

Figure 9: This plot is designed to depict where the compositions fall relative to alkaline and sub-alkaline series. The data for the Hawaiian Islands appears to be well spread between both with a favor for a more sub-alkaline character. This is in line with the findings of figure 7 that the compositional series is calc-alkaline, a category of sub-alkaline.

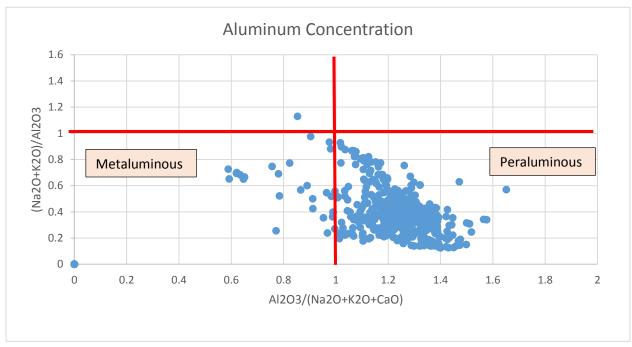


Figure 8: This plot is designed to depict the level of aluminum saturation in the data. The Aleutian Arc data set appears to be peraluminous. This favors the formation of Al bearing mineral phases such as biotite. It is also an indicator that the setting is not alkaline further corroborating the findings of figures 7 and 8.