

Major comments:

1. We politely ask to disagree with reviewer #2. In section 3.2 we did list and discuss the growth rates that the reviewer is missing and compare them to other Arctic and subarctic results. After suggestions of reviewer #1 this discussion is widened to include growth rates measured over the North Atlantic.
2. Assuming that reviewer # 2 means global radiation with the acronym GR and condensation sink with the acronym CS we fail to see substantial additional value in a scatter plot of formation rates at 10 nm rates versus CS/GR, in particular since much of the data set does not include particles smaller than 10 nm.
3. We feel comfortable with our definition of PCT-events, (which reviewer #2 did not object to). From our data one cannot make any statements about a “lack of growth” because we have no information on any growth processes that occurred before the particles reached diameters that we could sense with our instruments.
4. We are most grateful for the information about NPF-events in Australian Eucalyptus forests comparable to our MEV-events and included three related “Suni papers” in our discussion of MEV-events with the text “The concurrent appearance of high concentrations at many particle sizes below 60 nm resembles the nocturnal NPF-events analyzed by Suni et al. (2008) in the Australian Eucalyptus forest and simulated in subsequent chamber experiments (Ristovski et al., 2010; Junninen et al., 2008). We emphasize though that the condensing vapors in the Australian NPF-events originating from terrestrial biogenic emission are quite different from the polymer gels implicated in the Arctic MEV-events and originating from the surface microlayer of the ocean.”

Minor comment:

We updated the address of Peter Tunved

Literature

- Junninen, H., Hulkkonen, M., Riipinen, I., Nieminen, T., Hirsikko, A., Suni, T., Boy, M., Lee, S.-H., Vana, M., Tammet, H., Kerminen, V.-M., and Kulmala, M.: Observations on nocturnal growth of atmospheric clusters, *Tellus B*, 60, 365-371, 2008.
- Ristovski, Z. D., Suni, T., Kulmala, M., Boy, M., Meyer, N. K., Duplissy, J., Turnipseed, A., Morawska, L., and Baltensperger, U.: The role of sulphates and organic vapours in growth of newly formed particles in a eucalypt forest, *Atmos. Chem. Phys.*, 10, 2919-2926, 10.5194/acp-10-2919-2010, 2010.
- Suni, T., Kulmala, M., Hirsikko, A., Bergman, T., Laakso, L., Aalto, P. P., Leuning, R., Cleugh, H., Zegelin, S., Hughes, D., van Gorsel, E., Kitchen, M., Vana, M., Hörrak, U., Mirme, S., Mirme, A., Sevanto, S., Twining, J., and Tardos, C.: Formation and characteristics of ions and charged aerosol particles in a native Australian Eucalypt forest, *Atmos. Chem. Phys.*, 8, 129-139, 10.5194/acp-8-129-2008, 2008.