

Interactive comment on “Spatial, temporal and vertical distribution of ammonia concentrations over Europe – comparing a static and dynamic approach with WRF-Chem” by M. Werner et al.

A.J. Dore

todo@ceh.ac.uk

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With nitrogen deposition and eutrophication considered as a global concern for natural ecosystems, there is a clear need to better understand the behaviour of ammonia in the atmosphere. This paper is of major significance as it links the emissions of ammonia to a dynamic meteorological simulation and allows representation of the high sensitivity of emissions to temperature. Inclusion of such processes in modelling studies is also important for understanding the impact of future climate change on ammonia emissions as well as the controlling role of ammonia in formation of fine particulates which pose a risk to human health. The difference between a static and dynamic rep-

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resentation of ammonia emissions has been carefully presented in this paper, making use of comparison with measurements.

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