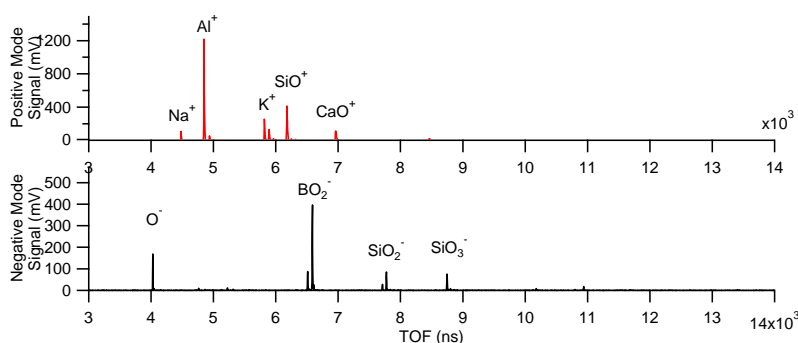


Supplementary Material to; *On-line Differentiation of mineral phase in aerosol particles by Ion Formation mechanism using a LAAP-ToF single particle mass spectrometer*

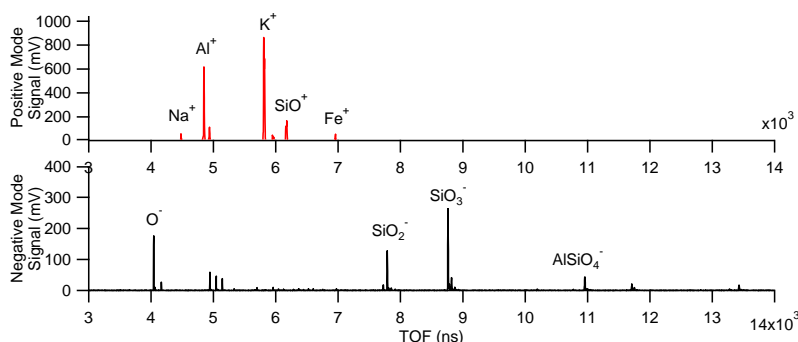
Representative Mass Spectra

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.

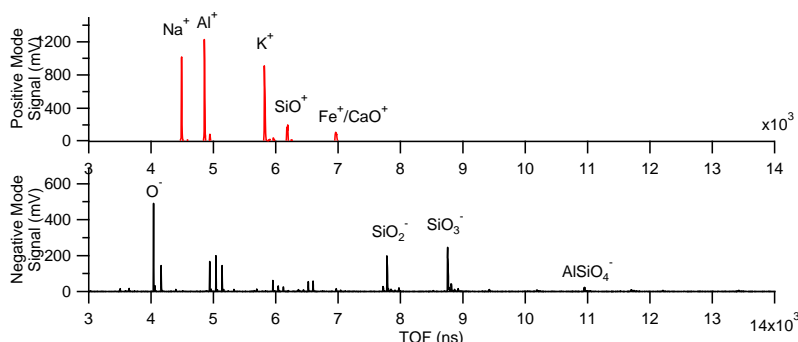
Borosilicate Glass



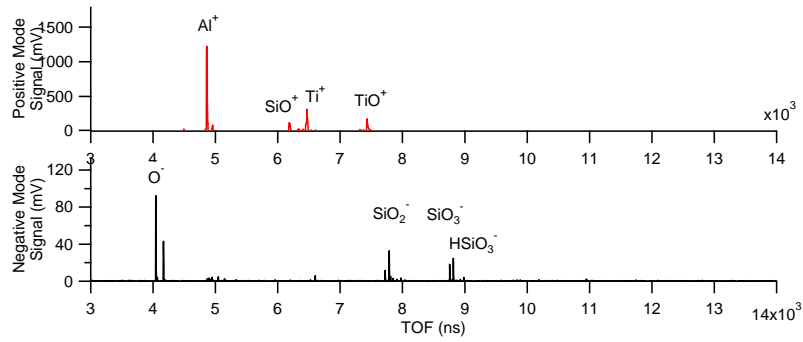
Orthoclase Feldspar



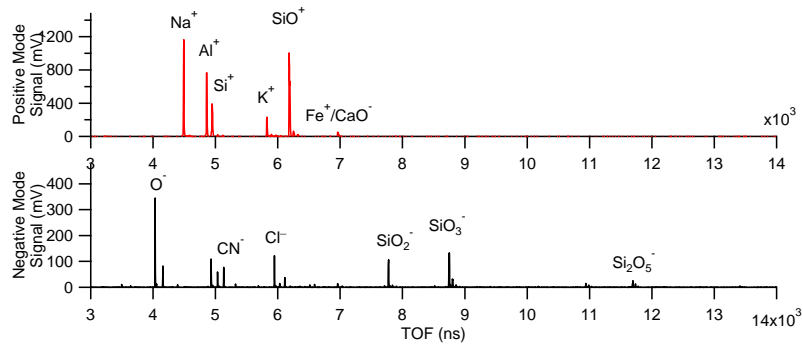
Plagioclase Feldspar



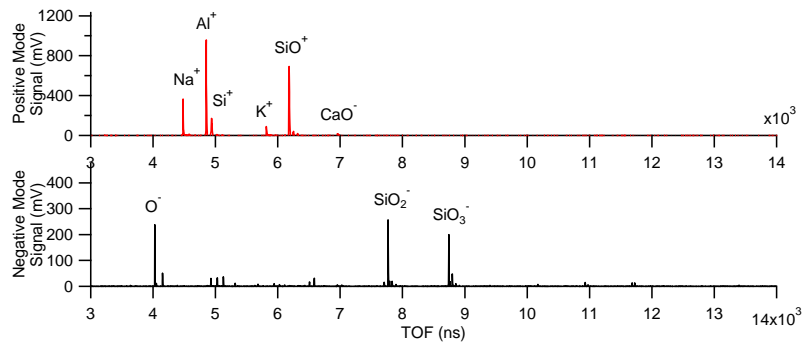
KGa-1b (Kaolinite)



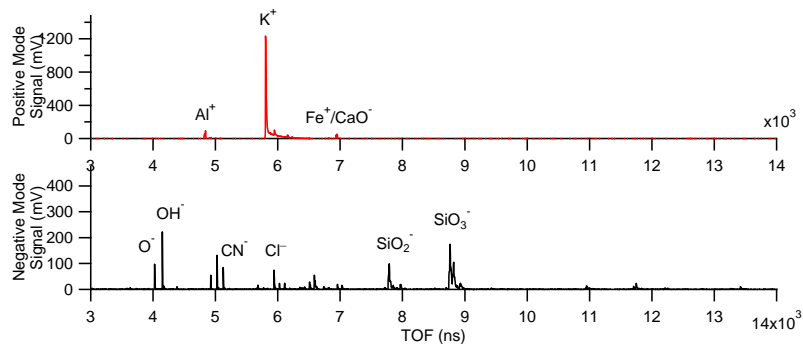
SWy-3 (Na Montmorillonite)



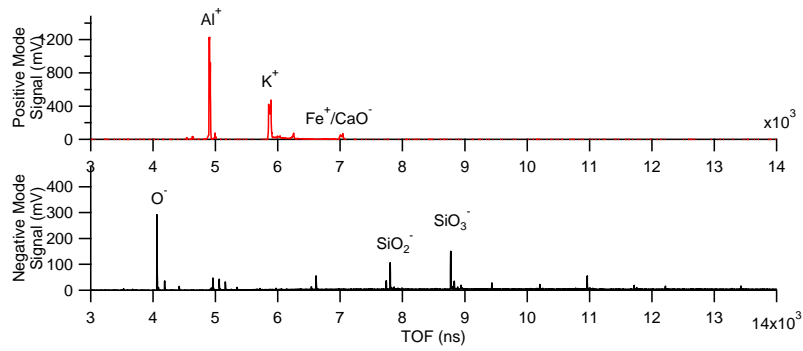
STx-1b (Ca Montmorillonite)



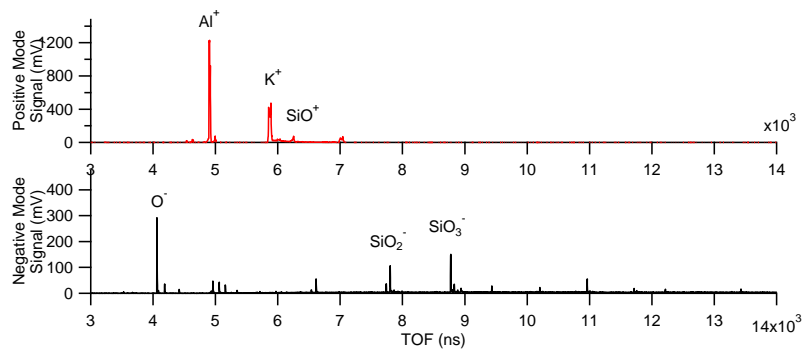
IMt-2 Class 1



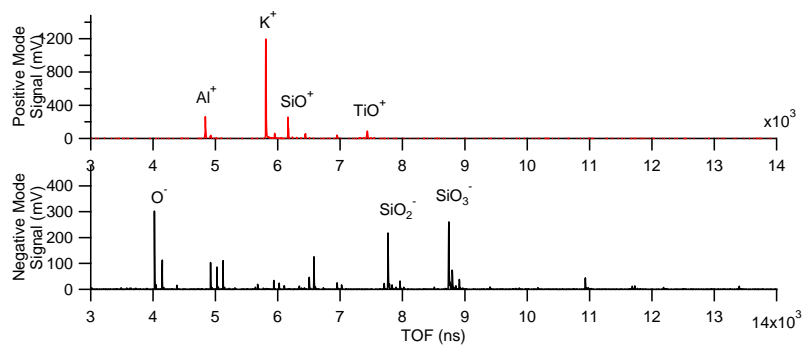
IMt-2 Class 2



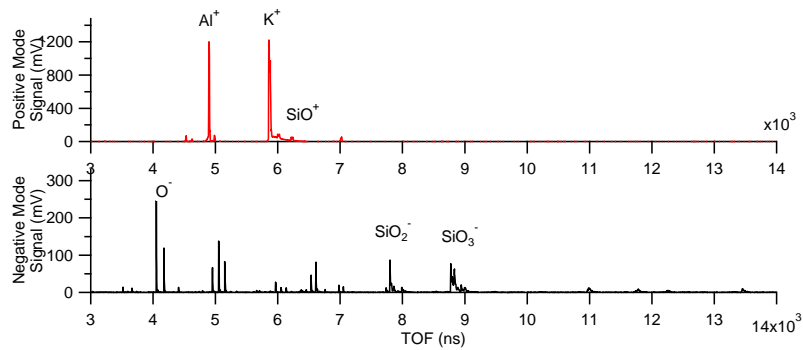
Mt-2 Class 3



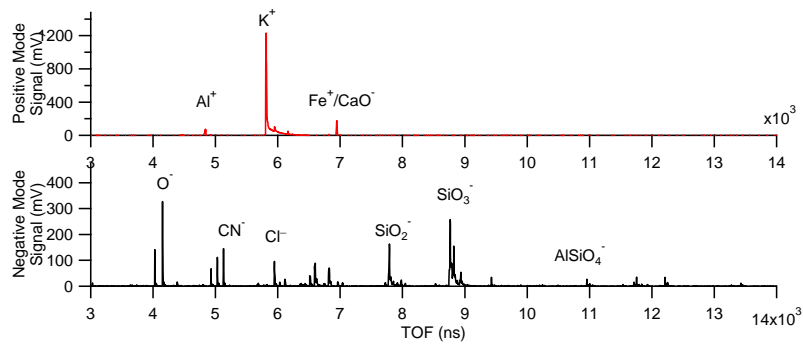
IMt-2 Class 4



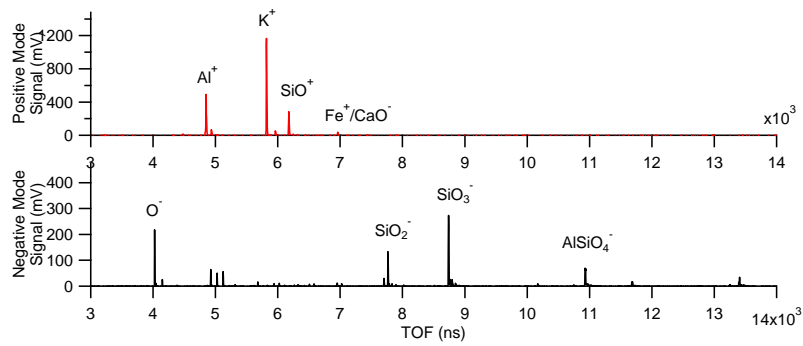
IMt-2 Class 5



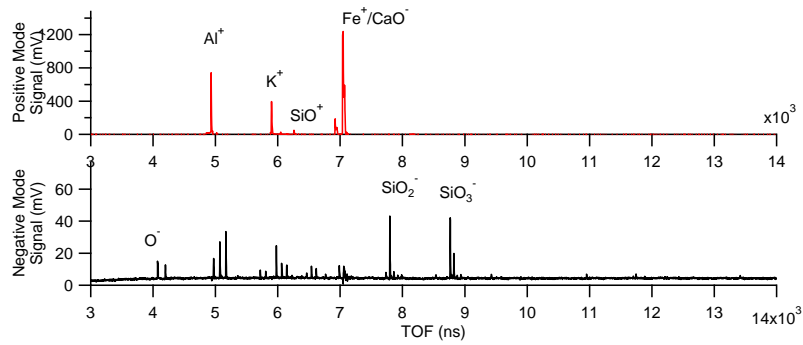
ISCz-1 Class1



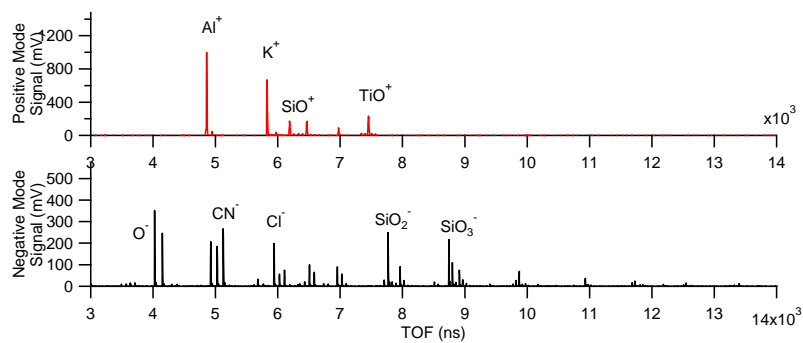
ISCz-1 Class2



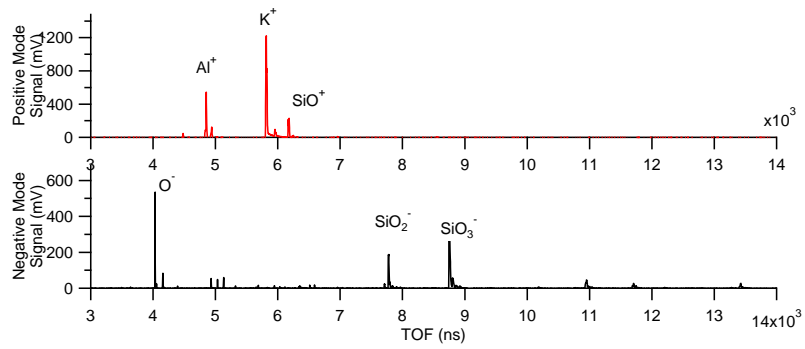
ISCz-1 Class3



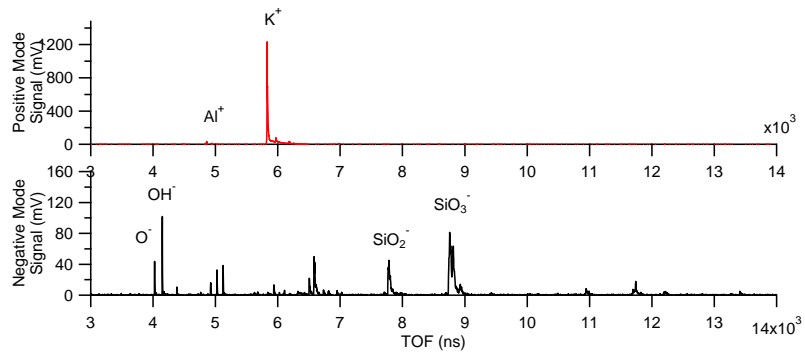
ISCz-1 Class4



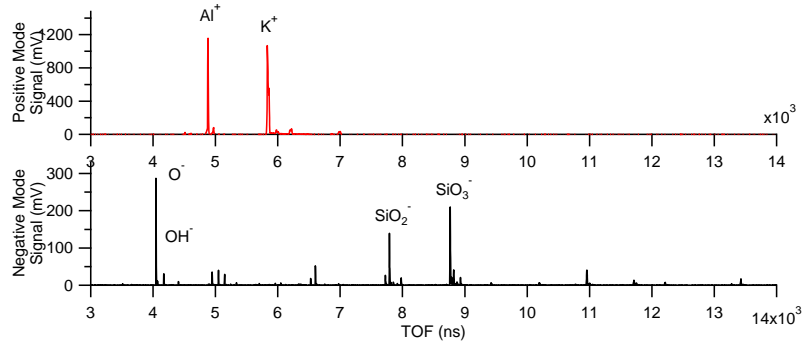
ISCz-1 Class5



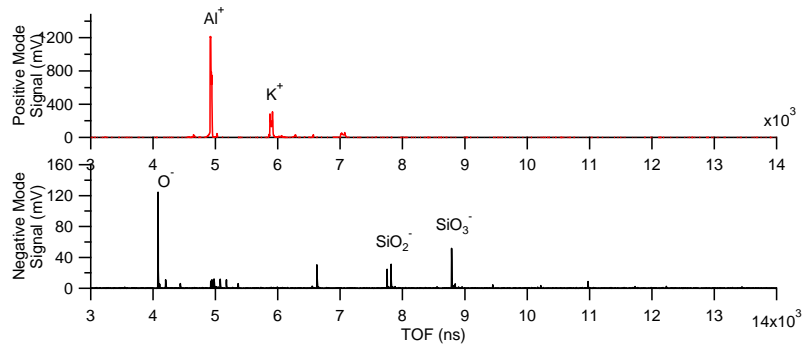
Illite nx Class 1



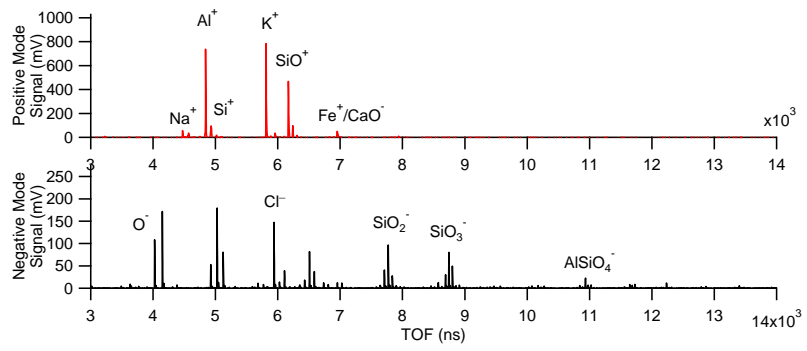
Illite nx Class 2



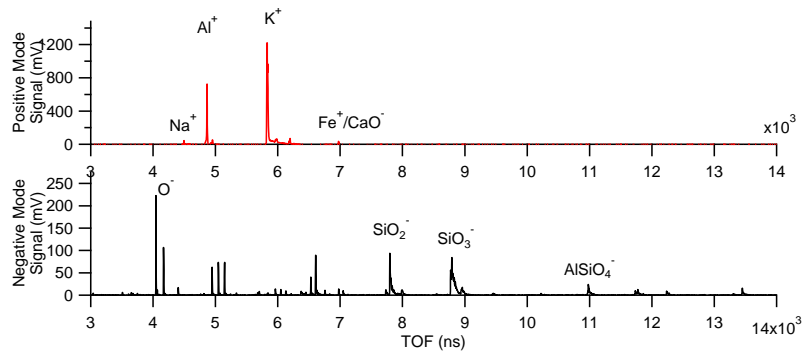
Illite nx Class 3



Illite nx Class 4



Illite nx Class 5



Peak Centre Measurements

