

Dataset	30% CS	
	PCCC	PCCC-N2-S
n300-k10-s10	16.0	1.3
n300-k10-s20	15.7	1.0
n300-k10-s30	19.0	1.9
n300-k10-s40	49.4	4.2
n300-k10-s50	1,230.9	4.8
n300-k20-s10	63.3	1.9
n300-k20-s20	66.0	2.6
n300-k20-s30	96.6	3.9
n300-k20-s40	84.4	3.5
n300-k20-s50	1,354.8	5.2
n300-k50-s10	89.5	1.2
n300-k50-s20	126.8	1.6
n300-k50-s30	115.8	1.8
n300-k50-s40	145.4	2.4
n300-k50-s50	100.5	1.4
Sum	3,574.2	38.7

Table W50: Average running times (in seconds) of the PCCC and the PCCC-N2-S algorithms for the constraint sets of size 30% 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.