

Soil warming  
experiment  
to depth  
data  
integration  
effort

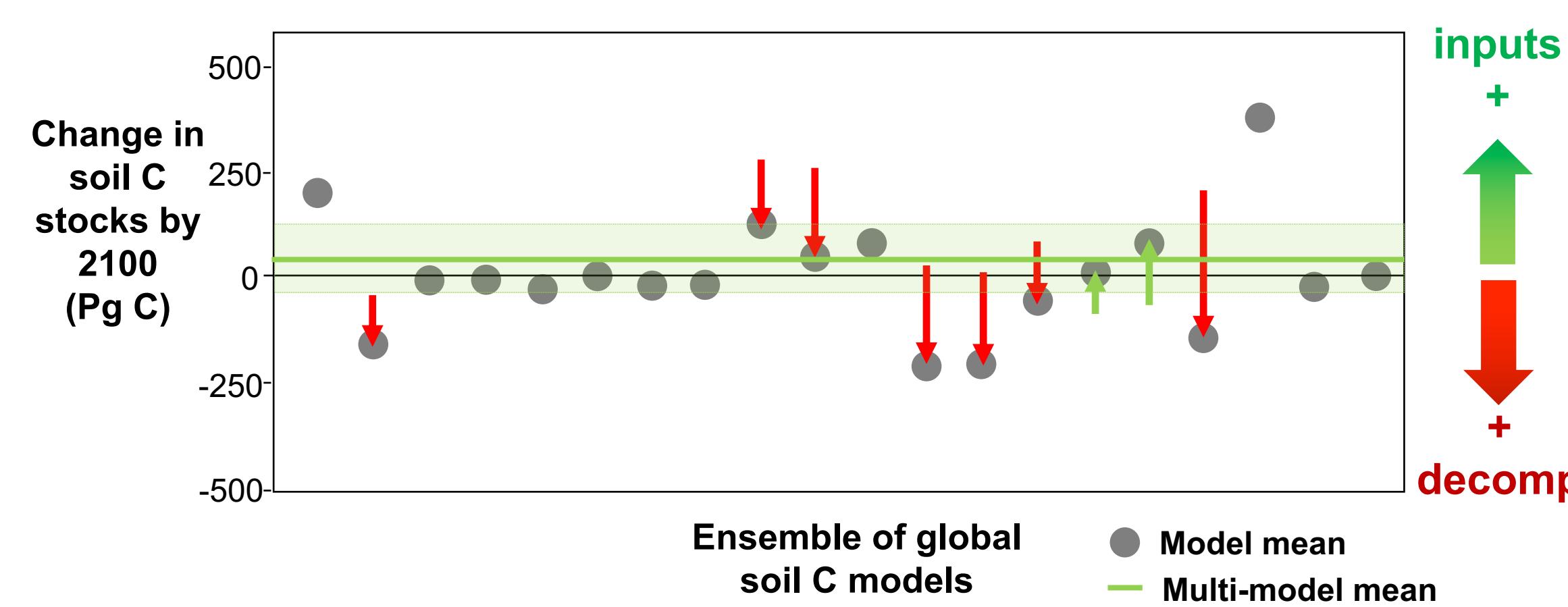
# Is Warming Drying?

*Comparing soil moisture in ecosystem warming experiments worldwide*

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## Background:

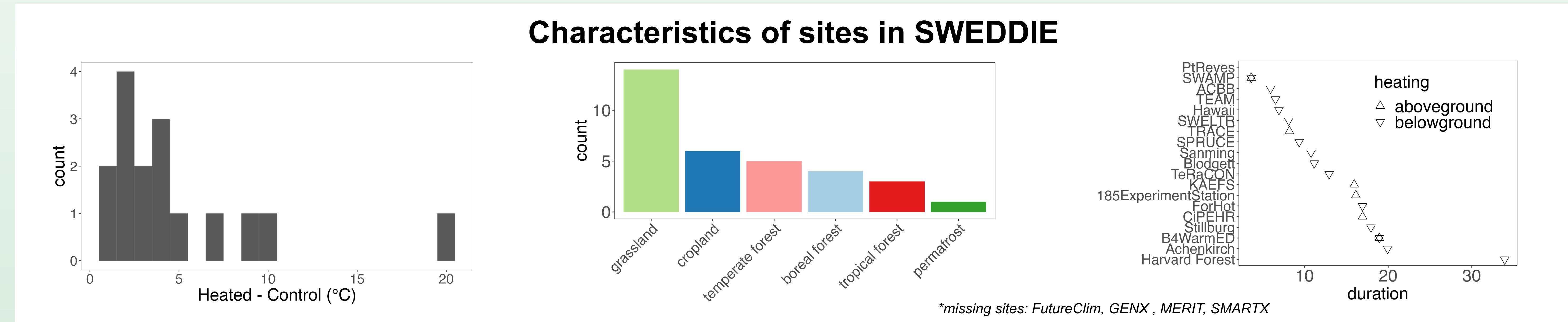
- Q10s derived from soil warming experiments indicate potential losses by 2100<sup>1</sup>



- In addition to temperature, soil C inputs and soil C decomposition rates are also influenced by soil moisture

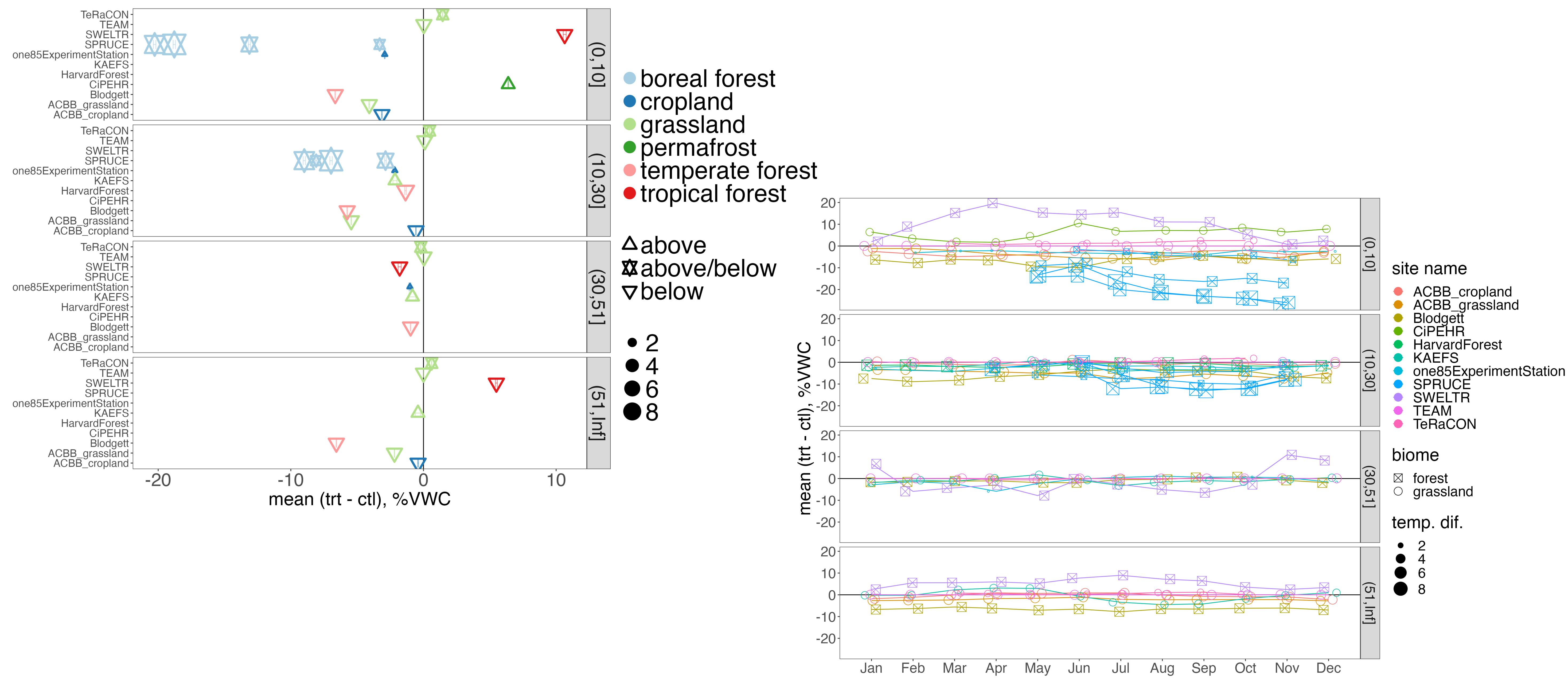
## Questions:

- Under what conditions does warming = drying?
- What are the implications for C stock changes?



\*missing sites: FutureClim, GENX, MERIT, SMARTX

## Overall mean differences in soil moisture (by depth)



## Monthly mean differences in soil moisture (by depth)

## SWEDDIE sites

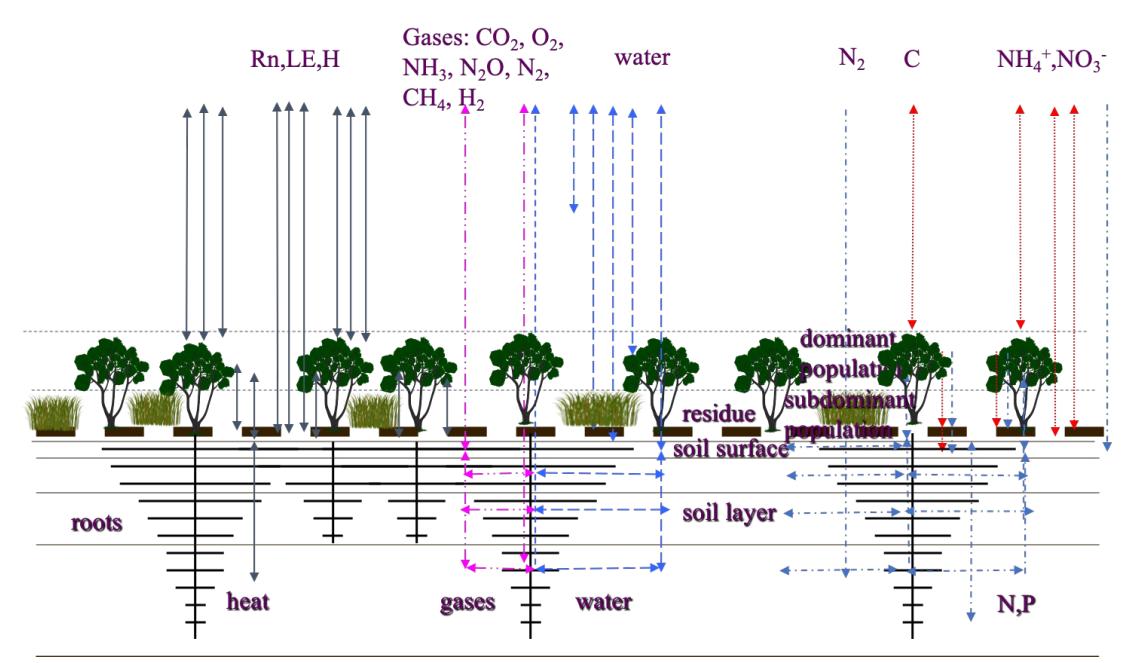


## Adjacent SWEDDIE projects:

- 1) Compare the age and magnitude of heterotrophic and autotrophically respiration CO<sub>2</sub> across sites as a function of depth
- 2) Acquire additional data to use sites for benchmarking ecosys model (post doc Lei Zhang at LBL)



measuring <sup>14</sup>C-CO<sub>2</sub> eco at Blodgett forest (to be combined with depth-resolved incubation data)



ecosys model schematic

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