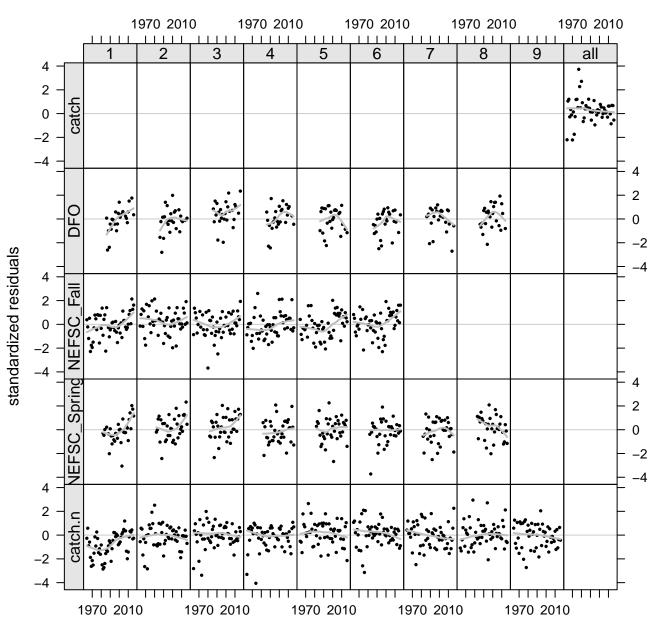
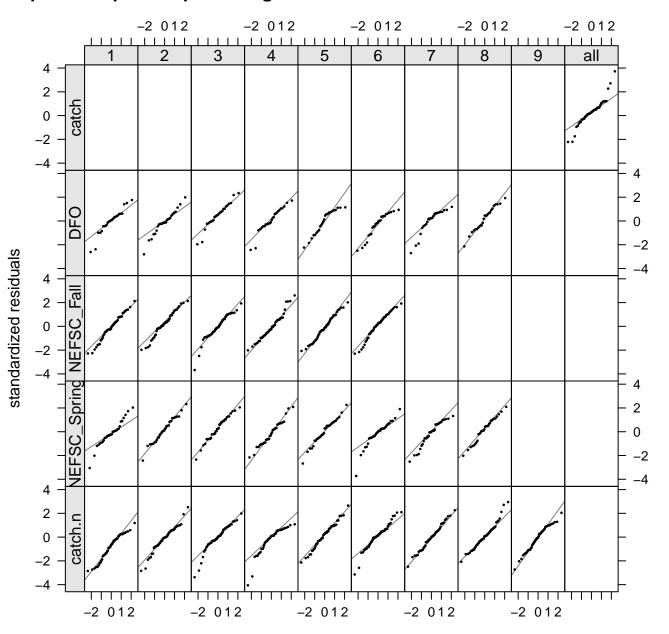
# log residuals of catch and abundance indices by age



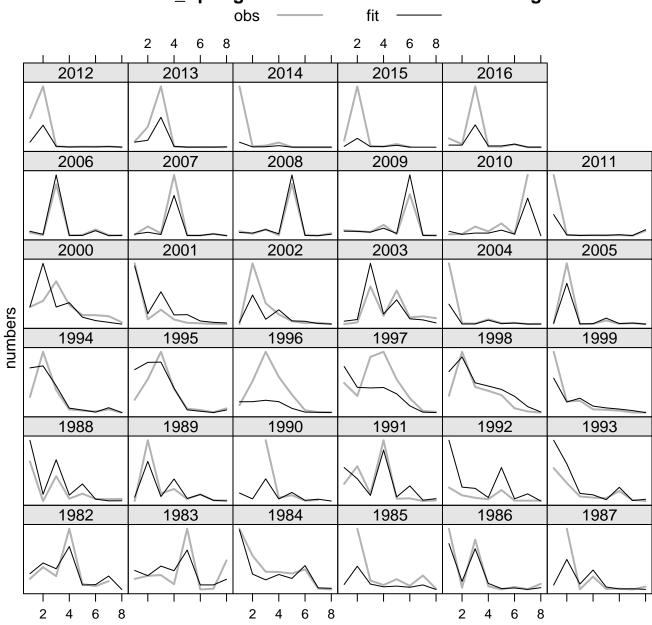
# quantile-quantile plot of log residuals of catch and abundance indices



#### fitted and observed catch-at-age obs fit 2 4 6 8 2 4 6 8 numbers 2 4 6 8 2 4 6 8 4 6 8 2 4 6 8

age

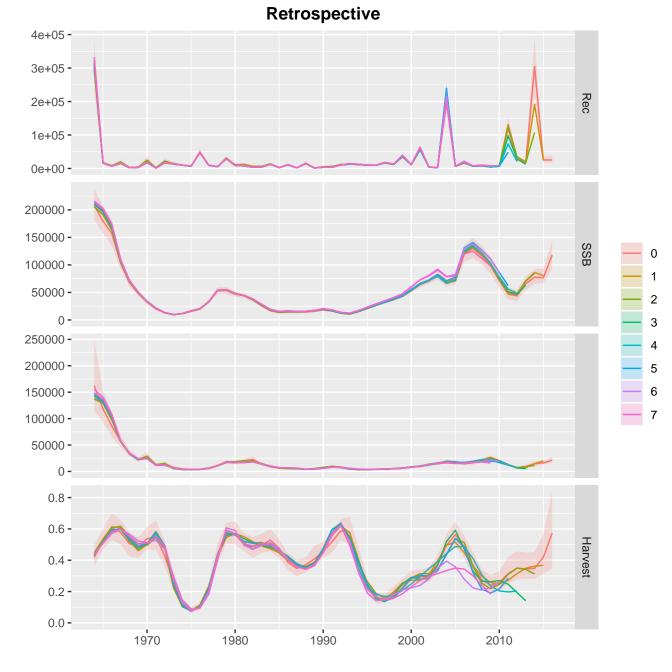
### NEFSC\_Spring: fitted and observed index-at-age



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

DFO: fitted and observed index-at-age

obs fit numbers 



**Stock summary** 4e+05 -3e+05 -Rec 2e+05 -1e+05 **-**0e+00 -200000 -150000 -SSB 100000 -50000 -0 -250000 -200000 -150000 -100000 -50000 -0 -0.8 -0.6 -0.4 -0.2 -0.0 -1970 1980 1990 2000 2010

# **Abundance indices predictions**

