

GCI Impact Simulated

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Simulation results: GCI vs NOGCI

```
## Warning: package 'dplyr' was built under R version 3.6.1
```

```
## Warning: package 'ggplot2' was built under R version 3.6.1
```

ECDF for response time of all simulation

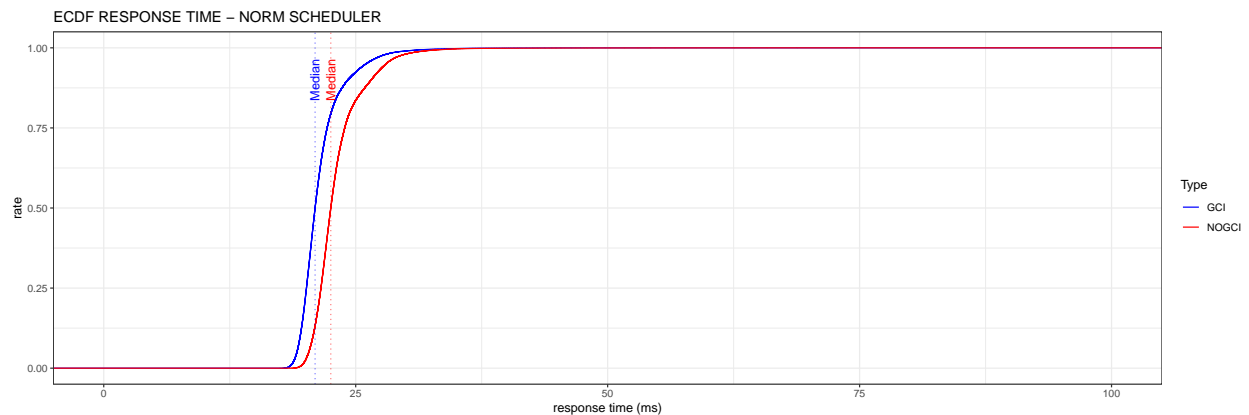
```
## Warning: Removed 1534 rows containing non-finite values (stat_ecdf).
```

```
## Warning: Removed 1 rows containing missing values (geom_text).
```

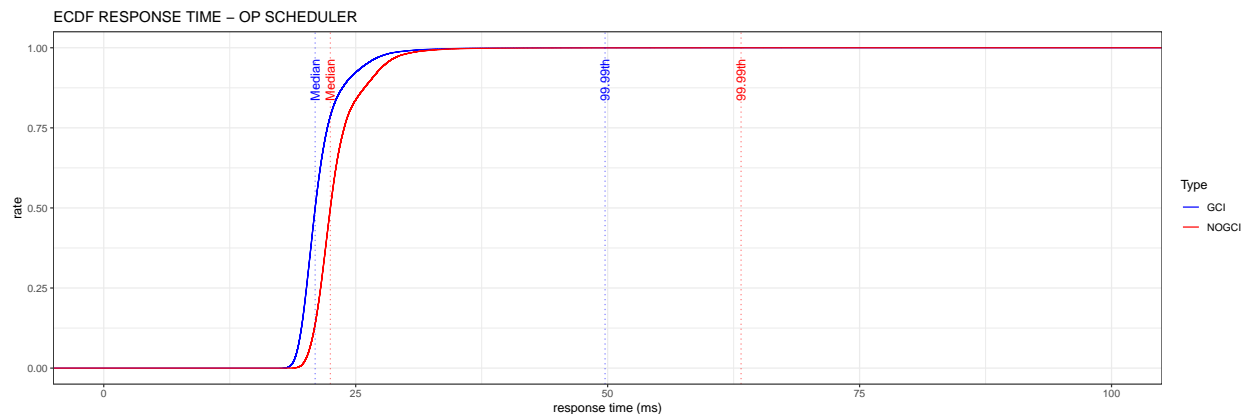
```
## Warning: Removed 1 rows containing missing values (geom_vline).
```

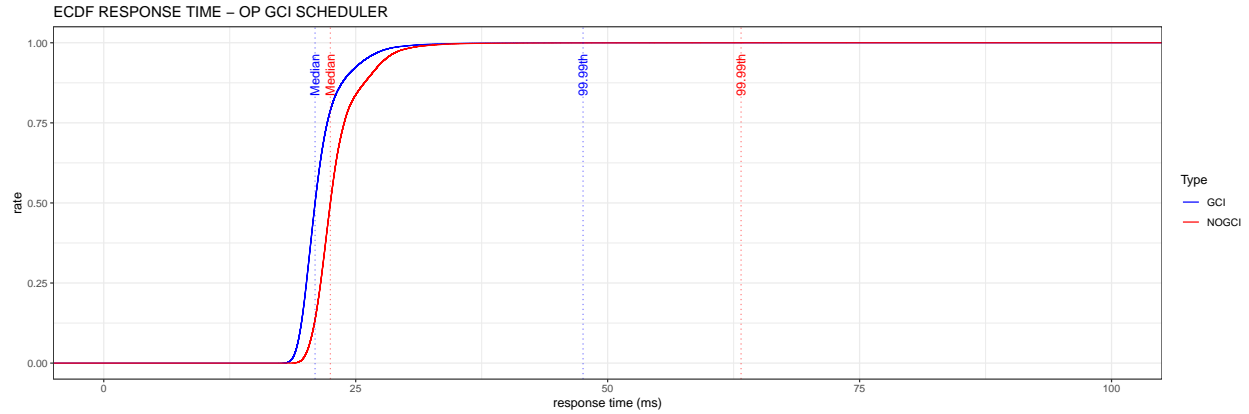
```
## Warning: Removed 1 rows containing missing values (geom_text).
```

```
## Warning: Removed 1 rows containing missing values (geom_vline).
```



```
## Warning: Removed 50 rows containing non-finite values (stat_ecdf).
```





summary table of confidence interval for response time, both in milliseconds, of all simulation

##	stats	gci.cii	gci.cis	nogci.cii	nogci.cis
## 1	avg	22.00	23.00	24.00	24.00
## 2	p50	20.97	20.97	22.52	22.53
## 3	p95	26.03	26.05	28.01	28.03
## 4	p99	29.96	30.05	31.84	31.90
## 5	p999	39.80	40.24	43.93	44.63
## 6	p9999	2982.00	3030.00	2989.00	2989.00
## 7	p99999	3034.00	3034.00	3493.00	3493.00
## 8	dist	3013.00	3013.00	3470.00	3470.00

##	stats	gci.cii	gci.cis	nogci.cii	nogci.cis
## 1	avg	22.00	22.00	23.00	23.00
## 2	p50	20.98	20.98	22.48	22.49
## 3	p95	26.08	26.10	27.98	28.00
## 4	p99	29.94	30.03	31.59	31.69
## 5	p999	37.94	38.29	40.56	41.14
## 6	p9999	49.02	51.26	62.54	63.40
## 7	p99999	2964.00	2983.00	68.21	68.25
## 8	dist	2943.00	2962.00	45.72	45.76

##	stats	gci.cii	gci.cis	nogci.cii	nogci.cis
## 1	avg	22.00	22.00	23.00	23.00
## 2	p50	20.97	20.97	22.48	22.49
## 3	p95	26.05	26.07	27.98	28.00
## 4	p99	29.91	29.99	31.59	31.69
## 5	p999	37.71	38.03	40.56	41.14
## 6	p9999	47.29	48.15	62.54	63.40
## 7	p99999	59.66	67.25	68.21	68.25
## 8	dist	38.70	46.28	45.72	45.76

comparison table for response time, of all simulation

##	nogci	gci	comparison
## 0%	18.229	17.310	1.053091
## 25%	21.552	20.114	1.071492
## 50%	22.528	20.971	1.074245
## 75%	23.912	22.166	1.078769

## 90%	26.546	24.222	1.095946
## 95%	28.018	26.042	1.075877
## 99%	31.884	30.014	1.062304
## 99.9%	44.399	40.035	1.109005
## 99.99%	2989.443	2982.027	1.002487
## 99.999%	3492.909	3033.681	1.151376
## 100%	3492.909	3034.696	1.150991

##	nogci	gci	comparison
## 0%	18.353	17.31000	1.06025419
## 25%	21.519	20.11500	1.06979866
## 50%	22.487	20.97800	1.07193250
## 75%	23.861	22.18800	1.07540112
## 90%	26.511	24.26500	1.09256130
## 95%	27.988	26.09000	1.07274818
## 99%	31.630	29.98000	1.05503669
## 99.9%	40.940	38.07223	1.07532440
## 99.99%	63.239	49.74400	1.27128900
## 99.999%	68.246	2969.24261	0.02298431
## 100%	73.696	3035.68200	0.02427659

##	nogci	gci	comparison
## 0%	18.353	17.31000	1.0602542
## 25%	21.519	20.10900	1.0701179
## 50%	22.487	20.96900	1.0723926
## 75%	23.861	22.17400	1.0760801
## 90%	26.511	24.23100	1.0940943
## 95%	27.988	26.05900	1.0740243
## 99%	31.630	29.94600	1.0562346
## 99.9%	40.940	37.92700	1.0794421
## 99.99%	63.239	47.55927	1.3296882
## 99.999%	68.246	64.82434	1.0527836
## 100%	73.696	76.82600	0.9592586

Visualizing metrics

##	scenario	scheduler_name	throughput	instances_cost
## 1	pp-gci1	-normscheduler	49.97244	73804.87
## 2	pp-gci1	-opgcischeduler	50.01344	32105.54
## 3	pp-gci1	-opscheduler	50.01622	29329.74
## 4	pp-nogci1	-normscheduler	50.00022	71569.78
## 5	pp-nogci1	-opscheduler	50.01178	27598.90
## 6	pp-gci2	-normscheduler	49.98378	74121.81
## 7	pp-gci2	-opgcischeduler	50.00456	31579.35
## 8	pp-gci2	-opscheduler	50.00122	30585.21
## 9	pp-nogci2	-normscheduler	50.01000	72395.49
## 10	pp-nogci2	-opscheduler	50.00733	27291.99
## 11	pp-gci3	-normscheduler	49.99656	75334.31
## 12	pp-gci3	-opgcischeduler	50.01633	30803.45
## 13	pp-gci3	-opscheduler	50.01422	30925.18
## 14	pp-nogci3	-normscheduler	50.00733	71231.51
## 15	pp-nogci3	-opscheduler	49.98622	27599.22
## 16	pp-gci4	-normscheduler	50.00456	74726.22

## 17	pp-gci4	-opgcischeduler	49.98878	31267.64
## 18	pp-gci4	-opscheduler	50.01211	32820.64
## 19	pp-nogci4	-normscheduler	50.01244	71533.79
## 20	pp-nogci4	-opscheduler	49.99733	27590.42
## 21	pp-gci5	-normscheduler	50.00822	73667.23
## 22	pp-gci5	-opgcischeduler	50.00700	29914.21
## 23	pp-gci5	-opscheduler	49.98089	31059.65
## 24	pp-nogci5	-normscheduler	50.00589	71834.96
## 25	pp-nogci5	-opscheduler	50.01511	27598.45
##	instances_efficiency		simulation_exec_time	
## 1		0.03316579	8	
## 2		0.28790037	4	
## 3		0.28851775	4	
## 4		0.02467734	8	
## 5		0.35558055	4	
## 6		0.02892223	9	
## 7		0.27594743	4	
## 8		0.24240071	4	
## 9		0.03047020	9	
## 10		0.37548173	4	
## 11		0.03012551	8	
## 12		0.27569262	4	
## 13		0.29272286	4	
## 14		0.02633598	8	
## 15		0.37872777	4	
## 16		0.02773661	8	
## 17		0.24620733	4	
## 18		0.27879058	4	
## 19		0.02389440	7	
## 20		0.37098539	4	
## 21		0.03007710	7	
## 22		0.29786229	4	
## 23		0.27686908	4	
## 24		0.02583279	8	
## 25		0.38446936	4	

ECDF for response time of 1^o simulation

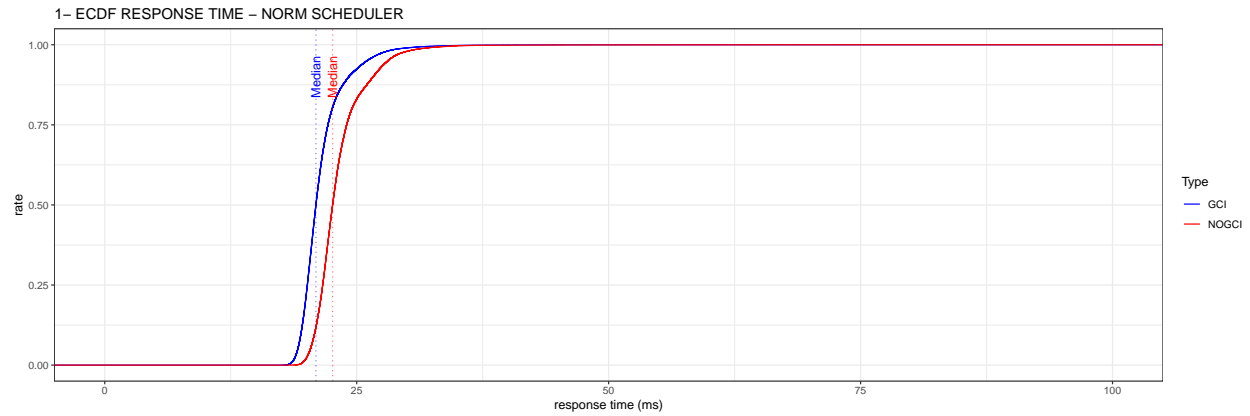
Warning: Removed 305 rows containing non-finite values (stat_ecdf).

Warning: Removed 1 rows containing missing values (geom_text).

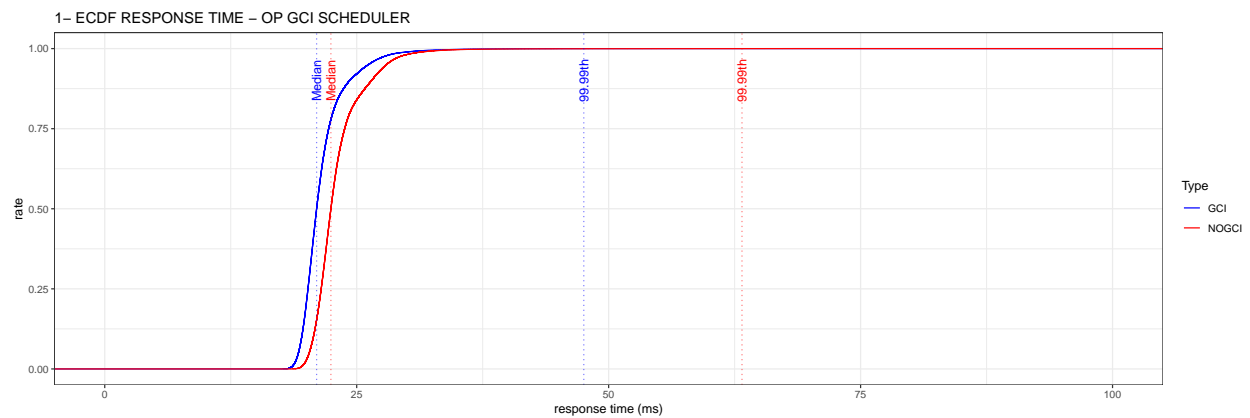
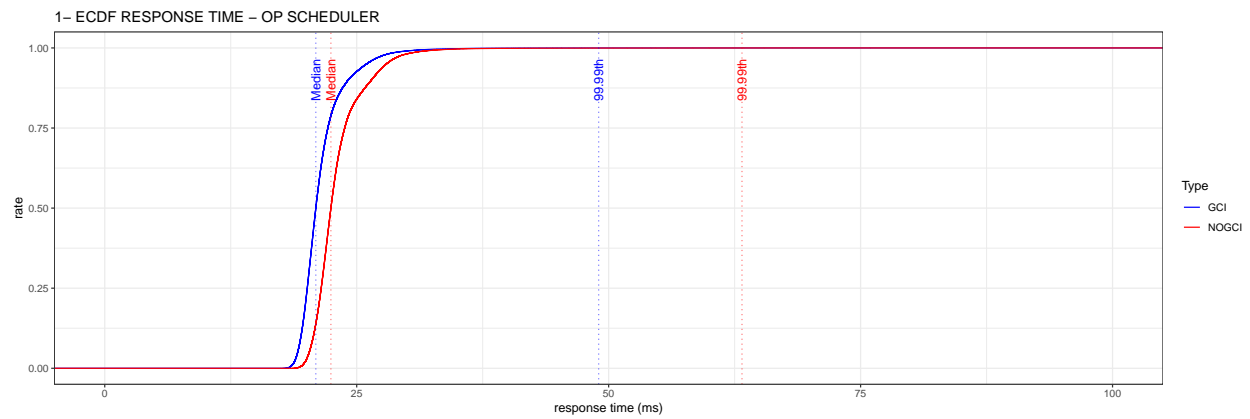
Warning: Removed 1 rows containing missing values (geom_vline).

Warning: Removed 1 rows containing missing values (geom_text).

Warning: Removed 1 rows containing missing values (geom_vline).



Warning: Removed 8 rows containing non-finite values (stat_ecdf).



summary table of confidence interval for response time, both in milliseconds, of 1^o simulation

##	stats	gci.cii	gci.cis	nogci.cii	nogci.cis
## 1	avg	22.00	23.00	24.00	24.00
## 2	p50	20.95	20.96	22.60	22.62
## 3	p95	26.01	26.07	28.08	28.12
## 4	p99	29.92	30.11	32.00	32.14
## 5	p999	39.53	40.69	43.93	45.32
## 6	p9999	2969.00	3030.00	2979.00	2994.00
## 7	p99999	3034.00	3034.00	3493.00	3493.00
## 8	dist	3013.00	3013.00	3470.00	3470.00

##	stats	gci.cii	gci.cis	nogci.cii	nogci.cis
## 1	avg	22.00	22.00	23.00	23.00
## 2	p50	20.94	20.95	22.43	22.44
## 3	p95	25.96	26.01	27.93	27.97
## 4	p99	29.71	29.87	31.53	31.71
## 5	p999	37.71	38.59	40.52	41.65
## 6	p9999	47.32	51.66	61.71	63.44
## 7	p99999	75.96	3033.00	68.21	68.25
## 8	dist	55.02	3012.00	45.77	45.80

##	stats	gci.cii	gci.cis	nogci.cii	nogci.cis
## 1	avg	22.00	22.00	23.00	23.00
## 2	p50	21.02	21.03	22.43	22.44
## 3	p95	26.13	26.19	27.93	27.97
## 4	p99	30.05	30.22	31.53	31.71
## 5	p999	37.96	38.86	40.52	41.65
## 6	p9999	47.12	49.44	61.71	63.44
## 7	p99999	54.26	71.41	68.21	68.25
## 8	dist	33.24	50.38	45.77	45.80

comparison table for response time, of 1^o simulation

##		nogci	gci	comparison
## 0%		18.229	17.31000	1.053091
## 25%		21.627	20.10200	1.075863
## 50%		22.609	20.95300	1.079034
## 75%		24.006	22.14800	1.083890
## 90%		26.646	24.21700	1.100301
## 95%		28.097	26.04000	1.078994
## 99%		32.071	30.01549	1.068482
## 99.9%		44.612	40.03500	1.114325
## 99.99%		2989.443	2982.02700	1.002487
## 99.999%		3492.909	3033.68100	1.151376
## 100%		3492.909	3034.44400	1.151087

##		nogci	gci	comparison
## 0%		18.35300	17.31000	1.06025419
## 25%		21.47800	20.09400	1.06887628
## 50%		22.44000	20.94300	1.07147973
## 75%		23.80900	22.13700	1.07552966
## 90%		26.46450	24.15700	1.09552097
## 95%		27.95200	25.98400	1.07573892
## 99%		31.59800	29.80700	1.06008656
## 99.9%		41.24998	38.13700	1.08162624
## 99.99%		63.23171	49.00941	1.29019525
## 99.999%		68.22596	2966.38729	0.02299968
## 100%		68.24600	3035.33400	0.02248385

##		nogci	gci	comparison
## 0%		18.35300	17.31000	1.0602542
## 25%		21.47800	20.16300	1.0652185
## 50%		22.44000	21.02200	1.0674531

```
## 75%      23.80900 22.22000 1.0715122
## 90%      26.46450 24.30100 1.0890293
## 95%      27.95200 26.15800 1.0685832
## 99%      31.59800 30.13600 1.0485134
## 99.9%    41.24998 38.40104 1.0741891
## 99.99%   63.23171 47.53300 1.3302698
## 99.999%  68.22596 60.17234 1.1338426
## 100%     68.24600 75.95600 0.8984939
```

ECDF for response time of 2^o simulation

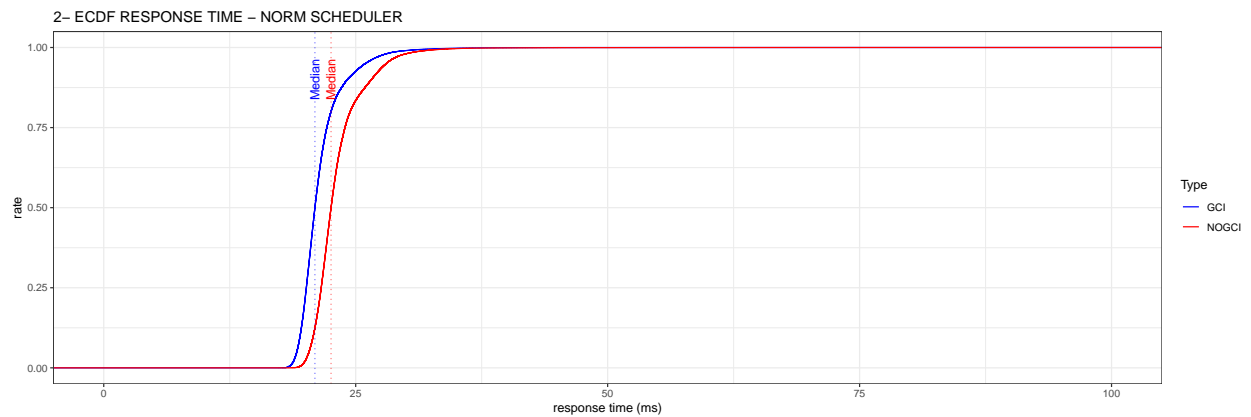
```
## Warning: Removed 310 rows containing non-finite values (stat_ecdf).
```

```
## Warning: Removed 1 rows containing missing values (geom_text).
```

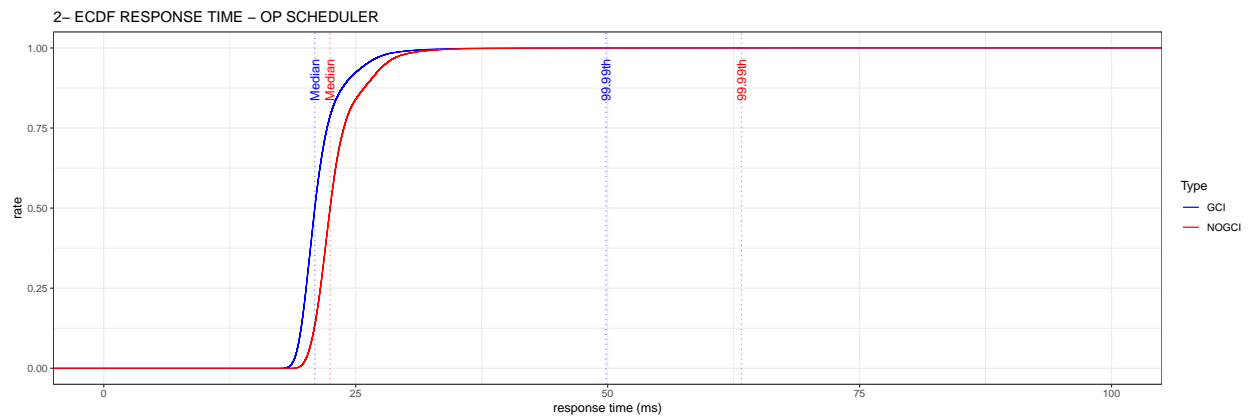
```
## Warning: Removed 1 rows containing missing values (geom_vline).
```

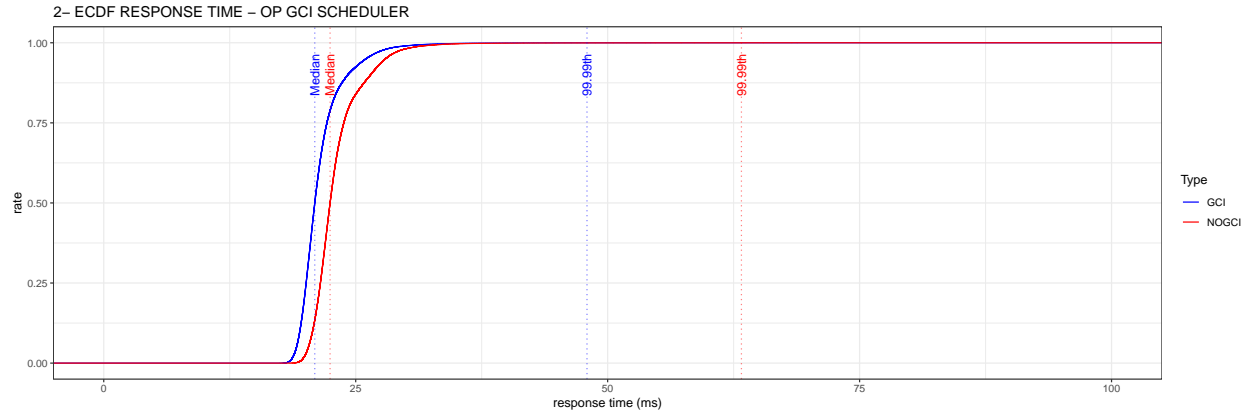
```
## Warning: Removed 1 rows containing missing values (geom_text).
```

```
## Warning: Removed 1 rows containing missing values (geom_vline).
```



```
## Warning: Removed 10 rows containing non-finite values (stat_ecdf).
```





summary table of confidence interval for response time, both in milliseconds, of 2^o simulation

##	stats	gci.cii	gci.cis	nogci.cii	nogci.cis
## 1	avg	22.00	23.00	24.00	24.00
## 2	p50	20.95	20.96	22.55	22.56
## 3	p95	25.94	26.01	28.02	28.06
## 4	p99	29.87	30.06	31.84	32.00
## 5	p999	39.78	40.73	43.63	45.32
## 6	p9999	2981.00	3030.00	2979.00	2994.00
## 7	p99999	3034.00	3034.00	3493.00	3493.00
## 8	dist	3013.00	3013.00	3470.00	3470.00

##	stats	gci.cii	gci.cis	nogci.cii	nogci.cis
## 1	avg	22.00	22.00	23.00	23.00
## 2	p50	20.93	20.94	22.45	22.46
## 3	p95	26.04	26.09	27.94	27.99
## 4	p99	29.84	30.01	31.52	31.69
## 5	p999	37.42	38.19	40.40	41.59
## 6	p9999	47.32	54.16	62.32	63.69
## 7	p99999	2936.00	3036.00	68.21	73.70
## 8	dist	2915.00	3015.00	45.75	51.23

##	stats	gci.cii	gci.cis	nogci.cii	nogci.cis
## 1	avg	21.00	21.00	23.00	23.00
## 2	p50	20.93	20.94	22.45	22.46
## 3	p95	25.99	26.05	27.94	27.99
## 4	p99	29.79	29.95	31.52	31.69
## 5	p999	37.40	38.14	40.40	41.59
## 6	p9999	47.12	49.84	62.32	63.69
## 7	p99999	57.98	71.73	68.21	73.70
## 8	dist	37.05	50.79	45.75	51.23

comparison table for response time, of all simulation

##	nogci	gci	comparison
## 0%	18.229	17.32400	1.052240
## 25%	21.579	20.10300	1.073422
## 50%	22.555	20.95300	1.076457
## 75%	23.937	22.13700	1.081312

## 90%	26.563	24.17300	1.098871
## 95%	28.037	25.97500	1.079384
## 99%	31.897	29.96000	1.064653
## 99.9%	44.543	40.17476	1.108731
## 99.99%	2989.443	2982.02700	1.002487
## 99.999%	3492.909	3033.68100	1.151376
## 100%	3492.909	3034.69600	1.150991

##	nogci	gci comparison	
## 0%	18.353	17.49200	1.04922250
## 25%	21.497	20.08300	1.07040781
## 50%	22.458	20.94000	1.07249284
## 75%	23.820	22.15800	1.07500677
## 90%	26.480	24.25600	1.09168865
## 95%	27.961	26.06200	1.07286471
## 99%	31.573	29.91200	1.05552955
## 99.9%	40.942	37.88394	1.08072180
## 99.99%	63.275	49.83600	1.26966450
## 99.999%	68.246	2969.52193	0.02298215
## 100%	73.696	3035.68200	0.02427659

##	nogci	gci comparison	
## 0%	18.353	17.31000	1.0602542
## 25%	21.497	20.08300	1.0704078
## 50%	22.458	20.93900	1.0725441
## 75%	23.820	22.14400	1.0756864
## 90%	26.480	24.21300	1.0936274
## 95%	27.961	26.02600	1.0743487
## 99%	31.573	29.87000	1.0570137
## 99.9%	40.942	37.71100	1.0856779
## 99.99%	63.275	47.95032	1.3195948
## 99.999%	68.246	63.78100	1.0700052
## 100%	73.696	76.82600	0.9592586

ECDF for response time of 3^o simulation

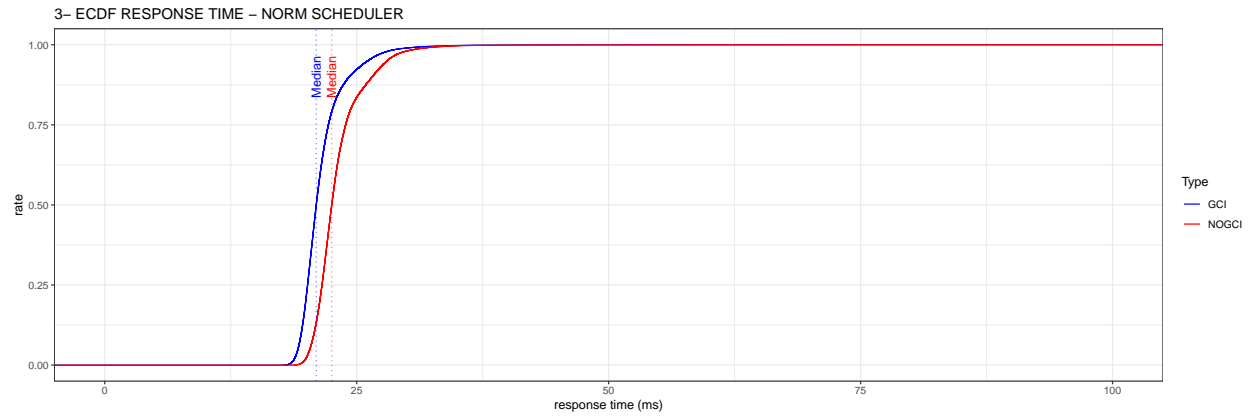
Warning: Removed 306 rows containing non-finite values (stat_ecdf).

Warning: Removed 1 rows containing missing values (geom_text).

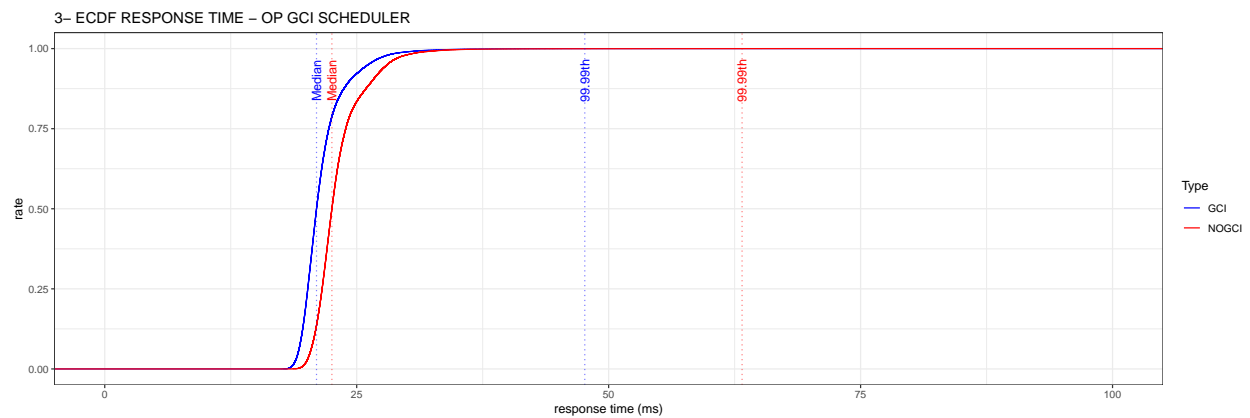
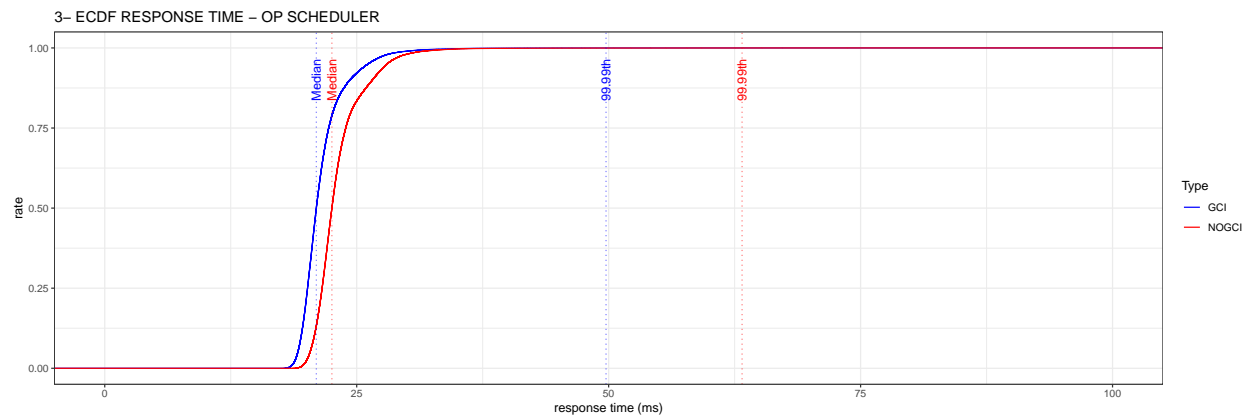
Warning: Removed 1 rows containing missing values (geom_vline).

Warning: Removed 1 rows containing missing values (geom_text).

Warning: Removed 1 rows containing missing values (geom_vline).



Warning: Removed 11 rows containing non-finite values (stat_ecdf).



summary table of confidence interval for response time, both in milliseconds, of 3^o simulation

##	stats	gci.cii	gci.cis	nogci.cii	nogci.cis
## 1	avg	22.00	23.00	24.00	24.00
## 2	p50	20.98	20.99	22.52	22.53
## 3	p95	26.08	26.15	28.00	28.05
## 4	p99	30.04	30.23	31.79	31.95
## 5	p999	39.54	40.69	43.73	45.75
## 6	p9999	2981.00	3030.00	2979.00	2994.00
## 7	p99999	3034.00	3034.00	3493.00	3493.00
## 8	dist	3013.00	3013.00	3470.00	3470.00

##	stats	gci.cii	gci.cis	nogci.cii	nogci.cis
## 1	avg	22.00	22.00	23.00	23.00
## 2	p50	20.99	21.00	22.53	22.54
## 3	p95	26.09	26.16	28.00	28.04
## 4	p99	29.93	30.10	31.57	31.80
## 5	p999	37.68	38.54	39.85	41.27
## 6	p9999	47.63	54.16	61.78	63.45
## 7	p99999	2956.00	3035.00	67.76	73.70
## 8	dist	2935.00	3014.00	45.23	51.15

##	stats	gci.cii	gci.cis	nogci.cii	nogci.cis
## 1	avg	22.00	22.00	23.00	23.00
## 2	p50	21.01	21.02	22.53	22.54
## 3	p95	26.11	26.17	28.00	28.04
## 4	p99	29.94	30.13	31.57	31.80
## 5	p999	37.50	38.40	39.85	41.27
## 6	p9999	47.10	49.75	61.78	63.45
## 7	p99999	60.92	75.96	67.76	73.70
## 8	dist	39.91	54.94	45.23	51.15

comparison table for response time, of all simulation

##	nogci	gci	comparison
## 0%	18.3280	17.31000	1.058810
## 25%	21.5570	20.12600	1.071102
## 50%	22.5230	20.98700	1.073188
## 75%	23.9050	22.19100	1.077239
## 90%	26.5515	24.26400	1.094275
## 95%	28.0230	26.11700	1.072979
## 99%	31.8787	30.12092	1.058357
## 99.9%	44.6120	40.04800	1.113963
## 99.99%	2989.4430	2982.02700	1.002487
## 99.999%	3492.9090	3033.68100	1.151376
## 100%	3492.9090	3034.34000	1.151126

##	nogci	gci	comparison
## 0%	18.353	17.32400	1.05939737
## 25%	21.567	20.12300	1.07175868
## 50%	22.539	20.99400	1.07359245
## 75%	23.913	22.22000	1.07619262
## 90%	26.561	24.30900	1.09264059
## 95%	28.021	26.13100	1.07232789
## 99%	31.687	30.02300	1.05542417
## 99.9%	40.795	38.03160	1.07266054
## 99.99%	63.239	49.74081	1.27137047
## 99.999%	68.246	2969.98723	0.02297855
## 100%	73.696	3035.07400	0.02428145

##	nogci	gci	comparison
## 0%	18.353	17.31000	1.0602542
## 25%	21.567	20.14400	1.0706414
## 50%	22.539	21.01300	1.0726217

```
## 75%      23.913 22.23350 1.0755392
## 90%      26.561 24.30900 1.0926406
## 95%      28.021 26.14600 1.0717127
## 99%      31.687 30.04200 1.0547567
## 99.9%    40.795 37.96200 1.0746273
## 99.99%   63.239 47.63253 1.3276432
## 99.999%  68.246 67.24700 1.0148557
## 100%     73.696 75.95600 0.9702459
```

ECDF for response time of 4^o simulation

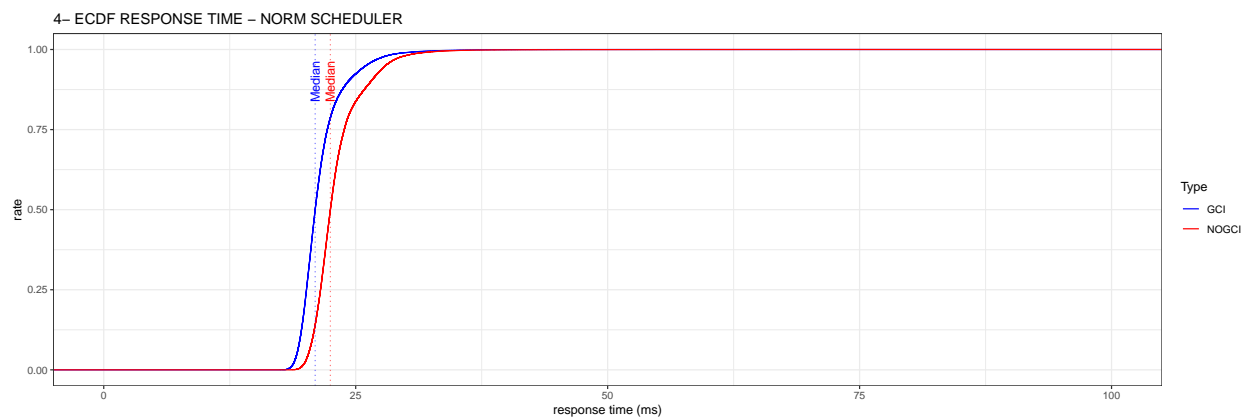
```
## Warning: Removed 309 rows containing non-finite values (stat_ecdf).
```

```
## Warning: Removed 1 rows containing missing values (geom_text).
```

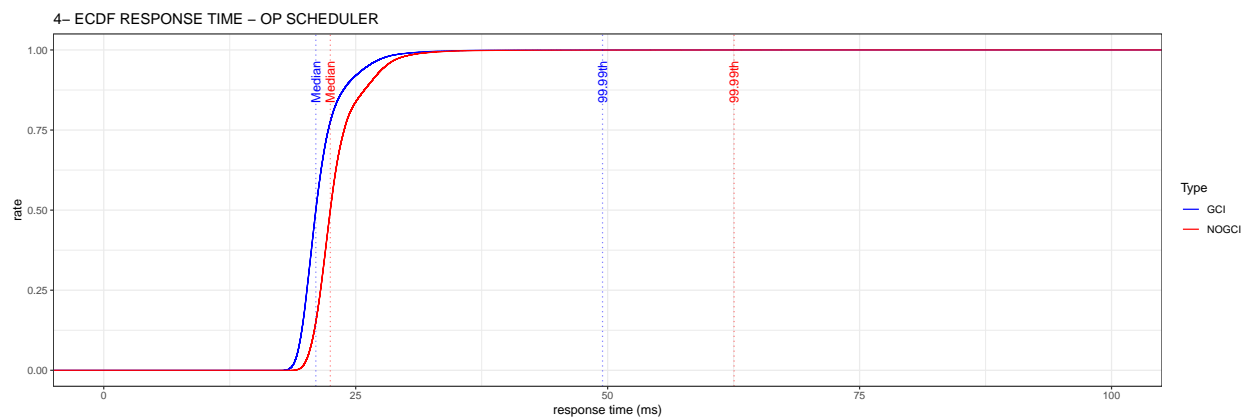
```
## Warning: Removed 1 rows containing missing values (geom_vline).
```

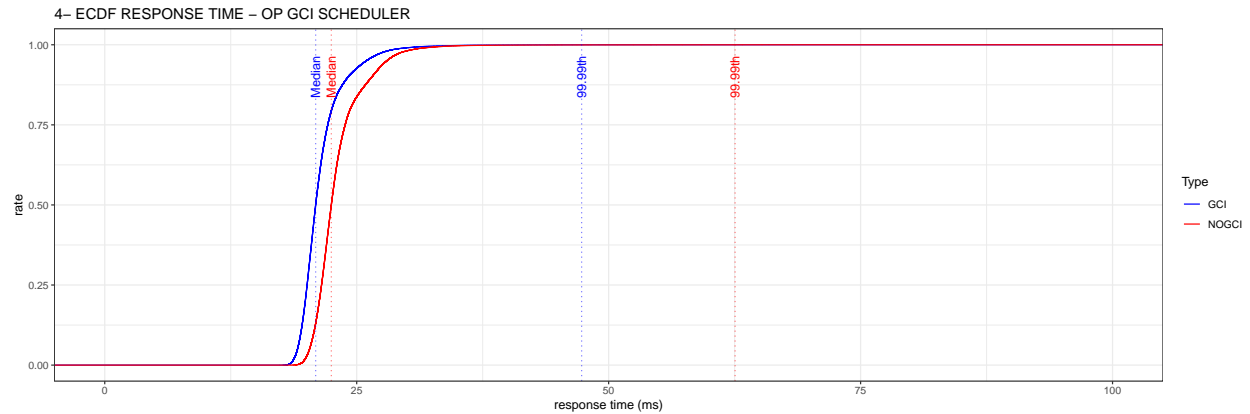
```
## Warning: Removed 1 rows containing missing values (geom_text).
```

```
## Warning: Removed 1 rows containing missing values (geom_vline).
```



```
## Warning: Removed 12 rows containing non-finite values (stat_ecdf).
```





summary table of confidence interval for response time, both in milliseconds, of 4^o simulation

##	stats	gci.cii	gci.cis	nogci.cii	nogci.cis
## 1	avg	22.00	23.00	24.00	24.00
## 2	p50	20.97	20.98	22.48	22.50
## 3	p95	26.01	26.07	27.96	28.00
## 4	p99	29.90	30.08	31.61	31.82
## 5	p999	39.14	40.38	42.48	44.37
## 6	p9999	2982.00	3030.00	2979.00	2994.00
## 7	p99999	3034.00	3034.00	3493.00	3493.00
## 8	dist	3013.00	3013.00	3470.00	3470.00

##	stats	gci.cii	gci.cis	nogci.cii	nogci.cis
## 1	avg	22.00	22.00	23.00	23.00
## 2	p50	21.04	21.05	22.48	22.49
## 3	p95	26.19	26.25	27.96	28.01
## 4	p99	30.08	30.27	31.54	31.72
## 5	p999	37.68	38.51	39.99	41.43
## 6	p9999	47.92	54.23	60.36	63.40
## 7	p99999	2946.00	3033.00	67.76	73.70
## 8	dist	2925.00	3012.00	45.28	51.21

##	stats	gci.cii	gci.cis	nogci.cii	nogci.cis
## 1	avg	21.00	21.00	23.00	23.00
## 2	p50	20.92	20.93	22.48	22.49
## 3	p95	25.92	25.99	27.96	28.01
## 4	p99	29.69	29.88	31.54	31.72
## 5	p999	37.42	38.46	39.99	41.43
## 6	p9999	47.10	51.03	60.36	63.40
## 7	p99999	55.59	70.44	67.76	73.70
## 8	dist	34.67	49.51	45.28	51.21

comparison table for response time, of all simulation

##	nogci	gci	comparison
## 0%	18.229	17.324	1.052240
## 25%	21.509	20.115	1.069302
## 50%	22.488	20.980	1.071878
## 75%	23.867	22.184	1.075865

## 90%	26.505	24.250	1.092990
## 95%	27.980	26.045	1.074294
## 99%	31.732	29.992	1.058015
## 99.9%	43.145	39.800	1.084045
## 99.99%	2989.443	2982.027	1.002487
## 99.999%	3492.909	3033.681	1.151376
## 100%	3492.909	3034.492	1.151069

##	nogci	gci	comparison
## 0%	18.353	17.3100	1.06025419
## 25%	21.511	20.1570	1.06717269
## 50%	22.482	21.0430	1.06838379
## 75%	23.854	22.2790	1.07069438
## 90%	26.511	24.3790	1.08745232
## 95%	27.987	26.2146	1.06761118
## 99%	31.603	30.1630	1.04774061
## 99.9%	40.934	38.0840	1.07483458
## 99.99%	62.545	49.4930	1.26371406
## 99.999%	68.246	2969.2363	0.02298436
## 100%	73.696	3035.5290	0.02427781

##	nogci	gci	comparison
## 0%	18.353	17.31000	1.0602542
## 25%	21.511	20.07900	1.0713183
## 50%	22.482	20.92800	1.0742546
## 75%	23.854	22.13000	1.0779033
## 90%	26.511	24.15000	1.0977640
## 95%	27.987	25.95600	1.0782478
## 99%	31.603	29.77212	1.0614965
## 99.9%	40.934	37.92900	1.0792270
## 99.99%	62.545	47.31900	1.3217735
## 99.999%	68.246	56.65000	1.2046955
## 100%	73.696	75.95600	0.9702459

ECDF for response time of 5^o simulation

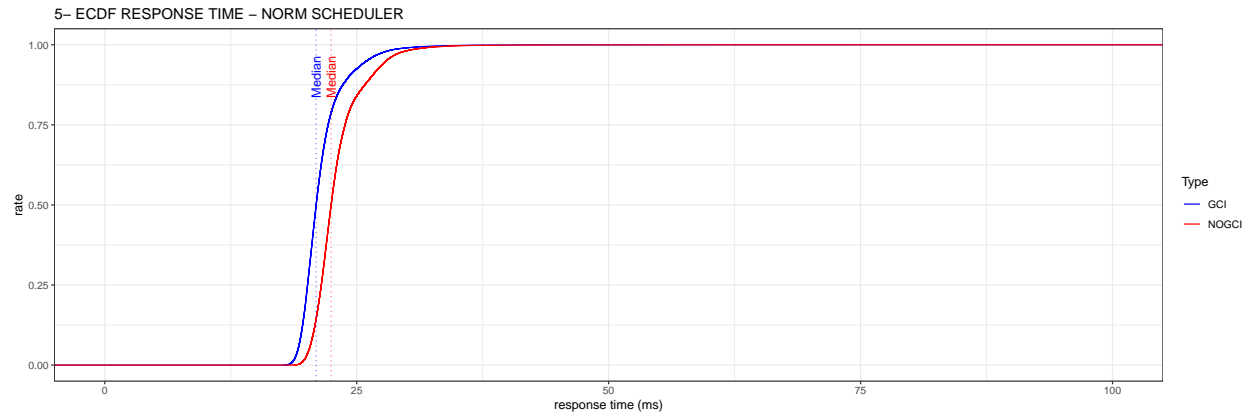
Warning: Removed 304 rows containing non-finite values (stat_ecdf).

Warning: Removed 1 rows containing missing values (geom_text).

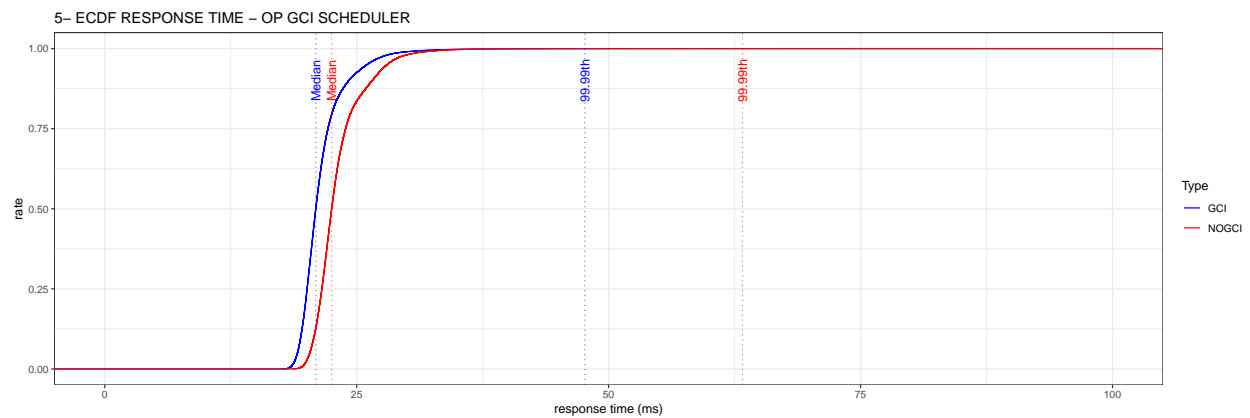
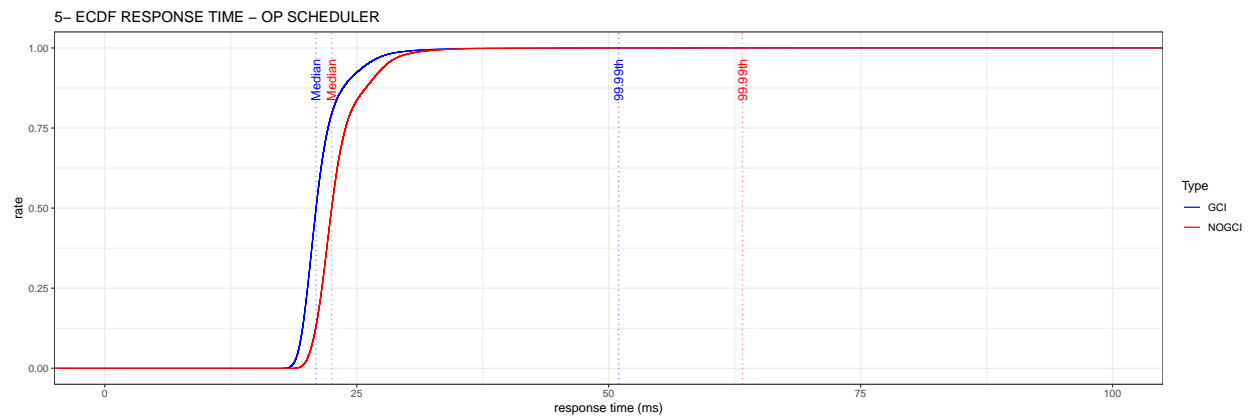
Warning: Removed 1 rows containing missing values (geom_vline).

Warning: Removed 1 rows containing missing values (geom_text).

Warning: Removed 1 rows containing missing values (geom_vline).



Warning: Removed 9 rows containing non-finite values (stat_ecdf).



summary table of confidence interval for response time, both in milliseconds, of 5^o simulation

##	stats	gci.cii	gci.cis	nogci.cii	nogci.cis
## 1	avg	22.00	23.00	24.00	24.00
## 2	p50	20.97	20.98	22.46	22.47
## 3	p95	25.98	26.05	27.93	27.97
## 4	p99	29.87	30.05	31.70	31.86
## 5	p999	39.33	40.51	43.27	45.29
## 6	p9999	2970.00	3030.00	2979.00	2994.00
## 7	p99999	3034.00	3034.00	3493.00	3493.00
## 8	dist	3013.00	3013.00	3470.00	3470.00

##	stats	gci.cii	gci.cis	nogci.cii	nogci.cis
## 1	avg	22.00	22.00	23.00	23.00
## 2	p50	20.96	20.97	22.51	22.52
## 3	p95	26.05	26.10	27.99	28.03
## 4	p99	29.91	30.08	31.61	31.84
## 5	p999	37.96	38.86	40.07	41.36
## 6	p9999	48.02	54.23	62.32	63.74
## 7	p99999	1535.00	3002.00	68.21	73.70
## 8	dist	1514.00	2981.00	45.69	51.17

##	stats	gci.cii	gci.cis	nogci.cii	nogci.cis
## 1	avg	21.00	21.00	23.00	23.00
## 2	p50	20.93	20.94	22.51	22.52
## 3	p95	25.98	26.05	27.99	28.03
## 4	p99	29.83	30.01	31.61	31.84
## 5	p999	37.18	37.91	40.07	41.36
## 6	p9999	47.24	49.76	62.32	63.74
## 7	p99999	57.98	68.79	68.21	73.70
## 8	dist	37.05	47.85	45.69	51.17

comparison table for response time, of all simulation

##		nogci	gci	comparison
## 0%		18.22900	17.32400	1.052240
## 25%		21.48800	20.12500	1.067727
## 50%		22.46300	20.97800	1.070788
## 75%		23.84500	22.16500	1.075795
## 90%		26.46700	24.21000	1.093226
## 95%		27.95000	26.01400	1.074421
## 99%		31.78000	29.96127	1.060703
## 99.9%		44.43521	39.94800	1.112326
## 99.99%		2989.44300	2982.02700	1.002487
## 99.999%		3492.90900	3033.68100	1.151376
## 100%		3492.90900	3034.34100	1.151126

##		nogci	gci	comparison
## 0%		18.35300	17.31000	1.06025419
## 25%		21.54500	20.12000	1.07082505
## 50%		22.51800	20.96700	1.07397339
## 75%		23.89900	22.15625	1.07865726
## 90%		26.54200	24.23500	1.09519290
## 95%		28.01000	26.07200	1.07433262
## 99%		31.72765	30.01100	1.05720069
## 99.9%		40.93919	38.40200	1.06606922
## 99.99%		63.27500	50.99900	1.24071060
## 99.999%		70.96364	2963.69699	0.02394430
## 100%		73.69600	3035.61200	0.02427715

##		nogci	gci	comparison
## 0%		18.35300	17.32400	1.059397
## 25%		21.54500	20.07700	1.073118
## 50%		22.51800	20.93900	1.075410

## 75%	23.89900	22.14500	1.079205
## 90%	26.54200	24.20400	1.096596
## 95%	28.01000	26.01400	1.076728
## 99%	31.72765	29.91338	1.060651
## 99.9%	40.93919	37.46563	1.092713
## 99.99%	63.27500	47.63400	1.328358
## 99.999%	70.96364	63.78100	1.112614
## 100%	73.69600	68.79000	1.071319