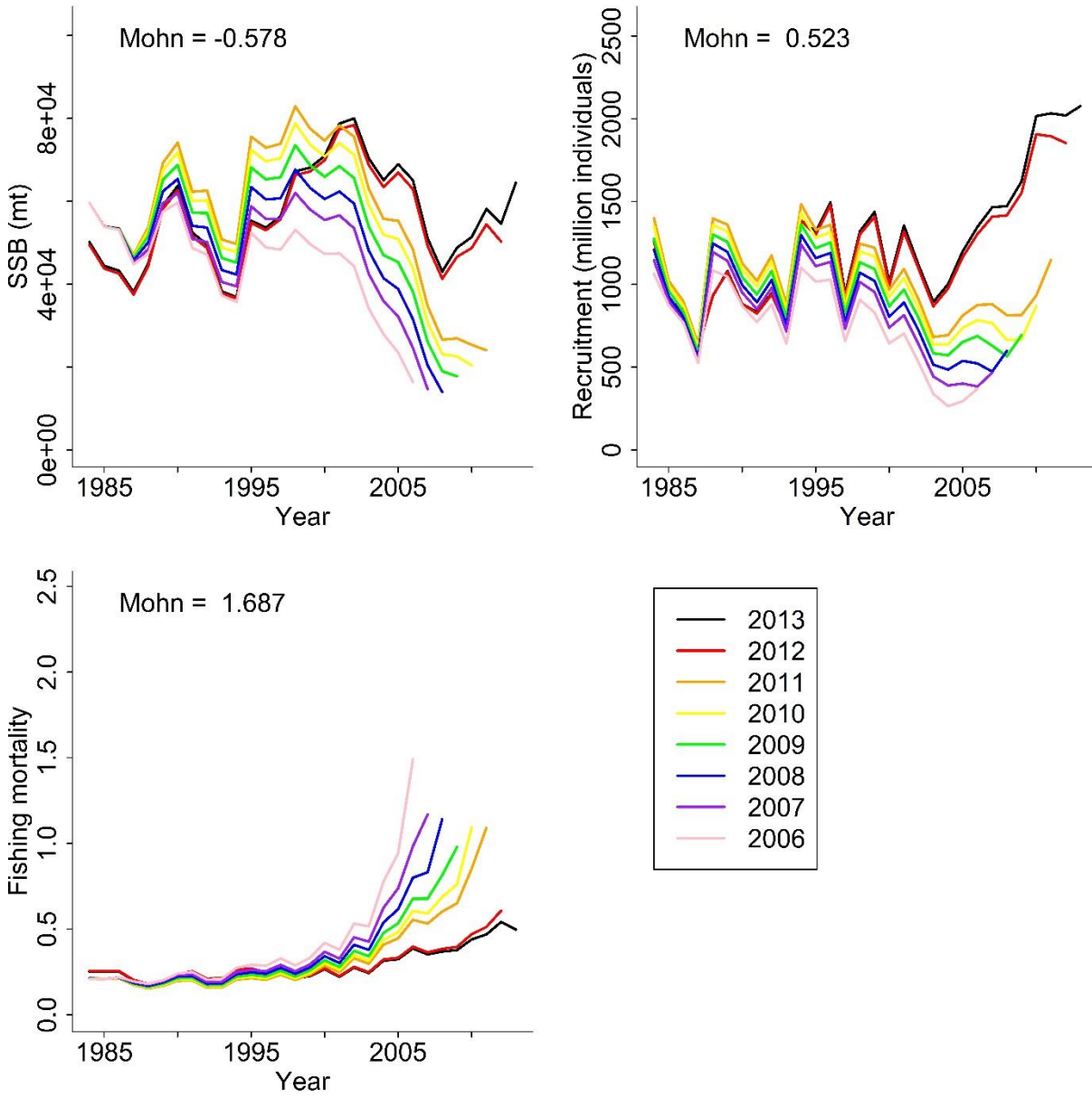
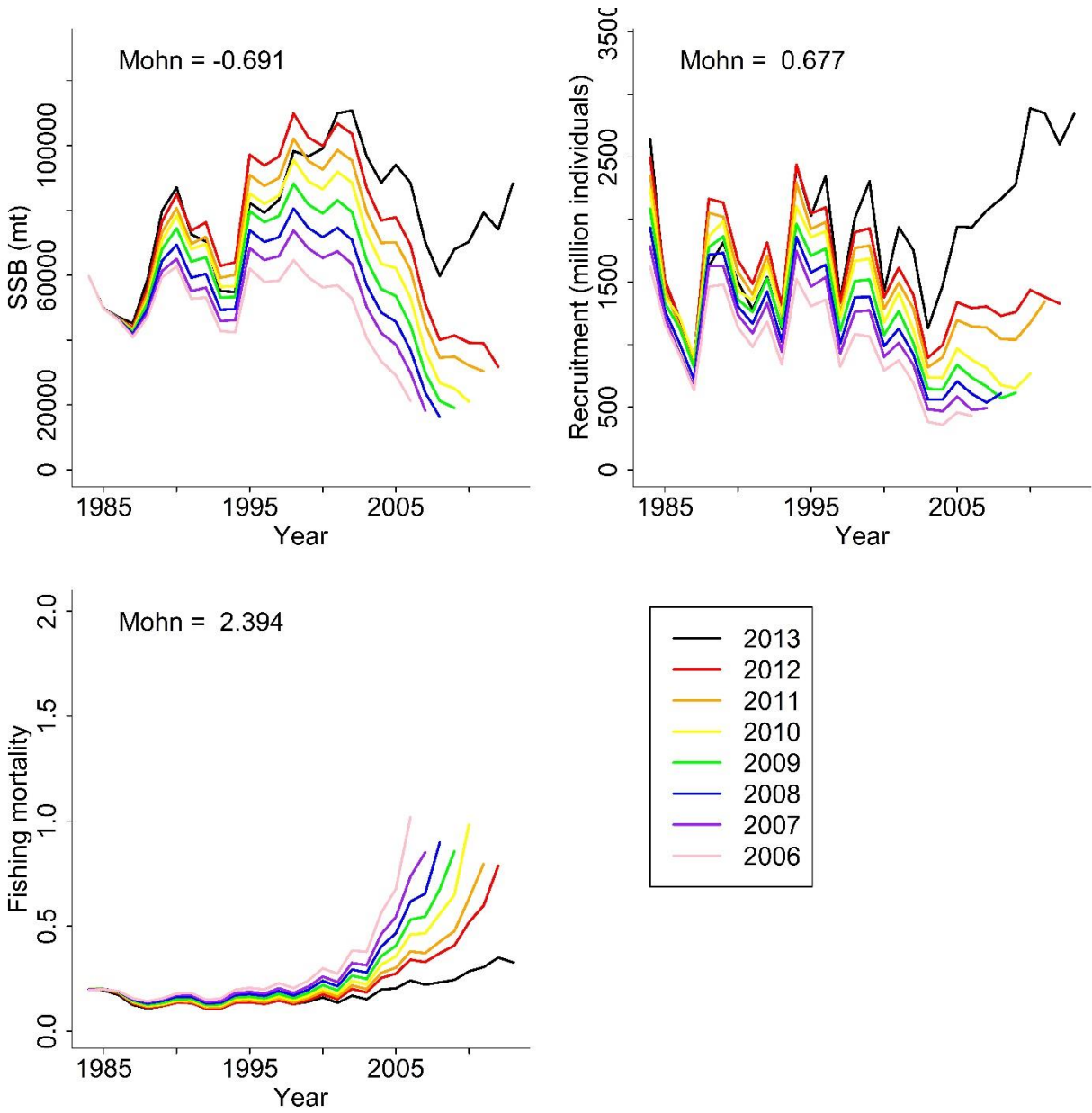


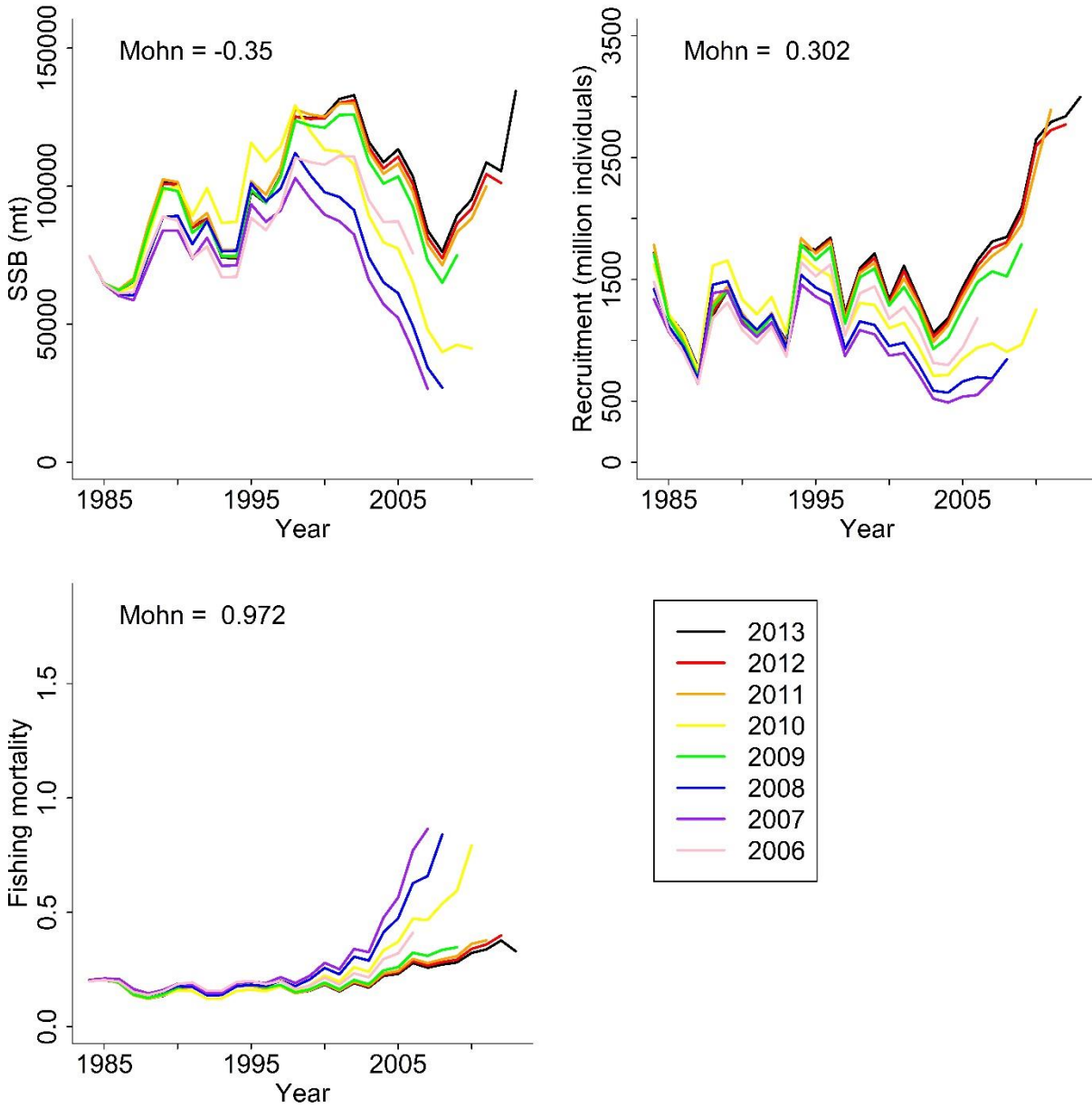
Supplementary Figure 2. Retrospective patterns of spawning stock biomass (SSB) in metric tons (mt), recruitment in millions of individuals, and fishing mortality for UMM scenario 1 (the base case). Mohn's rho values (Mohn) are displayed for each parameter and were calculated from seven-year peels.



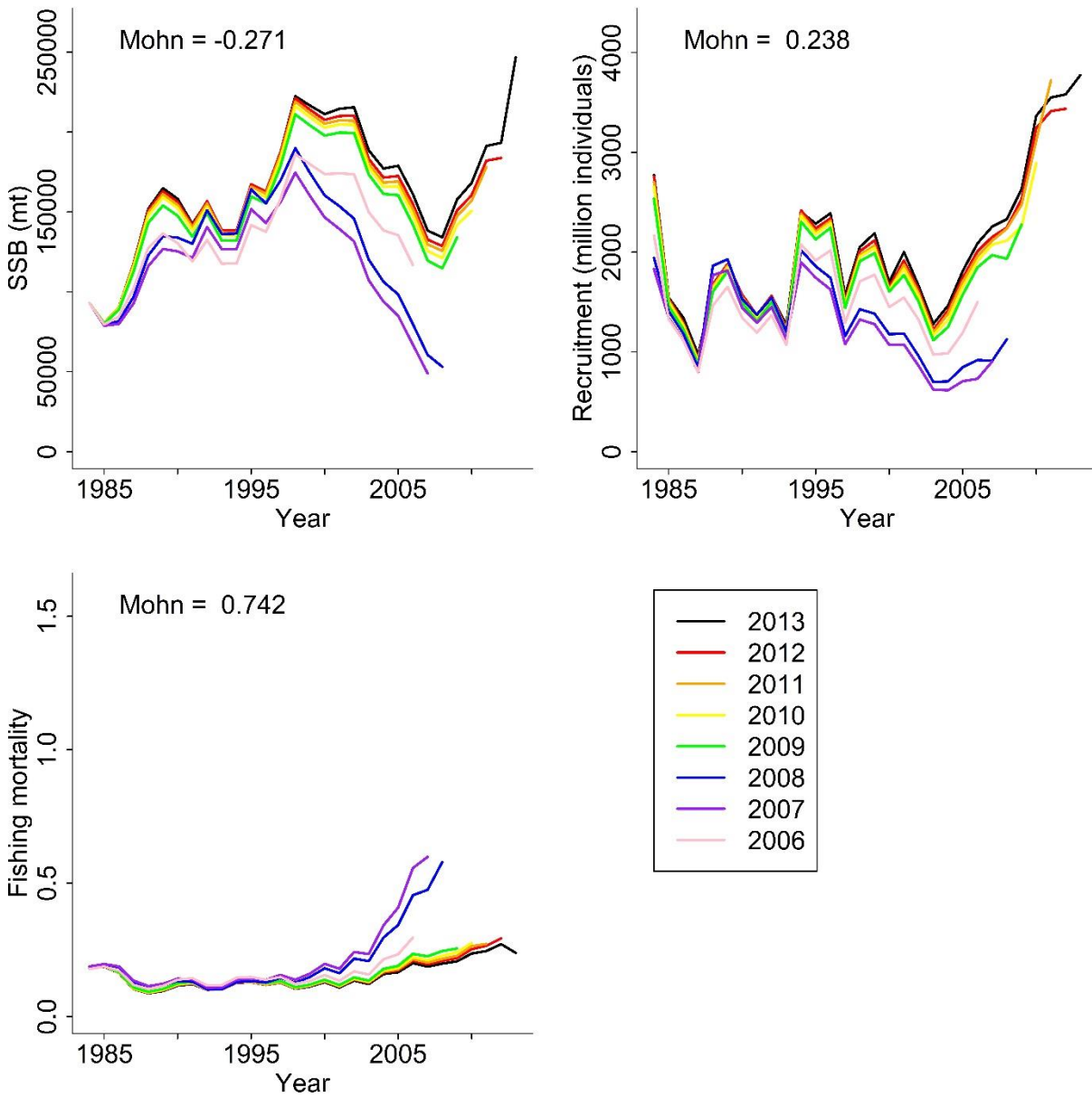
Supplementary Figure 3. Retrospective patterns of spawning stock biomass (SSB) in metric tons (mt), recruitment in millions of individuals, and fishing mortality for UMM scenario 2. Mohn's rho values (Mohn) are displayed for each parameter and were calculated from seven-year peels.



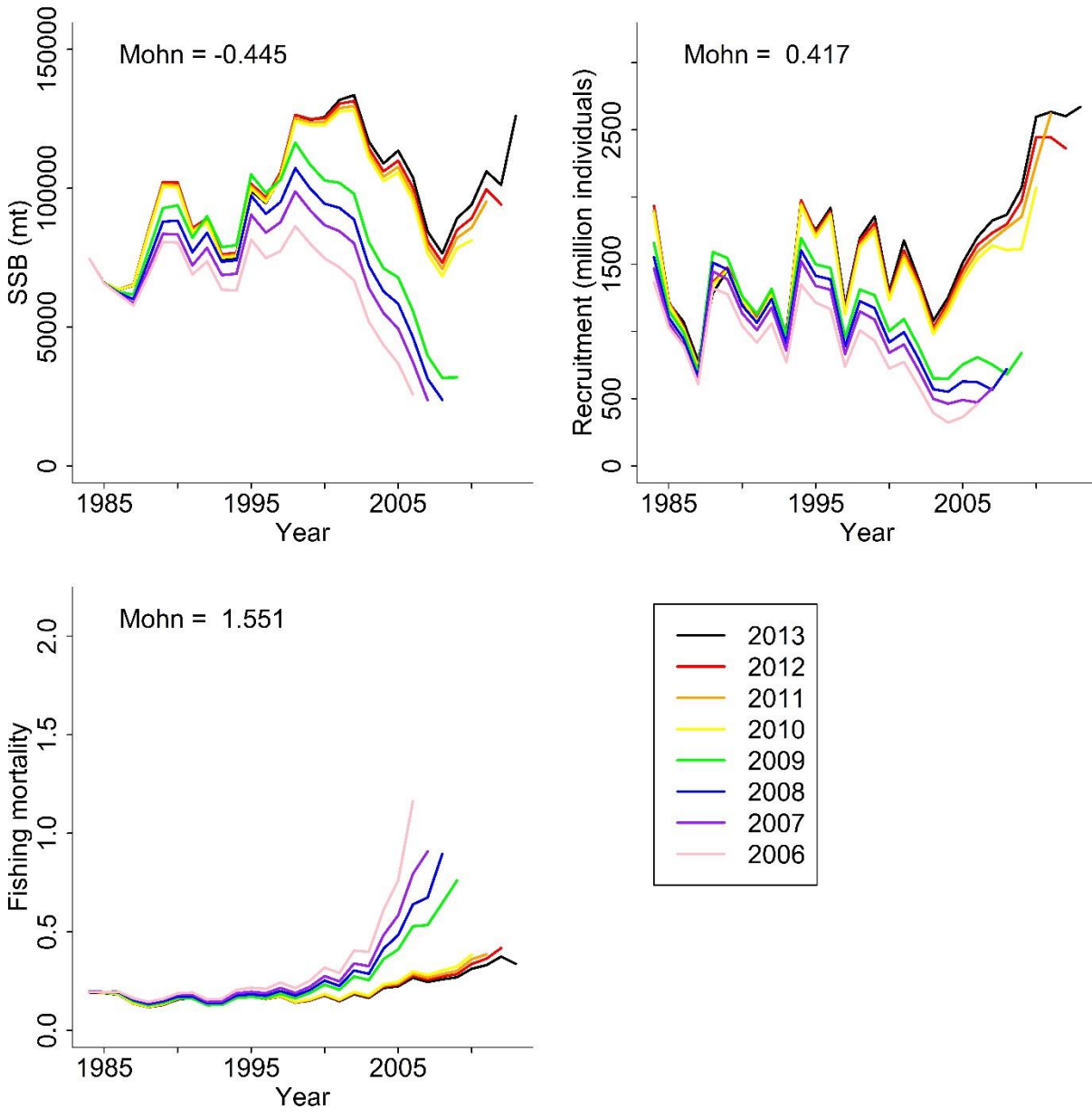
Supplementary Figure 4. Retrospective patterns of spawning stock biomass (SSB) in metric tons (mt), recruitment in millions of individuals, and fishing mortality for UMM scenario 3. Mohn's rho values (Mohn) are displayed for each parameter and were calculated from seven-year peels.



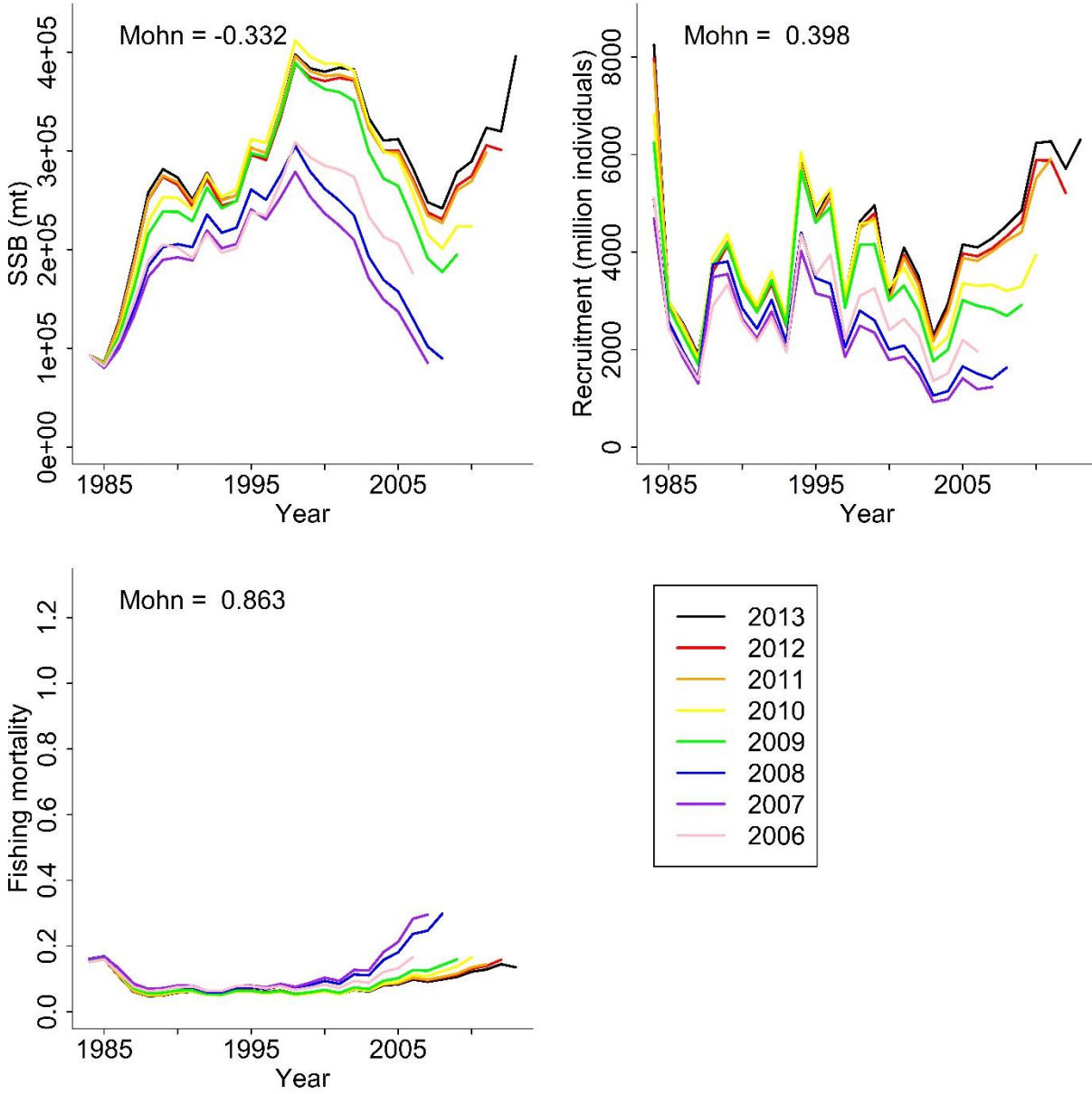
Supplementary Figure 5. Retrospective patterns of spawning stock biomass (SSB) in metric tons (mt), recruitment in millions of individuals, and fishing mortality for UMM scenario 4. Mohn's rho values (Mohn) are displayed for each parameter and were calculated from seven-year peels.



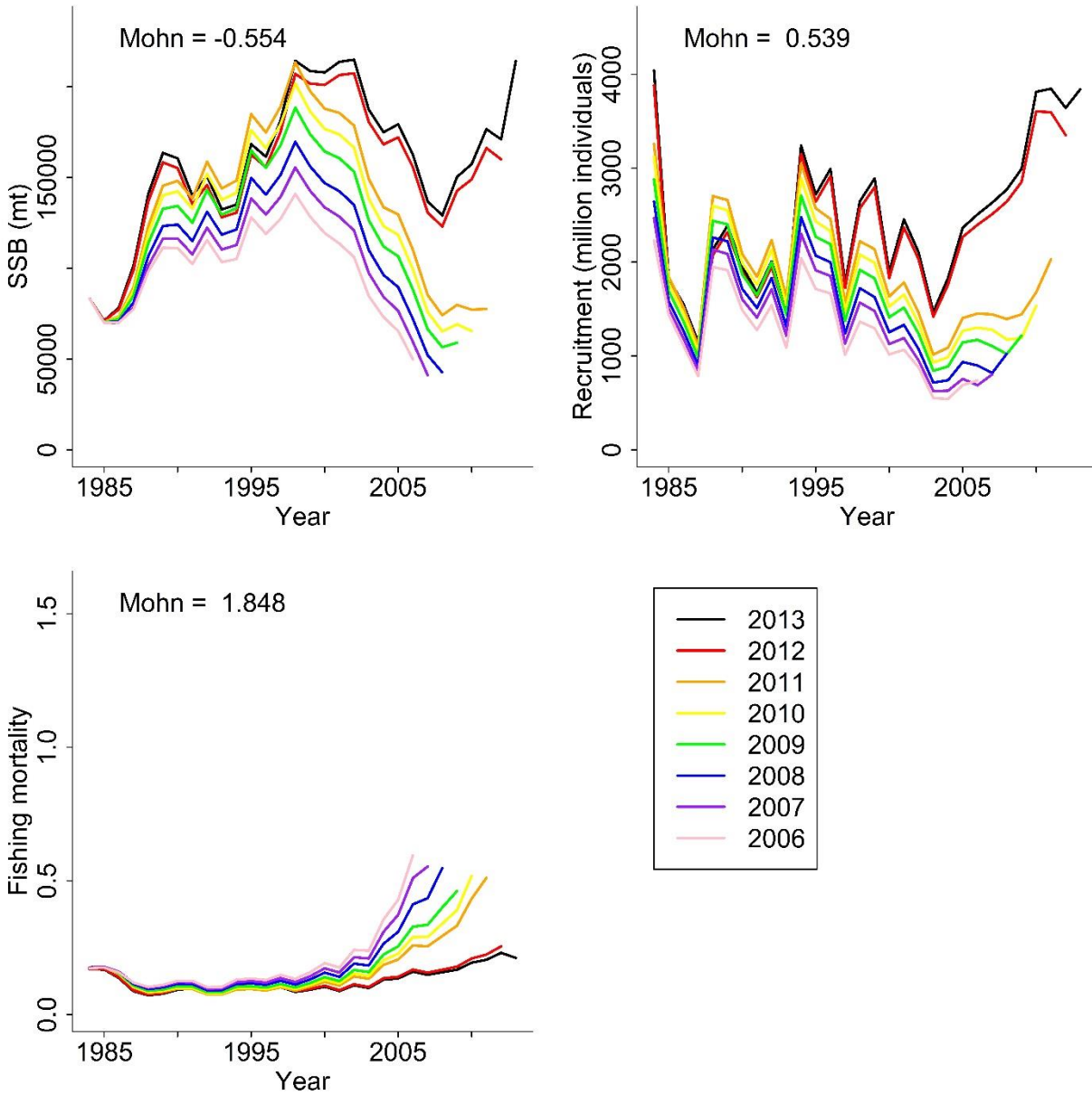
Supplementary Figure 6. Retrospective patterns of spawning stock biomass (SSB) in metric tons (mt), recruitment in millions of individuals, and fishing mortality for UMM Scenario 5. Mohn's rho values (Mohn) are displayed for each parameter and were calculated from seven-year peels.



Supplementary Figure 7. Retrospective patterns of spawning stock biomass (SSB) in metric tons (mt), recruitment in millions of individuals, and fishing mortality for UMM scenario 6. Mohn's rho values (Mohn) are displayed for each parameter and were calculated from seven-year peels.

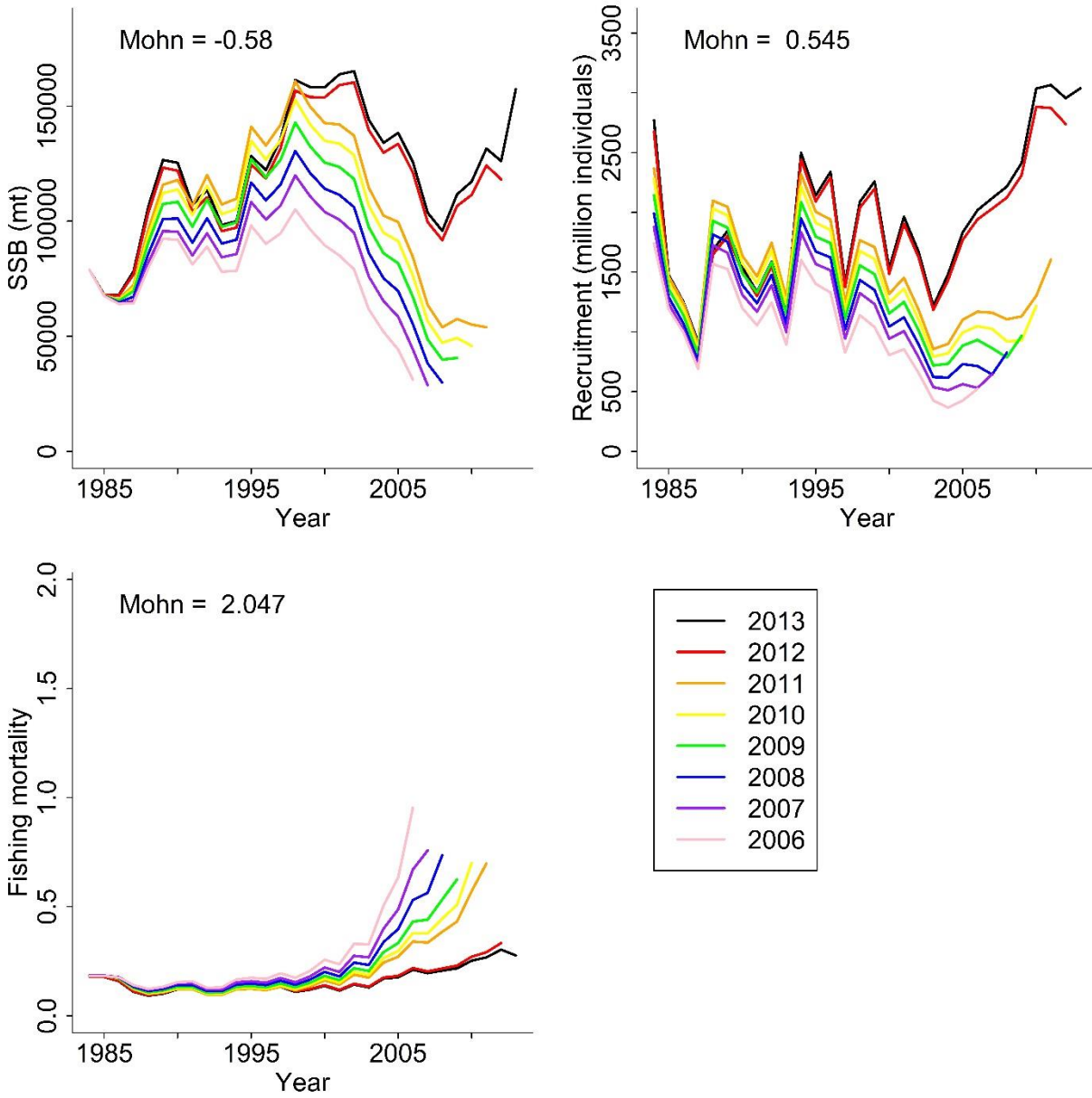


Supplementary Figure 8. Retrospective patterns of spawning stock biomass (SSB) in metric tons (mt), recruitment in millions of individuals, and fishing mortality for UMM scenario 7. Mohn's rho values (Mohn) are displayed for each parameter and were calculated from seven-year peels.

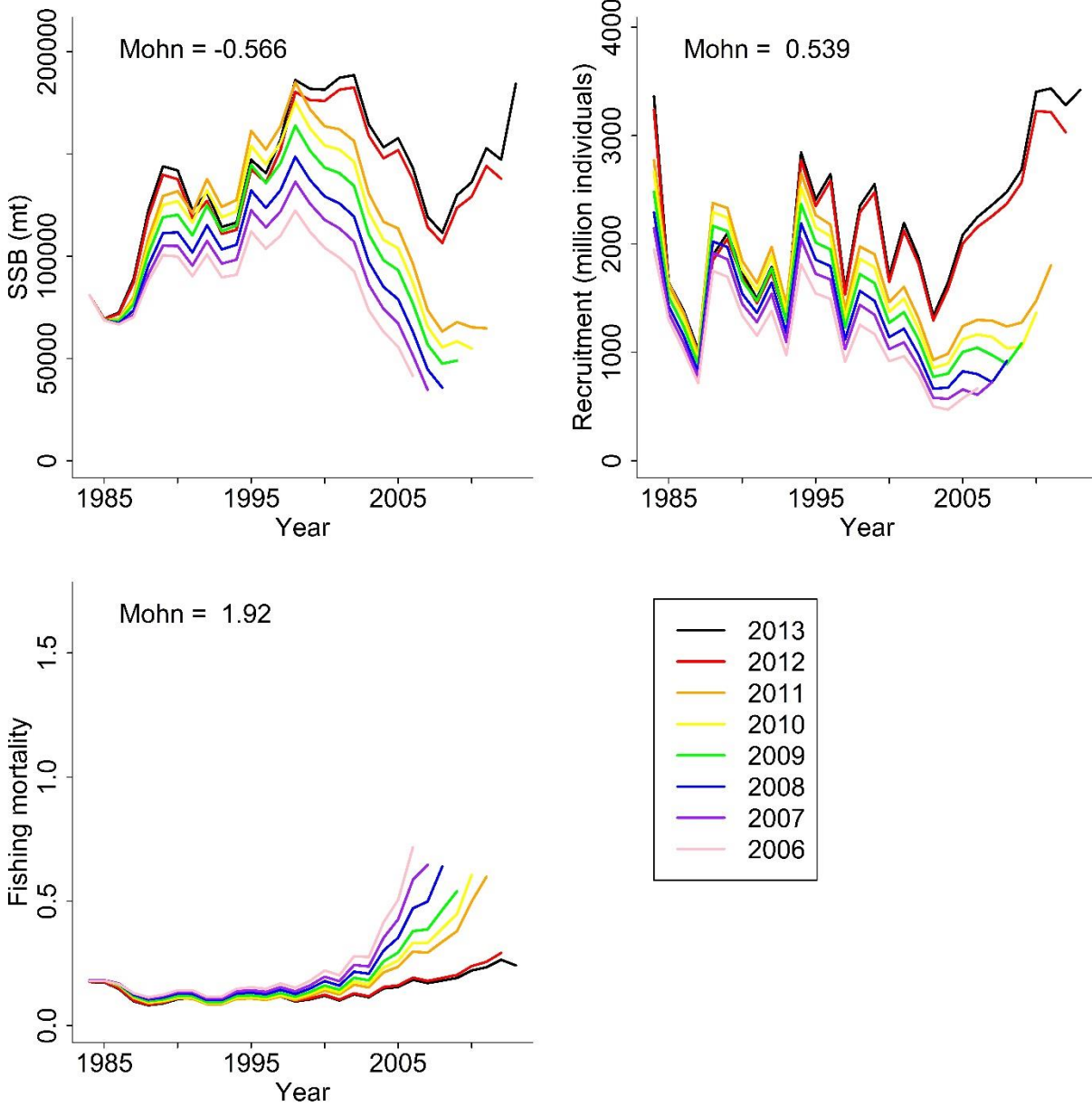


Supplementary Figure 9. Retrospective patterns of spawning stock biomass (SSB) in metric tons (mt), recruitment in millions of individuals, and fishing mortality for the sensitivity analysis of growth and size-at-maturity. Mohn's rho values (Mohn) are displayed for each parameter and were calculated from seven-year peels. These plots represent a growth shift of 1.5 and a size-at-maturity of 82.41 mm.

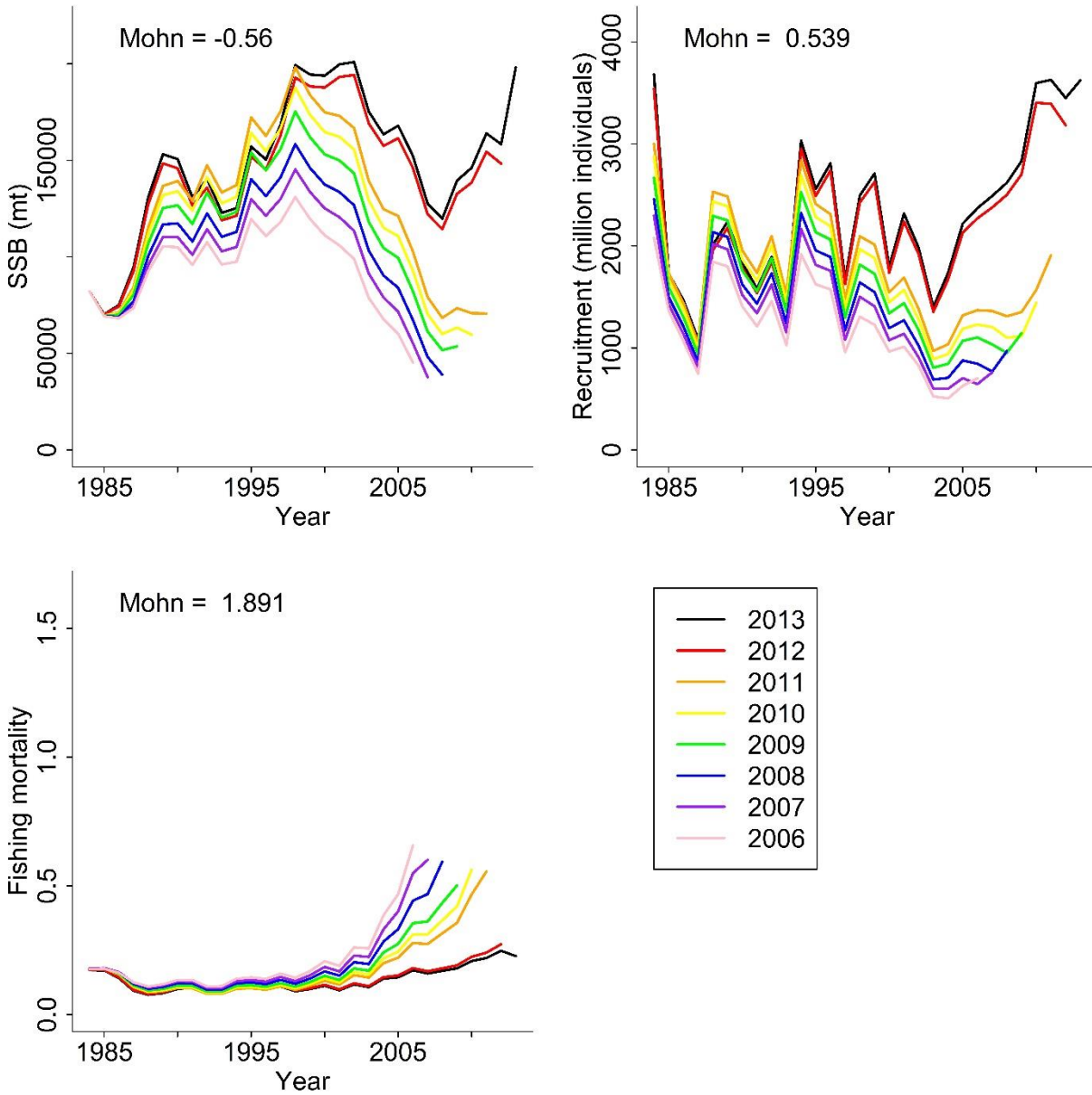




Supplementary Figure 10. Retrospective patterns of spawning stock biomass (SSB) in metric tons (mt), recruitment in millions of individuals, and fishing mortality for the sensitivity analysis of growth and size-at-maturity. Mohn's rho values (Mohn) are displayed for each parameter and were calculated from seven-year peels. These plots represent a growth shift of 1.25 and a size-at-maturity of 83.81 mm.



Supplementary Figure 11. Retrospective patterns of spawning stock biomass (SSB) in metric tons (mt), recruitment in millions of individuals, and fishing mortality for the sensitivity analysis of growth and size-at-maturity. Mohn's rho values (Mohn) are displayed for each parameter and were calculated from seven-year peels. These plots represent a growth shift of 1.375 and a size-at-maturity of 83.11 mm.



Supplementary Figure 12. Retrospective patterns of spawning stock biomass (SSB) in metric tons (mt), recruitment in millions of individuals, and fishing mortality for the sensitivity analysis of growth and size-at-maturity. Mohn's rho values (Mohn) are displayed for each parameter and were calculated from seven-year peels. These plots represent a growth shift of 1.4375 and a size-at-maturity of 82.76 mm.