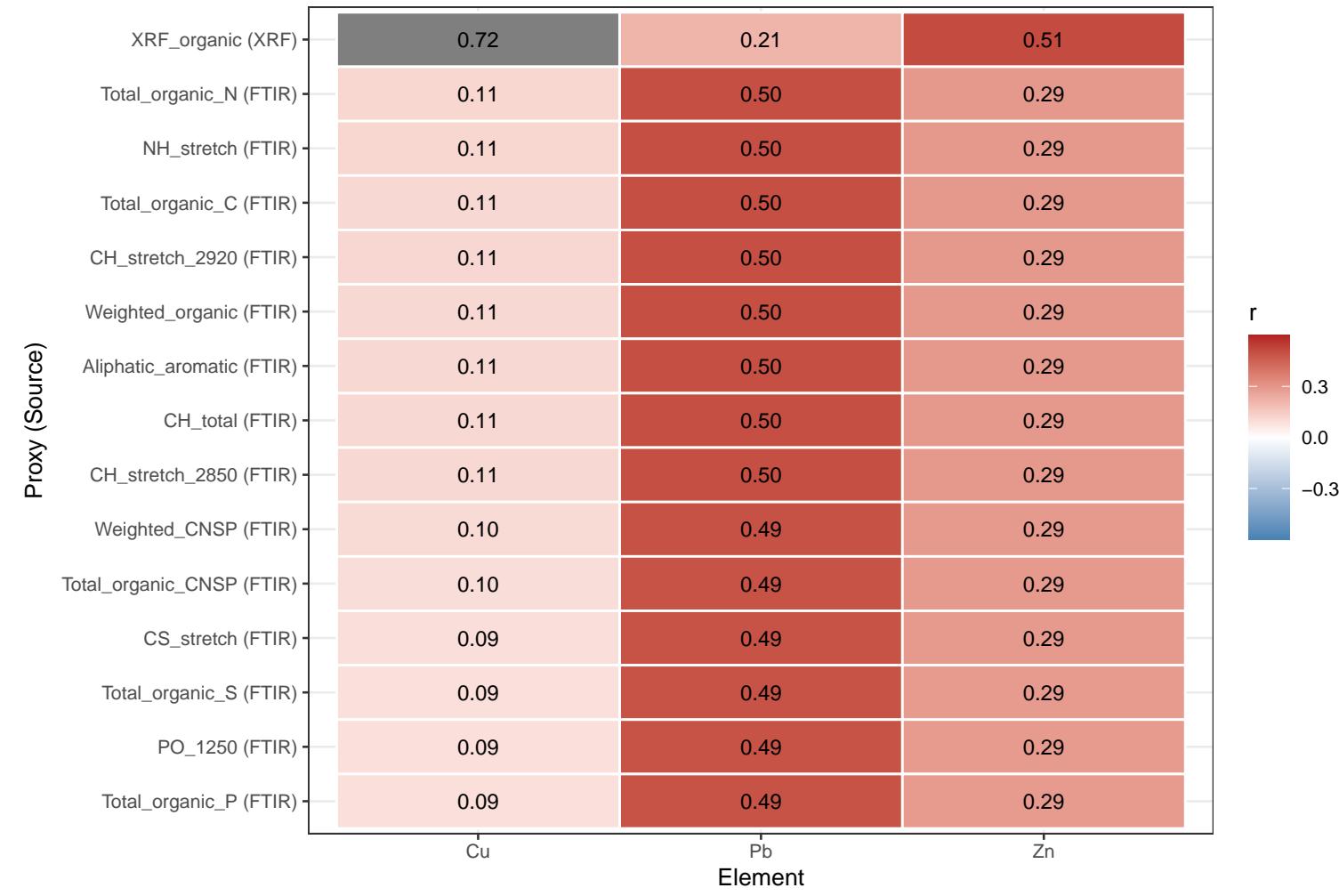


FTIR-ATR Organic Proxies: Comprehensive Multi-Element Analysis

Evaluating spectral proxies for XRF-ICPMS offset prediction across Pb, Zn, and Cu

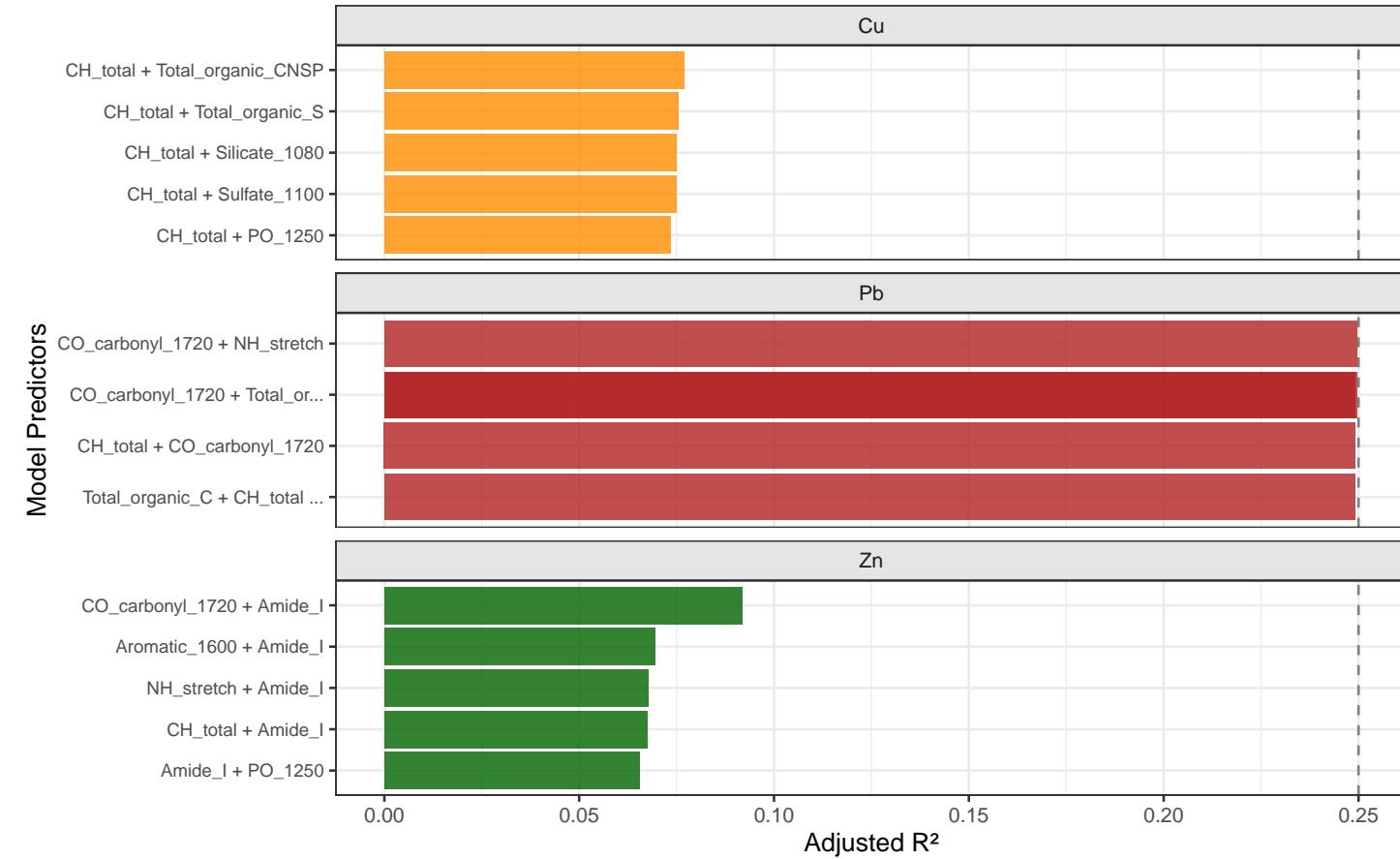
A) Proxy Correlations with XRF-ICPMS Offset by Element

Top 15 proxies ranked by mean $|r|$ across all elements



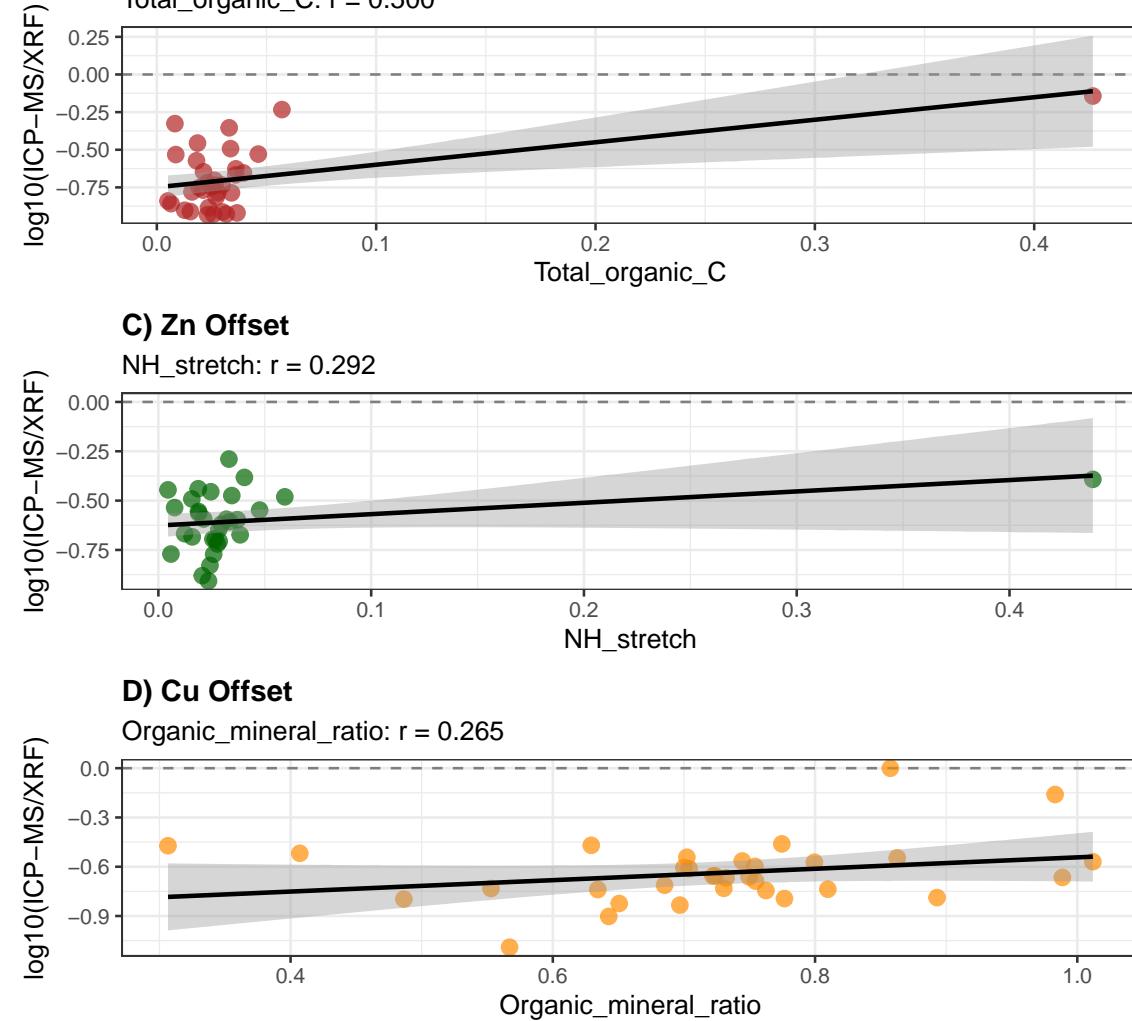
E) Best Multivariate Models by Element

Top 5 models ranked by Adjusted R-squared



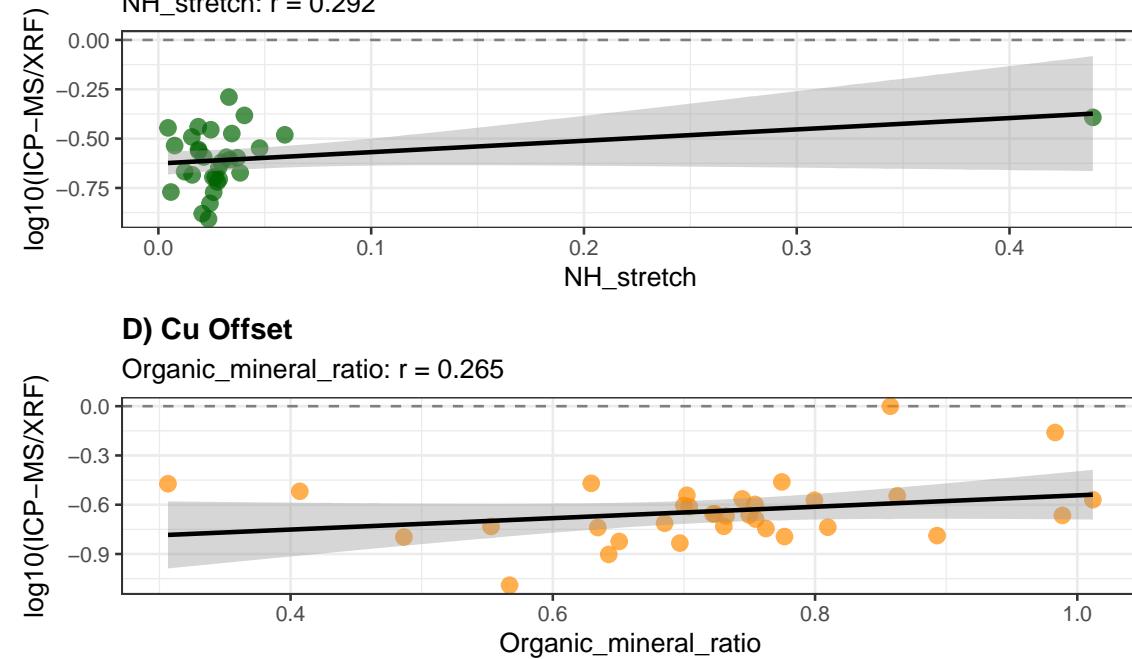
B) Pb Offset

Total_organic_C: $r = 0.500$



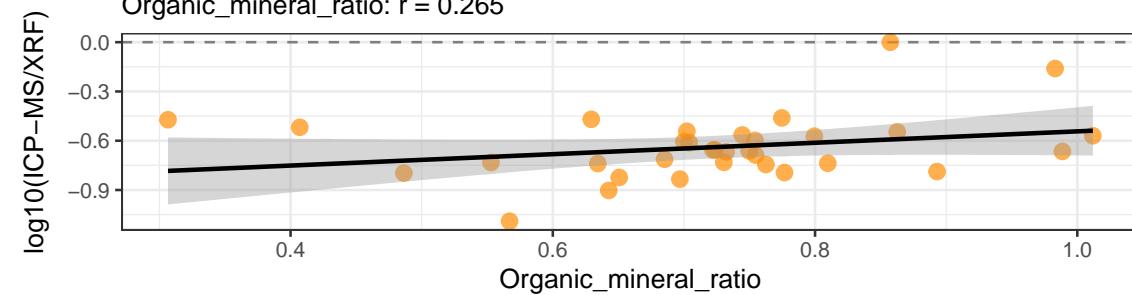
C) Zn Offset

NH_stretch: $r = 0.292$



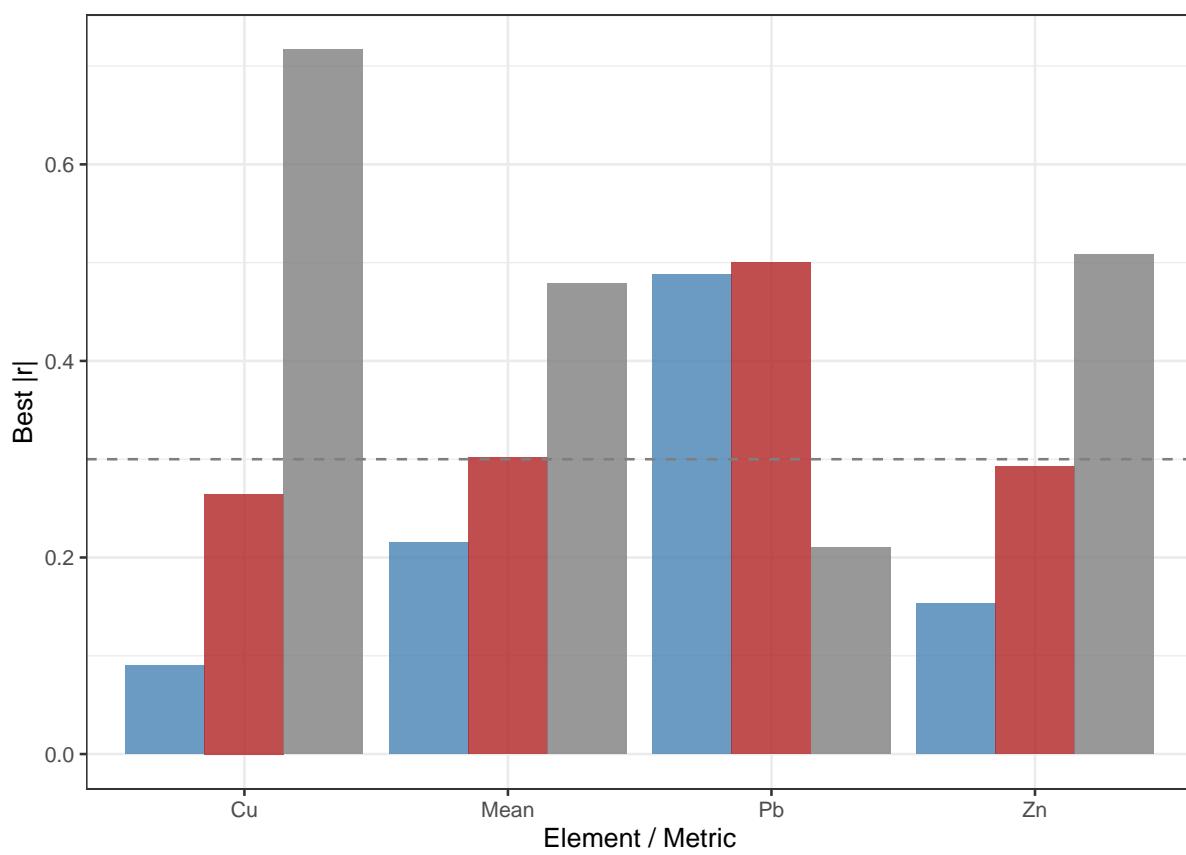
D) Cu Offset

Organic_mineral_ratio: $r = 0.265$



F) Best Correlation by Source and Element

Comparing FTIR, ASD, and XRF organic proxies



Source ASD FTIR XRF