

Figure X. Relationships of the ISD (a,c) and standing stock biomass (b,d) across mean annual stream temperature, annual gross primary production (GPP), and standing stock organic matter (OM). The top two panels (a,b) show the marginal relationship between ISD or standing stock biomass from models that include ln GPP, ln organic matter, temperature, and all 2 and 3-way interactions. The bottom panels (c,d) show the counterfactual predictions of the ISD and standing stock across the 25th, 50th, and 75th quantiles of ln organic matter and ln GPP.

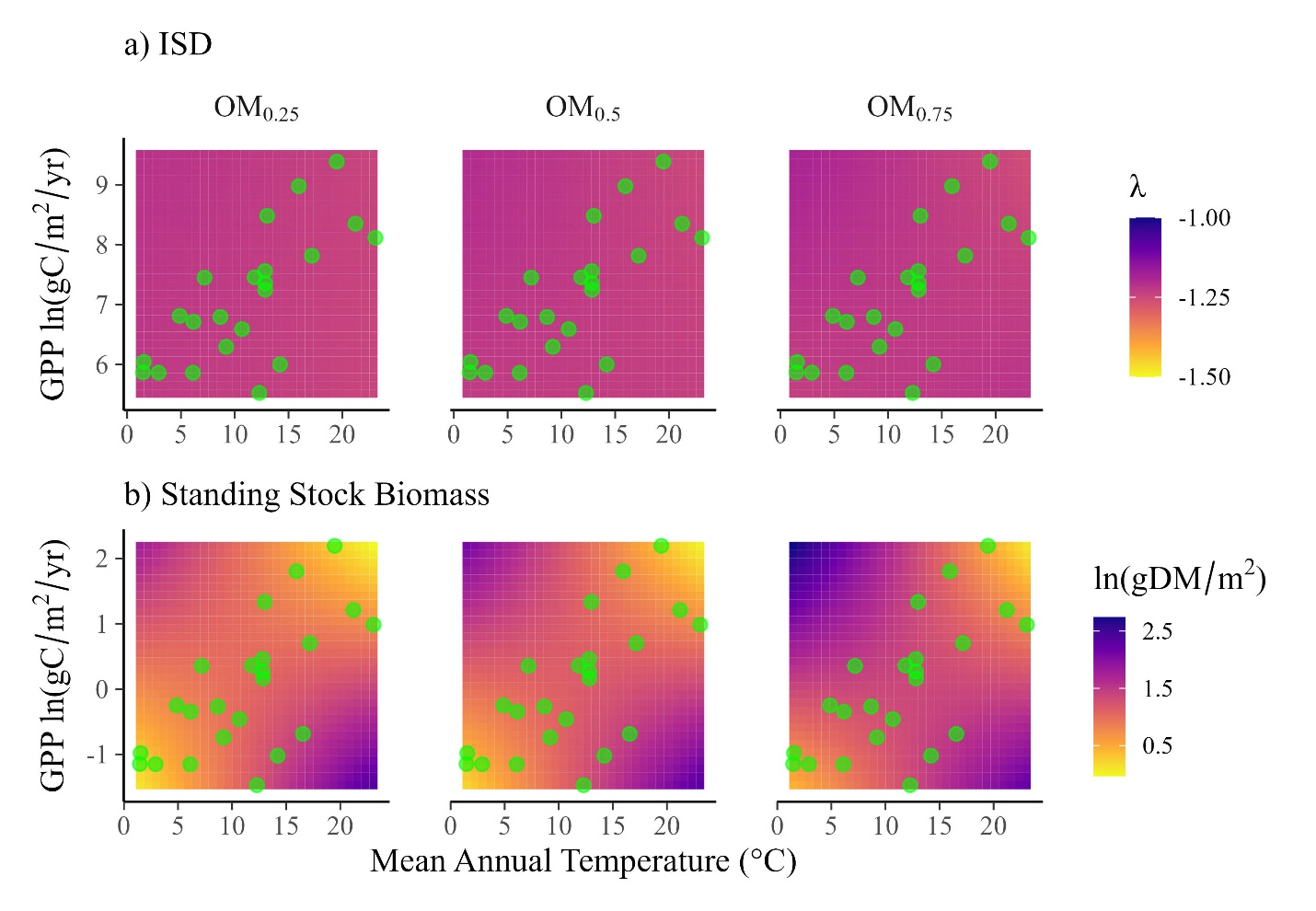


Figure X. Model predictions of the ISD exponent (a) and standing stock biomass (b) across continuous values of annual gross primary production (ln GPP) and mean annual stream temperature at three levels of standing stock organic matter (OM; 25th, 50th, and 75th quantiles). The dots show the corresponding values of ln GPP and mean annual stream temperature across the 22 NEON sites. The lack of color change in a) reflects the invariance of the ISD exponent to environmental conditions. By contrast, the color change in b) shows interactions with GPP, organic matter (OM), but the strongest changes occur for environmental conditions that are not present in the NEON sites (e.g., high GPP/low temperature or low GPP/high temperature).