

# Atmospheric Aerosol Modelling activities at IEK-8

*Wednesday 21 June 2023 17:00 (1 hour)*

Atmospheric aerosols degrade air quality on regional and global scales and play a significant role in climate change. Depending on their composition, aerosols affect the energy budget of the Earth's atmosphere by scattering and absorbing solar radiation (direct effect) and by influencing the reflective properties of clouds, their lifetime, and precipitation formation (indirect effects). Furthermore, exposure to particulate matter is the most significant environmental cause of human premature mortality. Our modeling activities at the IEK-8: Troposphere, Forschungszentrum Jülich, aim to develop innovative modeling tools for understanding the tropospheric aerosol formation and physicochemical evolution in order to characterize their impact on air quality and climate.

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**Session Classification:** Poster Session

**Track Classification:** Earth system modelling