

Dataset	Objects	Features	Clusters	0% CS					DILS
				PCCC-N2-S	PCCC-N2-S-RD	COPKM	LCC	CSC	
Banana	5,300	2	2	4.8	6.9	1.0	–	5,208.4	3,849.2
Letter	20,000	16	26	135.9	148.4	1,023.6	–	–	4,450.1
Shuttle	57,999	9	7	31.0	148.6	233.5	–	–	–
CIFAR10	60,000	3,072	10	308.5	3,310.3	–	–	–	–
CIFAR100	60,000	3,072	100	1,027.7	3,613.3	–	–	–	–
MNIST	70,000	784	10	156.7	2,808.5	3,715.8	–	–	–
Sum				1,664.7	10,036.1	12,173.9*	21,600.0*	23,208.4*	22,699.4*

*Nan values (–) are replaced with 3,600 before computing the sum.

Table W108: Average running times (in seconds) of the PCCC and the PCCC-R algorithms and the four state-of-the-art algorithms (COPKM, CSC, DILS, LCC) for the constraint sets of size 0% CS. Higher values indicate better separated clusters. The lowest values are stated in bold. The column KMEANS reports the average running time of the unconstrained k-means algorithm. The hyphen indicates that the respective algorithm returned no solution within the time limit of 1,800 seconds.