

Recent Advances in Modelling Long-Range Transport of Ozone, Secondary Inorganic Aerosols And Open Biomass Burning Emissions



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[Zoom Link](#) (Mixed-mode)

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Air quality model representations of the formation, transport, and transformation of secondary air pollutants must be frequently updated to keep pace with new discoveries from field and laboratory studies. On the other hand, careful interpretation of model results can lead to new knowledge about these secondary pollutants. In this presentation, I will first discuss our recent work on improving the model representation of light-absorbing organic compounds, commonly called brown carbon, and evaluating their impact on O_3 and $PM_{2.5}$ formation during large open biomass burning events in Southeast Asia. The second part of the talk will focus on the regional transport of ozone, ammonium nitrate and sulfate. These compounds can be transported over long distances to affect air quality in downwind areas hundreds and even thousands of kilometers away. The mechanisms governing their long-range transport from China to South Korea in autumn and winter will be elucidated through careful analysis of source-oriented model results.



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