

Interactive comment on “Implementation of a soil albedo scheme in the CABLEv1.4b land surface model and evaluation against MODIS estimates over Australia” by J. Kala et al.

J. Mao (Referee)

maoj@ornl.gov

Received and published: 2 May 2014

The improvement and evaluation of the albedo scheme in the land surface model and the earth system model are very important in terms of the significant impact of albedo on the energy, water and even carbon fluxes within the atmosphere-vegetation-soil system. The topic of this paper is interesting and important not just to the CABLE community but also to other land surface modelers. It is generally well organized and clearly demonstrated. So, the reviewer suggests the acceptance of this paper after addressing the following minor questions:

1. For the albedo related study, I don't see the necessity for the authors to evaluate CA-

C476

BLE's capability in reproducing the energy fluxes at the two FLUXNET sites. This topic would be worth writing another paper that systematically evaluates CABLE's performance against more towers and observation-based large-scale estimations of energy budget and partitioning over the Australia. 2. For the Figures 4, 5, 7 and 8, it would be useful to know whether those differences are significant or not.

Interactive comment on Geosci. Model Dev. Discuss., 7, 1671, 2014.