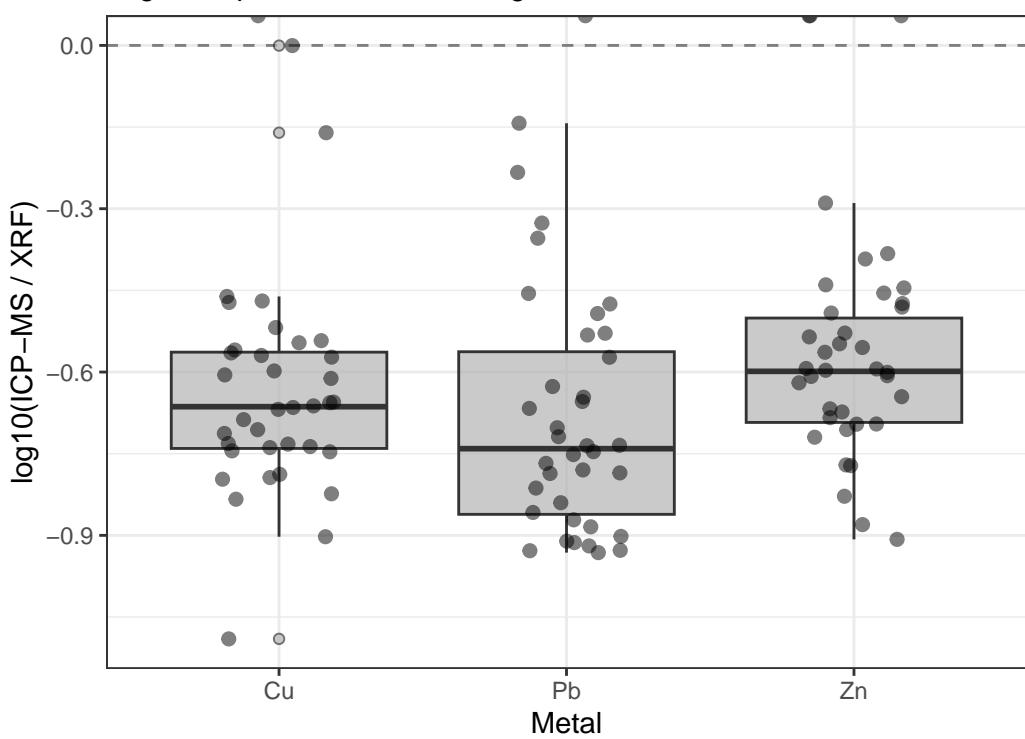


# Multi-Spectral Evidence for Matrix Effects on Metal Detection

Comparing XRF, ICP-MS, ASD, and AVIRIS proxies

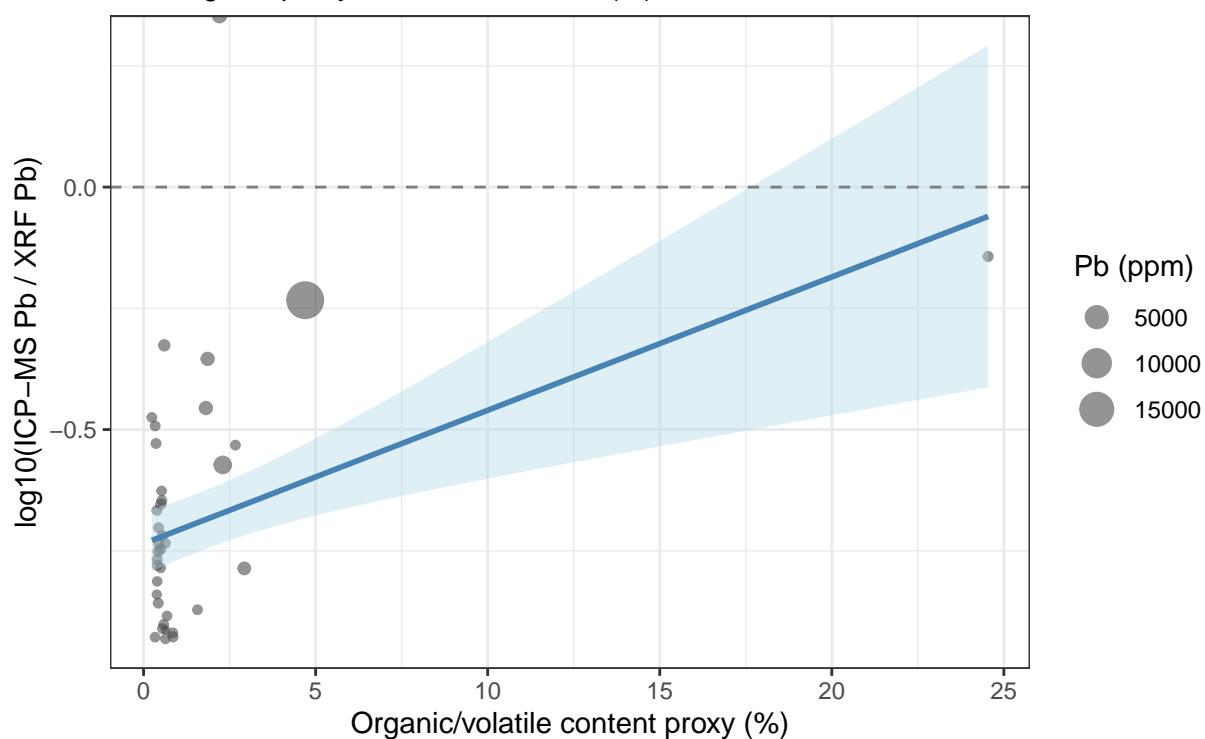
## A) ICP-MS vs XRF Measurement Comparison

Log ratio: positive = ICP-MS higher than XRF



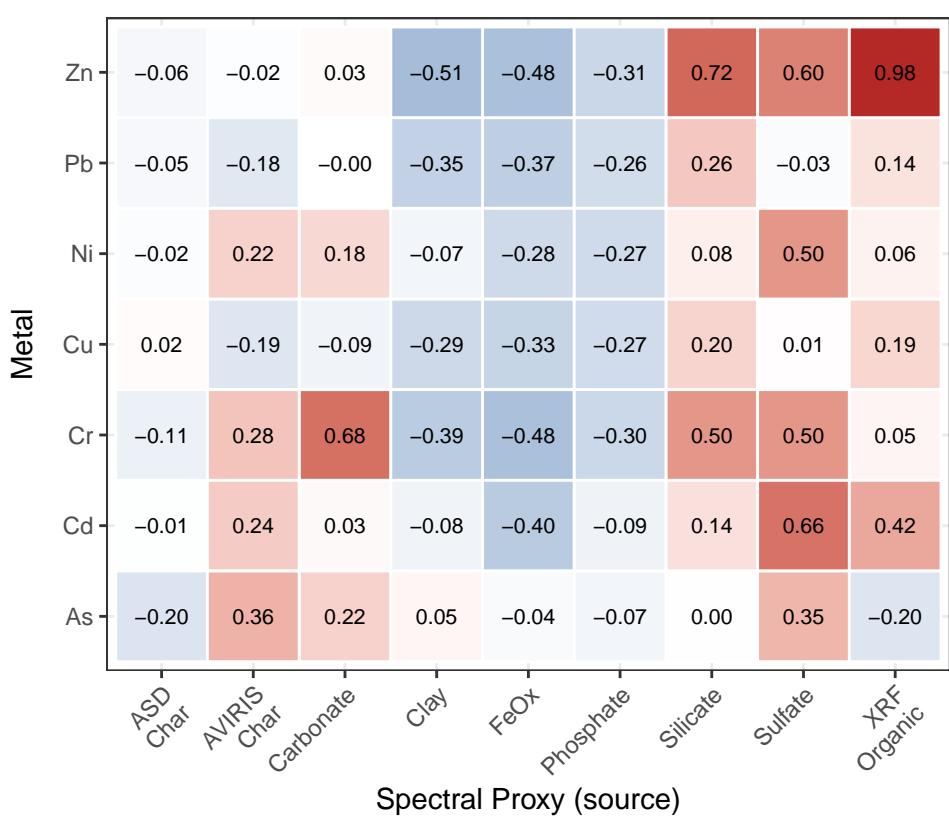
## B) Pb Measurement Discrepancy vs Matrix Composition

XRF organic proxy = 100 – oxide sum (%)



## C) Metal–Spectral Proxy Correlations

Multi-source spectral indices



## D) ASD Char Index vs Metal Concentrations

Char index from field spectroscopy

