

Supporting Materials for

**Change of iron species and iron solubility in
Asian dust during the long-range transport
from western China to Japan**

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Summary of the number in Supplementary Information

- the number of pages: 4 (including this sheet)
- the number of figures: 2
- the number of table: 1

Table S1. Sampling sites and periods.

Station	Location	Latitude (N), Longitude (E)	Height (meters above S. L.)	Sampling Period (low-volume)	Sampling Period (high-volume)
Aksu	The Aksu Water Budget Experiment Station, Chinese Academy of Science	40°37′, 80°44′	7	15–21 March, 2002	15–18 March, 2002
Qingdao	Ocean University of China	36°07′, 120°33′	80	20–23 March, 2002	
Tsukuba	Geological Survey of Japan	36°06′, 140°14′	44	20–31 March, 2002	20–26 March, 2002

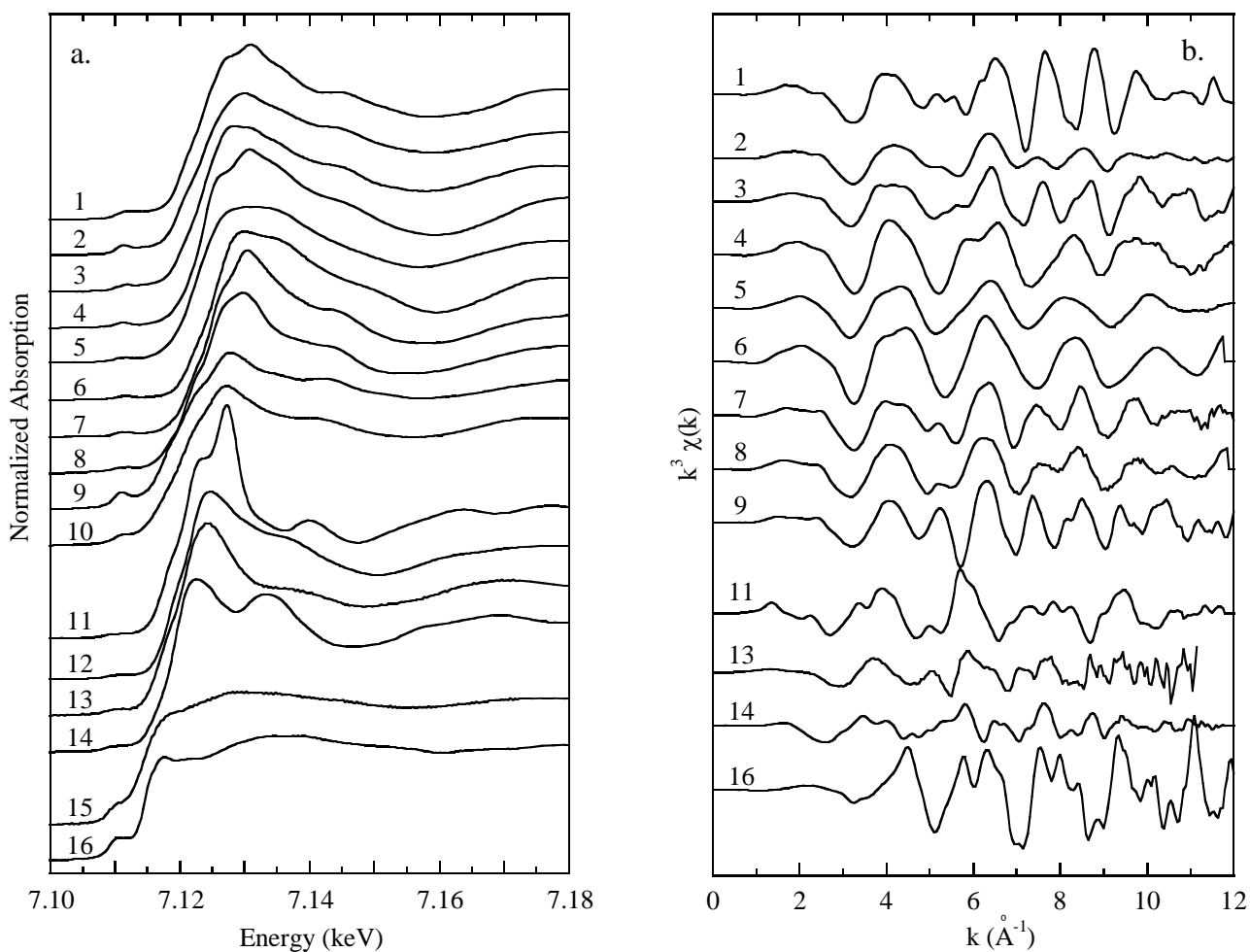


Figure S1. (a) Normalized Fe K-edge XANES and (b) normalized k^3 -weighted EXAFS spectra for various reference materials. 1 hematite ($\alpha\text{-Fe}_2\text{O}_3$); 2 ferrihydrite; 3 goethite ($\alpha\text{-FeOOH}$); 4 Fe(III) oxalate; 5 Fe(III) citrate; 6 Fe(III) sulfate; 7 smectite (SWy-2); 8 illite (IMt-1); 9 magnetite (Fe_3O_4); 10 Fe (II) oxide; 11 chlorite (CCa-2); 12 Fe(II) sulfate; 13 fayalite (Fe_2SiO_4); 14 siderite (FeCO_3); 15 pyrrhotite (Fe_7S_8); 16 pyrite (FeS_2). SWy-2, IMt-1, and CCa-2 were obtained from the Source Clays Repository of the Clay Mineral Society.

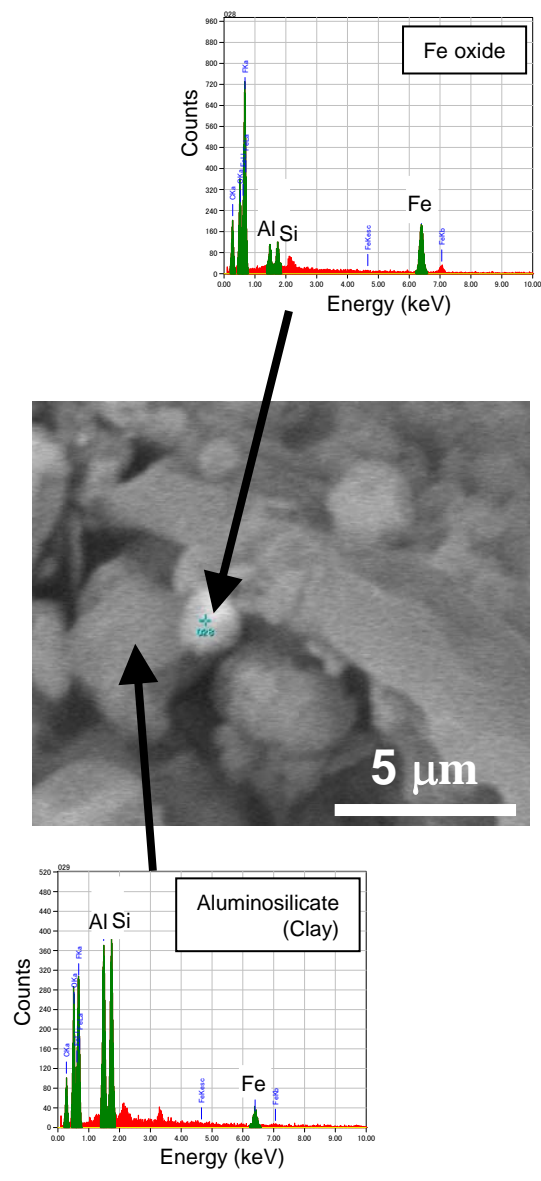


Figure S2. SEM image of aerosol particles collected on stage 1 in Tsukuba in the dust period. Small particle of Fe oxide is associated with clay particles.