

Interactive  
Comment

## ***Interactive comment on “Infrared and millimetre-wave scintillometry in the suburban environment – Part 2: Large-area sensible and latent heat fluxes” by H. C. Ward et al.***

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This paper is the second of a two part study. The first part dealing with structure parameters and this paper (the second part) dealing with the important practical question of transforming measured structure parameter values to evaporation (the sum of surface evaporation and evapotranspiration) at footprint scales in phase with land use scales and satellite observations. This is done using optical and radio scintillometry combining one, two and bichromatic wavelength methods over a suburban landscape with seasonal timescales. As such this study is both original and important to the scientific community demonstrating an operation method of observing evaporation at this impor-

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tant land use scale. Furthermore the authors discuss in detail potential advantages and short comings of the method allowing the reader to evaluate its potential for their use.

Here are a couple of comments:

P11233 line 23 I think you can add the bichromatic method along with the two-wavelength method. P11234 lines 26 and 27 Why if saturation is a problem it possible to have Sensible Heat values on some days that are higher than the 'saturation limit' ? P11236 line 15 large-scale circulations. It is probable that the scintillometry 'sees' more large scale eddies on its path. It is perhaps useful to mention this.

A comment to finish the transformation from structure parameter to flux, especially for water, is probably the weak link.

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Interactive comment on Atmos. Meas. Tech. Discuss., 7, 11221, 2014.

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