

Figure 8: Weight percent of (A) gravel, (B) sand, (C) mud, (D) clay and silt in 2014 and 2018 as sampled downstream in the Rio Guayanés with samples collected in small tributary shown as negative distance. The weight percent of gravel (A) 2018 versus 2014 is much lower, while the sand (B) and mud (C) size fractions are higher in 2018 than in 2014 in similar locations. The weight percent of clay (D) displays an opposite trend in 2014 versus 2018 with higher weight percent values in 2018 proximally versus distally while the silt displays very similar values between the two years.

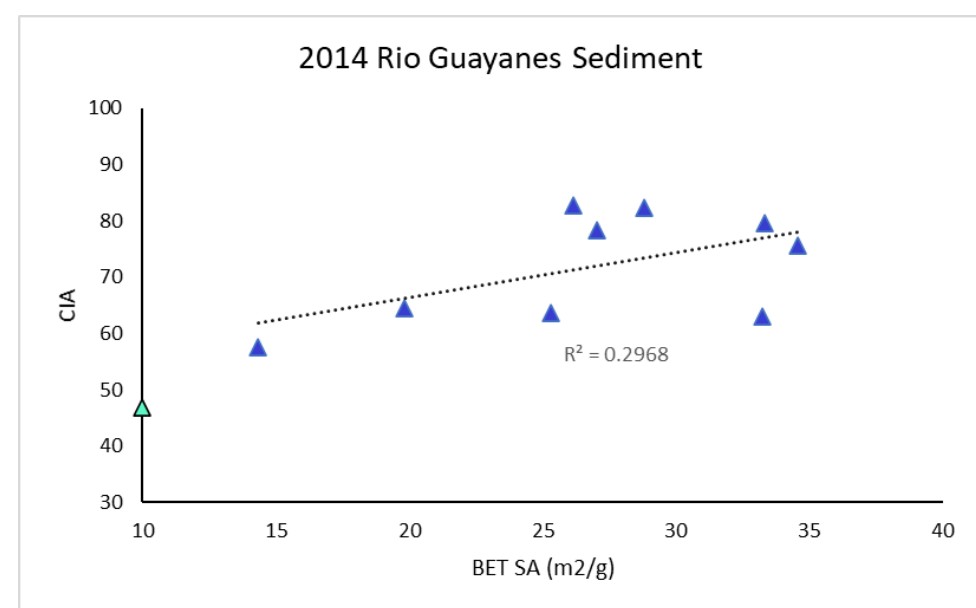
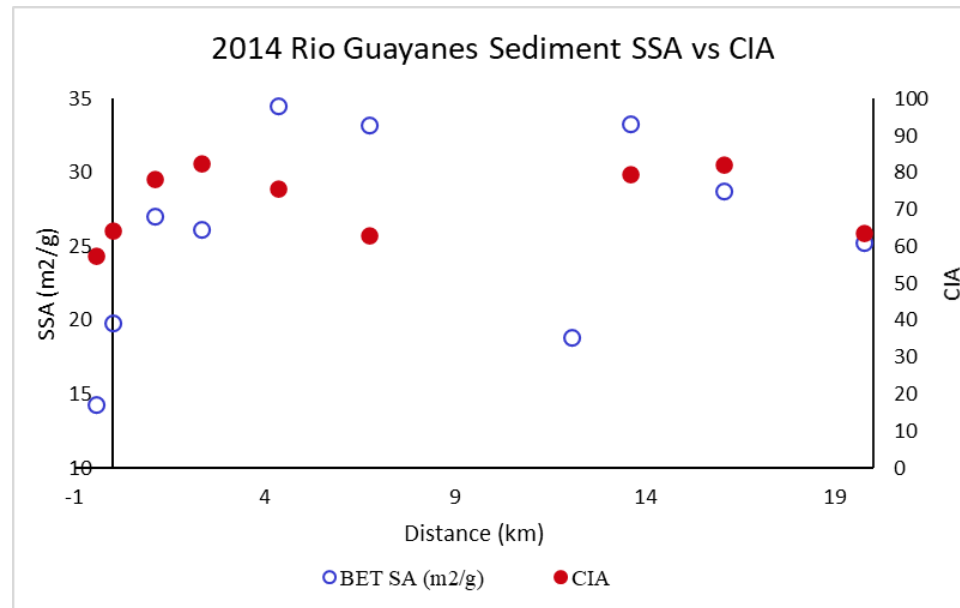
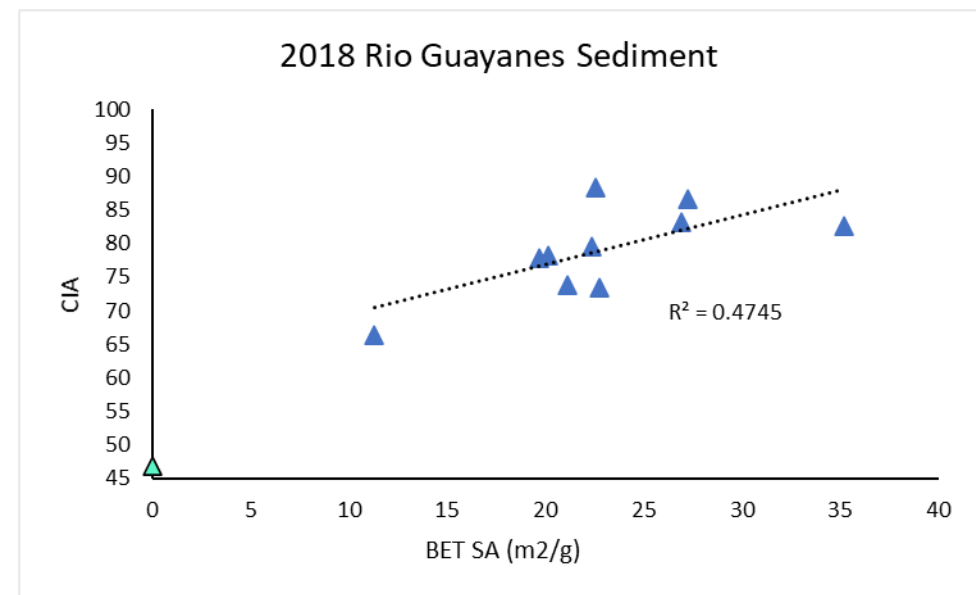
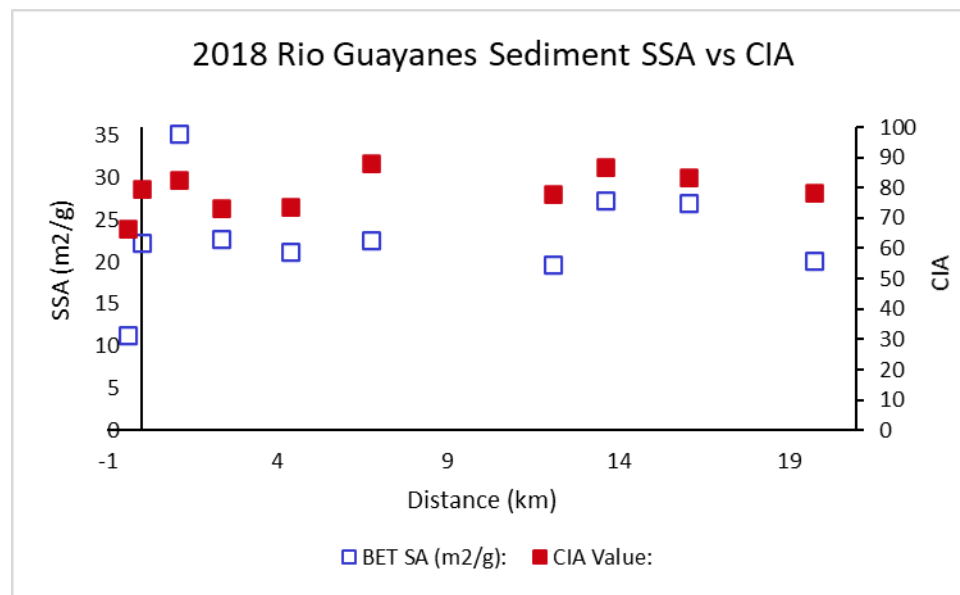


Figure 10. Rio Guayanés sediment and samples demonstrating a slight trend between the specific surface area and chemical index of alteration in 2018 (A & B). 2018 Rio Guayanés saprolite samples demonstrating a strong trend: as specific surface area increases an increase is also observed in the chemical index of alteration (C & D). The CIA value for sample 7 was not obtained by Joo et al. Teal triangle represents bedrock CIA in the study region.

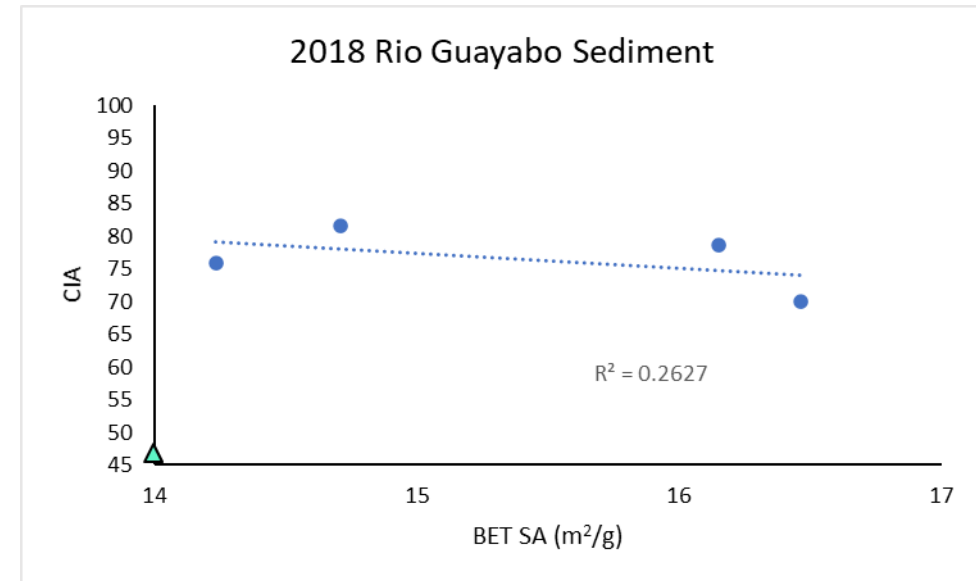
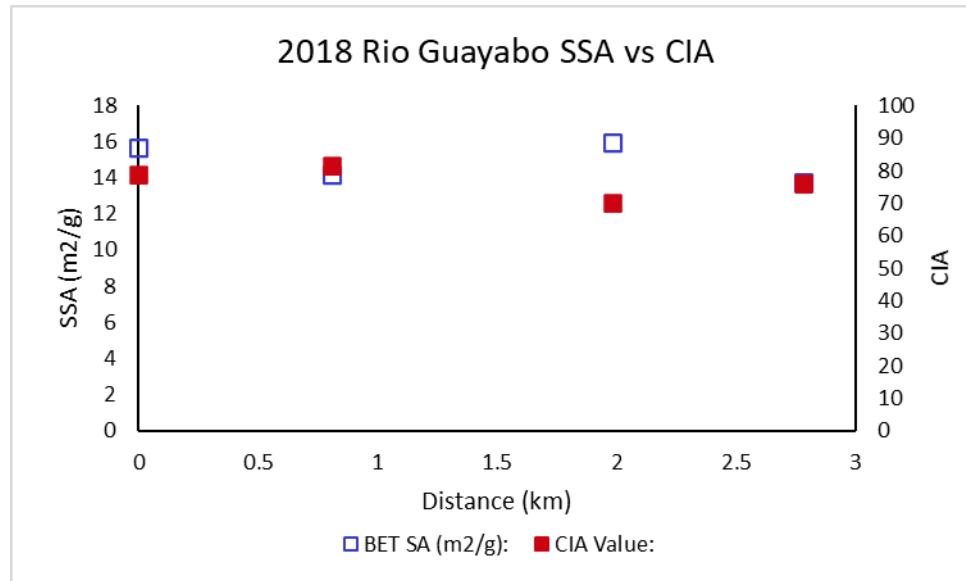


Figure 11: (A) Rio Guayabo sediment specific surface area and chemical index of alteration in 2018 versus downstream distance, which shows strong correlation to one another. (B) 2018 Rio Guayabo specific surface area versus chemical index of alteration which shows no trend.

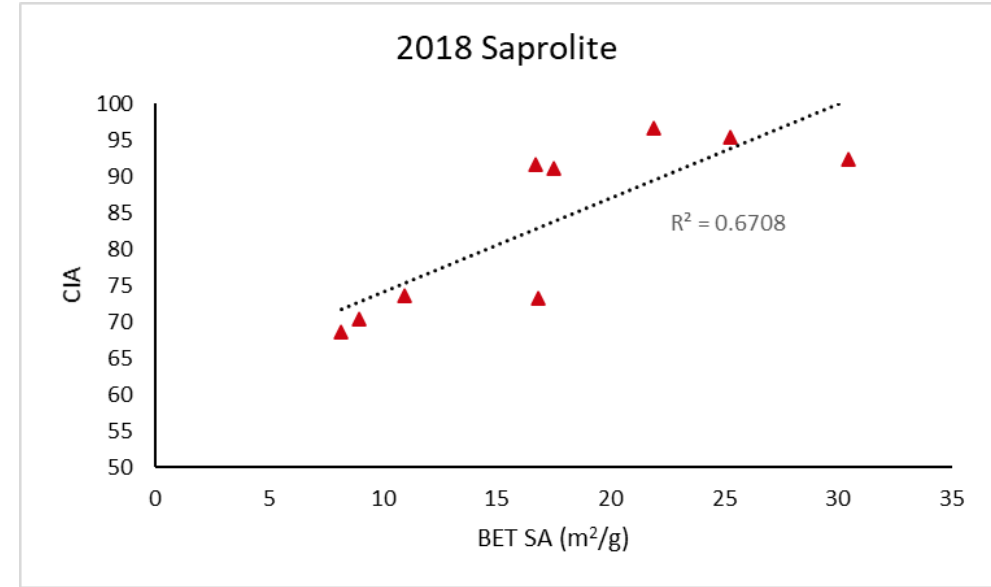
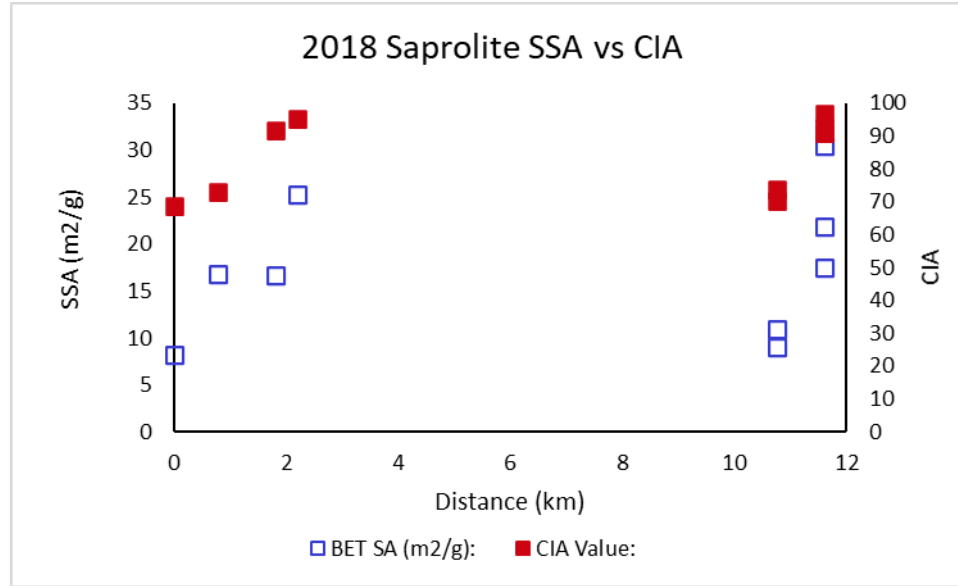


Figure 12: (A) Saprolite sediment specific surface area and chemical index of alteration in 2018 versus distance, which shows a strong correlation to one another. (B) 2018 Saprolite sediment specific surface area versus chemical index of alteration which shows a relatively strong trend.