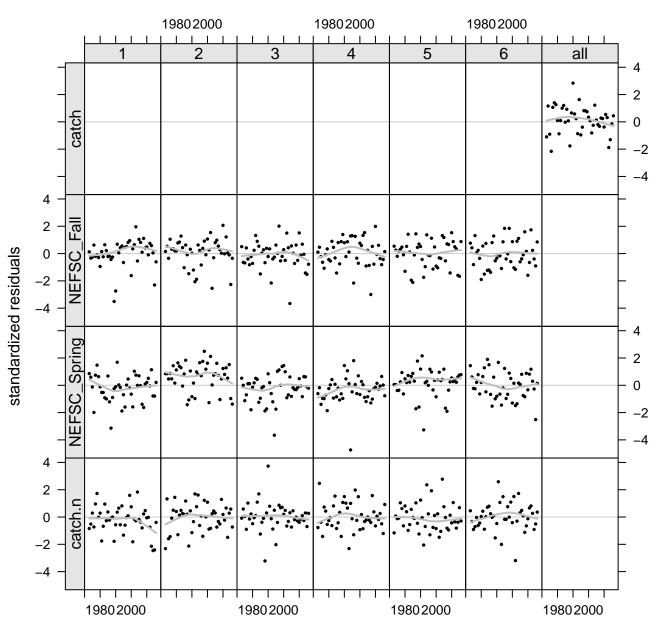
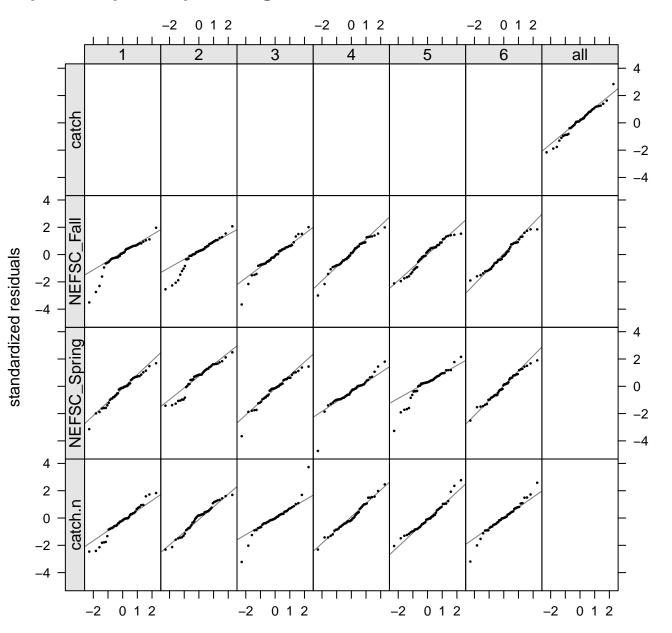
## log residuals of catch and abundance indices by age



## quantile-quantile plot of log residuals of catch and abundance indices



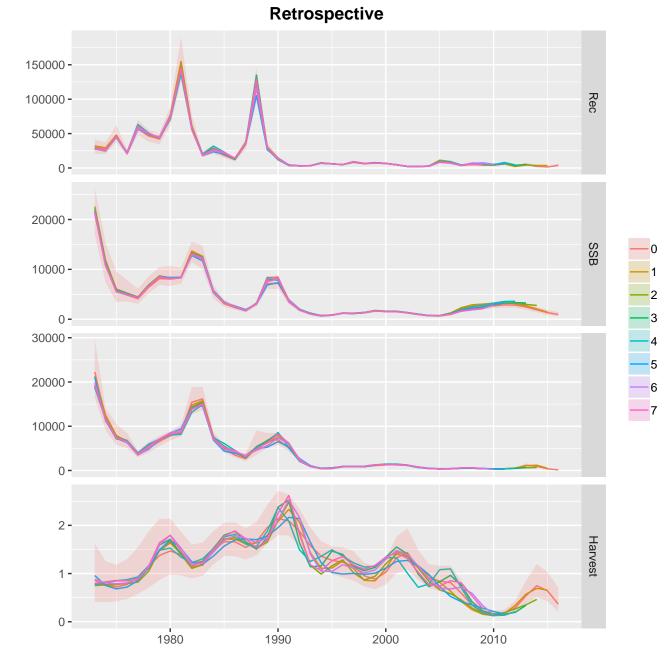
obs fit 1 2 3 4 5 6 numbers 1 2 3 4 5 6 1 2 3 4 5 6 2 3 4 2 3 4 5 6 

age

fitted and observed catch-at-age

## NEFSC\_Spring: fitted and observed index-at-age obs fit 1 2 3 4 5 6 numbers 2 3 4 5 6 1 2 3 4 5 6 2 3 4 1 2 3 4 5 6

## NEFSC\_Fall: fitted and observed index-at-age obs fit 1 2 3 4 5 6 numbers 1 2 3 4 5 6 1 2 3 4 5 6 1 2 3 4 5 6 1 2 3 4 5 6



Stock summary 150000 -Rec 100000 -50000 -0 -20000 -SSB 10000 -0 -30000 -20000 -10000 -0 -2 -П 1 -0 -1990 2000 2010 1980

**Abundance indices predictions** 

