

# **Constraining the Effects of Composition and Mixing State on CCN Activity**

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## **Abstract:**

Understanding the impact of aerosol size distribution and chemical composition on the concentration of cloud condensation nuclei (CCN) is one of the requirements for quantifying the aerosol indirect effect. This talk will present theoretical and observationally-based approaches used to study this issue. Using global model simulations guided by CCN and aerosol observations from field campaigns, we determine the level of theoretical complexity required to adequately address the aerosol-CCN problem indirect forcing assessments.