Interactive comment on “Time-span and spatial-scale of regional new particle formation events over Finland and Southern Sweden” by T. Hussein et al.

Anonymous Referee #3

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This is an excellent paper, which analyses, in a most thorough and systematical way, the spatial and temporal characteristics of new particle formation. Drawing from a large body of data from five monitoring stations in Finland and Sweden, the authors analyse the occurrence of different classes of nucleation events, origin and extent in time and space. Such knowledge is critically needed, however still very limited. I support publication of this paper almost as is, with only several very minor comments.

Page 136, line 19. “On median” is not a commonly used term.

Page 141, lines 24 to 26. “Fine” used four times. Consider replacing with another word, not only to read better, but also because it could be confusing, since
"fine particles" are usually understood as PM2.5 fraction. This applies to several other palaces in the text.

Page 143, line 19. Replace "visually watching" by "visually inspecting".

Figures 4 to 5 should have locations of the sites marked.

In addition, I think that it would be beneficial to include at the beginning a map showing the locations of all the sites, as well as the main directions of air mass movement, as discussed in the text.

Interactive comment on Atmos. Chem. Phys. Discuss., 9, 135, 2009.