

## ***Interactive comment on “In-situ air temperature and humidity measurements over diverse landcovers in Greenbelt, MD Nov. 2013–Nov. 2015” by Mark L. Carroll et al.***

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The authors would like to thank the reviewer for their thoughtful and detailed comments. Specific responses below:

1) a better description of the exact location of sensors on surfaces is needed Agreed, we will revise the document to include a more precise description of the location of the instruments. Specific care was taken with regards to locating the sensors away from the edges of surfaces and exhaust vents for HVAC but this was not made clear in the document. We will add specific descriptions of this to aid the user in understanding how to use the data.

C1

2) more description of the weather station is needed Agreed, additional detail will be added to clarify the instrumentation, location and citations for the BARC weather data.

3) overall concern that the analysis isn't showing UHI because of methodological concerns This paper is a review of a dataset not a full-blown analysis of the UHI concept or the presence/absence of UHI at GSFC-Greenbelt. We state in the text that the data could be used for "validation of satellite data or impact of variable surface types on heating". These are just a few potential uses for the data and it would really be up to the end user to decide the suitability of the data for their intended analysis. The concerns raised by the reviewer would be fully Germain for a science analysis of the data, but that is not what we have done here. The stated purpose of this paper is to make the data available to the science user community and to provide enough information for those scientists to use the data effectively. We clearly need to add some additional description about the collection of the data (e.g. comments 1 and 2 from this review and also comments from another reviewer) and we will revise the text (lines 76 - 79) which contain language that implies this is explicitly a UHI study and may have caused confusion.

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