



Figure B: Determination the optimal analytical conditions in the scandium spectral region for the pXRF analysis.

(a) Analysis of the optimal acquisition time of 30, 60, 90 and 120 seconds of the pXRF measurements on seven samples containing 71.7, 96.5, 117.5, 168.5, 185.9, 192.9 and 314.8 ppm of Sc determined with the whole-rock analyses by the SARM service. Each boxplot was carried out on six pXRF measurements for each sample represented by circles and their whiskers.

(b) Analysis of the number of measurements necessary (from 3 to 8 randomly selected from a total of measurements) to carry out on the same sample showing the evolution of measurement uncertainties (standard deviation) for the calibration analyses with pXRF. Example on a sample containing 117.5 ppm of Sc determined from whole-rock analysis by the SARM service.