CABLE workshop

3rd December 2014, 10AM-4PM
Hales room in Jaeger 7 building on Mills Road, part of the Research School of Earth Sciences, ANU, Canberra
By video: CSIRO Aspendale, Chief's conference room (AM), Lecture theatre (PM)

10.00 Gather and coffee

10.15 Welcome and CABLE year in review (Rachel Law)

10.25 A few thoughts on CABLE (Ying-Ping Wang)

10.40 CABLE for ACCESS-NWP (Huqiang Zhang)

10.55 Proposed changes to CABLE + some bug fixes worth knowing about (Bernard Pak)

11.05 CABLE and the PLUMBER experiment: results and possible causes (Gab Abramowitz)

11.20 CABLE deficiencies (Individuals to speak **very** briefly to submitted slides – 2 min max each)

- Modularity (Jhan Srbinovsky)
- Initialisation (Lauren Stevens)
- Excessive evaporation (and impact in WRF) (Claire Carouge)
- Bias in latent heat flux (Ruth Lorenz)
- Transpiration correction impact on WUE (Vanessa Haverd)
- Diurnal temperature range (Rachel Law)
- CABLE issues for regional climate modelling (Marcus Thatcher)
- Carbon related deficiencies (Ying-Ping Wang)
- Carbon conservation (Rachel Law)

11.50 Discussion to address:

- Are others seeing these problems and in what ways do they manifest?
- What tests are done to define the problem?
- Has anyone thought about a solution for any of these issues?
- Is this something we can take action on now? If, yes, who?

12.30 Lunch – provided. (Create list of those needing a taxi to airport)

13.30 Technical update (Jhan Srbinovsky)

13.45 A model of seasonal to interannual savanna dynamics, based on mechanistic representations of allocation, carbohydrate storage, phenology and tree-grass interactions (Vanessa Haverd)

14.00 A fire model for CABLE (Lars Nieradzik)

14.15 CABLE benchmarking (Slides and discussion: individuals to speak very briefly to submitted slides – 2 min max each)
The aim of this session is to define a (comprehensive?) benchmarking suite for CABLE, seeking consensus on the details (e.g. grid, timestep, period) of tests for different CABLE applications.

- Global scale AMIP:
  Ruth Lorenz - mean seasonal near surface air T, Tmax, Tmin, precip
  Lauren Stevens – UMPLOT tool
  - time correlation, RMSE, SD distributions?
  - space and time resolution?

- Global scale AMIP and offline:
  Ruth Lorenz - mean seasonal ET, radiation
  Vanessa Haverd - global snow cover; forcing issues offline
  Yingping Wang - MPI GPP, MODIS LAI, soil, biomass data, leaf N:P ratio
  Alex Norton - gridded global fluorescence
  - which driving products, space and time resolution?

- Australian continent:
  Claire Carouge - NARCliM grid, WRF
  - mean seasonal near surface air T, Tmax, Tmin, precip, ET, radiation - same products?
  - which driving products, space and time resolution?
  - catchment scale streamflow?

- Point-based:
  Gab Abramowitz - 20 PLUMBER sites; OzFlux suite? Metric tables
  Vanessa Haverd - Leaf-stem allometry

- Technical testing (which of the above tests should be used to check):
  - MPI vs serial - any differences
  - ACCESS forcing vs AMIP - any differences
  - restart vs continuous run

15.45 Summary, action, future meetings

16.00 Finish