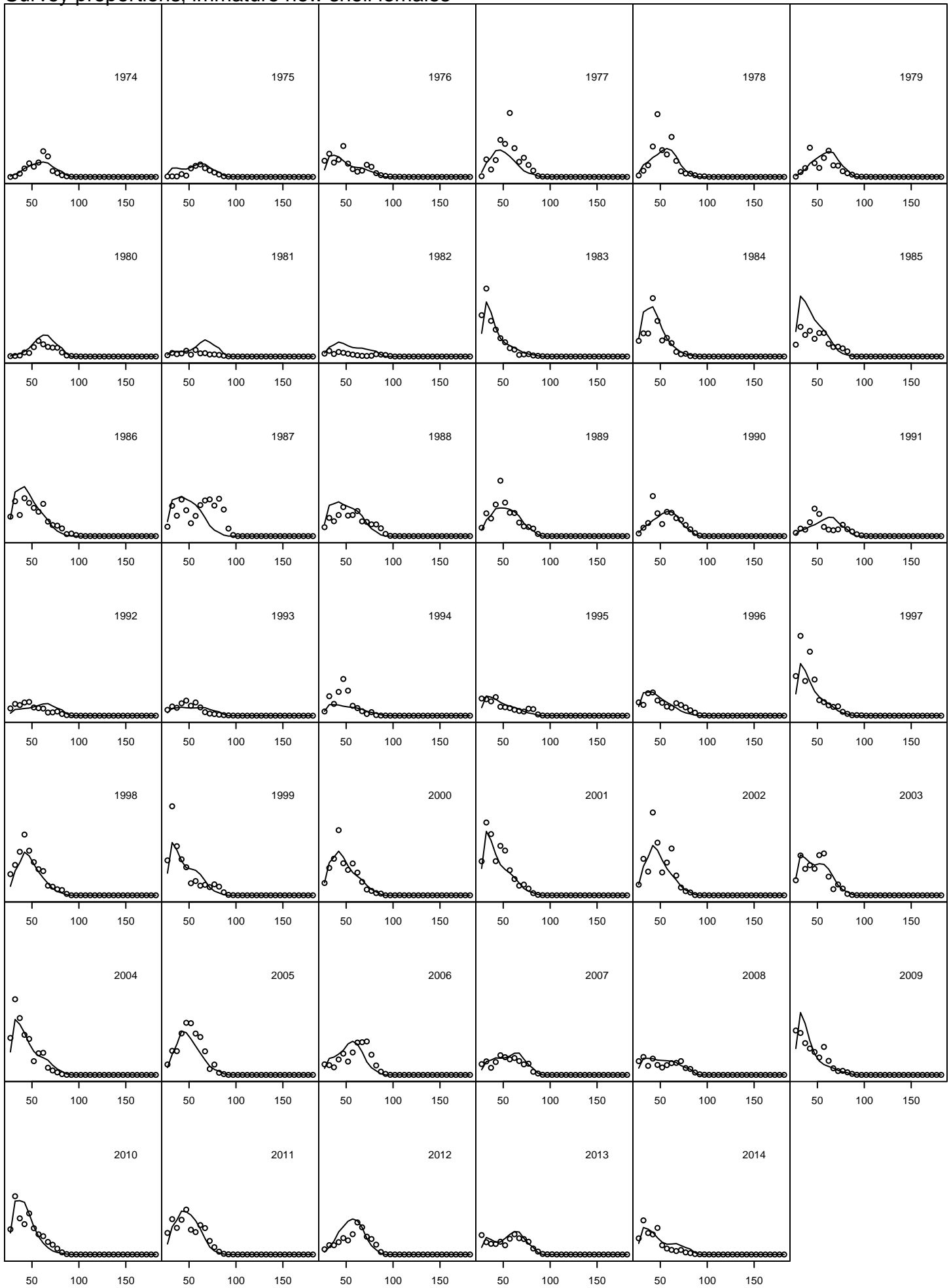
Survey proportions, males



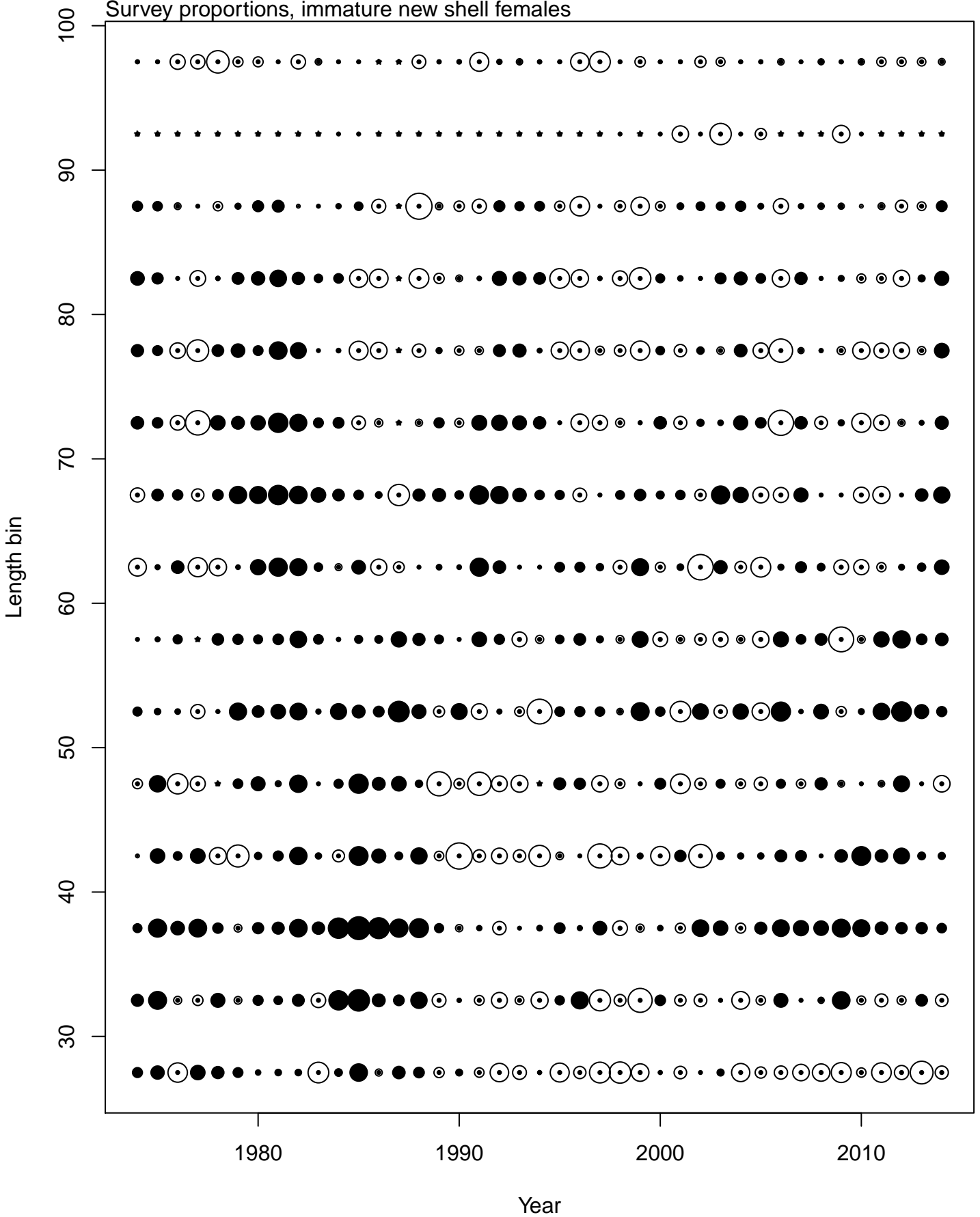
Standardized Pearson Residual Range -2.463 2.963



# Survey proportions, immature new shell females

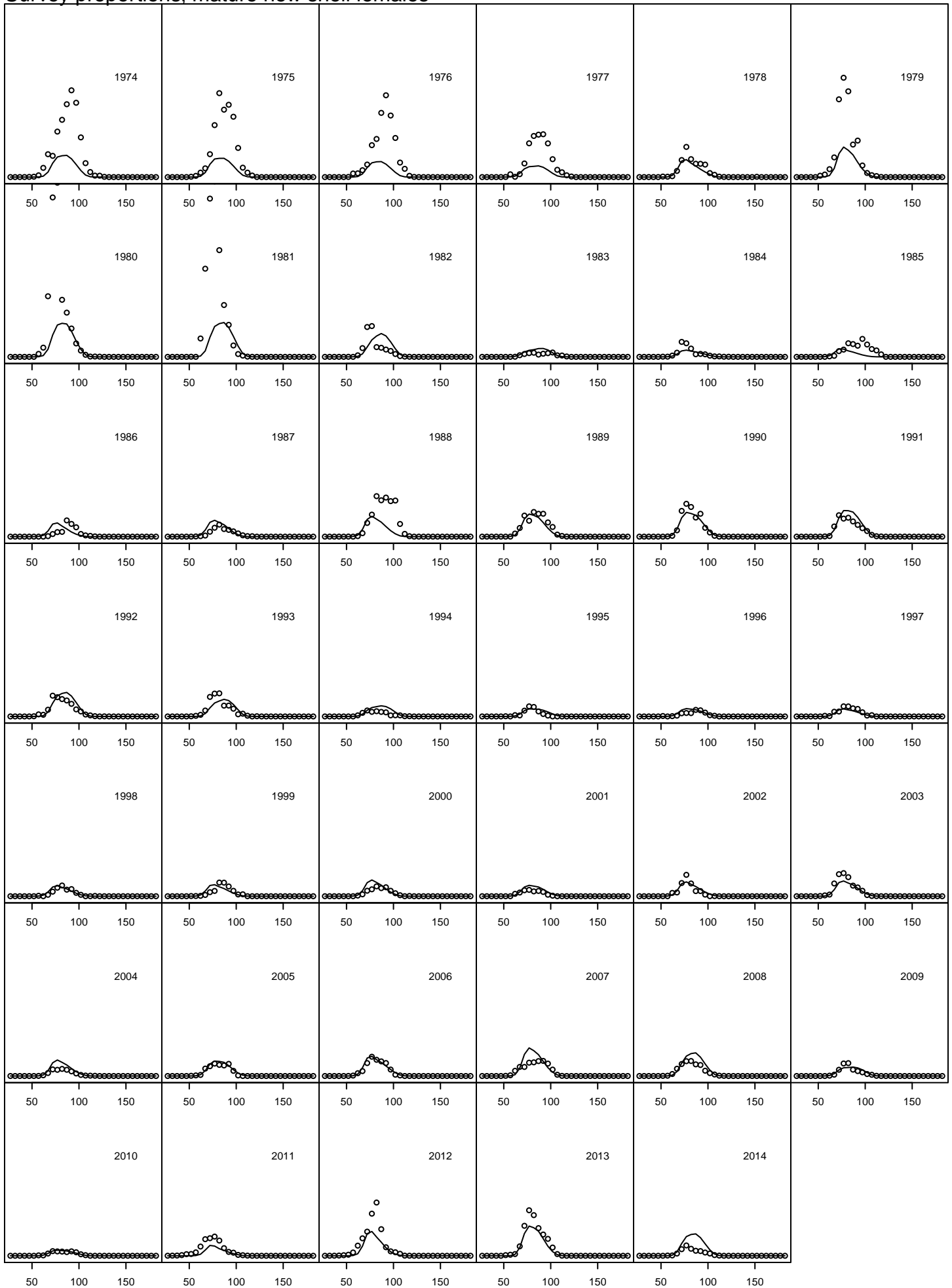


Survey proportions, immature new shell females

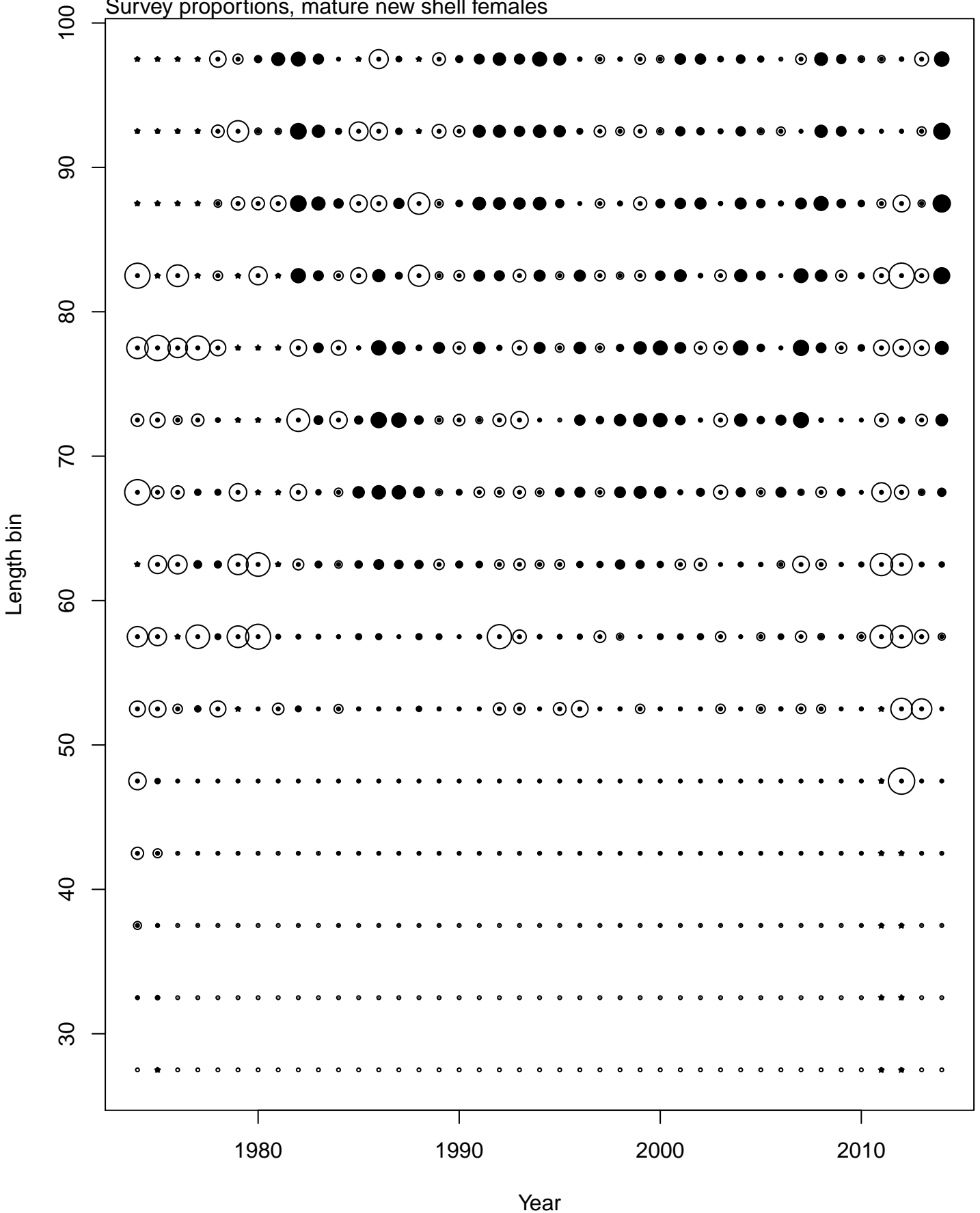


Standardized Pearson Residual Range -2.216 2.941

# Survey proportions, mature new shell females

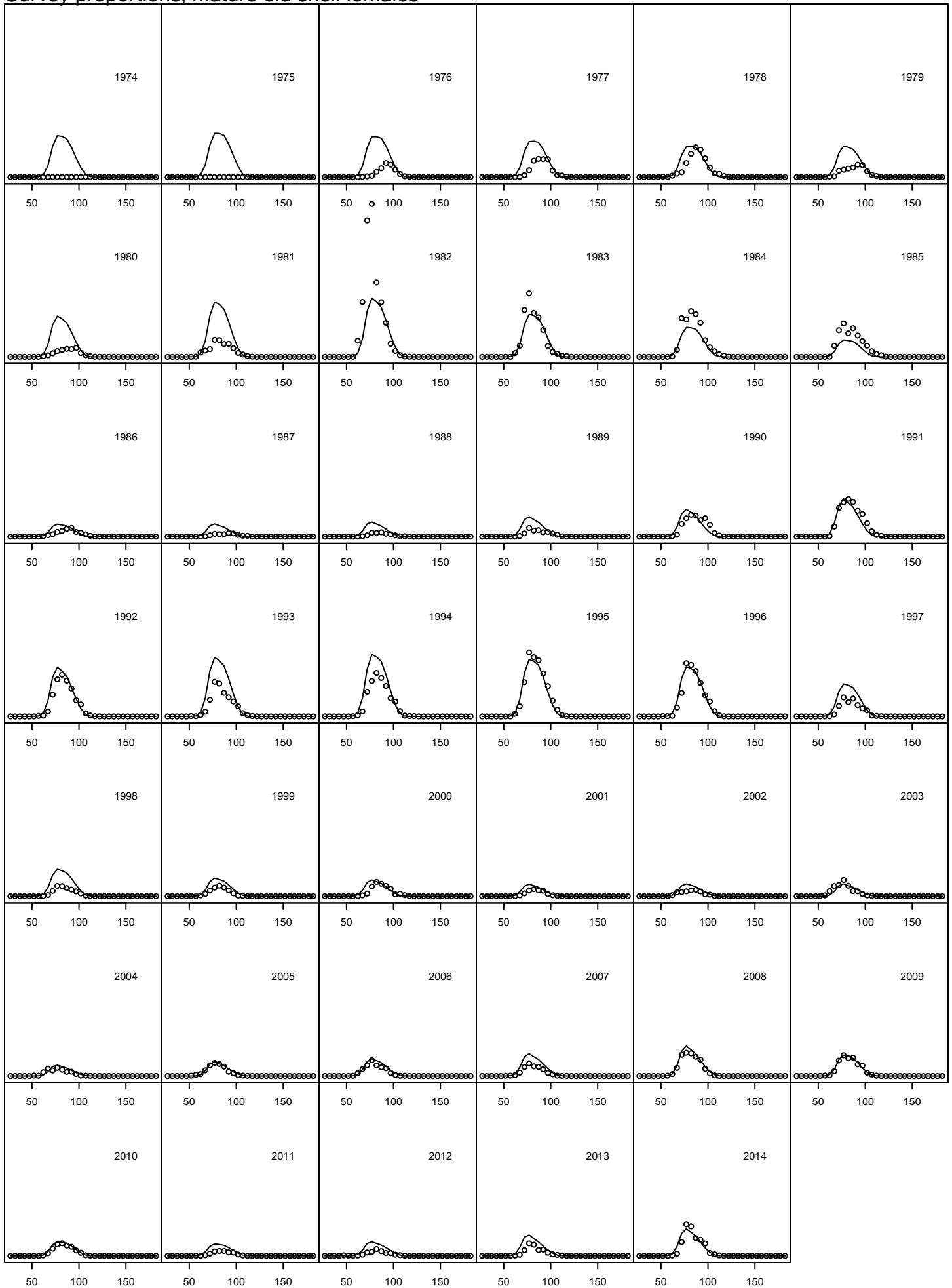


Survey proportions, mature new shell females

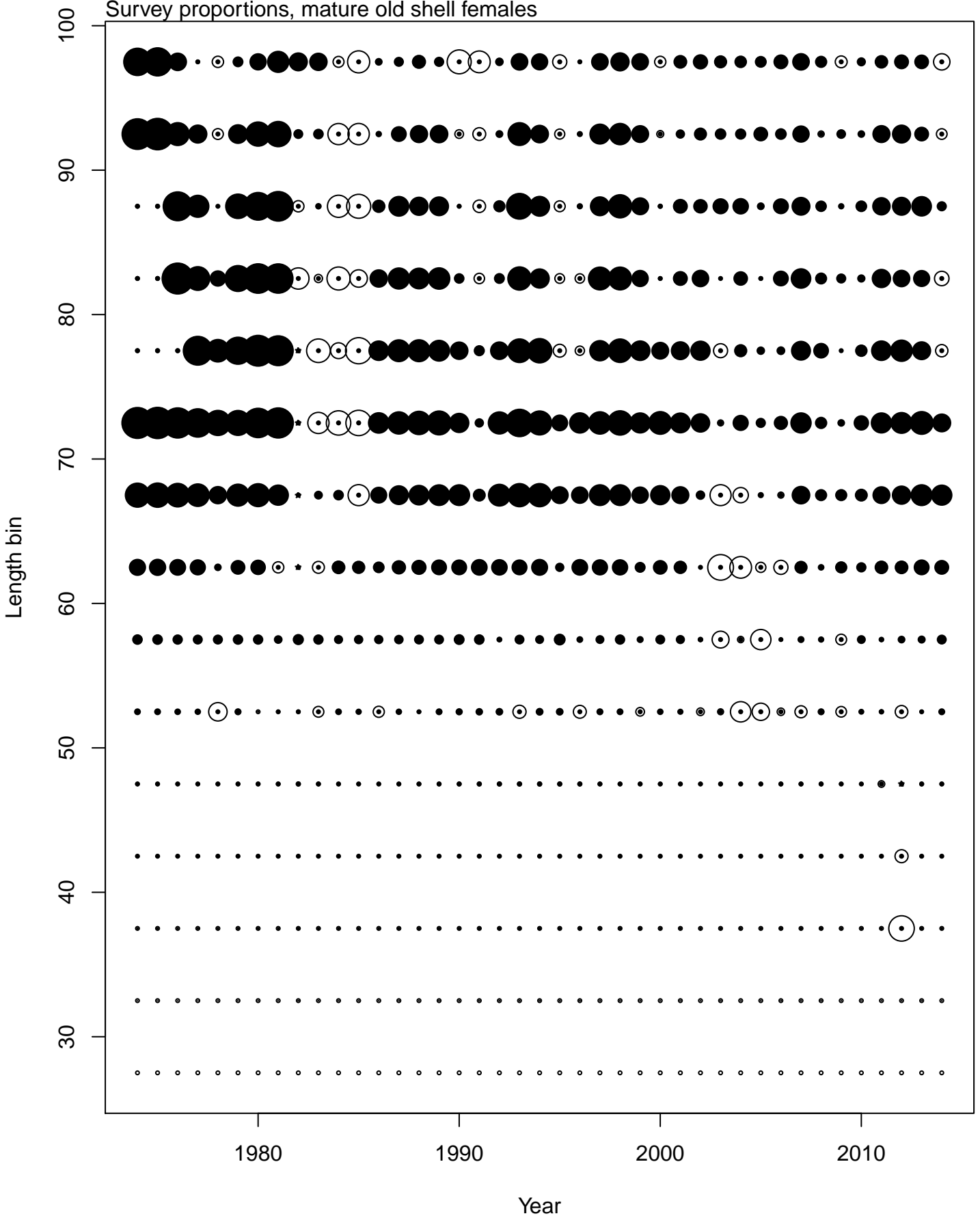


Standardized Pearson Residual Range -1.259 2.977

# Survey proportions, mature old shell females

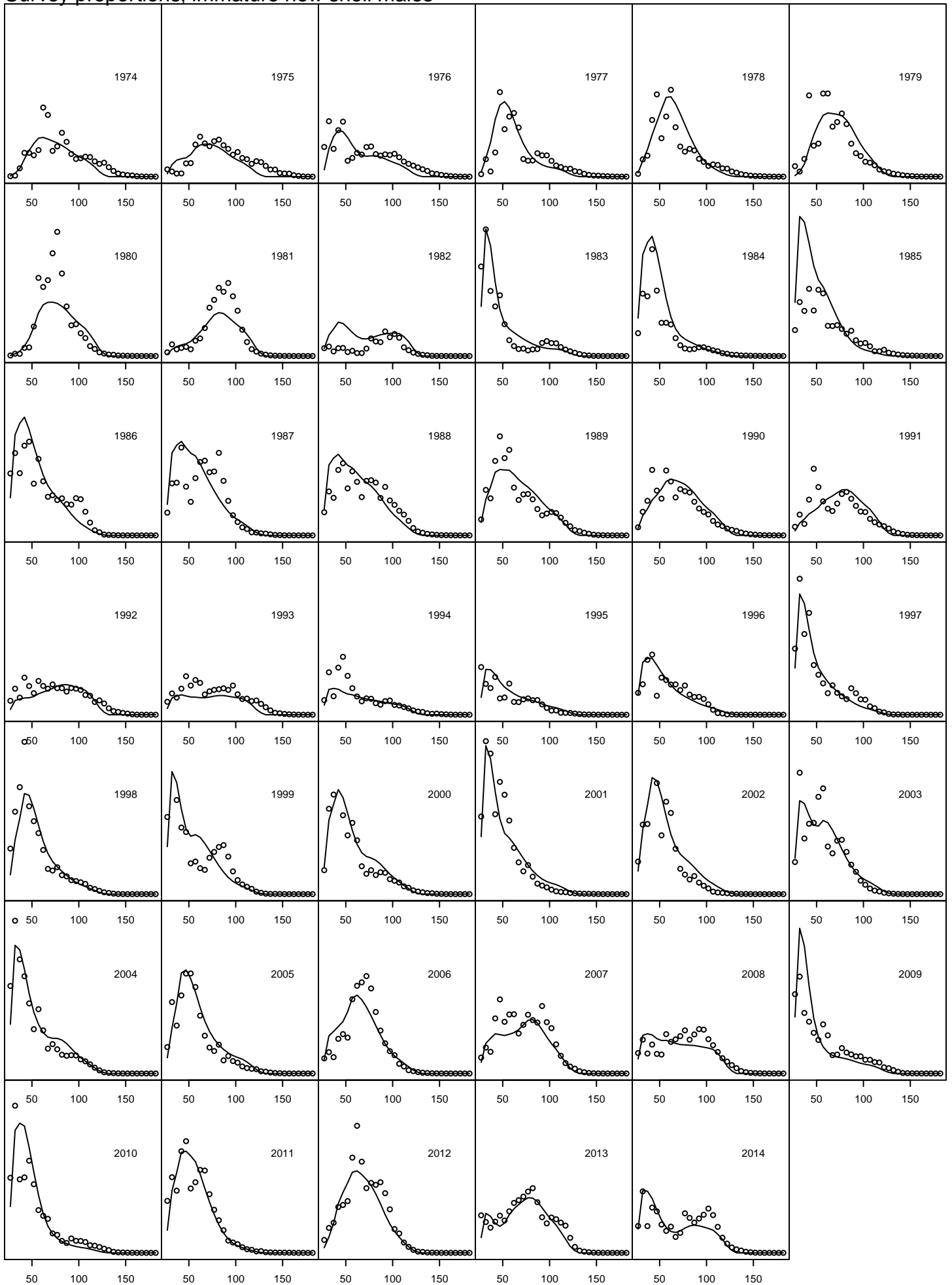


Survey proportions, mature old shell females

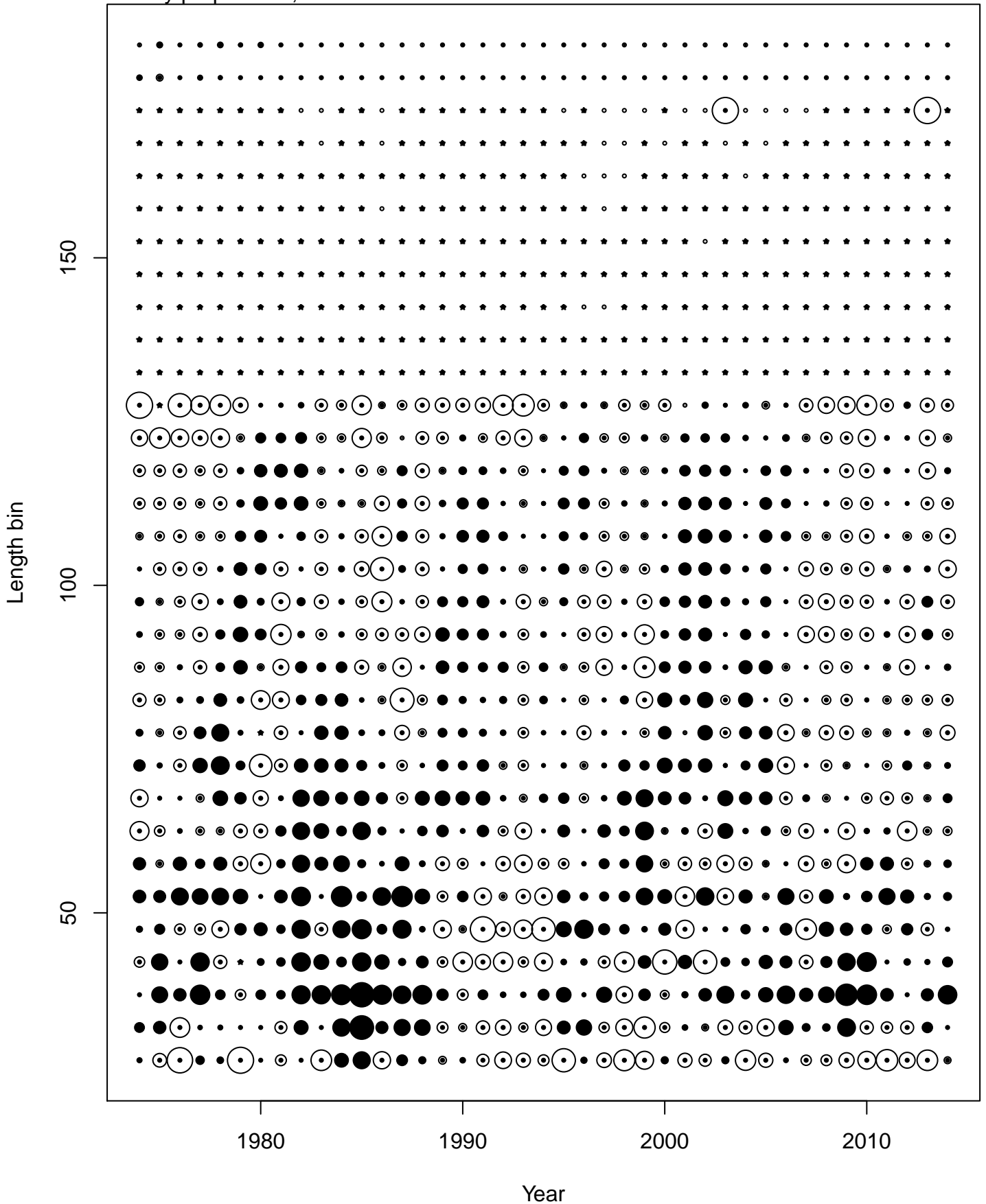


Standardized Pearson Residual Range -2.796 1.944

# Survey proportions, immature new shell males



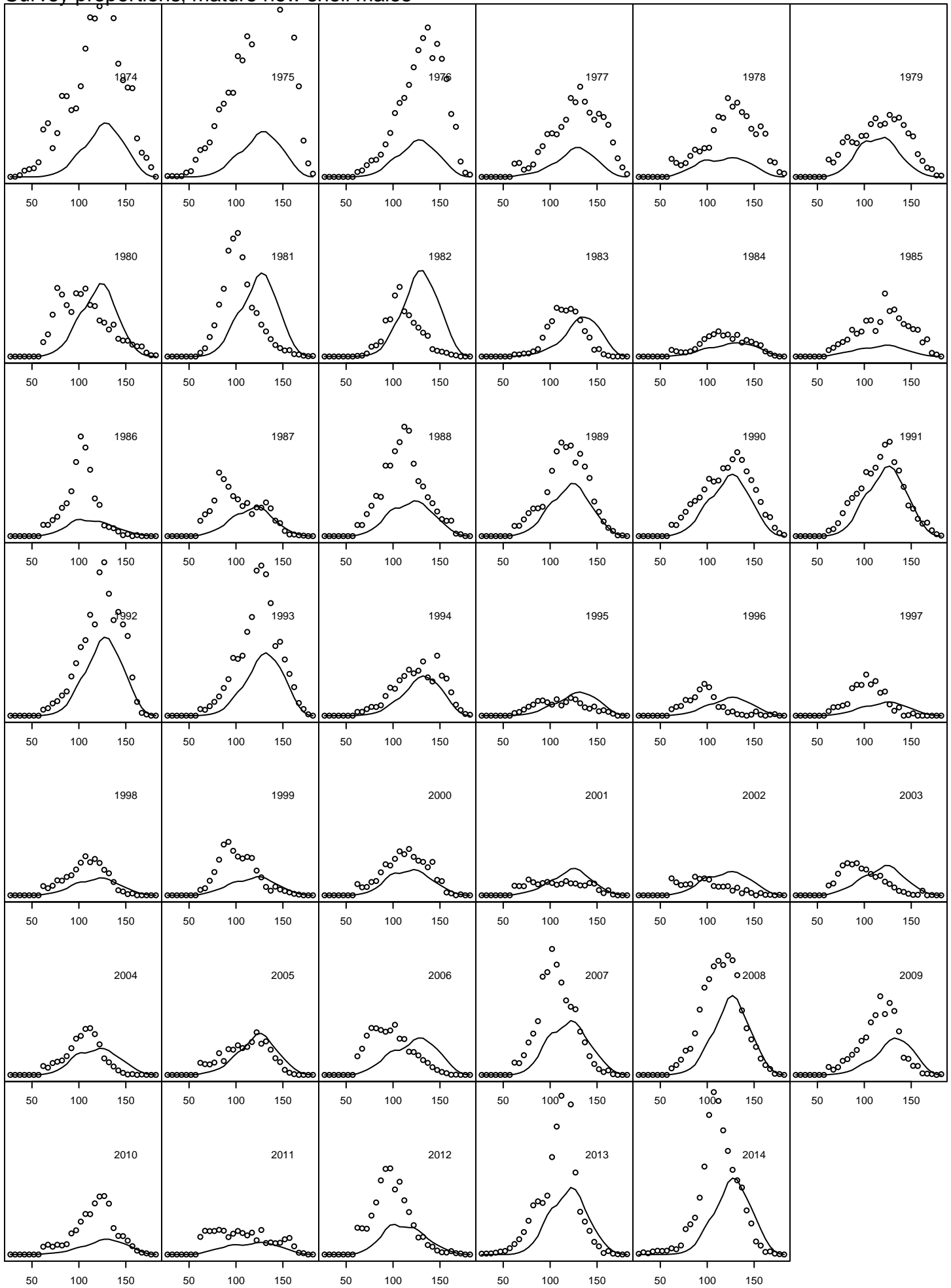
Survey proportions, immature new shell males



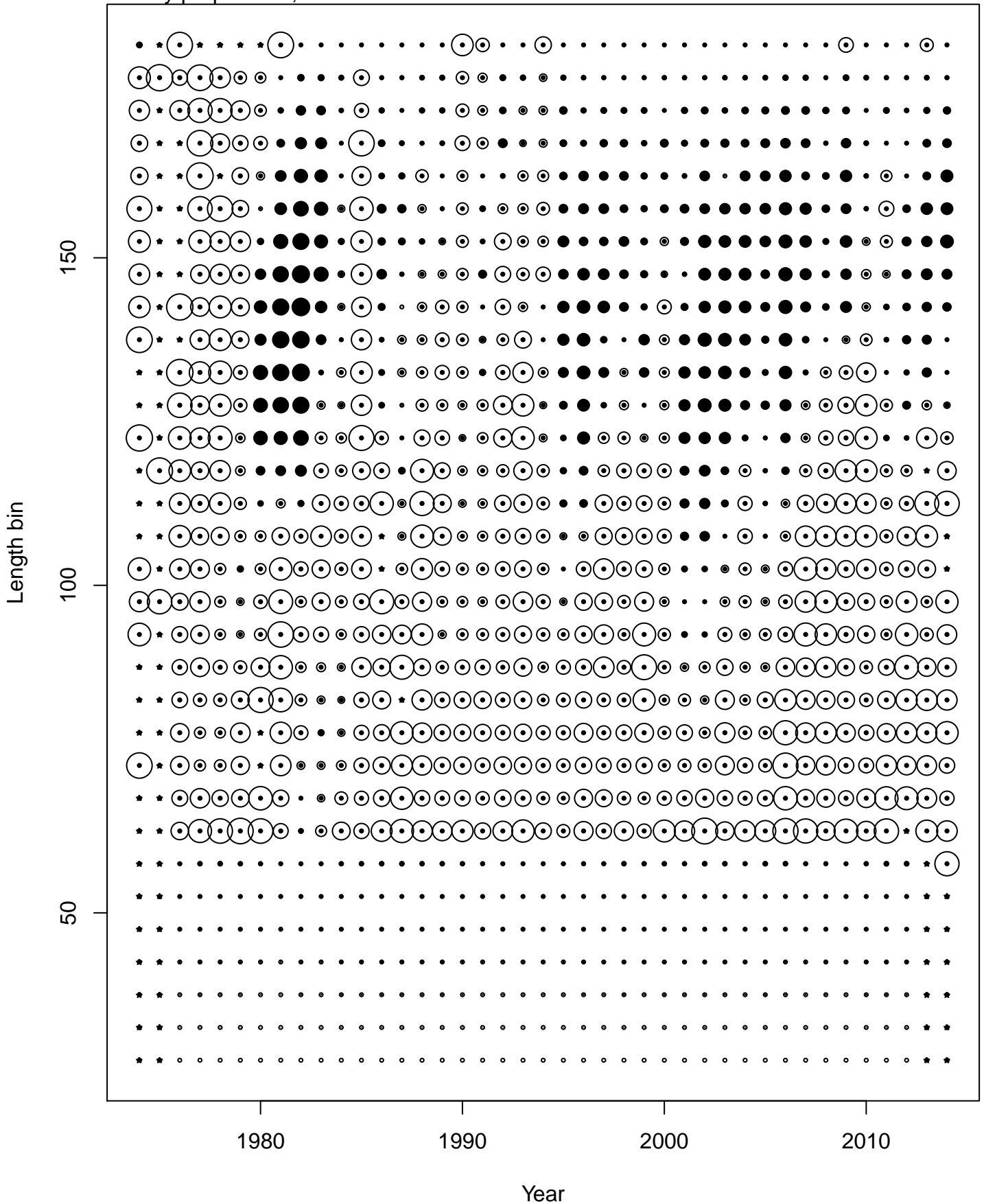
Standardized Pearson Residual Range -2.463 2.922



# Survey proportions, mature new shell males

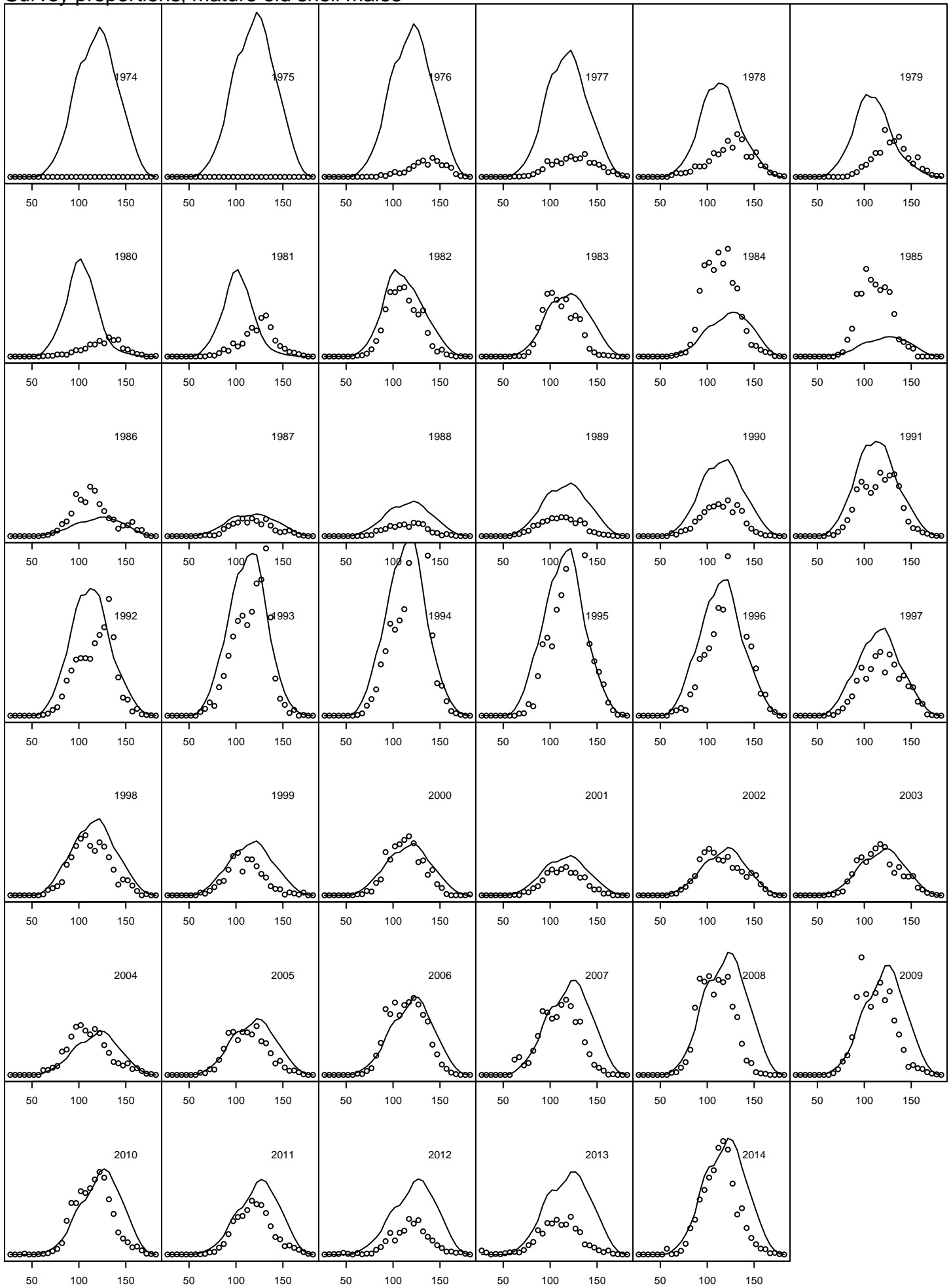


Survey proportions, mature new shell males

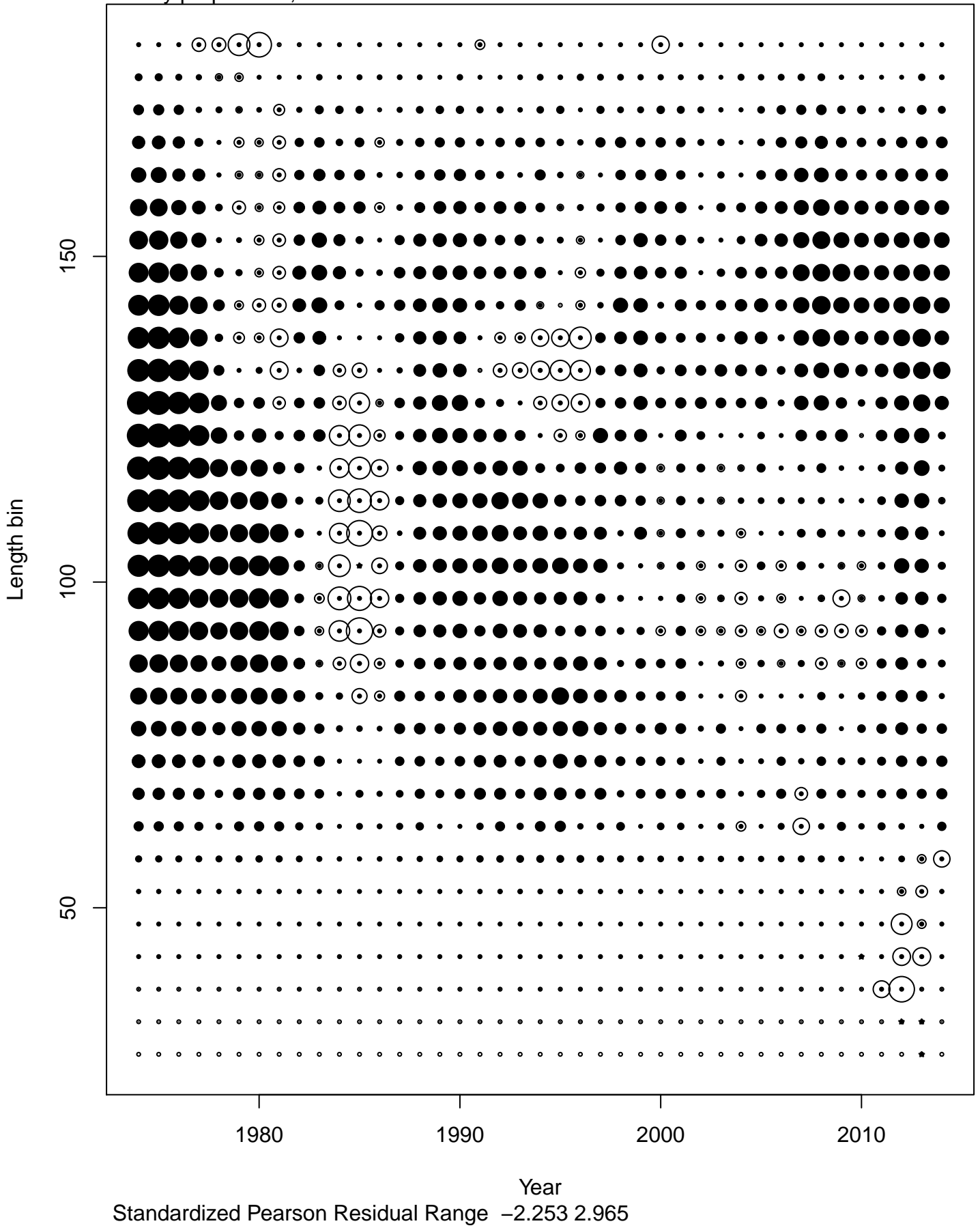


Standardized Pearson Residual Range -1.291 2.968

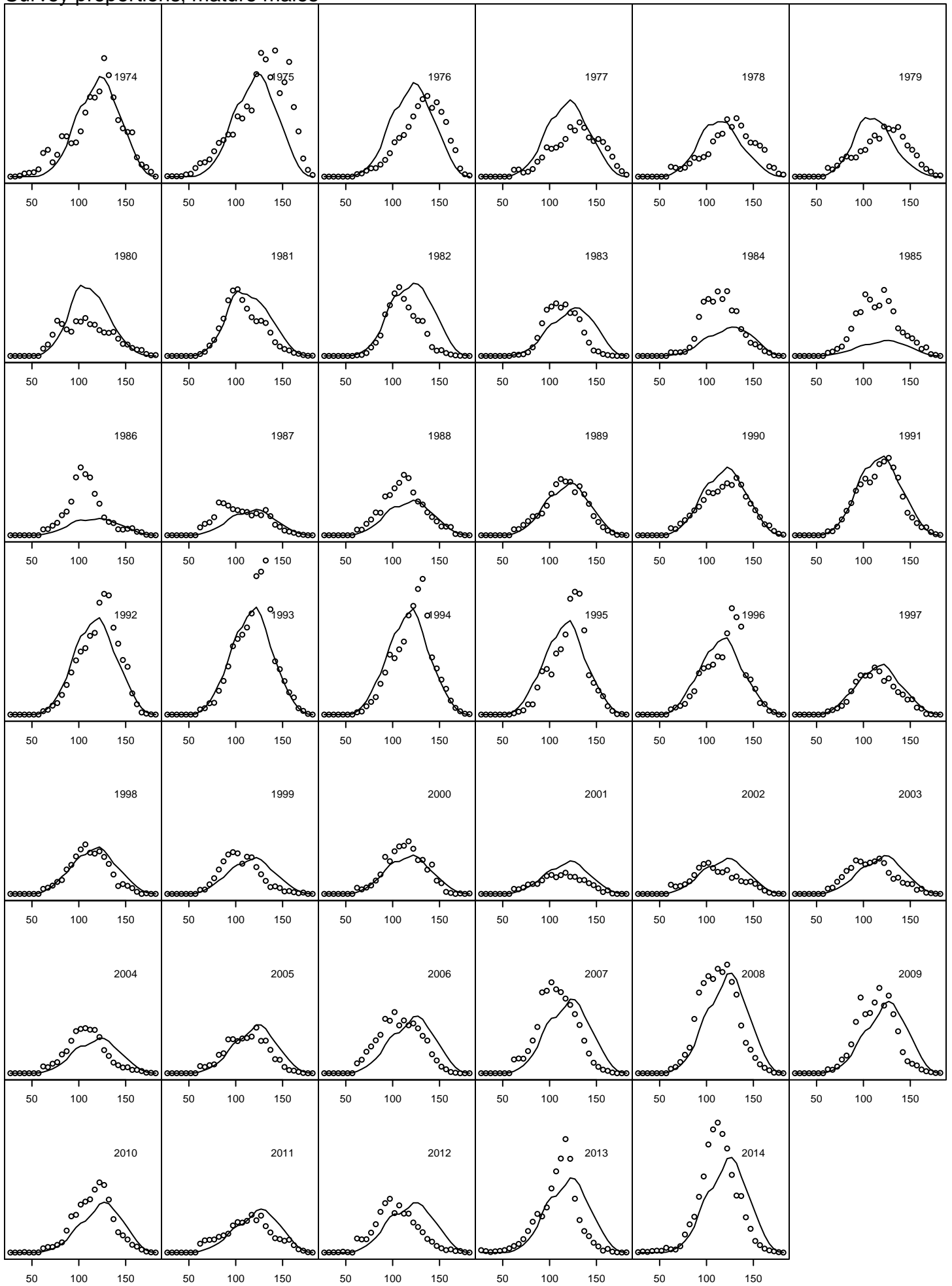
# Survey proportions, mature old shell males



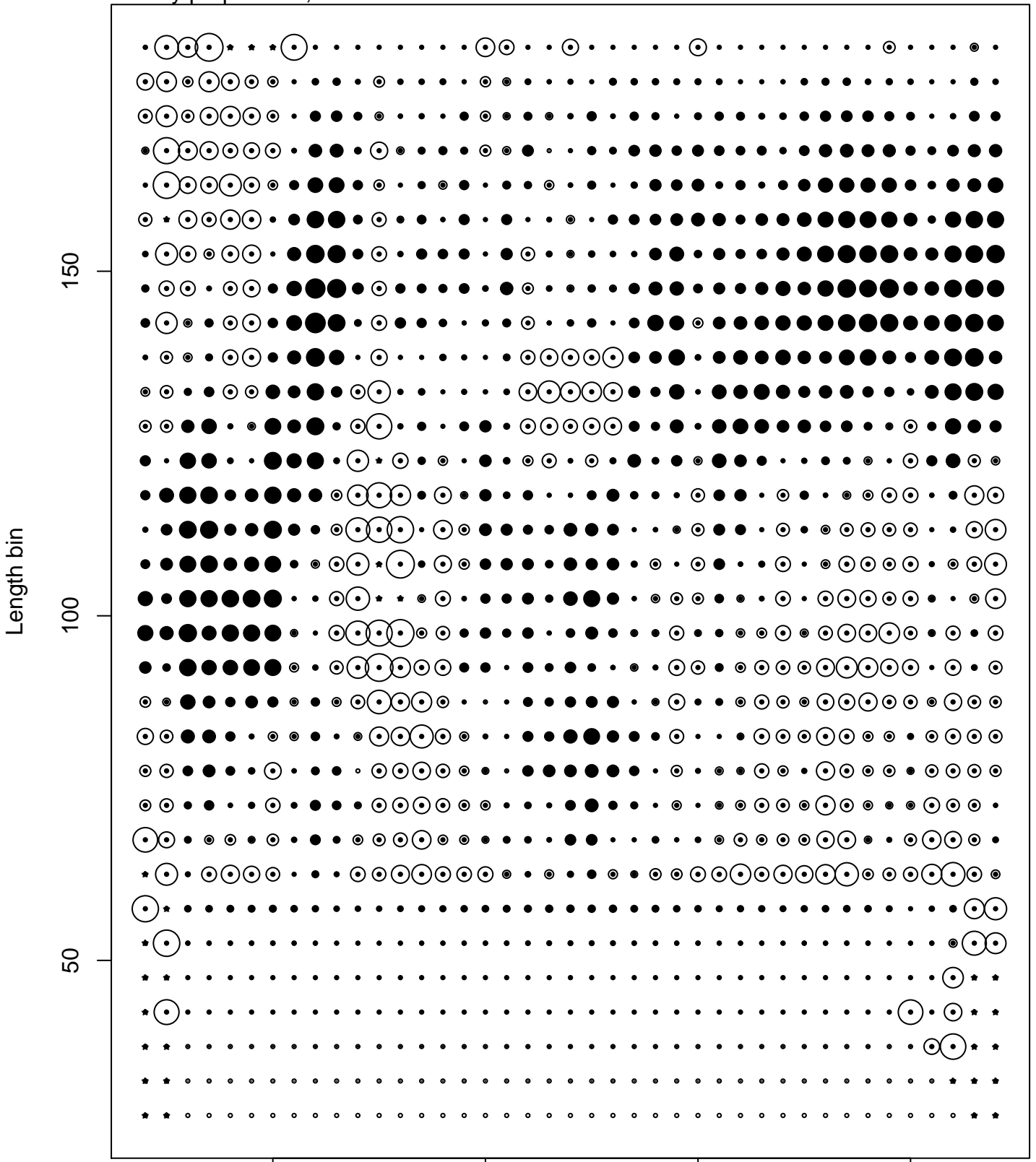
Survey proportions, mature old shell males



# Survey proportions, mature males

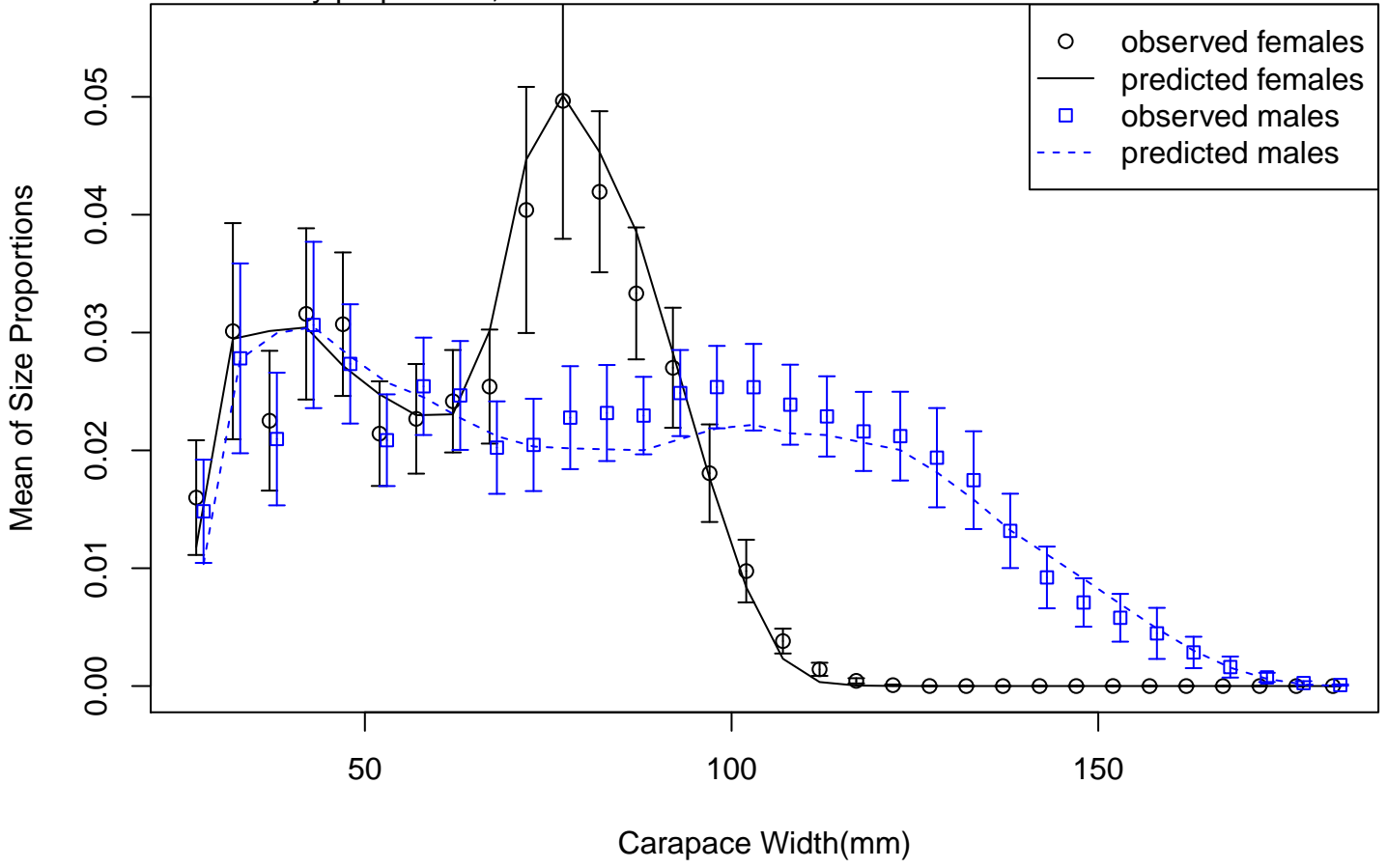


Survey proportions, mature males

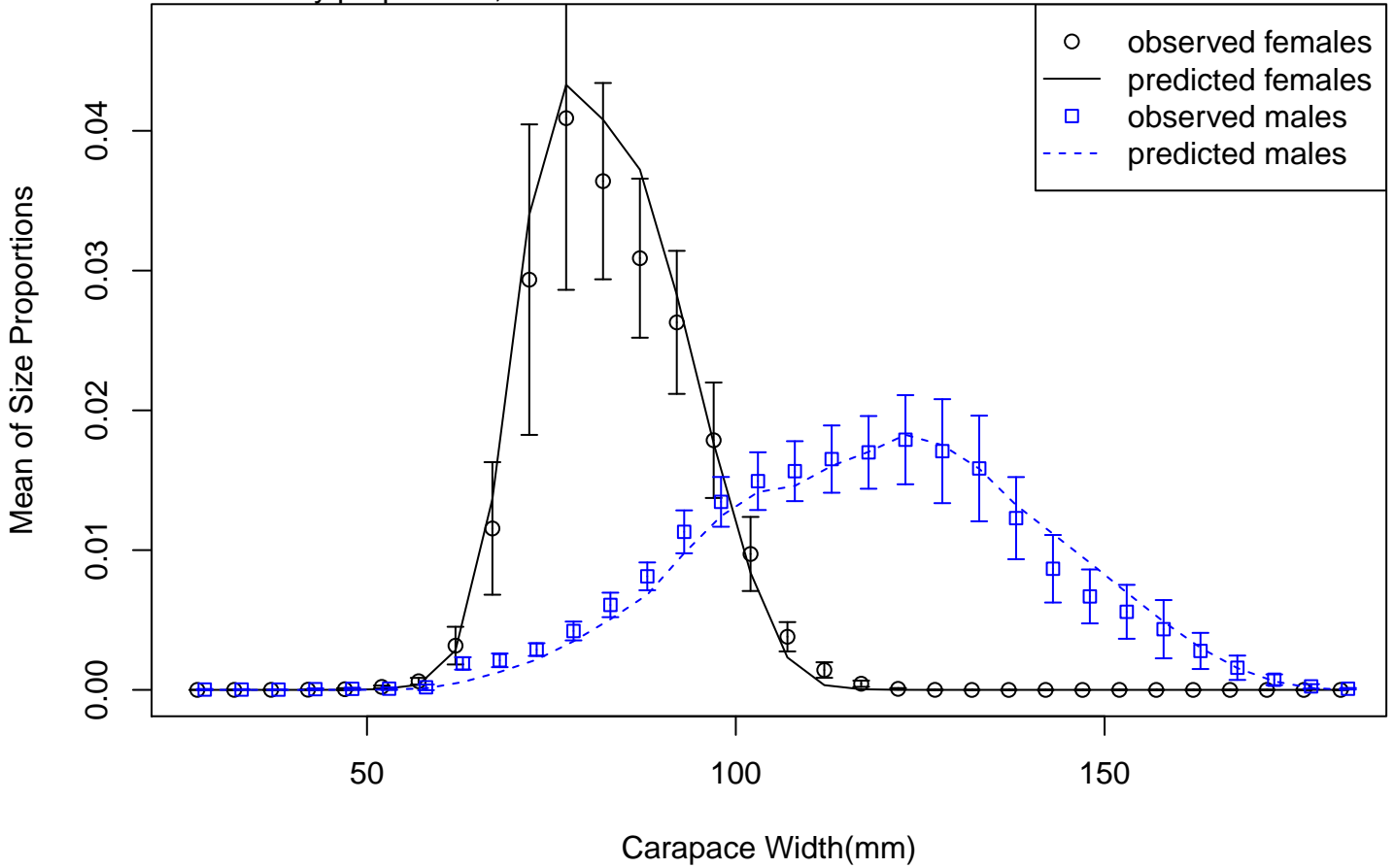


Standardized Pearson Residual Range -1.444 2.975

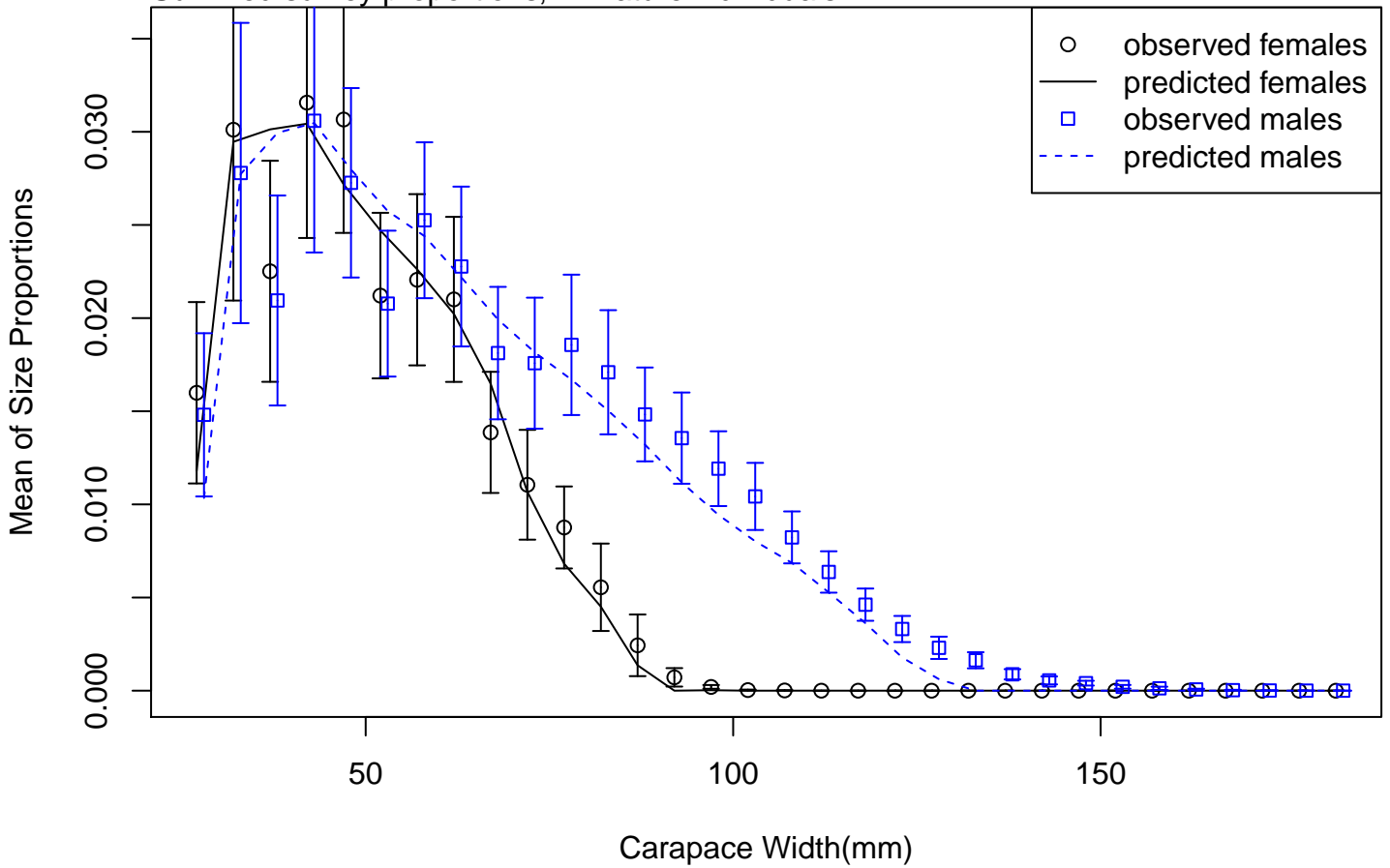
Mean survey proportions, all individuals



Mean survey proportions, mature individuals

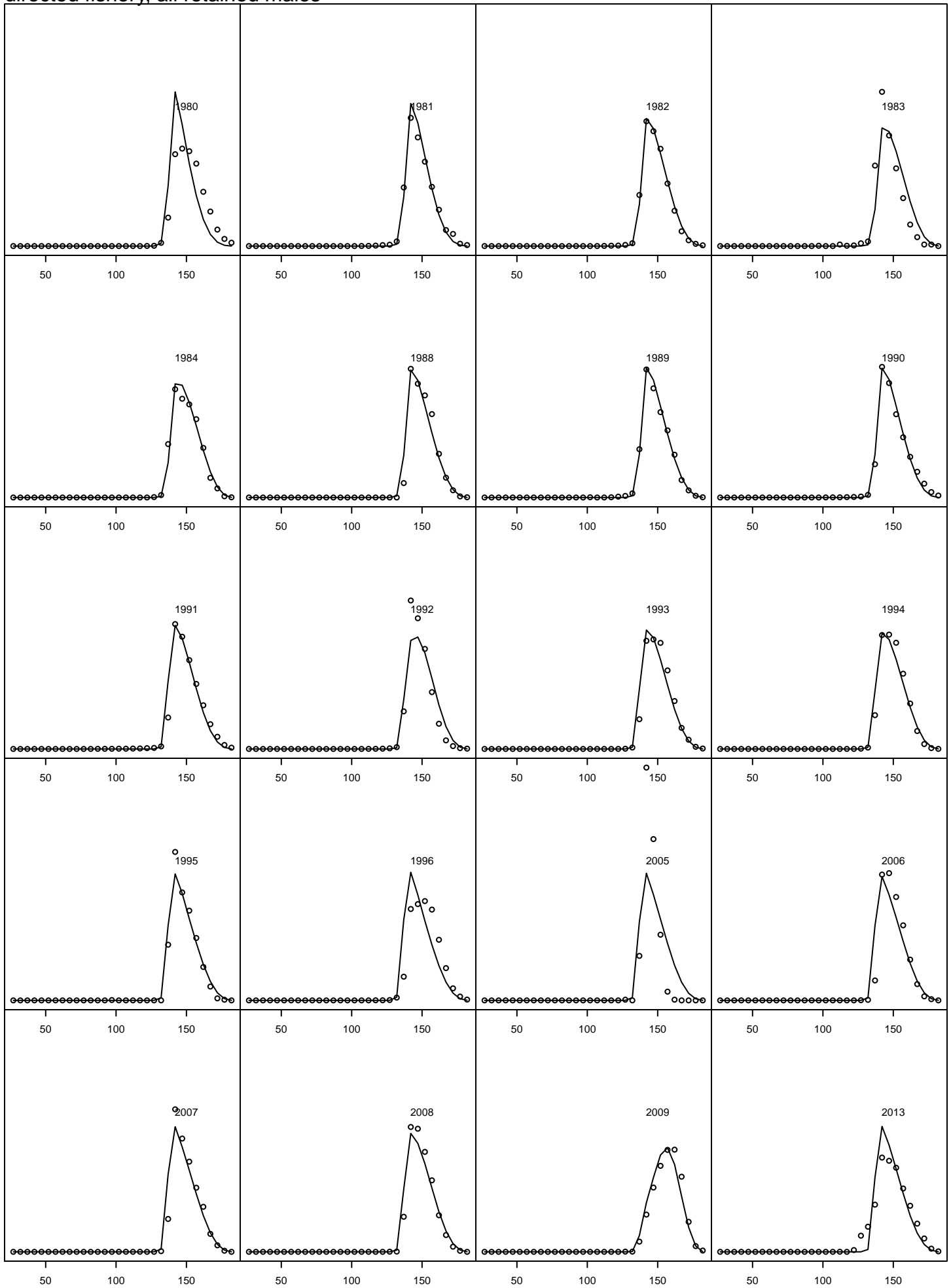


Summed survey proportions, immature individuals

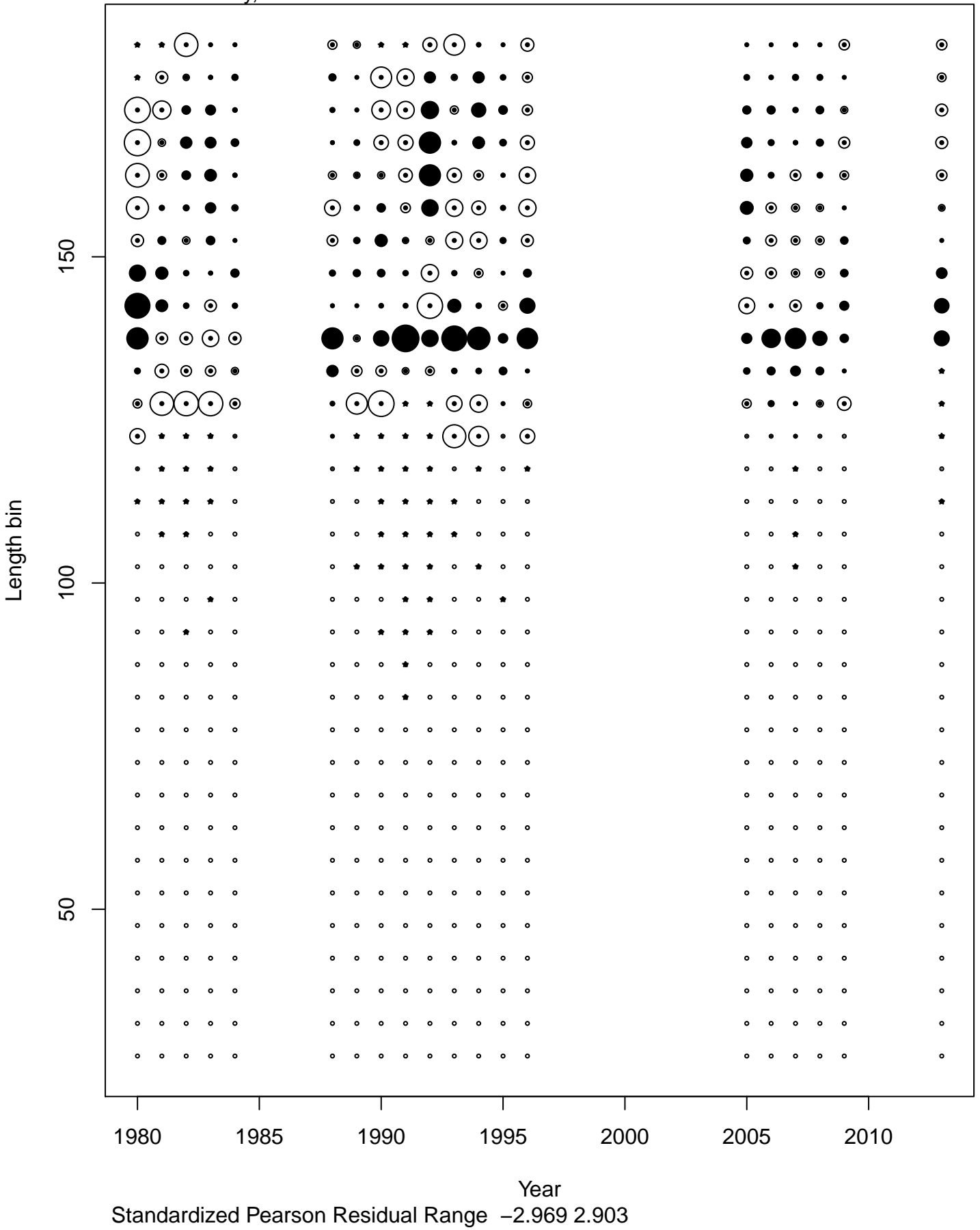




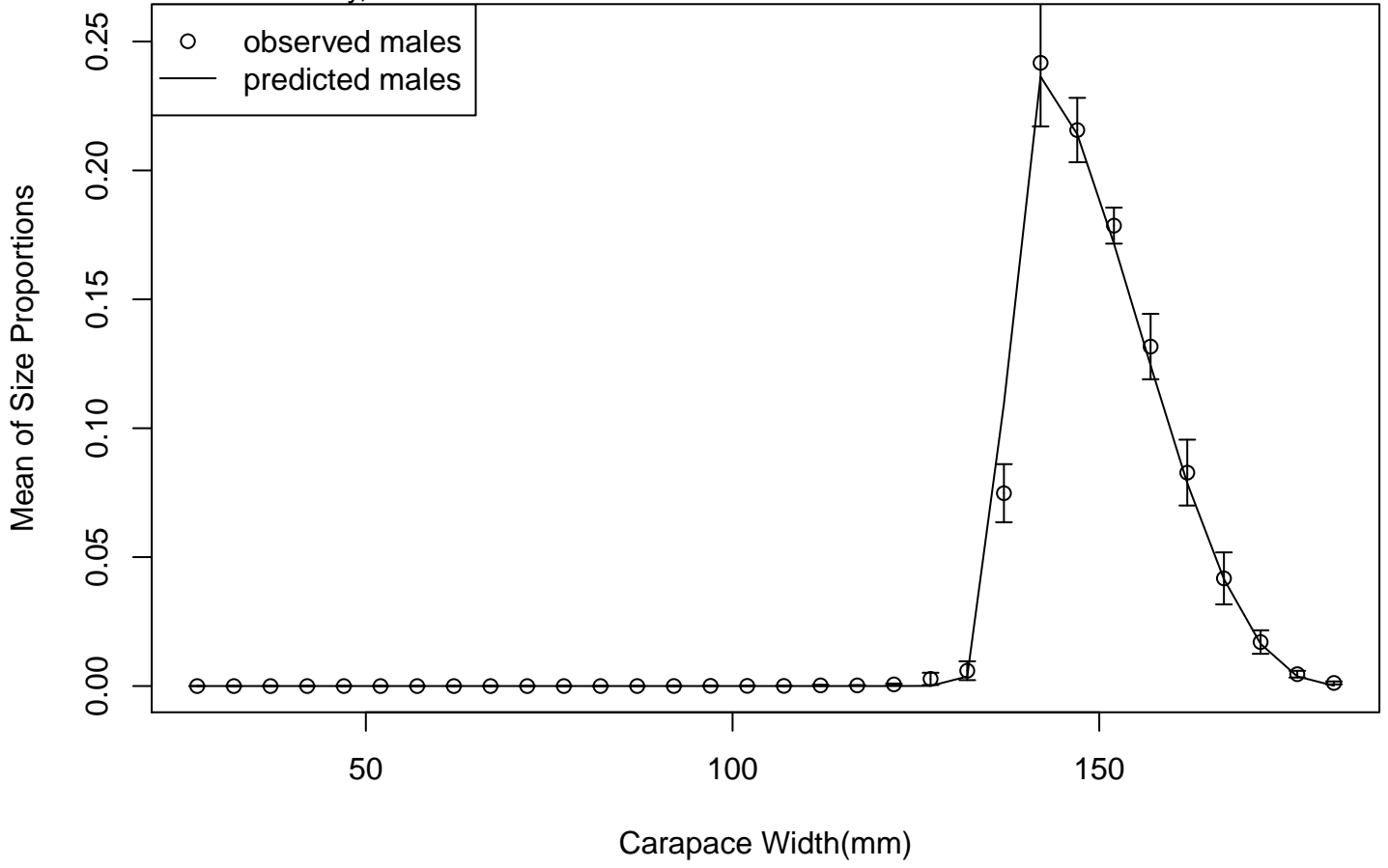
directed fishery, all retained males



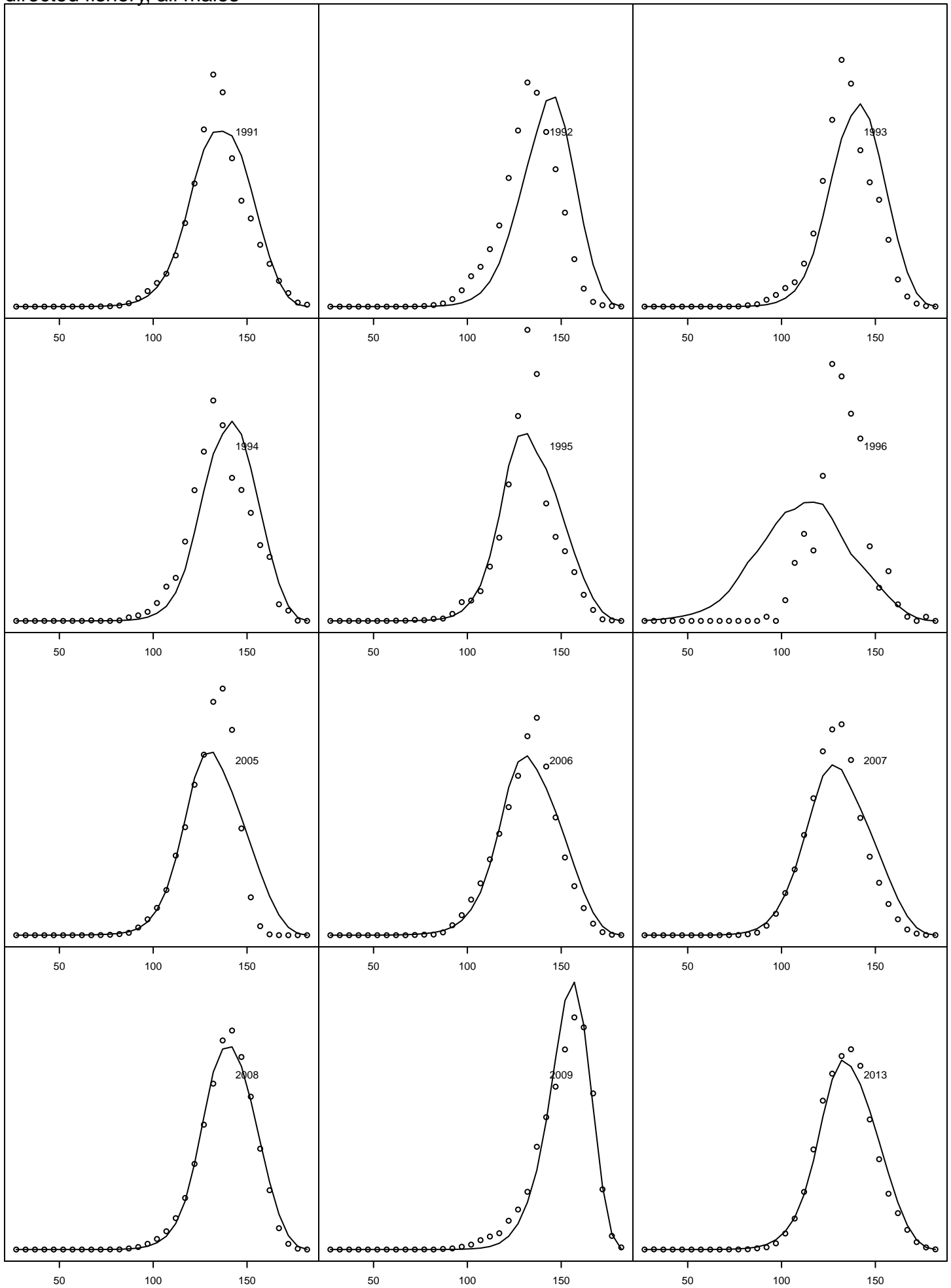
directed fishery, all retained males



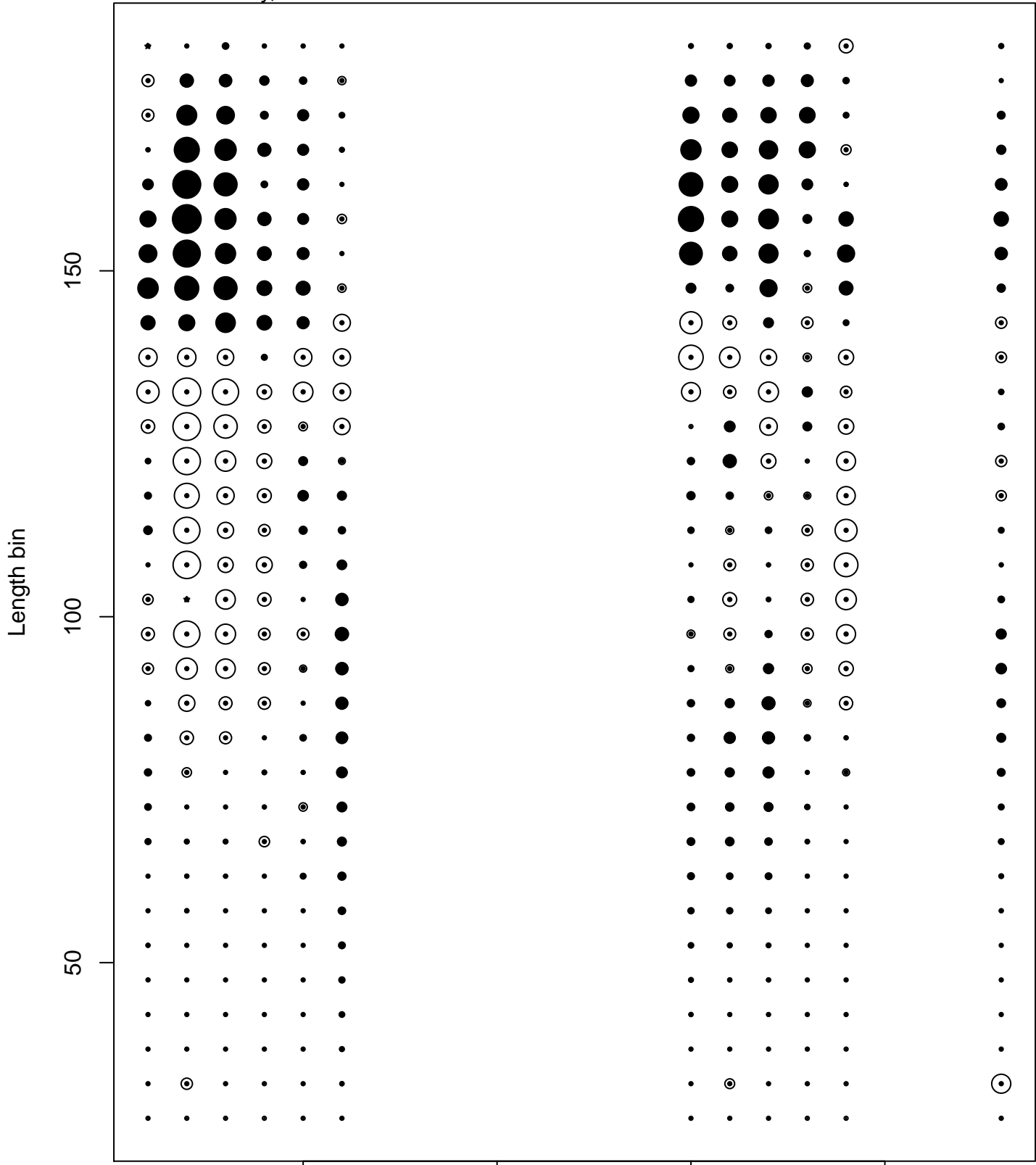
directed fishery, all retained males



directed fishery, all males



directed fishery, all males



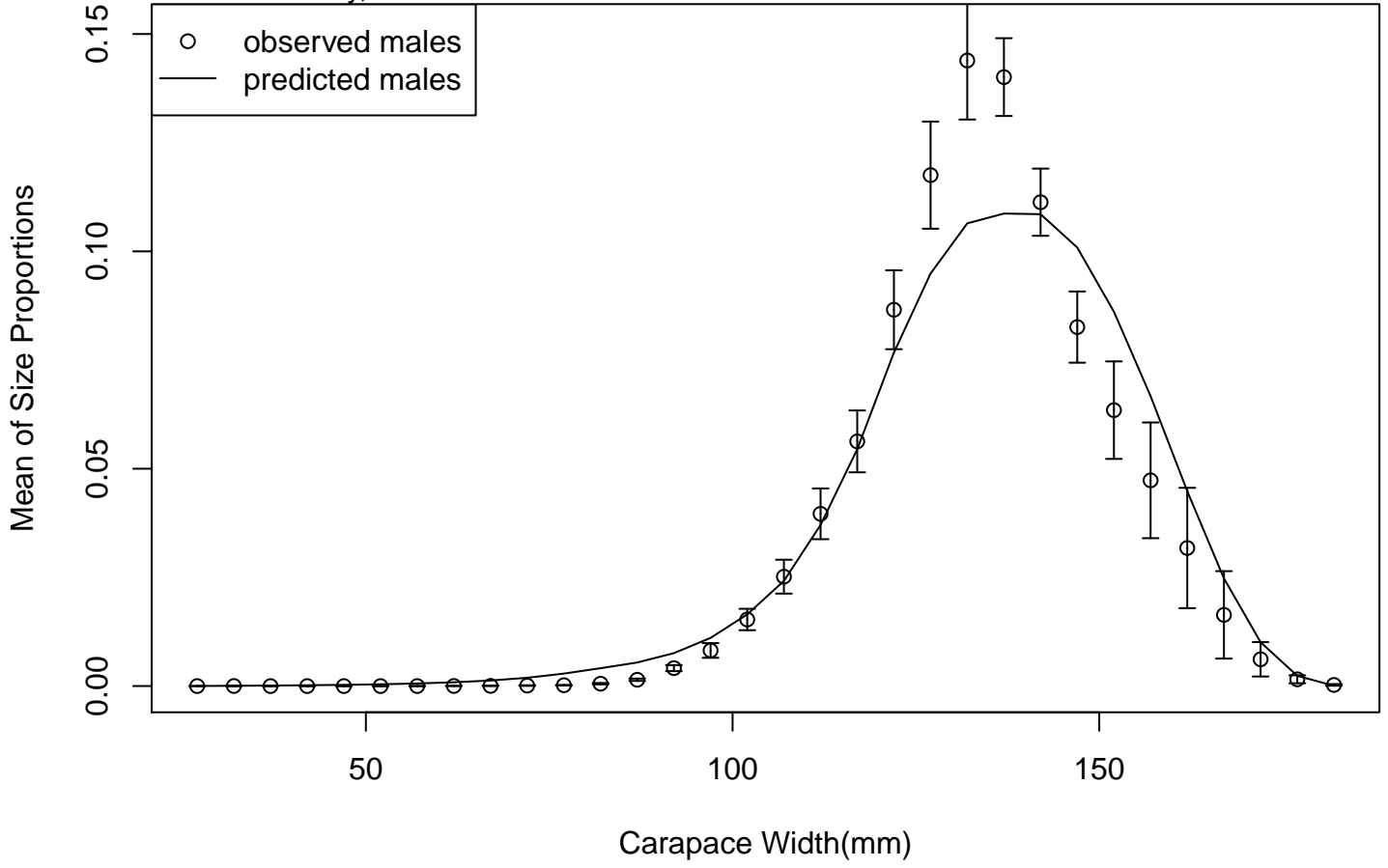
1995 2000 2005 2010

Length bin

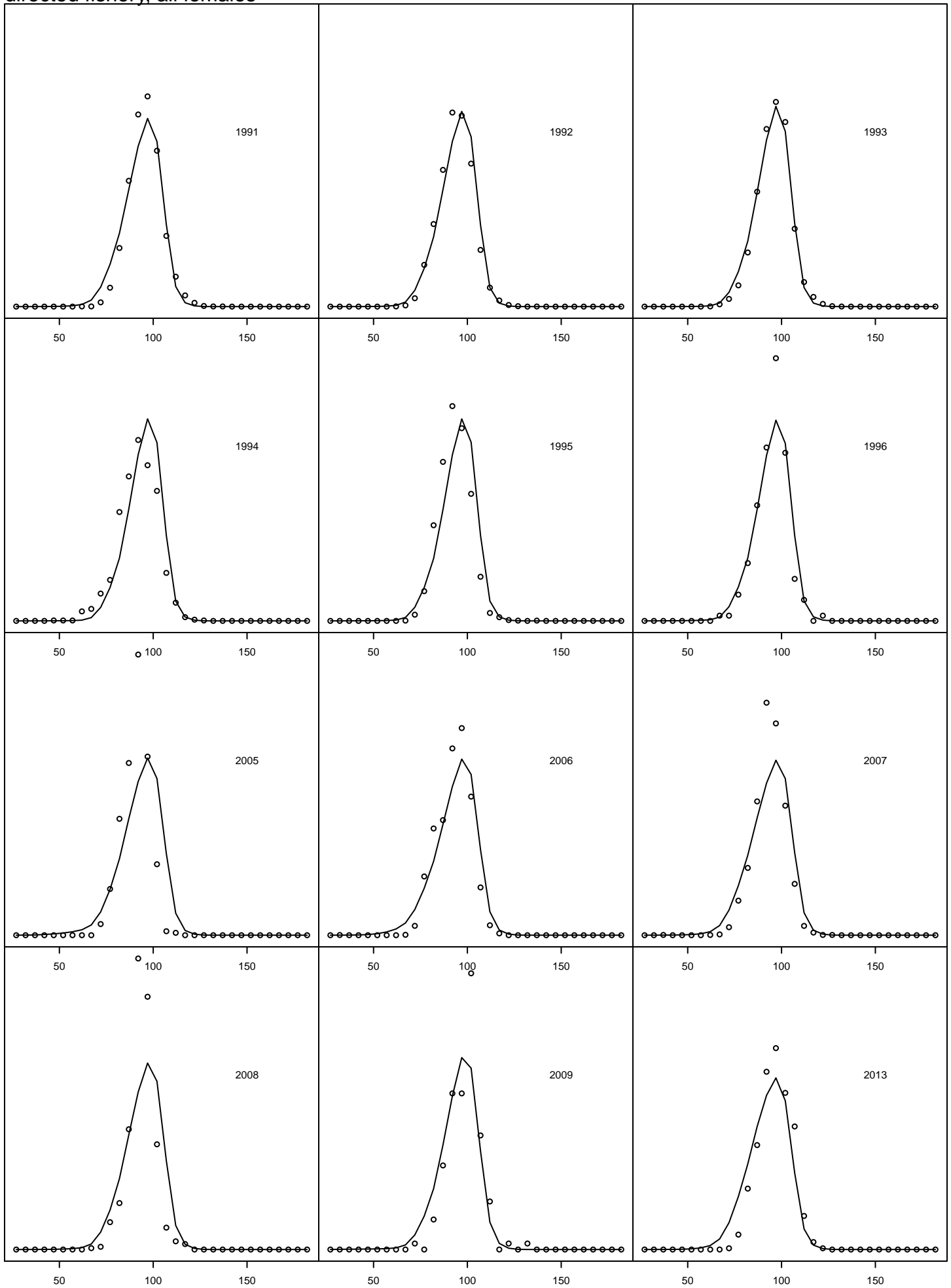
Year

Standardized Pearson Residual Range -2.861 2.725

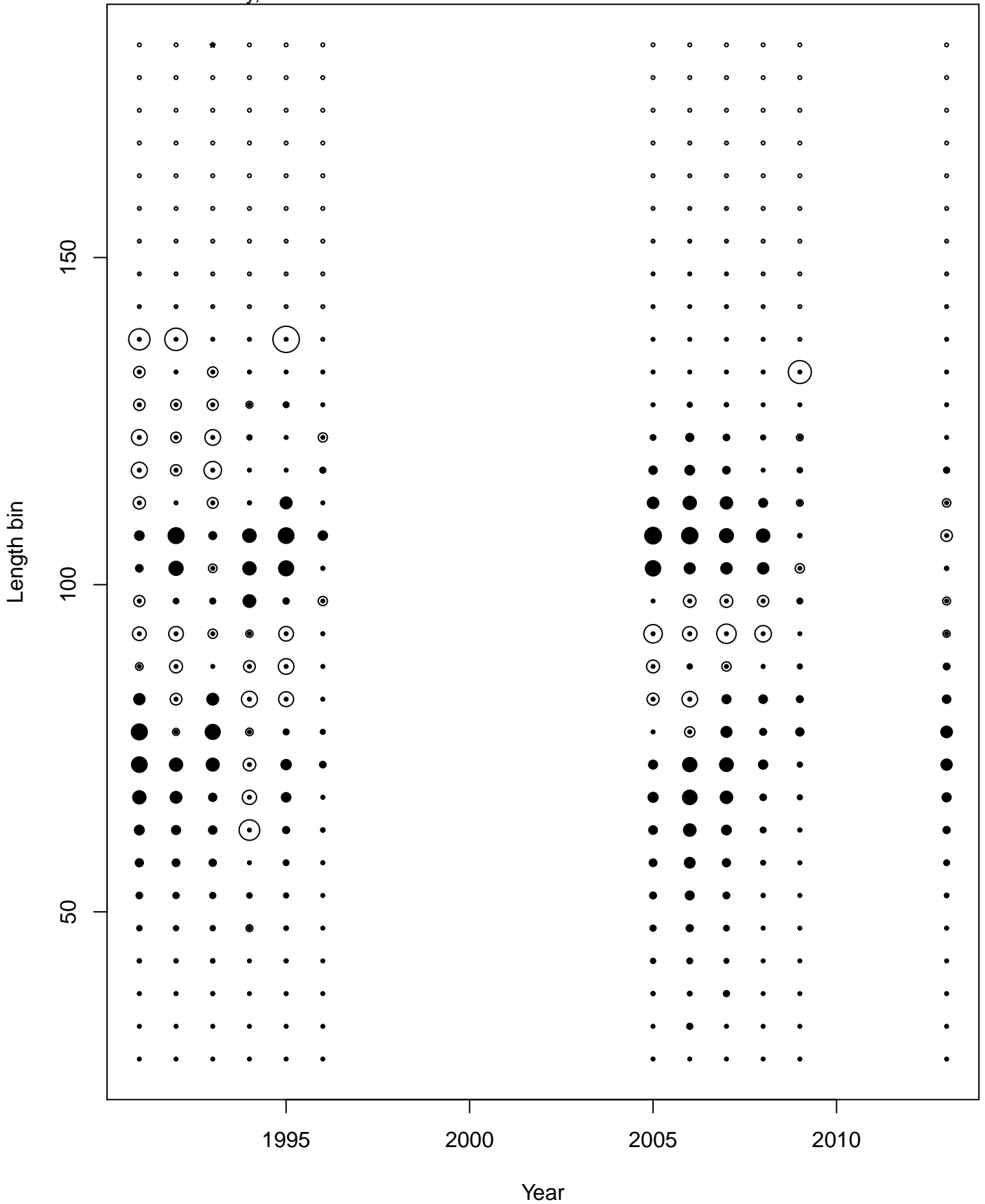
directed fishery, all males



directed fishery, all females

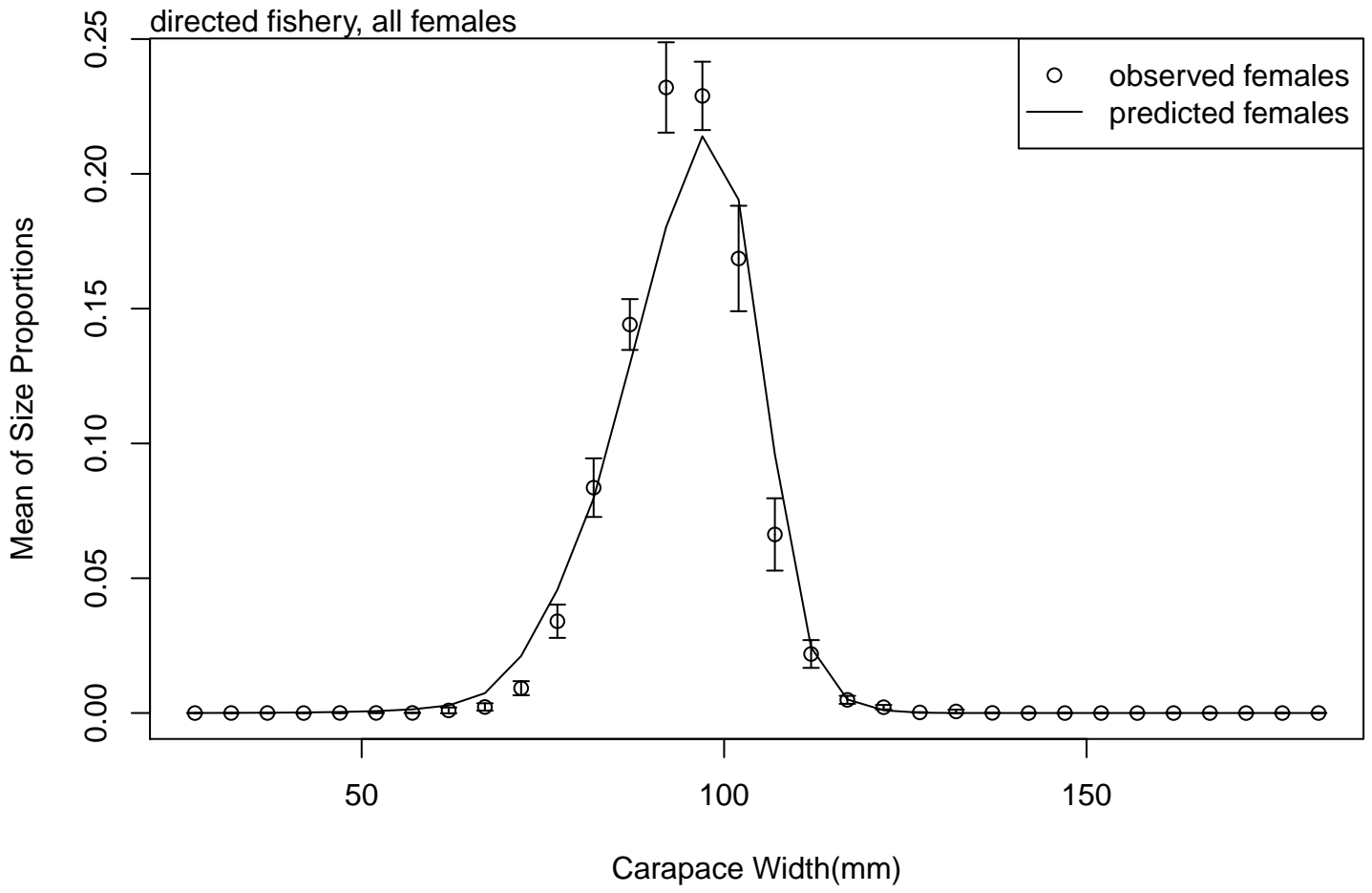


directed fishery, all females

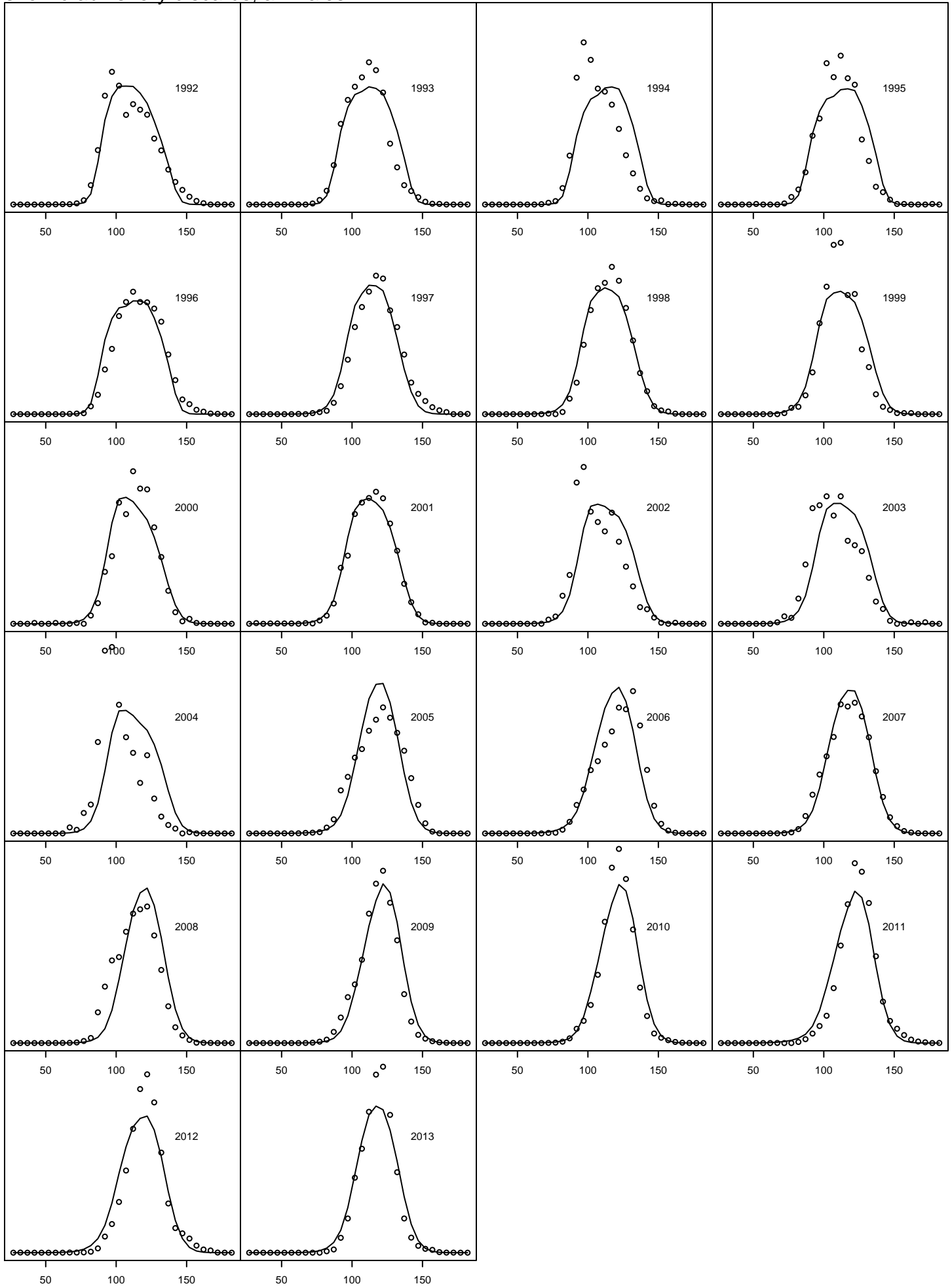


Standardized Pearson Residual Range -0.854 2.178

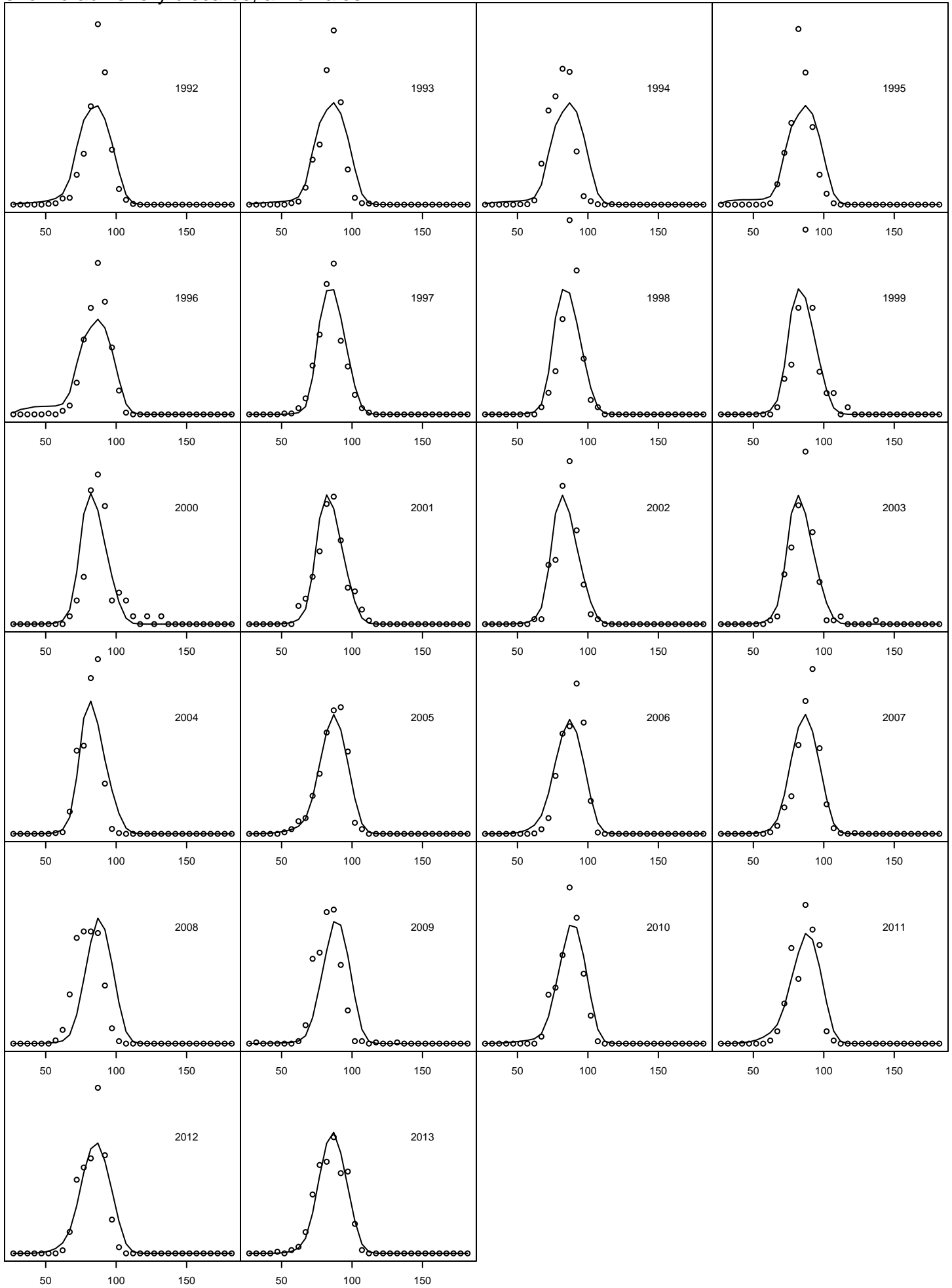




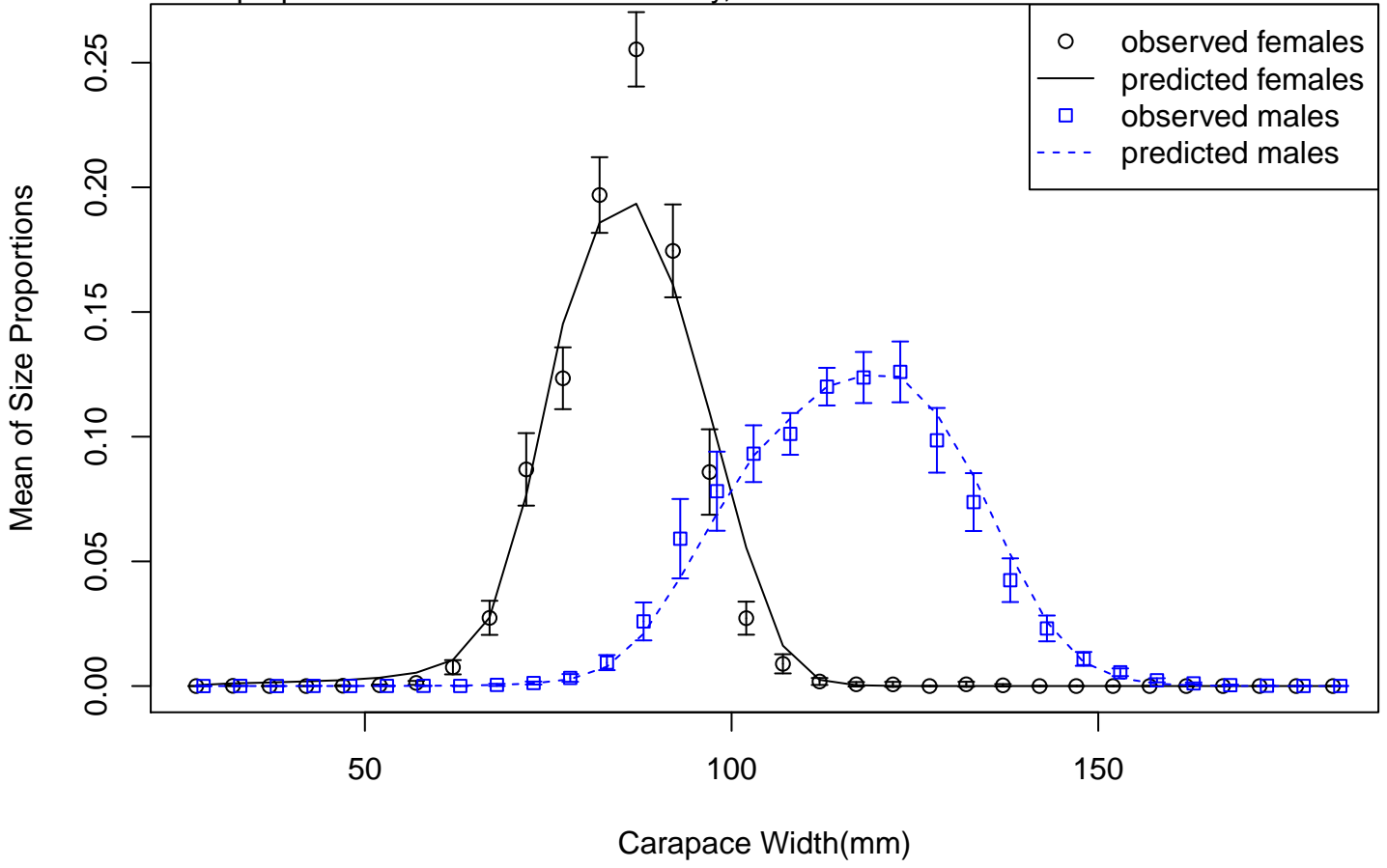
snow crab fishery discards, all males



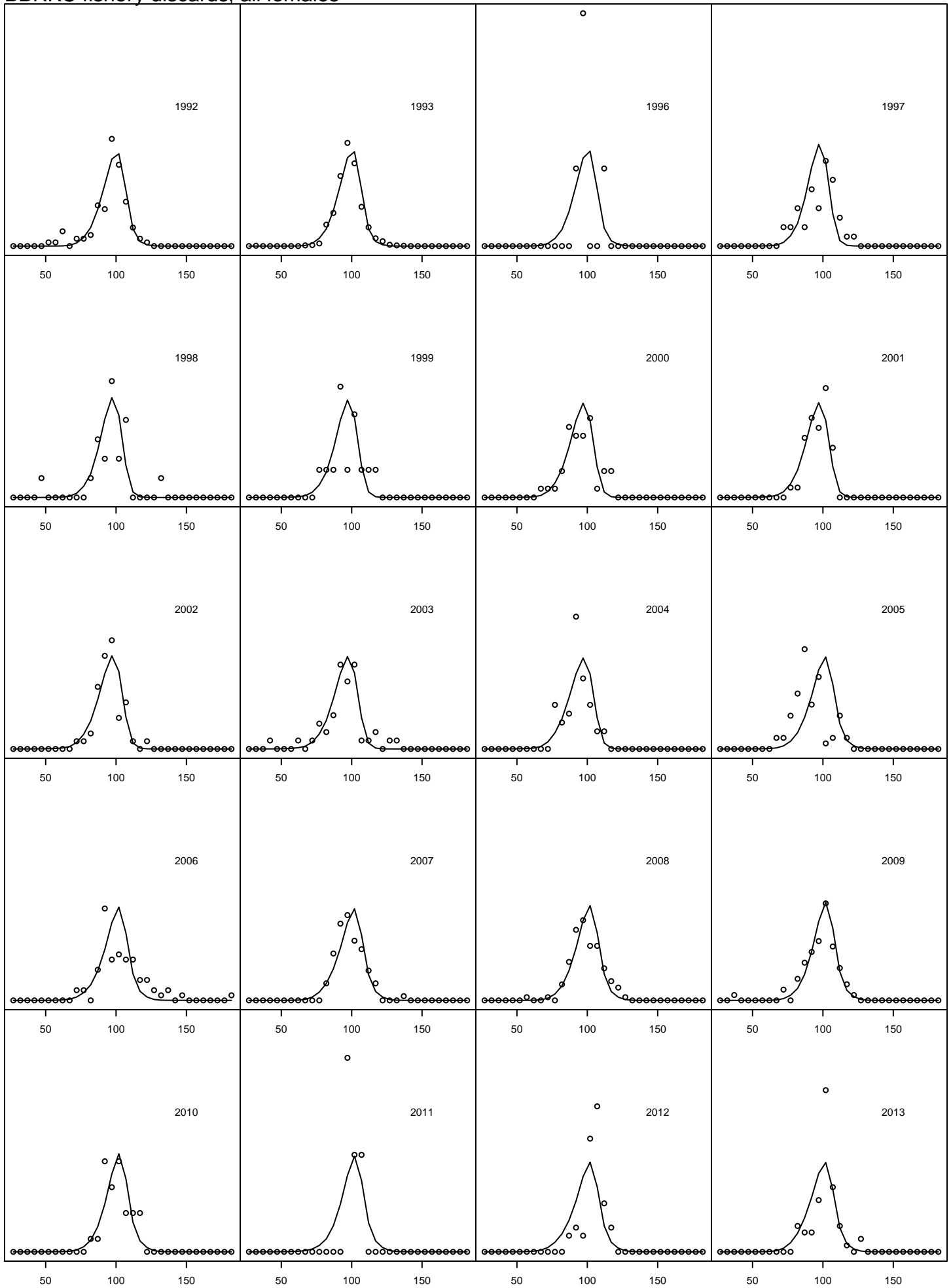
snow crab fishery discards, all females



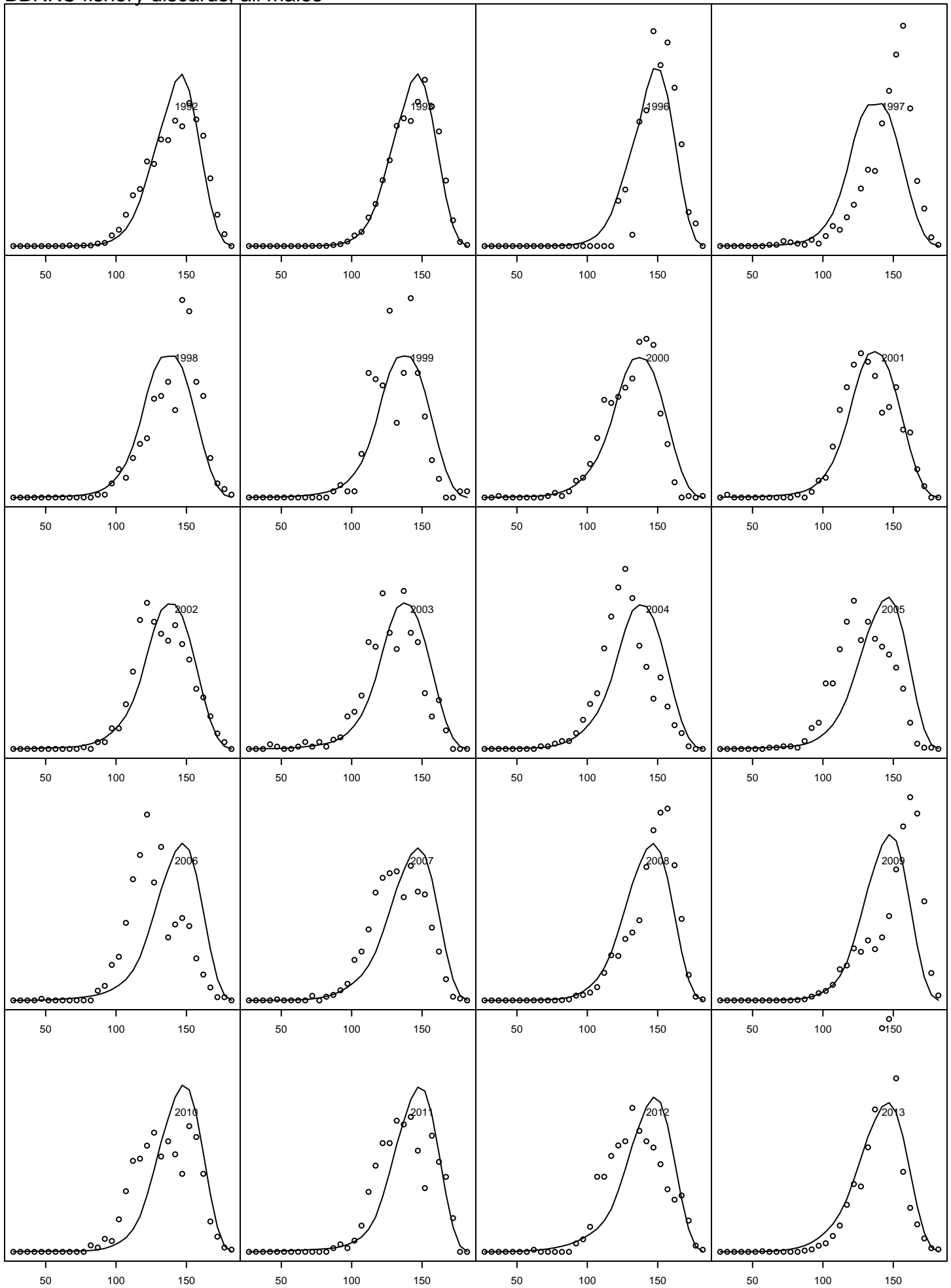
Mean proportions in the snow crab fishery, all individuals



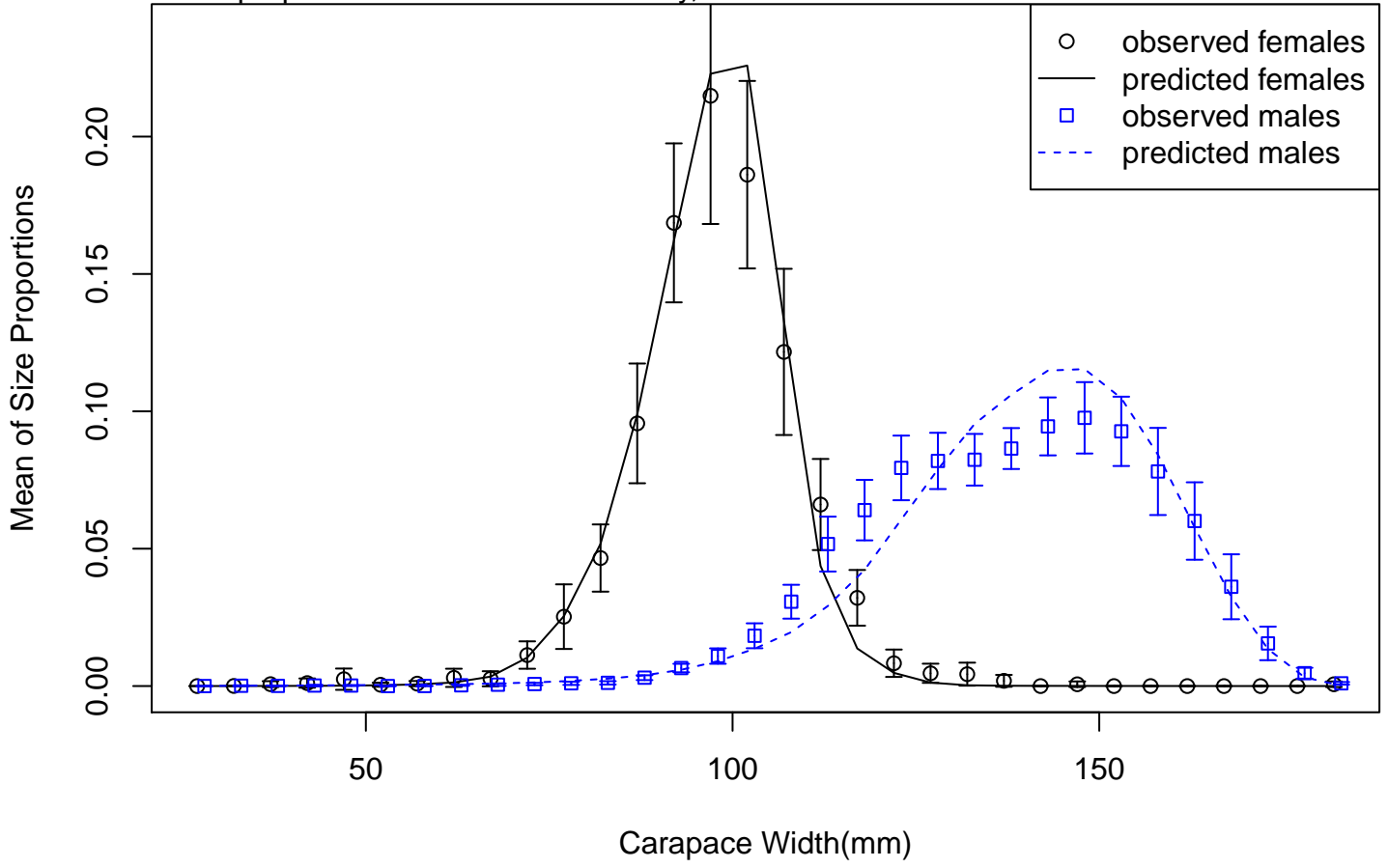
BBRKC fishery discards, all females



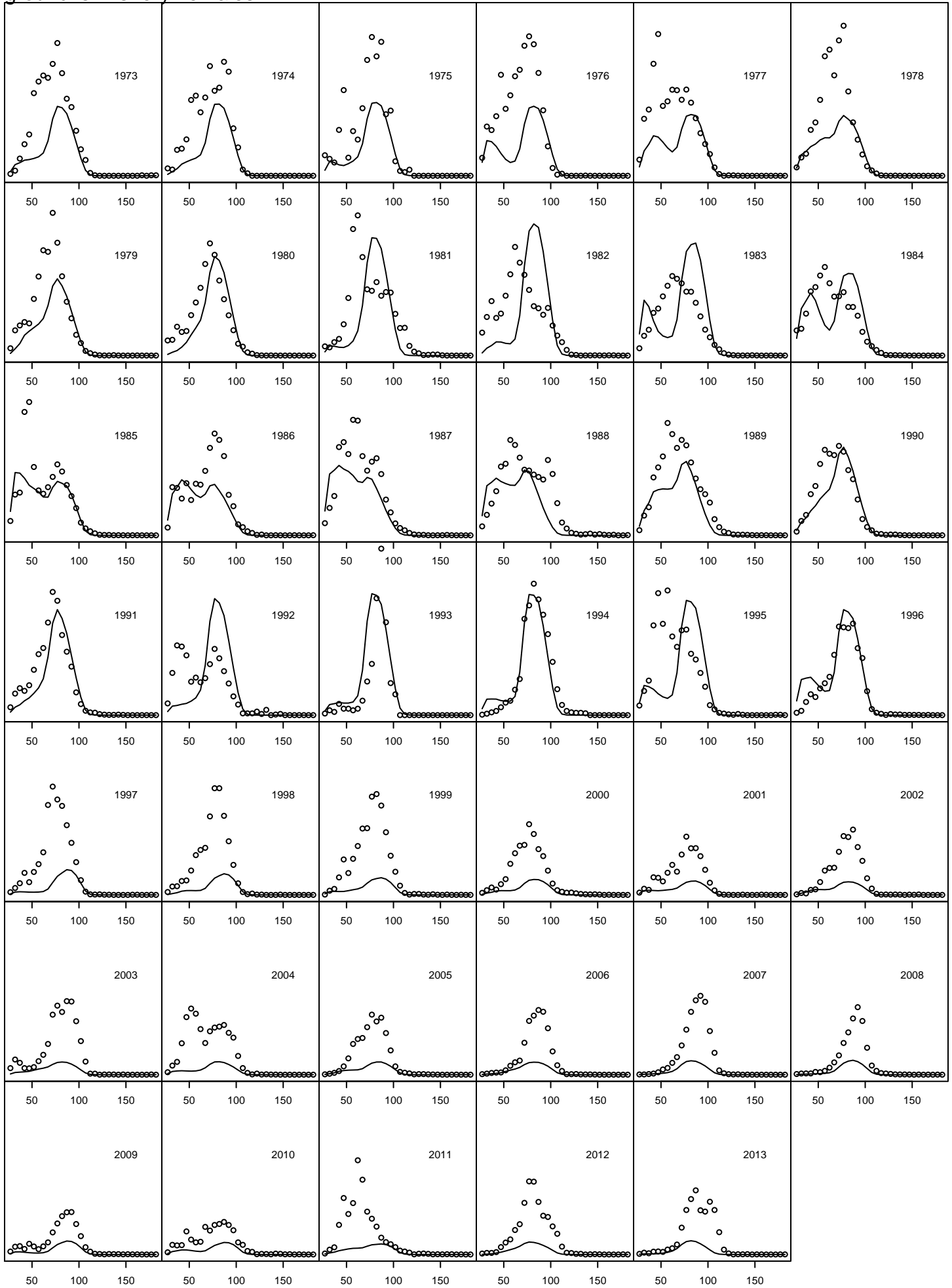
BBRKC fishery discards, all males



Mean proportions in the BBRKC fishery, all individuals

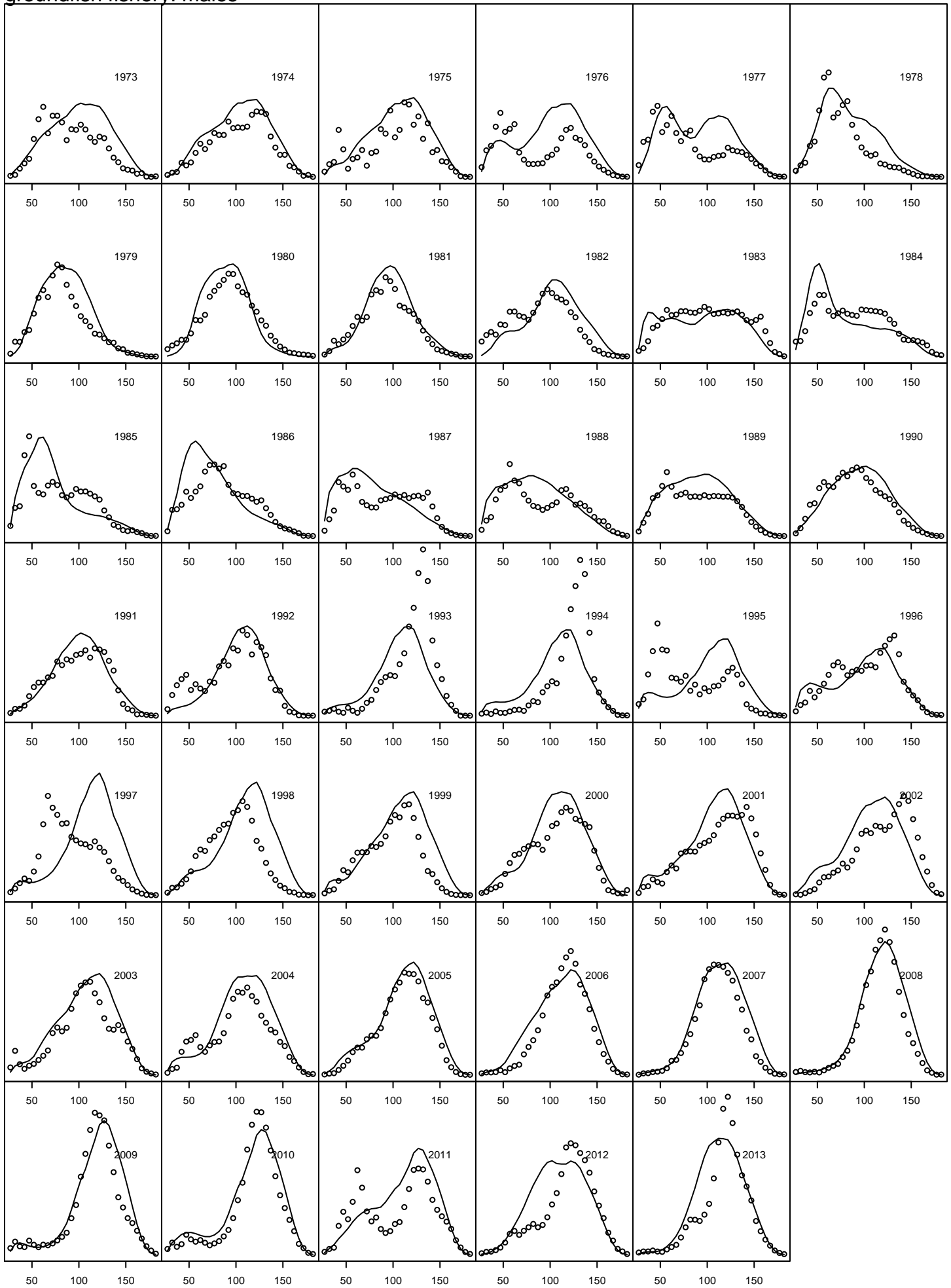


groundfish fishery: females

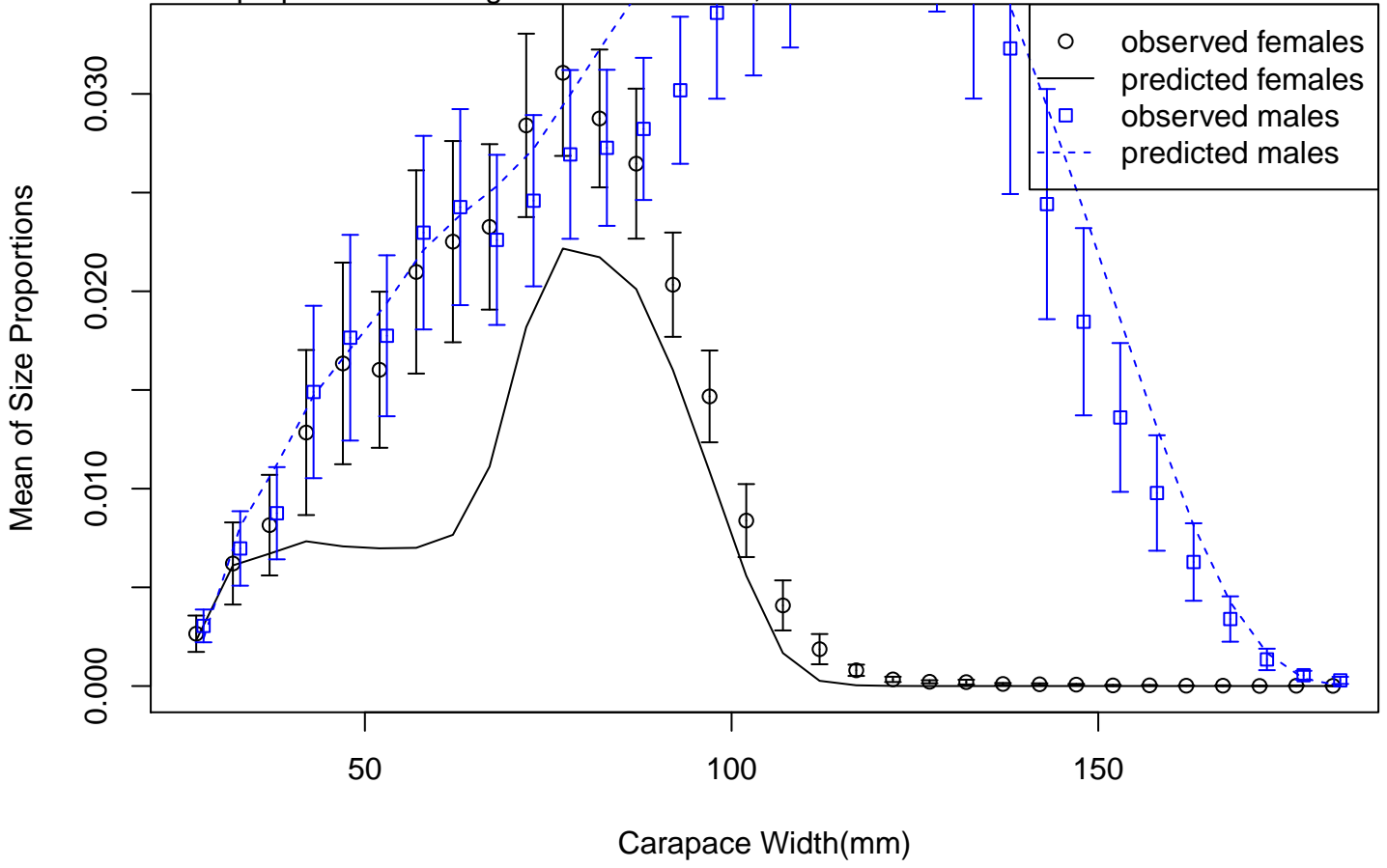




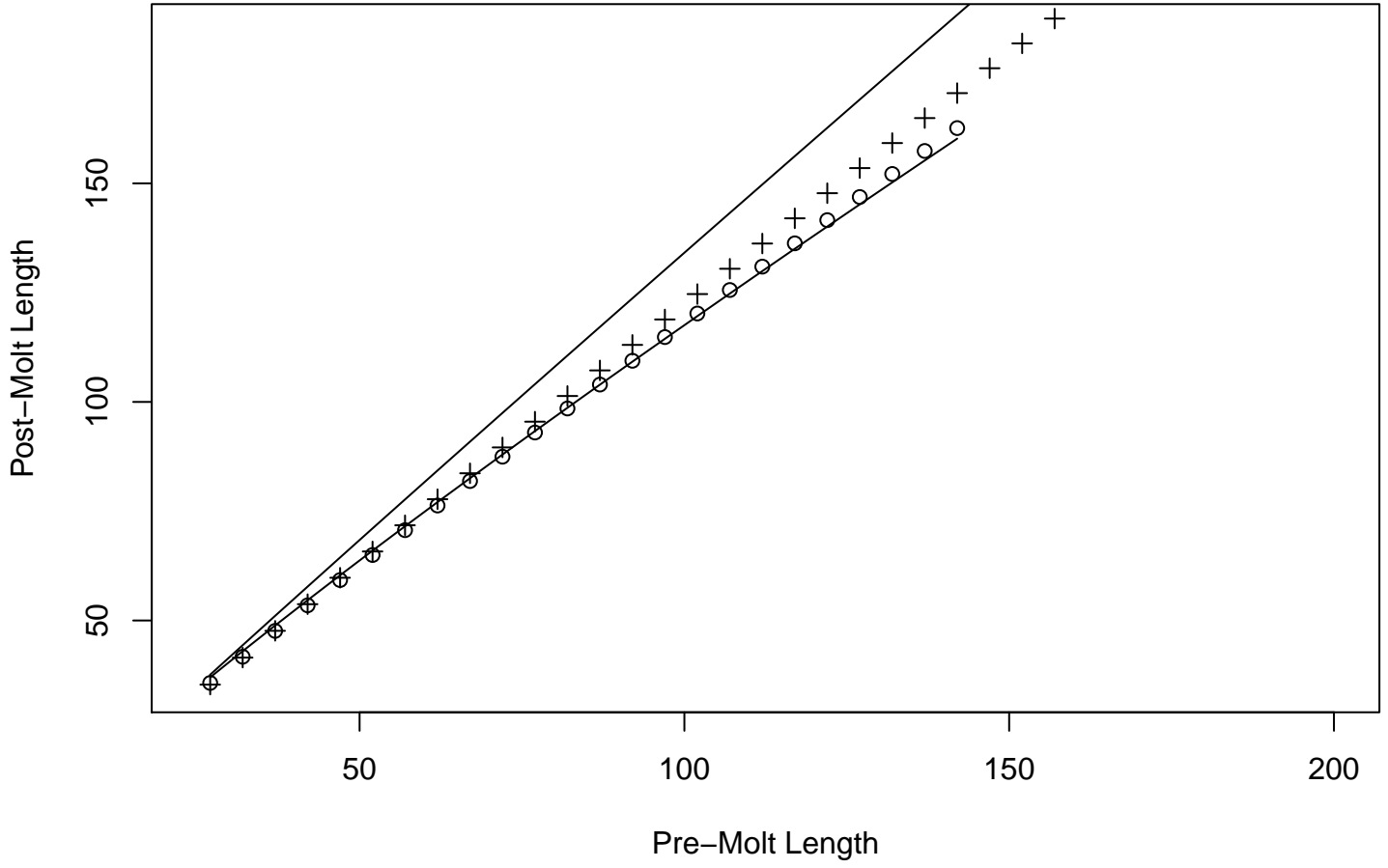
groundfish fishery: males

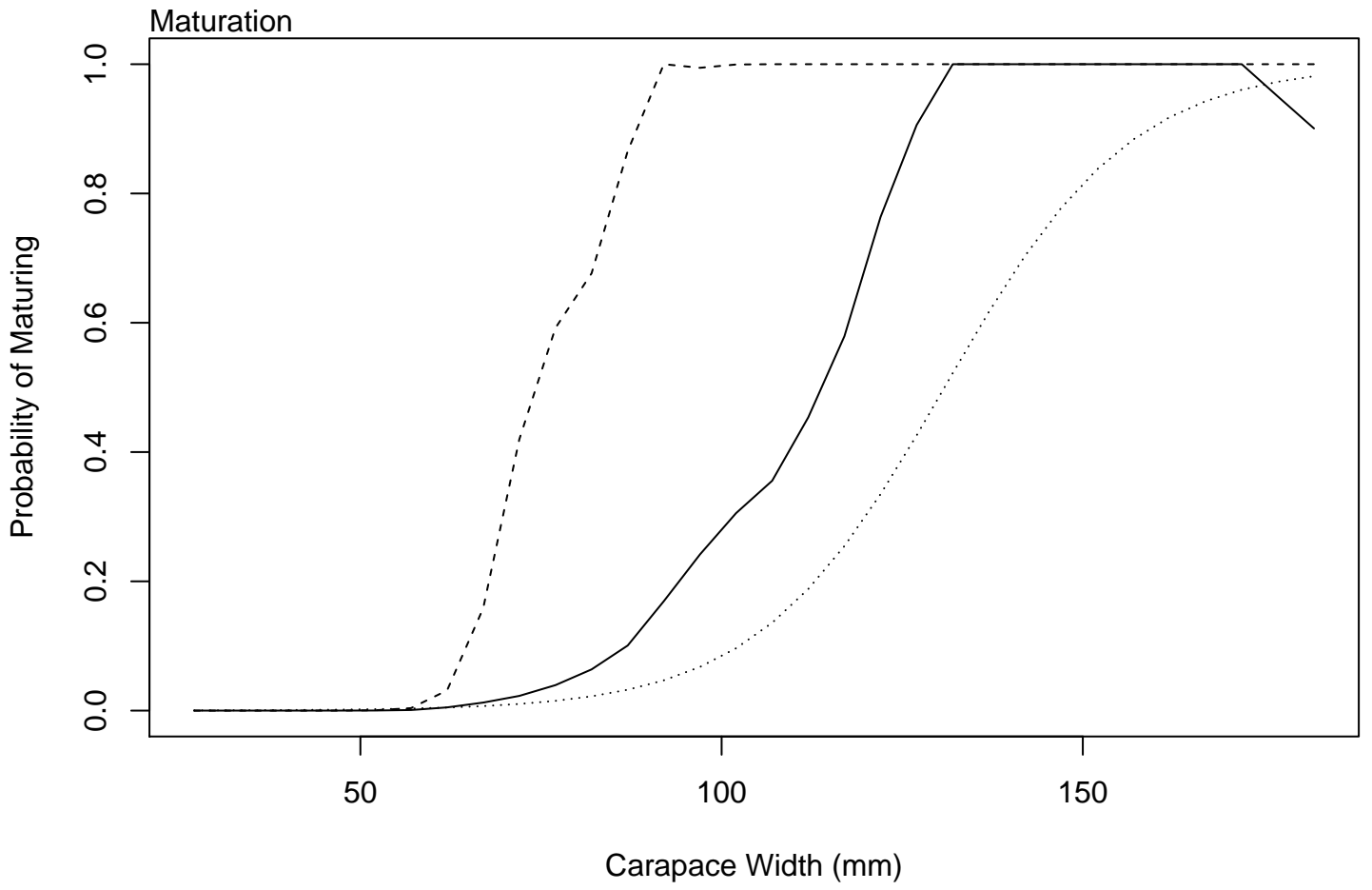


Mean proportions in the groundfish fisheries, all individuals

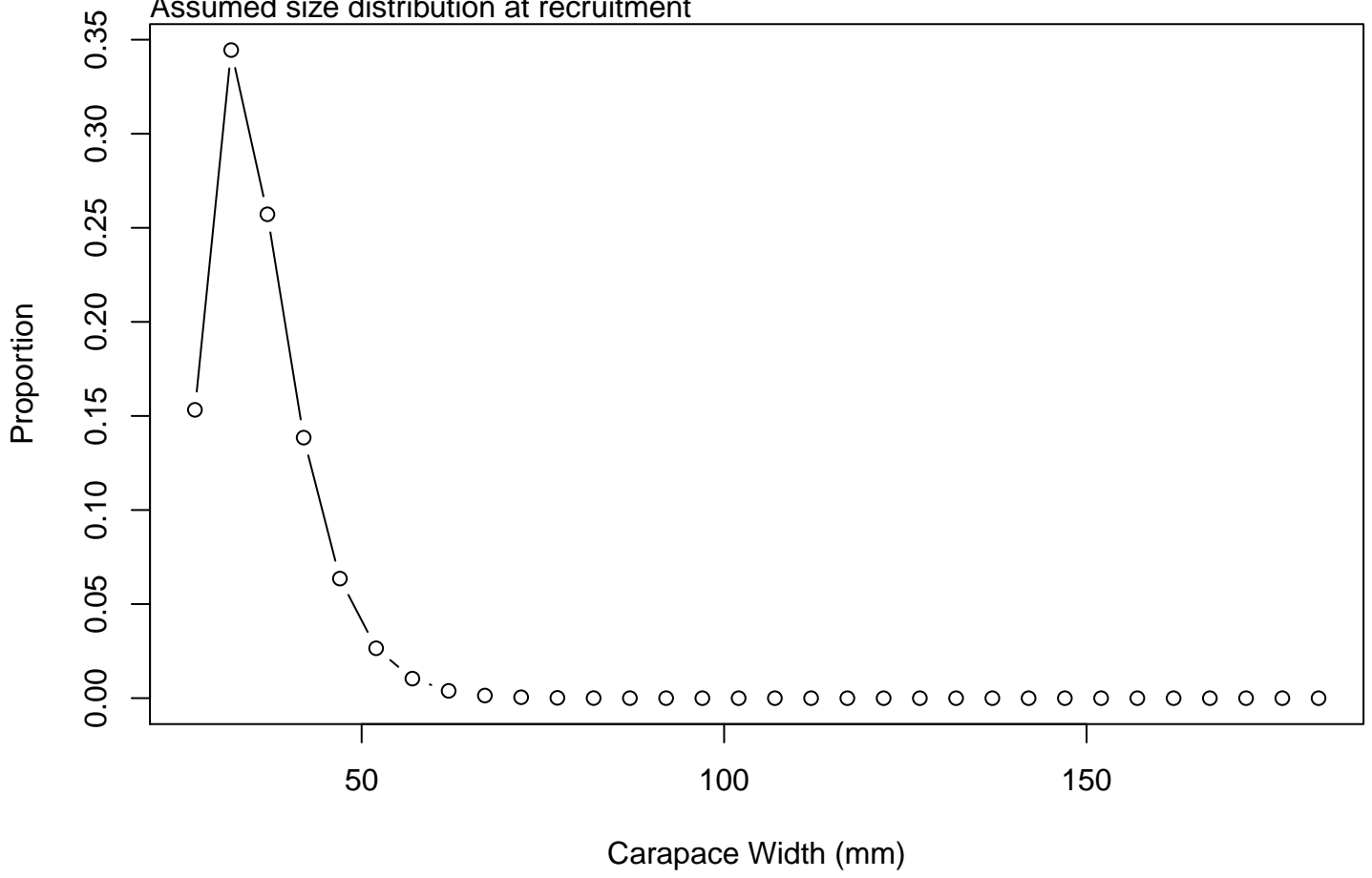


Growth

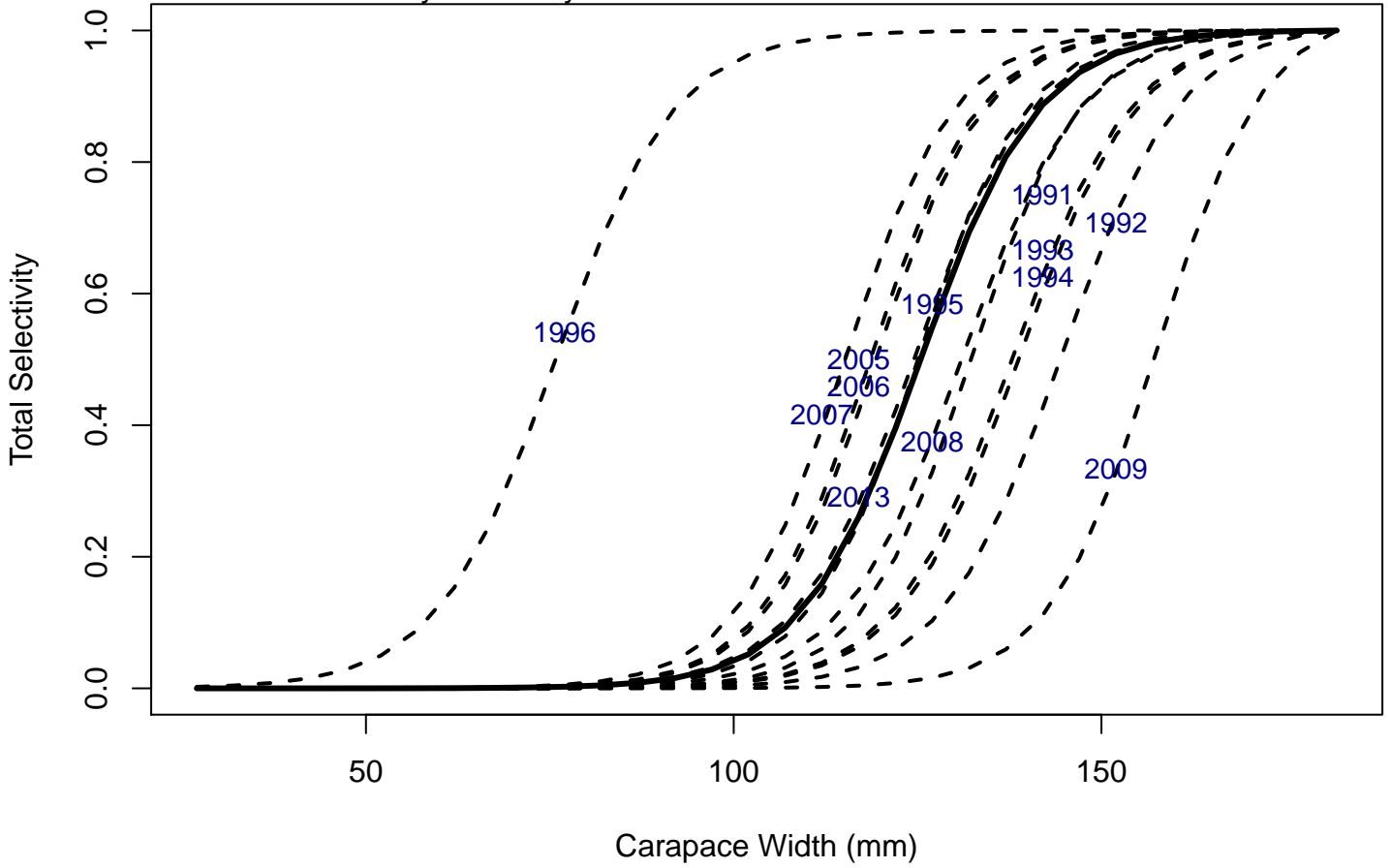




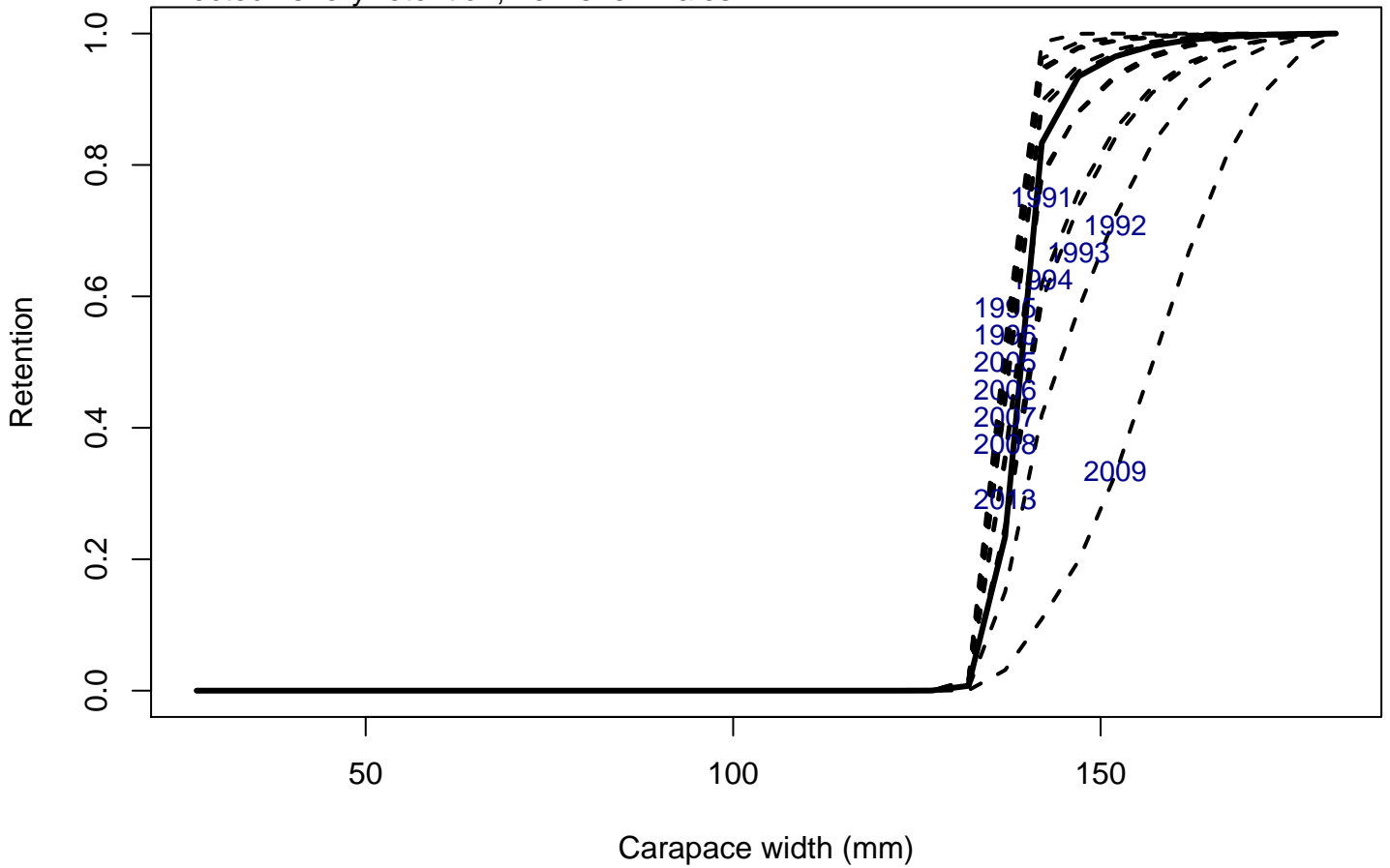
Assumed size distribution at recruitment



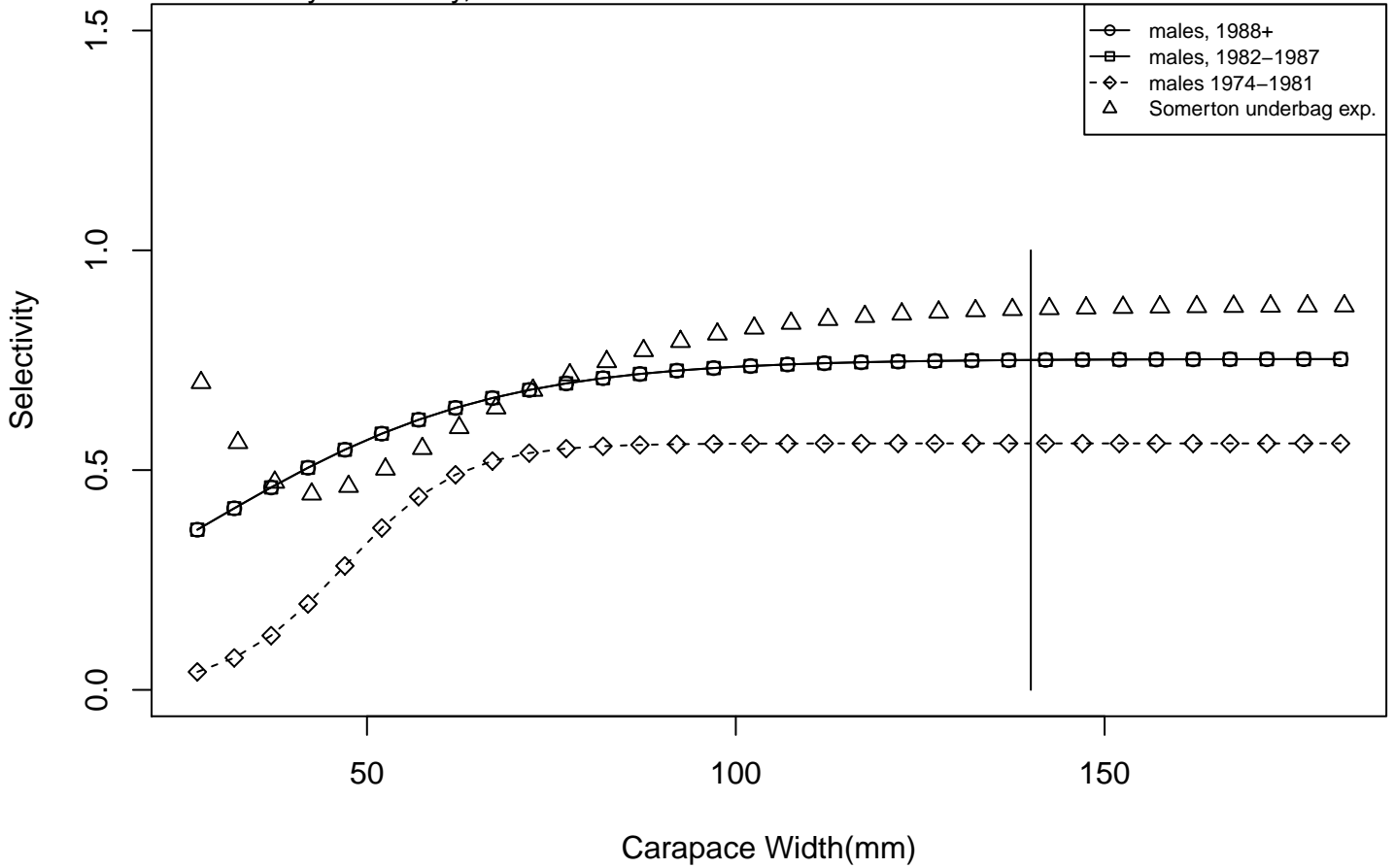
Total directed fishery selectivity on new shell males



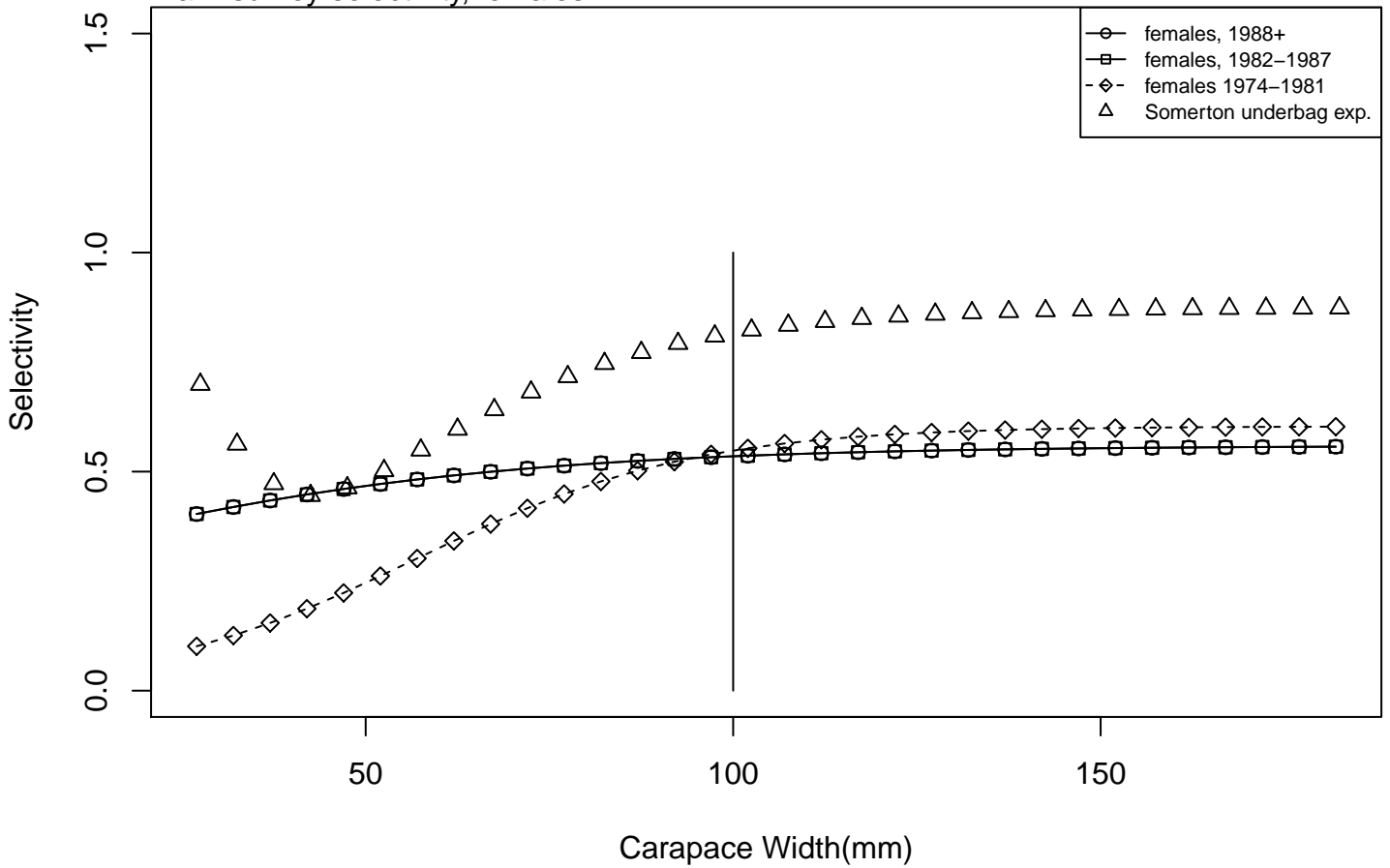
Directed fishery retention, new shell males



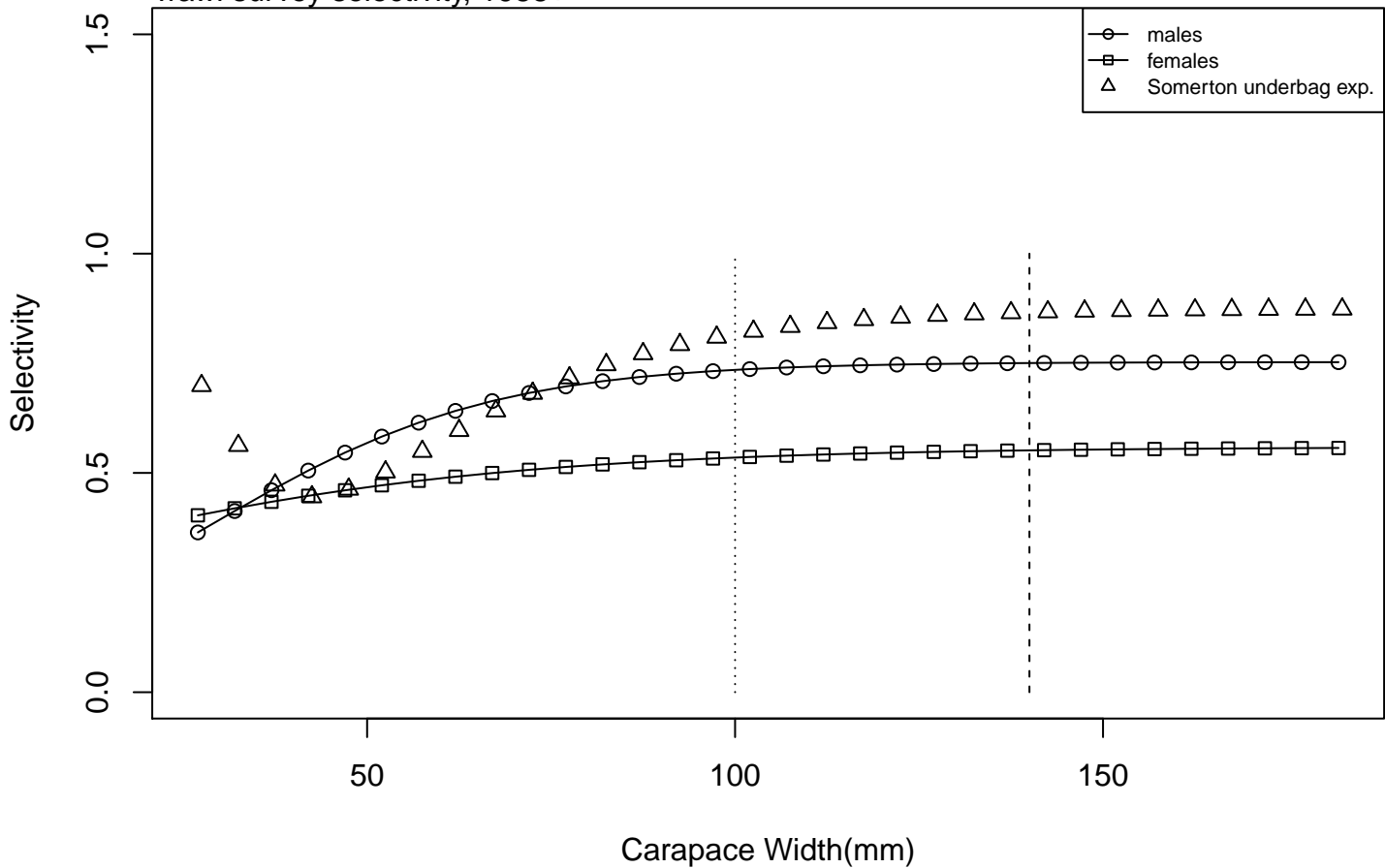
Trawl survey selectivity, males



Trawl survey selectivity, females

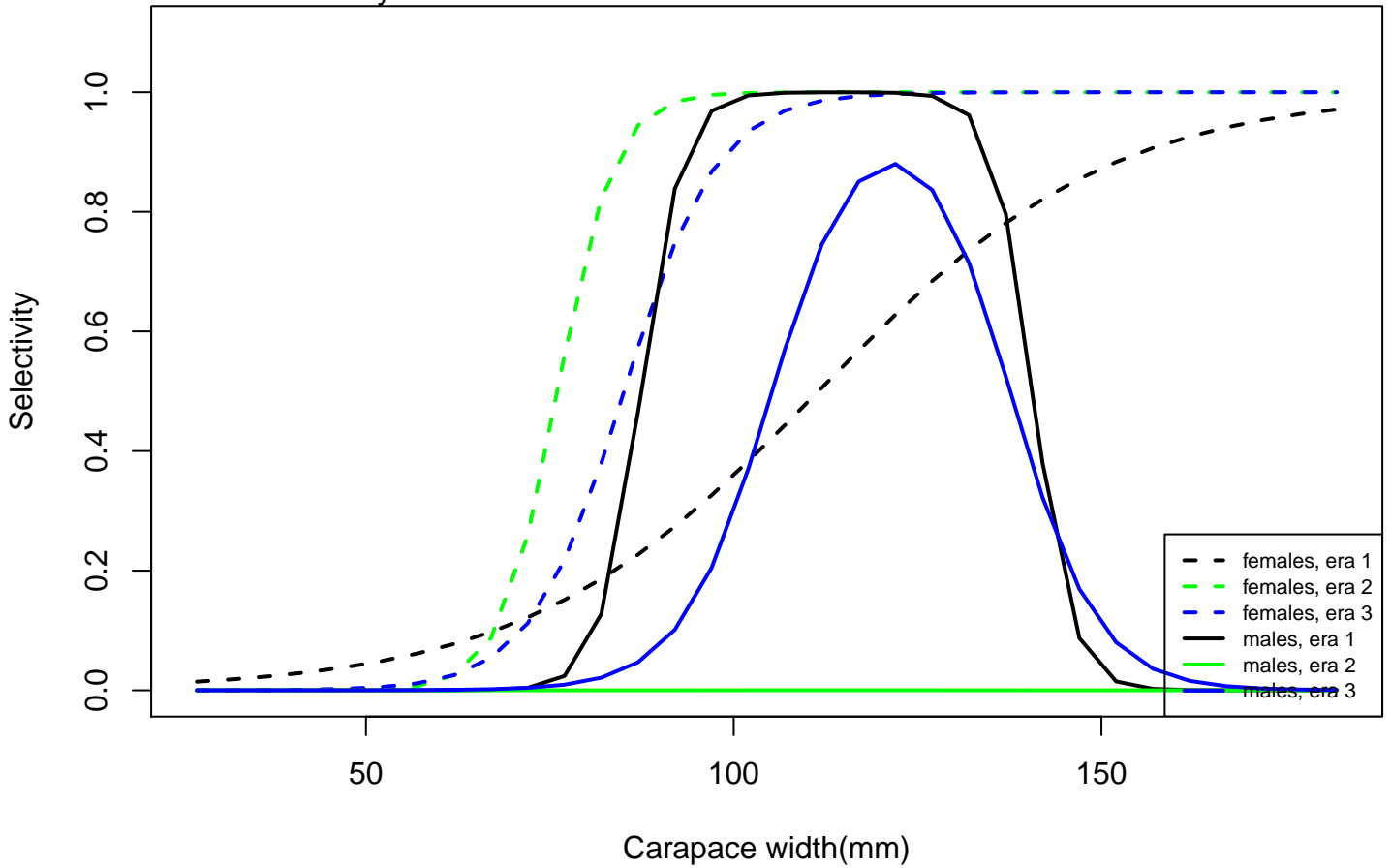


Trawl survey selectivity, 1988+

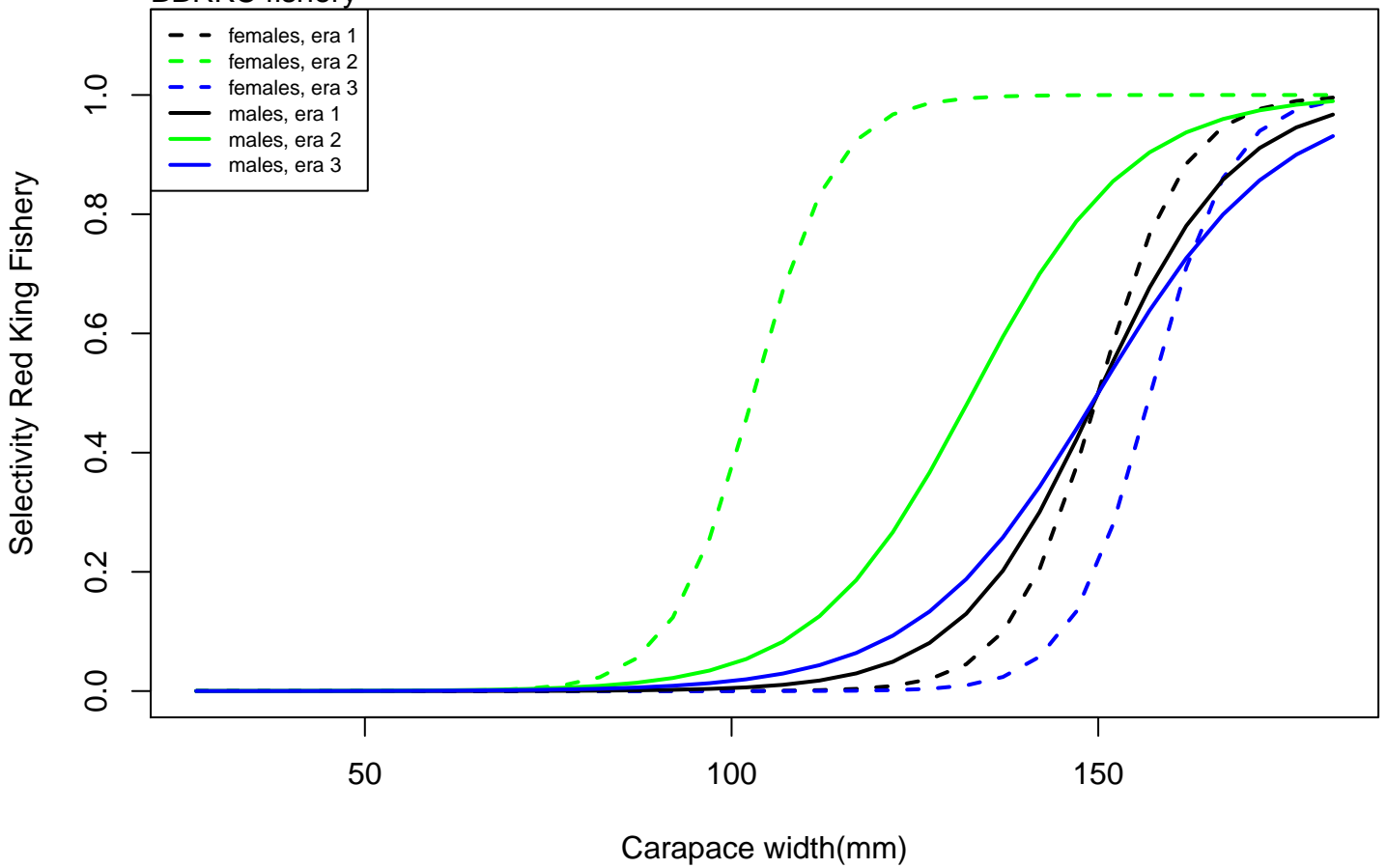




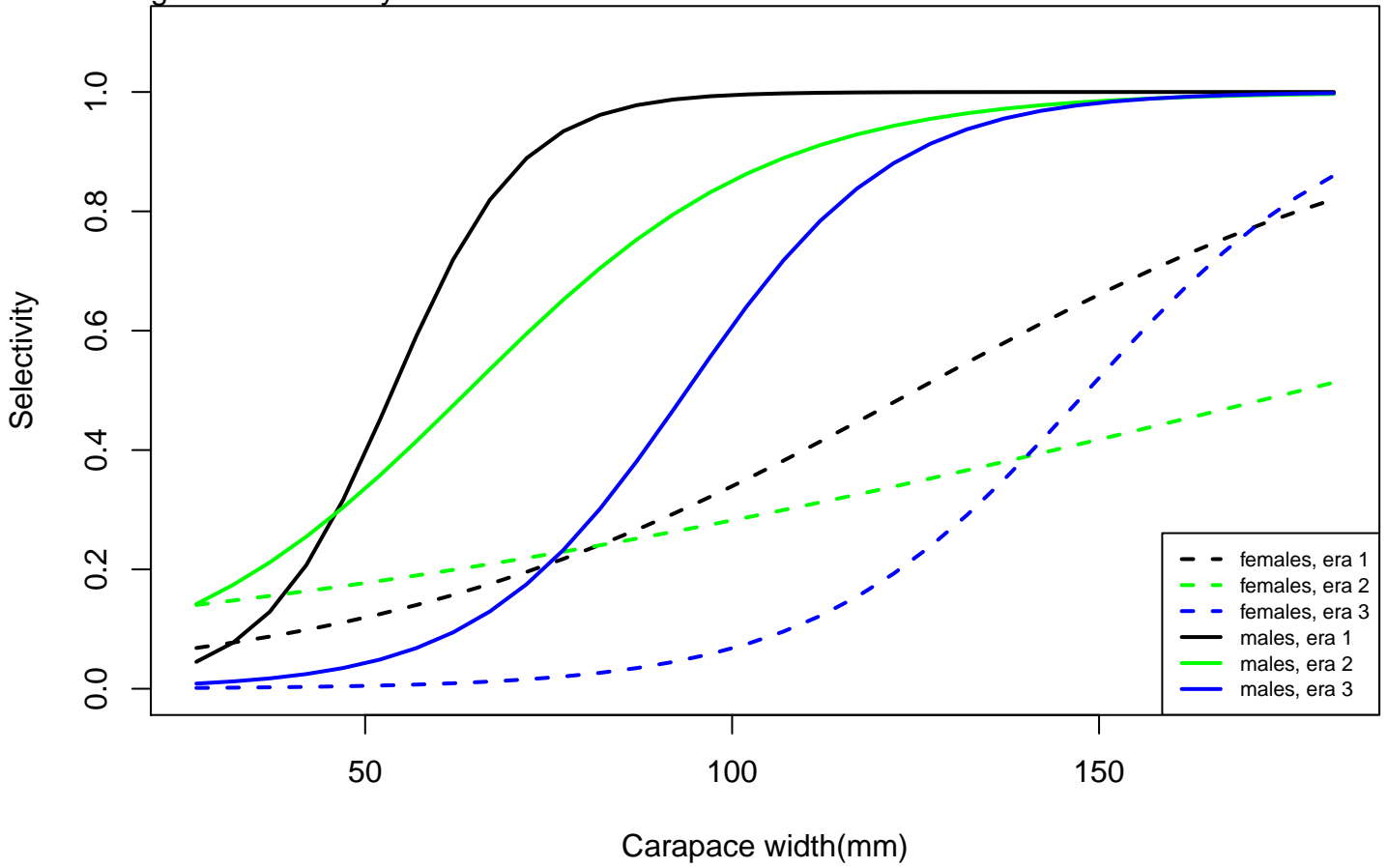
snow crab fishery



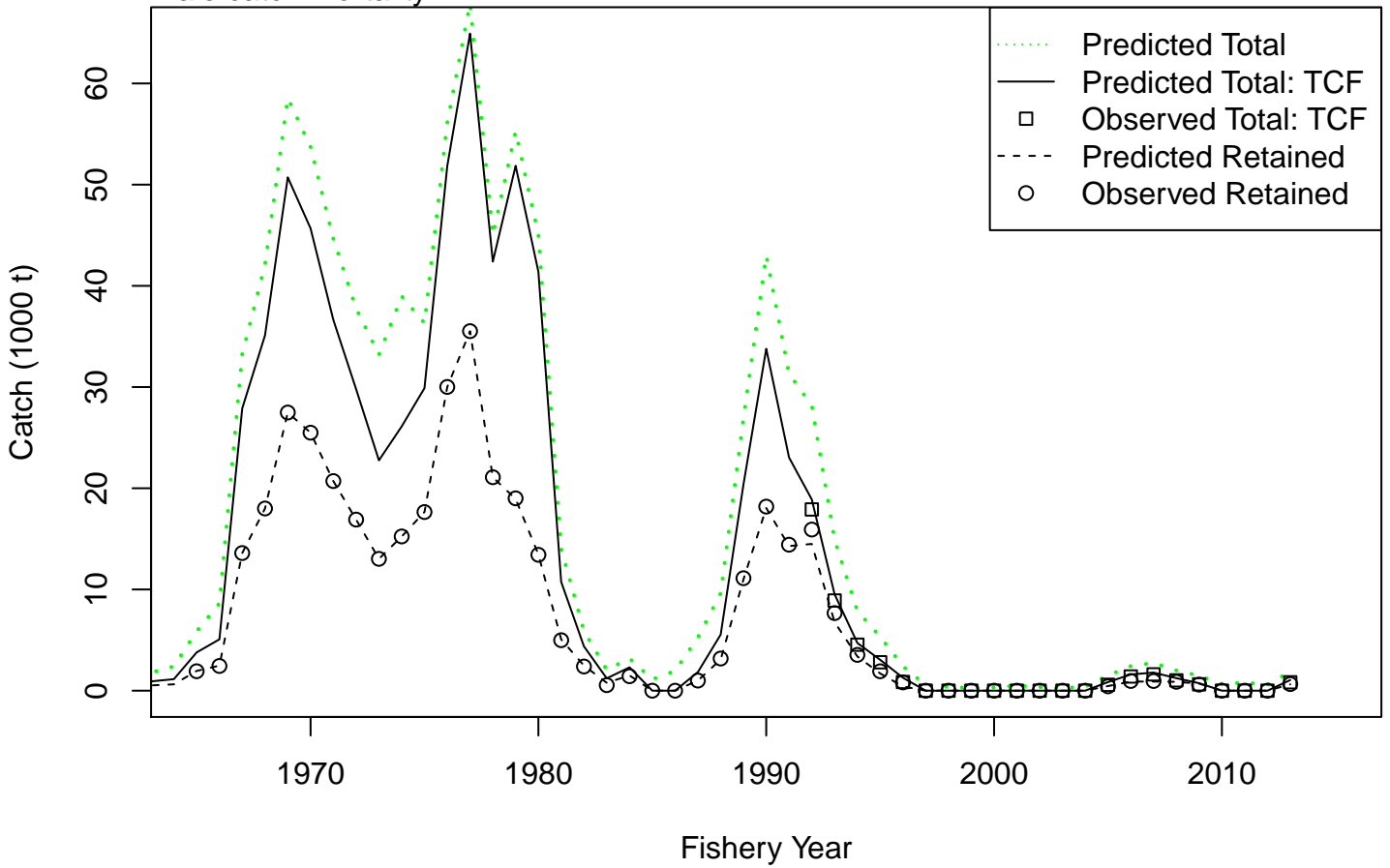
BBRKC fishery

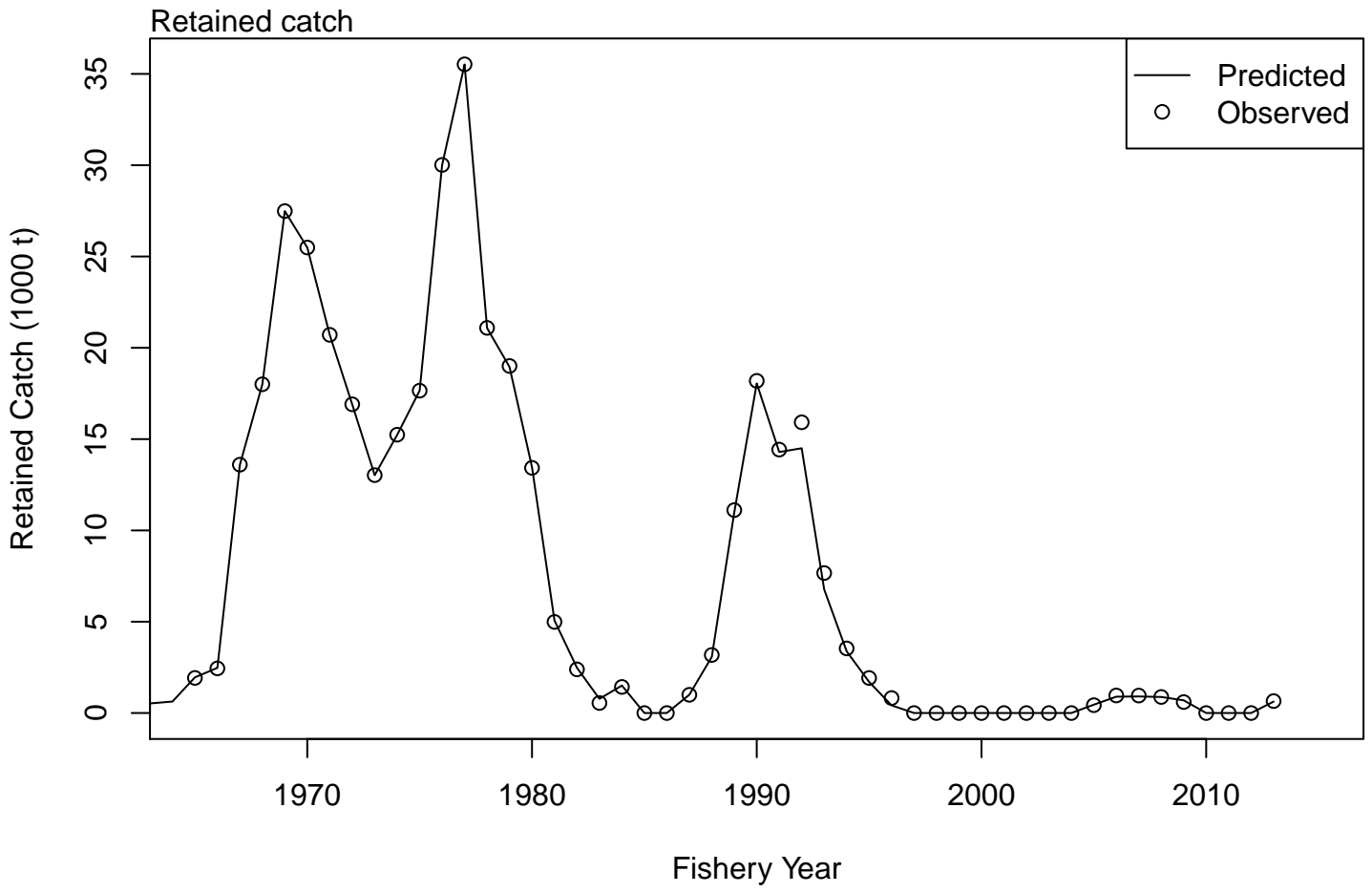


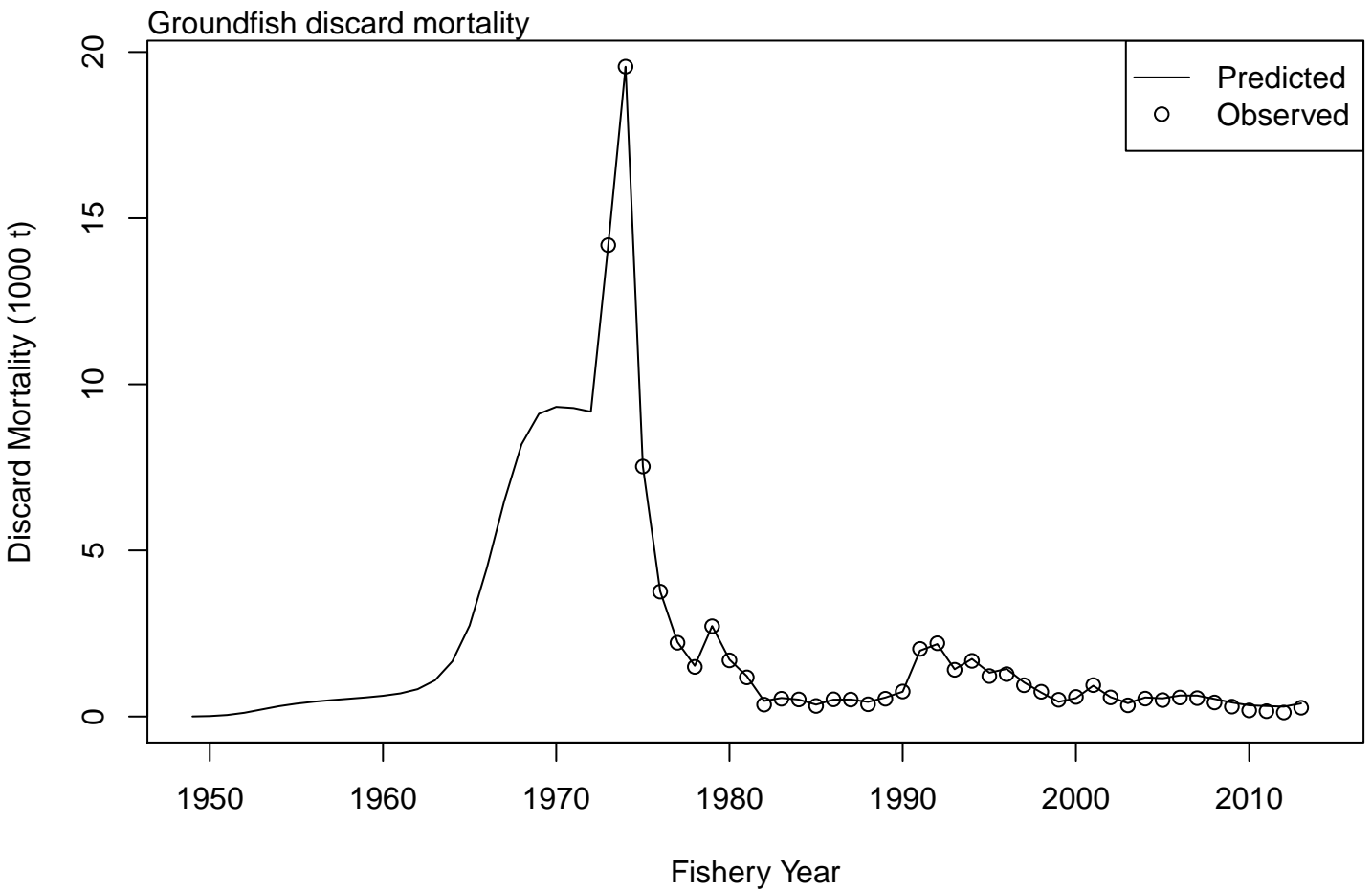
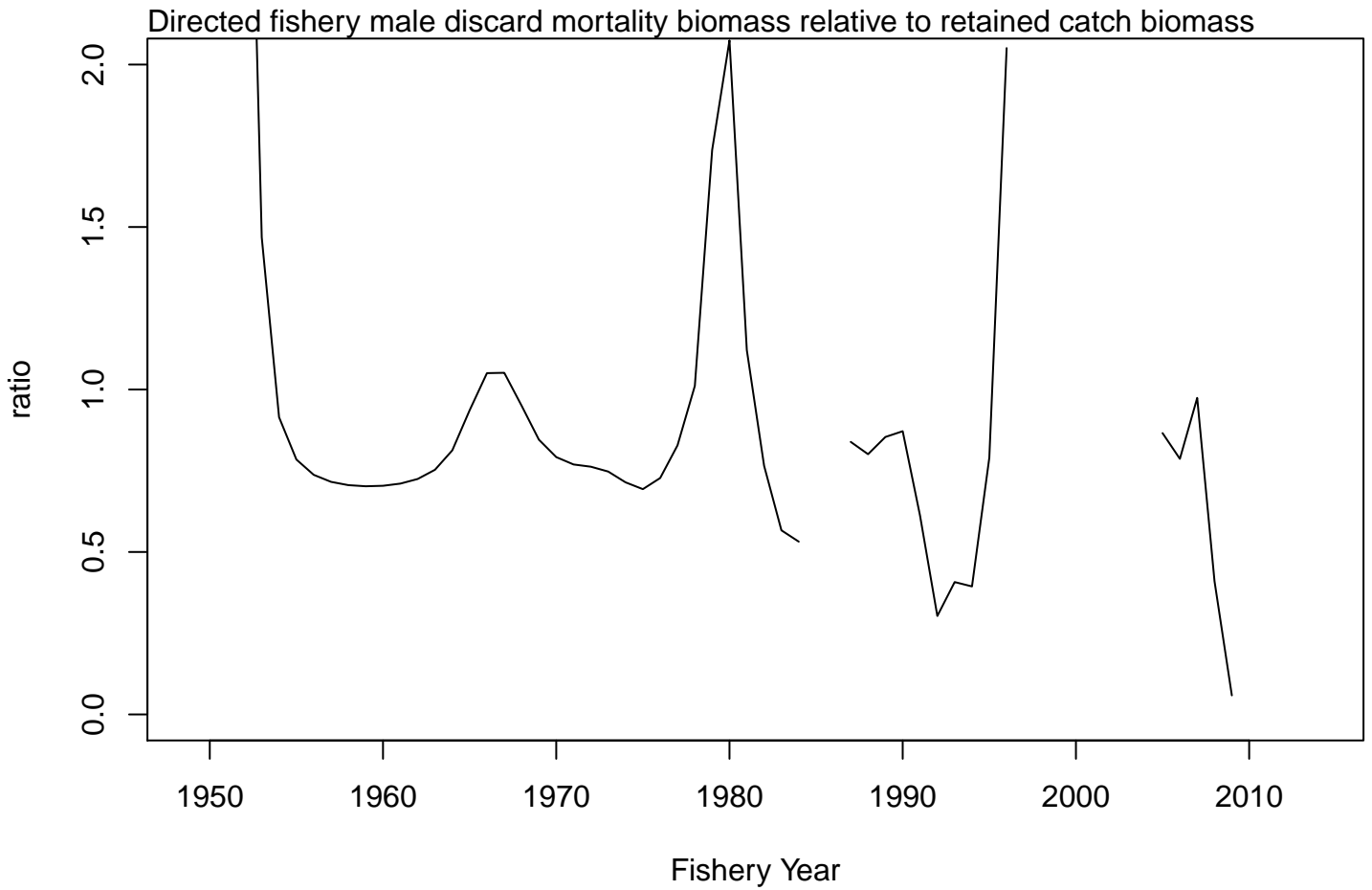
groundfish fishery



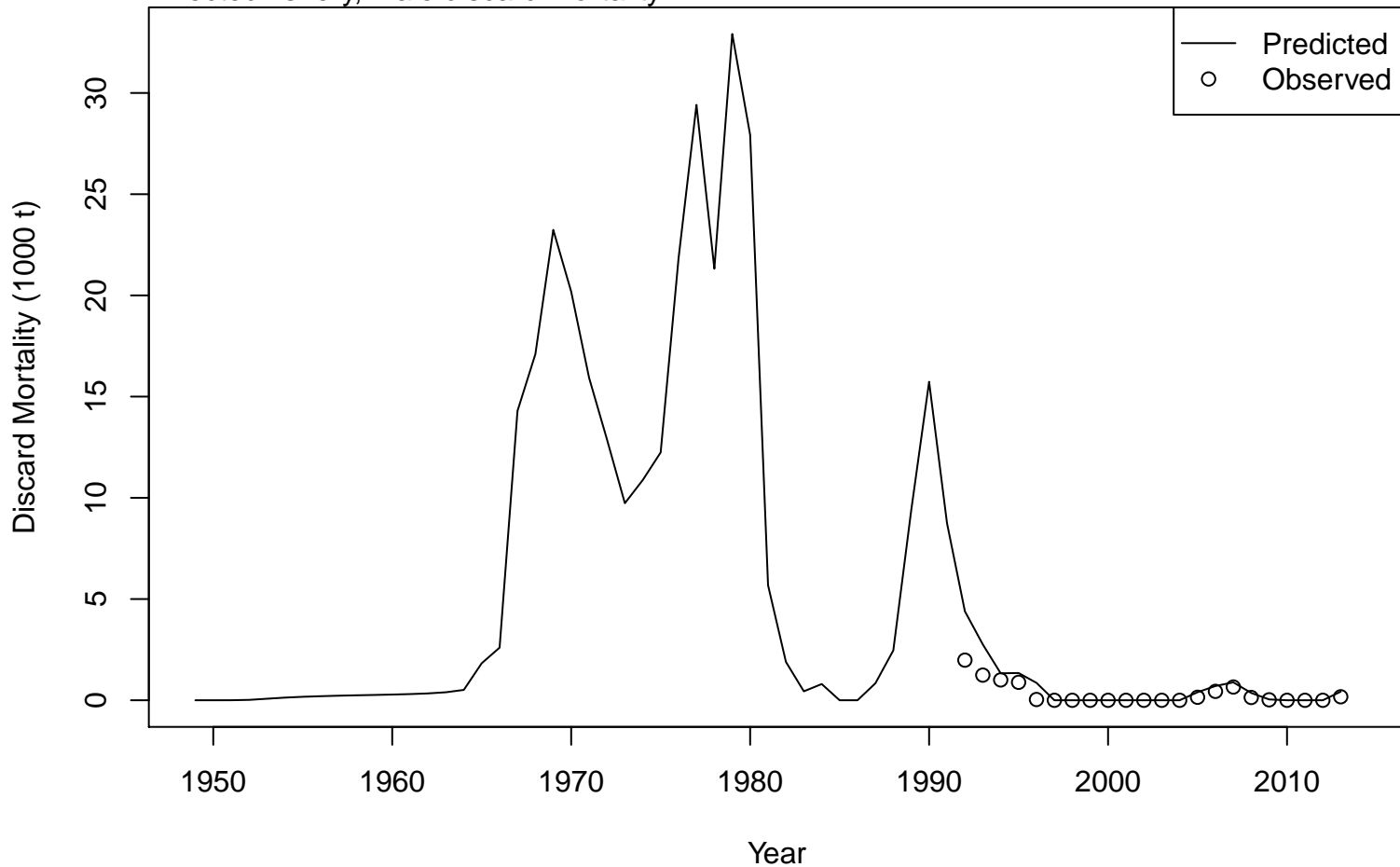
Male catch mortality



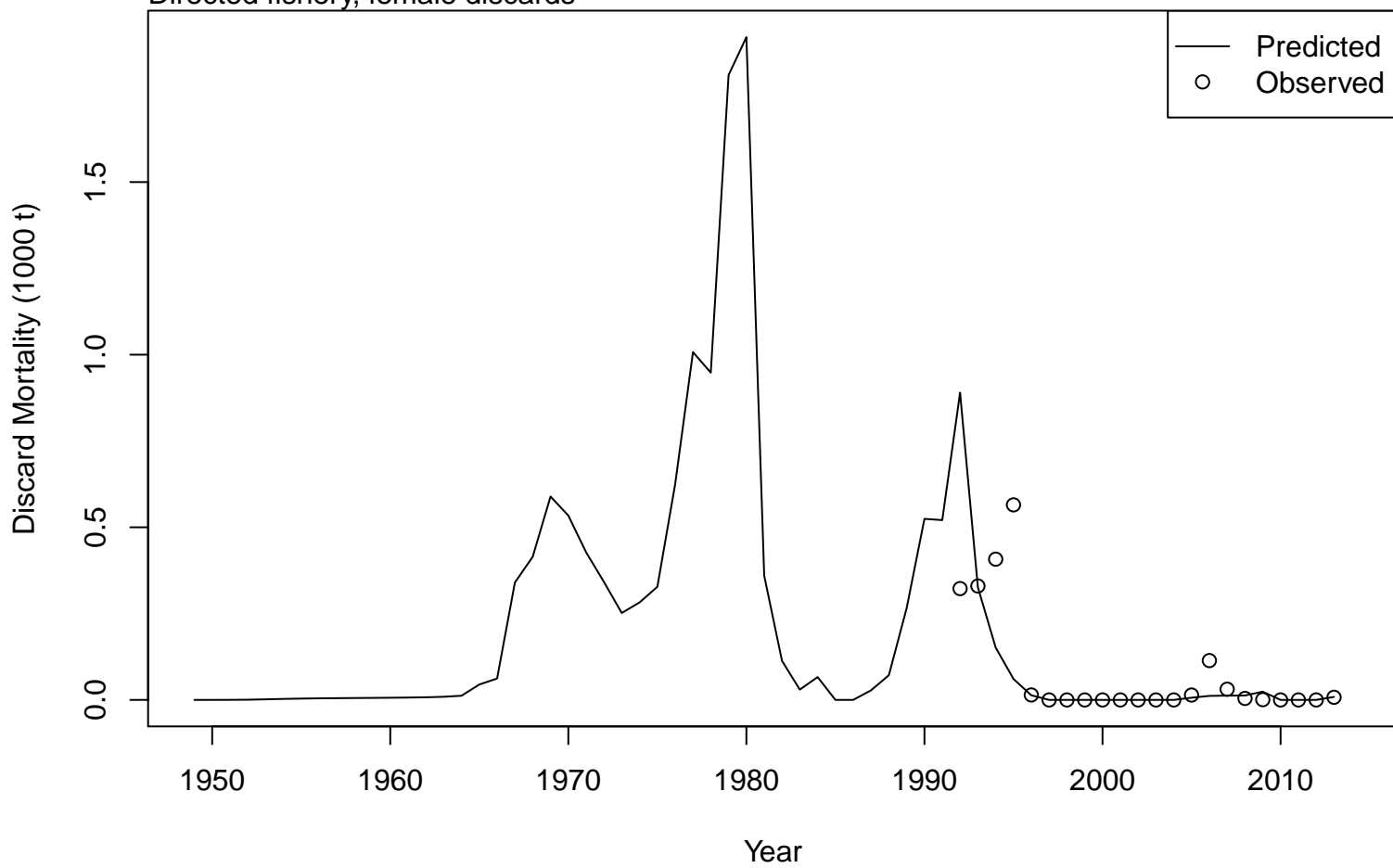




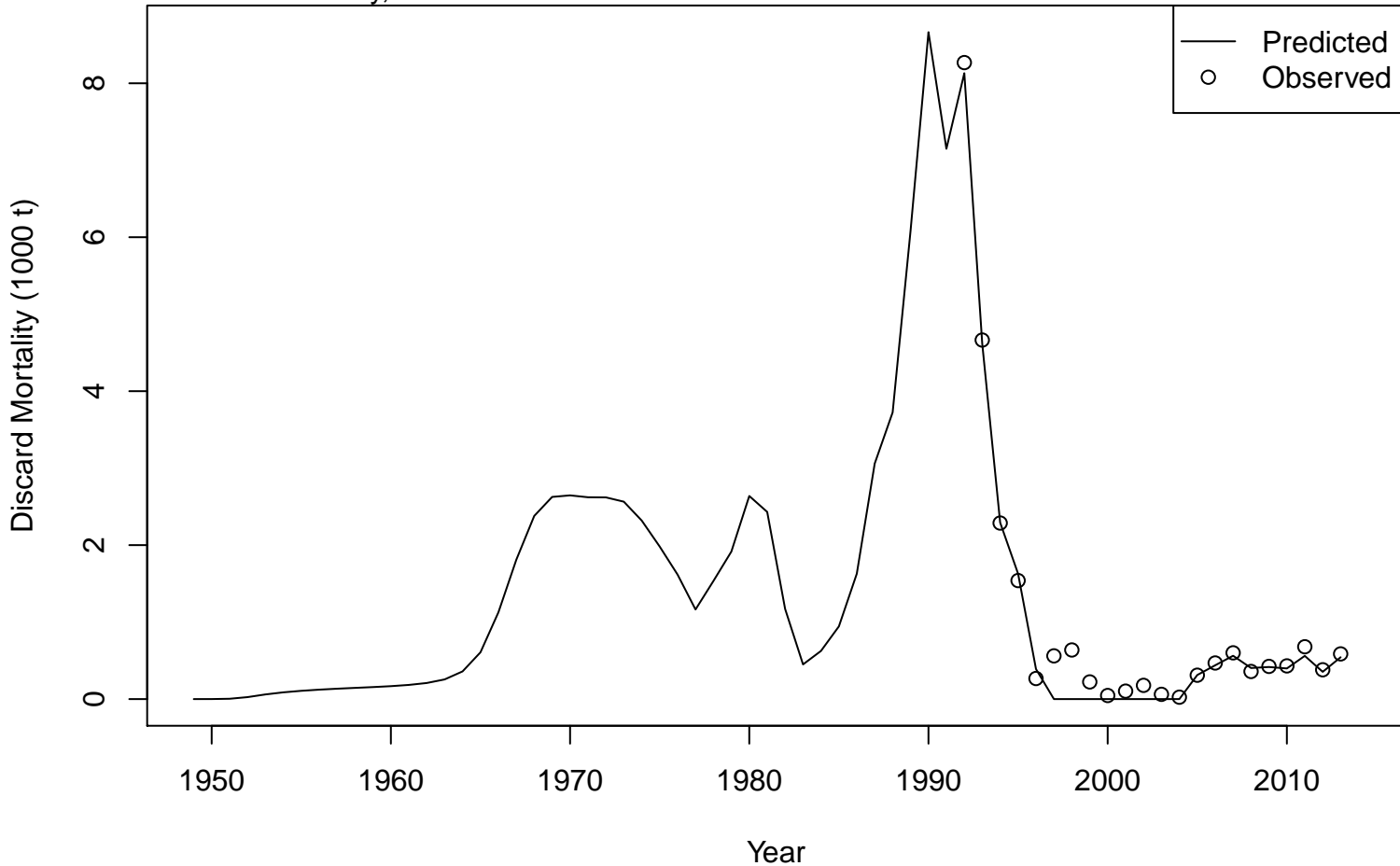
Directed fishery, male discard mortality



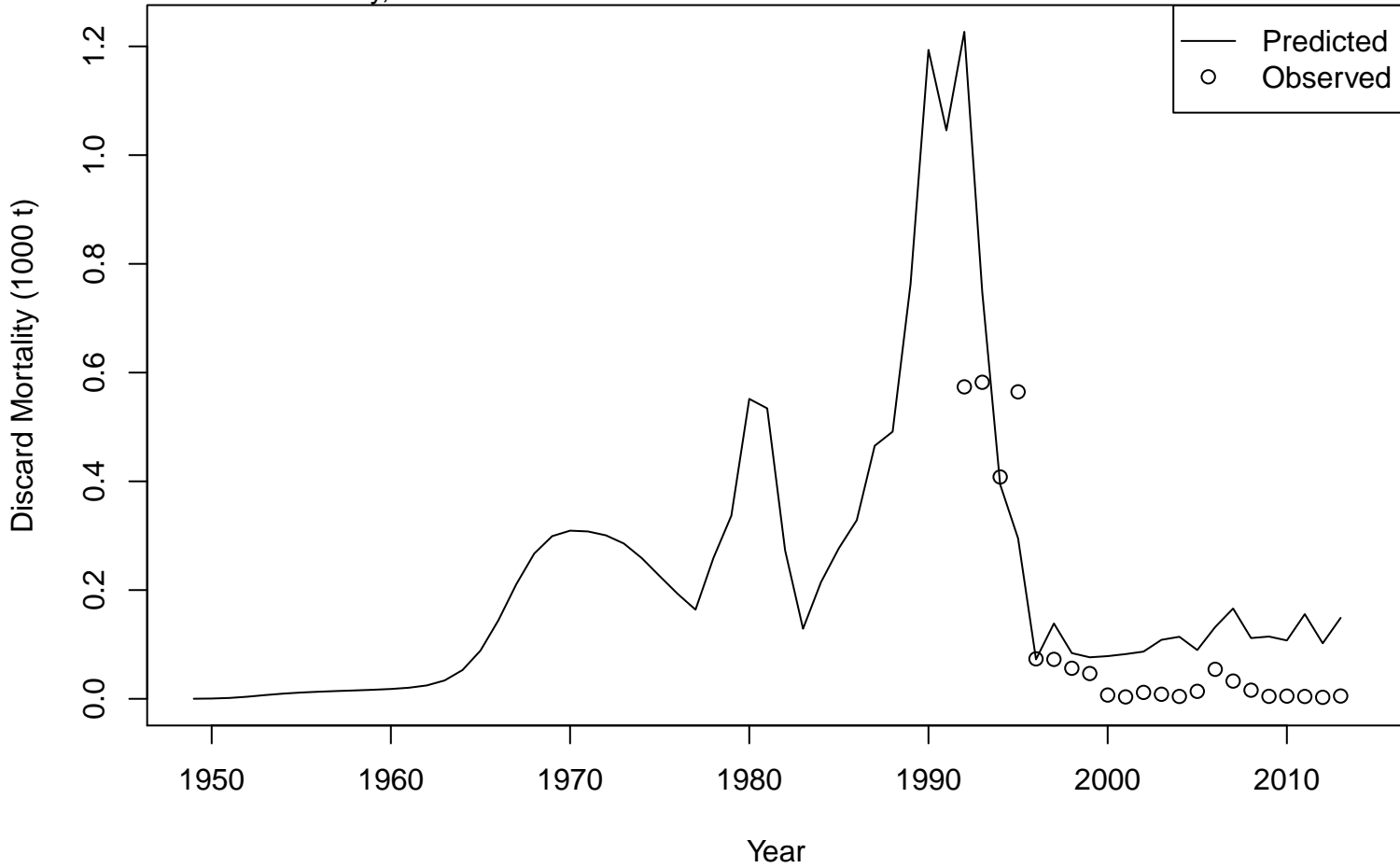
Directed fishery, female discards



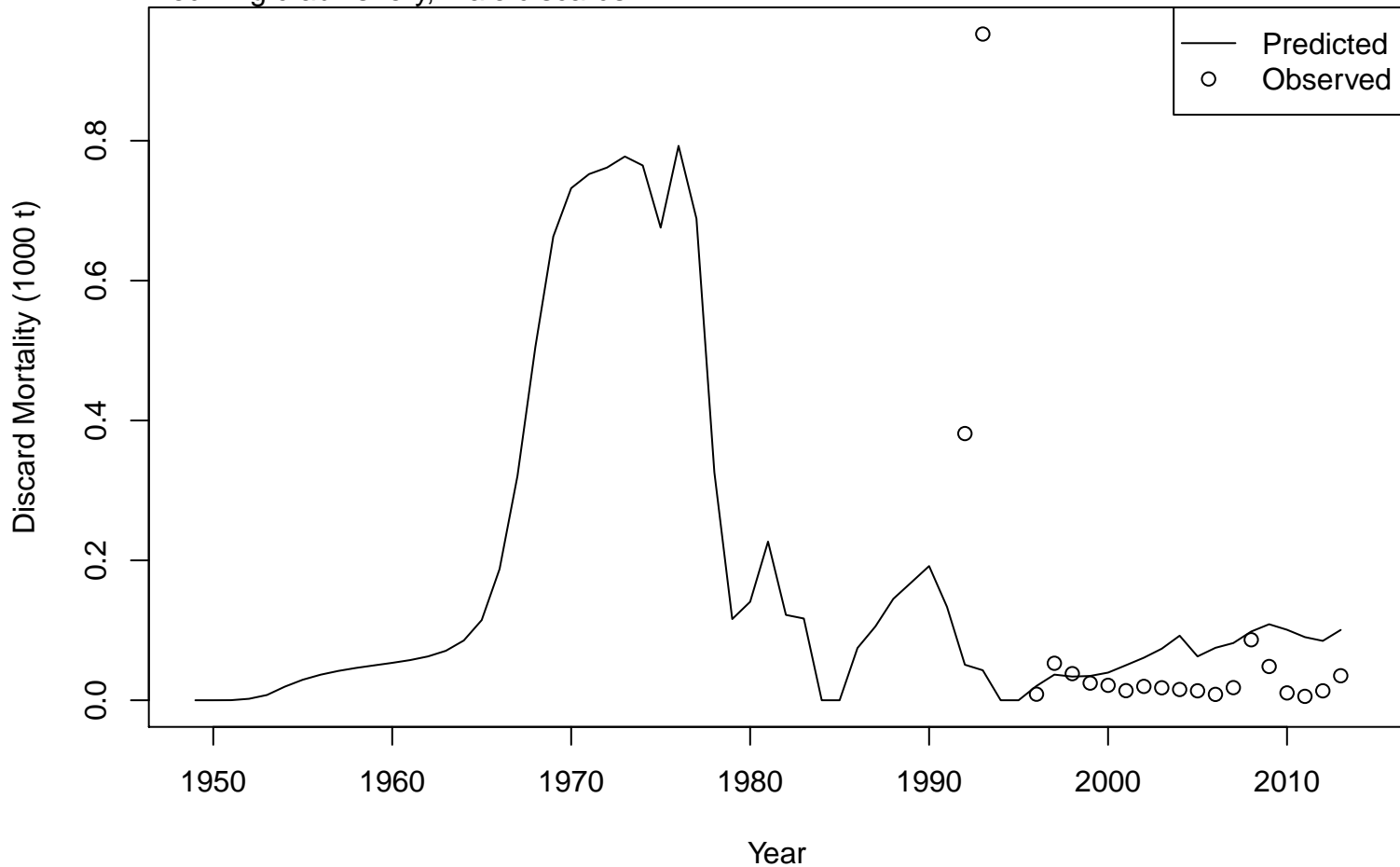
Snow crab fishery, male discards



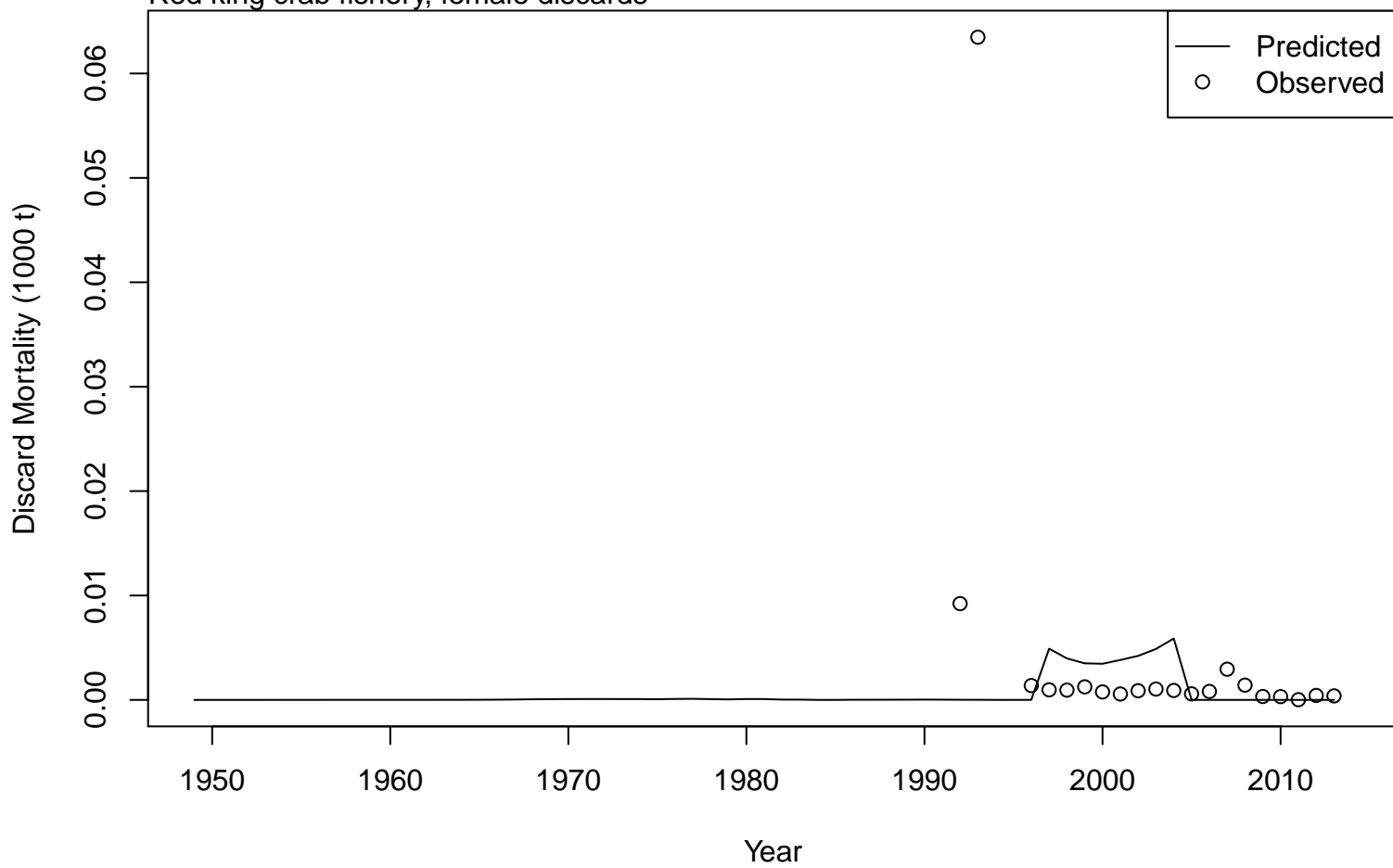
Snow crab fishery, female discards

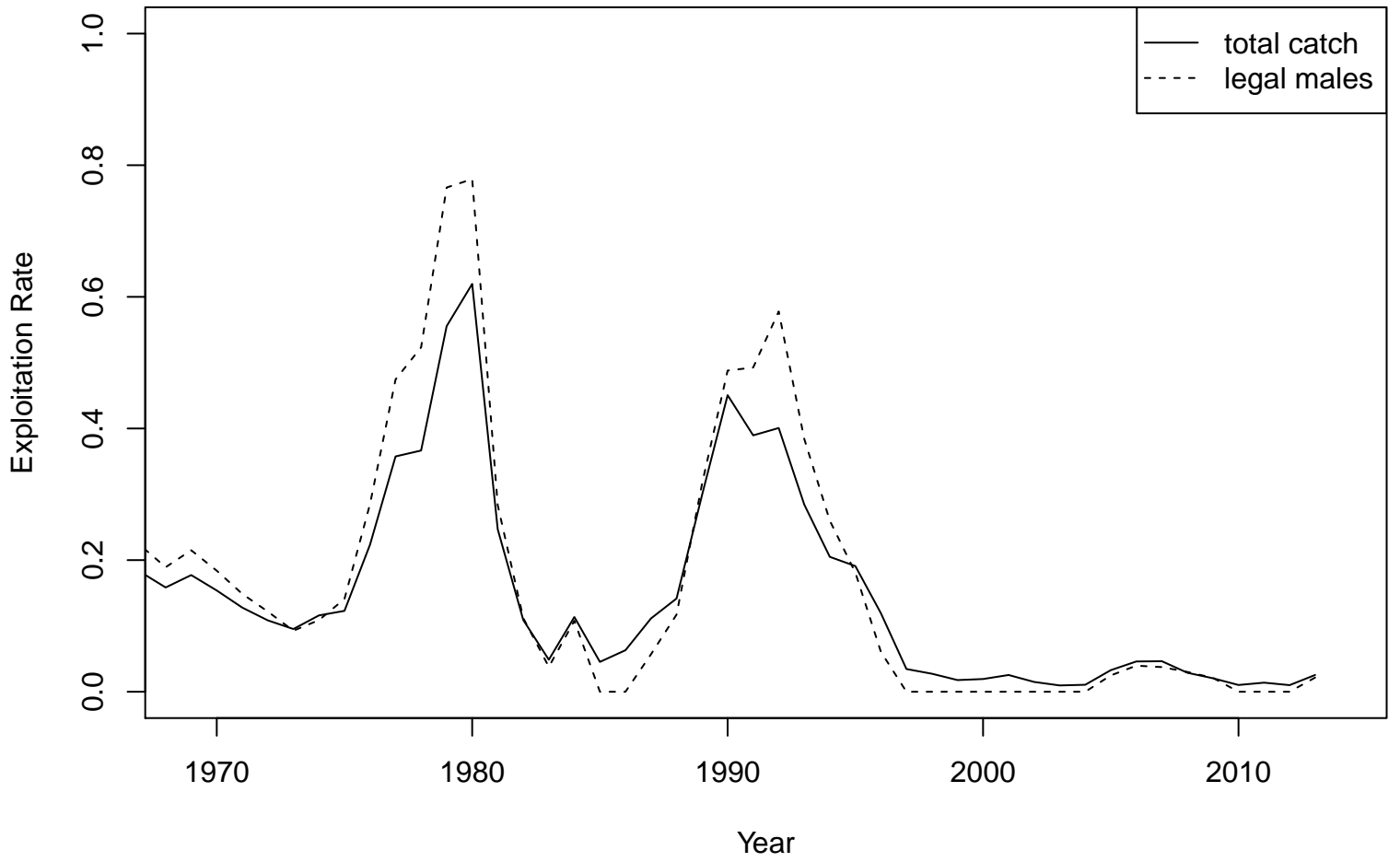


Red king crab fishery, male discards



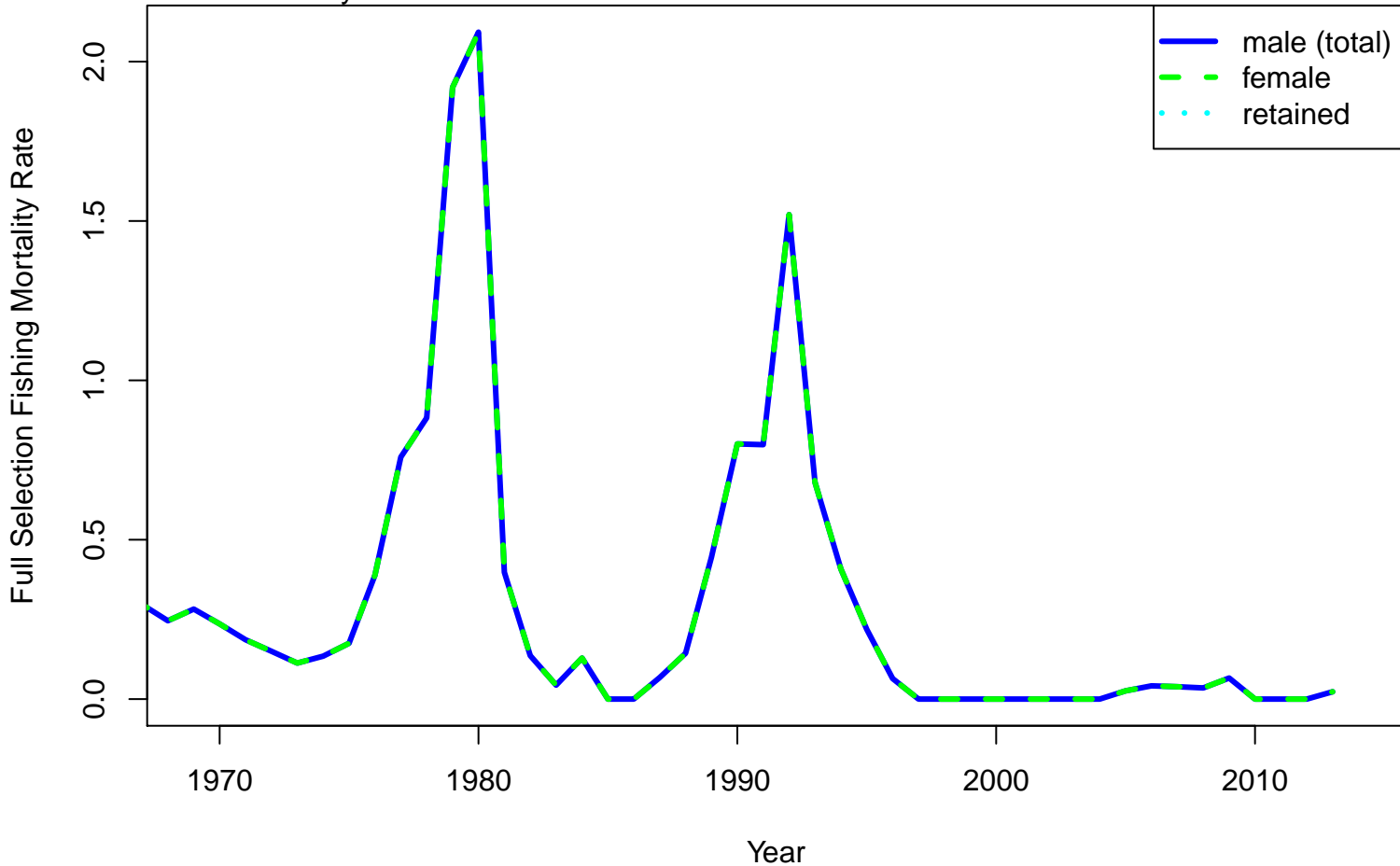
Red king crab fishery, female discards



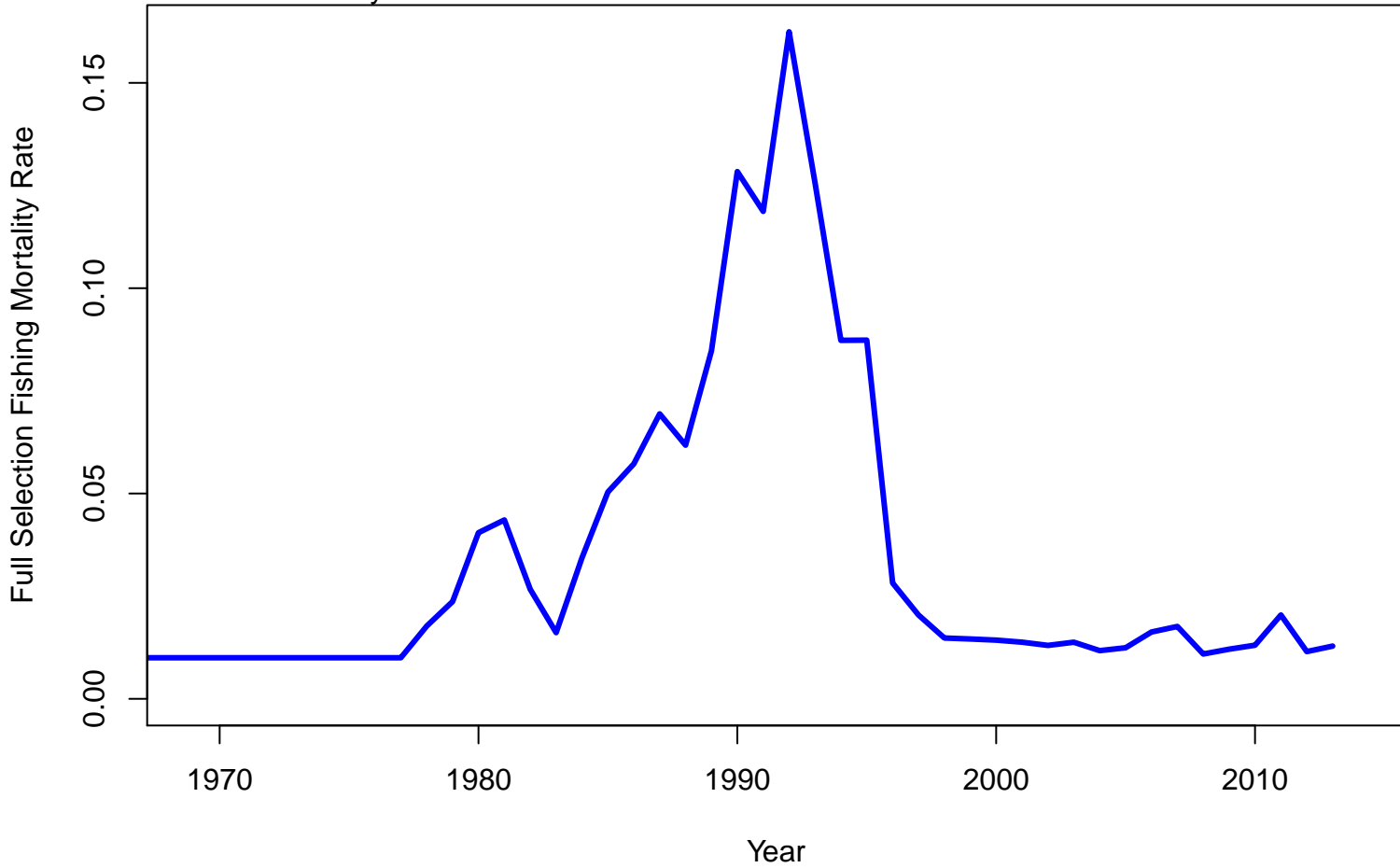




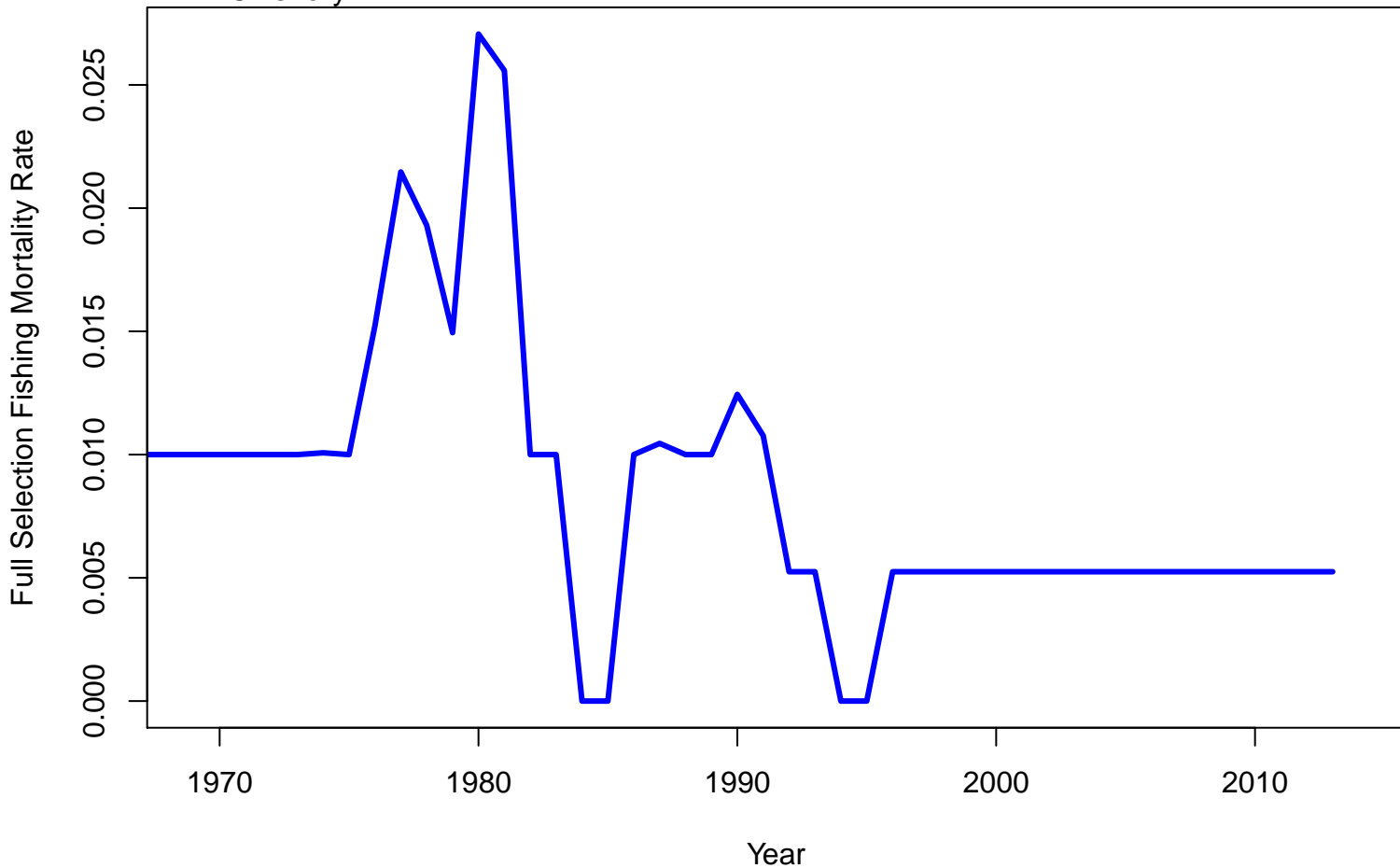
Directed fishery



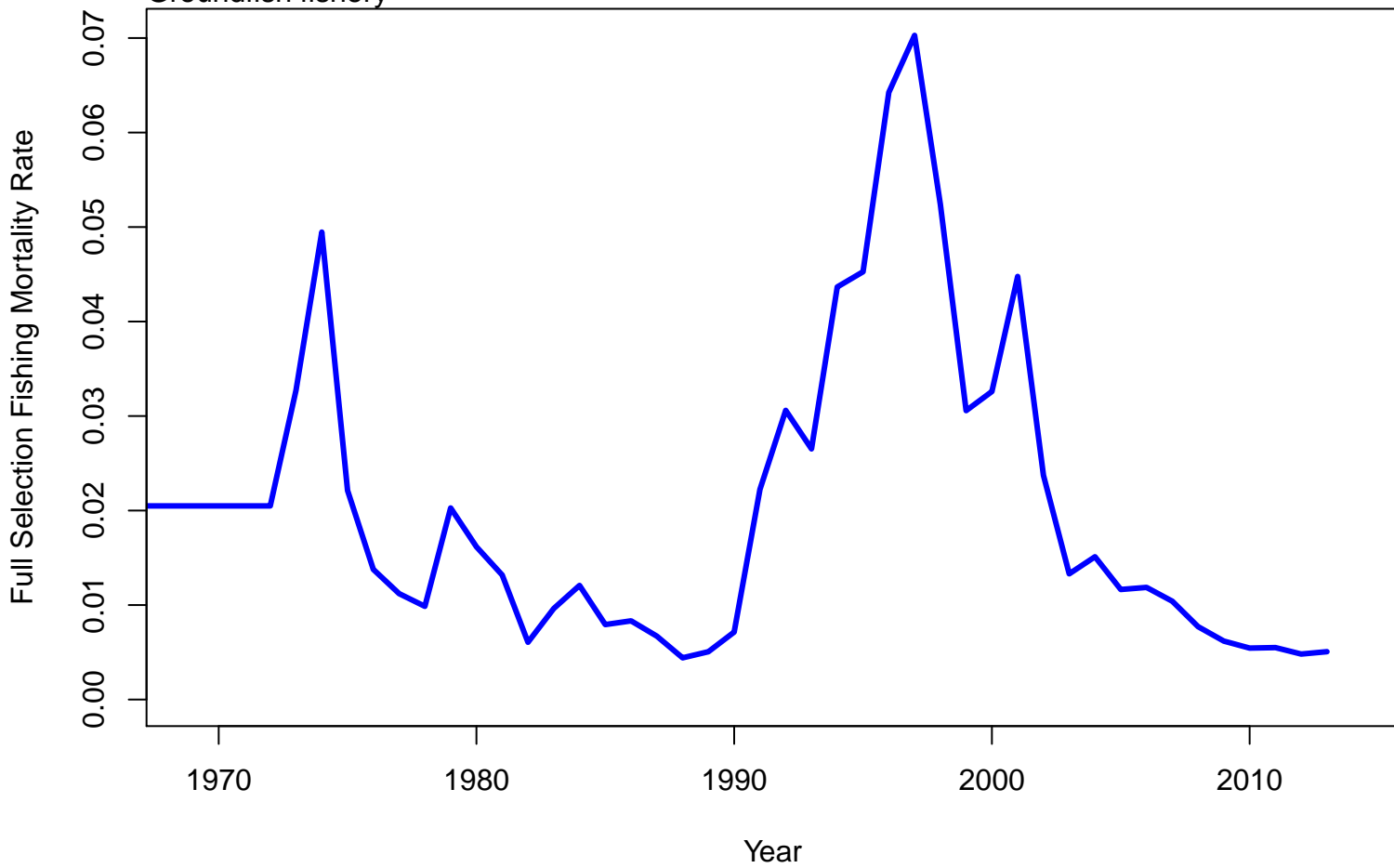
Snow crab fishery



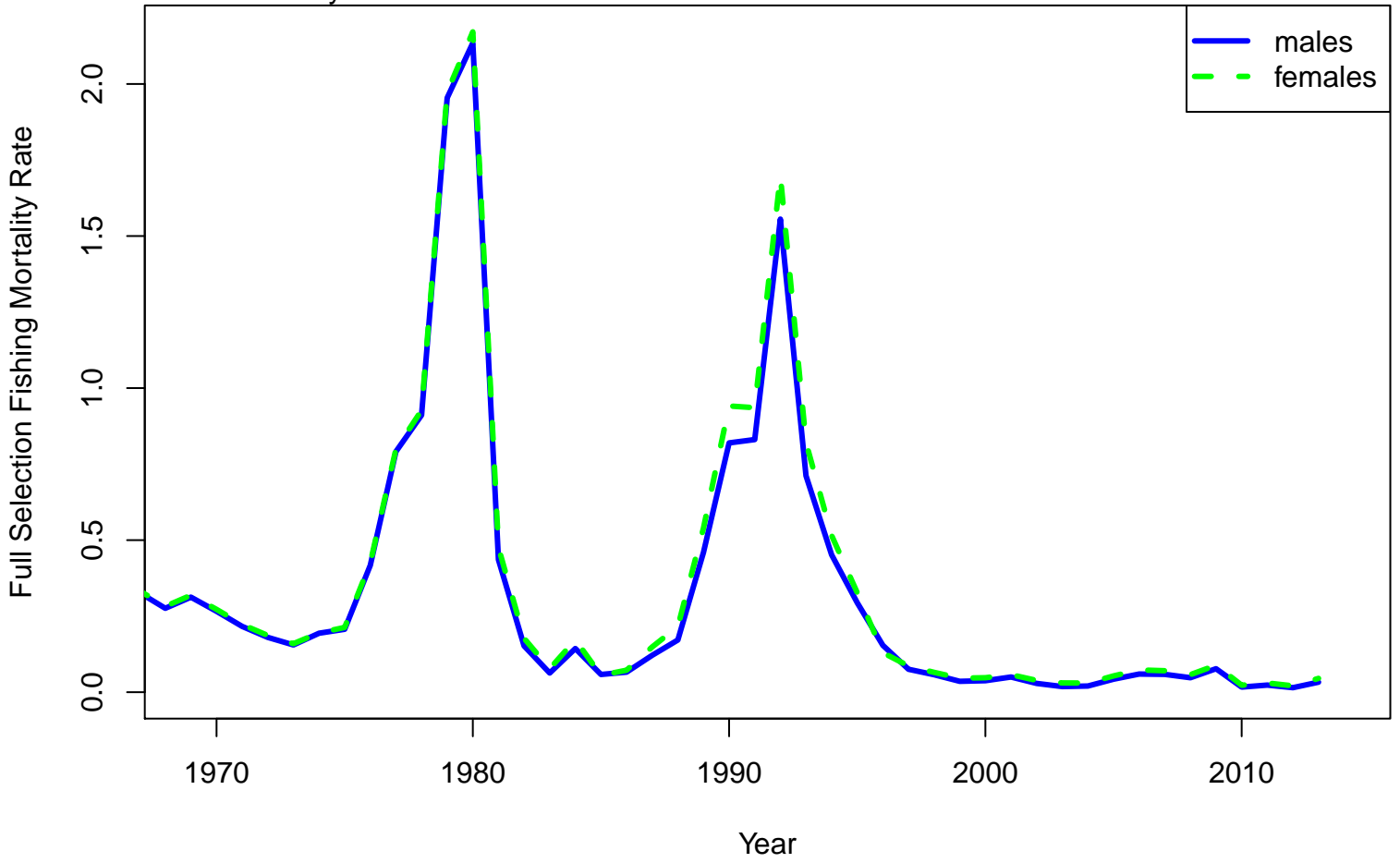
BBRKC fishery



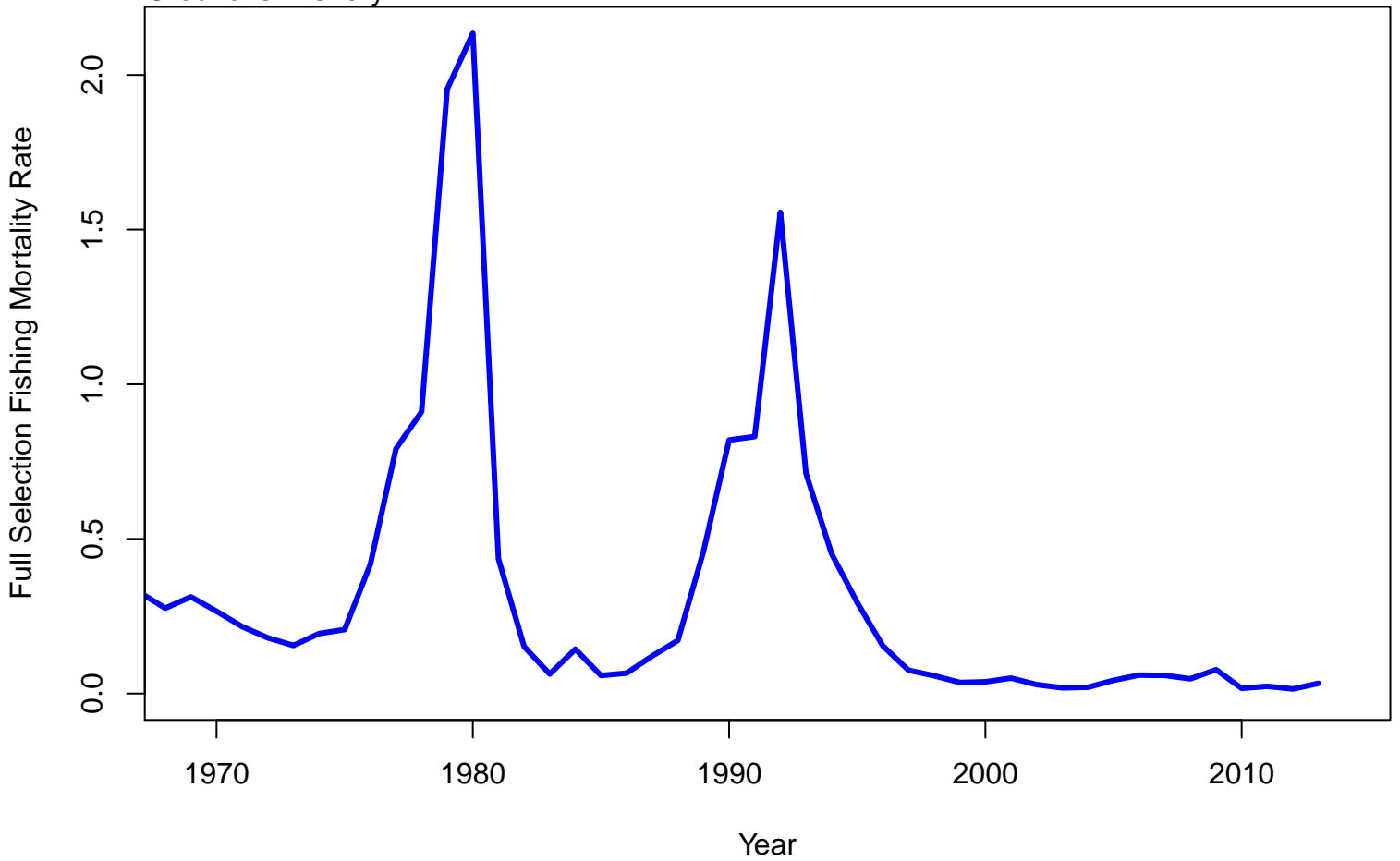
Groundfish fishery



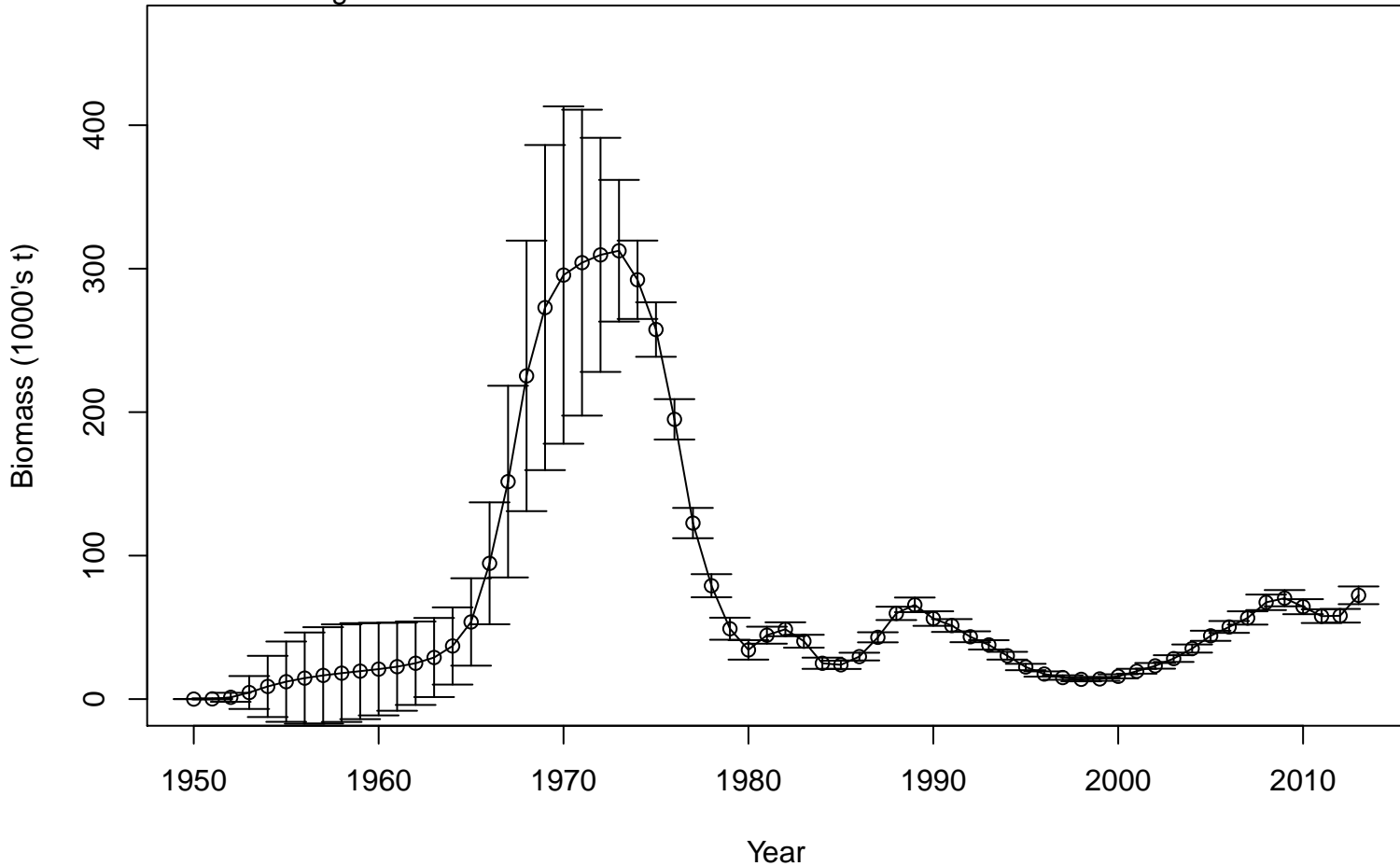
BBRKC fishery



Groundfish fishery



MMB at Mating



Total recruitment

