Multiscale assimilation of remote sensing data into land surface models

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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