

Interactive comment on “The Met Office Unified Model Global Atmosphere 6.0/6.1 and JULES Global Land 6.0/6.1 configurations” by David Walters et al.

I. Dharssi

I.Dharssi@bom.gov.au

Received and published: 15 August 2016

I very much hope that this paper is published. I would suggest that some details about the ancillaries in Table 1 are not quite correct.

1) Are the GA6 soil properties only using HWSD or are other datasets also used? For the United States region, is the State Soil Geographic Database (Miller and White, 1998) used? Are point observations of soil sand, silt and clay fractions (Batjes, 2009) used?

Batjes, N. H. (2009), Harmonized soil profile data for applications at global and continental scales: updates to the WISE database. Soil Use and Management, 25: 124–

Printer-friendly version

Discussion paper



127. doi: 10.1111/j.1475-2743.2009.00202.x

Miller, D. and White, R.: A conterminous United States multilayer soil characteristics dataset for regional climate and hydrology modeling, *Earth Interactions*, 2, 1–26, doi:10.1175/1087-3562(1998)002<0001:ACUSMS>2.3.CO;2, 1998.

2) Is canopy height based on MODIS data as suggested in Table 1 or is it based on IGBP landcover?

3) For the "Urban Canopy" perhaps it would be worth also referencing Best et al (2006) which shows some limitations with the simple scheme. As well as mentioning the MORUSES scheme which is used in the convective scale versions of the Unified Model (Porson et al, 2010).

Best, M. J., C. S. B. Grimmond, and Maria Gabriella Villani. "Evaluation of the urban tile in MOSES using surface energy balance observations." *Boundary-Layer Meteorology* 118.3 (2006): 503-525.

Porson, A., Clark, P. A., Harman, I. N., Best, M. J., & Belcher, S. E. (2010). Implementation of a new urban energy budget scheme in the MetUM. Part I: Description and idealized simulations. *Quarterly Journal of the Royal Meteorological Society*, 136(651), 1514-1529.

Interactive comment on Geosci. Model Dev. Discuss., doi:10.5194/gmd-2016-194, 2016.

GMDD

Interactive
comment

Printer-friendly version

Discussion paper

