

Interactive comment on “A look at aerosol formation using data mining techniques” by S. Hyvönen et al.

Anonymous Referee #3

Received and published: 30 September 2005

General comment This manuscript is an attempt to find key factors affecting particle formation event at boreal forests by analyzing a large dataset. Authors (1) presented a good example of applying statistical analysis of larger dataset to explain particle formation event (2) found two important parameters related with the event us, relative humidity and condensation sink, and finally (3) derived nucleation probability function in the boreal environment. Overall, this MS is written well and addressed the issue feasibly based on a sound approach. I suggest that this MS is a good addition to the scope of ACP and accept after considering a minor suggestion.

Minor comment Though the cluster analysis did not consider calendar date, each cluster, at least 1, 2, and 3 seem to represent quite well for each season judging from the

Full Screen / Esc

Print Version

Interactive Discussion

Discussion Paper

figure 2. Authors classified 3rd cluster as 'cloudy days', indeed true for mid-year cases, but is it possible that this could be mis-interpreted due to relatively weaker solar radiation during the winter time? Figure 2 shows that some event days in this cluster are grouped in early stage of the year. Though RH is high for 3rd clusters from the figure, larger number of data point during winter time should be justified somehow.

Interactive comment on Atmos. Chem. Phys. Discuss., 5, 7577, 2005.

Full Screen / Esc

Print Version

Interactive Discussion

Discussion Paper