

Development of Observation Method of Long-Range Transportation of Asian Aerosols by PIXE Technique

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Abstract

Atmospheric Aerosols abundance is great concern not only on human health but also on global warming potential and air quality. Our study is focusing on chemical properties of atmospheric aerosols and its abundances in East Asian regional scale. Our observation of aerosols were conducted during APEX research program 2000 to 2004, and intensive observation was done from March to April, 2003 as APEX-E3 observation combined with other optical, chemical and climatologic measurements. The main findings of this study was possibility of spot samples analysis by PIXE method on polycarbonate filter for observation. We obtained spot sample's reliability by measuring twelve of repetition for verification of reliability of spot samples. And dependence of metal species on reproducibility of repetition was also examined.