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: **SiO2, AlO3, FeO, MgO, Na2O, K2O, TiO2, CaO**

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| **Hawaii Dataset (10,476 Samples)** | **PRB Dataset (532 Samples)** |
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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

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| **Hawaii Dataset (10,476 Samples)** | **PRB Dataset (532 Samples)** |
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|  |  |

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)** |
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