

Multiscale assimilation of remote sensing data into land surface models

V. R. N. Pauwels^a

^a *Monash University, Department of Civil Engineering, Clayton campus, Vic., Australia*

Email: valentijn.pauwels@monash.edu

Abstract: The merging of land surface model results with remote sensing data is commonly known to be the best way to improve the predictions of these models. A wealth remote sensing data is available for this purpose, with a number of satellite missions to be launched in the relatively near future. All these satellite products are available at a range of spatial resolutions. Consequently, the mismatch between the spatial resolution of the model and the remote sensing data needs to be correctly accounted for. This presentation will first provide a short overview of the most straightforward way to achieve this, and will then demonstrate this methodology in a case study in the Murray-Darling basin.

Keywords: *Land surface models, remote sensing, merging, spatial resolution*