

Peter Tunved

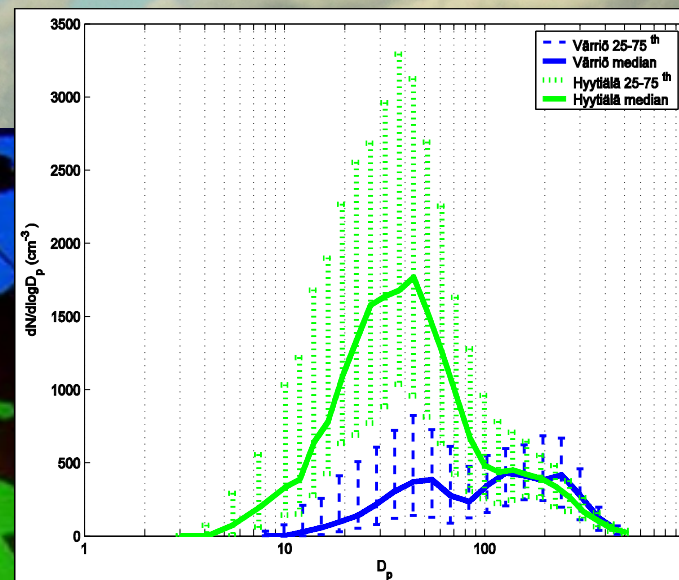
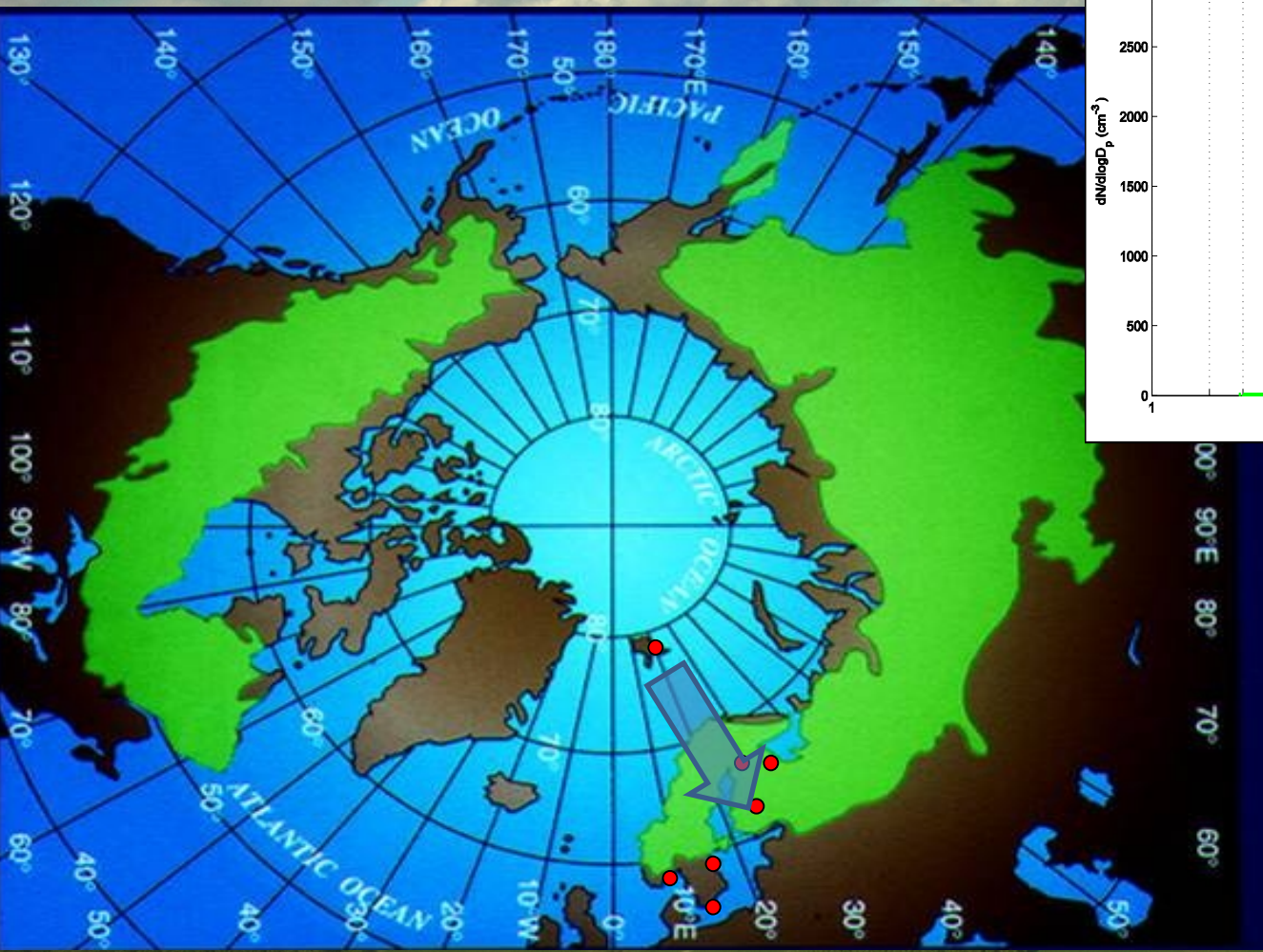
Department of Applied
Environmental Science,
Atmospheric Science Unit

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Main research interests

- ❖ **Regional transport of boundary layer aerosols**
- ❖ **Focus on aerosol properties as observed over the Fenno-Scandinavian boreal forest; formation, aging and deposition**
- ❖ **Extensive network of stations; Nordic long-term measurement sites: DMPS 10(3)-500nm**
- ❖ **Main research question: how much**

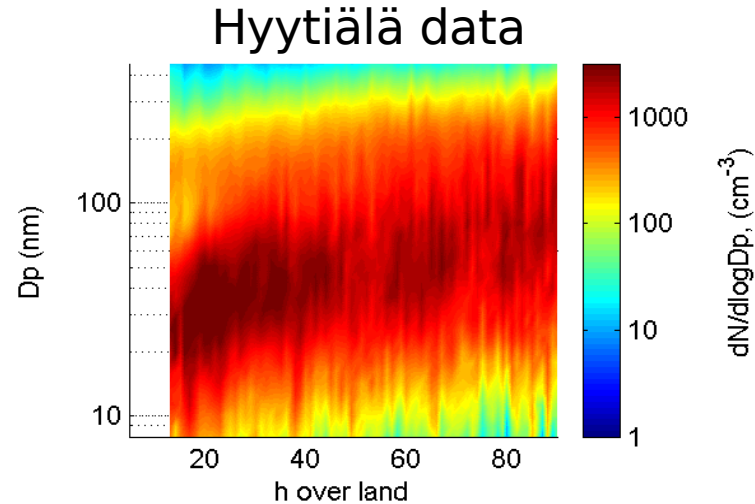
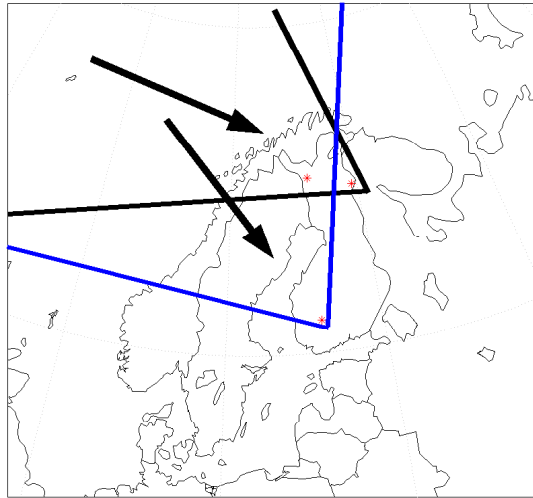
The boreal region

DMPS size distributions at 7 stations in northern Europe



The forest likely a significant source of aerosol number in an environment otherwise devoid of primary sources contributing to the fine particles

The Scandinavian aerosol: The role of biogenic emissions



- The marine-to-continental transition includes a significant change in source profiles
- The condensation growth is shown to be supported by natural emissions of mono-terpenes (or similar substances)
- The boreal forest is capable to establish a typical number concentration of more than 1000 cm^{-3} in a climatic relevant size range (50-100nm)