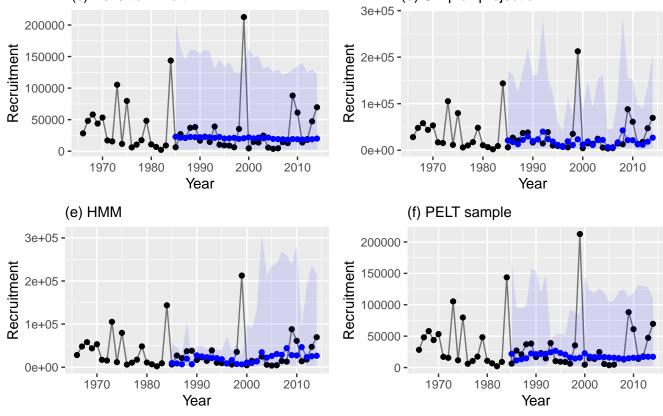
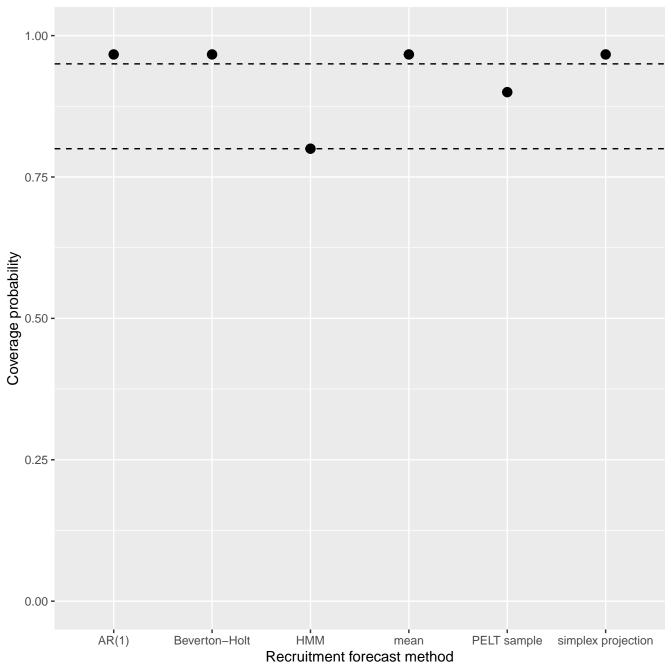
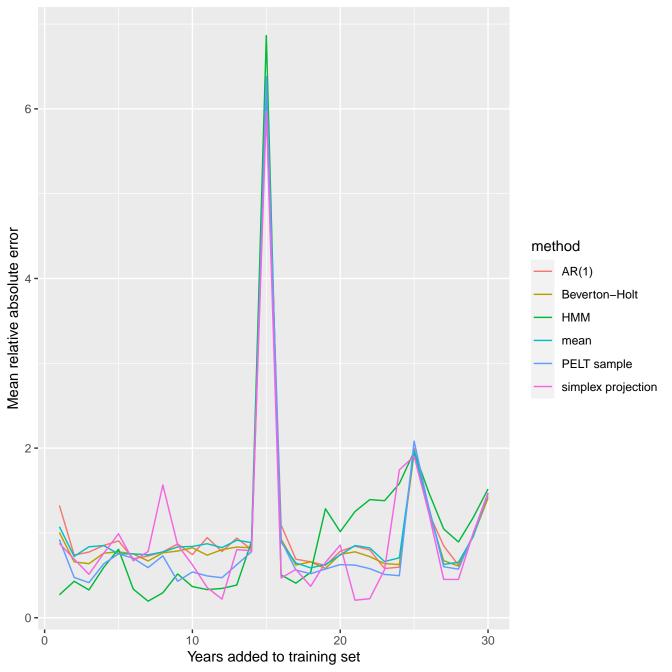
(a) Mean (b) AR(1) 200000 -2e+05 -Recruitment Recruitment 150000 -100000 -1e+05 -50000 0e+00 0 -1980 1990 1990 2010 1980 2010 1970 2000 1970 2000 Year Year (c) Beverton-Holt (d) Simplex projection 3e+05 -200000 -Recruitment Recruitment 150000 -2e+05 -100000 -1e+05 -50000 0e+00 -0 -1980 2010 1970 1990 1990 2010 1970 1980 2000 2000 Year Year (e) HMM (f) PELT sample

1-step Forecasts







200000 -200000 -Recruitment Recruitment 150000 -150000 -100000 -100000 -50000 50000 0 -0 -1980 1970 1980 2010 1990 2010 1990 1970 2000 2000 Year Year (c) Beverton-Holt (d) Simplex projection 200000 -3e+05 -Recruitment Recruitment 150000 -2e+05 -100000 -1e+05 -50000

5-step Forecasts

(b) AR(1)

(a) Mean

