

***Interactive comment on “***

**The impact of temperature changes on summer  
time ozone and its' precursors in the Eastern  
Mediterranean” by U. Im et al.**

**U. Im et al.**

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We thank both reviewers for the careful reading and the valuable comments that helped significantly improving our paper. All suggested English, typographic corrections as well as presentation changes and further interpretation of our results have been performed for the revised version of the manuscript.

The specific comments of the reviewers have been addressed as detailed in the short comments published by Ulas Im on the behalf of all co-authors.

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We have improved the introduction and all parts suggested by the reviewers. The model description has been further developed, in particular with regard to the vertical resolution of the model. Additional references are now provided for both the global model providing the lateral boundaries for the mesoscale simulations and the mesoscale model. Figures of the spatial and temporal variability of the boundary layer over the region and the location of the observational stations are now included in supplementary material. In the supplement, Table S1 compares deposition velocity of ozone, soil temperature, soil moisture and wind speed at FIN and the domain-averaged cloud fractions for the different scenarios in order to better document the differences between the various studied scenarios.

Finally, figure and table captions have been complemented for clarity when necessary; Figure 6 and 7 have been improved as suggested by the reviewers, the order of panels in Figure 4 has been corrected; Table 2 has been complemented with the correlations between model results and the hourly observations of ozone and isoprene as suggested by the reviewers.

Please also note the supplement to this comment:

[http://www.atmos-chem-phys-discuss.net/11/C1639/2011/acpd-11-C1639-2011-  
supplement.pdf](http://www.atmos-chem-phys-discuss.net/11/C1639/2011/acpd-11-C1639-2011-supplement.pdf)

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