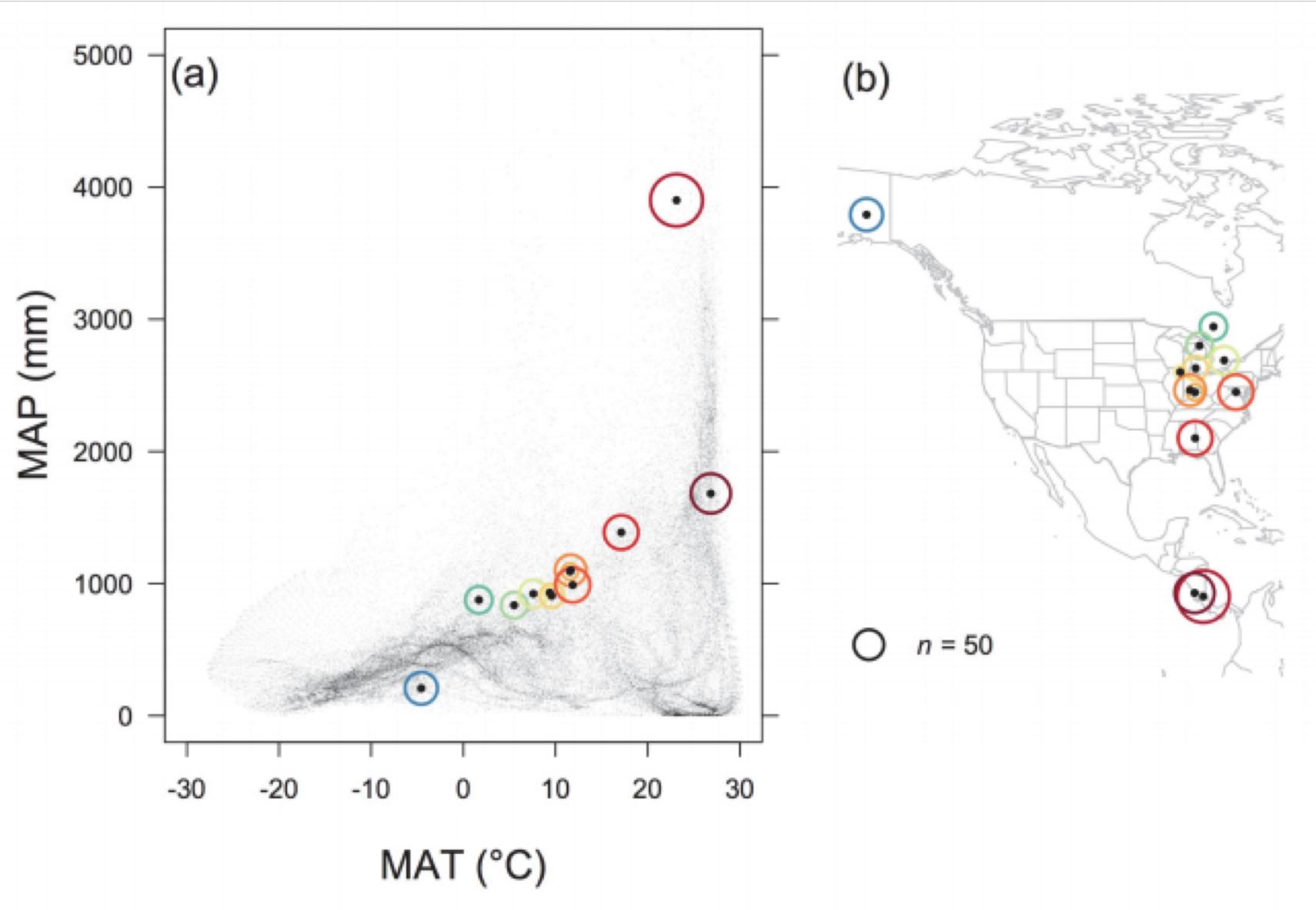


Drivers of Leaf Carbon Exchange Capacity Across Biomes at the Continental Scale

Smith and Dukes (2018)

Ecology

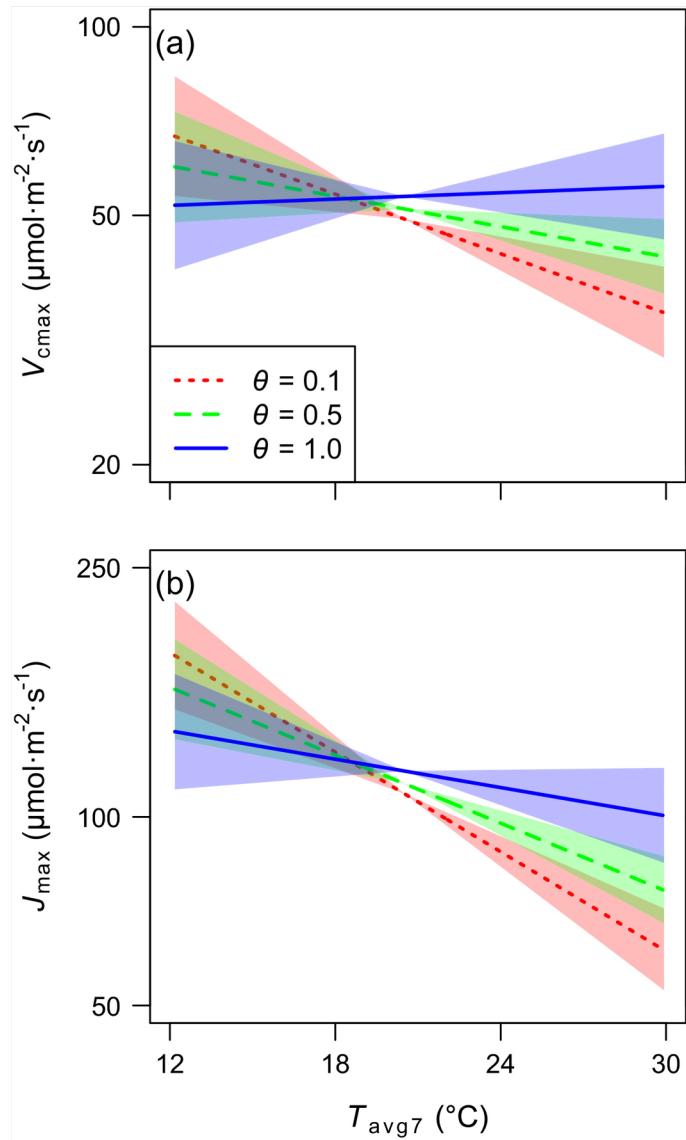


<u>Traits</u>
- V_{cmax}
- J_{max}
- R_d
- LMA
- Leaf N
- LWP
- Height
- DBH
- Life history

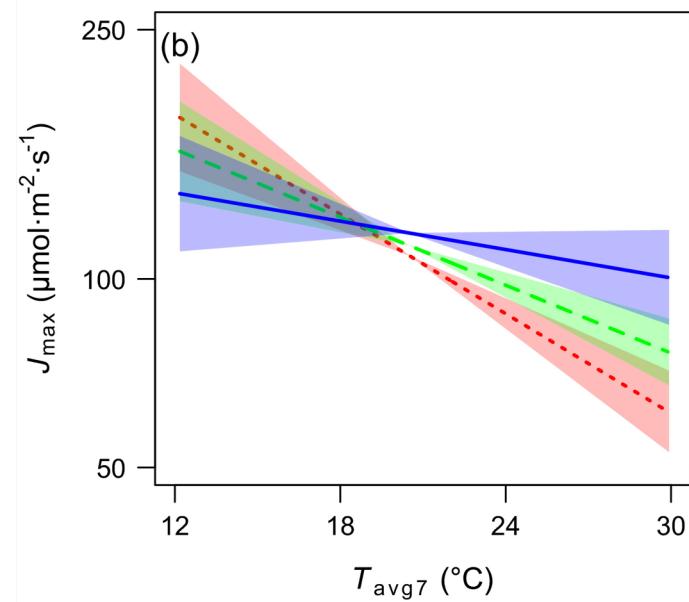
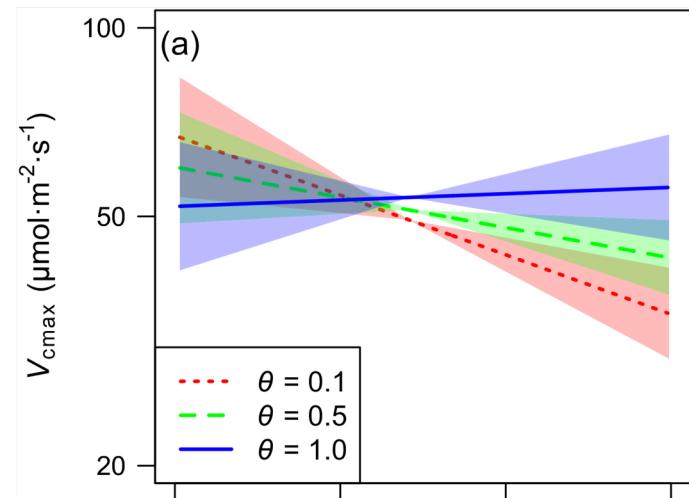


Questions on methodology?

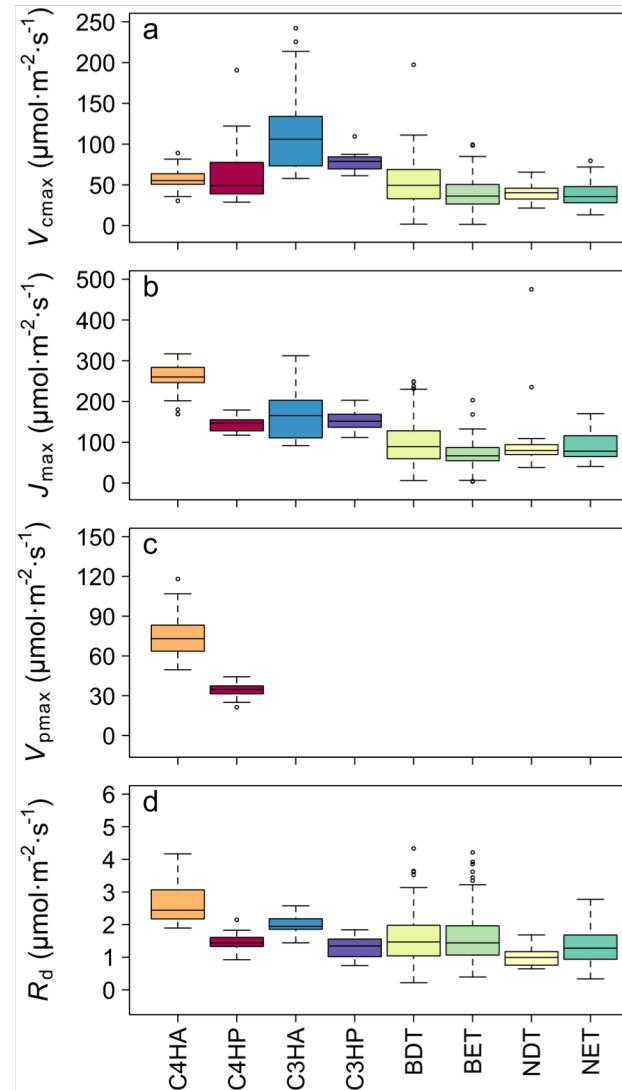
Dry/wet conditions reduce photosynthetic capacity...



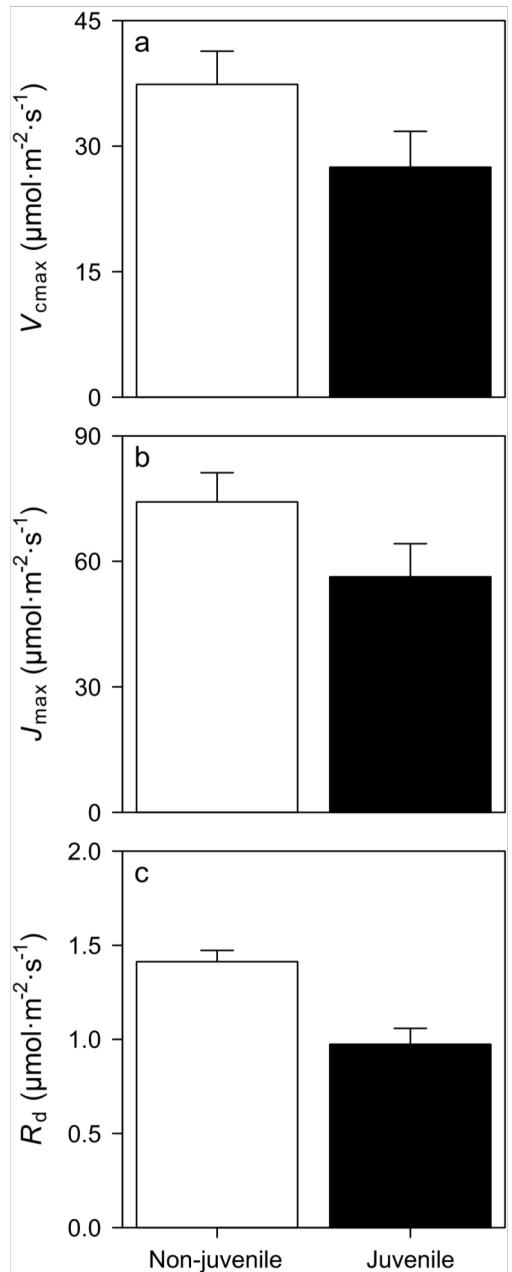
...and plants are responding quickly



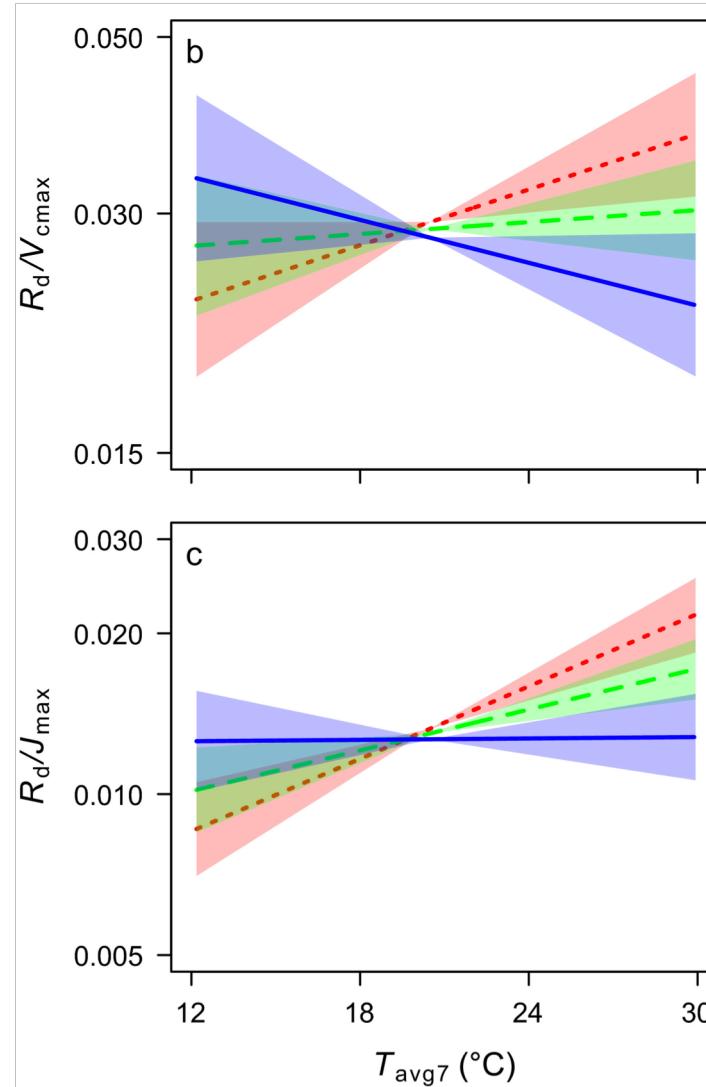
Fast plant types tend to have faster traits



Juveniles are slower than adults



Hot dry conditions reduce net carbon gain



Any other big takeaways?

Where in the world would you expect the most photosynthesis?

Does this vary over time?

How will photosynthesis change
in the future?