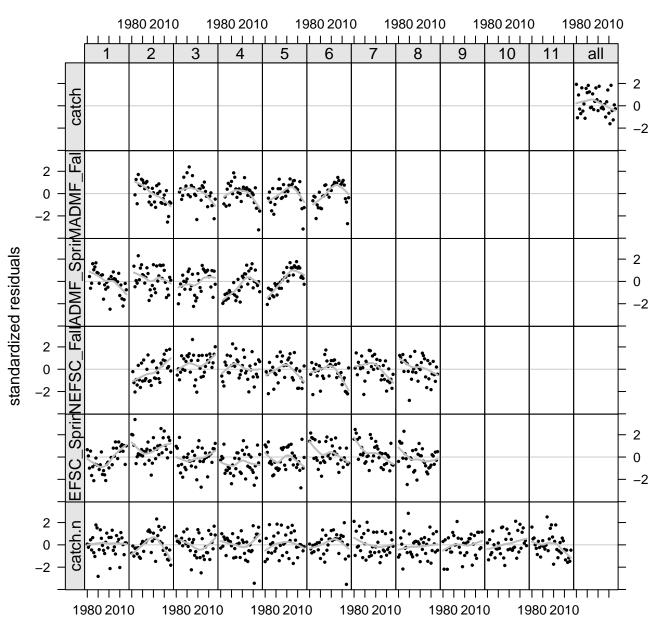
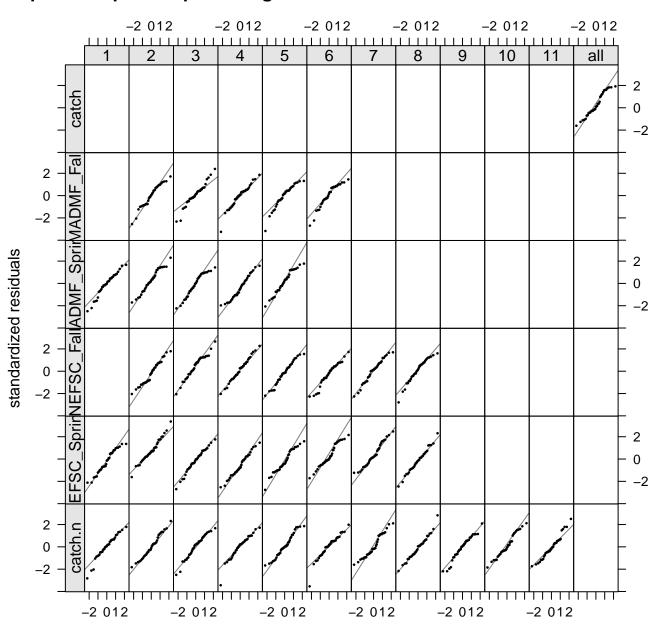
# log residuals of catch and abundance indices by age



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

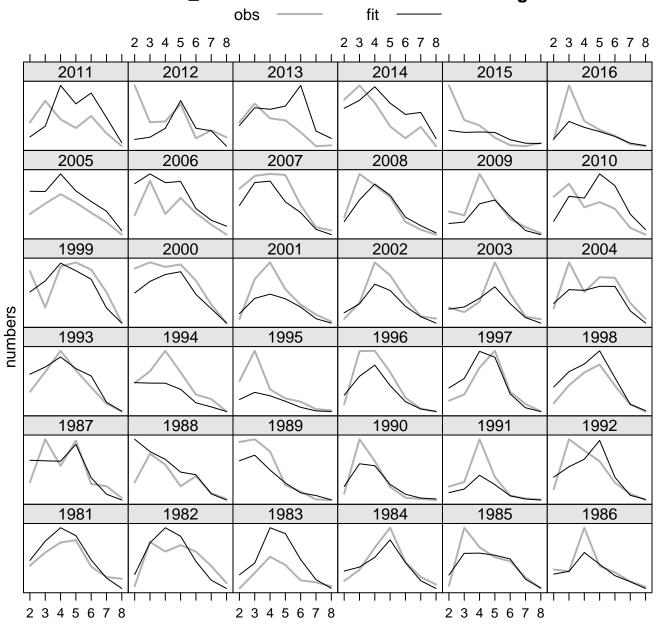


fitted and observed catch-at-age obs fit 2 4 6 8 10 numbers 6 8 10 2 4 6 8 10 2 4 6 8 10 2 4 2 4 6 8 10

age

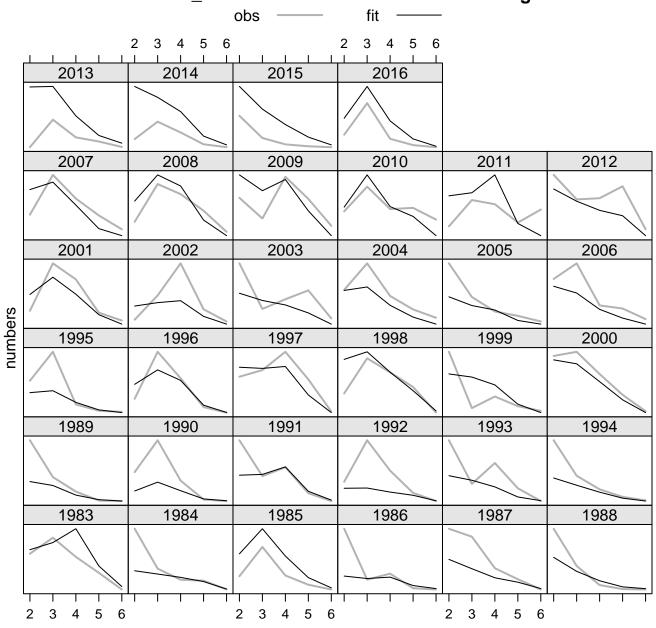
#### NEFSC\_Spring: fitted and observed index-at-age obs fit numbers

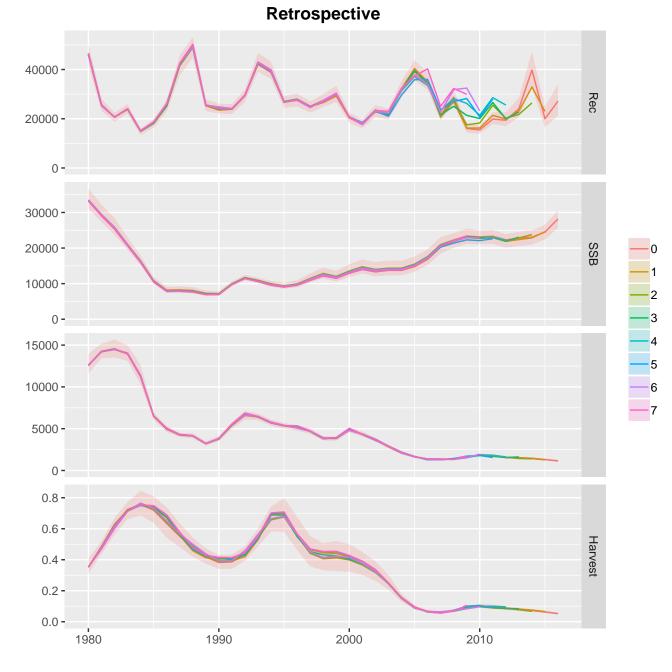
### NEFSC\_Fall: fitted and observed index-at-age



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

### MADMF\_Fall: fitted and observed index-at-age





**Stock summary** 40000 -Rec 20000 -0 -30000 -SSB 20000 -10000 -0 -15000 -10000 -5000 -0 -0.8 -0.6 -0.4 -0.2 -

2000

1990

2010

0.0 -

1980

# **Abundance indices predictions**

