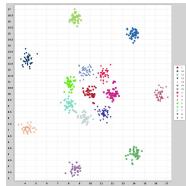
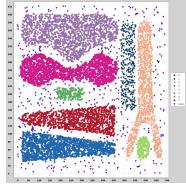
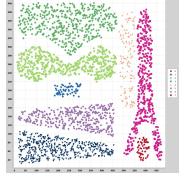
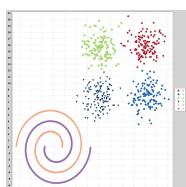
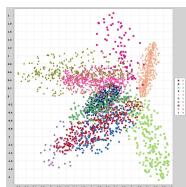
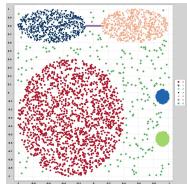
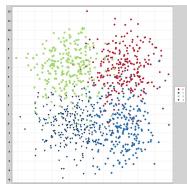
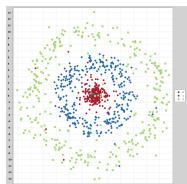
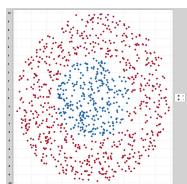
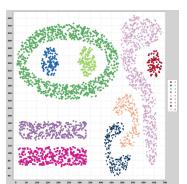


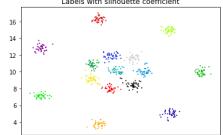
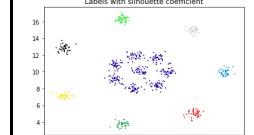
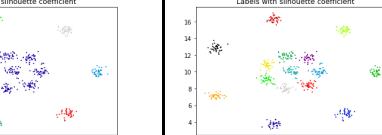
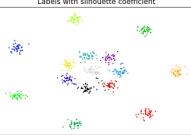
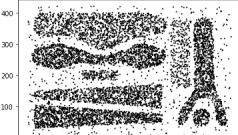
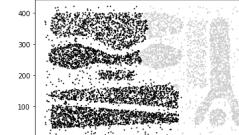
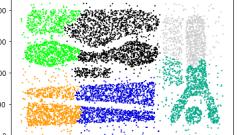
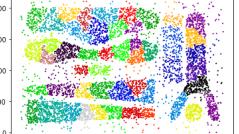
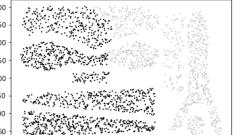
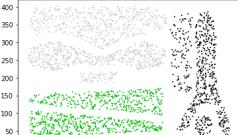
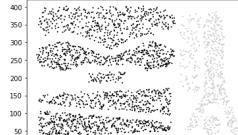
Annexe 1: Jeux de données

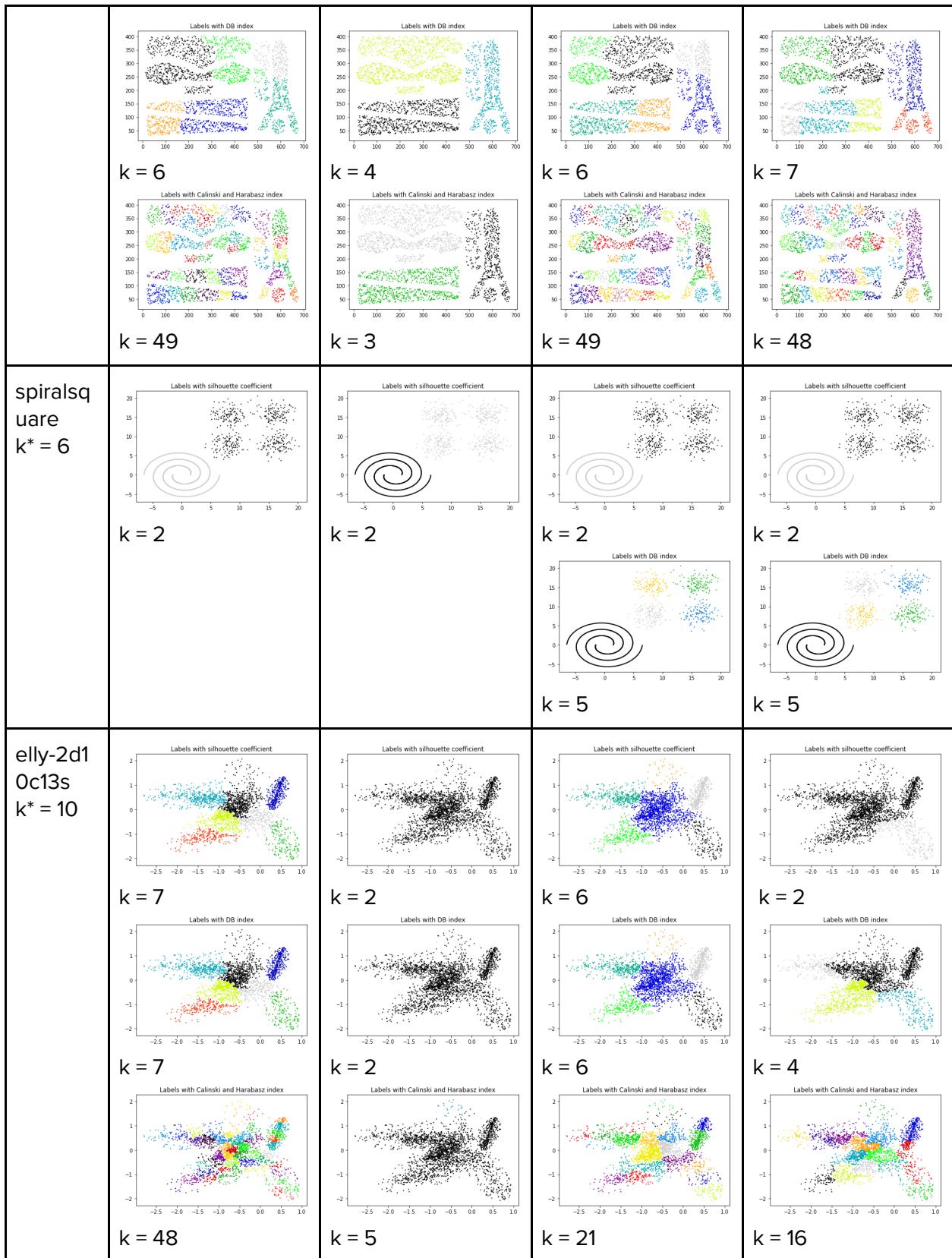
Nous avons choisi les jeux de données suivants car leurs caractéristiques sont toujours différentes et ils forment un panel complet des différentes caractéristiques :

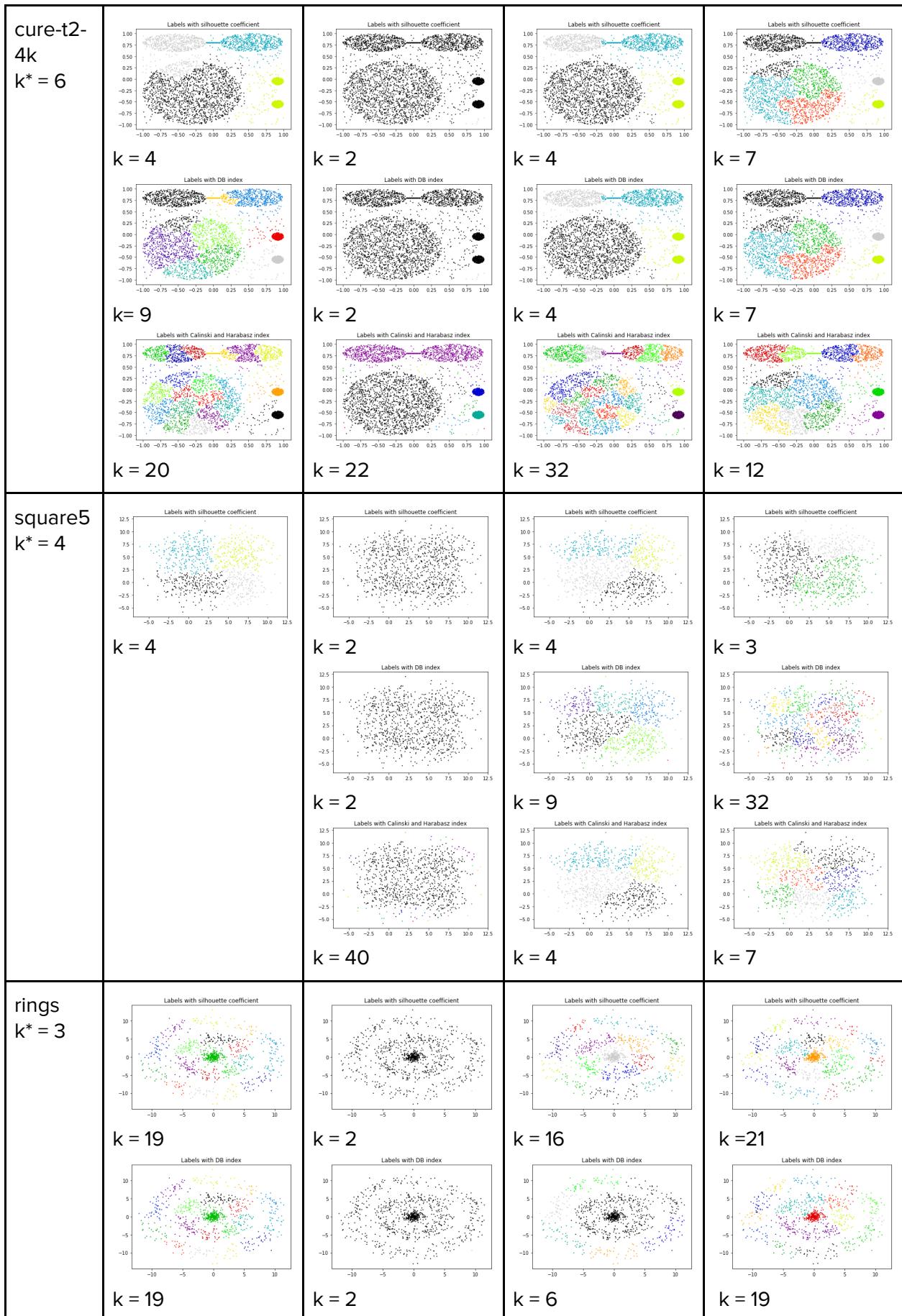
Jeux de données	formes convexe/ non convexes	formes bien séparées / mal séparées	densité similaire / variable	présence ou non de données bruitées	image et nombre de clusters
R15	convexes	bien	similaire	non	 k = 15
cluto-t8.8k	convexes et non convexes	bien	similaire	oui	 k = 8
complex8	convexes et non convexes	bien	similaire	non	 k = 8
spiralsquare	convexes (squares) et non convexes (spirals)	bien	variable	non	 k = 6
elly-2d10c13s	convexes	mal	variable	non	 k = 10

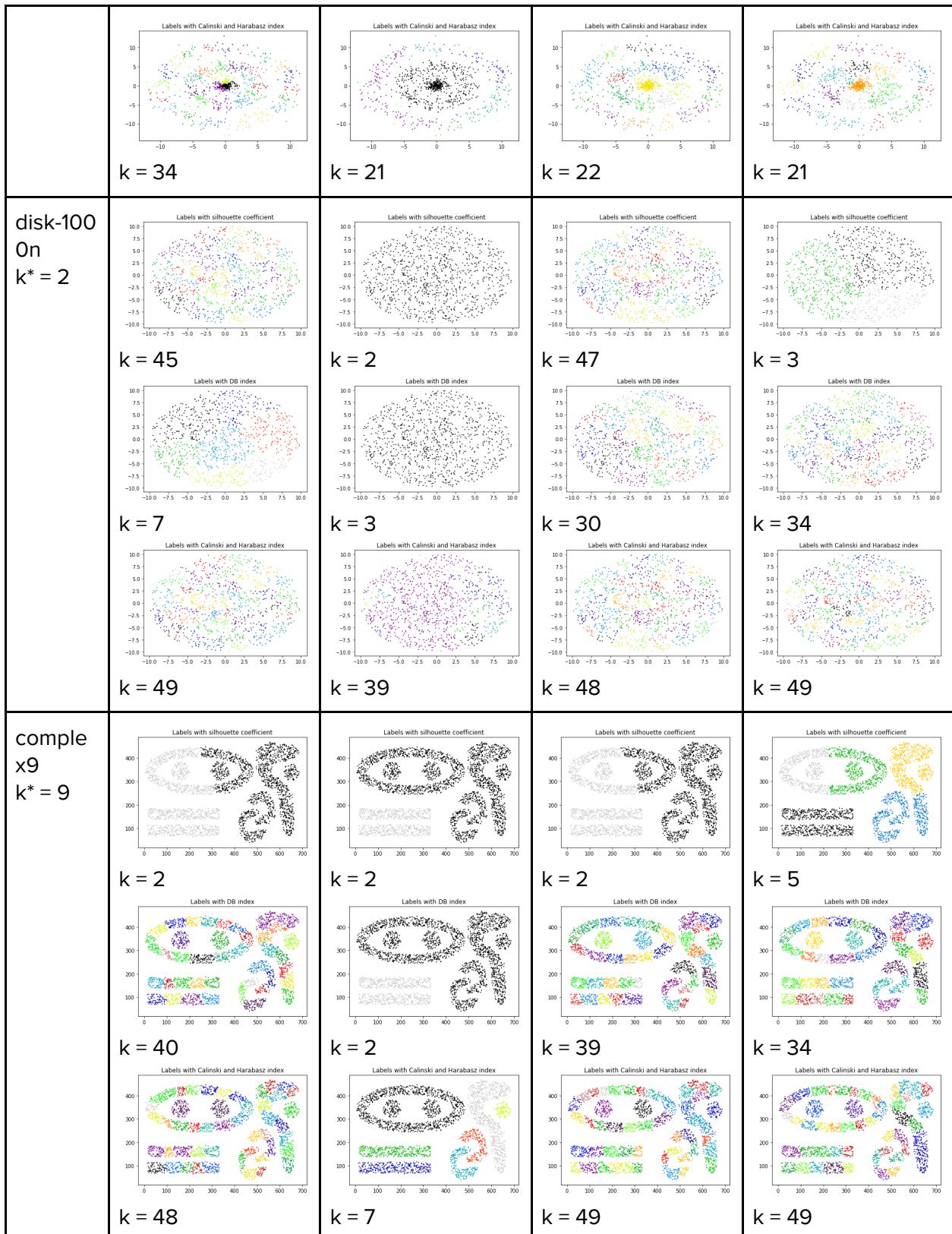
cure-t2-4k	convexes	bien	variable	oui	 k = 6
square5	convexes	mal	similaire	oui	 k = 4
rings	non convexes et convexe	mal	variable	oui	 k = 3
disk-1000n	convexe et non convexe	mal	similaire	non	 k = 2
complex9	convexes et non convexes	bien	similaire	non	 k = 9

Annexe 2: Comparaison des clusters obtenus avec les différentes méthodes de combinaison pour le clustering agglomératif

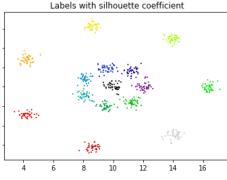
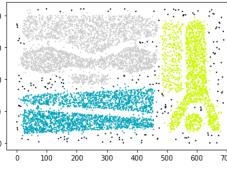
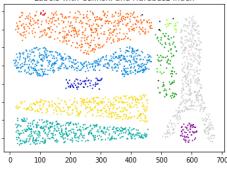
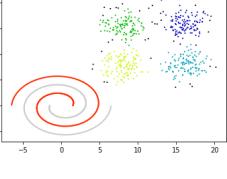
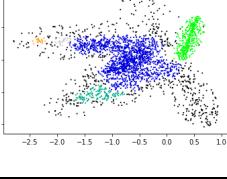
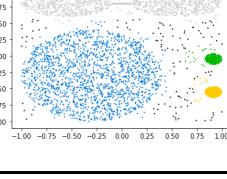
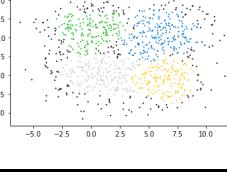
Dataset	Méthode de combinaison			
	Ward	Single	Average	Complete
R15 $k^* = 15$	 k = 15	 k = 8	 k = 15	 k = 15
cluto-t8. 8k $k^* = 8$	 k = 2	 k = 2	 k = 2	 k = 2
	 k = 6	 k = 14	 k = 2	 k = 6
	 k = 49	 k = 7	 k = 10	 k = 44
comple x8 $k^* = 8$	 k = 2	 k = 3	 k = 2	 k = 2

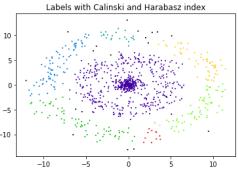
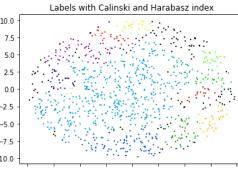
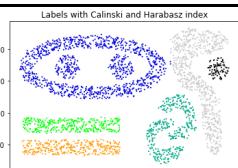






Annexe 3: Clusters obtenus avec DBSCAN selon les métriques et les paramètres

Dataset	Meilleurs résultats
R15 $k^* = 15$	 <p>$k = 15$ eps= 0.7 min-samples= 29</p>
cluto-t8.8k $k^* = 8$	 <p>$k = 4$ eps= 13,0 et min-samples= 7 avec le coefficient de silhouette ou l'indice de Calinski et Harabasz</p>
complex8 $k^* = 8$	 <p>$k = 12$ eps= 14,9 et min-samples= 5 avec l'indice de Calinski et Harabasz</p>
spiralsquare $k^* = 6$	 <p>$k = 7$ eps= 0,95 et min-samples= 5 avec le coefficient de silhouette ou l'indice de Calinski et Harabasz</p>
elly-2d10c13s $k^* = 10$	 <p>$k = 6$ eps= 0,1 et min-samples= 15 avec l'indice de Calinski et Harabasz</p>
cure-t2-4k $k^* = 6$	 <p>$k = 5$ eps= 0,1 et min-samples= 9 avec le coefficient de silhouette ou l'indice de Calinski et Harabasz</p>
square5 $k^* = 4$	 <p>$k = 5$ eps= 0,9 min-samples= 17 avec l'indice de Calinski et Harabasz</p>

rings $k^* = 3$	 Labels with Calinski and Harabasz index k = 9 eps= 1,11 et min_samples= 3 avec l'indice de Calinski et Harabasz
disk-1000n $k^* = 2$	 Labels with Calinski and Harabasz index k = 14 eps= 1 et min-samples= 11 avec l'indice de Calinski et Harabasz
complex9 $k^* = 9$	 Labels with Calinski and Harabasz index k = 6 eps= 21 et min-samples = 18 avec l'indice de Calinski et Harabasz