

## **Relationship between radioactive isotopes and metals contained in the air suspended**

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### **Abstract**

Relationships between stable elements and radioactive isotopes were explored for understanding the behavior of aerosol around Nagasaki-City. In the report, we presented relationships between the amounts of radioactive isotopes Pb-210 and Be-7 obtained from gamma spectrometry and the stable elements obtained from PIXE analysis, and considered conceivable behavior.

Thirteen elements were significantly detected from the PIXE analysis. Amount of the 9 elements, nss-Br, Al, Se, nss-S, Fe, Zn, nss-Sr, Rb and Pb were correlated with Pb-210 radioactivity and varied seasonally, where nss indicates non-sea-salt. The other 4 elements, Cu, nss-Mg, Ni and Na showed no seasonal variation. It suggests that large part of the 9 elements may come from the continent with the small grains of aerosol and the 4 elements may come from neighborhood with the relatively large grains.