A graph with numbers and letters

Description automatically generated with medium confidence

Cluster 0 seems to contain samples with much higher contamination levels for certain PFAs, particularly PFOA-VA and PFOS-VA. This could indicate that these samples are from regions with significant environmental or industrial contamination.

Clusters 1 and 2 have lower and more consistent levels across all PFAs, which might suggest they represent areas with less contamination or different environmental conditions.

A diagram of numbers and a number

Description automatically generated with medium confidence

Strong Positive Correlations:

* PFOS-VA and PFOA-VA (0.94): These two compounds are highly correlated, suggesting that they often occur together in similar concentrations. This could indicate that they share a similar source or are influenced by similar environmental factors.
* PFDoA-VA and PFDA-VA (0.91): This indicates a strong relationship between these two compounds, again hinting that they may be coming from the same source or degrade at similar rates in the environment.
* PFOS-VA and PFHpA-VA (0.93): This is another strong positive correlation, which suggests these two chemicals are likely present together.

Moderate Positive Correlations:

* 6\_2 FTS-VA and 8\_2 FTS-VA (0.73): These two fluorotelomer sulfonates (FTS) compounds show a decent positive correlation, which is expected since they are structurally related.
* PFUnA-VA and PFTrDA-VA (0.74): Moderate positive correlation between these two long-chain PFAs.

Moderate Negative Correlations:

* PFOA-VA and PFHxA-VA (-0.50): A moderate negative correlation suggests that when PFOA levels increase, PFHxA levels tend to decrease. This could indicate different environmental behavior or sources for these compounds.

A collage of graphs

Description automatically generated

Several variables, such as PFOA-VA, PFOS-VA, and PFHxS-VA, show a few observations that are significantly higher than the majority of the data, which could be potential outliers.