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Atmospheric composition research with ICON-ART

Wednesday 21 June 2023 14:50 (20 minutes)

This presentation reviews the recent developments in the model system ICON-ART (ICOsahedral Nonhydrostatic model with Aerosols and Reactive Trace gases) with respect to the detailed treatment of emissions, chemistry, aerosol dynamics and aerosol-radiation-cloud interactions from large eddy to global scale. The results show that the ability of the model to precisely simulate cross-scale interactions determines its success or failure in reproducing certain observations. The conclusion focuses on the implications and plans towards seamless atmospheric composition modeling.

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