This table explains the columns of the main table with particle data (tab-divided), "data_table.txt". Each line in the main table refers to one particle measurement. That means that for example deposition rates given in the table contain the amount of mass deposited by the according individual particle.
The sample name and number are given in the first column. Refer to the "sampling_times.txt" and "supplement.pdf" file (Table S 1) for additional information.
Note that most of the quantifications regarding rare elements are probably due to noise. Exceptions might be Ba, Sr, Zr, Ce, Y, Nd, La.
For samples with number of 30 and less, the following elements could not be measured: B, F, Ni, Cu, Zn, Br, Sr, Zr, Mo, Ag, Sn, Sb, Ba, Y, In, Ce, Nd, Tb, Re, Os, Pt, Tl, Pb, Ge, La, Rb, Pd, Cd, Eu, Yb, Ir, U, Rh, Pr, Hf, Ta, Tc, Bi, Sc, I, Cs, Dy, W, Hg, Ru, Tm, Nb

column header	***description***
sample name	designation of sample, see separate table for date/time of sampling
AvgDiam	particle projected-area-equivalent diameter, 10^{-6} m
LProj	particle longest projection, 10^{-6} m
Area	particle area, 10^{-12} m^2
Perim	particle perimeter, 10^{-6} m
Aspe	particle 2D aspect ratio
XPos_abs	absolute X position of particle centroid on sample, 10^{-6} m; for each separate sample, these values are absolute
YPos_abs	absolute Y position of particle centroid on sample, 10^{-6} m; for each separate sample, these values are absolute
C	corrected atomic concentration of C, %
N	corrected atomic concentration of N, %
O	corrected atomic concentration of O, %
Na	corrected atomic concentration of Na, %
Mg	corrected atomic concentration of Mg, %
Al	corrected atomic concentration of Al, %
Si	corrected atomic concentration of Si, %
P	corrected atomic concentration of P, %
S	corrected atomic concentration of S, %
Cl	corrected atomic concentration of Cl, %
K	corrected atomic concentration of K, %
Ca	corrected atomic concentration of Ca, %
Ti	corrected atomic concentration of Ti, %
V	corrected atomic concentration of V, %
Cr	corrected atomic concentration of Cr, %
Mn	corrected atomic concentration of Mn, %
Fe	corrected atomic concentration of Fe, %
Co	corrected atomic concentration of Co, %
B	corrected atomic concentration of B, %
F	corrected atomic concentration of F, %
Ni	corrected atomic concentration of Ni, %
Cu	corrected atomic concentration of Cu, %
Zn	corrected atomic concentration of Zn, %
Br	corrected atomic concentration of Br, %
Sr	corrected atomic concentration of Sr, %
Zr	corrected atomic concentration of Zr, %
Mo	corrected atomic concentration of Mo, %

column header	*description*
Ag	corrected atomic concentration of Ag, %
Sn	corrected atomic concentration of Sn, %
Sb	corrected atomic concentration of Sb, %
Ba	corrected atomic concentration of Ba, %
Y	corrected atomic concentration of Y, %
In	corrected atomic concentration of In, %
Ce	corrected atomic concentration of Ce, %
Nd	corrected atomic concentration of Nd, %
Tb	corrected atomic concentration of Tb, %
Re	corrected atomic concentration of Re, %
Os	corrected atomic concentration of Os, %
Pt	corrected atomic concentration of Pt, %
Tl	corrected atomic concentration of Tl, %
Pb	corrected atomic concentration of Pb, %
Ge	corrected atomic concentration of Ge, %
La	corrected atomic concentration of La, %
Rb	corrected atomic concentration of Rb, %
Pd	corrected atomic concentration of Pd, %
Cd	corrected atomic concentration of Cd, %
Eu	corrected atomic concentration of Eu, %
Yb	corrected atomic concentration of Yb, %
Ir	corrected atomic concentration of Ir, %
U	corrected atomic concentration of U, %
Rh	corrected atomic concentration of Rh, %
Pr	corrected atomic concentration of Pr, %
Hf	corrected atomic concentration of Hf, %
Ta	corrected atomic concentration of Ta, %
Tc	corrected atomic concentration of Tc, %
Bi	corrected atomic concentration of Bi, %
Sc	corrected atomic concentration of Sc, %
I	corrected atomic concentration of I, %
Cs	corrected atomic concentration of Cs, %
Dy	corrected atomic concentration of Dy, %
W	corrected atomic concentration of W, %
Hg	corrected atomic concentration of Hg, %
Ru	corrected atomic concentration of Ru, %
Tm	corrected atomic concentration of Tm, %
Nb	corrected atomic concentration of Nb, %
group name	particle sub-type as identified by rule set
class name	particle type as identified by rule set
S_V	volumentric shape factor
VOLAVGDIAM	volume-averaged diameter. 10^{-6} m
MASS_DUSTPARTICLE_UPPER	upper estimate of dust mass in particle, kg
MASS_DUSTPARTICLE_LOWER	lower estimate of dust mass in particle, kg
MASS_FE_UPPER	upper estimate of Fe mass in particle, kg
MASS_FE_LOWER	lower estimate of Fe mass in particle, kg
MASS_SI_UPPER	upper estimate of Si mass in particle, kg
MASS_SI_LOWER	lower estimate of Si mass in particle, kg
MASS_AL_UPPER	upper estimate of Al mass in particle, kg
MASS_AL_LOWER	lower estimate of Al mass in particle, kg

column header	*description*
MASS_P_UPPER	upper estimate of P mass in particle, kg
MASS_P_LOWER	lower estimate of P mass in particle, kg
MASS_TI_UPPER	upper estimate of Ti mass in particle, kg
MASS_TI_LOWER	lower estimate of Ti mass in particle, kg
D_DUST_AERO_UPPER	upper estimate of aerodynamic diameter of dust (or dust fraction in particle), m
D_DUST_AERO_LOWER	lower estimate of aerodynamic diameter of dust (or dust fraction in particle), m
DEPOFLUX_DUST_UPPER	upper estimate of dust deposition flux for this sample, mg/m^2
DEPOFLUX_DUST_LOWER	lower estimate of dust deposition flux for this sample, mg/m^2
DEPOFLUX_FE_UPPER	upper estimate of Fe deposition flux for this sample, mg/m^2
DEPOFLUX_FE_LOWER	lower estimate of Fe deposition flux for this sample, mg/m^2
DEPOFLUX_SI_UPPER	upper estimate of Si deposition flux for this sample, mg/m^2
DEPOFLUX_SI_LOWER	lower estimate of Si deposition flux for this sample, mg/m^2
DEPOFLUX_AL_UPPER	upper estimate of Al deposition flux for this sample, mg/m^2
DEPOFLUX_AL_LOWER	lower estimate of Al deposition flux for this sample, mg/m^2
DEPOFLUX_P_UPPER	upper estimate of P deposition flux for this sample, mg/m^2
DEPOFLUX_P_LOWER	lower estimate of P deposition flux for this sample, mg/m^2
DEPOFLUX_TI_UPPER	upper estimate of Ti deposition flux for this sample, mg/m^2
DEPOFLUX_TI_LOWER	lower estimate of Ti deposition flux for this sample, mg/m^2
DEPORATE_DUST_UPPER	upper estimate of dust deposition rate for this sample, mg/(m^2 d)
DEPORATE_DUST_LOWER	lower estimate of dust deposition rate for this sample, mg/(m^2 d)
DEPORATE_FE_UPPER	upper estimate of Fe deposition rate for this sample, mg/(m^2 d)
DEPORATE_FE_LOWER	lower estimate of Fe deposition rate for this sample, mg/(m^2 d)
DEPORATE_SI_UPPER	upper estimate of Si deposition rate for this sample, mg/(m^2 d)
DEPORATE_SI_LOWER	lower estimate of Si deposition rate for this sample, mg/(m^2 d)
DEPORATE_AL_UPPER	upper estimate of Al deposition rate for this sample, mg/(m^2 d)
DEPORATE_AL_LOWER	lower estimate of Al deposition rate for this sample, mg/(m^2 d)
DEPORATE_P_UPPER	upper estimate of P deposition rate for this sample, mg/(m^2 d)
DEPORATE_P_LOWER	lower estimate of P deposition rate for this sample, mg/(m^2 d)
DEPORATE_TI_UPPER	upper estimate of Ti deposition rate for this sample, mg/(m^2 d)
DEPORATE_TI_LOWER	lower estimate of Ti deposition rate for this sample, mg/(m^2 d)
RH_ambient (% rel. hum.)	average relative humidity for sample, %
T_ambient (K)	average temperature for sample, K
P_ambient (hPa)	average air pressure for sample, hPa
v_wind (m/s)	average wind speed for sample, m/s
sampling_duration (minutes)	exposure duration, minutes
analysis_area (10^-12 m^2)	area analyzed on sampler, 10^{-12} m^2