5-step Forecasts (a) mean (b) AR(1) 8e+05 8e+05 Recruitment 6e+05 Recruitment 6e+05 4e+05 4e+05 2e+05 2e+05 0e+00 0e+00 1990 1980 2000 2010 2020 1980 1990 2000 2010 2020 Year Year (d) simplex (c) Beverton-Holt 8e+05 8e+05 Recruitment 6e+05 Recruitment 6e+05 4e+05 4e+05 2e+05 2e+05 0e+00 0e+00 1980 1990 2000 2010 2020 1980 1990 2000 2010 2020 Year Year (f) HMM (e) PELT 8e+05 8e+05 Recruitment Recruitment 6e+05 6e+05 4e+05 4e+05 2e+05 2e+05 0e+00 0e+00 1980 1990 2000 2010 2020 1980 1990 2000 2010 2020 Year Year