

Figure S1: Box and whisker plots of ET partitioning estimates across plant functional types (PFT) created using all quantitative data extracted from the literature search. PFTs are shaded according to the estimated typical ecosystem LAI with the darker greens representing higher LAI. Misc. represents studies who reported data from combined ecosystem types, while All represents all data found from the literature search. The red dotted line ($T/ET = 0.58$) represents the mean reported from global studies across methods. SAV: savanna, EBF: evergreen broadleaf forest, WSA: woody savanna, CRO: cropland, DBF: deciduous broadleaf forest, ENF: evergreen needleleaf forest, GRA: grassland, MF: mixed forest, OSH: open shrubland, WET: wetland, BSV: bare sparse vegetation.

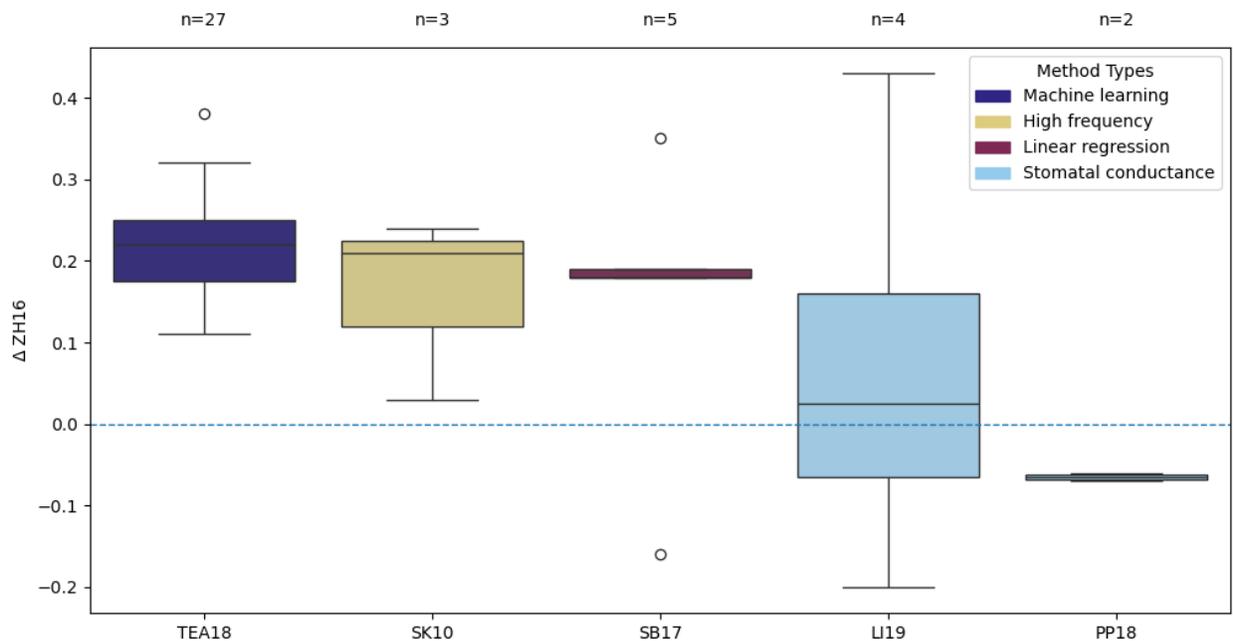


Figure S2: Difference in method T/ET estimations from paired analyses with ZH16. Data was only extracted from studies that included annual or growing season mean quantitative data for ZH16 and an additional method. n is number of records found from literature search used in the plot. Methods: ZH16: Zhou et al. (2016), TEA18: Nelson et al. (2018), SK10: Scanlon & Kustas (2010), SB17: Scott & Biederman (2017), LI19: Li et al. (2019), PP18: Perez-Preigo et al. (2018).