



Supplementary Figure S1: The consistency of mapping protocol on EPMA for both WDS and EDS over the time period for which data was obtained for this study. Mg, Ca, Al, and Ti were measured using WDS and Si is the representative element measured using EDS. All elements except Mg are extremely consistent. Inconsistency in Mg was due to a change in spectrometer alignment. There is one anomalous Si measurement on 22 April 2015, which may indicate that EDS-measured elements may not be entirely consistent. As such, maps must be considered from each mapping collection day to determine if a map intensity correction is necessary or if data must be recollected.