

Collaborative Research: MSA: RUI: Development and validation of a continuous soil respiration product at core terrestrial NEON sites

NSF# 2017829

"The Z Team"



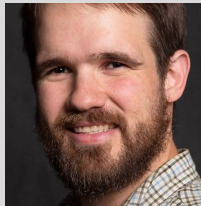
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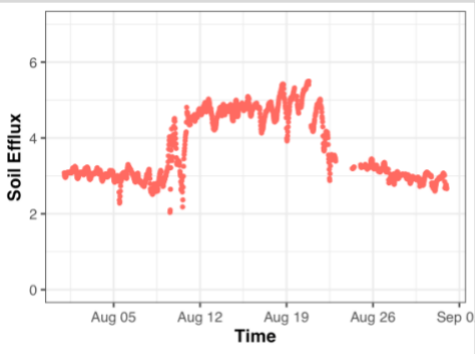


Overview

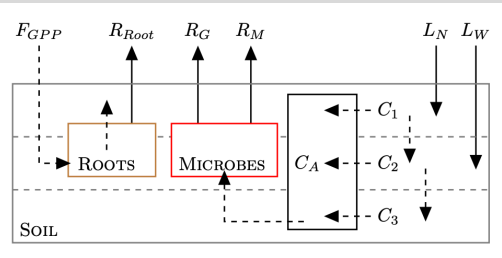
- We will **develop and validate** models for soil CO₂ flux from NEON sites
- We will **lead PUI faculty in a mentoring cohort** to build research capacity and teaching materials

What

Develop and validate a continuous soil CO₂ efflux product at core terrestrial sites



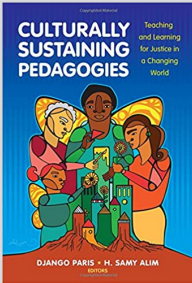
Corroborate soil CO₂ effluxes and parameterize biogeochemical models



Increase the participation of PUI faculty and students engaging with NEON and macrosystems science



Increase faculty capacity for conducting culturally sustaining research training of undergraduates



How

Deploy temporary instrumentation at NEON sites to validate fluxes, develop open-source R package

Benchmark fluxes against the Soil Respiration Database with data assimilation

Support instrumentation grants to PUI faculty in exchange for developing curriculum modules

Conduct professional development in intercultural development theory and practice