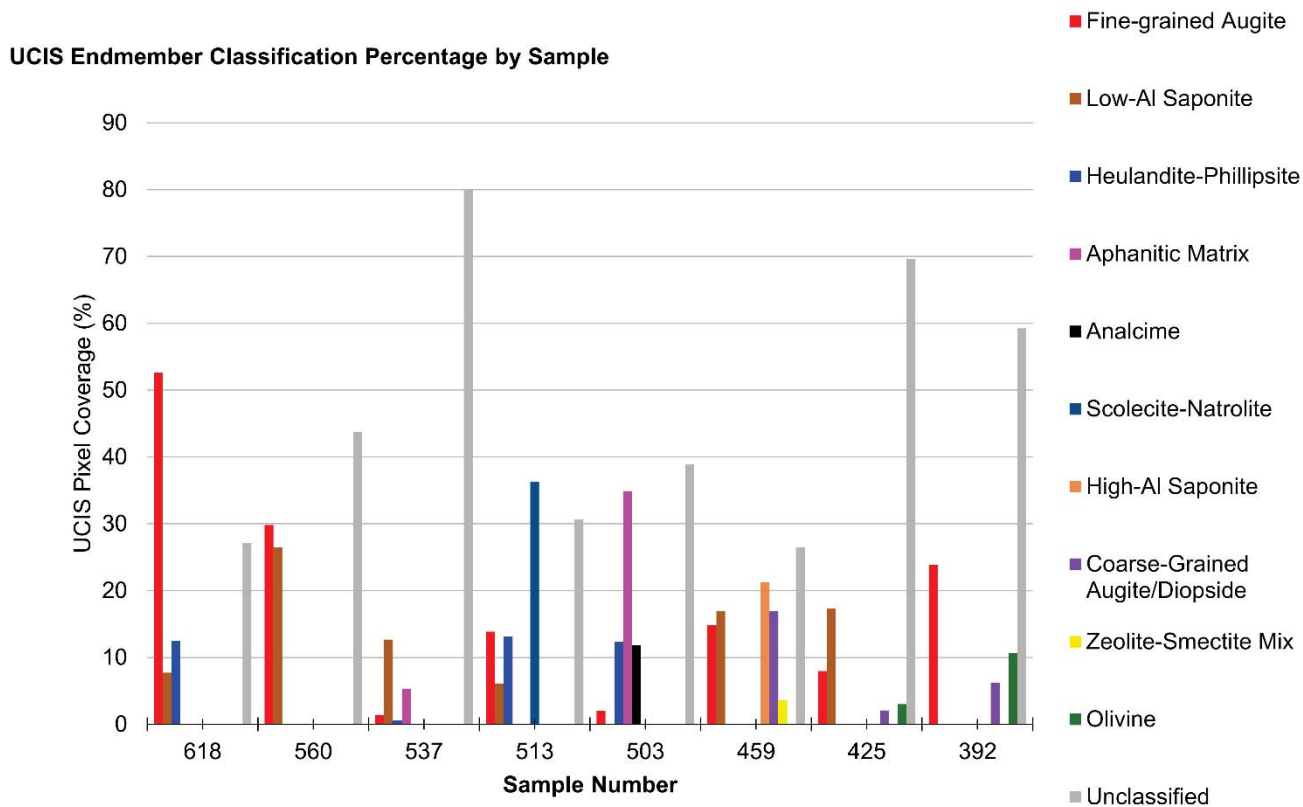
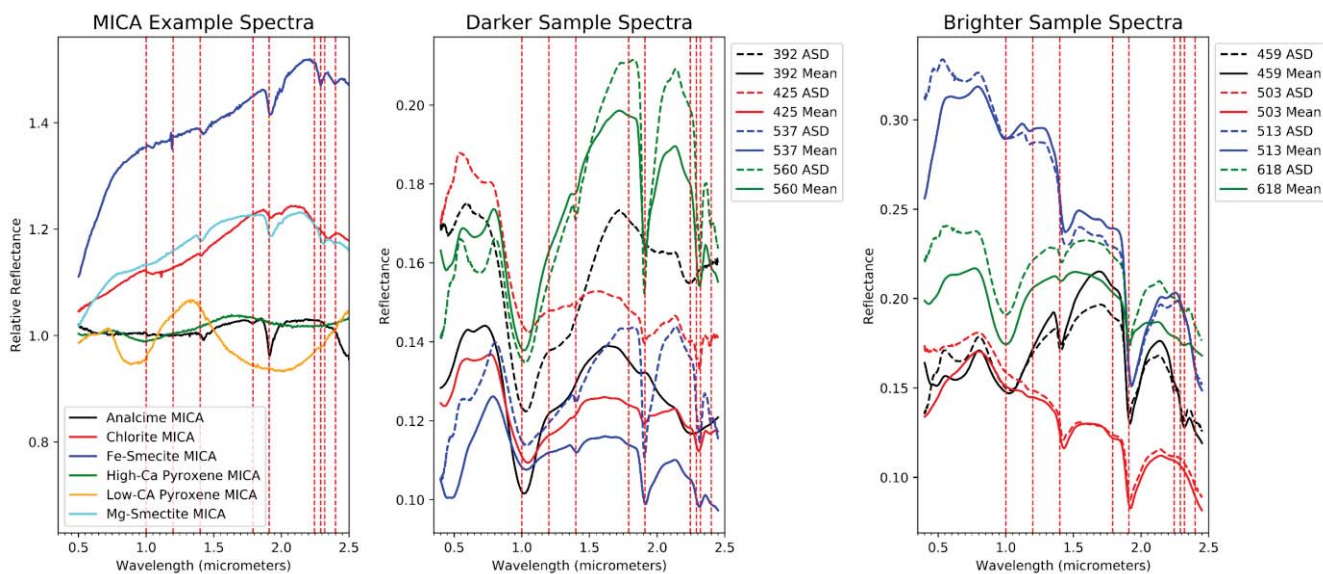


Appendix Figures

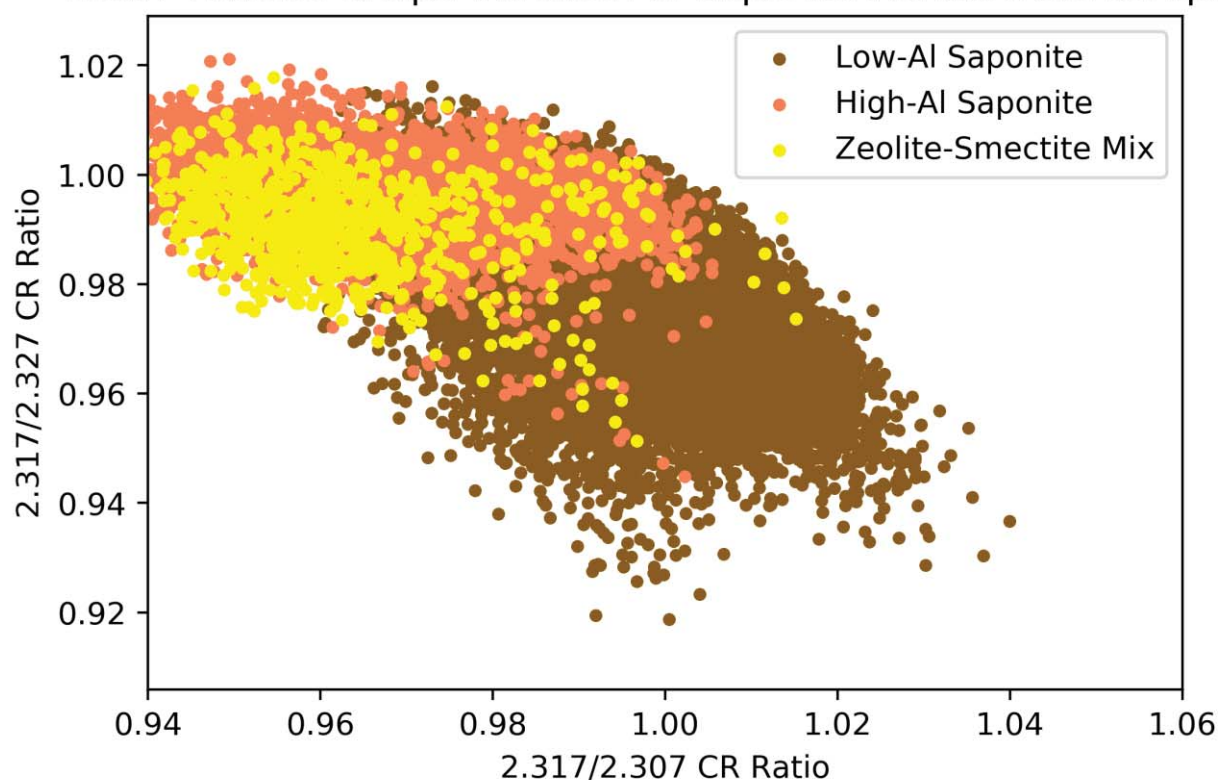


Appendix Figure 1: Spectral end-member classified pixel abundances from UCIS image mosaic. Unclassified pixels are generally plagioclase and primary oxide grains, though voids in the interior of samples are included in this case.

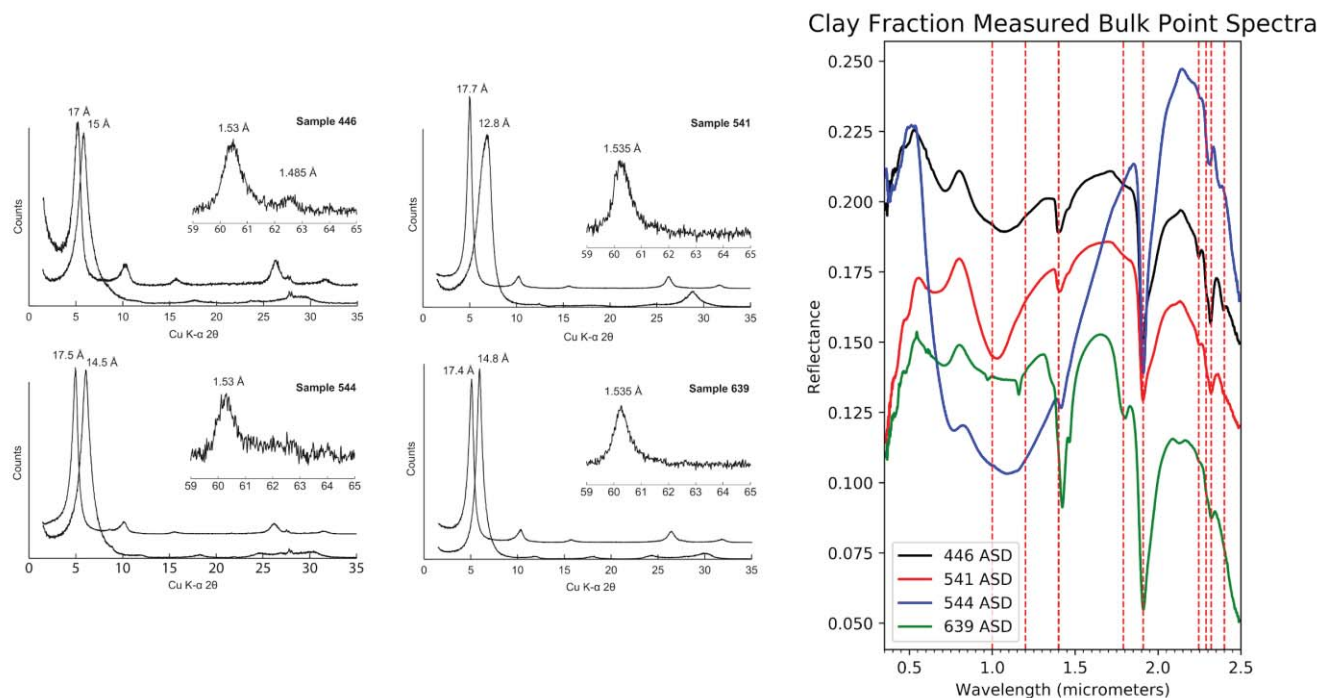


Appendix Figure 2: Ratioed CRISM Minerals Identified through CRISM Analysis (MICA) spectra (Viviano-beck et al., 2014) of relevant mineralogy compared to both mean UCIS pixels of each sample, and bulk point spectra of each sample.

2.317 Feature Shape Variation of Saponite Across UCIS Samples



Appendix Figure 3: Feature shape variation of all UCIS pixels classified as saponite-containing. The ratio values on each axis are of continuum-removed spectra.



Appendix Figure 4: Clay fraction and bulk XRD results for samples SR-446, -541, -544, and -639 and their cut face point spectra for comparison. Each panel shows the 0-35 2θ range both glycolated and air dried, with a zoomed in view of the 59-65 2θ range. All samples, despite varying VIS-SWIR spectral shapes, are characteristic of saponite.