Inorganic Geochemistry

- Great suite of geochemical data to groundtruth continuous elemental variability from scanning XRF to low-resolution elemental concentration and actual minerals (XRD)

- Information about carbonate mineralogy for stable isotopes; are there ways to distinguish autochthonous vs endogenic carbonate geochemically?

- Geochemistry and elemental ratios capturing diagenetic processes: can we use mineralogy to understand the cores better?
  - syn-depositional processes vs deep post-depositional processes

- Paleomag data would be benefit from information about gypsum vs pyrite; XRF data shows two populations

- Geochemical characterization of paleosols

- Detrital fractions: common minerals in all records, site-specific minerals

- Pristine vs diagenetic signals: PCA
- How do we handle S-minerals and potential hydrothermal systems?
- Si isssue: Chert vs biogenic silica; Si remains in a closed system
- Carbonate isotopes (CB, OLO, NA)
- Clay minerals
  - Dioctaherdral vs. trioctahedral
  - Illitization (burial > mircoburial)

- Other potential measurements/proxies?
  - Sr-isotopes so far only for CB, WTK
  - Stable Isotopes on diatoms (potential very useful to fill gaps of lacking carbonate isotopes)
  - Stable isotopes of Na-carbonates