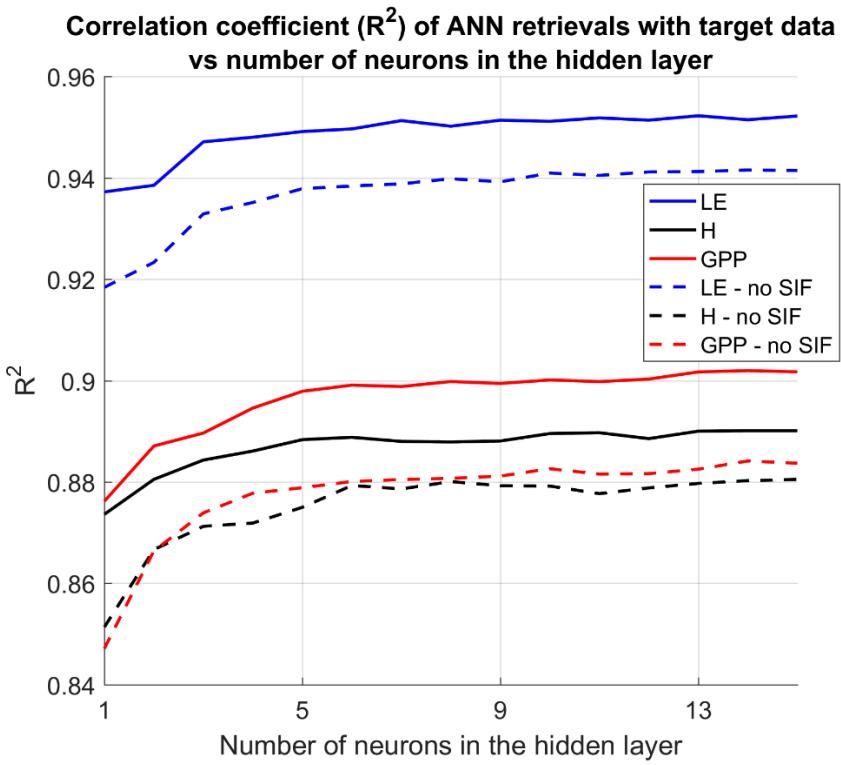


# **Water, Energy, and Carbon with Artificial Neural Networks (WECANN): A statistically-based estimate of global surface turbulent fluxes using solar-induced fluorescence**

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## **Supplementary Material**



**Figure S1: Correlation coefficients ( $R^2$ ) between ANN retrievals of LE, H, and GPP and target data as a function of number of neurons in hidden layer. Solid lines show  $R^2$  for retrievals that include SIF as an input in ANN, and dashed lines show  $R^2$  for retrievals without SIF as an input.**

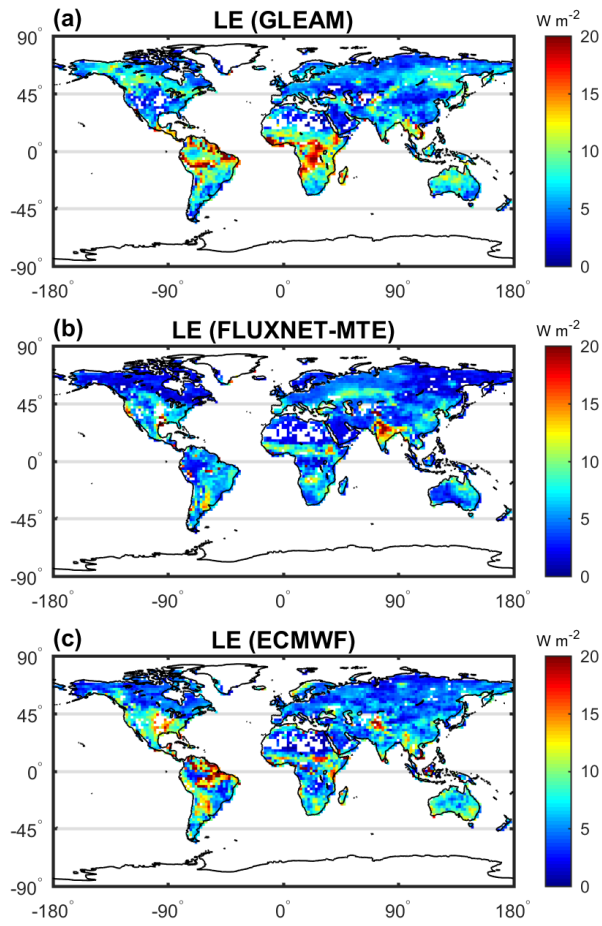


Figure S2: RMSE of LE for each of the three training datasets estimated by Triple Collocation (2008-2010).

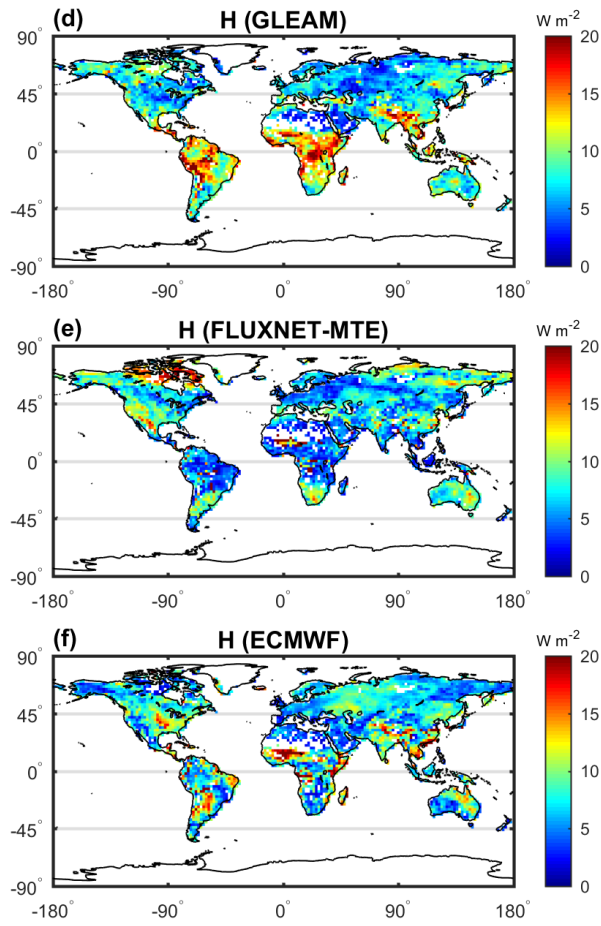


Figure S3: Similar to Figure S1 for H.

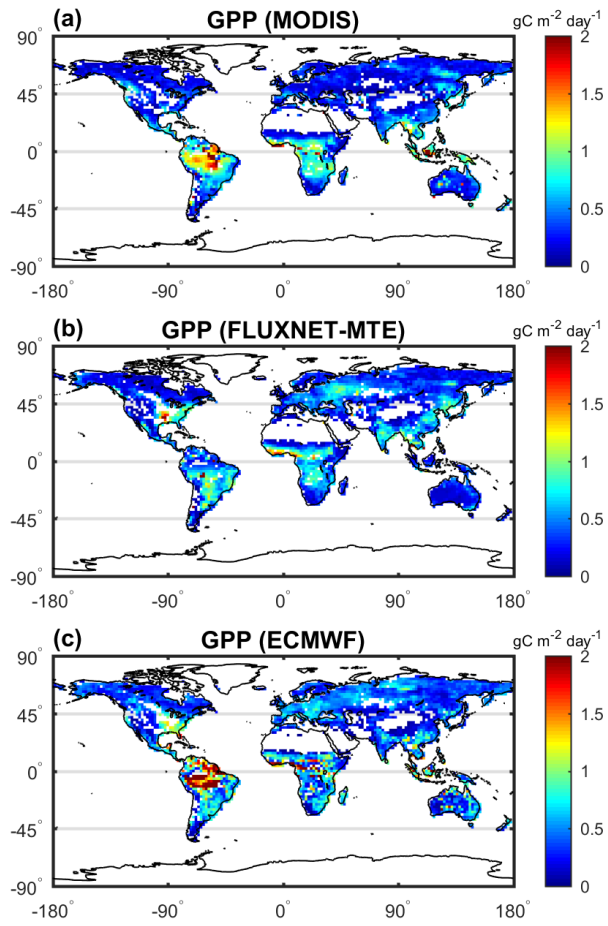


Figure S4: Similar to Figure S1 for GPP.