CABLE annual workshop: Dec 3rd 2014

Pre-workshop tasks

1. CABLE deficiencies and potential solutions

In this session we want to explore what CABLE deficiencies are common across a variety of applications, where different deficiencies may be linked and what could be done to mitigate any of the problems.

As input to the session, we would like everyone to submit a single slide highlighting a CABLE deficiency, i.e. a component of CABLE that you believe does not perform as well as comparable models or as well as needed for your application. Please include a short description of the problem and, if helpful, a figure showing how the problem manifests in your application. Both science and technical deficiencies are welcome as input. Please name your slide CABLEproblem_Surname (ppt or pdf) and email to rachel.law@csiro.au.

Following presentation of these slides, we will form groups around common or linked deficiencies to discuss potential model improvements and how these could be implemented and tested.

2. CABLE benchmarking

This session will be dedicated to finding benchmark tests for CABLE. That is, when we make changes to the CABLE code, what kinds of tests should we always perform to assess whether the changes are useful and don't have a negative impact on CABLE's existing applications and abilities?

To do this, we are asking everyone to submit a single slide on one or two (favourite) CABLE evaluation tests. When you use CABLE, what kinds of tests do you perform to check it is running correctly and to make sure it's giving sensible answers? These tests might be very simple or elaborate, be at a single site or involve global evaluation - it doesn't matter. We would like to know which observed / forcing data sets you use to do this (if any), and what kind of metrics you use (e.g. RMSE, Australian maps at 0.5x0.5 degree of mean evapotranspiration, site-based water use efficiency). Your slide can contain images, a list, or whatever you think is appropriate. Please name your slide CABLEtest_Surname (ppt or pdf), and send it to Gab (gabsun@gmail.com / gabriel@unsw.edu.au).

Once we have a sense of the spectrum of testing that we currently do as a community, we will split into research areas to try to formulate a few key tests that we would like to see in a CABLE benchmarking suite – with the aim that these benchmarks would span process, regional and global scales at a range of timescales where appropriate. A mapping of the range of CABLE users' interests can be found at https://trac.nci.org.au/trac/cable/wiki/CableCommunity).