

Mineralogical analyses of small solid materials in acid snow and aerosol by TEM :Al-Si-spherules, gypsum and soot

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Acid snow and aerosol were collected from central China and along the coasts of Japan Sea contained, respectively. Solid particles and minerals were examined by TEM (AEM). Characteristic Al-Si spherules, which are known to be formed by burning of coal, were also contained. Spherules of the largest size (~10 μ m) were found in Wakkanai. On the other hand, small spherules up to 4 μ m in diameter were found in Niigata area. The difference in size of spherules may be due to the difference in distances from the source where particles were discharged. Examining other mineral grains, some varieties in morphology of gypsum and soot materials were found. These varieties and differences may be due to different sources of them.