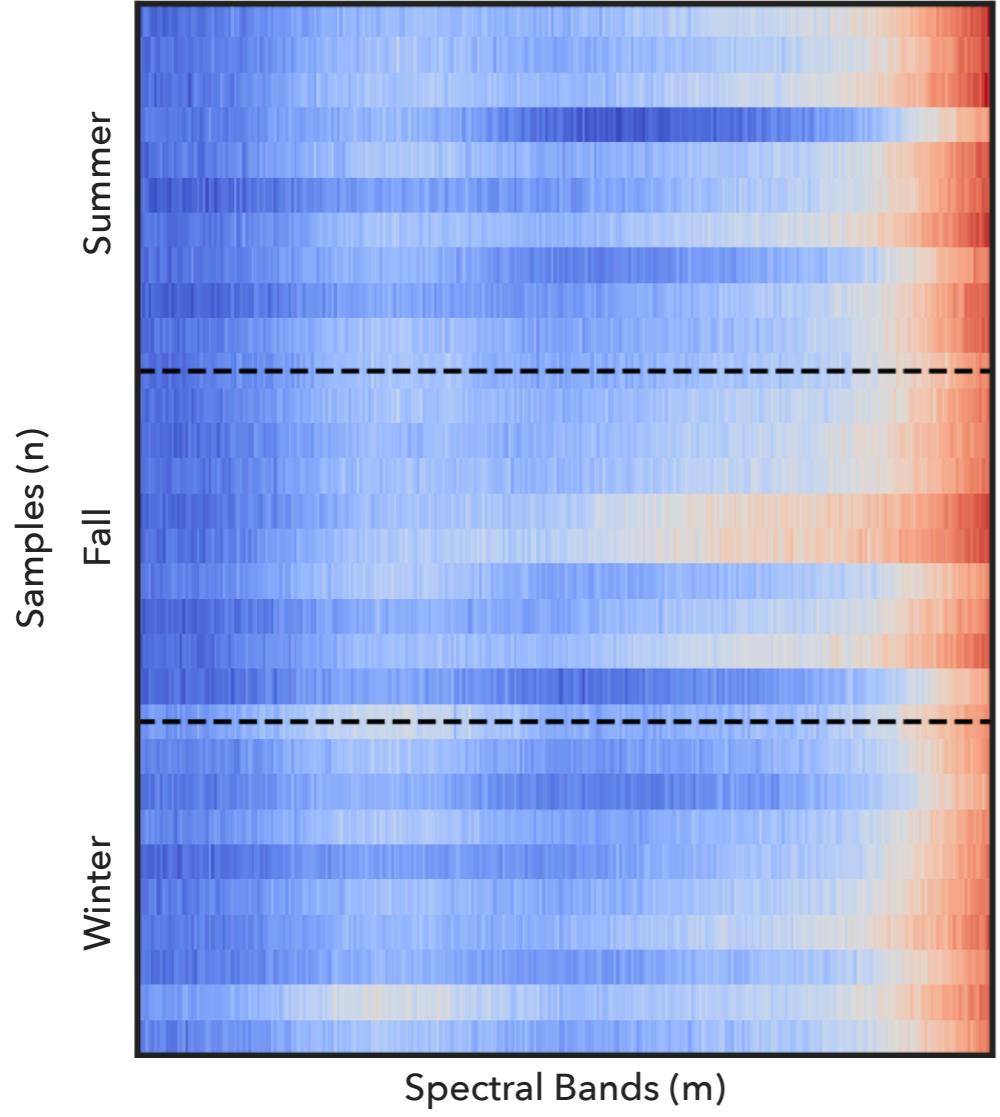
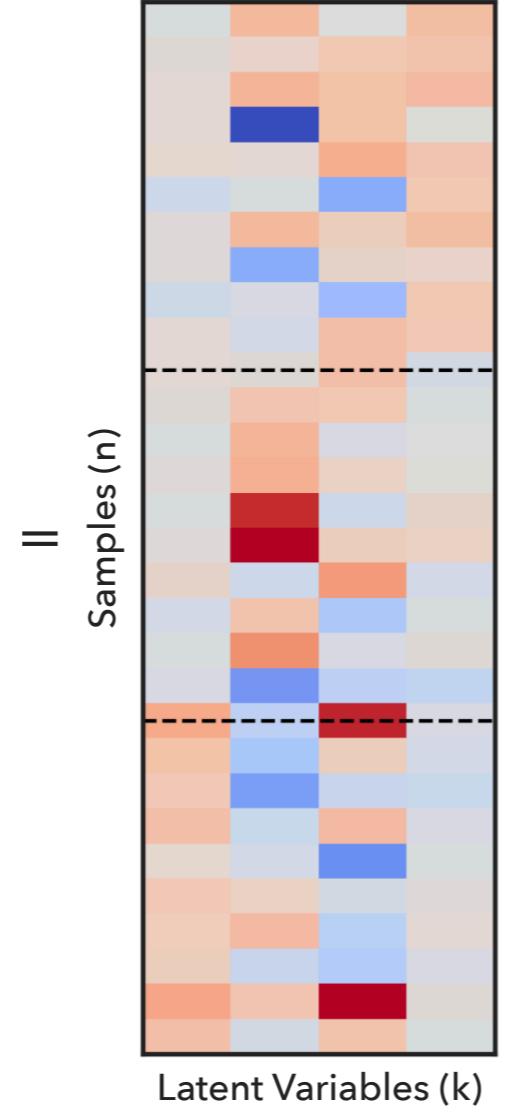


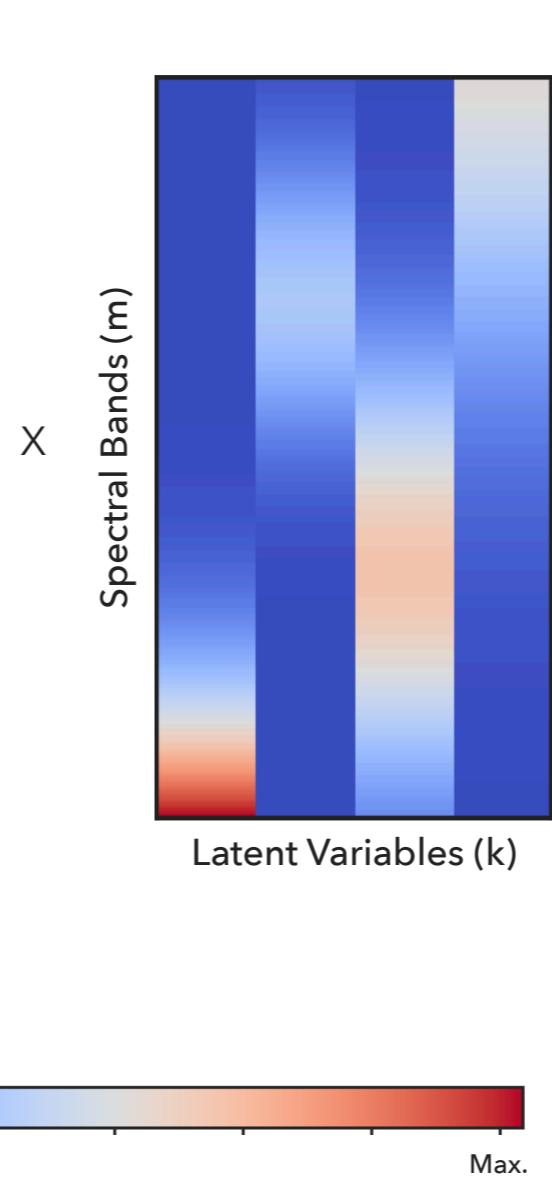
Feature Matrix  $\mathbf{X}$



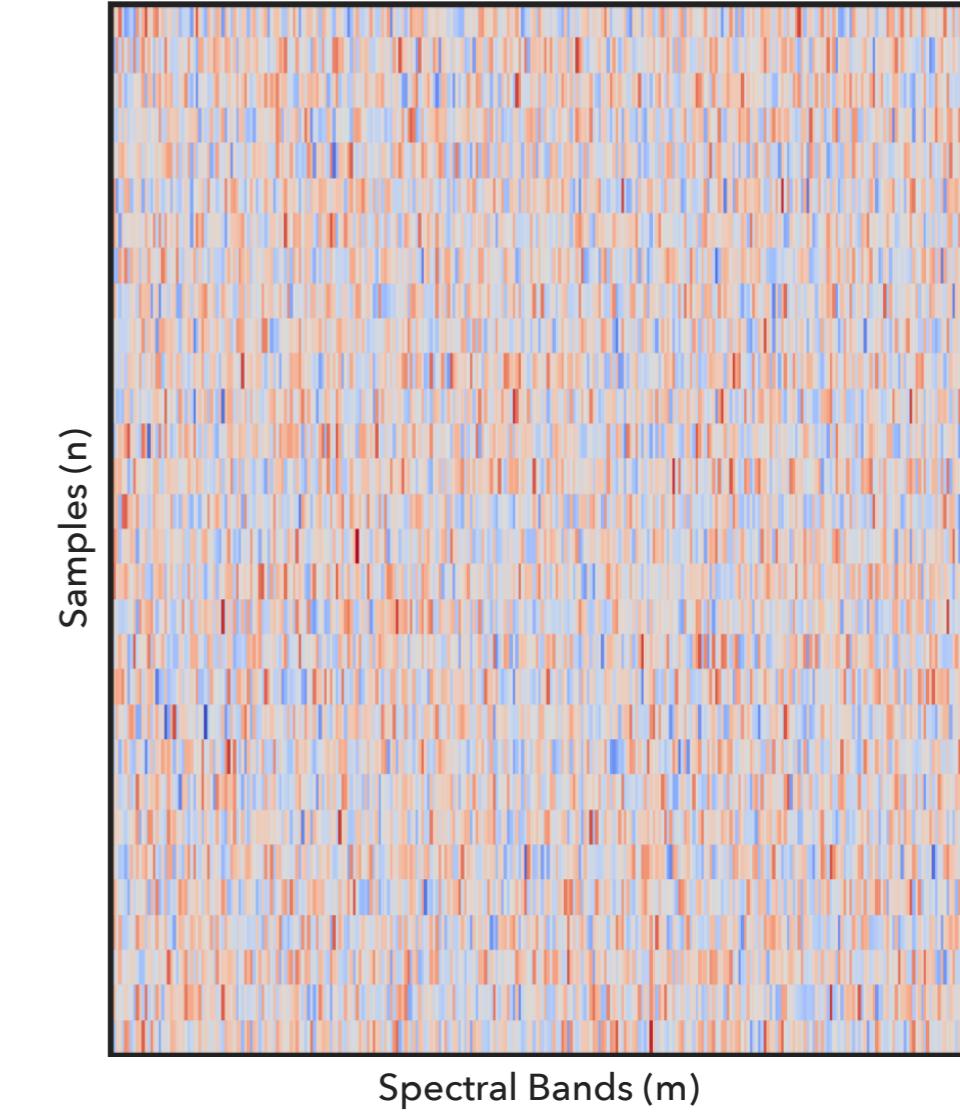
Score Matrix  $\mathbf{T}$



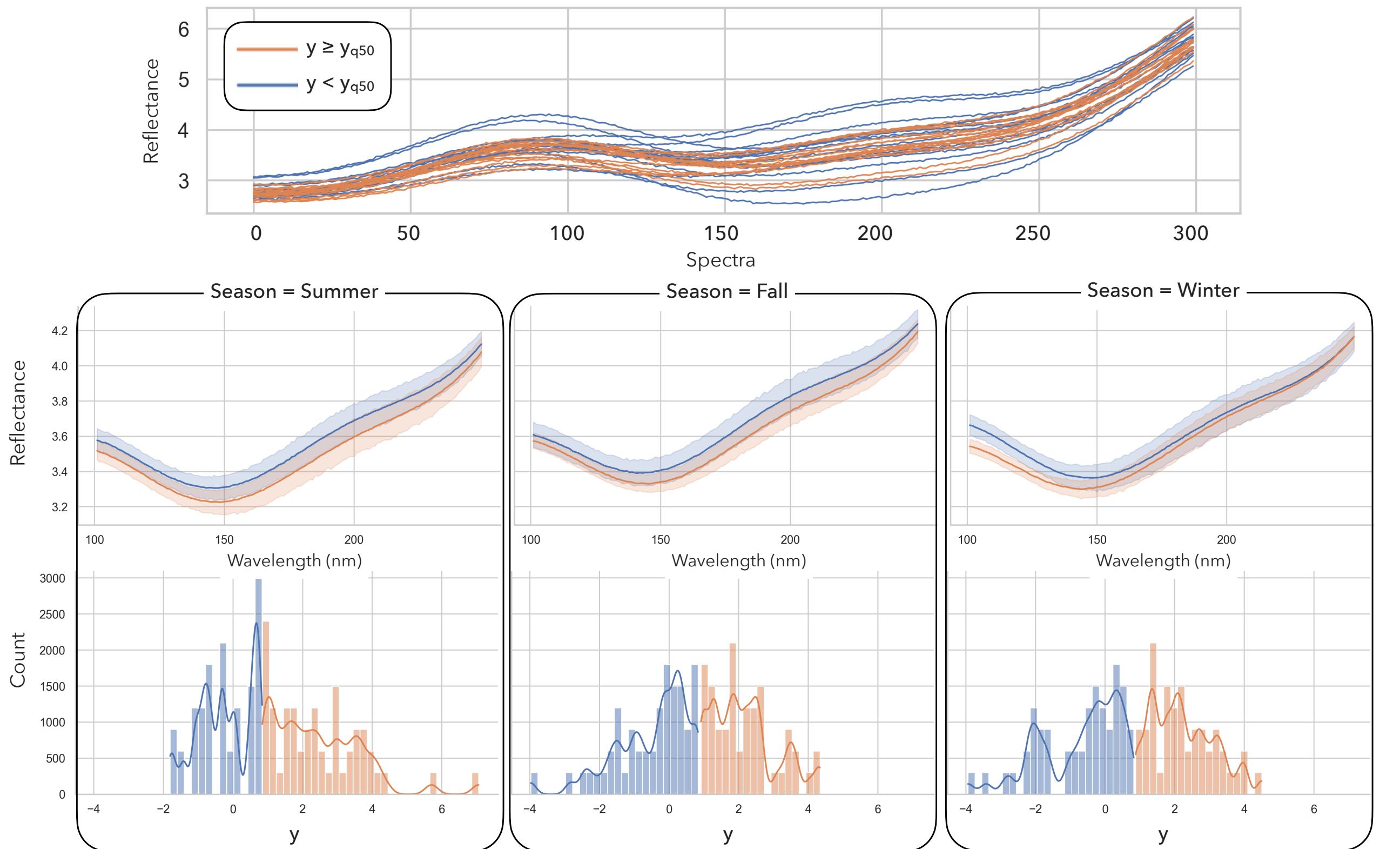
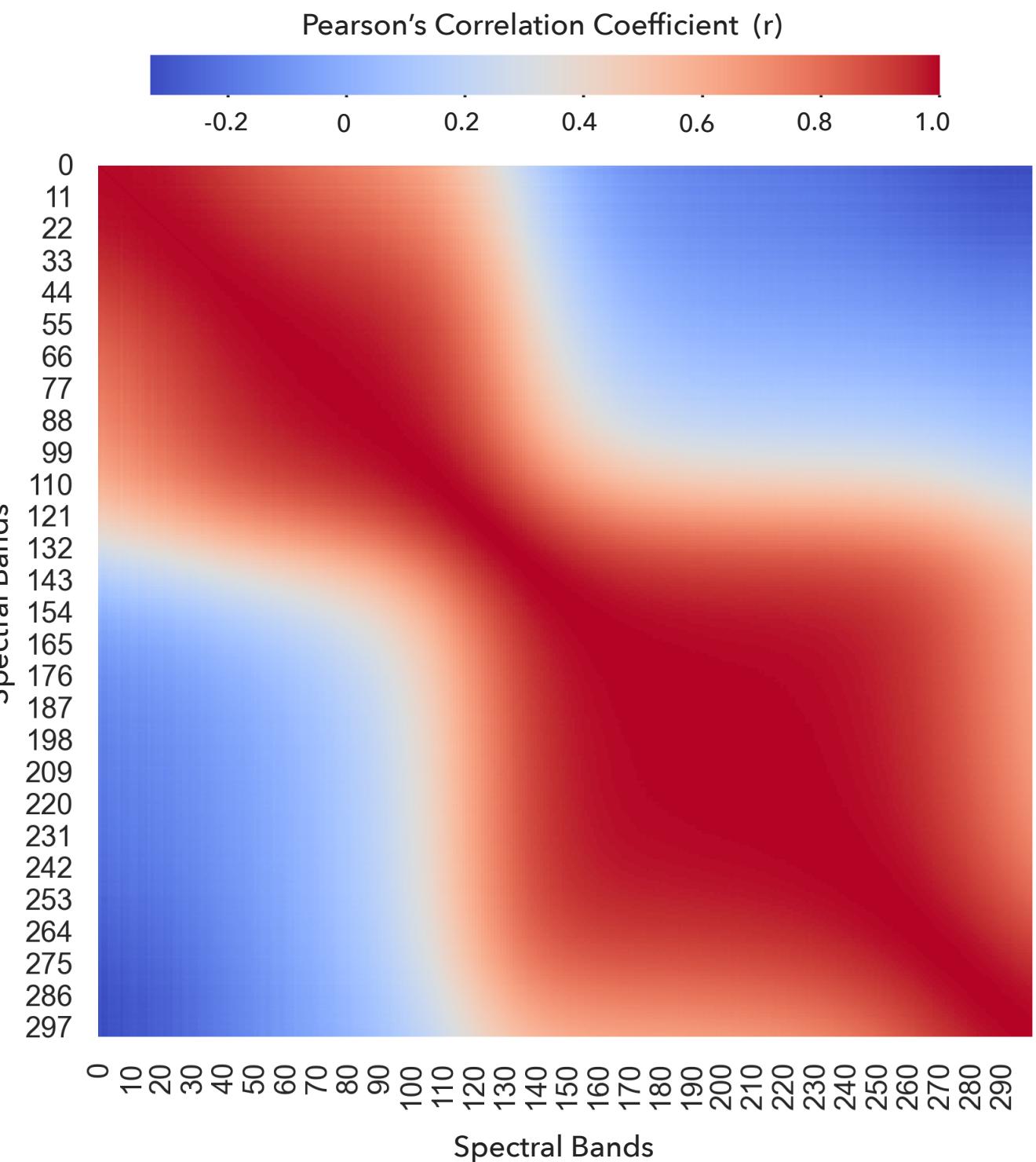
Loading Matrix  $\mathbf{P}$

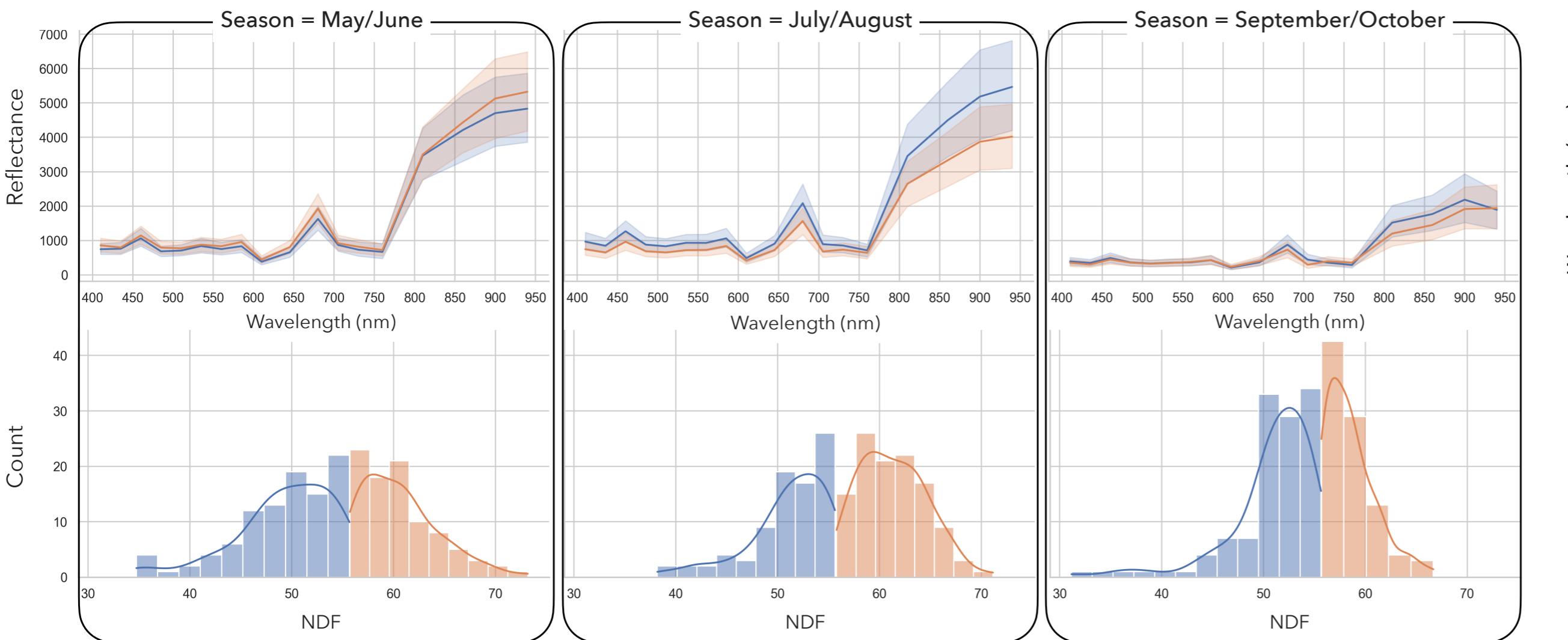
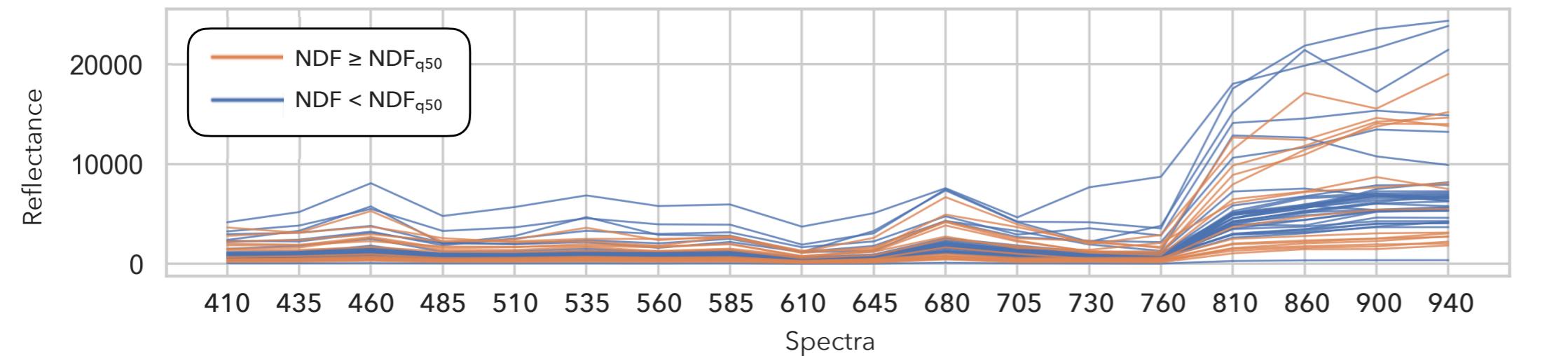
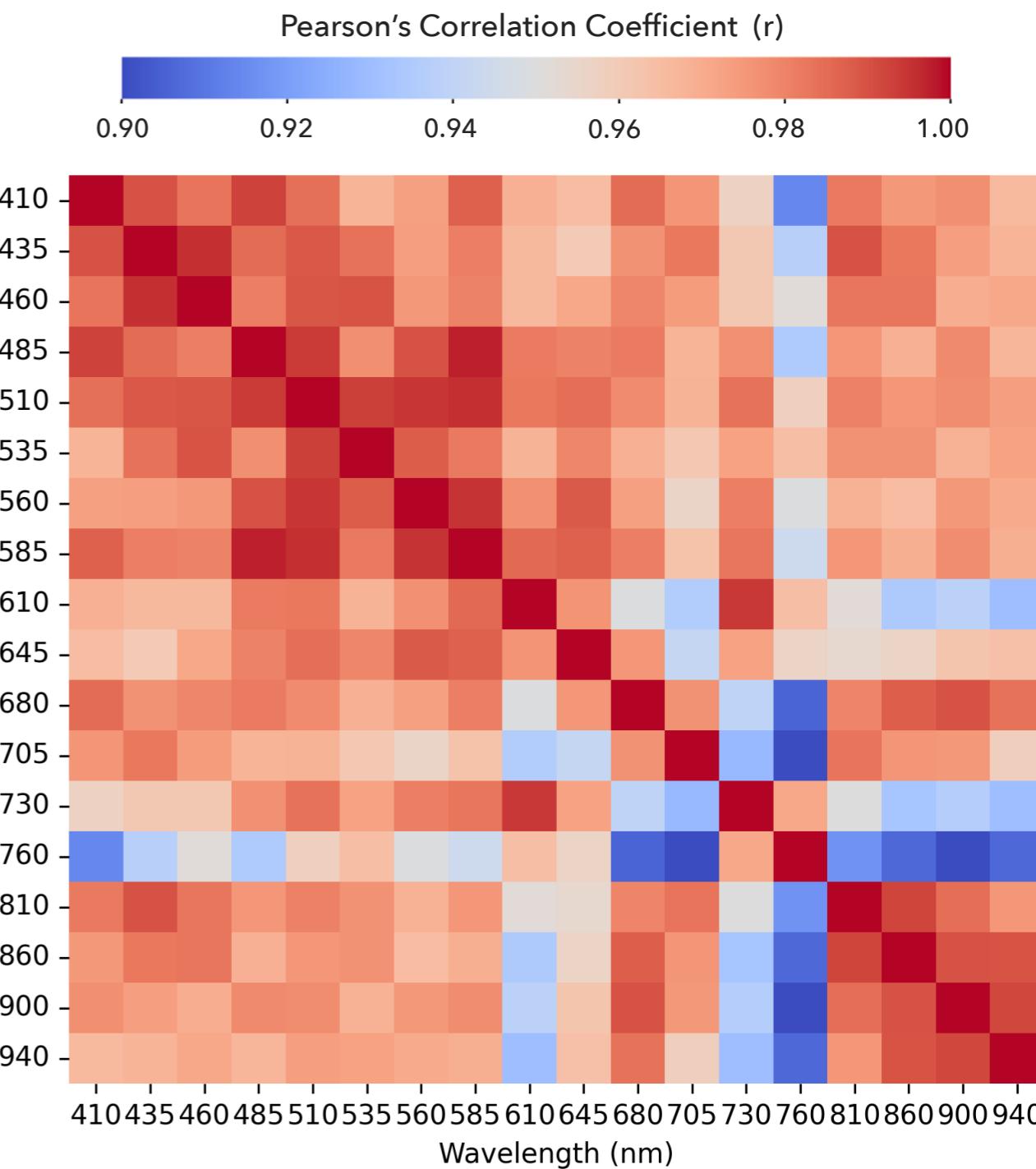


Residual Matrix  $\mathbf{E}$



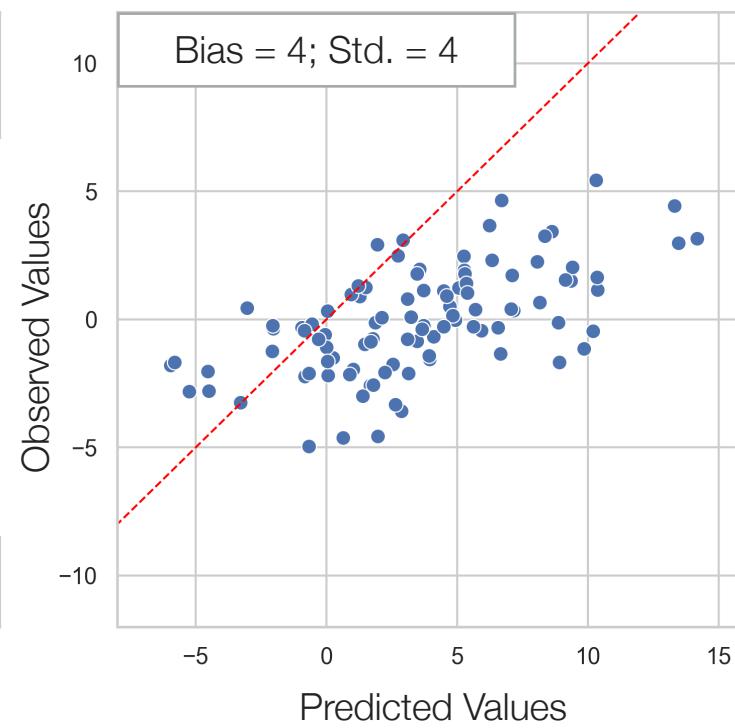
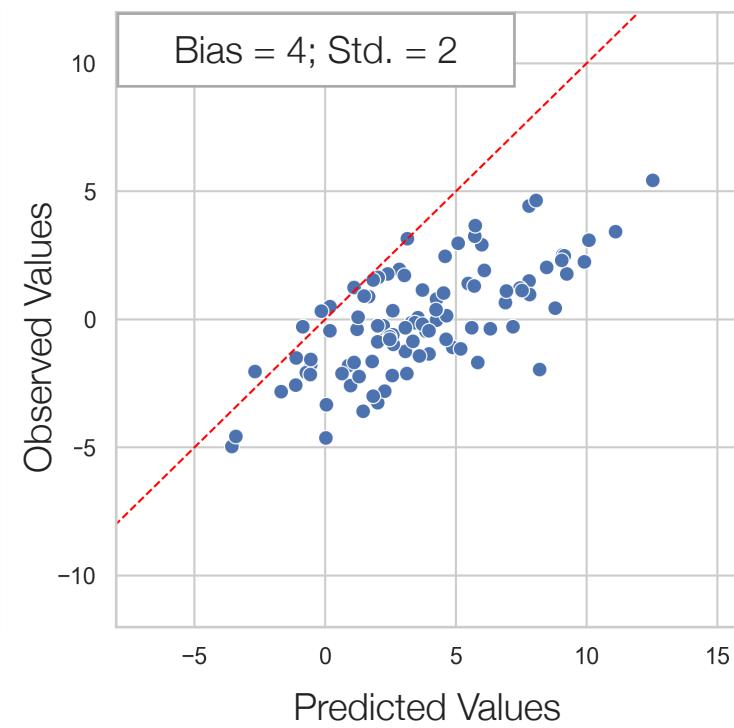
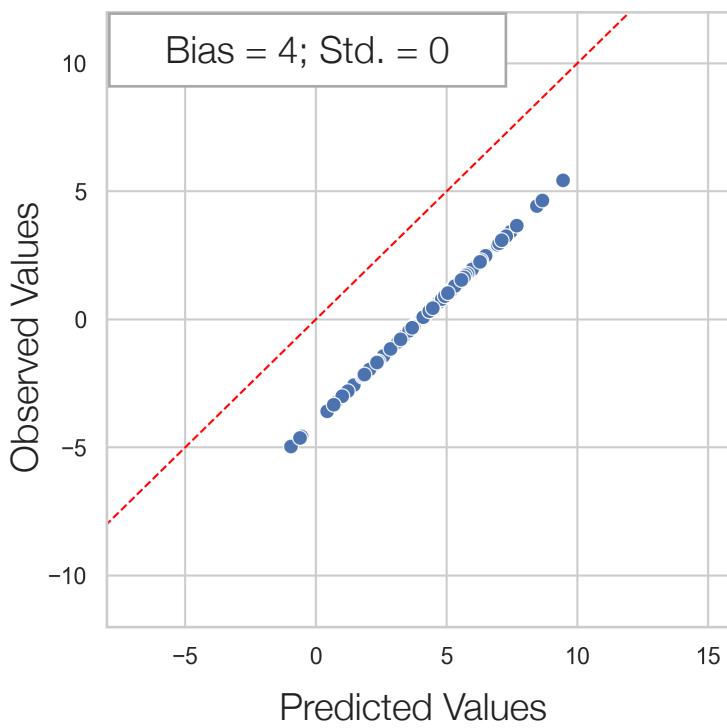
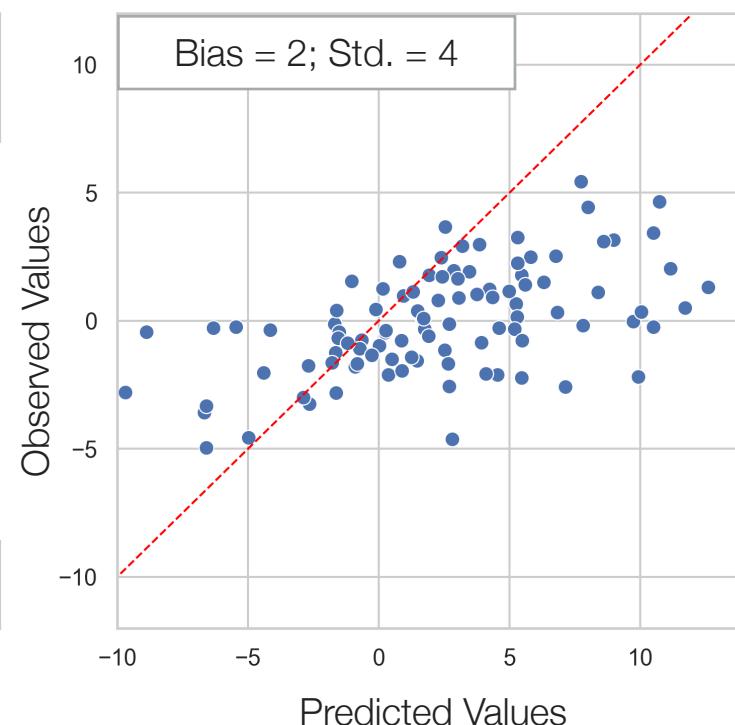
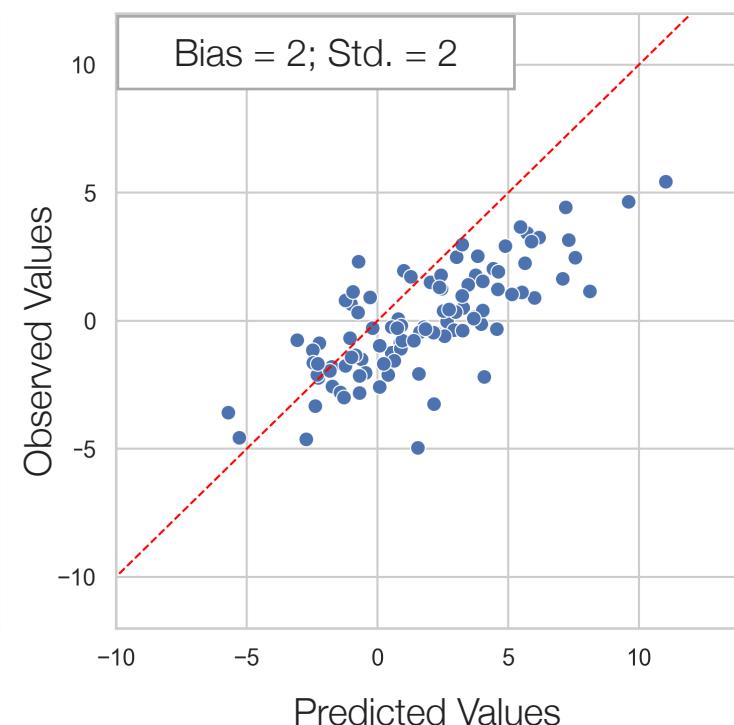
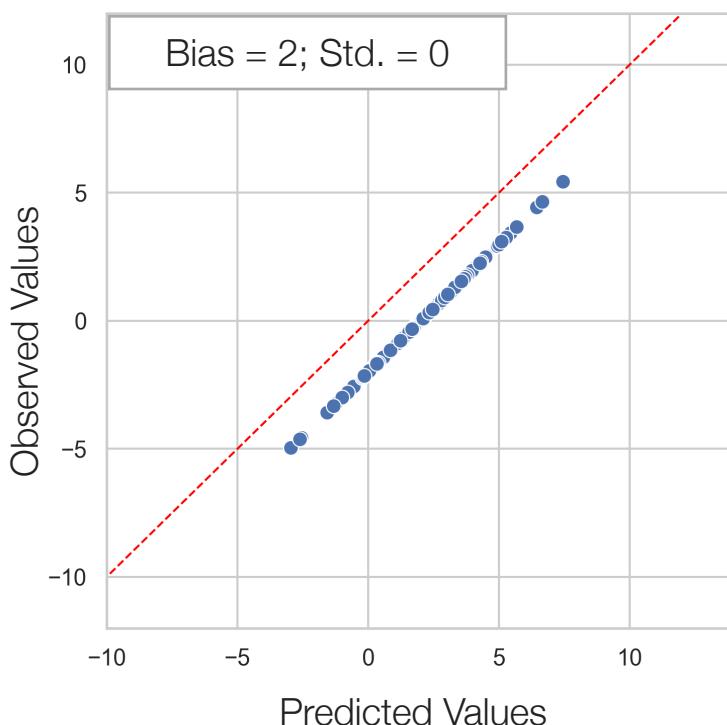
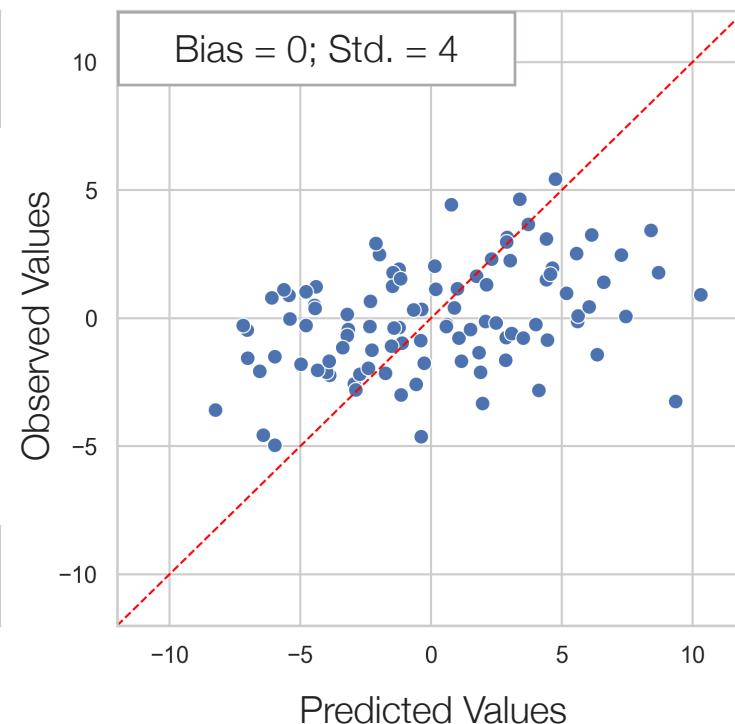
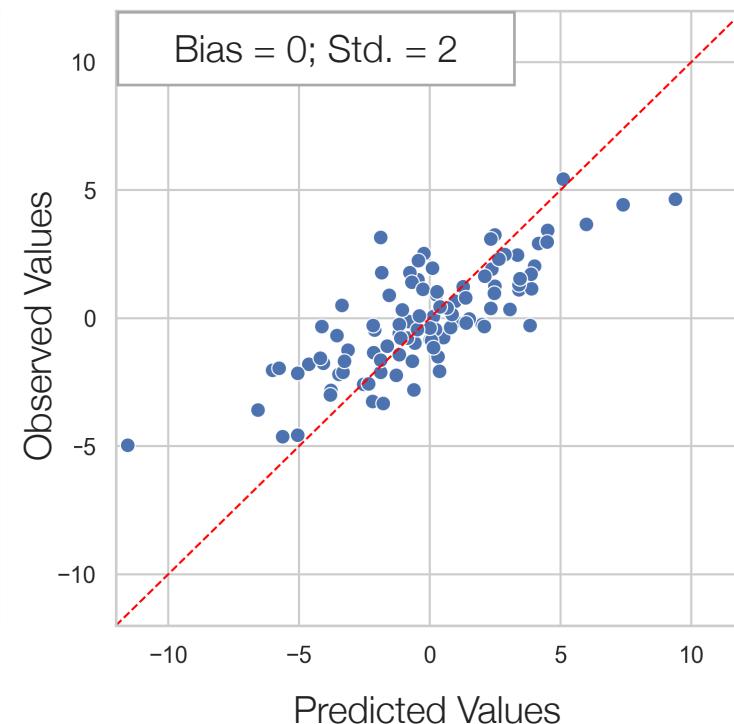
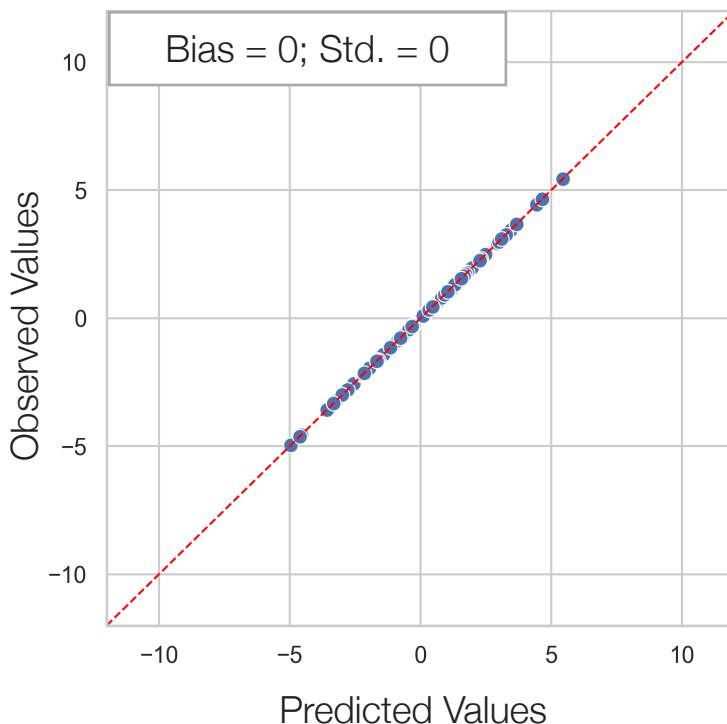
Min. Max.

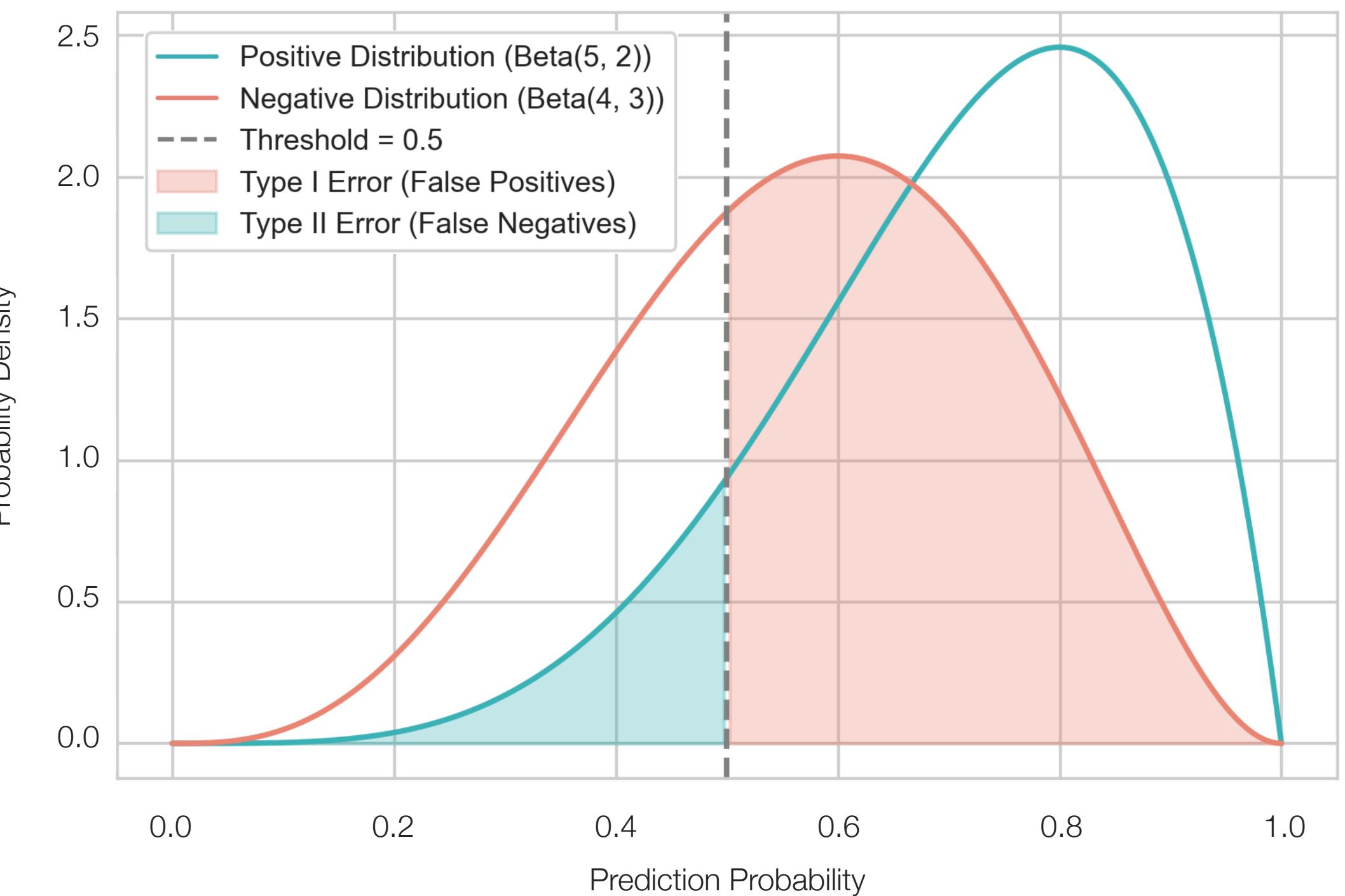
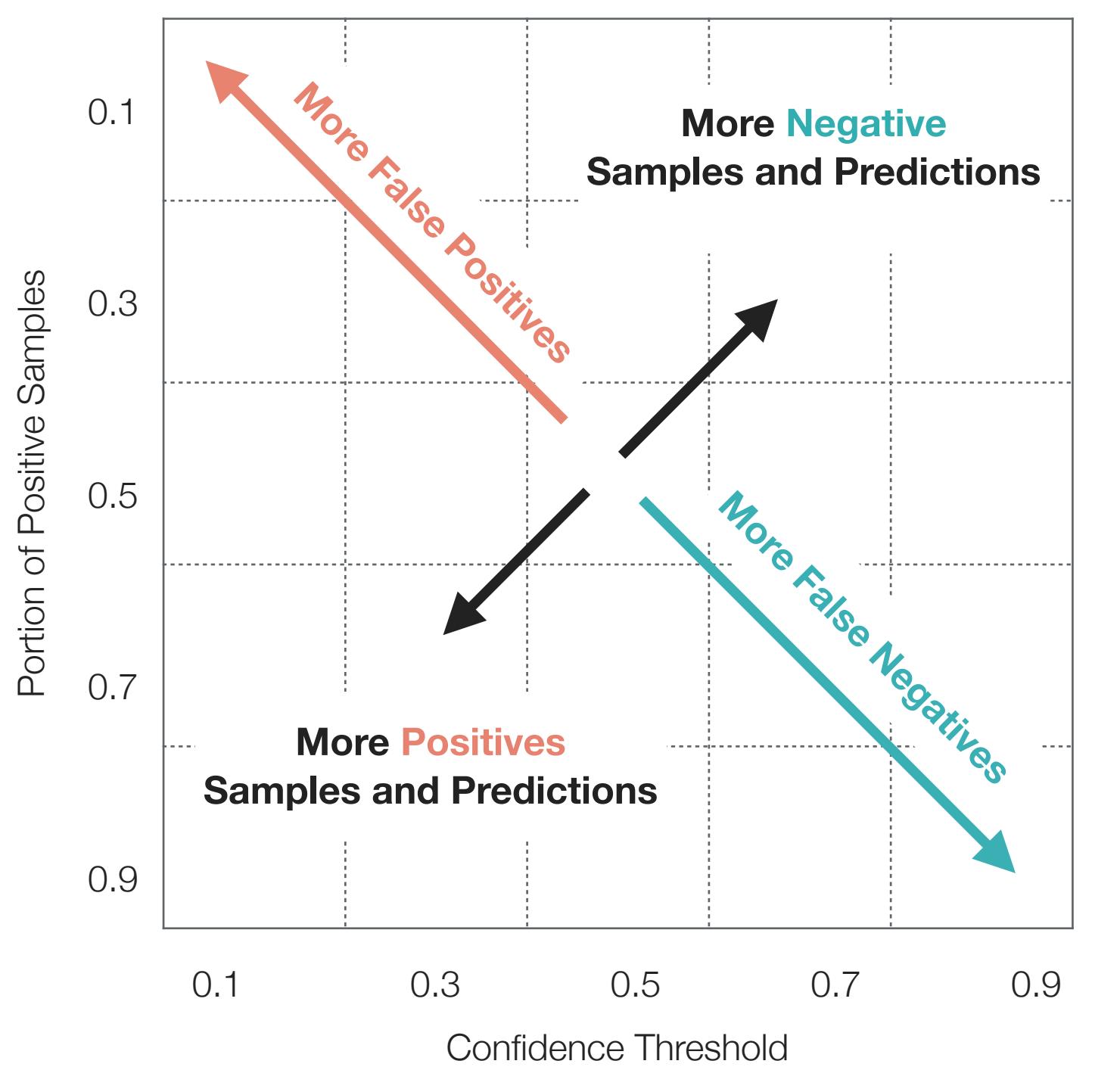
**a.****b.**

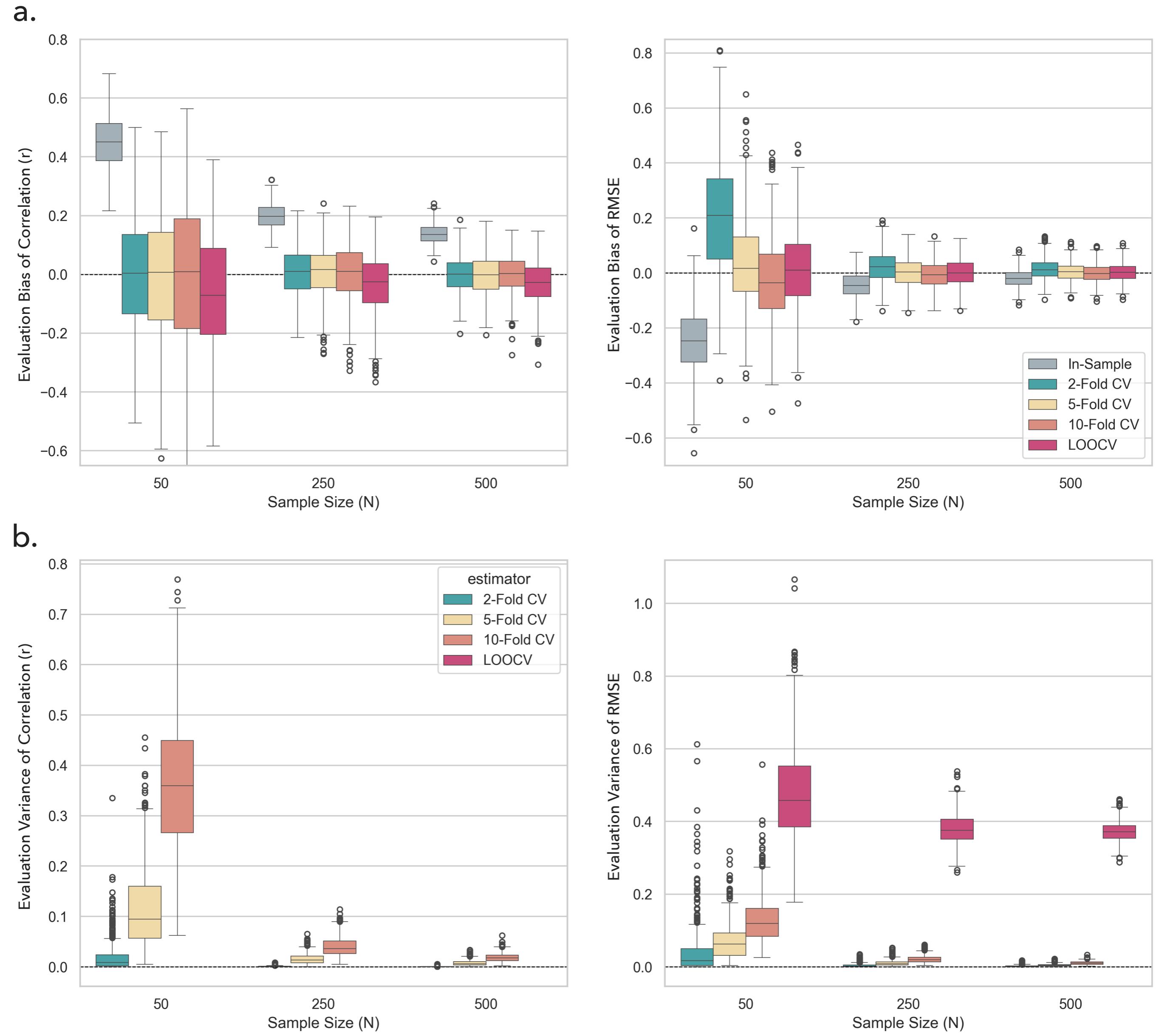
**a.****b.**

# Higher Error Variance

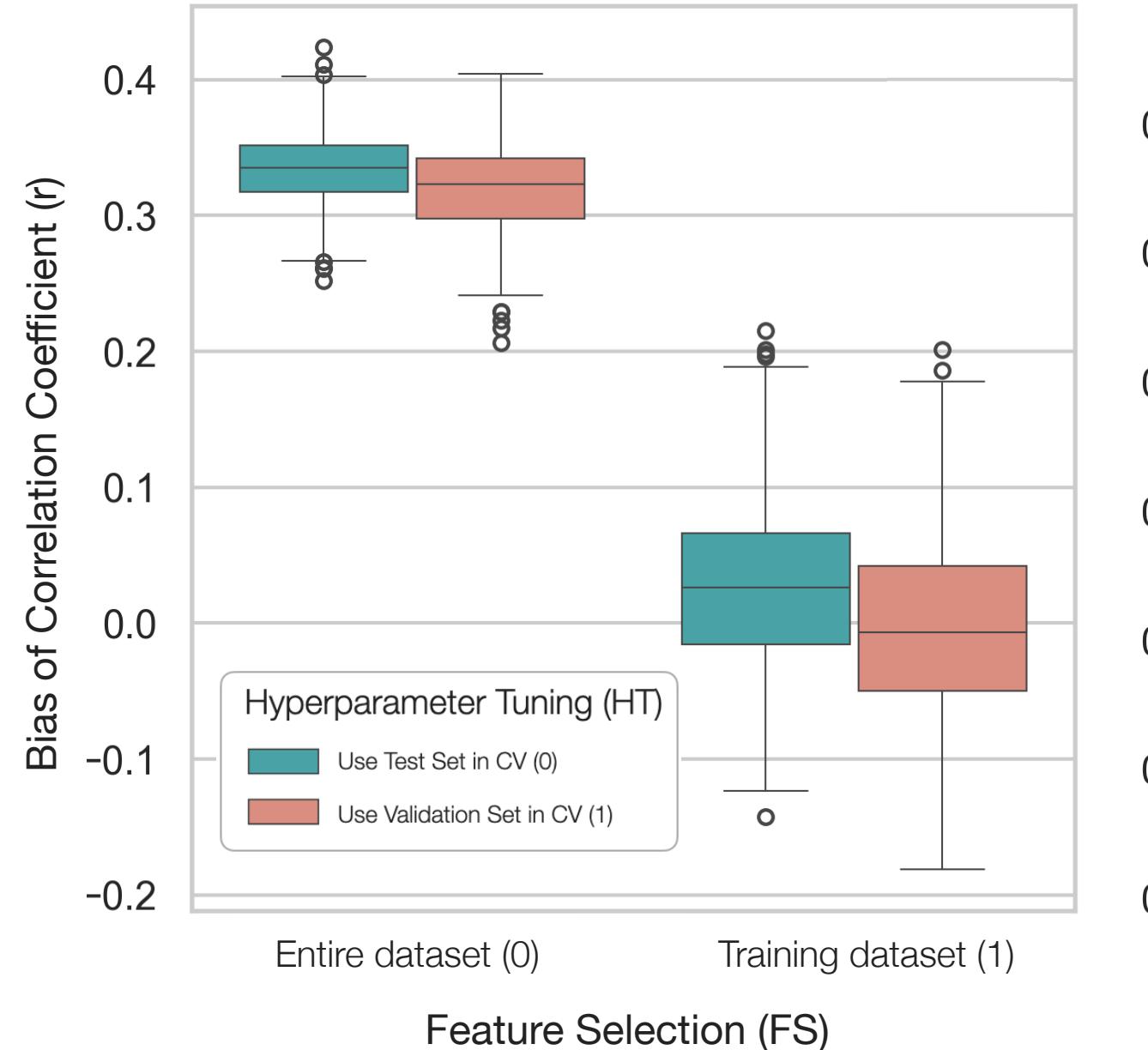
Higher Error Bias



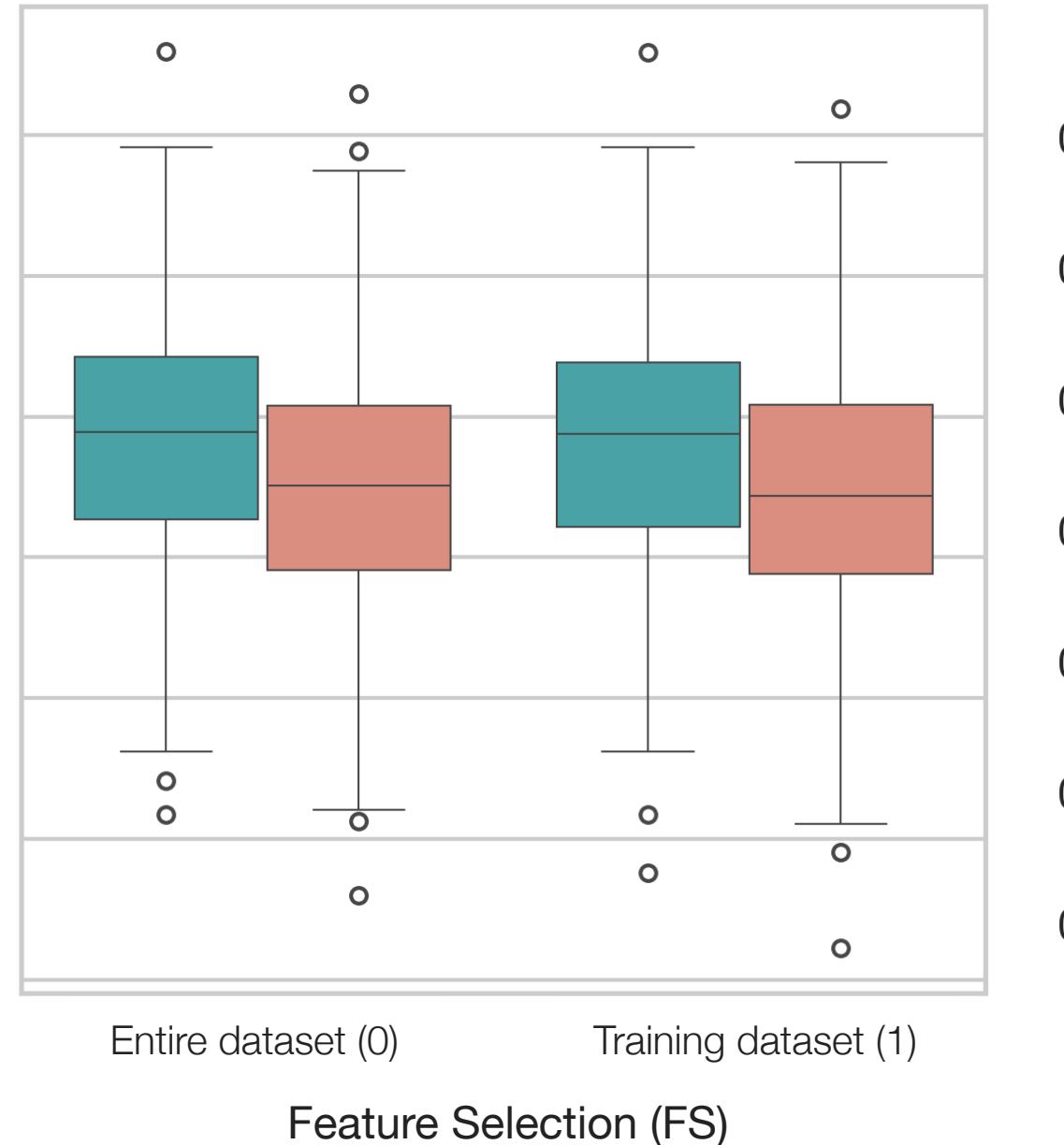




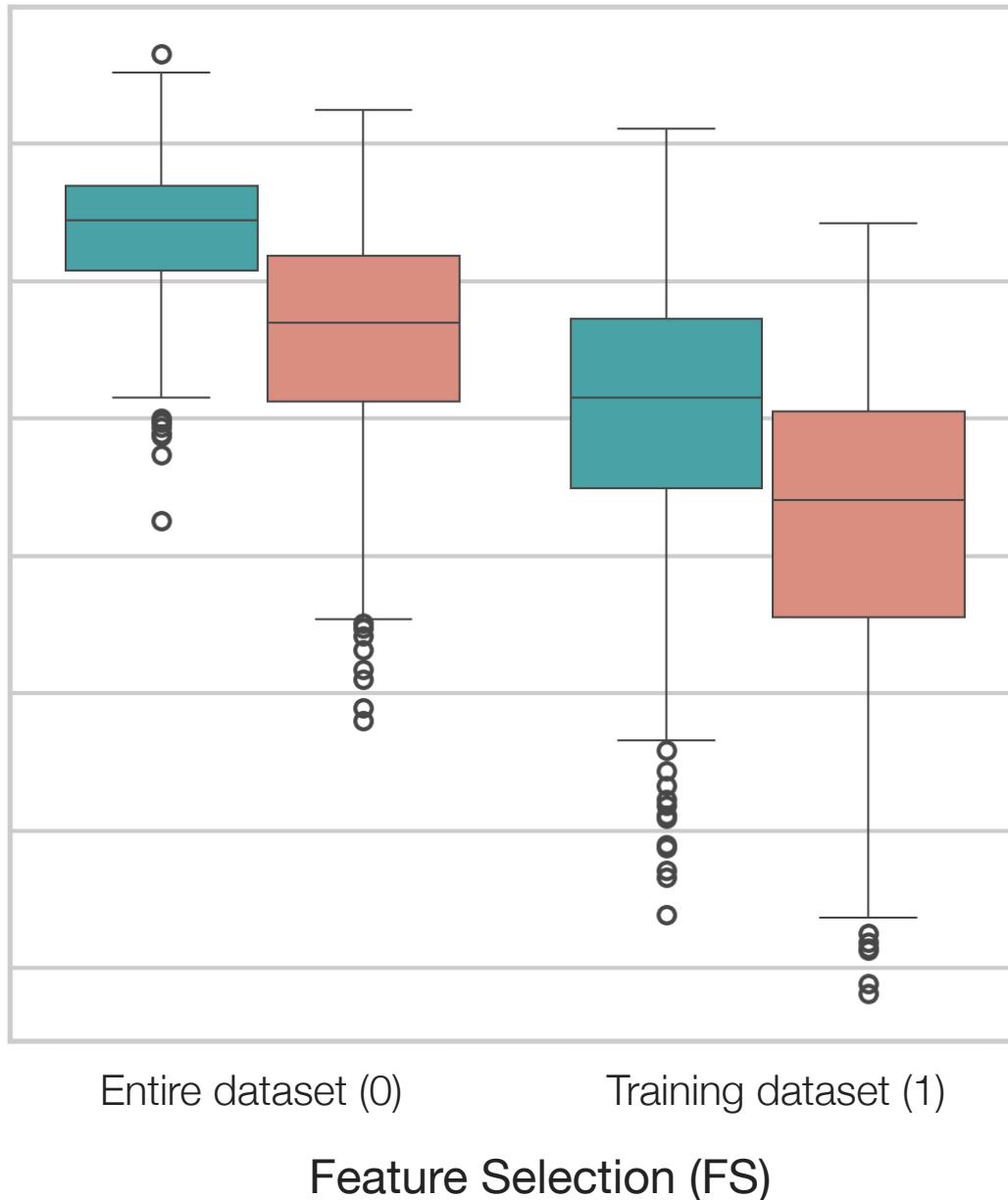
Null Dataset

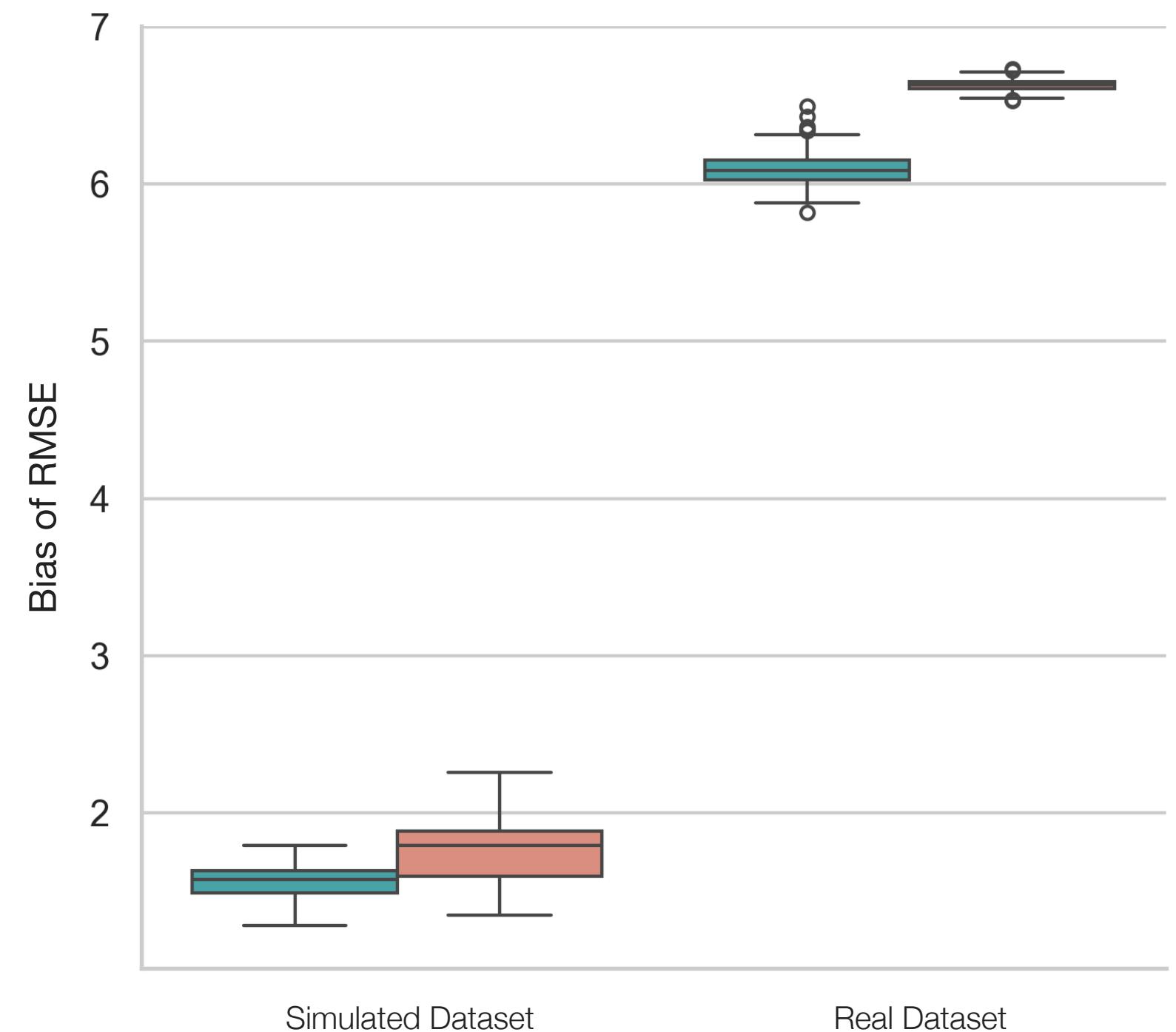
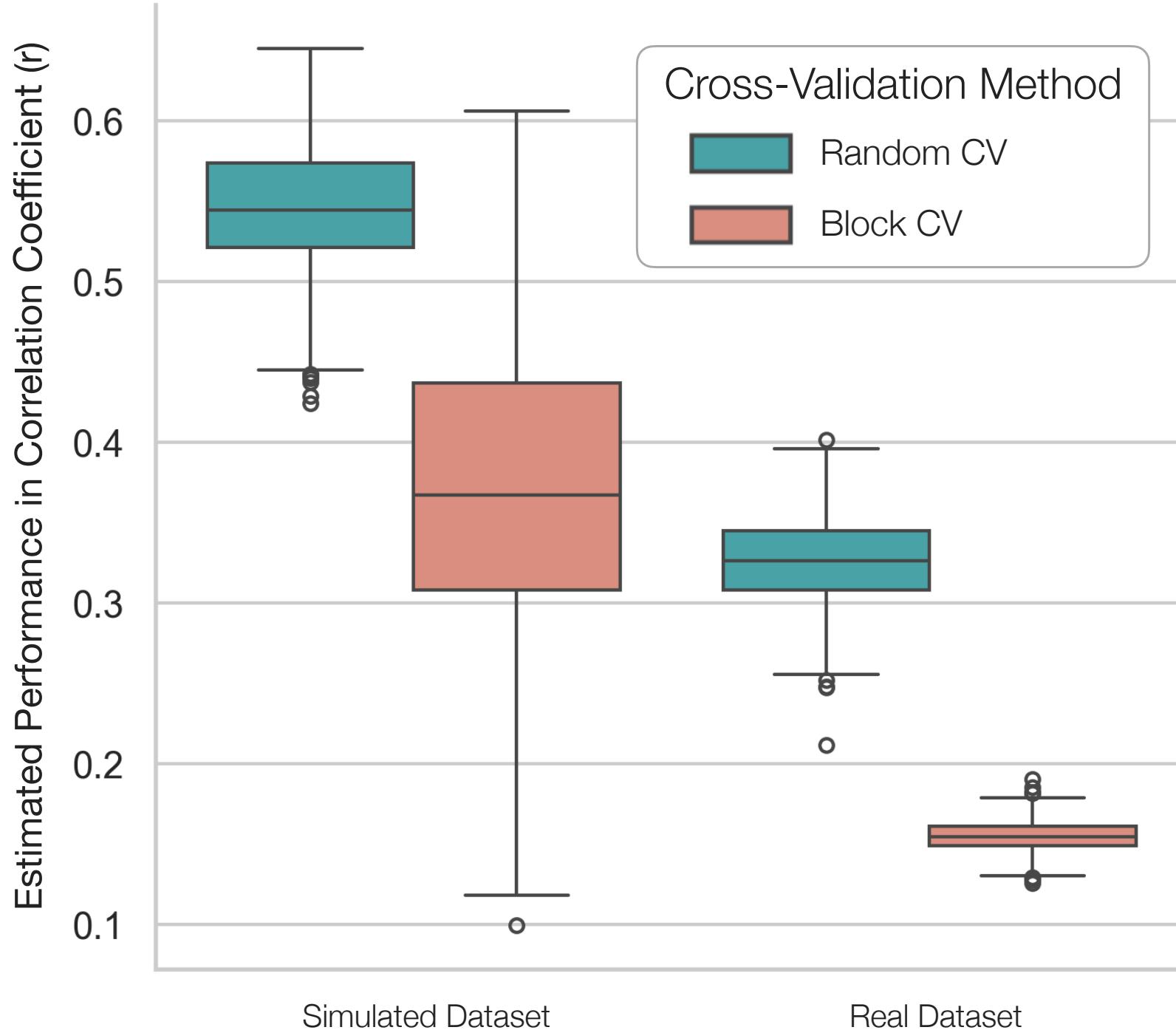


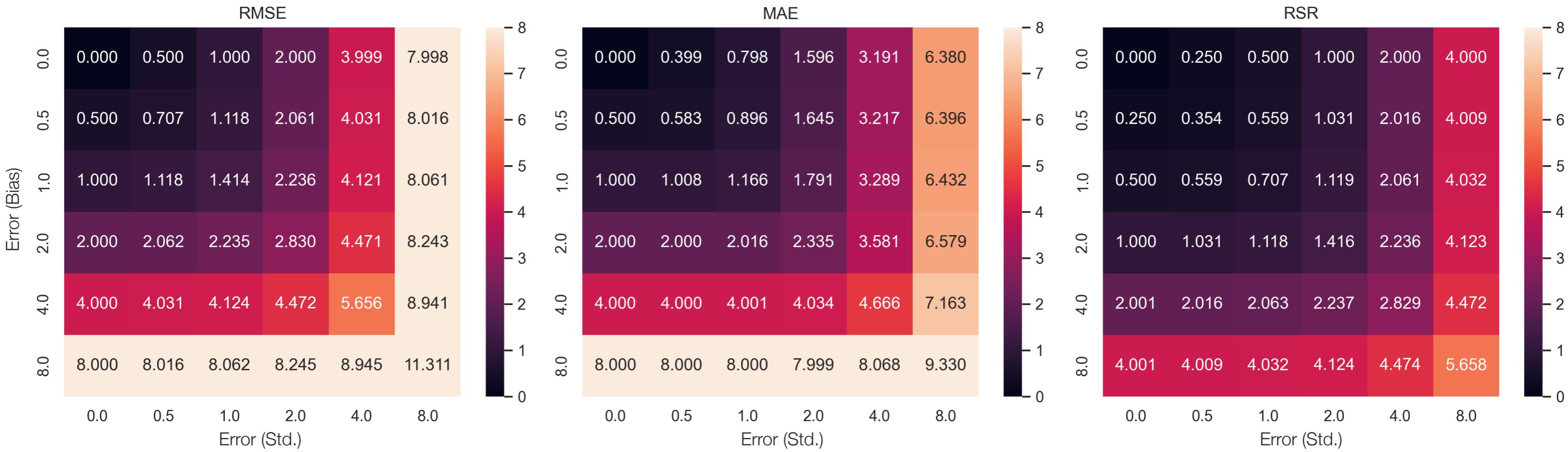
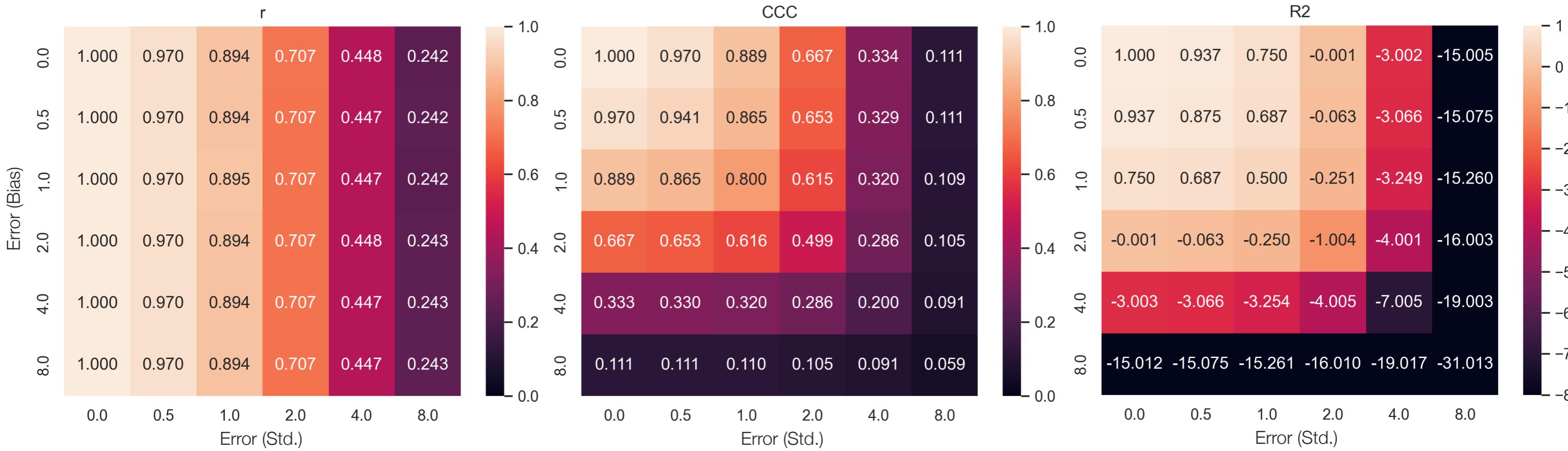
Simulated Spectral Dataset

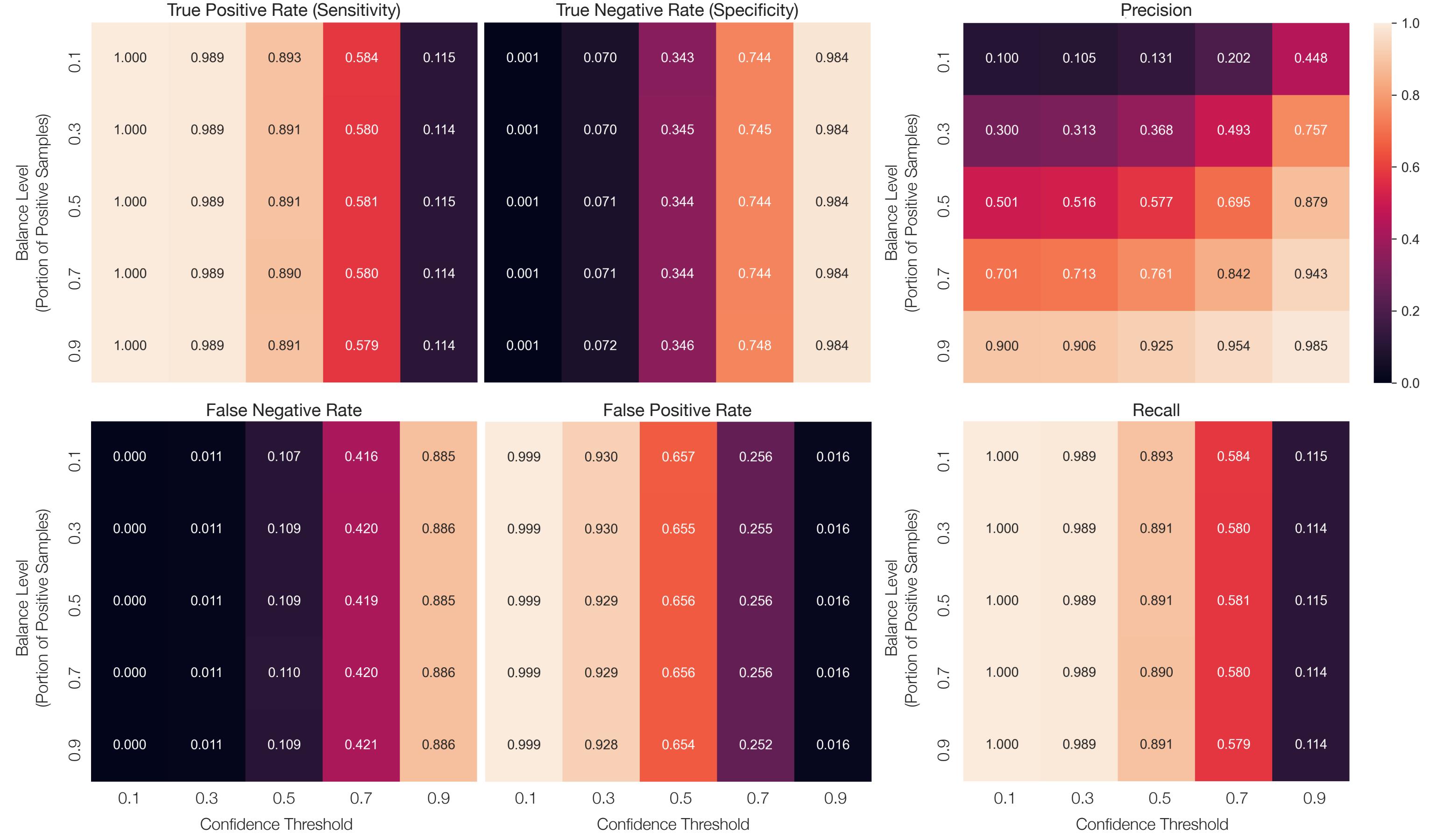


Real Spectral Dataset



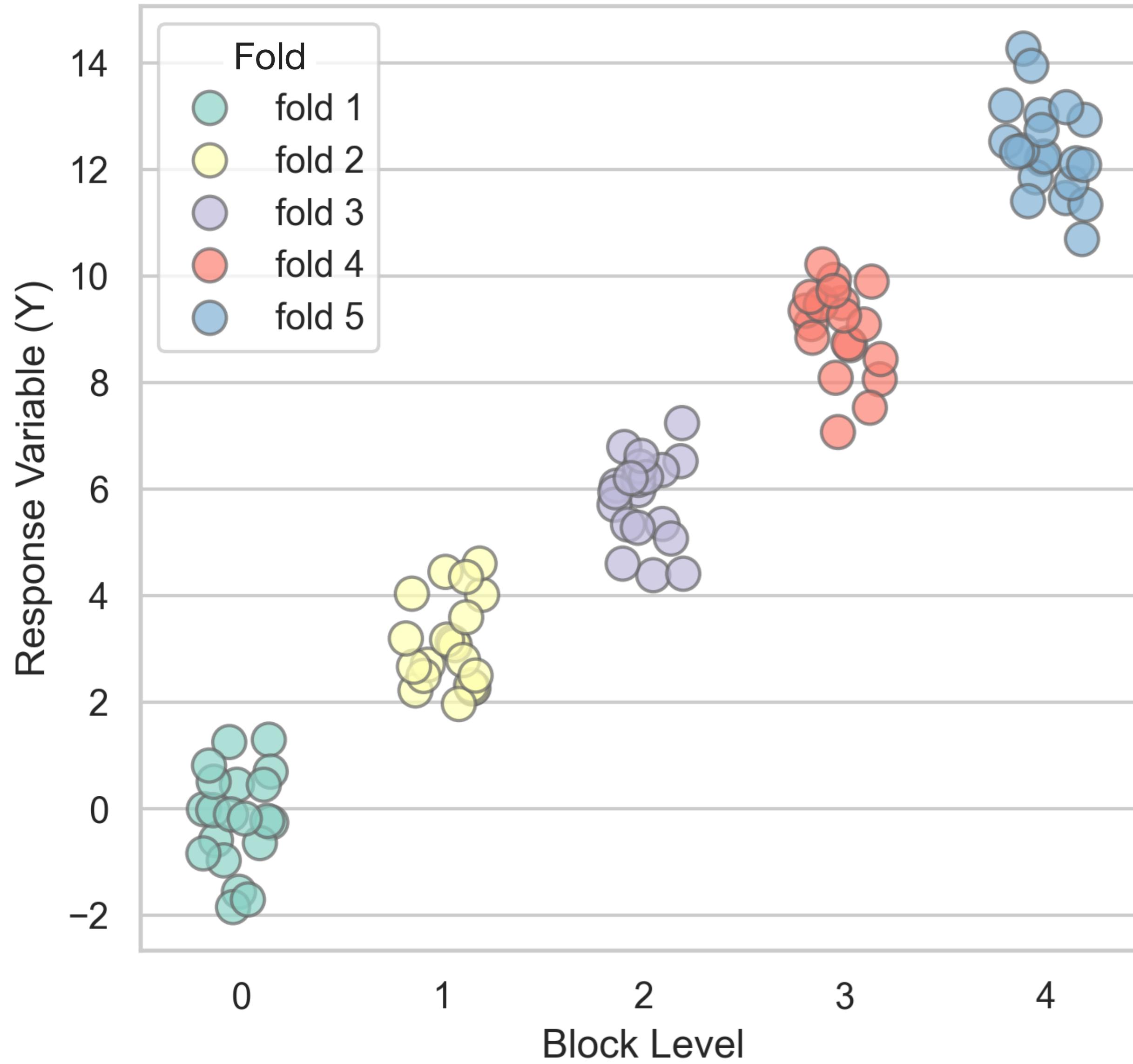








### Block Cross Validation



### Random Cross Validation

