

Out [36]: [Show Code](#)

## Overall Metric Sums

	label	TPCH wall time	TPC-DS wall time	TPCH CPU time	TPC-DS CPU time	TPCH peak memory	TPC-DS peak memory
0	base_orc_part	543.442167	996.182667	58642.900000	108547.746667	1.196 TiB	1.013 TiB
1	after_orc_part	540.630333	974.831500	57442.200000	106166.982000	1.173 TiB	0.941 TiB
2	base_orc_unpart	523.373667	1469.622500	56398.500000	190191.166000	569.620 GiB	0.992 TiB
3	after_orc_unpart	523.800167	1448.382000	55687.300000	186133.298333	552.601 GiB	0.920 TiB

## Tags

	Tag	Label	Color
0	220525-oss-382-S-fcfd210880-hive_sf1000_orc_part-s599	base_orc_part	c
1	test-oss-383-S-cf29082c87-hive_sf1000_orc_part-s635	after_orc_part	orange
2	220522-oss-382-S-cb1889063b-hive_sf1000_orc_unpart-s586	base_orc_unpart	m
3	220529-oss-383-S-cf29082c87-hive_sf1000_orc_unpart-s628	after_orc_unpart	y

## FAILED QUERIES

### base\_orc\_part

benchmark query mean\_duration std\_dev

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### after\_orc\_part

benchmark query mean\_duration std\_dev

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### base\_orc\_unpart

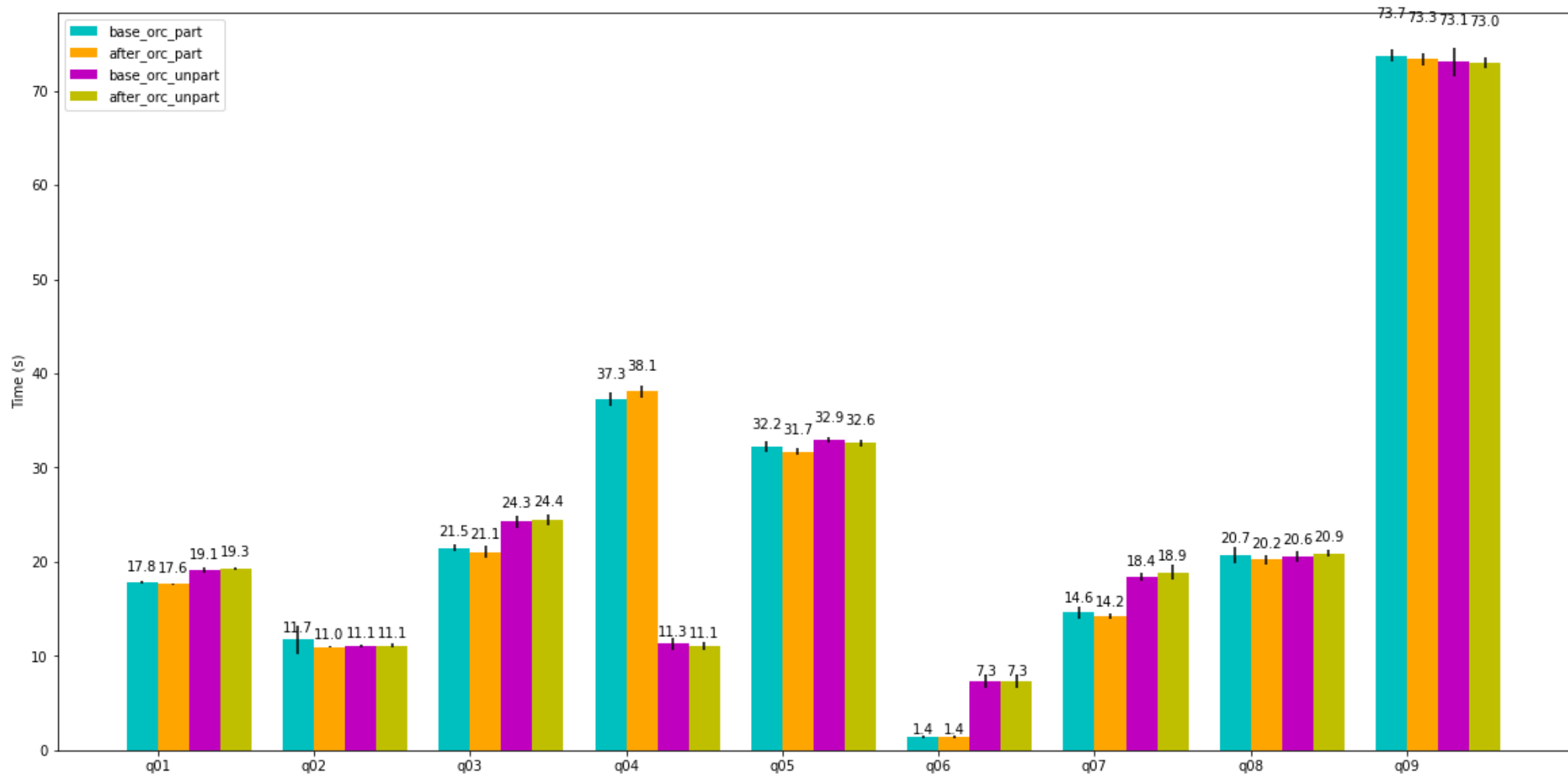
benchmark query mean\_duration std\_dev

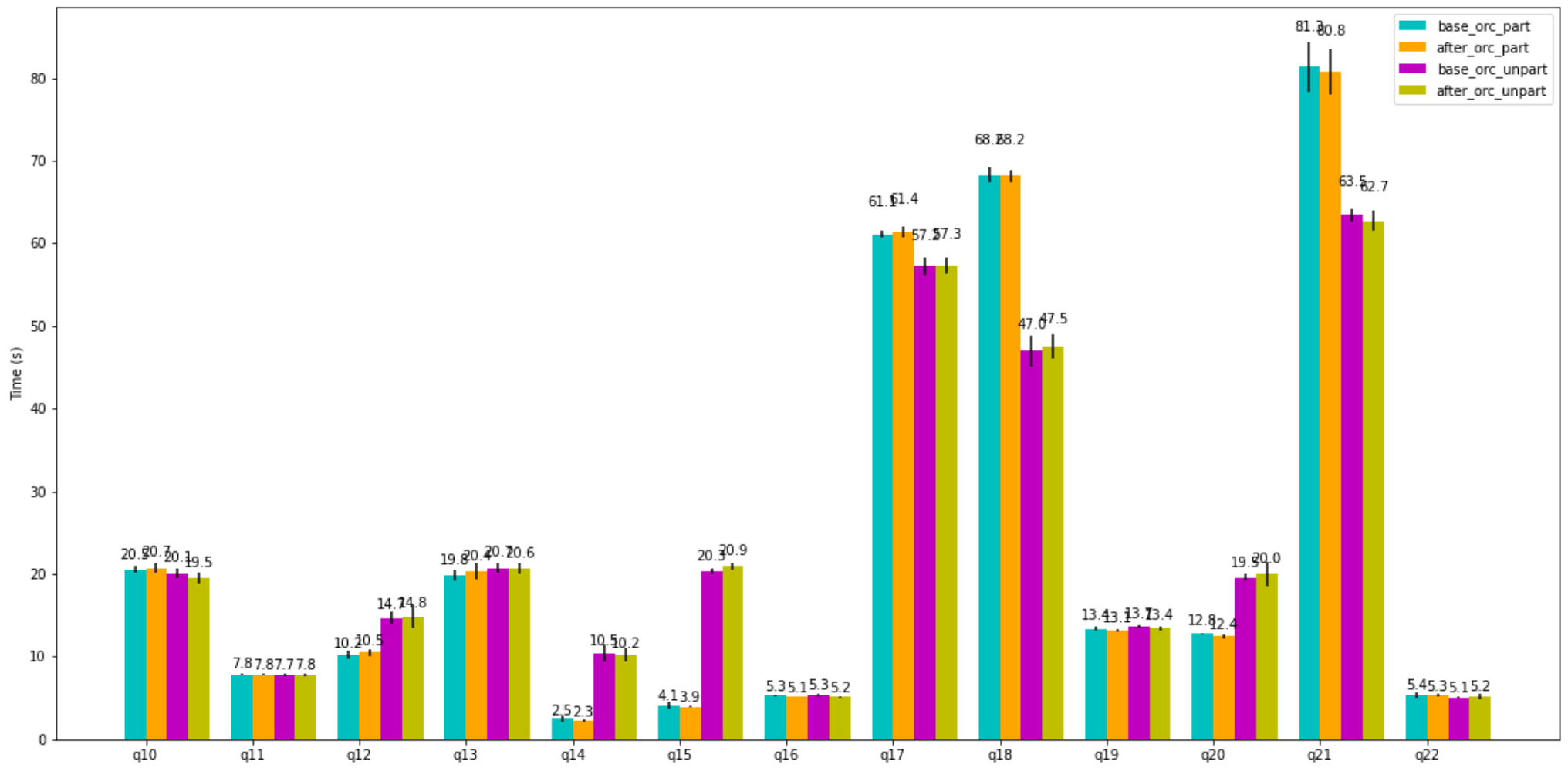
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after\_orc\_unpart

benchmark query mean\_duration std\_dev

## TPC-H Comparison (DURATION)



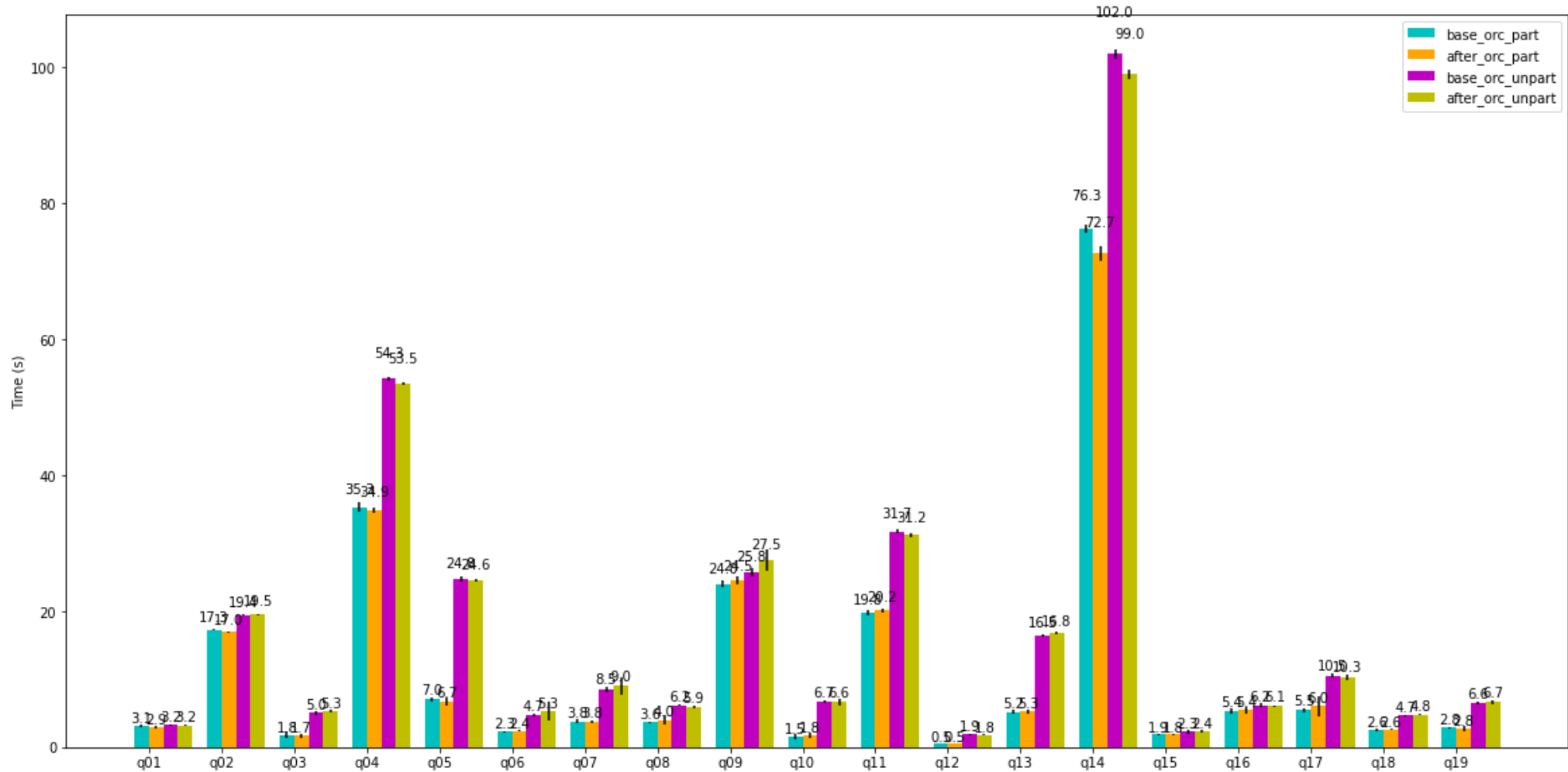


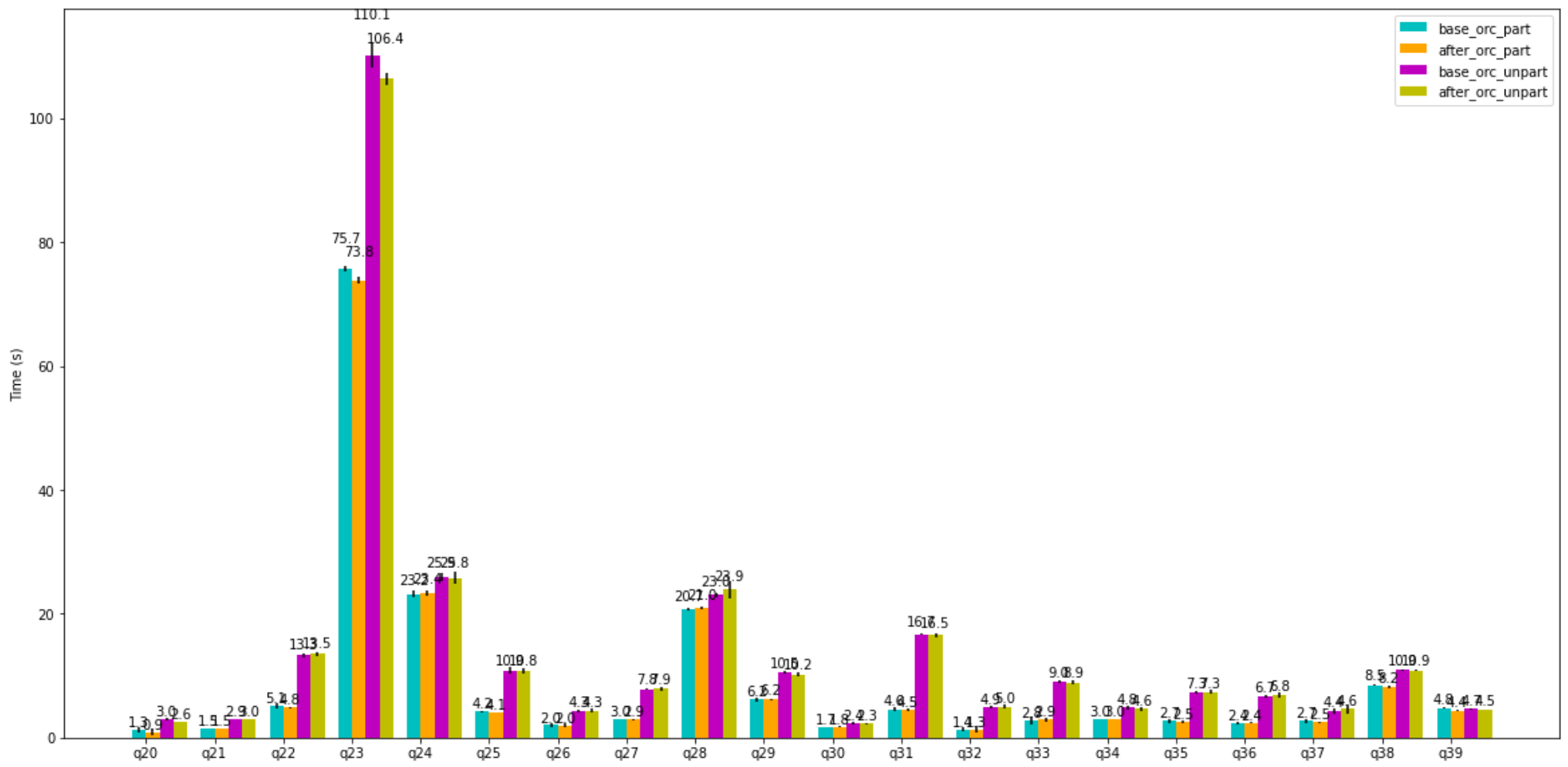
	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
0	presto/tpch: q01	17.776667	0.132823	17.626333	0.108762	19.126500	0.230071	19.281333	0.188496
1	presto/tpch: q02	11.706667	1.527466	10.972500	0.101342	11.090500	0.130195	11.119667	0.184246
2	presto/tpch: q03	21.455000	0.358797	21.055333	0.633953	24.279167	0.651404	24.413667	0.598498
3	presto/tpch: q04	37.272667	0.745223	38.106833	0.658918	11.284167	0.676016	11.084667	0.428835

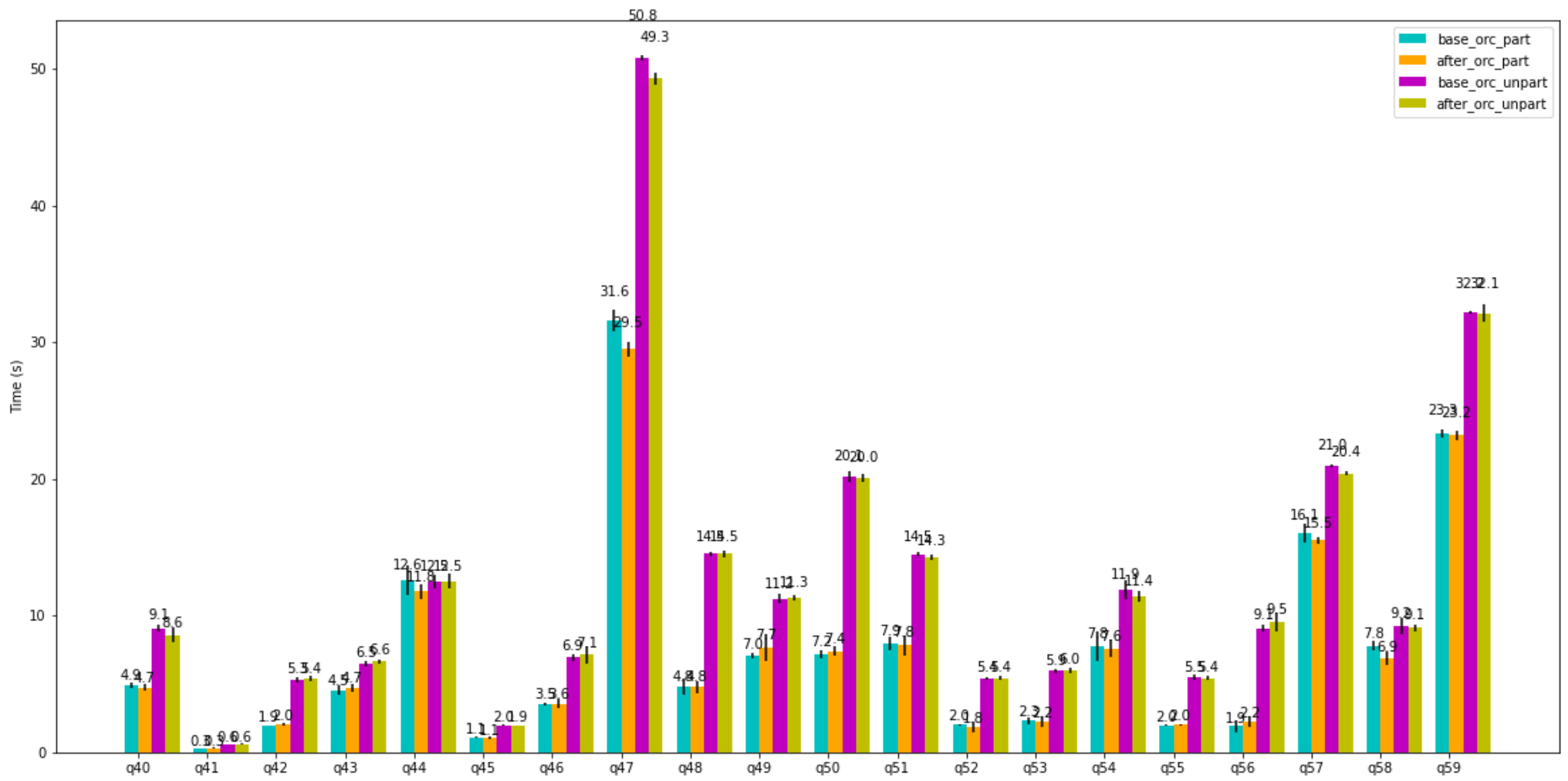
	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
4	presto/tpch: q05	32.219333	0.554637	31.715333	0.379959	32.946333	0.328902	32.628333	0.365974
5	presto/tpch: q06	1.369333	0.145666	1.419333	0.171589	7.326333	0.735602	7.316000	0.666347
6	presto/tpch: q07	14.619833	0.656843	14.245333	0.277637	18.442500	0.459072	18.887667	0.795960
7	presto/tpch: q08	20.663833	0.847954	20.202333	0.489440	20.565167	0.551858	20.858833	0.357444
8	presto/tpch: q09	73.749000	0.593058	73.336333	0.603040	73.053167	1.490076	72.978167	0.630775
9	presto/tpch: q10	20.520667	0.399211	20.729000	0.581607	20.082167	0.639624	19.491667	0.667205
10	presto/tpch: q11	7.836000	0.085527	7.802000	0.075929	7.743833	0.172617	7.778000	0.113956
11	presto/tpch: q12	10.210167	0.445318	10.527833	0.393626	14.678667	0.746990	14.847500	1.426025
12	presto/tpch: q13	19.849167	0.668778	20.361333	0.941371	20.703500	0.615012	20.602167	0.664646
13	presto/tpch: q14	2.525333	0.368332	2.266167	0.117488	10.456167	1.024192	10.228333	0.812284
14	presto/tpch: q15	4.105833	0.355812	3.939667	0.126759	20.318667	0.348550	20.909000	0.475238
15	presto/tpch: q16	5.319333	0.102950	5.145500	0.036768	5.326000	0.198279	5.152167	0.101089
16	presto/tpch: q17	61.101333	0.396420	61.421333	0.633372	57.217833	1.065453	57.321000	0.946540
17	presto/tpch: q18	68.236333	0.892791	68.165500	0.719201	46.981167	1.893899	47.516500	1.464790
18	presto/tpch: q19	13.395500	0.307331	13.106667	0.175166	13.667333	0.195554	13.443167	0.254729
19	presto/tpch: q20	12.814000	0.089302	12.437833	0.281439	19.544167	0.438357	20.004833	1.398553

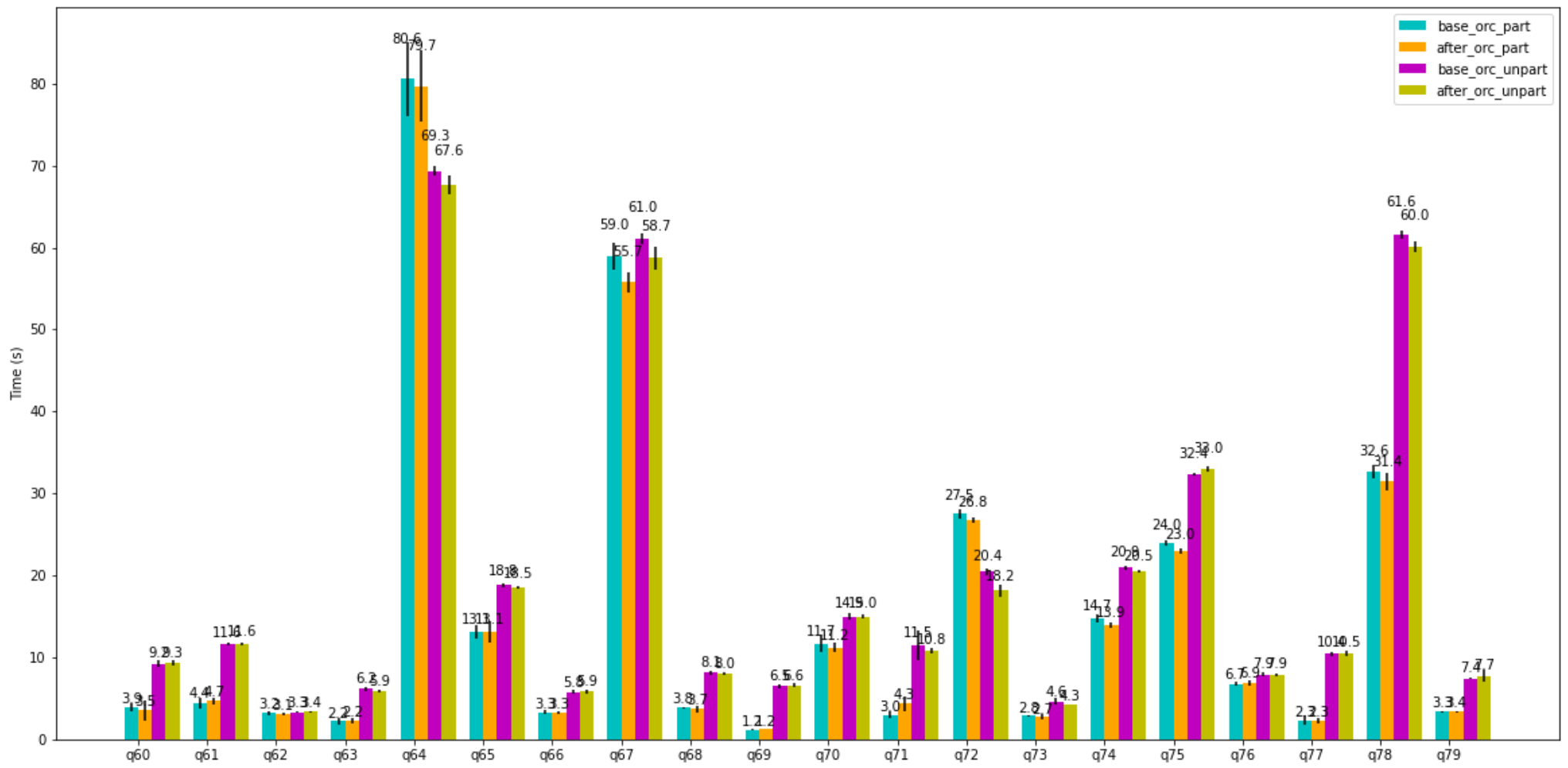
	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
20	presto/tpch: q21	81.323667	2.998508	80.779333	2.769676	63.464667	0.732385	62.742667	1.221205
21	presto/tpch: q22	5.372500	0.324414	5.268500	0.165517	5.075667	0.122691	5.194833	0.270606

## TPC-DS Comparison (DURATION)

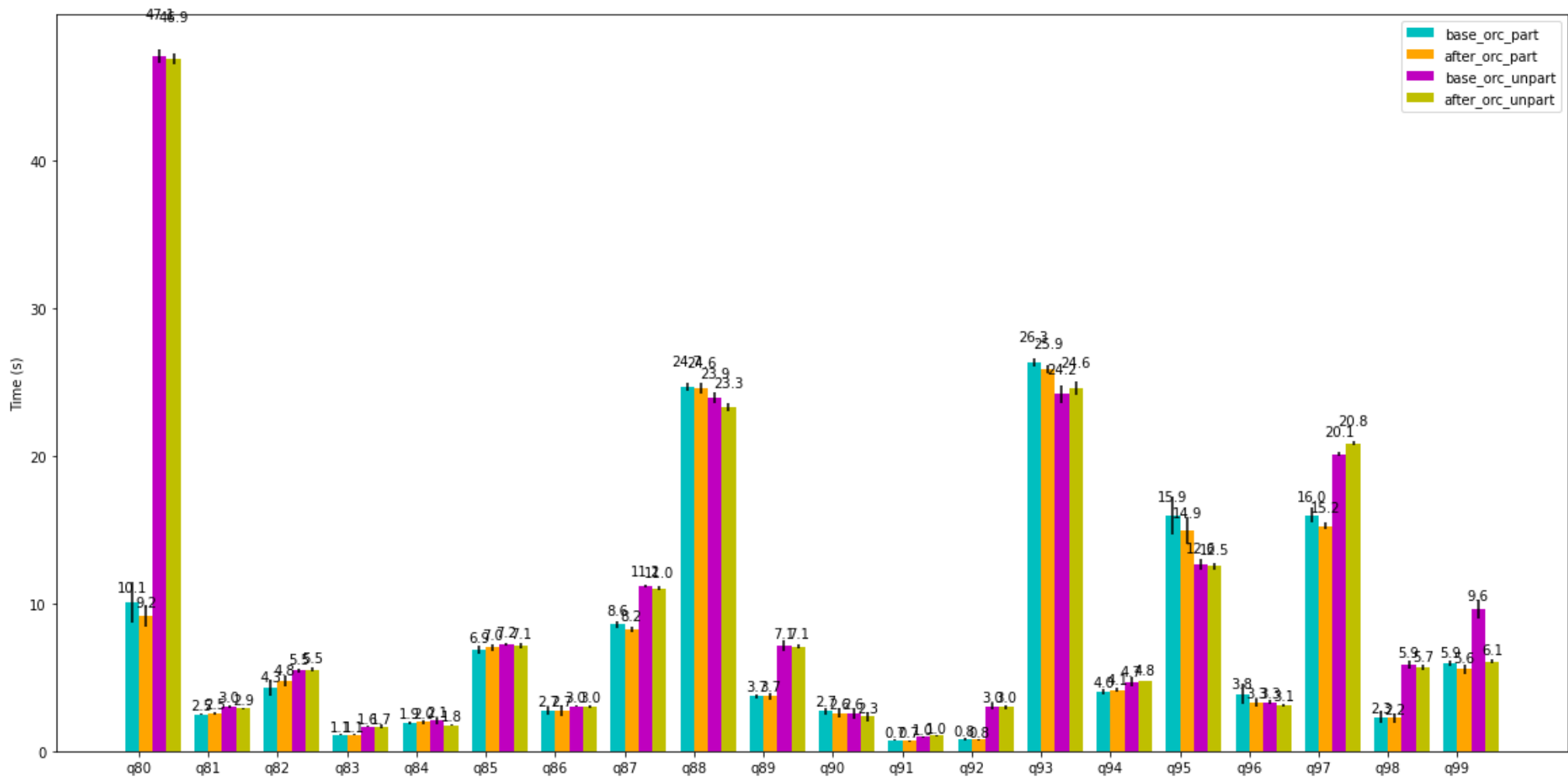












query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
0 presto/tpcds: q01	3.061333	0.178940	2.946833	0.141839	3.239500	0.112183	3.215167	0.081859
1 presto/tpcds: q02	17.263500	0.092238	16.961667	0.089728	19.424333	0.088213	19.510500	0.074315
2 presto/tpcds: q03	1.808667	0.438824	1.688333	0.272356	5.018333	0.206740	5.262333	0.201955
3 presto/tpcds: q04	35.277333	0.675131	34.896833	0.445088	54.256667	0.324385	53.474167	0.245615

	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
4	presto/tpcds: q05	7.015000	0.353617	6.703000	0.601011	24.776167	0.386406	24.568000	0.151937
5	presto/tpcds: q06	2.332000	0.095260	2.351500	0.098571	4.737000	0.194844	5.252333	1.401149
6	presto/tpcds: q07	3.824833	0.294127	3.779333	0.190389	8.485000	0.377104	9.024000	1.291903
7	presto/tpcds: q08	3.634000	0.064153	4.020667	0.767554	6.171500	0.135561	5.906000	0.206439
8	presto/tpcds: q09	23.992667	0.485001	24.515667	0.598126	25.786167	0.596299	27.509667	1.613323
9	presto/tpcds: q10	1.524667	0.368009	1.815667	0.381657	6.681333	0.194956	6.630833	0.496483
10	presto/tpcds: q11	19.768667	0.451308	20.162167	0.305269	31.728167	0.303968	31.205500	0.257672
11	presto/tpcds: q12	0.504833	0.032183	0.490167	0.022391	1.921167	0.091219	1.808500	0.044406
12	presto/tpcds: q13	5.192500	0.239982	5.263833	0.296840	16.495500	0.188978	16.774333	0.203937
13	presto/tpcds: q14	76.329000	0.639669	72.654833	1.113520	102.017667	0.637284	99.023167	0.766630
14	presto/tpcds: q15	1.856000	0.096650	1.847500	0.051099	2.304333	0.270455	2.419667	0.212360
15	presto/tpcds: q16	5.353333	0.439381	5.434167	0.514917	6.195000	0.234664	6.080167	0.107298
16	presto/tpcds: q17	5.482833	0.302481	6.017833	1.508152	10.518500	0.294515	10.320333	0.376000
17	presto/tpcds: q18	2.557167	0.266694	2.577500	0.068217	4.655833	0.105241	4.772000	0.091771
18	presto/tpcds: q19	2.843333	0.056309	2.757000	0.393006	6.557500	0.169715	6.686833	0.307662
19	presto/tpcds: q20	1.254000	0.502478	0.919833	0.499741	2.973833	0.300329	2.613333	0.030533

	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
20	presto/tpcds: q21	1.529333	0.030415	1.459667	0.019190	2.933333	0.042599	2.956500	0.057594
21	presto/tpcds: q22	5.051500	0.437208	4.827500	0.139911	13.344667	0.296847	13.495500	0.327946
22	presto/tpcds: q23	75.717833	0.390688	73.764000	0.529111	110.103500	1.931821	106.358667	0.939357
23	presto/tpcds: q24	23.156333	0.539542	23.360333	0.458101	25.898667	0.640758	25.813833	0.904730
24	presto/tpcds: q25	4.197833	0.170164	4.069833	0.071787	10.870833	0.550347	10.772167	0.360022
25	presto/tpcds: q26	2.042833	0.283410	1.962833	0.279924	4.316667	0.264892	4.344833	0.311893
26	presto/tpcds: q27	2.978333	0.096056	2.900833	0.192787	7.845333	0.043316	7.903333	0.322009
27	presto/tpcds: q28	20.746833	0.242689	20.990000	0.244079	23.046667	0.332955	23.886500	1.462644
28	presto/tpcds: q29	6.159500	0.340721	6.199167	0.116288	10.478000	0.239636	10.170833	0.335831
29	presto/tpcds: q30	1.656167	0.013363	1.759500	0.162512	2.362000	0.234674	2.273667	0.080348
30	presto/tpcds: q31	4.591000	0.335967	4.515833	0.292808	16.721333	0.181616	16.535833	0.271910
31	presto/tpcds: q32	1.357500	0.401807	1.342000	0.472733	4.925500	0.275856	5.009167	0.300072
32	presto/tpcds: q33	2.827333	0.689075	2.899000	0.399554	9.006500	0.210875	8.852167	0.323041
33	presto/tpcds: q34	2.999333	0.034529	2.952500	0.024139	4.845833	0.384622	4.644167	0.306180
34	presto/tpcds: q35	2.709167	0.289728	2.504333	0.202541	7.336167	0.248389	7.330000	0.332273
35	presto/tpcds: q36	2.358833	0.153230	2.402667	0.127953	6.670000	0.220883	6.832167	0.396788

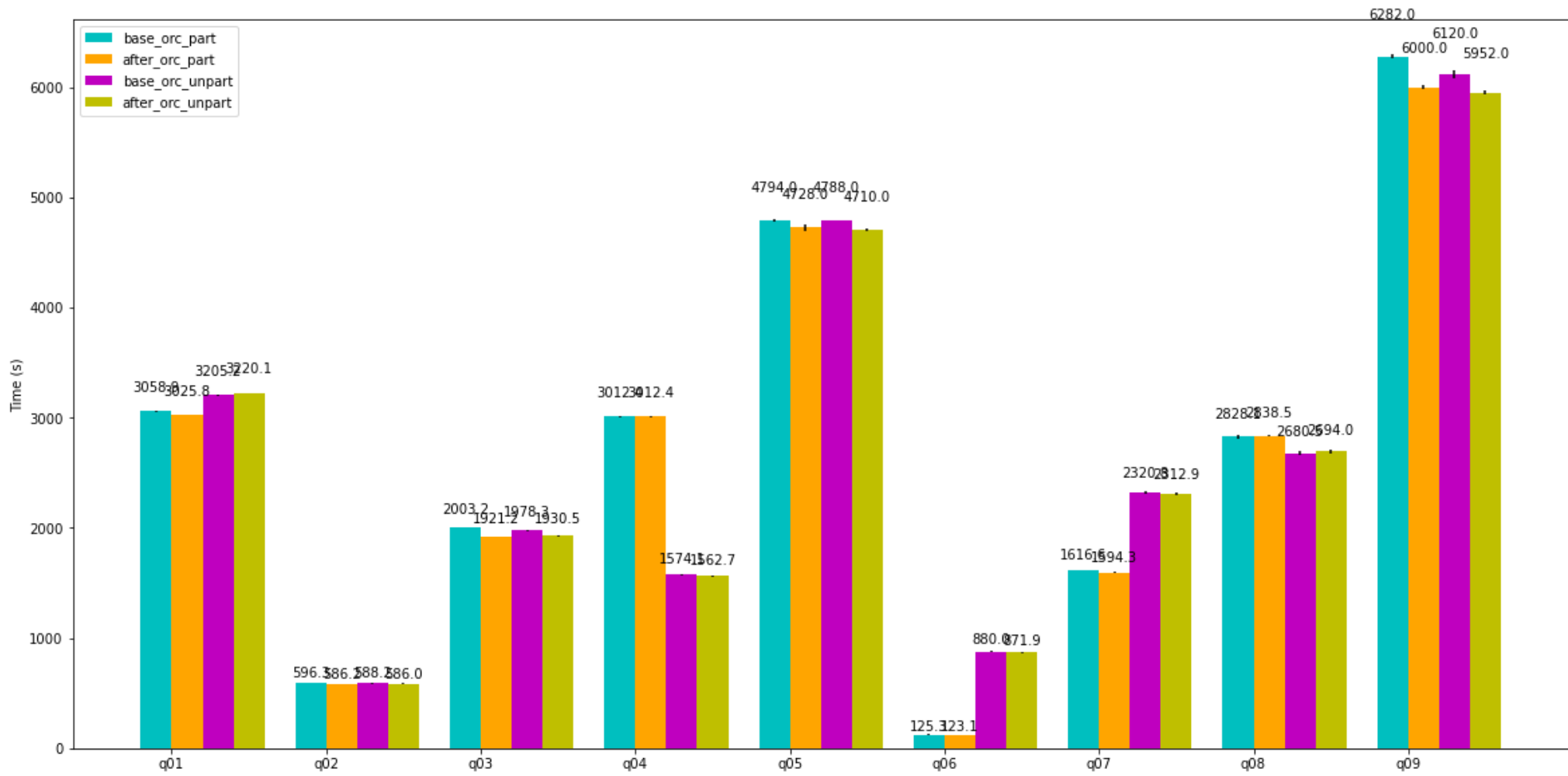
	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
36	presto/tpcds: q37	2.742500	0.298045	2.476500	0.065111	4.381167	0.428462	4.640667	0.748840
37	presto/tpcds: q38	8.494333	0.204400	8.160167	0.131772	10.907333	0.183882	10.874000	0.139004
38	presto/tpcds: q39	4.758167	0.138019	4.367000	0.049872	4.694167	0.118209	4.522333	0.061921
39	presto/tpcds: q40	4.907000	0.177911	4.727333	0.265085	9.054333	0.247531	8.571333	0.546300
40	presto/tpcds: q41	0.272667	0.002422	0.292000	0.042807	0.577833	0.036723	0.585167	0.043301
41	presto/tpcds: q42	1.940167	0.033066	2.018333	0.089558	5.309667	0.233248	5.386833	0.205487
42	presto/tpcds: q43	4.543833	0.332094	4.695333	0.267027	6.478667	0.162439	6.638000	0.178919
43	presto/tpcds: q44	12.580333	1.055118	11.757000	0.504844	12.460167	0.493180	12.520000	0.524221
44	presto/tpcds: q45	1.097000	0.033841	1.061333	0.052302	1.987667	0.062800	1.942333	0.033898
45	presto/tpcds: q46	3.544167	0.071208	3.568500	0.324891	6.927833	0.275641	7.121833	0.643665
46	presto/tpcds: q47	31.615333	0.789731	29.500000	0.523319	50.824000	0.172374	49.302167	0.424583
47	presto/tpcds: q48	4.780667	0.580345	4.761833	0.482439	14.539667	0.135964	14.524833	0.255220
48	presto/tpcds: q49	7.045000	0.186126	7.689833	0.995764	11.247833	0.345290	11.307667	0.226368
49	presto/tpcds: q50	7.177500	0.307373	7.415000	0.301226	20.143667	0.403628	20.037833	0.297750
50	presto/tpcds: q51	7.928667	0.498530	7.831167	0.739120	14.491167	0.121188	14.289833	0.185779
51	presto/tpcds: q52	2.015000	0.039299	1.834000	0.407654	5.400333	0.130852	5.441167	0.145056

	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
52	presto/tpcds: q53	2.314167	0.264081	2.246500	0.348463	5.944500	0.183770	5.959167	0.189134
53	presto/tpcds: q54	7.760167	1.083434	7.586000	0.626443	11.911333	0.676075	11.440833	0.394834
54	presto/tpcds: q55	1.989500	0.042599	2.016000	0.037937	5.468333	0.184553	5.439667	0.156103
55	presto/tpcds: q56	1.902833	0.472726	2.224667	0.390359	9.075000	0.265021	9.490167	0.693043
56	presto/tpcds: q57	16.059167	0.691829	15.496167	0.200170	20.955667	0.100842	20.405667	0.168724
57	presto/tpcds: q58	7.790500	0.357061	6.884667	0.461542	9.233667	0.583800	9.117667	0.239024
58	presto/tpcds: q59	23.345833	0.267808	23.181500	0.332420	32.183667	0.135030	32.133833	0.671322
59	presto/tpcds: q60	3.869000	0.531388	3.534667	1.194030	9.222167	0.364725	9.272833	0.342233
60	presto/tpcds: q61	4.427667	0.643953	4.655667	0.435741	11.583333	0.171428	11.630333	0.213836
61	presto/tpcds: q62	3.233667	0.242193	3.139333	0.162208	3.333500	0.050942	3.379000	0.074761
62	presto/tpcds: q63	2.198667	0.351764	2.246167	0.272340	6.185333	0.226178	5.872833	0.121246
63	presto/tpcds: q64	80.551333	4.490844	79.693333	4.297003	69.346000	0.621029	67.608000	1.155027
64	presto/tpcds: q65	13.143000	0.824962	13.123500	1.311877	18.796667	0.243969	18.476167	0.147068
65	presto/tpcds: q66	3.303000	0.258431	3.299000	0.177253	5.770833	0.198625	5.865167	0.231549
66	presto/tpcds: q67	58.989833	1.668491	55.744167	1.243769	61.033000	0.620956	58.727167	1.373696
67	presto/tpcds: q68	3.837500	0.105016	3.678500	0.375259	8.127000	0.232045	7.980000	0.135954

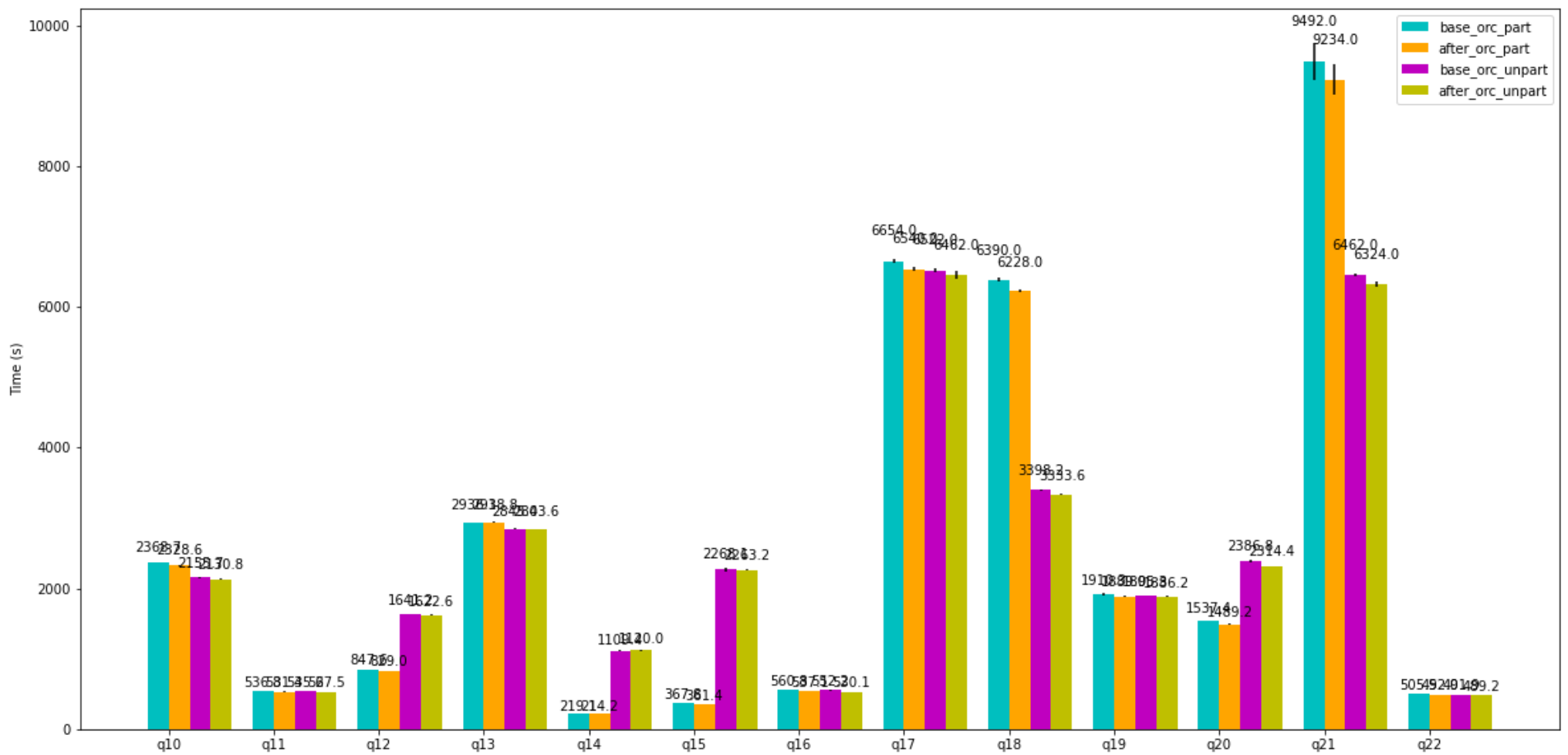
	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
68	presto/tpcds: q69	1.194333	0.055511	1.245333	0.028381	6.525833	0.249981	6.565667	0.252762
69	presto/tpcds: q70	11.703500	1.032744	11.171500	0.587391	14.946833	0.399750	14.952167	0.249747
70	presto/tpcds: q71	3.004667	0.338042	4.322667	0.906815	11.512833	1.806189	10.788000	0.278296
71	presto/tpcds: q72	27.510333	0.605482	26.768167	0.294668	20.442167	0.423013	18.152667	0.772828
72	presto/tpcds: q73	2.849333	0.034967	2.697000	0.321408	4.585667	0.392536	4.254167	0.037833
73	presto/tpcds: q74	14.704333	0.524858	13.916333	0.286794	20.919833	0.204688	20.494167	0.203380
74	presto/tpcds: q75	23.986833	0.292403	22.956167	0.266852	32.394333	0.174555	32.983667	0.316111
75	presto/tpcds: q76	6.729667	0.222056	6.879667	0.323644	7.914167	0.303137	7.915833	0.169415
76	presto/tpcds: q77	2.338833	0.512326	2.273167	0.314112	10.410500	0.273659	10.487667	0.265719
77	presto/tpcds: q78	32.639000	0.764057	31.426833	0.995184	61.586833	0.441568	60.035667	0.634069
78	presto/tpcds: q79	3.335000	0.082743	3.351000	0.051954	7.402667	0.108594	7.742500	0.793992
79	presto/tpcds: q80	10.091667	1.373109	9.179167	0.760527	47.061167	0.461821	46.897167	0.388020
80	presto/tpcds: q81	2.496667	0.042070	2.549500	0.065790	3.016333	0.101795	2.876000	0.073585
81	presto/tpcds: q82	4.296833	0.524587	4.750000	0.394078	5.456667	0.141220	5.528333	0.111545
82	presto/tpcds: q83	1.094500	0.044357	1.127000	0.067906	1.642667	0.040554	1.656833	0.123378
83	presto/tpcds: q84	1.937333	0.100456	1.981667	0.138311	2.055000	0.205322	1.767167	0.071079

	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
84	presto/tpcds: q85	6.860667	0.256487	7.020500	0.243509	7.223333	0.112582	7.134167	0.152229
85	presto/tpcds: q86	2.738833	0.287562	2.717667	0.392429	3.048833	0.077432	3.009000	0.069877
86	presto/tpcds: q87	8.569333	0.255545	8.247667	0.224159	11.163667	0.098435	11.030333	0.124646
87	presto/tpcds: q88	24.656333	0.294427	24.610167	0.351362	23.917667	0.343556	23.304333	0.248022
88	presto/tpcds: q89	3.739500	0.135920	3.710500	0.199843	7.146167	0.355037	7.088333	0.115483
89	presto/tpcds: q90	2.719333	0.229227	2.589167	0.315537	2.569333	0.348177	2.342333	0.297164
90	presto/tpcds: q91	0.742667	0.026235	0.704333	0.041979	0.958833	0.016869	1.039833	0.066707
91	presto/tpcds: q92	0.806167	0.077200	0.774500	0.077668	3.040833	0.211865	2.979167	0.124292
92	presto/tpcds: q93	26.309833	0.273022	25.871000	0.300756	24.188000	0.621492	24.616833	0.465824
93	presto/tpcds: q94	4.016000	0.155824	4.135167	0.128677	4.702000	0.356357	4.758500	0.031615
94	presto/tpcds: q95	15.923167	1.274537	14.930333	0.904449	12.649333	0.393452	12.538500	0.223667
95	presto/tpcds: q96	3.849833	0.694364	3.265500	0.283500	3.311167	0.154931	3.115333	0.097773
96	presto/tpcds: q97	15.963333	0.512163	15.245333	0.236979	20.117333	0.151834	20.836667	0.137733
97	presto/tpcds: q98	2.317333	0.438046	2.238000	0.359264	5.868500	0.297647	5.680167	0.185056
98	presto/tpcds: q99	5.944000	0.183078	5.557000	0.329021	9.600000	0.657750	6.070167	0.128862

## TPC-H Comparison (CPU)





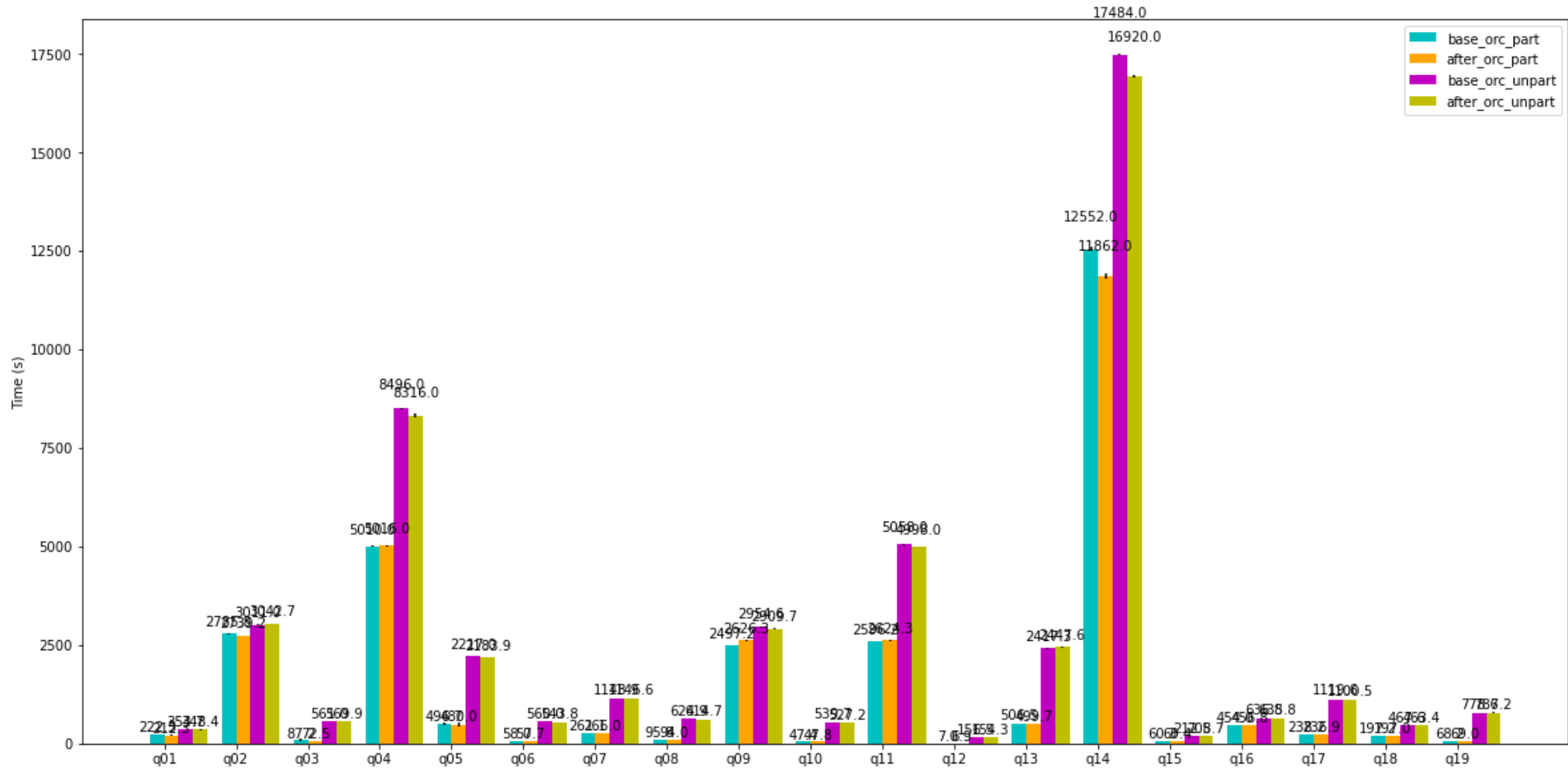


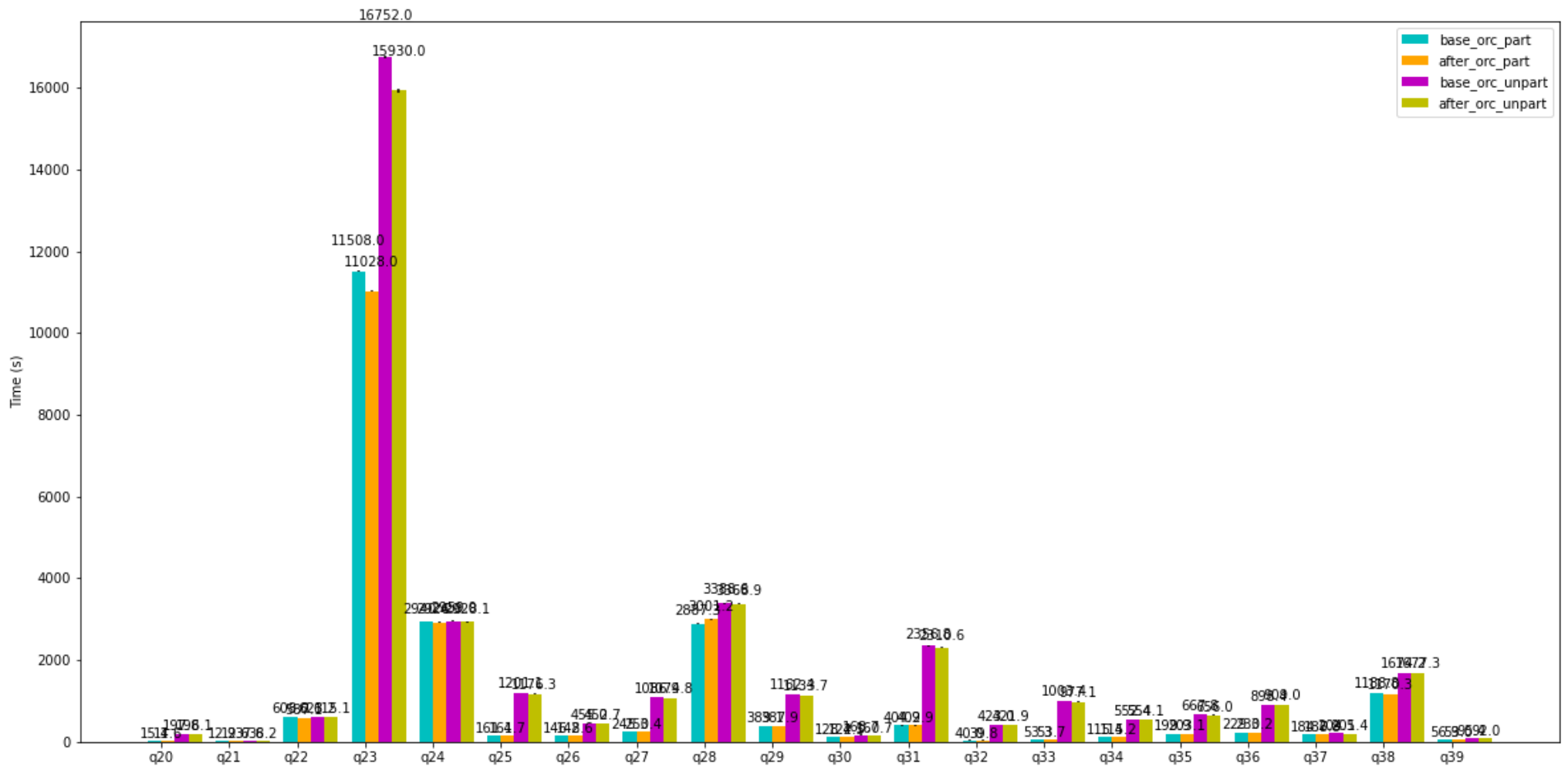
query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
0 presto/tpch: q01	3058.9	4.480625	3025.8	2.839718	3205.2	6.462198	3220.1	2.721029
1 presto/tpch: q02	596.3	1.796664	586.2	1.258571	588.2	2.234278	586.0	2.478709
2 presto/tpch: q03	2003.2	1.995996	1921.2	4.139565	1978.3	5.040238	1930.5	4.549725
3 presto/tpch: q04	3012.4	2.856571	3012.4	3.075061	1574.1	3.077012	1562.7	2.858671

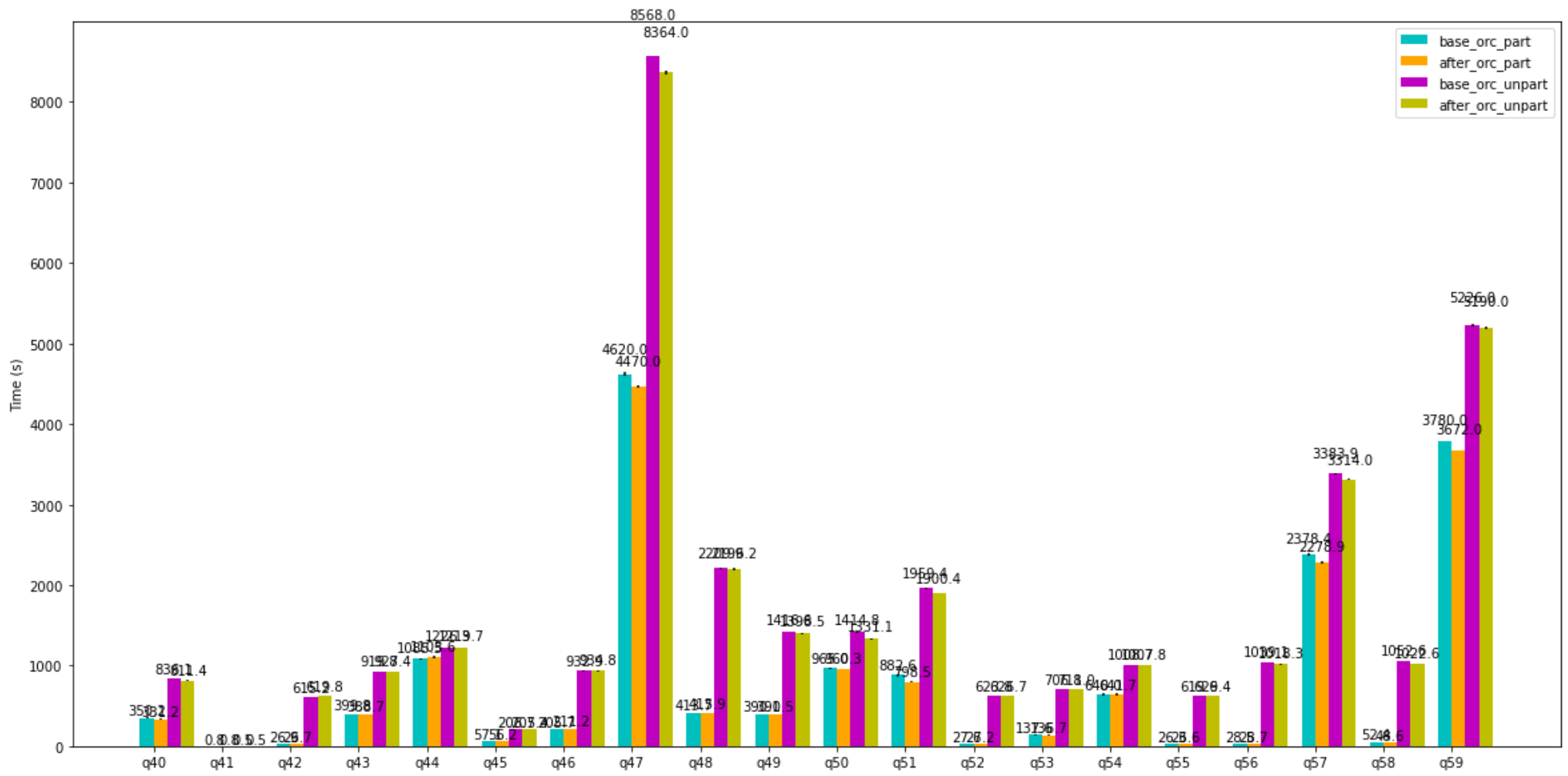
	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
4	presto/tpch: q05	4794.0	14.696938	4728.0	29.393877	4788.0	0.000000	4710.0	14.696938
5	presto/tpch: q06	125.3	0.451664	123.1	0.244949	880.0	3.593327	871.9	6.887380
6	presto/tpch: q07	1616.6	4.579956	1594.3	5.908299	2320.8	11.121870	2312.9	14.377065
7	presto/tpch: q08	2828.1	15.087346	2838.5	7.999750	2680.5	13.686051	2694.0	16.894023
8	presto/tpch: q09	6282.0	19.718012	6000.0	18.590320	6120.0	32.199379	5952.0	18.590320
9	presto/tpch: q10	2368.7	4.576024	2328.6	8.891344	2155.7	7.174120	2130.8	4.354308
10	presto/tpch: q11	536.8	1.806654	531.4	1.922498	535.6	1.453272	527.5	1.672124
11	presto/tpch: q12	847.6	1.806654	829.0	1.179830	1641.2	2.906544	1622.6	4.749737
12	presto/tpch: q13	2936.1	4.289056	2938.8	7.200000	2845.0	7.266361	2843.6	4.337741
13	presto/tpch: q14	219.1	2.824889	214.2	1.258571	1109.4	9.763606	1120.0	8.608833
14	presto/tpch: q15	367.8	0.536656	361.4	0.903327	2268.1	21.403831	2263.2	8.270429
15	presto/tpch: q16	560.8	2.647263	537.1	1.986957	552.2	0.619677	530.1	1.849324
16	presto/tpch: q17	6654.0	27.099815	6540.0	29.393877	6522.0	27.099815	6462.0	59.154036
17	presto/tpch: q18	6390.0	19.718012	6228.0	22.768399	3398.2	9.893028	3333.6	6.383729
18	presto/tpch: q19	1910.3	18.649933	1889.0	3.471023	1895.3	5.068728	1886.2	3.429286
19	presto/tpch: q20	1537.4	3.234811	1489.2	4.800000	2386.8	11.192855	2314.4	6.458483

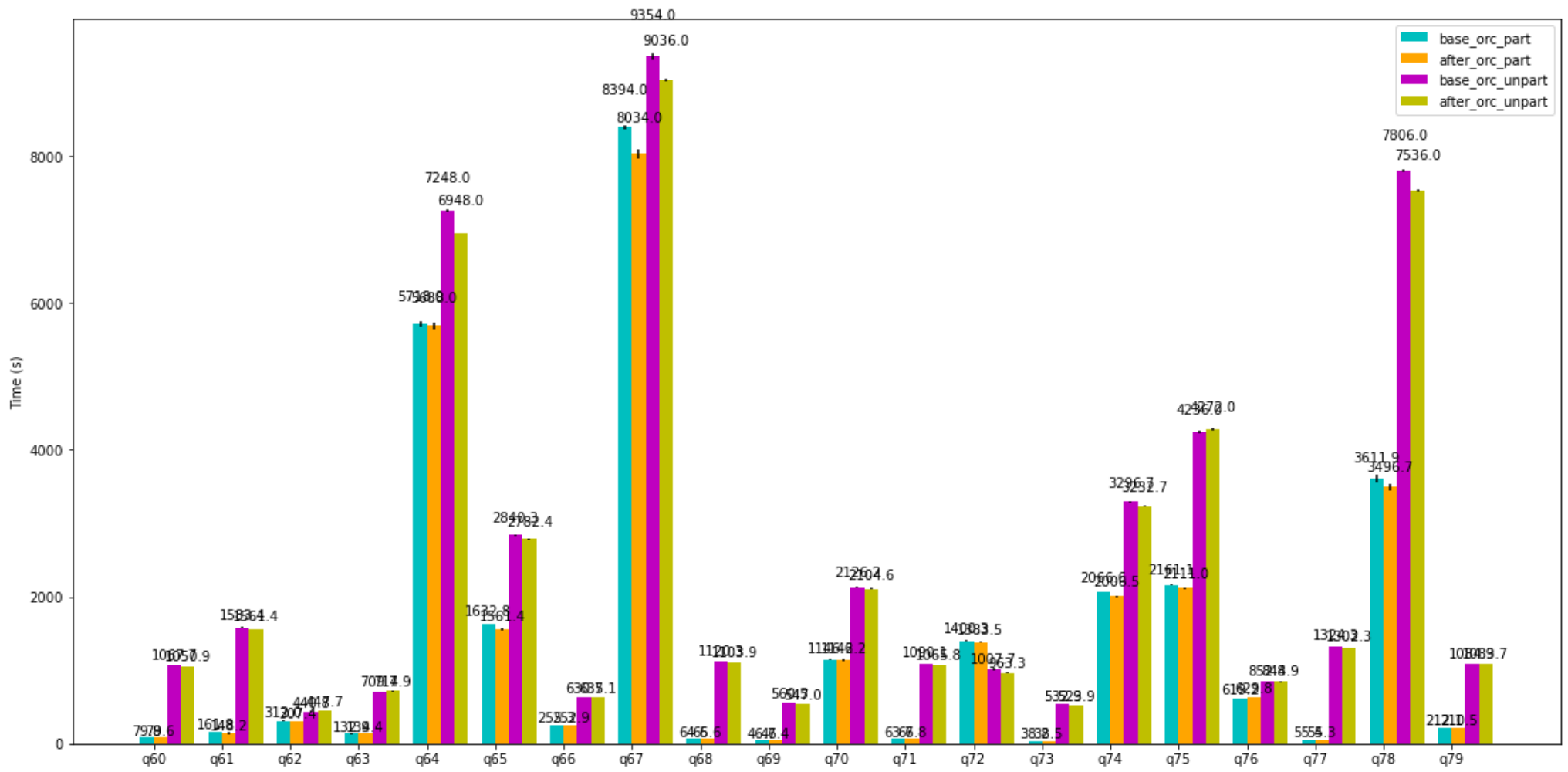
	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
20	presto/tpch: q21	9492.0	259.266658	9234.0	220.454077	6462.0	19.718012	6324.0	29.393877
21	presto/tpch: q22	505.5	0.827043	492.0	0.657267	491.9	0.797496	489.2	1.766352

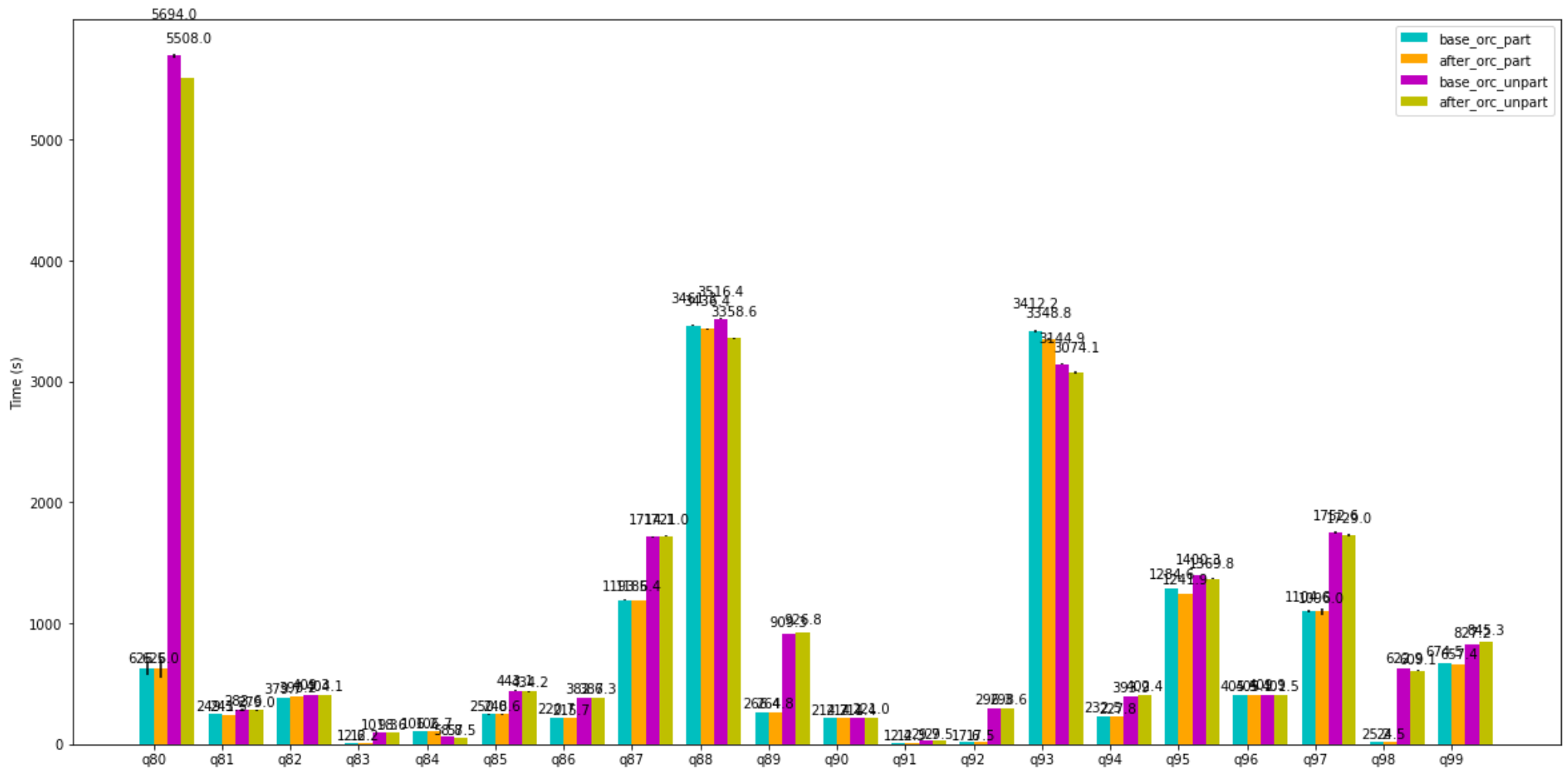
## TPC-DS Comparison (CPU)











query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
0 presto/tpcds: q01	222.500000	1.875100	212.300000	1.913113	354.700000	1.836301	348.400000	1.453272
1 presto/tpcds: q02	2785.800000	6.495537	2739.200000	7.024528	3011.000000	9.627461	3042.700000	3.745397
2 presto/tpcds: q03	87.200000	38.707519	72.500000	1.224745	561.000000	1.073313	569.900000	0.589915
3 presto/tpcds: q04	5010.000000	14.696938	5016.000000	18.590320	8496.000000	22.768399	8316.000000	45.536798

	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
4	presto/tpcds: q05	496.700000	24.114975	480.000000	50.229712	2217.000000	9.201739	2183.900000	4.350172
5	presto/tpcds: q06	57.950000	0.301131	57.661667	0.510506	560.000000	0.619677	543.800000	0.903327
6	presto/tpcds: q07	261.100000	0.797496	266.000000	0.903327	1148.900000	2.721029	1146.600000	2.629068
7	presto/tpcds: q08	95.800000	0.309839	94.000000	0.819756	624.900000	1.244186	614.700000	0.734847
8	presto/tpcds: q09	2497.200000	12.113464	2626.300000	14.311813	2954.600000	4.884260	2909.700000	16.613609
9	presto/tpcds: q10	47.385000	0.483270	47.773333	0.896898	539.700000	0.827043	527.200000	0.819756
10	presto/tpcds: q11	2596.200000	2.400000	2624.300000	17.031618	5058.000000	19.718012	4998.000000	14.696938
11	presto/tpcds: q12	7.005000	0.096488	6.921667	0.031885	156.500000	0.244949	154.300000	0.244949
12	presto/tpcds: q13	506.500000	0.701427	499.700000	0.883176	2417.300000	10.100099	2447.600000	10.877500
13	presto/tpcds: q14	12552.000000	54.199631	11862.000000	59.154036	17484.000000	18.590320	16920.000000	32.199379
14	presto/tpcds: q15	60.278333	0.518475	60.393333	0.807036	212.500000	0.451664	208.700000	0.451664
15	presto/tpcds: q16	454.000000	3.532704	456.800000	1.806654	636.800000	2.881666	635.800000	2.389979
16	presto/tpcds: q17	238.200000	5.119375	236.900000	7.972703	1119.600000	4.069398	1100.500000	4.023431
17	presto/tpcds: q18	197.200000	0.489898	197.000000	0.903327	467.600000	2.674322	463.400000	0.903327
18	presto/tpcds: q19	68.200000	0.489898	69.000000	0.379473	778.600000	4.321111	787.200000	4.139565
19	presto/tpcds: q20	15.098333	0.124807	14.633333	0.089144	197.800000	0.309839	196.100000	0.244949



	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
20	presto/tpcds: q21	12.895000	0.198267	12.586667	0.153580	37.645000	0.124218	38.241667	0.065243
21	presto/tpcds: q22	608.000000	2.234278	587.100000	1.962651	623.200000	1.350555	615.100000	3.588314
22	presto/tpcds: q23	11508.000000	18.590320	11028.000000	29.393877	16752.000000	29.393877	15930.000000	44.090815
23	presto/tpcds: q24	2940.400000	12.606665	2926.000000	20.546533	2959.000000	25.038530	2928.100000	12.842897
24	presto/tpcds: q25	161.400000	9.123157	161.700000	7.443386	1201.100000	5.747695	1176.300000	11.287338
25	presto/tpcds: q26	146.200000	0.979796	148.600000	0.979796	455.000000	1.050714	452.700000	2.703331
26	presto/tpcds: q27	245.300000	0.883176	250.400000	1.050714	1086.900000	1.553061	1074.800000	3.300909
27	presto/tpcds: q28	2887.300000	9.774047	3001.200000	16.334993	3388.600000	9.797959	3368.900000	12.865302
28	presto/tpcds: q29	389.100000	0.629285	387.900000	0.827043	1162.400000	5.415533	1133.700000	3.472751
29	presto/tpcds: q30	128.400000	0.379473	122.500000	1.489966	168.700000	7.881878	160.700000	4.448370
30	presto/tpcds: q31	404.900000	6.728744	402.900000	6.289992	2356.800000	13.999429	2310.600000	2.244994
31	presto/tpcds: q32	39.955000	24.812663	39.808333	20.882667	423.000000	0.536656	421.900000	1.033441
32	presto/tpcds: q33	53.341667	1.908208	53.685000	0.265236	1003.400000	1.922498	977.100000	5.363208
33	presto/tpcds: q34	115.400000	0.309839	115.200000	0.536656	552.400000	0.726636	554.100000	1.184905
34	presto/tpcds: q35	199.900000	1.337161	203.100000	0.985901	667.800000	1.971801	656.000000	2.066882
35	presto/tpcds: q36	229.300000	0.451664	230.200000	0.309839	898.400000	1.179830	909.000000	1.934942

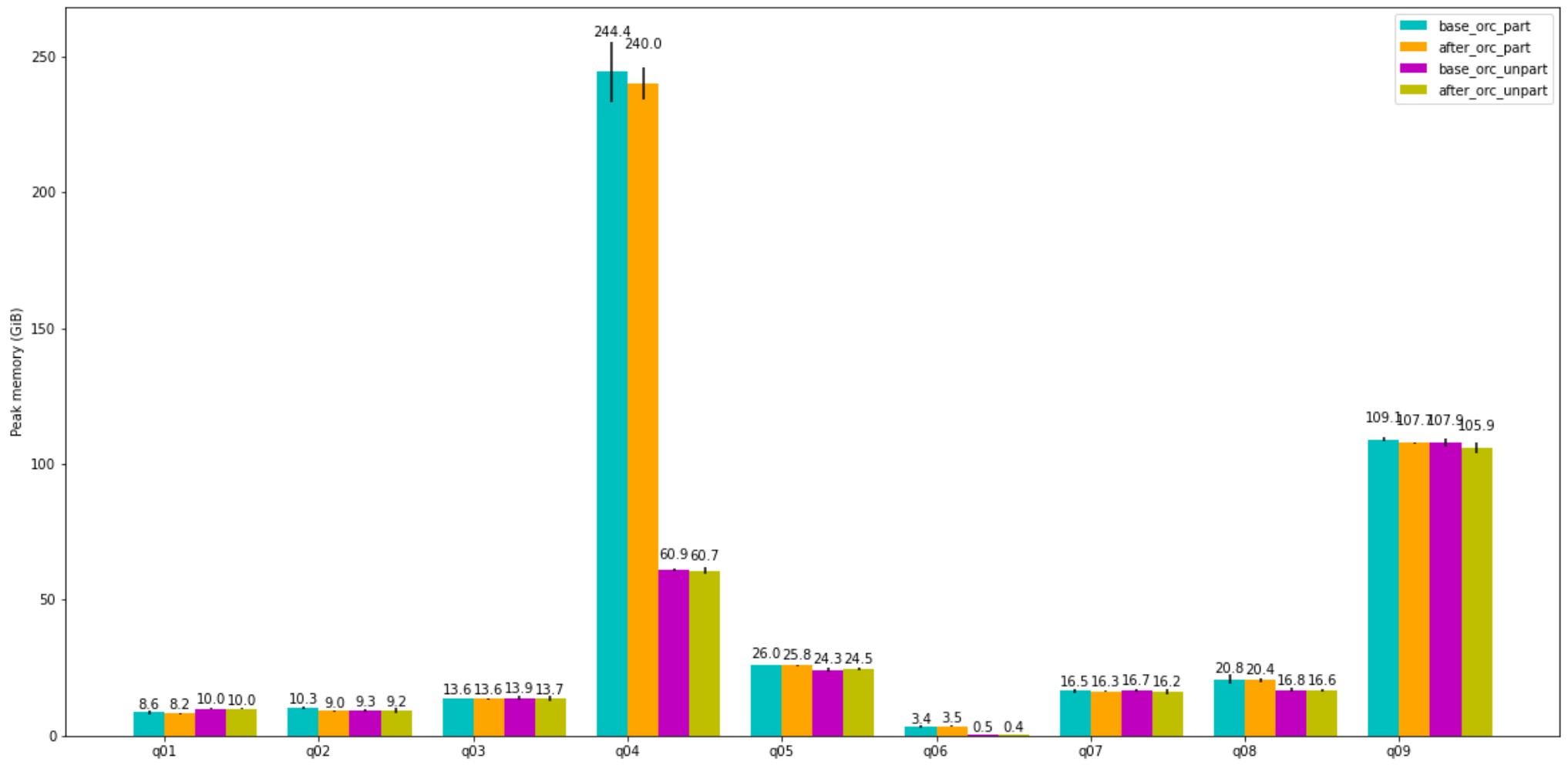
	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
36	presto/tpcds: q37	184.700000	0.451664	186.800000	0.309839	204.500000	0.244949	201.400000	0.489898
37	presto/tpcds: q38	1188.800000	2.647263	1170.300000	6.056732	1674.200000	7.819974	1677.300000	5.073460
38	presto/tpcds: q39	56.860000	0.912688	53.046667	0.345408	95.400000	0.379473	92.000000	0.489898
39	presto/tpcds: q40	350.200000	3.471023	331.200000	9.486833	836.100000	3.191865	811.400000	11.967957
40	presto/tpcds: q41	0.805000	0.008649	0.808667	0.009501	0.451000	0.015531	0.466667	0.018662
41	presto/tpcds: q42	26.938333	0.117884	26.728333	0.053072	615.200000	1.639512	619.800000	1.897367
42	presto/tpcds: q43	399.800000	1.239355	388.700000	0.701427	919.800000	2.179908	927.400000	3.256992
43	presto/tpcds: q44	1085.500000	5.236411	1103.600000	13.951344	1226.300000	3.338862	1219.700000	3.608324
44	presto/tpcds: q45	57.070000	0.380789	56.220000	0.376882	206.700000	0.501996	205.400000	0.619677
45	presto/tpcds: q46	205.700000	1.756132	211.200000	1.697056	932.900000	1.537530	934.800000	3.372833
46	presto/tpcds: q47	4620.000000	29.393877	4470.000000	14.696938	8568.000000	0.000000	8364.000000	18.590320
47	presto/tpcds: q48	413.700000	0.985901	415.900000	1.164474	2209.900000	9.039248	2196.200000	11.009087
48	presto/tpcds: q49	390.100000	2.500400	390.500000	1.672124	1416.600000	2.709982	1398.500000	11.189102
49	presto/tpcds: q50	965.000000	1.050714	960.300000	0.985901	1414.800000	3.869884	1331.100000	5.984981
50	presto/tpcds: q51	882.600000	1.368211	798.500000	1.628496	1959.400000	13.452137	1900.400000	2.674322
51	presto/tpcds: q52	27.636667	0.152272	27.198333	0.099482	623.800000	1.501999	626.700000	1.300769

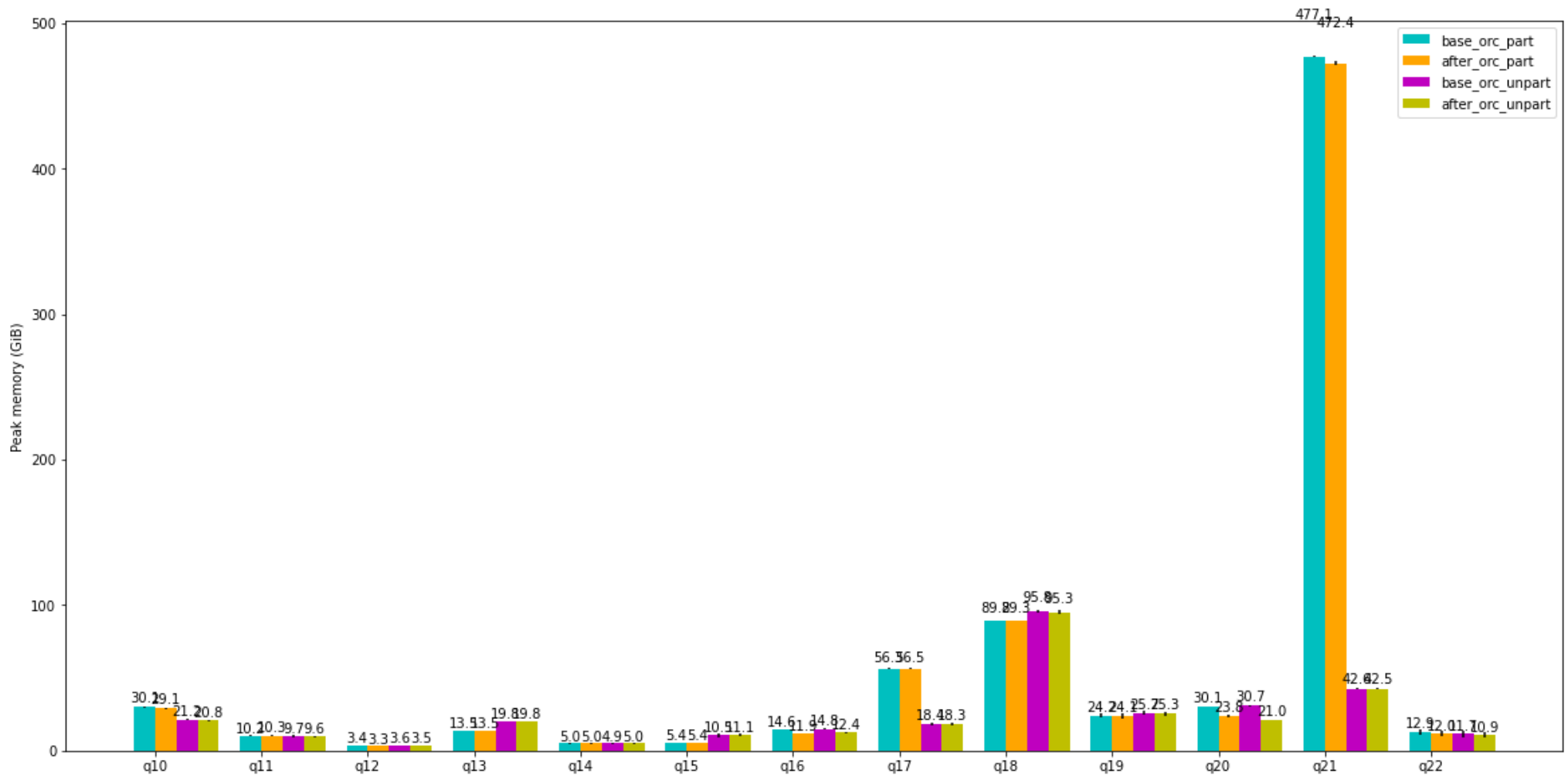
	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
52	presto/tpcds: q53	137.600000	1.453272	136.700000	1.337161	706.800000	1.368211	711.000000	0.536656
53	presto/tpcds: q54	640.000000	16.888339	641.700000	14.617113	1008.700000	3.588314	1007.800000	4.595650
54	presto/tpcds: q55	26.320000	0.089219	26.618333	0.055648	619.600000	1.453272	629.400000	0.848528
55	presto/tpcds: q56	28.491667	0.153417	28.696667	0.168958	1039.100000	2.126970	1018.300000	4.300233
56	presto/tpcds: q57	2378.400000	10.998182	2278.900000	11.020526	3383.900000	4.997199	3314.000000	3.769350
57	presto/tpcds: q58	52.410000	0.381104	48.600000	0.690246	1052.600000	3.075061	1022.600000	5.072278
58	presto/tpcds: q59	3780.000000	0.000000	3672.000000	0.000000	5226.000000	14.696938	5190.000000	14.696938
59	presto/tpcds: q60	79.800000	0.536656	79.600000	0.979796	1067.700000	3.993495	1050.900000	3.146427
60	presto/tpcds: q61	161.800000	1.050714	148.200000	16.068354	1583.400000	6.361132	1561.400000	2.297825
61	presto/tpcds: q62	312.000000	3.308172	307.400000	4.045738	440.800000	0.309839	447.700000	0.451664
62	presto/tpcds: q63	132.900000	0.827043	134.400000	1.073313	709.700000	1.282186	714.900000	3.214343
63	presto/tpcds: q64	5718.000000	35.394915	5688.000000	39.436024	7248.000000	18.590320	6948.000000	0.000000
64	presto/tpcds: q65	1632.800000	3.844997	1561.400000	22.223231	2840.300000	13.103740	2782.400000	7.413501
65	presto/tpcds: q66	255.300000	0.501996	252.900000	1.122497	630.700000	3.115766	635.100000	3.614969
66	presto/tpcds: q67	8394.000000	27.099815	8034.000000	62.006451	9354.000000	42.085627	9036.000000	22.768399
67	presto/tpcds: q68	64.600000	0.309839	65.600000	0.819756	1120.300000	1.950385	1103.900000	2.258318

	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
68	presto/tpcds: q69	46.670000	0.261916	46.391667	0.394331	560.500000	1.224745	547.000000	0.819756
69	presto/tpcds: q70	1146.600000	15.498129	1142.200000	13.564070	2126.200000	6.311894	2104.600000	11.931806
70	presto/tpcds: q71	63.700000	1.986957	66.800000	2.234278	1090.100000	3.229241	1065.800000	3.212476
71	presto/tpcds: q72	1400.300000	6.388427	1383.500000	9.150082	1007.700000	17.692371	963.300000	11.520937
72	presto/tpcds: q73	38.171667	0.041191	38.460000	0.242487	532.900000	0.451664	523.900000	0.961249
73	presto/tpcds: q74	2066.600000	5.335166	2006.500000	11.593619	3296.700000	10.138047	3232.700000	14.256367
74	presto/tpcds: q75	2161.100000	6.803235	2111.000000	6.763431	4236.000000	18.590320	4272.000000	18.590320
75	presto/tpcds: q76	619.200000	1.138420	629.800000	3.750200	852.800000	1.050714	844.900000	5.068728
76	presto/tpcds: q77	55.416667	0.418887	55.328333	0.559586	1324.300000	1.100909	1302.300000	0.909945
77	presto/tpcds: q78	3611.900000	52.029953	3496.700000	47.708741	7806.000000	14.696938	7536.000000	18.590320
78	presto/tpcds: q79	212.100000	0.827043	210.500000	0.451664	1084.900000	1.714643	1083.700000	1.583667
79	presto/tpcds: q80	626.500000	57.199126	626.000000	76.131150	5694.000000	14.696938	5508.000000	0.000000
80	presto/tpcds: q81	249.300000	0.827043	241.500000	0.328634	283.600000	8.912912	279.000000	9.075682
81	presto/tpcds: q82	379.700000	0.883176	390.200000	0.726636	409.300000	0.883176	404.100000	1.184905
82	presto/tpcds: q83	12.618333	0.444991	12.166667	0.536234	101.300000	0.244949	98.600000	0.309839
83	presto/tpcds: q84	106.200000	0.848528	106.700000	0.451664	58.761667	0.127502	57.513333	0.143898

	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
84	presto/tpcds: q85	250.000000	5.533896	248.600000	4.133763	443.100000	5.044998	434.200000	3.234811
85	presto/tpcds: q86	220.700000	0.701427	215.700000	0.501996	382.600000	0.309839	387.300000	0.629285
86	presto/tpcds: q87	1193.500000	3.069202	1186.400000	1.453272	1714.100000	2.126970	1721.000000	4.304416
87	presto/tpcds: q88	3461.300000	5.054503	3436.400000	7.176629	3516.400000	4.913654	3358.600000	4.484640
88	presto/tpcds: q89	266.400000	1.517893	264.800000	0.619677	909.300000	0.827043	926.800000	1.117139
89	presto/tpcds: q90	214.700000	0.701427	214.100000	0.244949	214.400000	1.117139	221.000000	0.309839
90	presto/tpcds: q91	12.358333	0.783413	12.295000	0.659174	29.708333	0.525487	29.476667	0.699390
91	presto/tpcds: q92	17.621667	0.224447	17.476667	0.140523	296.300000	0.589915	298.600000	0.489898
92	presto/tpcds: q93	3412.200000	10.733126	3348.800000	12.905813	3144.900000	7.167426	3074.100000	6.358302
93	presto/tpcds: q94	232.500000	0.629285	227.800000	0.489898	393.900000	1.643168	402.400000	1.239355
94	presto/tpcds: q95	1284.600000	1.368211	1241.900000	2.500400	1400.300000	1.489966	1369.800000	2.179908
95	presto/tpcds: q96	405.500000	0.451664	405.100000	0.244949	409.900000	0.451664	401.500000	0.701427
96	presto/tpcds: q97	1104.600000	11.640619	1096.000000	28.641229	1752.600000	7.664985	1729.000000	12.117425
97	presto/tpcds: q98	25.250000	0.096125	24.483333	0.289183	622.900000	0.797496	609.100000	0.961249
98	presto/tpcds: q99	674.500000	1.389964	657.400000	0.903327	827.200000	1.639512	845.300000	1.836301

## TPC-H Comparison (peak Memory)





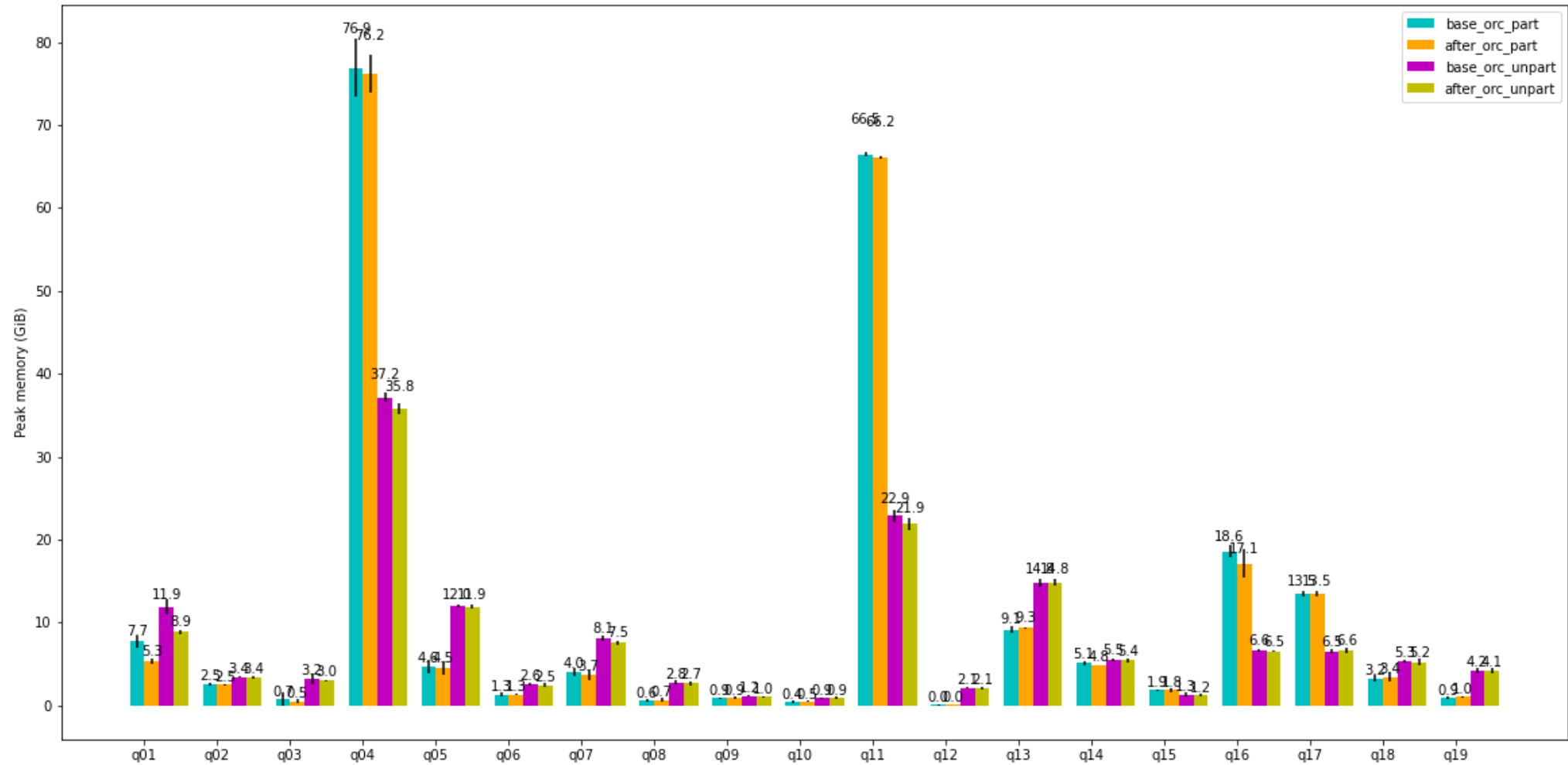
query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
0 presto/tpch: q01	8.563 GiB	540.061 MiB	8.226 GiB	282.642 MiB	10.009 GiB	298.768 MiB	9.993 GiB	298.764 MiB
1 presto/tpch: q02	10.271 GiB	529.379 MiB	9.040 GiB	219.596 MiB	9.294 GiB	584.817 MiB	9.208 GiB	832.525 MiB
2 presto/tpch: q03	13.635 GiB	155.970 MiB	13.610 GiB	153.993 MiB	13.900 GiB	735.701 MiB	13.699 GiB	0.927 GiB
3 presto/tpch: q04	244.355 GiB	10.963 GiB	240.048 GiB	5.909 GiB	60.946 GiB	625.895 MiB	60.686 GiB	1.117 GiB

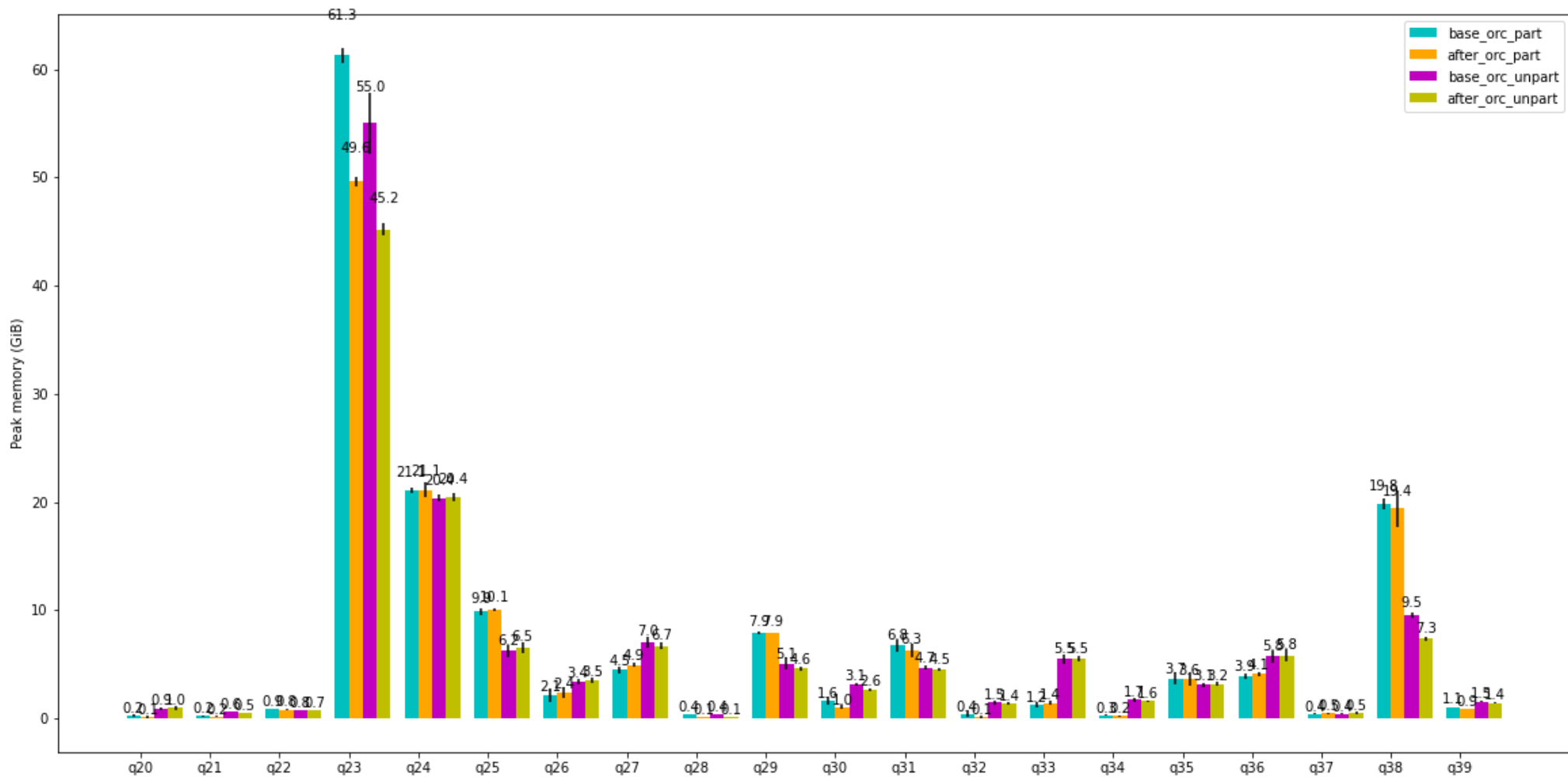
	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
4	presto/tpch: q05	25.989 GiB	183.366 MiB	25.831 GiB	323.312 MiB	24.251 GiB	727.631 MiB	24.504 GiB	497.846 MiB
5	presto/tpch: q06	3.352 GiB	482.138 MiB	3.527 GiB	326.264 MiB	460.851 MiB	180.897 MiB	400.136 MiB	131.396 MiB
6	presto/tpch: q07	16.478 GiB	613.632 MiB	16.342 GiB	299.083 MiB	16.740 GiB	579.854 MiB	16.152 GiB	802.051 MiB
7	presto/tpch: q08	20.815 GiB	1.559 GiB	20.428 GiB	922.047 MiB	16.847 GiB	597.598 MiB	16.635 GiB	437.767 MiB
8	presto/tpch: q09	109.103 GiB	0.928 GiB	107.703 GiB	263.339 MiB	107.860 GiB	1.381 GiB	105.872 GiB	1.902 GiB
9	presto/tpch: q10	30.069 GiB	641.491 MiB	29.096 GiB	606.358 MiB	21.213 GiB	319.579 MiB	20.758 GiB	313.353 MiB
10	presto/tpch: q11	10.183 GiB	310.318 MiB	10.341 GiB	314.586 MiB	9.705 GiB	0.959 GiB	9.552 GiB	827.411 MiB
11	presto/tpch: q12	3.408 GiB	142.639 MiB	3.256 GiB	75.422 MiB	3.592 GiB	159.271 MiB	3.493 GiB	104.934 MiB
12	presto/tpch: q13	13.450 GiB	210.900 MiB	13.541 GiB	188.662 MiB	19.751 GiB	61.324 MiB	19.829 GiB	135.393 MiB
13	presto/tpch: q14	4.992 GiB	134.694 MiB	4.978 GiB	143.463 MiB	4.890 GiB	89.397 MiB	4.969 GiB	113.792 MiB
14	presto/tpch: q15	5.405 GiB	34.132 MiB	5.414 GiB	31.220 MiB	10.471 GiB	1.232 GiB	11.114 GiB	735.469 MiB
15	presto/tpch: q16	14.618 GiB	145.080 MiB	11.922 GiB	189.374 MiB	14.759 GiB	307.967 MiB	12.351 GiB	295.226 MiB
16	presto/tpch: q17	56.276 GiB	363.285 MiB	56.456 GiB	436.366 MiB	18.417 GiB	877.952 MiB	18.336 GiB	547.366 MiB
17	presto/tpch: q18	89.226 GiB	141.327 MiB	89.299 GiB	190.535 MiB	95.790 GiB	835.426 MiB	95.275 GiB	1.147 GiB
18	presto/tpch: q19	24.218 GiB	1.293 GiB	24.104 GiB	1.787 GiB	25.729 GiB	1.351 GiB	25.328 GiB	1.389 GiB
19	presto/tpch: q20	30.090 GiB	133.968 MiB	23.806 GiB	717.693 MiB	30.733 GiB	719.230 MiB	21.017 GiB	317.642 MiB

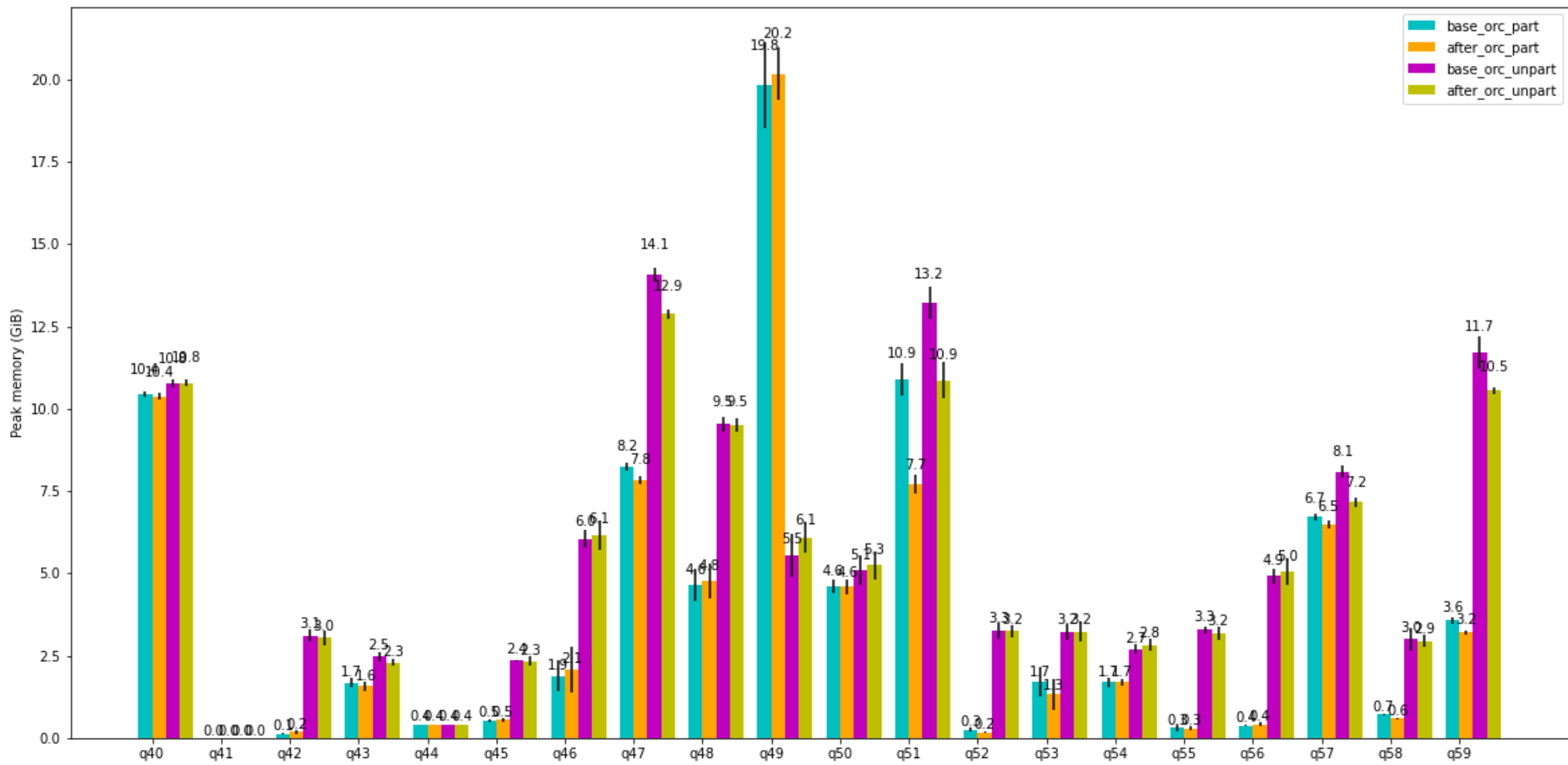


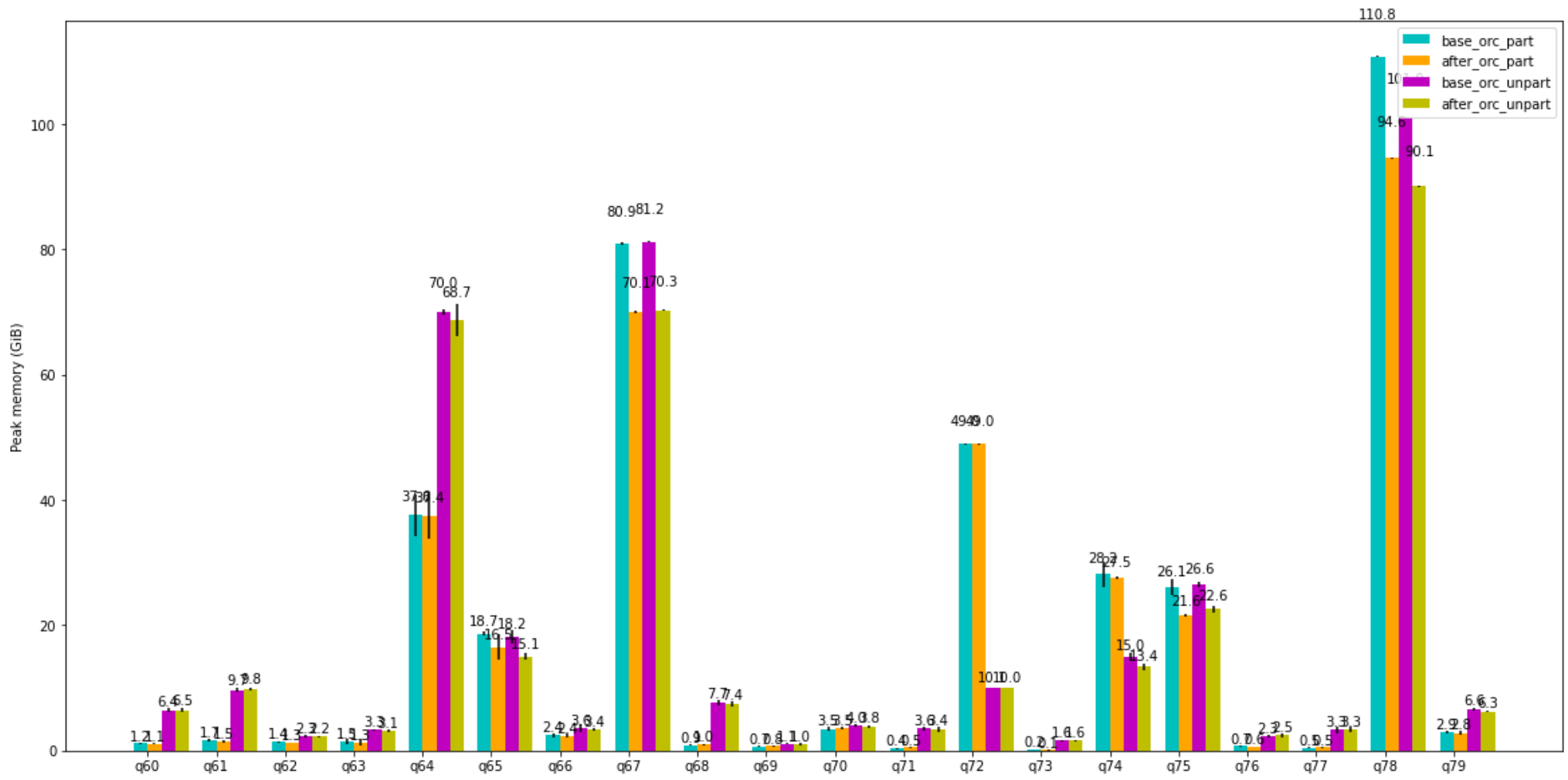
	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
20	presto/tpch: q21	477.130 GiB	530.968 MiB	472.353 GiB	1.257 GiB	42.619 GiB	608.644 MiB	42.505 GiB	590.948 MiB
21	presto/tpch: q22	12.941 GiB	1.980 GiB	12.024 GiB	1.656 GiB	11.654 GiB	2.200 GiB	10.933 GiB	1.821 GiB

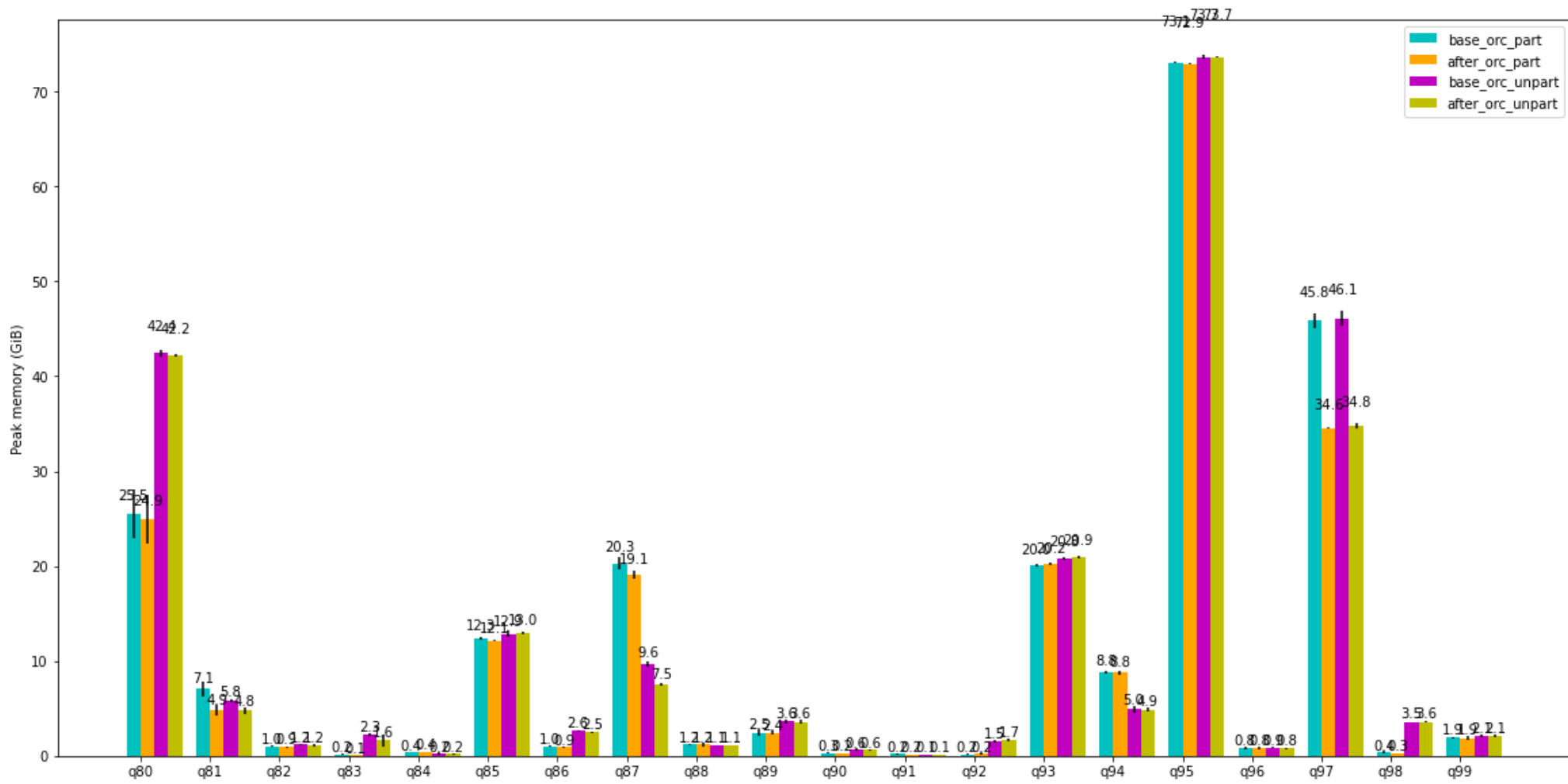
## TPC-DS Comparison (peak Memory)











query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
0 presto/tpcds: q01	7.683 GiB	831.792 MiB	5.307 GiB	357.550 MiB	11.895 GiB	866.201 MiB	8.850 GiB	209.475 MiB
1 presto/tpcds: q02	2.549 GiB	125.576 MiB	2.484 GiB	113.758 MiB	3.405 GiB	76.404 MiB	3.387 GiB	112.871 MiB
2 presto/tpcds: q03	757.029 MiB	834.060 MiB	499.129 MiB	260.256 MiB	3.234 GiB	621.658 MiB	2.995 GiB	119.484 MiB
3 presto/tpcds: q04	76.947 GiB	3.521 GiB	76.159 GiB	2.282 GiB	37.156 GiB	586.261 MiB	35.819 GiB	653.593 MiB

	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
4	presto/tpcds: q05	4.615 GiB	836.534 MiB	4.548 GiB	832.666 MiB	11.964 GiB	149.911 MiB	11.890 GiB	206.360 MiB
5	presto/tpcds: q06	1.281 GiB	259.673 MiB	1.279 GiB	118.554 MiB	2.557 GiB	172.176 MiB	2.462 GiB	173.278 MiB
6	presto/tpcds: q07	4.019 GiB	573.472 MiB	3.653 GiB	671.267 MiB	8.075 GiB	284.682 MiB	7.537 GiB	260.588 MiB
7	presto/tpcds: q08	611.371 MiB	106.872 MiB	673.061 MiB	284.498 MiB	2.767 GiB	204.718 MiB	2.680 GiB	272.561 MiB
8	presto/tpcds: q09	886.552 MiB	60.087 MiB	0.918 GiB	96.088 MiB	1.158 GiB	109.909 MiB	1.021 GiB	63.448 MiB
9	presto/tpcds: q10	429.968 MiB	118.023 MiB	463.962 MiB	93.587 MiB	889.408 MiB	81.814 MiB	892.375 MiB	133.415 MiB
10	presto/tpcds: q11	66.479 GiB	210.537 MiB	66.151 GiB	194.566 MiB	22.869 GiB	712.964 MiB	21.875 GiB	698.638 MiB
11	presto/tpcds: q12	24.282 MiB	14.856 MiB	34.334 MiB	11.564 MiB	2.097 GiB	117.023 MiB	2.062 GiB	203.362 MiB
12	presto/tpcds: q13	9.093 GiB	397.004 MiB	9.323 GiB	99.467 MiB	14.791 GiB	487.803 MiB	14.835 GiB	452.743 MiB
13	presto/tpcds: q14	5.091 GiB	247.595 MiB	4.827 GiB	75.441 MiB	5.537 GiB	182.400 MiB	5.410 GiB	196.003 MiB
14	presto/tpcds: q15	1.870 GiB	95.995 MiB	1.817 GiB	182.768 MiB	1.304 GiB	232.933 MiB	1.220 GiB	131.593 MiB
15	presto/tpcds: q16	18.555 GiB	727.572 MiB	17.109 GiB	1.693 GiB	6.568 GiB	145.880 MiB	6.492 GiB	108.948 MiB
16	presto/tpcds: q17	13.513 GiB	313.352 MiB	13.509 GiB	350.188 MiB	6.498 GiB	263.258 MiB	6.598 GiB	319.290 MiB
17	presto/tpcds: q18	3.217 GiB	432.263 MiB	3.421 GiB	533.842 MiB	5.260 GiB	189.529 MiB	5.224 GiB	434.664 MiB
18	presto/tpcds: q19	897.980 MiB	125.216 MiB	1.006 GiB	57.709 MiB	4.199 GiB	274.658 MiB	4.119 GiB	347.022 MiB
19	presto/tpcds: q20	236.104 MiB	141.388 MiB	117.005 MiB	94.330 MiB	0.926 GiB	115.571 MiB	0.979 GiB	180.193 MiB

	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
20	presto/tpcds: q21	229.832 MiB	42.393 MiB	196.737 MiB	17.141 MiB	598.116 MiB	7.051 MiB	524.327 MiB	10.457 MiB
21	presto/tpcds: q22	893.301 MiB	26.159 MiB	840.845 MiB	33.564 MiB	772.228 MiB	5.992 MiB	733.581 MiB	8.626 MiB
22	presto/tpcds: q23	61.263 GiB	715.793 MiB	49.610 GiB	410.431 MiB	55.006 GiB	2.838 GiB	45.206 GiB	561.209 MiB
23	presto/tpcds: q24	21.078 GiB	253.180 MiB	21.133 GiB	707.960 MiB	20.375 GiB	278.517 MiB	20.441 GiB	397.771 MiB
24	presto/tpcds: q25	9.898 GiB	331.374 MiB	10.073 GiB	148.303 MiB	6.233 GiB	621.263 MiB	6.546 GiB	541.981 MiB
25	presto/tpcds: q26	2.137 GiB	681.266 MiB	2.370 GiB	493.817 MiB	3.425 GiB	247.091 MiB	3.513 GiB	202.875 MiB
26	presto/tpcds: q27	4.483 GiB	290.407 MiB	4.941 GiB	201.730 MiB	7.046 GiB	475.309 MiB	6.710 GiB	330.630 MiB
27	presto/tpcds: q28	407.720 MiB	4.883 MiB	138.277 MiB	4.997 MiB	400.420 MiB	2.605 MiB	128.287 MiB	1.934 MiB
28	presto/tpcds: q29	7.931 GiB	106.119 MiB	7.925 GiB	17.950 MiB	5.080 GiB	542.800 MiB	4.592 GiB	168.121 MiB
29	presto/tpcds: q30	1.627 GiB	332.838 MiB	1.038 GiB	186.772 MiB	3.118 GiB	95.195 MiB	2.646 GiB	95.427 MiB
30	presto/tpcds: q31	6.758 GiB	574.094 MiB	6.300 GiB	680.045 MiB	4.699 GiB	171.989 MiB	4.534 GiB	91.179 MiB
31	presto/tpcds: q32	444.204 MiB	294.652 MiB	138.295 MiB	141.978 MiB	1.465 GiB	167.727 MiB	1.376 GiB	127.272 MiB
32	presto/tpcds: q33	1.226 GiB	280.094 MiB	1.415 GiB	201.252 MiB	5.477 GiB	434.958 MiB	5.490 GiB	241.477 MiB
33	presto/tpcds: q34	316.270 MiB	76.024 MiB	226.087 MiB	80.347 MiB	1.707 GiB	171.996 MiB	1.589 GiB	71.690 MiB
34	presto/tpcds: q35	3.707 GiB	533.536 MiB	3.643 GiB	603.046 MiB	3.106 GiB	167.454 MiB	3.182 GiB	231.222 MiB
35	presto/tpcds: q36	3.921 GiB	261.488 MiB	4.112 GiB	219.014 MiB	5.755 GiB	576.682 MiB	5.819 GiB	566.784 MiB

	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
36	presto/tpcds: q37	439.022 MiB	54.190 MiB	475.924 MiB	69.515 MiB	452.675 MiB	60.155 MiB	545.703 MiB	90.006 MiB
37	presto/tpcds: q38	19.838 GiB	504.481 MiB	19.386 GiB	1.693 GiB	9.536 GiB	249.655 MiB	7.348 GiB	194.802 MiB
38	presto/tpcds: q39	1.054 GiB	8.608 MiB	901.404 MiB	17.216 MiB	1.543 GiB	36.699 MiB	1.403 GiB	47.841 MiB
39	presto/tpcds: q40	10.448 GiB	85.273 MiB	10.370 GiB	98.841 MiB	10.778 GiB	119.562 MiB	10.785 GiB	121.180 MiB
40	presto/tpcds: q41	436.952 KiB	582.133 KiB	343.496 KiB	156.202 KiB	44.290 KiB	53.723 KiB	71.698 KiB	48.696 KiB
41	presto/tpcds: q42	134.343 MiB	25.079 MiB	189.070 MiB	56.622 MiB	3.097 GiB	190.310 MiB	3.038 GiB	216.832 MiB
42	presto/tpcds: q43	1.684 GiB	132.189 MiB	1.568 GiB	142.402 MiB	2.477 GiB	145.600 MiB	2.289 GiB	104.072 MiB
43	presto/tpcds: q44	425.839 MiB	1.539 MiB	426.856 MiB	760.406 KiB	424.863 MiB	529.247 KiB	426.232 MiB	623.842 KiB
44	presto/tpcds: q45	533.079 MiB	30.516 MiB	562.519 MiB	63.401 MiB	2.351 GiB	26.196 MiB	2.325 GiB	150.368 MiB
45	presto/tpcds: q46	1.889 GiB	490.539 MiB	2.089 GiB	712.306 MiB	6.047 GiB	264.001 MiB	6.149 GiB	459.119 MiB
46	presto/tpcds: q47	8.232 GiB	123.183 MiB	7.838 GiB	122.313 MiB	14.065 GiB	200.416 MiB	12.871 GiB	144.605 MiB
47	presto/tpcds: q48	4.641 GiB	502.728 MiB	4.776 GiB	545.500 MiB	9.527 GiB	242.806 MiB	9.501 GiB	207.745 MiB
48	presto/tpcds: q49	19.824 GiB	1.306 GiB	20.174 GiB	810.786 MiB	5.546 GiB	666.491 MiB	6.084 GiB	475.996 MiB
49	presto/tpcds: q50	4.602 GiB	194.557 MiB	4.586 GiB	225.632 MiB	5.094 GiB	460.727 MiB	5.251 GiB	435.989 MiB
50	presto/tpcds: q51	10.895 GiB	490.372 MiB	7.706 GiB	297.256 MiB	13.210 GiB	500.488 MiB	10.865 GiB	562.862 MiB
51	presto/tpcds: q52	256.582 MiB	56.058 MiB	174.817 MiB	29.746 MiB	3.262 GiB	236.036 MiB	3.237 GiB	180.818 MiB



	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
52	presto/tpcds: q53	1.695 GiB	450.812 MiB	1.323 GiB	485.505 MiB	3.210 GiB	242.843 MiB	3.234 GiB	326.387 MiB
53	presto/tpcds: q54	1.693 GiB	134.201 MiB	1.692 GiB	90.983 MiB	2.693 GiB	140.782 MiB	2.823 GiB	189.217 MiB
54	presto/tpcds: q55	310.188 MiB	91.465 MiB	295.256 MiB	73.449 MiB	3.278 GiB	116.150 MiB	3.185 GiB	202.422 MiB
55	presto/tpcds: q56	383.067 MiB	24.991 MiB	422.717 MiB	73.385 MiB	4.922 GiB	231.035 MiB	5.046 GiB	430.999 MiB
56	presto/tpcds: q57	6.720 GiB	101.242 MiB	6.484 GiB	123.318 MiB	8.083 GiB	186.238 MiB	7.170 GiB	147.508 MiB
57	presto/tpcds: q58	724.122 MiB	27.350 MiB	602.839 MiB	20.591 MiB	3.004 GiB	360.170 MiB	2.948 GiB	190.848 MiB
58	presto/tpcds: q59	3.567 GiB	107.393 MiB	3.201 GiB	74.048 MiB	11.695 GiB	496.601 MiB	10.543 GiB	121.912 MiB
59	presto/tpcds: q60	1.157 GiB	106.904 MiB	1.111 GiB	83.332 MiB	6.434 GiB	292.978 MiB	6.490 GiB	284.126 MiB
60	presto/tpcds: q61	1.668 GiB	207.609 MiB	1.528 GiB	240.484 MiB	9.680 GiB	270.881 MiB	9.803 GiB	228.664 MiB
61	presto/tpcds: q62	1.391 GiB	61.699 MiB	1.270 GiB	64.784 MiB	2.302 GiB	205.546 MiB	2.228 GiB	167.676 MiB
62	presto/tpcds: q63	1.521 GiB	417.517 MiB	1.300 GiB	604.124 MiB	3.317 GiB	176.237 MiB	3.139 GiB	270.154 MiB
63	presto/tpcds: q64	37.645 GiB	3.336 GiB	37.430 GiB	3.639 GiB	70.044 GiB	509.378 MiB	68.707 GiB	2.571 GiB
64	presto/tpcds: q65	18.683 GiB	380.142 MiB	16.530 GiB	2.057 GiB	18.169 GiB	1.089 GiB	15.052 GiB	646.506 MiB
65	presto/tpcds: q66	2.436 GiB	360.116 MiB	2.356 GiB	322.497 MiB	3.584 GiB	622.367 MiB	3.370 GiB	251.433 MiB
66	presto/tpcds: q67	80.942 GiB	207.417 MiB	70.058 GiB	217.121 MiB	81.238 GiB	127.855 MiB	70.336 GiB	81.766 MiB
67	presto/tpcds: q68	938.719 MiB	100.337 MiB	0.992 GiB	92.554 MiB	7.691 GiB	467.960 MiB	7.419 GiB	477.953 MiB

	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
68	presto/tpcds: q69	710.910 MiB	77.352 MiB	775.679 MiB	83.142 MiB	1.075 GiB	118.074 MiB	1.024 GiB	136.871 MiB
69	presto/tpcds: q70	3.473 GiB	306.767 MiB	3.499 GiB	221.821 MiB	4.019 GiB	303.424 MiB	3.823 GiB	307.361 MiB
70	presto/tpcds: q71	366.757 MiB	95.739 MiB	508.247 MiB	101.372 MiB	3.570 GiB	339.428 MiB	3.440 GiB	391.754 MiB
71	presto/tpcds: q72	48.972 GiB	97.420 MiB	48.994 GiB	124.364 MiB	10.109 GiB	10.427 MiB	10.024 GiB	35.399 MiB
72	presto/tpcds: q73	157.732 MiB	24.584 MiB	92.783 MiB	27.334 MiB	1.614 GiB	67.746 MiB	1.598 GiB	134.607 MiB
73	presto/tpcds: q74	28.182 GiB	2.008 GiB	27.539 GiB	248.235 MiB	14.955 GiB	662.013 MiB	13.355 GiB	584.668 MiB
74	presto/tpcds: q75	26.074 GiB	1.207 GiB	21.638 GiB	243.544 MiB	26.558 GiB	426.513 MiB	22.592 GiB	481.441 MiB
75	presto/tpcds: q76	743.463 MiB	88.214 MiB	616.168 MiB	83.748 MiB	2.311 GiB	284.315 MiB	2.468 GiB	270.340 MiB
76	presto/tpcds: q77	475.830 MiB	38.147 MiB	518.451 MiB	70.190 MiB	3.308 GiB	588.421 MiB	3.347 GiB	452.919 MiB
77	presto/tpcds: q78	110.811 GiB	119.510 MiB	94.582 GiB	174.085 MiB	100.998 GiB	62.764 MiB	90.113 GiB	74.673 MiB
78	presto/tpcds: q79	2.896 GiB	200.313 MiB	2.847 GiB	263.598 MiB	6.575 GiB	183.895 MiB	6.258 GiB	67.343 MiB
79	presto/tpcds: q80	25.481 GiB	2.550 GiB	24.920 GiB	2.602 GiB	42.439 GiB	359.359 MiB	42.181 GiB	126.657 MiB
80	presto/tpcds: q81	7.052 GiB	831.037 MiB	4.889 GiB	585.365 MiB	5.800 GiB	121.535 MiB	4.787 GiB	396.414 MiB
81	presto/tpcds: q82	1.040 GiB	102.631 MiB	0.925 GiB	68.556 MiB	1.190 GiB	116.367 MiB	1.162 GiB	134.728 MiB
82	presto/tpcds: q83	159.160 MiB	43.821 MiB	101.417 MiB	6.177 MiB	2.269 GiB	134.640 MiB	1.628 GiB	702.779 MiB
83	presto/tpcds: q84	374.233 MiB	18.310 MiB	428.956 MiB	52.680 MiB	247.012 MiB	166.811 MiB	200.937 MiB	125.856 MiB

	query	base_orc_part mean	base_orc_part std.dev	after_orc_part mean	after_orc_part std.dev	base_orc_unpart mean	base_orc_unpart std.dev	after_orc_unpart mean	after_orc_unpart std.dev
<b>84</b>	presto/tpcds: q85	12.344 GiB	148.568 MiB	12.134 GiB	99.729 MiB	12.868 GiB	349.286 MiB	12.962 GiB	175.681 MiB
<b>85</b>	presto/tpcds: q86	1.018 GiB	62.837 MiB	936.166 MiB	54.508 MiB	2.631 GiB	107.344 MiB	2.485 GiB	63.371 MiB
<b>86</b>	presto/tpcds: q87	20.283 GiB	658.565 MiB	19.124 GiB	445.935 MiB	9.640 GiB	263.808 MiB	7.477 GiB	156.247 MiB
<b>87</b>	presto/tpcds: q88	1.192 GiB	75.805 MiB	1.191 GiB	170.414 MiB	1.110 GiB	41.891 MiB	1.123 GiB	62.242 MiB
<b>88</b>	presto/tpcds: q89	2.468 GiB	408.506 MiB	2.418 GiB	228.020 MiB	3.626 GiB	197.338 MiB	3.576 GiB	183.614 MiB
<b>89</b>	presto/tpcds: q90	285.109 MiB	75.042 MiB	251.237 MiB	59.437 MiB	664.736 MiB	148.084 MiB	630.299 MiB	98.327 MiB
<b>90</b>	presto/tpcds: q91	197.477 MiB	49.198 MiB	164.060 MiB	11.727 MiB	126.417 MiB	21.659 MiB	133.275 MiB	26.809 MiB
<b>91</b>	presto/tpcds: q92	183.588 MiB	138.117 MiB	243.431 MiB	168.903 MiB	1.543 GiB	171.829 MiB	1.694 GiB	202.875 MiB
<b>92</b>	presto/tpcds: q93	20.034 GiB	144.783 MiB	20.190 GiB	161.653 MiB	20.790 GiB	186.504 MiB	20.909 GiB	122.826 MiB
<b>93</b>	presto/tpcds: q94	8.823 GiB	185.474 MiB	8.755 GiB	250.567 MiB	4.951 GiB	363.618 MiB	4.861 GiB	228.146 MiB
<b>94</b>	presto/tpcds: q95	73.065 GiB	100.944 MiB	72.948 GiB	121.585 MiB	73.664 GiB	213.946 MiB	73.670 GiB	126.598 MiB
<b>95</b>	presto/tpcds: q96	852.861 MiB	92.782 MiB	844.695 MiB	118.924 MiB	879.592 MiB	98.100 MiB	822.049 MiB	83.153 MiB
<b>96</b>	presto/tpcds: q97	45.849 GiB	811.065 MiB	34.555 GiB	34.500 MiB	46.127 GiB	830.969 MiB	34.830 GiB	285.290 MiB
<b>97</b>	presto/tpcds: q98	380.656 MiB	188.749 MiB	270.242 MiB	53.259 MiB	3.539 GiB	24.407 MiB	3.576 GiB	83.571 MiB
<b>98</b>	presto/tpcds: q99	1.908 GiB	96.034 MiB	1.884 GiB	191.098 MiB	2.104 GiB	139.111 MiB	2.106 GiB	107.881 MiB