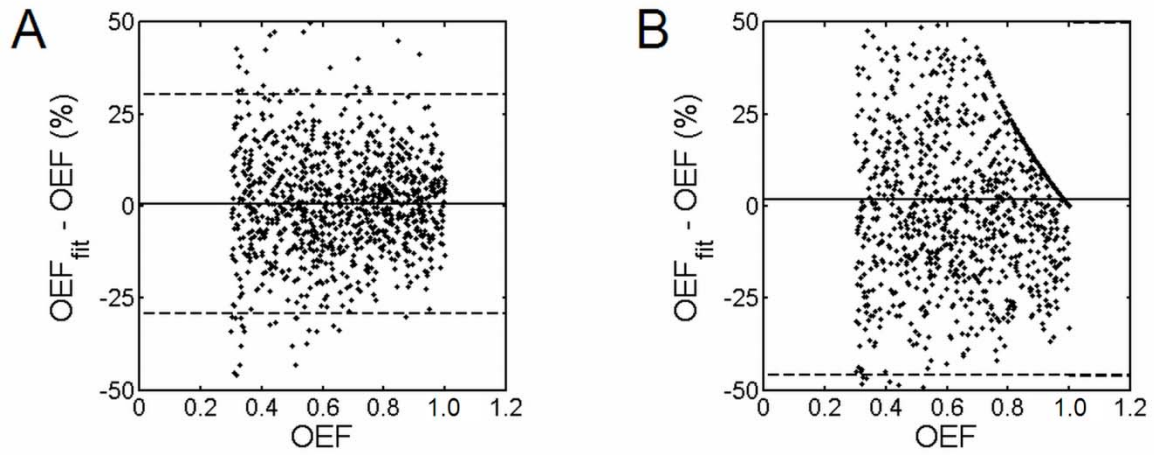


Supplemental Figure 1. Simulation study: percentage deviation between fitted and simulated OEF values for models 2 (A) and 2' (B).



Supplemental Figure 2. Simulation study: percentage deviation between fitted and simulated OEF values for models 2 (A) and 8 (B), in case of small movements between ^{15}O -water and $^{15}\text{O}_2$ scans.