Supplementary Material to; On-line Differentiation of mineral phase in aerosol particles by Ion Formation mechanism using a LAAP-ToF single particle mass spectrometer

Representative Mass Spectra
The following single particle mass spectra were selected to represent each particle type analysed. In the case of clay mineral standards which were differentiated by ion formation mechanism, a representative spectra of each class (as defined by Tables 7 of the main text) is given. It is noted that there is considerable variation in mass spectral patterns for each of the material types analysed, and the mass spectra displayed here were chosen as typical examples.

Borosilicate Glass

Orthoclase Feldspar

Plagioclase Feldspar
KGa-1b (Kaolinite)

SWy-3 (Na Montmorillonite)

STx-1b (Ca Montmorillonite)

IMt-2 Class 1
Peak Centre Measurements

![Graph of Peak Centre Measurements]

- Borosilicate Glass
- Orthoclase
- Illite IMt-2
- Kaolinite KGa-1b