



Figure F: Signal improvement for the quantification of Sc and Ca for an example of XRF spectrum (log scale of counts per second as a function of energy in keV) fitted with PyMCA (Solé et al., 2007) of the same laterite sample (containing 0.2% of Ca and 251.7 ppm of Sc) acquired with the Niton pXRF spectrometer. The energy range is from 3 to 7 keV in the scandium spectral region for the pXRF analysis.

(a) Spectrum acquired using the '20 Cu' method (purple curve) and the '18 Fe' method (green curve) for the same analysis time (90 seconds) in an energy range from 3 to 7 keV; (b) Zoom on this spectrum in an energy range from 3 to 5 keV showing the spectral lines of Ca and Sc (Ca-K α , Ca-K β and Sc-K α).