Supplementary Material for the ACP Manuscript, “In situ measurements of aerosols optical properties and number size distributions in a coastal region of Norway”

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S. 1. Scatter plot of particle concentration between 30 and 100 nm as a function of particle concentrations above 100 nm. According to Asmi et al. (2011), the shape of the scatter density contour can be interpreted as a characteristic feature of the station, and comparison of our values (concentrated mainly in a grouping between 100 and 1000 cm$^{-3}$) with their work demonstrates that the data from ALOMAR presents similar behavior to that of the other Nordic stations that they considered. ALOMAR presents an intermediate behavior between Birkenes and Pallas, with the concentration of particles lower than in Birkenes but higher than in Pallas. The shape of the median size distribution is more similar to the shape registered in Birkenes, with the bimodal aspect more clearly defined than in Pallas. On the contrary, the shape of the area with greatest density of points in the scatter plot of $N_{30-100}$ versus $N_{100}$ is more similar to that of Pallas, suggesting cleaner air from the Arctic or Atlantic Oceans, than that on Birkenes.
S. 2. Particle number size distributions measured for the supermicrometer particles. Color scale indicates the number of particles in each size.
References