Interactive comment on “Particle number concentrations over Europe in 2030: the role of emissions and new particle formation” by L. Ahlm et al.

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I’m grateful to Dr. Ahlm for taking the time to reply in detail to the points I raised previously. Regarding the response to ‘Comment 1’ – The statement that “However, the exact year is not the most important issue here, but rather how sensitive atmospheric chemistry and aerosol formation are to the potential emission reductions during the coming two decades” seems somewhat self-contradictory with regard to the reporting of data just from an arbitrary year (2030) as is currently the paper’s focus? A report of the trend (be it a single additional graphic or data table) in the predicted % particle number variation to span 2008-2030 would be more consistent with the quoted statement and in meeting the stated aim of informing air quality/climate policy, whilst also allowing for periodic model validation on a shorter timescale. If the model cannot be shown to be capturing reasonably well the ‘real’ numbers throughout the 20-odd year period, and thereby validate the emissions data, then validation at an arbitrarily chosen long-term single year is less convincing in my opinion.

Interactive comment on Atmos. Chem. Phys. Discuss., 13, 8769, 2013.