

Wide Ranged Measurement of Elemental Composition in the Atmospheric Aerosols - Research Results 2002

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Abstract

The wide ranged measurement of elemental composition in the atmospheric aerosols was done as part of “The study on indirect effects of aerosols on global warming/cooling for atmospheric environmental impacts of aerosols in East Asia.” Aerosols samples of elemental analysis were collected during a period from June 2002 to January 2003 at isolated islands (Fukue-jima, Miyako-jima, Amami-oshima and Chichi-jima) in East China Sea. Elemental composition of the aerosols samples was determined by PIXE. 29 elements: Na, Mg, Al, P, Si, S, Cl, K, Ca, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Ga, As, Se, Br, Sr, Y, Nb, Mo, Cd, Hg and Pb were determined in total. The elements Na, Mg, Al, Si, S, K, Ca, Fe, Zn and Pb were found to be the major elemental components at all the isolated islands.