

Interactive comment on “Modeling air pollution in Lebanon: evaluation at a suburban site in Beirut” by A. Waked et al.

Anonymous Referee #1

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This is a work of air quality modelling over the city of Beirut and the Lebanon. The modelling system used represents the state of the art. The explanation of the methodology used is clear and accurate, is well described. It is a correct analysis of the performance evaluation of NWP and CTM models used.

Essentially there are several points to make:

1. The title should contain that has been studied only a summer situation. This should be corrected. 2. The weather situation should be explained in more detail. 3. The comparison of results is made, in a meaningful way, on the work of Matthias et al 2008, referred essentially as described in the manuscript is the area North Sea coastal region. That has characteristics for climate and topography/terrain very different of the coast under study in the East Mediterranean, would be much more convenient

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comparison with other studies done on the coast of Israel, and also the contrast to the eastern coast of the Iberian peninsula. 4. It would also be desirable, it would have been an analysis of the model results in vertical, especially take in consideration the recirculation mesoscale processes due to land-sea breezes and land-sea. They have been widely studied in the Mediterranean coasts, and its association with air pollution problems. 5. The additional material is not necessary, since it is only the numerical definition of statistical indicators used, and are abundantly described in the literature.

Minor comment:

1 Introduction The Middle East region is characterized by a diverse landscape including elevated terrain, semi-arid and Saharan deserts OUTBREAKS, sea shores and vast plains.

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