

RAL SEMINAR SERIES

Marine or Terrestrial? Unravelling the Sources of Aerosols That Seed Clouds in the Polar Regions

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The polar regions are warming faster than anywhere else on Earth. Aerosols and clouds play a critical role in regulating the surface energy budget; however, the magnitude of their effects is not adequately quantified. Specifically, aerosols called ice nucleating particles (INPs) that initiate cloud ice formation remain understudied. In this presentation, I will report on our recent work focused on characterizing the main sources of Arctic INPs and address the importance of marine versus terrestrial contributions. I will also highlight our current INP studies in the Southern Ocean and Antarctica.