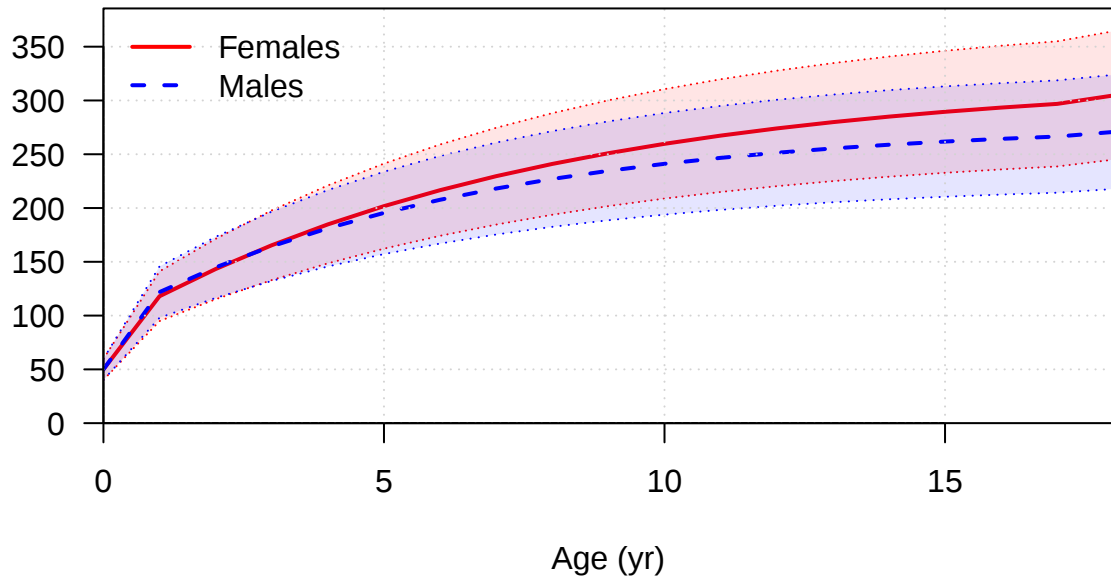
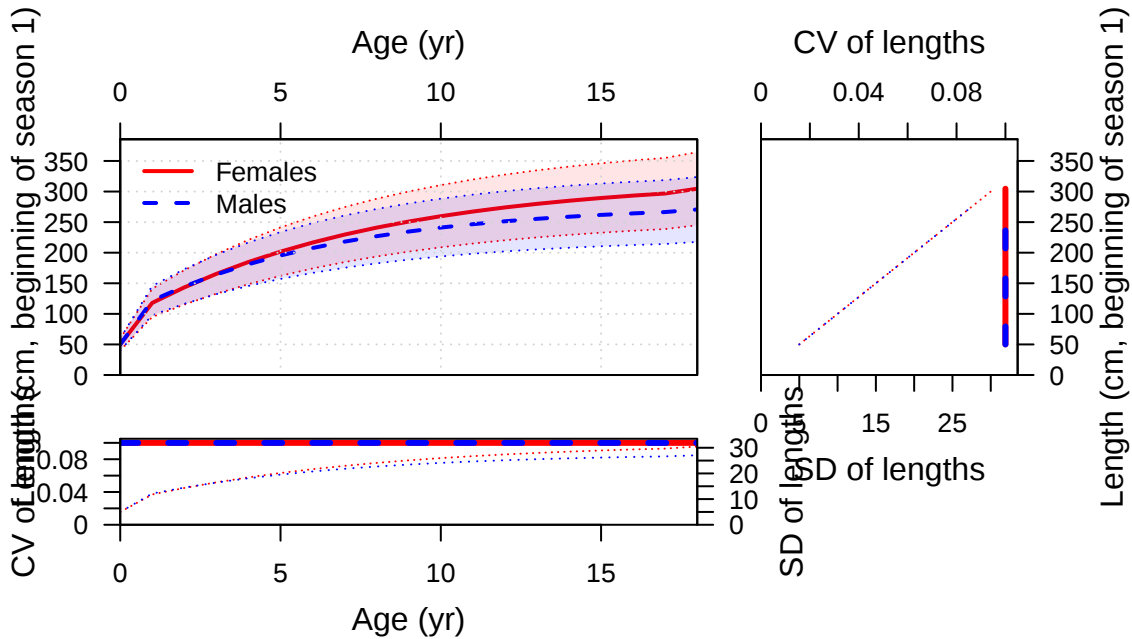
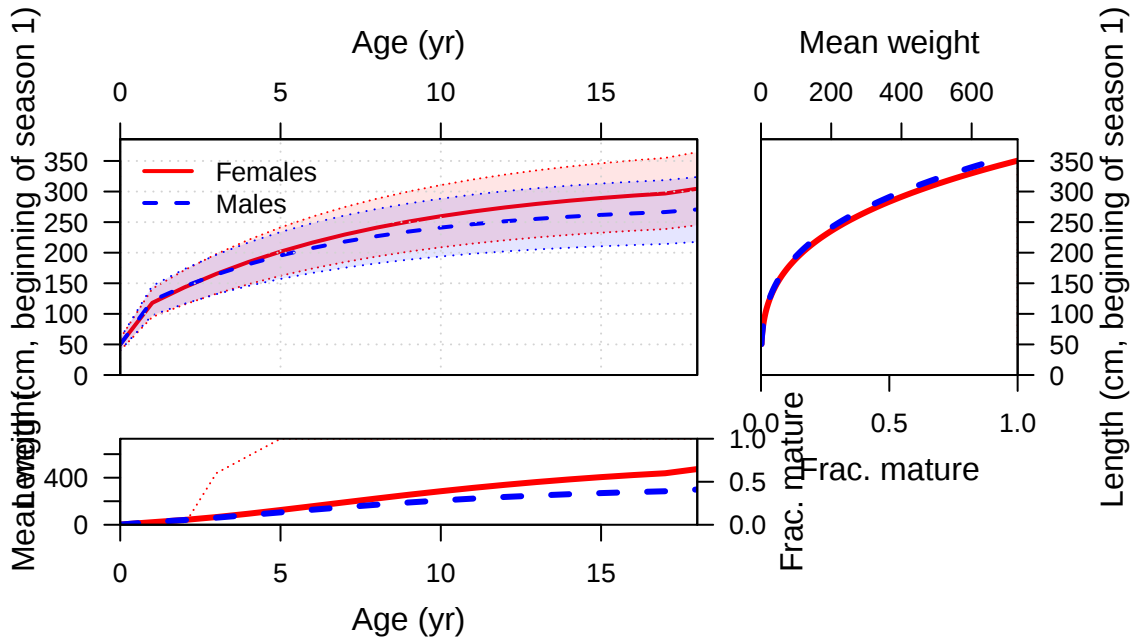


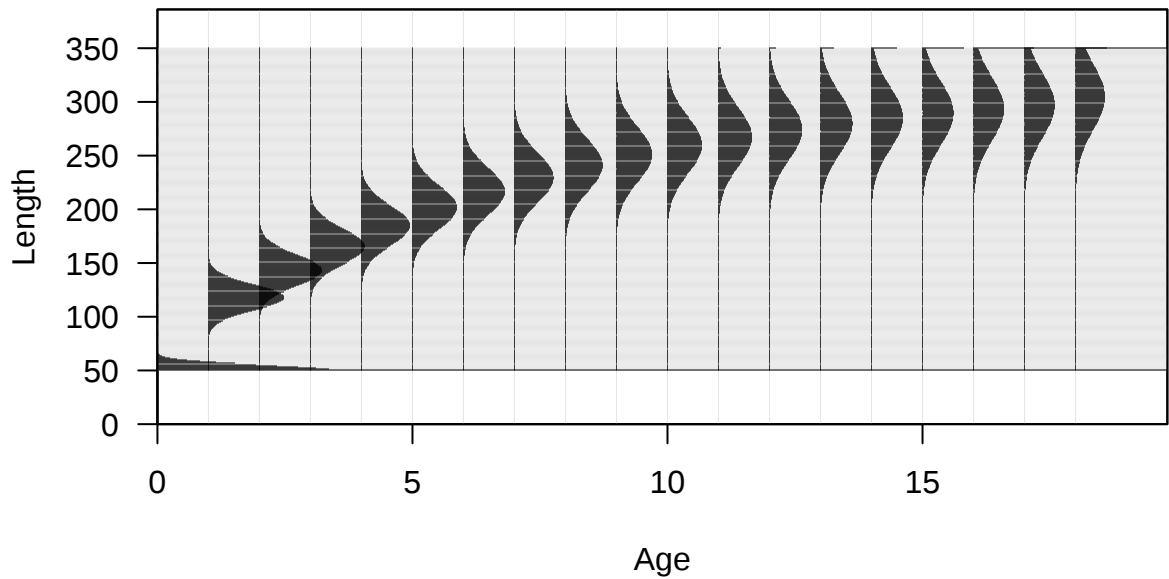
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StartTime: Mon Jul 11 10:41:11 2022
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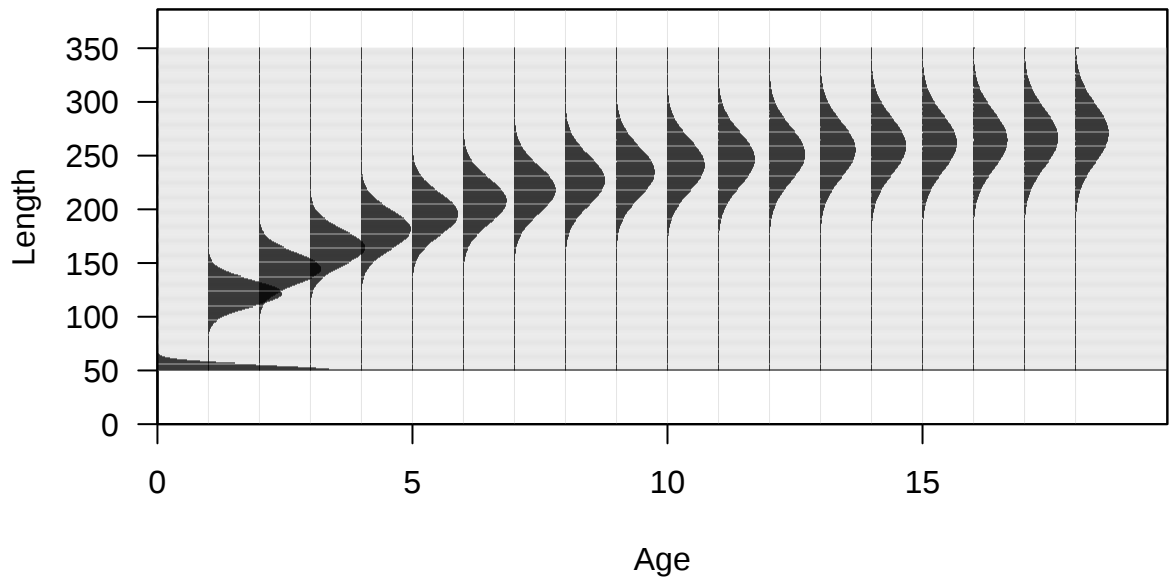
Length (cm, beginning of season 1)

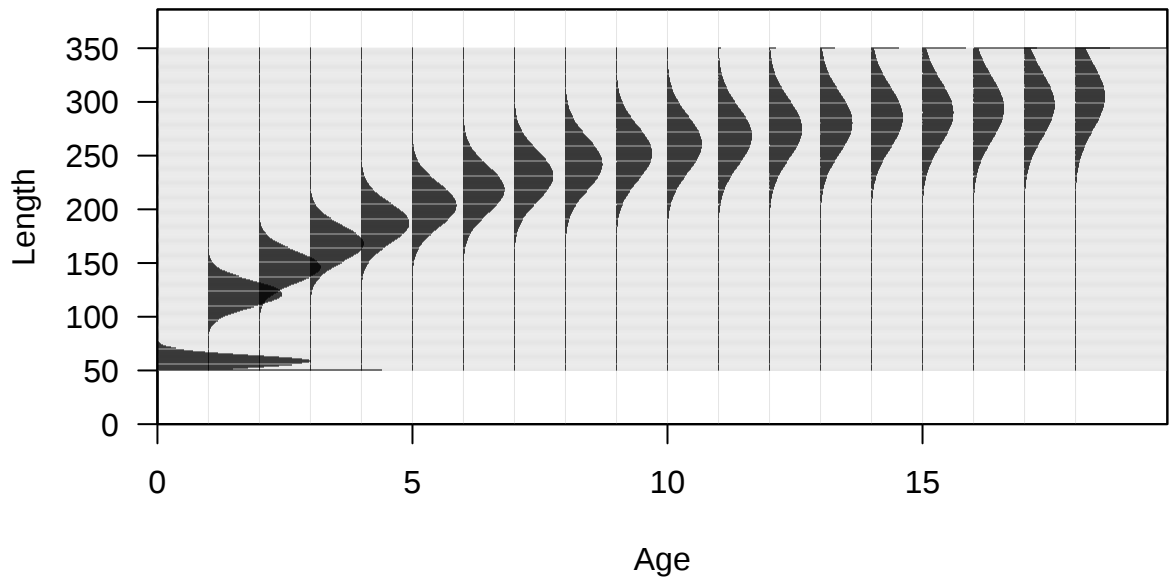


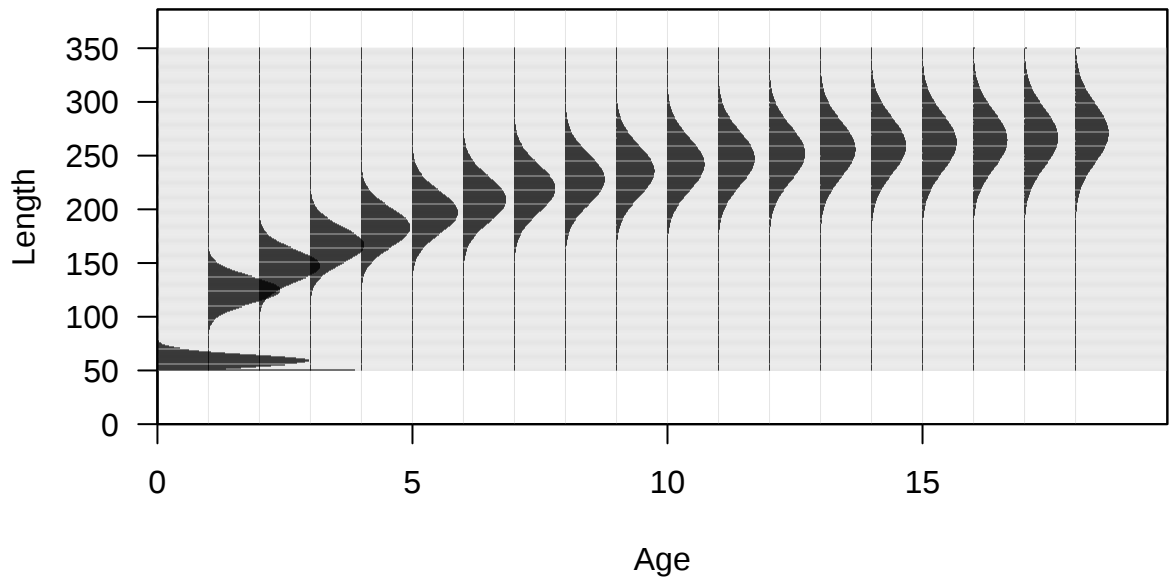


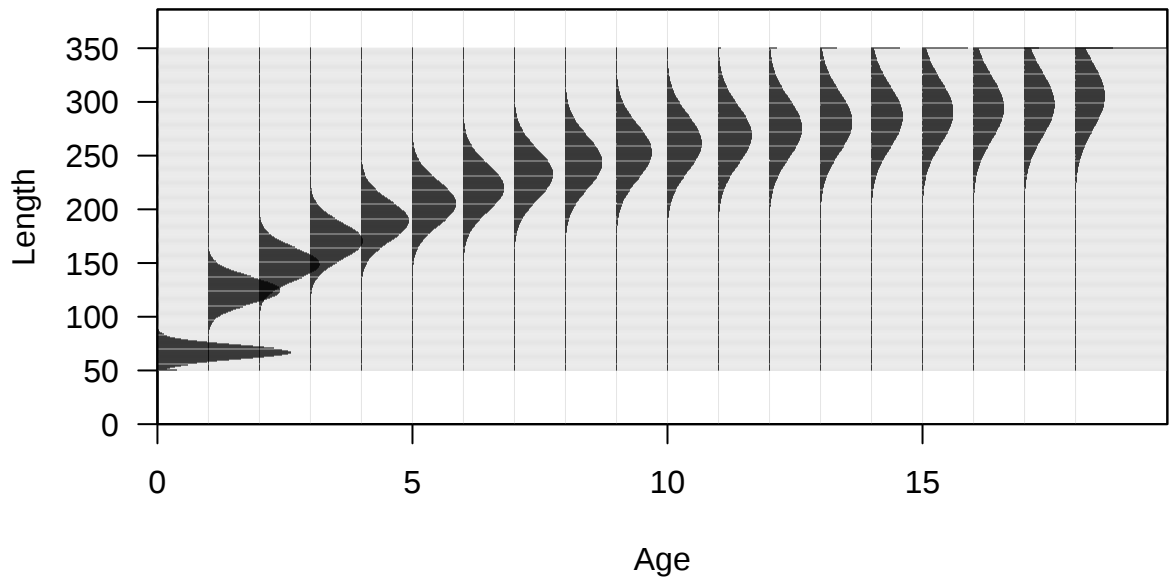


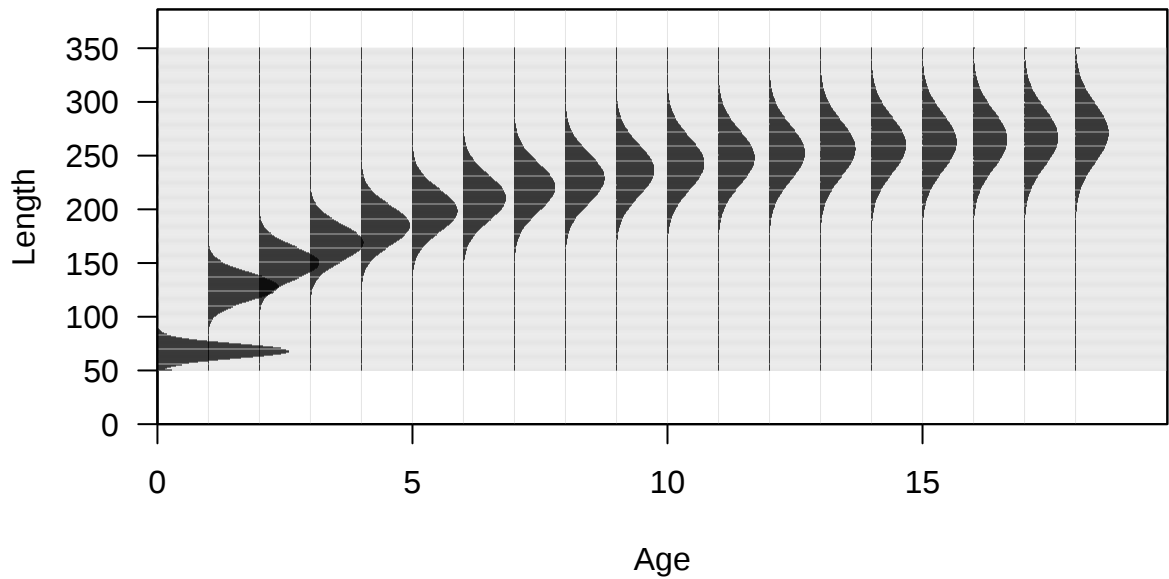


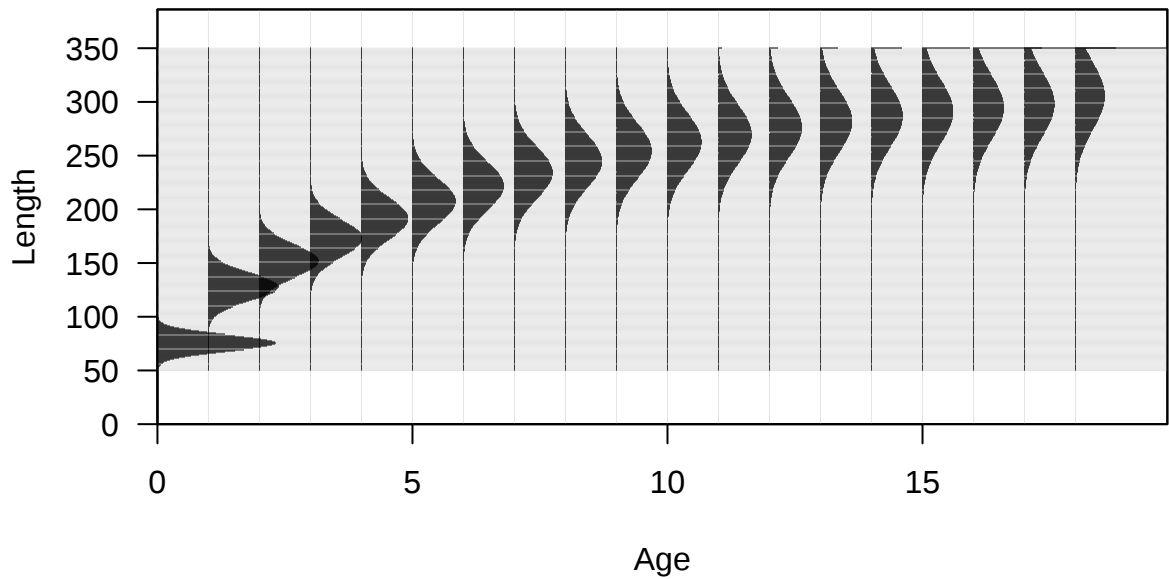


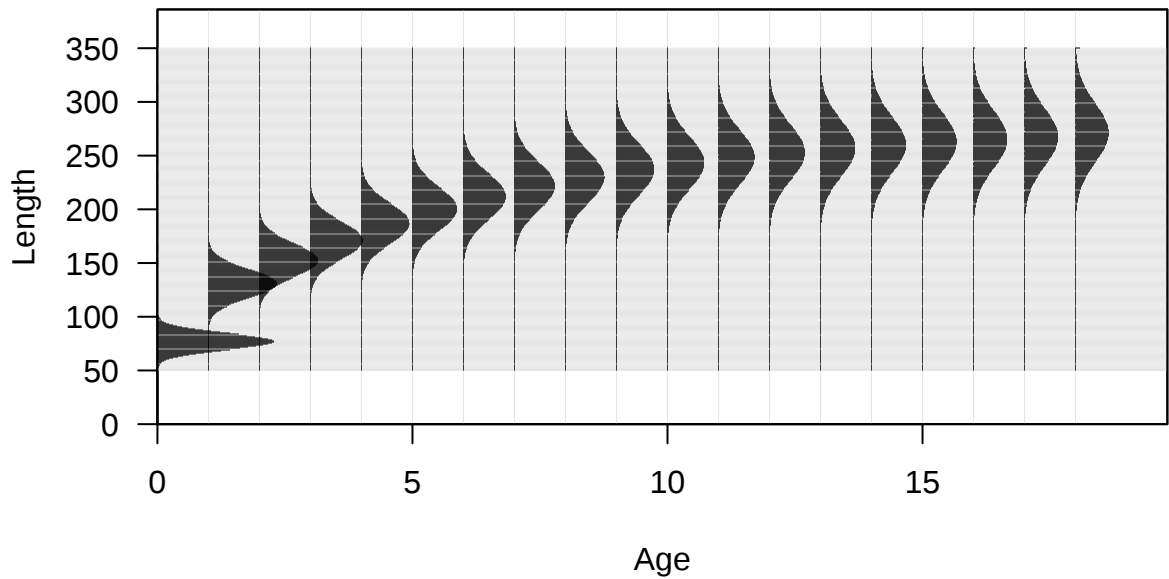


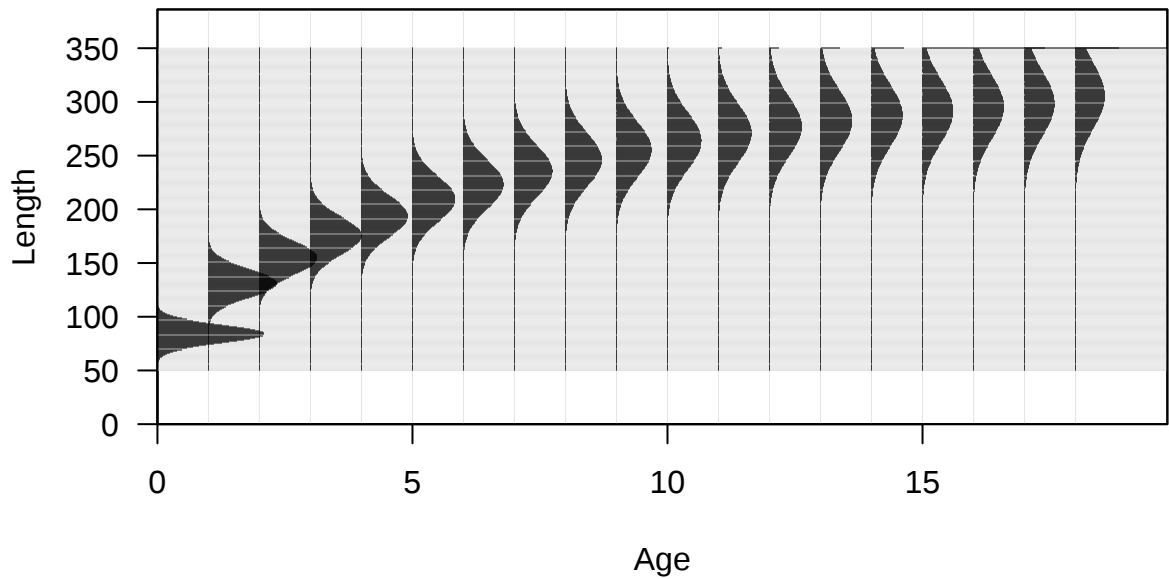


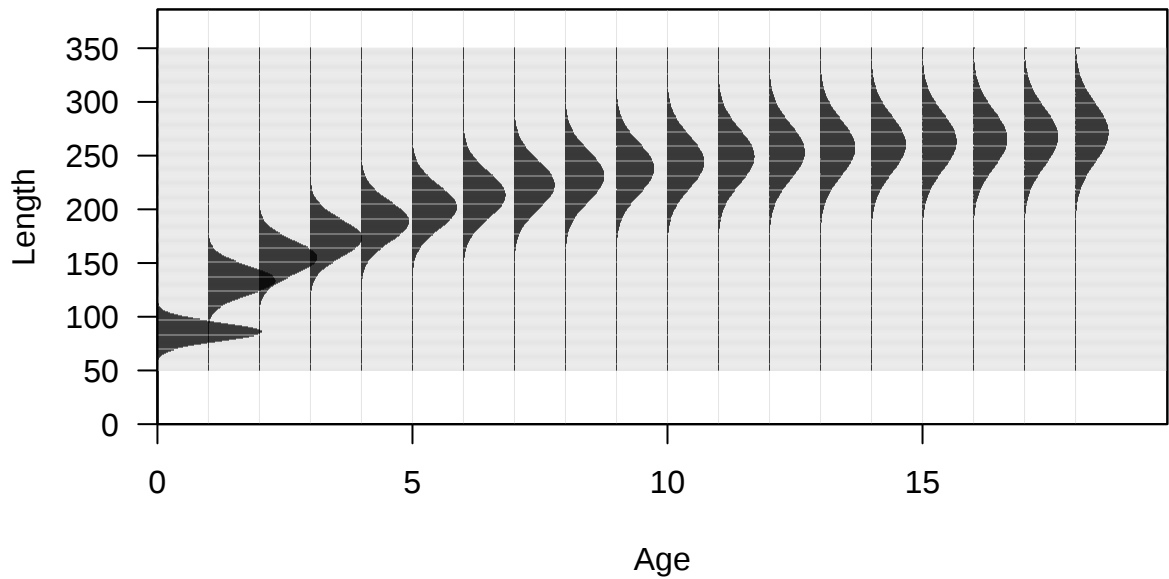


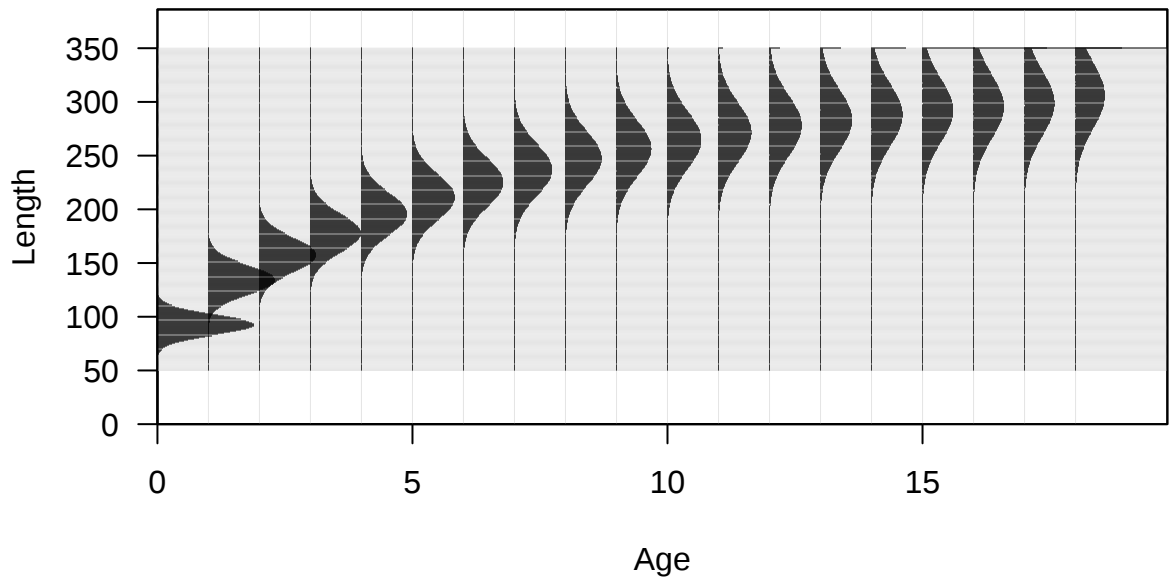


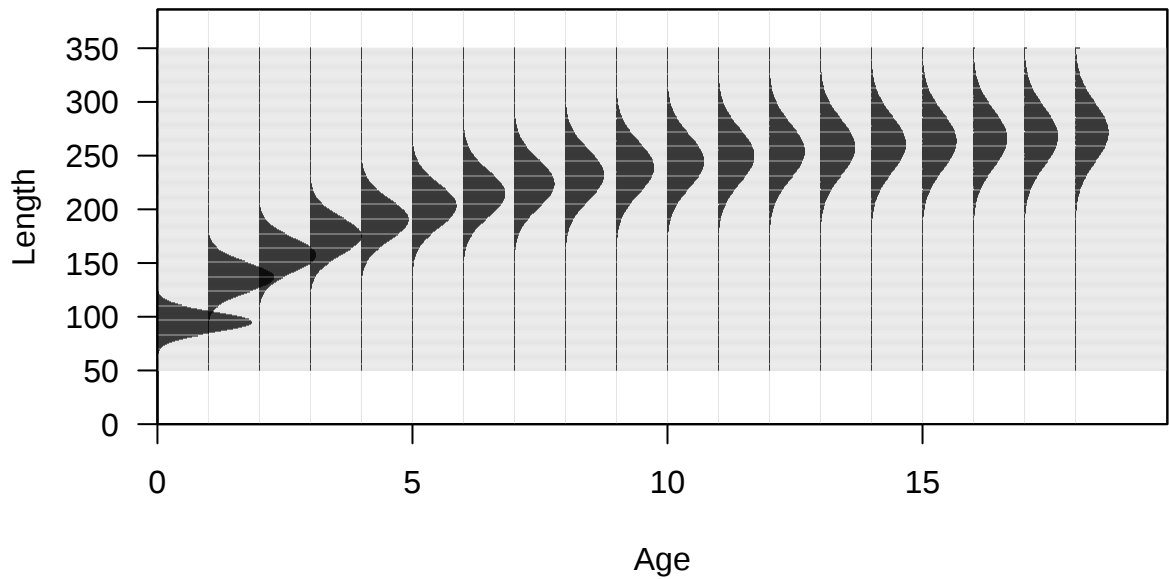


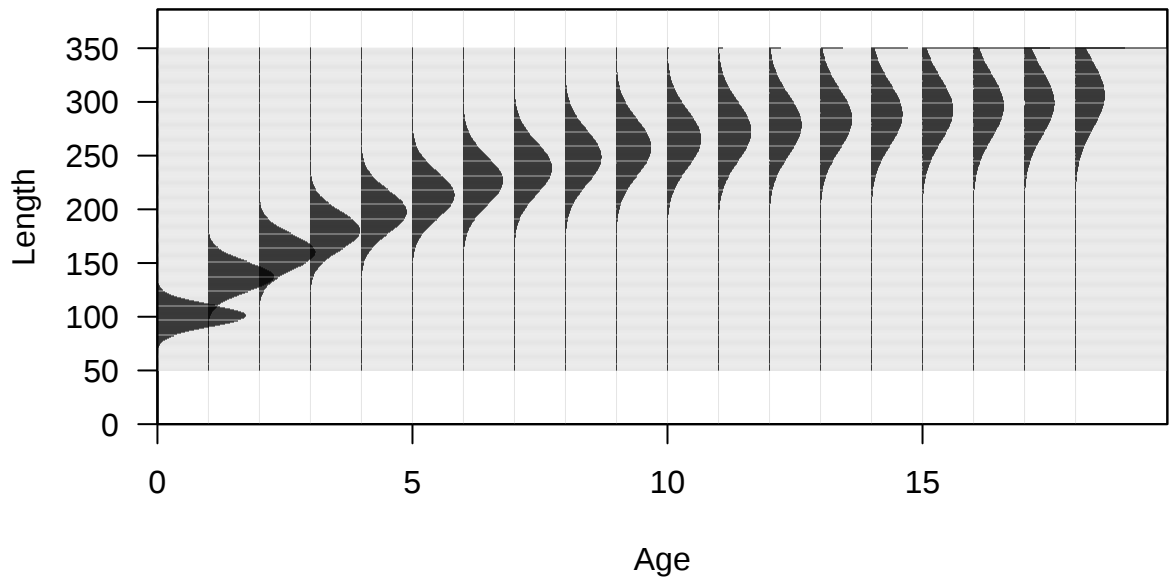


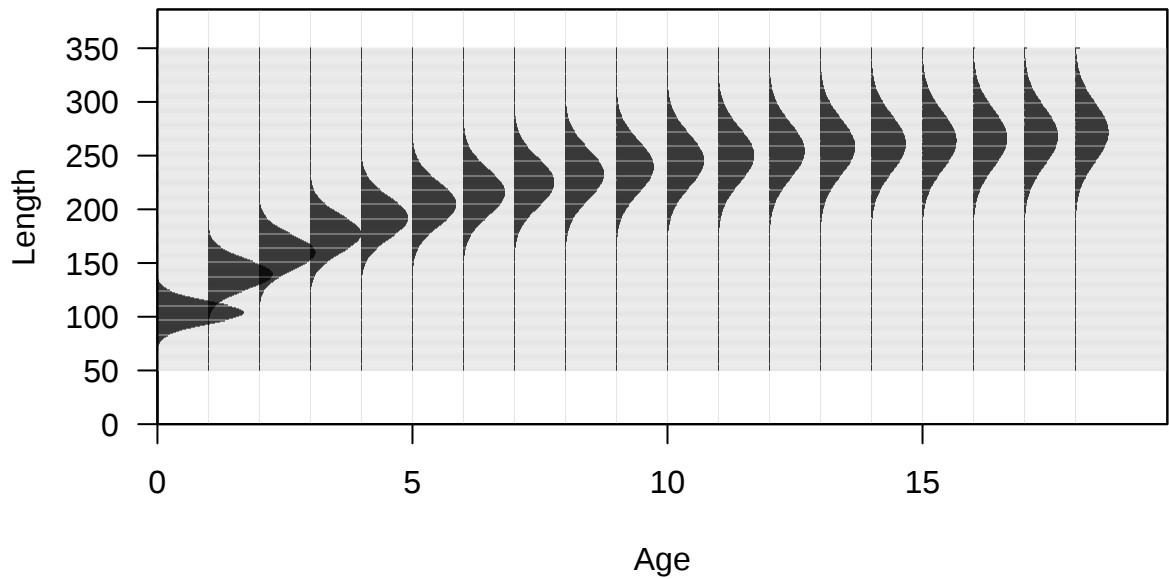


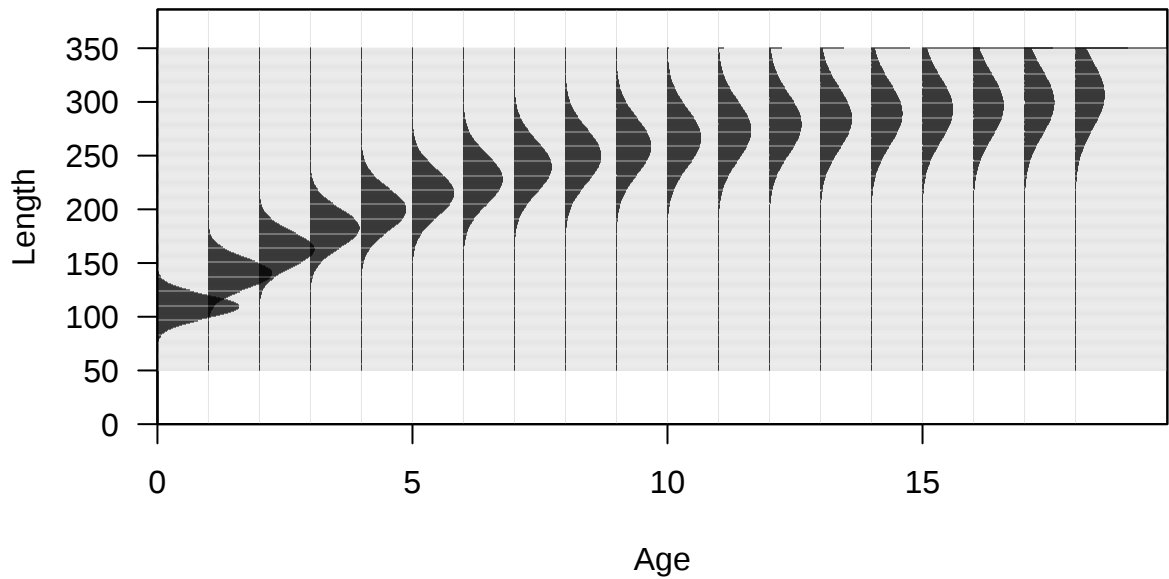


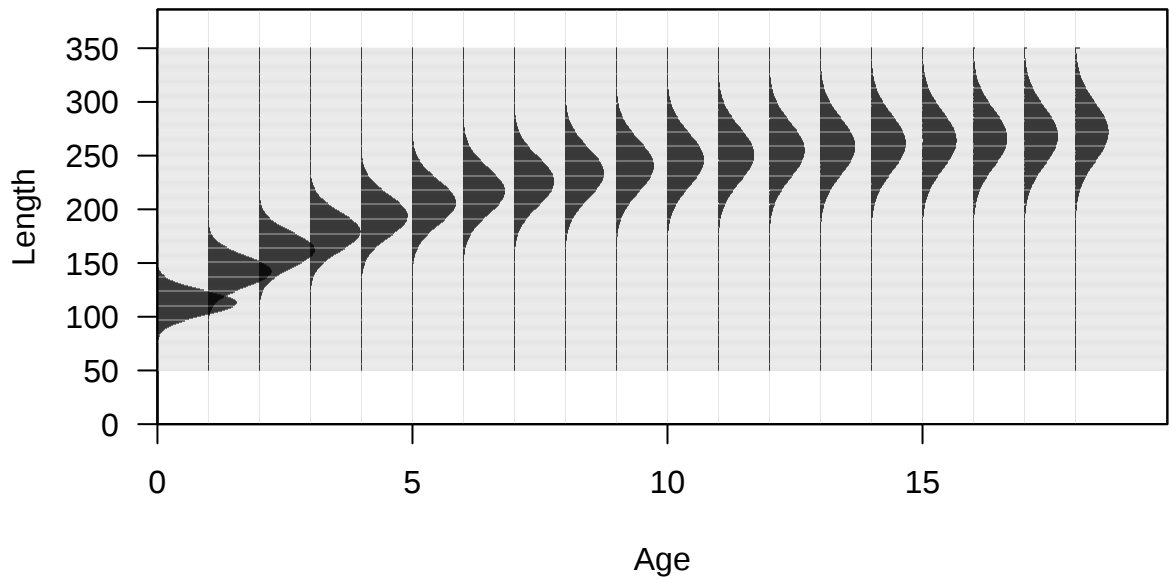


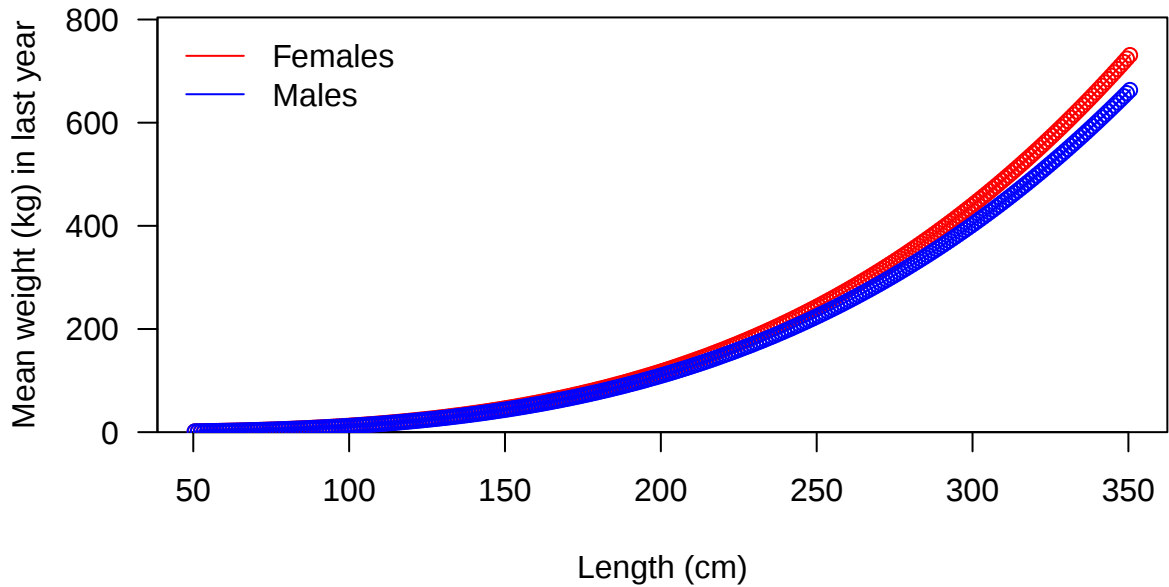


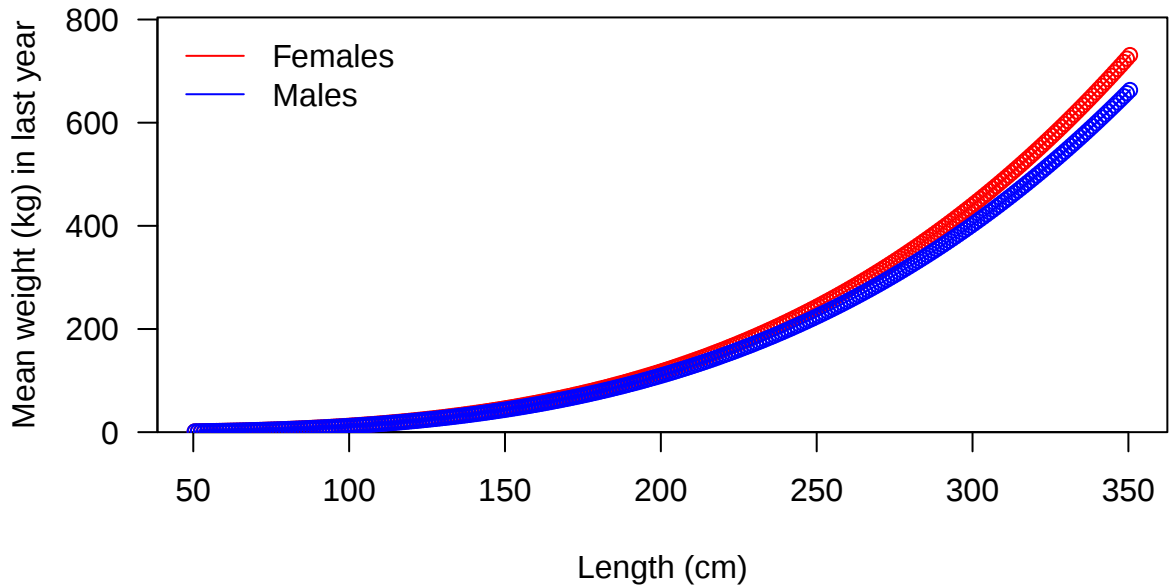


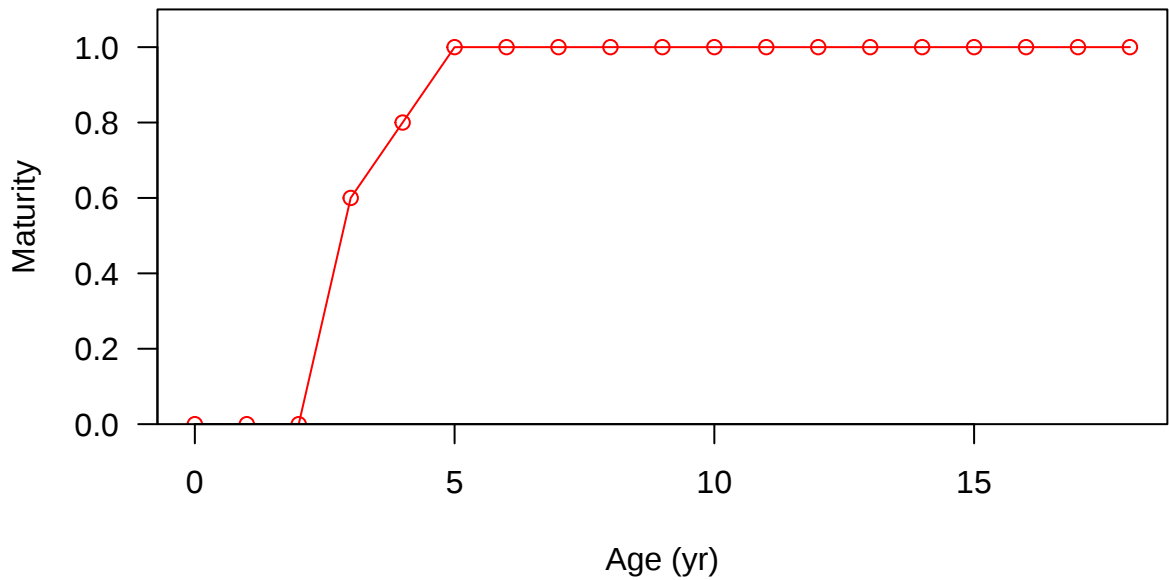


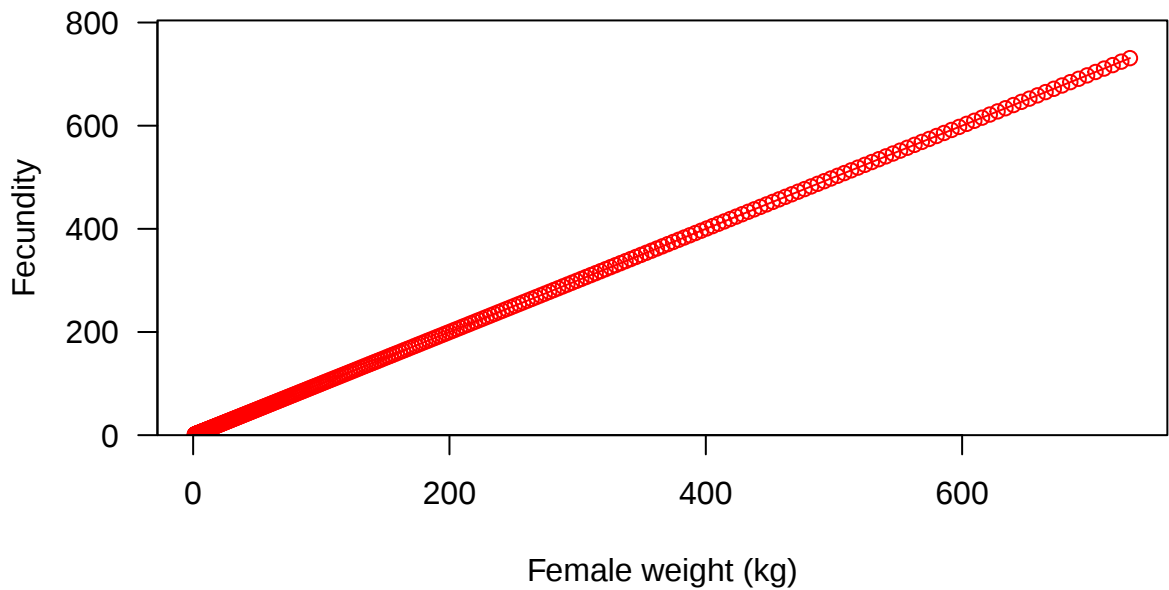


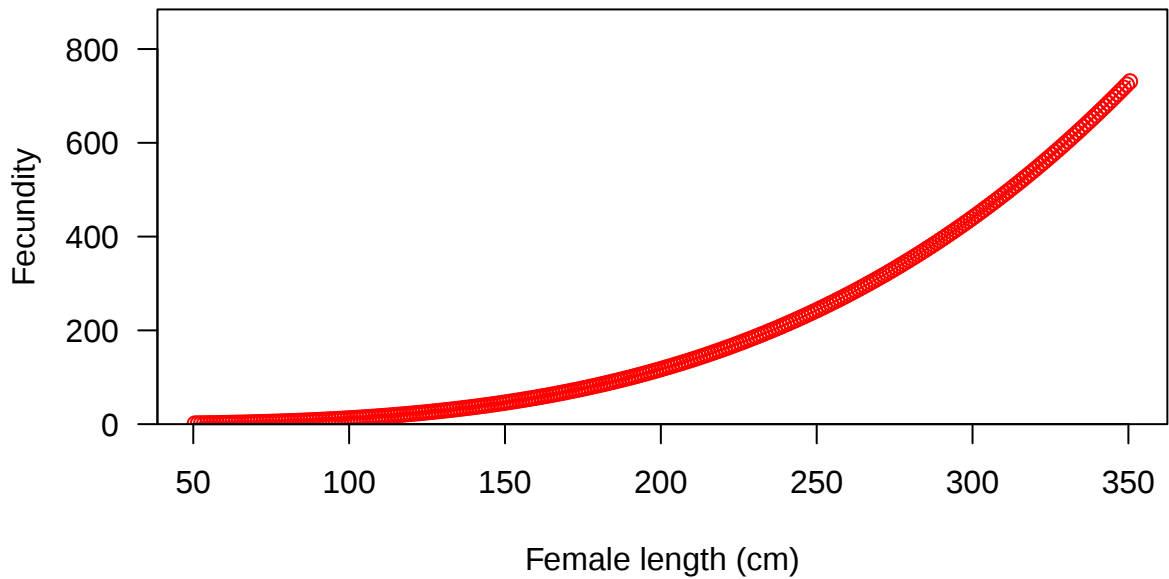


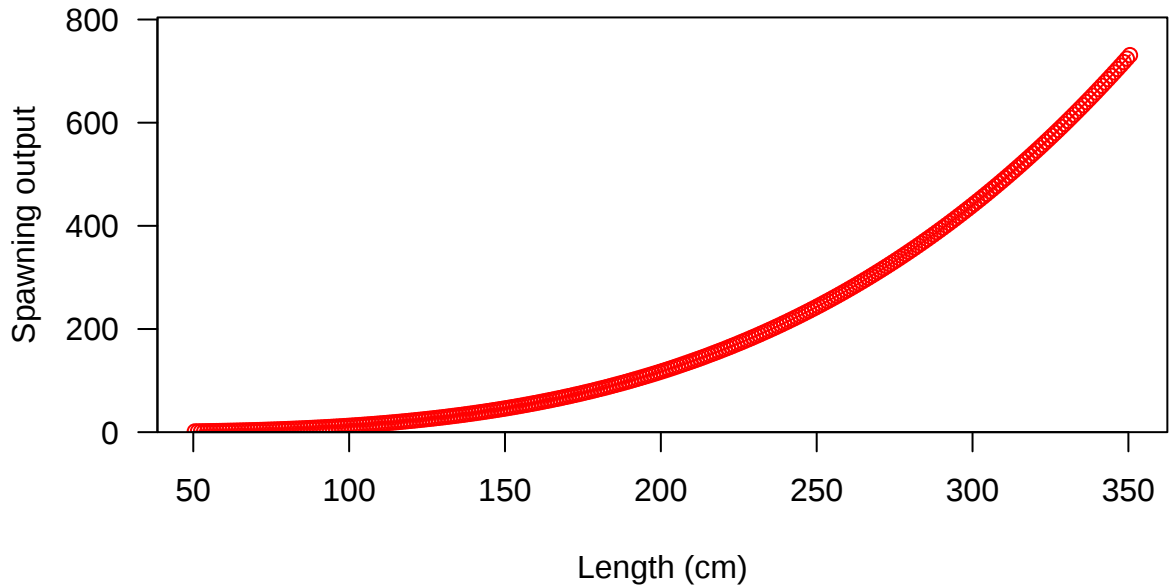


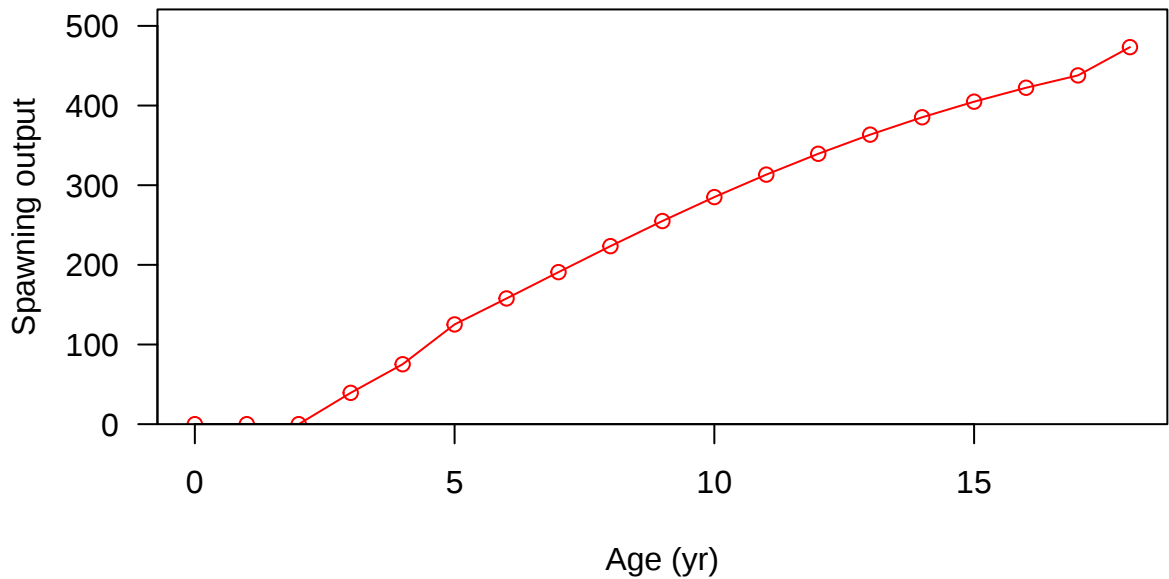




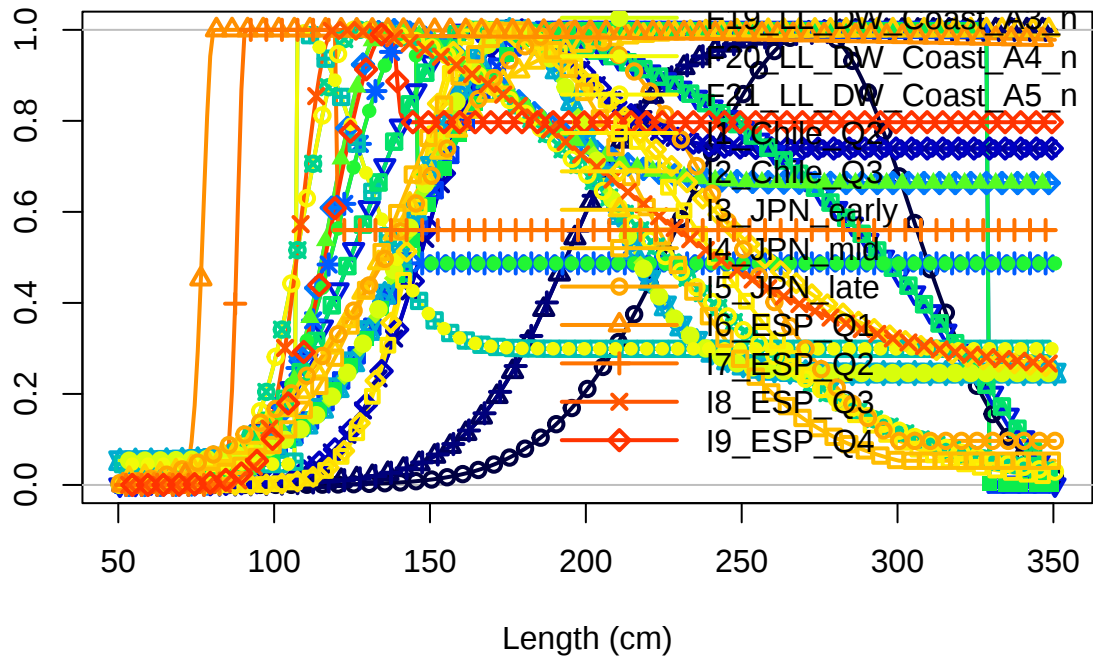




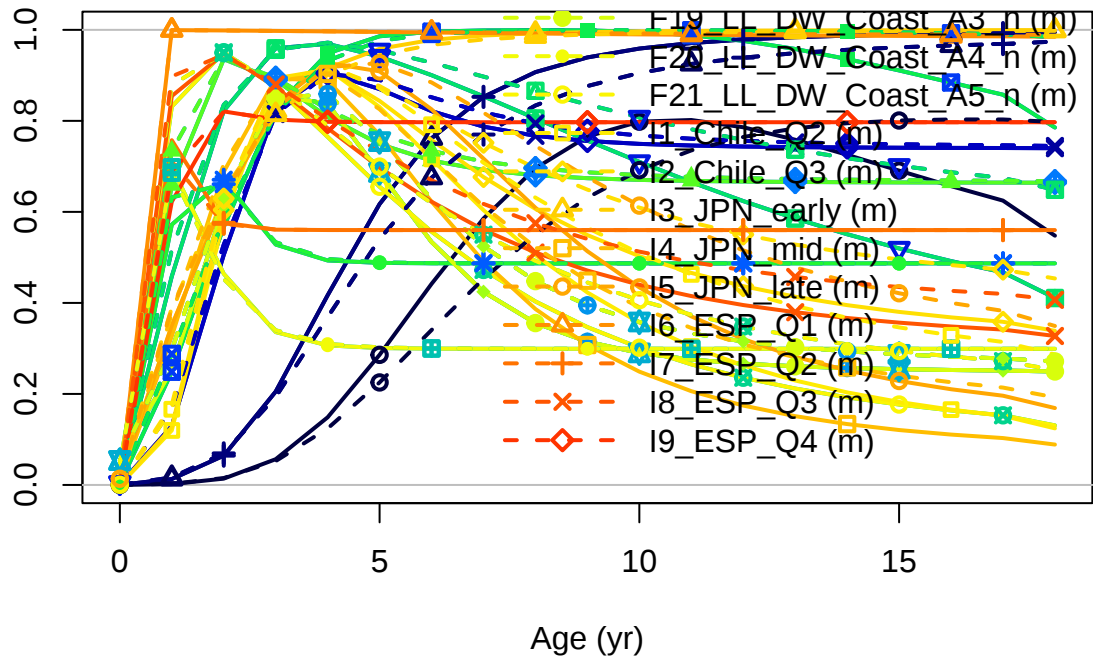




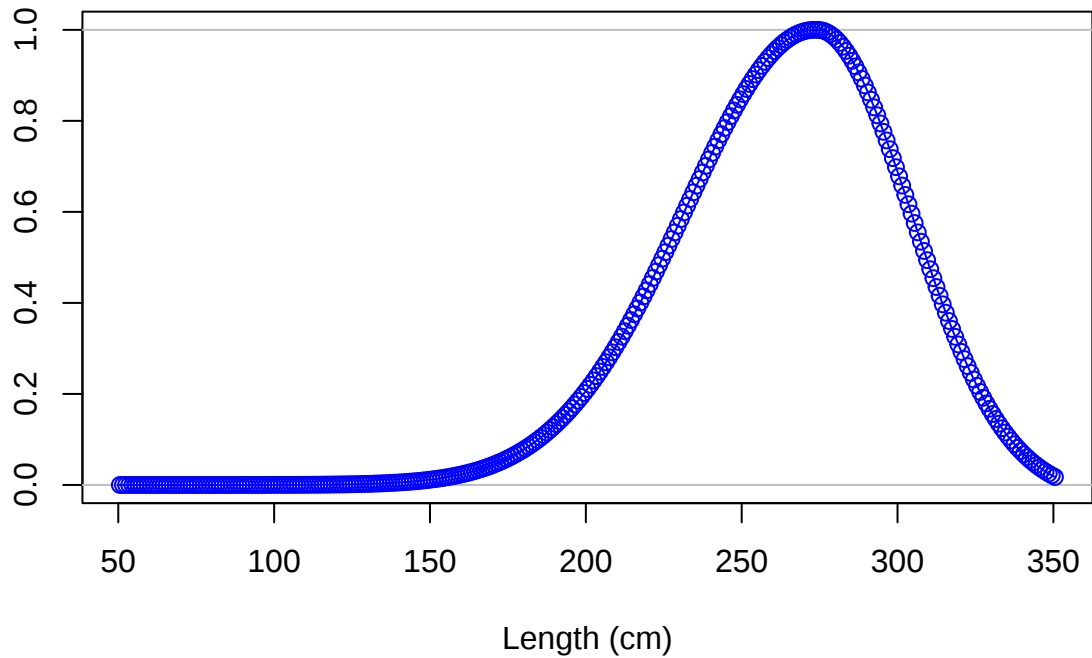
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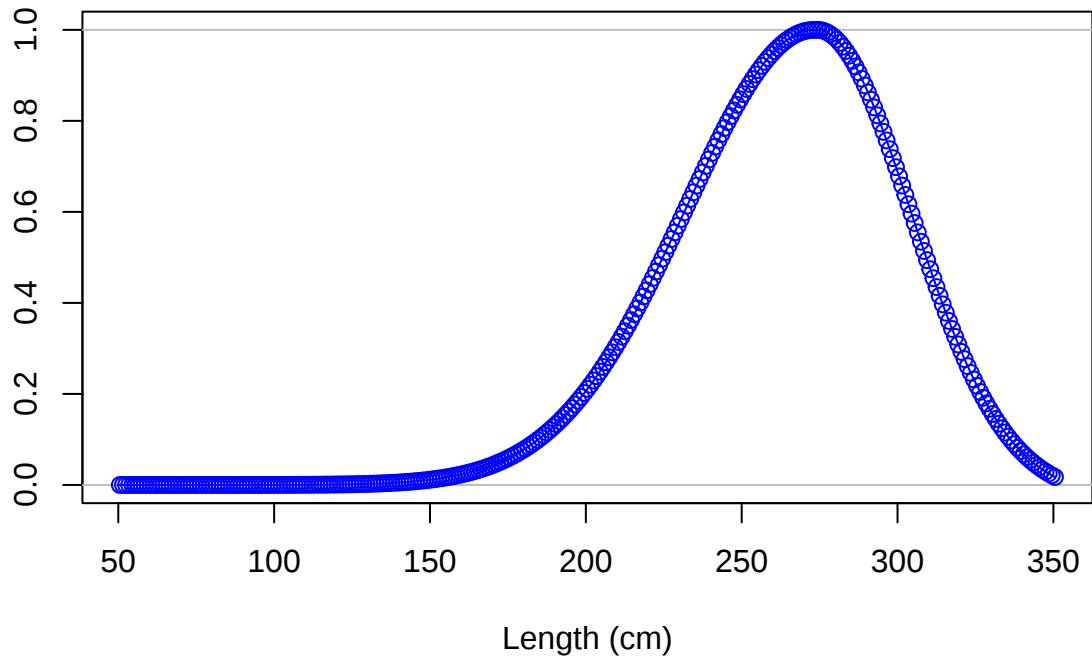
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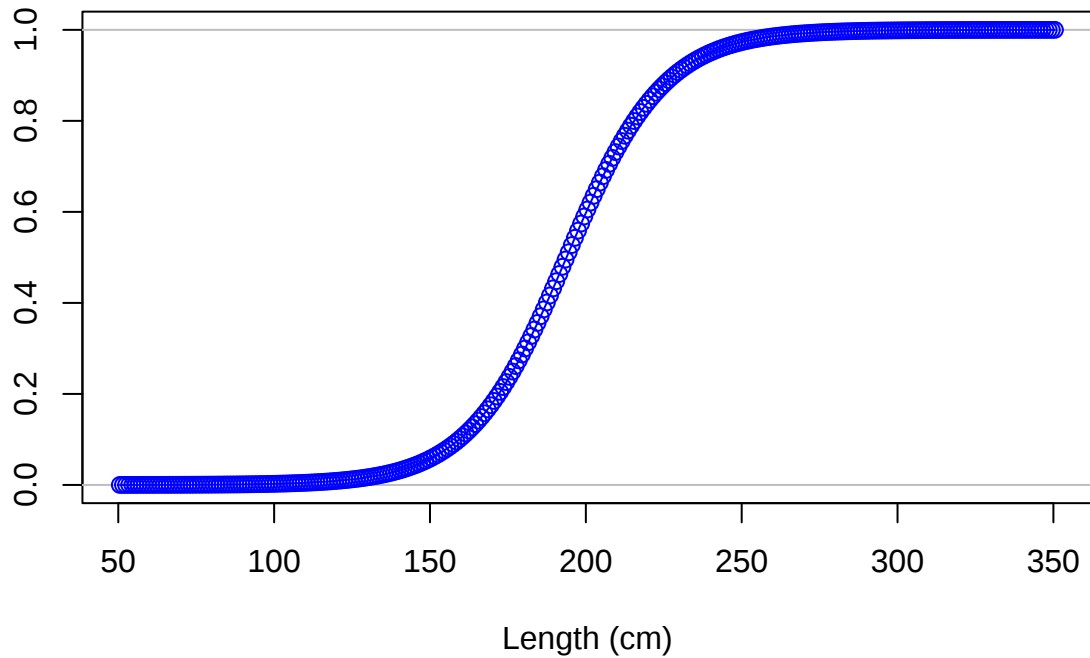
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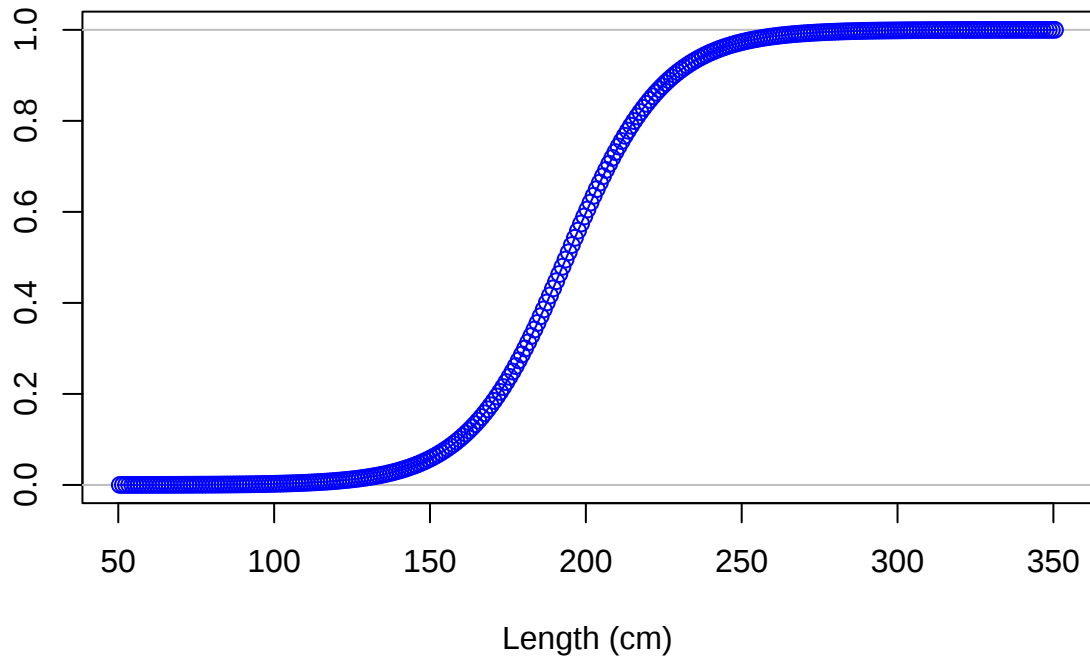
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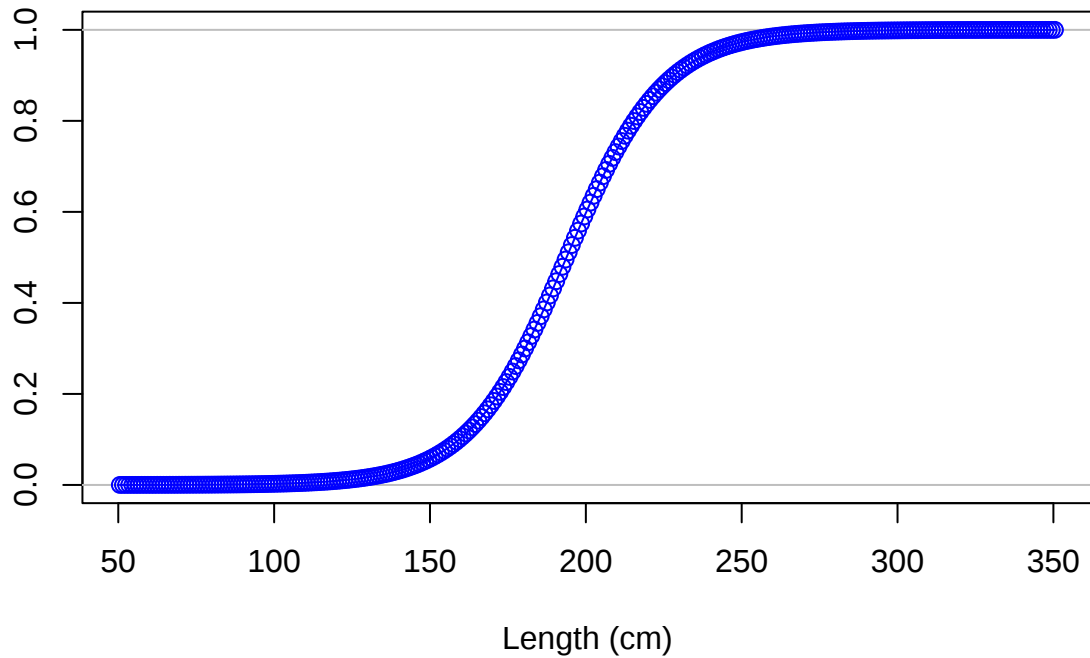
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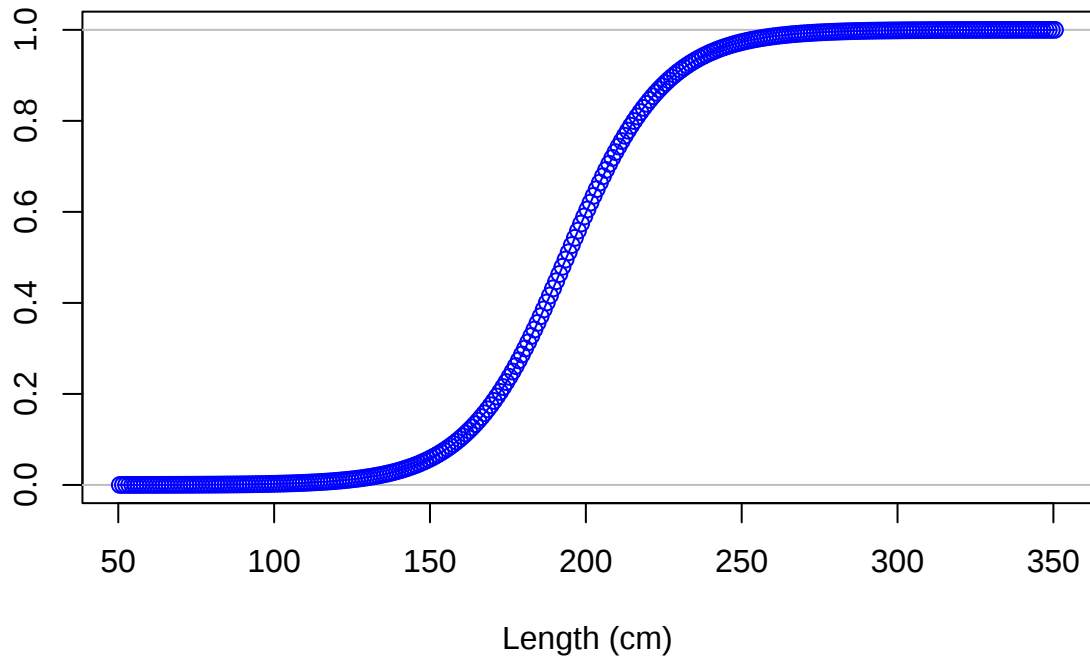
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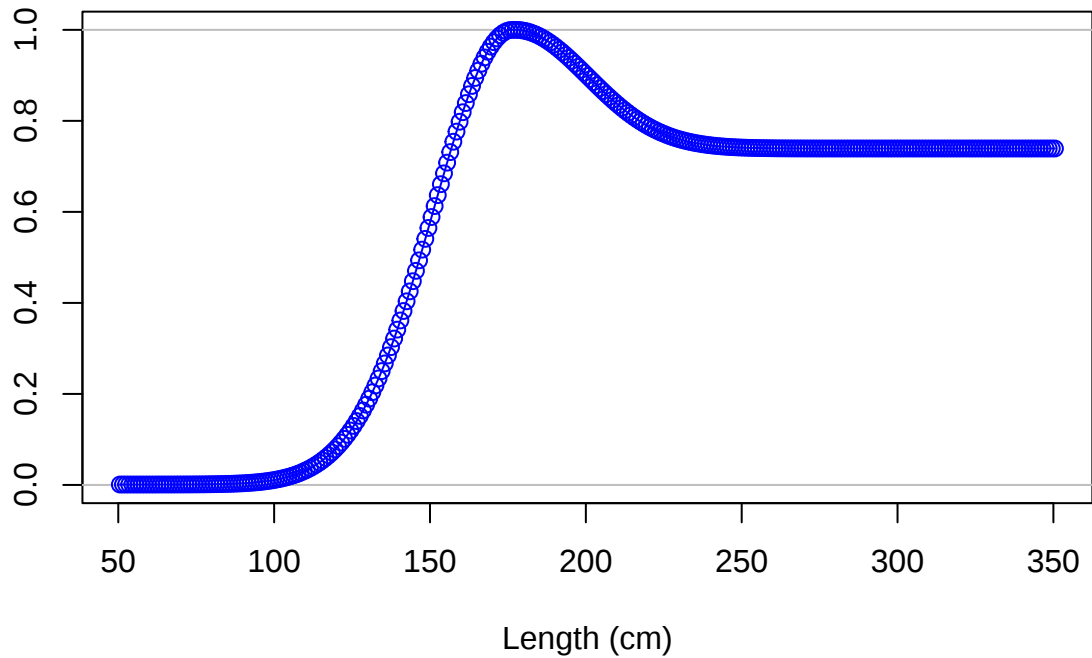
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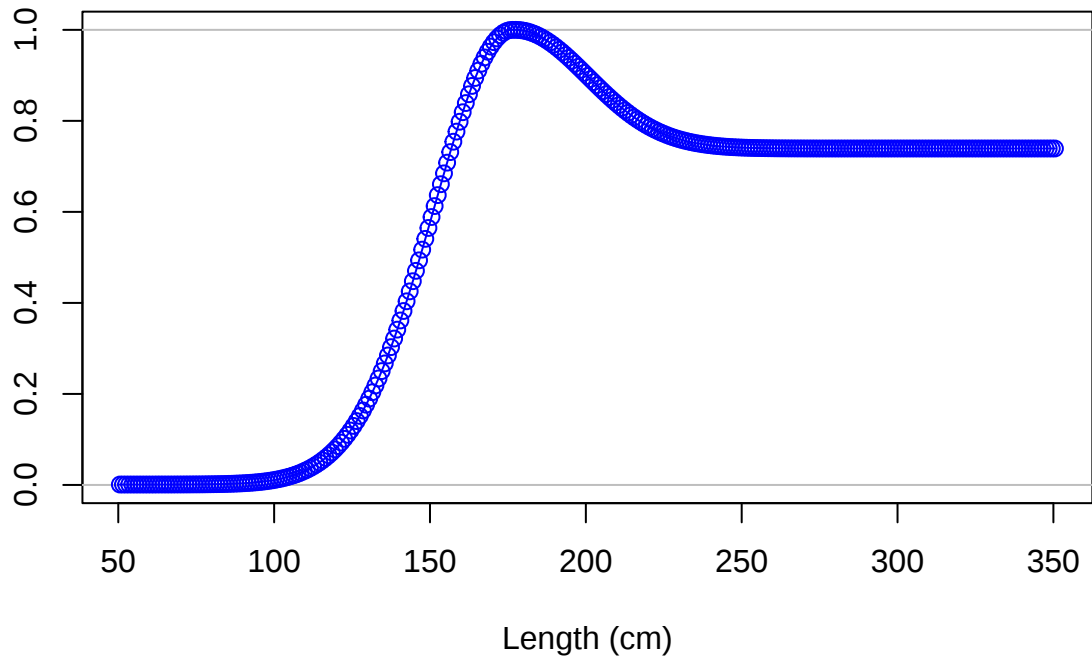
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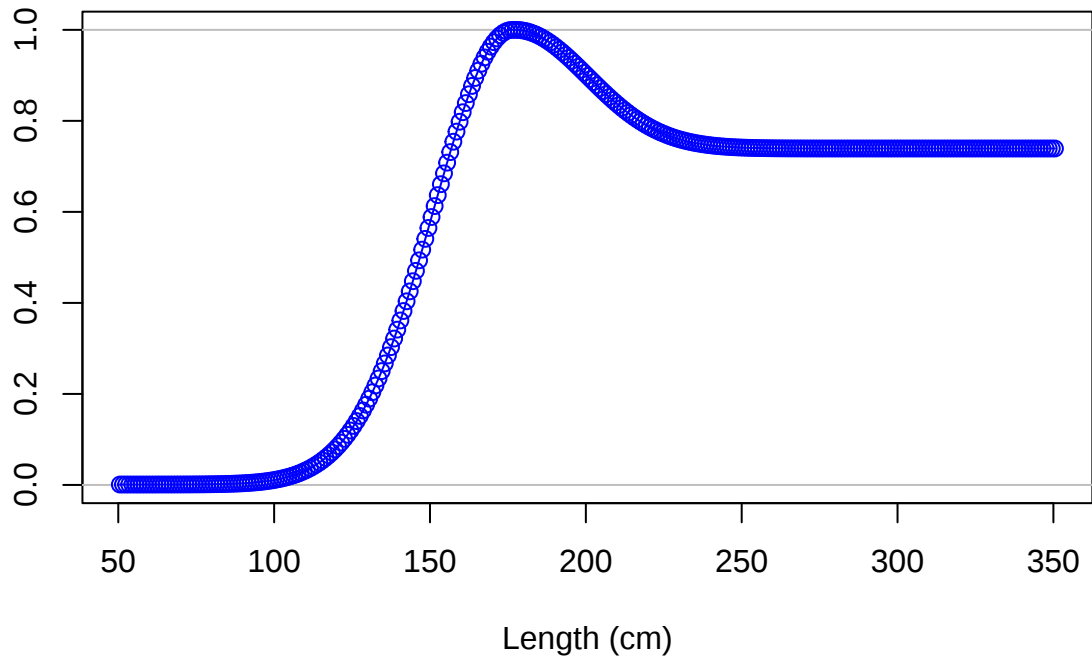
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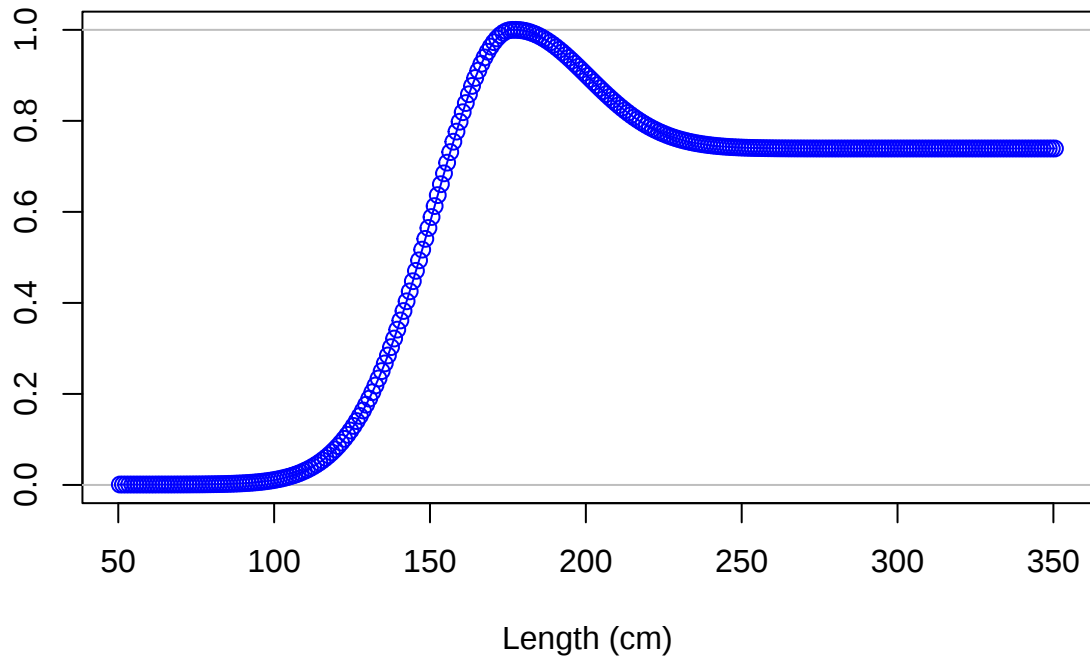
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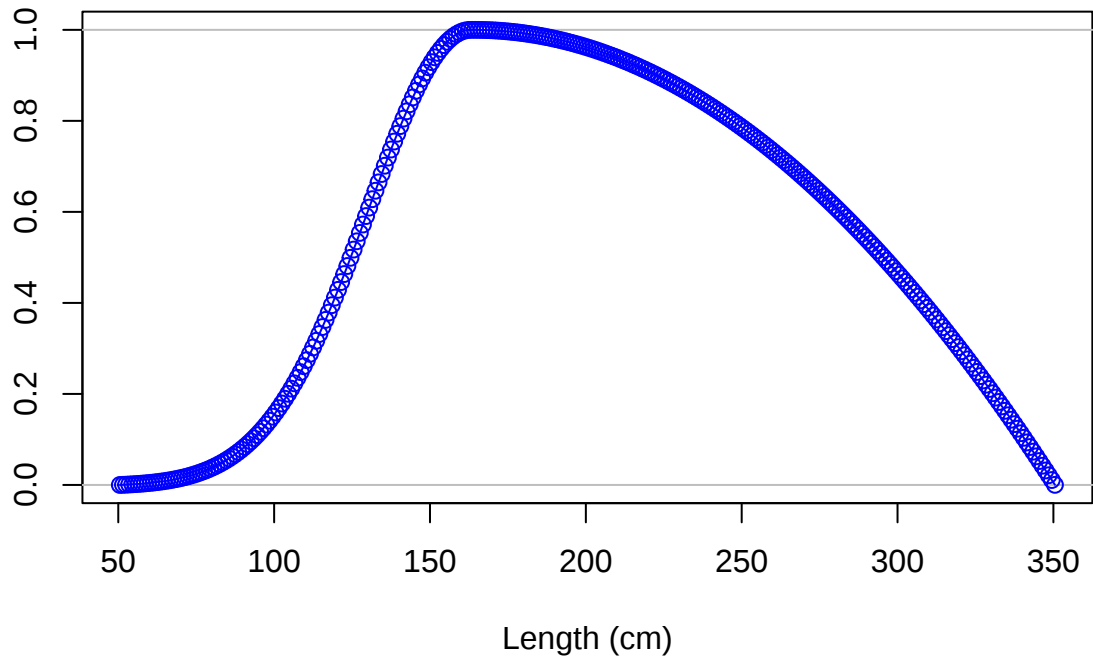
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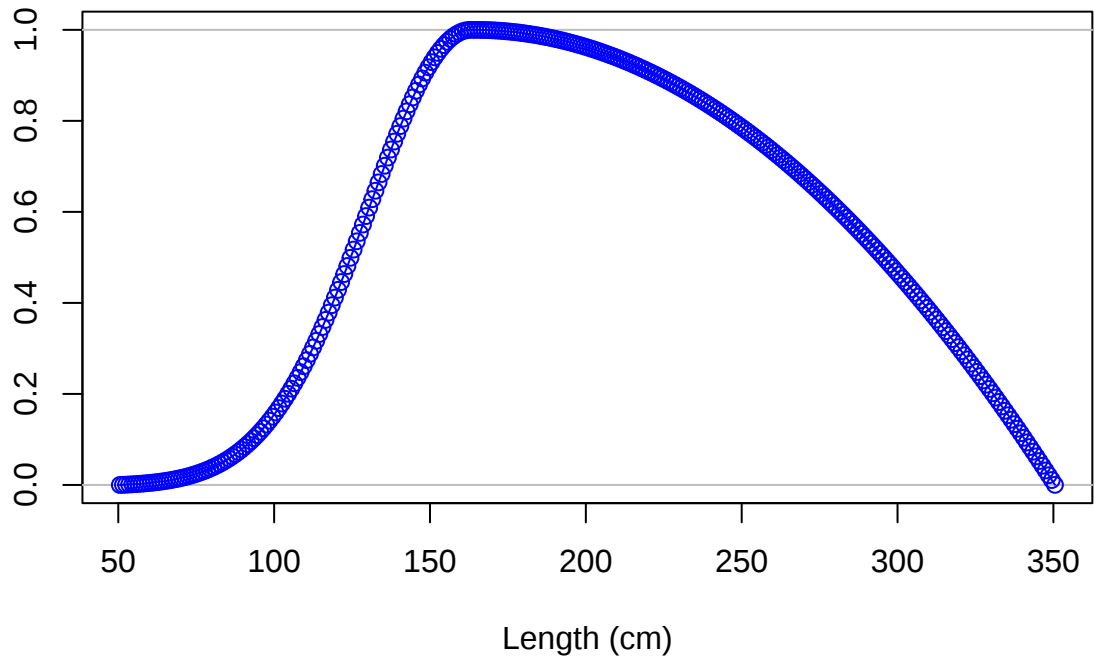
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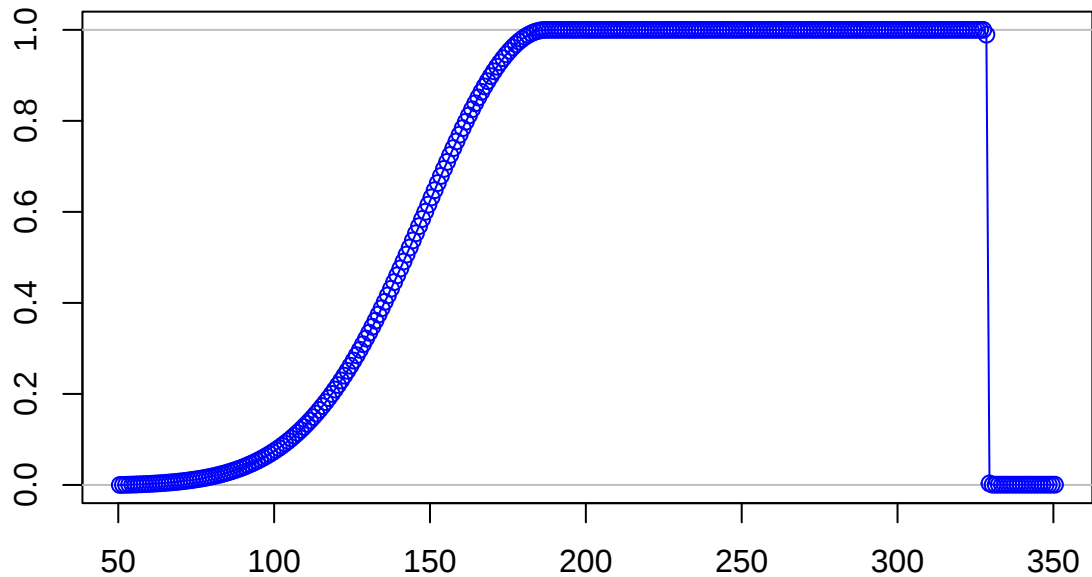
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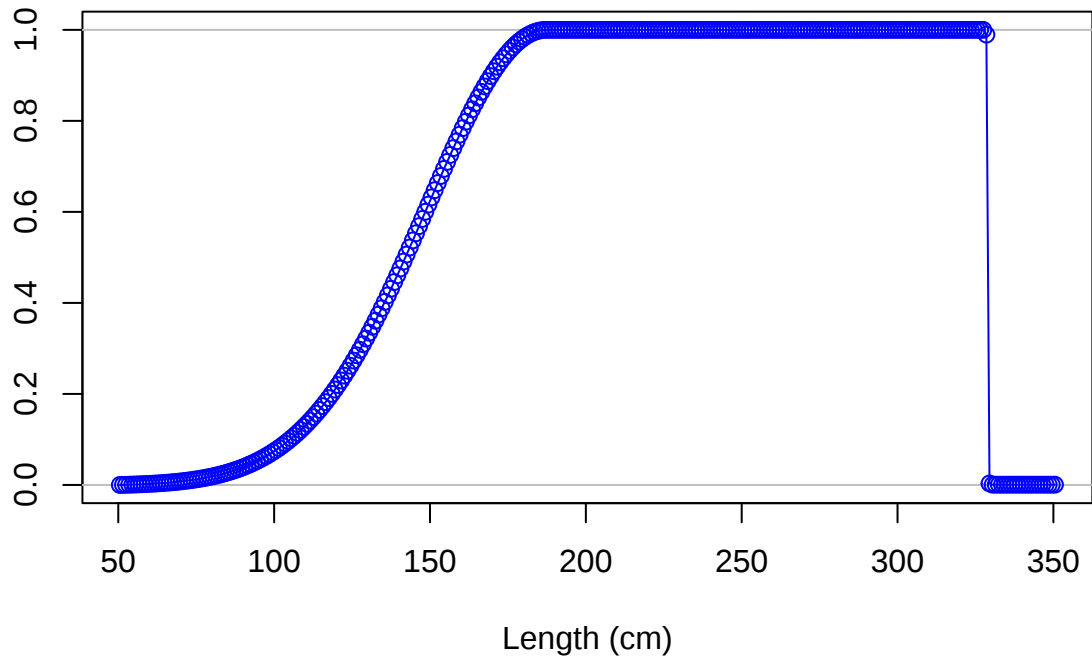


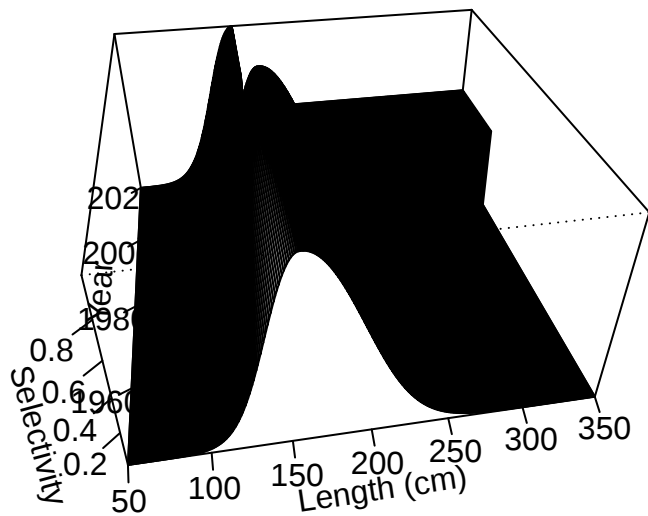
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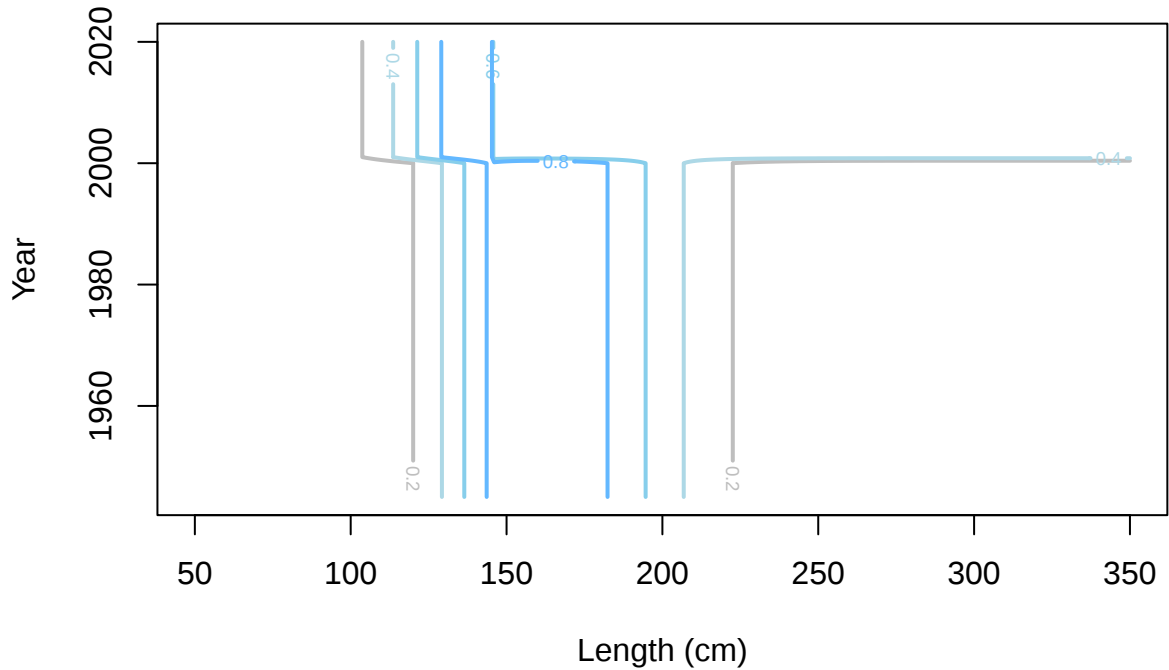


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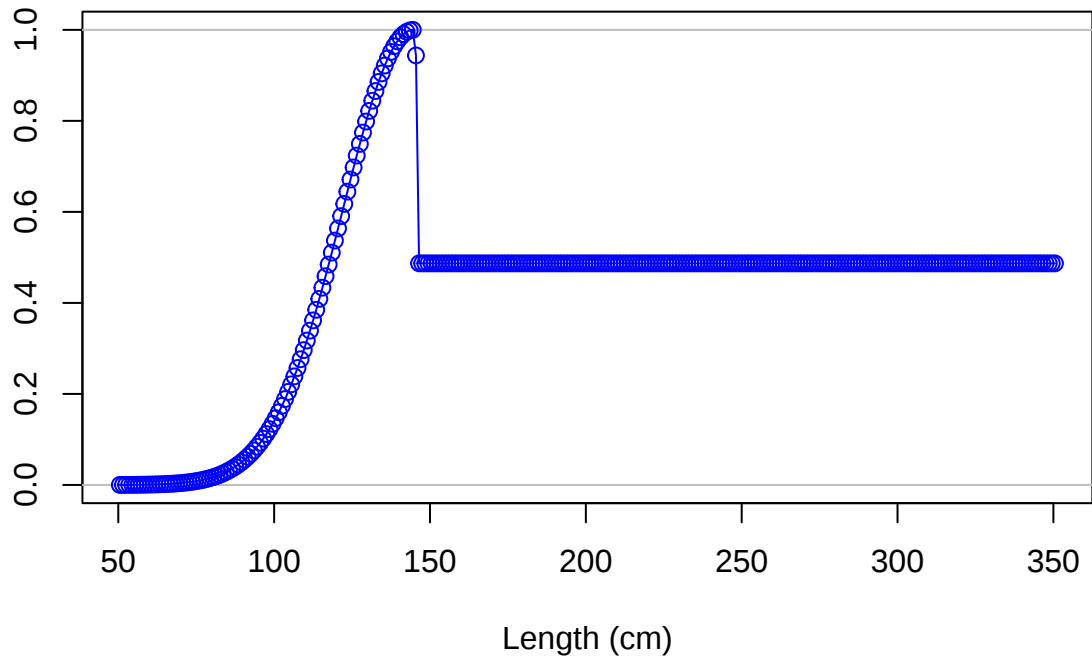
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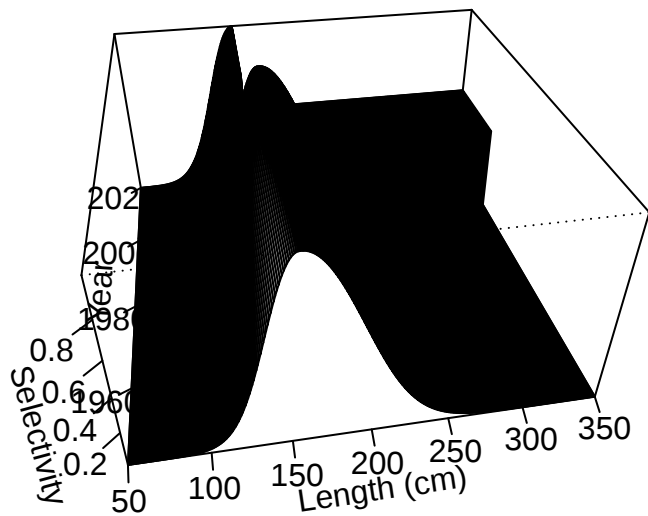


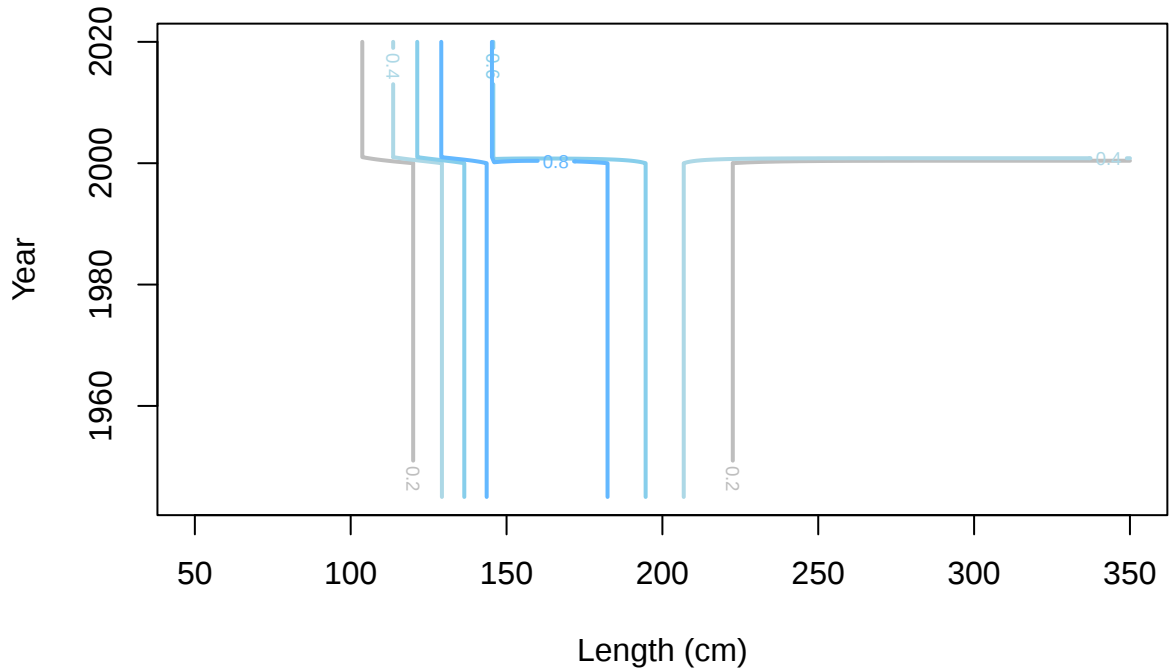




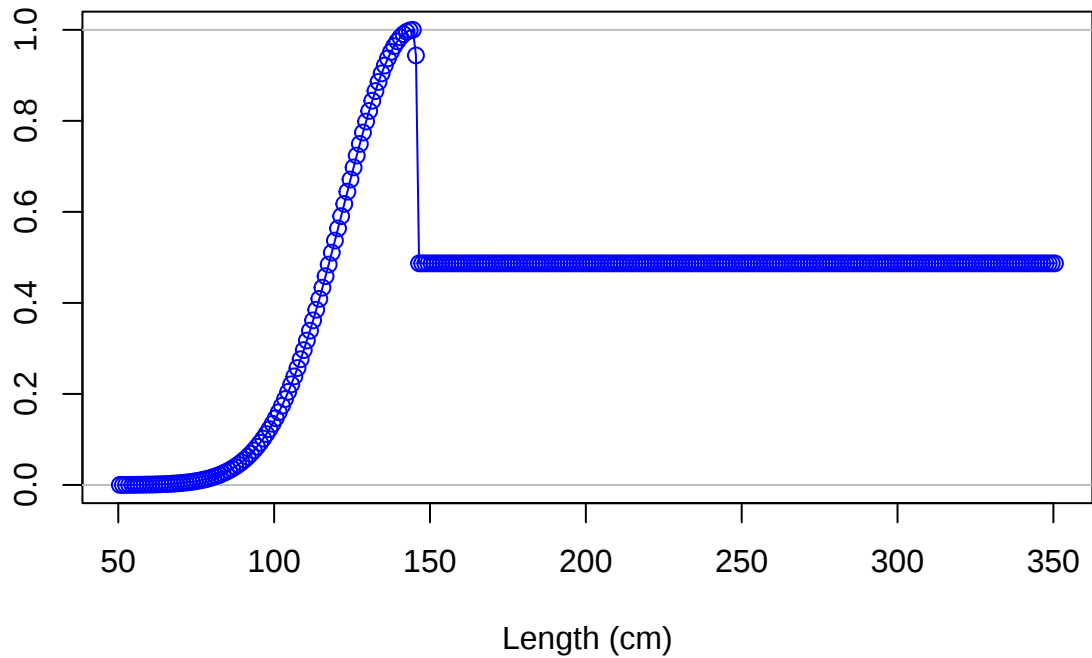
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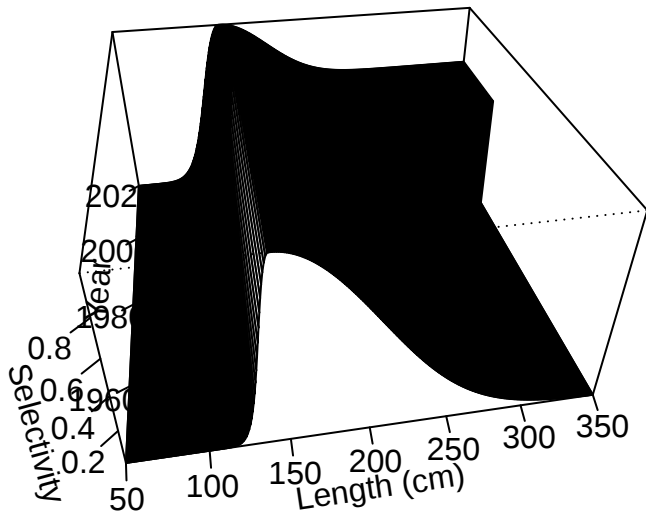


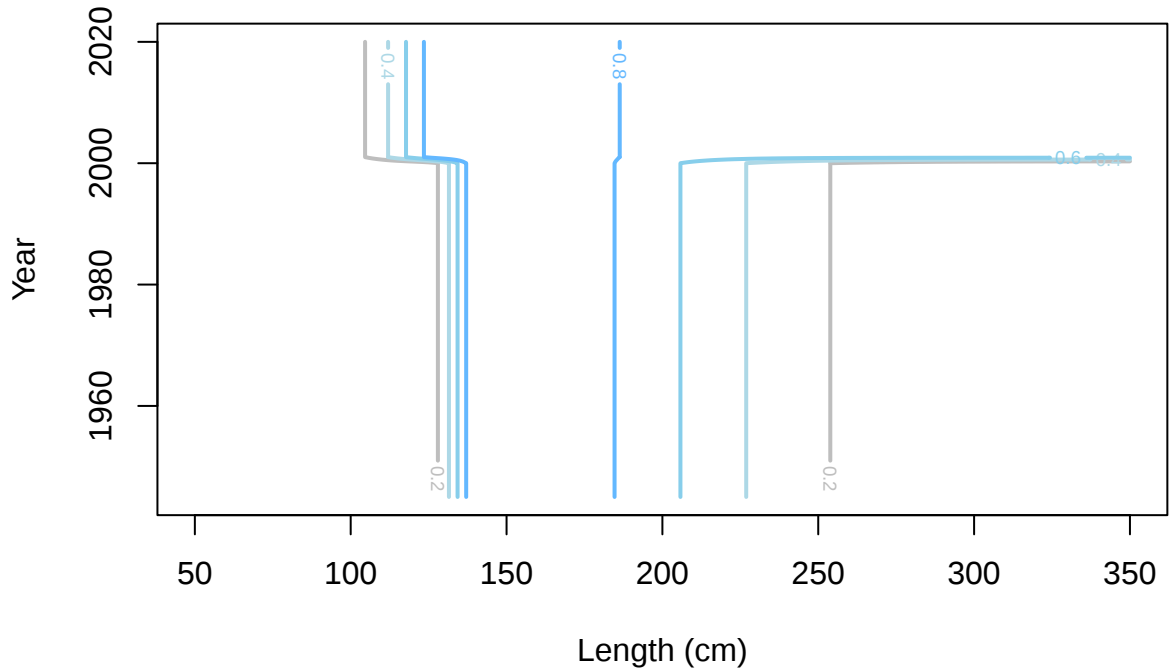




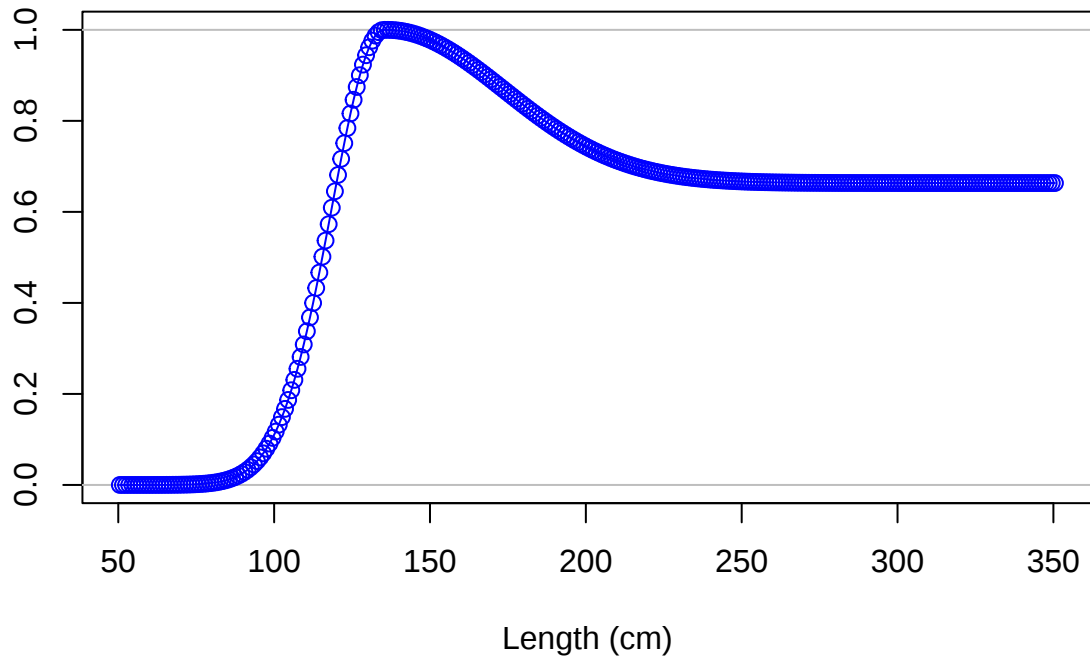
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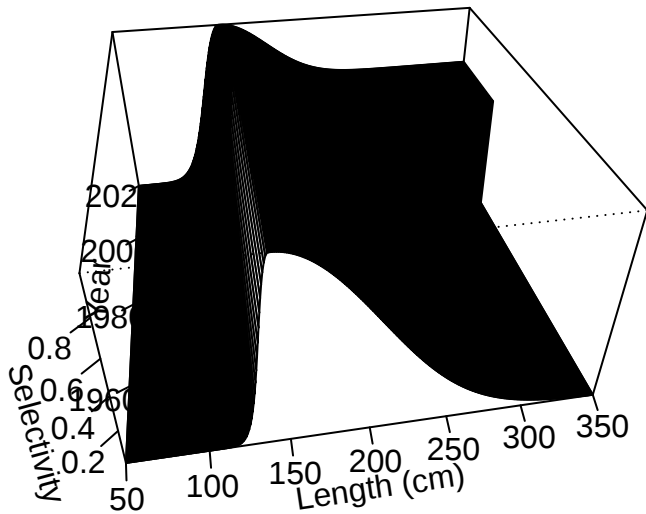


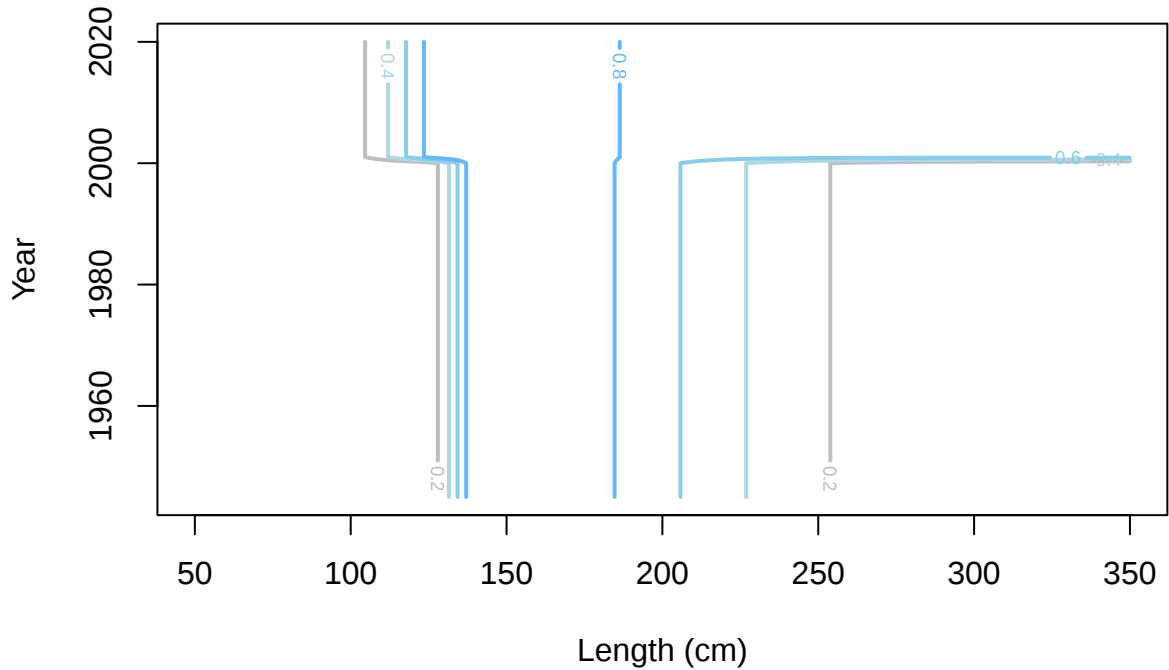




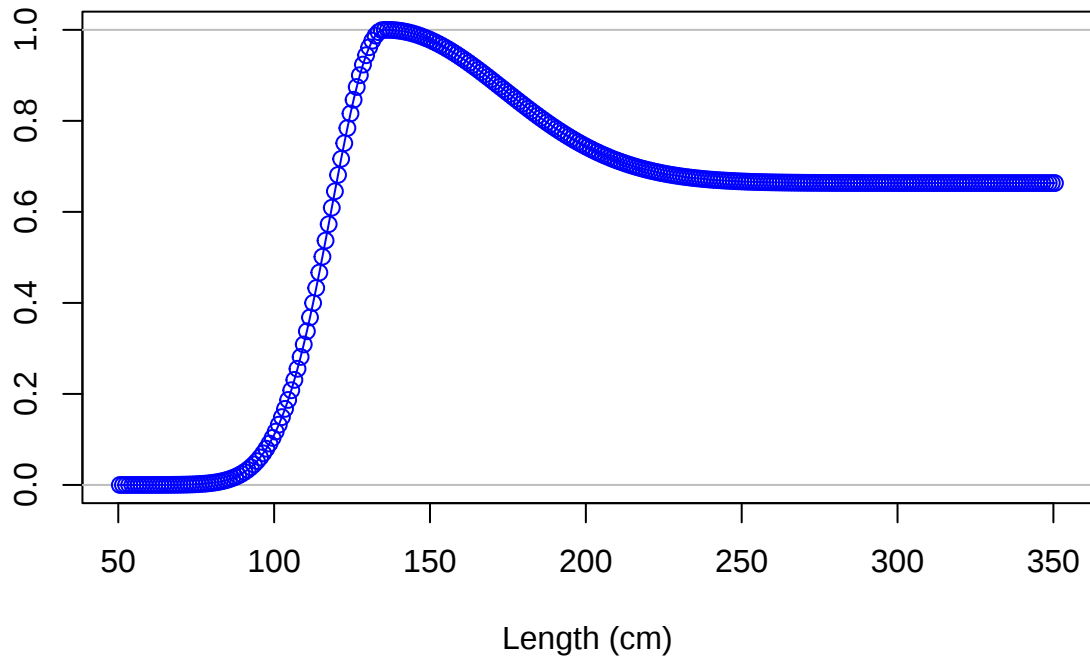
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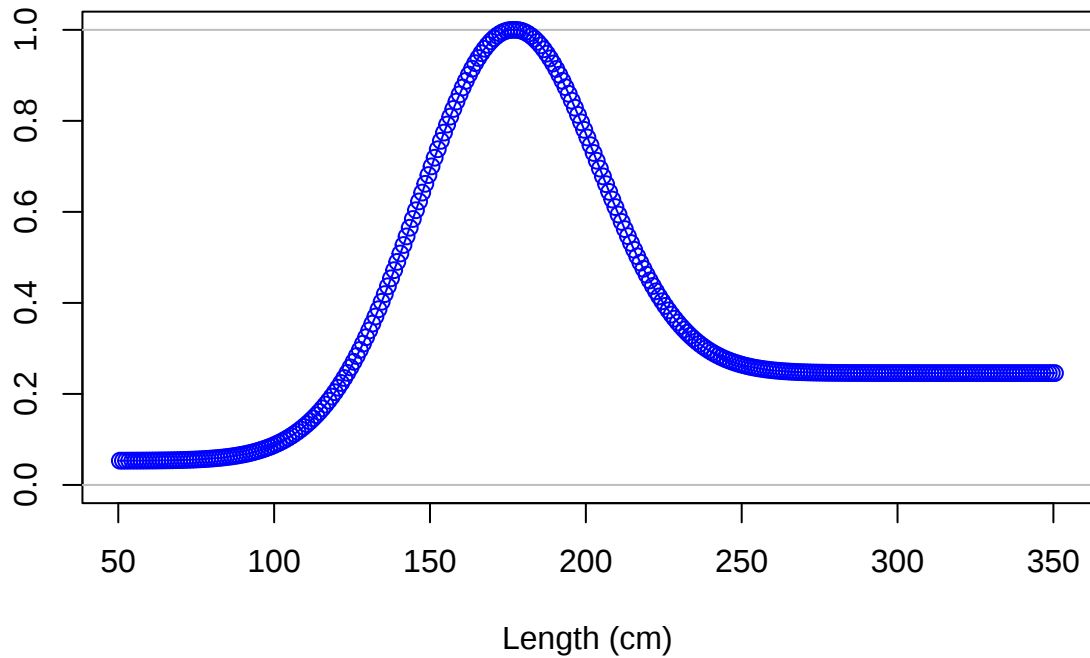




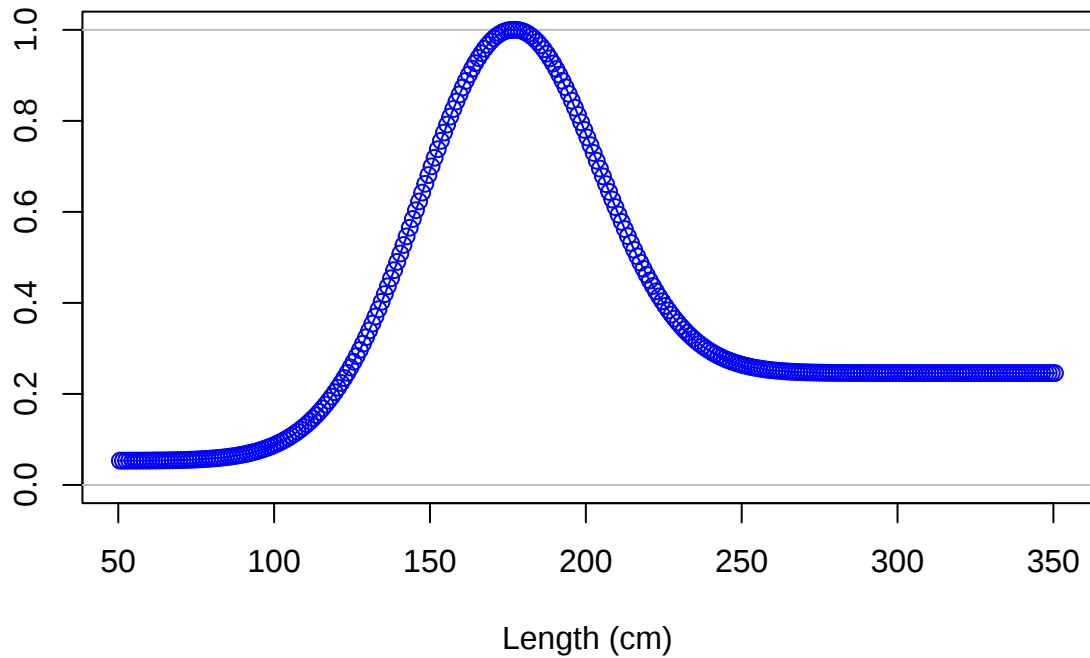
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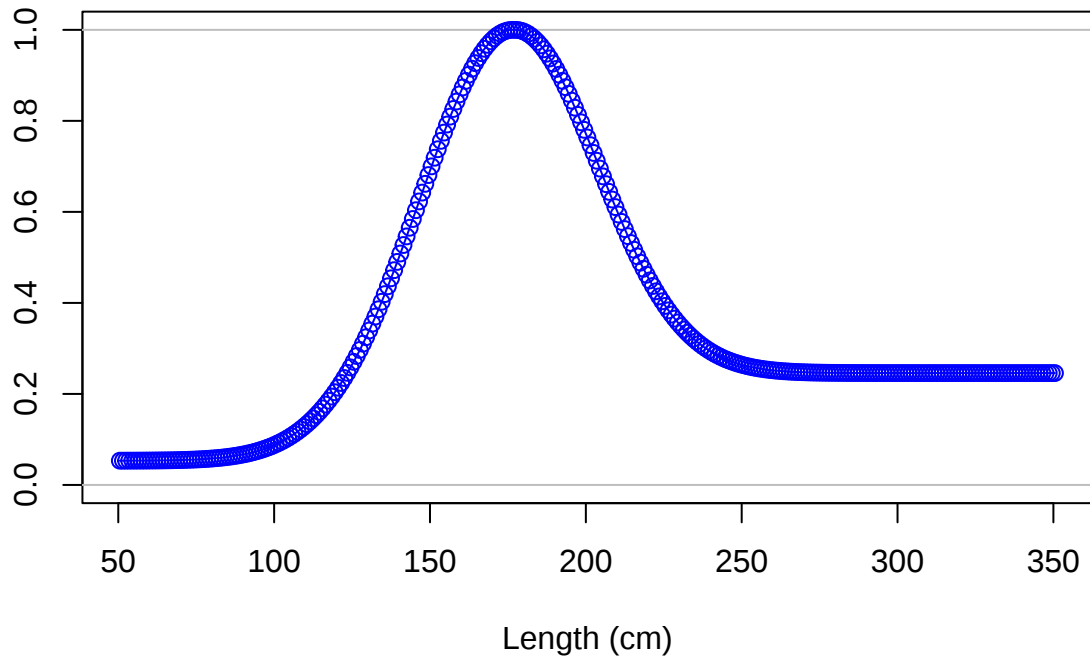
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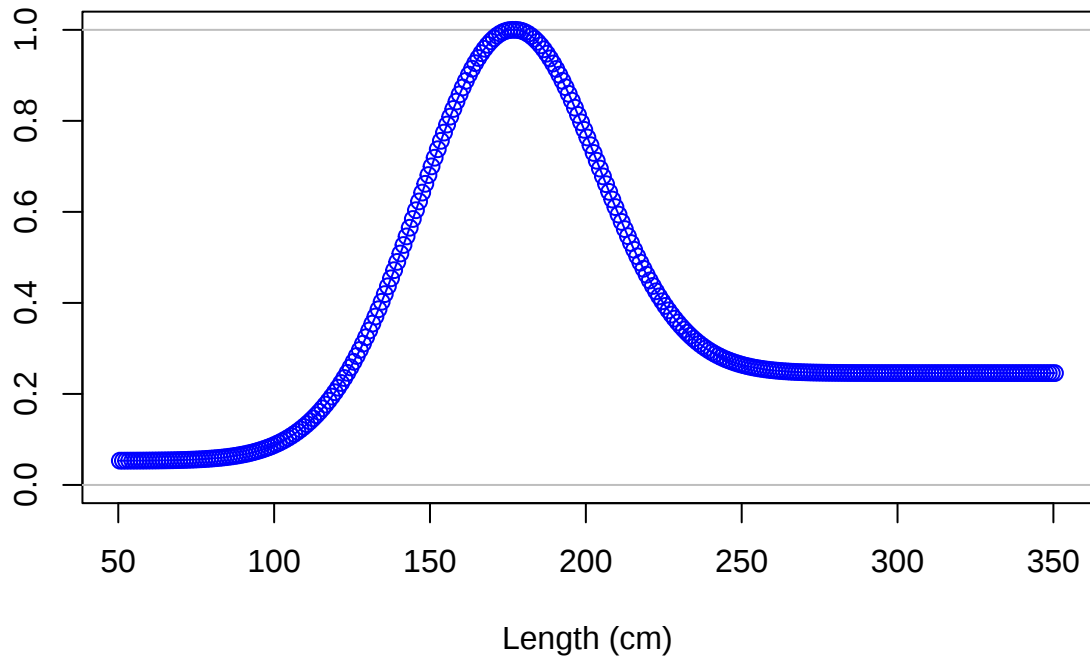
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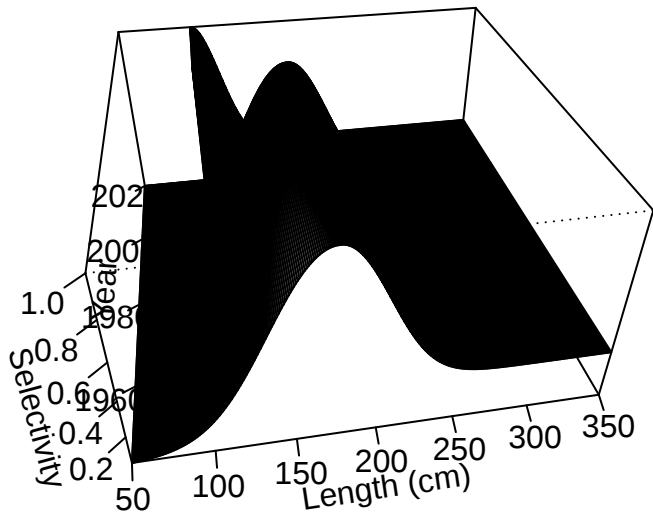


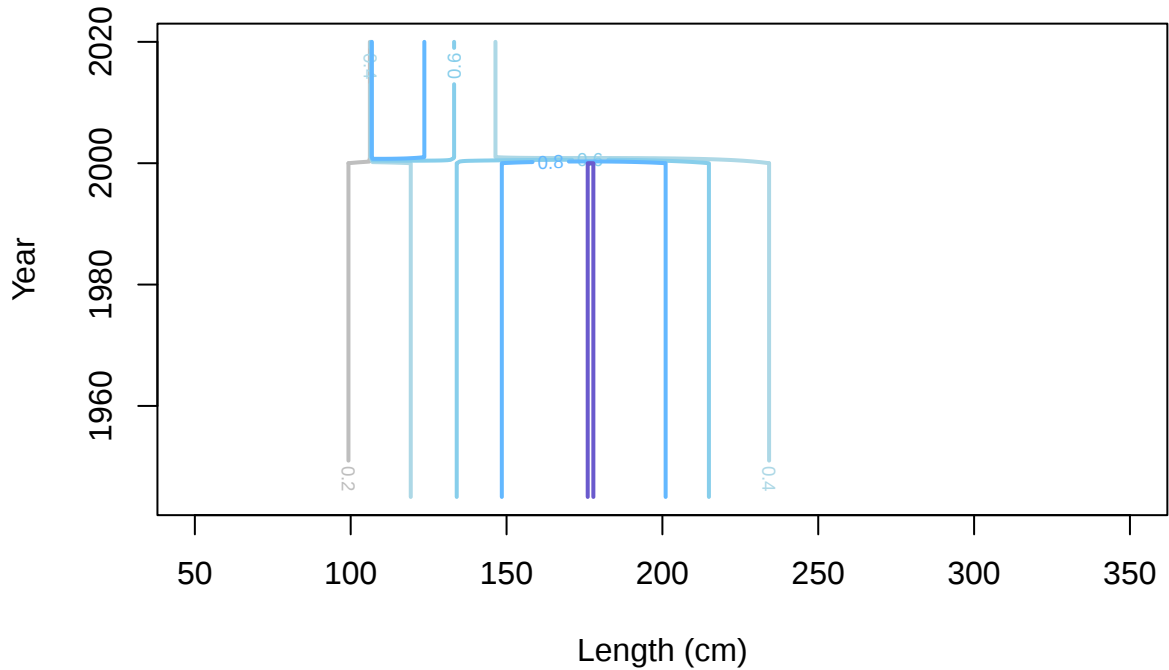
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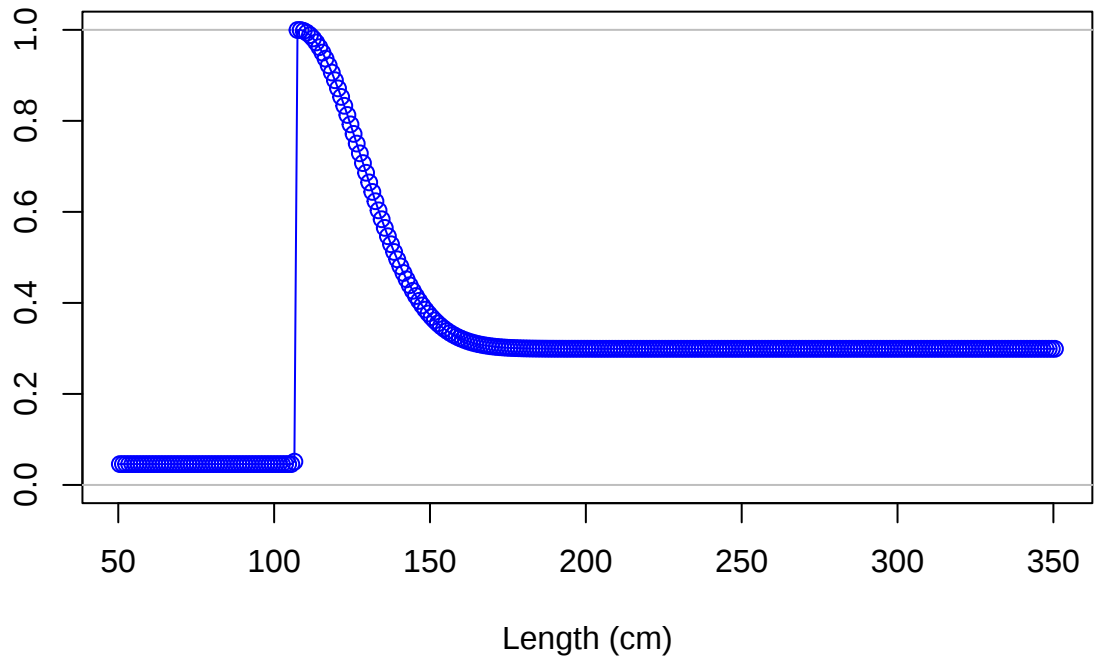
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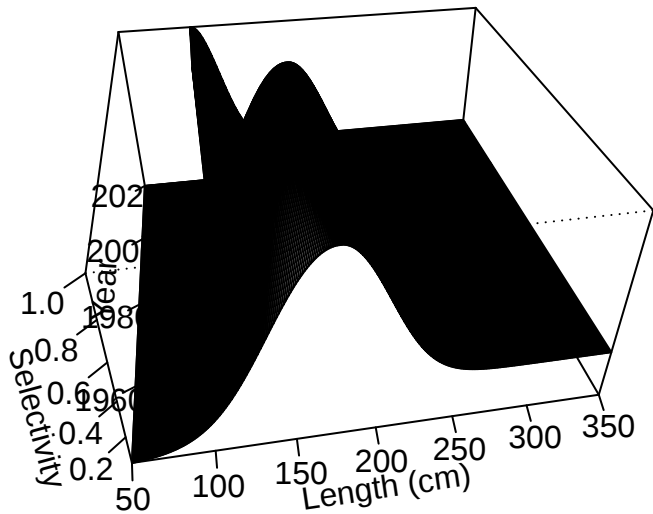


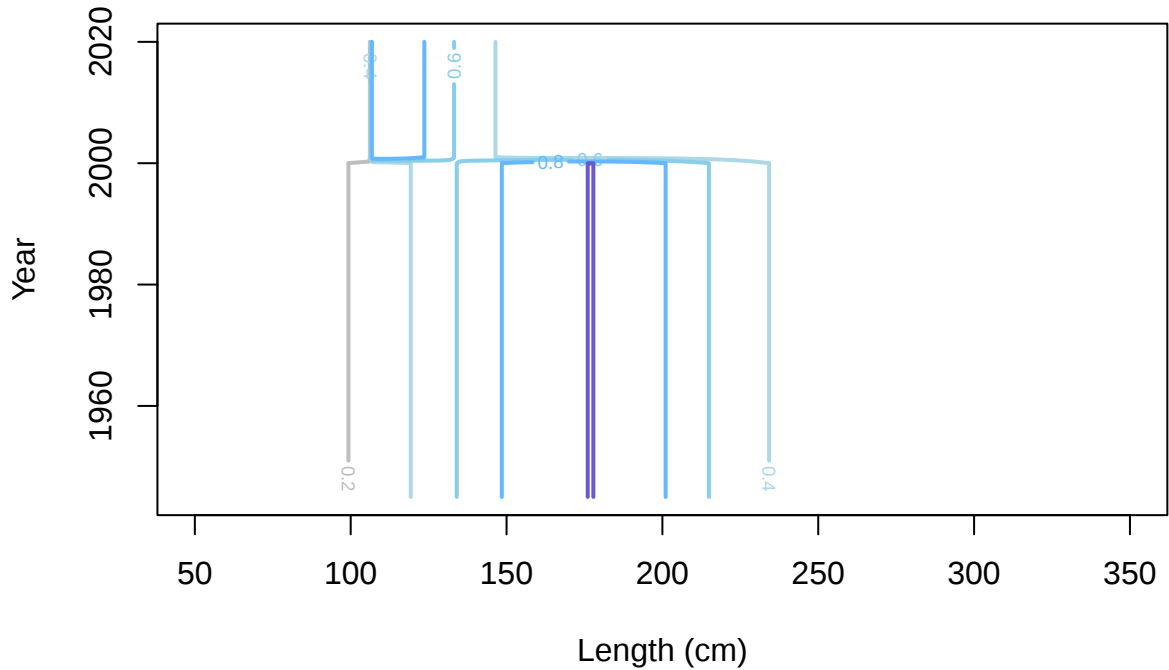




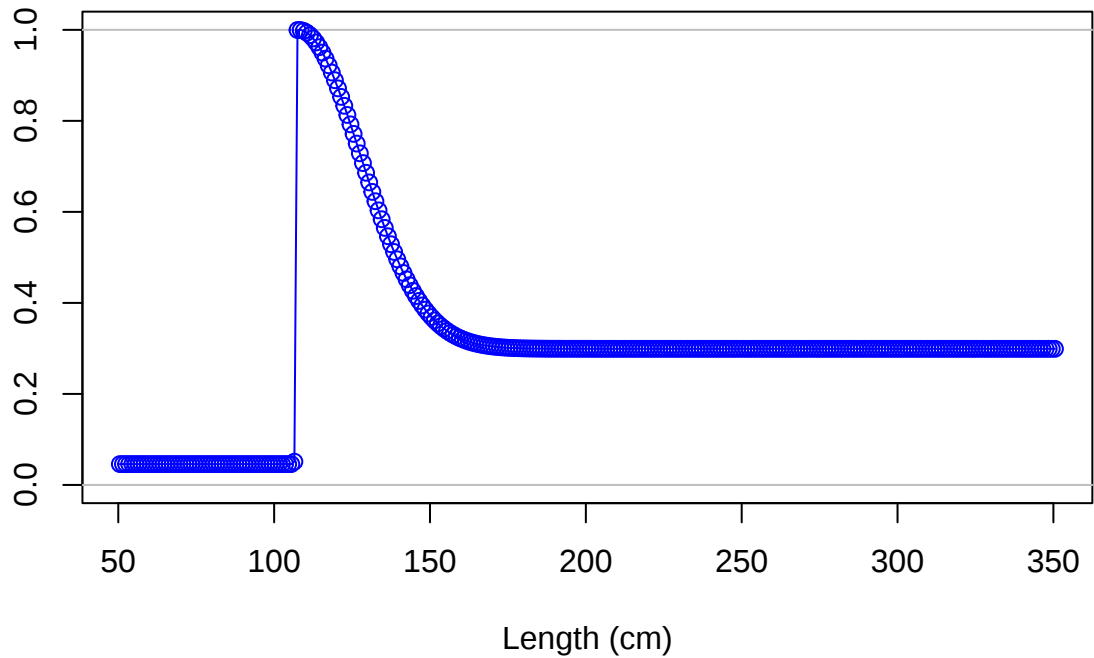
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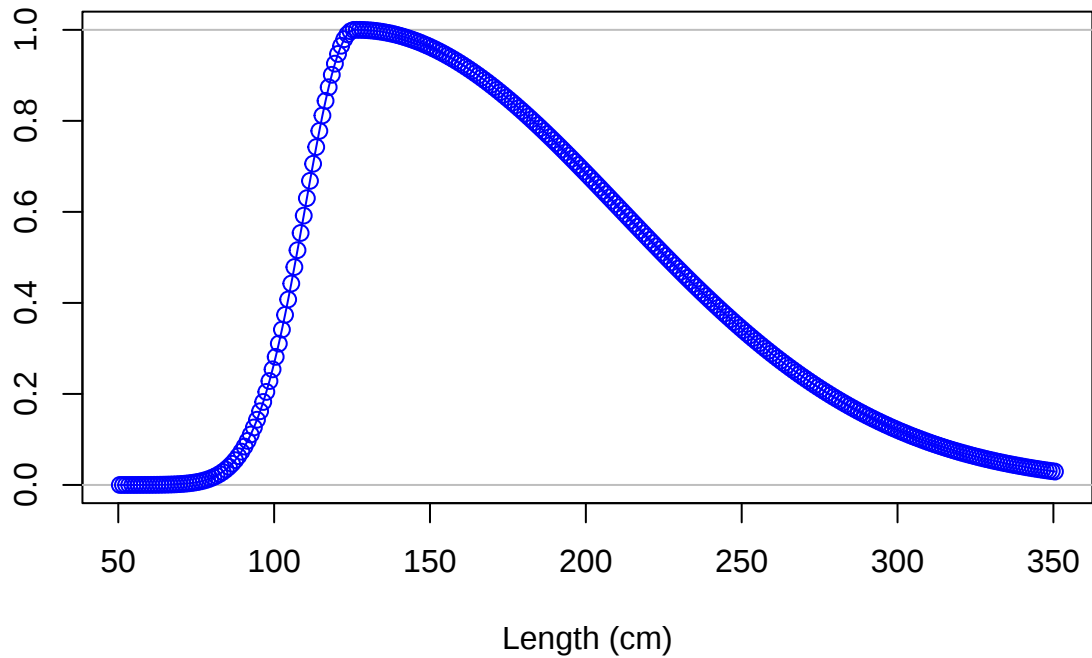




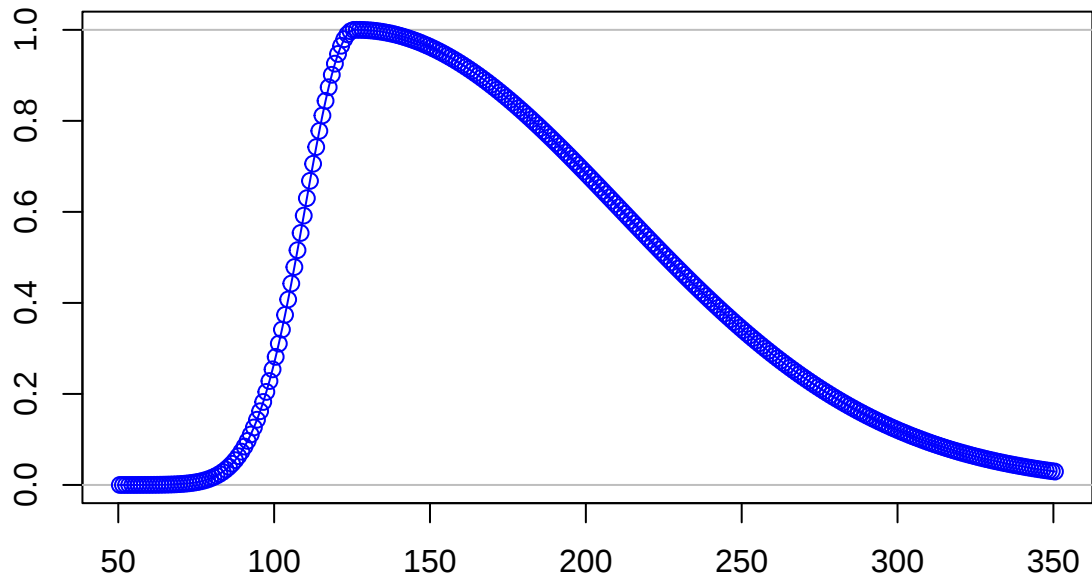
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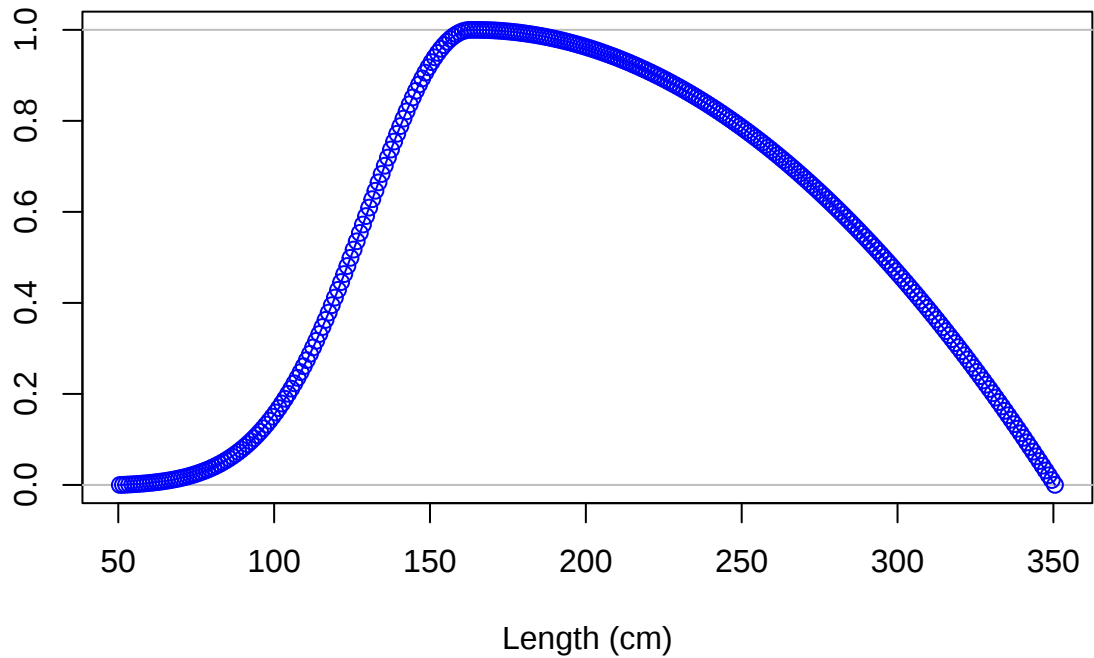


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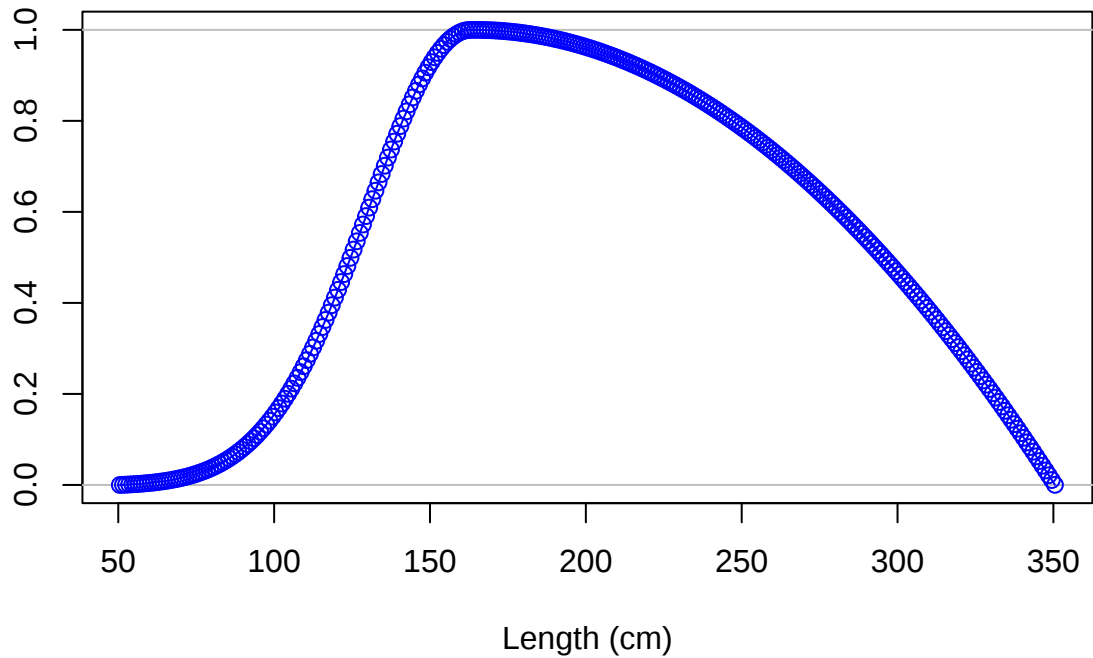


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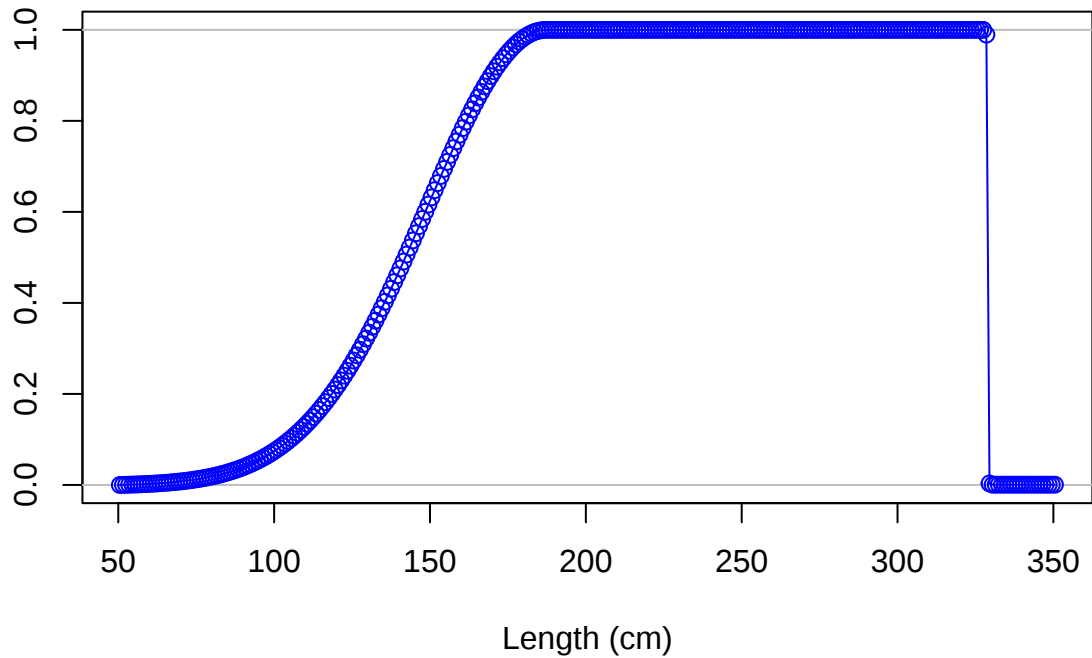
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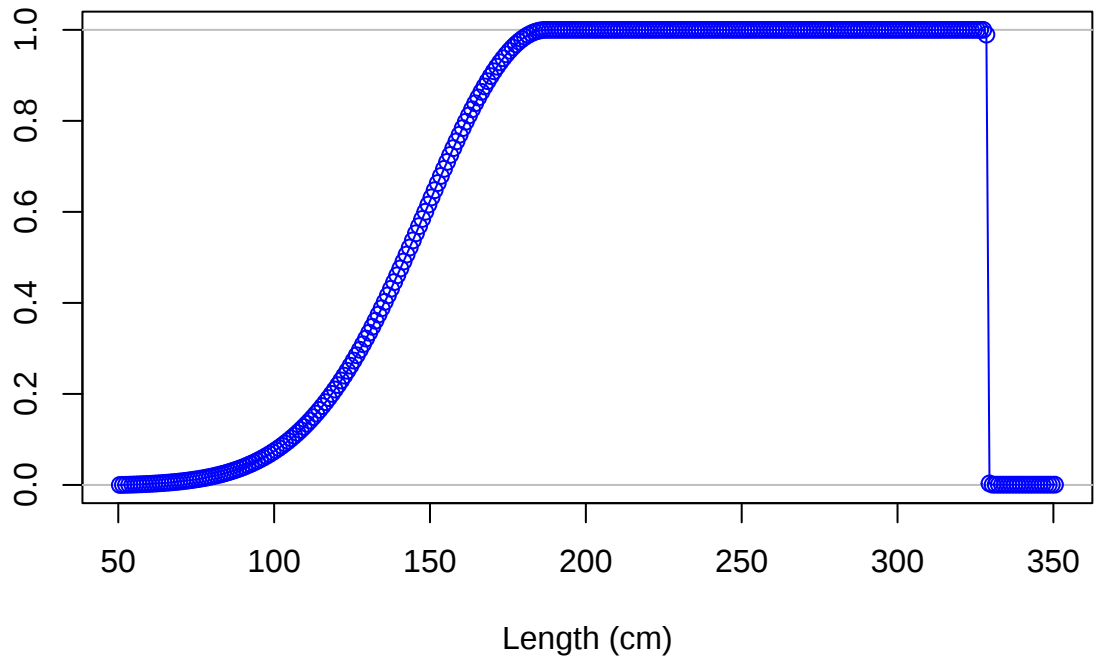
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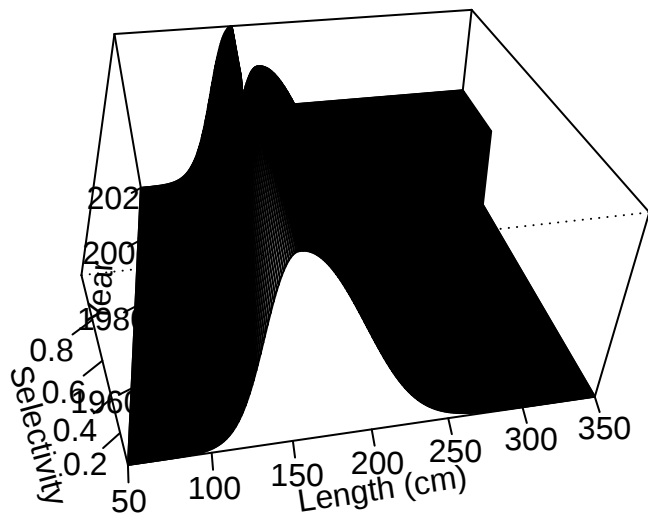


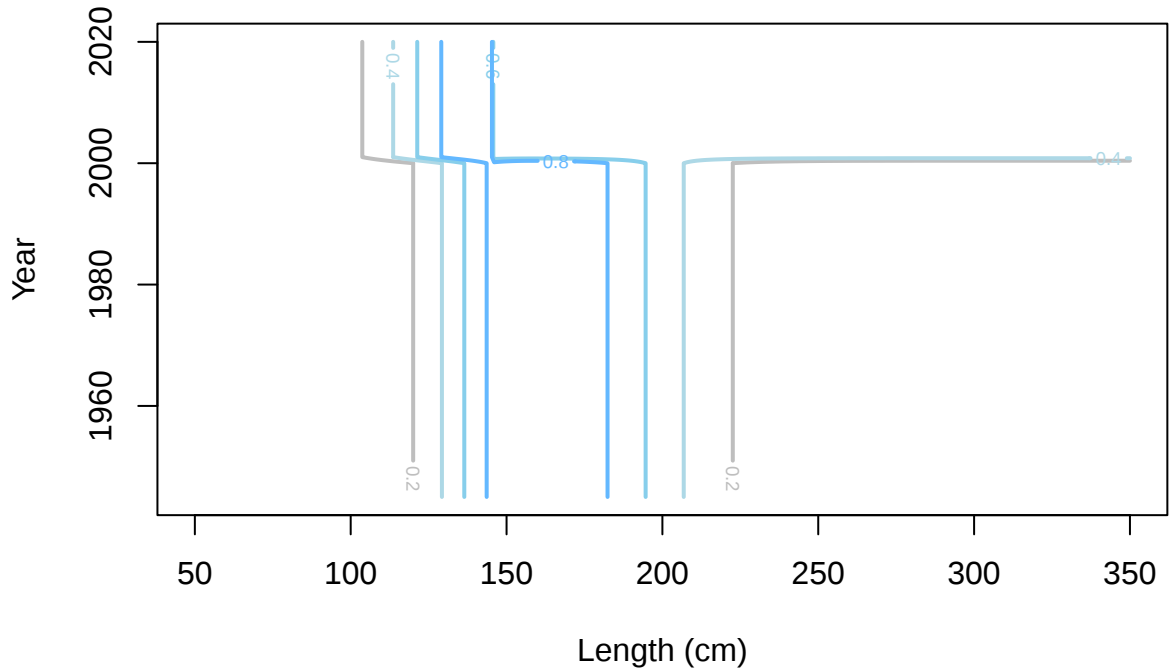
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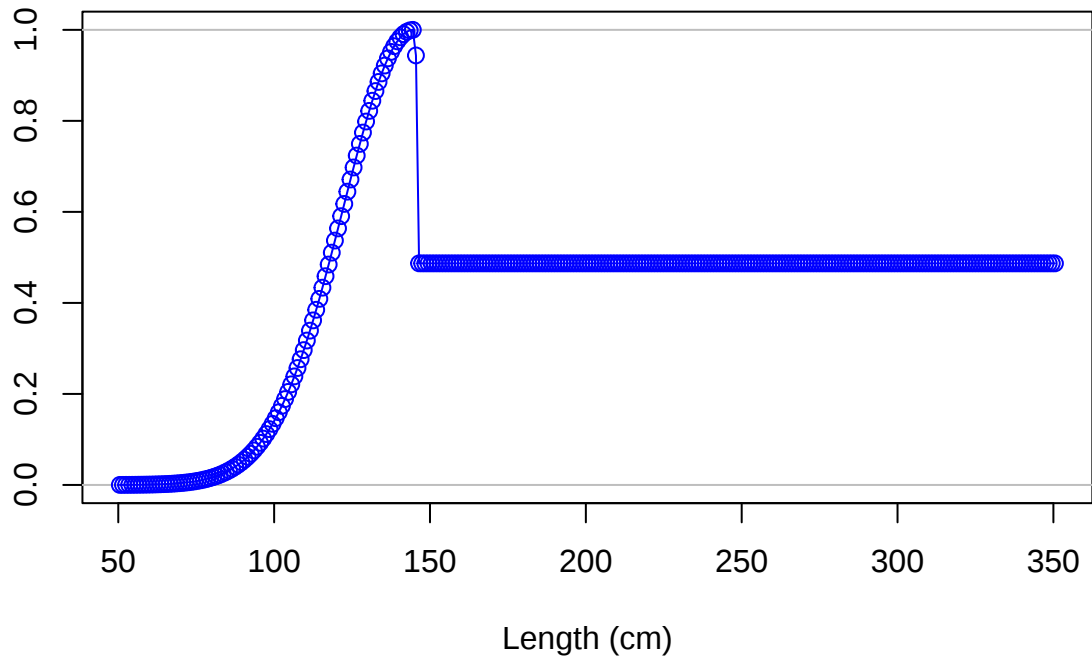
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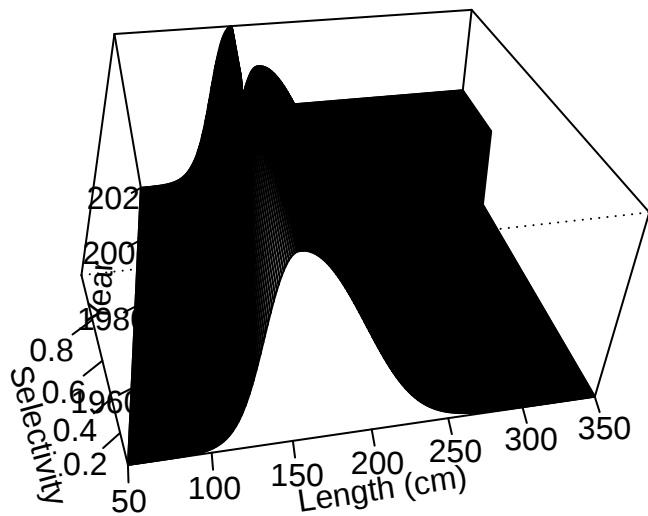


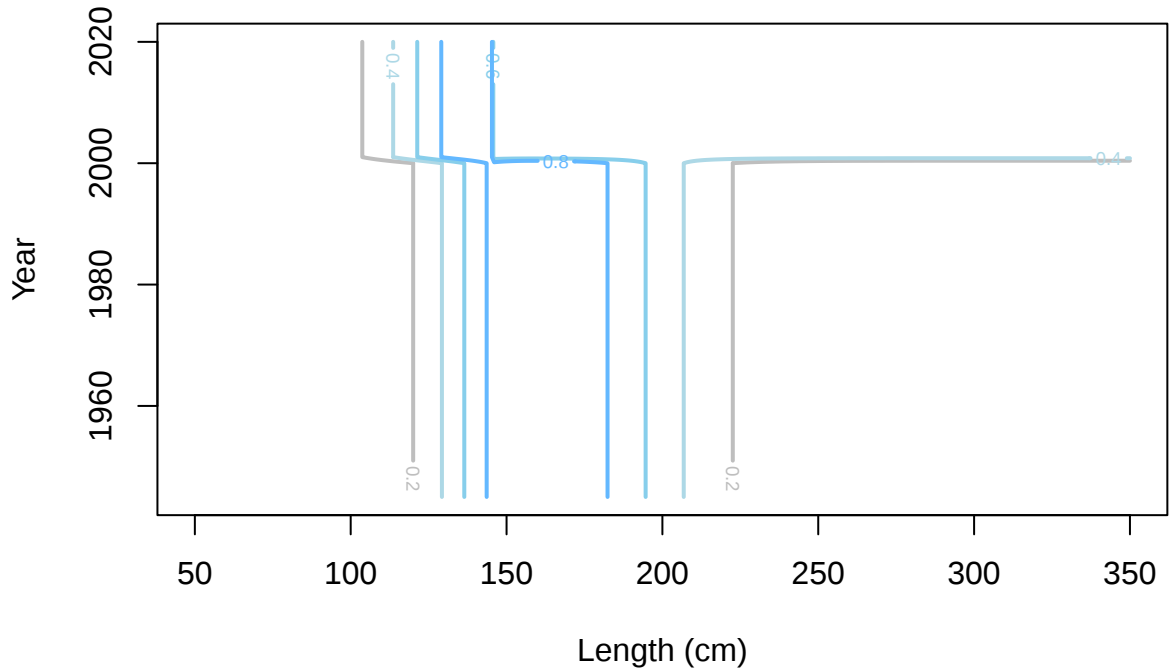




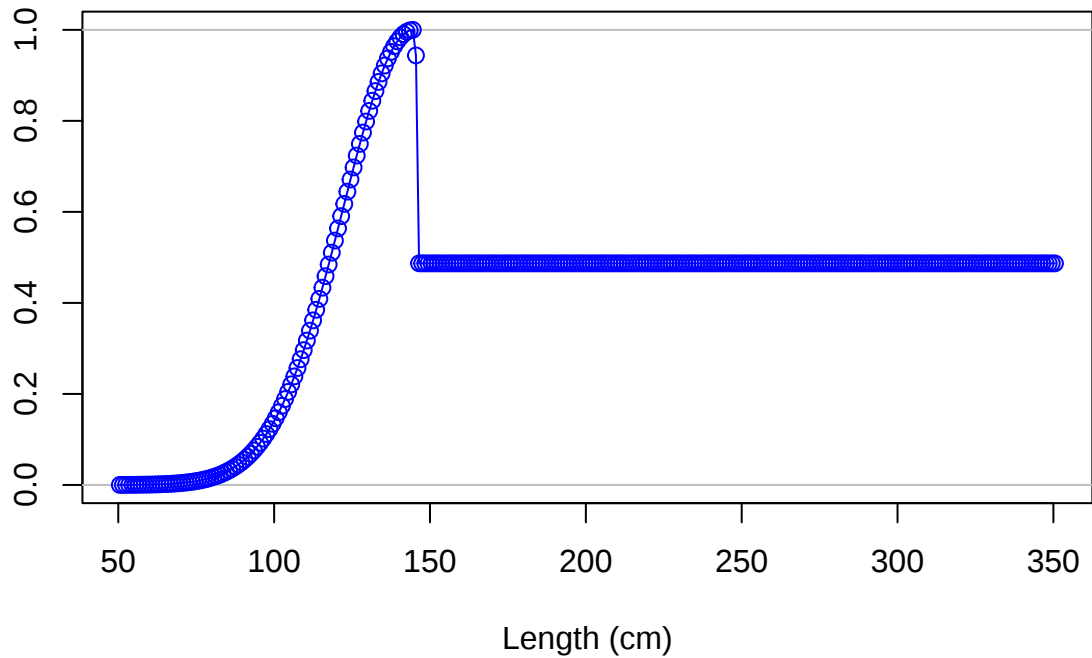
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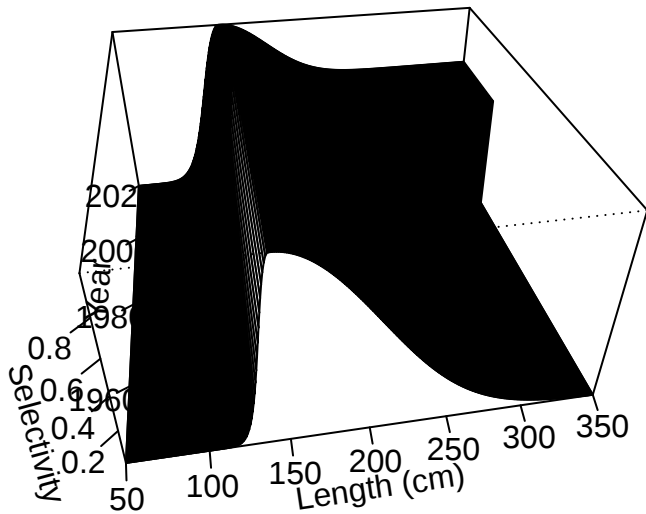


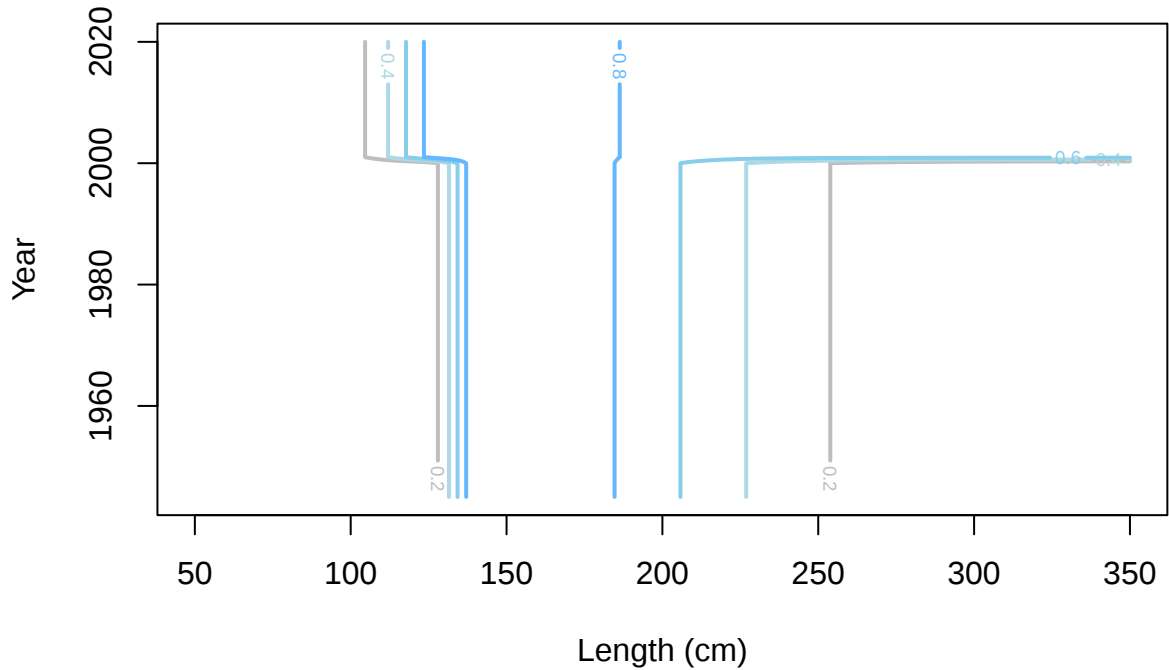




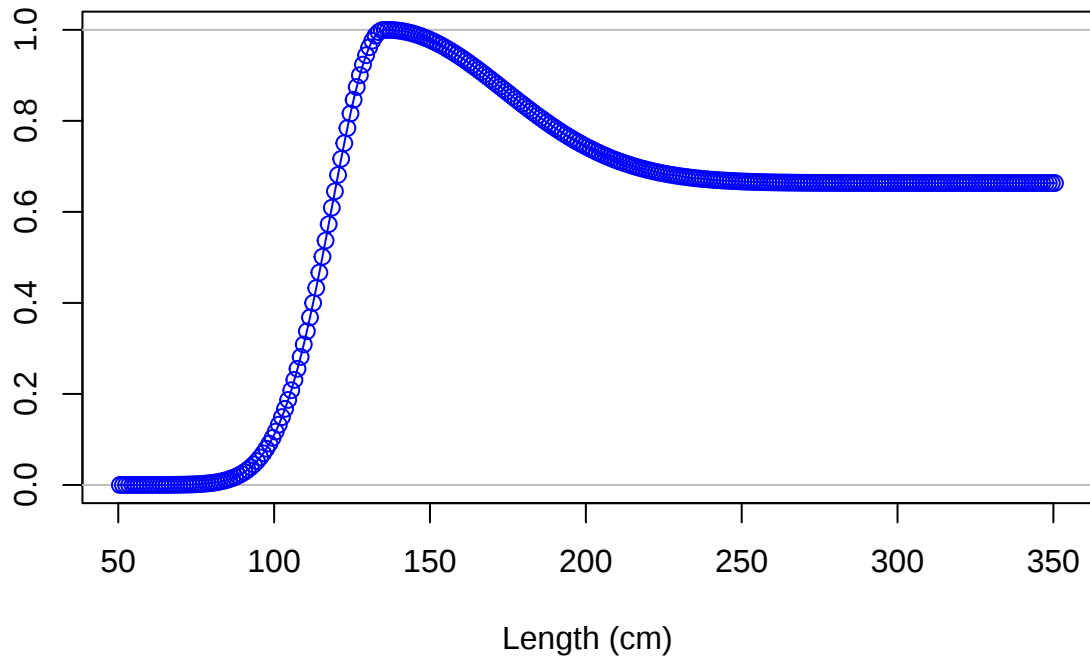
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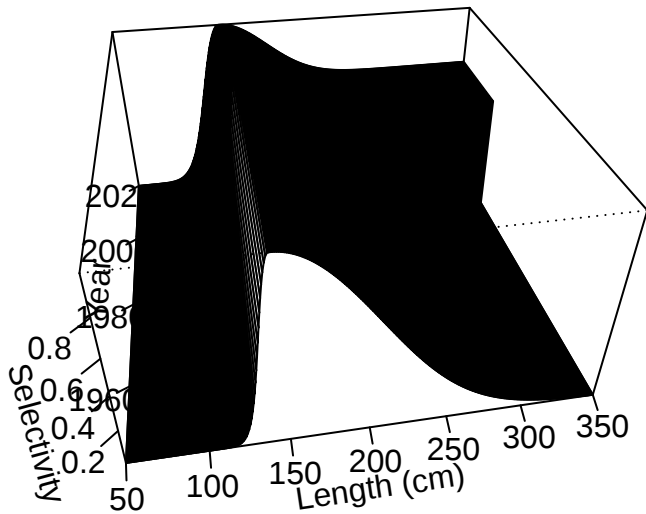


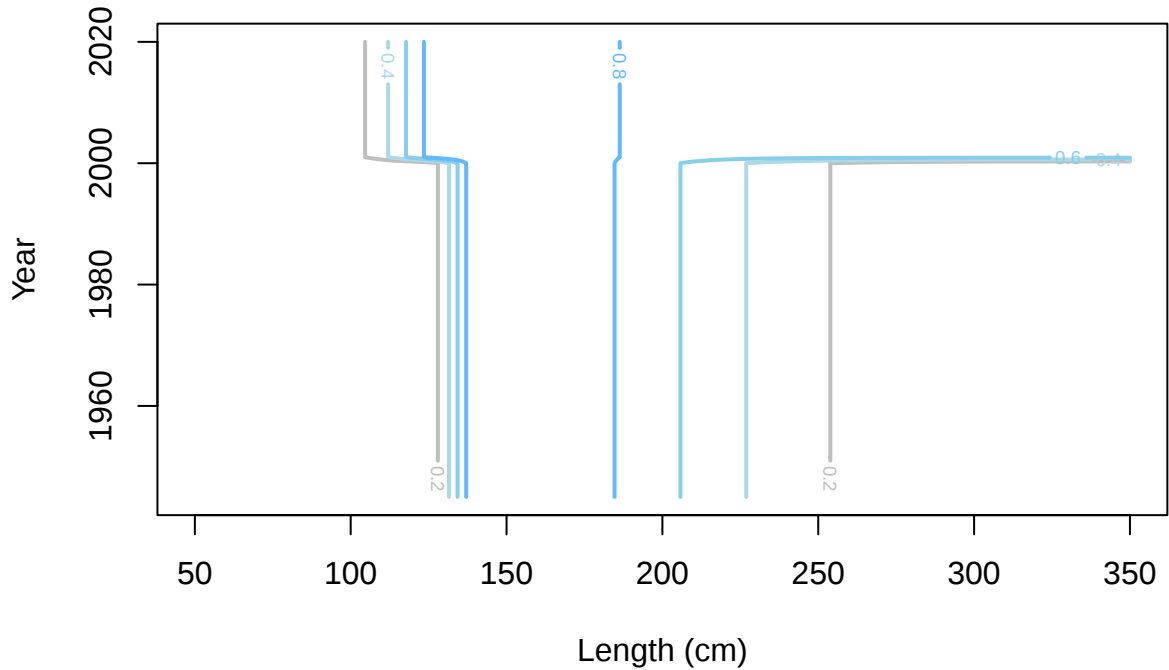




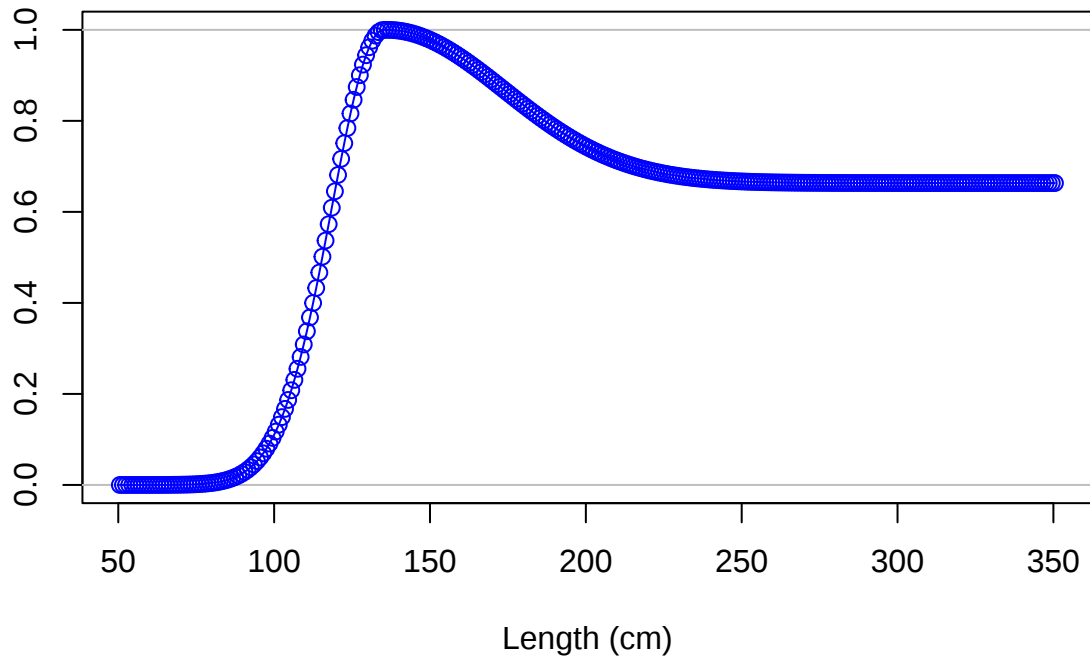
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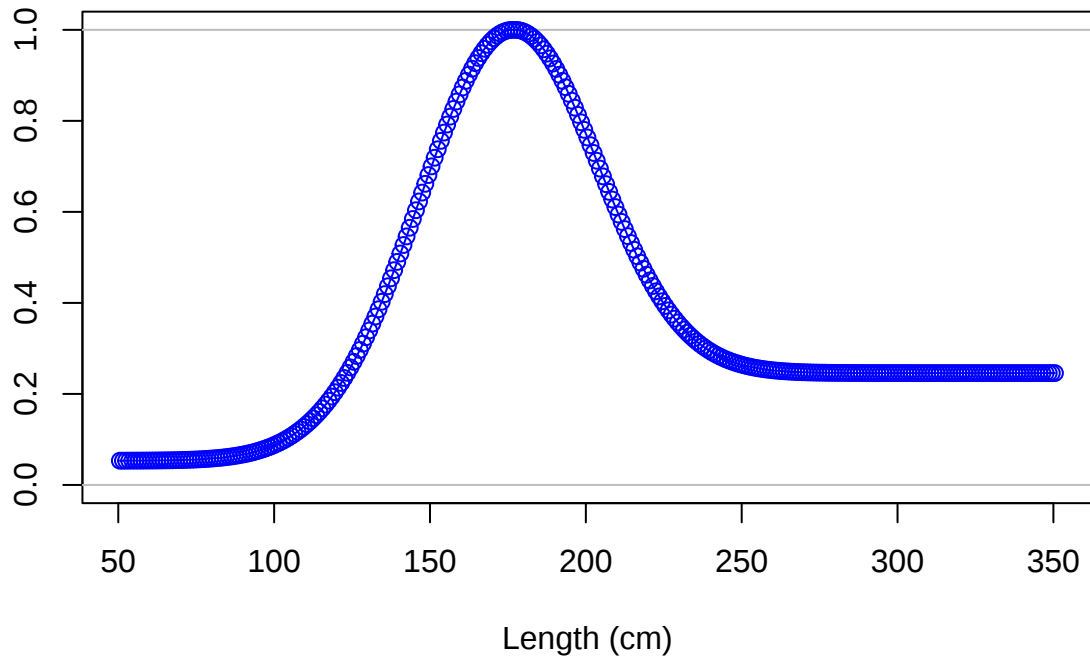




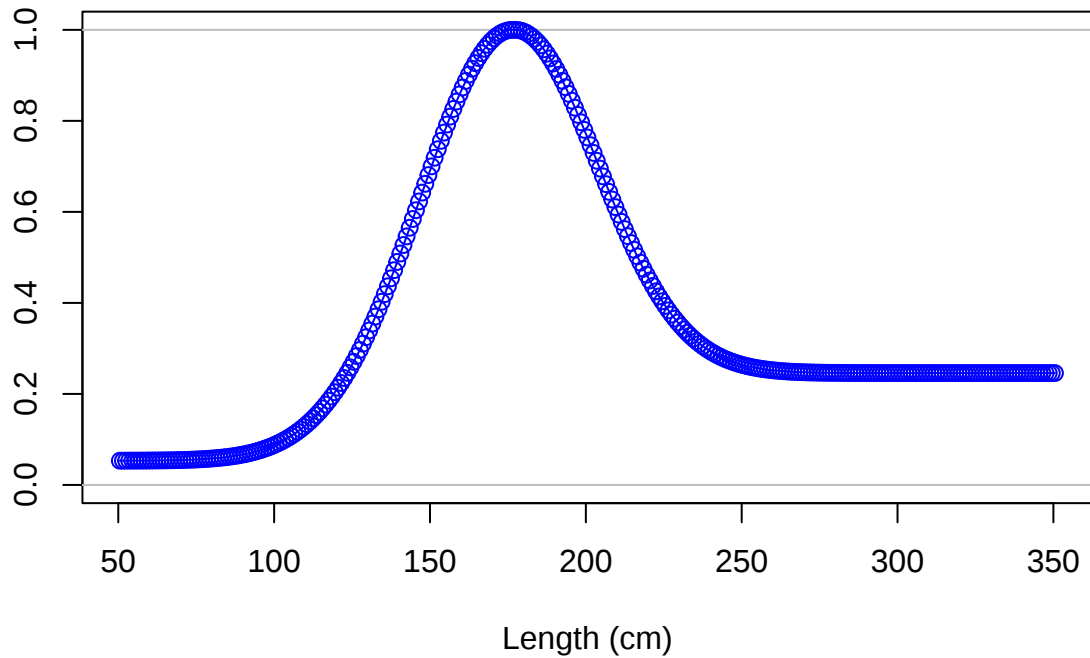
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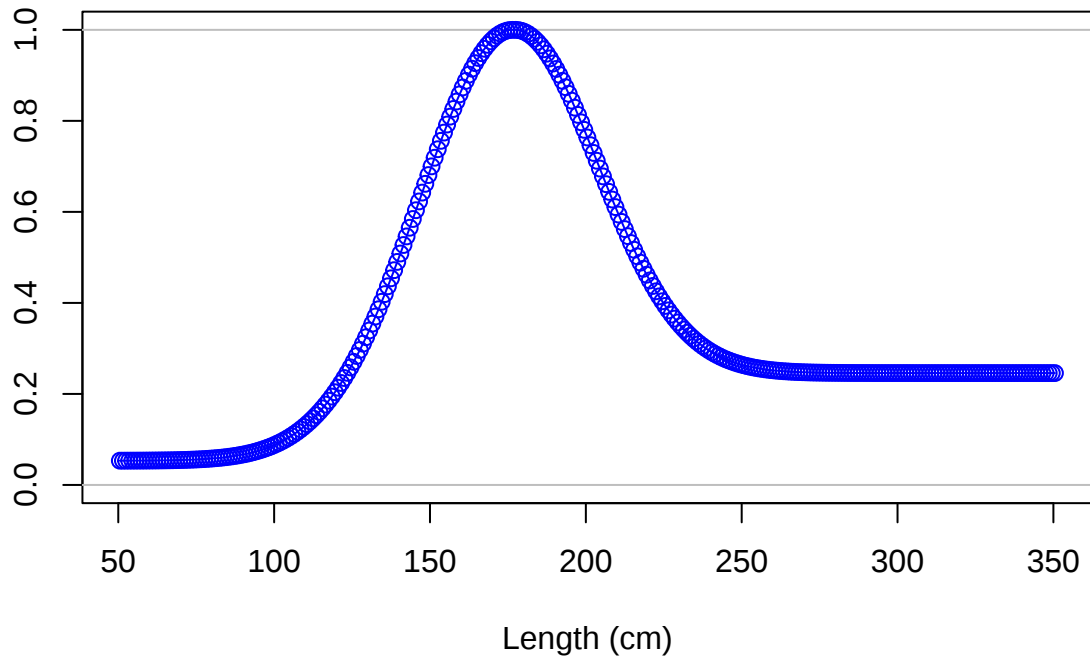
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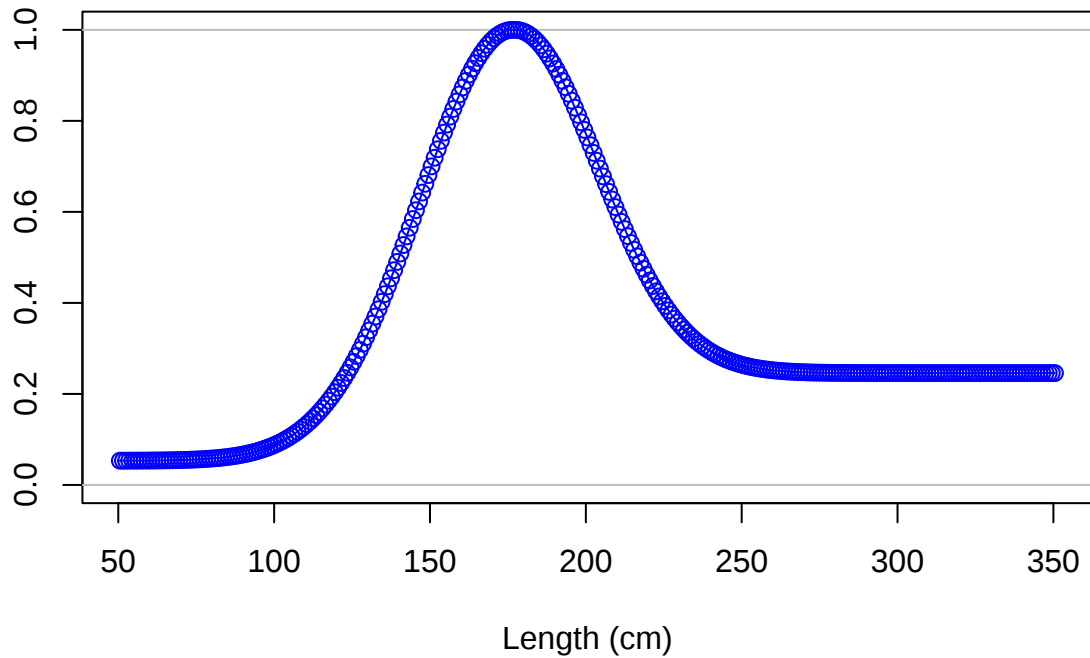
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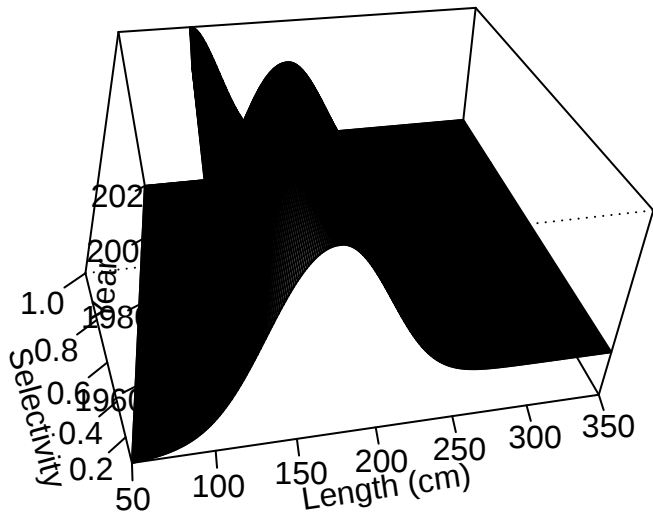


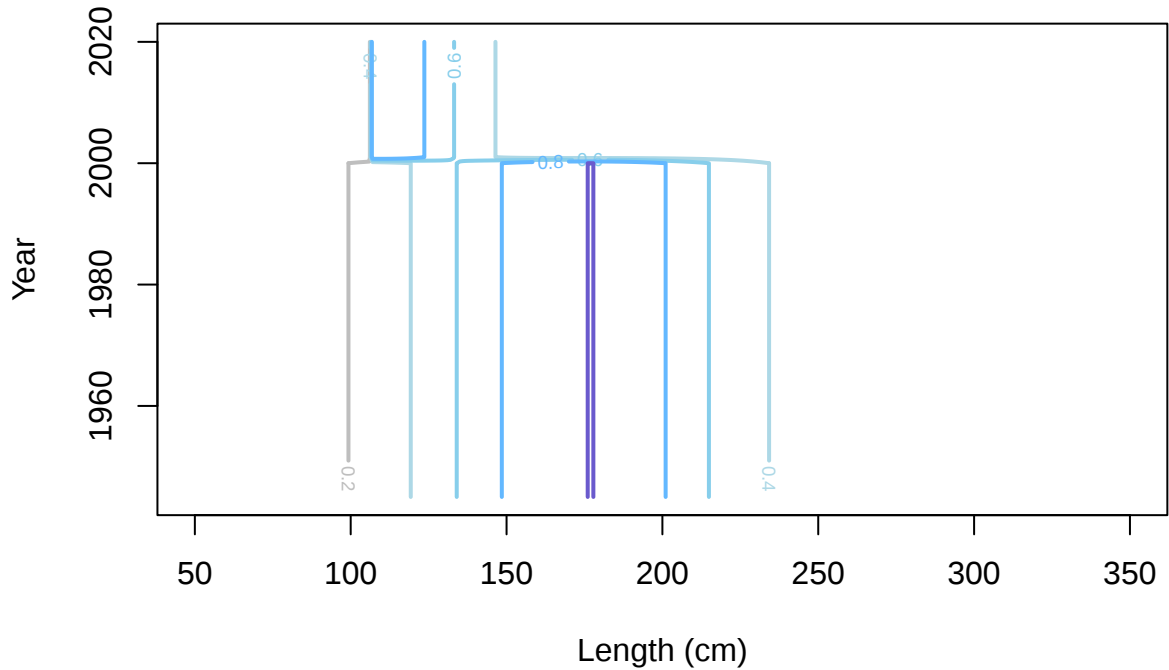
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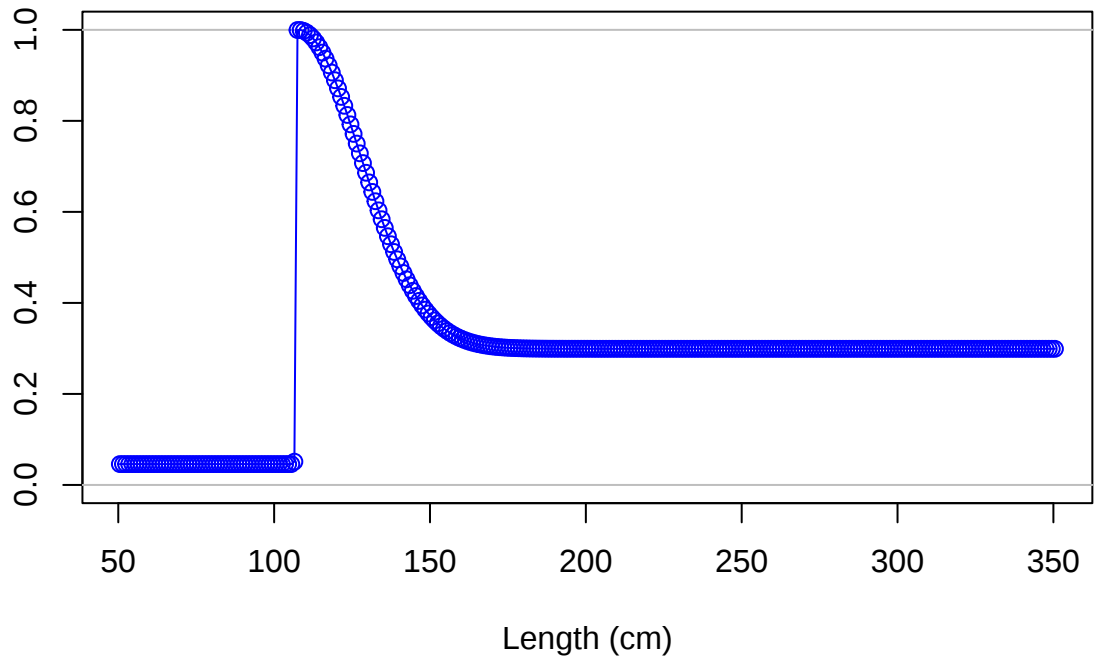
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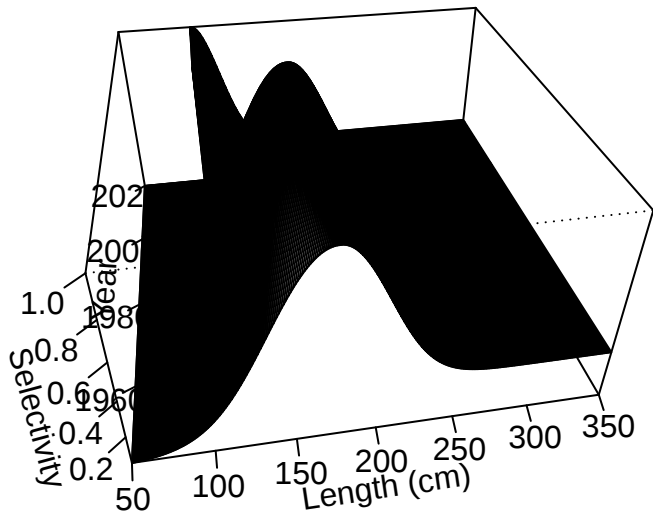


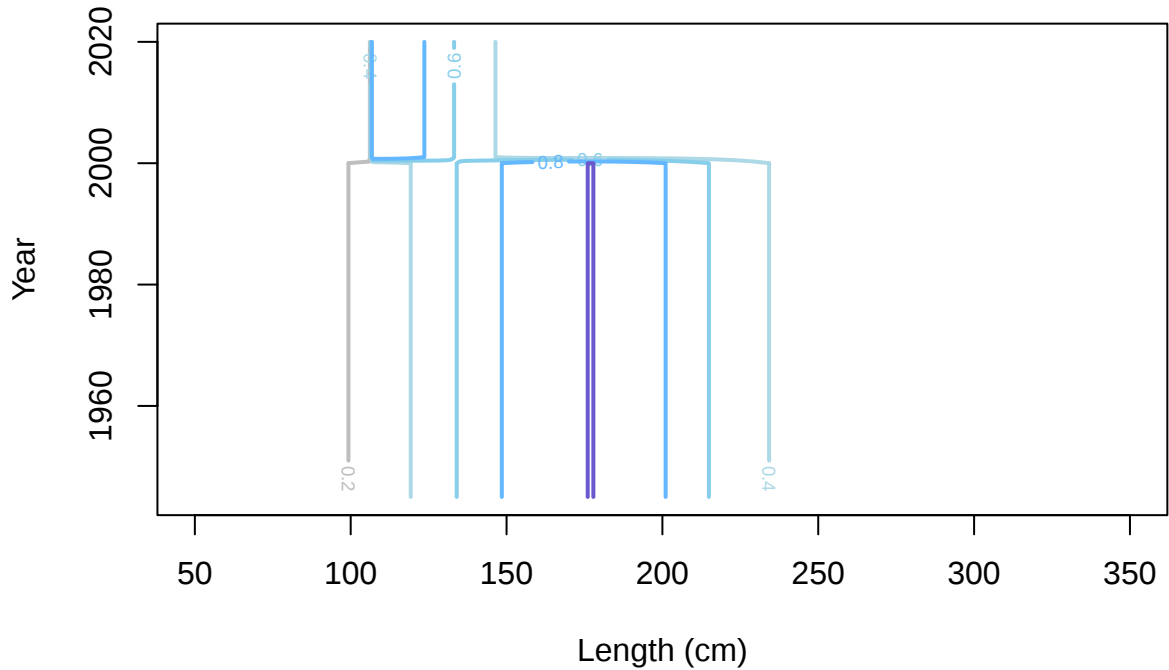




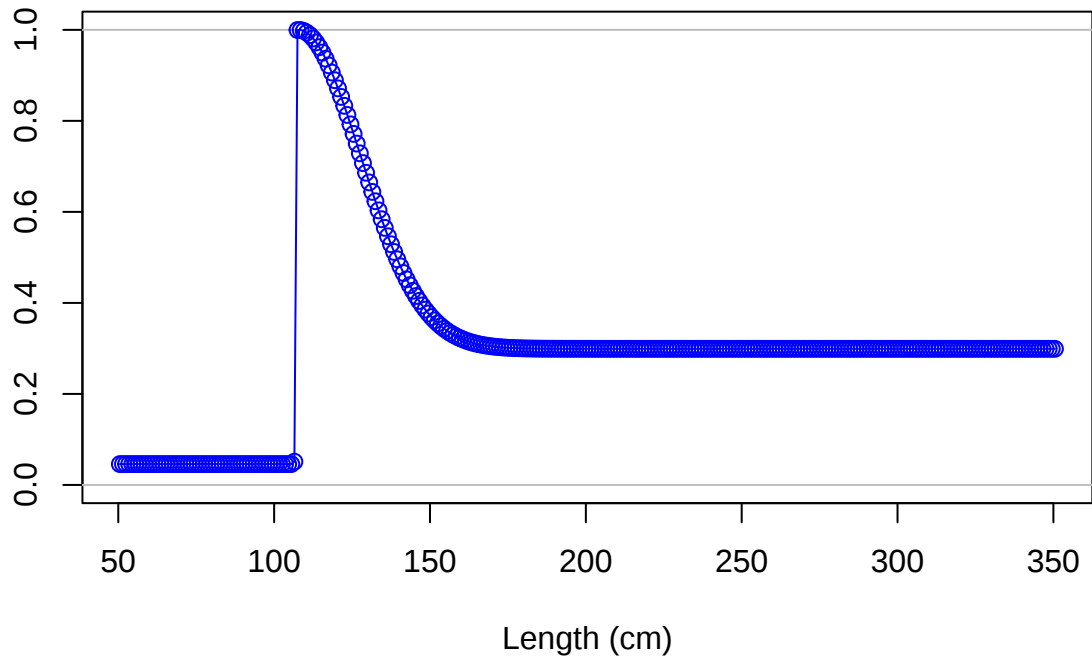
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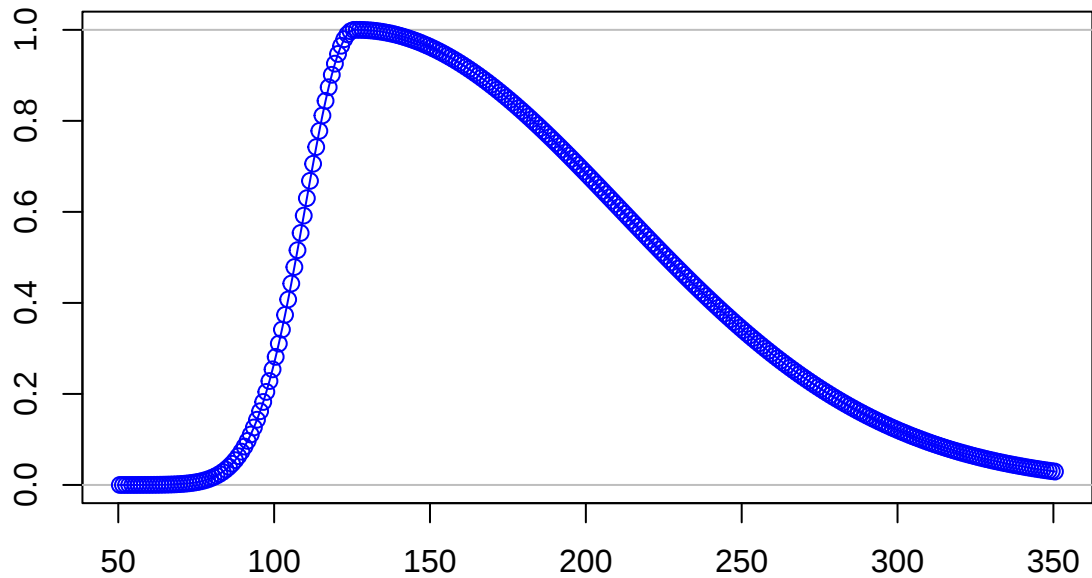




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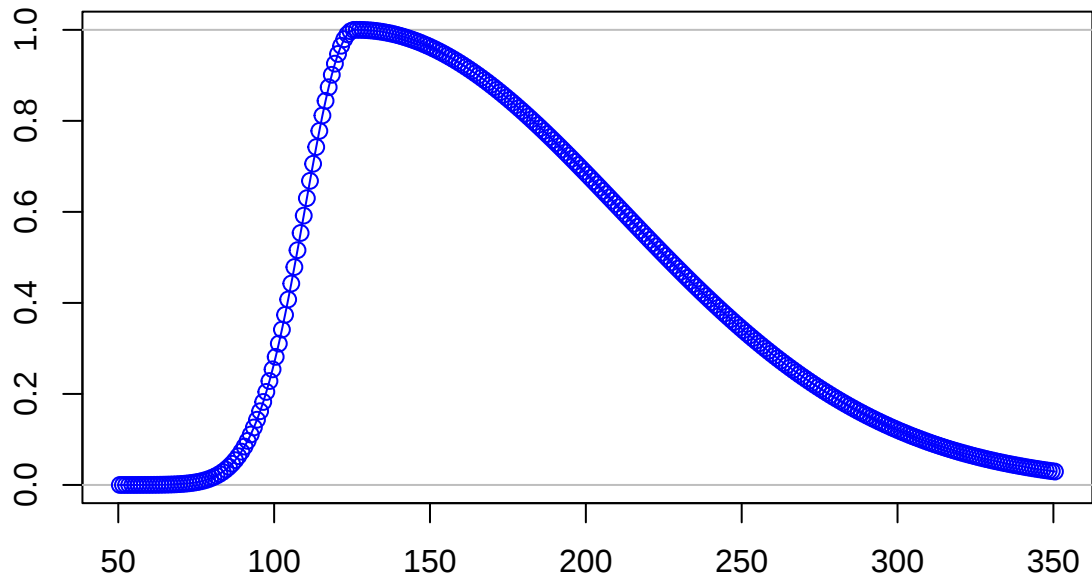


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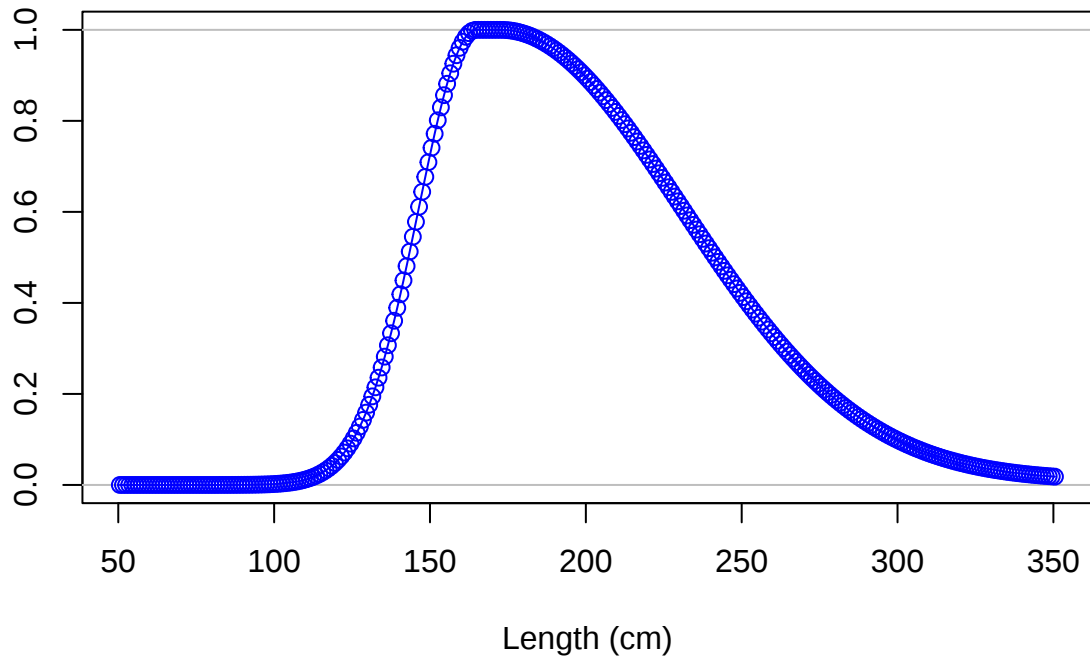
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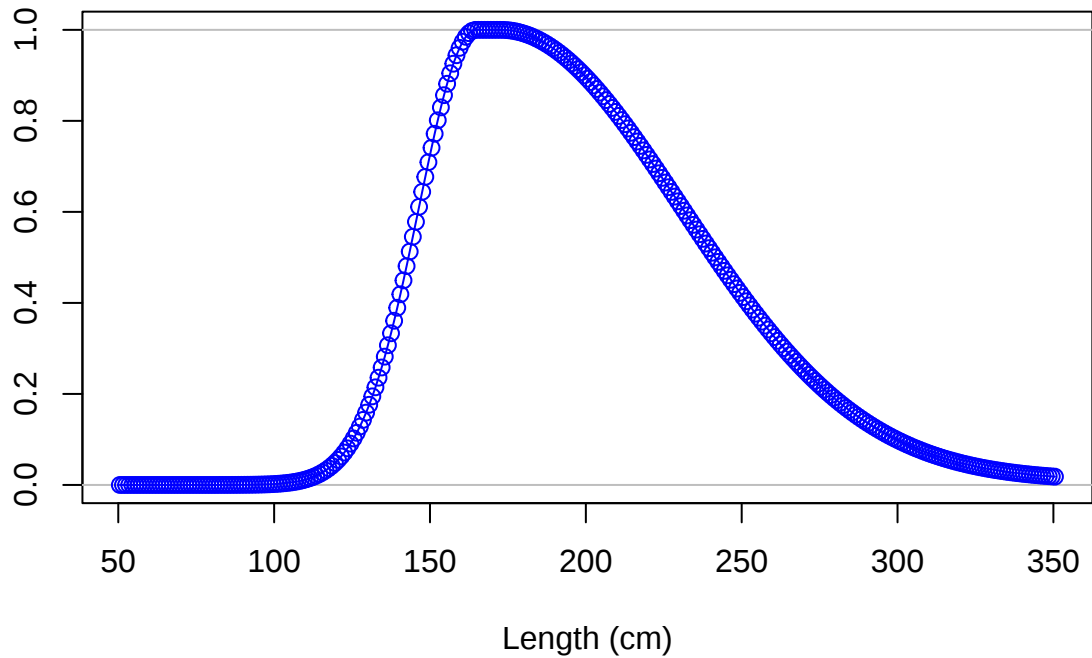


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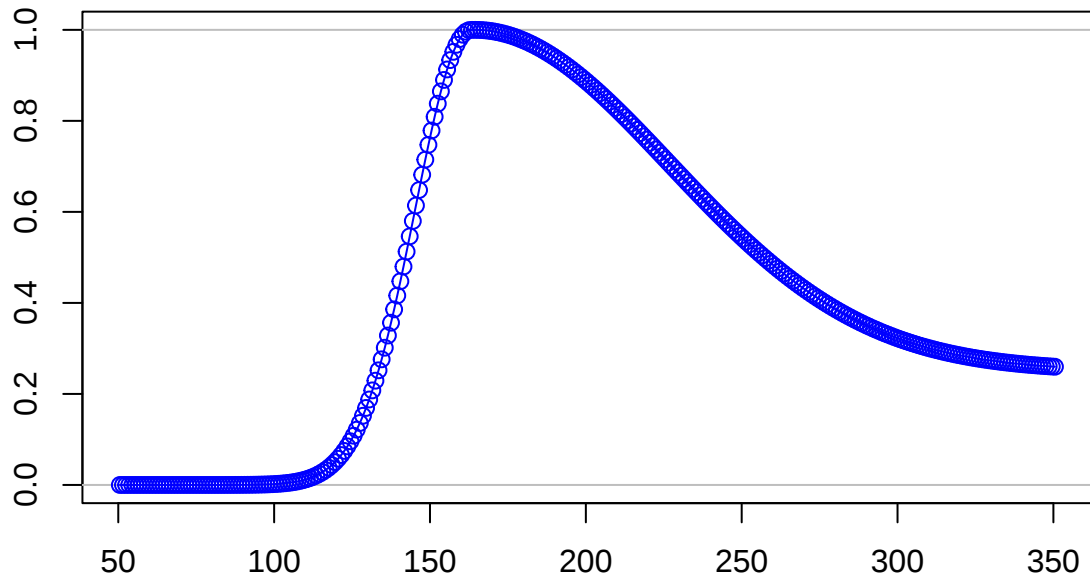
Selectivity



Selectivity

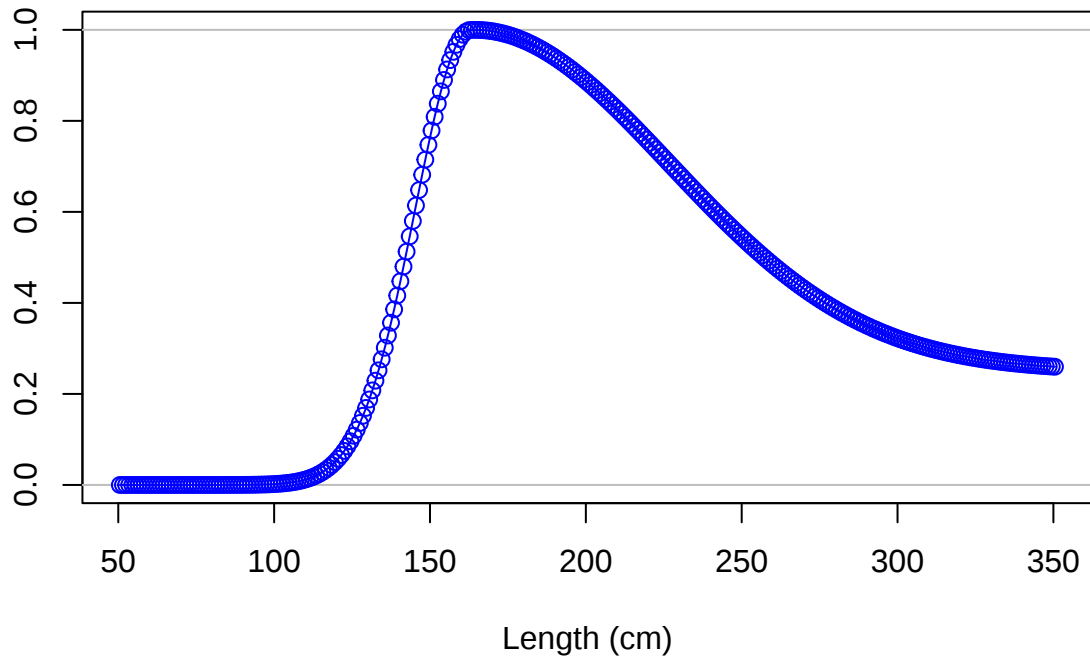


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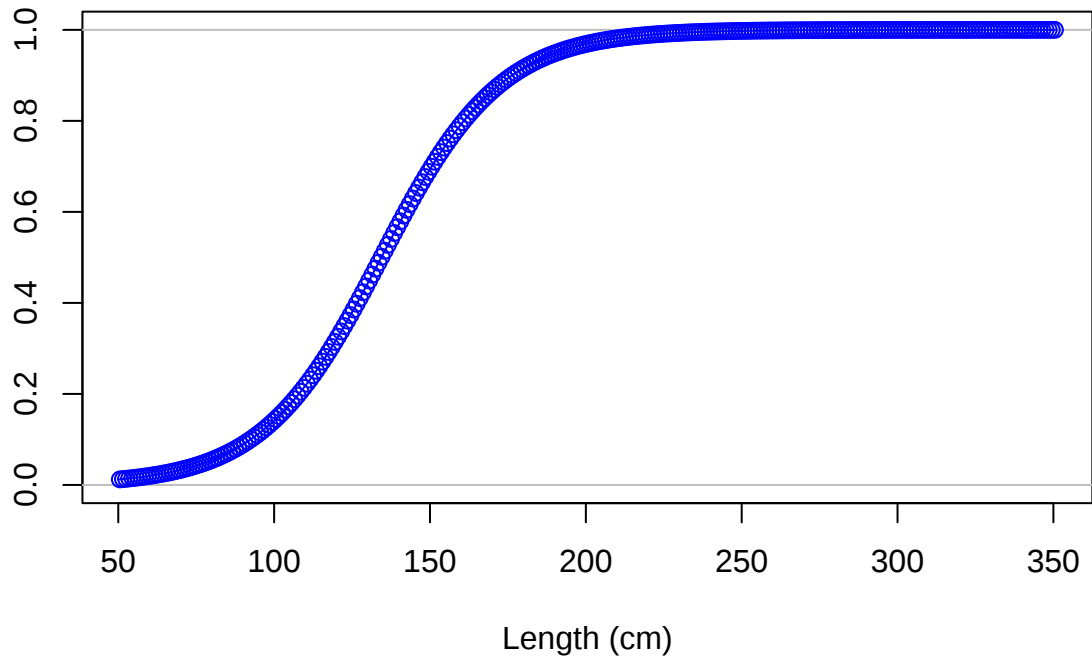


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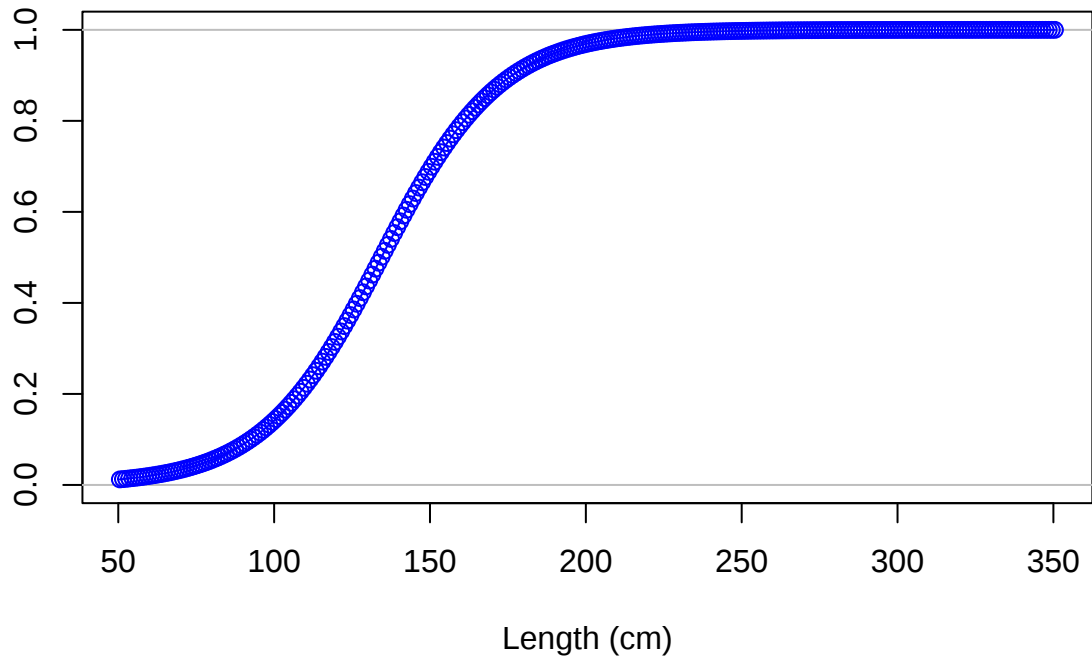
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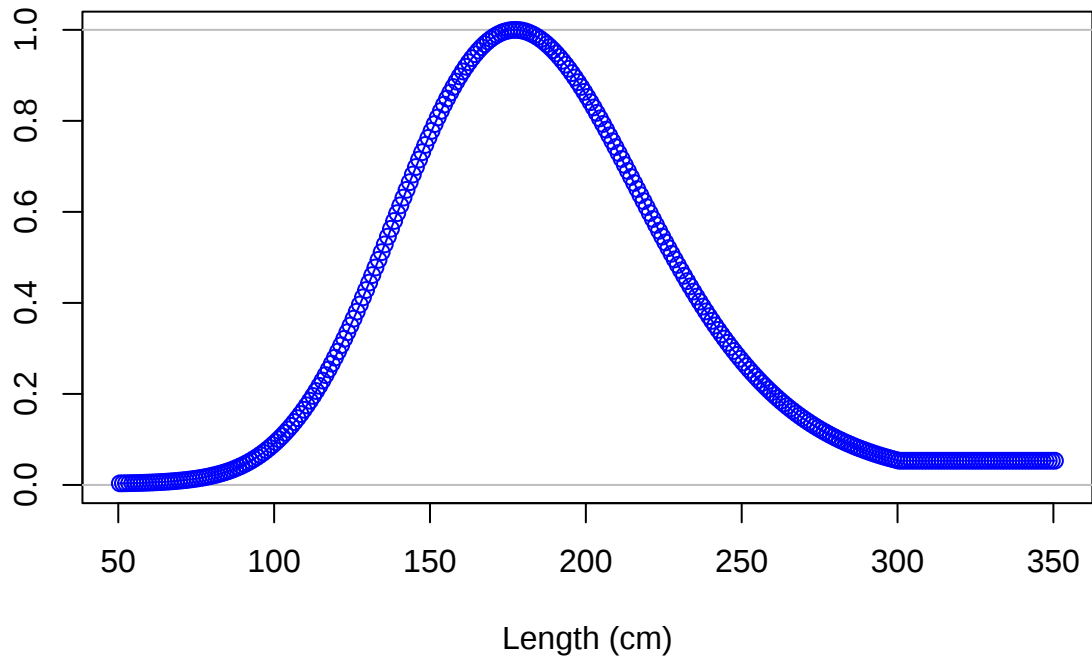
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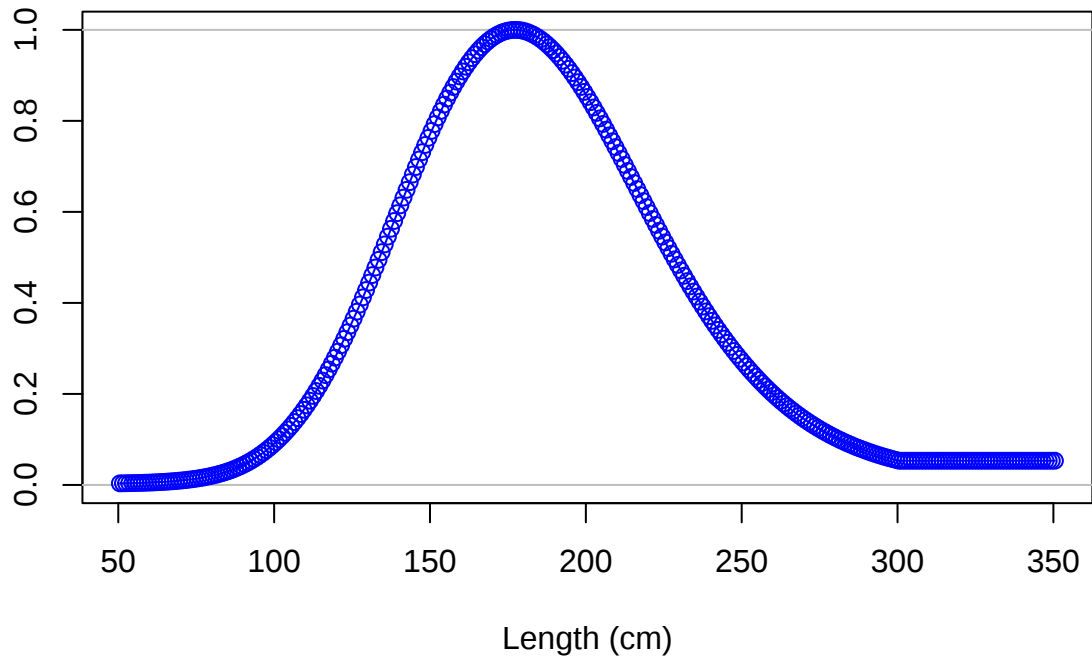
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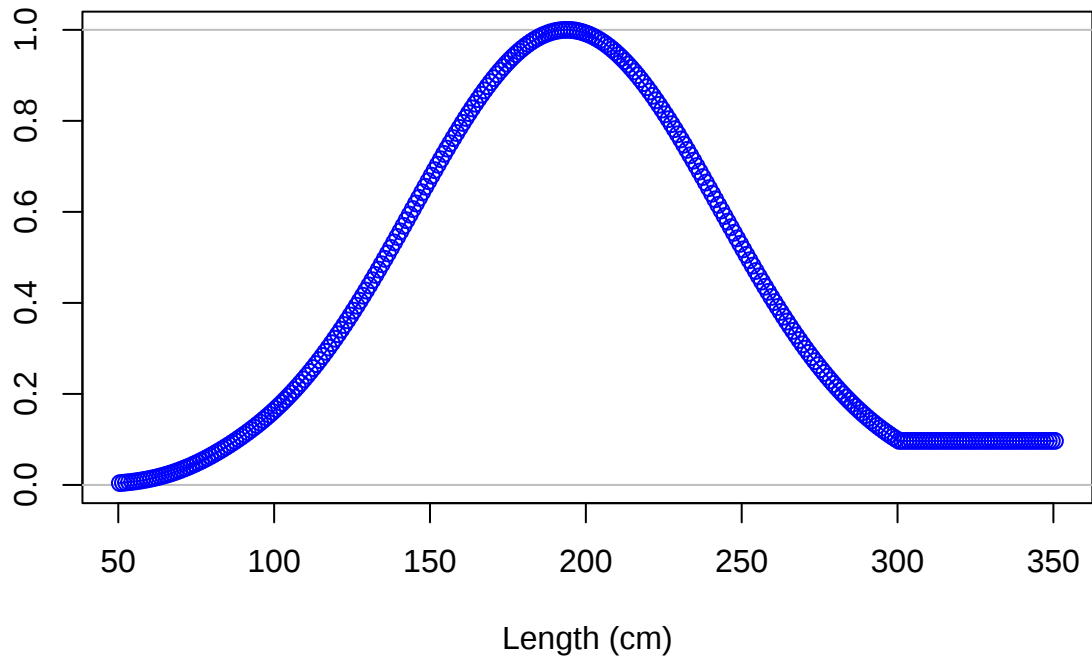
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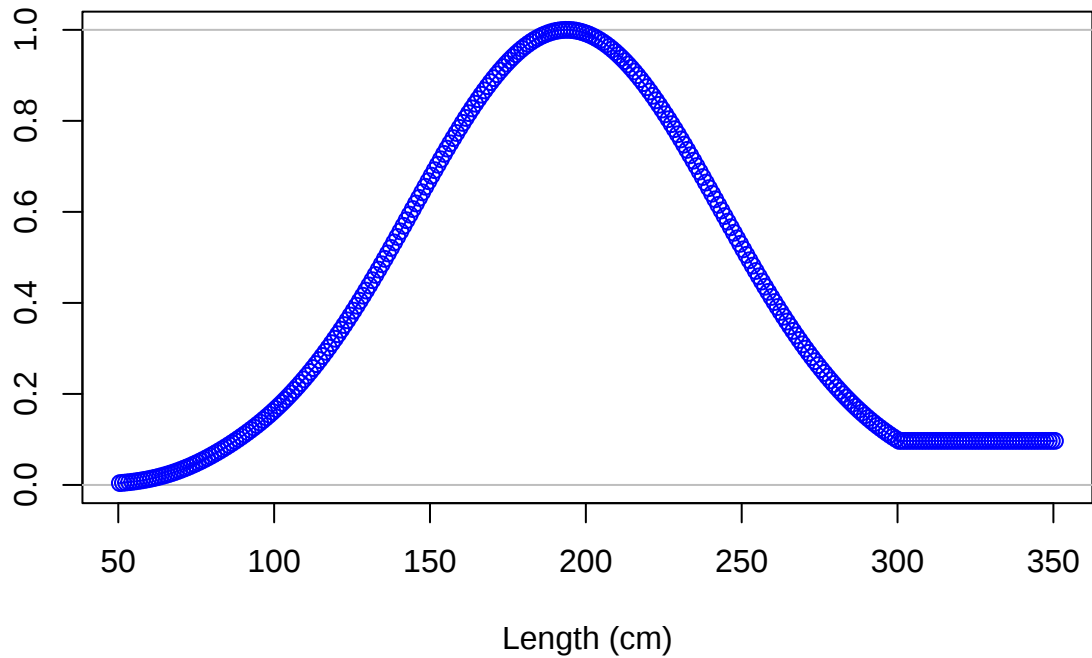
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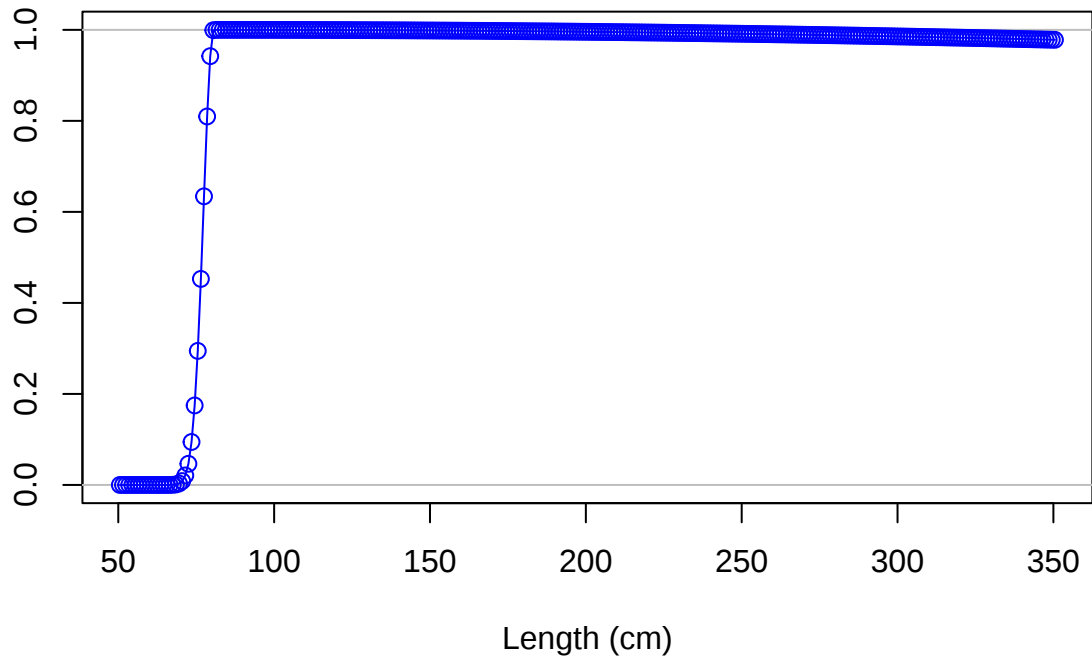
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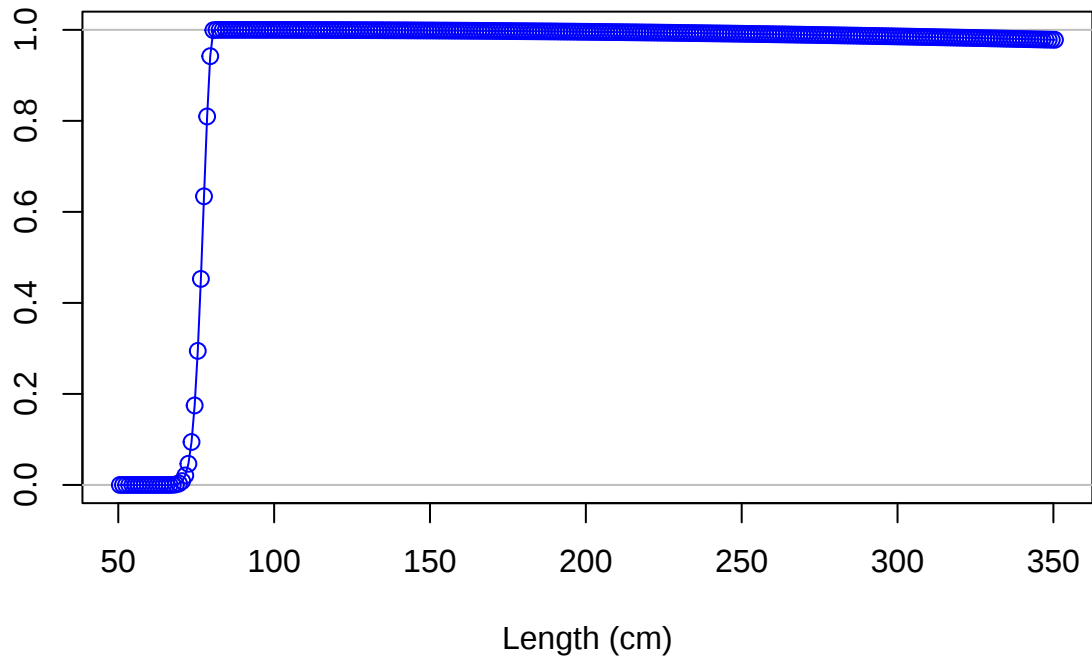
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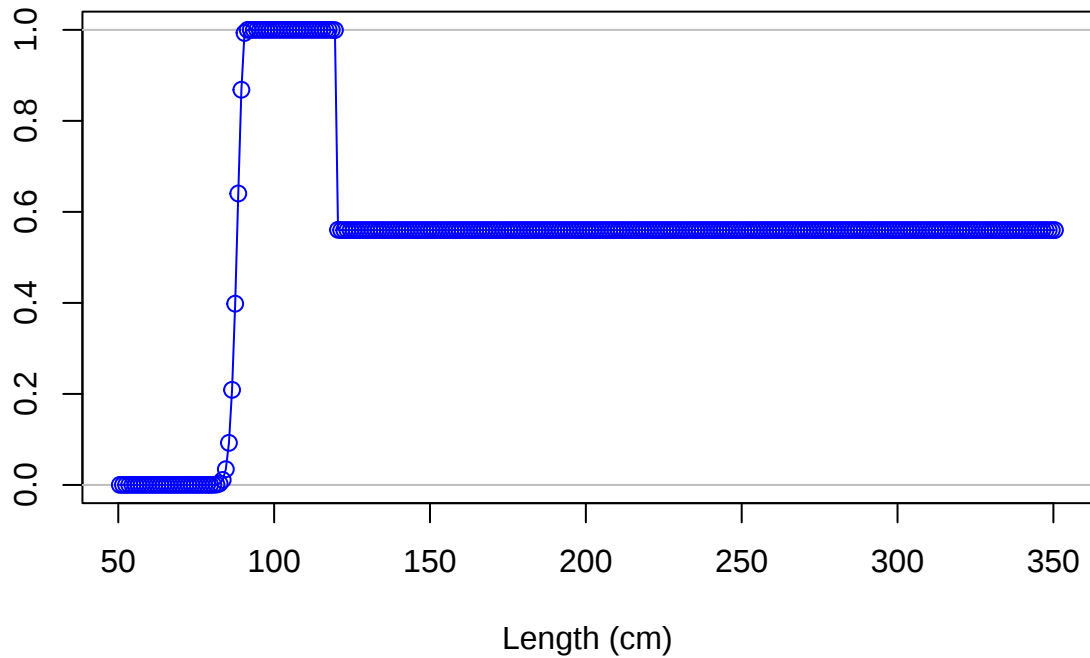
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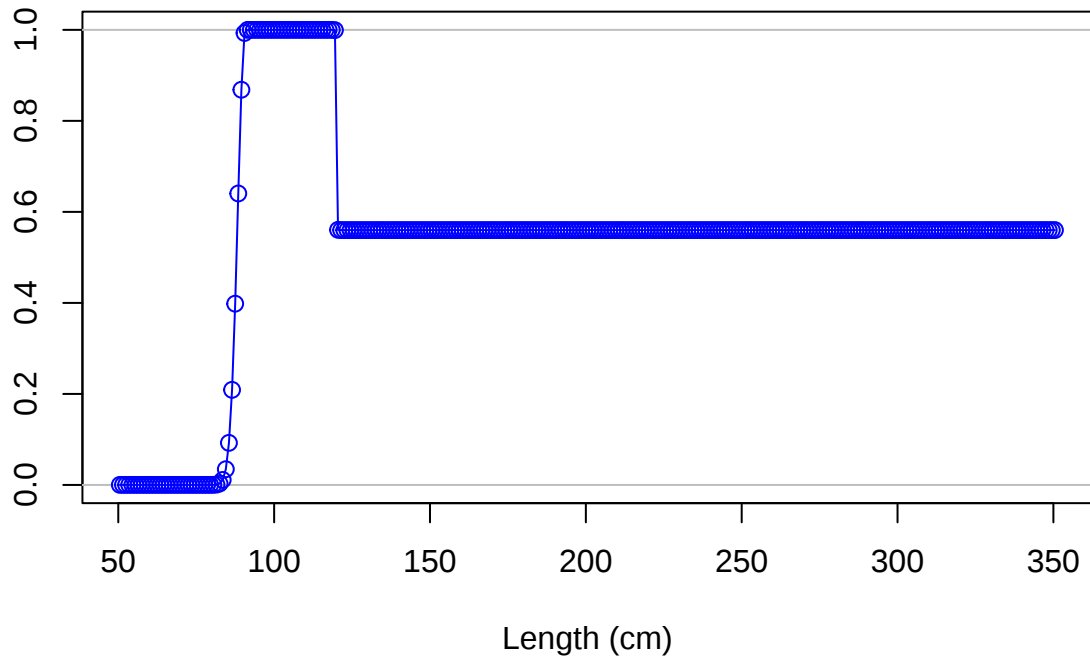
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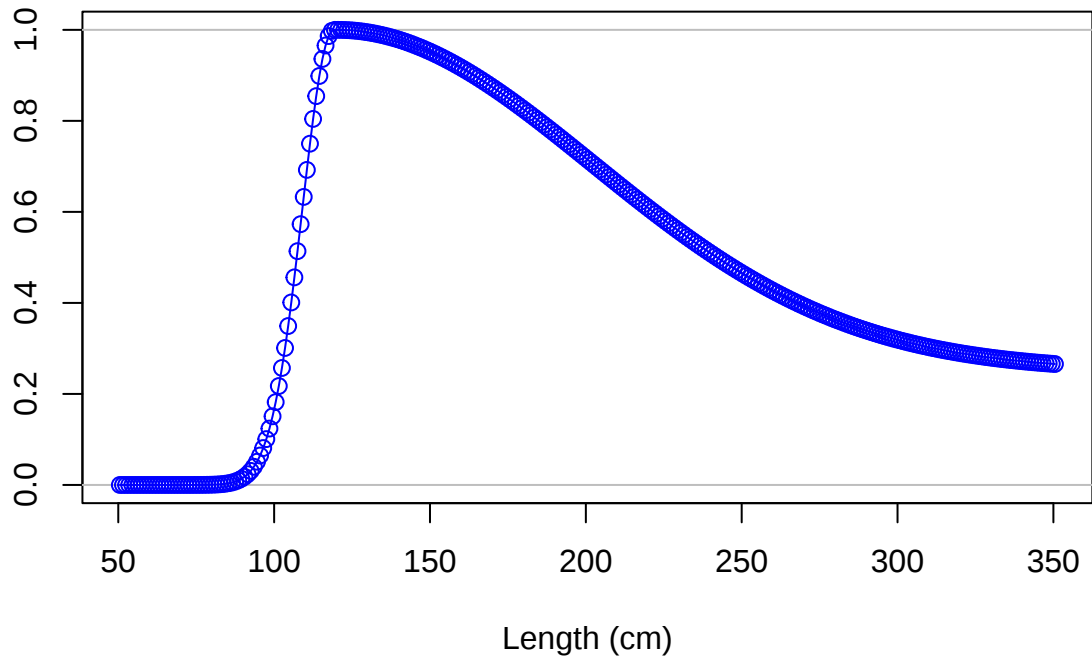
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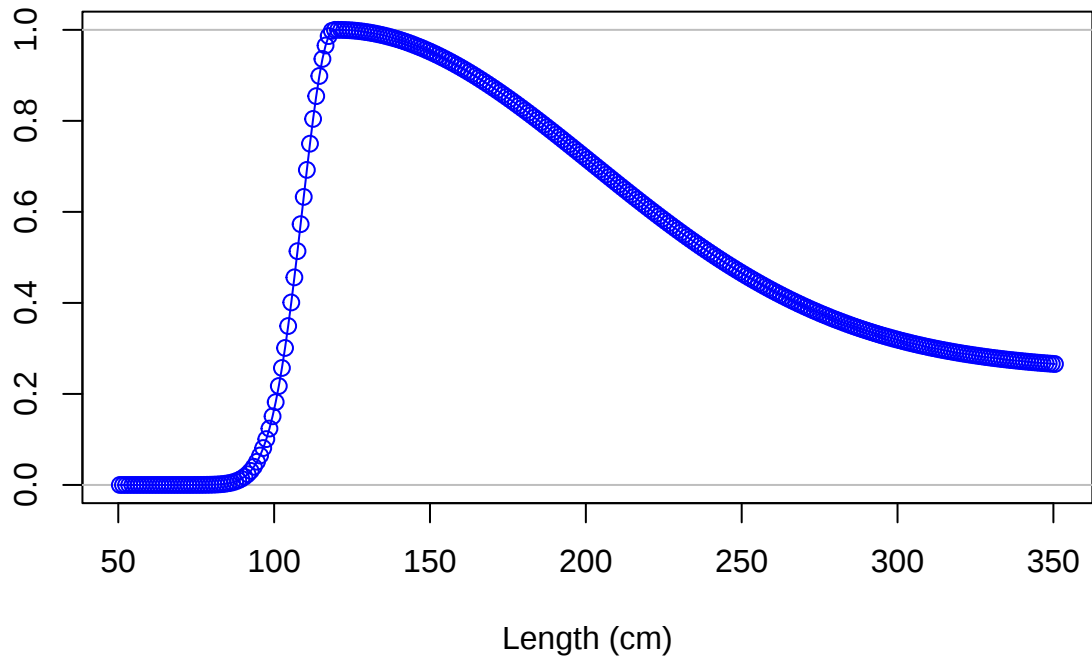
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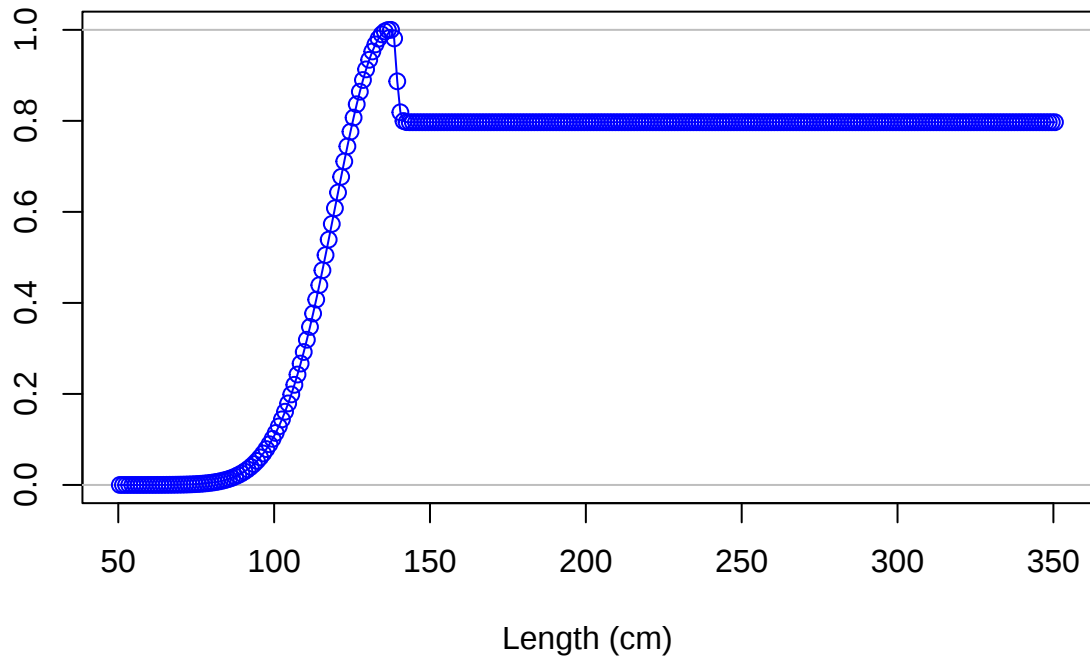
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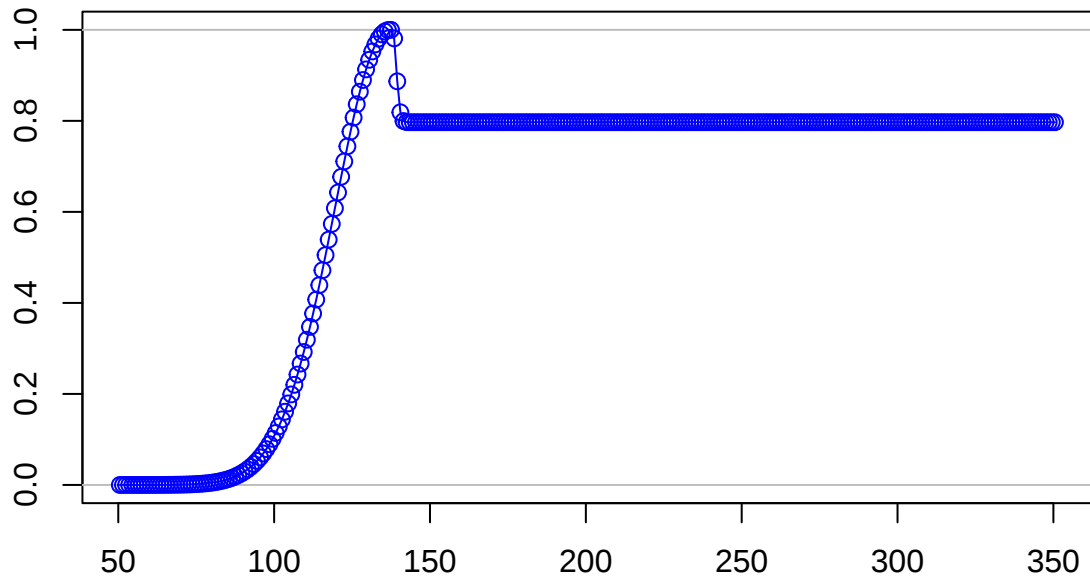
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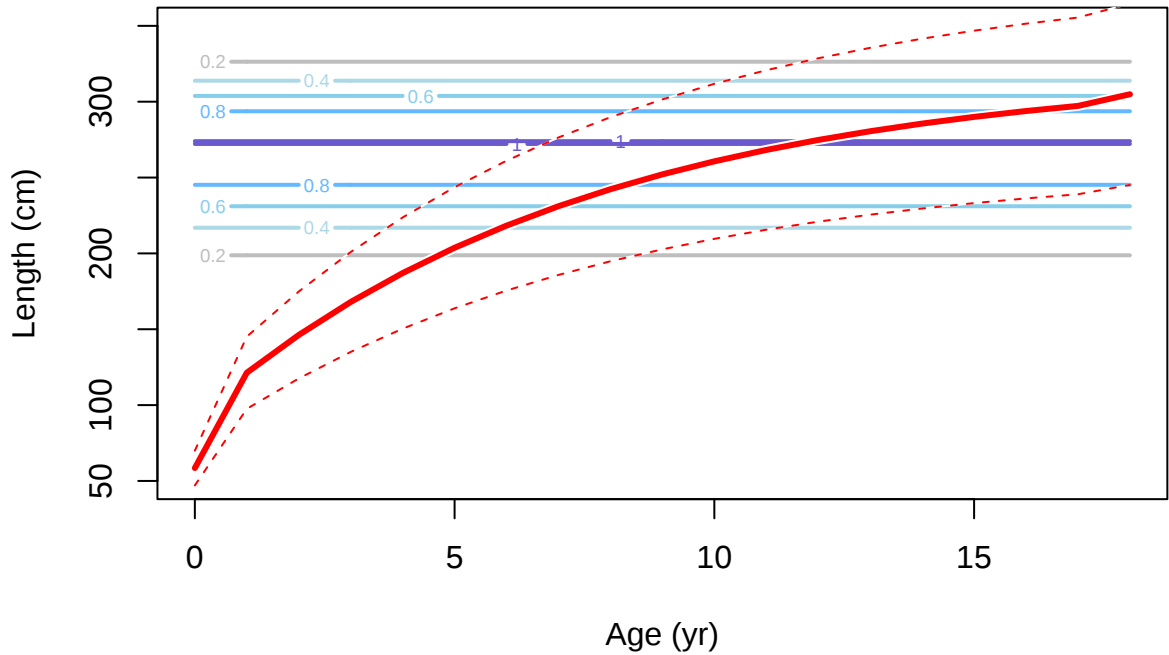
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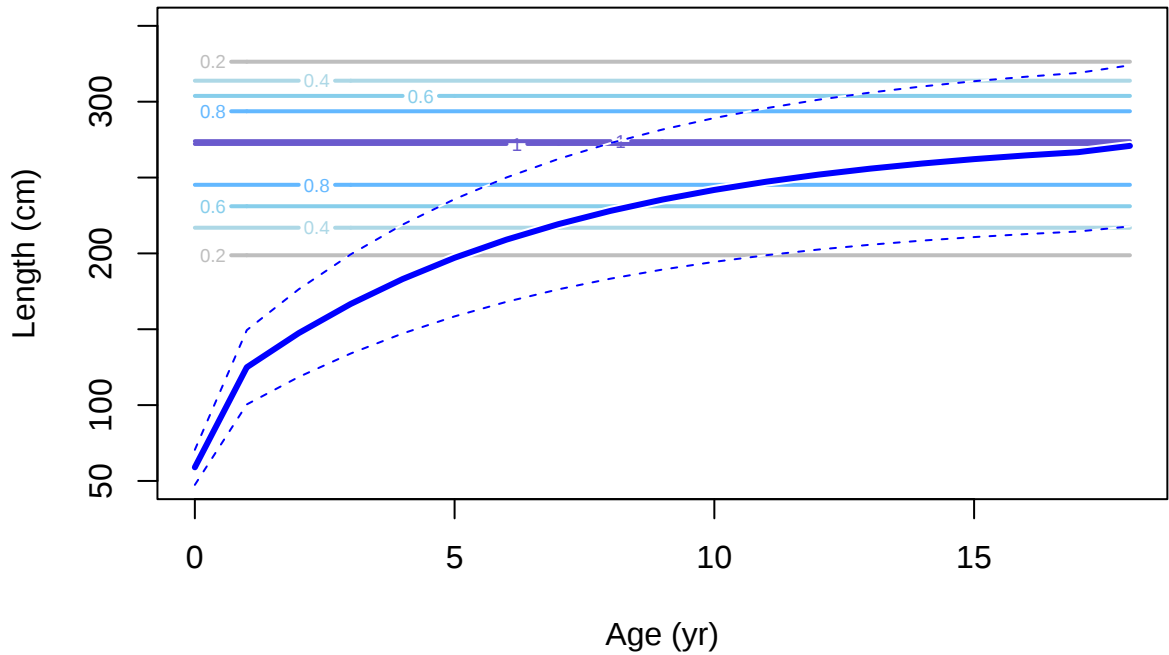


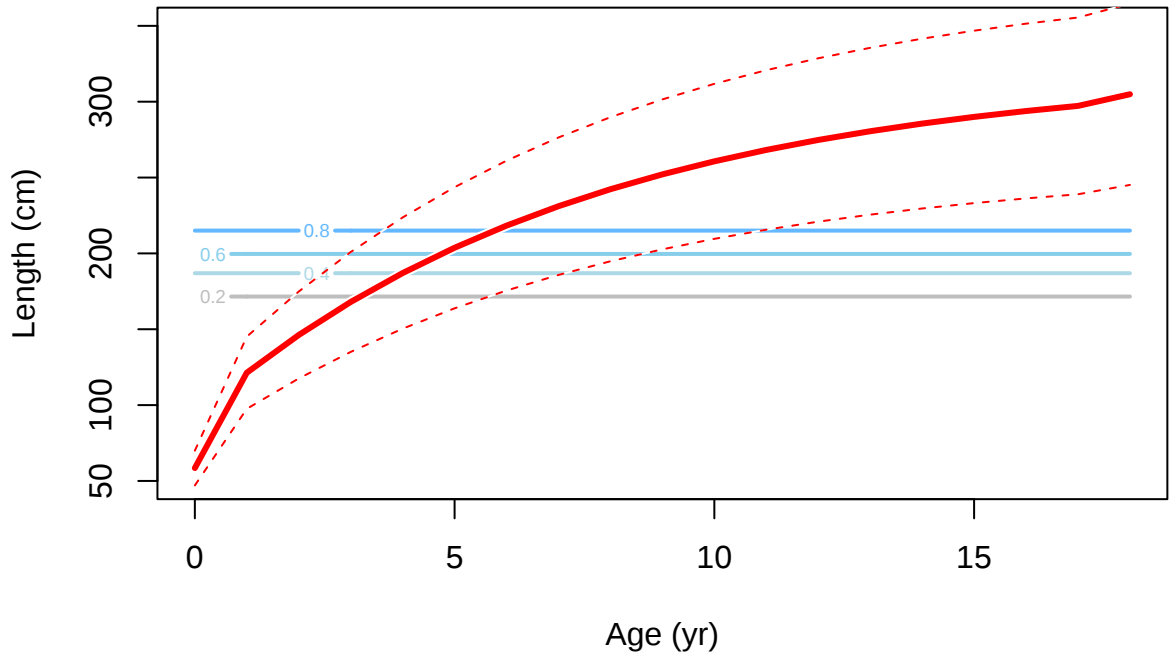
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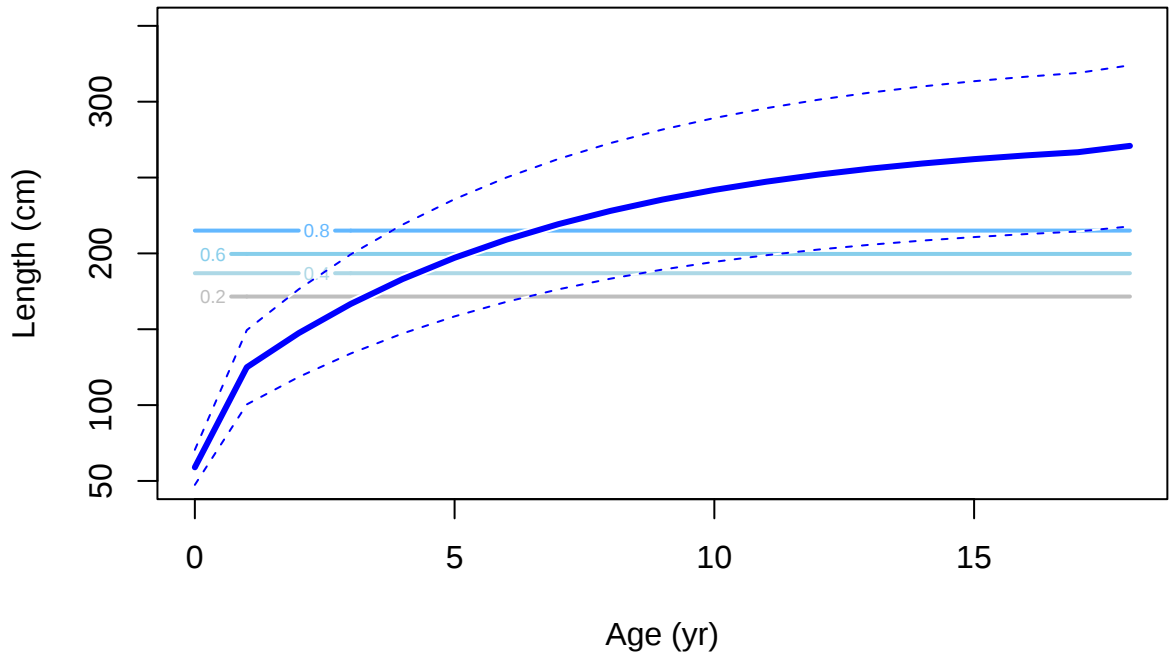


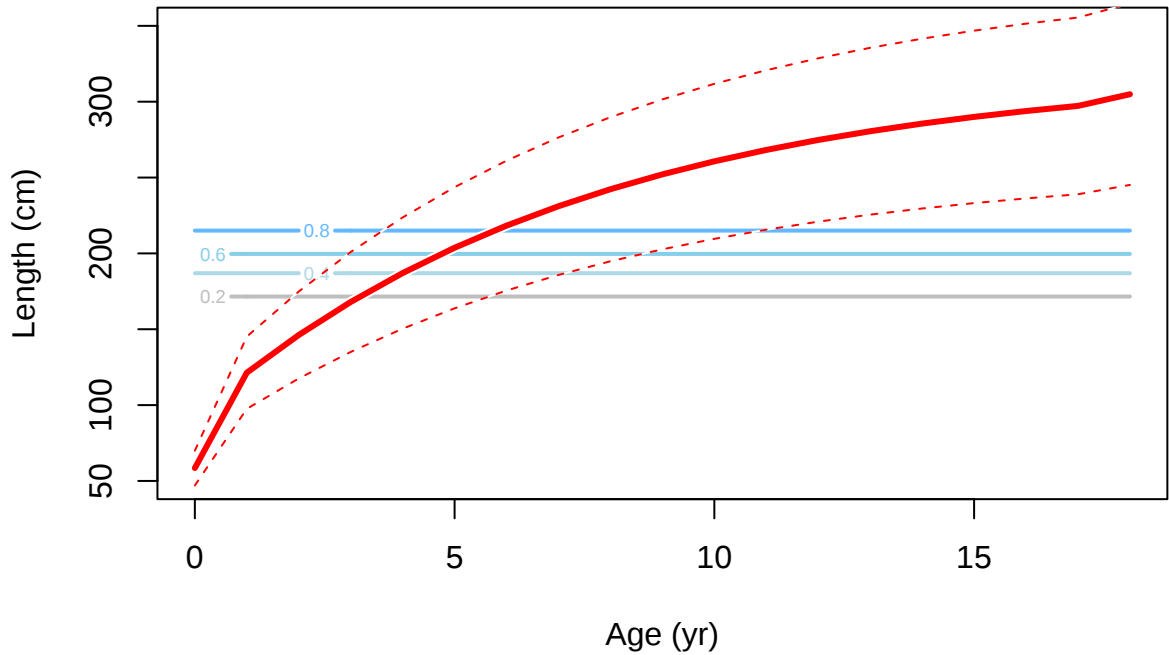
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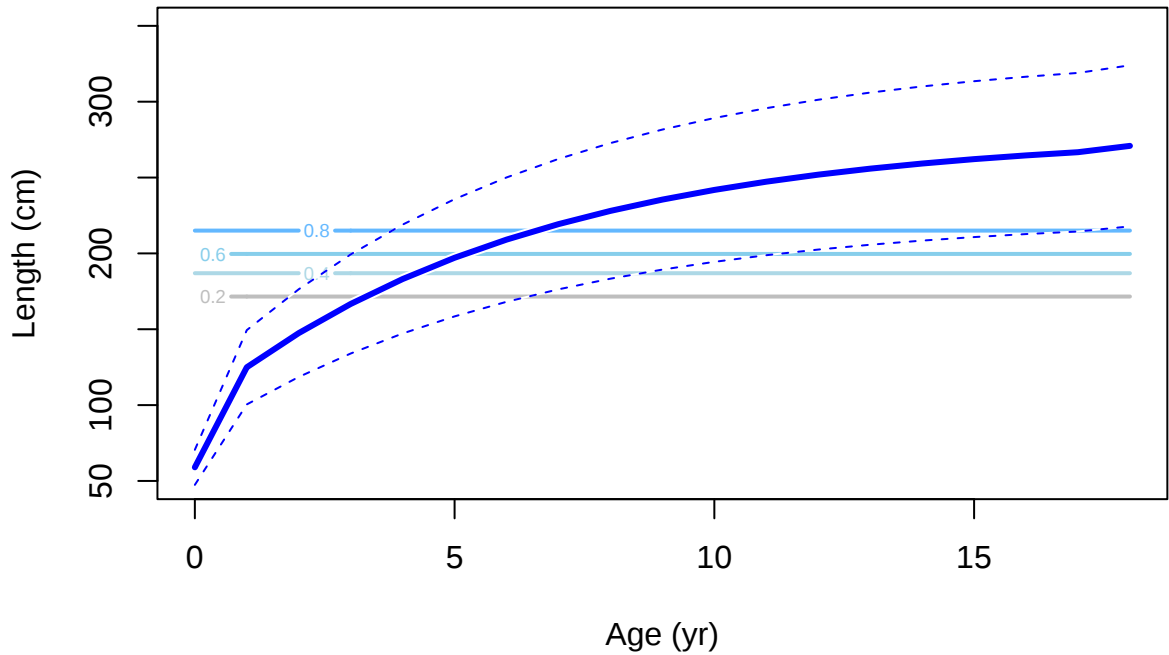


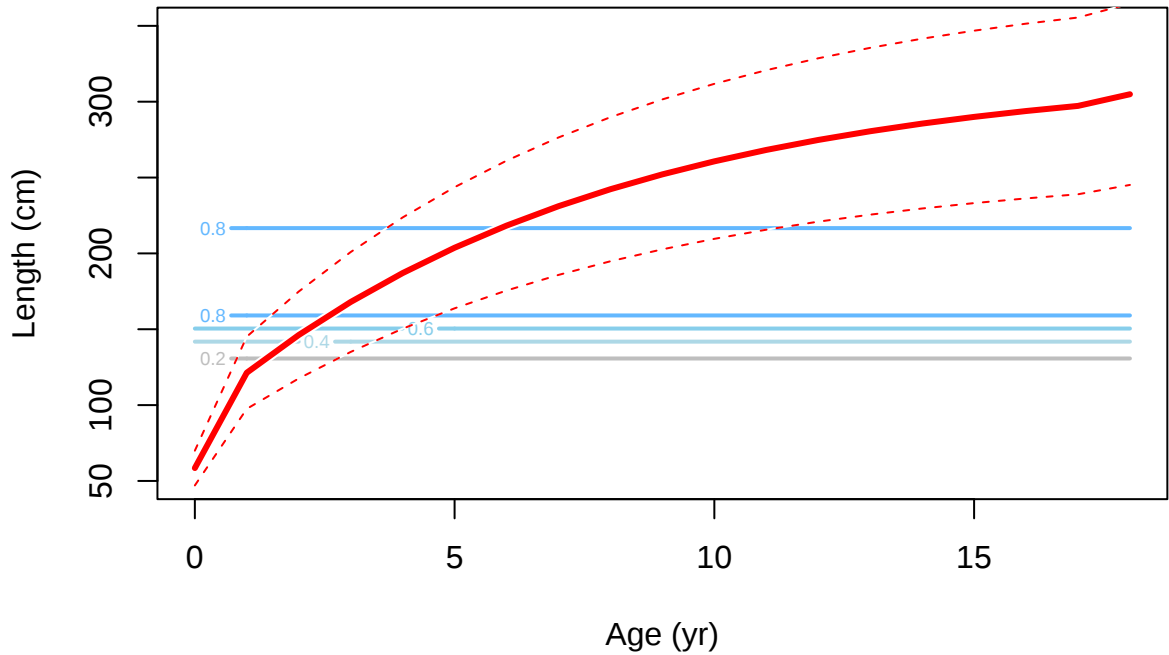


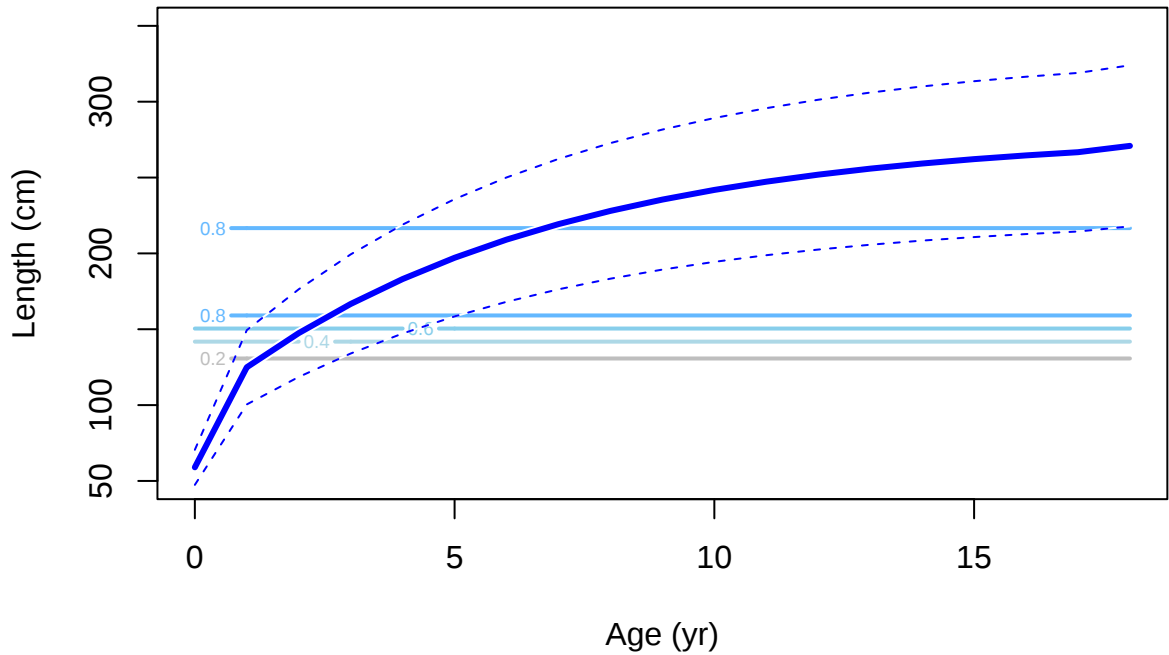


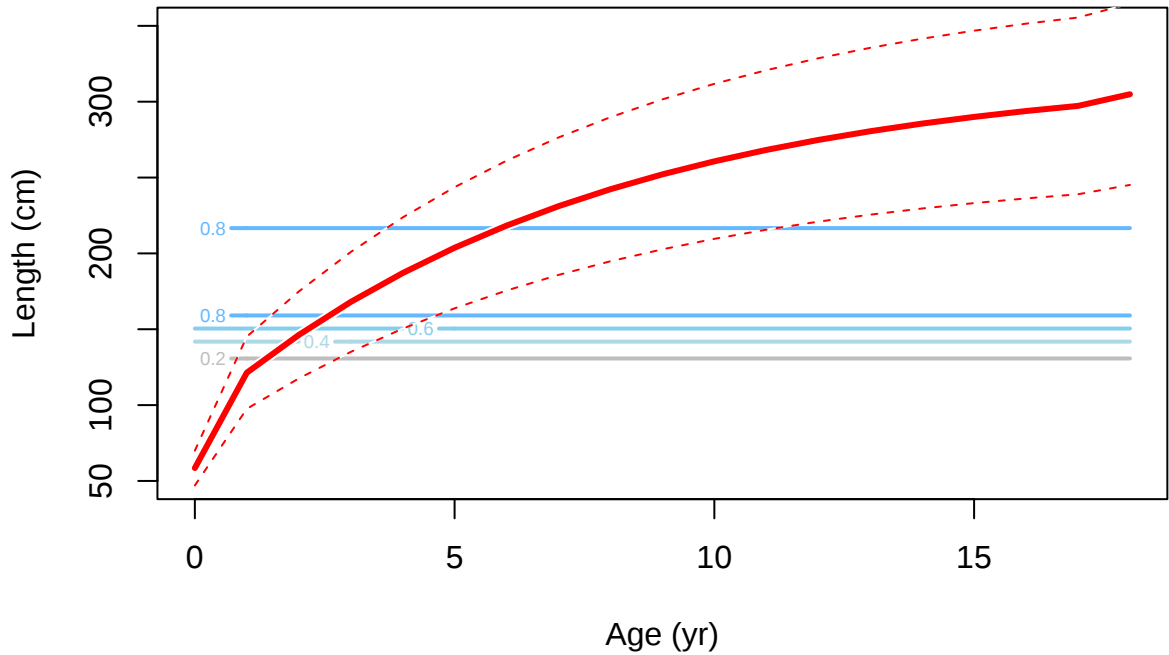


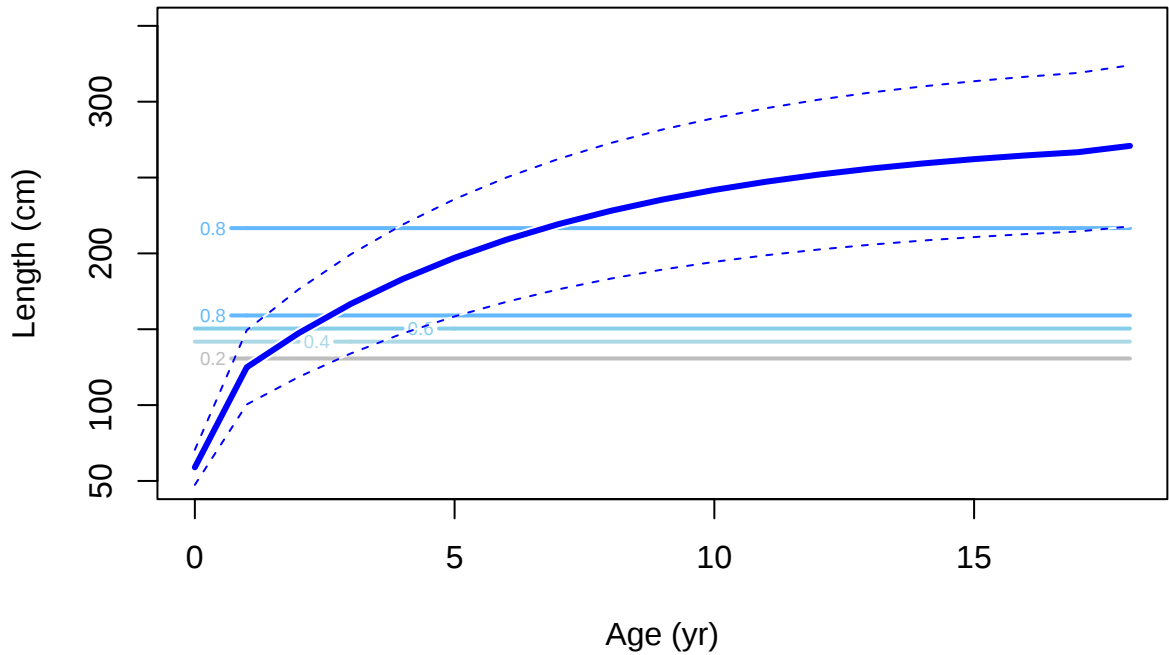


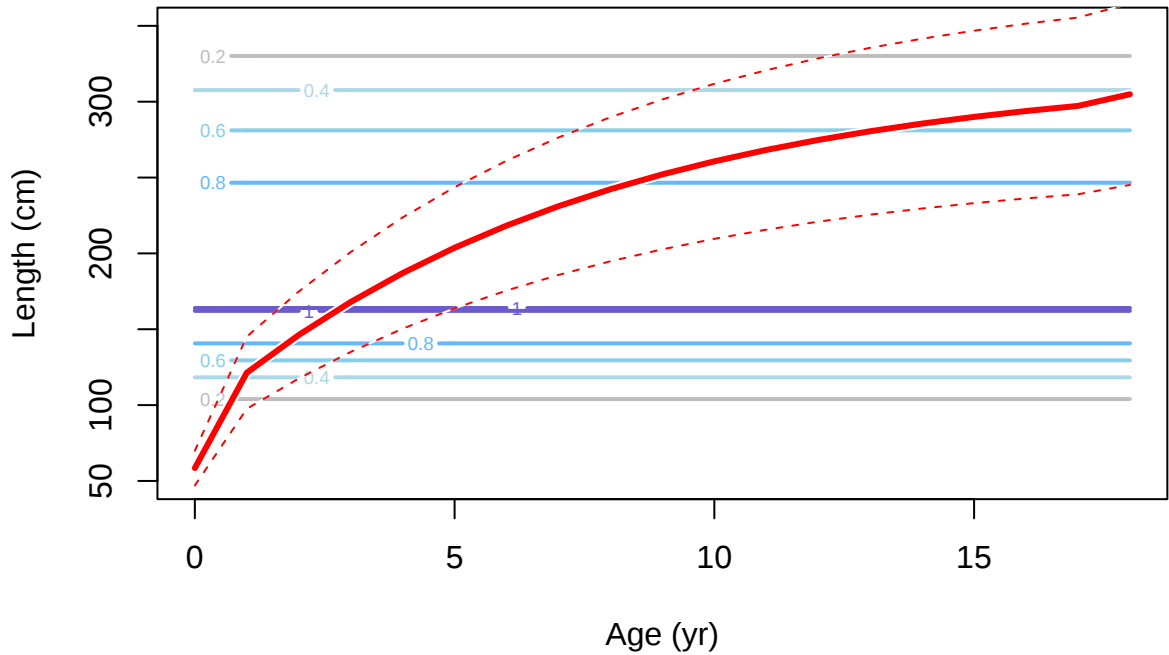


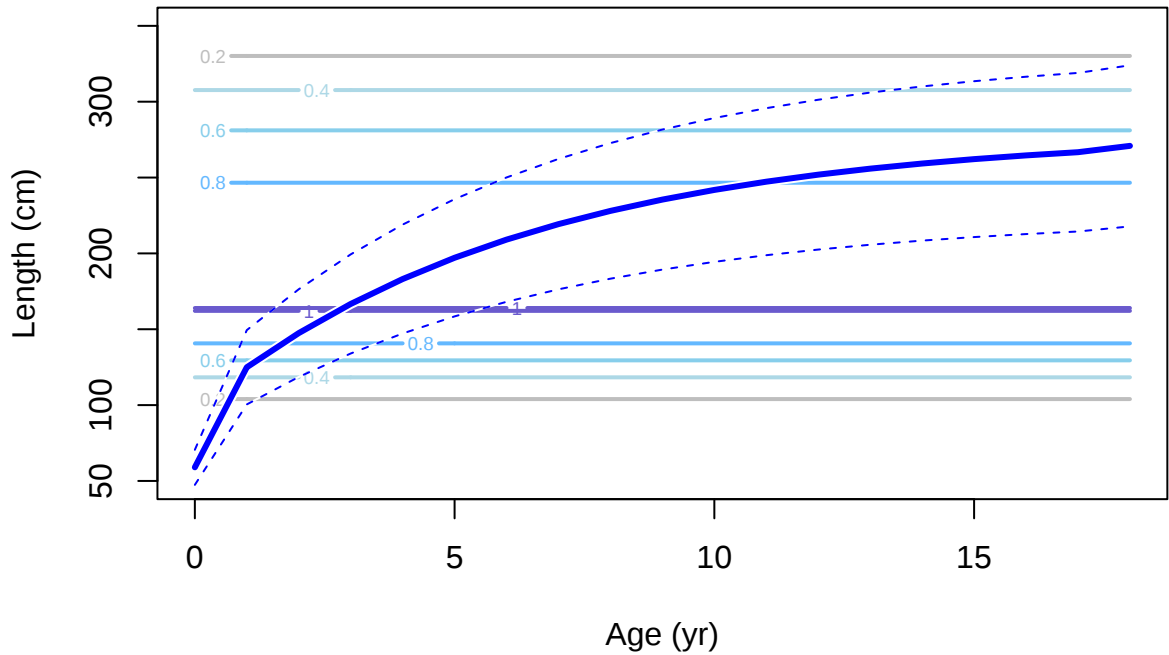


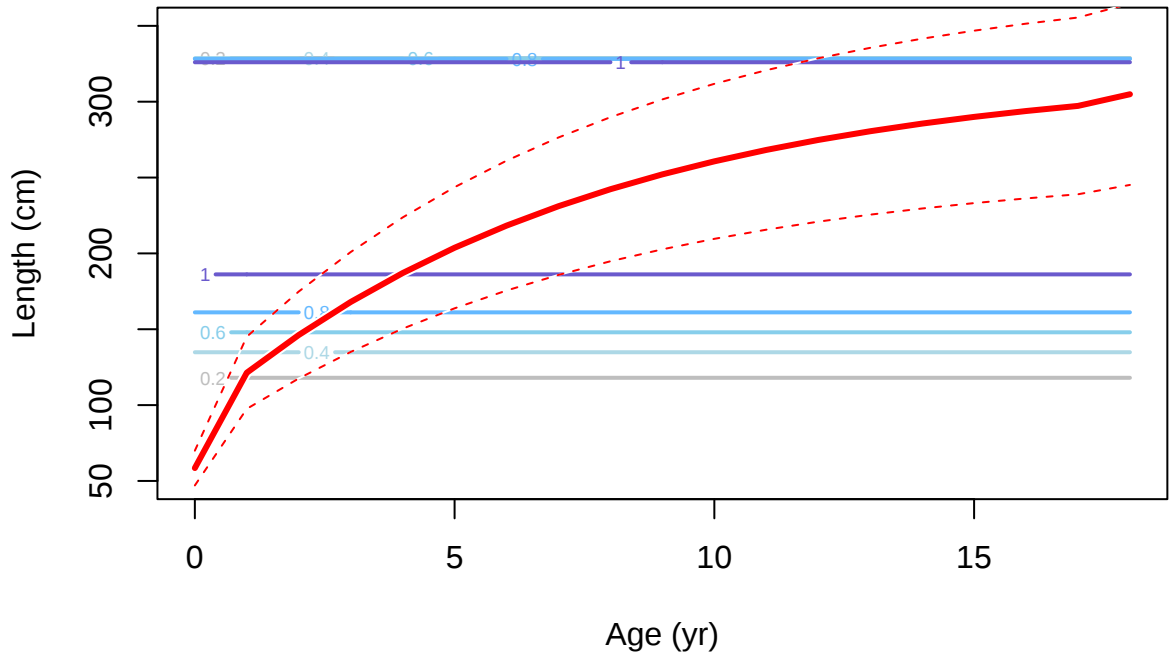


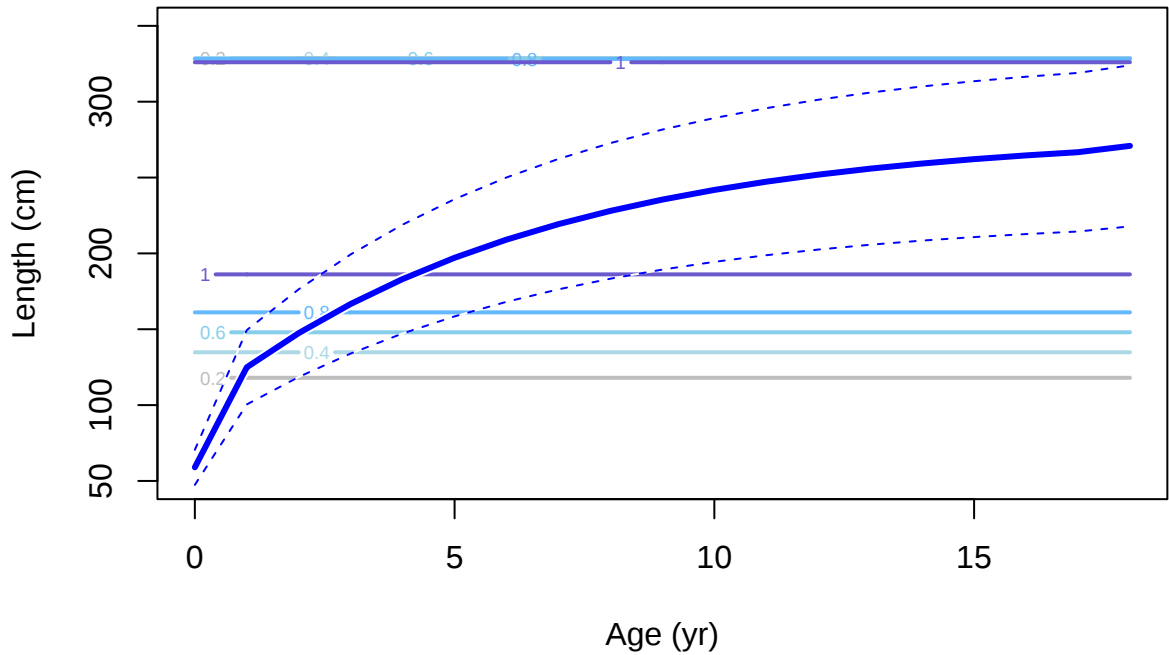


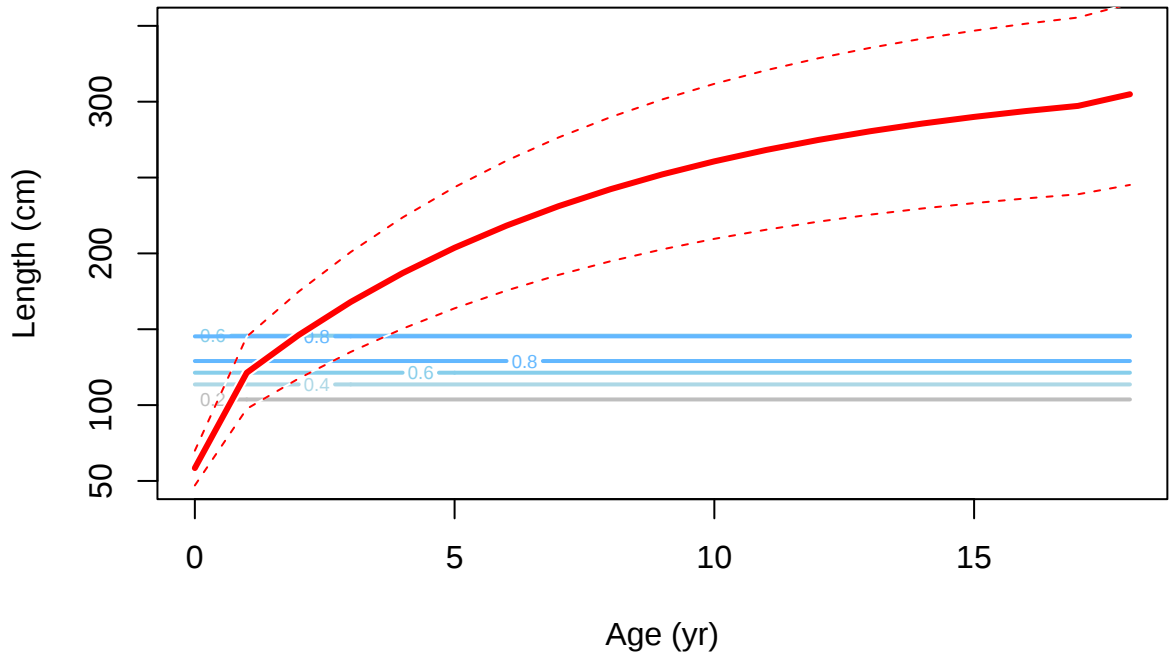


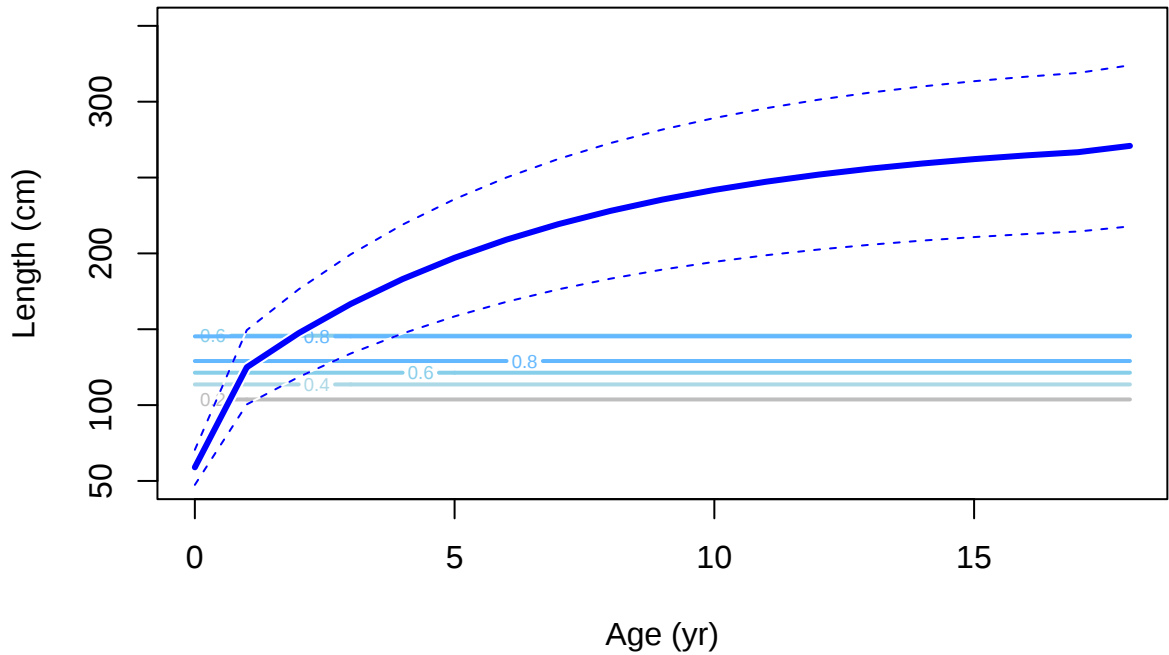


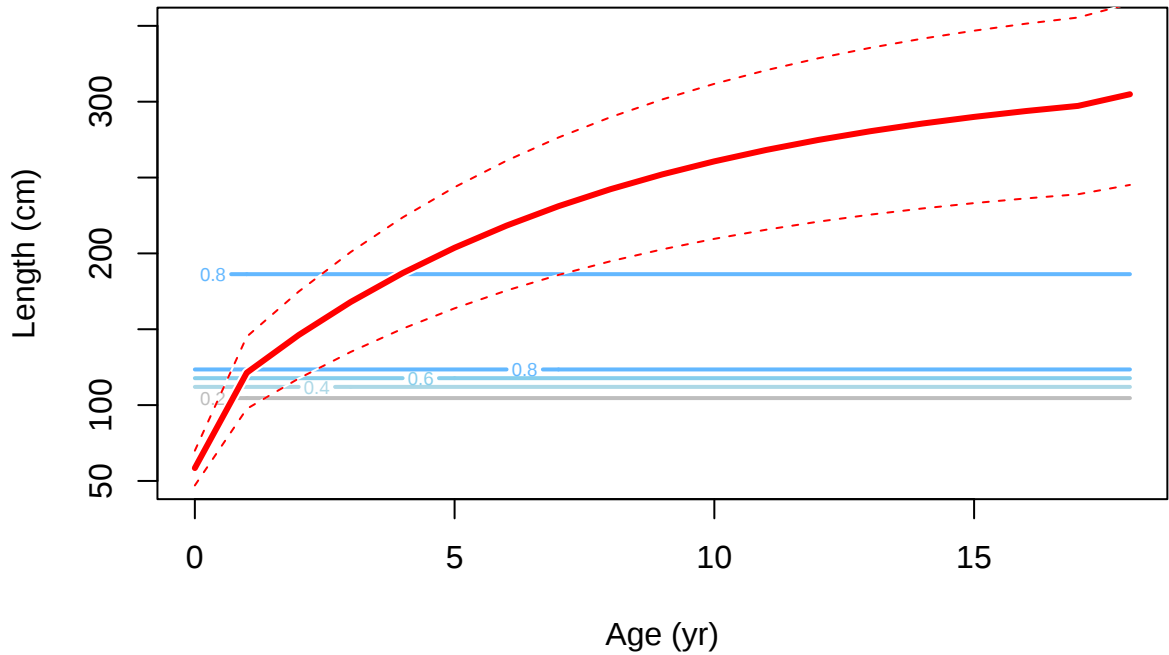


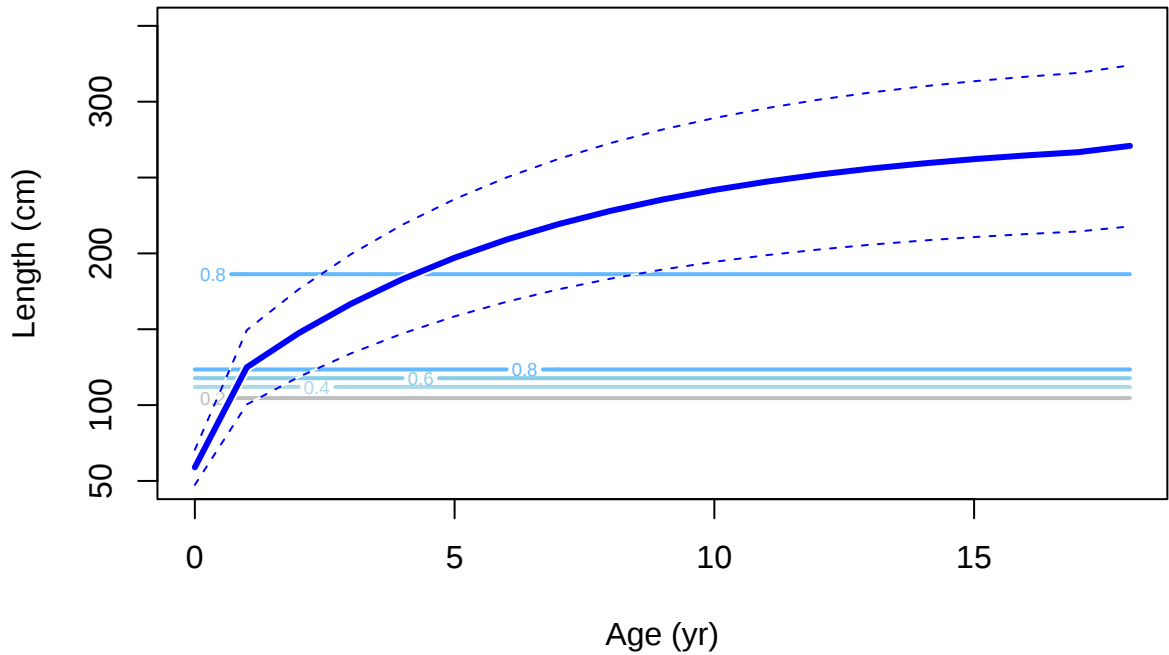


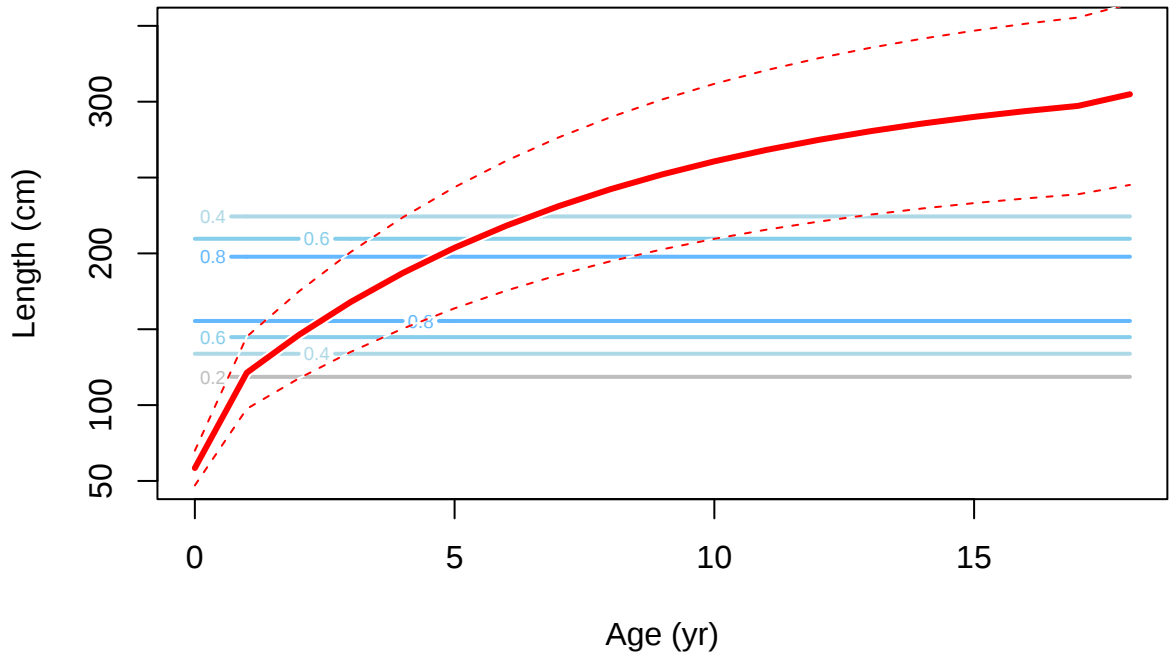


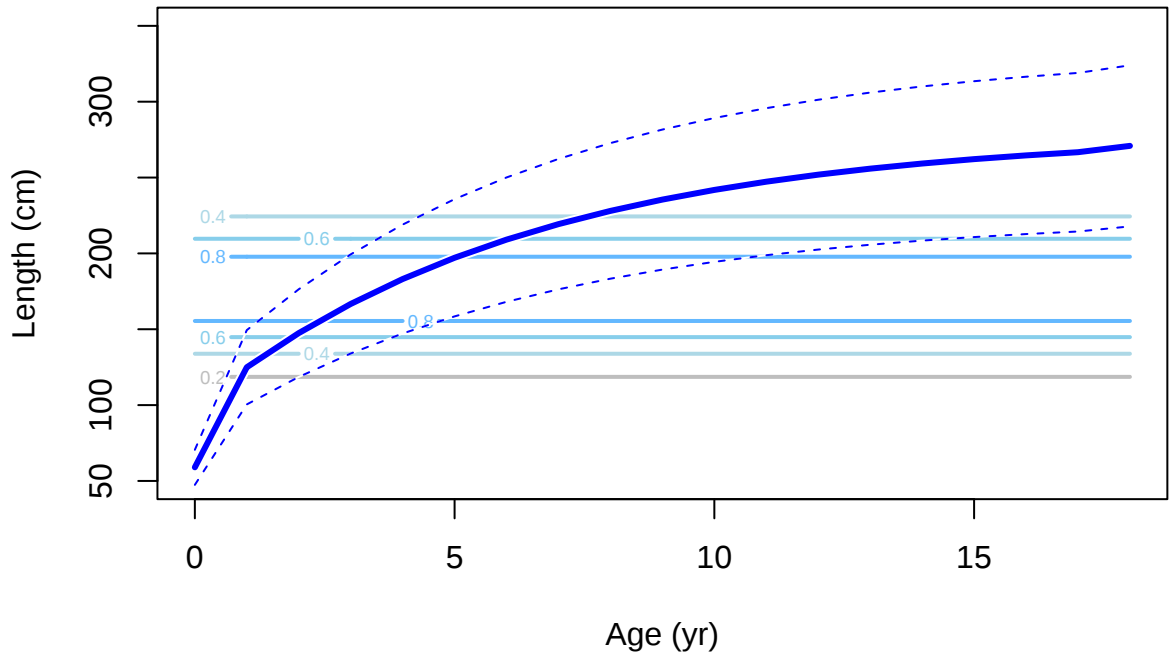


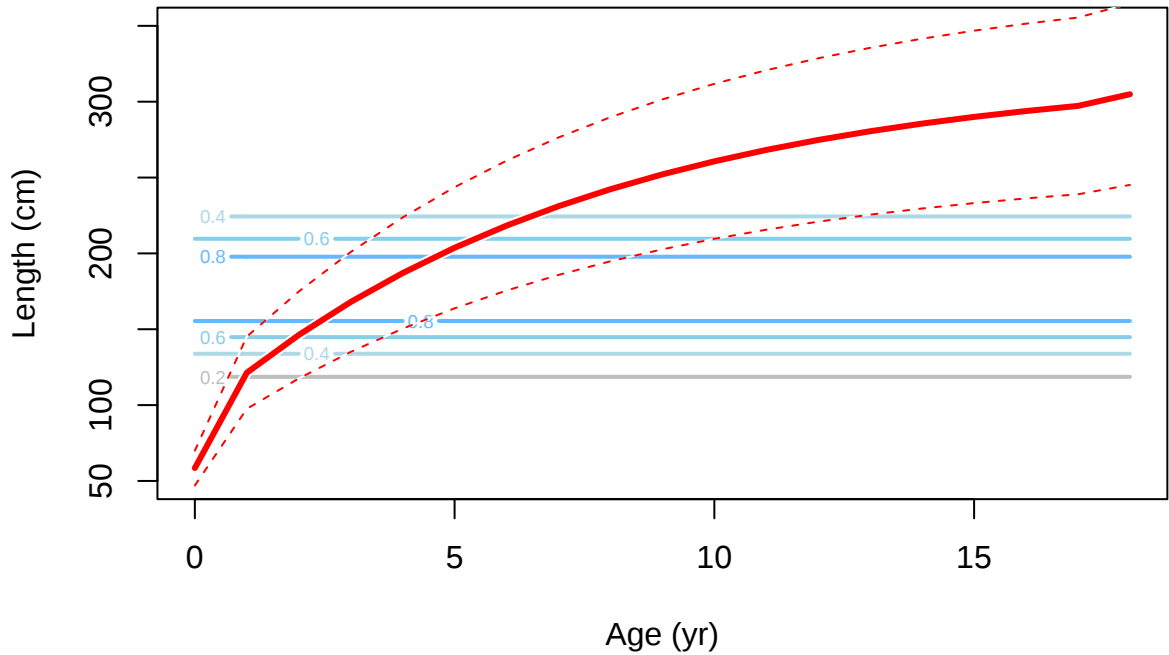


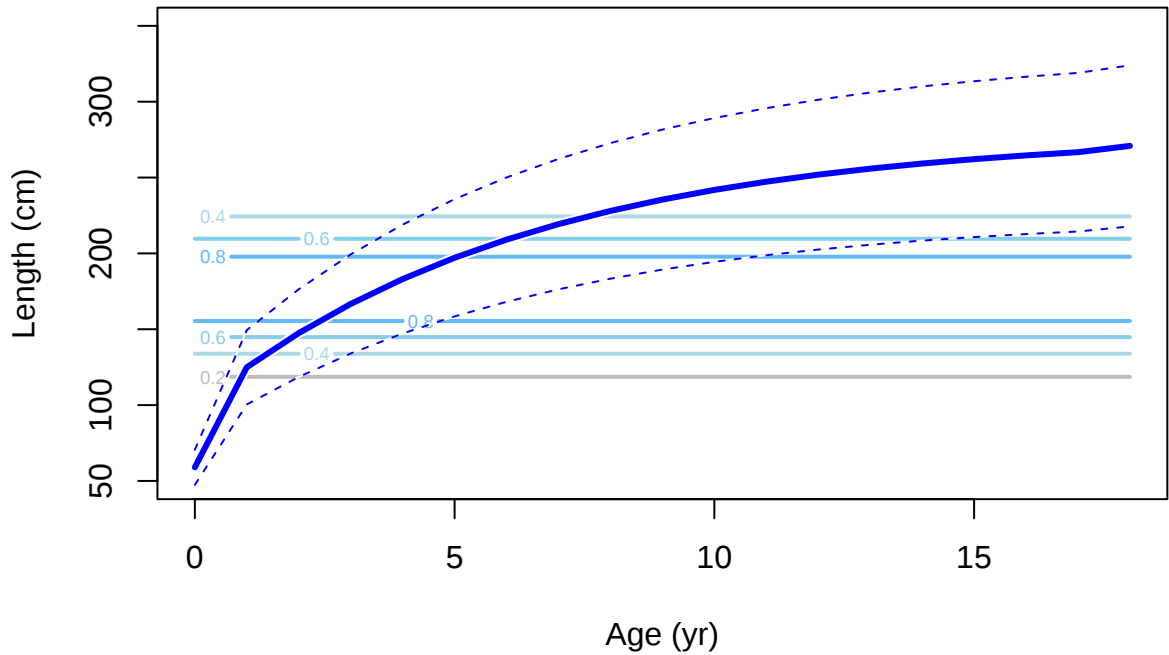


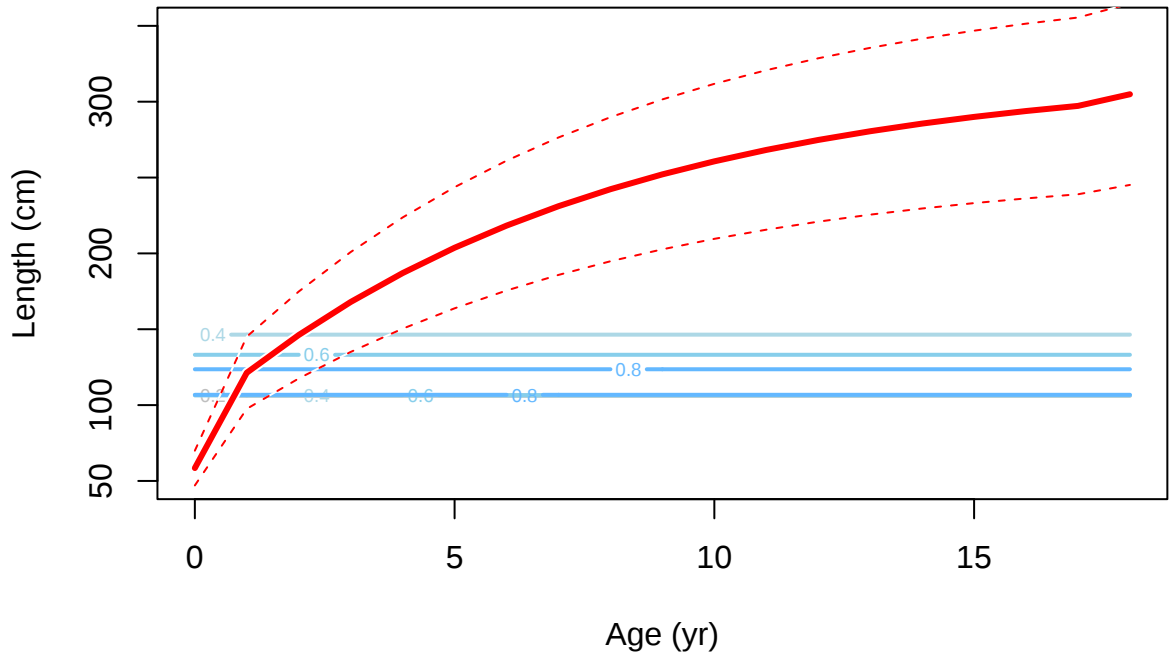


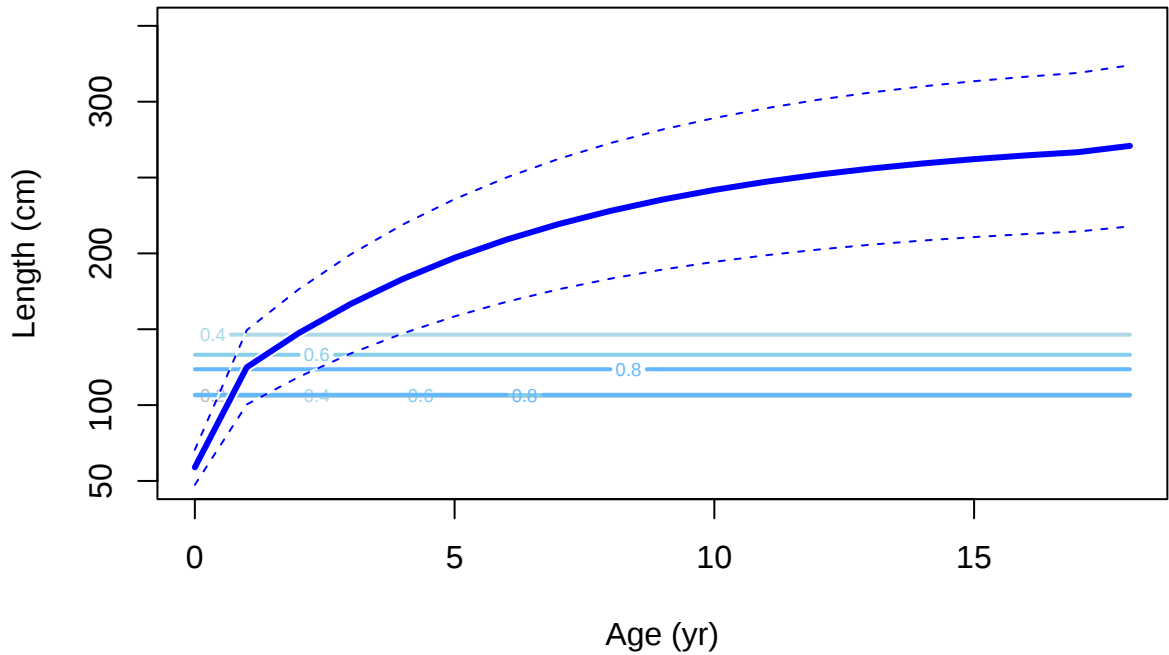


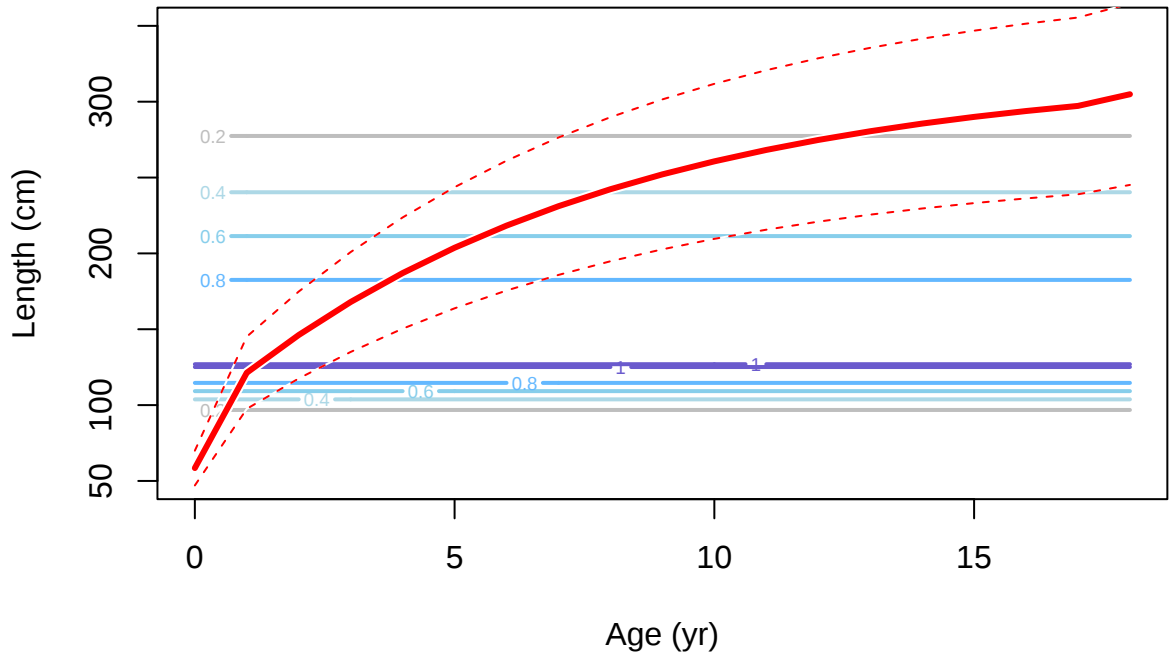


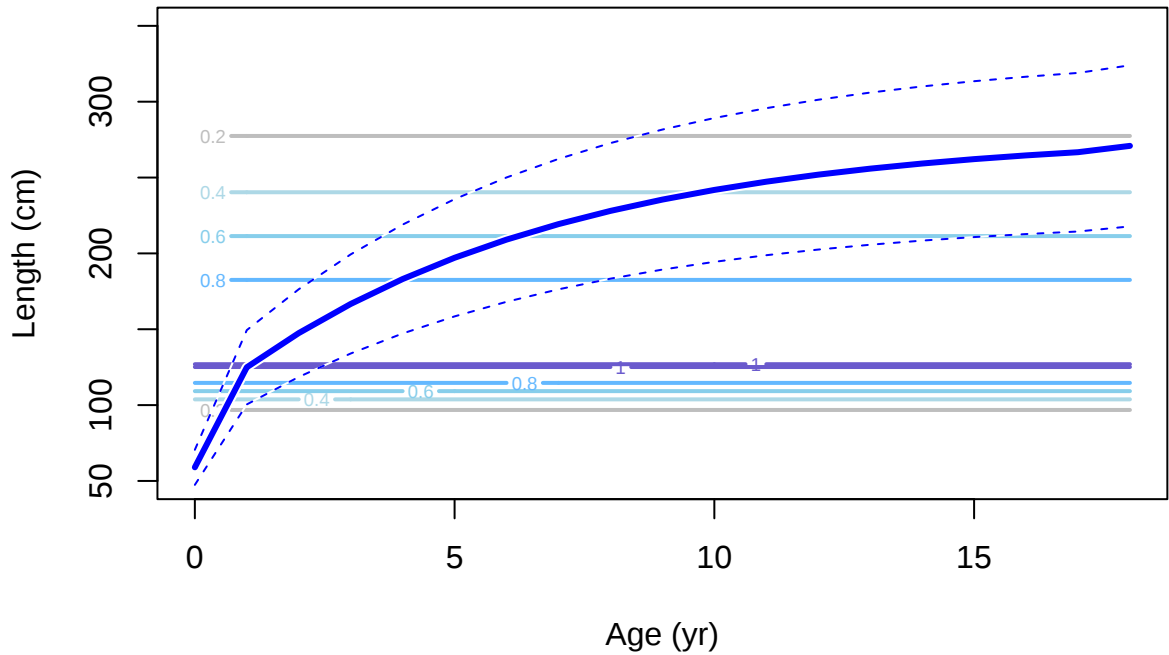


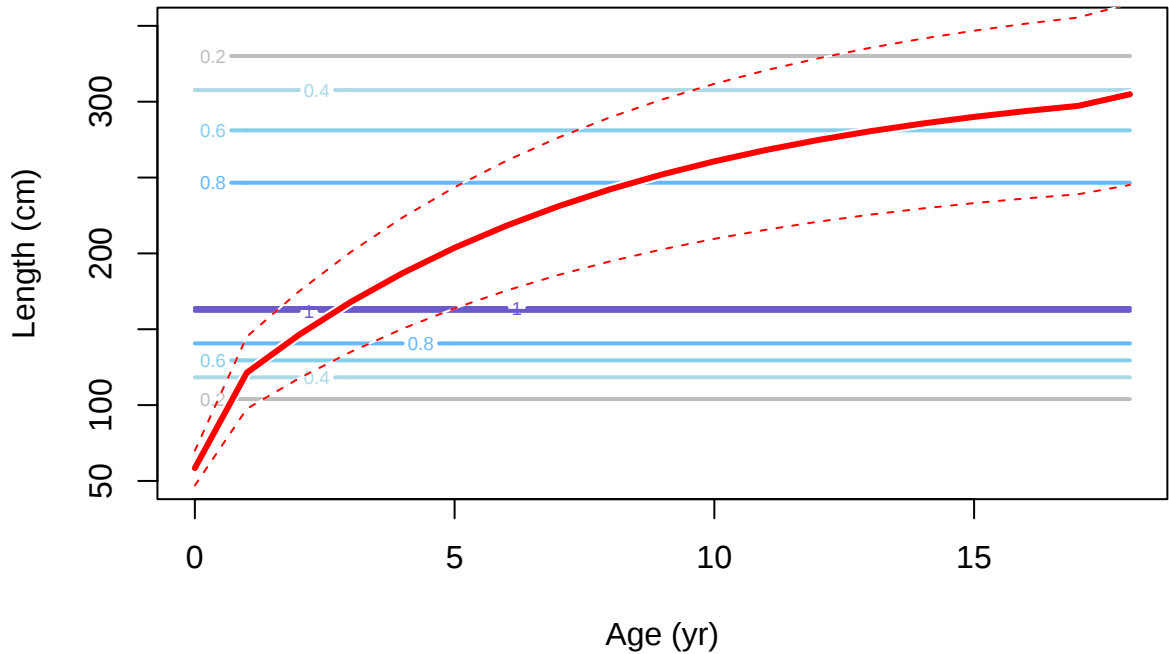


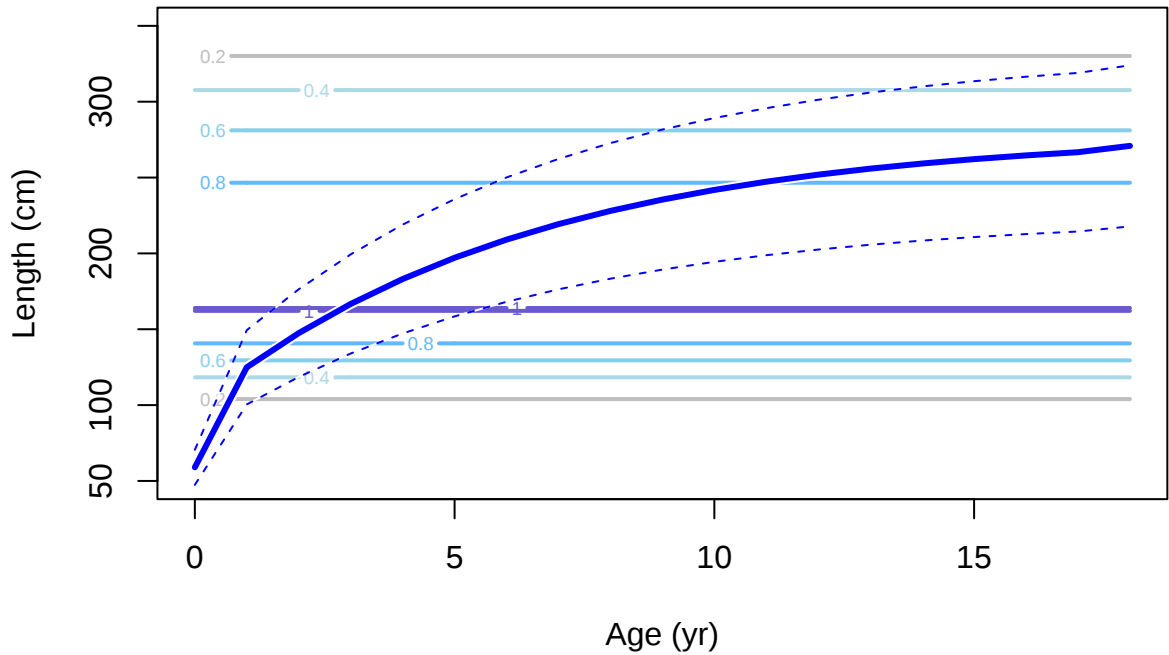


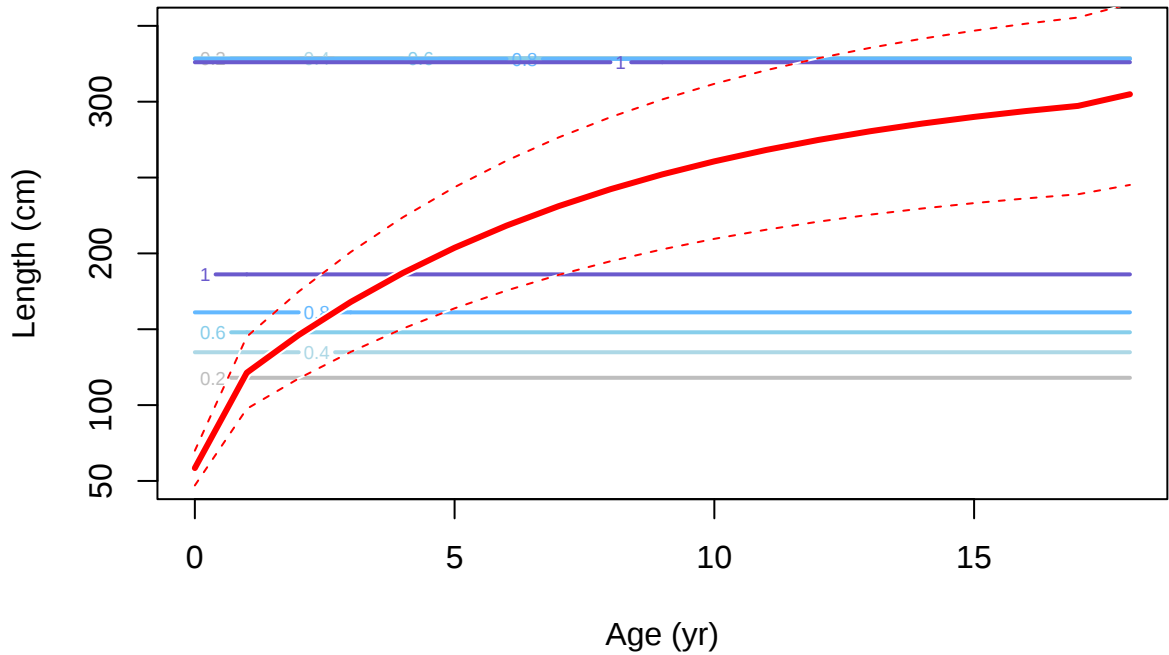


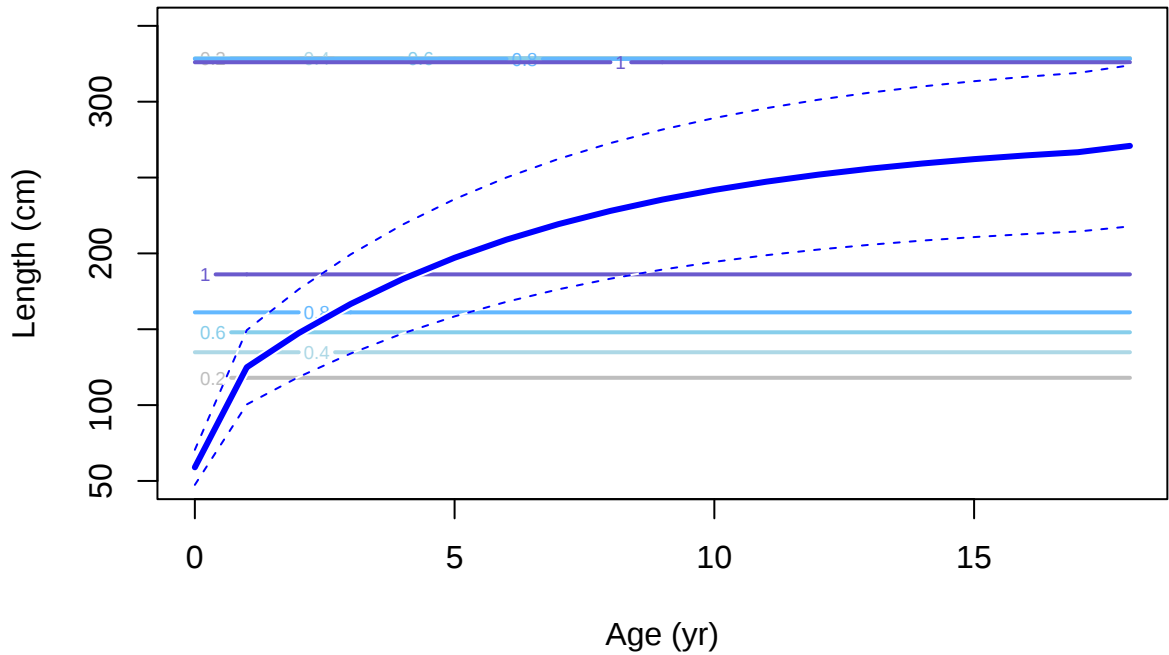


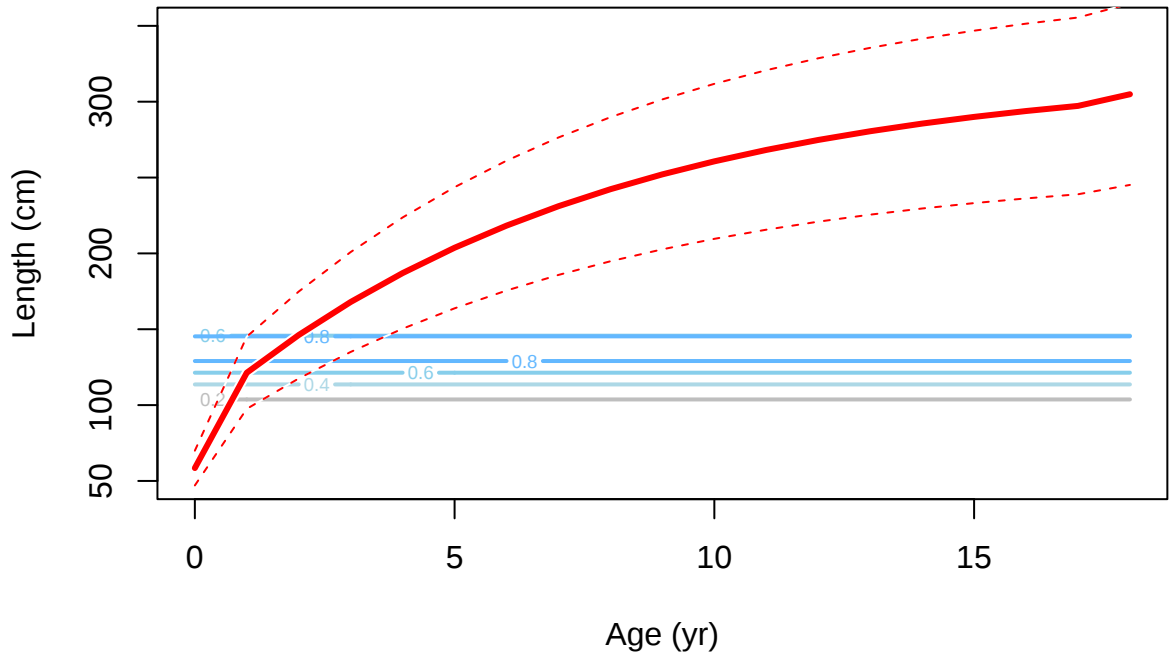


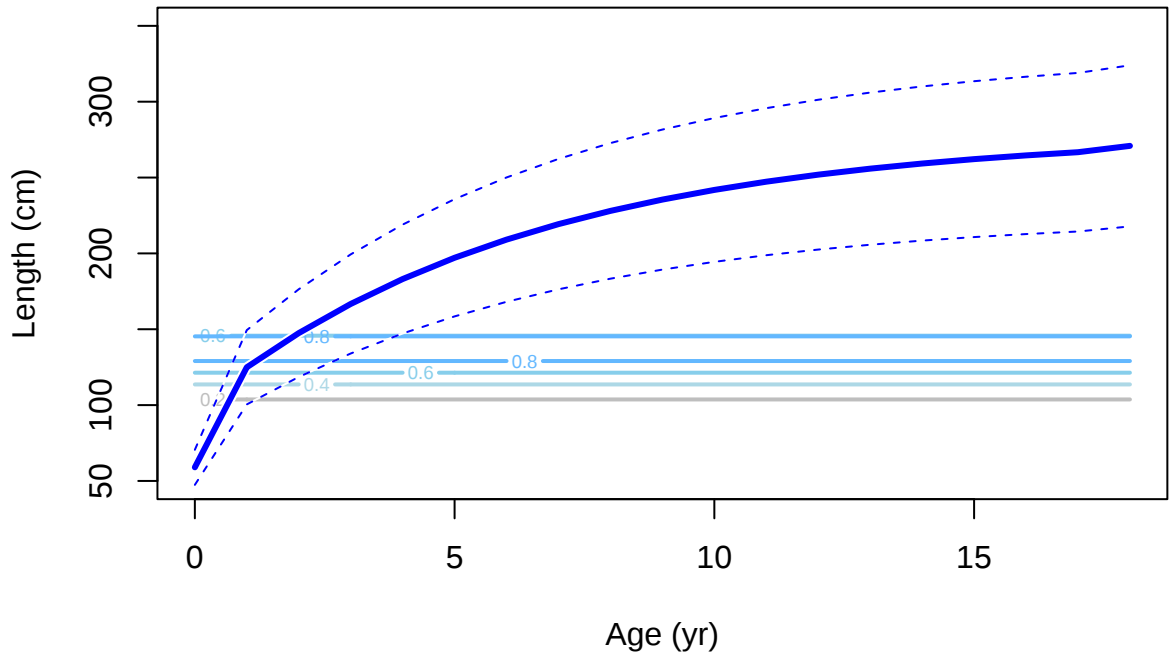


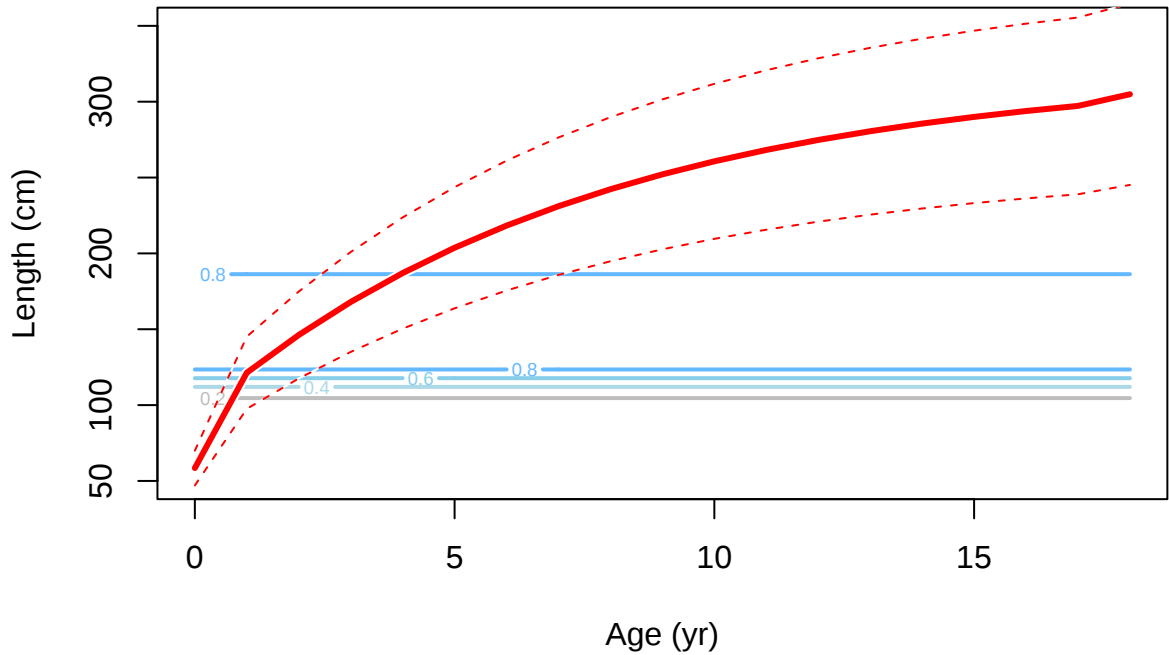


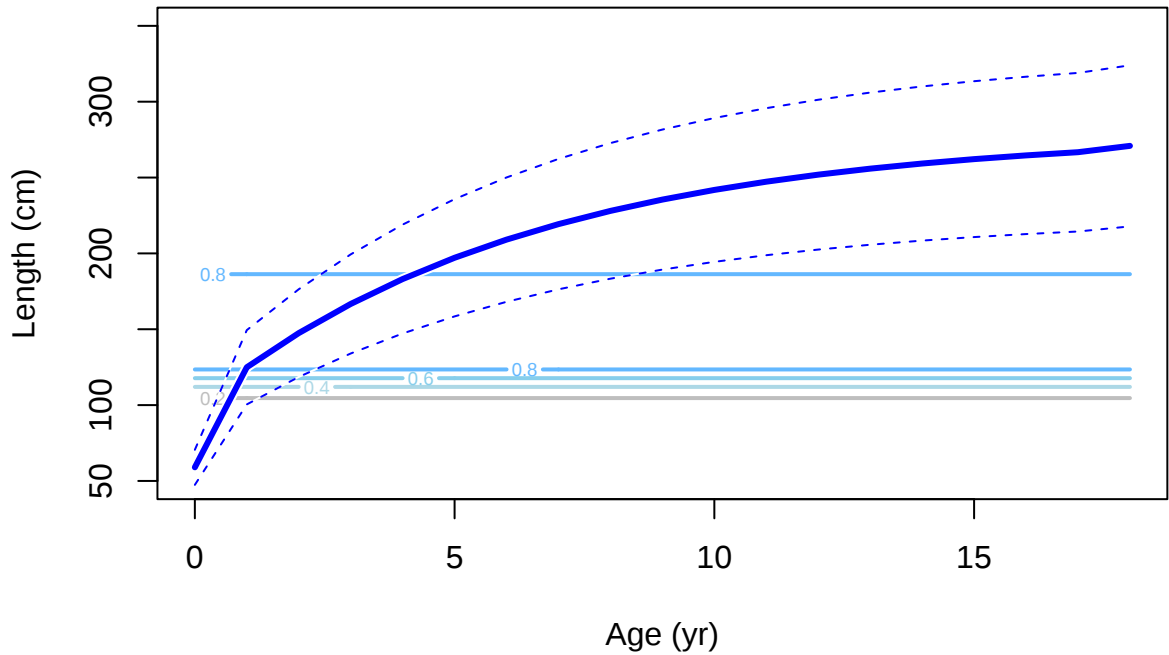


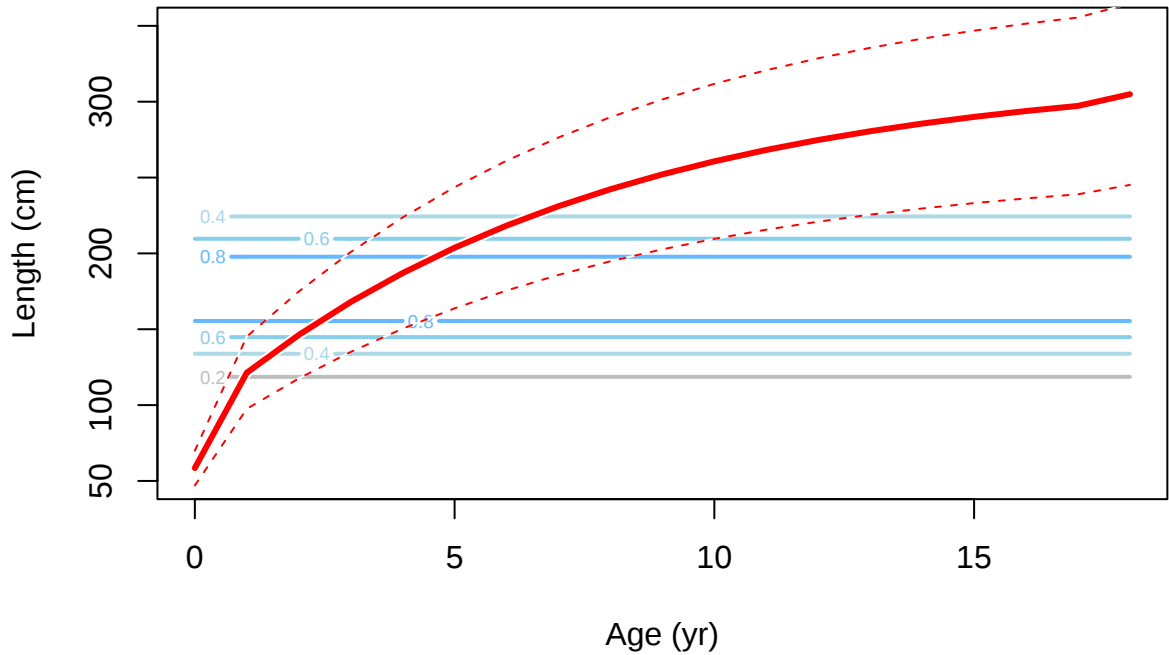


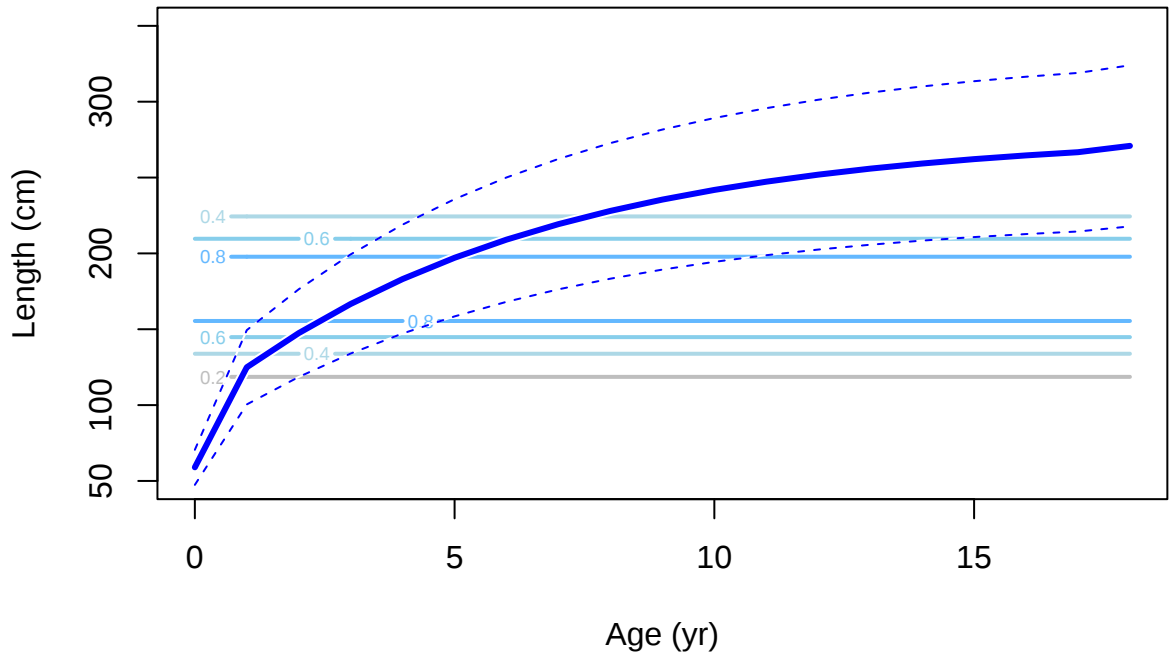


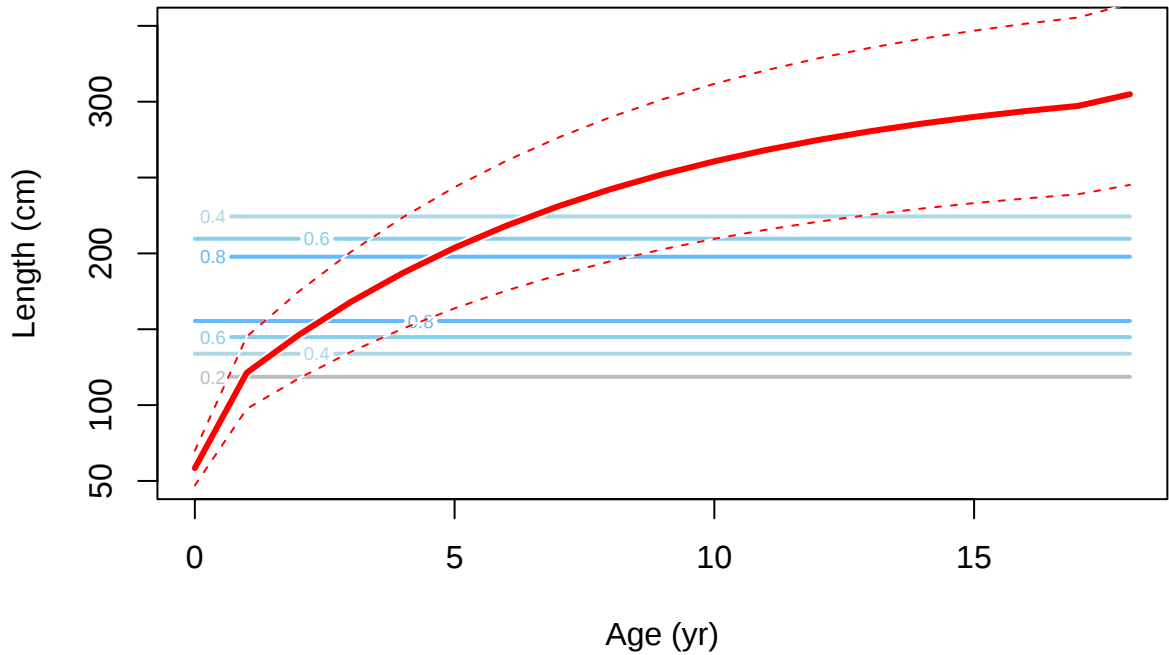


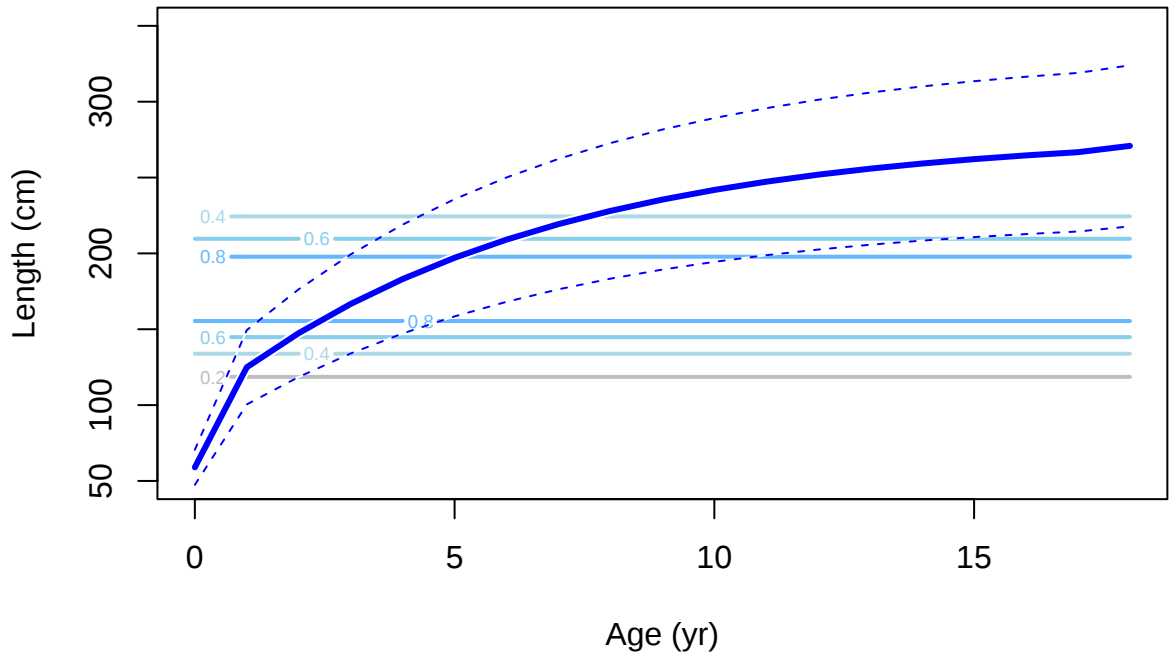


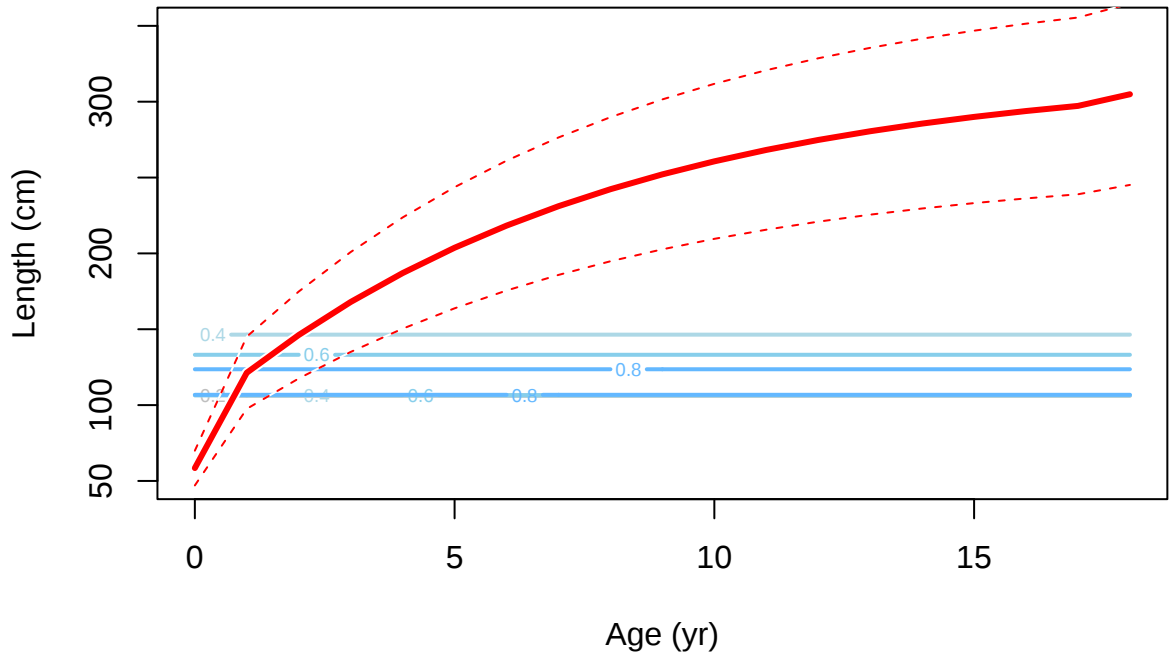


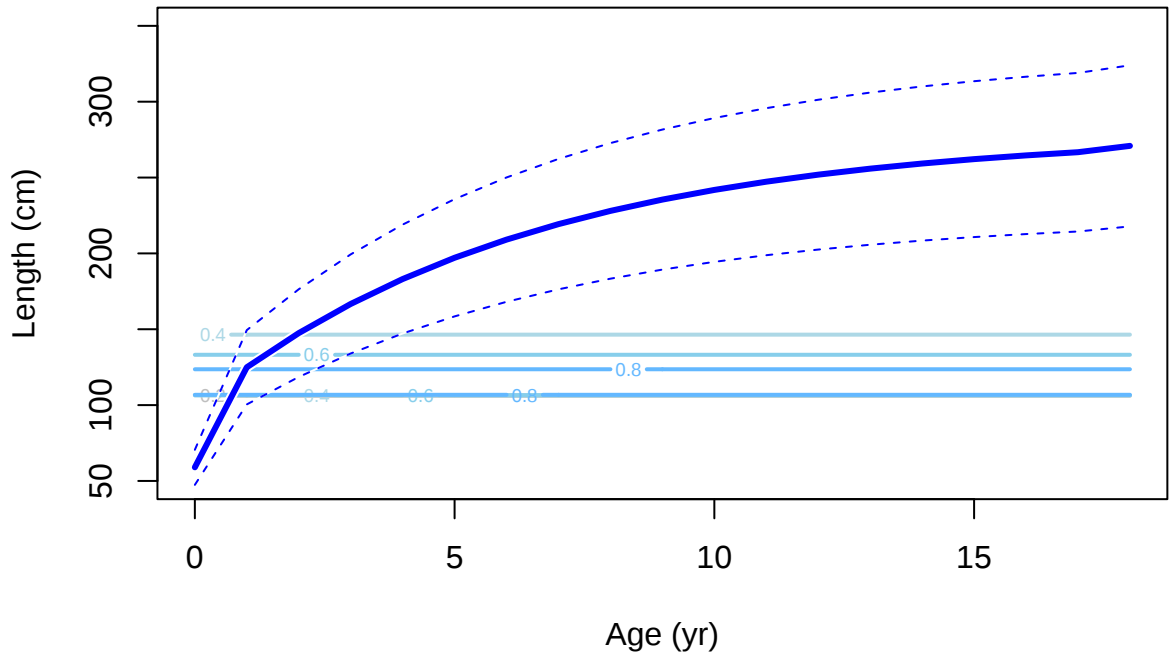


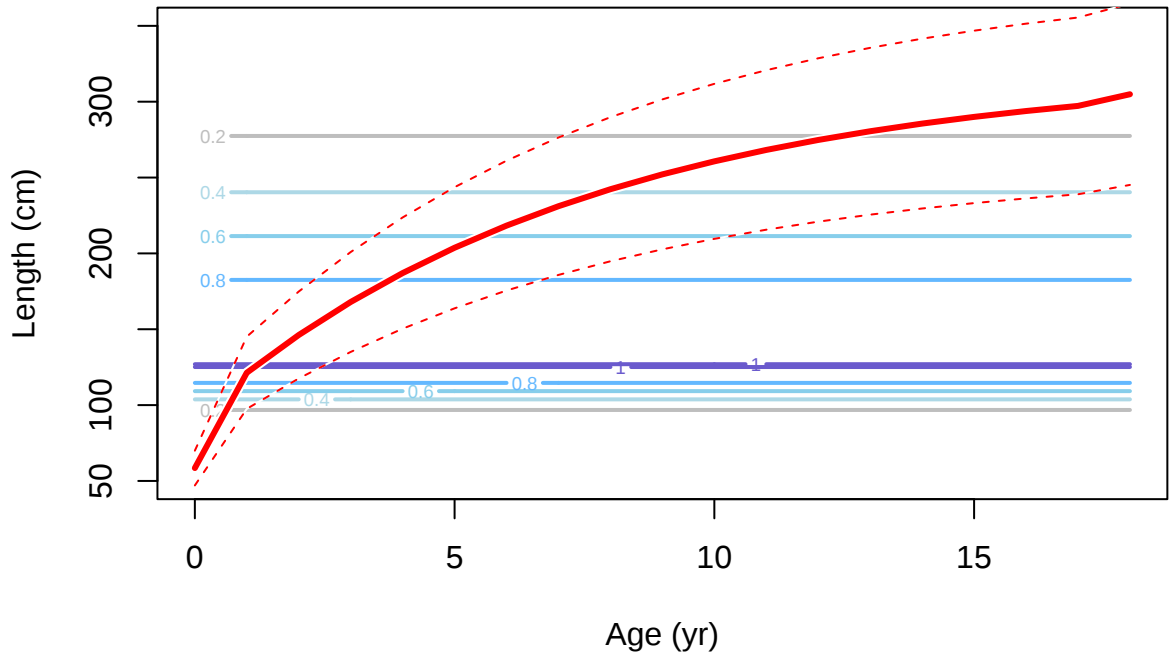


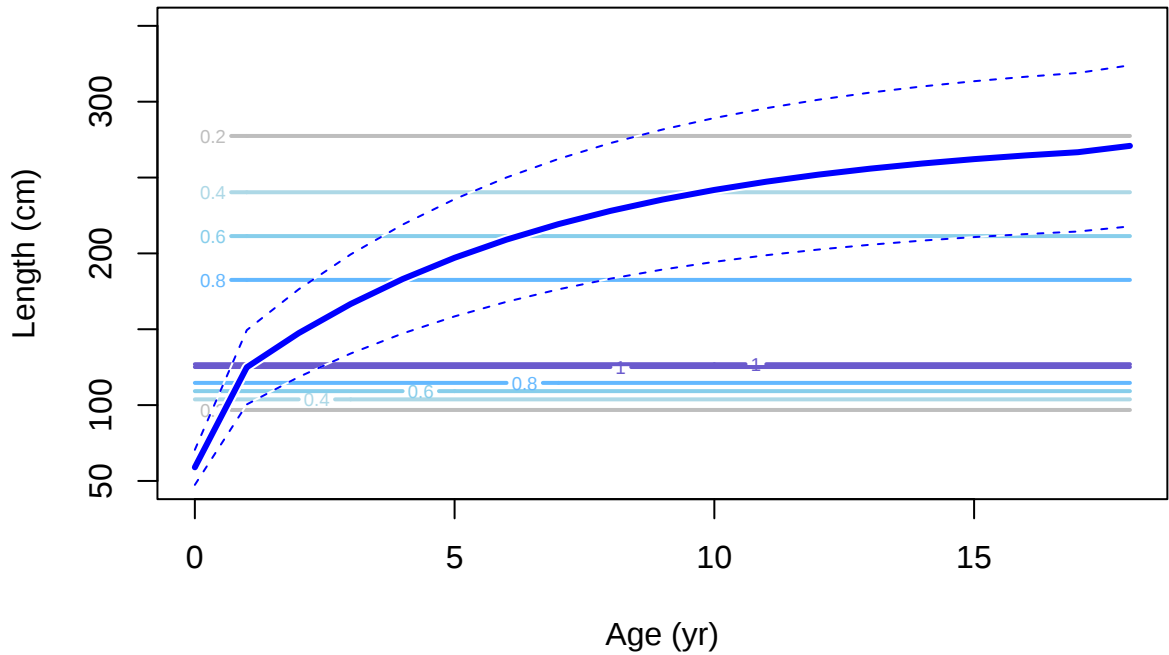


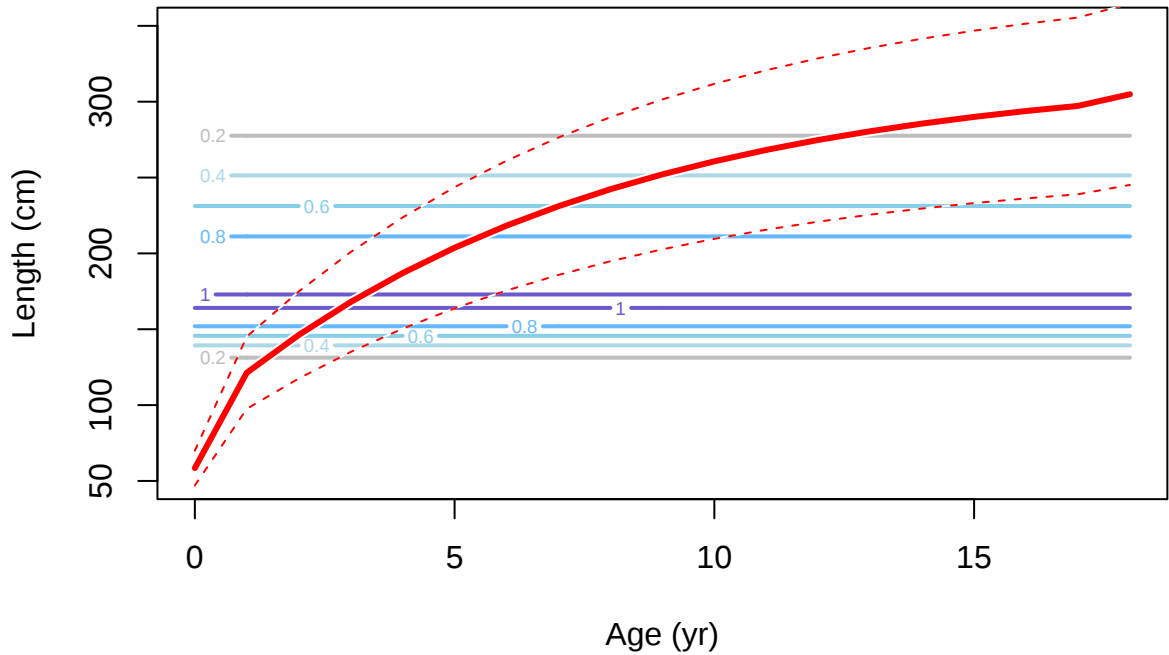


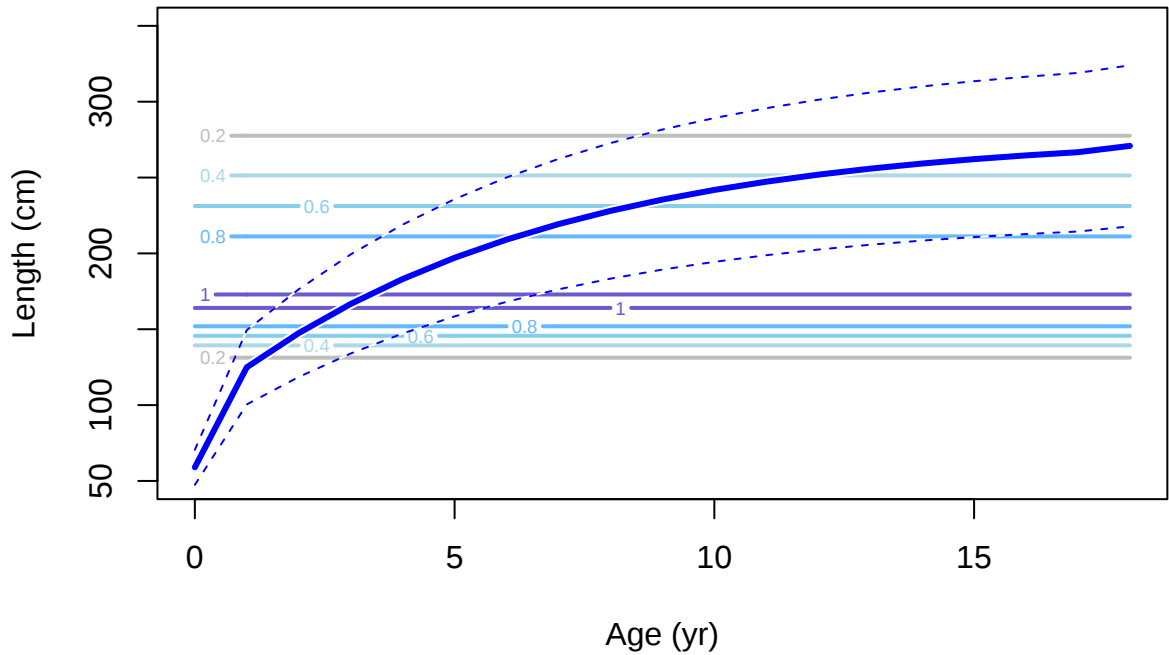


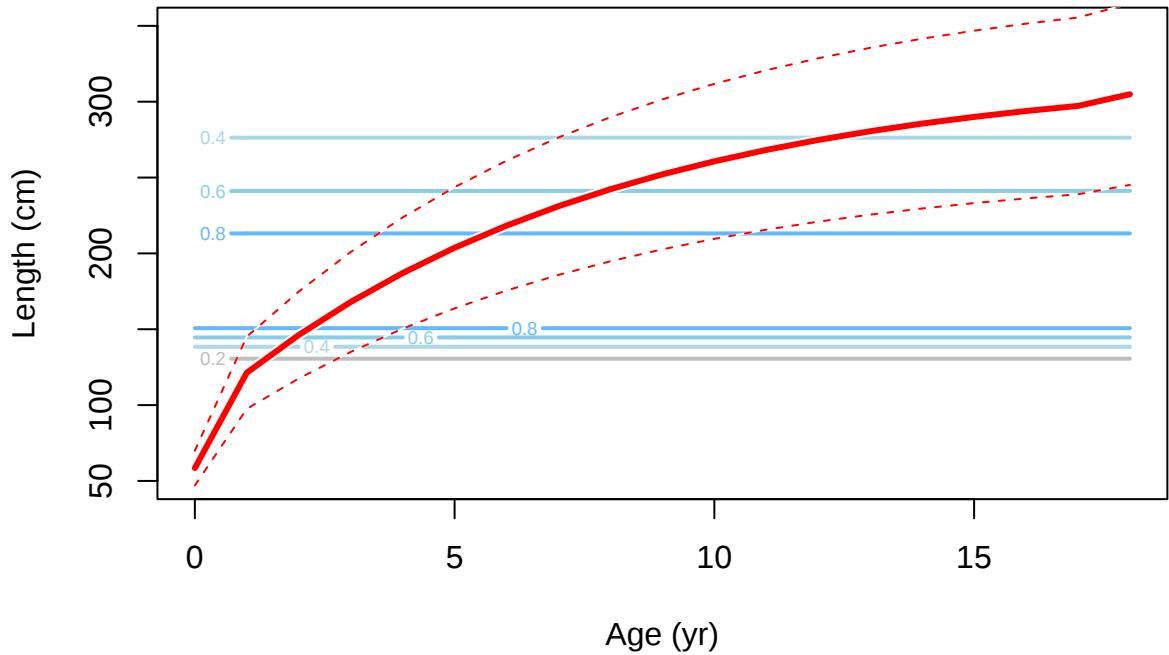


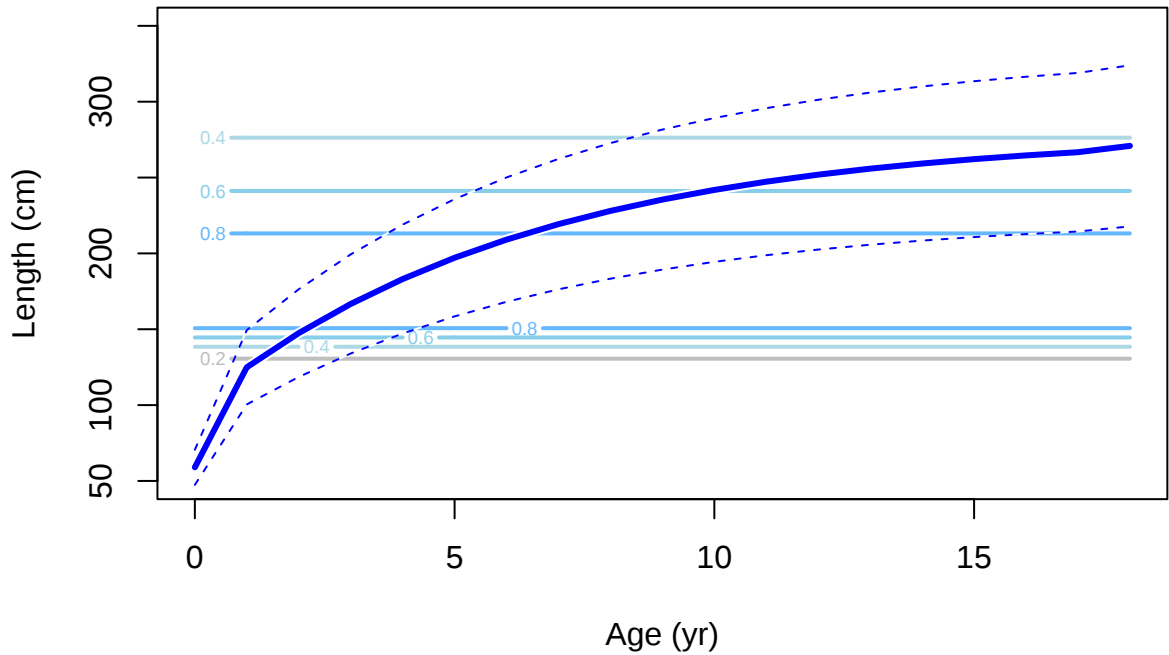


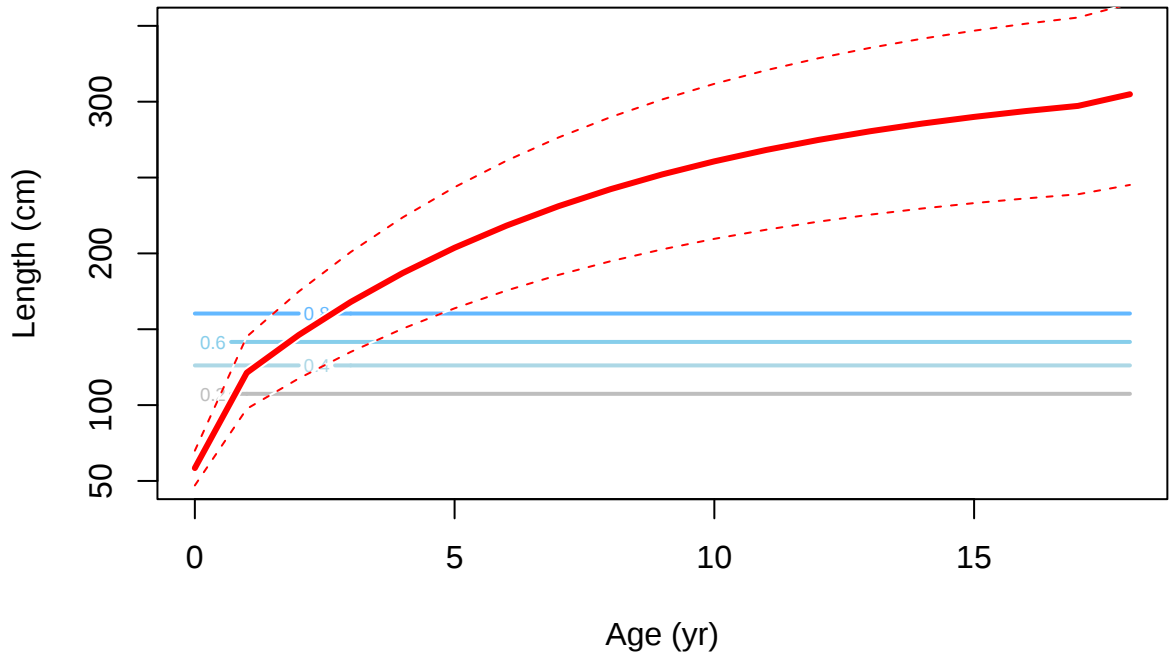


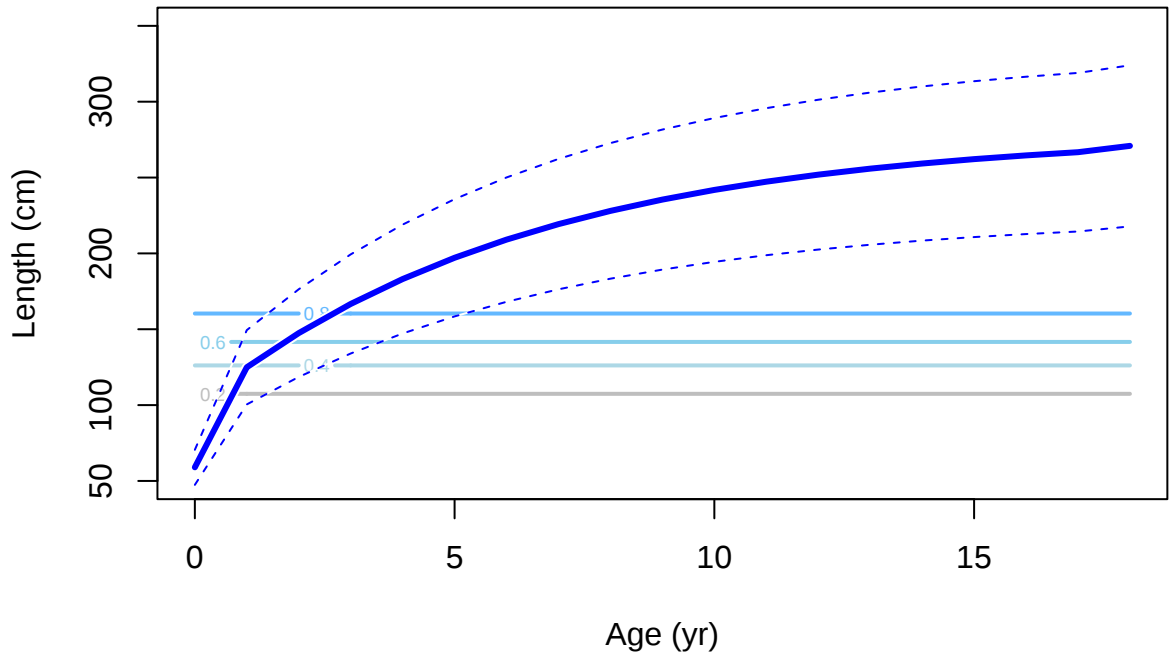


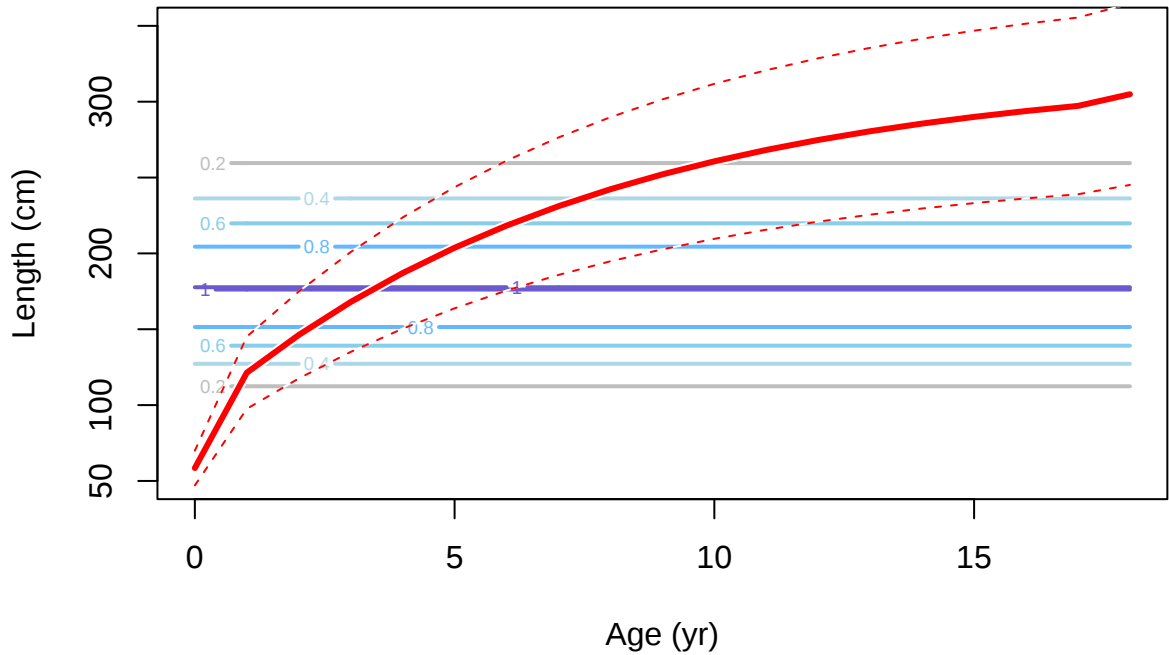


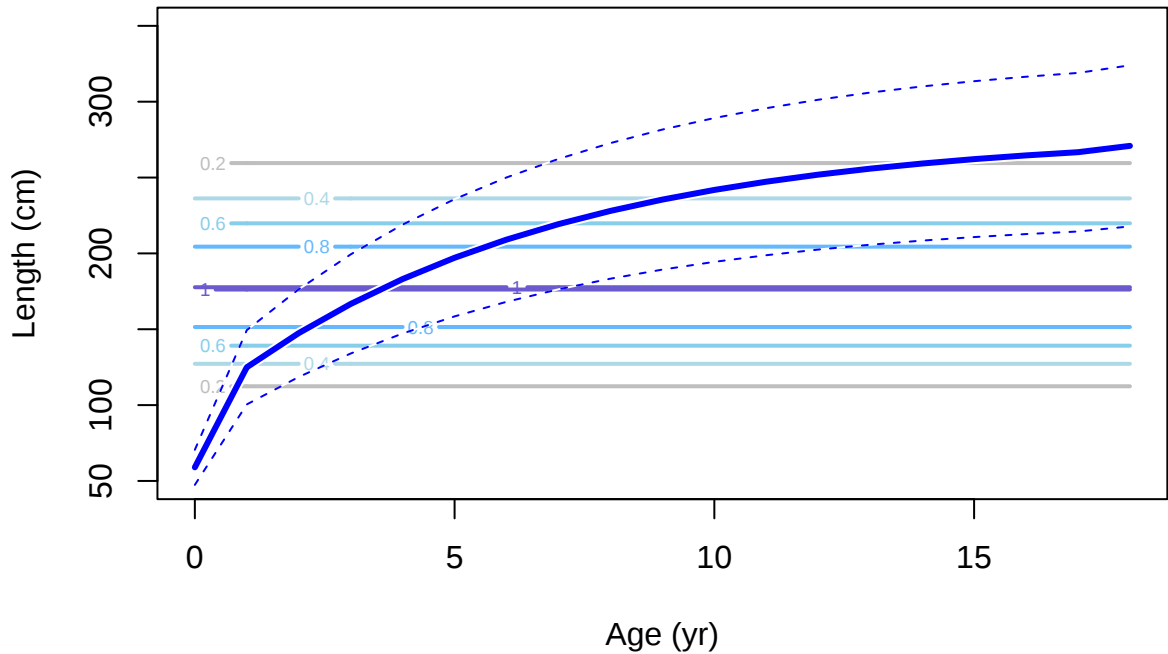


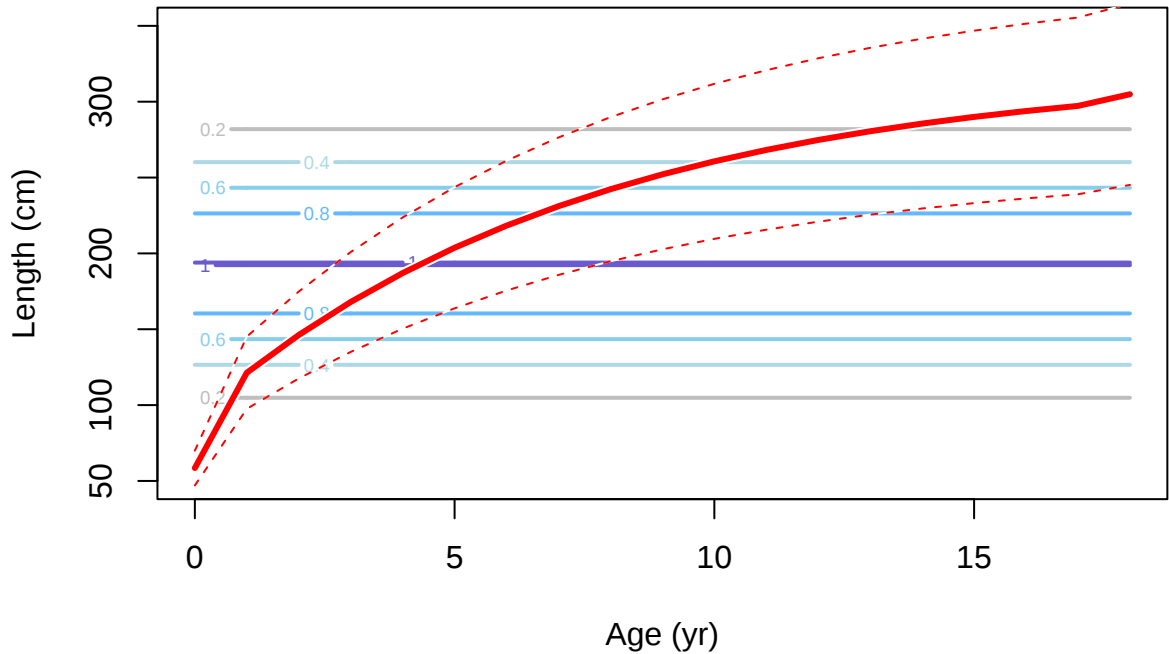


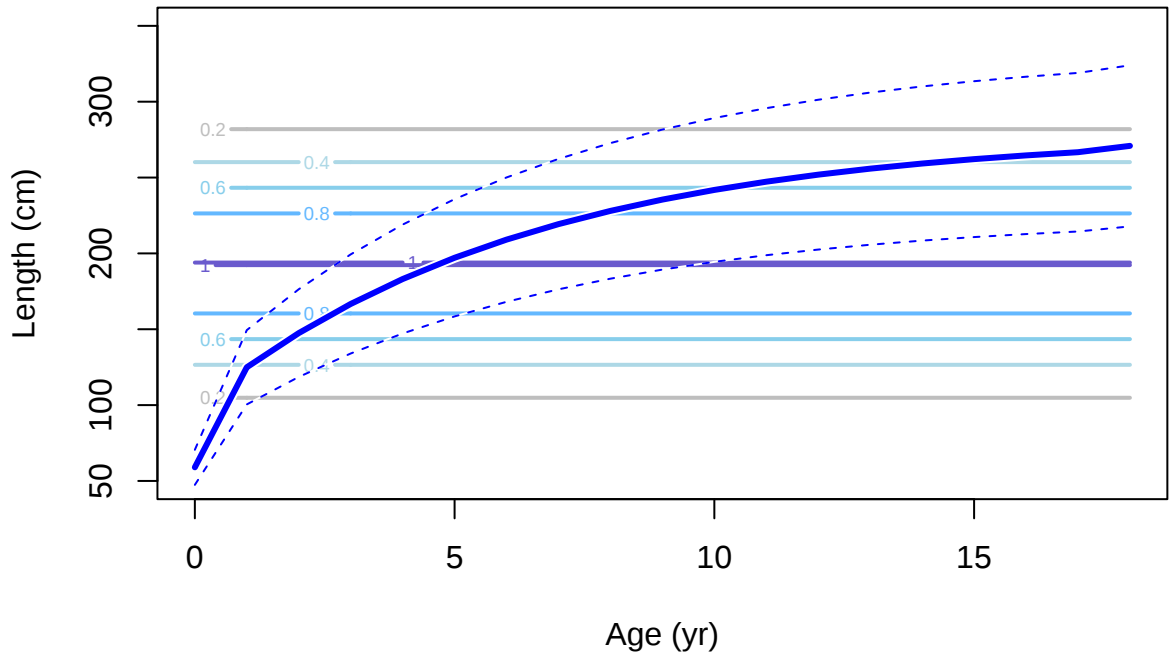


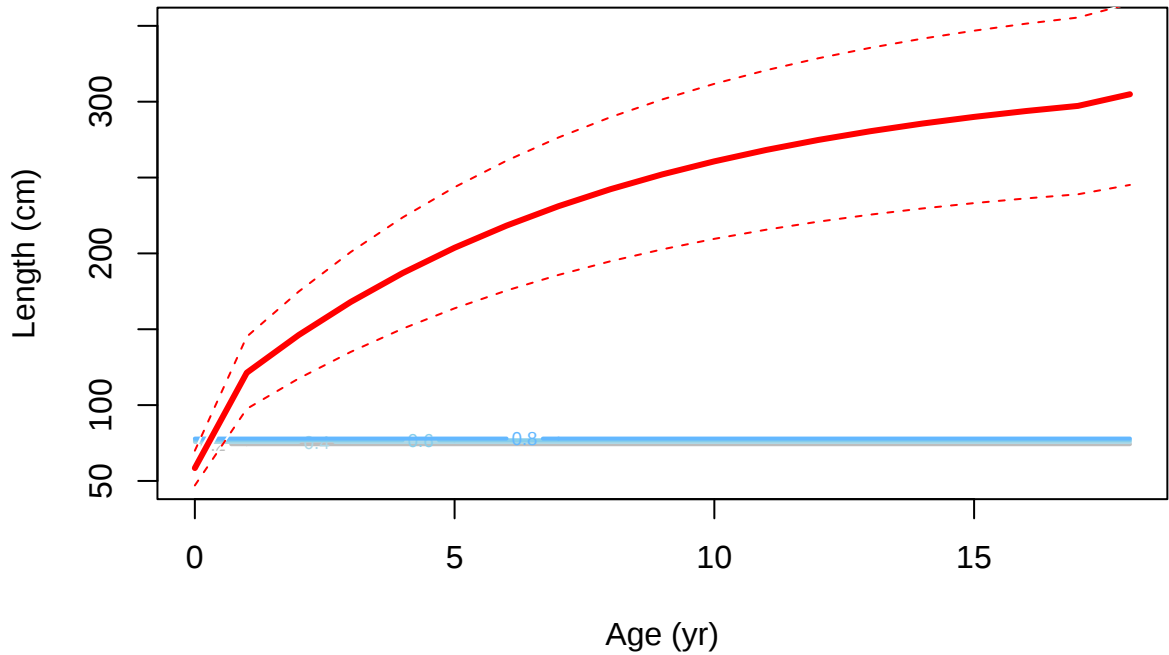


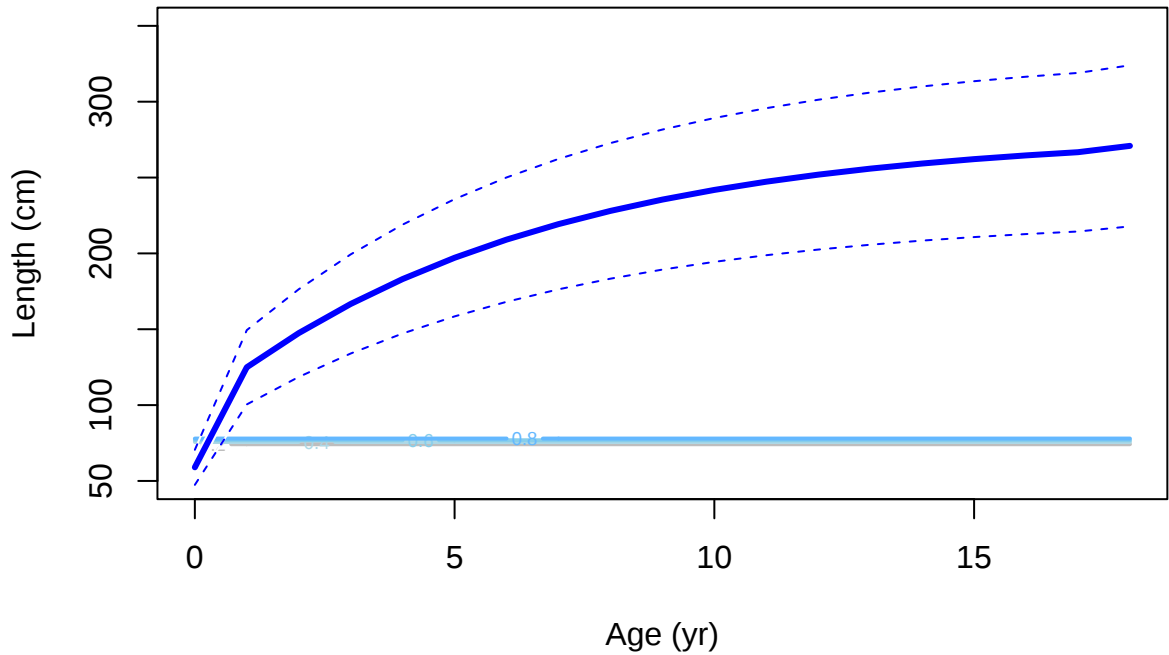


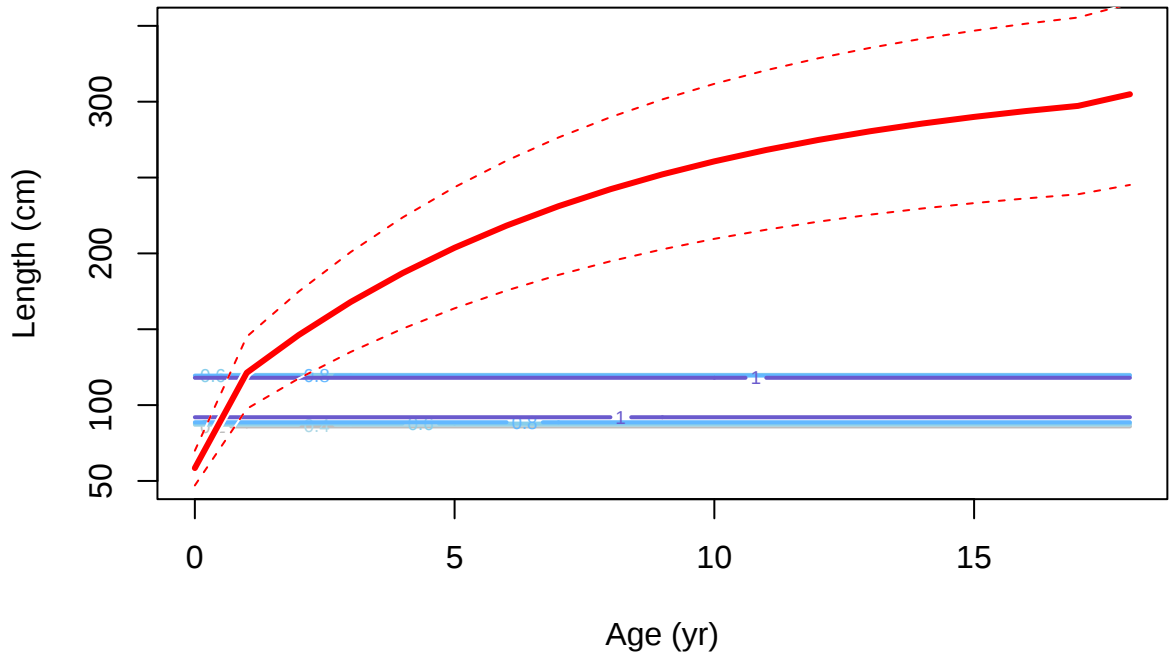


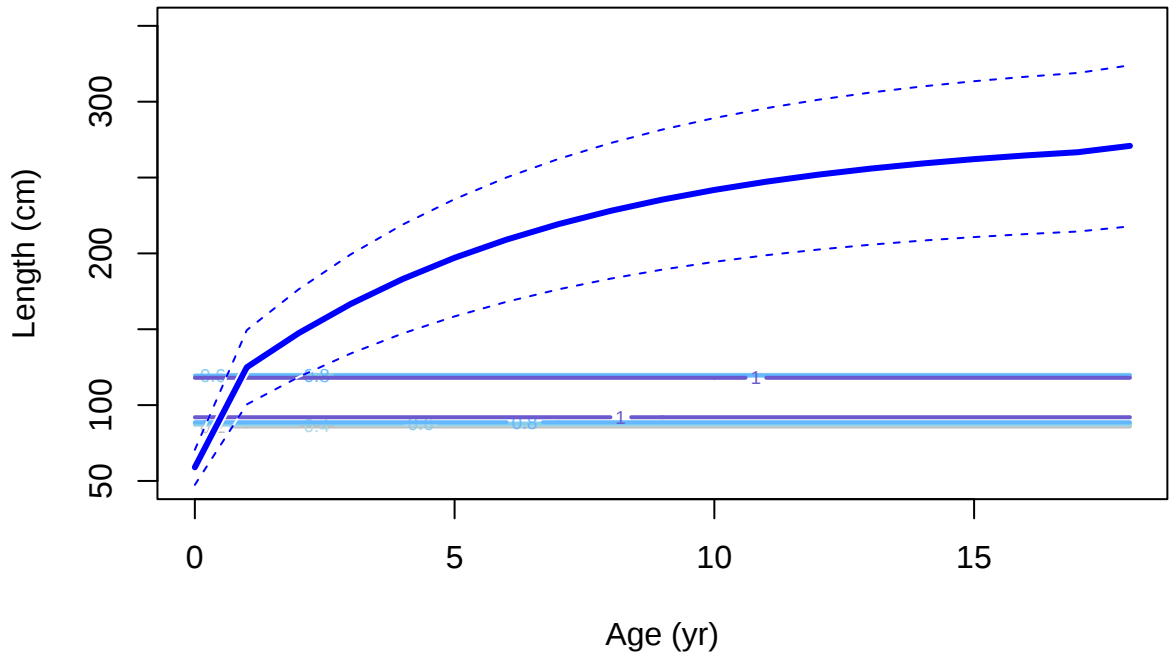


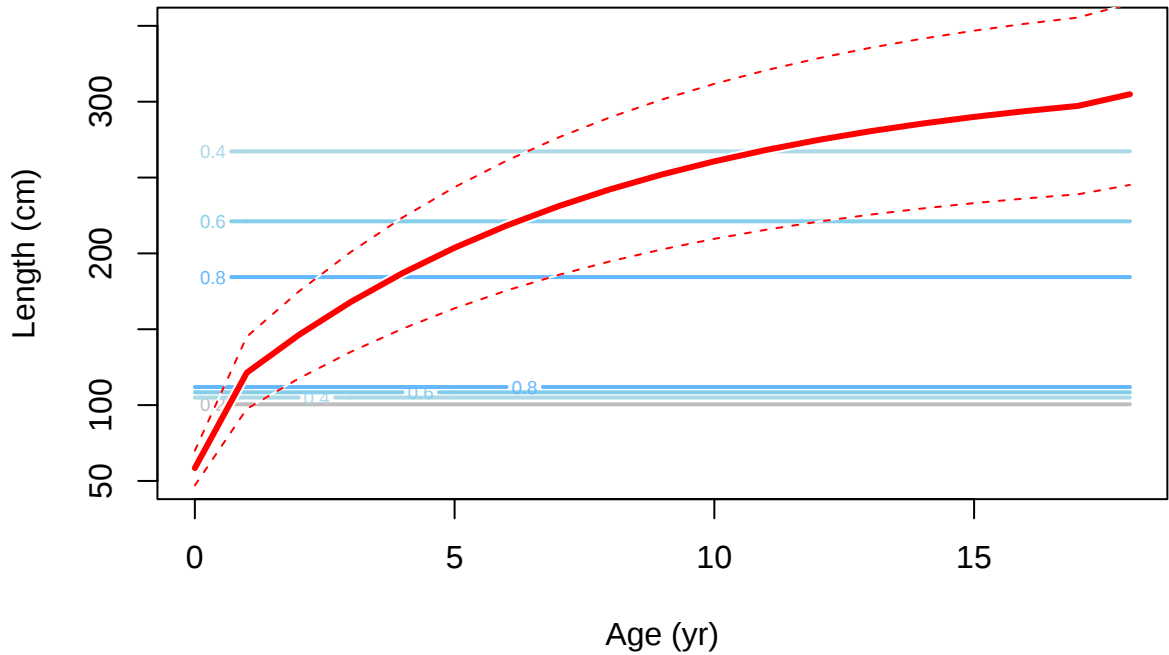


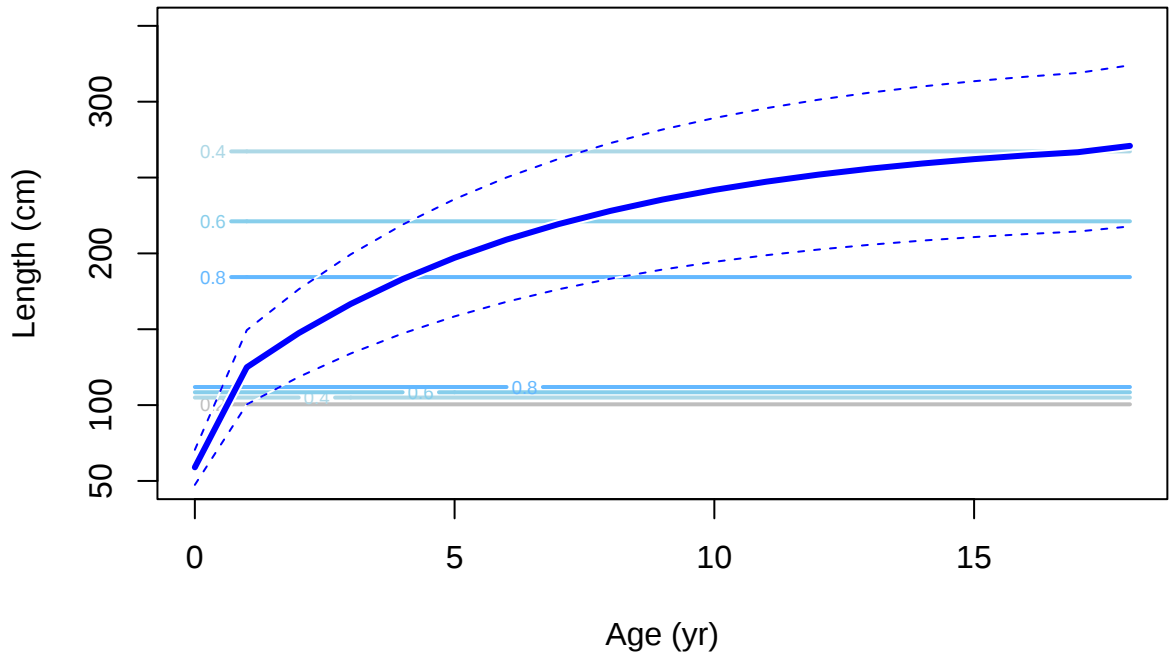


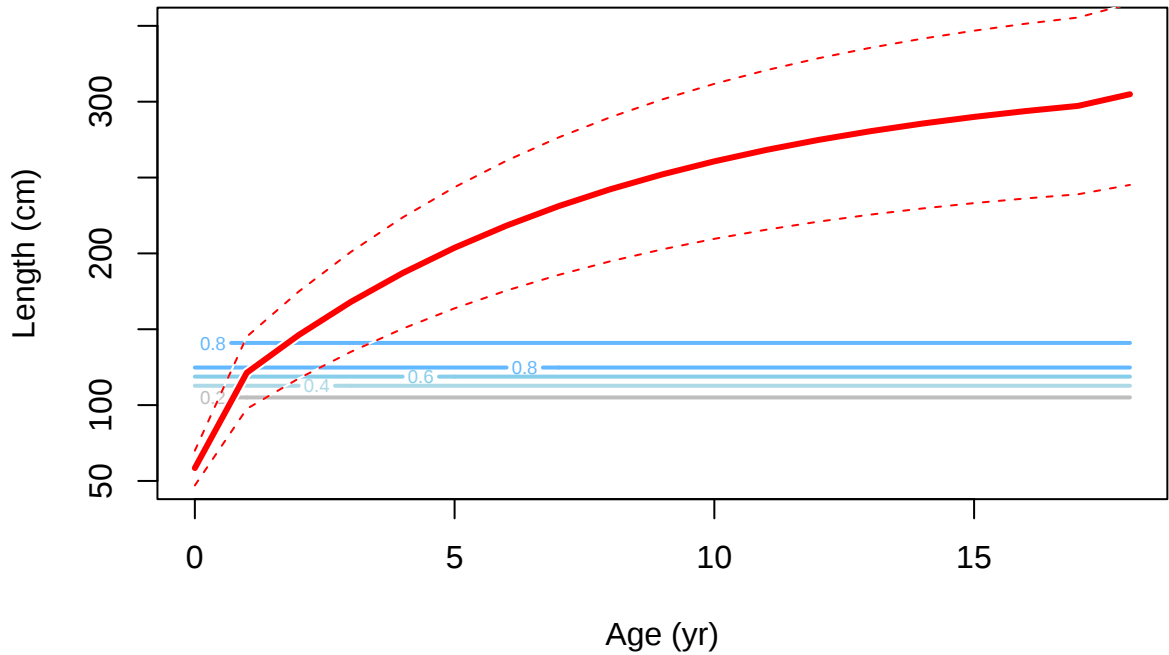


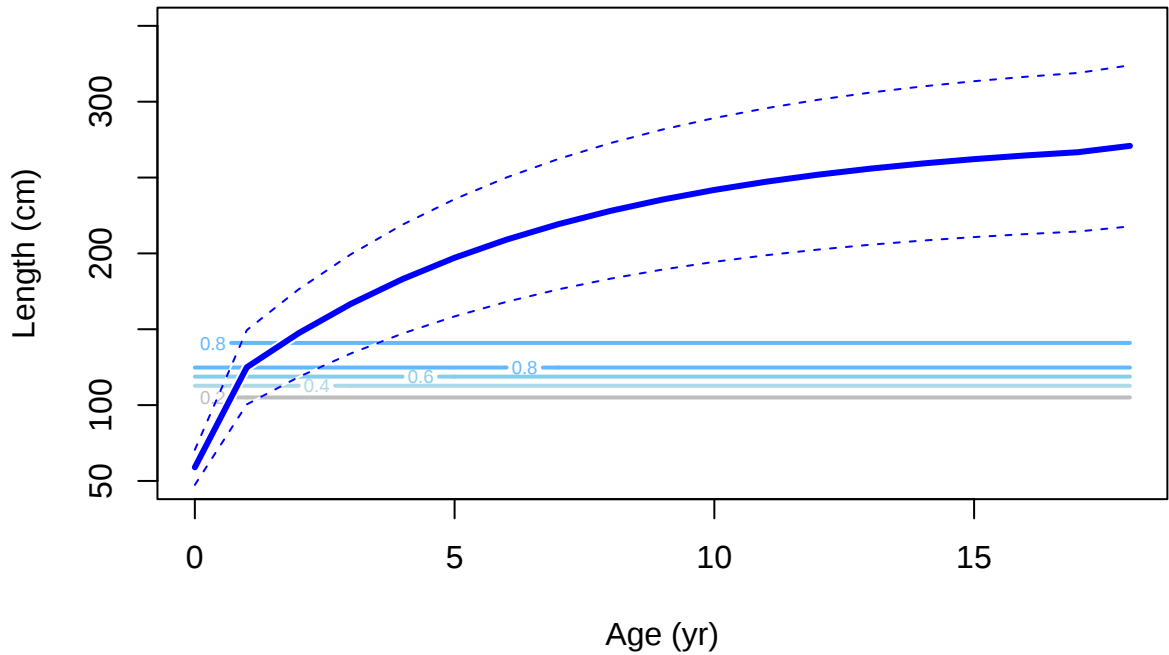


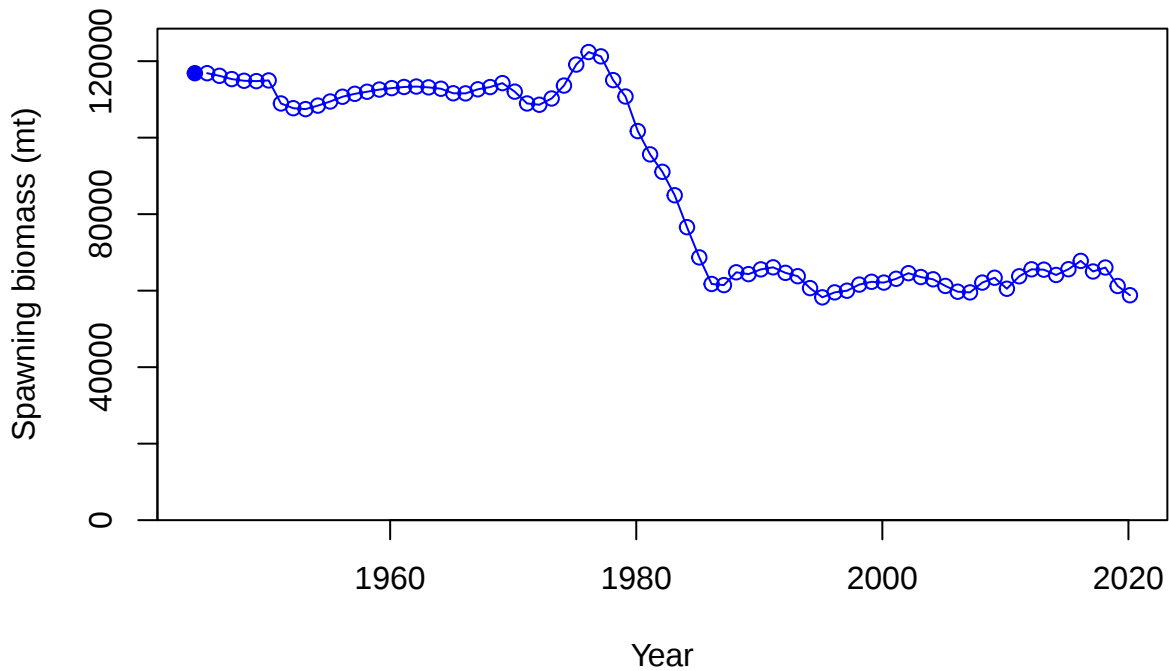




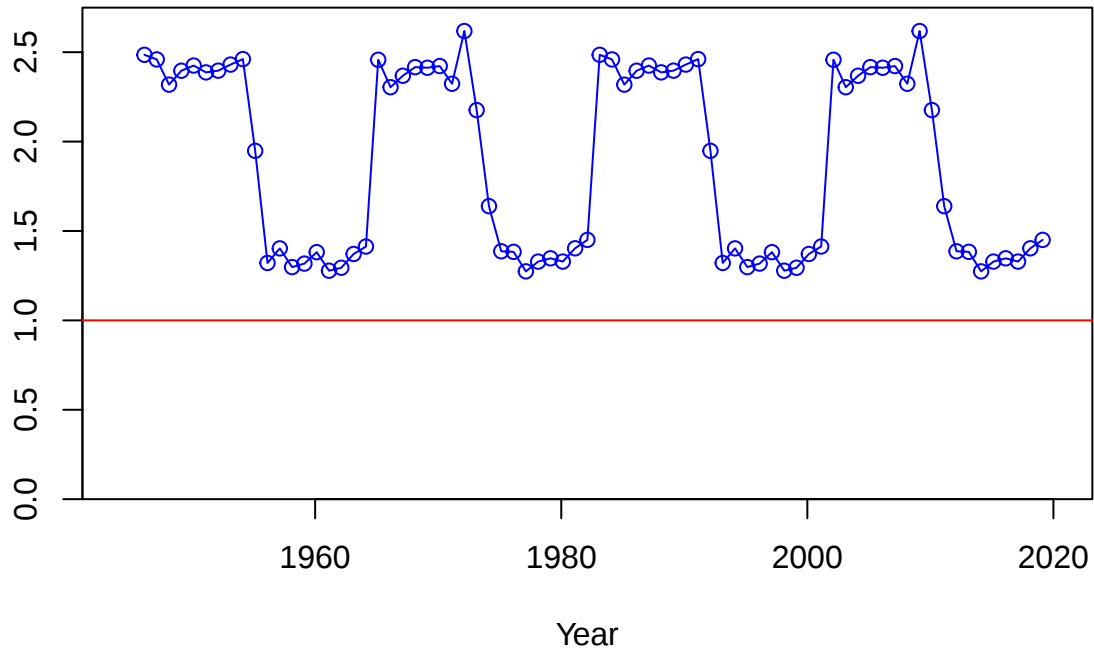


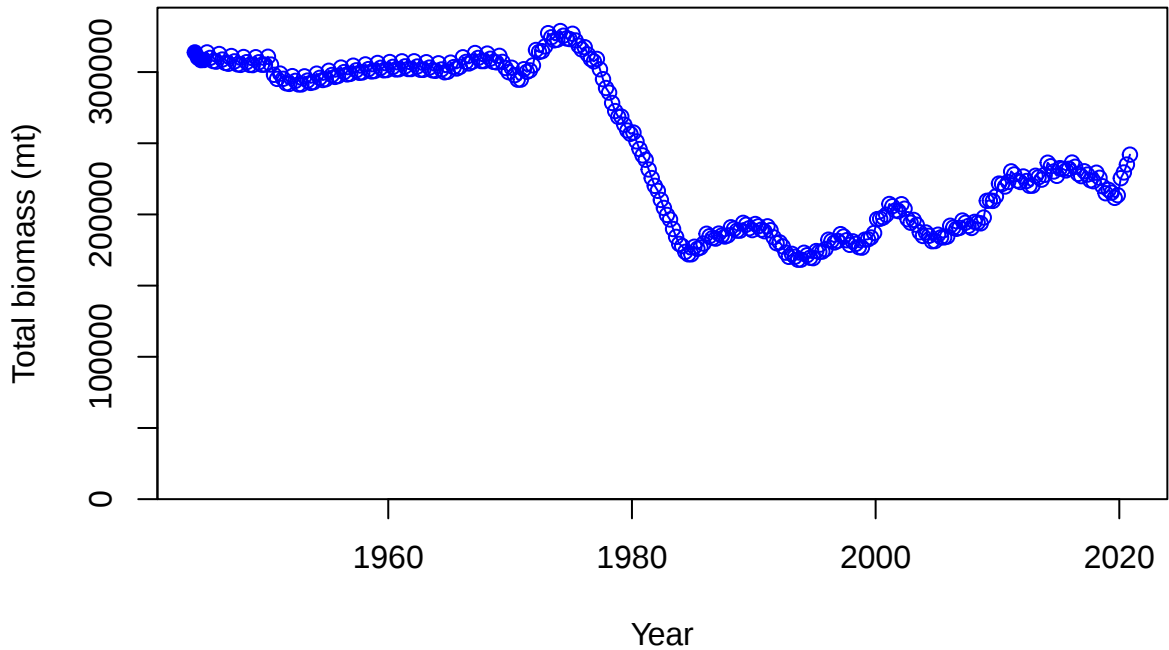




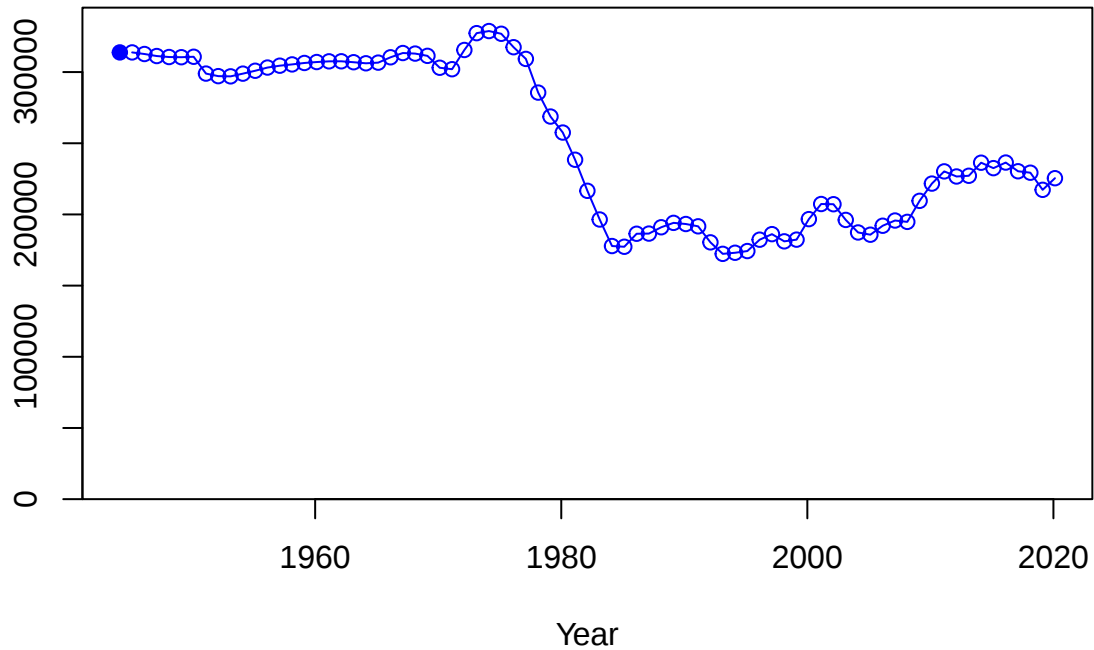


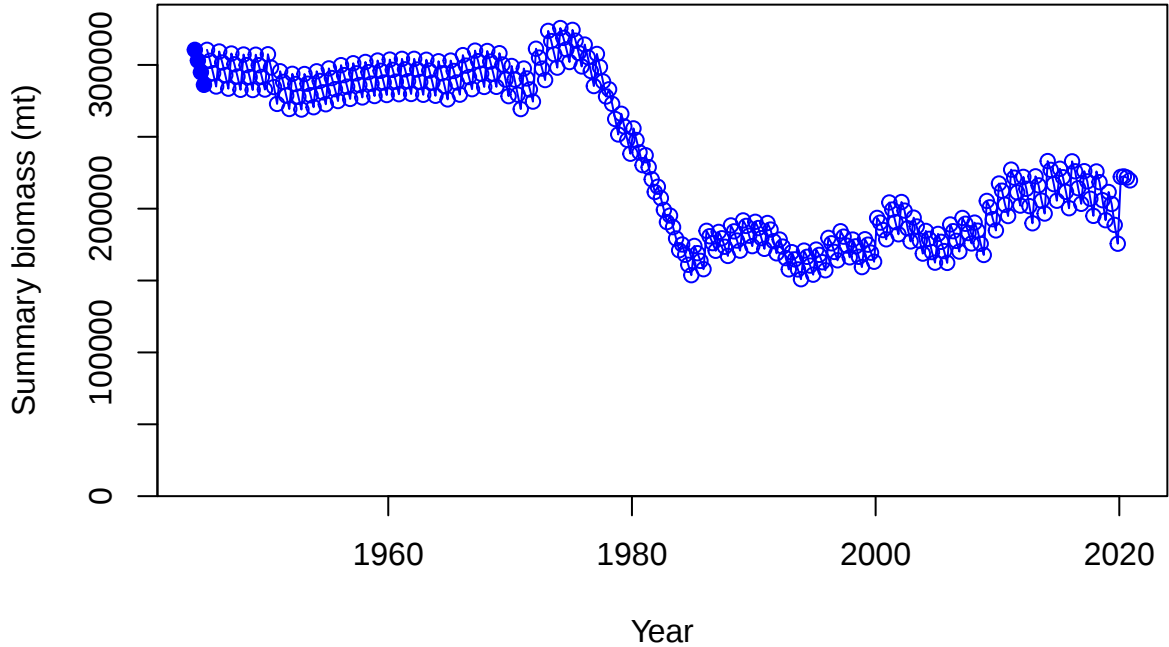
Relative spawning biomass: B/(40%*Virgin_Biomass)



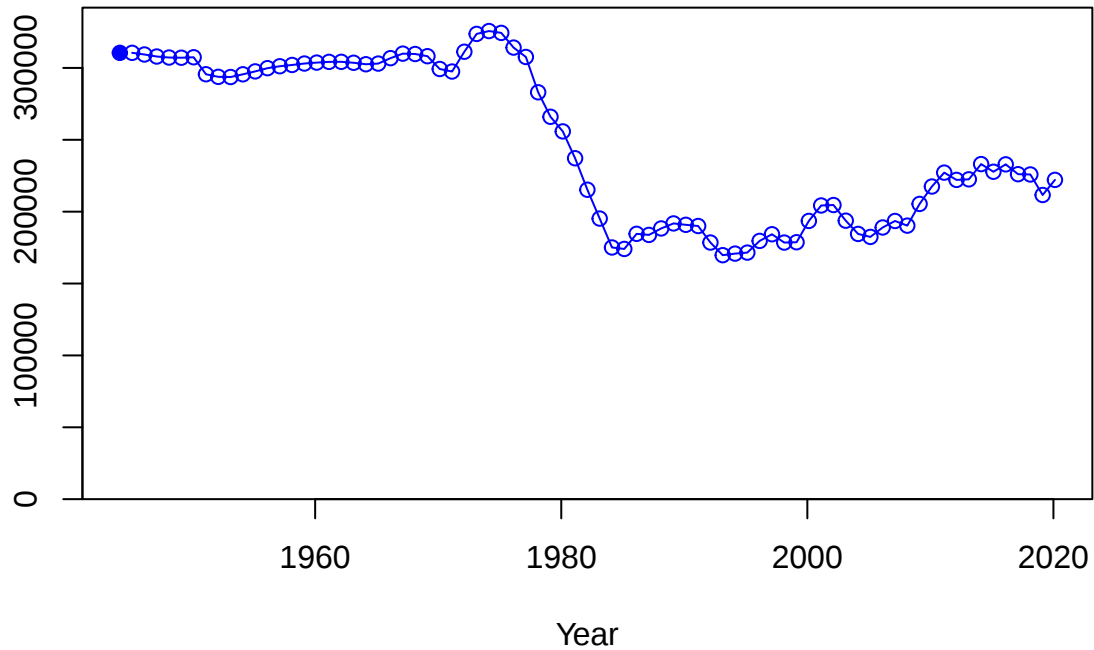


Total biomass (mt) at beginning of season 1

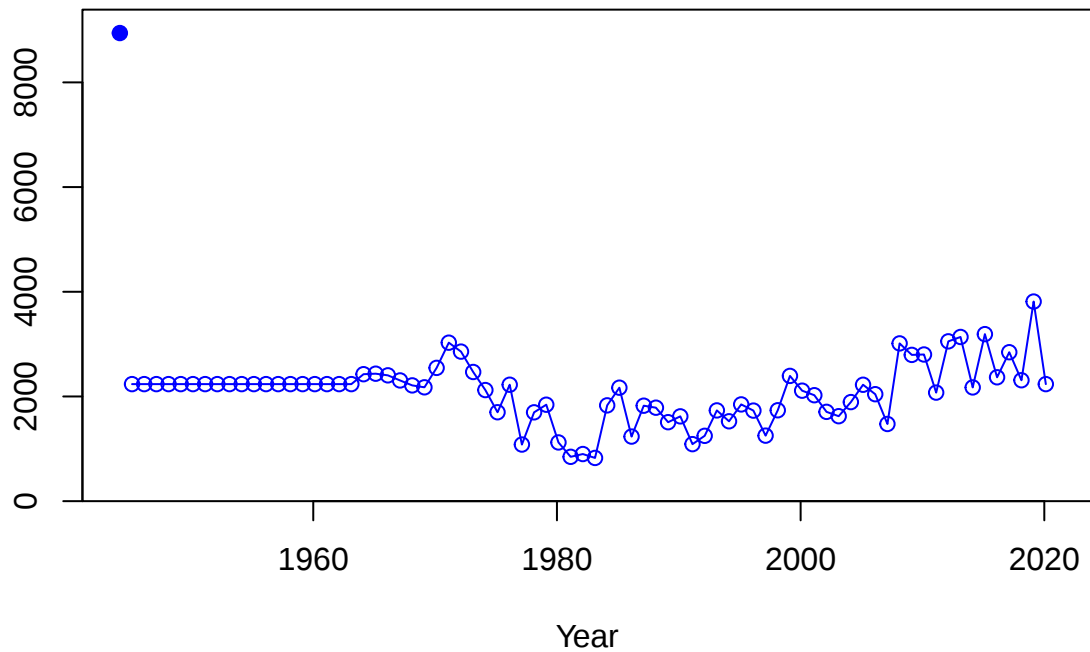




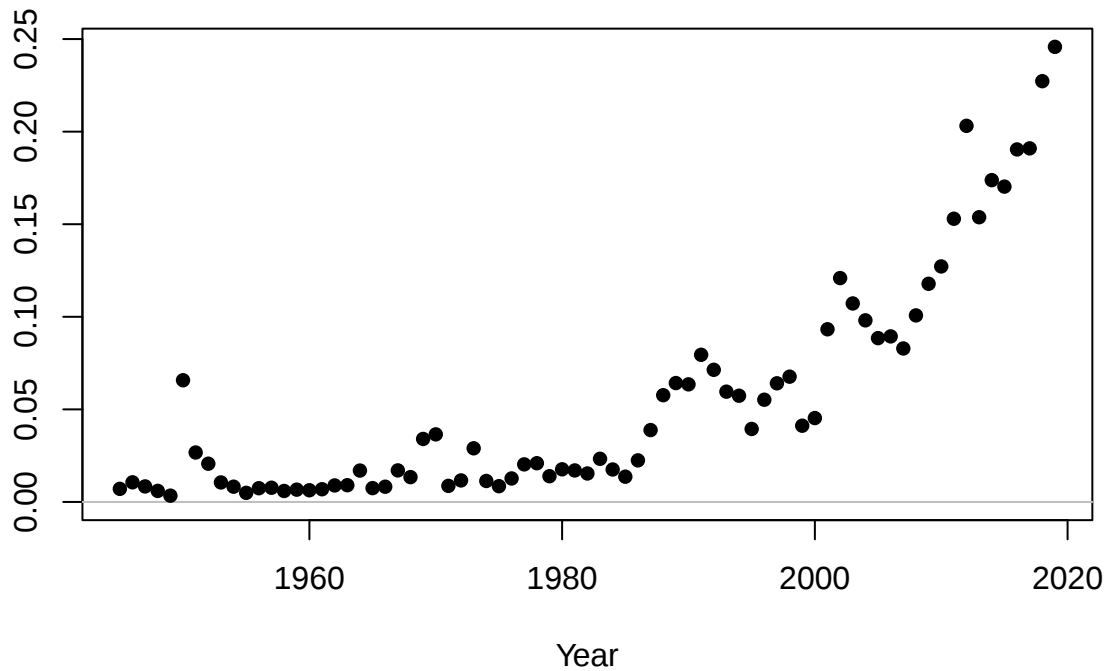
Summary biomass (mt) at beginning of season

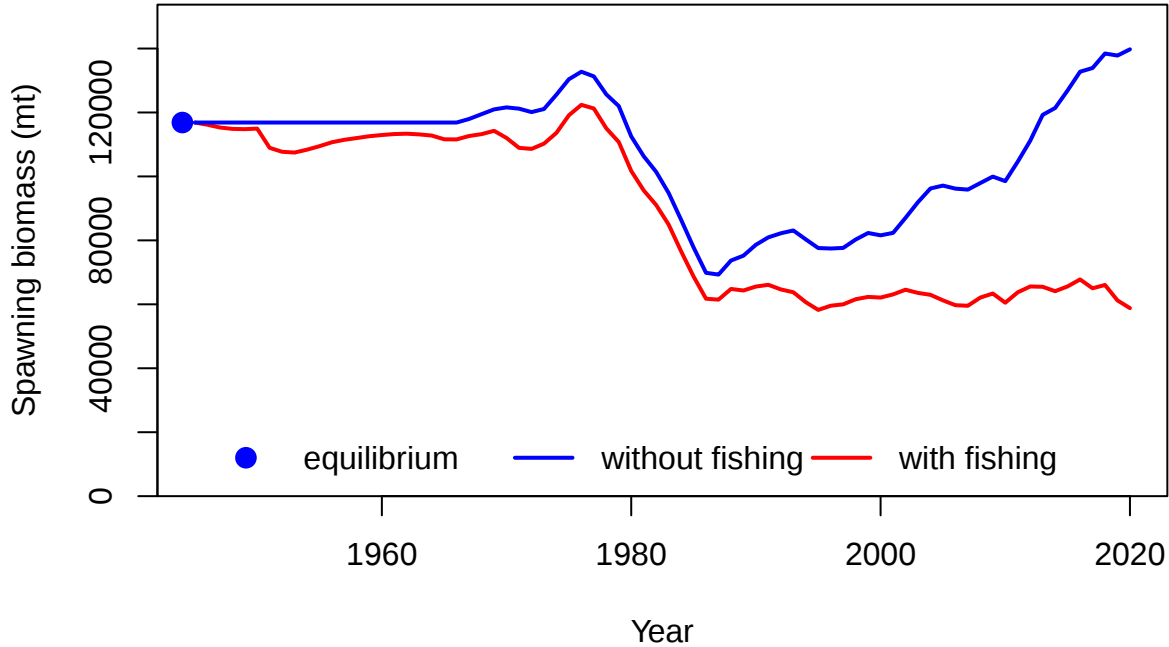


Age-0 recruits (1,000s)

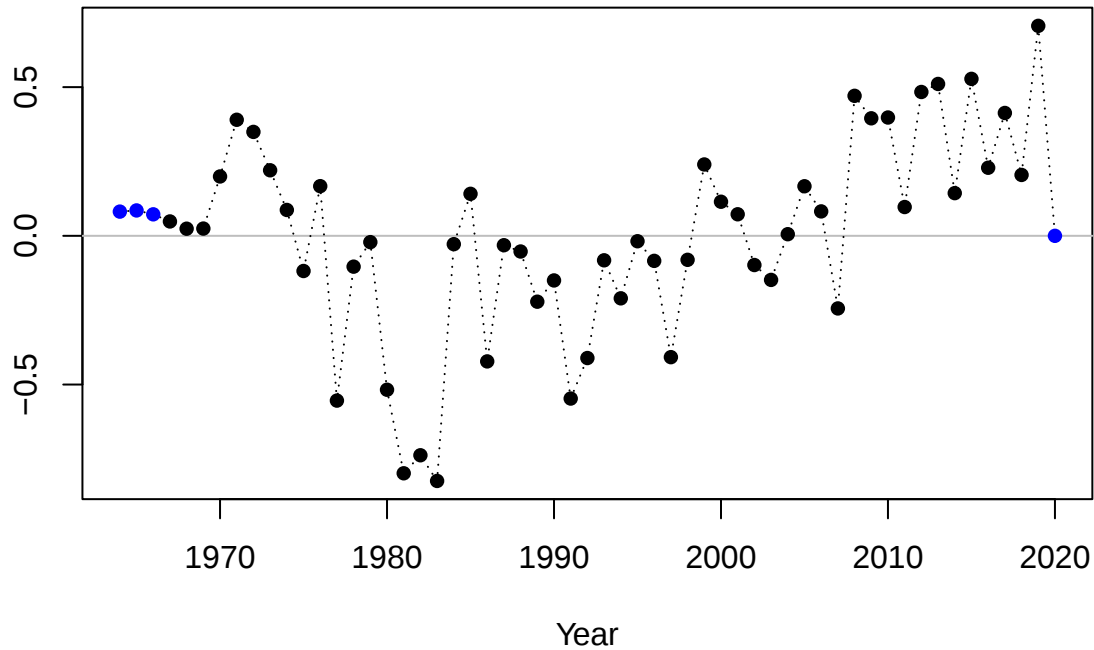


Summary Fishing Mortality

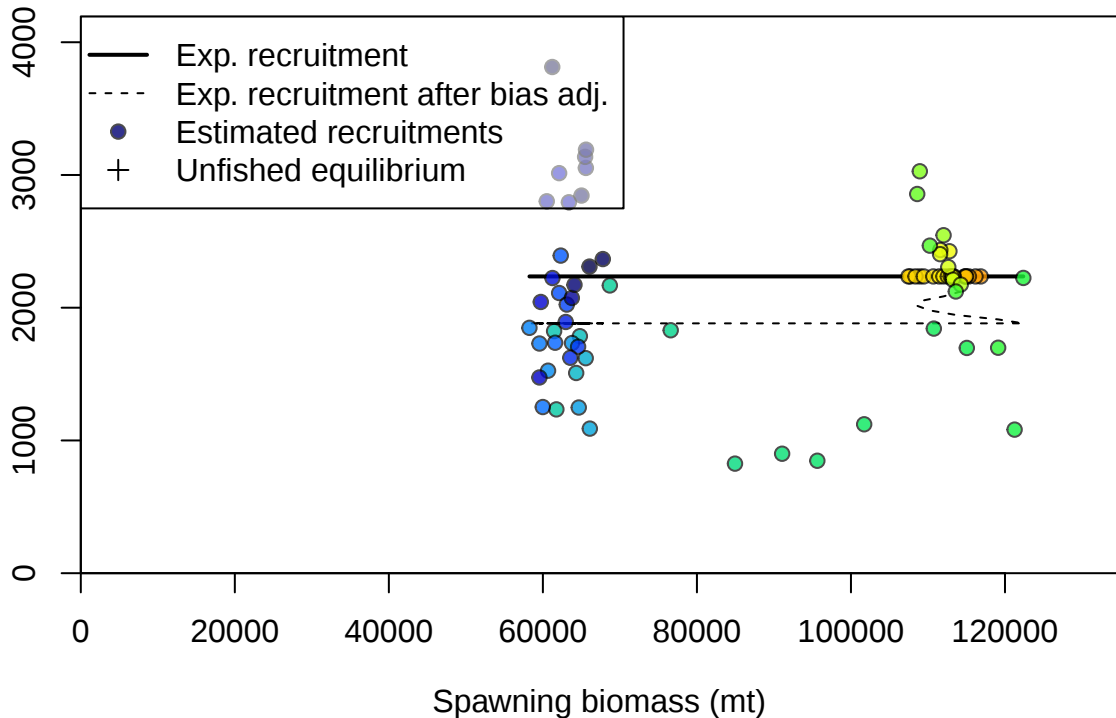




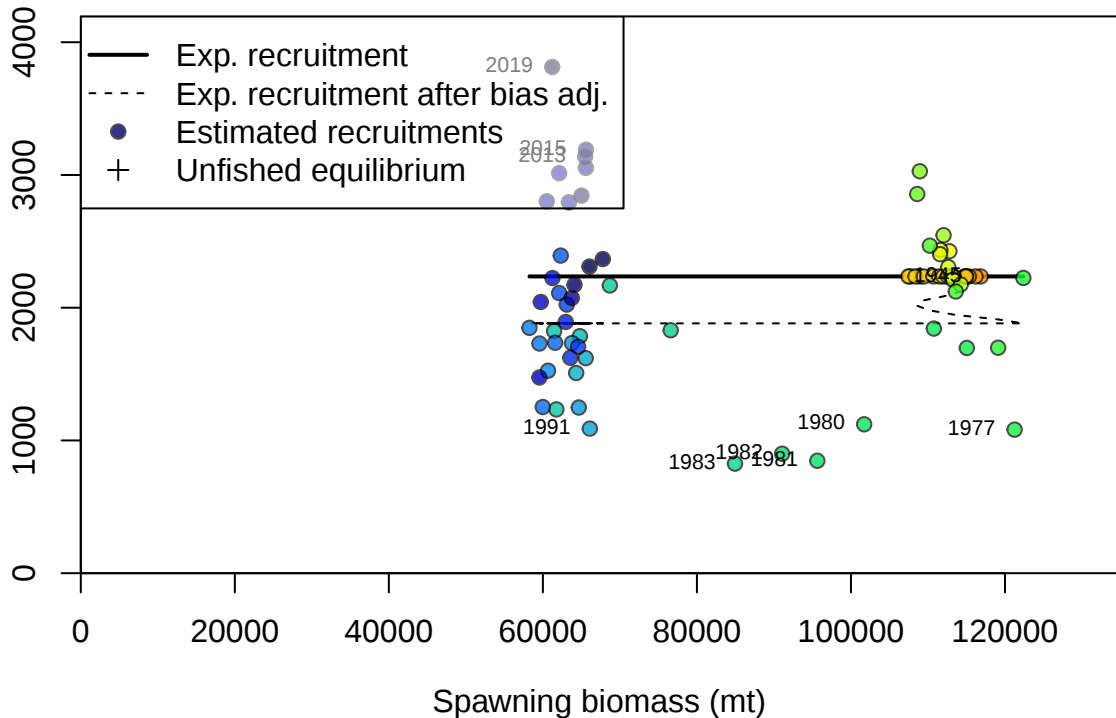
Log recruitment deviation



Recruitment (1,000s)



Recruitment (1,000s)



Log recruitment deviation

2019

2015

1991

1983

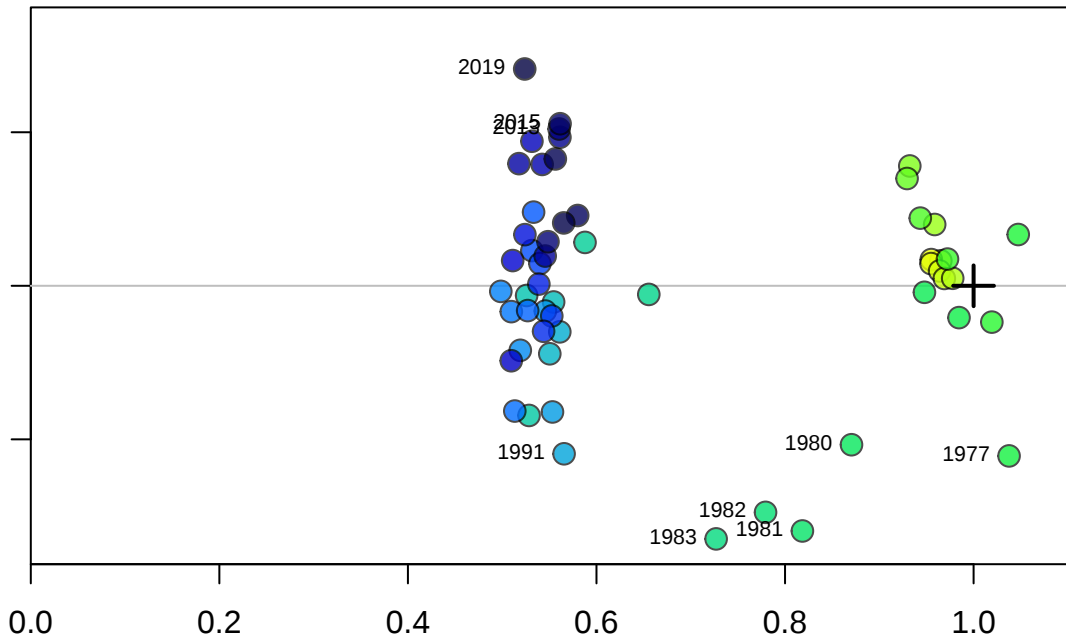
1982

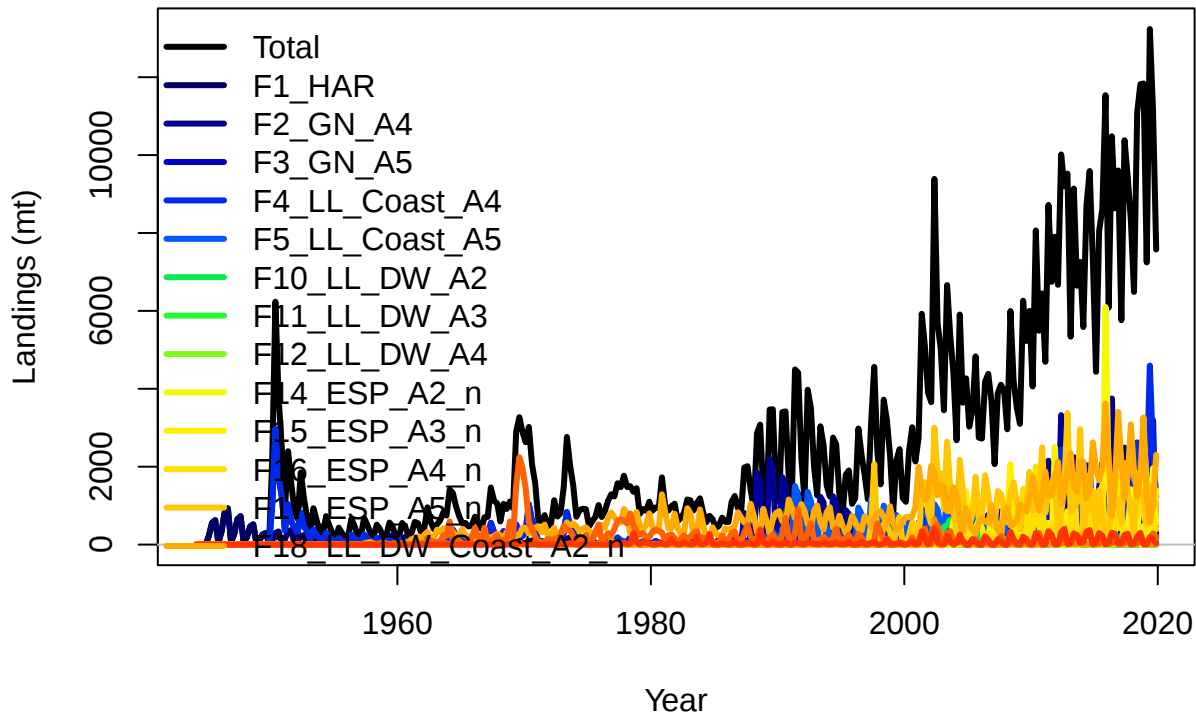
1981

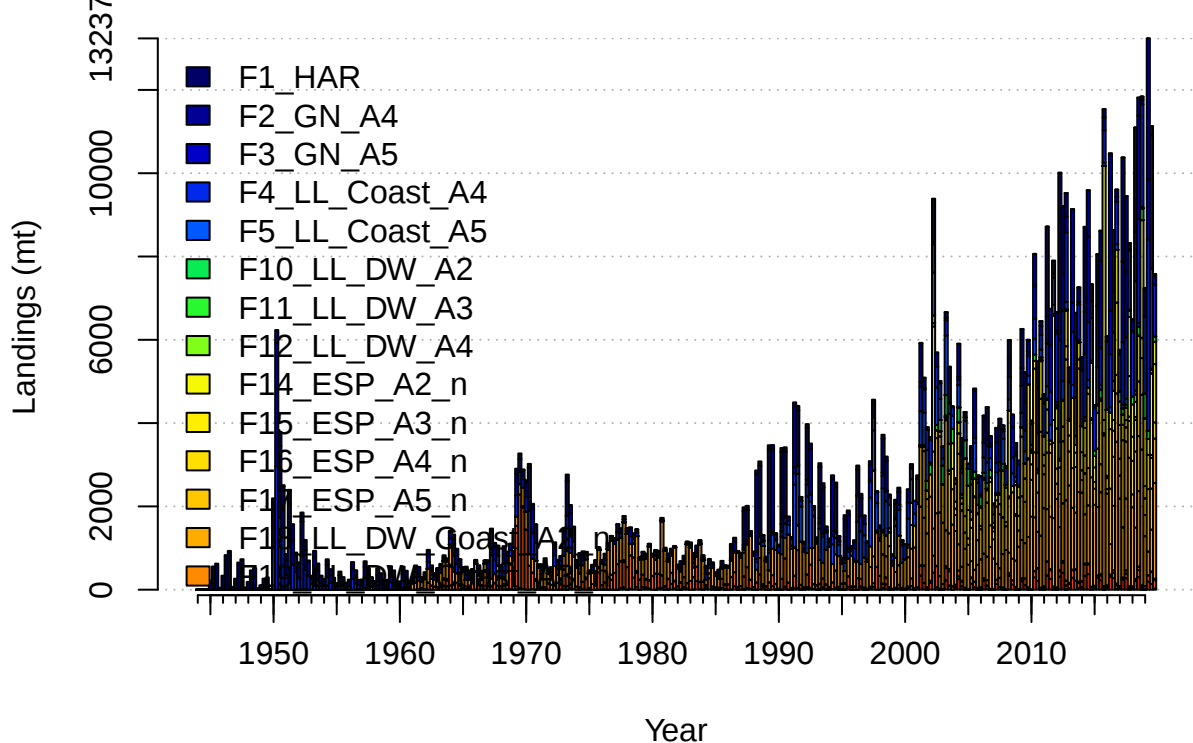
1980

1977

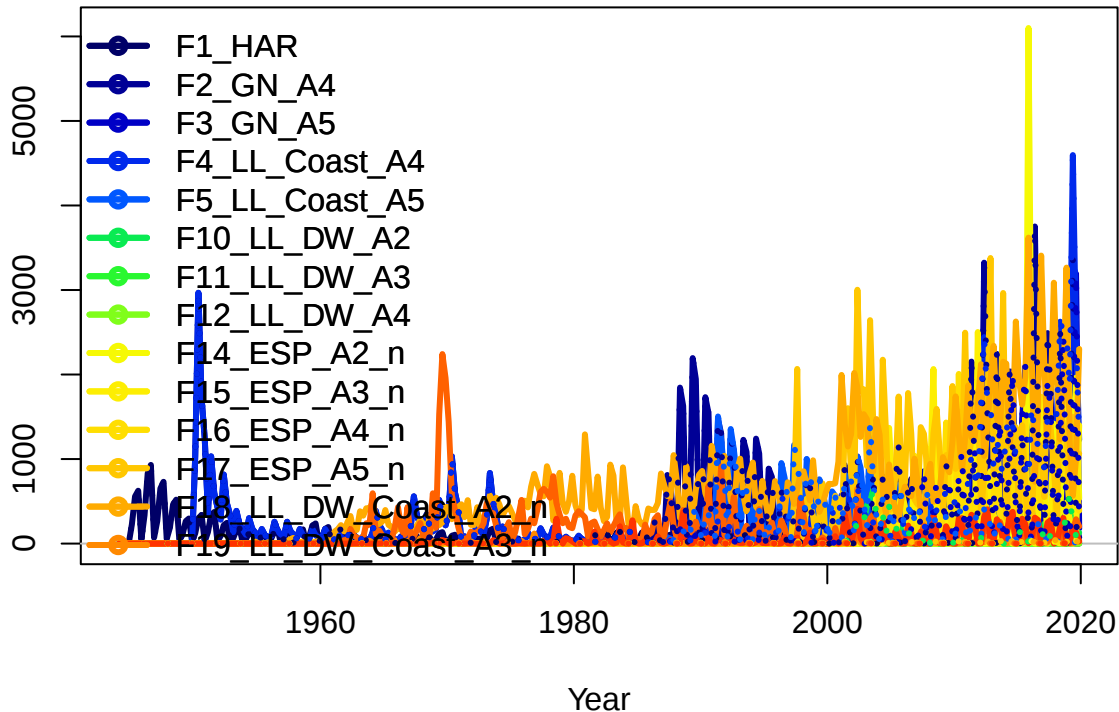
Spawning output (relative to B_0)



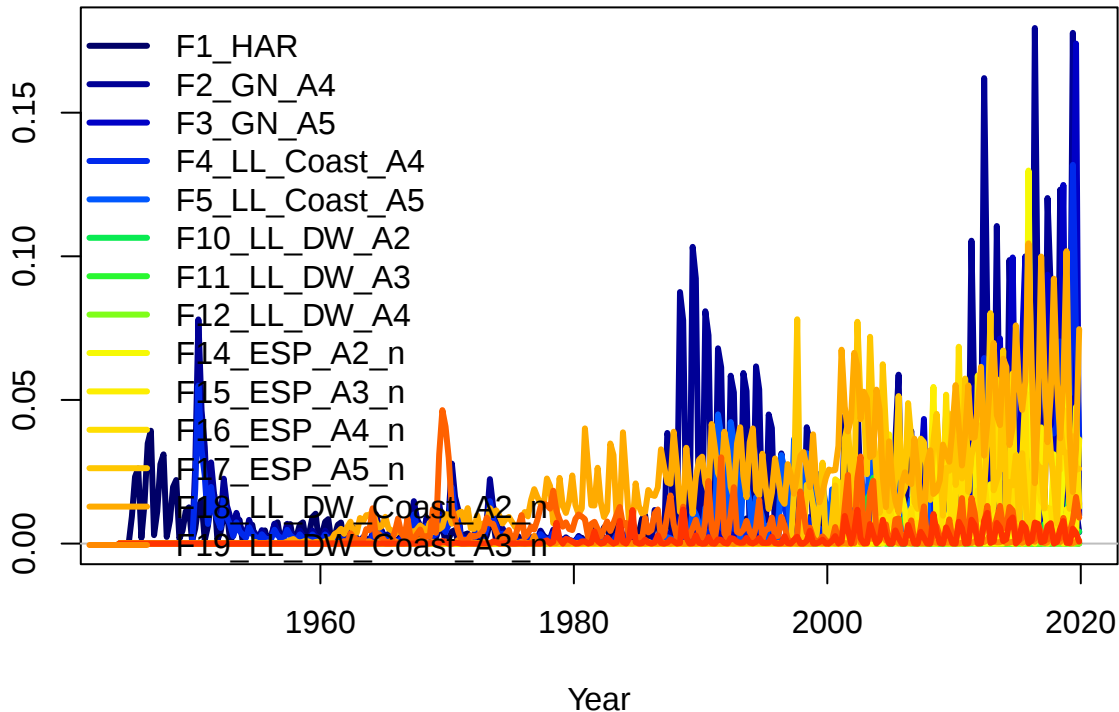


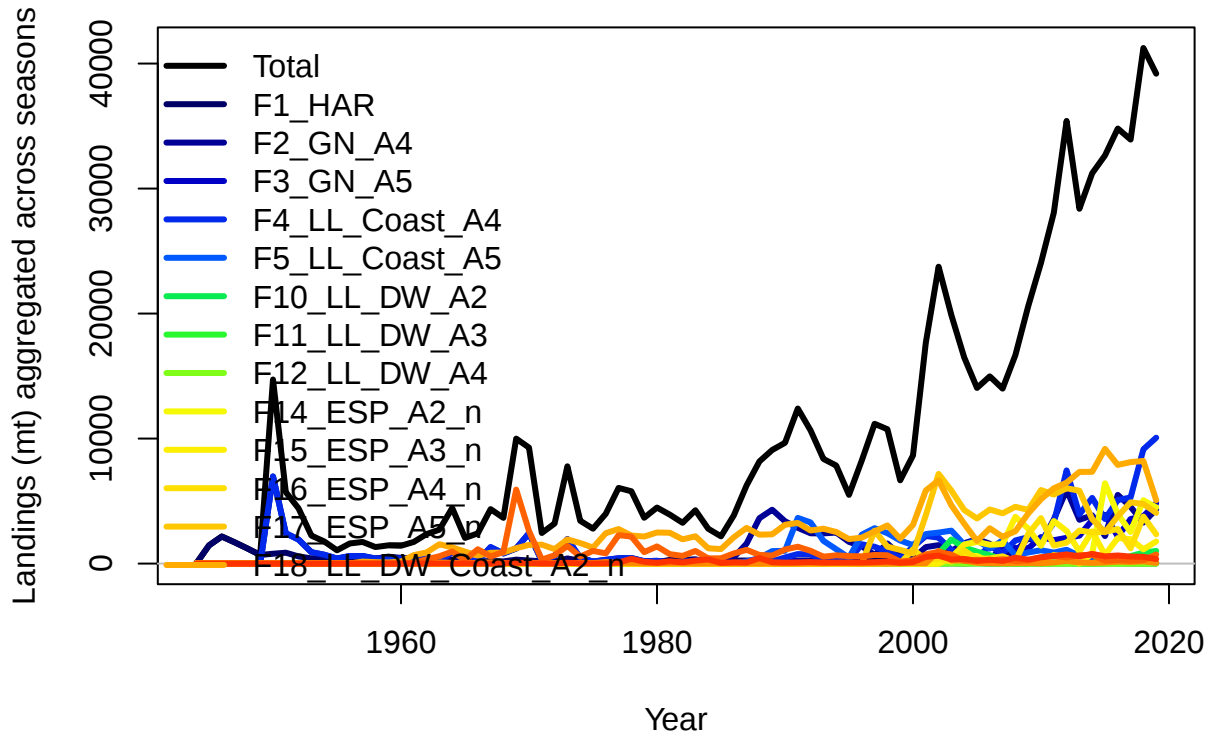


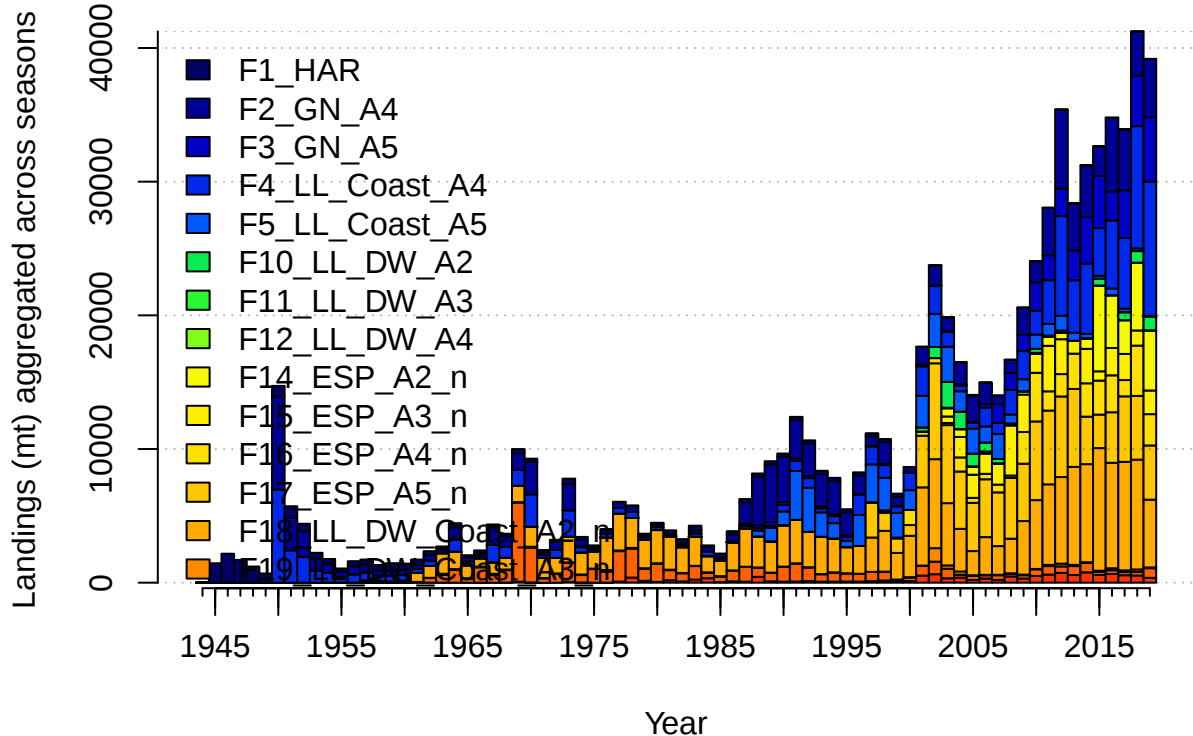
Observed and expected Landings (mt)



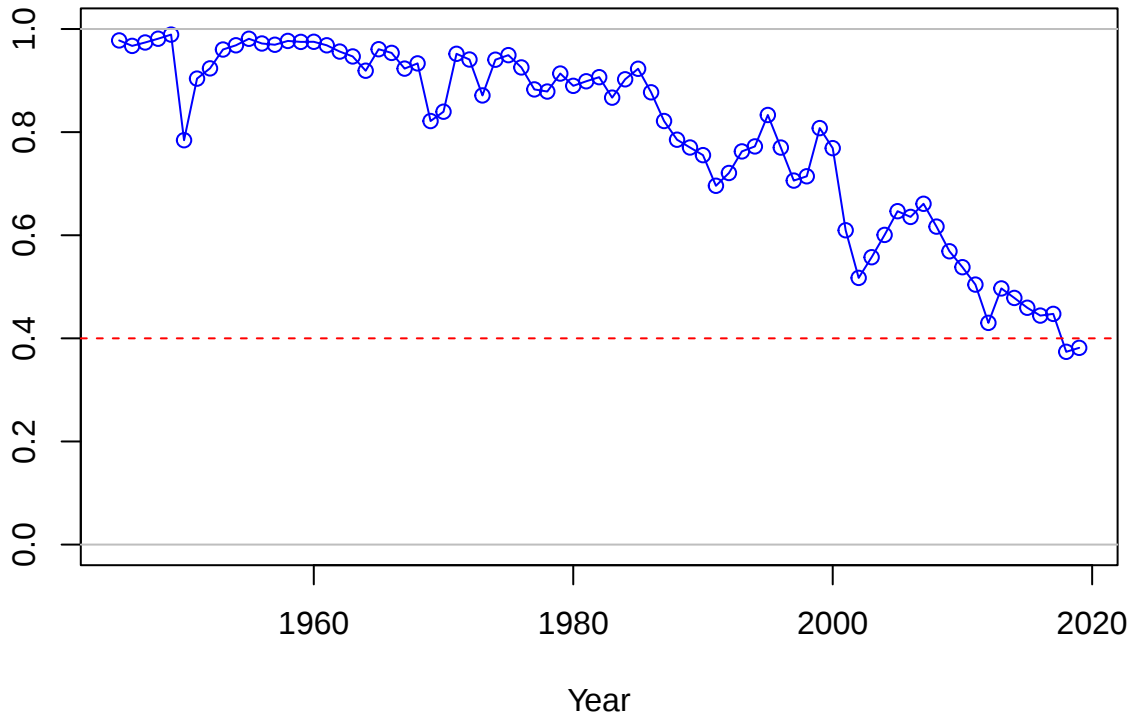
Continuous F



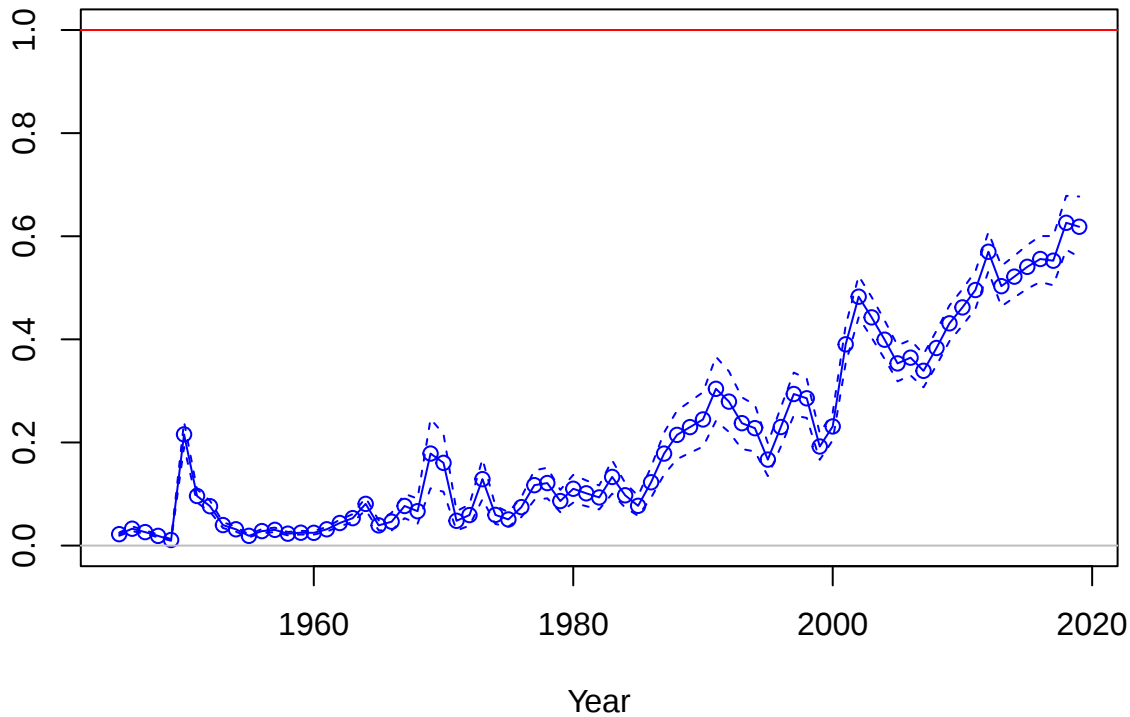




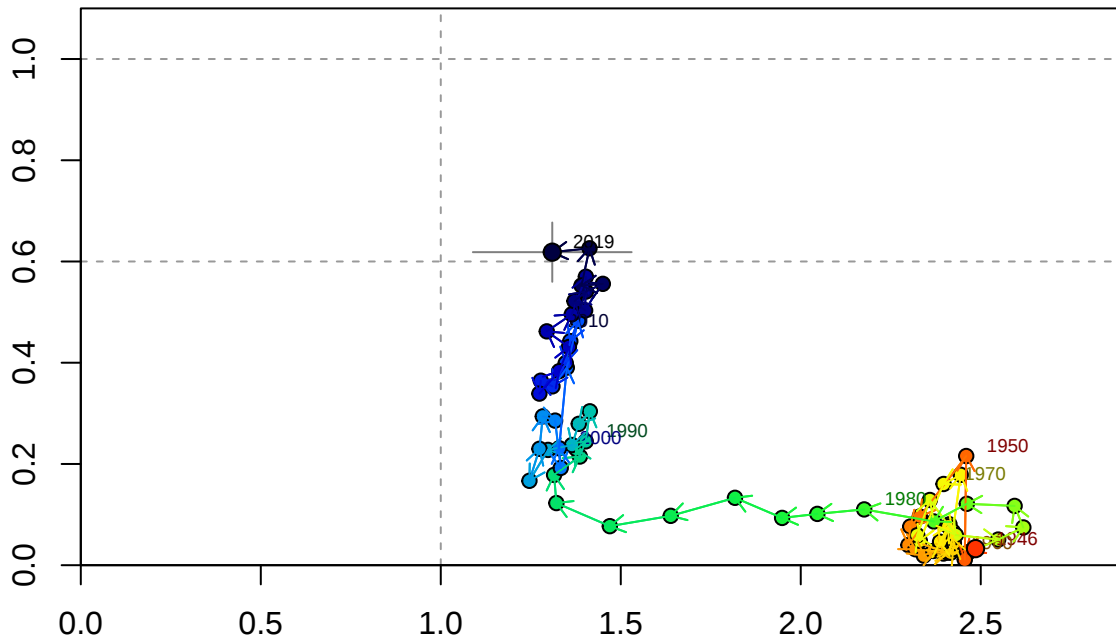
SPR



Fishing intensity: 1-SPR

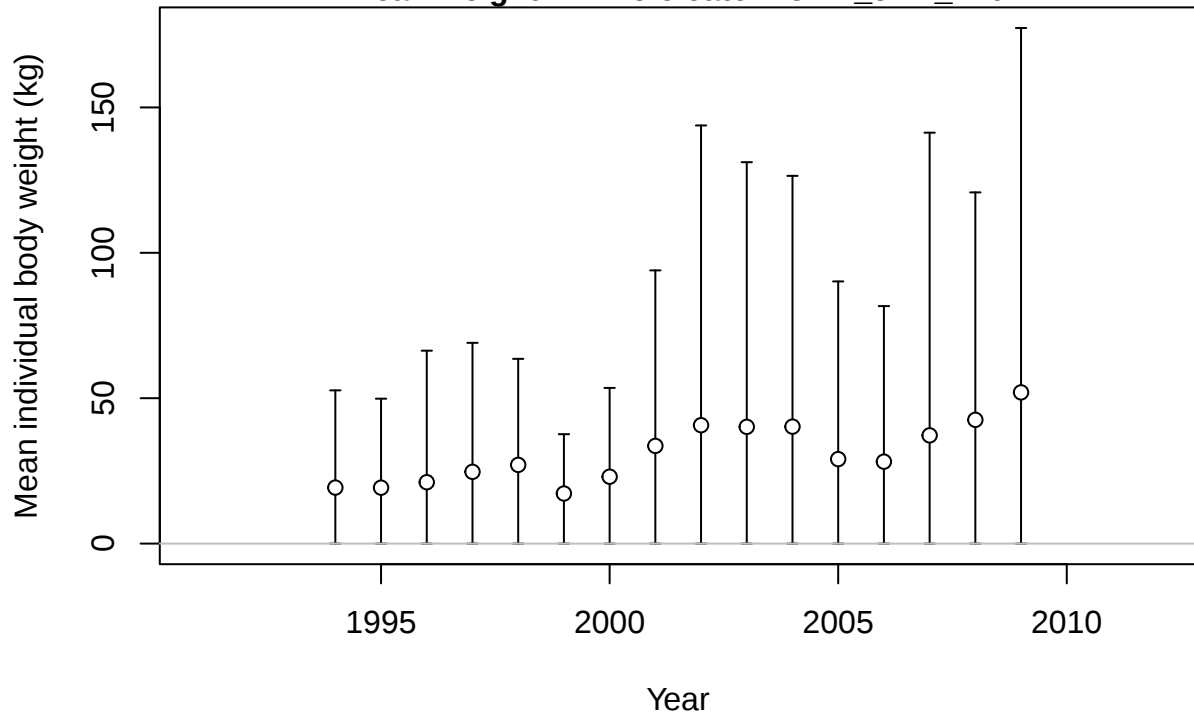


Fishing intensity: 1-SPR

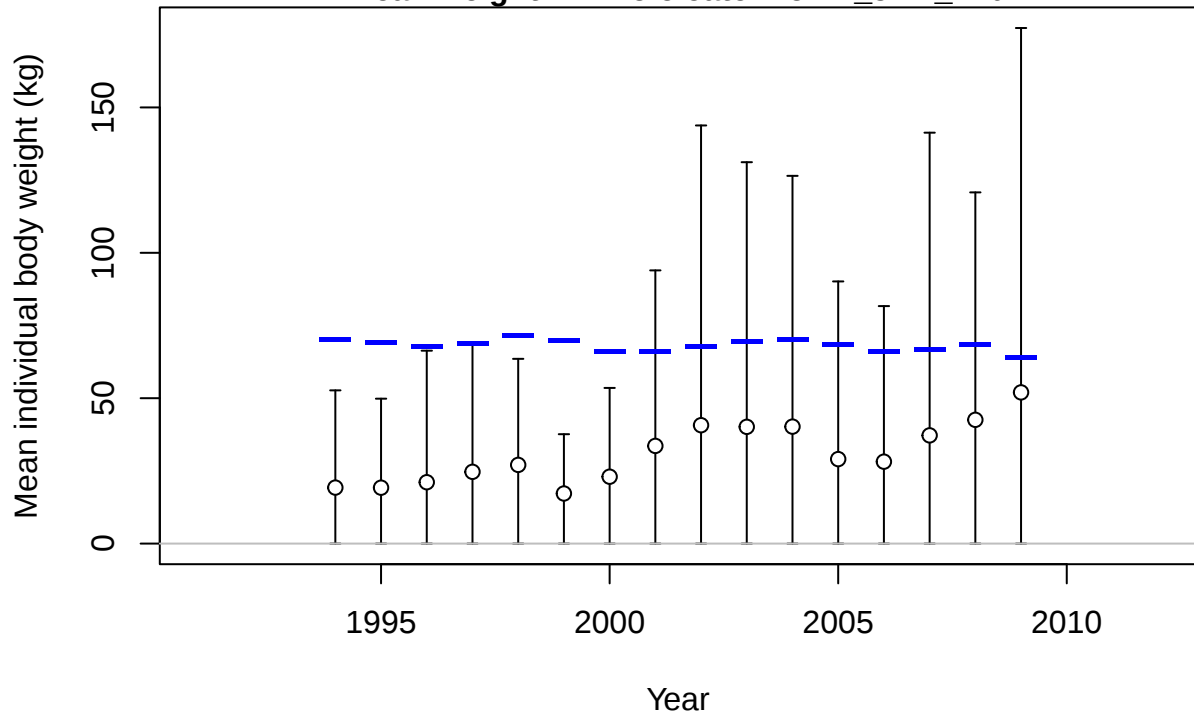


Relative spawning output: $B/(40\% \times \text{Virgin_Biomass})$

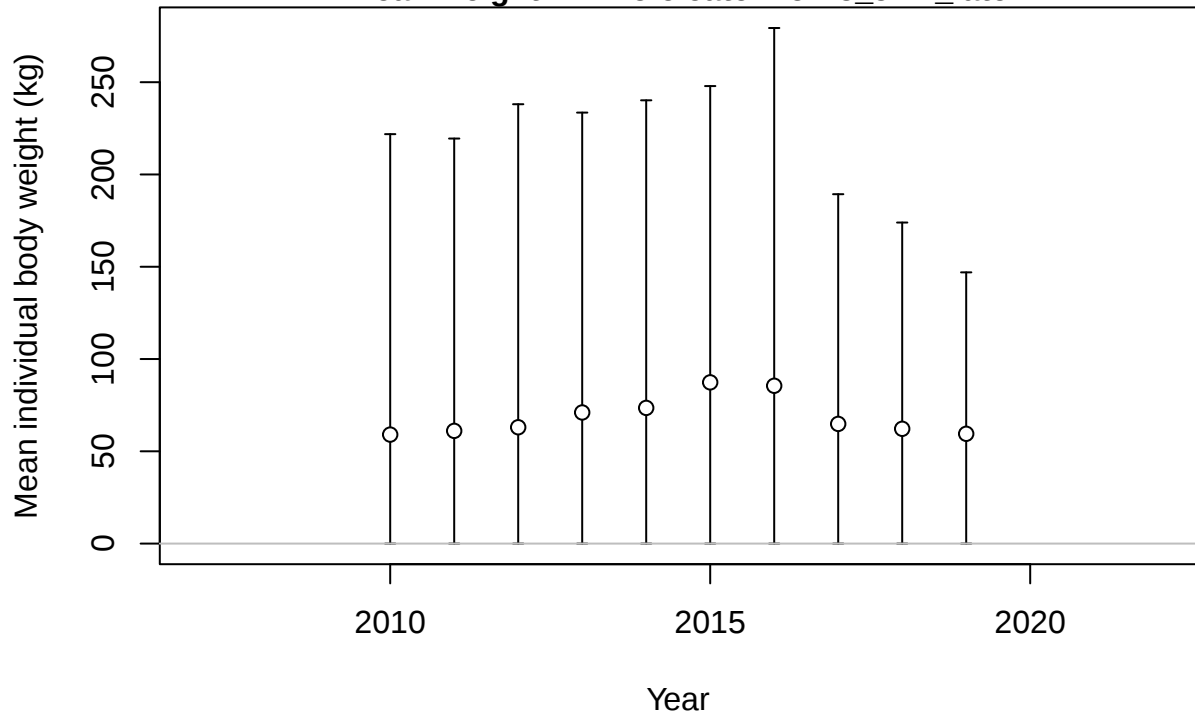
Mean weight in whole catch for I4_JPN_mid



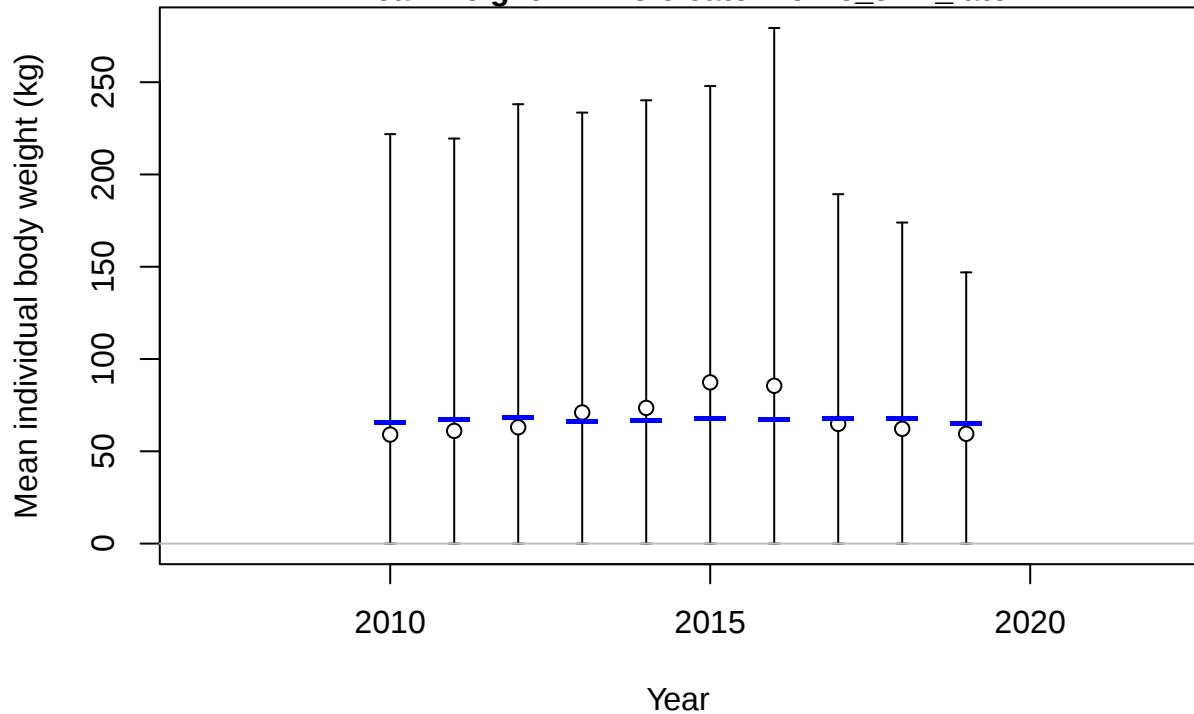
Mean weight in whole catch for I4_JPN_mid



Mean weight in whole catch for I5_JPN_late



Mean weight in whole catch for I5_JPN_late



Index

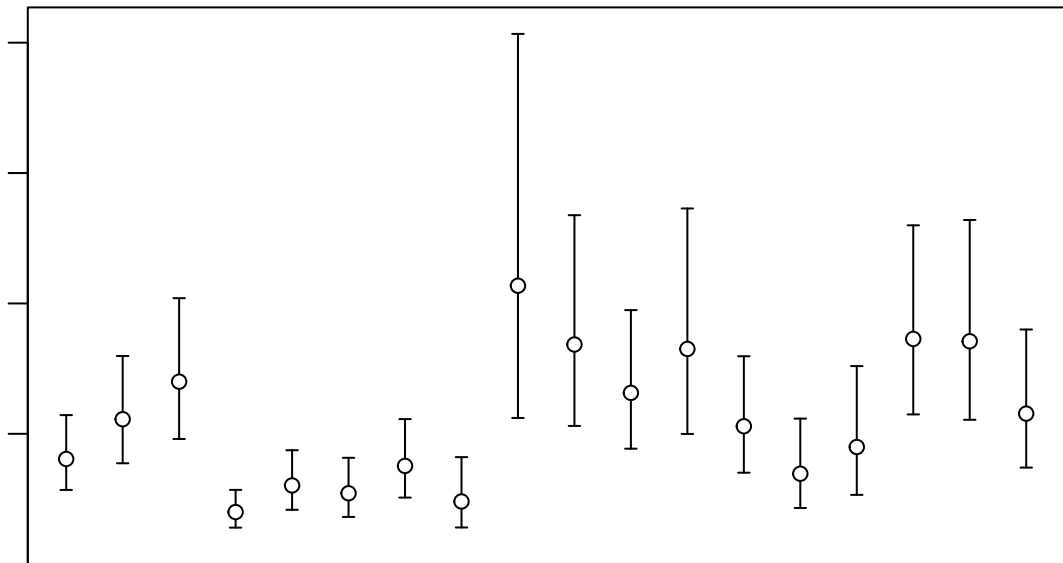
0.4
0.3
0.2
0.1
0.0

2005

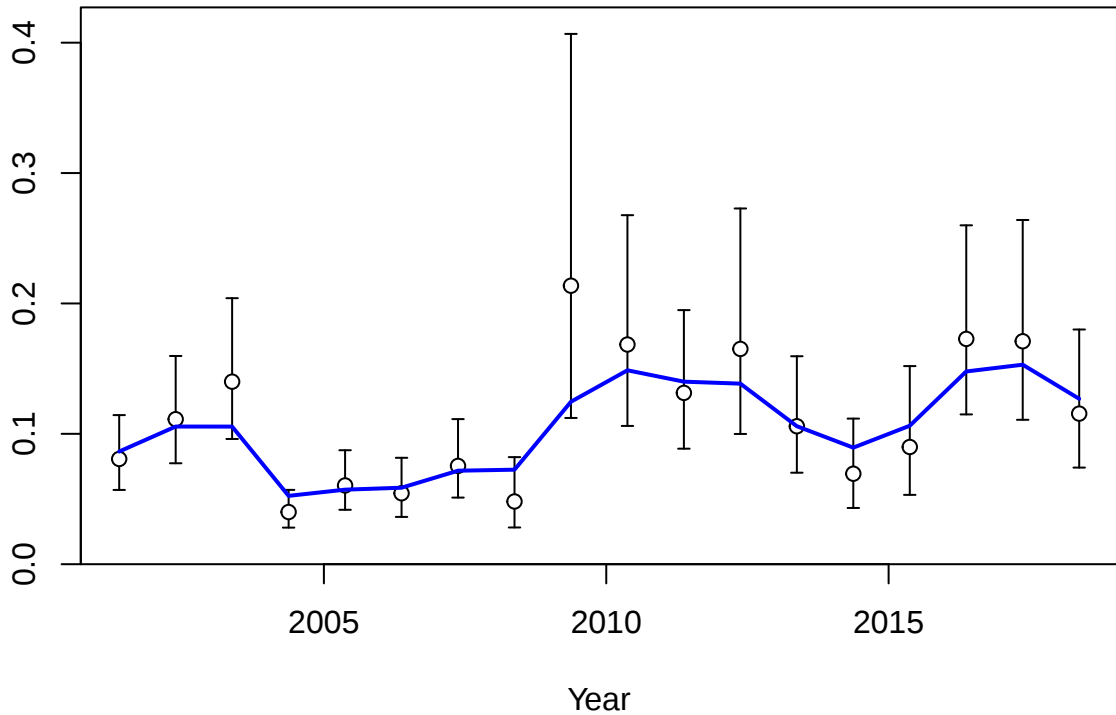
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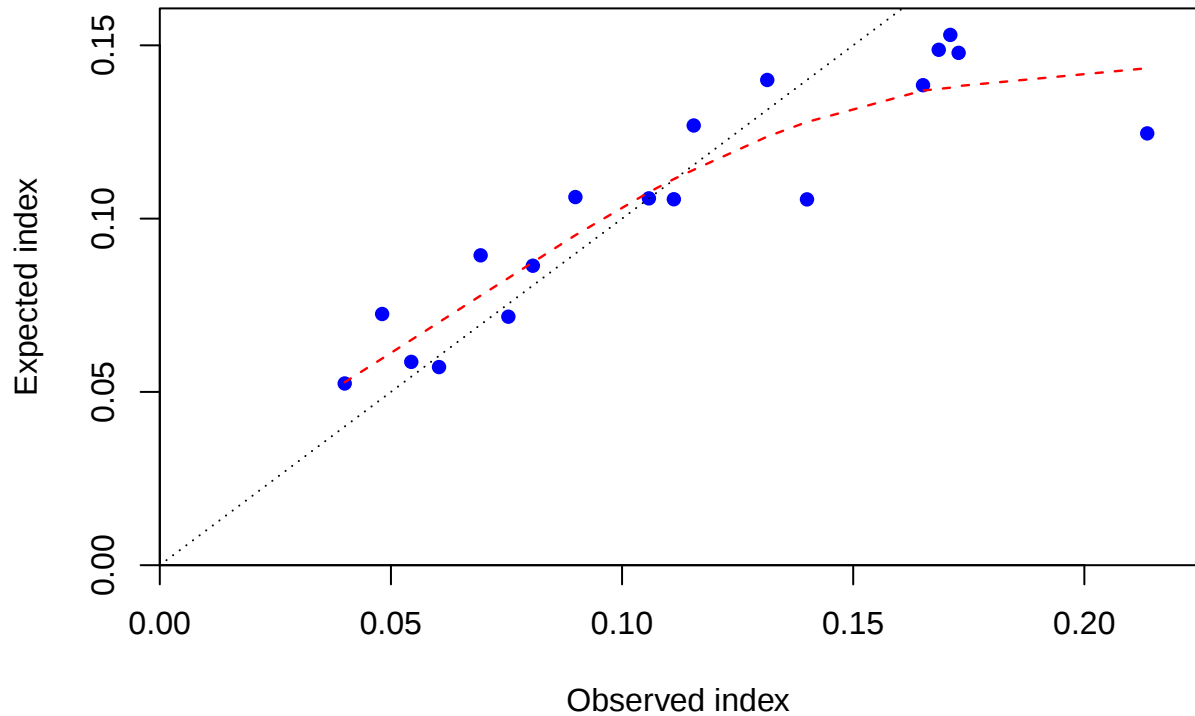
2015

Year

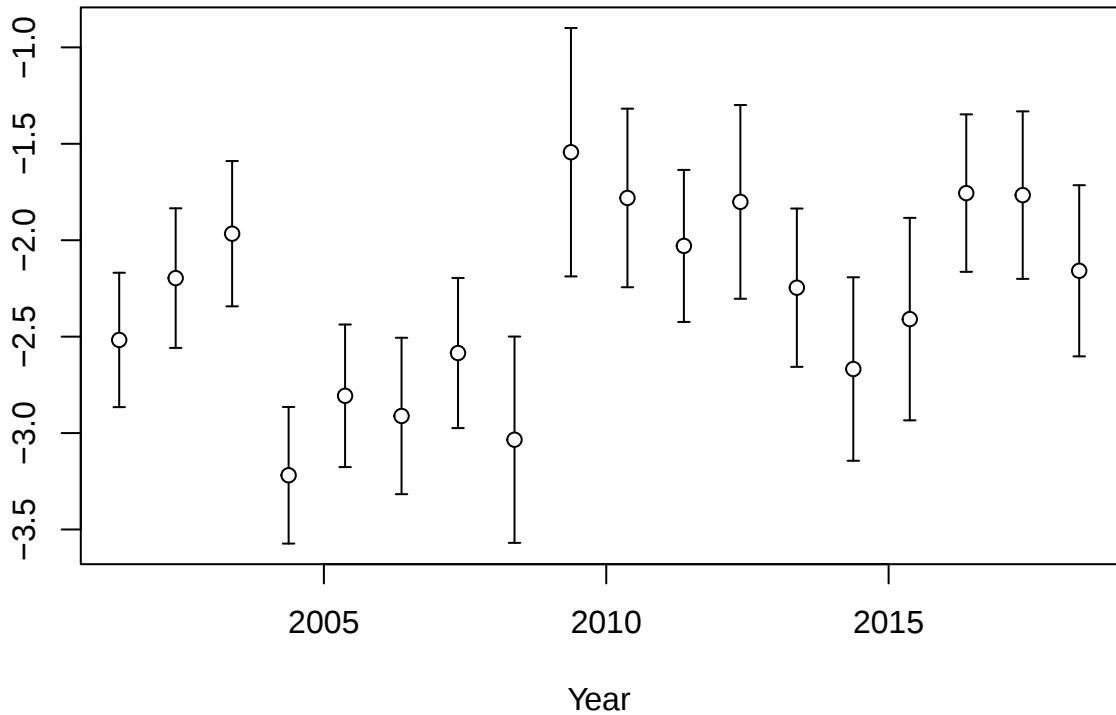


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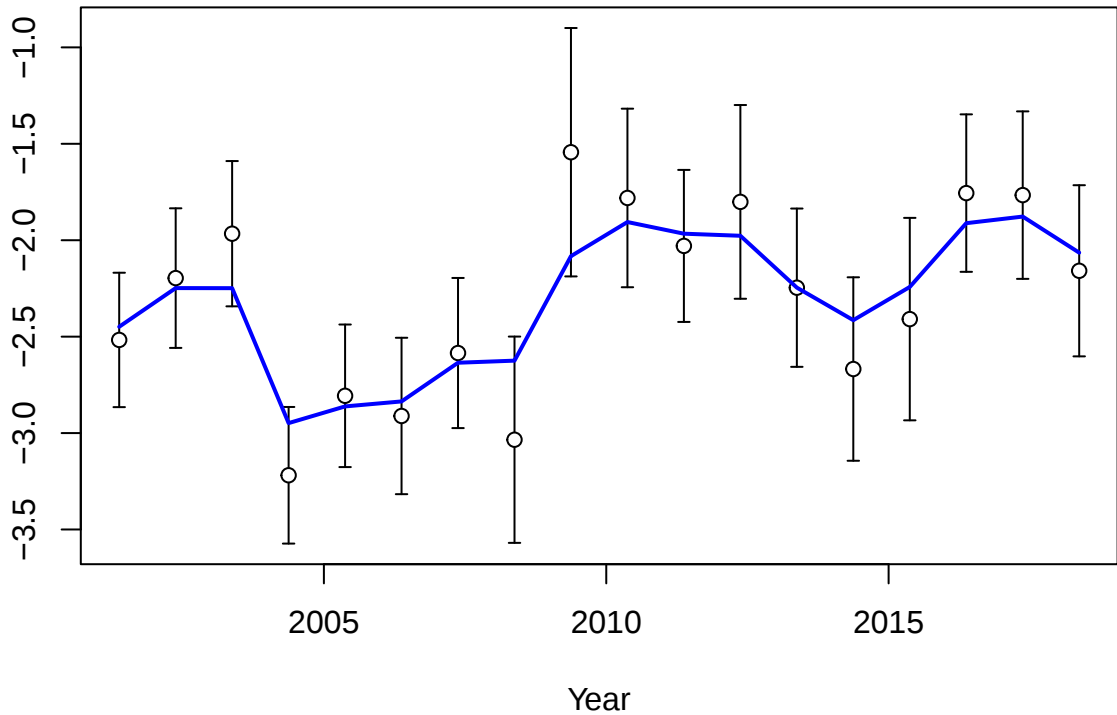


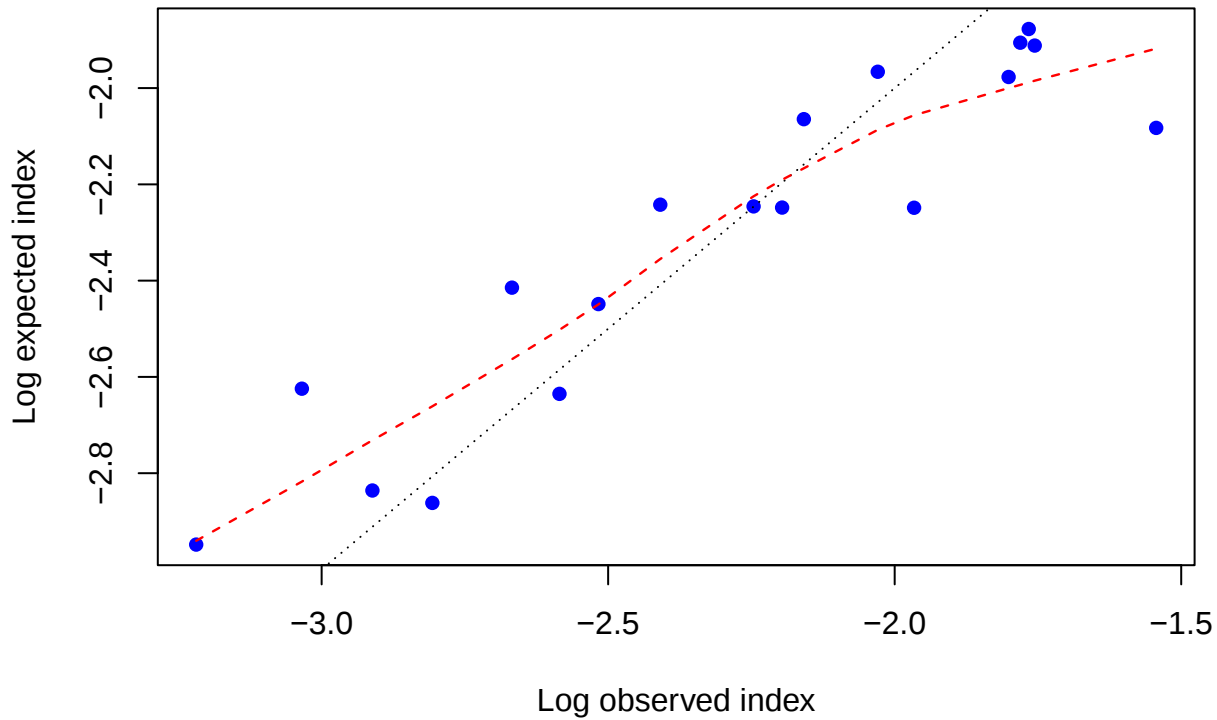


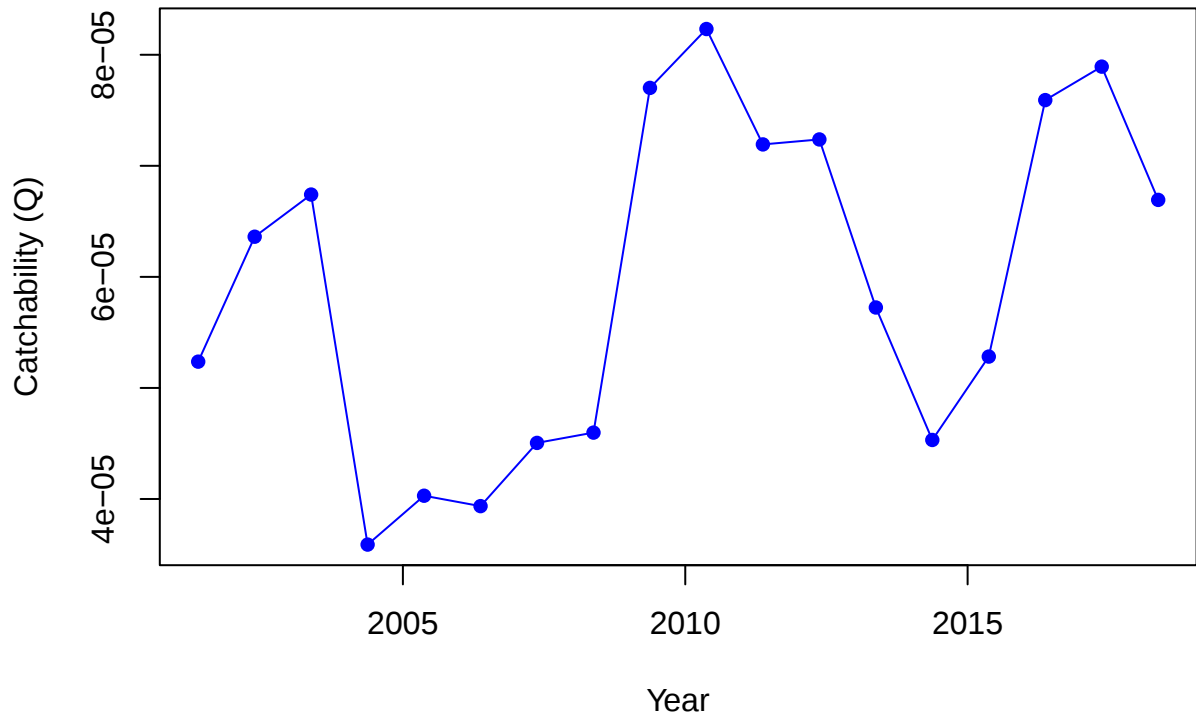
Log index

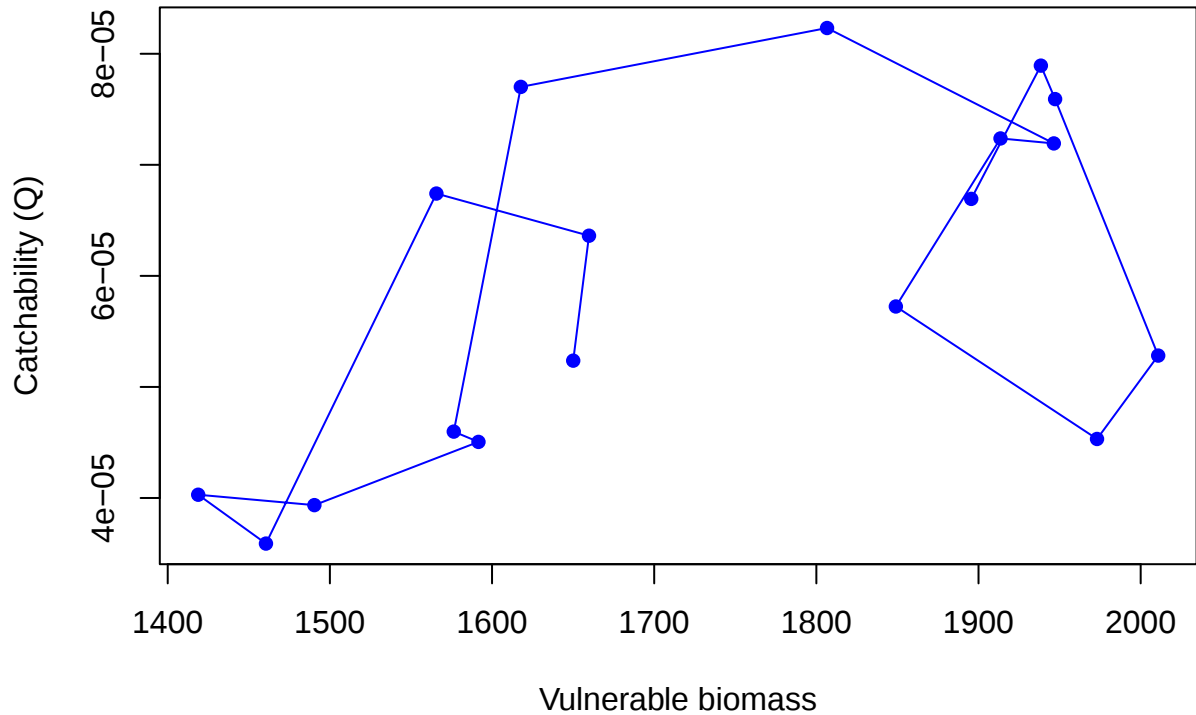


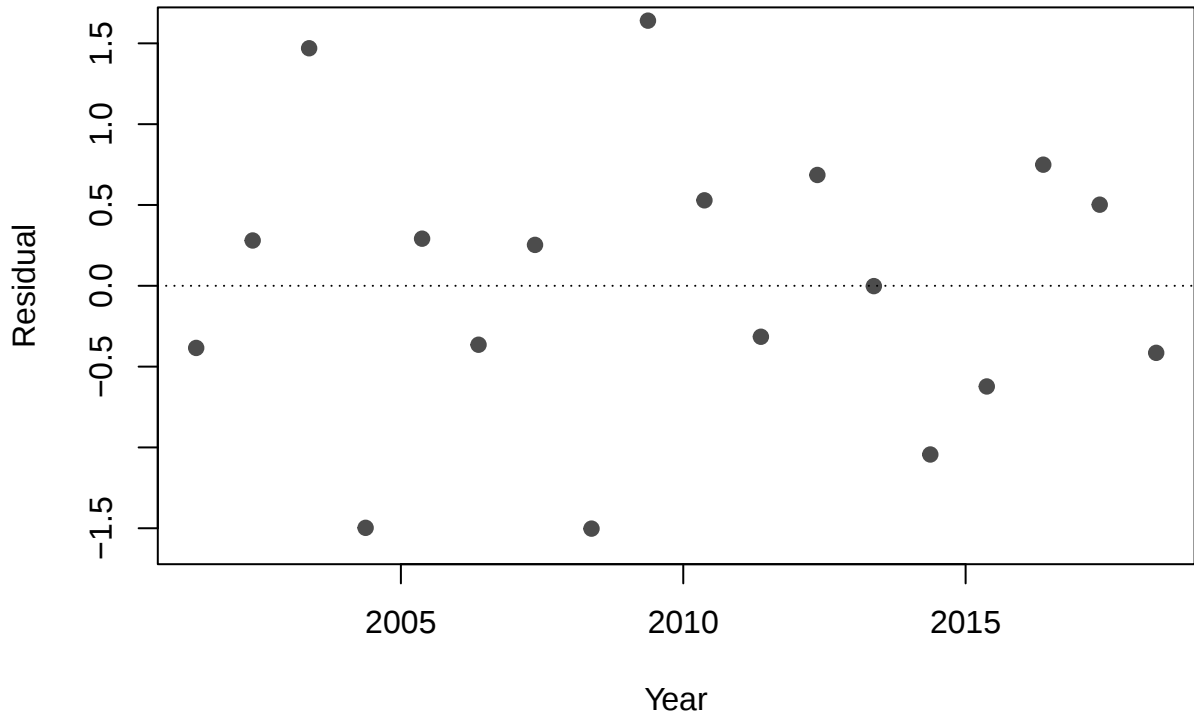
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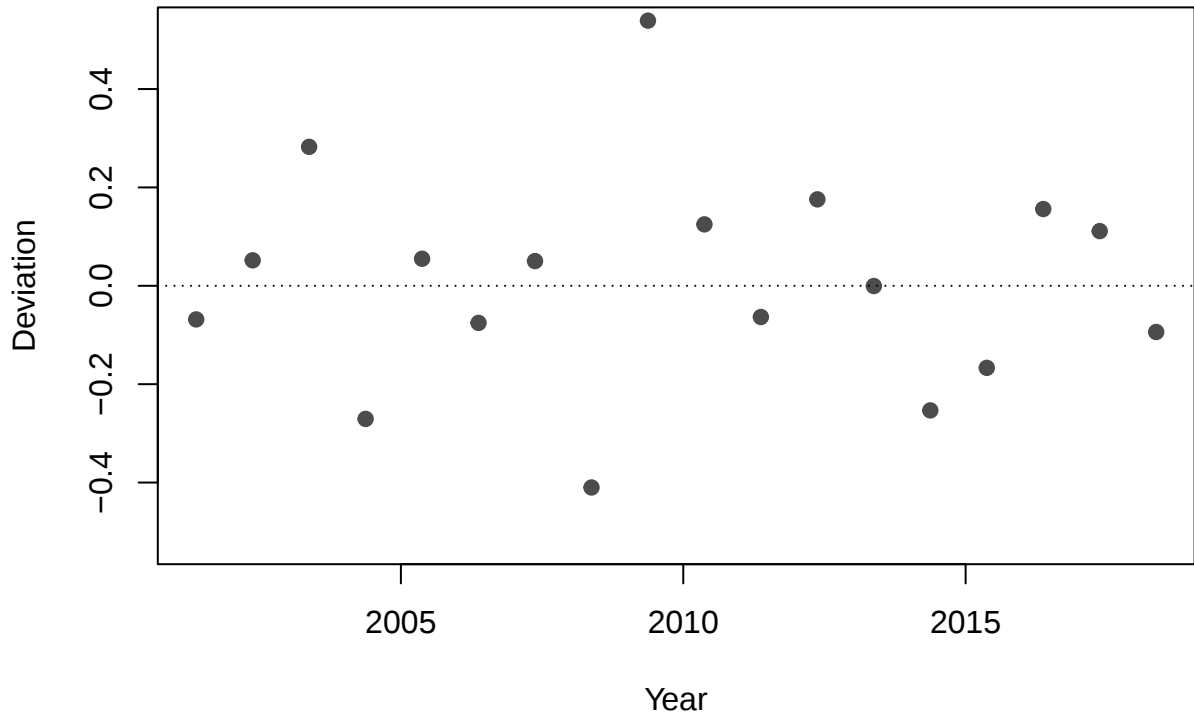


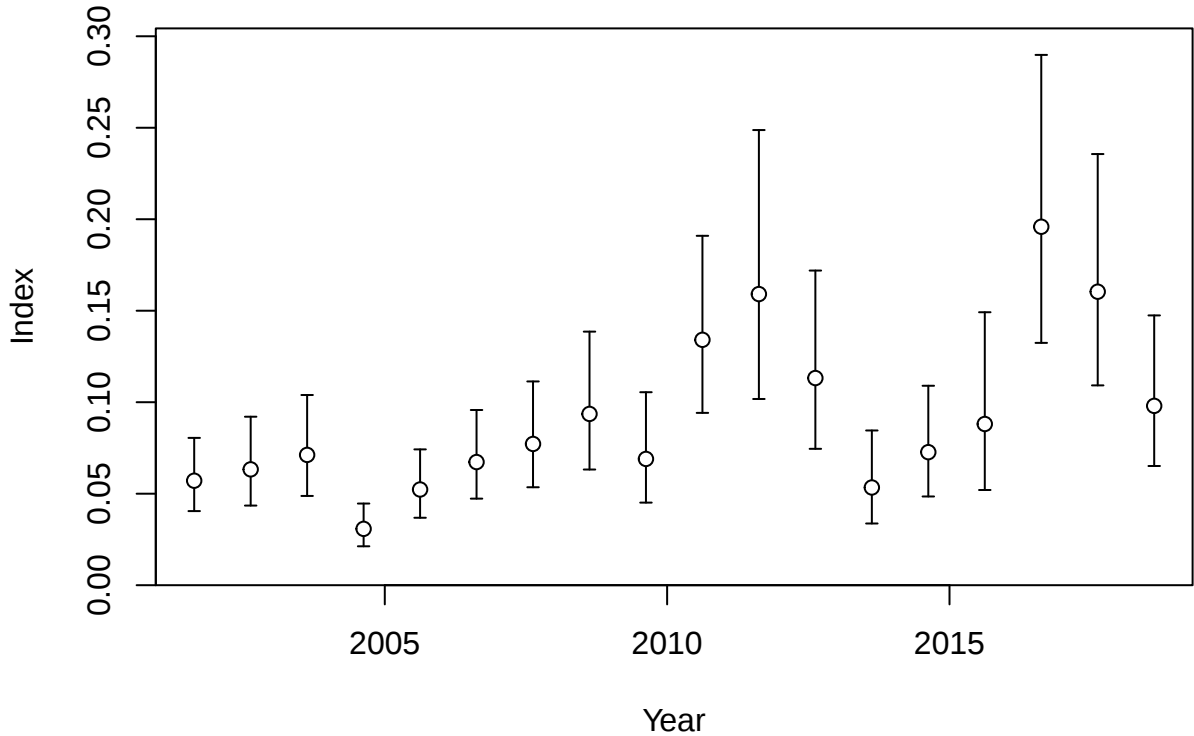


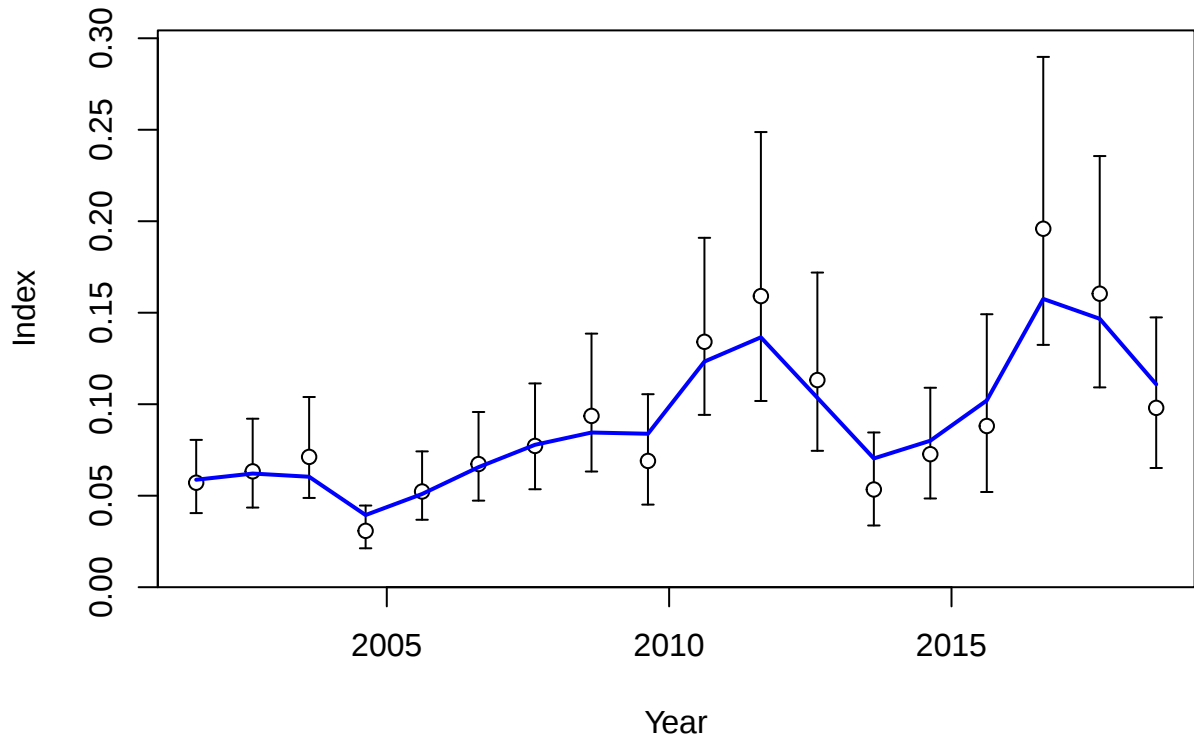


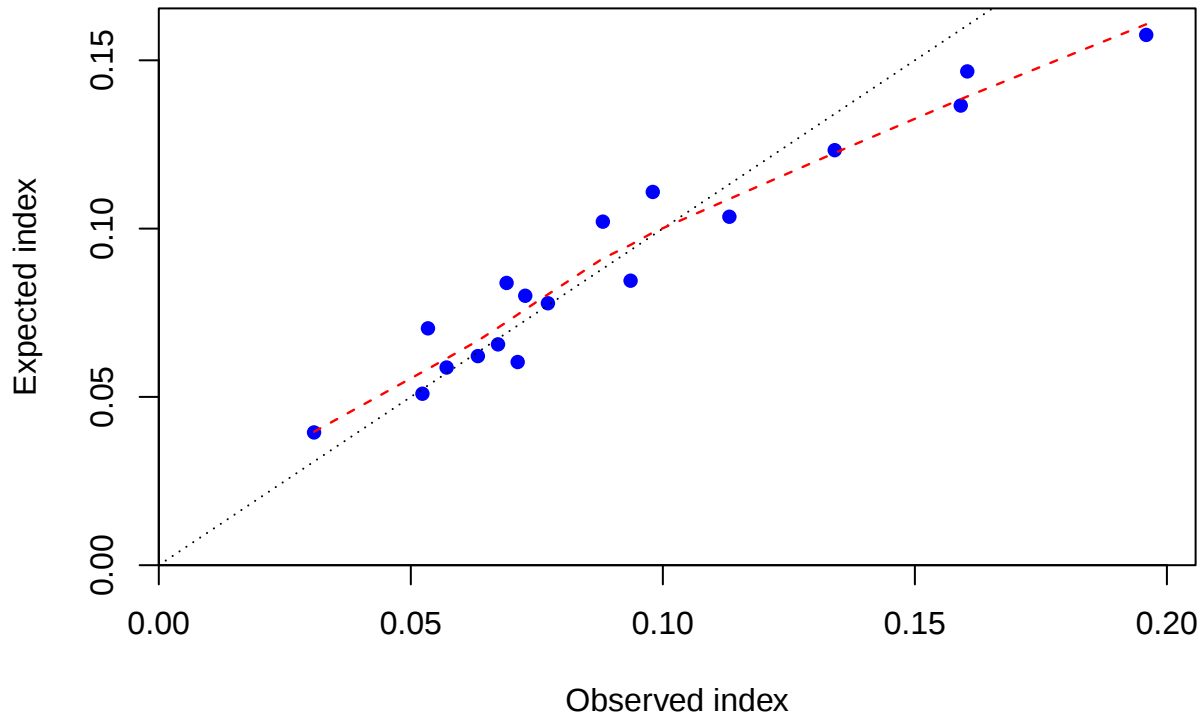












Log index

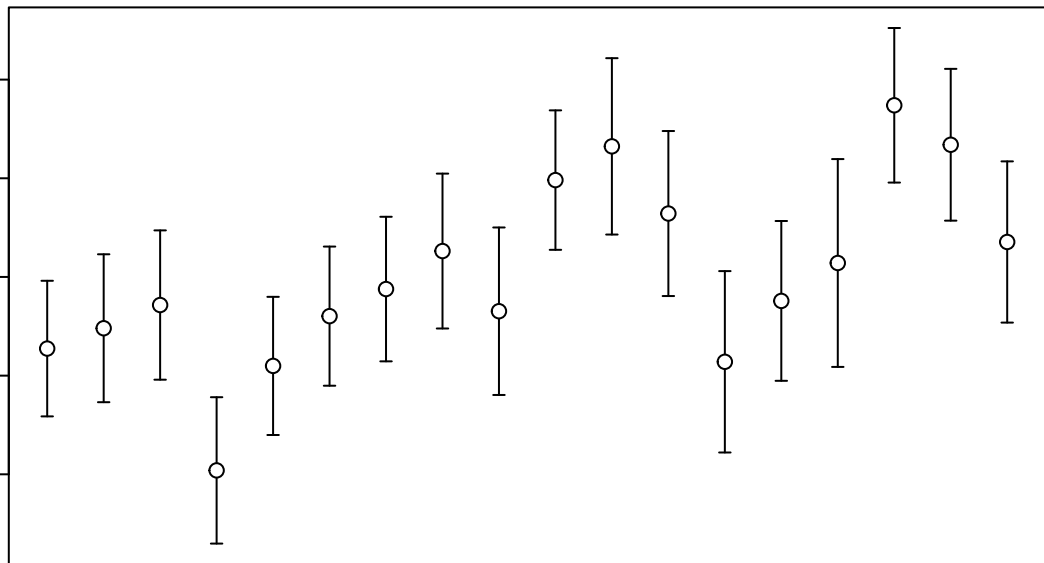
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-3.0
-2.5
-2.0
-1.5

2005

2010

2015

Year



Log index

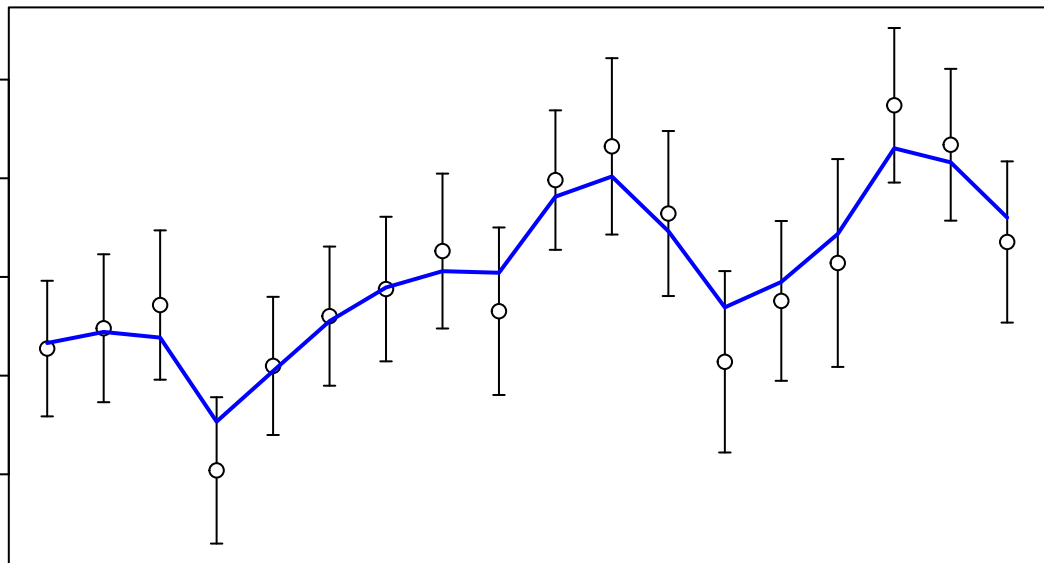
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-3.0
-2.5
-2.0
-1.5

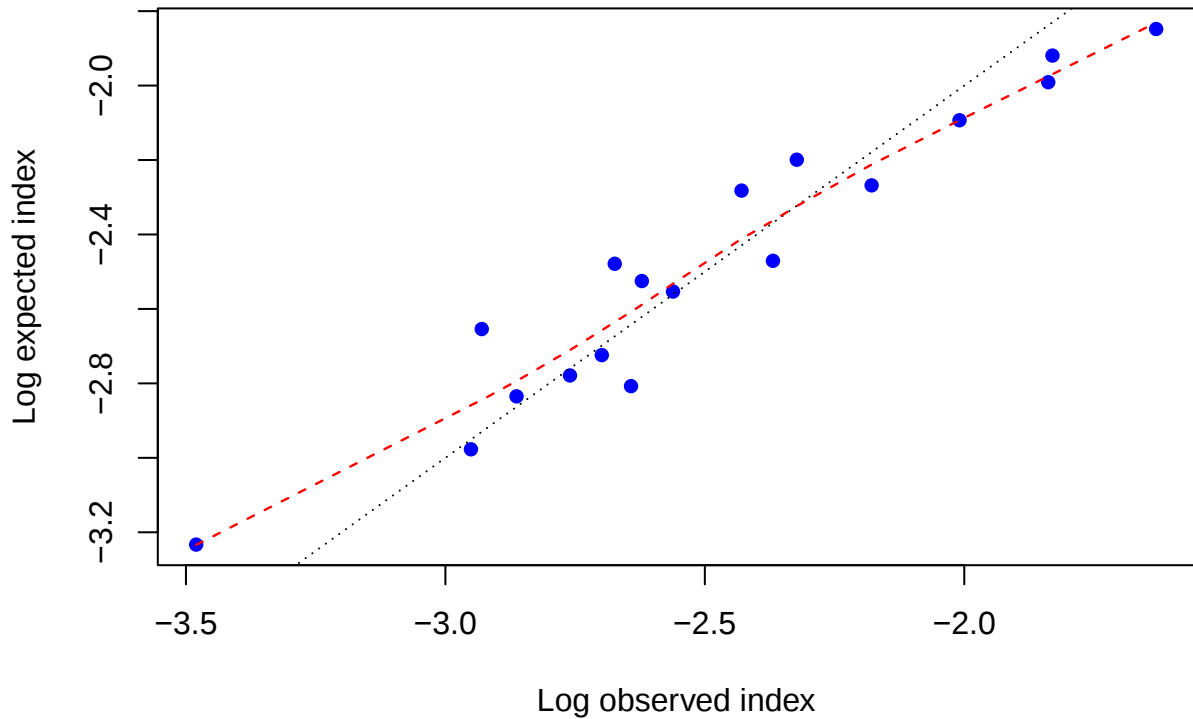
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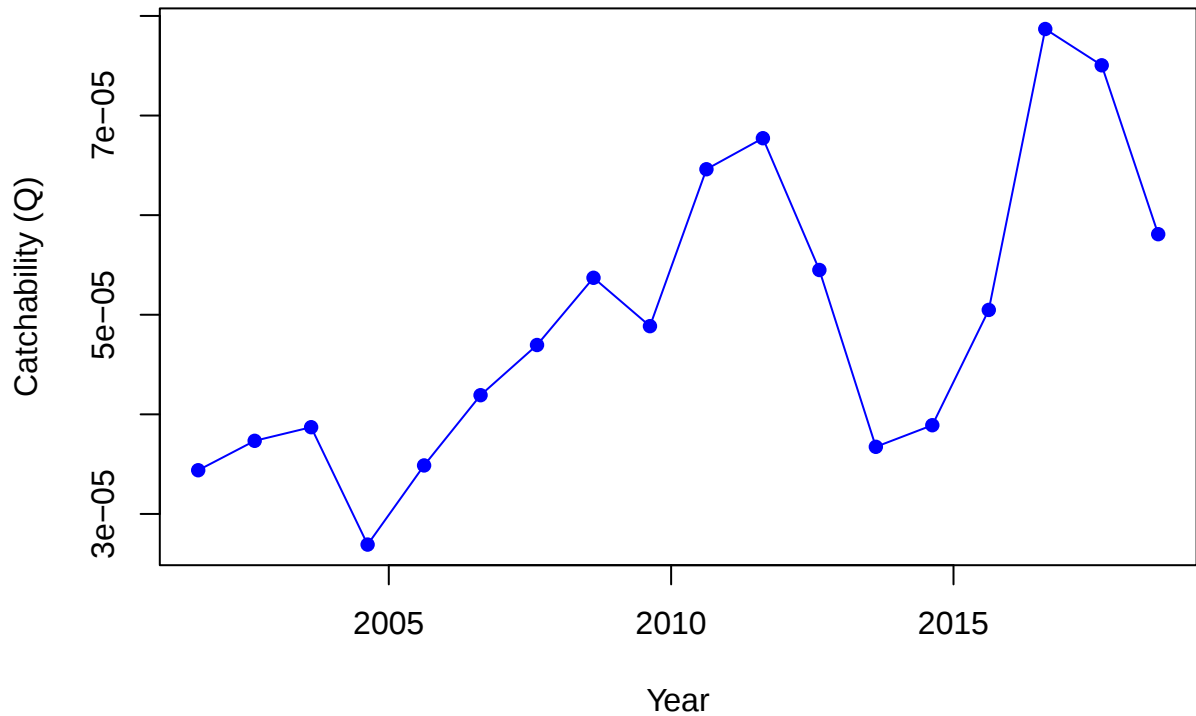
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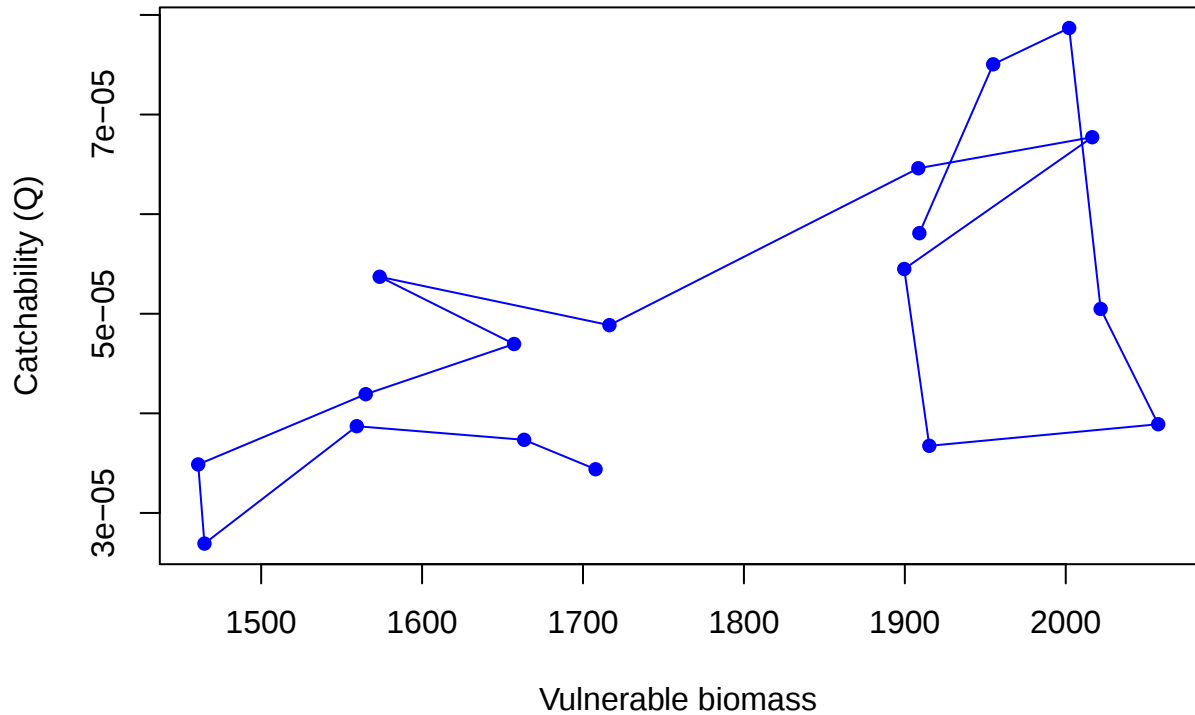
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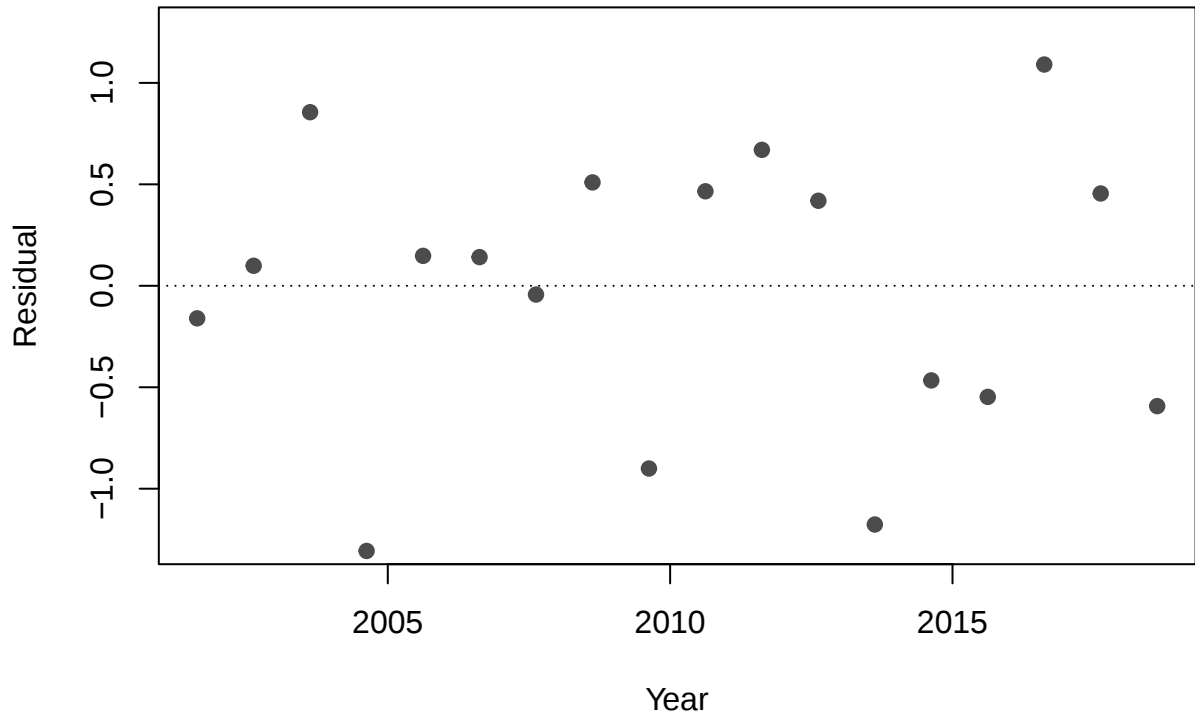
Year

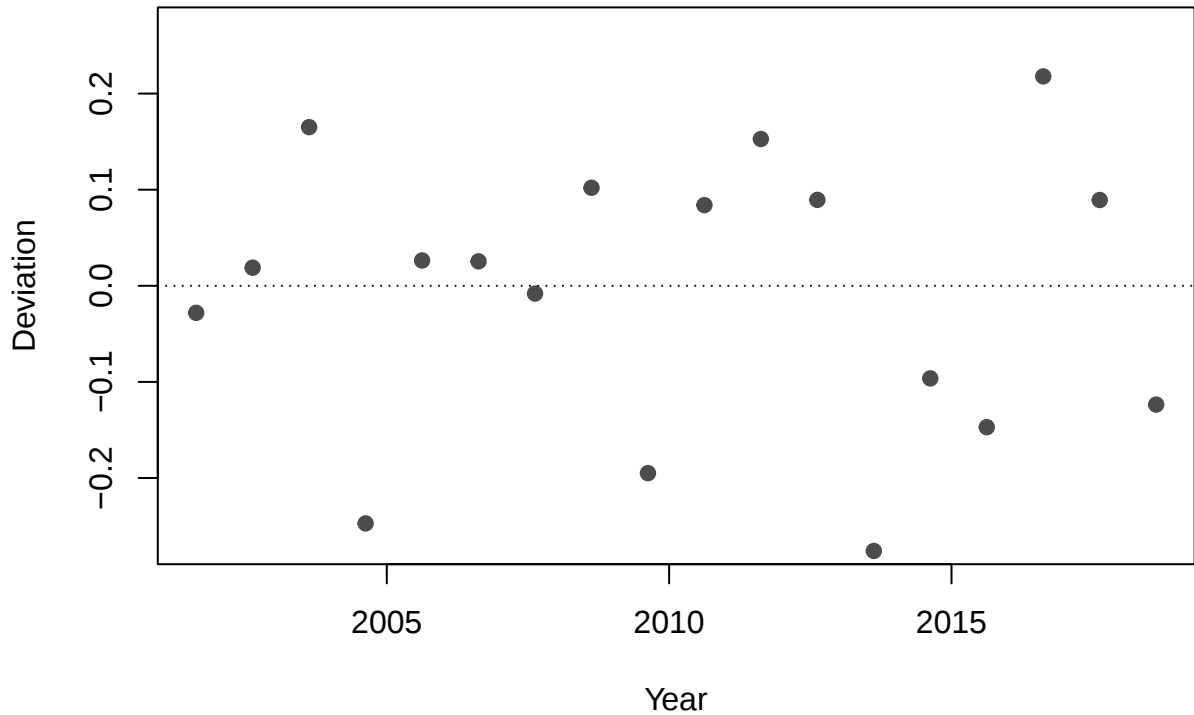


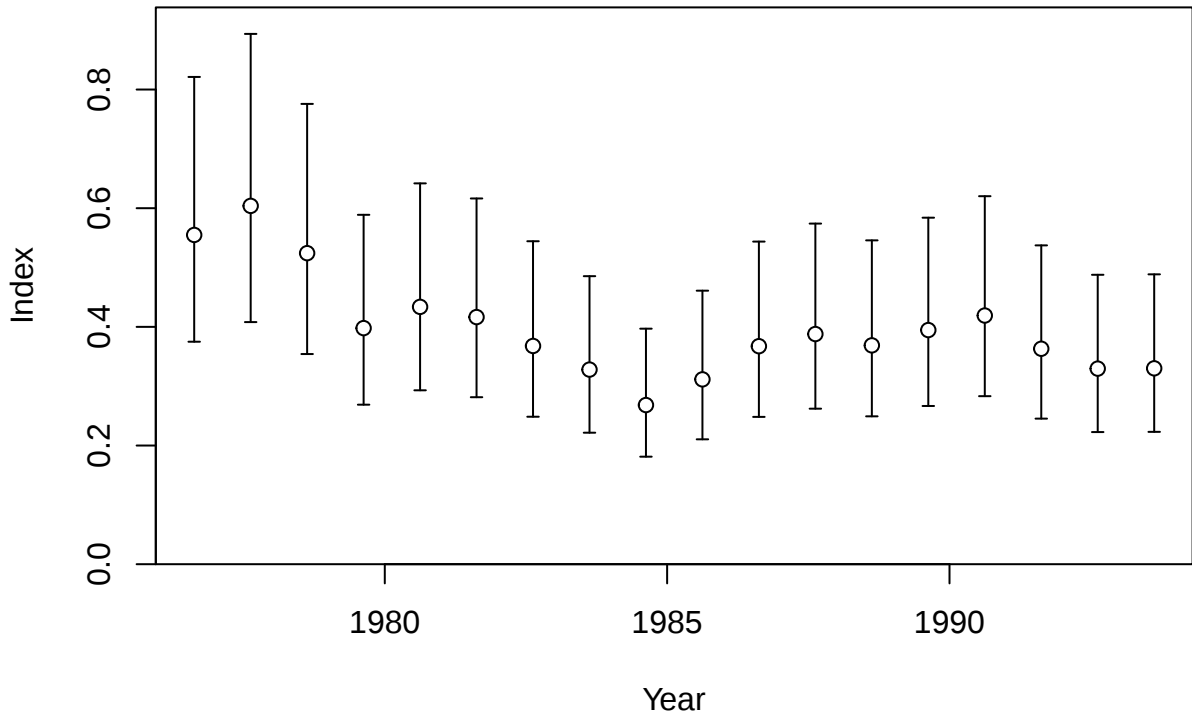


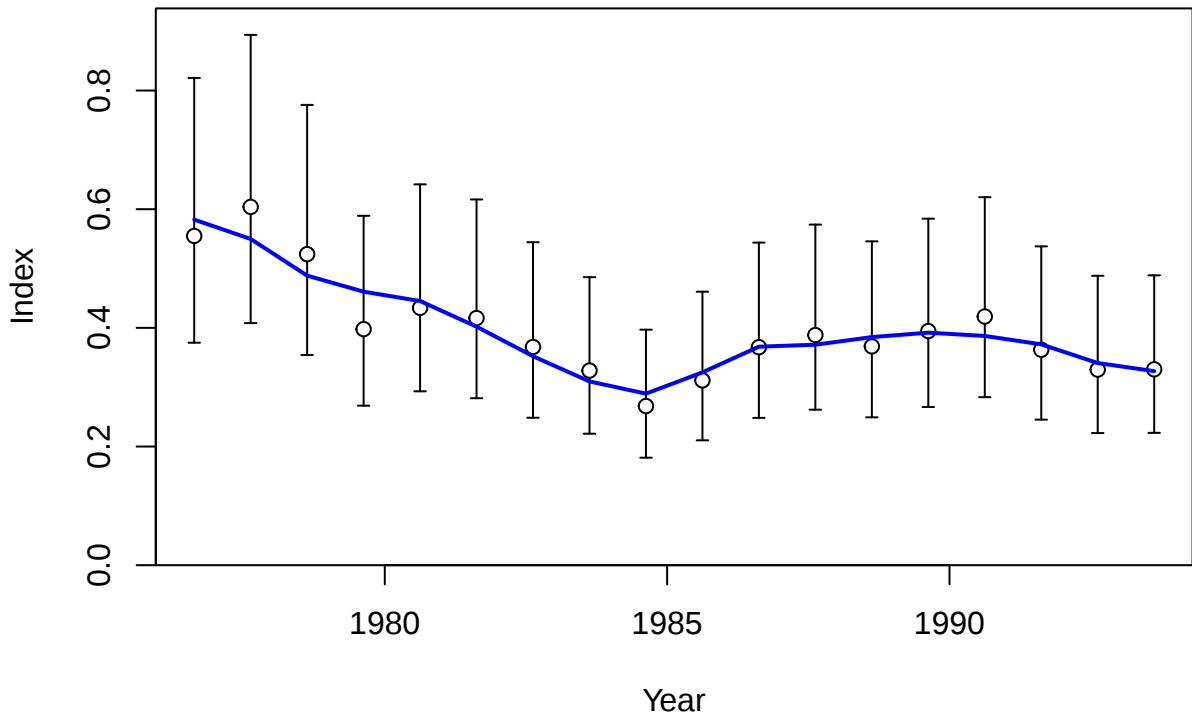




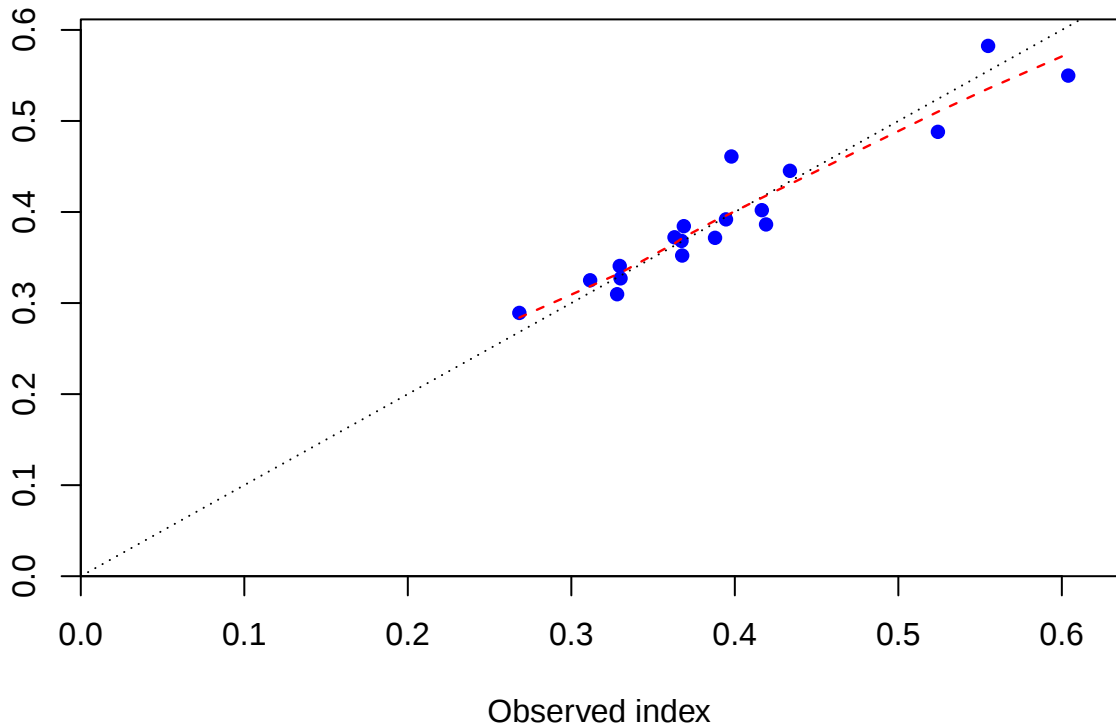


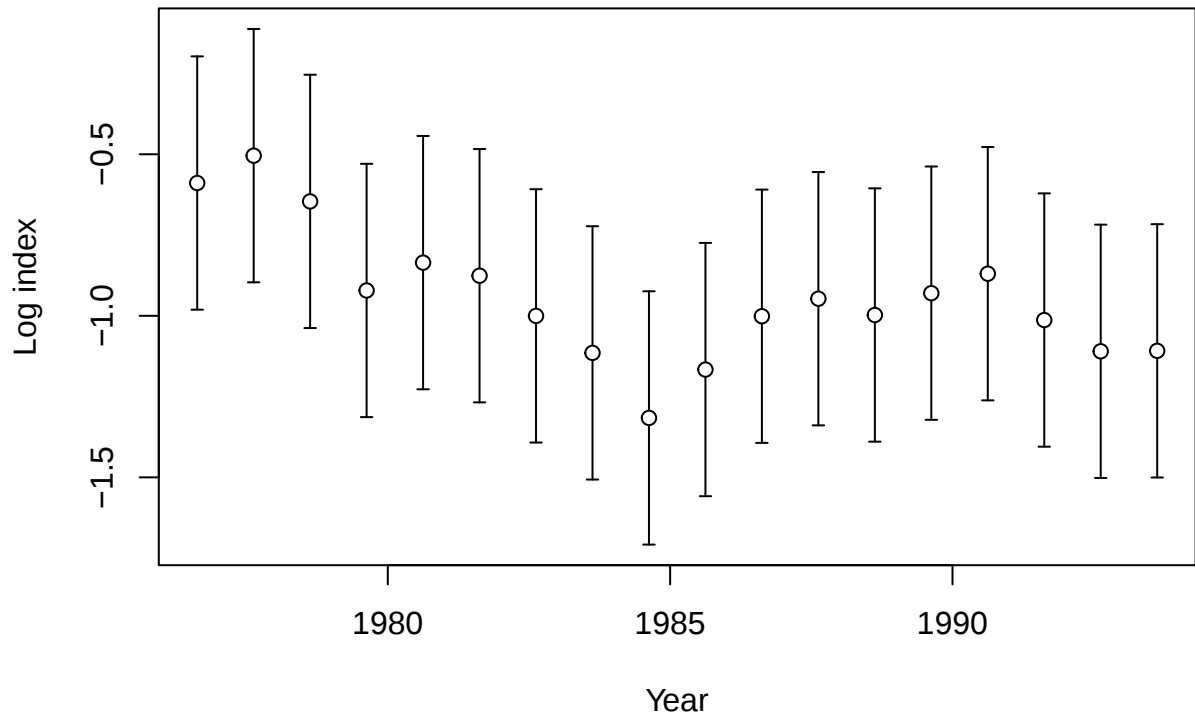


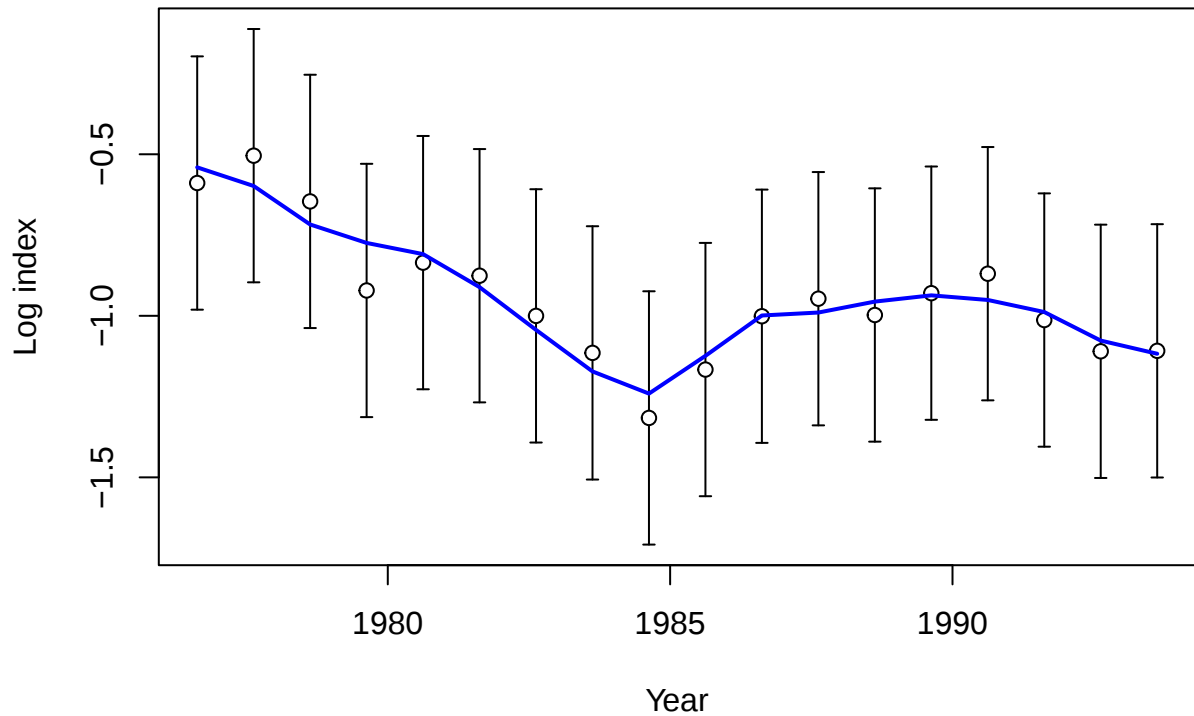


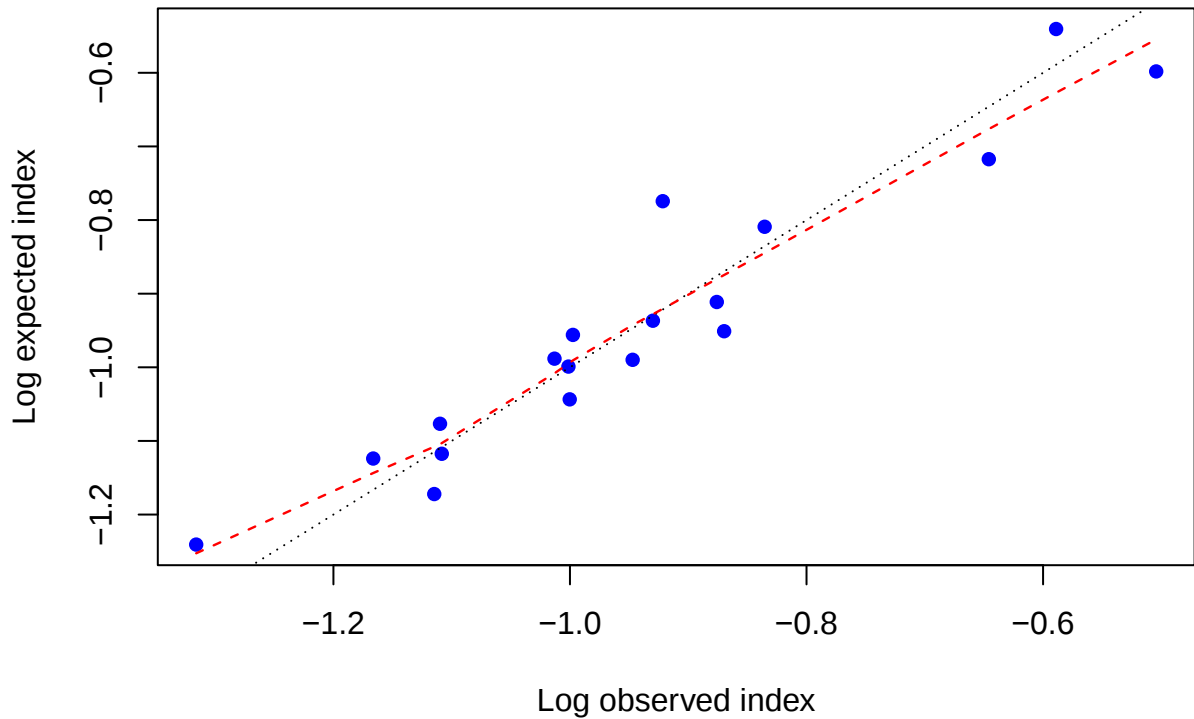


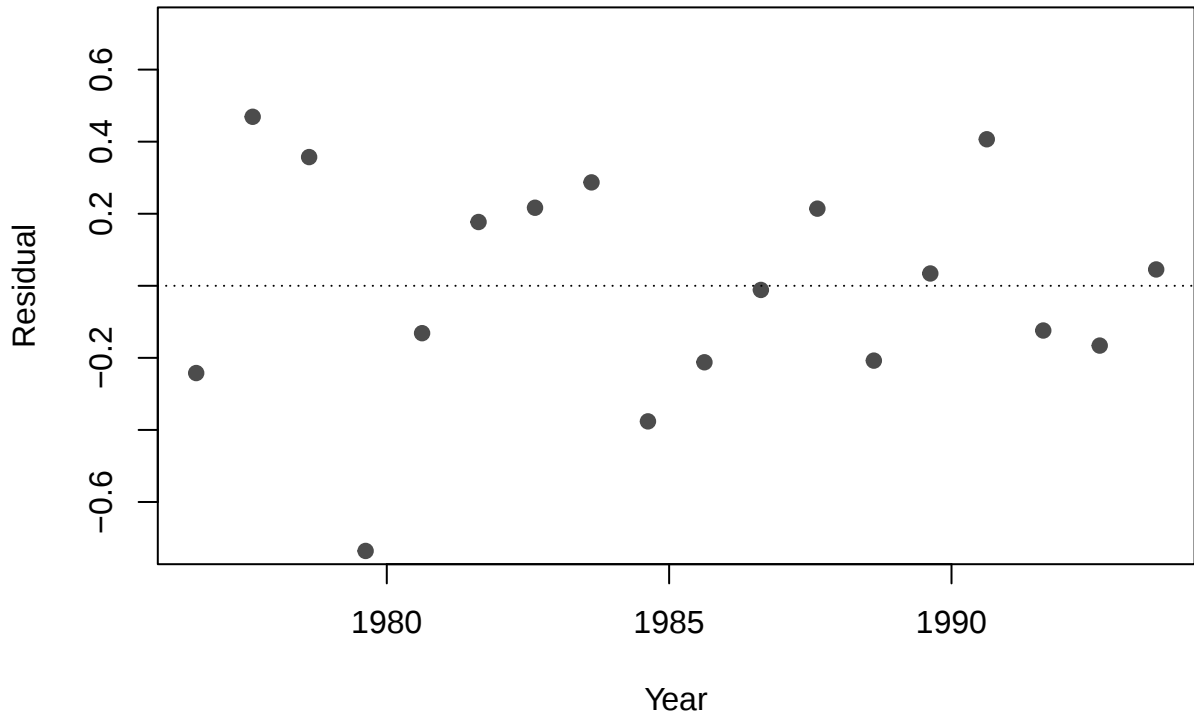
Expected index



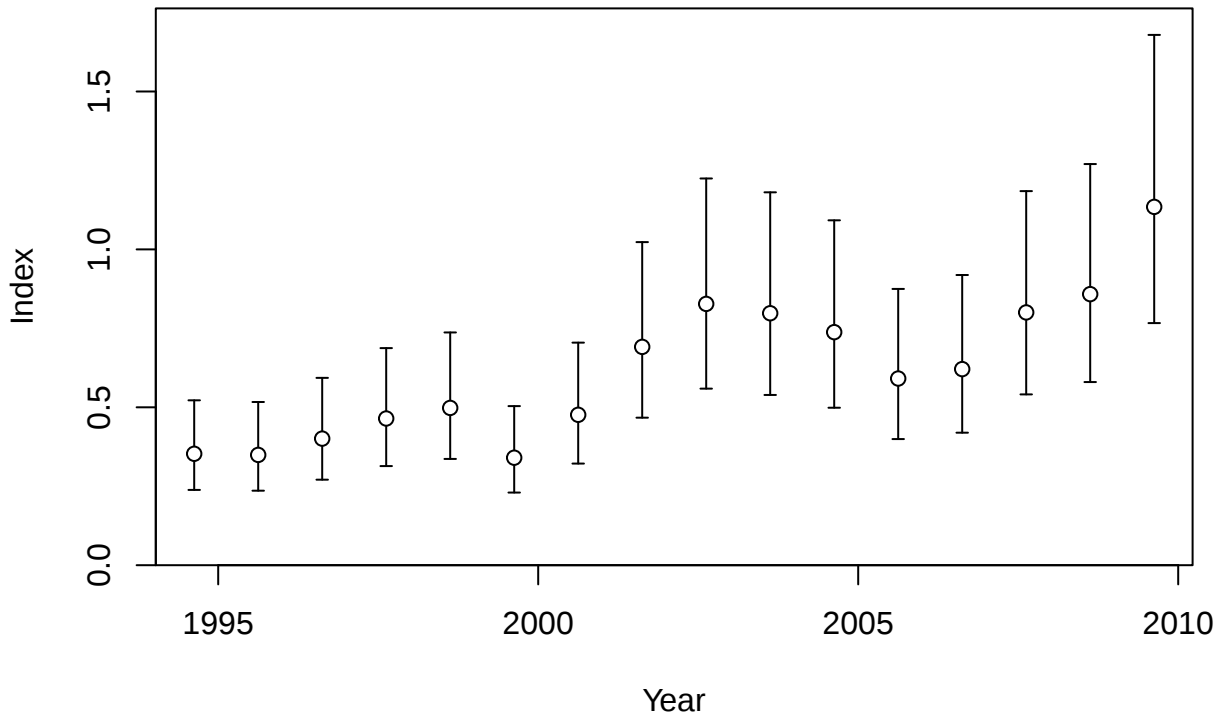


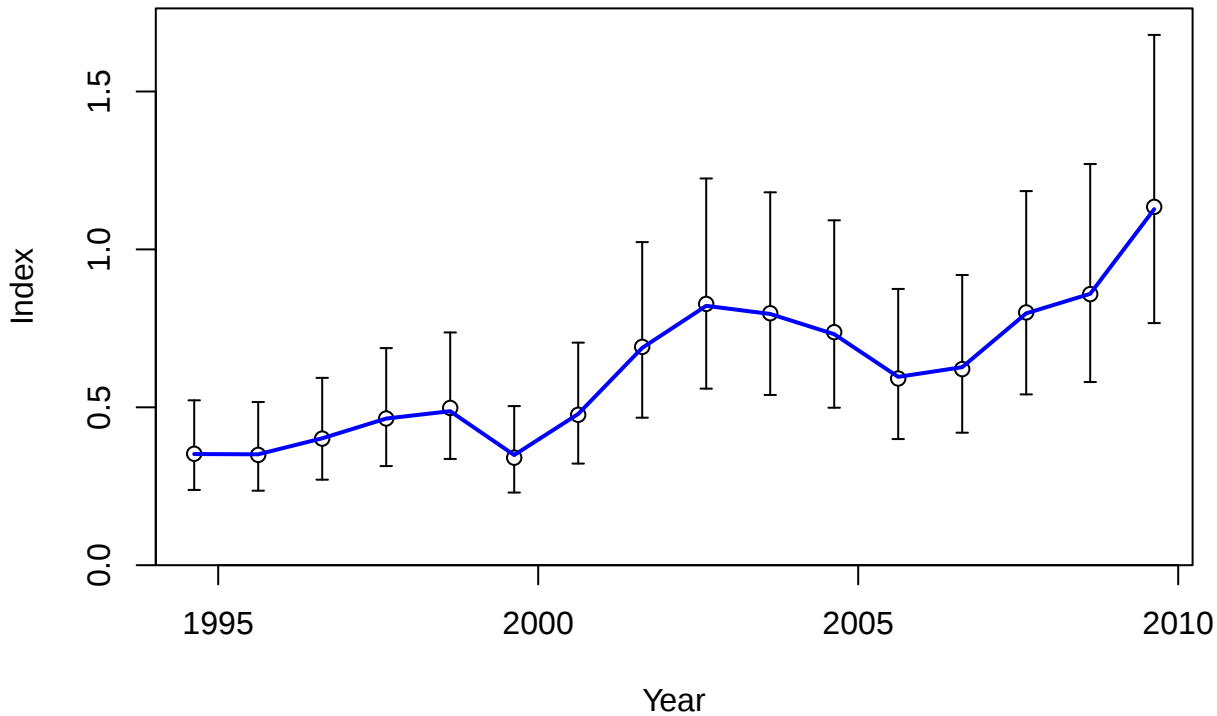


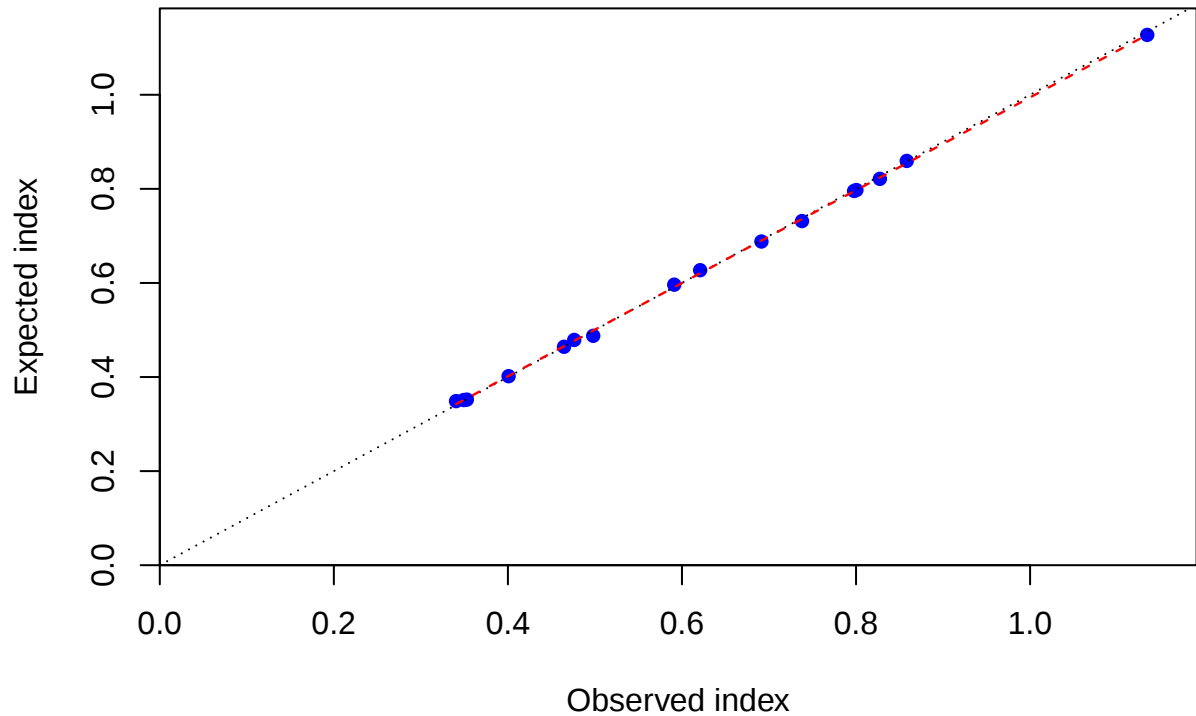




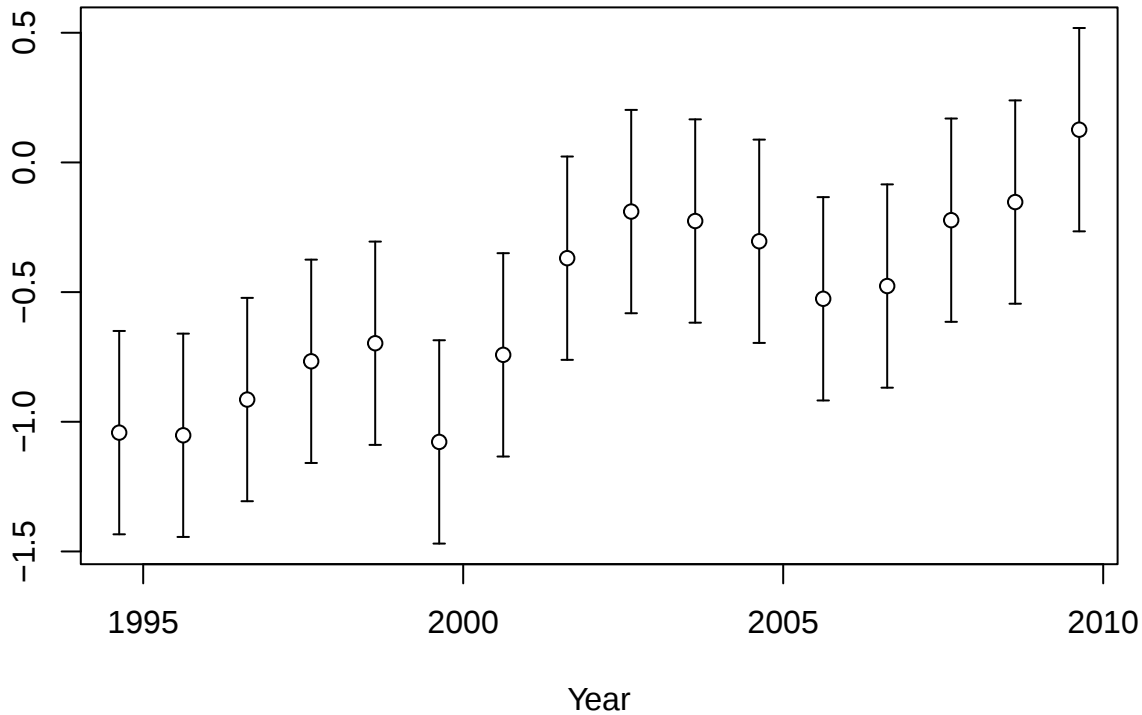


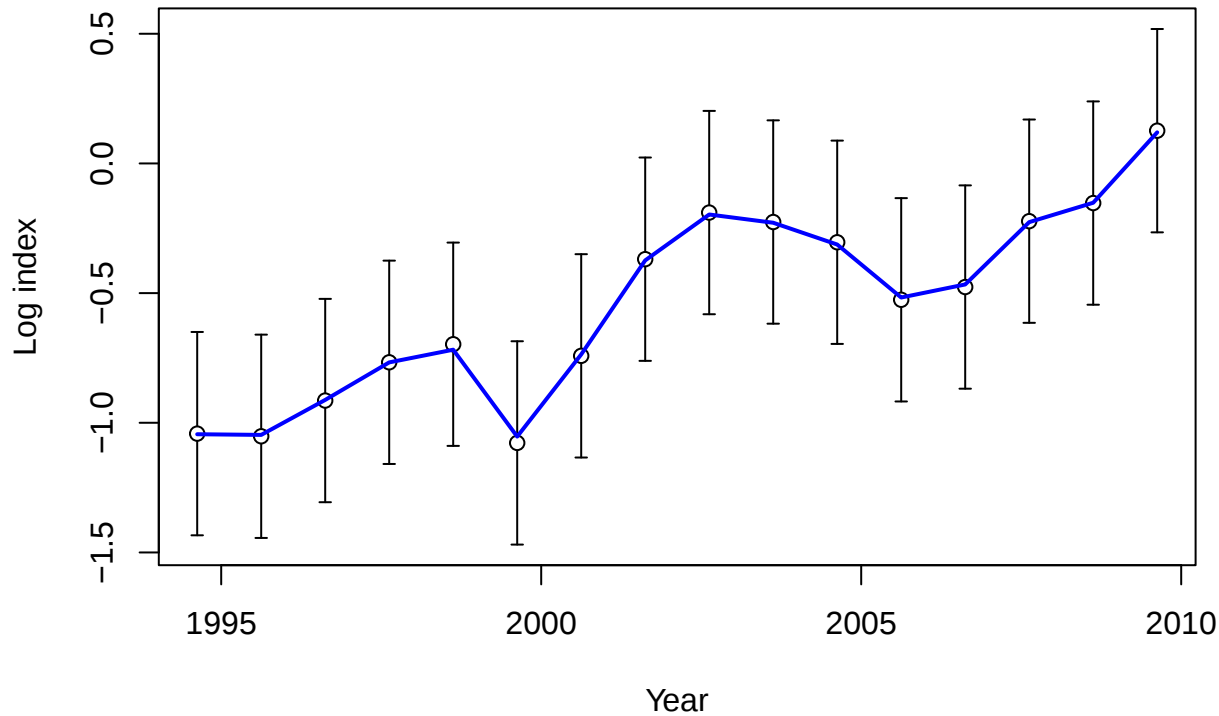


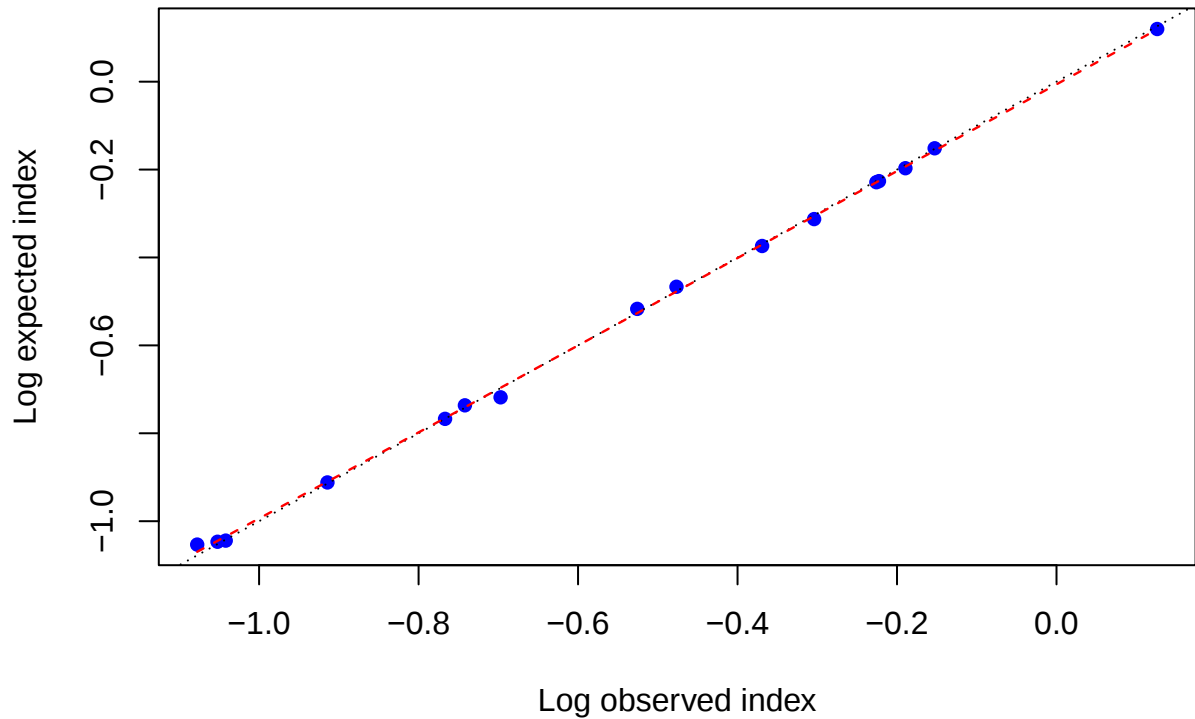




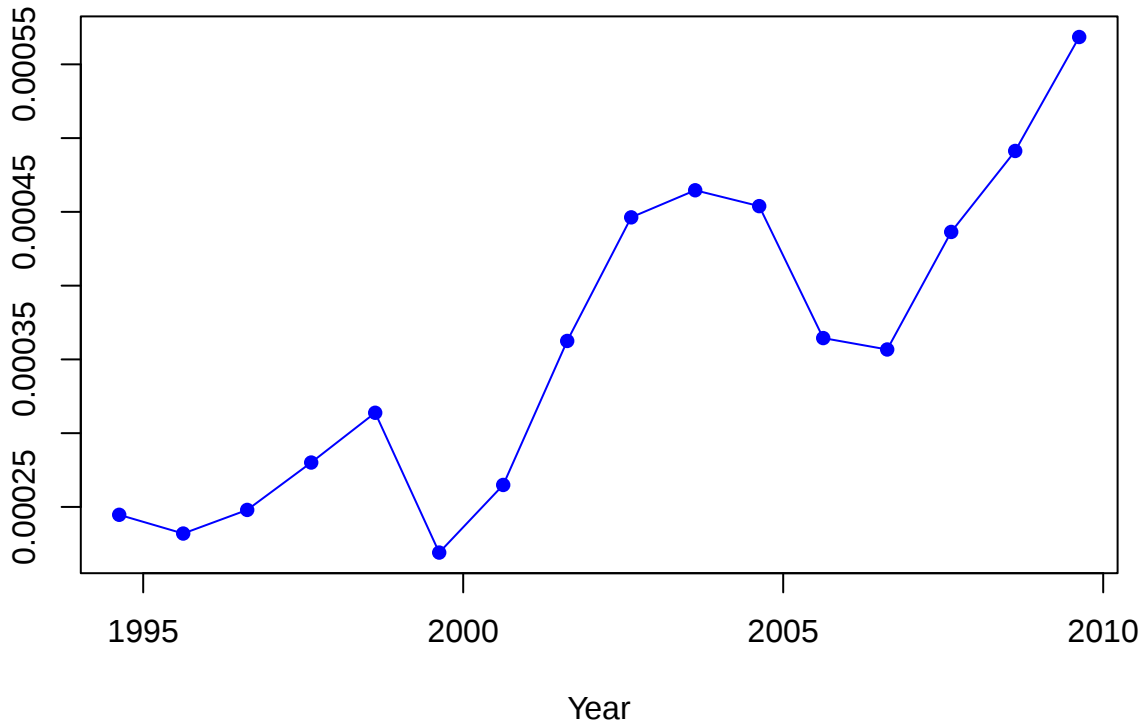
Log index



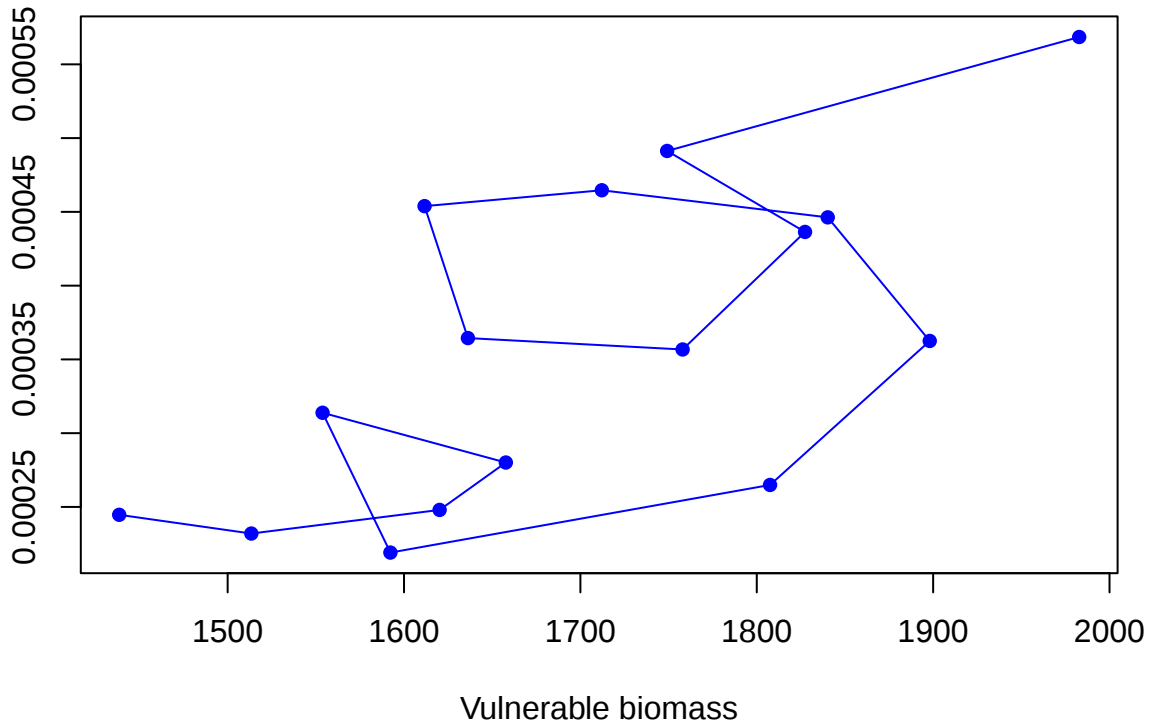


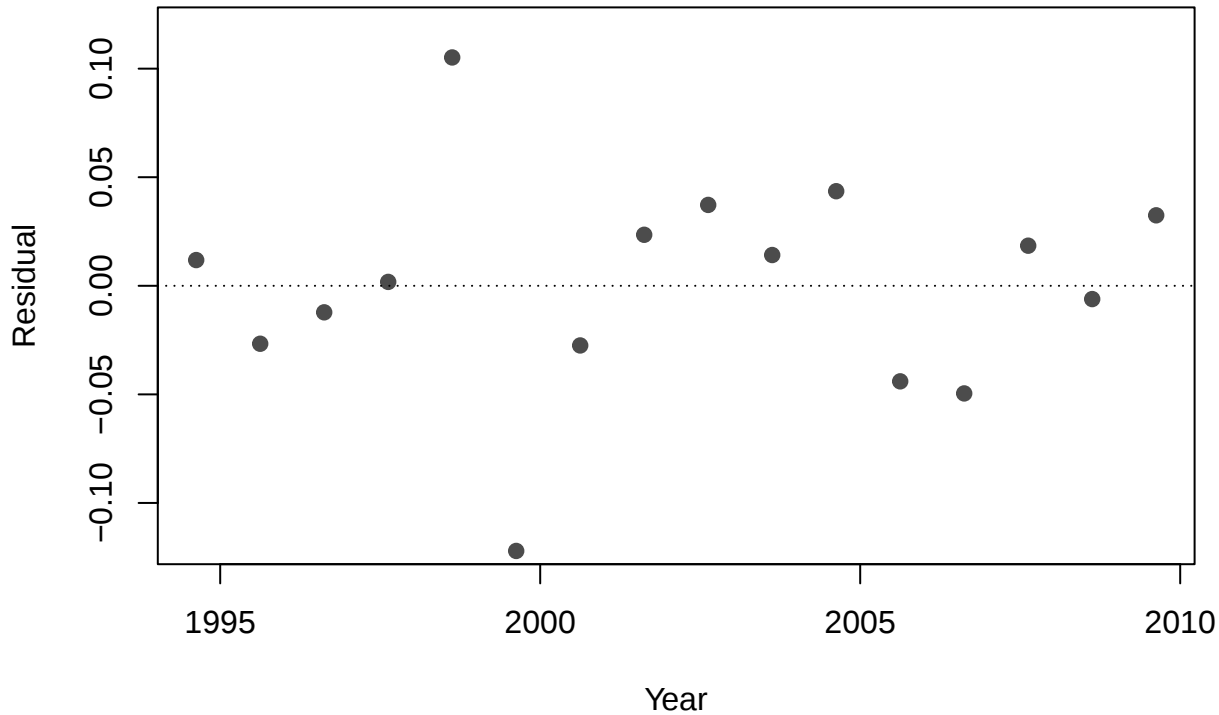


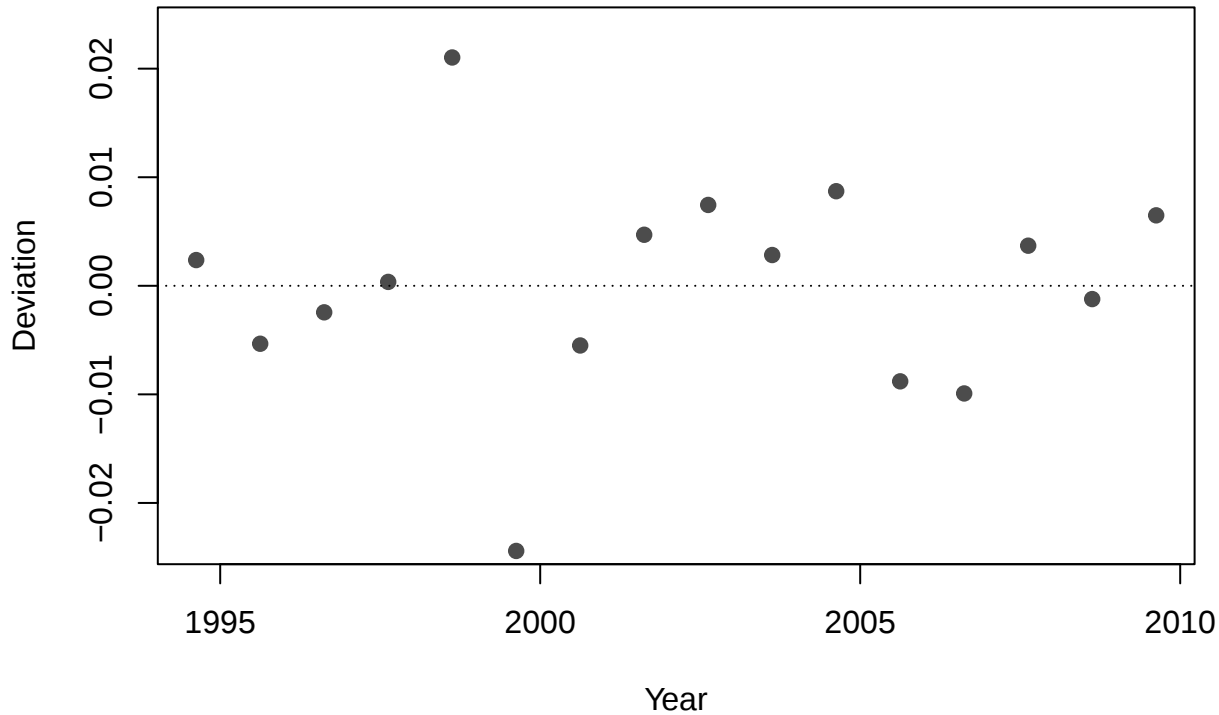
Catchability (Q)



Catchability (Q)







Index

2.5
2.0
1.5
1.0
0.5
0.0

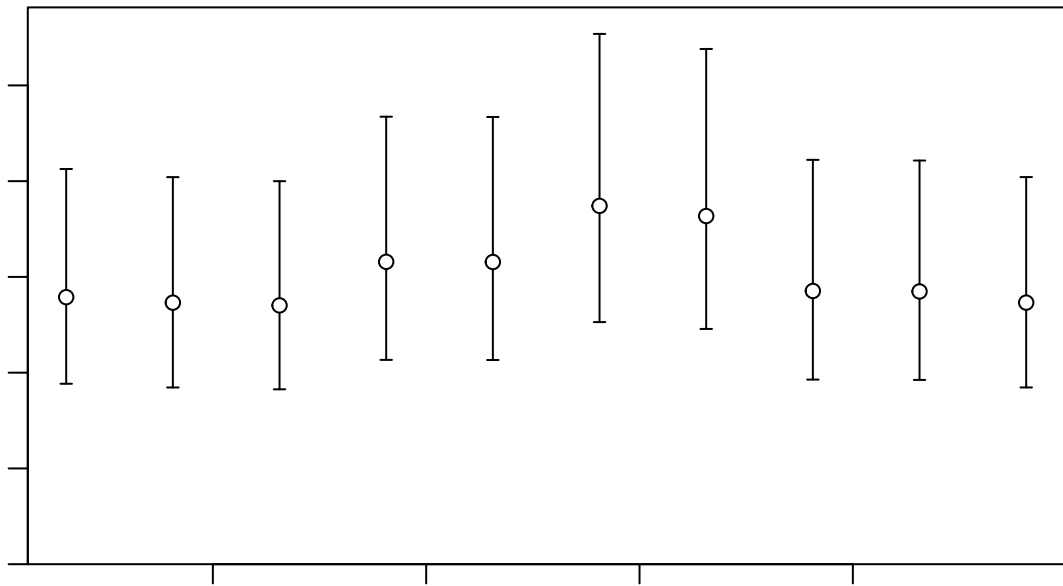
2012

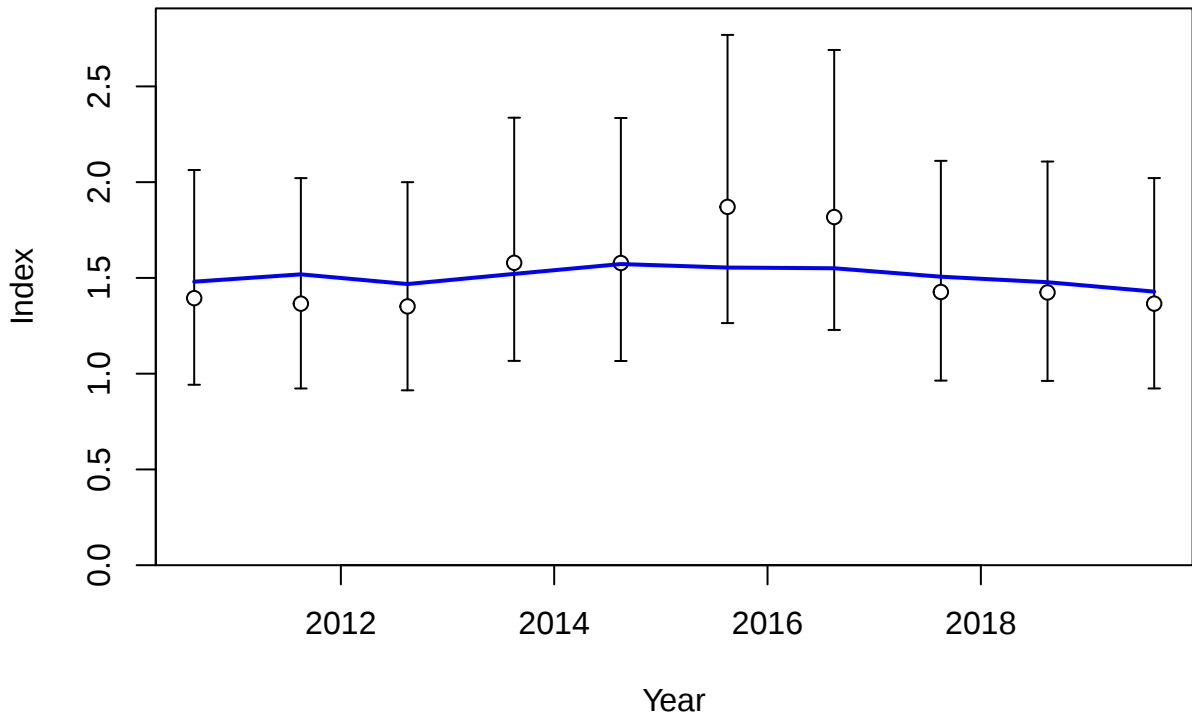
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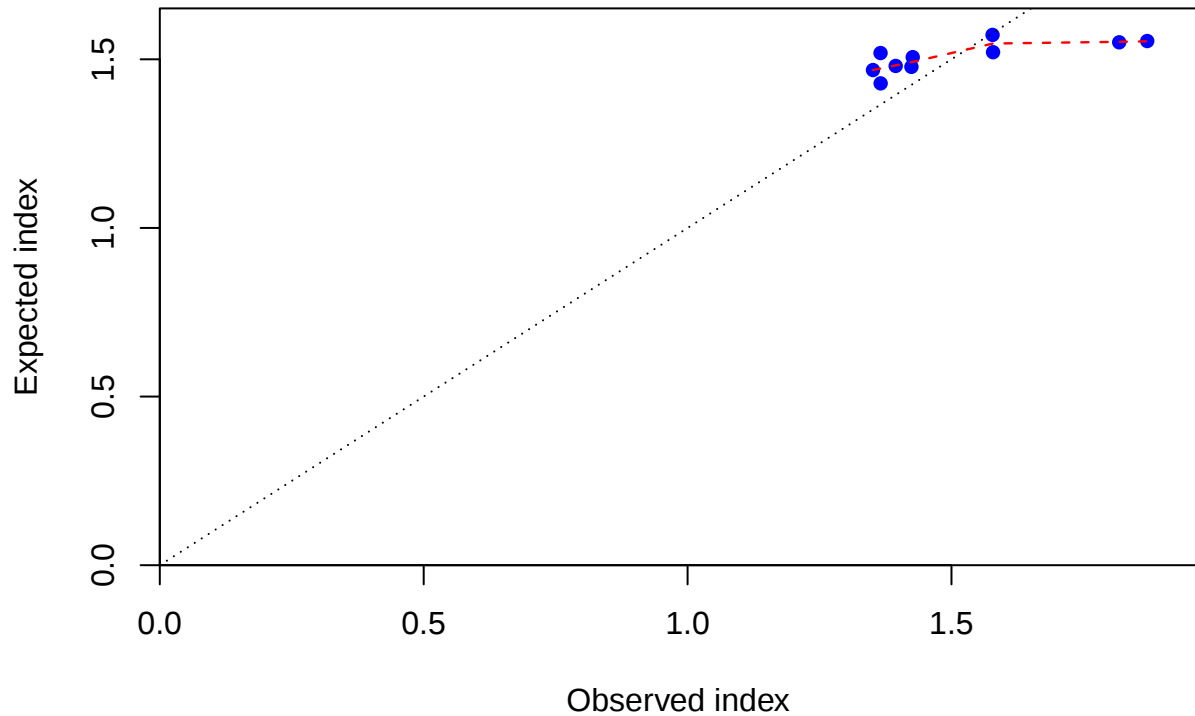
2016

2018

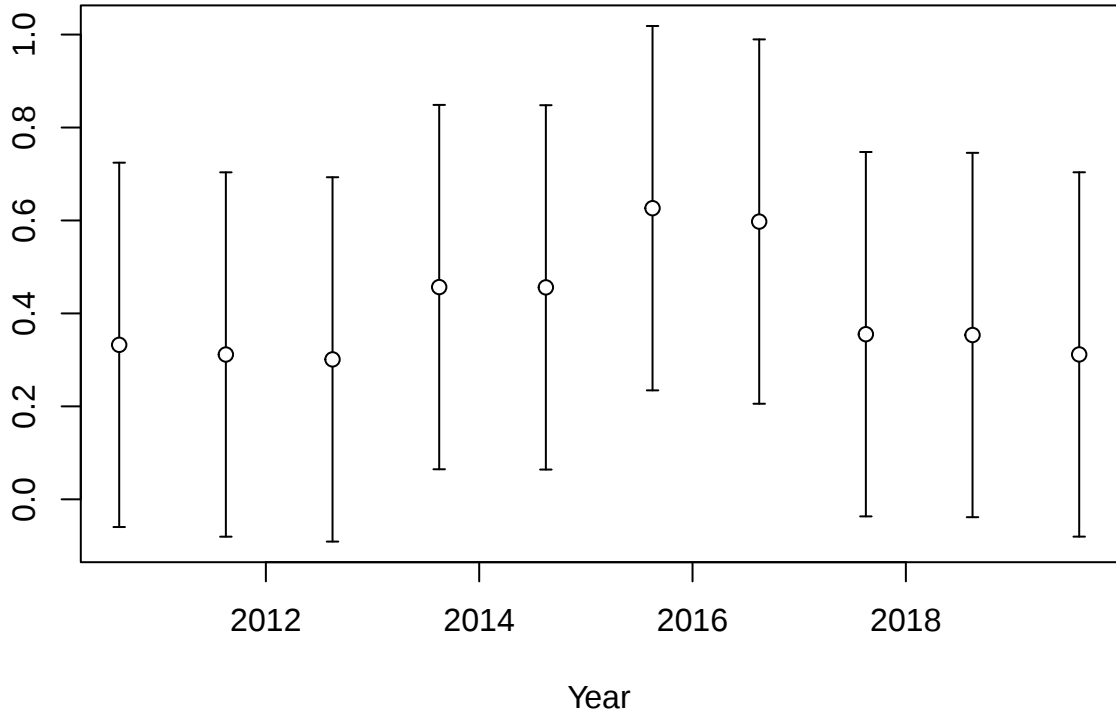
Year



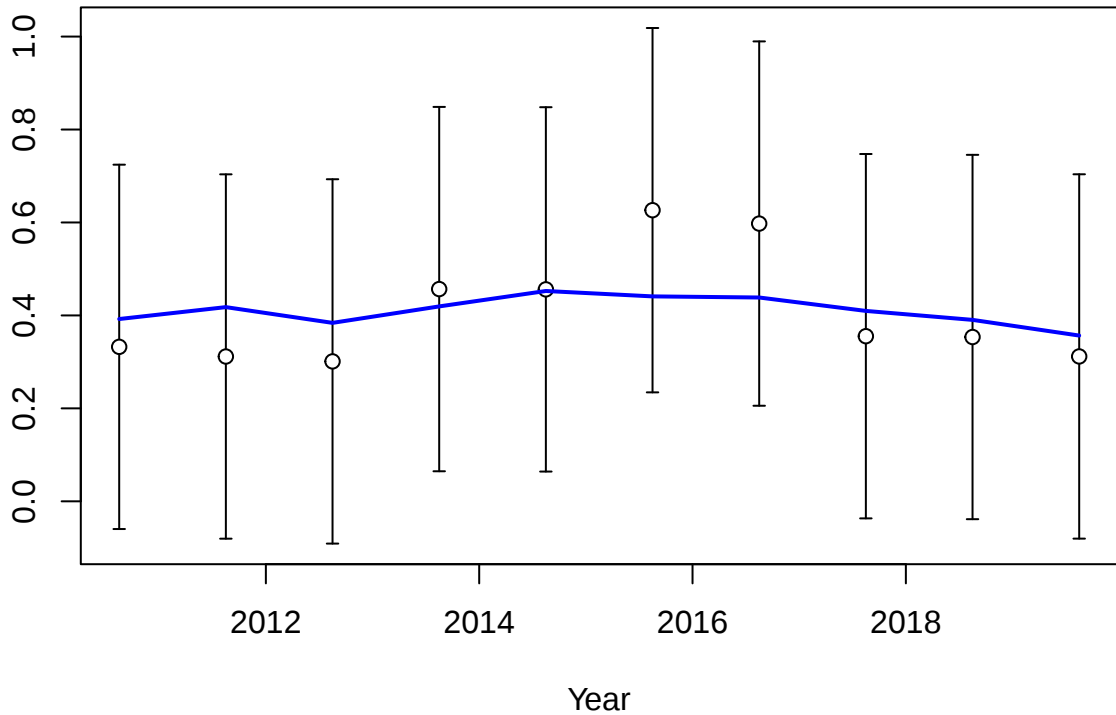


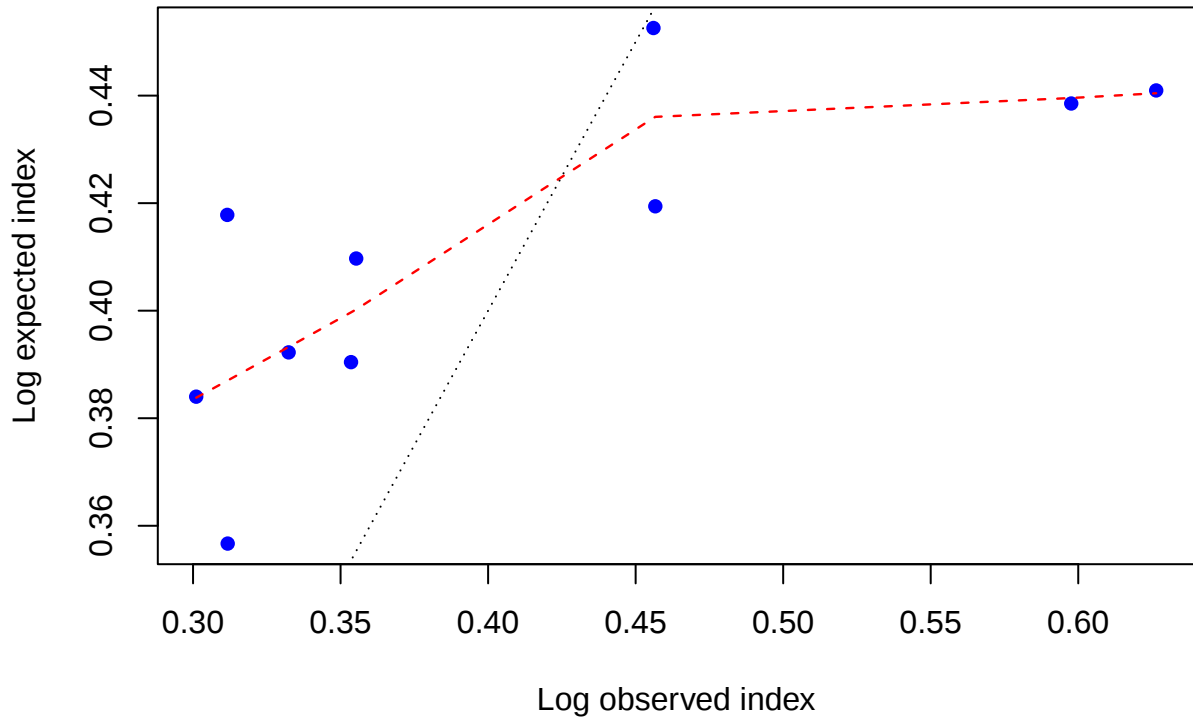


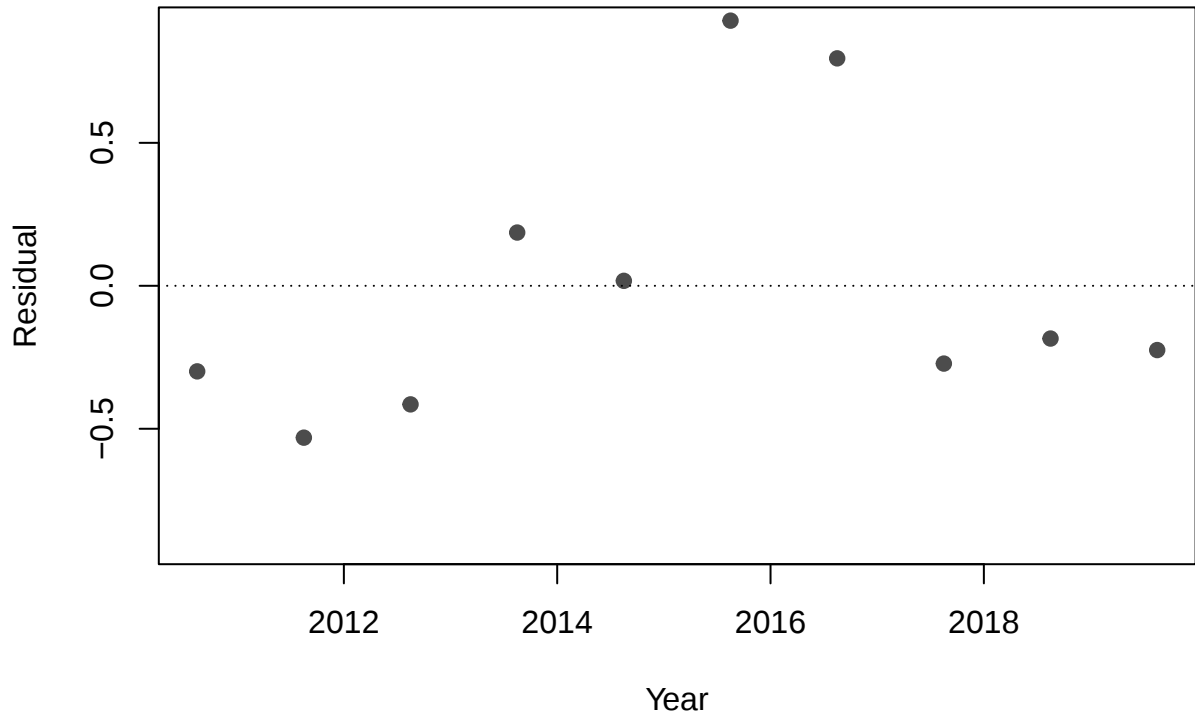
Log index

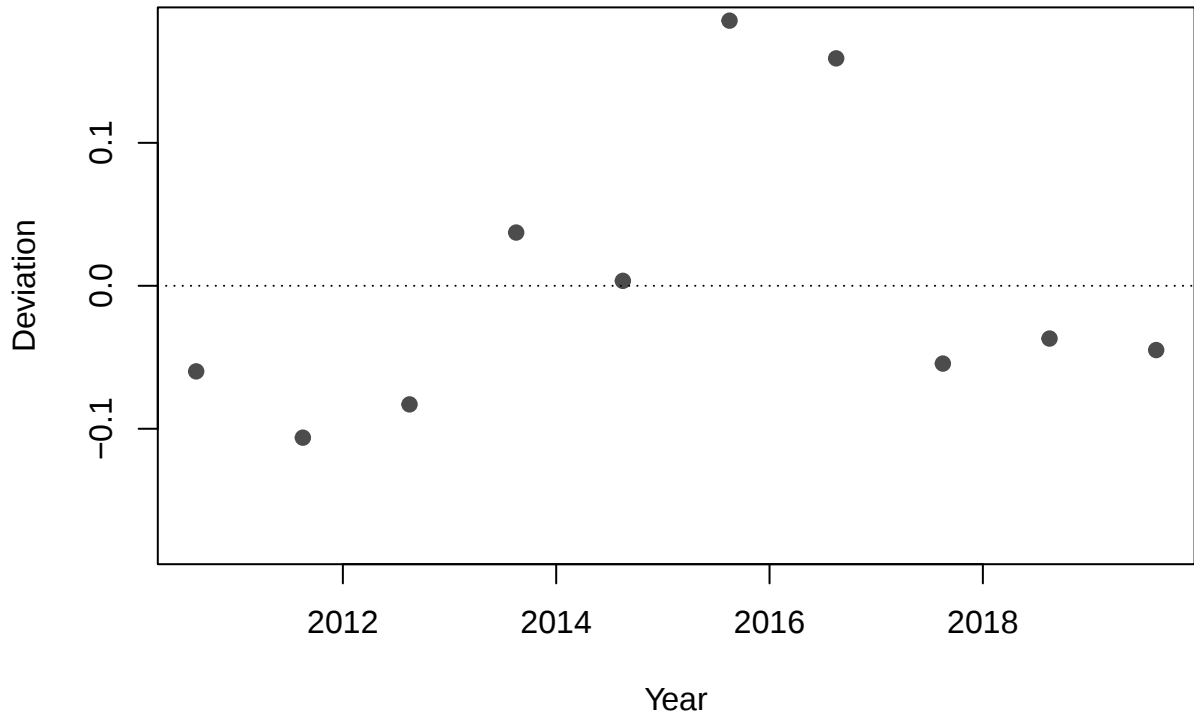


Log index









Index

40
30
20
10
0

2006

2008

2010

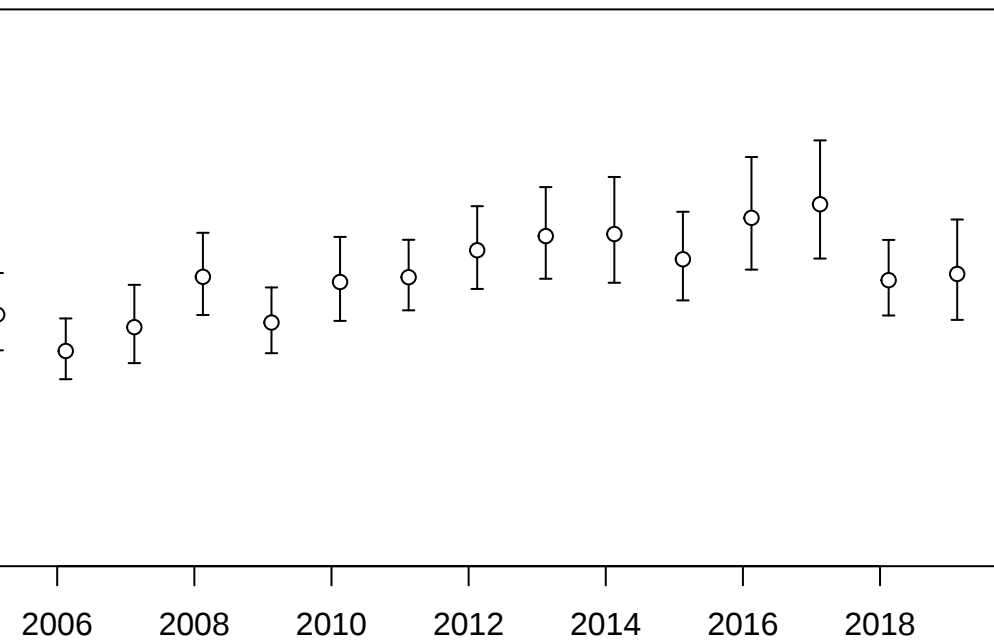
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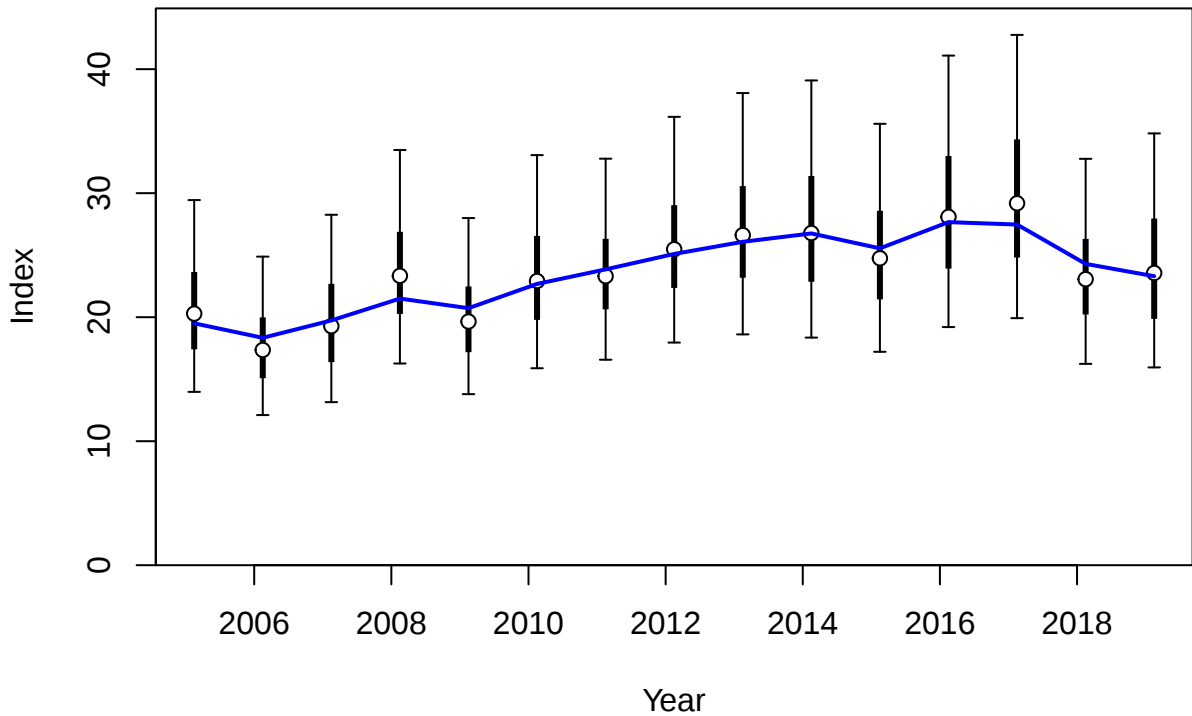
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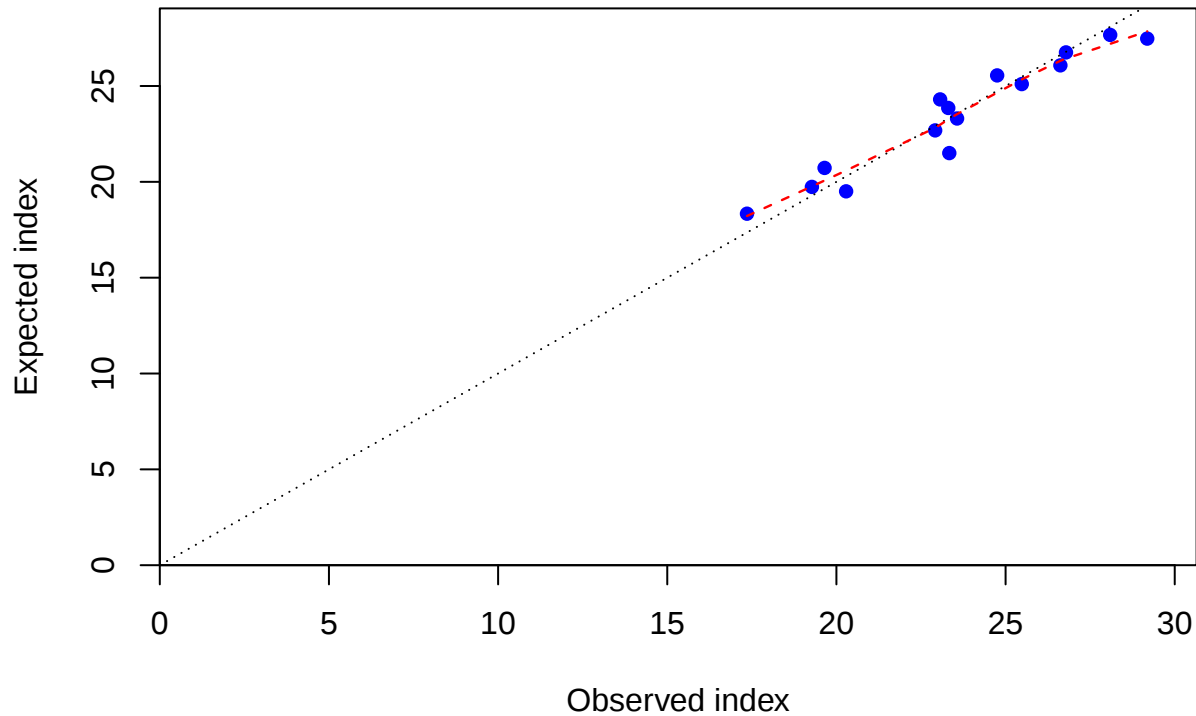
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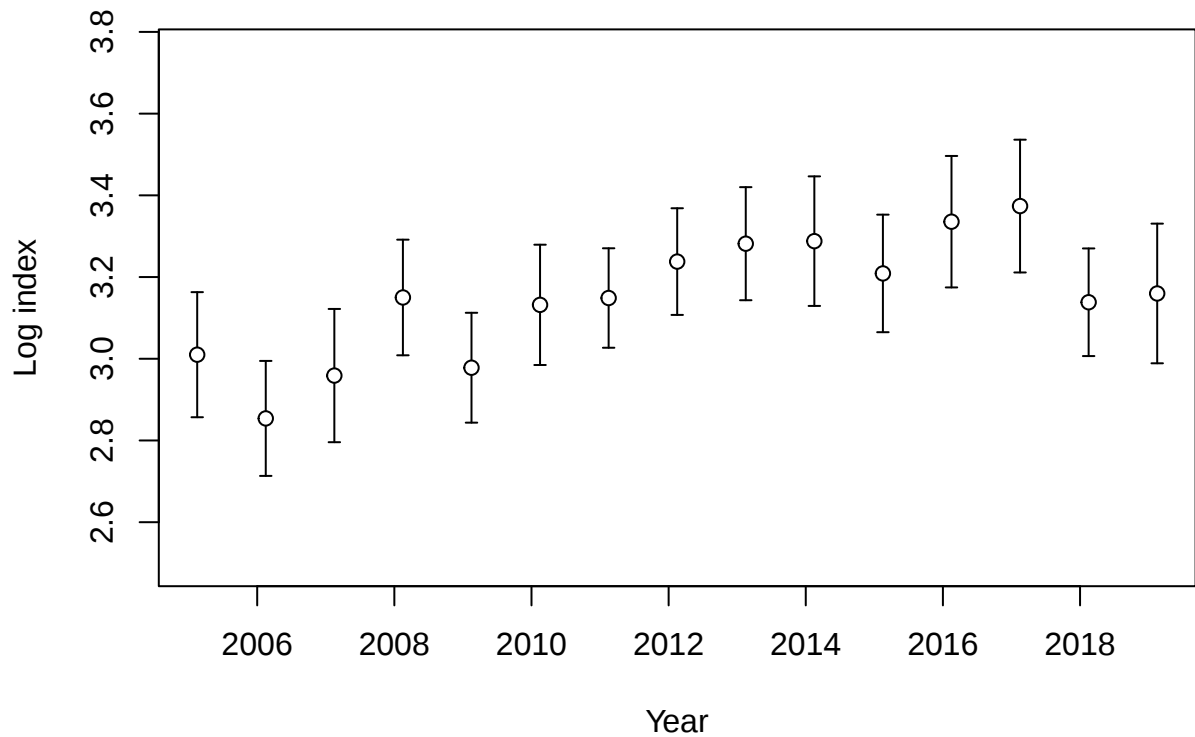
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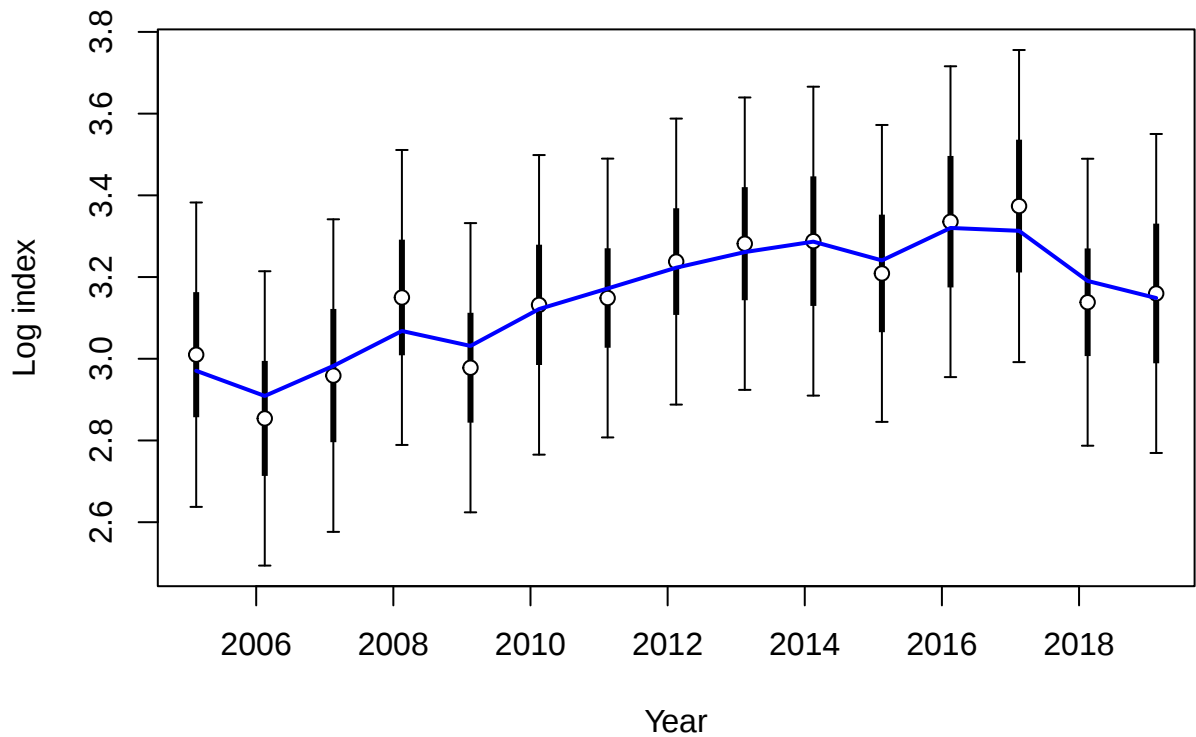
Year

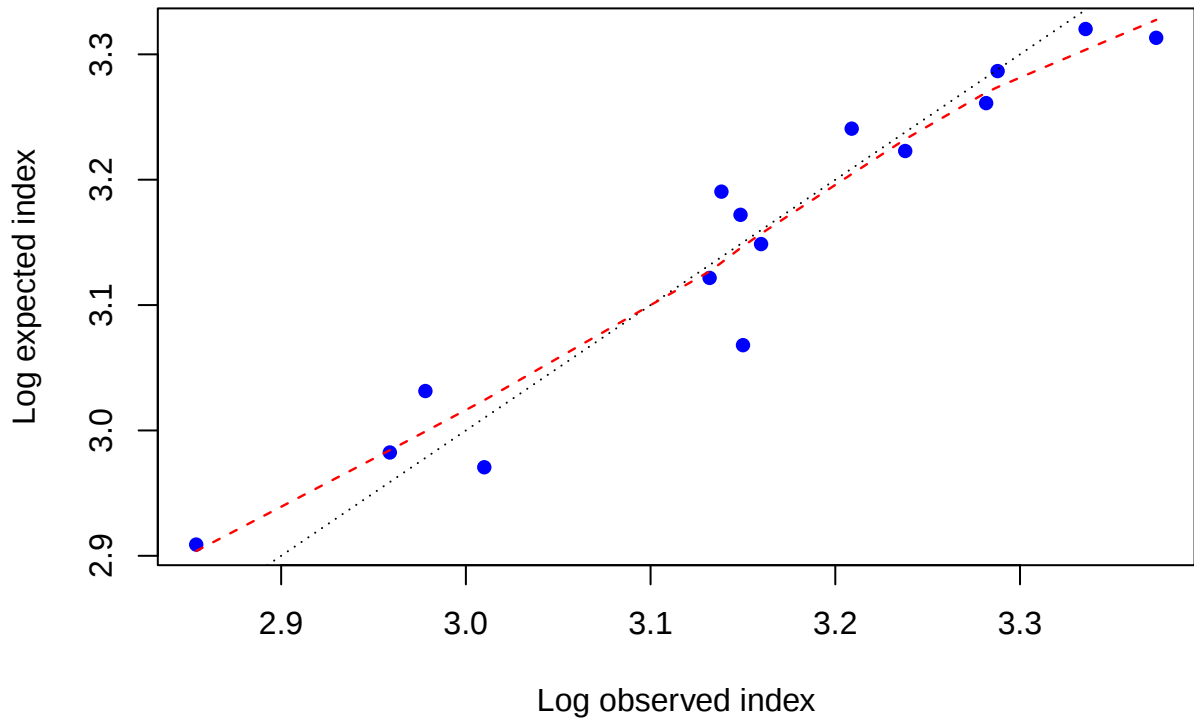


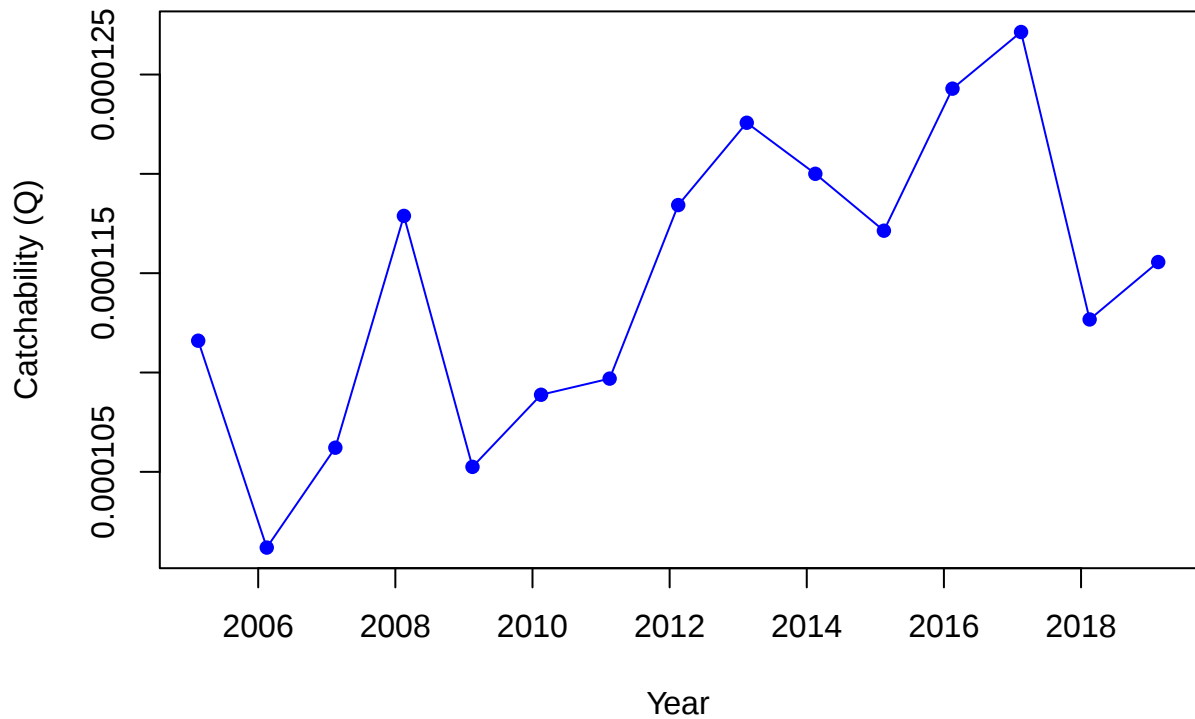


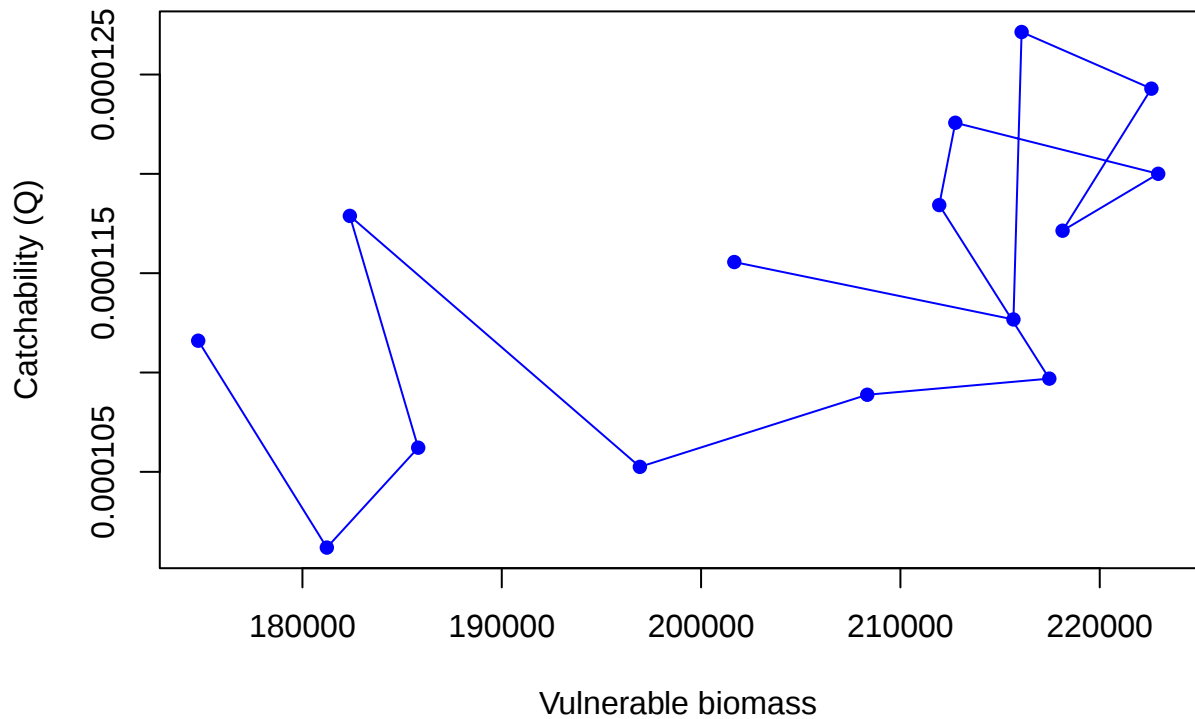


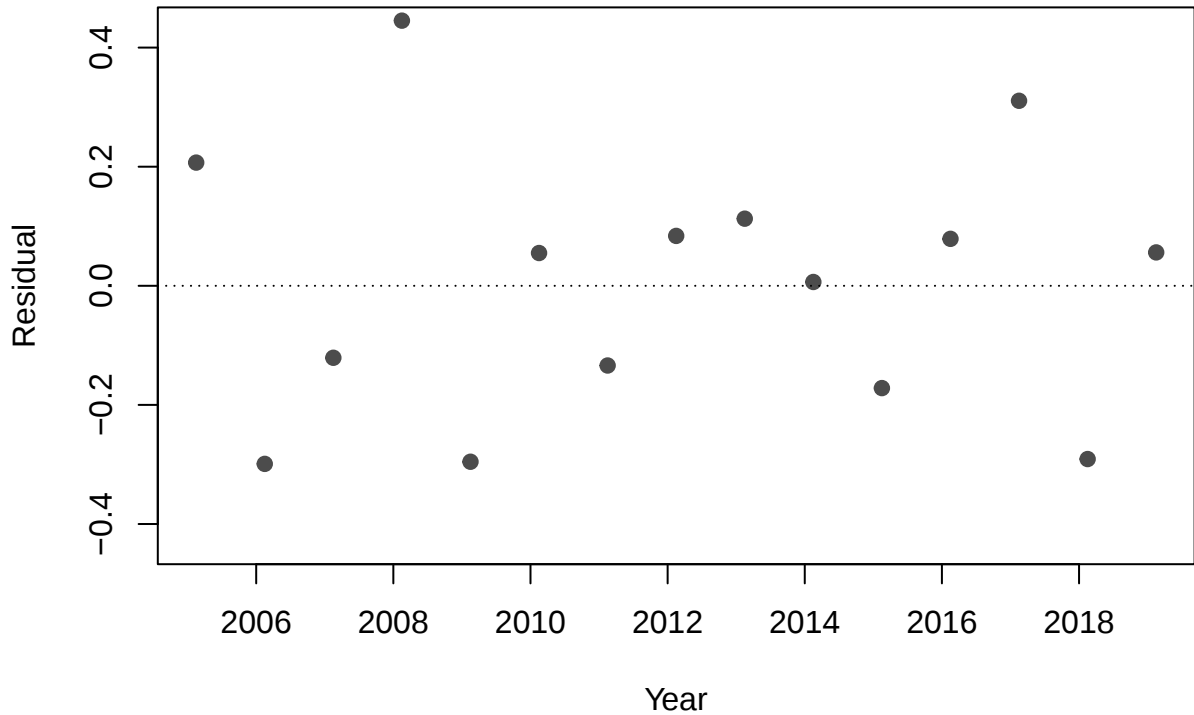


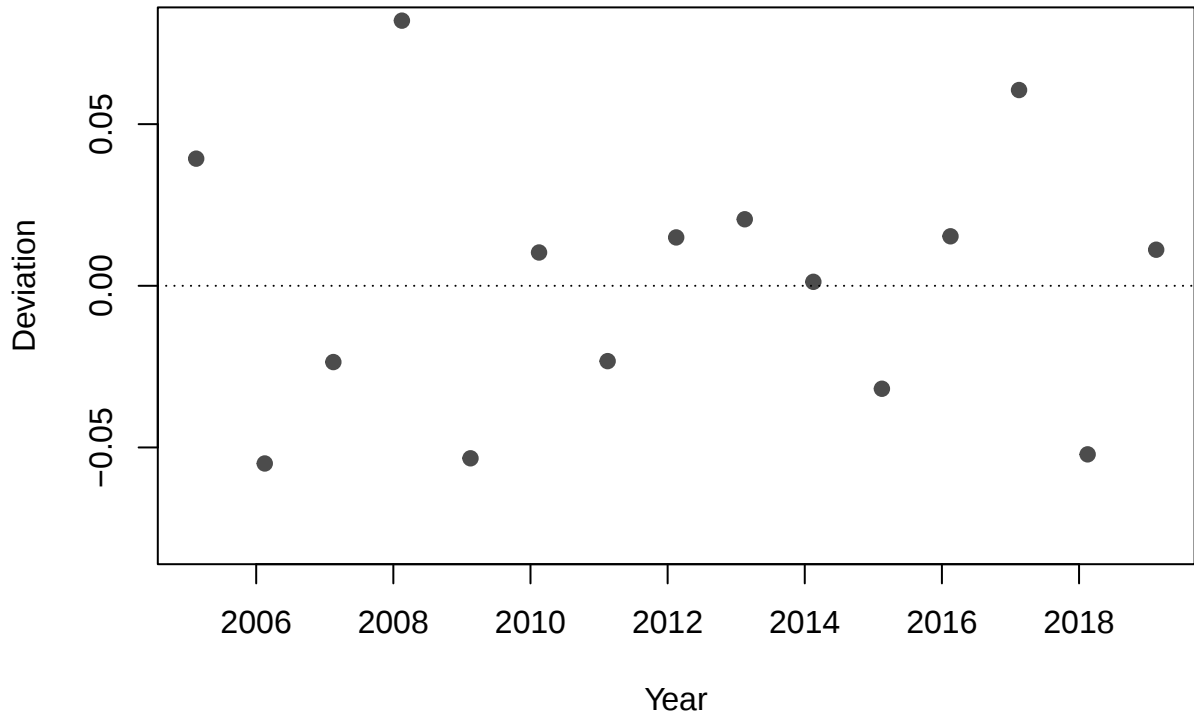












Index

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20
10
0

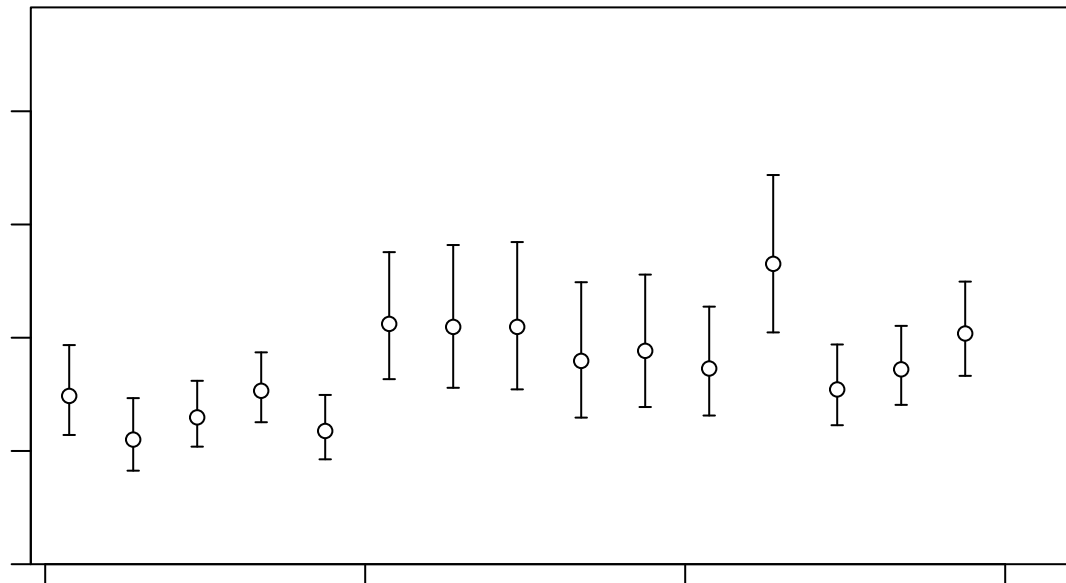
2005

2010

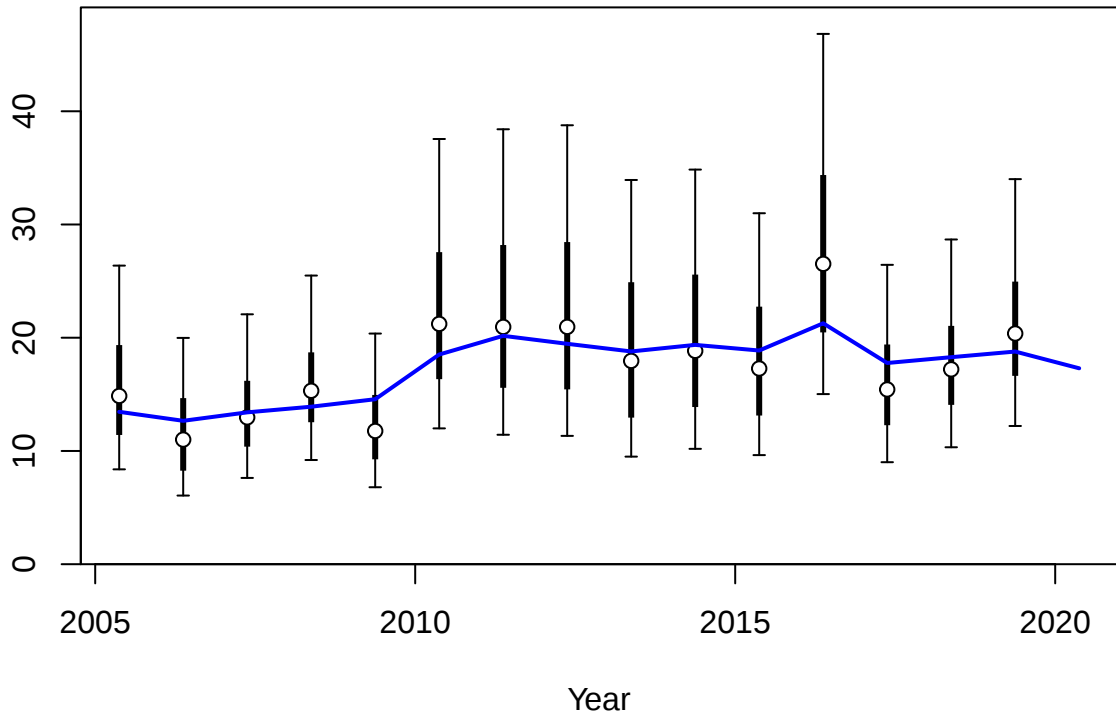
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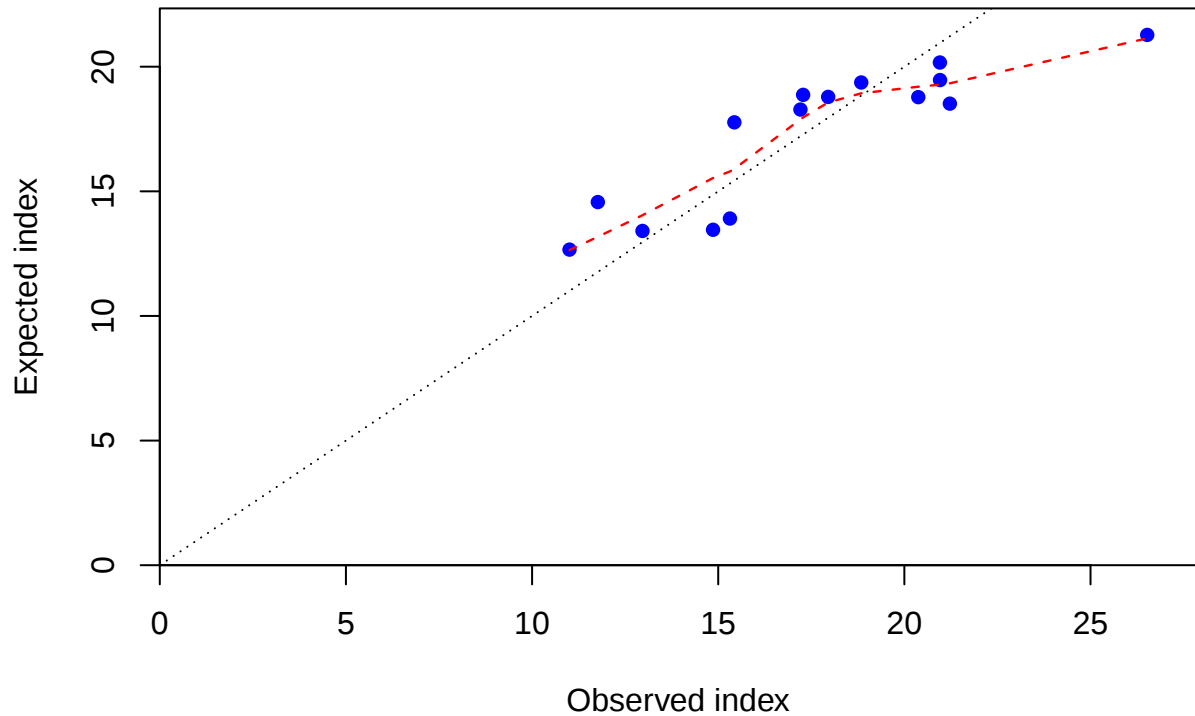
2020

Year



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3.5
3.0
2.5
2.0

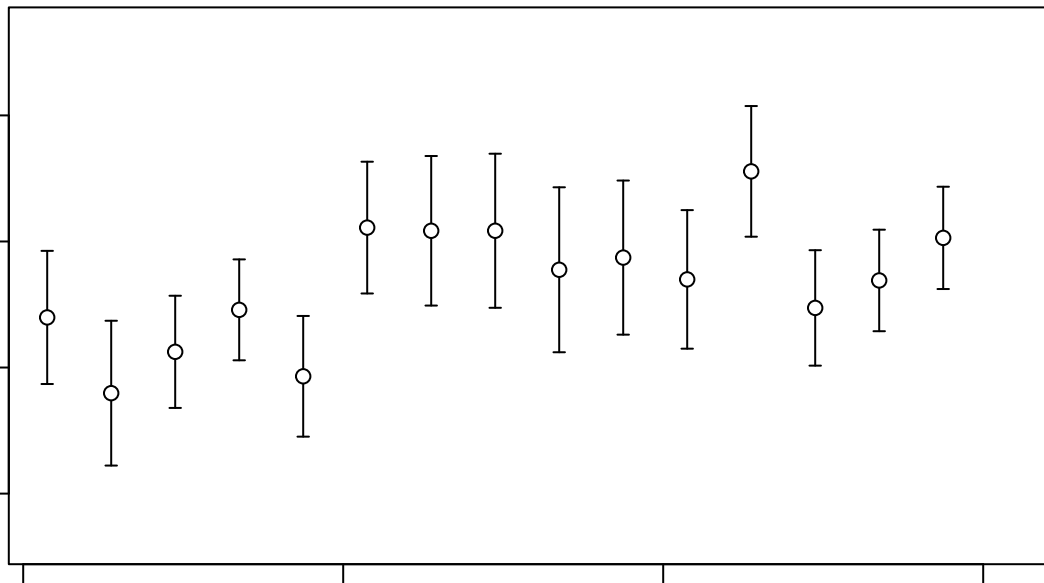
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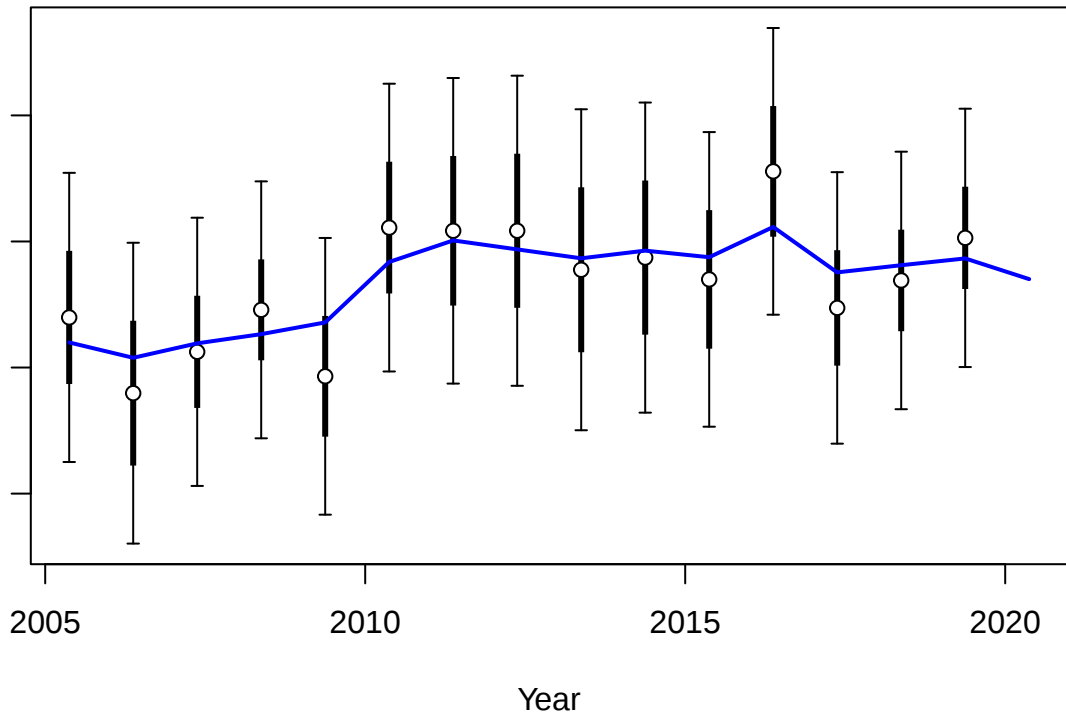
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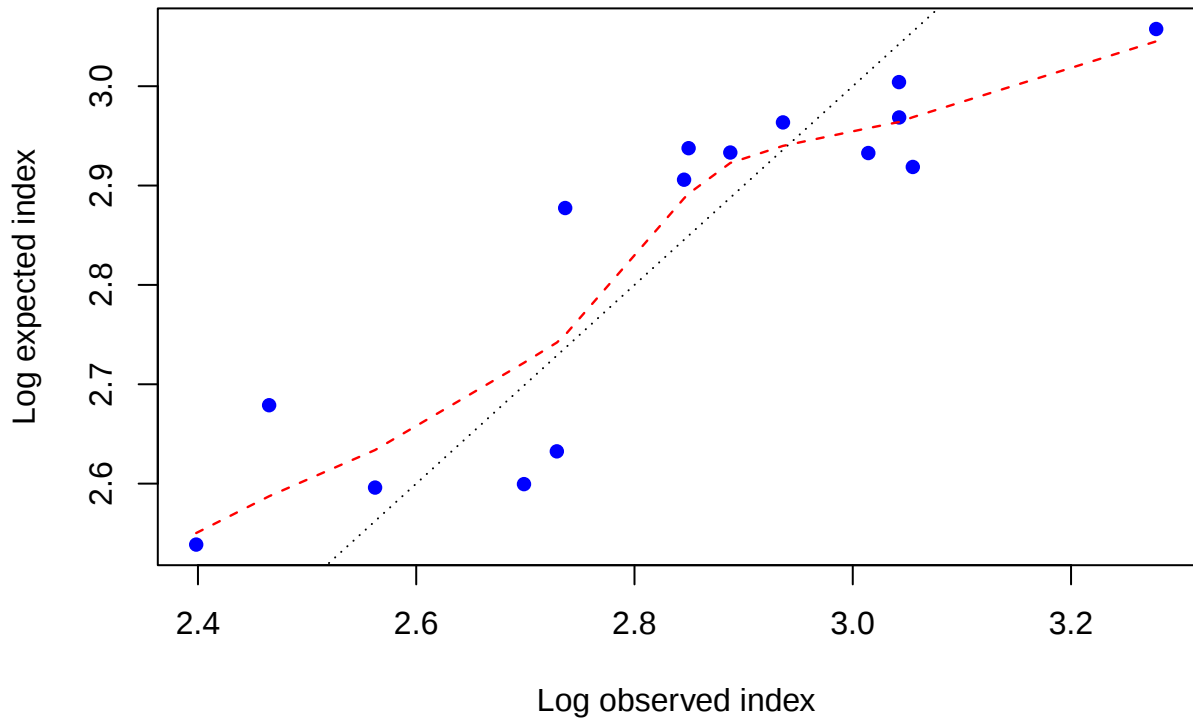
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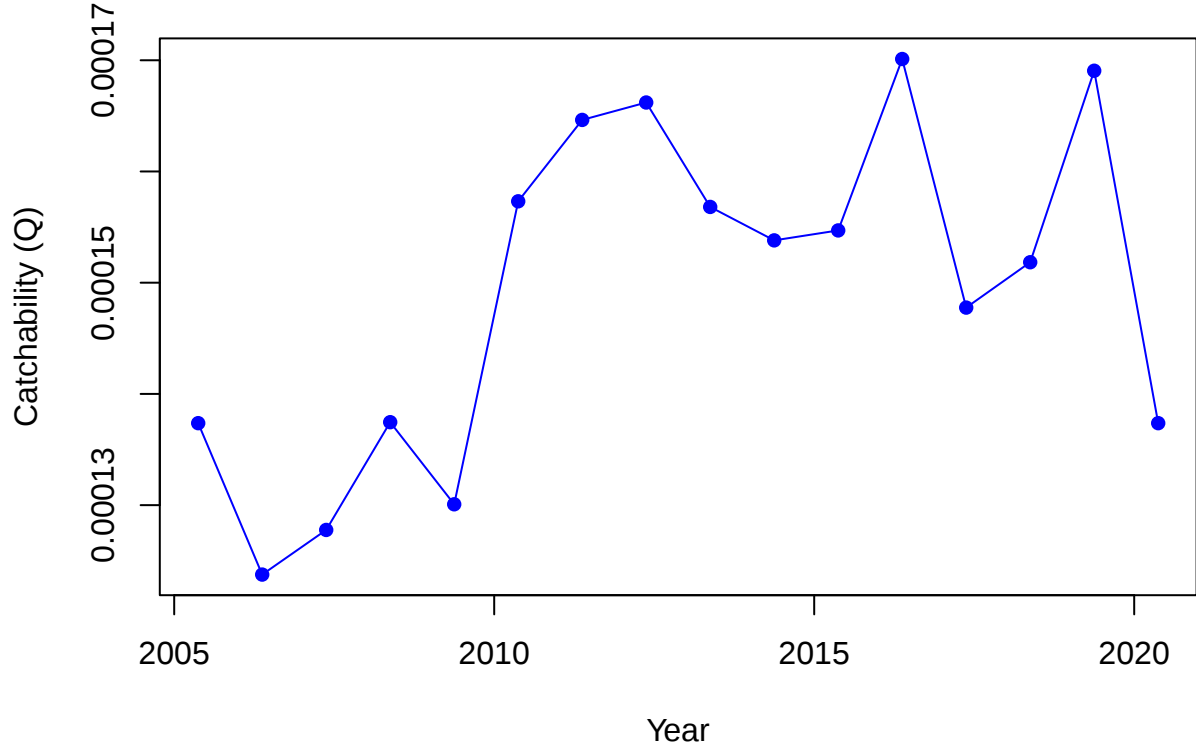
Year

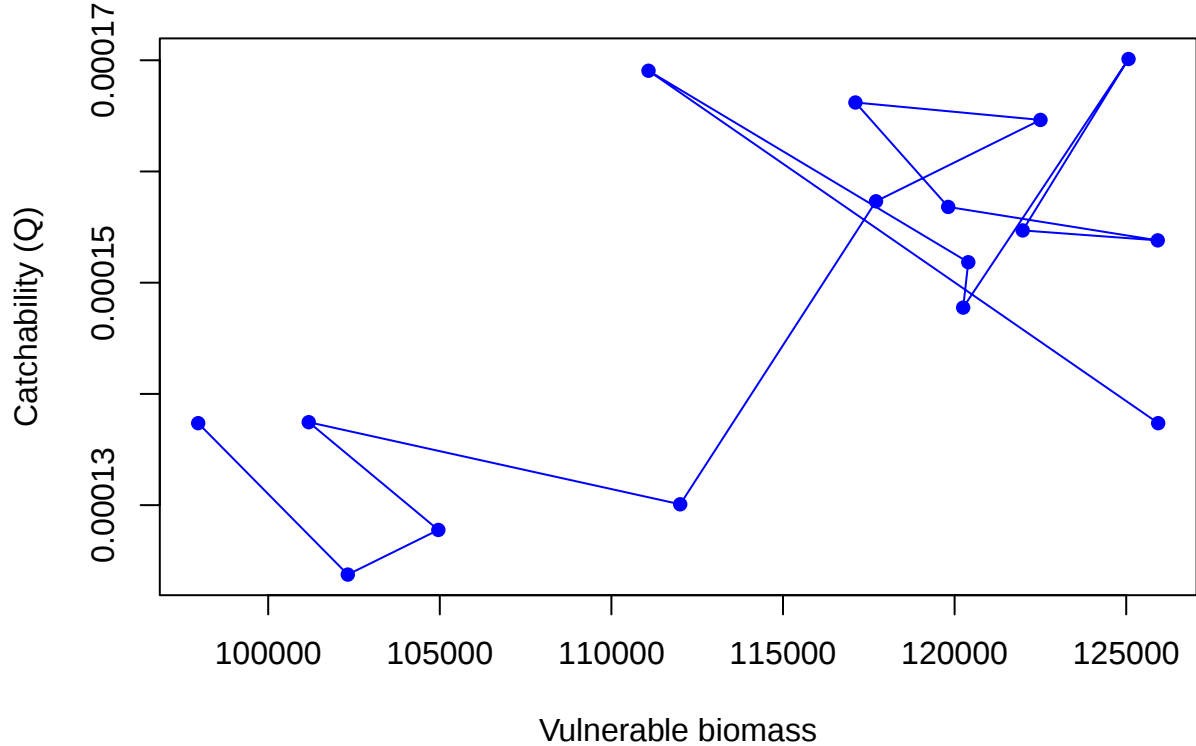


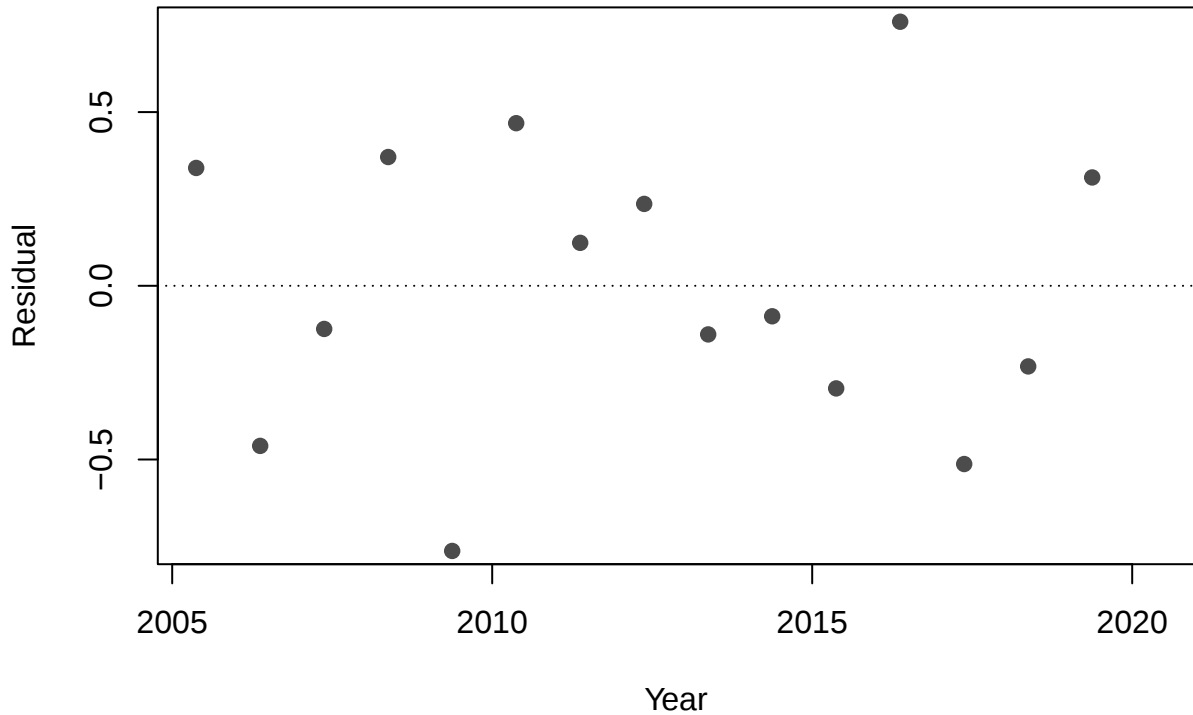
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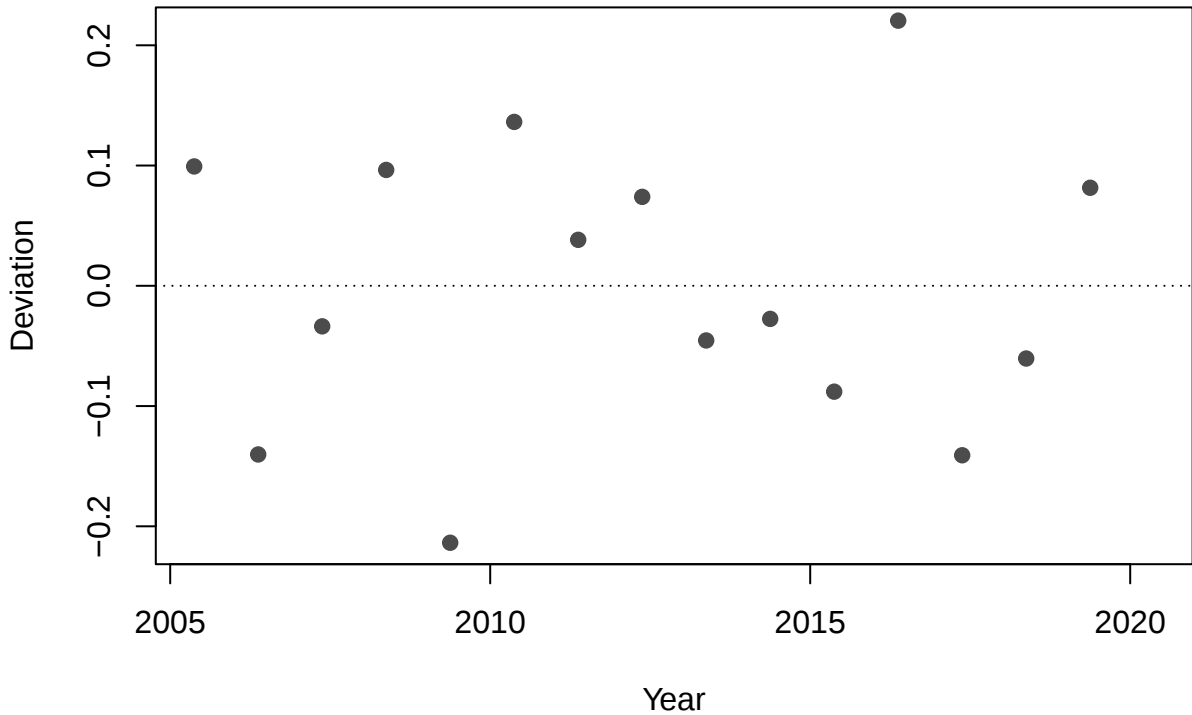












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20
10
0

2006

2008

2010

2012

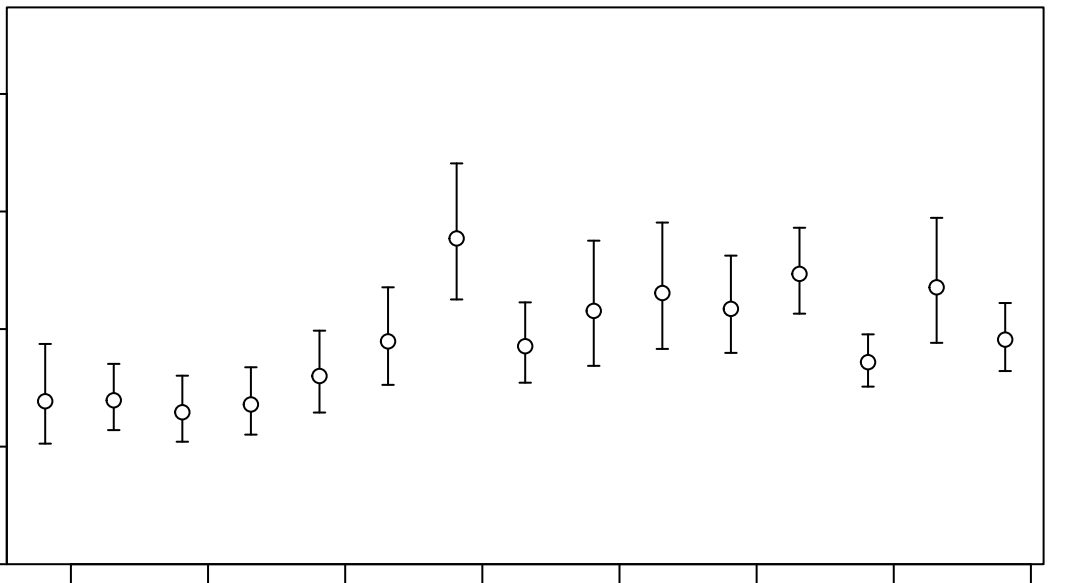
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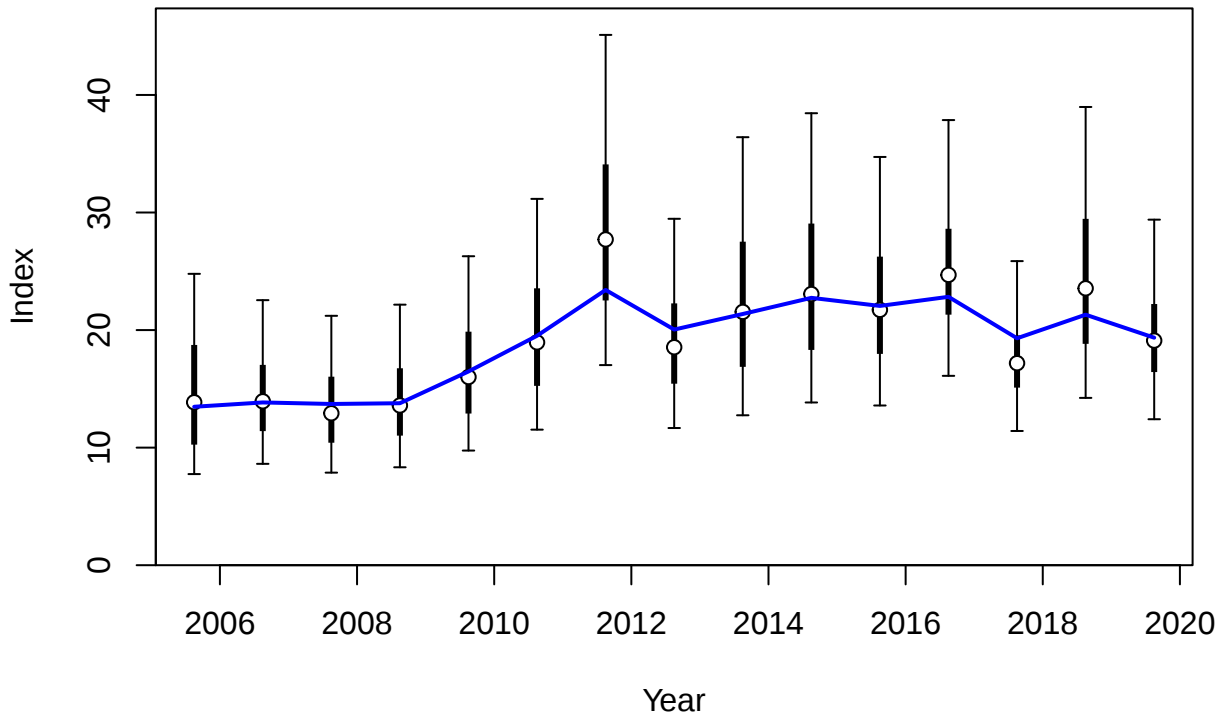
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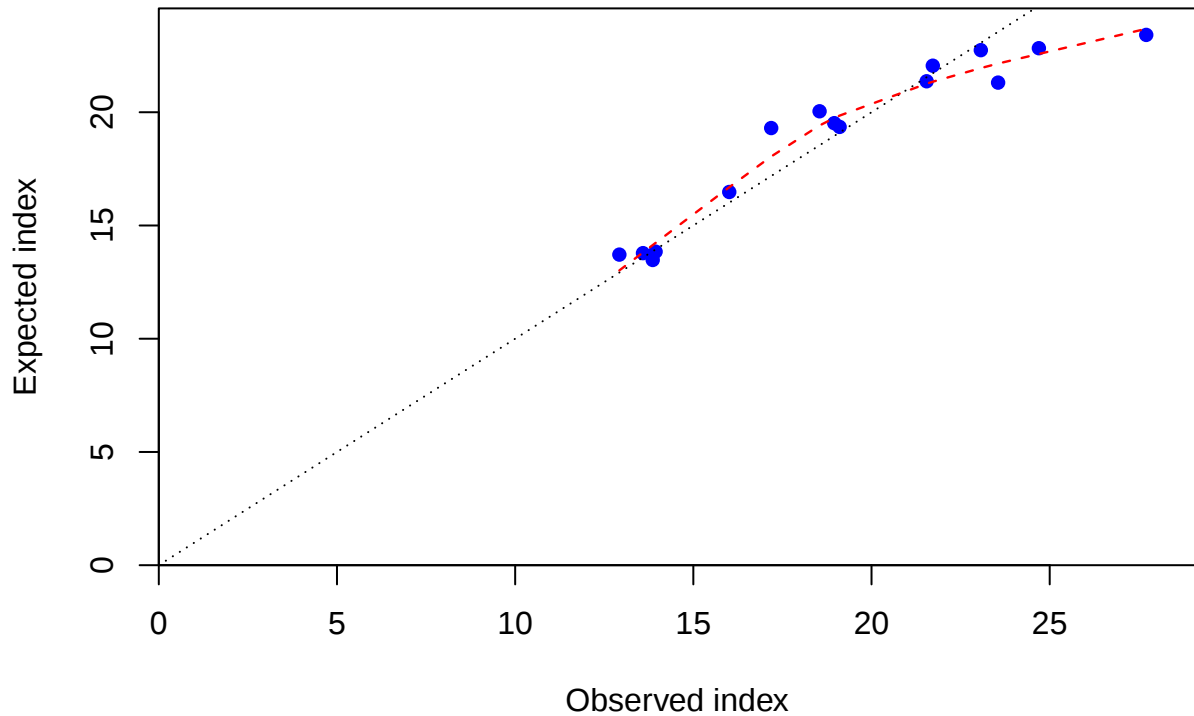
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2020

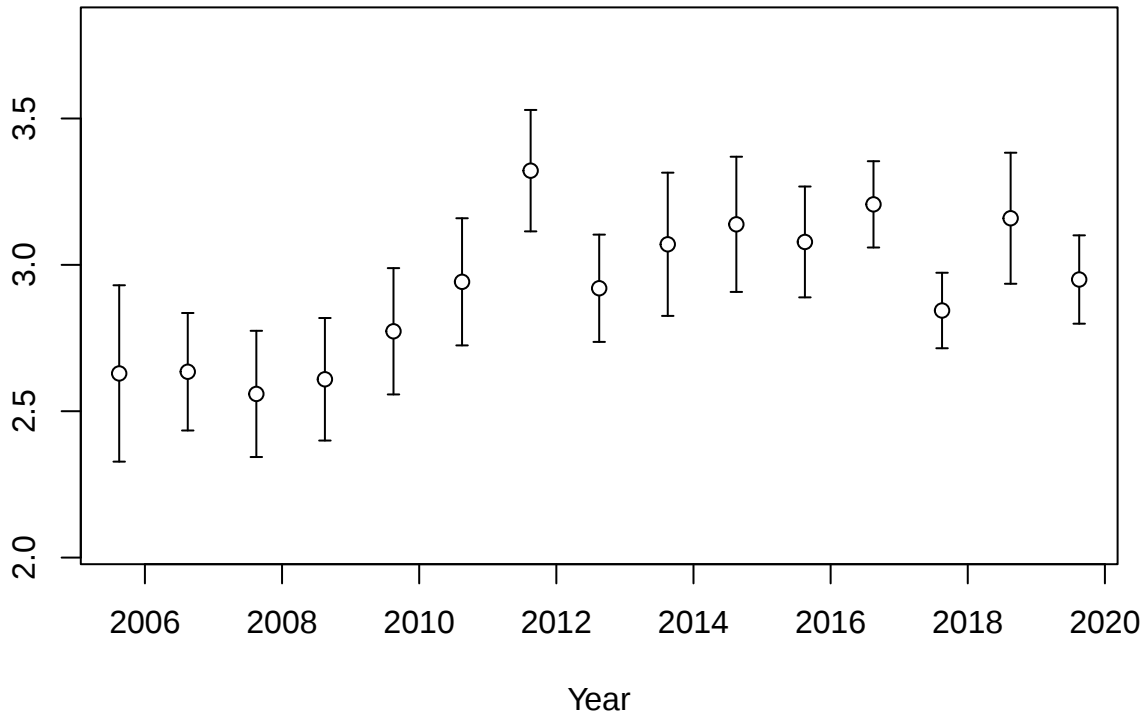
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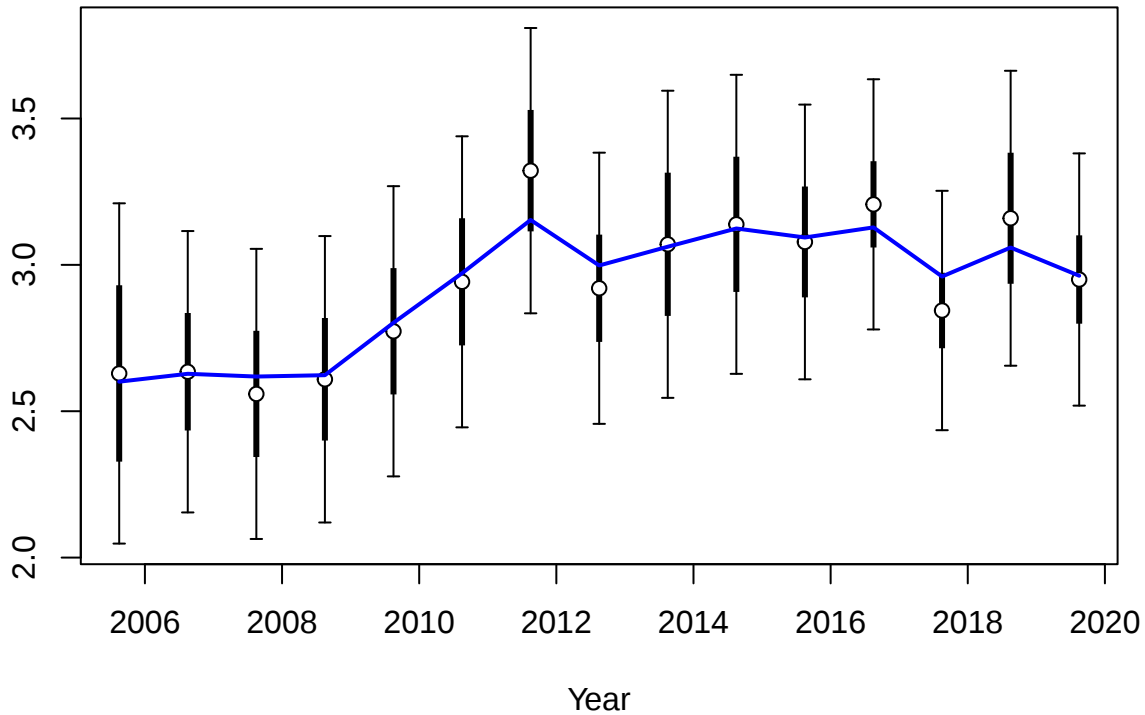


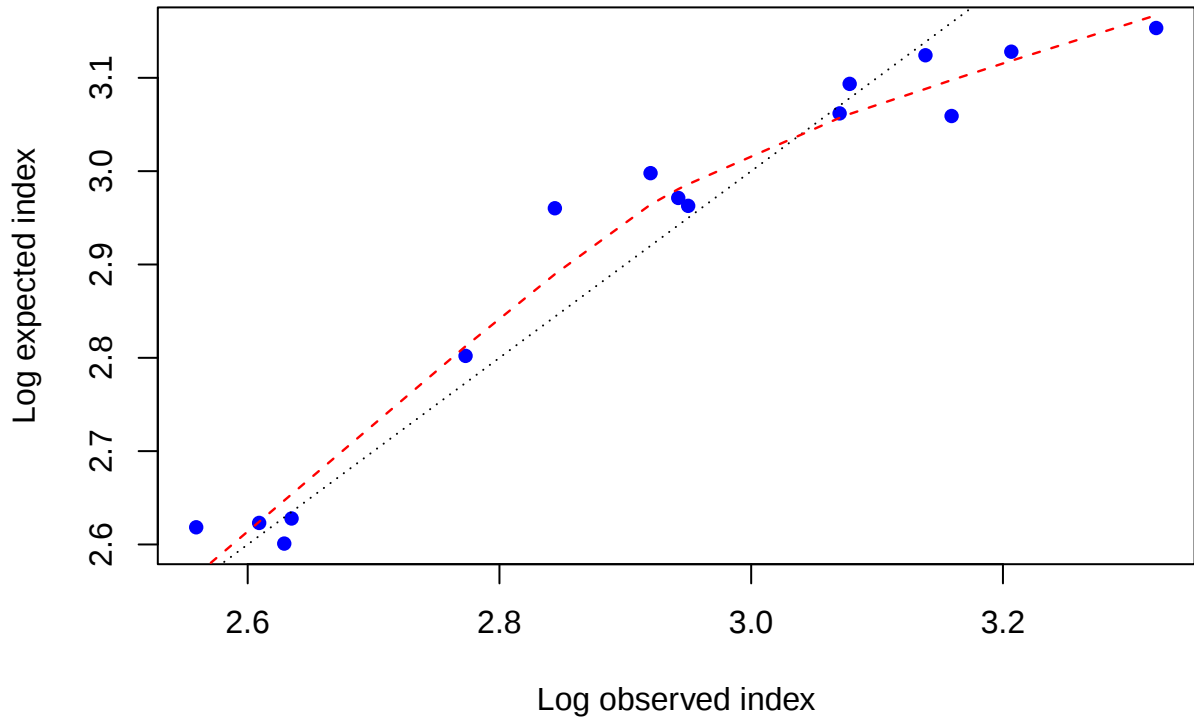


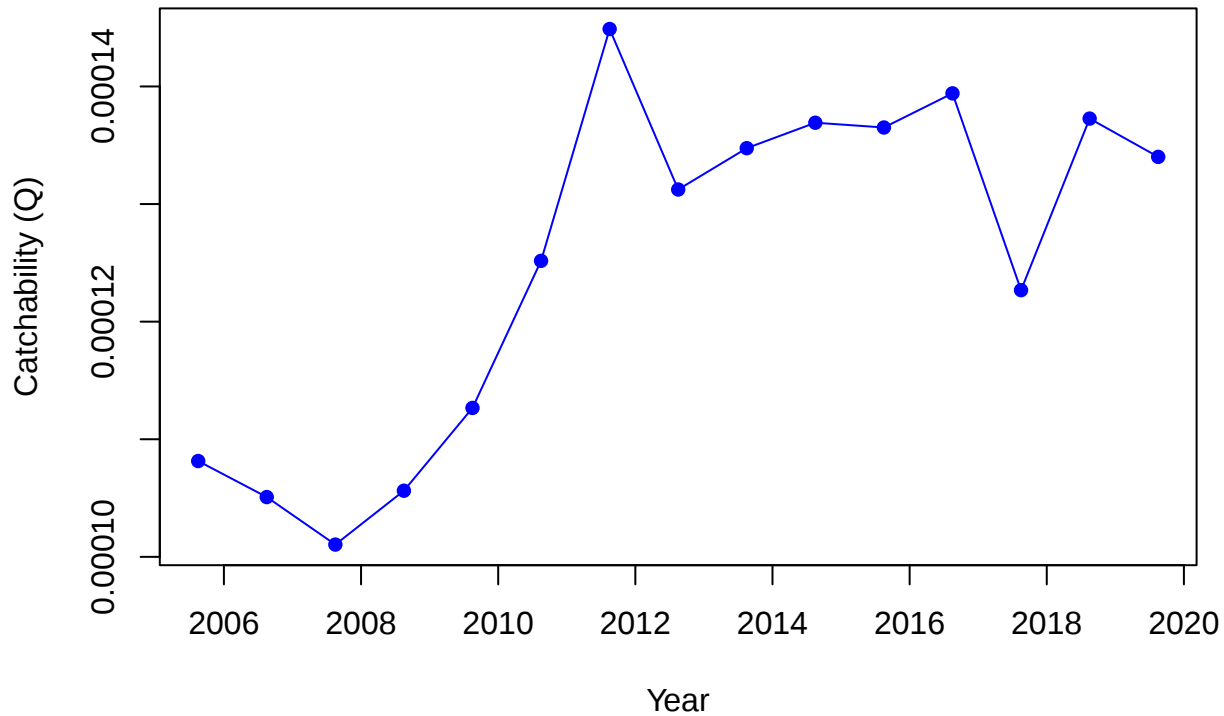
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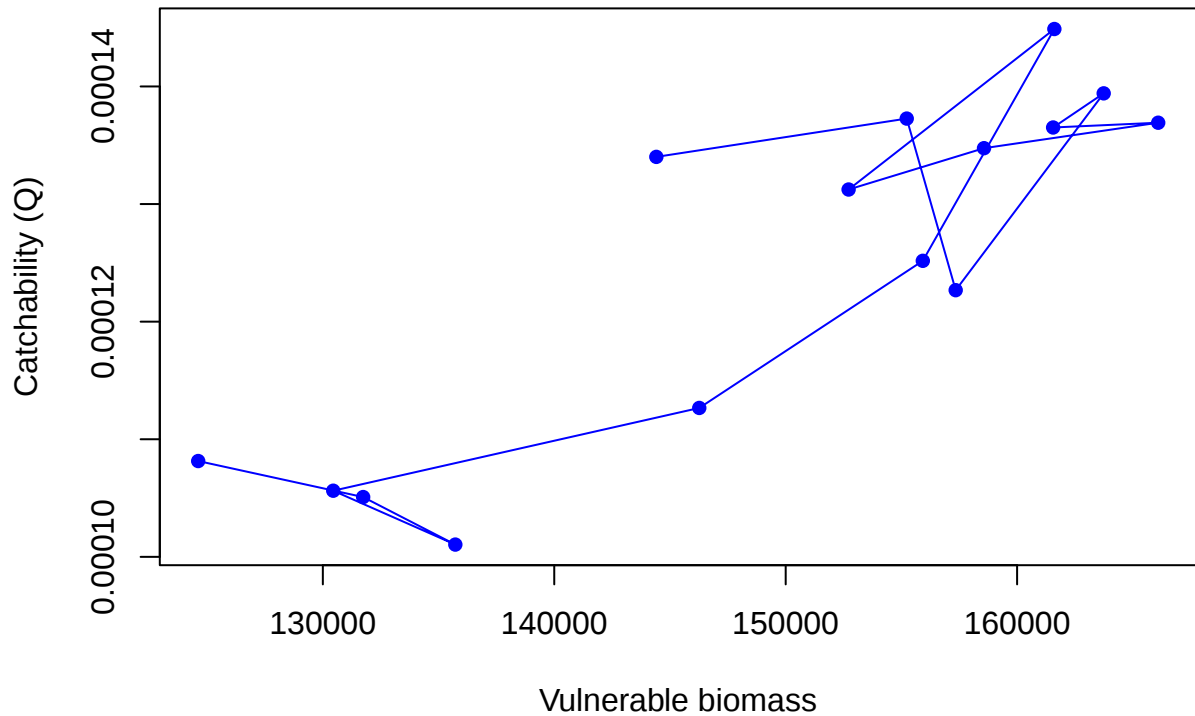


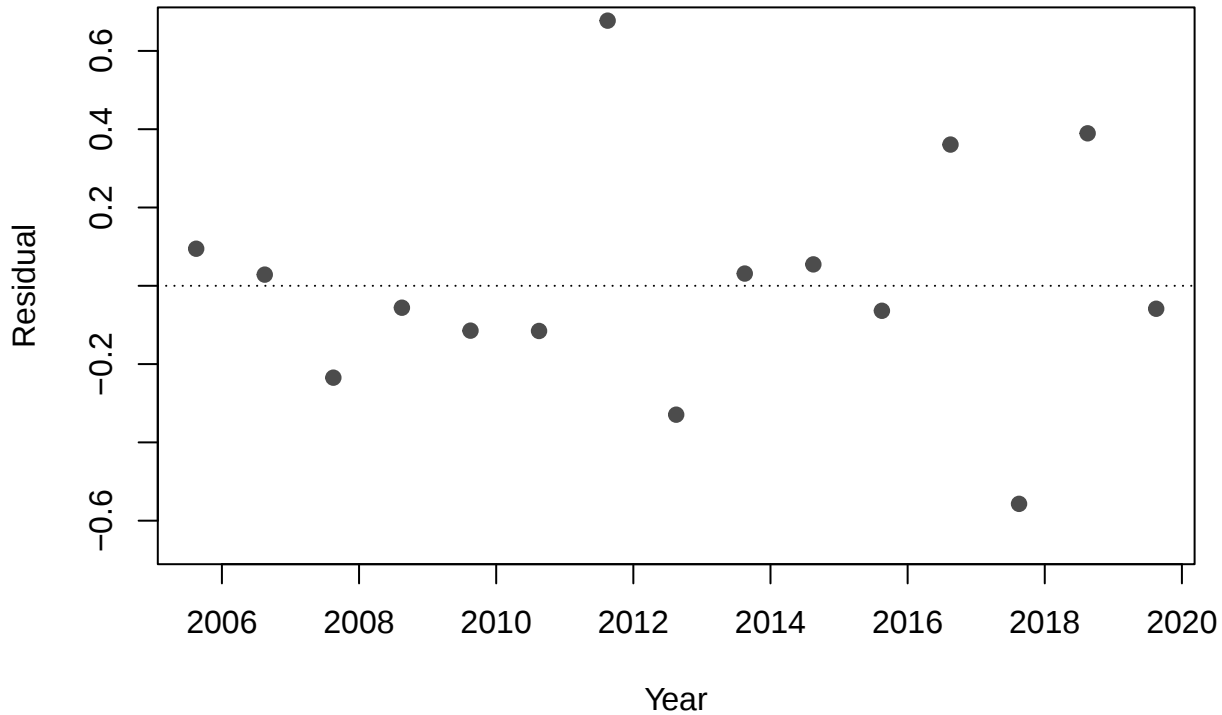
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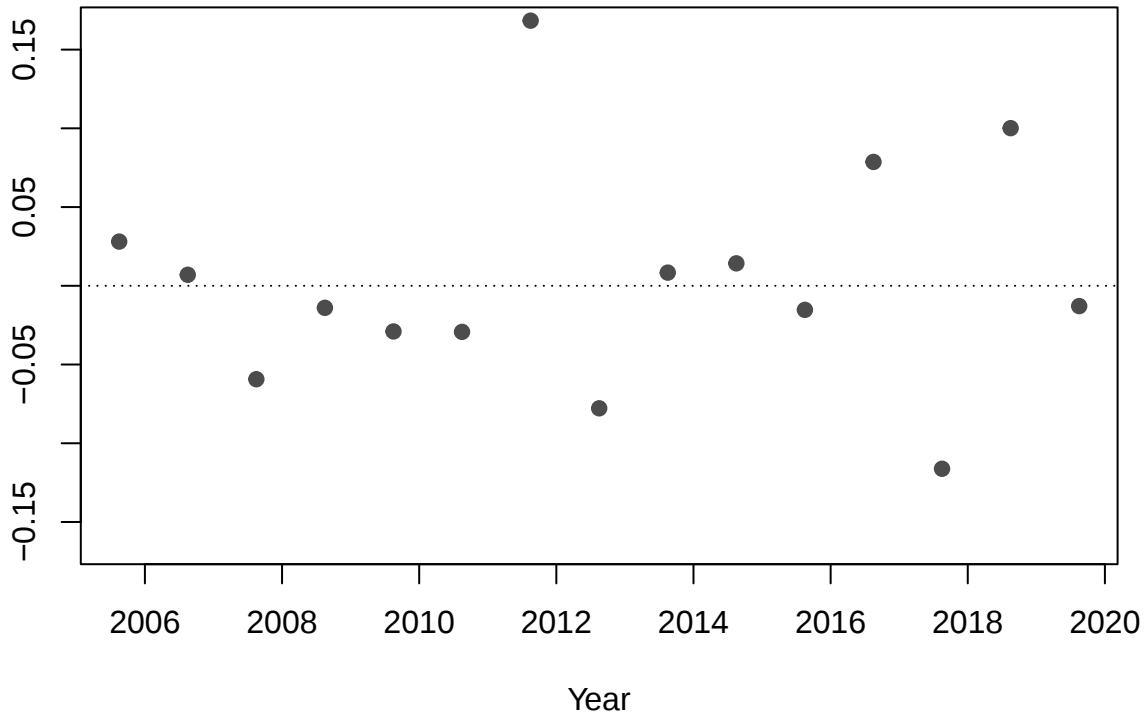


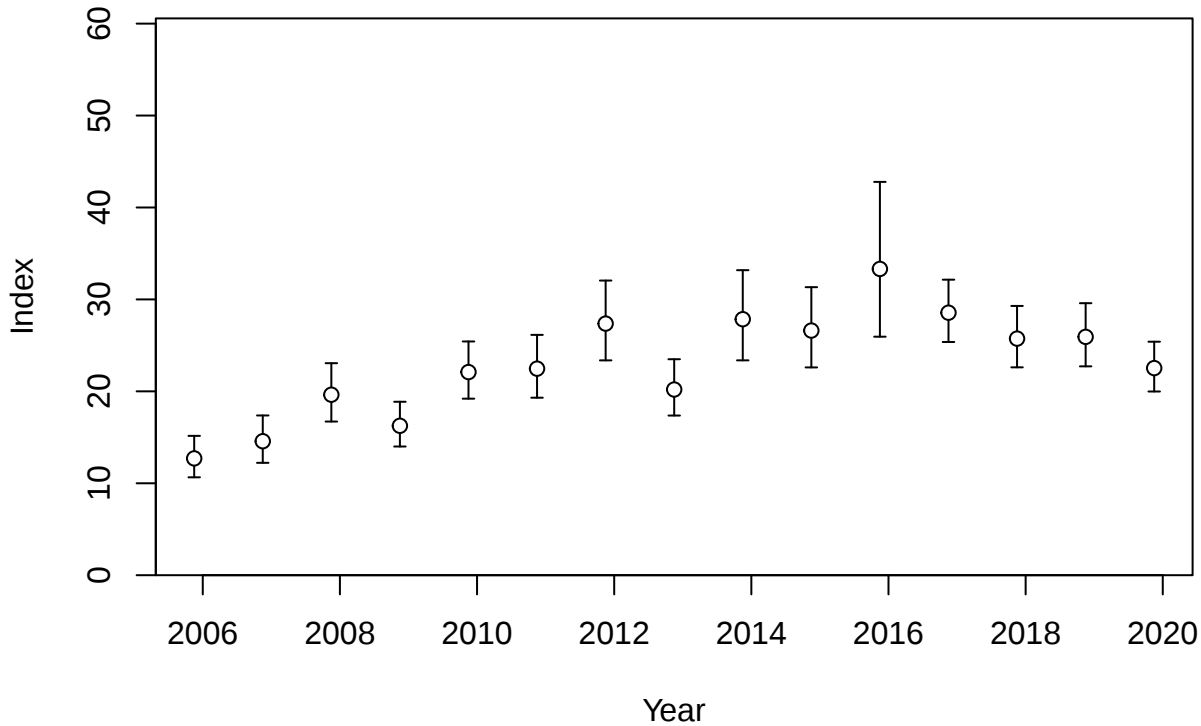


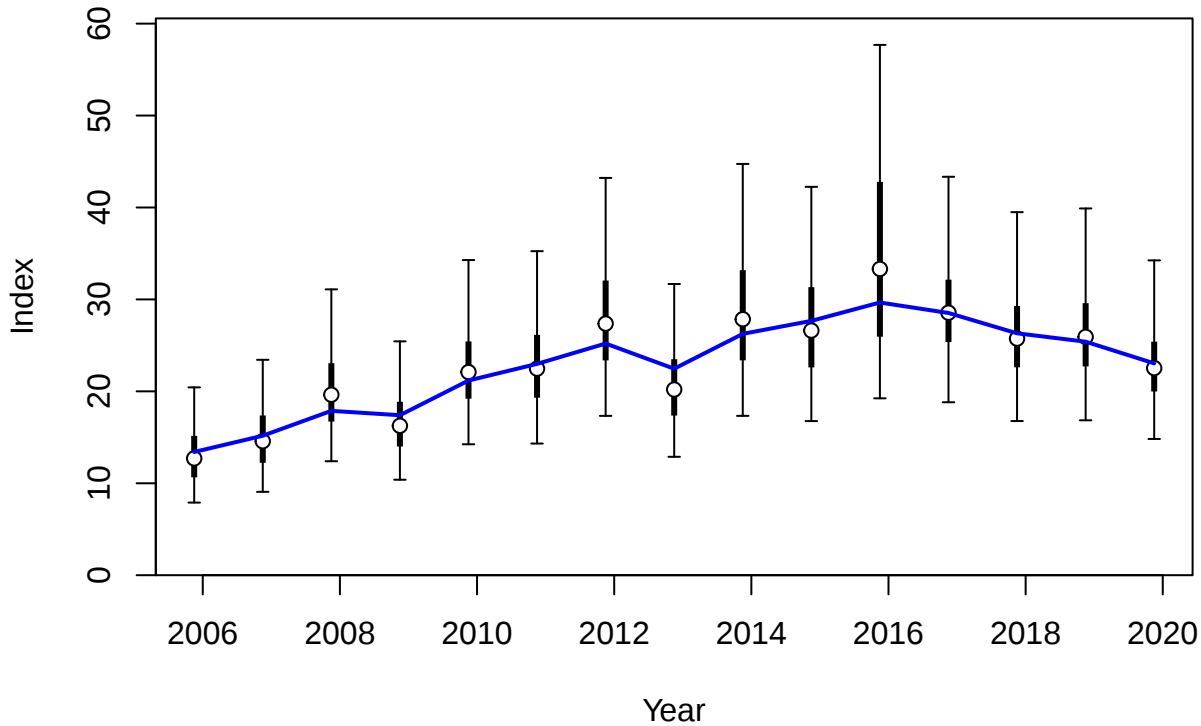




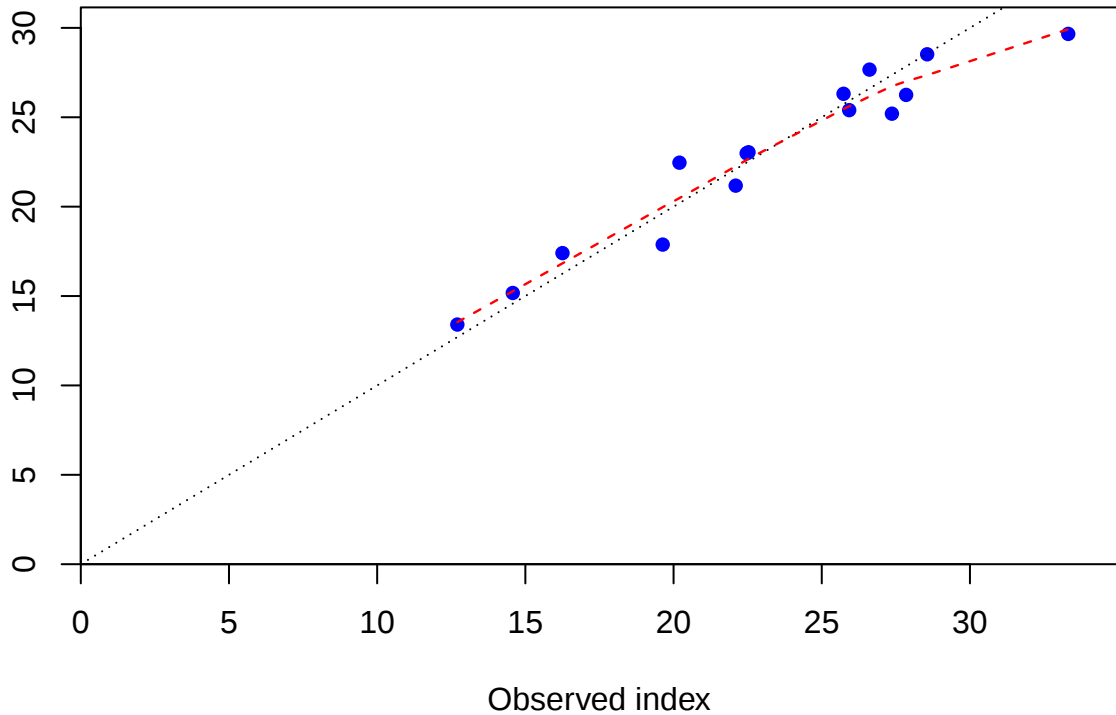
Deviation



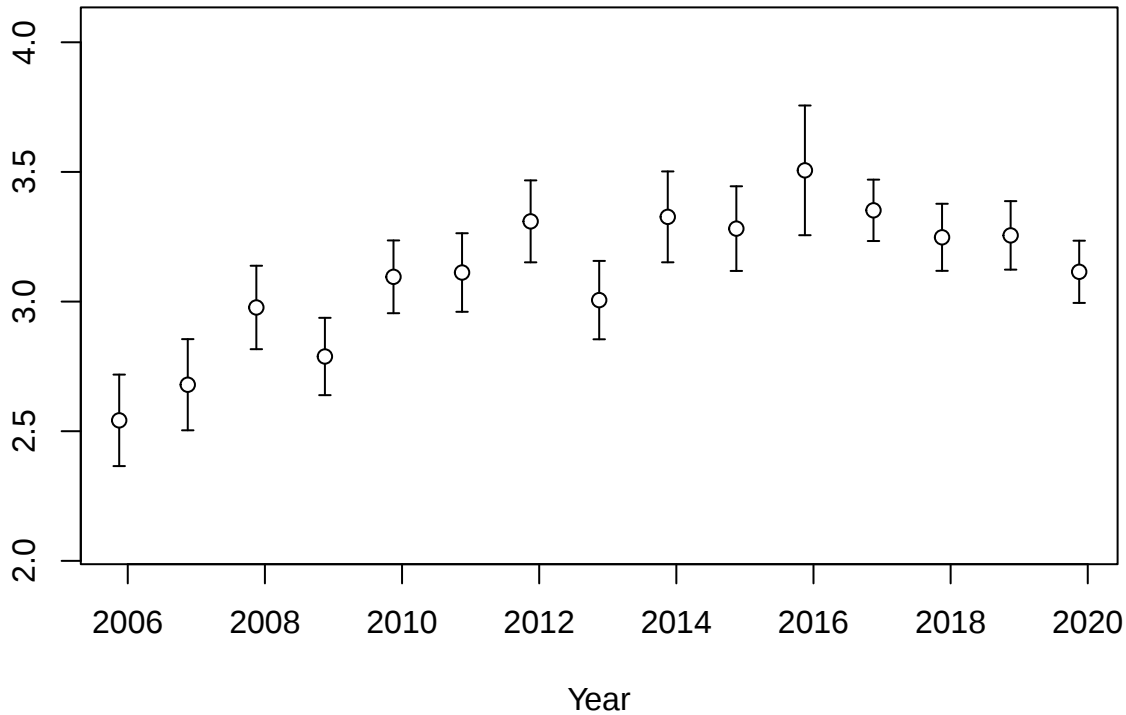




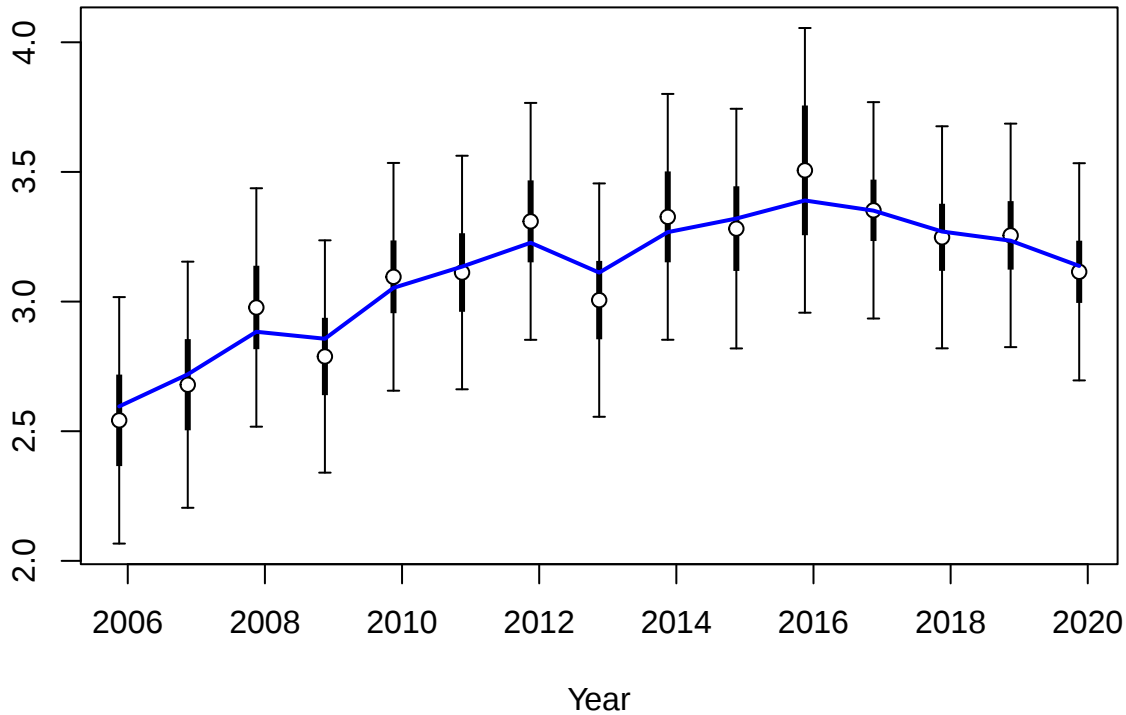
Expected index



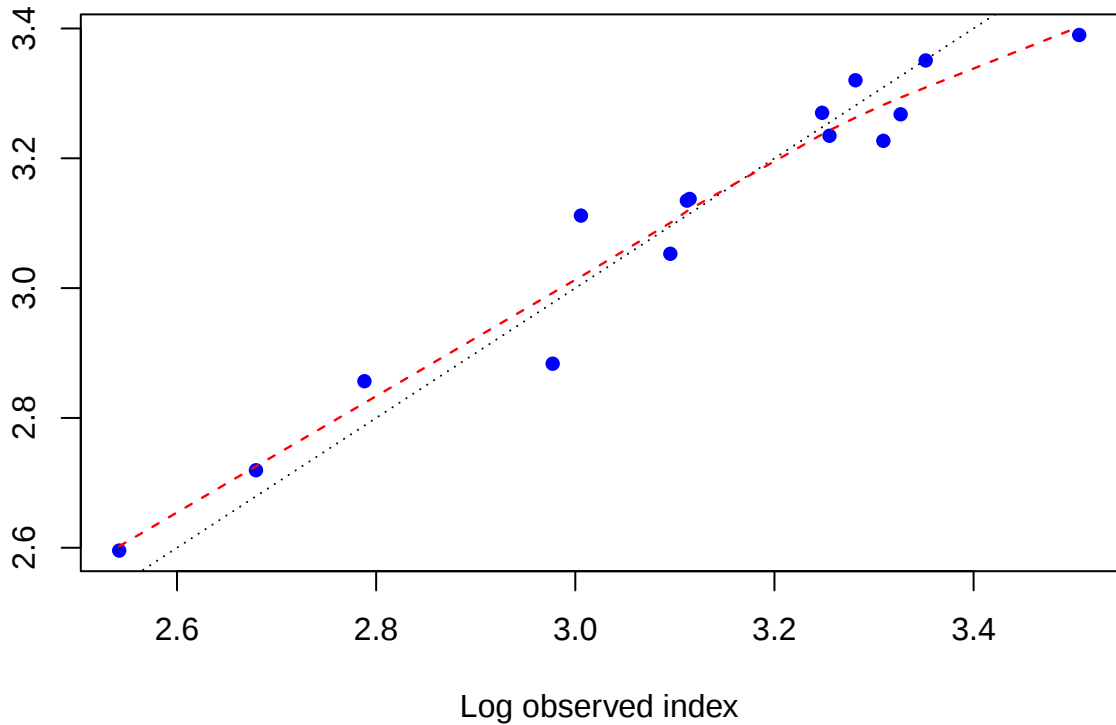
Log index



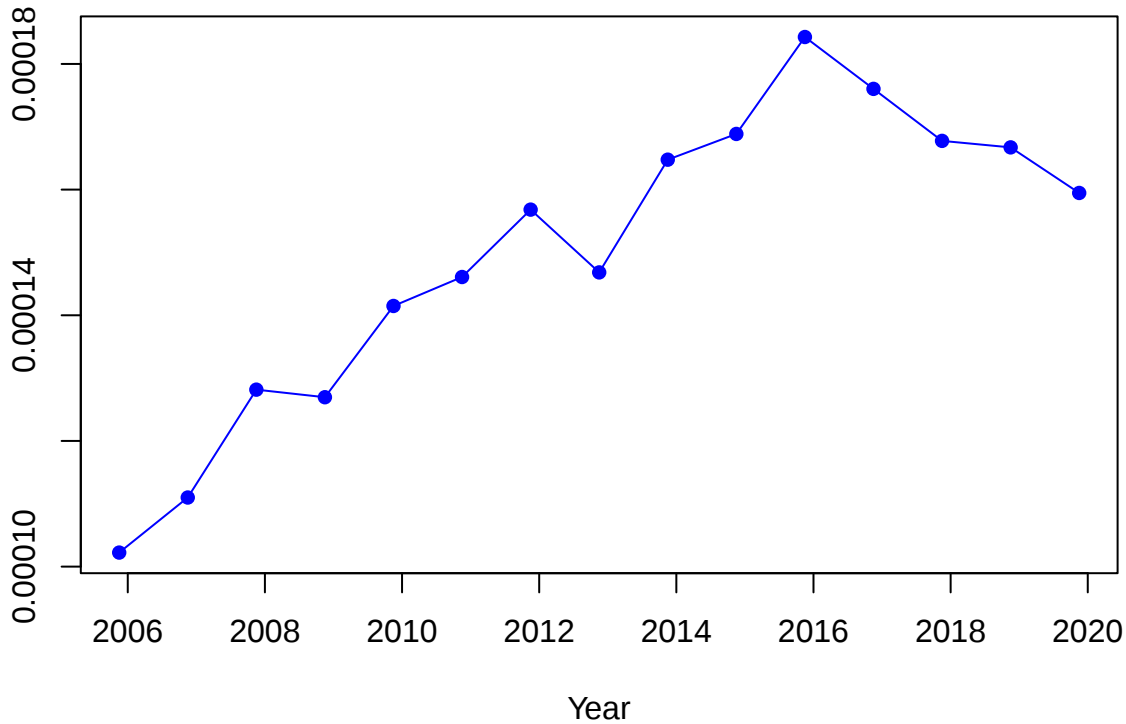
Log index



Log expected index



Catchability (Q)



Catchability (Q)

0.00018
0.00014
0.00010

130000

135000

140000

145000

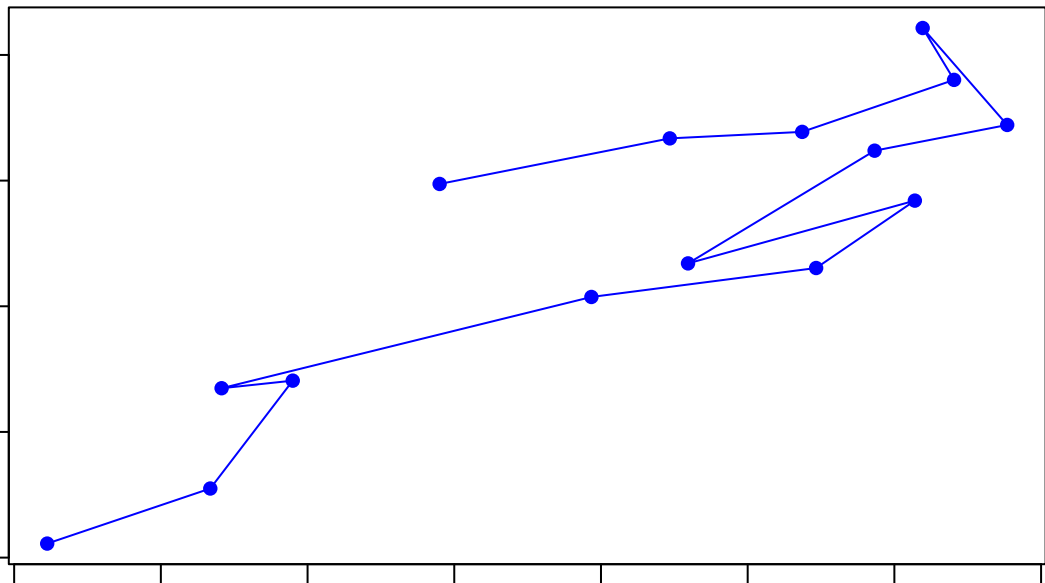
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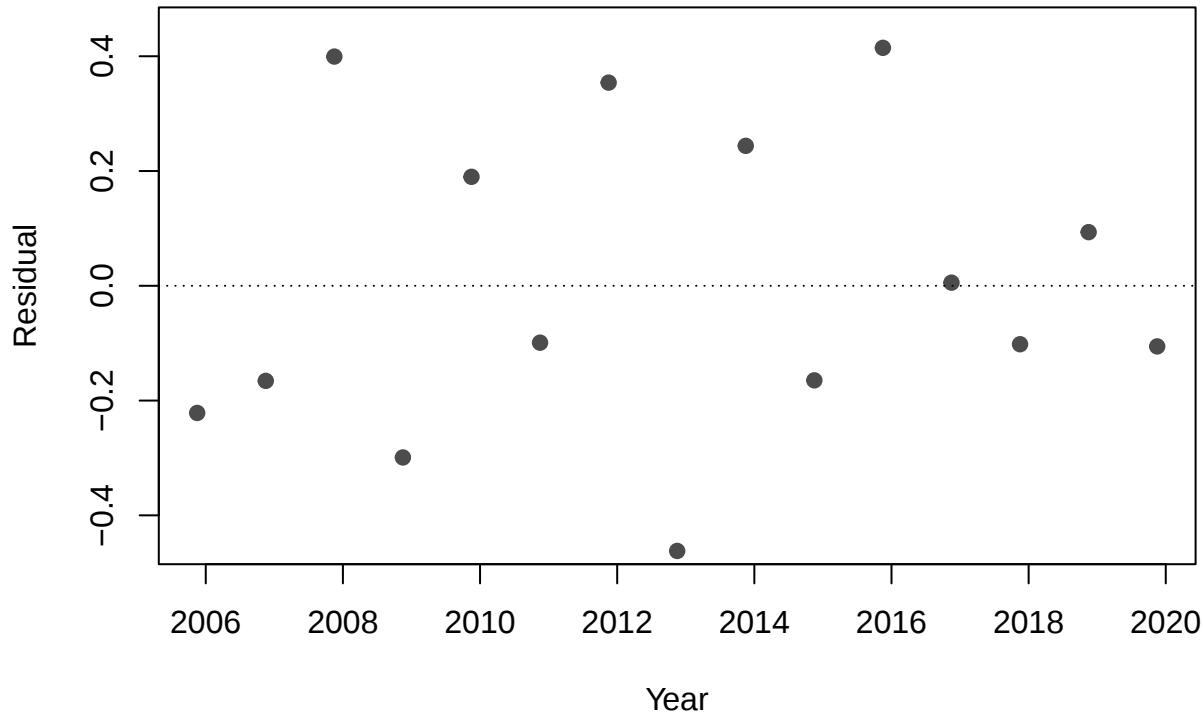
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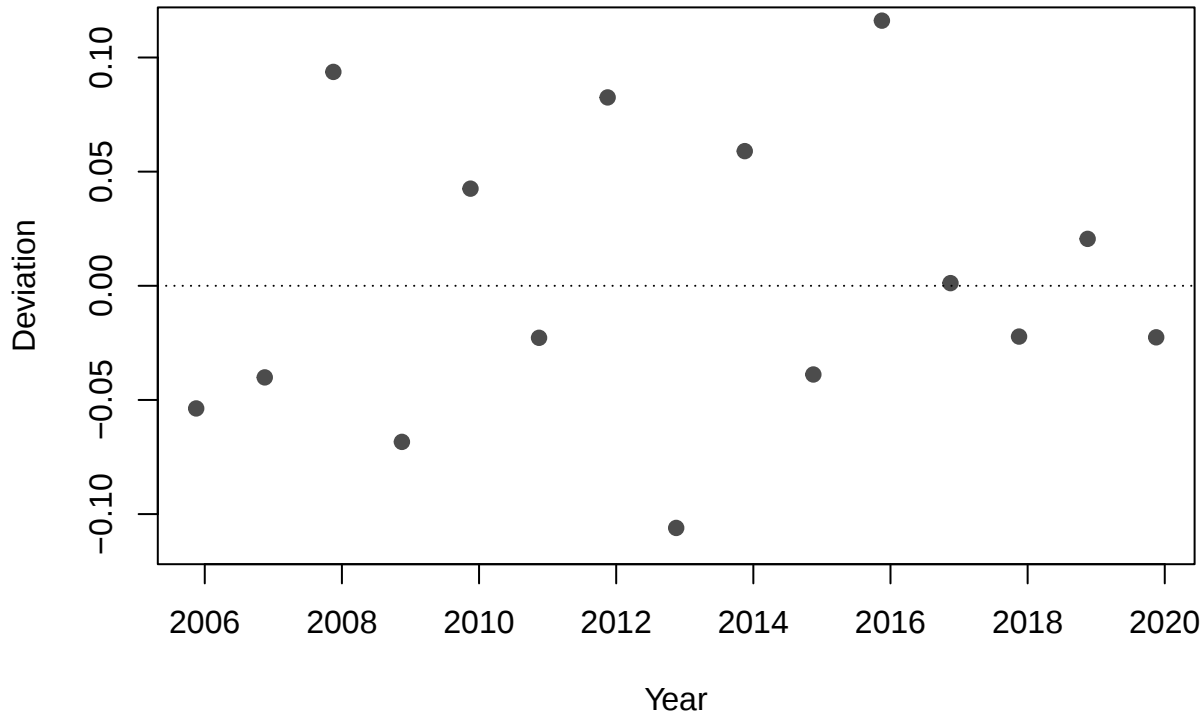
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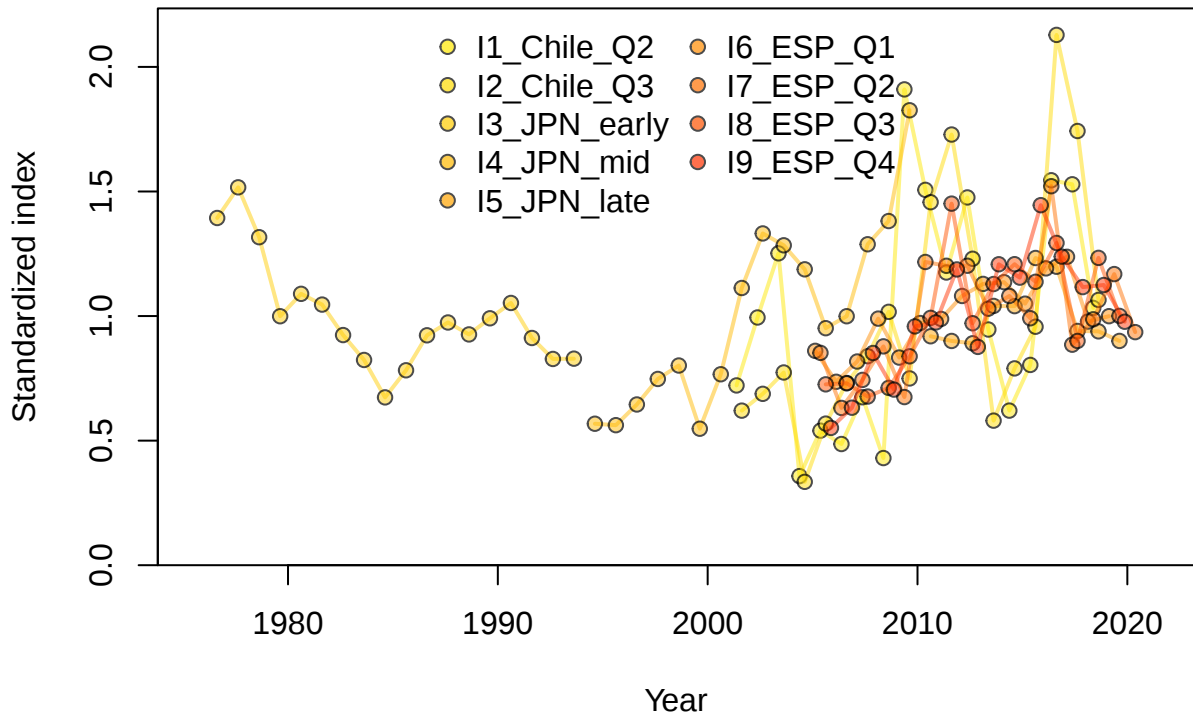
165000

Vulnerable biomass

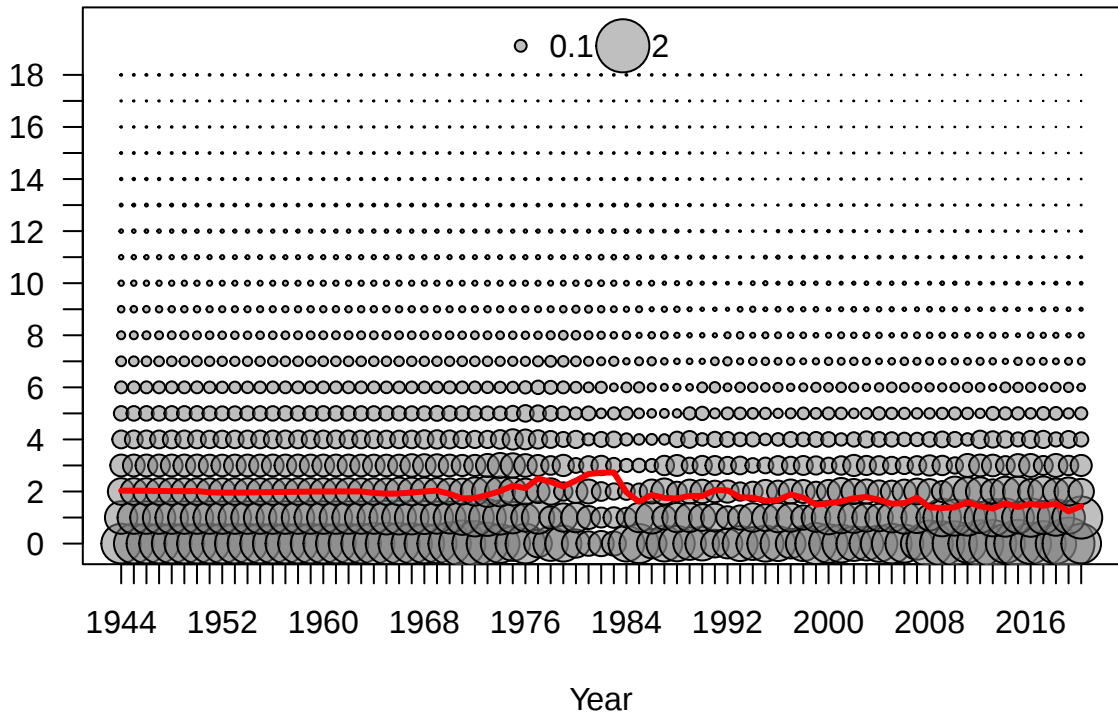




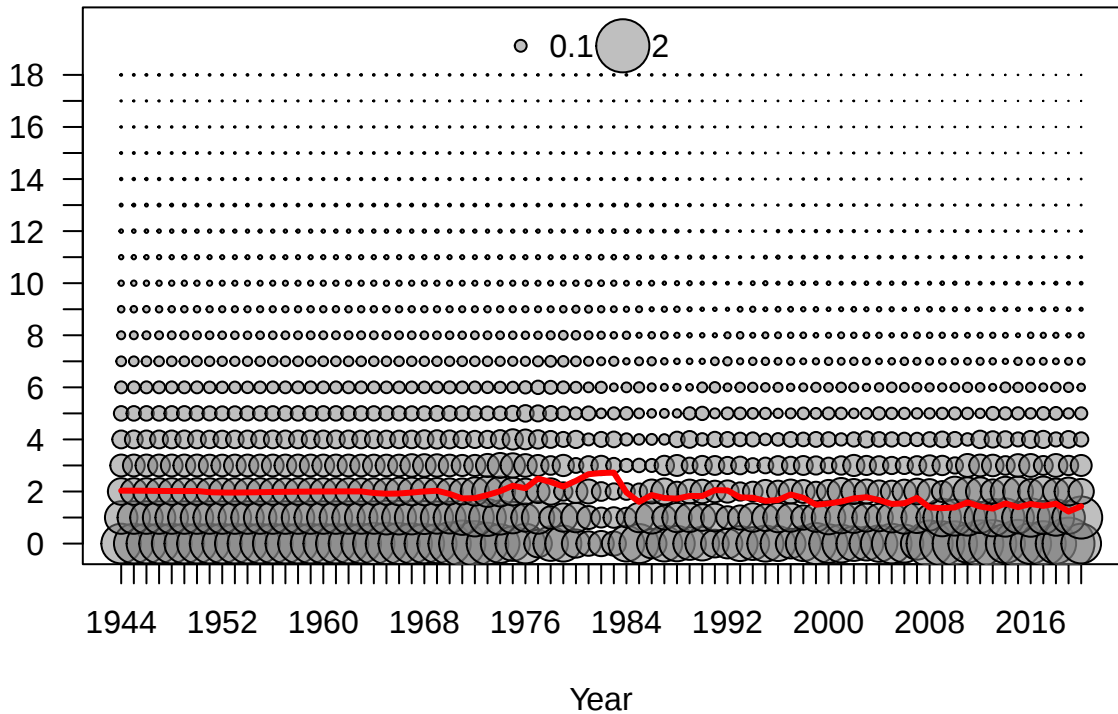


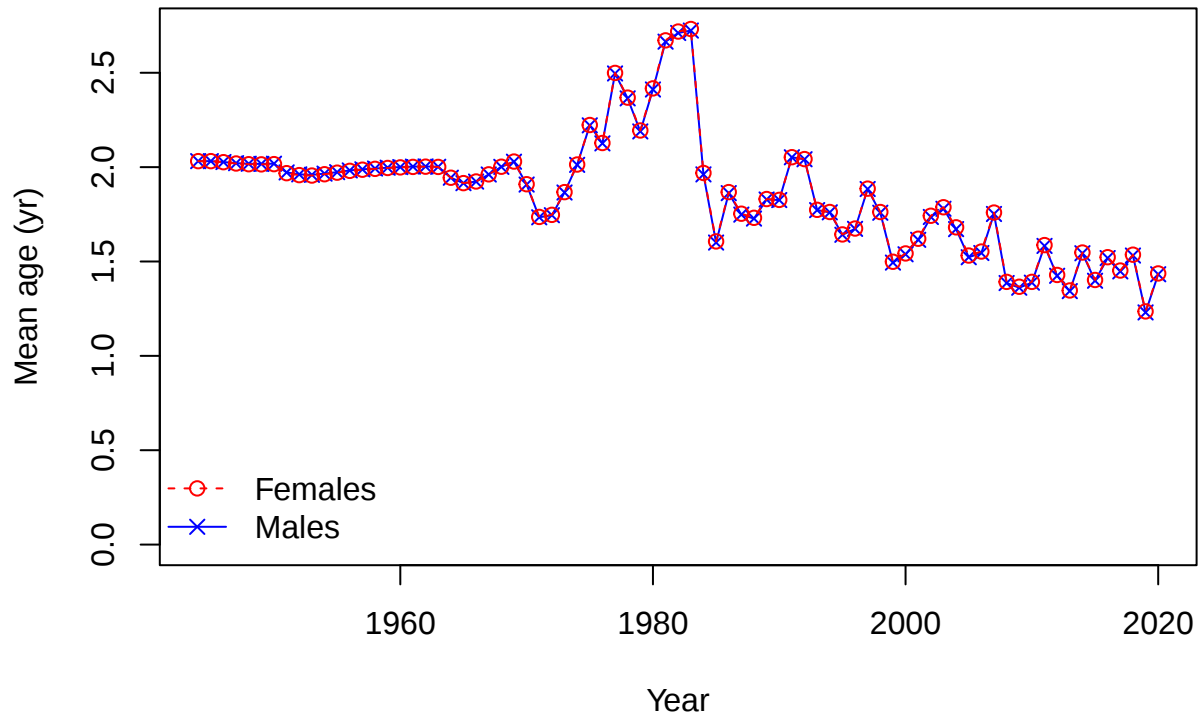


Age

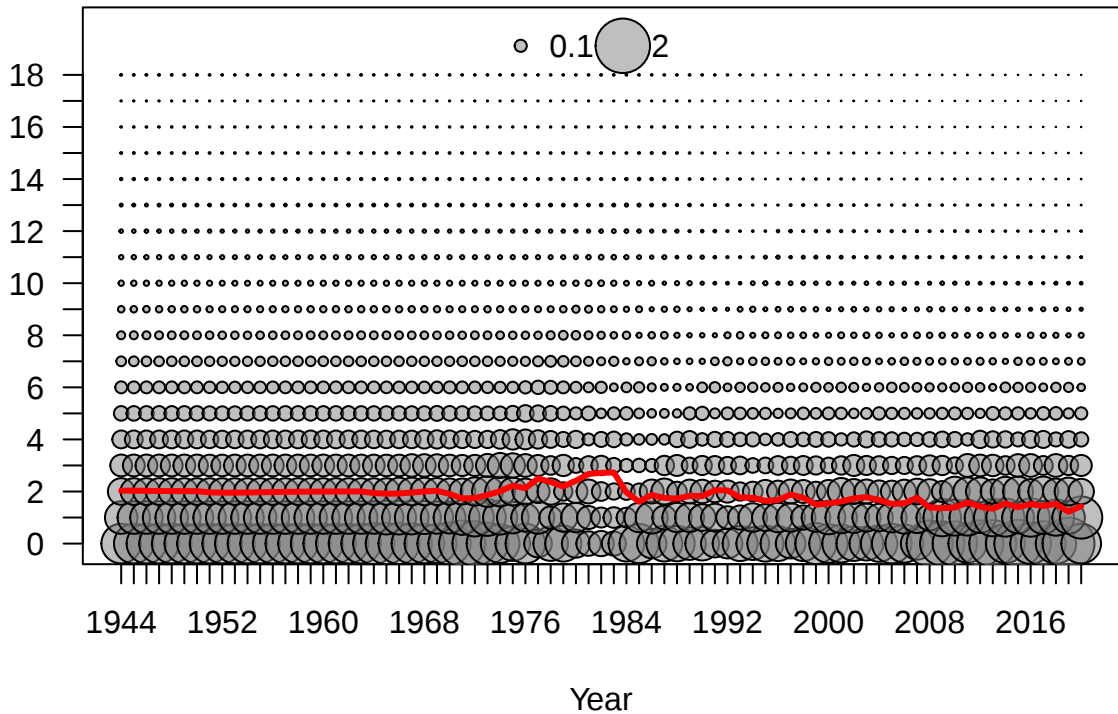


Age

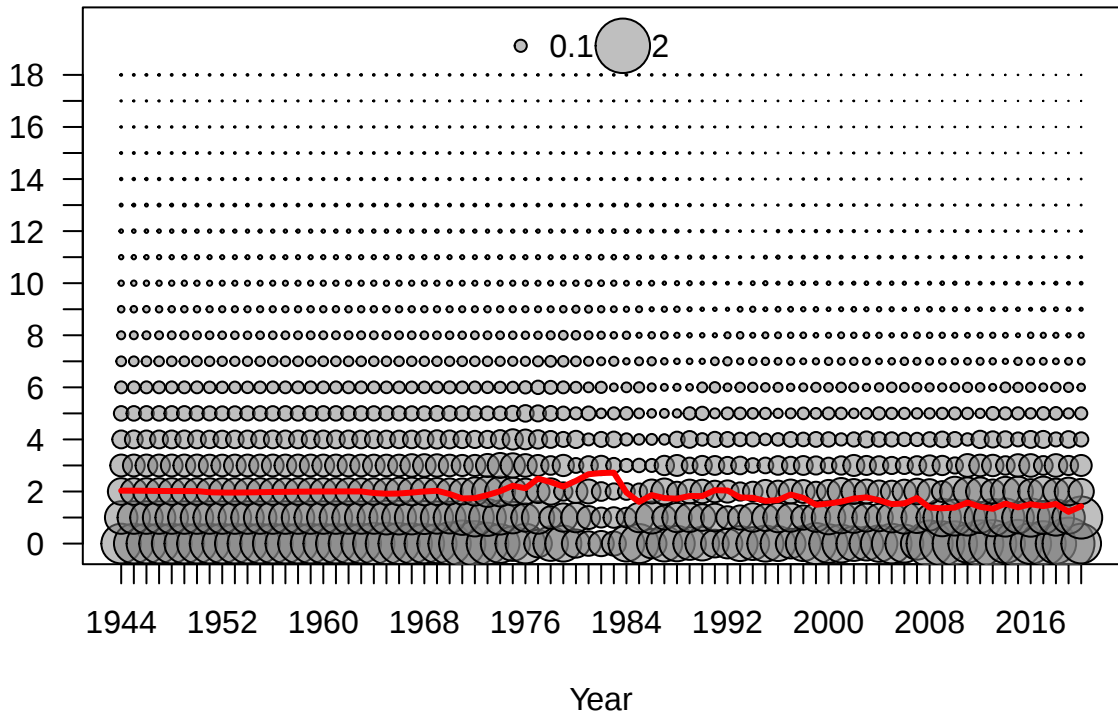


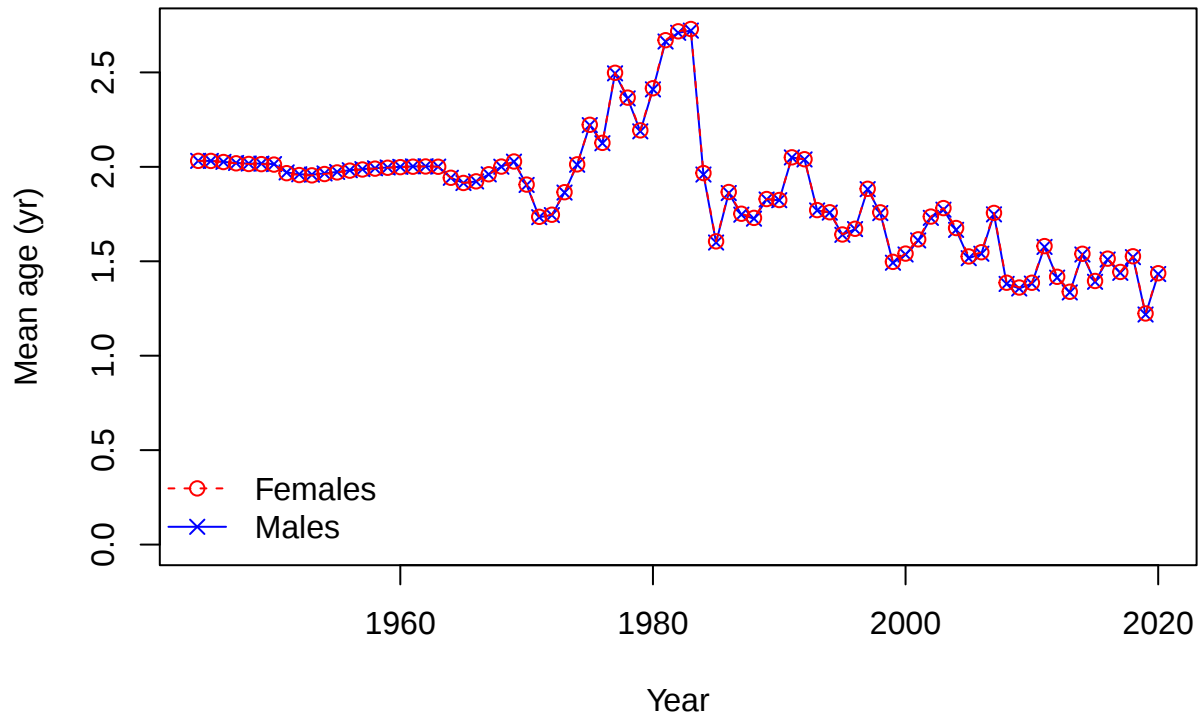


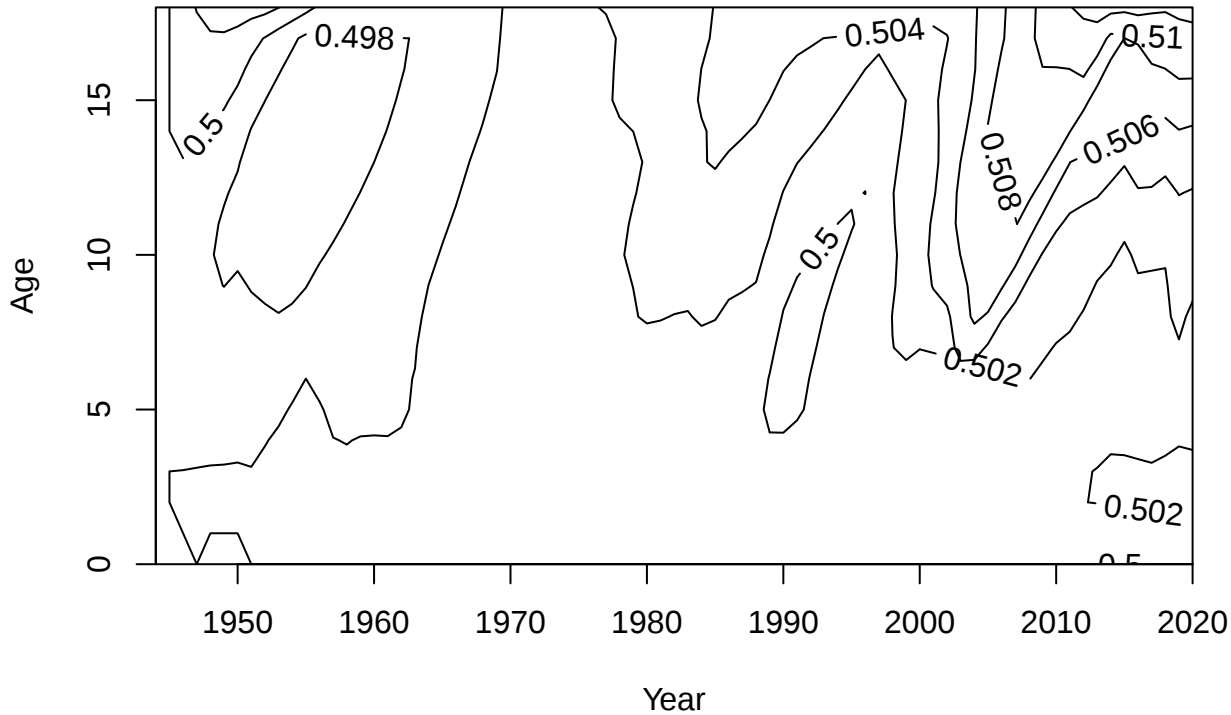
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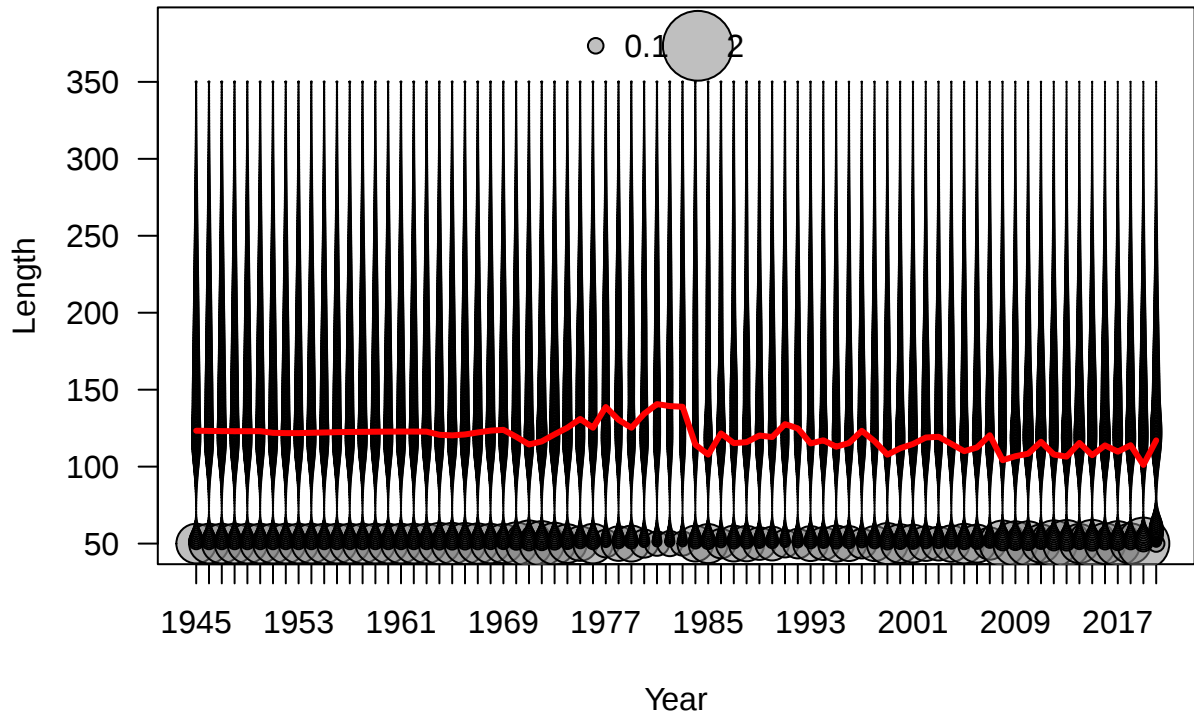


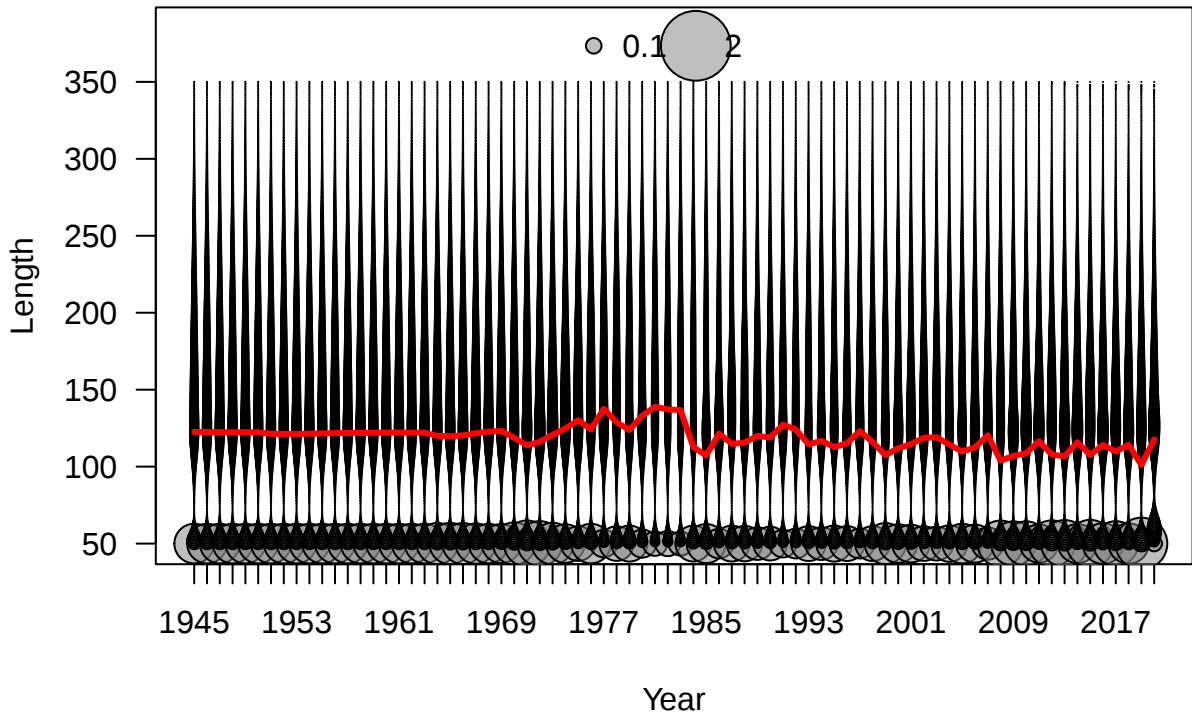
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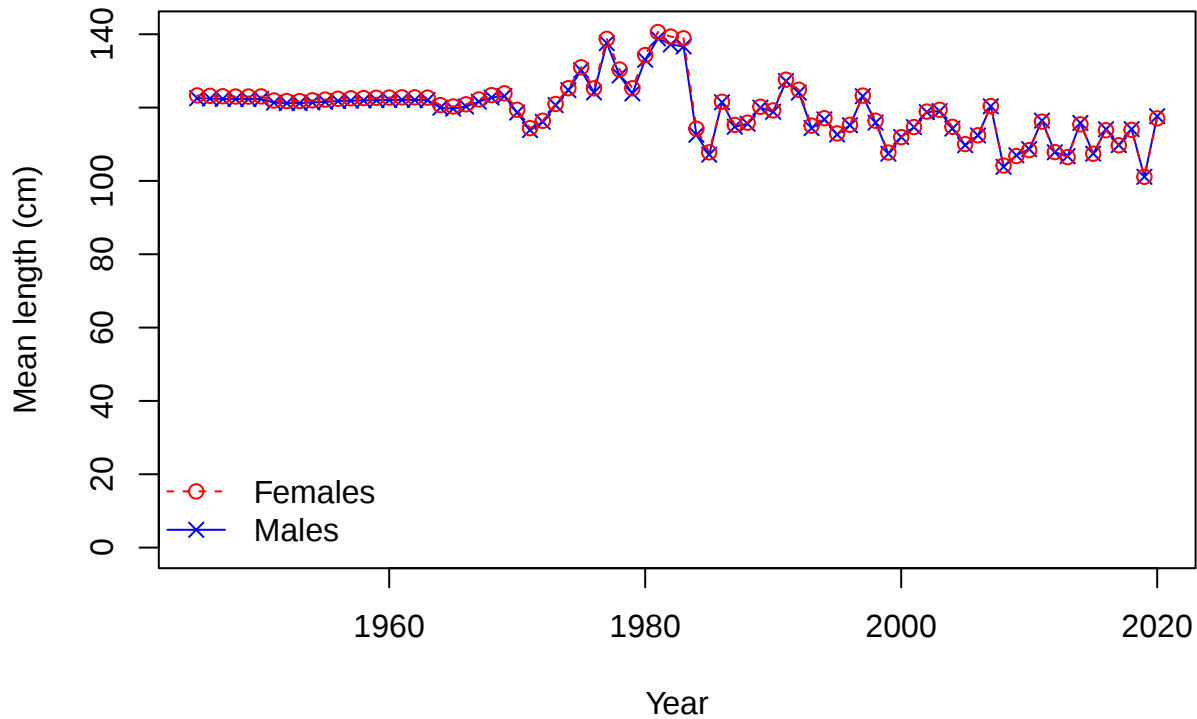


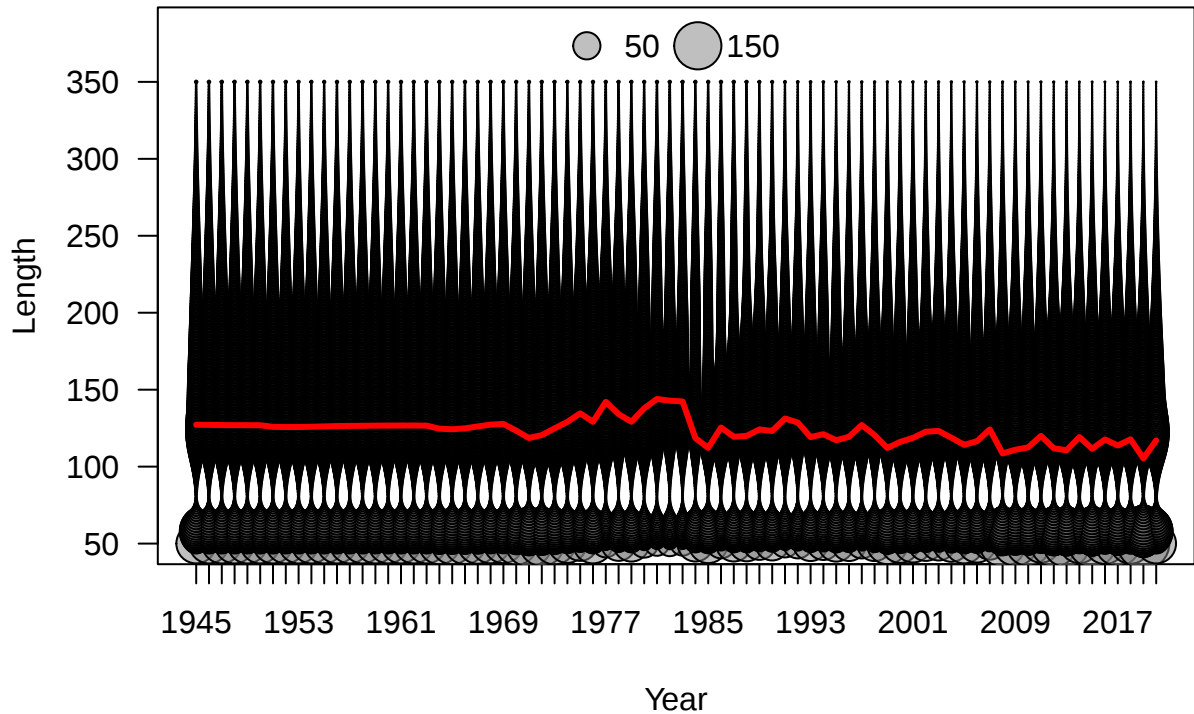


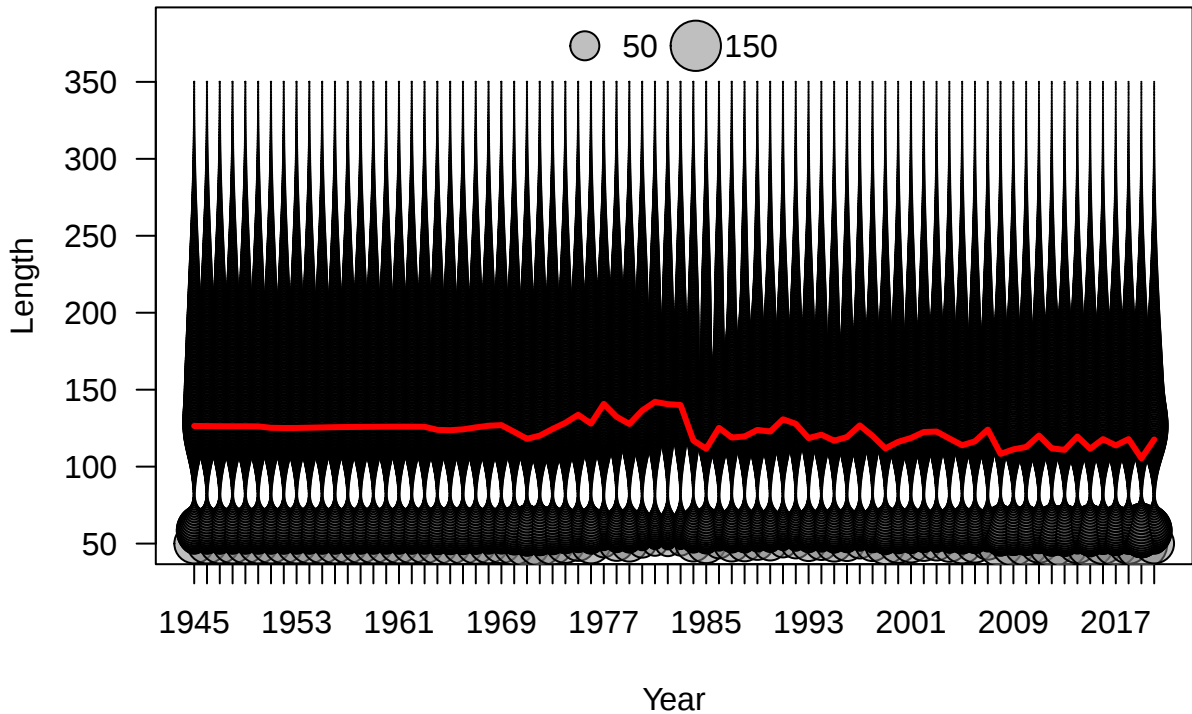


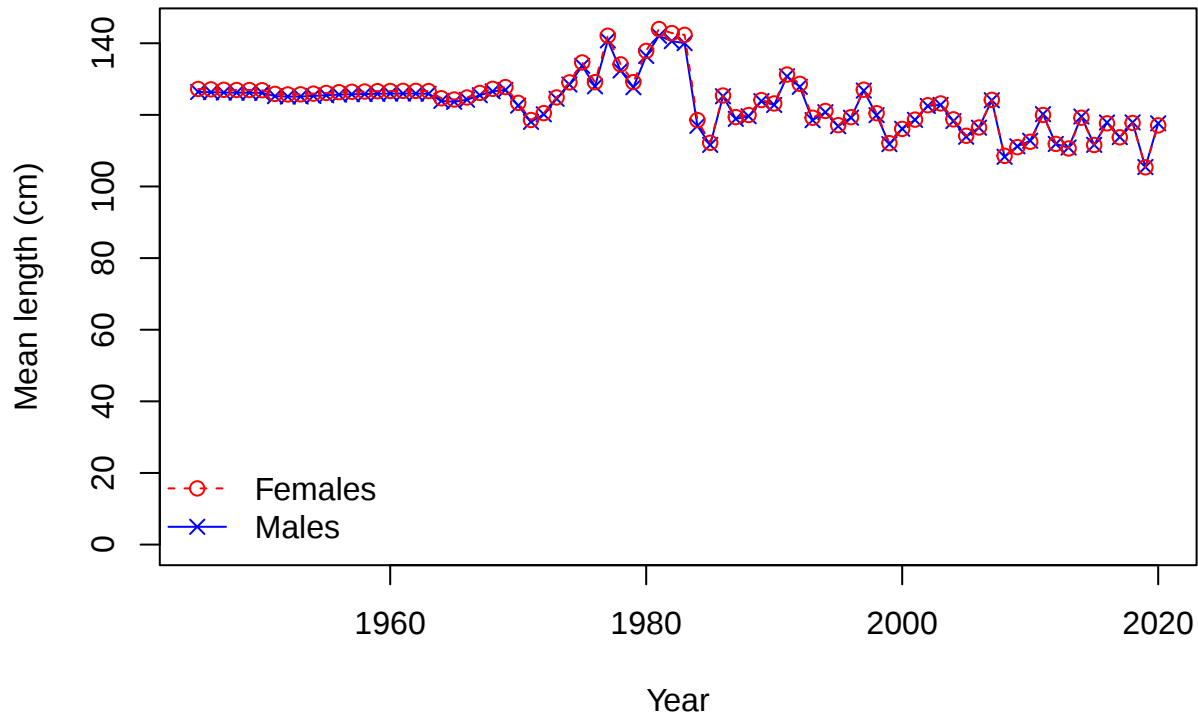


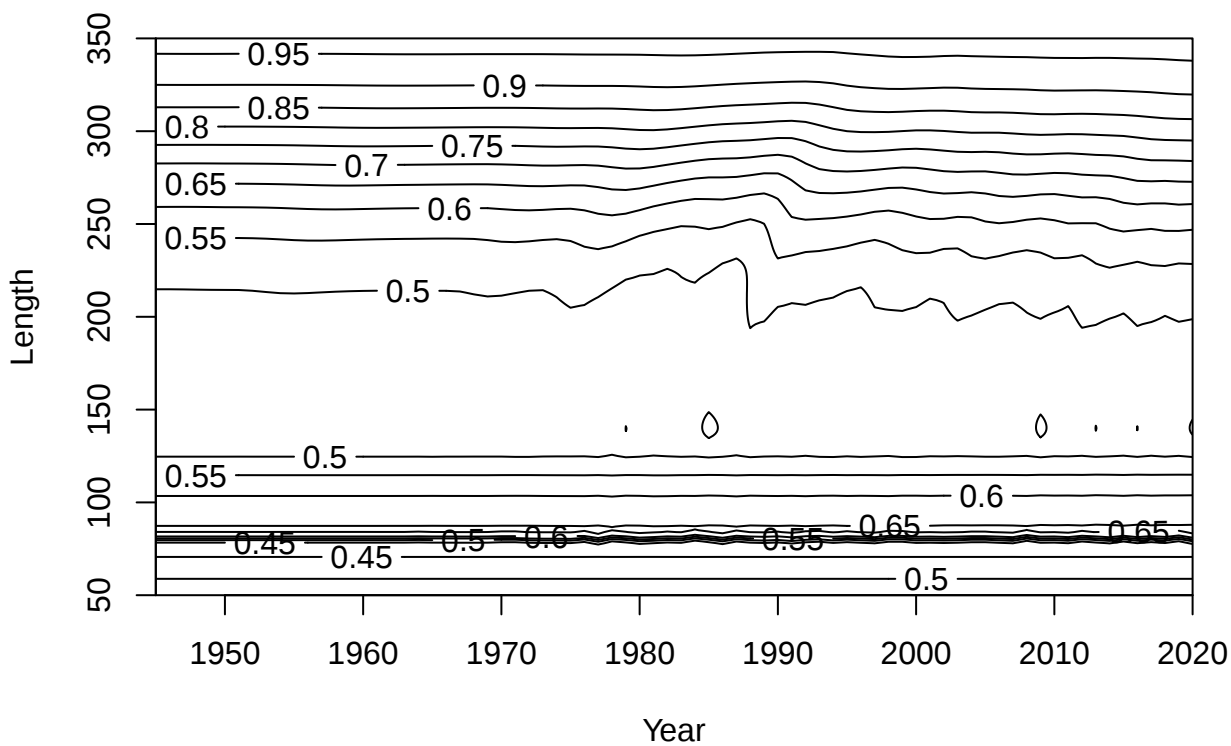


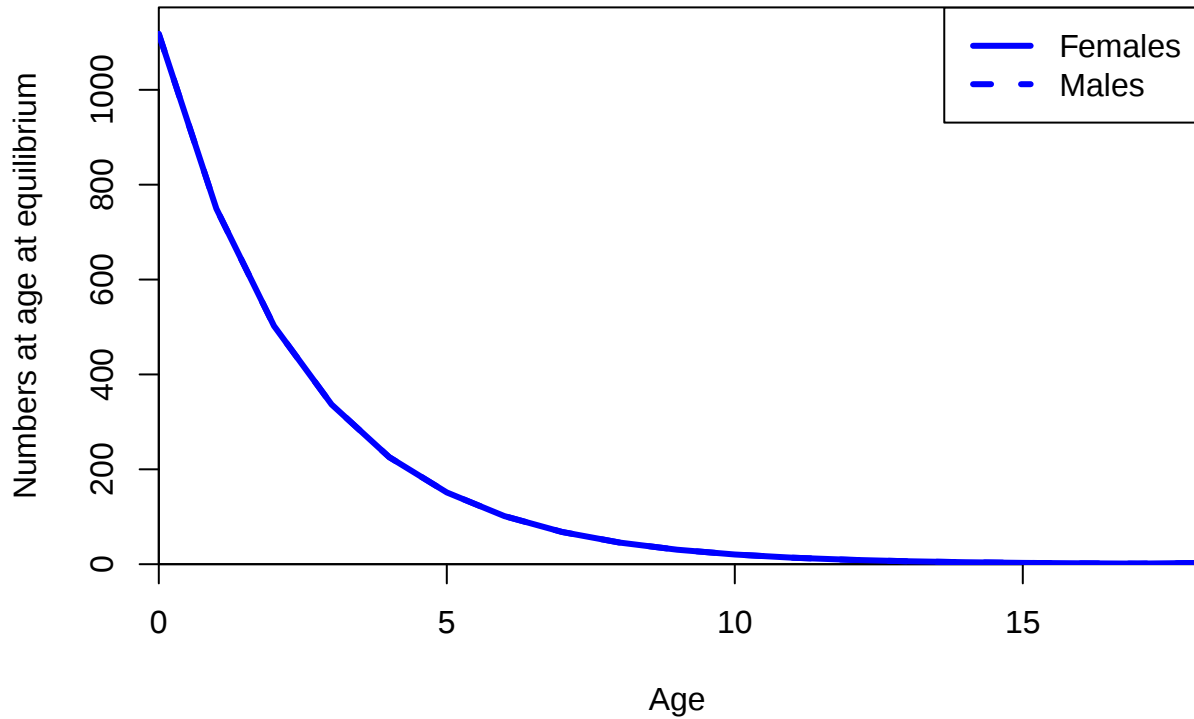


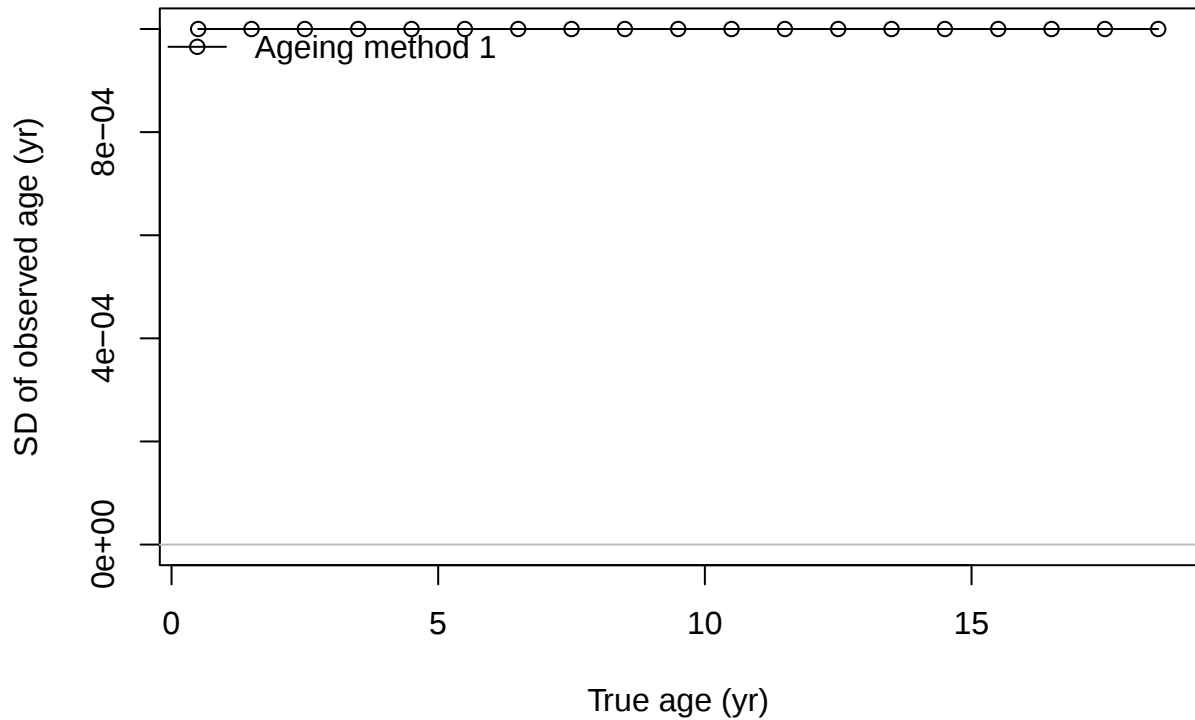


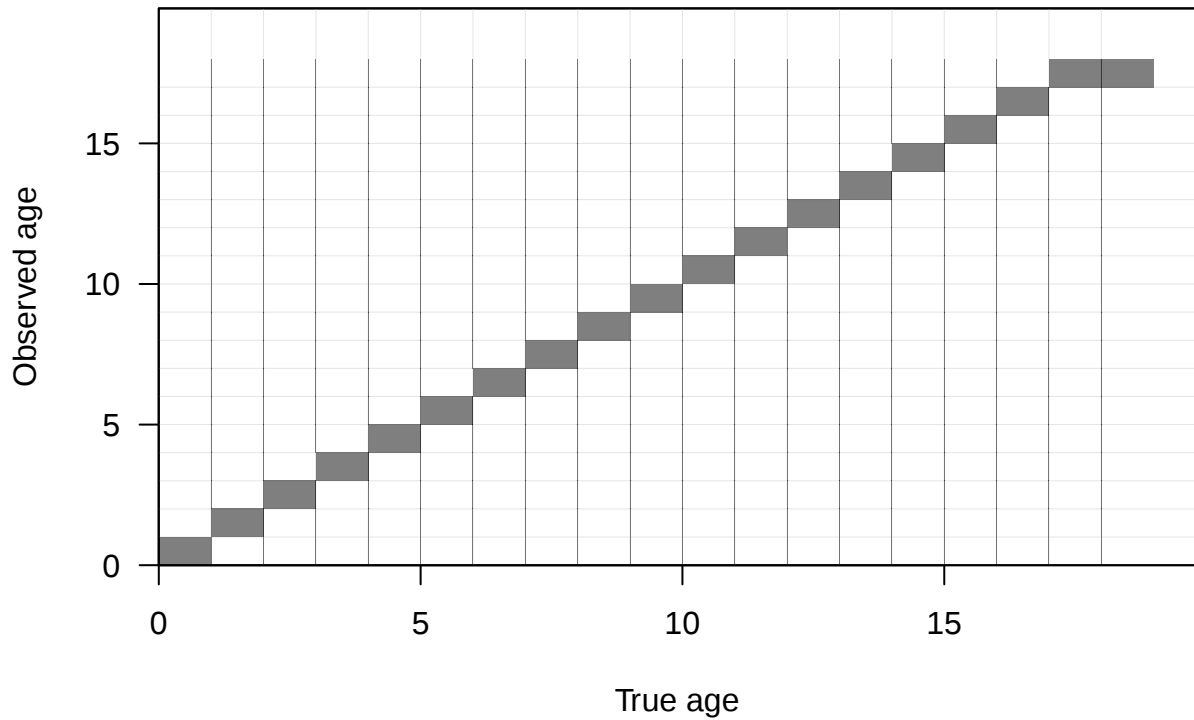


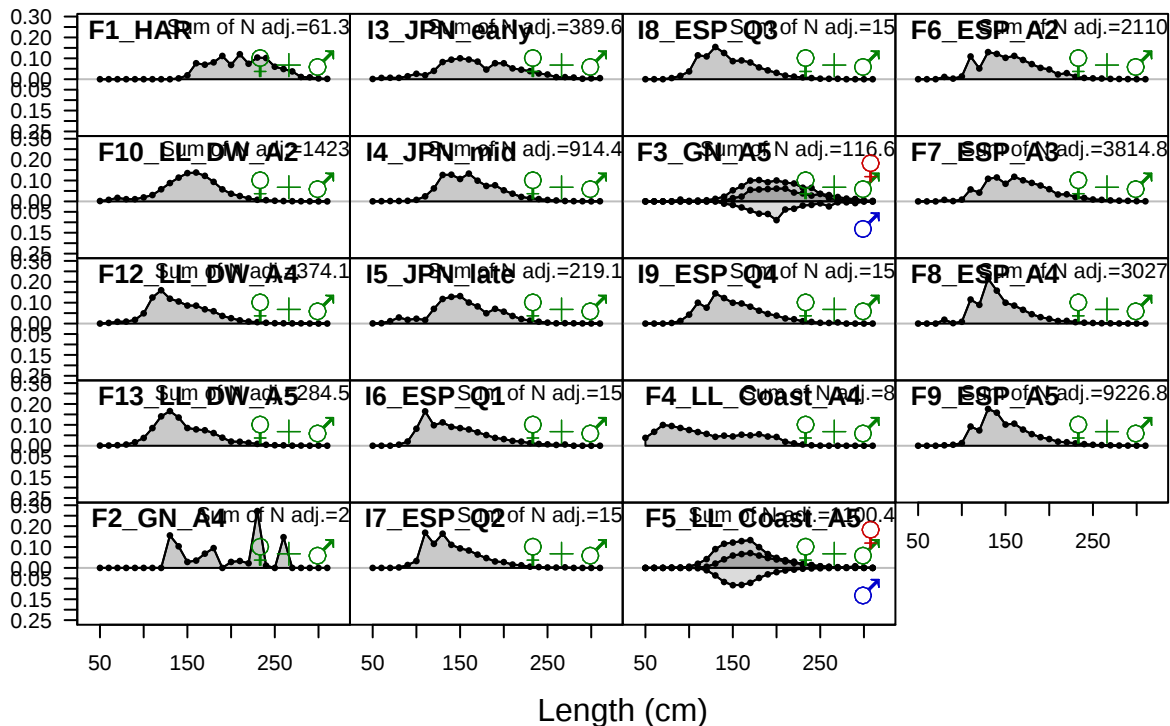


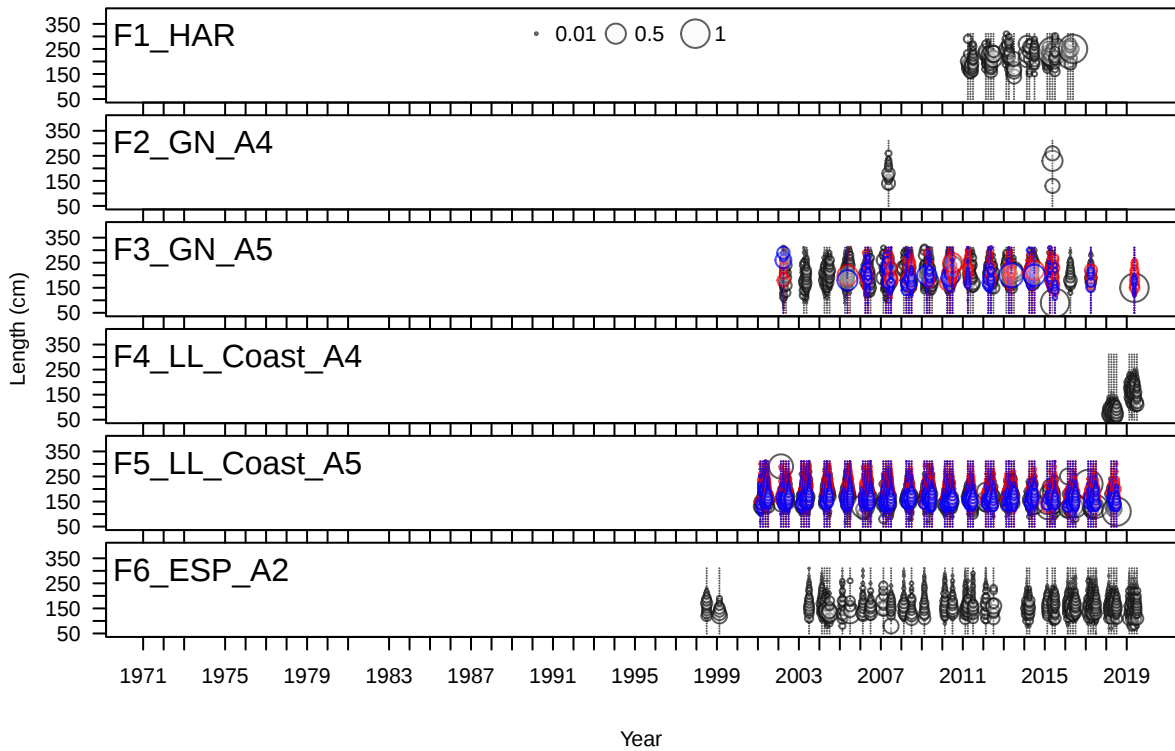


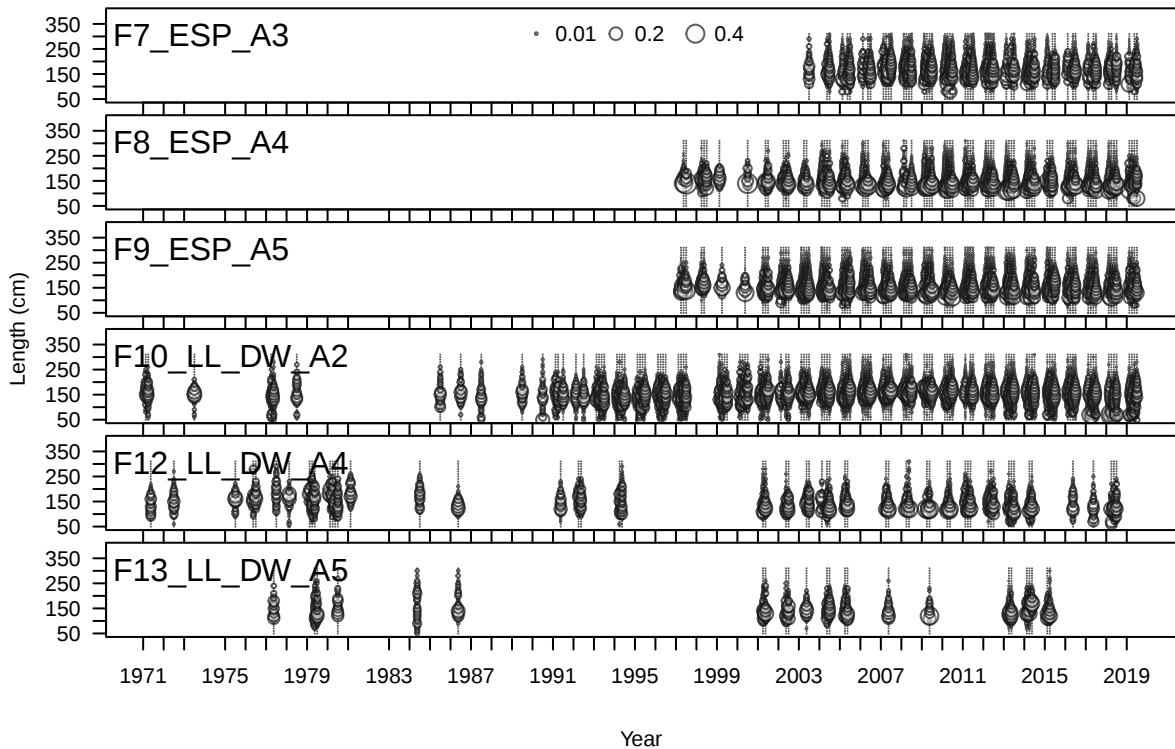


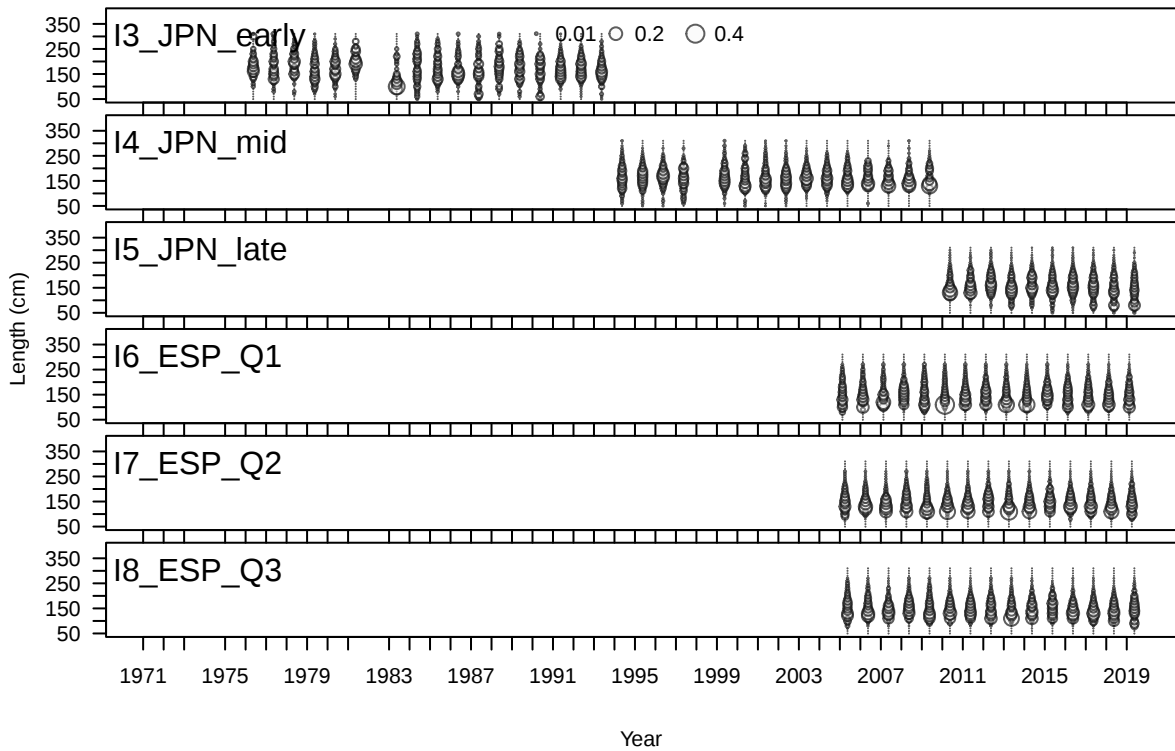




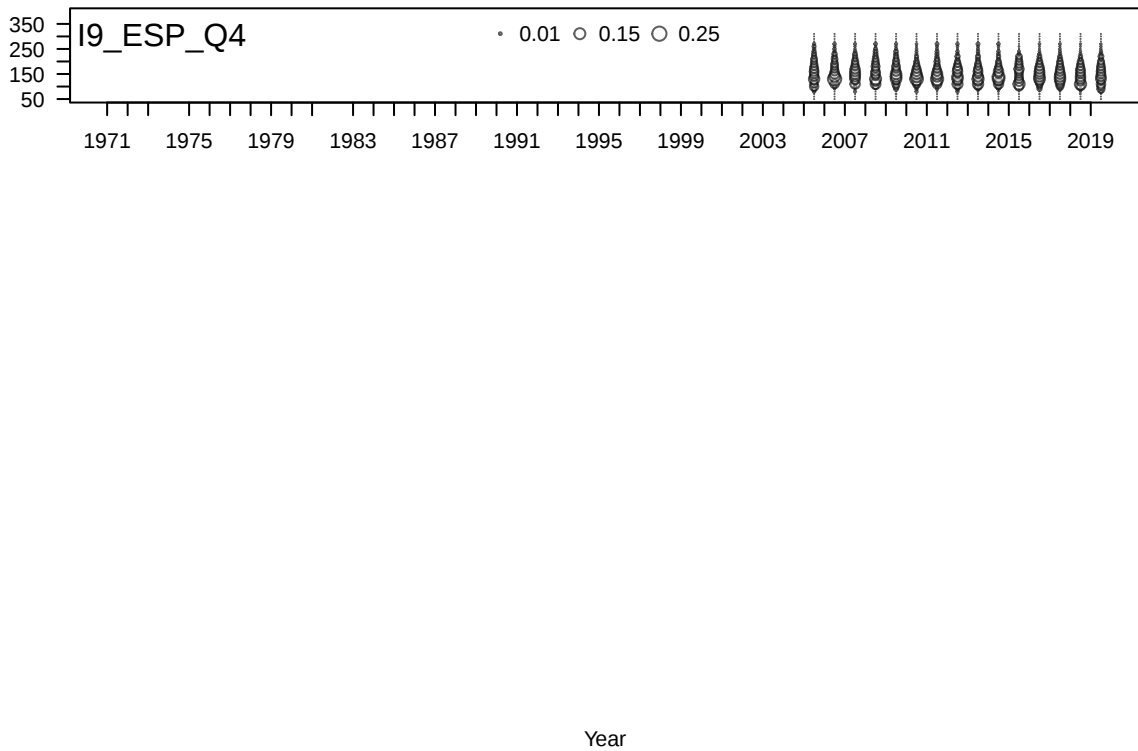




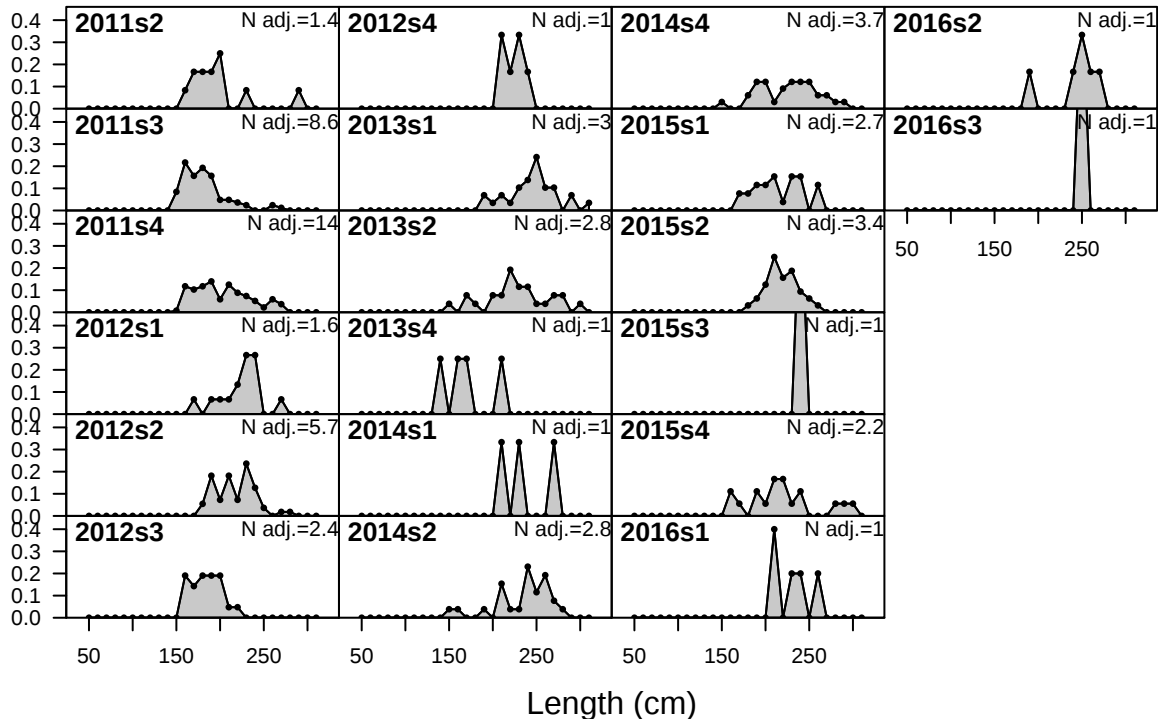


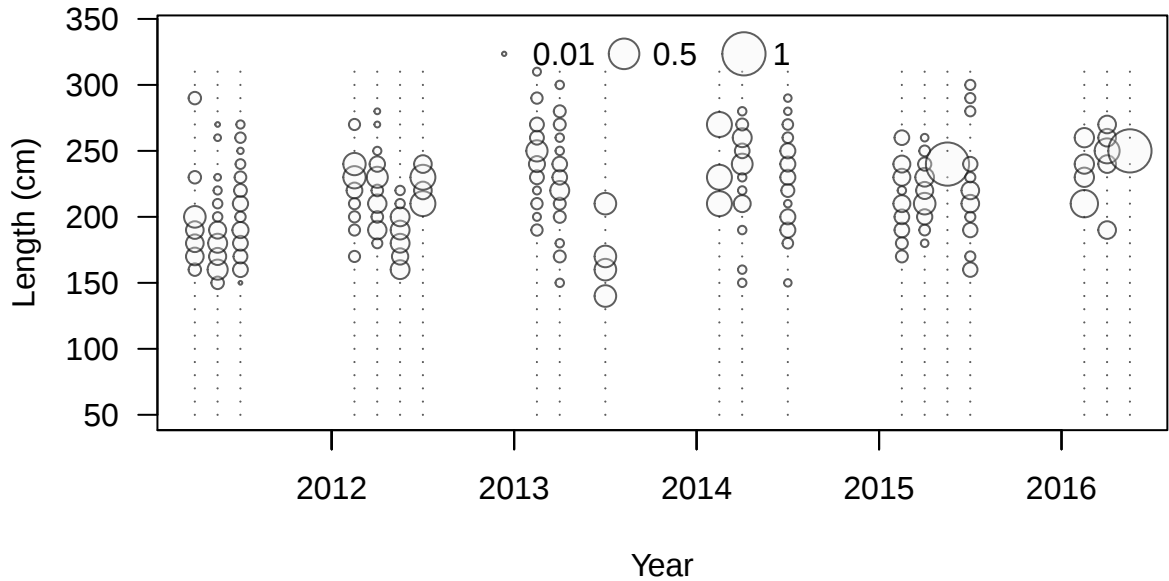


Length (cm)

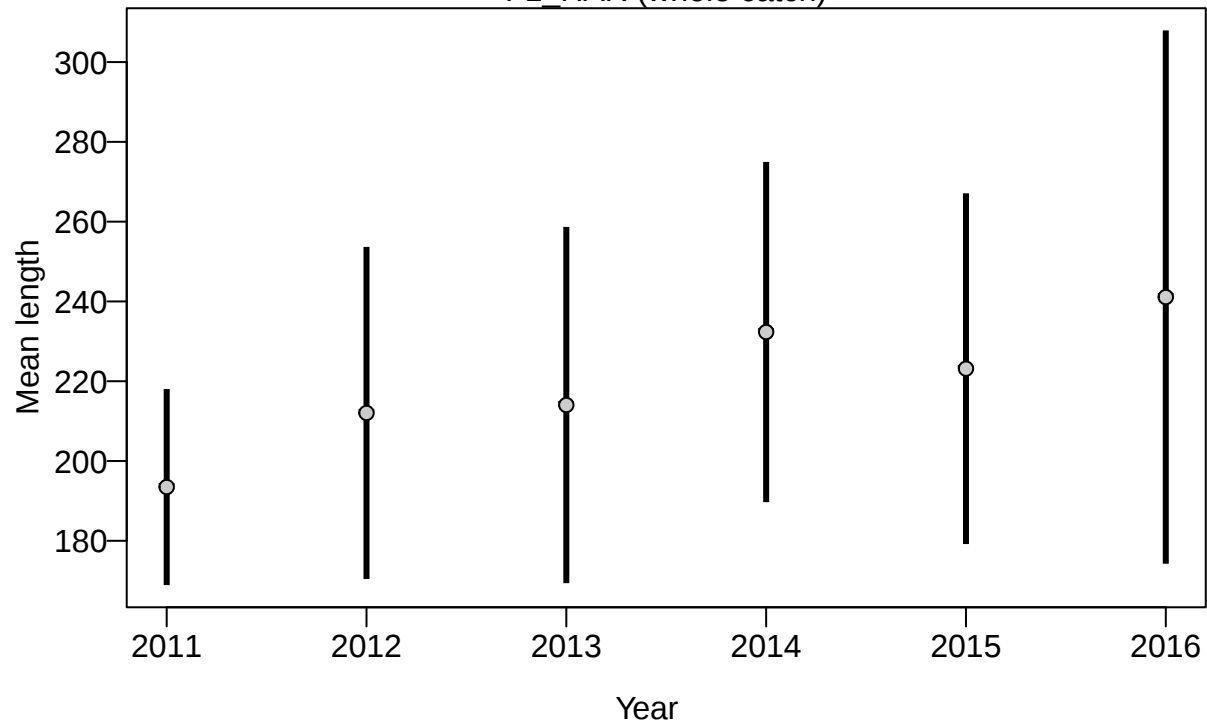


Proportion

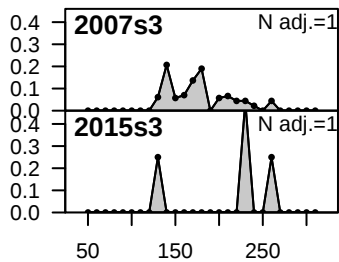




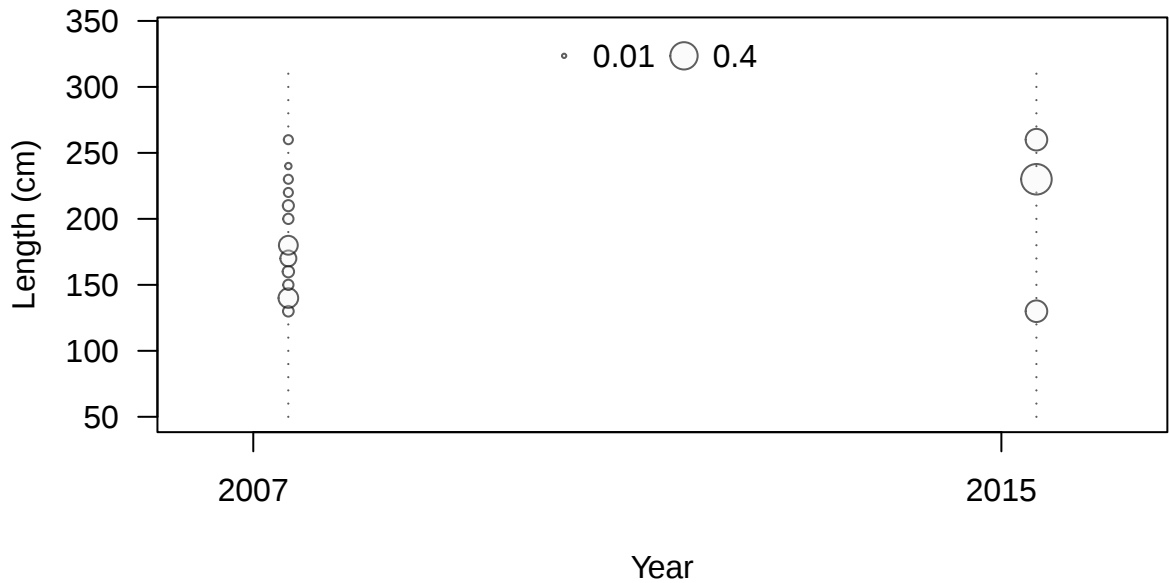
F1_HAR (whole catch)



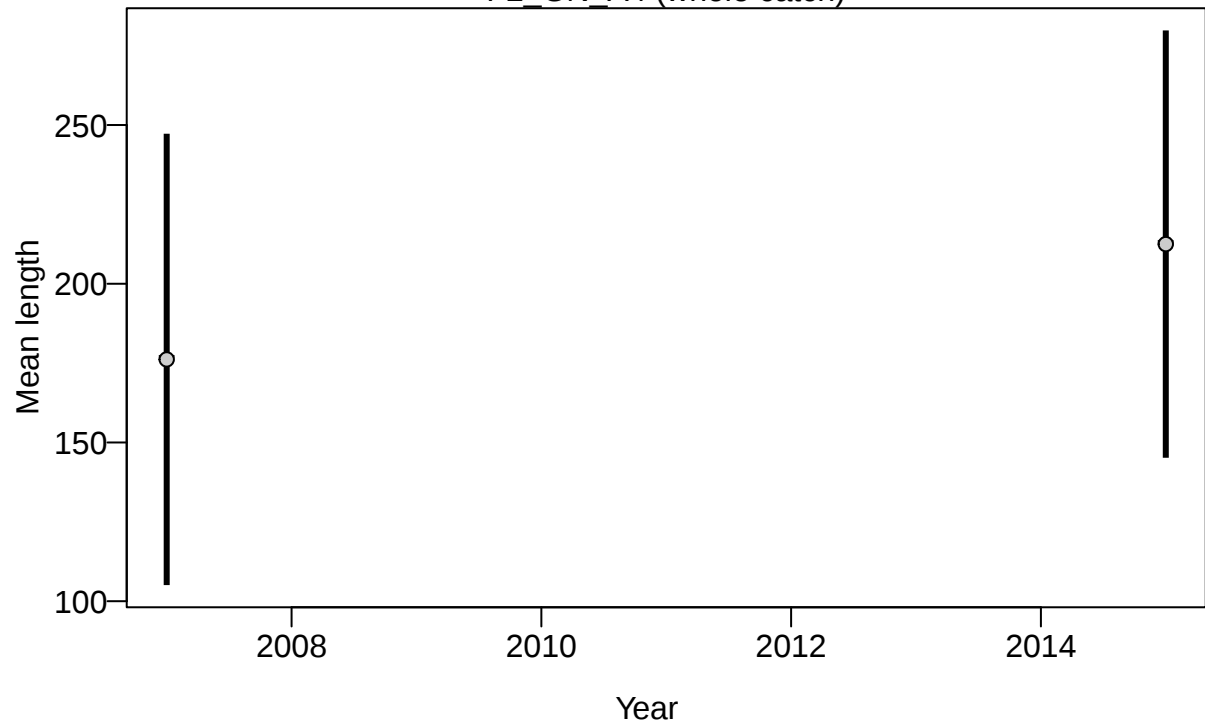
Proportion



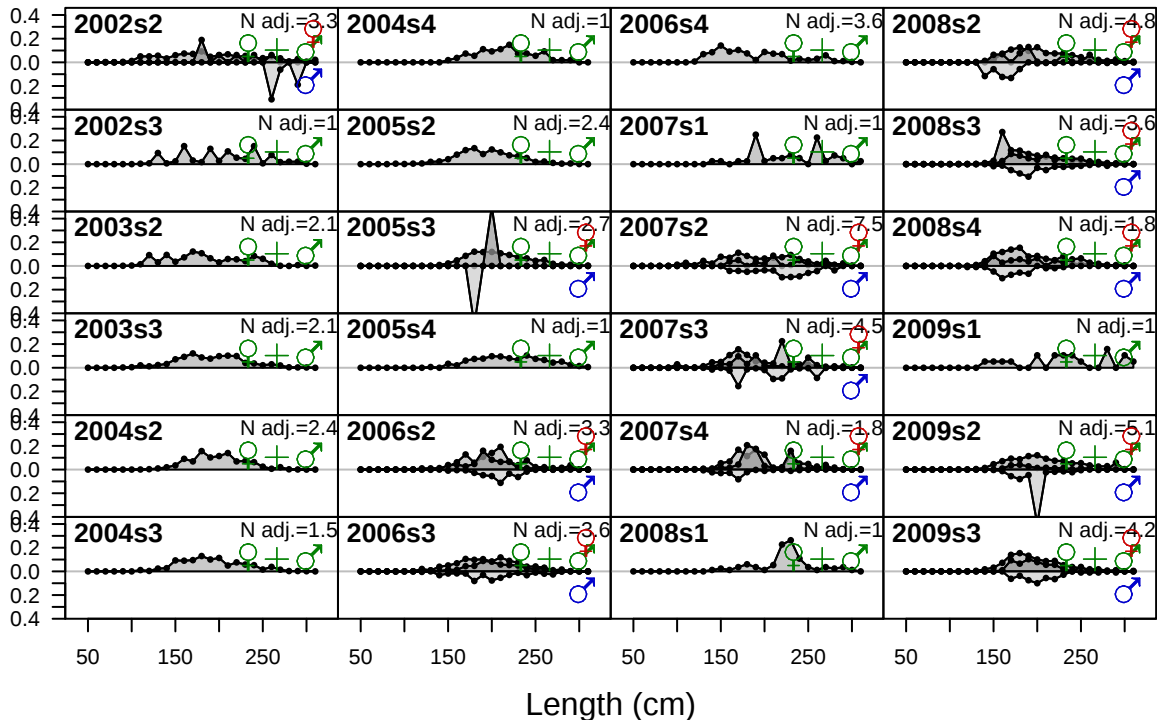
Length (cm)



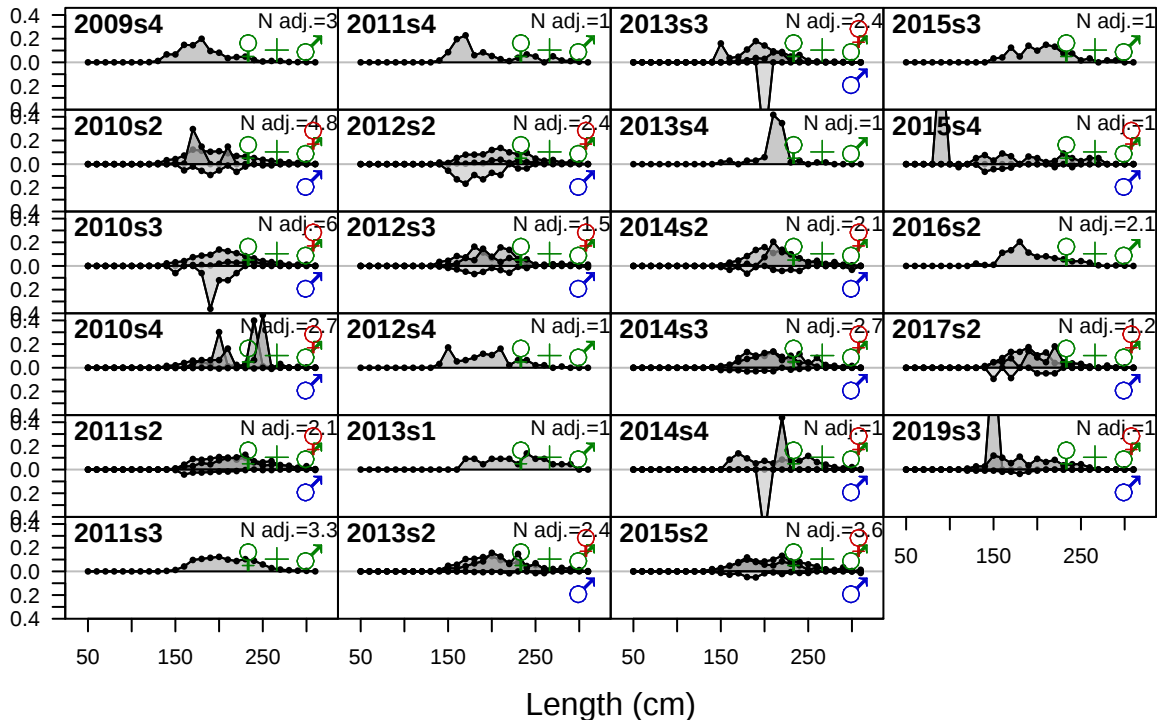
F2_GN_A4 (whole catch)

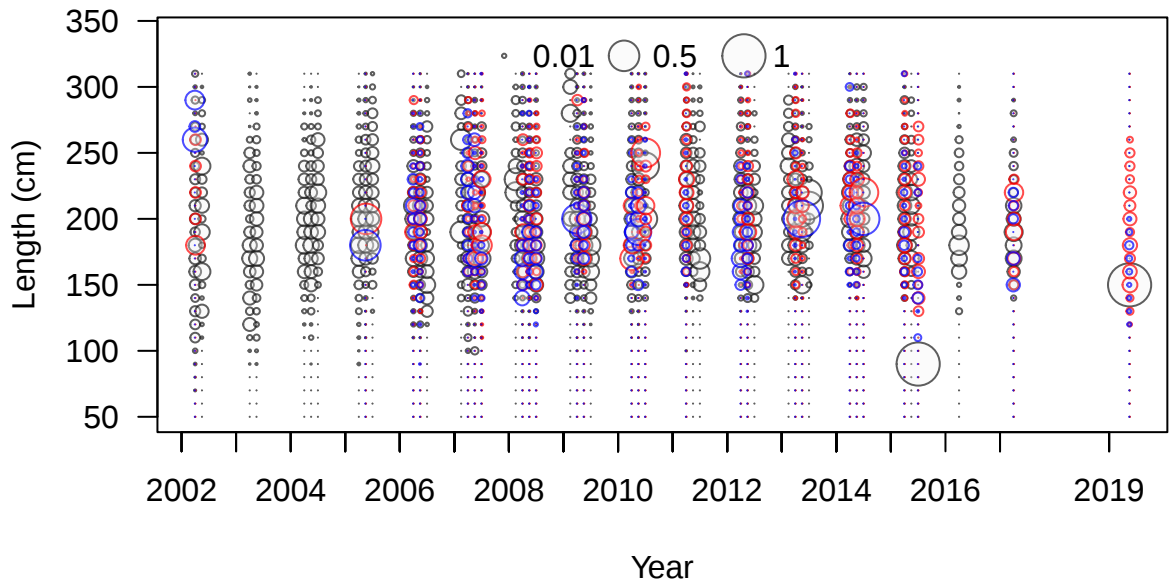


Proportion

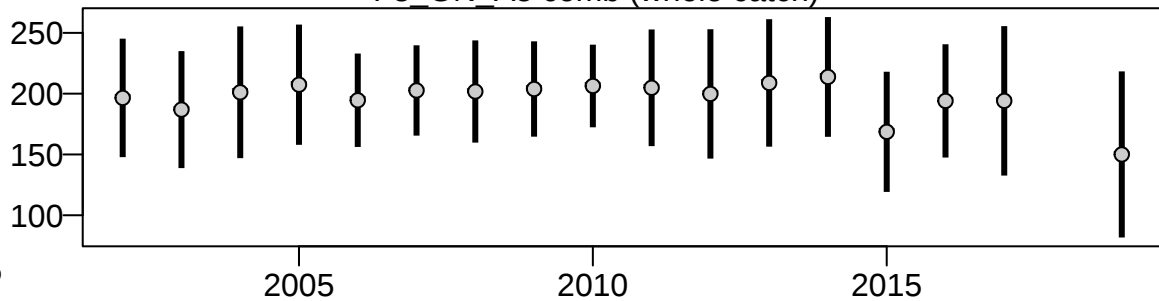


Proportion

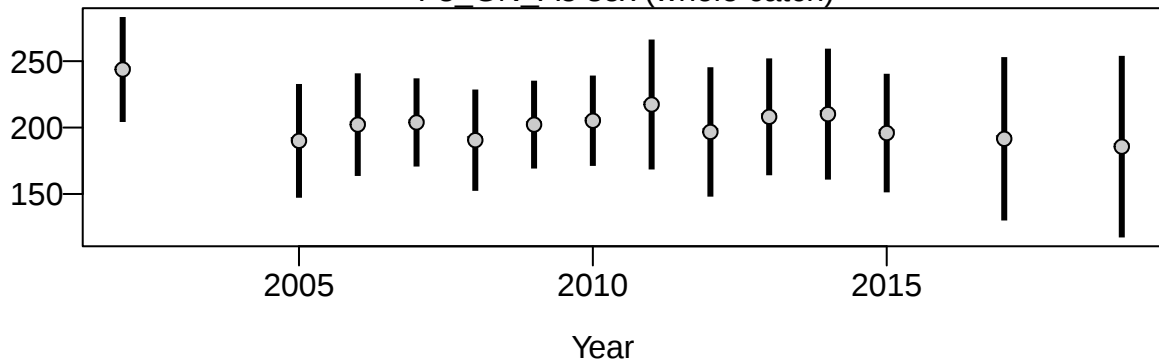




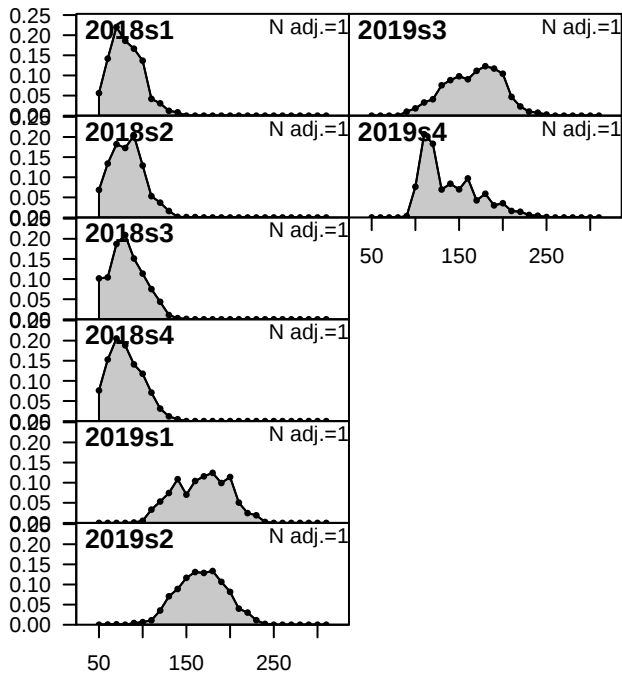
F3_GN_A5 comb (whole catch)



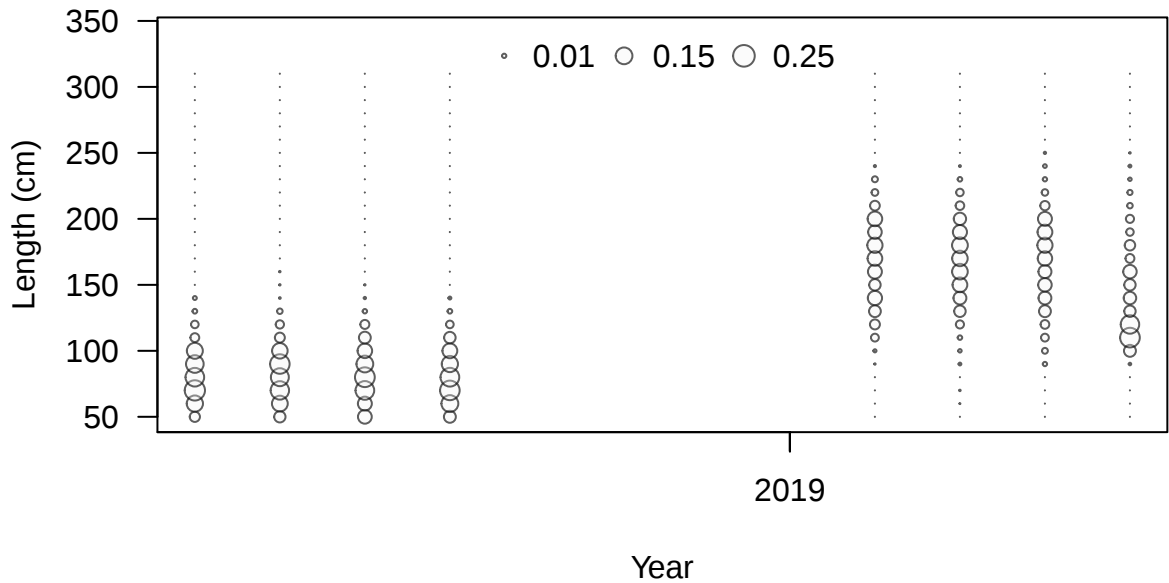
F3_GN_A5 sex (whole catch)



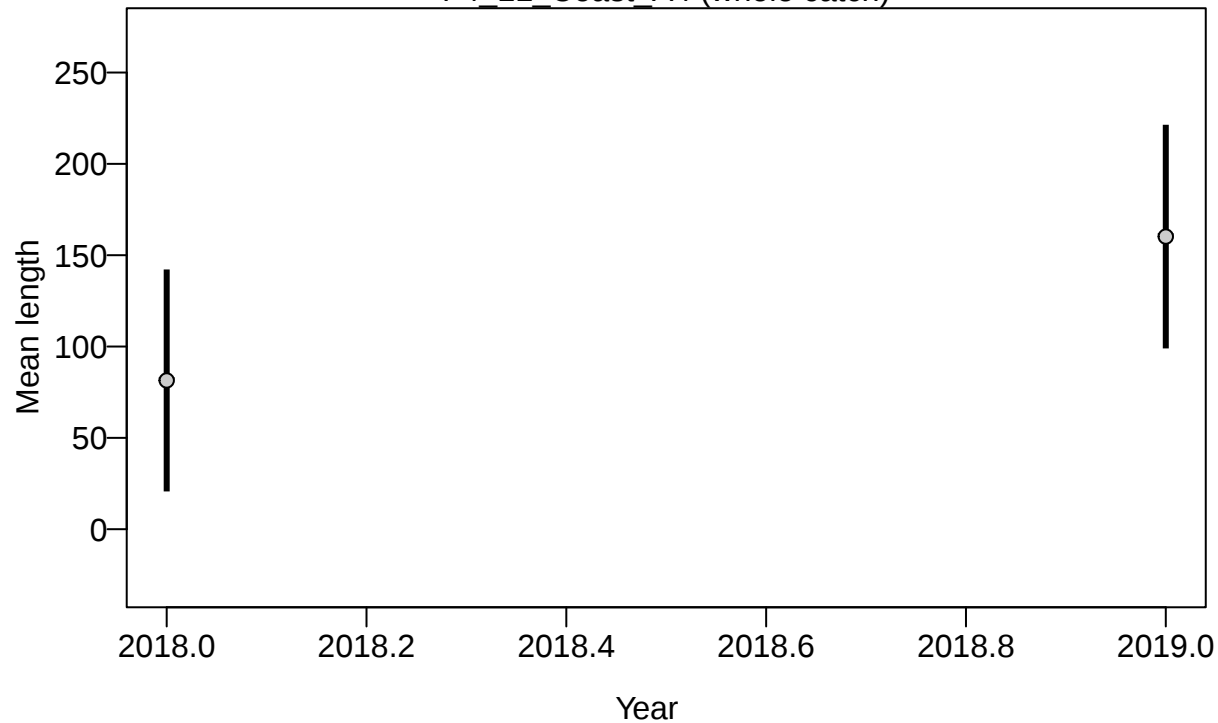
Proportion



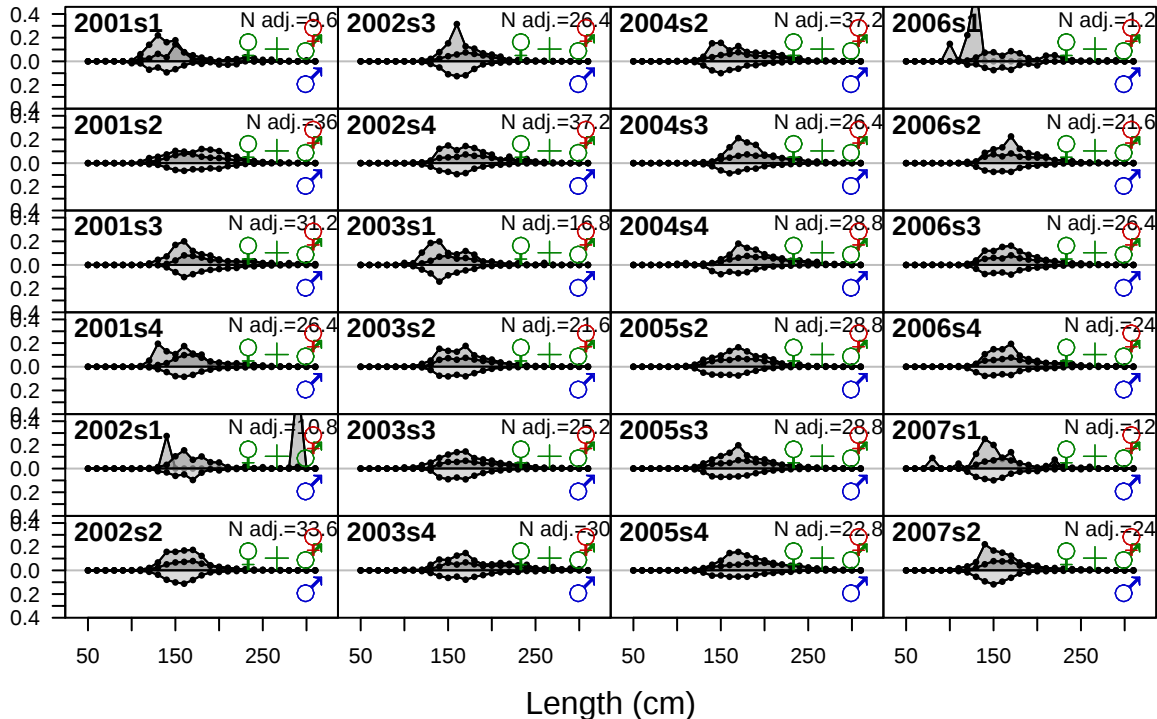
Length (cm)



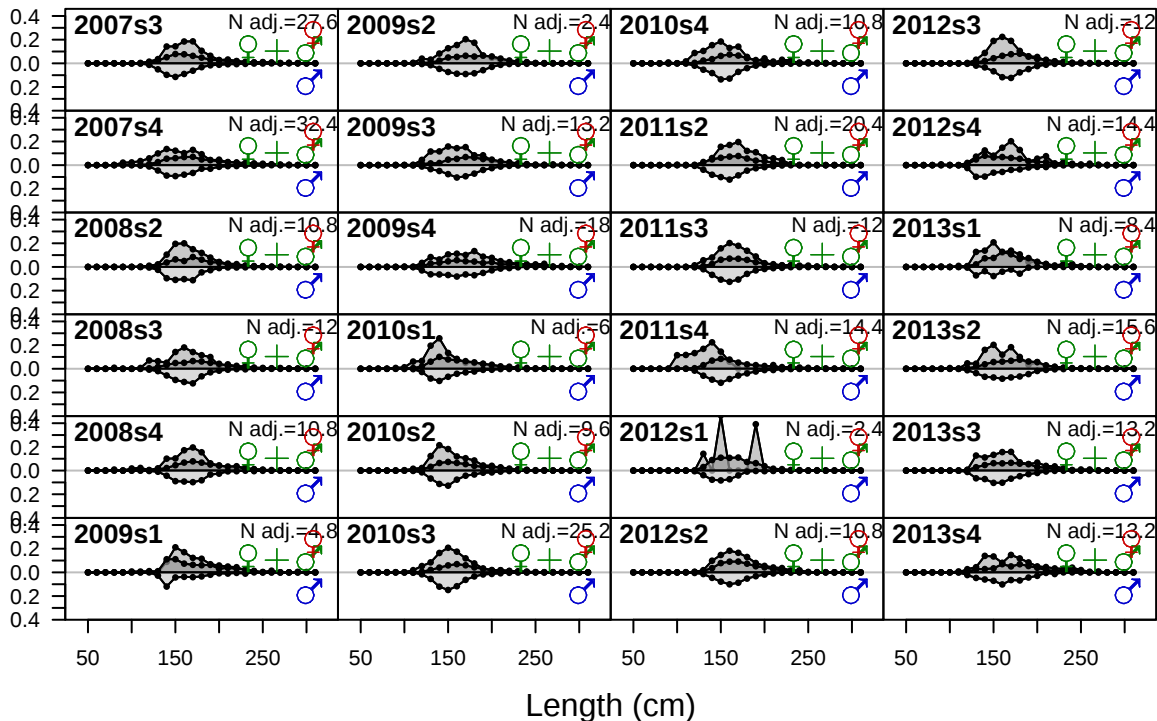
F4_LL_Coast_A4 (whole catch)



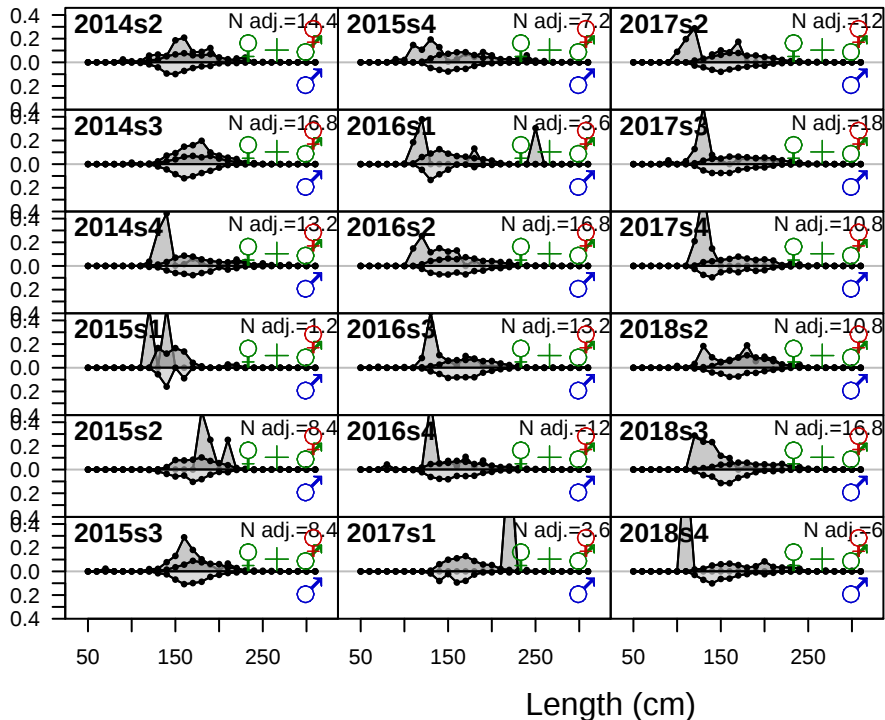
Proportion

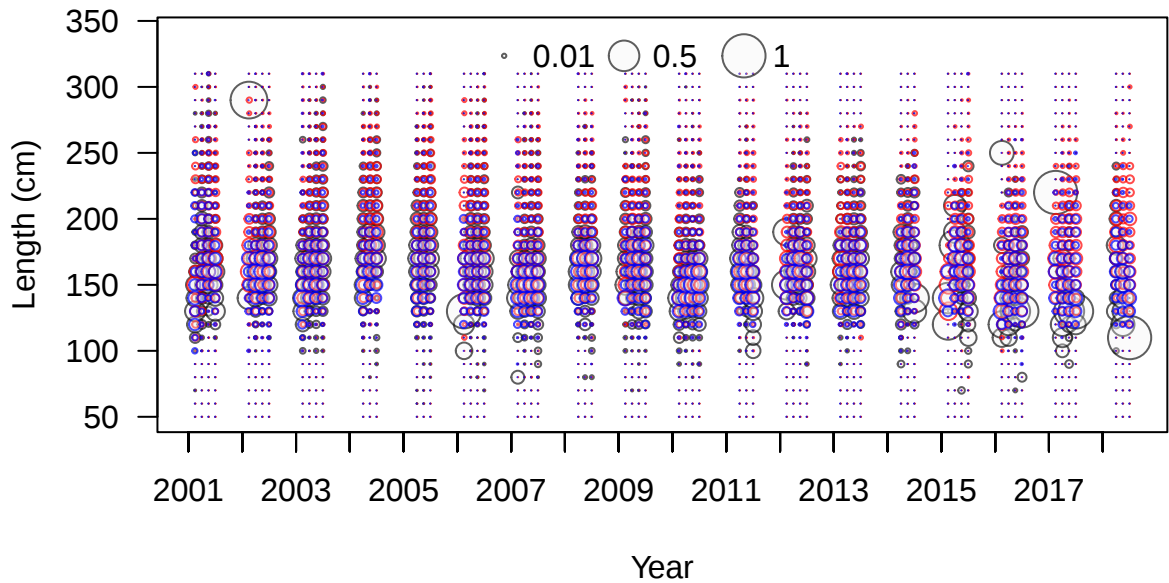


Proportion



Proportion

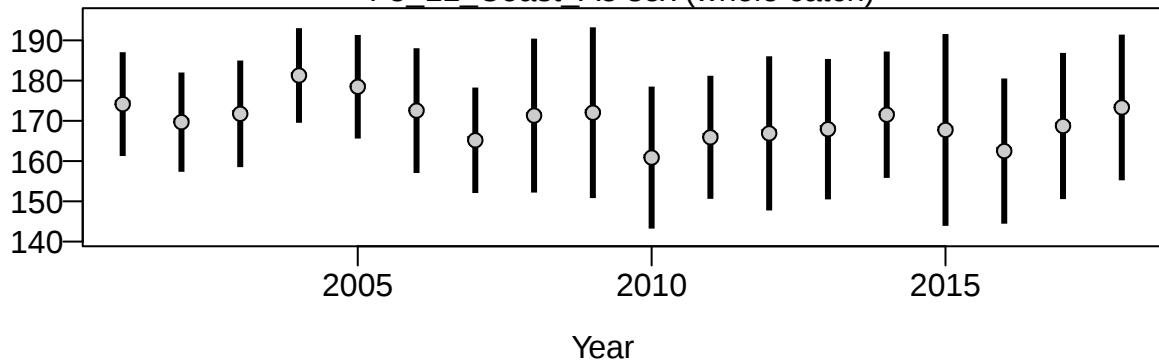




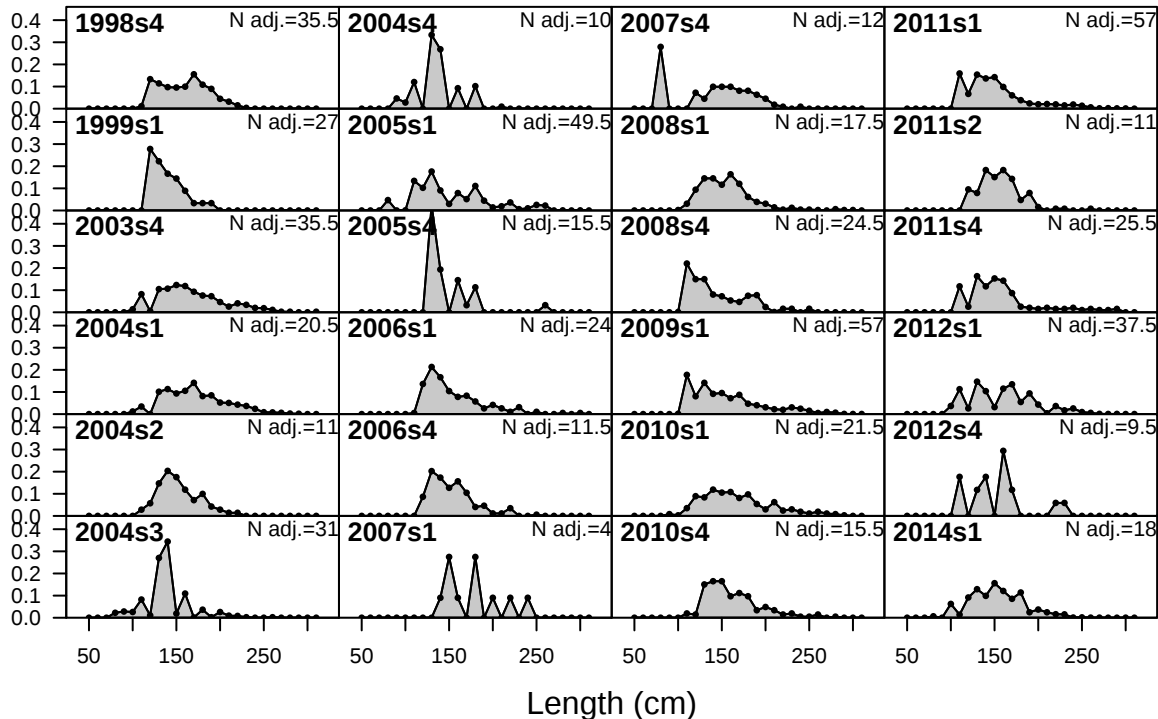
F5_LL_Coast_A5 comb (whole catch)



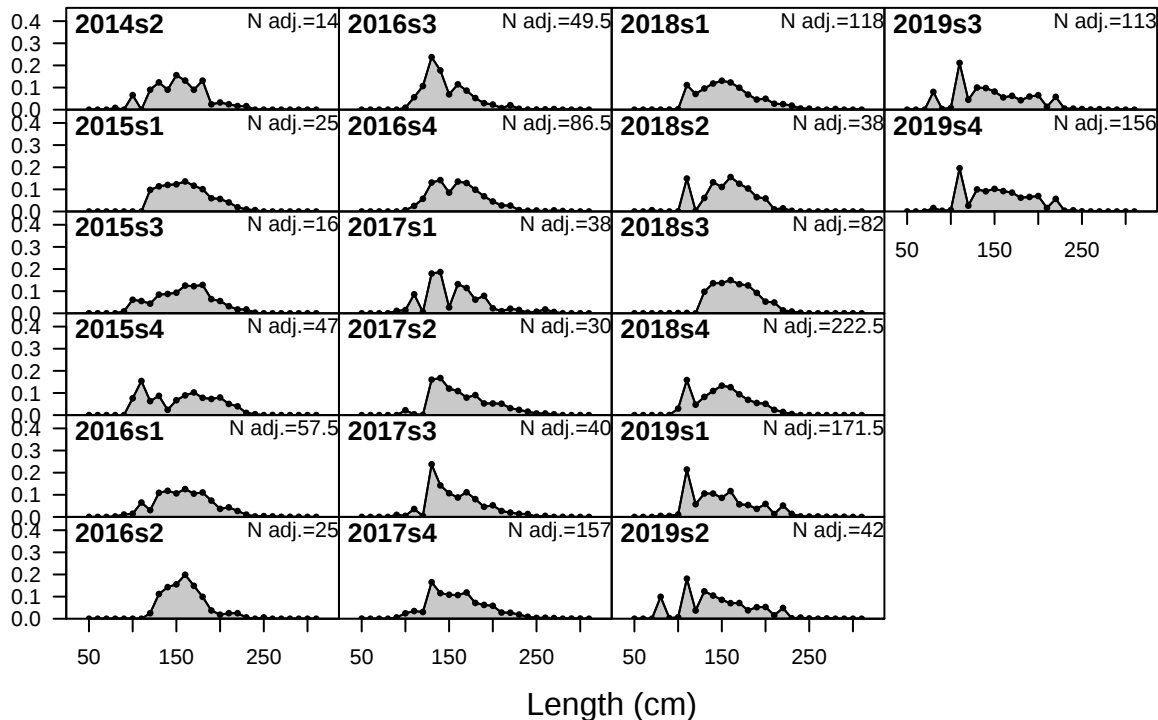
F5_LL_Coast_A5 sex (whole catch)

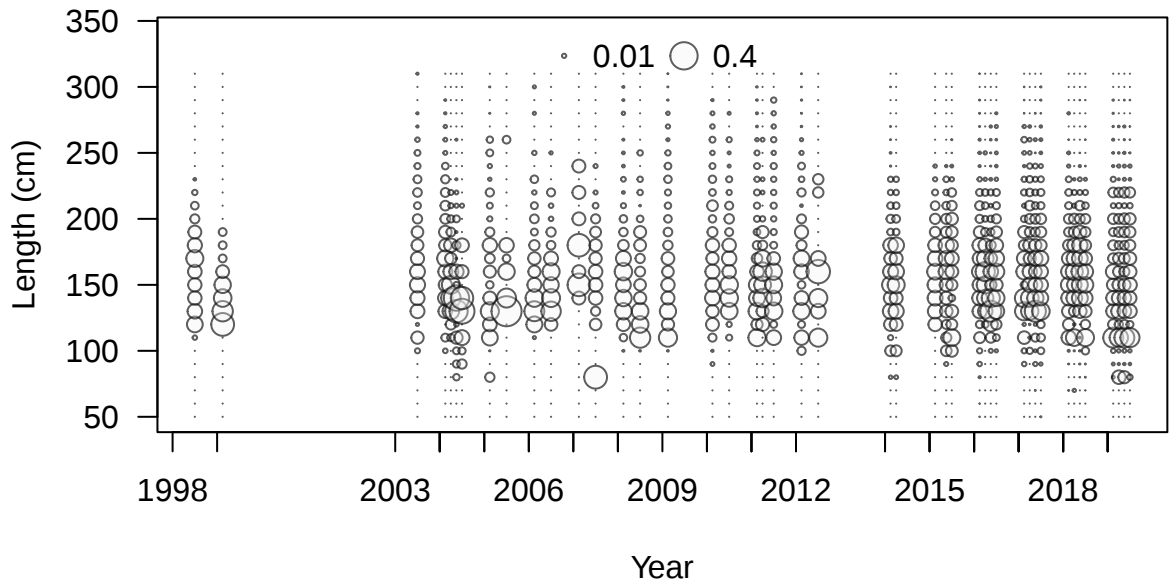


Proportion

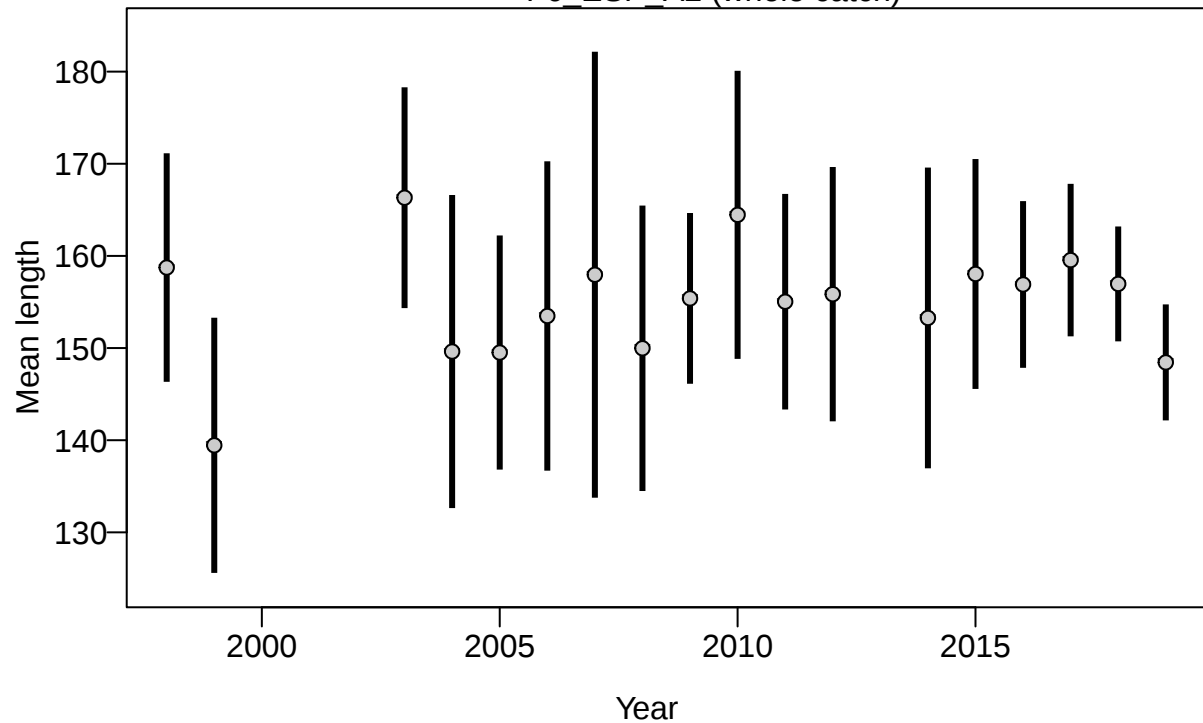


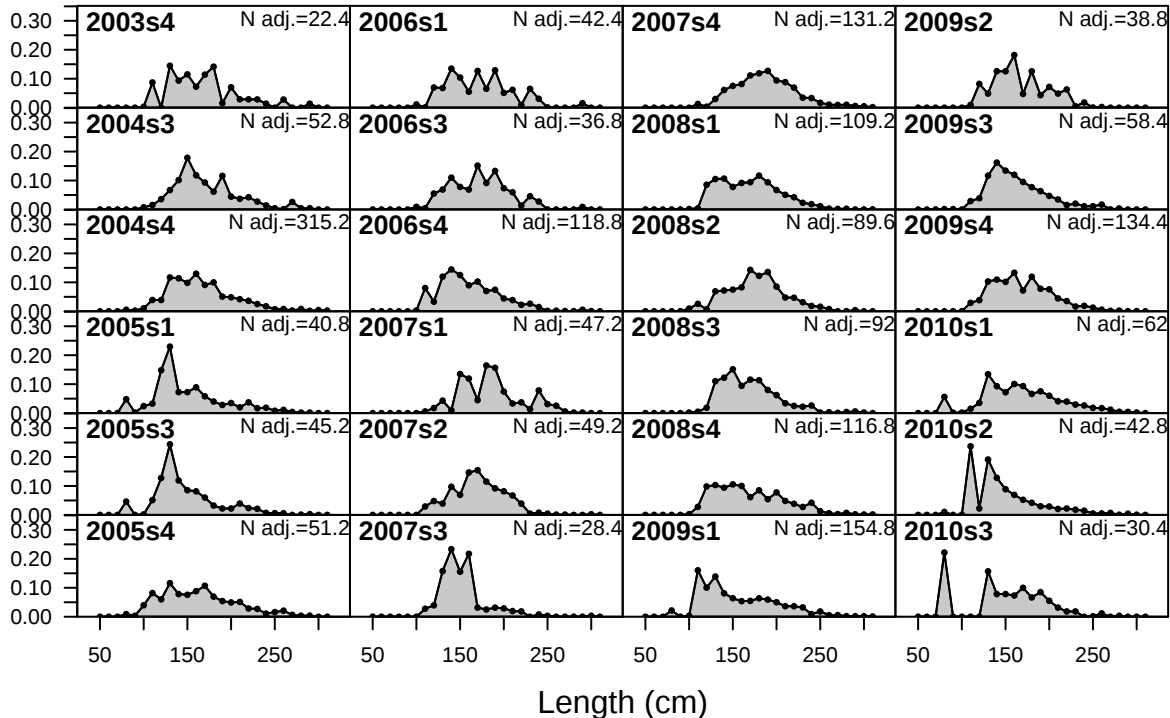
Proportion

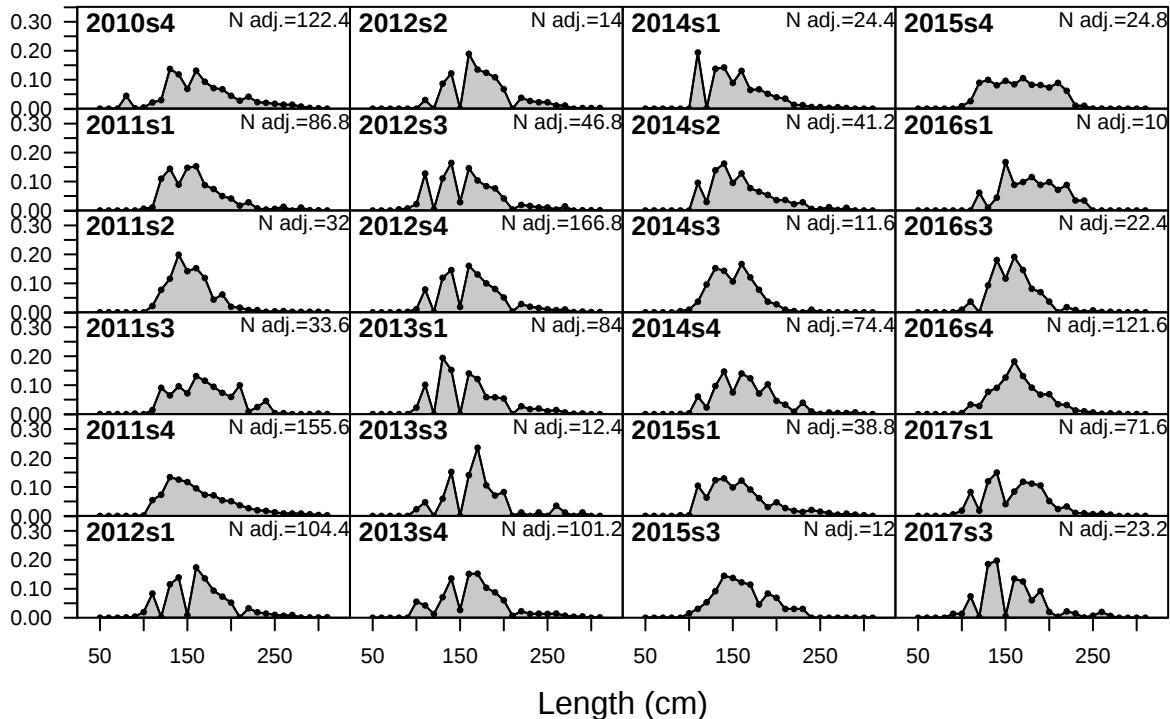




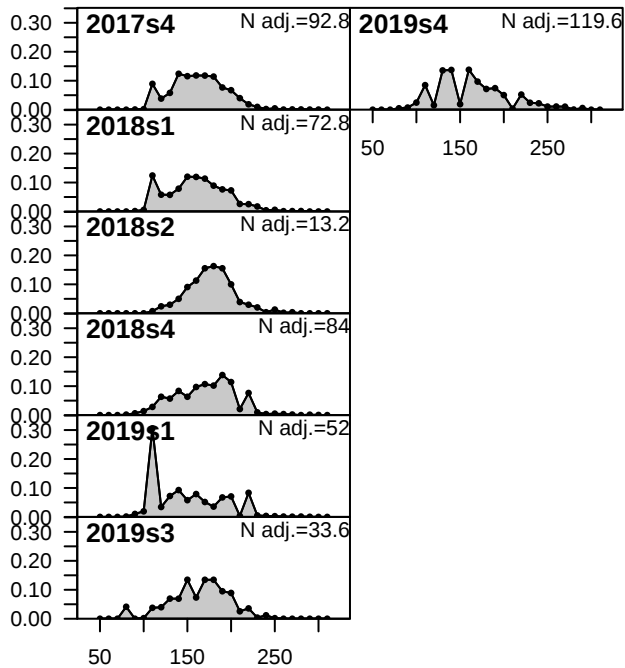
F6_ESP_A2 (whole catch)

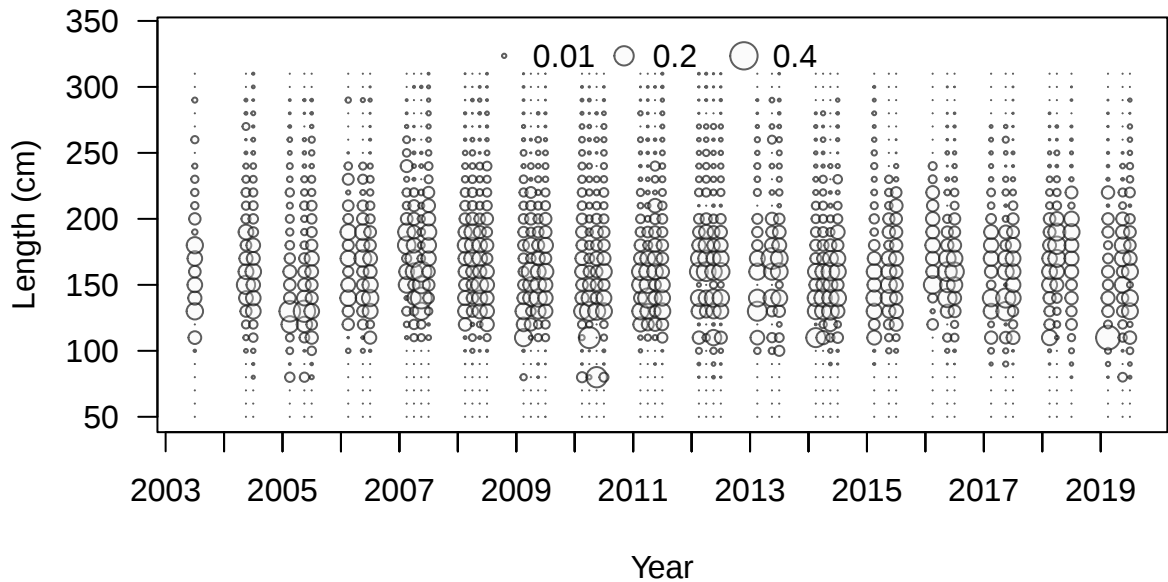




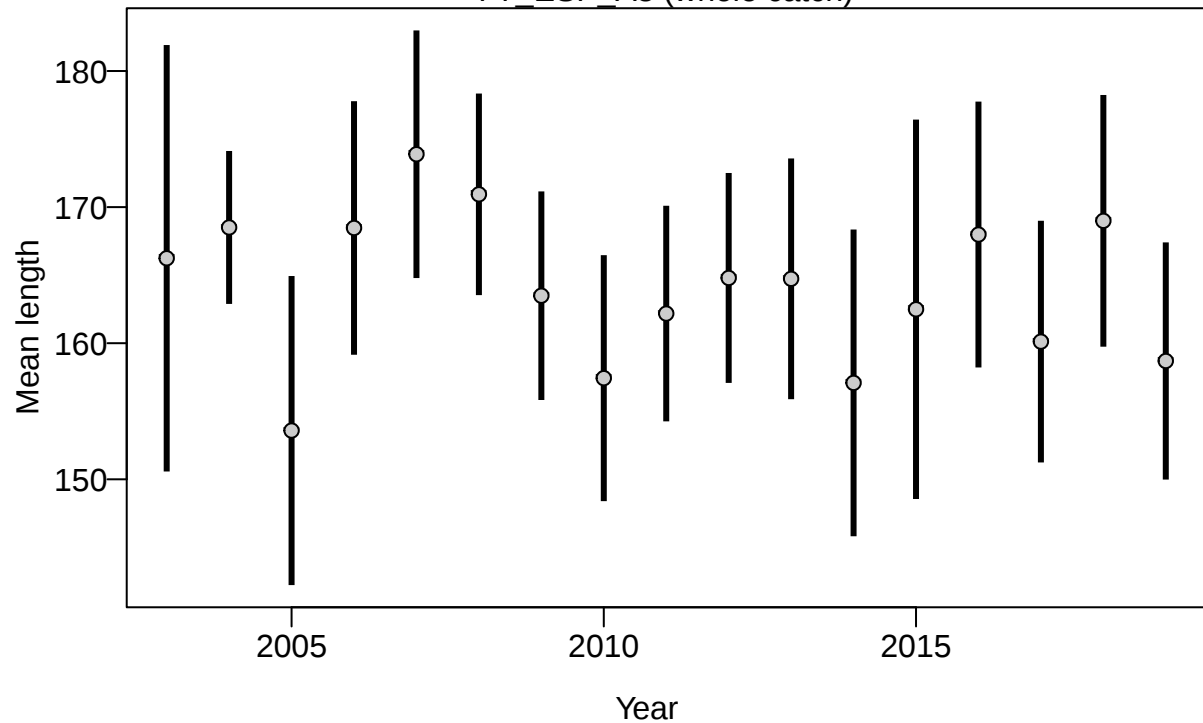


Proportion

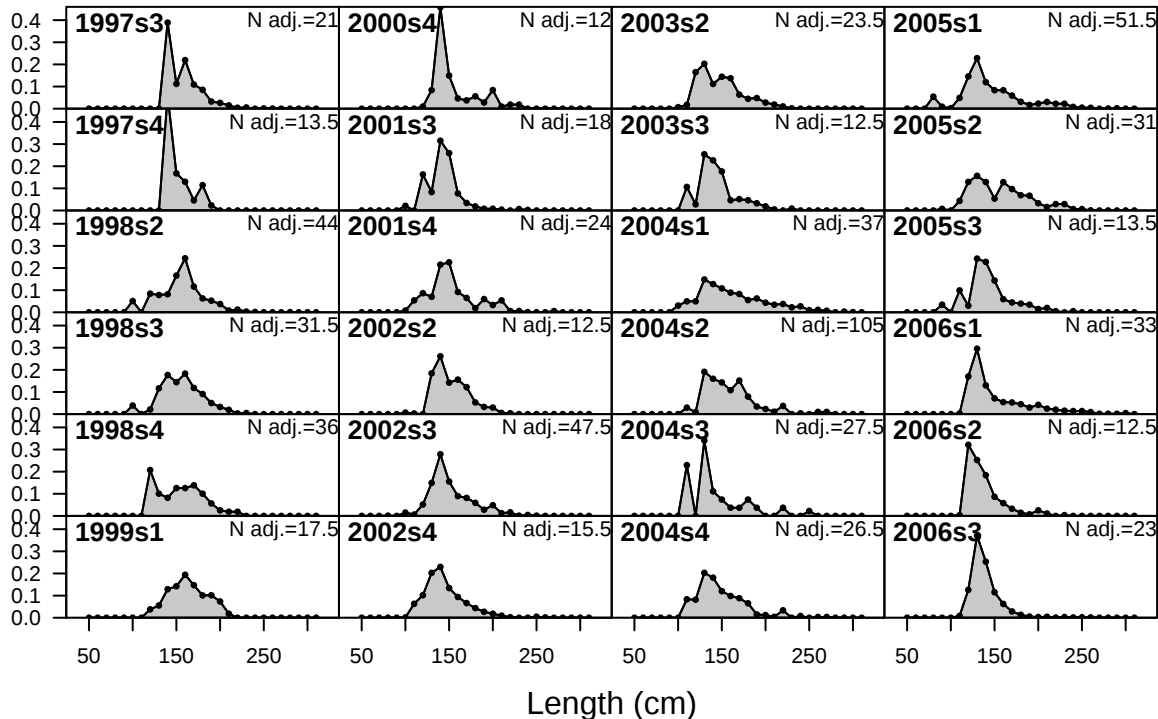


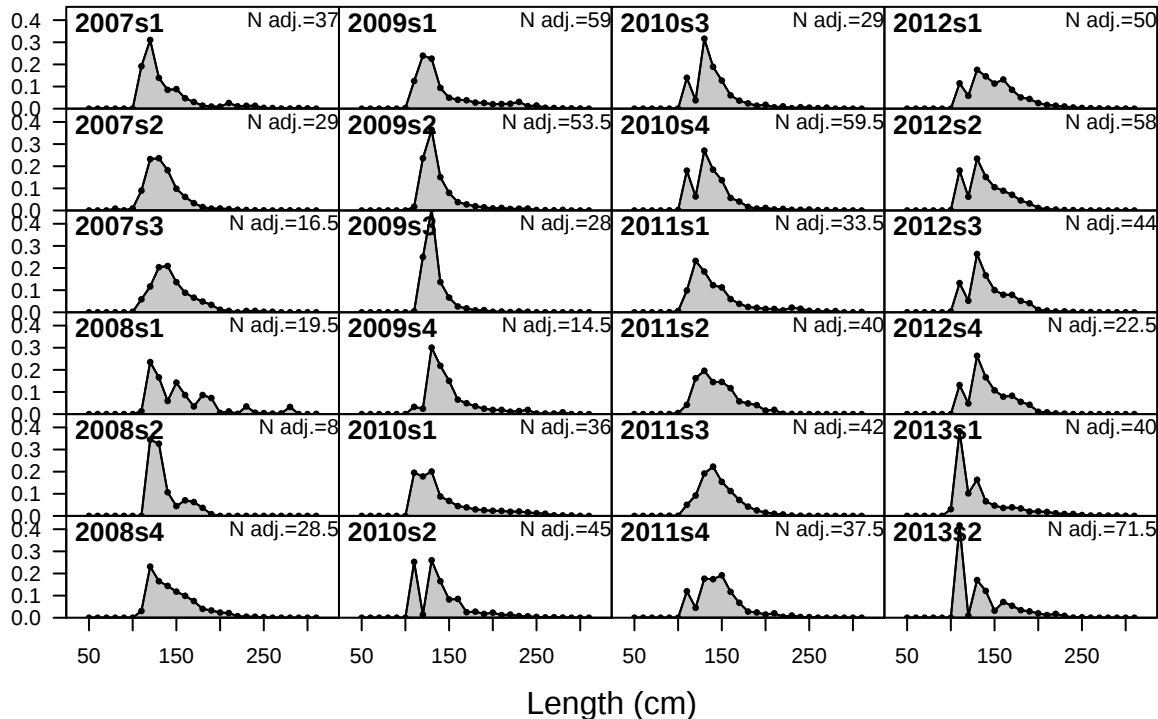


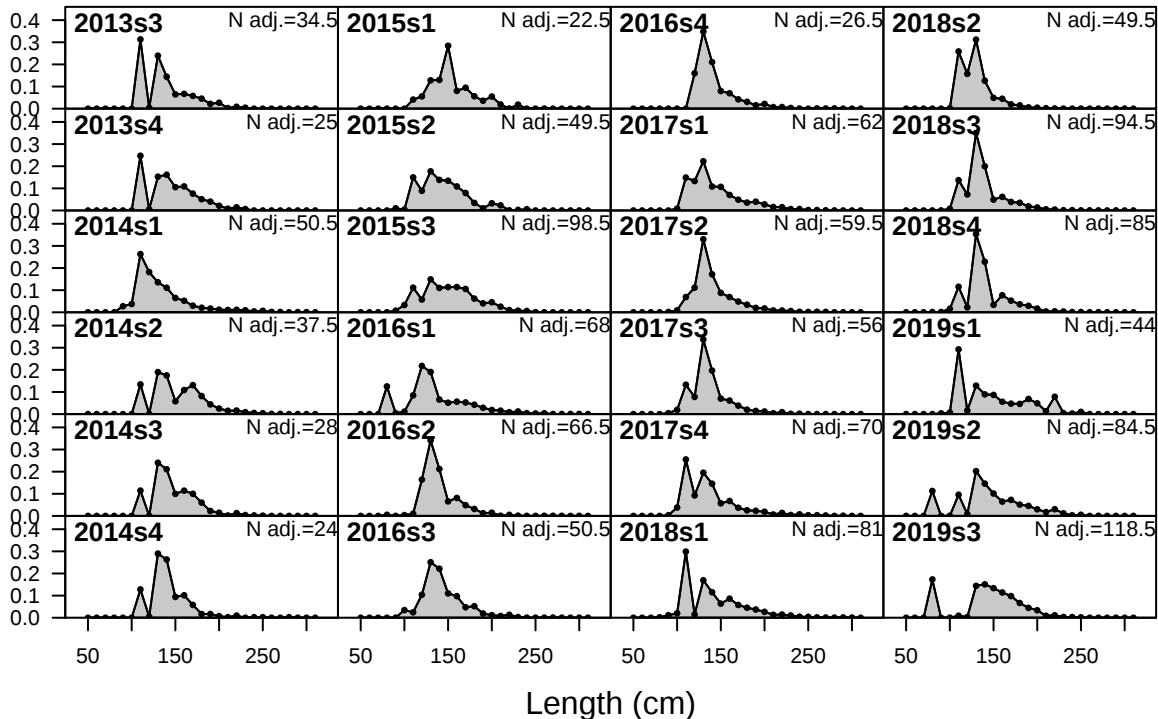
F7_ESP_A3 (whole catch)

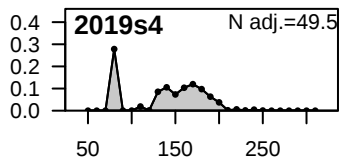


Proportion

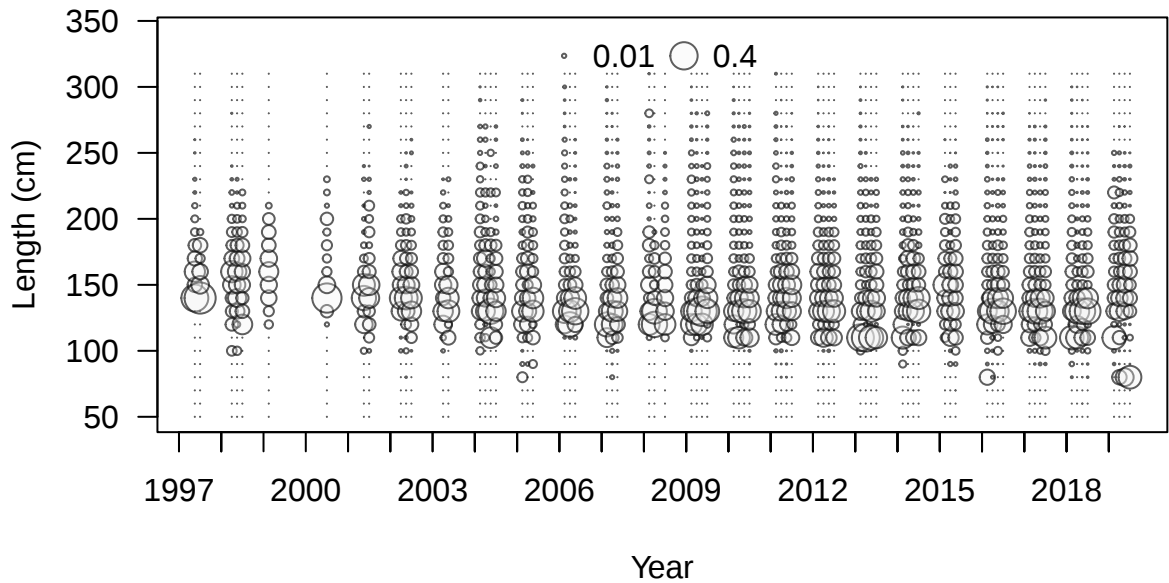




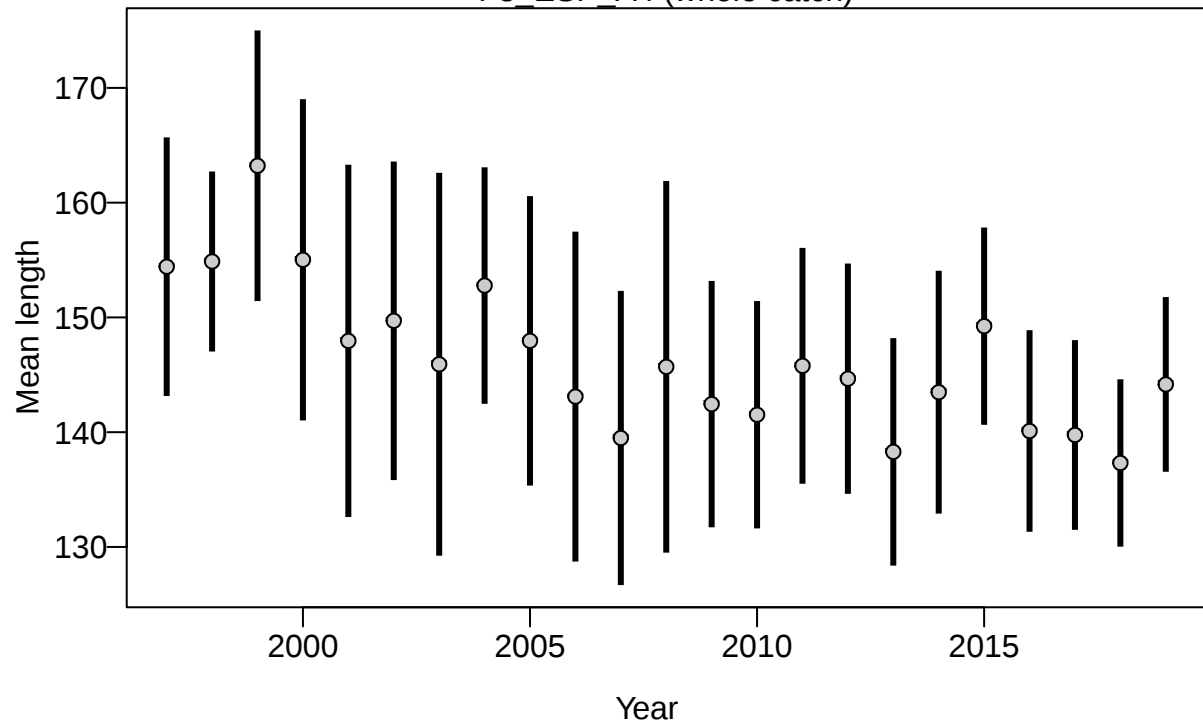




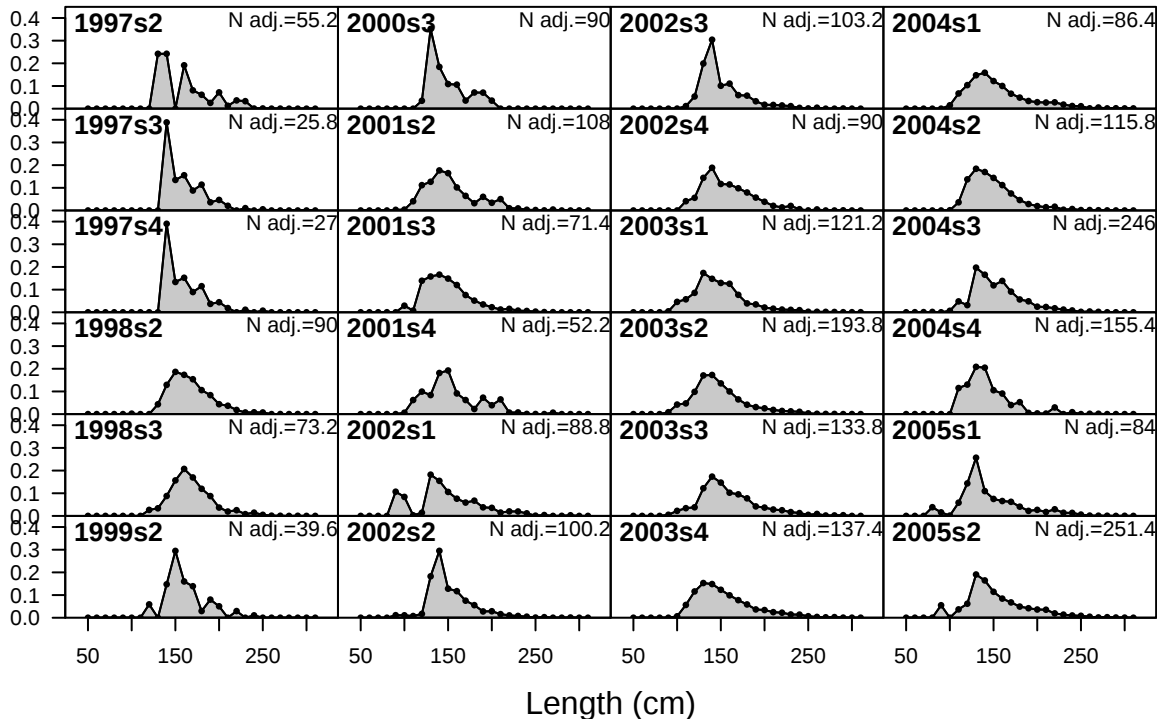
Length (cm)



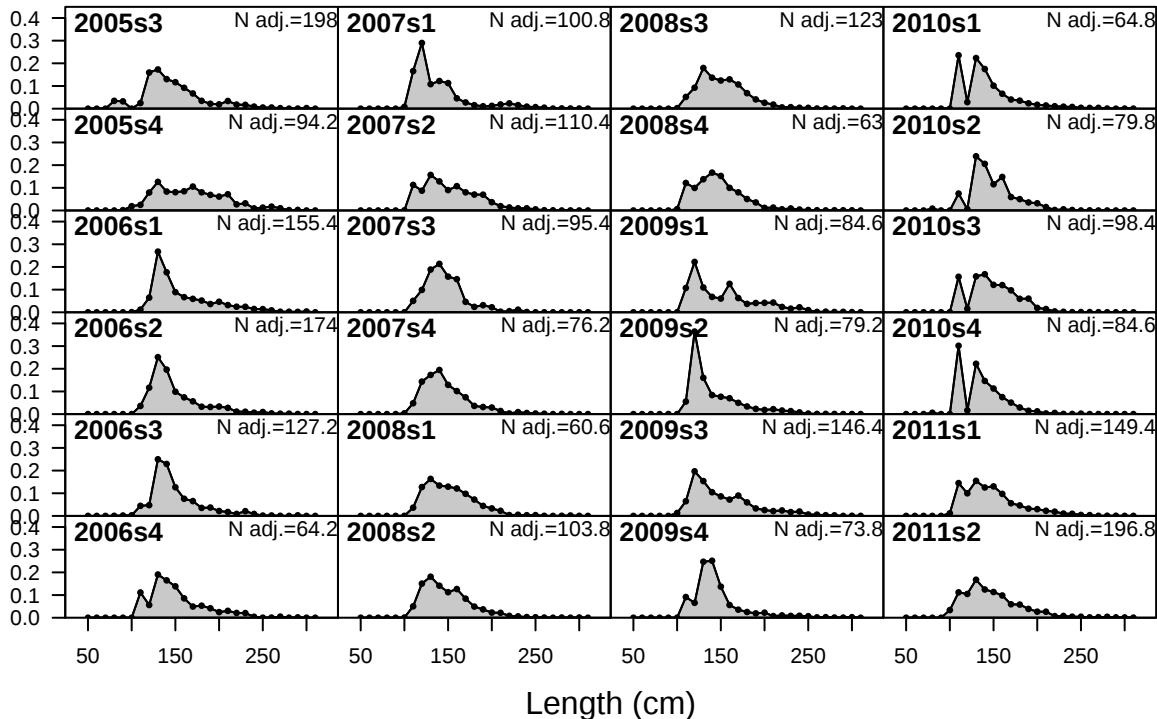
F8_ESP_A4 (whole catch)

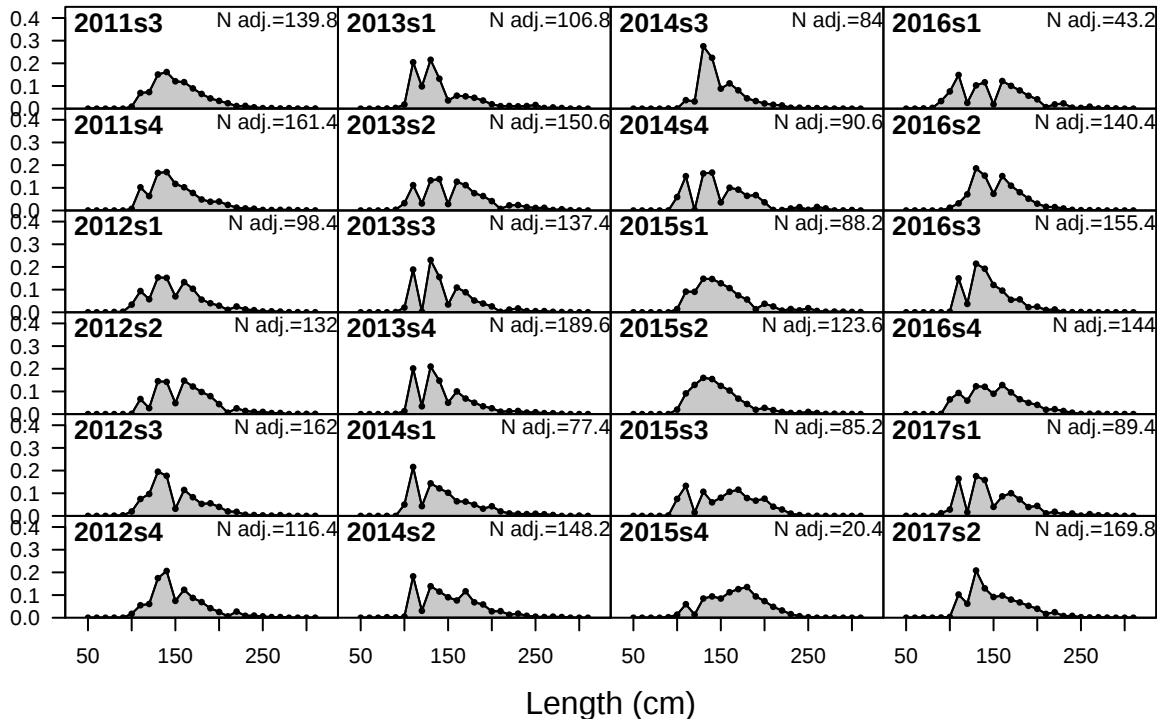


Proportion

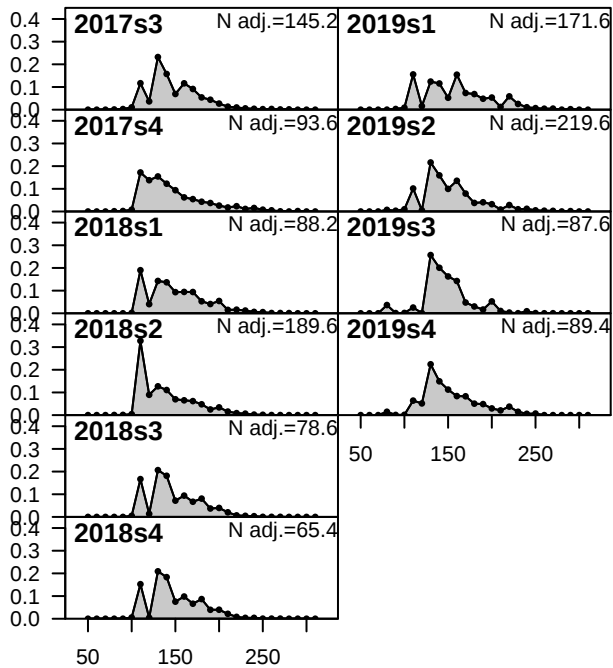


Proportion

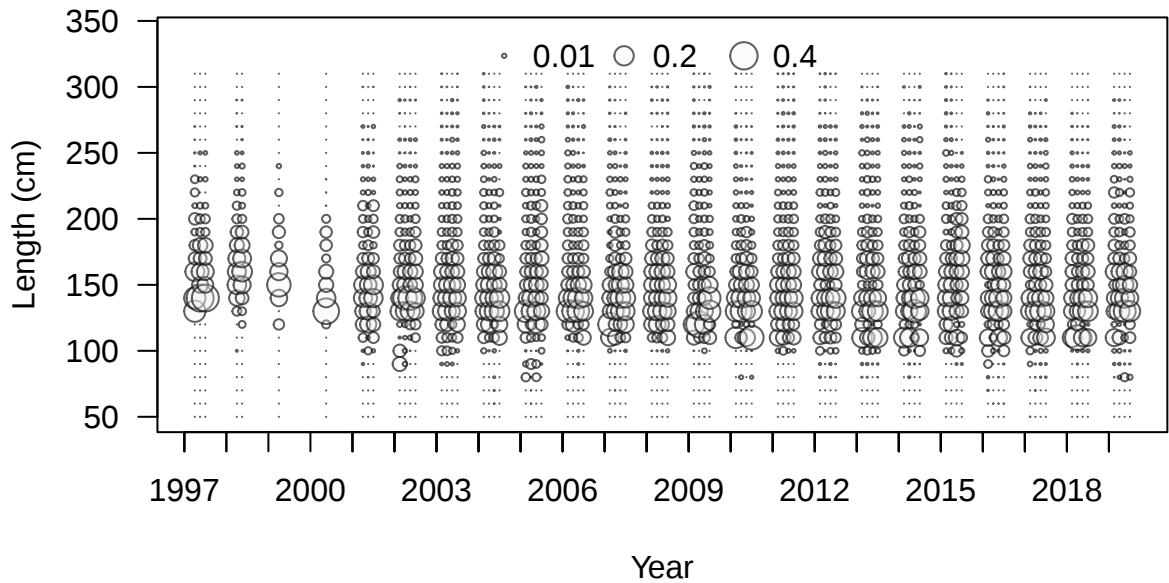




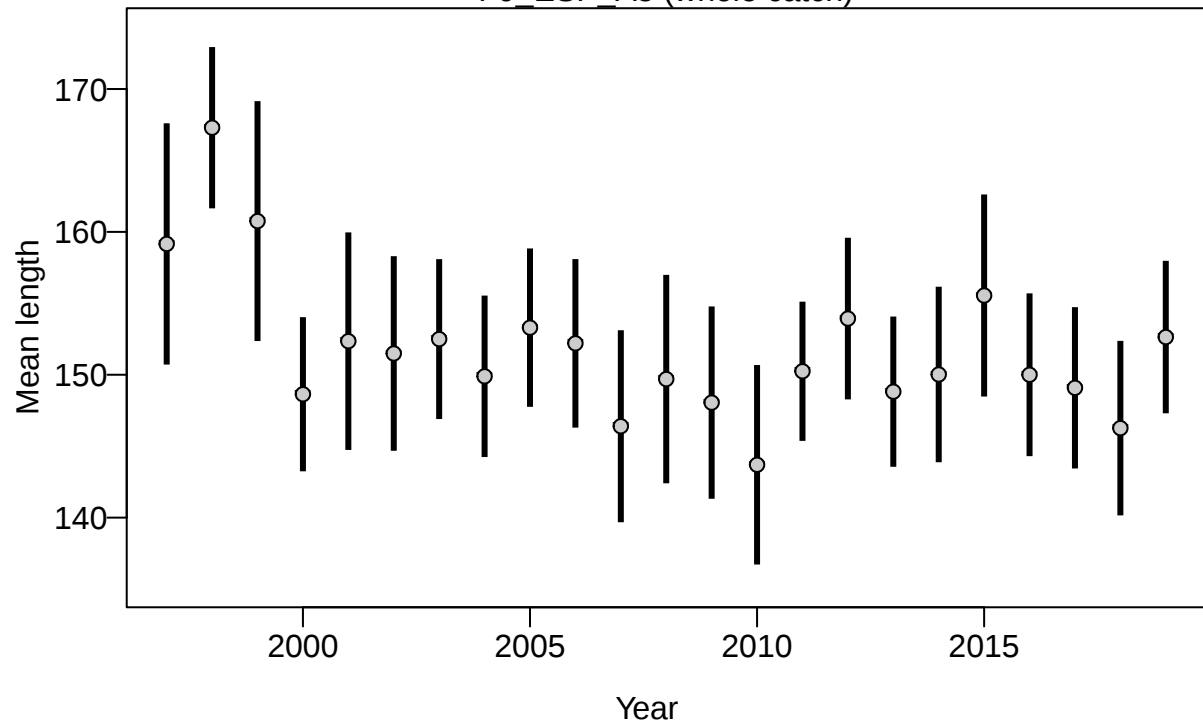
Proportion



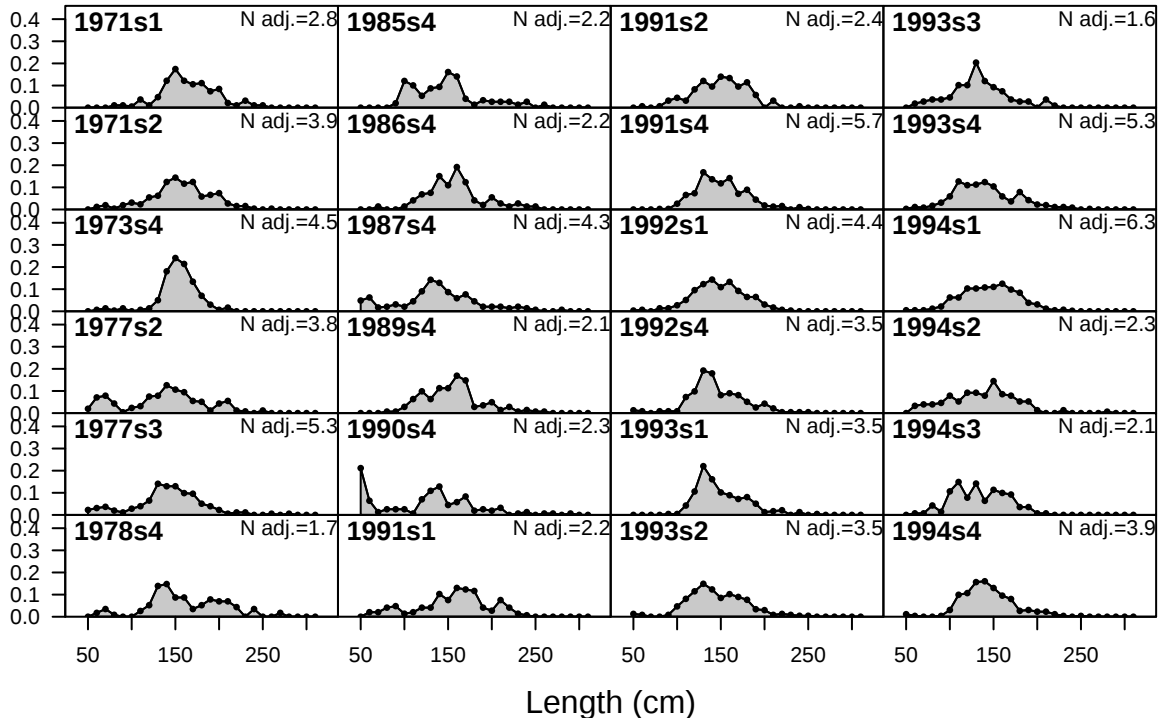
Length (cm)



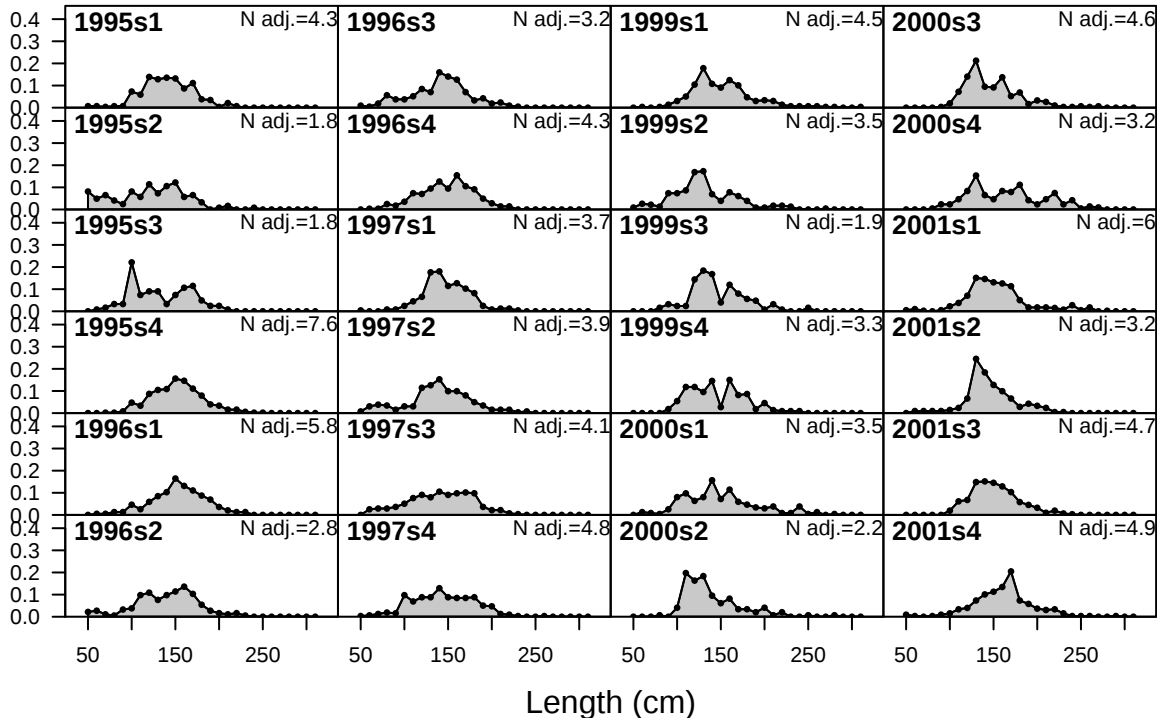
F9_ESP_A5 (whole catch)

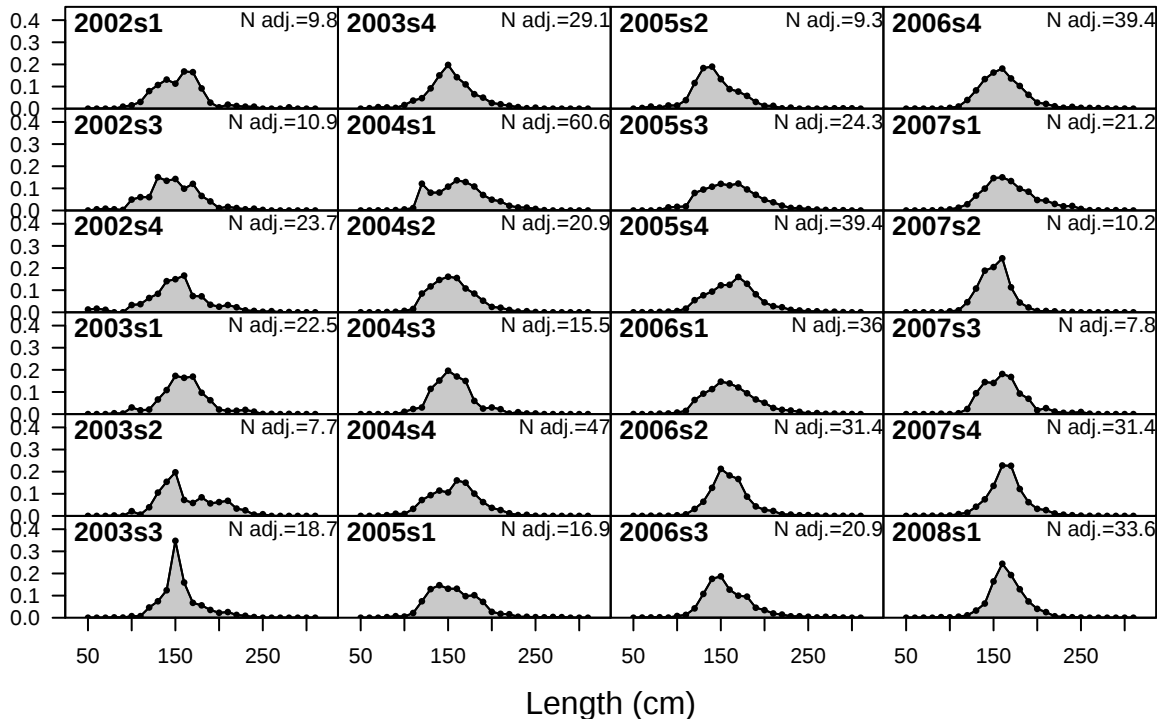


Proportion

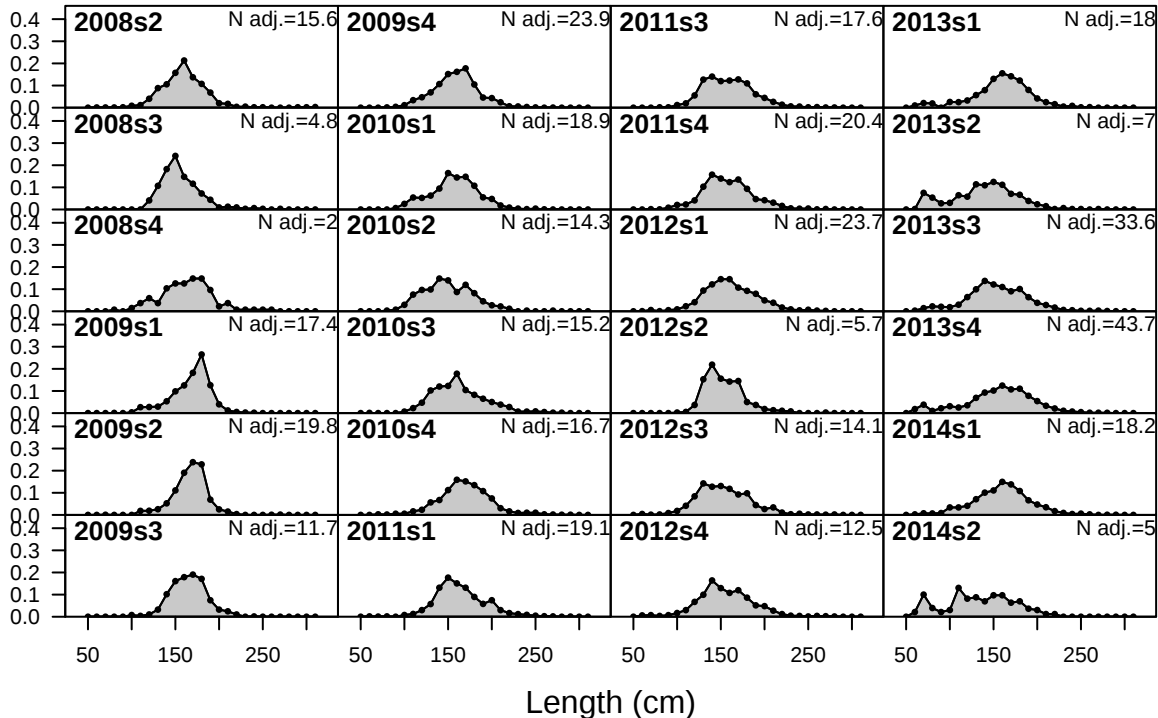


Proportion

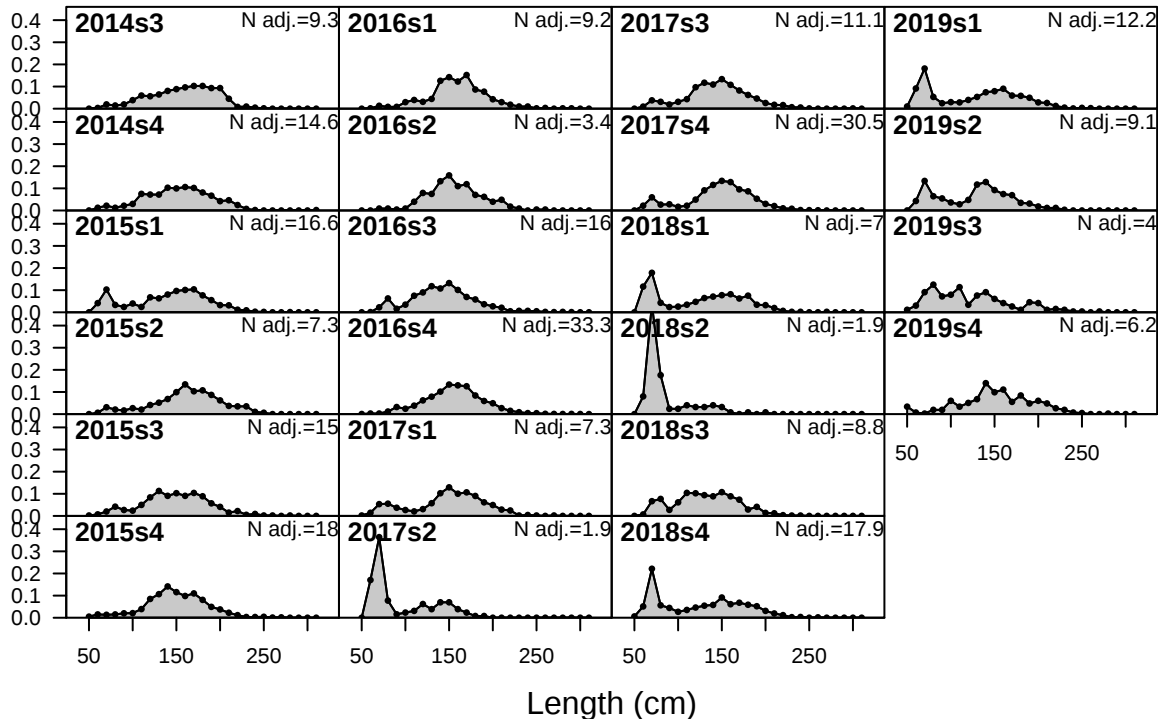


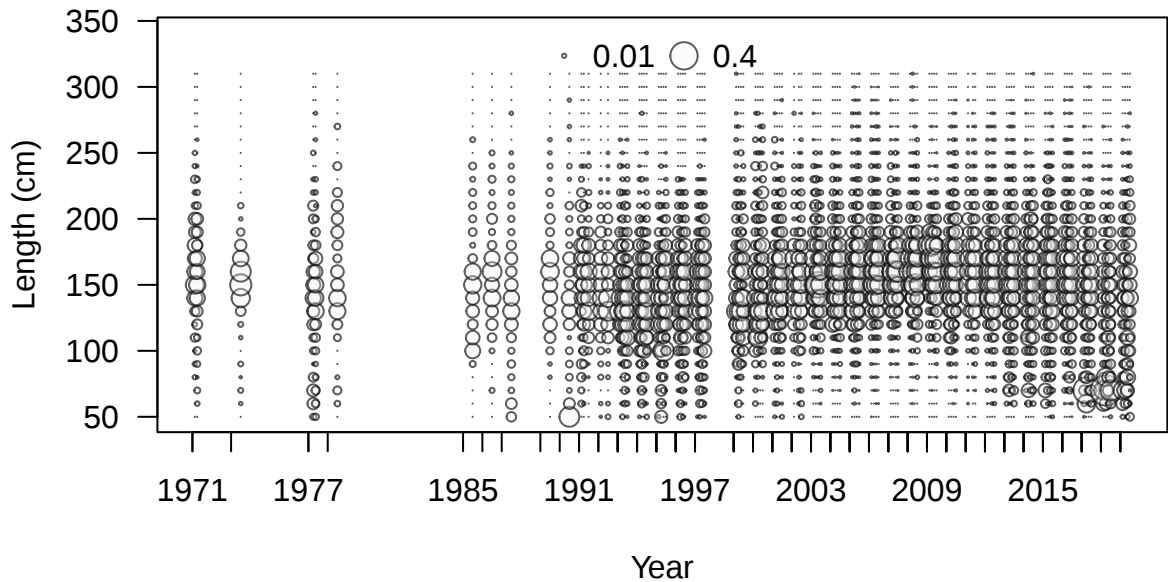


Proportion

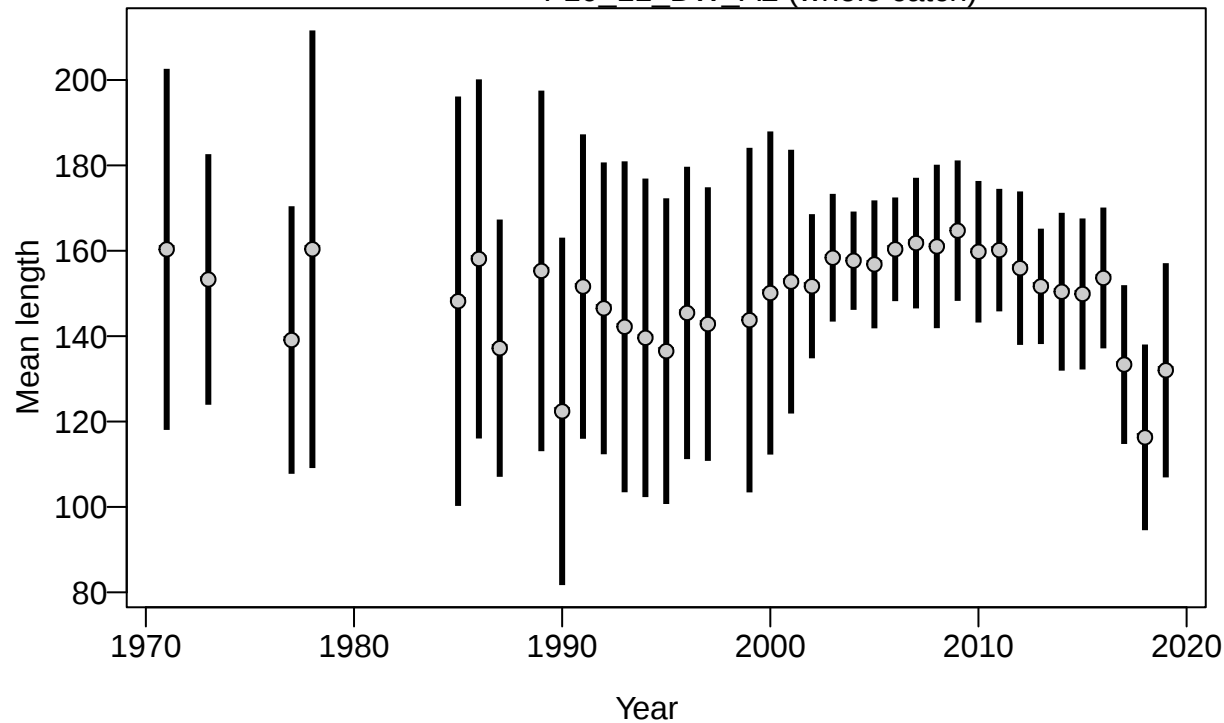


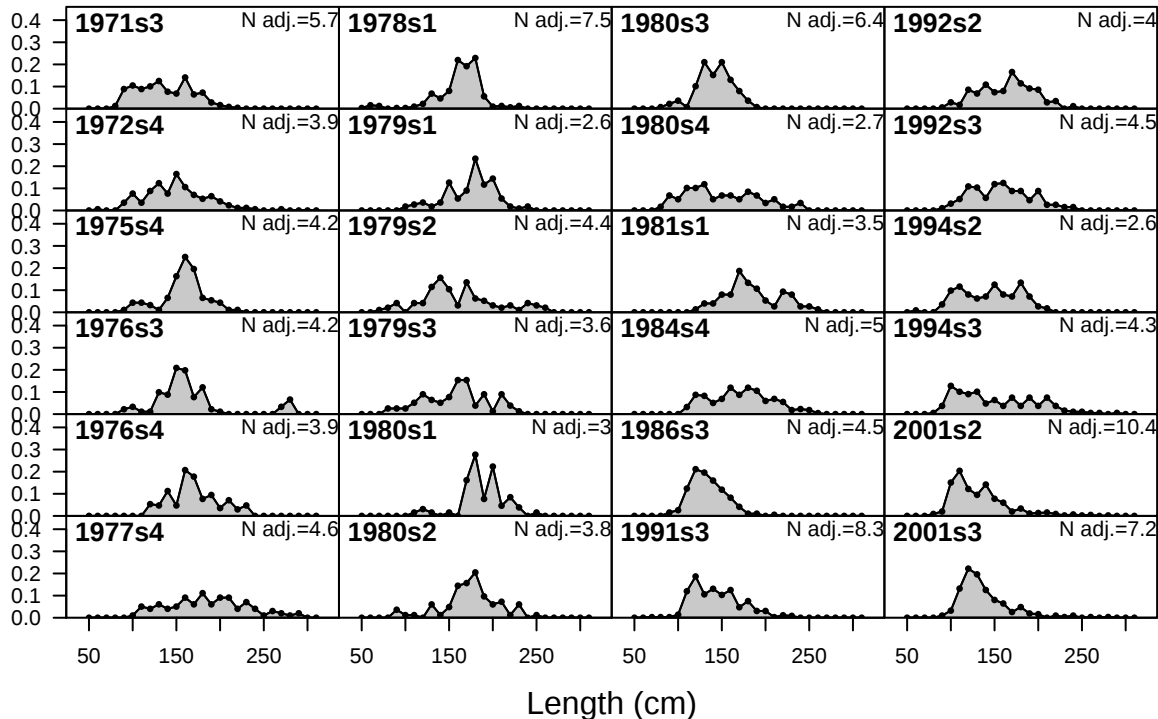
Proportion

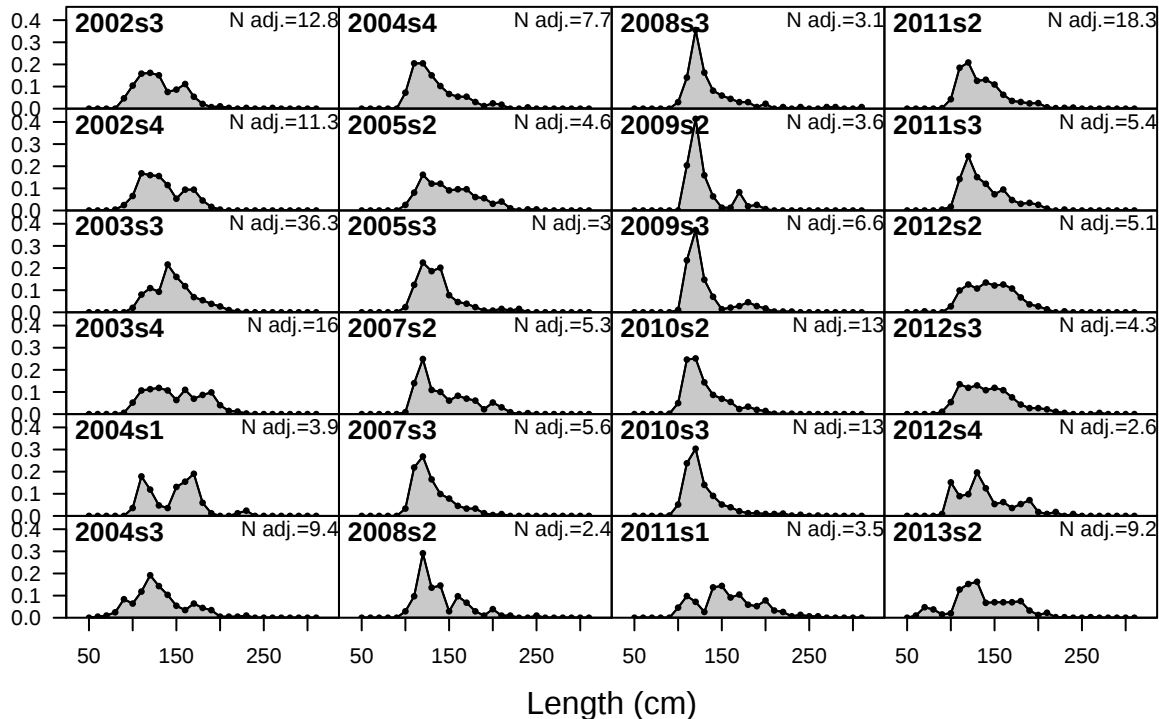




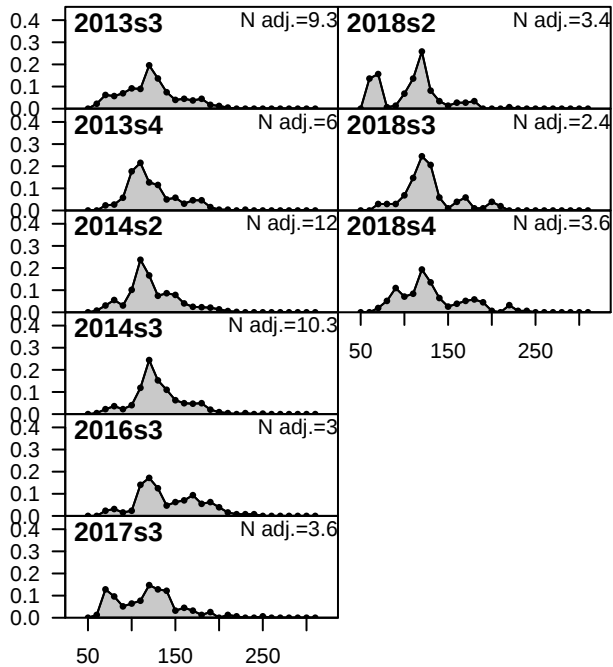
F10_LL_DW_A2 (whole catch)



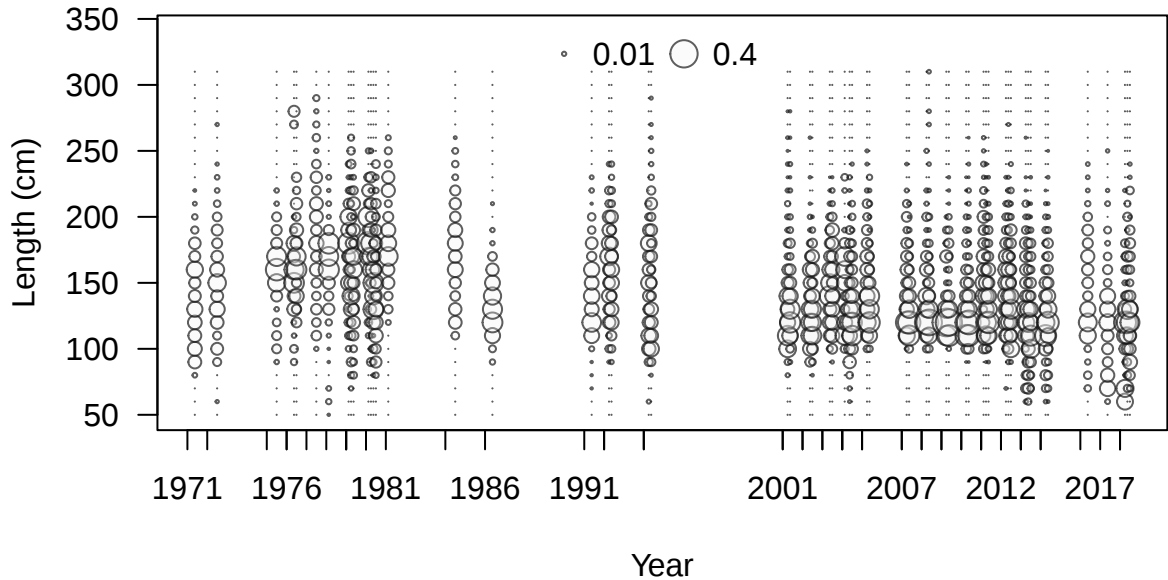




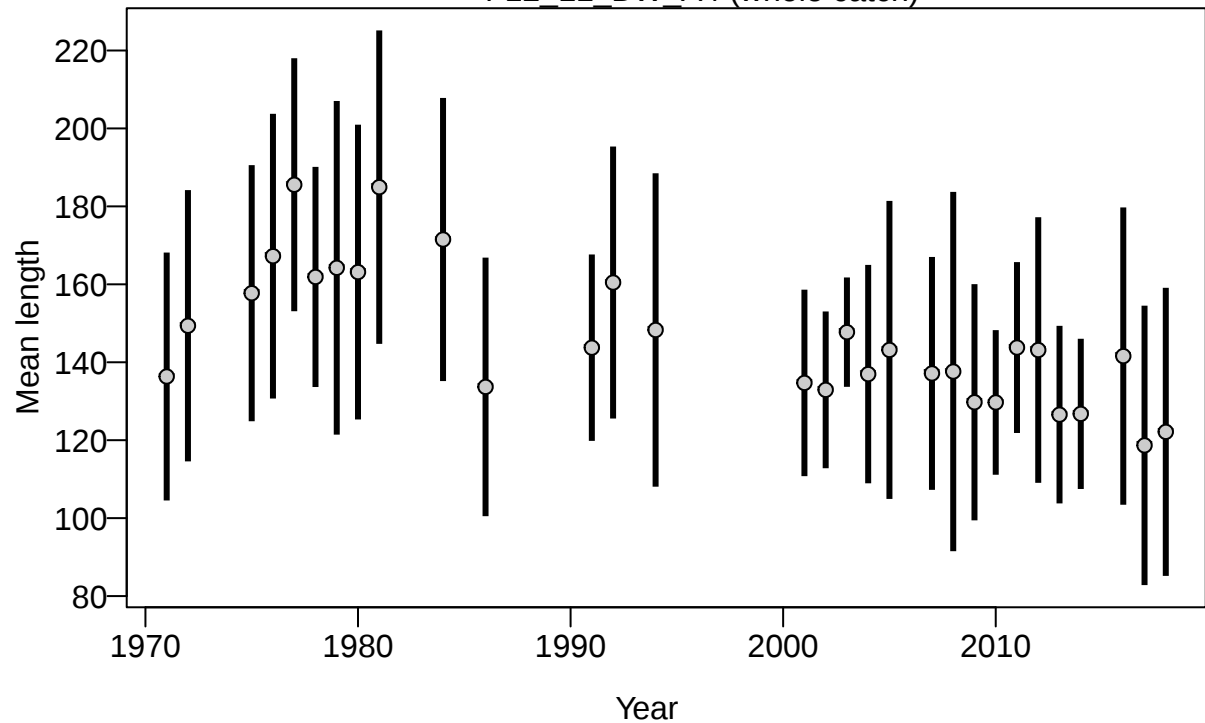
Proportion

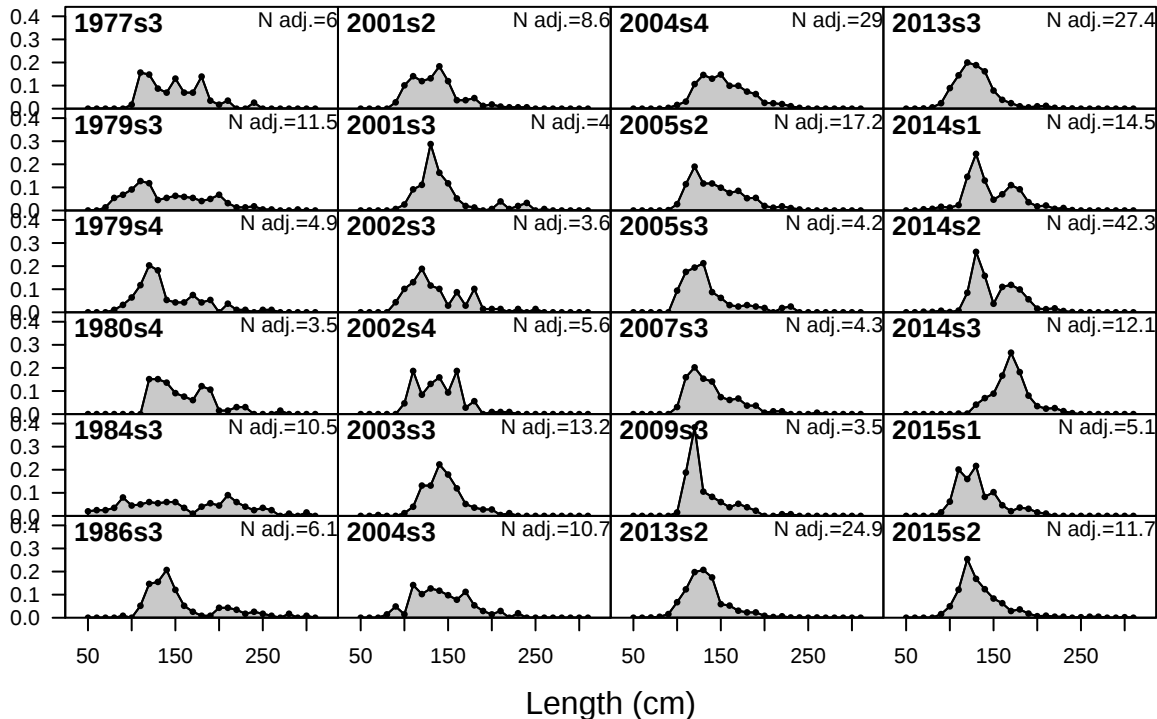


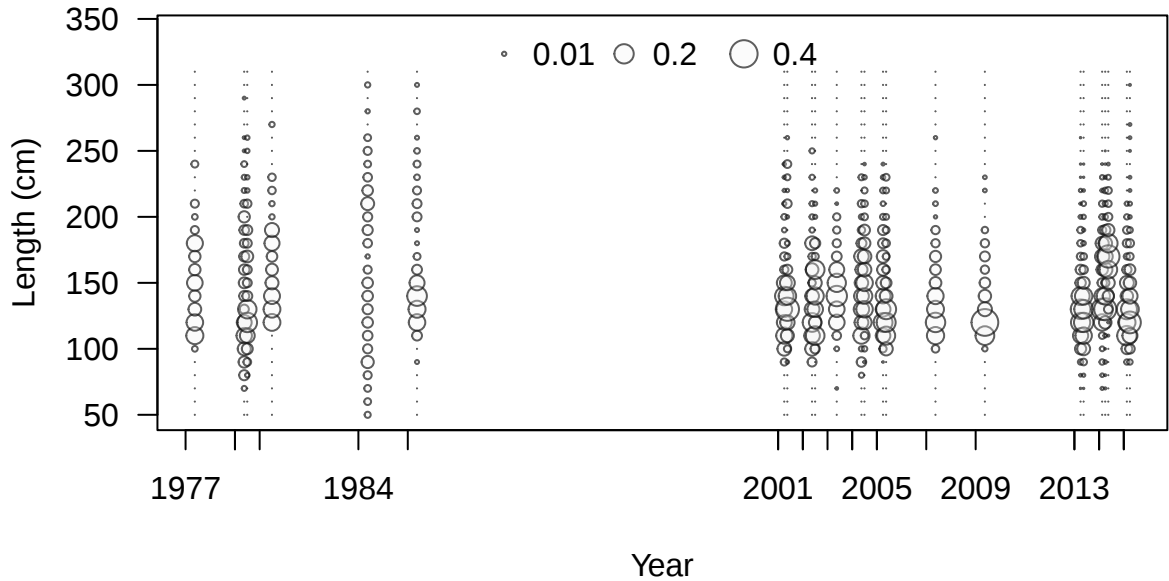
Length (cm)



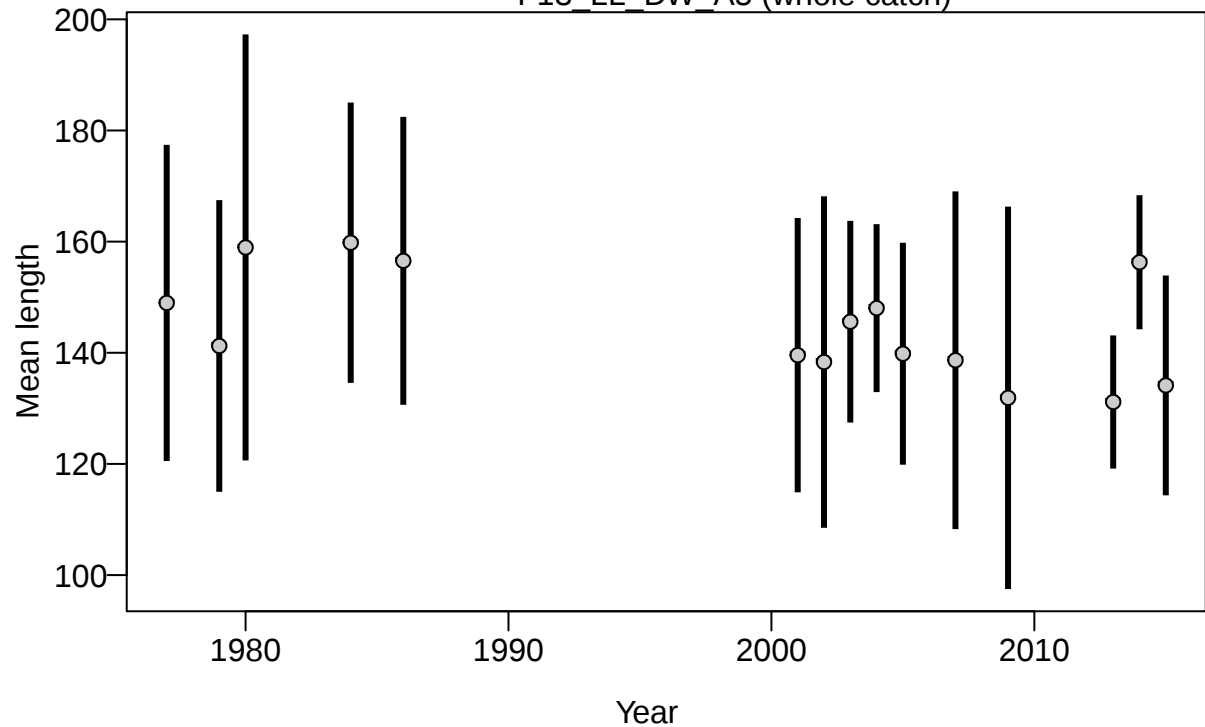
F12_LL_DW_A4 (whole catch)



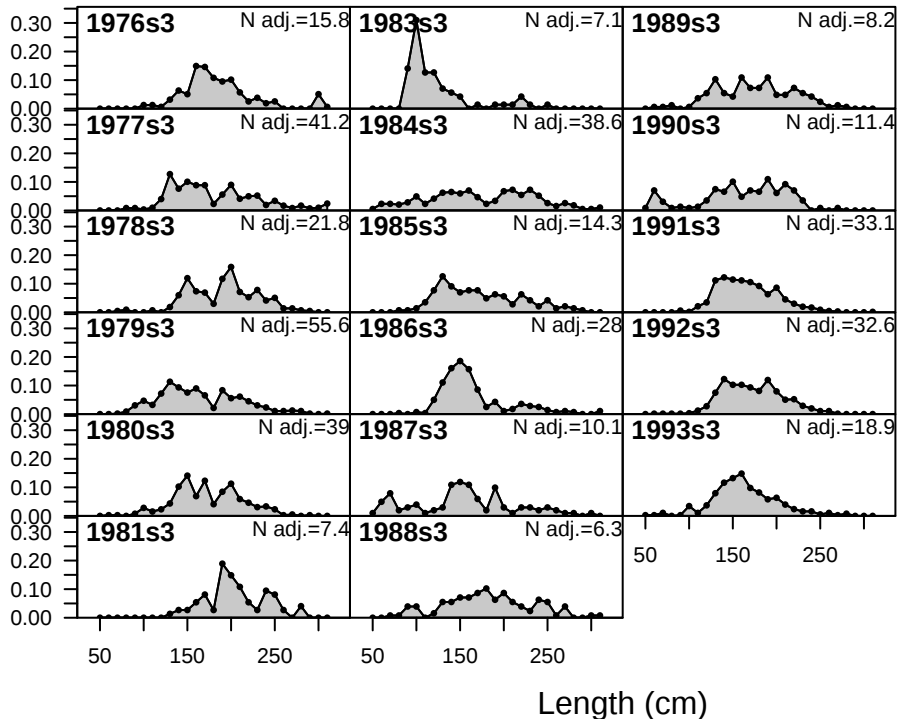


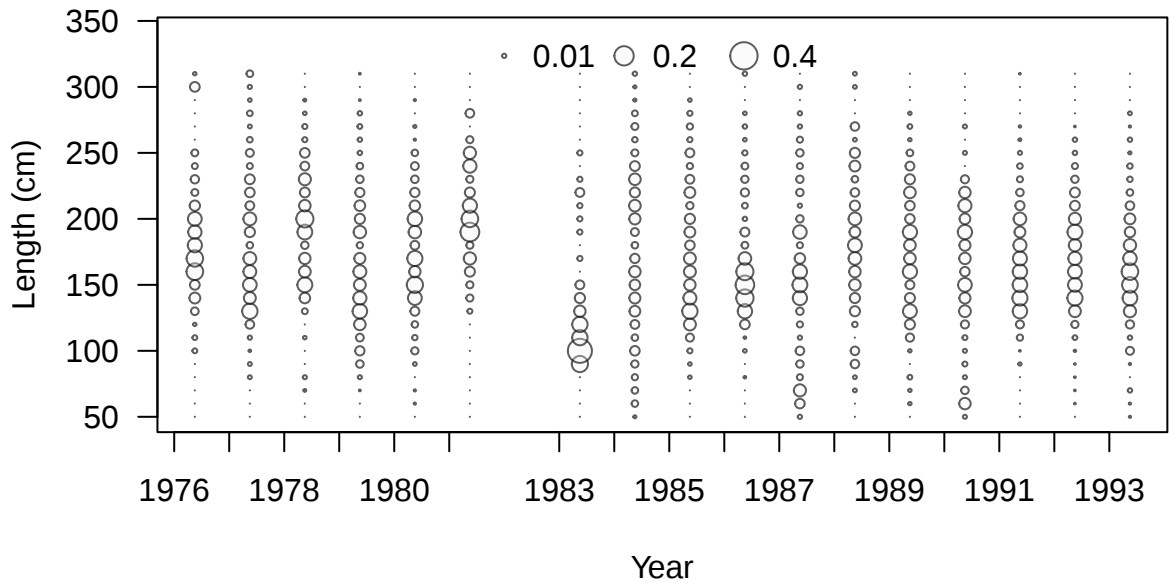


F13_LL_DW_A5 (whole catch)

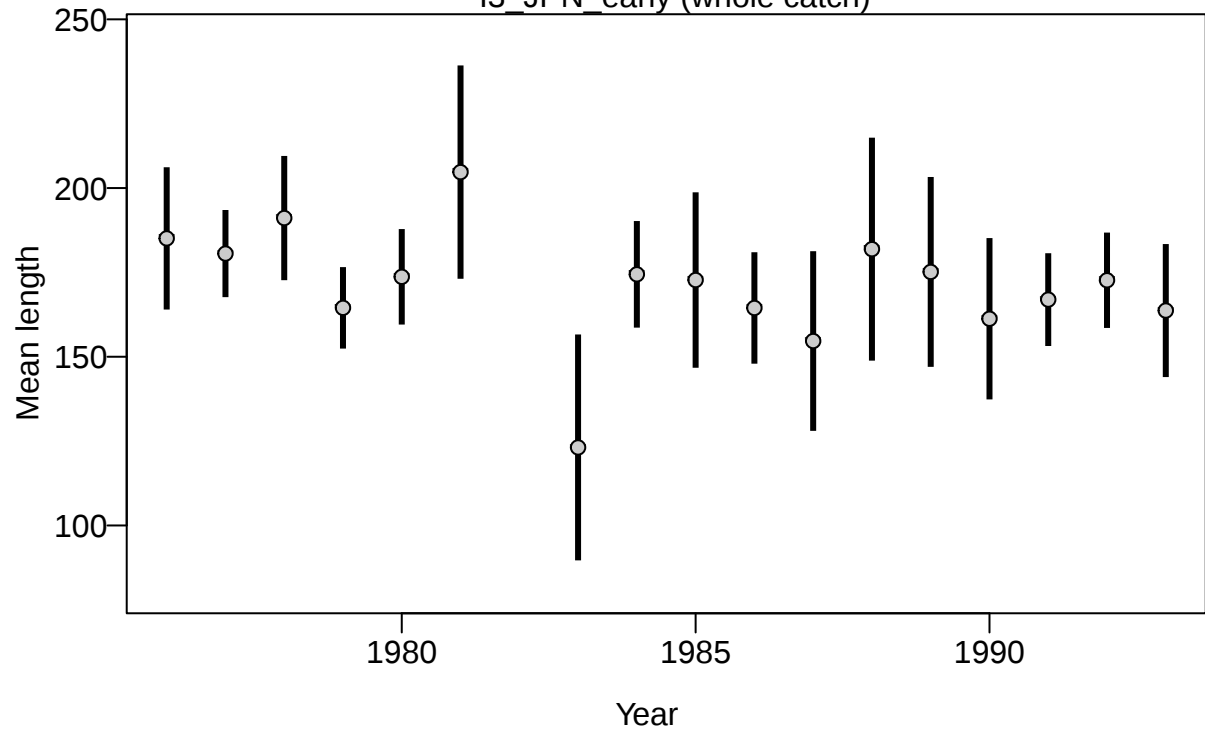


Proportion

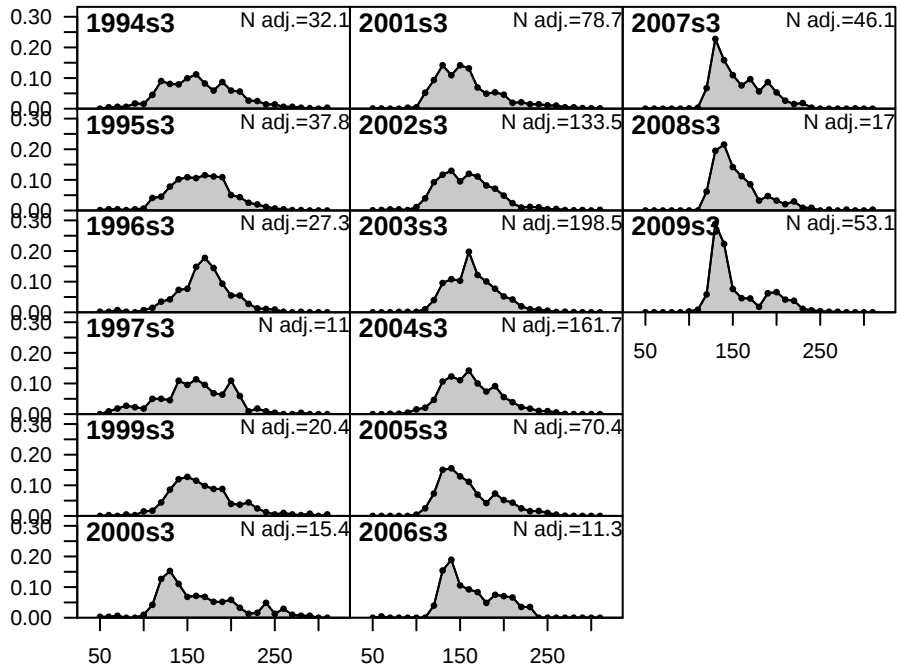




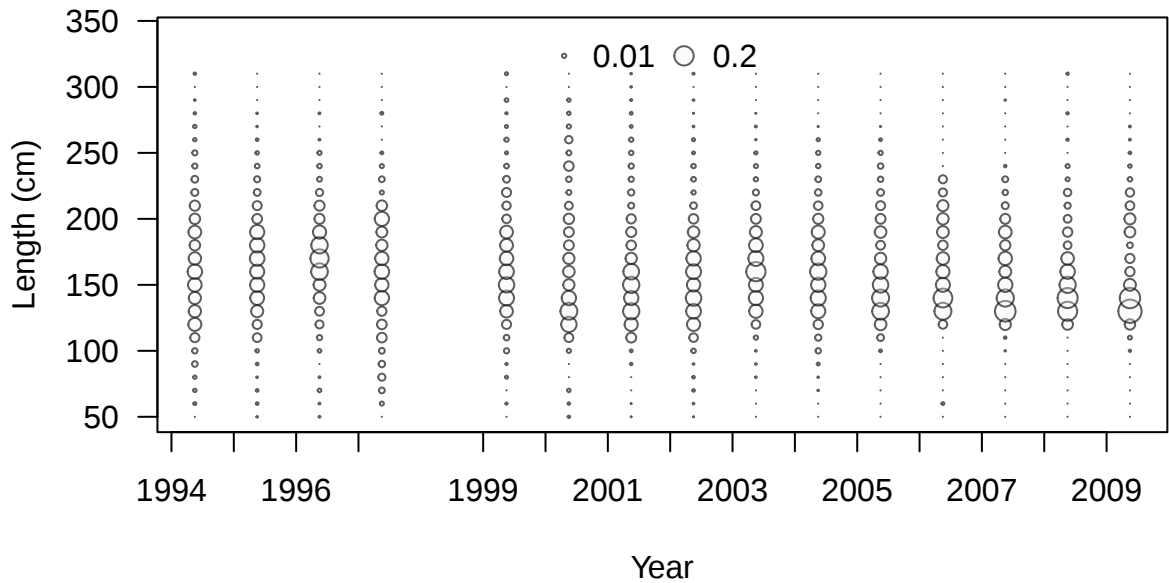
I3_JPN_early (whole catch)



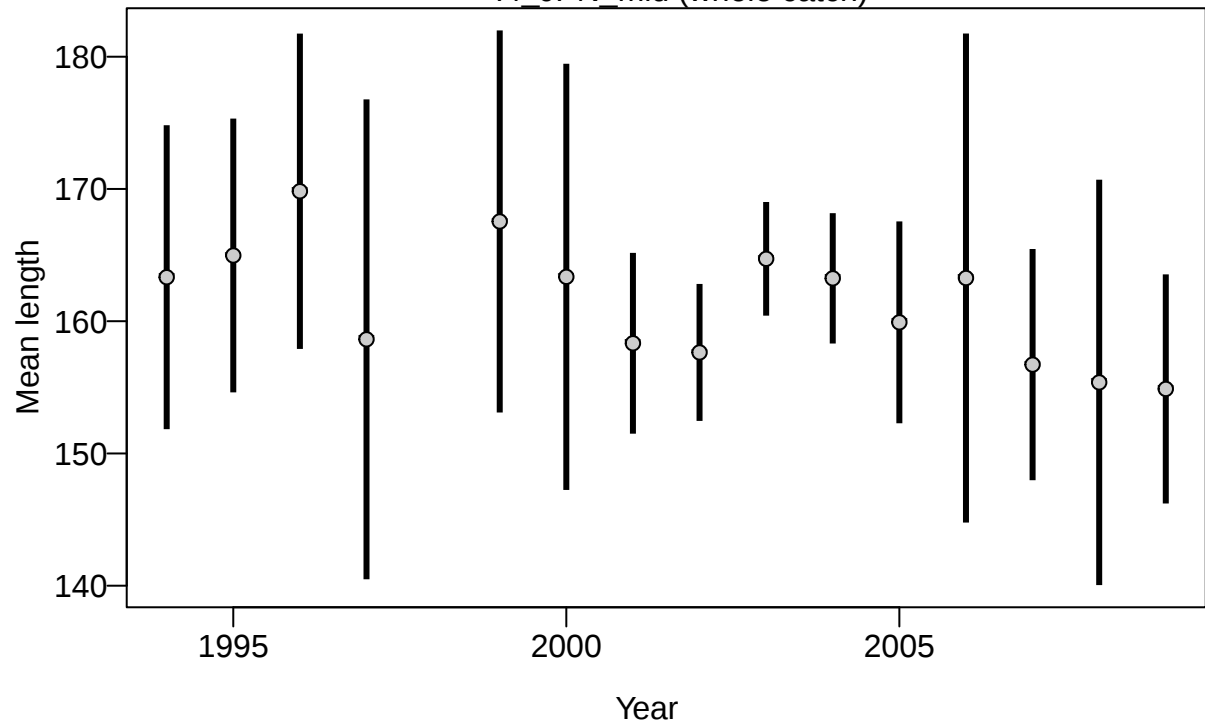
Proportion



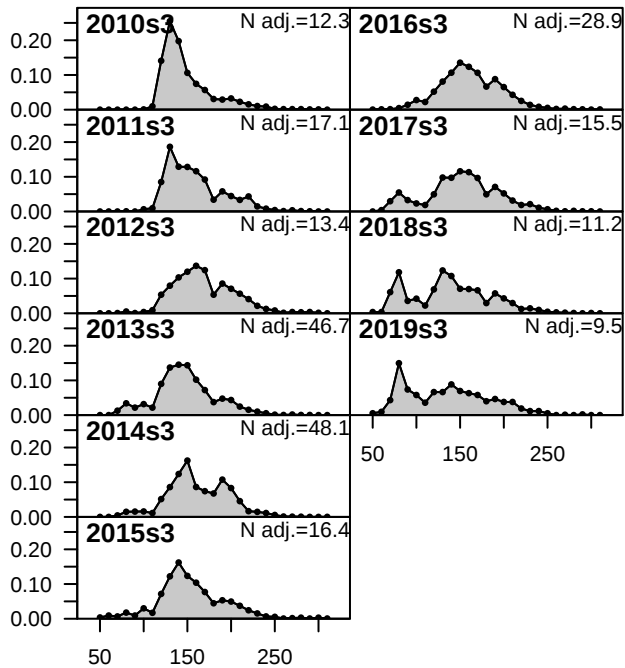
Length (cm)



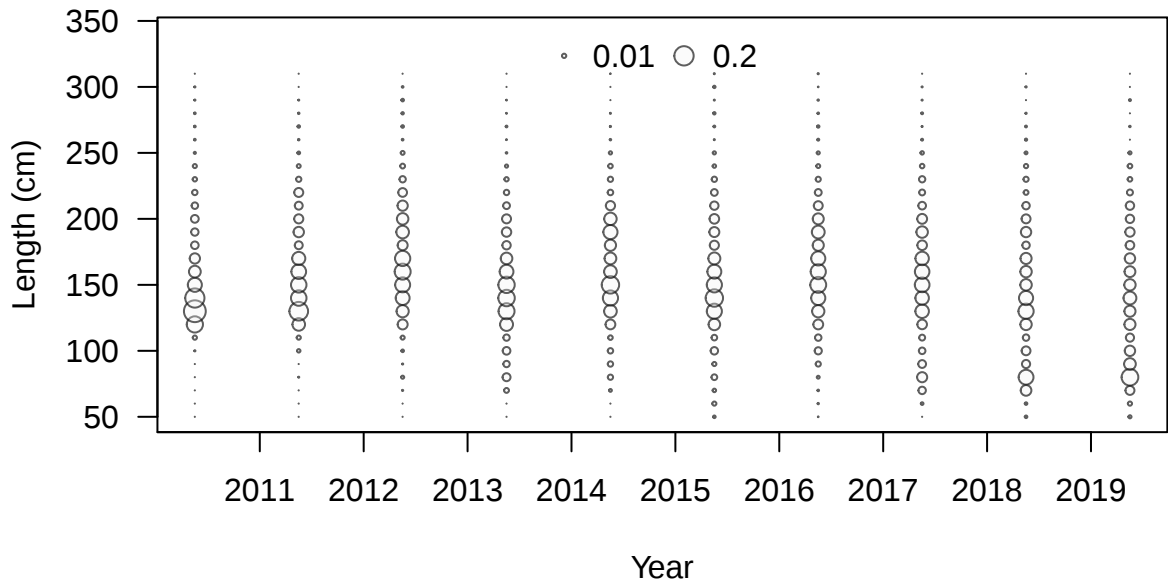
I4_JPN_mid (whole catch)



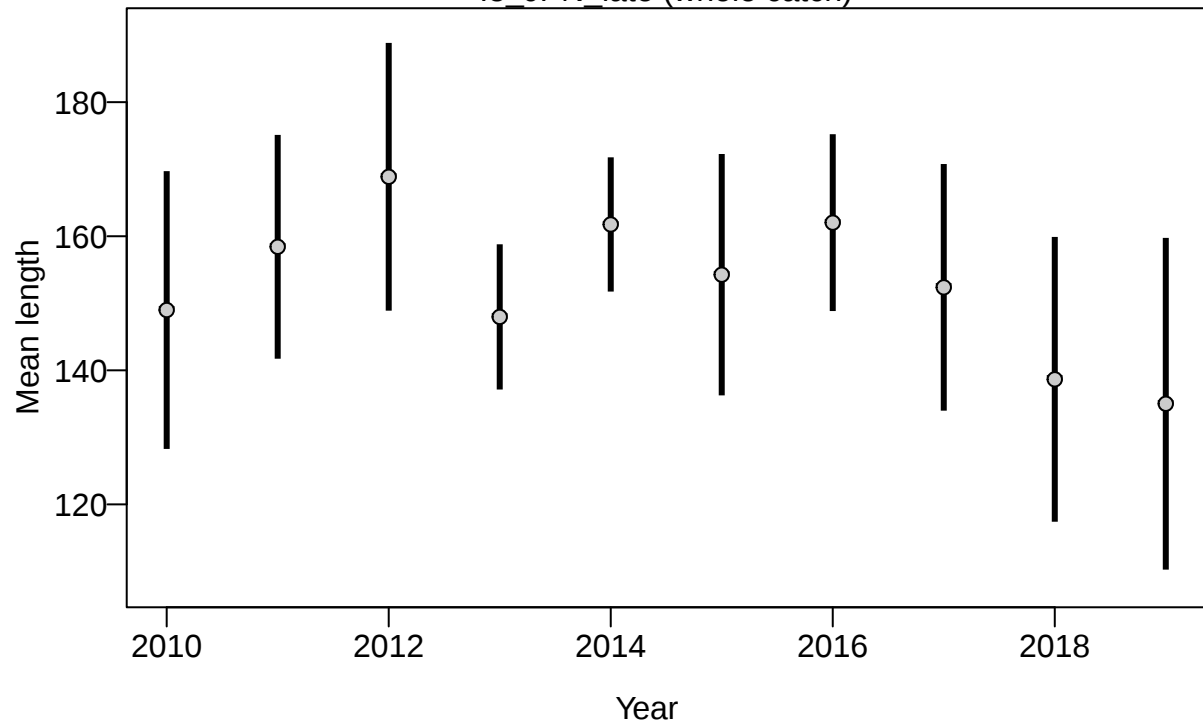
Proportion



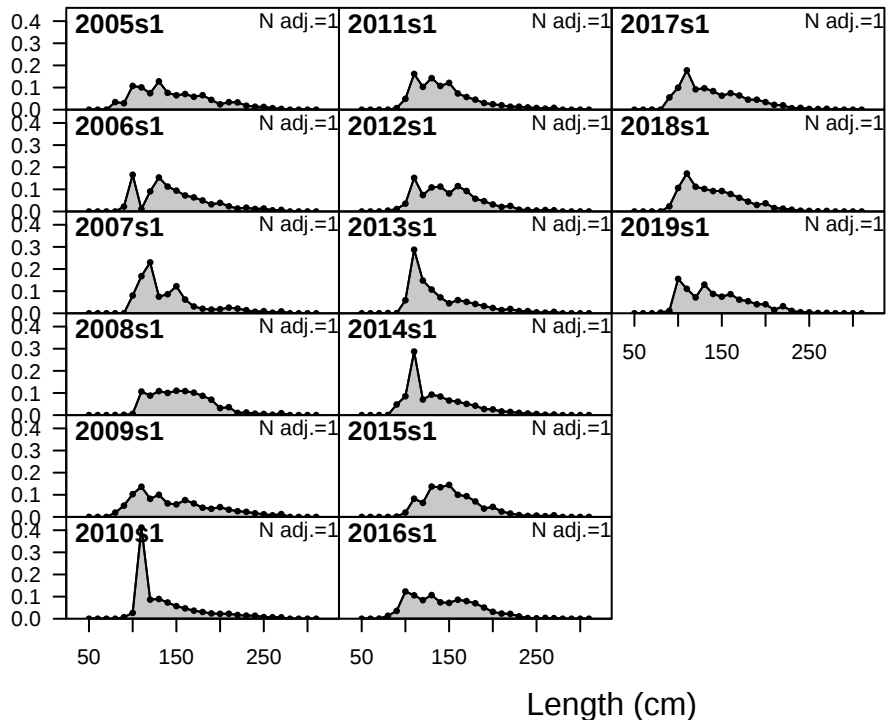
Length (cm)

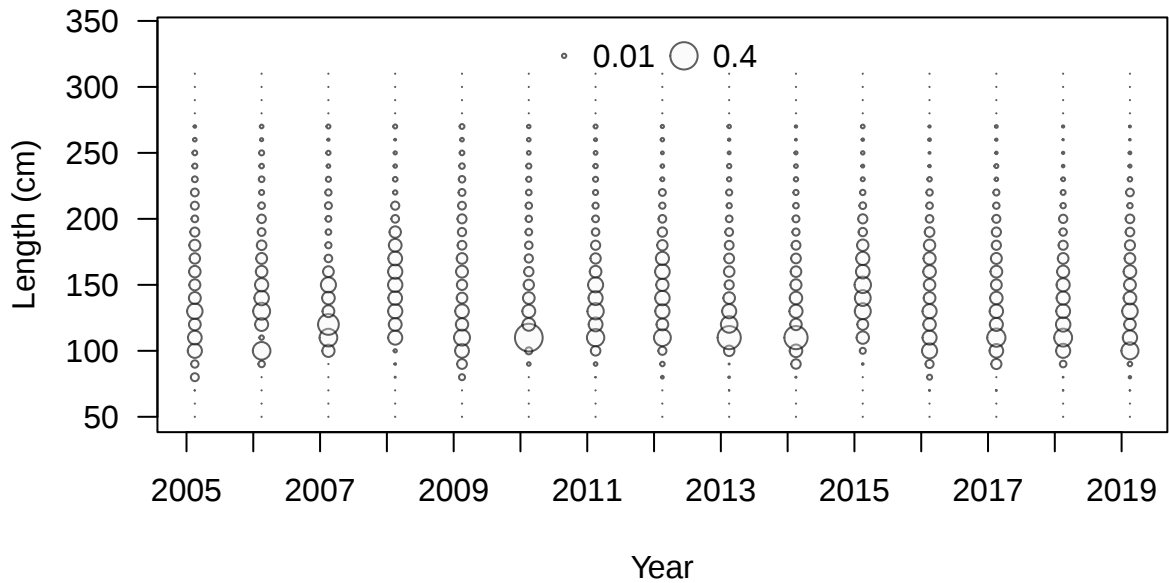


I5_JPN_late (whole catch)

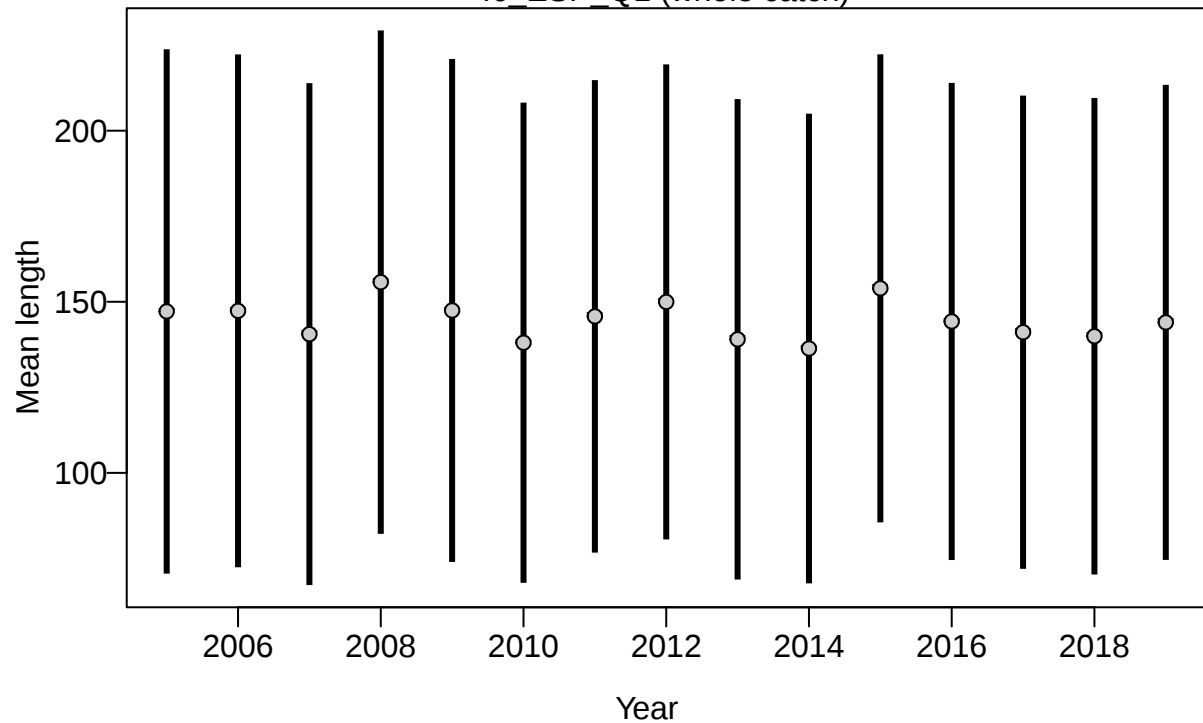


Proportion

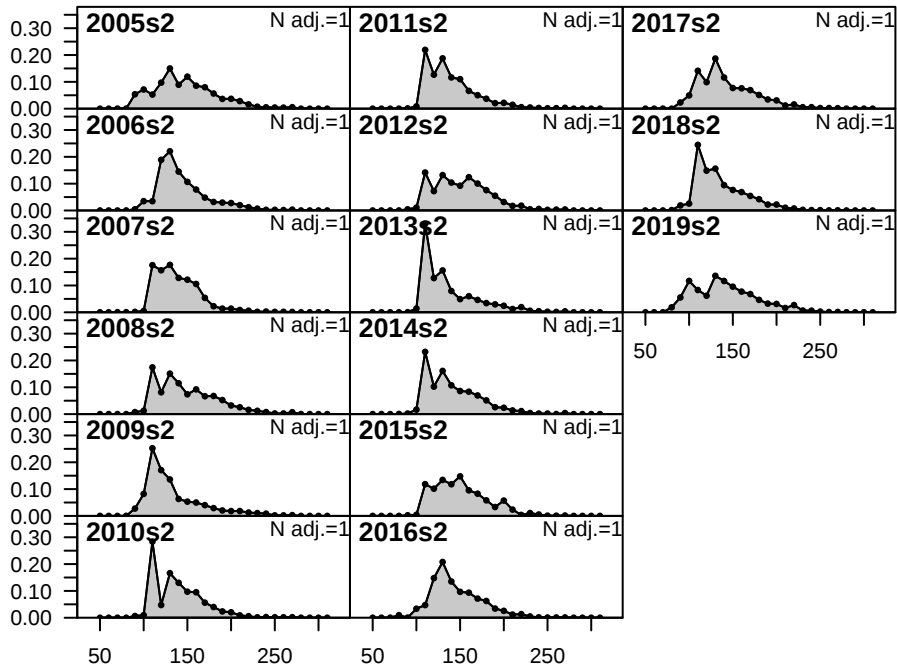




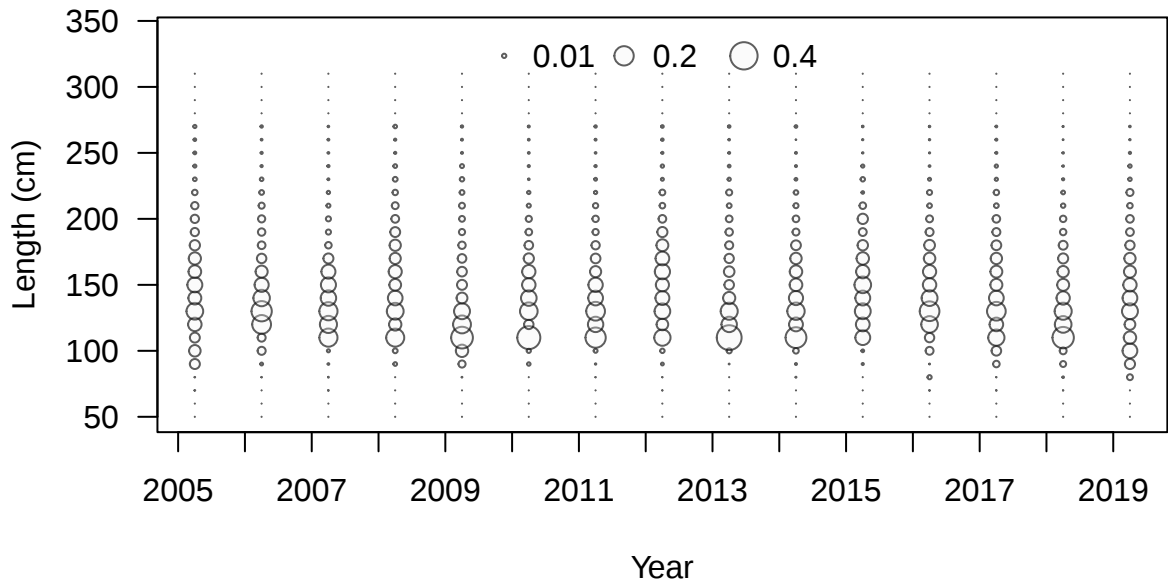
I6_ESP_Q1 (whole catch)



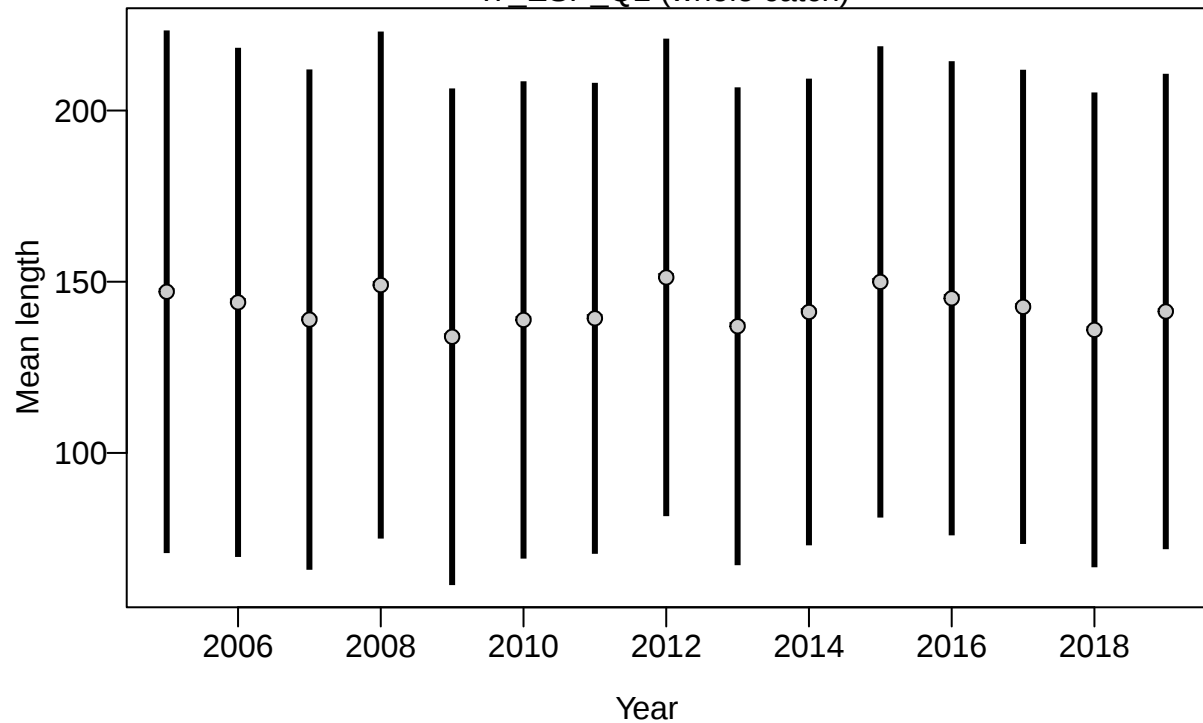
Proportion



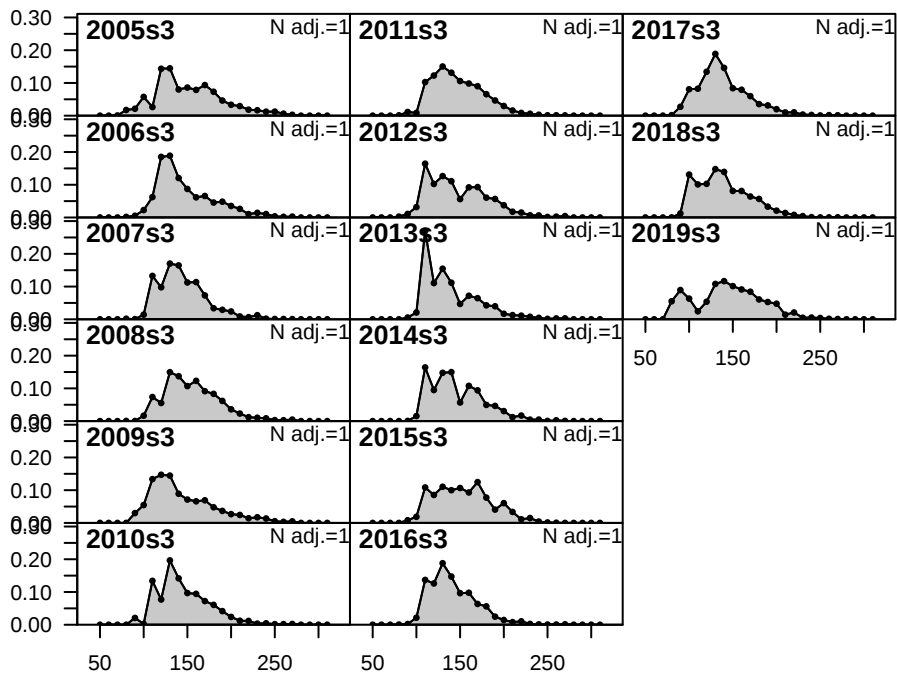
Length (cm)



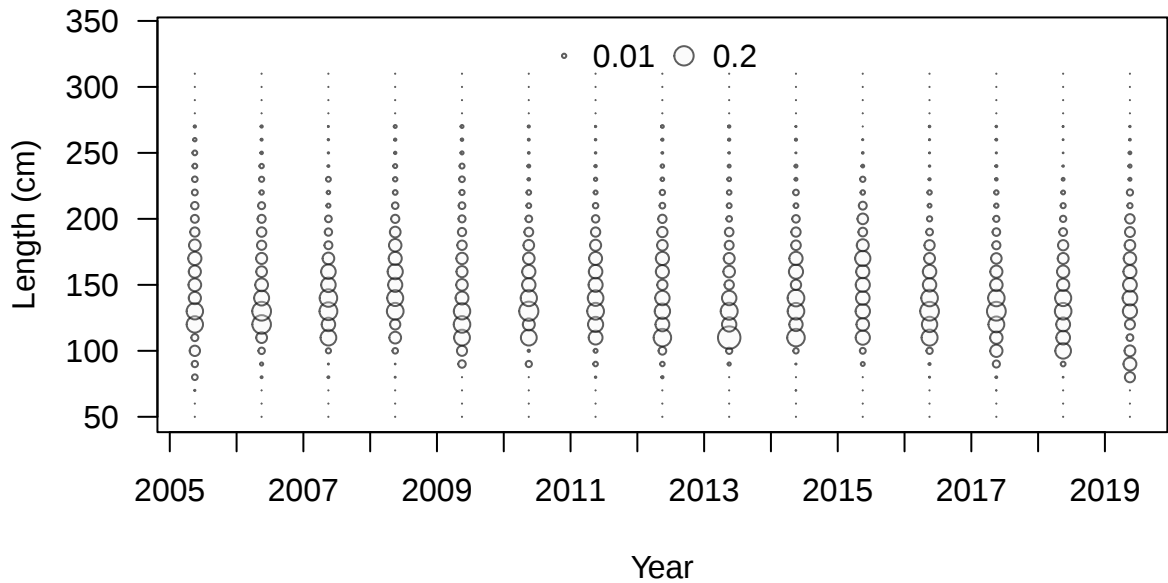
I7_ESP_Q2 (whole catch)



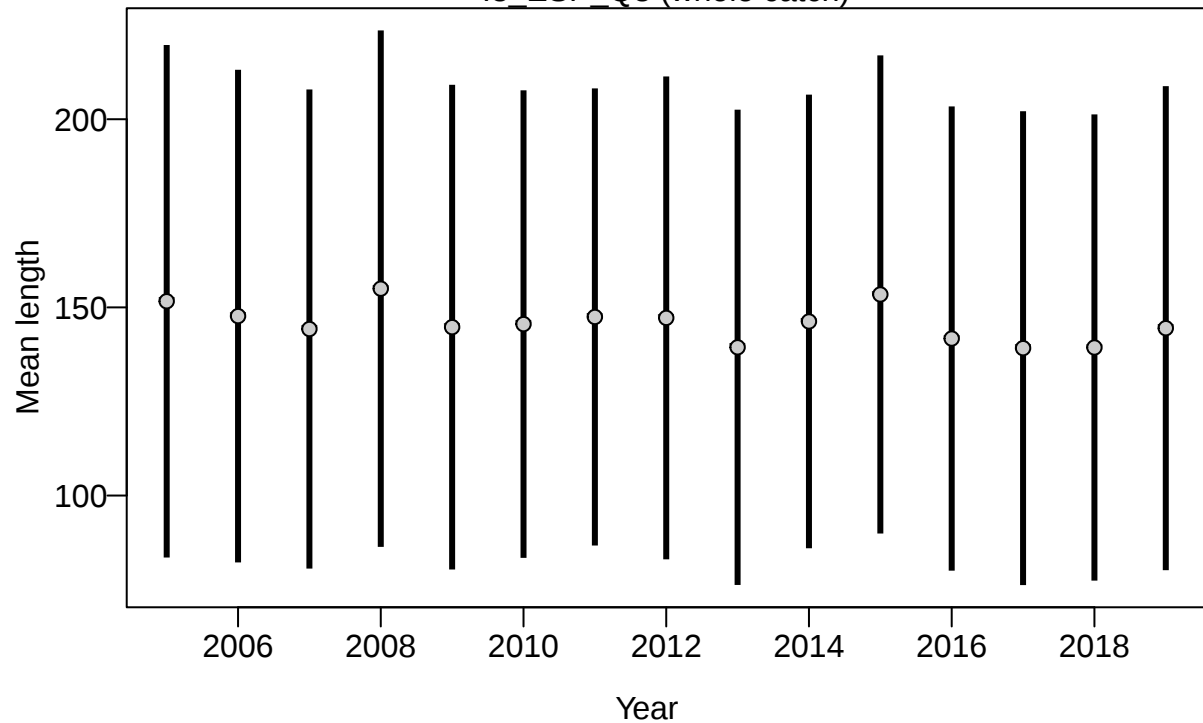
Proportion



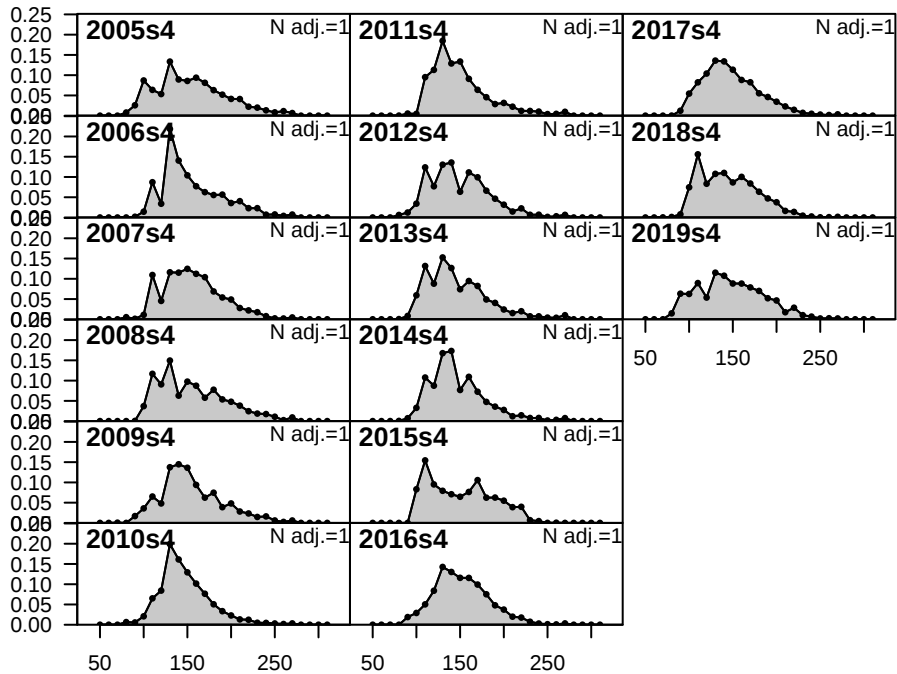
Length (cm)



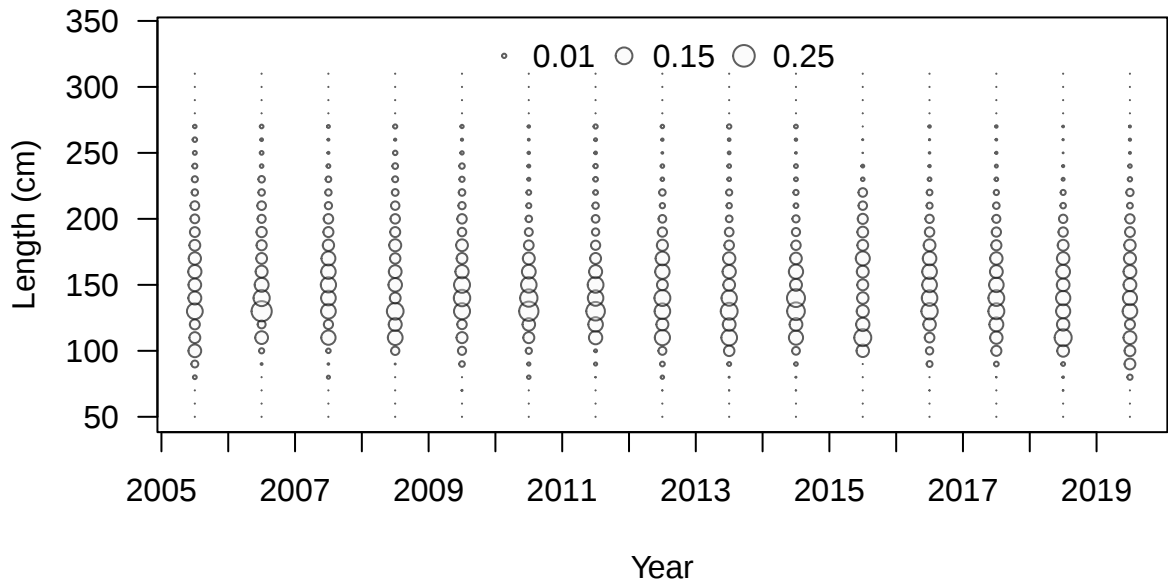
I8_ESP_Q3 (whole catch)



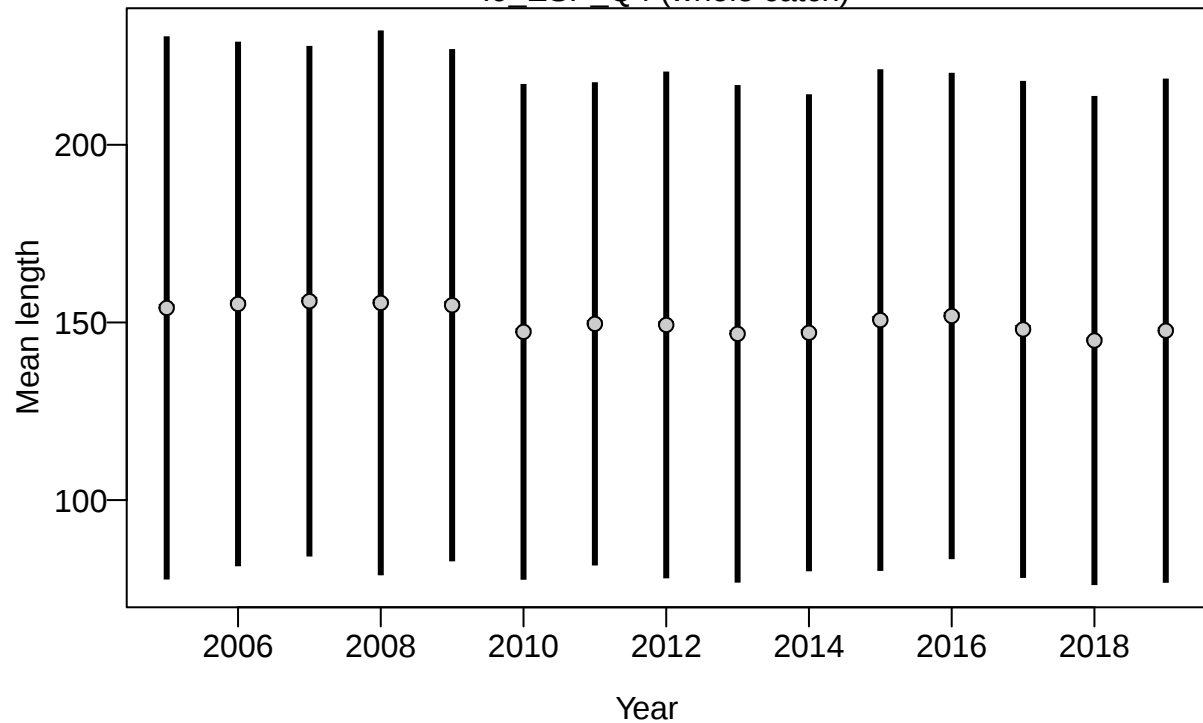
Proportion



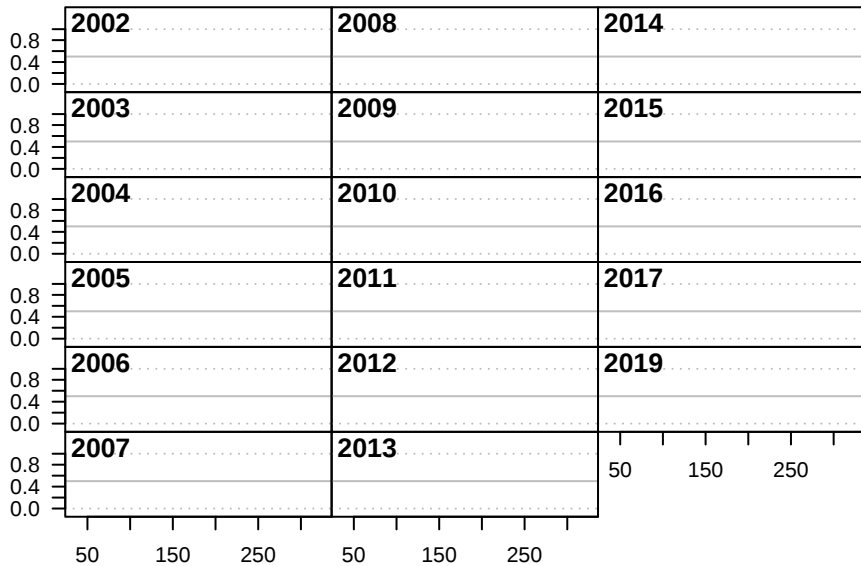
Length (cm)



I9_ESP_Q4 (whole catch)

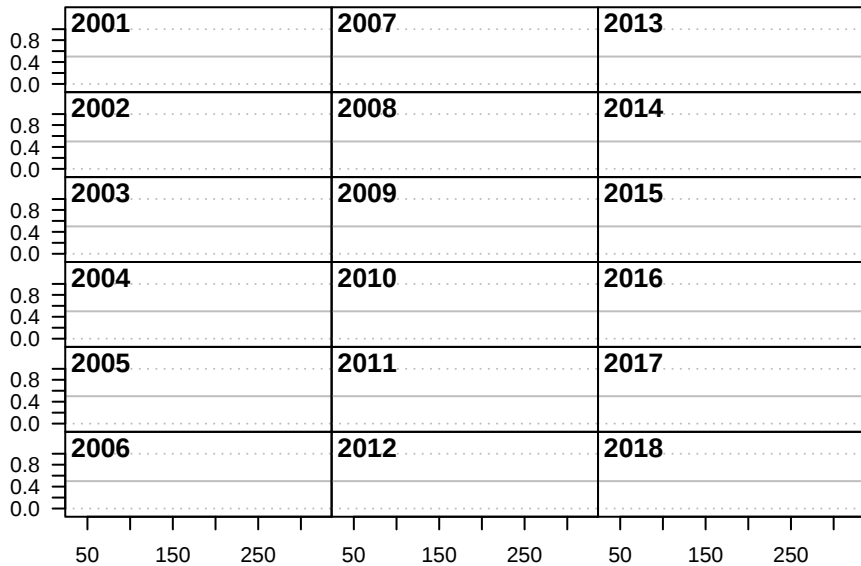


Fraction female



Length (cm)

Fraction female



Length (cm)

Proportion

I1_Chile_Q2

Sum of N adj.=641.3

I2_Chile_Q3

Sum of N adj.=485.6

100

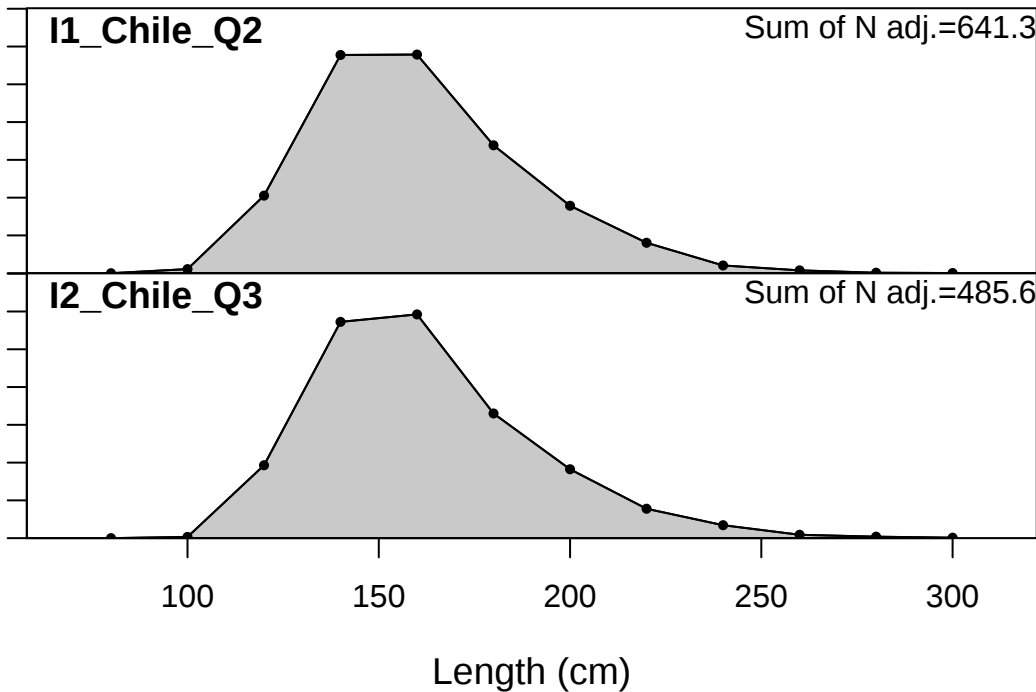
150

200

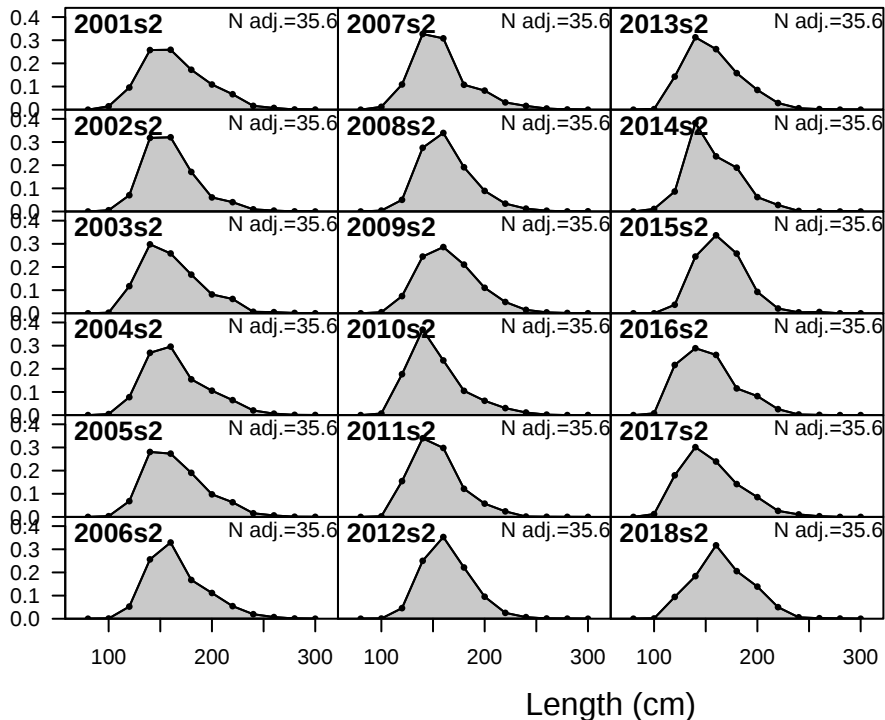
250

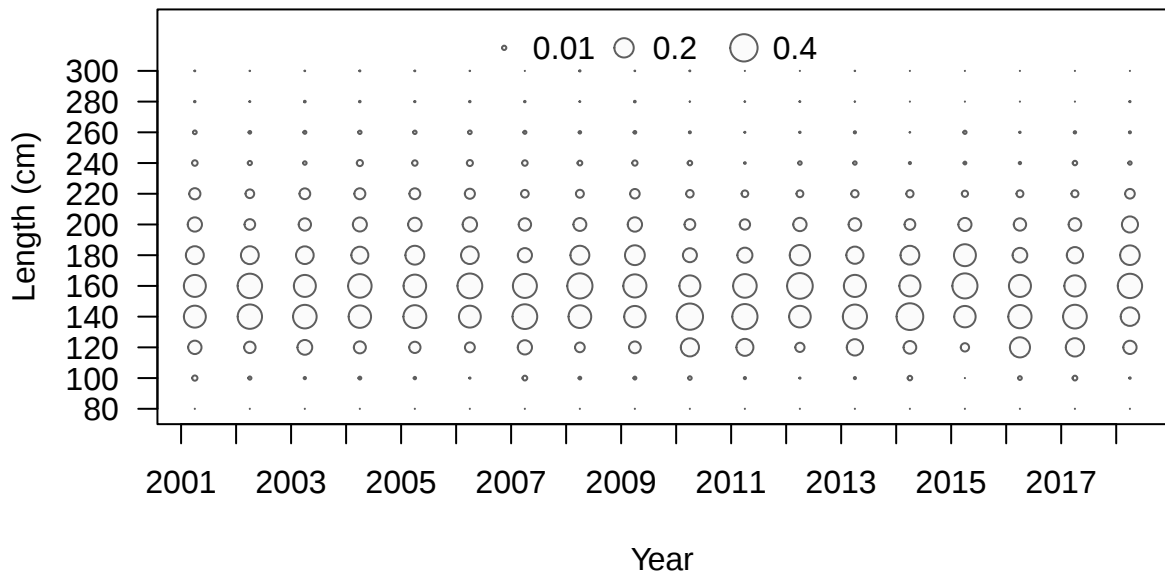
300

Length (cm)

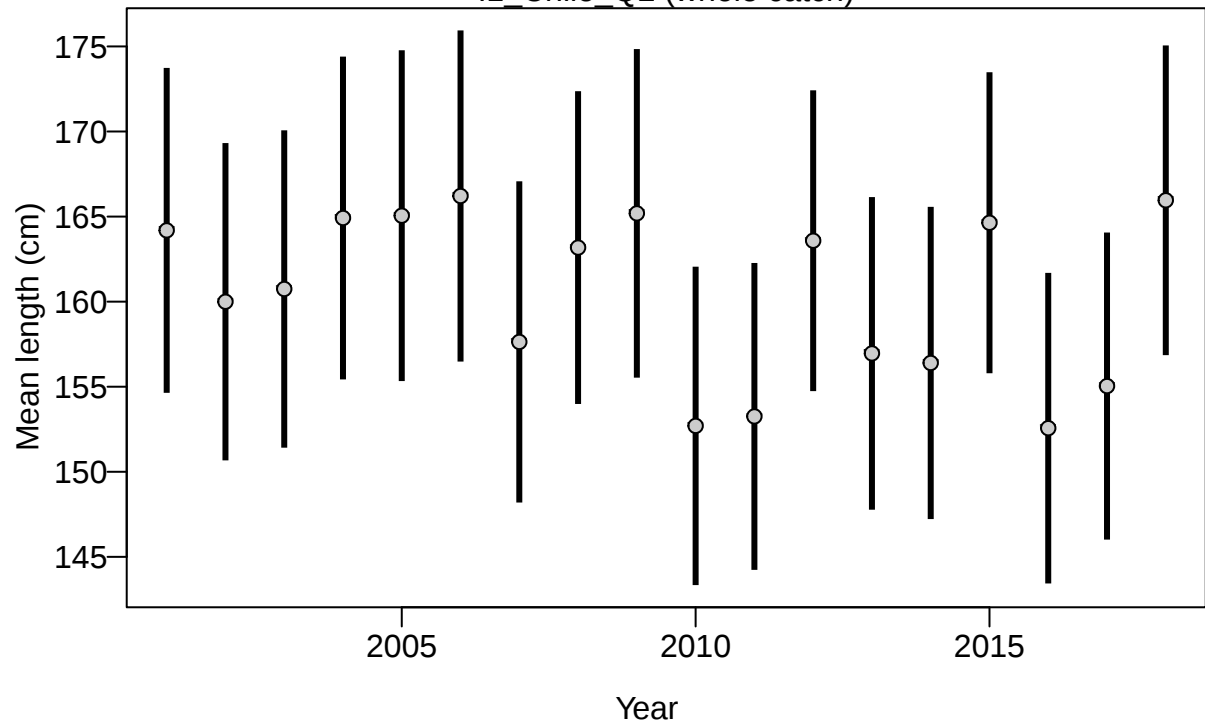


Proportion

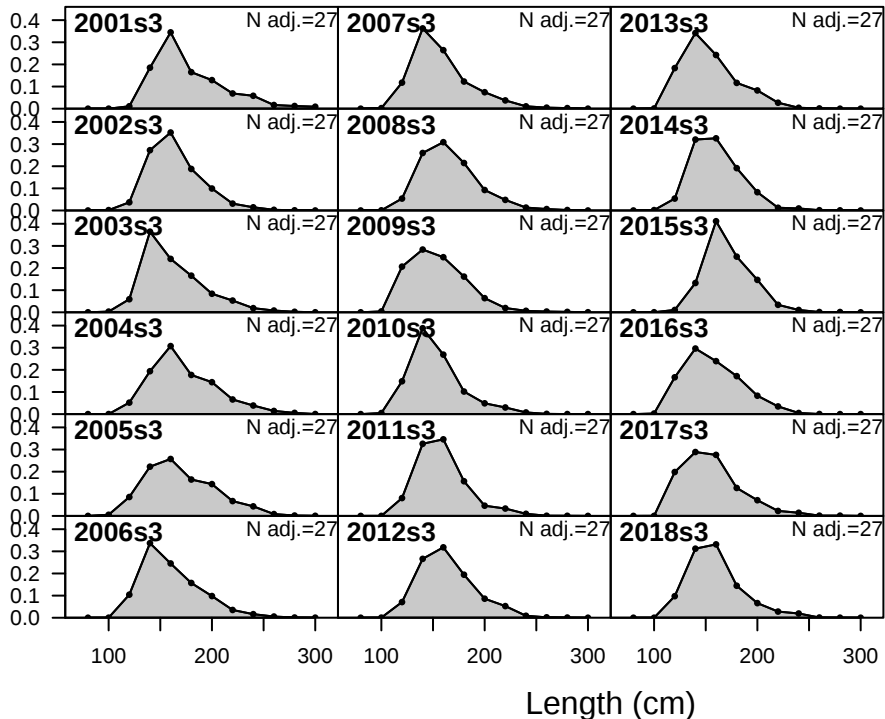


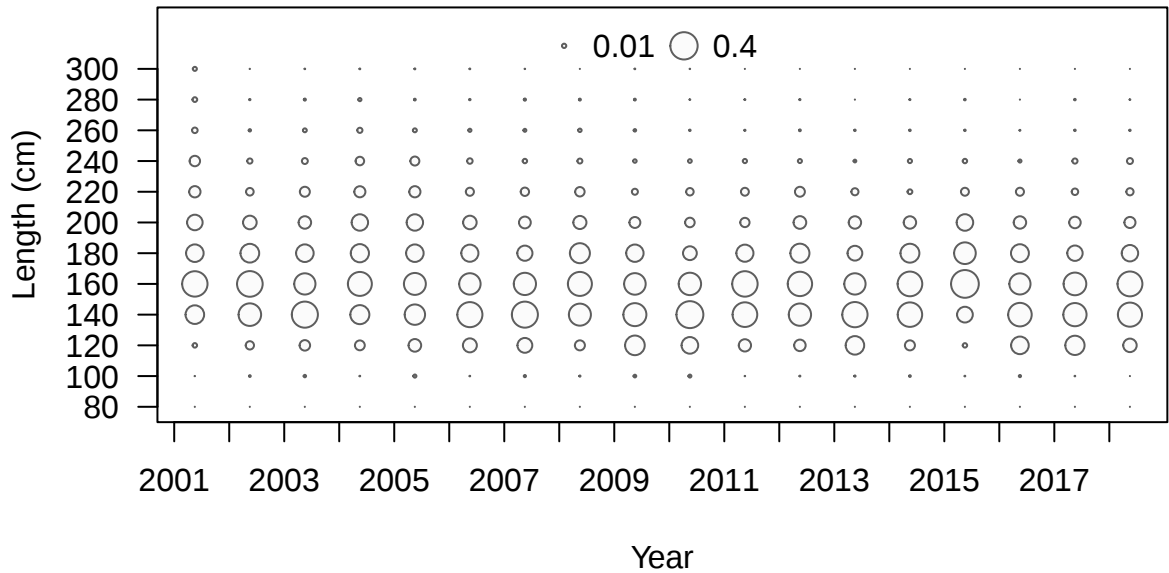


I1_Chile_Q2 (whole catch)

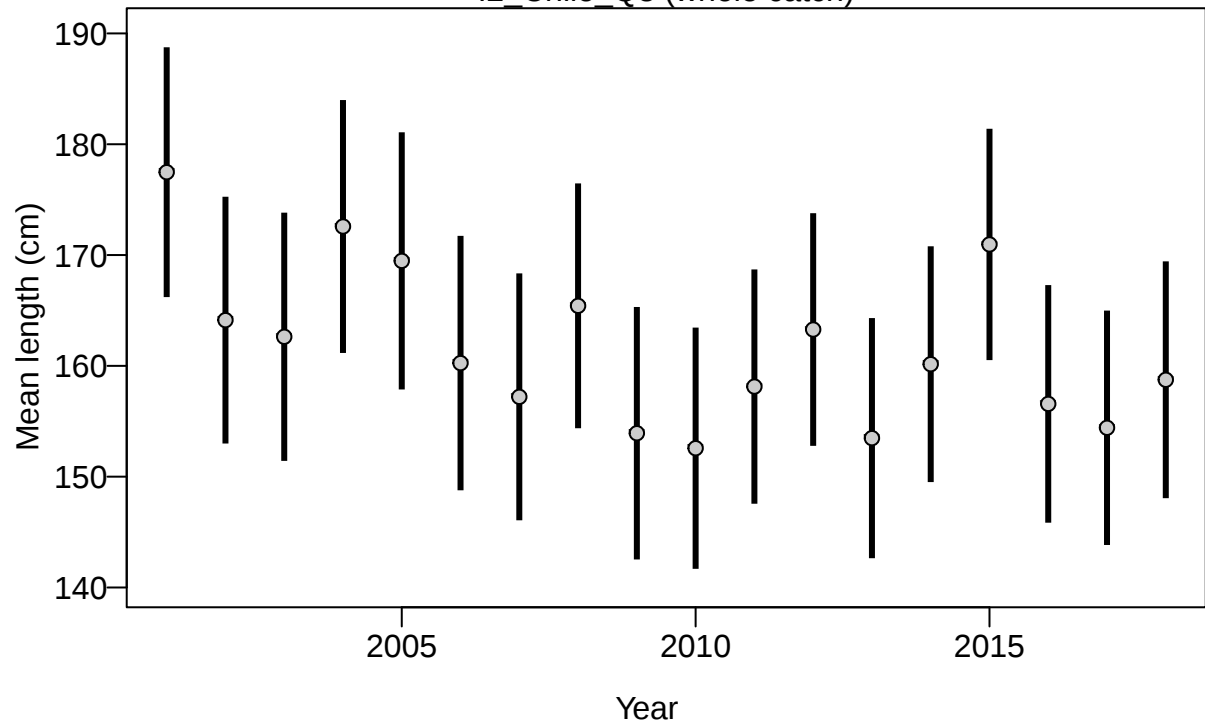


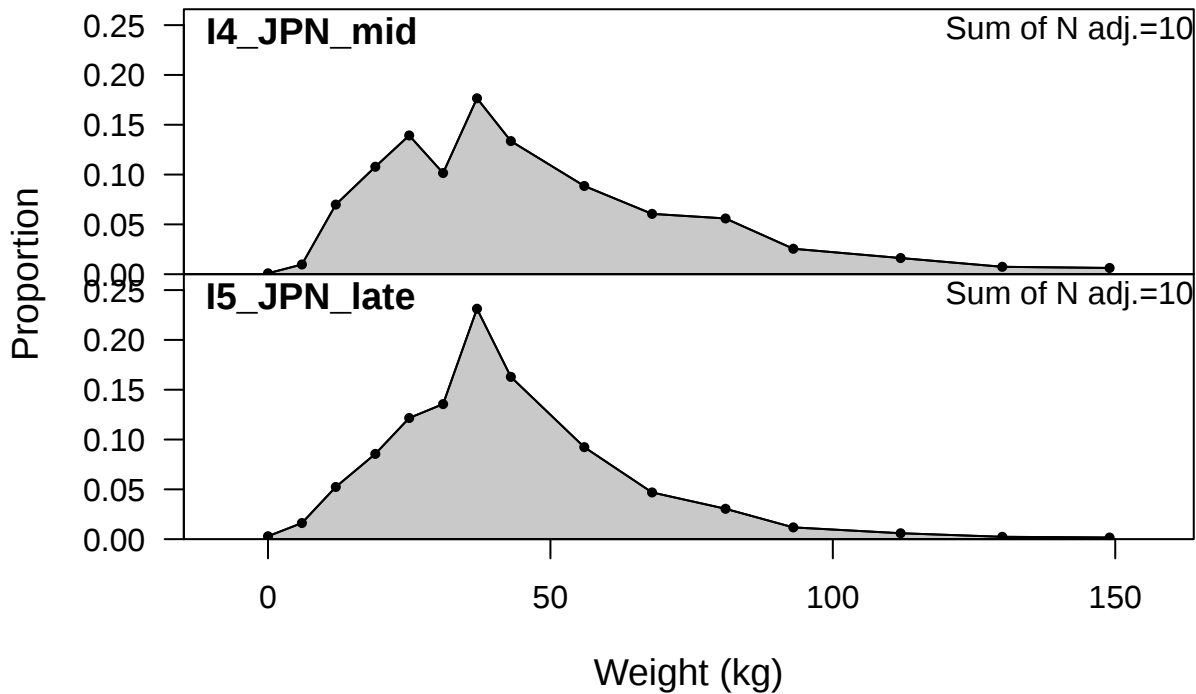
Proportion

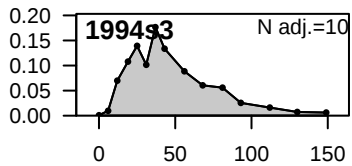




I2_Chile_Q3 (whole catch)

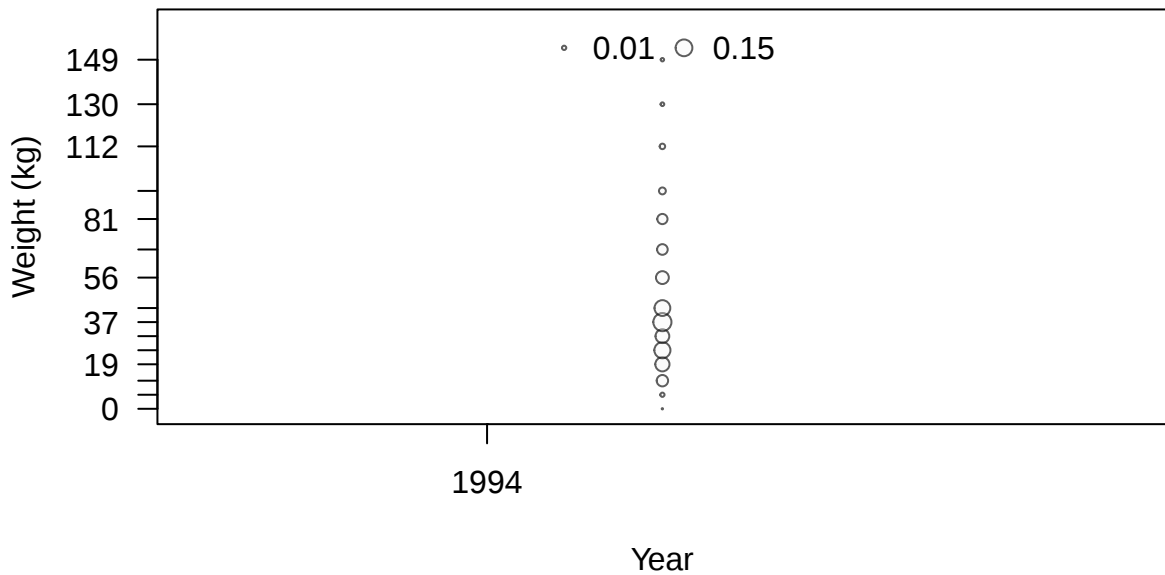


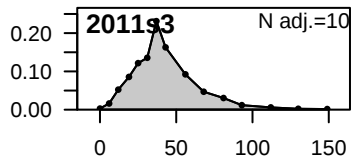




Proportion

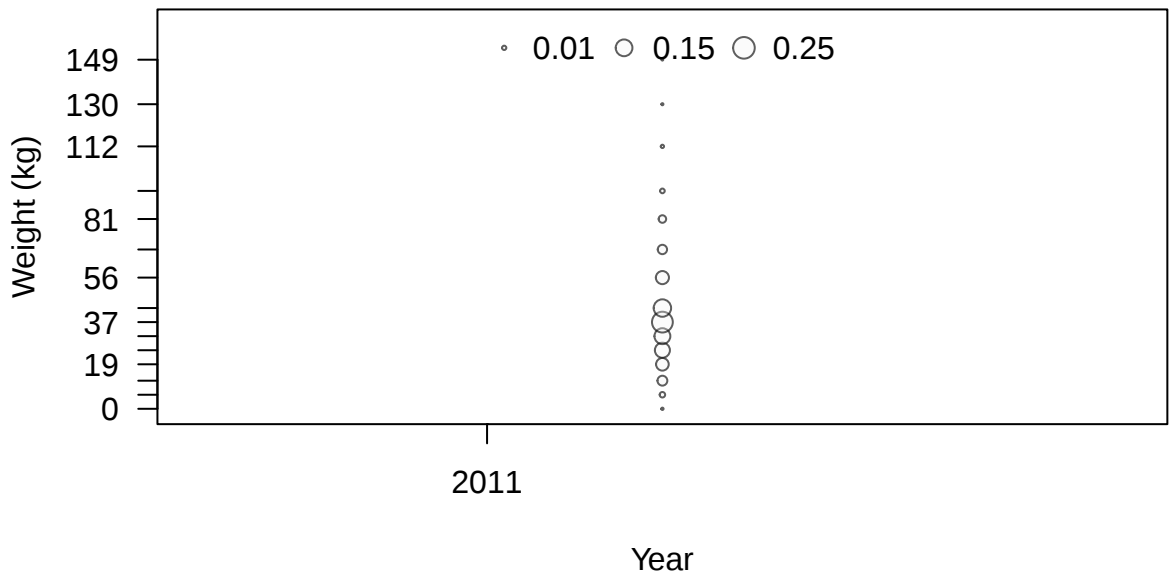
Weight (kg)





Proportion

Weight (kg)



Proportion

I6_ESP_Q1

Sum of N adj.=750

I8_ESP_Q3

Sum of N adj.=750

I7_ESP_Q2

Sum of N adj.=750

I9_ESP_Q4

Sum of N adj.=750

Length (cm)

0.15
0.10
0.05
0.00
0.00
0.05
0.10
0.15

50

100

150

200

250

50

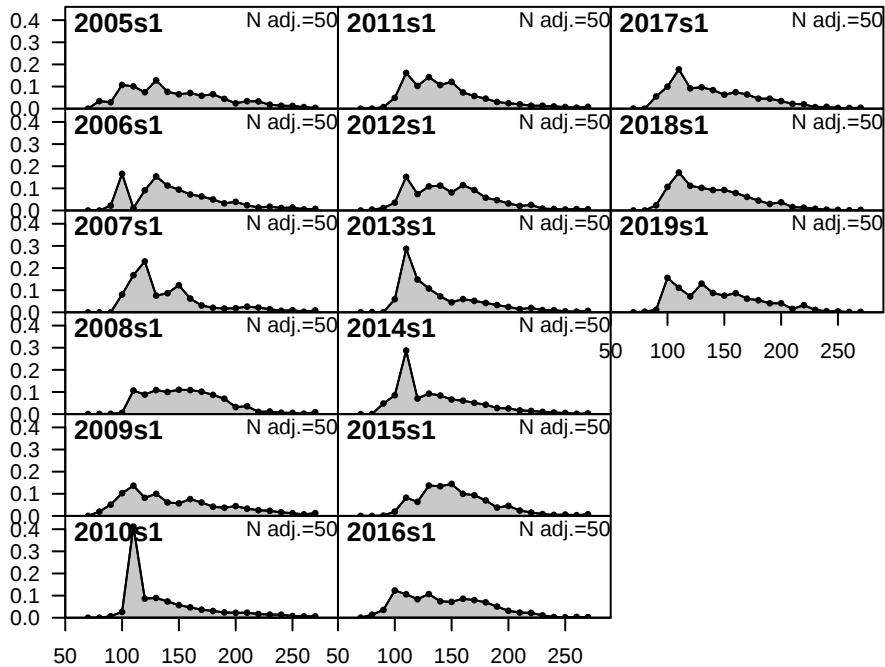
100

150

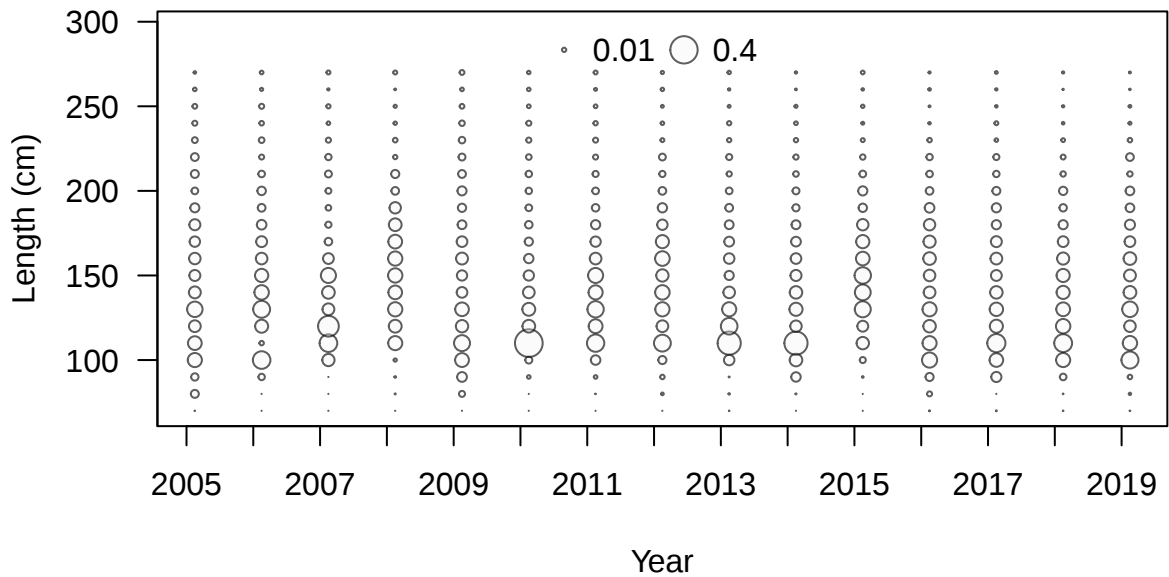
200

250

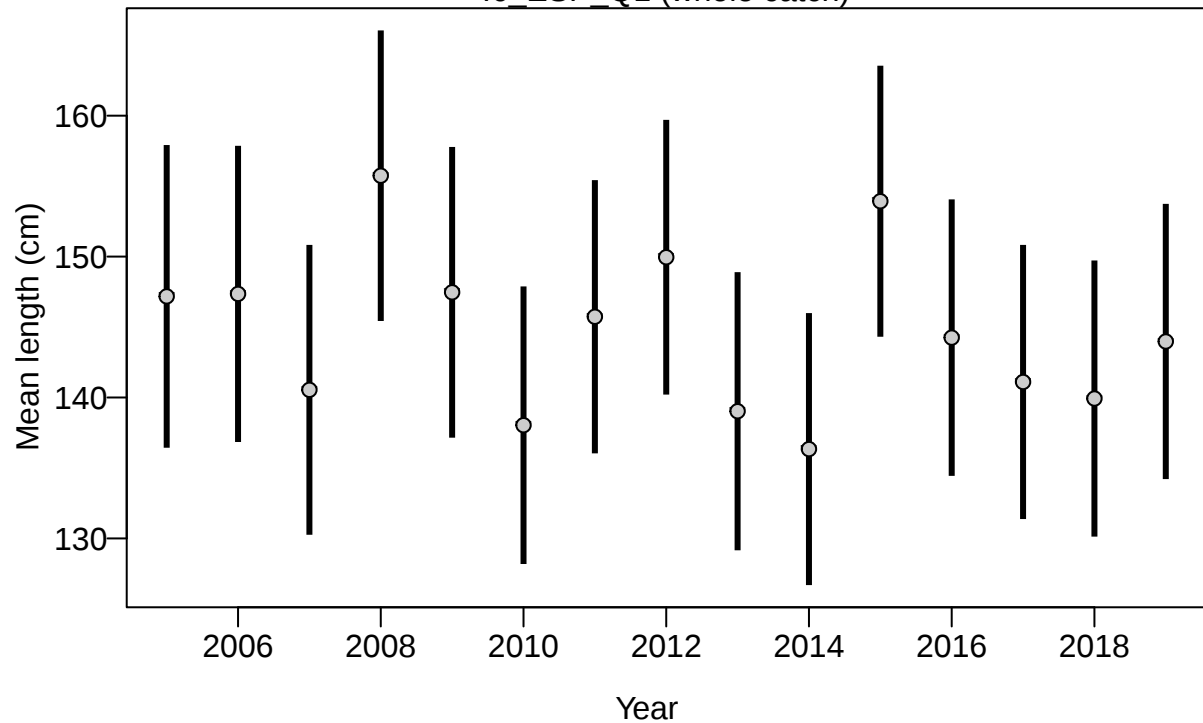
Proportion



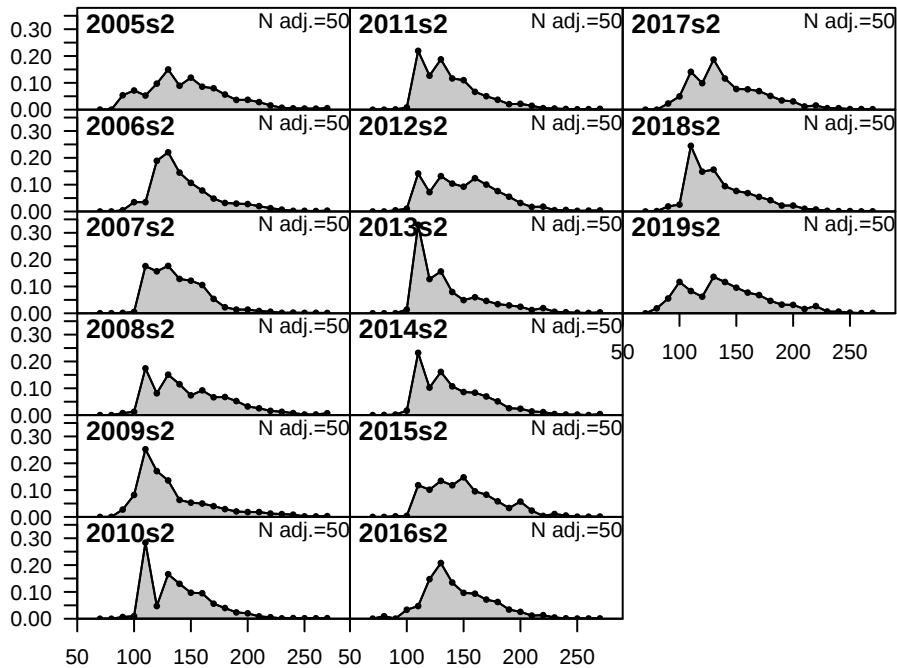
Length (cm)



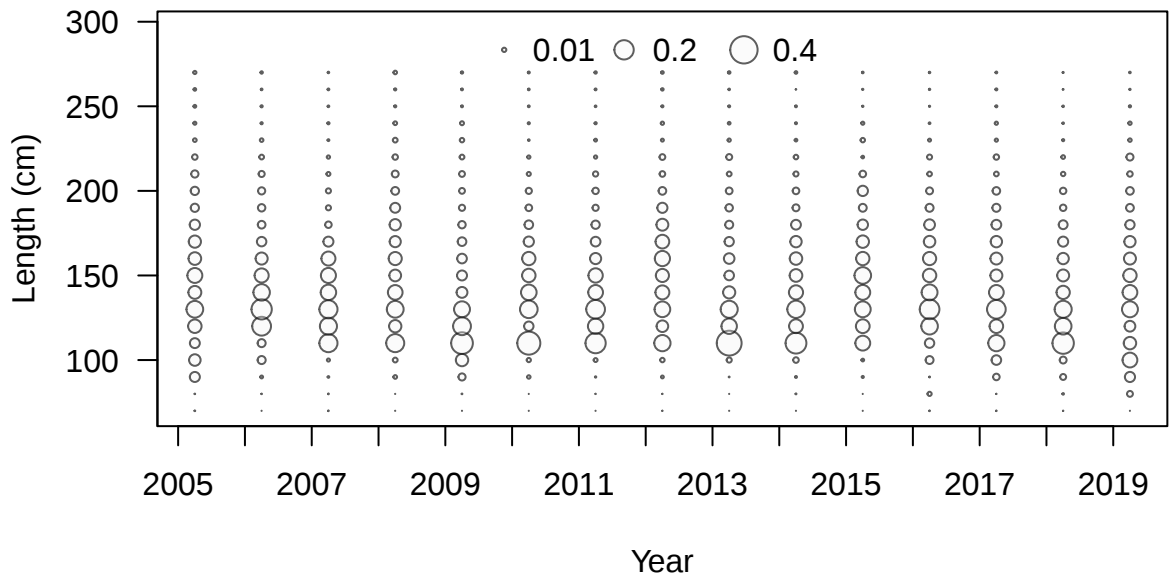
I6_ESP_Q1 (whole catch)



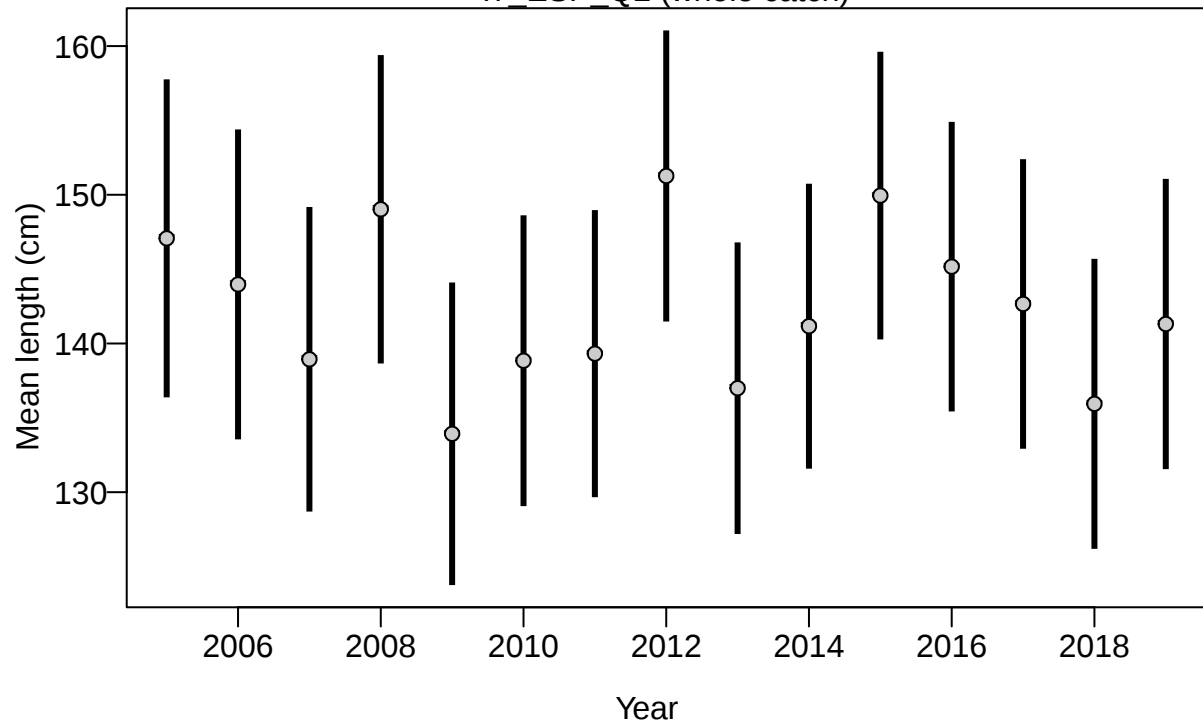
Proportion



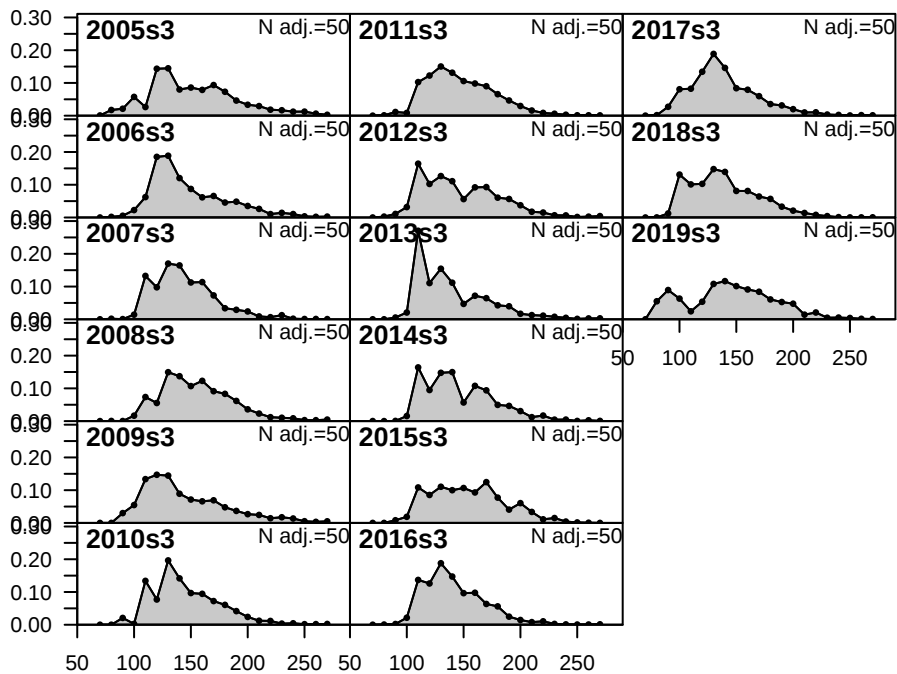
Length (cm)



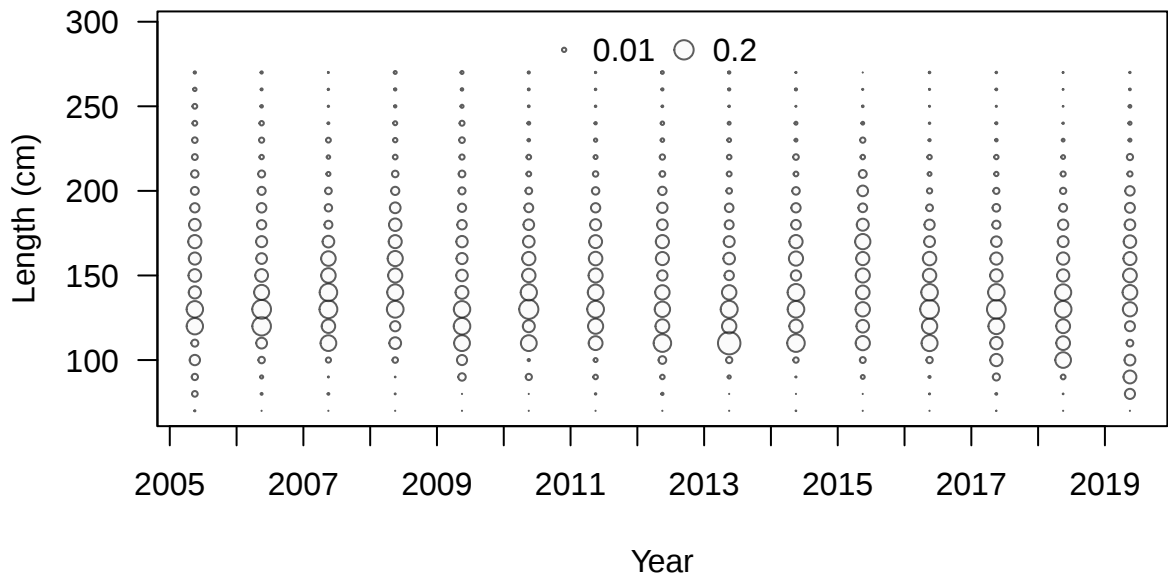
I7_ESP_Q2 (whole catch)



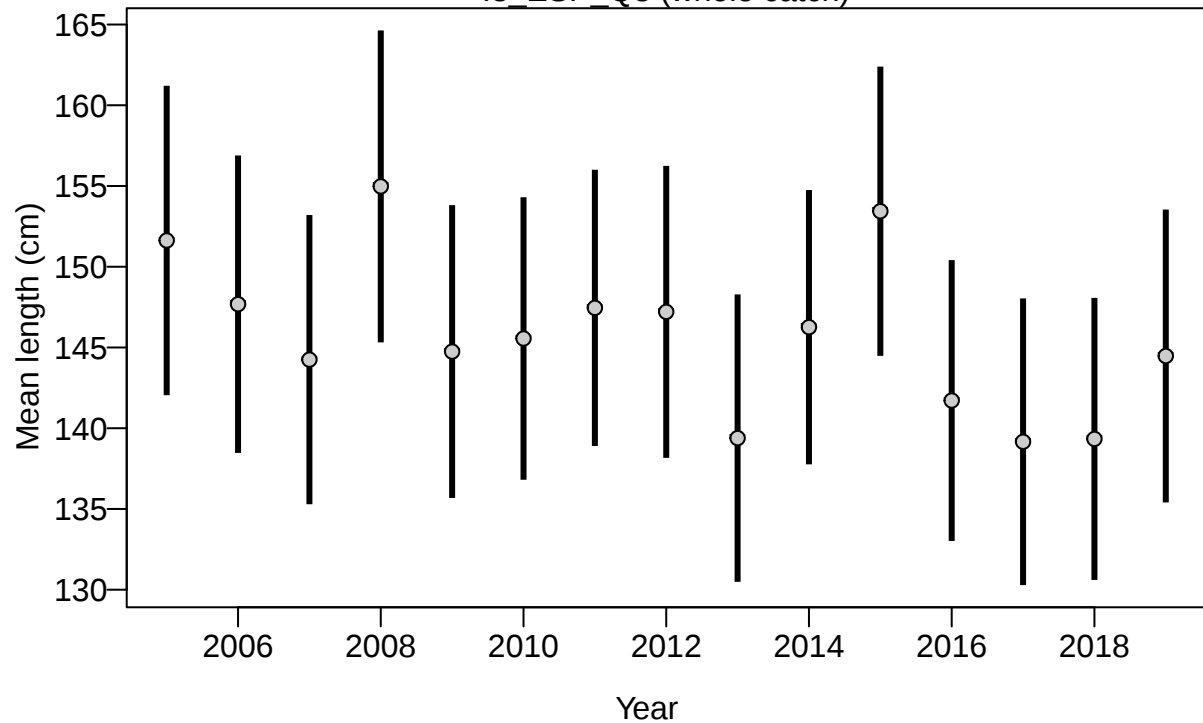
Proportion



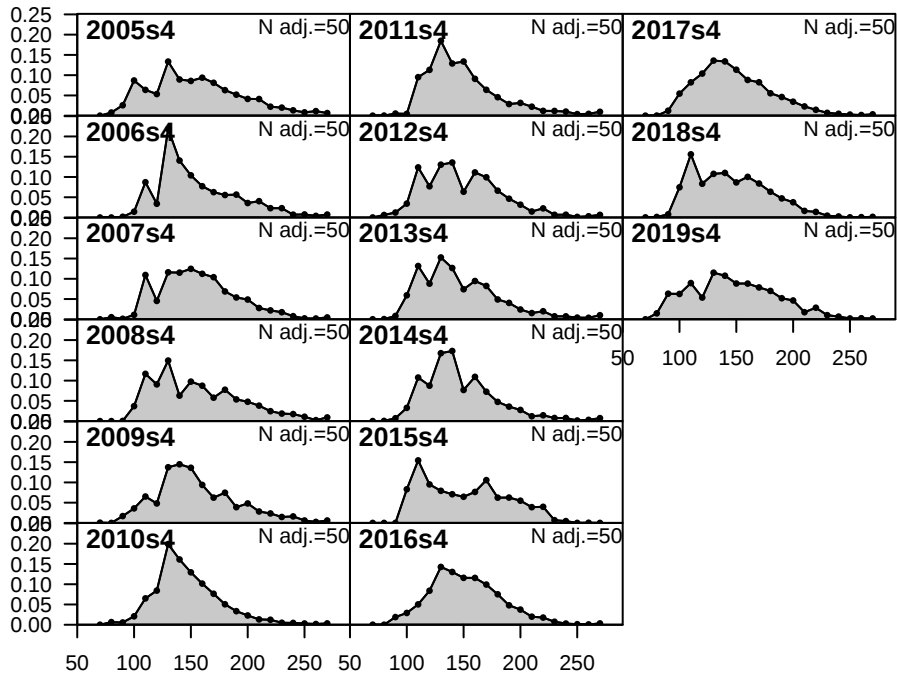
Length (cm)



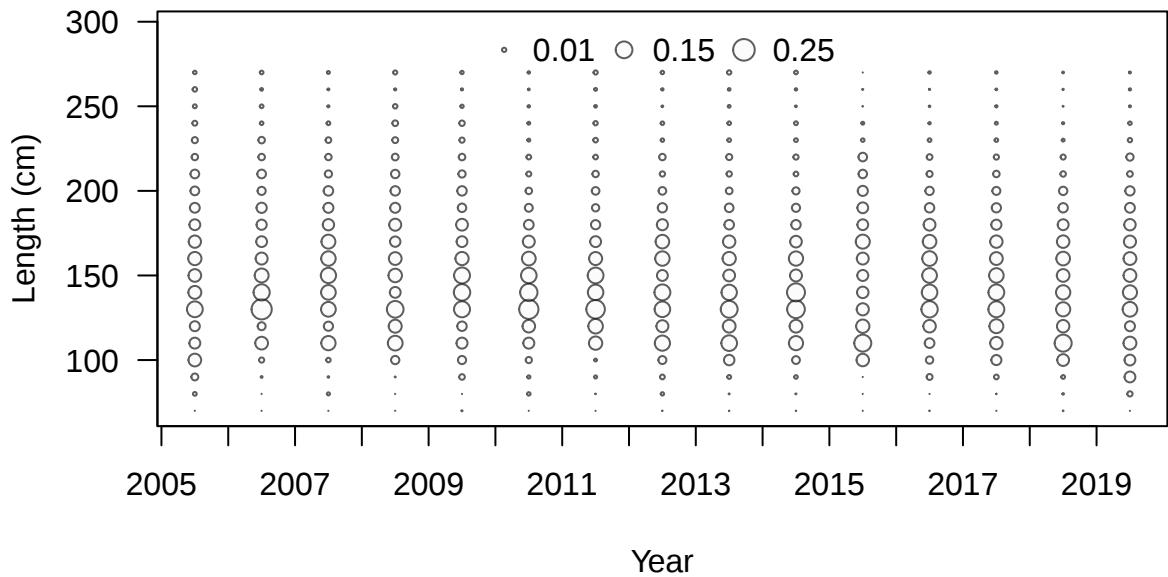
I8_ESP_Q3 (whole catch)



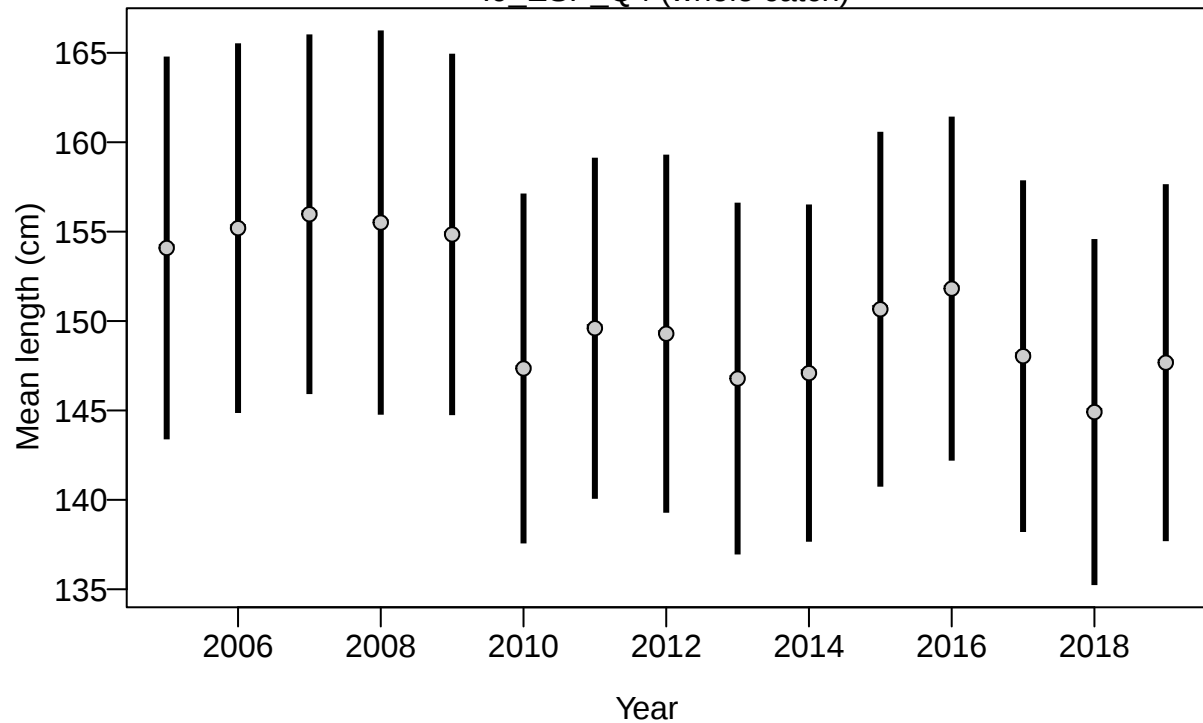
Proportion

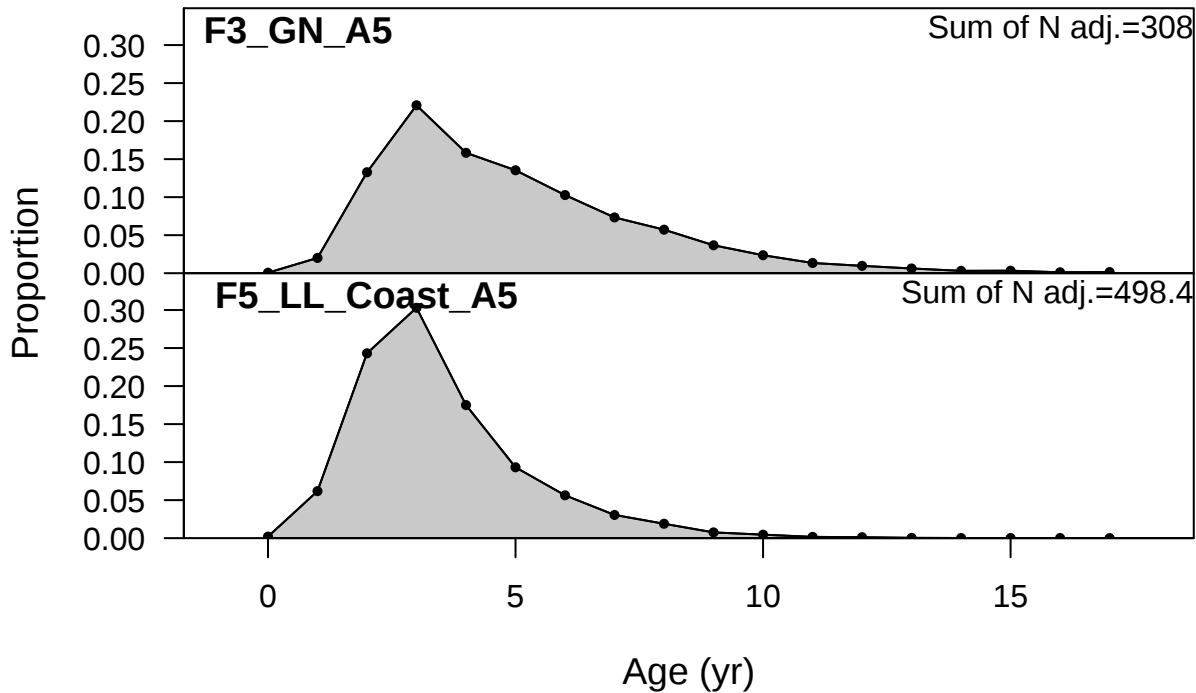


Length (cm)

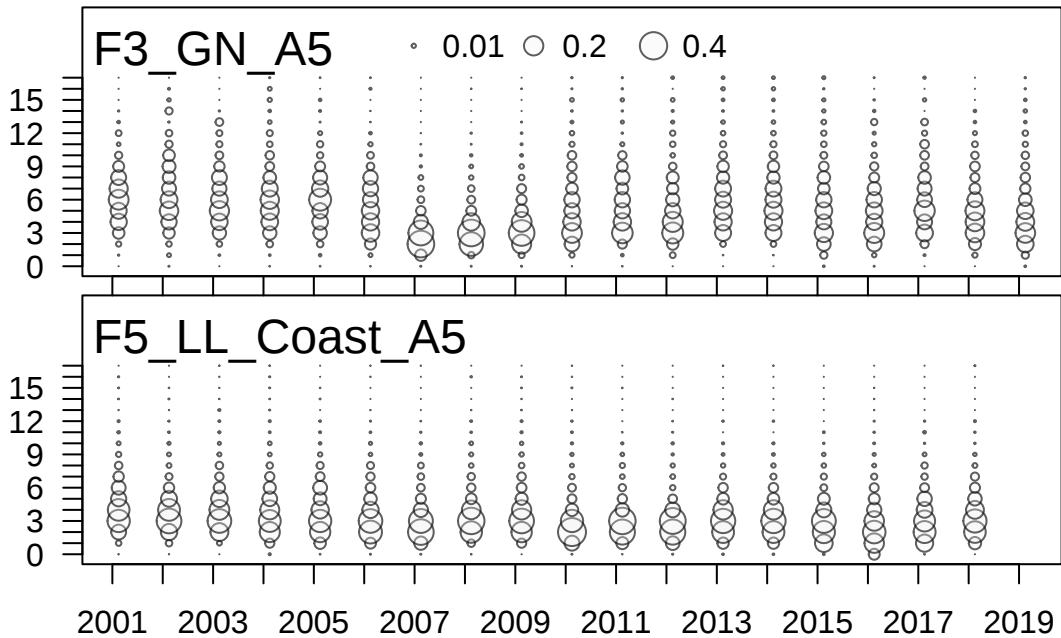


I9_ESP_Q4 (whole catch)



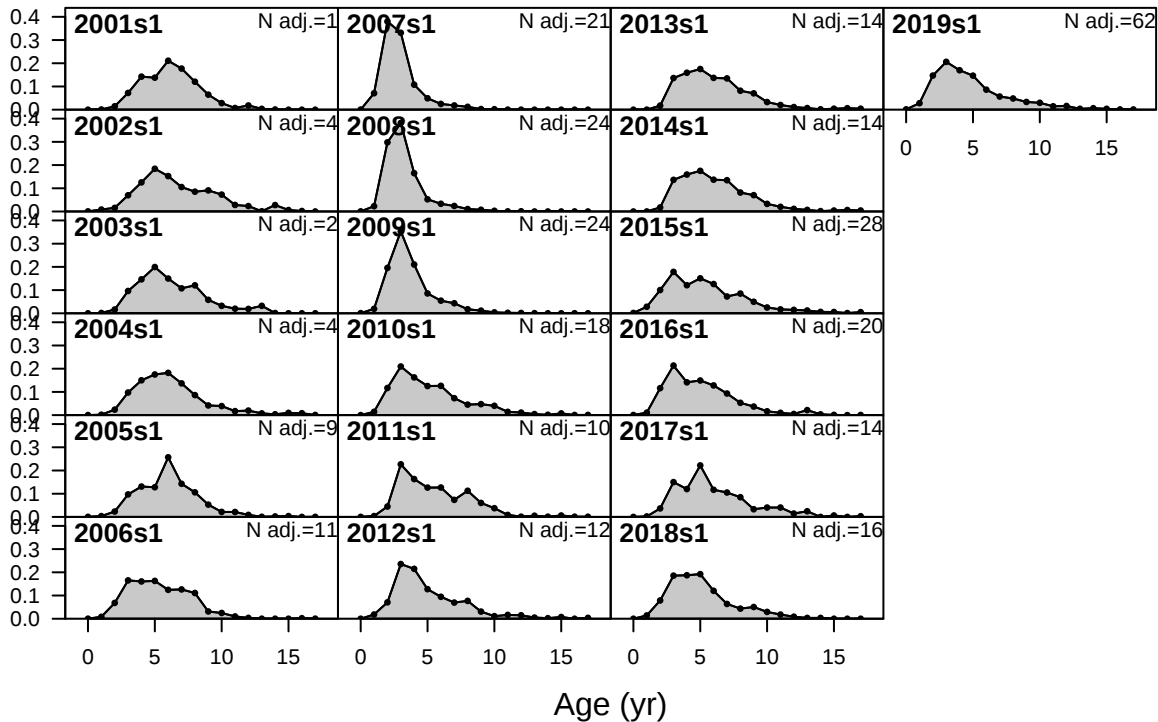


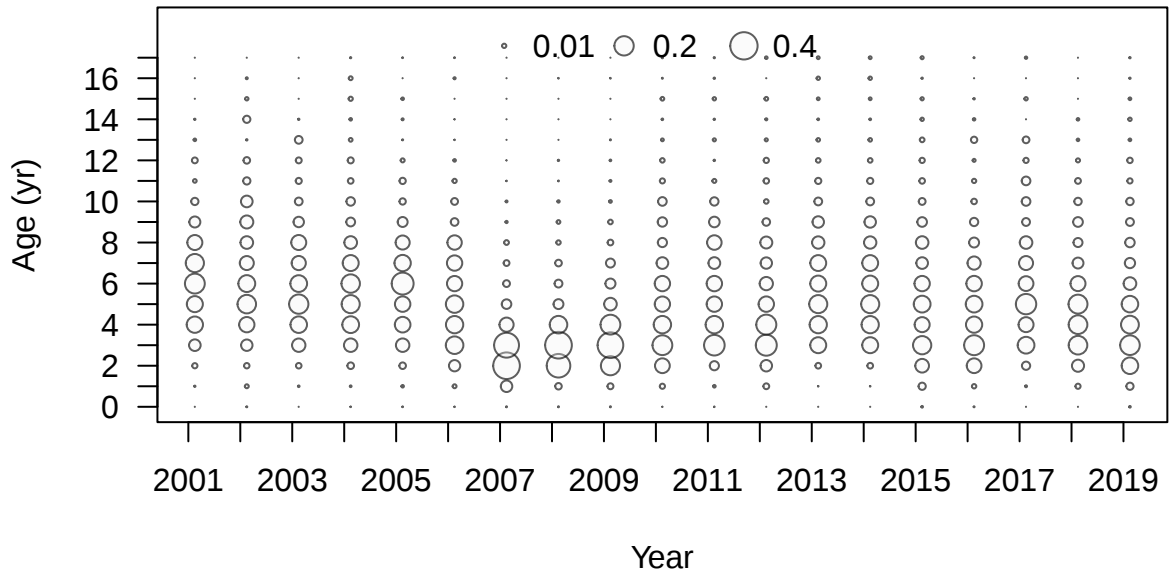
Age (yr)



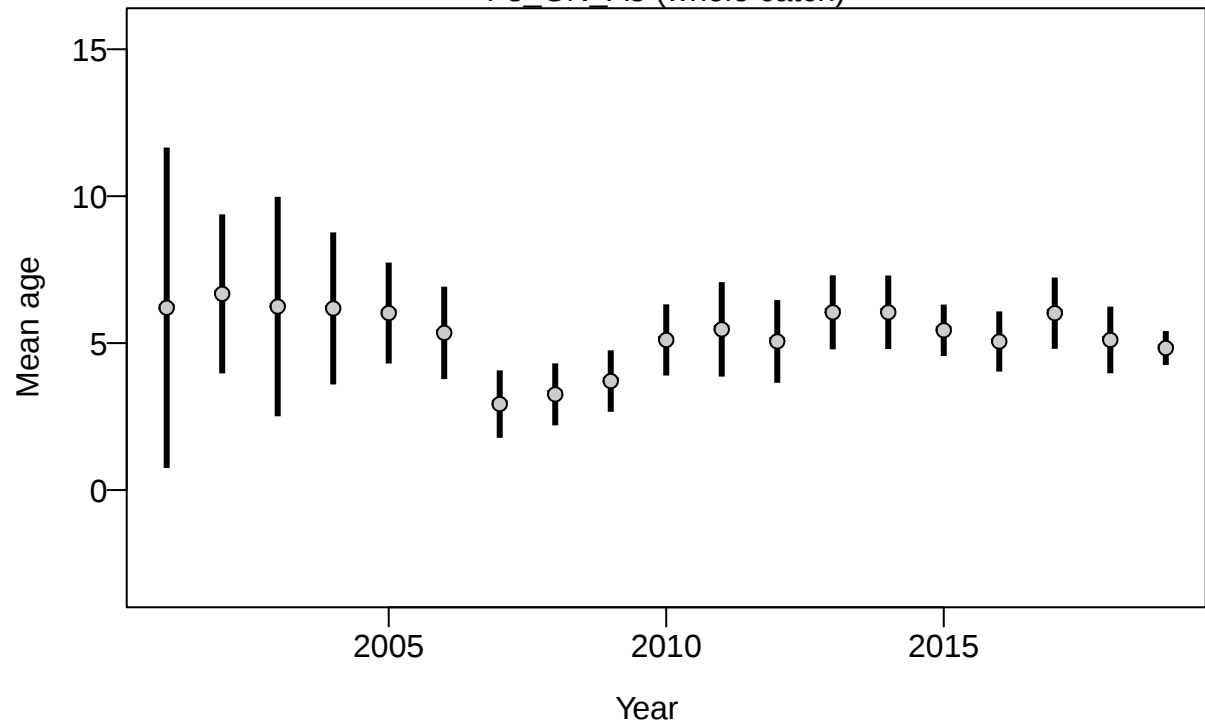
Year

Proportion

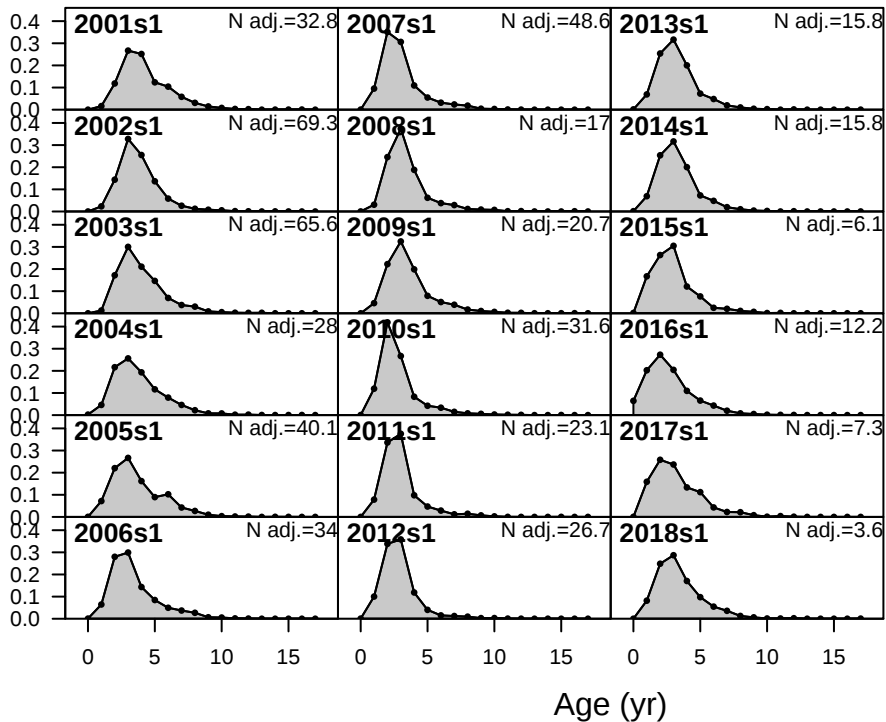


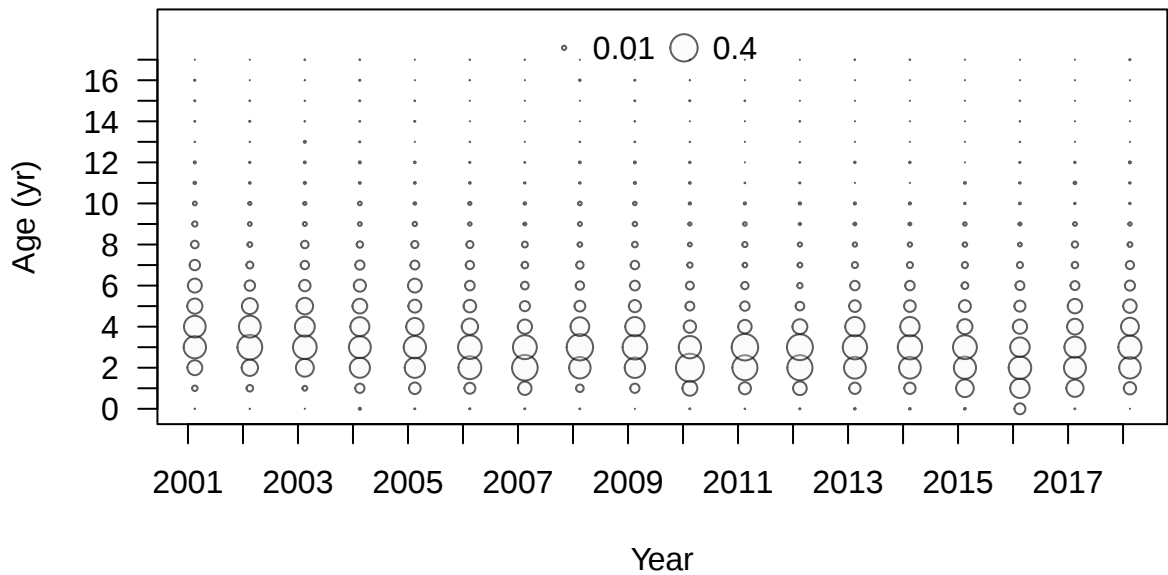


F3_GN_A5 (whole catch)

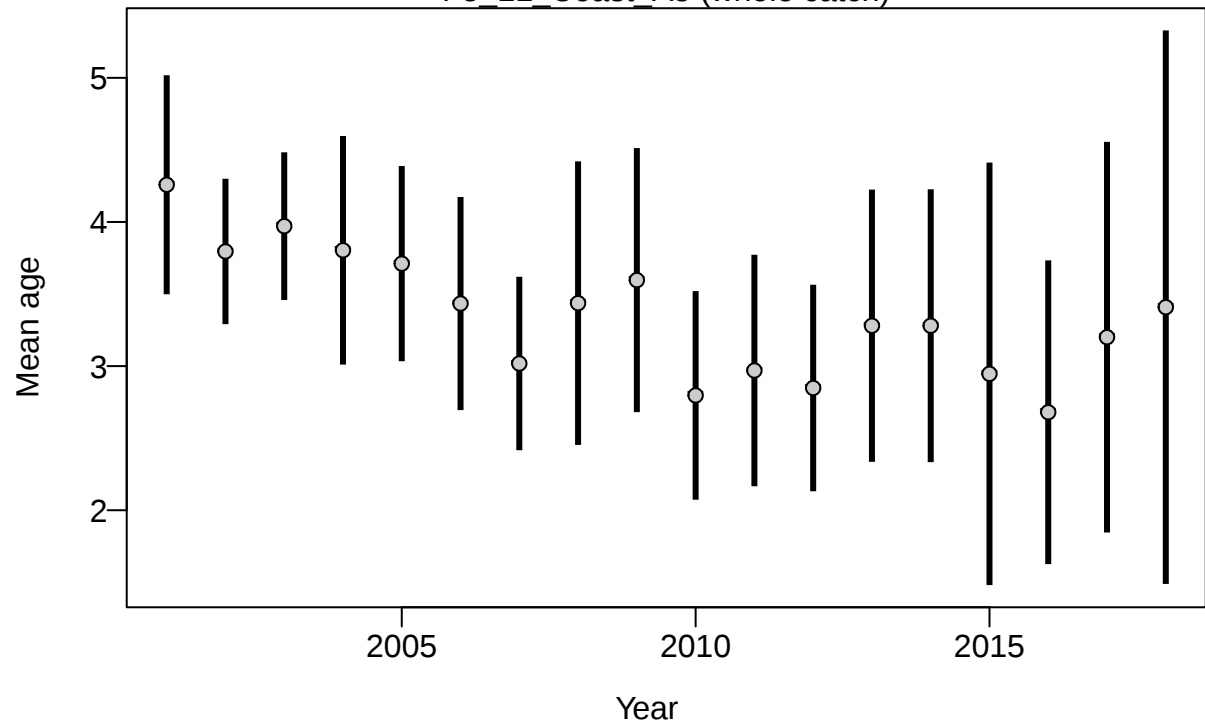


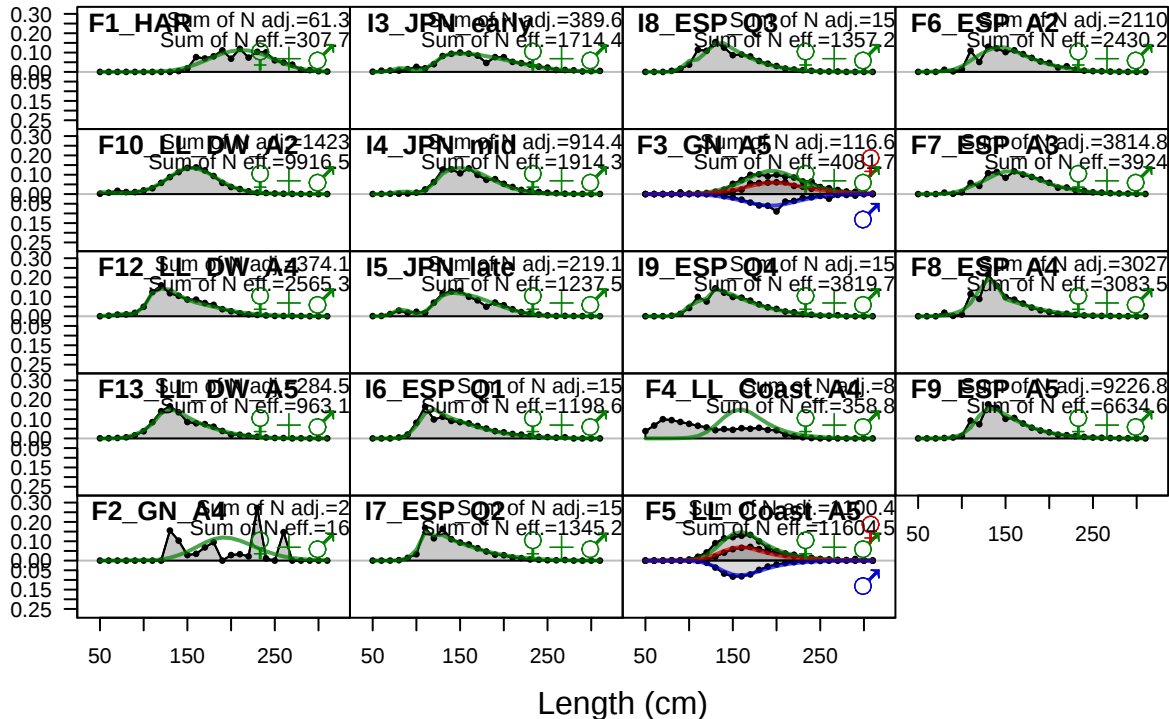
Proportion

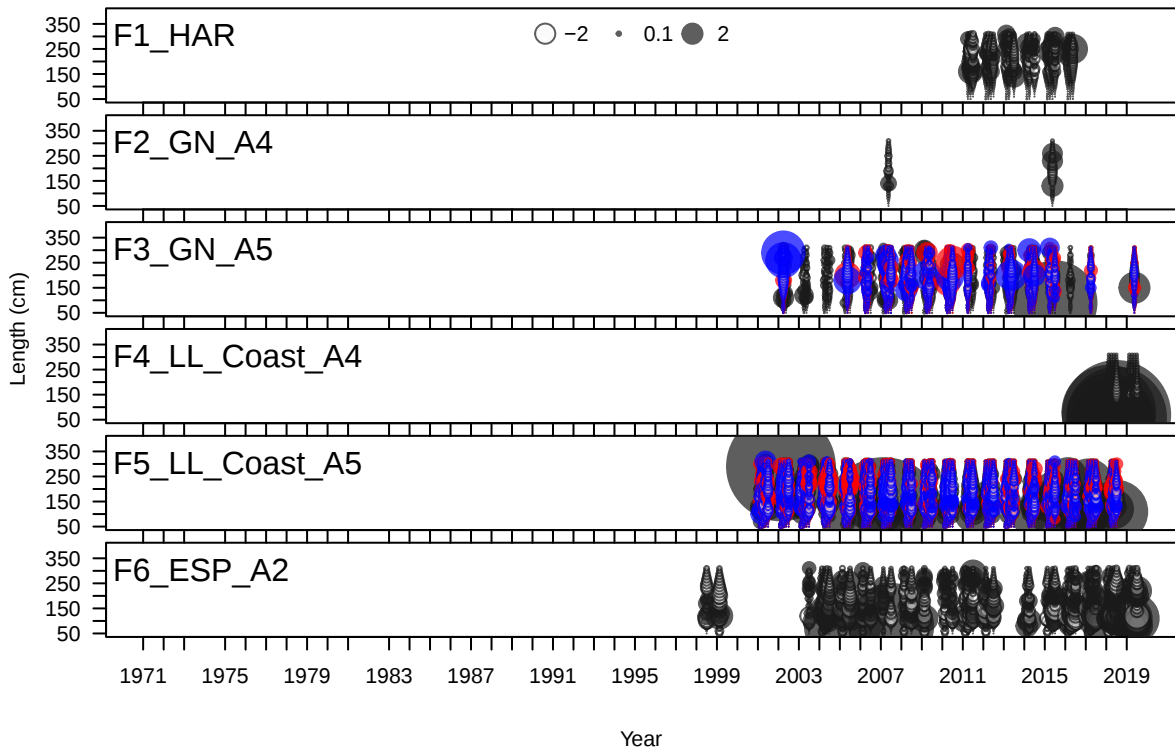


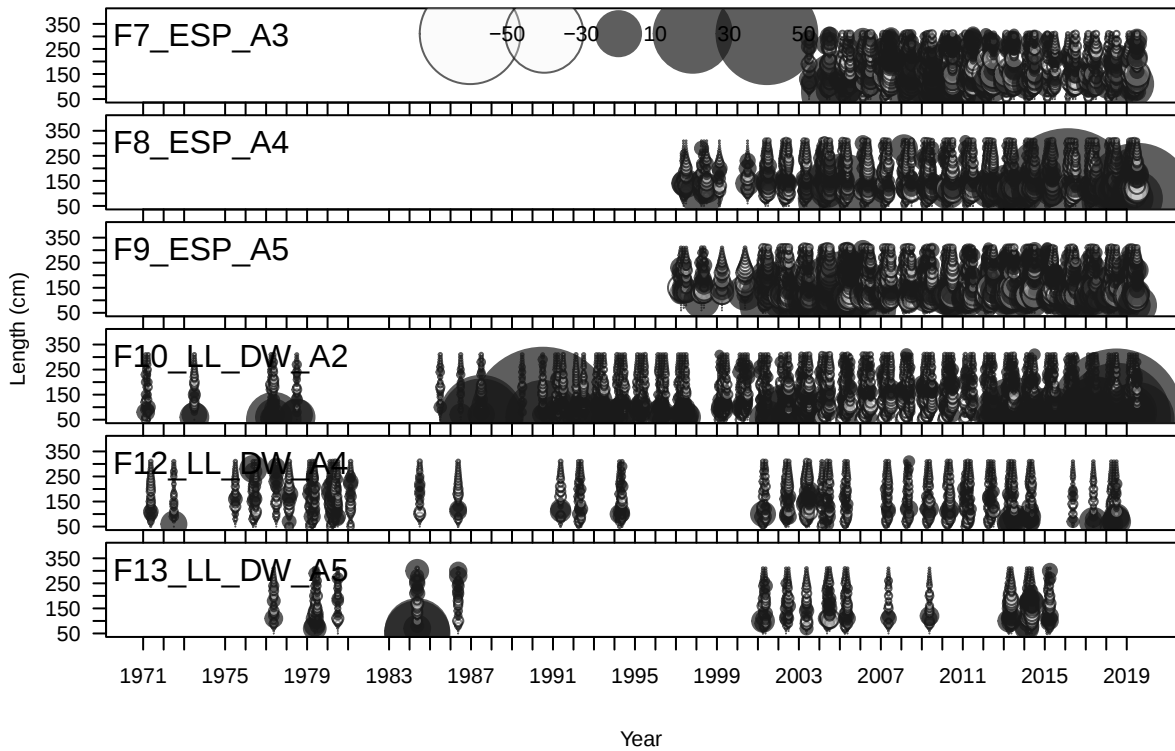


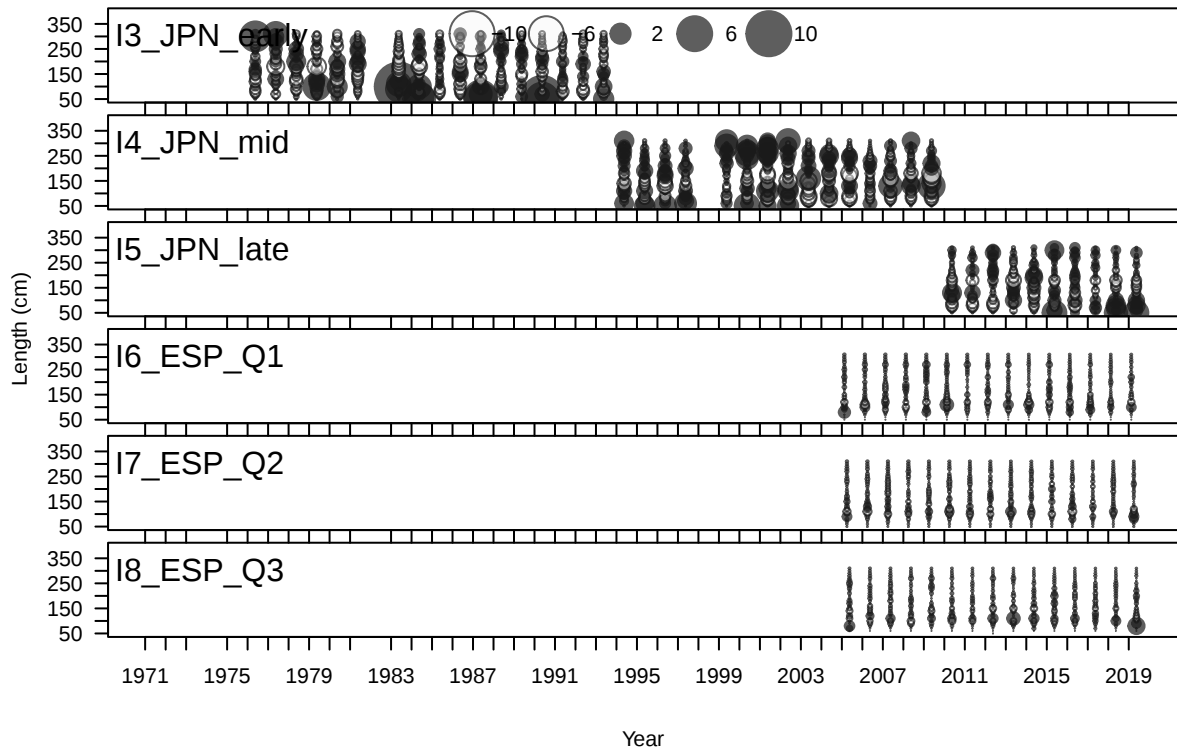
F5_LL_Coast_A5 (whole catch)



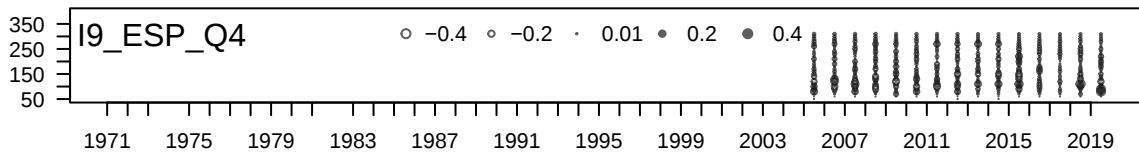




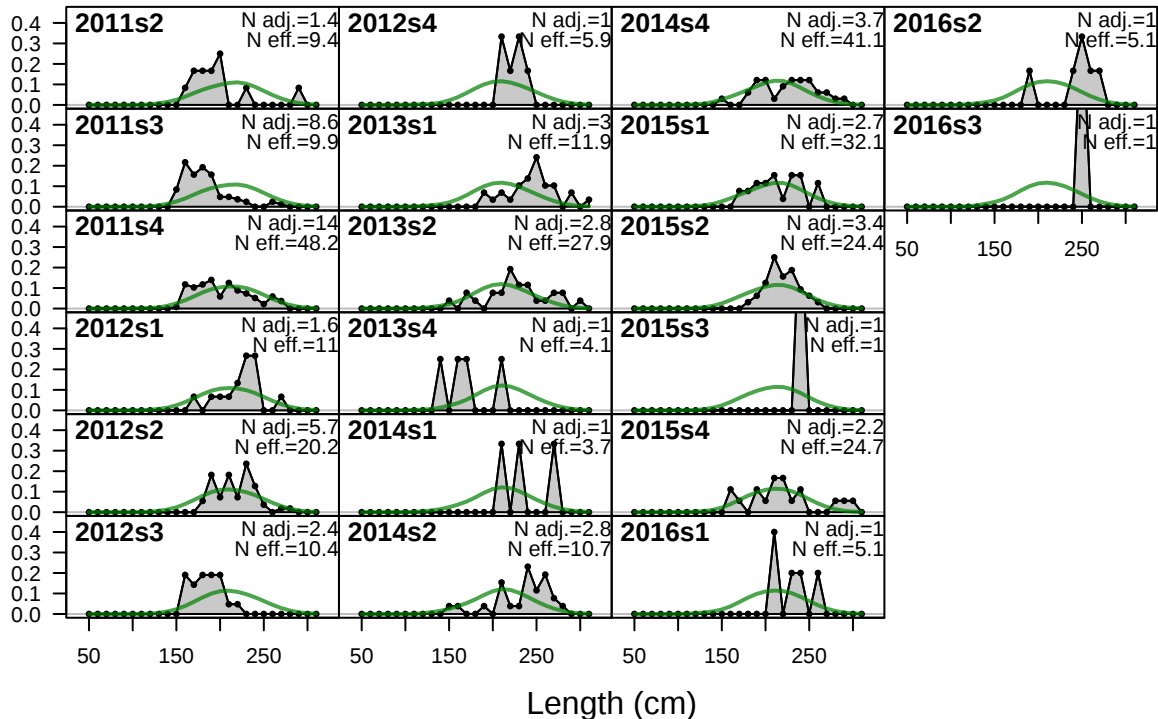


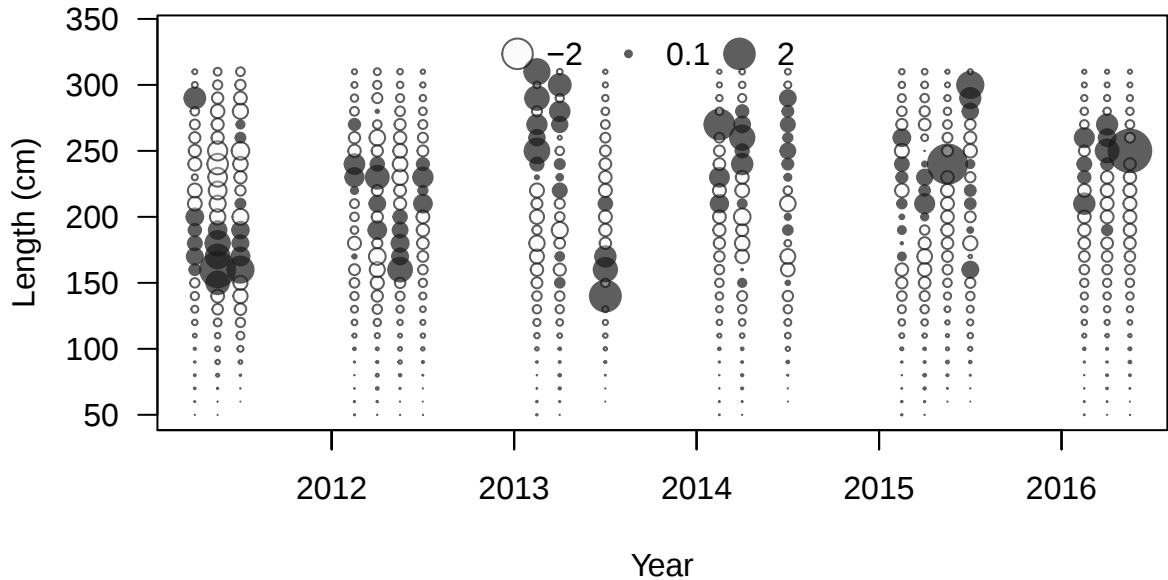


Length (cm)

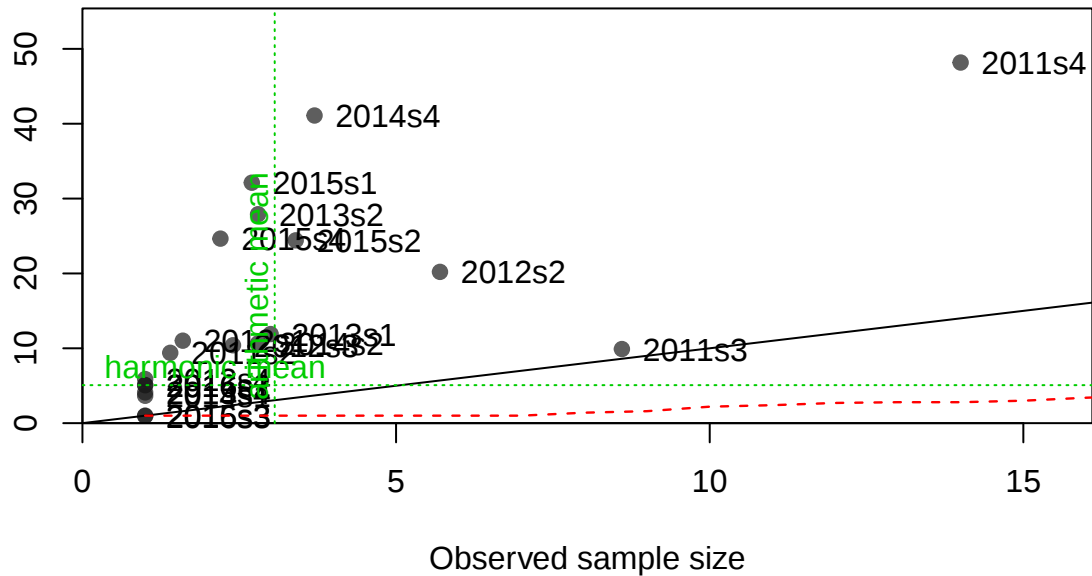


Proportion

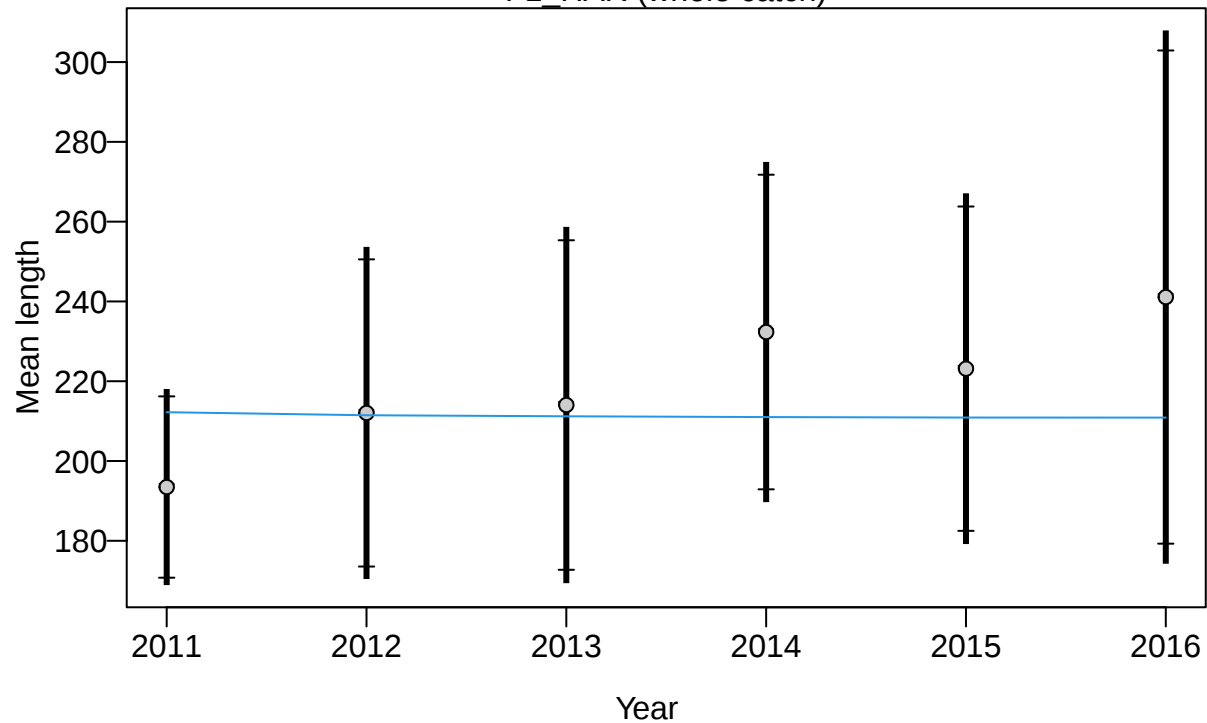




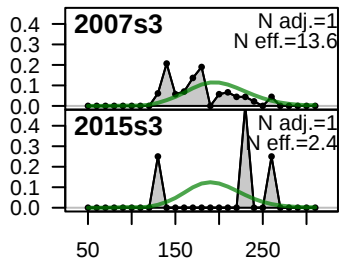
Effective sample size



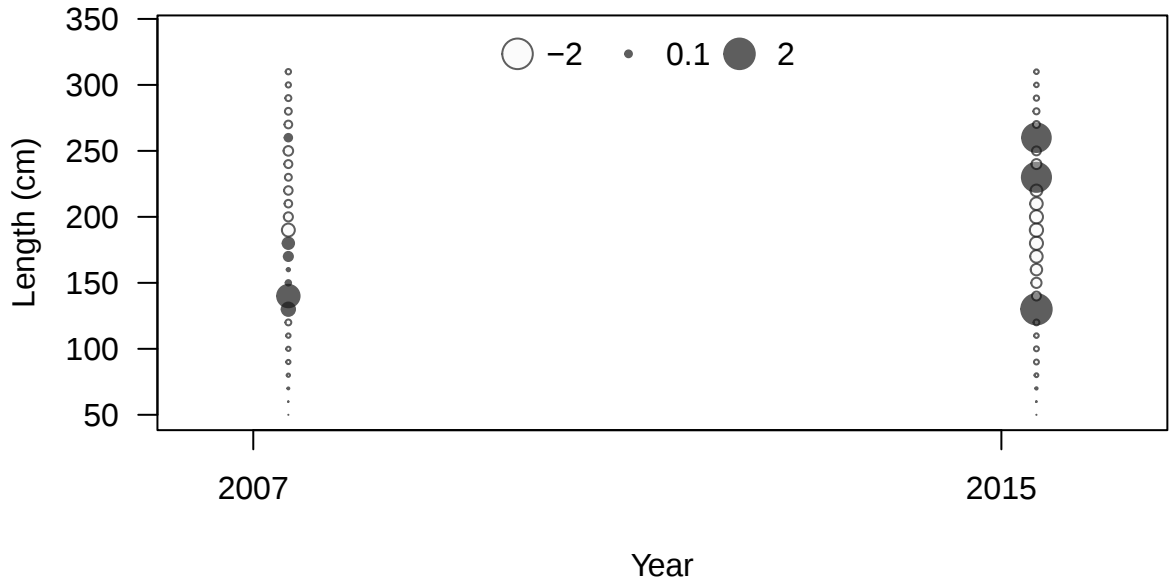
F1_HAR (whole catch)



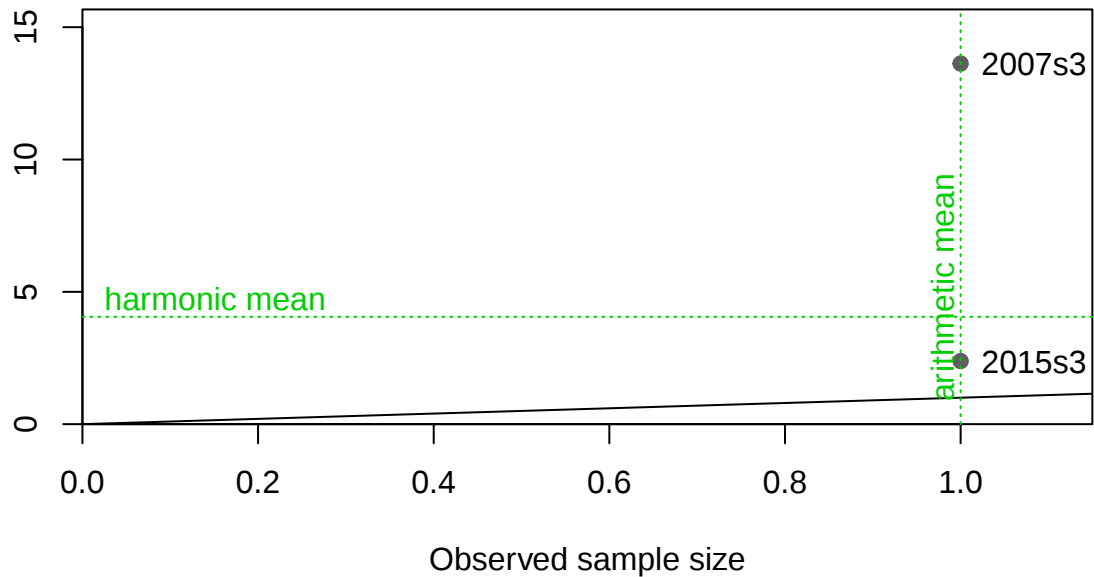
Proportion



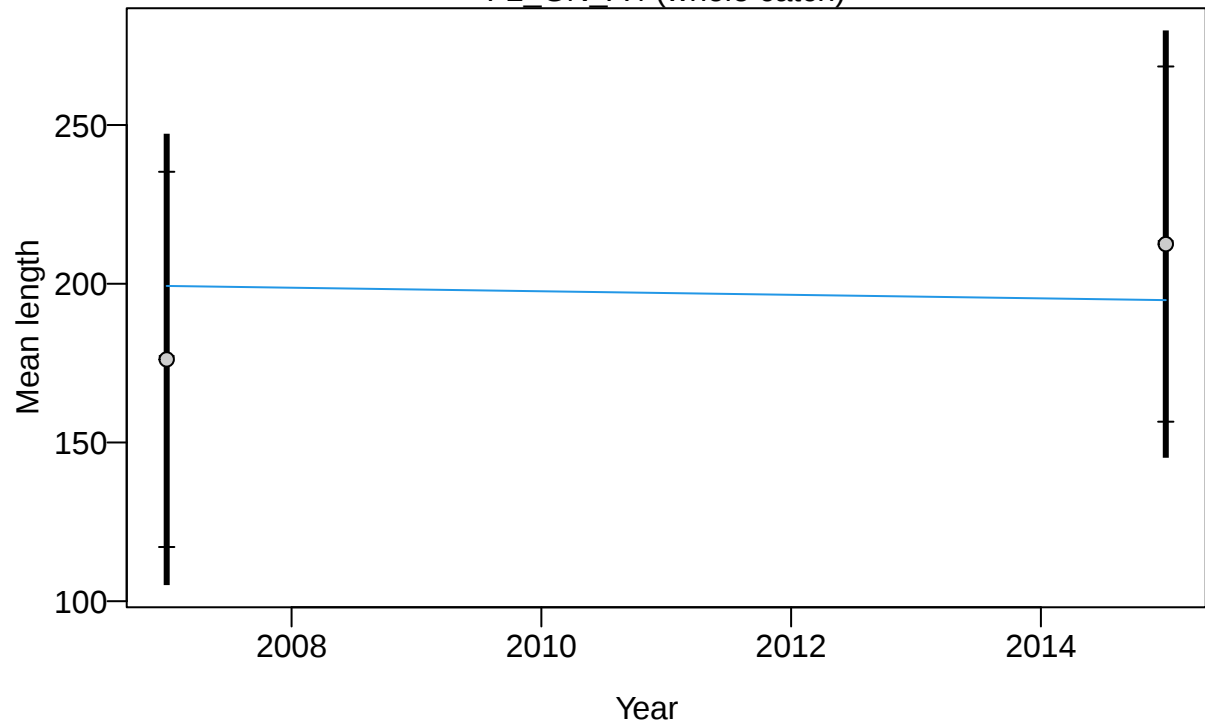
Length (cm)



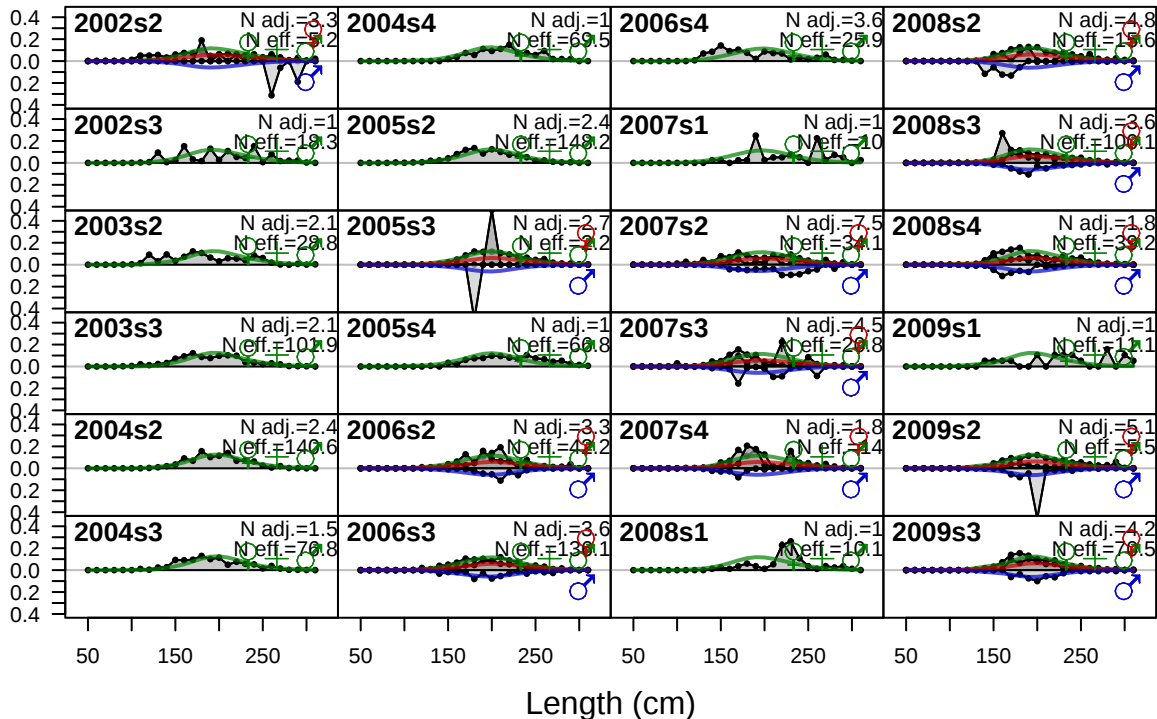
Effective sample size



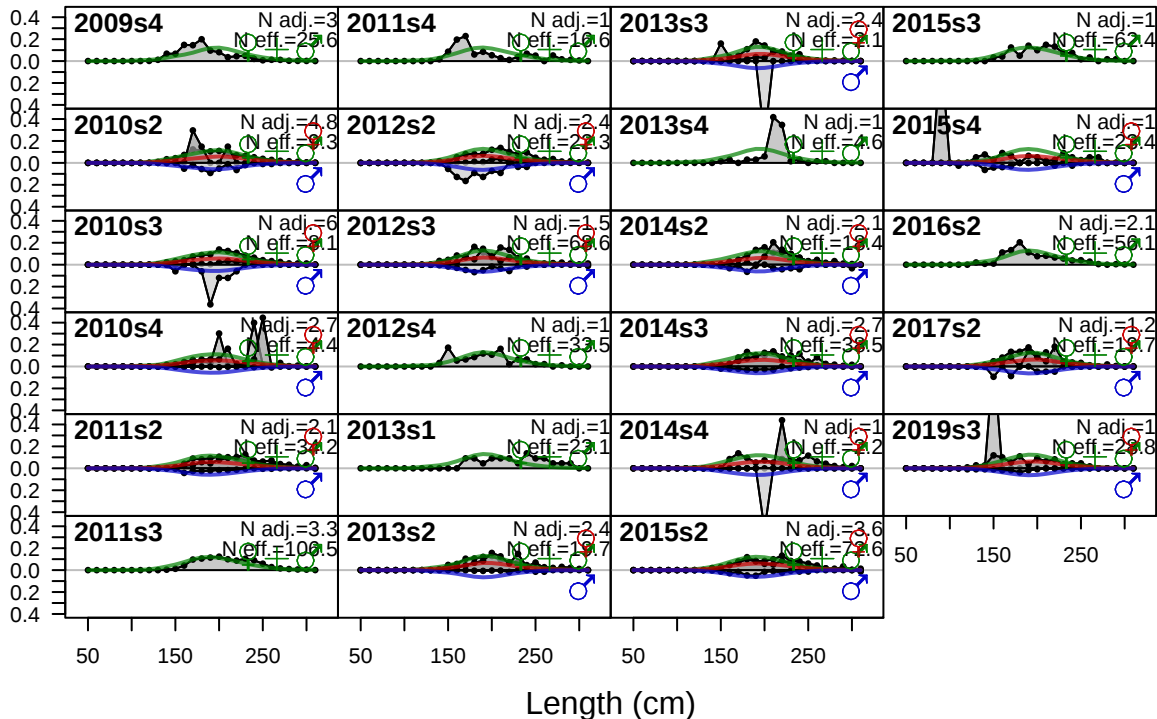
F2_GN_A4 (whole catch)

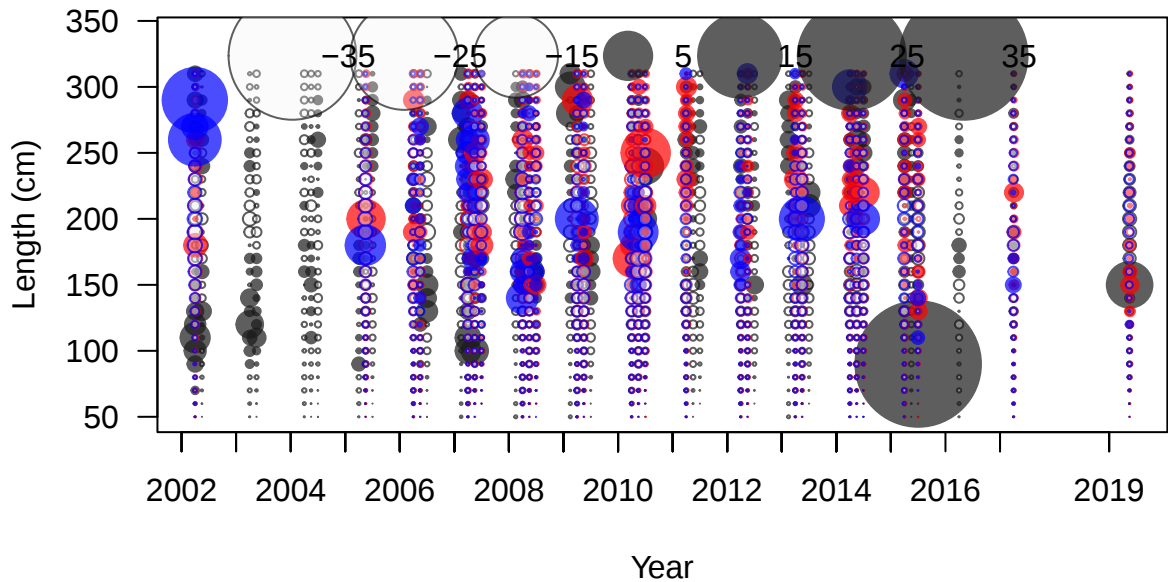


Proportion

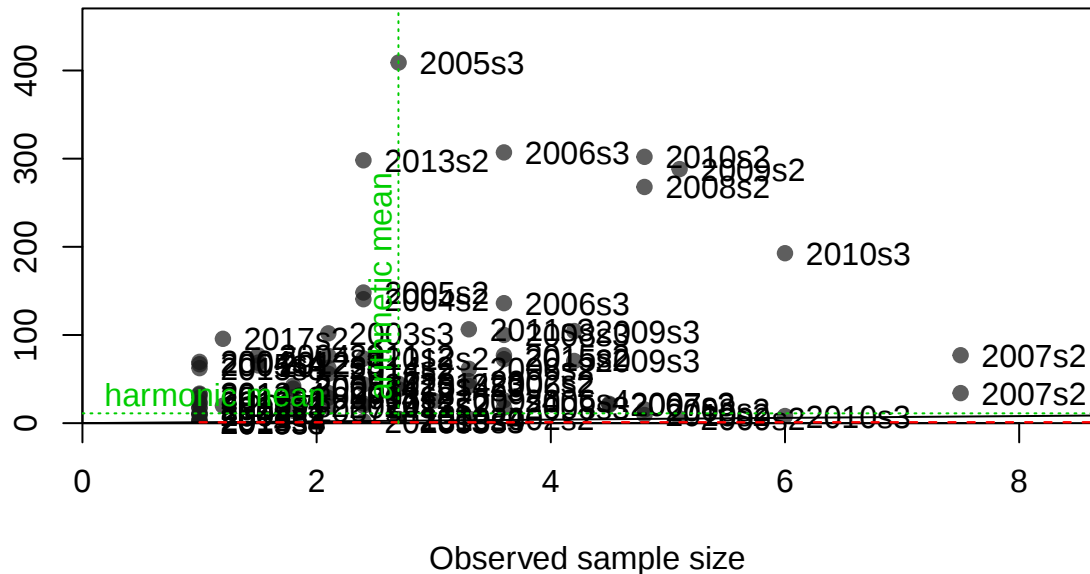


Proportion

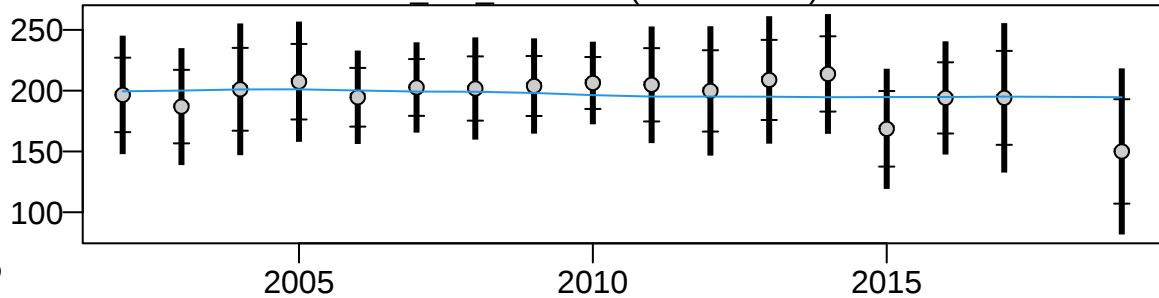




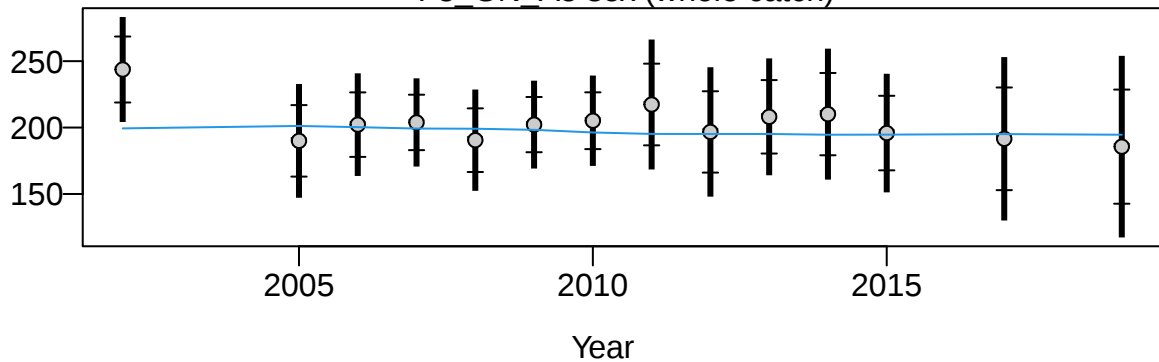
Effective sample size



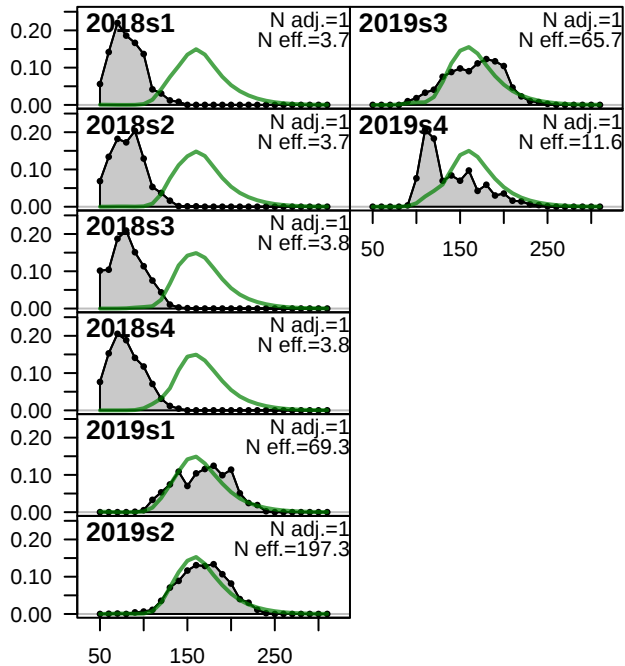
F3_GN_A5 comb (whole catch)



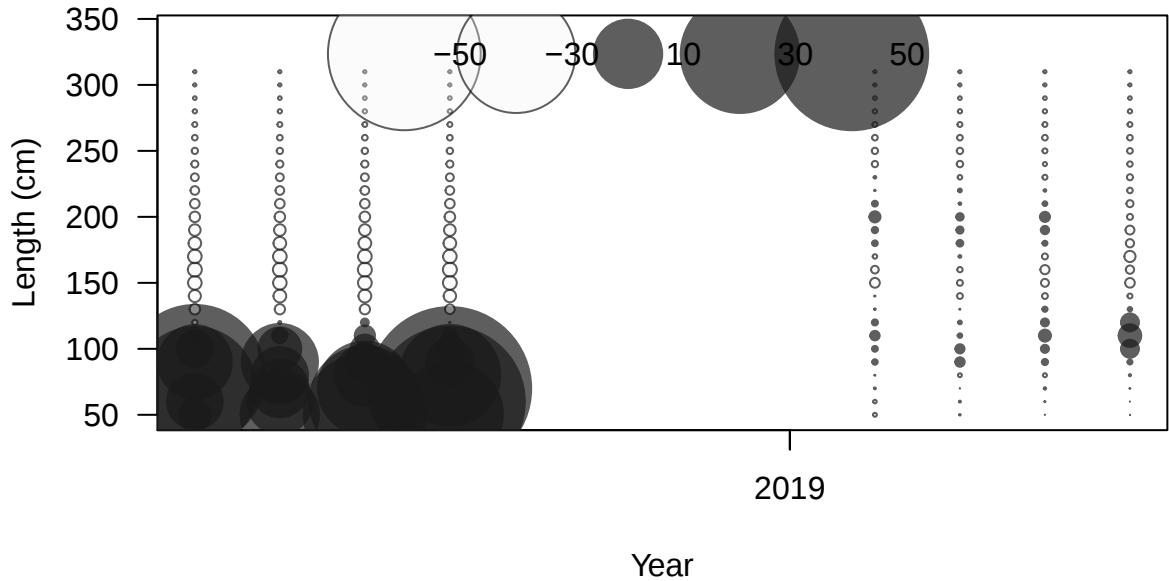
F3_GN_A5 sex (whole catch)



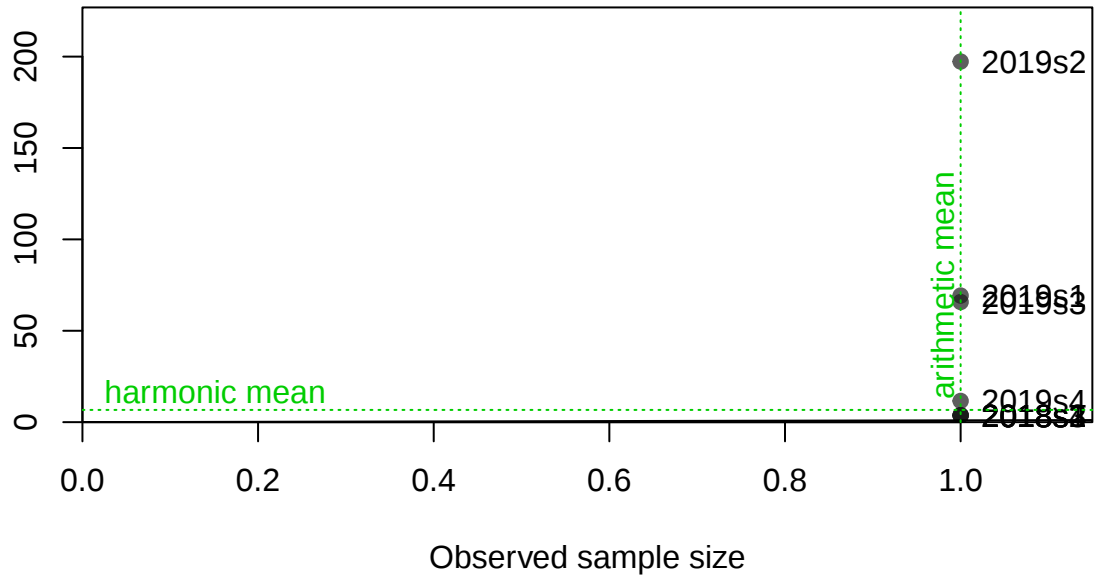
Proportion



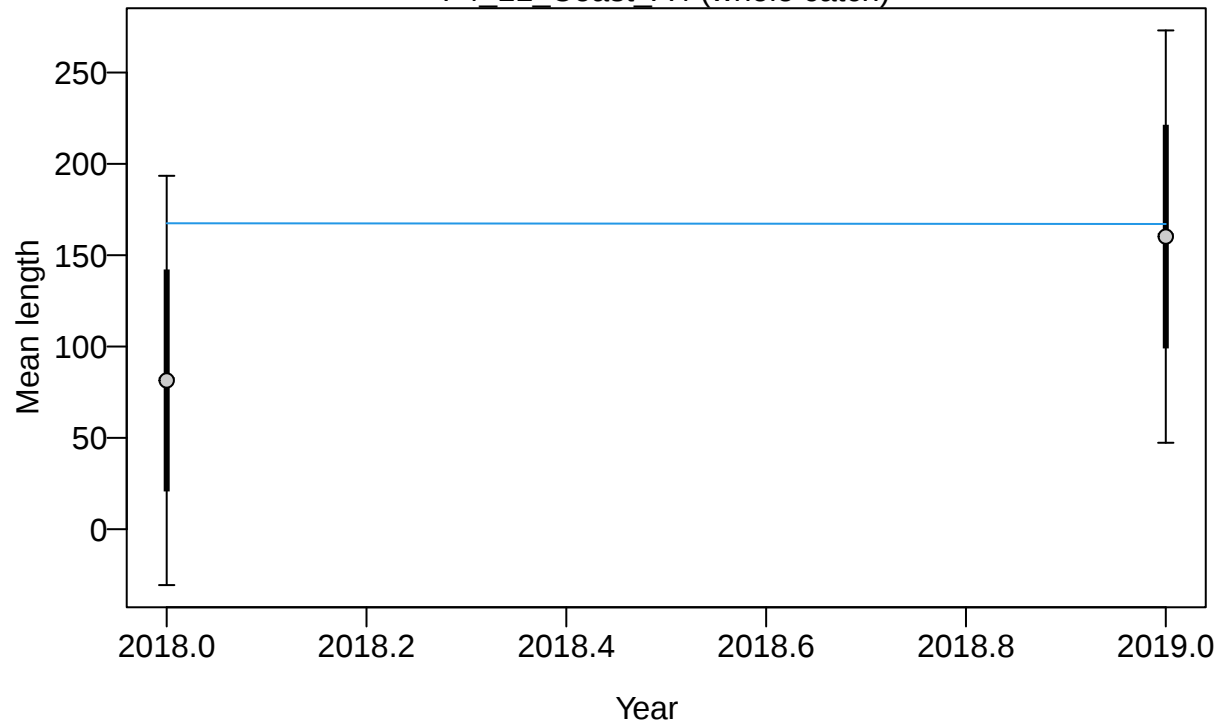
Length (cm)



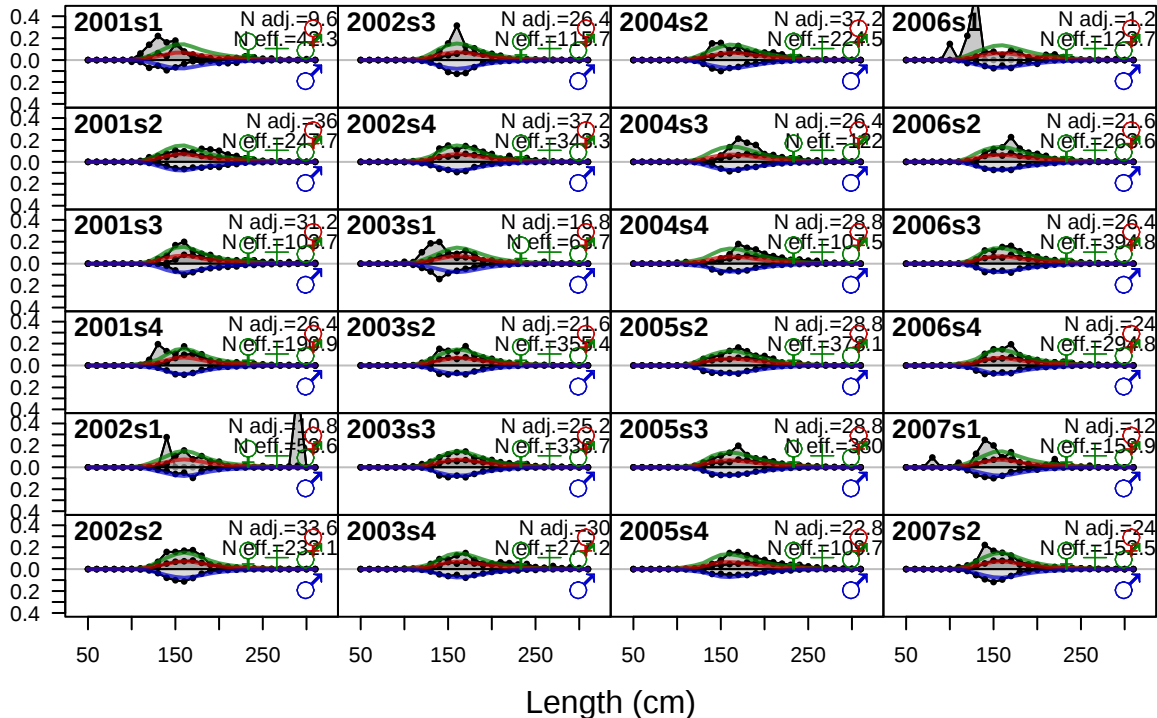
Effective sample size



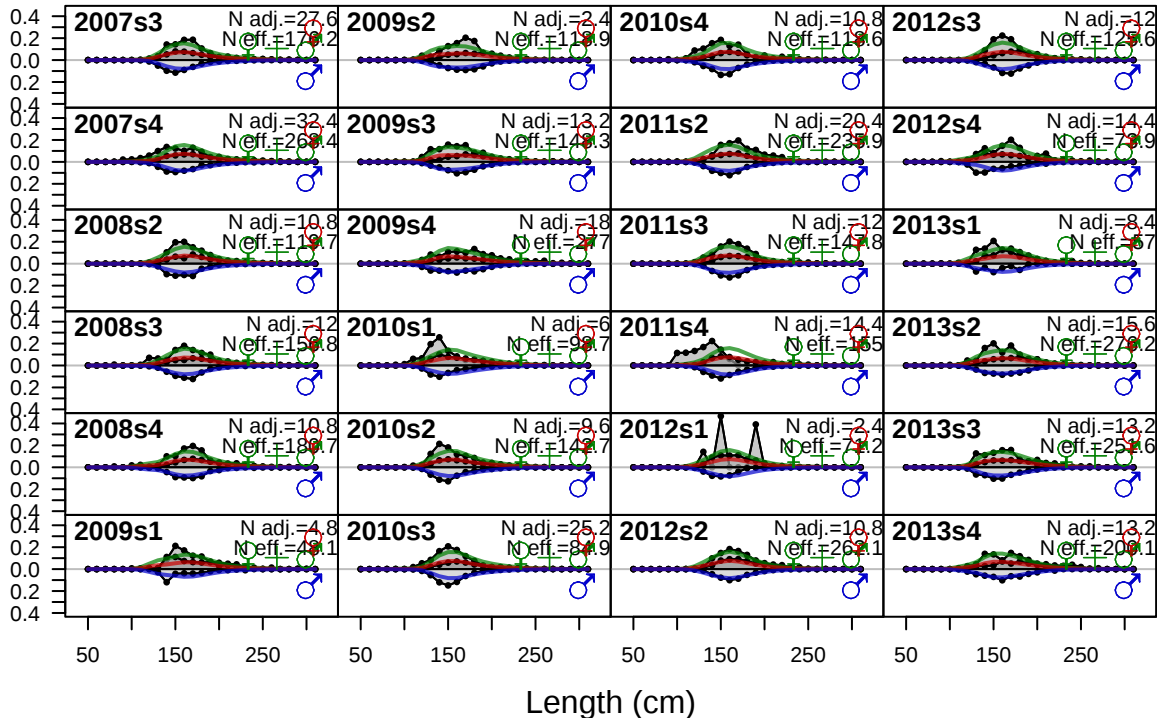
F4_LL_Coast_A4 (whole catch)



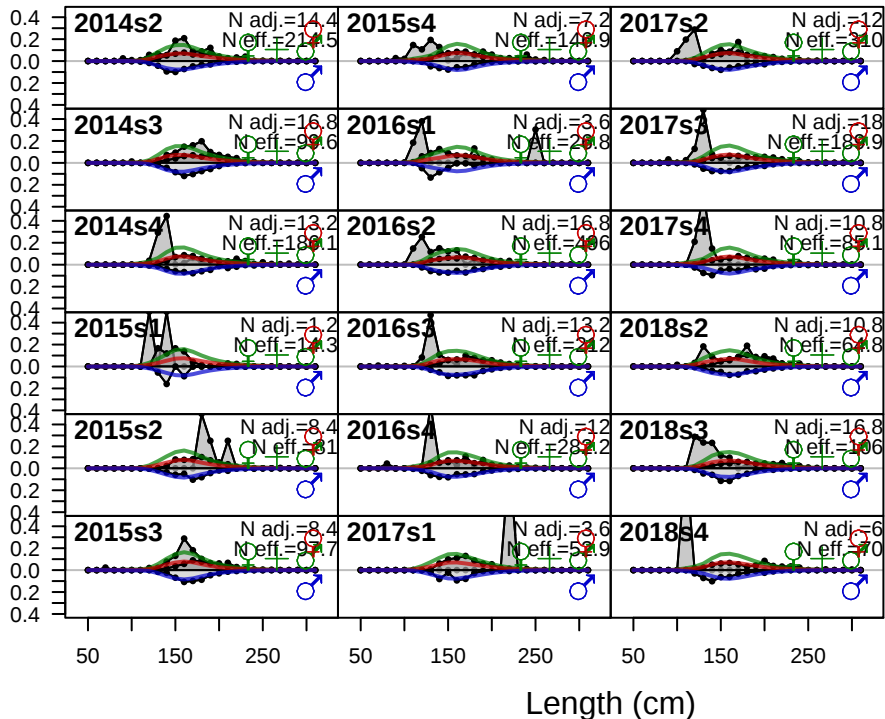
Proportion

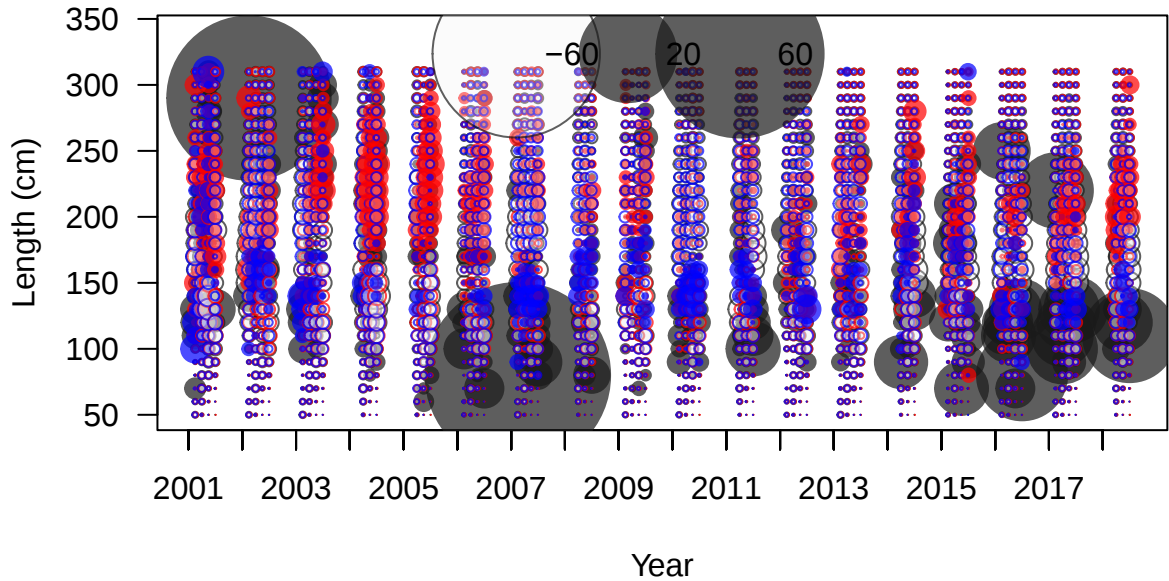


Proportion

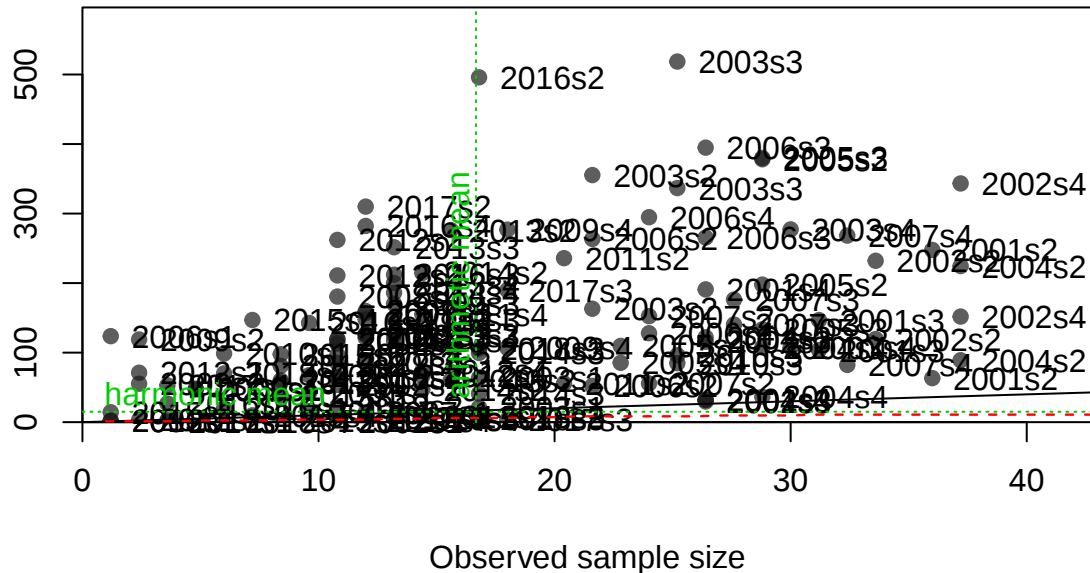


Proportion

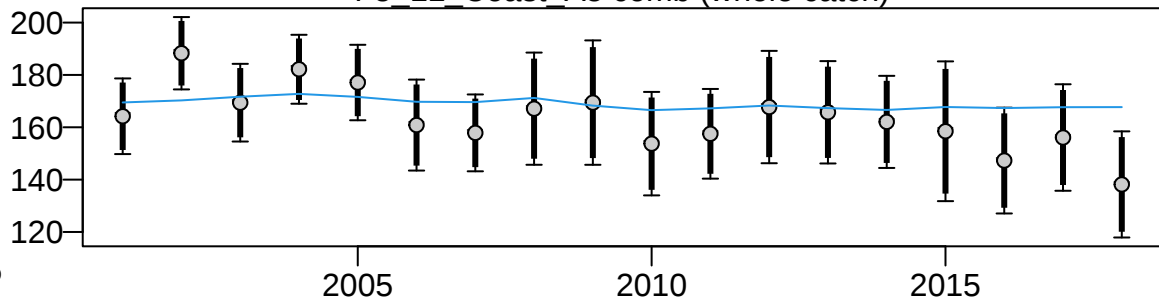




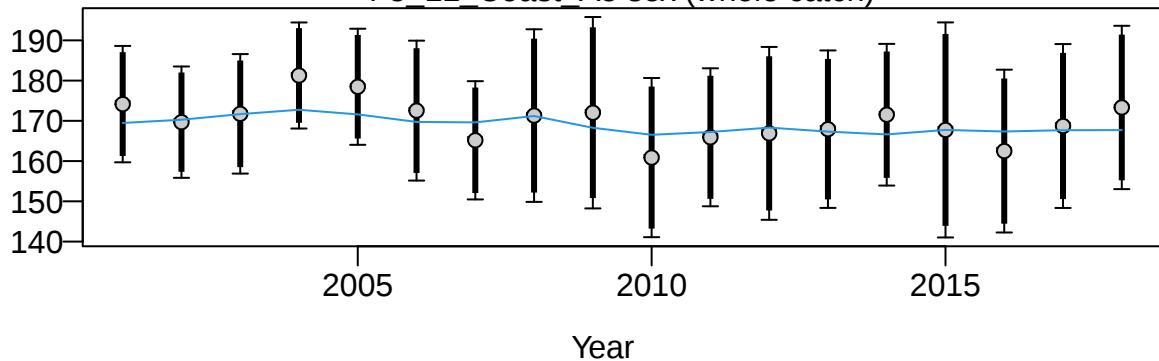
Effective sample size



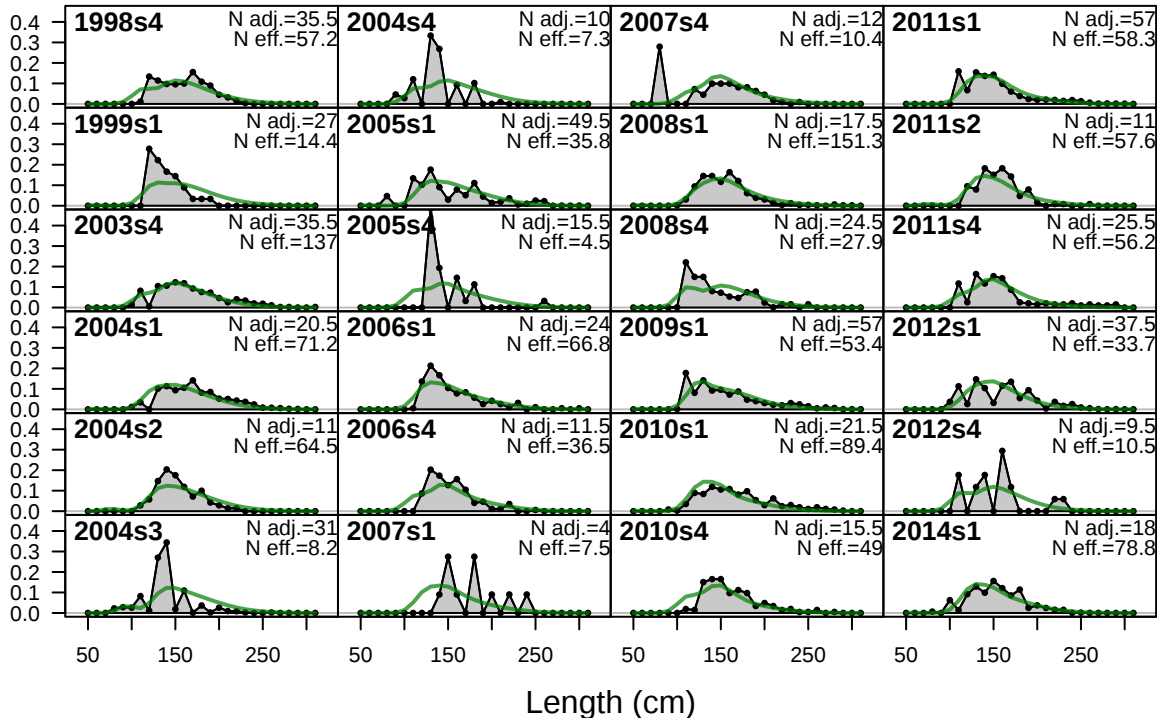
F5_LL_Coast_A5 comb (whole catch)



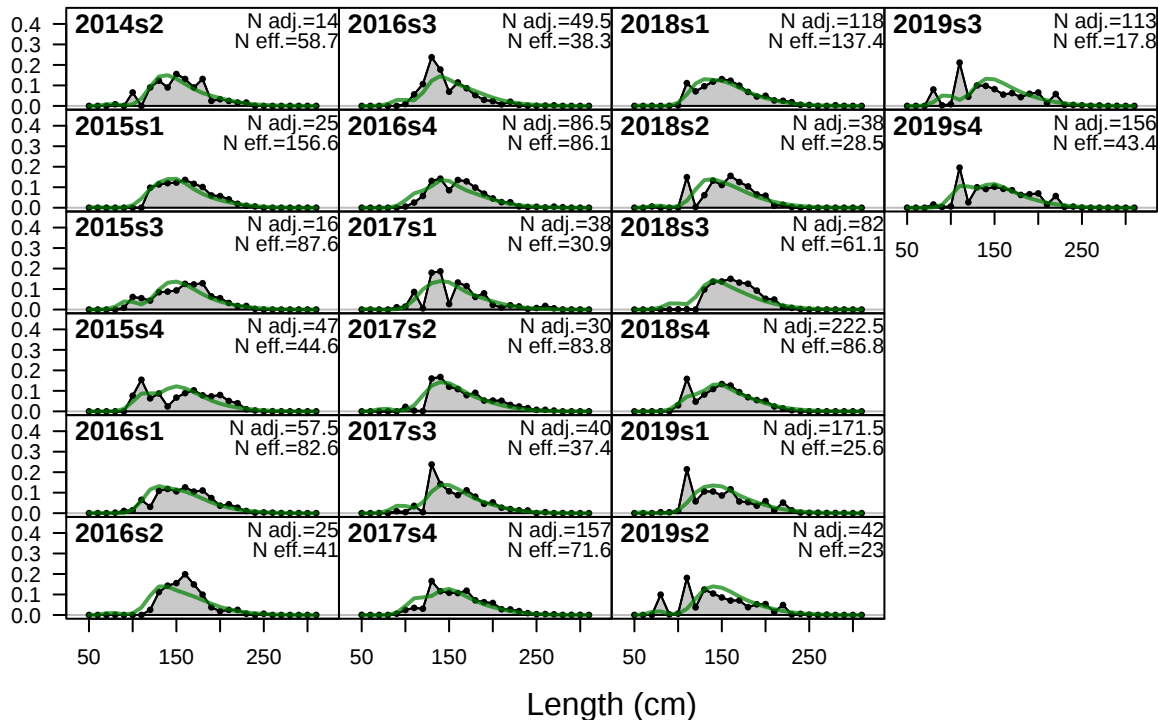
F5_LL_Coast_A5 sex (whole catch)

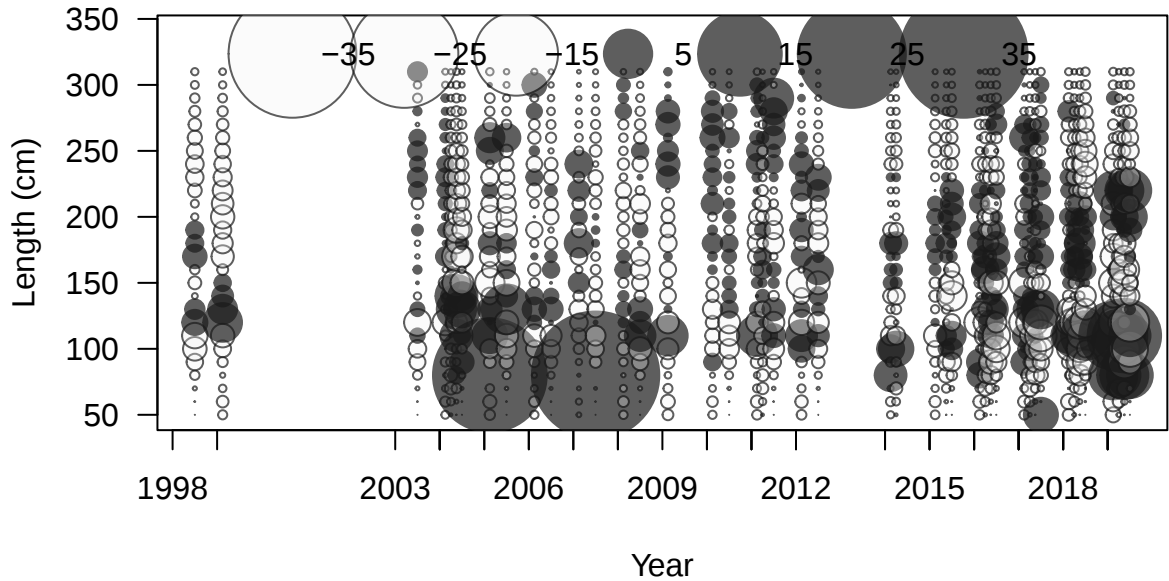


Proportion

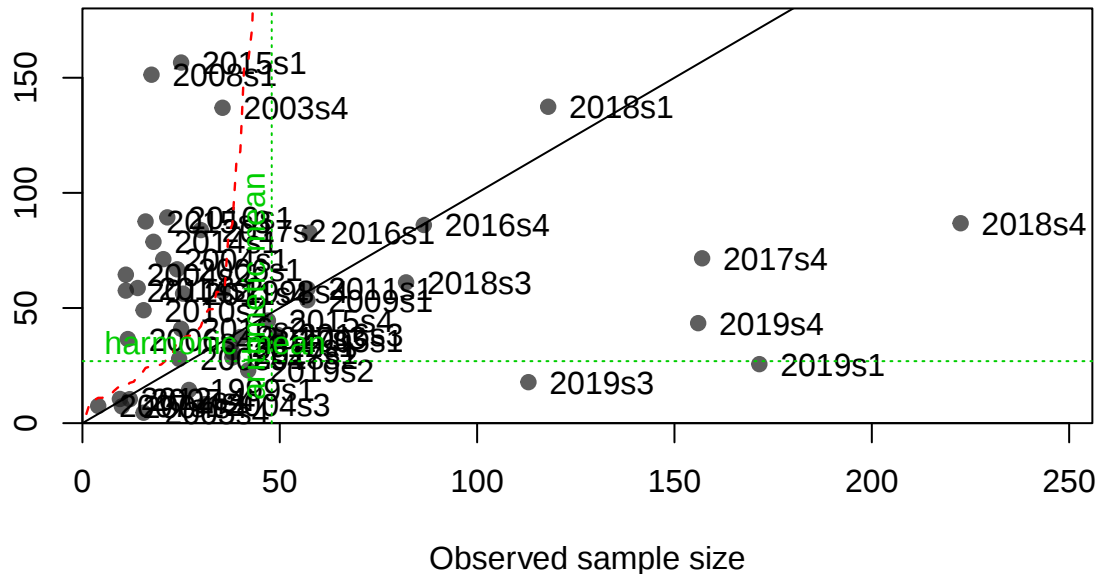


Proportion

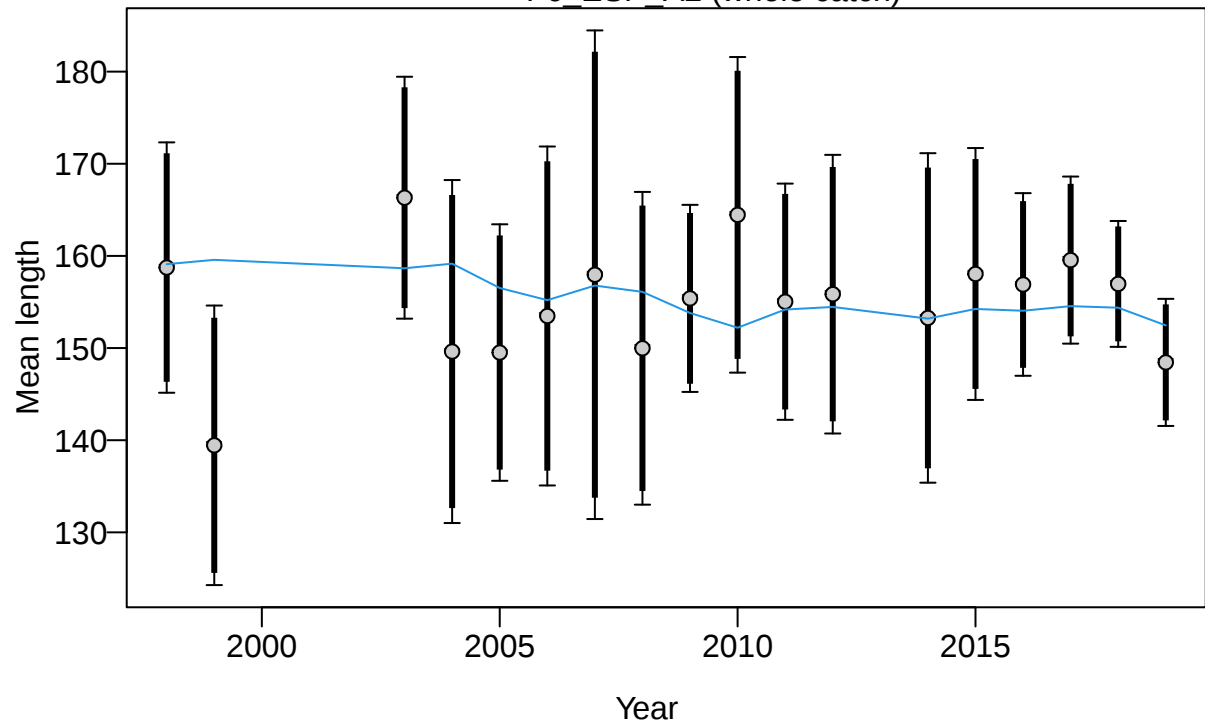


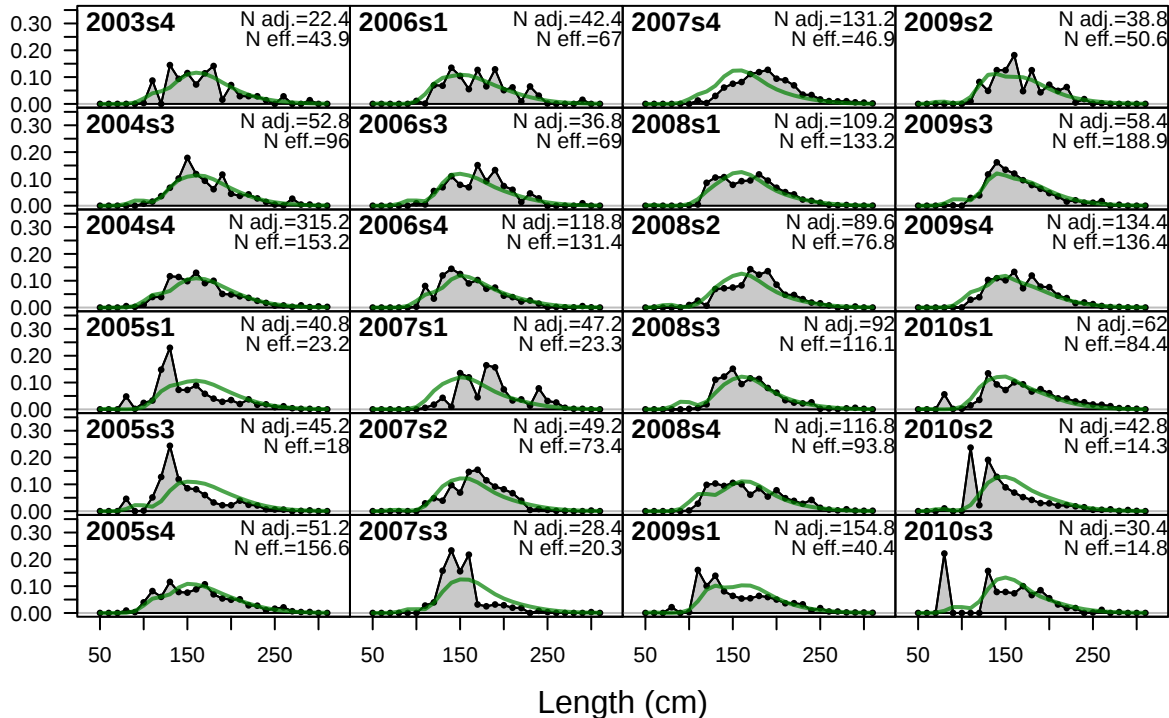


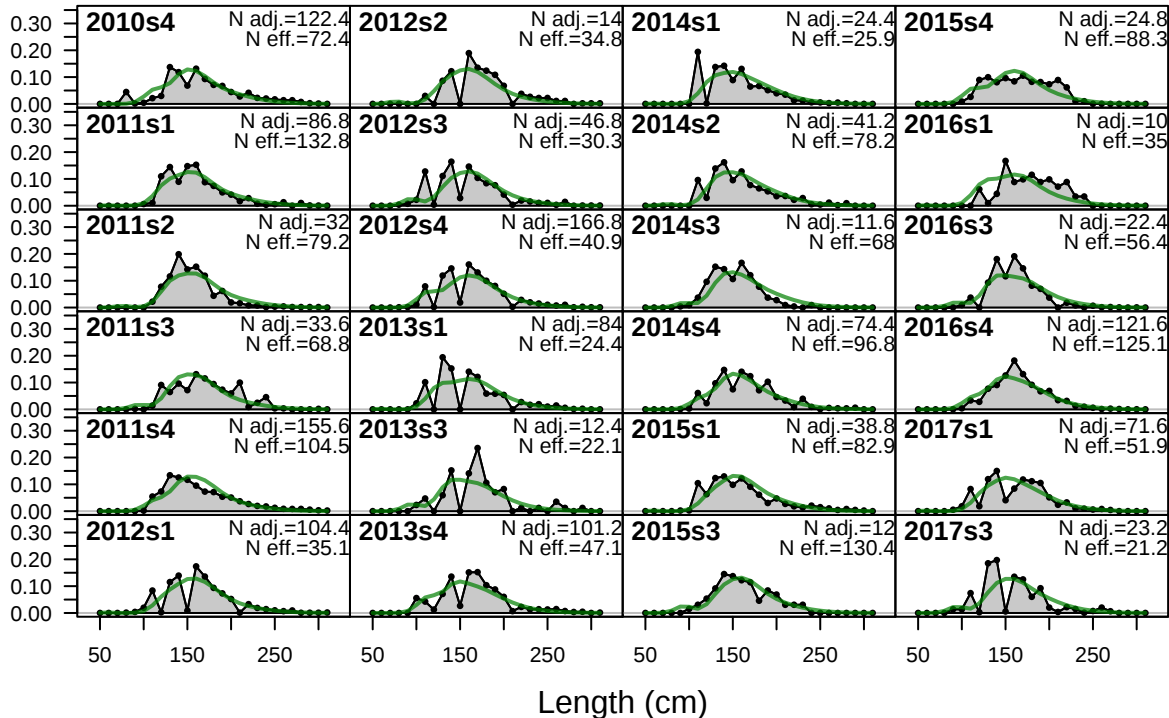
Effective sample size



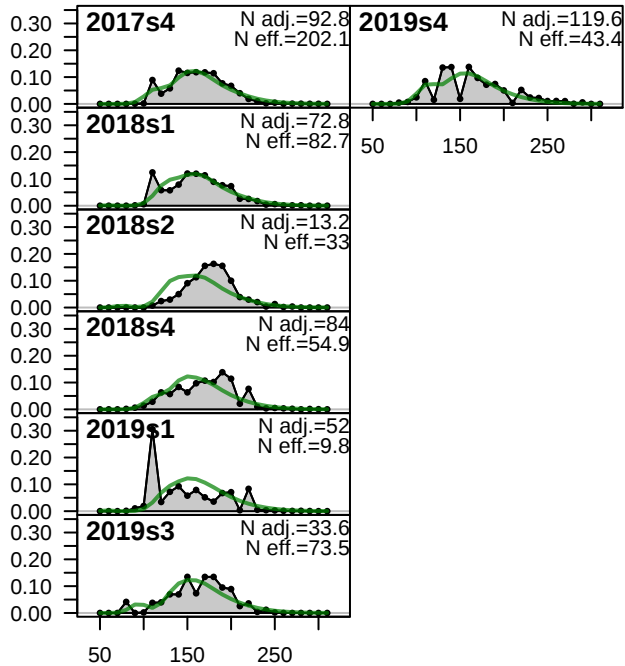
F6_ESP_A2 (whole catch)



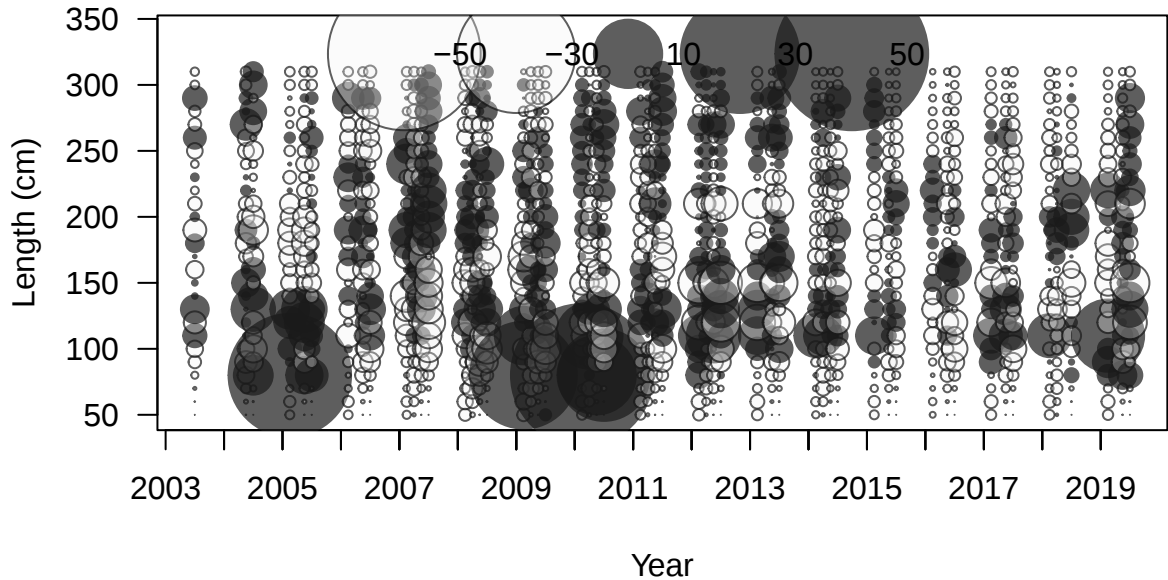




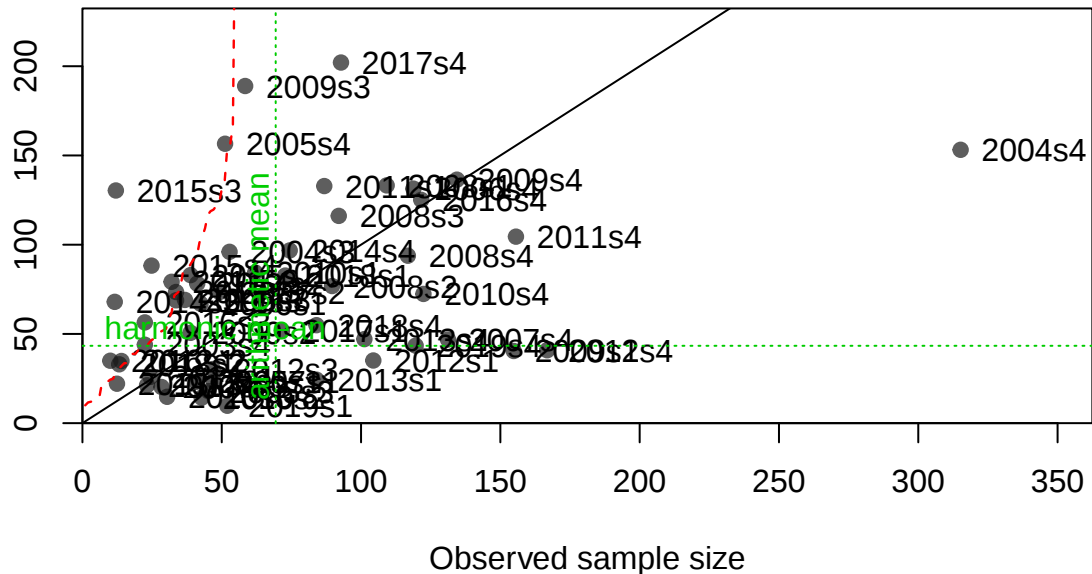
Proportion



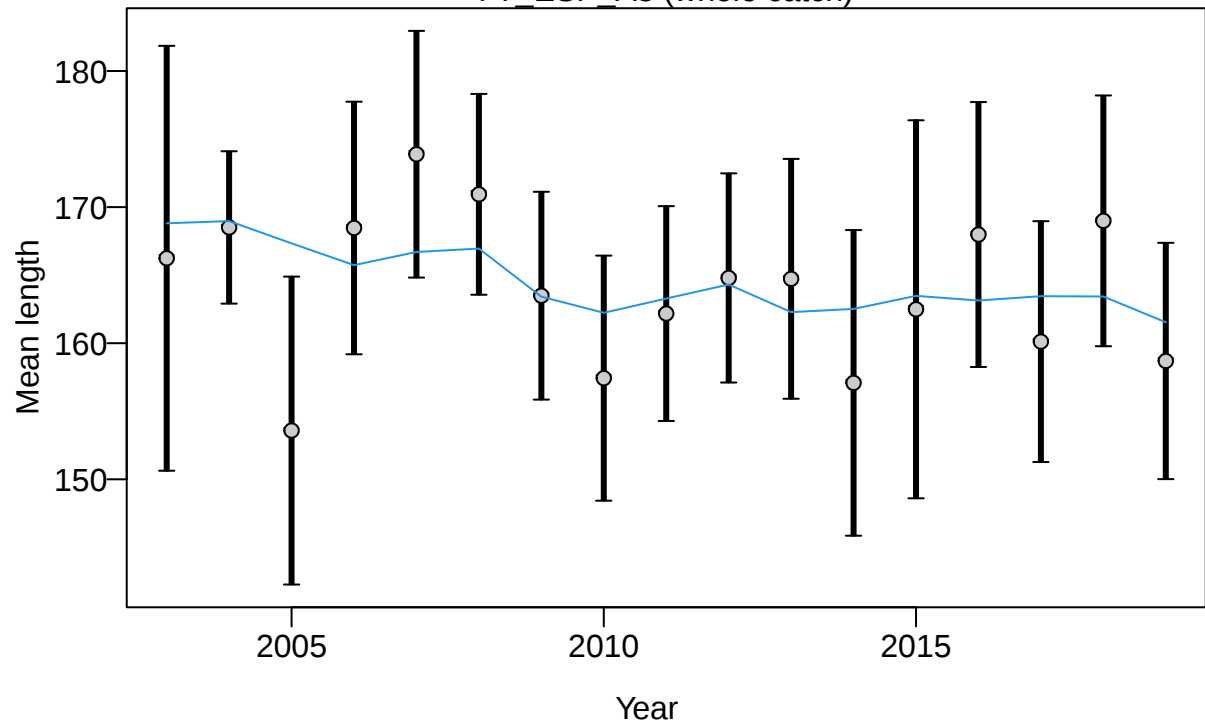
Length (cm)



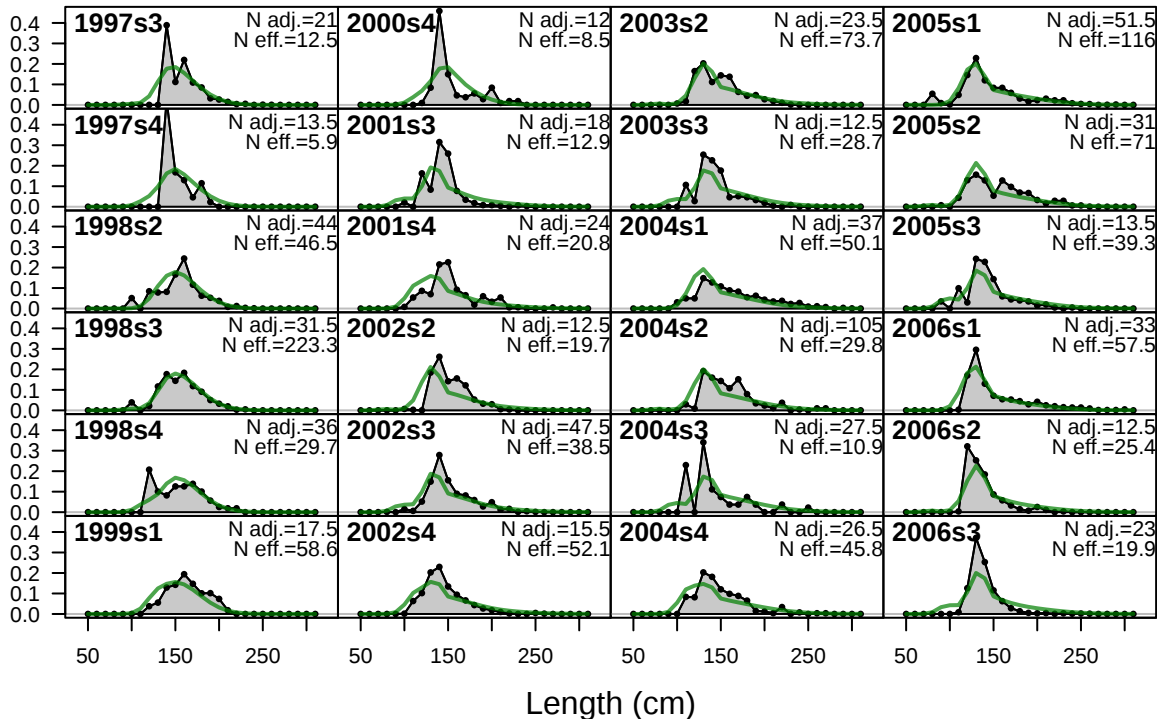
Effective sample size

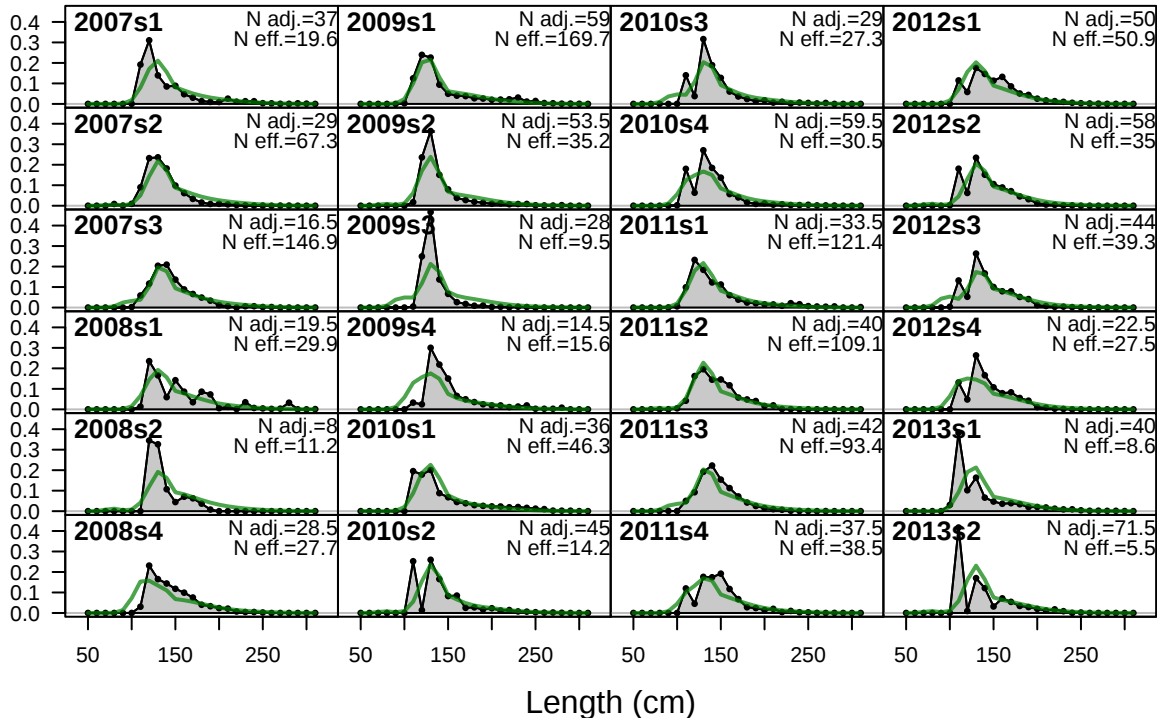


F7_ESP_A3 (whole catch)

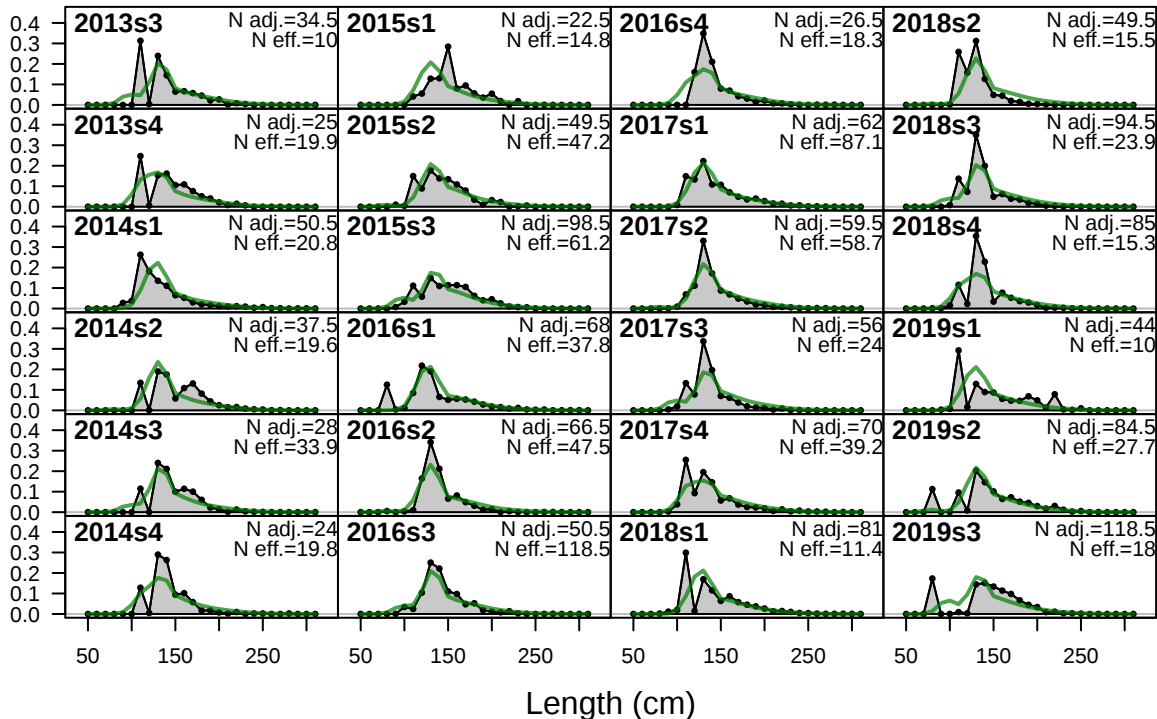


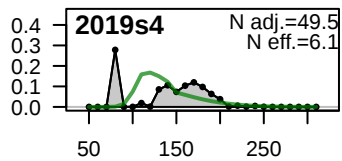
Proportion





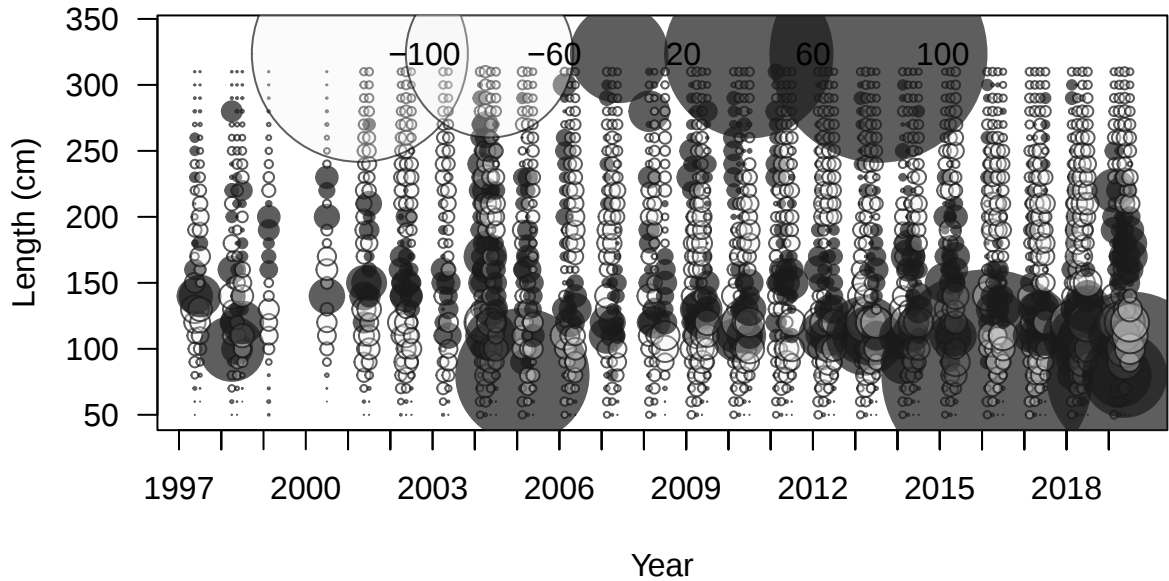
Proportion



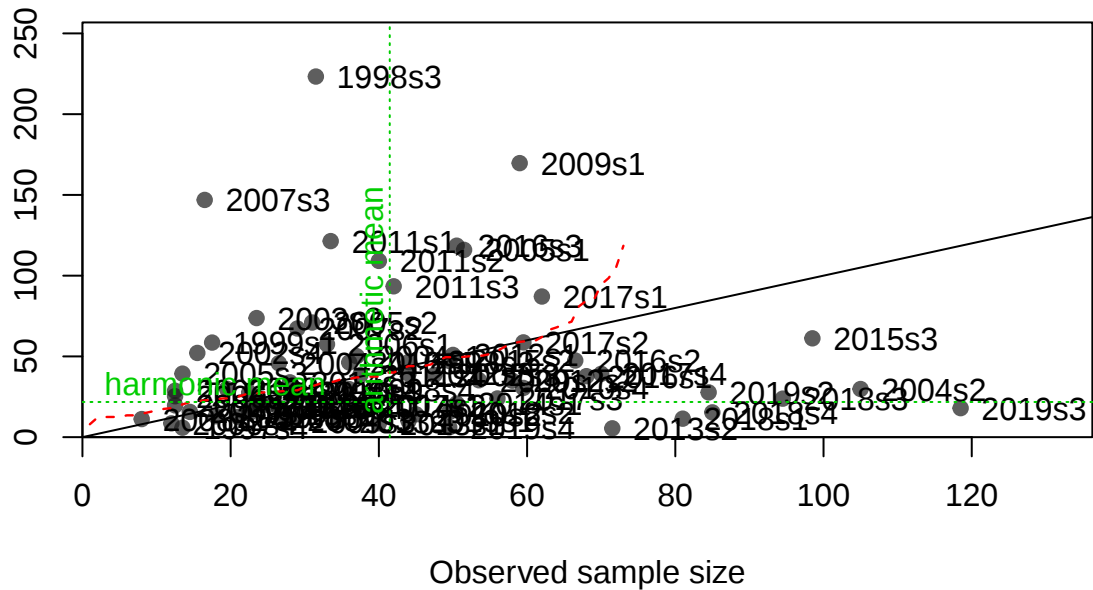


Proportion

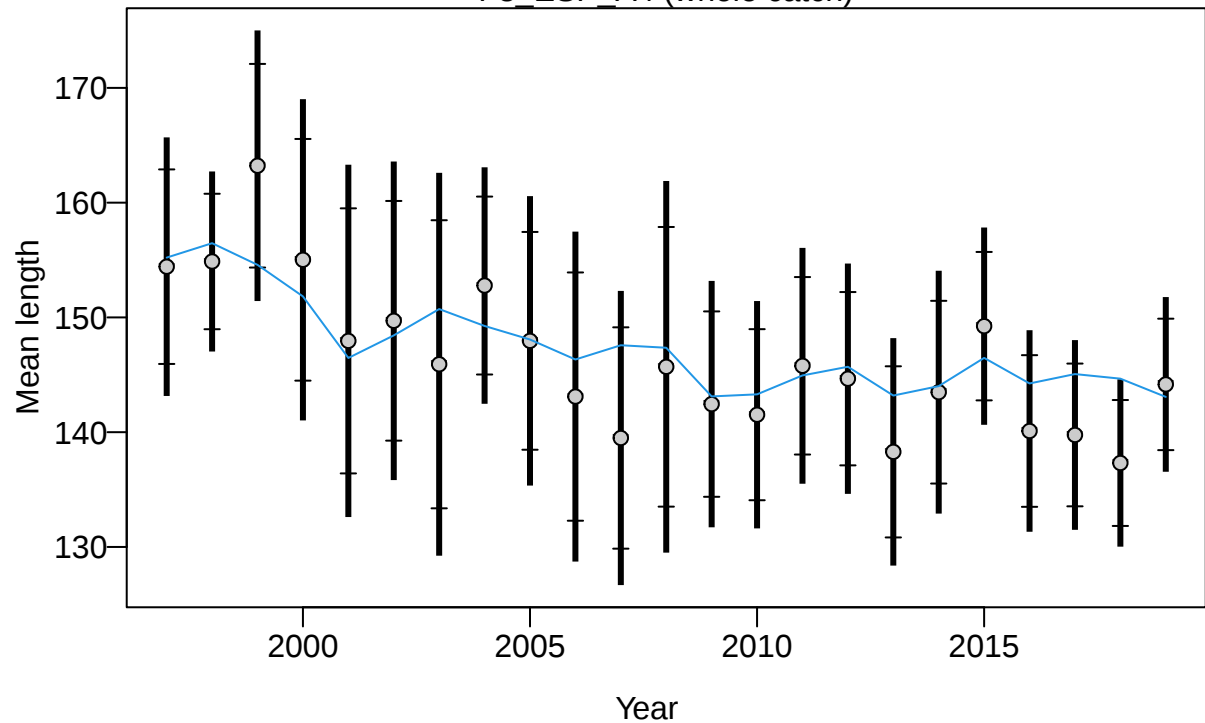
Length (cm)

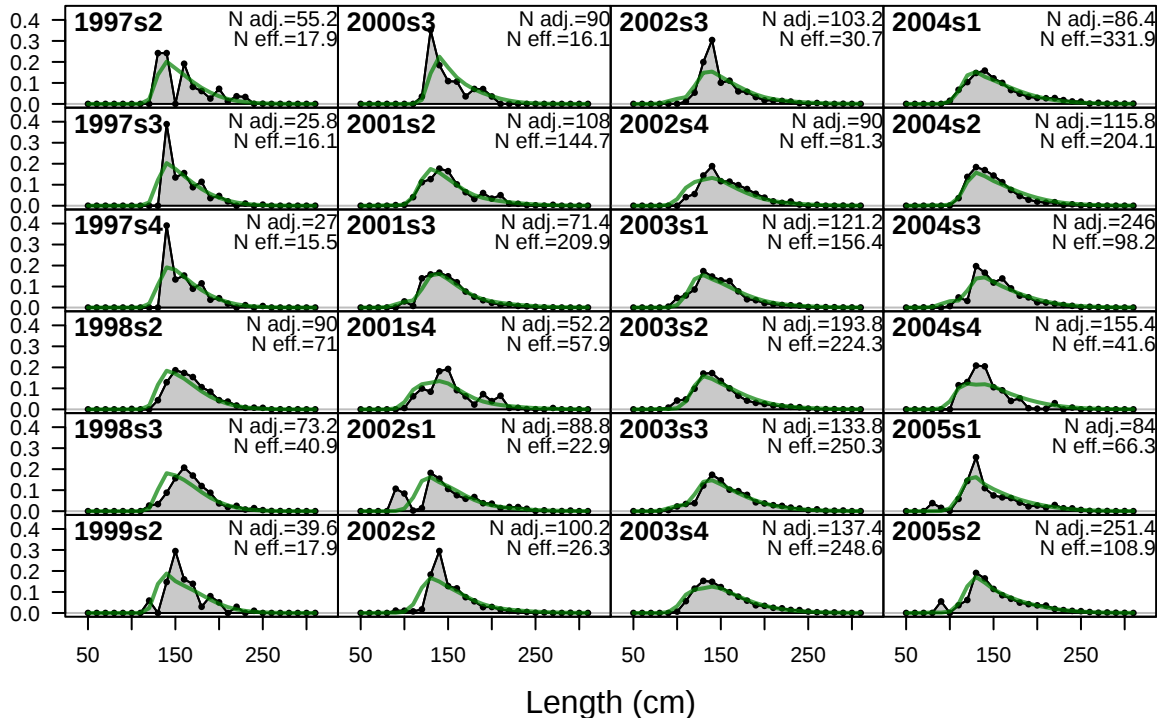


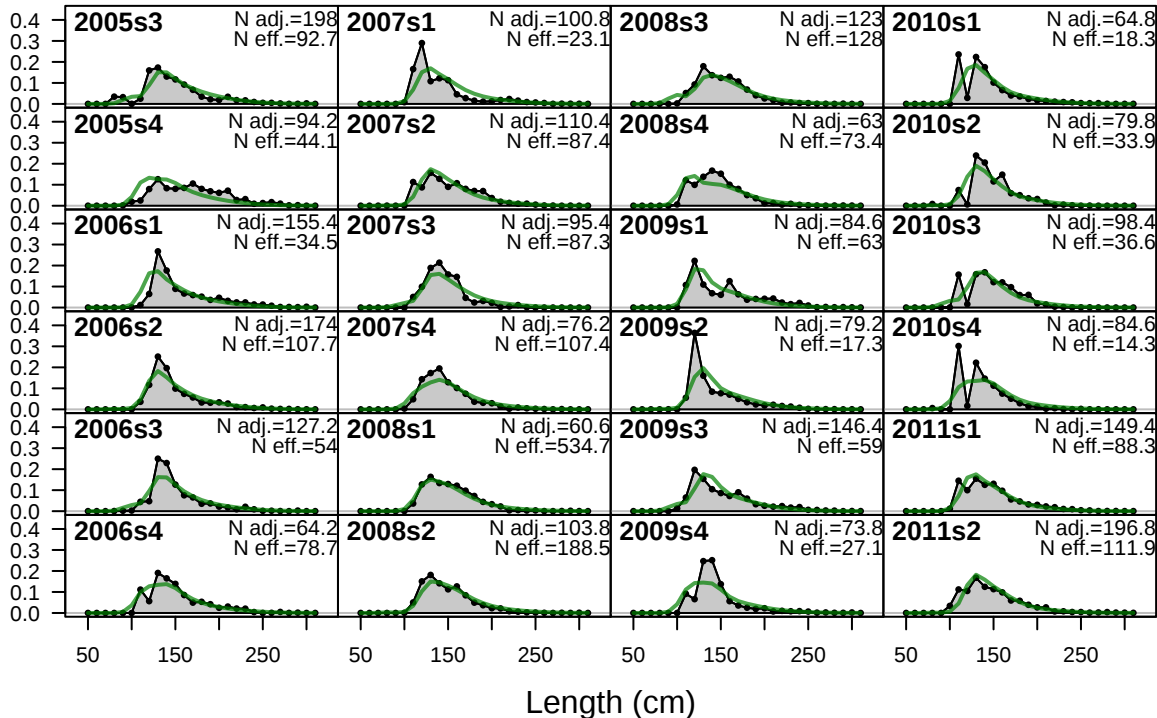
Effective sample size

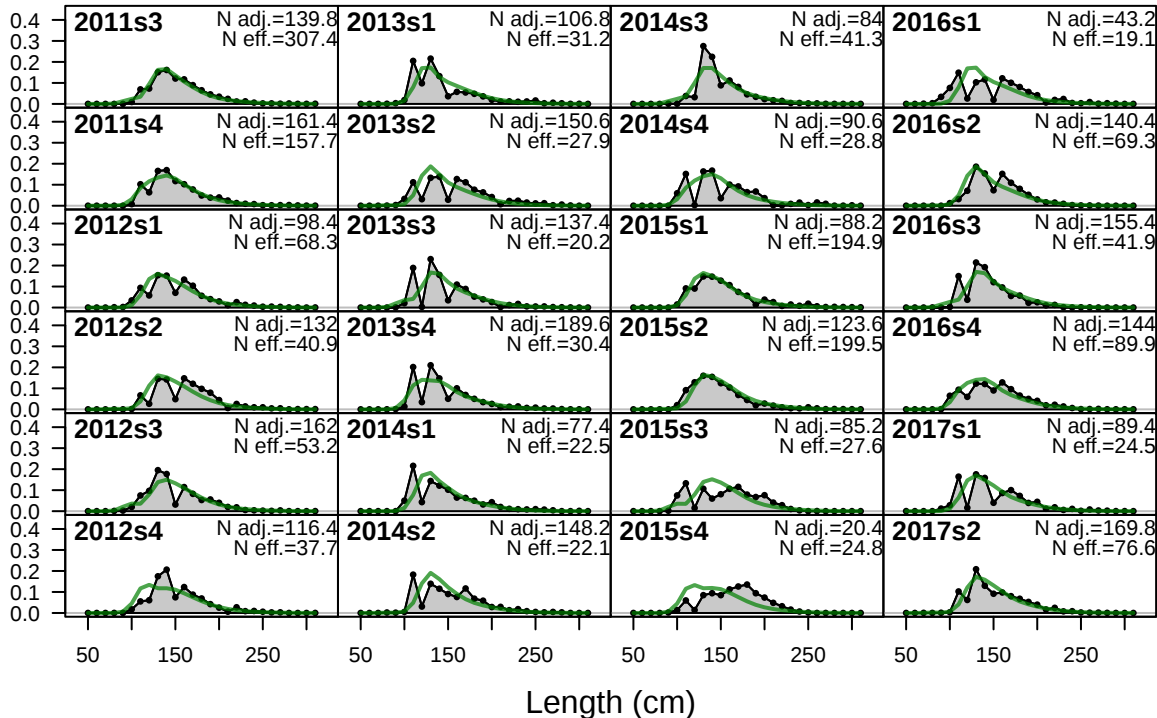


F8_ESP_A4 (whole catch)

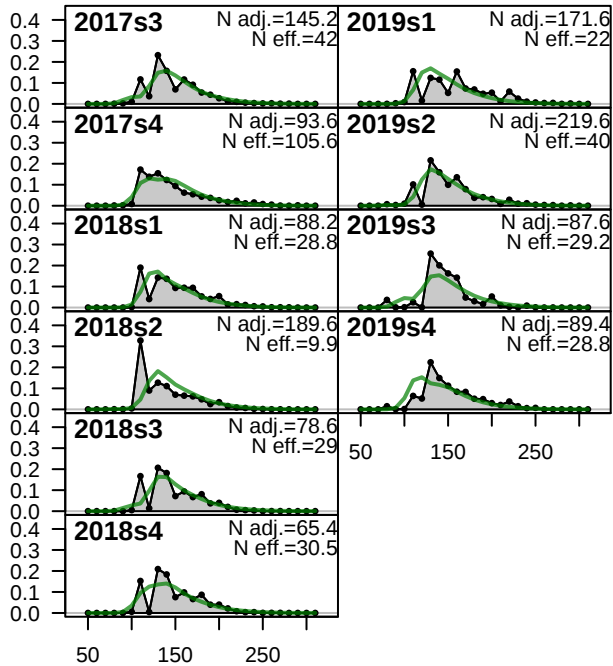




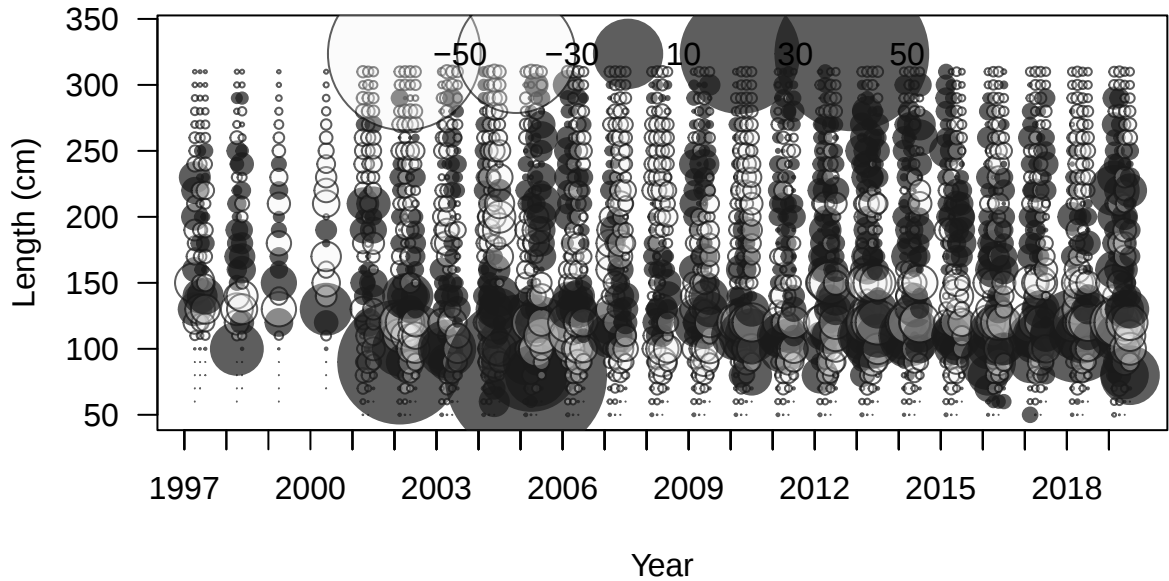




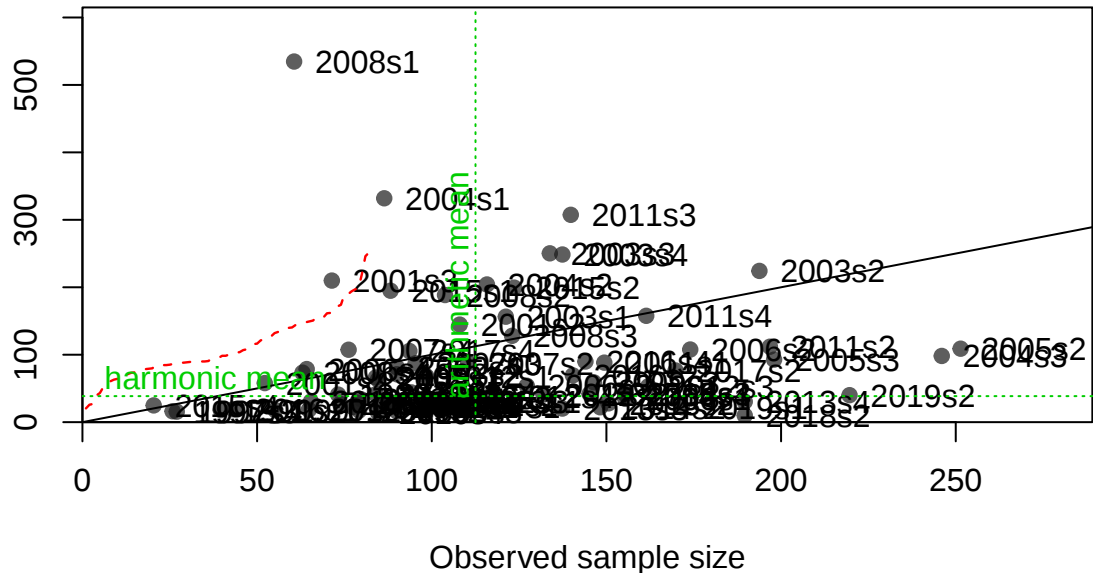
Proportion



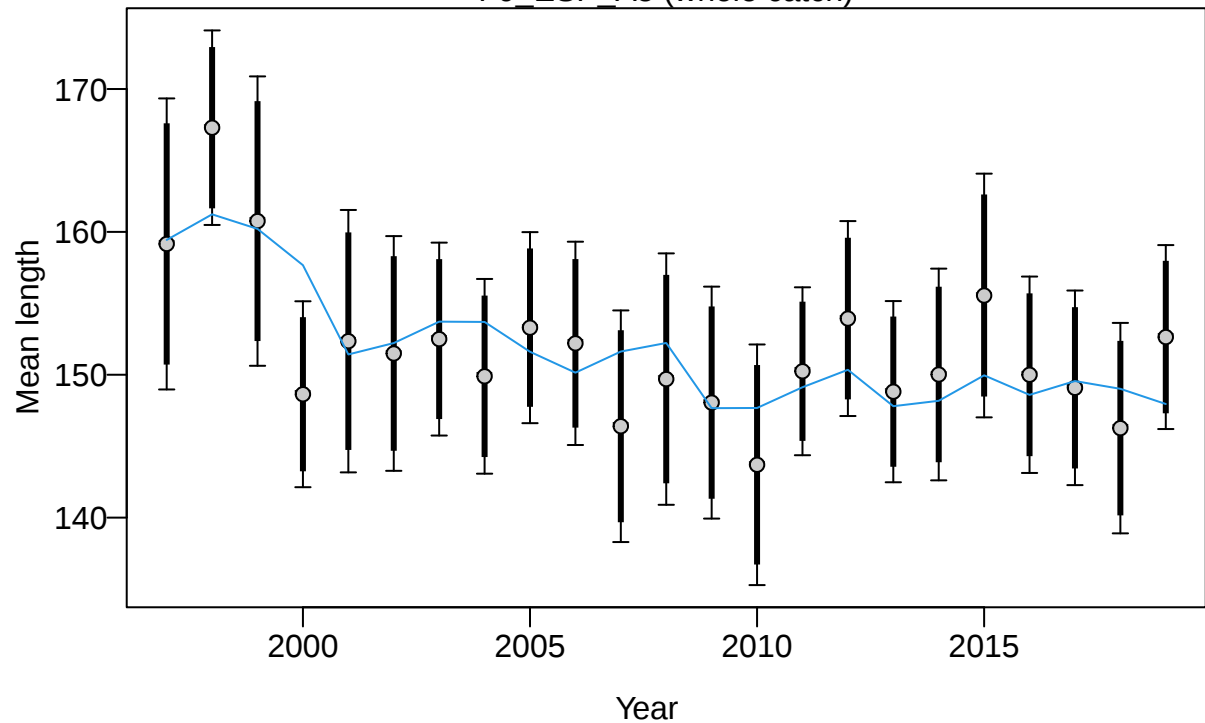
Length (cm)



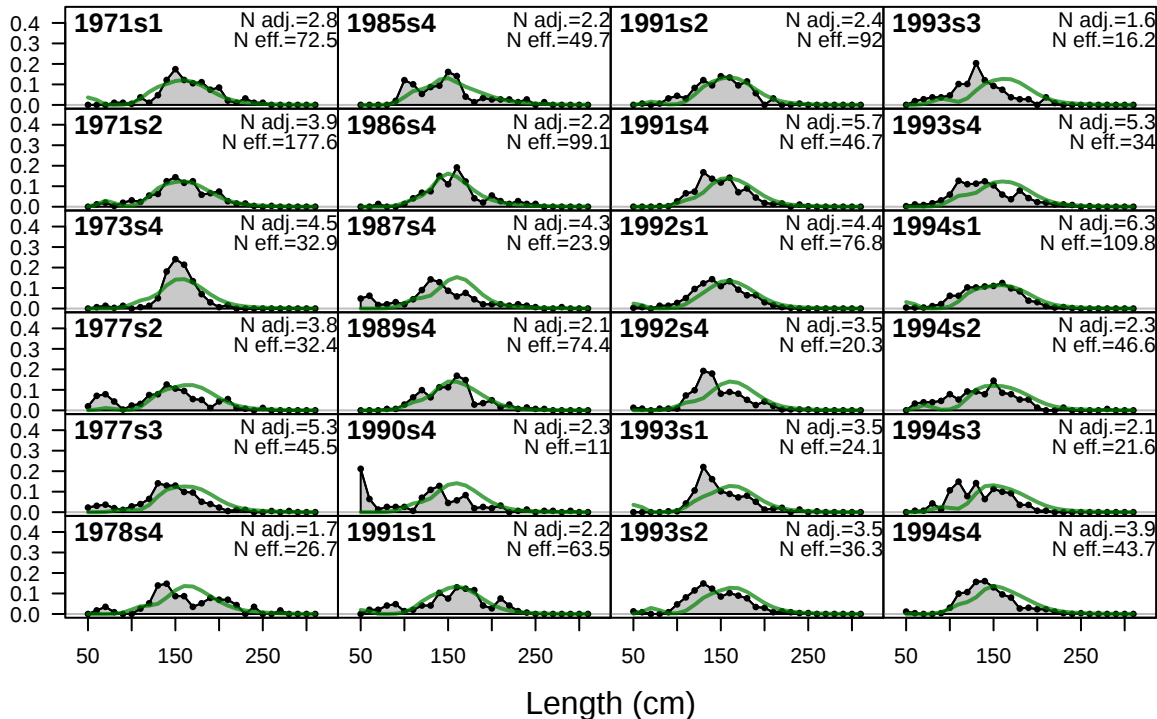
Effective sample size



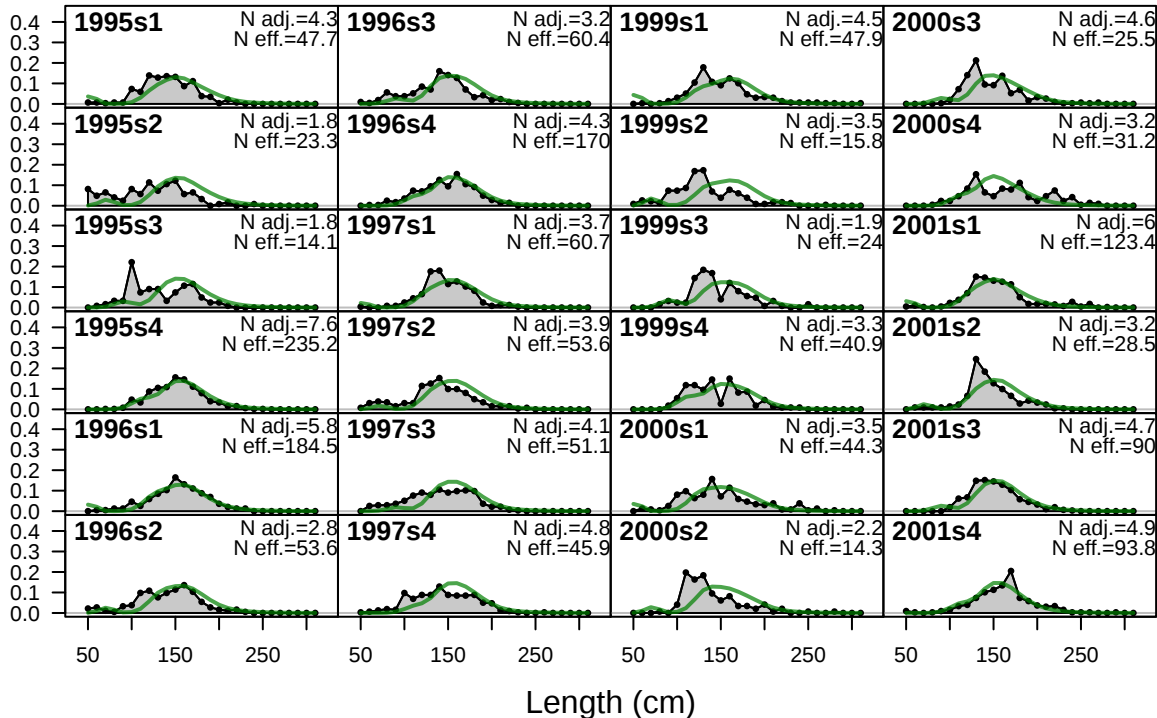
F9_ESP_A5 (whole catch)



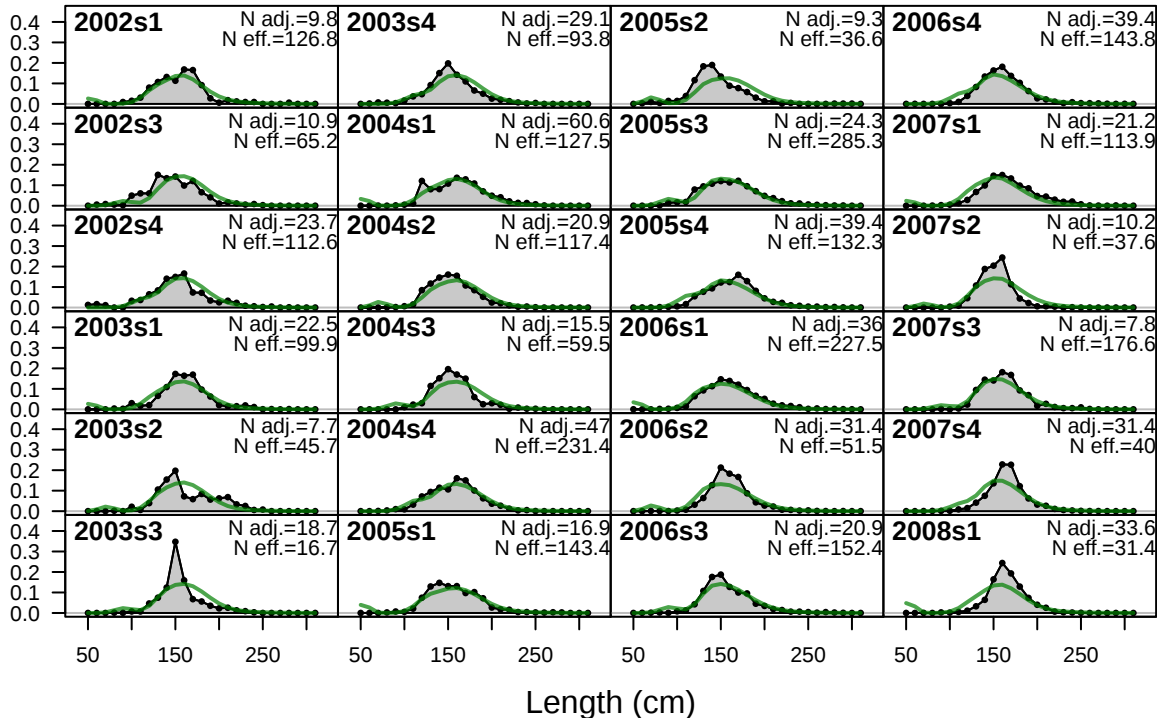
Proportion

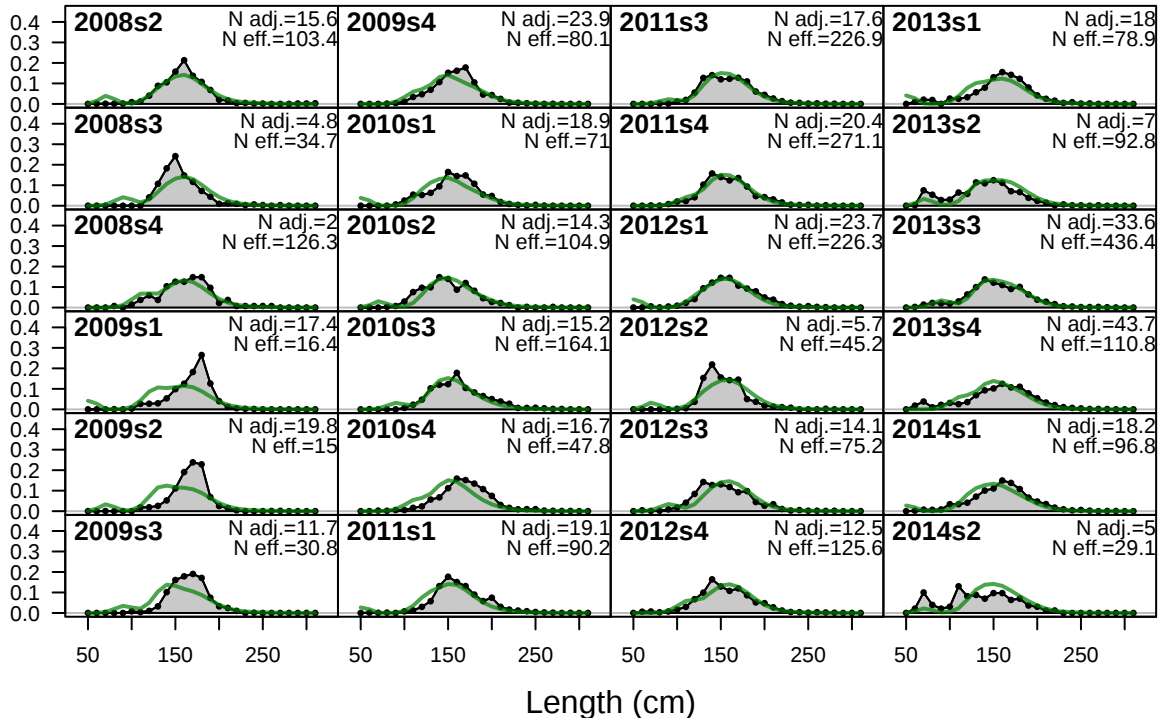


Proportion

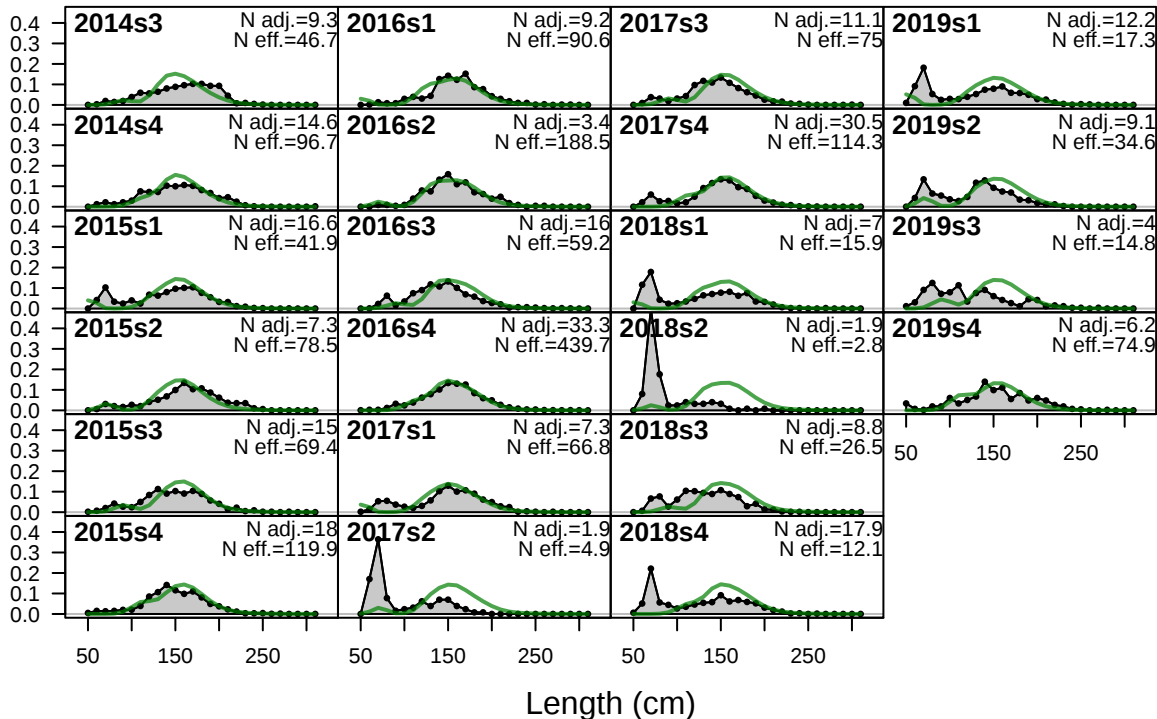


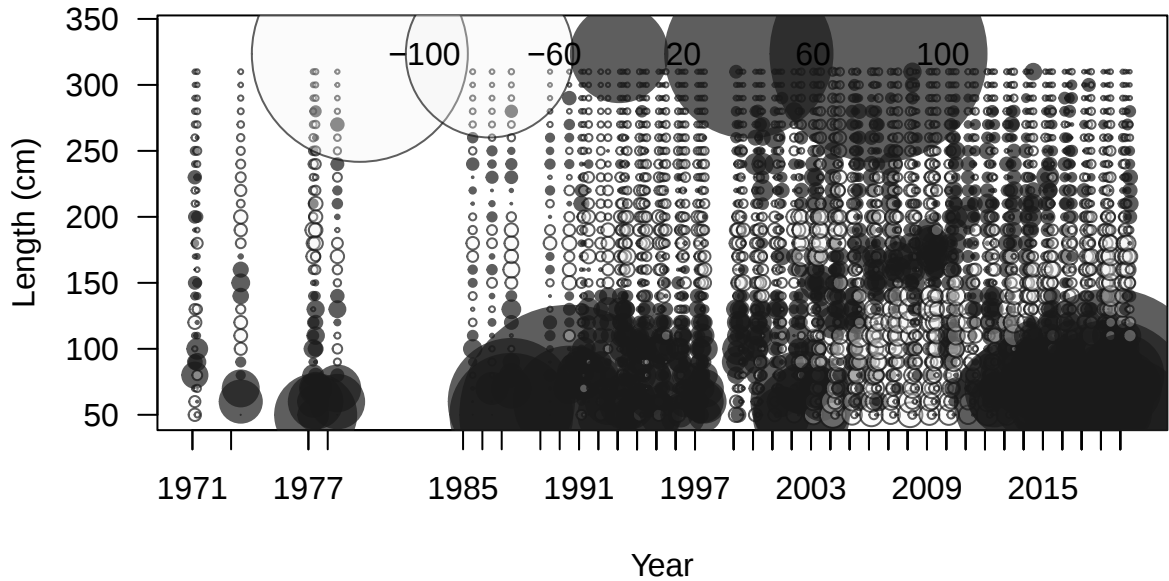
Proportion



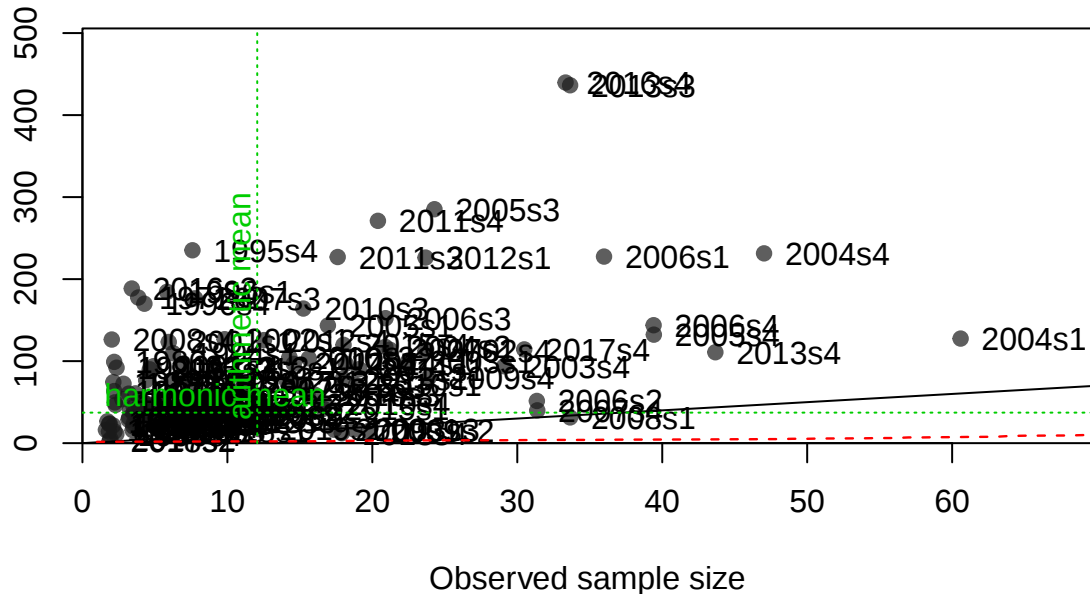


Proportion

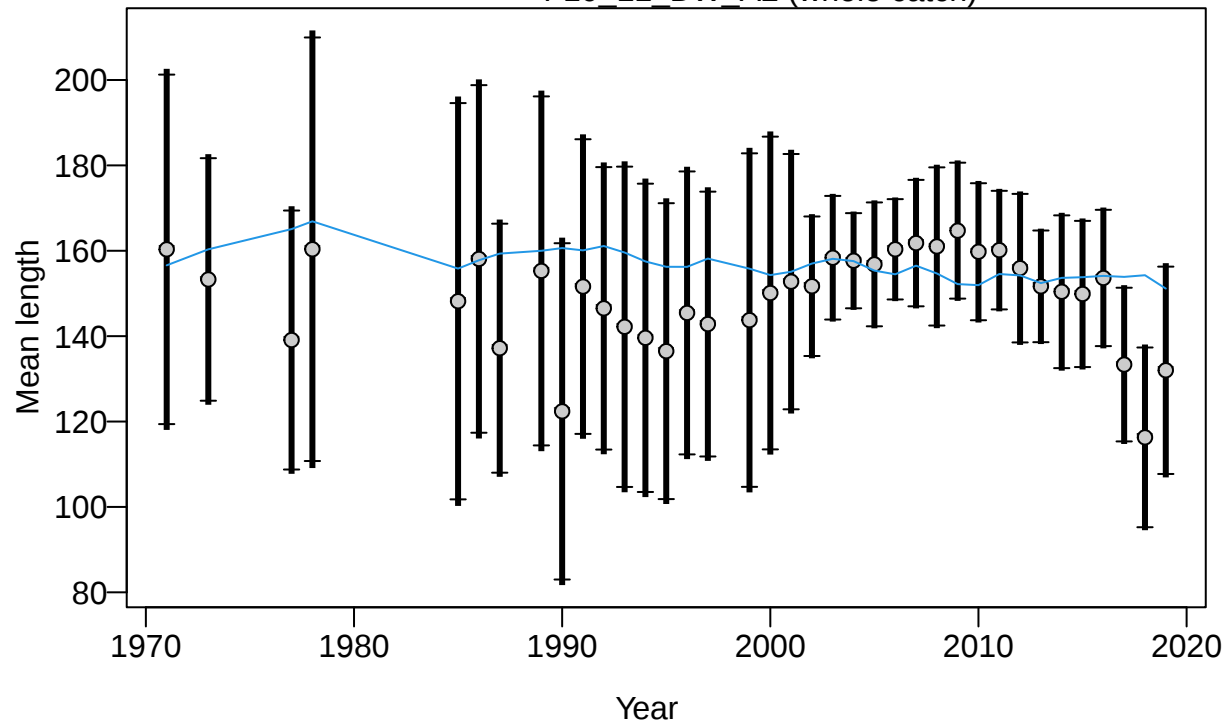


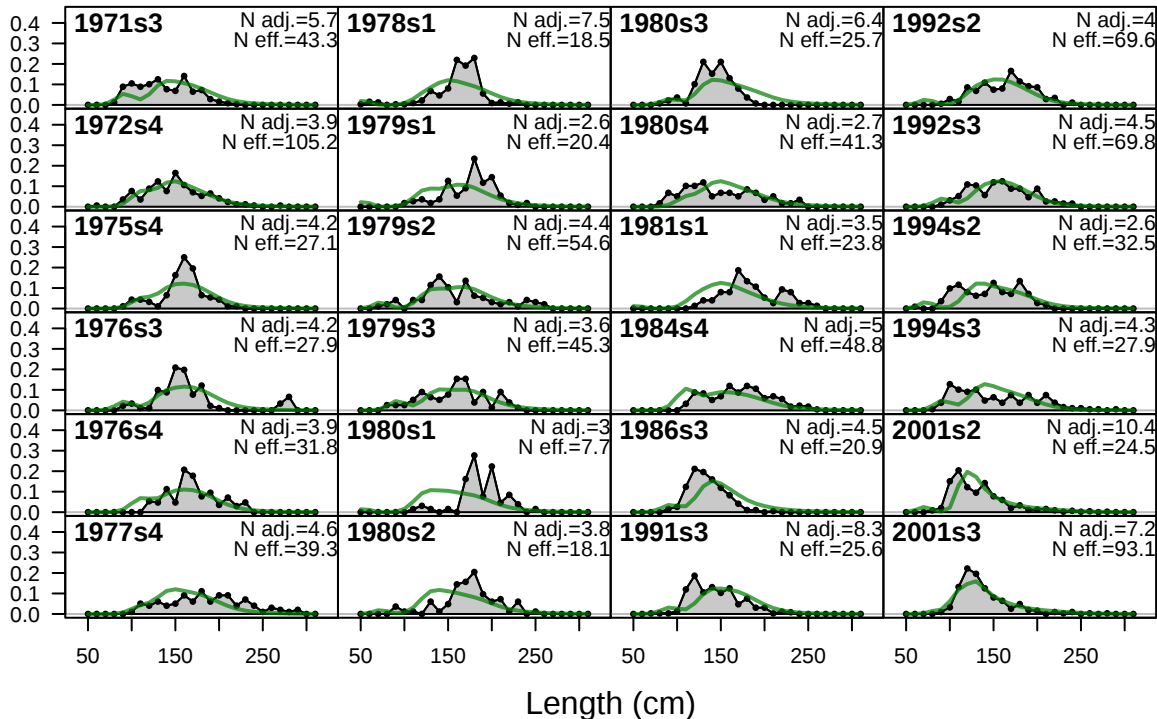


Effective sample size

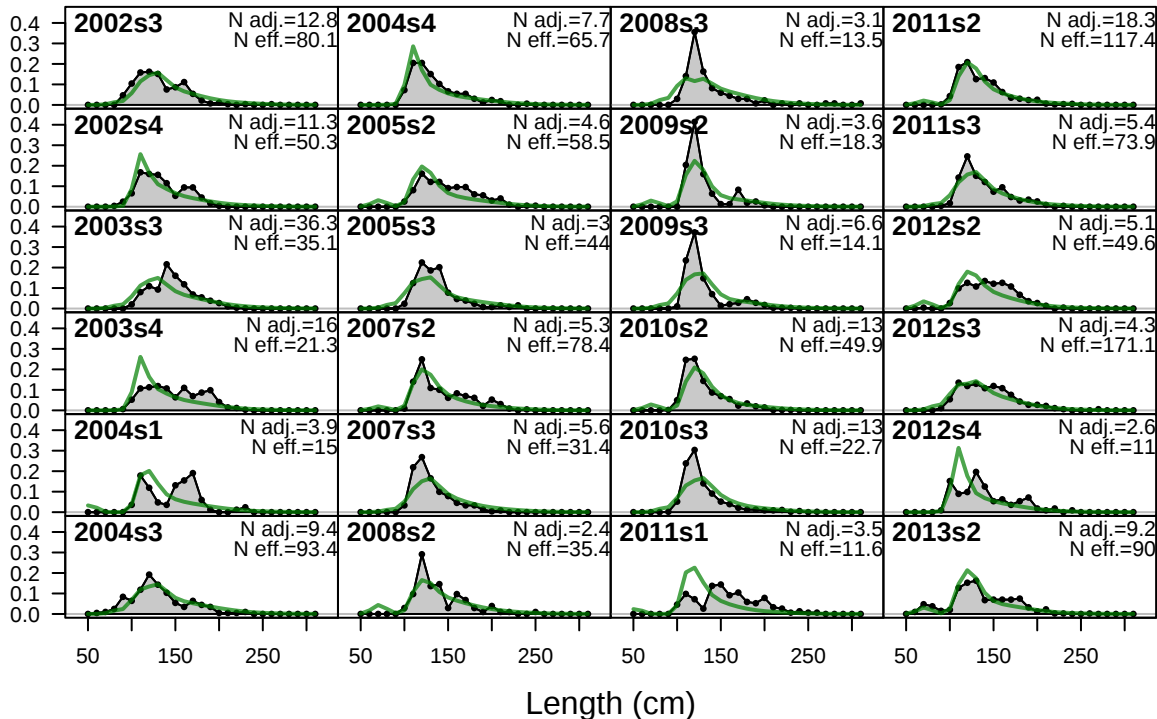


F10_LL_DW_A2 (whole catch)

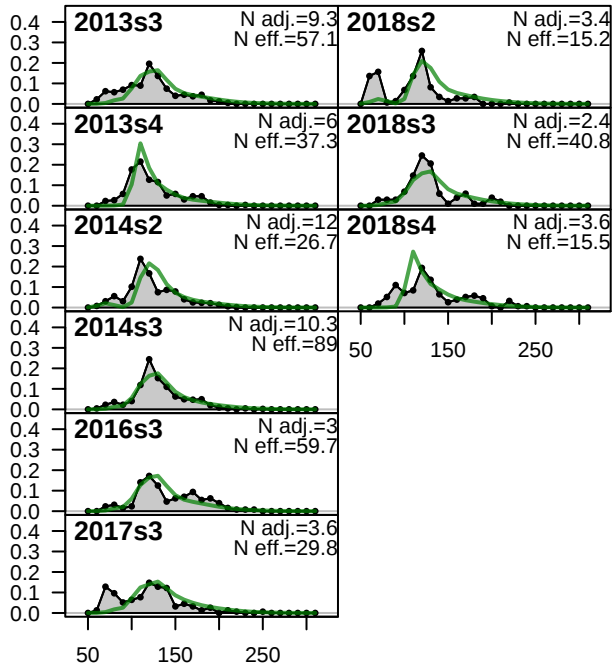




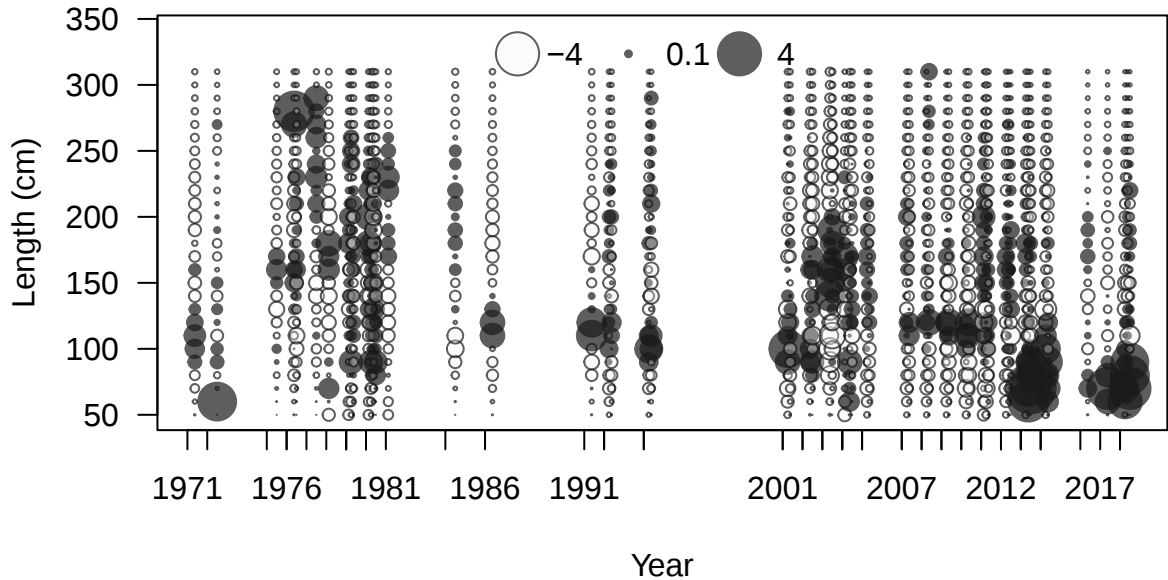
Proportion



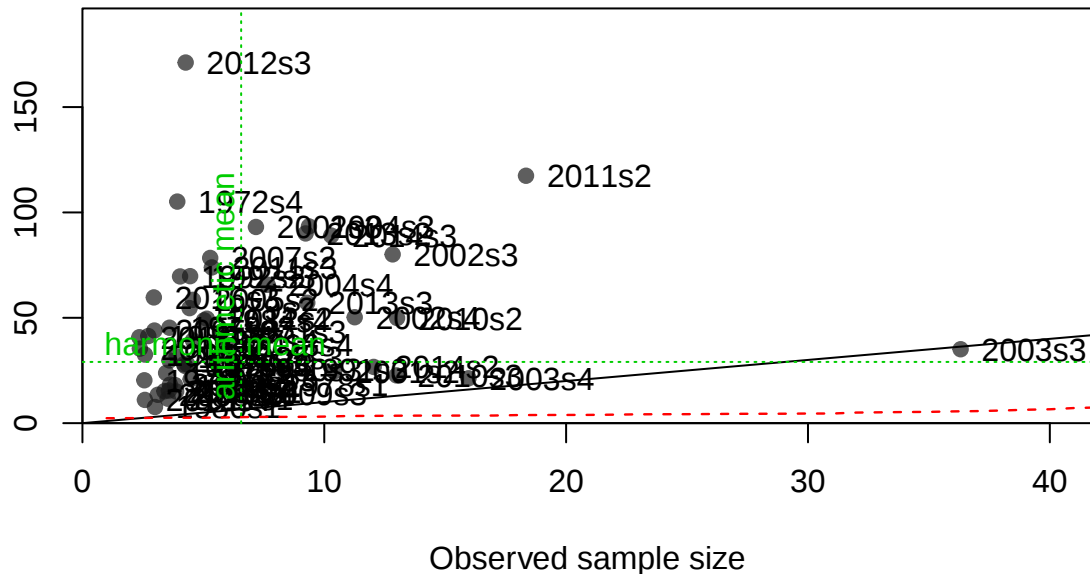
Proportion



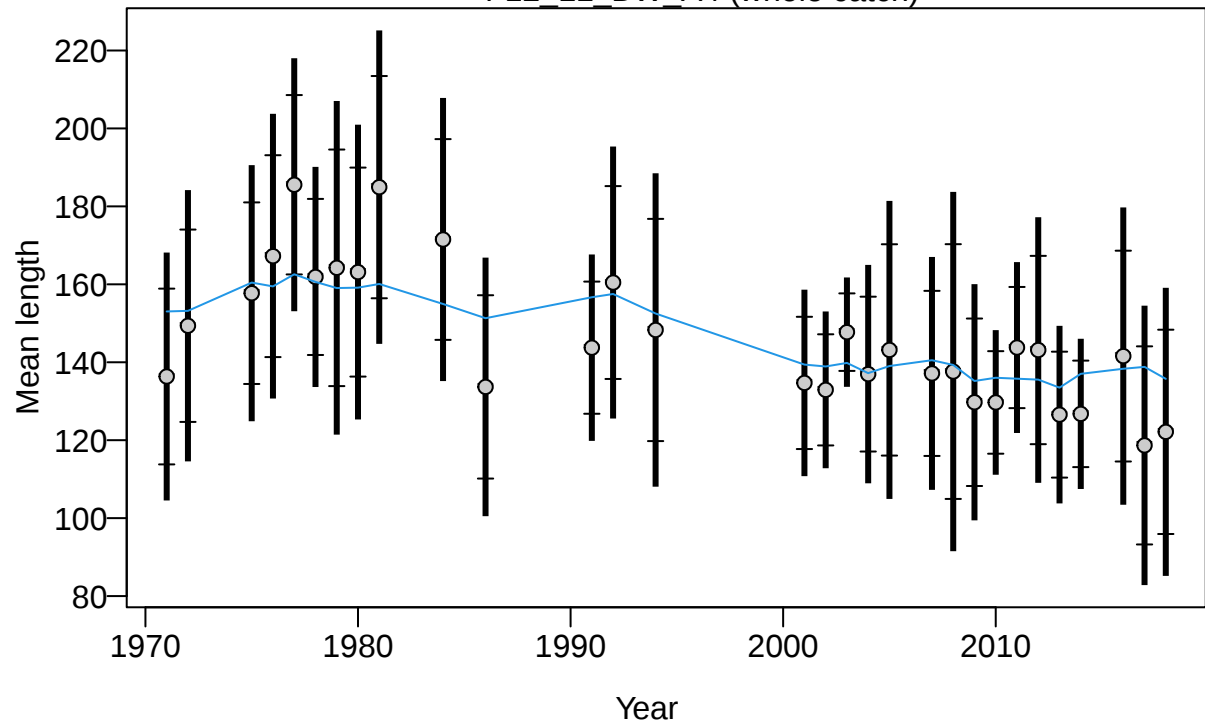
Length (cm)

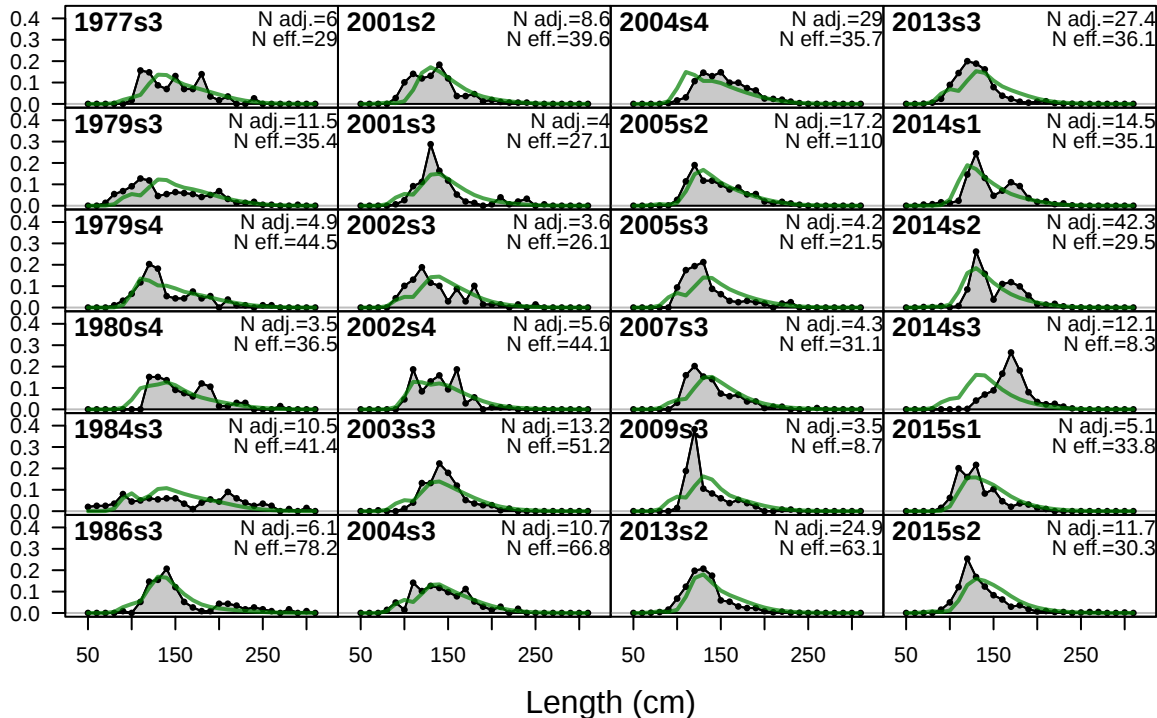


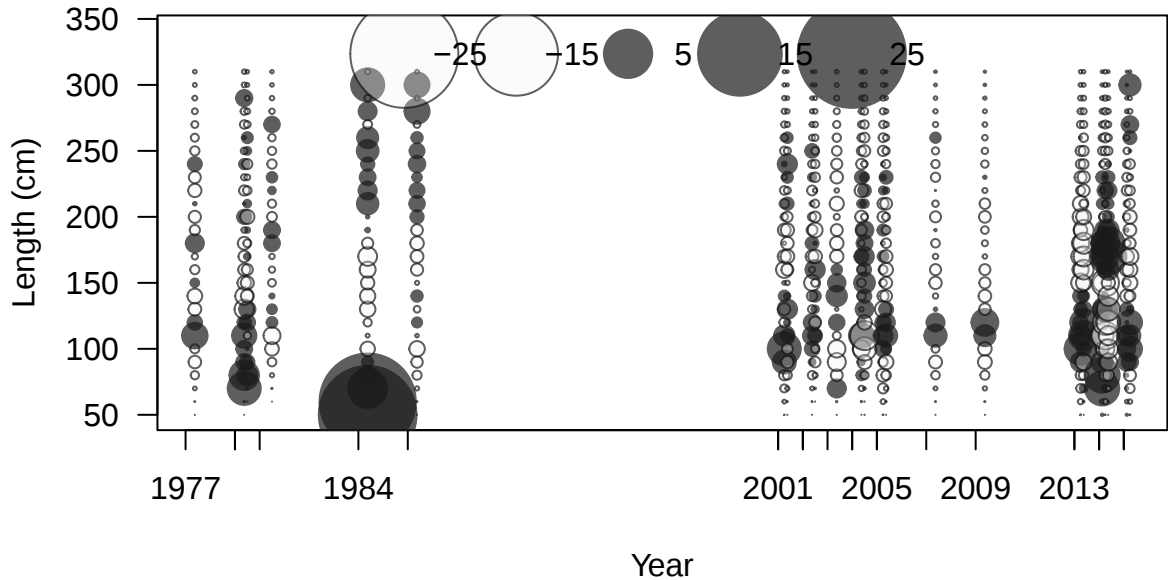
Effective sample size



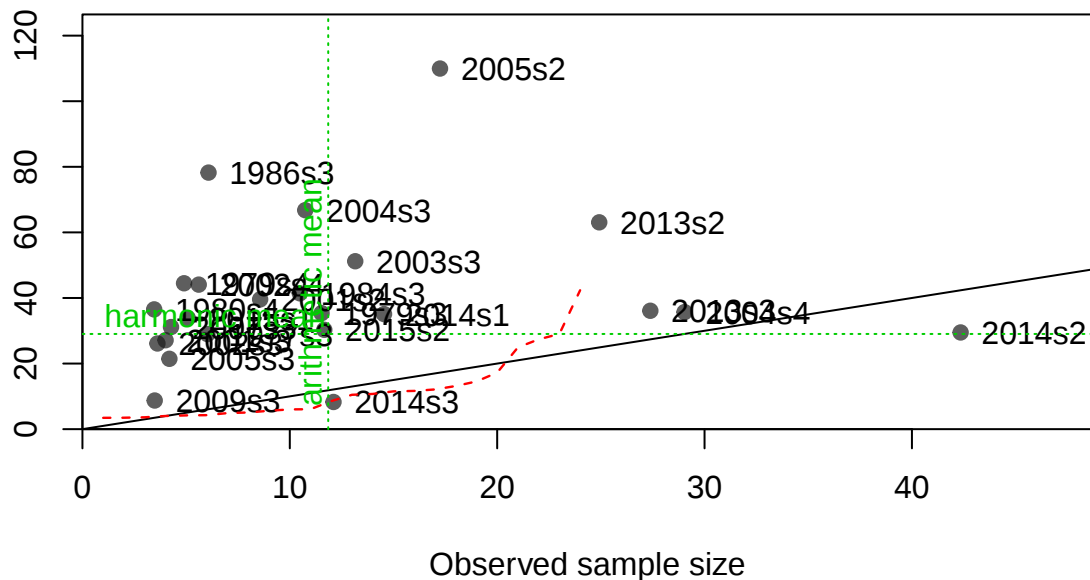
F12_LL_DW_A4 (whole catch)



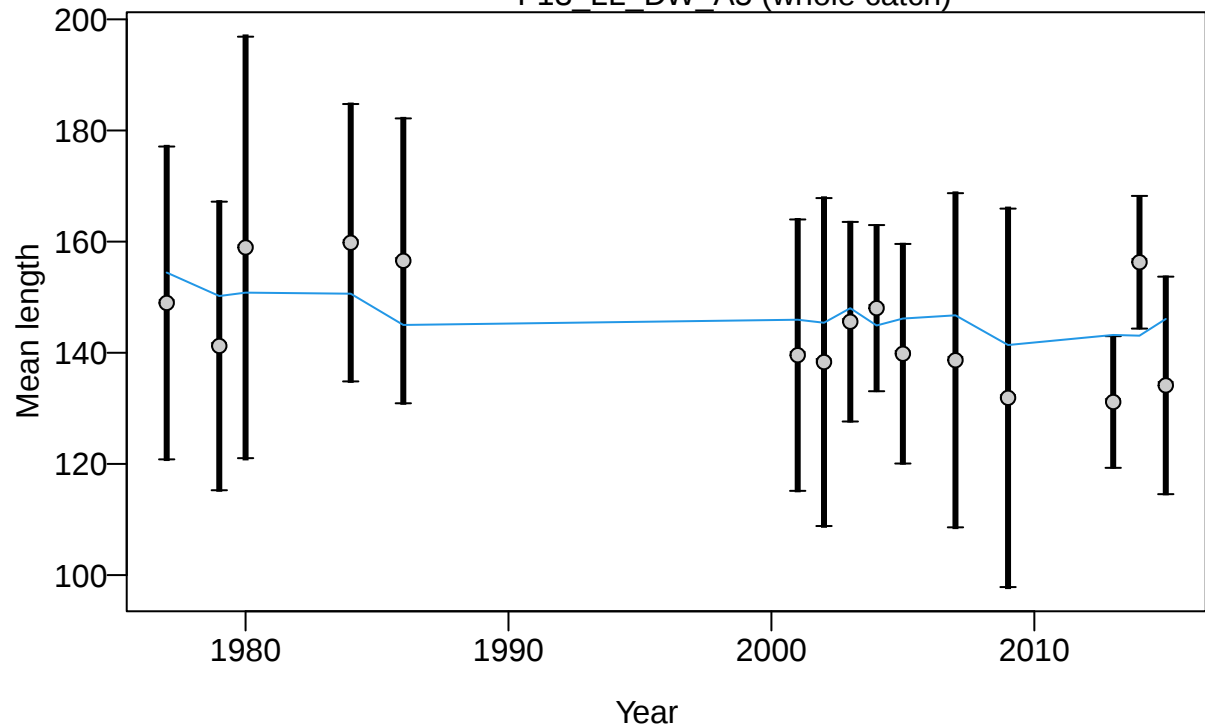




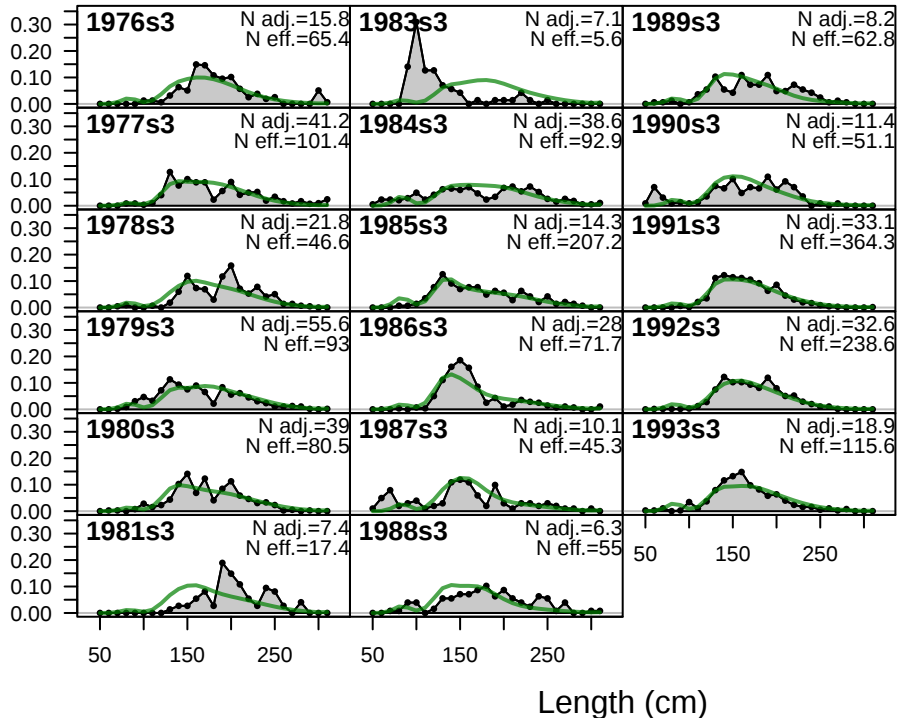
Effective sample size

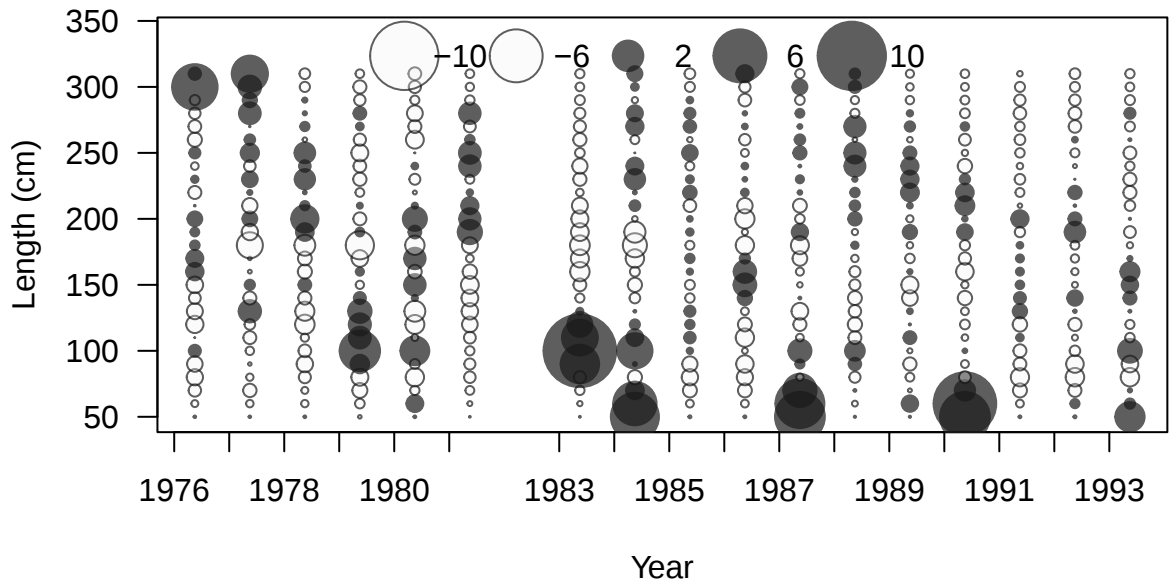


F13_LL_DW_A5 (whole catch)

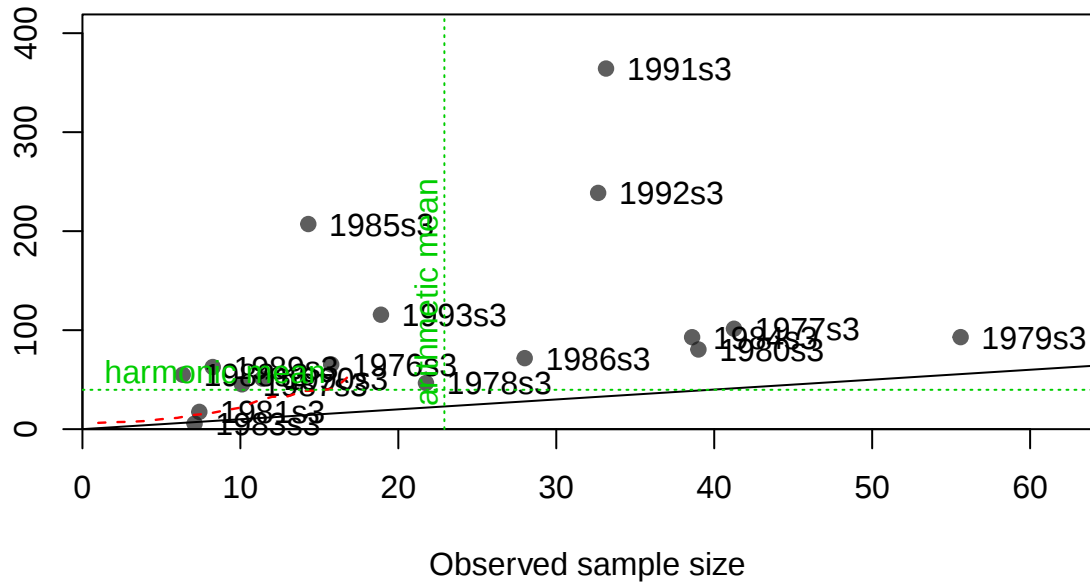


Proportion

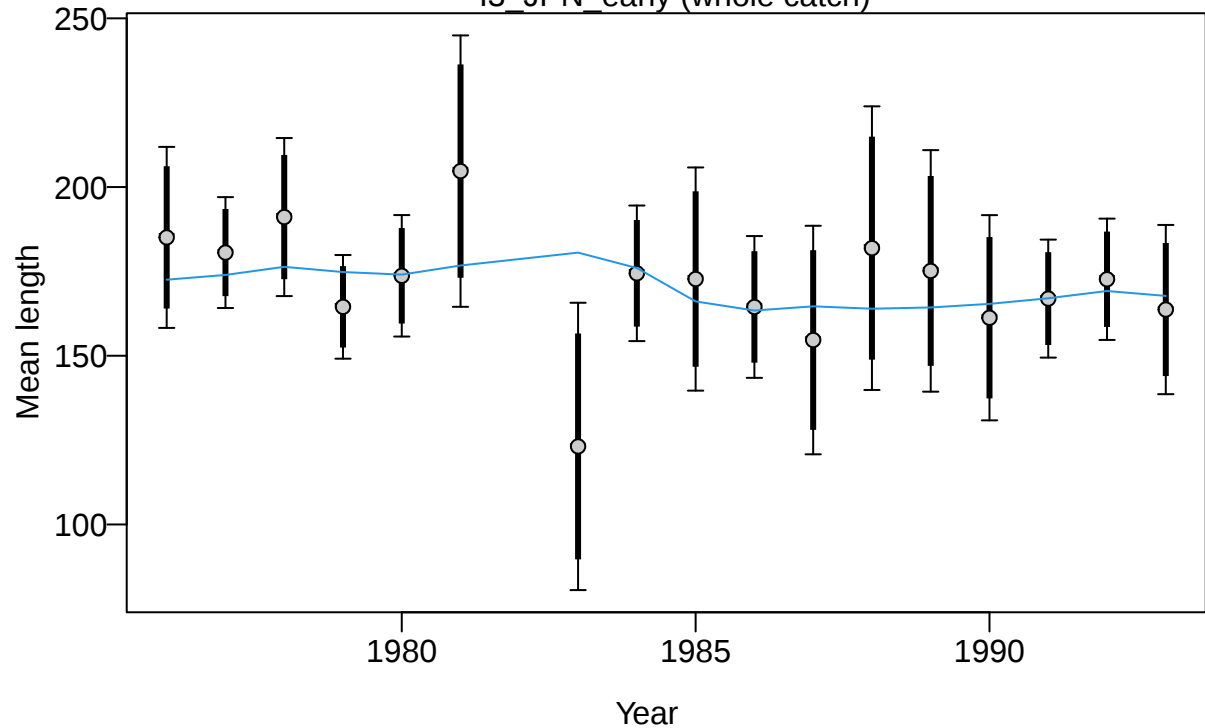




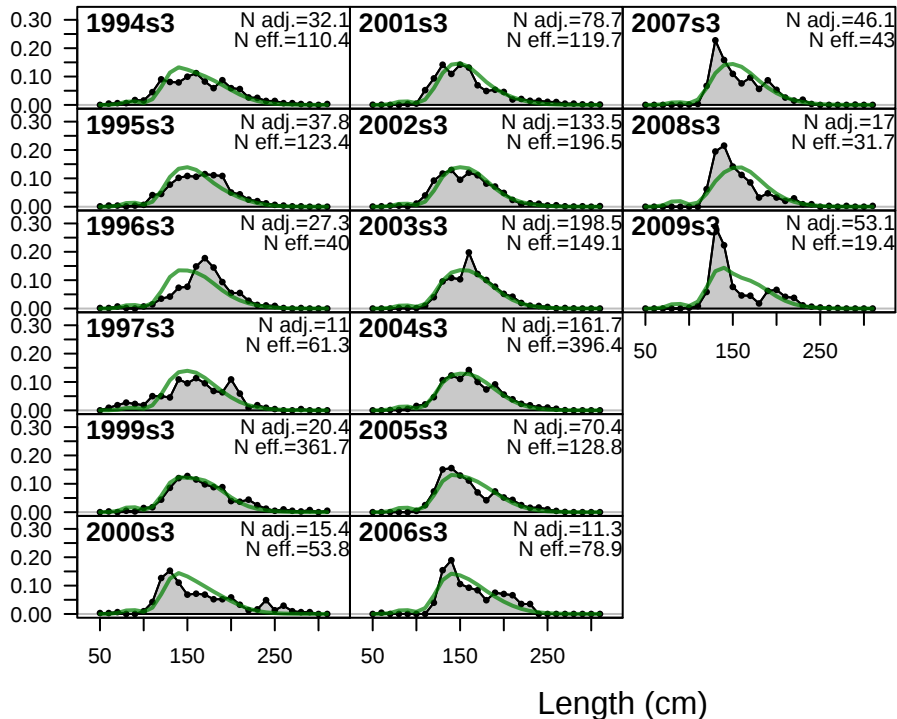
Effective sample size

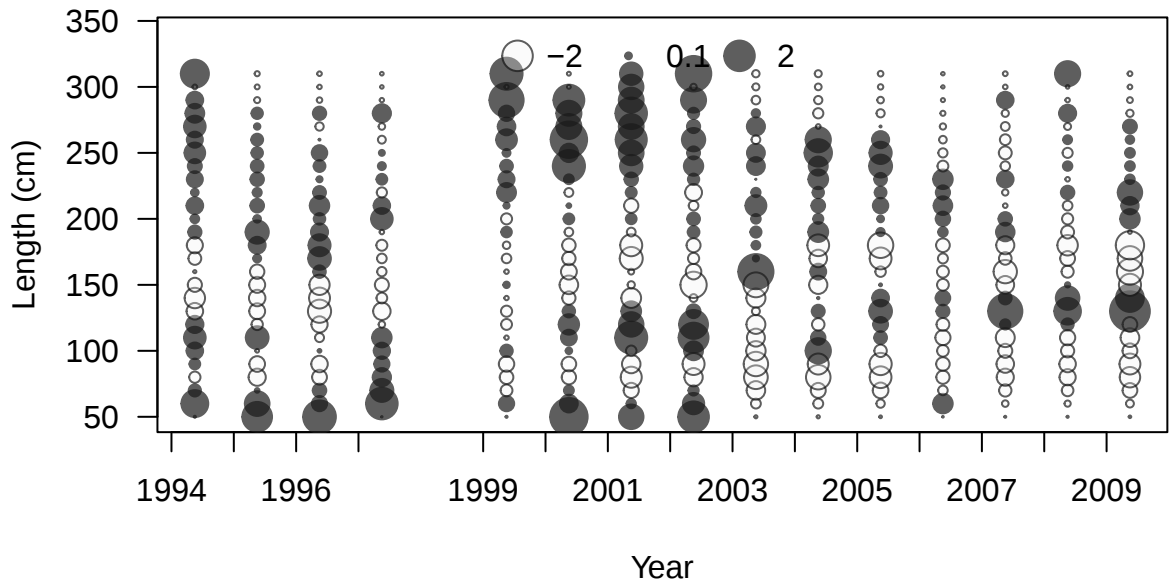


I3_JPN_early (whole catch)

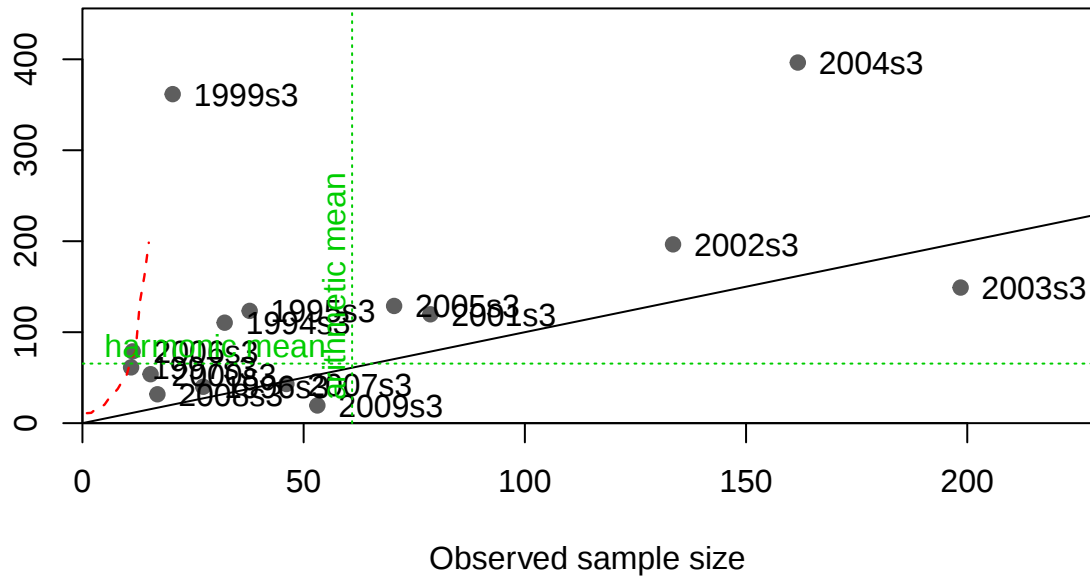


Proportion

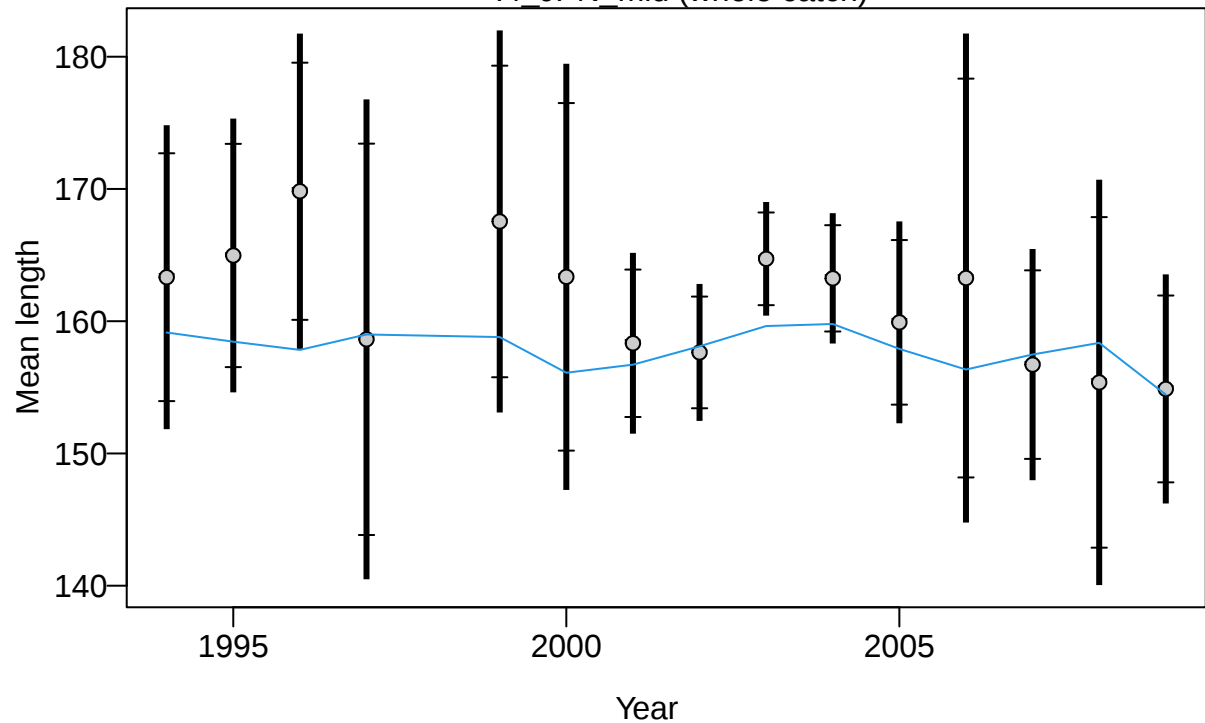




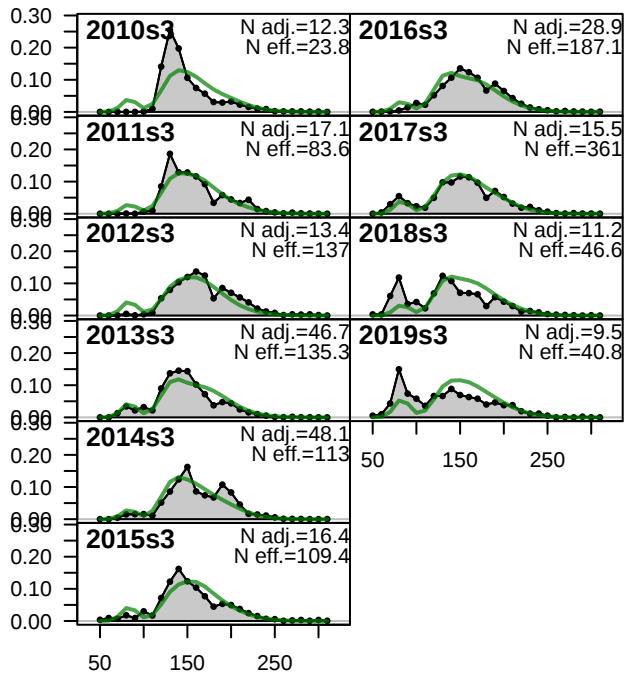
Effective sample size



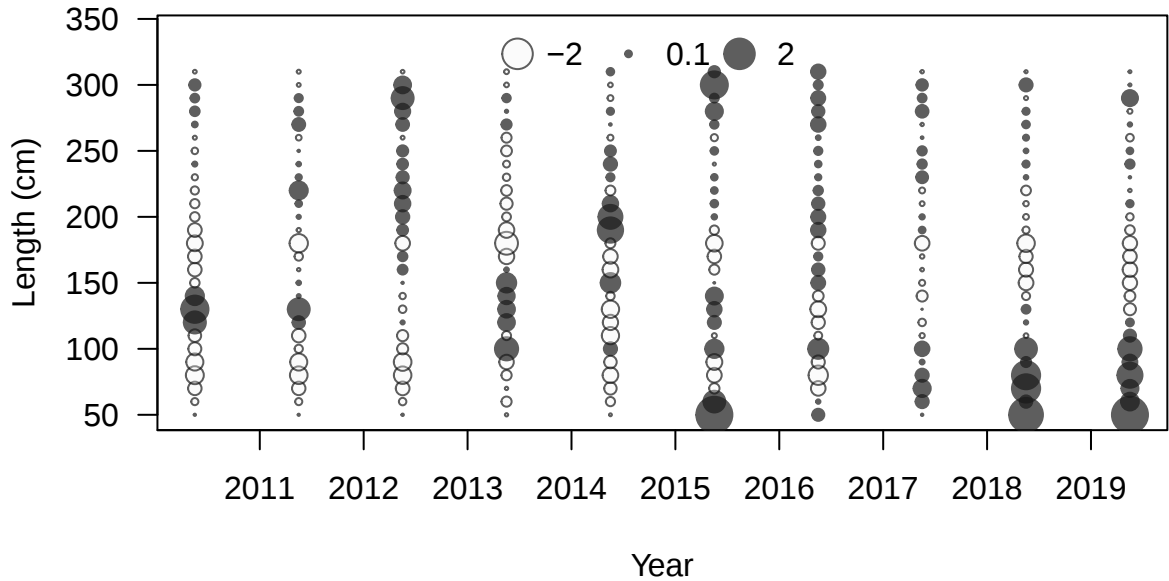
l4_JPN_mid (whole catch)



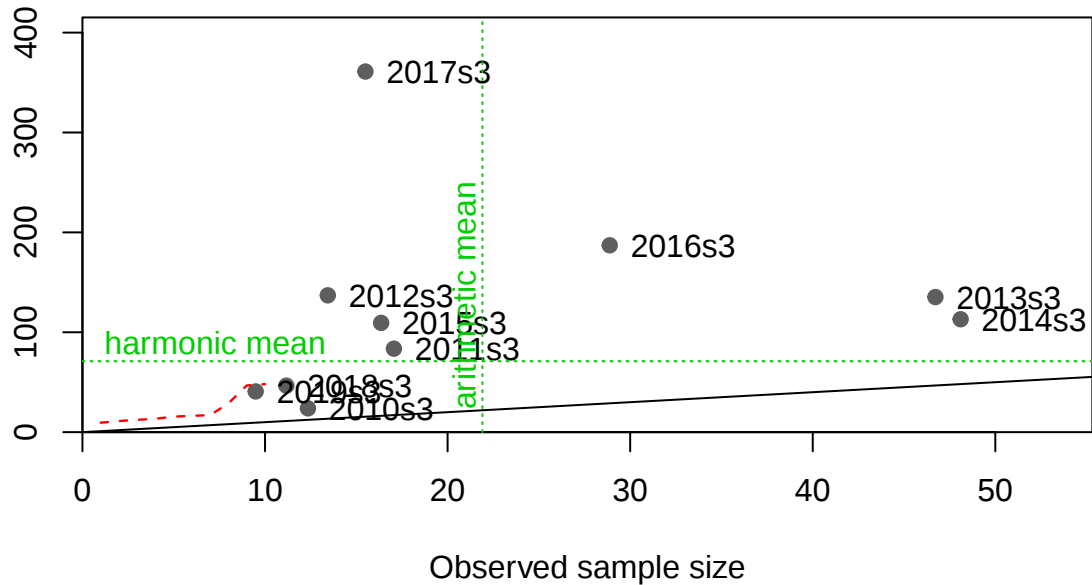
Proportion



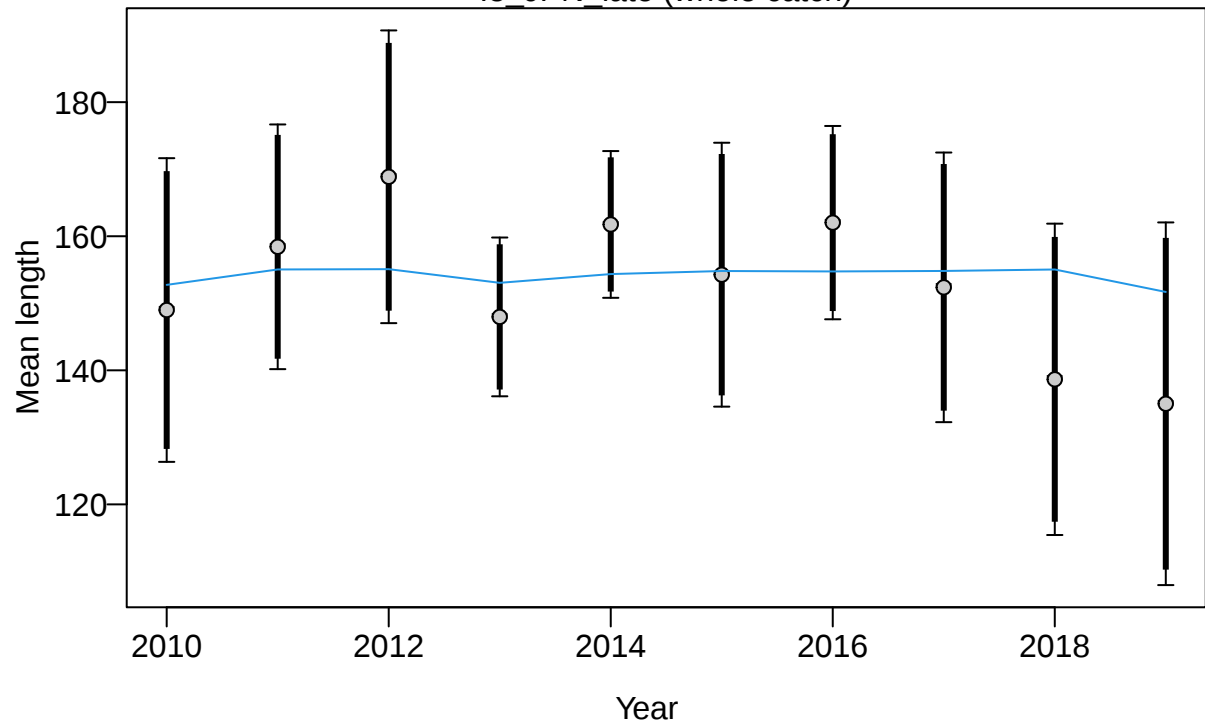
Length (cm)



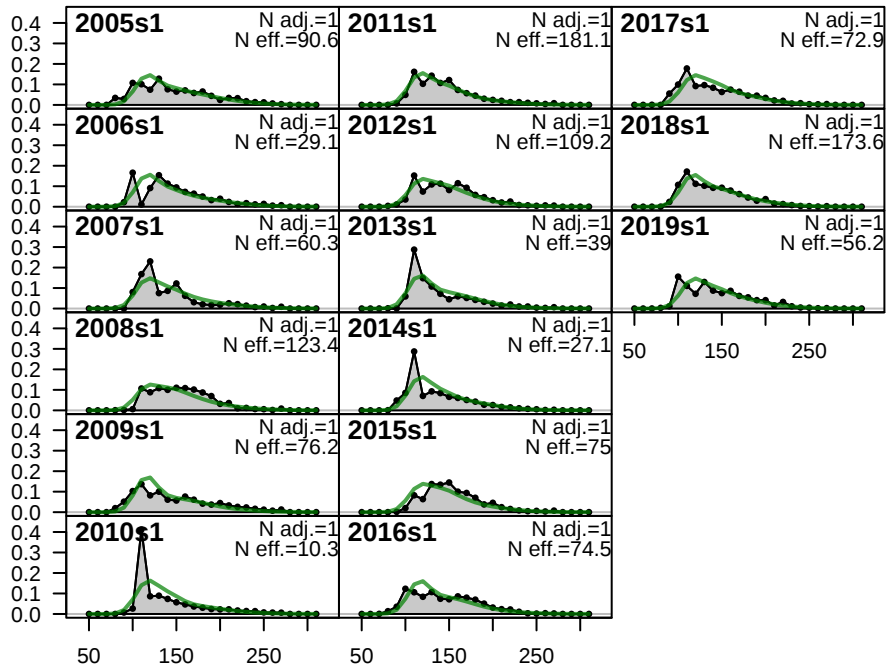
Effective sample size



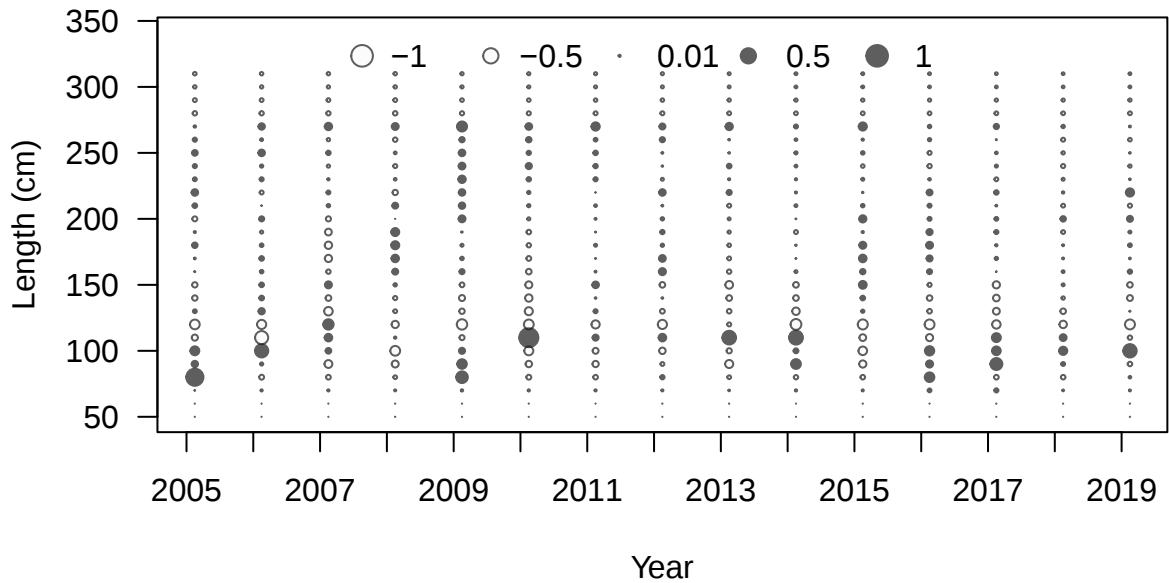
I5_JPN_late (whole catch)



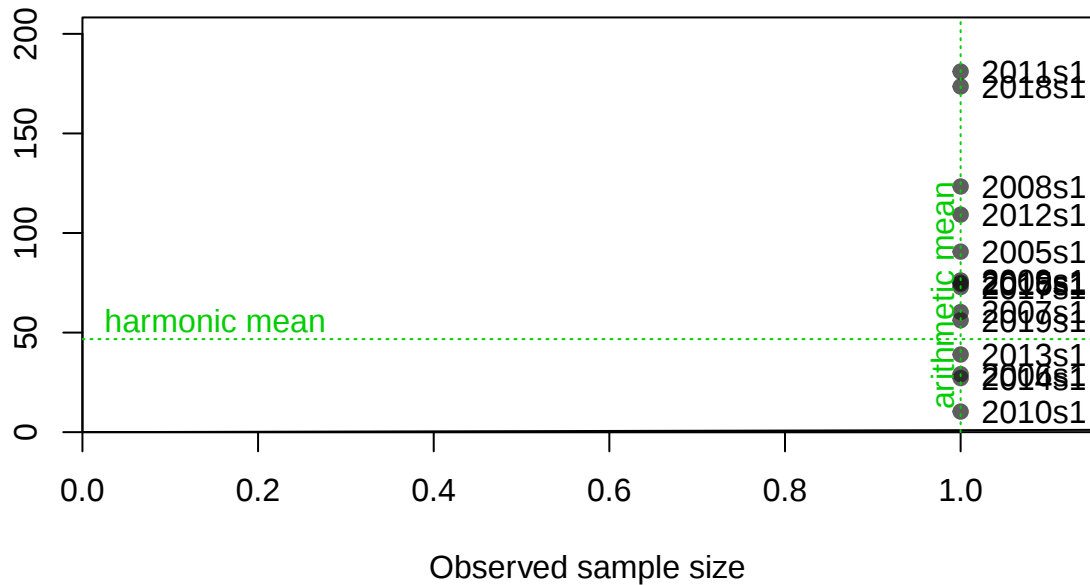
Proportion



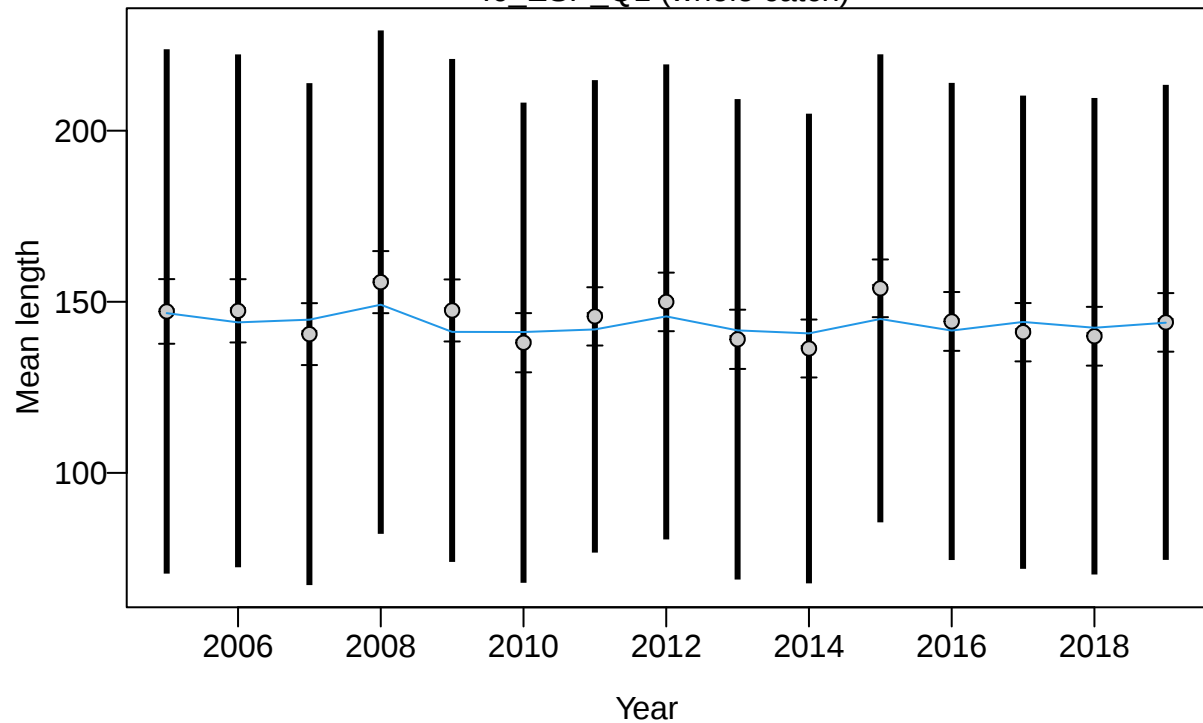
Length (cm)



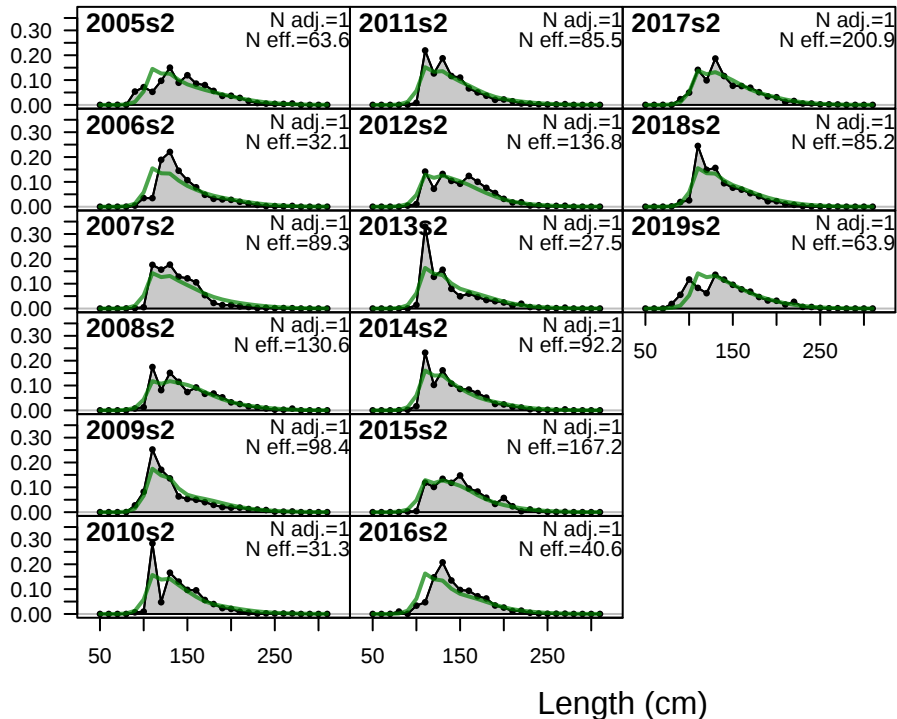
Effective sample size

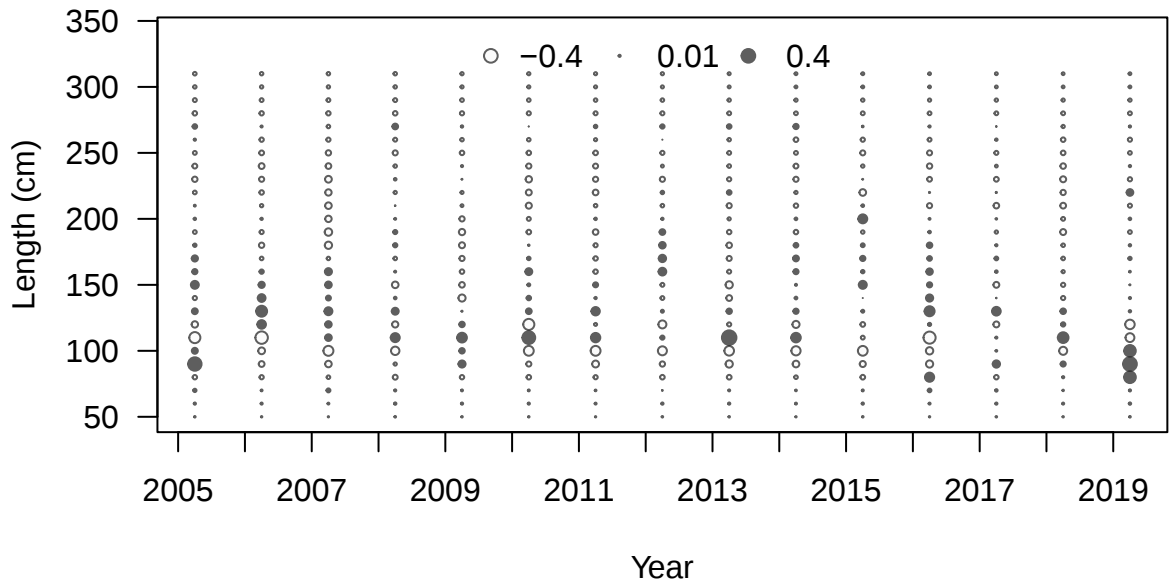


I6_ESP_Q1 (whole catch)

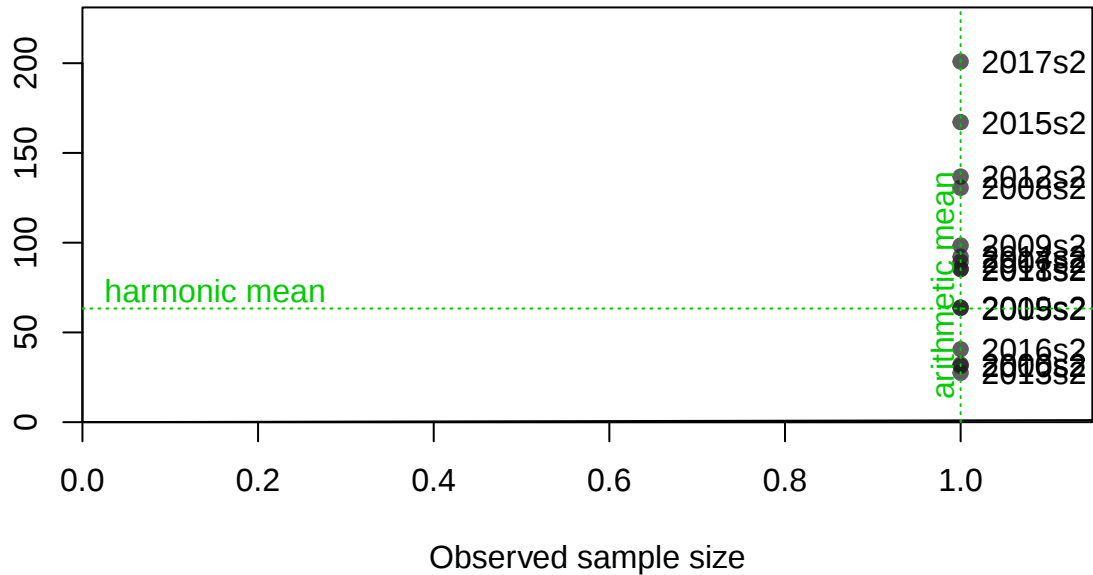


Proportion

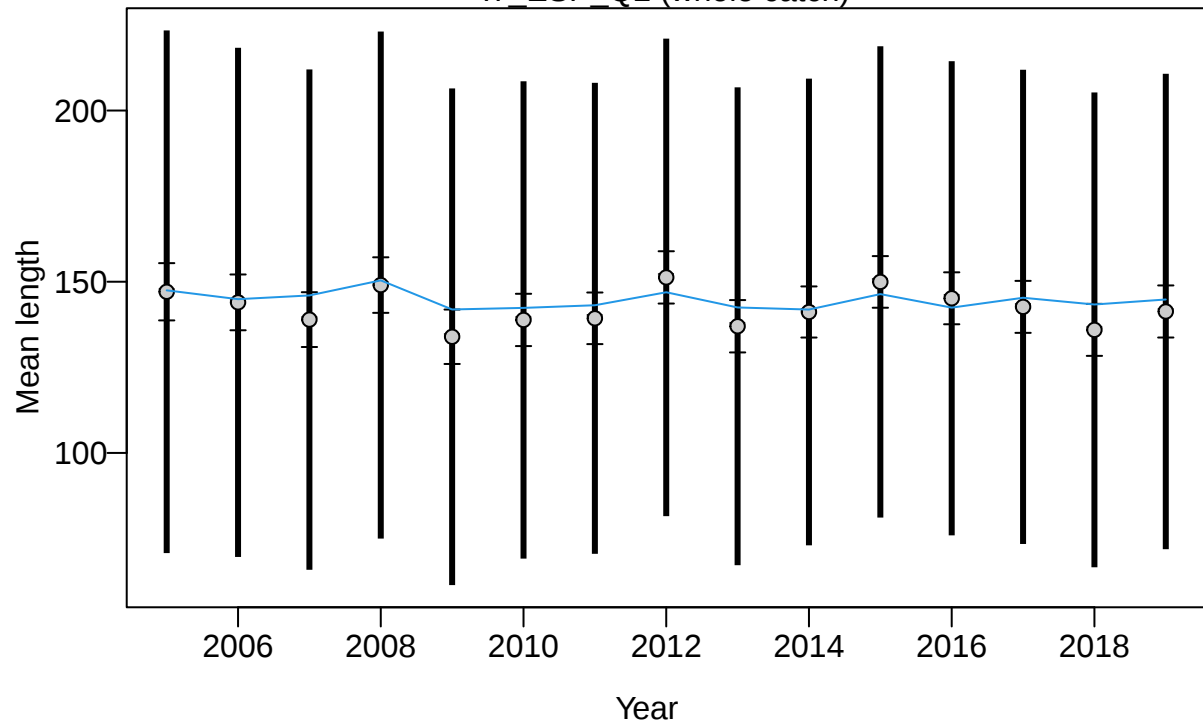




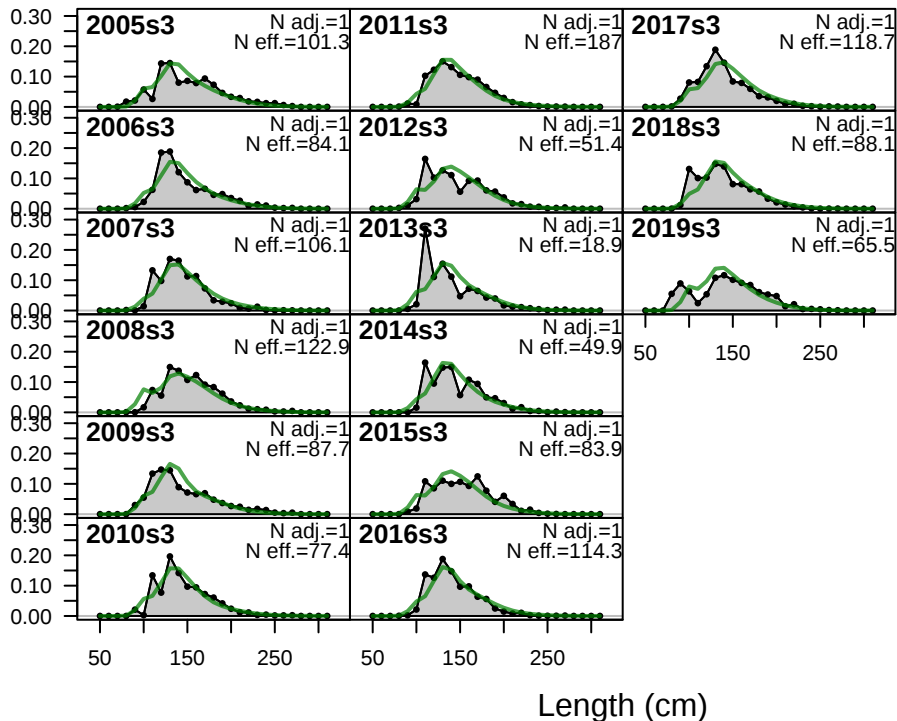
Effective sample size

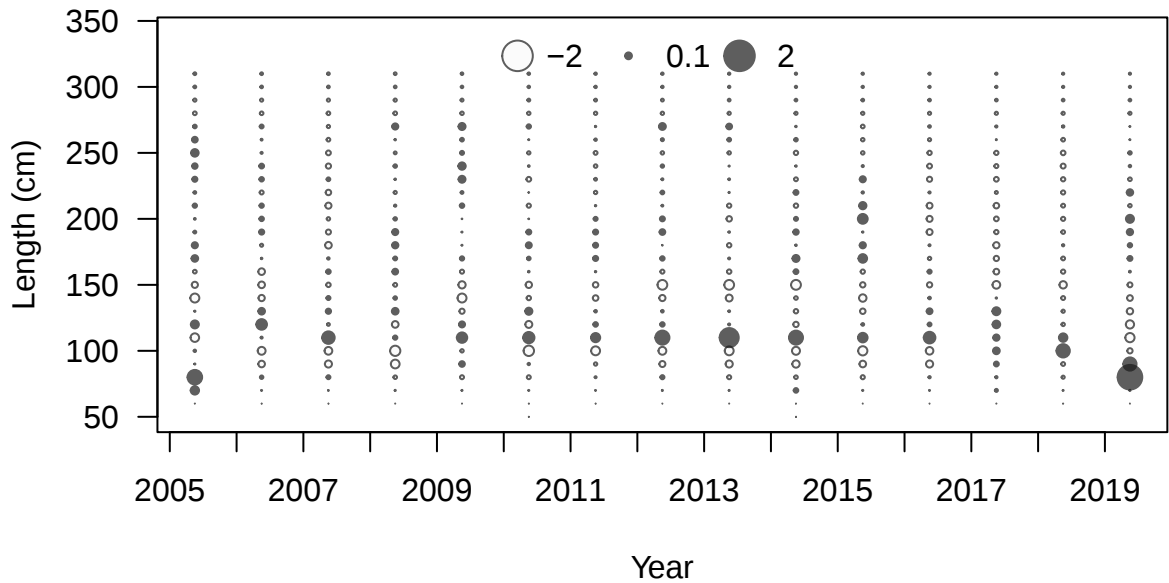


I7_ESP_Q2 (whole catch)

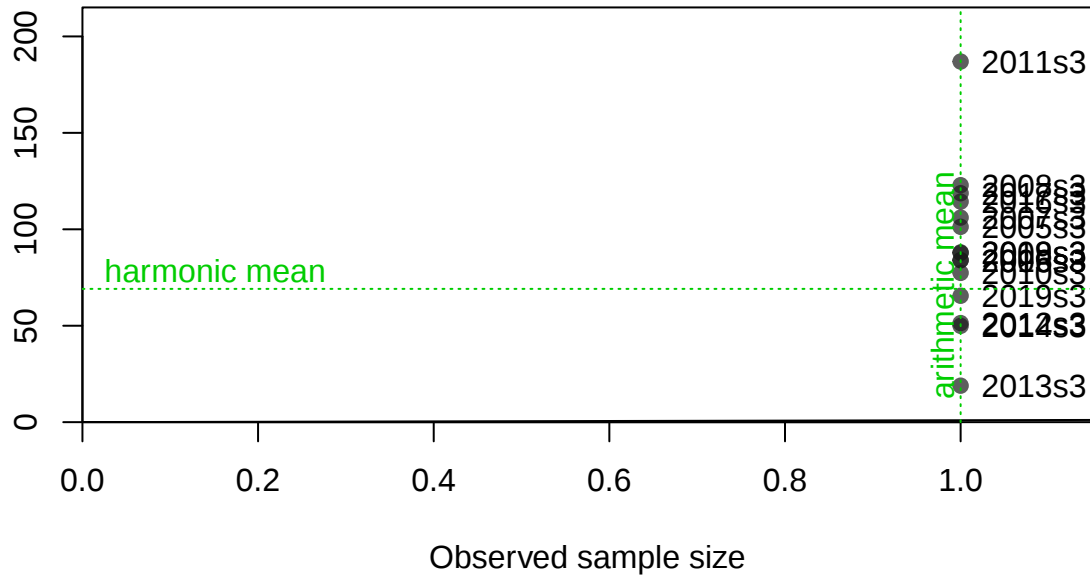


Proportion

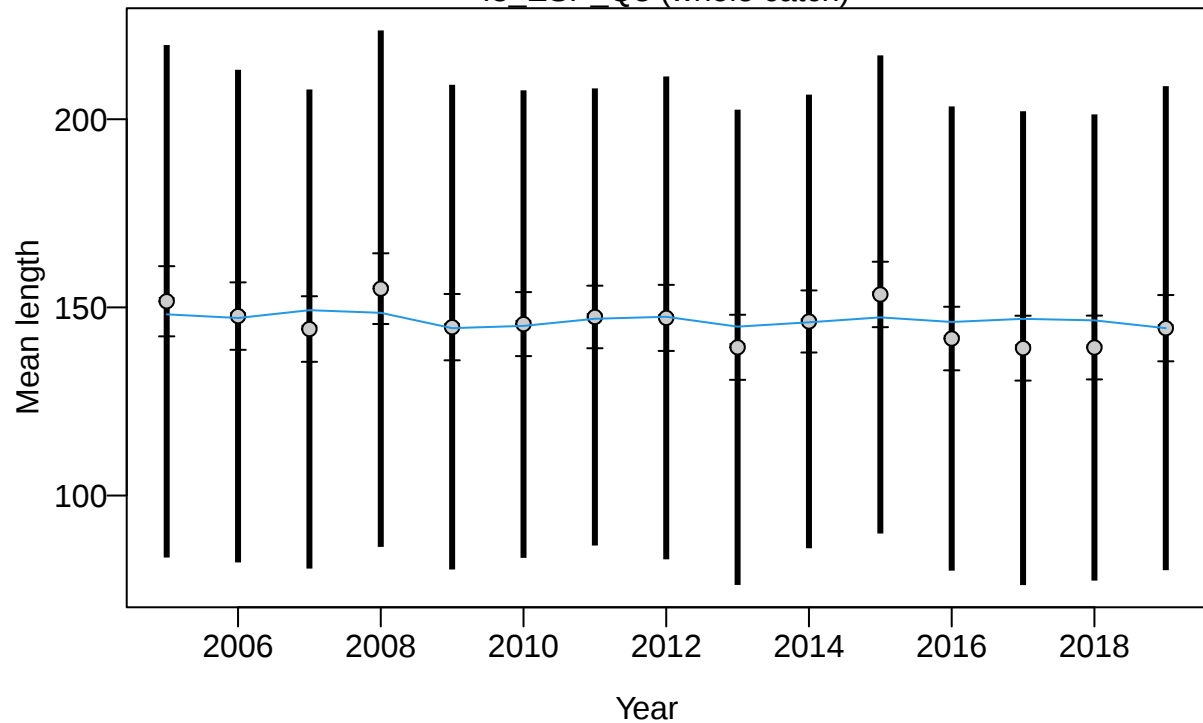


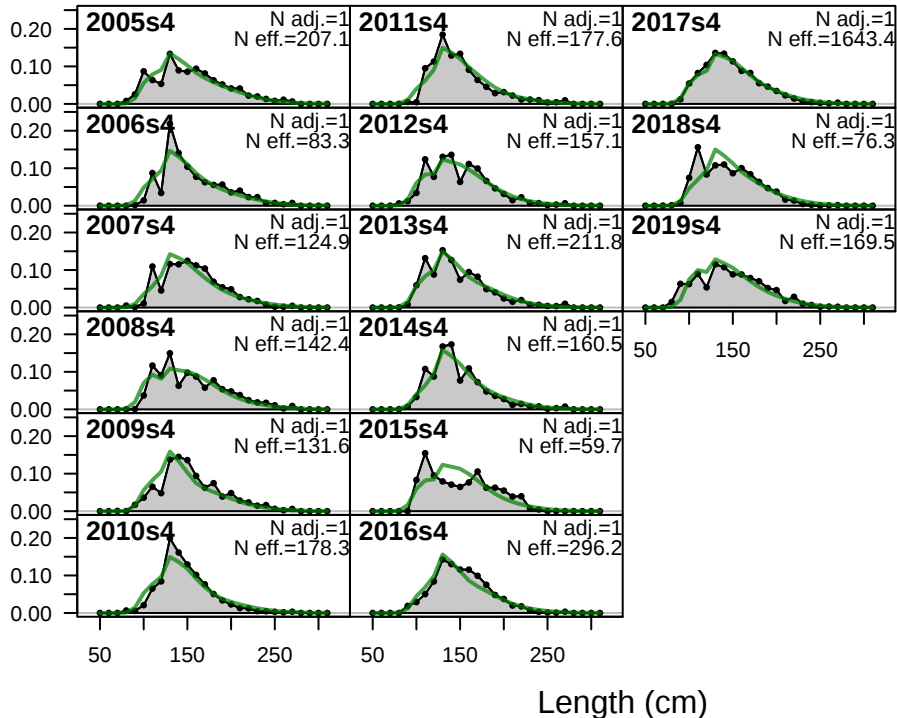


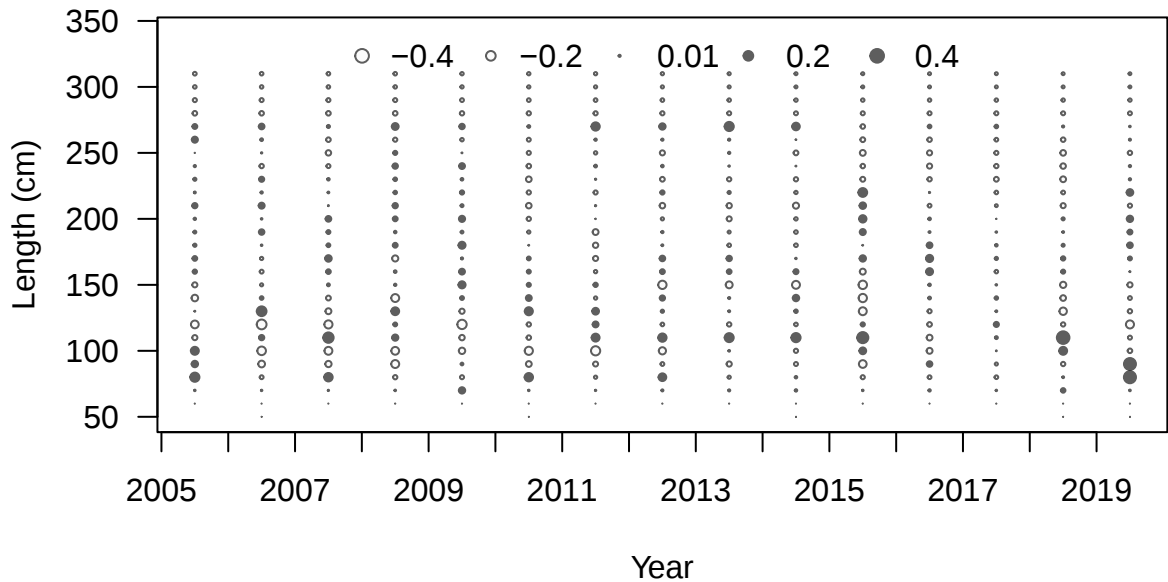
Effective sample size

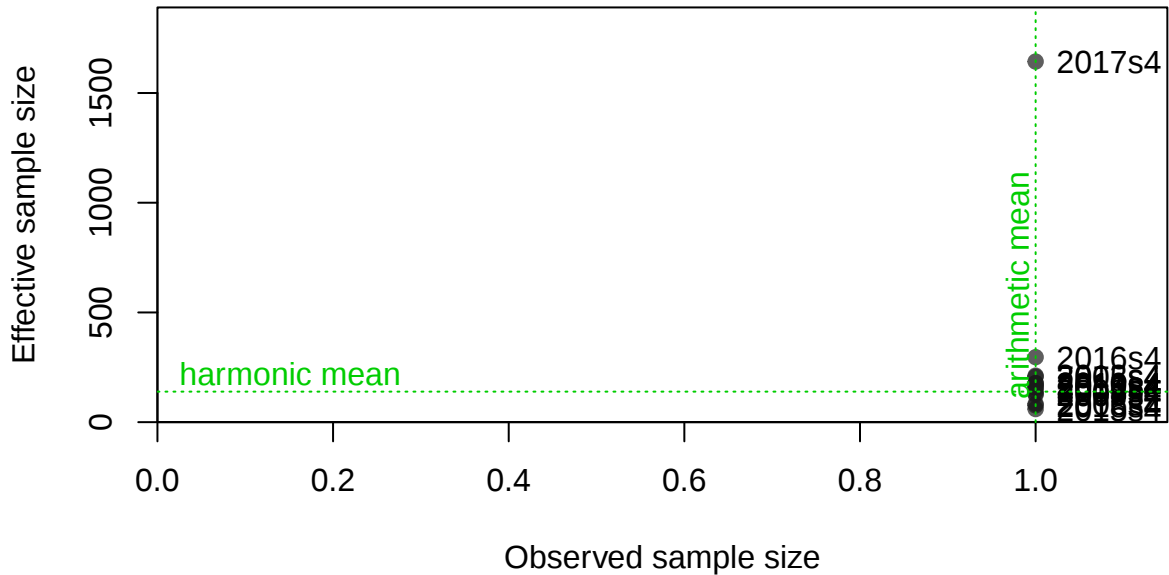


I8_ESP_Q3 (whole catch)

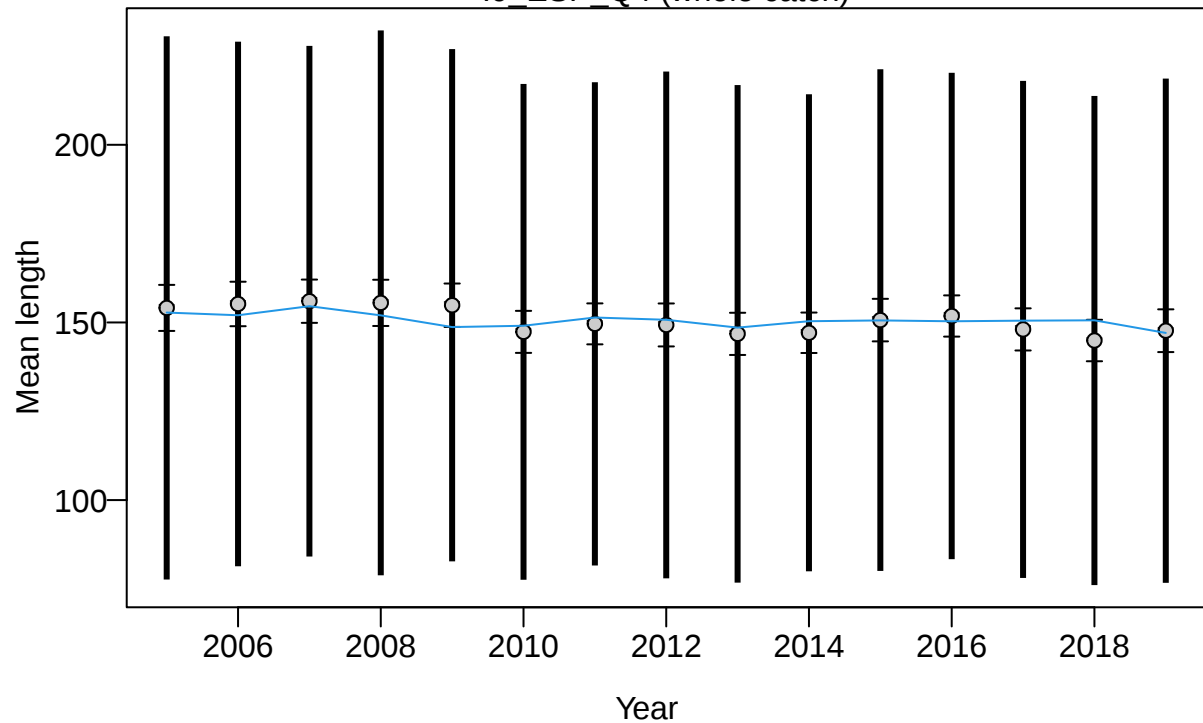




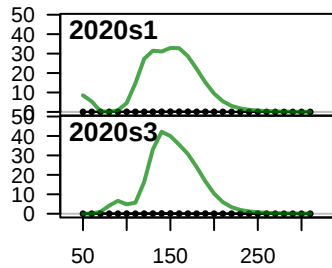




I9_ESP_Q4 (whole catch)

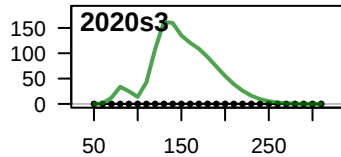


Proportion



Length (cm)

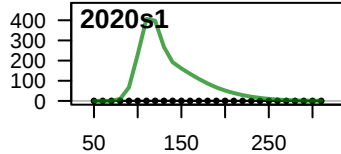
2020s3



Proportion

Length (cm)

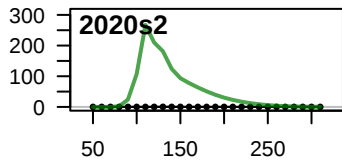
2020s1



Proportion

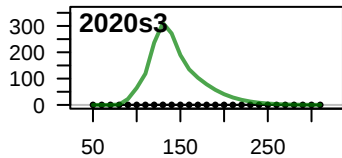
Length (cm)

Proportion



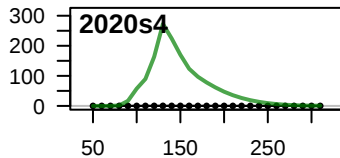
Length (cm)

Proportion



Length (cm)

2020s4



Proportion

Length (cm)

Proportion

I1_Chile_Q2

Sum of N adj.=641.3
Sum of N eff.=3195.2

I2_Chile_Q3

Sum of N adj.=485.6
Sum of N eff.=3103.9

100

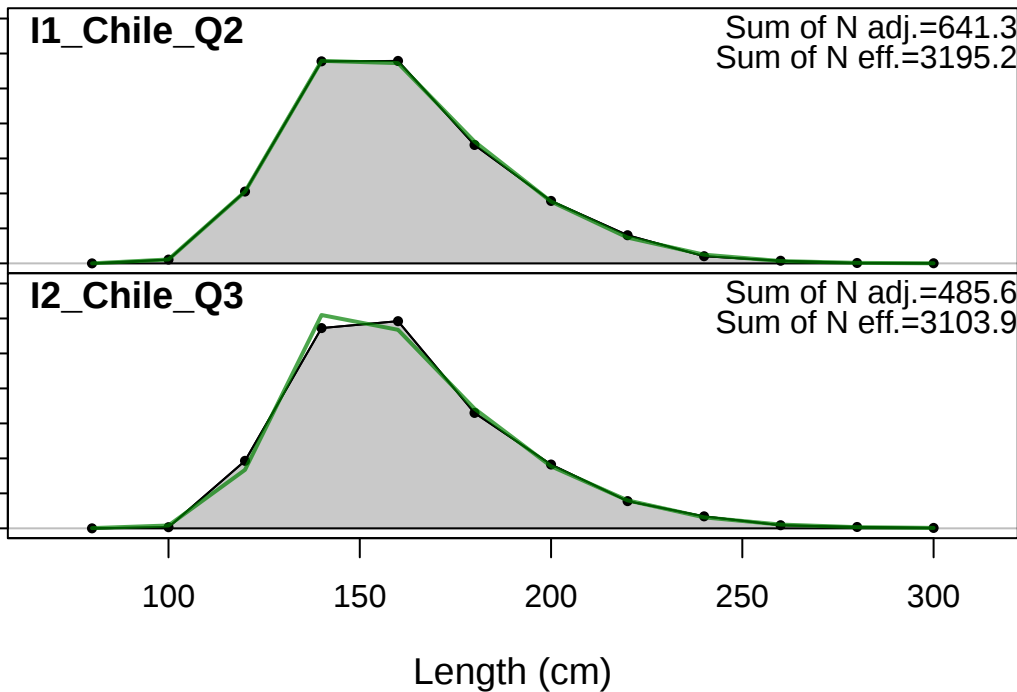
150

200

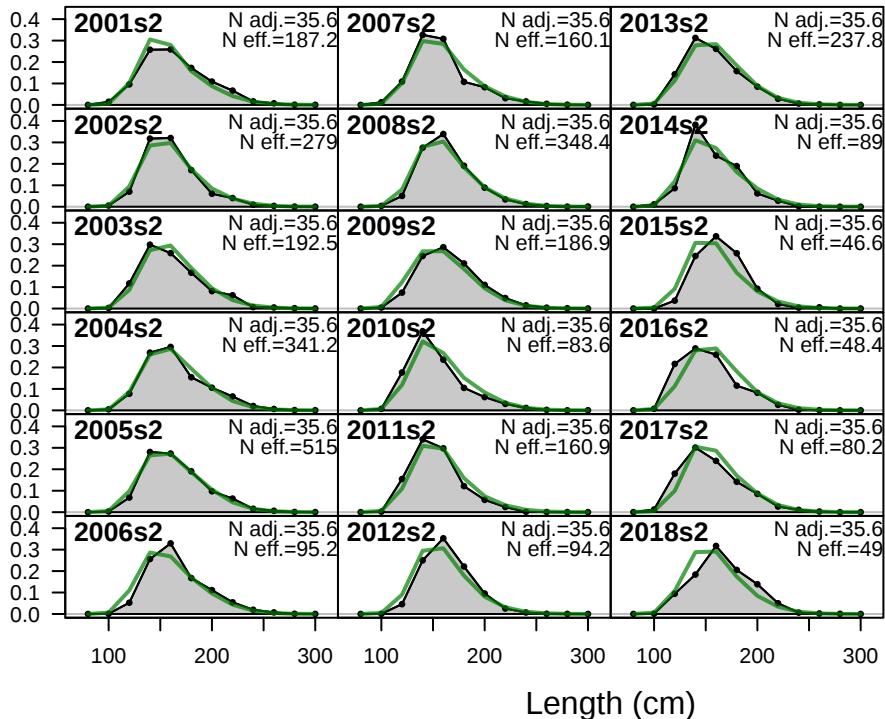
250

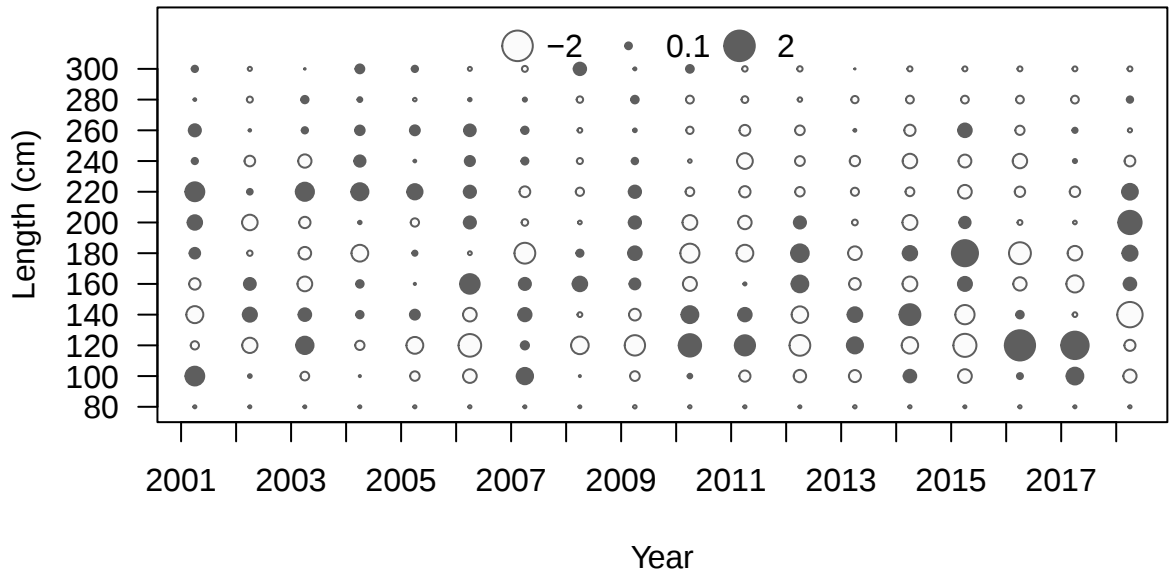
300

Length (cm)

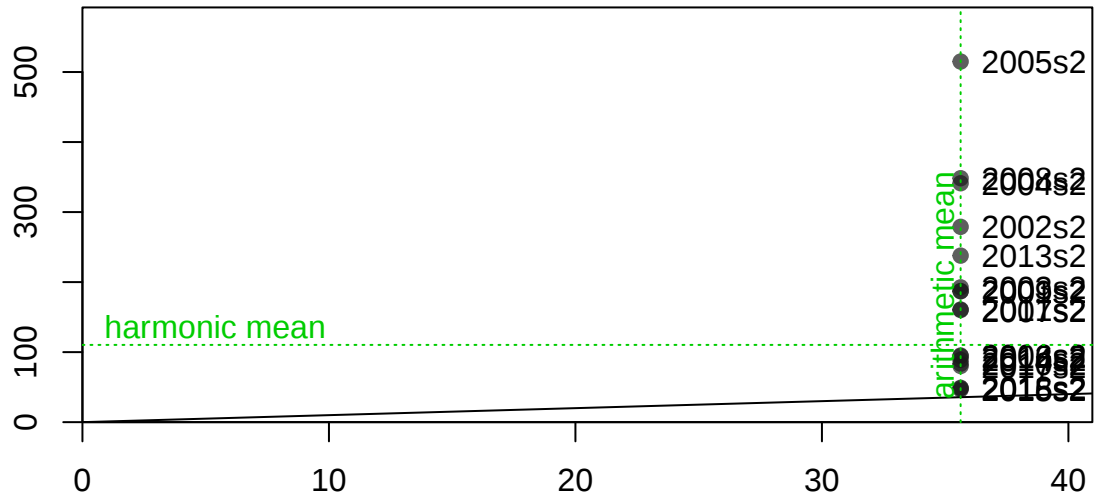


Proportion



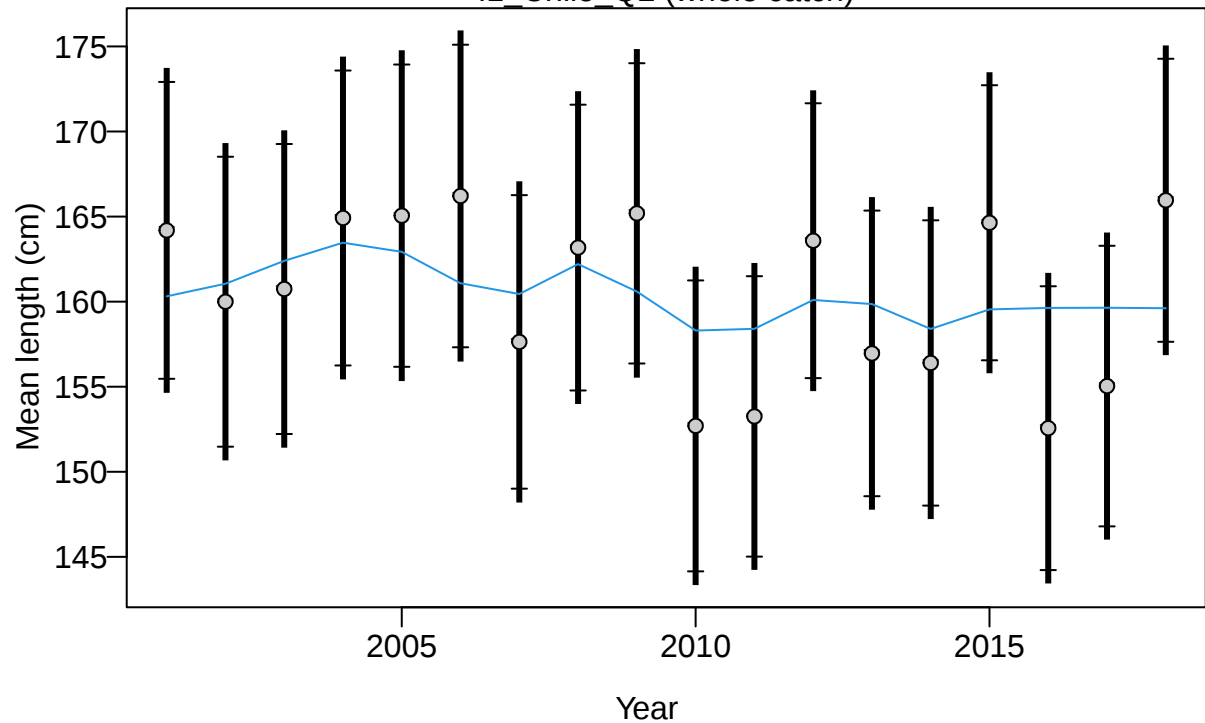


Effective sample size

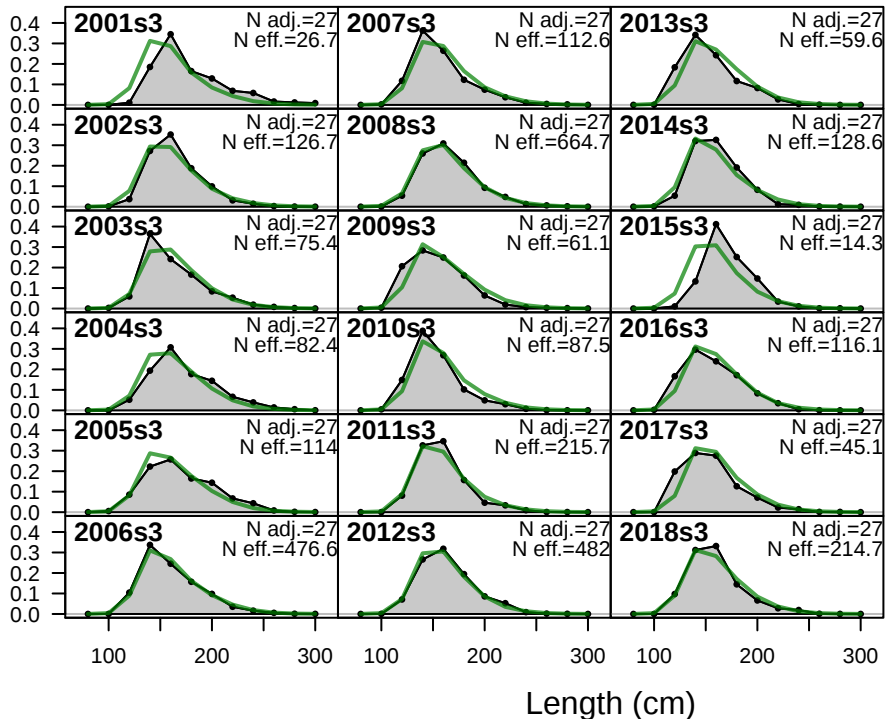


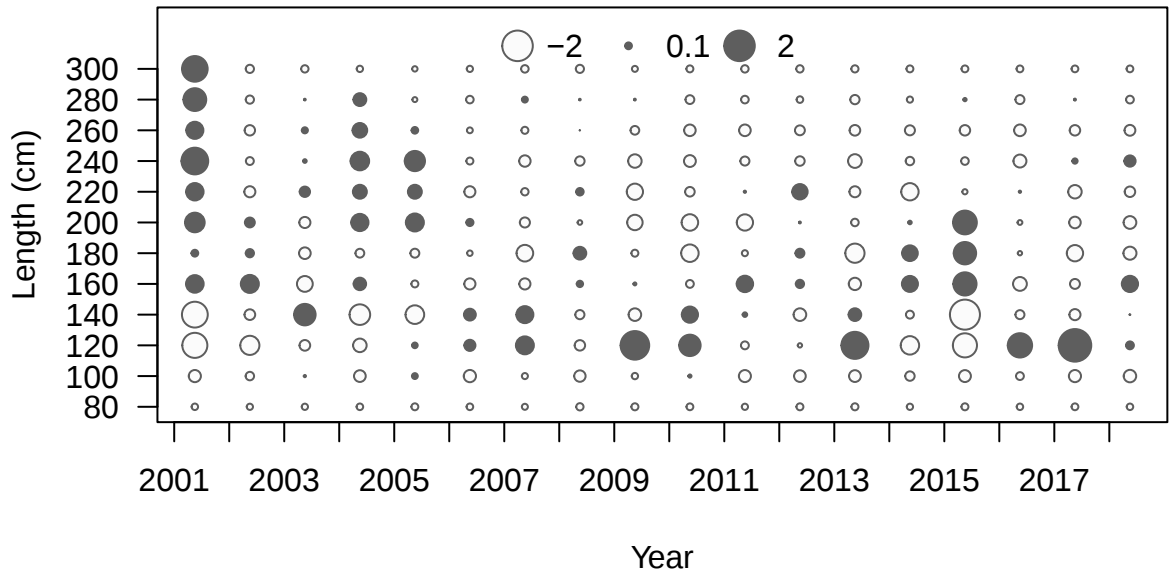
Observed sample size

I1_Chile_Q2 (whole catch)

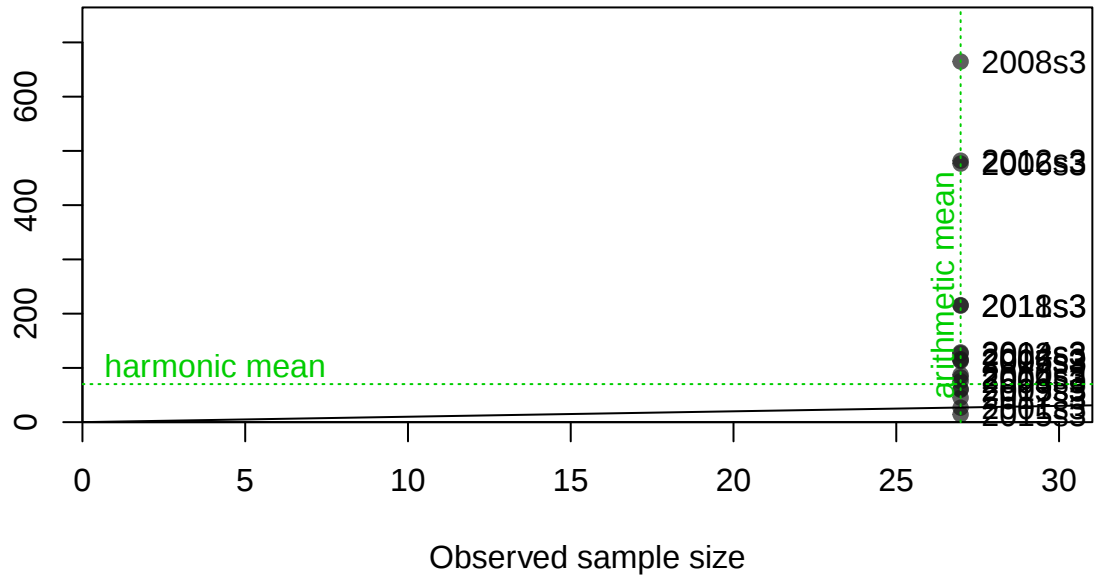


Proportion

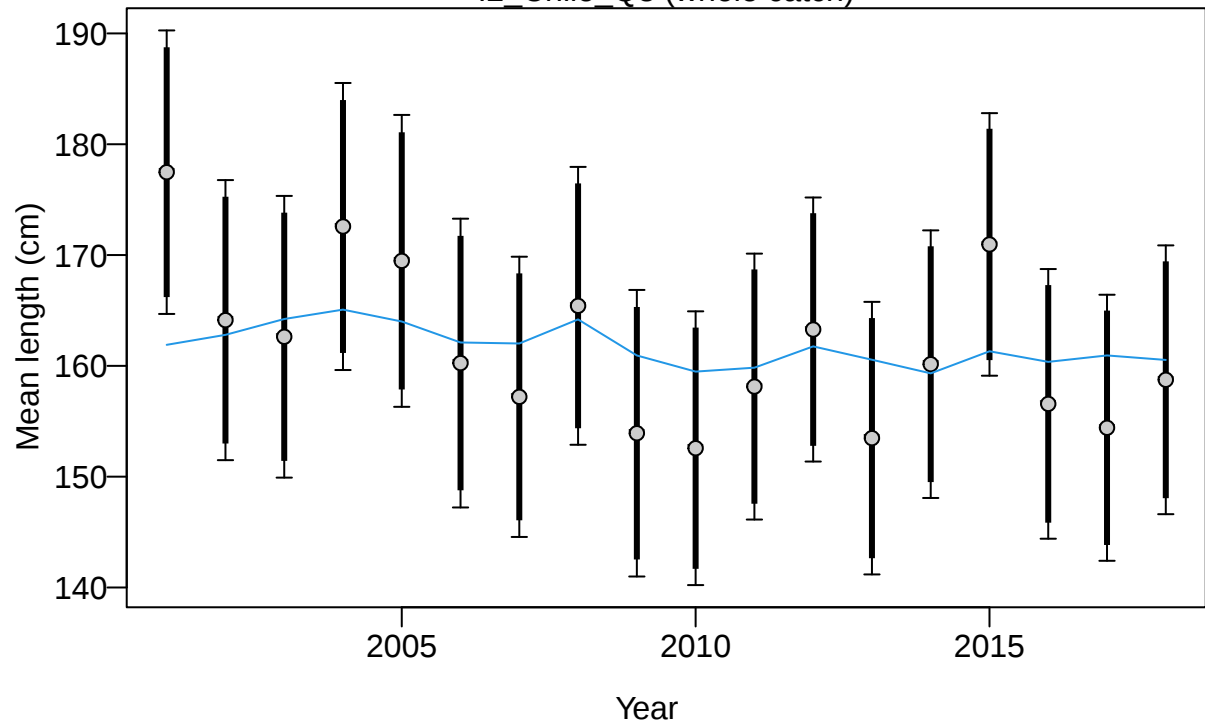




Effective sample size



I2_Chile_Q3 (whole catch)

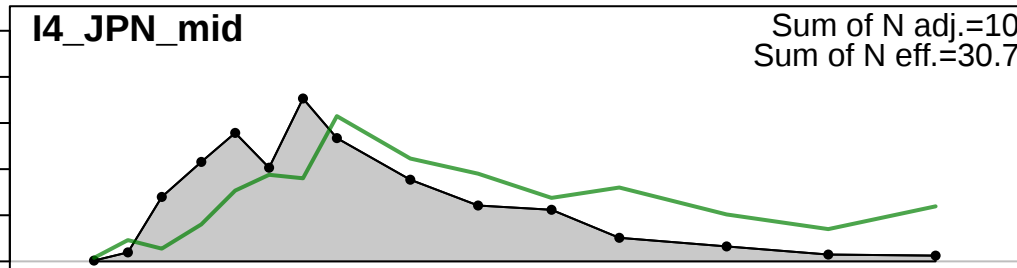


Proportion

I4_JPN_mid

Sum of N adj.=10
Sum of N eff.=30.7

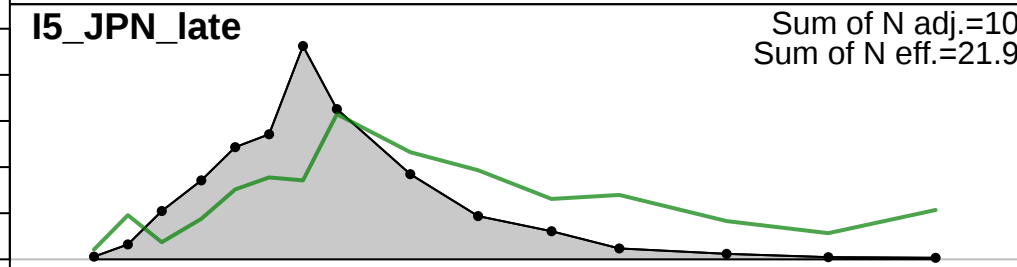
0.25
0.20
0.15
0.10
0.05
0.00



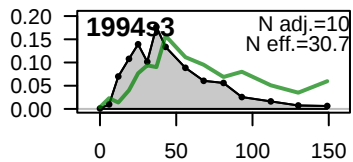
I5_JPN_late

Sum of N adj.=10
Sum of N eff.=21.9

0.25
0.20
0.15
0.10
0.05
0.00

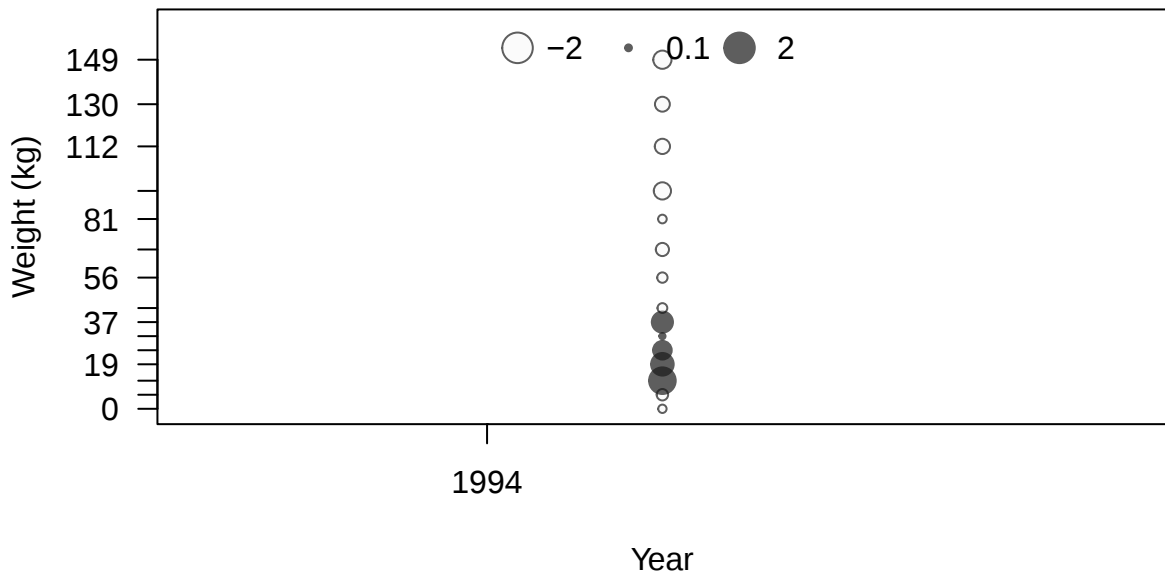


Weight (kg)

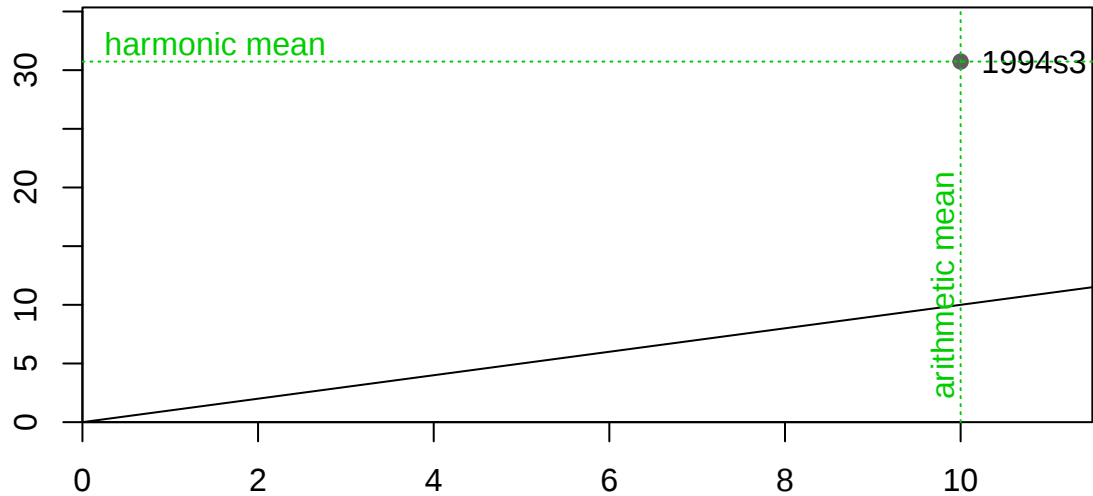


Proportion

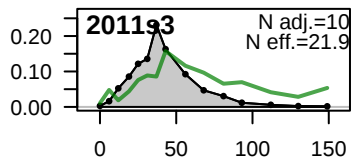
Weight (kg)

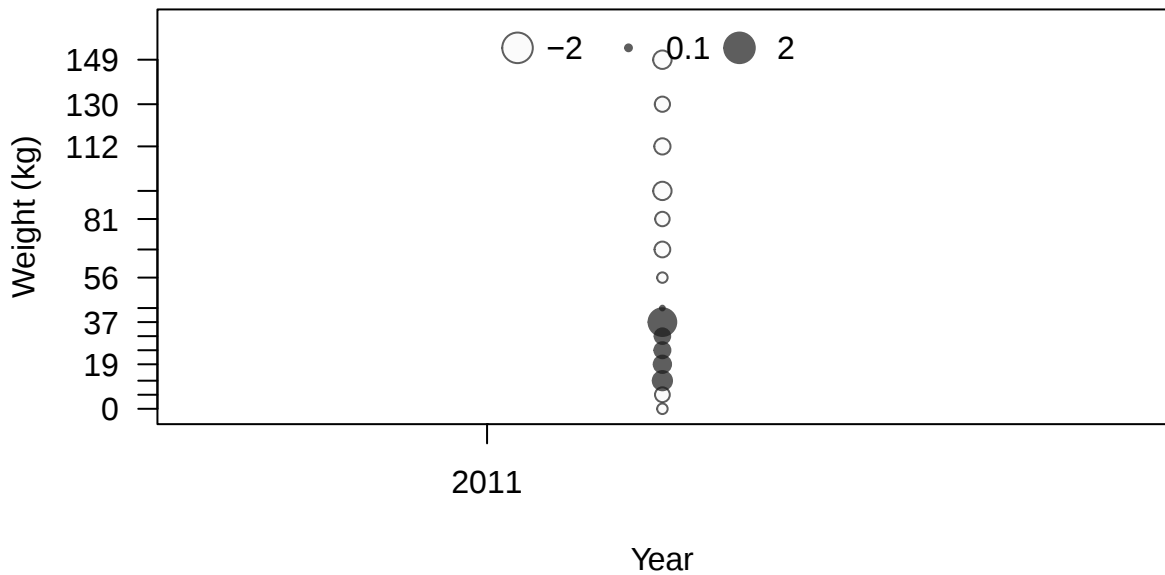


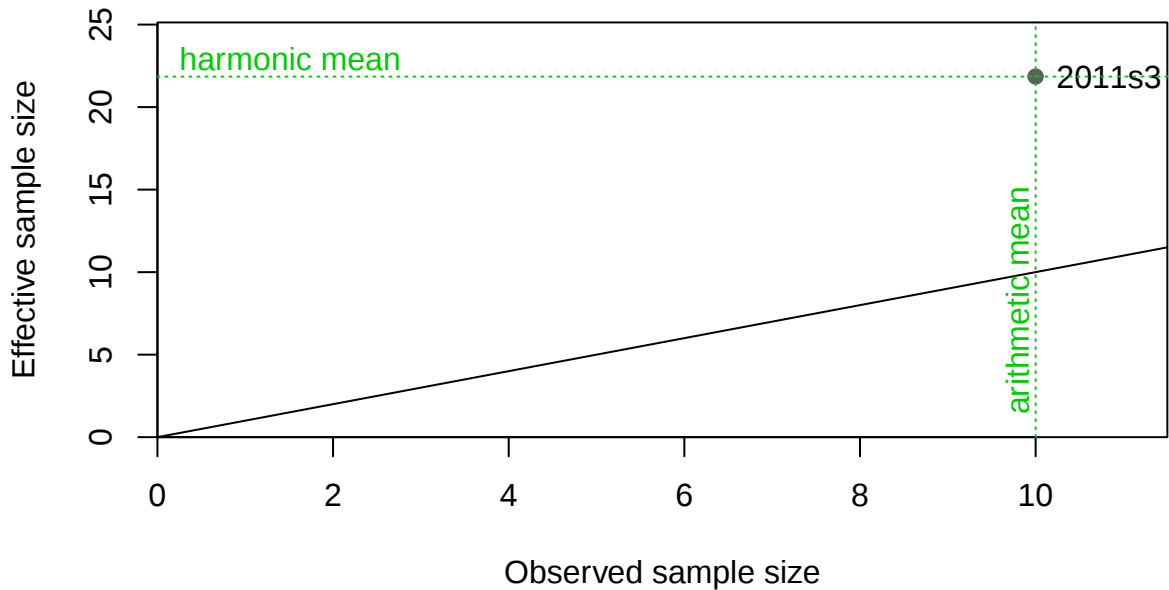
Effective sample size



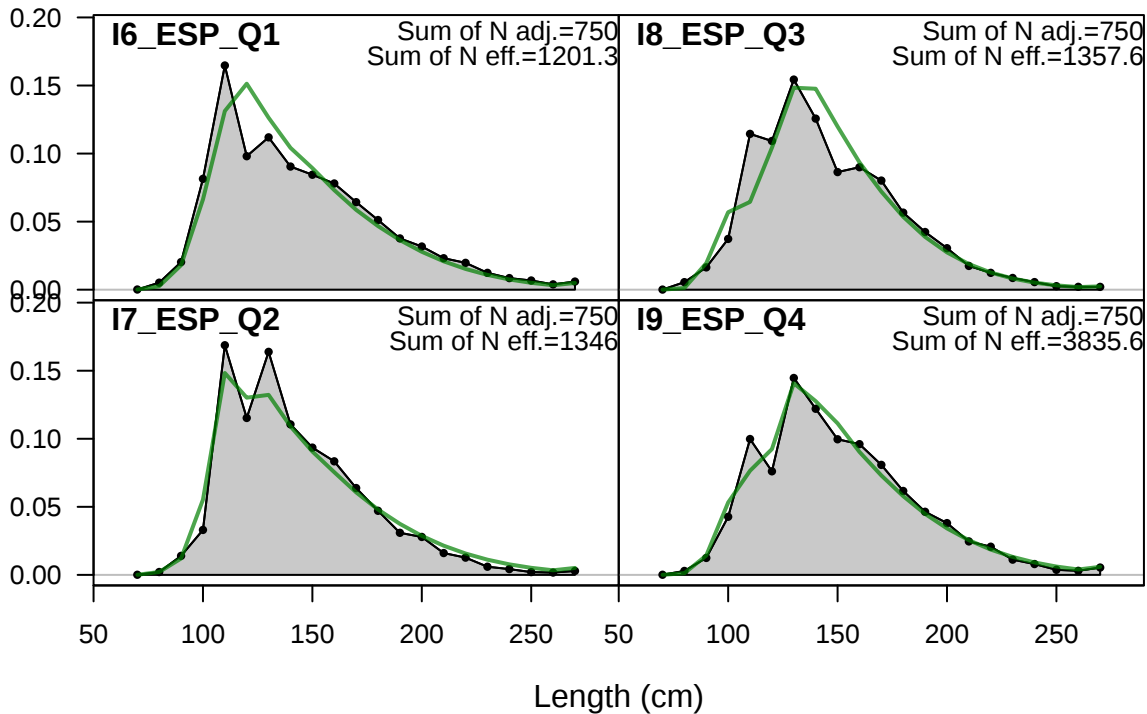
Observed sample size



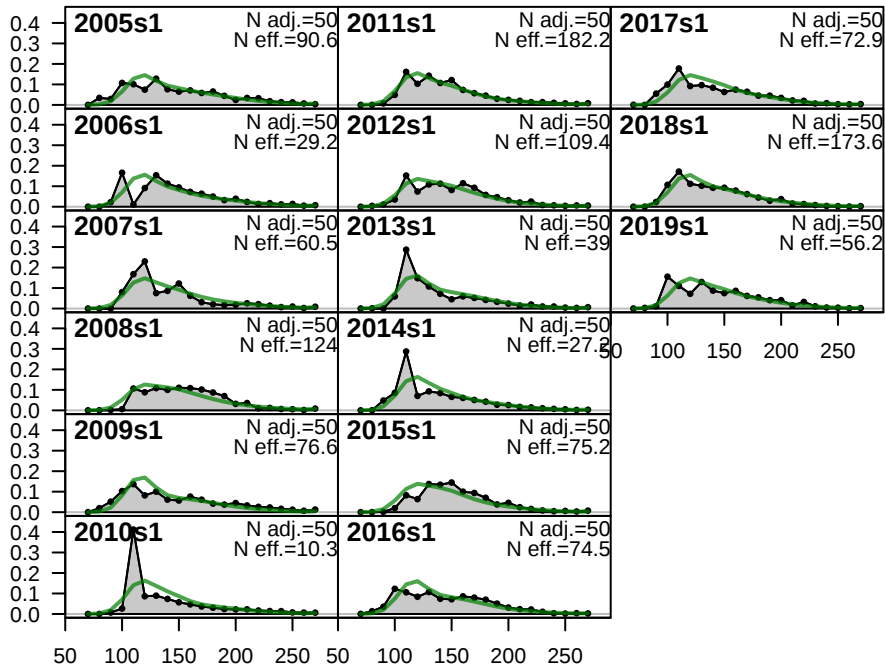




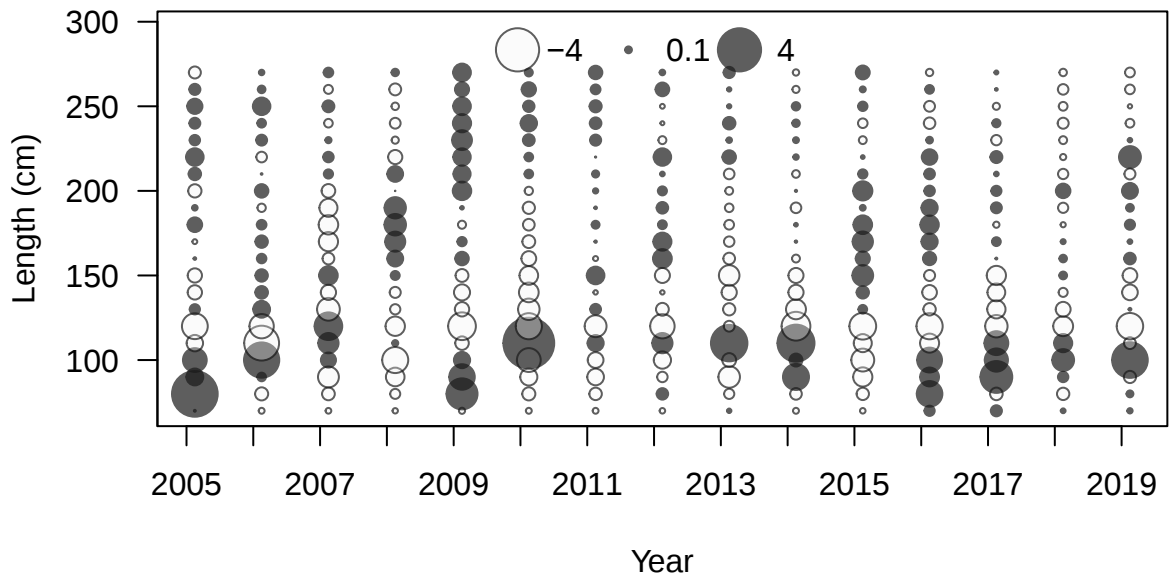
Proportion



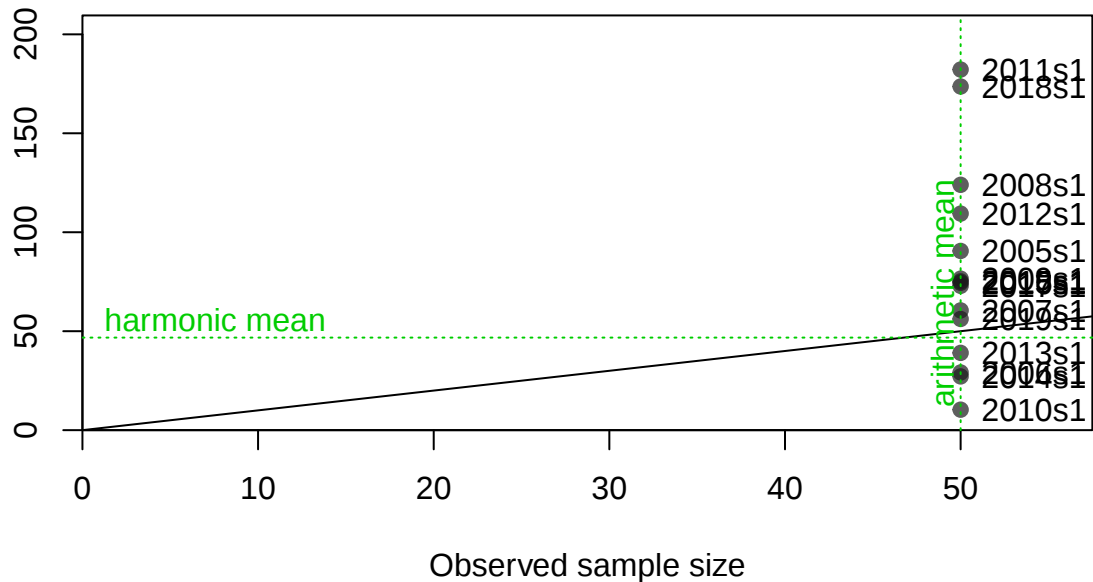
Proportion



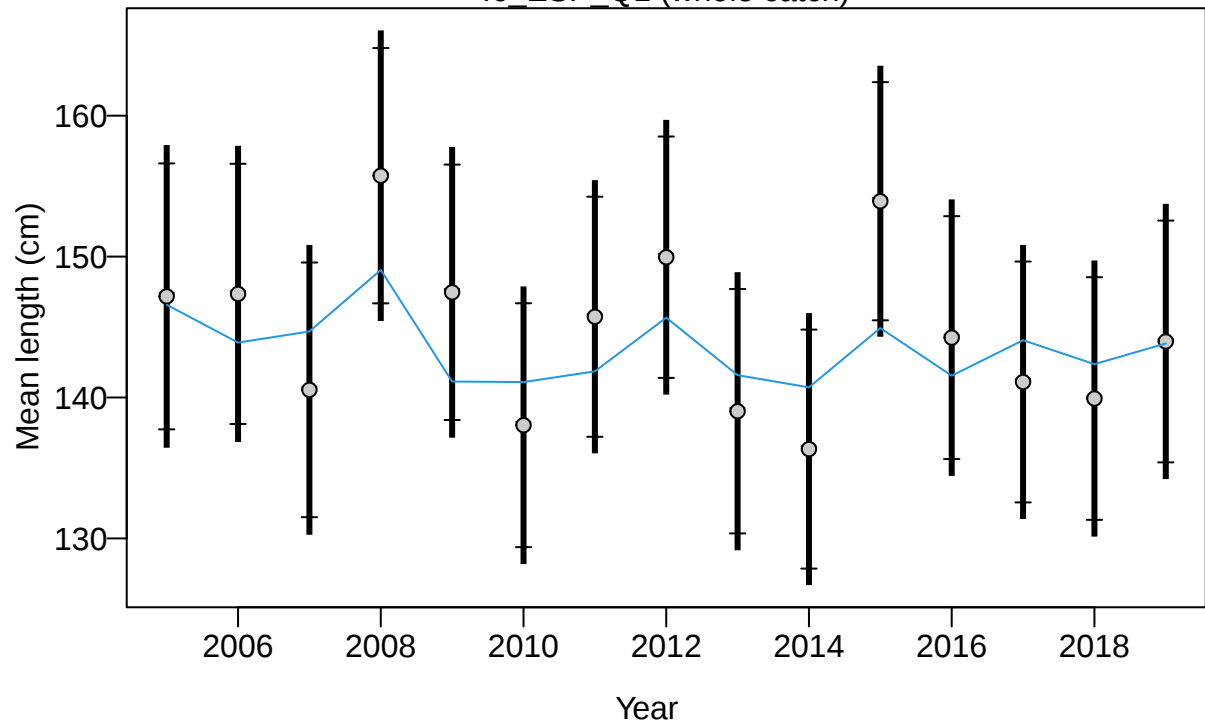
Length (cm)



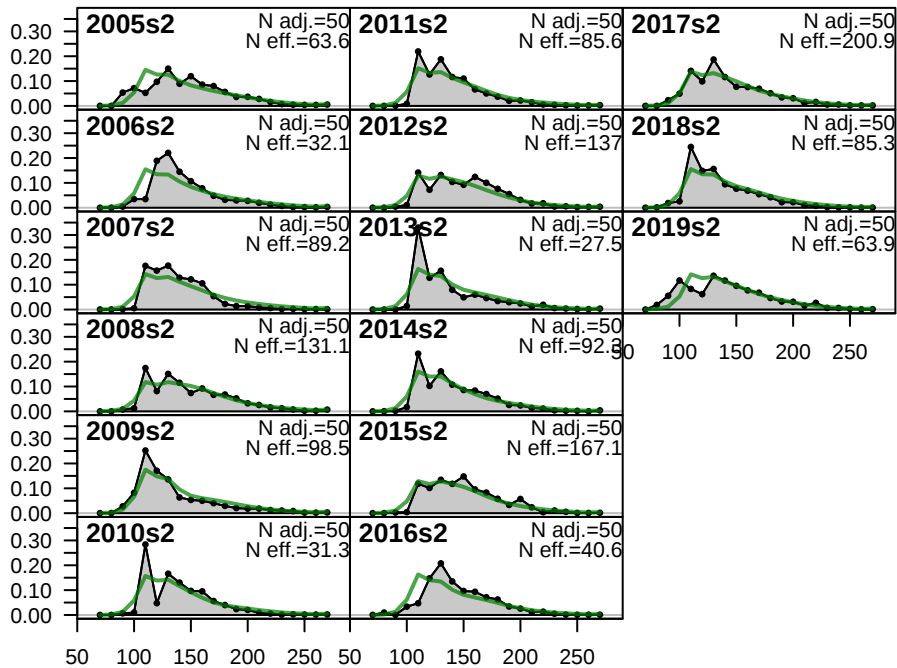
Effective sample size



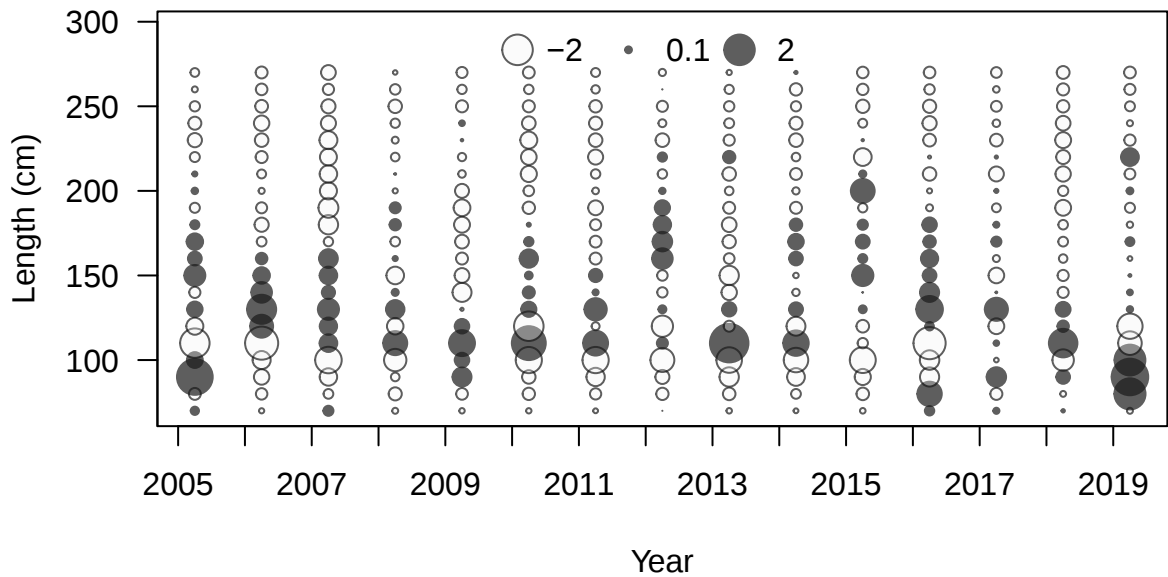
I6_ESP_Q1 (whole catch)



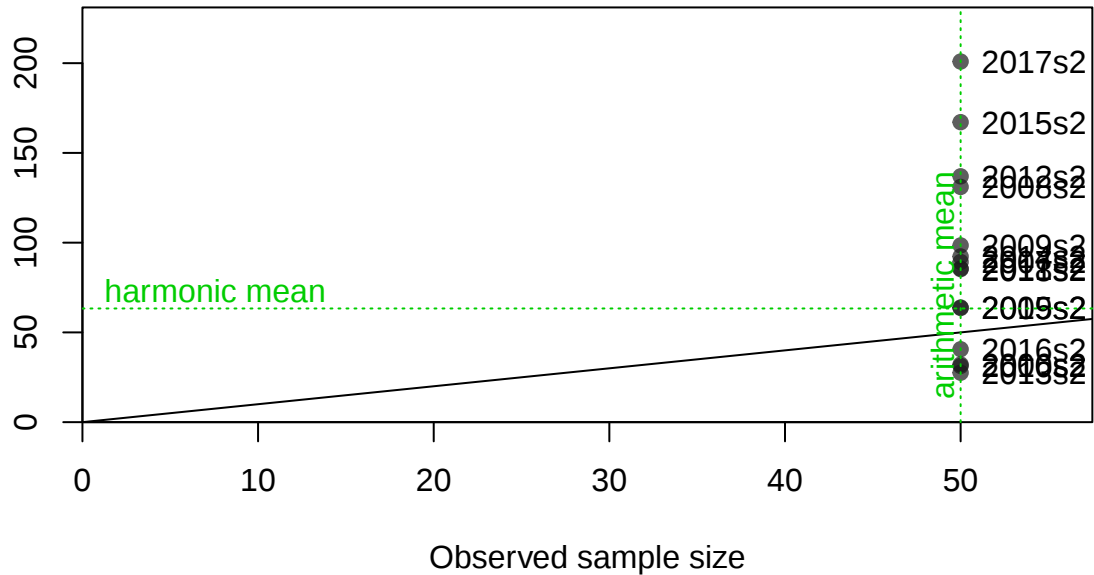
Proportion



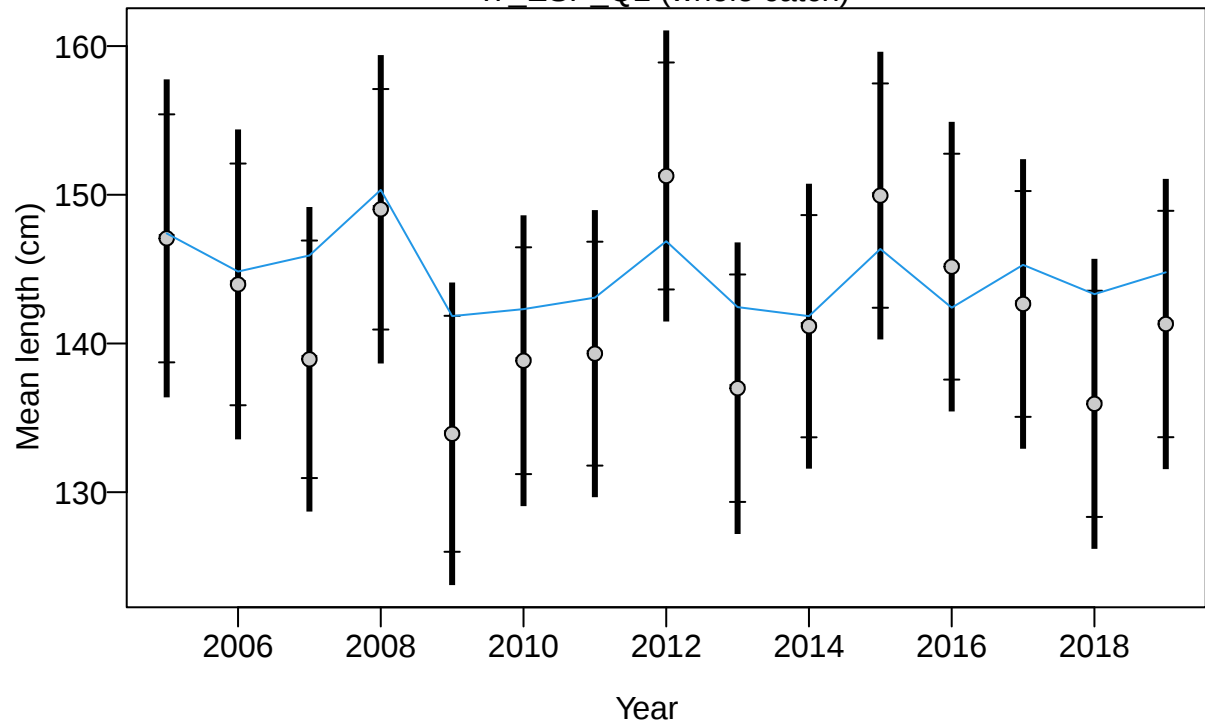
Length (cm)



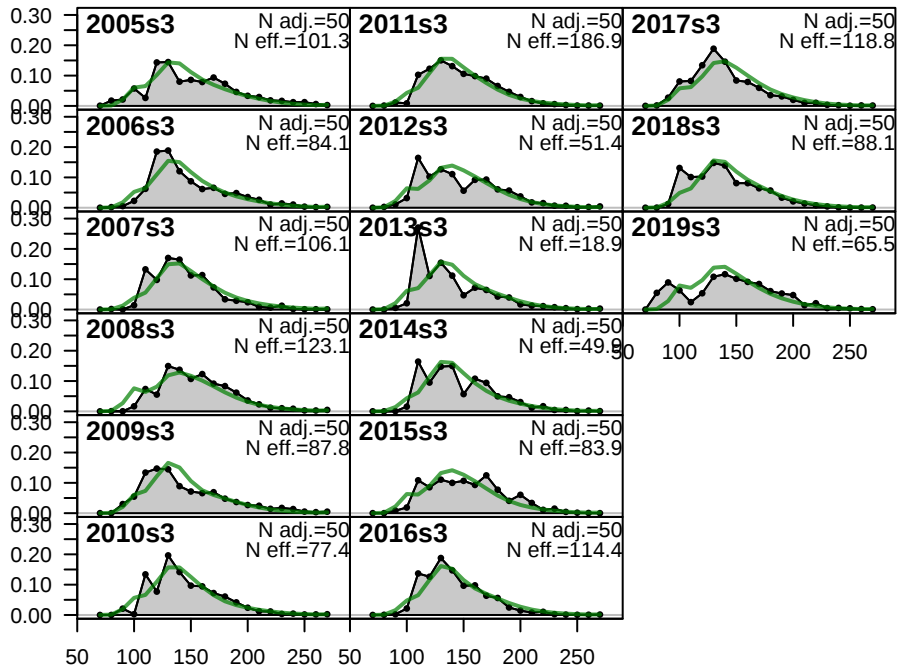
Effective sample size



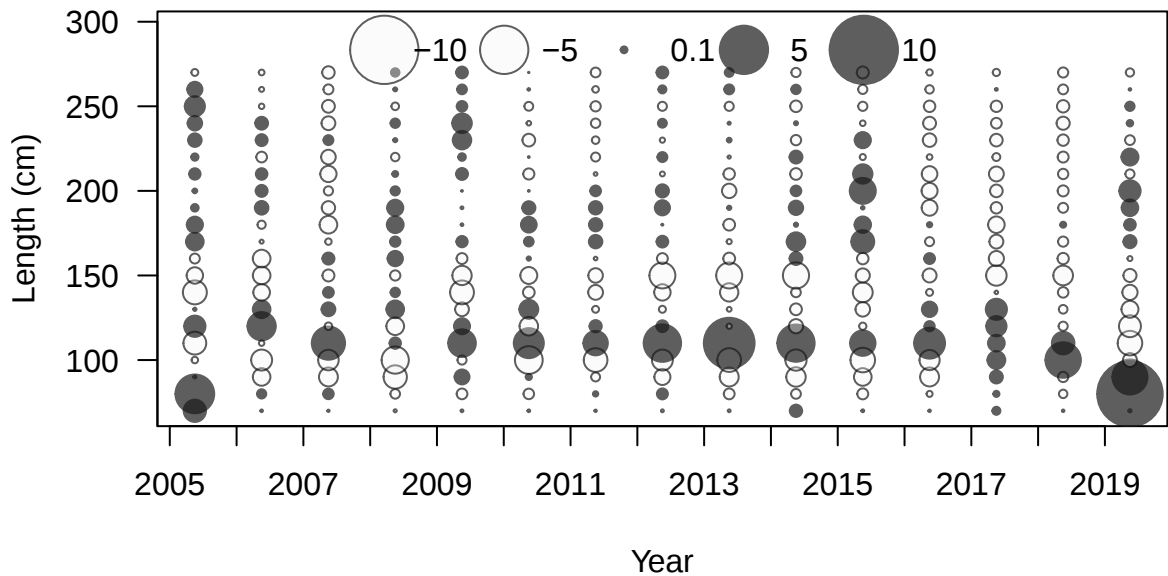
I7_ESP_Q2 (whole catch)



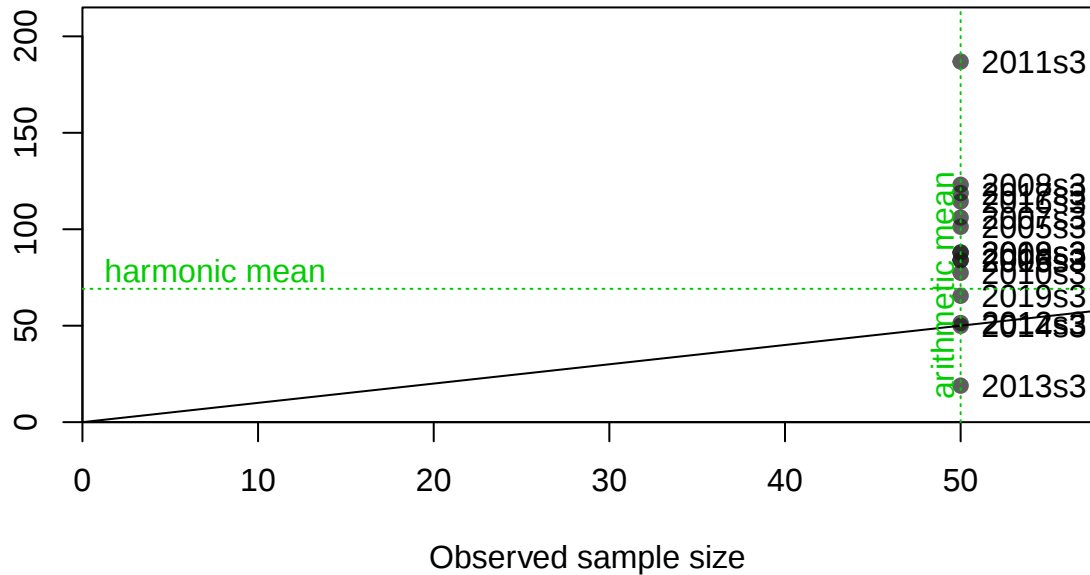
Proportion



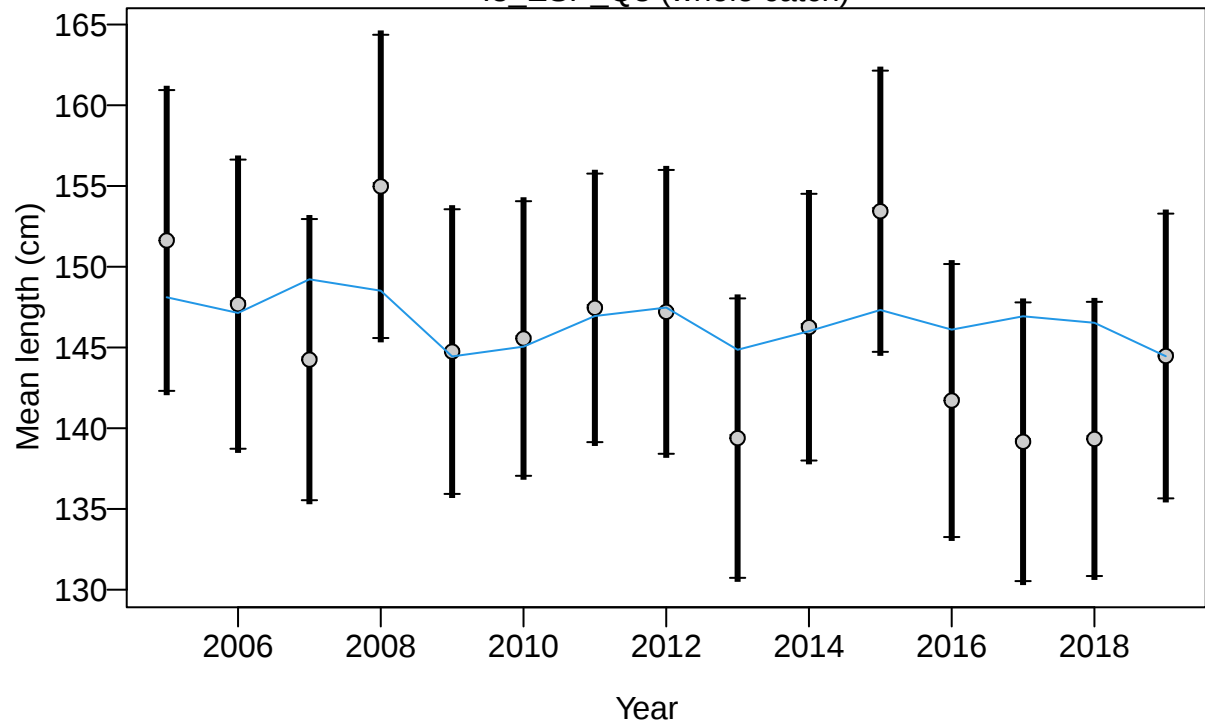
Length (cm)

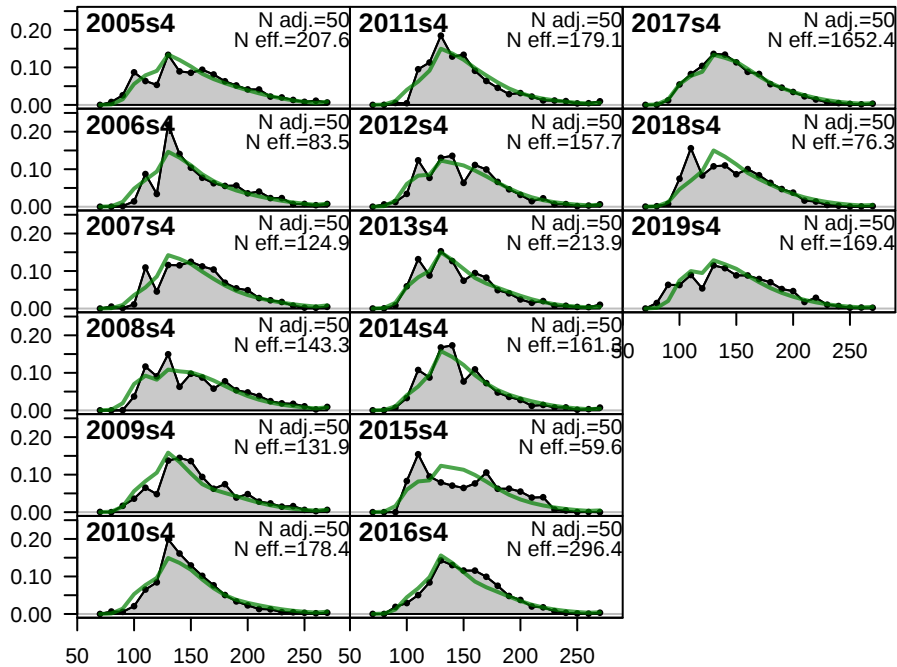


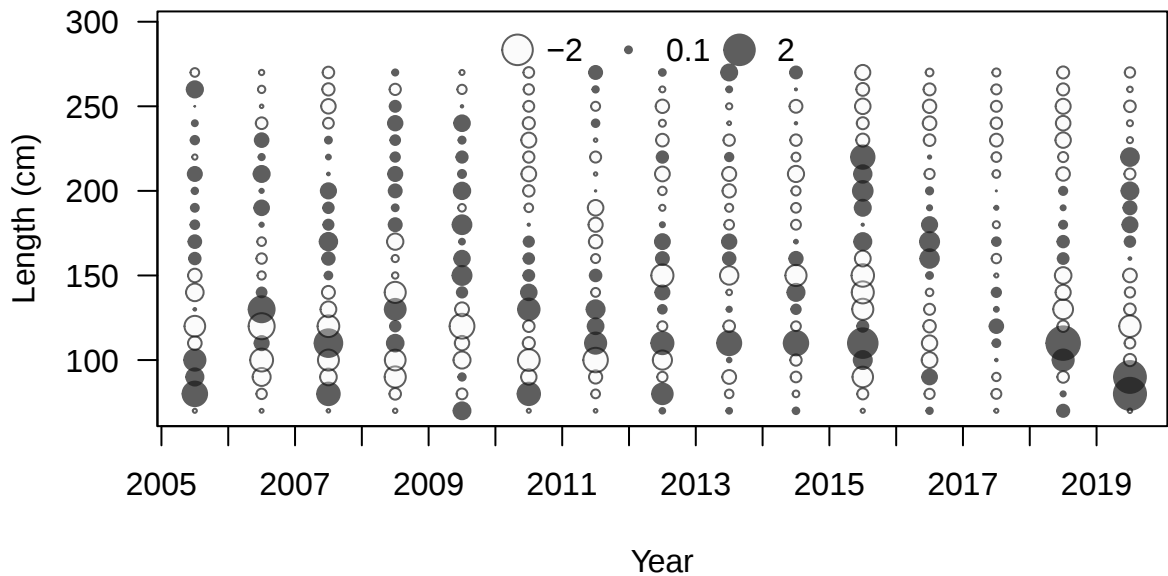
Effective sample size



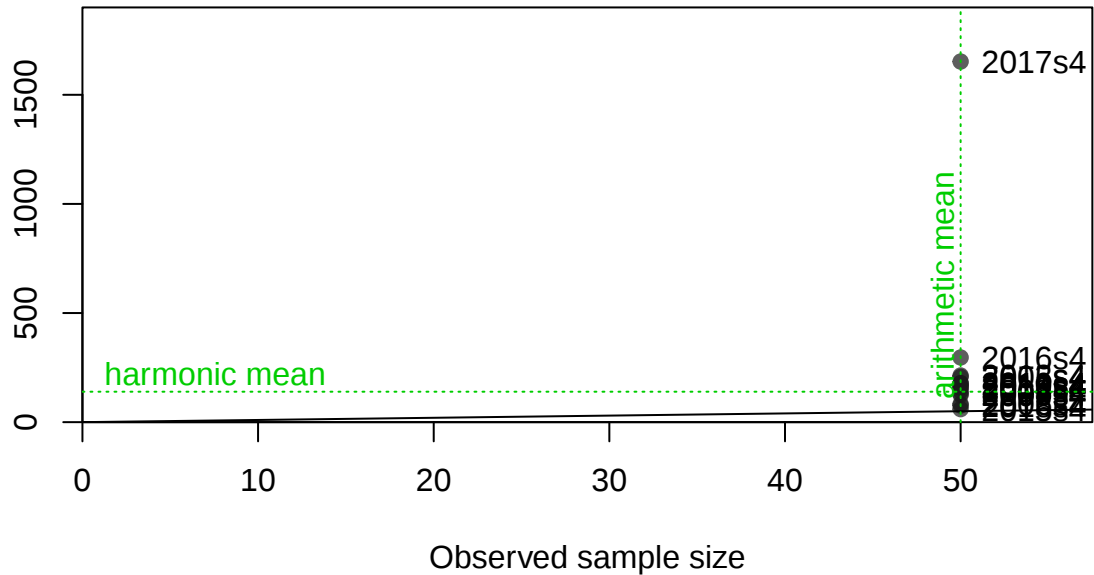
I8_ESP_Q3 (whole catch)



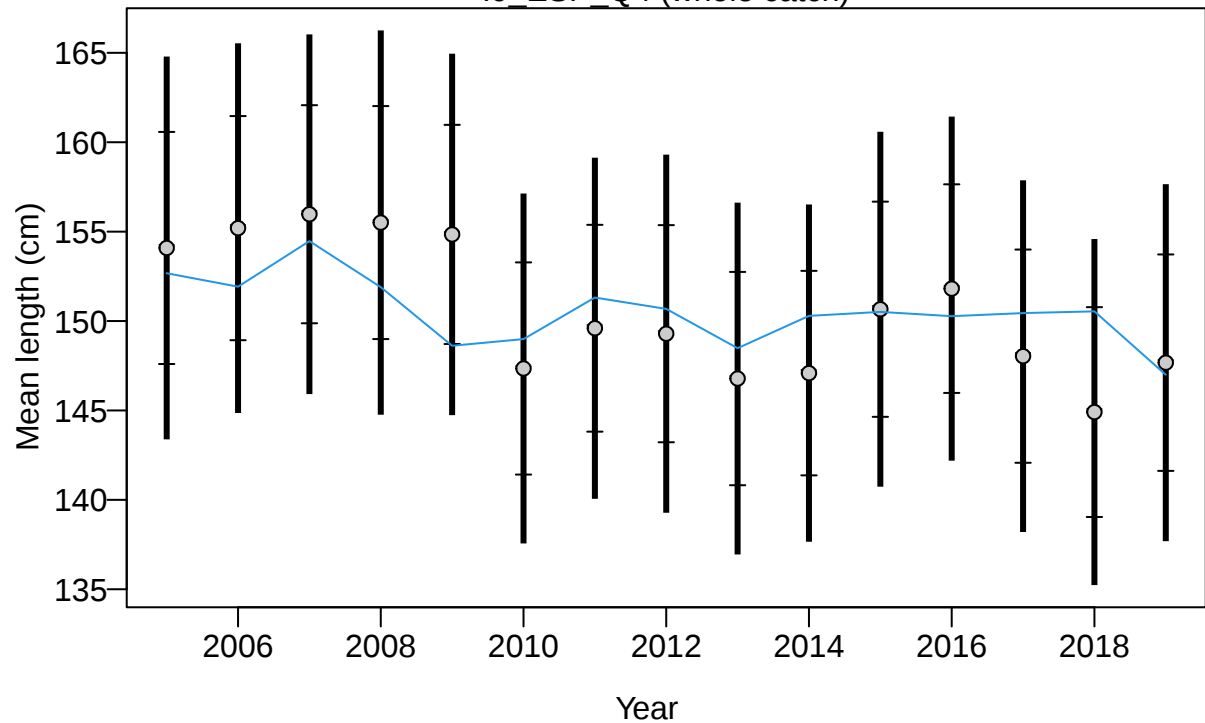




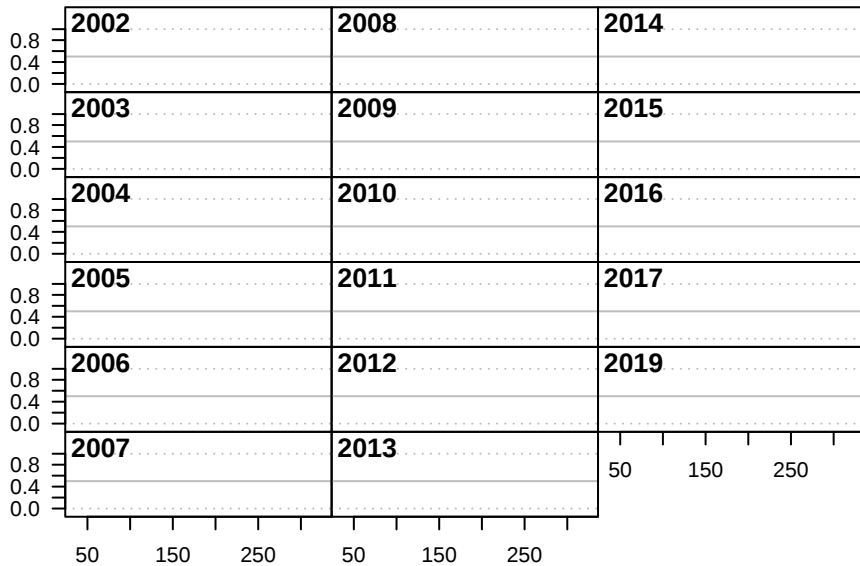
Effective sample size



I9_ESP_Q4 (whole catch)

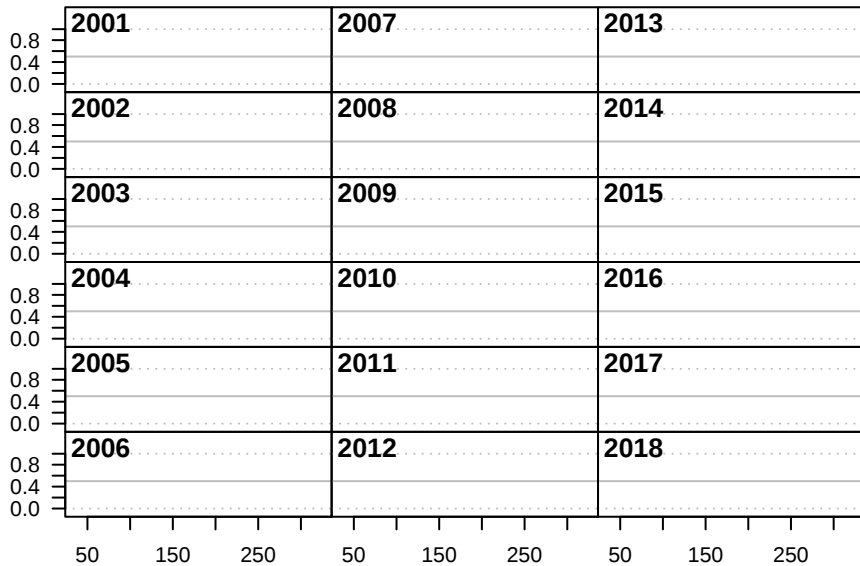


Fraction female



Length (cm)

Fraction female



Length (cm)

Proportion

F3_GN_A5

Sum of N adj.=308
Sum of N eff.=1202.3

F5_LL_Coast_A5

Sum of N adj.=498.4
Sum of N eff.=1216.7

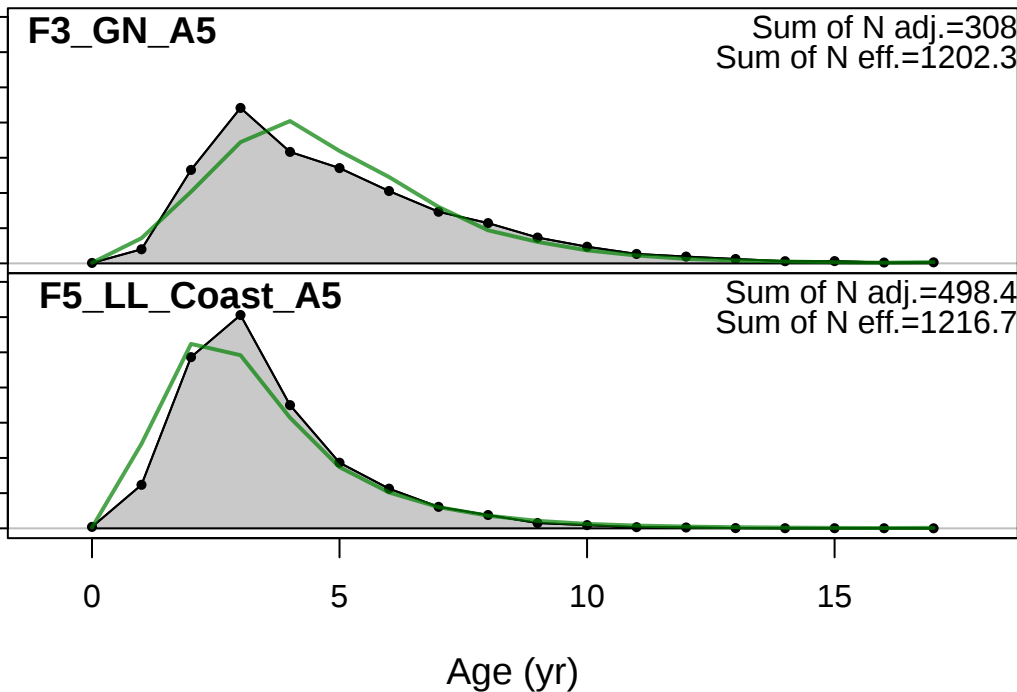
0

5

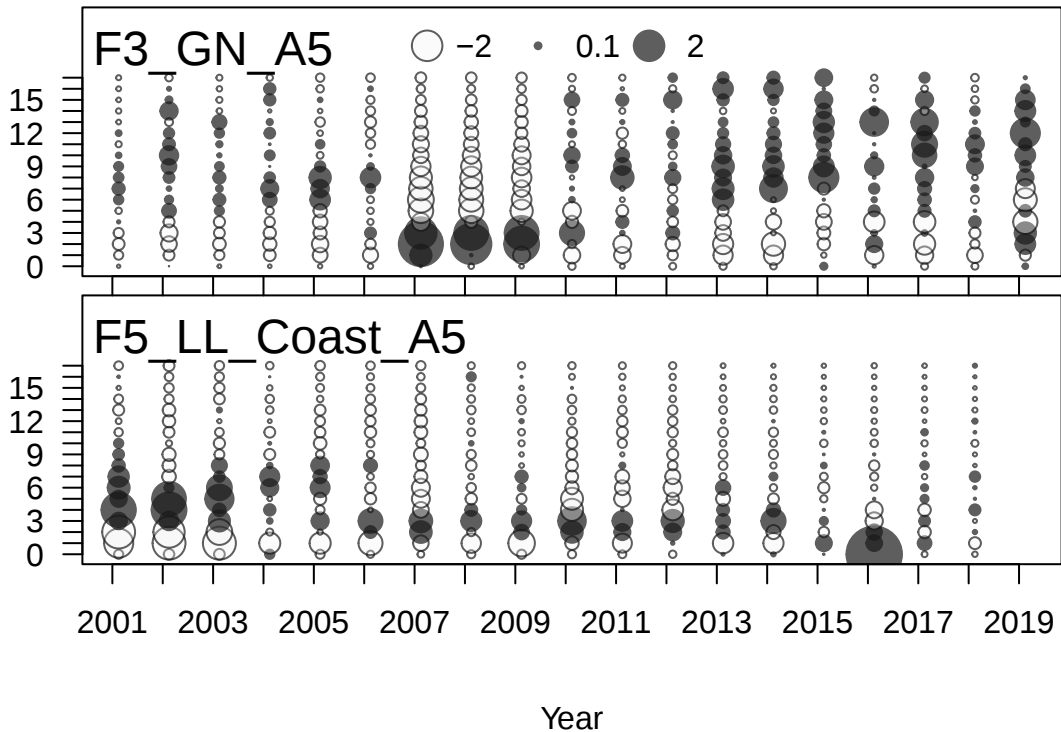
10

15

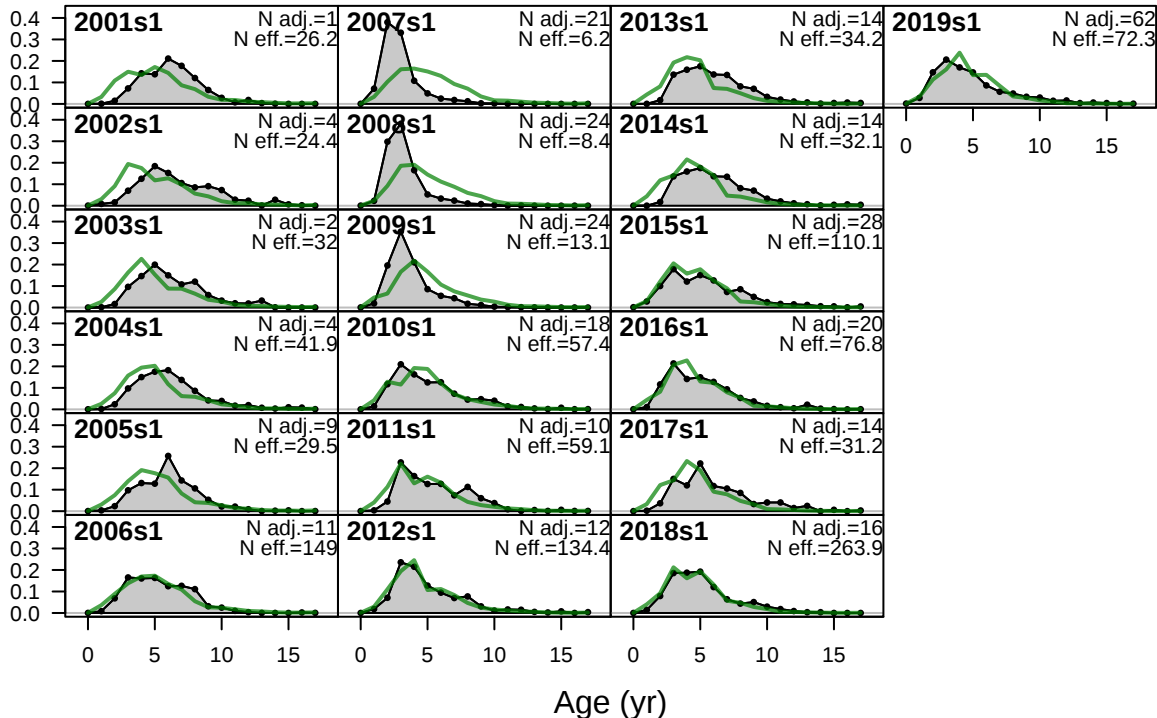
Age (yr)

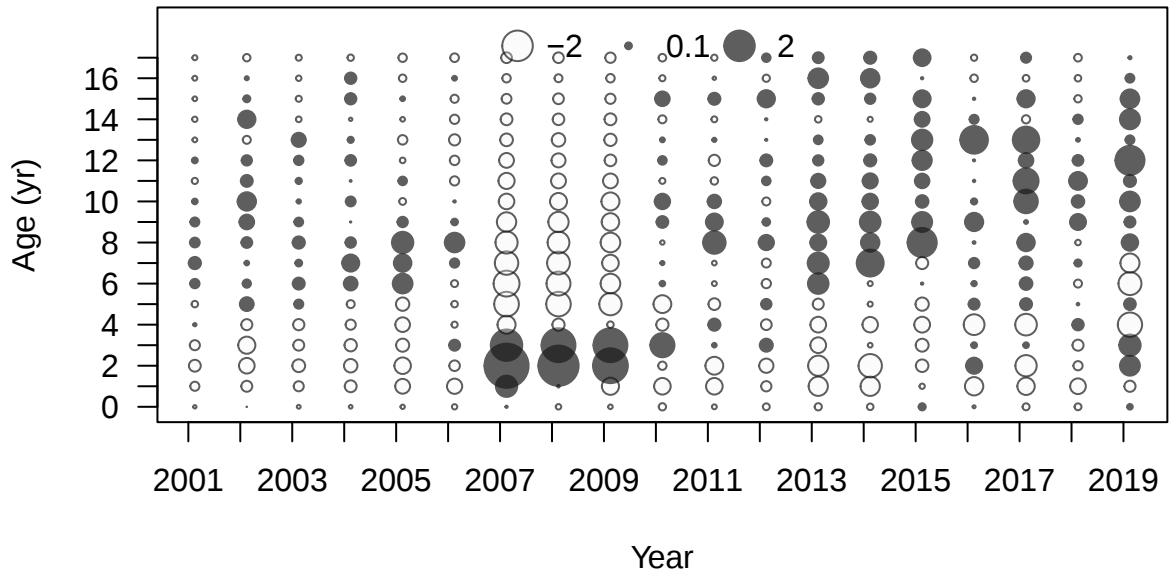


Age (yr)

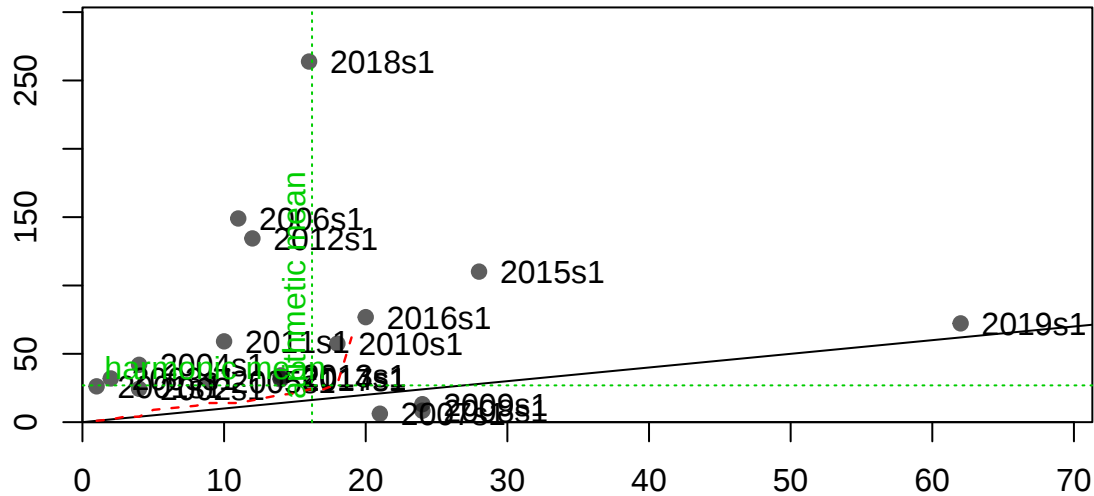


Proportion



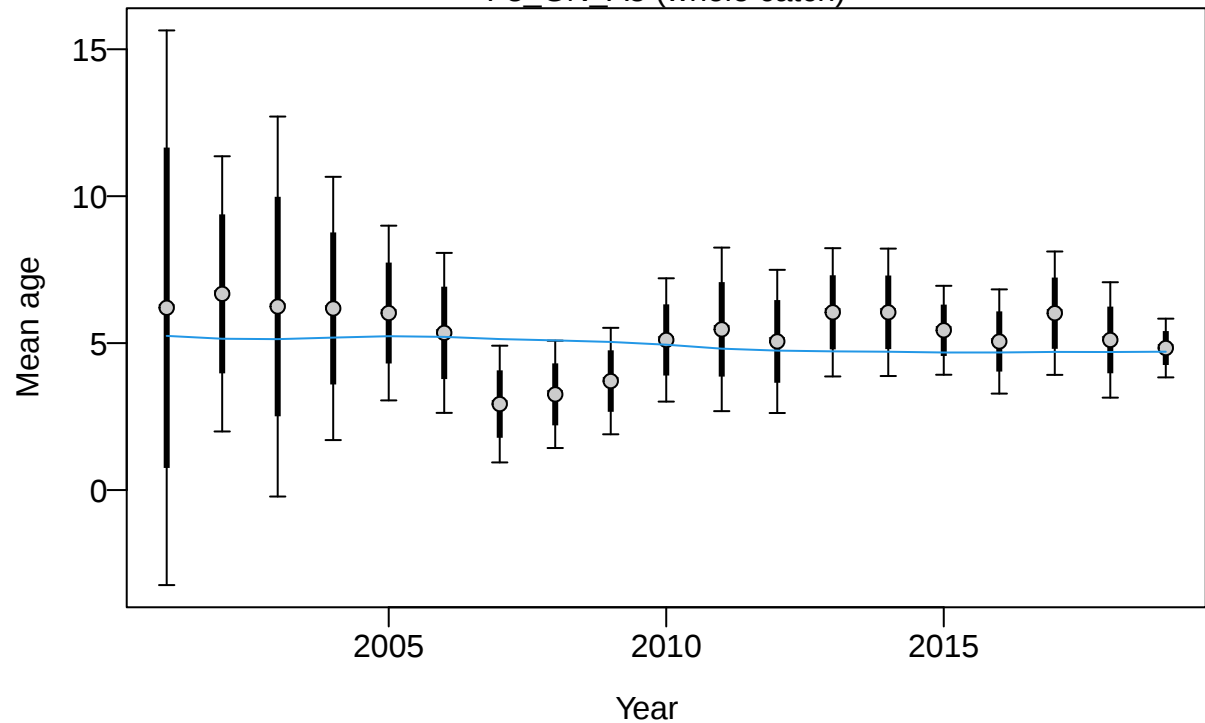


Effective sample size

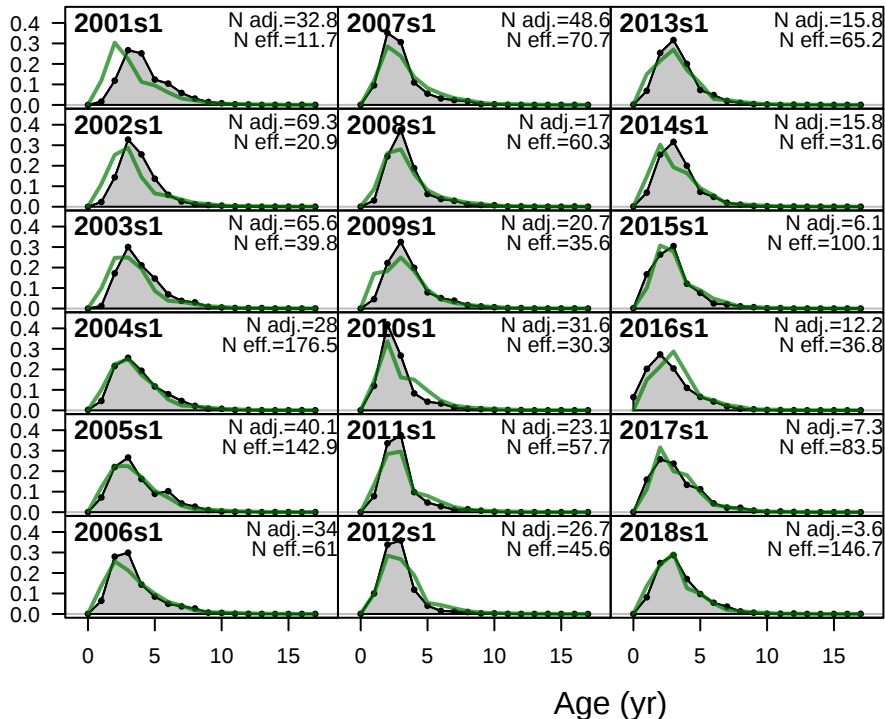


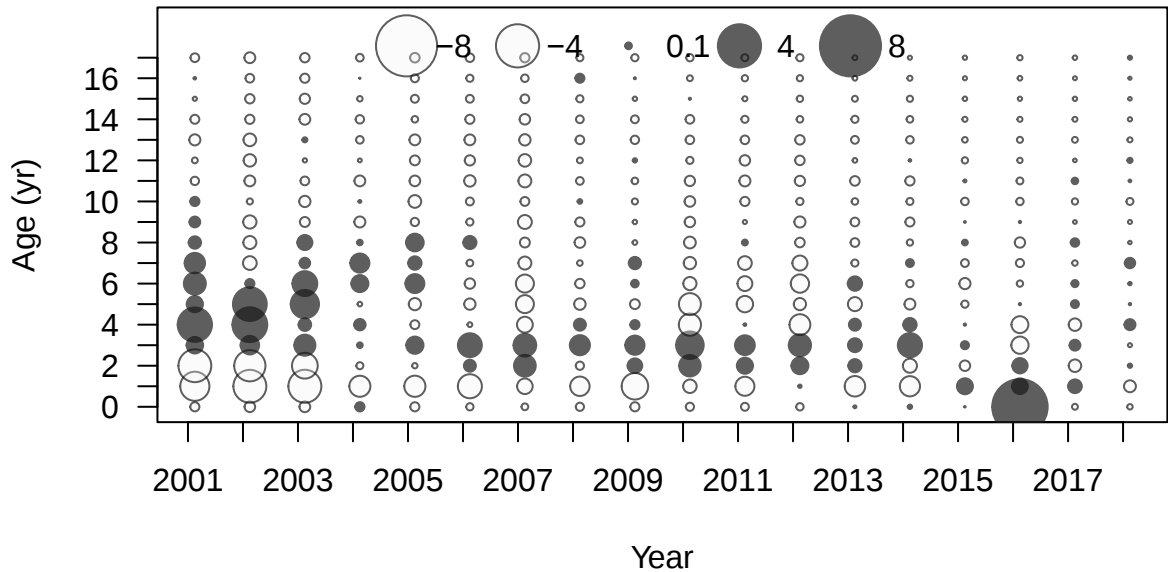
Observed sample size

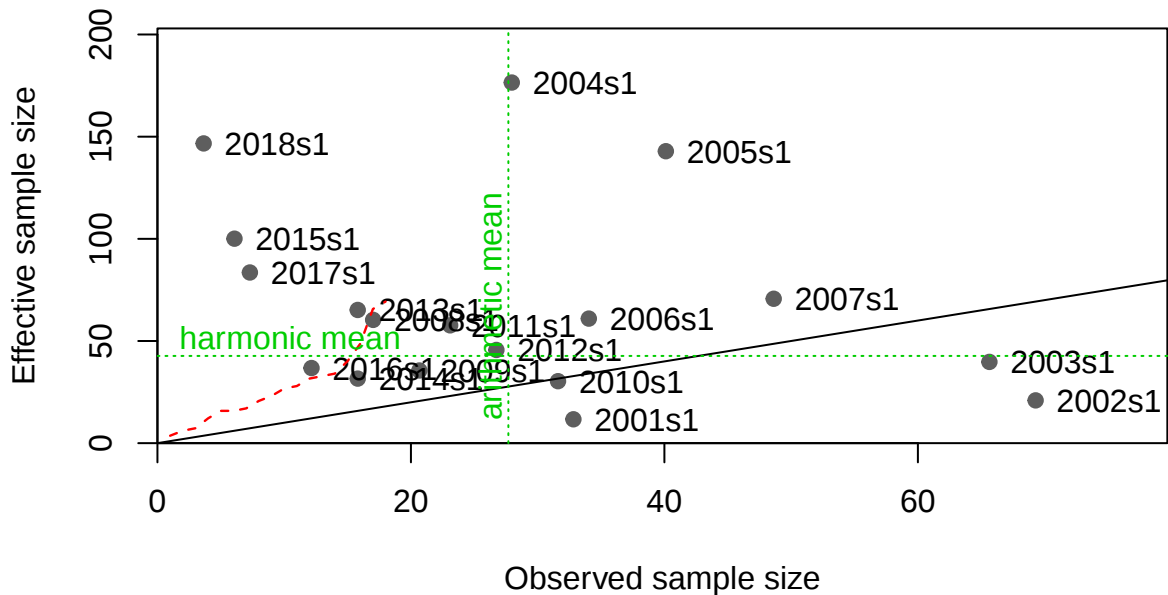
F3_GN_A5 (whole catch)



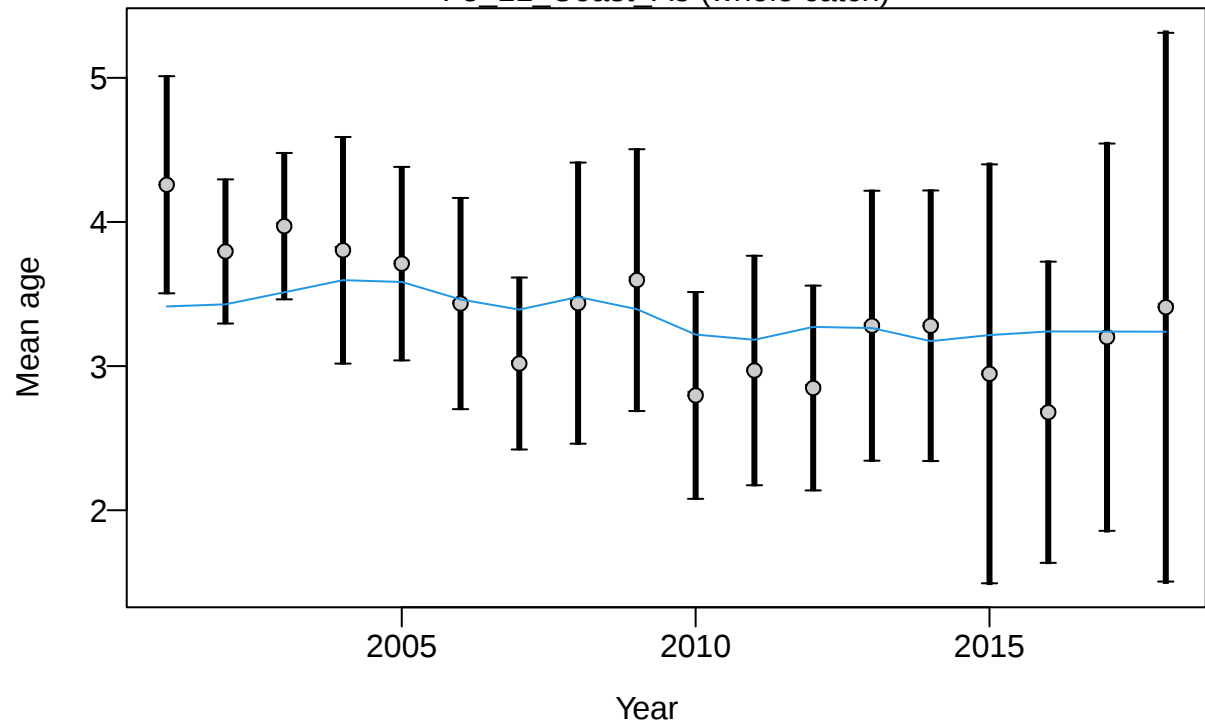
Proportion

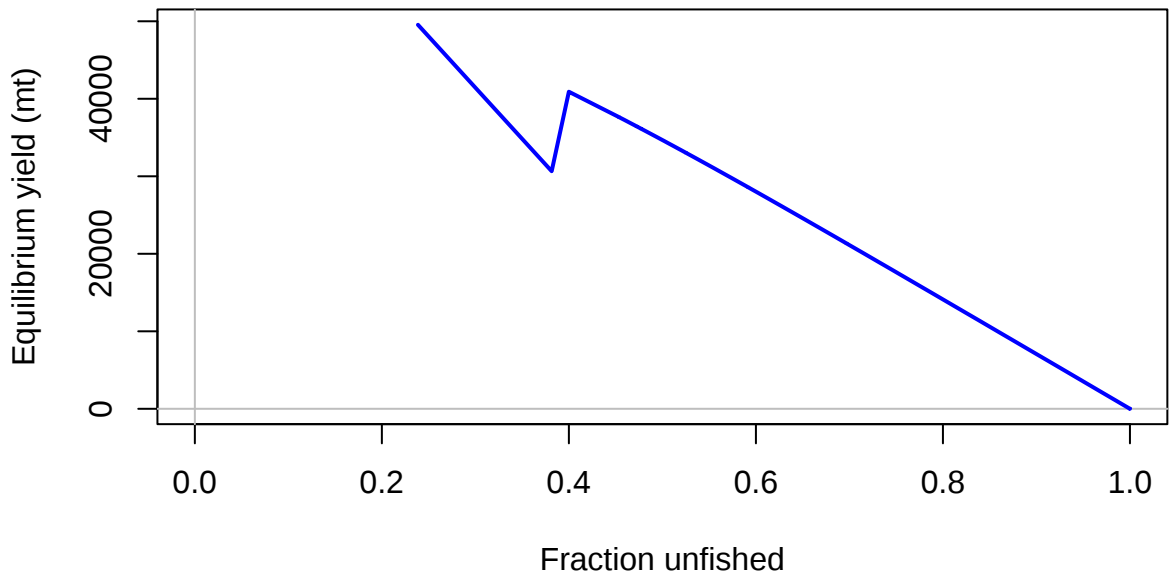


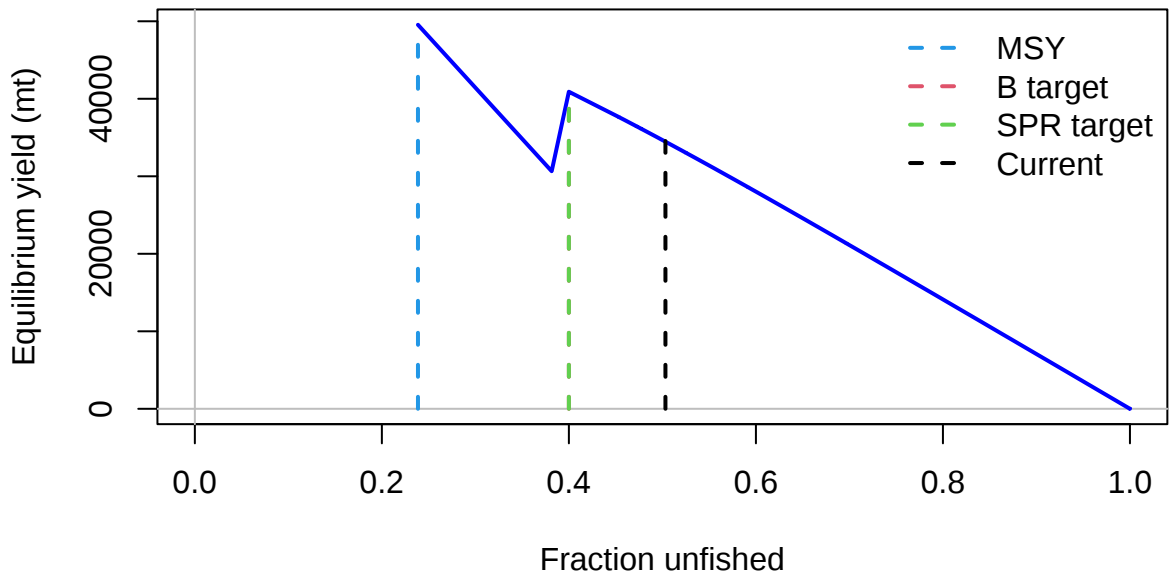


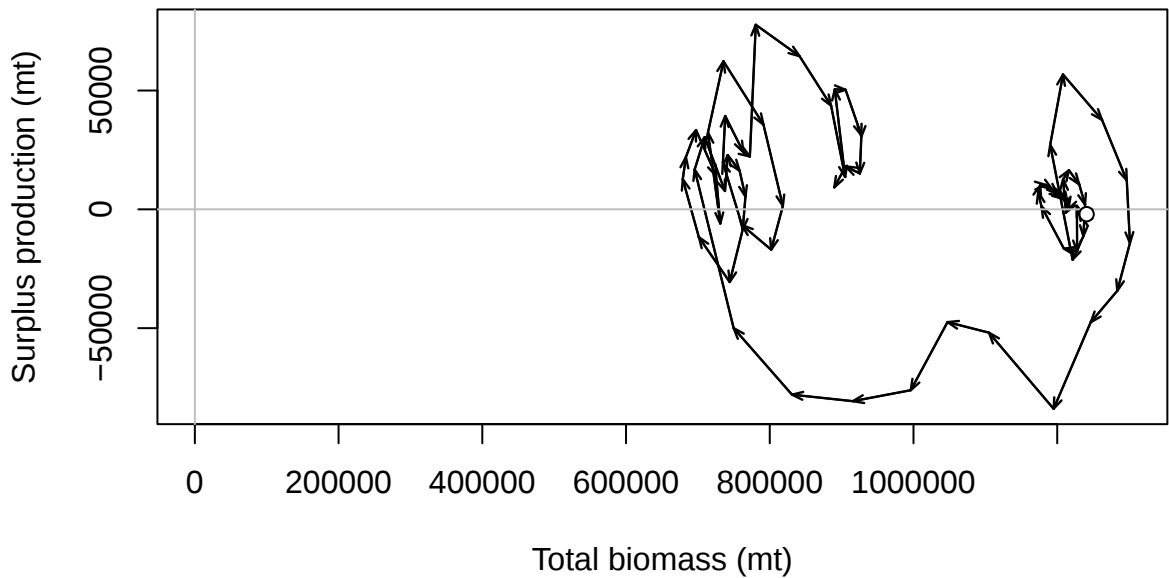


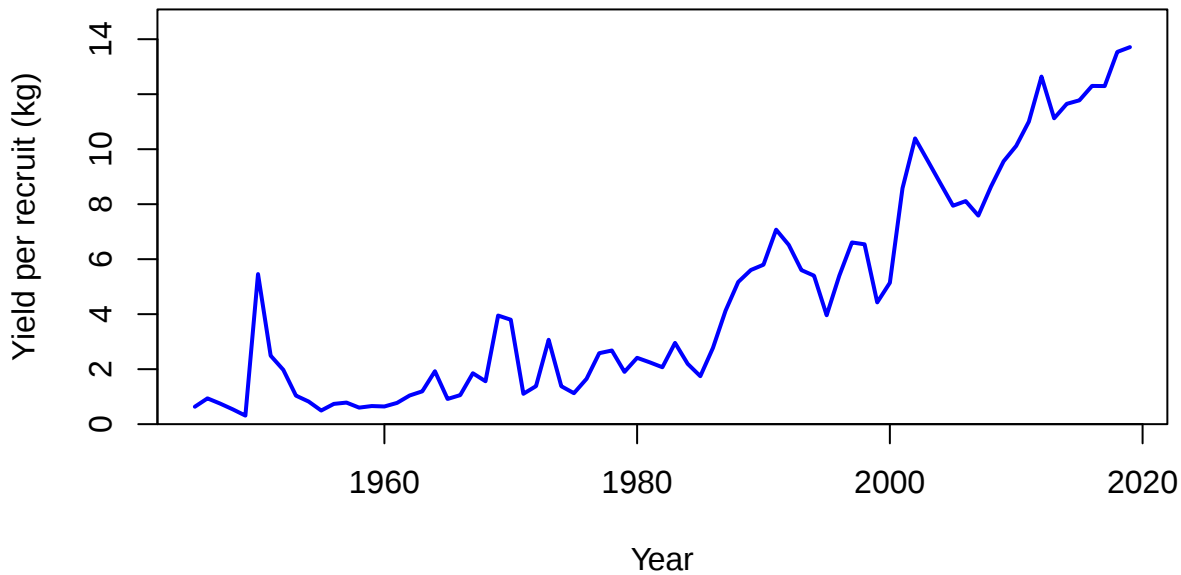
F5_LL_Coast_A5 (whole catch)

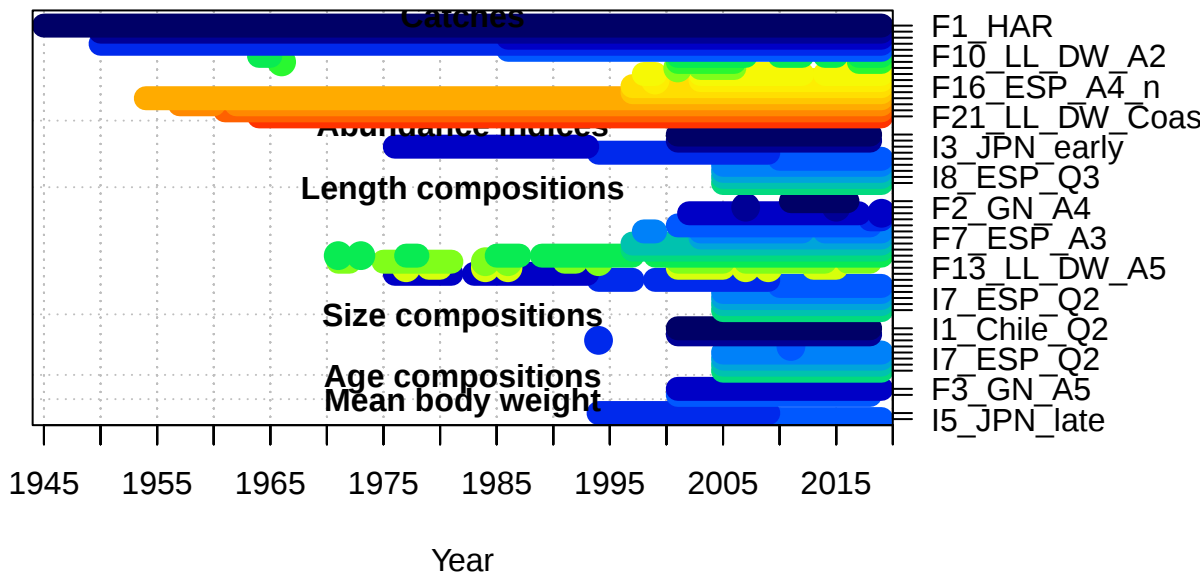


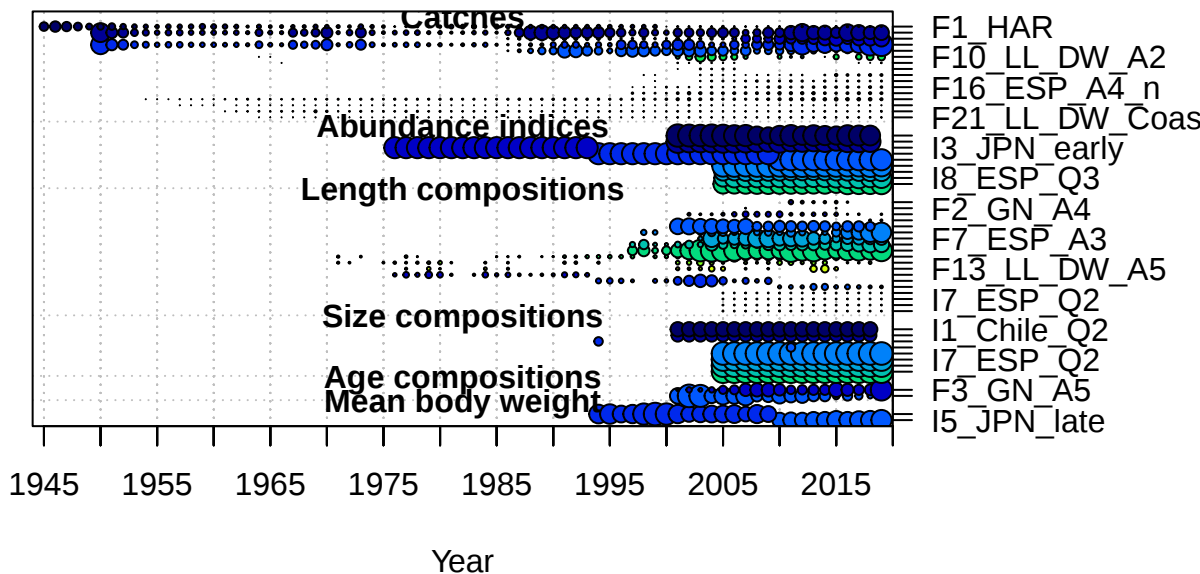




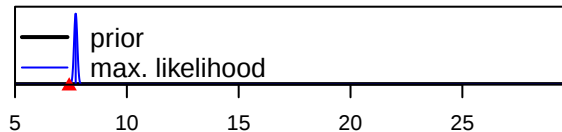




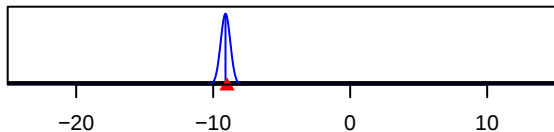




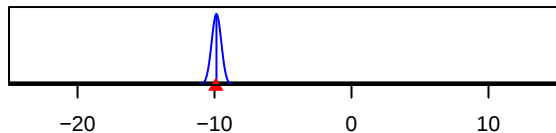
SR_LN(R0)



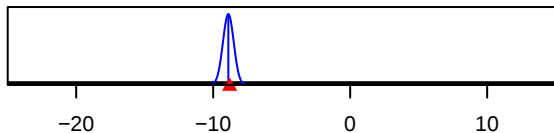
LnQ_base_I6_ESP_Q1(27)



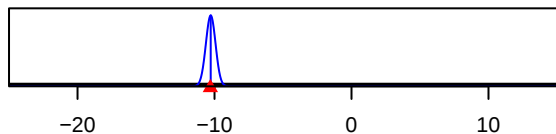
LnQ_base_I1_Chile_Q2(22)



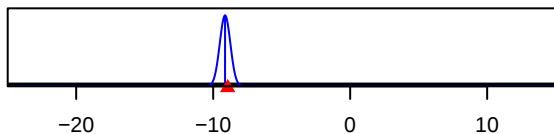
LnQ_base_I7_ESP_Q2(28)



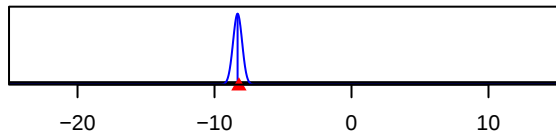
LnQ_base_I2_Chile_Q3(23)



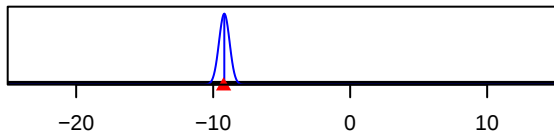
LnQ_base_I8_ESP_Q3(29)



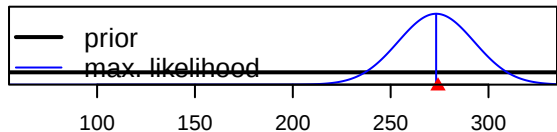
LnQ_base_I4_JPN_mid(25)



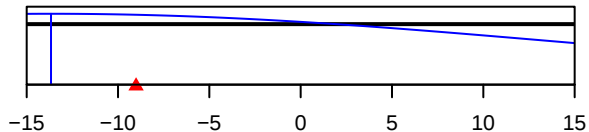
LnQ_base_I9_ESP_Q4(30)



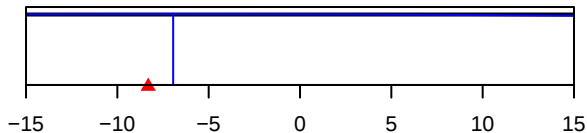
Size_DbIN_peak_F1_HAR(1)



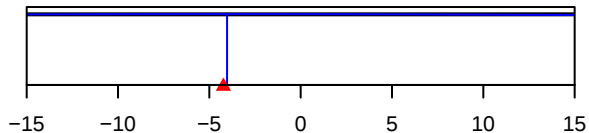
Size_DbIN_start_logit_F1_HAR(1)



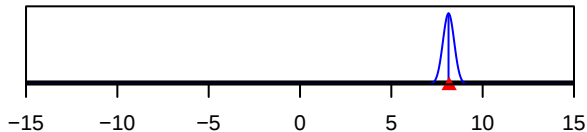
Size_DbIN_top_logit_F1_HAR(1)



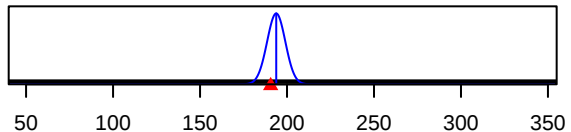
Size_DbIN_end_logit_F1_HAR(1)



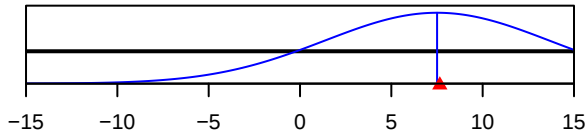
Size_DbIN_ascend_se_F1_HAR(1)



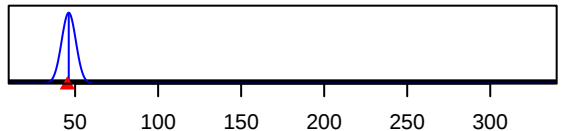
Size_inflection_F2_GN_A4(2)



Size_DbIN_descend_se_F1_HAR(1)

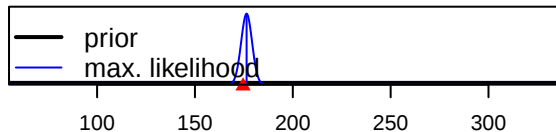


Size_95%width_F2_GN_A4(2)

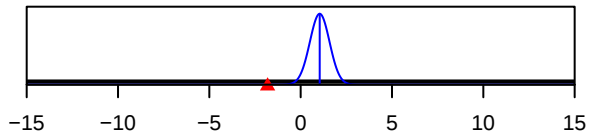


Parameter value

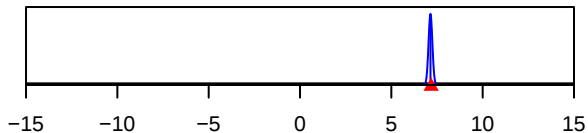
Size_DbIN_peak_F4_LL_Coast_A4(4)



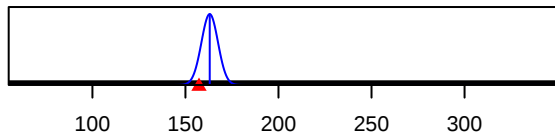
Size_DbIN_end_logit_F4_LL_Coast_A4(4)



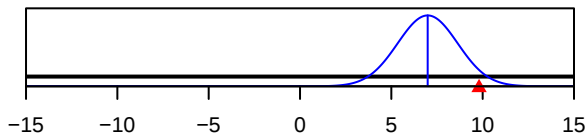
Size_DbIN_ascend_se_F4_LL_Coast_A4(4)



Size_DbIN_peak_F6_ESP_A2(6)



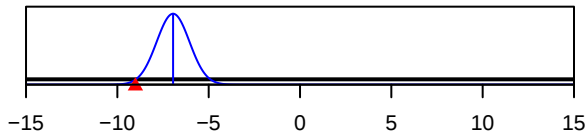
Size_DbIN_descend_se_F4_LL_Coast_A4(4)



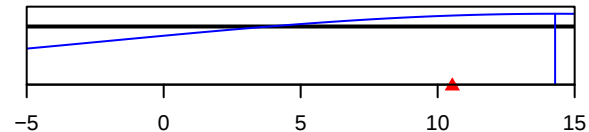
Size_DbIN_ascend_se_F6_ESP_A2(6)



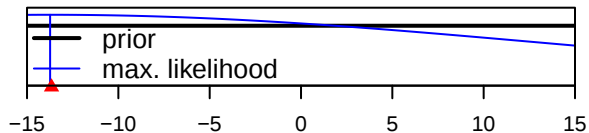
Size_DbIN_start_logit_F4_LL_Coast_A4(4)



Size_DbIN_descend_se_F6_ESP_A2(6)



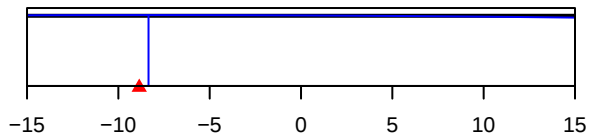
Size_DbIN_start_logit_F6_ESP_A2(6)



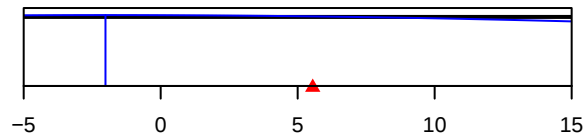
Size_DbIN_ascend_se_F7_ESP_A3(7)



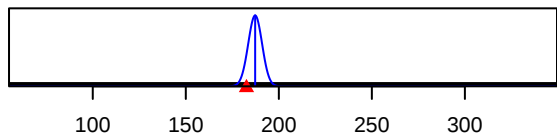
Size_DbIN_end_logit_F6_ESP_A2(6)



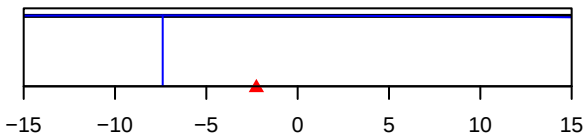
Size_DbIN_descend_se_F7_ESP_A3(7)



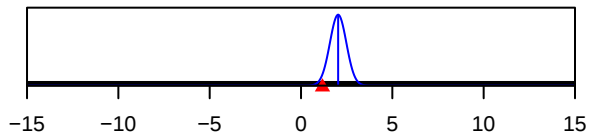
Size_DbIN_peak_F7_ESP_A3(7)



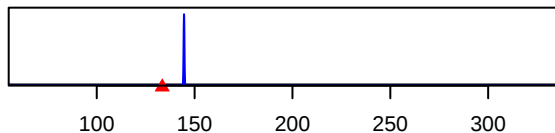
Size_DbIN_end_logit_F7_ESP_A3(7)

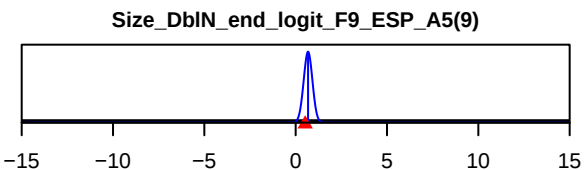
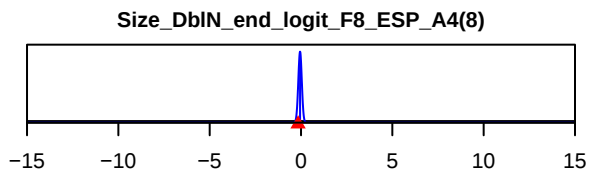
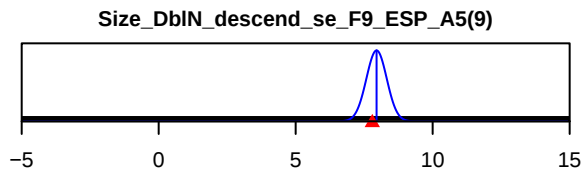
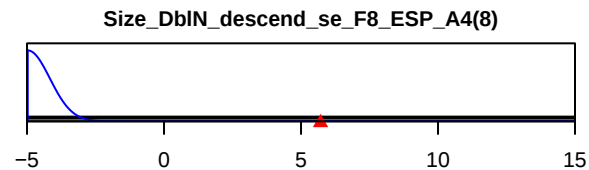
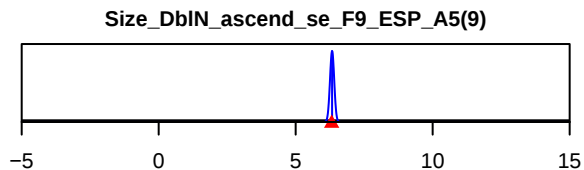
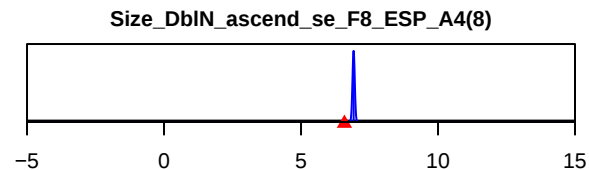
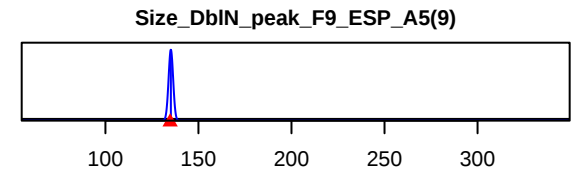
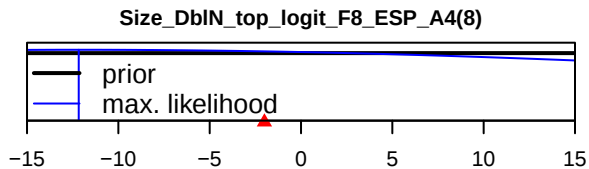


Size_DbIN_top_logit_F7_ESP_A3(7)



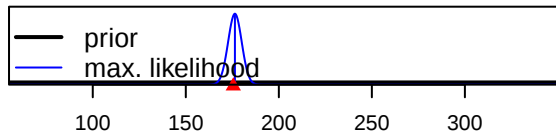
Size_DbIN_peak_F8_ESP_A4(8)



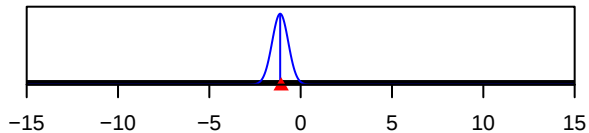


Parameter value

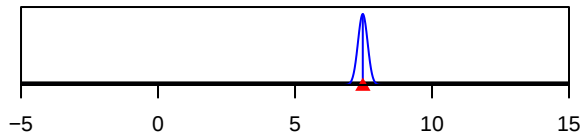
Size_DblN_peak_F10_LL_DW_A2(10)



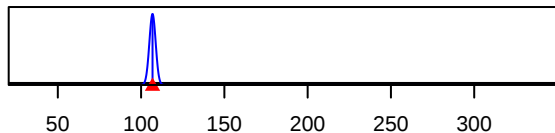
Size_DblN_end_logit_F10_LL_DW_A2(10)



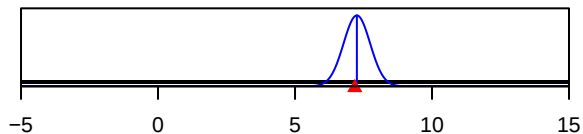
Size_DblN_ascend_se_F10_LL_DW_A2(10)



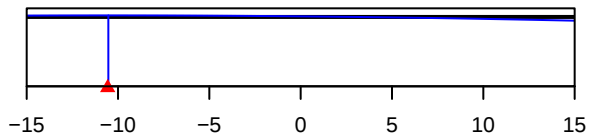
Size_DblN_peak_F12_LL_DW_A4(12)



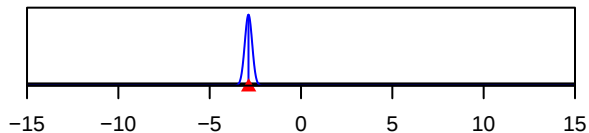
Size_DblN_descend_se_F10_LL_DW_A2(10)



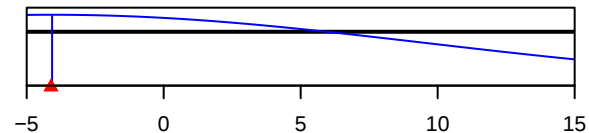
Size_DblN_top_logit_F12_LL_DW_A4(12)



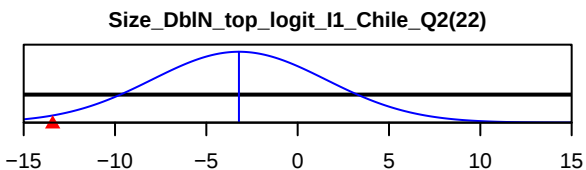
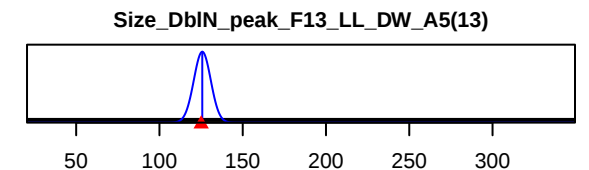
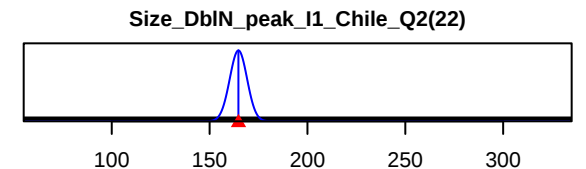
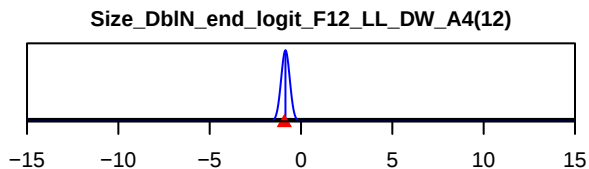
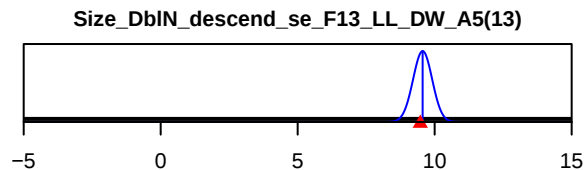
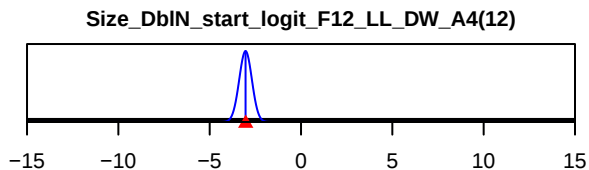
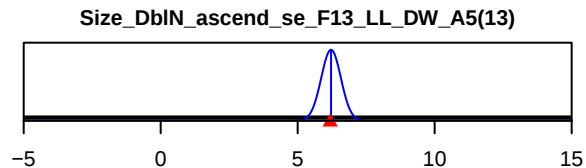
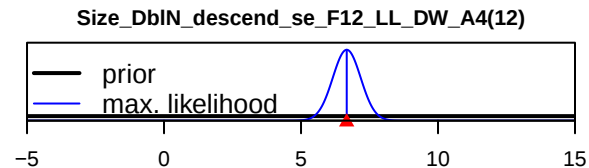
Size_DblN_start_logit_F10_LL_DW_A2(10)



Size_DblN_ascend_se_F12_LL_DW_A4(12)

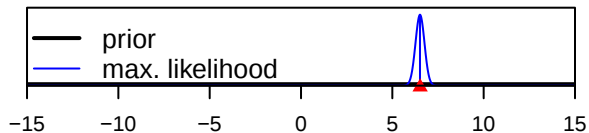


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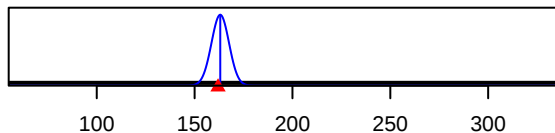


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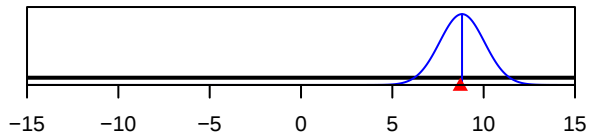
Size_DbIN_ascend_se_I1_Chile_Q2(22)



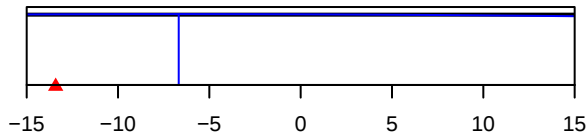
Size_DbIN_peak_I2_Chile_Q3(23)



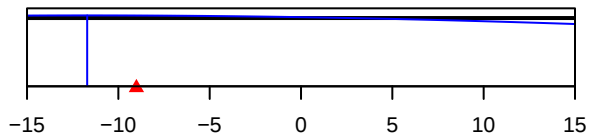
Size_DbIN_descend_se_I1_Chile_Q2(22)



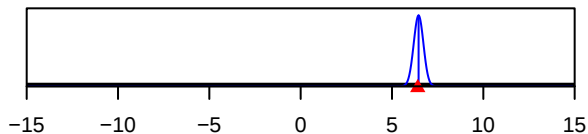
Size_DbIN_top_logit_I2_Chile_Q3(23)



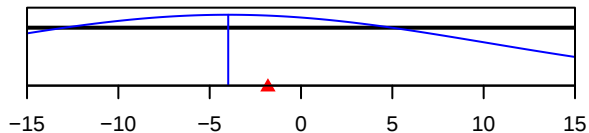
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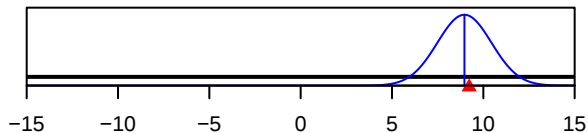
Size_DbIN_ascend_se_I2_Chile_Q3(23)

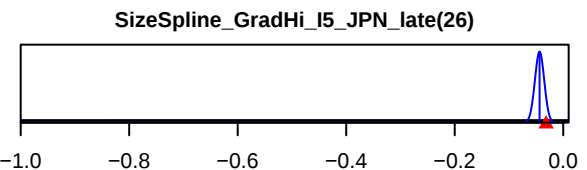
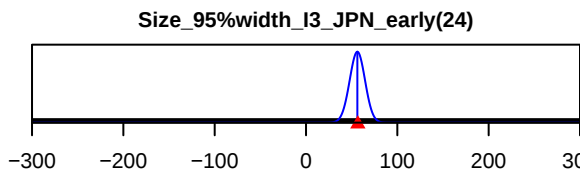
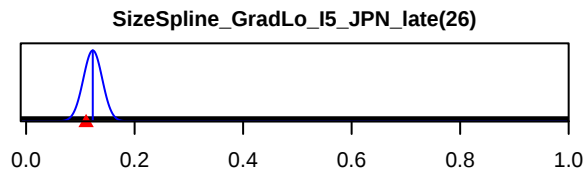
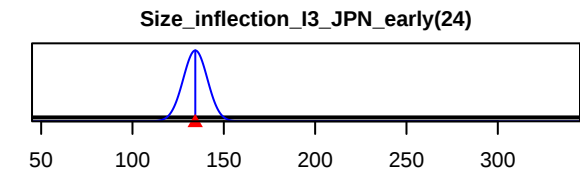
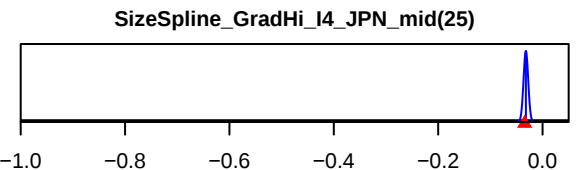
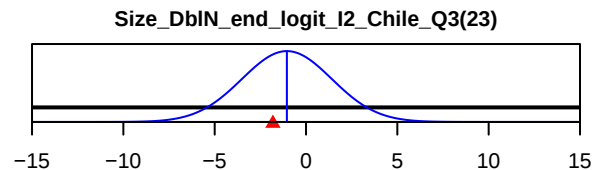
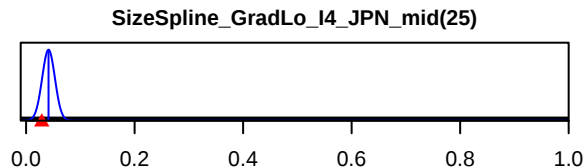
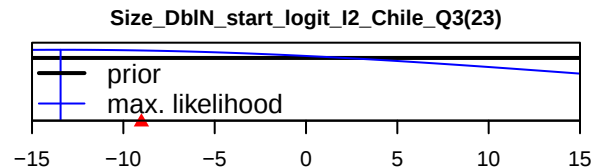


Size_DbIN_end_logit_I1_Chile_Q2(22)



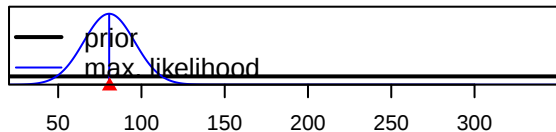
Size_DbIN_descend_se_I2_Chile_Q3(23)



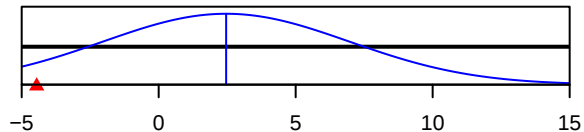


Parameter value

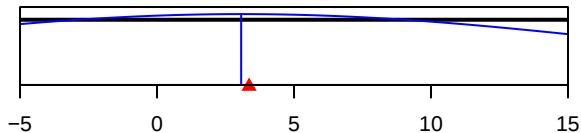
Size_DbIN_peak_I6_ESP_Q1(27)



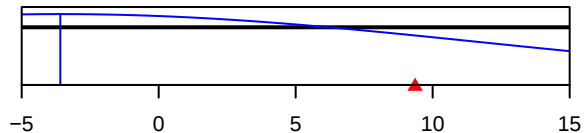
Size_DbIN_ascend_se_I7_ESP_Q2(28)



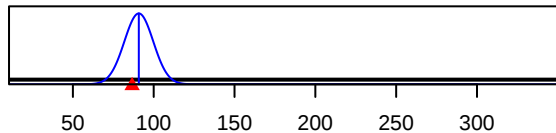
Size_DbIN_ascend_se_I6_ESP_Q1(27)



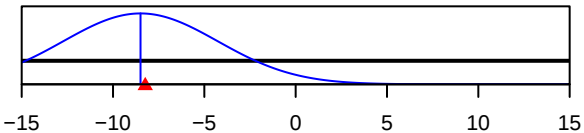
Size_DbIN_descend_se_I7_ESP_Q2(28)



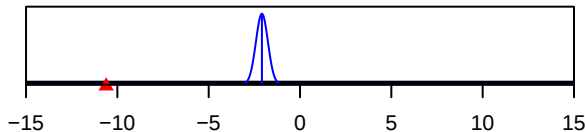
Size_DbIN_peak_I7_ESP_Q2(28)



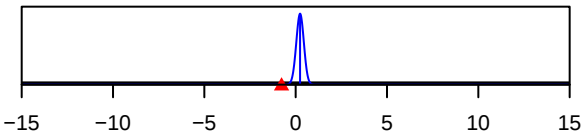
Size_DbIN_start_logit_I7_ESP_Q2(28)



Size_DbIN_top_logit_I7_ESP_Q2(28)

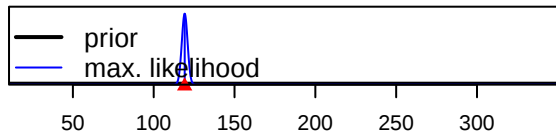


Size_DbIN_end_logit_I7_ESP_Q2(28)

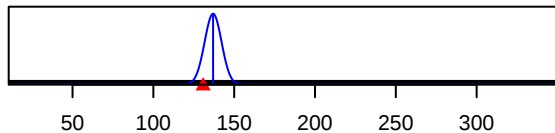


Parameter value

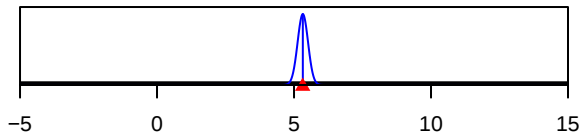
Size_DbIN_peak_I8_ESP_Q3(29)



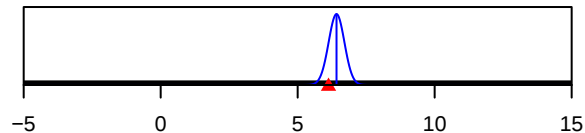
Size_DbIN_peak_I9_ESP_Q4(30)



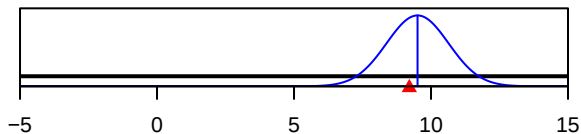
Size_DbIN_ascend_se_I8_ESP_Q3(29)



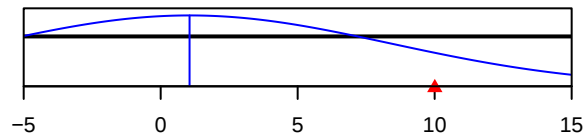
Size_DbIN_ascend_se_I9_ESP_Q4(30)



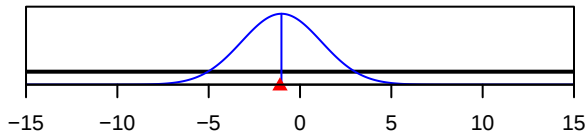
Size_DbIN_descend_se_I8_ESP_Q3(29)



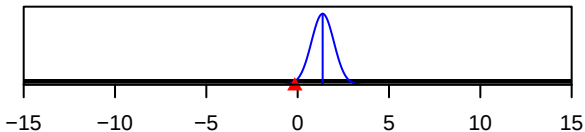
Size_DbIN_descend_se_I9_ESP_Q4(30)



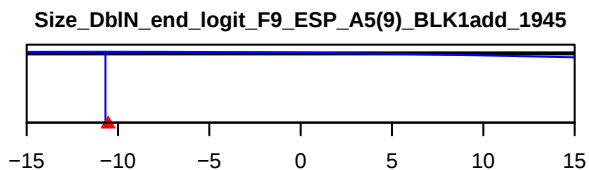
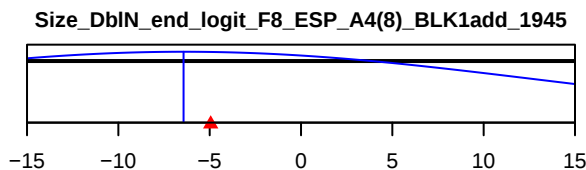
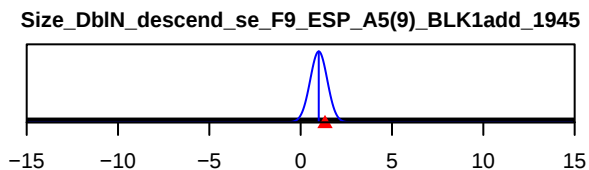
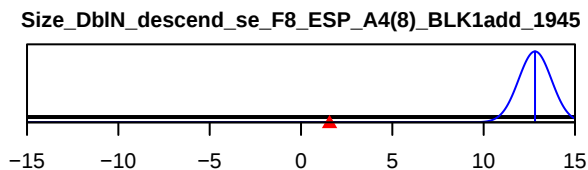
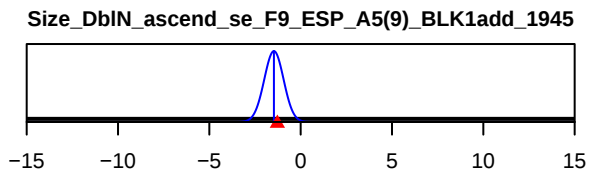
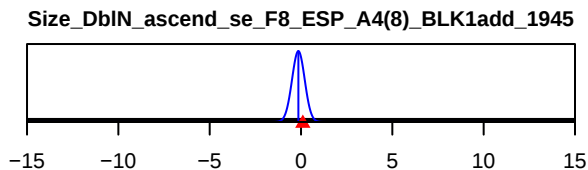
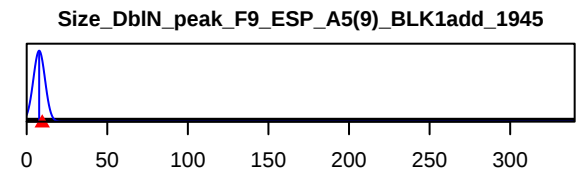
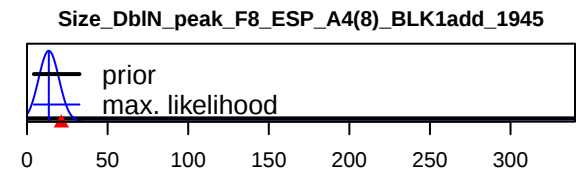
Size_DbIN_end_logit_I8_ESP_Q3(29)



Size_DbIN_end_logit_I9_ESP_Q4(30)

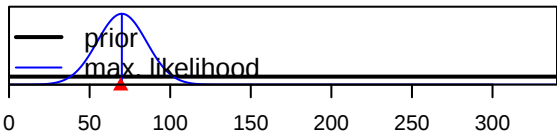


Parameter value

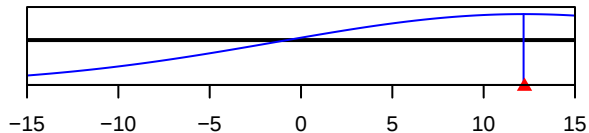


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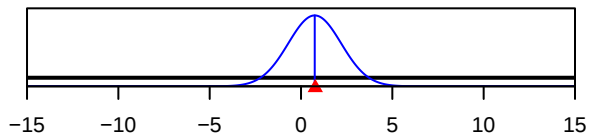
Size_DblN_peak_F12_LL_DW_A4(12)_BLK1delta_1945



Size_DblN_ascend_se_F12_LL_DW_A4(12)_BLK1delta_1945



Size_DblN_descend_se_F12_LL_DW_A4(12)_BLK1delta_1945



Parameter value