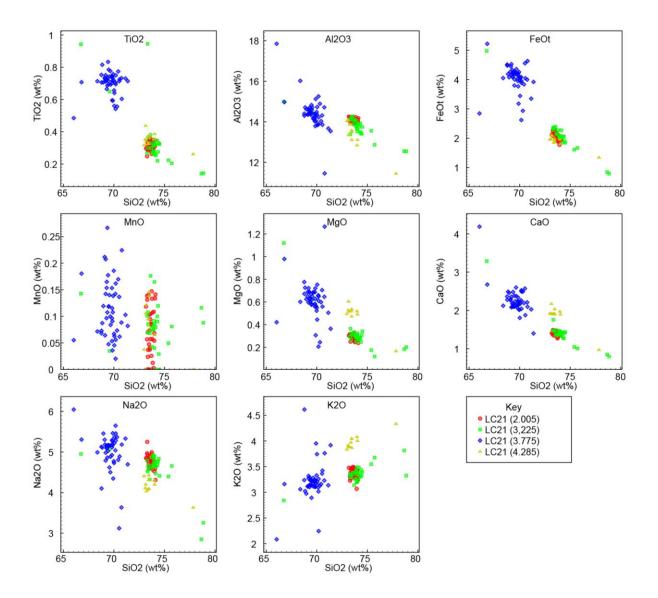
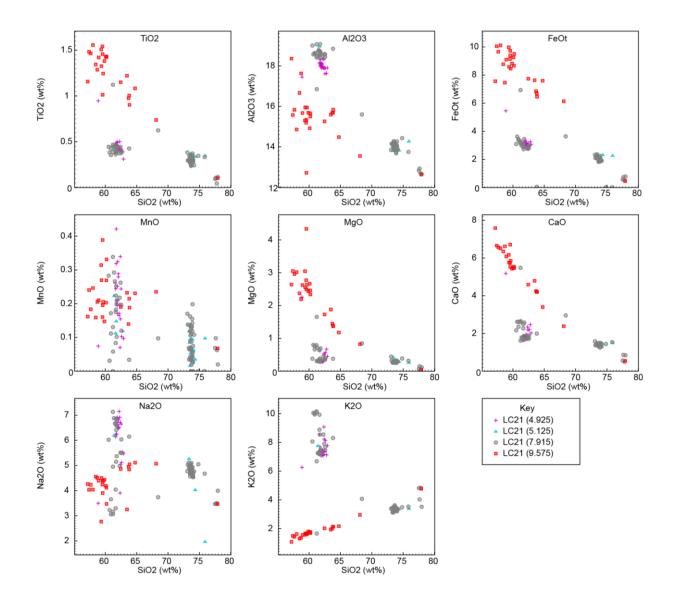


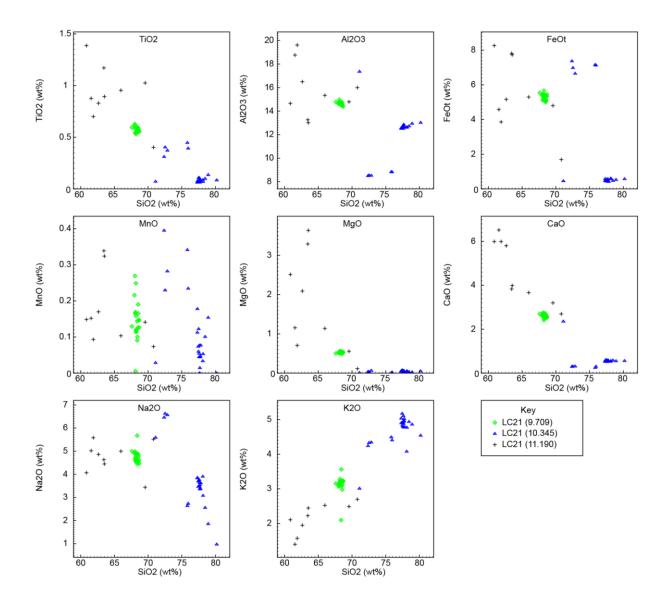
**Supplementary Figure 1a** Major element analyses of LC21 (0.940) and LC21 (0.010) to test for geochemical differences between the two samples, and thus to identify reworking of the visible tephra LC21 (0.940).



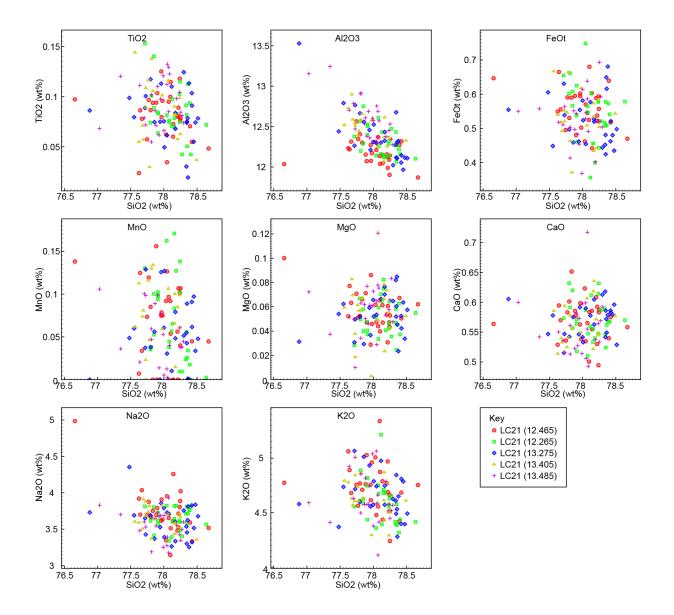
**Supplementary Figure 1b** All major element analyses of shards found within sample LC21 (2.005), LC21 (3.225), LC21 (3.775) and LC21 (4.285).



Supplementary Figure 1c Major element analyses of samples from LC21 (4.925), (5.145), (7.915) and (9.575).



Supplementary Figure 1d Major element analyses of tephra shards from samples LC21 (9.709), (10.345) and (11.190).



Supplementary Figure 1e Major element analyses for samples LC21 (12.465), (12.625), (13.275), (13.405), (13.485).