

Sam-SiB3 Coupling

Land Surface Interactions Breakout

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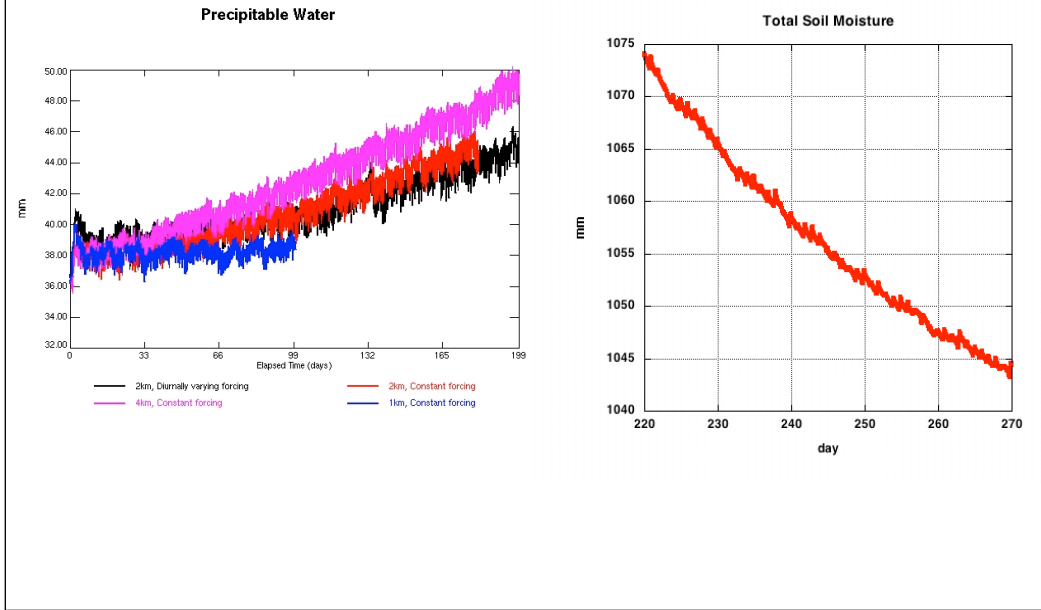
Variability in SAM/SiB3

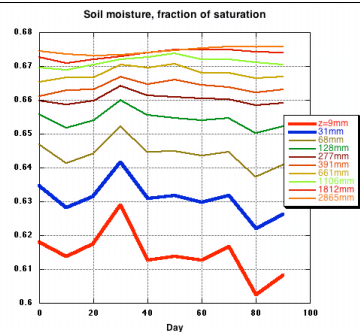
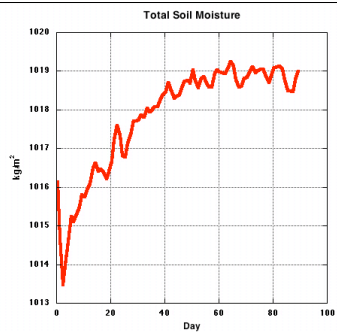
- Homogeneous biome, elevation and plant and soil physiological parameters
- Heterogenous prognostic variables - each cell has its own history of temperature, moisture, etc. depending on the atmospheric forcing.

Endless Summer Experiments

- Purpose: examine the diurnal cycle of a mid-latitude, summer land site.
- Time-mean forcing prepared using ARM-SGP July IOP data and applied perpetually.
- Domain size 256km x 256km, 4km, 2km, 1km and 0.5km resolutions

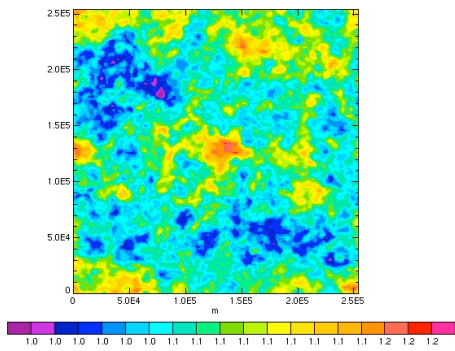
Adjustment





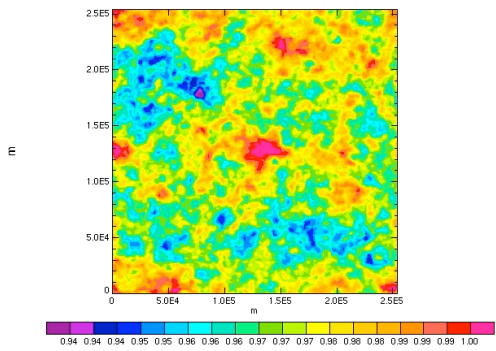
5,2010

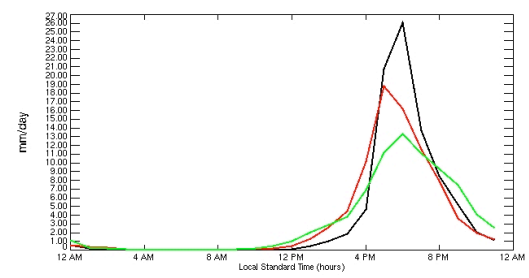
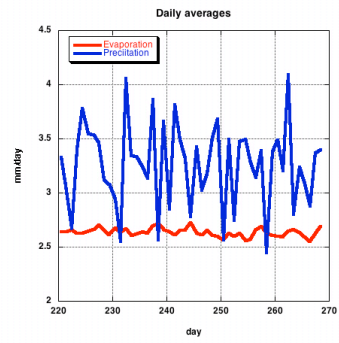
Total Soil Water (time average)
kg/m² times 1.0e+03



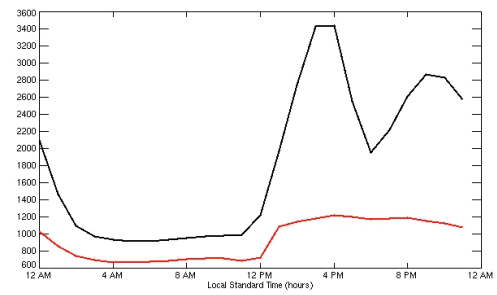
Jan 12, 2010

Soil Moisture Stress Factor (time average)

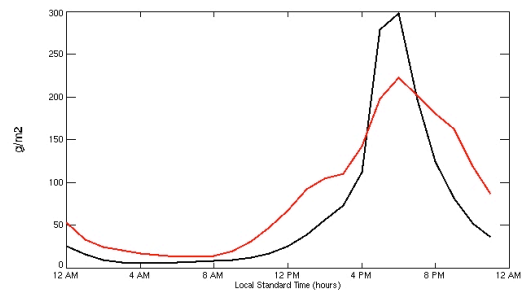




CAPE - Diurnal composite

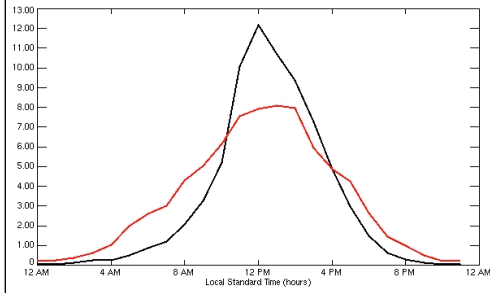


Ice Water Path - Diurnal composite



Homogenous Radiation

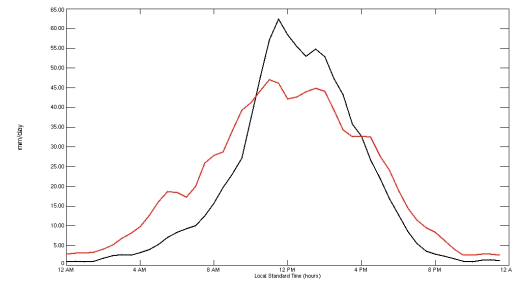
Surface Precipitation - Diurnal composite



Control, mean = 3.08 Homogeneous Radiation, mean=3.26

04/16/2011

Surface Precip. Rate spatial std. dev - Diurnal composite



Control Homogeneous Radiation

