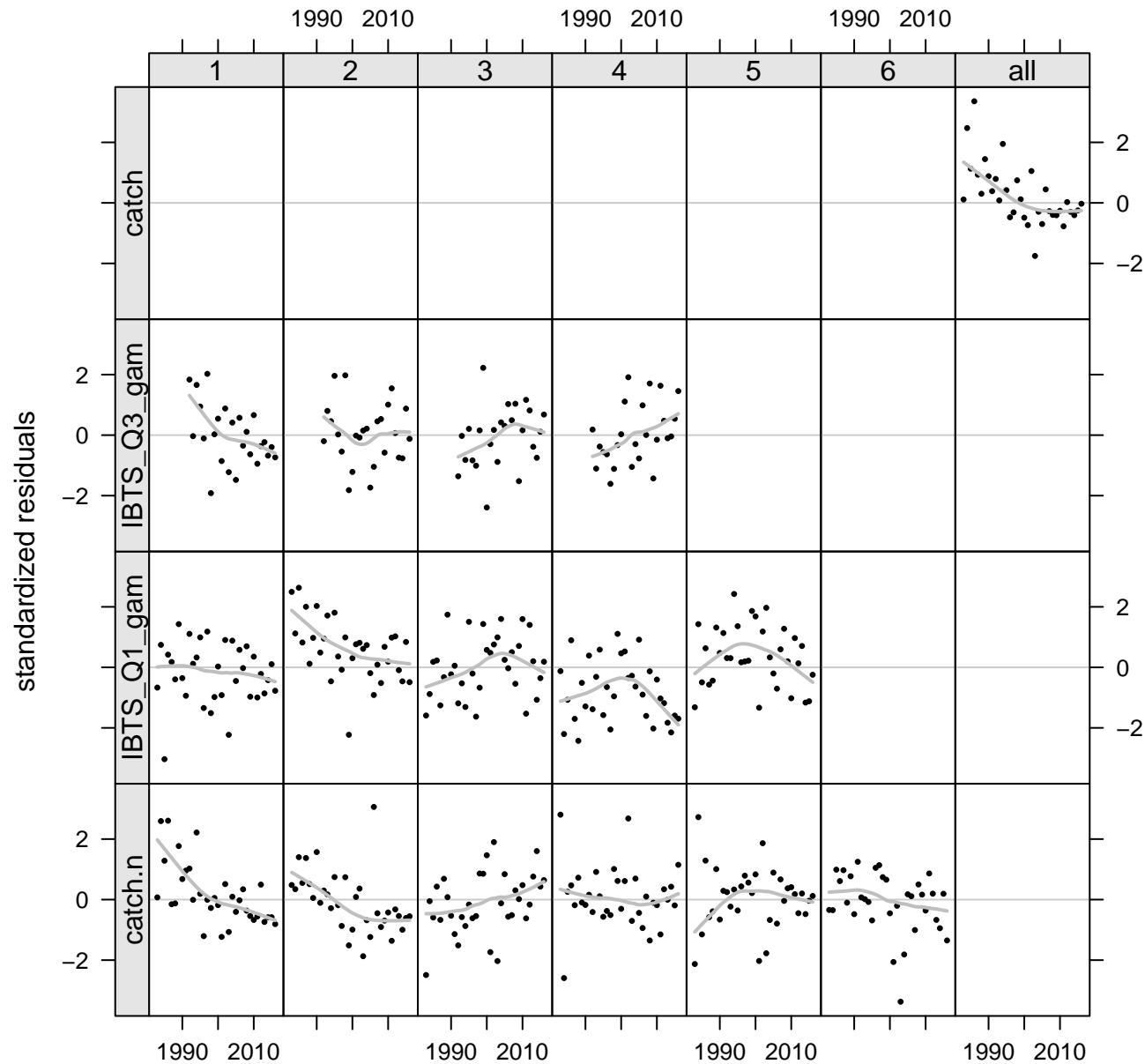
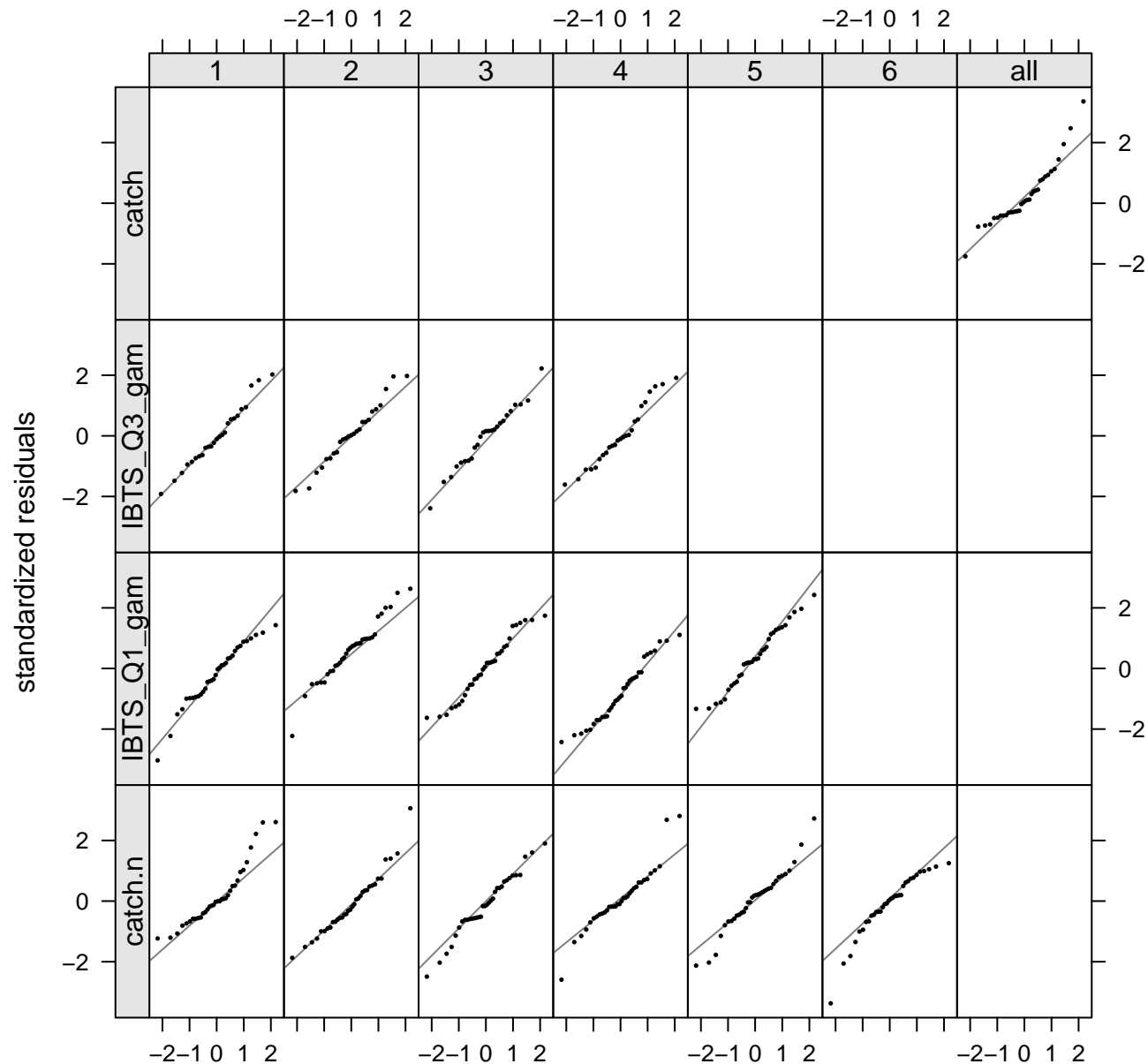


# log residuals of catch and abundance indices by age



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

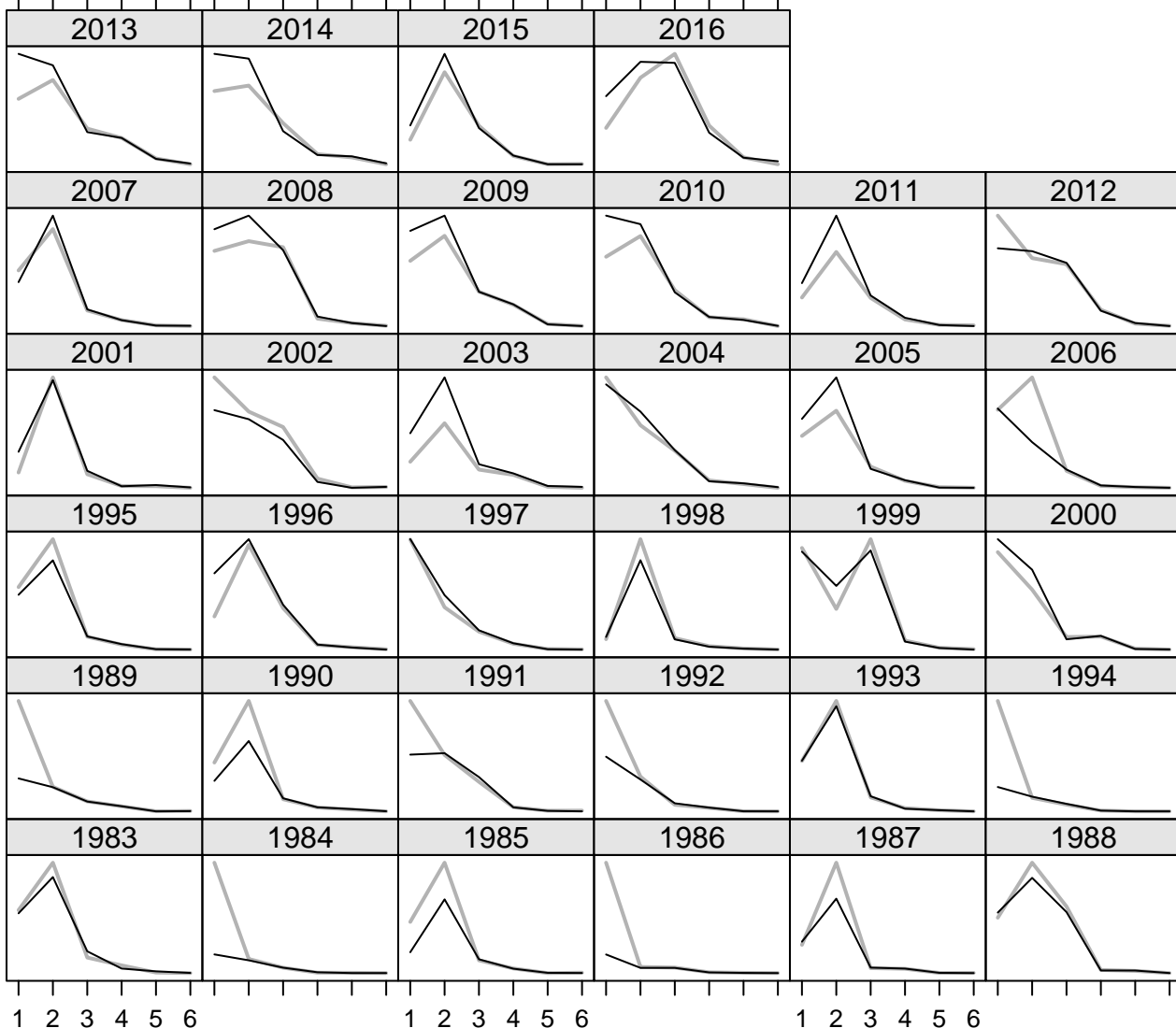


# fitted and observed catch-at-age

obs ——— fit ———

1 2 3 4 5 6 1 2 3 4 5 6

numbers



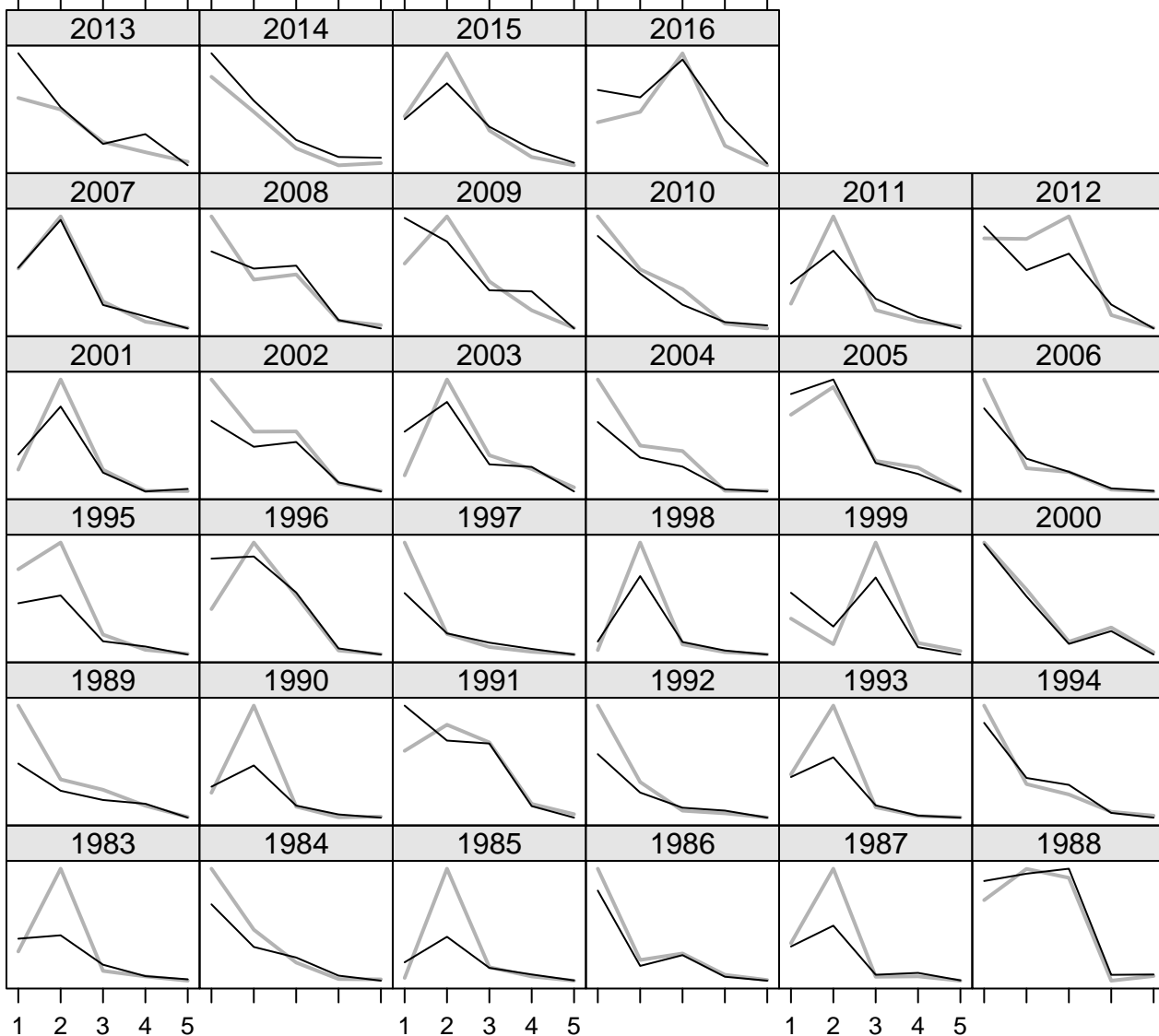
age

# IBTS\_Q1\_gam: fitted and observed index-at-age

obs — fit

1 2 3 4 5 1 2 3 4 5

numbers



# IBTS\_Q3\_gam: fitted and observed index-at-age

obs — fit

1.0 2.0 3.0 4.0

1.0 2.0 3.0 4.0

2012

2013

2014

2015

2016

2007

2008

2009

2010

2011

2002

2003

2004

2005

2006

1997

1998

1999

2000

2001

1992

1993

1994

1995

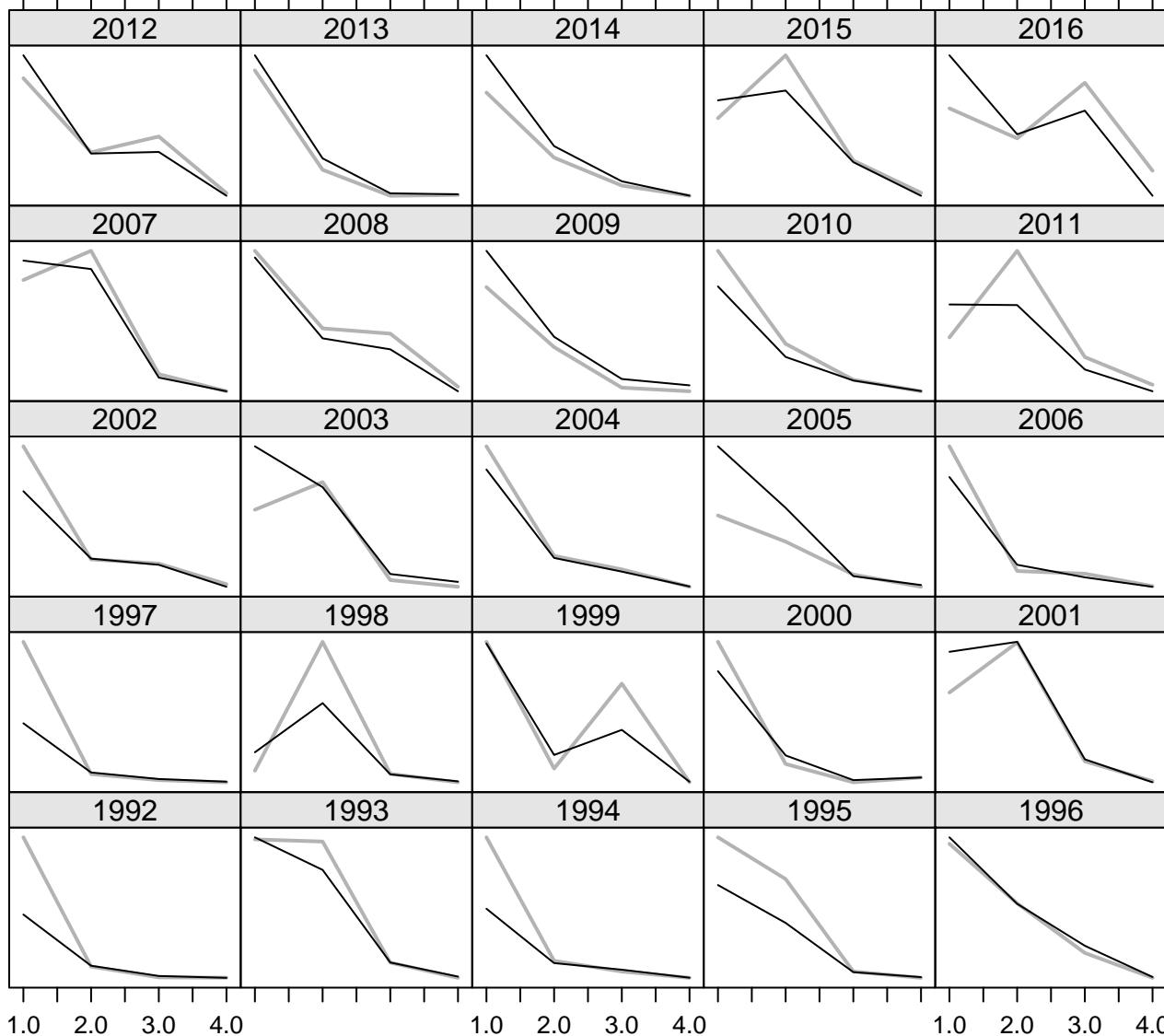
1996

numbers

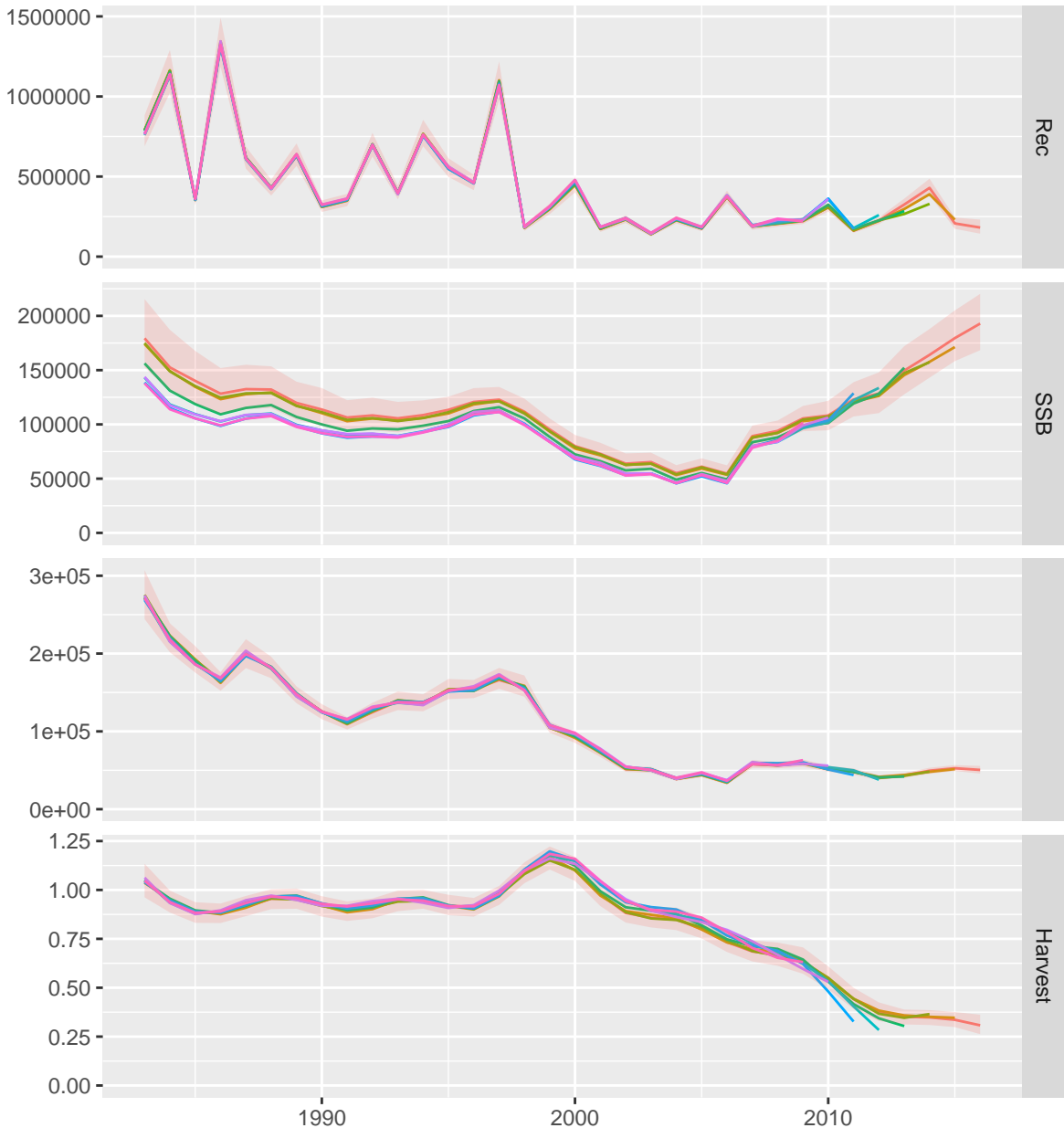
1.0 2.0 3.0 4.0

1.0 2.0 3.0 4.0

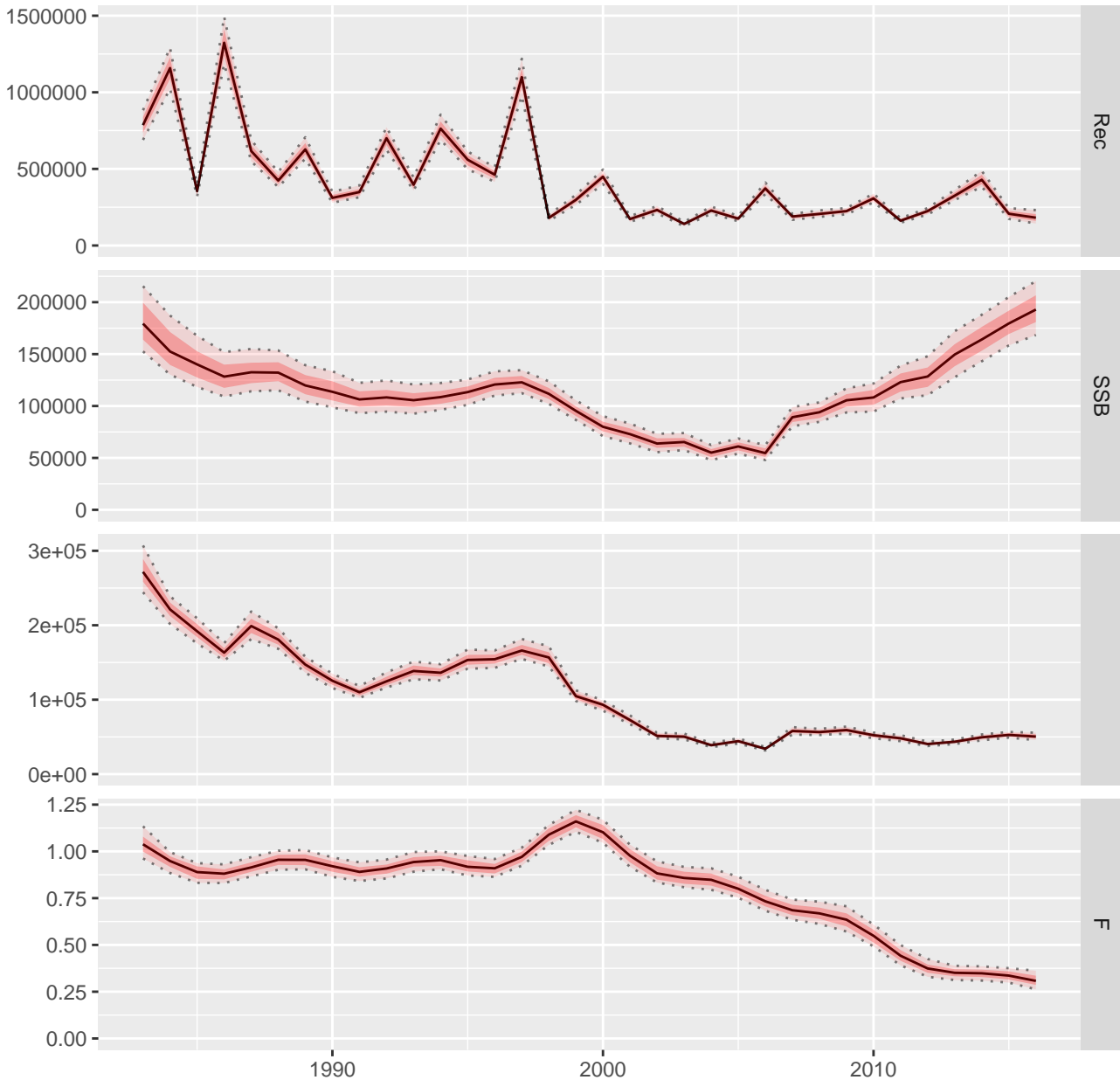
1.0 2.0 3.0 4.0



# Retrospective



# Stock summary



# Abundance indices predictions

