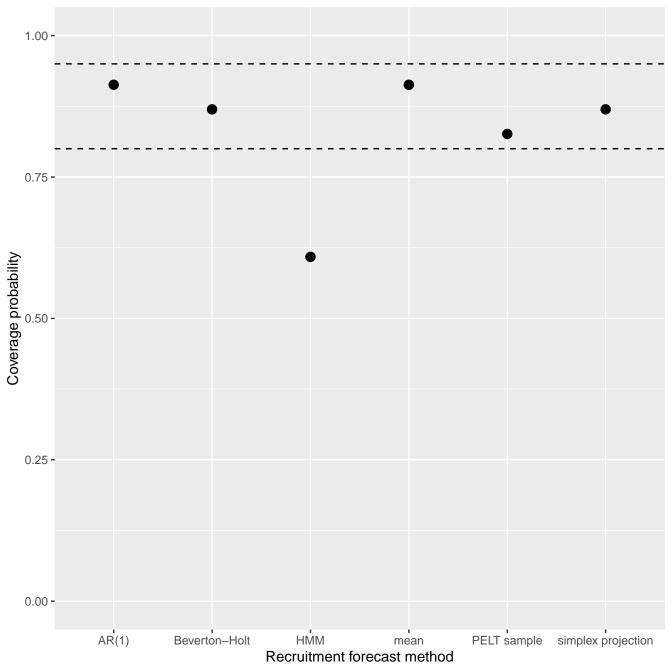
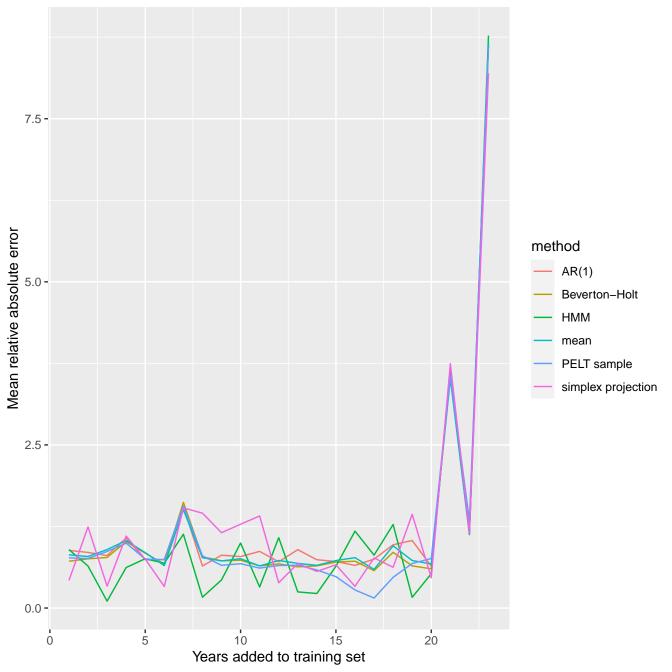
1-step Forecasts (a) Mean (b) AR(1) 1.5e+08 -1.5e+08 -Recruitment **Recruitment** 1.0e+08 **-**1.0e+08 **-**5.0e+07 **-**5.0e+07 **-**0.0e+00 0.0e+00 202 1990 2010 202 2000 2000 2010 1980 1980 1990 Year Year (c) Beverton-Holt (d) Simplex projection 1.5e+08 -1.5e+08 -Recruitment Recruitment 1.0e+08 **-**1.0e+08 **-**5.0e+07 **-**5.0e+07 -0.0e+00 **-**0.0e+00 -1990 2000 2000 1990 2010 2010 1980 202 1980 202 Year Year (f) HMM (e) PELT sample 1.5e+08 -1.5e+08 -Recruitment Recruitment 1.0e+08 **-**1.0e+08 **-**5.0e+07 **-**5.0e+07 **-**0.0e+00 -0.0e+00 -1990 2000 1980 1990 1980 2000 2010 2010 202 202 Year Year





1.5e+08 -1.5e+08 -Recruitment **Recruitment** 1.0e+08 **-**1.0e+08 **-**5.0e+07 **-**5.0e+07 **-**0.0e+00 0.0e+00 202 1990 2010 202 2000 2000 2010 1980 1980 1990 Year Year (c) Beverton-Holt (d) Simplex projection 1.5e+08 -1.5e+08 -Recruitment Recruitment 1.0e+08 **-**1.0e+08 -5.0e+07 **-**5.0e+07 **-**0.0e+00 **-**0.0e+00 -1990 2000 1990 2000 2010 2010 1980 202 1980 202 Year Year

5-step Forecasts

(b) AR(1)

(a) Mean

