Distributed Land Site-Test: K83, Brazil

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From this

Atmosphere

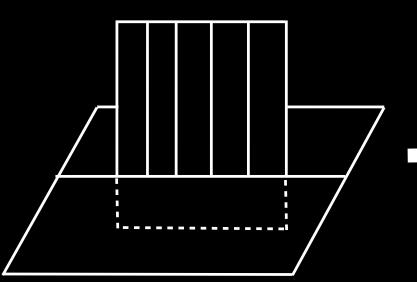
(Harper et al., 2010)

Land

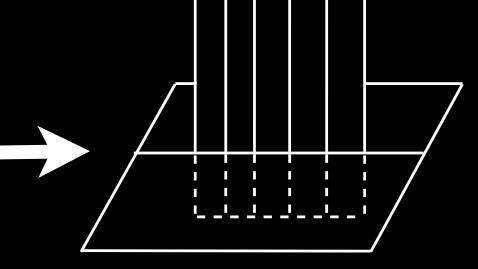
Superparameterized
Single Column
Model (Super-SCM)



To this



To this

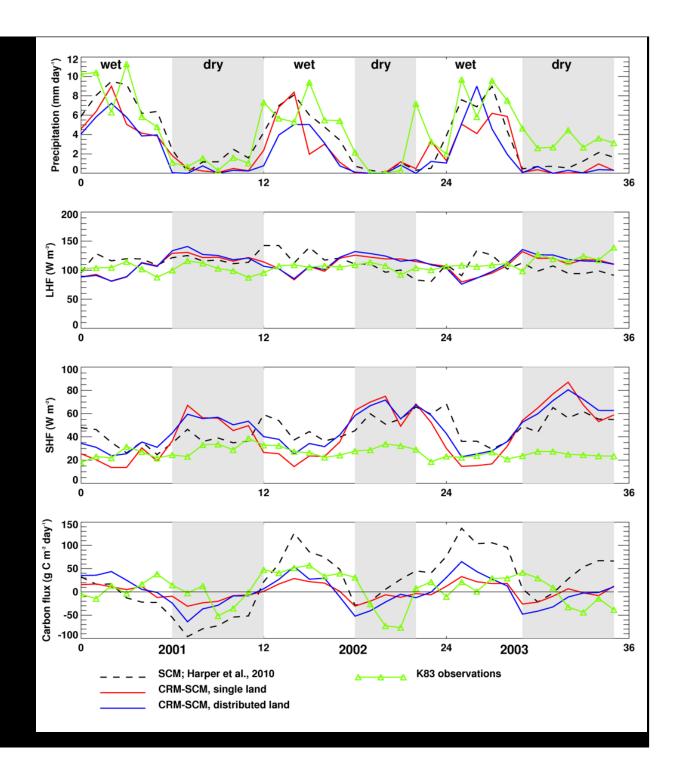


What kinds of changes are we looking for?

- Bowen Ratio/evaporation components
- Precipitation
- Carbon Flux
- Diurnal cycle NEXT!

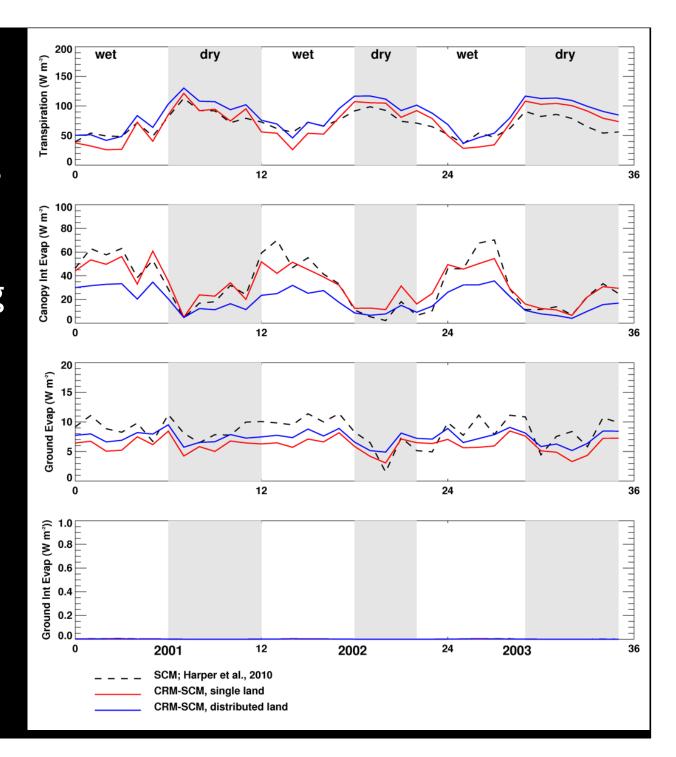
The BASICS

 Had to use some proxies for LHF/SHF



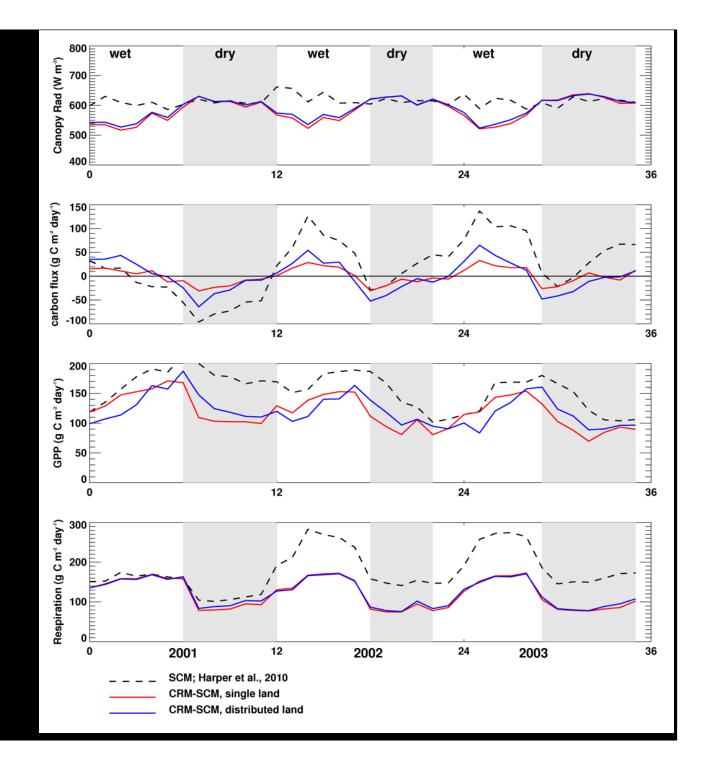
Evaporation Components

- repartitioning away from ECI with distributed land
- ground evap always small



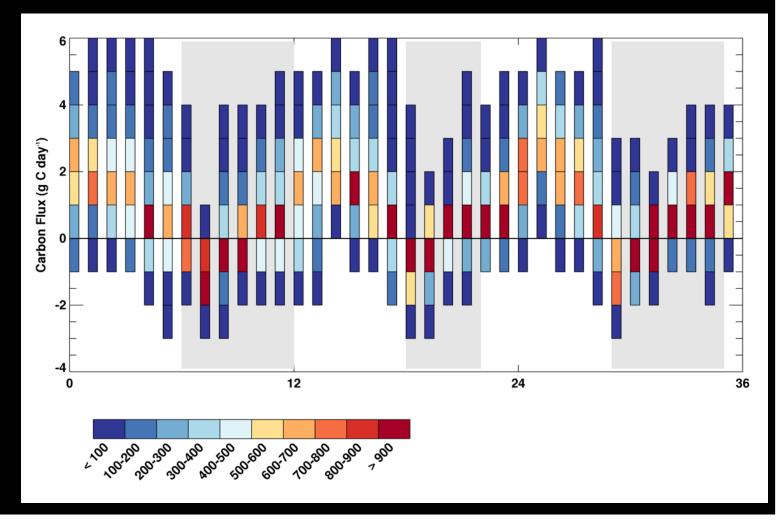
Carbon Cycle

- SCM shows no annual cycle in canopy rad
- SCM has largest amplitude carbon cycle
- CRM-SCM single land has lowestamplitude carbon flux; why?



Carbon Cycle

- Monthly-mean daily carbon flux, SCM-CRM distributed land
- Heterogeneity of response; on a monthly basis, there is uptake/efflux from a fraction of the GCM gridcell



What about the atmosphere?

 Initial runs do not have very many atmospheric diagnostics, and what we have does not overlap with the diagnostics saved by Harper et al. (2010)

NEXT:

- Re-run SCM-CRM single and distributed land to obtain atmospheric diagnostics aligned with Harper et al. (2010)
- Diurnal composites (hourly output)