

Benchmark details

```
[('mcgbh-reset-precise-baseline-oss-379-S-985cdee6d0-hive_sf1000_orc_part-s580',
 'baseline',
 'r'),
('mcgbh-reset-precise-oss-379-S-b2c57ffb29-hive_sf1000_orc_part-s579',
 'reset with exact positions',
 'g')]
```

Overall Times

	label	TPCH wall time	TPC- DS wall time	TPCH CPU time	TPC- DS CPU time	TPCH Network	TPC-DS Network	TPCH peak mem	TPC- DS peak mem	TPCH physical input	TPC-DS physical input	TPCH wall time % change	TPC-DS wall time % change	TPCH CPU time % change	TPC-DS CPU time % change	TPCH Network % change	TPC-DS Network % change	TPCH peak mem % change	TPC- DS peak mem % change	TPCH physical input % change	TPCH physical input % change	TPC-DS physical input % change
0	baseline	544	1,022	58,773	112,392	2.073 PiB	1.715 PiB	1.166 TiB	0.949 TiB	833.244 GiB	1.009 TiB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	reset with exact positions	546	1,025	58,821	113,101	2.083 PiB	1.715 PiB	1.155 TiB	0.929 TiB	833.262 GiB	1.010 TiB	0.42	0.29	0.08	0.63	0.48	0.05	-0.91	-2.12	0.00	0.00	0.05

FAILED QUERIES

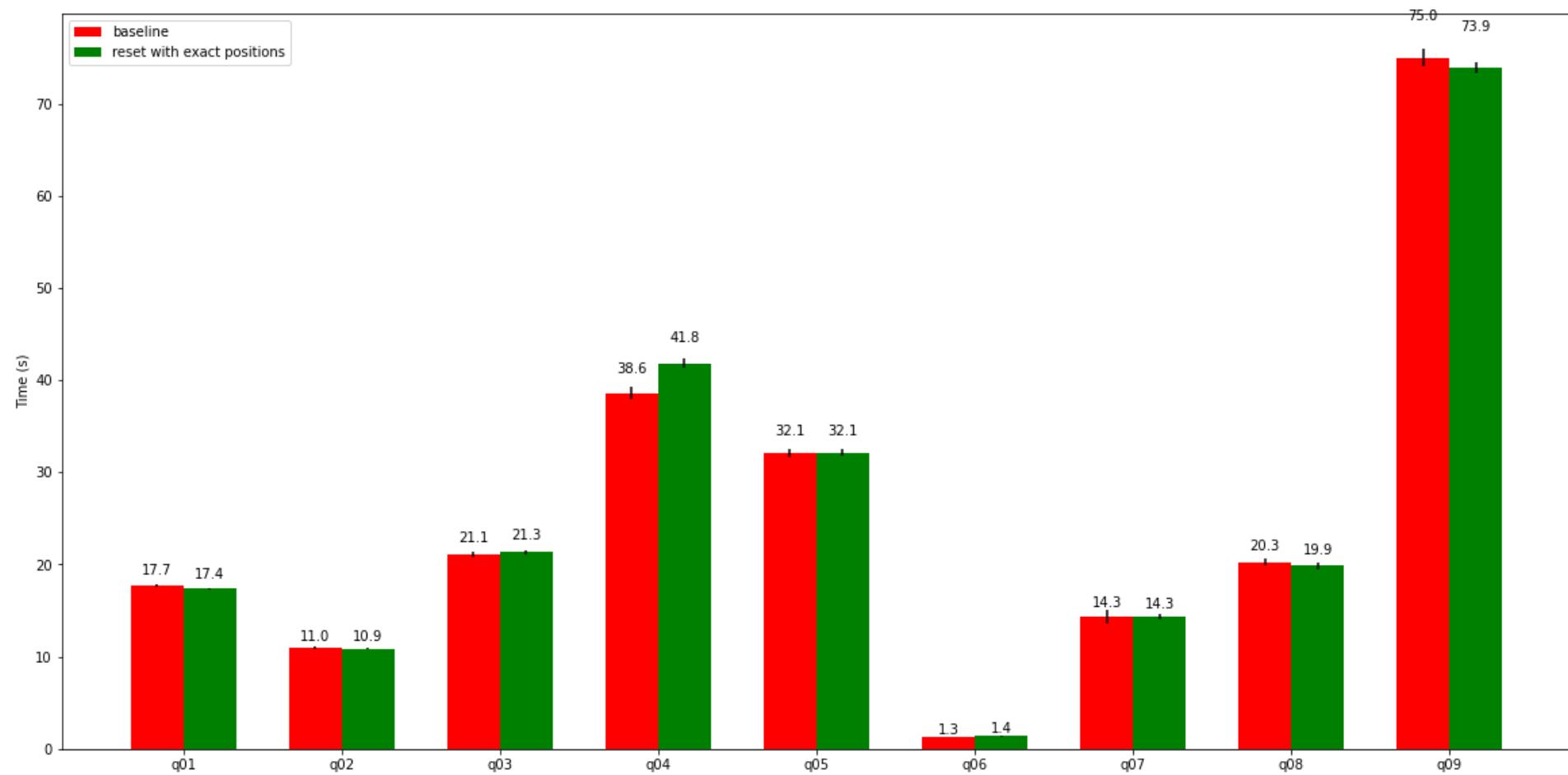
baseline

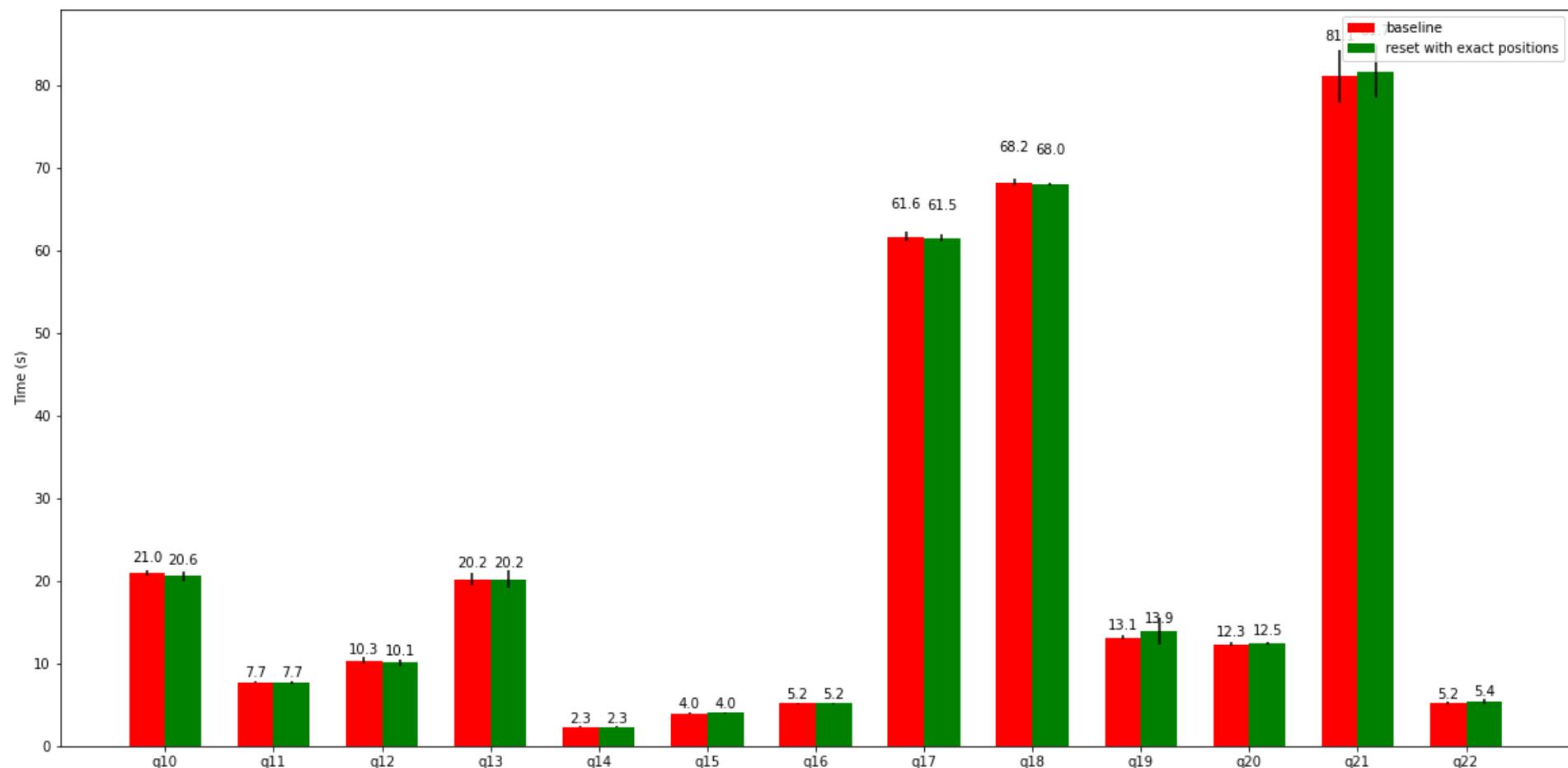
benchmark	query	mean_duration	std_dev
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reset with exact positions

benchmark	query	mean_duration	std_dev
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TPC-H Comparison (DURATION)

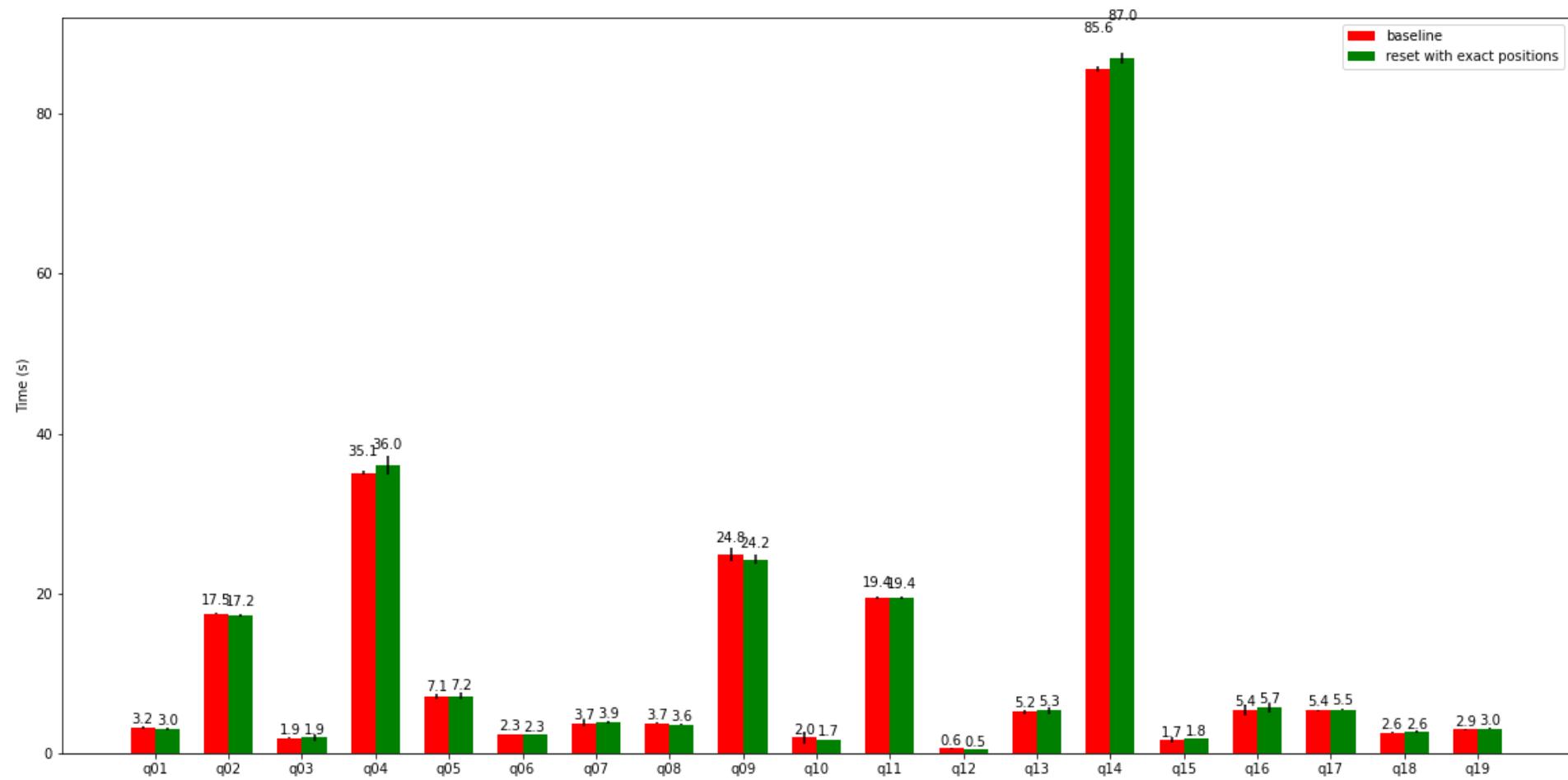


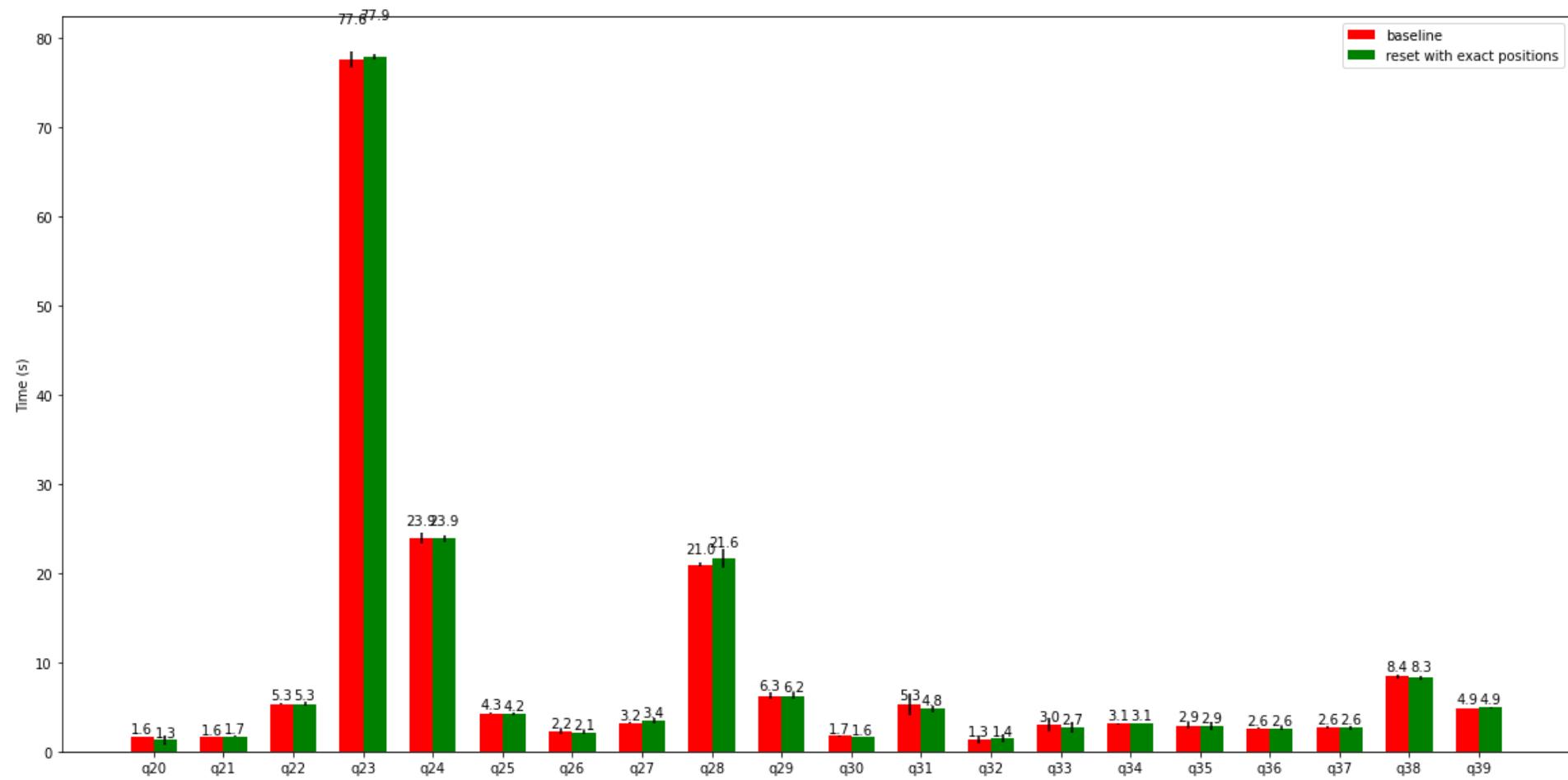


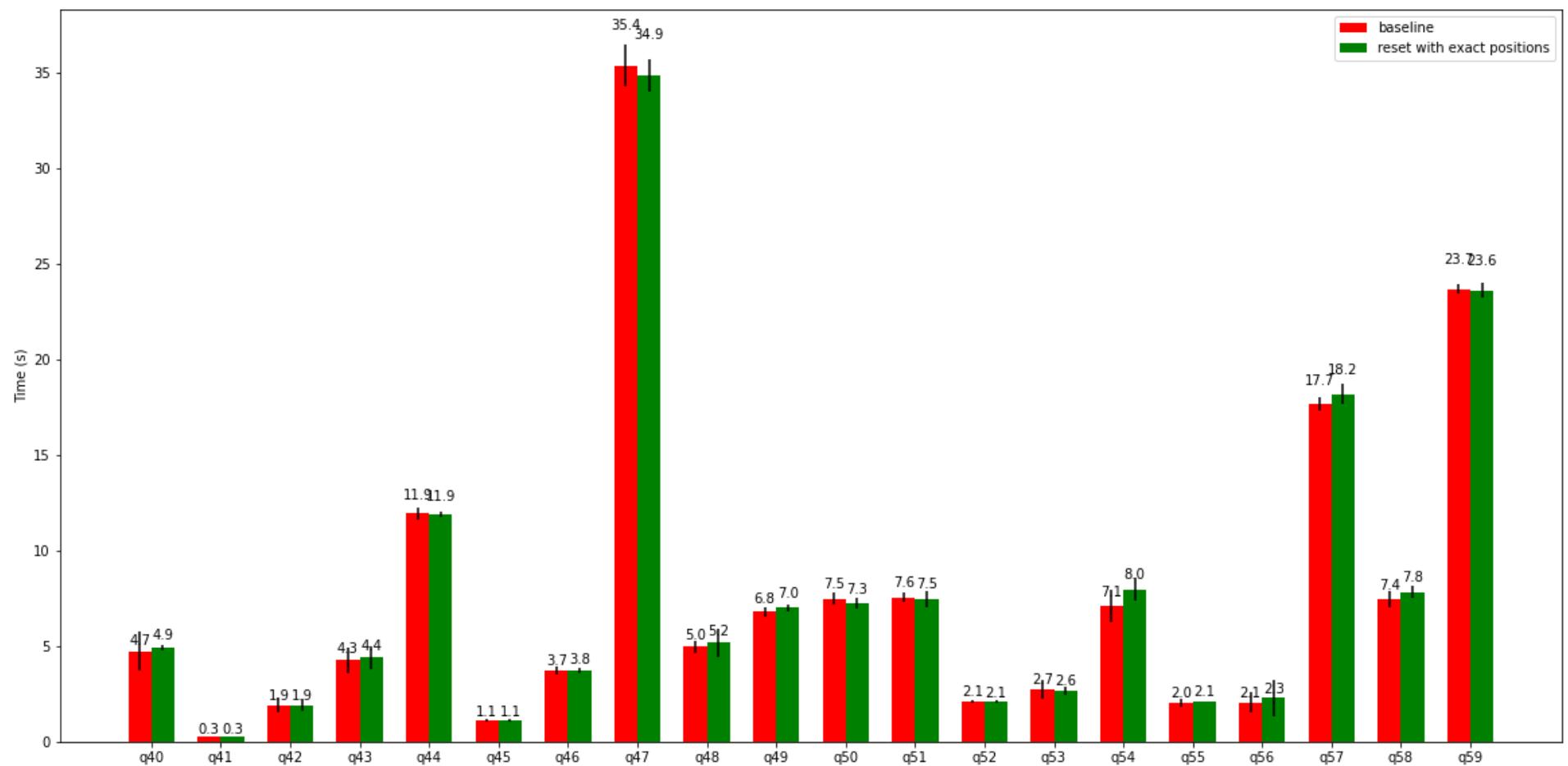
	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
8	presto/tpch: q09	74.98	0.95	73.91	0.54	-1.42	-1.07	1.27	0.73	0.03779
9	presto/tpch: q10	20.97	0.39	20.57	0.61	-1.90	-0.40	1.84	2.95	0.20525
7	presto/tpch: q08	20.26	0.35	19.87	0.35	-1.94	-0.39	1.75	1.75	0.08164
0	presto/tpch: q01	17.69	0.14	17.37	0.09	-1.80	-0.32	0.79	0.55	0.00097
17	presto/tpch: q18	68.20	0.41	67.96	0.15	-0.36	-0.25	0.60	0.21	0.19283
11	presto/tpch: q12	10.32	0.40	10.07	0.45	-2.39	-0.25	3.90	4.44	0.33808
16	presto/tpch: q17	61.62	0.57	61.53	0.34	-0.16	-0.10	0.92	0.55	0.72011

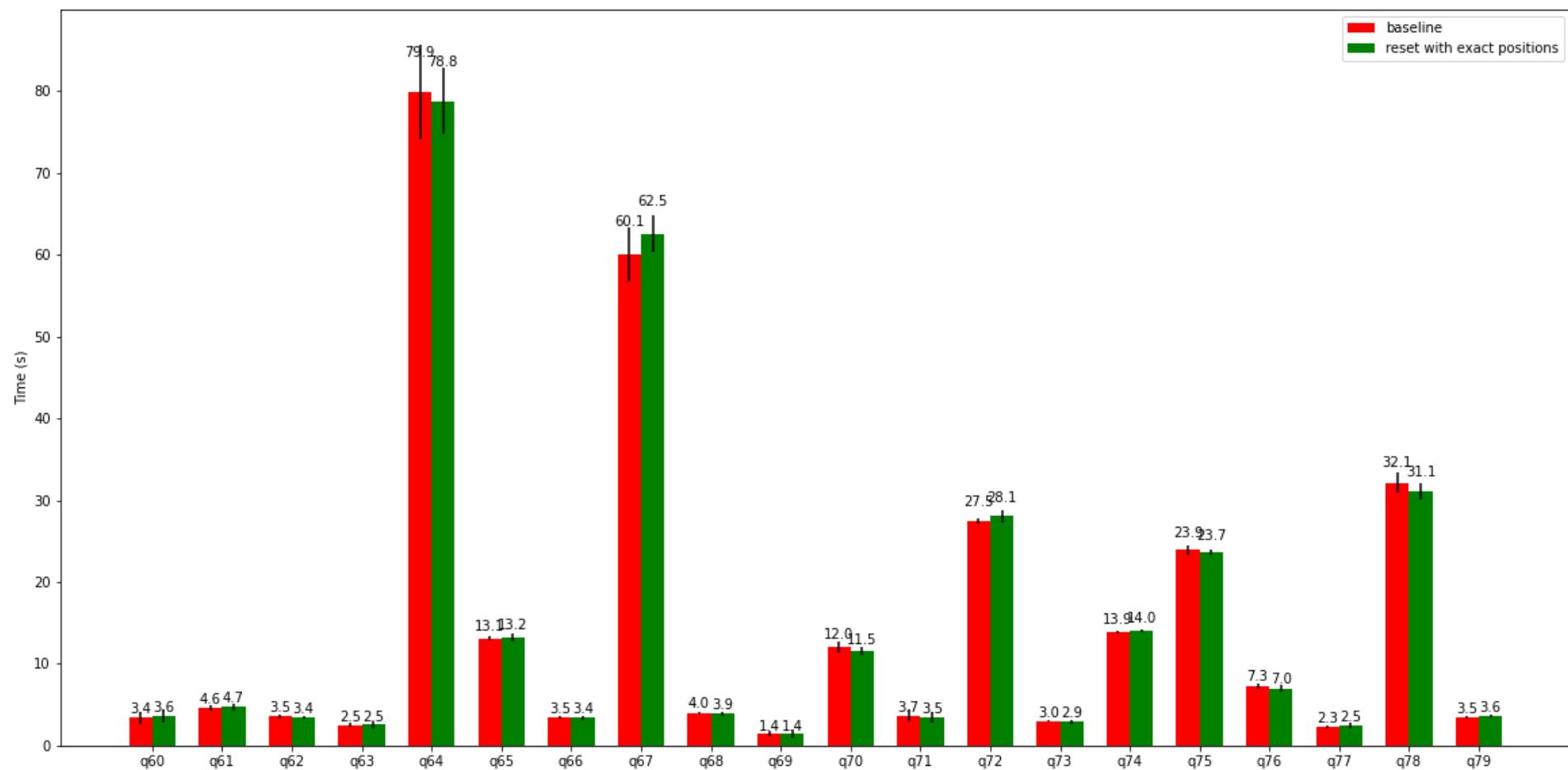
	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
1	presto/tpch: q02	10.96	0.11	10.88	0.10	-0.74	-0.08	1.03	0.93	0.21944
6	presto/tpch: q07	14.35	0.67	14.31	0.33	-0.24	-0.03	4.67	2.29	0.91127
15	presto/tpch: q16	5.18	0.08	5.16	0.05	-0.48	-0.03	1.55	1.01	0.53588
4	presto/tpch: q05	32.13	0.44	32.11	0.37	-0.07	-0.02	1.38	1.16	0.92170
13	presto/tpch: q14	2.34	0.09	2.32	0.05	-1.01	-0.02	3.78	2.17	0.58108
12	presto/tpch: q13	20.21	0.79	20.19	1.07	-0.10	-0.02	3.93	5.31	0.97000
10	presto/tpch: q11	7.68	0.08	7.68	0.10	-0.06	-0.00	1.10	1.27	0.93376
14	presto/tpch: q15	3.98	0.13	4.03	0.12	1.20	0.05	3.35	2.88	0.52186
5	presto/tpch: q06	1.29	0.05	1.37	0.08	6.22	0.08	4.02	5.93	0.06887
19	presto/tpch: q20	12.32	0.22	12.45	0.13	1.09	0.13	1.81	1.06	0.23523
21	presto/tpch: q22	5.19	0.15	5.38	0.34	3.65	0.19	2.92	6.37	0.24398
2	presto/tpch: q03	21.13	0.33	21.34	0.25	0.99	0.21	1.56	1.17	0.24369
20	presto/tpch: q21	81.07	3.22	81.70	3.18	0.77	0.63	3.97	3.90	0.74203
18	presto/tpch: q19	13.15	0.18	13.91	1.66	5.84	0.77	1.40	11.93	0.28654
3	presto/tpch: q04	38.61	0.69	41.81	0.53	8.28	3.20	1.80	1.26	0.00000
count	22									
mean	1									
std	3									
min	-2									
25%	-1									
50%	-0									
75%	1									
max	8									
Name:	% change	, dtype:	float64							

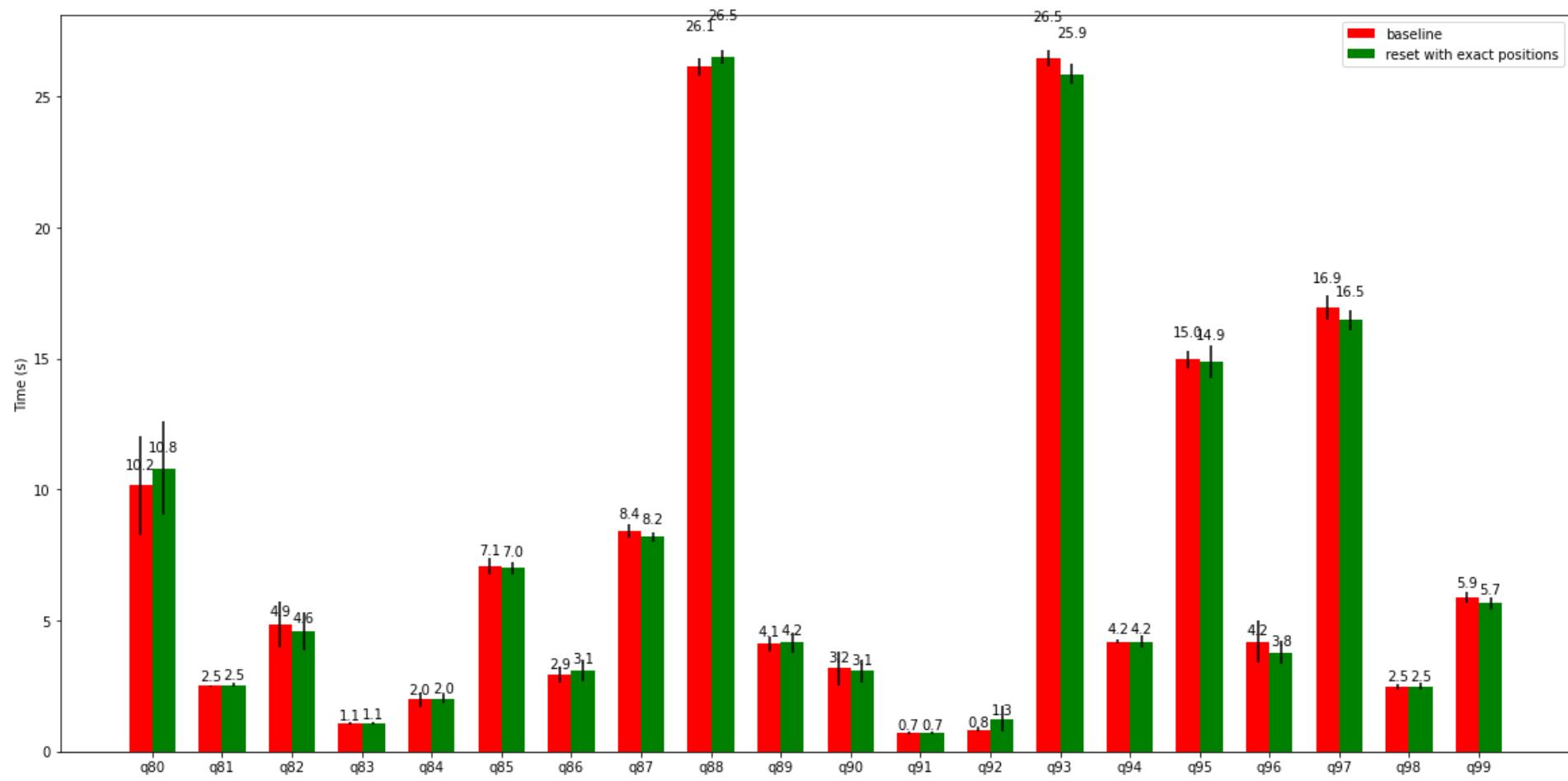
TPC-DS Comparison (DURATION)

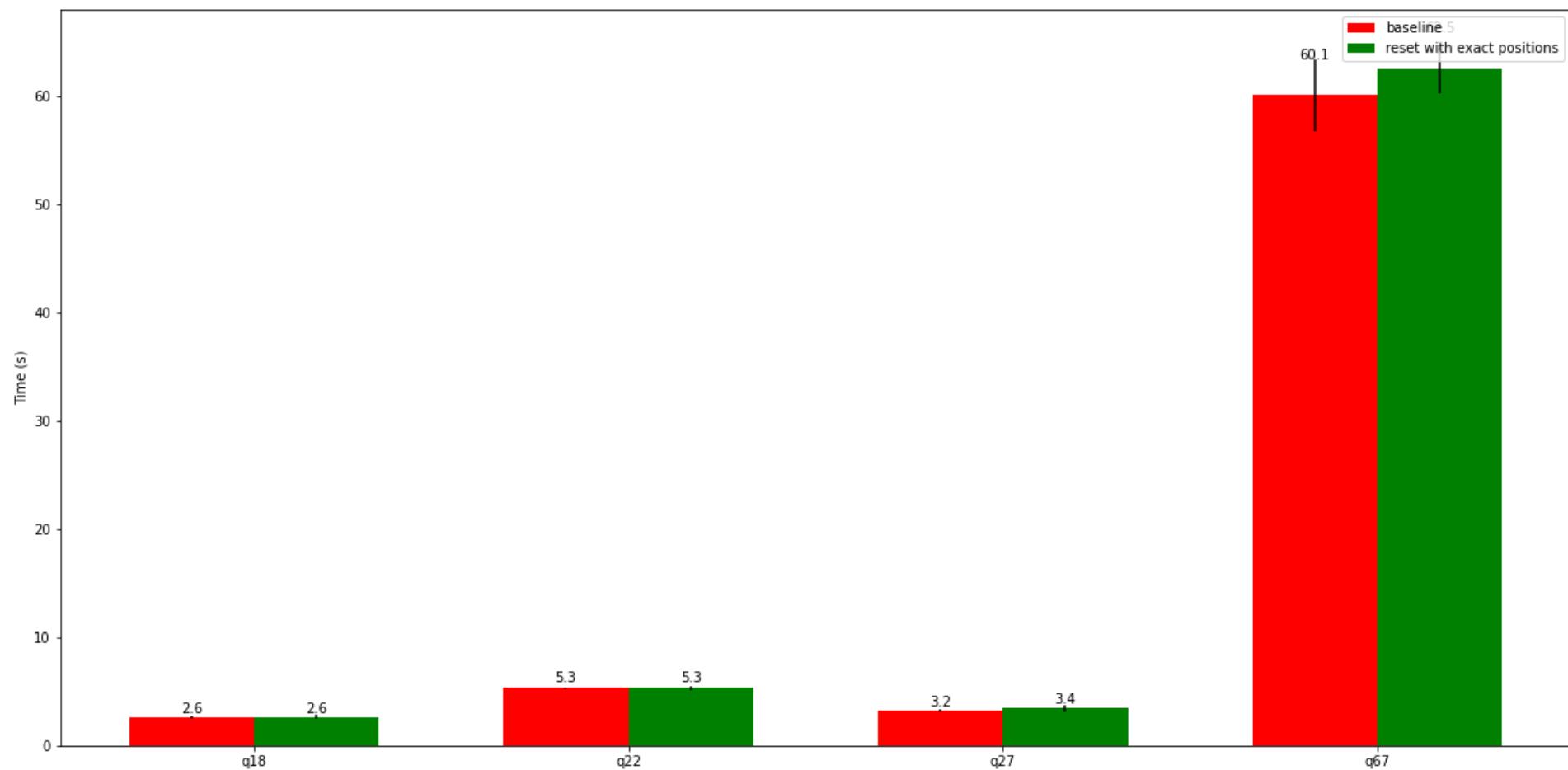












	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
63	presto/tpcds: q64	79.91	5.78	78.81	4.03	-1.38	-1.10	7.23	5.11	0.70949
77	presto/tpcds: q78	32.15	1.17	31.08	1.01	-3.31	-1.06	3.64	3.26	0.12293
8	presto/tpcds: q09	24.85	0.93	24.23	0.64	-2.49	-0.62	3.73	2.65	0.20841
92	presto/tpcds: q93	26.46	0.30	25.85	0.40	-2.30	-0.61	1.14	1.55	0.01403
30	presto/tpcds: q31	5.29	1.20	4.76	0.35	-10.03	-0.53	22.62	7.44	0.32239
46	presto/tpcds: q47	35.40	1.10	34.89	0.86	-1.44	-0.51	3.11	2.47	0.39460
69	presto/tpcds: q70	12.03	0.61	11.52	0.48	-4.21	-0.51	5.08	4.12	0.14052

	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
96	presto/tpcds: q97	16.95	0.47	16.47	0.38	-2.83	-0.48	2.76	2.29	0.07941
95	presto/tpcds: q96	4.18	0.80	3.79	0.44	-9.42	-0.39	19.08	11.60	0.31412
19	presto/tpcds: q20	1.62	0.01	1.28	0.49	-20.93	-0.34	0.83	37.75	0.11683
32	presto/tpcds: q33	3.02	0.74	2.71	0.60	-10.27	-0.31	24.65	22.32	0.44677
75	presto/tpcds: q76	7.27	0.30	6.97	0.40	-4.02	-0.29	4.09	5.71	0.18095
9	presto/tpcds: q10	1.96	0.75	1.69	0.04	-13.75	-0.27	38.30	2.54	0.40045
81	presto/tpcds: q82	4.86	0.89	4.59	0.74	-5.51	-0.27	18.36	16.16	0.58417
49	presto/tpcds: q50	7.49	0.32	7.25	0.28	-3.13	-0.23	4.28	3.92	0.20934
98	presto/tpcds: q99	5.88	0.22	5.65	0.24	-3.93	-0.23	3.70	4.16	0.10775
86	presto/tpcds: q87	8.41	0.26	8.19	0.20	-2.65	-0.22	3.05	2.41	0.12190
74	presto/tpcds: q75	23.90	0.51	23.68	0.33	-0.90	-0.21	2.15	1.39	0.40804
1	presto/tpcds: q02	17.45	0.12	17.24	0.12	-1.19	-0.21	0.71	0.70	0.01525
70	presto/tpcds: q71	3.67	0.77	3.46	0.62	-5.54	-0.20	20.87	18.00	0.62502
0	presto/tpcds: q01	3.16	0.22	3.02	0.18	-4.36	-0.14	6.83	6.10	0.26174
7	presto/tpcds: q08	3.71	0.07	3.59	0.10	-3.30	-0.12	1.92	2.74	0.03298
61	presto/tpcds: q62	3.53	0.23	3.42	0.17	-3.31	-0.12	6.45	4.91	0.33540
65	presto/tpcds: q66	3.48	0.14	3.37	0.26	-3.10	-0.11	4.06	7.64	0.38942
37	presto/tpcds: q38	8.40	0.25	8.30	0.23	-1.20	-0.10	2.96	2.79	0.48540
24	presto/tpcds: q25	4.26	0.08	4.16	0.17	-2.33	-0.10	1.95	3.98	0.21780
29	presto/tpcds: q30	1.72	0.13	1.62	0.04	-5.75	-0.10	7.30	2.35	0.09478
89	presto/tpcds: q90	3.17	0.64	3.07	0.44	-3.08	-0.10	20.06	14.28	0.76315
94	presto/tpcds: q95	14.98	0.33	14.89	0.62	-0.57	-0.09	2.21	4.19	0.77184

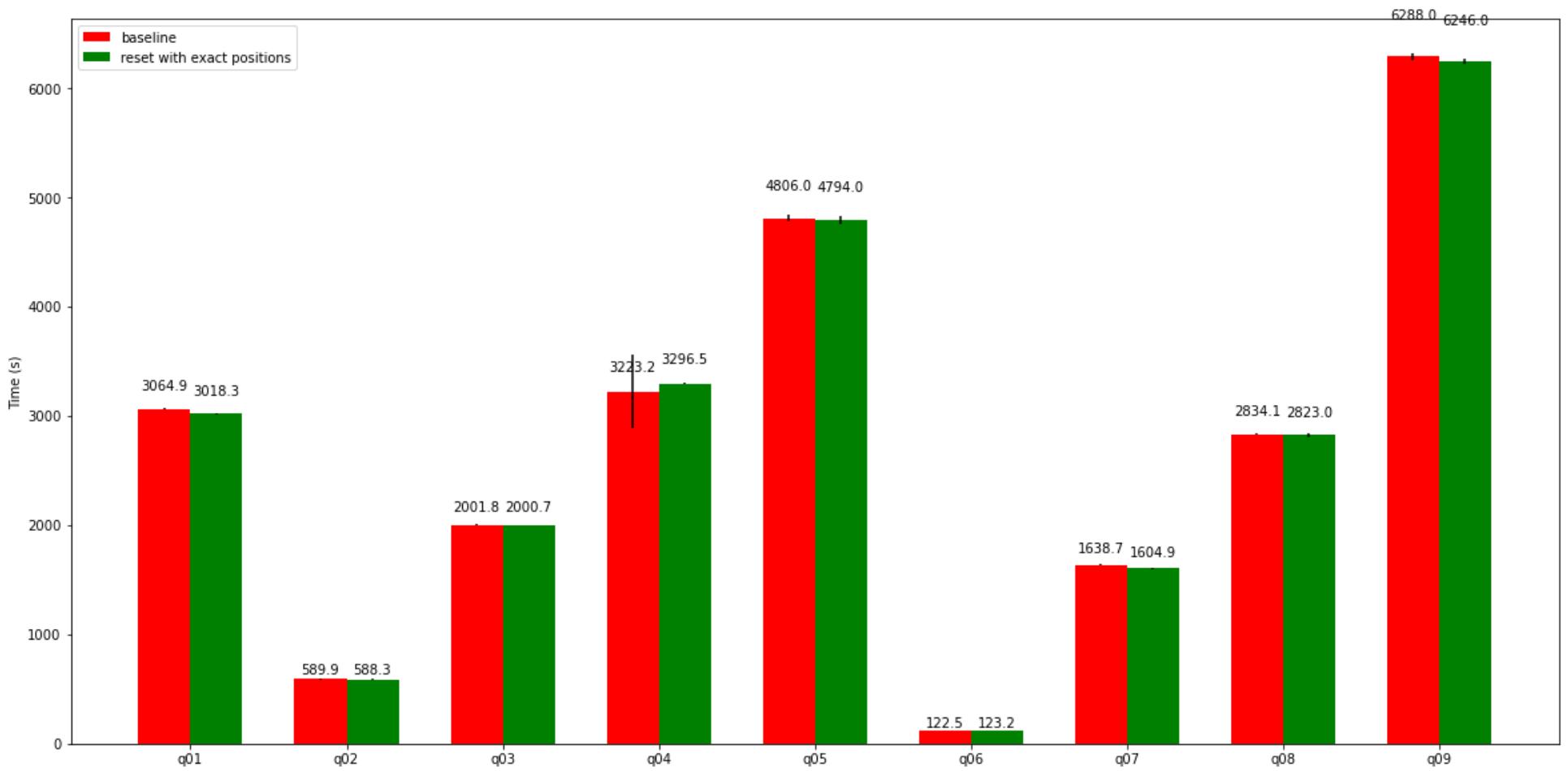
	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
72	presto/tpcds: q73	2.99	0.07	2.90	0.25	-2.83	-0.08	2.20	8.63	0.44256
52	presto/tpcds: q53	2.73	0.48	2.64	0.20	-3.08	-0.08	17.45	7.59	0.69846
50	presto/tpcds: q51	7.56	0.27	7.48	0.42	-1.11	-0.08	3.58	5.67	0.69179
58	presto/tpcds: q59	23.70	0.24	23.63	0.39	-0.31	-0.07	1.01	1.67	0.70262
25	presto/tpcds: q26	2.21	0.28	2.14	0.18	-3.32	-0.07	12.83	8.65	0.60648
11	presto/tpcds: q12	0.56	0.11	0.50	0.02	-11.31	-0.06	19.61	3.08	0.19203
67	presto/tpcds: q68	3.99	0.04	3.93	0.26	-1.50	-0.06	0.96	6.50	0.58286
84	presto/tpcds: q85	7.07	0.29	7.02	0.23	-0.82	-0.06	4.04	3.27	0.70626
23	presto/tpcds: q24	23.93	0.55	23.88	0.35	-0.24	-0.06	2.29	1.45	0.83247
10	presto/tpcds: q11	19.43	0.23	19.37	0.19	-0.29	-0.06	1.19	0.98	0.65166
34	presto/tpcds: q35	2.92	0.41	2.87	0.49	-1.78	-0.05	14.03	17.21	0.84630
43	presto/tpcds: q44	11.94	0.33	11.90	0.15	-0.34	-0.04	2.77	1.24	0.78615
5	presto/tpcds: q06	2.34	0.06	2.30	0.01	-1.73	-0.04	2.63	0.54	0.14532
28	presto/tpcds: q29	6.26	0.38	6.23	0.38	-0.52	-0.03	6.13	6.13	0.88547
51	presto/tpcds: q52	2.11	0.07	2.09	0.07	-0.94	-0.02	3.52	3.26	0.64068
68	presto/tpcds: q69	1.44	0.38	1.42	0.46	-1.34	-0.02	26.27	32.34	0.93806
90	presto/tpcds: q91	0.71	0.05	0.70	0.04	-1.41	-0.01	6.47	6.02	0.70304
36	presto/tpcds: q37	2.64	0.15	2.64	0.23	0.09	0.00	5.73	8.88	0.98292
40	presto/tpcds: q41	0.27	0.01	0.28	0.01	1.72	0.00	3.58	5.21	0.52562
41	presto/tpcds: q42	1.91	0.41	1.92	0.31	0.35	0.01	21.45	16.36	0.97540
93	presto/tpcds: q94	4.19	0.07	4.20	0.22	0.24	0.01	1.74	5.15	0.91674
35	presto/tpcds: q36	2.61	0.12	2.62	0.18	0.50	0.01	4.73	6.90	0.88586

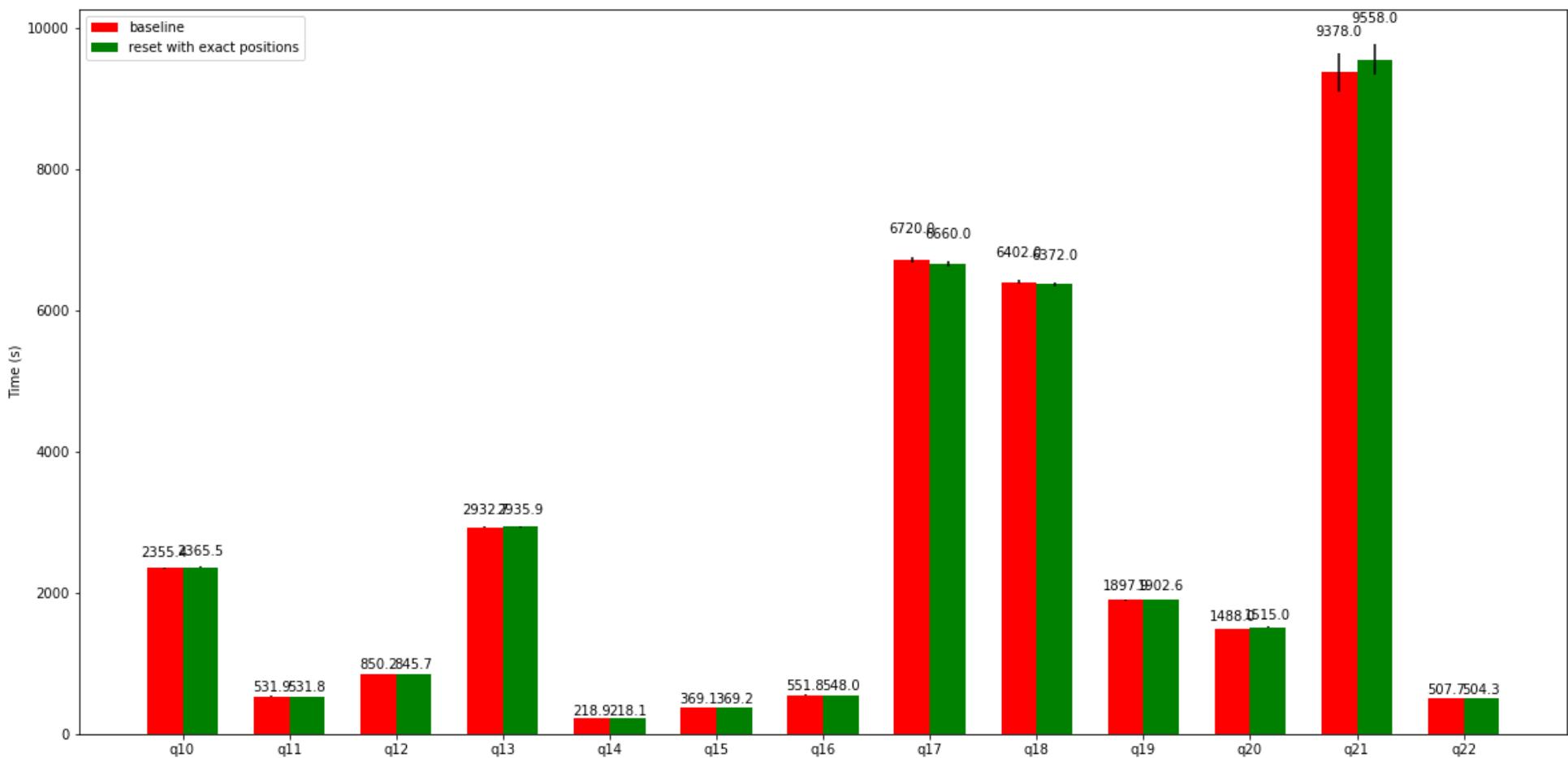
	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
82	presto/tpcds: q83	1.08	0.03	1.09	0.05	1.29	0.01	2.65	4.38	0.555557
33	presto/tpcds: q34	3.12	0.09	3.13	0.05	0.52	0.02	2.74	1.67	0.69820
83	presto/tpcds: q84	2.00	0.29	2.03	0.17	1.07	0.02	14.27	8.31	0.87704
97	presto/tpcds: q98	2.46	0.09	2.48	0.12	0.89	0.02	3.72	4.86	0.72950
21	presto/tpcds: q22	5.31	0.07	5.33	0.18	0.45	0.02	1.29	3.44	0.77186
44	presto/tpcds: q45	1.10	0.06	1.13	0.06	2.22	0.02	5.18	5.32	0.48612
62	presto/tpcds: q63	2.51	0.25	2.54	0.36	1.37	0.03	9.91	14.17	0.85083
17	presto/tpcds: q18	2.58	0.10	2.62	0.19	1.36	0.04	3.93	7.22	0.69768
80	presto/tpcds: q81	2.51	0.04	2.54	0.09	1.43	0.04	1.62	3.54	0.39490
88	presto/tpcds: q89	4.11	0.27	4.15	0.39	1.07	0.04	6.58	9.45	0.82496
20	presto/tpcds: q21	1.60	0.01	1.65	0.09	2.97	0.05	0.89	5.35	0.22104
45	presto/tpcds: q46	3.70	0.23	3.75	0.14	1.36	0.05	6.11	3.72	0.65160
2	presto/tpcds: q03	1.88	0.04	1.94	0.39	2.92	0.05	2.25	19.95	0.73611
54	presto/tpcds: q55	2.04	0.20	2.11	0.02	3.33	0.07	9.88	1.18	0.43229
38	presto/tpcds: q39	4.87	0.02	4.94	0.04	1.44	0.07	0.44	0.89	0.00561
4	presto/tpcds: q05	7.08	0.34	7.16	0.35	1.14	0.08	4.85	4.86	0.69509
16	presto/tpcds: q17	5.37	0.08	5.46	0.13	1.60	0.09	1.41	2.31	0.18330
64	presto/tpcds: q65	13.12	0.32	13.20	0.56	0.68	0.09	2.44	4.23	0.74285
60	presto/tpcds: q61	4.60	0.40	4.69	0.34	1.93	0.09	8.63	7.36	0.68814
31	presto/tpcds: q32	1.35	0.50	1.44	0.44	6.76	0.09	36.83	30.36	0.74259
18	presto/tpcds: q19	2.94	0.03	3.03	0.10	3.23	0.09	1.04	3.24	0.04708
78	presto/tpcds: q79	3.48	0.13	3.59	0.15	3.12	0.11	3.77	4.16	0.20979

	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
6	presto/tpcds: q07	3.75	0.38	3.87	0.13	3.32	0.12	10.13	3.42	0.46652
42	presto/tpcds: q43	4.25	0.66	4.40	0.60	3.46	0.15	15.62	13.69	0.69634
73	presto/tpcds: q74	13.85	0.15	14.01	0.19	1.11	0.15	1.10	1.37	0.15531
12	presto/tpcds: q13	5.16	0.21	5.32	0.39	3.18	0.16	4.04	7.24	0.38092
85	presto/tpcds: q86	2.94	0.32	3.11	0.41	5.67	0.17	10.87	13.24	0.45119
14	presto/tpcds: q15	1.66	0.31	1.83	0.06	10.29	0.17	18.58	3.32	0.21268
76	presto/tpcds: q77	2.30	0.12	2.48	0.29	7.98	0.18	5.20	11.80	0.18593
47	presto/tpcds: q48	4.97	0.31	5.17	0.76	4.03	0.20	6.24	14.63	0.56158
39	presto/tpcds: q40	4.72	1.02	4.92	0.15	4.38	0.21	21.61	3.07	0.63366
48	presto/tpcds: q49	6.80	0.25	7.01	0.17	3.07	0.21	3.61	2.46	0.11967
26	presto/tpcds: q27	3.21	0.10	3.42	0.32	6.50	0.21	3.11	9.27	0.15491
59	presto/tpcds: q60	3.41	0.76	3.63	0.78	6.64	0.23	22.41	21.58	0.62382
55	presto/tpcds: q56	2.06	0.51	2.29	0.93	11.22	0.23	24.66	40.58	0.60474
15	presto/tpcds: q16	5.38	0.62	5.68	0.58	5.51	0.30	11.59	10.29	0.41520
22	presto/tpcds: q23	77.58	0.92	77.91	0.29	0.43	0.33	1.19	0.37	0.41525
87	presto/tpcds: q88	26.13	0.35	26.50	0.24	1.43	0.37	1.32	0.91	0.05477
57	presto/tpcds: q58	7.44	0.44	7.84	0.31	5.42	0.40	5.85	3.92	0.09374
91	presto/tpcds: q92	0.82	0.07	1.25	0.48	51.98	0.43	8.70	38.08	0.05465
56	presto/tpcds: q57	17.67	0.36	18.20	0.51	3.00	0.53	2.03	2.81	0.06433
71	presto/tpcds: q72	27.49	0.33	28.09	0.75	2.19	0.60	1.21	2.66	0.10148
27	presto/tpcds: q28	20.95	0.20	21.59	1.06	3.05	0.64	0.96	4.90	0.17681
79	presto/tpcds: q80	10.17	1.89	10.81	1.78	6.37	0.65	18.57	16.43	0.55420

	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
53	presto/tpcds: q54	7.13	0.84	7.99	0.62	12.07	0.86	11.75	7.74	0.07055
3	presto/tpcds: q04	35.09	0.29	35.98	1.20	2.53	0.89	0.83	3.33	0.10862
13	presto/tpcds: q14	85.62	0.36	87.01	0.63	1.63	1.40	0.41	0.72	0.00080
66	presto/tpcds: q67	60.12	3.32	62.55	2.24	4.04	2.43	5.52	3.58	0.16767
count	99									
mean	0									
std	7									
min	-21									
25%	-2									
50%	0									
75%	3									
max	52									
Name:	% change									
	dtype:	float64								

TPC-H Comparison (CPU)

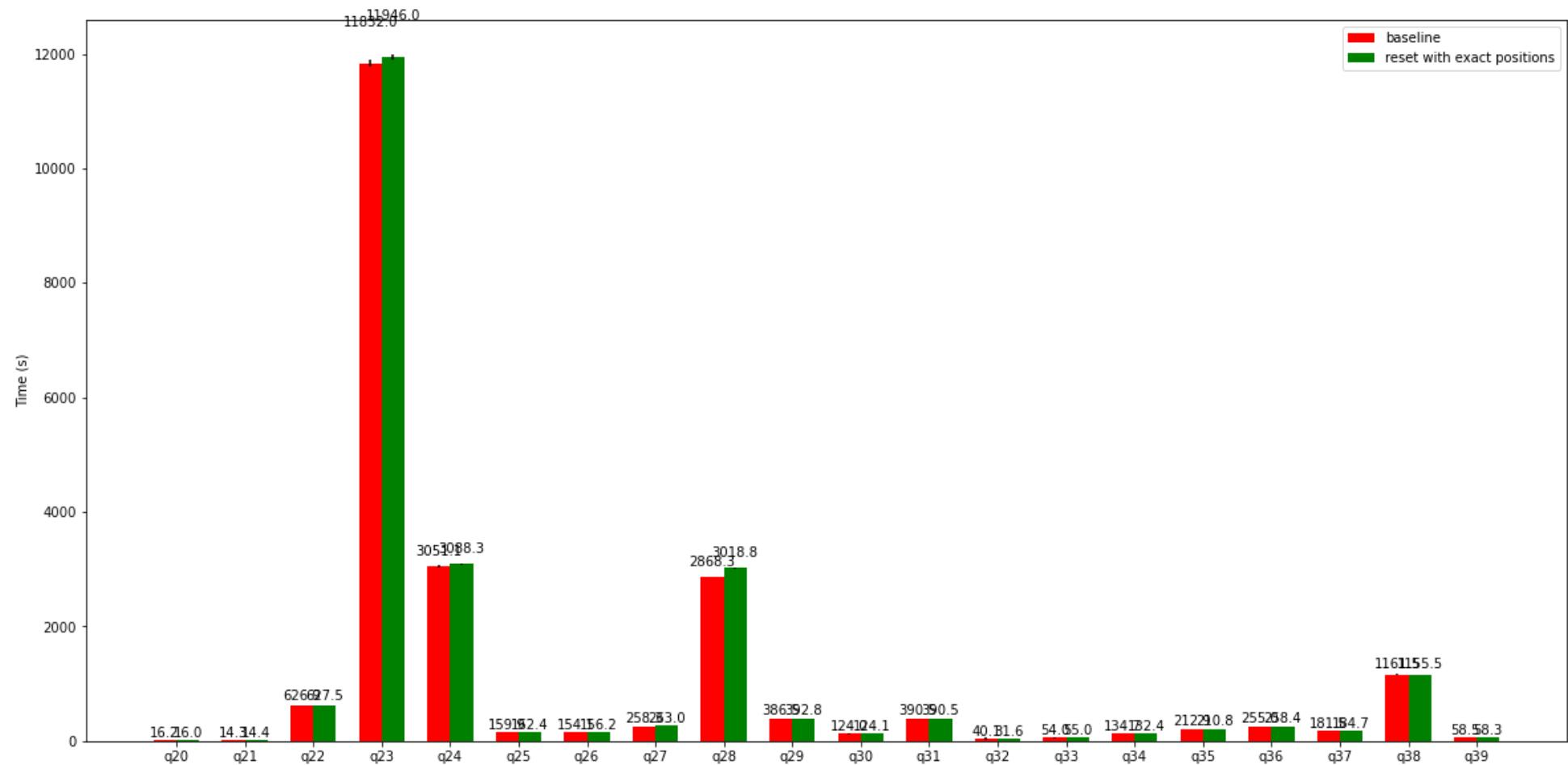


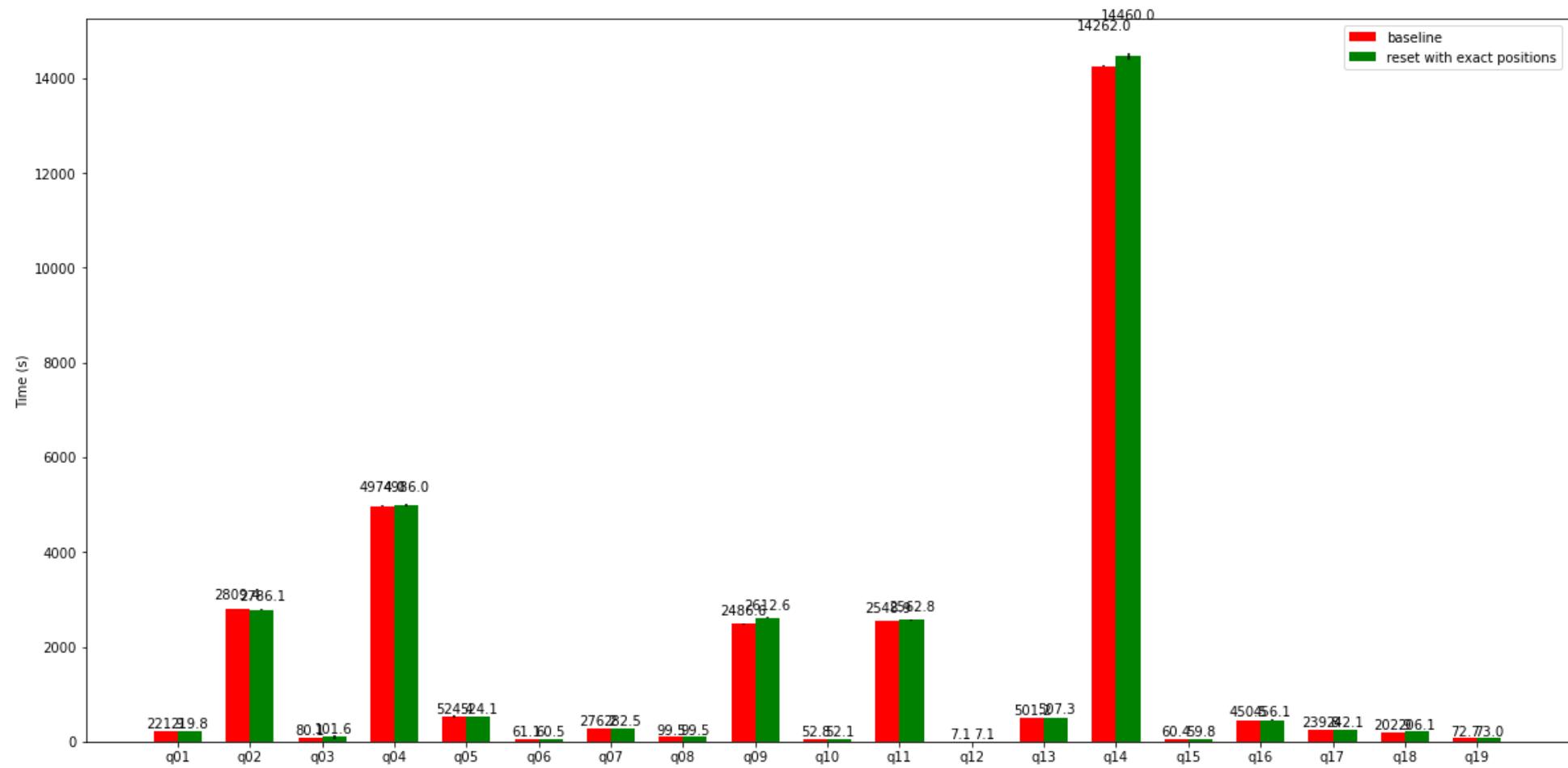


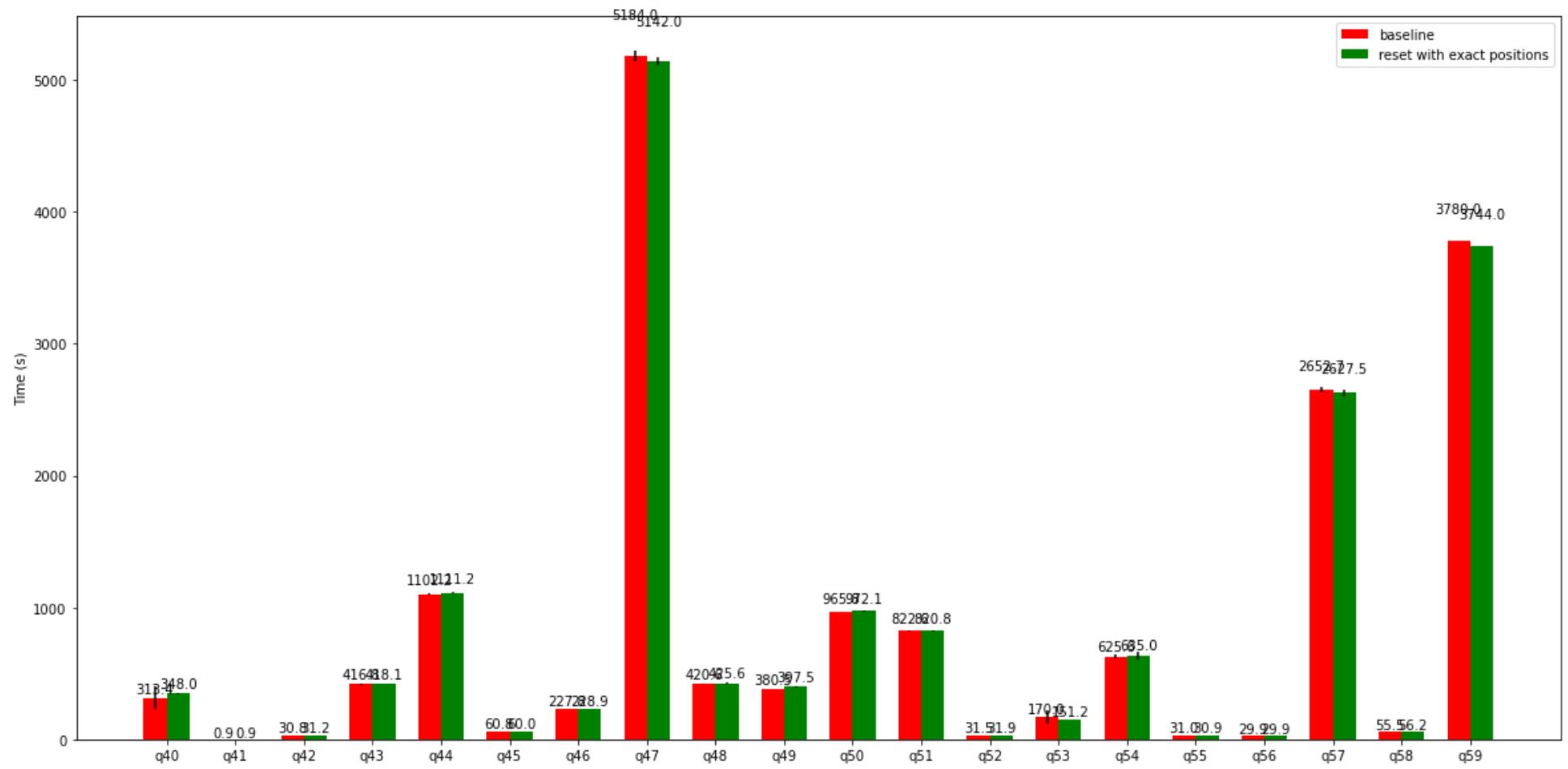
	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
6	presto/tpch: q07	1638.70	11.85	1604.90	7.94	-2.06	-33.80	0.72	0.49	0.00017
0	presto/tpch: q01	3064.90	6.63	3018.30	7.42	-1.52	-46.60	0.22	0.25	0.00000
16	presto/tpch: q17	6720.00	29.39	6660.00	32.20	-0.89	-60.00	0.44	0.48	0.00711
15	presto/tpch: q16	551.80	3.21	548.00	0.90	-0.69	-3.80	0.58	0.16	0.01914
21	presto/tpch: q22	507.70	1.76	504.30	1.06	-0.67	-3.40	0.35	0.21	0.00227
8	presto/tpch: q09	6288.00	29.39	6246.00	19.72	-0.67	-42.00	0.47	0.32	0.01566
11	presto/tpch: q12	850.20	2.11	845.70	1.41	-0.53	-4.50	0.25	0.17	0.00146

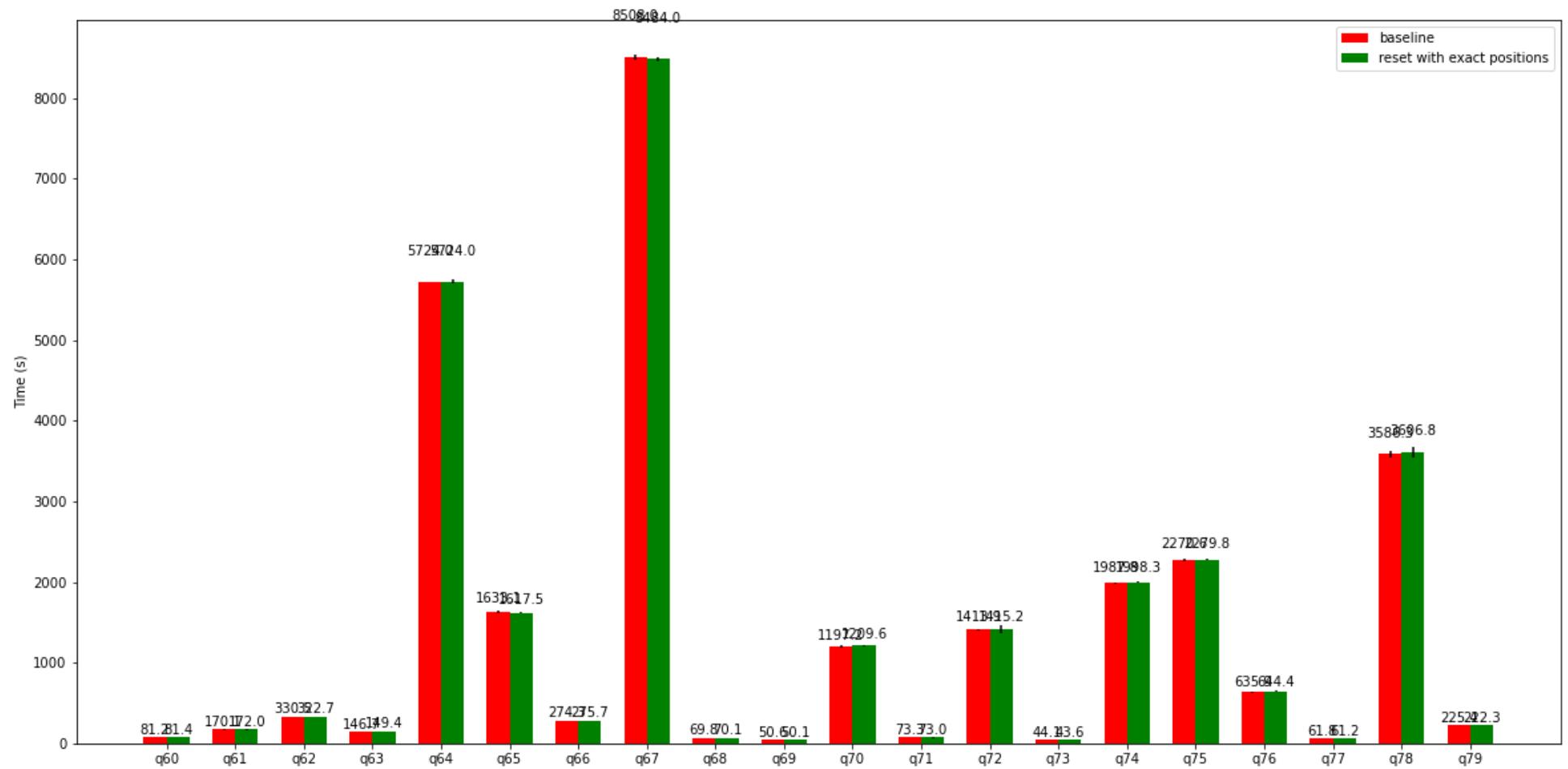
	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
17	presto/tpch: q18	6402.00	27.10	6372.00	22.77	-0.47	-30.00	0.42	0.36	0.06462
7	presto/tpch: q08	2834.10	7.48	2823.00	23.73	-0.39	-11.10	0.26	0.84	0.30016
13	presto/tpch: q14	218.90	2.44	218.10	2.68	-0.37	-0.80	1.12	1.23	0.60046
1	presto/tpch: q02	589.90	1.44	588.30	1.64	-0.27	-1.60	0.24	0.28	0.10316
4	presto/tpch: q05	4806.00	30.12	4794.00	35.39	-0.25	-12.00	0.63	0.74	0.54128
2	presto/tpch: q03	2001.80	3.45	2000.70	3.47	-0.05	-1.10	0.17	0.17	0.59412
10	presto/tpch: q11	531.90	2.68	531.80	1.45	-0.02	-0.10	0.50	0.27	0.93749
14	presto/tpch: q15	369.10	0.88	369.20	0.31	0.03	0.10	0.24	0.08	0.79886
12	presto/tpch: q13	2932.70	4.01	2935.90	7.86	0.11	3.20	0.14	0.27	0.39529
18	presto/tpch: q19	1897.90	6.03	1902.60	7.06	0.25	4.70	0.32	0.37	0.24321
9	presto/tpch: q10	2355.40	7.88	2365.50	2.45	0.43	10.10	0.33	0.10	0.01343
5	presto/tpch: q06	122.50	0.24	123.20	0.31	0.57	0.70	0.20	0.25	0.00146
19	presto/tpch: q20	1488.00	3.11	1515.00	2.84	1.81	27.00	0.21	0.19	0.00000
20	presto/tpch: q21	9378.00	273.93	9558.00	220.45	1.92	180.00	2.92	2.31	0.23839
3	presto/tpch: q04	3223.20	333.63	3296.50	7.85	2.27	73.30	10.35	0.24	0.60233
count	22									
mean	-0									
std	1									
min	-2									
25%	-1									
50%	-0									
75%	0									
max	2									
Name:	% change	dtype:	float64							

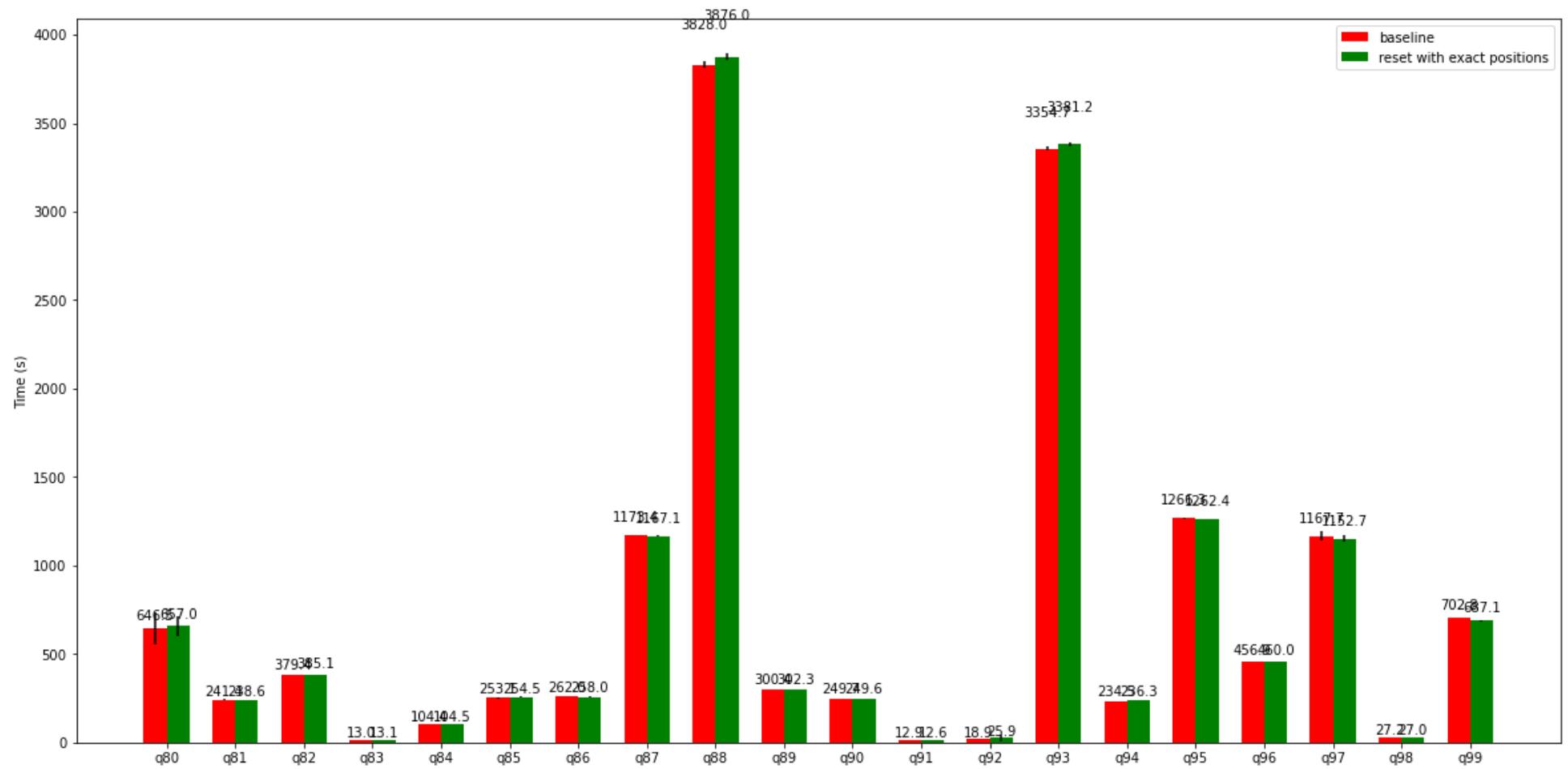
TPC-DS Comparison (CPU)

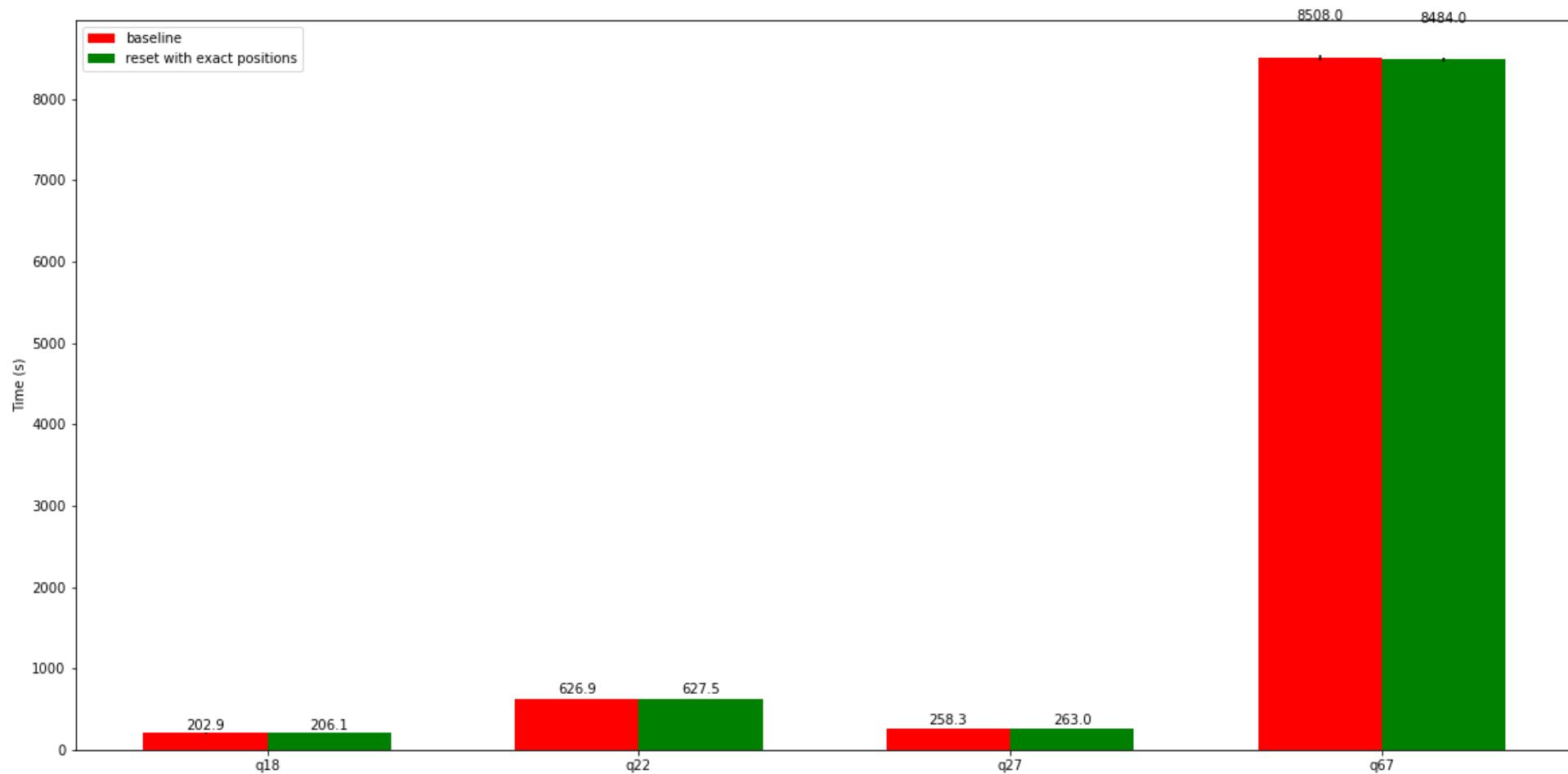












	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
31	presto/tpcds: q32	40.12	21.20	31.61	0.42	-21.23	-8.52	52.84	1.32	0.34844
52	presto/tpcds: q53	170.00	49.87	151.20	0.66	-11.06	-18.80	29.34	0.43	0.37760
61	presto/tpcds: q62	330.50	0.88	322.70	1.28	-2.36	-7.80	0.27	0.40	0.00000
98	presto/tpcds: q99	702.80	0.82	687.10	0.96	-2.23	-15.70	0.12	0.14	0.00000
90	presto/tpcds: q91	12.89	0.95	12.65	0.82	-1.87	-0.24	7.37	6.50	0.64770
33	presto/tpcds: q34	134.70	0.33	132.40	0.31	-1.71	-2.30	0.24	0.23	0.00000
85	presto/tpcds: q86	262.00	2.00	258.00	0.76	-1.53	-4.00	0.76	0.29	0.00100

	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
78	presto/tpcds: q79	225.40	0.73	222.30	0.73	-1.38	-3.10	0.32	0.33	0.00002
44	presto/tpcds: q45	60.76	0.79	59.97	0.54	-1.30	-0.79	1.29	0.90	0.07067
96	presto/tpcds: q97	1167.70	26.41	1152.70	20.42	-1.28	-15.00	2.26	1.77	0.29687
72	presto/tpcds: q73	44.11	0.06	43.58	0.06	-1.20	-0.53	0.13	0.14	0.00000
9	presto/tpcds: q10	52.75	0.42	52.12	0.50	-1.20	-0.63	0.79	0.97	0.04001
80	presto/tpcds: q81	241.40	1.59	238.60	0.49	-1.16	-2.80	0.66	0.21	0.00211
5	presto/tpcds: q06	61.10	0.59	60.49	0.46	-0.99	-0.61	0.97	0.76	0.07521
34	presto/tpcds: q35	212.90	2.16	210.80	1.55	-0.99	-2.10	1.01	0.73	0.08178
76	presto/tpcds: q77	61.80	0.38	61.20	0.38	-0.97	-0.60	0.61	0.62	0.02088
64	presto/tpcds: q65	1633.10	15.54	1617.50	11.02	-0.96	-15.60	0.95	0.68	0.07270
58	presto/tpcds: q59	3780.00	0.00	3744.00	0.00	-0.95	-36.00	0.00	0.00	0.00000
56	presto/tpcds: q57	2652.70	17.09	2627.50	21.92	-0.95	-25.20	0.64	0.83	0.05059
14	presto/tpcds: q15	60.35	0.38	59.78	0.45	-0.95	-0.57	0.63	0.74	0.03777
0	presto/tpcds: q01	221.90	2.44	219.80	2.45	-0.95	-2.10	1.10	1.11	0.16781
68	presto/tpcds: q69	50.58	0.23	50.10	0.16	-0.94	-0.48	0.45	0.33	0.00190
1	presto/tpcds: q02	2809.40	4.47	2786.10	5.36	-0.83	-23.30	0.16	0.19	0.00001
19	presto/tpcds: q20	16.16	0.14	16.03	0.09	-0.81	-0.13	0.87	0.58	0.08494
46	presto/tpcds: q47	5184.00	39.44	5142.00	27.10	-0.81	-42.00	0.76	0.53	0.05706
97	presto/tpcds: q98	27.23	0.23	27.00	0.23	-0.81	-0.22	0.84	0.85	0.12680
40	presto/tpcds: q41	0.88	0.01	0.87	0.01	-0.78	-0.01	1.56	1.05	0.33184
86	presto/tpcds: q87	1173.40	2.07	1167.10	2.41	-0.54	-6.30	0.18	0.21	0.00066
37	presto/tpcds: q38	1161.50	4.37	1155.50	4.70	-0.52	-6.00	0.38	0.41	0.04495

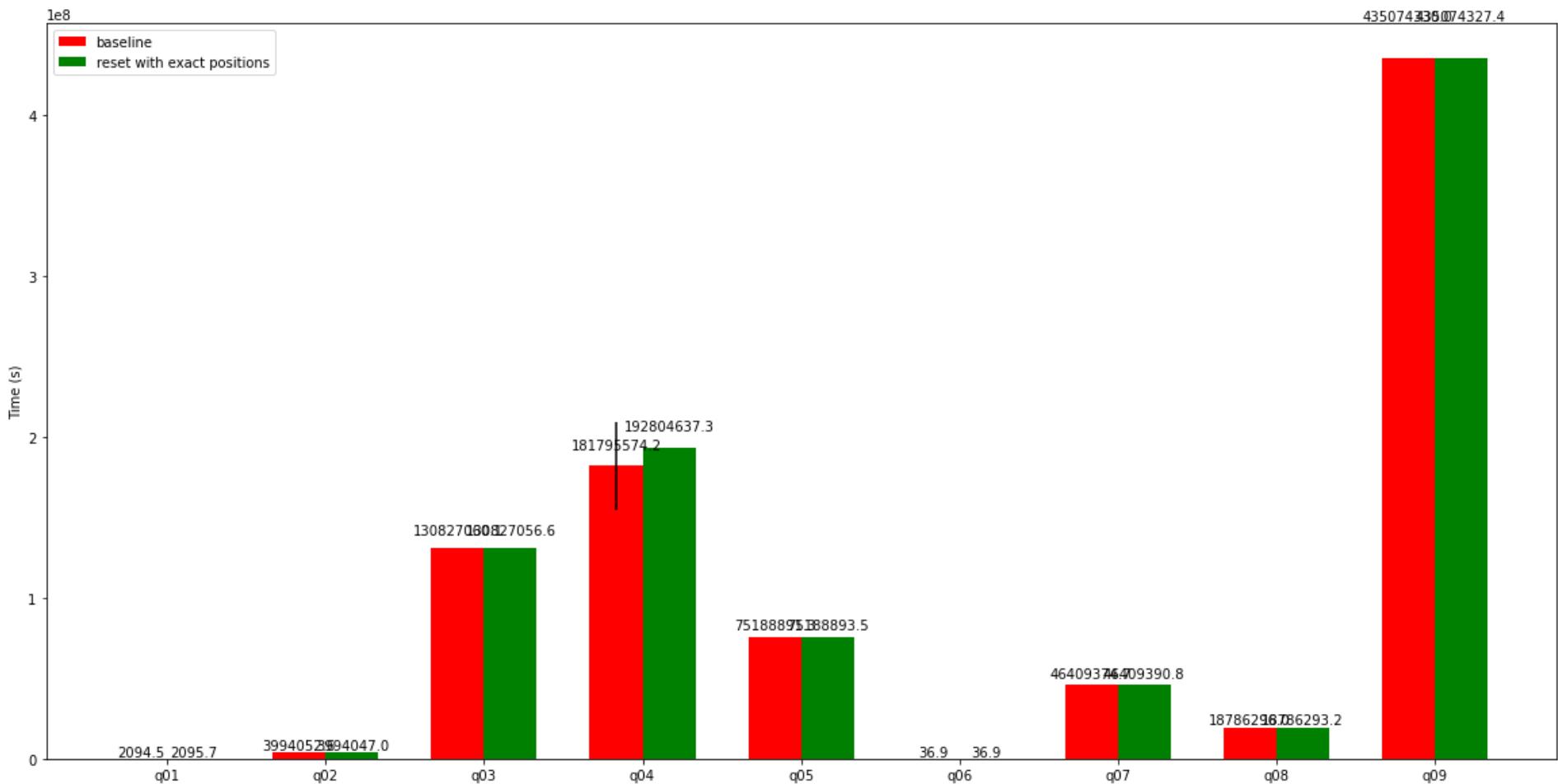
	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
70	presto/tpcds: q71	73.30	2.02	73.00	2.14	-0.41	-0.30	2.76	2.93	0.80778
54	presto/tpcds: q55	30.98	0.22	30.86	0.08	-0.39	-0.12	0.71	0.25	0.23959
11	presto/tpcds: q12	7.14	0.06	7.11	0.05	-0.35	-0.02	0.88	0.68	0.45905
94	presto/tpcds: q95	1266.30	2.33	1262.40	1.61	-0.31	-3.90	0.18	0.13	0.00710
66	presto/tpcds: q67	8508.00	29.39	8484.00	29.39	-0.28	-24.00	0.35	0.35	0.18767
38	presto/tpcds: q39	58.47	0.20	58.34	0.37	-0.24	-0.14	0.34	0.63	0.43671
50	presto/tpcds: q51	822.60	2.81	820.80	1.93	-0.22	-1.80	0.34	0.24	0.22575
4	presto/tpcds: q05	524.40	28.78	524.10	8.13	-0.06	-0.30	5.49	1.55	0.98088
89	presto/tpcds: q90	249.70	0.70	249.60	0.54	-0.04	-0.10	0.28	0.22	0.78716
30	presto/tpcds: q31	390.50	3.53	390.50	2.13	0.00	0.00	0.90	0.54	1.00000
7	presto/tpcds: q08	99.50	0.24	99.50	0.45	0.00	0.00	0.25	0.45	1.00000
63	presto/tpcds: q64	5724.00	0.00	5724.00	22.77	0.00	0.00	0.00	0.40	1.00000
29	presto/tpcds: q30	124.00	1.55	124.10	1.28	0.08	0.10	1.25	1.03	0.90547
71	presto/tpcds: q72	1413.90	7.77	1415.20	43.61	0.09	1.30	0.55	3.08	0.94411
21	presto/tpcds: q22	626.90	2.13	627.50	1.99	0.10	0.60	0.34	0.32	0.62455
83	presto/tpcds: q84	104.40	0.38	104.50	0.24	0.10	0.10	0.36	0.23	0.59947
55	presto/tpcds: q56	29.89	0.23	29.94	0.35	0.16	0.05	0.76	1.17	0.78261
3	presto/tpcds: q04	4974.00	14.70	4986.00	19.72	0.24	12.00	0.30	0.40	0.25957
59	presto/tpcds: q60	81.20	0.90	81.40	0.62	0.25	0.20	1.11	0.76	0.66425
42	presto/tpcds: q43	416.80	0.49	418.10	0.59	0.31	1.30	0.12	0.14	0.00197
74	presto/tpcds: q75	2270.60	11.42	2279.80	7.31	0.41	9.20	0.50	0.32	0.12744
18	presto/tpcds: q19	72.70	0.59	73.00	0.31	0.41	0.30	0.81	0.42	0.29594

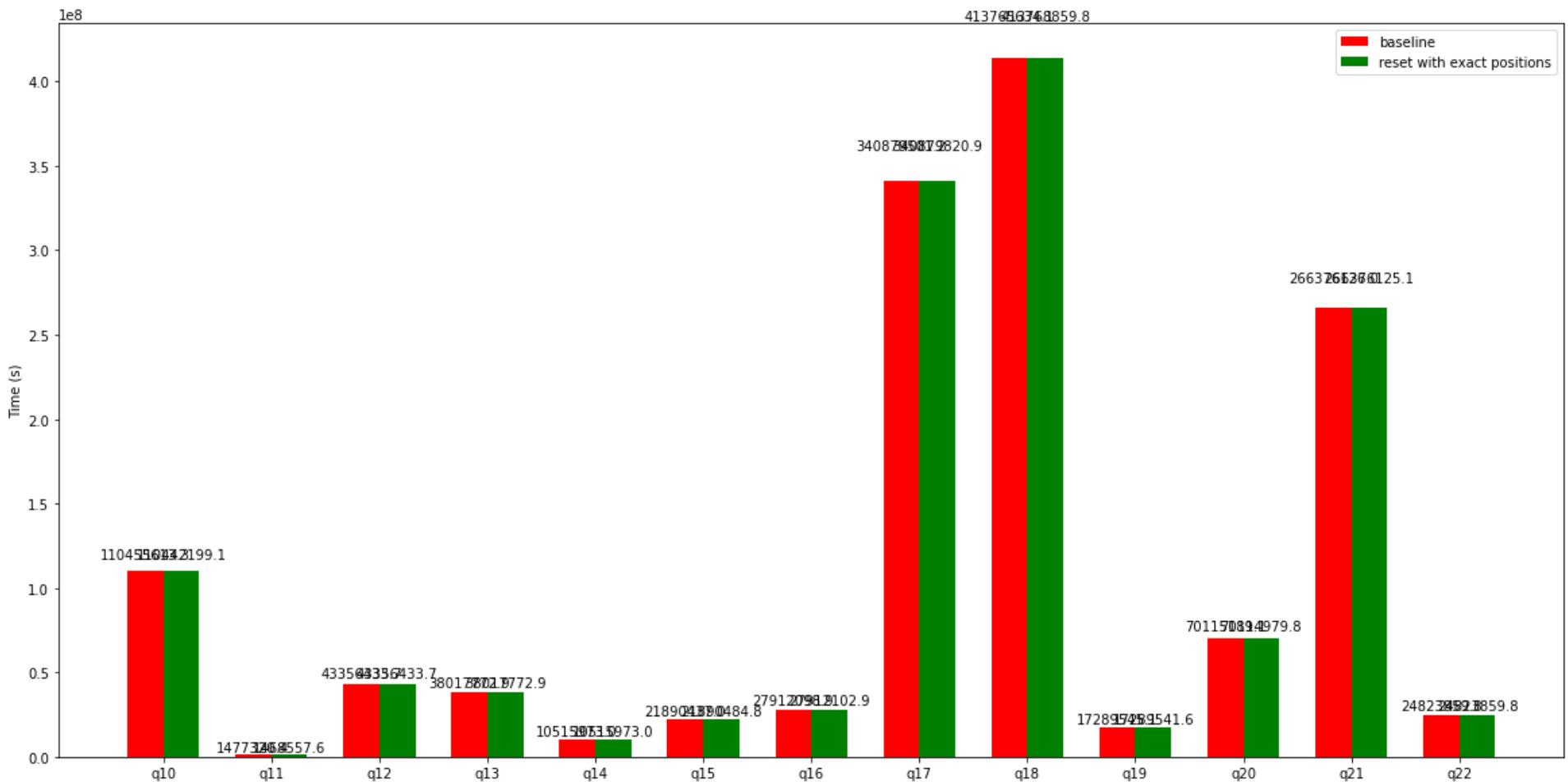
	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
67	presto/tpcds: q68	69.80	0.31	70.10	0.24	0.43	0.30	0.44	0.35	0.09244
45	presto/tpcds: q46	227.80	1.73	228.90	0.99	0.48	1.10	0.76	0.43	0.20491
20	presto/tpcds: q21	14.32	0.09	14.39	0.18	0.50	0.07	0.65	1.27	0.41282
65	presto/tpcds: q66	274.30	0.24	275.70	0.73	0.51	1.40	0.09	0.27	0.00128
73	presto/tpcds: q74	1987.80	4.95	1998.30	5.34	0.53	10.50	0.25	0.27	0.00541
10	presto/tpcds: q11	2548.90	1.54	2562.80	3.05	0.55	13.90	0.06	0.12	0.00000
84	presto/tpcds: q85	253.10	3.02	254.50	3.97	0.55	1.40	1.19	1.56	0.50746
77	presto/tpcds: q78	3586.30	46.23	3606.80	59.57	0.57	20.50	1.29	1.65	0.52051
88	presto/tpcds: q89	300.40	1.18	302.30	0.24	0.63	1.90	0.39	0.08	0.00315
49	presto/tpcds: q50	965.80	1.73	972.10	0.59	0.65	6.30	0.18	0.06	0.00001
95	presto/tpcds: q96	456.90	0.50	460.00	0.82	0.68	3.10	0.11	0.18	0.00001
82	presto/tpcds: q83	13.01	0.46	13.09	0.91	0.68	0.09	3.57	6.96	0.83676
93	presto/tpcds: q94	234.50	0.24	236.30	0.59	0.77	1.80	0.10	0.25	0.00004
92	presto/tpcds: q93	3354.70	11.98	3381.20	13.32	0.79	26.50	0.36	0.39	0.00466
43	presto/tpcds: q44	1102.20	7.29	1111.20	6.45	0.82	9.00	0.66	0.58	0.04699
16	presto/tpcds: q17	239.80	6.42	242.10	6.62	0.96	2.30	2.68	2.74	0.55516
22	presto/tpcds: q23	11832.00	54.20	11946.00	42.09	0.96	114.00	0.46	0.35	0.00225
69	presto/tpcds: q70	1197.20	17.35	1209.60	10.58	1.04	12.40	1.45	0.88	0.16593
60	presto/tpcds: q61	170.10	8.90	172.00	4.97	1.12	1.90	5.23	2.89	0.65770
41	presto/tpcds: q42	30.84	0.12	31.20	0.10	1.16	0.36	0.38	0.33	0.00025
47	presto/tpcds: q48	420.60	0.85	425.60	1.24	1.19	5.00	0.20	0.29	0.00001
12	presto/tpcds: q13	501.20	1.18	507.30	1.12	1.22	6.10	0.24	0.22	0.00000

	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
23	presto/tpcds: q24	3051.10	12.97	3088.30	14.45	1.22	37.20	0.42	0.47	0.00085
15	presto/tpcds: q16	450.50	1.84	456.10	2.29	1.24	5.60	0.41	0.50	0.00088
87	presto/tpcds: q88	3828.00	18.59	3876.00	18.59	1.25	48.00	0.49	0.48	0.00119
35	presto/tpcds: q36	255.00	0.54	258.40	0.31	1.33	3.40	0.21	0.12	0.00000
75	presto/tpcds: q76	635.90	6.81	644.40	8.19	1.34	8.50	1.07	1.27	0.07921
25	presto/tpcds: q26	154.10	0.80	156.20	0.82	1.36	2.10	0.52	0.52	0.00115
51	presto/tpcds: q52	31.48	0.09	31.91	0.09	1.37	0.43	0.28	0.28	0.00001
57	presto/tpcds: q58	55.47	0.73	56.23	0.79	1.37	0.76	1.31	1.41	0.11369
13	presto/tpcds: q14	14262.00	27.10	14460.00	67.03	1.39	198.00	0.19	0.46	0.00005
81	presto/tpcds: q82	379.40	0.98	385.10	0.70	1.50	5.70	0.26	0.18	0.00000
53	presto/tpcds: q54	625.60	15.21	635.00	33.38	1.50	9.40	2.43	5.26	0.54425
24	presto/tpcds: q25	159.90	5.07	162.40	6.33	1.56	2.50	3.17	3.90	0.46793
17	presto/tpcds: q18	202.90	0.88	206.10	0.50	1.58	3.20	0.44	0.24	0.00002
79	presto/tpcds: q80	646.50	88.81	657.00	54.80	1.62	10.50	13.74	8.34	0.81032
28	presto/tpcds: q29	386.50	0.59	392.80	0.90	1.63	6.30	0.15	0.23	0.00000
32	presto/tpcds: q33	54.03	1.66	54.98	0.28	1.76	0.95	3.07	0.51	0.19801
36	presto/tpcds: q37	181.50	0.83	184.70	0.59	1.76	3.20	0.46	0.32	0.00002
26	presto/tpcds: q27	258.30	0.33	263.00	1.05	1.82	4.70	0.13	0.40	0.00000
62	presto/tpcds: q63	146.70	0.50	149.40	1.78	1.84	2.70	0.34	1.19	0.00504
6	presto/tpcds: q07	276.20	0.62	282.50	0.80	2.28	6.30	0.22	0.28	0.00000
48	presto/tpcds: q49	380.50	4.13	397.50	1.73	4.47	17.00	1.09	0.43	0.00000
8	presto/tpcds: q09	2486.60	9.81	2612.60	10.82	5.07	126.00	0.39	0.41	0.00000

	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
27	presto/tpcds: q28	2868.30	6.30	3018.80	16.38	5.25	150.50	0.22	0.54	0.00000
39	presto/tpcds: q40	313.40	84.66	348.00	4.98	11.04	34.60	27.01	1.43	0.34116
2	presto/tpcds: q03	80.10	0.33	101.60	46.93	26.84	21.50	0.41	46.20	0.28806
91	presto/tpcds: q92	18.86	0.26	25.89	17.30	37.31	7.04	1.37	66.82	0.34272
count	99									
mean	1									
std	5									
min	-21									
25%	-1									
50%	0									
75%	1									
max	37									
Name: % change, dtype: float64										

TPC-H Comparison (Network)

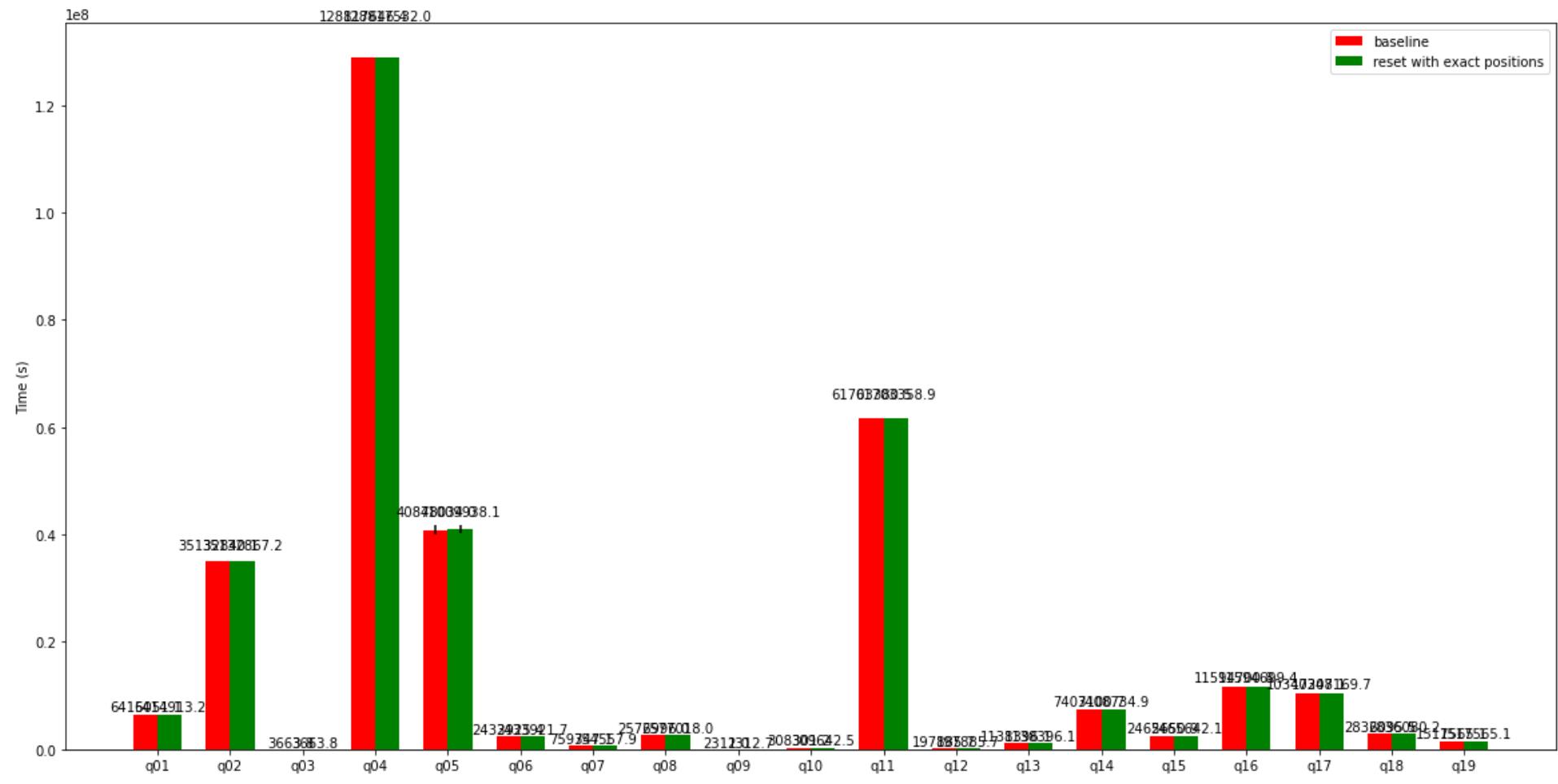




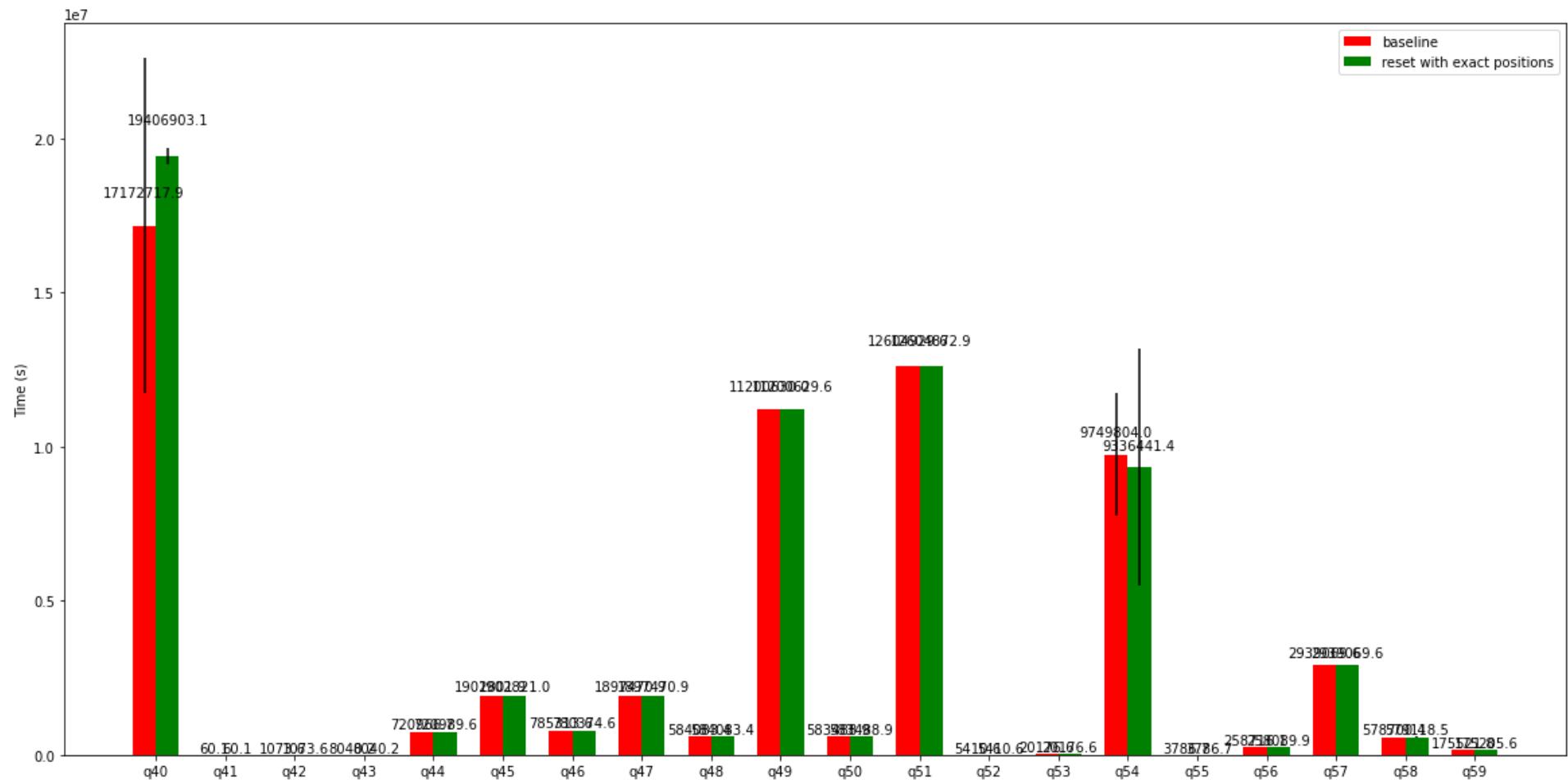
	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
10	presto/tpch: q11	1477320.44	13227.16	1468557.65	5794.20	-0.59	-8762.80	0.90	0.39	0.16801
5	presto/tpch: q06	36.95	0.10	36.91	0.12	-0.10	-0.04	0.26	0.32	0.57366
9	presto/tpch: q10	110455613.26	1750.87	110442199.14	3101.70	-0.01	-13414.12	0.00	0.00	0.00000
19	presto/tpch: q20	70115189.10	256.85	70114979.77	332.07	-0.00	-209.33	0.00	0.00	0.24994
1	presto/tpch: q02	3994052.62	20.04	3994047.00	31.40	-0.00	-5.62	0.00	0.00	0.71938
18	presto/tpch: q19	17289545.06	4.26	17289541.58	0.00	-0.00	-3.47	0.00	0.00	0.07377
7	presto/tpch: q08	18786296.03	8.99	18786293.16	5.42	-0.00	-2.87	0.00	0.00	0.51822

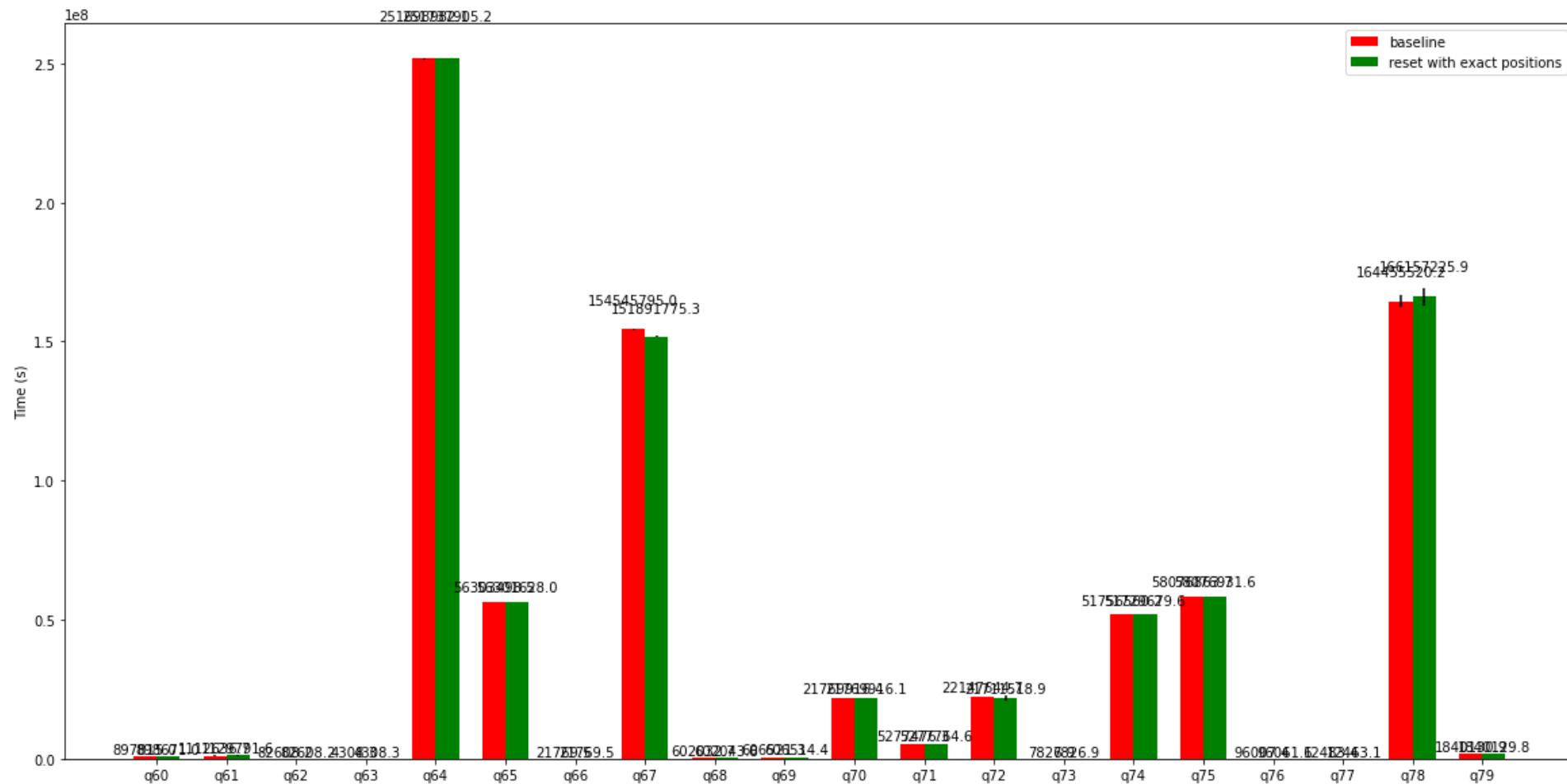
	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
2	presto/tpch: q03	130827060.07	8.64	130827056.59	7.62	-0.00	-3.47	0.00	0.00	0.47713
8	presto/tpch: q09	435074330.00	9.11	435074327.43	6.82	-0.00	-2.57	0.00	0.00	0.59149
20	presto/tpch: q21	266376126.00	9.02	266376125.09	8.53	-0.00	-0.91	0.00	0.00	0.86103
13	presto/tpch: q14	10515972.95	0.00	10515972.95	0.00	0.00	0.00	0.00	0.00	nan
12	presto/tpch: q13	38017772.90	0.00	38017772.90	0.00	0.00	0.00	0.00	0.00	nan
21	presto/tpch: q22	24823859.83	0.00	24823859.83	0.00	0.00	0.00	0.00	0.00	nan
11	presto/tpch: q12	43356433.66	0.00	43356433.66	0.00	0.00	0.00	0.00	0.00	nan
4	presto/tpch: q05	75188891.33	4.93	75188893.47	10.57	0.00	2.15	0.00	0.00	0.66171
15	presto/tpch: q16	27912098.87	5.65	27912102.93	3.09	0.00	4.06	0.00	0.00	0.15297
6	presto/tpch: q07	46409374.66	34.90	46409390.78	2.56	0.00	16.11	0.00	0.00	0.28567
16	presto/tpch: q17	340879501.24	567.15	340879820.91	139.59	0.00	319.67	0.00	0.00	0.20970
14	presto/tpch: q15	21890436.95	135.88	21890484.84	113.08	0.00	47.89	0.00	0.00	0.52194
17	presto/tpch: q18	413765634.09	10770.92	413768859.81	7507.61	0.00	3225.71	0.00	0.00	0.56069
0	presto/tpch: q01	2094.55	2.34	2095.69	1.27	0.05	1.14	0.11	0.06	0.31932
3	presto/tpch: q04	181795574.24	26965374.89	192804637.29	415.97	6.06	11009063.05	14.83	0.00	0.34087
count	22									
mean	0									
std	1									
min	-1									
25%	-0									
50%	0									
75%	0									
max	6									
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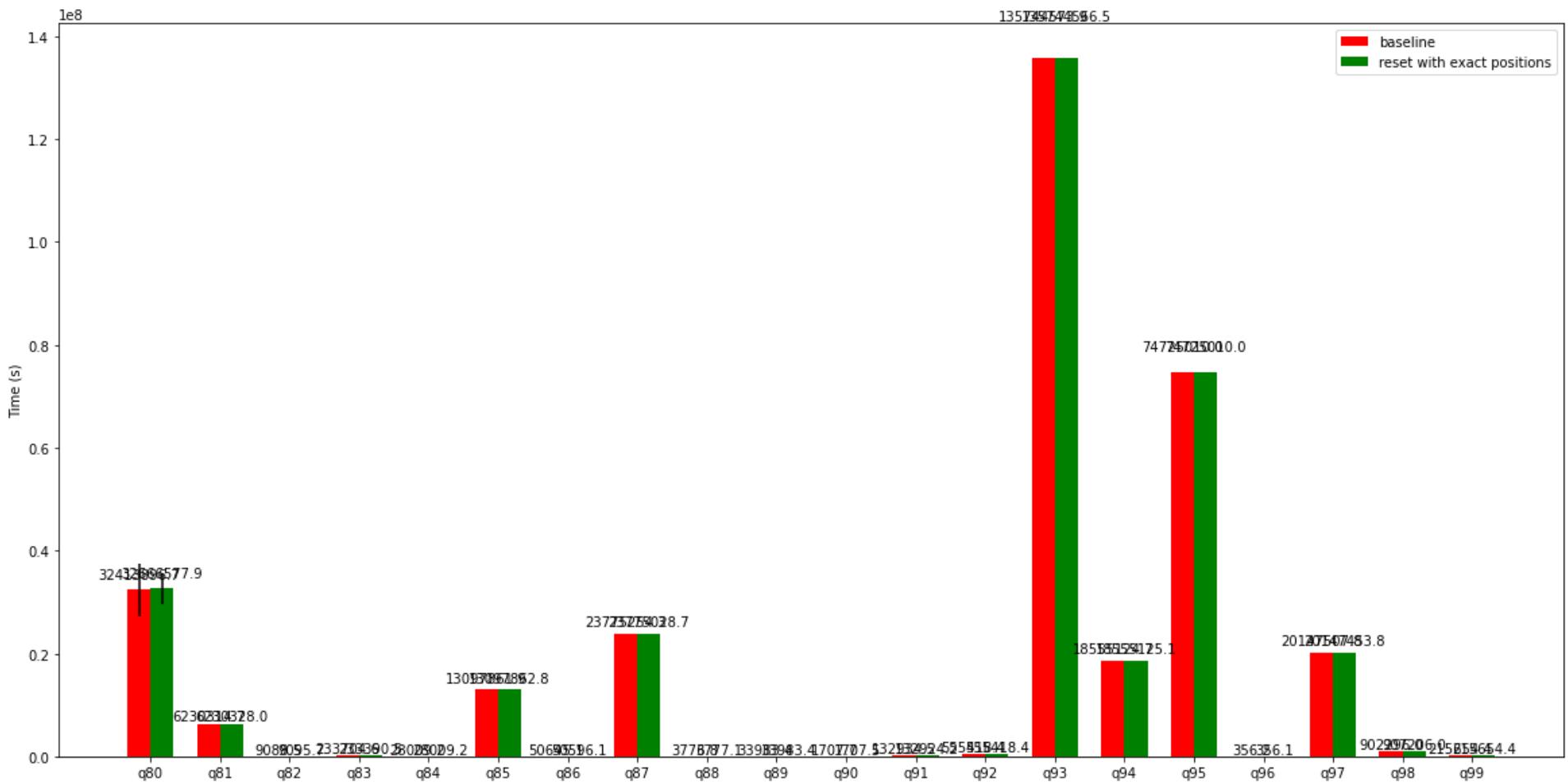
TPC-DS Comparison (Network)











	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
53	presto/tpcds: q54	9749803.96	1977214.79	9336441.36	3829643.28	-4.24	-413362.60	20.28	41.02	0.81900
71	presto/tpcds: q72	22147644.71	6.14	21711518.89	1068277.20	-1.97	-436125.82	0.00	4.92	0.34089
66	presto/tpcds: q67	154545794.97	248281.66	151891775.33	380688.63	-1.72	-2654019.64	0.16	0.25	0.00000
6	presto/tpcds: q07	759347.11	7698.24	754557.86	15465.02	-0.63	-4789.26	1.01	2.05	0.51250
45	presto/tpcds: q46	785313.65	1.26	780374.59	12098.80	-0.63	-4939.06	0.00	1.55	0.34092
55	presto/tpcds: q56	258716.10	1220.65	258089.86	1225.13	-0.24	-626.24	0.47	0.47	0.39592
58	presto/tpcds: q59	175521.81	476.62	175205.55	506.88	-0.18	-316.25	0.27	0.29	0.29159

	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
76	presto/tpcds: q77	12483.39	588.84	12463.09	623.07	-0.16	-20.30	4.72	5.00	0.95489
82	presto/tpcds: q83	233704.55	4827.95	233390.49	3375.02	-0.13	-314.06	2.07	1.45	0.89869
85	presto/tpcds: q86	50645.10	23.47	50596.07	79.60	-0.10	-49.03	0.05	0.16	0.17841
73	presto/tpcds: q74	51756560.24	703.40	51729679.55	907.02	-0.05	-26880.69	0.00	0.00	0.00000
95	presto/tpcds: q96	356.20	0.22	356.07	0.30	-0.04	-0.13	0.06	0.08	0.40275
89	presto/tpcds: q90	1707.72	0.23	1707.47	0.37	-0.01	-0.25	0.01	0.02	0.19045
90	presto/tpcds: q91	132934.47	20.22	132924.21	16.67	-0.01	-10.26	0.02	0.01	0.36020
64	presto/tpcds: q65	56303498.45	2528.01	56301627.99	3526.78	-0.00	-1870.46	0.00	0.01	0.31587
30	presto/tpcds: q31	13791911.06	1014.56	13791537.23	502.69	-0.00	-373.83	0.01	0.00	0.43749
0	presto/tpcds: q01	6415051.08	1941.30	6414913.22	2485.66	-0.00	-137.86	0.03	0.04	0.91685
68	presto/tpcds: q69	606521.35	286.29	606514.40	405.12	-0.00	-6.95	0.05	0.07	0.97328
86	presto/tpcds: q87	23775254.30	67.80	23775028.66	196.95	-0.00	-225.64	0.00	0.00	0.02417
37	presto/tpcds: q38	23775263.97	123.26	23775096.62	94.82	-0.00	-167.35	0.00	0.00	0.02491
17	presto/tpcds: q18	2836095.55	23.79	2836080.19	18.75	-0.00	-15.36	0.00	0.00	0.24264
50	presto/tpcds: q51	12604929.59	113.38	12604872.93	138.52	-0.00	-56.66	0.00	0.00	0.45610
16	presto/tpcds: q17	10347208.12	44.64	10347169.70	38.81	-0.00	-38.42	0.00	0.00	0.14270
14	presto/tpcds: q15	2465650.86	14.74	2465642.08	12.13	-0.00	-8.78	0.00	0.00	0.28621
96	presto/tpcds: q97	20147507.82	387.68	20147453.81	304.98	-0.00	-54.01	0.00	0.00	0.79399
5	presto/tpcds: q06	2433925.37	9.32	2433921.66	2.47	-0.00	-3.71	0.00	0.00	0.36796
27	presto/tpcds: q28	3182926.21	9.09	3182922.30	9.35	-0.00	-3.91	0.00	0.00	0.47971
3	presto/tpcds: q04	128817646.43	454.47	128817531.98	668.43	-0.00	-114.45	0.00	0.00	0.73590
72	presto/tpcds: q73	7826.93	0.01	7826.93	0.01	-0.00	-0.01	0.00	0.00	0.43383

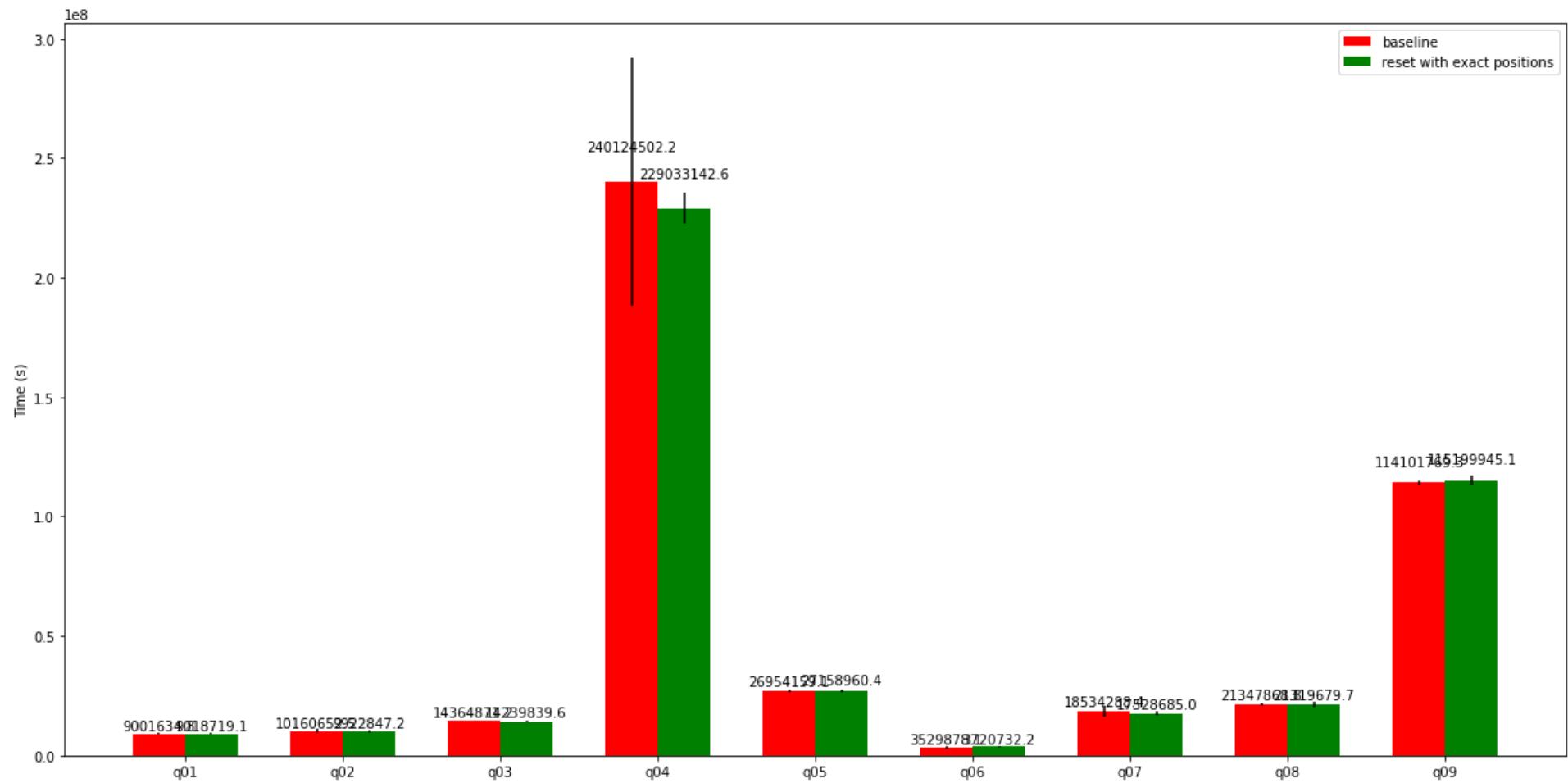
	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
78	presto/tpcds: q79	1840130.91	0.55	1840129.83	3.14	-0.00	-1.08	0.00	0.00	0.42503
10	presto/tpcds: q11	61703380.52	56.86	61703358.90	32.31	-0.00	-21.63	0.00	0.00	0.43679
15	presto/tpcds: q16	11594700.85	2.40	11594699.41	2.25	-0.00	-1.43	0.00	0.00	0.31151
92	presto/tpcds: q93	135744573.92	315.15	135744566.53	257.46	-0.00	-7.39	0.00	0.00	0.96541
33	presto/tpcds: q34	16395.37	0.00	16395.37	0.00	-0.00	-0.00	0.00	0.00	0.73417
48	presto/tpcds: q49	11200630.03	0.72	11200629.60	0.86	-0.00	-0.43	0.00	0.00	0.36597
69	presto/tpcds: q70	21769916.43	0.81	21769916.07	0.76	-0.00	-0.37	0.00	0.00	0.43629
61	presto/tpcds: q62	82608.21	0.00	82608.21	0.00	0.00	0.00	0.00	0.00	nan
94	presto/tpcds: q95	74725010.00	0.00	74725010.00	0.00	0.00	0.00	0.00	0.00	nan
91	presto/tpcds: q92	555418.35	0.00	555418.35	0.00	0.00	0.00	0.00	0.00	nan
56	presto/tpcds: q57	2939069.58	0.00	2939069.58	0.00	0.00	0.00	0.00	0.00	nan
54	presto/tpcds: q55	3786.73	0.00	3786.73	0.00	0.00	0.00	0.00	0.00	nan
88	presto/tpcds: q89	33983.45	0.00	33983.45	0.00	0.00	0.00	0.00	0.00	nan
52	presto/tpcds: q53	20176.63	0.00	20176.63	0.00	0.00	0.00	0.00	0.00	nan
51	presto/tpcds: q52	5410.64	0.00	5410.64	0.00	0.00	0.00	0.00	0.00	nan
83	presto/tpcds: q84	28009.23	0.05	28009.23	0.05	0.00	0.00	0.00	0.00	1.00000
62	presto/tpcds: q63	4308.33	0.00	4308.33	0.00	0.00	0.00	0.00	0.00	nan
65	presto/tpcds: q66	21769.46	0.00	21769.46	0.00	0.00	0.00	0.00	0.00	nan
49	presto/tpcds: q50	583488.94	0.00	583488.94	0.00	0.00	0.00	0.00	0.00	nan
46	presto/tpcds: q47	1897470.94	0.00	1897470.94	0.00	0.00	0.00	0.00	0.00	nan
2	presto/tpcds: q03	3663.83	0.00	3663.83	0.00	0.00	0.00	0.00	0.00	nan
11	presto/tpcds: q12	197885.67	0.00	197885.67	0.00	0.00	0.00	0.00	0.00	nan

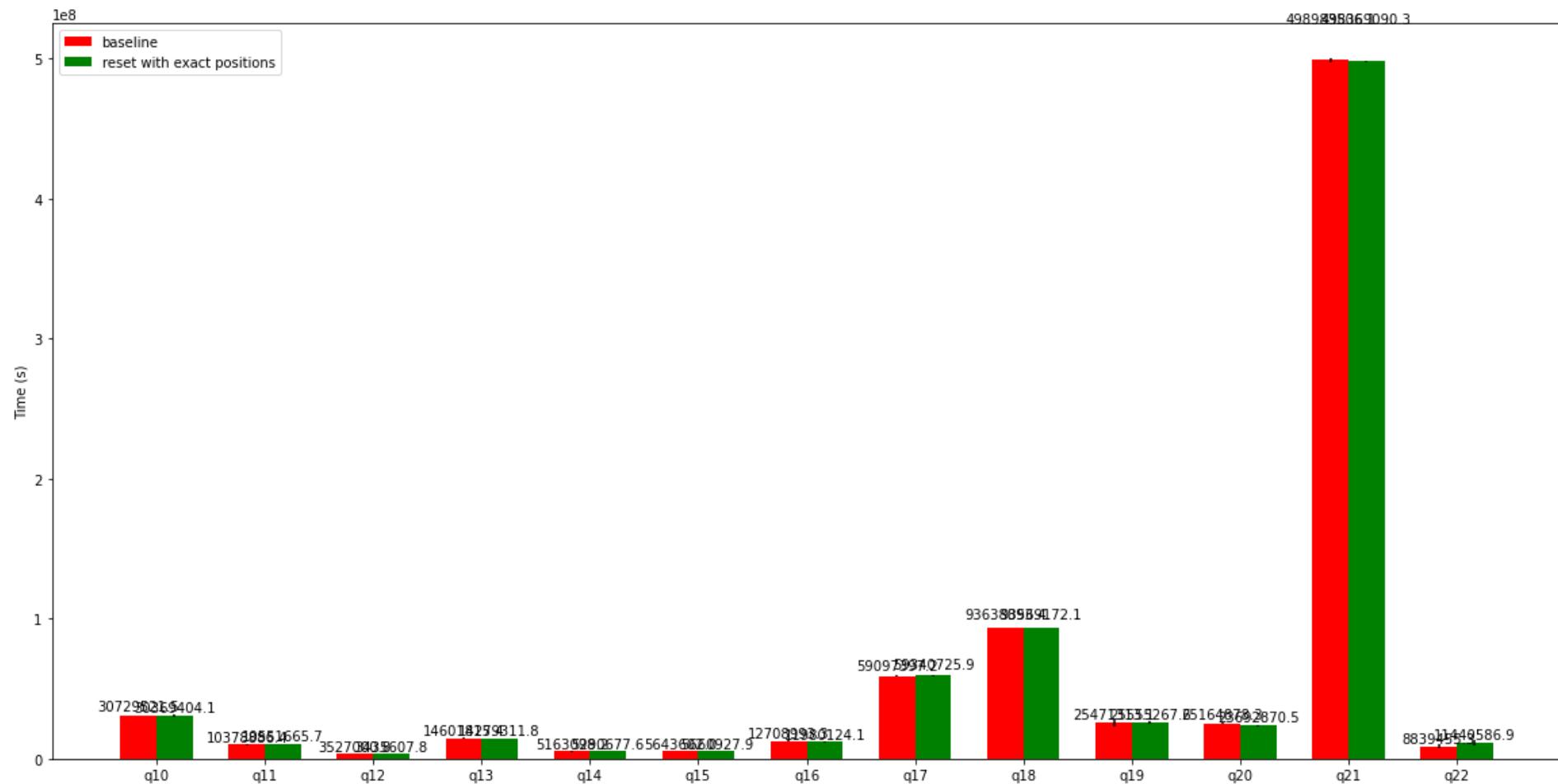
	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
12	presto/tpcds: q13	1138396.15	0.00	1138396.15	0.00	0.00	0.00	0.00	0.00	nan
18	presto/tpcds: q19	1517565.14	0.00	1517565.14	0.00	0.00	0.00	0.00	0.00	nan
20	presto/tpcds: q21	146188.43	0.00	146188.43	0.00	0.00	0.00	0.00	0.00	nan
21	presto/tpcds: q22	13413244.95	0.00	13413244.95	0.00	0.00	0.00	0.00	0.00	nan
47	presto/tpcds: q48	584083.40	0.00	584083.40	0.00	0.00	0.00	0.00	0.00	nan
24	presto/tpcds: q25	6781282.01	0.00	6781282.01	0.00	0.00	0.00	0.00	0.00	nan
28	presto/tpcds: q29	4591049.47	0.00	4591049.47	0.00	0.00	0.00	0.00	0.00	nan
31	presto/tpcds: q32	677171.43	0.00	677171.43	0.00	0.00	0.00	0.00	0.00	nan
98	presto/tpcds: q99	215654.43	0.00	215654.43	0.00	0.00	0.00	0.00	0.00	nan
42	presto/tpcds: q43	8040.19	0.00	8040.19	0.00	0.00	0.00	0.00	0.00	nan
36	presto/tpcds: q37	2504.65	0.00	2504.65	0.00	0.00	0.00	0.00	0.00	nan
41	presto/tpcds: q42	1073.62	0.00	1073.62	0.00	0.00	0.00	0.00	0.00	nan
40	presto/tpcds: q41	60.07	0.00	60.07	0.00	0.00	0.00	0.00	0.00	nan
93	presto/tpcds: q94	18555124.69	2.31	18555125.12	1.93	0.00	0.43	0.00	0.00	0.73418
84	presto/tpcds: q85	13097861.89	3.35	13097862.79	3.18	0.00	0.90	0.00	0.00	0.64236
23	presto/tpcds: q24	33131380.83	29.78	33131388.19	28.06	0.00	7.36	0.00	0.00	0.66884
29	presto/tpcds: q30	3073661.65	17.34	3073663.15	47.00	0.00	1.50	0.00	0.00	0.94298
38	presto/tpcds: q39	2162613.21	4.60	2162614.71	3.70	0.00	1.50	0.00	0.00	0.54846
1	presto/tpcds: q02	35132840.07	71.21	35132867.21	93.35	0.00	27.14	0.00	0.00	0.58375
74	presto/tpcds: q75	58076863.74	126.90	58076931.62	155.07	0.00	67.88	0.00	0.00	0.42600
80	presto/tpcds: q81	6230314.70	40.12	6230328.02	67.46	0.00	13.32	0.00	0.00	0.68644
22	presto/tpcds: q23	277207700.83	61321.44	277209477.43	26856.49	0.00	1776.60	0.02	0.01	0.94945

	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
7	presto/tpcds: q08	2576996.00	56.91	2577018.00	135.41	0.00	22.00	0.00	0.01	0.72139
44	presto/tpcds: q45	1902801.95	18.88	1902821.02	31.86	0.00	19.07	0.00	0.00	0.23578
67	presto/tpcds: q68	602032.73	60.28	602043.77	32.02	0.00	11.04	0.01	0.01	0.70027
34	presto/tpcds: q35	4347743.56	604.54	4347847.84	594.74	0.00	104.28	0.01	0.01	0.76942
43	presto/tpcds: q44	720966.72	16.63	720989.61	24.66	0.00	22.90	0.00	0.00	0.08871
35	presto/tpcds: q36	869621.37	96.21	869653.75	77.67	0.00	32.38	0.01	0.01	0.53563
70	presto/tpcds: q71	5277476.27	328.38	5277764.61	404.89	0.01	288.34	0.01	0.01	0.20529
26	presto/tpcds: q27	79728.44	5.55	79733.51	1.72	0.01	5.07	0.01	0.00	0.05835
87	presto/tpcds: q88	3776.78	1.10	3777.13	1.02	0.01	0.34	0.03	0.03	0.58756
63	presto/tpcds: q64	251698982.14	95529.83	251737905.23	99956.34	0.02	38923.09	0.04	0.04	0.50616
75	presto/tpcds: q76	96007.36	169.84	96061.64	97.59	0.06	54.28	0.18	0.10	0.51265
57	presto/tpcds: q58	578700.36	1632.32	579118.46	1849.56	0.07	418.10	0.28	0.32	0.68680
8	presto/tpcds: q09	2310.97	2.15	2312.70	2.37	0.07	1.73	0.09	0.10	0.21502
13	presto/tpcds: q14	7403100.70	13875.38	7408734.88	10550.40	0.08	5634.18	0.19	0.14	0.44688
81	presto/tpcds: q82	9088.46	10.02	9095.75	9.84	0.08	7.29	0.11	0.11	0.23240
59	presto/tpcds: q60	897814.99	4975.50	898670.97	2143.93	0.10	855.98	0.55	0.24	0.70686
25	presto/tpcds: q26	518033.46	10579.95	519103.95	5386.43	0.21	1070.49	2.04	1.04	0.82964
4	presto/tpcds: q05	40878034.05	862909.93	41009938.12	712582.06	0.32	131904.07	2.11	1.74	0.77870
9	presto/tpcds: q10	308301.21	2191.70	309642.46	1784.45	0.44	1341.25	0.71	0.58	0.27205
97	presto/tpcds: q98	902295.99	4768.62	907205.99	7650.17	0.54	4909.99	0.53	0.84	0.21174
79	presto/tpcds: q80	32413896.68	5134005.75	32666577.89	3017652.98	0.78	252681.21	15.84	9.24	0.91928
77	presto/tpcds: q78	164455520.16	2185049.41	166157225.89	3068336.64	1.03	1701705.73	1.33	1.85	0.29439

	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
60	presto/tpcds: q61	1112636.75	82454.91	1129791.64	63114.11	1.54	17154.89	7.41	5.59	0.69423
32	presto/tpcds: q33	1086279.31	43227.93	1103172.38	491.86	1.56	16893.07	3.98	0.04	0.36105
19	presto/tpcds: q20	541805.35	7168.03	550593.91	5128.64	1.62	8788.56	1.32	0.93	0.03470
39	presto/tpcds: q40	17172717.89	5436811.46	19406903.09	263910.24	13.01	2234185.20	31.66	1.36	0.33841
count	99									
mean	0									
std	1									
min	-4									
25%	-0									
50%	0									
75%	0									
max	13									
Name: % change, dtype: float64										

TPC-H Comparison (Peak memory)

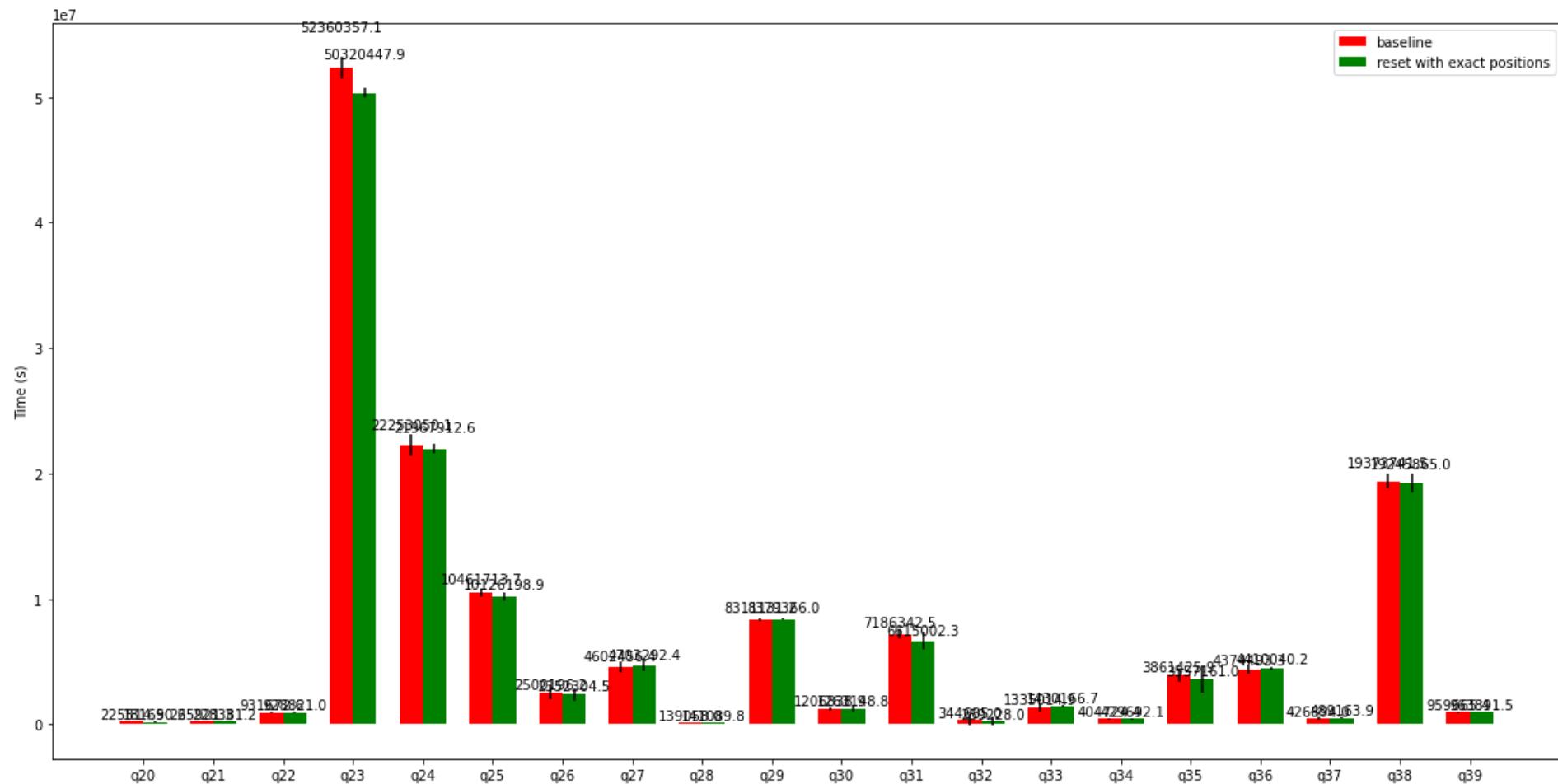


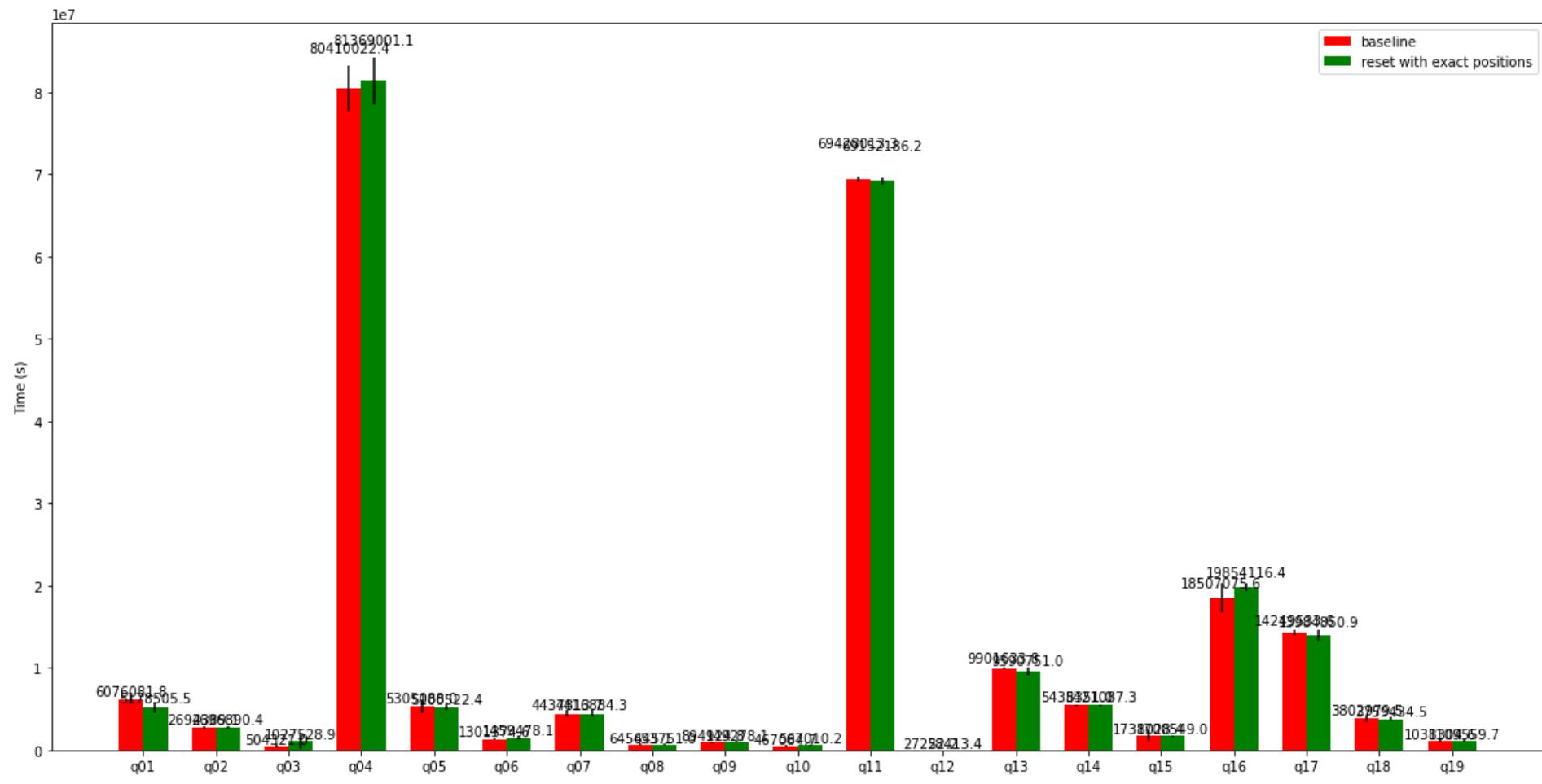


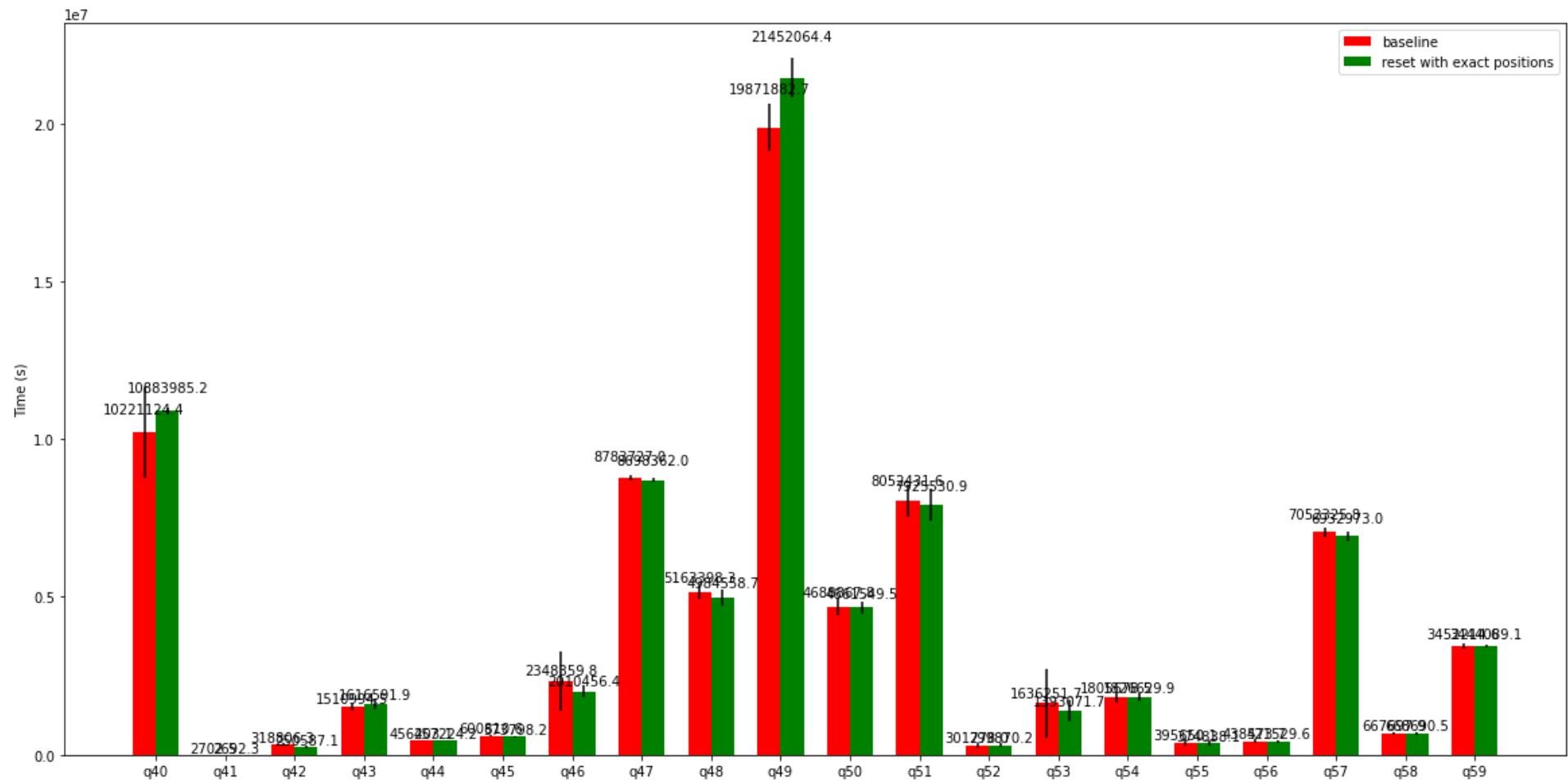
	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
19	presto/tpch: q20	25164878.27	607687.72	23692870.53	643767.77	-5.85	-1472007.74	2.41	2.72	0.00224
15	presto/tpch: q16	12708993.32	240178.56	11980124.10	275574.50	-5.74	-728869.23	1.89	2.30	0.00064
6	presto/tpch: q07	18534288.41	2068905.96	17528684.98	727947.73	-5.43	-1005603.43	11.16	4.15	0.28764
3	presto/tpch: q04	240124502.18	51816526.41	229033142.64	6380874.37	-4.62	-11091359.54	21.58	2.79	0.61412
11	presto/tpch: q12	3527000.84	151337.20	3435607.82	128001.43	-2.59	-91393.02	4.29	3.73	0.28508
1	presto/tpch: q02	10160652.55	953358.86	9922847.17	416189.03	-2.34	-237805.37	9.38	4.19	0.58783
12	presto/tpch: q13	14601815.44	267730.20	14279311.81	182789.62	-2.21	-322503.62	1.83	1.28	0.03504

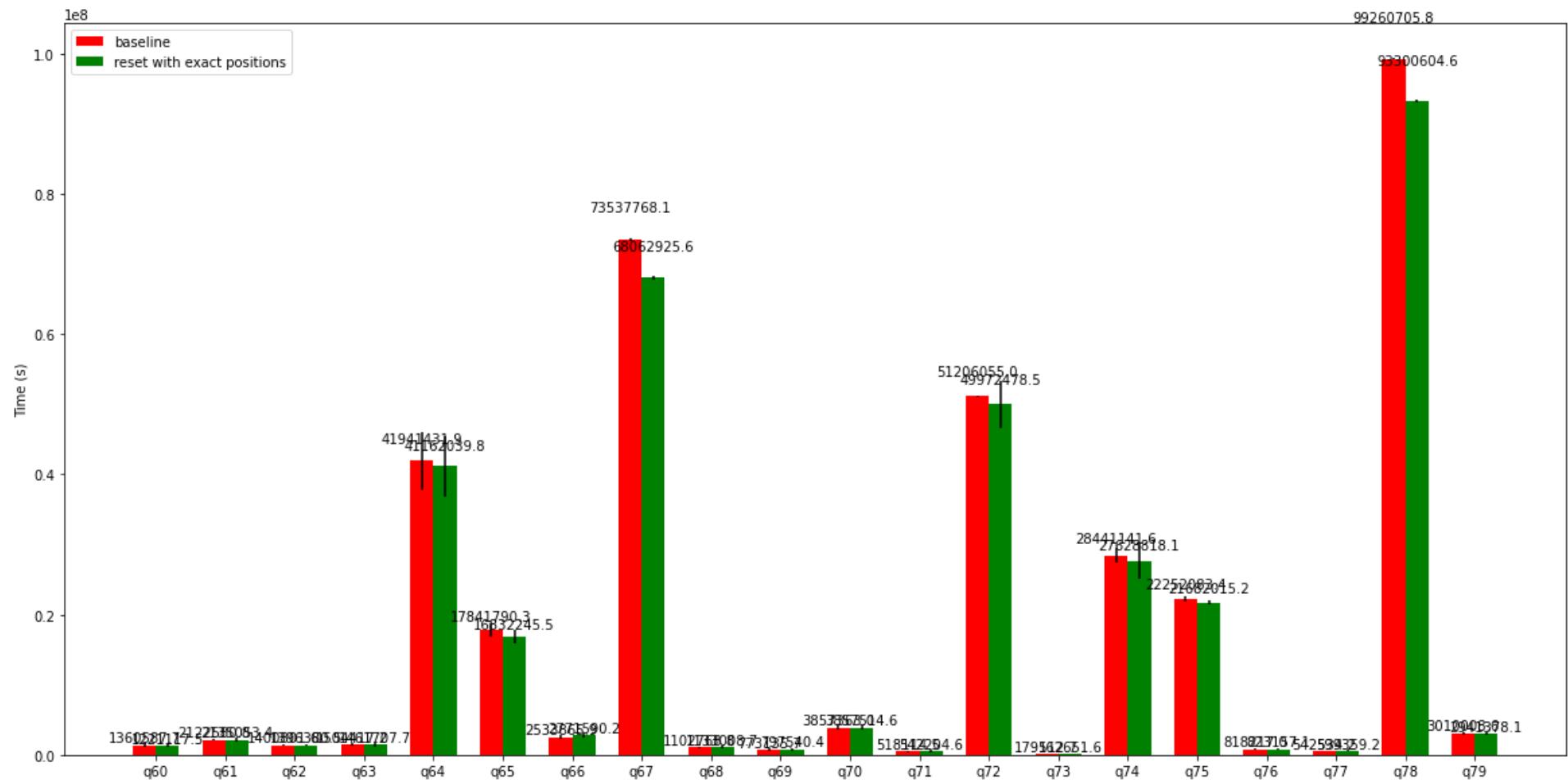
	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
9	presto/tpch: q10	30729521.52	380663.53	30369404.12	1035948.92	-1.17	-360117.39	1.24	3.41	0.44272
2	presto/tpch: q03	14364871.18	91223.62	14239839.55	316497.66	-0.87	-125031.63	0.64	2.22	0.37437
7	presto/tpch: q08	21347868.80	784327.68	21319679.68	1103734.55	-0.13	-28189.12	3.67	5.18	0.96033
20	presto/tpch: q21	498983506.07	1340869.39	498369090.28	540208.15	-0.12	-614415.78	0.27	0.11	0.32235
17	presto/tpch: q18	93638893.41	115567.70	93569172.08	155250.70	-0.07	-69721.33	0.12	0.17	0.39828
0	presto/tpch: q01	9001634.77	320382.35	9018719.10	310764.31	0.19	17084.32	3.56	3.45	0.92715
14	presto/tpch: q15	5643602.00	33275.66	5660927.95	27105.82	0.31	17325.95	0.59	0.48	0.34606
18	presto/tpch: q19	25471313.10	2121351.51	25555267.62	1041065.10	0.33	83954.52	8.33	4.07	0.93237
16	presto/tpch: q17	59097397.18	490034.06	59340725.86	484936.90	0.41	243328.68	0.83	0.82	0.40755
4	presto/tpch: q05	26954159.10	423859.49	27158960.44	627082.92	0.76	204801.33	1.57	2.31	0.52245
8	presto/tpch: q09	114101769.32	769364.84	115199945.13	1723639.15	0.96	1098175.82	0.67	1.50	0.18458
10	presto/tpch: q11	10378886.37	427844.53	10551665.68	257005.32	1.66	172779.31	4.12	2.44	0.41629
13	presto/tpch: q14	5163098.23	85131.27	5290677.55	91174.04	2.47	127579.32	1.65	1.72	0.03117
5	presto/tpch: q06	3529878.14	561253.03	3720732.22	369303.98	5.41	190854.08	15.90	9.93	0.50239
21	presto/tpch: q22	8839455.31	1385303.11	11440586.87	2116323.20	29.43	2601131.56	15.67	18.50	0.03044
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mean	0									
std	7									
min	-6									
25%	-2									
50%	-0									
75%	1									
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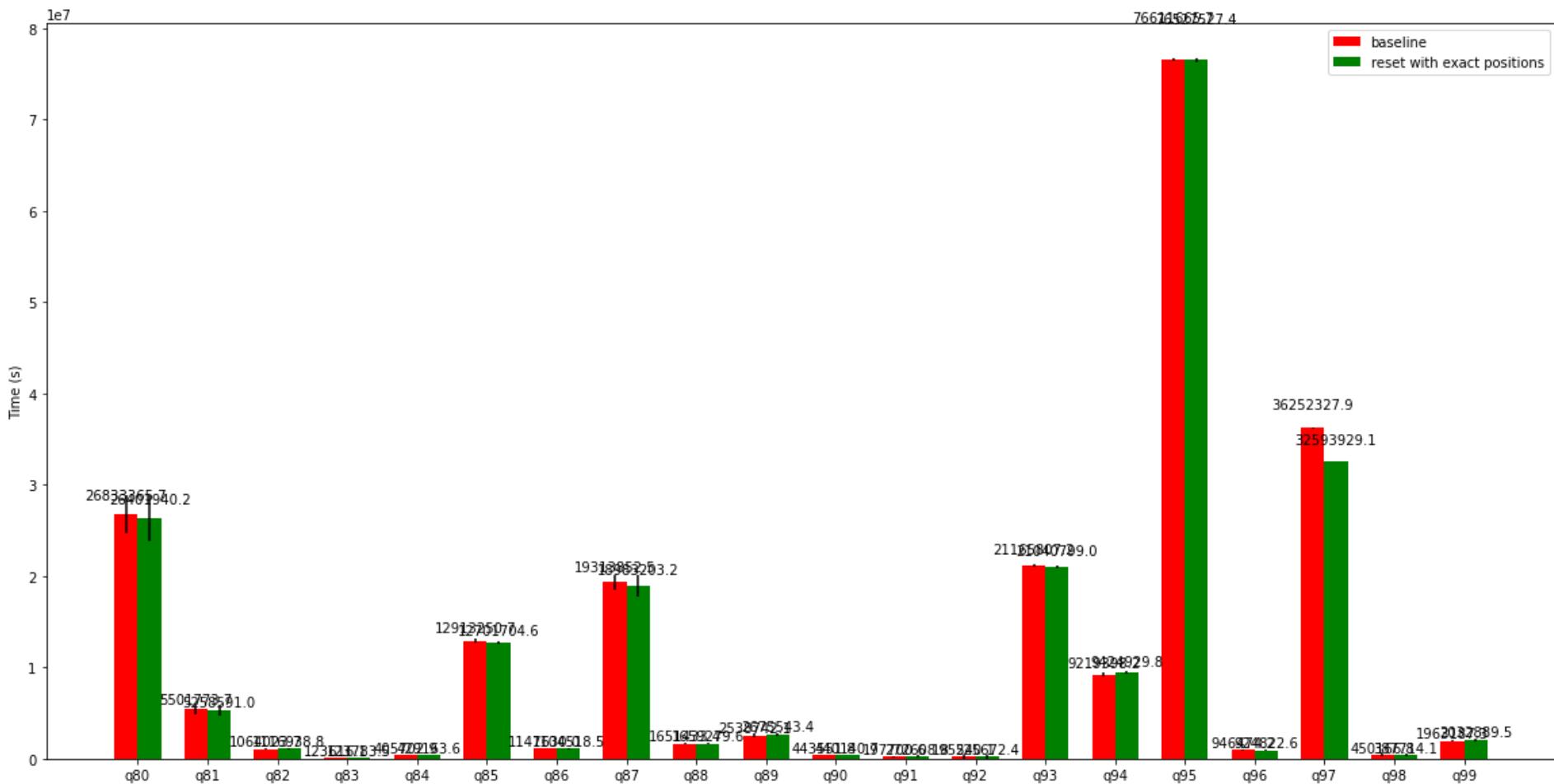
TPC-DS Comparison (Peak memory)

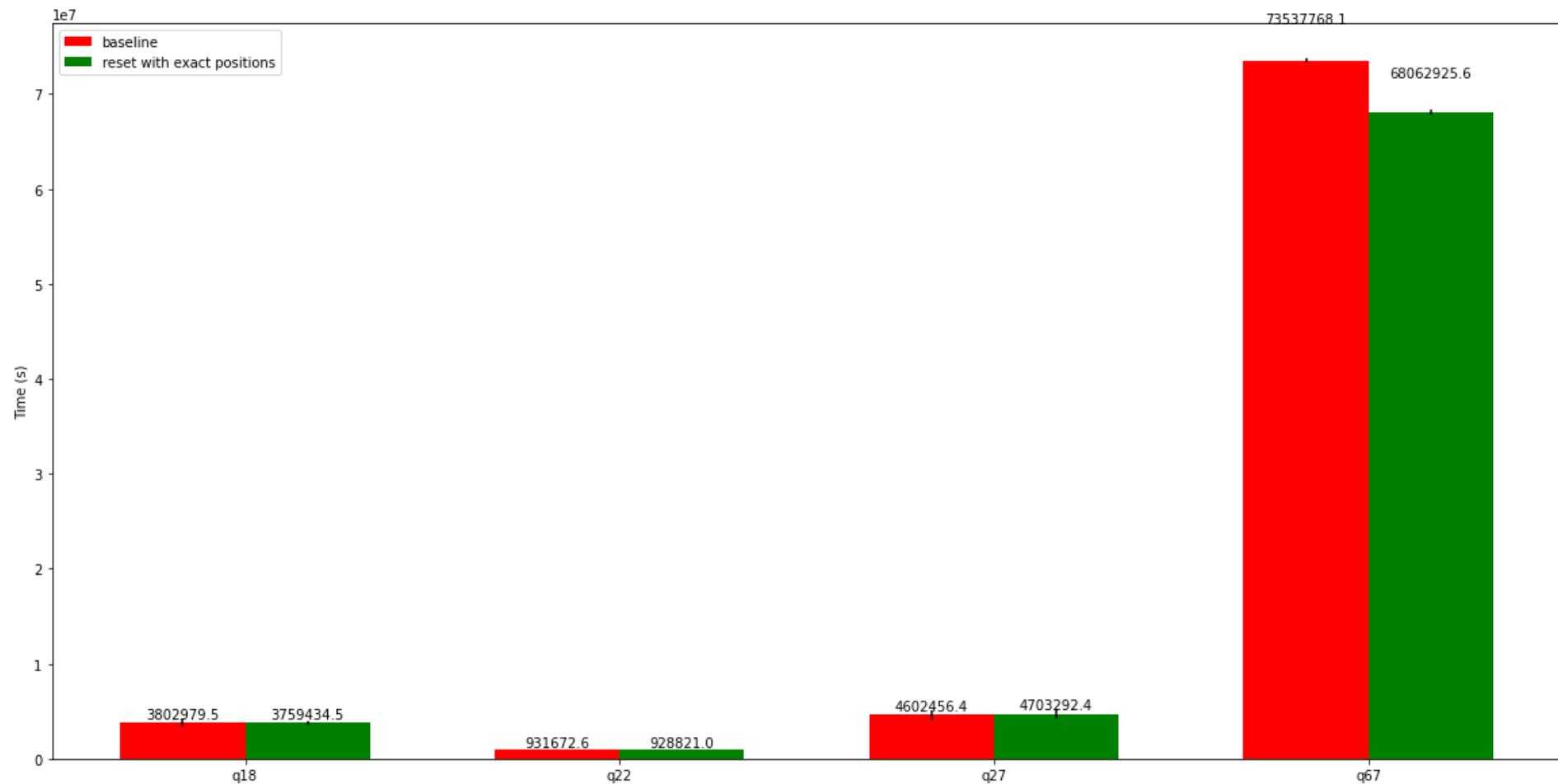












	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
31	presto/tpcds: q32	344684.98	432471.68	259228.00	353584.02	-24.79	-85456.98	125.47	136.40	0.71569
41	presto/tpcds: q42	318806.34	43345.59	250587.08	45111.27	-21.40	-68219.26	13.60	18.00	0.02345
19	presto/tpcds: q20	225514.48	30916.37	181690.57	92718.39	-19.43	-43823.91	13.71	51.03	0.29781
52	presto/tpcds: q53	1636251.69	1095755.43	1393071.74	341526.52	-14.86	-243179.95	66.97	24.52	0.61506
0	presto/tpcds: q01	6076081.82	479250.68	5178505.48	619729.05	-14.77	-897576.34	7.89	11.97	0.01859
45	presto/tpcds: q46	2348359.77	931679.40	2010456.41	198585.76	-14.39	-337903.36	39.67	9.88	0.40529
97	presto/tpcds: q98	450166.84	139548.32	387714.08	137942.46	-13.87	-62452.76	31.00	35.58	0.45367

	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
59	presto/tpcds: q60	1360587.70	253007.65	1221117.46	193611.19	-10.25	-139470.24	18.60	15.86	0.30877
96	presto/tpcds: q97	36252327.92	78429.56	32593929.14	16238.23	-10.09	-3658398.78	0.22	0.05	0.00000
72	presto/tpcds: q73	179512.67	23782.31	162651.57	27438.72	-9.39	-16861.10	13.25	16.87	0.28188
30	presto/tpcds: q31	7186342.52	340962.56	6615002.32	710248.21	-7.95	-571340.21	4.74	10.74	0.10606
34	presto/tpcds: q35	3861425.93	454977.15	3557161.05	1101195.53	-7.88	-304264.88	11.78	30.96	0.54564
66	presto/tpcds: q67	73537768.06	209013.08	68062925.58	275590.10	-7.44	-5474842.49	0.28	0.40	0.00000
77	presto/tpcds: q78	99260705.79	111905.87	93300604.63	171282.94	-6.00	-5960101.16	0.11	0.18	0.00000
25	presto/tpcds: q26	2500196.18	505560.53	2352304.46	501602.64	-5.92	-147891.72	20.22	21.32	0.62202
64	presto/tpcds: q65	17841790.34	915012.39	16832245.47	1027443.70	-5.66	-1009544.87	5.13	6.10	0.10249
54	presto/tpcds: q55	395650.09	89975.43	374838.07	97007.62	-5.26	-20812.01	22.74	25.88	0.70809
44	presto/tpcds: q45	600810.62	22790.00	573798.23	25803.93	-4.50	-27012.39	3.79	4.50	0.08354
80	presto/tpcds: q81	5501773.75	585503.95	5258590.96	566288.87	-4.42	-243182.78	10.64	10.77	0.48139
22	presto/tpcds: q23	52360357.15	847334.53	50320447.85	370381.90	-3.90	-2039909.30	1.62	0.74	0.00030
55	presto/tpcds: q56	438573.72	78957.76	421529.61	33095.52	-3.89	-17044.11	18.00	7.85	0.63631
4	presto/tpcds: q05	5305088.04	779544.06	5100522.43	314288.46	-3.86	-204565.61	14.69	6.16	0.56432
85	presto/tpcds: q86	1147629.99	43849.37	1104518.49	62691.16	-3.76	-43111.50	3.82	5.68	0.19756
47	presto/tpcds: q48	5163398.25	247038.27	4984558.75	258192.51	-3.46	-178839.51	4.78	5.18	0.24832
24	presto/tpcds: q25	10461713.68	329209.07	10126198.92	308162.24	-3.21	-335514.76	3.15	3.04	0.09837
12	presto/tpcds: q13	9901633.81	68062.33	9590751.04	458828.16	-3.14	-310882.77	0.69	4.78	0.13168
73	presto/tpcds: q74	28441141.59	1089447.84	27628818.07	2480595.28	-2.86	-812323.52	3.83	8.98	0.47956
62	presto/tpcds: q63	1504417.17	147574.09	1461707.69	403402.78	-2.84	-42709.48	9.81	27.60	0.81250
74	presto/tpcds: q75	22252083.43	390729.19	21682015.19	265037.41	-2.56	-570068.24	1.76	1.22	0.01435

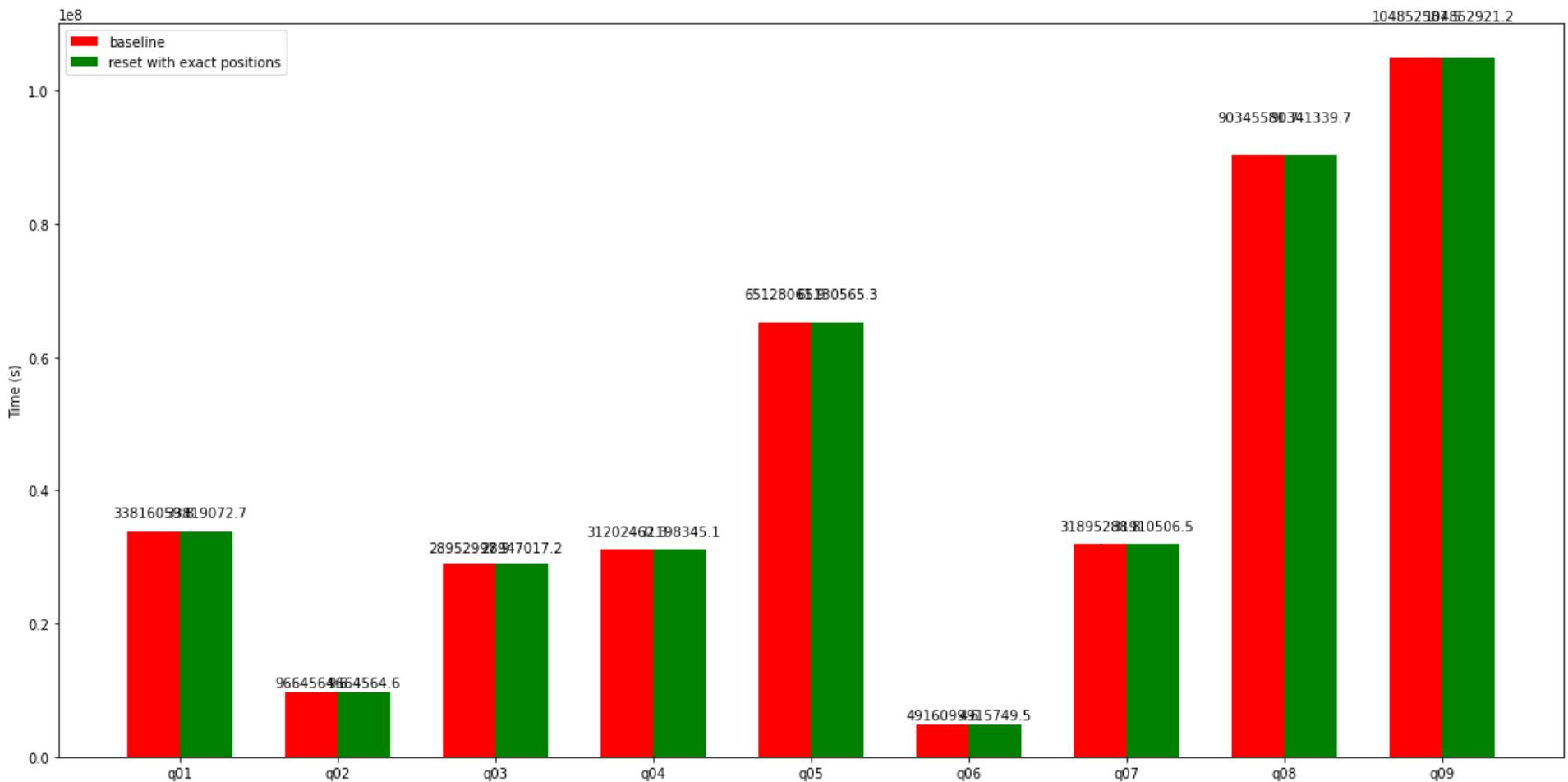
	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
71	presto/tpcds: q72	51206055.04	97038.21	49972478.50	3300022.85	-2.41	-1233576.53	0.19	6.60	0.38160
95	presto/tpcds: q96	946474.24	90220.20	924822.58	124701.61	-2.29	-21651.66	9.53	13.48	0.73755
78	presto/tpcds: q79	3010008.63	131032.09	2941378.08	195468.91	-2.28	-68630.55	4.35	6.65	0.49133
14	presto/tpcds: q15	1738028.38	653217.06	1700549.03	109033.71	-2.16	-37479.35	37.58	6.41	0.89250
63	presto/tpcds: q64	41941431.89	4116835.85	41162039.78	4346438.62	-1.86	-779392.11	9.82	10.56	0.75637
16	presto/tpcds: q17	14249533.61	325383.17	13984850.90	634482.84	-1.86	-264682.71	2.28	4.54	0.38461
86	presto/tpcds: q87	19313852.55	830756.95	18983203.20	1171931.27	-1.71	-330649.35	4.30	6.17	0.58530
56	presto/tpcds: q57	7052325.78	135029.69	6932973.00	147099.52	-1.69	-119352.78	1.91	2.12	0.17387
84	presto/tpcds: q85	12913250.65	222261.63	12701704.65	157153.86	-1.64	-211546.01	1.72	1.24	0.08611
79	presto/tpcds: q80	26833365.73	2068417.82	26401940.21	2522446.07	-1.61	-431425.52	7.71	9.55	0.75264
50	presto/tpcds: q51	8052431.56	515739.09	7925530.95	512214.70	-1.58	-126900.61	6.40	6.46	0.67798
23	presto/tpcds: q24	22253050.08	865631.09	21967912.60	400268.49	-1.28	-285137.48	3.89	1.82	0.48077
17	presto/tpcds: q18	3802979.48	401196.83	3759434.47	223822.22	-1.15	-43545.01	10.55	5.95	0.82108
46	presto/tpcds: q47	8783726.96	92345.87	8698362.03	67263.66	-0.97	-85364.93	1.05	0.77	0.09713
89	presto/tpcds: q90	443551.83	43693.77	440140.74	46129.54	-0.77	-3411.09	9.85	10.48	0.89799
37	presto/tpcds: q38	19373741.46	591575.69	19245864.98	755871.21	-0.66	-127876.49	3.05	3.93	0.75090
51	presto/tpcds: q52	301777.97	90403.55	299870.17	65030.67	-0.63	-1907.80	29.96	21.69	0.96735
92	presto/tpcds: q93	21165807.24	166983.29	21040799.00	122377.55	-0.59	-125008.23	0.79	0.58	0.16992
49	presto/tpcds: q50	4688867.75	274354.72	4661549.49	177633.33	-0.58	-27318.26	5.85	3.81	0.84189
6	presto/tpcds: q07	4437813.66	435335.43	4416884.34	382820.30	-0.47	-20929.32	9.81	8.67	0.93128
10	presto/tpcds: q11	69428013.27	299714.36	69152186.21	333201.65	-0.40	-275827.06	0.43	0.48	0.16259
40	presto/tpcds: q41	2702.47	11.13	2692.31	0.00	-0.38	-10.16	0.41	0.00	0.04933

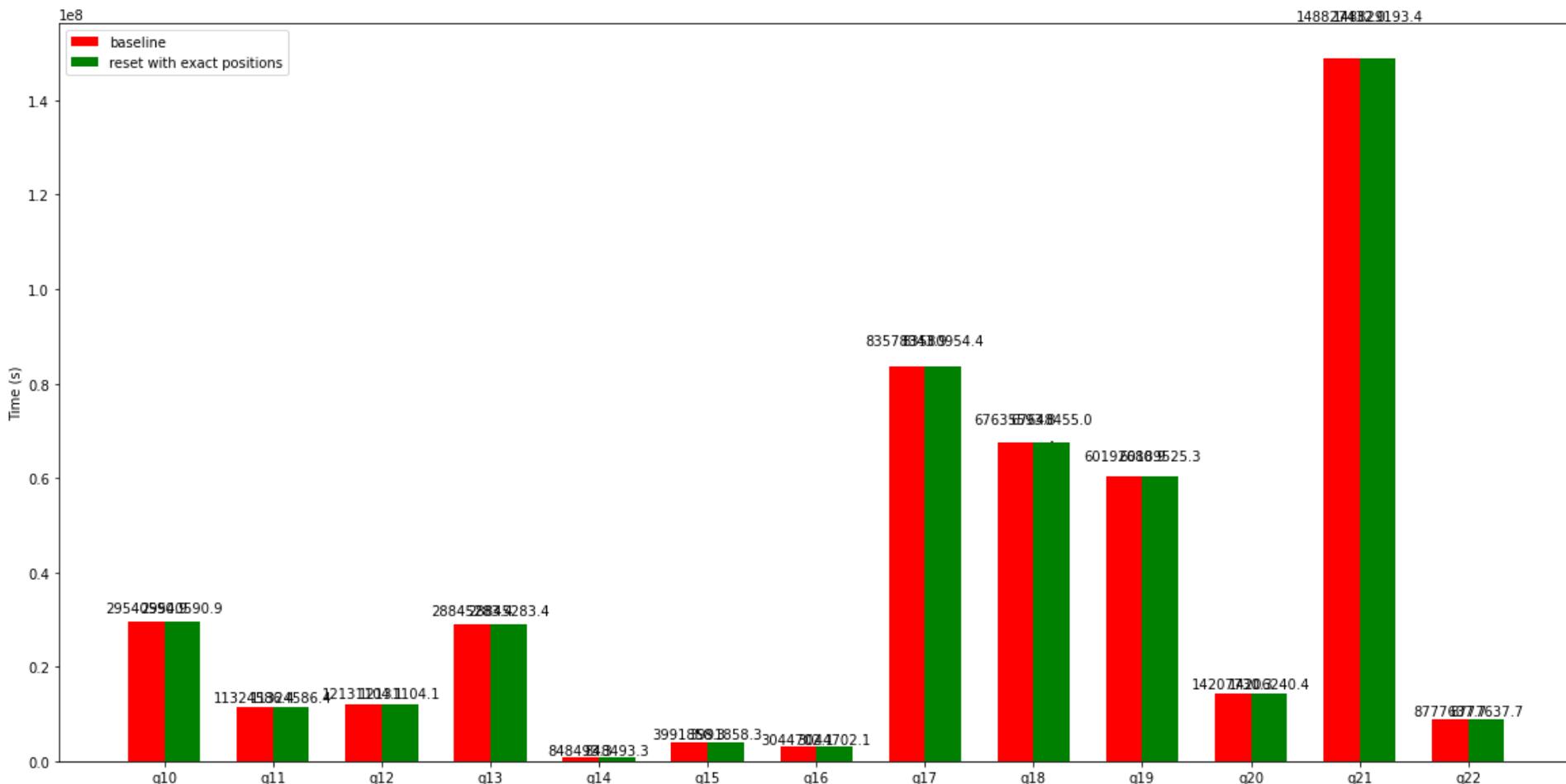
	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
13	presto/tpcds: q14	5438351.02	76310.57	5421087.30	46681.00	-0.32	-17263.72	1.40	0.86	0.64656
61	presto/tpcds: q62	1400801.63	57721.30	1396380.46	29379.14	-0.32	-4421.17	4.12	2.10	0.87054
21	presto/tpcds: q22	931672.65	23262.34	928820.95	12190.20	-0.31	-2851.70	2.50	1.31	0.79566
58	presto/tpcds: q59	3452214.63	80329.49	3444089.12	60659.20	-0.24	-8125.51	2.33	1.76	0.84722
94	presto/tpcds: q95	76611665.70	108745.99	76527527.43	196751.57	-0.11	-84138.27	0.14	0.26	0.38084
69	presto/tpcds: q70	3857363.04	232156.76	3857514.57	282971.89	0.00	151.53	6.02	7.34	0.99921
1	presto/tpcds: q02	2694389.06	121756.47	2696890.43	145194.83	0.09	2501.37	4.52	5.38	0.97484
82	presto/tpcds: q83	123616.07	12030.26	123783.52	8809.24	0.14	167.45	9.73	7.12	0.97860
57	presto/tpcds: q58	667697.93	34660.25	668690.53	32905.41	0.15	992.60	5.19	4.92	0.96043
43	presto/tpcds: q44	456203.11	606.26	457224.25	2319.98	0.22	1021.13	0.13	0.51	0.32146
38	presto/tpcds: q39	959665.39	20138.34	963891.52	22281.60	0.44	4226.13	2.10	2.31	0.73748
87	presto/tpcds: q88	1651433.42	35069.36	1659279.64	35472.54	0.48	7846.22	2.12	2.14	0.70809
60	presto/tpcds: q61	2122580.84	145256.78	2135053.38	257198.03	0.59	12472.53	6.84	12.05	0.91967
75	presto/tpcds: q76	818217.02	96618.07	823157.15	92719.16	0.60	4940.12	11.81	11.26	0.92978
35	presto/tpcds: q36	4374493.30	350550.47	4410040.18	108496.97	0.81	35546.87	8.01	2.46	0.81723
28	presto/tpcds: q29	8311131.25	107223.15	8379366.02	21369.43	0.82	68234.77	1.29	0.26	0.15732
20	presto/tpcds: q21	225921.29	13182.57	228381.21	18343.10	1.09	2459.92	5.84	8.03	0.79508
53	presto/tpcds: q54	1805678.49	130889.82	1826629.93	128035.31	1.16	20951.43	7.25	7.01	0.78497
3	presto/tpcds: q04	80410022.43	2783394.67	81369001.08	2800992.68	1.19	958978.65	3.46	3.44	0.56515
7	presto/tpcds: q08	645445.10	83776.51	653751.02	67047.40	1.29	8305.92	12.98	10.26	0.85341
27	presto/tpcds: q28	139057.97	12785.28	141089.84	13045.65	1.46	2031.87	9.19	9.25	0.79080
26	presto/tpcds: q27	4602456.35	431900.74	4703292.42	499308.57	2.19	100836.06	9.38	10.62	0.71612

	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
93	presto/tpcds: q94	9219398.16	204546.95	9424929.79	167708.27	2.23	205531.63	2.22	1.78	0.08615
67	presto/tpcds: q68	1102768.82	106348.59	1133008.74	163137.63	2.74	30239.92	9.64	14.40	0.71163
68	presto/tpcds: q69	773135.74	150692.46	797540.42	188307.19	3.16	24404.68	19.49	23.61	0.80926
98	presto/tpcds: q99	1963187.29	80212.13	2032889.53	119255.84	3.55	69702.24	4.09	5.87	0.26230
11	presto/tpcds: q12	27252.24	10767.62	28413.37	6064.60	4.26	1161.13	39.51	21.34	0.82262
70	presto/tpcds: q71	518114.55	111847.53	542204.64	222336.15	4.65	24090.09	21.59	41.01	0.81737
29	presto/tpcds: q30	1206838.92	141955.53	1263148.75	263172.96	4.67	56309.83	11.76	20.83	0.65447
81	presto/tpcds: q82	1064023.66	68607.87	1116938.80	69969.50	4.97	52915.14	6.45	6.26	0.21539
88	presto/tpcds: q89	2538742.14	261719.04	2675543.36	120867.39	5.39	136801.22	10.31	4.52	0.27207
83	presto/tpcds: q84	405702.92	47908.92	429163.56	34897.95	5.78	23460.64	11.81	8.13	0.35514
8	presto/tpcds: q09	894124.78	60692.01	949278.07	84024.95	6.17	55153.29	6.79	8.85	0.22165
33	presto/tpcds: q34	404724.43	80422.63	429692.11	73022.65	6.17	24967.68	19.87	16.99	0.58583
39	presto/tpcds: q40	10221124.43	1442798.95	10883985.15	92287.49	6.49	662860.73	14.12	0.85	0.28765
18	presto/tpcds: q19	1038304.57	165189.85	1109559.66	133800.32	6.86	71255.09	15.91	12.06	0.43076
42	presto/tpcds: q43	1510994.51	100785.59	1616591.86	157312.15	6.99	105597.35	6.67	9.73	0.19632
32	presto/tpcds: q33	1335014.87	339454.76	1430166.75	143754.42	7.13	95151.88	25.43	10.05	0.54141
15	presto/tpcds: q16	18507075.58	1782032.43	19854116.37	477738.97	7.28	1347040.79	9.63	2.41	0.10399
48	presto/tpcds: q49	19871882.66	729254.23	21452064.41	614953.29	7.95	1580181.75	3.67	2.87	0.00230
65	presto/tpcds: q66	2533865.88	263114.37	2771590.24	319209.43	9.38	237724.35	10.38	11.52	0.18955
76	presto/tpcds: q77	542534.17	39976.52	599359.24	129562.13	10.47	56825.07	7.37	21.62	0.32881
5	presto/tpcds: q06	1301374.62	87495.08	1459478.11	216707.16	12.15	158103.48	6.72	14.85	0.12849
36	presto/tpcds: q37	426894.02	88152.21	489163.95	82649.21	14.59	62269.93	20.65	16.90	0.23549

	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
91	presto/tpcds: q92	195540.14	166594.47	225672.40	182026.82	15.41	30132.26	85.20	80.66	0.77097
9	presto/tpcds: q10	467084.68	79803.70	567010.17	100245.10	21.39	99925.49	17.09	17.68	0.08517
90	presto/tpcds: q91	197700.55	20626.35	272608.77	97046.11	37.89	74908.22	10.43	35.60	0.09414
2	presto/tpcds: q03	504320.98	259973.23	1027528.94	871713.76	103.75	523207.96	51.55	84.84	0.18920
count	99									
mean	1									
std	13									
min	-25									
25%	-3									
50%	-0									
75%	2									
max	104									
Name: % change, dtype: float64										

TPC-H Comparison (physicalInputDataSize)





	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
2	presto/tpch: q03	28952997.88	17399.95	28947017.16	12278.39	-0.02	-5980.72	0.06	0.04	0.50715
3	presto/tpch: q04	31202462.32	17443.66	31198345.15	13835.18	-0.01	-4117.17	0.06	0.04	0.66024
19	presto/tpch: q20	14207730.30	139.83	14206240.40	3411.51	-0.01	-1489.90	0.00	0.02	0.31025
5	presto/tpch: q06	4916099.59	1858.36	4915749.47	2274.02	-0.01	-350.12	0.04	0.05	0.77623
18	presto/tpch: q19	60192680.94	3869.85	60189525.33	156.40	-0.01	-3155.61	0.01	0.00	0.07391
7	presto/tpch: q08	90345581.70	5228.43	90341339.65	3925.88	-0.00	-4242.05	0.01	0.00	0.14309
10	presto/tpch: q11	11324586.44	0.00	11324586.44	0.00	0.00	0.00	0.00	0.00	nan

	query	baseline mean	baseline std.dev	reset with exact positions mean	reset with exact positions std.dev	% change	absolute change	baseline std.dev %	reset with exact positions std.dev %	p-value
15	presto/tpch: q16	3044702.08	0.00	3044702.08	0.00	0.00	0.00	0.00	0.00	nan
14	presto/tpch: q15	3991858.28	0.00	3991858.28	0.00	0.00	0.00	0.00	0.00	nan
13	presto/tpch: q14	848493.32	0.00	848493.32	0.00	0.00	0.00	0.00	0.00	nan
12	presto/tpch: q13	28845283.36	0.00	28845283.36	0.00	0.00	0.00	0.00	0.00	nan
21	presto/tpch: q22	8777637.66	0.00	8777637.66	0.00	0.00	0.00	0.00	0.00	nan
9	presto/tpch: q10	29540590.93	0.00	29540590.93	0.00	0.00	0.00	0.00	0.00	nan
1	presto/tpch: q02	9664564.58	0.00	9664564.58	0.00	0.00	0.00	0.00	0.00	nan
11	presto/tpch: q12	12131104.14	0.00	12131104.14	0.00	0.00	0.00	0.00	0.00	nan
8	presto/tpch: q09	104852587.51	4608.72	104852921.20	4139.98	0.00	333.69	0.00	0.00	0.89765
20	presto/tpch: q21	148827432.00	21617.51	148829193.42	13038.97	0.00	1761.42	0.01	0.01	0.86771
16	presto/tpch: q17	83578343.87	2142.40	83580954.36	5351.91	0.00	2610.50	0.00	0.01	0.29330
4	presto/tpch: q05	65128061.89	7383.40	65130565.33	10726.85	0.00	2503.44	0.01	0.02	0.64782
0	presto/tpch: q01	33816059.80	5315.29	33819072.66	2641.47	0.01	3012.86	0.02	0.01	0.24209
17	presto/tpch: q18	67635593.81	12987.54	67648455.00	19795.95	0.02	12861.19	0.02	0.03	0.21286
6	presto/tpch: q07	31895288.78	37326.44	31910506.48	330.69	0.05	15217.70	0.12	0.00	0.34154
count	22									
mean	0									
std	0									
min	-0									
25%	-0									
50%	0									
75%	0									
max	0									
Name:	% change	, dtype:	float64							