

Number of clusters

 10^2 10^1 10^0

0.0

0.2

0.4

0.6

0.8

1.0

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

1: NO DR - KMEANS: $n_{clusters} = 42$, $n_{neighbors}^{kNN} = 2$
 2: NO DR - KMEANS: $n_{clusters} = 14$, $n_{neighbors}^{kNN} = 5$
 3: NO DR - KMEANS: $n_{clusters} = 33$, $n_{neighbors}^{kNN} = 5$
 4: NO DR - KMEANS: $n_{clusters} = 22$, $n_{neighbors}^{kNN} = 8$
 7: NO DR - KMEANS: $n_{clusters} = 27$, $n_{neighbors}^{kNN} = 5$

31: PCA - KMEANS: $n_{comp} = 44$, $n_{clusters} = 48$, $n_{neighbors}^{kNN} = 1$
 33: PCA - KMEANS: $n_{comp} = 11$, $n_{clusters} = 34$, $n_{neighbors}^{kNN} = 8$
 34: PCA - KMEANS: $n_{comp} = 11$, $n_{clusters} = 23$, $n_{neighbors}^{kNN} = 10$
 37: PCA - KMEANS: $n_{comp} = 51$, $n_{clusters} = 42$, $n_{neighbors}^{kNN} = 1$
 38: PCA - KMEANS: $n_{comp} = 51$, $n_{clusters} = 20$, $n_{neighbors}^{kNN} = 1$

61: UMAP - KMEANS: $n_{neighbors}^{UMAP} = 9$, $min_{dist} = 0.17$, $n_{components} = 4$, $n_{clusters} = 49$, $n_{neighbors}^{kNN} = 1$
 63: UMAP - KMEANS: $n_{neighbors}^{UMAP} = 10$, $min_{dist} = 0.18$, $n_{components} = 5$, $n_{clusters} = 28$, $n_{neighbors}^{kNN} = 6$
 65: UMAP - KMEANS: $n_{neighbors}^{UMAP} = 8$, $min_{dist} = 0.18$, $n_{components} = 5$, $n_{clusters} = 39$, $n_{neighbors}^{kNN} = 1$
 66: UMAP - KMEANS: $n_{neighbors}^{UMAP} = 9$, $min_{dist} = 0.44$, $n_{components} = 5$, $n_{clusters} = 16$, $n_{neighbors}^{kNN} = 3$
 68: UMAP - KMEANS: $n_{neighbors}^{UMAP} = 9$, $min_{dist} = 0.14$, $n_{components} = 5$, $n_{clusters} = 14$, $n_{neighbors}^{kNN} = 3$

80: UMAP - HDBSCAN: $n_{neighbors}^{UMAP} = 8$, $min_{dist} = 0.17$, $n_{components} = 4$, $min_{cluster\ size} = 8$, $min_{samples} = 2$, $\epsilon = 0.14$, $n_{neighbors}^{kNN}$
 82: UMAP - HDBSCAN: $n_{neighbors}^{UMAP} = 5$, $min_{dist} = 0.12$, $n_{components} = 5$, $min_{cluster\ size} = 2$, $min_{samples} = 4$, $\epsilon = 0.89$, $n_{neighbors}^{kNN}$

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