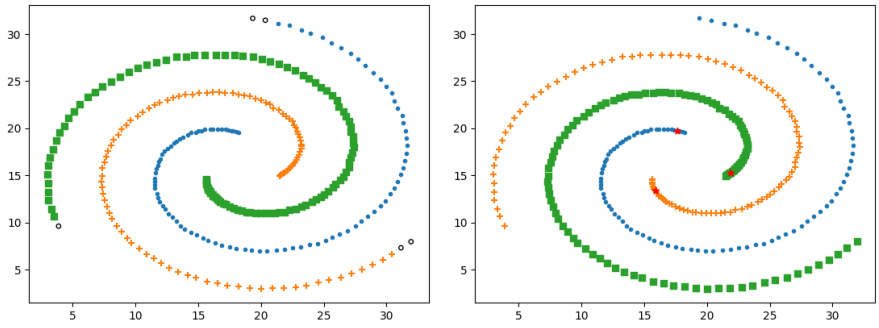
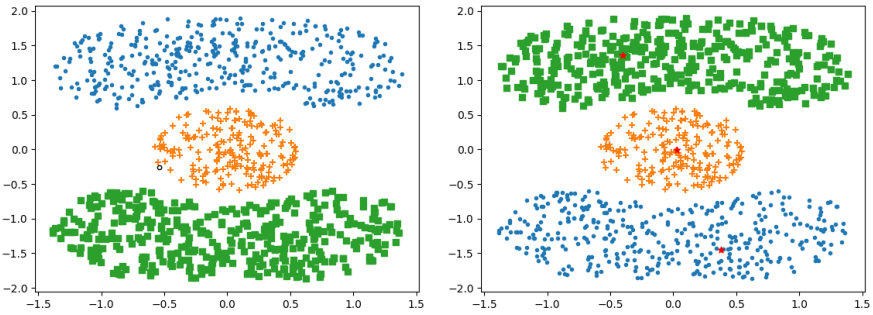


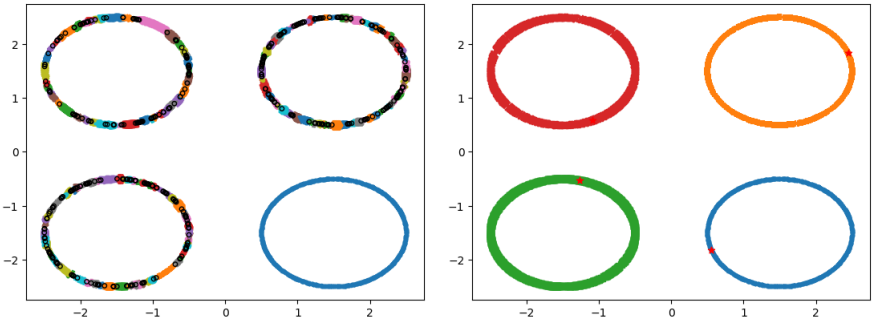
(a) HDBSCAN (b) MMJ-K-means

Figure 1: MMJ-K-means vs. HDBSCAN. The three clusters are well separated. HDBSCAN wrongly labeled five points (the five black circles) as noise/outliers. While MMJ-K-means labeled the data correctly. All the hyper-parameters of HDBSCAN are set to default. The best K of MMJ-K-means is automatically selected by MMJ-CH from range(2,31) .



(a) HDBSCAN (b) MMJ-K-means

Figure 2: MMJ-K-means vs. HDBSCAN. The three clusters are well separated. HDBSCAN wrongly labeled one point (the black circle) as noise/outlier. While MMJ-K-means labeled the data correctly. All the hyper-parameters of HDBSCAN are set to default. The best K of MMJ-K-means is automatically selected by MMJ-CH from range(2,31) .



(a) HDBSCAN (b) MMJ-K-means

Figure 3: MMJ-K-means vs. HDBSCAN. The four clusters are well separated. HDBSCAN totally mislabeled the data. While MMJ-K-means labeled the data correctly. All the hyper-parameters of HDBSCAN are set to default. The best K of MMJ-K-means is automatically selected by MMJ-CH from range(2,31) .