JULES summer science meeting
Leeds – 9-10 June 2010

- Welcome!
- Report from the JULES management meeting
- JULES version releases
- Back to the JULES meeting agenda!

JULES management meeting (March 2010)

- Changes to JULES consortium membership
- New research license (hopefully clickable)
- JULES coding standard
- JULES procedure for new development
- Priorities for future model development

Tomorrow's JULES science steering and management meetings

- Changes to JULES consortium membership
- JULES configurations
- JULES role in NERC ESM strategy & JWCRP
- Priorities for future model development
- JULES strategy

JULES versions

- V1.0 – extracted from MOSES, single column only, limited ascii I/O options
- V2.0 – processes unchanged, distributed, more I/O options (binary and limited netCDF for input, binary output), more flexible surface types, prescribed time-varying vegetation properties, more choices of input variables and enhanced diagnostics, automatic spin-up, bug-fixes
- V2.1 (Sep 2009) - re-integrated with the Met Office UM, re-formatted files to use Fortran 90 syntax, new layered snow scheme, implementation of RothC soil carbon when running with TRIFFID, change in linearisation procedure (uses a standard interface to calculate fluxes over land sea and sea-ice), netCDF output, bug-fixes
- V2.1.1/V2.1.2 (Feb 2010) – fixed water conservation bug in new snow scheme related to snow melt, fixed bug related to bare soil evaporation, fixed various control level bugs related to netCDF output and spin-up
  - Known bug in 2.1.2 – there is a known bug in the calculation of rdc (and hence gpp, respiration) in sf_stom. Doug Clark has posted about this bug and a fix for it on the mailing list – the fix will be implemented in v2.2

Plans for v2.2 and v3.0

- V2.2
  - Planned for Autumn 2010
  - ability to run full soil carbon independently of competing vegetation, ozone damage (Stephen Sitch), effect of direct/diffuse radiation on photosynthesis (Lina Mercado), bug-fixes, MORUSES (?)
- V3.0
  - Planned for Spring 2011
  - IMOGEN, complete I/O rewrite (to accommodate IMOGEN) using CF convention for input and output, bug-fixes
  - New model development (?)
- Benchmarking
  - Written in R – able to run with no licences (open source) and view code
  - Generates HTML reports (easily posted to websites)
  - Full suite (FLUXNET and global benchmarks) planned for end of summer