

$ DB $	1,000	3,000	7,000	10,000
avg. len.	42.9	44.0	43.5	43.4
PM comptime	2.0	6.5	15.0	21.4
# of rFTSs	6307	6872	6325	6266
GT comptime	217.3	951.2	2226.2	3465.3
# of FTSs	171787	190876	170387	170902
$ V_{avg} $	6	8	15	20
avg. len.	42.9	61.2	135.5	188.7
PM comptime	2.0	6.3	228.7	4335.0
# of rFTSs	6307	20755	3653370	81012875
GT comptime	217.3	3599.3	-	-
# of FTSs	171787	936115	-	-
$p_i$ [ avg. len.	116.7	65.0	42.9	18.7
PM comptime	419.0	7.5	2.0	0.7
# of rFTSs	4458046	58251	6307	585
GT comptime	-	4132.2	217.3	8.5
# of FTSs	-	2355657	171787	9765
$ L_e $	1	3	7	10
avg. len.	43.5	43.7	43.8	43.0
PM comptime	54.5	5.1	1.9	0.97
# of rFTSs	70257	12972	5318	3333
GT comptime	2195.9	644.0	205.9	122.1
# of FTSs	2995499	474564	132538	62897
$\sigma'$ [ avg. len.	42.9	42.9	42.9	42.9
PM comptime	377.1	30.7	2.0	1.8
# of rFTSs	90607156	5744037	6307	1630
GT comptime	2122.4	472.3	217.3	93.3
# of FTSs	176177313	11891069	171787	43100

PM: Proposed Method, GT: the original GTRACE, comptime: computation time [sec], avg. len.: average length of transformation sequences, # of rFTSs (or FTSs): the number of mined rFTSs (or FTSs)