

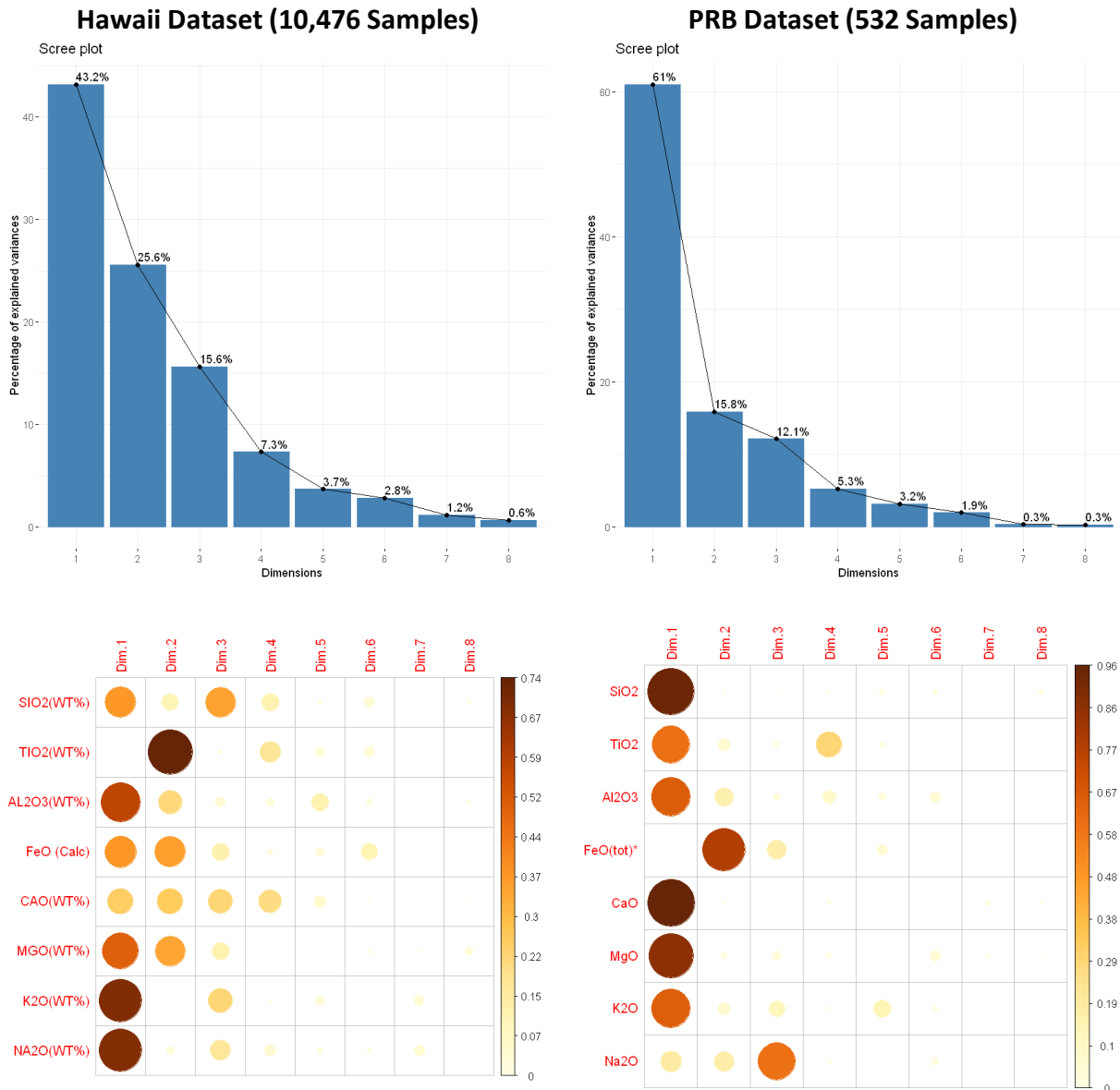
Hawaii and PRB Report

4/3/23 | Miro Manestar

Section 1 – Overview

Analysis was done using the primary elements from the Hawaii and the PRB dataset. Samples with missing data points for any of these 8 variables was excluded. The number of usable samples was 10,476 for Hawaii and 532 for the PRB.

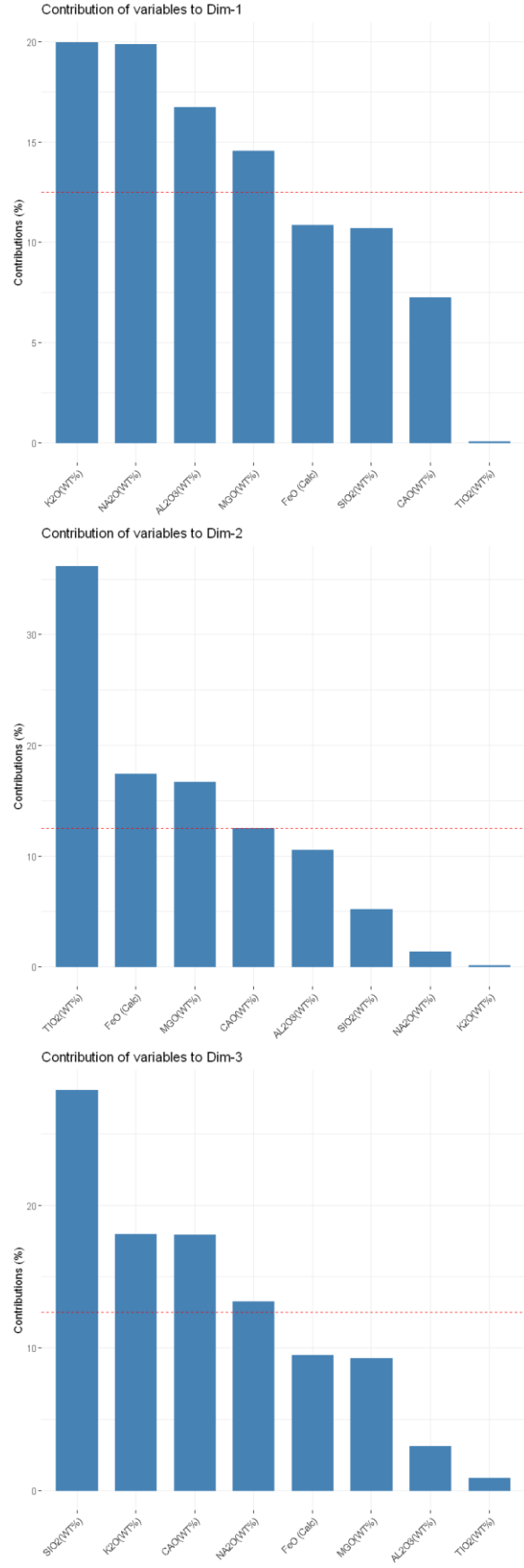
The used elements were as follows: SiO_2 , AlO_3 , FeO , MgO , Na_2O , K_2O , TiO_2 , CaO



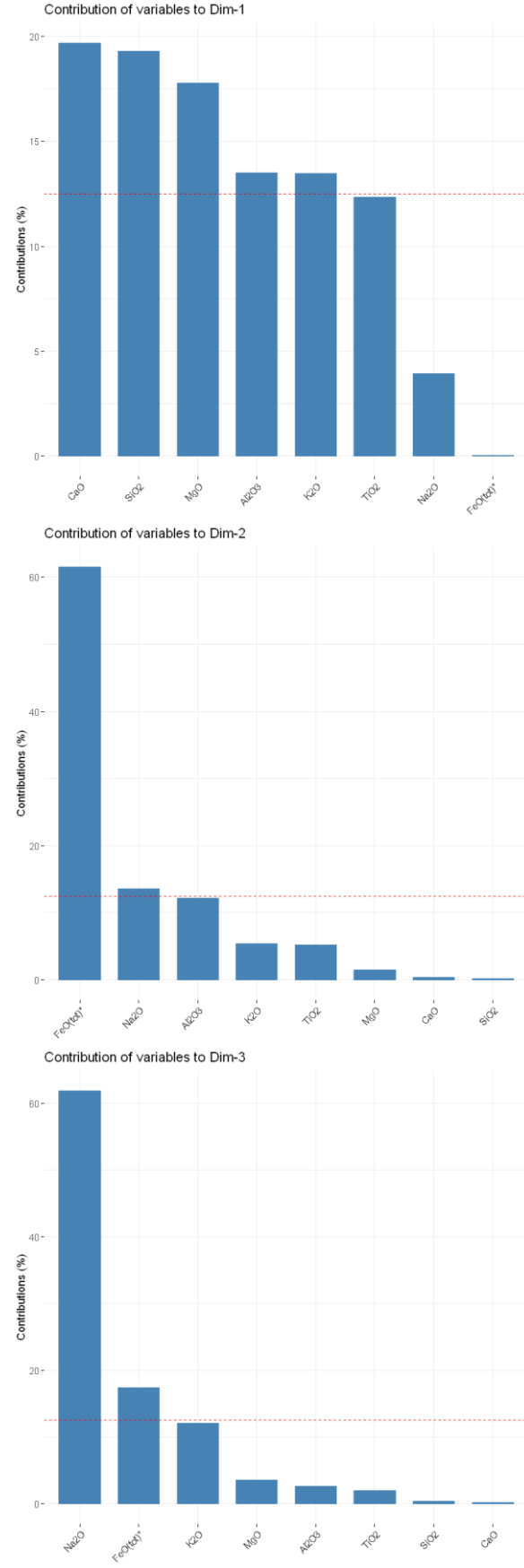
From the scree plots, only the first three dimensions in both datasets contain most of the variation. Thus, the accompanying analysis was done only up to three dimensions.

Contributions

Hawaii Dataset (10,476 Samples)



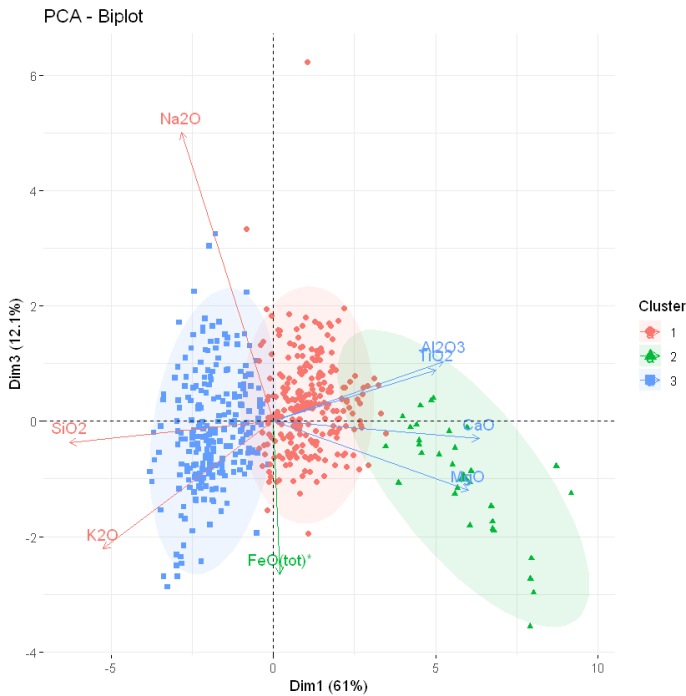
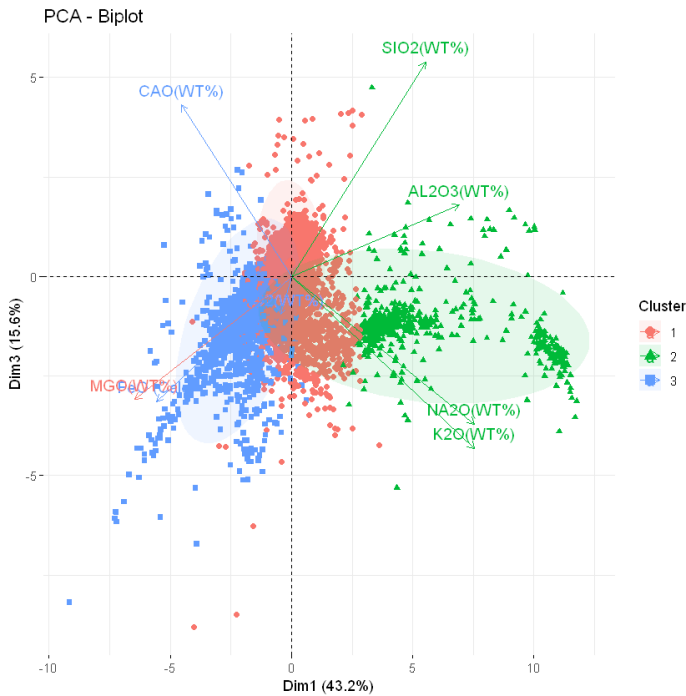
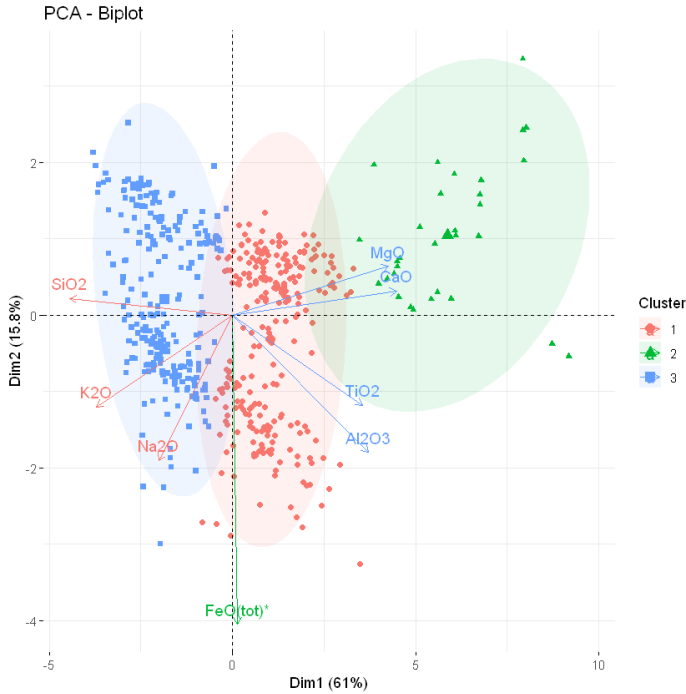
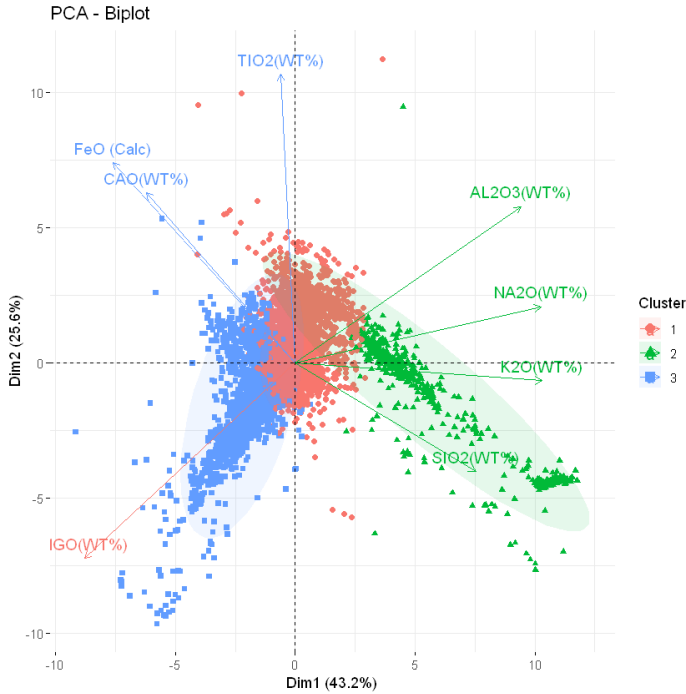
PRB Dataset (532 Samples)



Dimension 1

Hawaii Dataset (10,476 Samples)

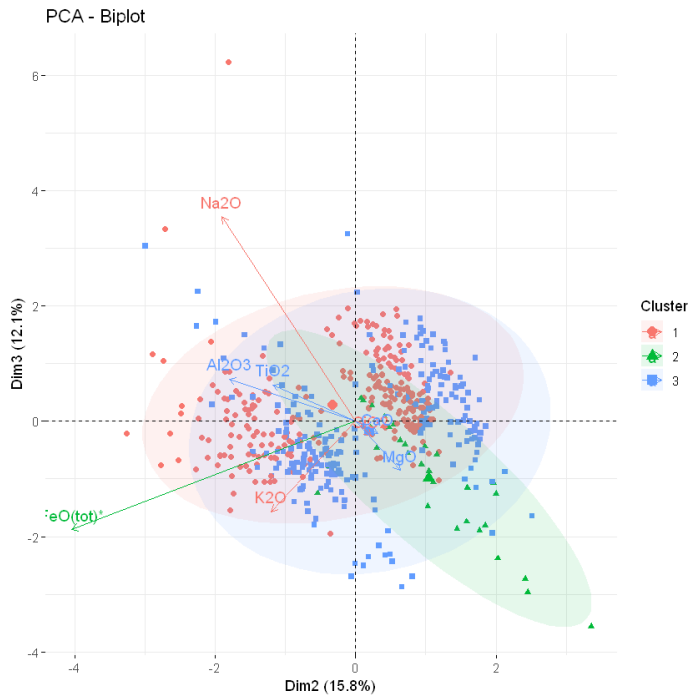
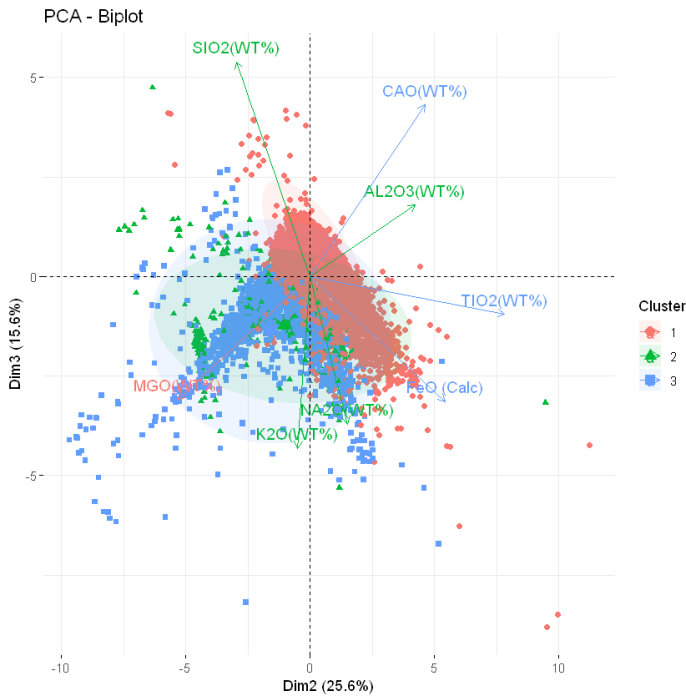
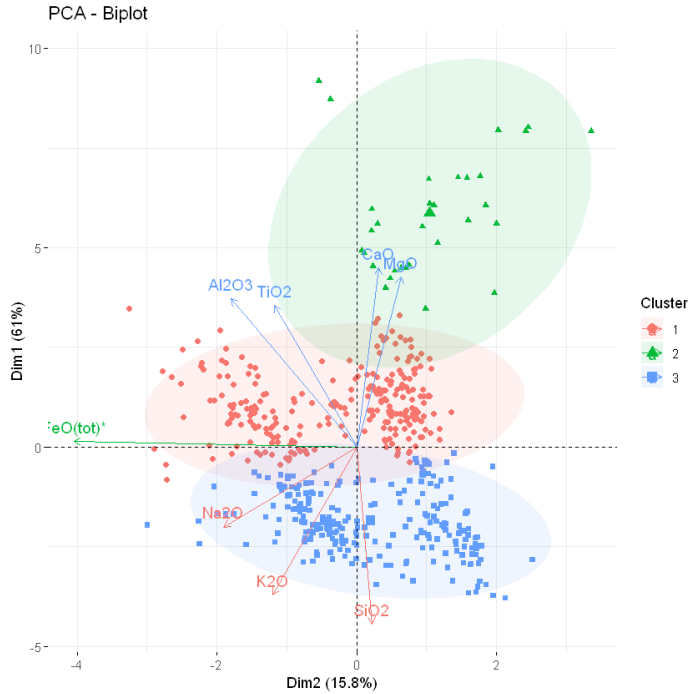
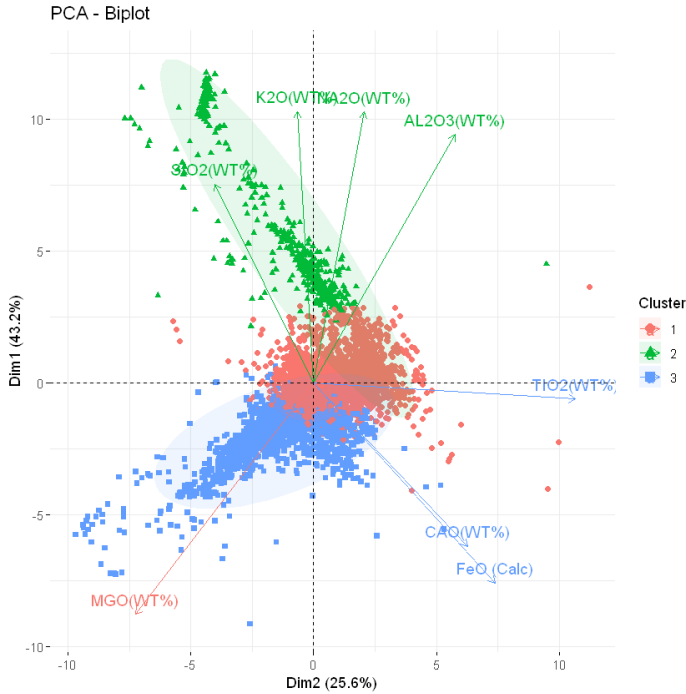
PRB Dataset (532 Samples)



Dimension 2

Hawaii Dataset (10,476 Samples)

PRB Dataset (532 Samples)



Dimension 3

Hawaii Dataset (10,476 Samples)

PRB Dataset (532 Samples)

