

Base operating model

ABT-MSE Operating model fitting report

Tom Carruthers

September 15, 2016

Operating model scenario is

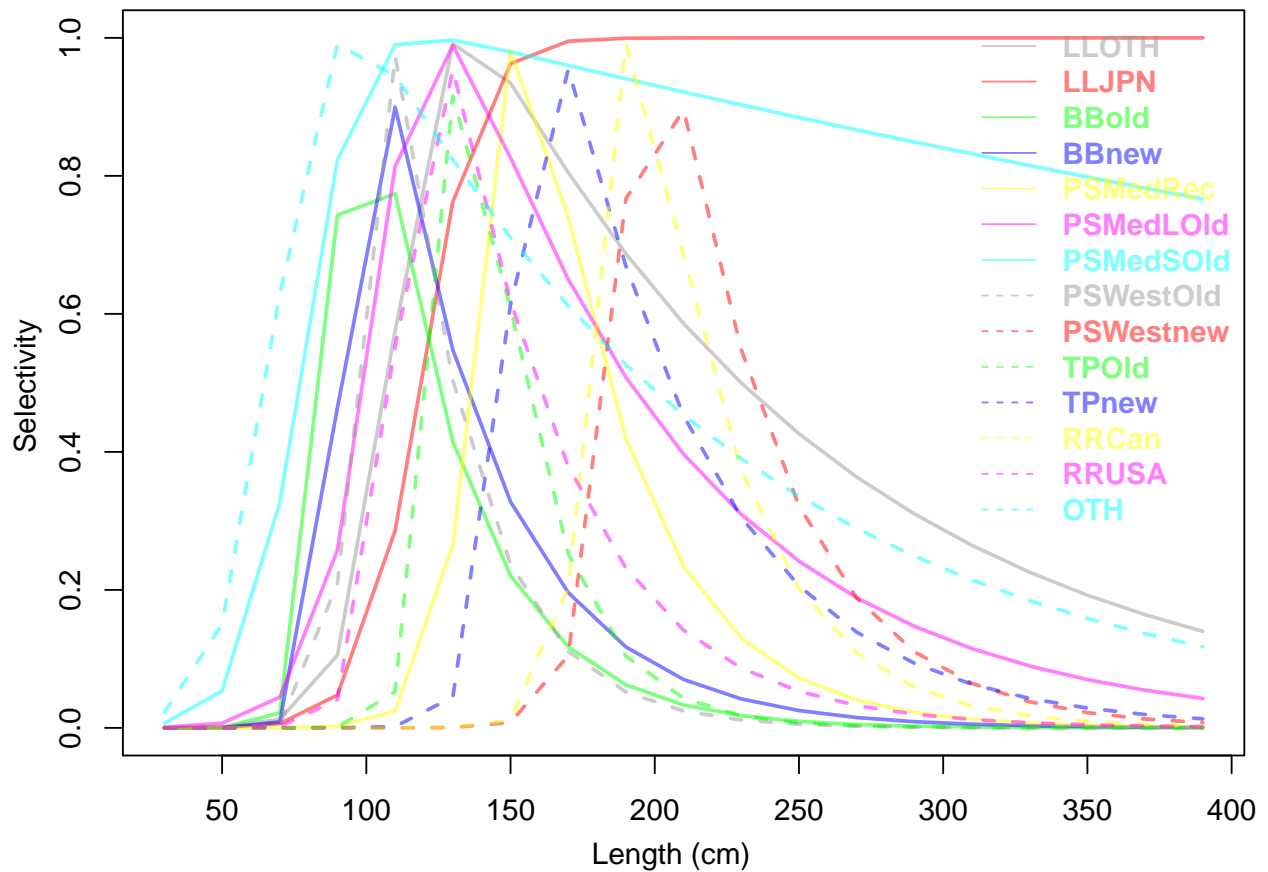
Level 1: High natural mortality and younger age of maturity for the Eastern stock, Low natural mortality and older age at maturity for the Western stock

Level 1: Steepness of the Beverton Holt Stock recruitment relationship for both stocks assumed to be 0.7

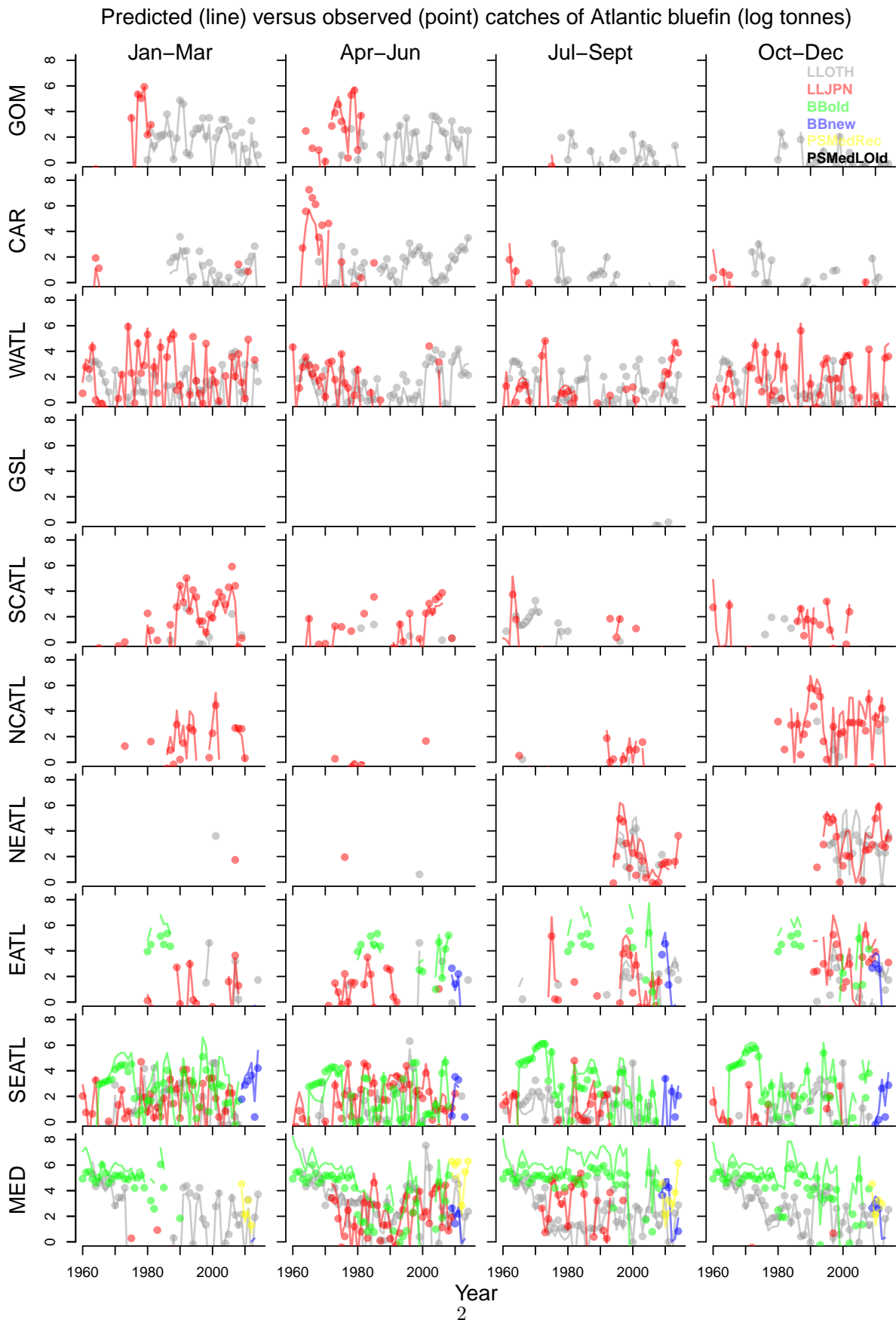
Level 1: Master abundance index calculated including Spanish CPUE data

Level 1: Depletion of both stocks as inferred by the unmodified master index

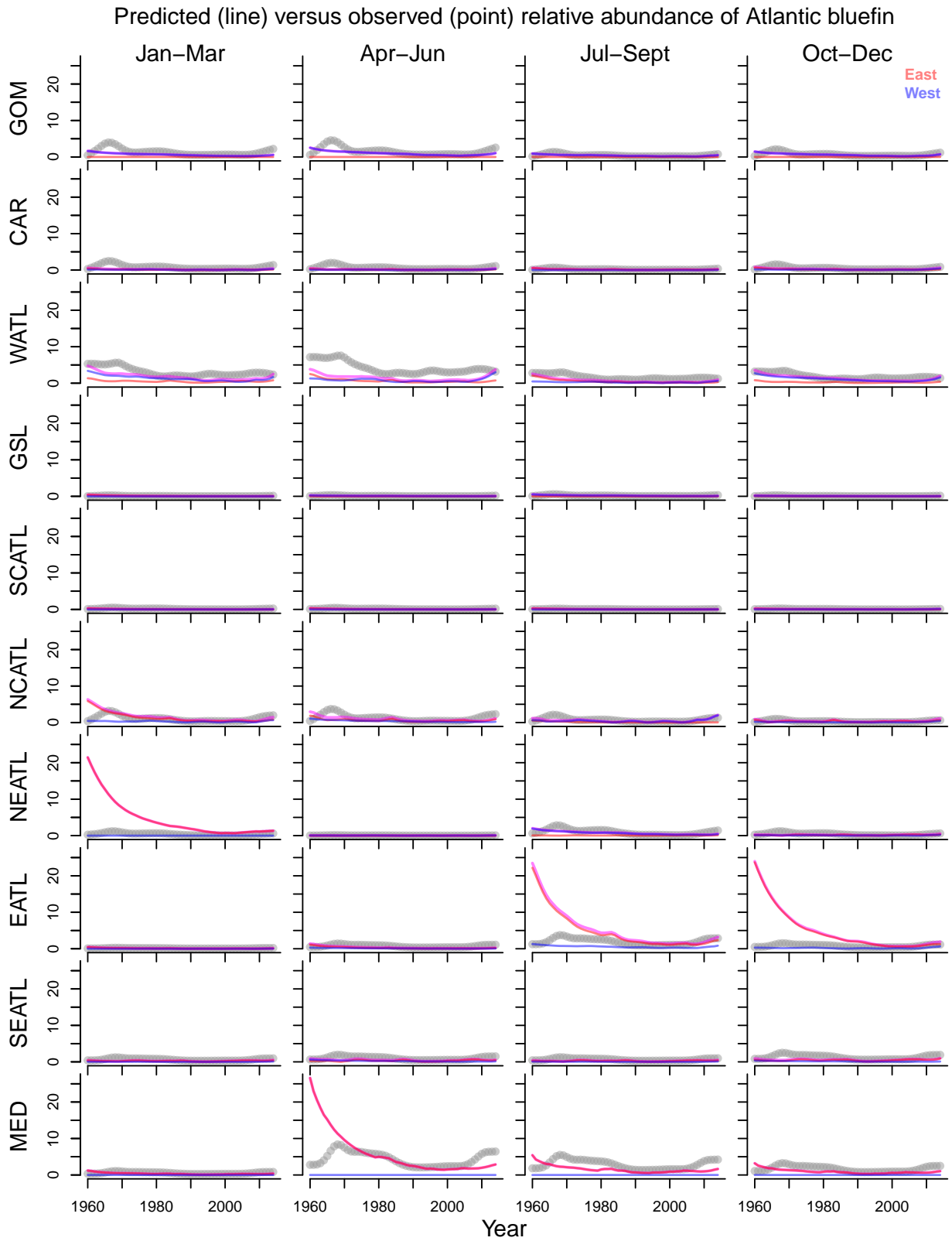
Estimated selectivities



Fit to observed catches

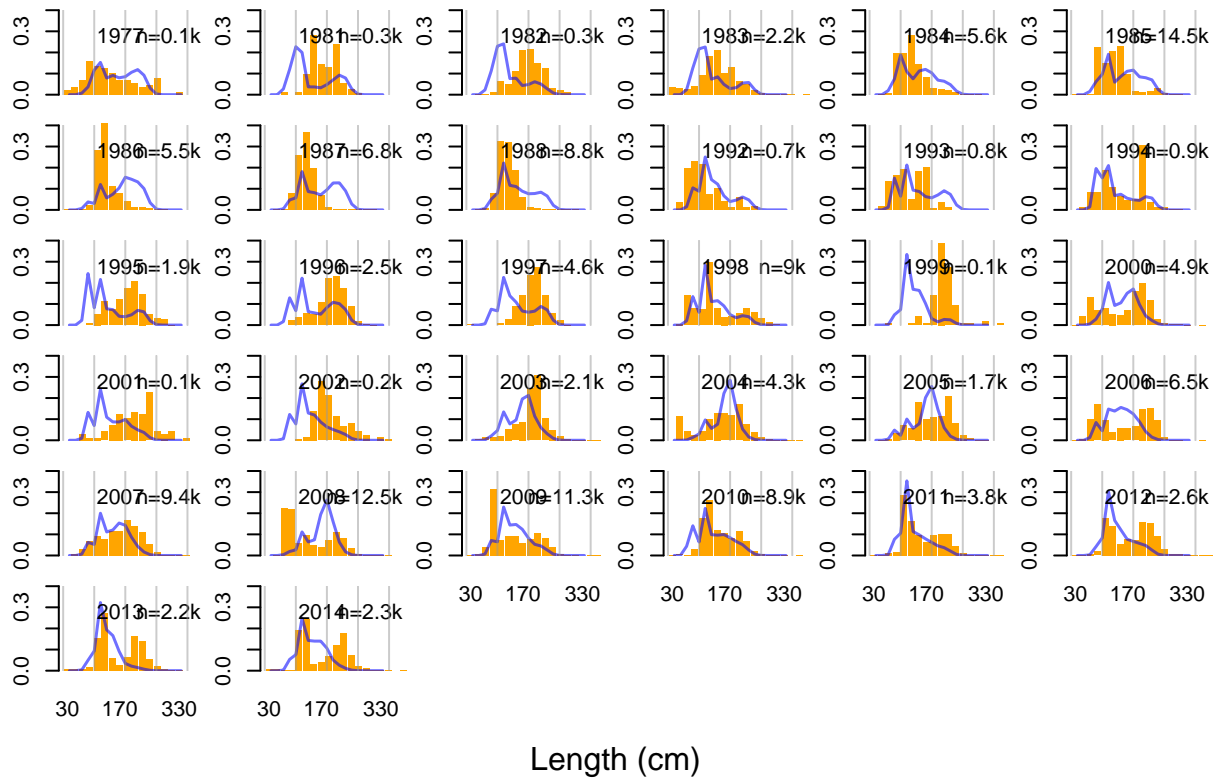


Fit to abundance indices



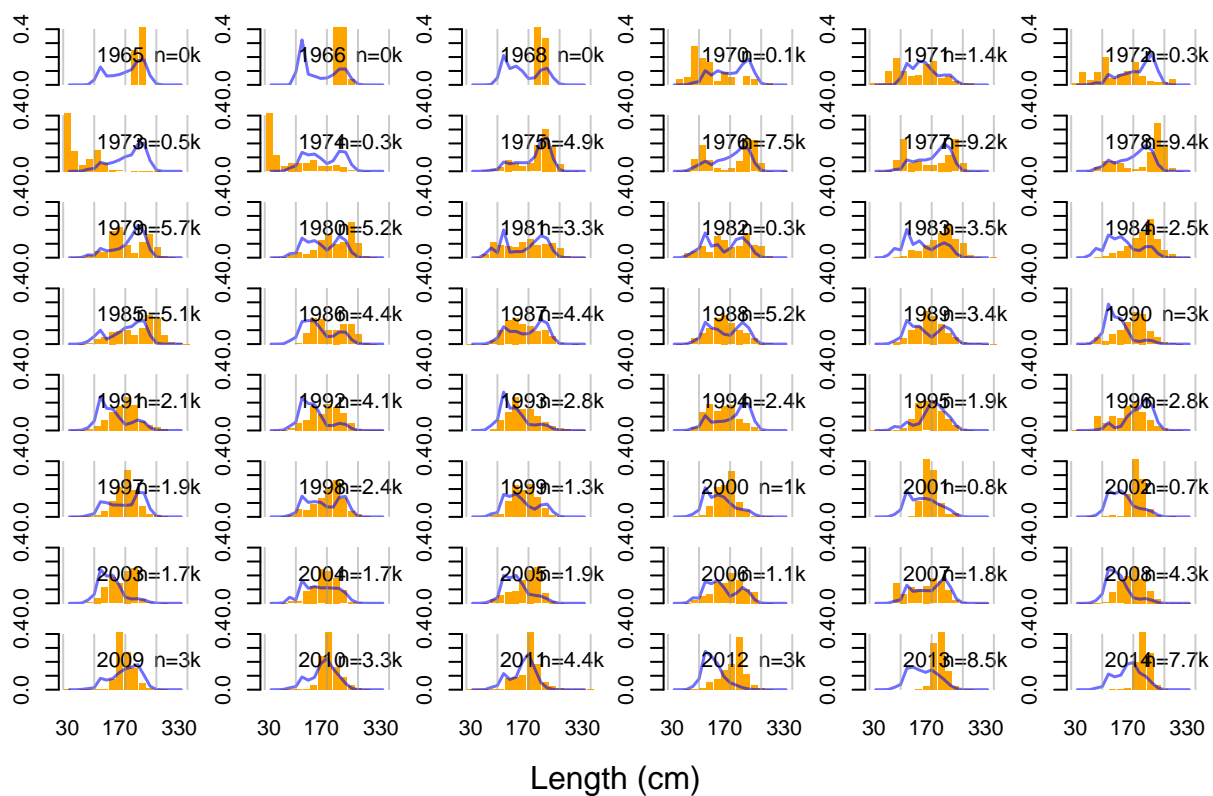
Catch composition fit for LLOTH

Predicted (line) versus observed (point) catch at length for the LLOTH fleet (n=137k)



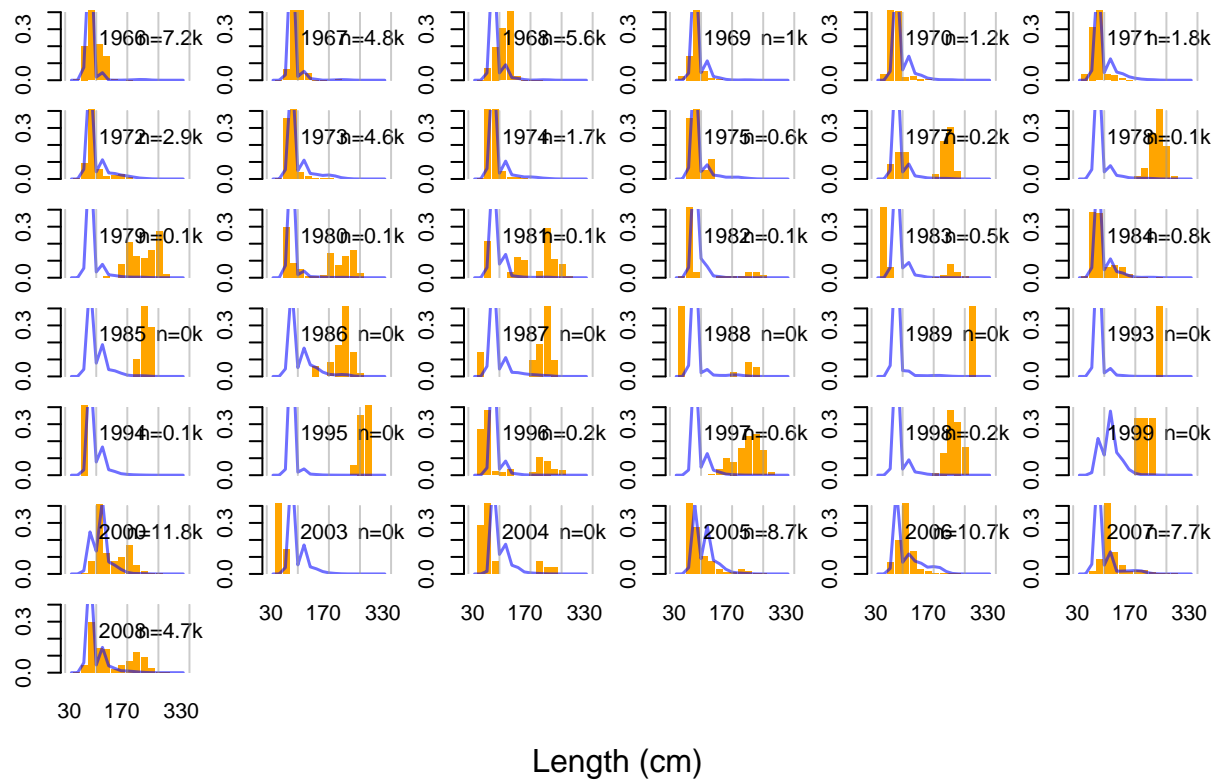
Catch composition fit for LLJPN

Predicted (line) versus observed (point) catch at length for the LLJPN fleet (n=146k)



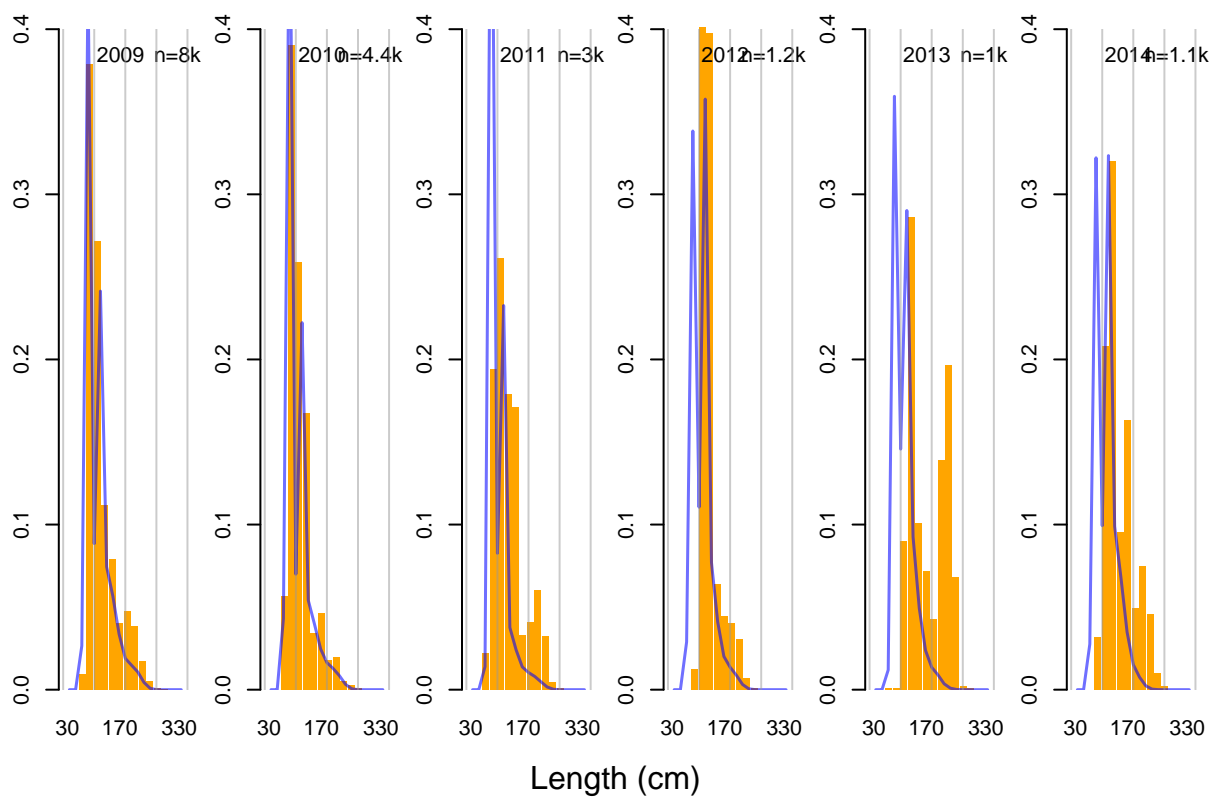
Catch composition fit for BBold

Predicted (line) versus observed (point) catch at length for the BBold fleet (n=78k)



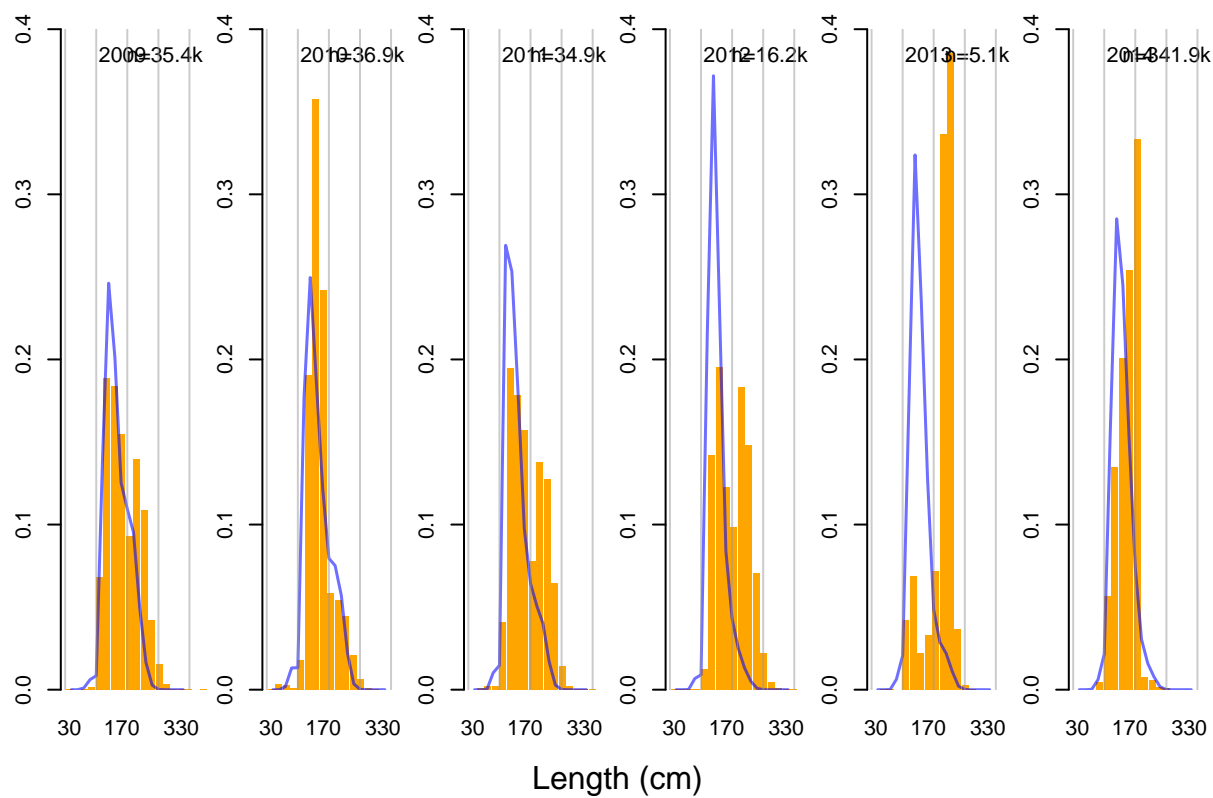
Catch composition fit for BBnew

Predicted (line) versus observed (point) catch at length for the BBnew fleet (n=18k)



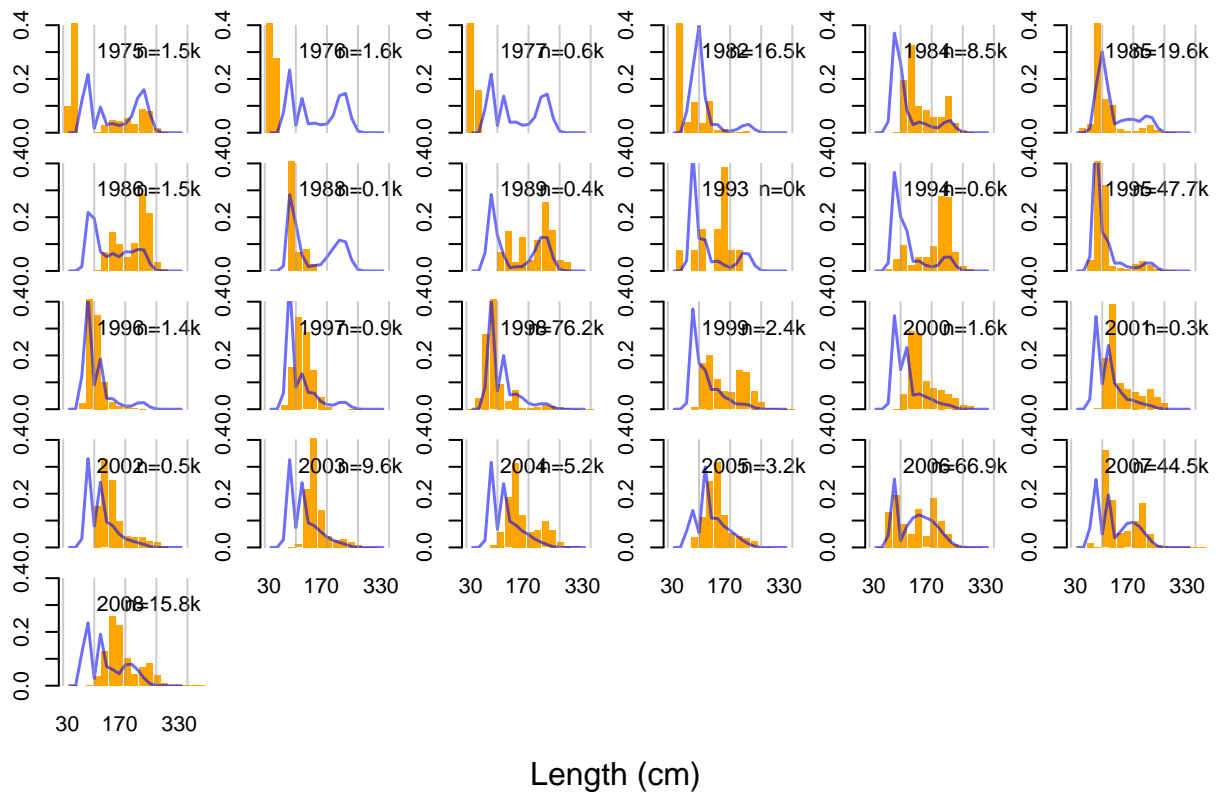
Catch composition fit for PSMedRec

Predicted (line) versus observed (point) catch at length for the PSMedRec fleet (n=470k)



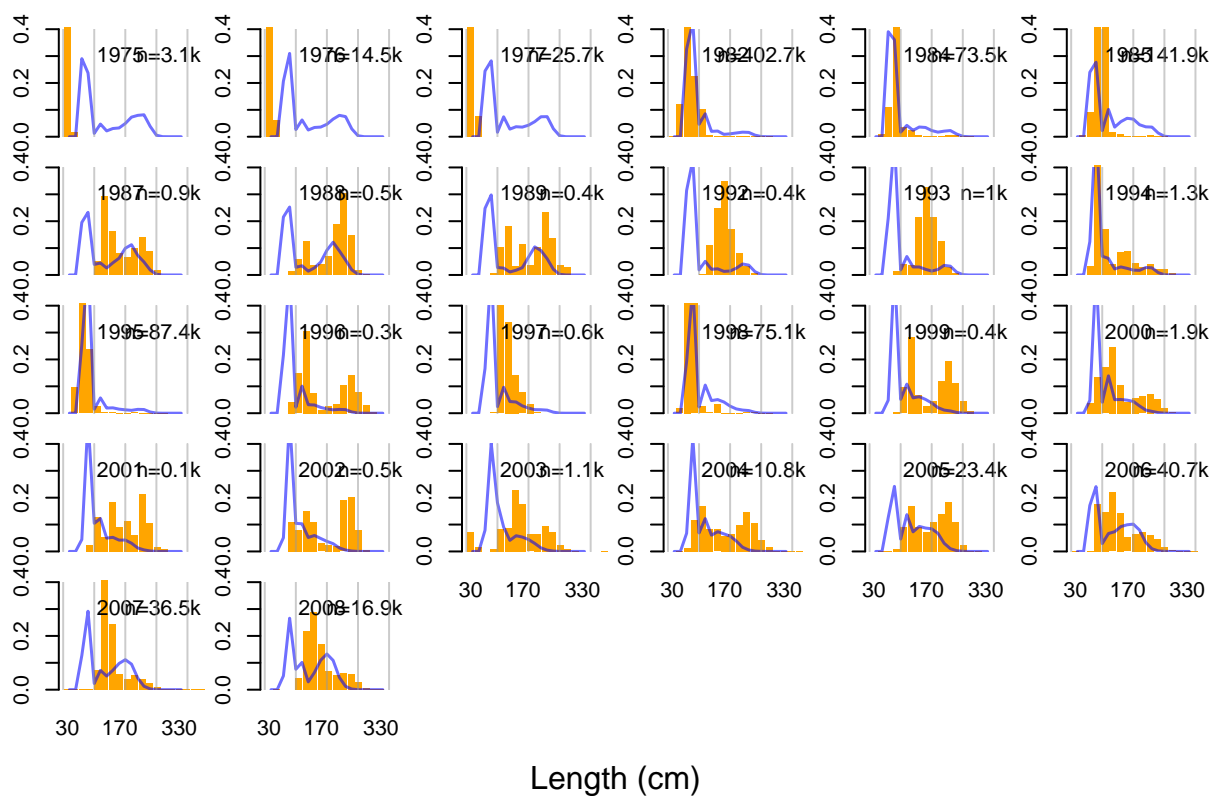
Catch composition fit for PSMedLOld

Predicted (line) versus observed (point) catch at length for the PSMedLOld fleet (n=327k)



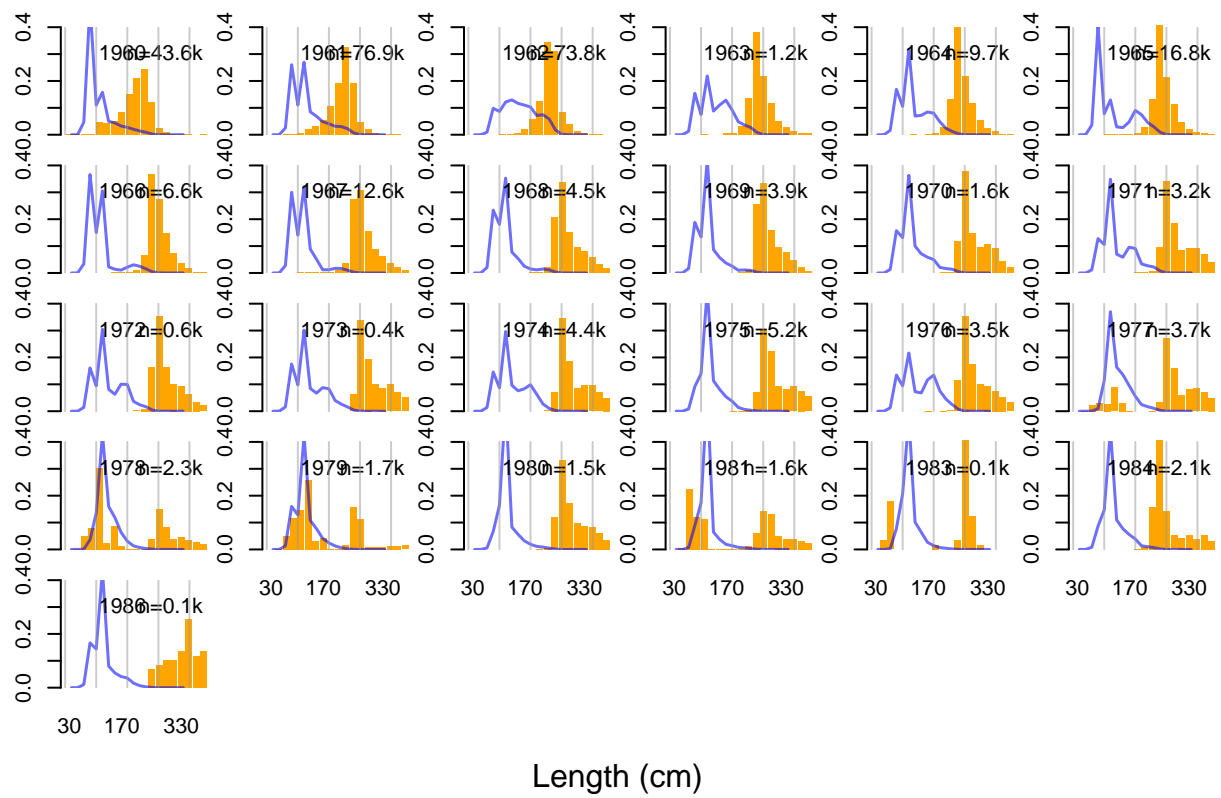
Catch composition fit for PSMedSOLD

Predicted (line) versus observed (point) catch at length for the PSMedSOLD fleet (n=961k)



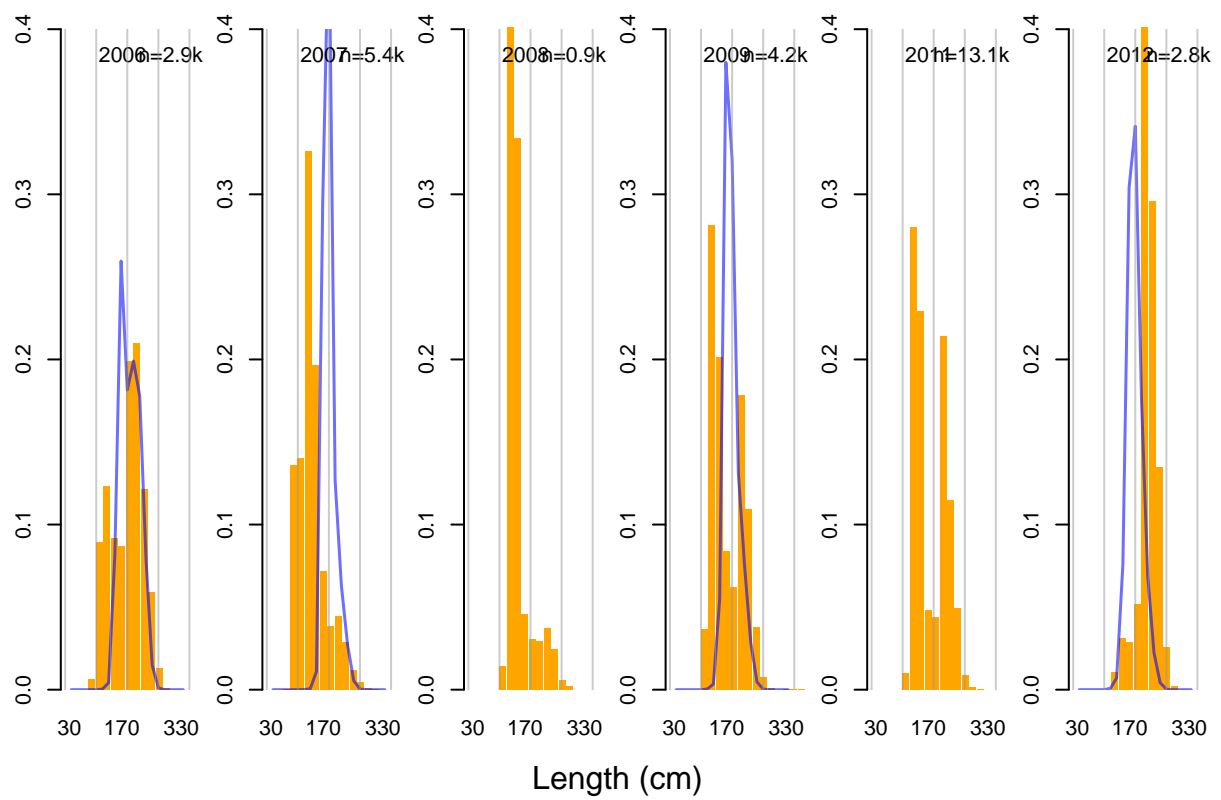
Catch composition fit for PSWestOld

Predicted (line) versus observed (point) catch at length for the PSWestOld fleet (n=281k)



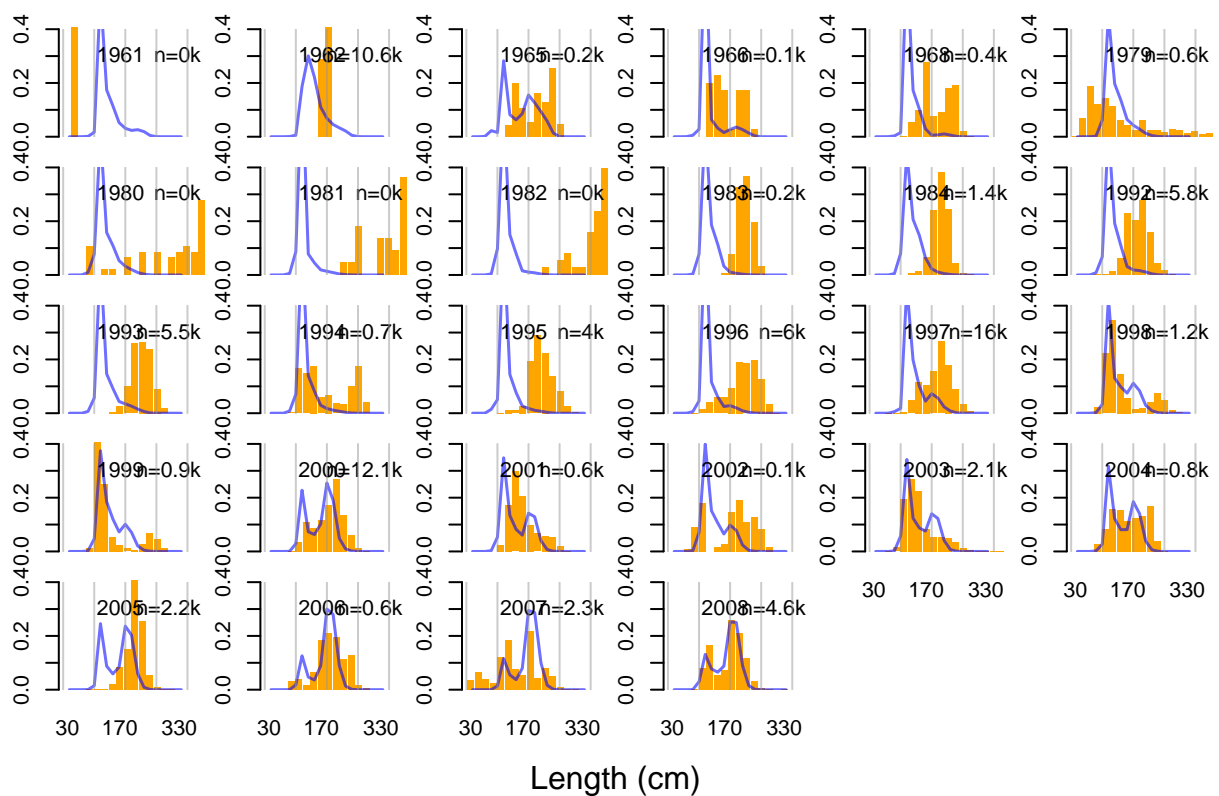
Catch composition fit for PSWestnew

Predicted (line) versus observed (point) catch at length for the PSWestnew fleet (n=29k)



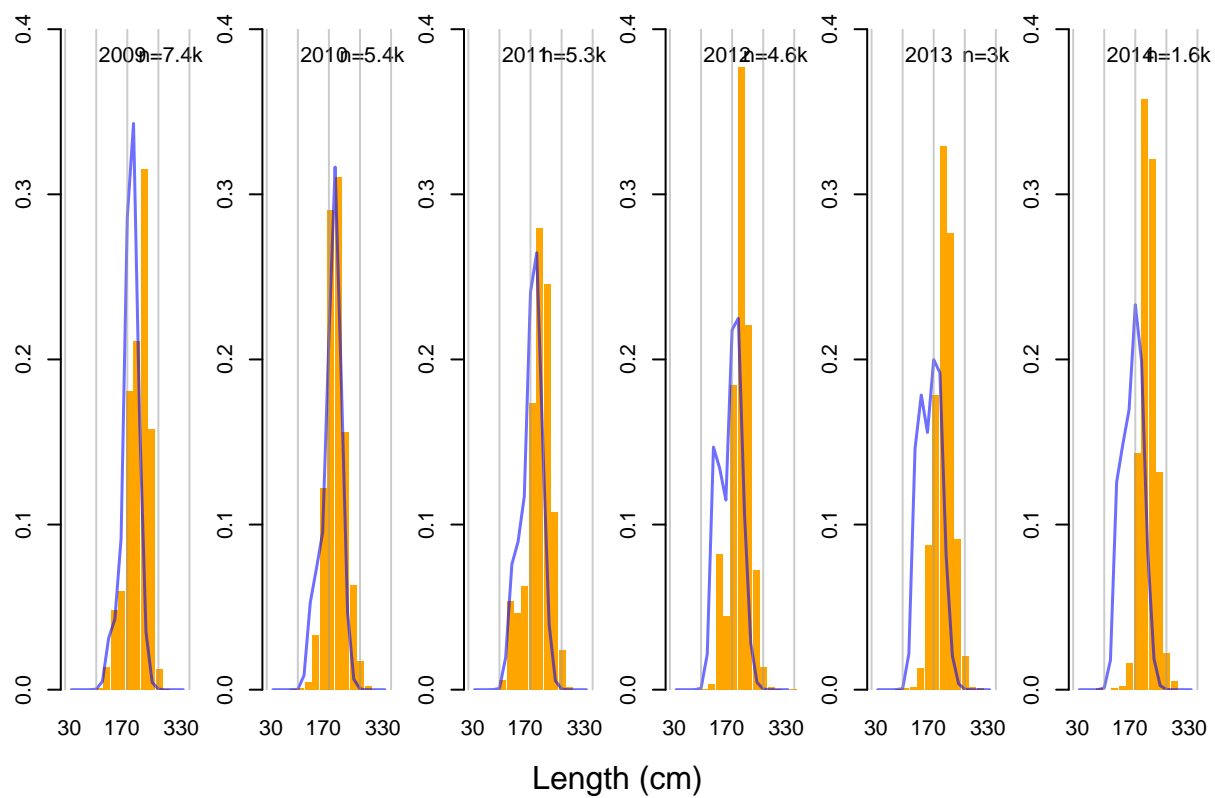
Catch composition fit for TPOld

Predicted (line) versus observed (point) catch at length for the TPOld fleet (n=79k)



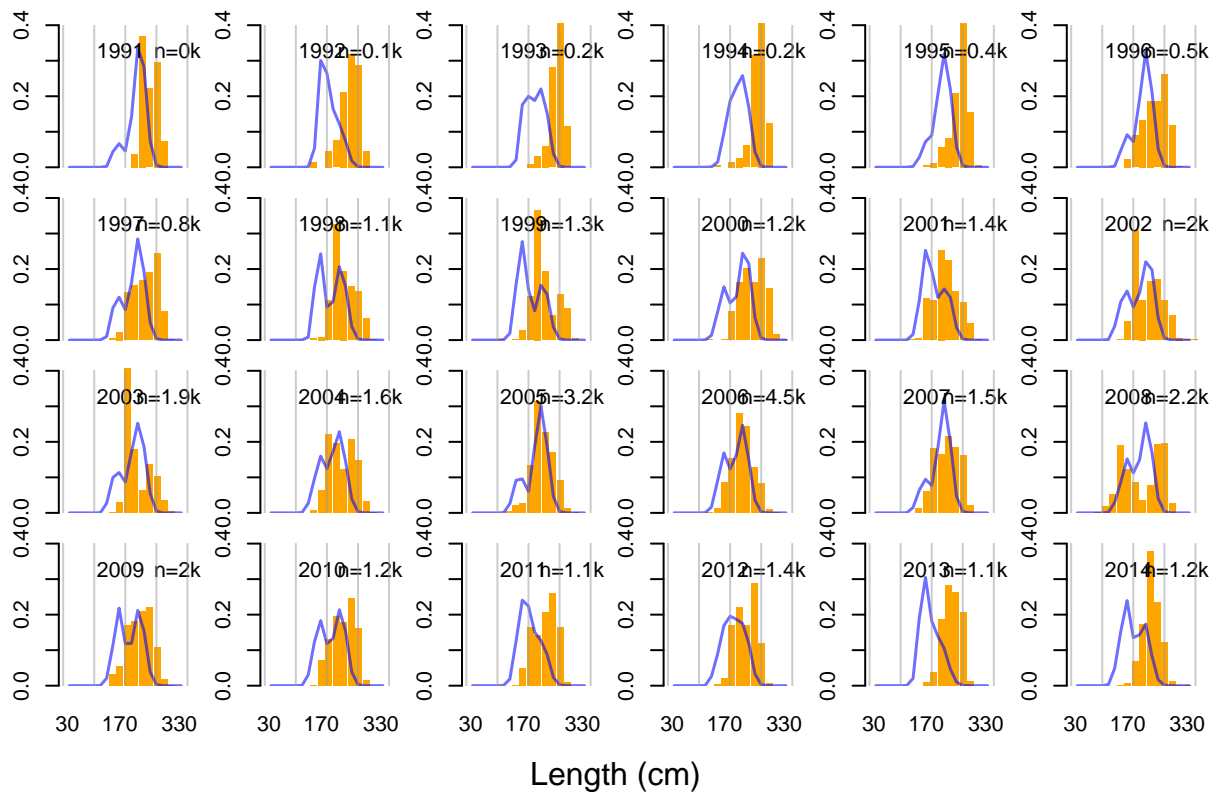
Catch composition fit for TPnew

Predicted (line) versus observed (point) catch at length for the TPnew fleet (n=27k)



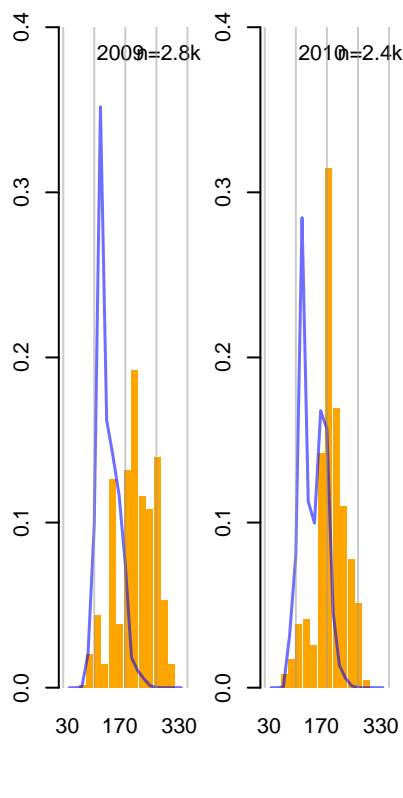
Catch composition fit for RRCan

Predicted (line) versus observed (point) catch at length for the RRCan fleet (n=32k)



Catch composition fit for RRUSA

Predicted (line) versus observed (point) catch at length for the RRUSA fleet (n=5k)



Catch composition fit for ALL OTH

Predicted (line) versus observed (point) catch at length for the ALL OTH fleet (n=171k)

