

## **Tracking Changes in Body Composition: Comparison of Methods and Influence of Pre-assessment Standardization.** *Tinsley et al.*

### **Supplementary Figures**

Supplementary Figure 1. Comparison of Fat-Free Mass Changes: SS vs. US

Supplementary Figure 2. Comparison of Fat-Free Mass Changes: SS vs. SU

Supplementary Figure 3. Comparison of Fat-Free Mass Changes: SS vs. UU

Supplementary Figure 4. Comparison of Fat Mass Changes: SS vs. US

Supplementary Figure 5. Comparison of Fat Mass Changes: SS vs. SU

Supplementary Figure 6. Comparison of Fat Mass Changes: SS vs. UU

Supplementary Figure 7. Comparison of Body Fat Percentage Changes: SS vs. US

Supplementary Figure 8. Comparison of Body Fat Percentage Changes: SS vs. SU

Supplementary Figure 9. Comparison of Body Fat Percentage Changes: SS vs. UU

Supplementary Figure 10. Strip Chart of Standardized Body Composition Changes

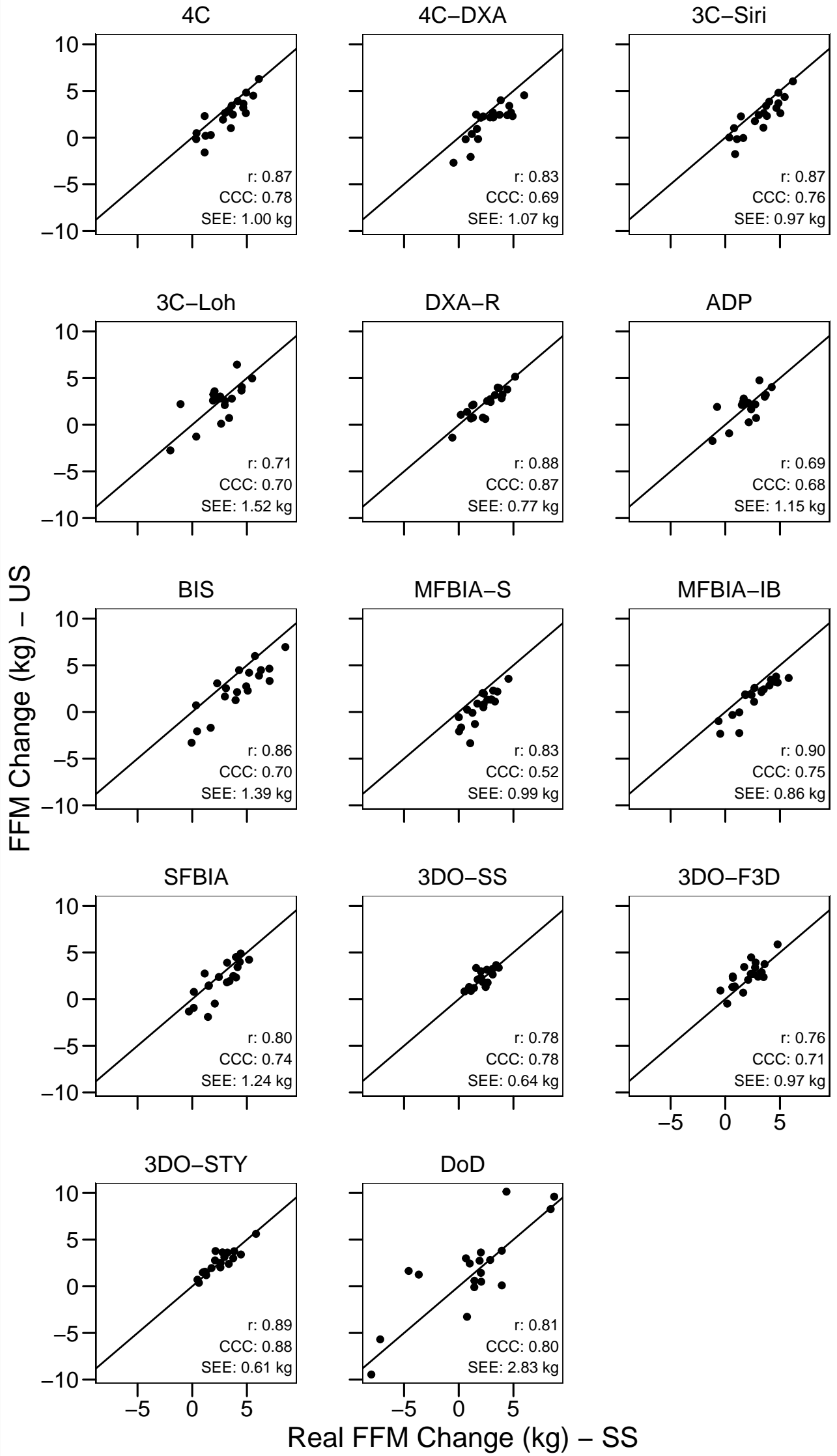
Supplementary Figure 11. Equivalence Testing for Fat-Free Mass Changes

Supplementary Figure 12. Equivalence Testing for Fat Mass Changes

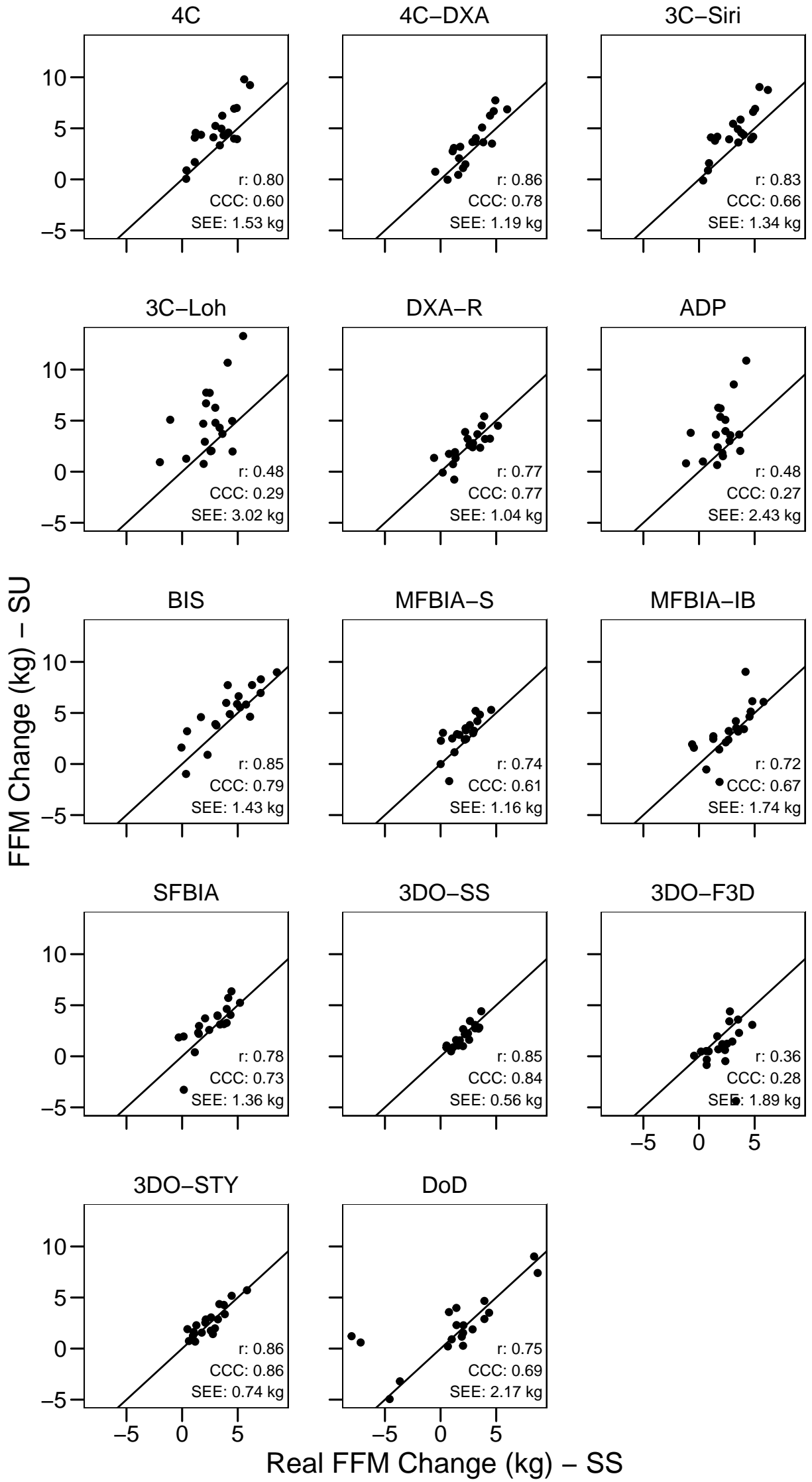
Supplementary Figure 13. Equivalence Testing for Body Fat Percentage Changes

*Abbreviations for all supplementary figures:* 4C – 4-component model; 4C-DXA – 4-component model with dual-energy X-ray absorptiometry body volume estimate; 3C-Siri – 3-component model using the equation of Siri; 3C-Loh – 3-component model using the equation of Lohman; DXA-R – dual-energy X-ray absorptiometry region estimate (GE Lunar Prodigy); ADP – air displacement plethysmography (Cosmed Bod Pod); BIS – bioimpedance spectroscopy (ImpediMed SFB7); MFBIA-S – multi-frequency bioelectrical impedance analysis (Seca mBCA 515/514); MFBIA-IB – multi-frequency bioelectrical impedance analysis (InBody 770); SFBIA – single-frequency bioelectrical impedance analysis (RJL Quantum V); 3DO-SS – 3-dimensional optical scanner (SizeStream SS20); 3DO-F3D – 3-dimensional optical scanner (Fit3D ProScanner); 3DO-STY – 3-dimensional optical scanner (Styku S100); DoD – United States Department of Defense body fat equation; SS – standardized pre and post body composition assessments; SU – standardized pre and unstandardized post body composition assessments; US – unstandardized pre and standardized post body composition assessments; UU – unstandardized pre and post body composition assessments; r – Pearson’s correlation coefficient; CCC – concordance correlation coefficient; SEE – standard error of the estimate; TOST – two one-sided t-tests; NHST – null-hypothesis significance testing (i.e., paired samples t-test).

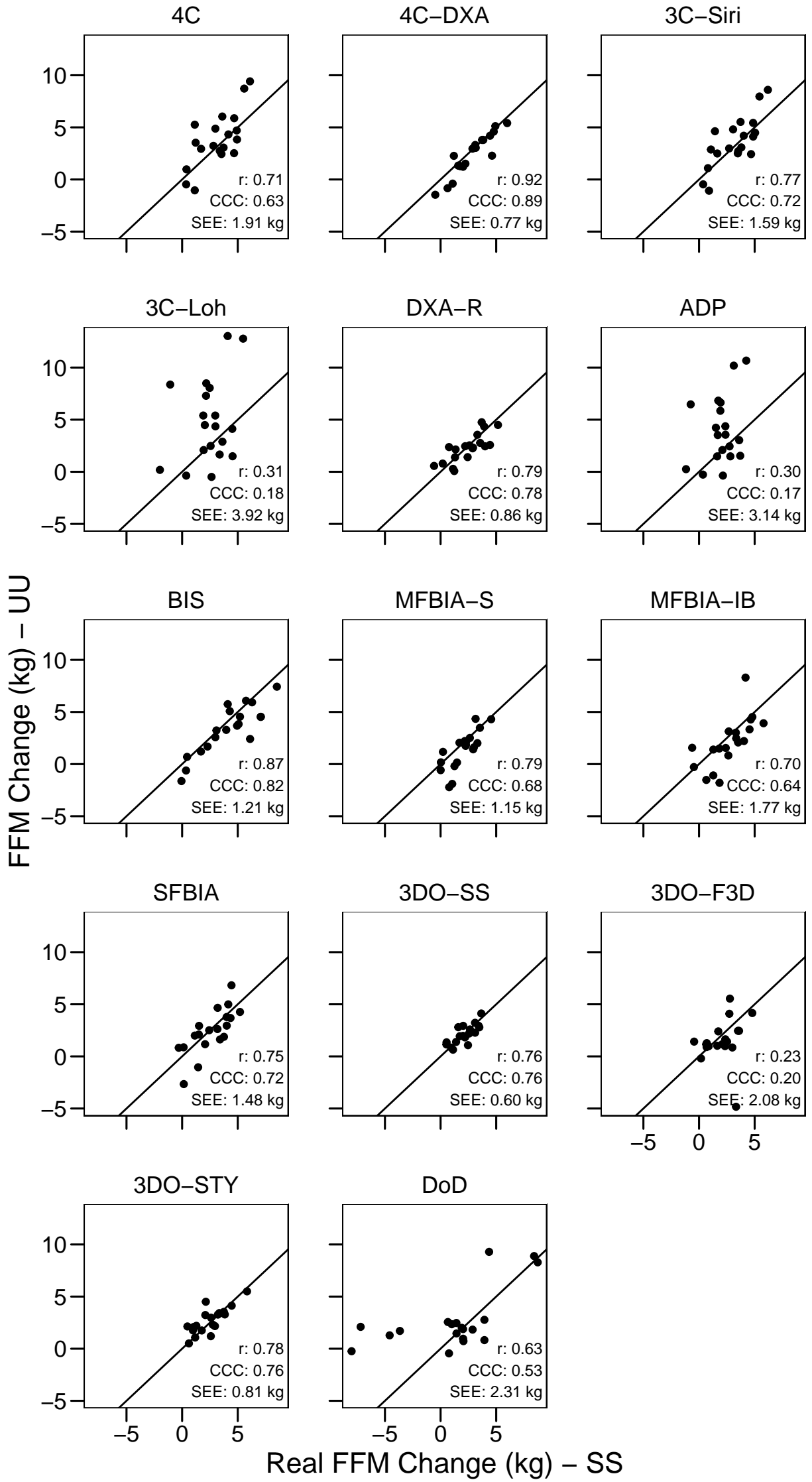
SF1



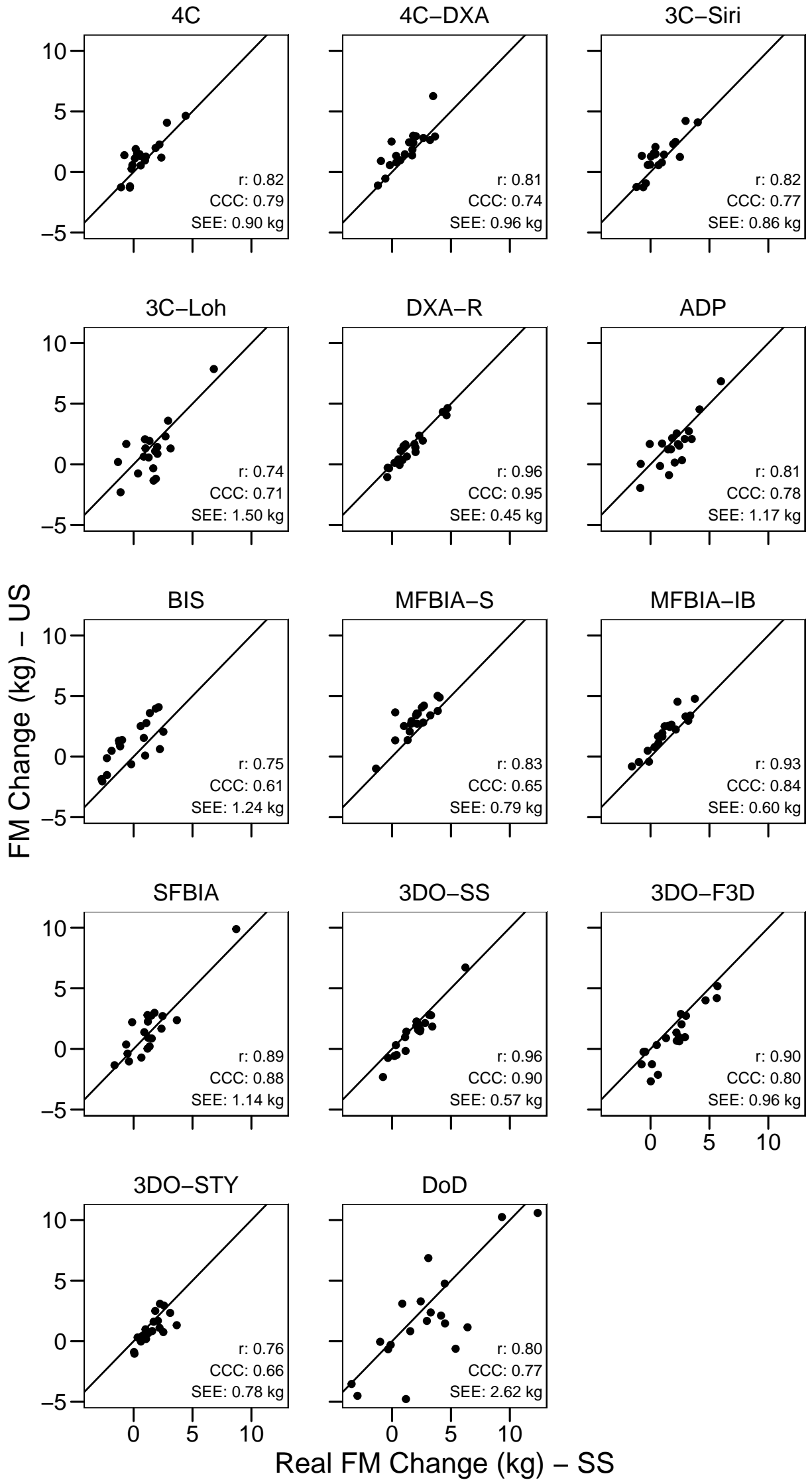
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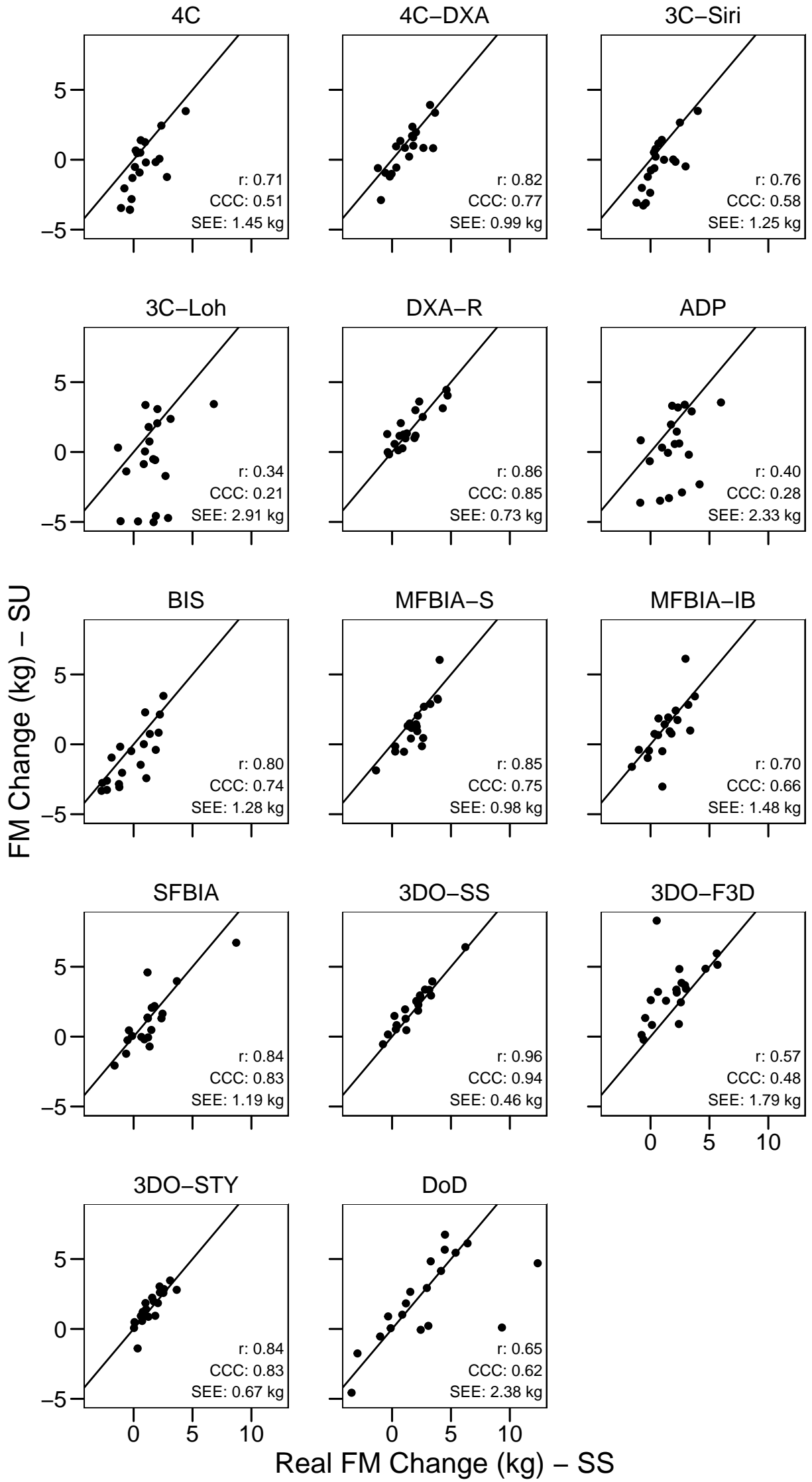
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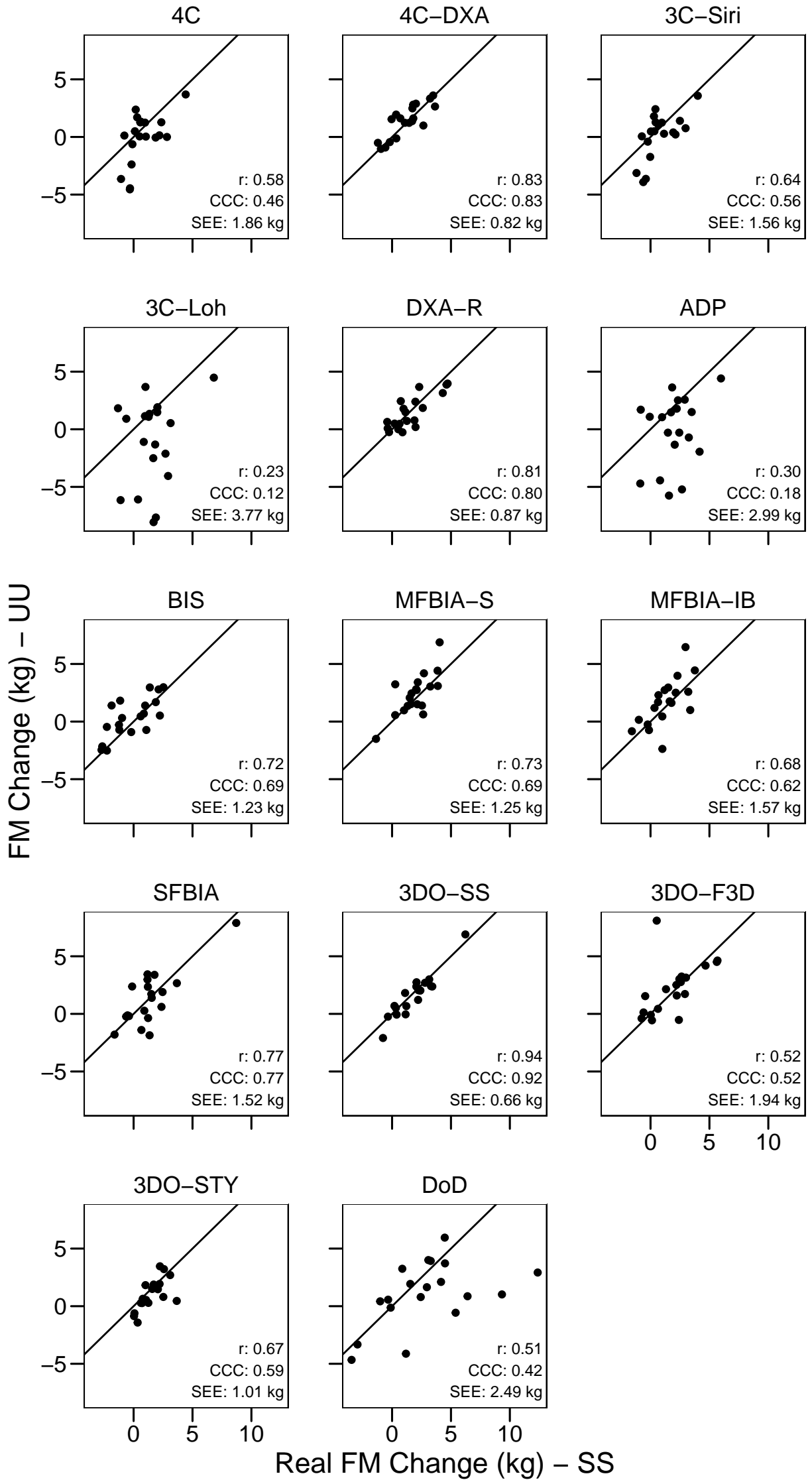
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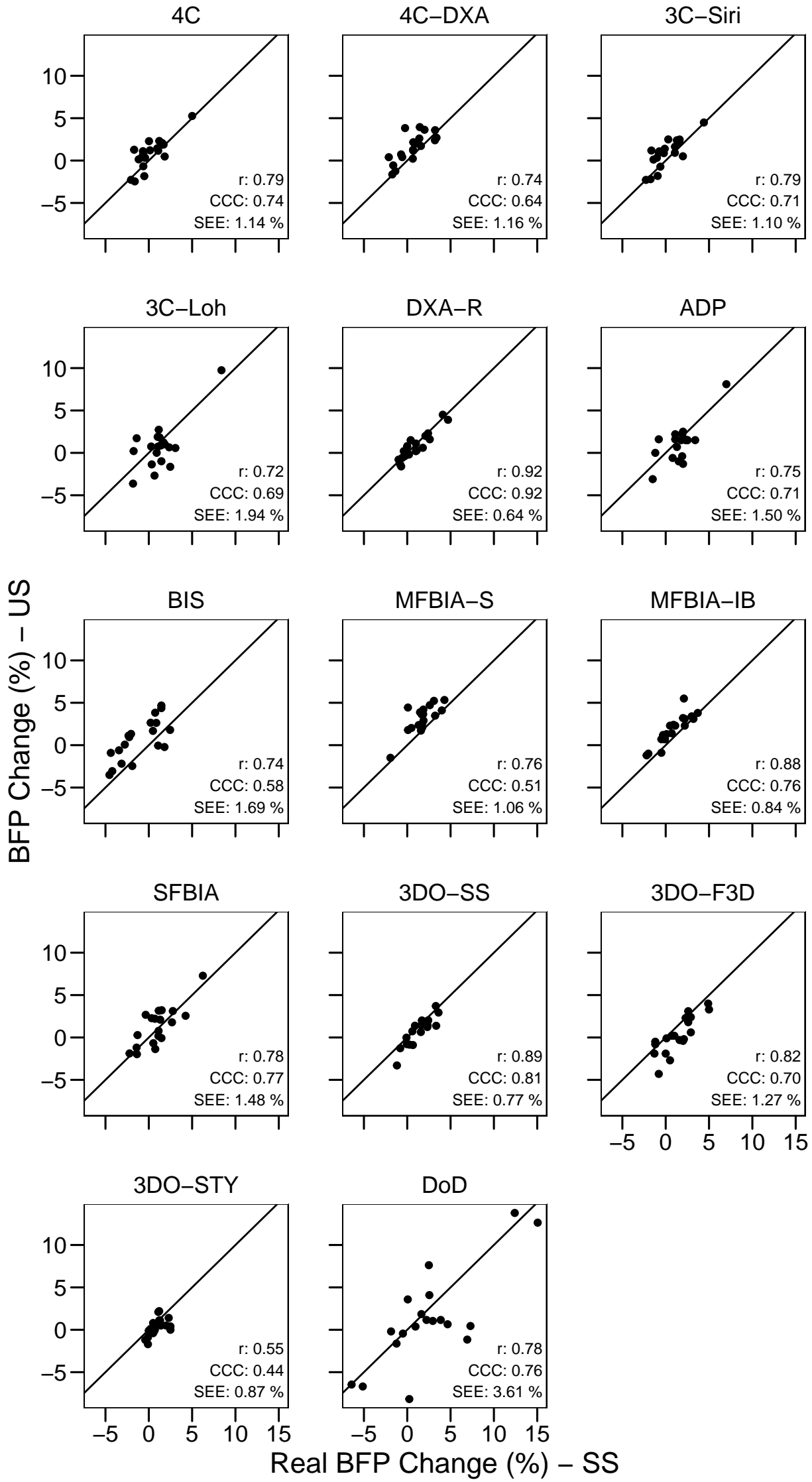


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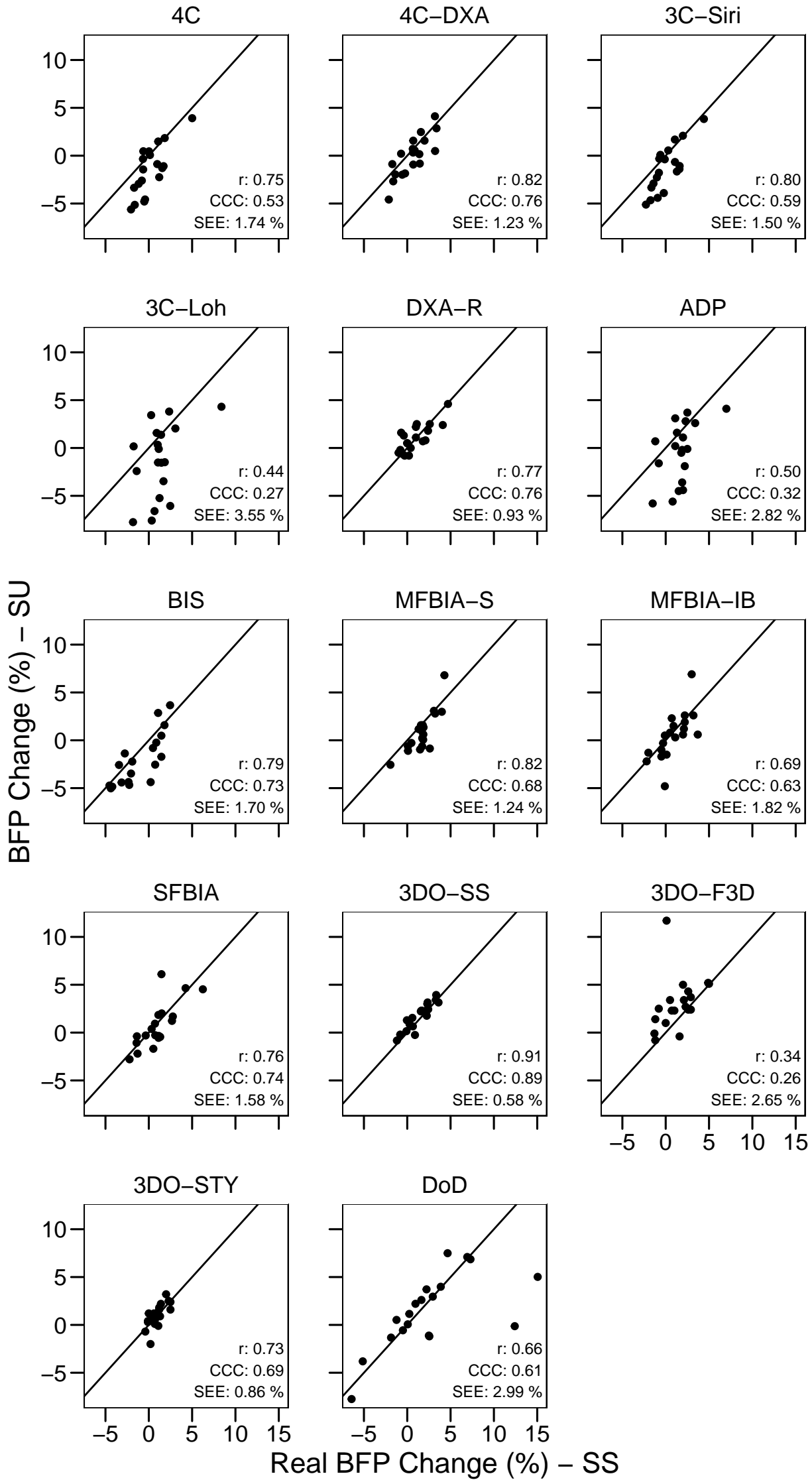
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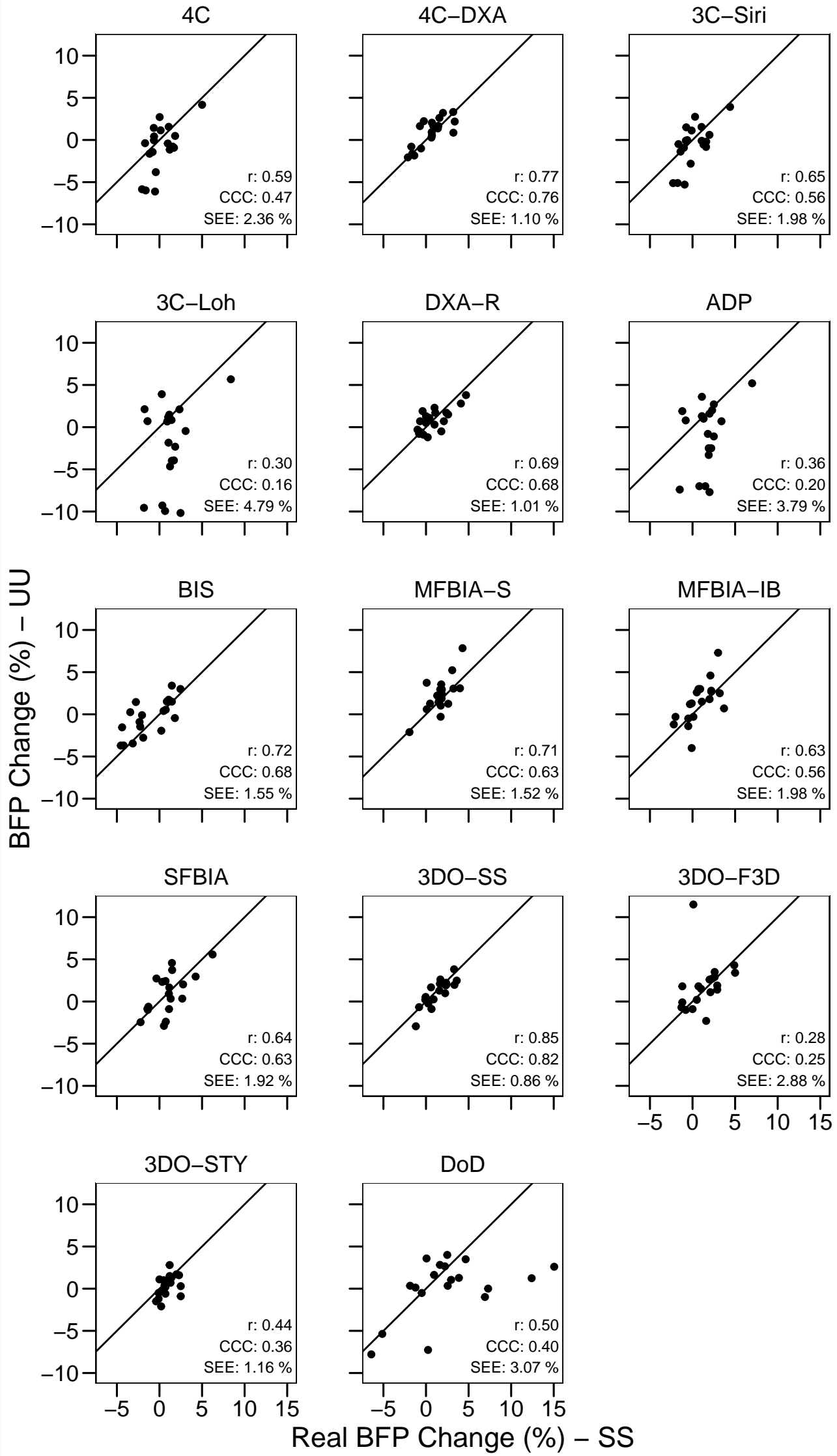


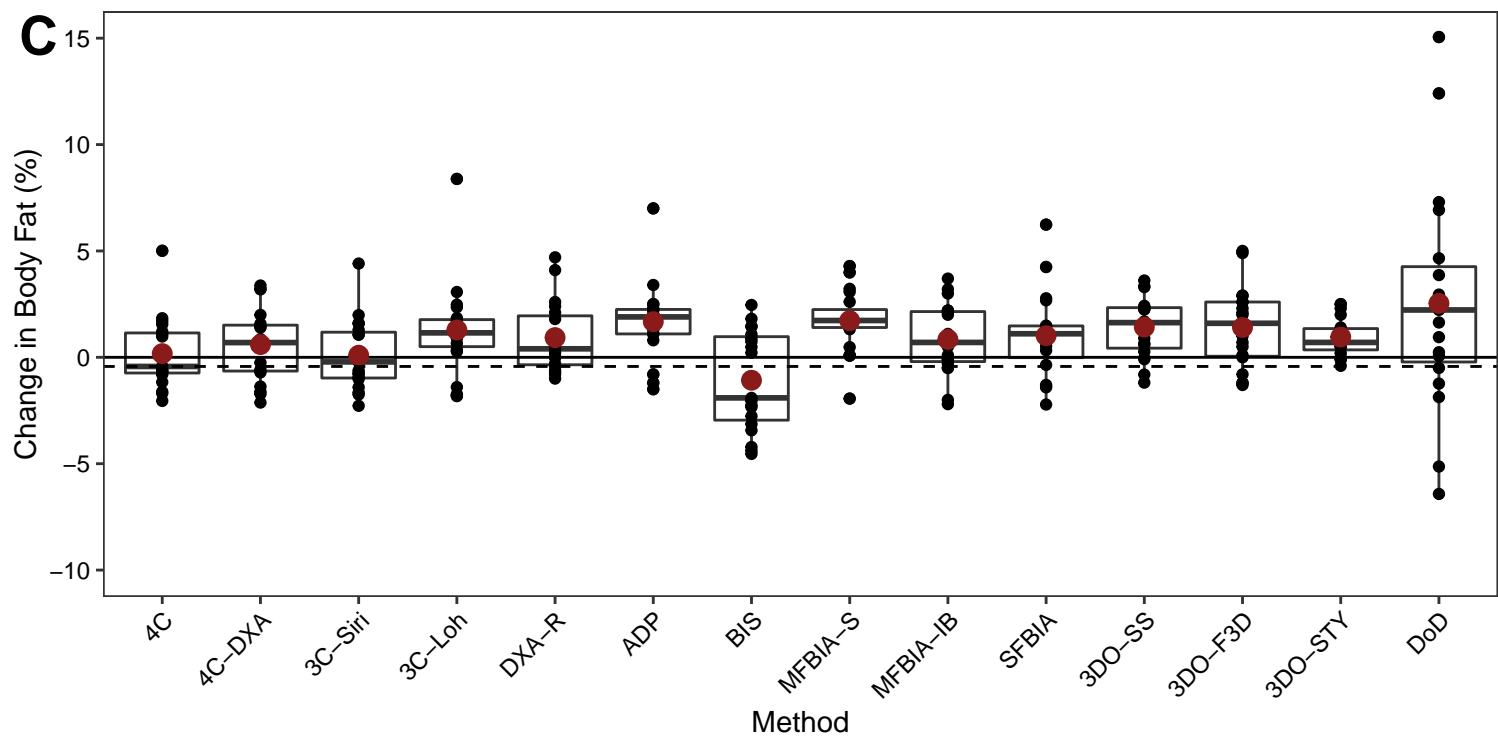
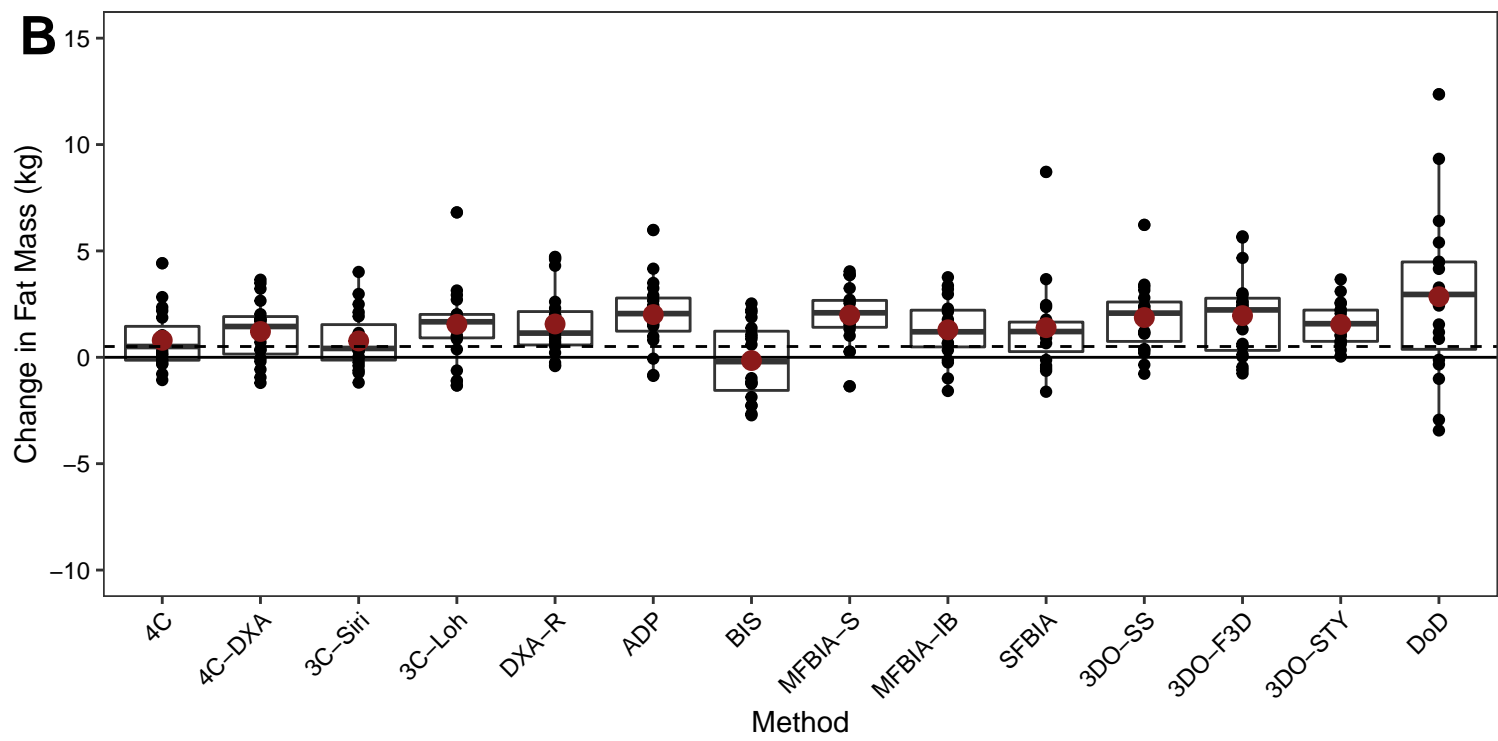
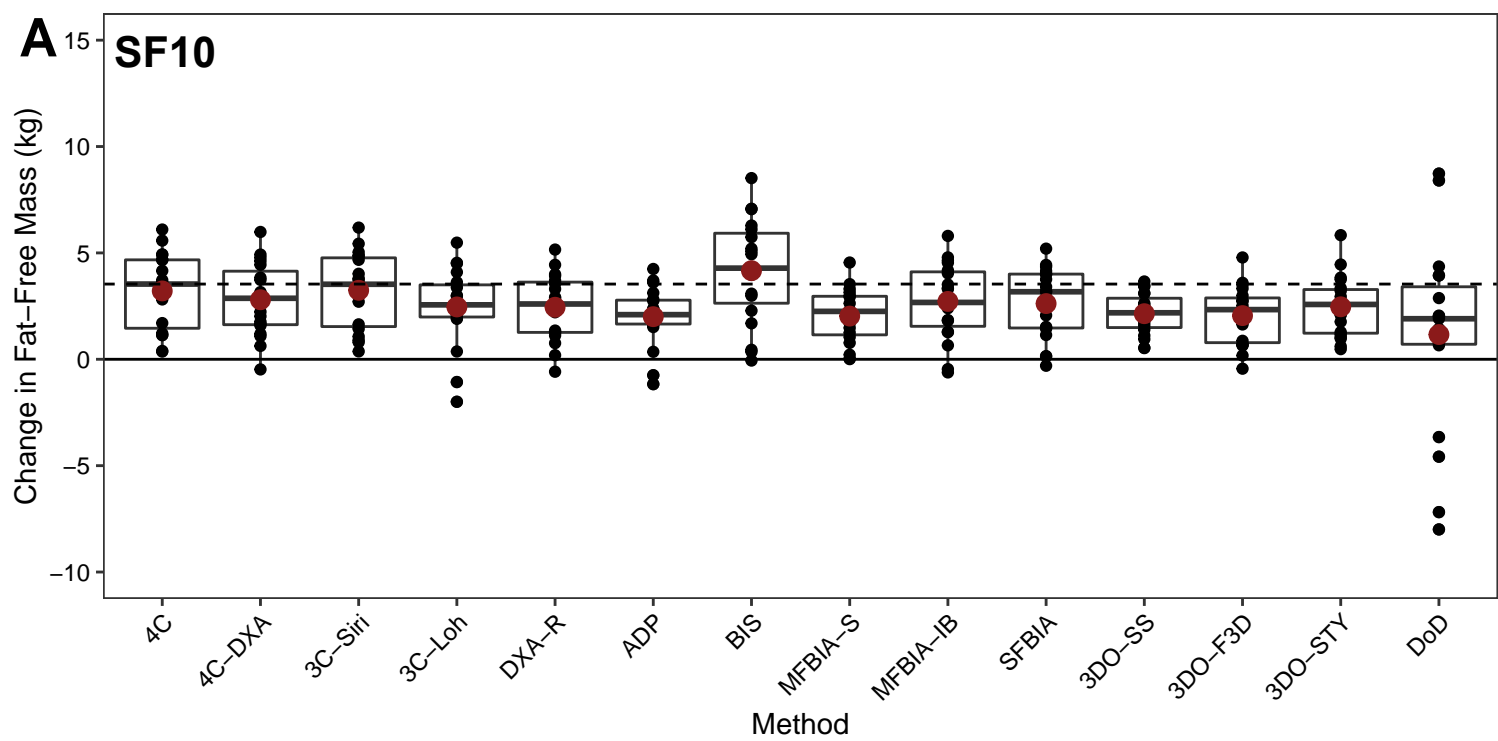


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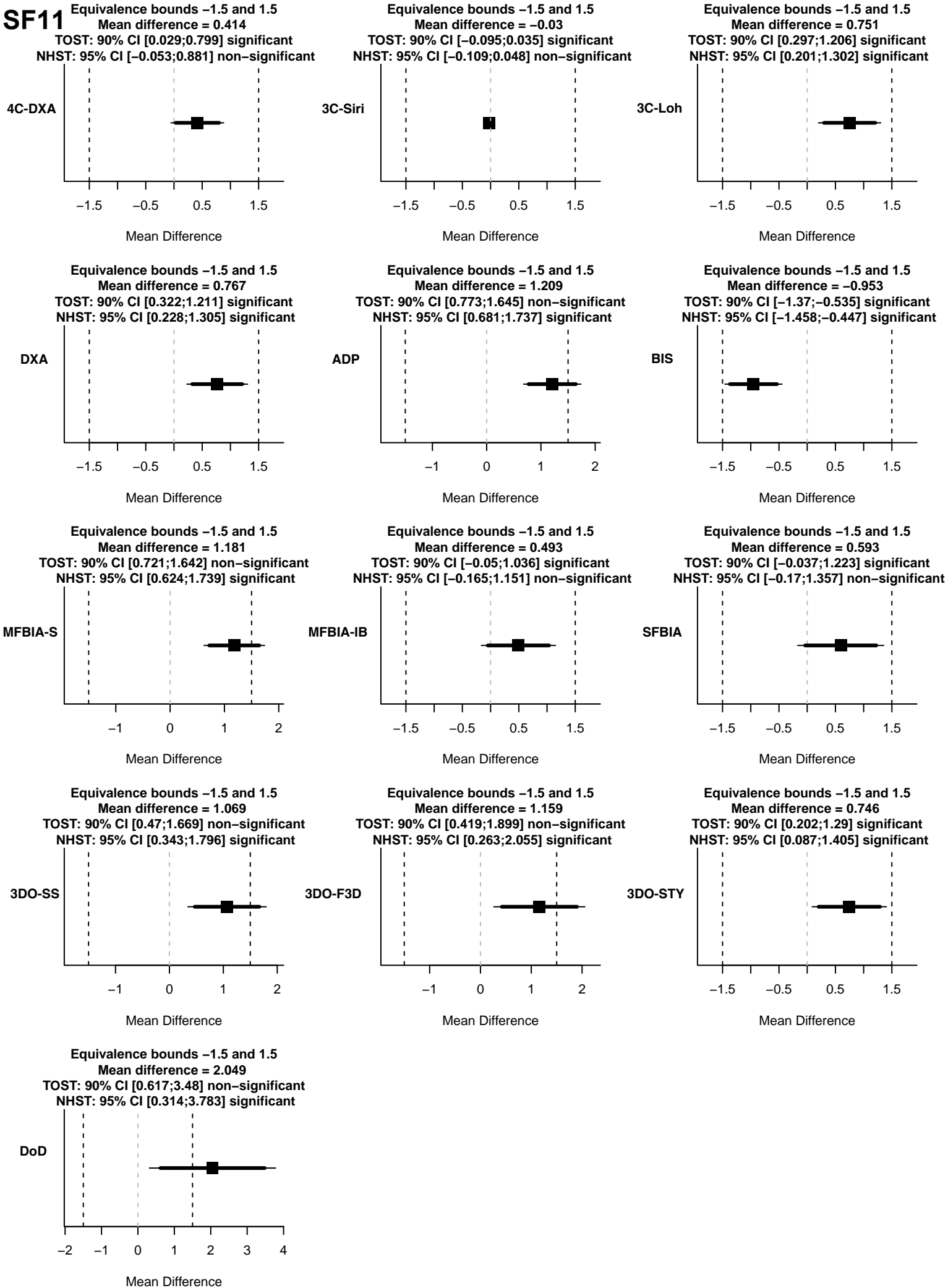


SF9

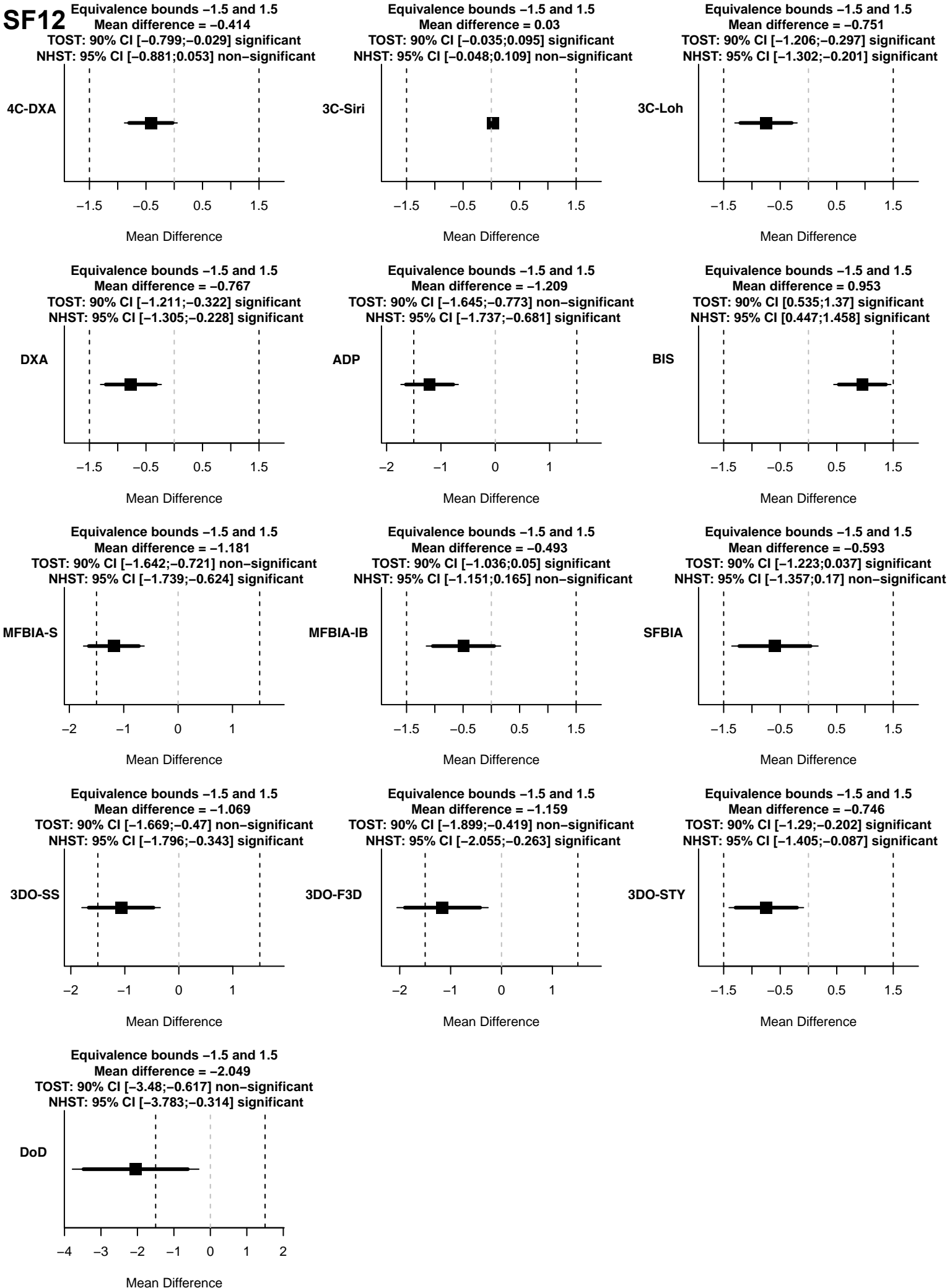




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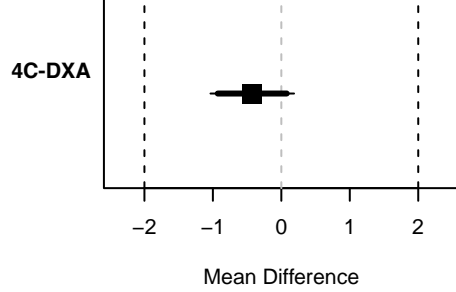


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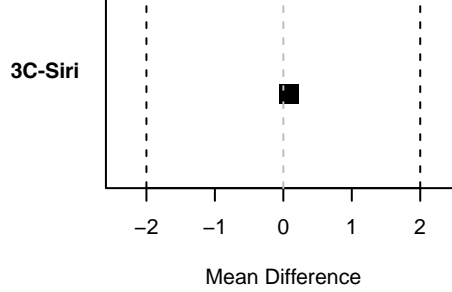


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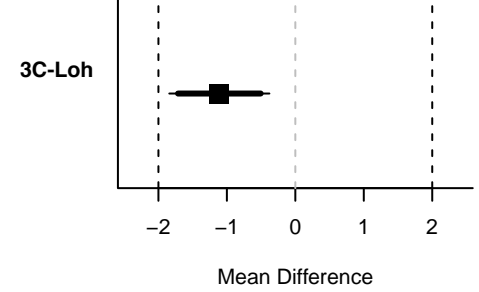
Equivalence bounds -2 and 2  
Mean difference = -0.425  
TOST: 90% CI [-0.929;0.079] significant  
NHST: 95% CI [-1.035;0.186] non-significant



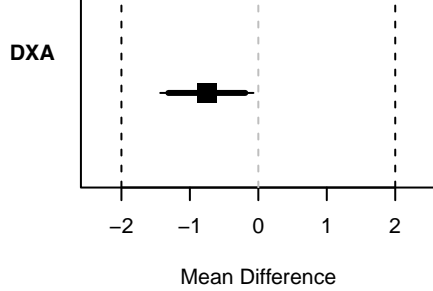
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TOST: 90% CI [-0.008;0.165] significant  
NHST: 95% CI [-0.026;0.183] non-significant



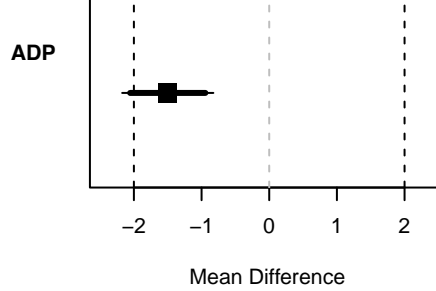
Equivalence bounds -2 and 2  
Mean difference = -1.11  
TOST: 90% CI [-1.714;-0.507] significant  
NHST: 95% CI [-1.842;-0.379] significant



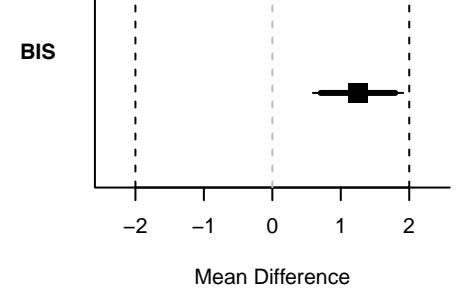
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TOST: 90% CI [-1.314;-0.19] significant  
NHST: 95% CI [-1.433;-0.071] significant



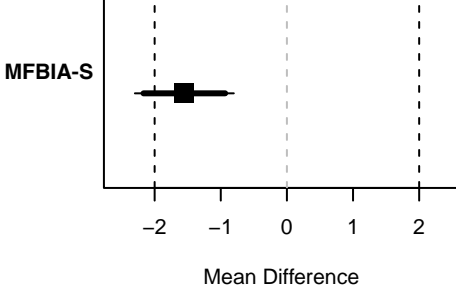
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Mean difference = -1.5  
TOST: 90% CI [-2.056;-0.943] non-significant  
NHST: 95% CI [-2.174;-0.826] significant



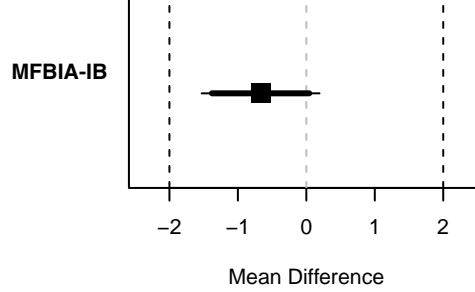
Equivalence bounds -2 and 2  
Mean difference = 1.252  
TOST: 90% CI [0.707;1.796] significant  
NHST: 95% CI [0.591;1.912] significant



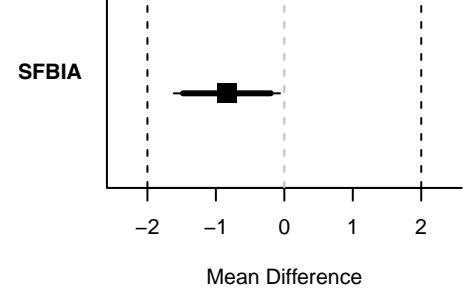
Equivalence bounds -2 and 2  
Mean difference = -1.551  
TOST: 90% CI [-2.168;-0.933] non-significant  
NHST: 95% CI [-2.299;-0.803] significant



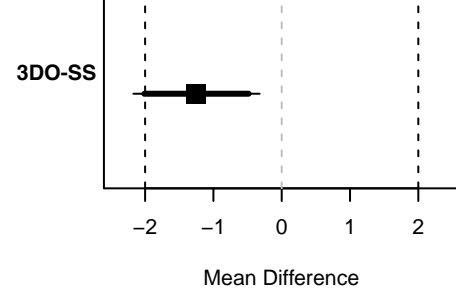
Equivalence bounds -2 and 2  
Mean difference = -0.668  
TOST: 90% CI [-1.379;0.042] significant  
NHST: 95% CI [-1.529;0.193] non-significant



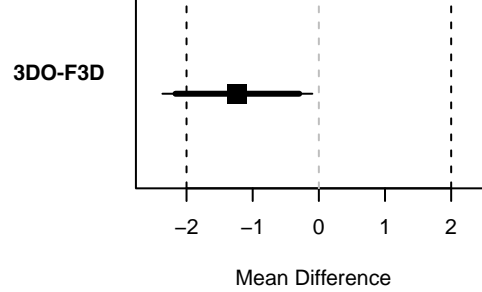
Equivalence bounds -2 and 2  
Mean difference = -0.839  
TOST: 90% CI [-1.48;-0.199] significant  
NHST: 95% CI [-1.615;-0.064] significant



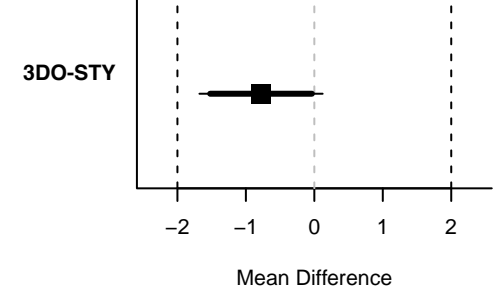
Equivalence bounds -2 and 2  
Mean difference = -1.248  
TOST: 90% CI [-2.011;-0.484] non-significant  
NHST: 95% CI [-2.172;-0.323] significant



Equivalence bounds -2 and 2  
Mean difference = -1.231  
TOST: 90% CI [-2.166;-0.296] non-significant  
NHST: 95% CI [-2.364;-0.098] significant



Equivalence bounds -2 and 2  
Mean difference = -0.779  
TOST: 90% CI [-1.522;-0.036] significant  
NHST: 95% CI [-1.679;0.122] non-significant



Equivalence bounds -2 and 2  
Mean difference = -2.36  
TOST: 90% CI [-4.297;-0.423] non-significant  
NHST: 95% CI [-4.707;-0.014] significant

