

Testing Global Approaches for Optical Remote Sensing of Carbon Fluxes Using EO-1 Hyperion

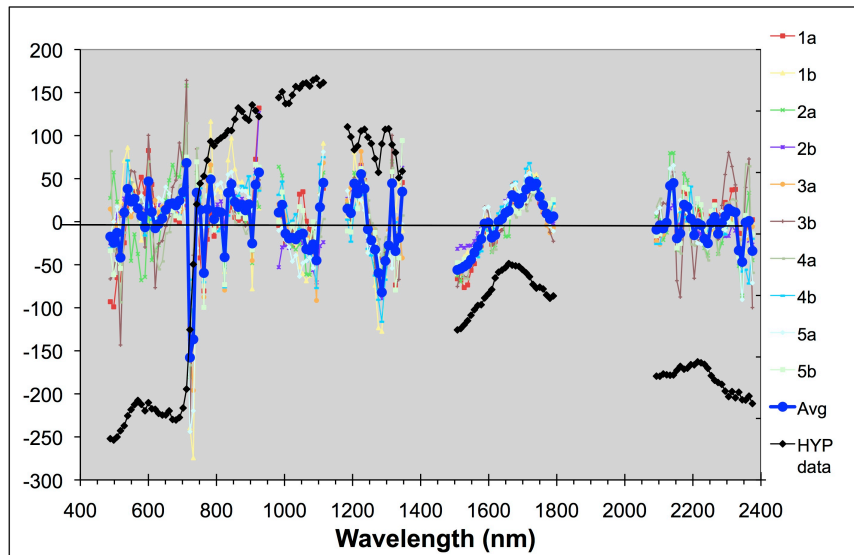
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Can a single hyperspectral algorithm provide carbon flux variables over a range of sites?

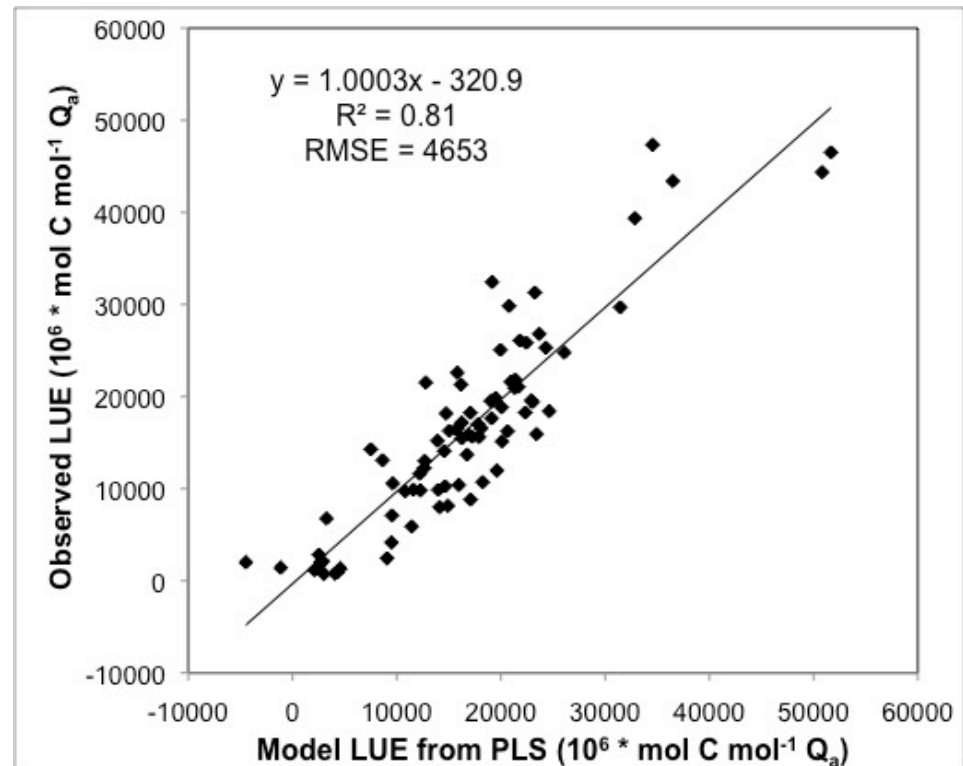
We matched flux data with Hyperion imagery from 33 globally distributed tower sites

Partial Least Squares Regressions from 10 random subsets produced similar weighting factors and good correlations with LUE

Indicates the possibility of such an algorithm



PLS weighting factors and sample reflectance spectra



LUE estimate from Reflectance using average PLS weighting factors vs. observed LUE from flux towers