

FAILED QUERIES

baseline hive unpartitioned parquet FTE

benchmark query mean_duration std_dev

zstd compression FTE

benchmark query mean_duration std_dev

SUMMARY

	label	TPCH wall time	TPC-DS wall time	TPCH CPU time	TPC-DS CPU time	TPCH physicalInputDataSize	TPC-DS physicalInputDataSize	TPCH internalNetworkInputDataSize	TPC-DS internalNetworkInputDataSize	TPCH peak memory	TPC-DS peak memory
0	baseline hive unpartitioned parquet FTE	651.727167	1641.692500	47703.500000	142211.077000	1.695 TiB	3.315 TiB	598.271 GiB	0.978 TiB	0.957 TiB	2.768 TiB
1	zstd compression FTE	685.849333	1728.036500	67512.500000	169652.339000	1.695 TiB	3.315 TiB	341.849 GiB	608.979 GiB	1.010 TiB	2.804 TiB

Store sales flat Comparison (DURATION)

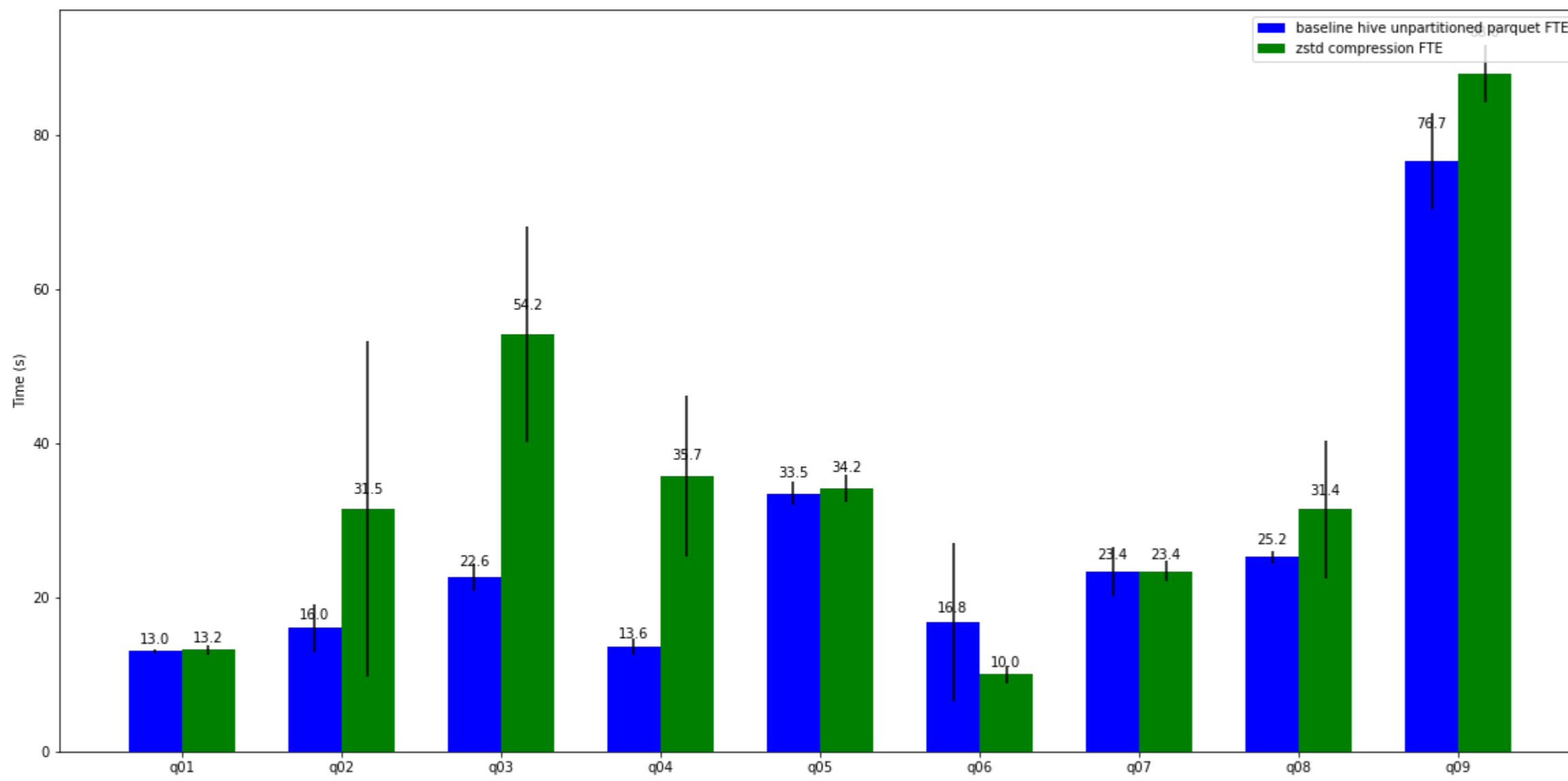
Store sales flat Comparison (CPU)

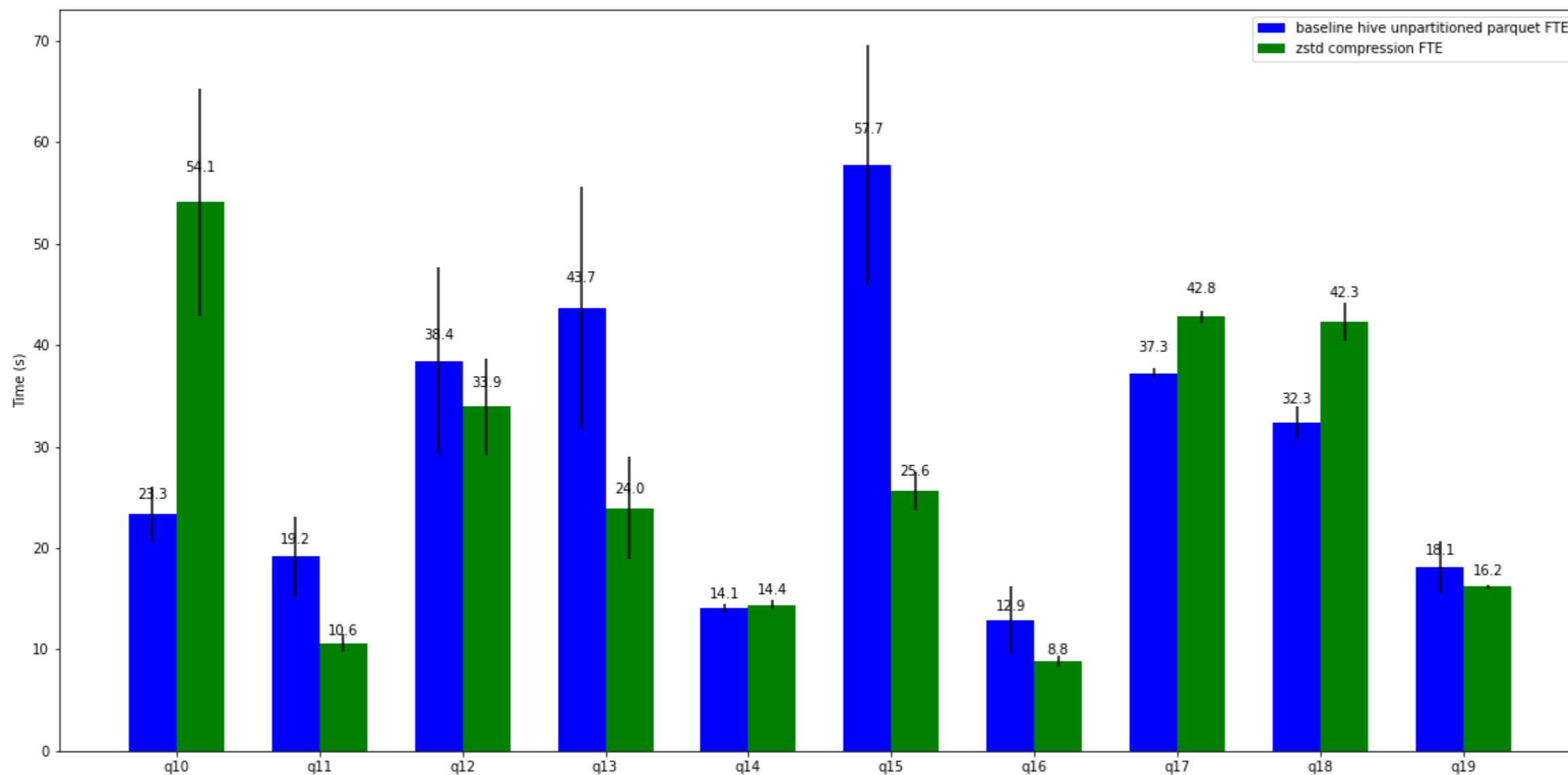
Insert Comparison (DURATION)

Insert Comparison (CPU)

Insert Comparison (PEAK MEMORY)

TPC-H Comparison (DURATION)

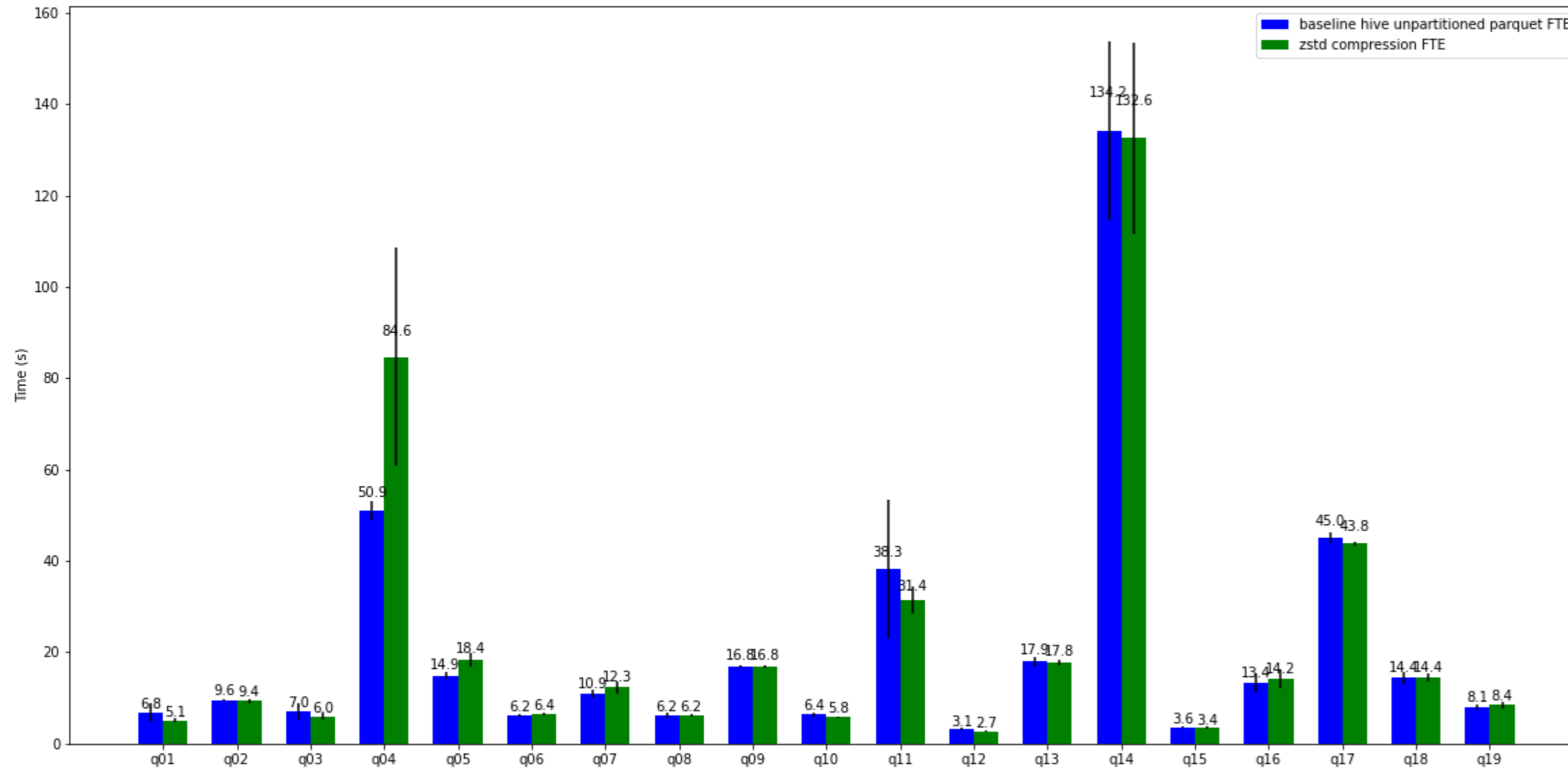


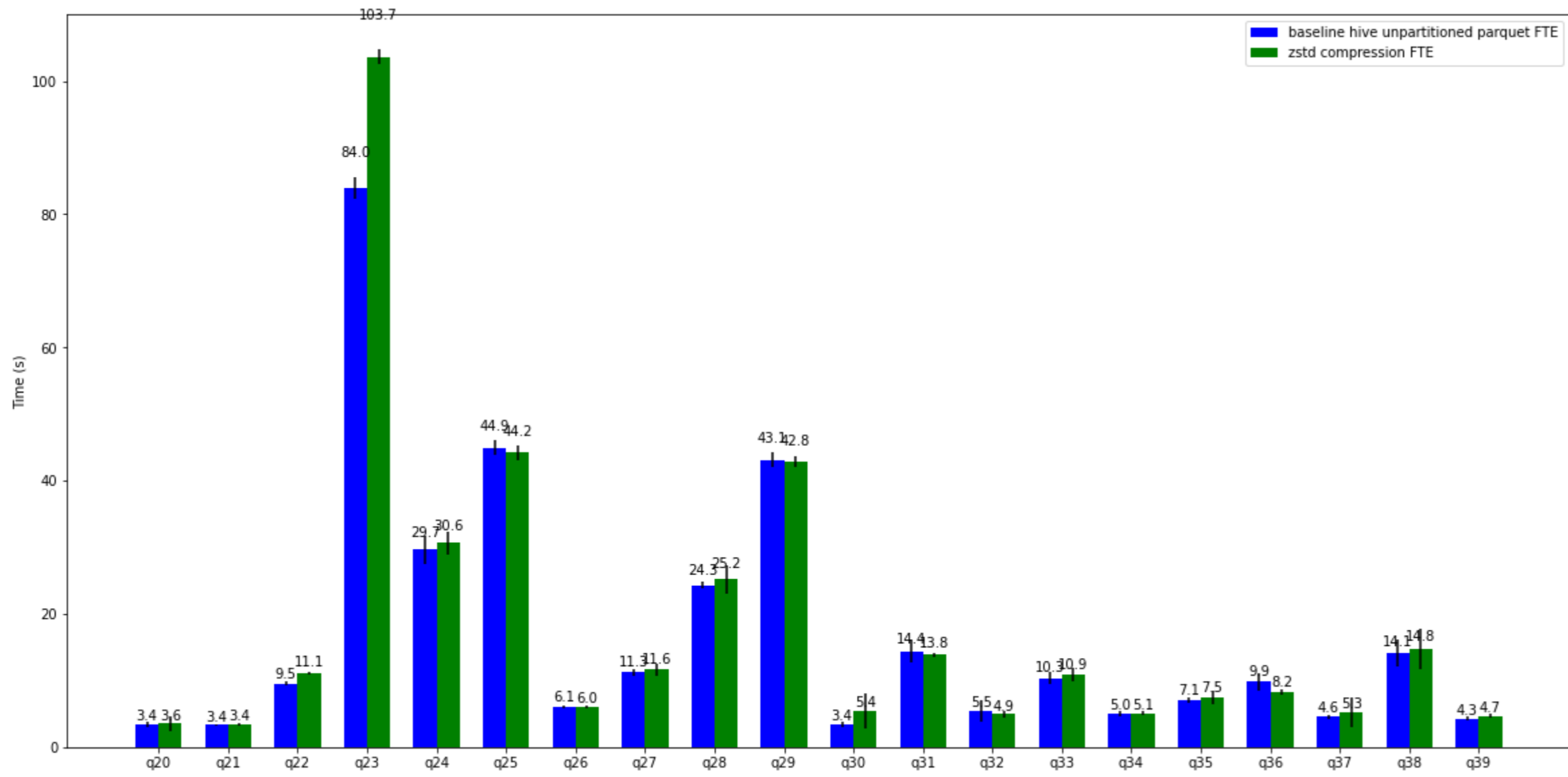


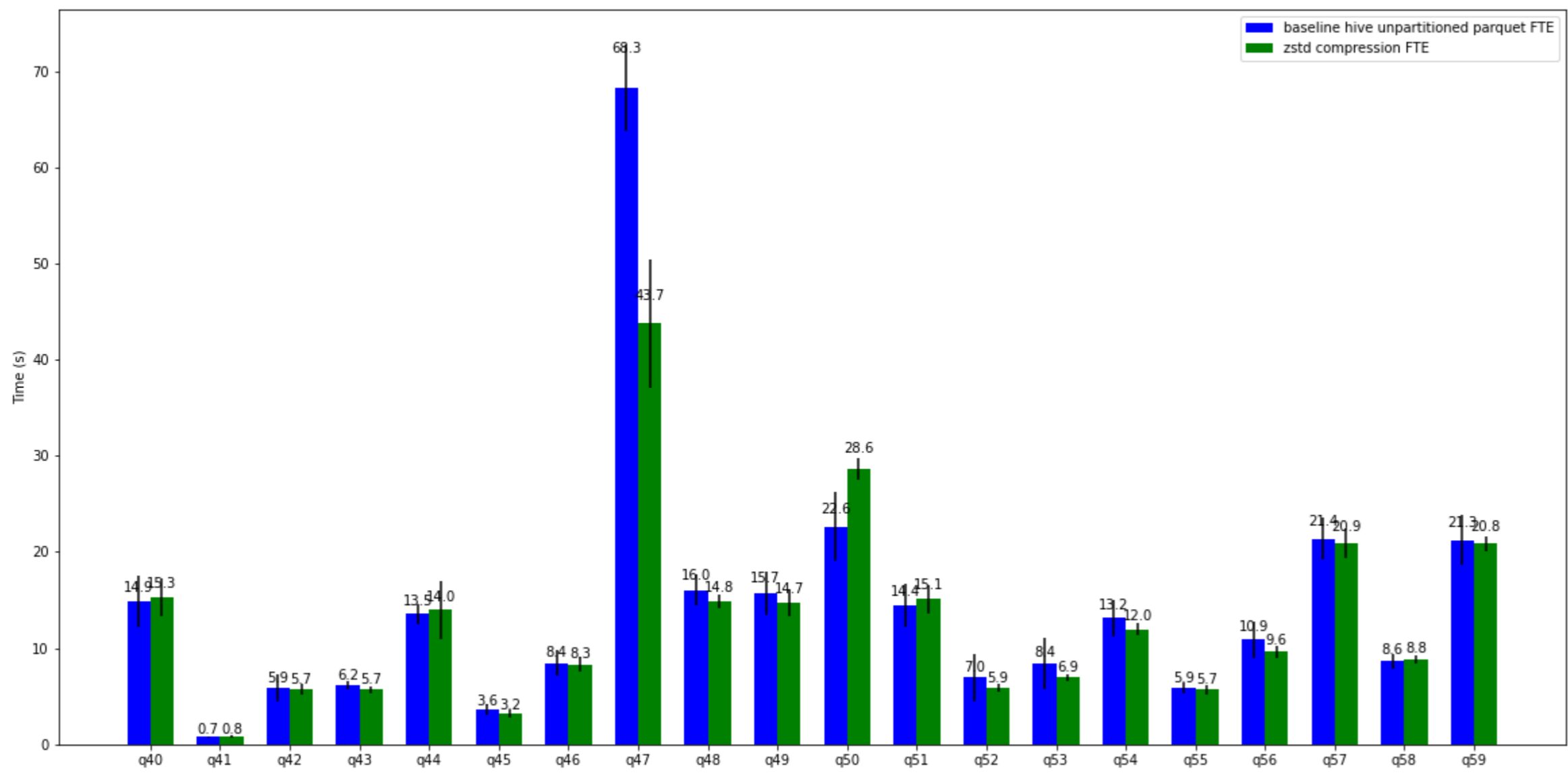
query	baseline hive unpartitioned parquet FTE mean	baseline hive unpartitioned parquet FTE std.dev	zstd compression FTE mean	zstd compression FTE std.dev
0 presto/tpch: q01	12.999333	0.261128	13.179000	0.587107
1 presto/tpch: q02	16.021333	3.150630	31.488667	21.817430
2 presto/tpch: q03	22.621000	1.770654	54.232167	13.979350
3 presto/tpch: q04	13.599667	1.074663	35.718000	10.435663
4 presto/tpch: q05	33.494833	1.542113	34.150667	1.855700
5 presto/tpch: q06	16.821500	10.221769	10.035833	1.175684
6 presto/tpch: q07	23.385167	3.148399	23.427167	1.278186
7 presto/tpch: q08	25.218167	0.734704	31.413333	8.951348
8 presto/tpch: q09	76.703833	6.191766	88.033667	3.679639
9 presto/tpch: q10	23.348500	2.708955	54.062167	11.180078
10 presto/tpch: q11	19.151833	3.931798	10.607167	0.888239
11 presto/tpch: q12	38.423333	9.216519	33.917833	4.788997
12 presto/tpch: q13	43.687333	11.969506	23.955667	5.082066
13 presto/tpch: q14	14.059500	0.418029	14.382333	0.479745
14 presto/tpch: q15	57.736167	11.825266	25.585167	1.874547
15 presto/tpch: q16	12.936833	3.249517	8.849333	0.569241
16 presto/tpch: q17	37.254667	0.531724	42.770000	0.660196
17 presto/tpch: q18	32.315000	1.598604	42.274333	1.882805

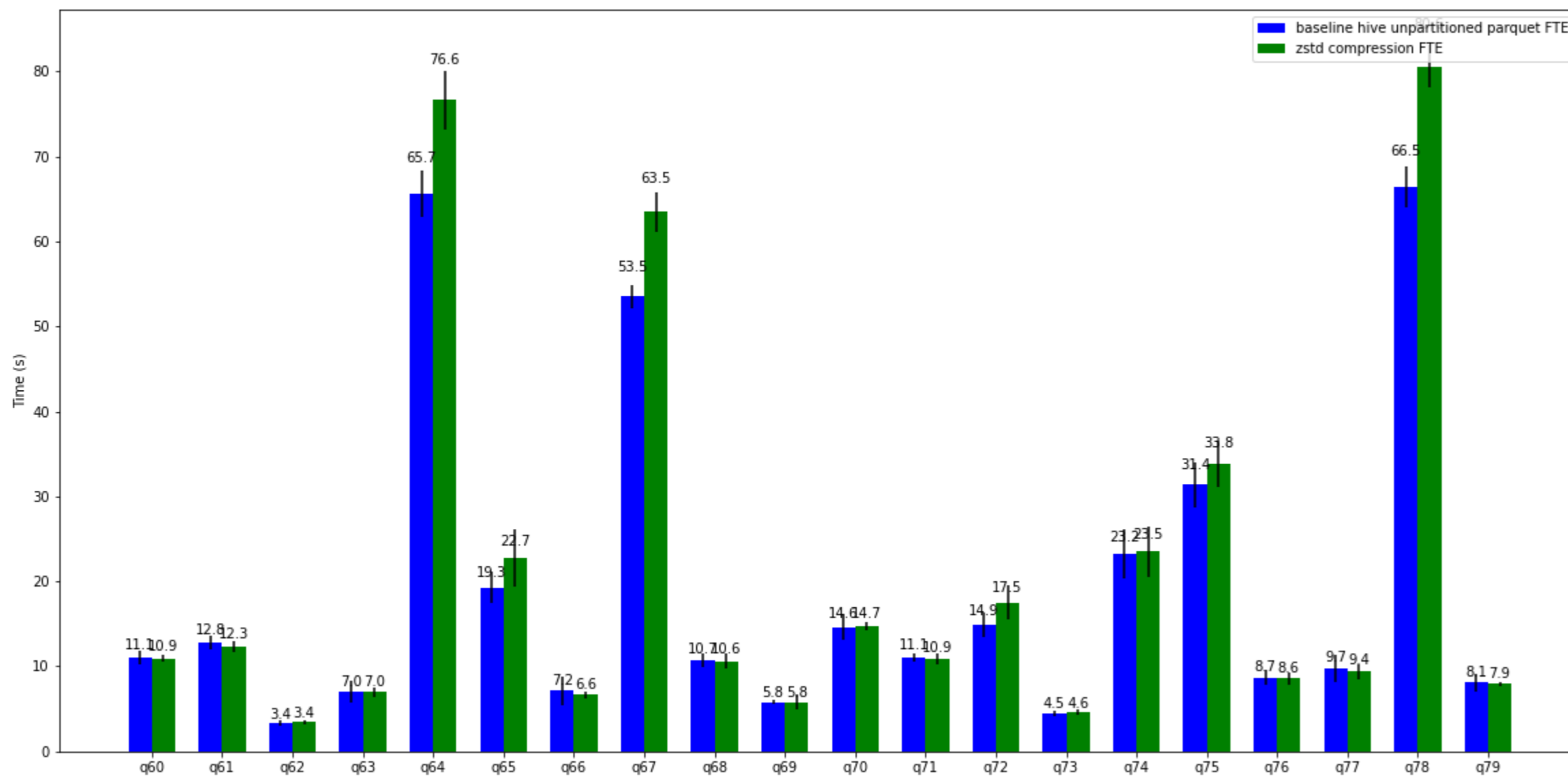
query	baseline hive unpartitioned parquet FTE mean	baseline hive unpartitioned parquet FTE std.dev	zstd compression FTE mean	zstd compression FTE std.dev
18 presto/tpch: q19	18.099500	2.576074	16.178833	0.231520
19 presto/tpch: q20	55.233333	12.445750	23.698333	2.631280
20 presto/tpch: q21	47.399500	1.961209	57.296667	0.984294
21 presto/tpch: q22	11.216833	3.806066	10.593000	2.954814

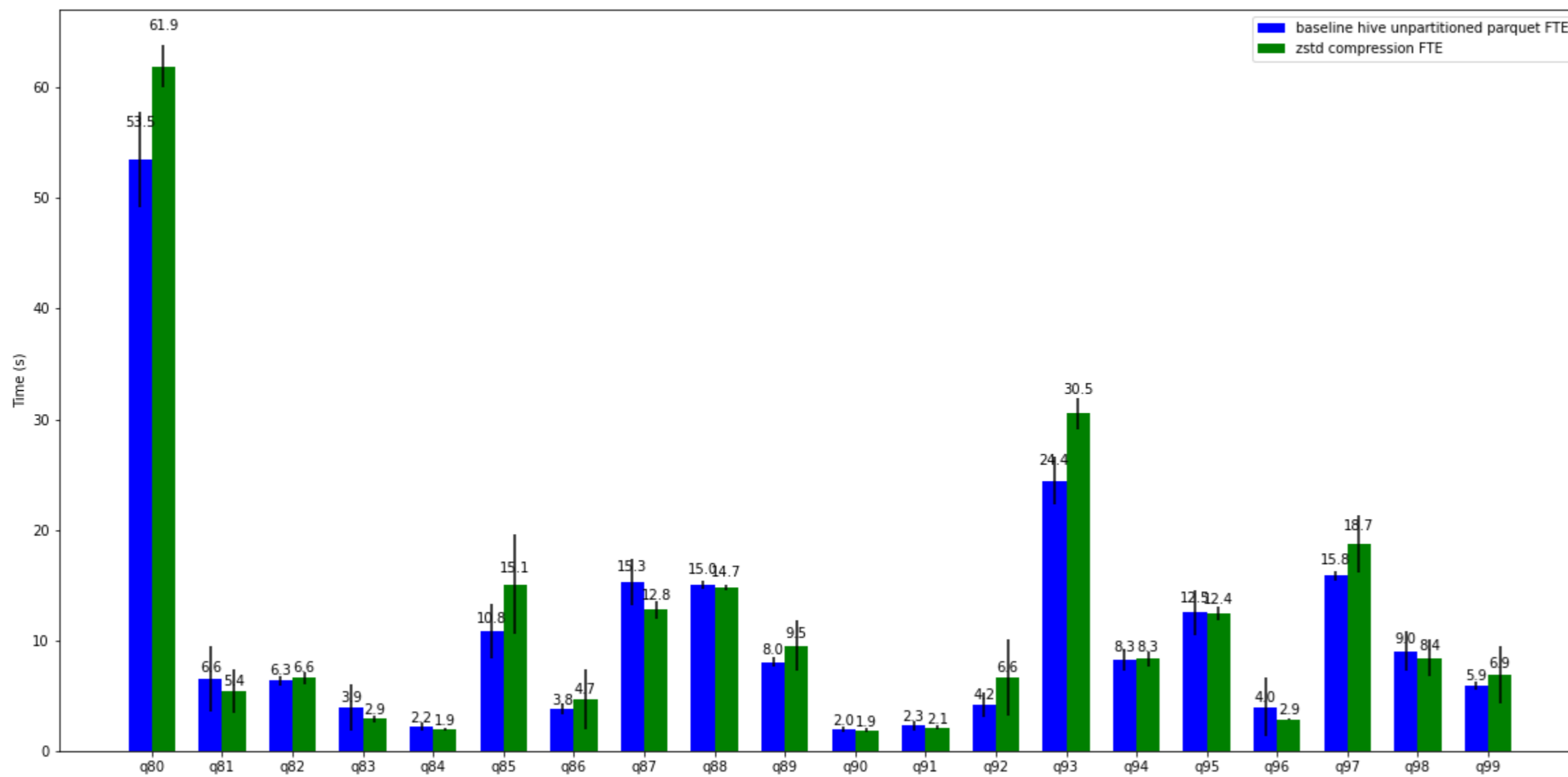
TPC-DS Comparison (DURATION)









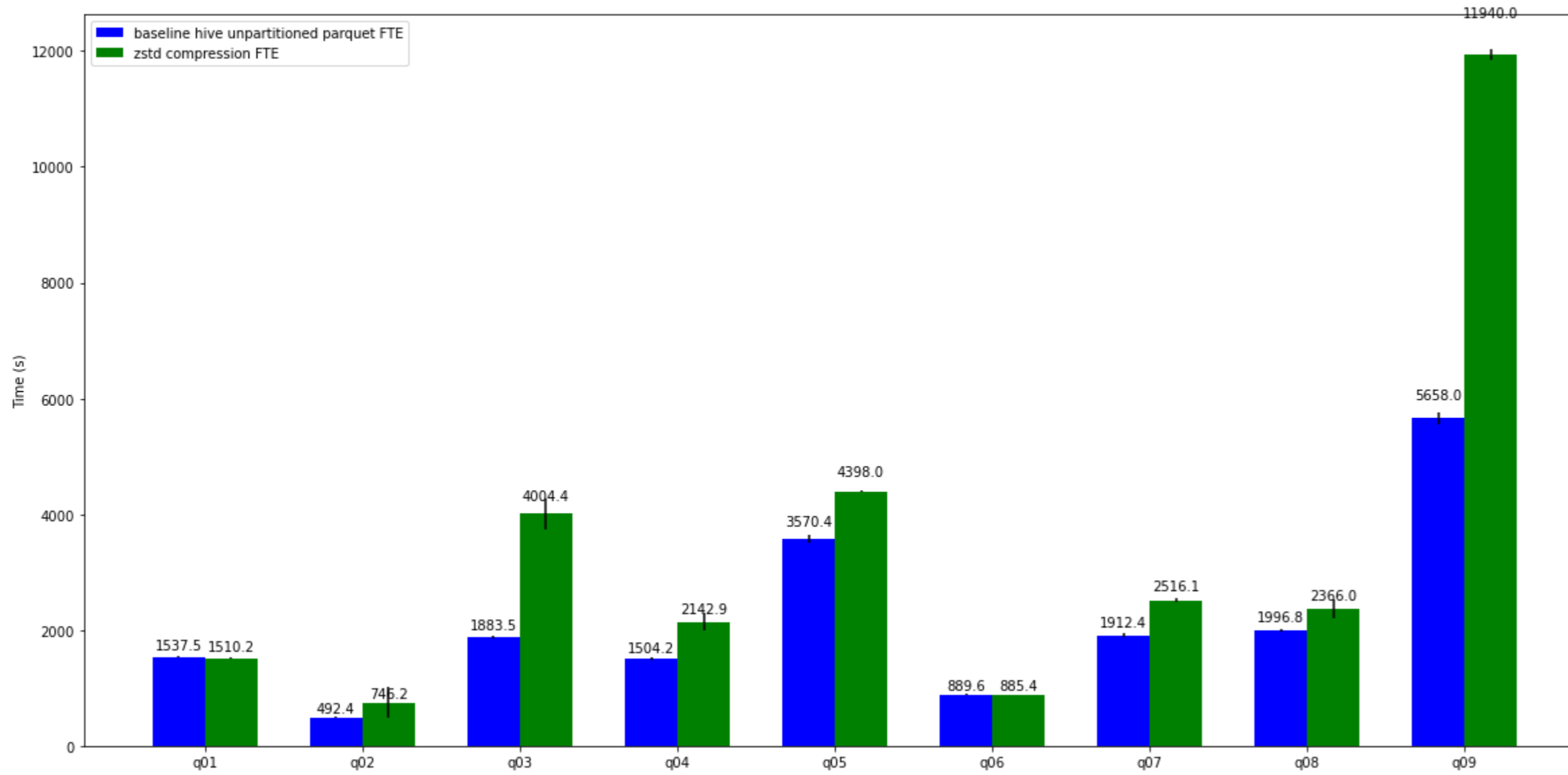


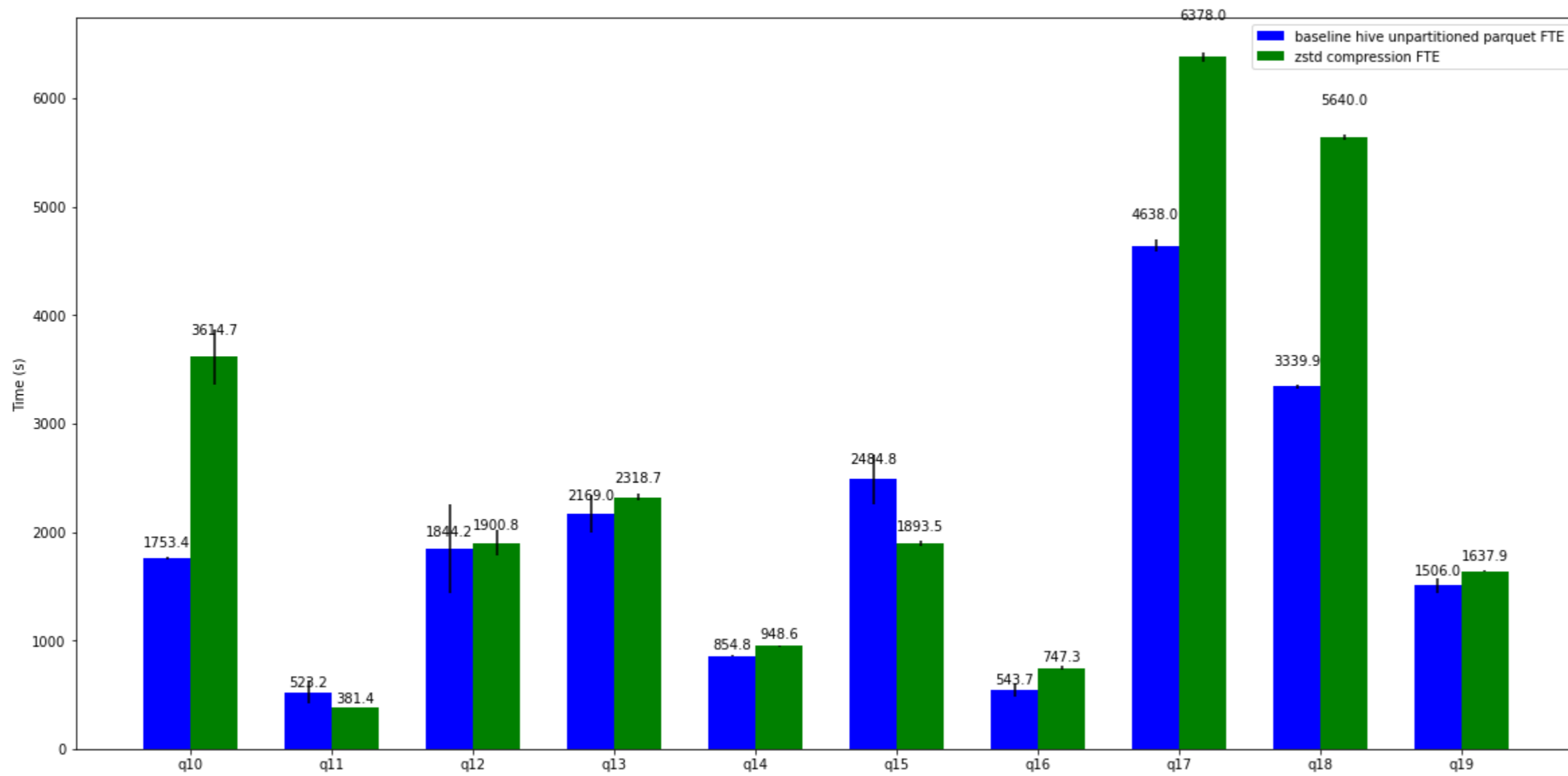
query	baseline hive unpartitioned parquet FTE mean	baseline hive unpartitioned parquet FTE std.dev	zstd compression FTE mean	zstd compression FTE std.dev
0 presto/tpcds: q01	6.796833	2.141885	5.115500	0.366118
1 presto/tpcds: q02	9.556000	0.136676	9.362000	0.403704
2 presto/tpcds: q03	7.024000	1.769604	6.007167	0.630197
3 presto/tpcds: q04	50.931667	2.106316	84.640333	23.859814
4 presto/tpcds: q05	14.916833	0.860783	18.431000	1.442222
5 presto/tpcds: q06	6.234500	0.227644	6.421000	0.311414
6 presto/tpcds: q07	10.930500	0.960272	12.285000	1.445384
7 presto/tpcds: q08	6.216333	0.548448	6.196833	0.326103
8 presto/tpcds: q09	16.845167	0.313729	16.840000	0.295312
9 presto/tpcds: q10	6.443667	0.464032	5.758167	0.189058
10 presto/tpcds: q11	38.280500	15.209978	31.351667	3.017545
11 presto/tpcds: q12	3.082833	0.279895	2.745333	0.127478
12 presto/tpcds: q13	17.919167	1.097041	17.786167	0.511684
13 presto/tpcds: q14	134.215667	19.551512	132.570333	20.812077
14 presto/tpcds: q15	3.611000	0.242008	3.449000	0.371026
15 presto/tpcds: q16	13.355833	1.980364	14.155833	1.977509
16 presto/tpcds: q17	45.008667	1.171948	43.768500	0.350569
17 presto/tpcds: q18	14.368833	1.405919	14.386833	0.876511

	query	baseline	hive unpartitioned	parquet FTE mean	baseline	hive unpartitioned	parquet FTE std.dev	zstd compression	FTE mean	zstd compression	FTE std.dev
18	presto/tpcds: q19			8.081333			0.578985		8.407833		0.638205
19	presto/tpcds: q20			3.405833			0.426668		3.561500		1.111460
20	presto/tpcds: q21			3.373500			0.098583		3.386333		0.219355
21	presto/tpcds: q22			9.502000			0.317205		11.098167		0.247849
22	presto/tpcds: q23			84.000667			1.649143		103.655000		1.104891
23	presto/tpcds: q24			29.681833			2.135372		30.616500		1.688906
24	presto/tpcds: q25			44.898333			1.104091		44.193500		1.124641
25	presto/tpcds: q26			6.093833			0.168982		5.972333		0.199639
26	presto/tpcds: q27			11.254167			0.539446		11.599333		0.933565
27	presto/tpcds: q28			24.324167			0.488806		25.216000		2.129169
28	presto/tpcds: q29			43.108833			1.109486		42.840667		0.749639
29	presto/tpcds: q30			3.392833			0.343133		5.395833		2.641581
30	presto/tpcds: q31			14.427333			1.767680		13.844000		0.353760
31	presto/tpcds: q32			5.468667			1.591075		4.923500		0.432172
32	presto/tpcds: q33			10.336167			0.917875		10.853000		0.957825
33	presto/tpcds: q34			4.962833			0.412162		5.097000		0.353302
34	presto/tpcds: q35			7.054167			0.398858		7.483000		0.974088
35	presto/tpcds: q36			9.858167			1.325818		8.222833		0.345365
36	presto/tpcds: q37			4.579333			0.271963		5.285833		2.213364
37	presto/tpcds: q38			14.128000			2.058139		14.798333		3.028160
38	presto/tpcds: q39			4.276333			0.314564		4.687500		0.312244
39	presto/tpcds: q40			14.852000			2.704750		15.276167		1.961896
40	presto/tpcds: q41			0.744833			0.022284		0.782167		0.105291
41	presto/tpcds: q42			5.902000			1.388924		5.694333		0.557150
42	presto/tpcds: q43			6.152000			0.401191		5.701000		0.357950
43	presto/tpcds: q44			13.534000			0.996414		13.952500		3.071210
44	presto/tpcds: q45			3.644833			0.555583		3.168000		0.415782
45	presto/tpcds: q46			8.448500			1.318611		8.288167		0.766307
46	presto/tpcds: q47			68.271833			4.465229		43.744000		6.703062
47	presto/tpcds: q48			16.016667			1.611613		14.842833		0.665692
48	presto/tpcds: q49			15.705167			2.235335		14.699333		1.379138
49	presto/tpcds: q50			22.634667			3.592550		28.636500		1.058662
50	presto/tpcds: q51			14.432333			2.256571		15.081167		1.492781
51	presto/tpcds: q52			6.960000			2.425437		5.858167		0.390662
52	presto/tpcds: q53			8.398167			2.637732		6.948833		0.332820
53	presto/tpcds: q54			13.151167			1.898620		11.979667		0.637150
54	presto/tpcds: q55			5.899000			0.572044		5.665000		0.459402
55	presto/tpcds: q56			10.881500			1.884787		9.613667		0.587667
56	presto/tpcds: q57			21.370000			2.158864		20.875167		1.512273
57	presto/tpcds: q58			8.632000			0.788671		8.764833		0.431059

	query	baseline	hive unpartitioned	parquet FTE mean	baseline	hive unpartitioned	parquet FTE std.dev	zstd compression	FTE mean	zstd compression	FTE std.dev
58	presto/tpcds: q59			21.255833			2.647573		20.835833		0.823350
59	presto/tpcds: q60			11.071667			0.767170		10.917833		0.383433
60	presto/tpcds: q61			12.794333			0.791130		12.308833		0.654511
61	presto/tpcds: q62			3.407000			0.324319		3.434833		0.234336
62	presto/tpcds: q63			6.976000			1.300210		6.958833		0.521391
63	presto/tpcds: q64			65.670500			2.735679		76.632333		3.466618
64	presto/tpcds: q65			19.289500			1.898970		22.730167		3.378880
65	presto/tpcds: q66			7.153000			1.676084		6.649167		0.457009
66	presto/tpcds: q67			53.495000			1.391136		63.459833		2.380754
67	presto/tpcds: q68			10.668000			0.801845		10.612000		0.901048
68	presto/tpcds: q69			5.777000			0.268055		5.785500		0.862372
69	presto/tpcds: q70			14.630000			1.481928		14.695833		0.519820
70	presto/tpcds: q71			11.065167			0.475822		10.863667		0.654173
71	presto/tpcds: q72			14.880500			1.418234		17.532167		1.935068
72	presto/tpcds: q73			4.480500			0.279350		4.611667		0.373786
73	presto/tpcds: q74			23.232333			2.854989		23.485333		3.027074
74	presto/tpcds: q75			31.367833			2.689513		33.816000		2.742938
75	presto/tpcds: q76			8.713500			0.937558		8.570667		0.711335
76	presto/tpcds: q77			9.737500			1.647205		9.377167		0.866081
77	presto/tpcds: q78			66.452000			2.396731		80.594500		2.491025
78	presto/tpcds: q79			8.125833			1.048940		7.946500		0.260285
79	presto/tpcds: q80			53.547833			4.324154		61.922000		1.922229
80	presto/tpcds: q81			6.552833			2.957923		5.410000		1.920917
81	presto/tpcds: q82			6.339000			0.434373		6.589833		0.518446
82	presto/tpcds: q83			3.921167			2.094136		2.915333		0.313582
83	presto/tpcds: q84			2.225667			0.347491		1.936000		0.155177
84	presto/tpcds: q85			10.803333			2.449530		15.075000		4.552014
85	presto/tpcds: q86			3.786667			0.447147		4.670667		2.706535
86	presto/tpcds: q87			15.291500			2.101514		12.752500		0.842625
87	presto/tpcds: q88			15.004333			0.383649		14.742000		0.271187
88	presto/tpcds: q89			8.027000			0.411297		9.504667		2.300099
89	presto/tpcds: q90			1.953167			0.239150		1.859333		0.193604
90	presto/tpcds: q91			2.303000			0.430387		2.129167		0.134357
91	presto/tpcds: q92			4.166167			1.072602		6.585333		3.457627
92	presto/tpcds: q93			24.427667			2.159528		30.537000		1.407548
93	presto/tpcds: q94			8.291333			0.987298		8.319500		0.639267
94	presto/tpcds: q95			12.510000			2.037230		12.445833		0.587551
95	presto/tpcds: q96			3.980667			2.686289		2.860500		0.104661
96	presto/tpcds: q97			15.832000			0.407215		18.716833		2.614697
97	presto/tpcds: q98			9.030167			1.823243		8.390500		1.651805

TPC-H Comparison (CPU)

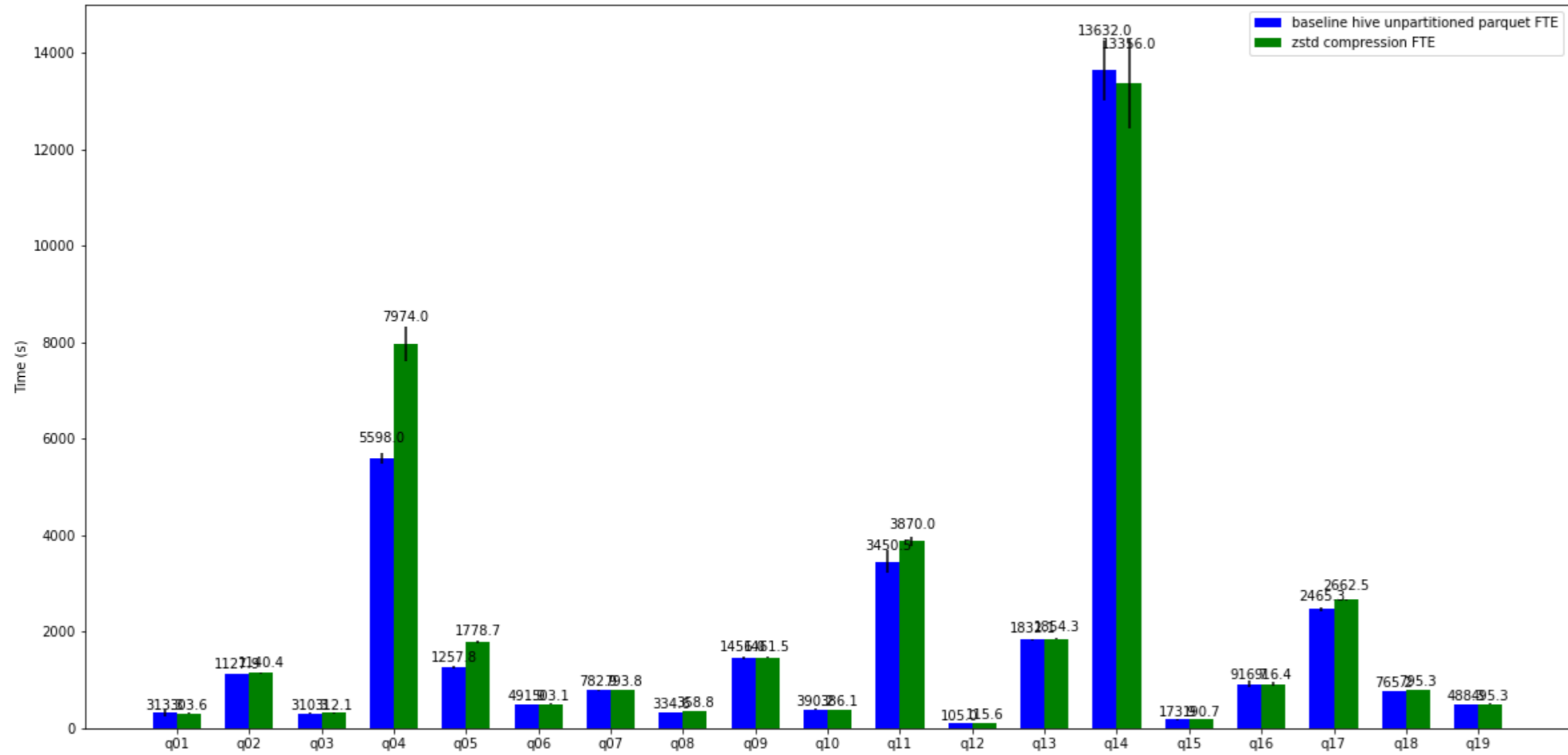


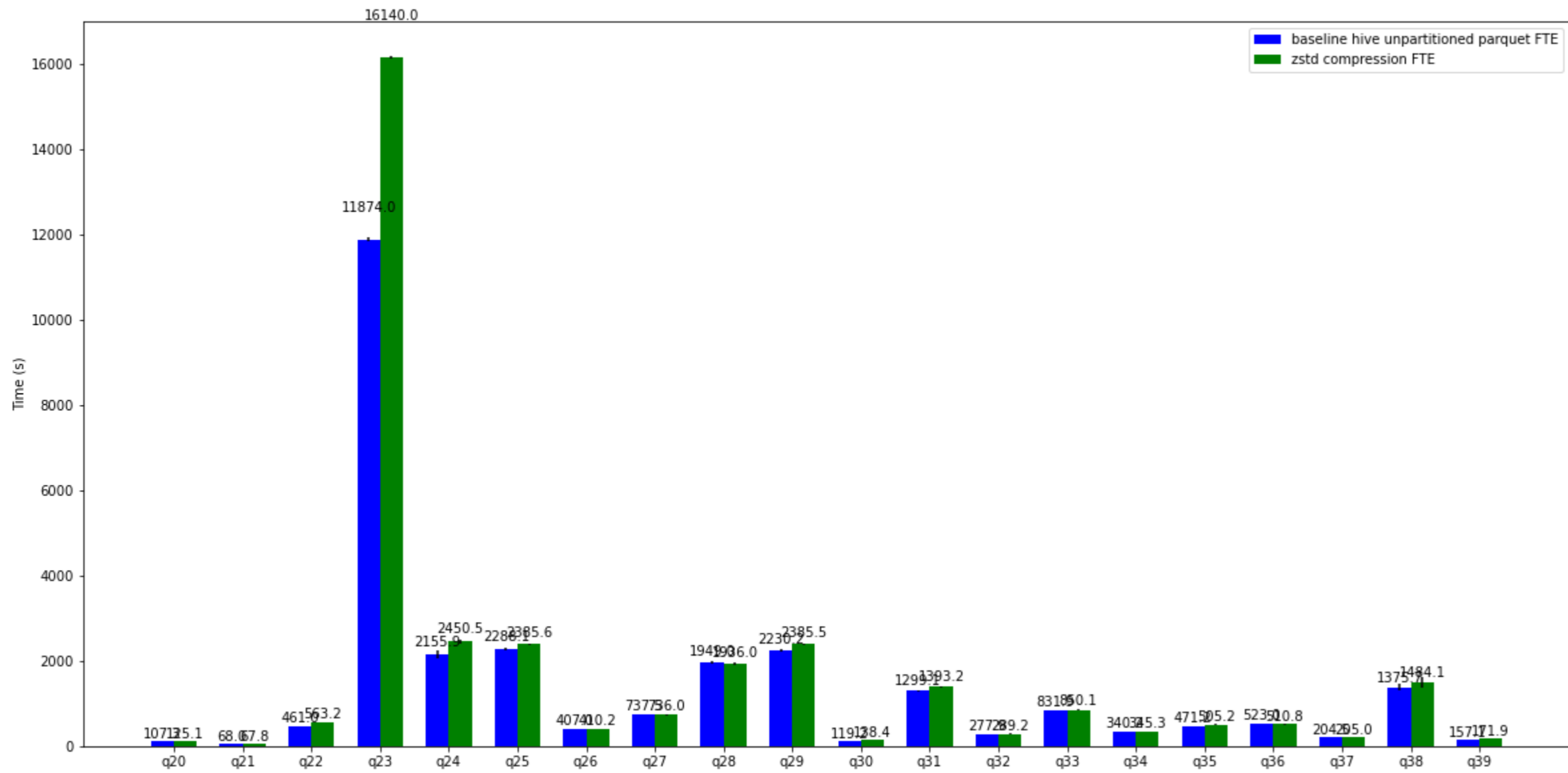


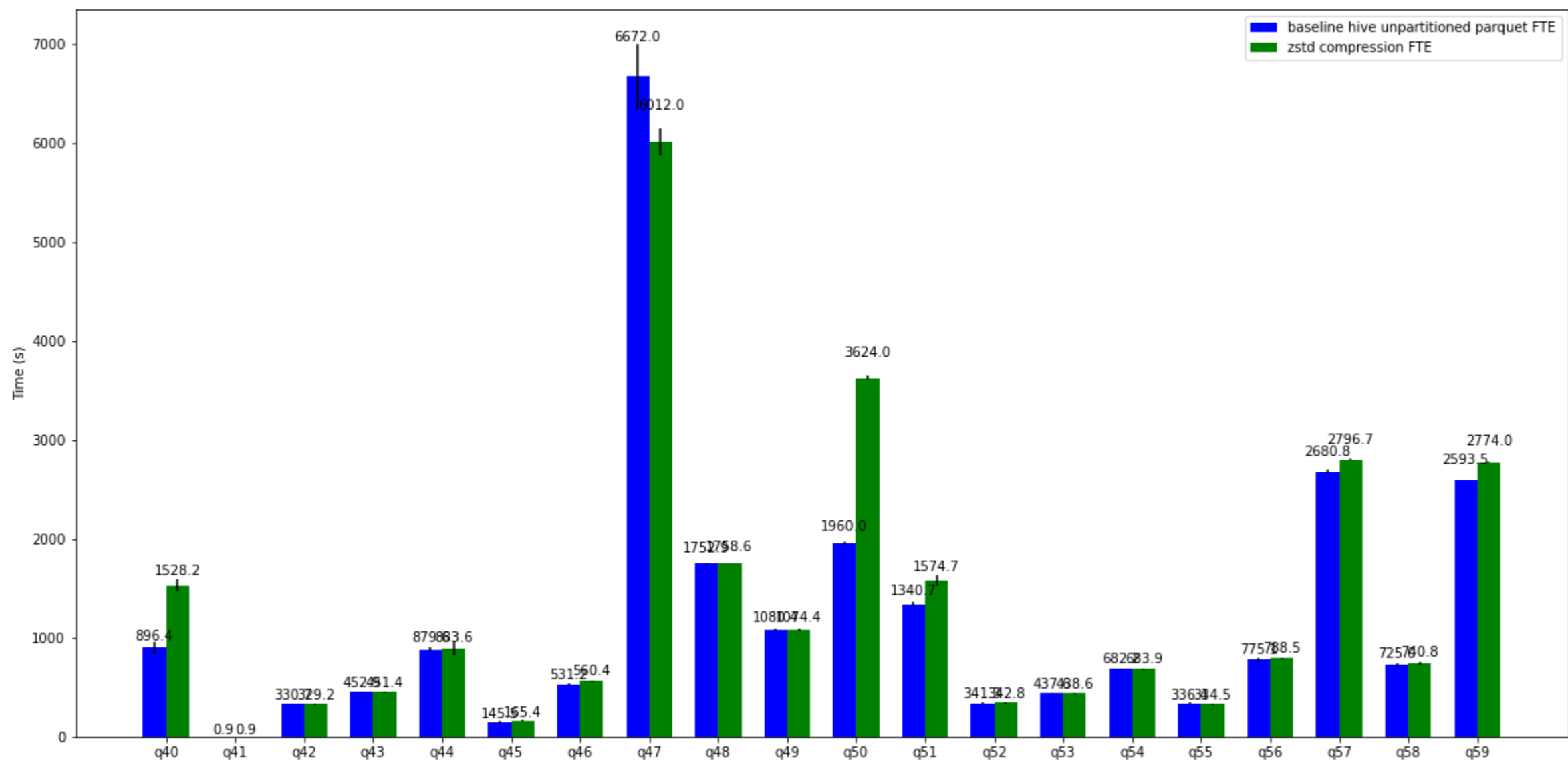
query	baseline hive unpartitioned parquet FTE mean	baseline hive unpartitioned parquet FTE std.dev	zstd compression FTE mean	zstd compression FTE std.dev
0 presto/tpch: q01	1537.5	13.569819	1510.2	12.974436
1 presto/tpch: q02	492.4	7.176629	746.2	270.510628
2 presto/tpch: q03	1883.5	27.402117	4004.4	277.752696
3 presto/tpch: q04	1504.2	17.410342	2142.9	143.244393
4 presto/tpch: q05	3570.4	66.494150	4398.0	14.696938
5 presto/tpch: q06	889.6	9.269304	885.4	3.882267
6 presto/tpch: q07	1912.4	28.558151	2516.1	28.754339
7 presto/tpch: q08	1996.8	31.326666	2366.0	171.972044
8 presto/tpch: q09	5658.0	105.367927	11940.0	90.119920
9 presto/tpch: q10	1753.4	11.694101	3614.7	256.408791
10 presto/tpch: q11	523.2	103.528083	381.4	3.512264
11 presto/tpch: q12	1844.2	410.493966	1900.8	121.820983
12 presto/tpch: q13	2169.0	177.599189	2318.7	29.946552
13 presto/tpch: q14	854.8	6.126663	948.6	6.550725
14 presto/tpch: q15	2484.8	229.148371	1893.5	22.936695
15 presto/tpch: q16	543.7	62.093961	747.3	13.291050
16 presto/tpch: q17	4638.0	57.674951	6378.0	42.085627
17 presto/tpch: q18	3339.9	15.001200	5640.0	29.393877

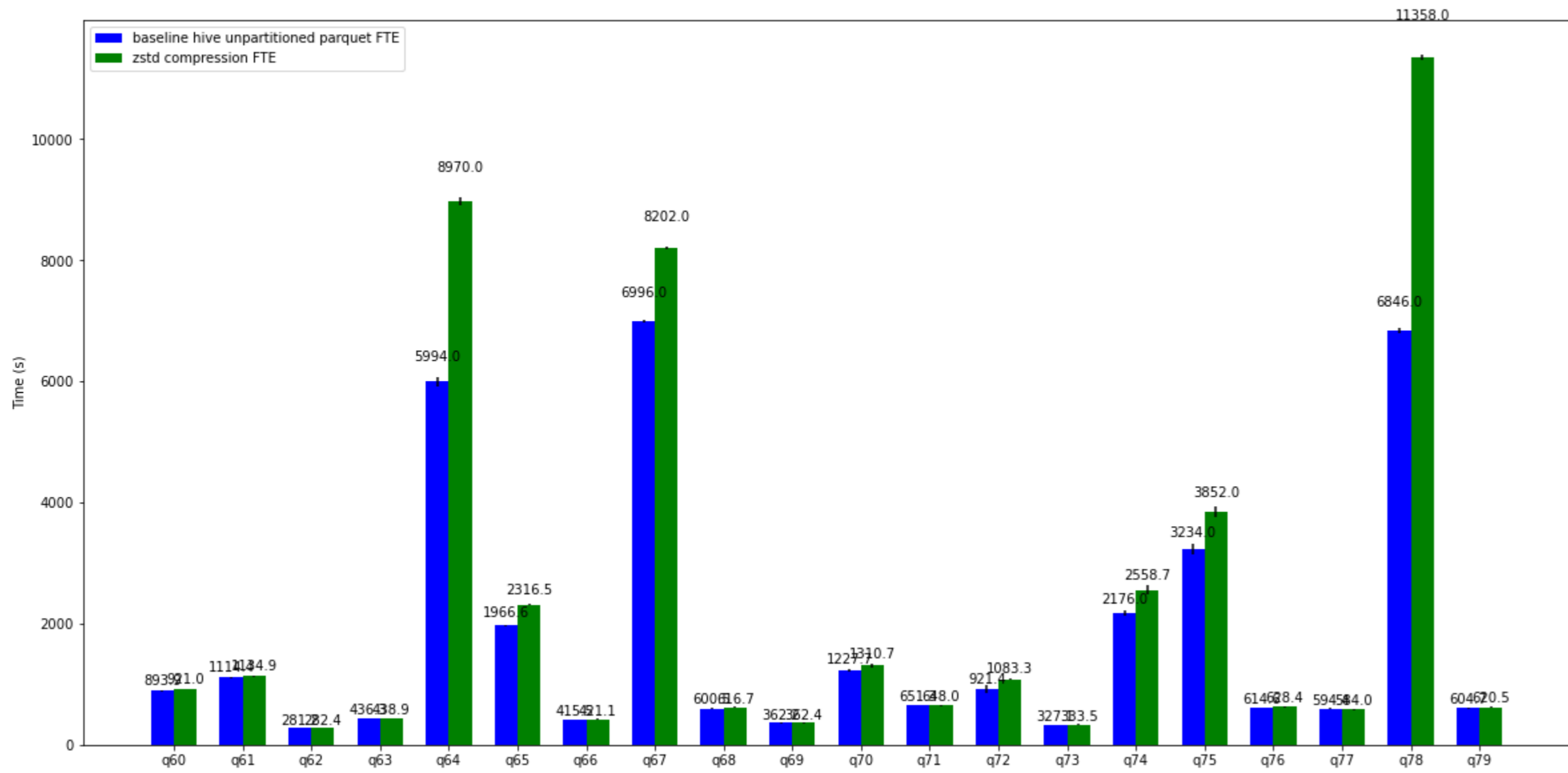
query	baseline hive unpartitioned parquet FTE mean	baseline hive unpartitioned parquet FTE std.dev	zstd compression FTE mean	zstd compression FTE std.dev
18 presto/tpch: q19	1506.0	69.854019	1637.9	6.620876
19 presto/tpch: q20	2540.8	412.614668	2490.2	61.174897
20 presto/tpch: q21	5538.0	95.019998	8202.0	62.006451
21 presto/tpch: q22	522.9	4.720593	850.2	37.087572

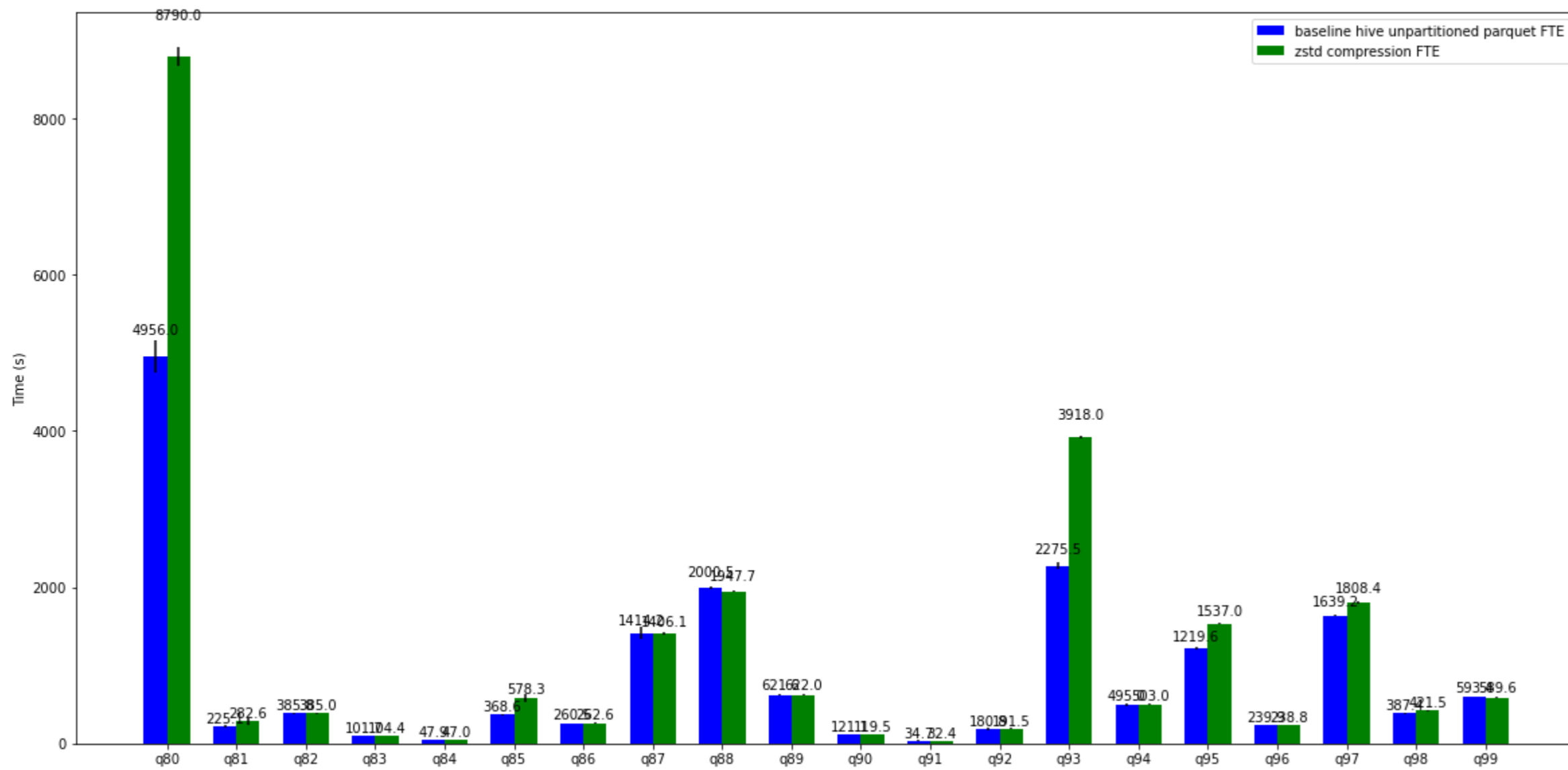
TPC-DS Comparison (CPU)











query	baseline hive unpartitioned parquet FTE mean	baseline hive unpartitioned parquet FTE std.dev	zstd compression FTE mean	zstd compression FTE std.dev
0 presto/tpcds: q01	313.300	63.552907	303.600000	14.760488
1 presto/tpcds: q02	1127.900	3.021920	1140.400000	2.135416
2 presto/tpcds: q03	310.300	4.939231	312.100000	3.951202
3 presto/tpcds: q04	5598.000	103.714994	7974.000000	355.471518
4 presto/tpcds: q05	1257.800	29.336666	1778.700000	26.298213
5 presto/tpcds: q06	491.900	4.076763	503.100000	3.214343
6 presto/tpcds: q07	782.900	9.847436	793.800000	10.196470
7 presto/tpcds: q08	334.600	4.337741	358.800000	5.779965
8 presto/tpcds: q09	1456.000	15.394025	1461.500000	12.304633
9 presto/tpcds: q10	390.200	5.813089	386.100000	8.180709
10 presto/tpcds: q11	3450.500	241.911314	3870.000000	84.427484
11 presto/tpcds: q12	105.000	1.517893	115.600000	2.478709
12 presto/tpcds: q13	1832.100	7.404593	1854.300000	10.858177
13 presto/tpcds: q14	13632.000	628.369318	13356.000000	921.487493
14 presto/tpcds: q15	173.900	4.745946	190.700000	4.700213
15 presto/tpcds: q16	916.700	59.726276	916.400000	35.204545
16 presto/tpcds: q17	2465.300	39.586210	2662.500000	20.093282
17 presto/tpcds: q18	765.200	3.189984	795.300000	5.586770

	query	baseline	hive unpartitioned	parquet FTE mean	baseline	hive unpartitioned	parquet FTE std.dev	zstd compression	FTE mean	zstd compression	FTE std.dev
18	presto/tpcds: q19			488.300			3.932938		495.300000		14.105744
19	presto/tpcds: q20			107.300			2.585343		125.100000		1.728583
20	presto/tpcds: q21			68.000			0.489898		67.800000		0.536656
21	presto/tpcds: q22			461.000			2.619924		563.200000		2.066882
22	presto/tpcds: q23			11874.000			35.394915		16140.000000		29.393877
23	presto/tpcds: q24			2155.900			88.363047		2450.500000		39.484225
24	presto/tpcds: q25			2288.100			31.436221		2385.600000		27.607825
25	presto/tpcds: q26			407.000			3.471023		410.200000		2.101428
26	presto/tpcds: q27			737.500			7.174120		736.000000		9.331238
27	presto/tpcds: q28			1949.000			33.513460		1936.000000		32.174027
28	presto/tpcds: q29			2230.200			30.791168		2385.500000		26.313723
29	presto/tpcds: q30			119.200			1.682855		138.400000		1.402854
30	presto/tpcds: q31			1299.100			12.175221		1393.200000		15.386228
31	presto/tpcds: q32			277.900			7.715698		289.200000		3.174902
32	presto/tpcds: q33			831.900			7.568091		850.100000		4.700213
33	presto/tpcds: q34			340.200			6.945502		345.300000		2.957702
34	presto/tpcds: q35			471.200			4.957419		505.200000		10.523117
35	presto/tpcds: q36			523.000			2.536139		510.800000		3.075061
36	presto/tpcds: q37			204.500			0.797496		205.000000		1.050714
37	presto/tpcds: q38			1375.700			77.412015		1484.100000		122.462778
38	presto/tpcds: q39			157.100			1.440833		171.900000		1.999000
39	presto/tpcds: q40			896.400			59.971193		1528.200000		63.471947
40	presto/tpcds: q41			0.932			0.045655		0.930667		0.017386
41	presto/tpcds: q42			330.700			1.672124		329.200000		4.151144
42	presto/tpcds: q43			452.900			3.667697		451.400000		5.959866
43	presto/tpcds: q44			879.600			22.256684		883.600000		67.988940
44	presto/tpcds: q45			145.500			8.609530		165.400000		2.805708
45	presto/tpcds: q46			531.200			9.709377		560.400000		9.364614
46	presto/tpcds: q47			6672.000			327.316361		6012.000000		136.610395
47	presto/tpcds: q48			1752.900			6.922138		1758.600000		1.819890
48	presto/tpcds: q49			1080.400			9.009328		1074.400000		12.087680
49	presto/tpcds: q50			1960.000			14.527767		3624.000000		18.590320
50	presto/tpcds: q51			1340.700			18.102707		1574.700000		54.747822
51	presto/tpcds: q52			341.300			6.588171		342.800000		4.151144
52	presto/tpcds: q53			437.600			4.287657		438.600000		5.602856
53	presto/tpcds: q54			682.200			8.661640		683.900000		6.297619
54	presto/tpcds: q55			336.400			6.558048		334.500000		7.257272
55	presto/tpcds: q56			775.100			18.665369		788.500000		13.004461
56	presto/tpcds: q57			2680.800			15.792657		2796.700000		7.113649
57	presto/tpcds: q58			725.000			11.601379		740.800000		8.019975

	query	baseline	hive unpartitioned	parquet FTE mean	baseline	hive unpartitioned	parquet FTE std.dev	zstd compression	FTE mean	zstd compression	FTE std.dev
58	presto/tpcds: q59			2593.500			6.220932		2774.000000		10.724178
59	presto/tpcds: q60			893.900			8.291441		921.000000		9.982384
60	presto/tpcds: q61			1114.400			7.403783		1134.900000		7.756030
61	presto/tpcds: q62			281.200			2.507588		282.400000		3.955755
62	presto/tpcds: q63			436.300			9.766678		438.900000		3.534402
63	presto/tpcds: q64			5994.000			67.349833		8970.000000		69.868448
64	presto/tpcds: q65			1966.600			10.910545		2316.500000		8.706549
65	presto/tpcds: q66			415.500			5.948781		421.100000		9.670367
66	presto/tpcds: q67			6996.000			18.590320		8202.000000		27.099815
67	presto/tpcds: q68			600.500			7.234086		616.700000		13.125700
68	presto/tpcds: q69			362.200			5.687882		362.400000		6.841053
69	presto/tpcds: q70			1227.700			12.263605		1310.700000		30.839650
70	presto/tpcds: q71			651.300			6.104097		648.000000		7.560952
71	presto/tpcds: q72			921.400			57.895078		1083.300000		8.242087
72	presto/tpcds: q73			327.100			5.871627		333.500000		6.040861
73	presto/tpcds: q74			2176.000			44.341042		2558.700000		77.875054
74	presto/tpcds: q75			3234.000			86.116201		3852.000000		88.181631
75	presto/tpcds: q76			614.600			7.146468		628.400000		10.757695
76	presto/tpcds: q77			594.400			6.742106		584.000000		10.575443
77	presto/tpcds: q78			6846.000			42.085627		11358.000000		37.757119
78	presto/tpcds: q79			604.700			6.455695		620.500000		7.881878
79	presto/tpcds: q80			4956.000			204.493521		8790.000000		123.489271
80	presto/tpcds: q81			225.100			15.523273		282.600000		47.646196
81	presto/tpcds: q82			385.800			7.397297		385.000000		2.359661
82	presto/tpcds: q83			101.700			5.030706		104.400000		3.106123
83	presto/tpcds: q84			47.855			1.179945		47.033333		0.205004
84	presto/tpcds: q85			368.600			4.253939		578.300000		54.849868
85	presto/tpcds: q86			260.500			2.557342		262.600000		1.766352
86	presto/tpcds: q87			1414.200			72.763947		1406.100000		22.426681
87	presto/tpcds: q88			2000.500			18.451992		1947.700000		4.638534
88	presto/tpcds: q89			621.600			6.745665		622.000000		6.161818
89	presto/tpcds: q90			121.100			2.382436		119.500000		1.672124
90	presto/tpcds: q91			34.690			7.028681		32.375000		2.363927
91	presto/tpcds: q92			180.800			15.579987		191.500000		6.064652
92	presto/tpcds: q93			2275.500			41.457786		3918.000000		14.696938
93	presto/tpcds: q94			495.000			14.459876		503.000000		9.362051
94	presto/tpcds: q95			1219.600			15.384668		1537.000000		3.652944
95	presto/tpcds: q96			239.900			1.714643		238.800000		3.308172
96	presto/tpcds: q97			1639.200			10.712983		1808.400000		13.597647
97	presto/tpcds: q98			387.400			5.212293		421.500000		5.599643

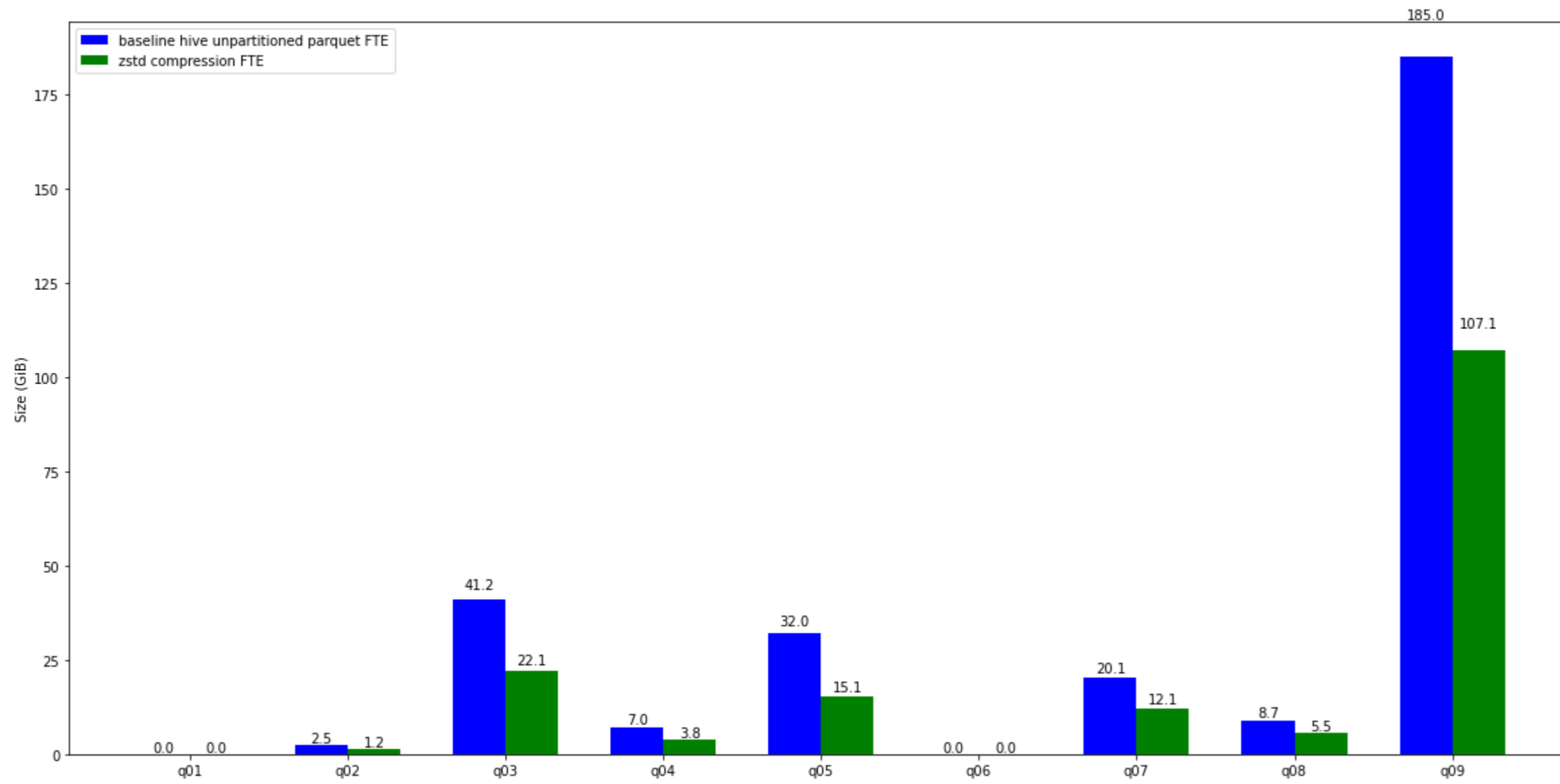
TPC-H Comparison (Peak memory)

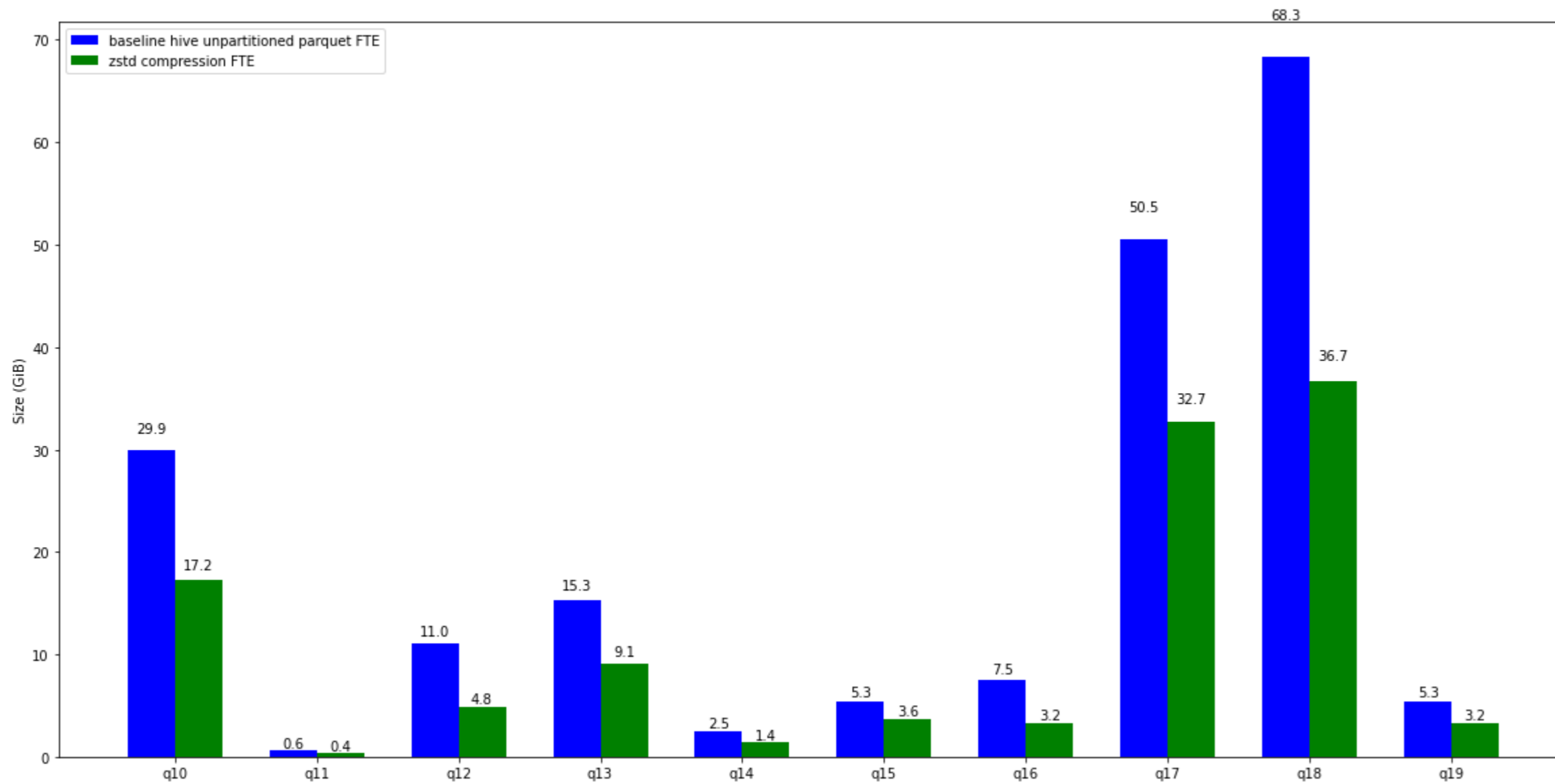
TPC-DS Comparison (Peak memory)

TPC-H Comparison (physicalInputDataSize)

TPC-DS Comparison (physicalInputDataSize)

TPC-H Comparison (internalNetworkInputDataSize GB)

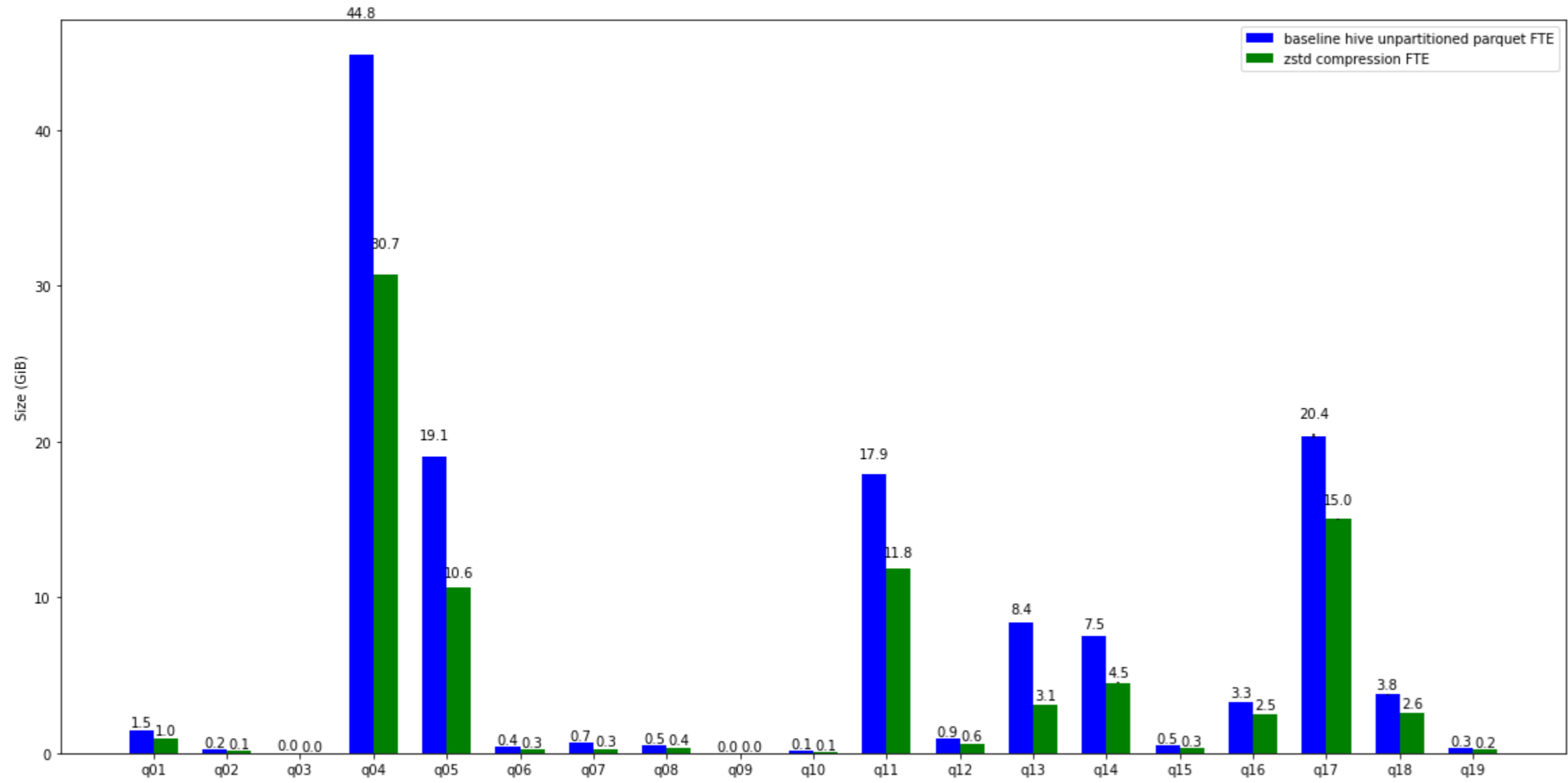


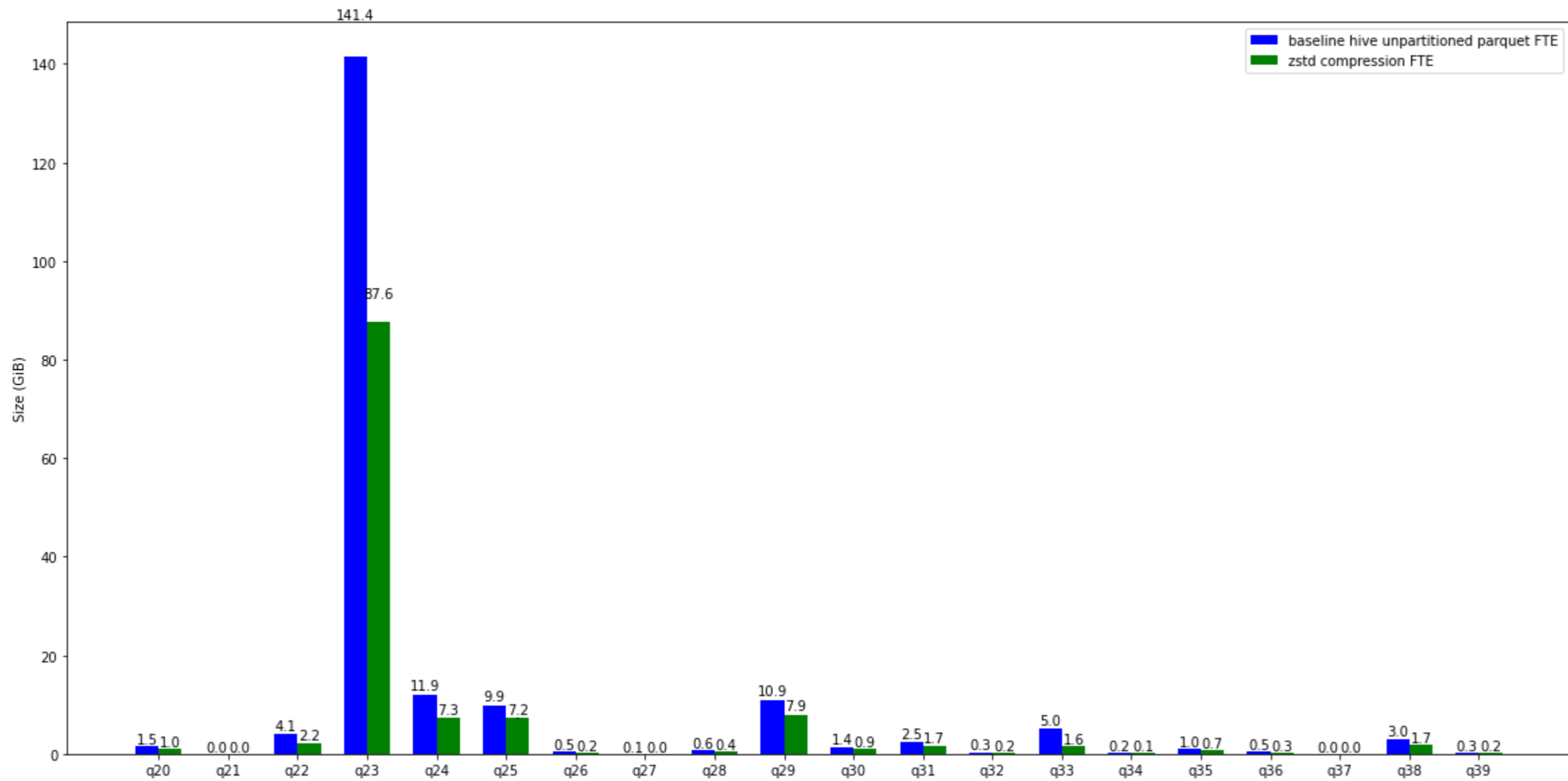


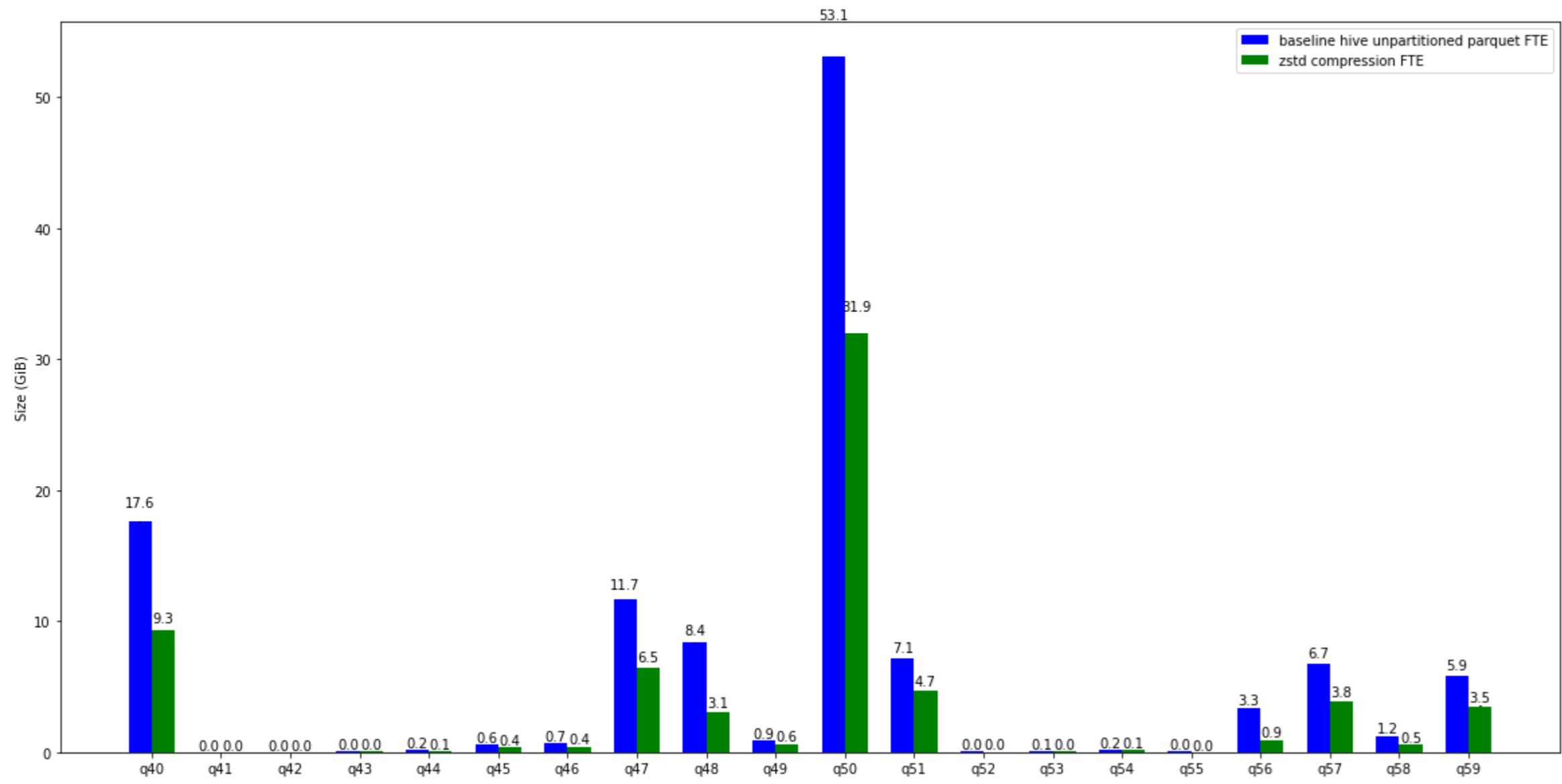
query	baseline hive unpartitioned parquet FTE mean	baseline hive unpartitioned parquet FTE std.dev	zstd compression FTE mean	zstd compression FTE std.dev
0 presto/tpch: q01	1.337 MiB	5.311 KiB	1.273 MiB	10.117 KiB
1 presto/tpch: q02	2.466 GiB	39.427 KiB	1.240 GiB	66.035 KiB
2 presto/tpch: q03	41.154 GiB	1.025 MiB	22.082 GiB	8.868 MiB
3 presto/tpch: q04	7.031 GiB	48.952 KiB	3.832 GiB	428.144 KiB
4 presto/tpch: q05	31.999 GiB	464.675 KiB	15.124 GiB	2.431 MiB
5 presto/tpch: q06	367.527 KiB	538.604 YiB	367.406 KiB	238.479 YiB
6 presto/tpch: q07	20.120 GiB	1.892 MiB	12.090 GiB	5.062 MiB
7 presto/tpch: q08	8.718 GiB	426.509 KiB	5.482 GiB	419.987 KiB
8 presto/tpch: q09	184.969 GiB	13.065 MiB	107.075 GiB	2.216 MiB
9 presto/tpch: q10	29.936 GiB	386.642 KiB	17.240 GiB	1.832 MiB
10 presto/tpch: q11	637.644 MiB	32.260 KiB	364.076 MiB	20.429 KiB
11 presto/tpch: q12	11.032 GiB	9.245 MiB	4.810 GiB	3.337 MiB
12 presto/tpch: q13	15.314 GiB	8.315 KiB	9.112 GiB	16.179 KiB
13 presto/tpch: q14	2.503 GiB	2.026 MiB	1.365 GiB	339.870 KiB
14 presto/tpch: q15	5.321 GiB	0.970 MiB	3.637 GiB	4.789 MiB
15 presto/tpch: q16	7.545 GiB	100.254 KiB	3.224 GiB	1.291 MiB
16 presto/tpch: q17	50.499 GiB	1.153 MiB	32.667 GiB	2.879 MiB
17 presto/tpch: q18	68.336 GiB	653.050 KiB	36.716 GiB	1.581 MiB

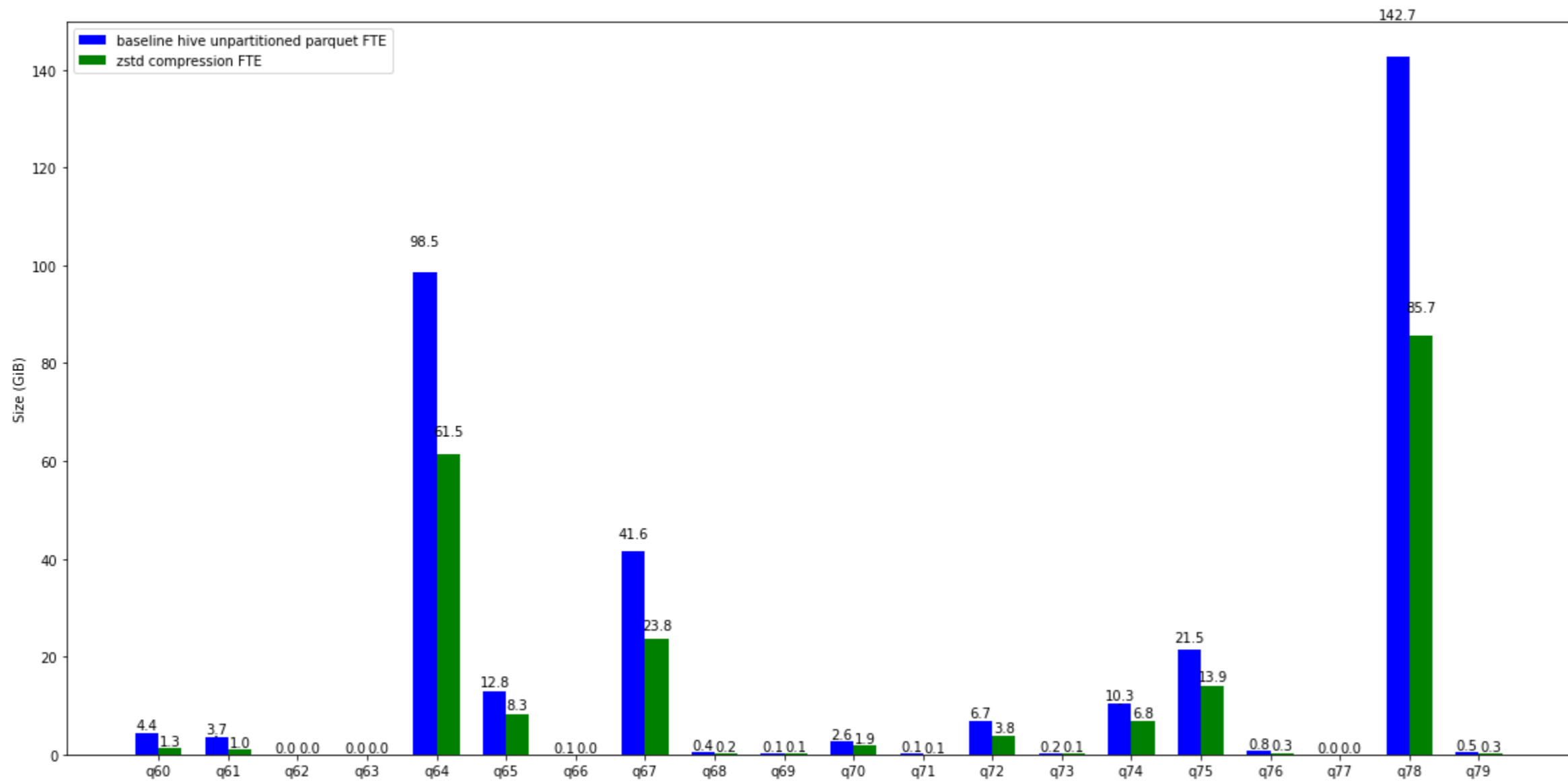
query	baseline hive unpartitioned parquet FTE mean	baseline hive unpartitioned parquet FTE std.dev	zstd compression FTE mean	zstd compression FTE std.dev
18 presto/tpch: q19	5.341 GiB	699.991 KiB	3.243 GiB	4.754 MiB
19 presto/tpch: q20	20.326 GiB	4.849 MiB	11.721 GiB	3.989 MiB
20 presto/tpch: q21	76.473 GiB	8.921 MiB	44.469 GiB	11.154 MiB
21 presto/tpch: q22	8.566 GiB	141.164 KiB	6.364 GiB	104.826 KiB

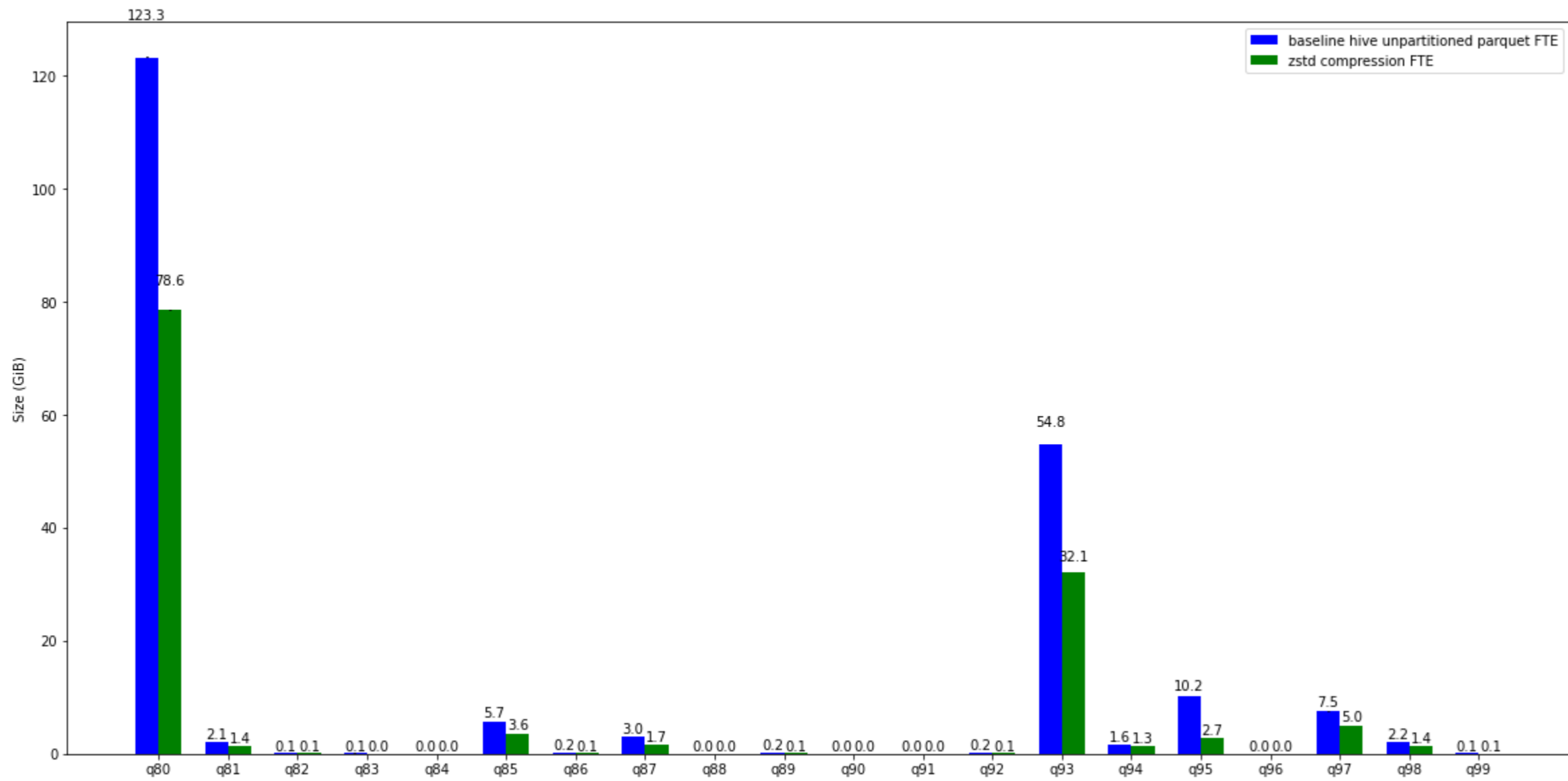
TPC-DS Comparison (internalNetworkInputDataSize GB)











query	baseline hive unpartitioned parquet FTE mean	baseline hive unpartitioned parquet FTE std.dev	zstd compression FTE mean	zstd compression FTE std.dev
0 presto/tpcds: q01	1.482 GiB	164.619 KiB	0.952 GiB	65.771 KiB
1 presto/tpcds: q02	251.157 MiB	1.676 MiB	135.084 MiB	1.718 MiB
2 presto/tpcds: q03	26.411 MiB	98.488 KiB	21.234 MiB	215.400 KiB
3 presto/tpcds: q04	44.815 GiB	2.760 MiB	30.697 GiB	2.738 MiB
4 presto/tpcds: q05	19.065 GiB	819.968 KiB	10.611 GiB	1.566 MiB
5 presto/tpcds: q06	440.251 MiB	223.804 KiB	262.472 MiB	68.796 KiB
6 presto/tpcds: q07	690.523 MiB	171.720 KiB	289.547 MiB	299.527 KiB
7 presto/tpcds: q08	521.763 MiB	325.516 KiB	363.433 MiB	217.057 KiB
8 presto/tpcds: q09	3.297 MiB	2.787 KiB	3.294 MiB	3.287 KiB
9 presto/tpcds: q10	115.587 MiB	347.501 KiB	76.944 MiB	323.686 KiB
10 presto/tpcds: q11	17.893 GiB	2.826 MiB	11.839 GiB	2.241 MiB
11 presto/tpcds: q12	0.922 GiB	3.717 MiB	615.649 MiB	1.884 MiB
12 presto/tpcds: q13	8.371 GiB	16.837 MiB	3.080 GiB	136.428 YiB
13 presto/tpcds: q14	7.513 GiB	8.035 MiB	4.524 GiB	7.446 MiB
14 presto/tpcds: q15	512.541 MiB	81.993 KiB	317.530 MiB	120.653 KiB
15 presto/tpcds: q16	3.289 GiB	6.293 MiB	2.517 GiB	88.725 KiB
16 presto/tpcds: q17	20.368 GiB	110.614 MiB	15.028 GiB	44.689 MiB
17 presto/tpcds: q18	3.750 GiB	8.012 MiB	2.584 GiB	5.764 MiB

	query	baseline	hive unpartitioned	parquet FTE mean	baseline	hive unpartitioned	parquet FTE std.dev	zstd compression	FTE mean	zstd compression	FTE std.dev
18	presto/tpcds: q19			333.593 MiB			276.442 KiB		210.730 MiB		254.443 KiB
19	presto/tpcds: q20			1.544 GiB			3.943 MiB		1.005 GiB		1.884 MiB
20	presto/tpcds: q21			24.137 MiB			0		15.123 MiB		50.200 KiB
21	presto/tpcds: q22			4.087 GiB			2.353 MiB		2.153 GiB		1.173 KiB
22	presto/tpcds: q23			141.443 GiB			11.366 MiB		87.570 GiB		17.201 MiB
23	presto/tpcds: q24			11.939 GiB			2.720 MiB		7.294 GiB		8.302 MiB
24	presto/tpcds: q25			9.881 GiB			32.367 MiB		7.222 GiB		40.803 MiB
25	presto/tpcds: q26			535.297 MiB			1.378 MiB		213.629 MiB		81.872 KiB
26	presto/tpcds: q27			60.457 MiB			169.235 KiB		36.387 MiB		151.287 KiB
27	presto/tpcds: q28			644.842 MiB			938.501 KiB		386.614 MiB		1.285 MiB
28	presto/tpcds: q29			10.931 GiB			19.020 MiB		7.937 GiB		35.096 MiB
29	presto/tpcds: q30			1.393 GiB			159.476 KiB		0.933 GiB		16.136 KiB
30	presto/tpcds: q31			2.479 GiB			2.393 MiB		1.676 GiB		3.549 MiB
31	presto/tpcds: q32			349.629 MiB			119.008 KiB		240.787 MiB		20.921 KiB
32	presto/tpcds: q33			5.029 GiB			4.848 MiB		1.552 GiB		398.030 KiB
33	presto/tpcds: q34			222.385 MiB			54.700 KiB		131.214 MiB		121.312 KiB
34	presto/tpcds: q35			1.043 GiB			595.955 KiB		667.530 MiB		557.167 KiB
35	presto/tpcds: q36			516.293 MiB			1.295 MiB		265.829 MiB		52.933 KiB
36	presto/tpcds: q37			15.479 MiB			41.162 KiB		12.933 MiB		5.867 KiB
37	presto/tpcds: q38			2.987 GiB			823.993 KiB		1.724 GiB		1.526 MiB
38	presto/tpcds: q39			320.098 MiB			910.961 KiB		171.700 MiB		178.557 KiB
39	presto/tpcds: q40			17.605 GiB			51.675 MiB		9.299 GiB		33.254 MiB
40	presto/tpcds: q41			25.229 KiB			0		23.133 KiB		0
41	presto/tpcds: q42			13.024 MiB			10.330 KiB		8.090 MiB		13.498 KiB
42	presto/tpcds: q43			46.198 MiB			181.143 KiB		34.547 MiB		216.332 KiB
43	presto/tpcds: q44			189.361 MiB			367.667 KiB		125.562 MiB		677.933 KiB
44	presto/tpcds: q45			601.792 MiB			444.079 KiB		371.028 MiB		306.140 KiB
45	presto/tpcds: q46			672.223 MiB			0.950 MiB		440.987 MiB		712.744 KiB
46	presto/tpcds: q47			11.684 GiB			5.383 MiB		6.468 GiB		6.413 MiB
47	presto/tpcds: q48			8.356 GiB			21.276 MiB		3.073 GiB		6.181 MiB
48	presto/tpcds: q49			906.110 MiB			1.723 MiB		639.070 MiB		1.632 MiB
49	presto/tpcds: q50			53.077 GiB			665.070 KiB		31.920 GiB		2.167 MiB
50	presto/tpcds: q51			7.138 GiB			4.483 MiB		4.694 GiB		8.420 MiB
51	presto/tpcds: q52			38.386 MiB			125.788 KiB		30.071 MiB		146.403 KiB
52	presto/tpcds: q53			69.235 MiB			160.767 KiB		43.645 MiB		83.449 KiB
53	presto/tpcds: q54			198.953 MiB			1.128 KiB		137.293 MiB		3.576 KiB
54	presto/tpcds: q55			34.954 MiB			187.685 KiB		27.397 MiB		105.008 KiB
55	presto/tpcds: q56			3.348 GiB			6.836 MiB		0.949 GiB		1.152 MiB
56	presto/tpcds: q57			6.721 GiB			1.706 MiB		3.837 GiB		6.979 MiB
57	presto/tpcds: q58			1.239 GiB			1.104 MiB		557.782 MiB		1.002 MiB

	query	baseline	hive unpartitioned	parquet FTE mean	baseline	hive unpartitioned	parquet FTE std.dev	zstd compression	FTE mean	zstd compression	FTE std.dev
58	presto/tpcds: q59			5.858 GiB			5.290 MiB		3.516 GiB		6.784 MiB
59	presto/tpcds: q60			4.440 GiB			3.800 MiB		1.284 GiB		422.242 KiB
60	presto/tpcds: q61			3.660 GiB			9.059 MiB		1.027 GiB		54.853 KiB
61	presto/tpcds: q62			24.602 MiB			4.056 KiB		16.575 MiB		2.730 KiB
62	presto/tpcds: q63			42.972 MiB			86.272 KiB		28.971 MiB		182.925 KiB
63	presto/tpcds: q64			98.526 GiB			4.374 MiB		61.495 GiB		5.314 MiB
64	presto/tpcds: q65			12.800 GiB			1.528 MiB		8.269 GiB		1.138 MiB
65	presto/tpcds: q66			59.320 MiB			507.838 KiB		33.493 MiB		633.165 KiB
66	presto/tpcds: q67			41.636 GiB			3.078 MiB		23.753 GiB		1.482 MiB
67	presto/tpcds: q68			385.073 MiB			26.754 KiB		241.578 MiB		70.281 KiB
68	presto/tpcds: q69			139.273 MiB			350.735 KiB		89.829 MiB		215.162 KiB
69	presto/tpcds: q70			2.635 GiB			65.699 KiB		1.882 GiB		155.074 KiB
70	presto/tpcds: q71			106.701 MiB			429.651 KiB		66.250 MiB		181.978 KiB
71	presto/tpcds: q72			6.733 GiB			203.744 KiB		3.771 GiB		591.270 KiB
72	presto/tpcds: q73			219.802 MiB			53.688 KiB		129.235 MiB		146.770 KiB
73	presto/tpcds: q74			10.281 GiB			3.302 MiB		6.774 GiB		4.846 MiB
74	presto/tpcds: q75			21.479 GiB			5.149 MiB		13.948 GiB		1.070 MiB
75	presto/tpcds: q76			807.863 MiB			1.866 MiB		353.458 MiB		703.682 KiB
76	presto/tpcds: q77			38.894 MiB			422.472 KiB		33.976 MiB		414.505 KiB
77	presto/tpcds: q78			142.664 GiB			4.953 MiB		85.728 GiB		5.747 MiB
78	presto/tpcds: q79			464.326 MiB			256.381 KiB		320.035 MiB		507.813 KiB
79	presto/tpcds: q80			123.282 GiB			143.963 MiB		78.572 GiB		128.368 MiB
80	presto/tpcds: q81			2.084 GiB			255.493 KiB		1.392 GiB		418.216 KiB
81	presto/tpcds: q82			89.728 MiB			180.633 KiB		75.348 MiB		61.490 KiB
82	presto/tpcds: q83			73.728 MiB			648.112 KiB		46.261 MiB		244.153 KiB
83	presto/tpcds: q84			24.318 MiB			1.284 KiB		17.543 MiB		192.739 KiB
84	presto/tpcds: q85			5.693 GiB			740.553 YiB		3.610 GiB		18.924 KiB
85	presto/tpcds: q86			253.555 MiB			1.254 MiB		129.824 MiB		512.014 KiB
86	presto/tpcds: q87			2.987 GiB			0.918 MiB		1.725 GiB		1.165 MiB
87	presto/tpcds: q88			30.356 MiB			51.365 KiB		13.507 MiB		18.838 KiB
88	presto/tpcds: q89			198.334 MiB			240.607 KiB		120.485 MiB		375.603 KiB
89	presto/tpcds: q90			7.166 MiB			28.848 KiB		2.631 MiB		6.213 KiB
90	presto/tpcds: q91			43.568 MiB			2.011 KiB		28.330 MiB		6.567 KiB
91	presto/tpcds: q92			186.213 MiB			260.973 KiB		127.843 MiB		110.724 KiB
92	presto/tpcds: q93			54.824 GiB			300.886 KiB		32.065 GiB		0.950 MiB
93	presto/tpcds: q94			1.592 GiB			6.962 MiB		1.316 GiB		6.610 MiB
94	presto/tpcds: q95			10.241 GiB			311.874 KiB		2.718 GiB		669.372 KiB
95	presto/tpcds: q96			2.687 MiB			240.395 YiB		1.218 MiB		42.832 YiB
96	presto/tpcds: q97			7.463 GiB			1.184 MiB		5.000 GiB		1.572 MiB
97	presto/tpcds: q98			2.160 GiB			3.306 MiB		1.421 GiB		3.172 MiB

query	baseline hive unpartitioned parquet FTE mean	baseline hive unpartitioned parquet FTE std.dev	zstd compression FTE mean	zstd compression FTE std.dev
98 presto/tpcds: q99	79.641 MiB	260.259 KiB	52.208 MiB	233.443 KiB