

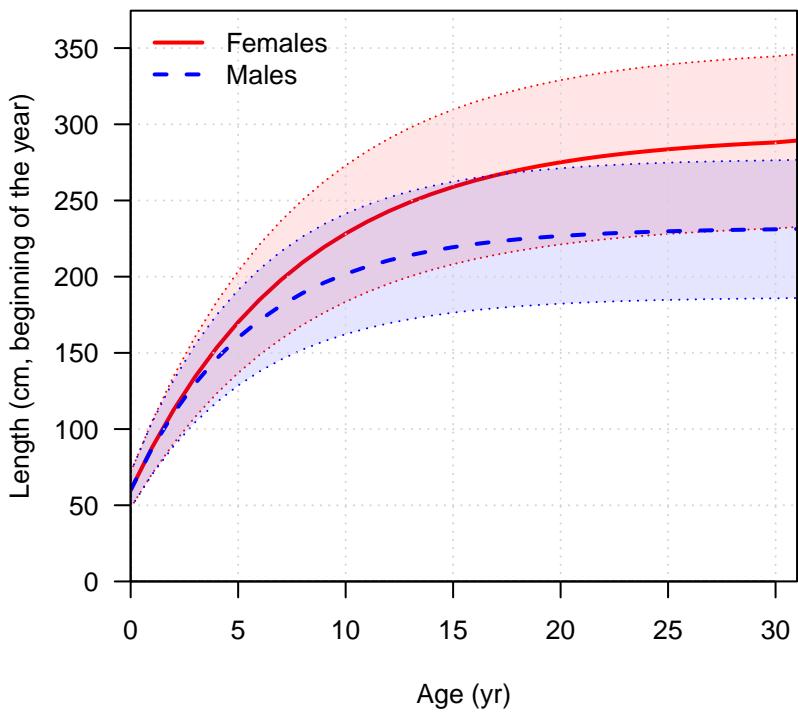
Plots created using the 'r4ss' package in R

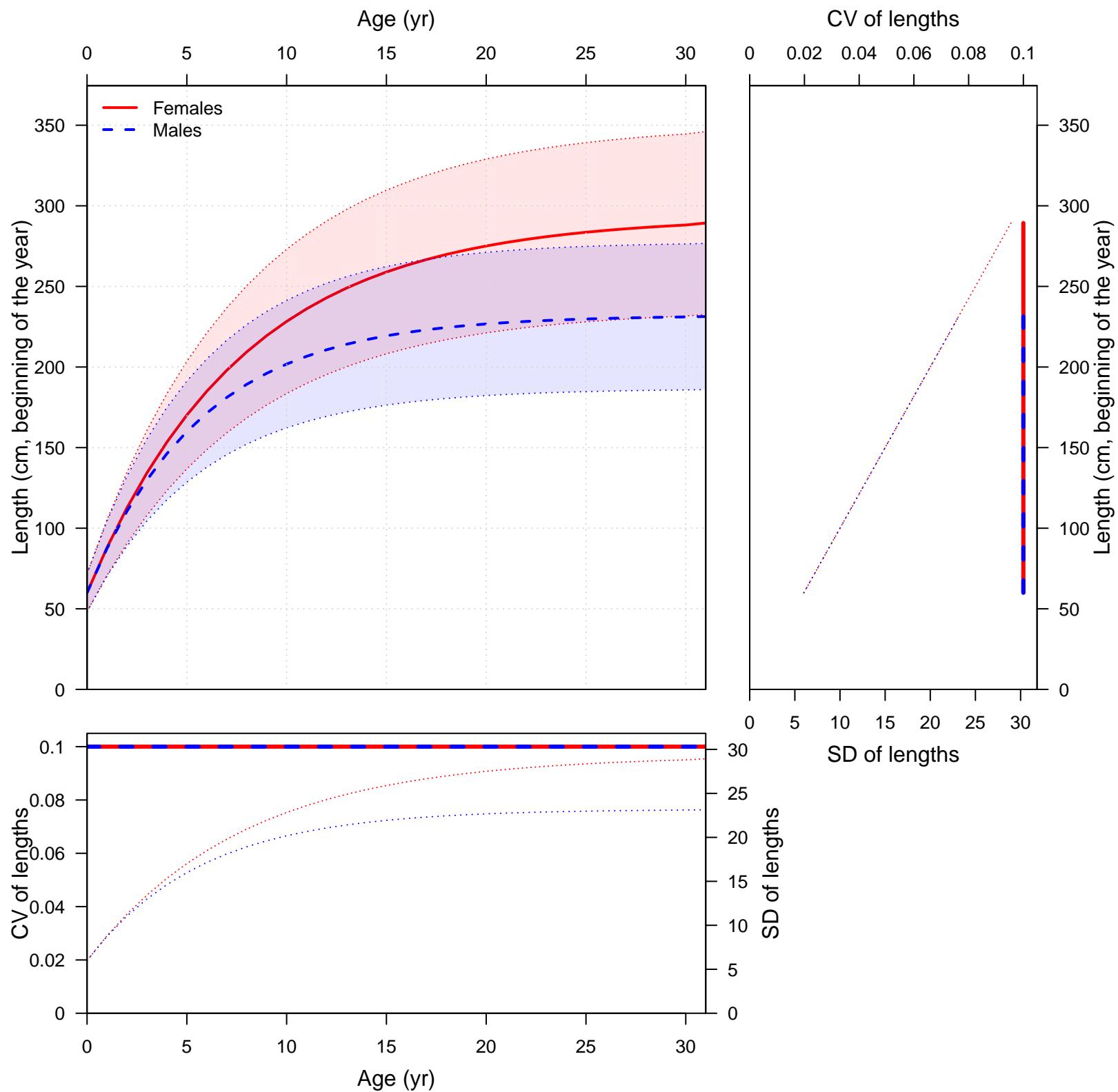
Stock Synthesis version: SS-V3.24U

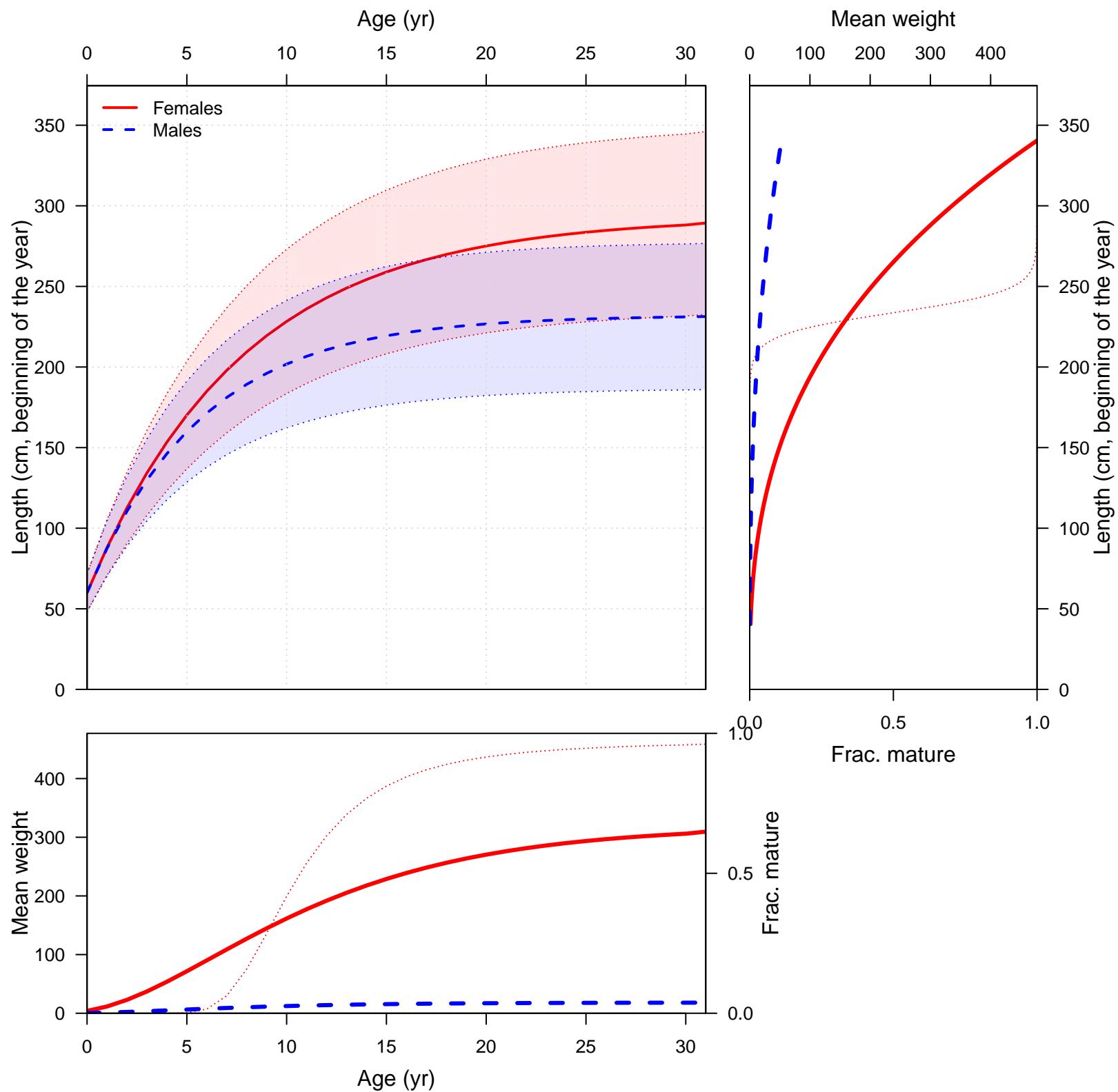
Data\_File: DATA.ss

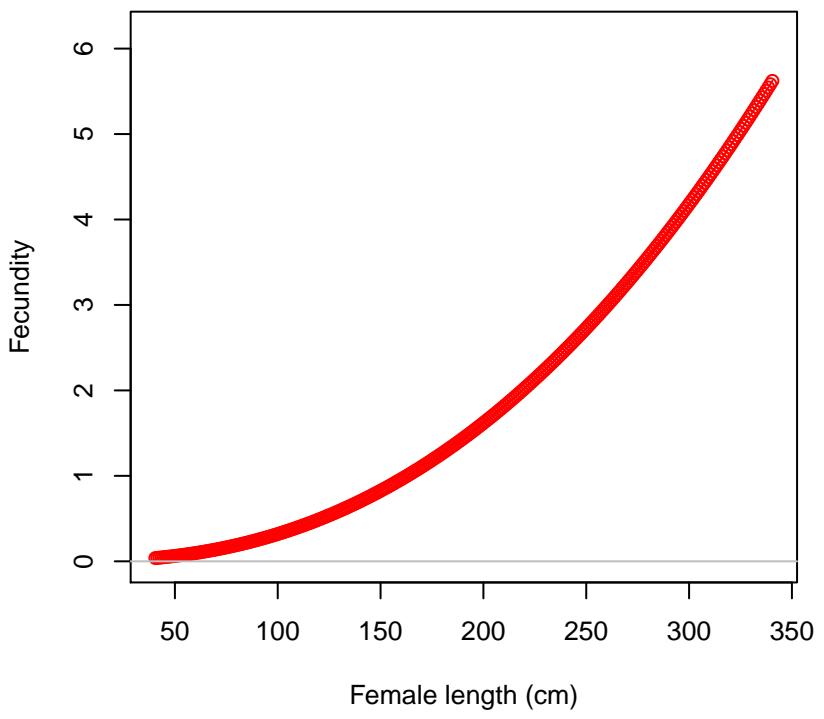
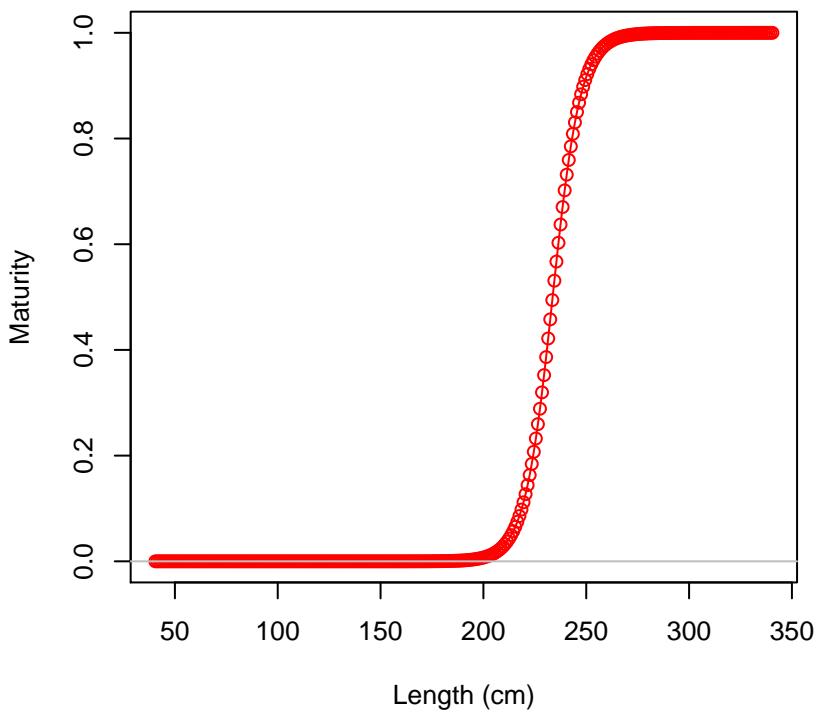
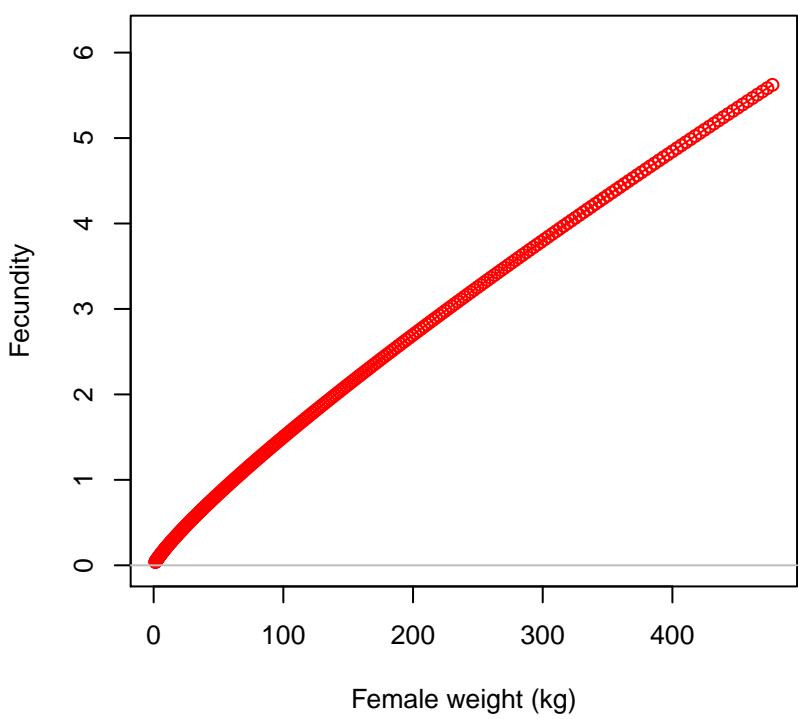
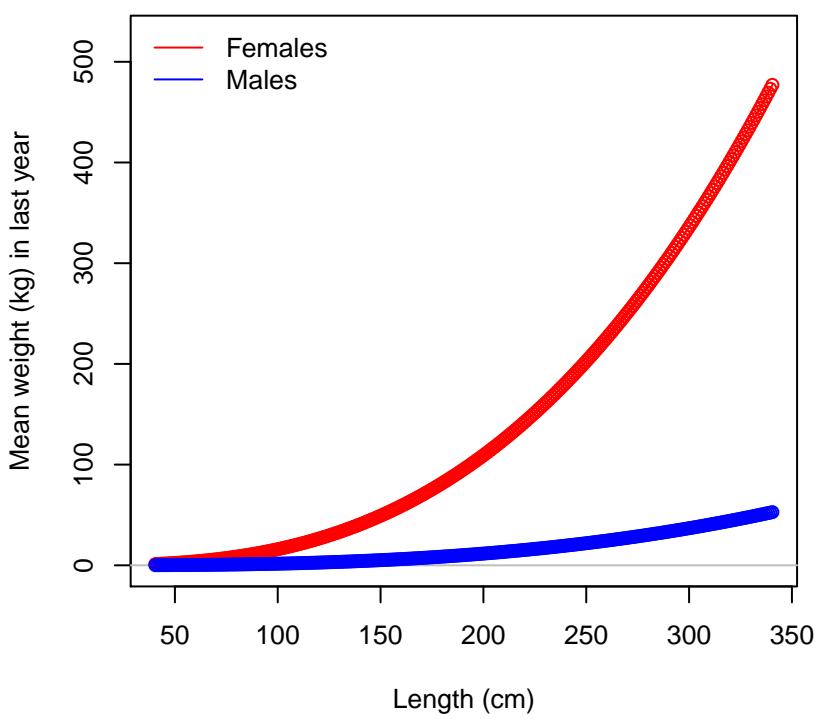
Control\_File: CONTROL.ss

### Ending year expected growth (with 95% intervals)

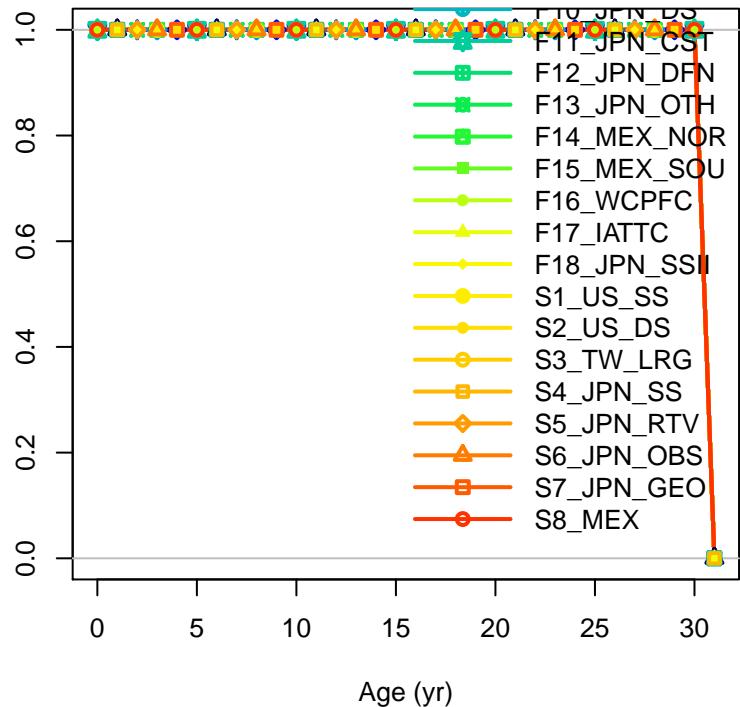




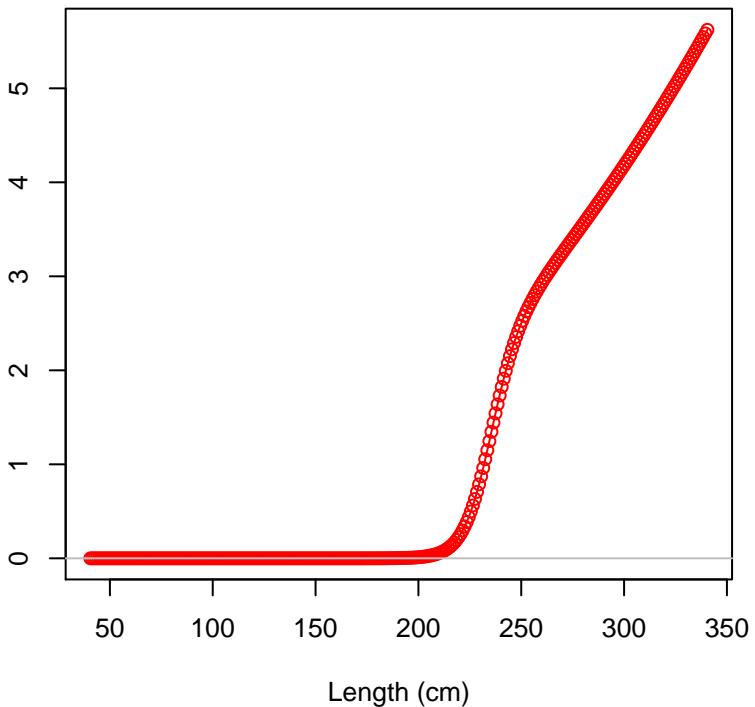




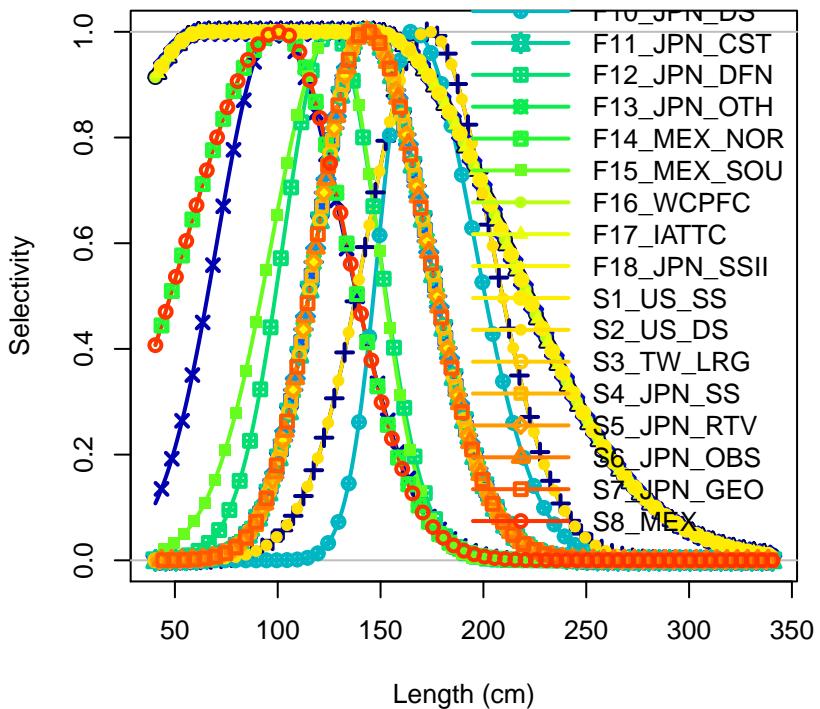
**Age-based selectivity by fleet in 2016**



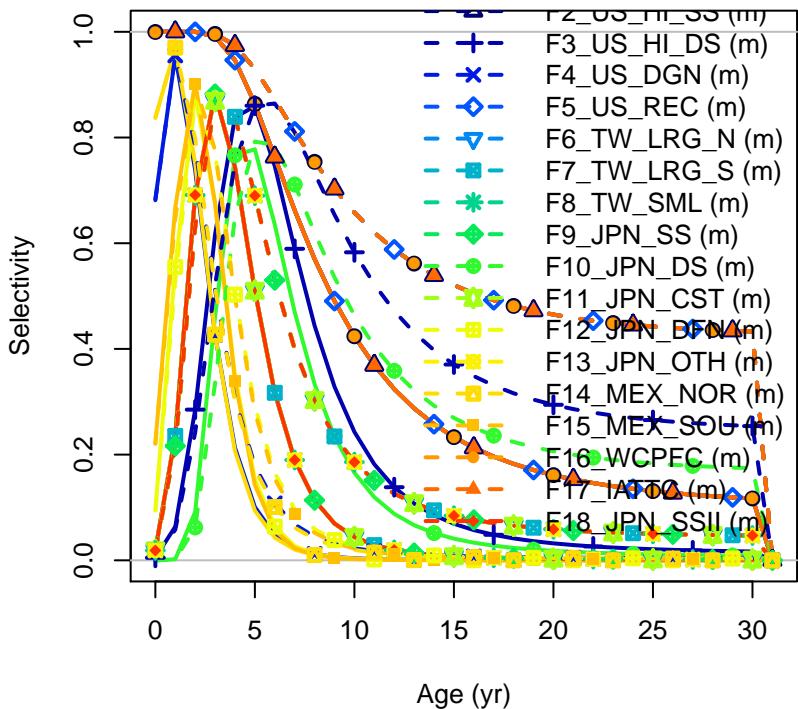
Spawning output



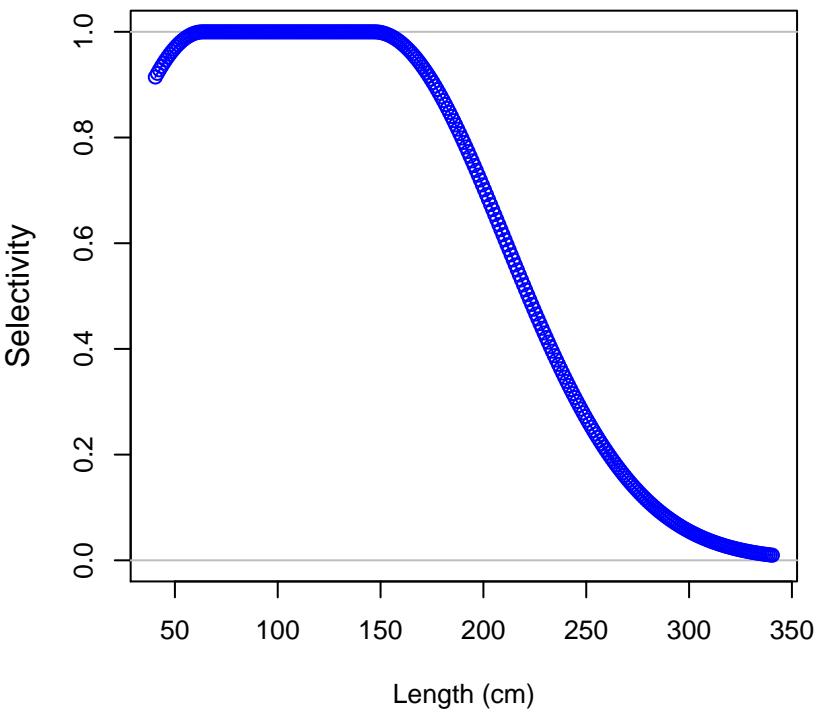
**Length-based selectivity by fleet in 2016**



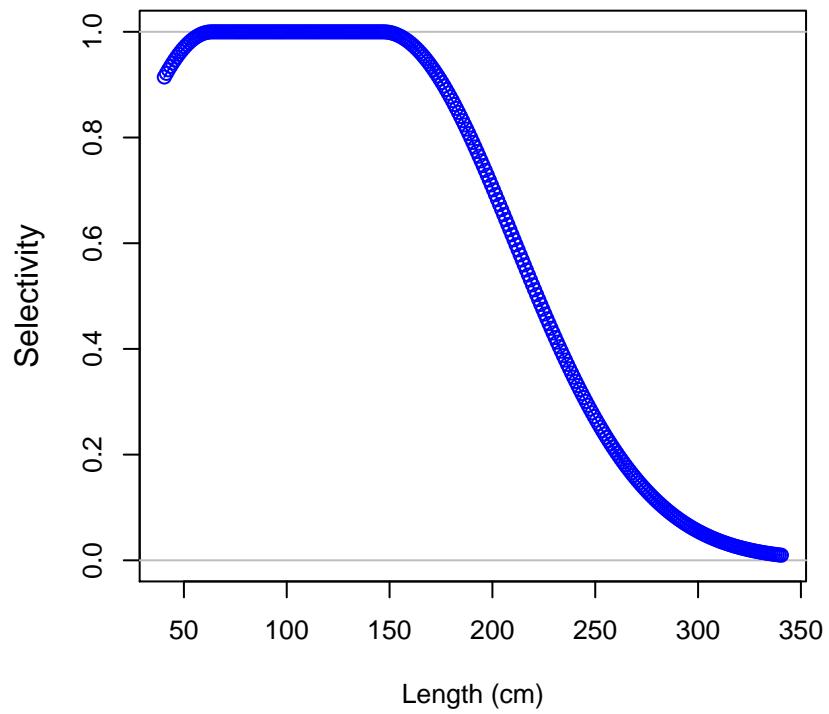
**Derived age-based from length-based selectivity by fleet in 2016**



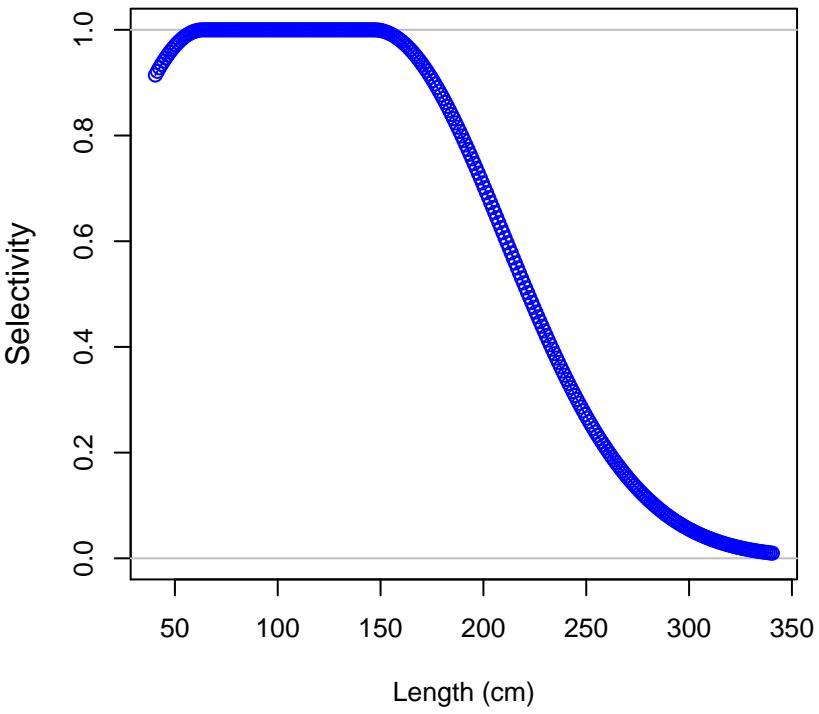
**Female ending year selectivity for F1\_US\_CA**



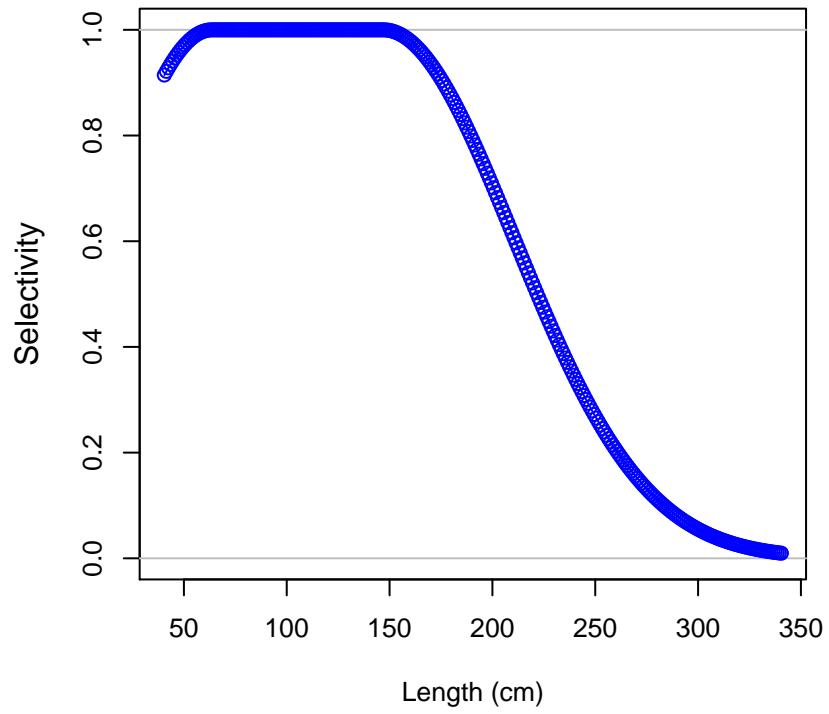
**Female ending year selectivity for F2\_US\_HI\_SS**



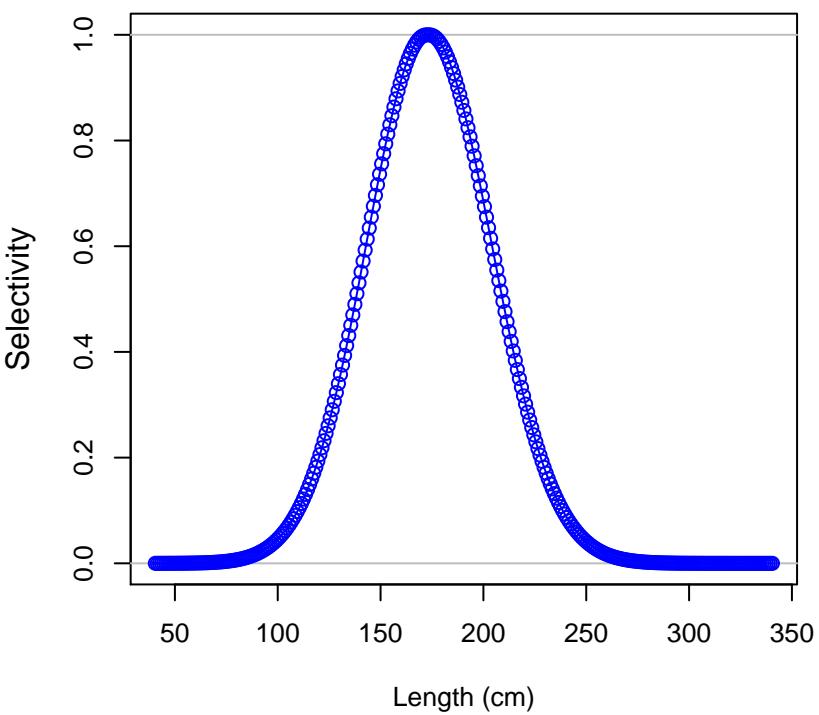
**Male ending year selectivity for F1\_US\_CA**



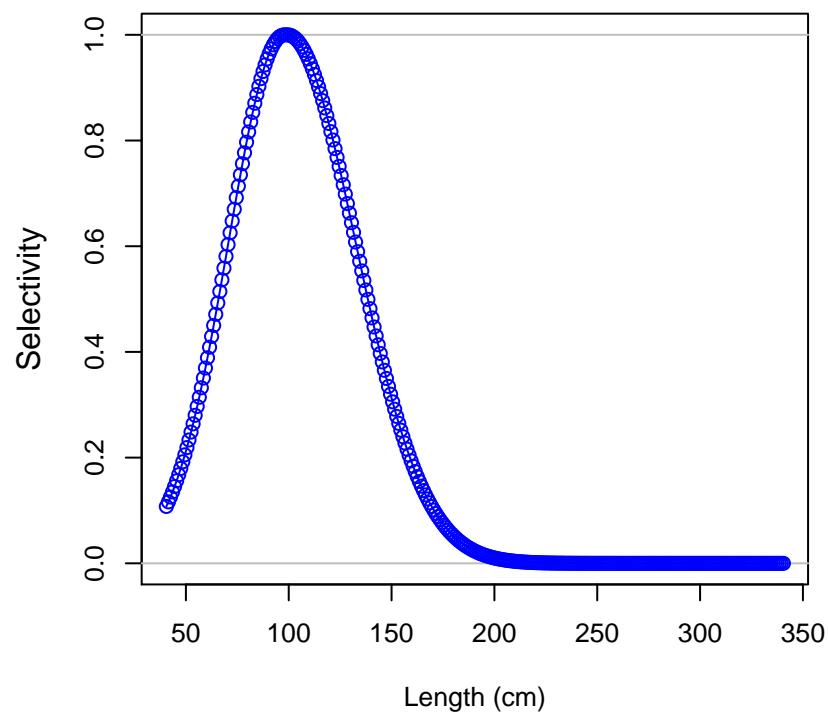
**Male ending year selectivity for F2\_US\_HI\_SS**



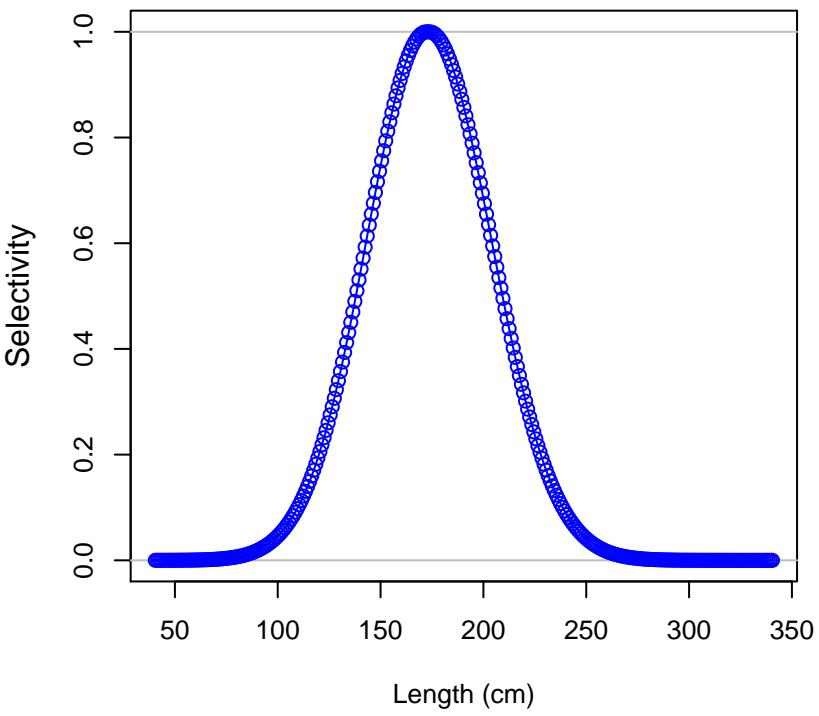
**Female ending year selectivity for F3\_US\_HI\_DS**



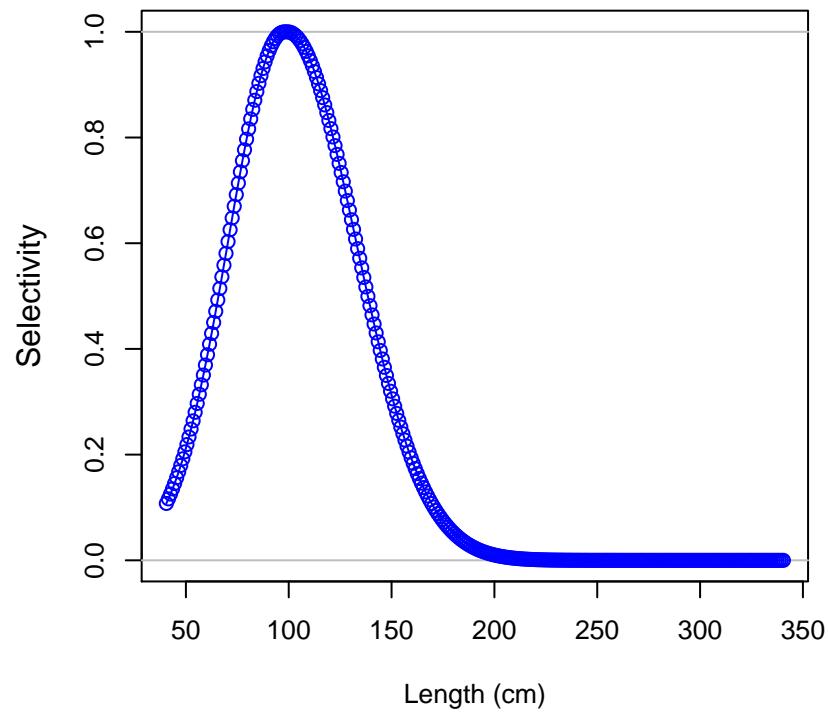
**Female ending year selectivity for F4\_US\_DGN**



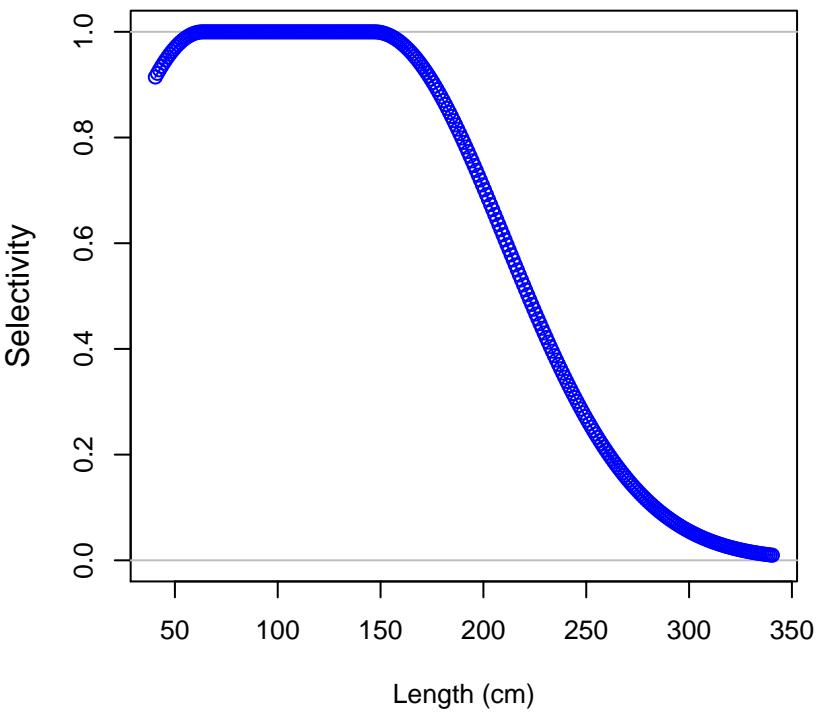
**Male ending year selectivity for F3\_US\_HI\_DS**



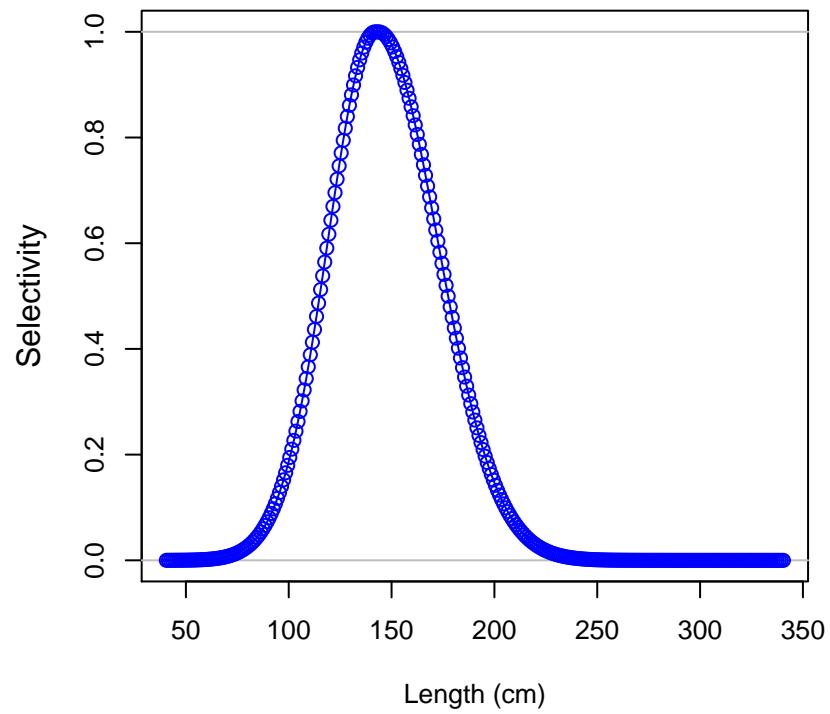
**Male ending year selectivity for F4\_US\_DGN**



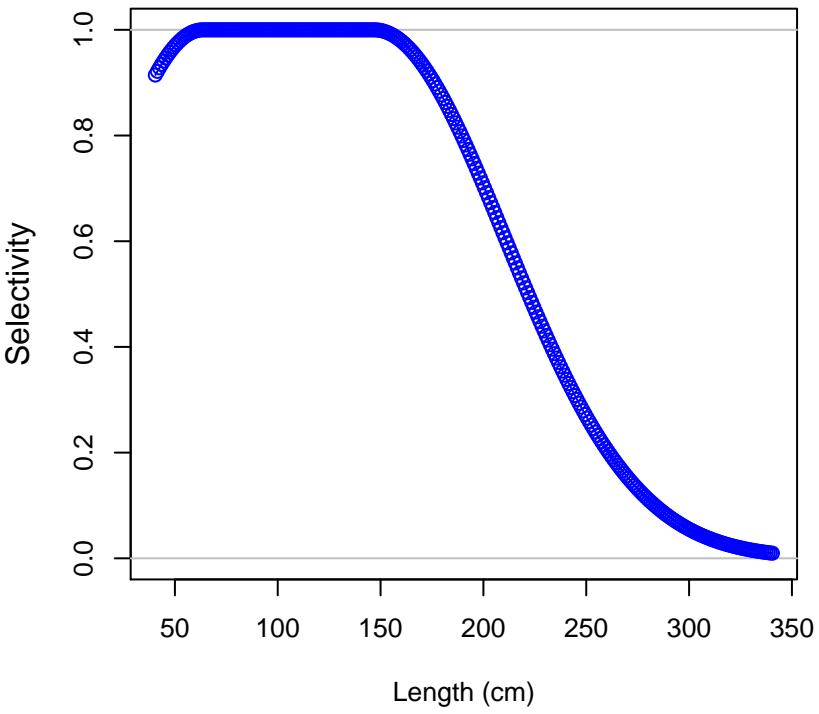
**Female ending year selectivity for F5\_US\_REC**



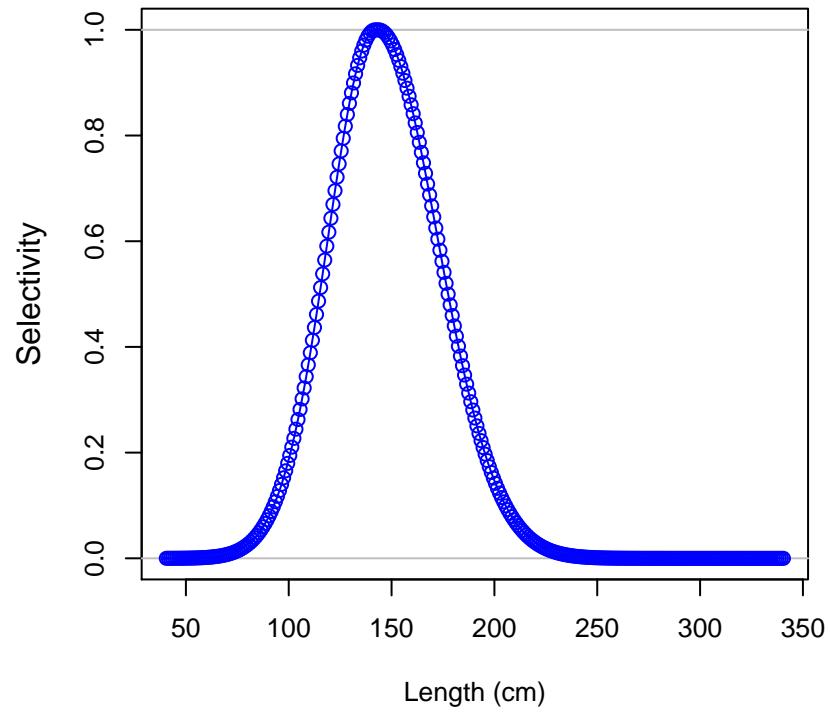
**Female ending year selectivity for F6\_TW\_LRG\_N**



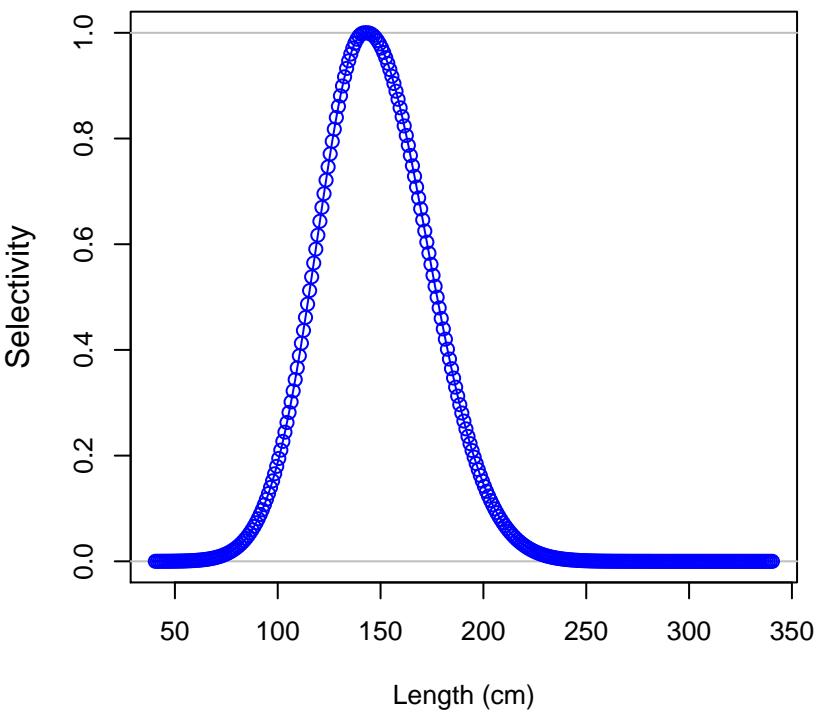
**Male ending year selectivity for F5\_US\_REC**



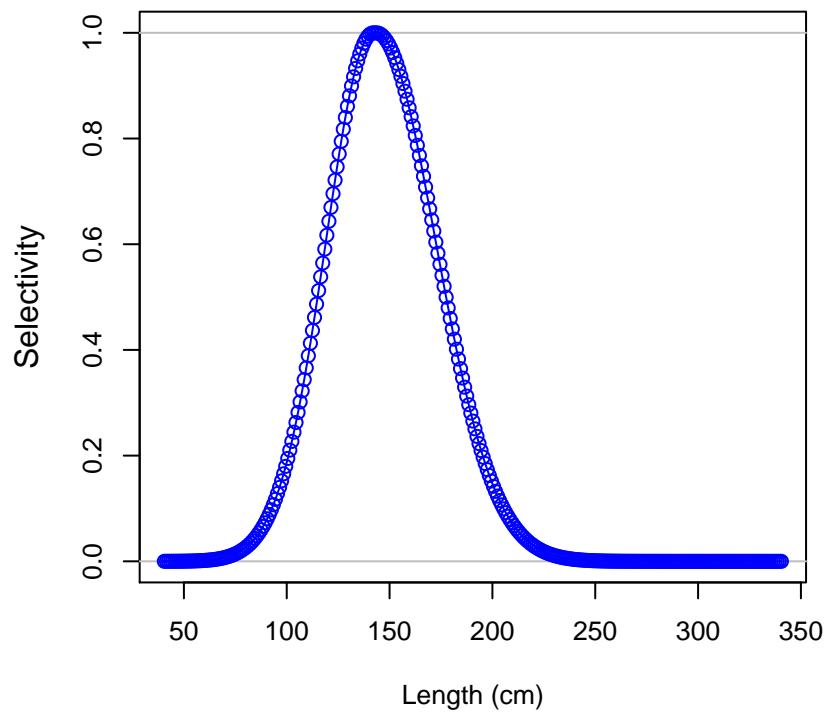
**Male ending year selectivity for F6\_TW\_LRG\_N**



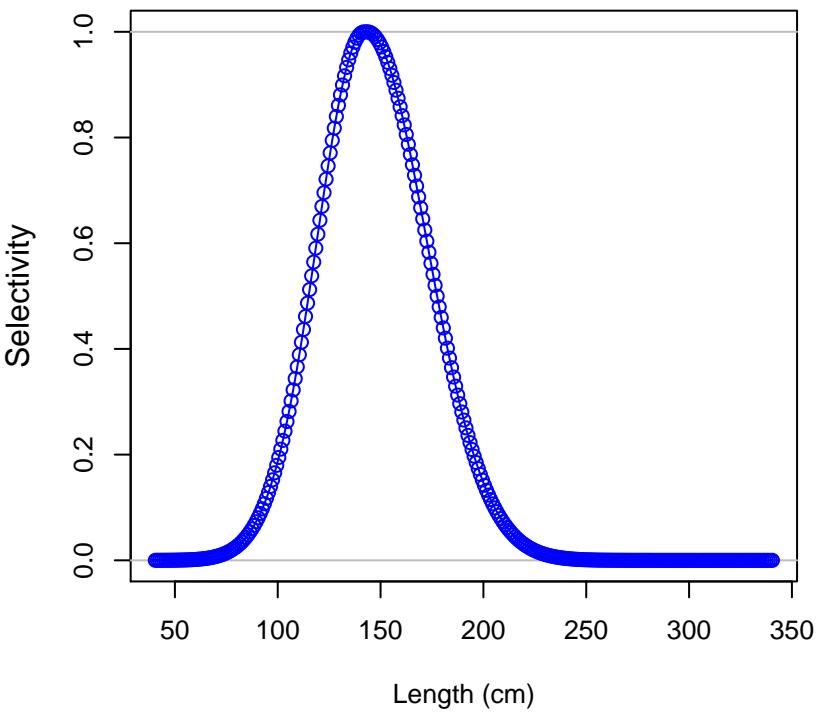
**Female ending year selectivity for F7\_TW\_LRG\_S**



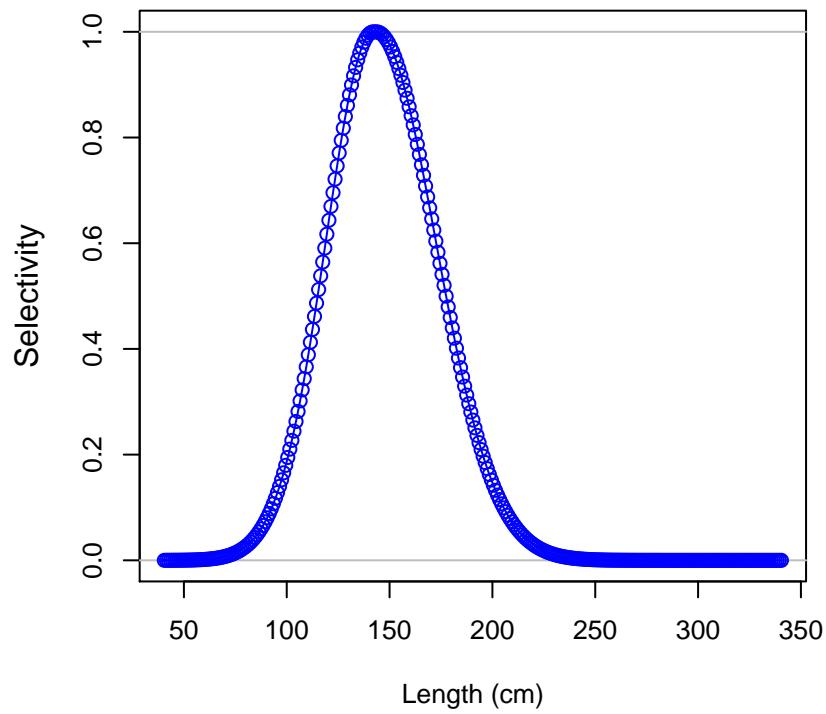
**Female ending year selectivity for F8\_TW\_SML**



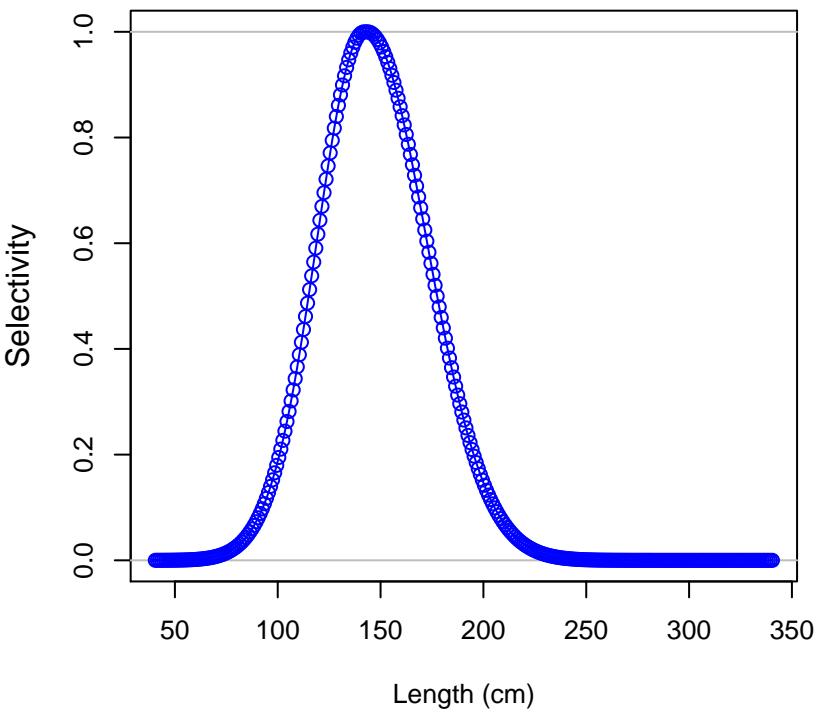
**Male ending year selectivity for F7\_TW\_LRG\_S**



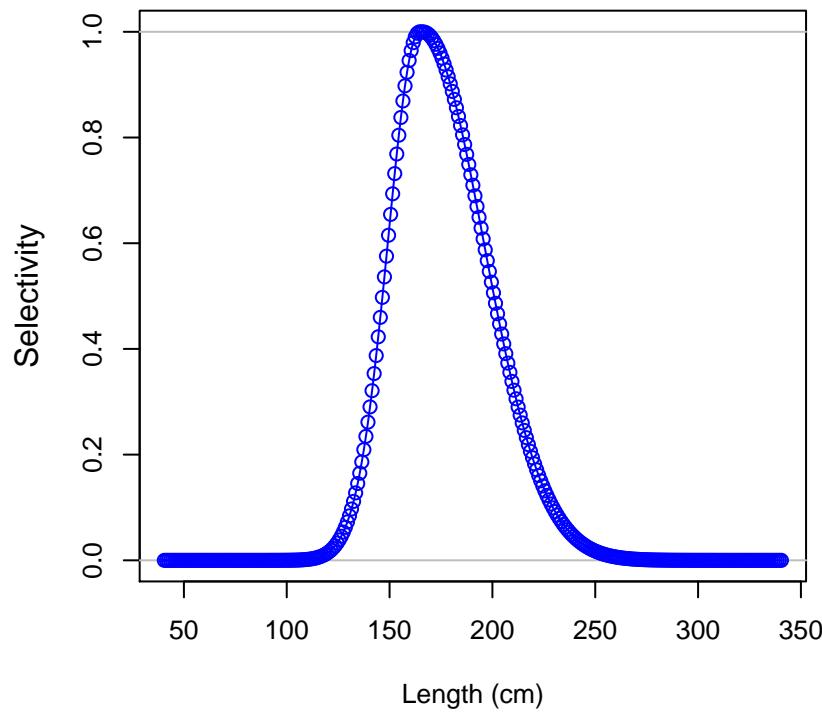
**Male ending year selectivity for F8\_TW\_SML**



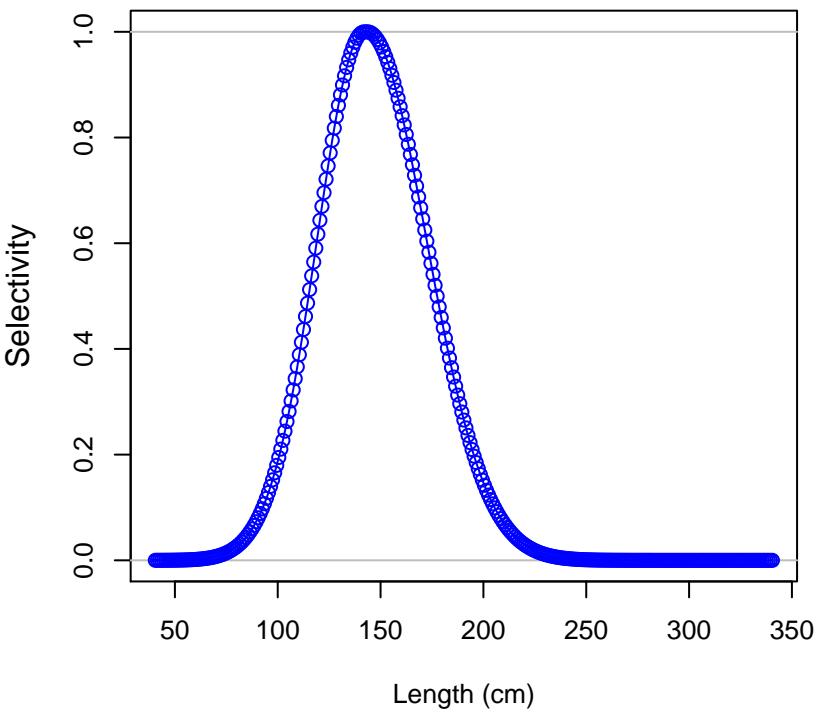
**Female ending year selectivity for F9\_JPN\_SS**



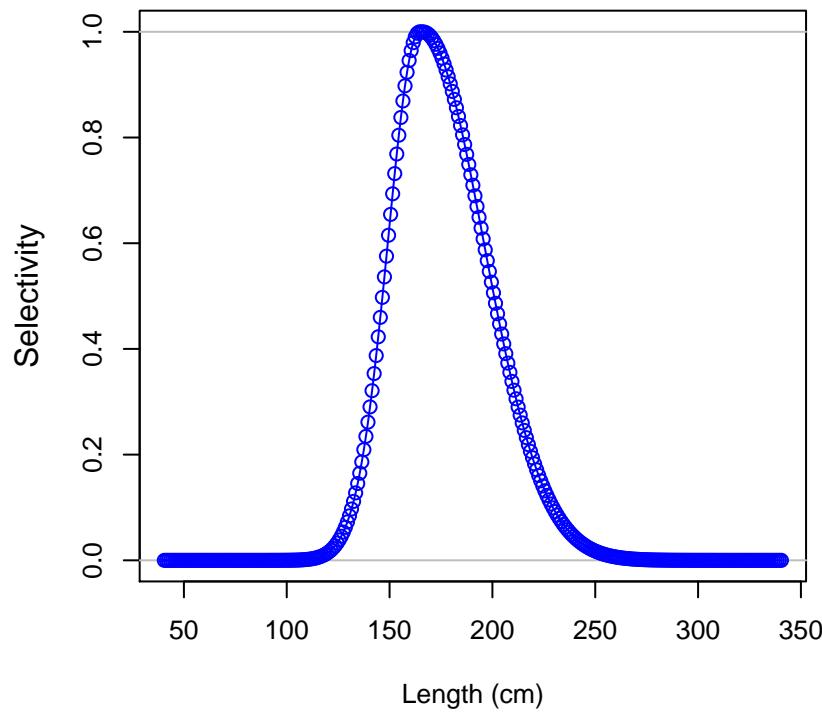
**Female ending year selectivity for F10\_JPN\_DS**



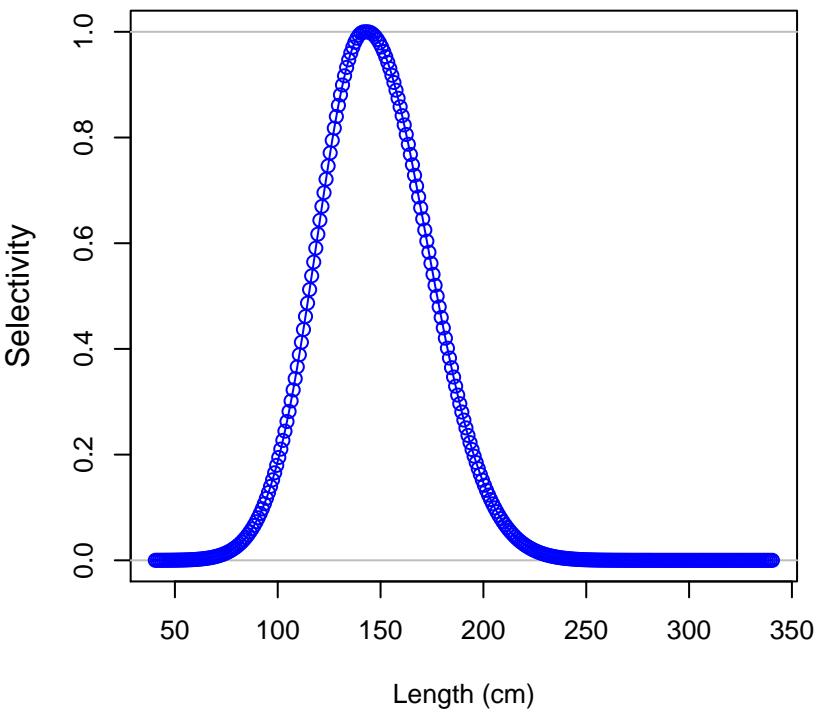
**Male ending year selectivity for F9\_JPN\_SS**



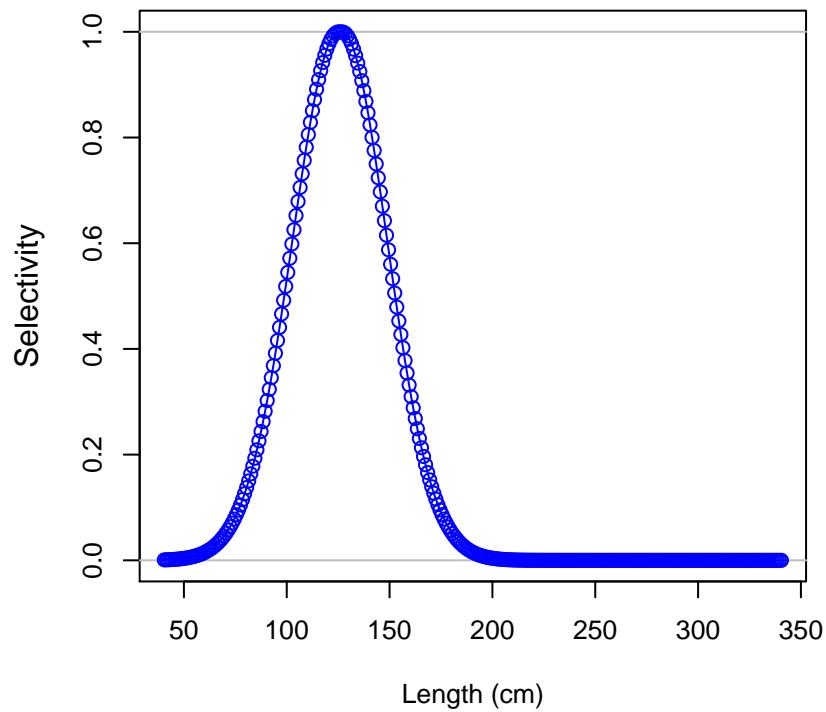
**Male ending year selectivity for F10\_JPN\_DS**



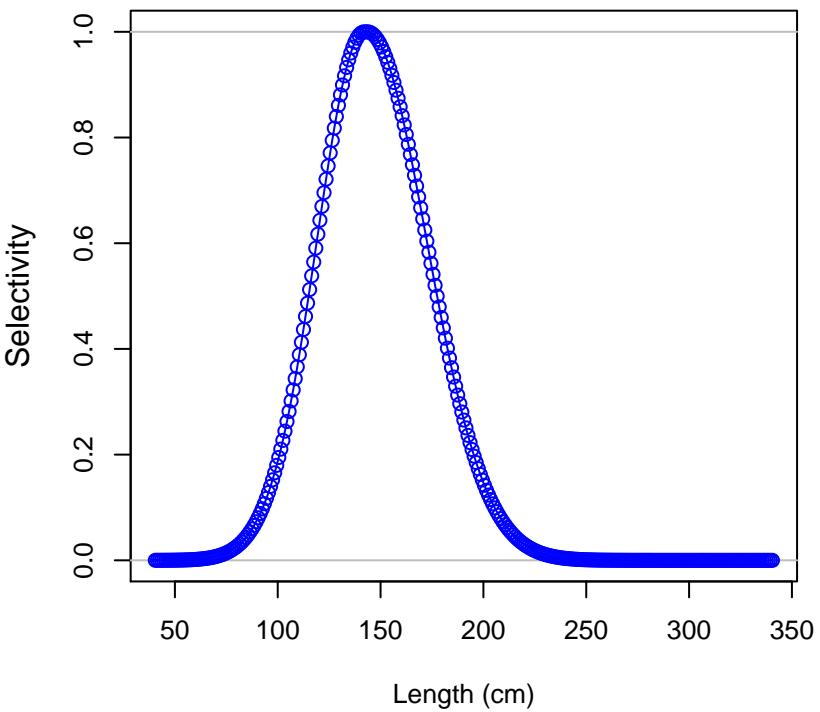
**Female ending year selectivity for F11\_JPN\_CST**



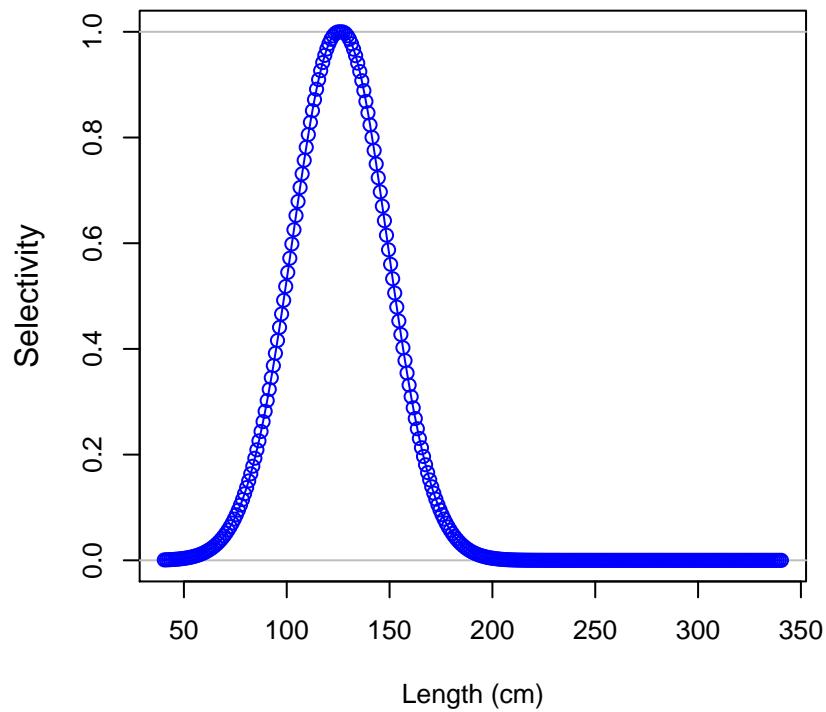
**Female ending year selectivity for F12\_JPN\_DFN**



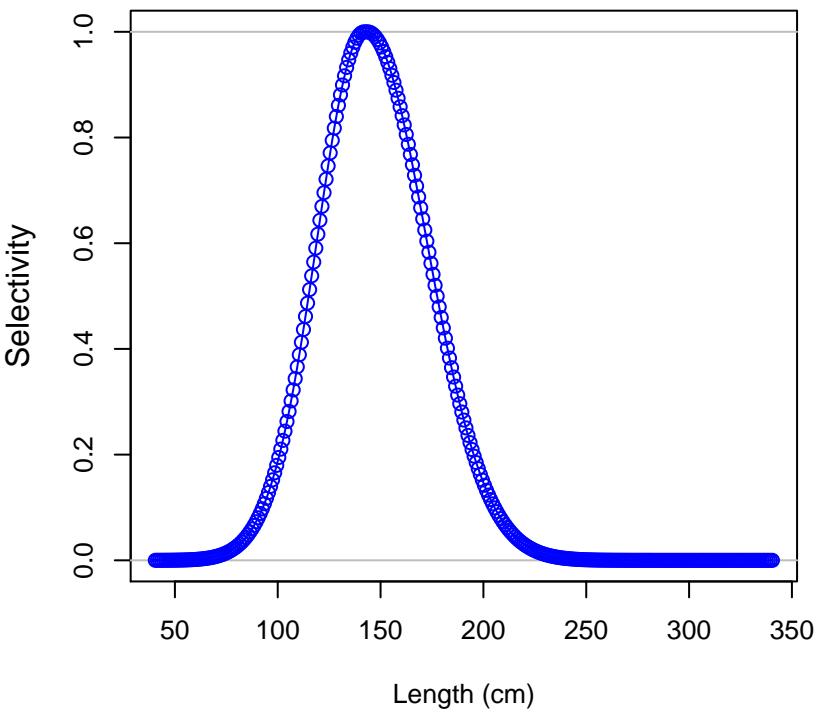
**Male ending year selectivity for F11\_JPN\_CST**



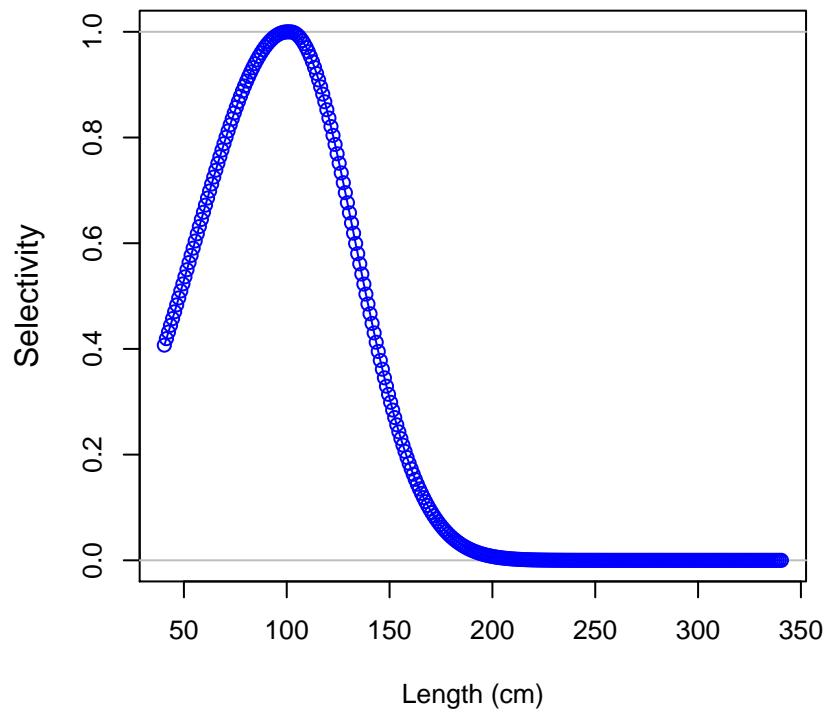
**Male ending year selectivity for F12\_JPN\_DFN**



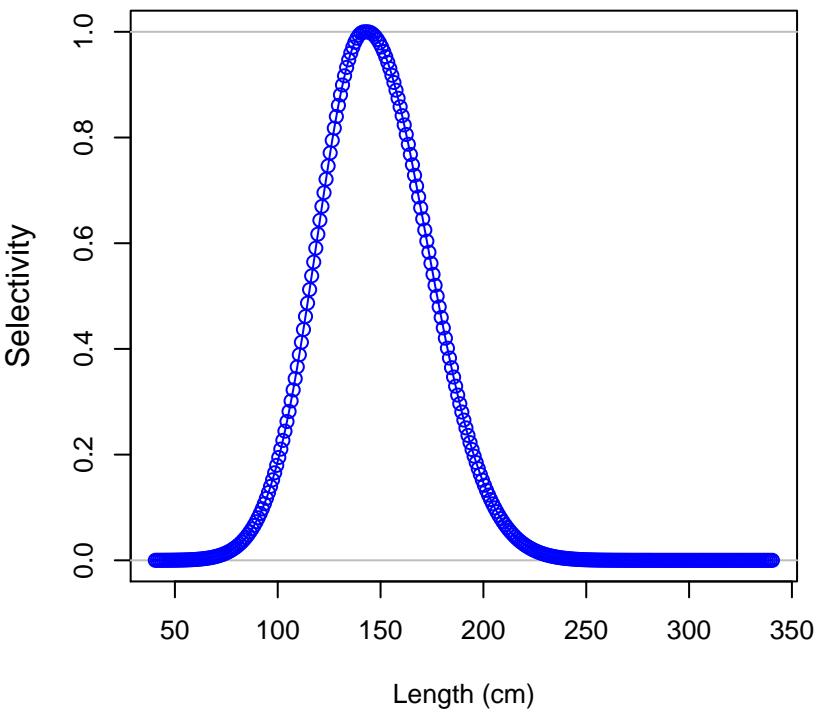
**Female ending year selectivity for F13\_JPN\_OTH**



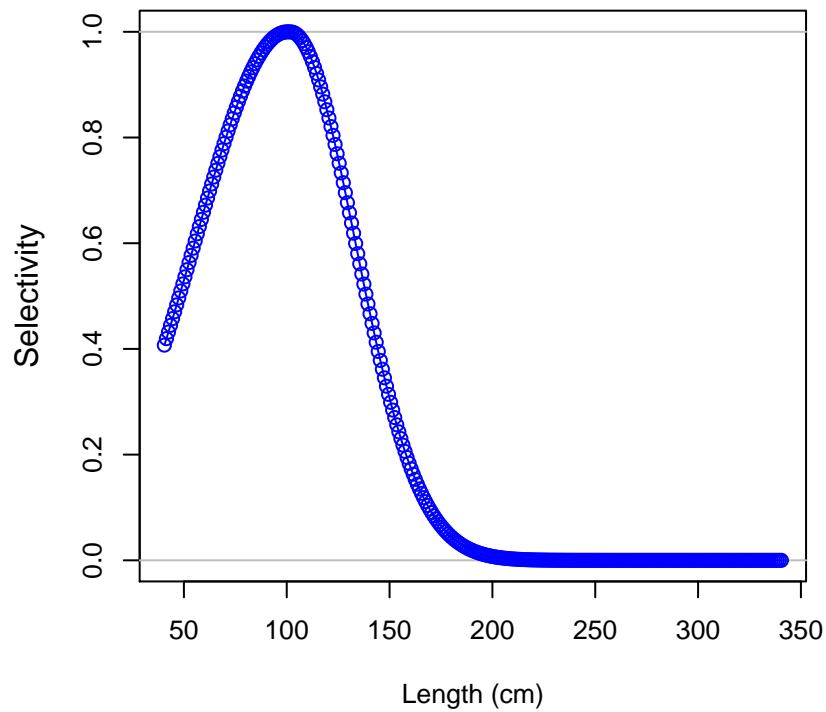
**Female ending year selectivity for F14\_MEX\_NOR**



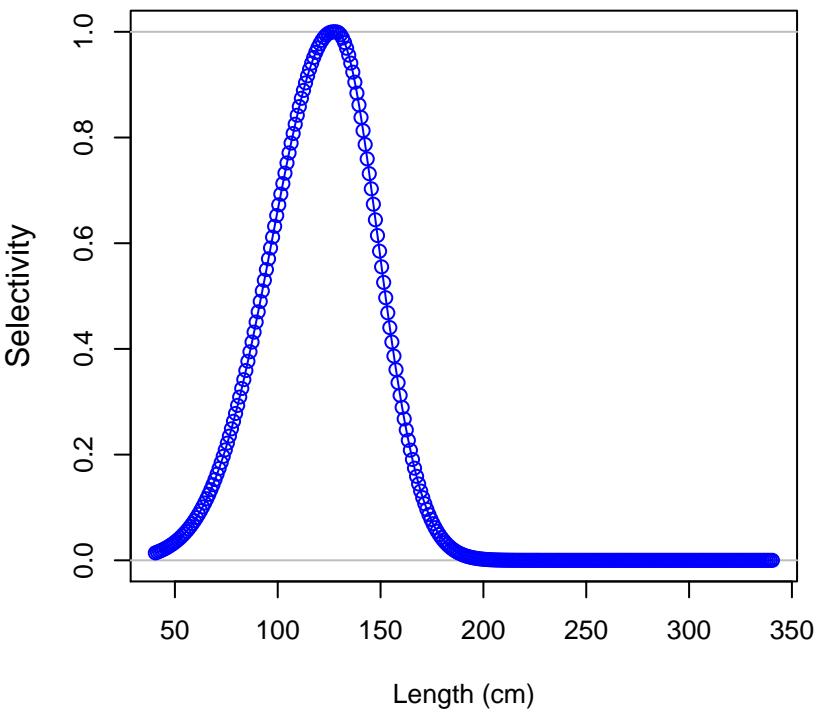
**Male ending year selectivity for F13\_JPN\_OTH**



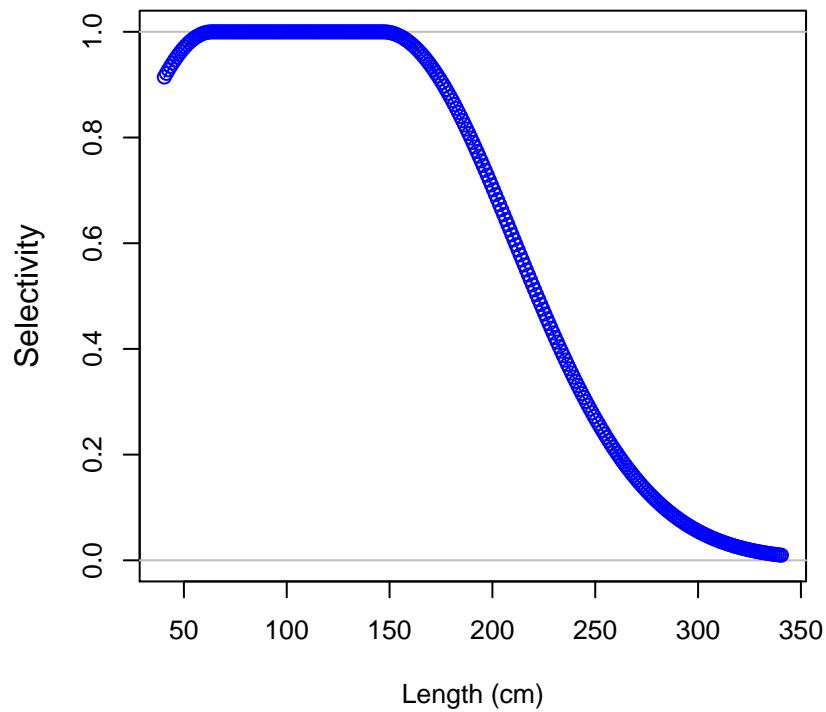
**Male ending year selectivity for F14\_MEX\_NOR**



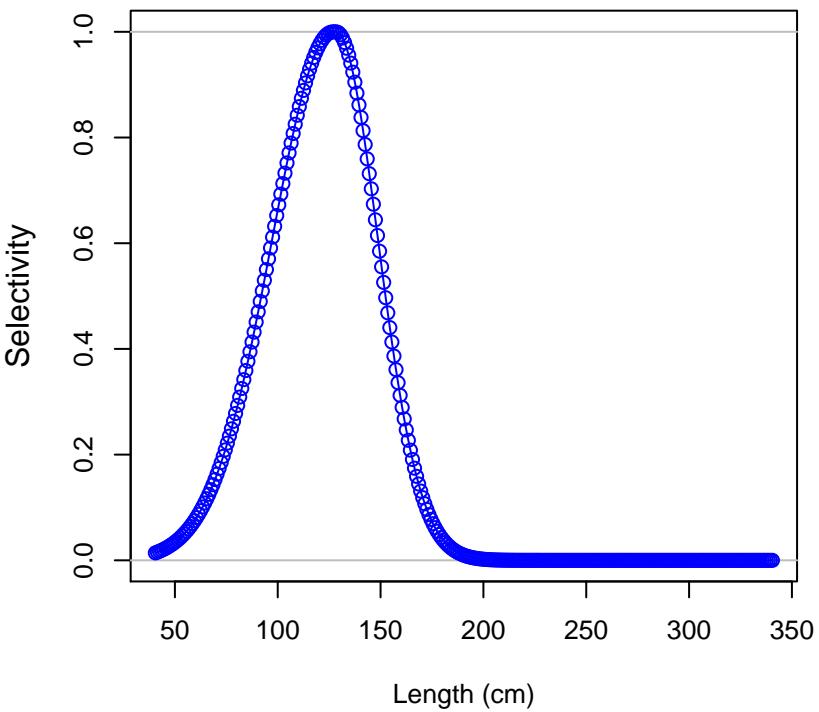
**Female ending year selectivity for F15\_MEX\_SO**



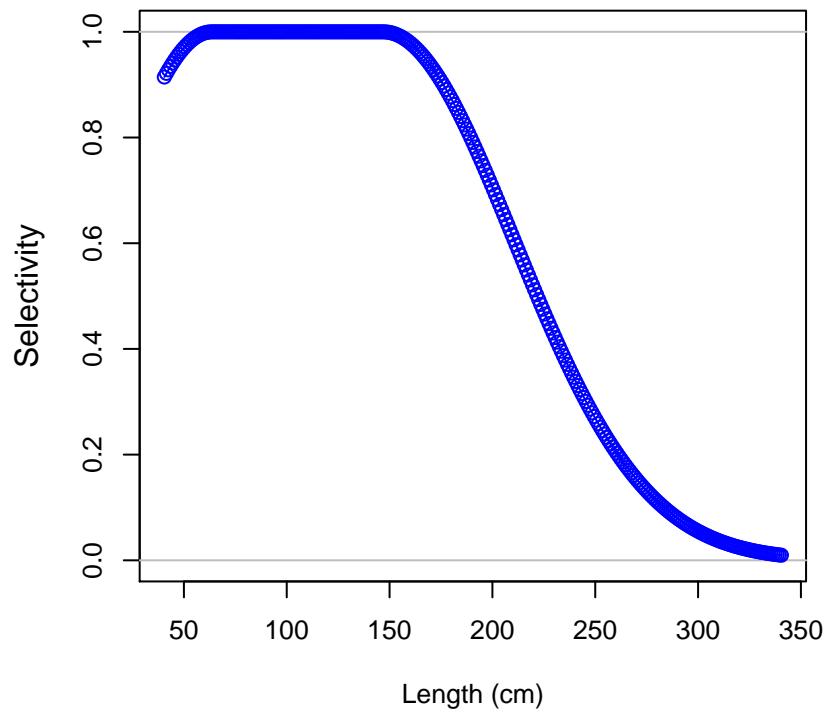
**Female ending year selectivity for F16\_WCPFC**



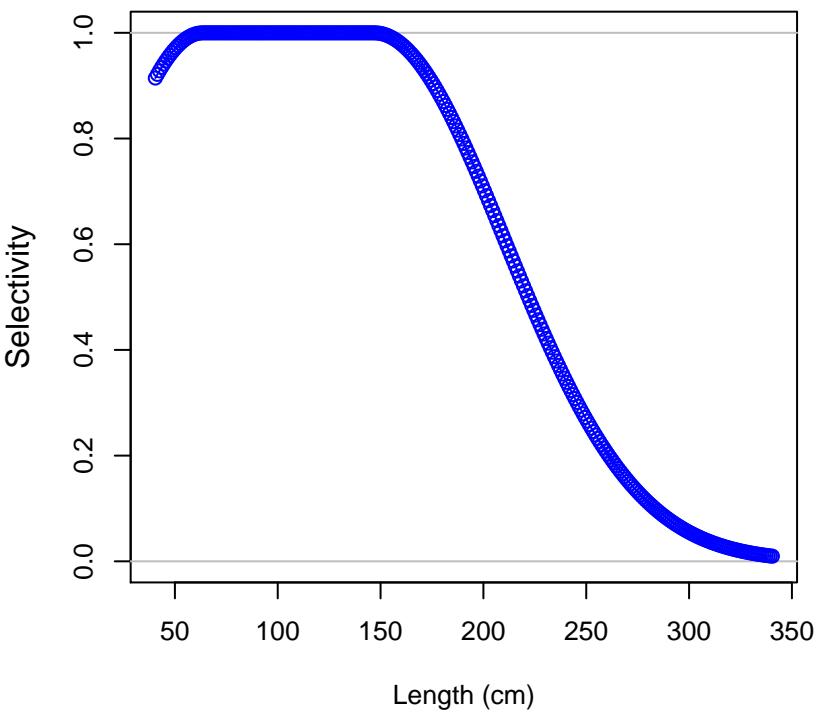
**Male ending year selectivity for F15\_MEX\_SO**



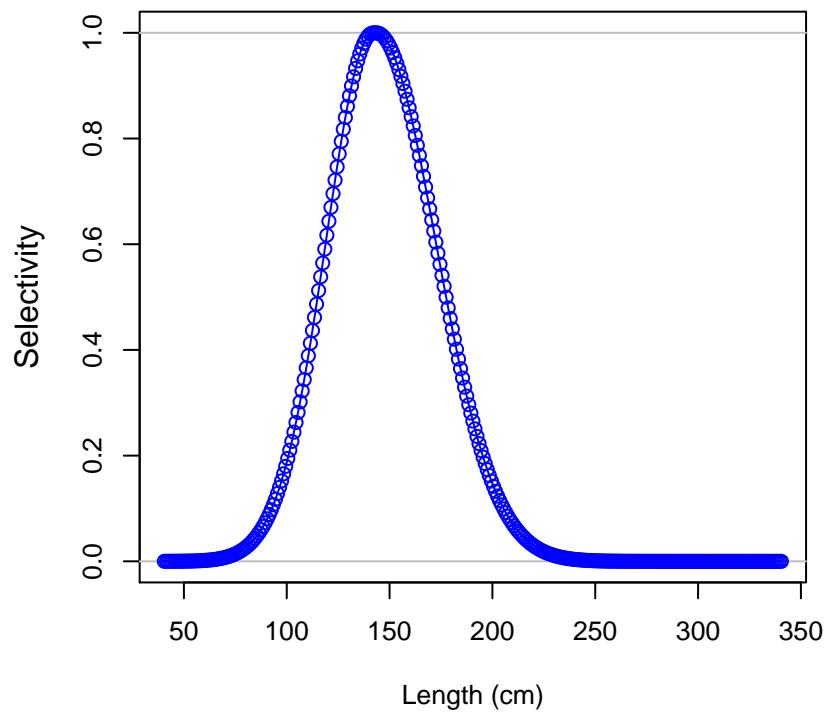
**Male ending year selectivity for F16\_WCPFC**



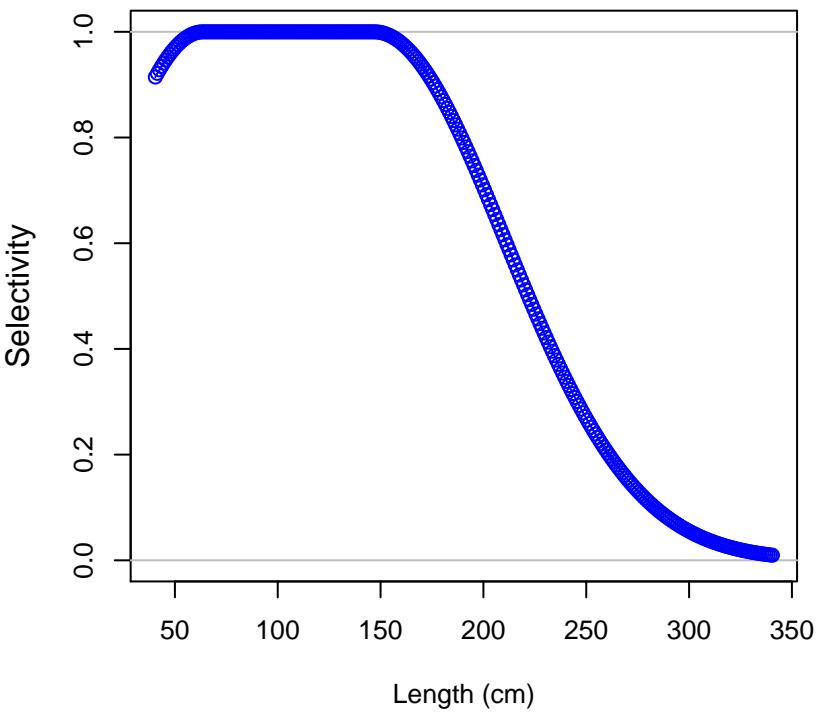
**Female ending year selectivity for F17\_IATTC**



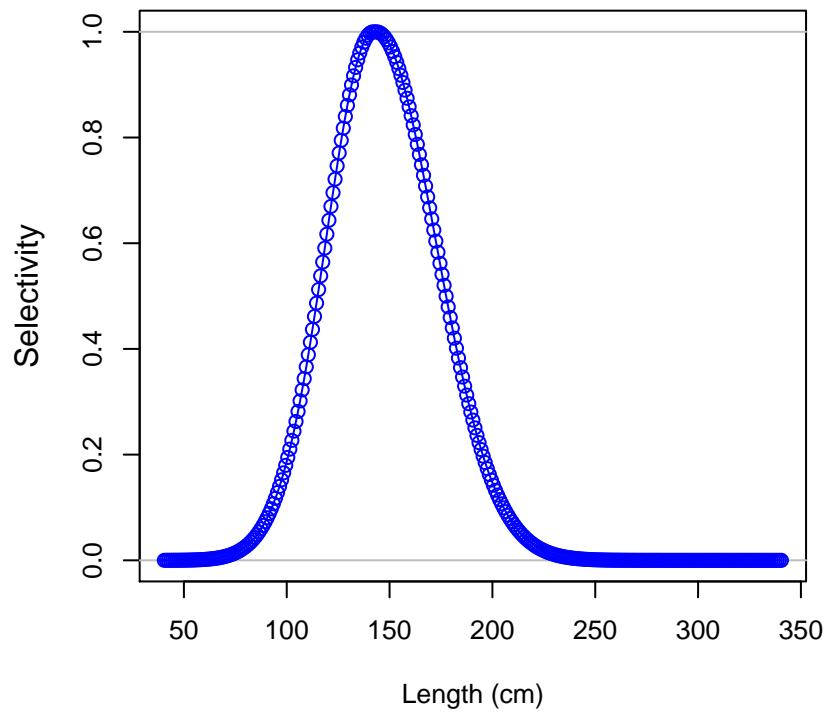
**Female ending year selectivity for F18\_JPN\_SSII**



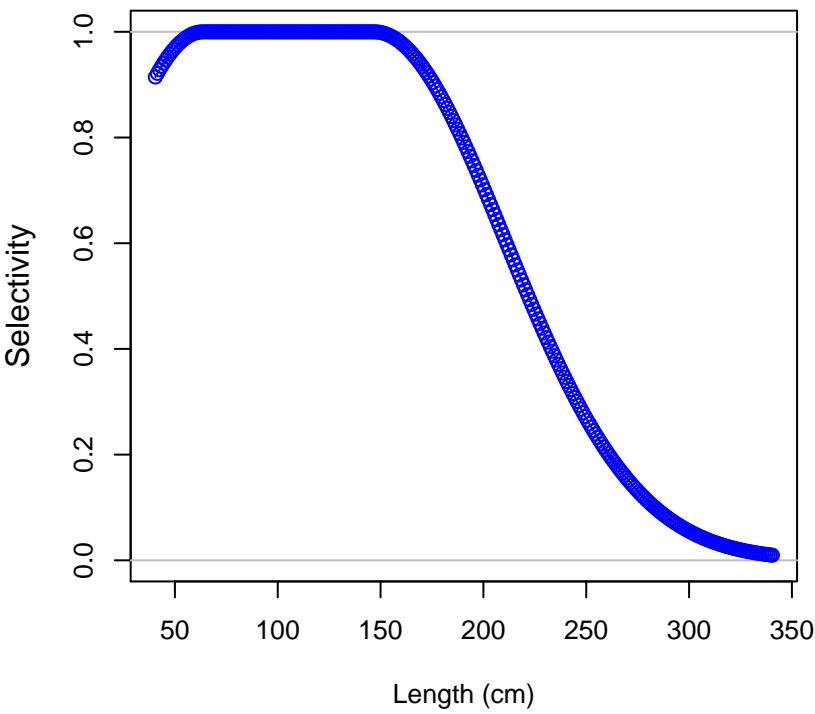
**Male ending year selectivity for F17\_IATTC**



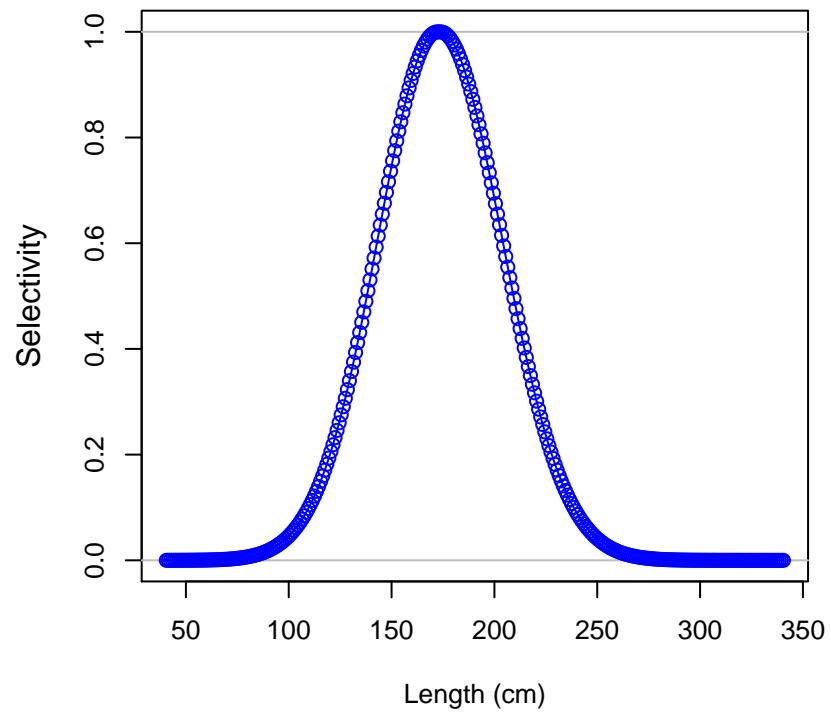
**Male ending year selectivity for F18\_JPN\_SSII**



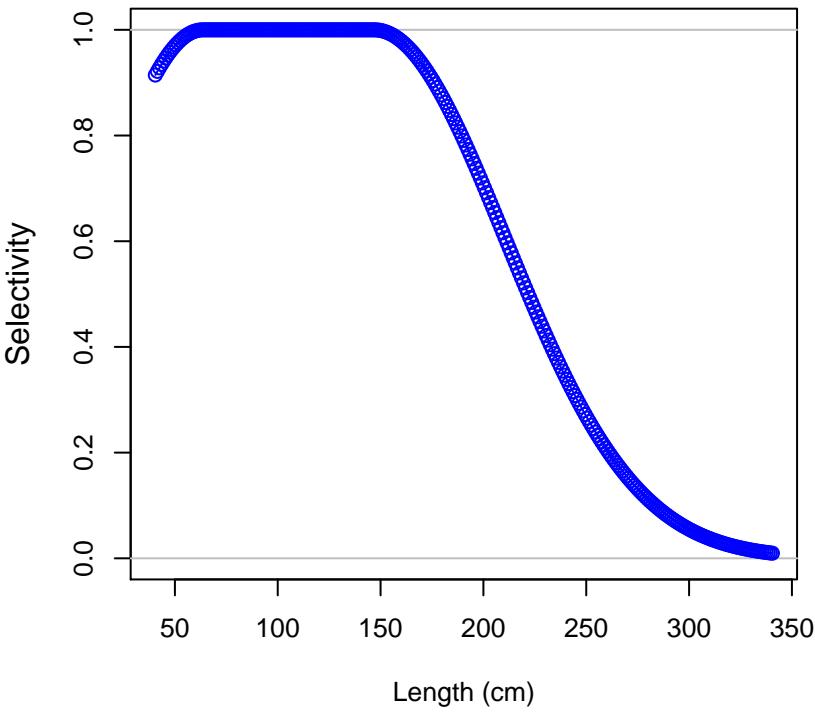
**Female ending year selectivity for S1\_US\_SS**



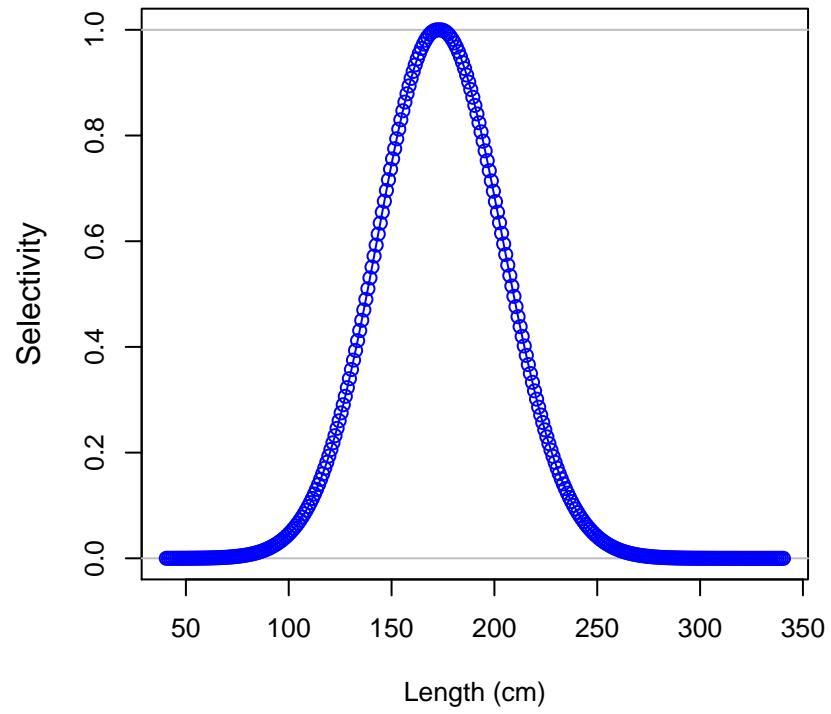
**Female ending year selectivity for S2\_US\_DS**



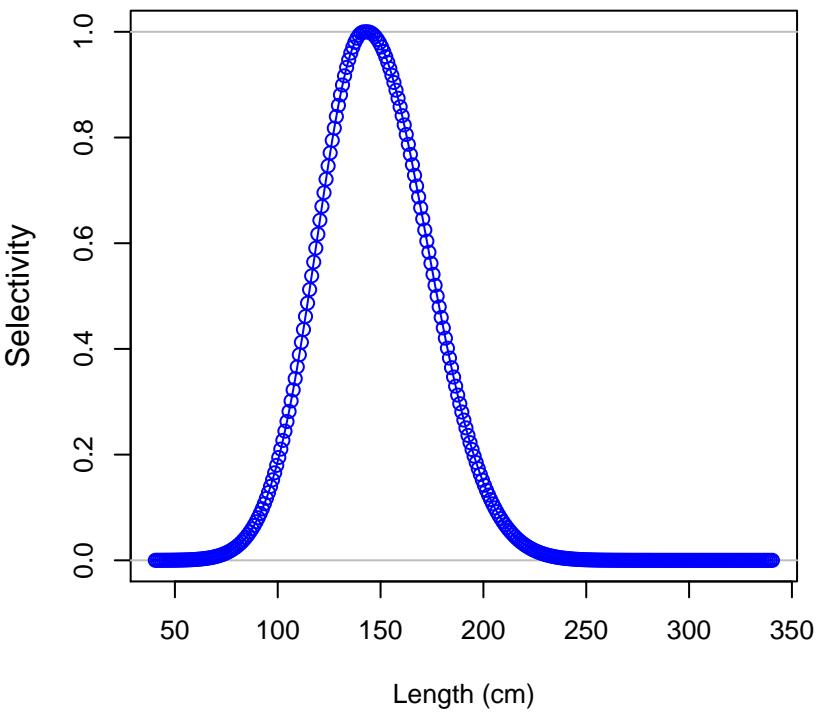
**Male ending year selectivity for S1\_US\_SS**



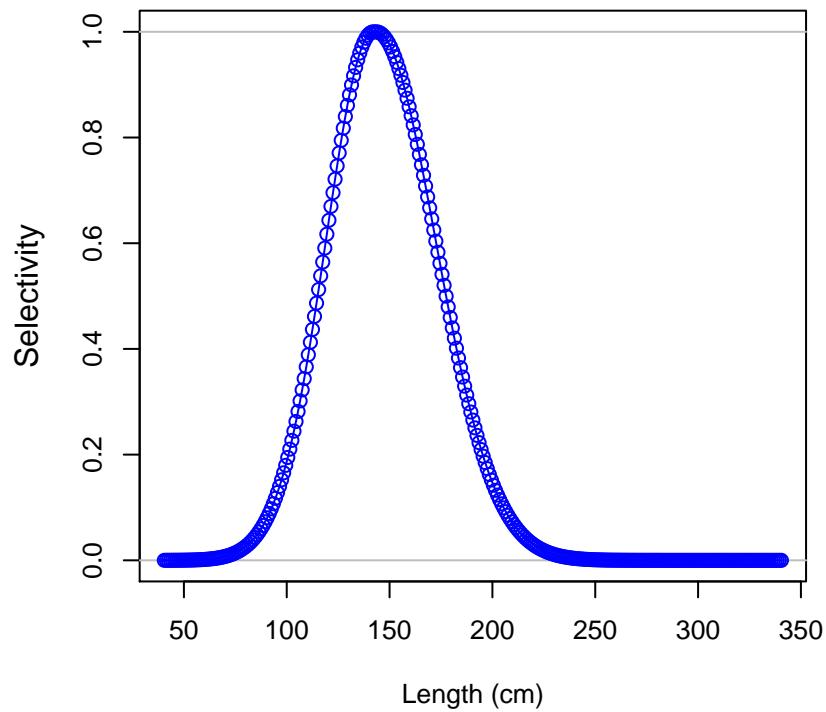
**Male ending year selectivity for S2\_US\_DS**



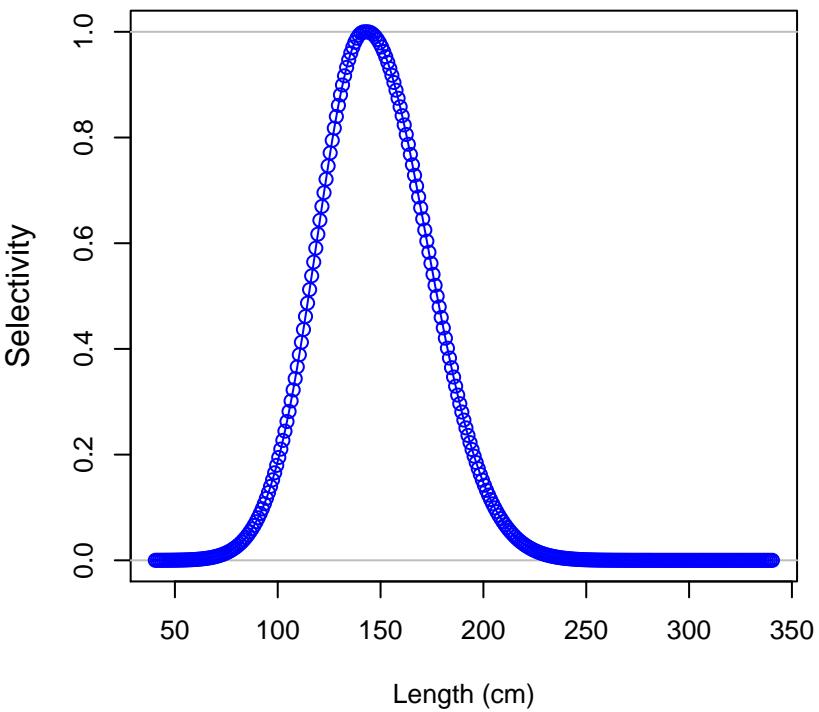
**Female ending year selectivity for S3\_TW\_LRG**



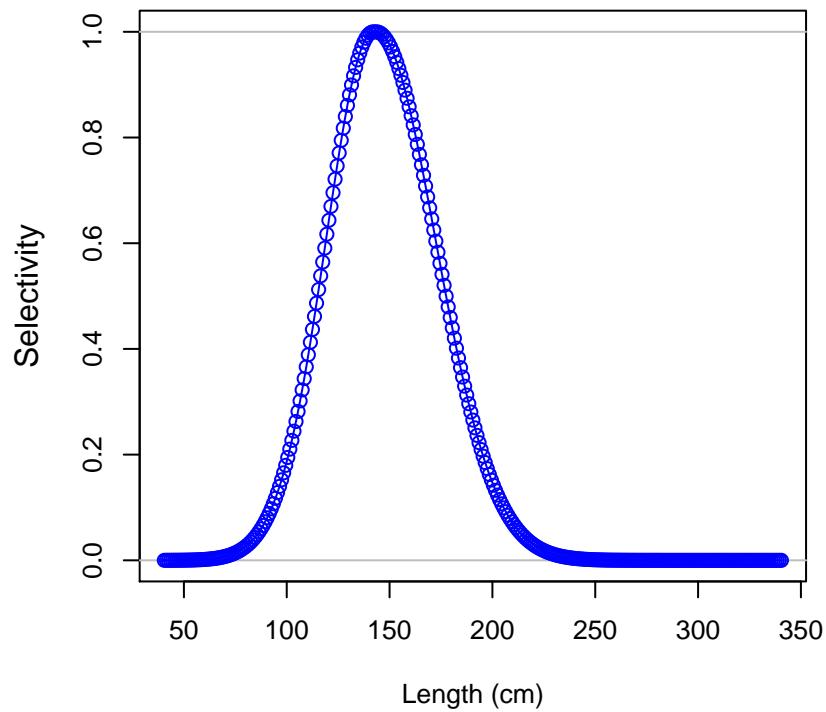
**Female ending year selectivity for S4\_JPN\_SS**



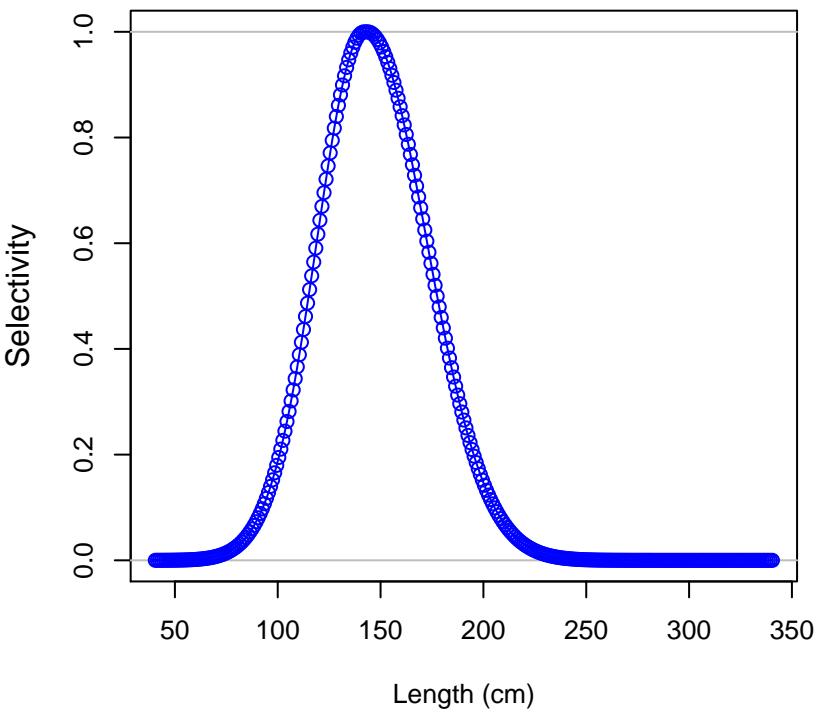
**Male ending year selectivity for S3\_TW\_LRG**



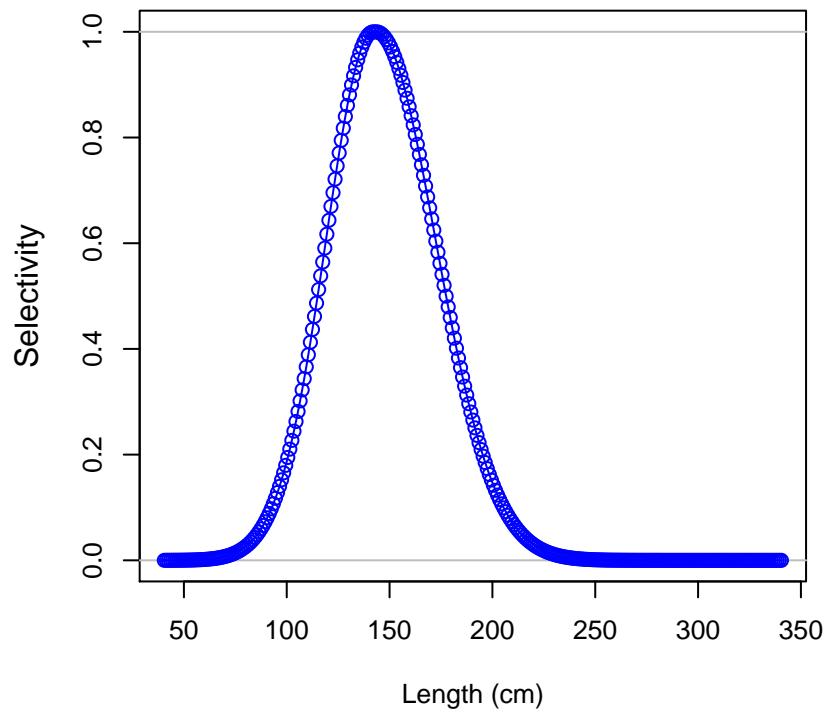
**Male ending year selectivity for S4\_JPN\_SS**



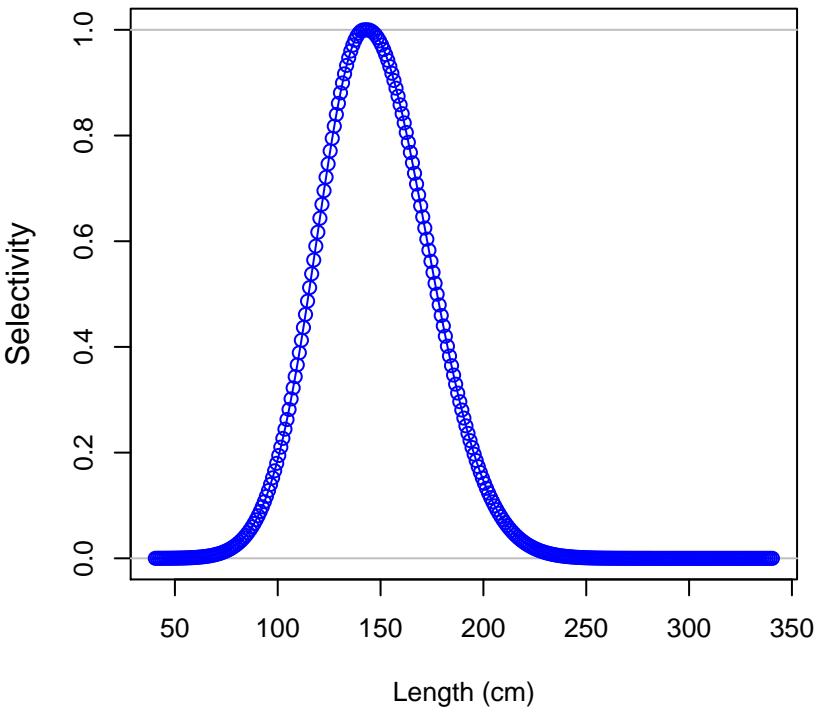
**Female ending year selectivity for S5\_JPN\_RTV**



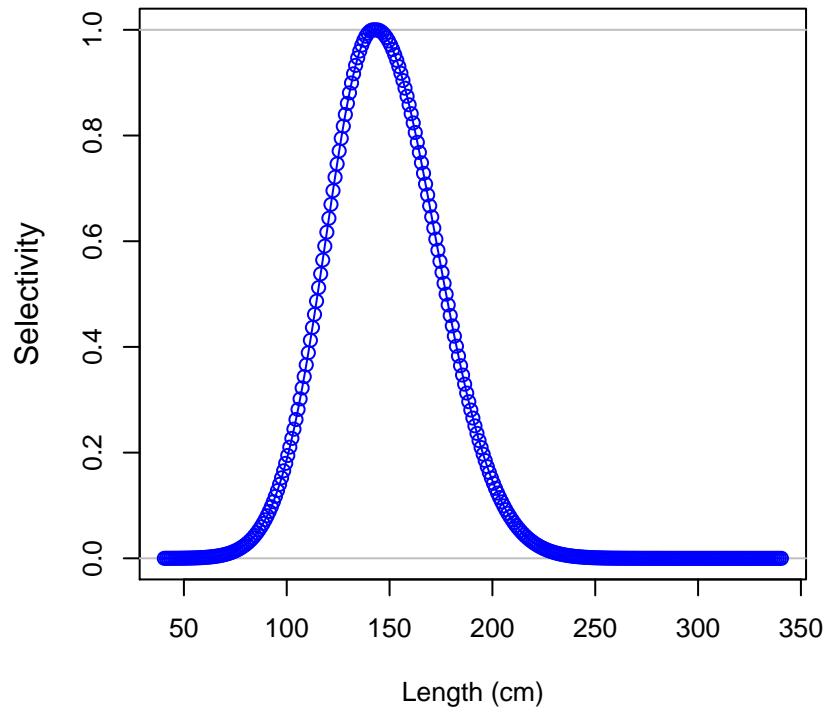
**Female ending year selectivity for S6\_JPN\_OBS**



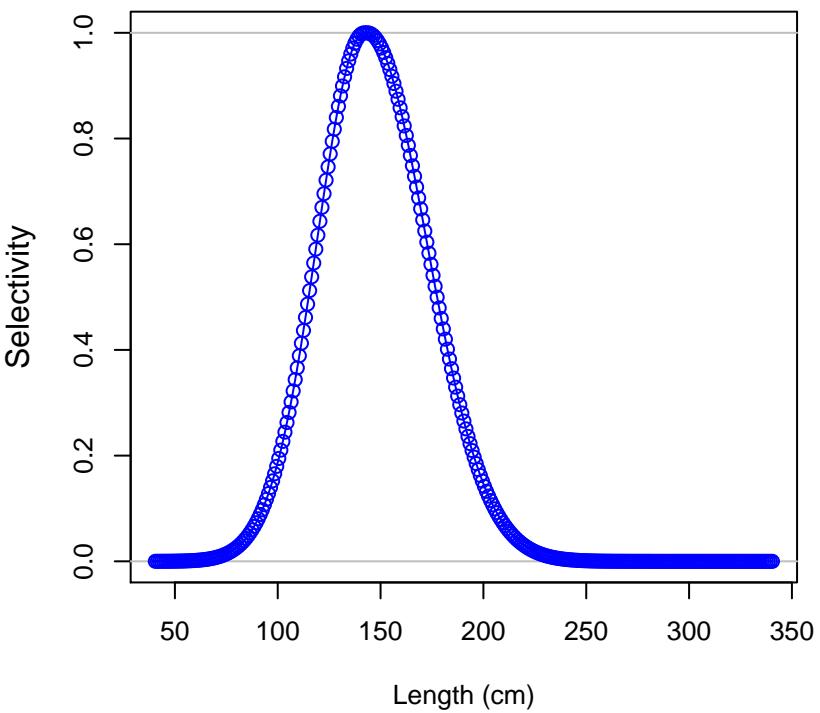
**Male ending year selectivity for S5\_JPN\_RTV**



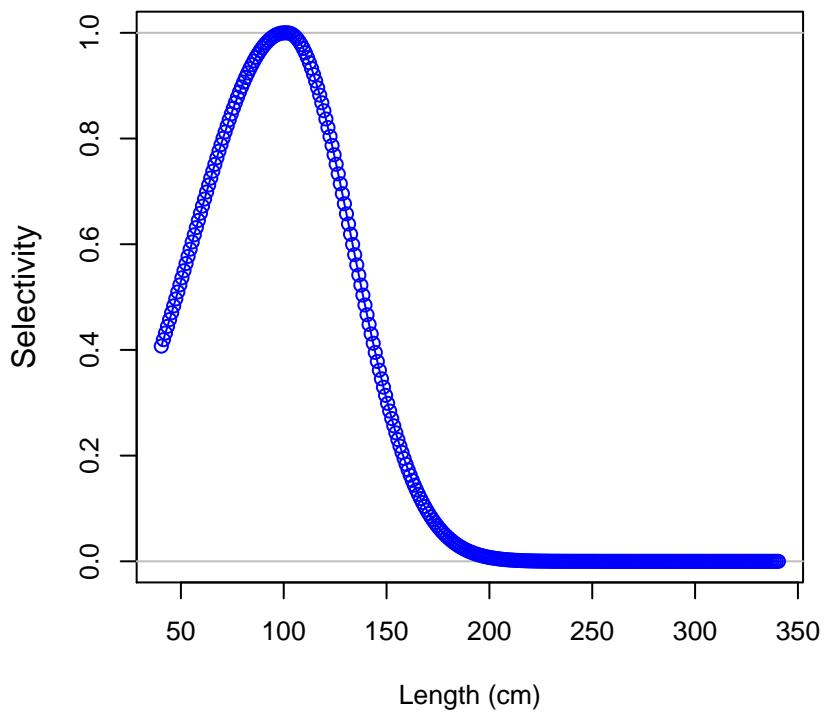
**Male ending year selectivity for S6\_JPN\_OBS**



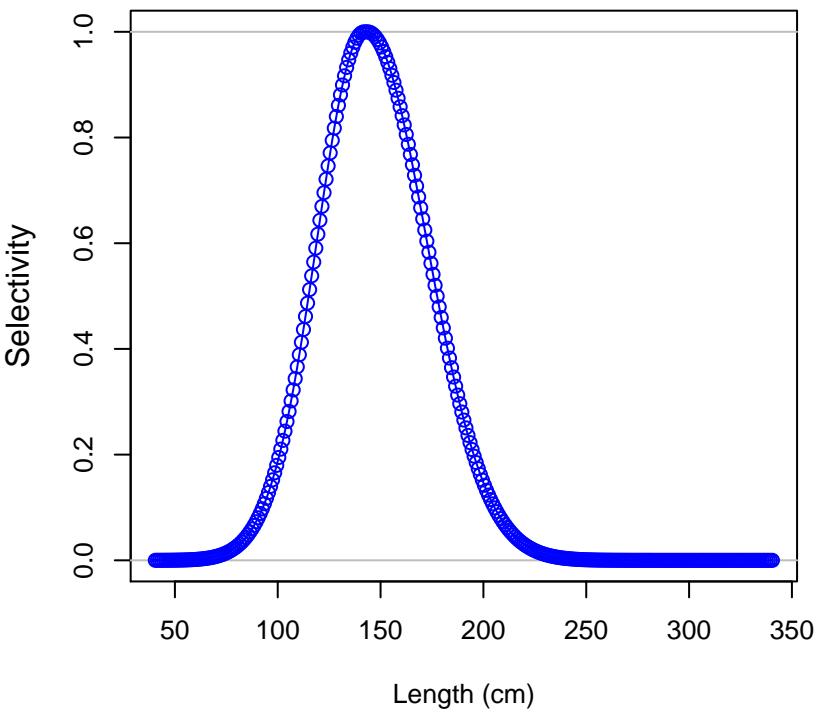
**Female ending year selectivity for S7\_JPN\_GEO**



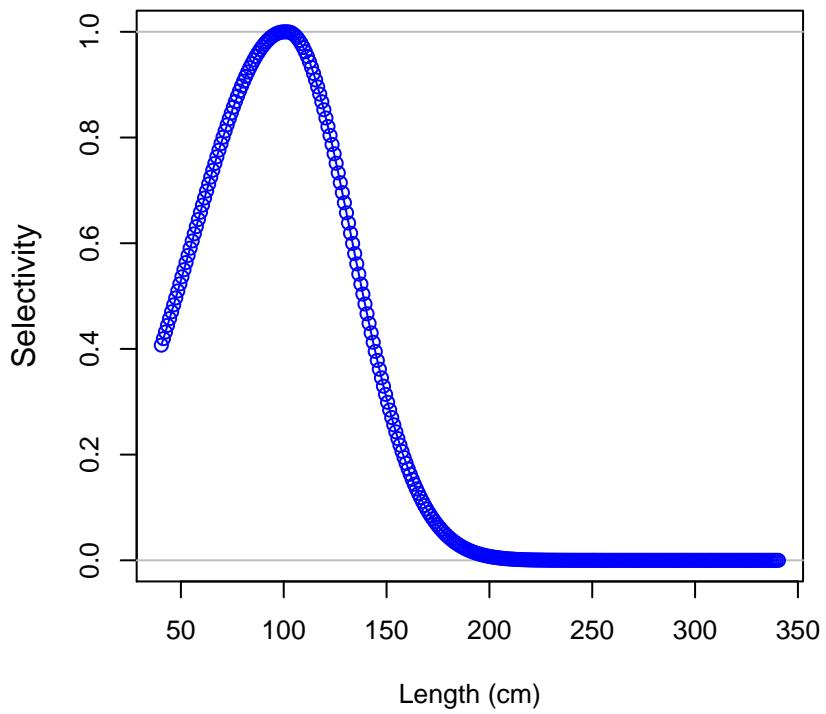
**Female ending year selectivity for S8\_MEX**



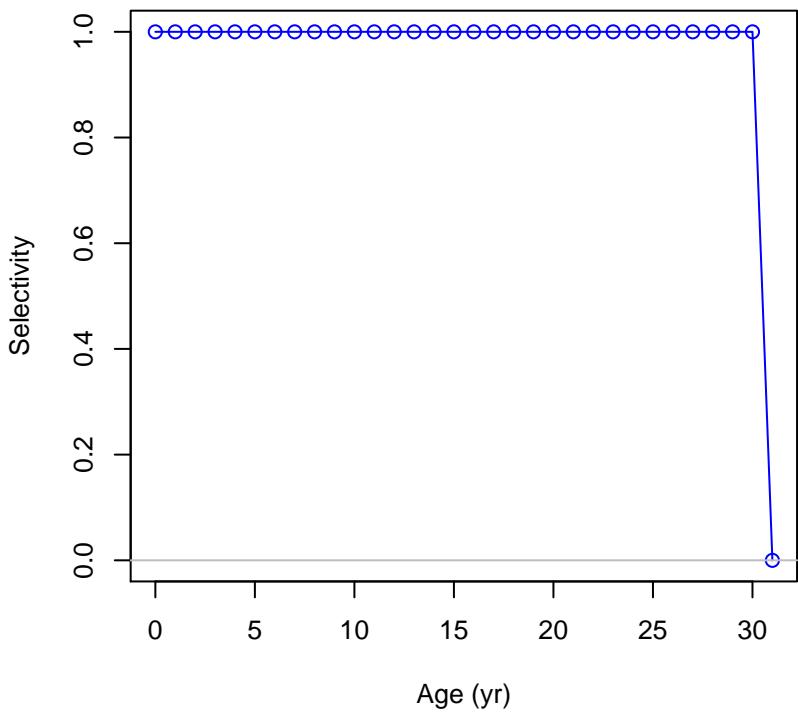
**Male ending year selectivity for S7\_JPN\_GEO**



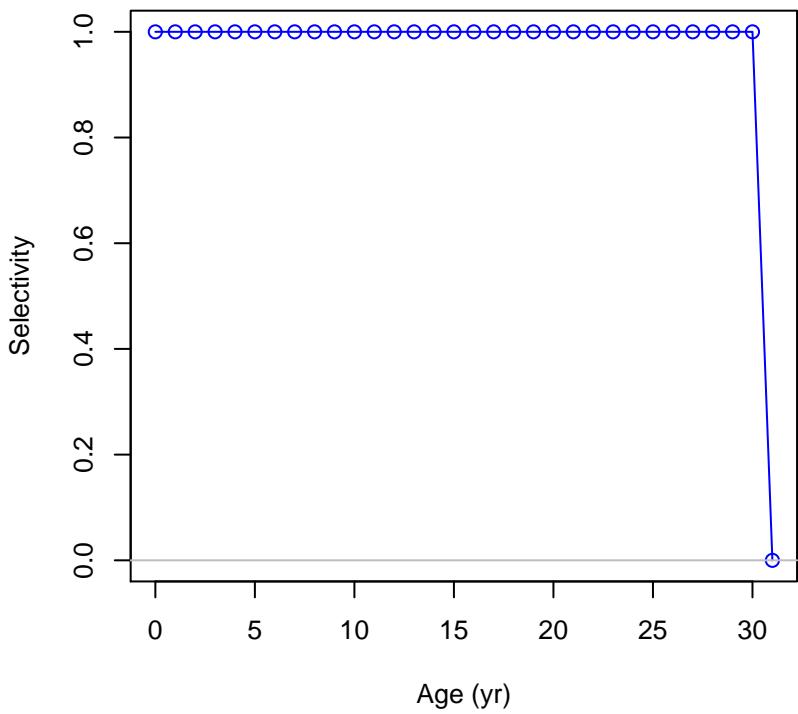
**Male ending year selectivity for S8\_MEX**



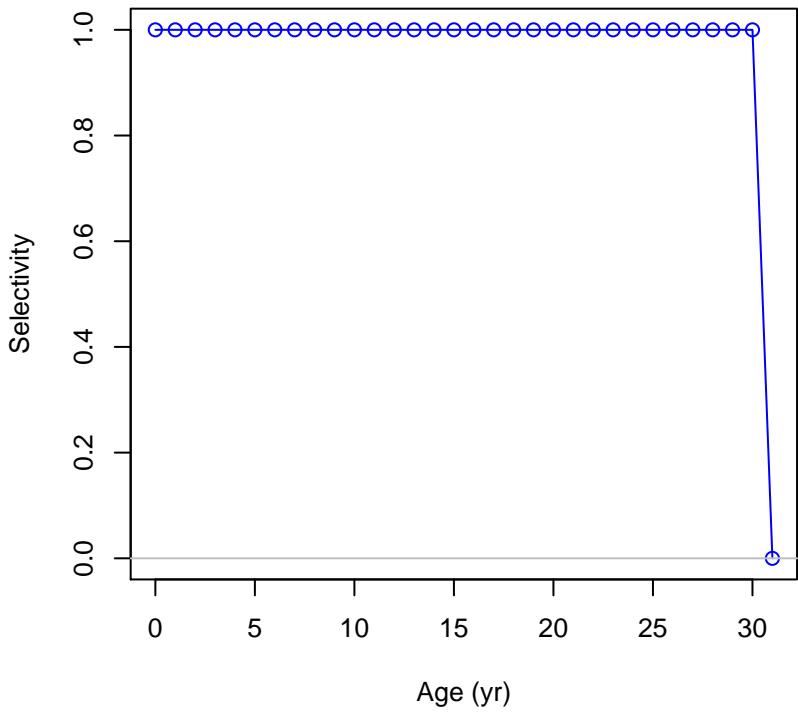
**Female ending year selectivity for F1\_US\_CA**



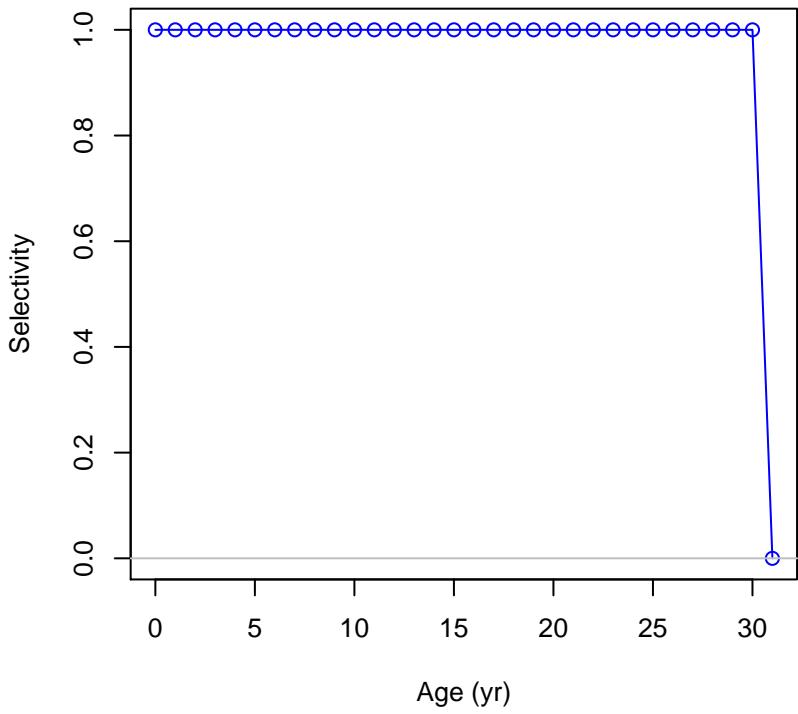
**Female ending year selectivity for F2\_US\_HI\_SS**



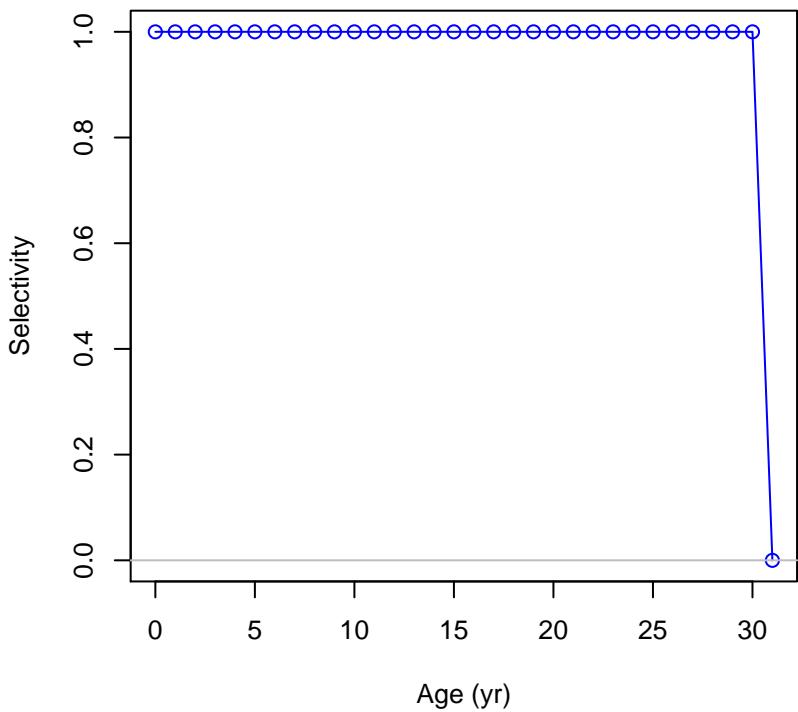
**Male ending year selectivity for F1\_US\_CA**



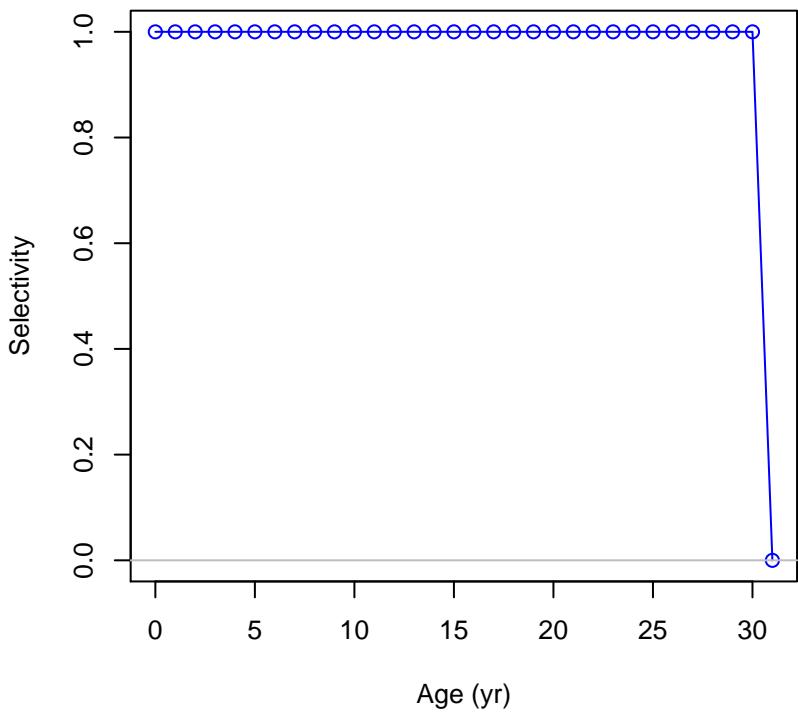
**Male ending year selectivity for F2\_US\_HI\_SS**



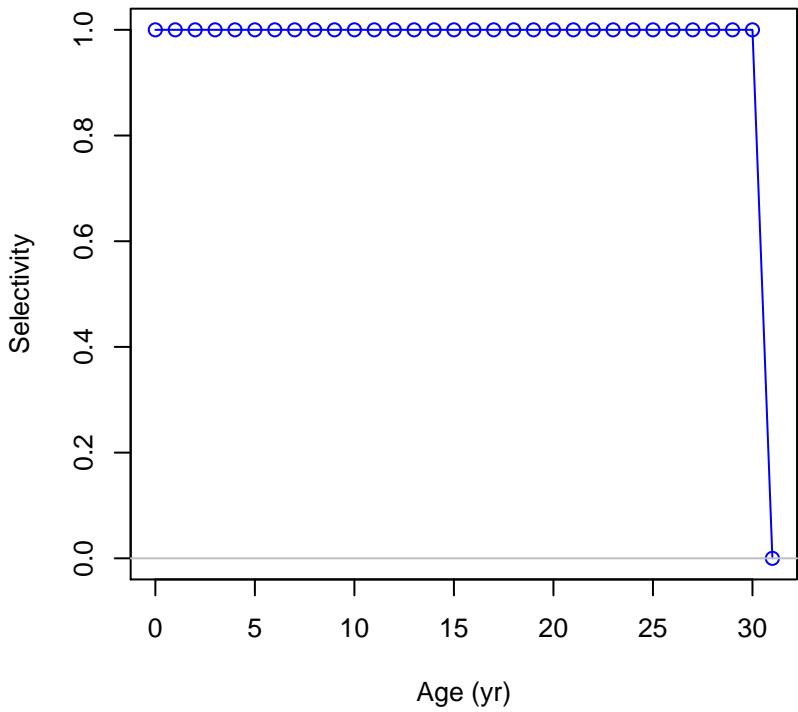
**Female ending year selectivity for F3\_US\_HI\_DS**



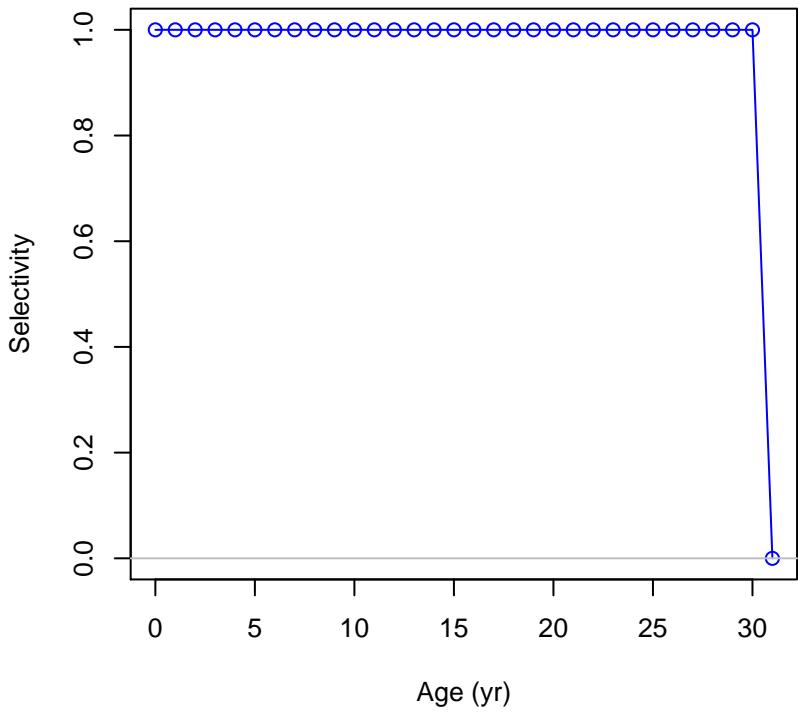
**Female ending year selectivity for F4\_US\_DGN**



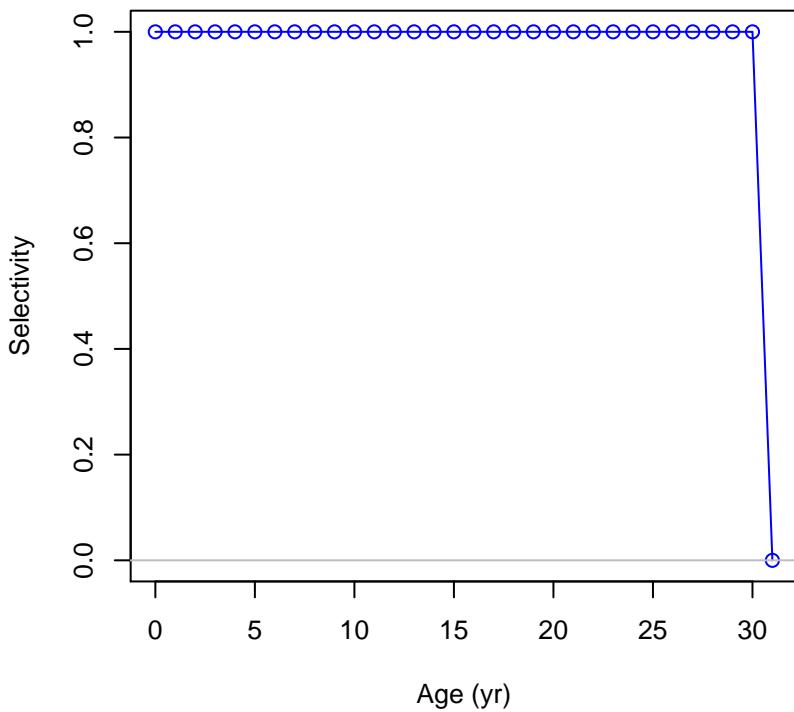
**Male ending year selectivity for F3\_US\_HI\_DS**



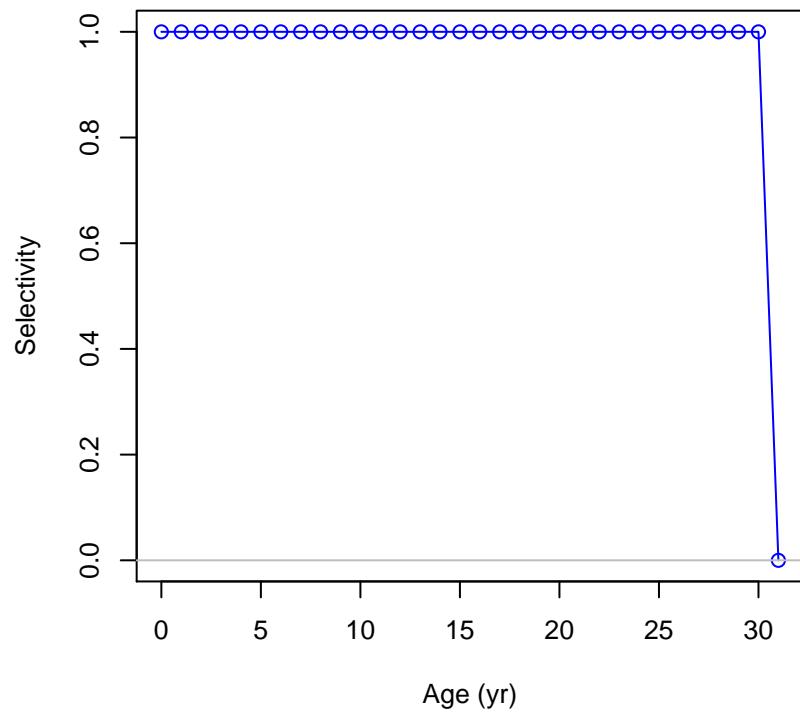
**Male ending year selectivity for F4\_US\_DGN**



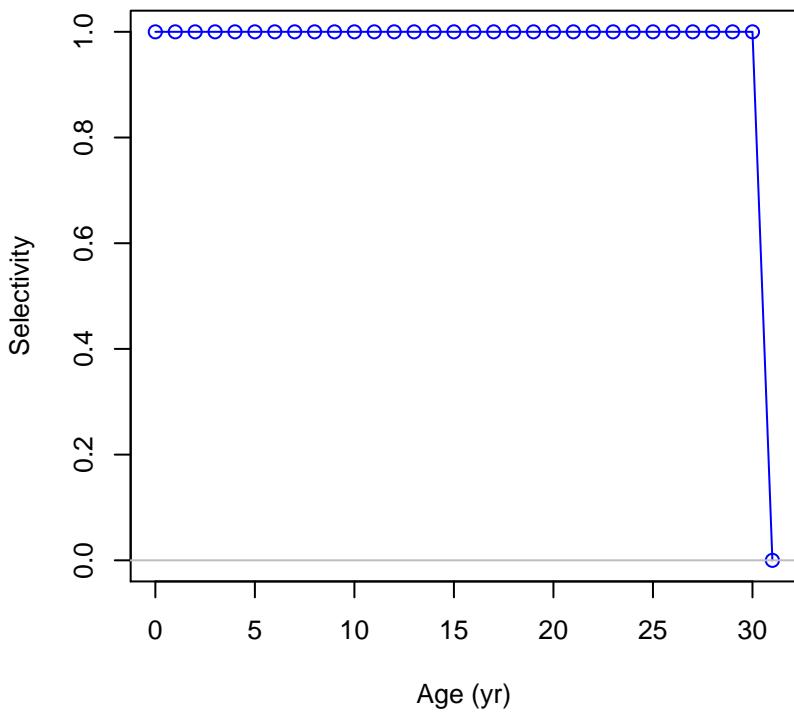
**Female ending year selectivity for F5\_US\_REC**



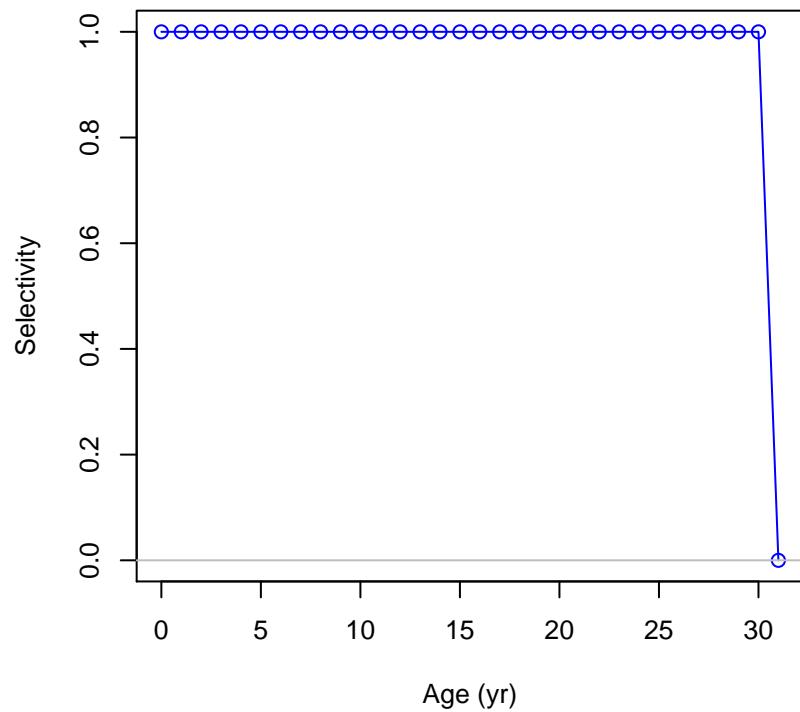
**Female ending year selectivity for F6\_TW\_LRG\_N**



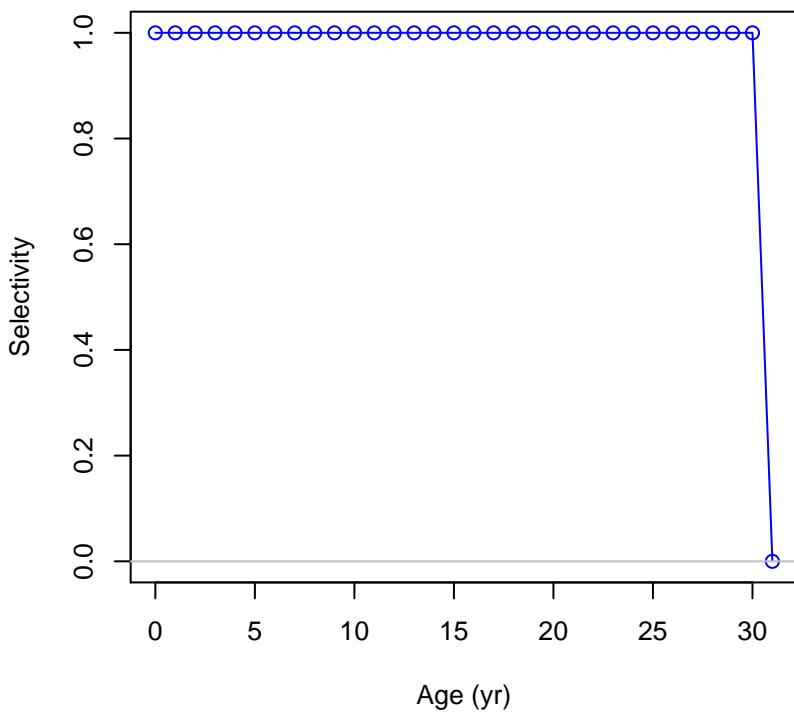
**Male ending year selectivity for F5\_US\_REC**



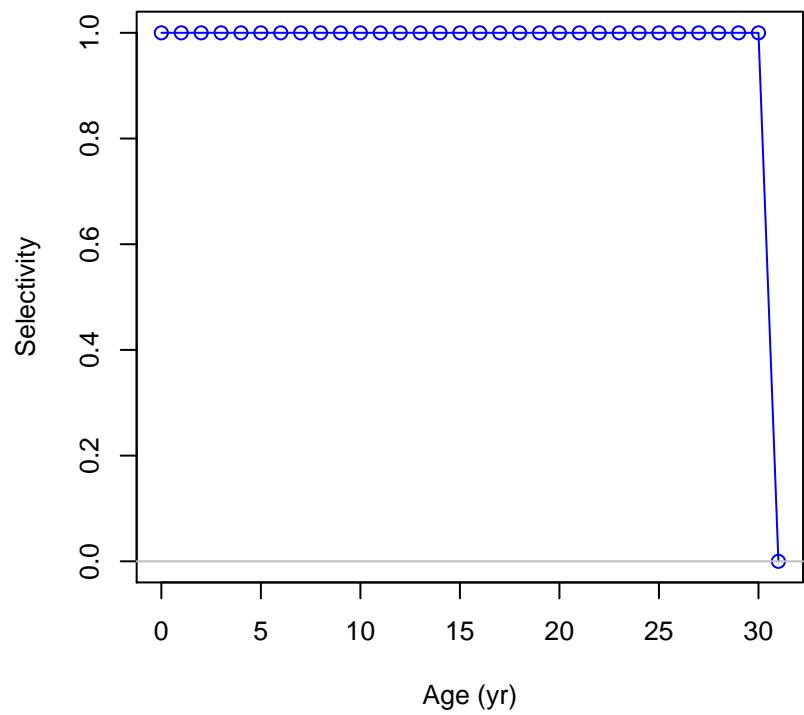
**Male ending year selectivity for F6\_TW\_LRG\_N**



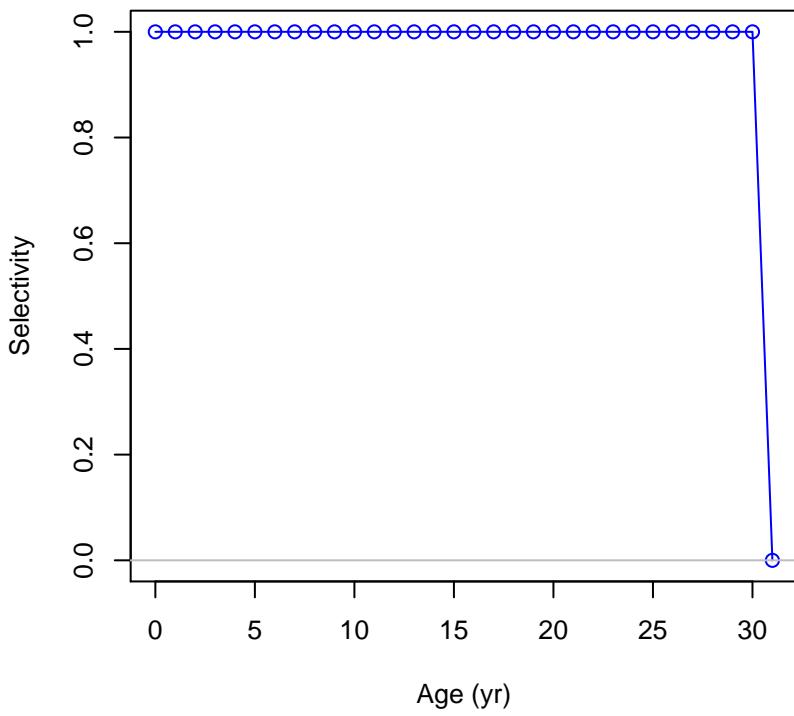
**Female ending year selectivity for F7\_TW\_LRG\_S**



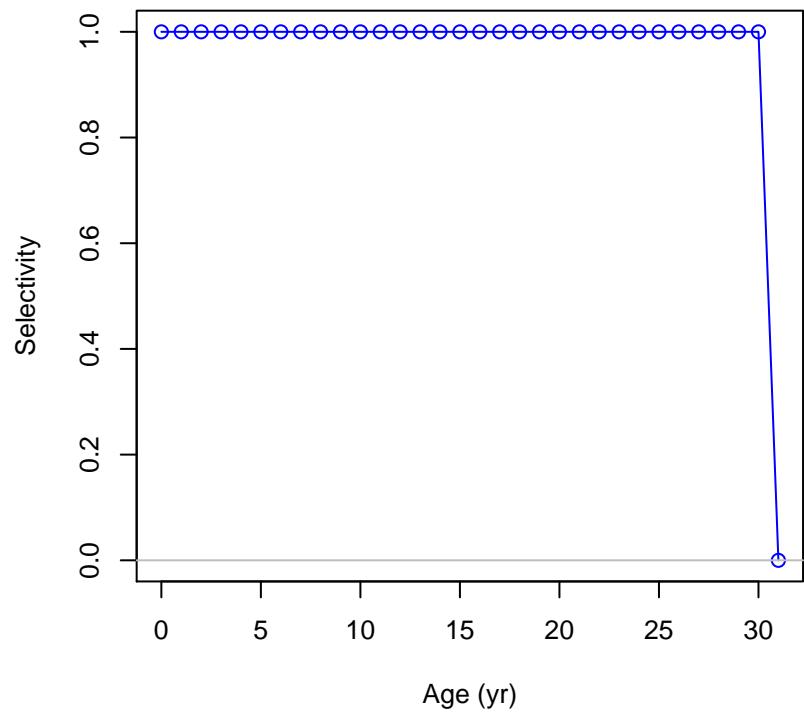
**Female ending year selectivity for F8\_TW\_SML**



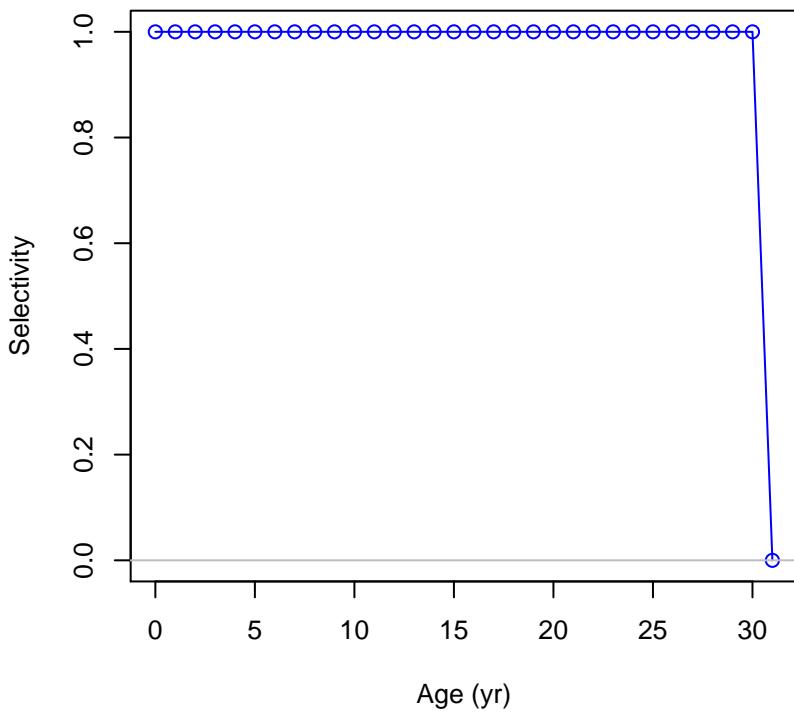
**Male ending year selectivity for F7\_TW\_LRG\_S**



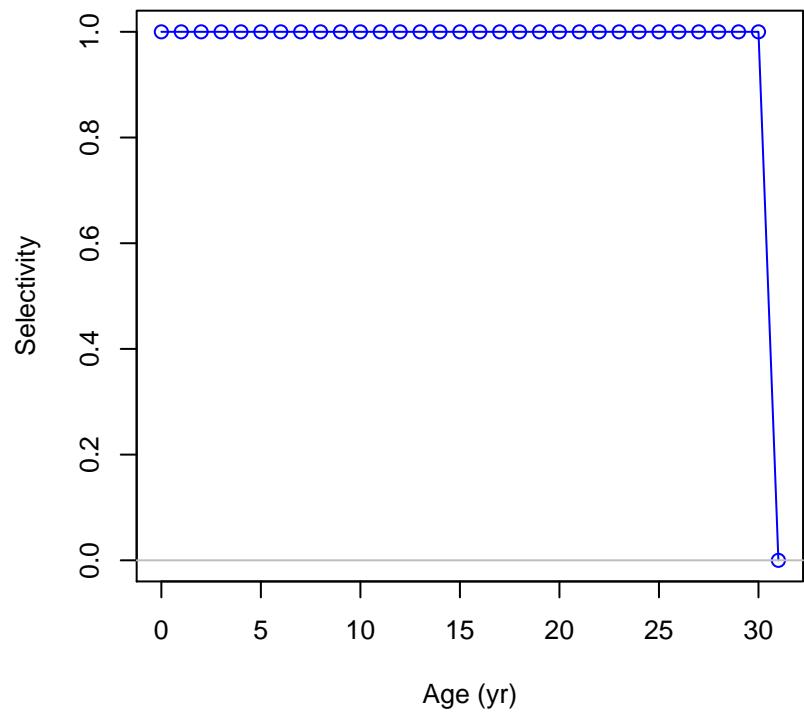
**Male ending year selectivity for F8\_TW\_SML**



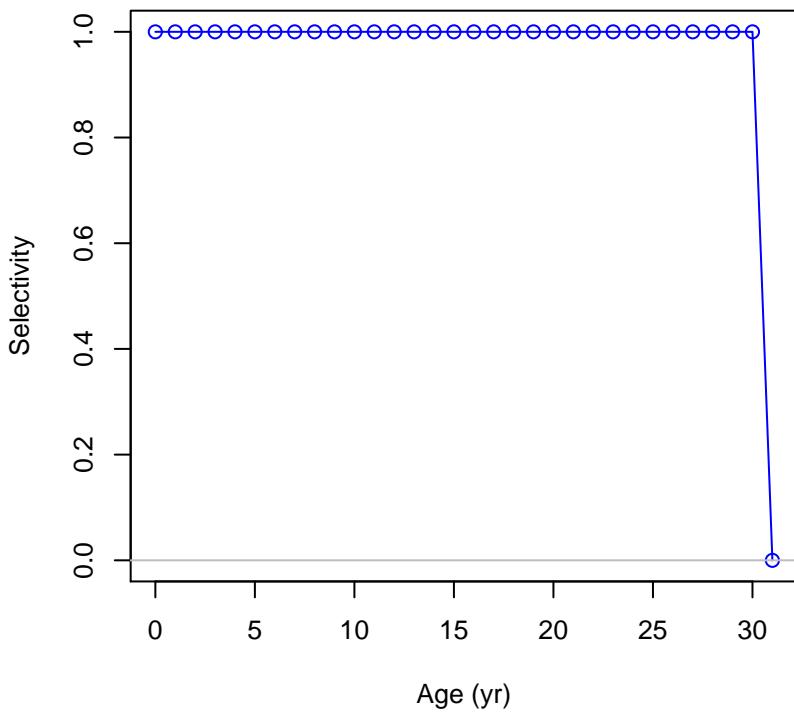
**Female ending year selectivity for F9\_JPN\_SS**



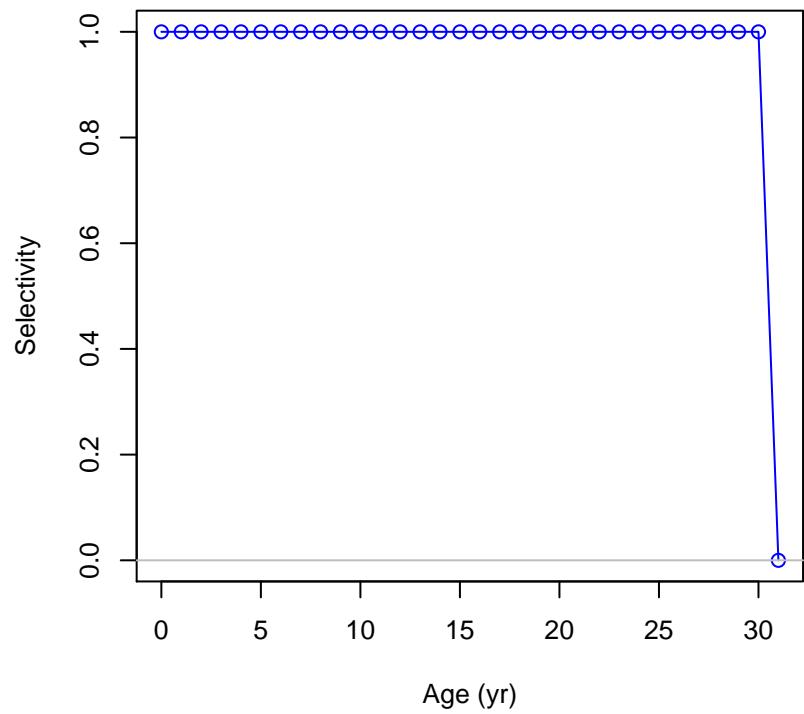
**Female ending year selectivity for F10\_JPN\_DS**



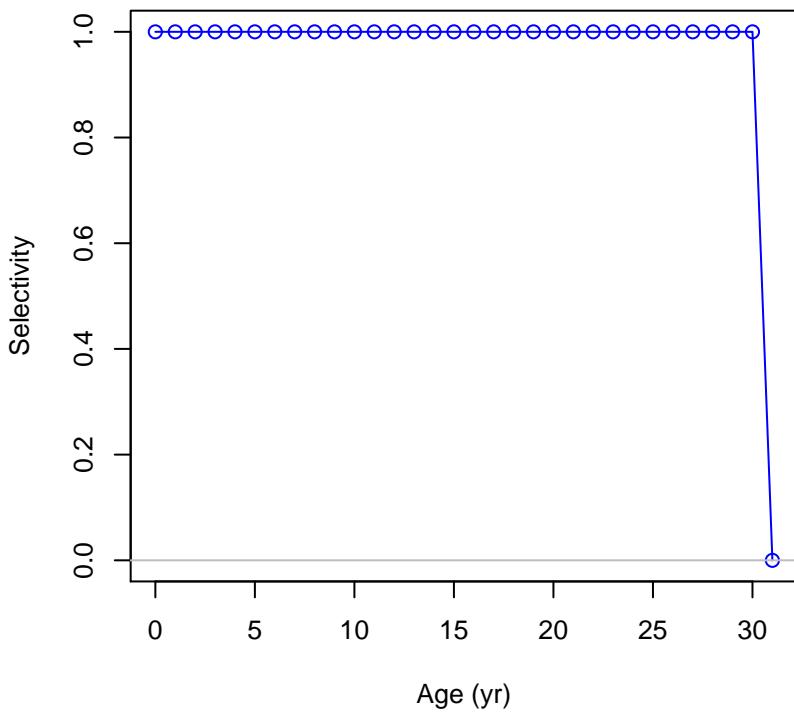
**Male ending year selectivity for F9\_JPN\_SS**



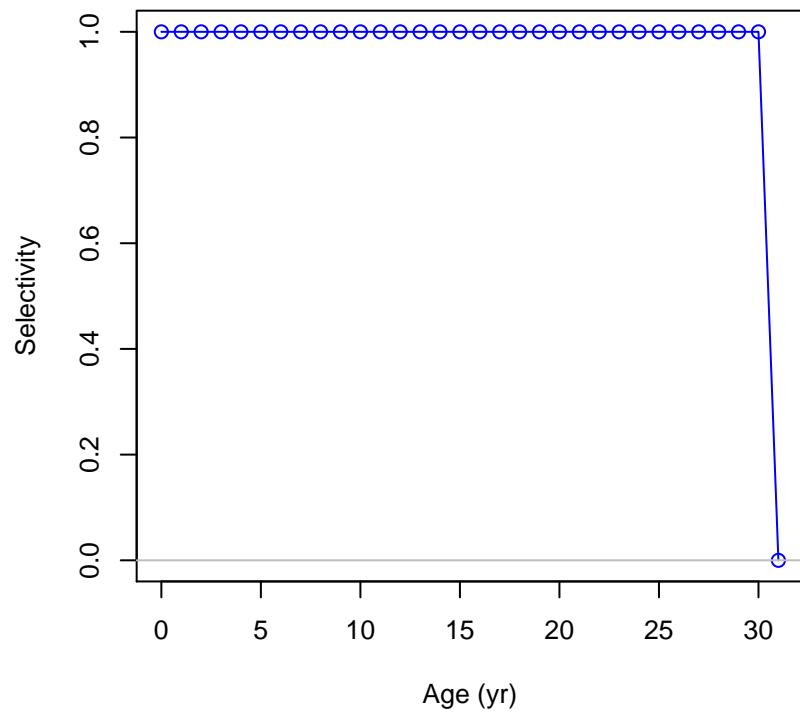
**Male ending year selectivity for F10\_JPN\_DS**



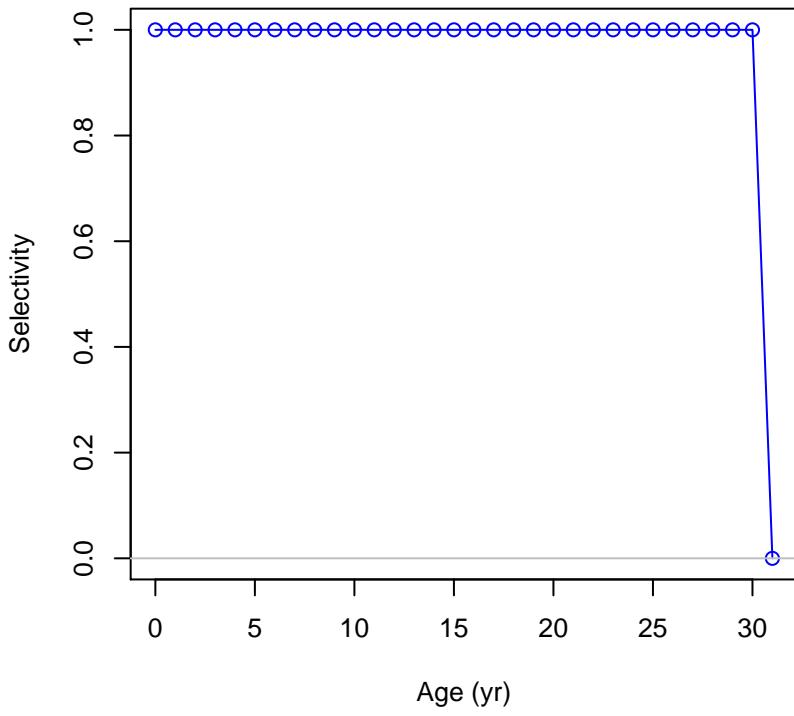
**Female ending year selectivity for F11\_JPN\_CST**



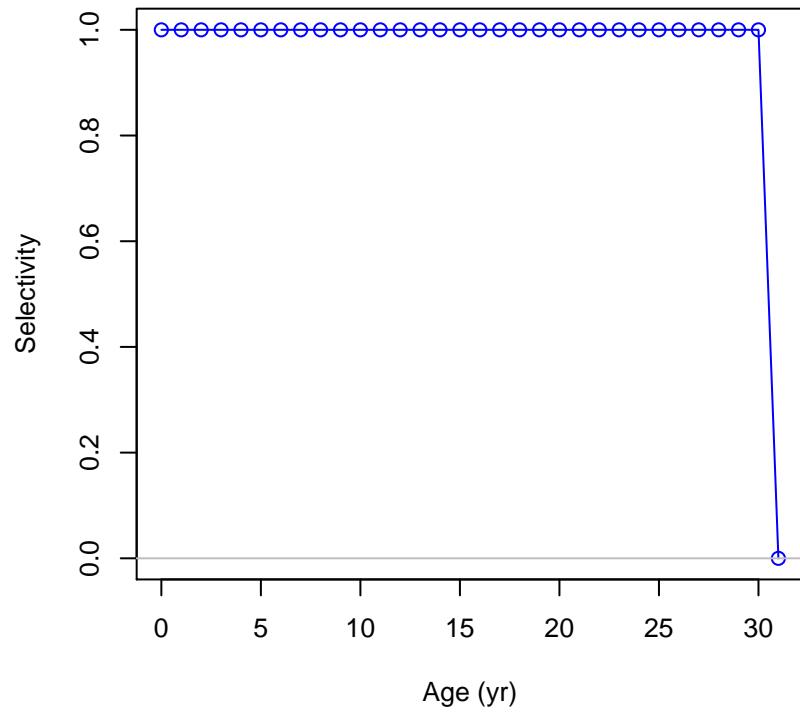
**Female ending year selectivity for F12\_JPN\_DFN**



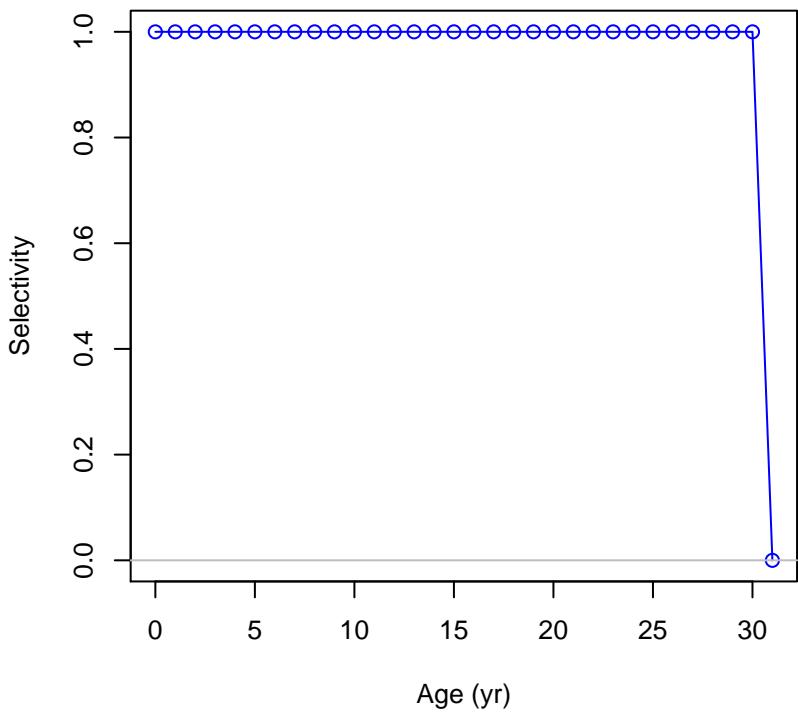
**Male ending year selectivity for F11\_JPN\_CST**



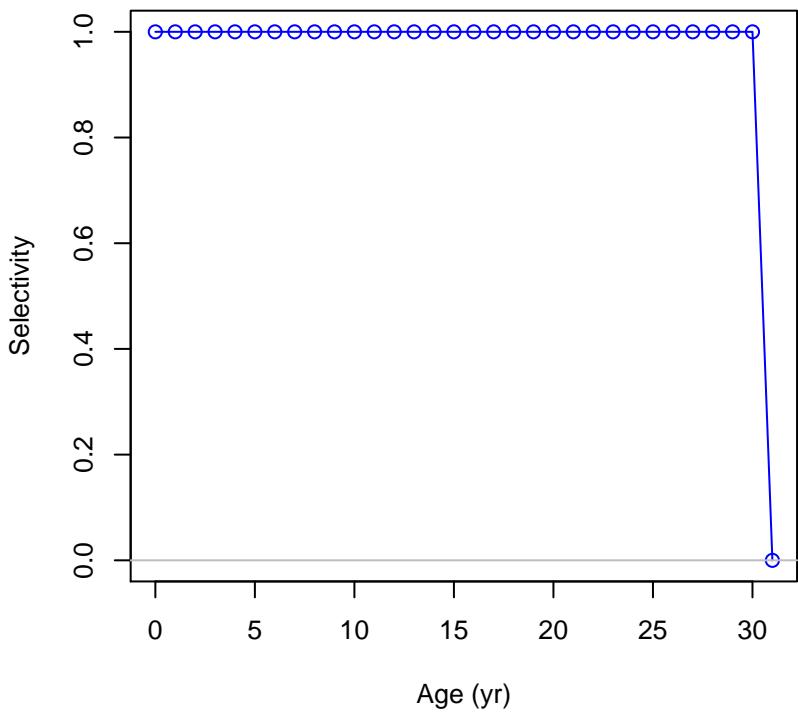
**Male ending year selectivity for F12\_JPN\_DFN**



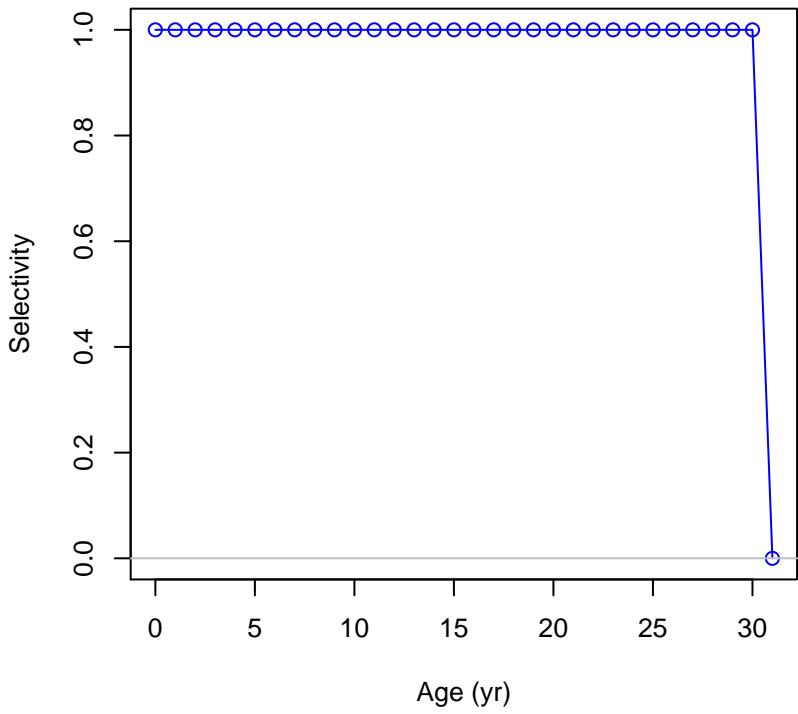
**Female ending year selectivity for F13\_JPN\_OTH**



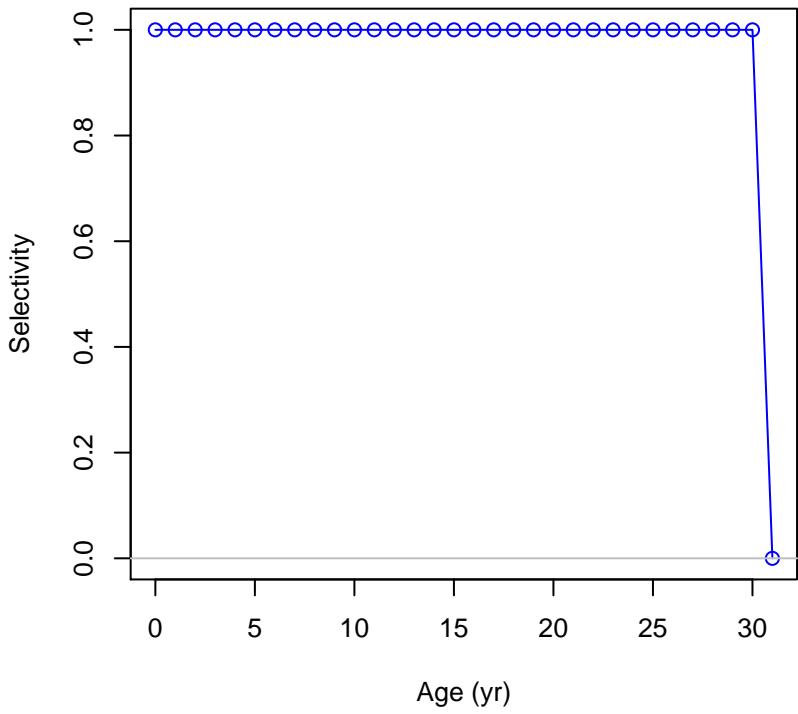
**Female ending year selectivity for F14\_MEX\_NOR**



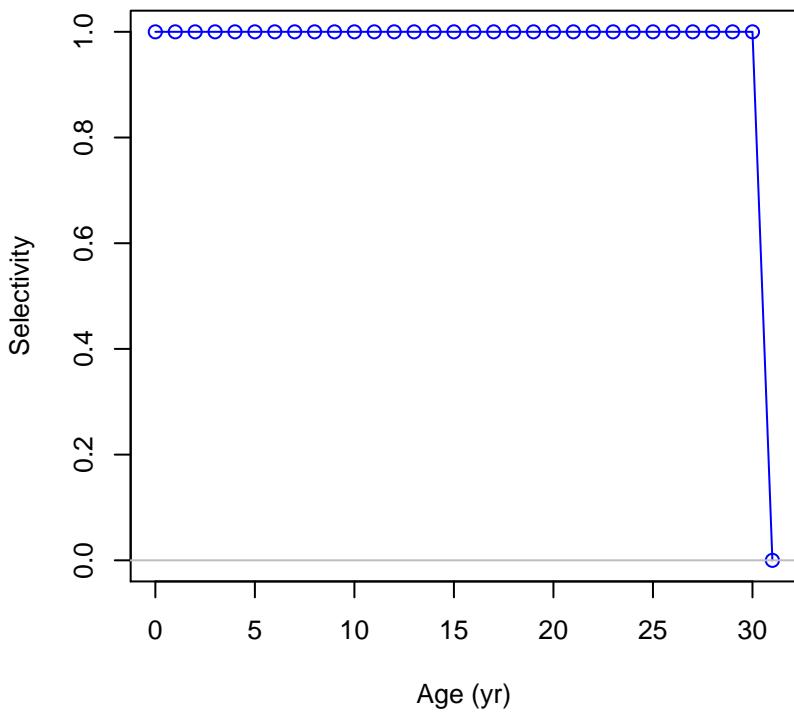
**Male ending year selectivity for F13\_JPN\_OTH**



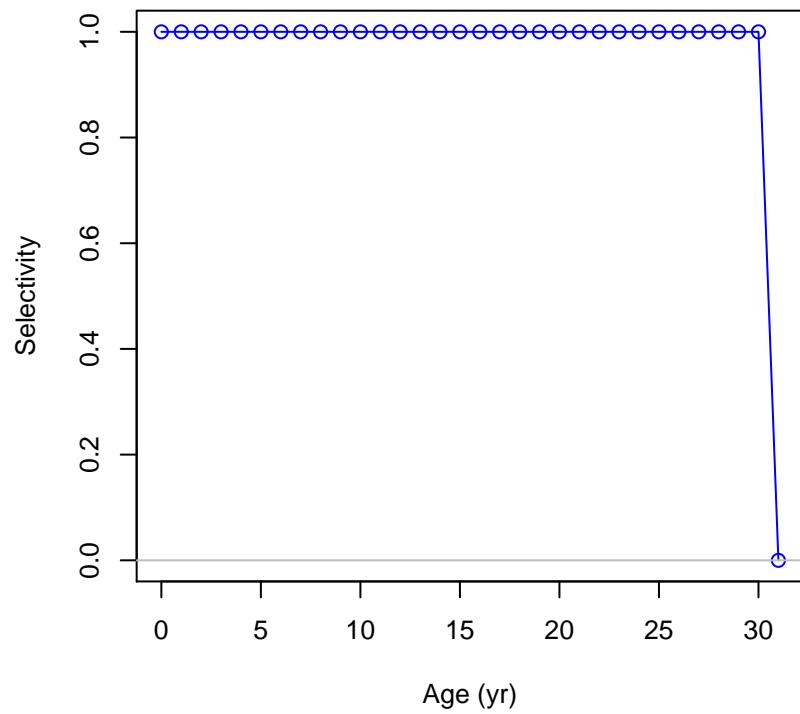
**Male ending year selectivity for F14\_MEX\_NOR**



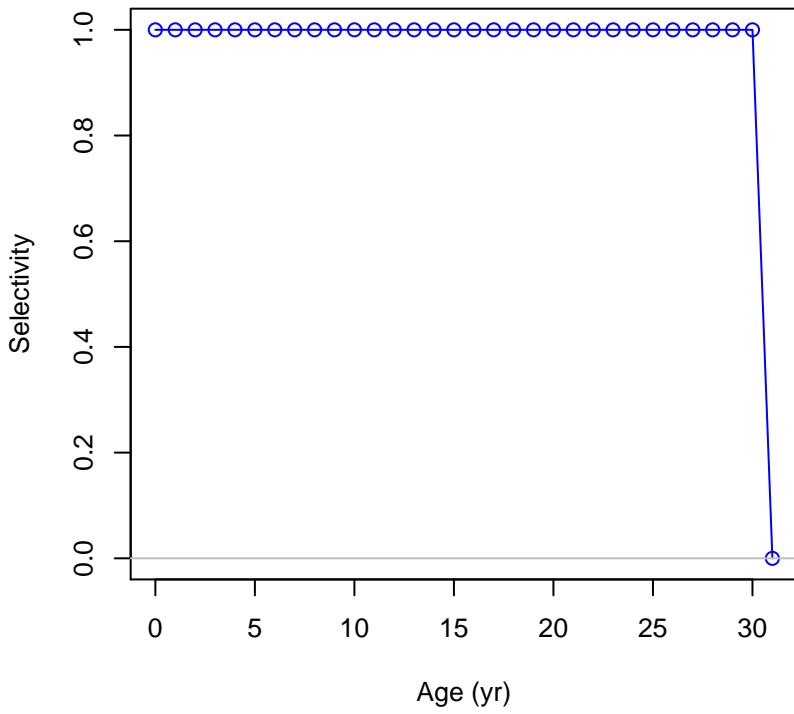
**Female ending year selectivity for F15\_MEX\_SOU**



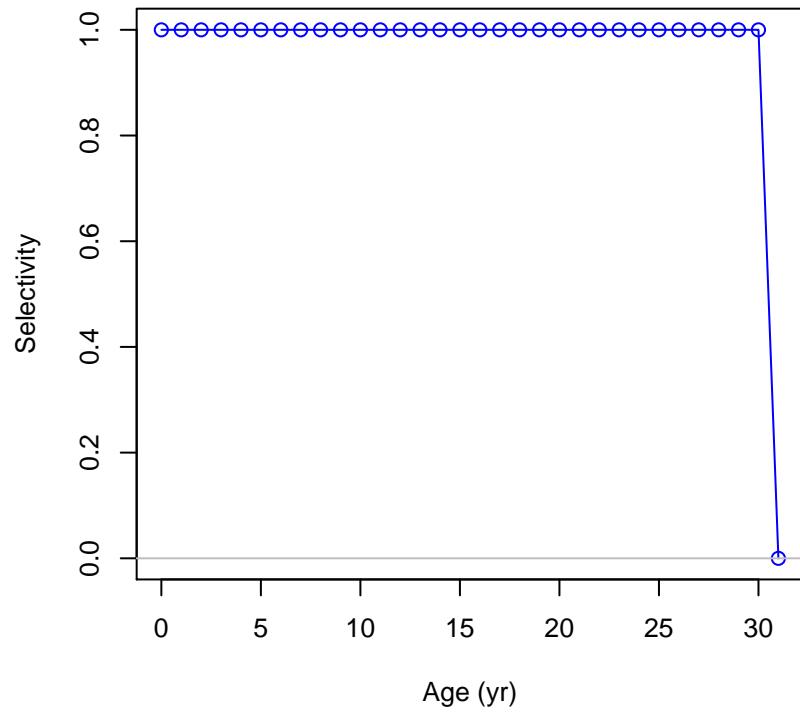
**Female ending year selectivity for F16\_WCPFC**



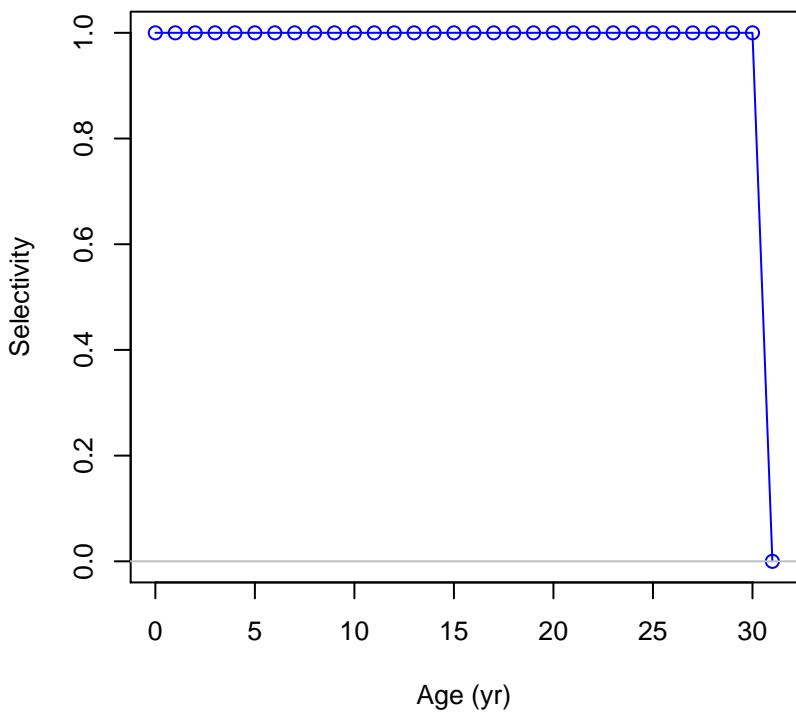
**Male ending year selectivity for F15\_MEX\_SOU**



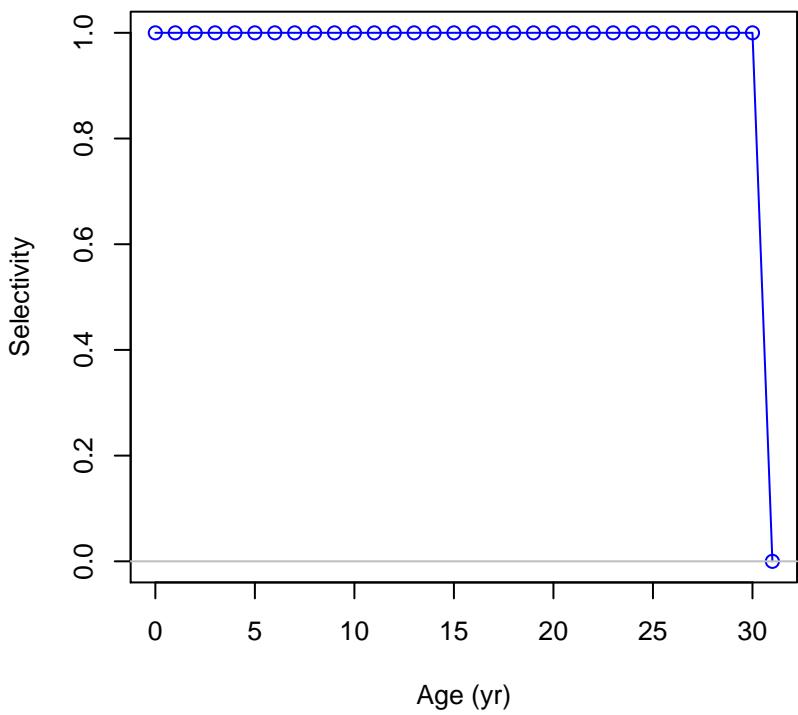
**Male ending year selectivity for F16\_WCPFC**



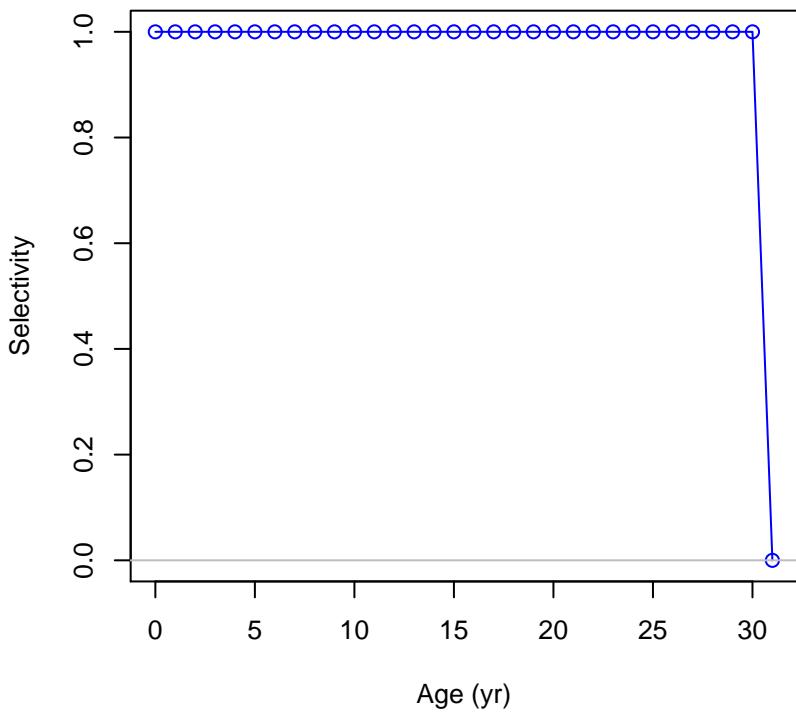
**Female ending year selectivity for F17\_IATTC**



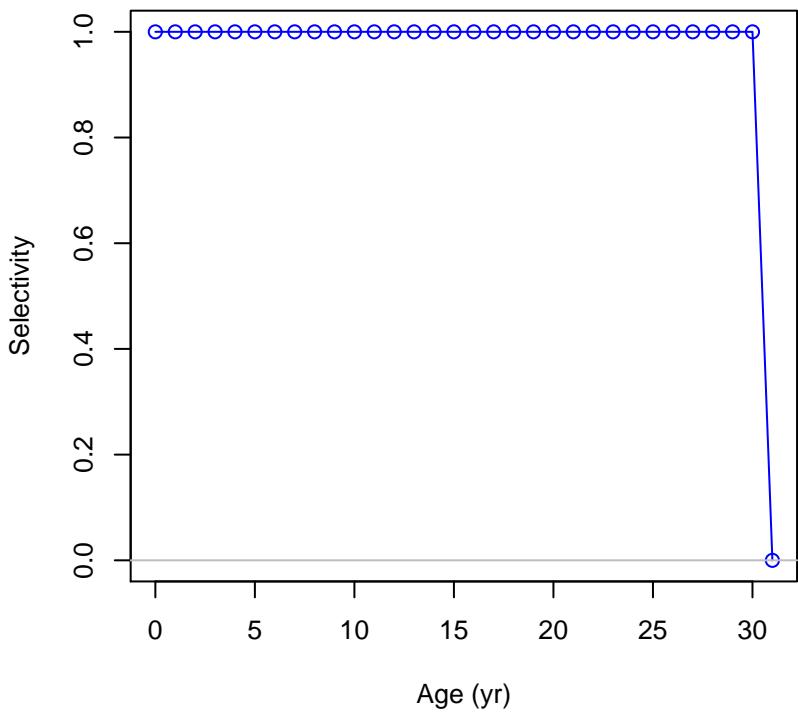
**Female ending year selectivity for F18\_JPN\_SSII**



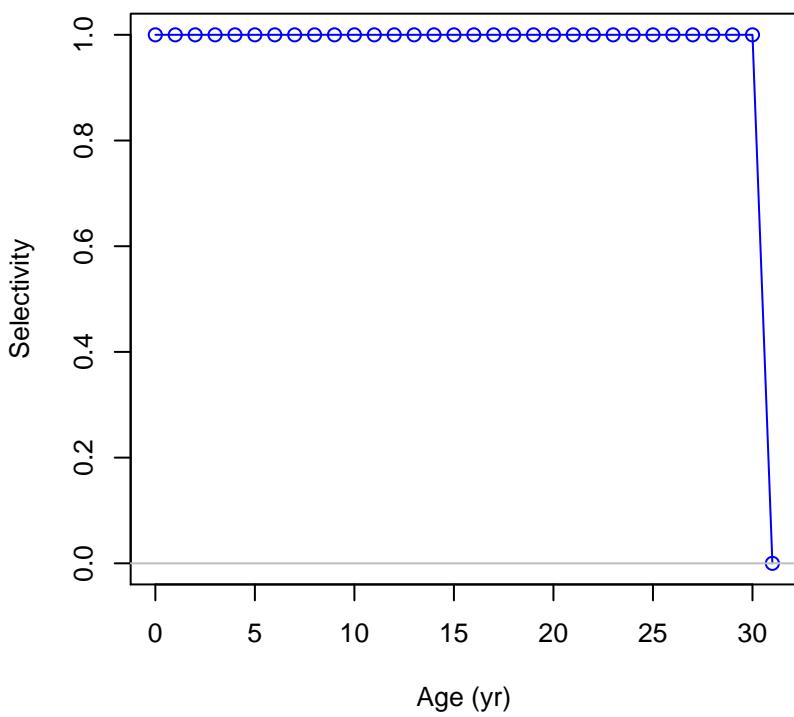
**Male ending year selectivity for F17\_IATTC**



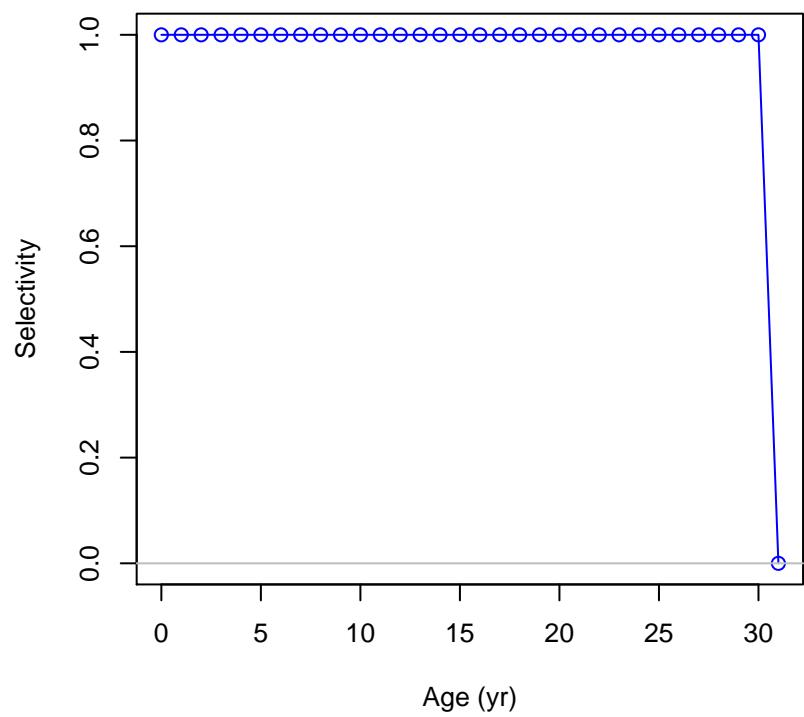
**Male ending year selectivity for F18\_JPN\_SSII**



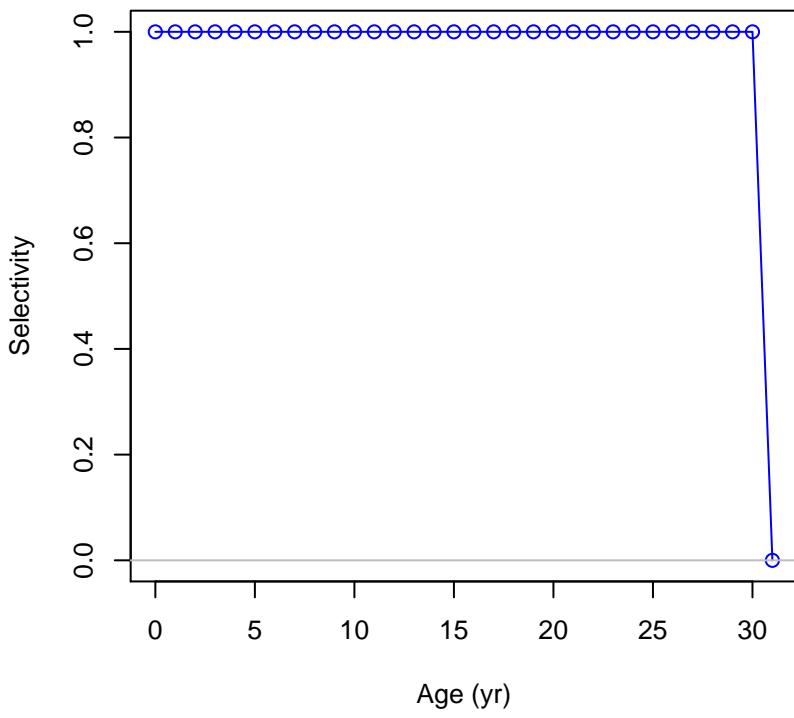
**Female ending year selectivity for S1\_US\_SS**



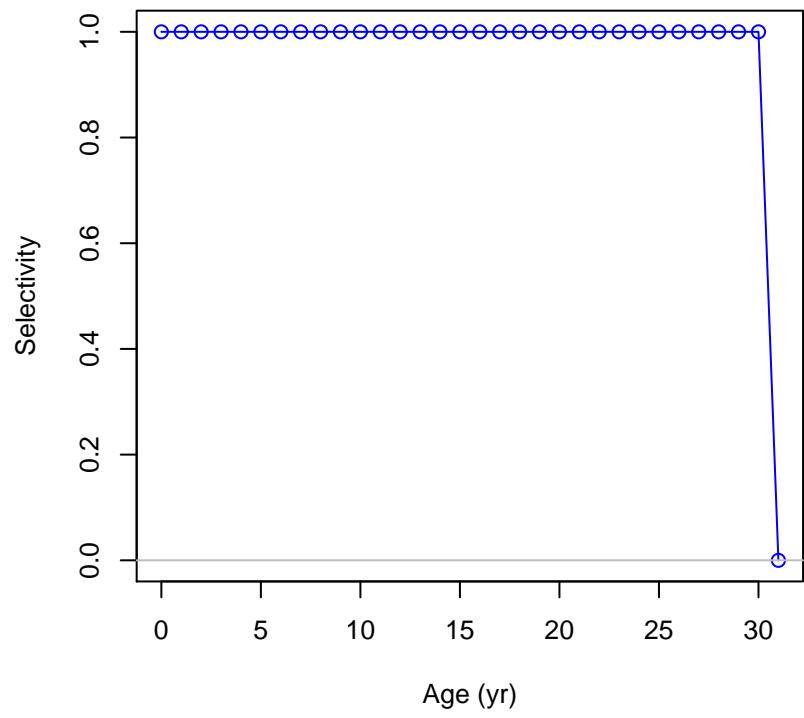
**Female ending year selectivity for S2\_US\_DS**



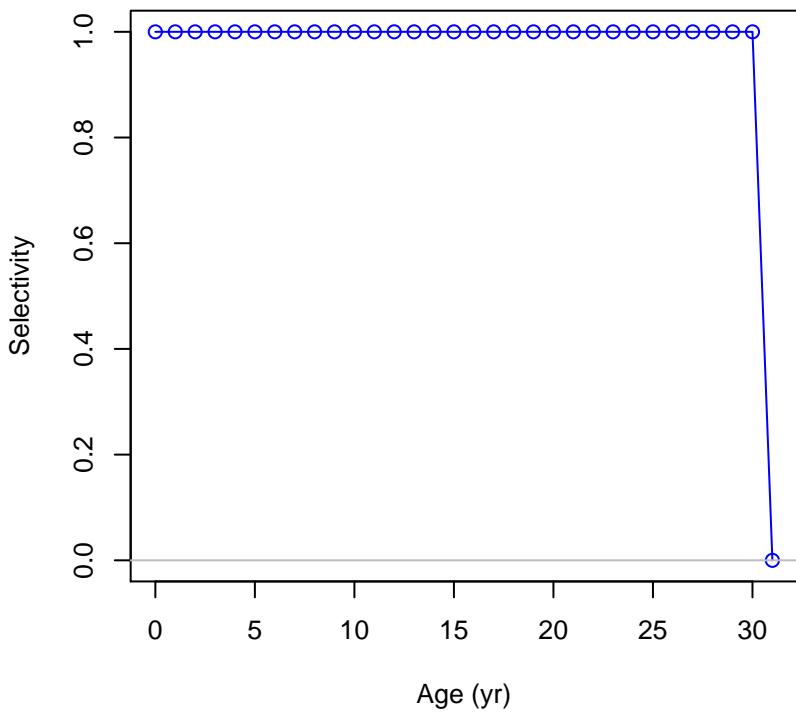
**Male ending year selectivity for S1\_US\_SS**



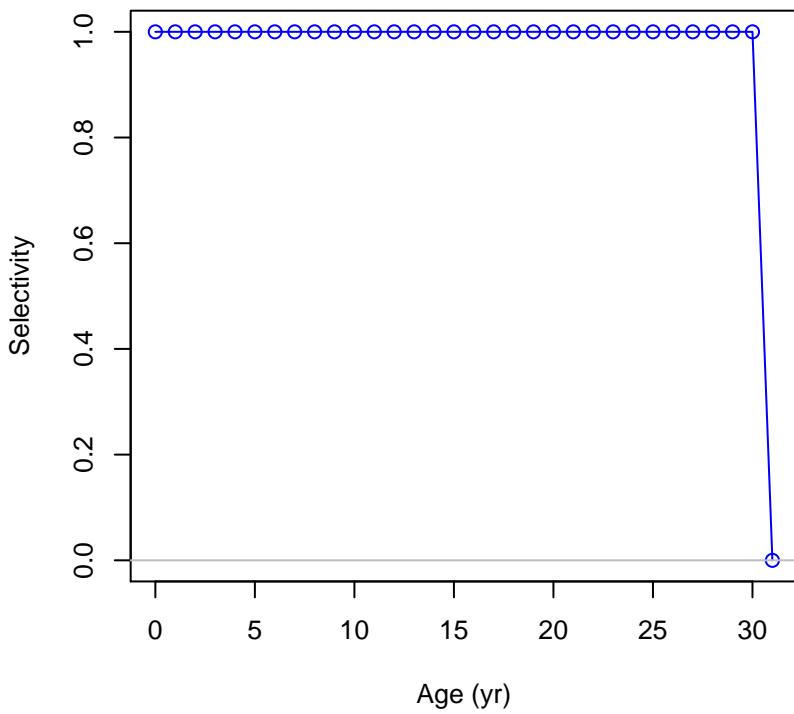
**Male ending year selectivity for S2\_US\_DS**



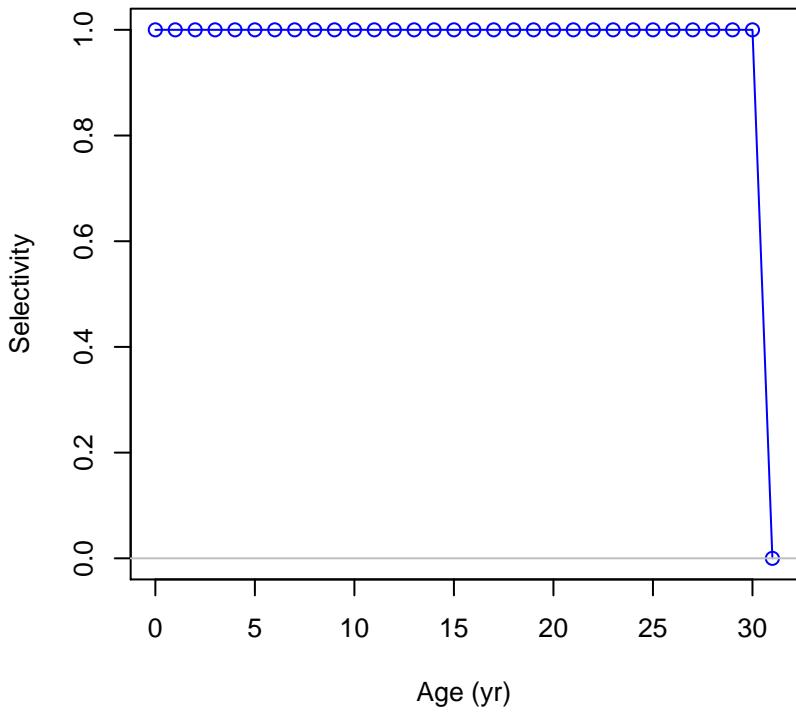
**Female ending year selectivity for S3\_TW\_LRG**



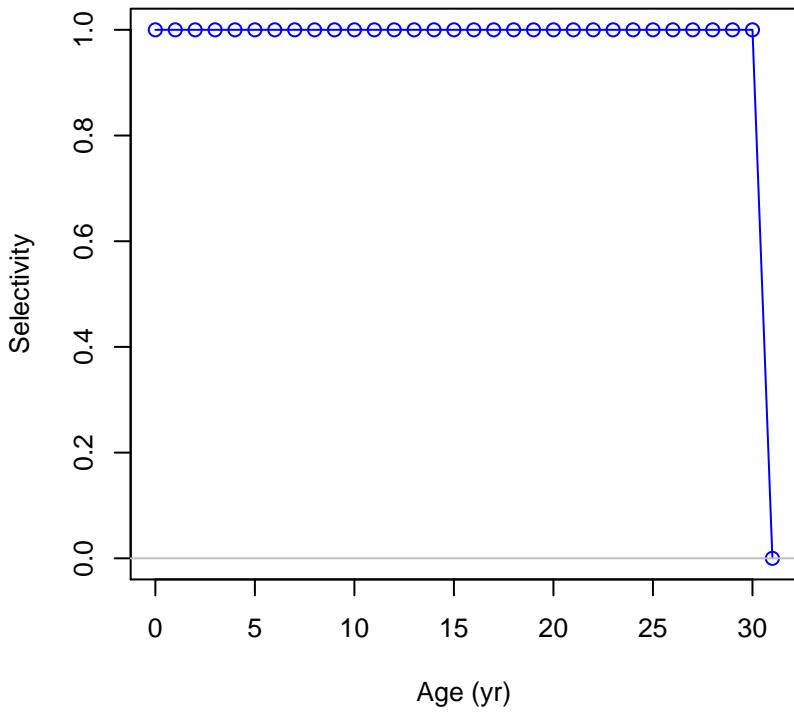
**Female ending year selectivity for S4\_JPN\_SS**



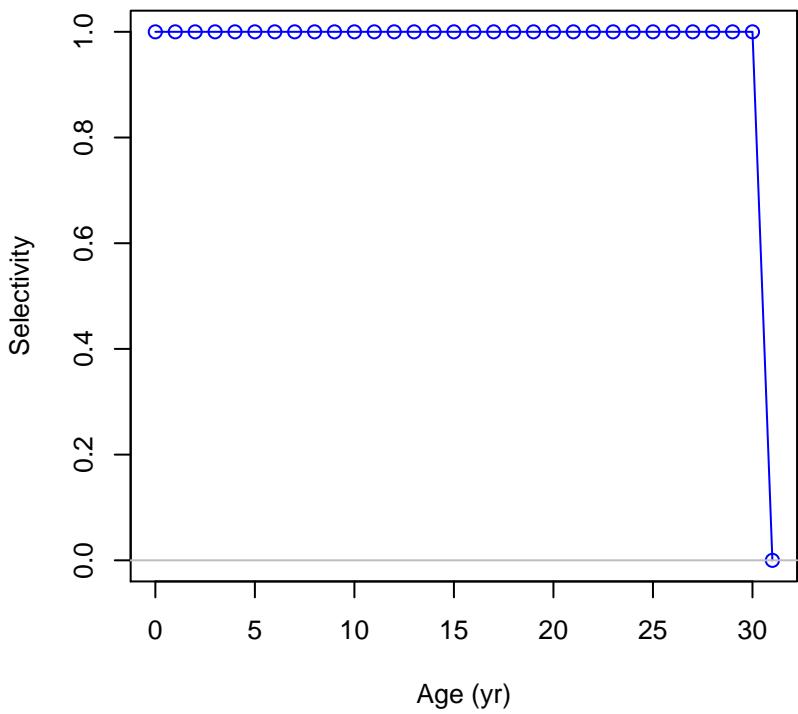
**Male ending year selectivity for S3\_TW\_LRG**



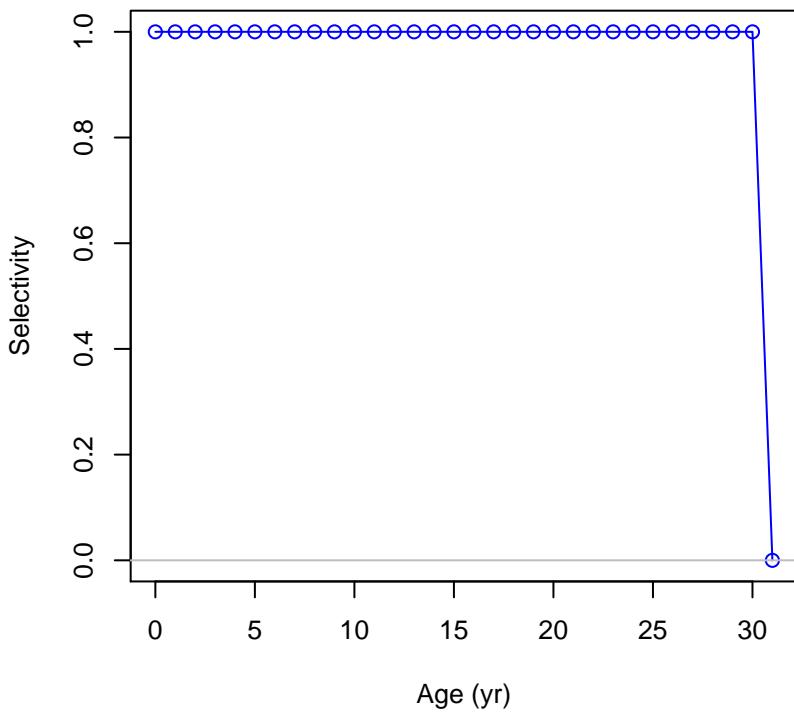
**Male ending year selectivity for S4\_JPN\_SS**



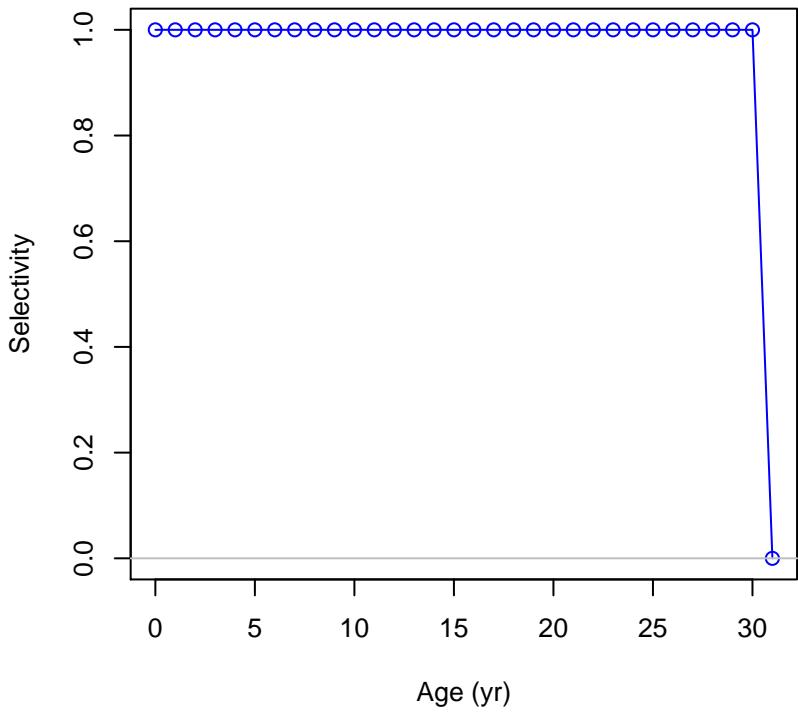
**Female ending year selectivity for S5\_JPN\_RTV**



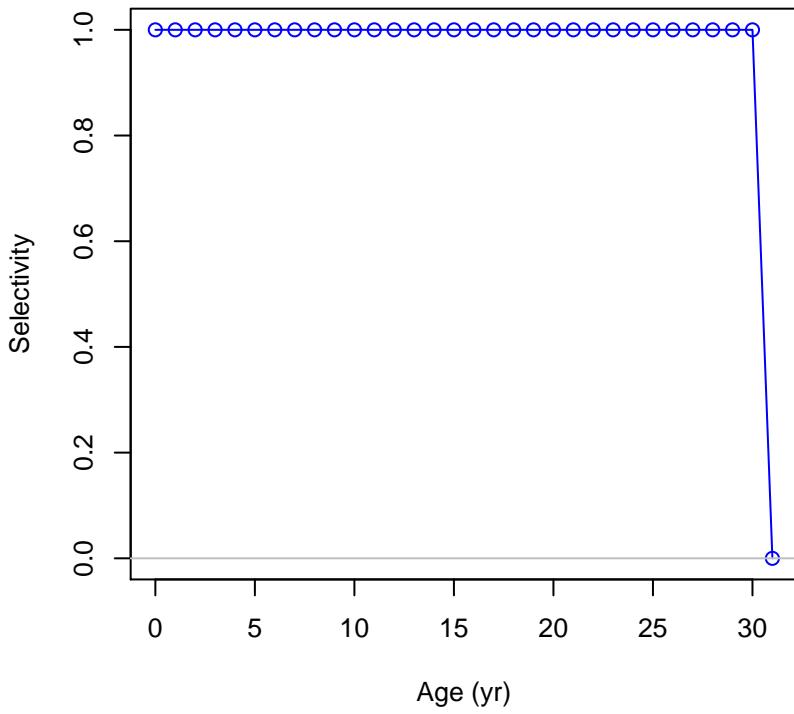
**Female ending year selectivity for S6\_JPN\_OBS**



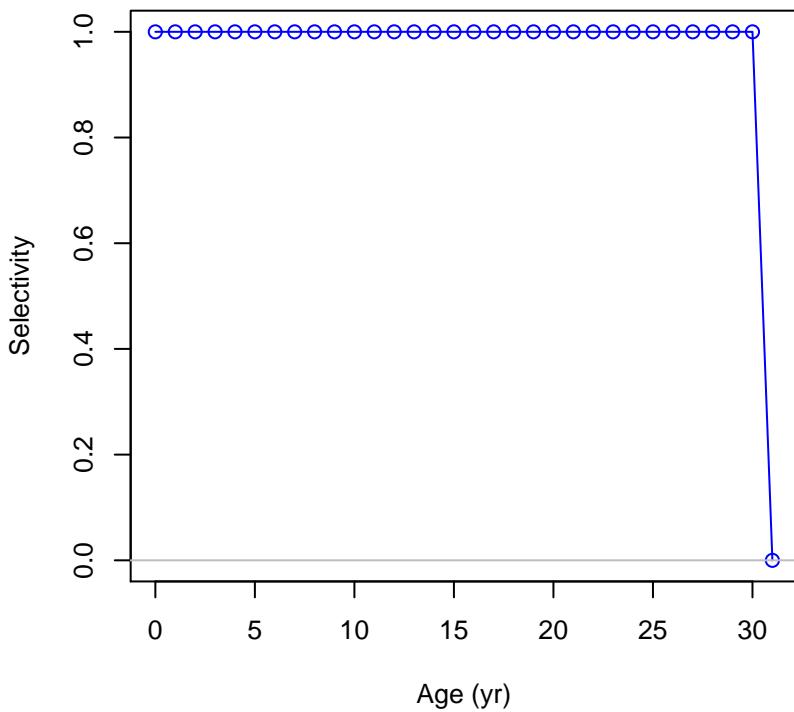
**Male ending year selectivity for S5\_JPN\_RTV**



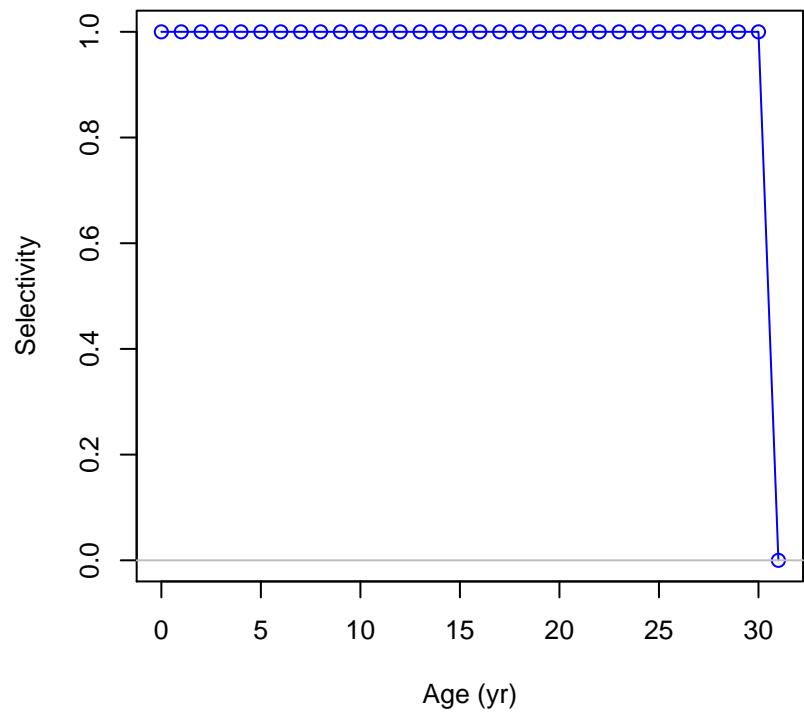
**Male ending year selectivity for S6\_JPN\_OBS**



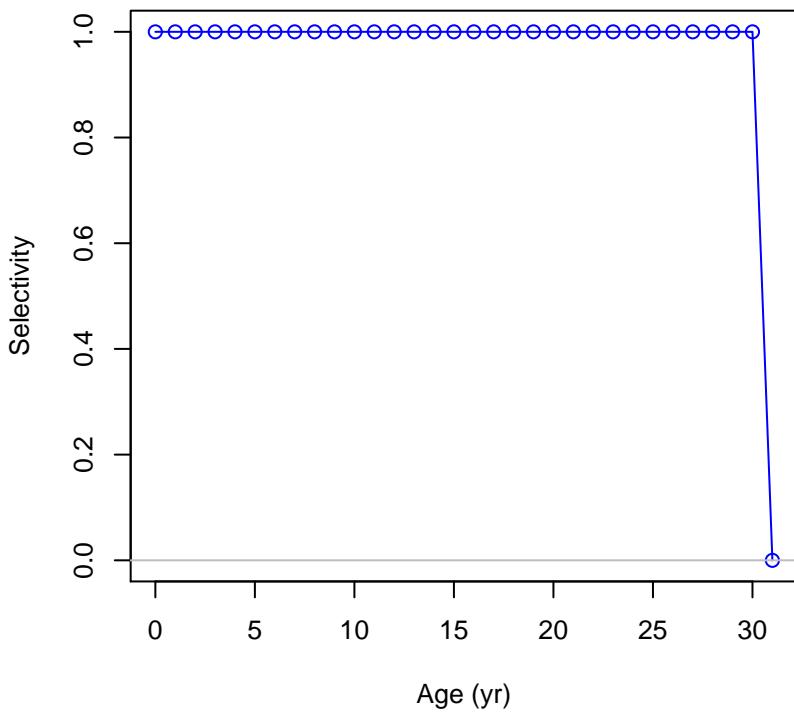
**Female ending year selectivity for S7\_JPN\_GEO**



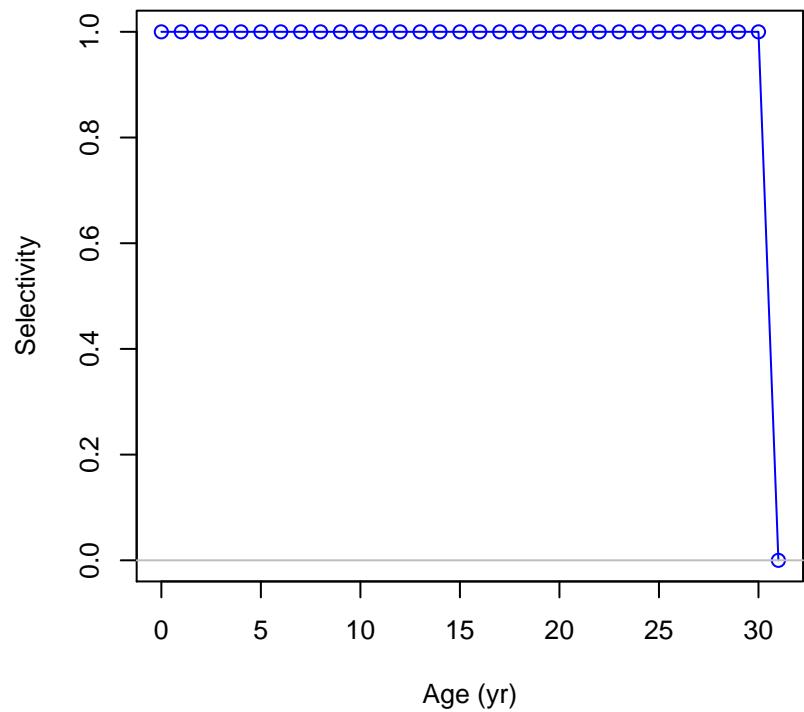
**Female ending year selectivity for S8\_MEX**



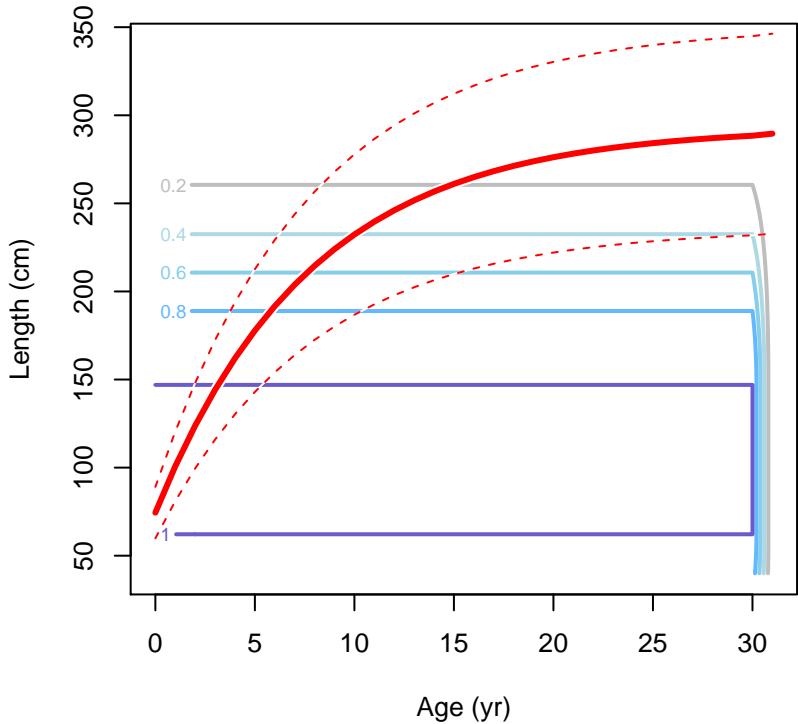
**Male ending year selectivity for S7\_JPN\_GEO**



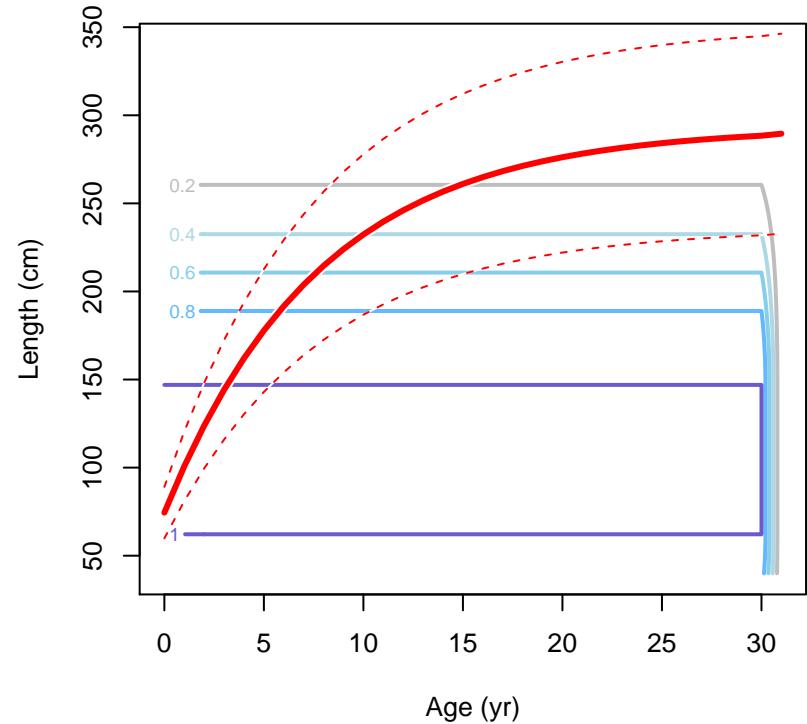
**Male ending year selectivity for S8\_MEX**



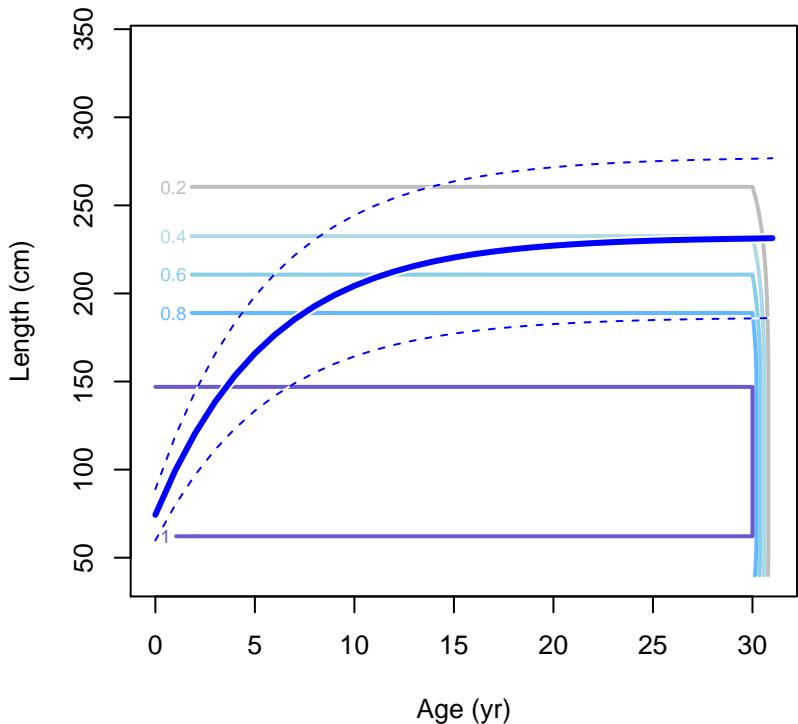
**Female ending year selectivity and growth for F1\_US\_CA**



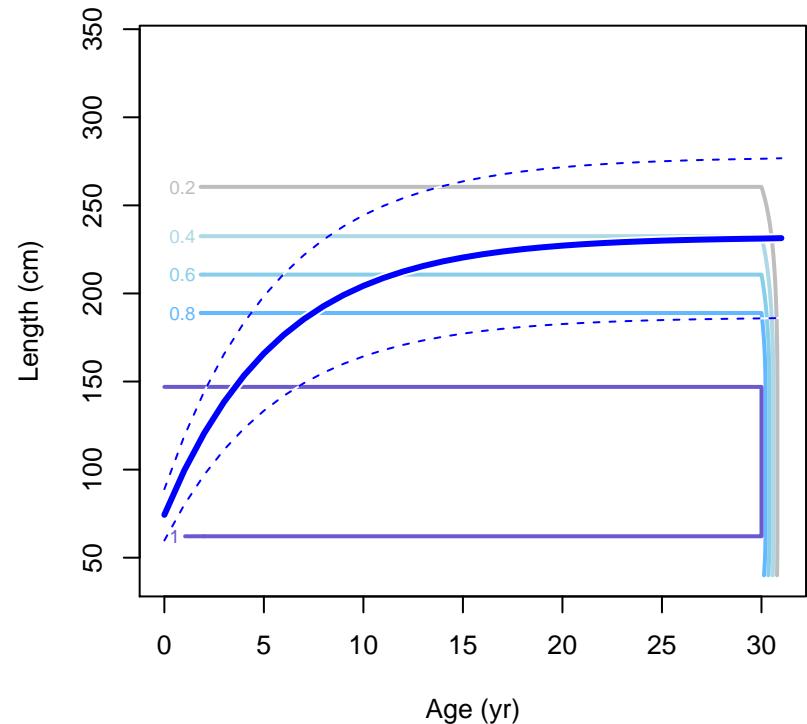
**Female ending year selectivity and growth for F2\_US\_HI\_SS**



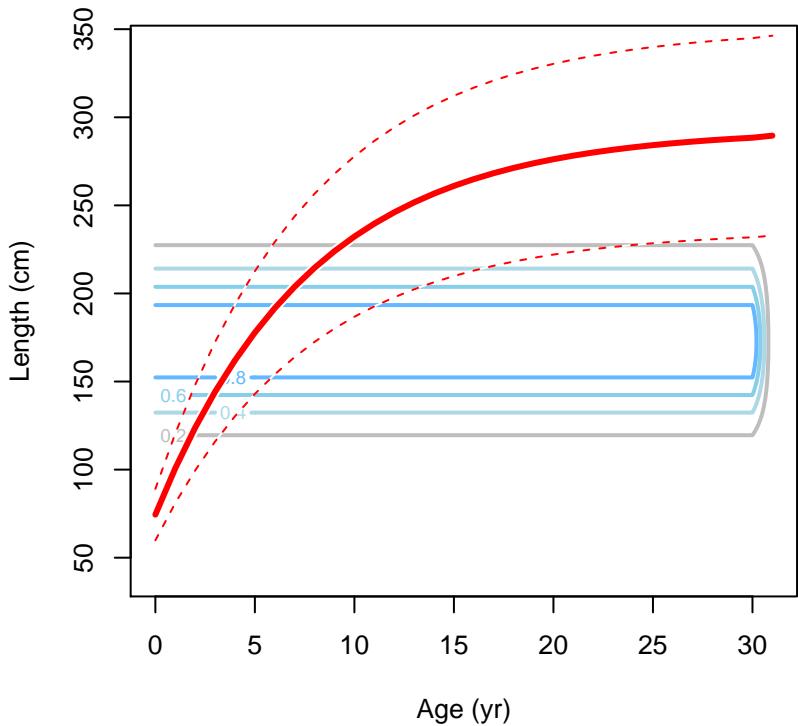
**Male ending year selectivity and growth for F1\_US\_CA**



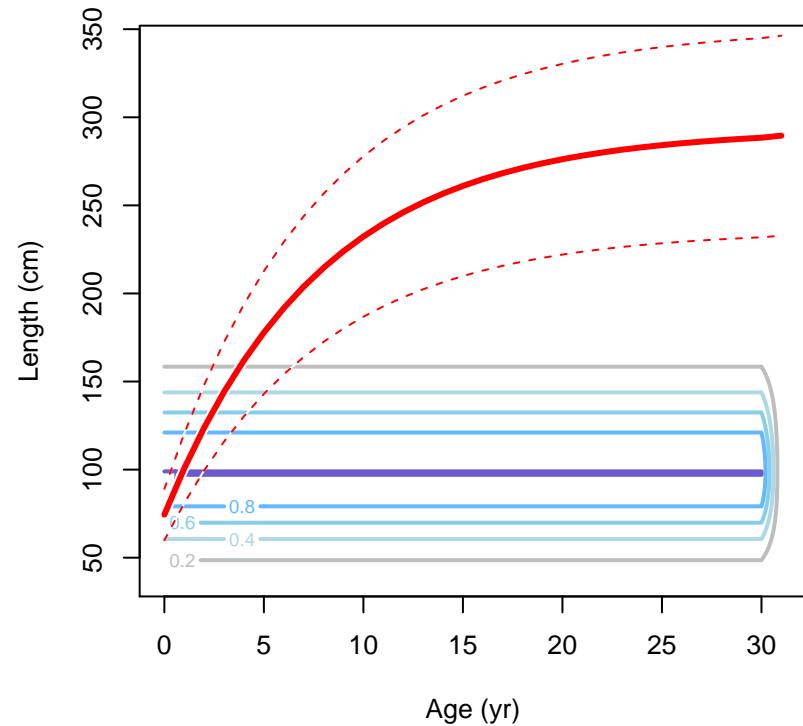
**Male ending year selectivity and growth for F2\_US\_HI\_SS**



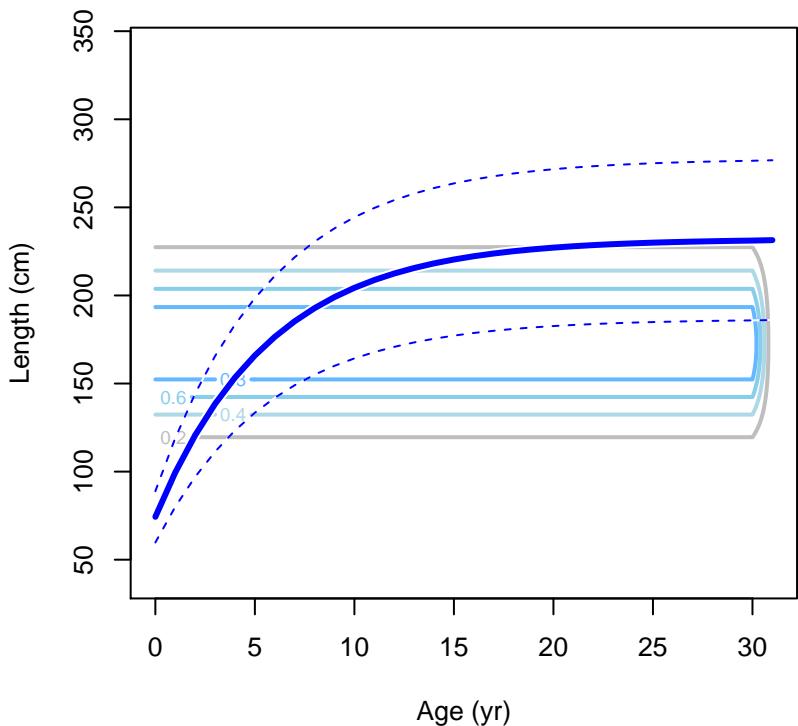
**Female ending year selectivity and growth for F3\_US\_HI\_DS**



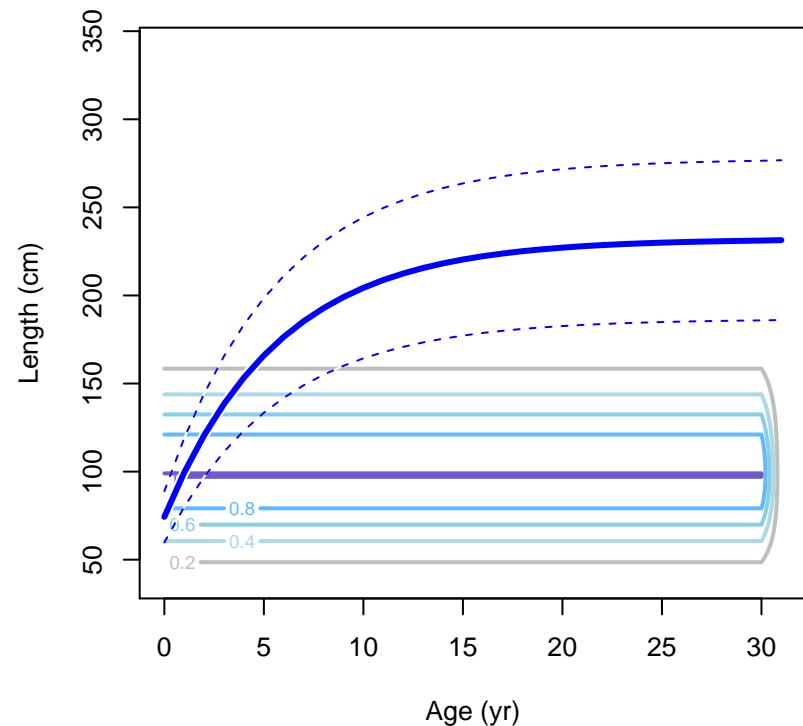
**Female ending year selectivity and growth for F4\_US\_DGN**



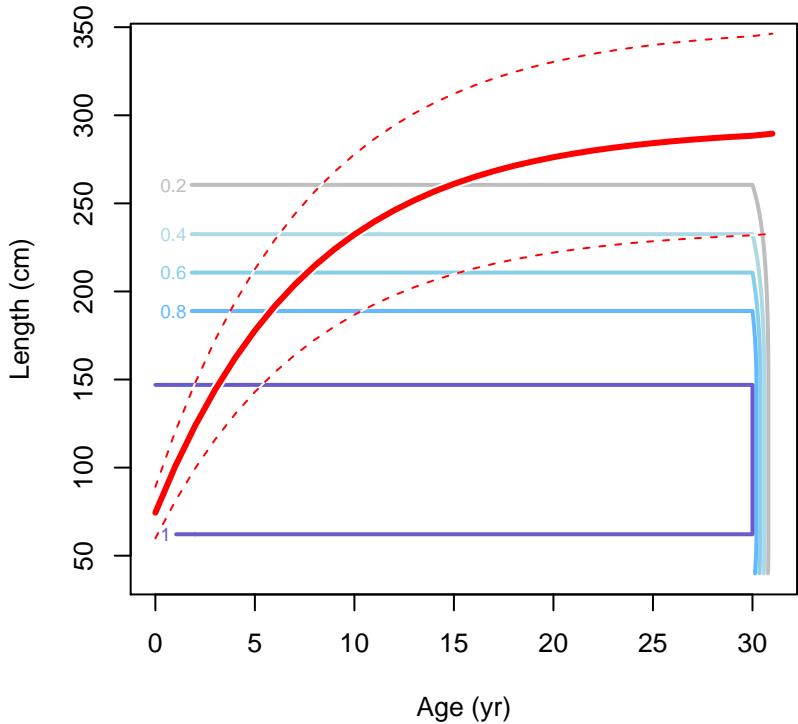
**Male ending year selectivity and growth for F3\_US\_HI\_DS**



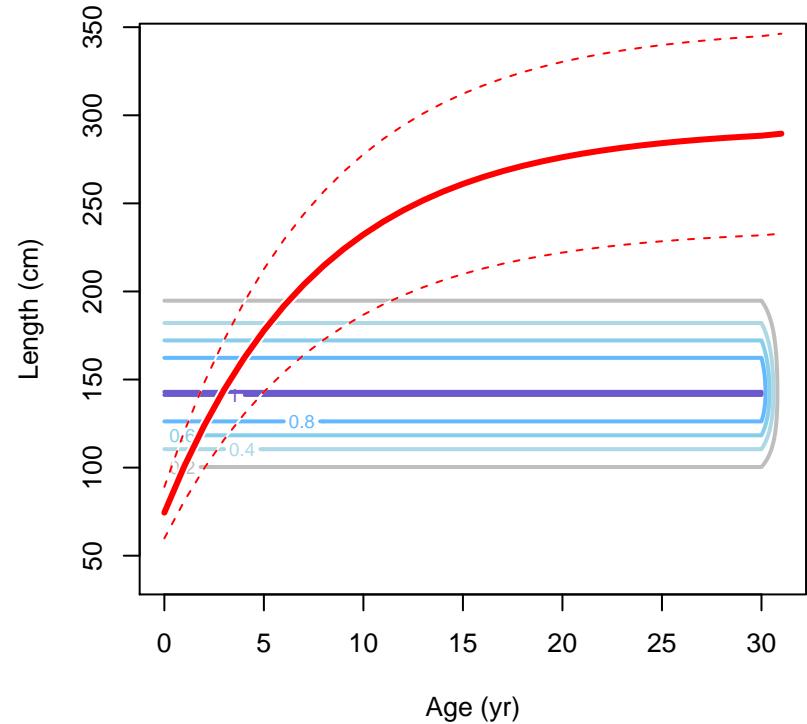
**Male ending year selectivity and growth for F4\_US\_DGN**



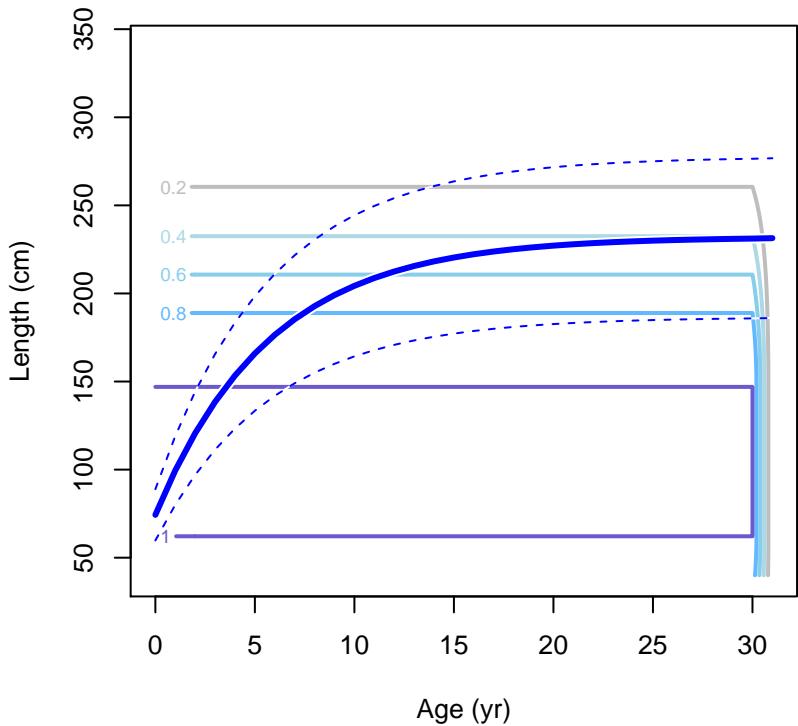
**Female ending year selectivity and growth for F5\_US\_REC**



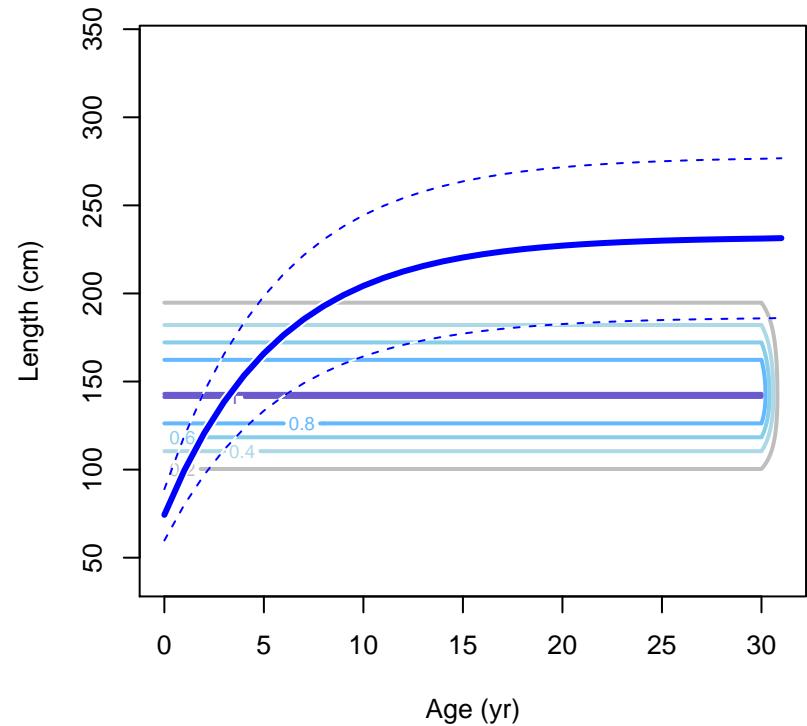
**Female ending year selectivity and growth for F6\_TW\_LRG\_N**



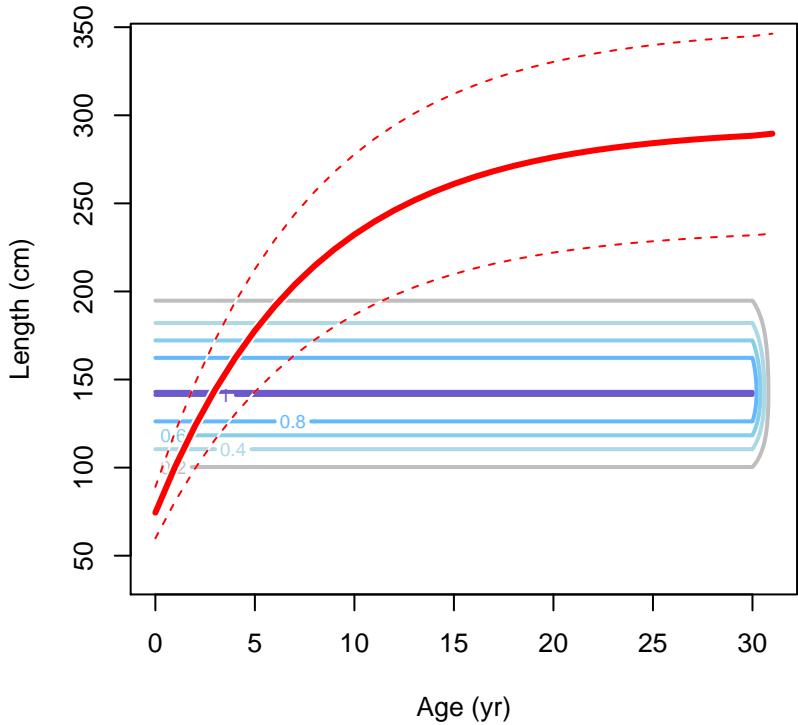
**Male ending year selectivity and growth for F5\_US\_REC**



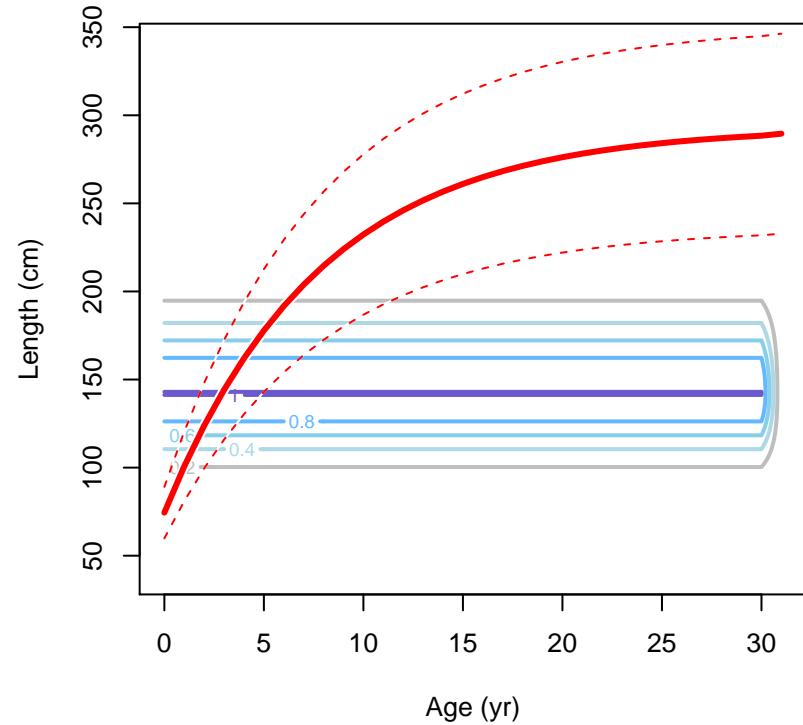
**Male ending year selectivity and growth for F6\_TW\_LRG\_N**



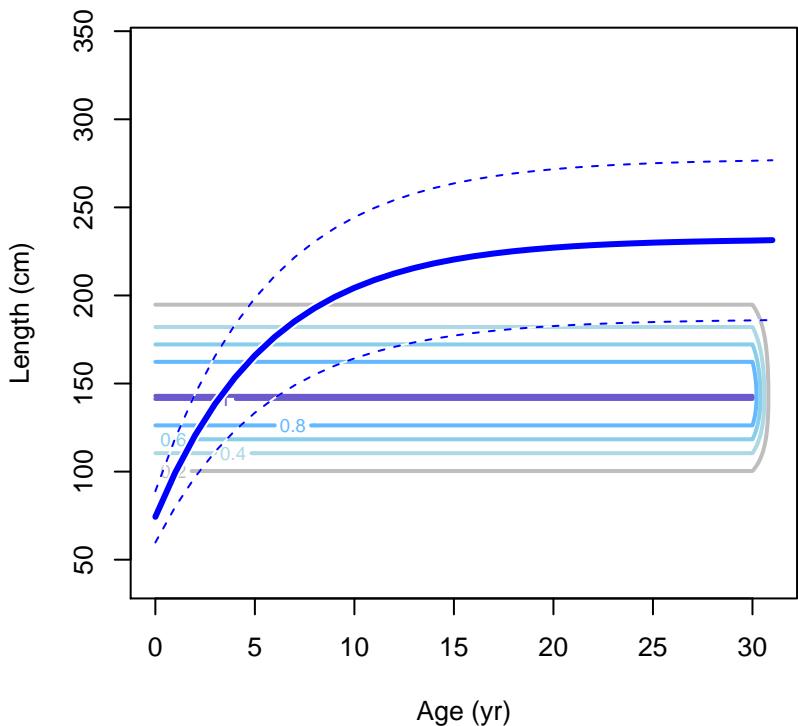
**Female ending year selectivity and growth for F7\_TW\_LRG\_S**



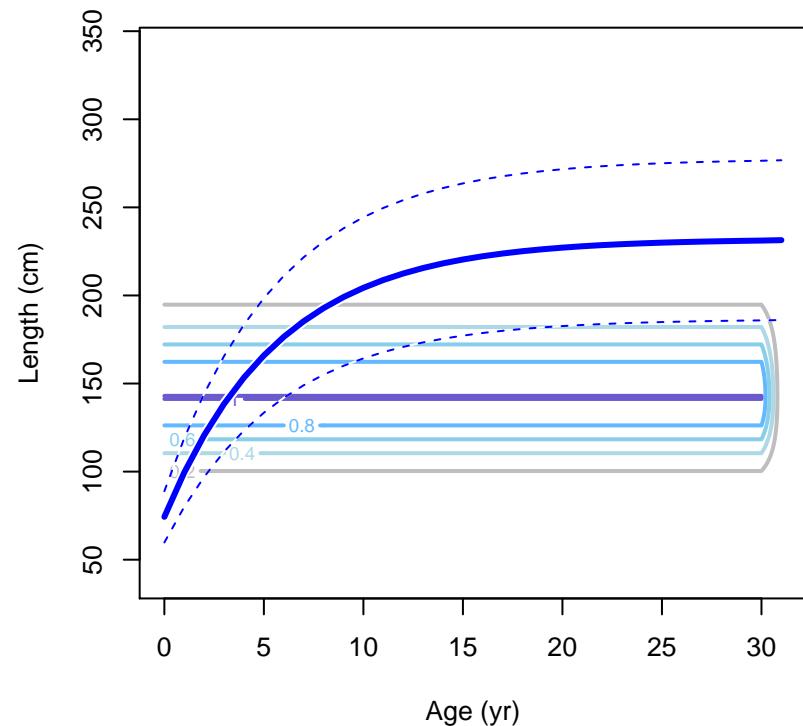
**Female ending year selectivity and growth for F8\_TW\_SML**



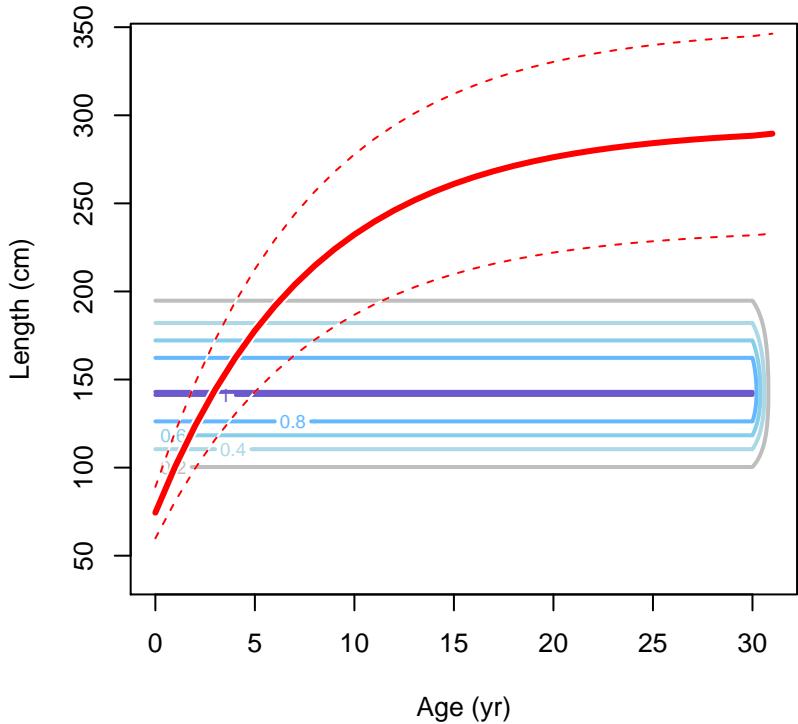
**Male ending year selectivity and growth for F7\_TW\_LRG\_S**



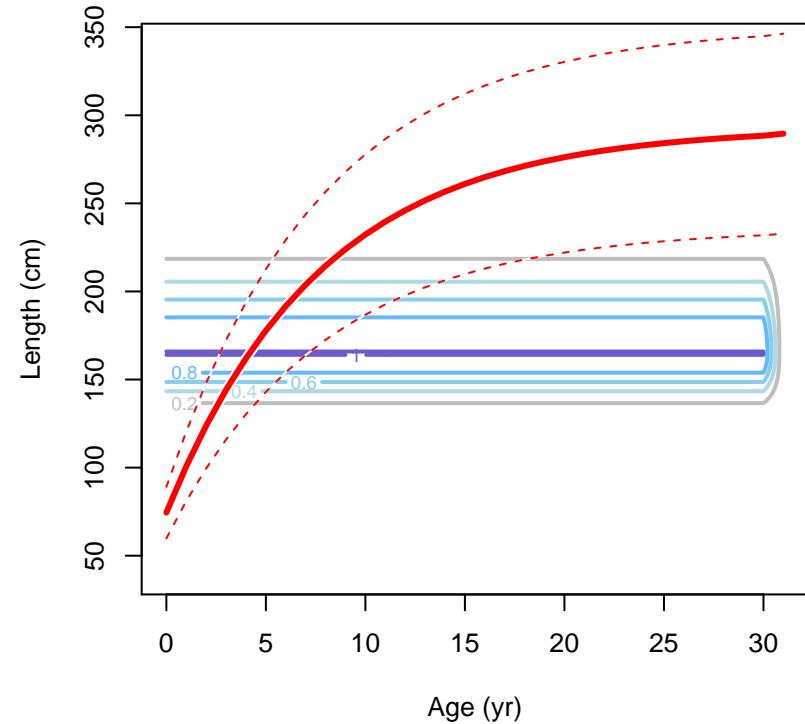
**Male ending year selectivity and growth for F8\_TW\_SML**



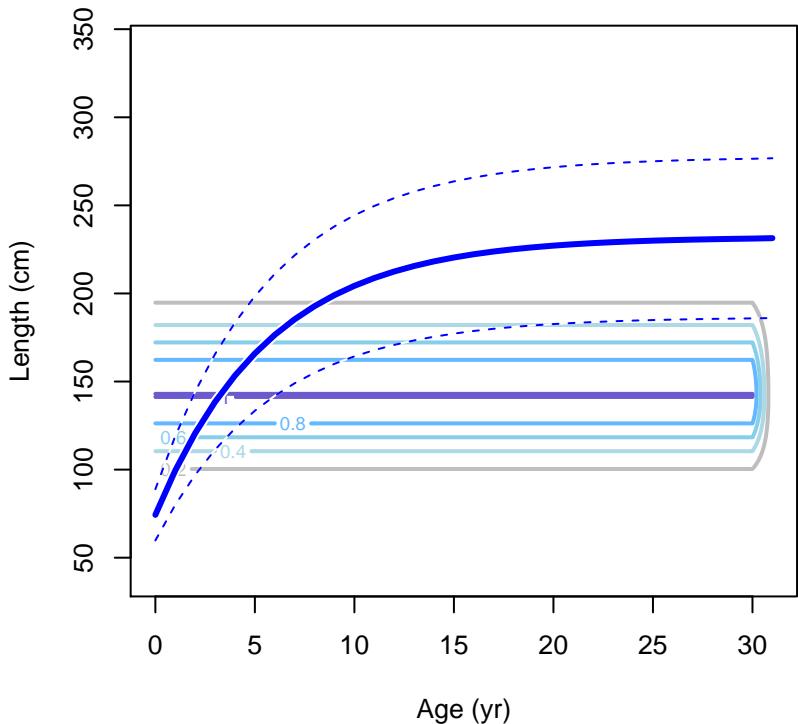
**Female ending year selectivity and growth for F9\_JPN\_SS**



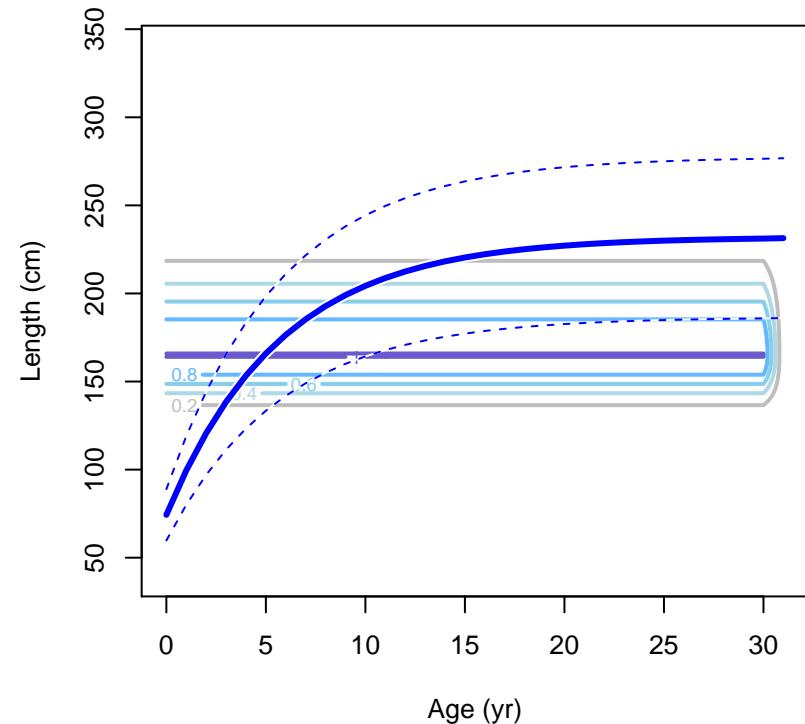
**Female ending year selectivity and growth for F10\_JPN\_DS**



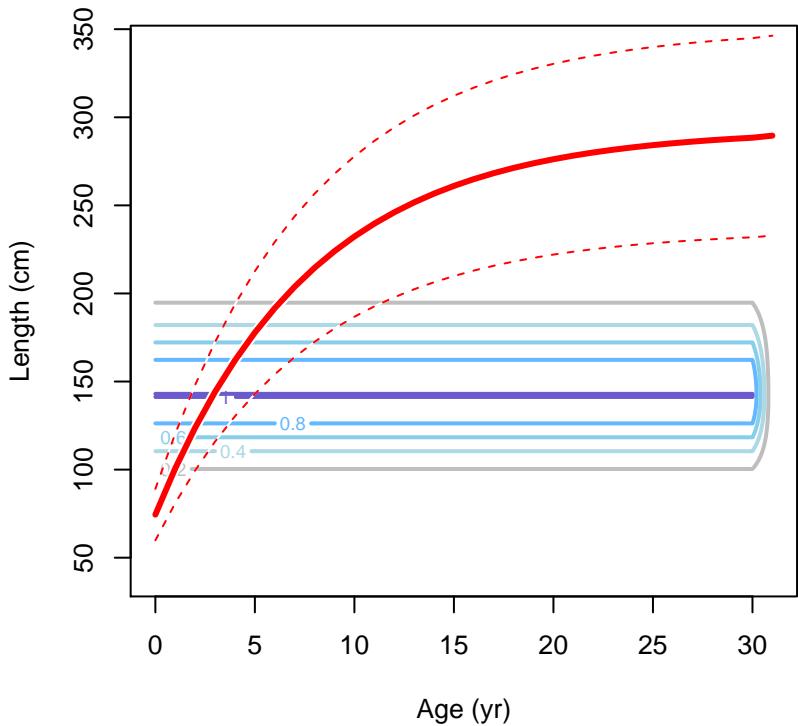
**Male ending year selectivity and growth for F9\_JPN\_SS**



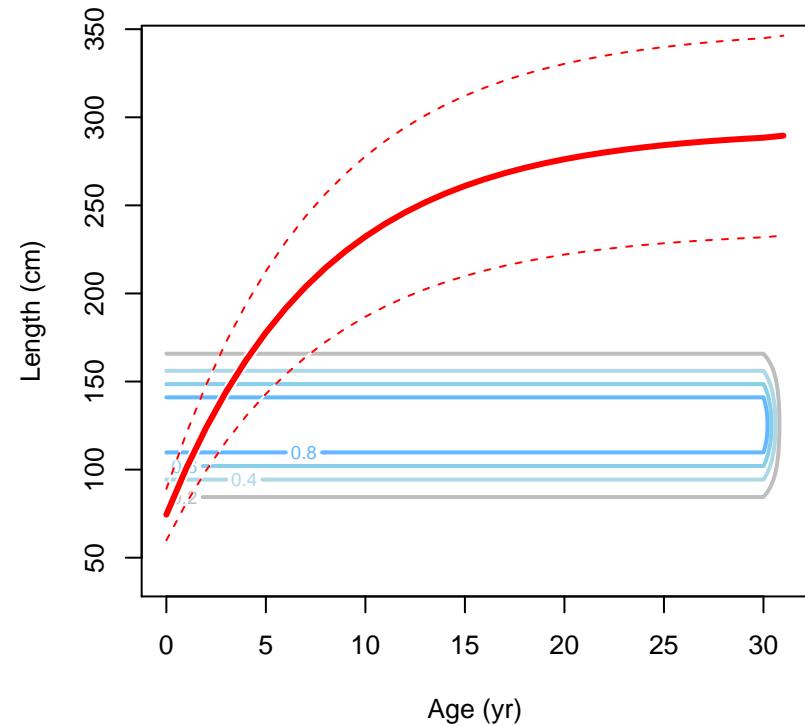
**Male ending year selectivity and growth for F10\_JPN\_DS**



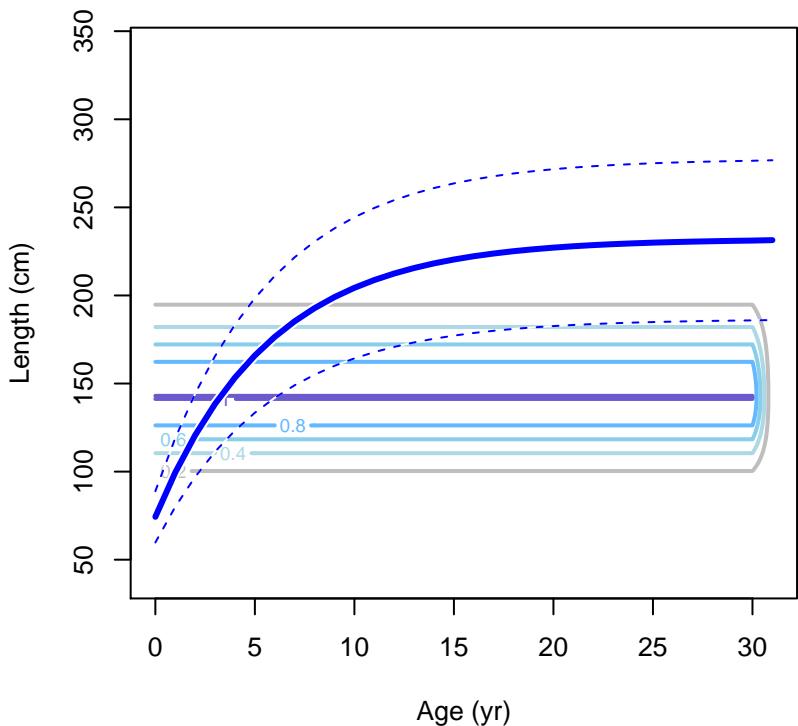
**Female ending year selectivity and growth for F11\_JPN\_CST**



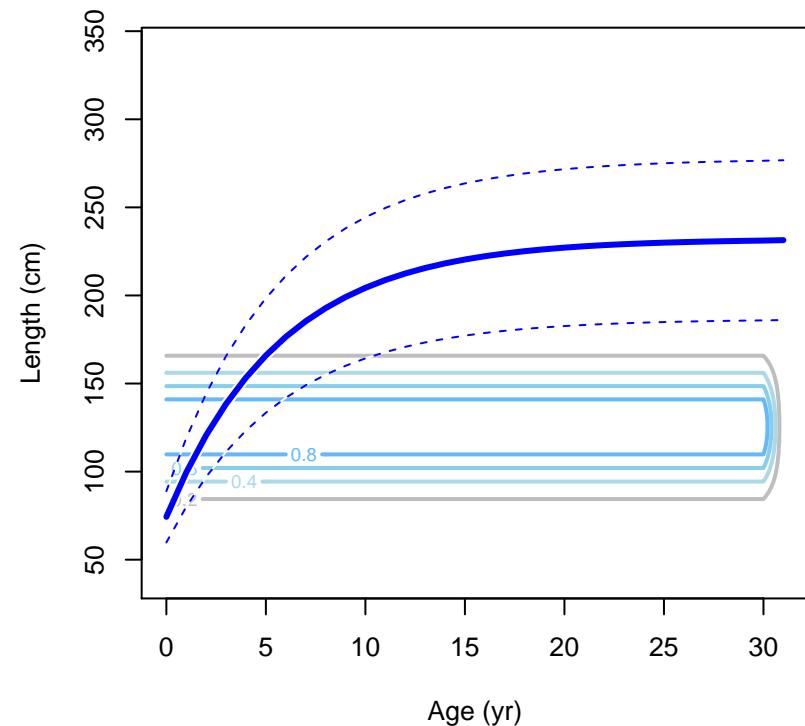
**Female ending year selectivity and growth for F12\_JPN\_DFN**



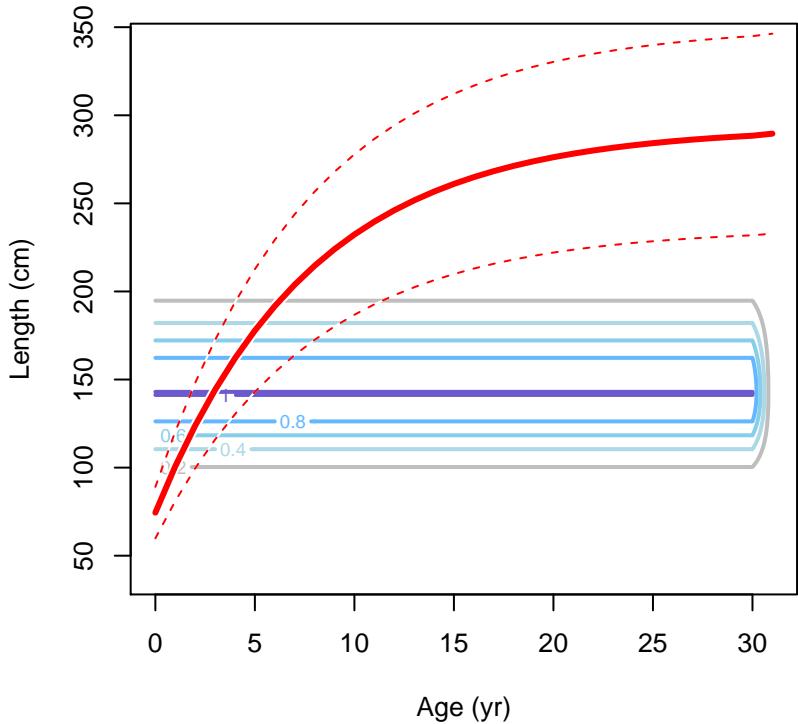
**Male ending year selectivity and growth for F11\_JPN\_CST**



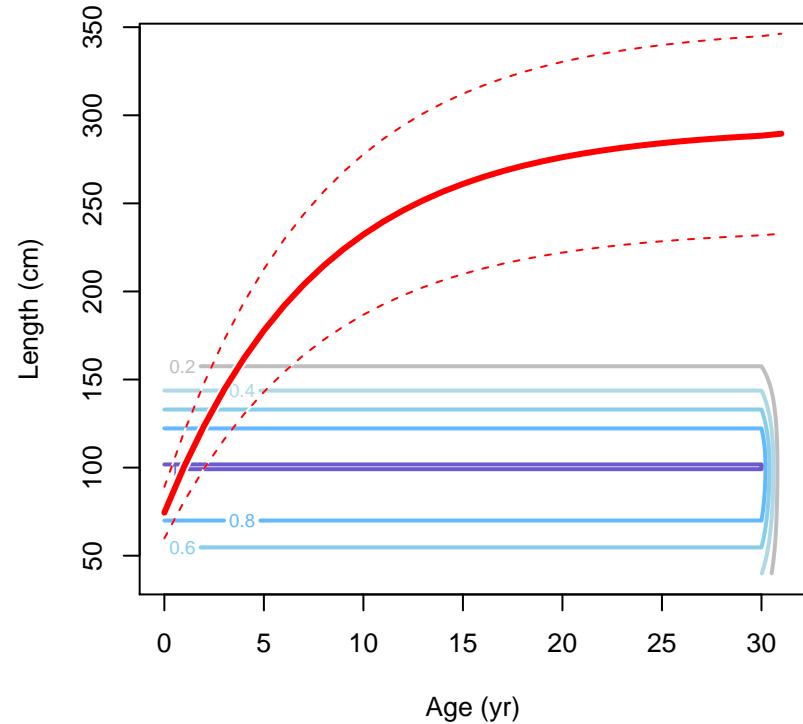
**Male ending year selectivity and growth for F12\_JPN\_DFN**



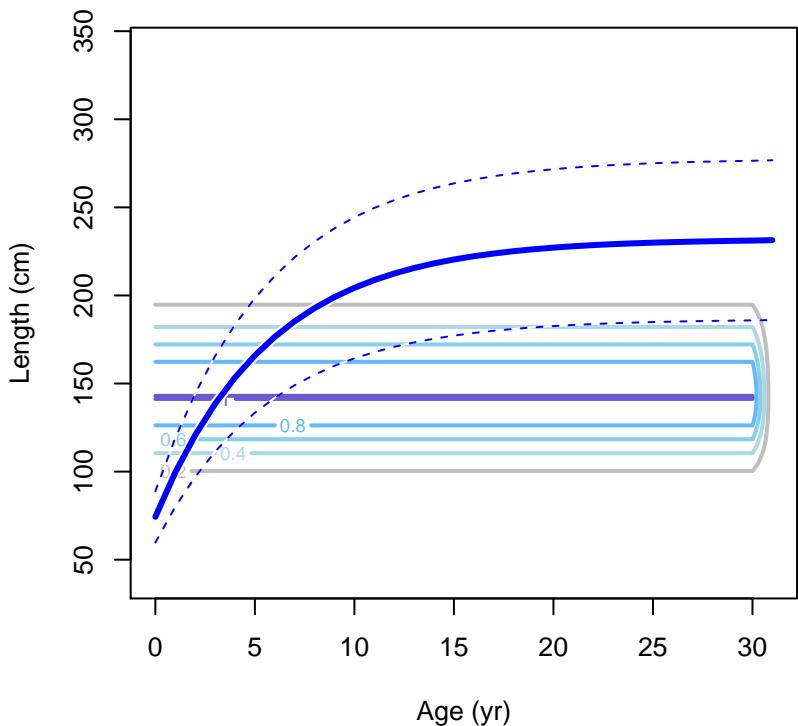
**Female ending year selectivity and growth for F13\_JPN\_OTH**



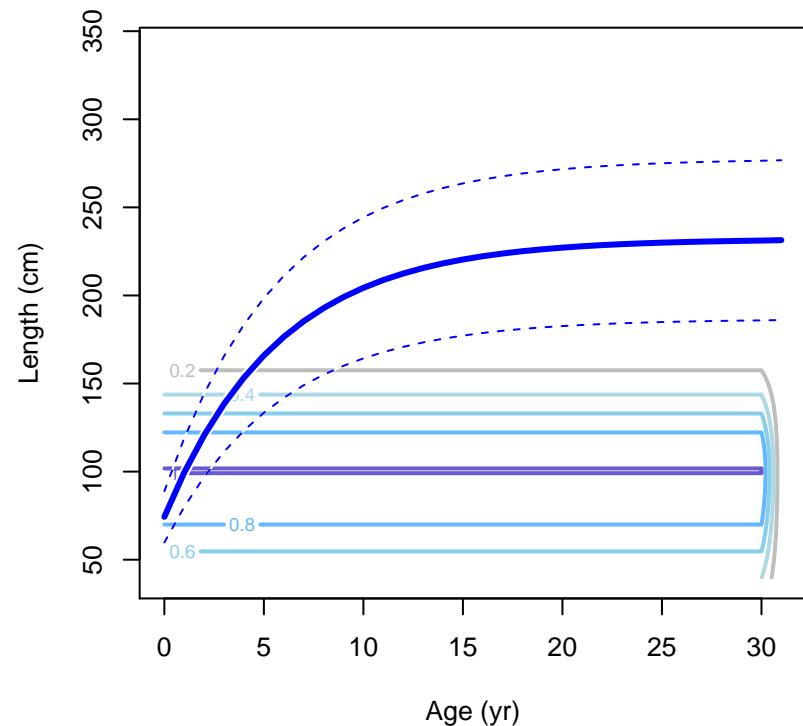
**Female ending year selectivity and growth for F14\_MEX\_NOR**



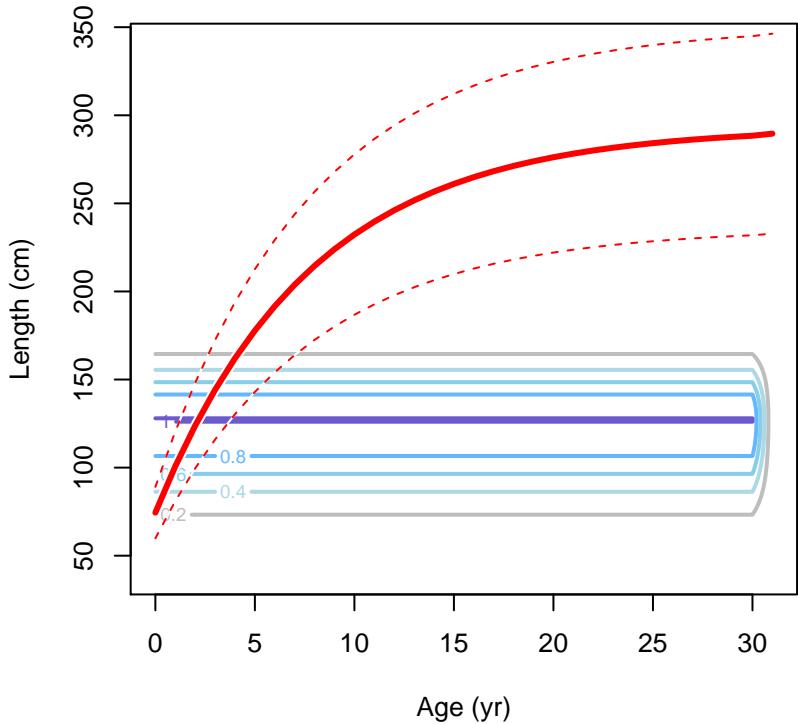
**Male ending year selectivity and growth for F13\_JPN\_OTH**



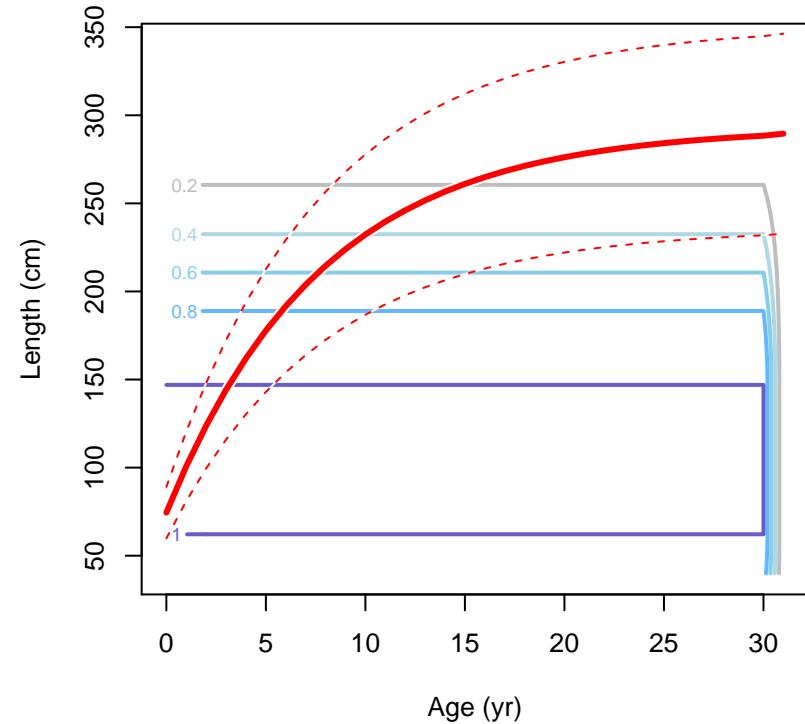
**Male ending year selectivity and growth for F14\_MEX\_NOR**



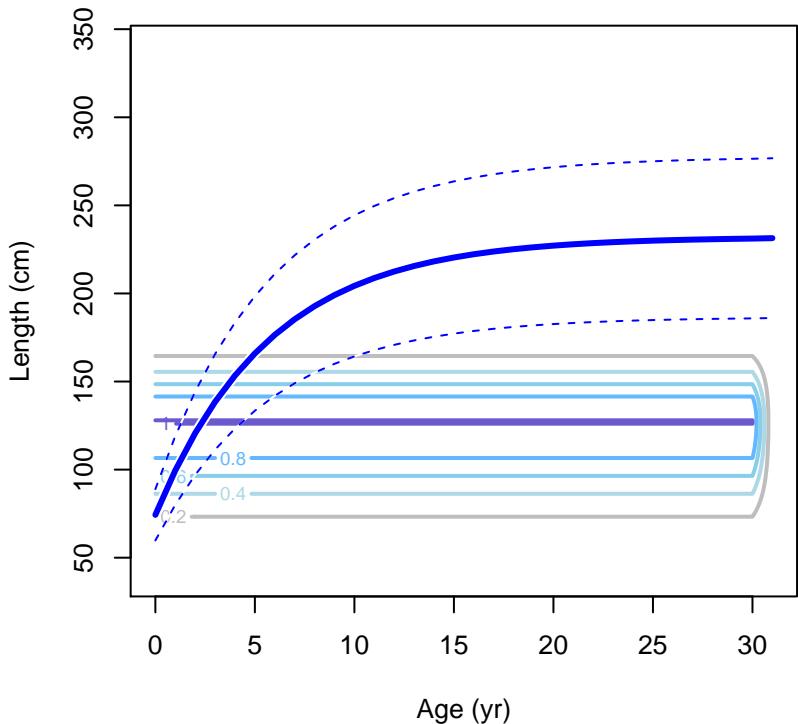
**Female ending year selectivity and growth for F15\_MEX\_SOU**



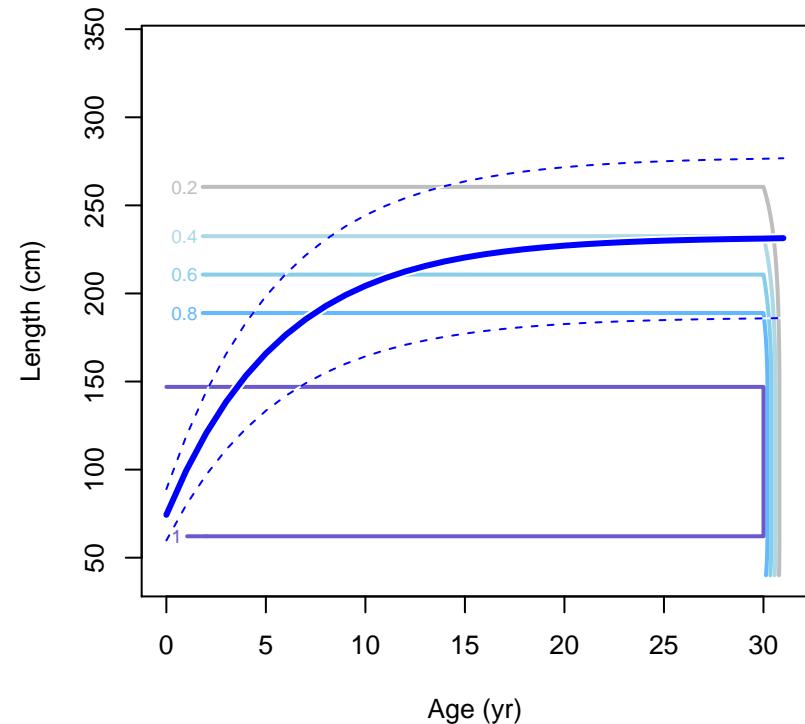
**Female ending year selectivity and growth for F16\_WCPFC**



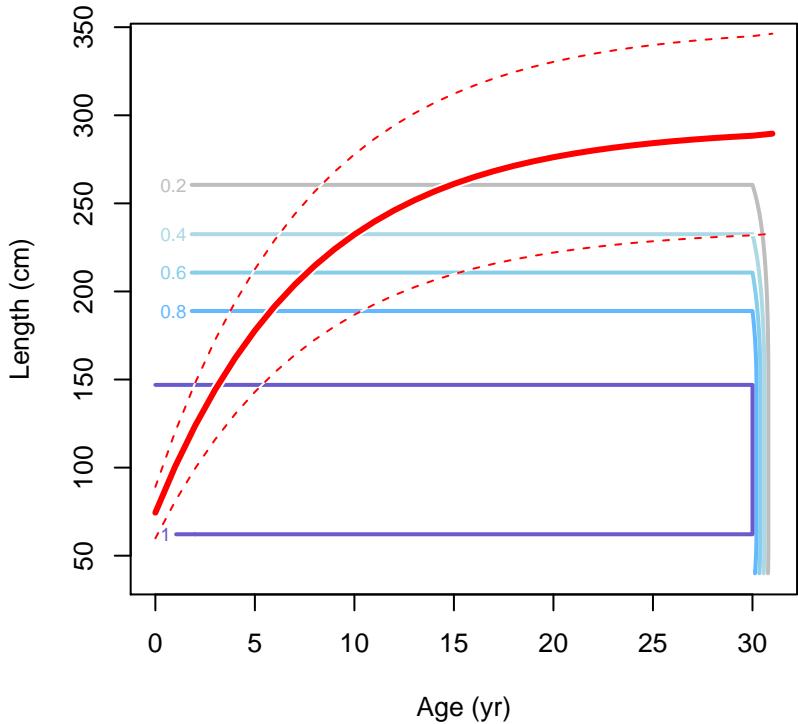
**Male ending year selectivity and growth for F15\_MEX\_SOU**



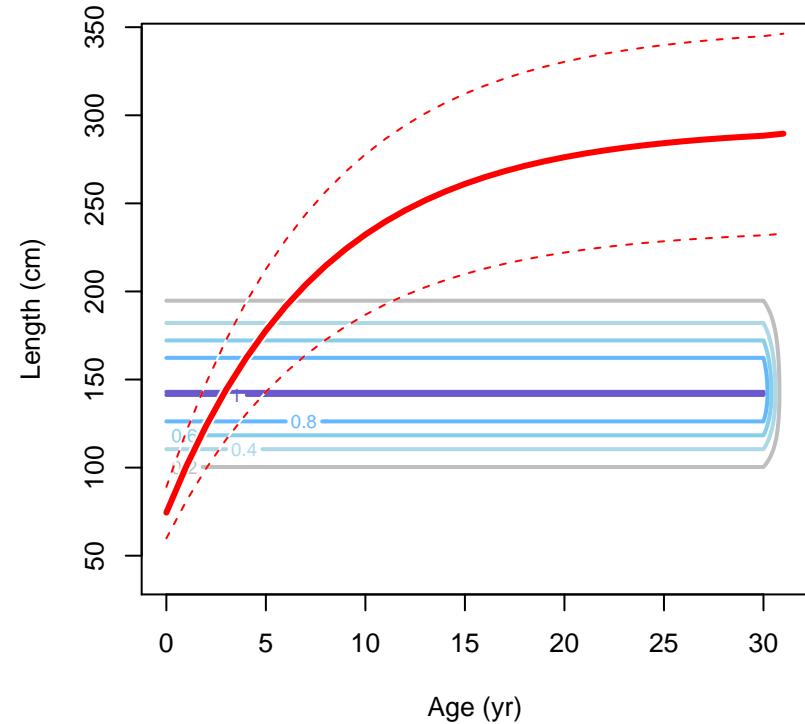
**Male ending year selectivity and growth for F16\_WCPFC**



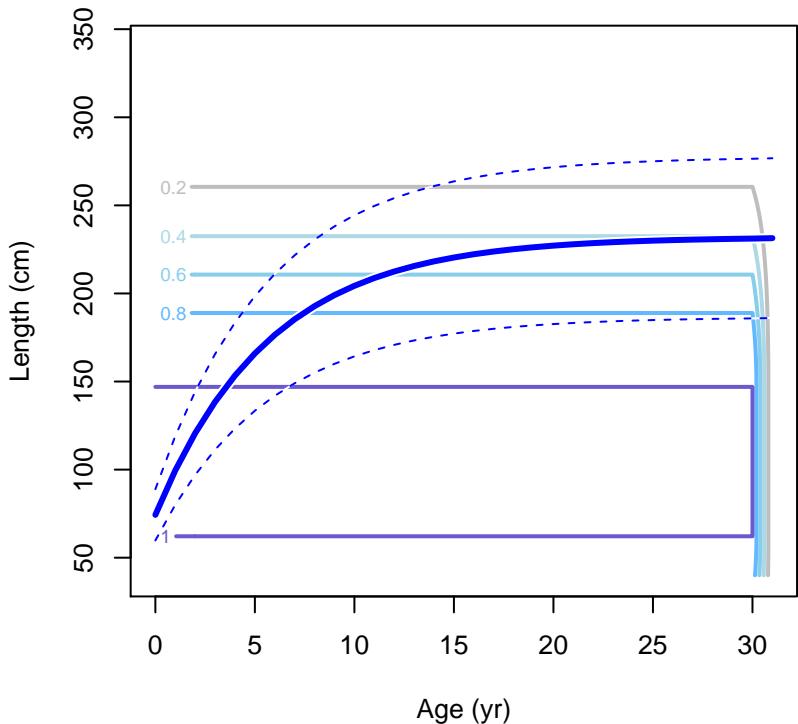
**Female ending year selectivity and growth for F17\_IATTC**



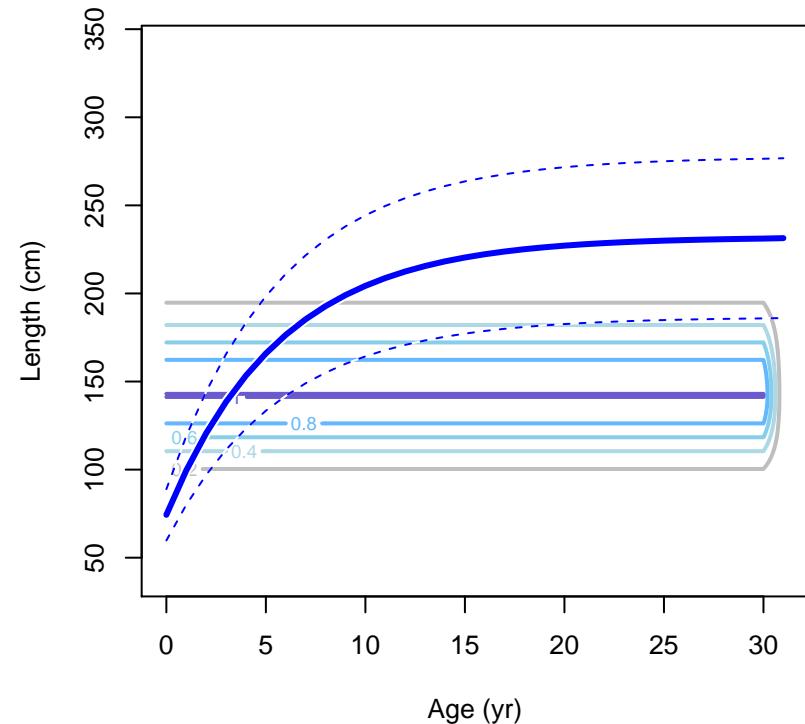
**Female ending year selectivity and growth for F18\_JPN\_SSII**



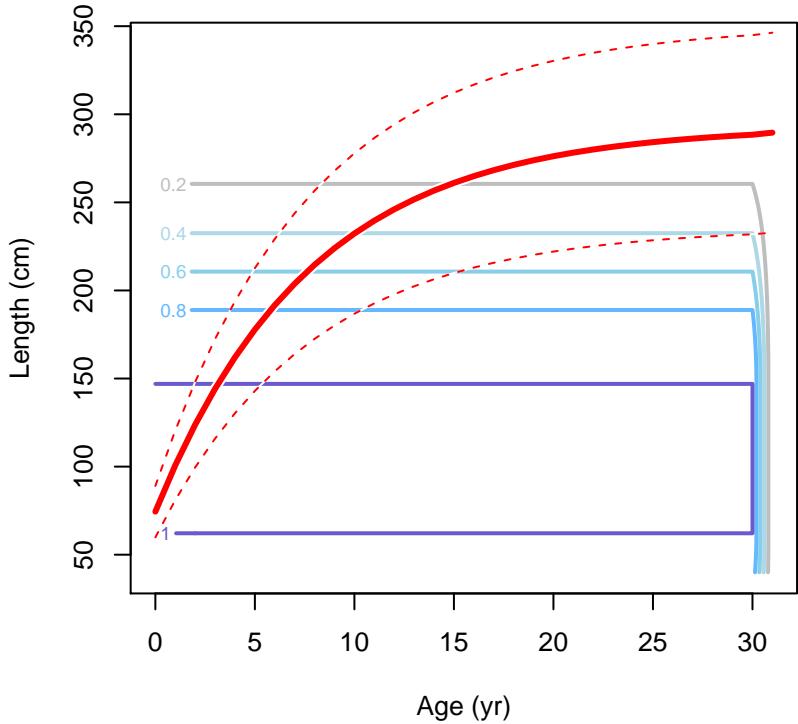
**Male ending year selectivity and growth for F17\_IATTC**



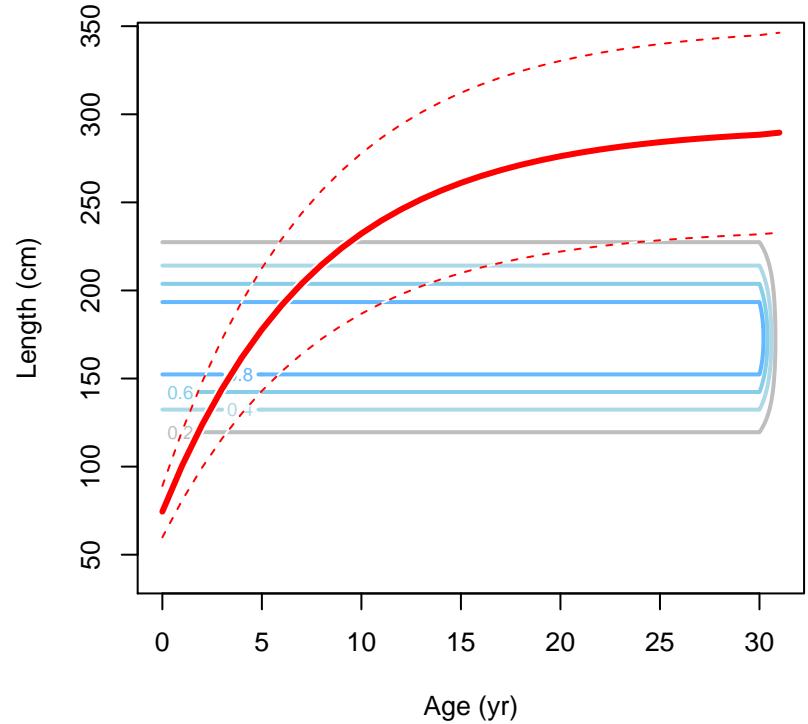
**Male ending year selectivity and growth for F18\_JPN\_SSII**



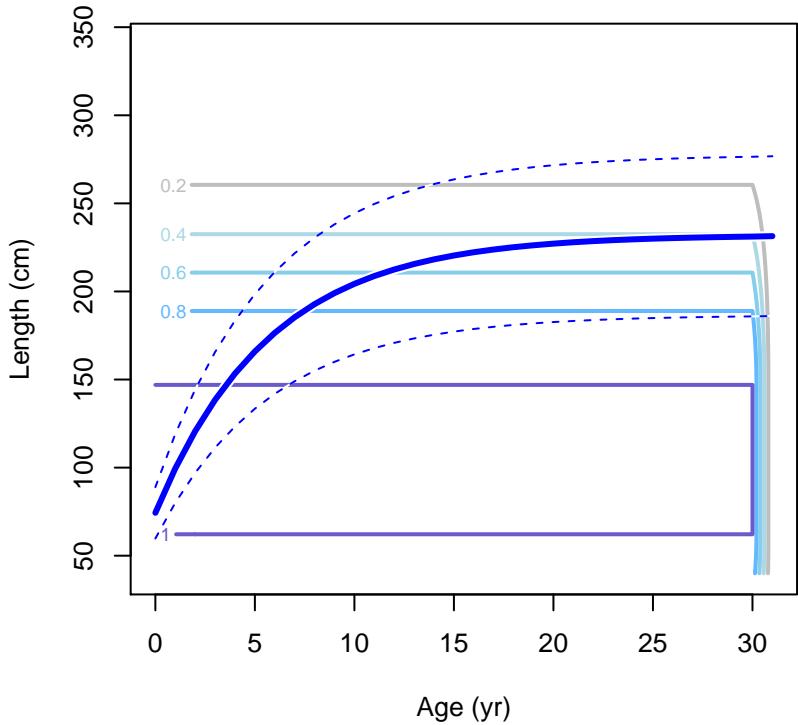
**Female ending year selectivity and growth for S1\_US\_SS**



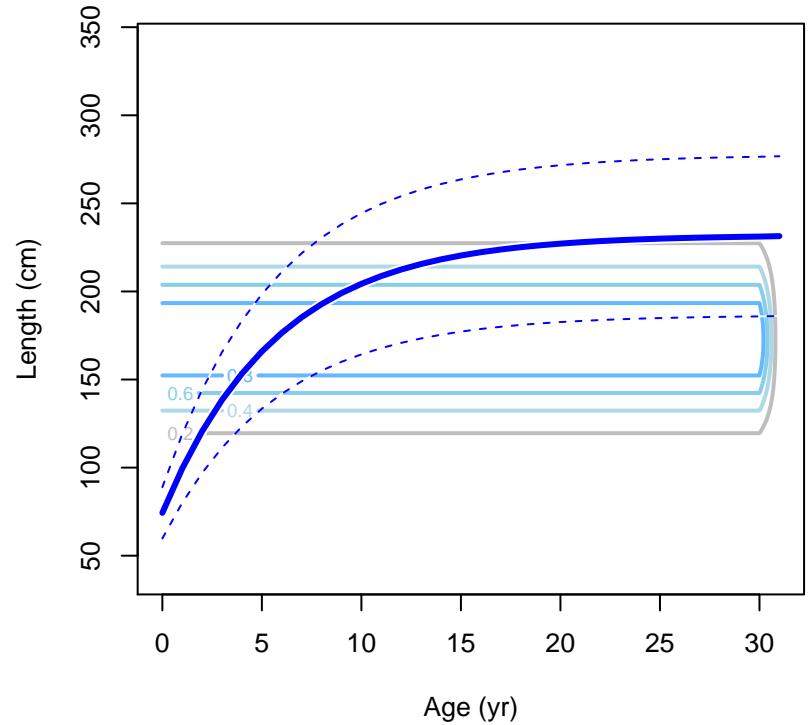
**Female ending year selectivity and growth for S2\_US\_DS**



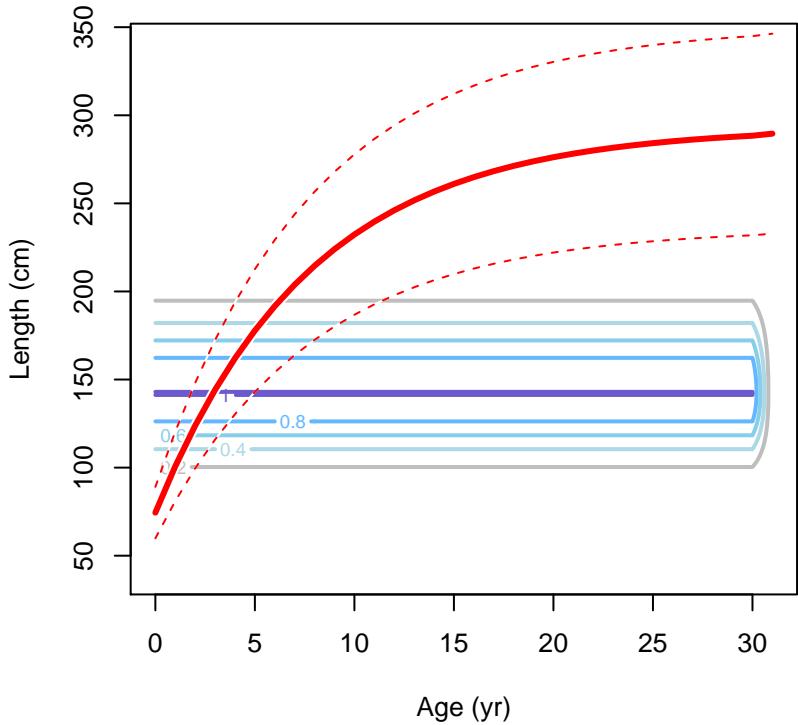
**Male ending year selectivity and growth for S1\_US\_SS**



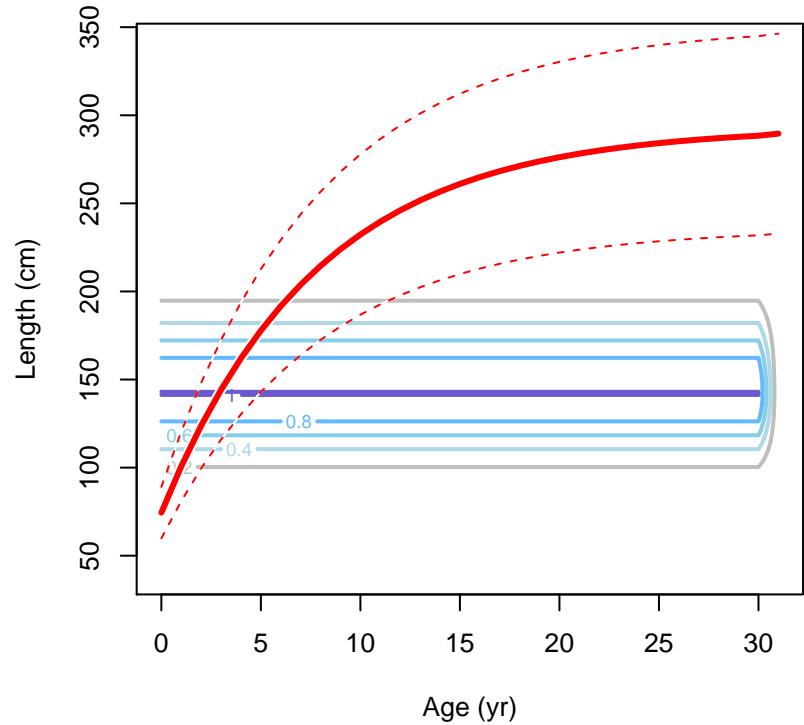
**Male ending year selectivity and growth for S2\_US\_DS**



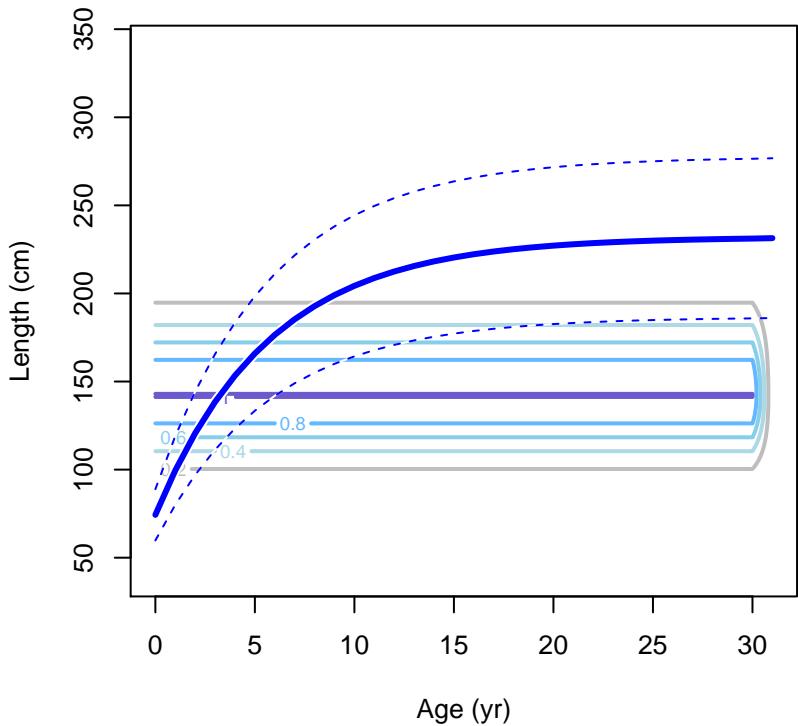
**Female ending year selectivity and growth for S3\_TW\_LRG**



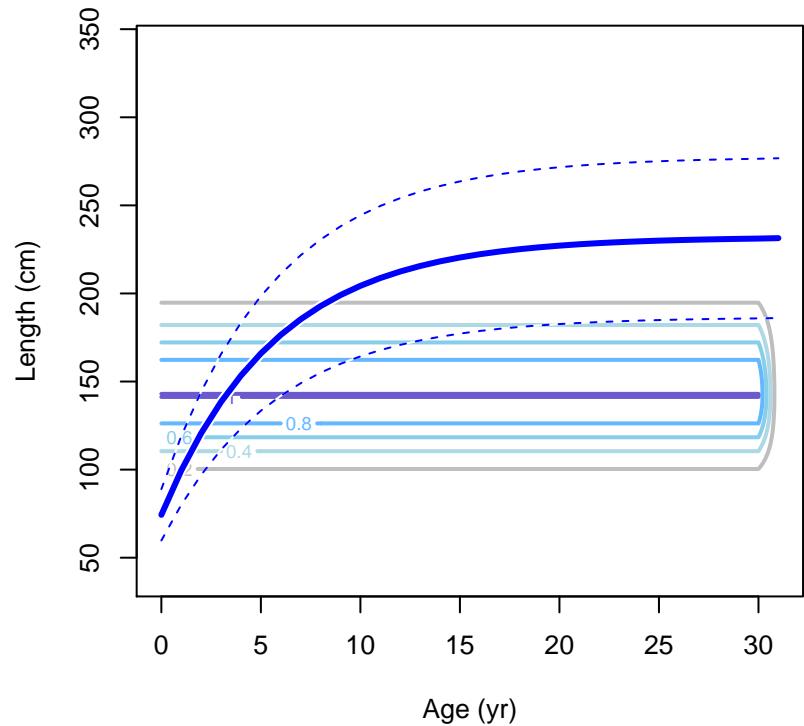
**Female ending year selectivity and growth for S4\_JPN\_SS**



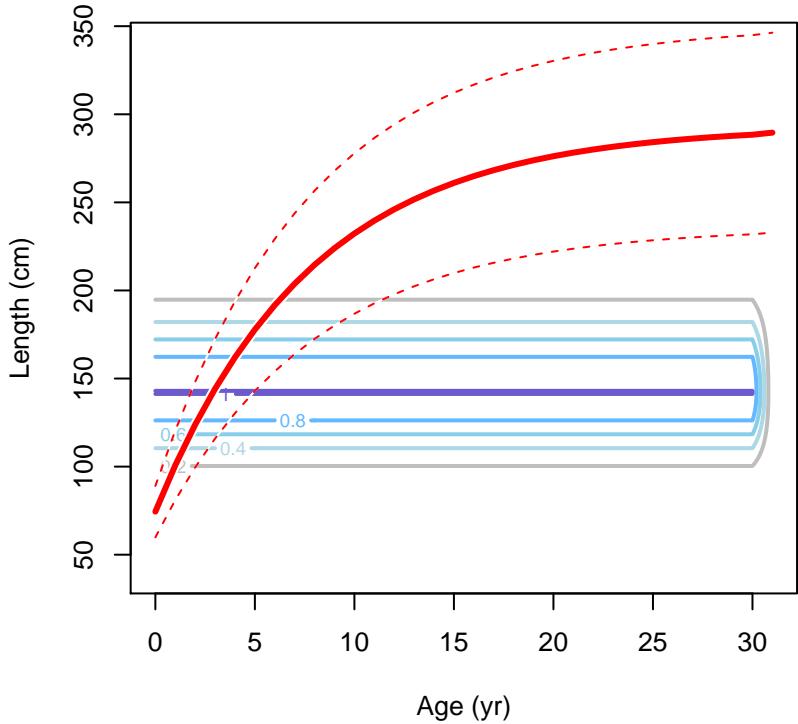
**Male ending year selectivity and growth for S3\_TW\_LRG**



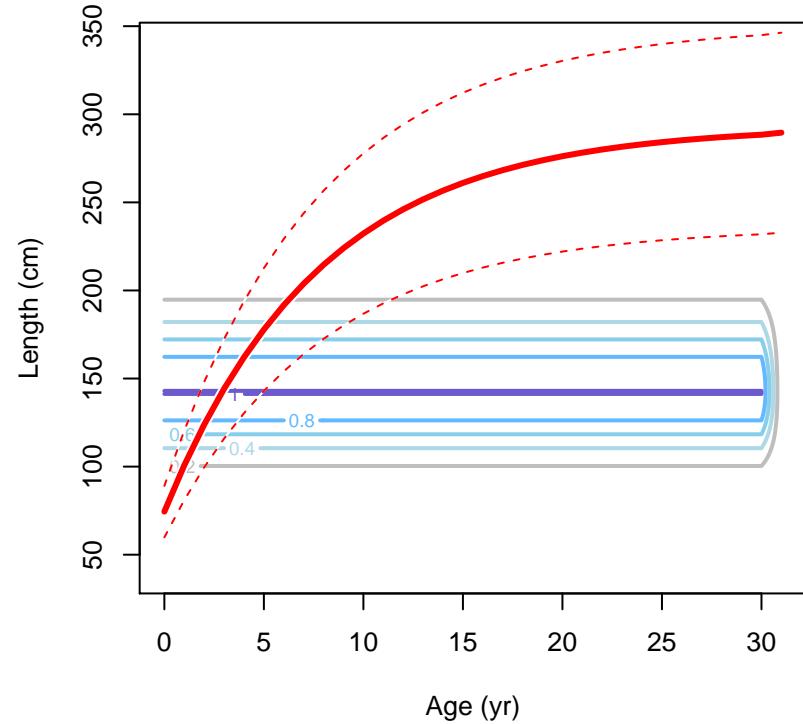
**Male ending year selectivity and growth for S4\_JPN\_SS**



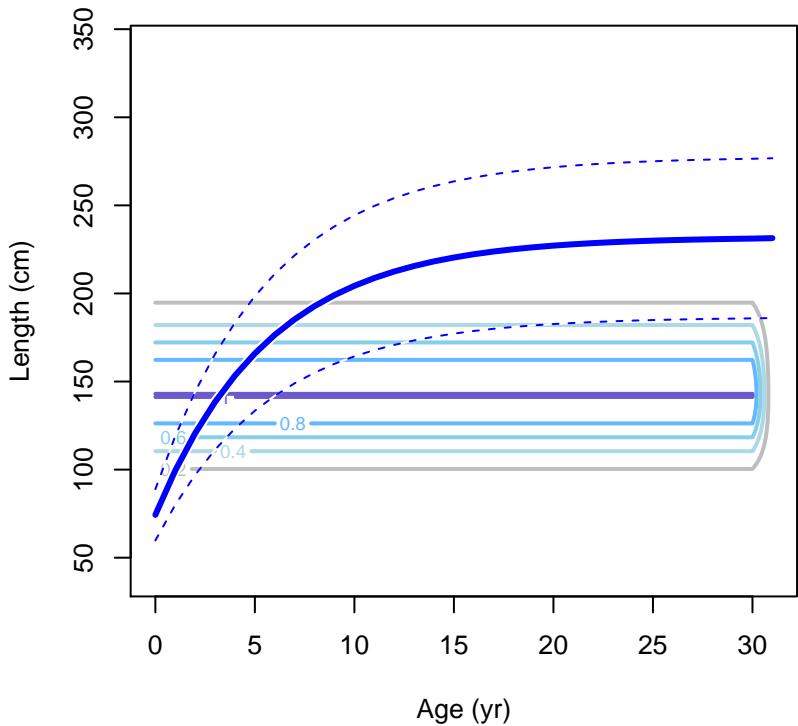
**Female ending year selectivity and growth for S5\_JPN\_RTV**



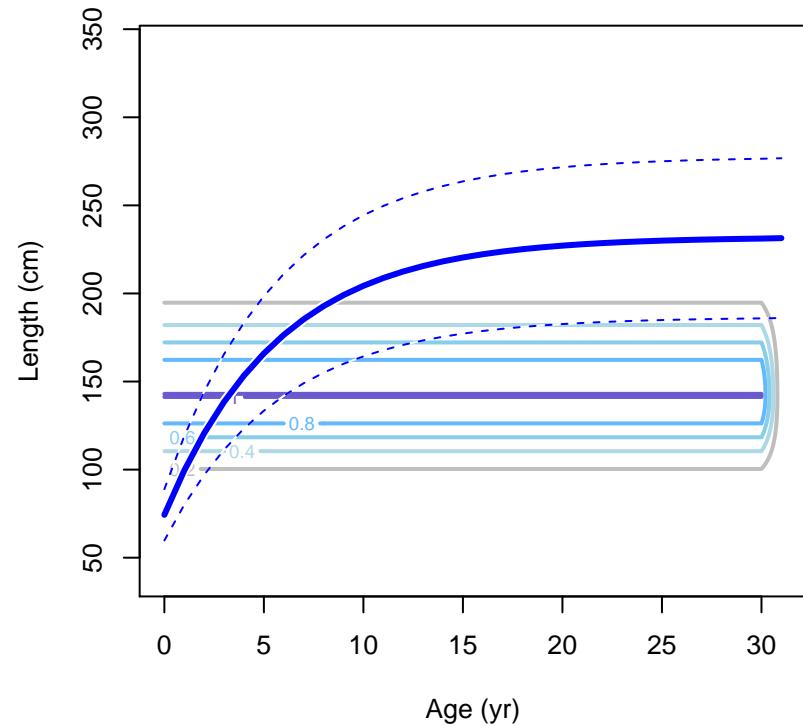
**Female ending year selectivity and growth for S6\_JPN\_OBS**



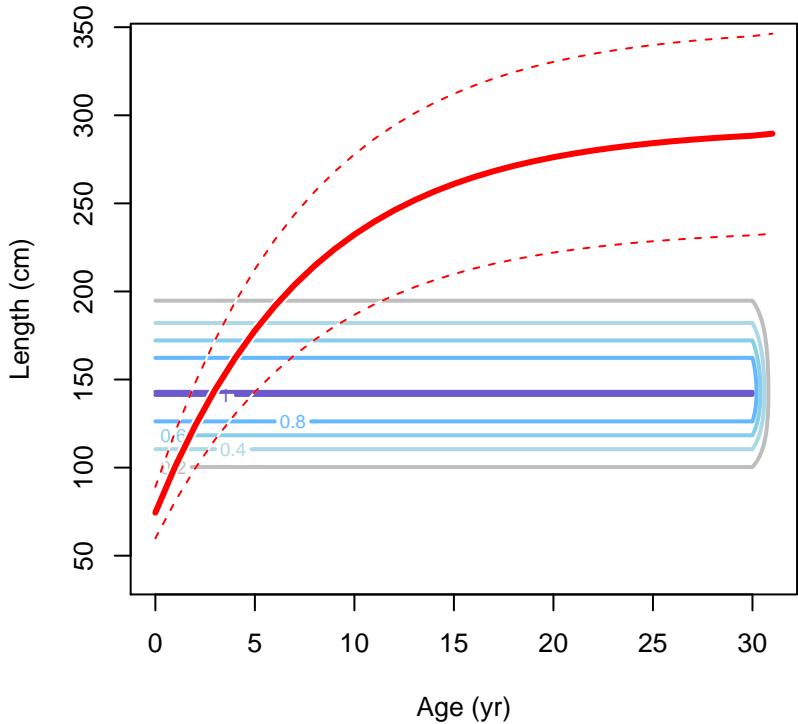
**Male ending year selectivity and growth for S5\_JPN\_RTV**



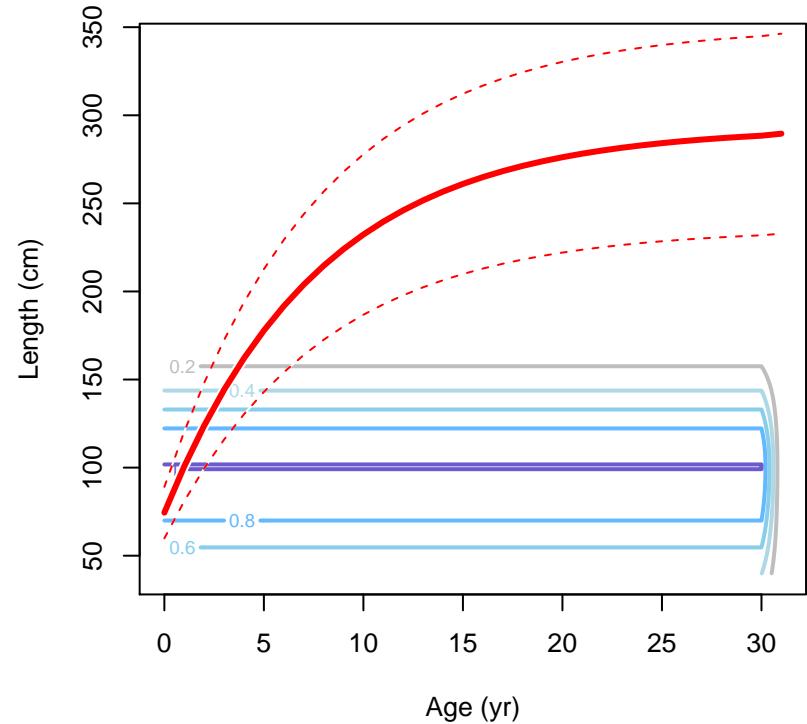
**Male ending year selectivity and growth for S6\_JPN\_OBS**



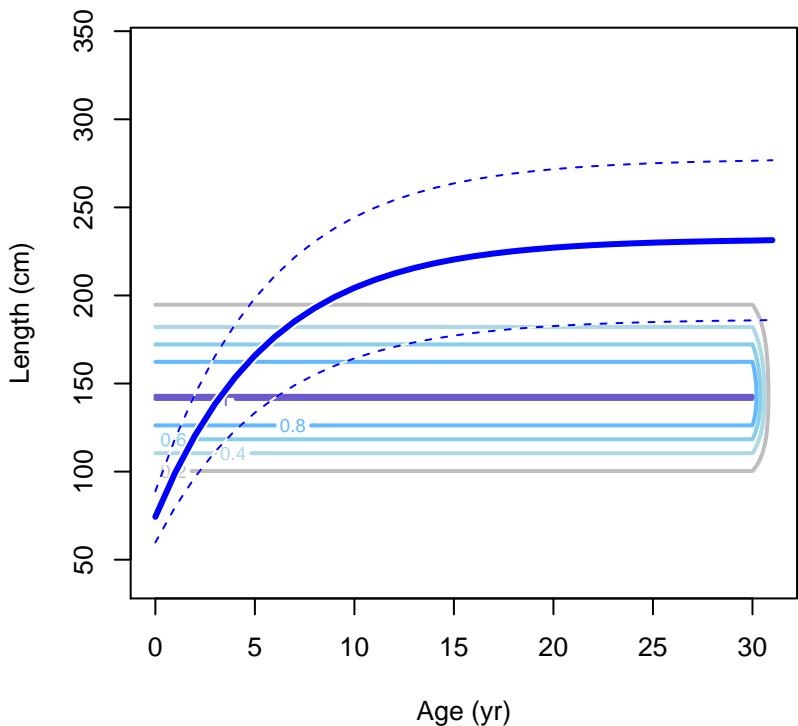
**Female ending year selectivity and growth for S7\_JPN\_GEO**



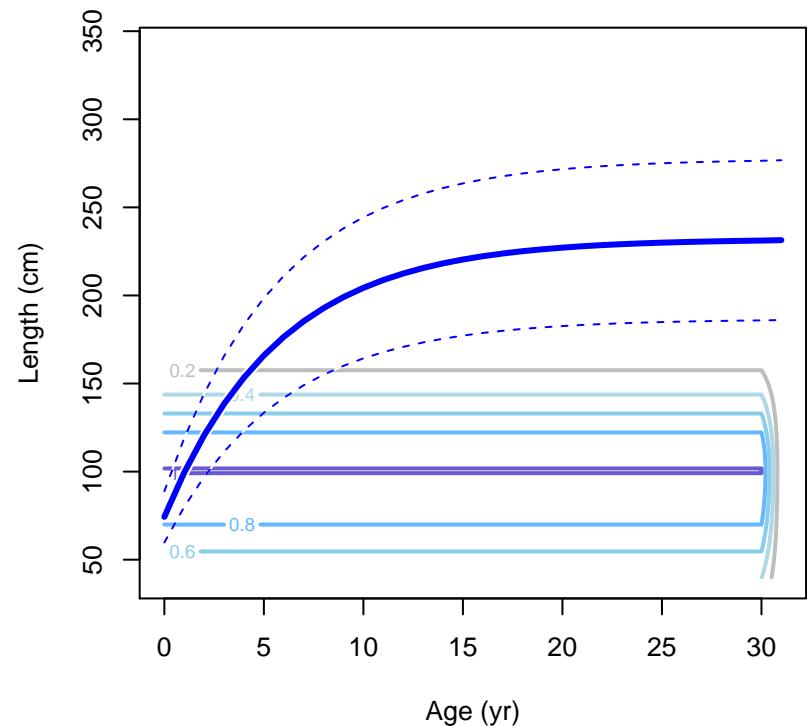
**Female ending year selectivity and growth for S8\_MEX**

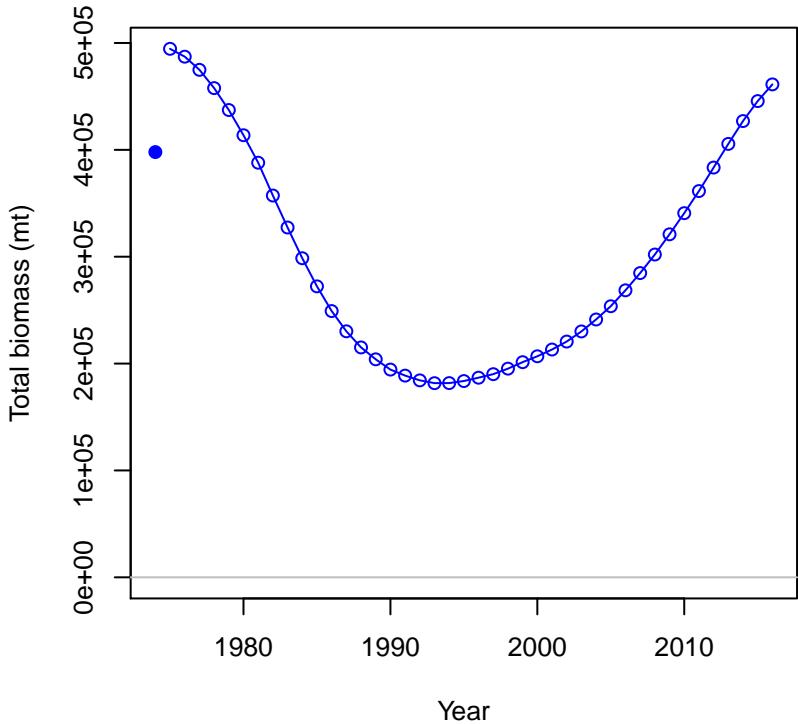
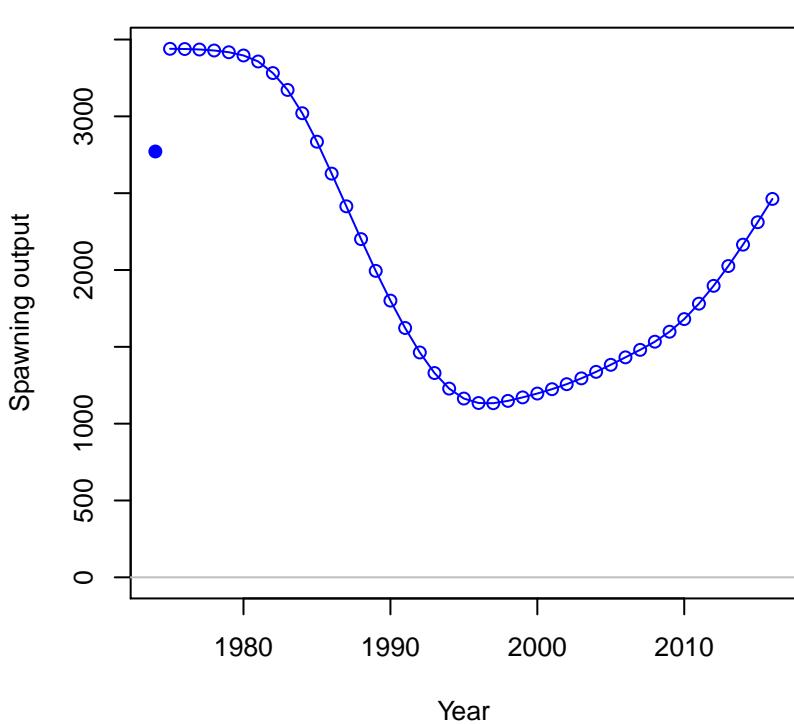
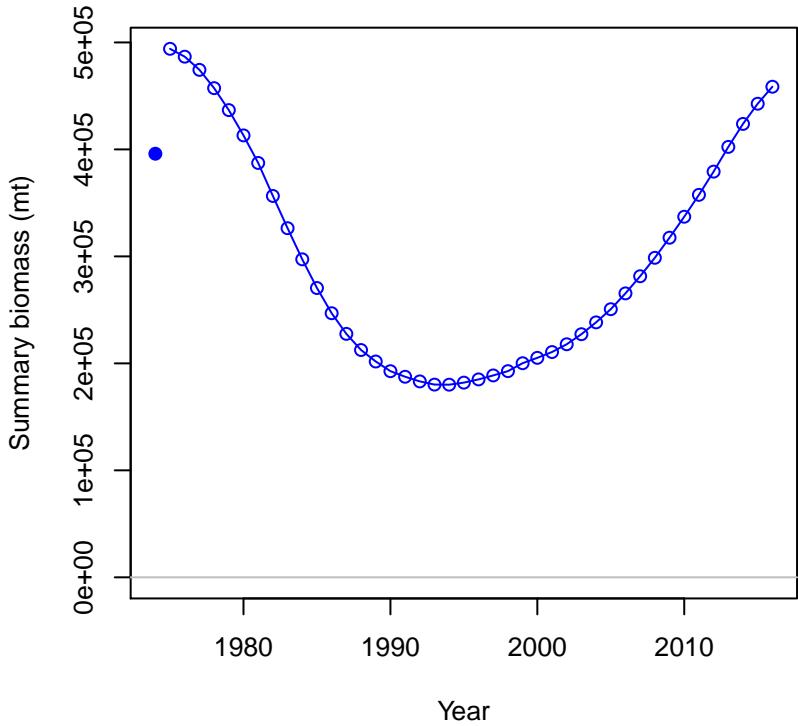
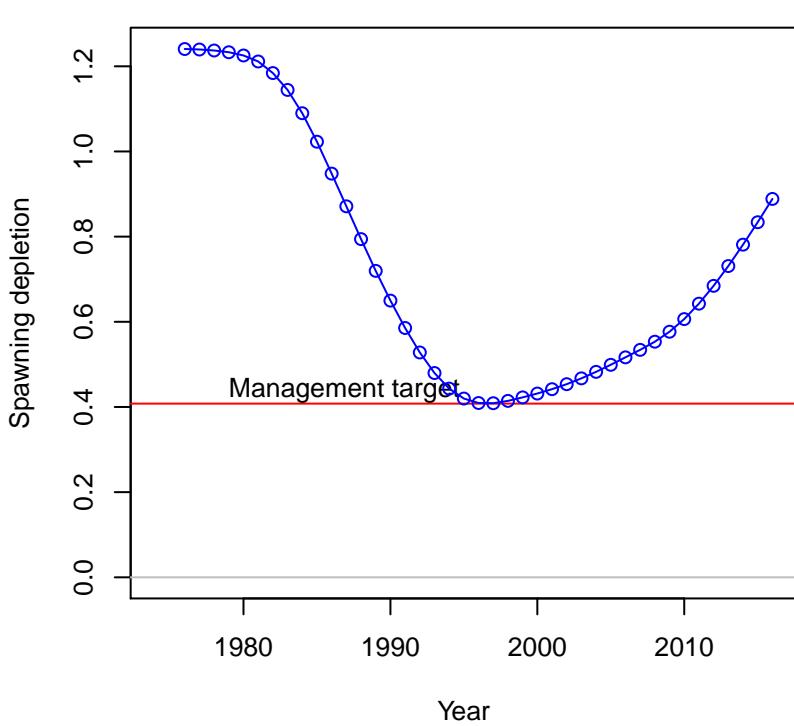


**Male ending year selectivity and growth for S7\_JPN\_GEO**

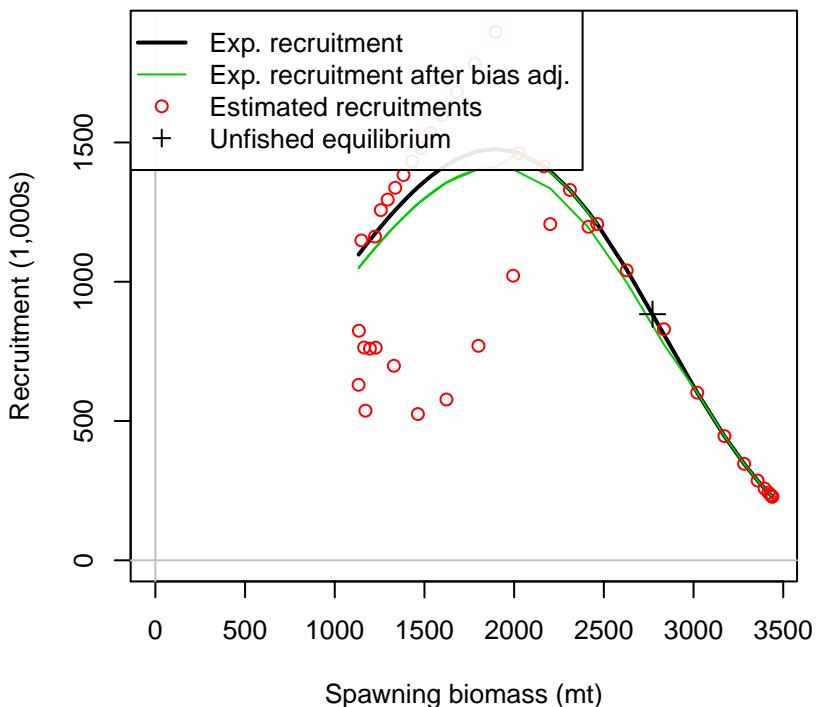
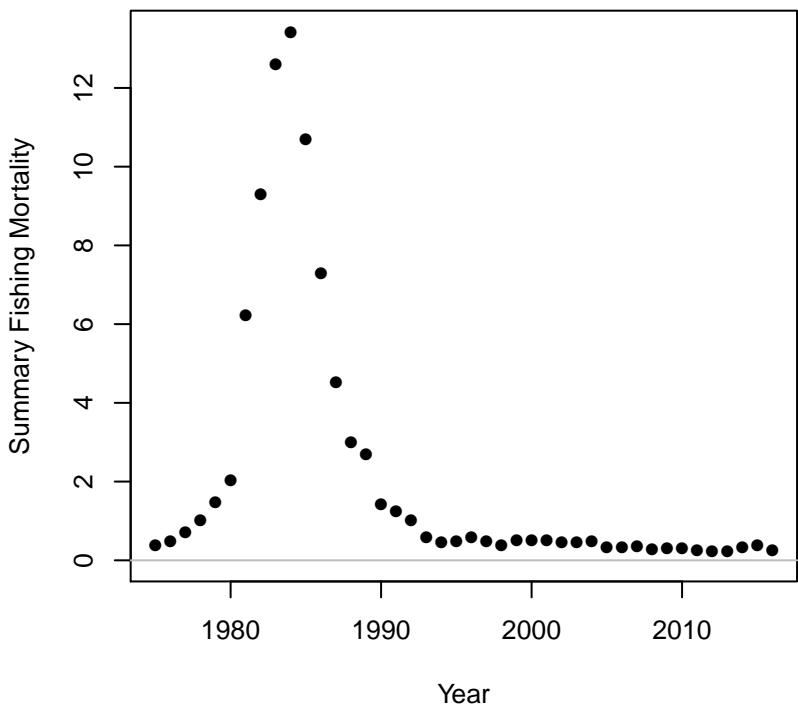
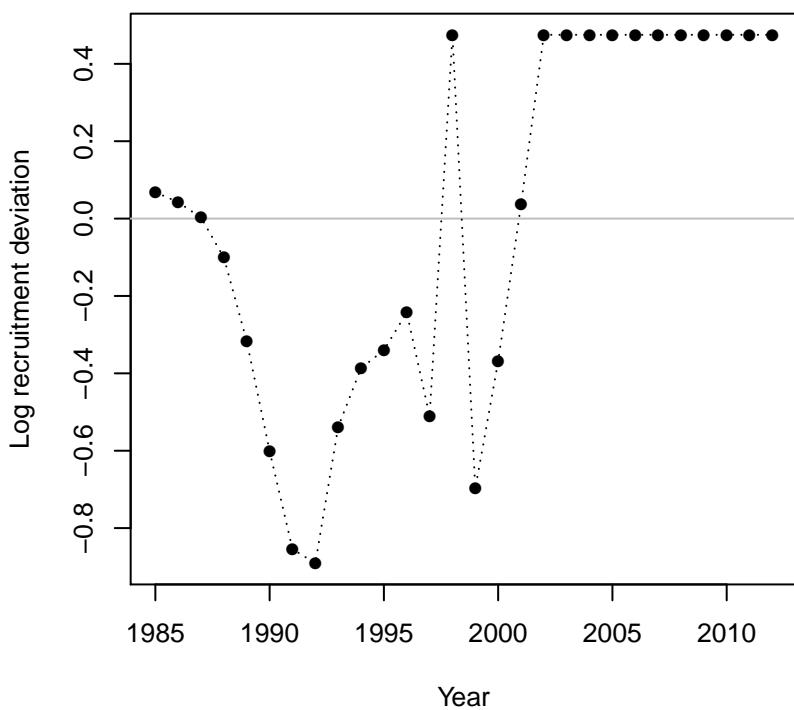
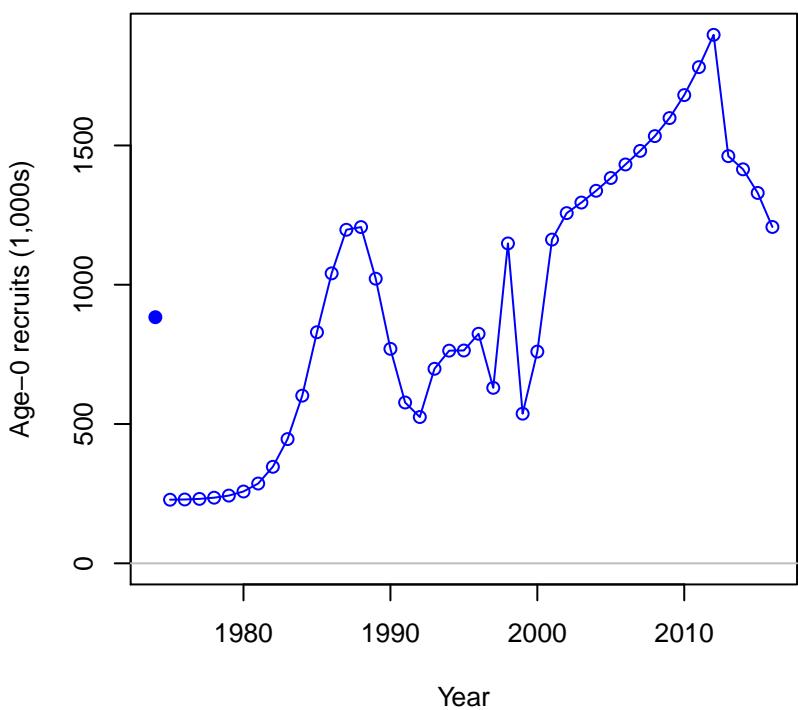


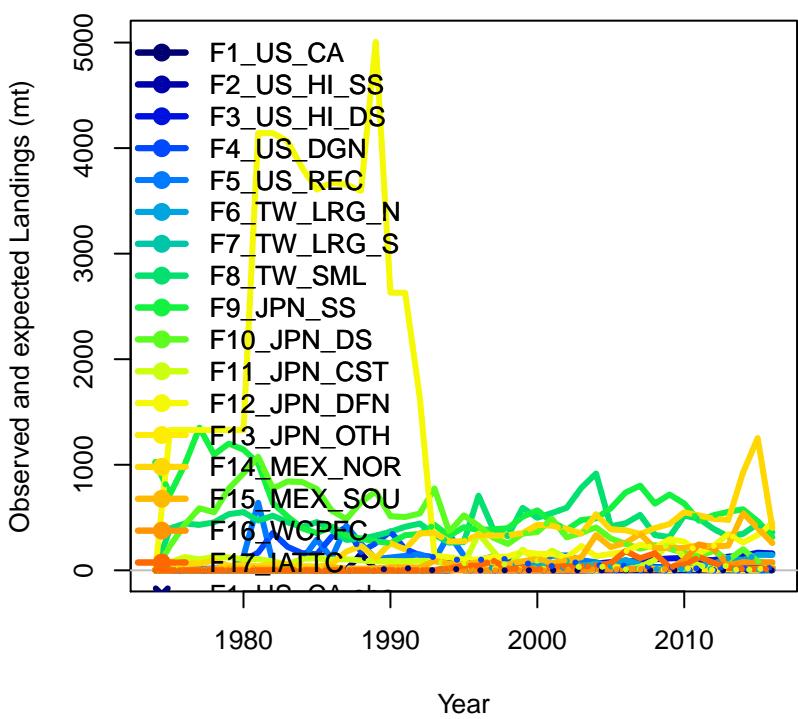
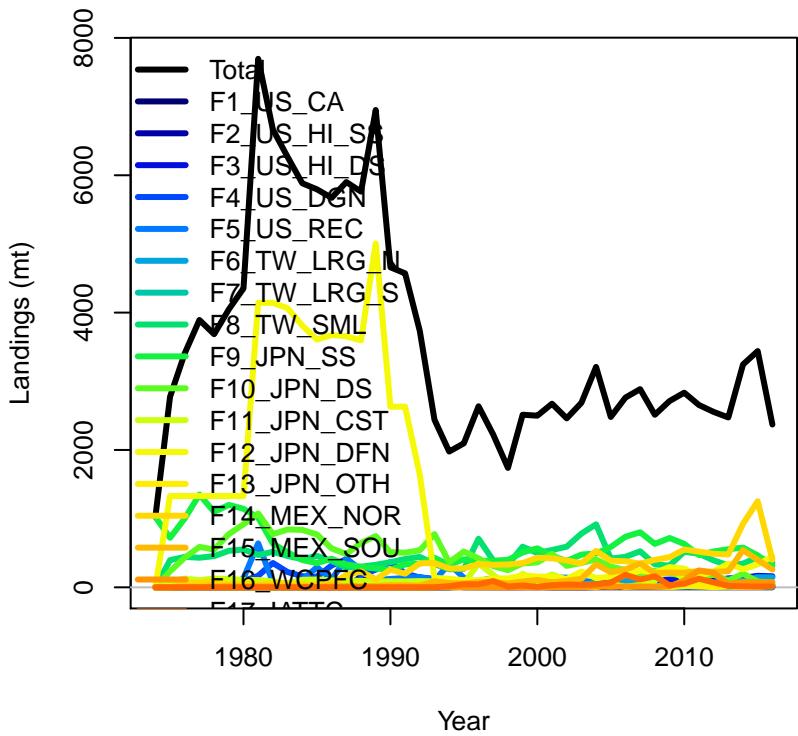
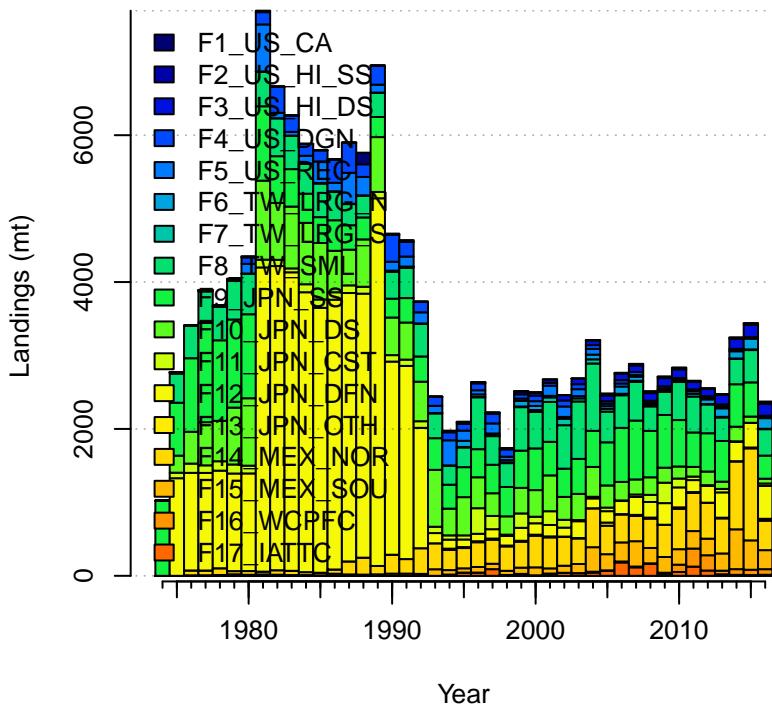
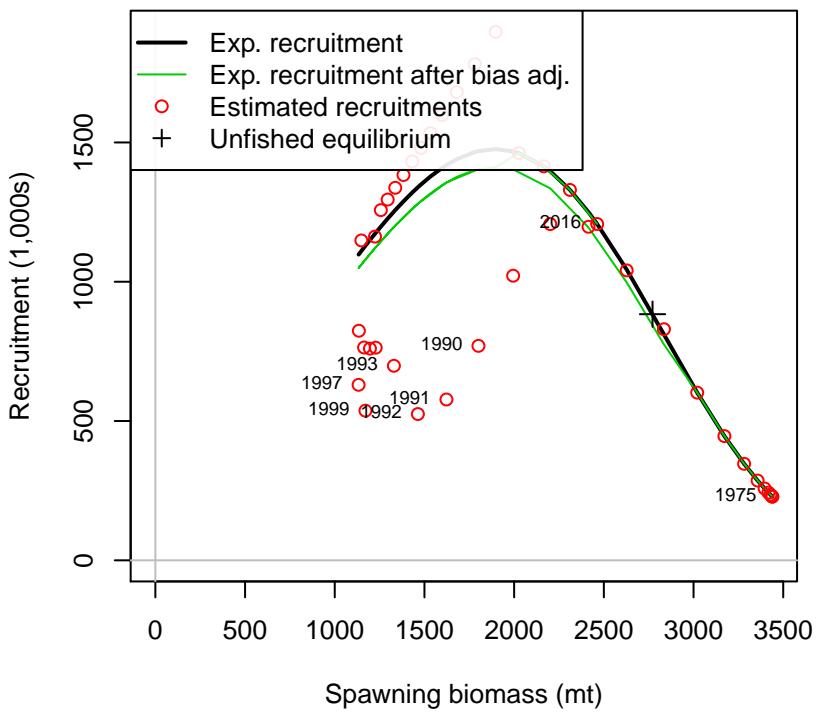
**Male ending year selectivity and growth for S8\_MEX**

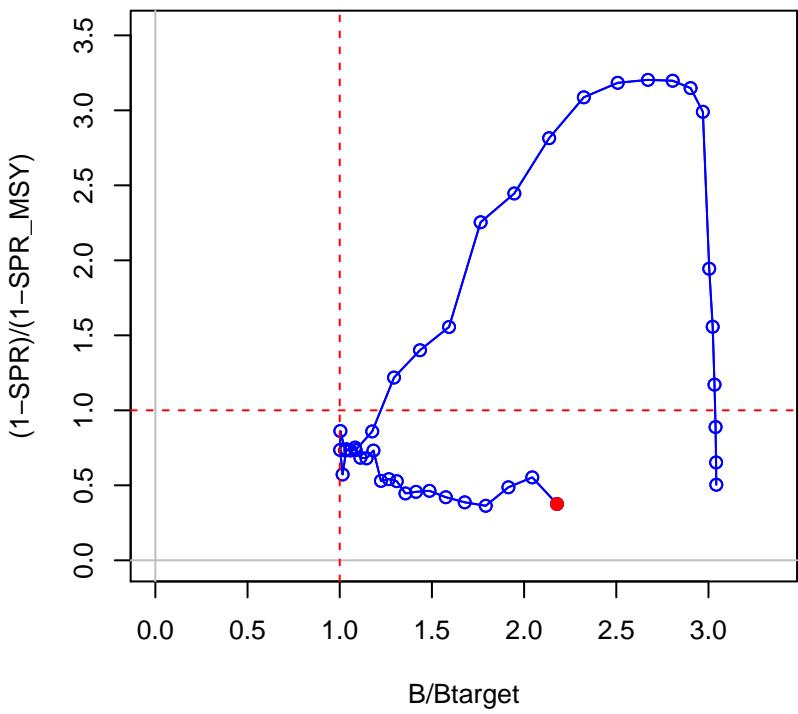
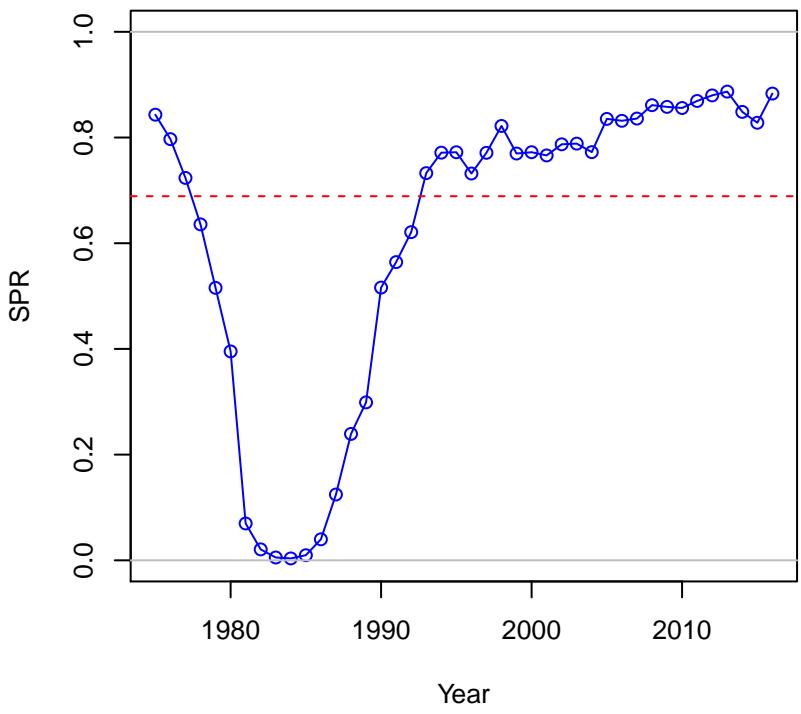
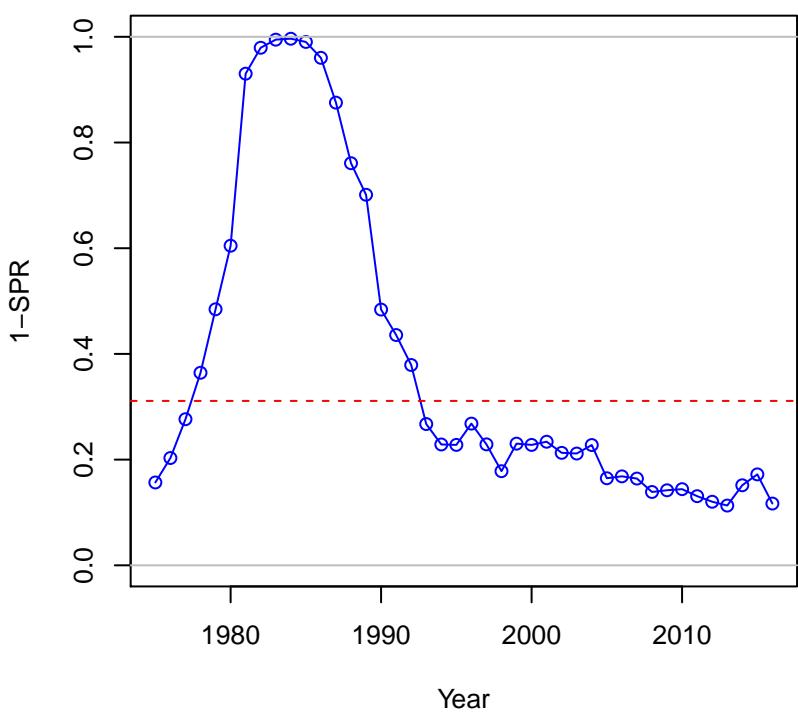
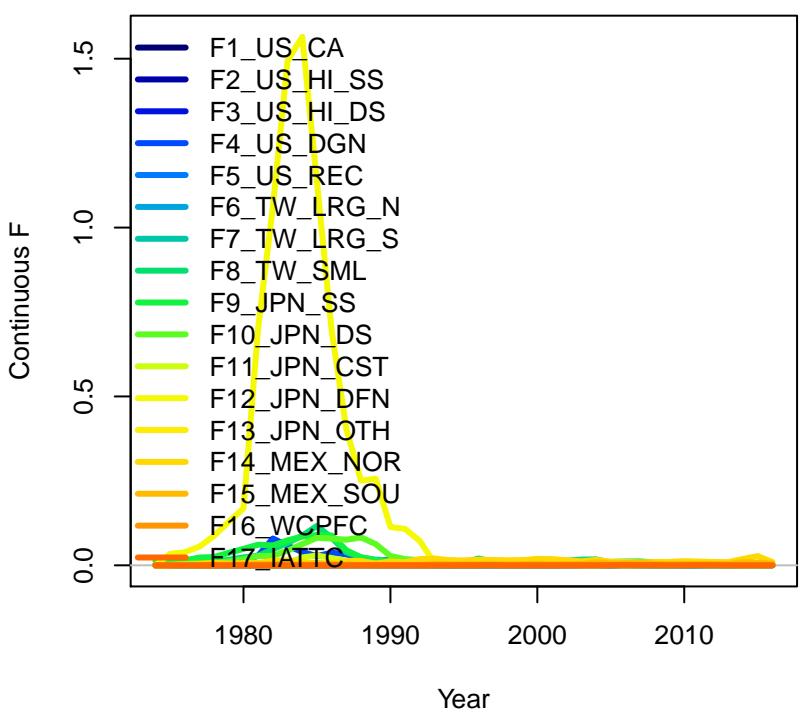


**Total biomass (mt)****Spawning output****Summary biomass (mt)****Spawning depletion**

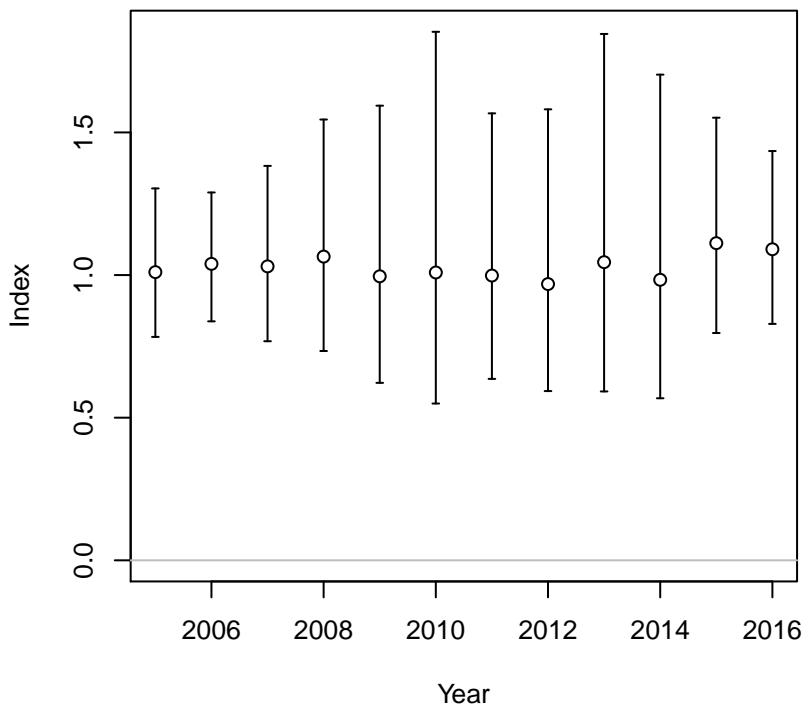
**Age-0 recruits (1,000s)**



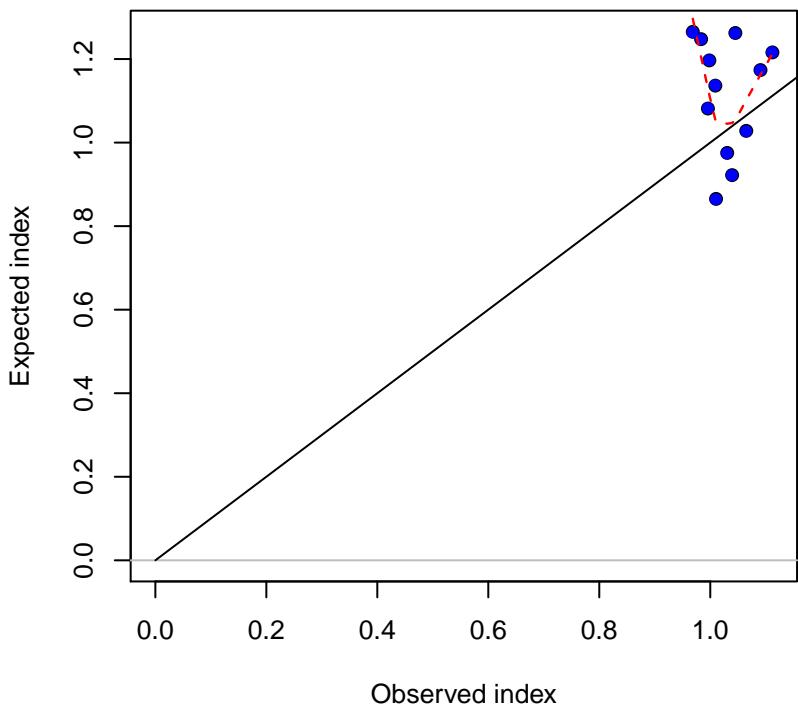




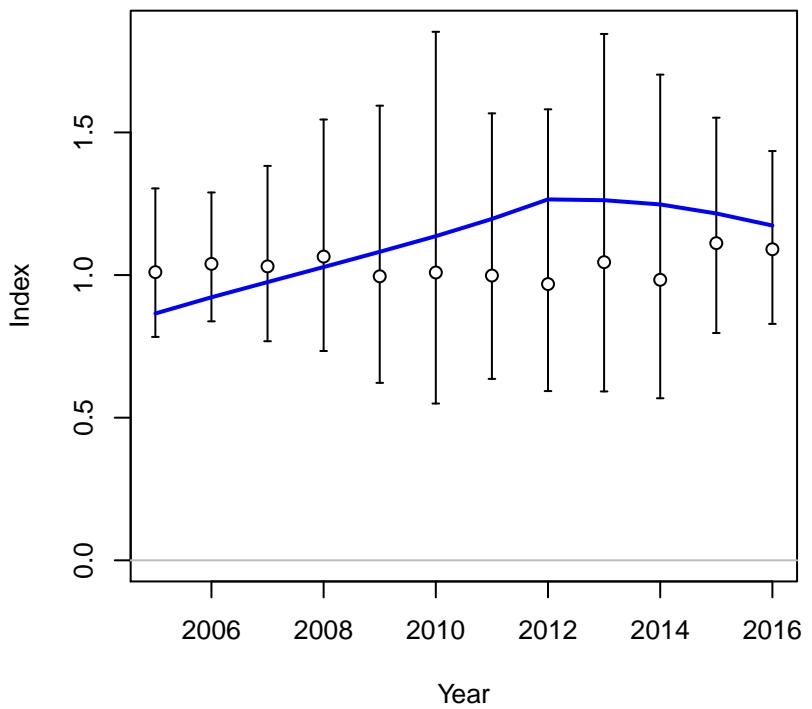
**Index S1\_US\_SS**



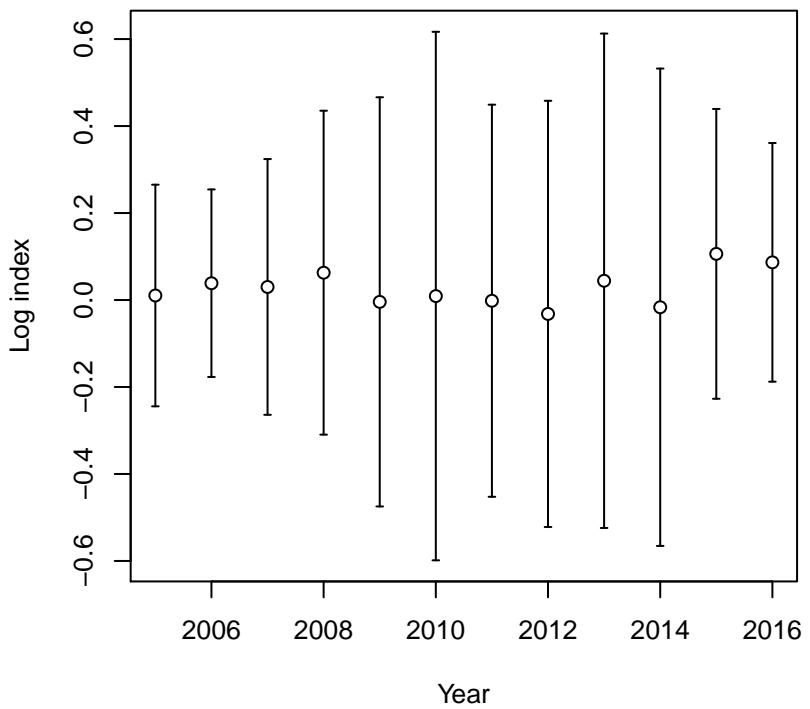
**Index S1\_US\_SS**



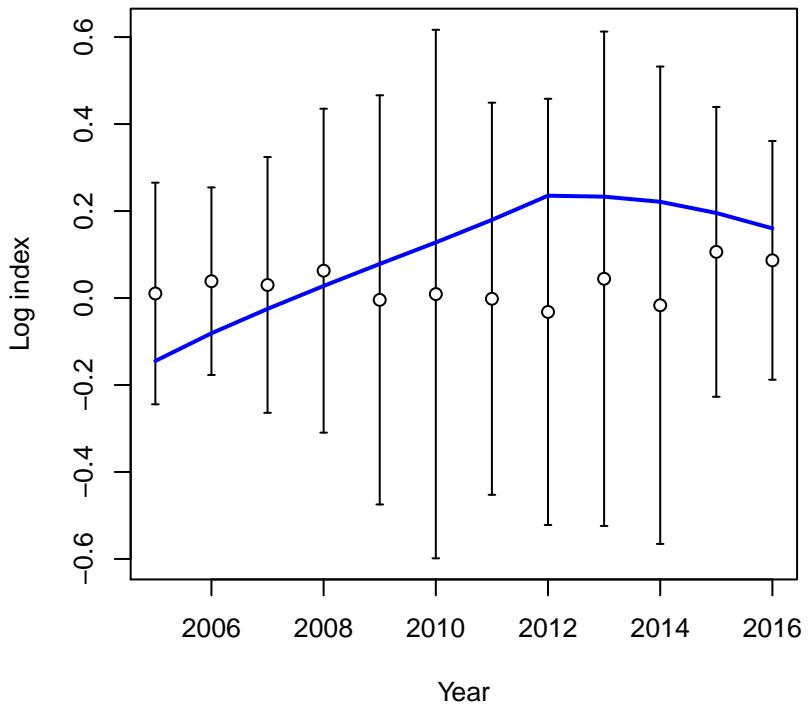
**Index S1\_US\_SS**



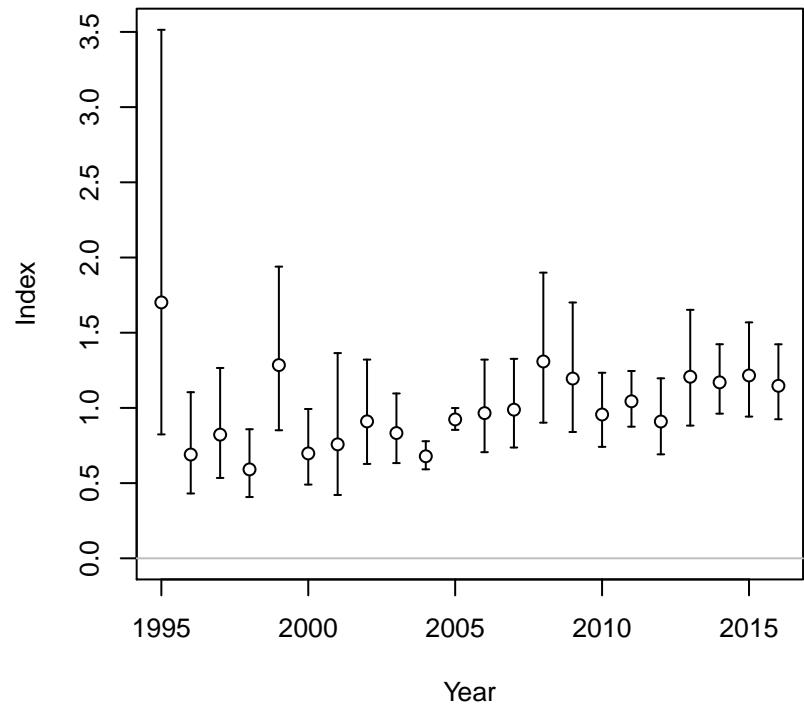
**Log index S1\_US\_SS**



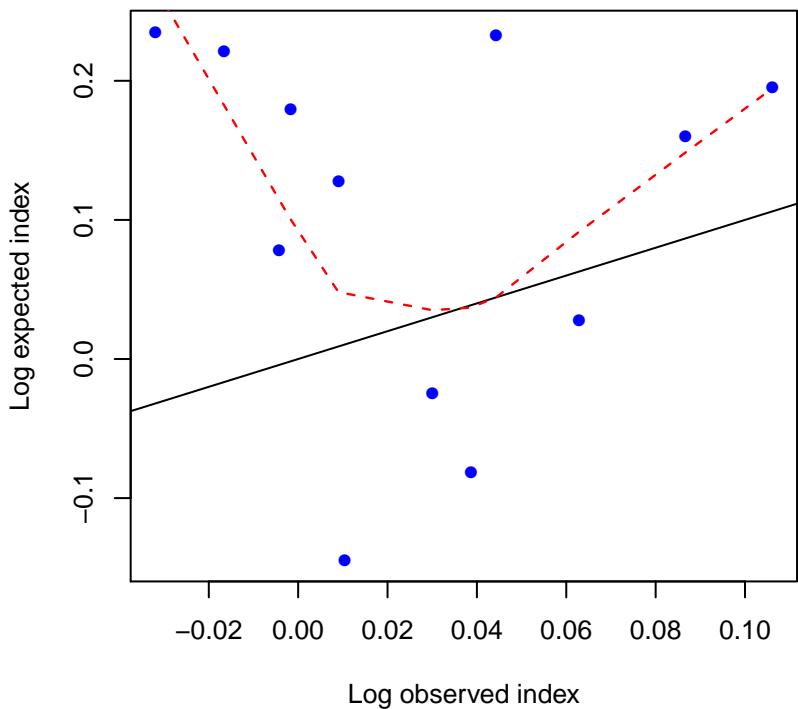
**Log index S1\_US\_SS**



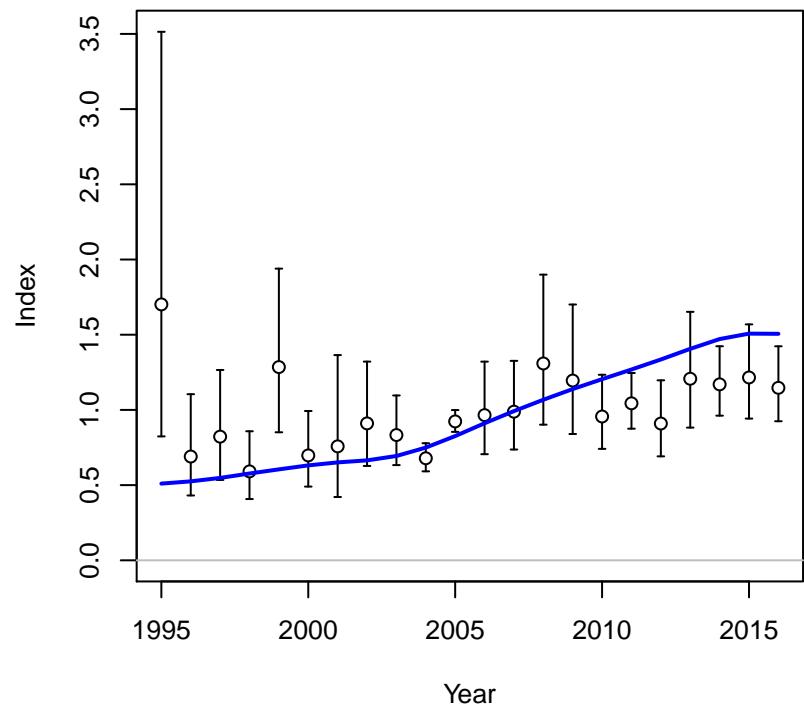
**Index S2\_US\_DS**

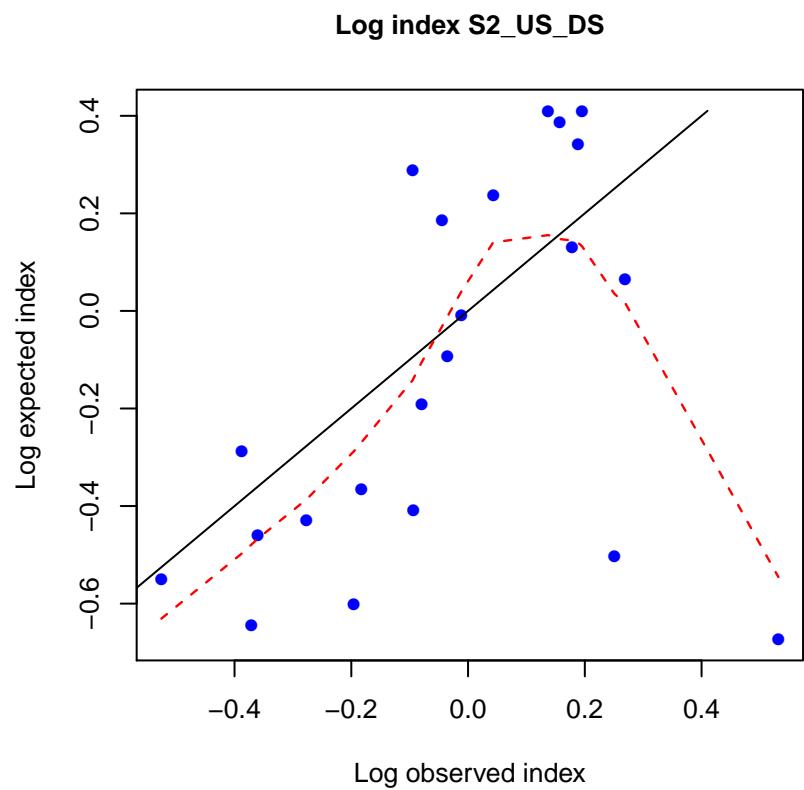
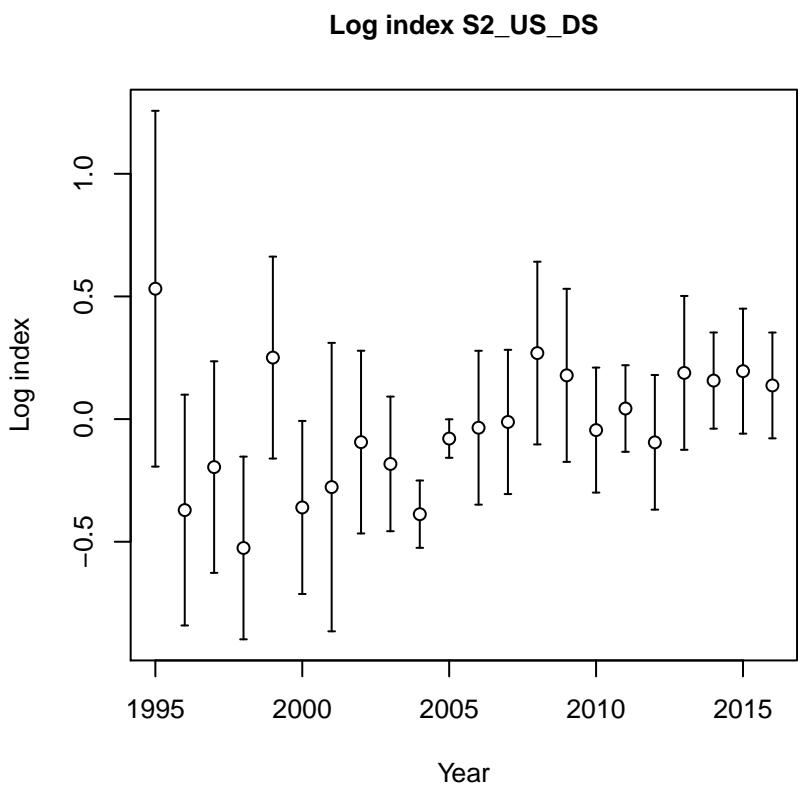
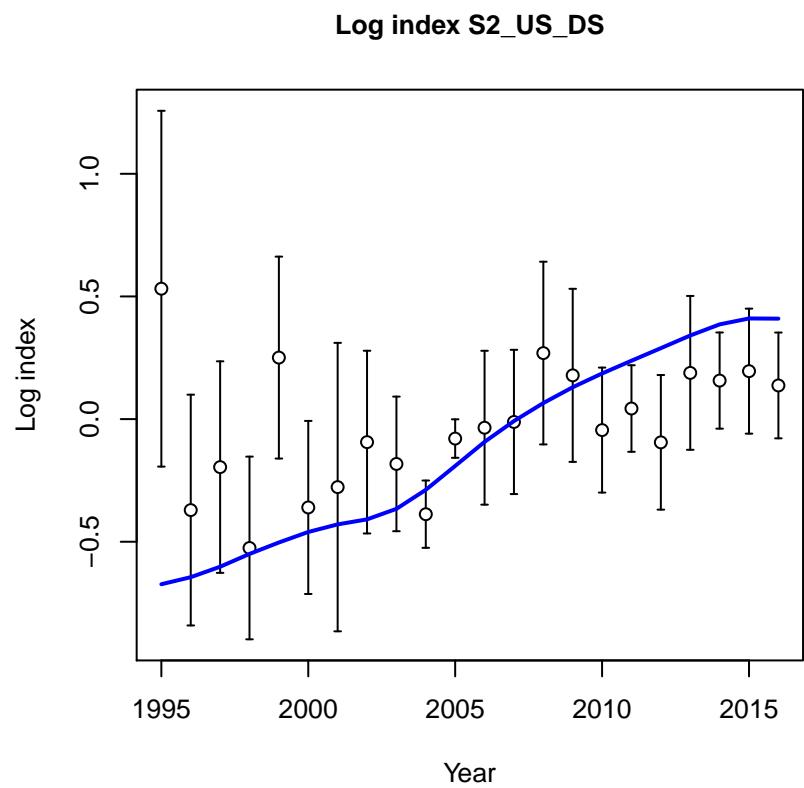
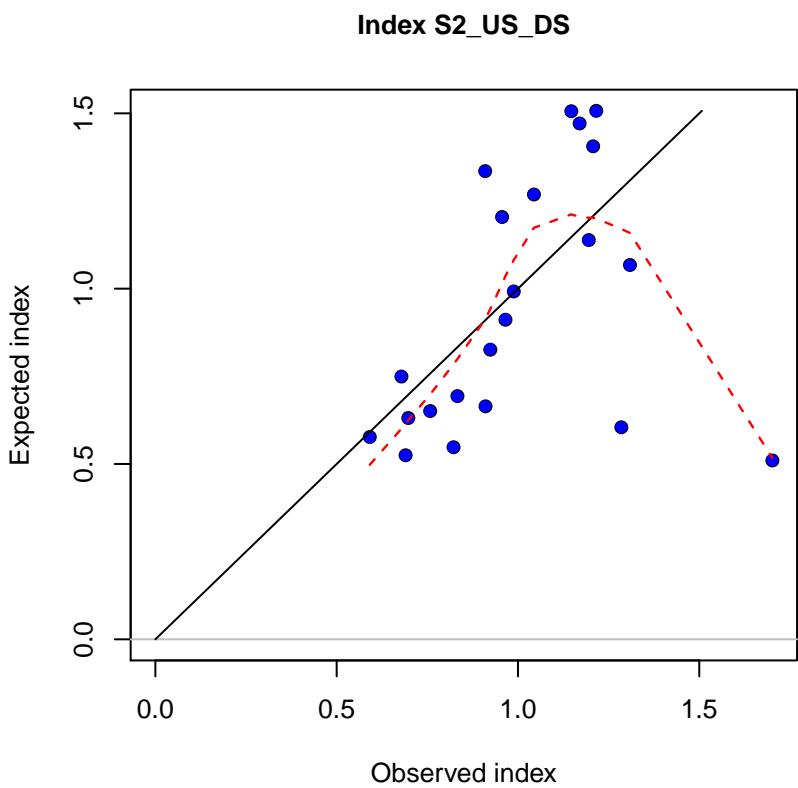


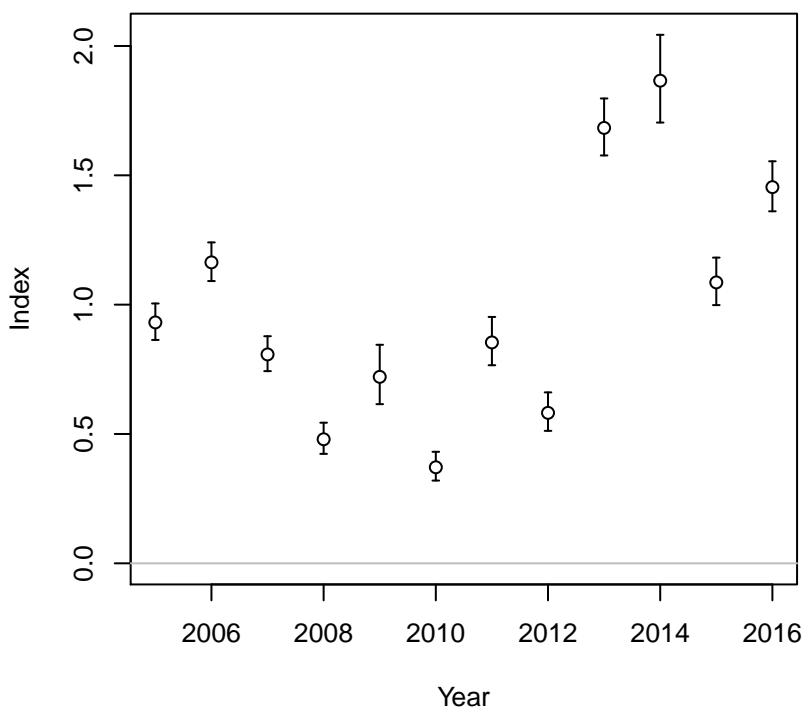
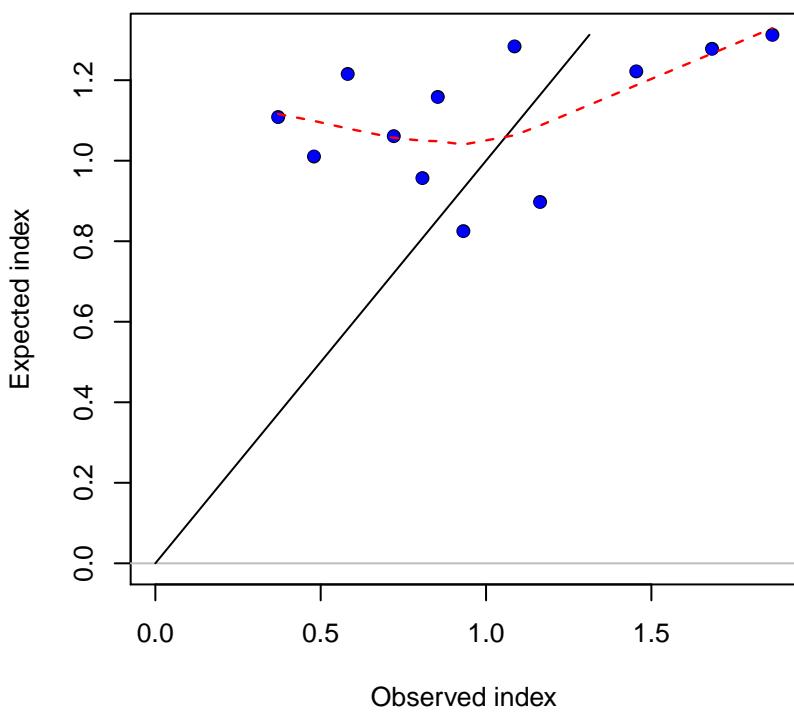
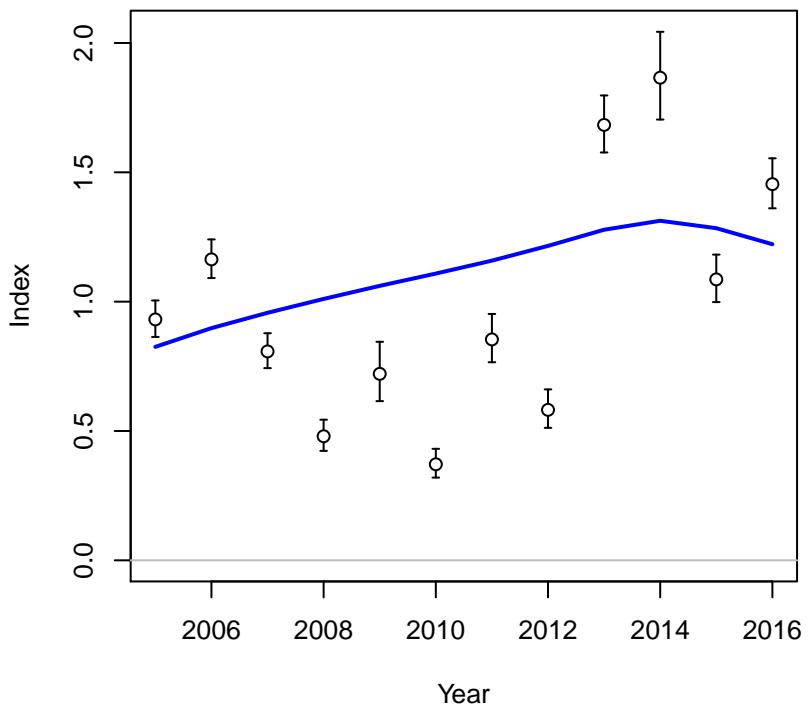
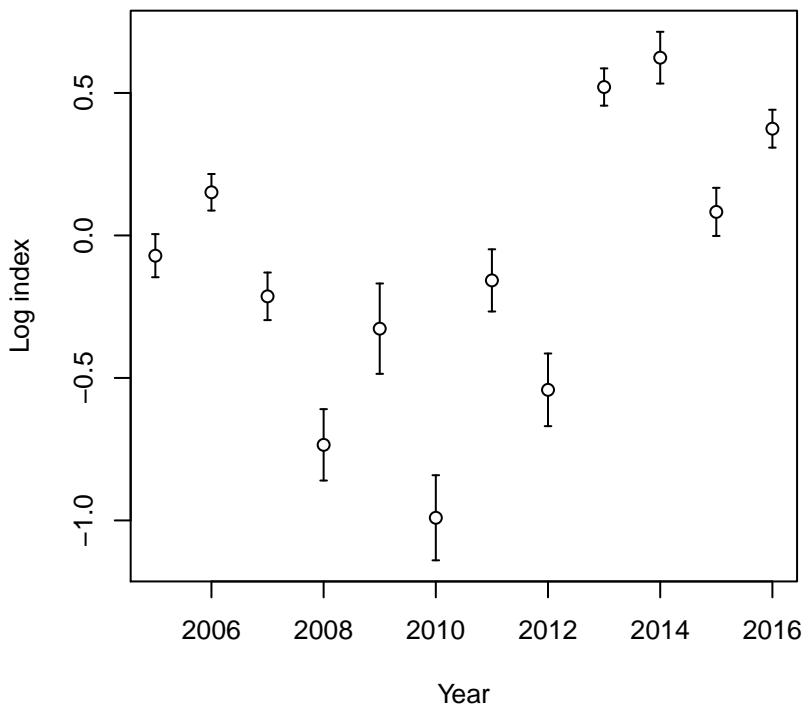
**Log index S1\_US\_SS**



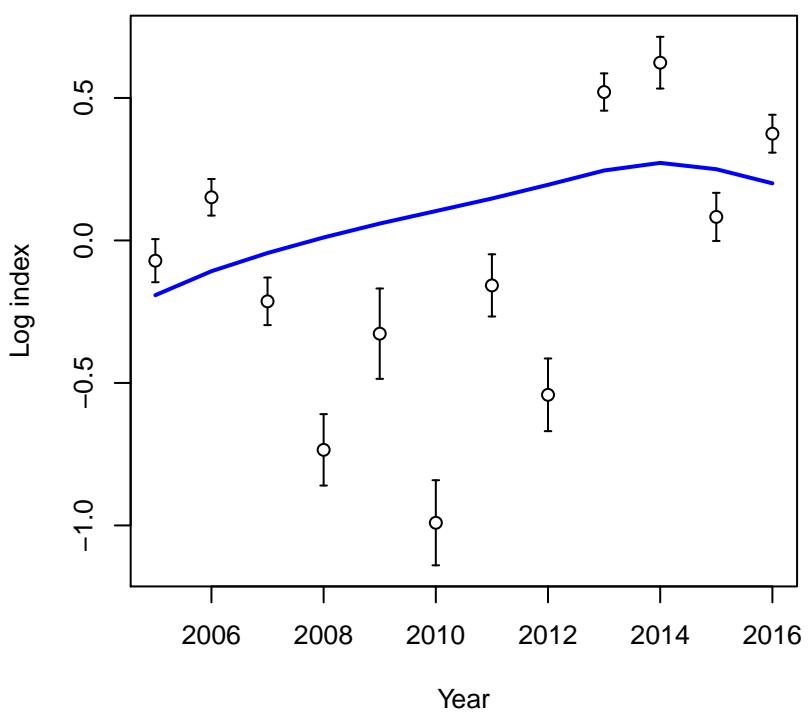
**Index S2\_US\_DS**



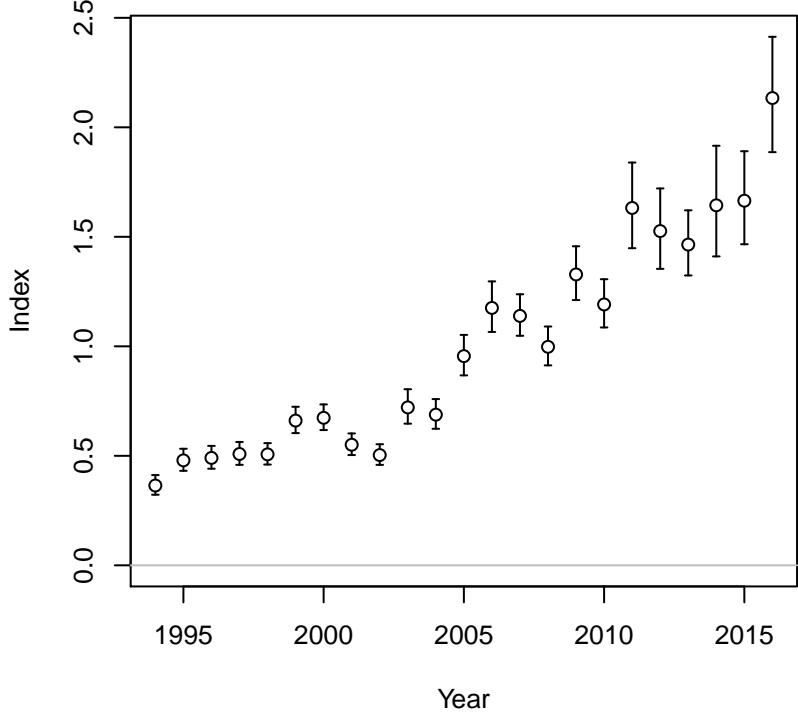


**Index S3\_TW\_LRG****Index S3\_TW\_LRG****Index S3\_TW\_LRG****Log index S3\_TW\_LRG**

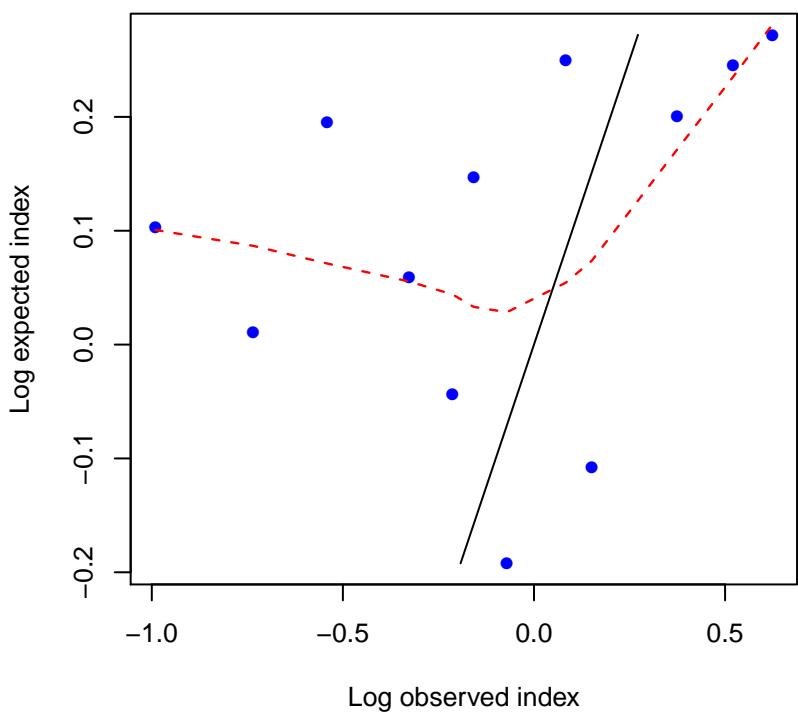
**Log index S3\_TW\_LRG**



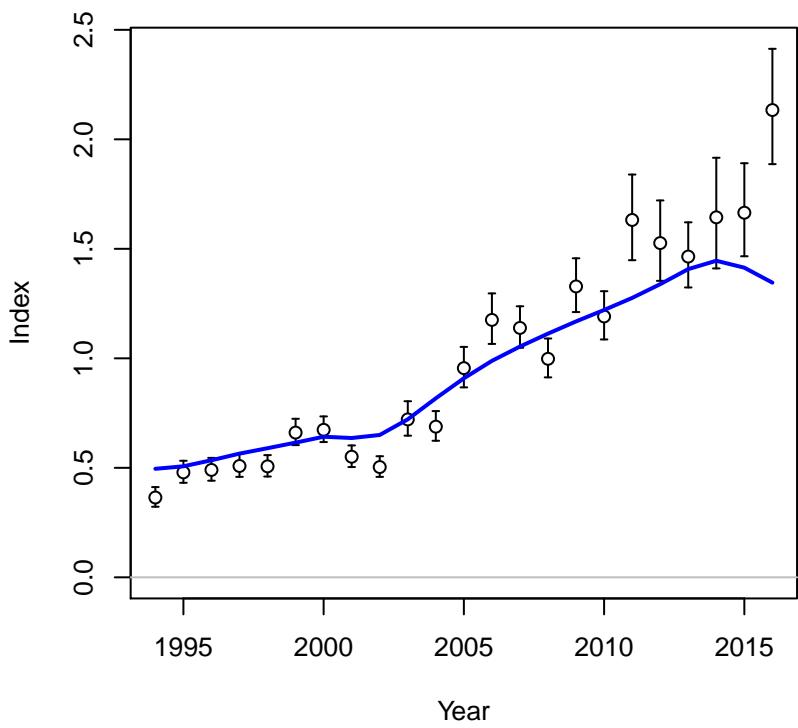
**Index S4\_JPN\_SS**

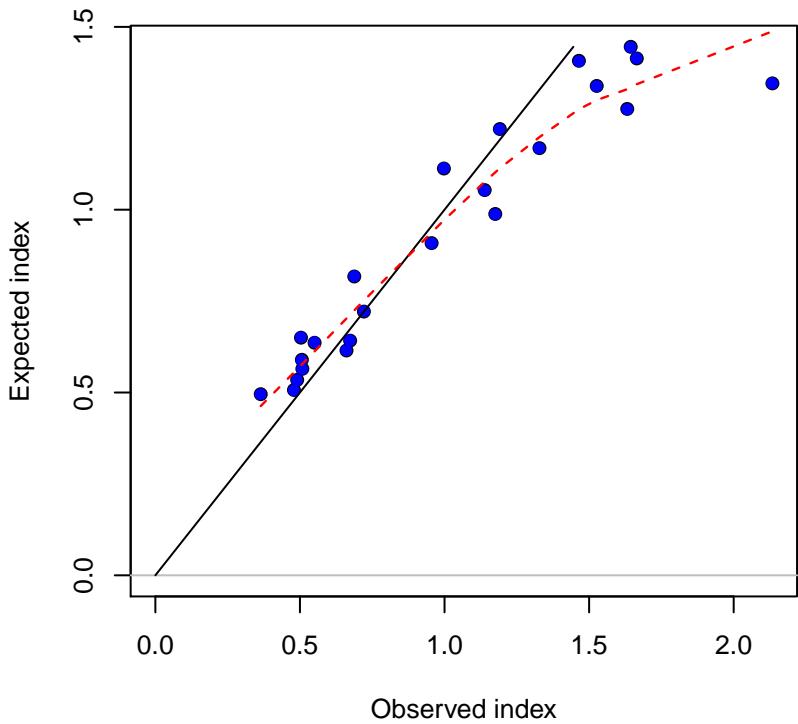
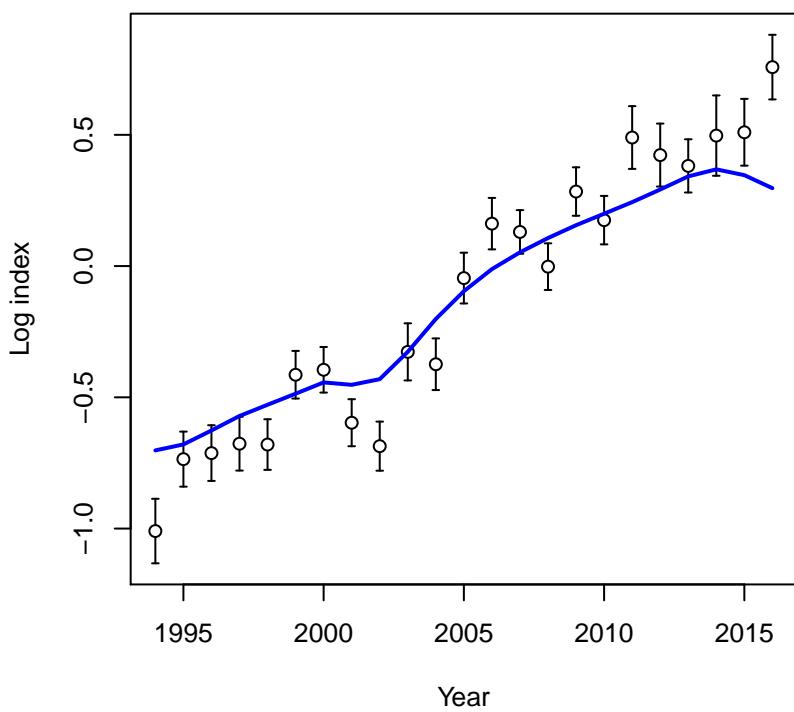
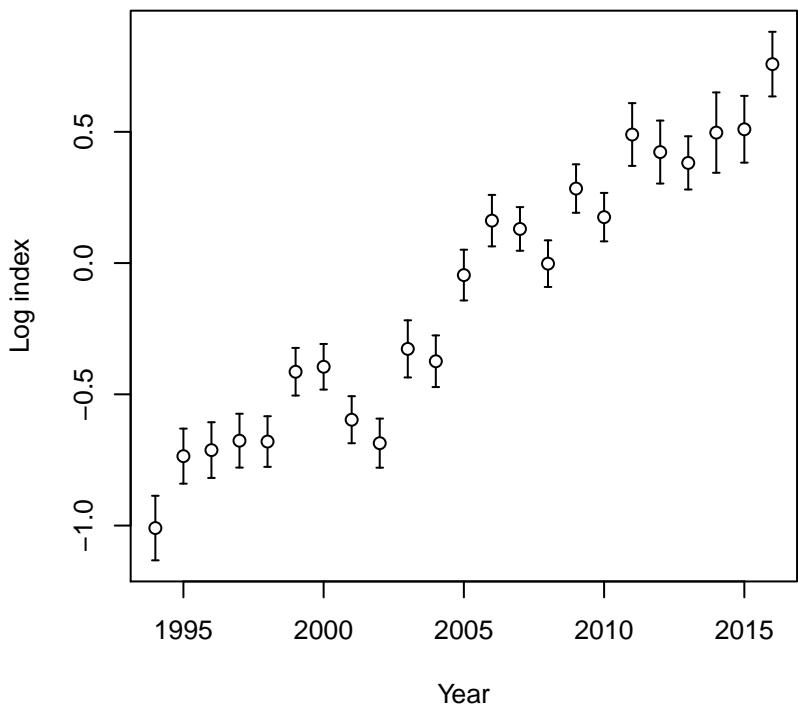
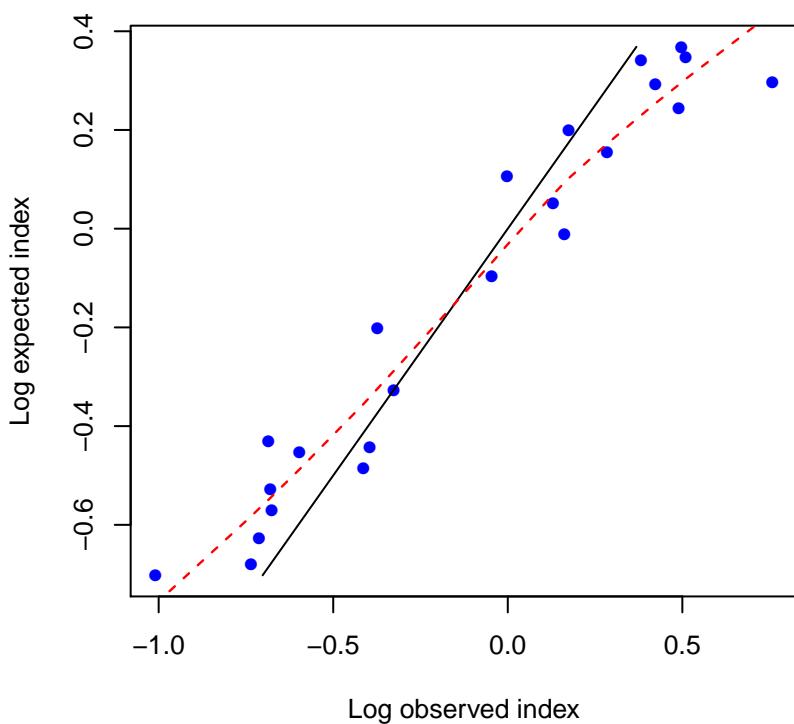


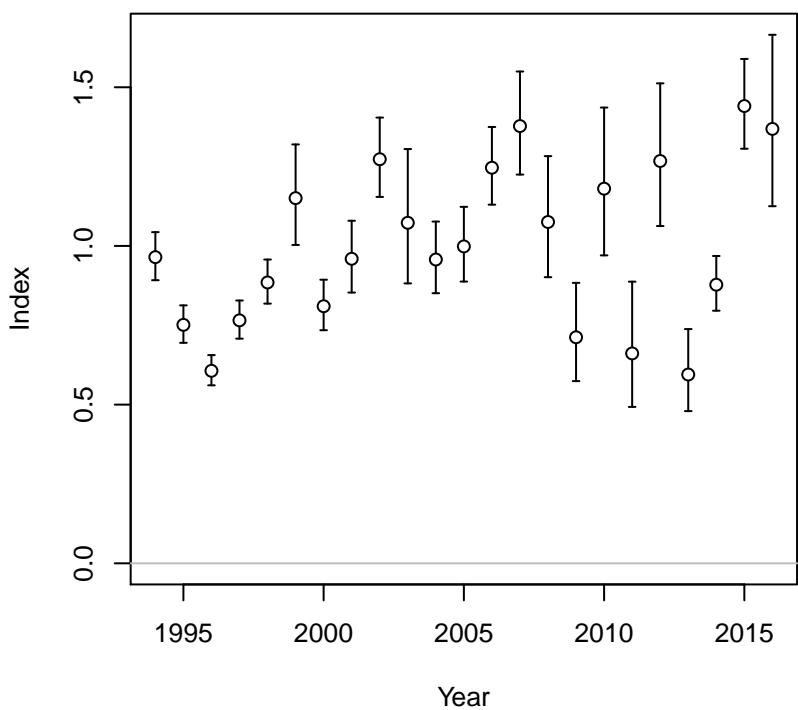
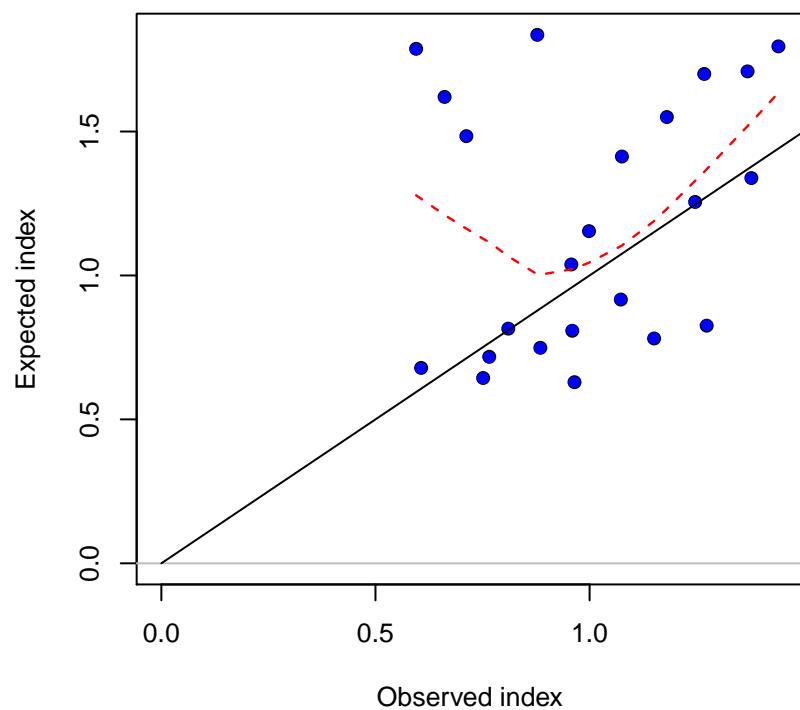
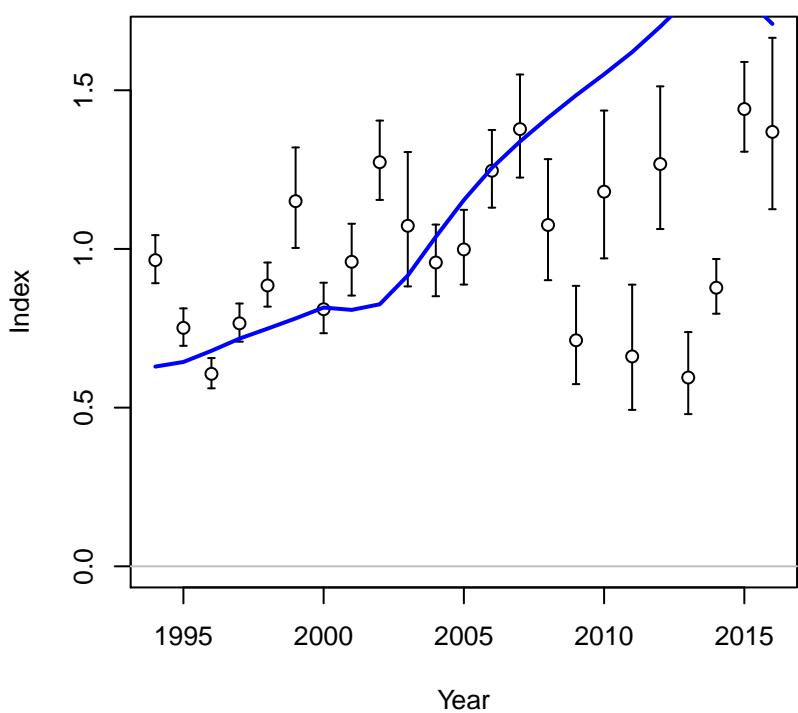
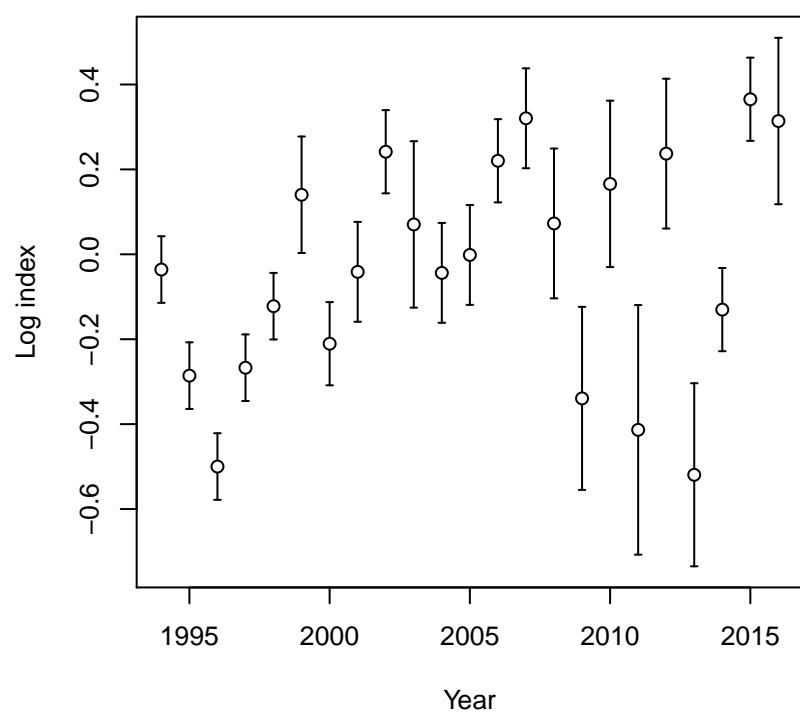
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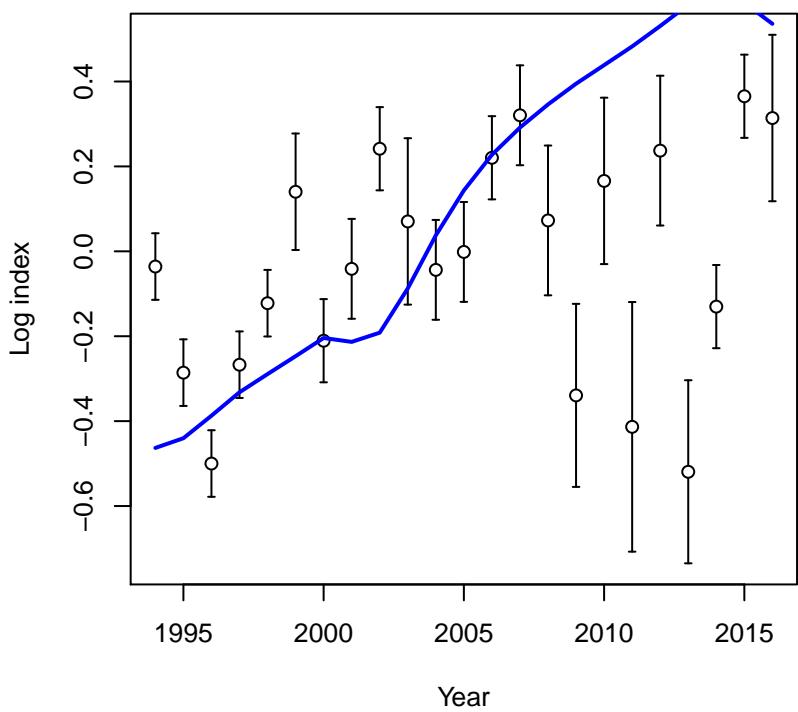
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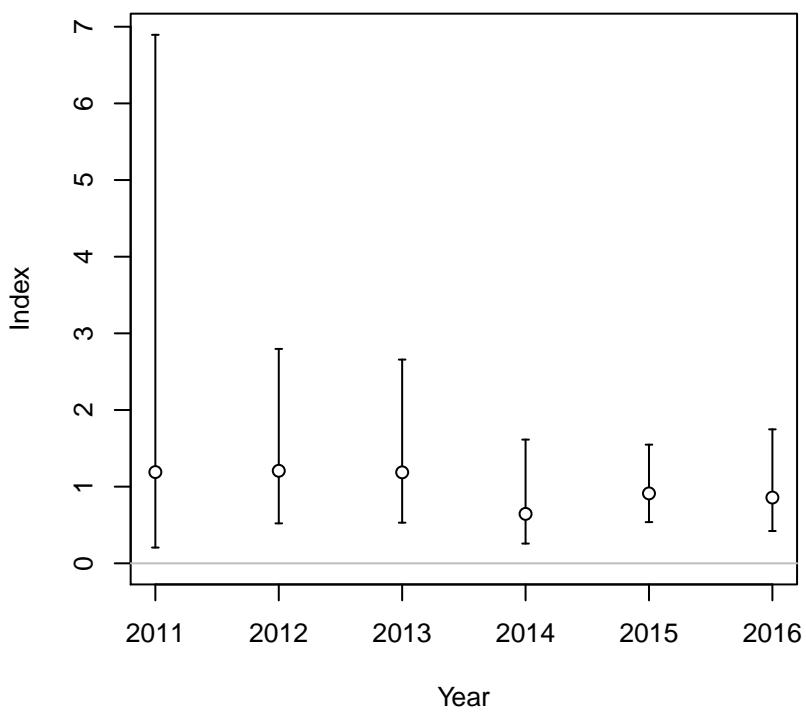
**Index S4\_JPN\_SS****Log index S4\_JPN\_SS****Log index S4\_JPN\_SS****Log index S4\_JPN\_SS**

**Index S5\_JPN\_RTV****Index S5\_JPN\_RTV****Index S5\_JPN\_RTV****Log index S5\_JPN\_RTV**

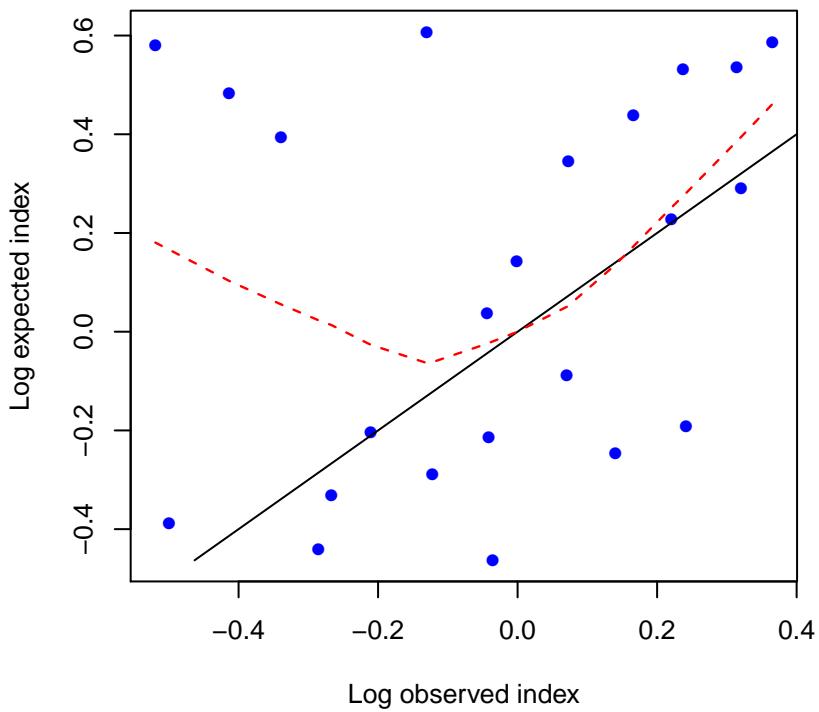
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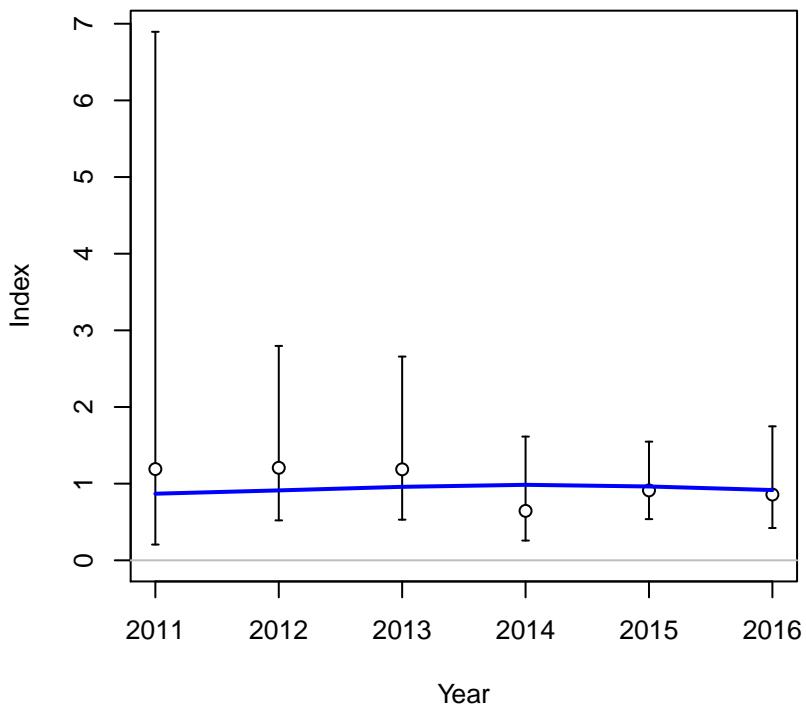
**Index S6\_JPN\_OBS**



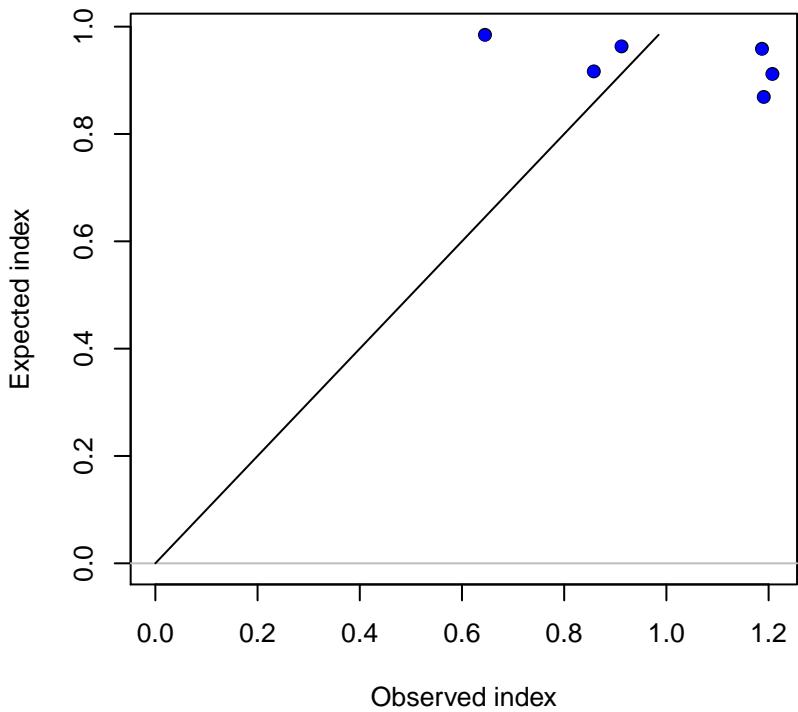
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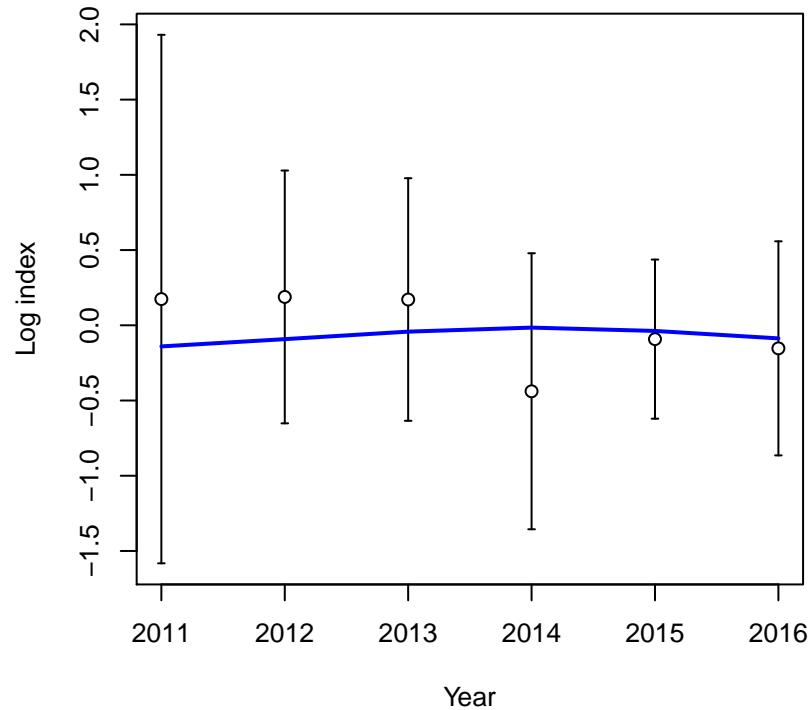
**Index S6\_JPN\_OBS**



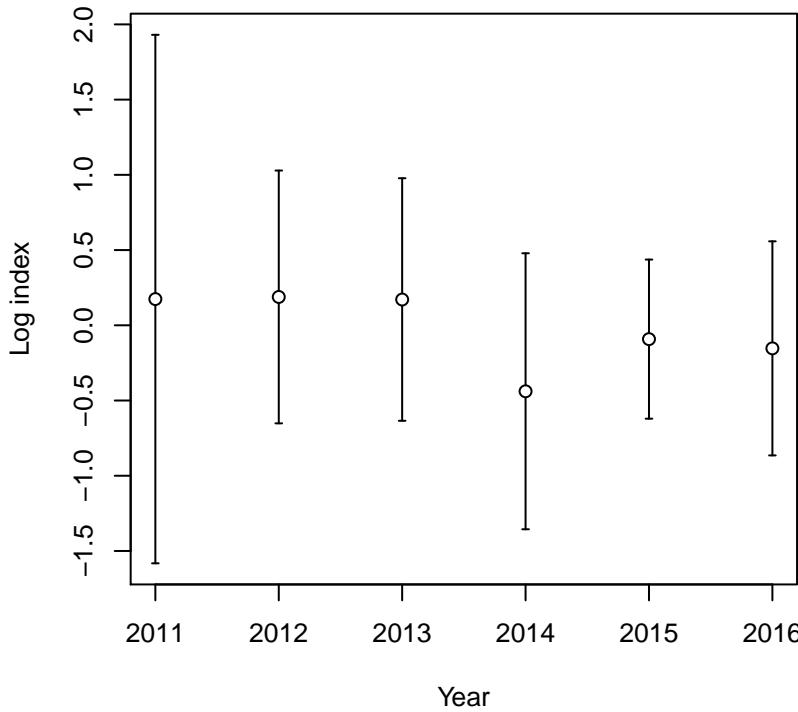
**Index S6\_JPN\_OBS**



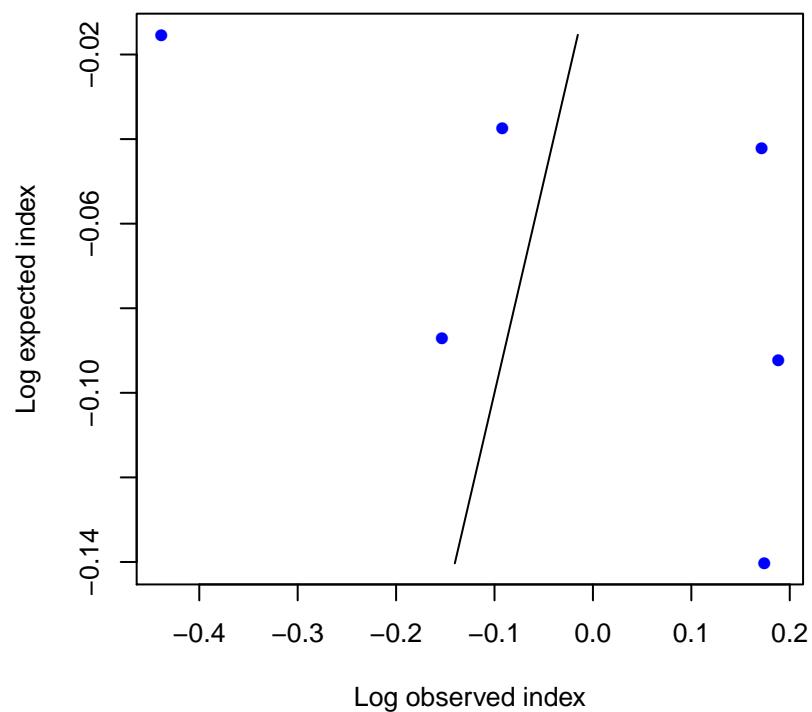
**Log index S6\_JPN\_OBS**



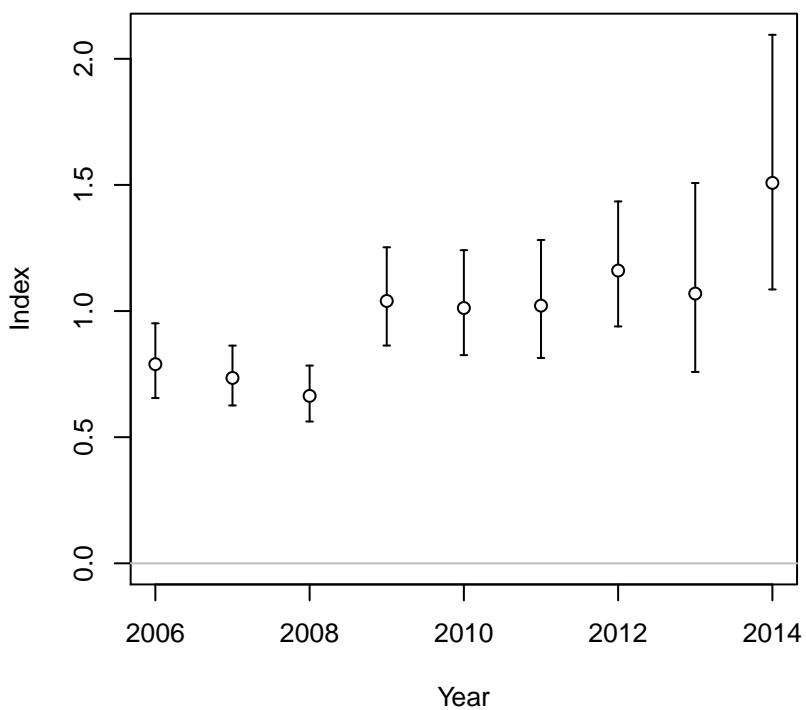
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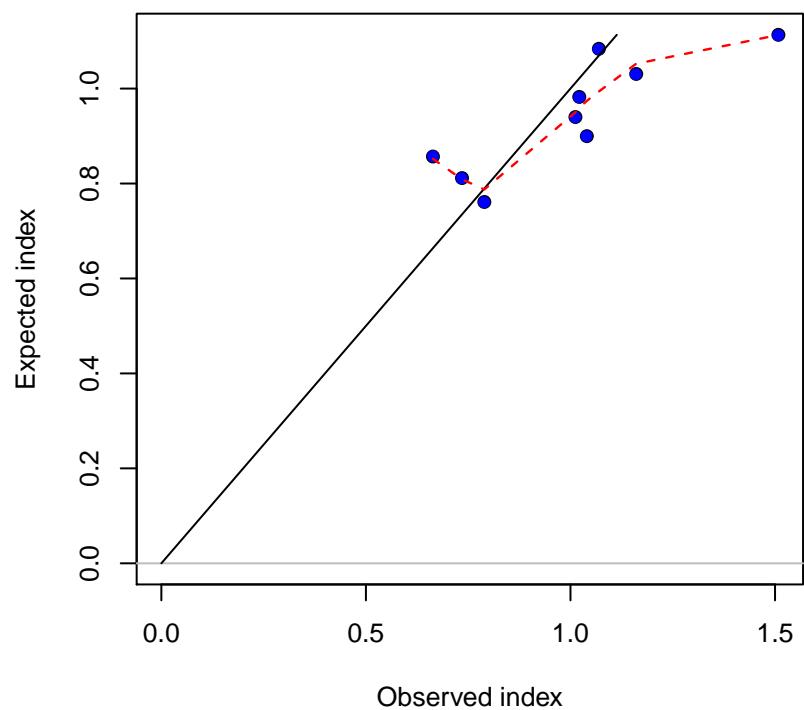
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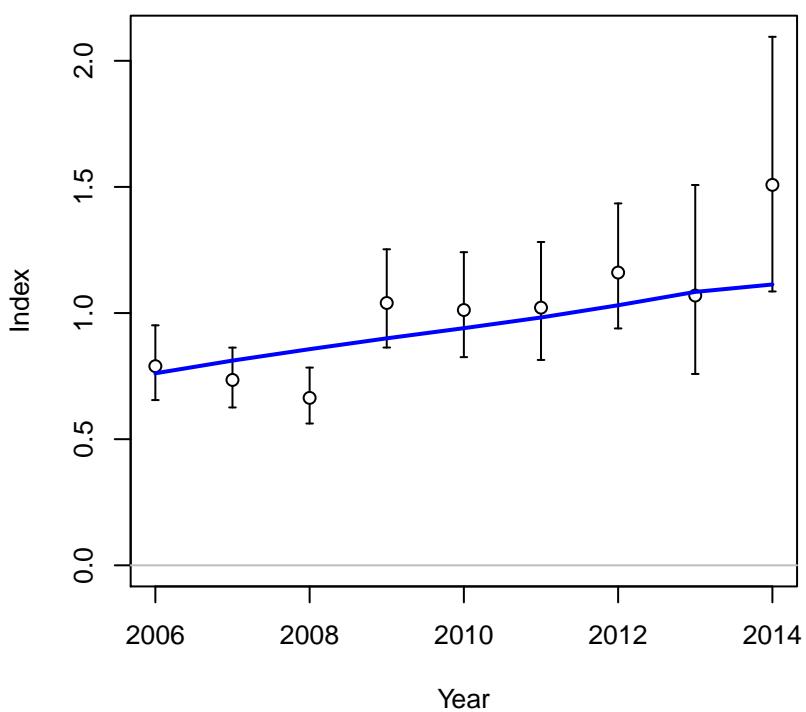
**Index S7\_JPN\_GEO**



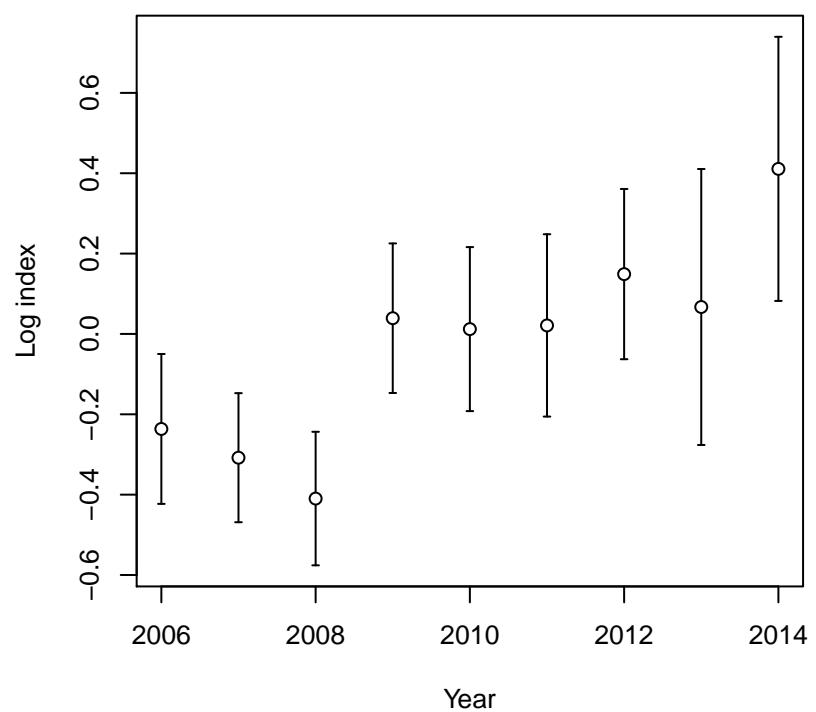
**Index S7\_JPN\_GEO**



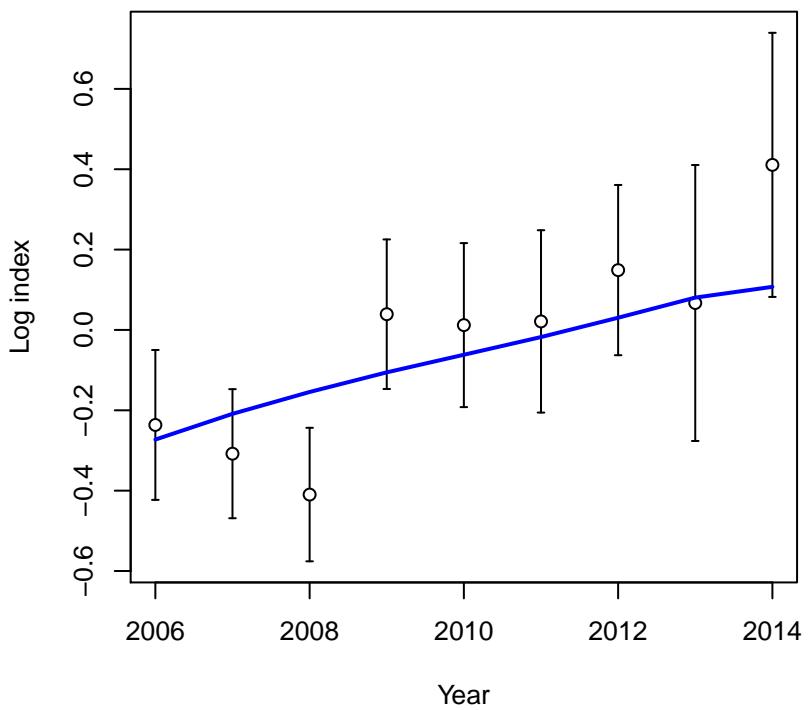
**Index S7\_JPN\_GEO**



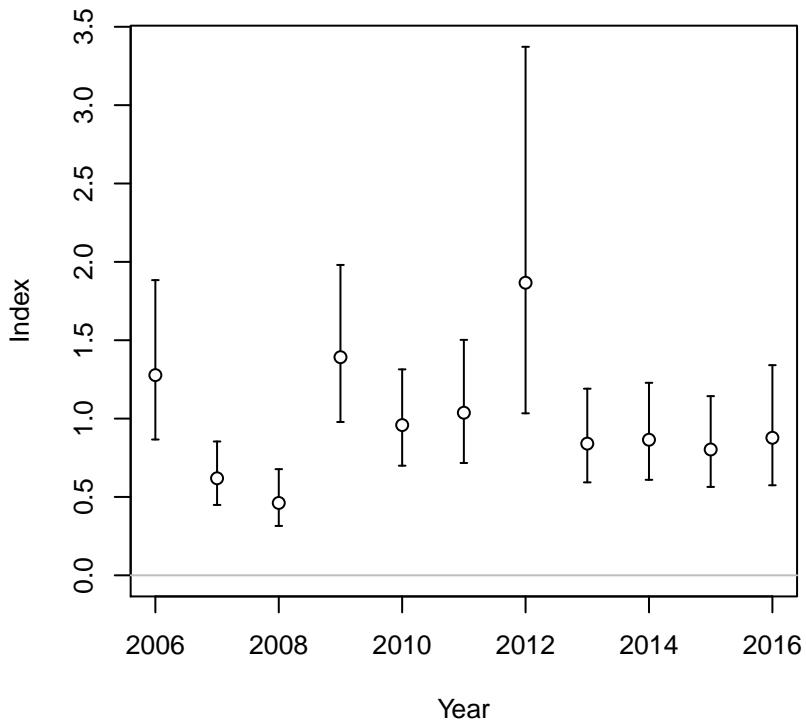
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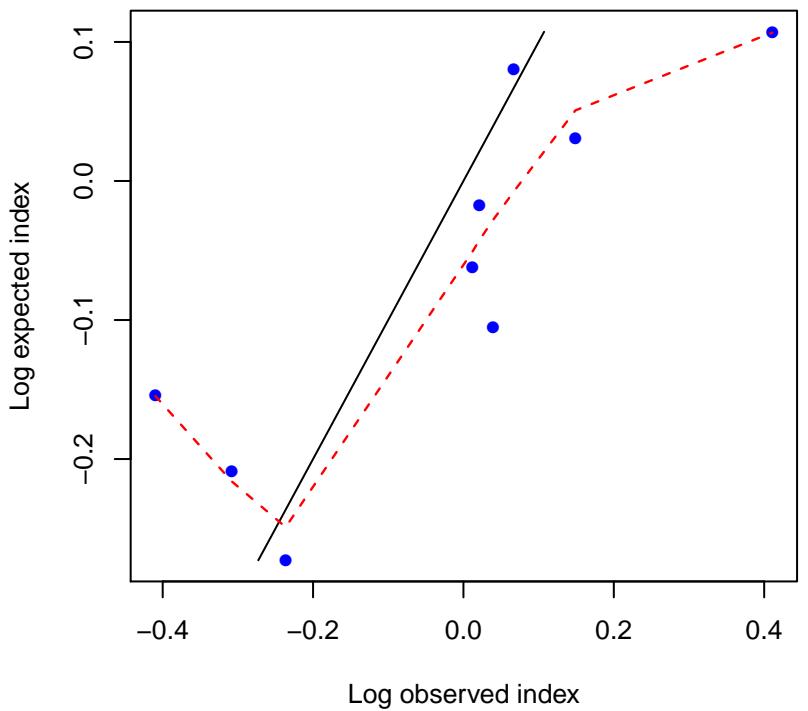
**Log index S7\_JPN\_GEO**



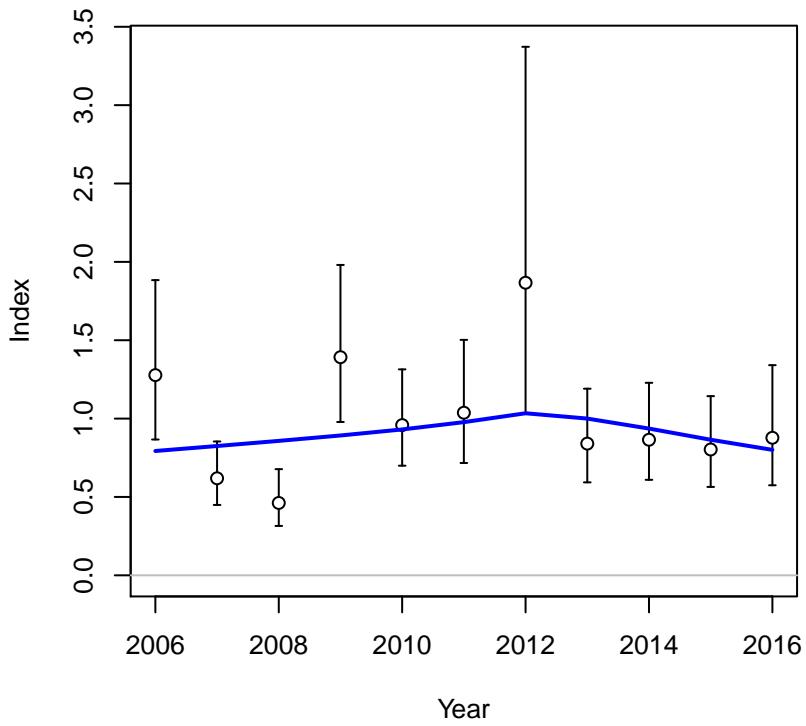
**Index S8\_MEX**

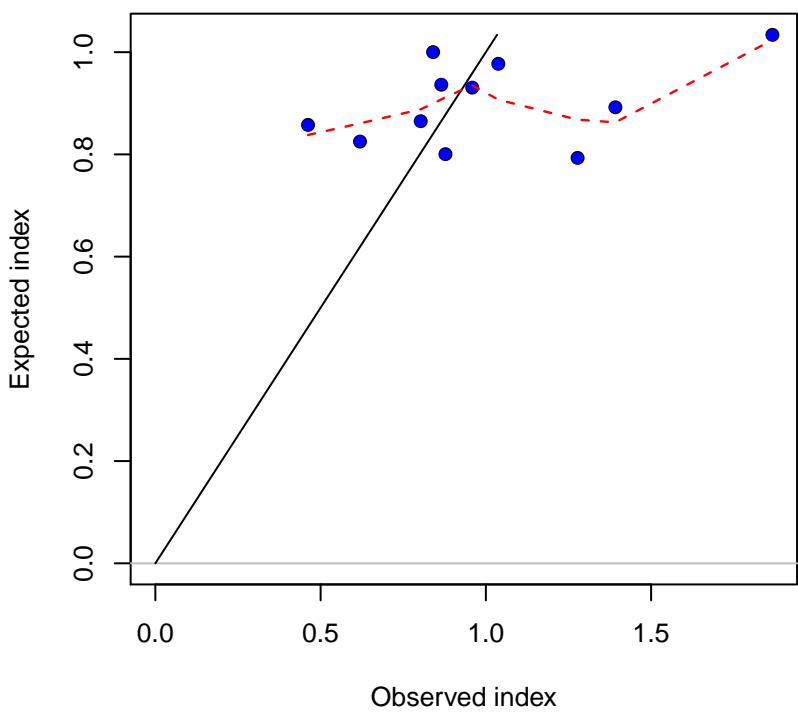
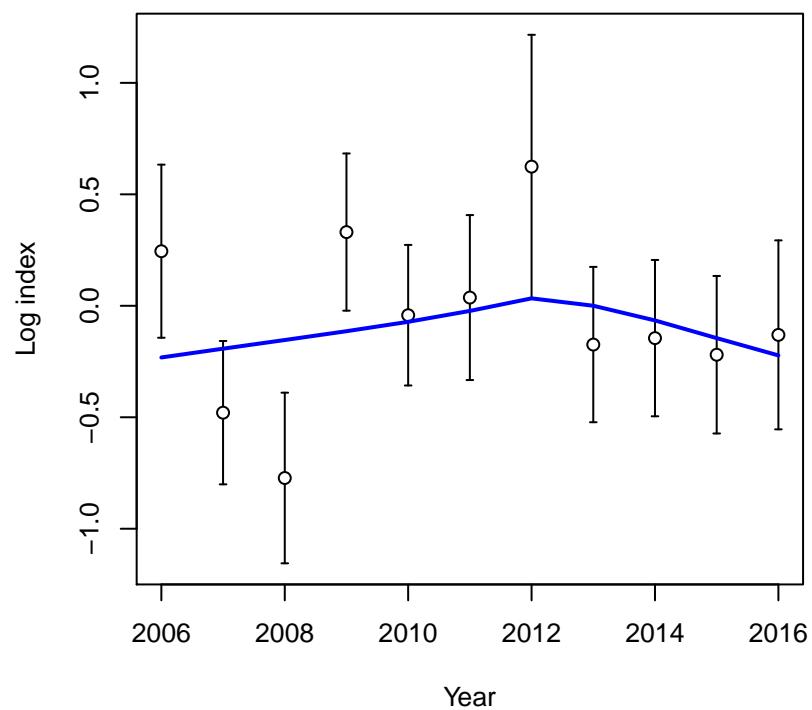
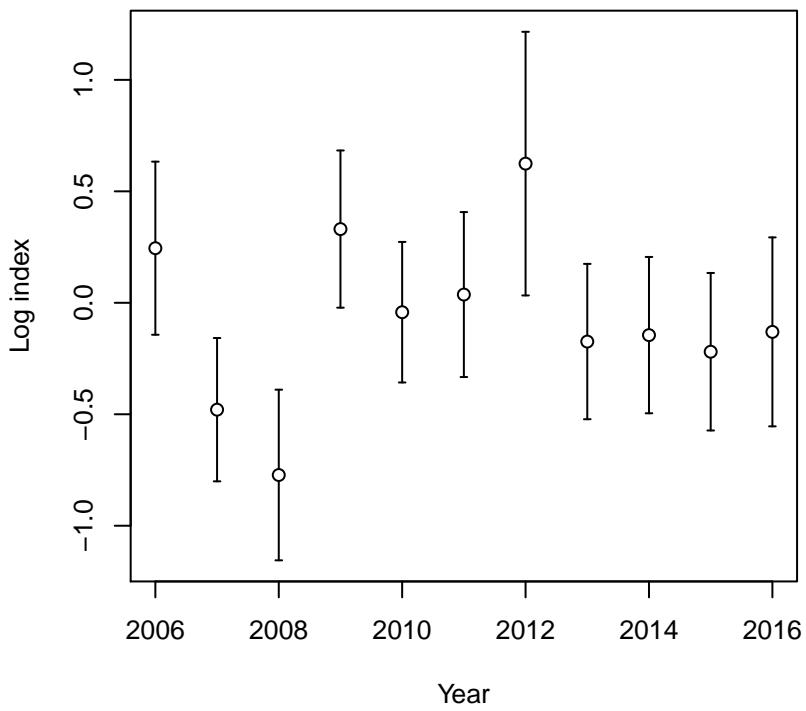
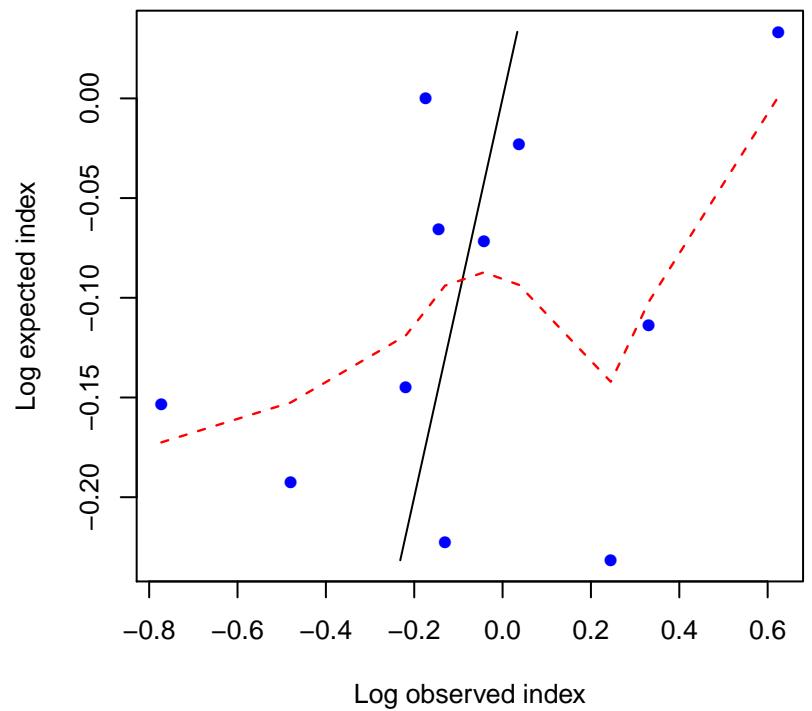


**Log index S7\_JPN\_GEO**

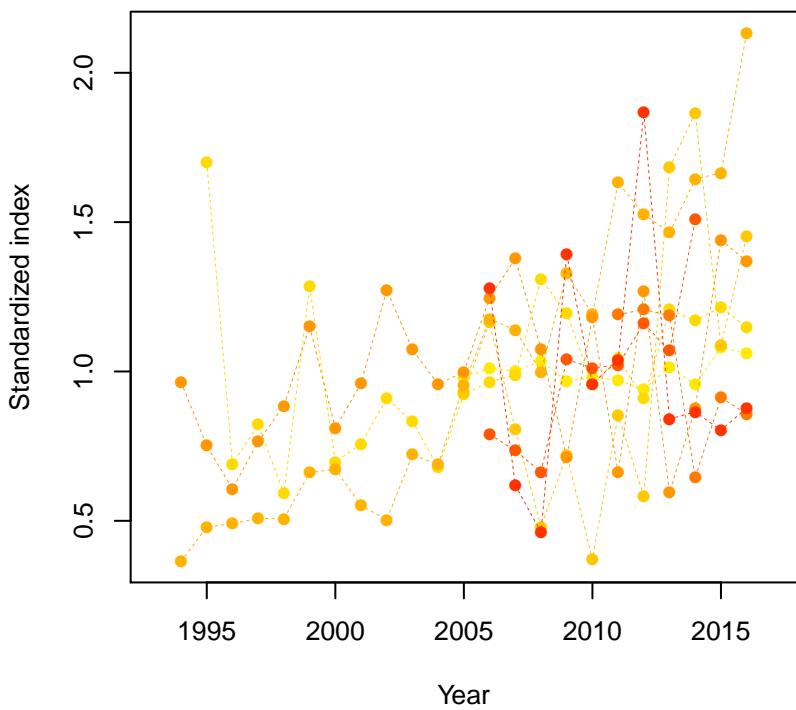


**Index S8\_MEX**

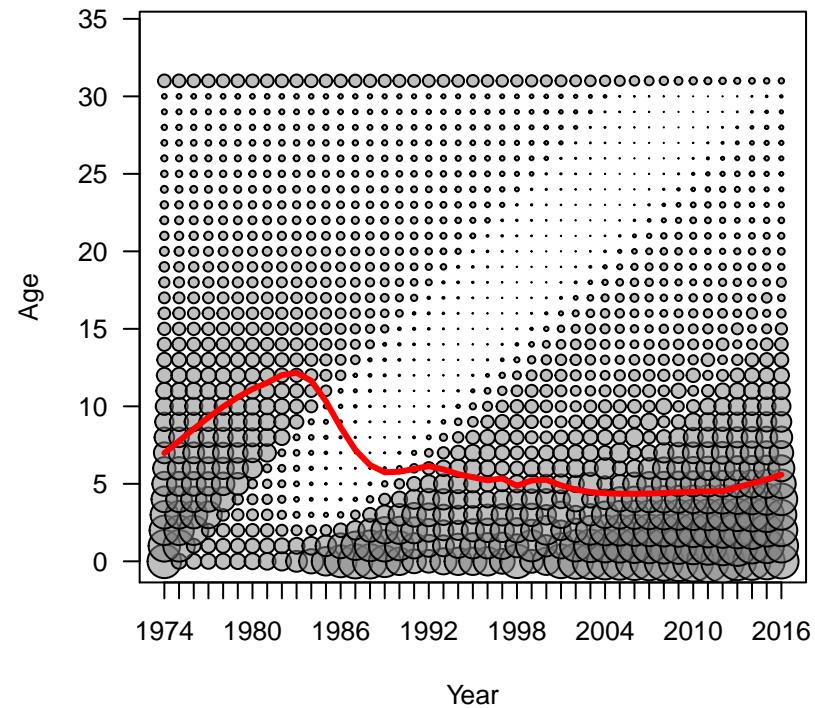


**Index S8\_MEX****Log index S8\_MEX****Log index S8\_MEX****Log index S8\_MEX**

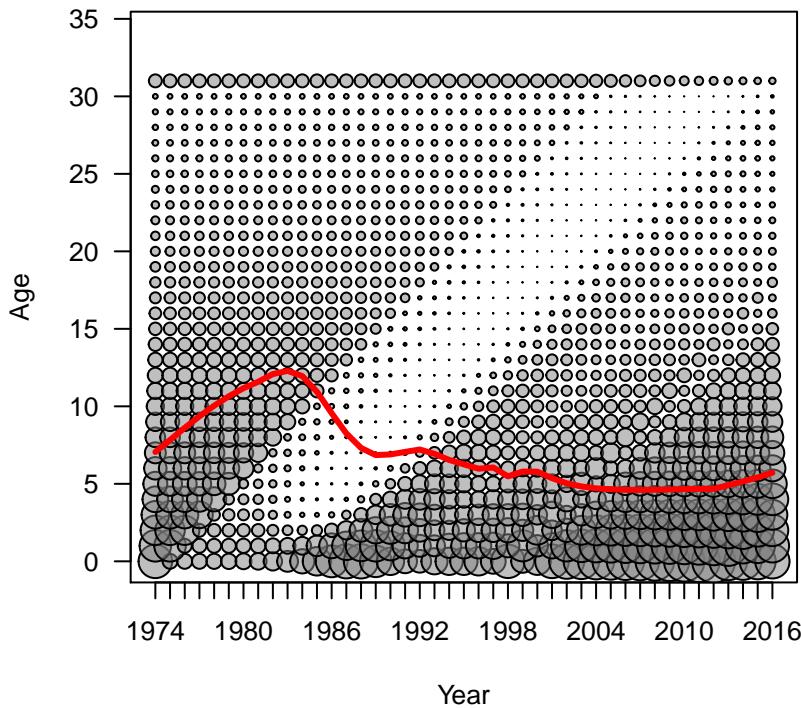
All cpue plot



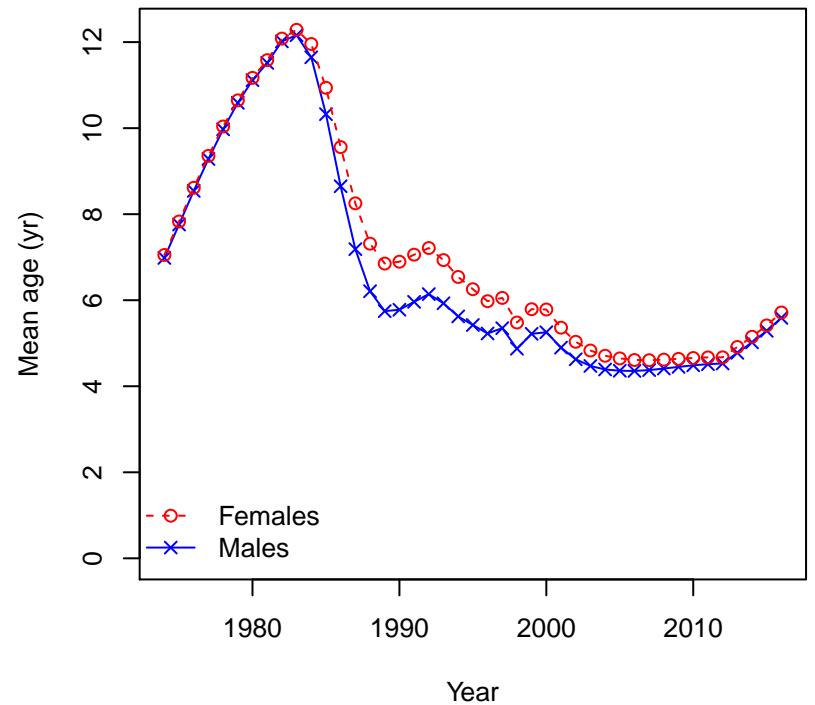
beginning of year expected numbers at age of males in (max ~ 948.6 the



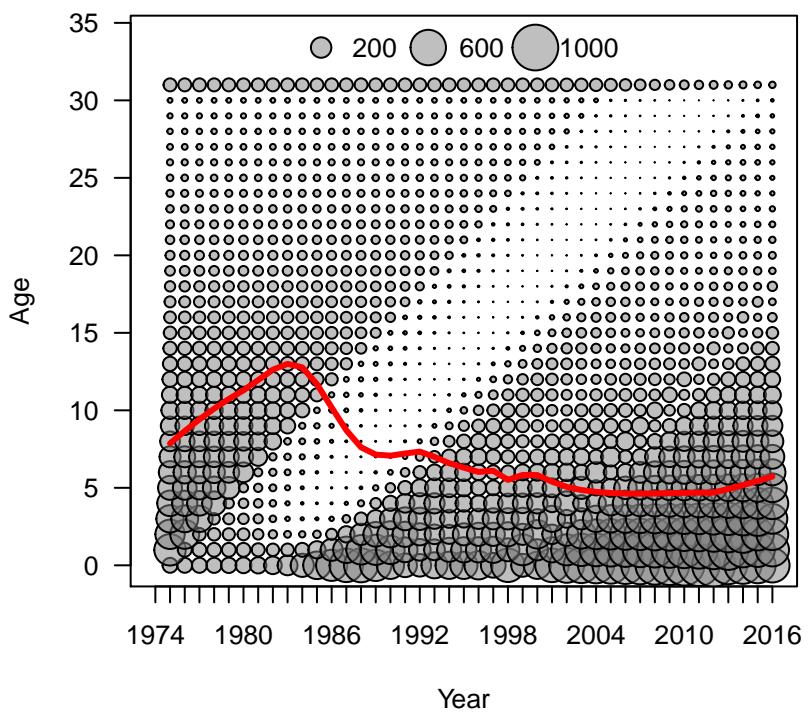
beginning of year expected numbers at age of females in (max ~ 948.6 th



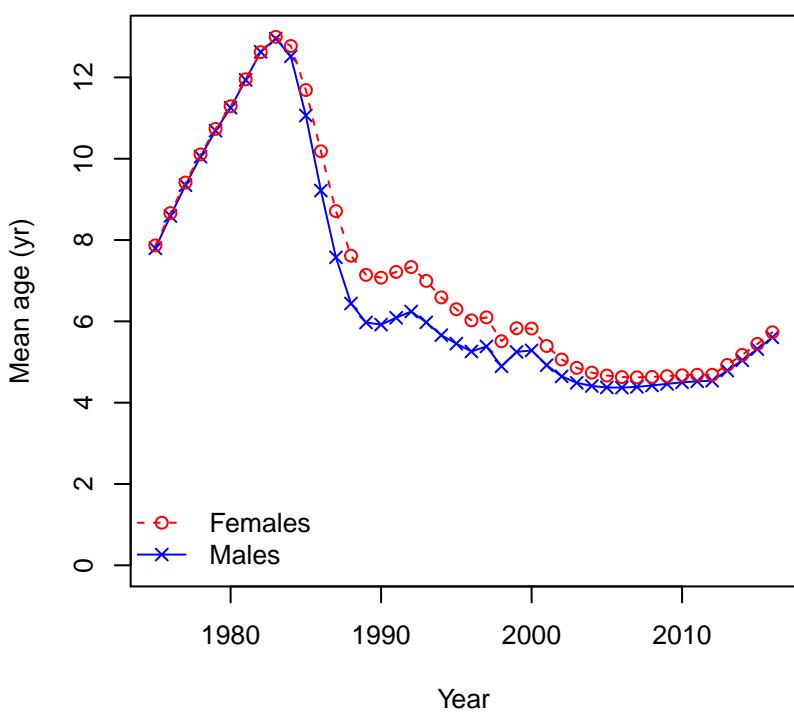
Beginning of year mean age in the population



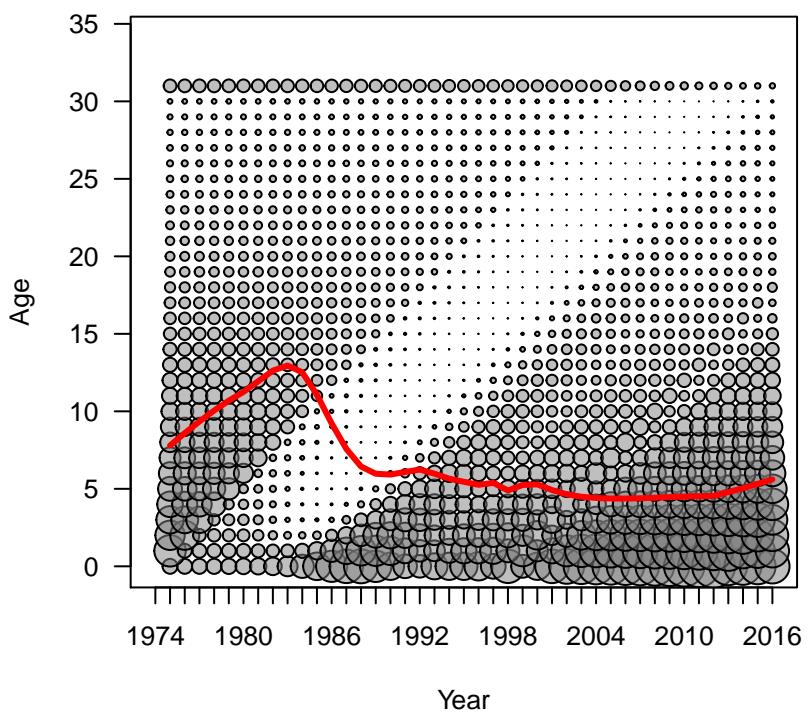
Middle of year expected numbers at age of females in (max ~ 884.6 tho



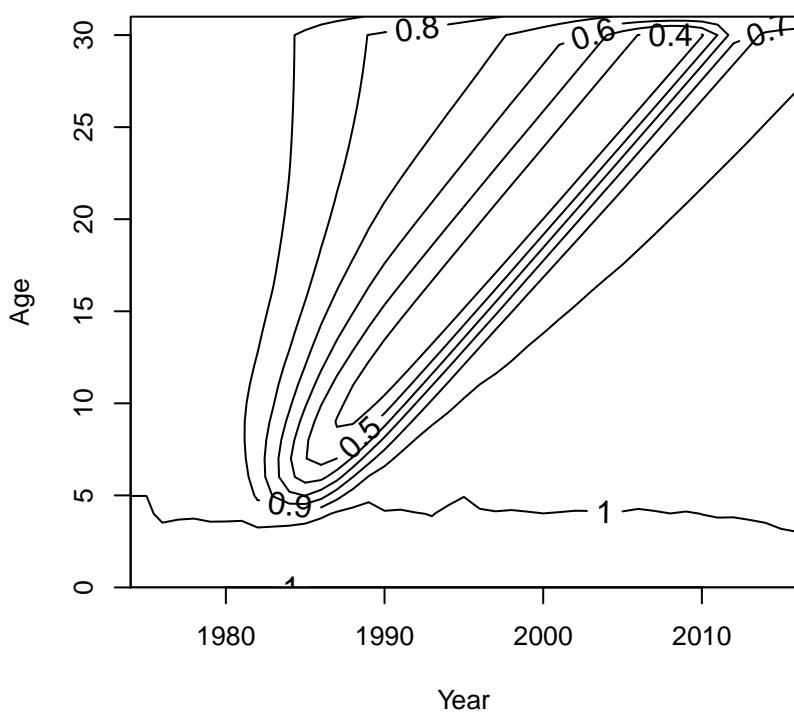
Middle of year mean age in the population



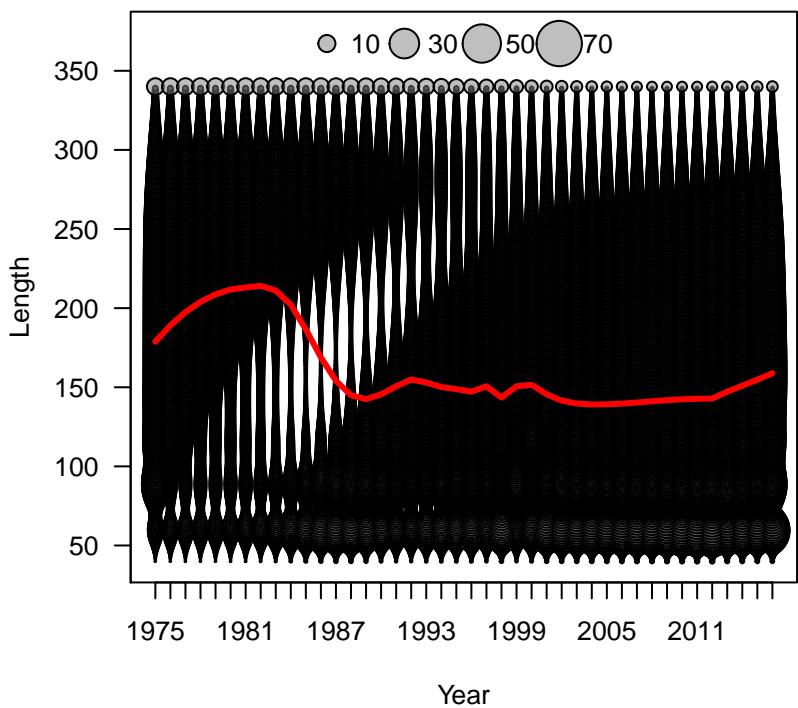
Middle of year expected numbers at age of males in (max ~ 884.6 tho)



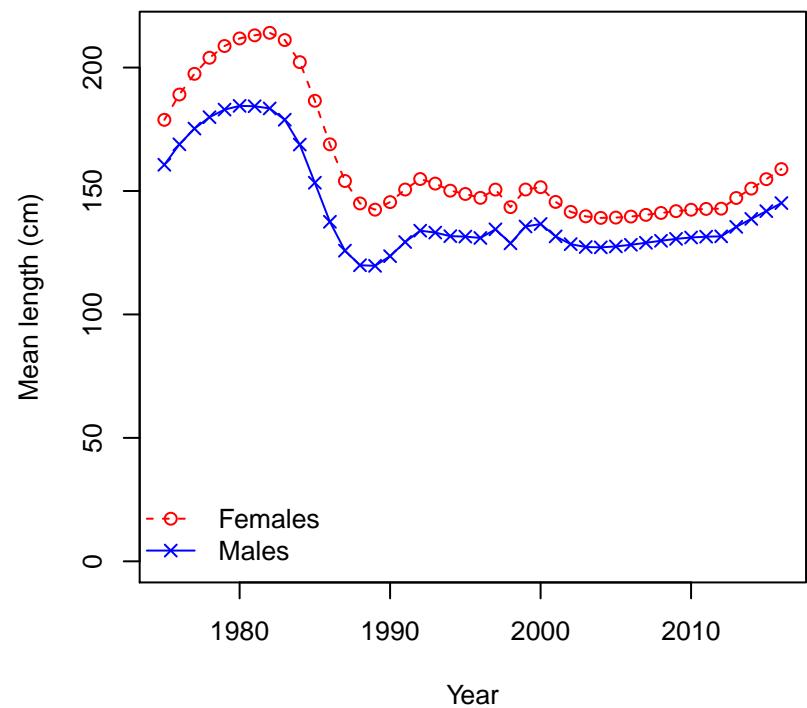
Sex ratio of numbers at age (males/females)



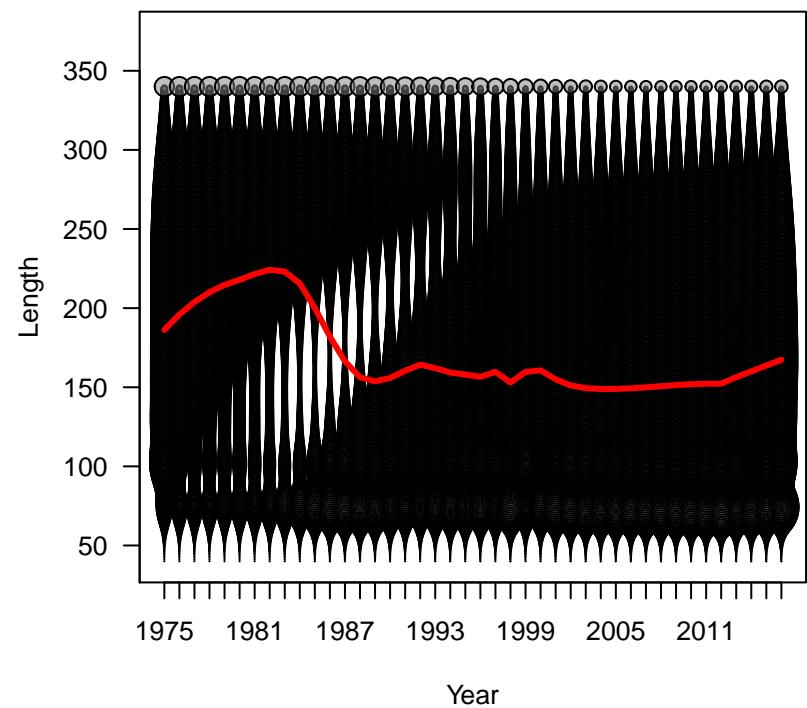
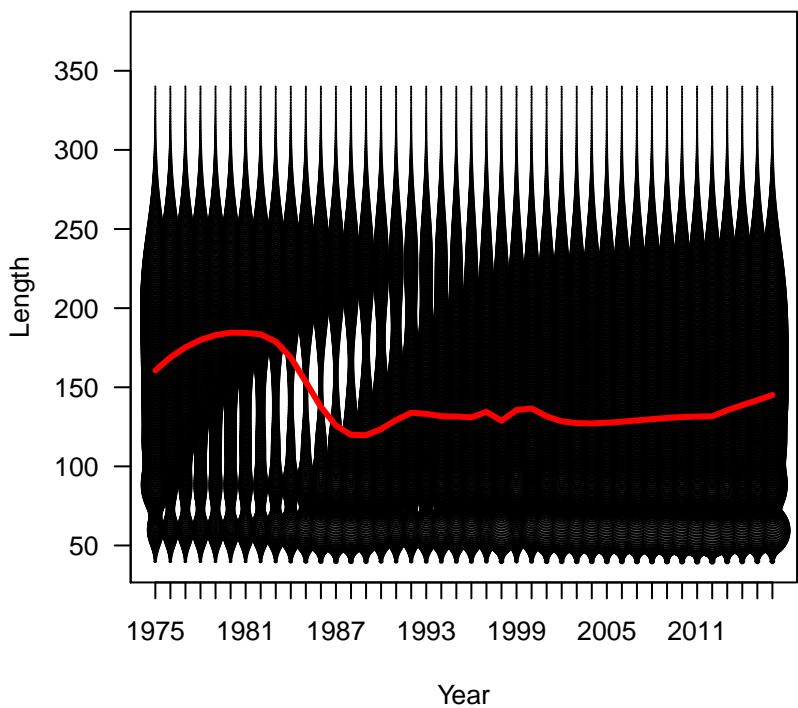
Beginning of year expected numbers at length of females in (max ~ 63.0 t)



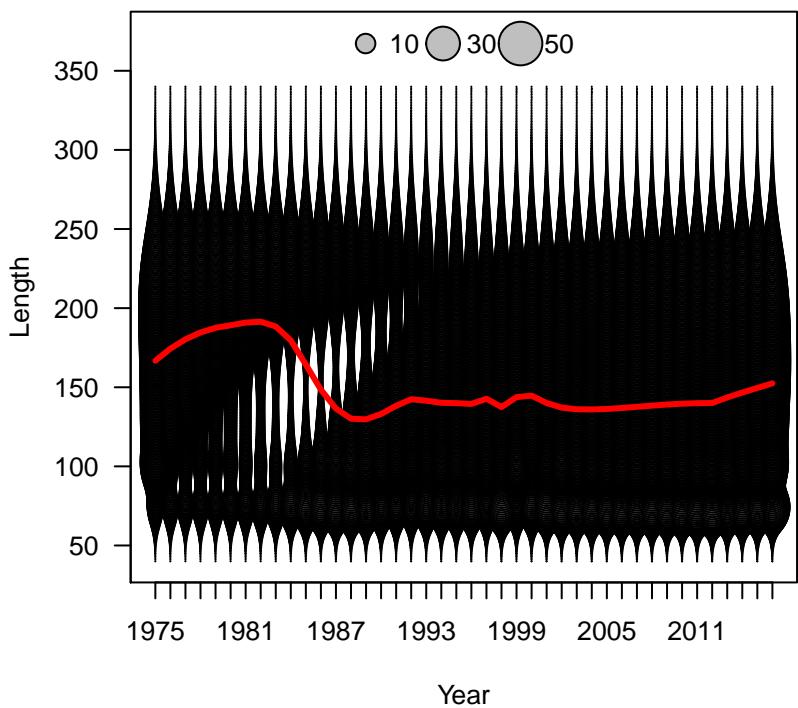
Beginning of year mean length (cm) in the population



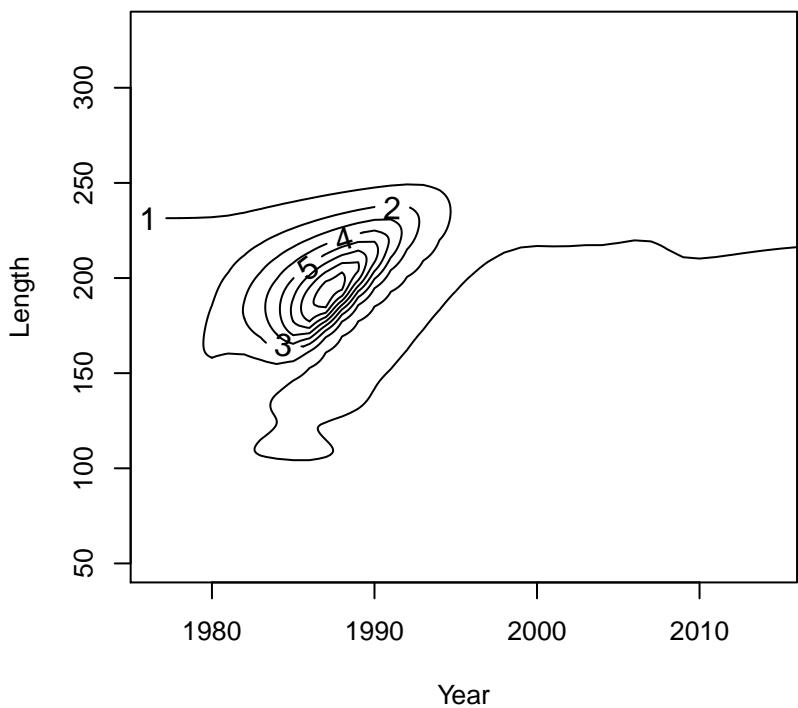
Beginning of year expected numbers at length of males in (max ~ 63.1 t) and beginning of year expected numbers at length of females in (max ~ 48.3 t)



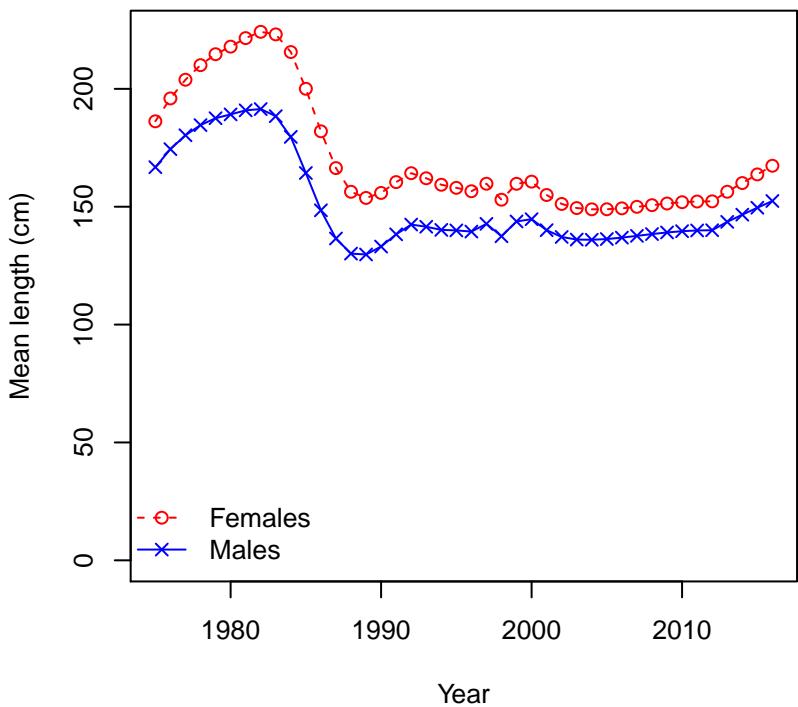
Middle of year expected numbers at length of males in (max ~ 48.7 tho



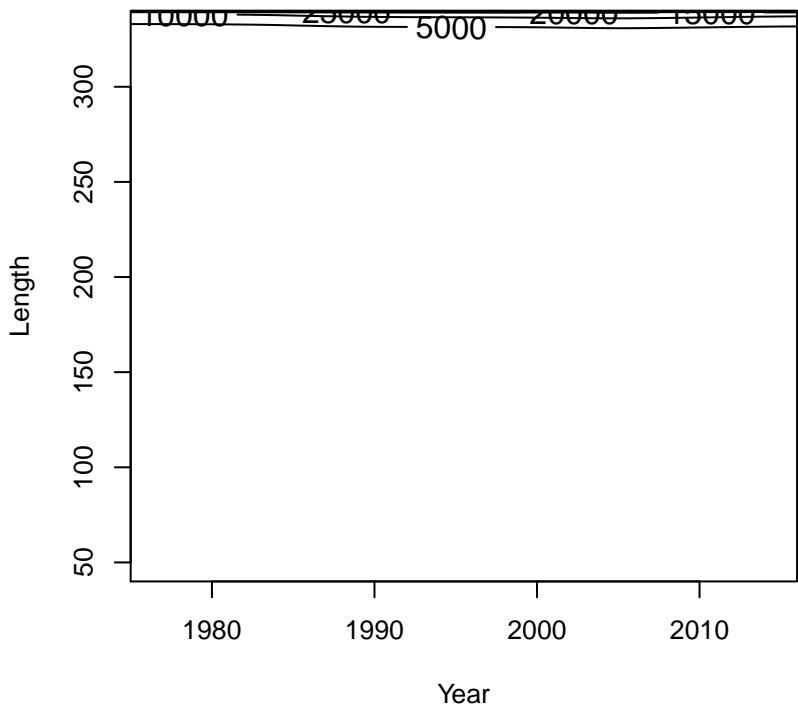
Sex ratio of numbers at length (males/females)



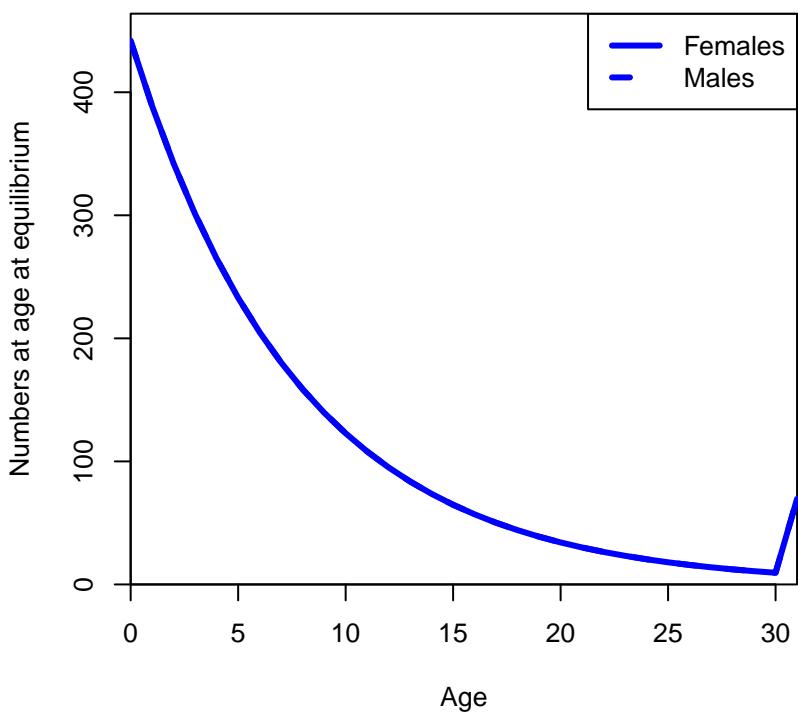
Middle of year mean length (cm) in the population



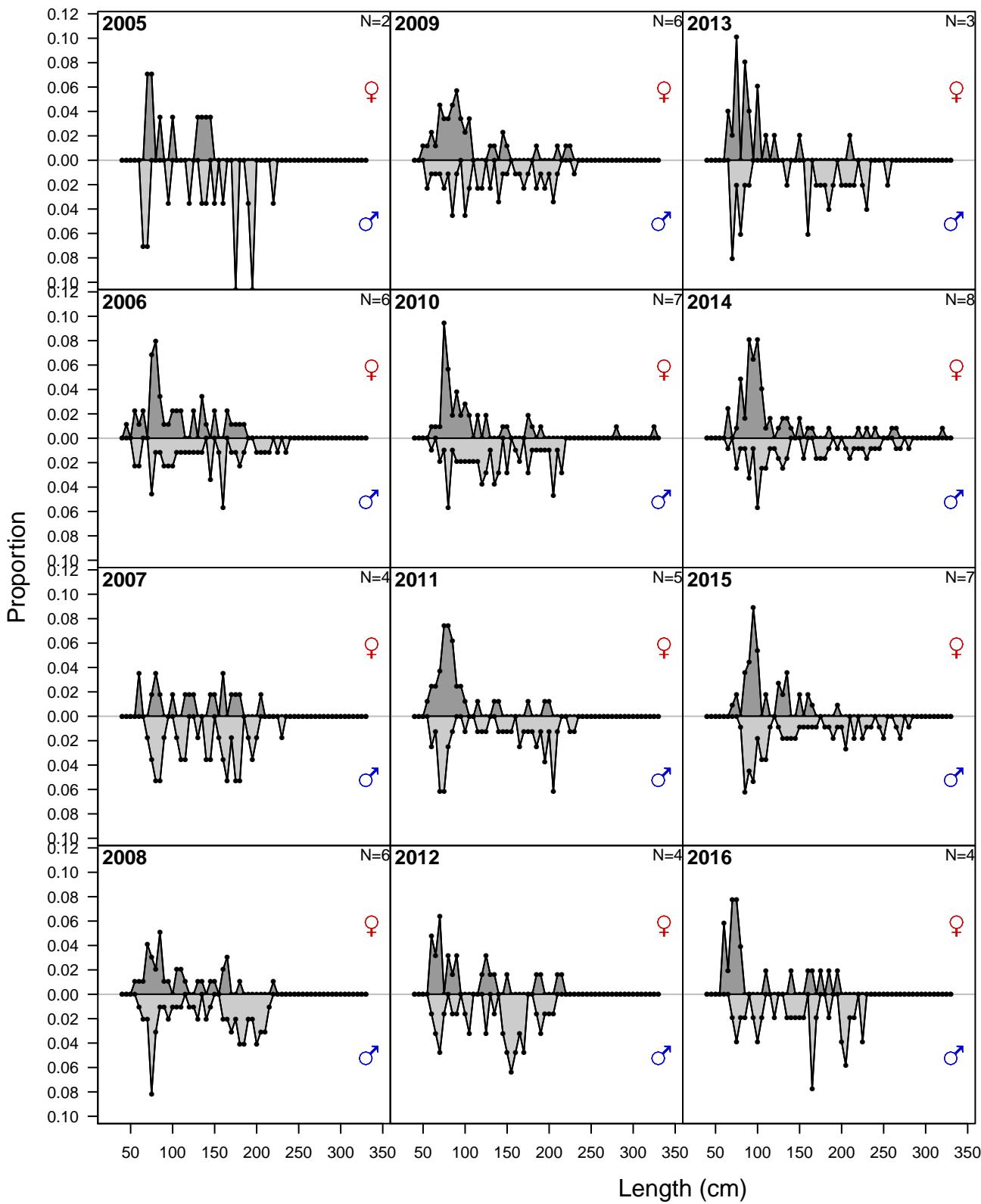
Sex ratio of numbers at length (females/males)



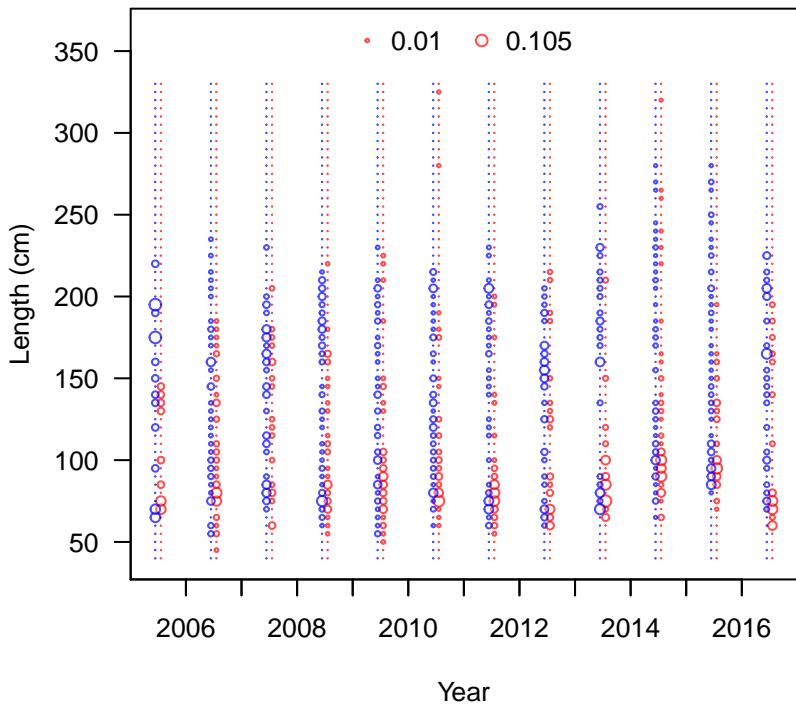
### Equilibrium age distribution



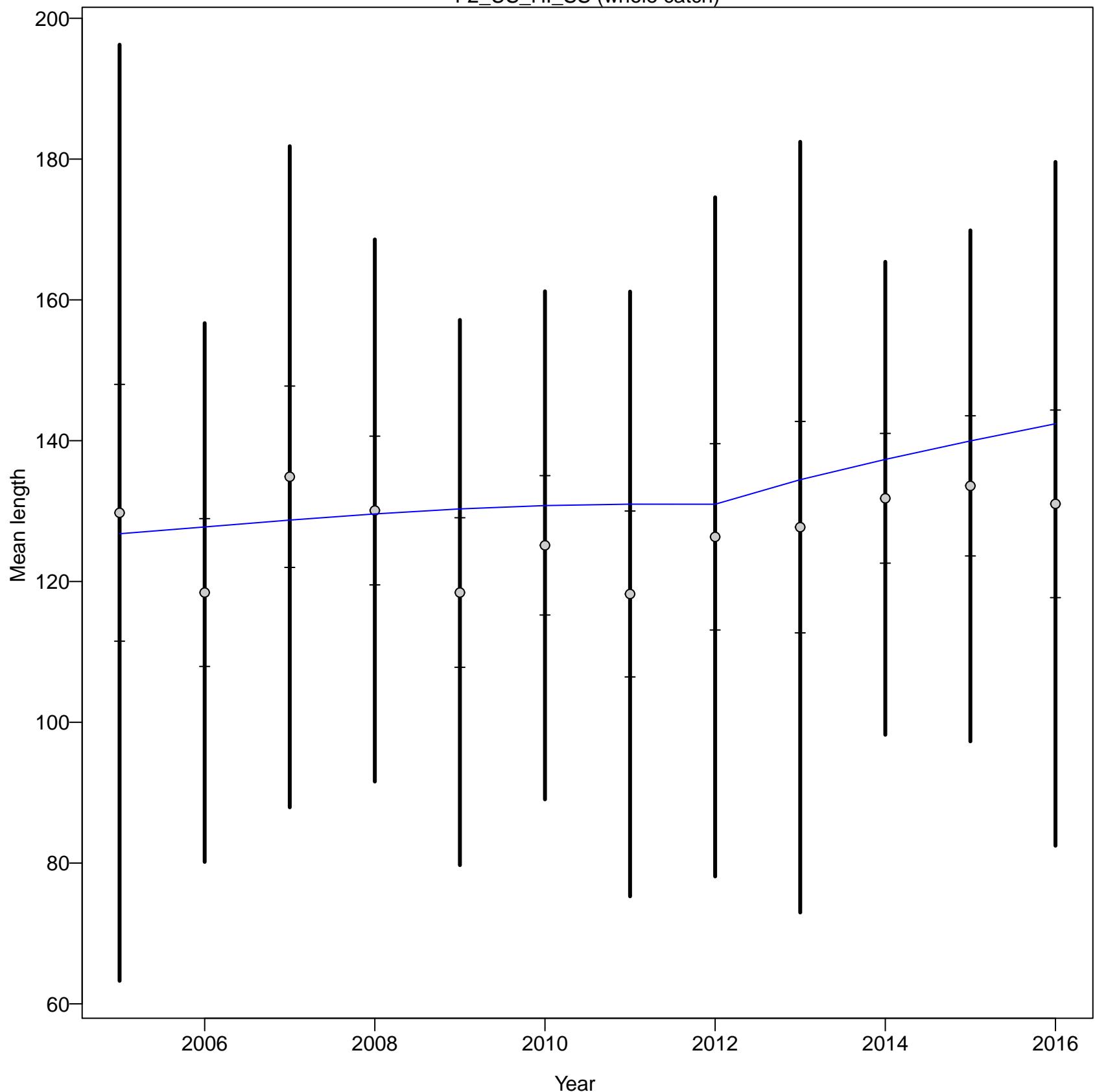
### length comp data, whole catch, F2\_US\_HI\_SS



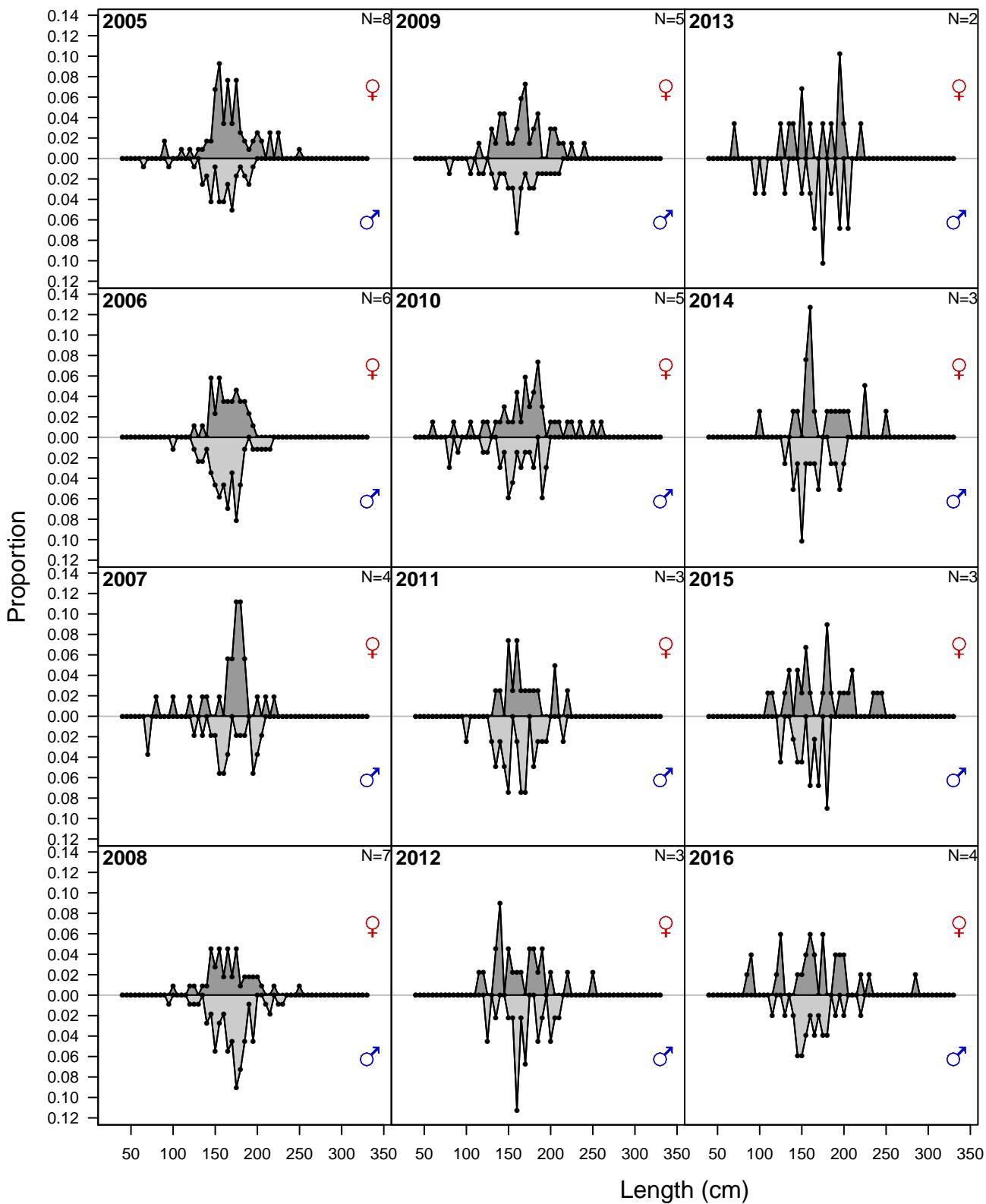
length comp data, whole catch, F2\_US\_HI\_SS (max=0.11)



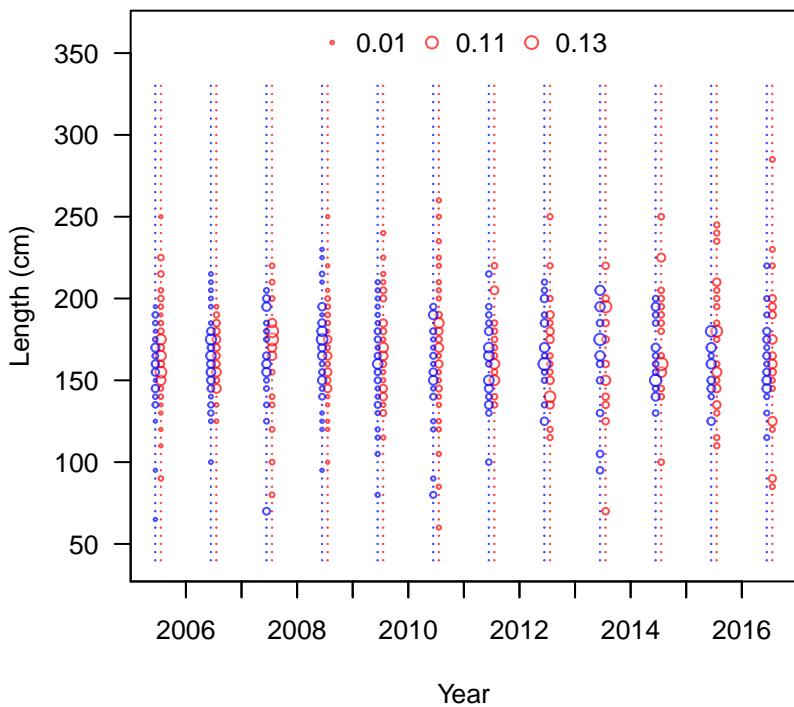
F2\_US\_HI\_SS (whole catch)



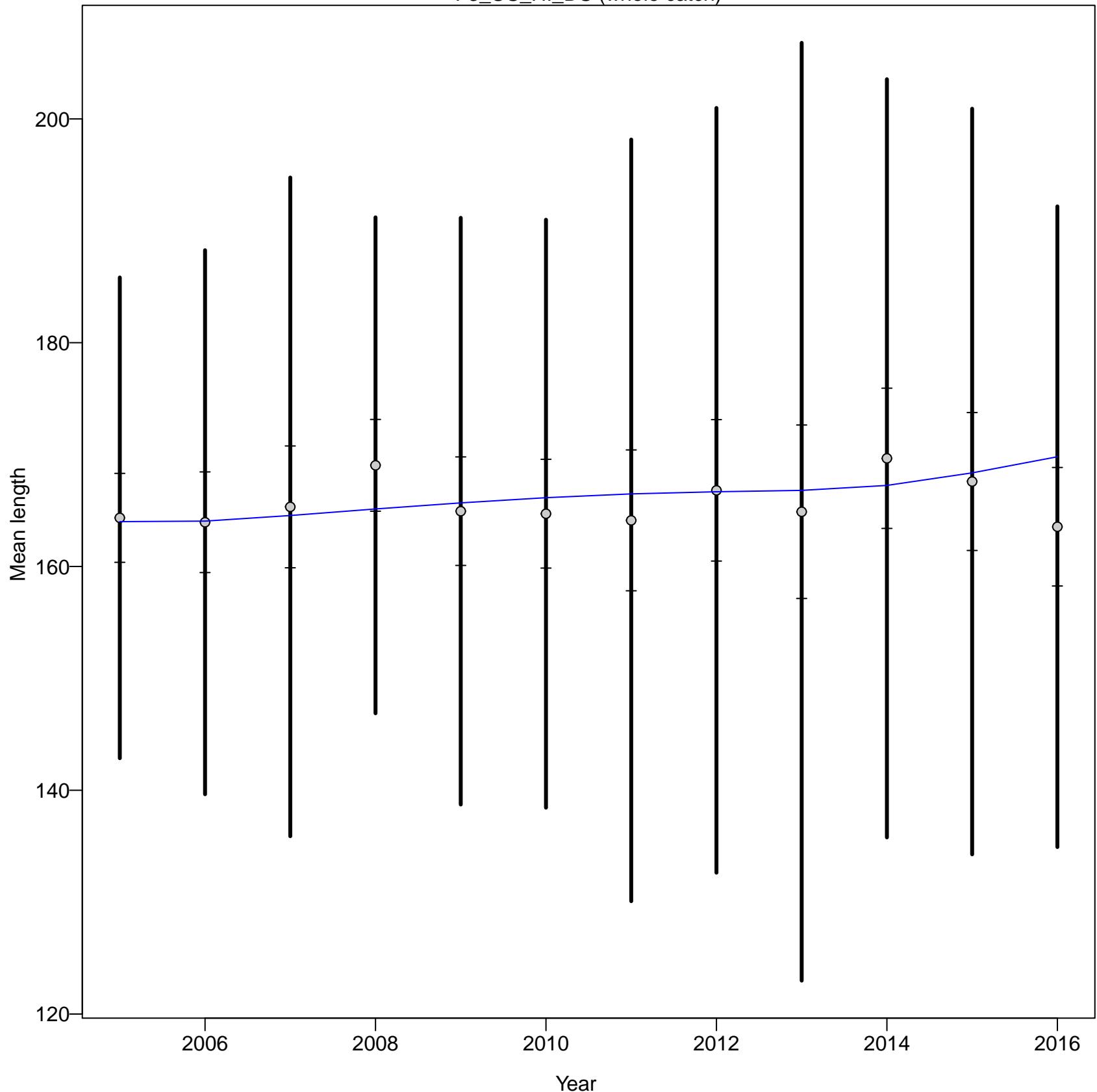
### length comp data, whole catch, F3\_US\_HI\_DS



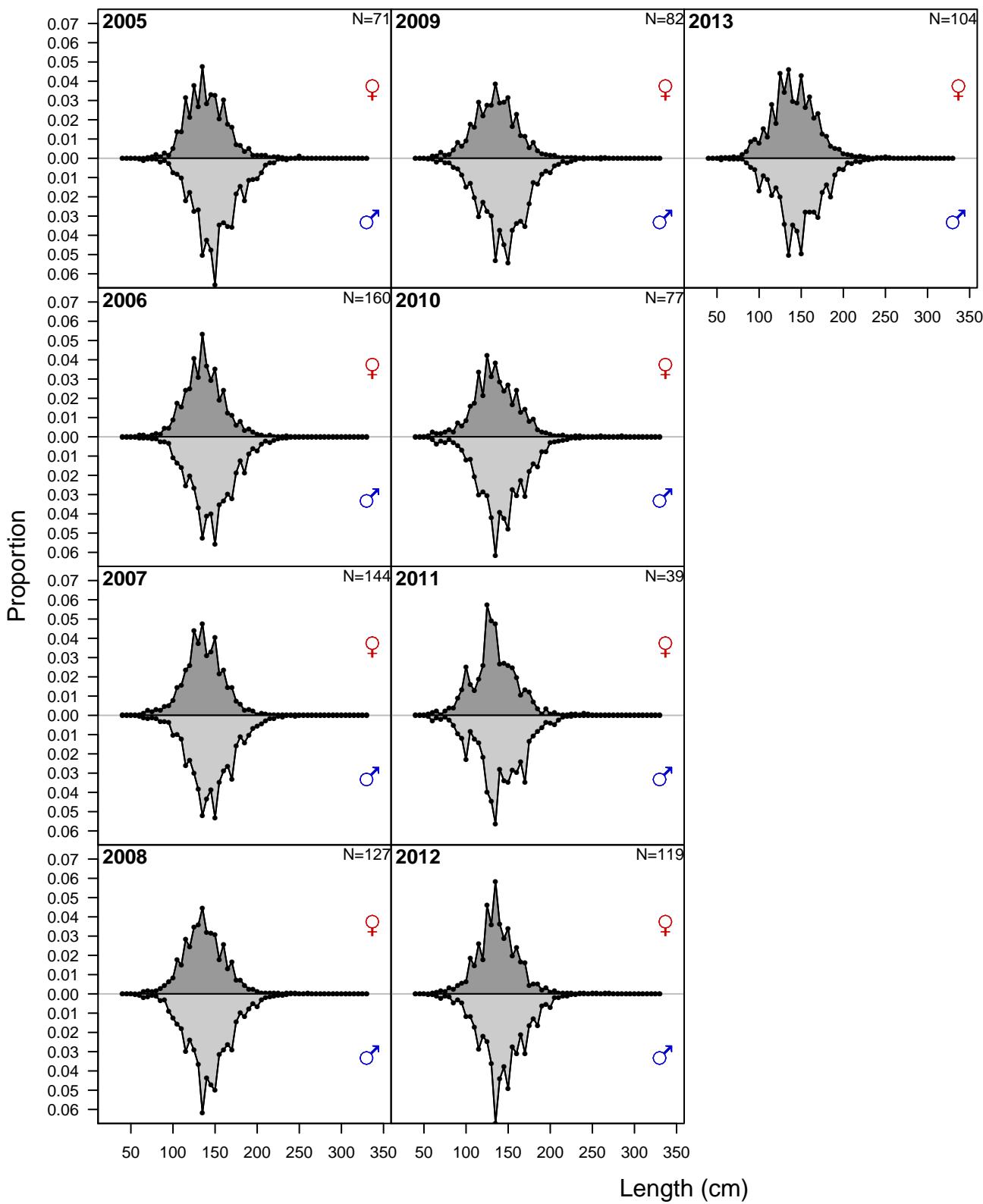
length comp data, whole catch, F3\_US\_HI\_DS (max=0.13)



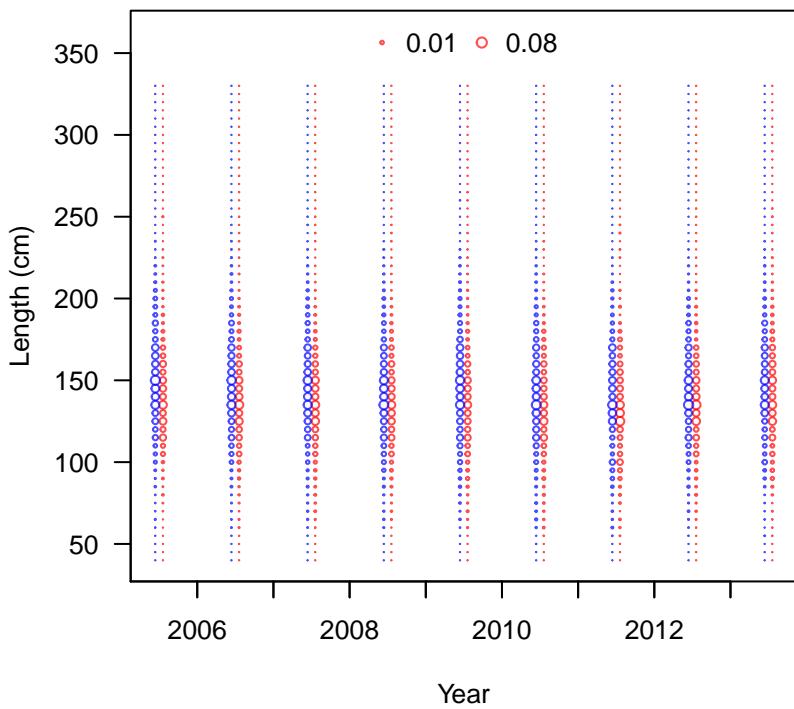
F3\_US\_HI\_DS (whole catch)



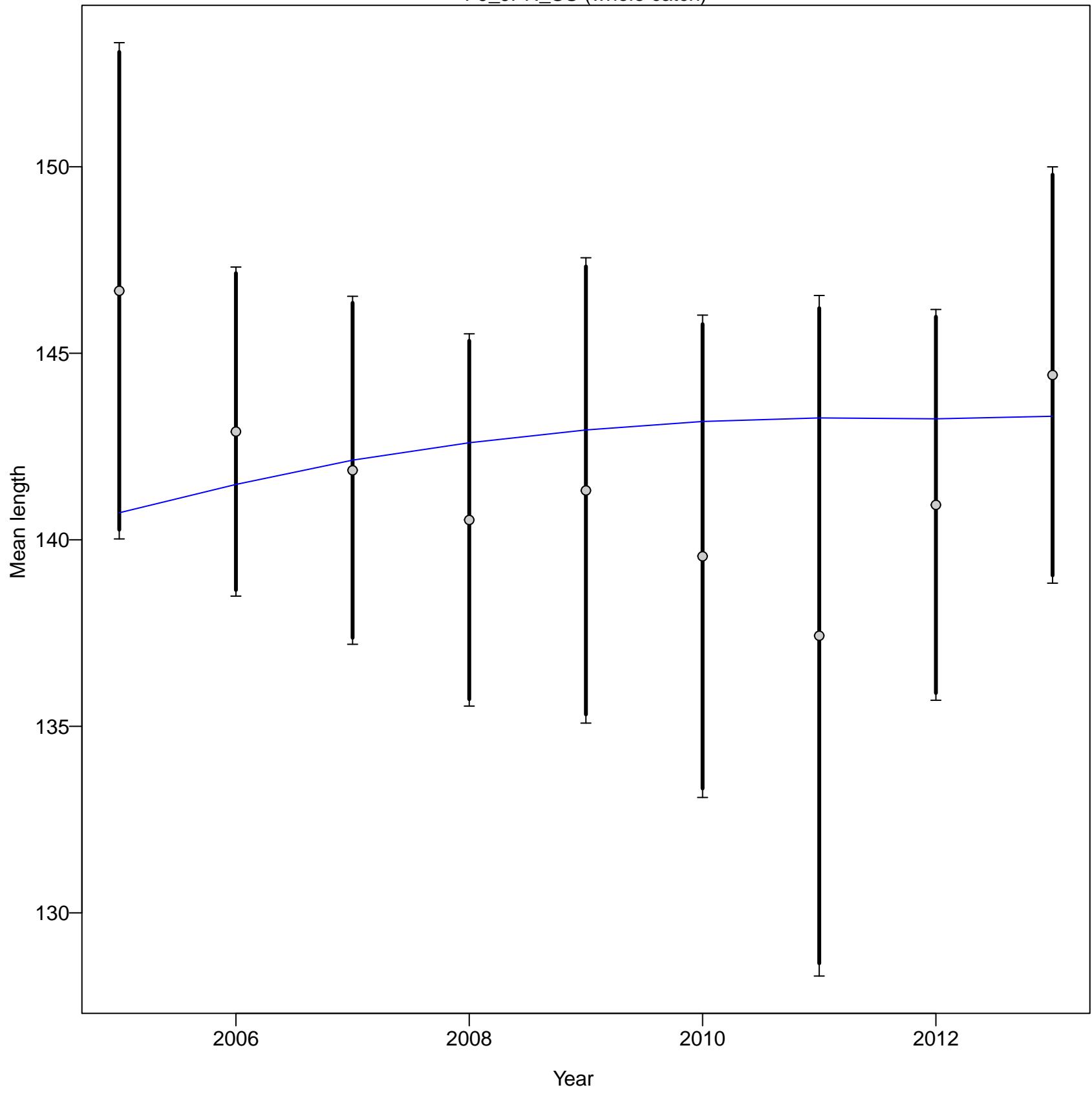
### length comp data, whole catch, F9\_JPN\_SS



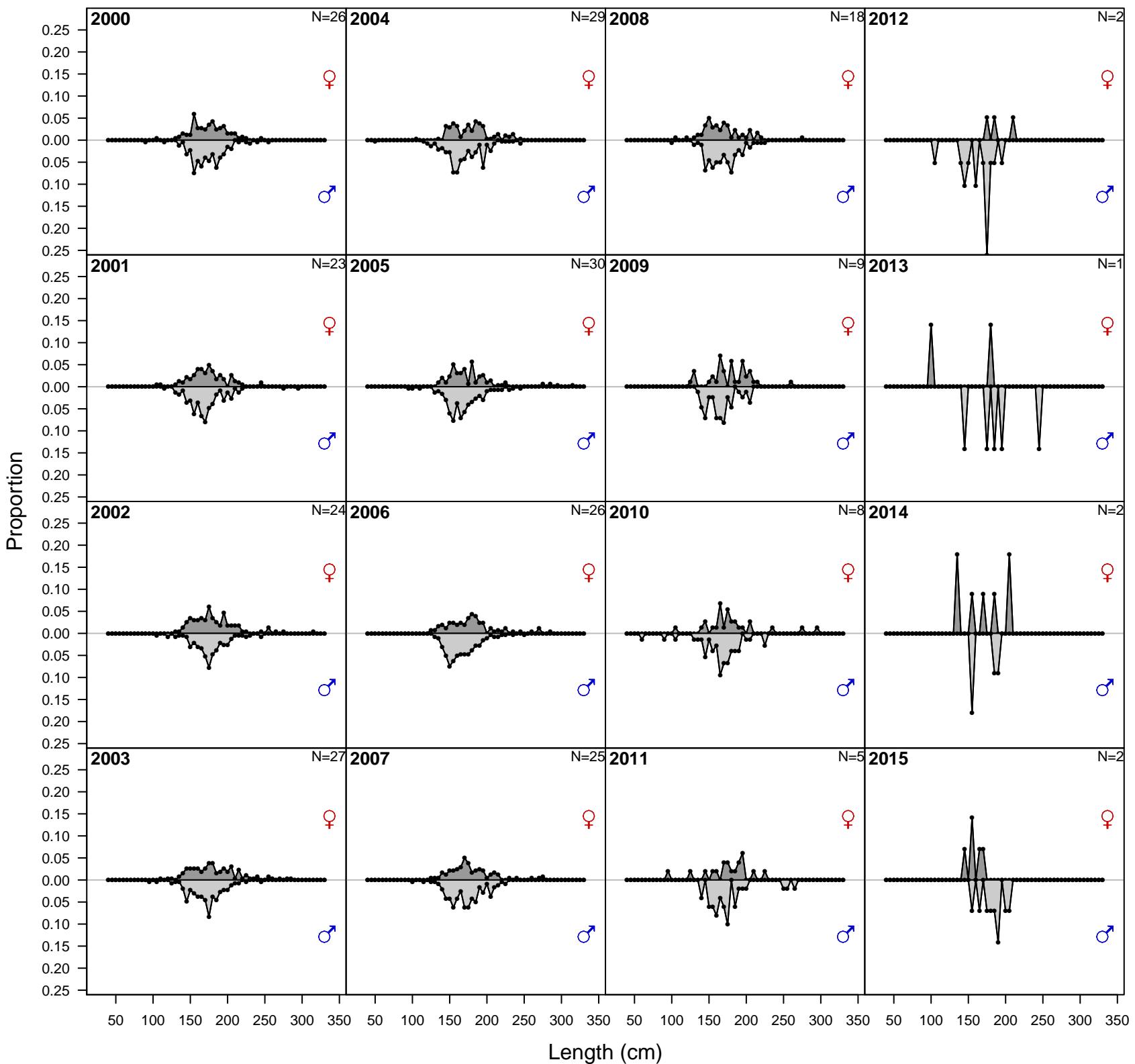
length comp data, whole catch, F9\_JPN\_SS (max=0.07)



F9\_JPN\_SS (whole catch)

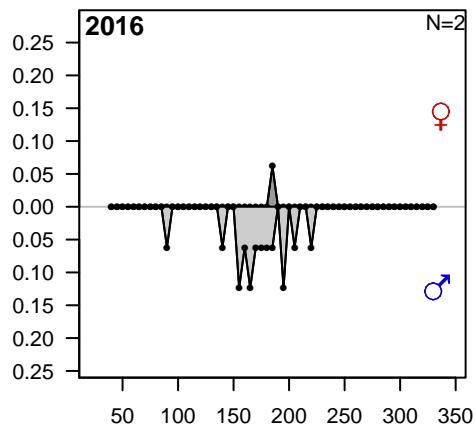


# length comp data, whole catch, F10\_JPN\_DS



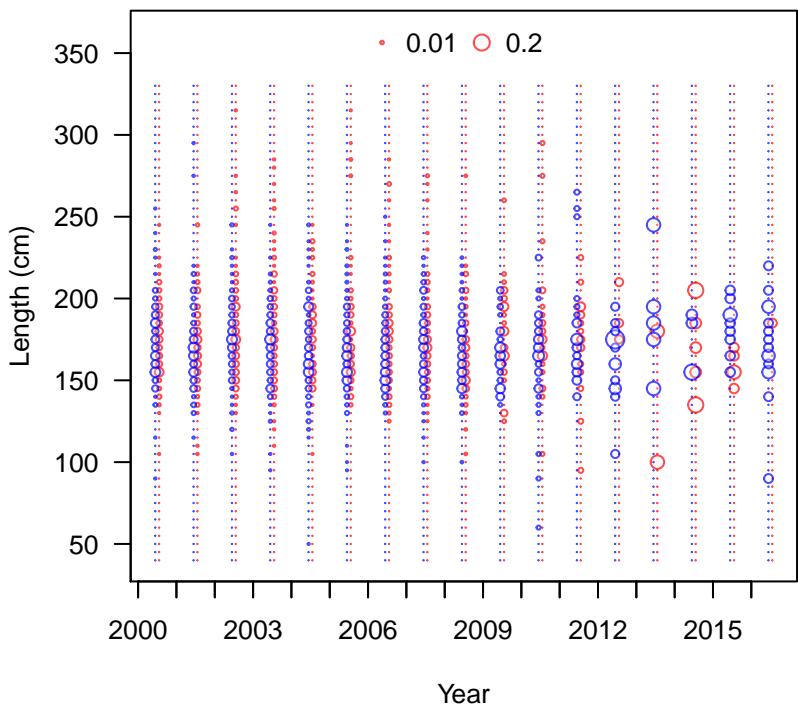
### length comp data, whole catch, F10\_JPN\_DS

Proportion

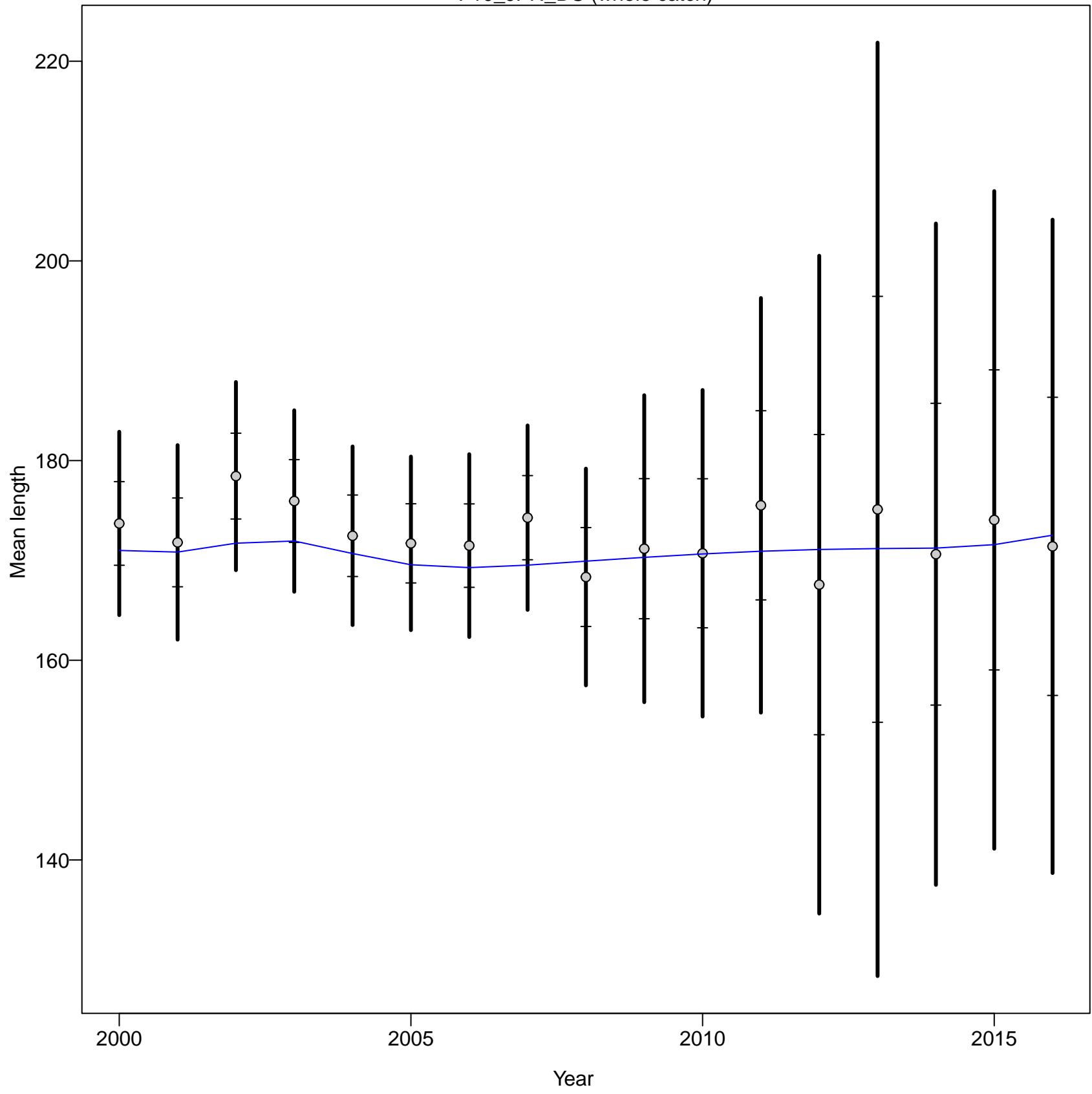


Length (cm)

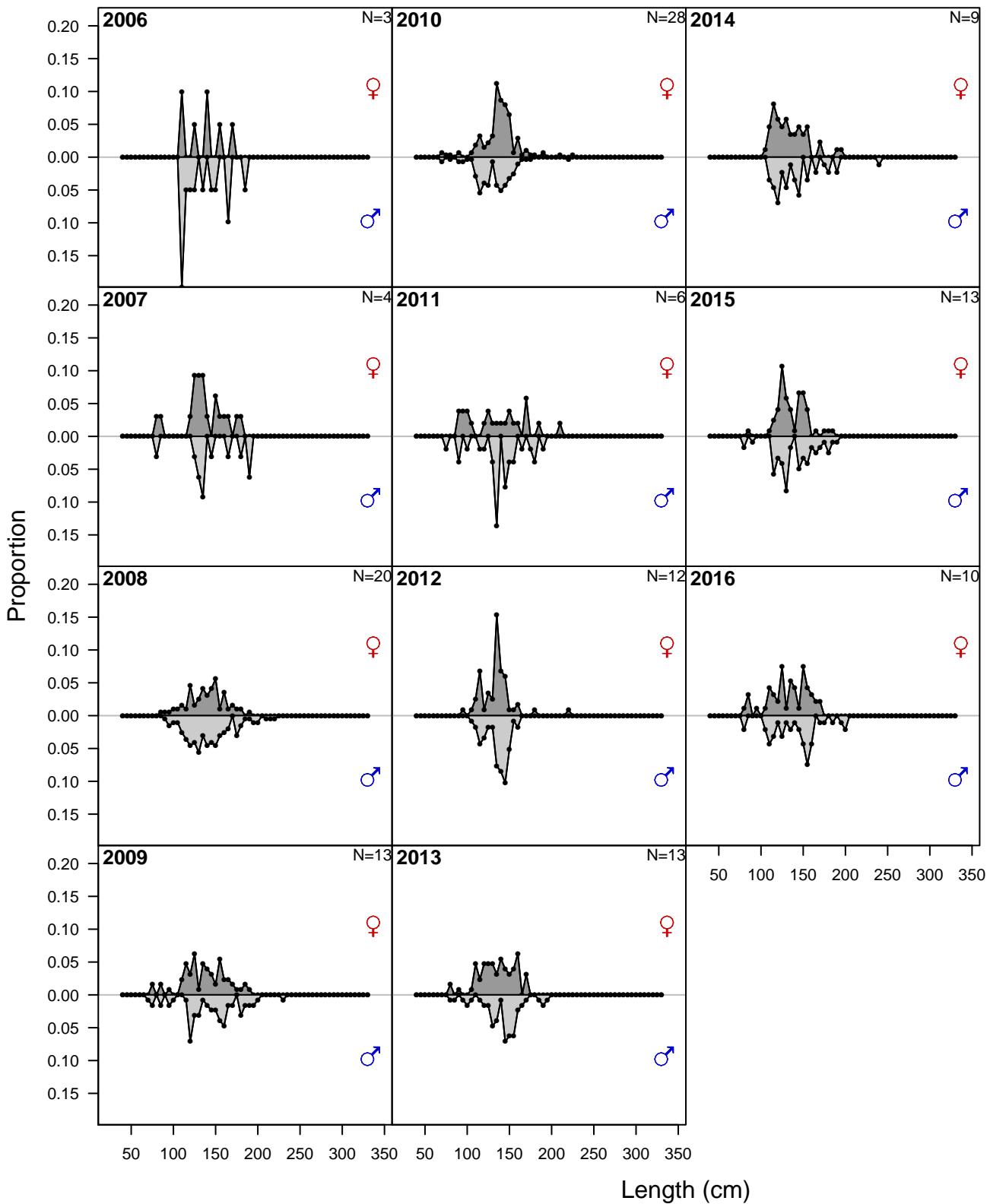
**length comp data, whole catch, F10\_JPN\_DS (max=0.26)**



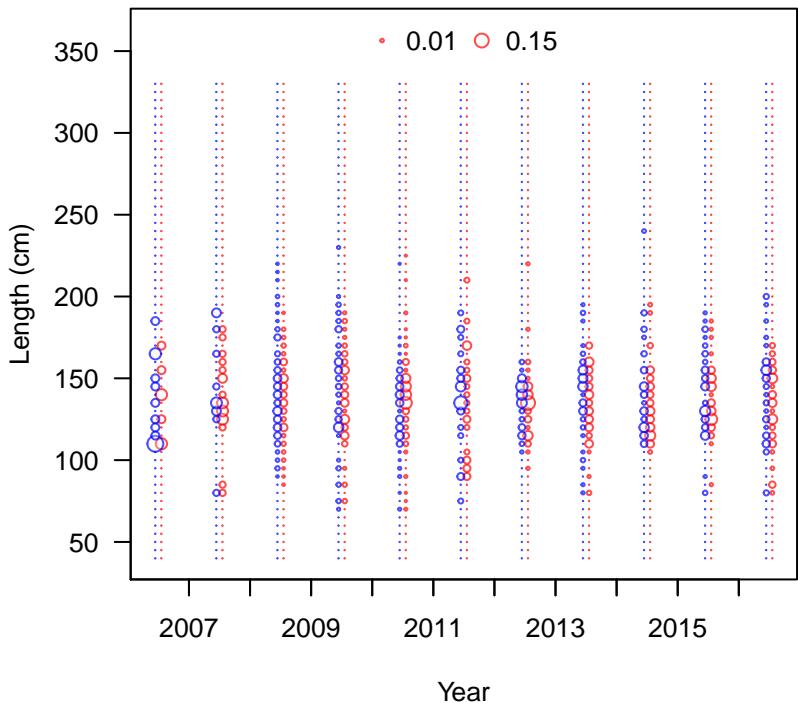
F10\_JPN\_DS (whole catch)



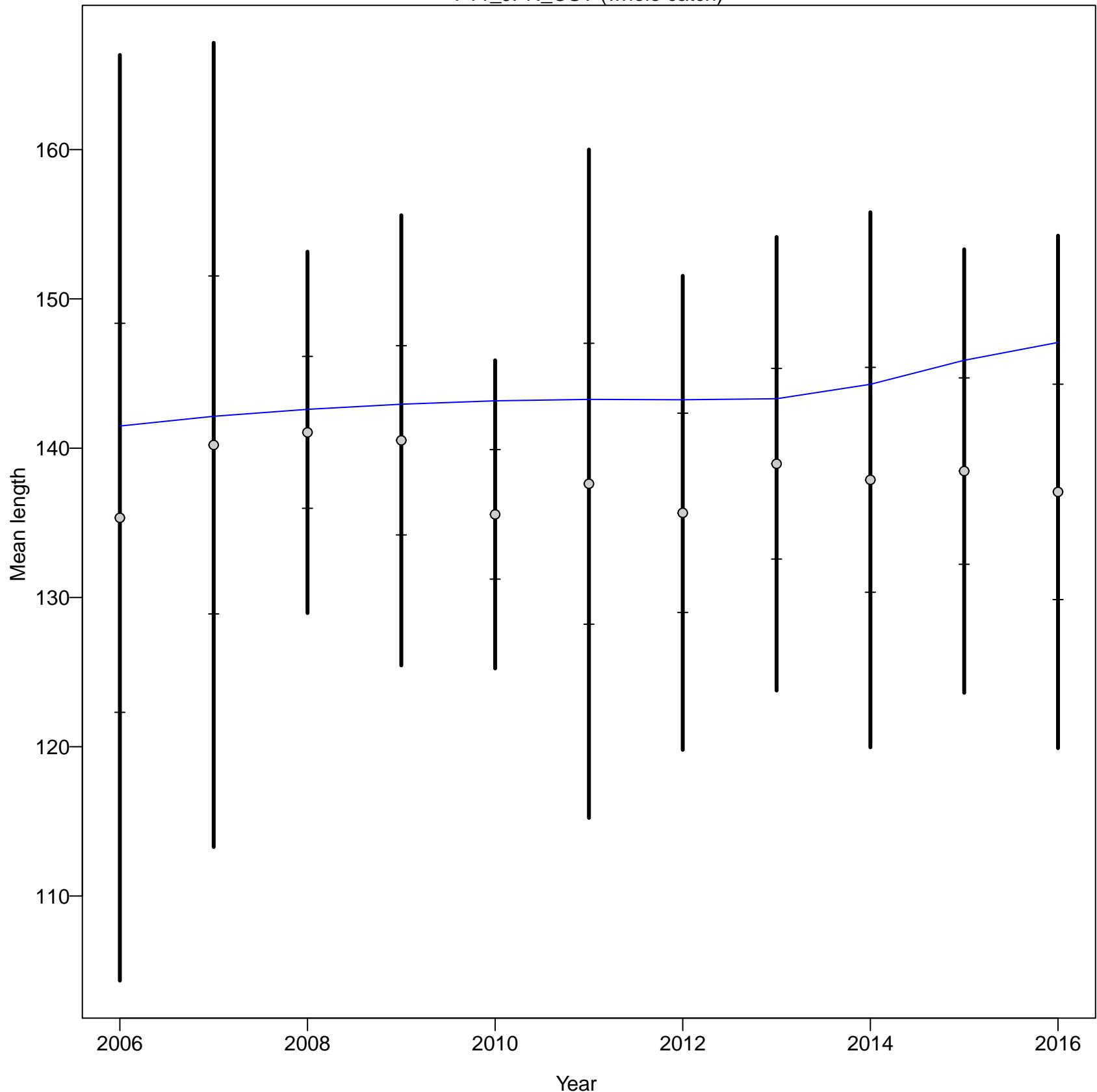
# length comp data, whole catch, F11\_JPN\_CST



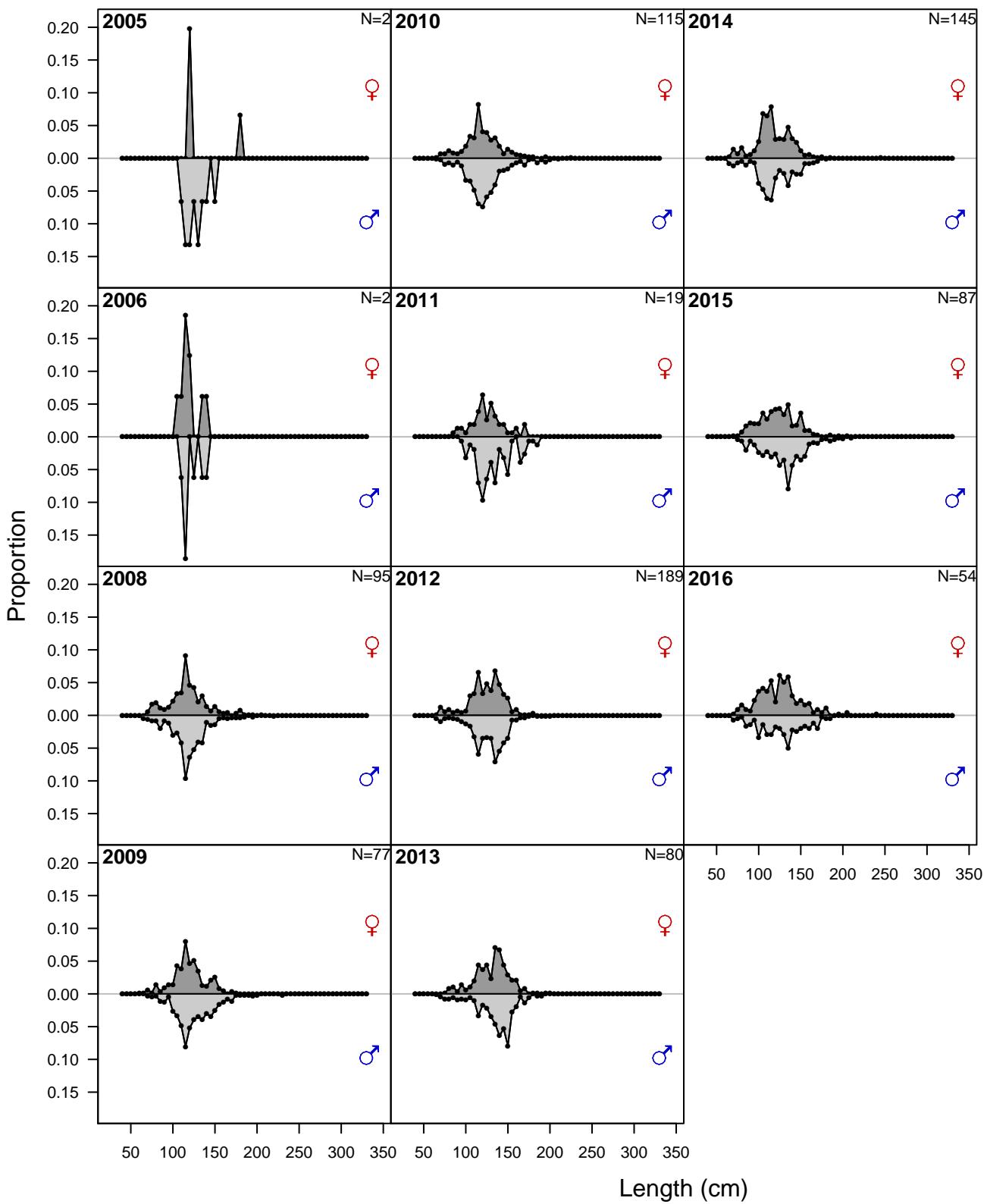
length comp data, whole catch, F11\_JPN\_CST (max=0.2)



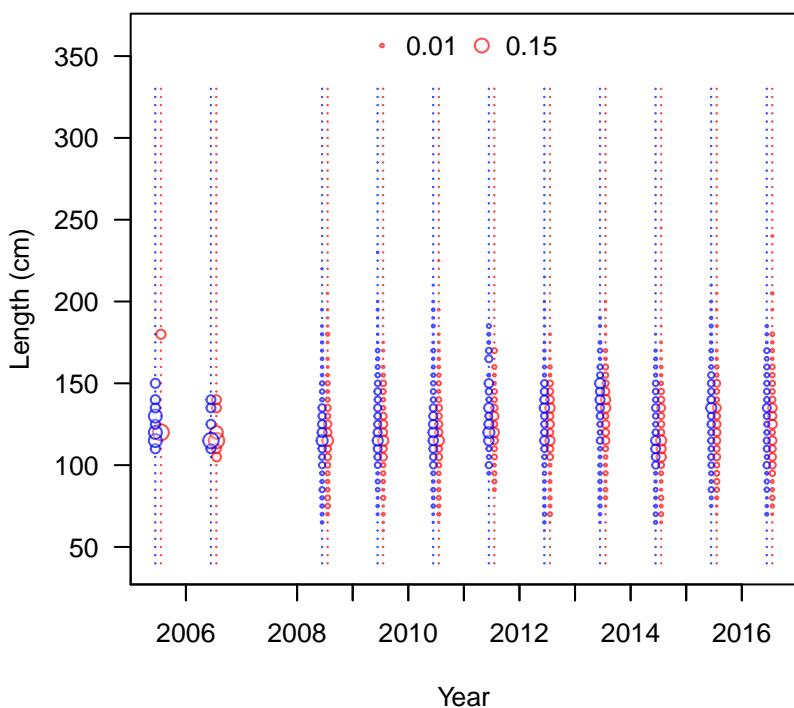
F11\_JPN\_CST (whole catch)



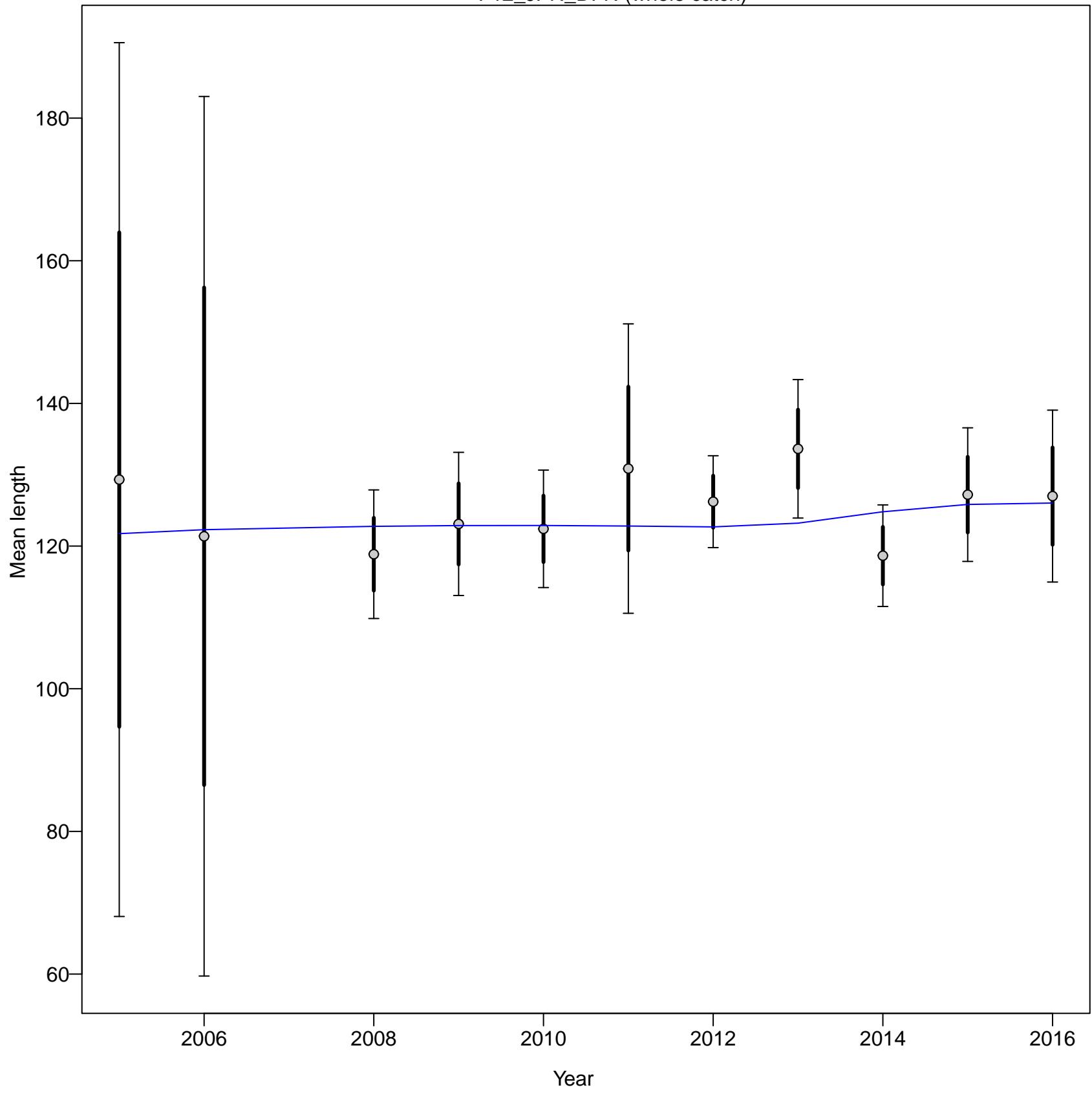
### length comp data, whole catch, F12\_JPN\_DFN



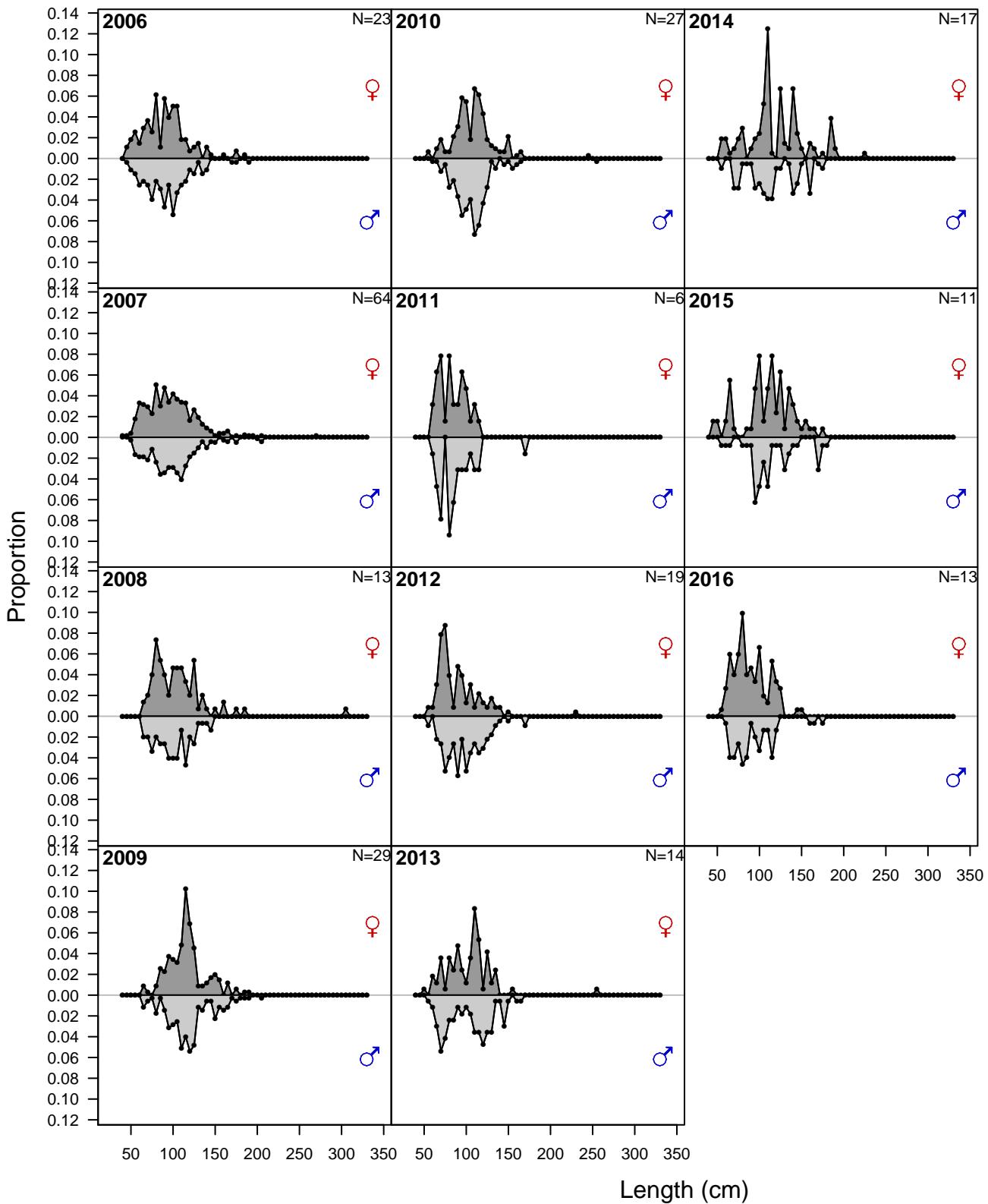
length comp data, whole catch, F12\_JPN\_DFN (max=0.2)



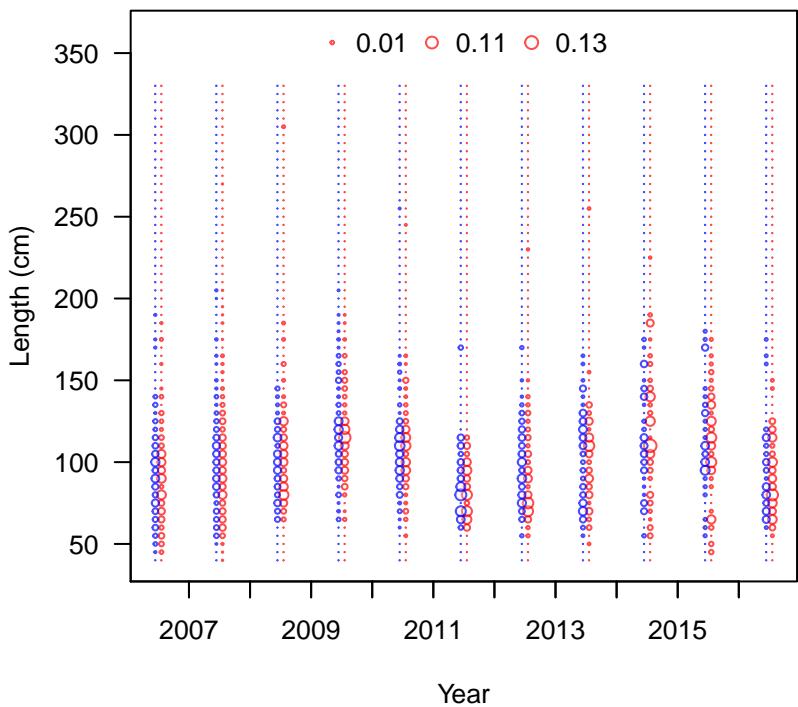
F12\_JPN\_DFN (whole catch)



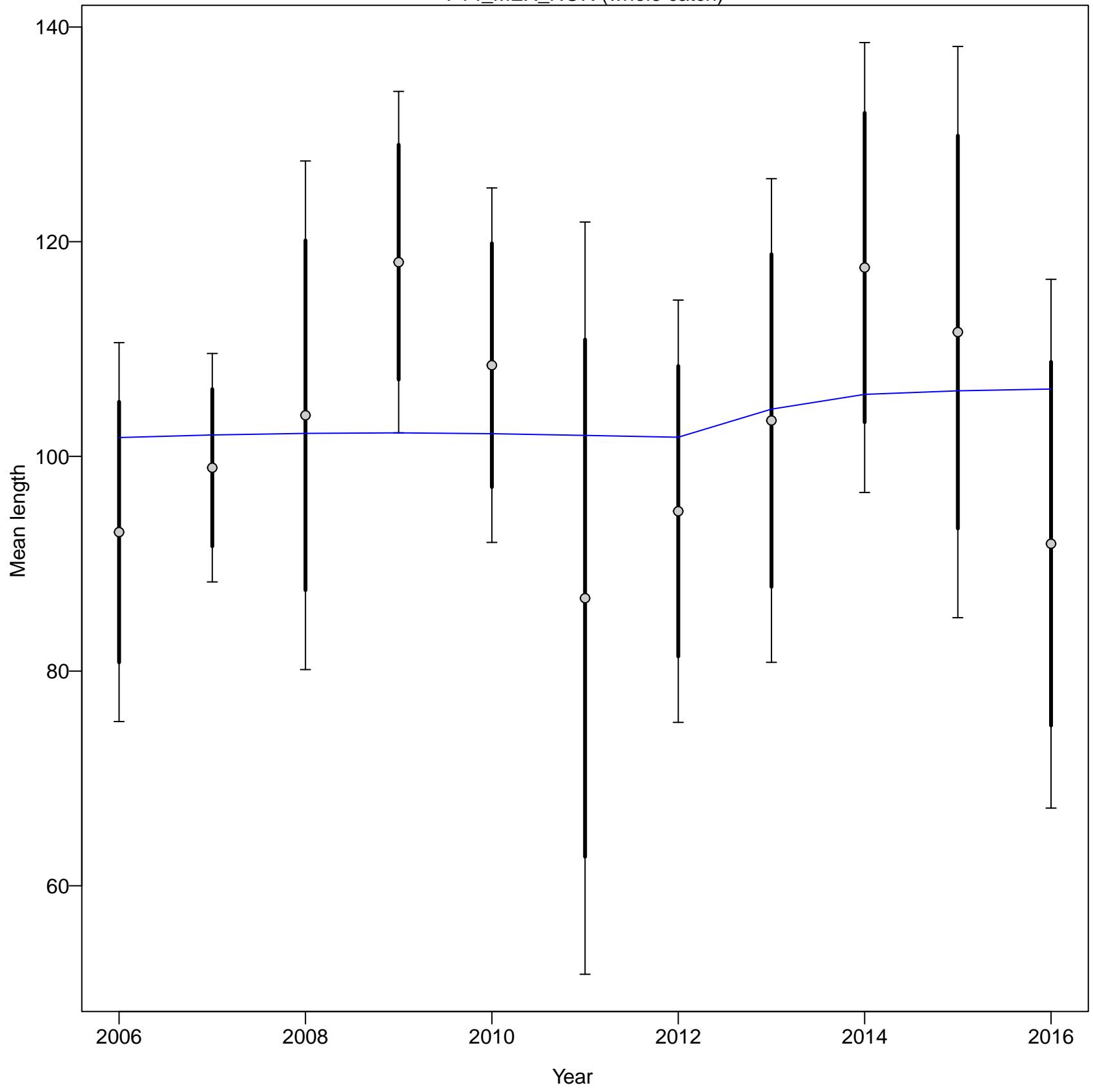
### length comp data, whole catch, F14\_MEX\_NOR



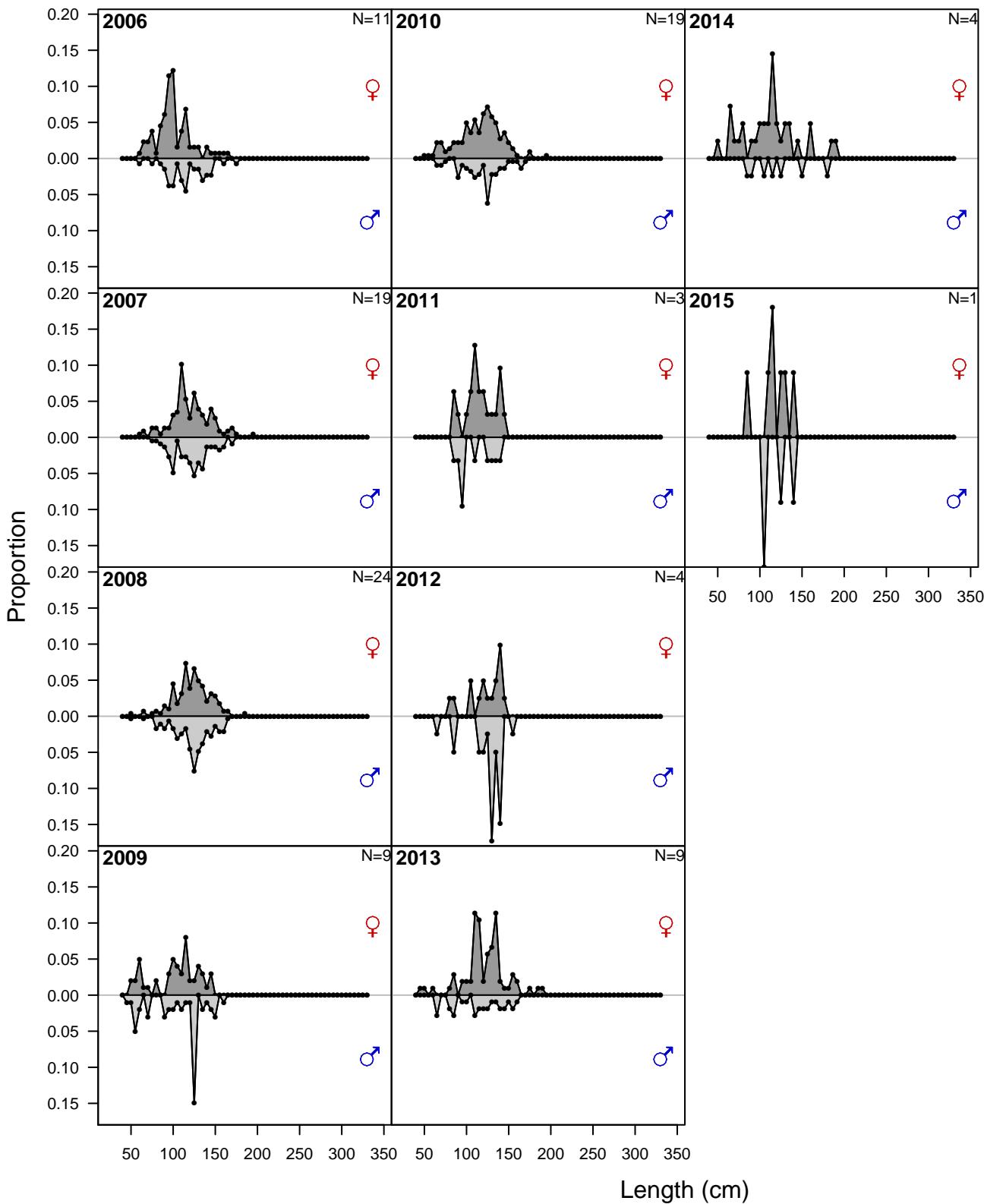
length comp data, whole catch, F14\_MEX\_NOR (max=0.12)



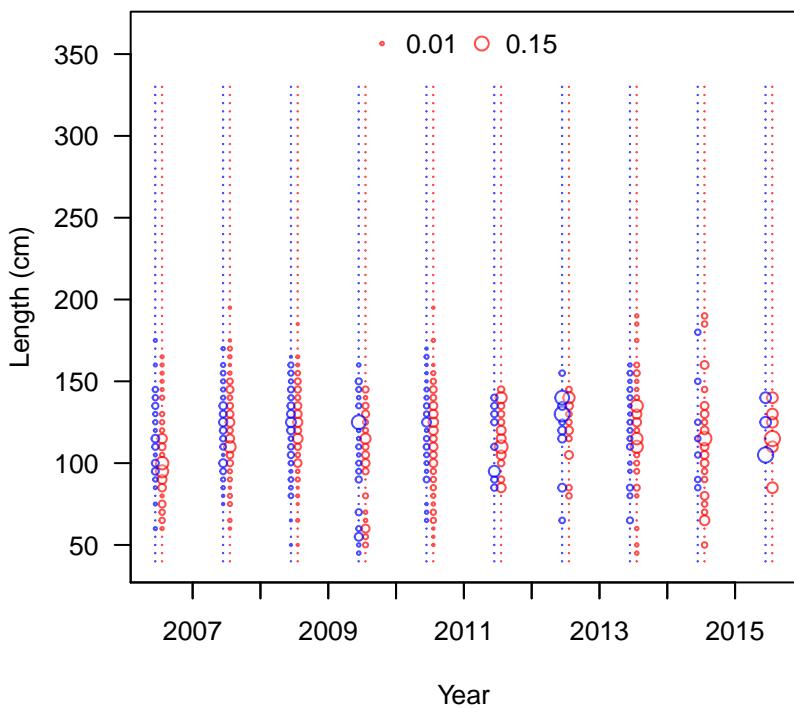
F14\_MEX\_NOR (whole catch)



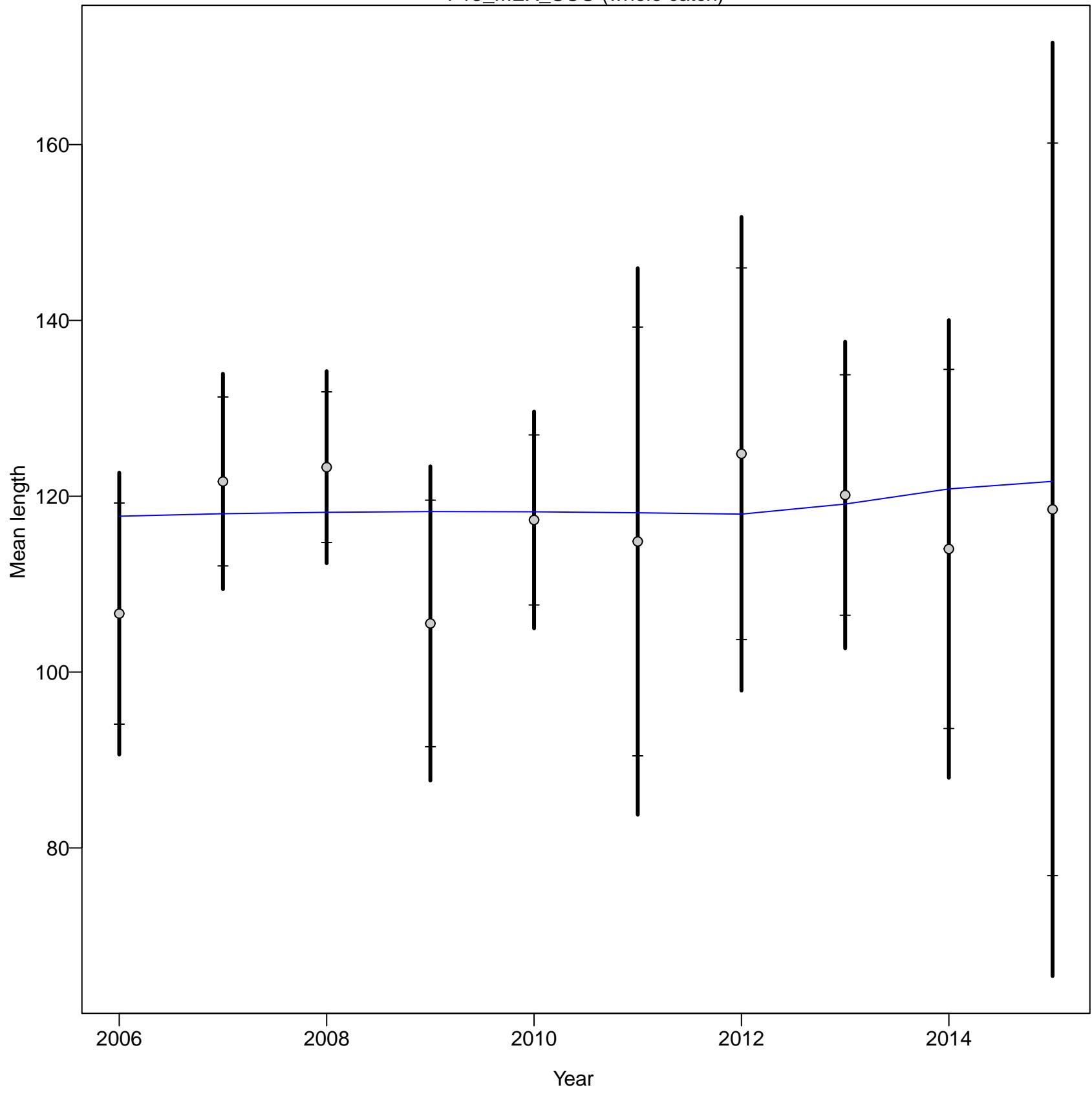
### length comp data, whole catch, F15\_MEX\_SOU



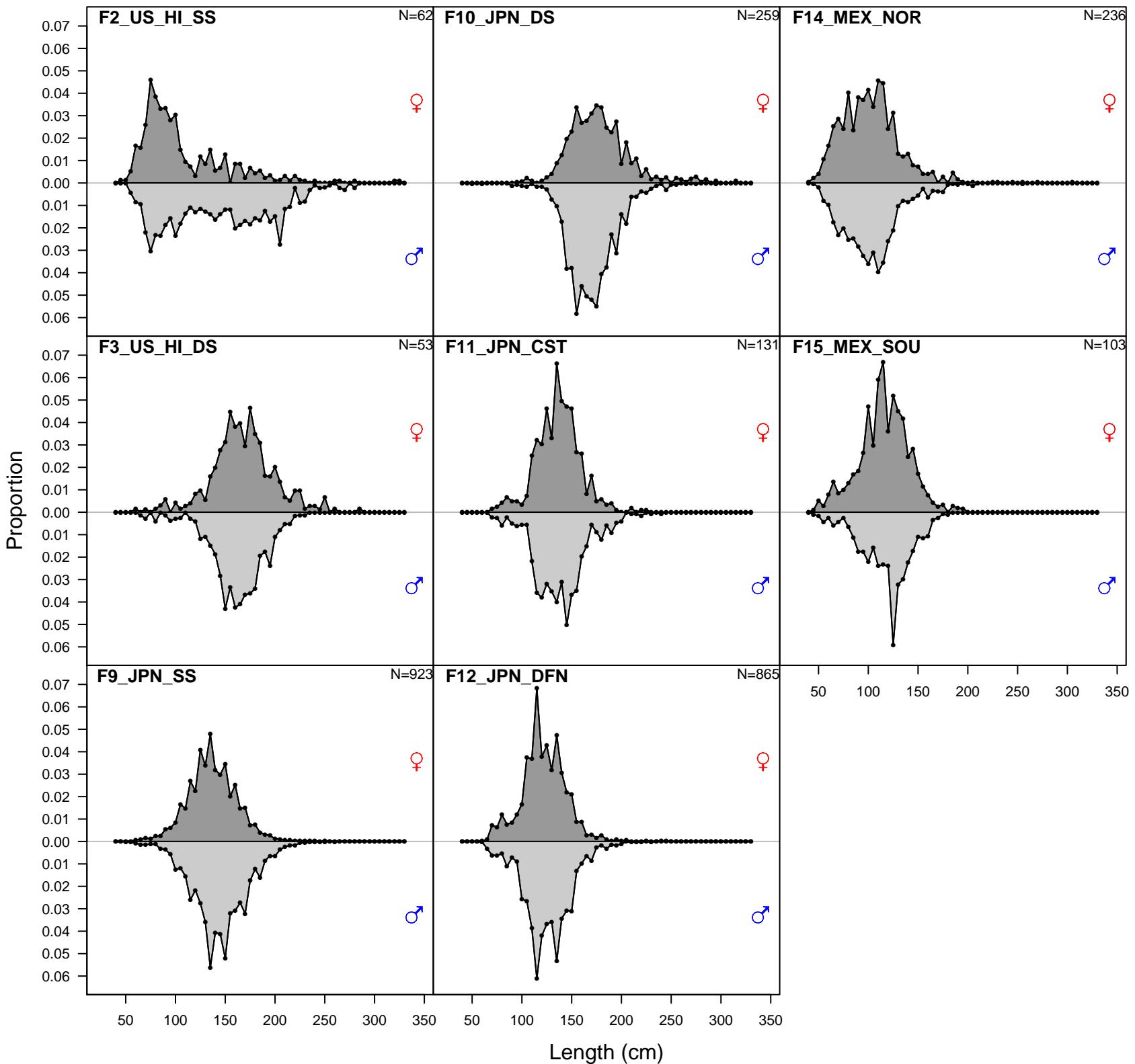
length comp data, whole catch, F15\_MEX\_SOU (max=0.18)



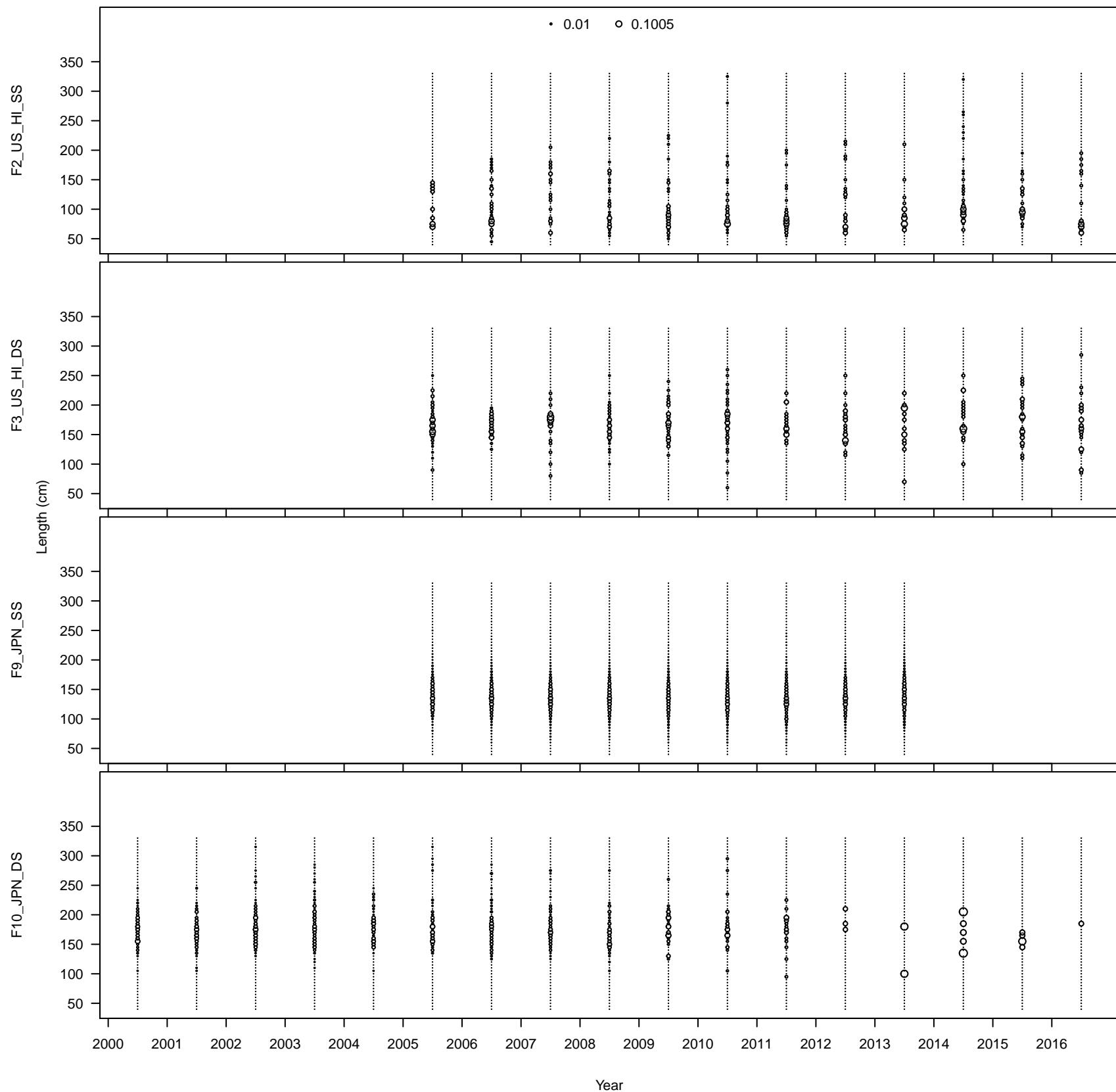
F15\_MEX\_SOU (whole catch)



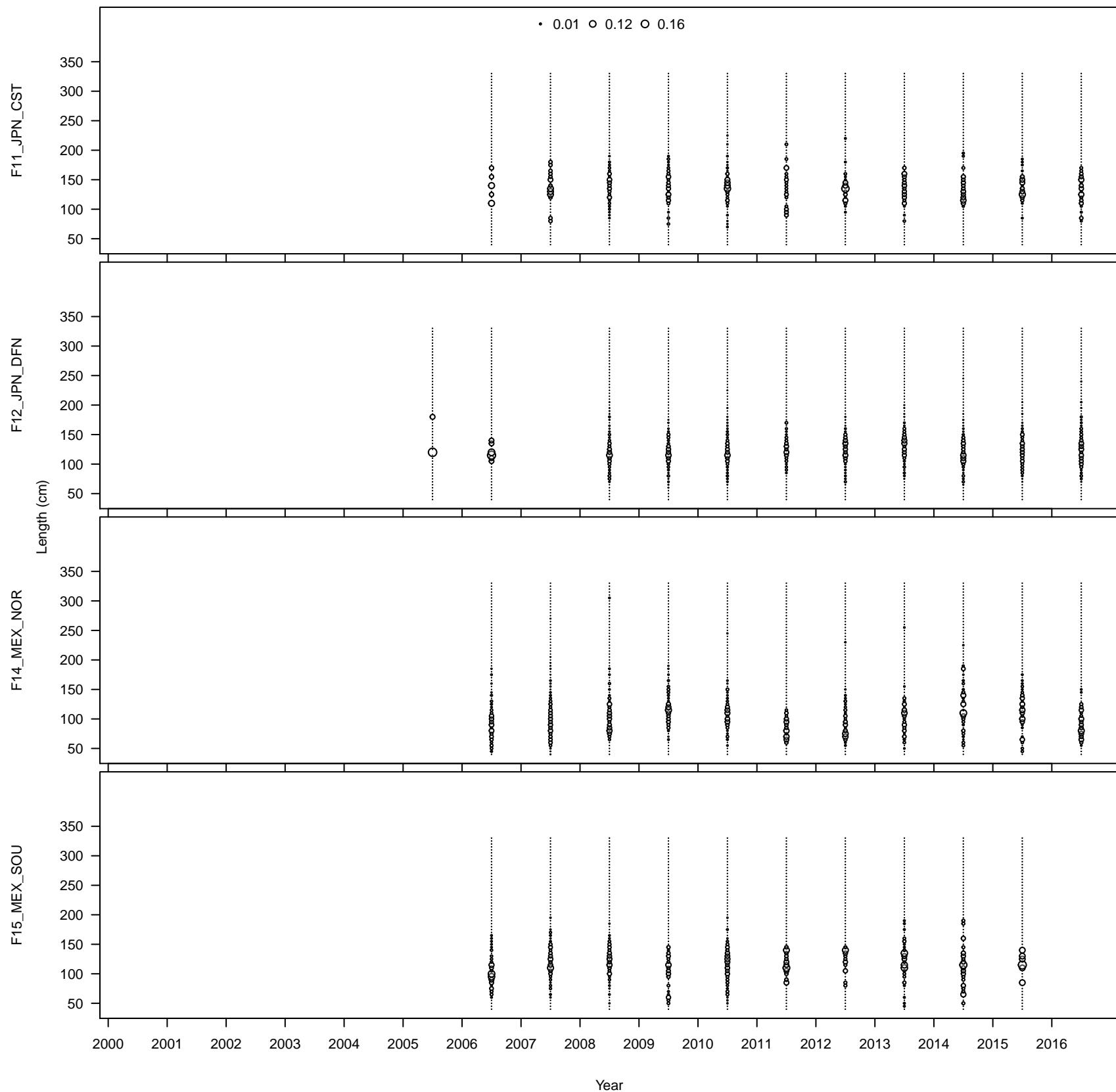
### length comp data, whole catch, aggregated across time by fleet



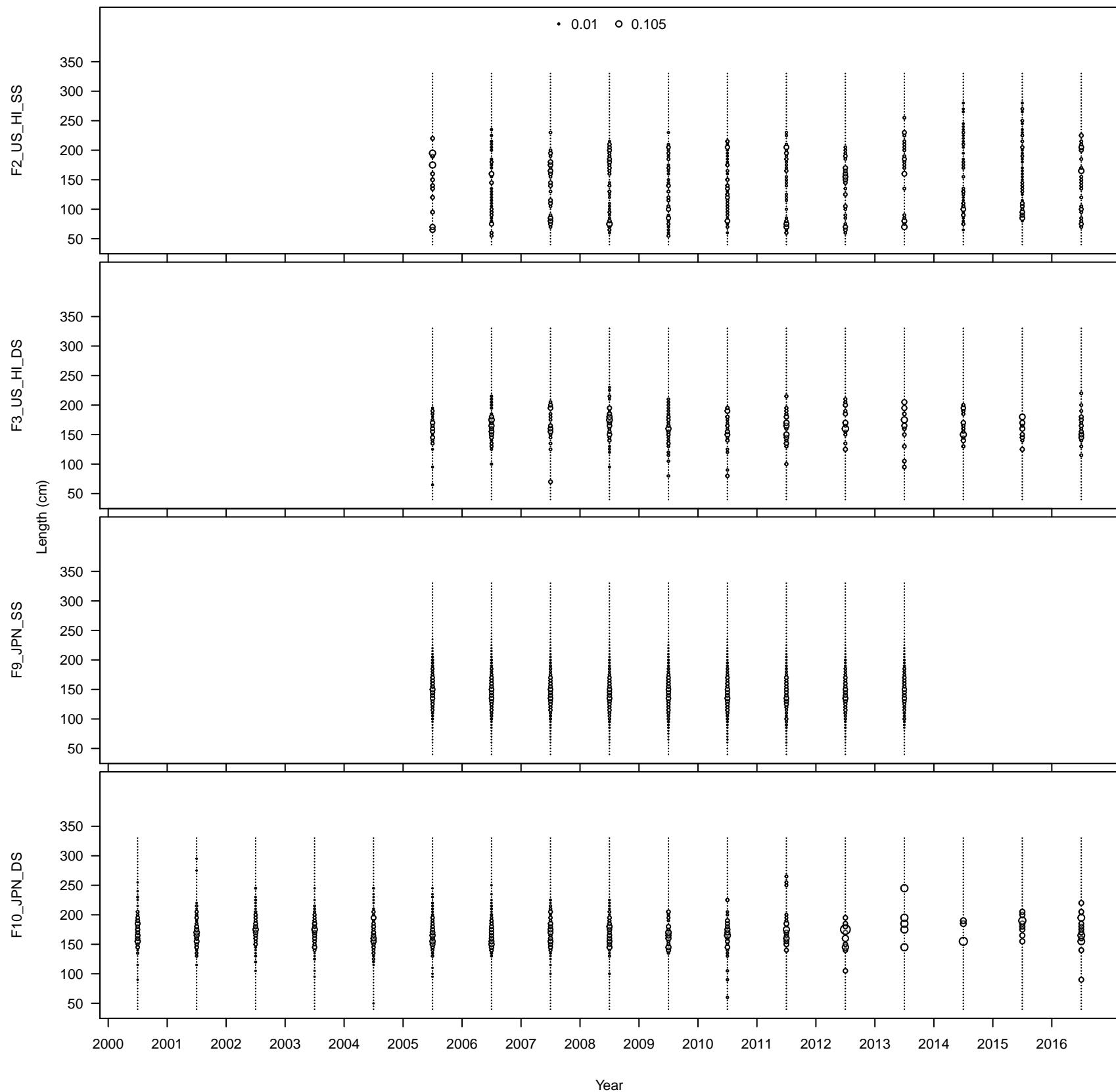
### length comp data, female, whole catch, comparing across fleets



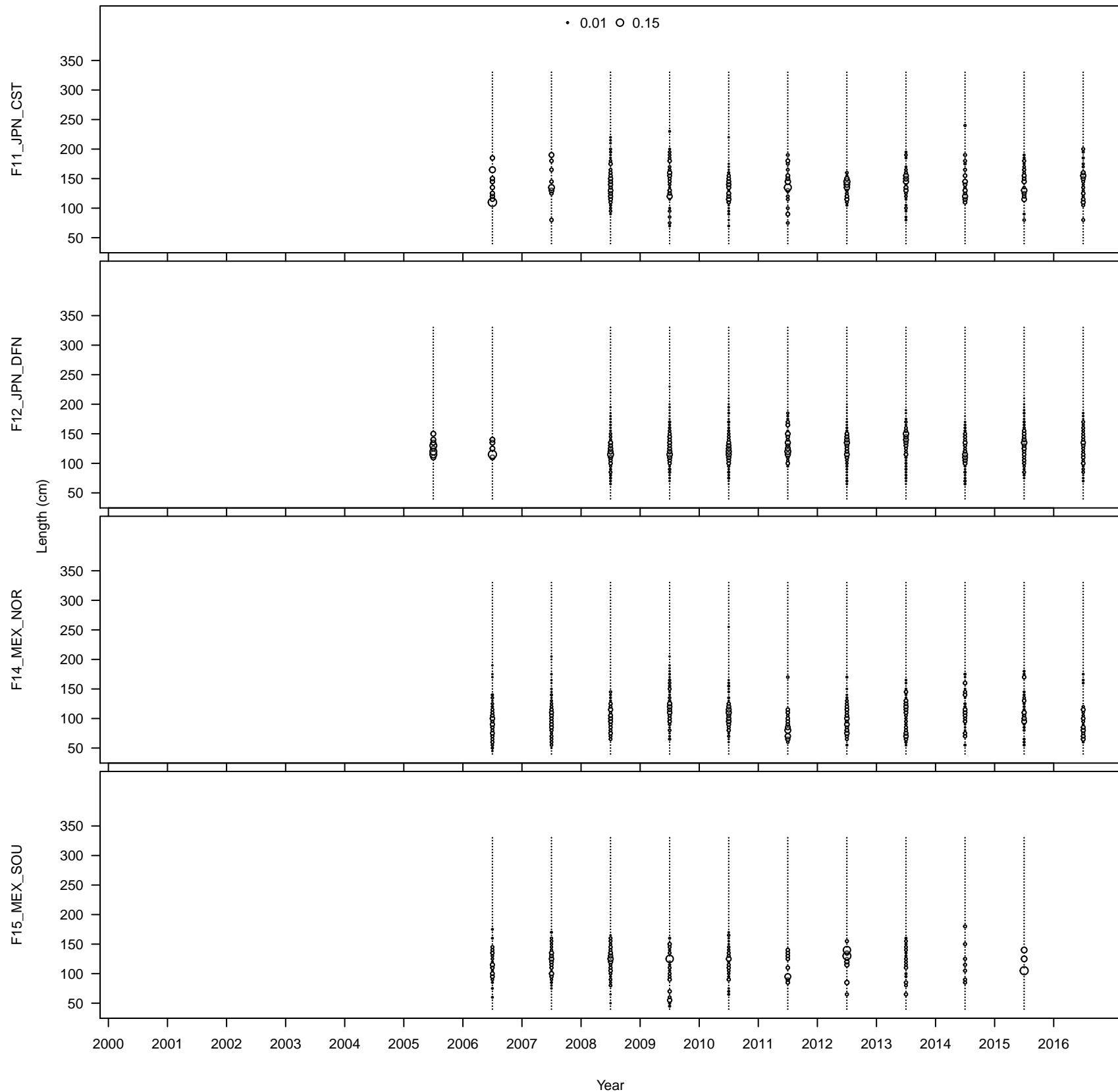
### length comp data, female, whole catch, comparing across fleets



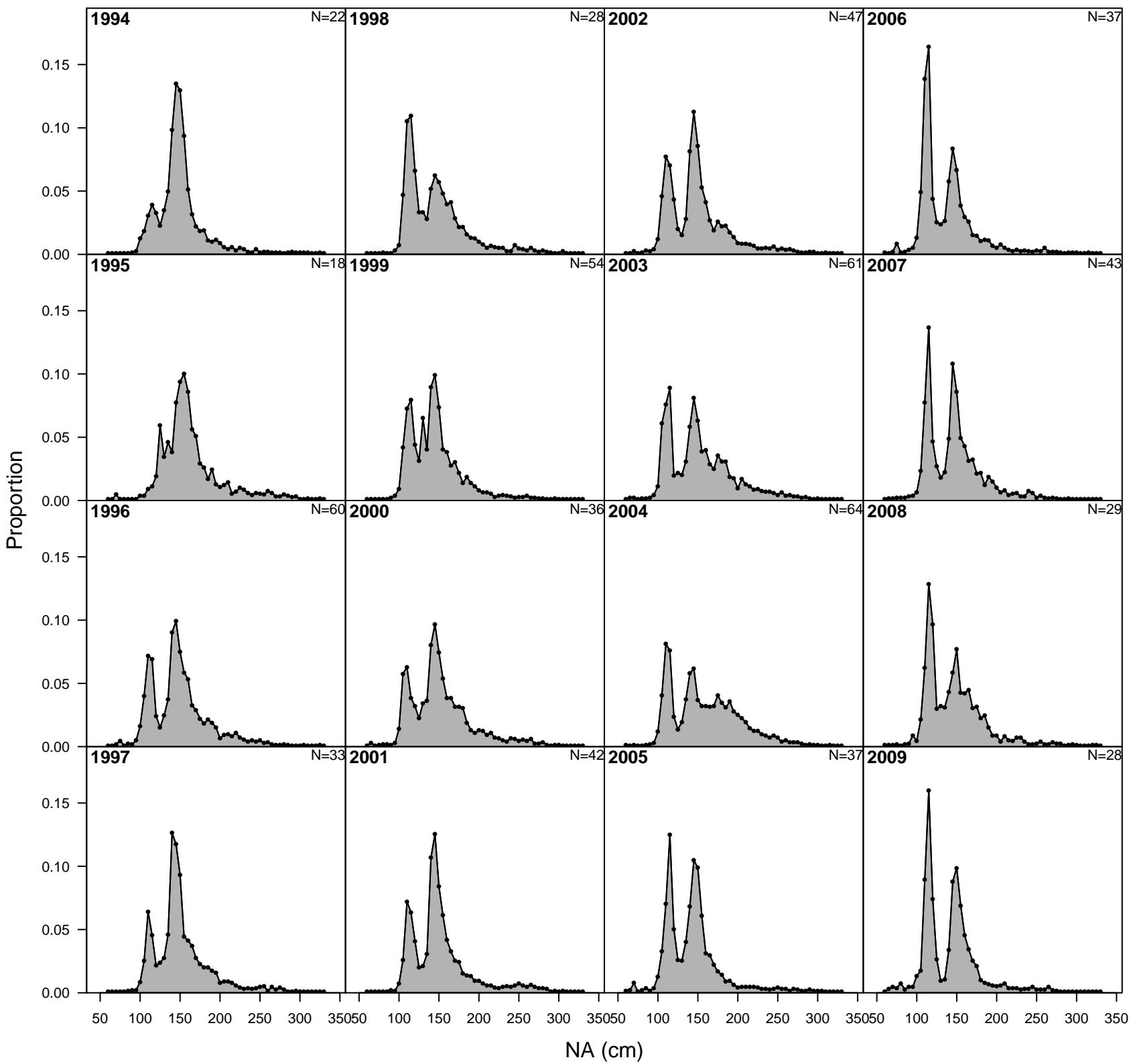
### length comp data, male, whole catch, comparing across fleets



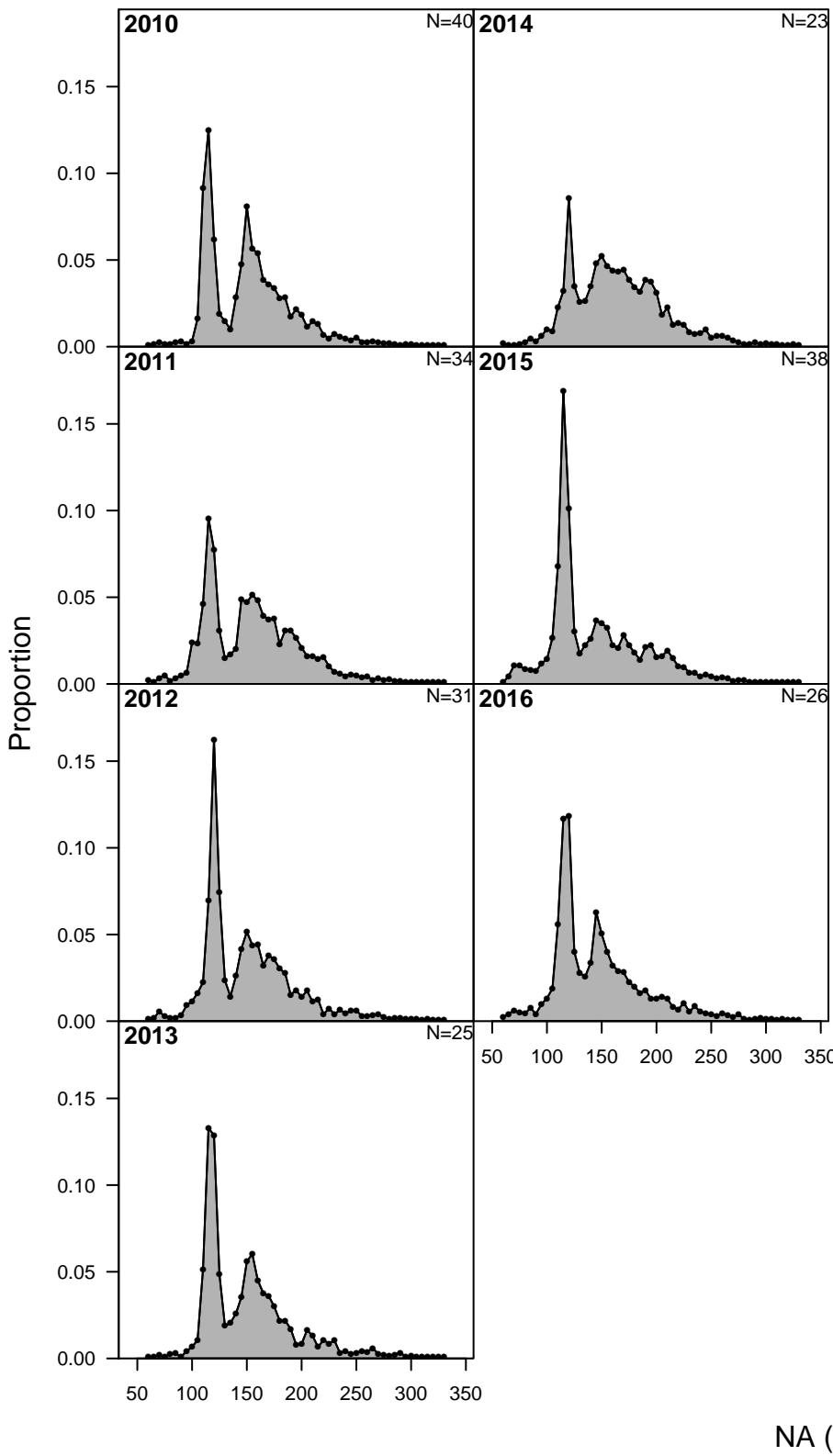
### length comp data, male, whole catch, comparing across fleets



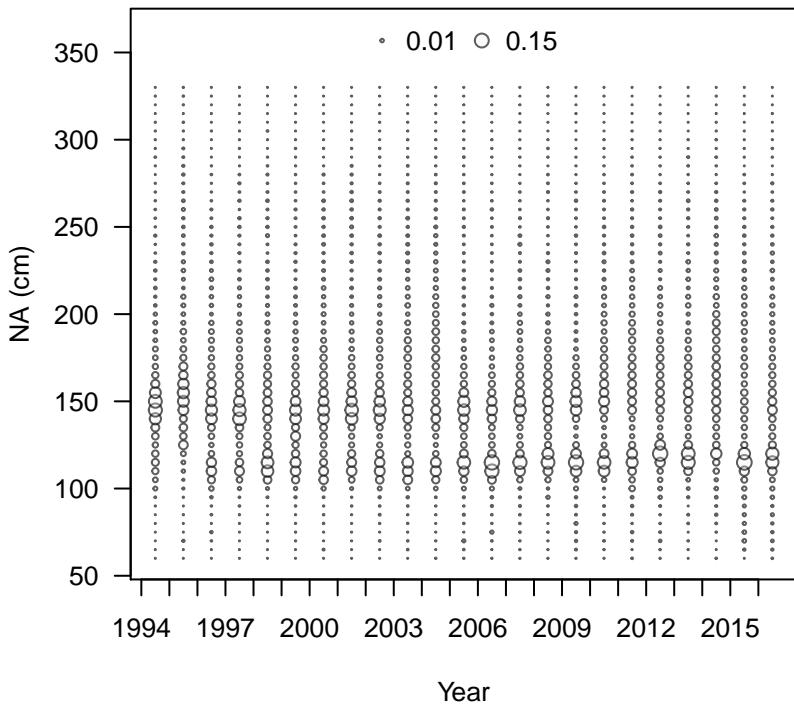
### size comp data, whole catch, F6\_TW\_LRG\_N



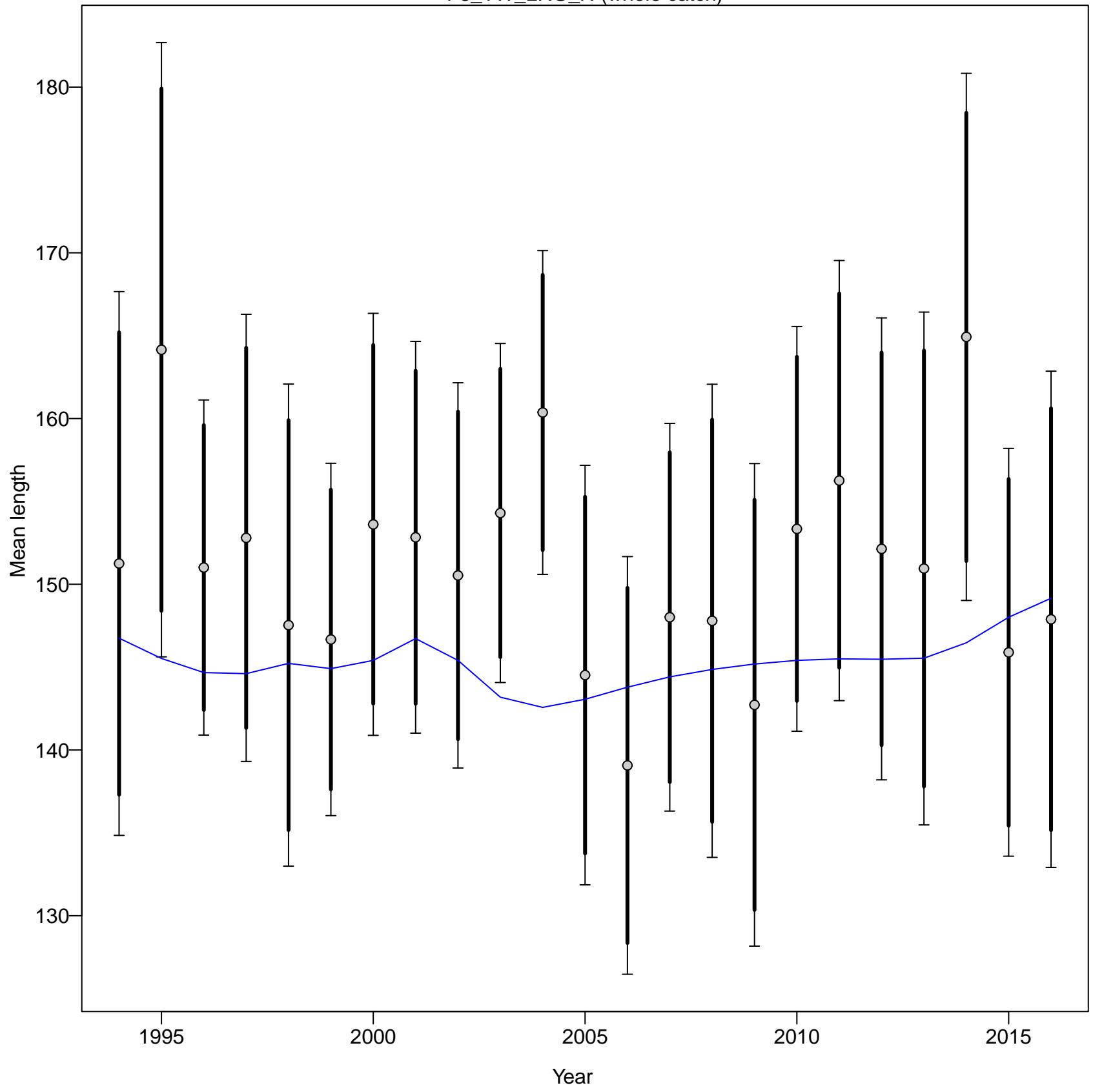
### size comp data, whole catch, F6\_TW\_LRG\_N



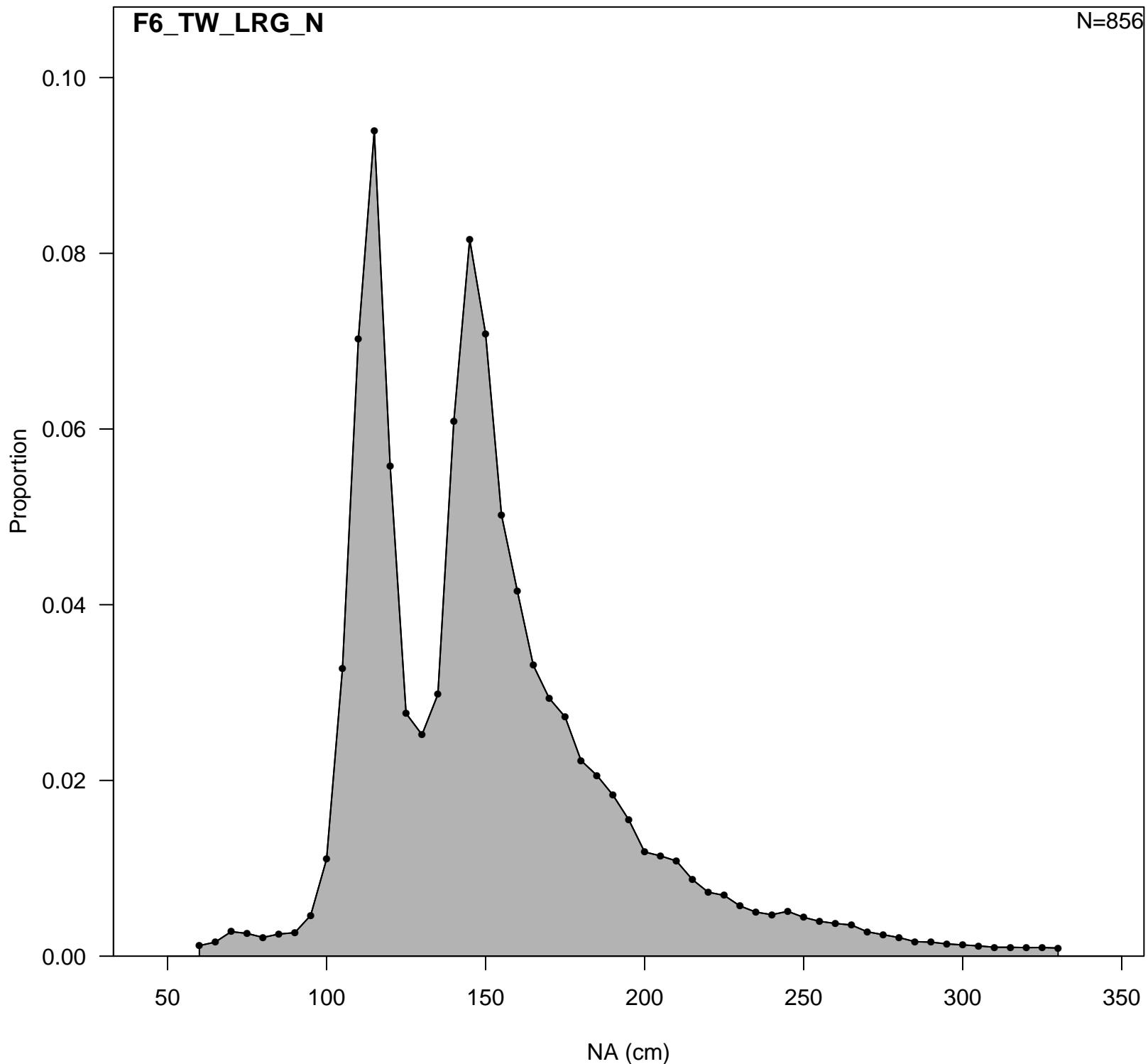
**size comp data, whole catch, F6\_TW\_LRG\_N (max=0.17)**



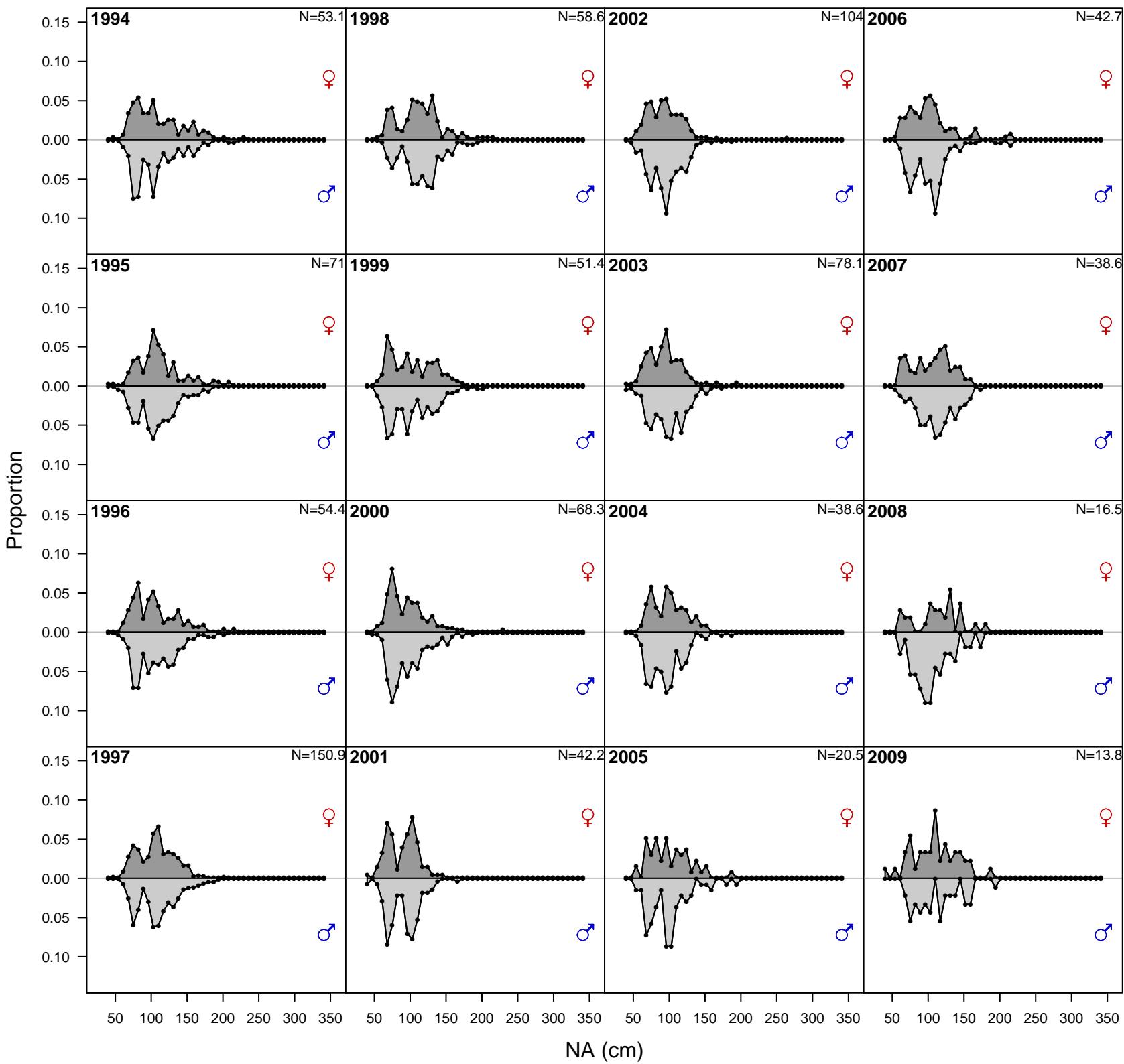
F6\_TW\_LRG\_N (whole catch)



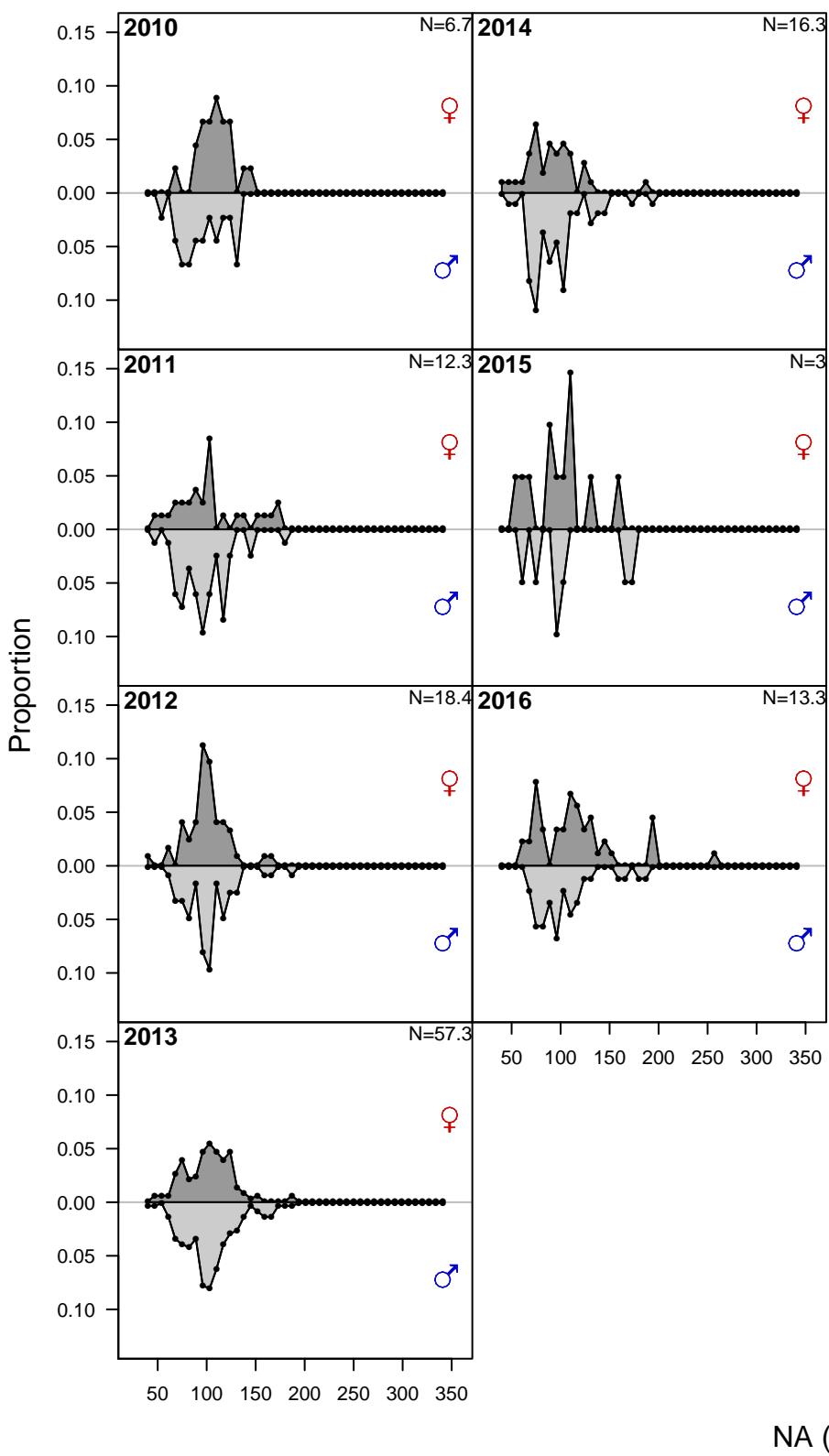
size comp data, whole catch, aggregated across time by fleet



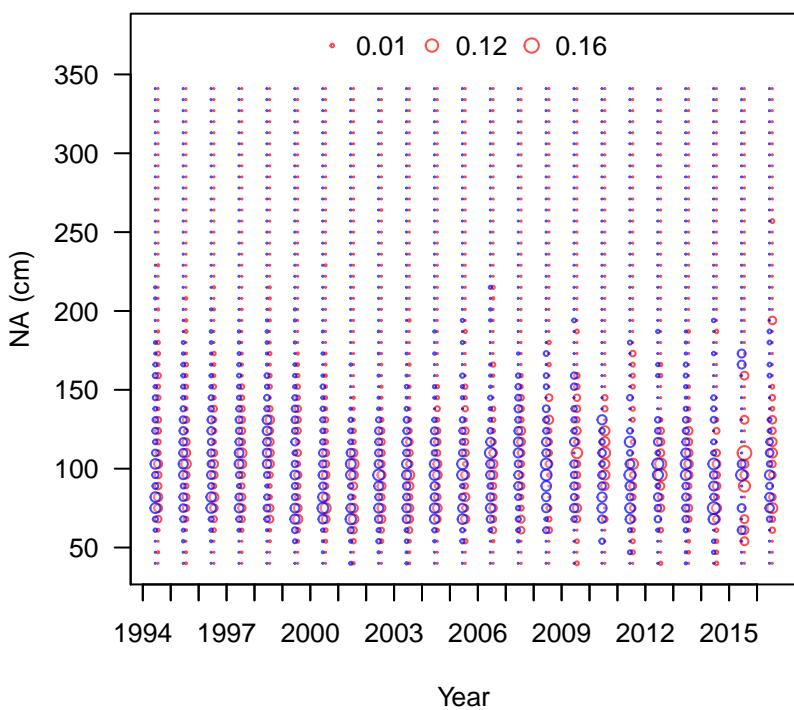
### size comp data, whole catch, F4\_US\_DGN



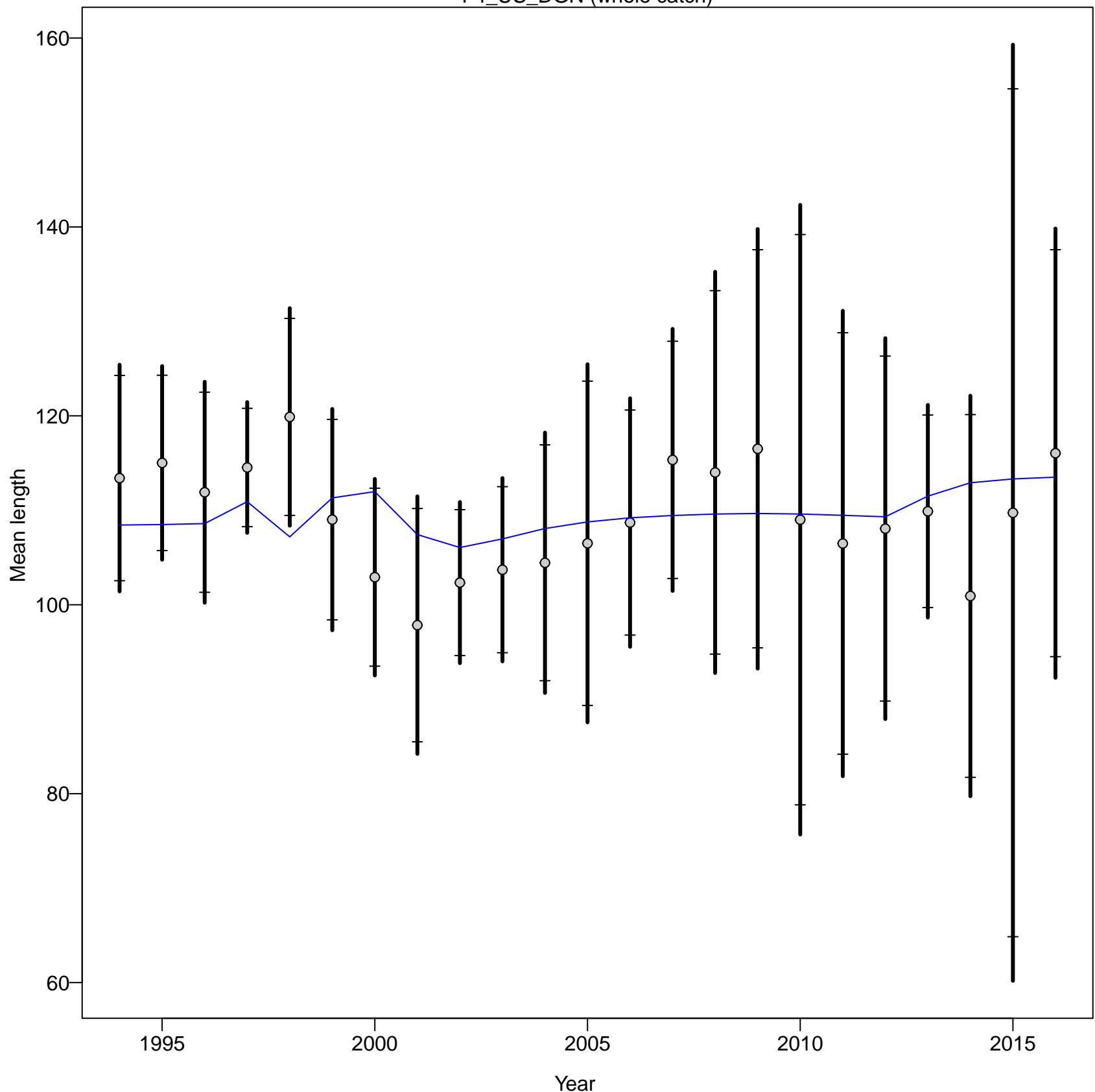
### size comp data, whole catch, F4\_US\_DGN



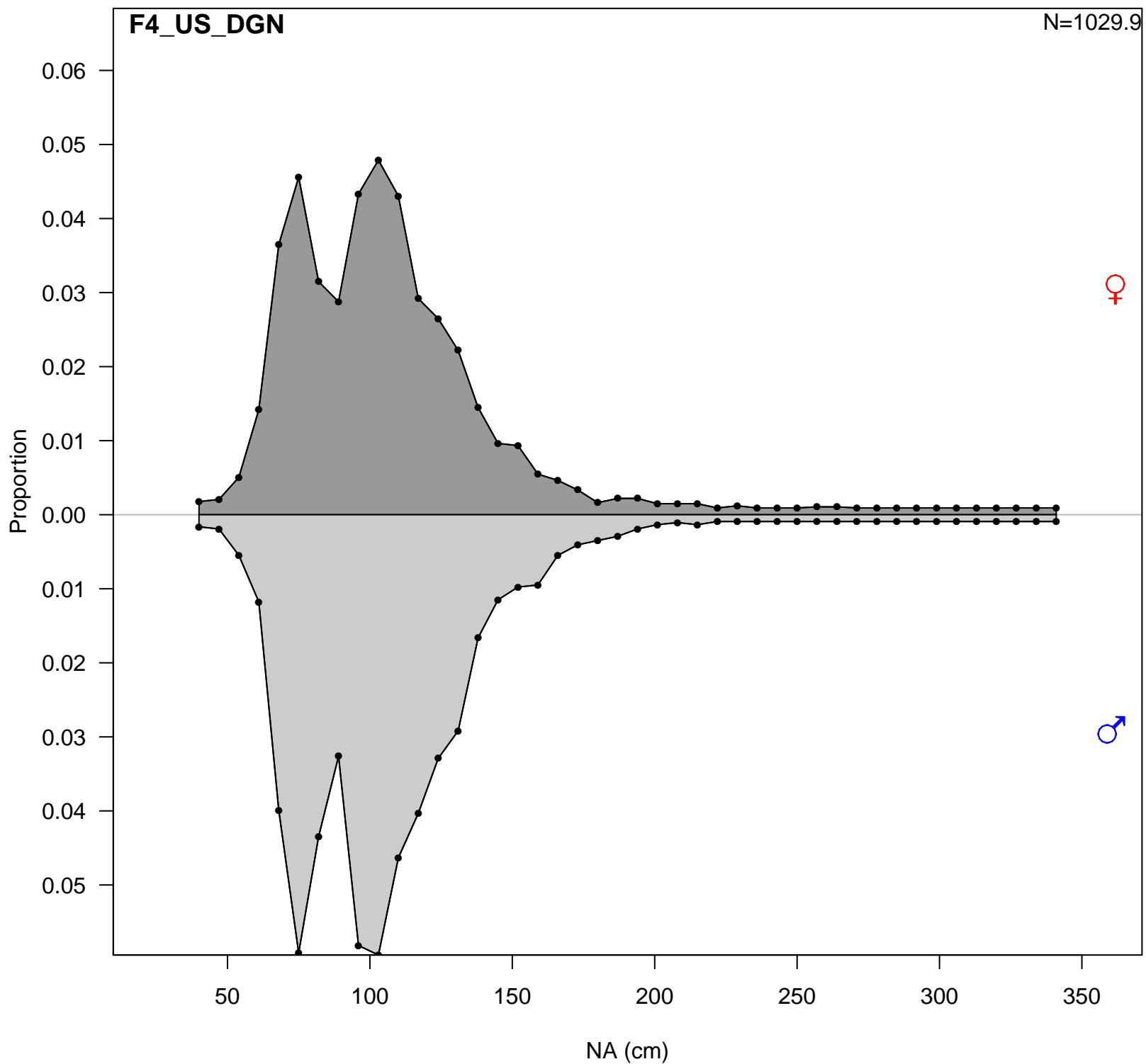
size comp data, whole catch, F4\_US\_DGN (max=0.15)



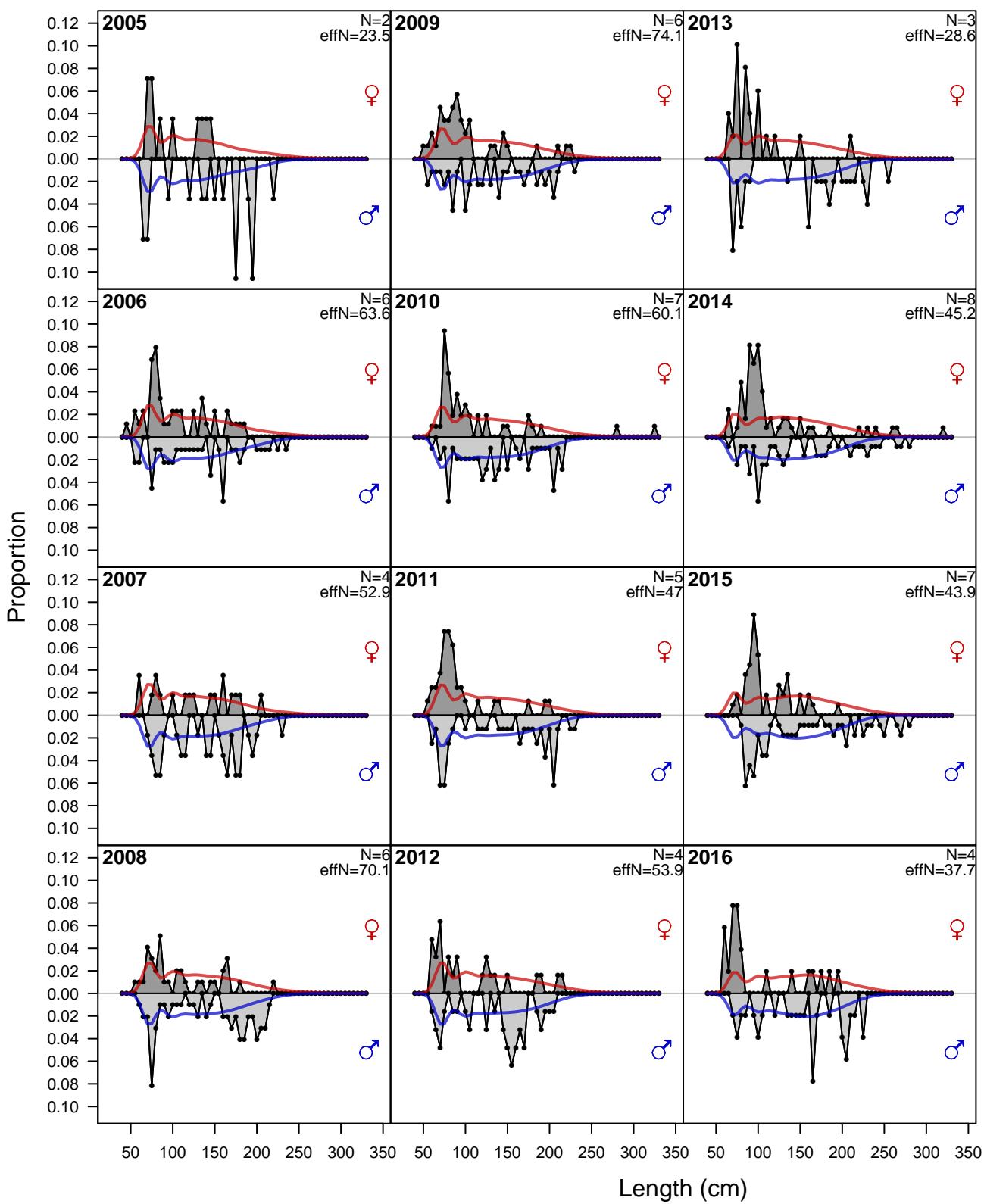
# F4\_US\_DGN (whole catch)



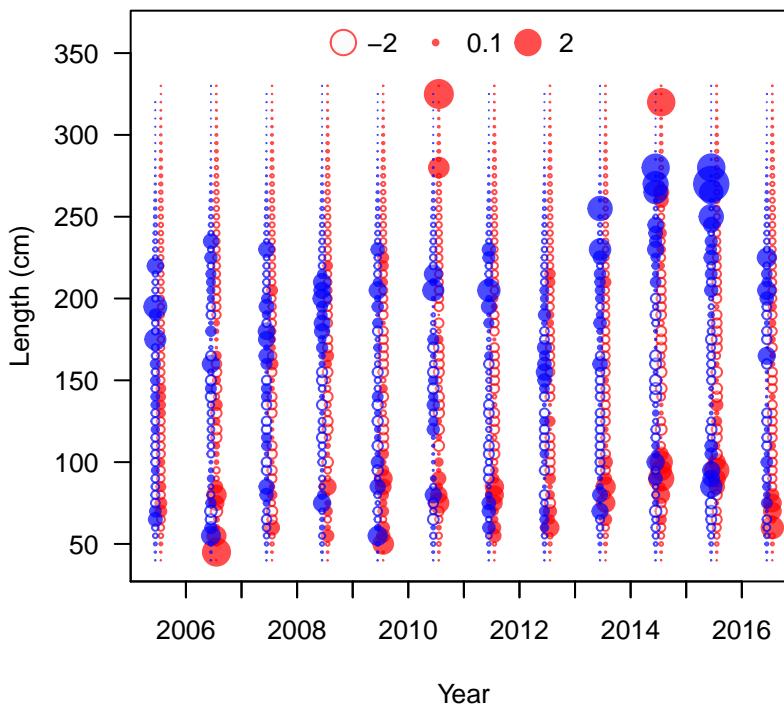
size comp data, whole catch, aggregated across time by fleet



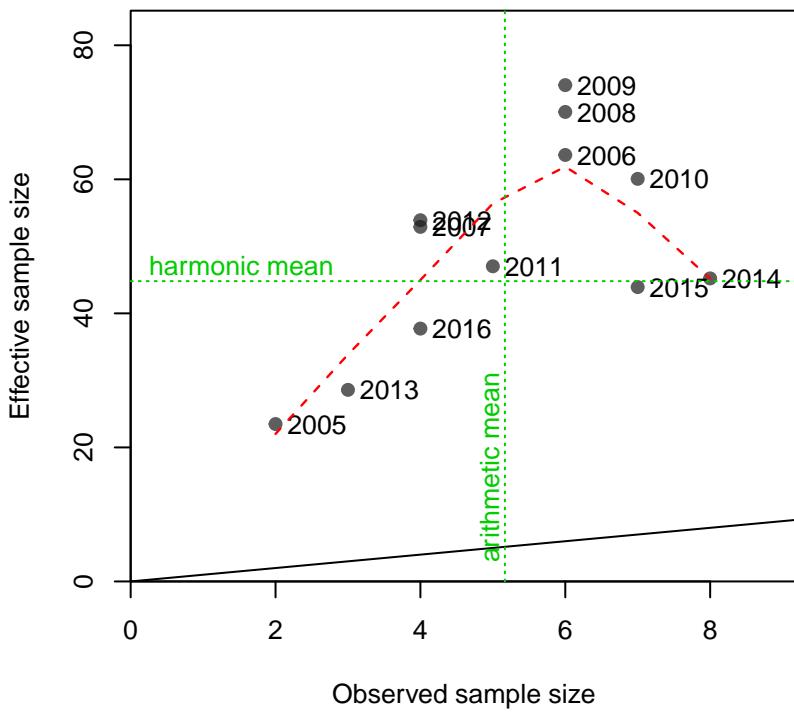
# length comps, whole catch, F2\_US\_HI\_SS



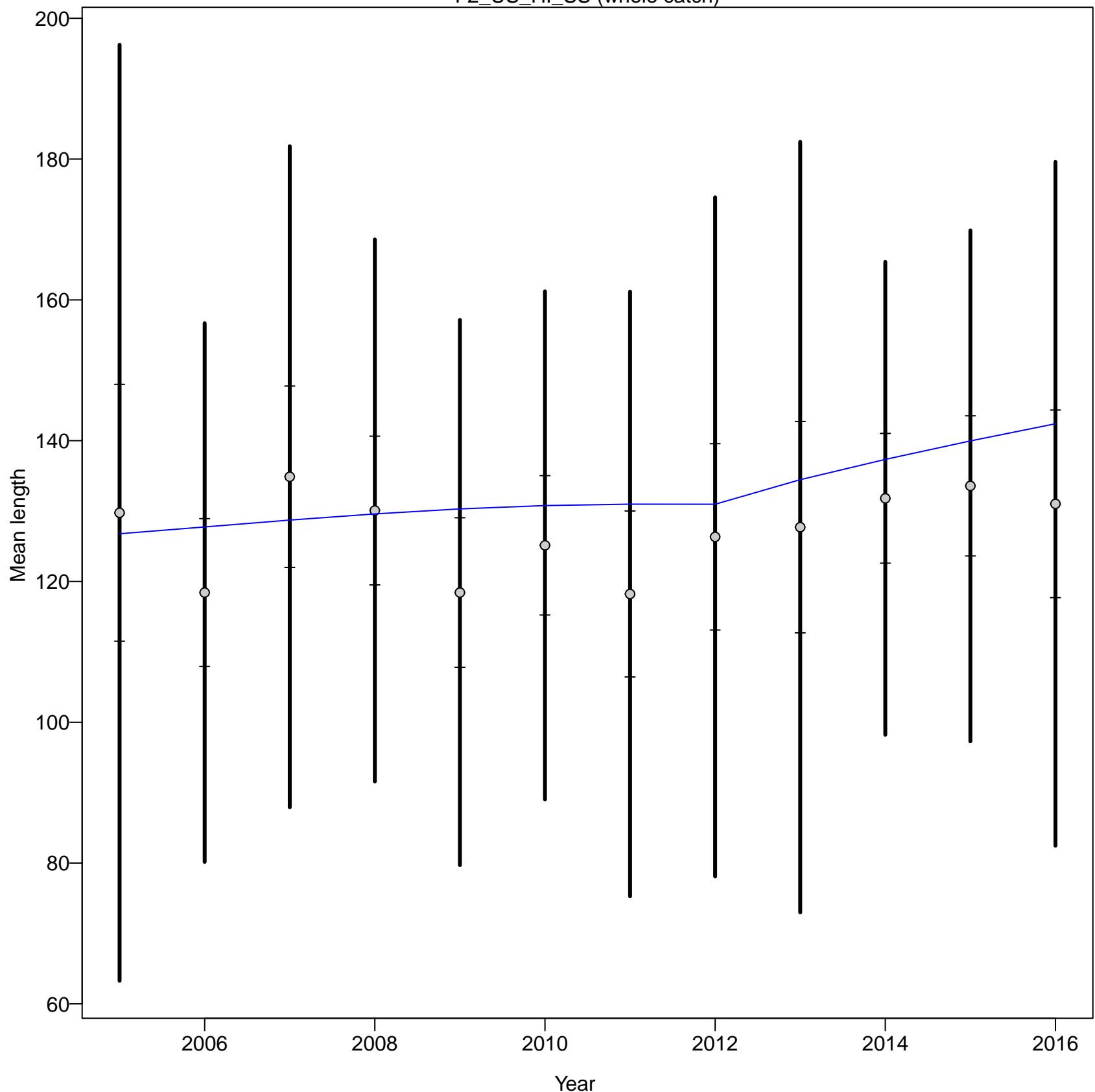
### Pearson residuals, whole catch, F2\_US\_HI\_SS (max=3.67)



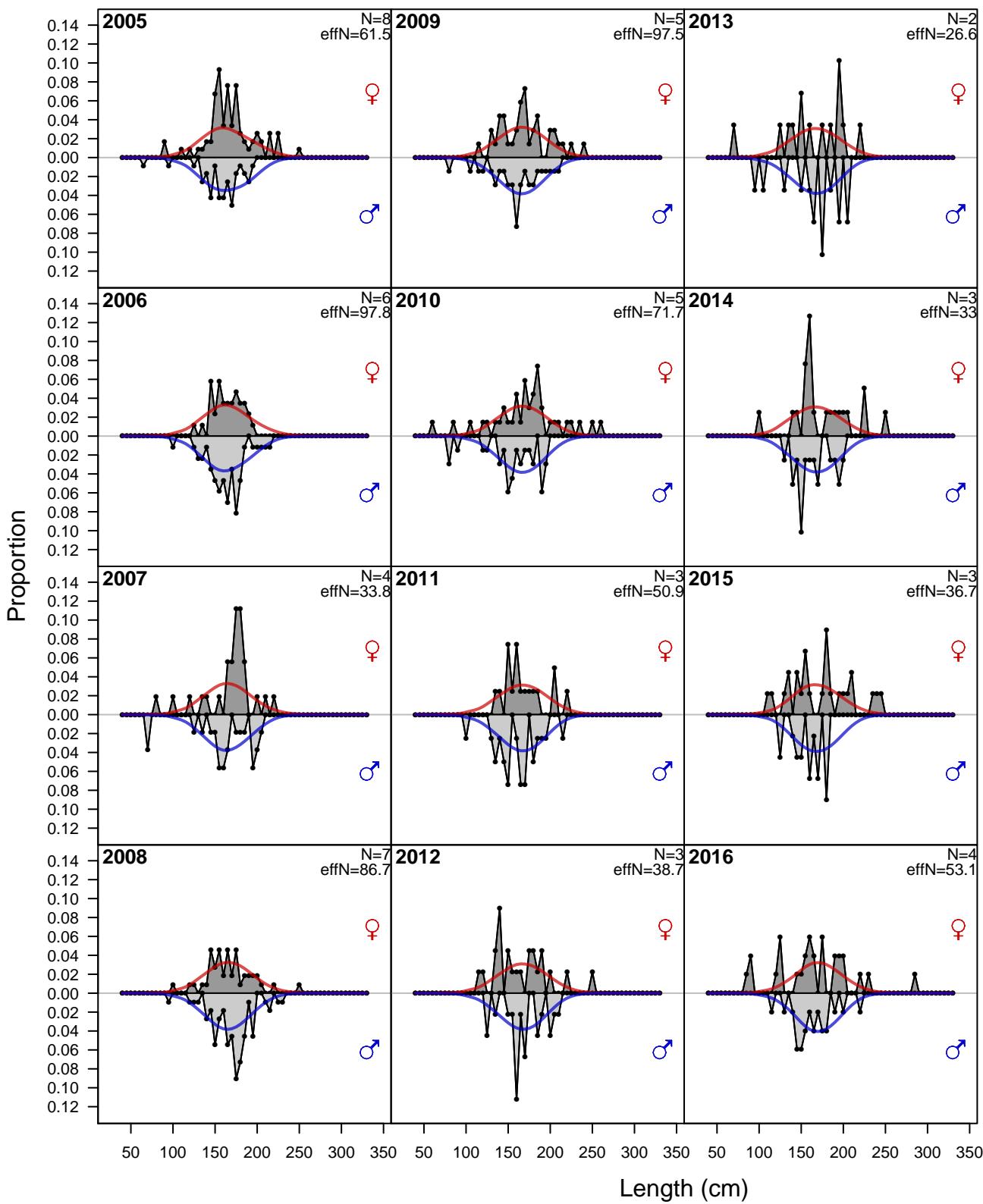
### N-EffN comparison, length comps, whole catch, F2\_US\_HI\_SS



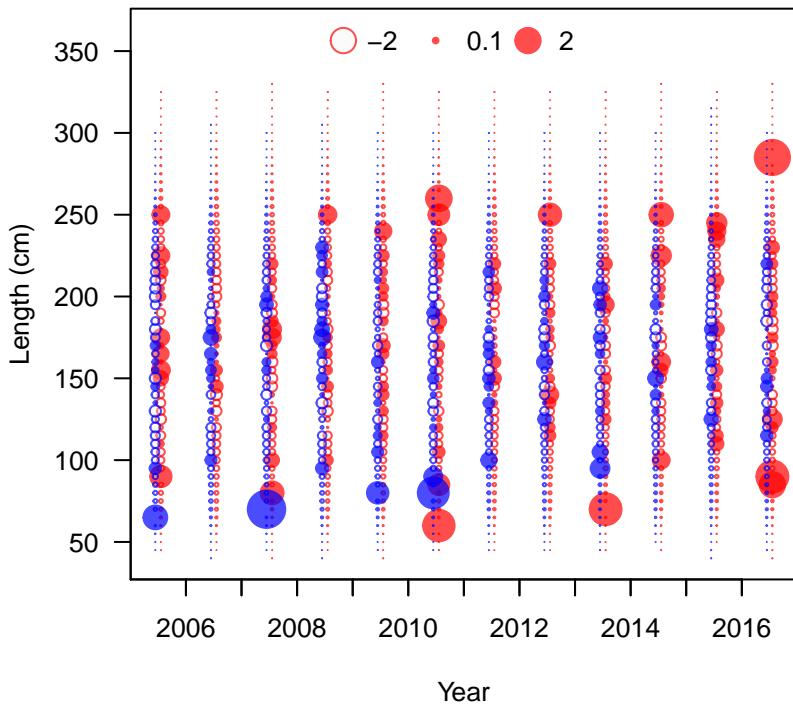
F2\_US\_HI\_SS (whole catch)



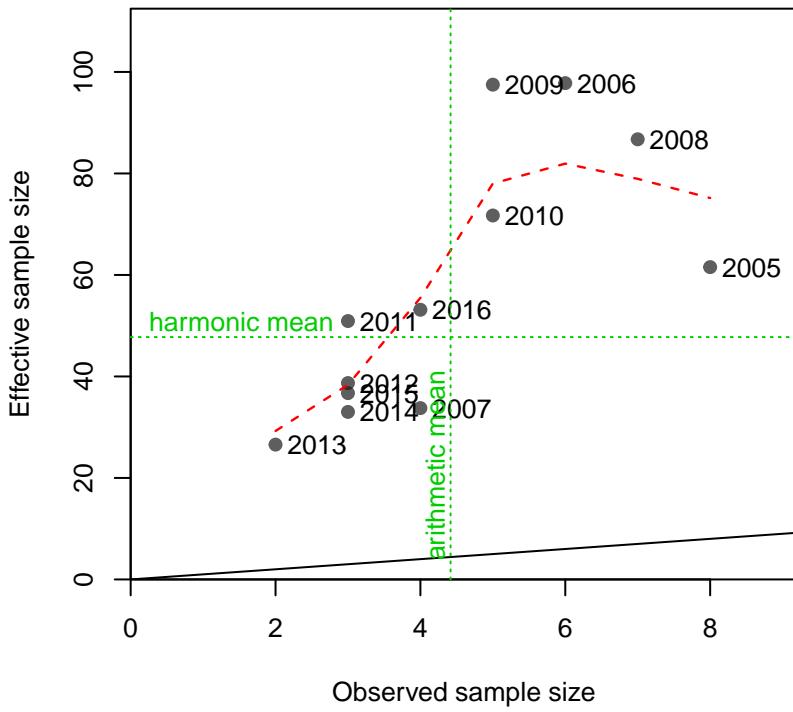
### length comps, whole catch, F3\_US\_HI\_DS



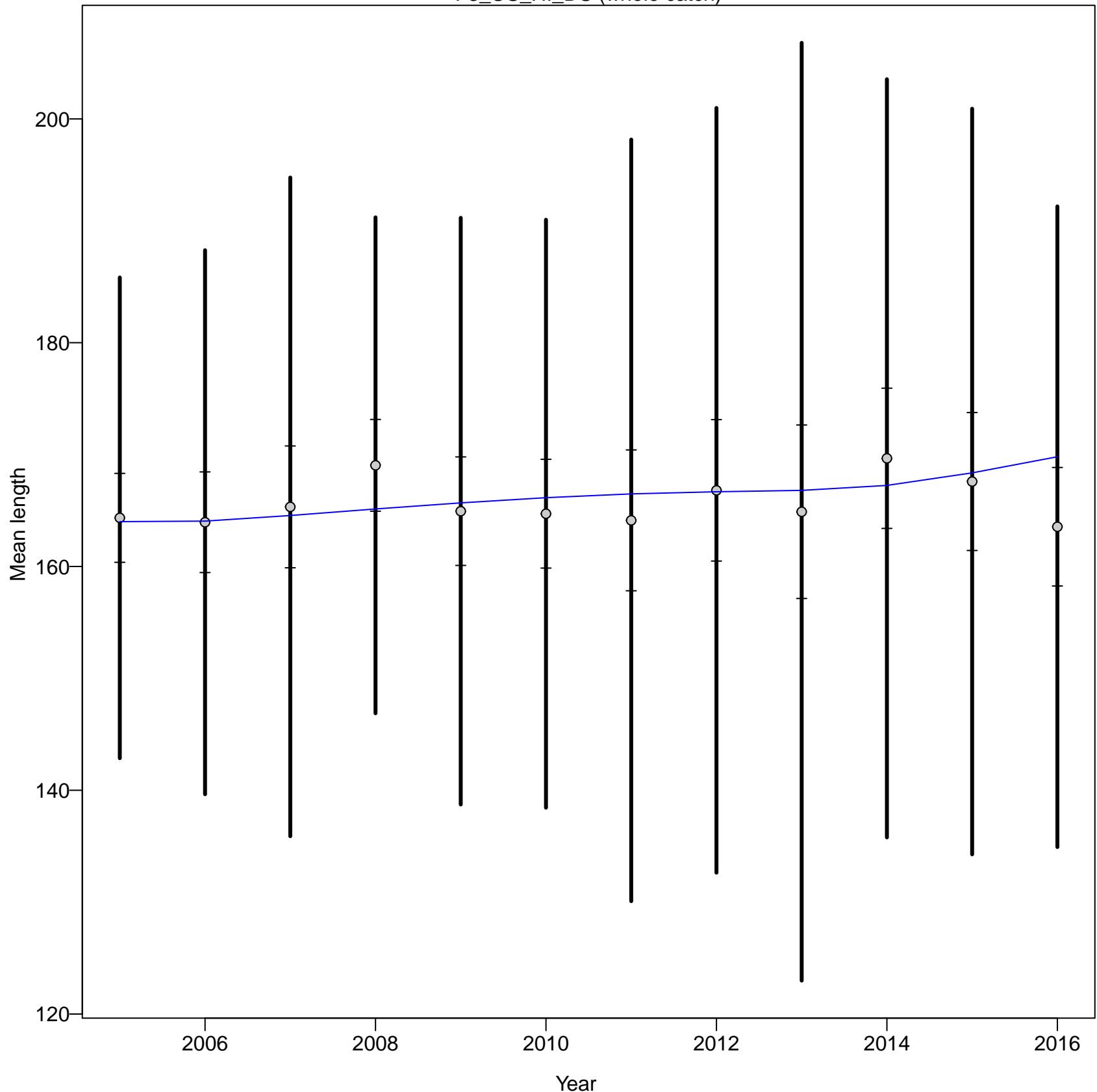
### Pearson residuals, whole catch, F3\_US\_HI\_DS (max=4.36)



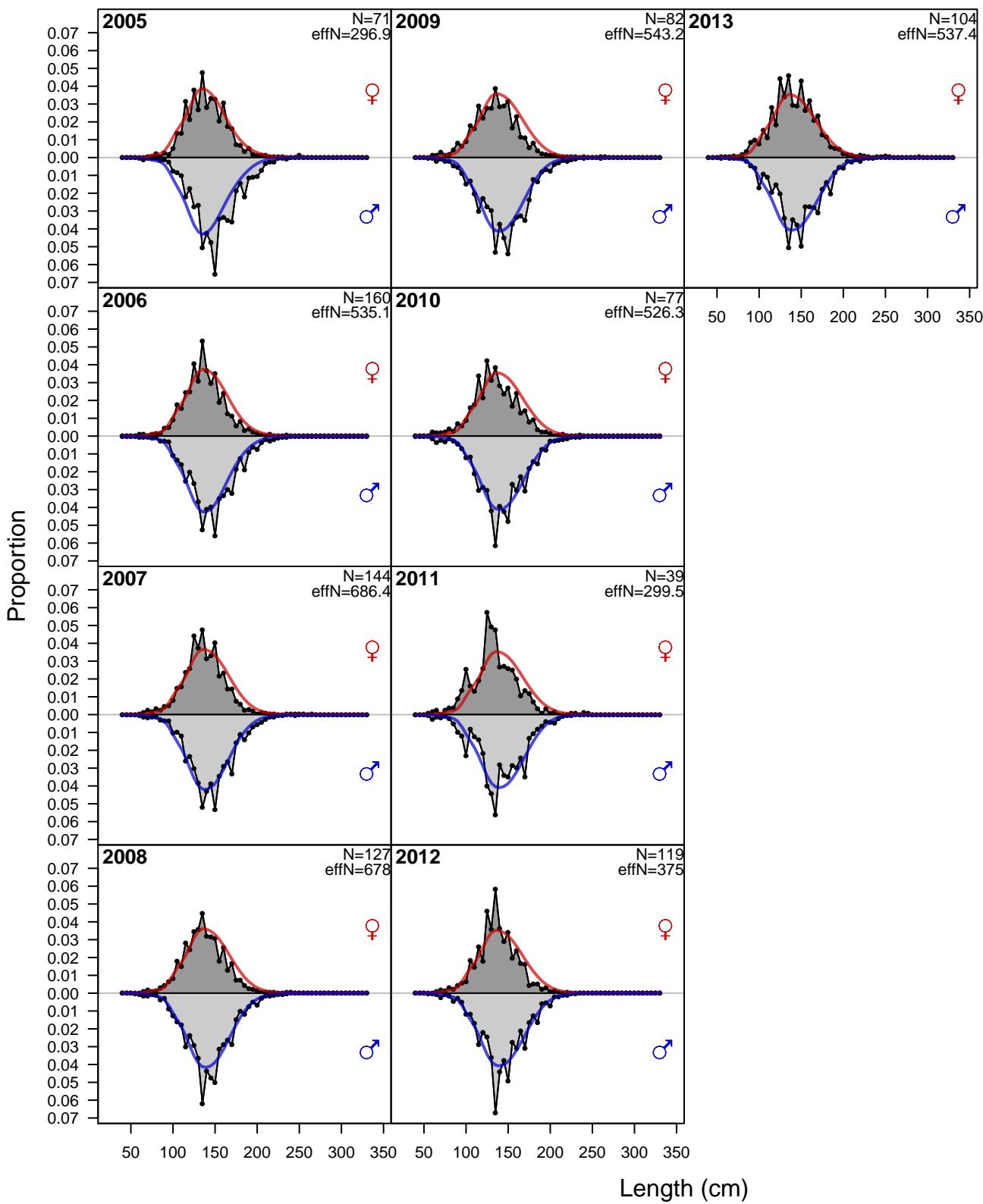
### N-EffN comparison, length comps, whole catch, F3\_US\_HI\_DS



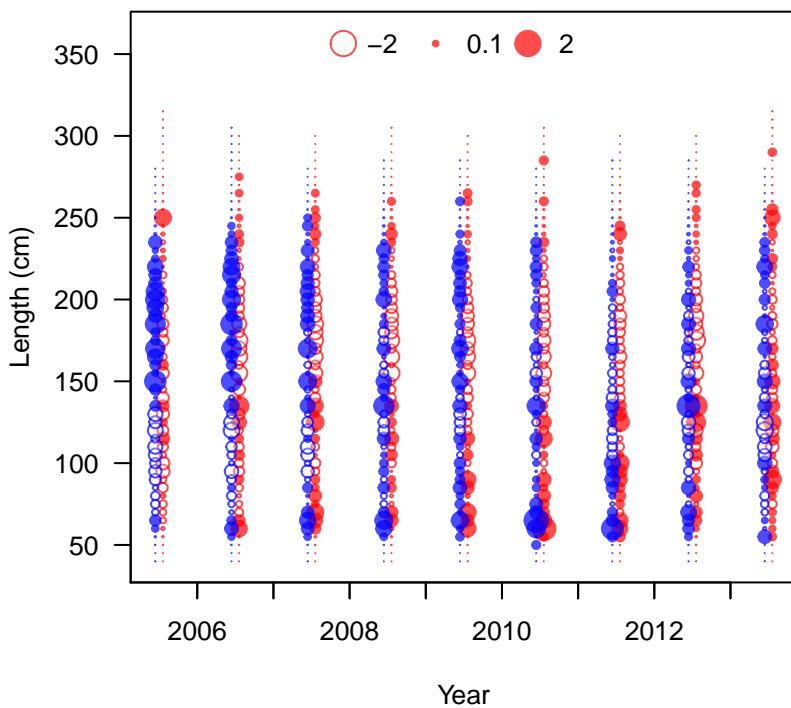
F3\_US\_HI\_DS (whole catch)



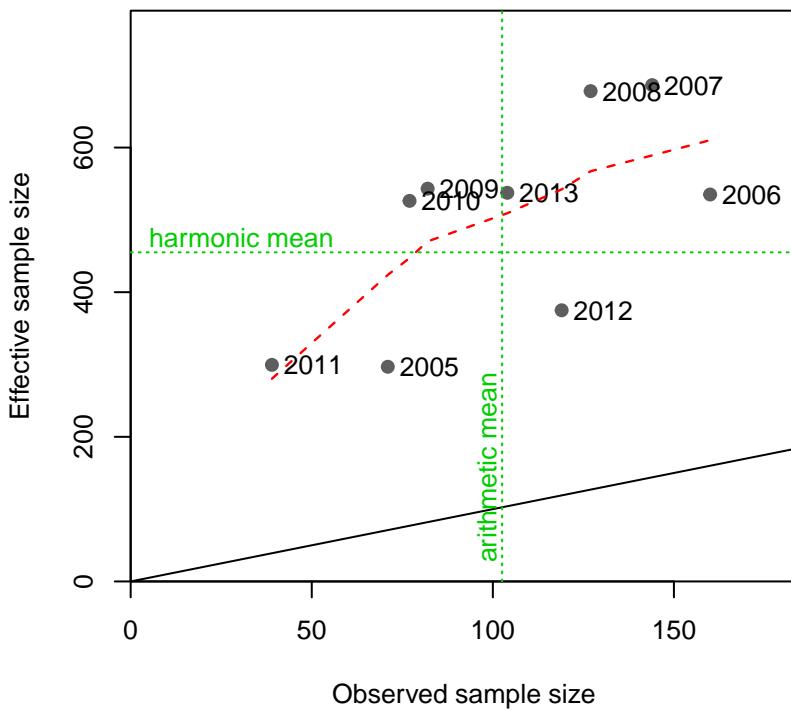
### length comps, whole catch, F9\_JPN\_SS



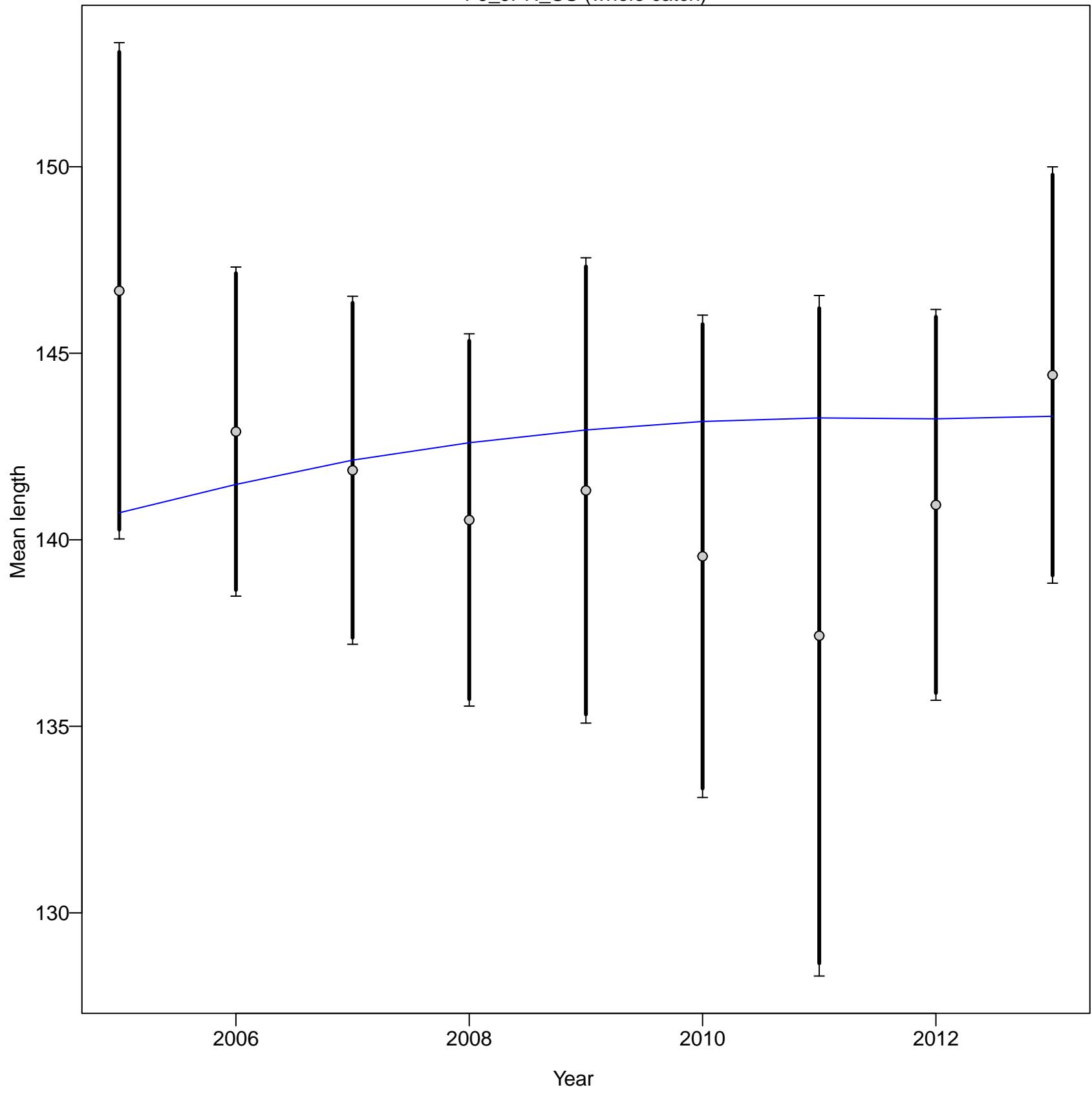
### Pearson residuals, whole catch, F9\_JPN\_SS (max=1.7)



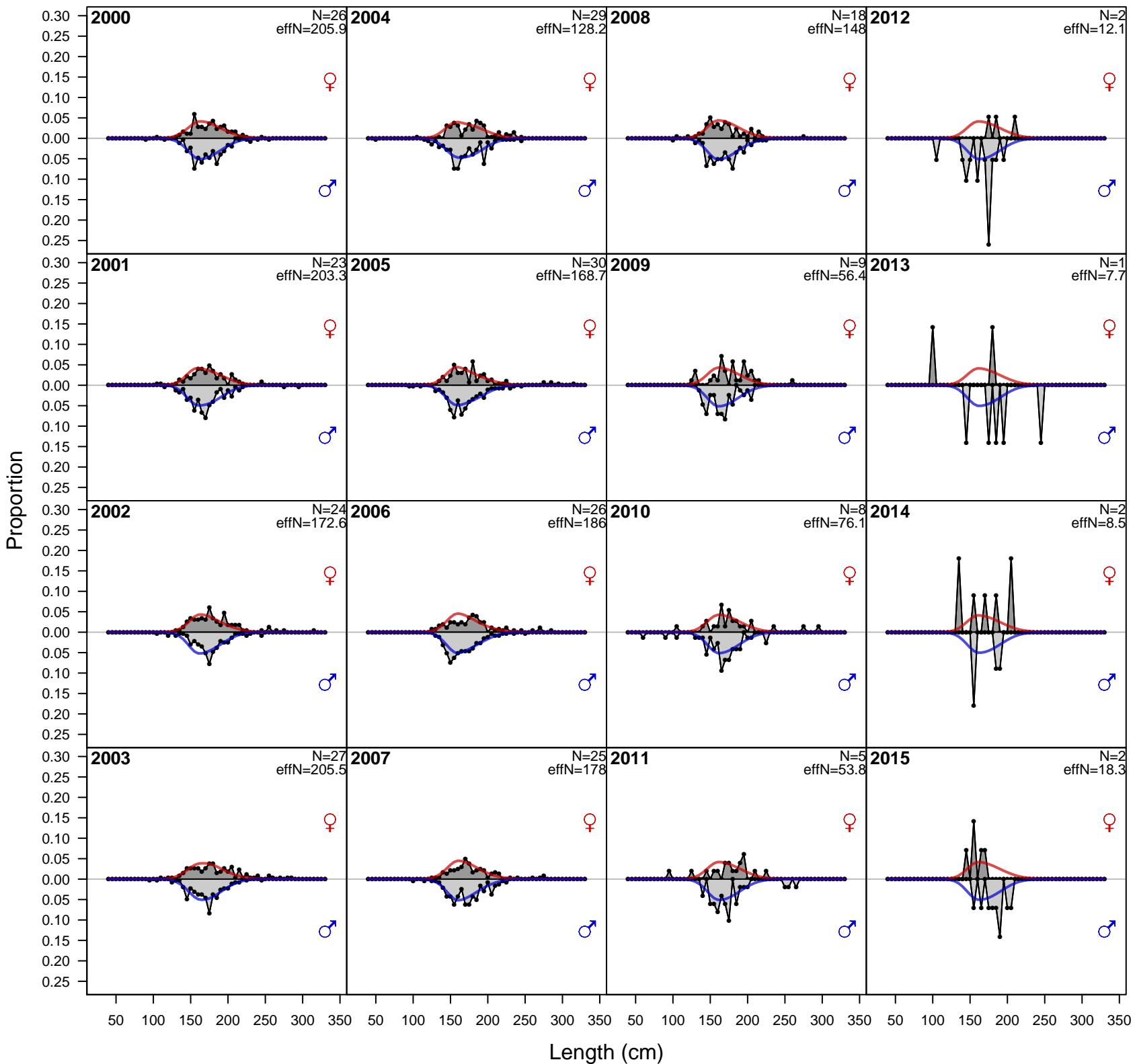
### N-EffN comparison, length comps, whole catch, F9\_JPN\_SS



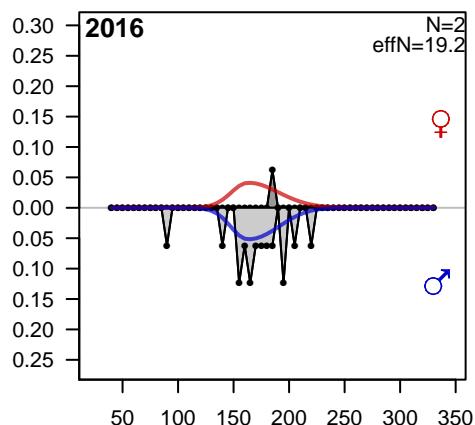
F9\_JPN\_SS (whole catch)



# length comps, whole catch, F10\_JPN\_DS



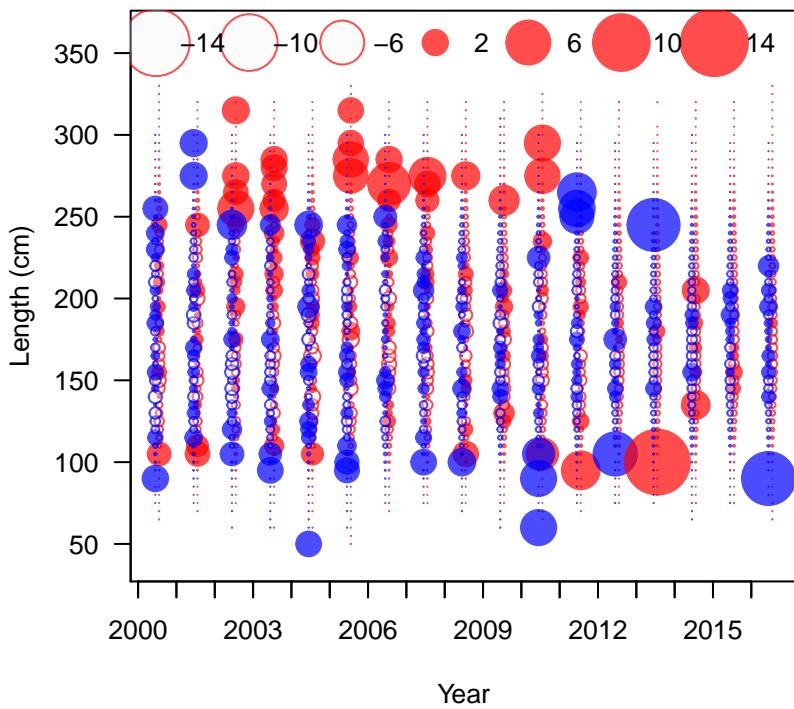
### length comps, whole catch, F10\_JPN\_DS



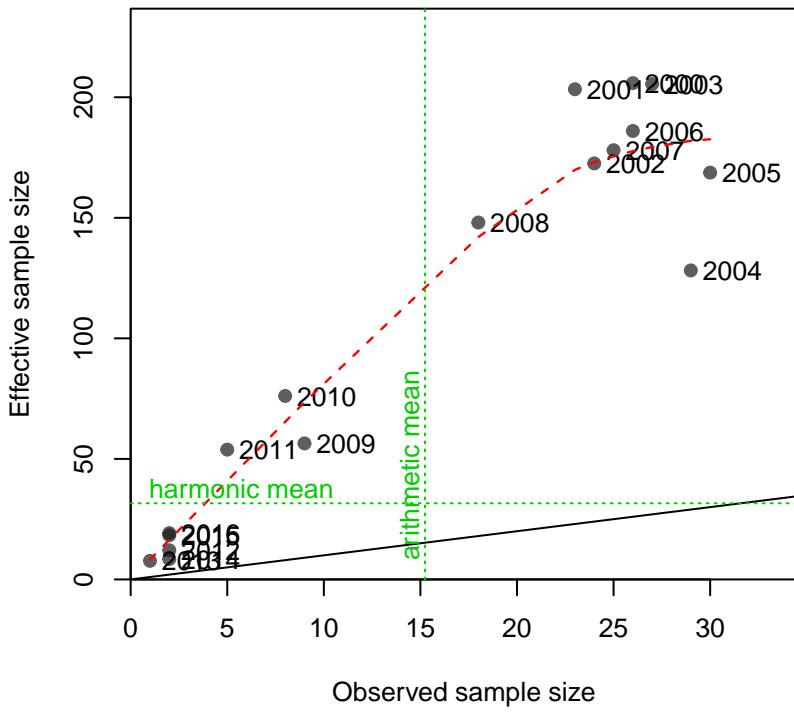
Proportion

Length (cm)

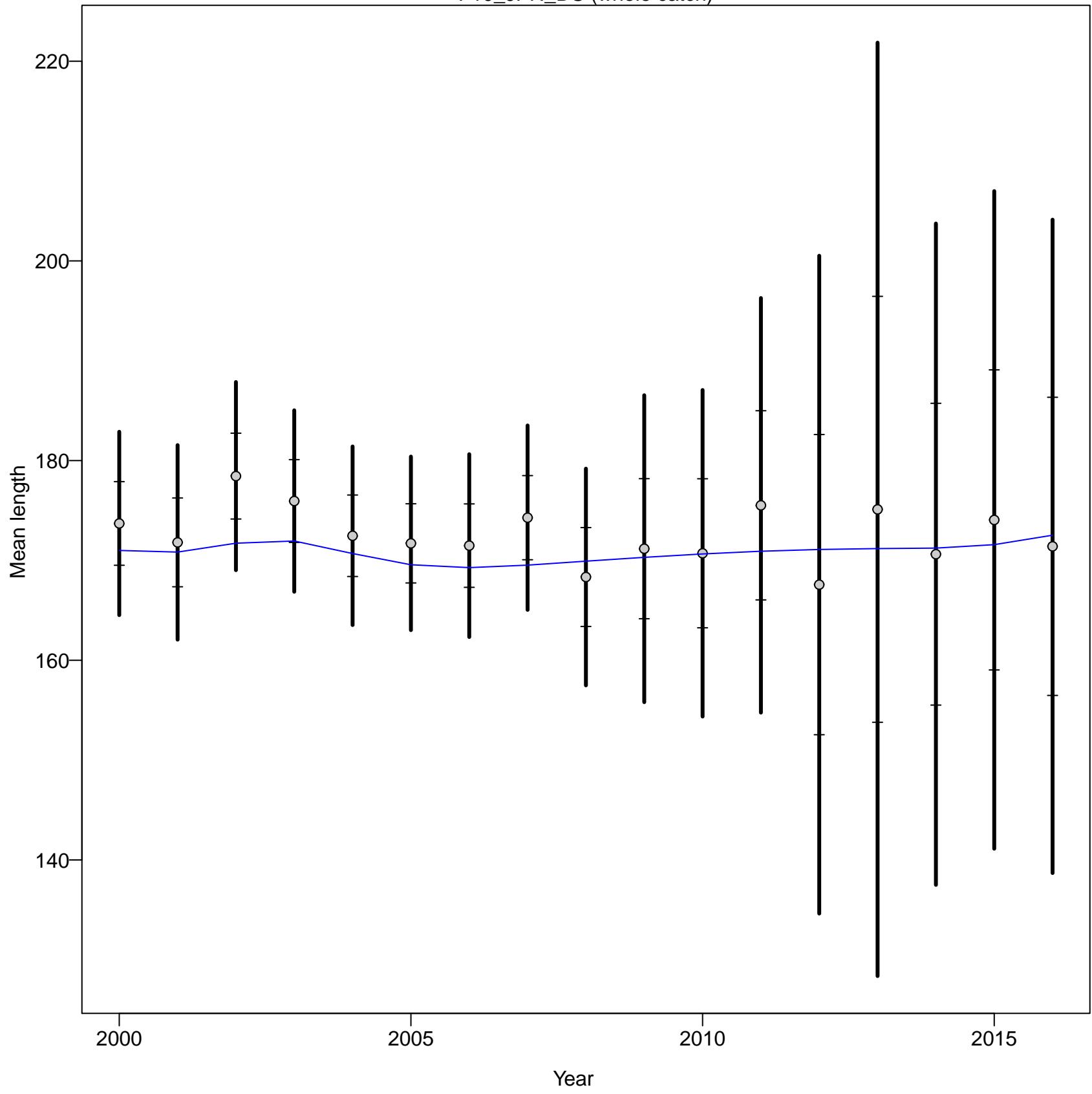
### Pearson residuals, whole catch, F10\_JPN\_DS (max=13.11)



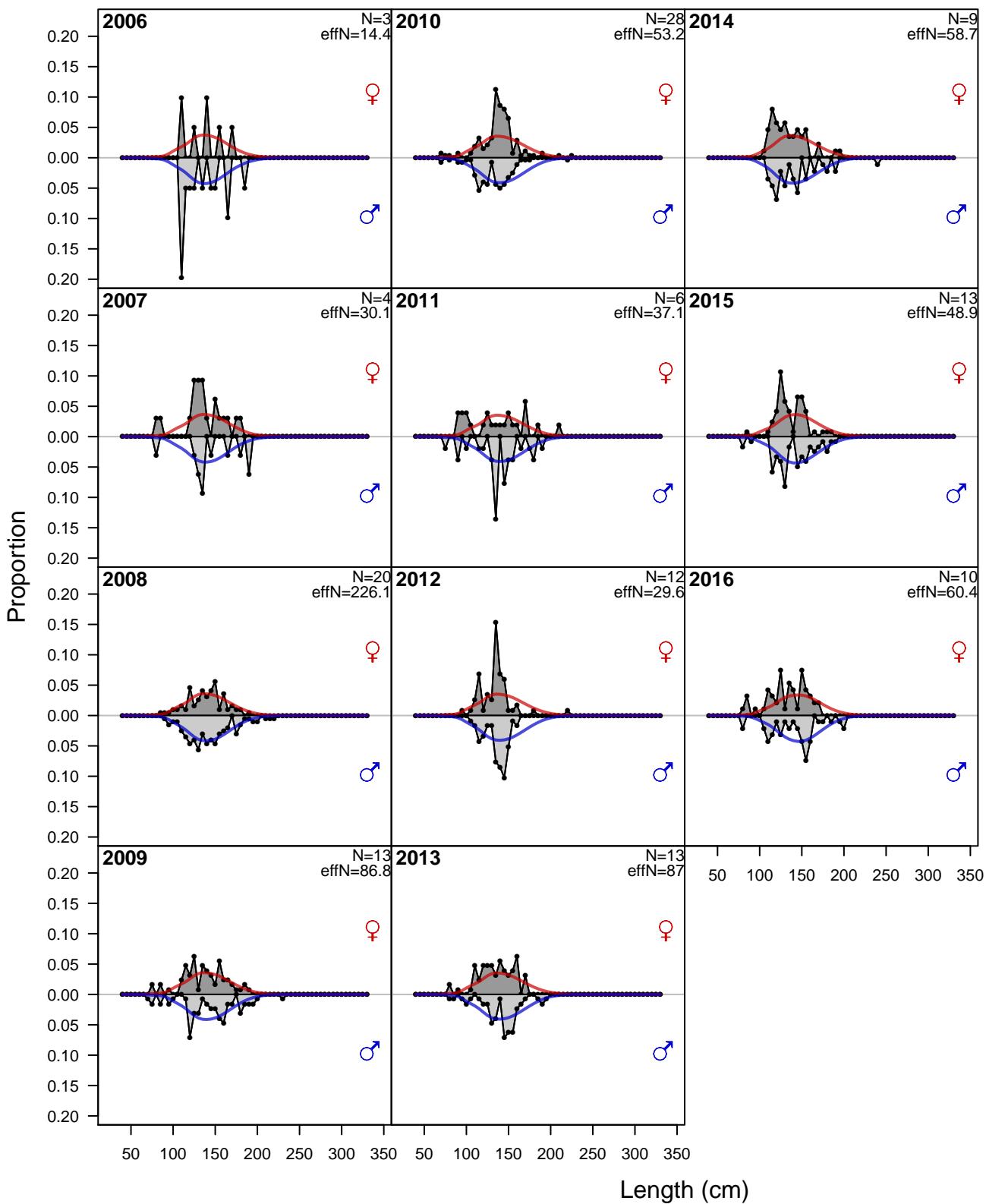
### N-EffN comparison, length comps, whole catch, F10\_JPN\_DS



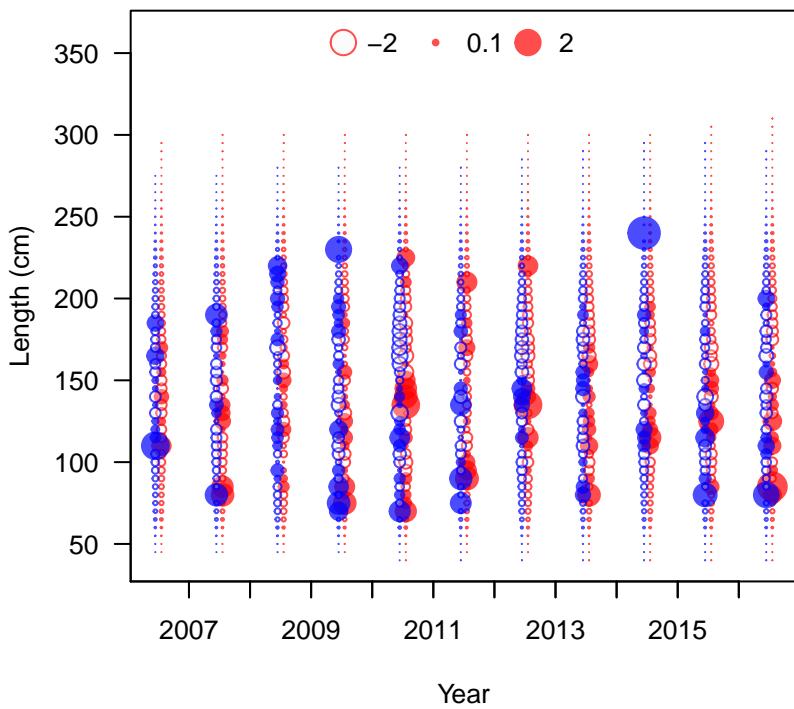
F10\_JPN\_DS (whole catch)



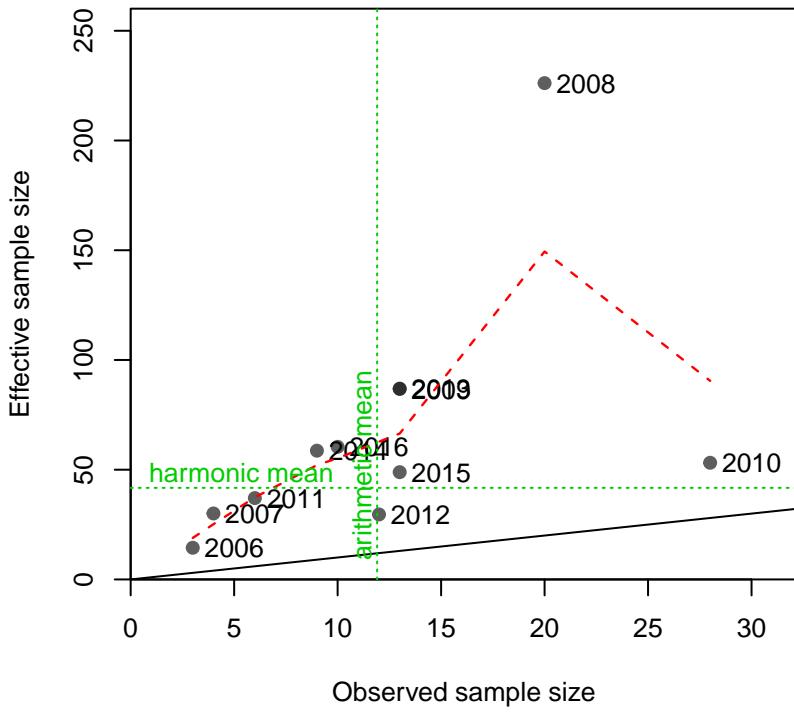
# length comps, whole catch, F11\_JPN\_CST



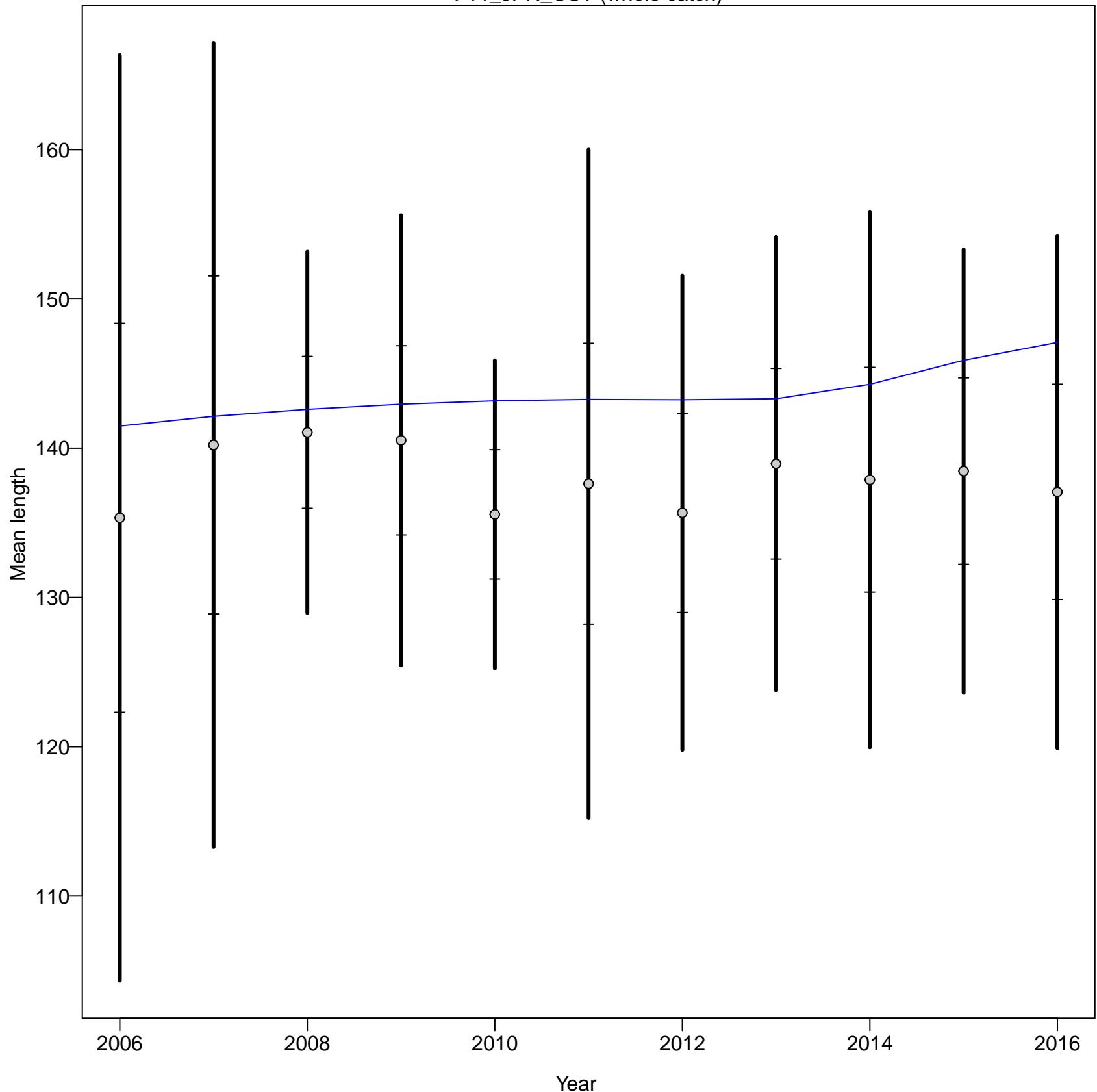
### Pearson residuals, whole catch, F11\_JPN\_CST (max=3.09)



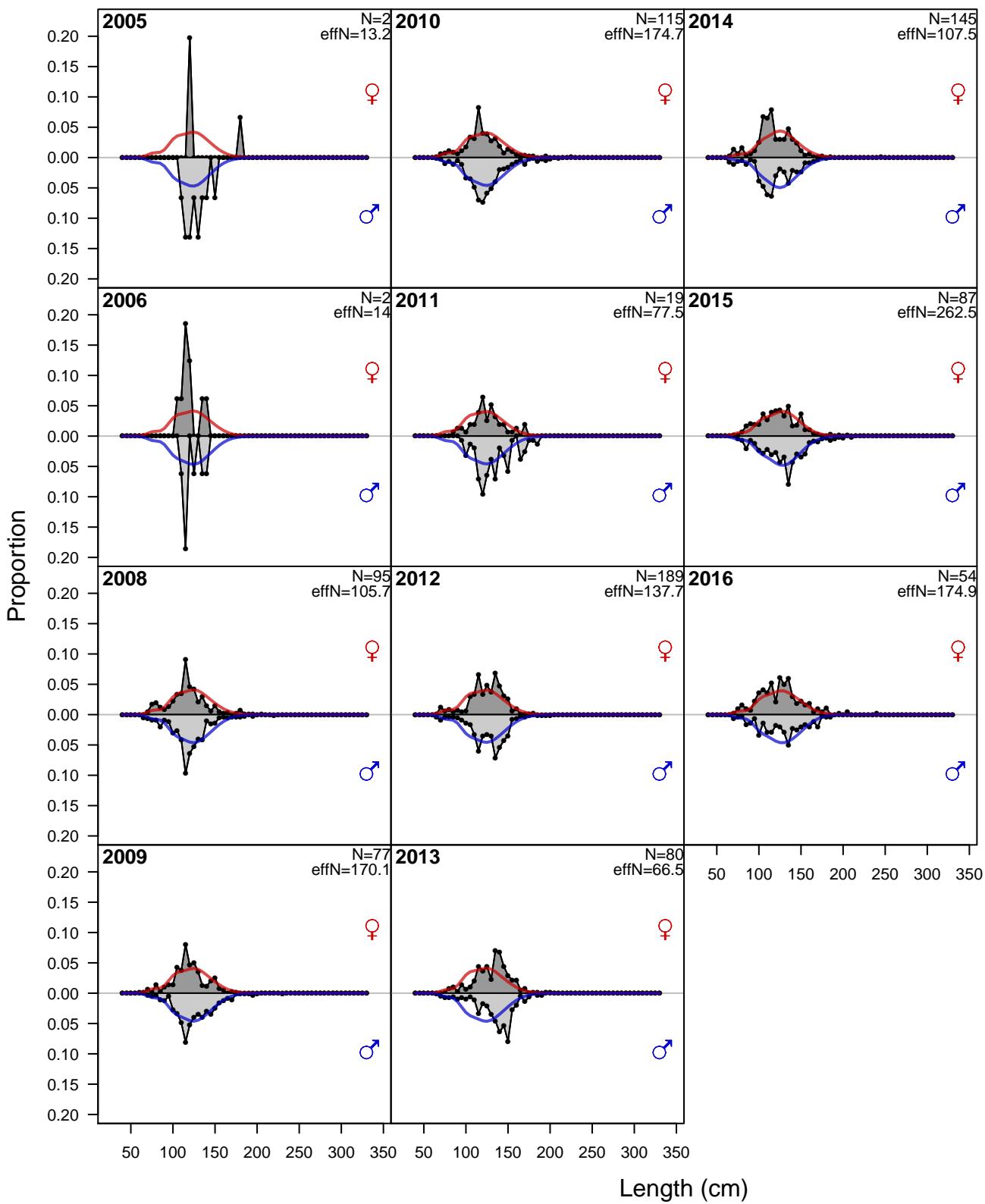
### N-EffN comparison, length comps, whole catch, F11\_JPN\_CST



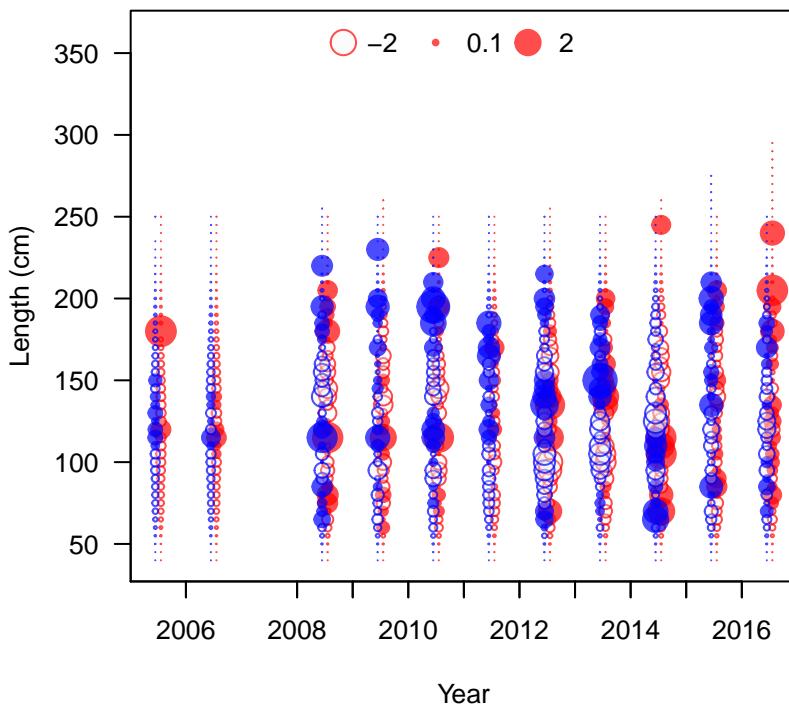
F11\_JPN\_CST (whole catch)



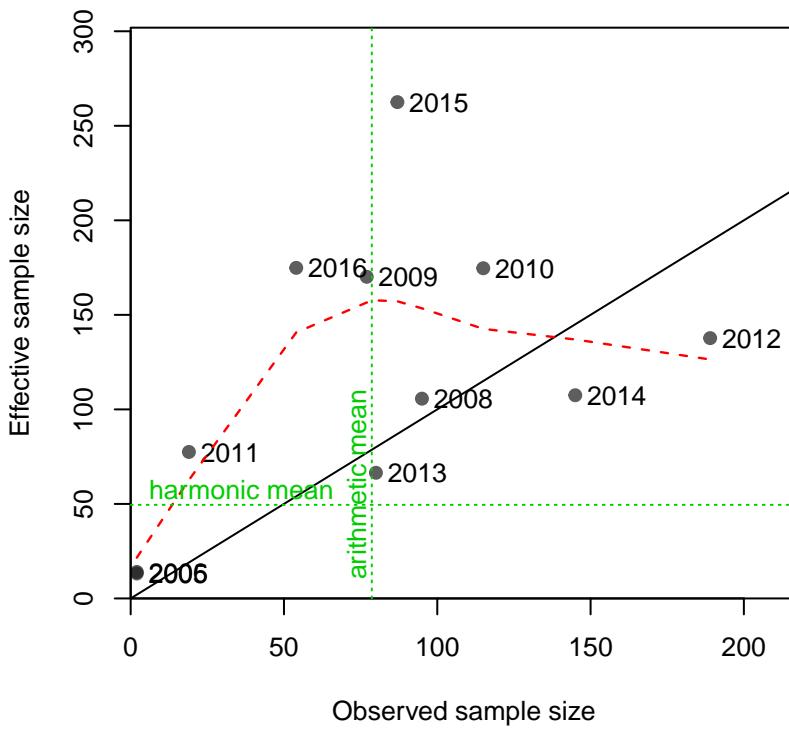
# length comps, whole catch, F12\_JPN\_DFN



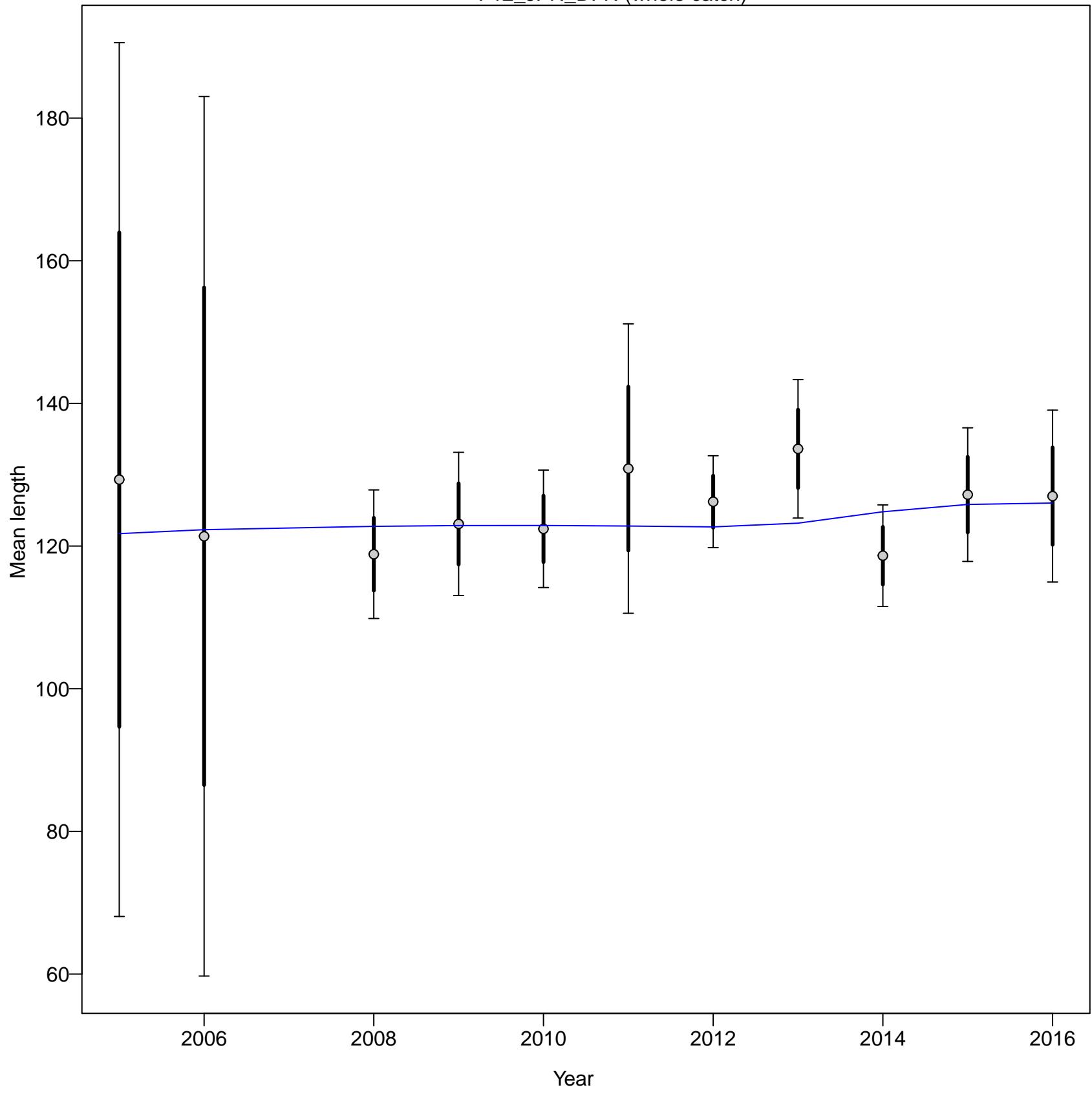
### Pearson residuals, whole catch, F12\_JPN\_DFN (max=3.44)



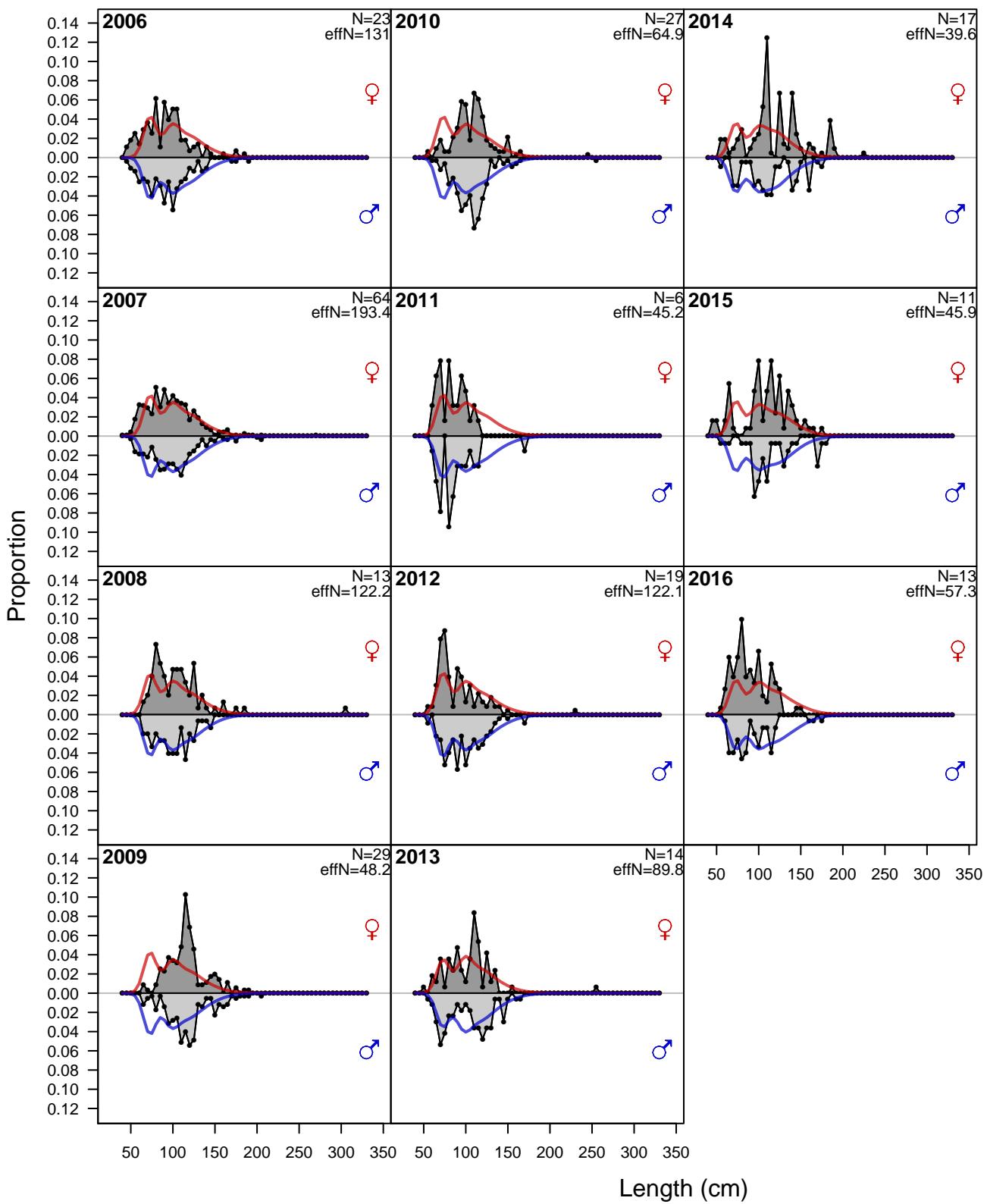
### N-EffN comparison, length comps, whole catch, F12\_JPN\_DFN



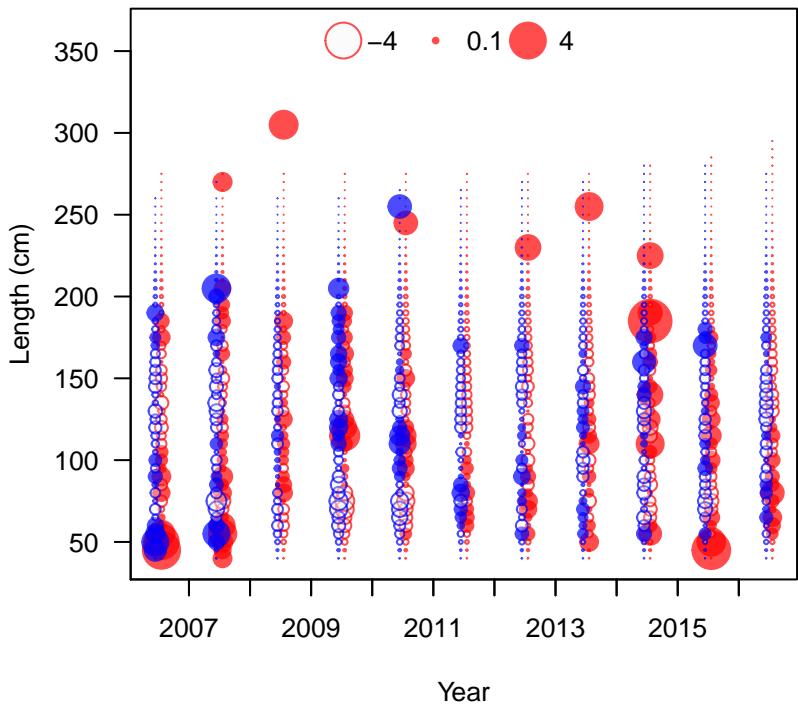
F12\_JPN\_DFN (whole catch)



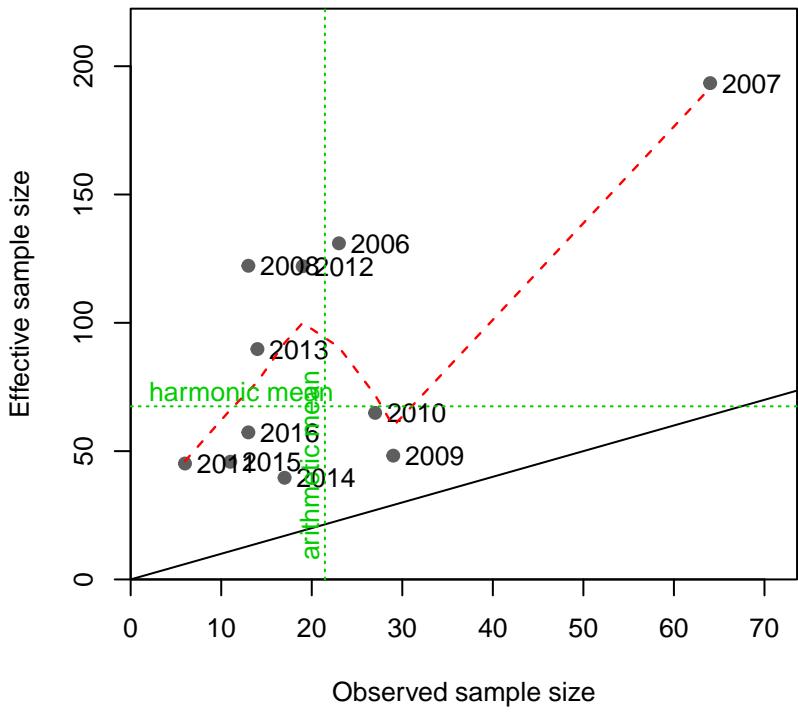
### length comps, whole catch, F14\_MEX\_NOR



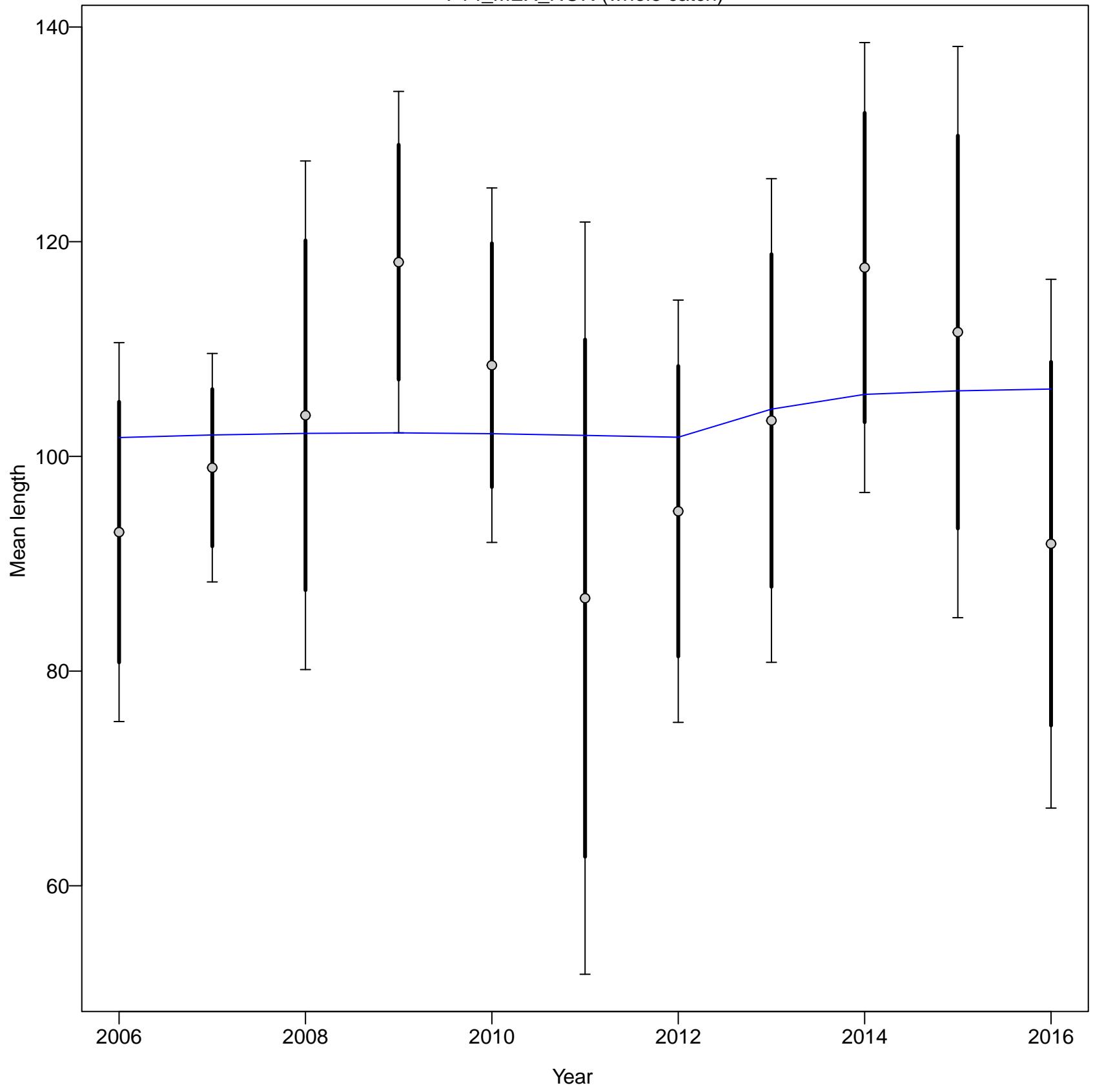
### Pearson residuals, whole catch, F14\_MEX\_NOR (max=5.66)



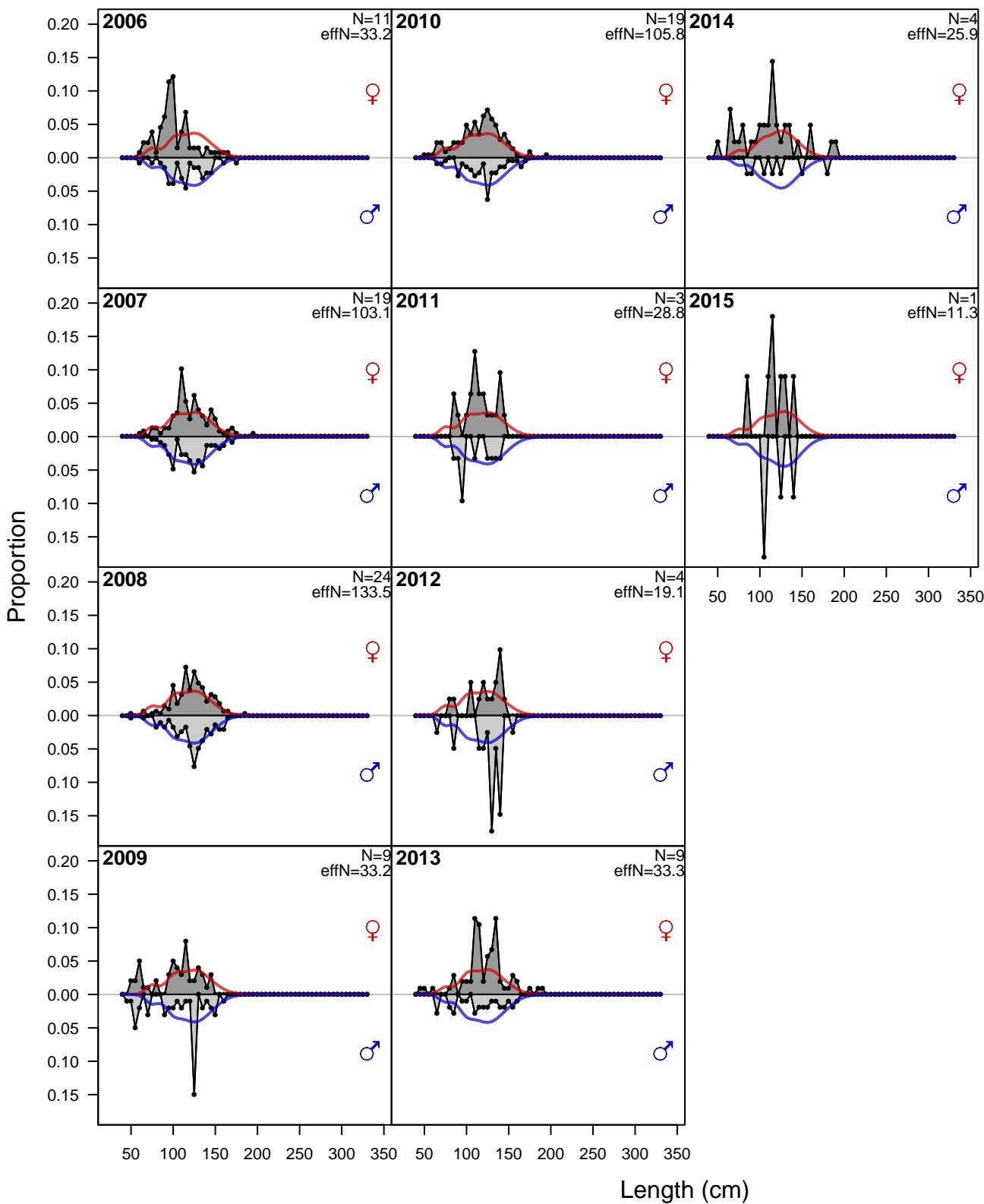
### N-EffN comparison, length comps, whole catch, F14\_MEX\_NOR



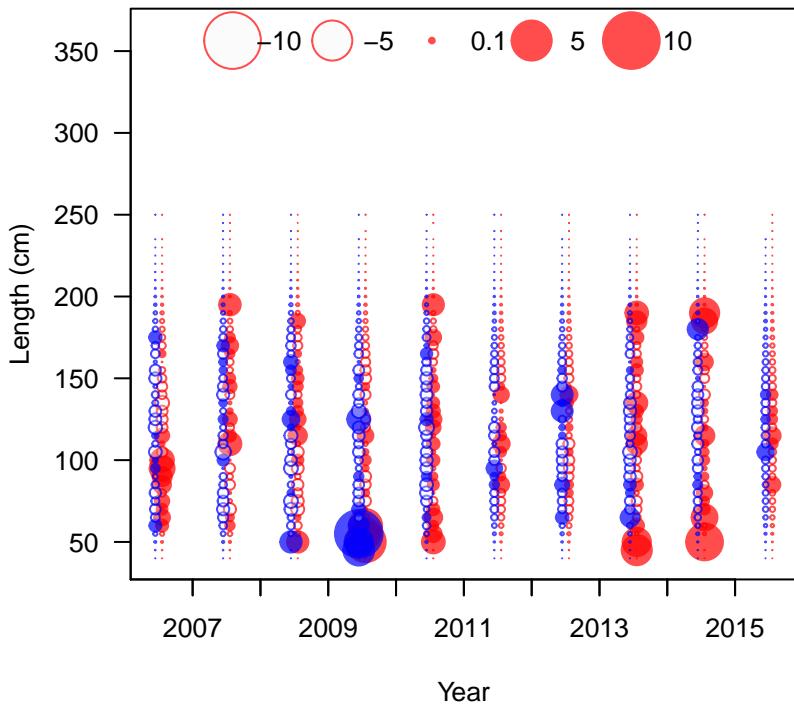
F14\_MEX\_NOR (whole catch)



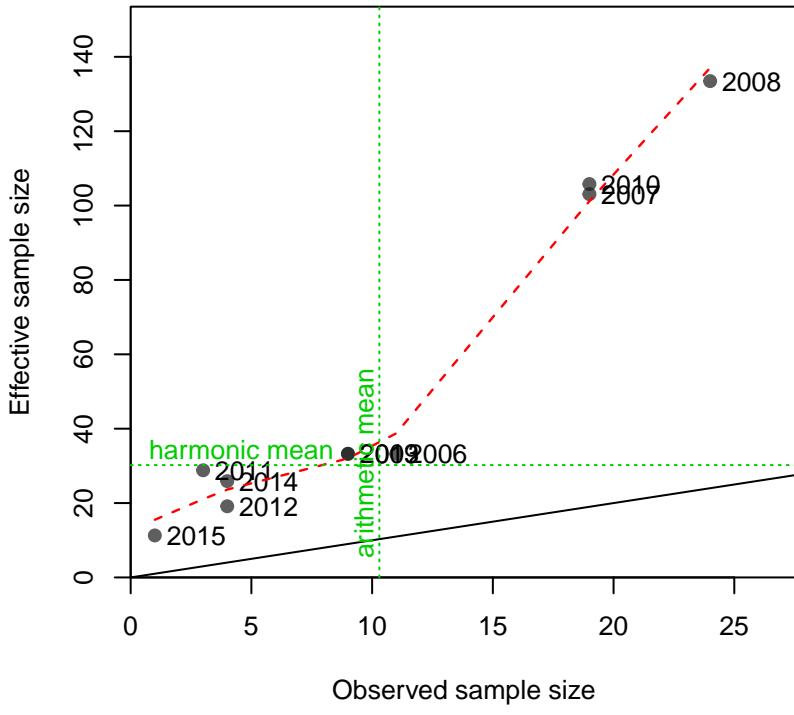
# length comps, whole catch, F15\_MEX\_SOU



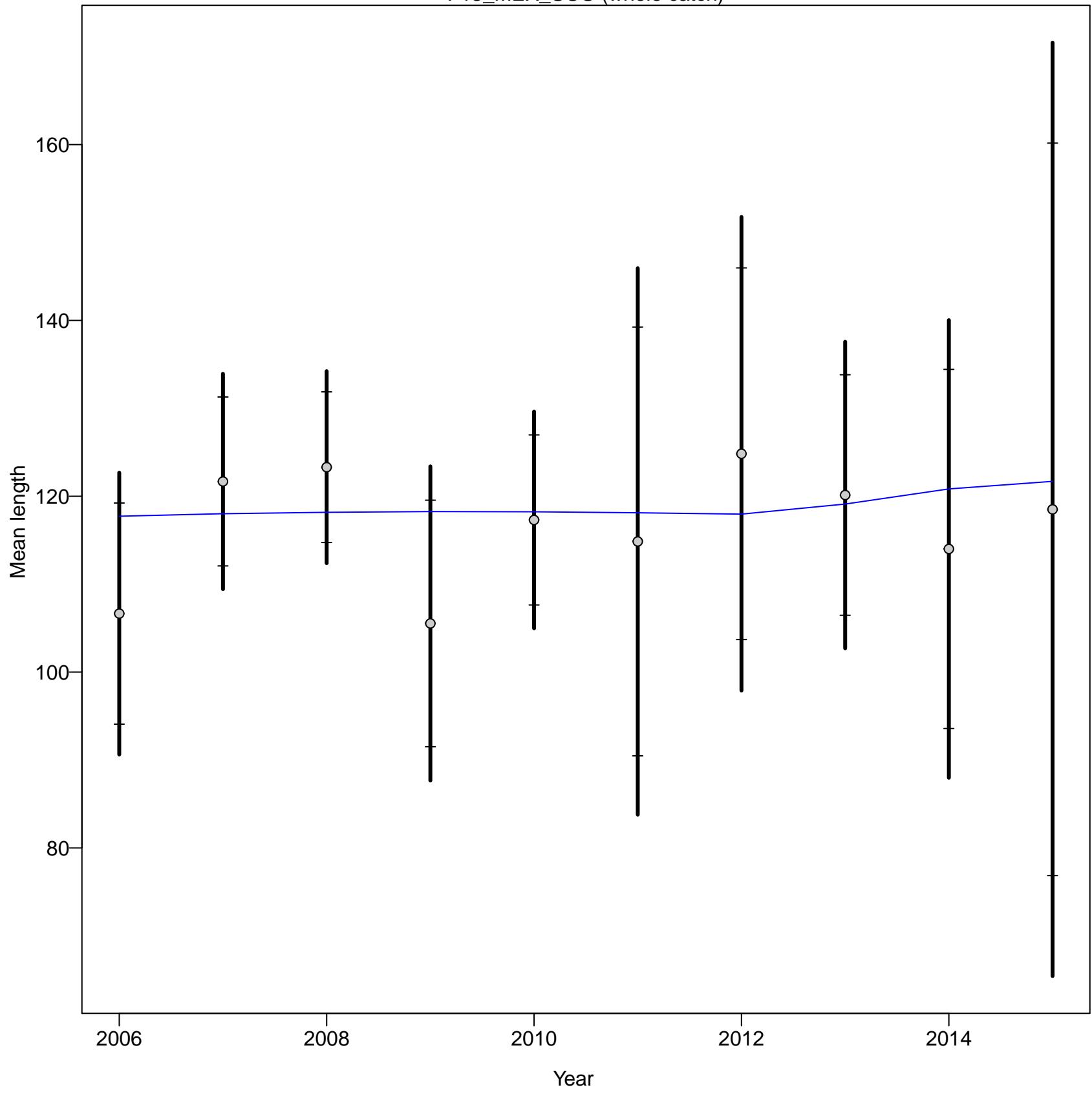
### Pearson residuals, whole catch, F15\_MEX\_SOU (max=7.04)



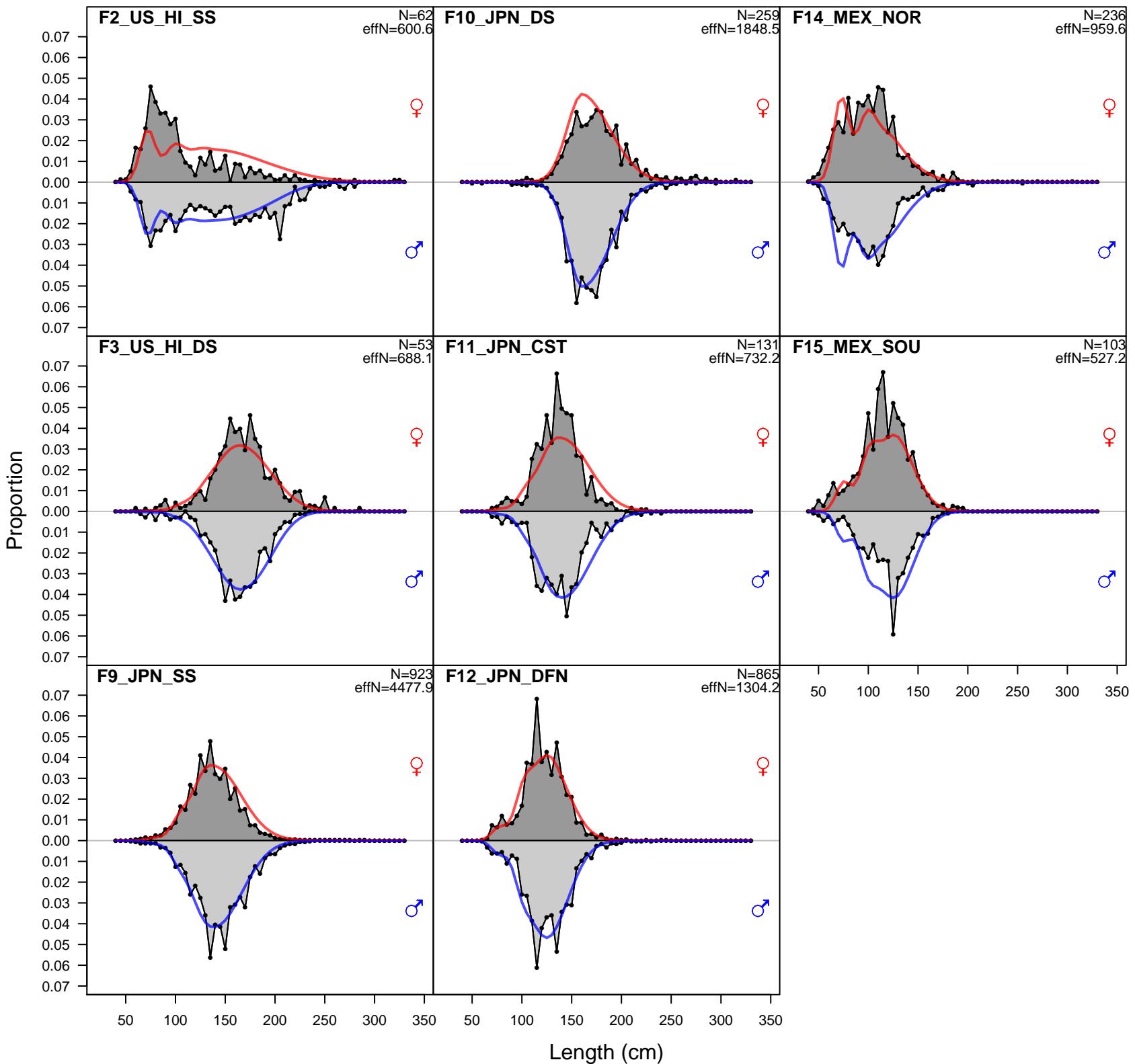
### N-EffN comparison, length comps, whole catch, F15\_MEX\_SOU



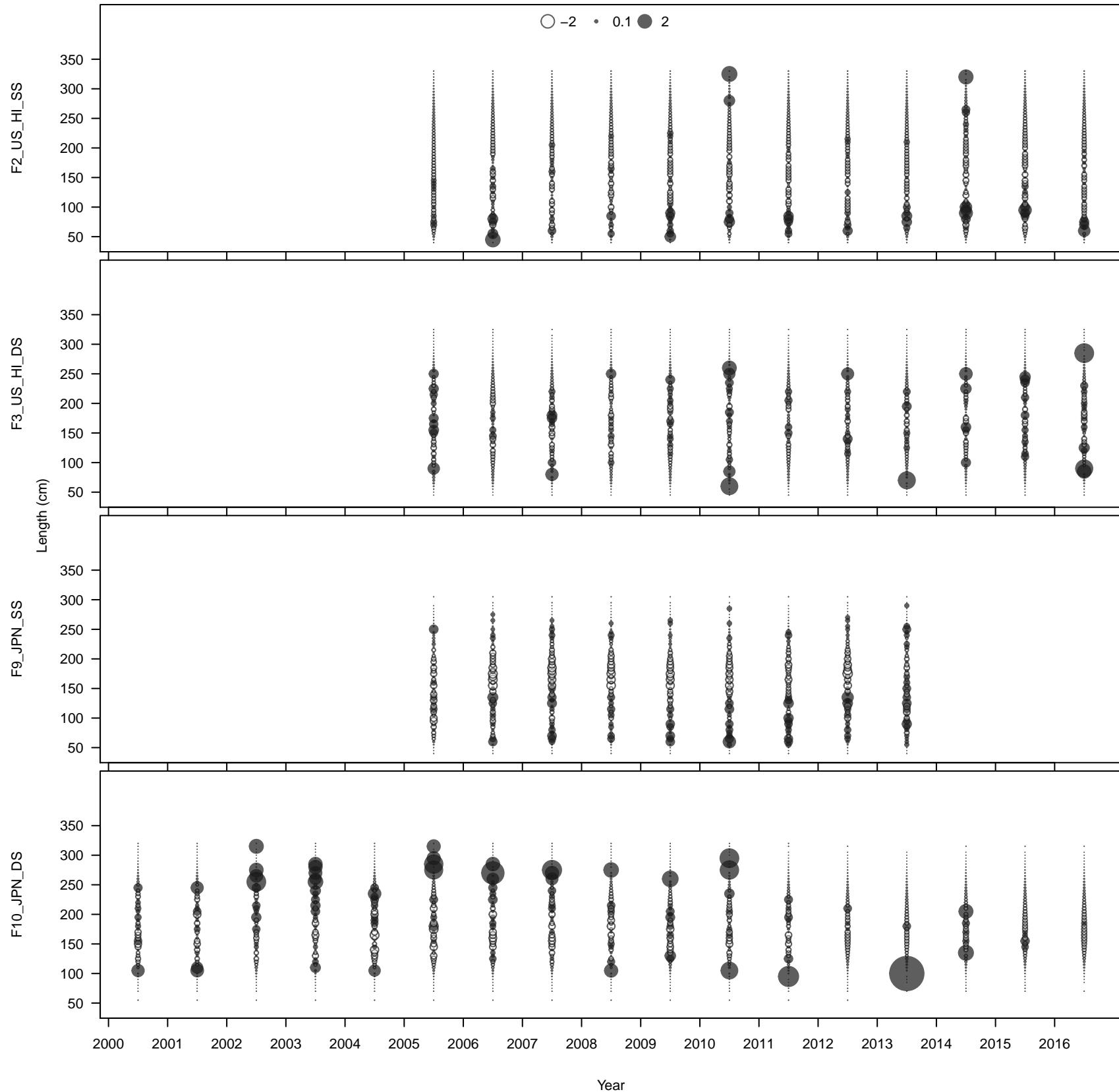
F15\_MEX\_SOU (whole catch)



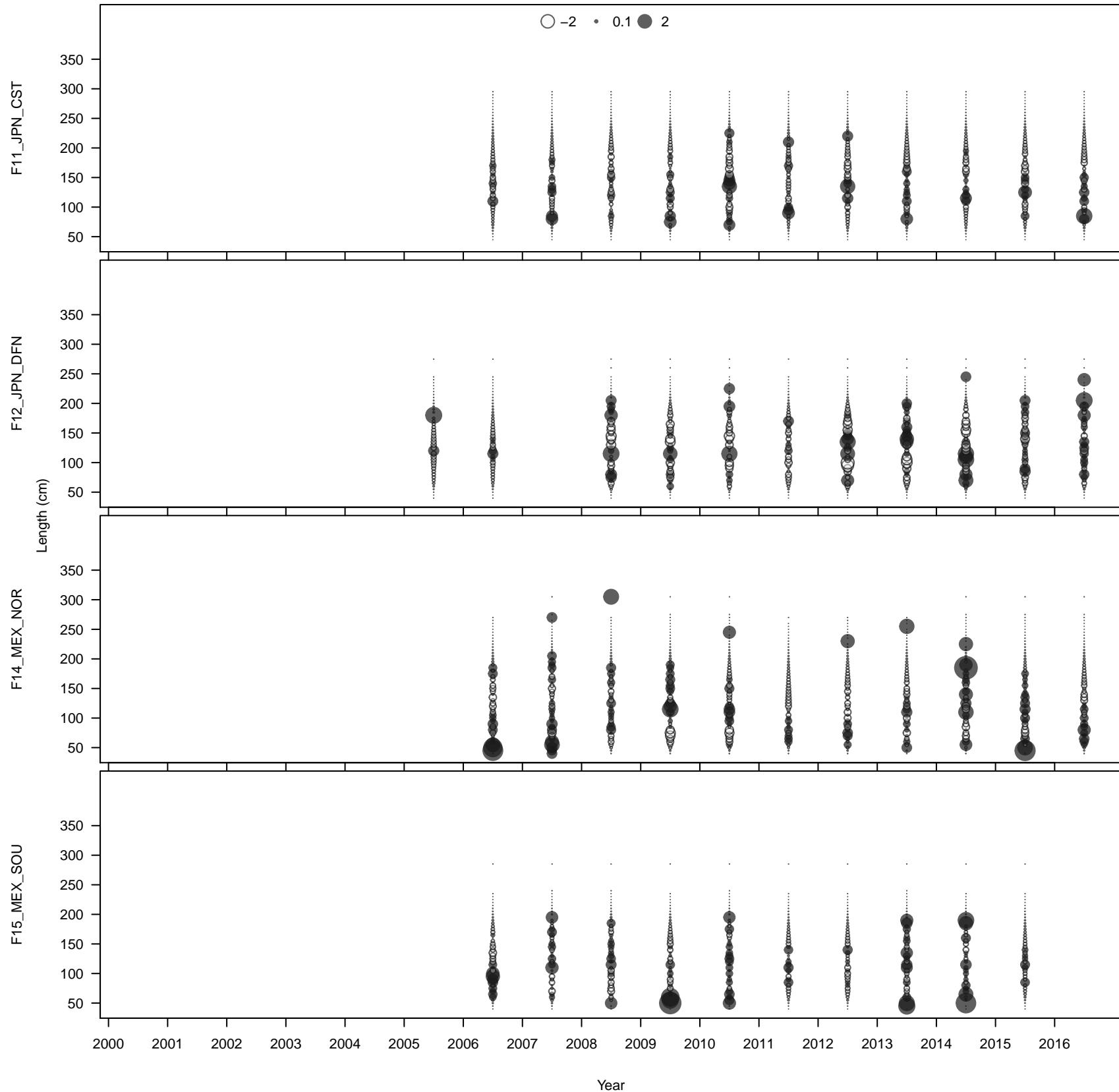
### length comps, whole catch, aggregated across time by fleet



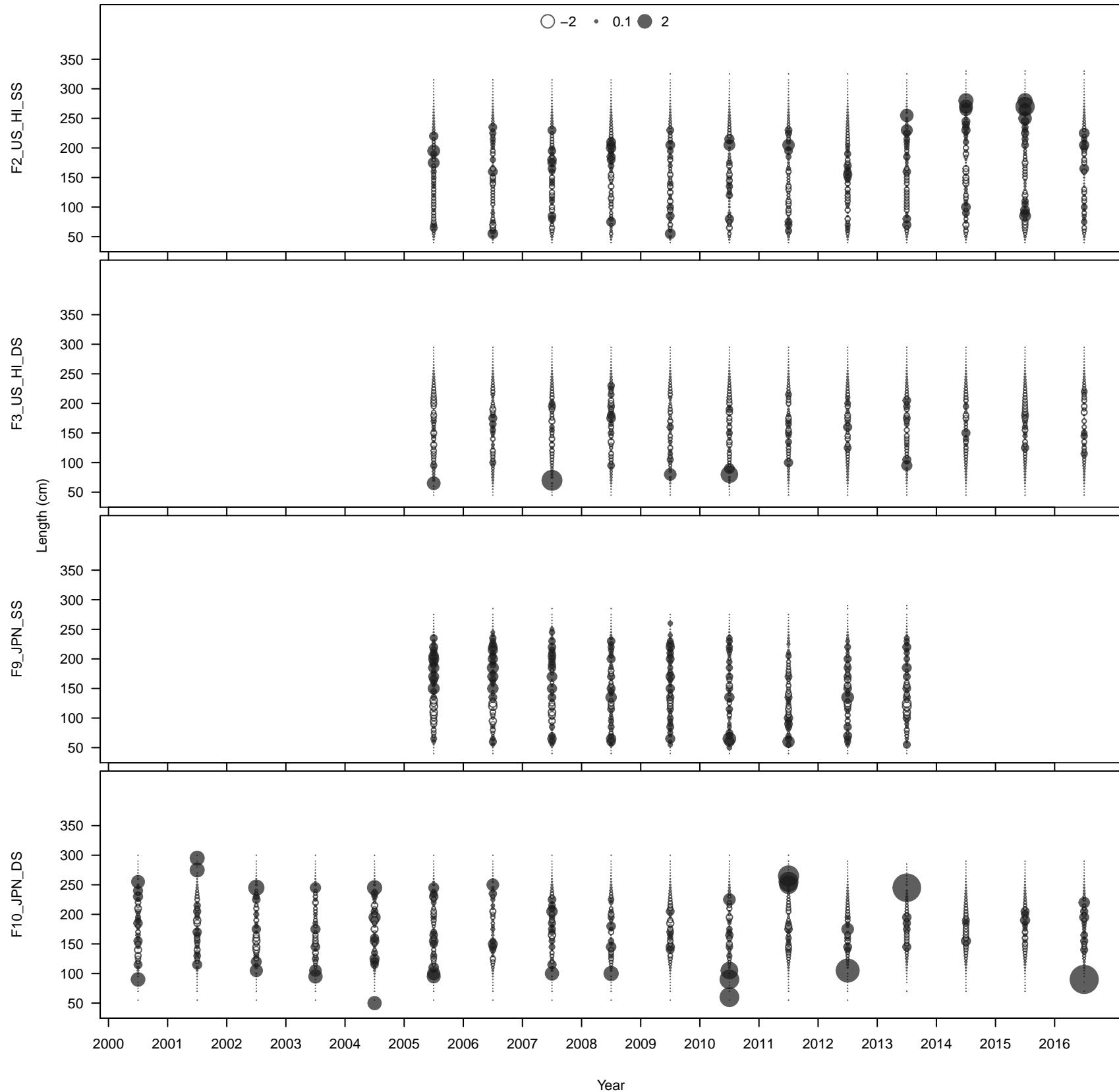
### Pearson residuals, female, whole catch, comparing across fleets



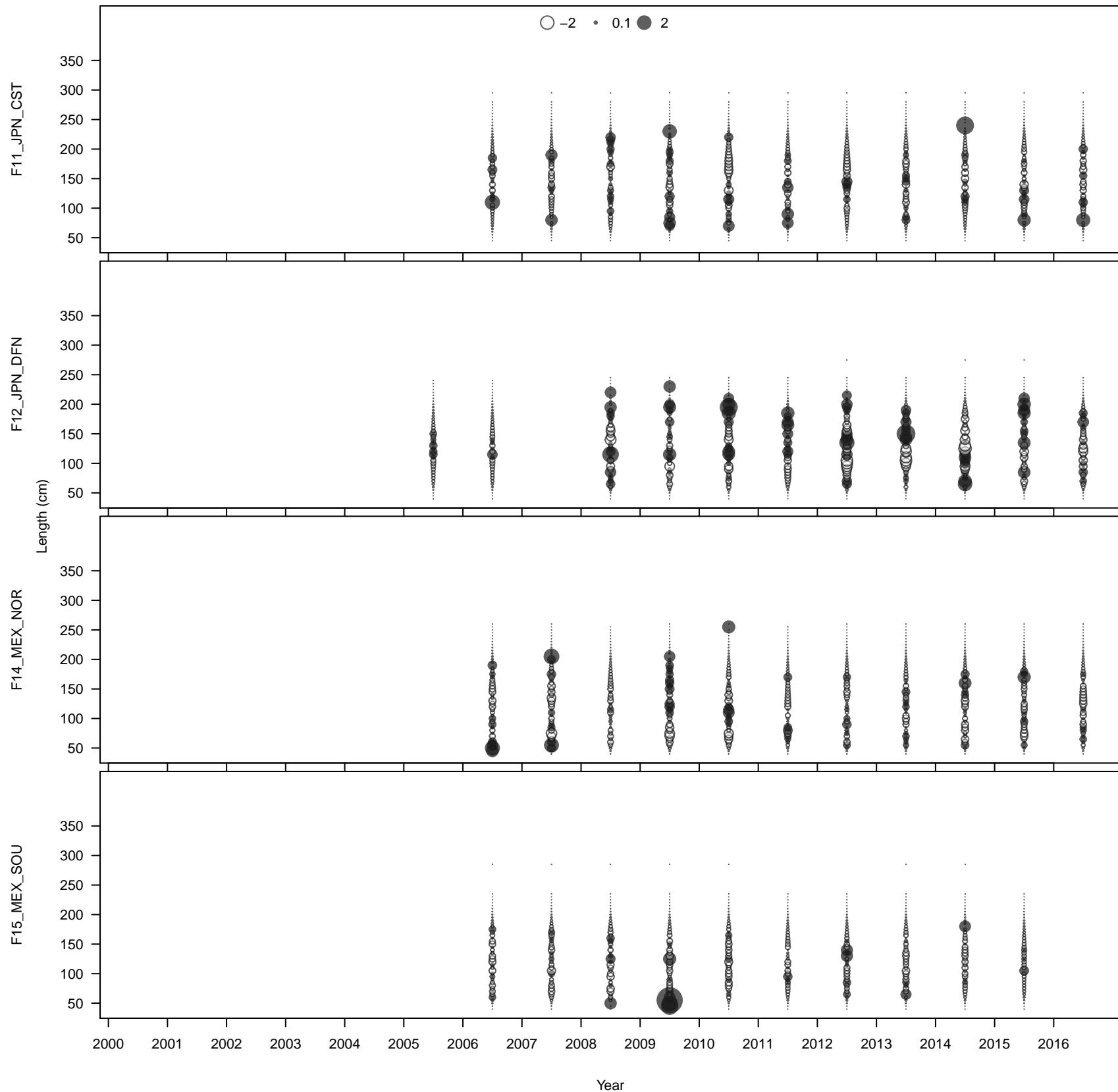
### Pearson residuals, female, whole catch, comparing across fleets



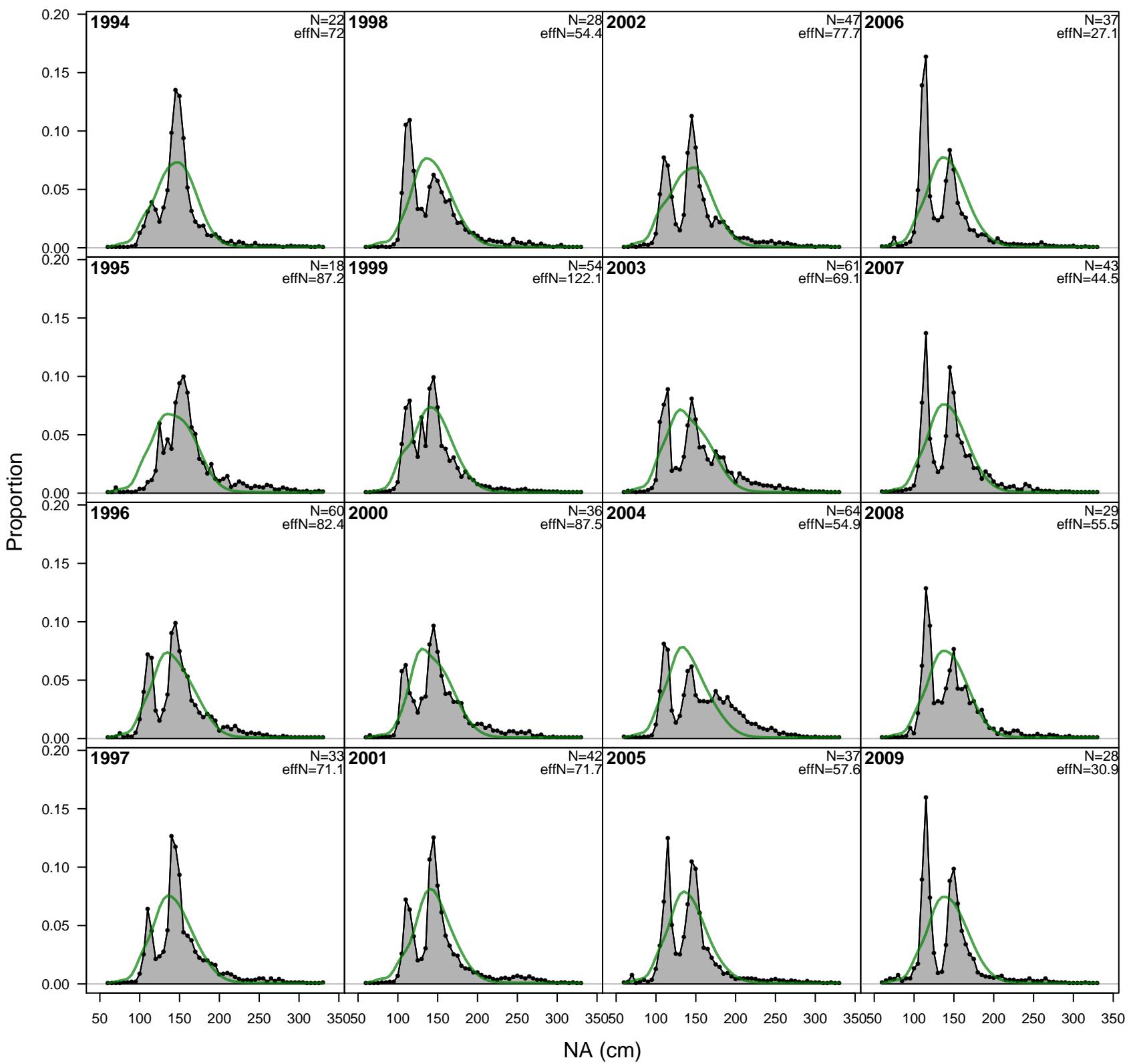
### Pearson residuals, male, whole catch, comparing across fleets



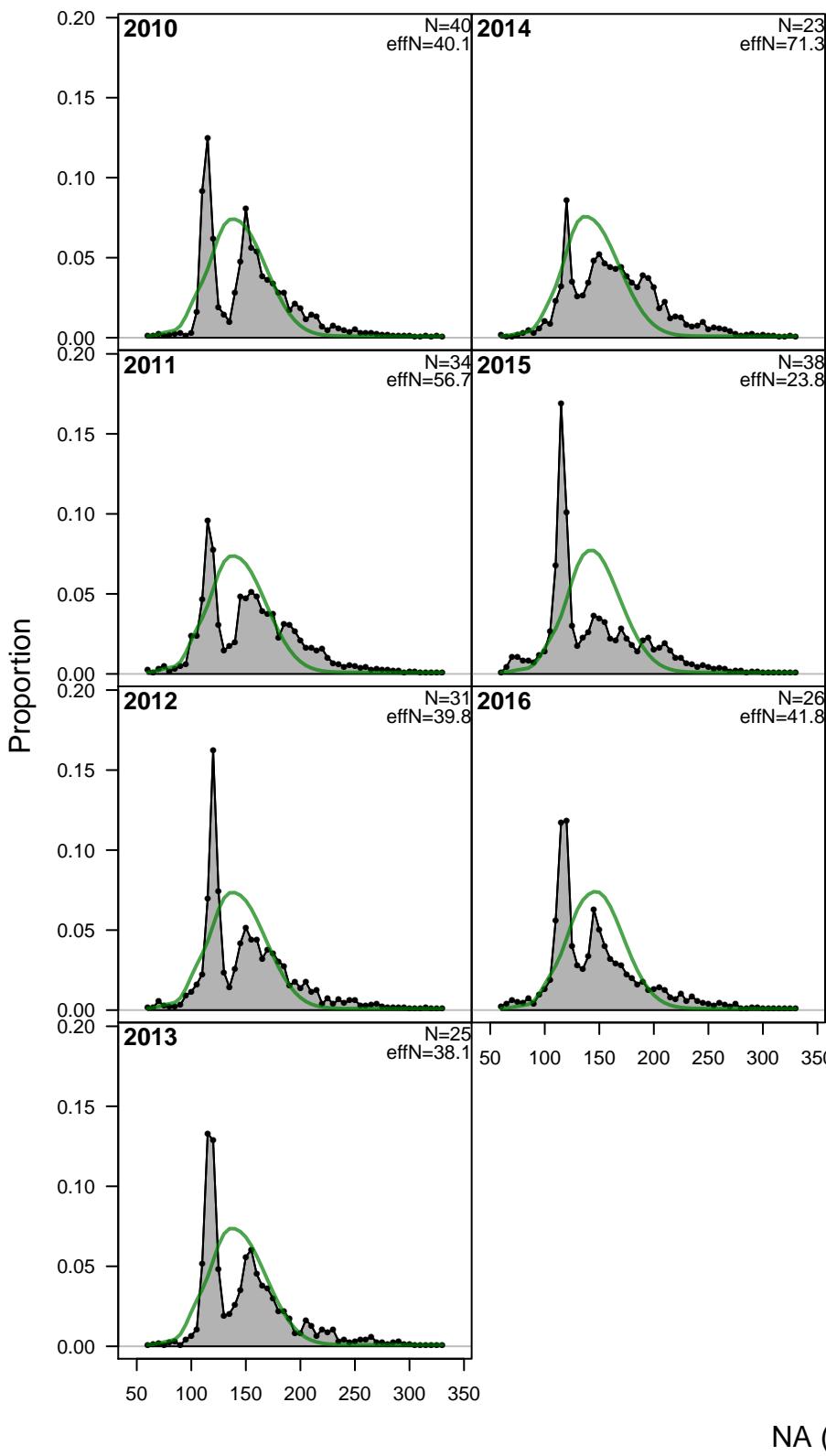
### Pearson residuals, male, whole catch, comparing across fleets



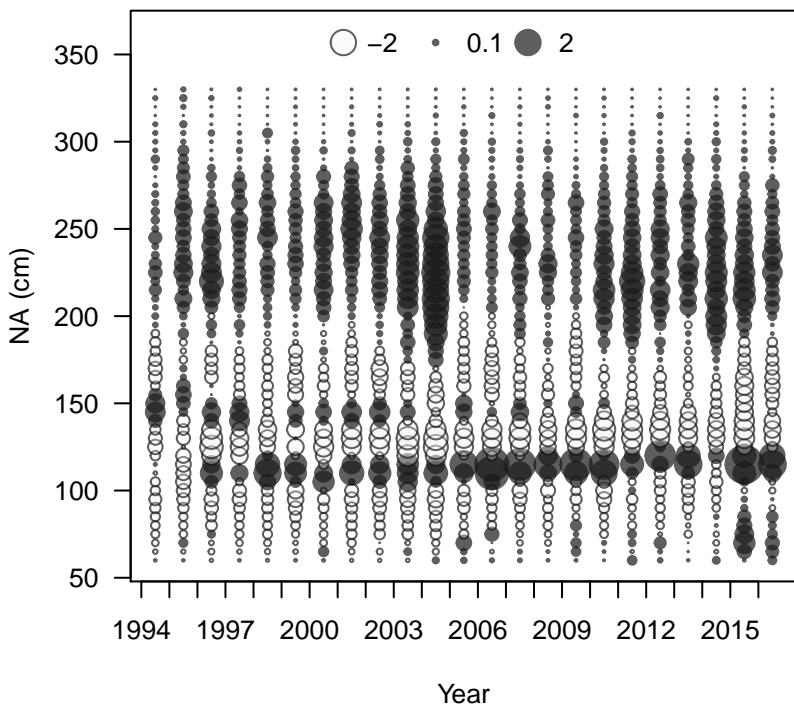
### size comps, whole catch, F6\_TW\_LRG\_N



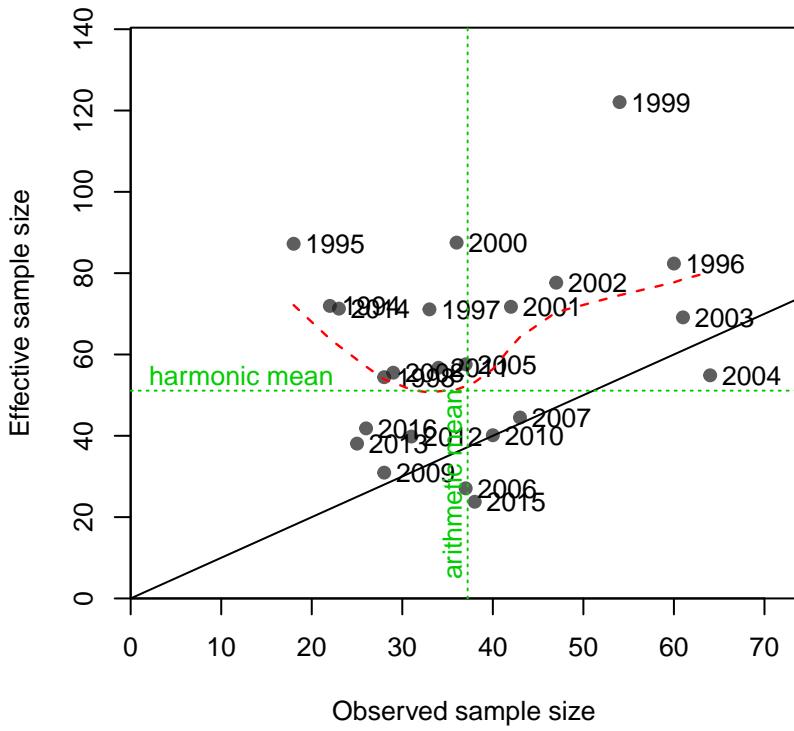
### size comps, whole catch, F6\_TW\_LRG\_N



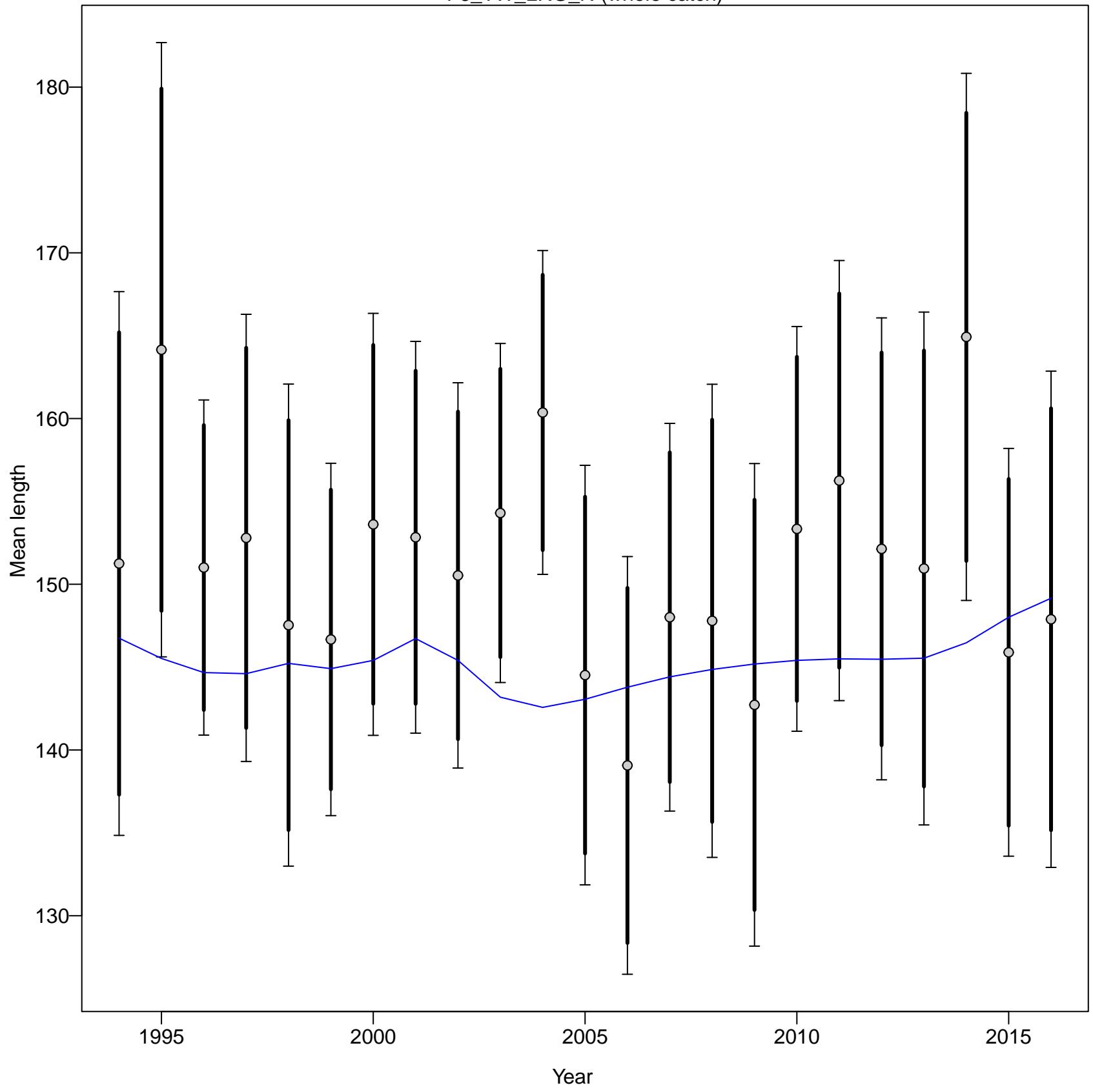
Pearson residuals, whole catch, F6\_TW\_LRG\_N (max=4.39)



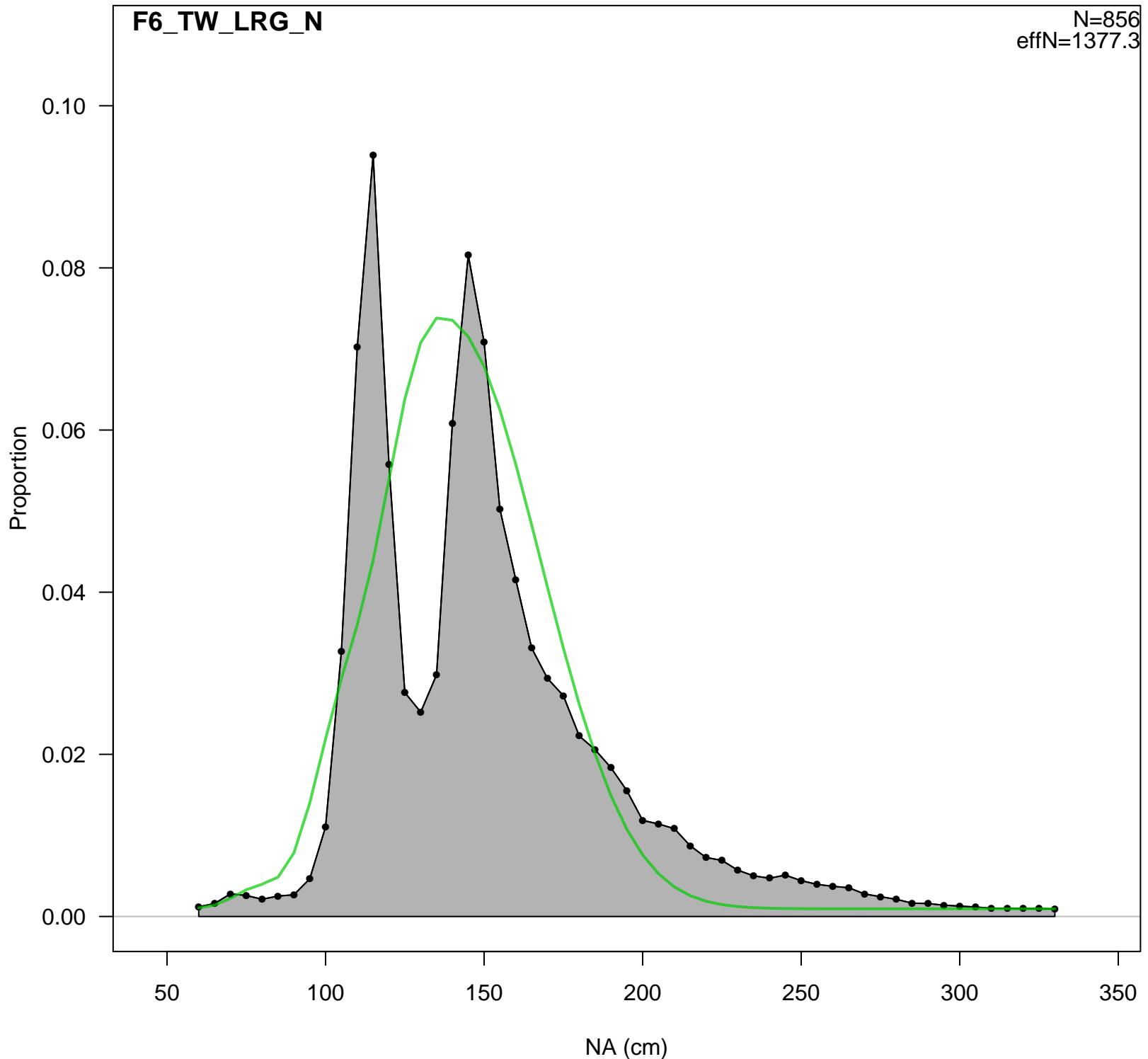
N-EffN comparison, size comps, whole catch, F6\_TW\_LRG\_N



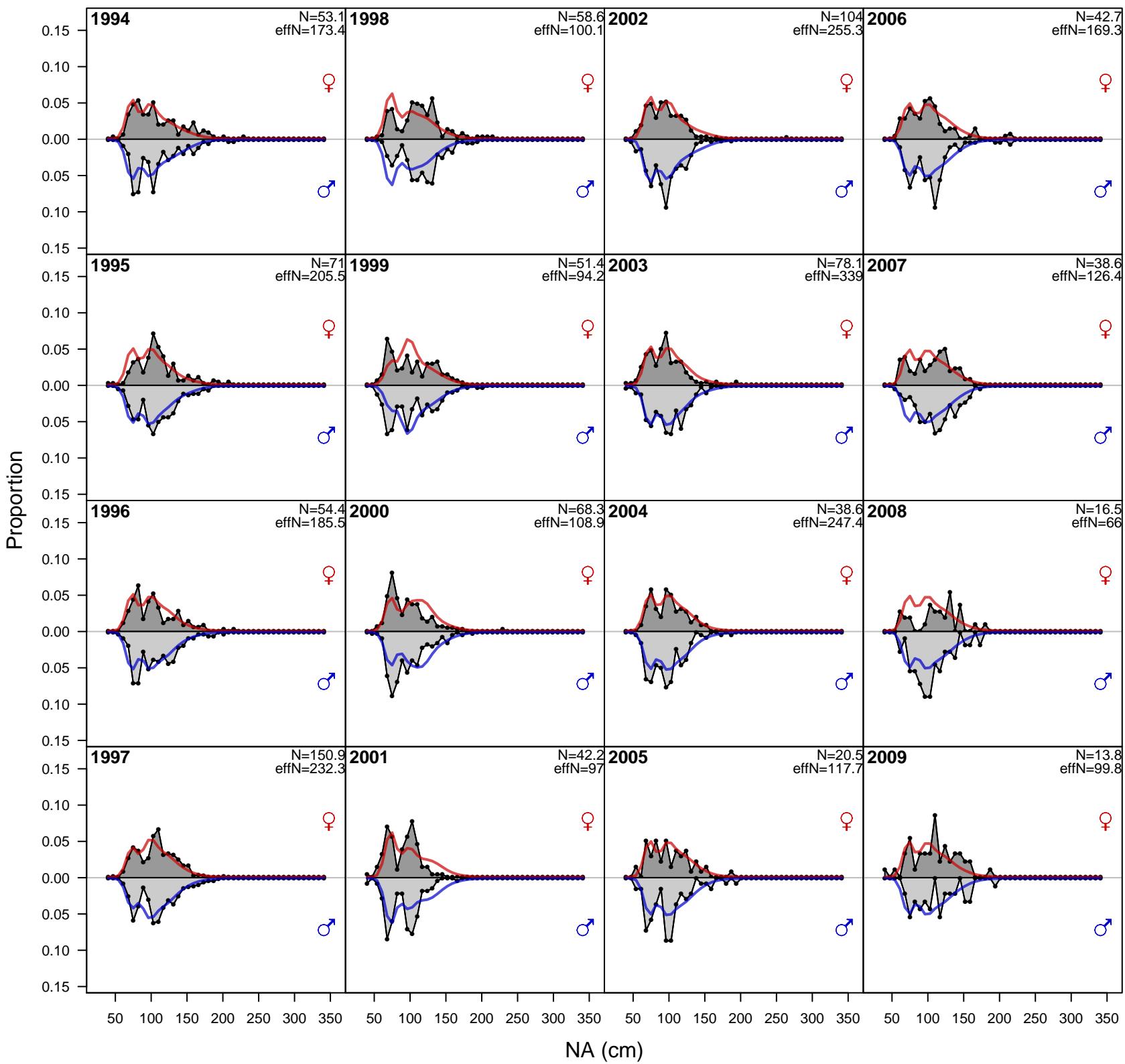
F6\_TW\_LRG\_N (whole catch)



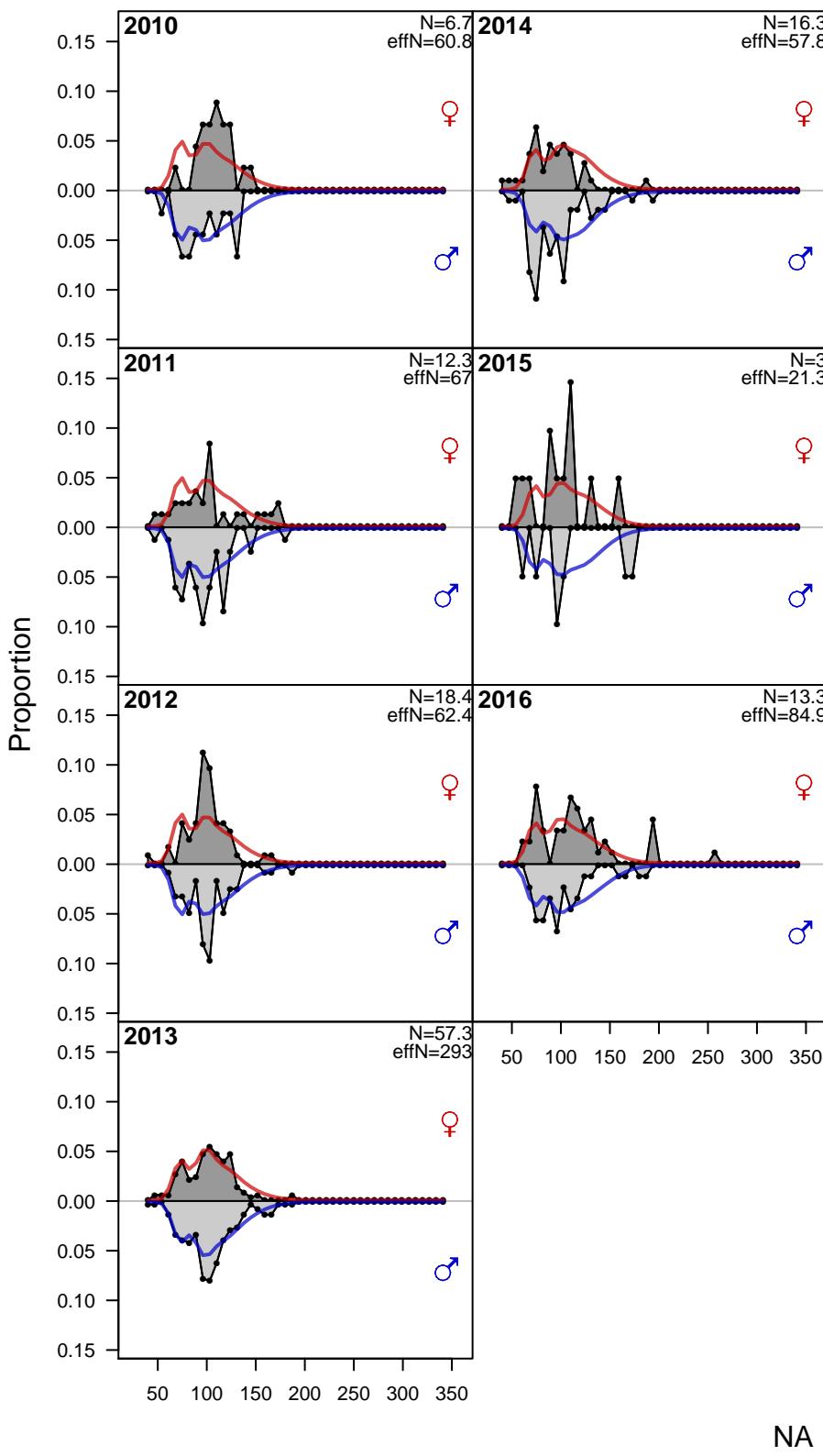
size comps, whole catch, aggregated across time by fleet



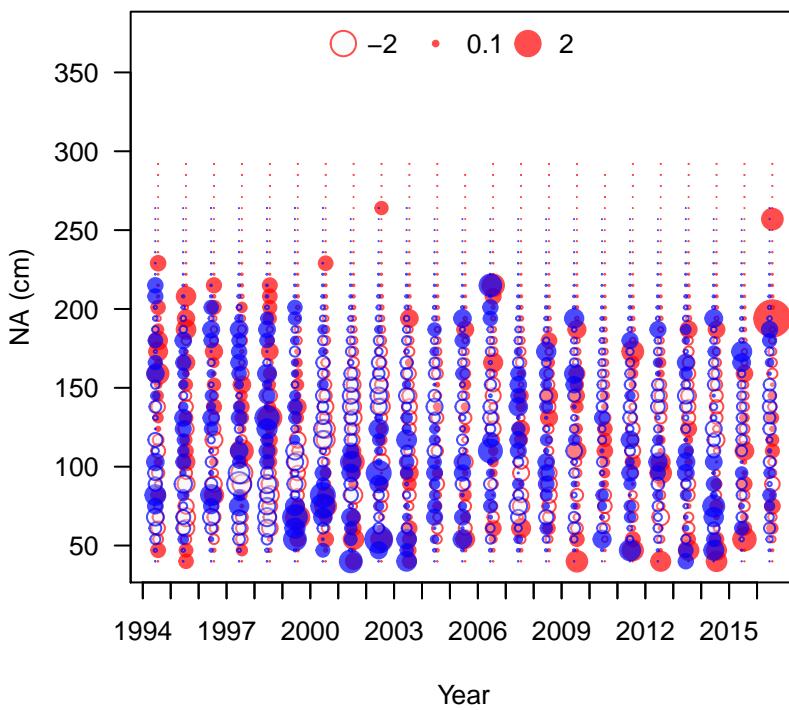
### size comps, whole catch, F4\_US\_DGN



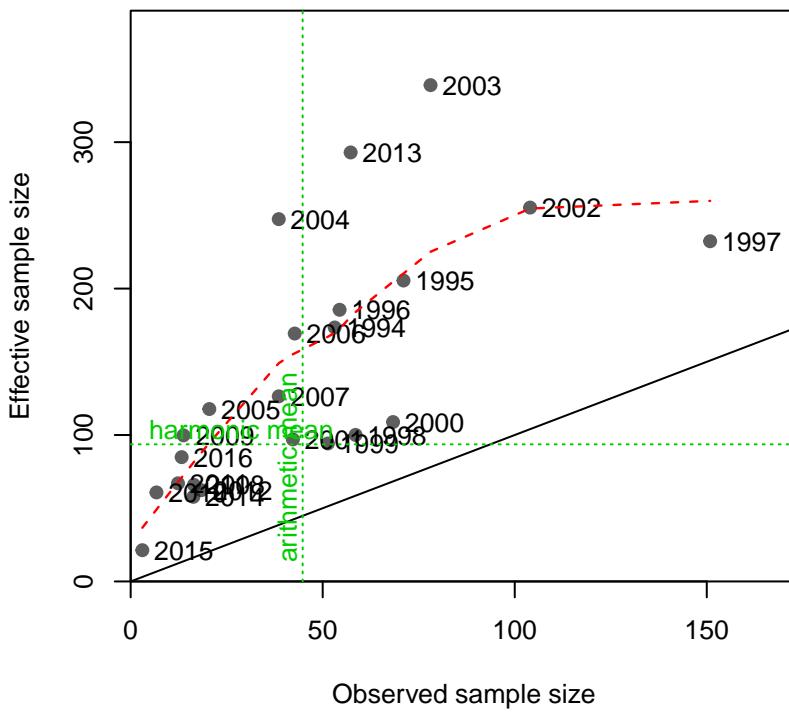
### size comps, whole catch, F4\_US\_DGN



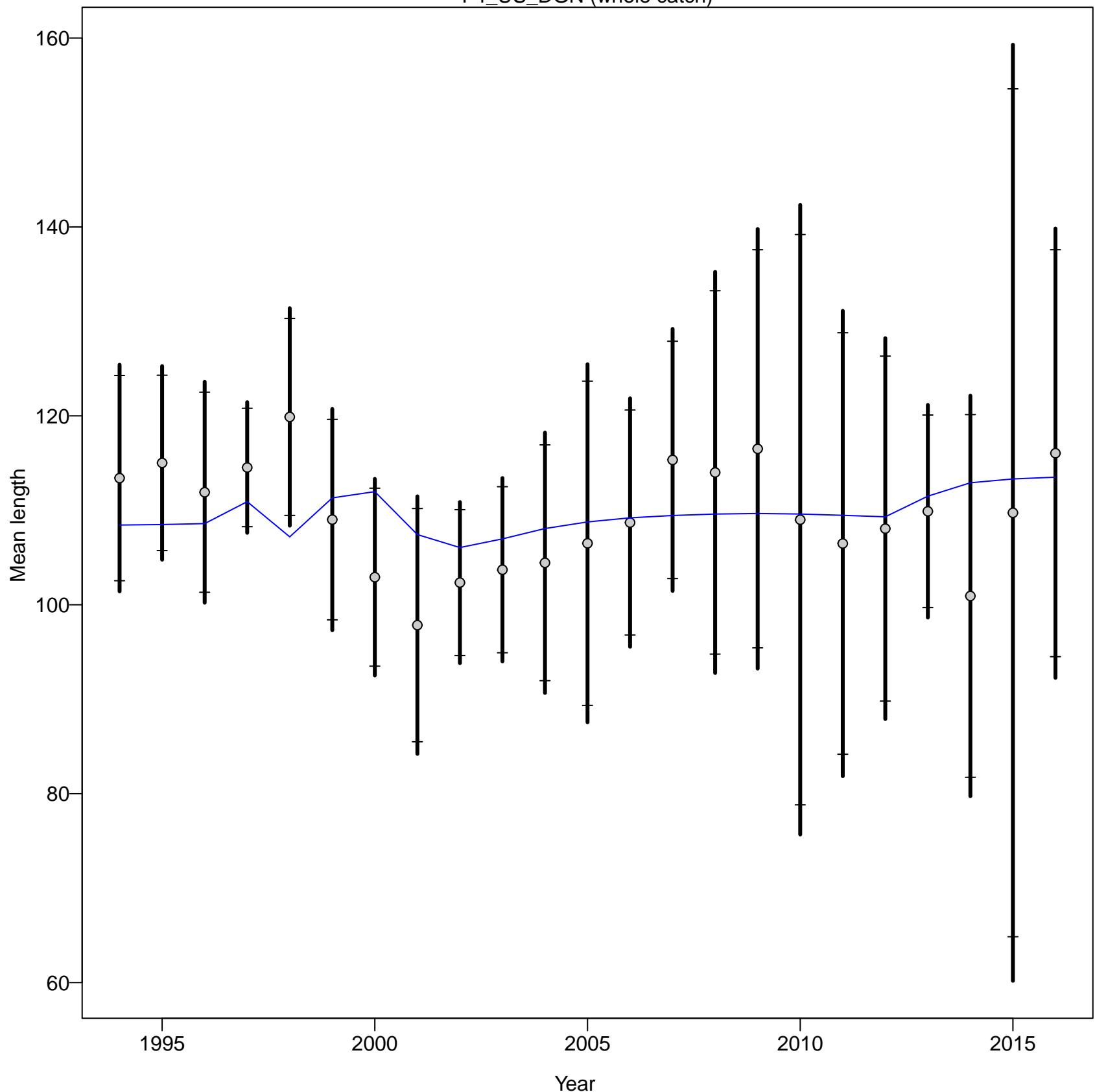
### Pearson residuals, whole catch, F4\_US\_DGN (max=4.1)



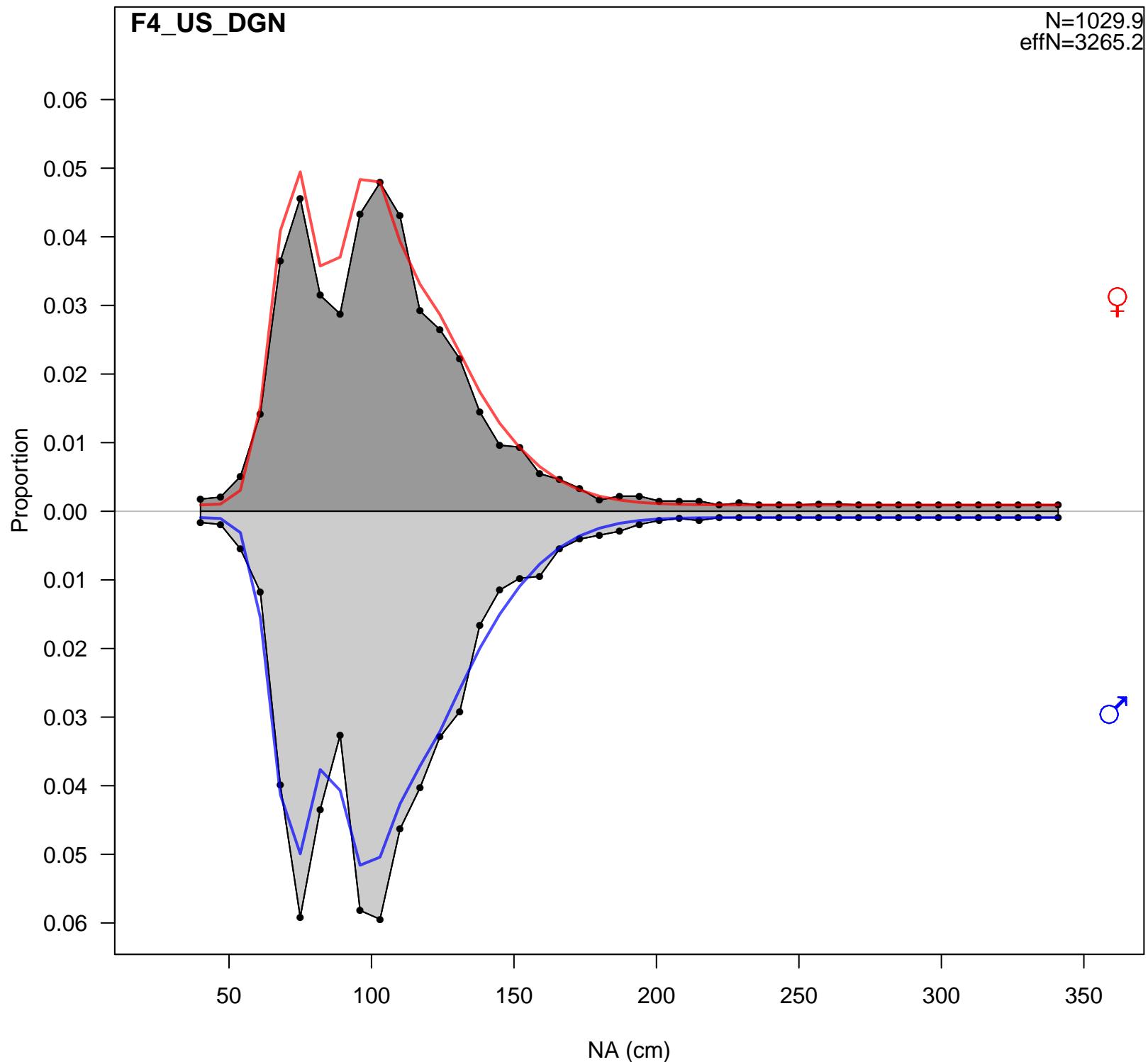
### N-EffN comparison, size comps, whole catch, F4\_US\_DGN



# F4\_US\_DGN (whole catch)



size comps, whole catch, aggregated across time by fleet



### Data by type and year

