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Research interests

- global modelling of marine boundary layer aerosol size distribution, composition, CCN properties etc.
 - transport of continental VOCs and SOA particles
 - biogenic oceanic emissions (e.g. isoprene)
- improving SOA description for studies of continental regions

GLOMAP (extension of TOMCAT CTM)

- sectional aerosol size distribution representation + several externally mixed distributions possible
 - SOA description needs to be highly simplified
- currently:
 - monoterpene emissions from GEIA data base (soon also isoprene!)
 - 13% of oxidation products assumed non-volatile → SOA

Wish list

- reliable emission inventories (temperature, radiation, ???)
- simplified schemes that capture the main features of the system
 - yield & removal (lifetime, transport), volatility, hygroscopicity...
- comparisons with other large scale models with bulk SOA: how much detail do we need in our scheme?
- field measurements of SOA – preferably size resolved

Future SOA related plans

- use nested GLOMAP together with Nordic aerosol measurement network to understand dominant processes/sources etc.