



Evaluating CABLE for simulating latent heat fluxes

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CABLE meeting May 2015





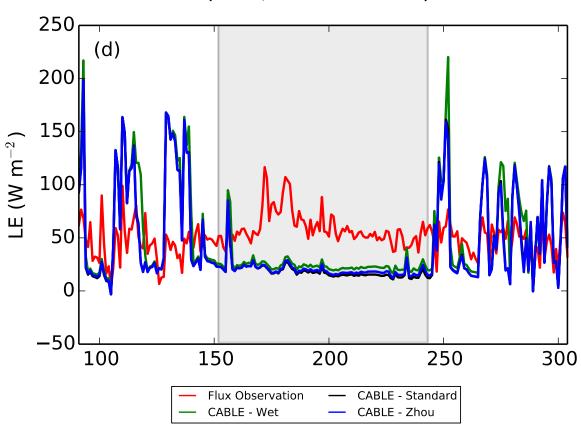




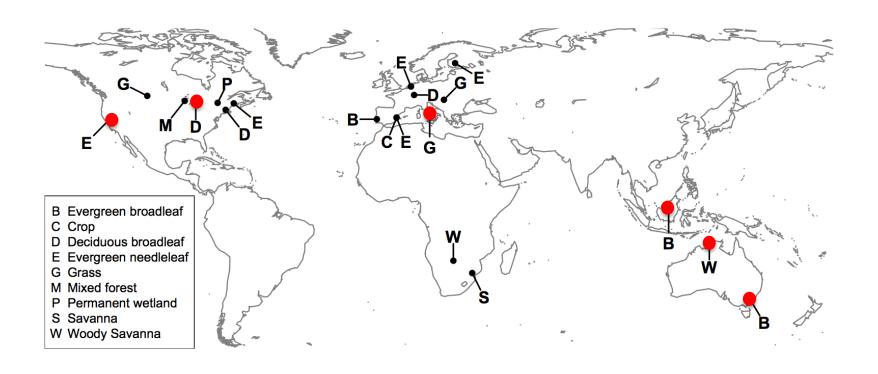


Motivation

El Saler during European drought 2003 (Zhou, de Kauwe et al.)



20 PLUMBER flux sites



Best et al. (2015), The plumbing of land surface models: benchmarking model performance

Ensembles

Default **Hydrology** Mark's Sandy Soil Clayey Leuning **Gs scheme** Medlyn Min **Leaf Area Index** Centre Max Slope (new hydro)

Soil parameters

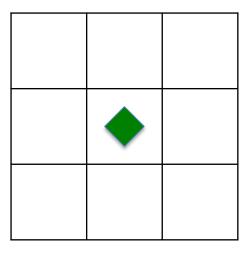
	1	2	3	4	5	6	7	8	9
Silt fraction	0.08	0.33	0.17	0.20	0.06	0.25	0.15	0.70	0.33
Clay fraction	0.09	0.30	0.67	0.20	0.42	0.48	0.27	0.17	0.30
Sand fraction	0.83	0.37	0.16	0.60	0.52	0.27	0.58	0.13	0.37

Swilt, Sfc, Ssat, Bch Hyds, Sucs, Rhosoil, Css

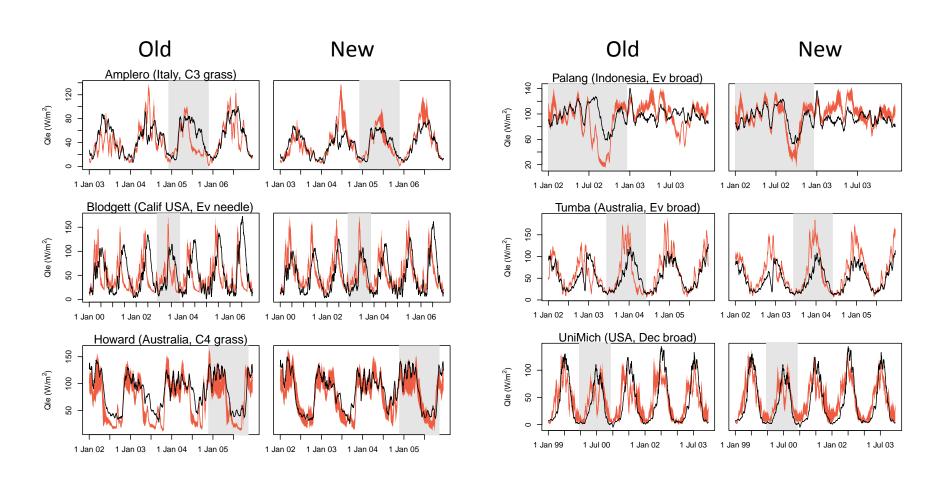
Leaf Area Index

MODIS 1km data

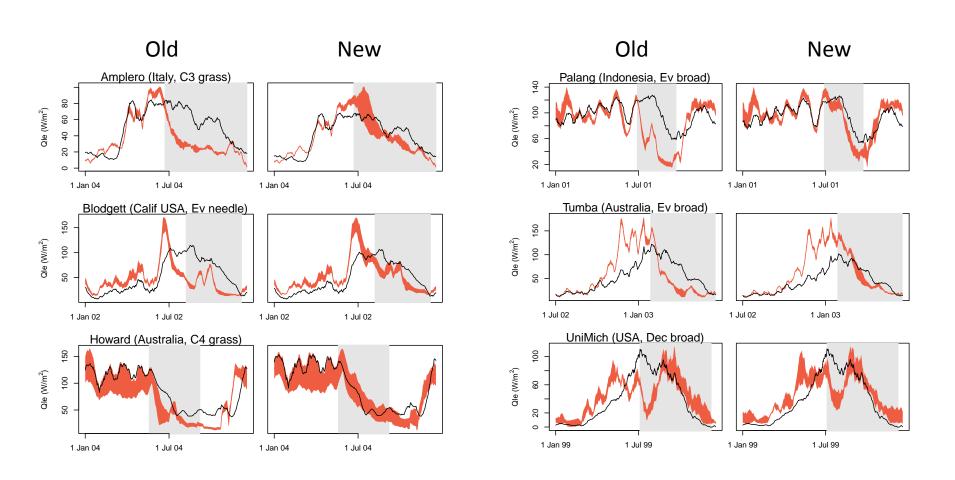
- Centre
- Min
- Max
- Monthly time series where available, climatology otherwise



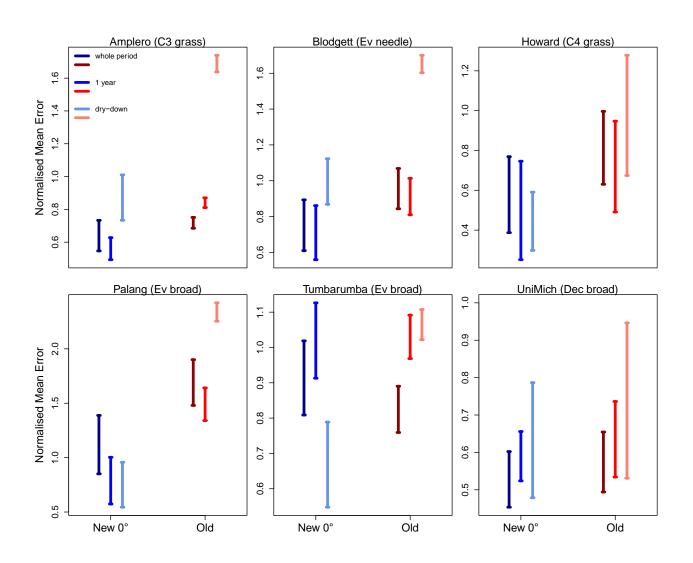
Old vs. new hydrology



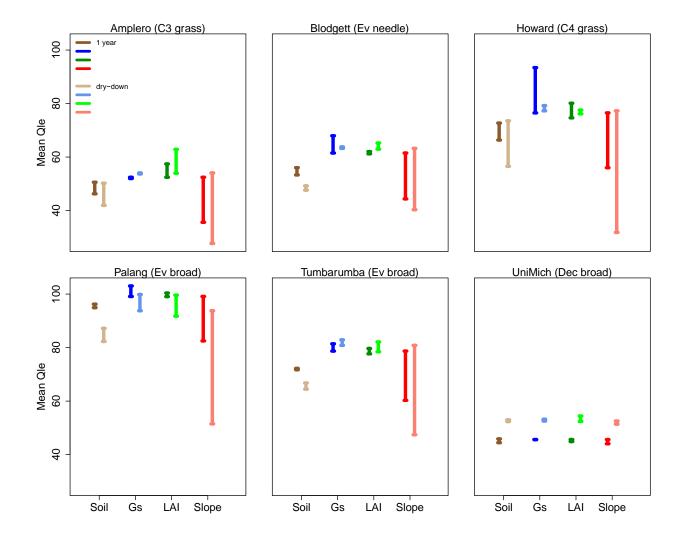
Dry-down periods



Comparison to obs



Effect of soil, gs, LAI and slope



Some issues...

Soil E peaks early

