

# FAILED QUERIES

## Baseline partitioned

benchmark query mean\_duration std\_dev

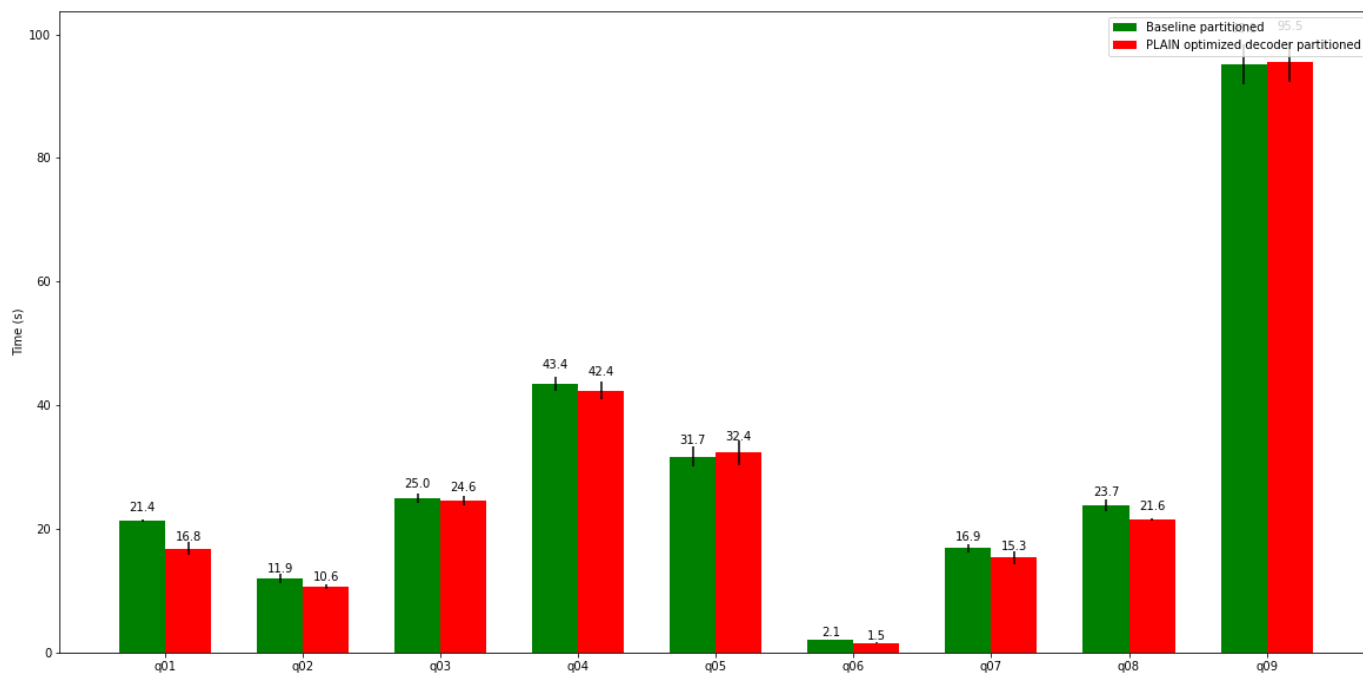
## PLAIN optimized decoder partitioned

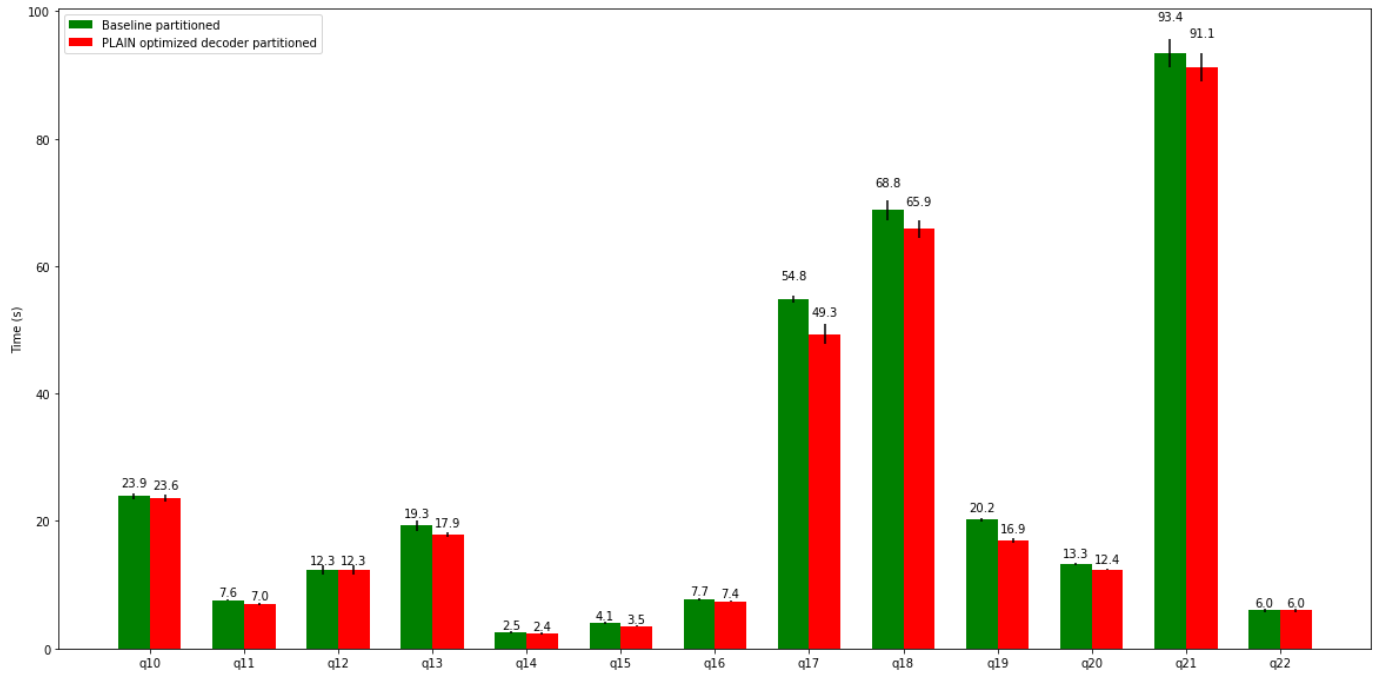
benchmark query mean\_duration std\_dev

# SUMMARY

	label	TPCH wall time	TPC-DS wall time	TPCH CPU time	TPC-DS CPU time	TPCH physicalInputDataSize	TPCH physicalInpu
0	Baseline partitioned	605.131667	872.567667	60666.200000	94494.878333	1.287 TiB	
1	PLAIN optimized decoder partitioned	576.286833	832.725667	50715.700000	85056.888333	1.287 TiB	

# TPC-H Comparison (DURATION)

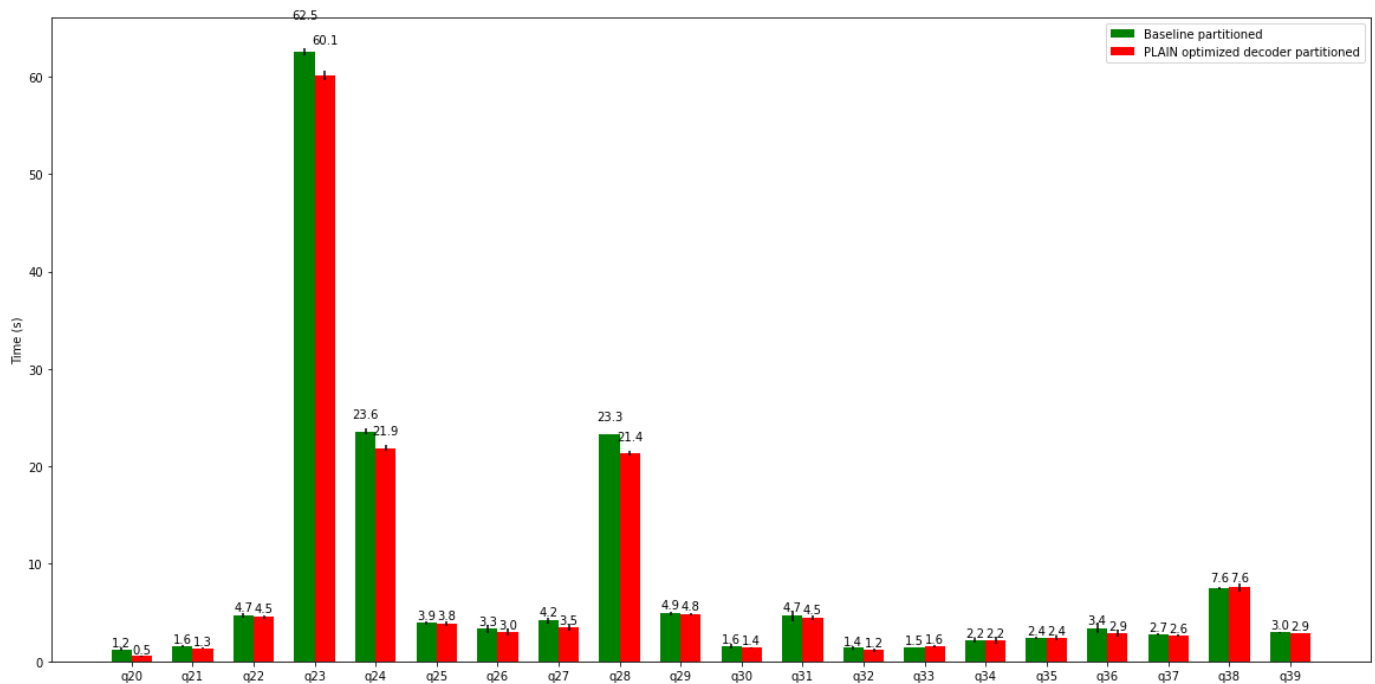
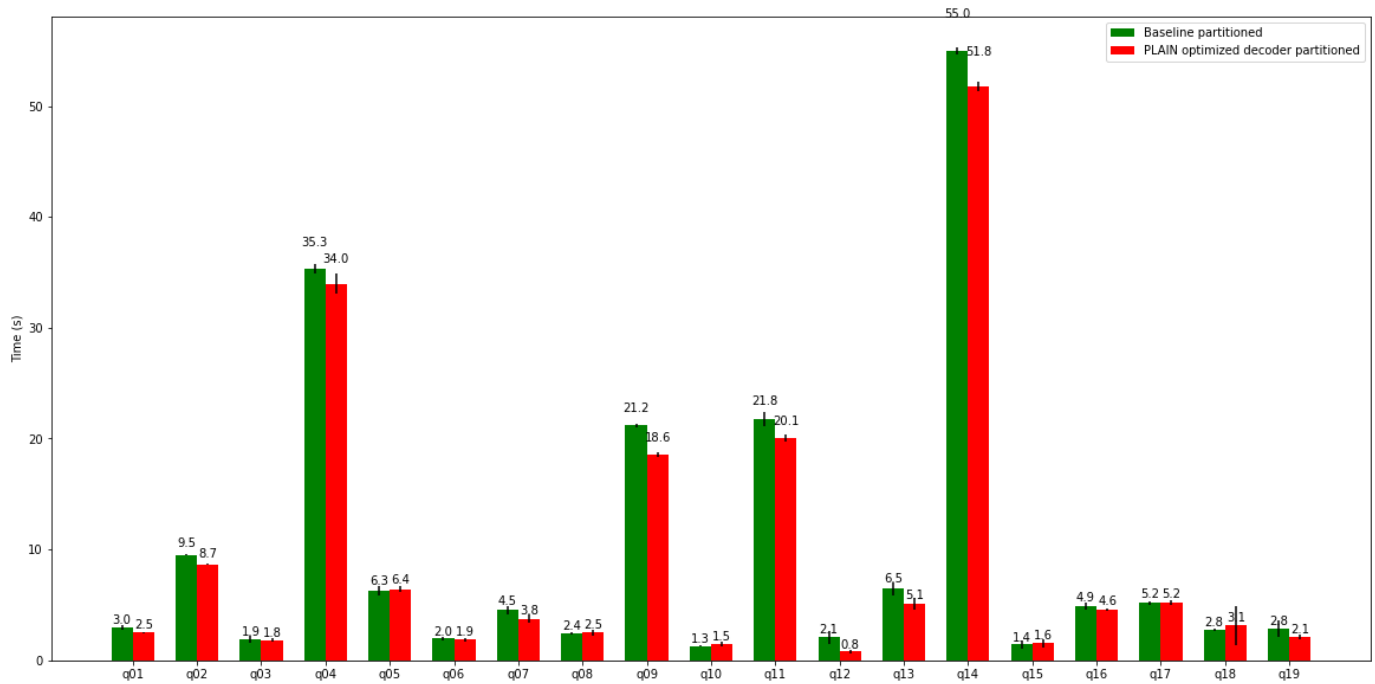


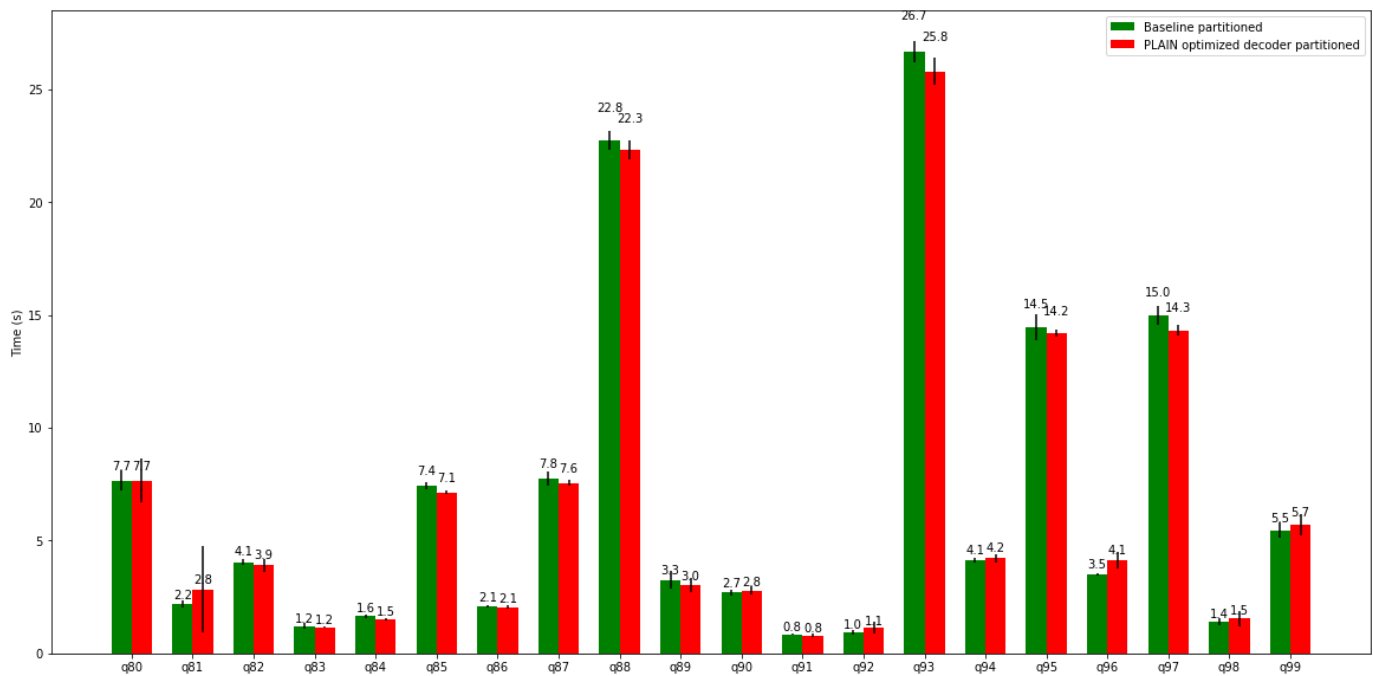
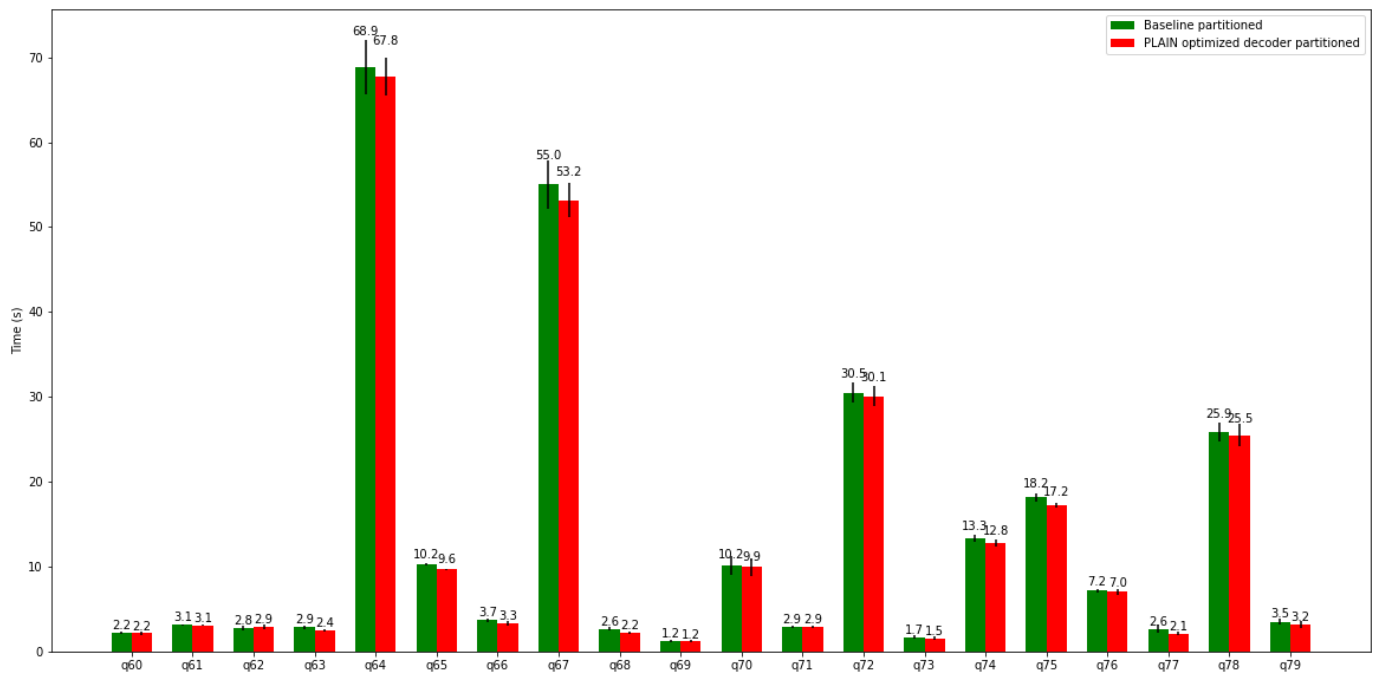
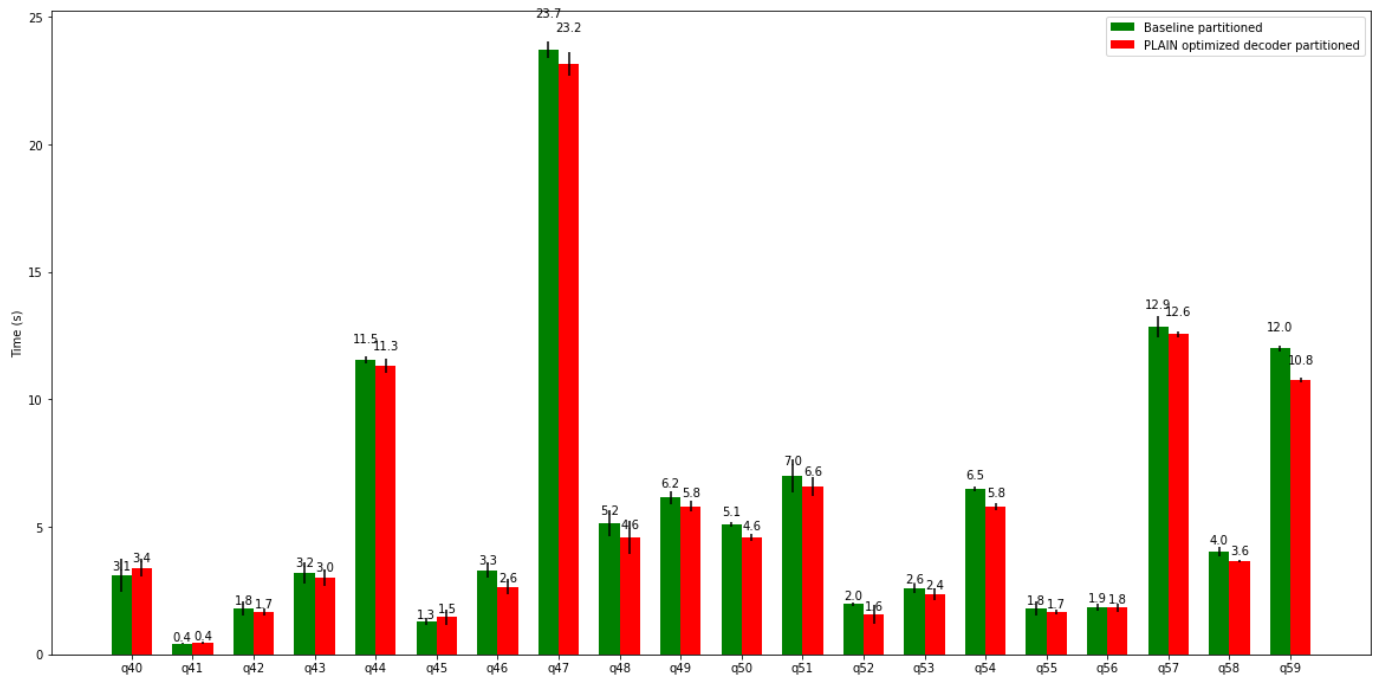


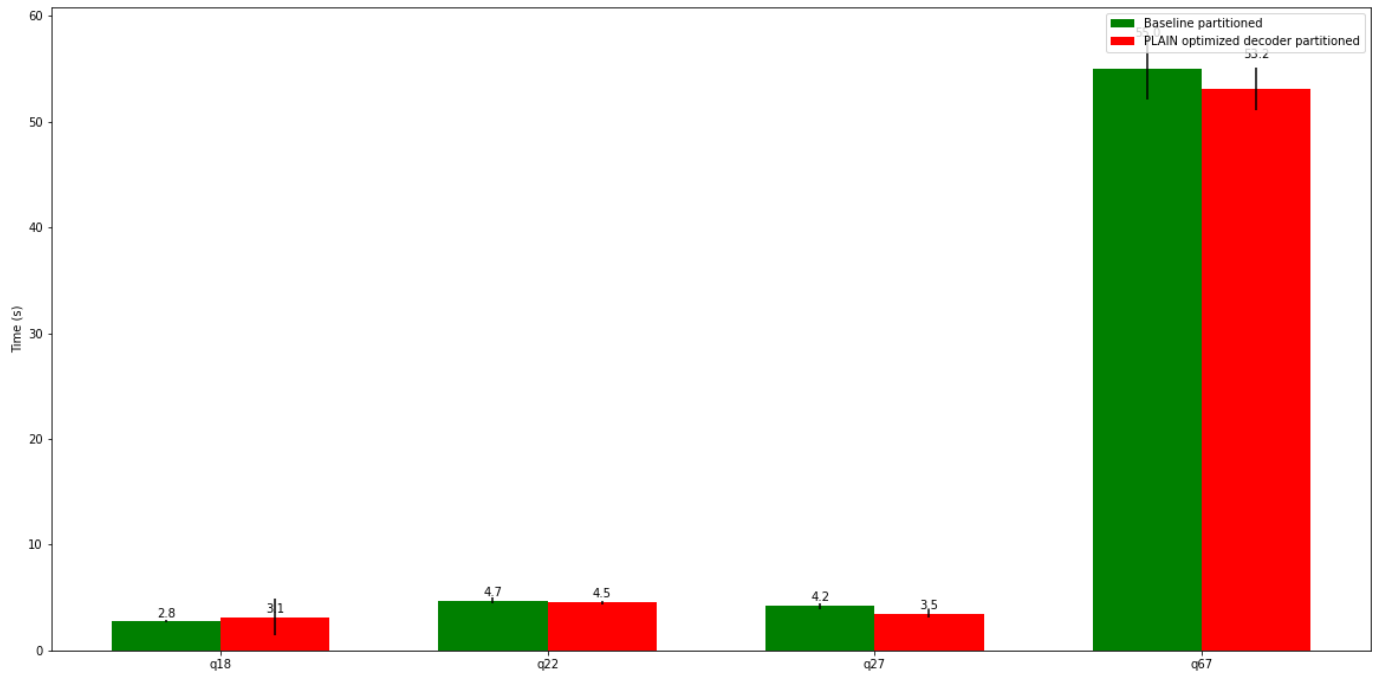
query	Baseline partitioned mean	Baseline partitioned std.dev	PLAIN optimized decoder partitioned mean	PLAIN optimized decoder partitioned std.dev
0 presto/tpch: q01	21.383833	0.190103	16.829833	1.018796
1 presto/tpch: q02	11.927167	0.783392	10.626000	0.326909
2 presto/tpch: q03	24.994333	0.777604	24.575667	0.757369
3 presto/tpch: q04	43.407333	1.153154	42.351333	1.390545
4 presto/tpch: q05	31.670333	1.646203	32.354667	1.974835
5 presto/tpch: q06	2.092667	0.062295	1.529000	0.087891
6 presto/tpch: q07	16.880500	0.644335	15.323333	1.088298
7 presto/tpch: q08	23.729333	0.960713	21.566333	0.224502
8 presto/tpch: q09	95.094833	3.210345	95.516833	3.237510
9 presto/tpch: q10	23.929167	0.470949	23.558000	0.595239
10 presto/tpch: q11	7.602500	0.088043	6.961000	0.190478
11 presto/tpch: q12	12.306167	0.738340	12.307833	0.731539
12 presto/tpch: q13	19.262667	0.754674	17.864833	0.326985
13 presto/tpch: q14	2.533667	0.129889	2.382333	0.128593
14 presto/tpch: q15	4.080667	0.196459	3.509833	0.109139
15 presto/tpch: q16	7.745667	0.214384	7.409000	0.151297

	query	Baseline partitioned mean	Baseline partitioned std.dev	PLAIN optimized decoder partitioned mean	PLAIN optimized decoder partitioned std.dev
16	presto/tpch: q17	54.804833	0.563676	49.347500	1.565247
17	presto/tpch: q18	68.783500	1.588685	65.851667	1.414974
18	presto/tpch: q19	20.187500	0.337688	16.934000	0.386956
19	presto/tpch: q20	13.262000	0.218480	12.392333	0.115495
20	presto/tpch: q21	93.436167	2.164042	91.117833	2.204862
21	presto/tpch: q22	6.016833	0.292360	5.977667	0.229031

## TPC-DS Comparison (DURATION)







query	Baseline partitioned mean	Baseline partitioned std.dev	PLAIN optimized decoder partitioned mean	PLAIN optimized decoder partitioned std.dev
0 presto/tpcds: q01	2.962167	0.247083	2.516000	0.056118
1 presto/tpcds: q02	9.526167	0.053779	8.672000	0.095620
2 presto/tpcds: q03	1.924833	0.306352	1.833000	0.180360
3 presto/tpcds: q04	35.335333	0.453116	33.956333	0.905603
4 presto/tpcds: q05	6.250167	0.435509	6.432500	0.261099
5 presto/tpcds: q06	1.954833	0.168954	1.876000	0.153965
6 presto/tpcds: q07	4.544833	0.350948	3.766833	0.379029
7 presto/tpcds: q08	2.448333	0.076907	2.492000	0.288294
8 presto/tpcds: q09	21.188833	0.165303	18.553000	0.220749
9 presto/tpcds: q10	1.300833	0.048730	1.468833	0.203419
10 presto/tpcds: q11	21.763333	0.606495	20.059000	0.322295
11 presto/tpcds: q12	2.102000	0.592452	0.795500	0.191902
12 presto/tpcds: q13	6.455500	0.611059	5.076333	0.550278
13 presto/tpcds: q14	54.983167	0.292910	51.763833	0.400208
14 presto/tpcds: q15	1.433000	0.353283	1.569000	0.383723
15 presto/tpcds: q16	4.896667	0.311798	4.601333	0.103655

	<b>query</b>	<b>Baseline partitioned mean</b>	<b>Baseline partitioned std.dev</b>	<b>PLAIN optimized decoder partitioned mean</b>	<b>PLAIN optimized decoder partitioned std.dev</b>
16	presto/tpcds: q17	5.202000	0.155909	5.180833	0.199230
17	presto/tpcds: q18	2.772333	0.073467	3.137333	1.725289
18	presto/tpcds: q19	2.847167	0.755874	2.110333	0.206756
19	presto/tpcds: q20	1.242000	0.174730	0.548833	0.054367
20	presto/tpcds: q21	1.553667	0.125111	1.342833	0.059496
21	presto/tpcds: q22	4.694333	0.275715	4.535500	0.179607
22	presto/tpcds: q23	62.525000	0.373270	60.145833	0.505245
23	presto/tpcds: q24	23.579167	0.281365	21.892667	0.341942
24	presto/tpcds: q25	3.927333	0.208774	3.848333	0.214858
25	presto/tpcds: q26	3.328667	0.412380	3.003667	0.351766
26	presto/tpcds: q27	4.191500	0.268692	3.471000	0.366808
27	presto/tpcds: q28	23.306167	0.055524	21.369333	0.238487
28	presto/tpcds: q29	4.911000	0.136615	4.827333	0.152106
29	presto/tpcds: q30	1.568500	0.253502	1.401167	0.032664
30	presto/tpcds: q31	4.662333	0.503368	4.497833	0.243275
31	presto/tpcds: q32	1.378333	0.199951	1.167000	0.181918
32	presto/tpcds: q33	1.466000	0.022217	1.585167	0.139260
33	presto/tpcds: q34	2.166500	0.258622	2.171333	0.391938
34	presto/tpcds: q35	2.374833	0.125893	2.370667	0.240513
35	presto/tpcds: q36	3.404833	0.541695	2.896333	0.407586
36	presto/tpcds: q37	2.748333	0.155535	2.639000	0.171801
37	presto/tpcds: q38	7.551833	0.113021	7.617167	0.425762
38	presto/tpcds: q39	2.966833	0.091250	2.881500	0.026403
39	presto/tpcds: q40	3.092000	0.657607	3.398667	0.345347
40	presto/tpcds: q41	0.431833	0.024244	0.442167	0.037950

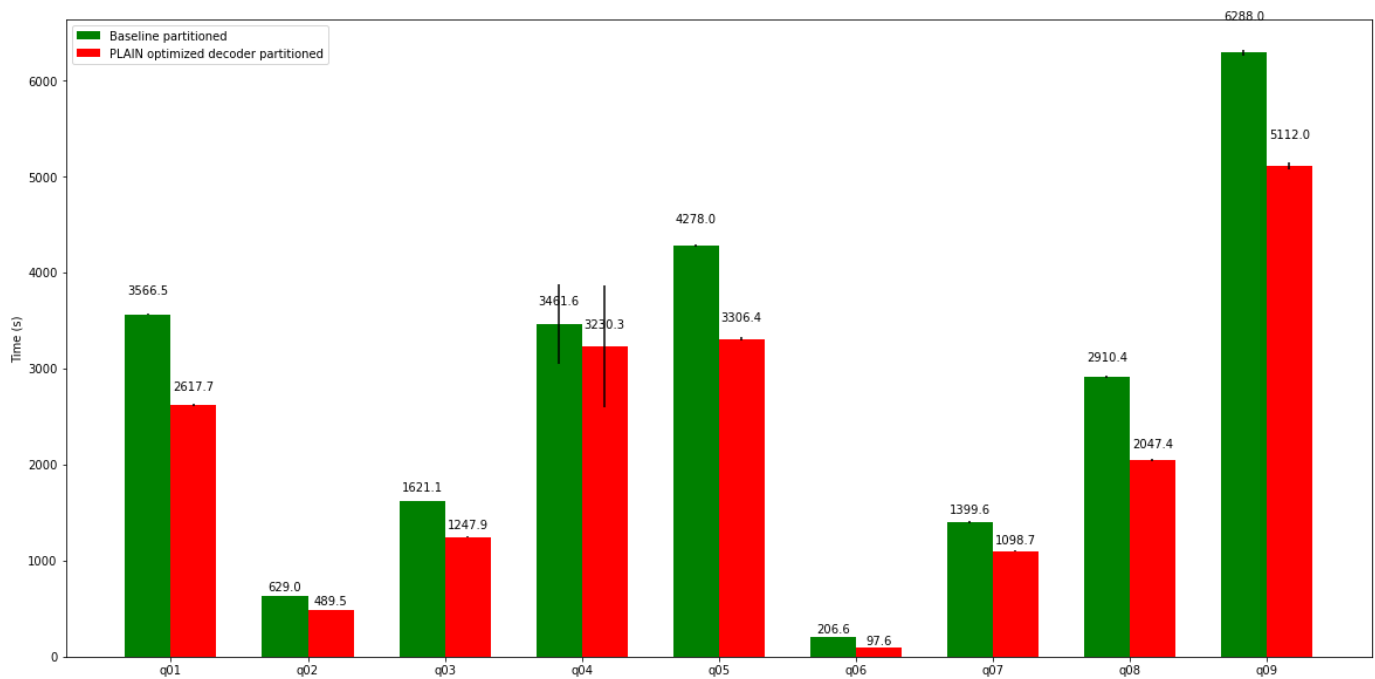
	query	Baseline partitioned mean	Baseline partitioned std.dev	PLAIN optimized decoder partitioned mean	PLAIN optimized decoder partitioned std.dev
41	presto/tpcds:q42	1.797500	0.281672	1.662167	0.142380
42	presto/tpcds:q43	3.205333	0.407607	3.017833	0.318091
43	presto/tpcds:q44	11.545833	0.142512	11.315667	0.284141
44	presto/tpcds:q45	1.278167	0.137433	1.467000	0.292887
45	presto/tpcds:q46	3.295167	0.302418	2.641833	0.302285
46	presto/tpcds:q47	23.717833	0.325266	23.175000	0.474357
47	presto/tpcds:q48	5.152000	0.498970	4.606333	0.648220
48	presto/tpcds:q49	6.156167	0.258907	5.799500	0.208522
49	presto/tpcds:q50	5.092167	0.091964	4.578667	0.139229
50	presto/tpcds:q51	7.020667	0.655177	6.595333	0.379137
51	presto/tpcds:q52	1.964500	0.068963	1.566167	0.375211
52	presto/tpcds:q53	2.596833	0.202765	2.371500	0.223343
53	presto/tpcds:q54	6.490000	0.072988	5.796667	0.157640
54	presto/tpcds:q55	1.803333	0.279959	1.668500	0.102479
55	presto/tpcds:q56	1.863333	0.141134	1.825500	0.147533
56	presto/tpcds:q57	12.866500	0.419296	12.568000	0.118997
57	presto/tpcds:q58	4.040500	0.175488	3.647500	0.036539
58	presto/tpcds:q59	11.998333	0.113234	10.759167	0.085952
59	presto/tpcds:q60	2.176667	0.117313	2.159000	0.194688
60	presto/tpcds:q61	3.137000	0.052230	3.083167	0.057290
61	presto/tpcds:q62	2.771000	0.239777	2.895167	0.225491
62	presto/tpcds:q63	2.863833	0.183433	2.446167	0.151630
63	presto/tpcds:q64	68.852833	3.183153	67.762333	2.241183
64	presto/tpcds:q65	10.238333	0.174113	9.648833	0.099079
65	presto/tpcds:q66	3.683333	0.222407	3.282000	0.283259

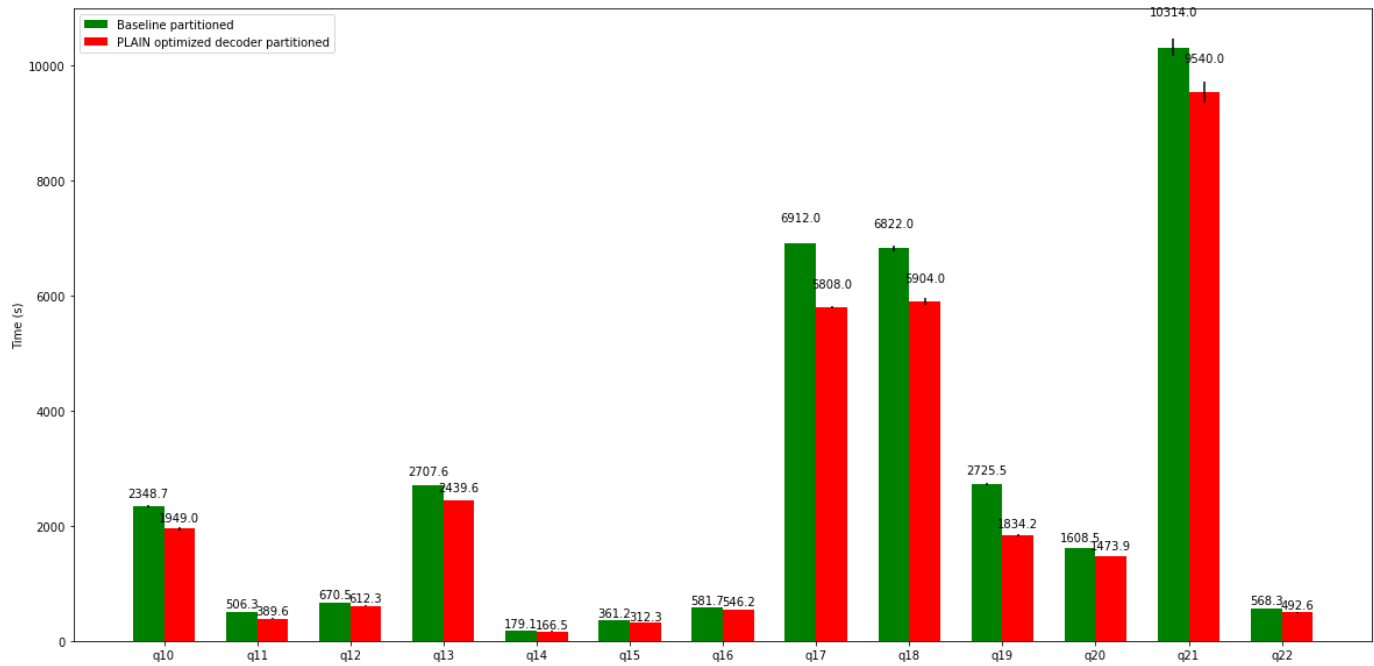
	query	Baseline partitioned mean	Baseline partitioned std.dev	PLAIN optimized decoder partitioned mean	PLAIN optimized decoder partitioned std.dev
66	presto/tpcds: q67	55.008000	2.904330	53.150833	2.008303
67	presto/tpcds: q68	2.630667	0.208515	2.177667	0.109184
68	presto/tpcds: q69	1.247333	0.155554	1.222833	0.126124
69	presto/tpcds: q70	10.171667	1.121553	9.922667	1.101019
70	presto/tpcds: q71	2.899833	0.145826	2.860333	0.115009
71	presto/tpcds: q72	30.510500	1.202344	30.091000	1.190652
72	presto/tpcds: q73	1.697833	0.187498	1.534333	0.190233
73	presto/tpcds: q74	13.307000	0.426982	12.793833	0.462676
74	presto/tpcds: q75	18.169000	0.465019	17.198000	0.258681
75	presto/tpcds: q76	7.153000	0.231938	7.042500	0.356051
76	presto/tpcds: q77	2.620167	0.484385	2.089667	0.236891
77	presto/tpcds: q78	25.895333	1.113098	25.450500	1.330511
78	presto/tpcds: q79	3.498333	0.348881	3.162167	0.427701
79	presto/tpcds: q80	7.653667	0.449090	7.659667	0.979419
80	presto/tpcds: q81	2.205667	0.158819	2.846167	1.890377
81	presto/tpcds: q82	4.052000	0.106926	3.917167	0.291514
82	presto/tpcds: q83	1.220833	0.111731	1.154333	0.026561
83	presto/tpcds: q84	1.648333	0.073777	1.510000	0.045922
84	presto/tpcds: q85	7.434000	0.135611	7.130667	0.083164
85	presto/tpcds: q86	2.108500	0.053657	2.050833	0.074802
86	presto/tpcds: q87	7.760000	0.327550	7.565167	0.140781
87	presto/tpcds: q88	22.760833	0.426977	22.328667	0.419942
88	presto/tpcds: q89	3.253667	0.385096	3.023333	0.298724
89	presto/tpcds: q90	2.703500	0.139414	2.774333	0.181083
90	presto/tpcds: q91	0.839667	0.033086	0.793500	0.074449



	query	Baseline partitioned mean	Baseline partitioned std.dev	PLAIN optimized decoder partitioned mean	PLAIN optimized decoder partitioned std.dev
91	presto/tpcds: q92	0.953833	0.102058	1.129833	0.267658
92	presto/tpcds: q93	26.664833	0.480193	25.800333	0.600968
93	presto/tpcds: q94	4.118000	0.101396	4.211500	0.186925
94	presto/tpcds: q95	14.468167	0.586841	14.191833	0.164360
95	presto/tpcds: q96	3.509667	0.068383	4.127333	0.361846
96	presto/tpcds: q97	14.972500	0.406531	14.322833	0.243787
97	presto/tpcds: q98	1.401833	0.140151	1.543500	0.345024
98	presto/tpcds: q99	5.459833	0.345014	5.696000	0.473227

## TPC-H Comparison (CPU)

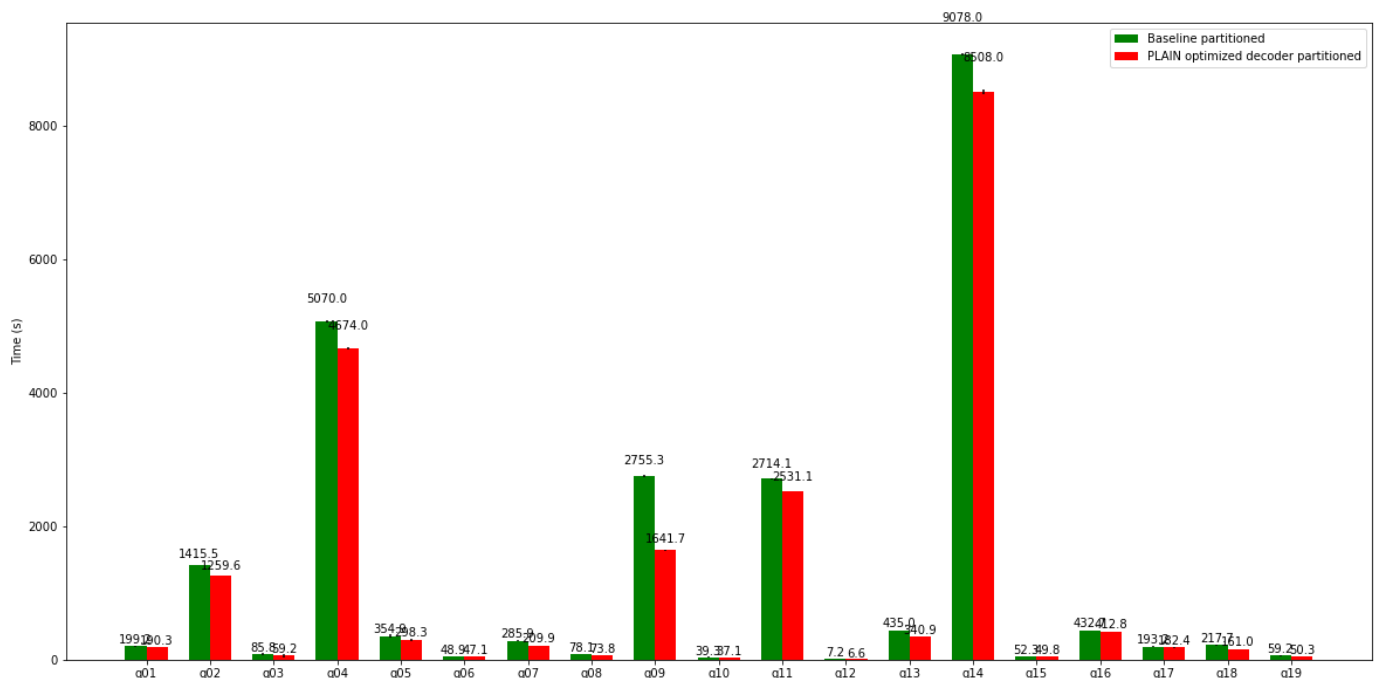
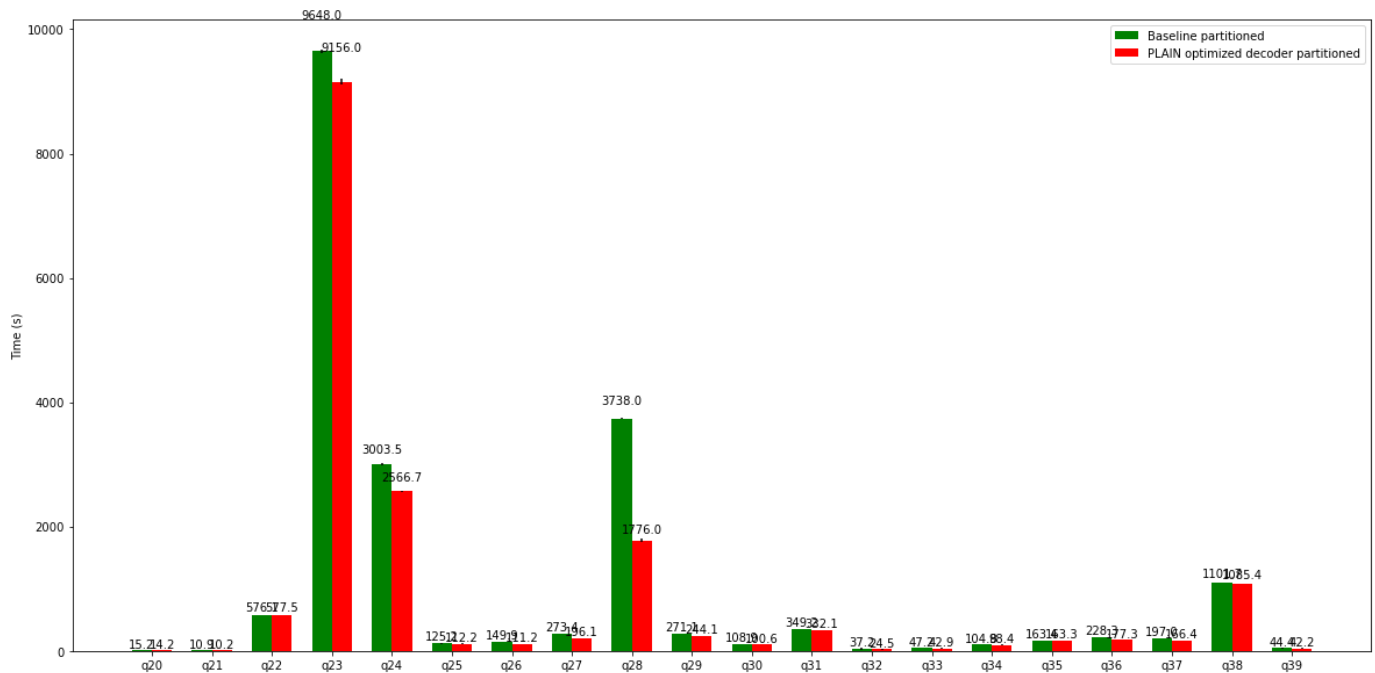


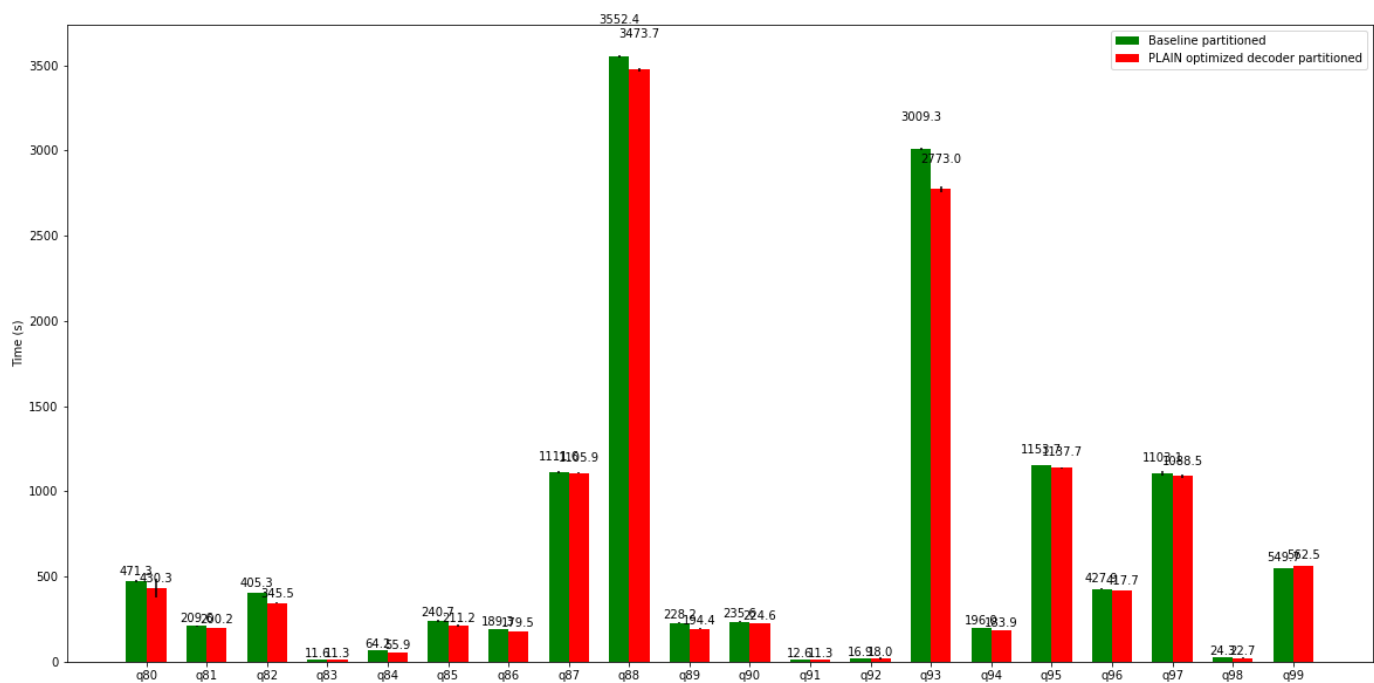
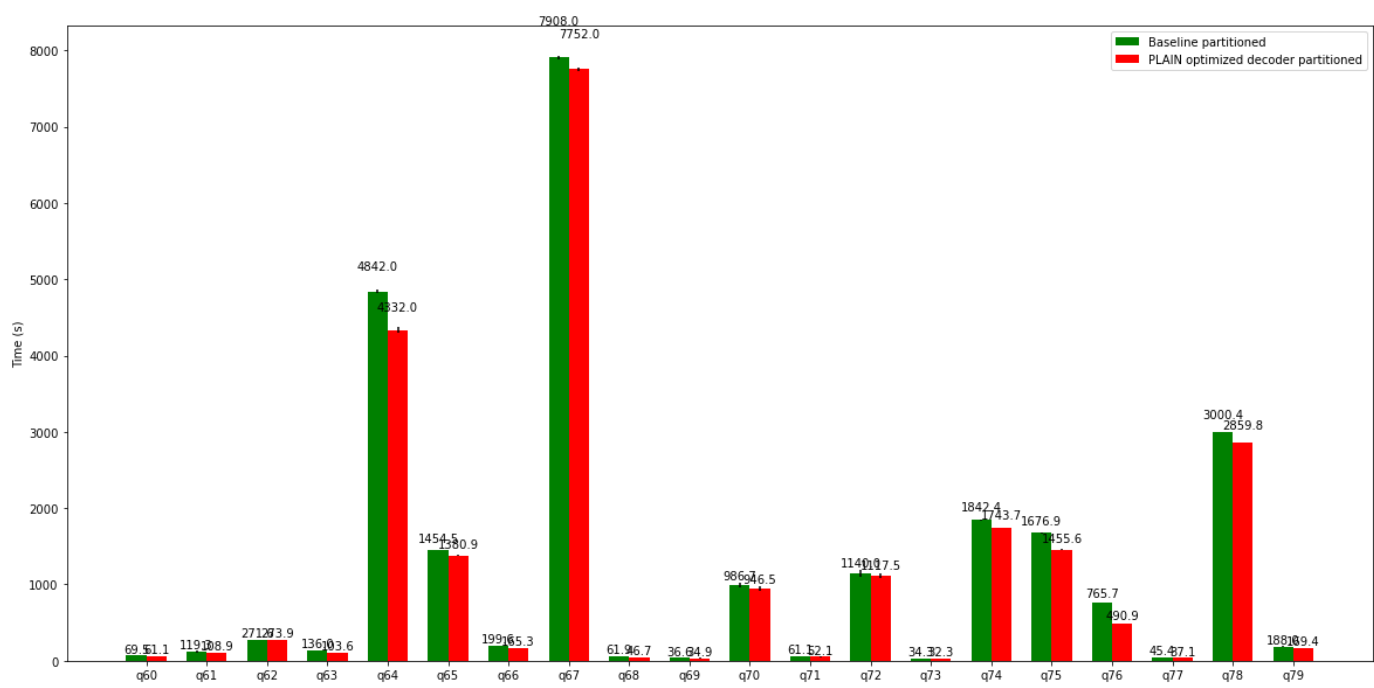
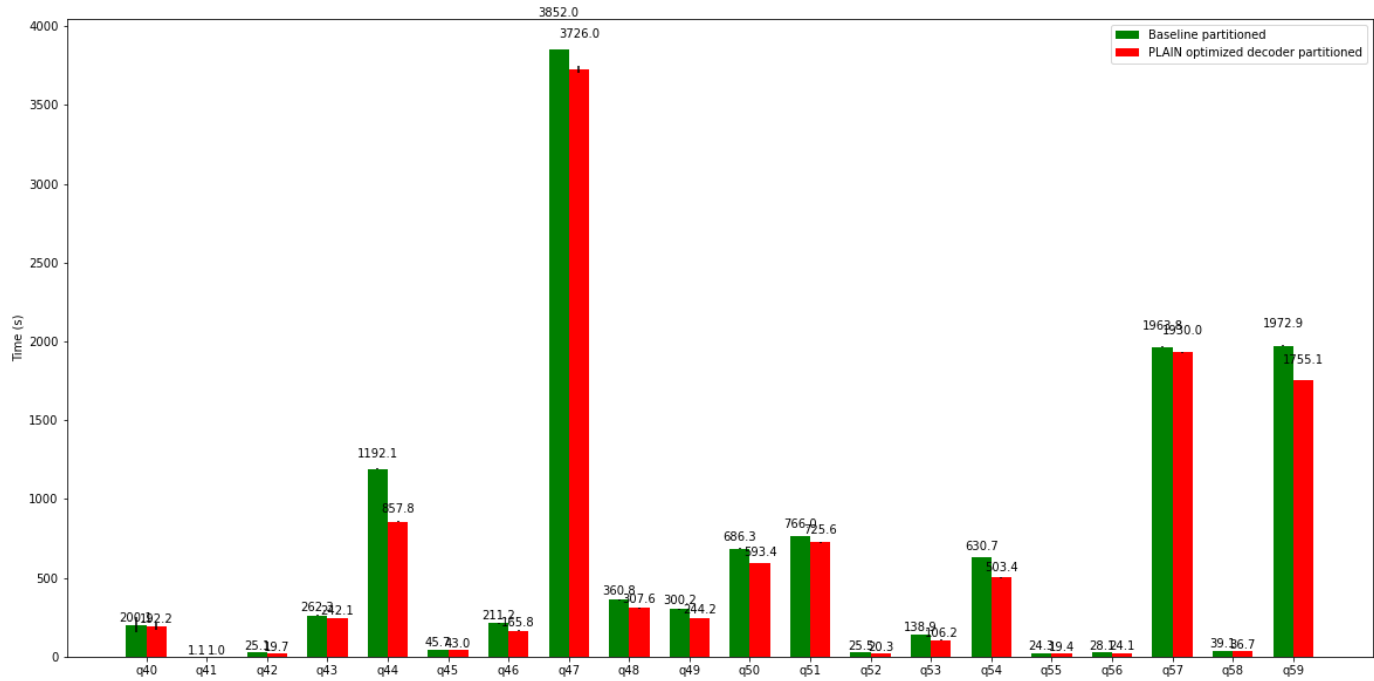


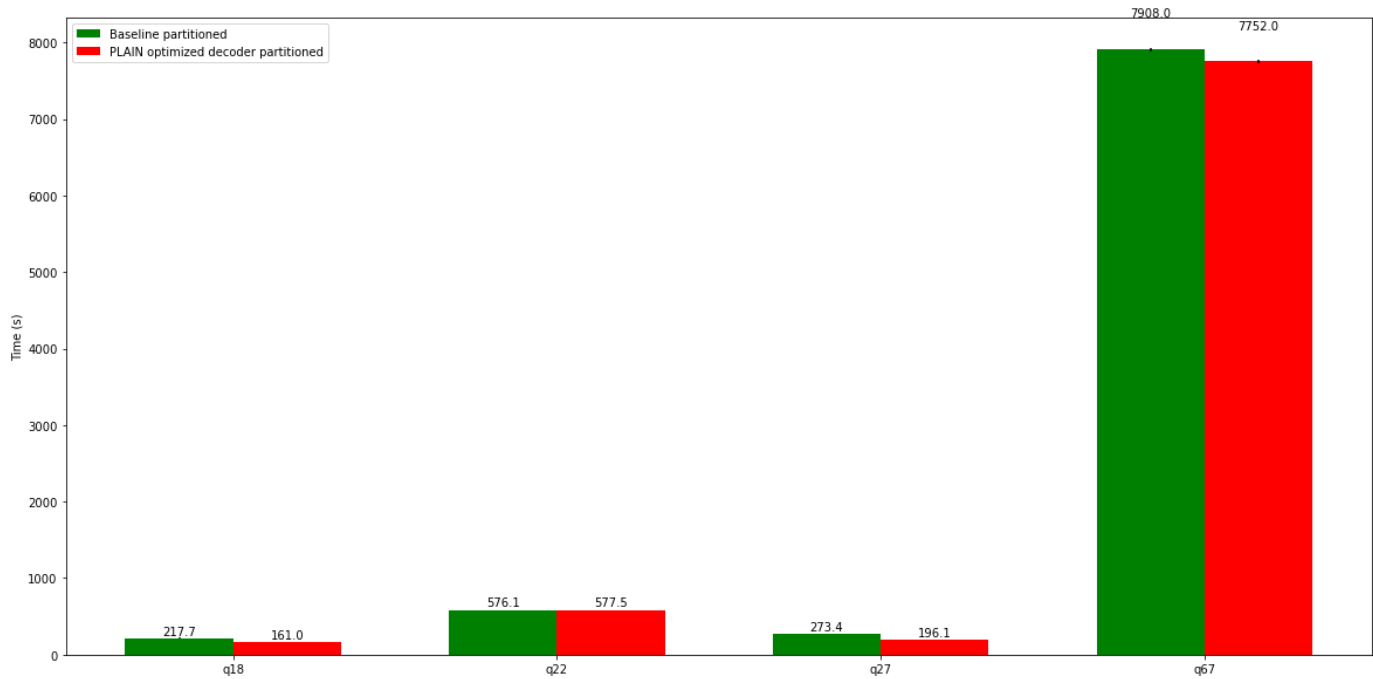
query	Baseline partitioned mean	Baseline partitioned std.dev	PLAIN optimized decoder partitioned mean	PLAIN optimized decoder partitioned std.dev
0 presto/tpch: q01	3566.5	4.023431	2617.7	9.625591
1 presto/tpch: q02	629.0	2.507588	489.5	0.883176
2 presto/tpch: q03	1621.1	0.883176	1247.9	4.953786
3 presto/tpch: q04	3461.6	412.479934	3230.3	637.289984
4 presto/tpch: q05	4278.0	14.696938	3306.4	19.956352
5 presto/tpch: q06	206.6	0.309839	97.6	0.309839
6 presto/tpch: q07	1399.6	13.055574	1098.7	4.730750
7 presto/tpch: q08	2910.4	14.729562	2047.4	13.236314
8 presto/tpch: q09	6288.0	29.393877	5112.0	32.199379
9 presto/tpch: q10	2348.7	18.873791	1949.0	25.744592
10 presto/tpch: q11	506.3	1.033441	389.6	2.359661
11 presto/tpch: q12	670.5	1.809972	612.3	1.553061
12 presto/tpch: q13	2707.6	7.246516	2439.6	6.539725
13 presto/tpch: q14	179.1	2.451938	166.5	2.908608
14 presto/tpch: q15	361.2	1.368211	312.3	0.985901
15 presto/tpch: q16	581.7	1.457395	546.2	1.549193

	query	Baseline partitioned mean	Baseline partitioned std.dev	PLAIN optimized decoder partitioned mean	PLAIN optimized decoder partitioned std.dev
16	presto/tpch: q17	6912.0	0.000000	5808.0	18.590320
17	presto/tpch: q18	6822.0	49.622576	5904.0	55.770960
18	presto/tpch: q19	2725.5	13.596323	1834.2	12.249408
19	presto/tpch: q20	1608.5	1.337161	1473.9	3.732559
20	presto/tpch: q21	10314.0	155.676588	9540.0	180.718566
21	presto/tpch: q22	568.3	1.986957	492.6	1.779888

## TPC-DS Comparison (CPU)







query	Baseline partitioned mean	Baseline partitioned std.dev	PLAIN optimized decoder partitioned mean	PLAIN optimized decoder partitioned std.dev
0 presto/tpcds: q01	199.200000	3.997999	190.300000	1.913113
1 presto/tpcds: q02	1415.500000	4.399545	1259.600000	3.322650
2 presto/tpcds: q03	85.800000	20.579213	59.188333	18.917195
3 presto/tpcds: q04	5070.000000	14.696938	4674.000000	14.696938
4 presto/tpcds: q05	354.900000	25.381489	298.300000	18.271617
5 presto/tpcds: q06	48.866667	0.200765	47.143333	0.120111
6 presto/tpcds: q07	285.900000	0.827043	209.900000	0.797496
7 presto/tpcds: q08	78.100000	2.058155	73.800000	0.929516
8 presto/tpcds: q09	2755.300000	11.966453	1641.700000	12.438489
9 presto/tpcds: q10	39.308333	1.233814	37.101667	0.531692
10 presto/tpcds: q11	2714.100000	8.742311	2531.100000	2.756084
11 presto/tpcds: q12	7.181667	0.071391	6.586667	0.027325
12 presto/tpcds: q13	435.000000	1.368211	340.900000	0.589915
13 presto/tpcds: q14	9078.000000	14.696938	8508.000000	37.180640
14 presto/tpcds: q15	52.275000	0.174557	49.825000	0.158840
15 presto/tpcds: q16	432.700000	1.224745	412.800000	1.003992

	query	Baseline partitioned mean	Baseline partitioned std.dev	PLAIN optimized decoder partitioned mean	PLAIN optimized decoder partitioned std.dev
16	presto/tpcds: q17	193.200000	7.932717	182.400000	5.577096
17	presto/tpcds: q18	217.700000	3.138790	161.000000	1.453272
18	presto/tpcds: q19	59.225000	3.288196	50.348333	1.250974
19	presto/tpcds: q20	15.160000	0.033466	14.181667	0.105341
20	presto/tpcds: q21	10.895000	0.114673	10.245000	0.137949
21	presto/tpcds: q22	576.100000	1.913113	577.500000	1.300769
22	presto/tpcds: q23	9648.000000	22.768399	9156.000000	43.598165
23	presto/tpcds: q24	3003.500000	17.682873	2566.700000	13.809996
24	presto/tpcds: q25	125.200000	7.929691	112.200000	9.554894
25	presto/tpcds: q26	149.900000	1.164474	111.200000	0.489898
26	presto/tpcds: q27	273.400000	0.903327	196.100000	1.033441
27	presto/tpcds: q28	3738.000000	14.696938	1776.000000	26.638919
28	presto/tpcds: q29	271.100000	0.244949	244.100000	0.451664
29	presto/tpcds: q30	108.900000	0.827043	100.600000	0.726636
30	presto/tpcds: q31	349.200000	3.639780	332.100000	4.404997
31	presto/tpcds: q32	37.173333	18.567334	24.453333	1.236813
32	presto/tpcds: q33	47.186667	0.114833	42.858333	0.291302
33	presto/tpcds: q34	104.800000	0.619677	98.400000	0.657267
34	presto/tpcds: q35	163.400000	4.564209	163.300000	4.316943
35	presto/tpcds: q36	228.300000	0.629285	177.300000	0.827043
36	presto/tpcds: q37	197.000000	0.309839	166.400000	0.489898
37	presto/tpcds: q38	1101.700000	5.318270	1085.400000	1.654086
38	presto/tpcds: q39	44.418333	5.340163	42.205000	0.943796
39	presto/tpcds: q40	200.100000	48.934037	192.200000	25.113184
40	presto/tpcds: q41	1.085000	0.010488	1.021667	0.011690

	query	Baseline partitioned mean	Baseline partitioned std.dev	PLAIN optimized decoder partitioned mean	PLAIN optimized decoder partitioned std.dev
41	presto/tpcds: q42	25.101667	0.254041	19.715000	0.175812
42	presto/tpcds: q43	262.300000	2.773446	242.100000	0.734847
43	presto/tpcds: q44	1192.100000	3.706751	857.800000	6.391244
44	presto/tpcds: q45	45.663333	0.210776	43.028333	0.303277
45	presto/tpcds: q46	211.200000	1.779888	165.800000	1.594992
46	presto/tpcds: q47	3852.000000	0.000000	3726.000000	19.718012
47	presto/tpcds: q48	360.800000	1.766352	307.600000	1.922498
48	presto/tpcds: q49	300.200000	3.144519	244.200000	0.929516
49	presto/tpcds: q50	686.300000	1.100909	593.400000	0.848528
50	presto/tpcds: q51	766.000000	2.031748	725.600000	2.507588
51	presto/tpcds: q52	25.528333	0.126241	20.313333	0.209061
52	presto/tpcds: q53	138.900000	0.501996	106.200000	0.379473
53	presto/tpcds: q54	630.700000	2.875413	503.400000	3.174902
54	presto/tpcds: q55	24.291667	0.240368	19.365000	0.110408
55	presto/tpcds: q56	28.131667	0.140060	24.128333	0.297013
56	presto/tpcds: q57	1963.800000	2.914790	1930.000000	1.884675
57	presto/tpcds: q58	39.058333	0.185840	36.681667	0.597274
58	presto/tpcds: q59	1972.900000	2.613044	1755.100000	1.756132
59	presto/tpcds: q60	69.500000	0.244949	61.100000	0.244949
60	presto/tpcds: q61	119.300000	11.437307	108.900000	2.833373
61	presto/tpcds: q62	271.600000	3.711603	273.900000	3.409985
62	presto/tpcds: q63	136.000000	0.309839	103.600000	0.309839
63	presto/tpcds: q64	4842.000000	19.718012	4332.000000	37.180640
64	presto/tpcds: q65	1454.500000	2.949576	1380.900000	3.280854
65	presto/tpcds: q66	199.600000	0.726636	165.300000	0.501996

	query	Baseline partitioned mean	Baseline partitioned std.dev	PLAIN optimized decoder partitioned mean	PLAIN optimized decoder partitioned std.dev
66	presto/tpcds: q67	7908.000000	18.590320	7752.000000	29.393877
67	presto/tpcds: q68	61.900000	0.883176	46.718333	0.411214
68	presto/tpcds: q69	36.580000	1.046040	34.895000	0.750860
69	presto/tpcds: q70	986.700000	31.805094	946.500000	25.814647
70	presto/tpcds: q71	61.075000	1.506649	52.128333	1.720970
71	presto/tpcds: q72	1140.000000	46.973524	1117.500000	30.212249
72	presto/tpcds: q73	34.335000	0.344078	32.346667	0.142080
73	presto/tpcds: q74	1842.400000	4.564209	1743.700000	6.251720
74	presto/tpcds: q75	1676.900000	7.640681	1455.600000	9.517142
75	presto/tpcds: q76	765.700000	1.164474	490.900000	2.949576
76	presto/tpcds: q77	45.381667	0.360134	37.063333	0.341448
77	presto/tpcds: q78	3000.400000	4.957419	2859.800000	7.024528
78	presto/tpcds: q79	188.000000	0.979796	169.400000	3.144519
79	presto/tpcds: q80	471.300000	8.198293	430.300000	55.870815
80	presto/tpcds: q81	209.600000	2.536139	200.200000	1.050714
81	presto/tpcds: q82	405.300000	0.734847	345.500000	0.589915
82	presto/tpcds: q83	11.583333	0.357976	11.275000	0.401684
83	presto/tpcds: q84	64.200000	0.000000	55.908333	0.185194
84	presto/tpcds: q85	240.700000	5.621032	211.200000	5.512168
85	presto/tpcds: q86	189.300000	0.827043	179.500000	0.244949
86	presto/tpcds: q87	1111.600000	4.202856	1105.900000	3.547957
87	presto/tpcds: q88	3552.400000	6.424951	3473.700000	8.020723
88	presto/tpcds: q89	228.200000	0.726636	194.400000	0.848528
89	presto/tpcds: q90	235.600000	0.489898	224.600000	1.549193
90	presto/tpcds: q91	12.580000	1.875580	11.298333	2.245488



	query	Baseline partitioned mean	Baseline partitioned std.dev	PLAIN optimized decoder partitioned mean	PLAIN optimized decoder partitioned std.dev
91	presto/tpcds: q92	16.896667	0.289114	18.013333	8.666572
92	presto/tpcds: q93	3009.300000	6.667833	2773.000000	15.813918
93	presto/tpcds: q94	196.000000	0.489898	183.900000	0.328634
94	presto/tpcds: q95	1153.700000	0.701427	1137.700000	1.836301
95	presto/tpcds: q96	427.900000	1.672124	417.700000	1.282186
96	presto/tpcds: q97	1103.100000	14.488478	1088.500000	8.008745
97	presto/tpcds: q98	24.296667	0.252719	22.651667	0.087274
98	presto/tpcds: q99	549.700000	1.389964	562.500000	1.457395

## TPC-H Comparison (Peak memory)

## TPC-DS Comparison (Peak memory)

## TPC-H Comparison (physicalInputDataSize)

## TPC-DS Comparison (physicalInputDataSize)