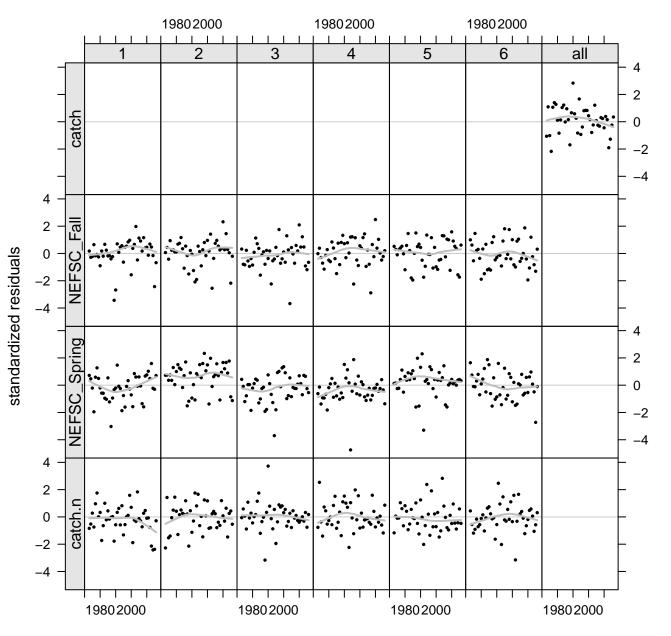
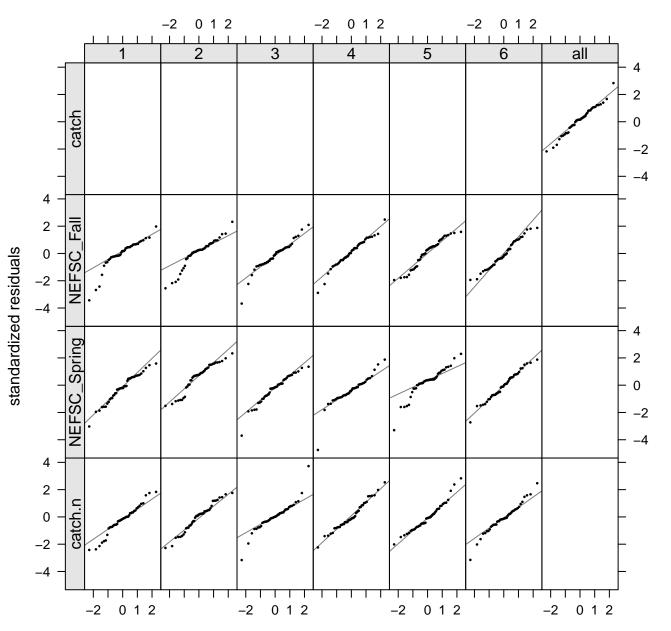
## log residuals of catch and abundance indices by age



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



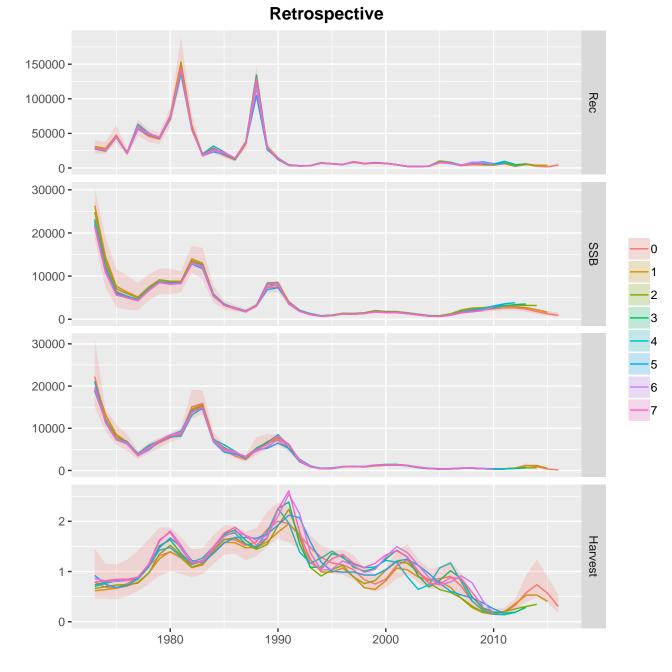
obs fit 1 2 3 4 5 6 numbers 1 2 3 4 5 6 2 3 4 2 3 4 5 6 1 2 3 4 5 6 

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 -30000 -20000 -SSB 10000 -0 -30000 -20000 -10000 -0 -2.0 -1.5 -1.0 -0.5 -0.0 -1980 1990 2000 2010

# Abundance indices predictions

