

Dataset	20% CS		KMEANS
	PCCC	PCCC-N2-S	
n300-k10-s10	1.8	0.3	0.1
n300-k10-s20	2.8	0.4	0.0
n300-k10-s30	4.3	0.8	0.0
n300-k10-s40	6.1	1.0	0.1
n300-k10-s50	6.3	0.8	0.1
n300-k20-s10	8.1	0.5	0.1
n300-k20-s20	12.1	0.7	0.0
n300-k20-s30	13.5	0.9	0.0
n300-k20-s40	9.6	0.8	0.0
n300-k20-s50	14.3	0.8	0.1
n300-k50-s10	17.4	0.5	0.1
n300-k50-s20	22.4	0.4	0.0
n300-k50-s30	28.0	0.6	0.0
n300-k50-s40	22.6	0.5	0.1
n300-k50-s50	25.6	0.5	0.0
Sum	195.0	9.5	0.7

Table W68: Average running times (in seconds) of the PCCC and the PCCC-N2-S algorithms for the constraint sets of size 20% CS. 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 3,600 seconds.