



Figure S9. A. Rank order plots show weighted mean calculations and the deviation from the CA-ID-TIMS age of individual runs for treated and untreated aliquots of reference material 91500. **B.** Concordia diagram of all U-Pb analyses for treated and untreated aliquots of 91500. **C.** Example CL images of untreated aliquot of 91500; no available imaging for the treated aliquot of 91500.