

Normalized Davies – Bouldin Index

- NO DR - KMEANS
- NO DR - DBSCAN
- NO DR - HDBSCAN
- PCA - KMEANS
- PCA - DBSCAN
- PCA - HDBSCAN
- UMAP - KMEANS
- UMAP - DBSCAN
- UMAP - HDBSCAN

0: NO DR - KMEANS:  $n_{clusters} = 3$ ,  $n_{neighbors}^{kNN} = 9$   
 10: NO DR - DBSCAN:  $eps = 80.27$ ,  $min_{samples} = 23$ ,  $n_{neighbors}^{kNN} = 11$   
 30: PCA - KMEANS:  $n_{comp} = 2$ ,  $n_{clusters} = 3$ ,  $n_{neighbors}^{kNN} = 2$   
 41: PCA - DBSCAN:  $n_{comp} = 1$ ,  $eps = 82.34$ ,  $min_{samples} = 4$ ,  $n_{neighbors}^{kNN} = 15$   
 59: UMAP - KMEANS:  $n_{neighbors}^{UMAP} = 10$ ,  $min_{dist} = 0.10$ ,  $n_{components} = 5$ ,  $n_{clusters} = 16$ ,  $n_{neighbors}^{kNN} = 4$   
 64: UMAP - DBSCAN:  $n_{neighbors}^{UMAP} = 9$ ,  $min_{dist} = 0.10$ ,  $n_{components} = 5$ ,  $eps = 1.41$ ,  $min_{samples} = 3$ ,  $n_{neighbors}^{kNN} = 14$   
 67: UMAP - HDBSCAN:  $n_{neighbors}^{UMAP} = 10$ ,  $min_{dist} = 0.11$ ,  $n_{components} = 5$ ,  $min_{cluster\ size} = 20$ ,  $min_{samples} = 6$ ,  $\epsilon = 0.66$ ,  $n_{neighbors}^{kNN} = 9$

Silhouette Score