Earth Syst. Sci. Data Discuss.,
doi:10.5194/essd-2017-14-RC2, 2017

Open Access Earth System Science Data Discussions

Interactive comment on "The MUMBA campaign: measurements of urban, marine and biogenic air" *by* Clare Paton-Walsh et al.

Anonymous Referee #2

Received and published: 4 April 2017

THE MUMBA CAMPAIGN: MEASUREMENTS OF URBAN, MARINE AND BIOGENIC AIR by Paton-Walsh et al.

The manuscript submitted by Paton-Walsh et al. describes a dataset for MUMBA campaign, which took place in a small coastal city in Australia, with the goal to provide information on atmospheric composition changes under the influences of marine air or urban and biogenic emissions.The dataset contains time series related to particles, atmospheric trace gases, speciated VOCs, radon and meteorological parameters. What makes it most interesting is that campaign captured two extreme heat events and a period when the site was under the influence of clean marine air. The provided dataset can be used for testing the chemical transport models, but not only. Present paper also introduces the future ones focused on specific issues mentioned in the Summary and Conclusion section.

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Discussion paper

The manuscript is logically structured and provides a good overview of the available information gathered during the measurement campaign. It is a well-written data description paper. Abstract is a good representation of the main text, the instrumentation is presented in necessary detail, the experimental methods are currently used in the field, enough explained and with references when it was necessary. The accuracy of the resulting dataset appears to be adequate. The data files are indeed public, easily accessible (under Creative Commons Attribution License) in many formats and the Summary and Conclusion section of the manuscript mentions clearly that MUMBA data is free to the scientific community.

I recommend publication of this work, subject to the very few minor comments:

1. The authors should give more details on pollution sources in the metropolitan area in Section 2.

2. The authors state their MUMBA campaign period runs from 21st December 2012 to 15th February 2013. However, the dataset on PM2.5 indicates data from 24-25 January to 15 February; carbonyls - only in February 2013; CN/CCN – from 16/15 January to 15 February; carbon fractions – from 22 January to 15 February... Although the authors indicate this in Table 1 and make a short statement in Section 3, it is not easy for reader to get a clear image of the different periods associated to the various measured parameter. I think a more elaborate explanation of these discrepancies should be added in Section 3. There are some negative values in the data set that should be also explained.

3. Page 6, line 21: please, replace "all times are reported in. . ." with "all measurements are reported in. . ."

4. Page 11, line 4 and line 15: please, replace "diel cycles" with "diurnal cycles".

Interactive comment on Earth Syst. Sci. Data Discuss., doi:10.5194/essd-2017-14, 2017.