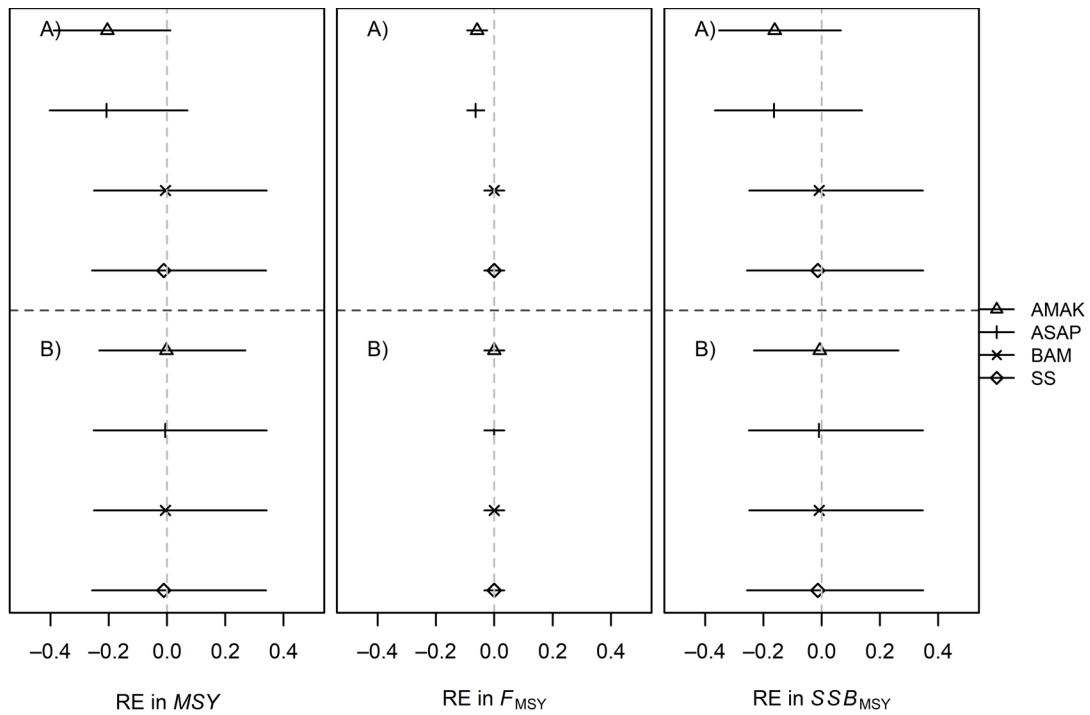


Supplementary Figure 1. Yield over fishing mortality from operating models of case 0 (C0), case 10 (C10), and case 11 (C11). The horizontal dashed lines represent maximum sustainable yield (MSY) and the vertical dashed lines represent fishing mortality rate that corresponds to MSY (F_{MSY}) from each case. It is difficult to distinguish individual lines from case 10 and case 11 because the lines are identical. The models, evaluated here for bias adjustment of recruitment, include the Beaufort Assessment Model (BAM) and Stock Synthesis (SS).



Supplementary Figure 2. Relative error (RE) in maximum sustainable yield (MSY), fishing mortality rate that corresponds to MSY (F_{MSY}), and spawning stock biomass at MSY (SSB_{MSY}) for 4 age-structured estimation models when A) no ad hoc adjustment was conducted for the assessment model for Alaska (AMAK) and the age-structured assessment program (ASAP) and B) ad hoc adjustment was conducted for AMAK and ASAP. The models, evaluated in this study for use in stock assessments, include AMAK, ASAP, the Beaufort Assessment Model (BAM), and Stock Synthesis (SS).