

Inorganic chemical characterization of individual aerosol particles

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Chemical analytical methods of inorganic aerosols are reviewed in terms of bulk and single particle analysis. Chemical characterization of Kosa and urban aerosols was performed by applying SR micro-XRF and micro-XANES. Double thin film method was developed to identify the mixing states of individual aerosols as mixtures of sulfate/nitrate, nitrate/chloride or not. The method was applied to study the transformation process of sea-salt aerosols. We also show the size-segregated chemical composition of aerosols during Kosa and non-Kosa period in background area.