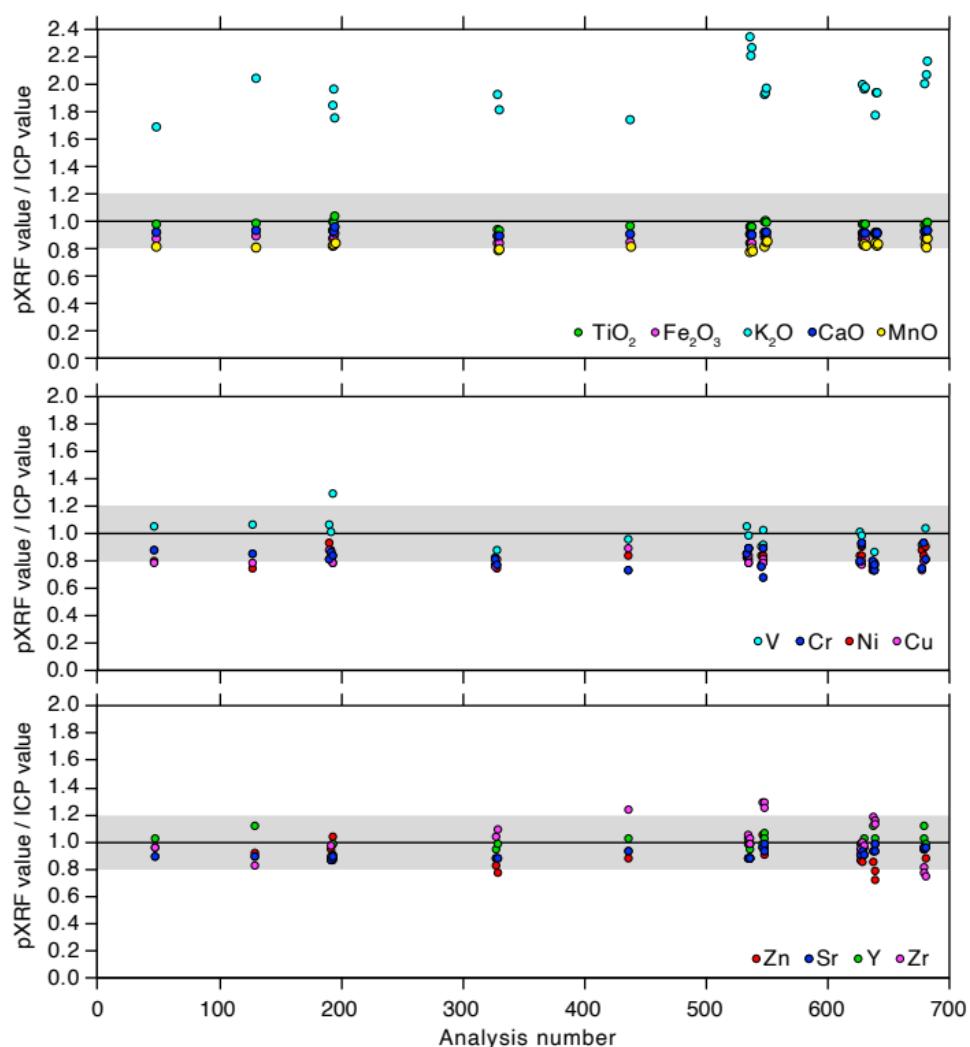


a) Expedition 390, RS-11R rock surface standard (homogeneity issues)



b) Expedition 393, RS-11R rock surface standard (homogeneity issues)

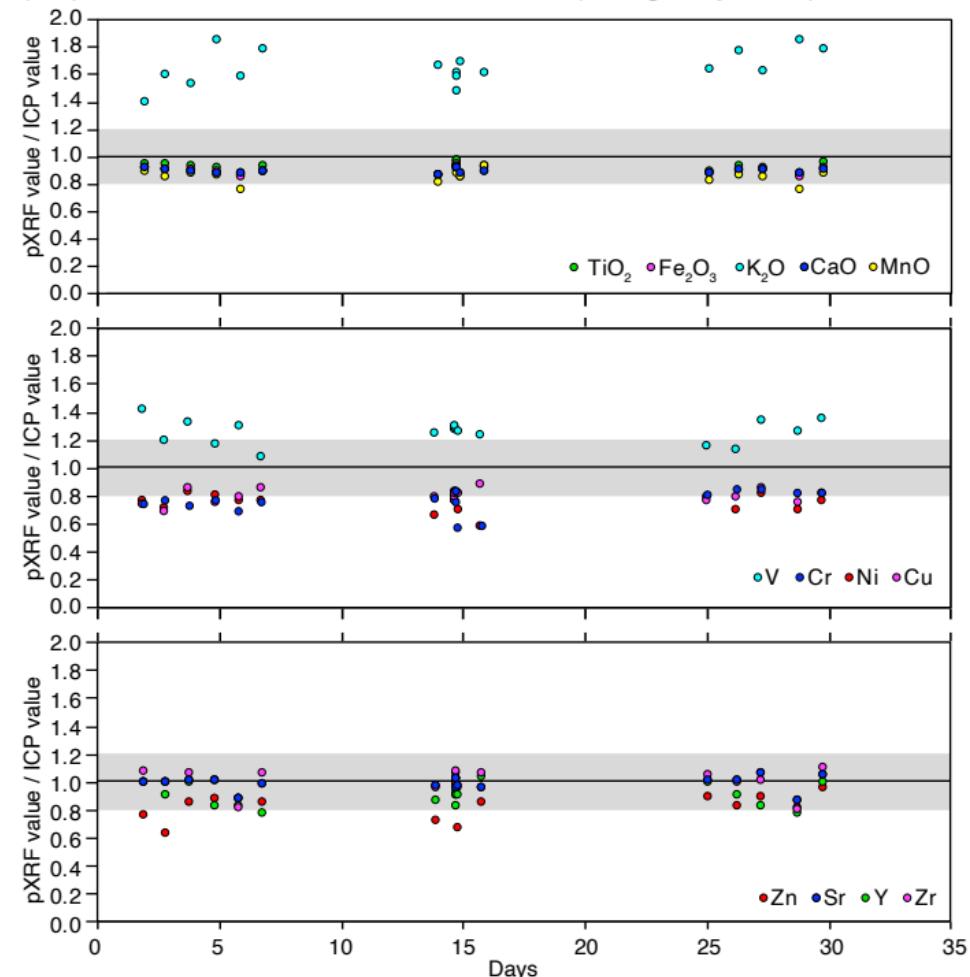


Figure S1. pXRF performance assessment for Expedition 390 and Expedition 393 campaigns using RS-11R rock surface standard, for which discrepancies in fluid mobile elements (e.g.  $\text{K}_2\text{O}$ ) exceeding pXRF precision and accuracy as defined by other assessments suggest heterogeneity in the original block.