

Pantheon Report

Generated at 2019-01-17 15:37:21 (UTC).

Data path: AWS California 1 on `ens5` (*local*) → Stanford on `eno1` (*remote*).

Repeated the test of 21 congestion control schemes 5 times.

Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

NTP offsets were measured against `time.stanford.edu` and have been applied to correct the timestamps in logs.

System info:

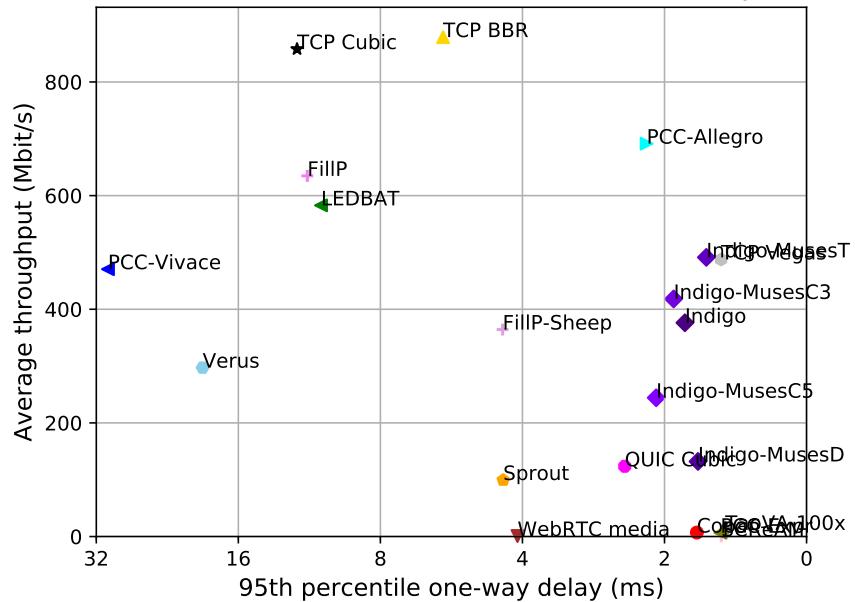
```
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

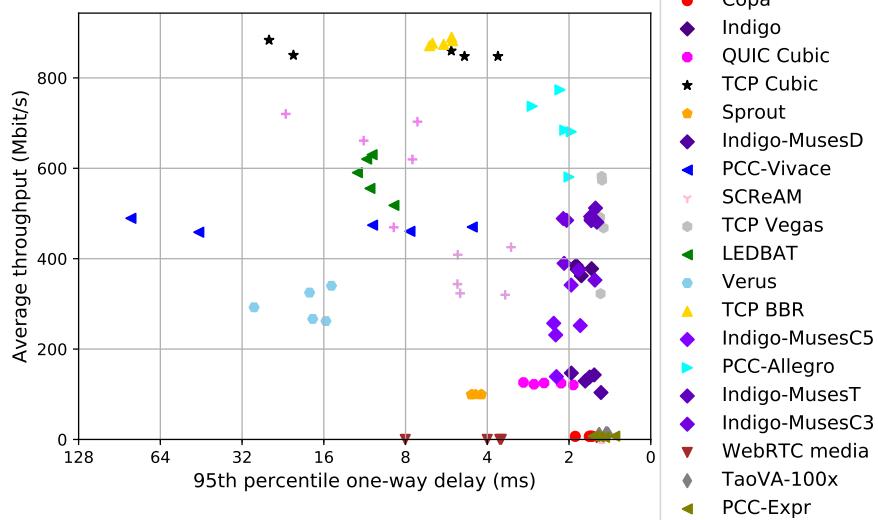
```
branch: muses @ c80a283586bf7b0cc1fe08c69c8f60d56498f81c
third_party/fillp @ d6da1459332fceef56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ c3eee875824760ec5b2fd207fefe166e1afe2170
third_party/pantheon-tunnel @ f866d3f58d27af942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
```

third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

test from AWS California 1 to Stanford, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



test from AWS California 1 to Stanford, 5 runs of 30s each per scheme
3 flows with 10s interval between flows



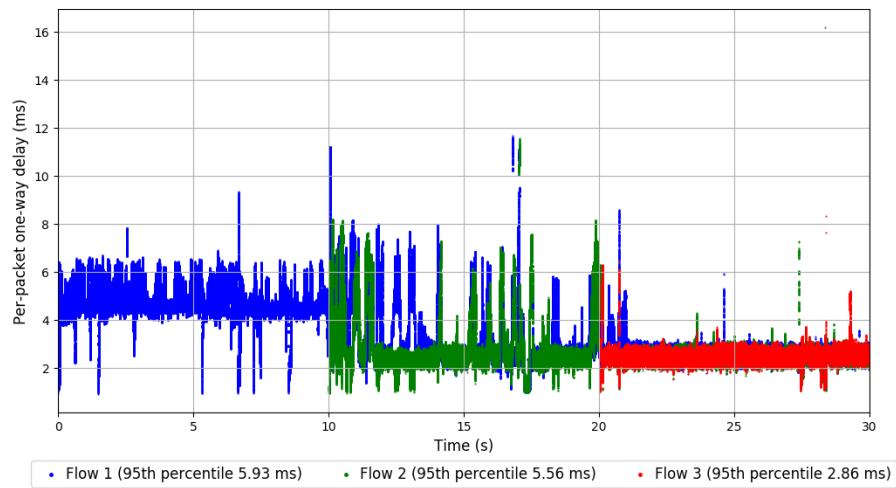
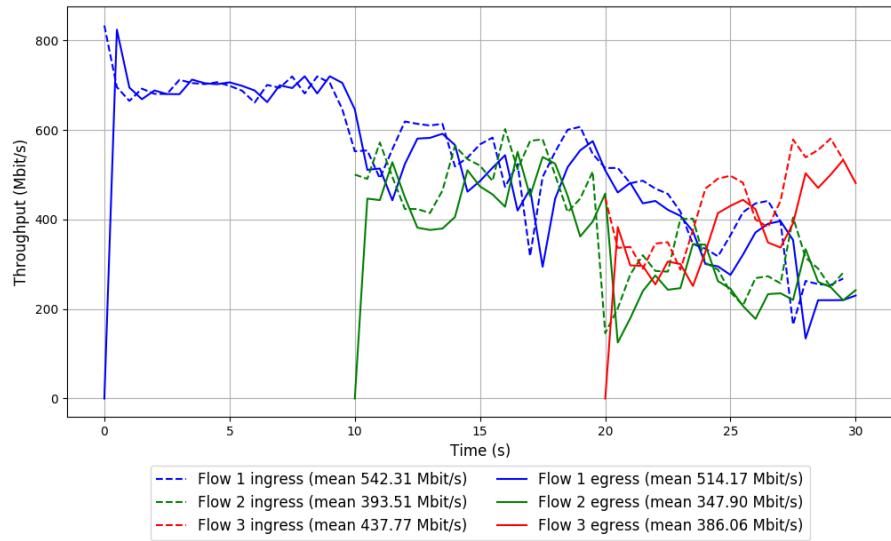
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	514.71	379.45	335.54	5.68	6.12	4.51	4.77	9.93	12.09
Copa	5	0.00	8.44	5.45	1.14	1.53	1.58	98.36	49.72	42.22
TCP Cubic	5	503.27	377.94	309.02	14.44	2.18	2.46	0.14	0.11	0.12
FillP	5	398.43	246.87	218.25	14.01	4.33	6.51	9.76	15.68	11.23
FillP-Sheep	5	311.82	68.42	21.34	4.59	2.53	2.35	3.11	3.99	4.80
Indigo	5	193.76	186.35	181.41	1.51	1.70	2.10	0.01	0.01	0.02
Indigo-MusesC3	5	214.95	225.51	192.20	1.86	1.81	1.98	0.06	0.06	0.08
Indigo-MusesC5	5	87.72	158.40	177.01	1.72	2.31	2.07	0.04	0.15	0.13
Indigo-MusesD	5	77.33	64.92	41.85	1.68	1.27	1.43	0.01	0.03	0.01
Indigo-MusesT	5	273.33	243.63	194.29	1.37	1.41	1.55	0.05	0.06	0.09
LEDBAT	5	337.73	261.87	224.52	11.64	7.19	6.59	0.18	0.27	0.35
PCC-Allegro	5	493.28	242.93	111.21	2.23	1.87	1.91	0.24	0.23	0.30
PCC-Expr	5	0.75	6.40	7.27	1.27	1.23	1.16	85.71	23.44	17.12
QUIC Cubic	5	67.15	59.44	51.86	1.77	1.94	4.01	0.01	0.01	0.02
SCReAM	5	0.22	0.22	0.22	1.20	1.20	1.20	0.00	0.00	0.00
Sprout	5	49.93	49.82	49.57	4.33	4.45	4.39	0.17	0.12	0.12
TaoVA-100x	5	6.37	5.96	4.53	1.17	1.09	1.12	58.30	68.34	74.67
TCP Vegas	5	214.02	254.08	313.71	1.18	1.21	1.25	0.01	0.02	0.03
Verus	5	162.88	134.39	135.63	11.00	27.89	60.94	2.48	4.53	5.09
PCC-Vivace	5	264.94	234.46	150.46	14.75	80.14	77.07	0.06	0.50	0.31
WebRTC media	5	0.47	0.32	0.15	3.68	3.60	4.23	0.00	0.00	0.01

Run 1: Statistics of TCP BBR

```
Start at: 2019-01-17 12:19:42
End at: 2019-01-17 12:20:12
Local clock offset: -0.185 ms
Remote clock offset: -0.129 ms

# Below is generated by plot.py at 2019-01-17 14:55:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 874.25 Mbit/s
95th percentile per-packet one-way delay: 5.791 ms
Loss rate: 7.96%
-- Flow 1:
Average throughput: 514.17 Mbit/s
95th percentile per-packet one-way delay: 5.931 ms
Loss rate: 5.19%
-- Flow 2:
Average throughput: 347.90 Mbit/s
95th percentile per-packet one-way delay: 5.562 ms
Loss rate: 11.58%
-- Flow 3:
Average throughput: 386.06 Mbit/s
95th percentile per-packet one-way delay: 2.856 ms
Loss rate: 11.80%
```

Run 1: Report of TCP BBR — Data Link

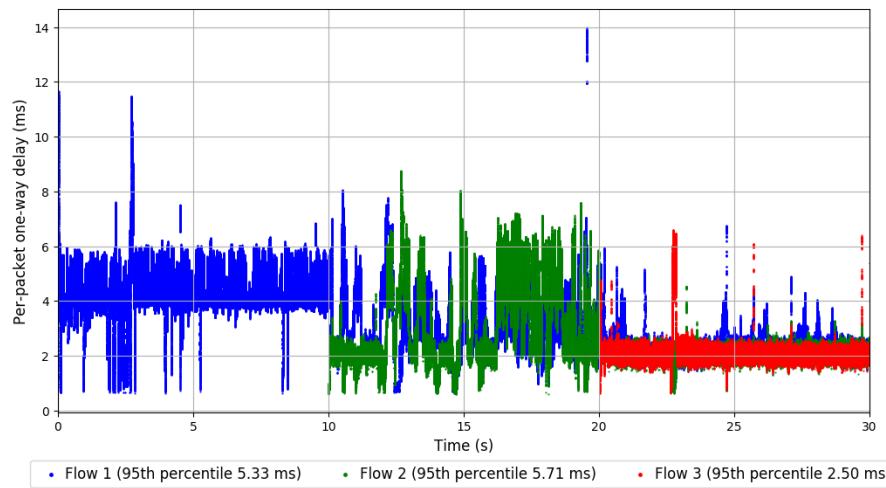
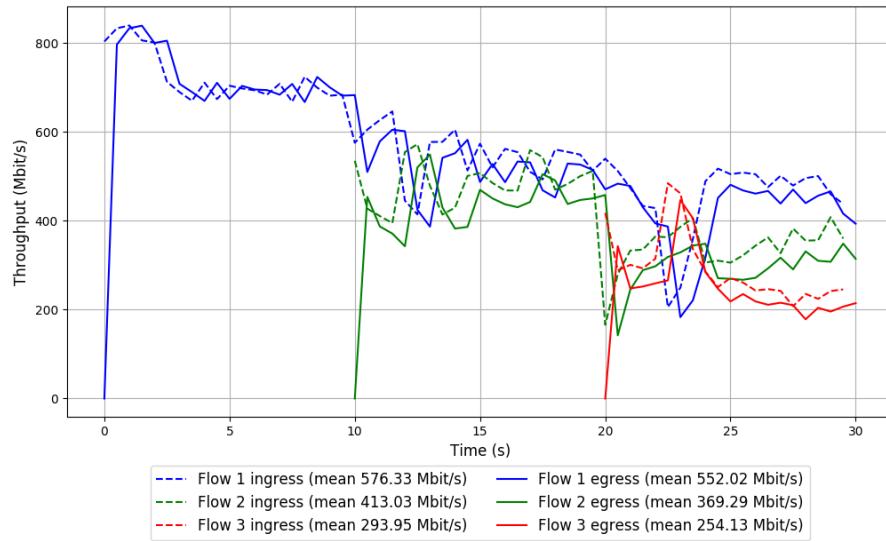


Run 2: Statistics of TCP BBR

```
Start at: 2019-01-17 12:49:57
End at: 2019-01-17 12:50:27
Local clock offset: 3.812 ms
Remote clock offset: 0.309 ms

# Below is generated by plot.py at 2019-01-17 14:55:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 882.40 Mbit/s
95th percentile per-packet one-way delay: 5.367 ms
Loss rate: 7.02%
-- Flow 1:
Average throughput: 552.02 Mbit/s
95th percentile per-packet one-way delay: 5.327 ms
Loss rate: 4.21%
-- Flow 2:
Average throughput: 369.29 Mbit/s
95th percentile per-packet one-way delay: 5.713 ms
Loss rate: 10.57%
-- Flow 3:
Average throughput: 254.13 Mbit/s
95th percentile per-packet one-way delay: 2.495 ms
Loss rate: 13.54%
```

Run 2: Report of TCP BBR — Data Link

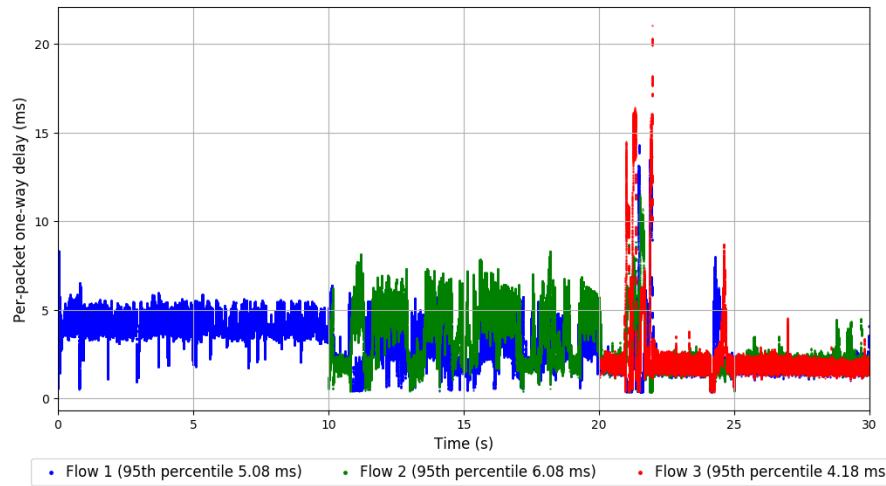
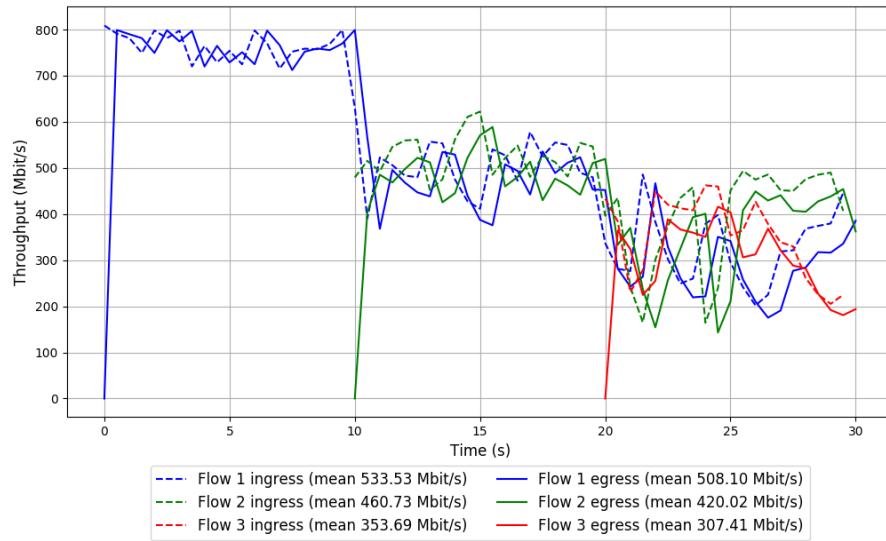


Run 3: Statistics of TCP BBR

```
Start at: 2019-01-17 13:20:08
End at: 2019-01-17 13:20:38
Local clock offset: 3.659 ms
Remote clock offset: -3.738 ms

# Below is generated by plot.py at 2019-01-17 14:55:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 890.03 Mbit/s
95th percentile per-packet one-way delay: 5.414 ms
Loss rate: 7.08%
-- Flow 1:
Average throughput: 508.10 Mbit/s
95th percentile per-packet one-way delay: 5.081 ms
Loss rate: 4.76%
-- Flow 2:
Average throughput: 420.02 Mbit/s
95th percentile per-packet one-way delay: 6.075 ms
Loss rate: 8.83%
-- Flow 3:
Average throughput: 307.41 Mbit/s
95th percentile per-packet one-way delay: 4.181 ms
Loss rate: 13.08%
```

Run 3: Report of TCP BBR — Data Link

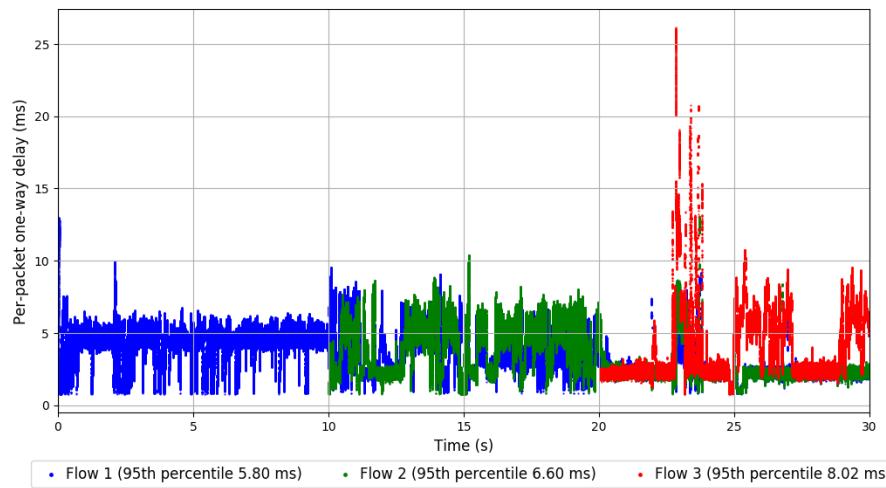
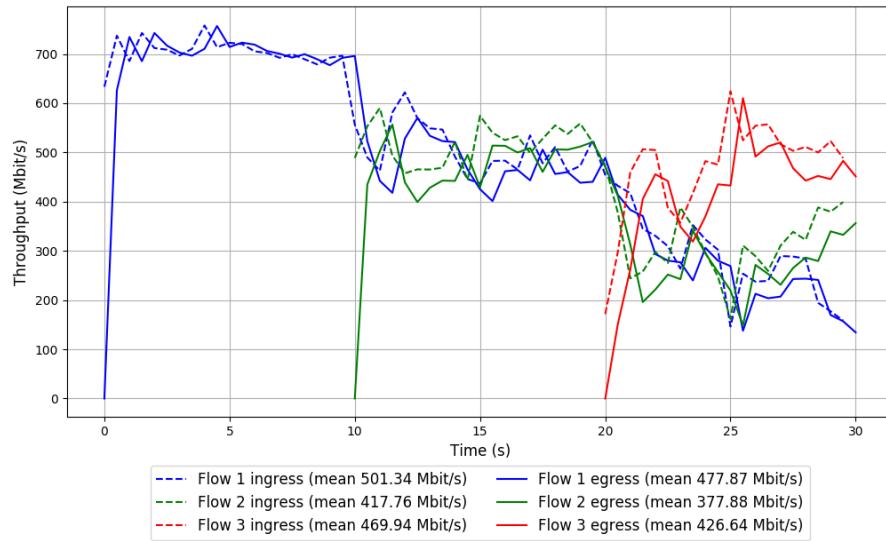


Run 4: Statistics of TCP BBR

```
Start at: 2019-01-17 13:50:06
End at: 2019-01-17 13:50:36
Local clock offset: -0.542 ms
Remote clock offset: -3.292 ms

# Below is generated by plot.py at 2019-01-17 14:55:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 871.31 Mbit/s
95th percentile per-packet one-way delay: 6.522 ms
Loss rate: 6.88%
-- Flow 1:
Average throughput: 477.87 Mbit/s
95th percentile per-packet one-way delay: 5.796 ms
Loss rate: 4.68%
-- Flow 2:
Average throughput: 377.88 Mbit/s
95th percentile per-packet one-way delay: 6.598 ms
Loss rate: 9.54%
-- Flow 3:
Average throughput: 426.64 Mbit/s
95th percentile per-packet one-way delay: 8.022 ms
Loss rate: 9.22%
```

Run 4: Report of TCP BBR — Data Link

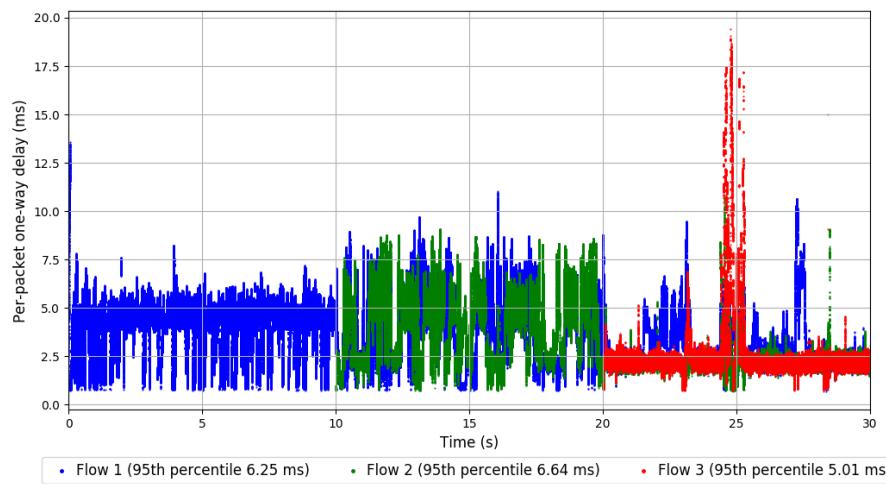
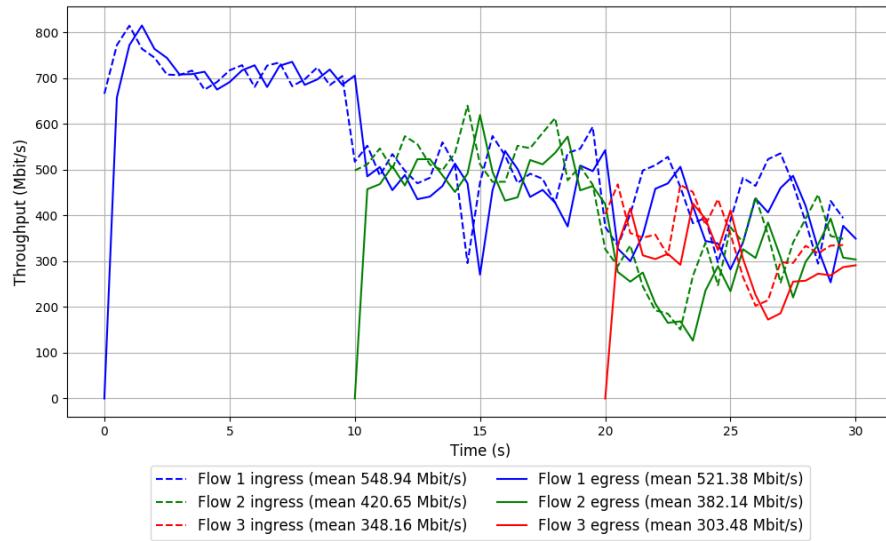


Run 5: Statistics of TCP BBR

```
Start at: 2019-01-17 14:20:05
End at: 2019-01-17 14:20:35
Local clock offset: -0.246 ms
Remote clock offset: 3.753 ms

# Below is generated by plot.py at 2019-01-17 14:55:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 876.88 Mbit/s
95th percentile per-packet one-way delay: 6.366 ms
Loss rate: 7.20%
-- Flow 1:
Average throughput: 521.38 Mbit/s
95th percentile per-packet one-way delay: 6.255 ms
Loss rate: 5.02%
-- Flow 2:
Average throughput: 382.14 Mbit/s
95th percentile per-packet one-way delay: 6.643 ms
Loss rate: 9.14%
-- Flow 3:
Average throughput: 303.48 Mbit/s
95th percentile per-packet one-way delay: 5.006 ms
Loss rate: 12.82%
```

Run 5: Report of TCP BBR — Data Link

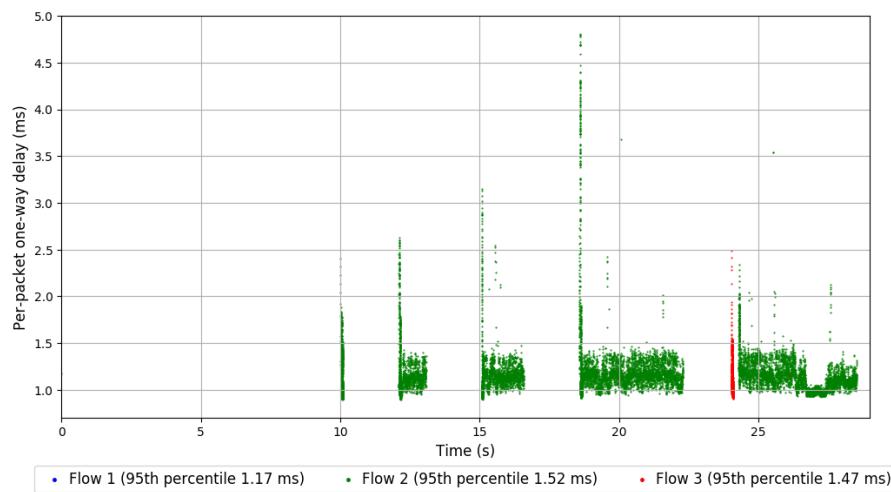
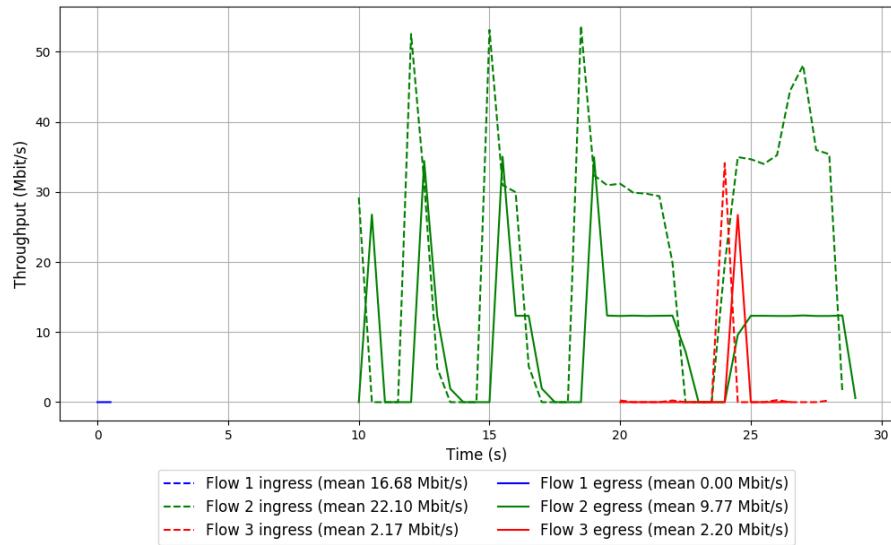


Run 1: Statistics of Copa

```
Start at: 2019-01-17 12:34:02
End at: 2019-01-17 12:34:32
Local clock offset: 2.718 ms
Remote clock offset: 0.135 ms

# Below is generated by plot.py at 2019-01-17 14:55:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.81 Mbit/s
95th percentile per-packet one-way delay: 1.504 ms
Loss rate: 54.46%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.172 ms
Loss rate: 97.92%
-- Flow 2:
Average throughput: 9.77 Mbit/s
95th percentile per-packet one-way delay: 1.517 ms
Loss rate: 55.77%
-- Flow 3:
Average throughput: 2.20 Mbit/s
95th percentile per-packet one-way delay: 1.469 ms
Loss rate: 23.85%
```

Run 1: Report of Copa — Data Link

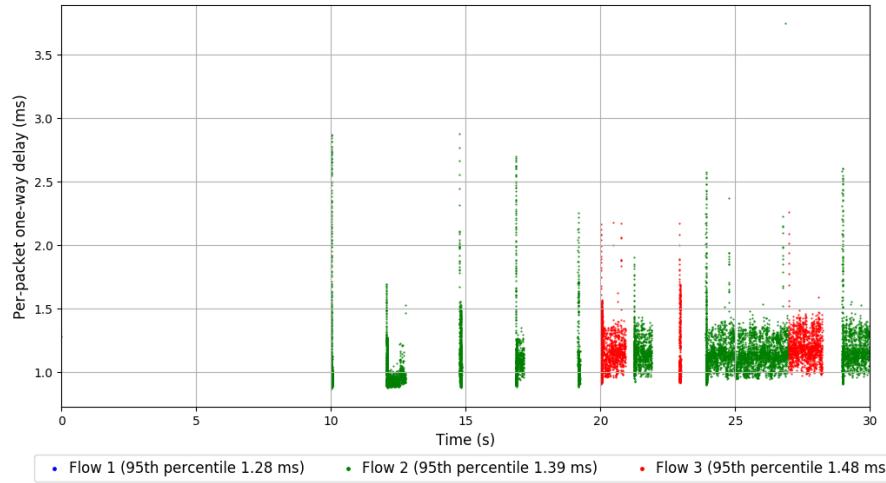
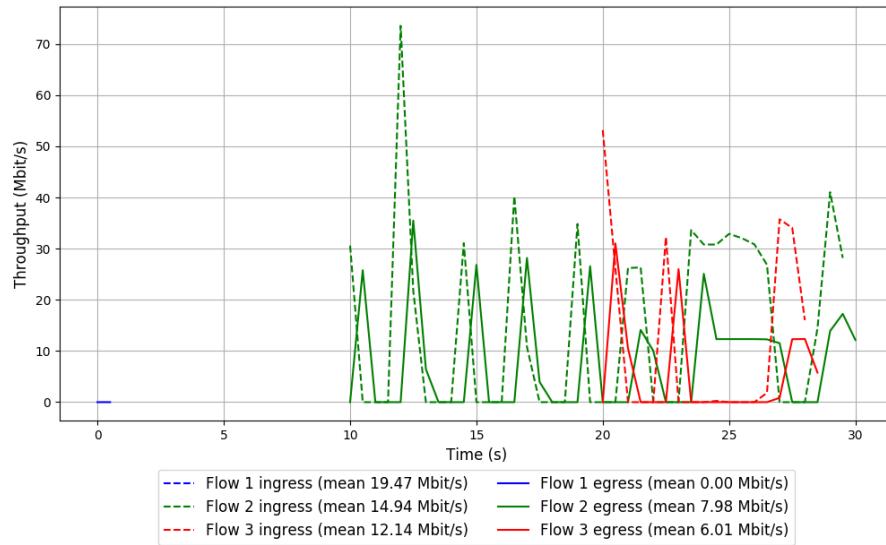


Run 2: Statistics of Copa

```
Start at: 2019-01-17 13:04:17
End at: 2019-01-17 13:04:47
Local clock offset: 3.407 ms
Remote clock offset: -2.464 ms

# Below is generated by plot.py at 2019-01-17 14:55:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.96 Mbit/s
95th percentile per-packet one-way delay: 1.430 ms
Loss rate: 47.57%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.280 ms
Loss rate: 98.33%
-- Flow 2:
Average throughput: 7.98 Mbit/s
95th percentile per-packet one-way delay: 1.392 ms
Loss rate: 46.58%
-- Flow 3:
Average throughput: 6.01 Mbit/s
95th percentile per-packet one-way delay: 1.476 ms
Loss rate: 50.48%
```

Run 2: Report of Copa — Data Link

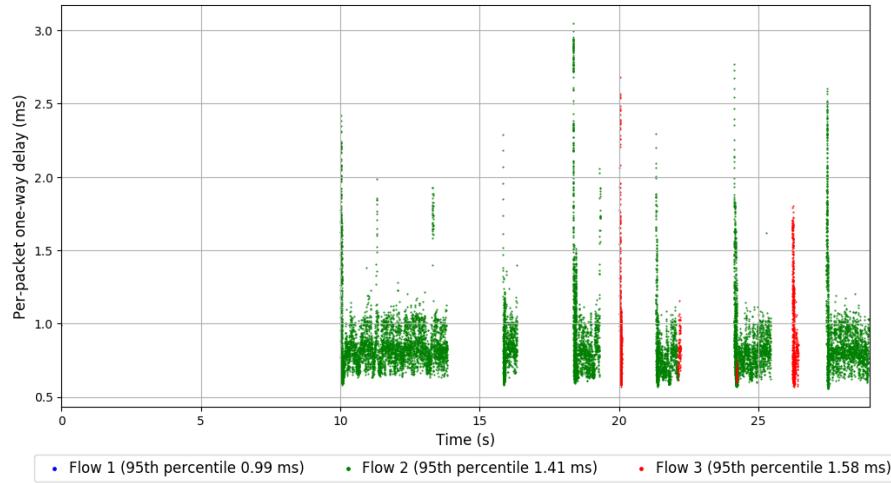
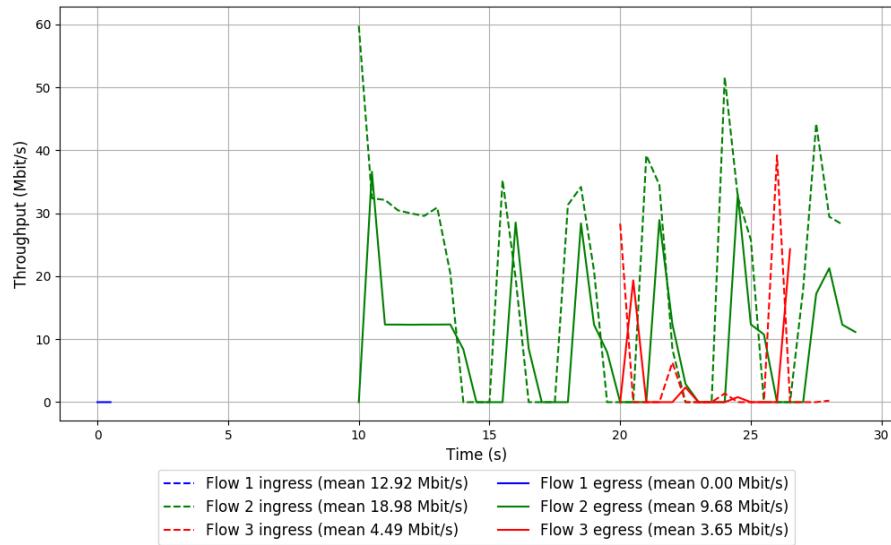


Run 3: Statistics of Copa

```
Start at: 2019-01-17 13:34:23
End at: 2019-01-17 13:34:53
Local clock offset: 0.442 ms
Remote clock offset: -3.431 ms

# Below is generated by plot.py at 2019-01-17 14:55:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.14 Mbit/s
95th percentile per-packet one-way delay: 1.451 ms
Loss rate: 47.96%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 0.988 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 9.68 Mbit/s
95th percentile per-packet one-way delay: 1.414 ms
Loss rate: 48.99%
-- Flow 3:
Average throughput: 3.65 Mbit/s
95th percentile per-packet one-way delay: 1.576 ms
Loss rate: 38.01%
```

Run 3: Report of Copa — Data Link

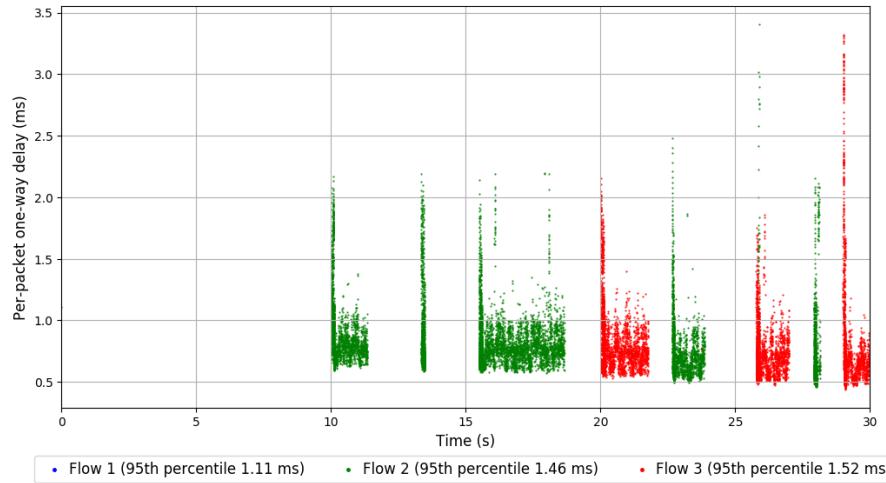
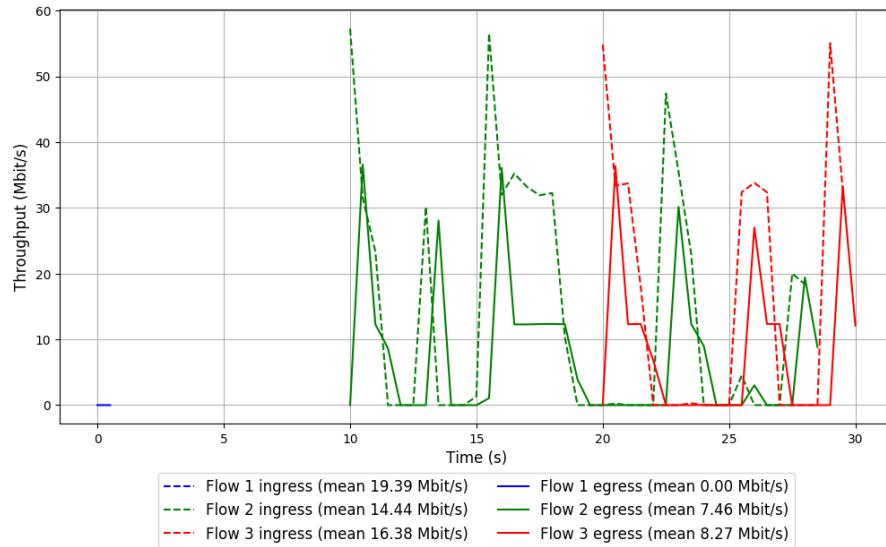


Run 4: Statistics of Copa

```
Start at: 2019-01-17 14:04:26
End at: 2019-01-17 14:04:56
Local clock offset: -0.134 ms
Remote clock offset: -0.491 ms

# Below is generated by plot.py at 2019-01-17 14:55:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.26 Mbit/s
95th percentile per-packet one-way delay: 1.489 ms
Loss rate: 48.79%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.108 ms
Loss rate: 98.33%
-- Flow 2:
Average throughput: 7.46 Mbit/s
95th percentile per-packet one-way delay: 1.461 ms
Loss rate: 48.32%
-- Flow 3:
Average throughput: 8.27 Mbit/s
95th percentile per-packet one-way delay: 1.520 ms
Loss rate: 49.53%
```

Run 4: Report of Copa — Data Link

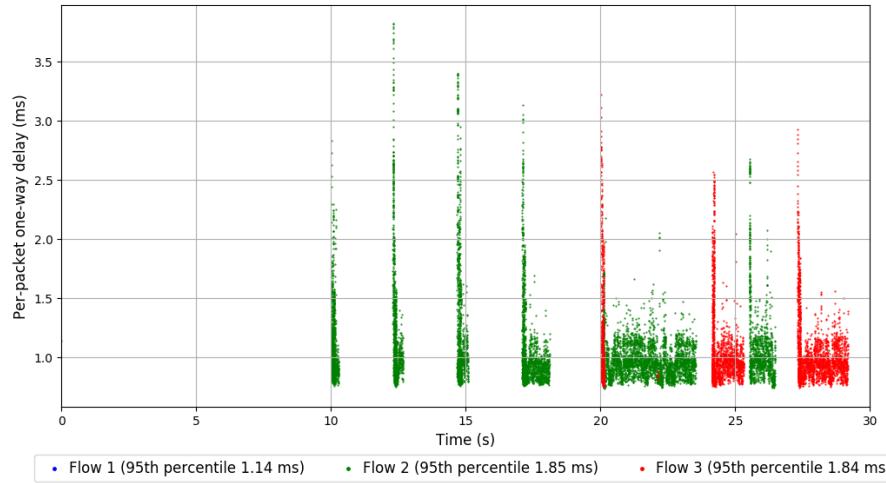
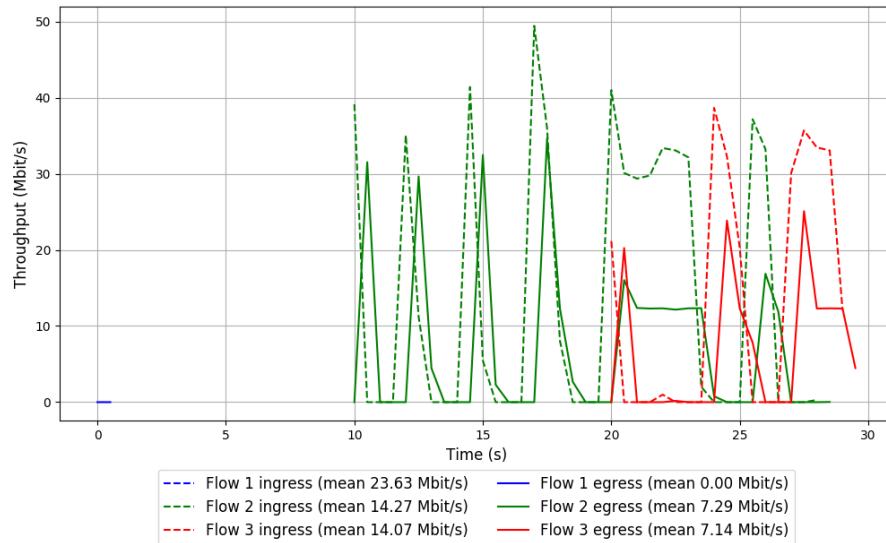


Run 5: Statistics of Copa

```
Start at: 2019-01-17 14:34:22
End at: 2019-01-17 14:34:52
Local clock offset: -0.101 ms
Remote clock offset: 5.3 ms

# Below is generated by plot.py at 2019-01-17 14:55:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.86 Mbit/s
95th percentile per-packet one-way delay: 1.848 ms
Loss rate: 49.03%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1.135 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 7.29 Mbit/s
95th percentile per-packet one-way delay: 1.854 ms
Loss rate: 48.92%
-- Flow 3:
Average throughput: 7.14 Mbit/s
95th percentile per-packet one-way delay: 1.839 ms
Loss rate: 49.22%
```

Run 5: Report of Copa — Data Link

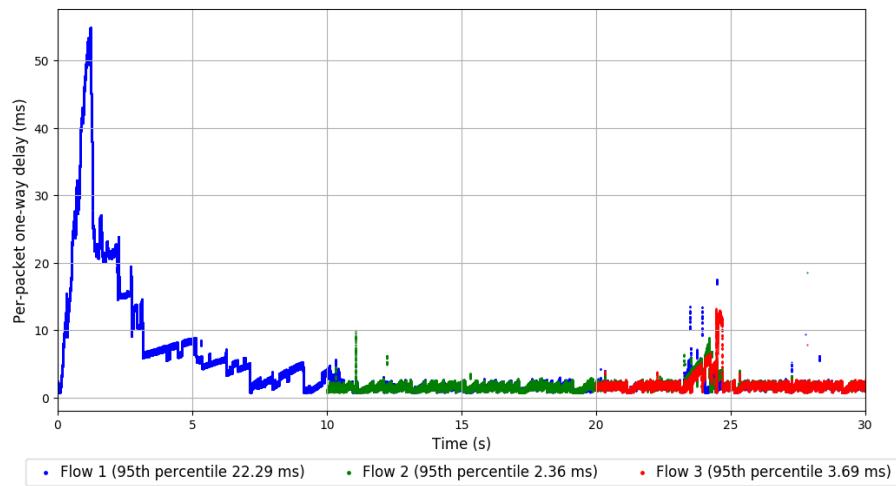
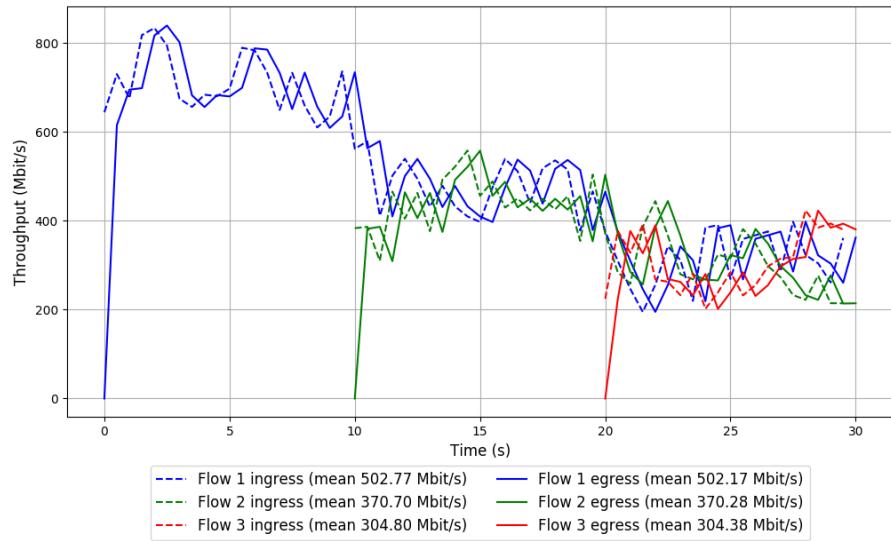


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-01-17 12:09:36
End at: 2019-01-17 12:10:06
Local clock offset: -0.14 ms
Remote clock offset: -0.284 ms

# Below is generated by plot.py at 2019-01-17 14:55:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 850.29 Mbit/s
95th percentile per-packet one-way delay: 20.700 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 502.17 Mbit/s
95th percentile per-packet one-way delay: 22.285 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 370.28 Mbit/s
95th percentile per-packet one-way delay: 2.364 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 304.38 Mbit/s
95th percentile per-packet one-way delay: 3.695 ms
Loss rate: 0.13%
```

Run 1: Report of TCP Cubic — Data Link

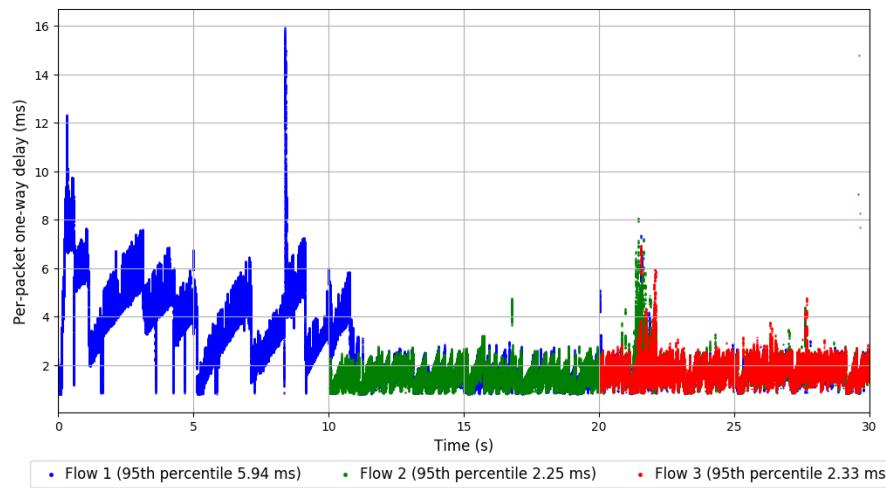
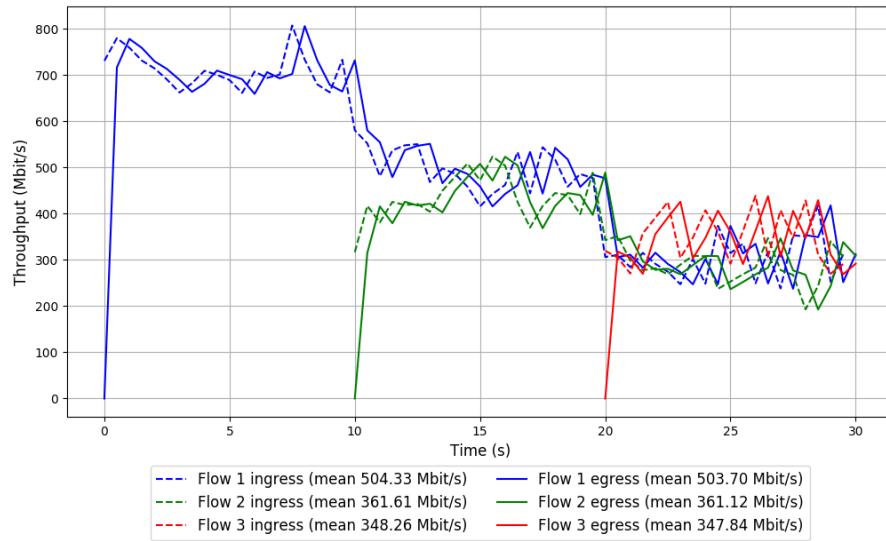


Run 2: Statistics of TCP Cubic

```
Start at: 2019-01-17 12:39:38
End at: 2019-01-17 12:40:08
Local clock offset: 3.214 ms
Remote clock offset: 0.196 ms

# Below is generated by plot.py at 2019-01-17 14:55:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 859.85 Mbit/s
95th percentile per-packet one-way delay: 5.427 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 503.70 Mbit/s
95th percentile per-packet one-way delay: 5.943 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 361.12 Mbit/s
95th percentile per-packet one-way delay: 2.254 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 347.84 Mbit/s
95th percentile per-packet one-way delay: 2.335 ms
Loss rate: 0.12%
```

Run 2: Report of TCP Cubic — Data Link

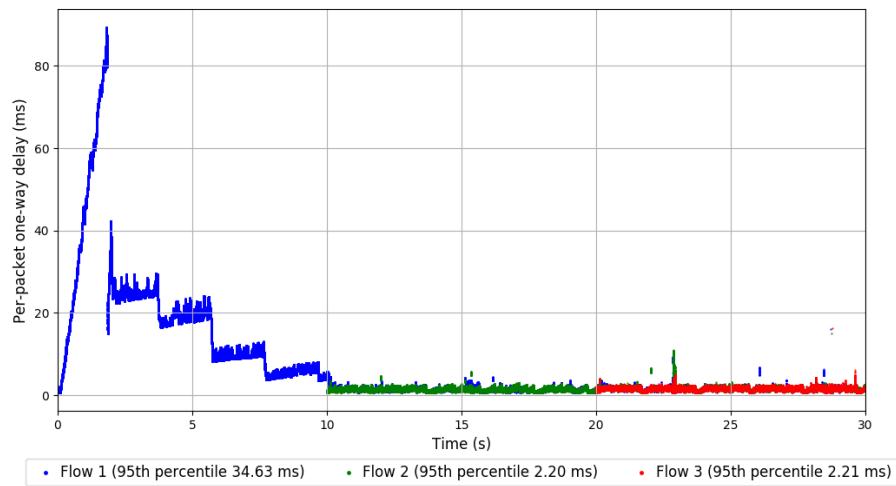
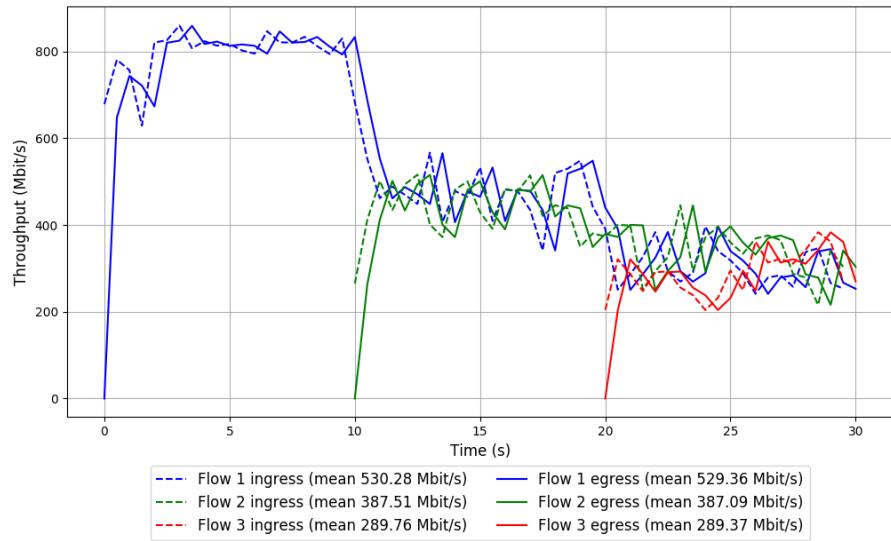


Run 3: Statistics of TCP Cubic

```
Start at: 2019-01-17 13:09:50
End at: 2019-01-17 13:10:20
Local clock offset: 3.474 ms
Remote clock offset: -3.146 ms

# Below is generated by plot.py at 2019-01-17 14:55:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 883.62 Mbit/s
95th percentile per-packet one-way delay: 25.448 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 529.36 Mbit/s
95th percentile per-packet one-way delay: 34.628 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 387.09 Mbit/s
95th percentile per-packet one-way delay: 2.198 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 289.37 Mbit/s
95th percentile per-packet one-way delay: 2.207 ms
Loss rate: 0.13%
```

Run 3: Report of TCP Cubic — Data Link

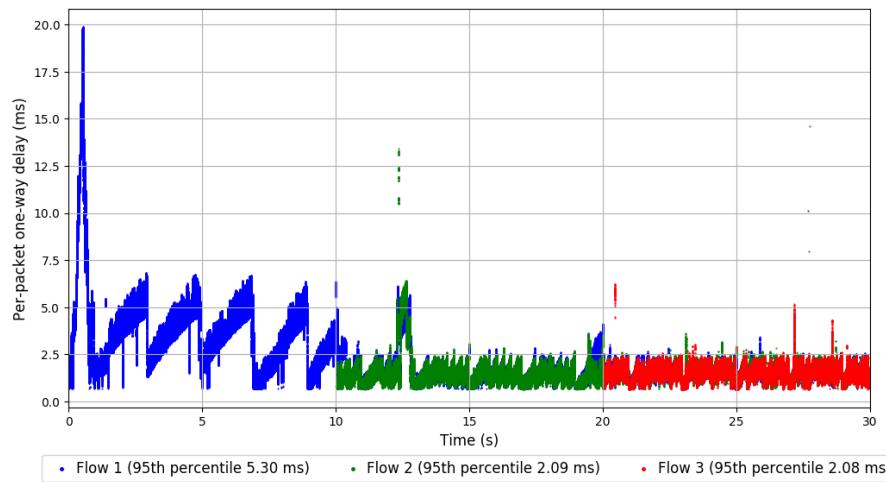
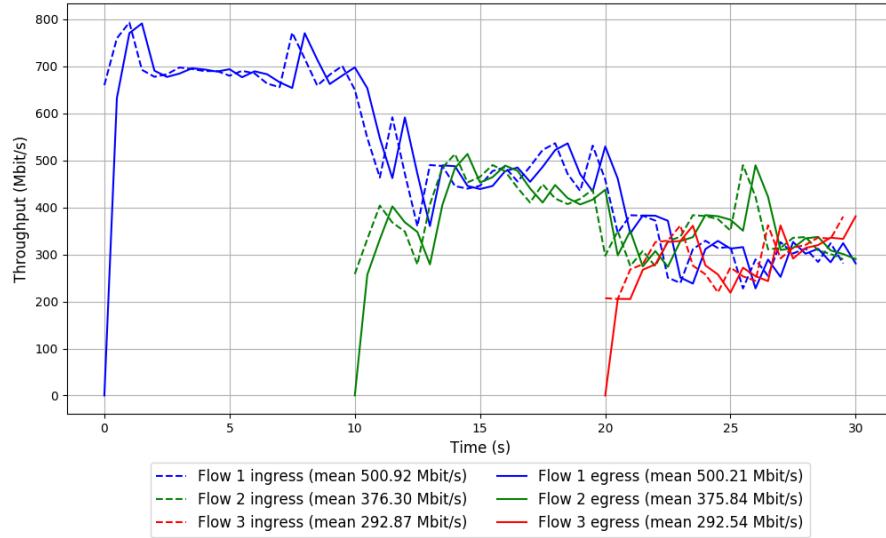


Run 4: Statistics of TCP Cubic

```
Start at: 2019-01-17 13:39:47
End at: 2019-01-17 13:40:17
Local clock offset: -0.025 ms
Remote clock offset: -3.31 ms

# Below is generated by plot.py at 2019-01-17 15:03:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 847.81 Mbit/s
95th percentile per-packet one-way delay: 4.852 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 500.21 Mbit/s
95th percentile per-packet one-way delay: 5.300 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 375.84 Mbit/s
95th percentile per-packet one-way delay: 2.094 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 292.54 Mbit/s
95th percentile per-packet one-way delay: 2.076 ms
Loss rate: 0.11%
```

Run 4: Report of TCP Cubic — Data Link

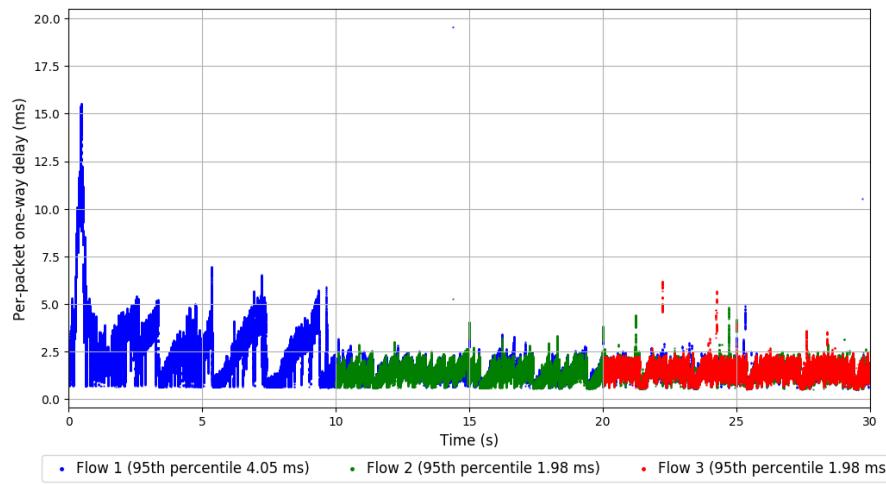
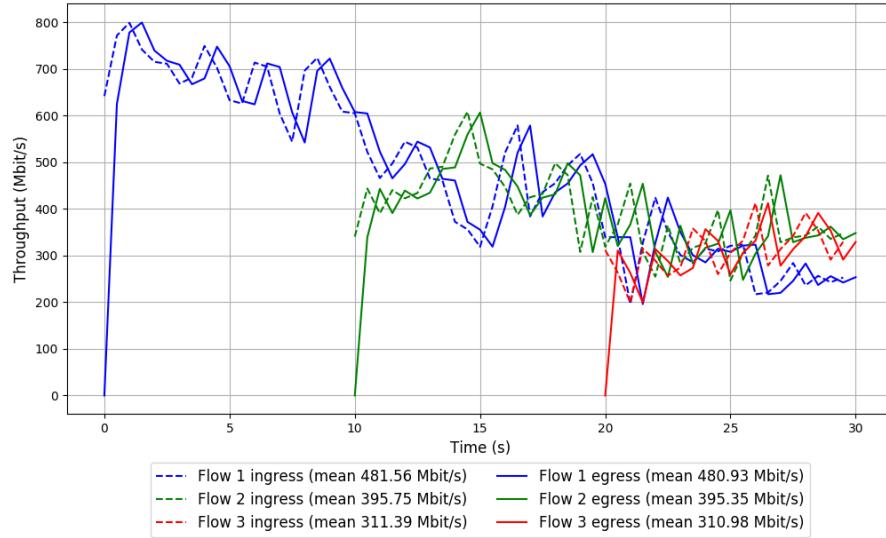


Run 5: Statistics of TCP Cubic

```
Start at: 2019-01-17 14:09:55
End at: 2019-01-17 14:10:25
Local clock offset: -0.178 ms
Remote clock offset: 1.568 ms

# Below is generated by plot.py at 2019-01-17 15:04:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 847.75 Mbit/s
95th percentile per-packet one-way delay: 3.654 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 480.93 Mbit/s
95th percentile per-packet one-way delay: 4.054 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 395.35 Mbit/s
95th percentile per-packet one-way delay: 1.977 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 310.98 Mbit/s
95th percentile per-packet one-way delay: 1.981 ms
Loss rate: 0.12%
```

Run 5: Report of TCP Cubic — Data Link

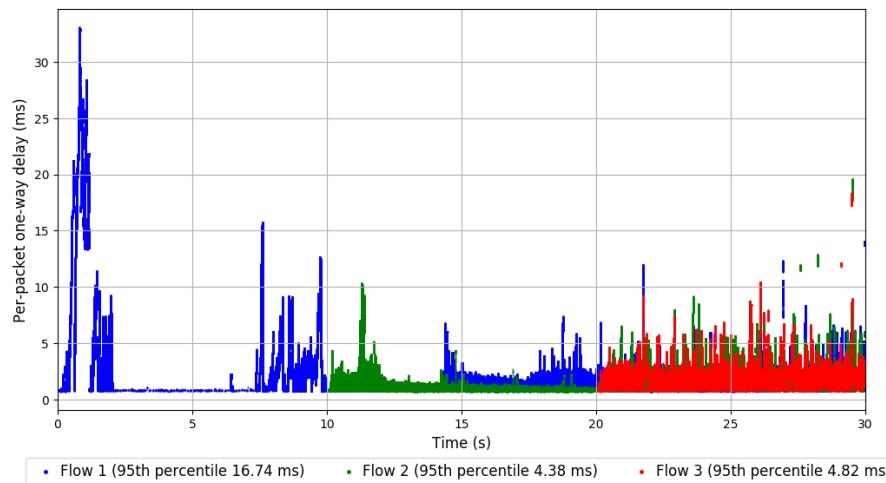
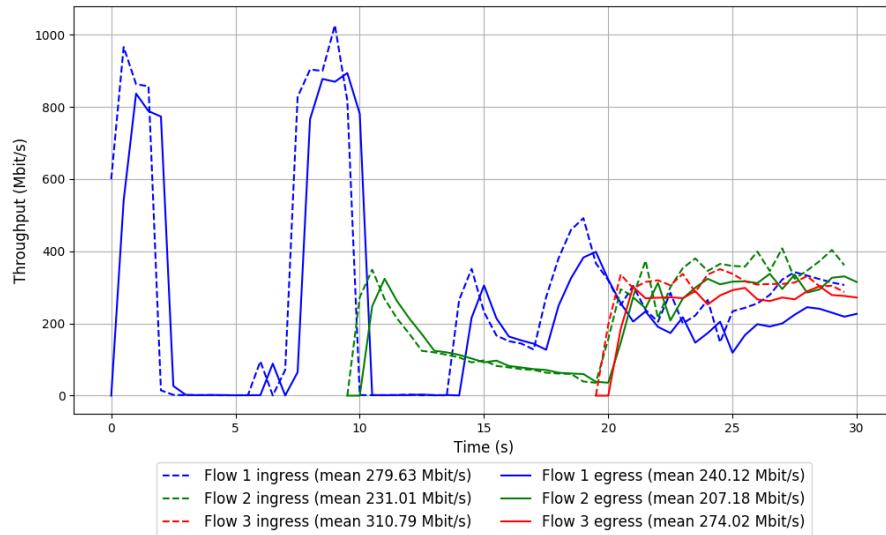


```
Run 1: Statistics of FillP

Start at: 2019-01-17 12:11:18
End at: 2019-01-17 12:11:48
Local clock offset: -0.152 ms
Remote clock offset: -0.281 ms

# Below is generated by plot.py at 2019-01-17 15:04:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 469.41 Mbit/s
95th percentile per-packet one-way delay: 8.843 ms
Loss rate: 12.59%
-- Flow 1:
Average throughput: 240.12 Mbit/s
95th percentile per-packet one-way delay: 16.736 ms
Loss rate: 14.13%
-- Flow 2:
Average throughput: 207.18 Mbit/s
95th percentile per-packet one-way delay: 4.375 ms
Loss rate: 10.31%
-- Flow 3:
Average throughput: 274.02 Mbit/s
95th percentile per-packet one-way delay: 4.822 ms
Loss rate: 11.84%
```

Run 1: Report of FillP — Data Link

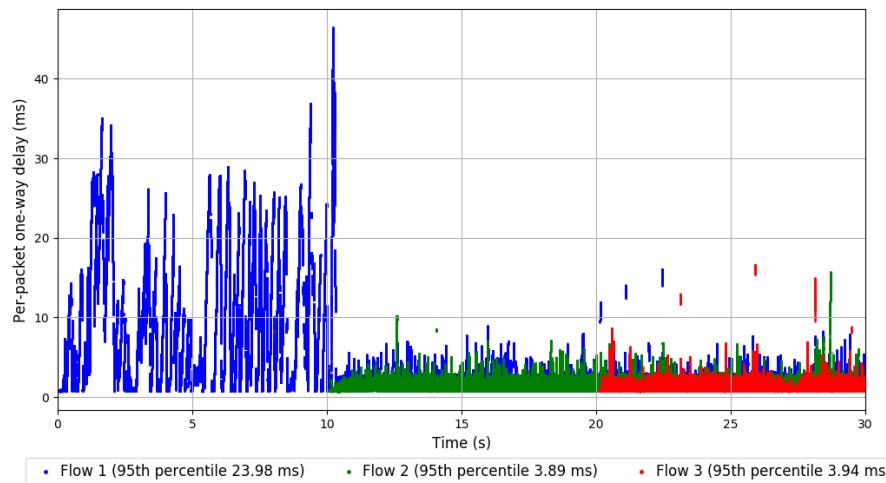
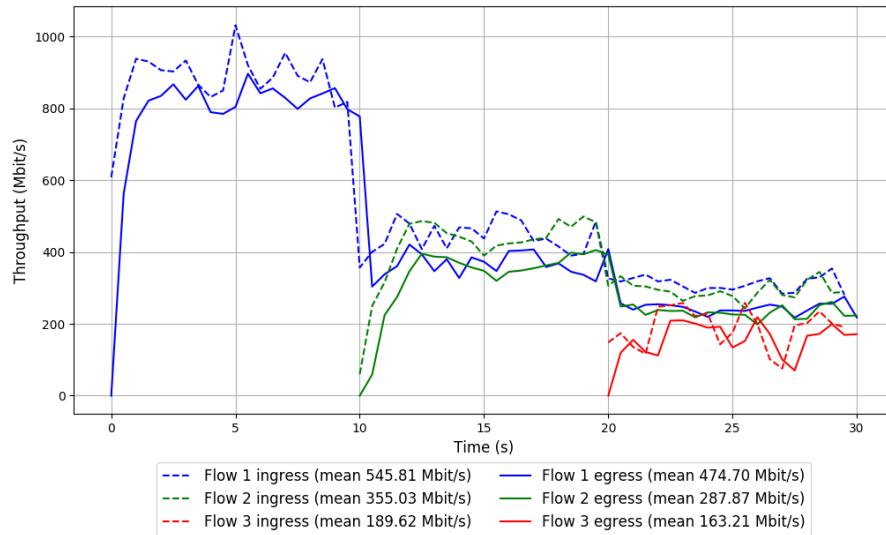


Run 2: Statistics of FillP

```
Start at: 2019-01-17 12:41:20
End at: 2019-01-17 12:41:50
Local clock offset: 3.316 ms
Remote clock offset: 0.181 ms

# Below is generated by plot.py at 2019-01-17 15:05:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 720.27 Mbit/s
95th percentile per-packet one-way delay: 22.096 ms
Loss rate: 14.74%
-- Flow 1:
Average throughput: 474.70 Mbit/s
95th percentile per-packet one-way delay: 23.982 ms
Loss rate: 13.03%
-- Flow 2:
Average throughput: 287.87 Mbit/s
95th percentile per-packet one-way delay: 3.886 ms
Loss rate: 18.91%
-- Flow 3:
Average throughput: 163.21 Mbit/s
95th percentile per-packet one-way delay: 3.939 ms
Loss rate: 13.93%
```

Run 2: Report of FillP — Data Link

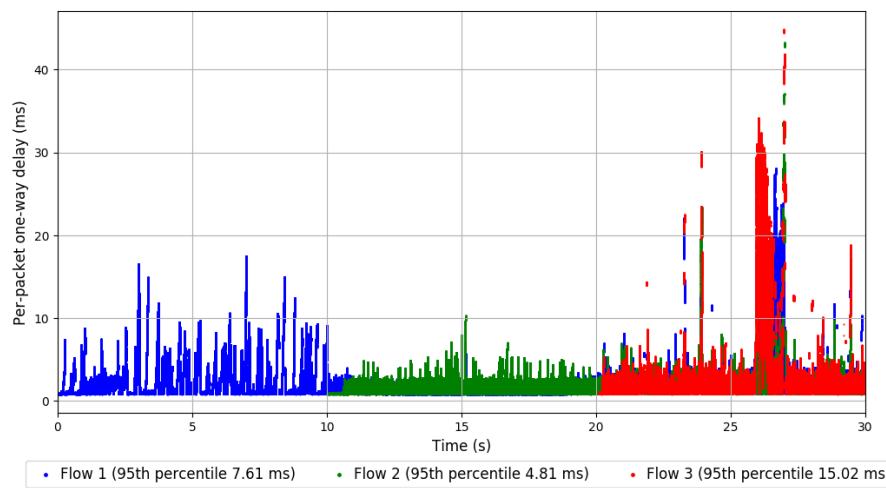
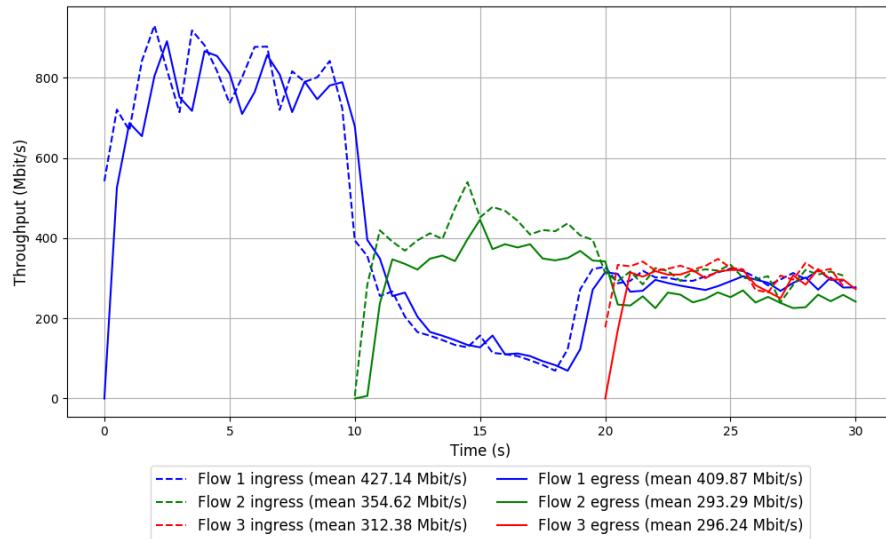


```
Run 3: Statistics of FillP
```

```
Start at: 2019-01-17 13:11:33
End at: 2019-01-17 13:12:03
Local clock offset: 3.497 ms
Remote clock offset: -3.227 ms

# Below is generated by plot.py at 2019-01-17 15:05:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 703.09 Mbit/s
95th percentile per-packet one-way delay: 7.232 ms
Loss rate: 8.27%
-- Flow 1:
Average throughput: 409.87 Mbit/s
95th percentile per-packet one-way delay: 7.613 ms
Loss rate: 4.04%
-- Flow 2:
Average throughput: 293.29 Mbit/s
95th percentile per-packet one-way delay: 4.810 ms
Loss rate: 17.29%
-- Flow 3:
Average throughput: 296.24 Mbit/s
95th percentile per-packet one-way delay: 15.020 ms
Loss rate: 5.14%
```

Run 3: Report of FillP — Data Link

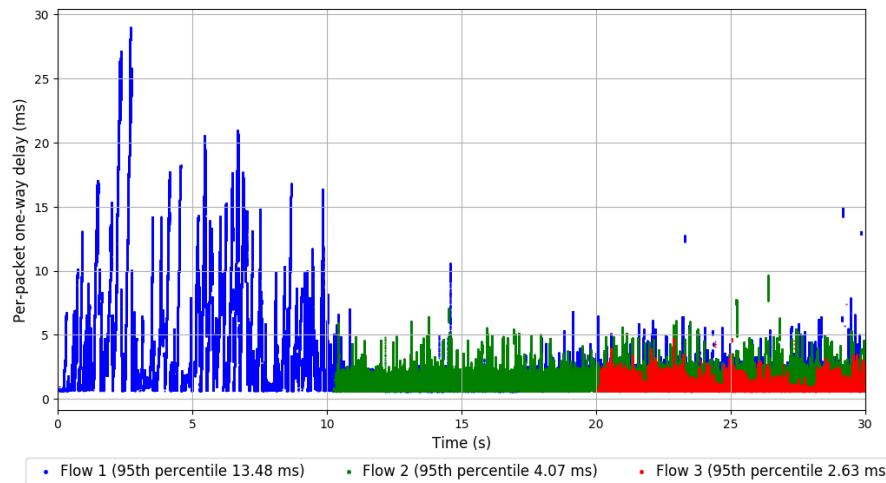
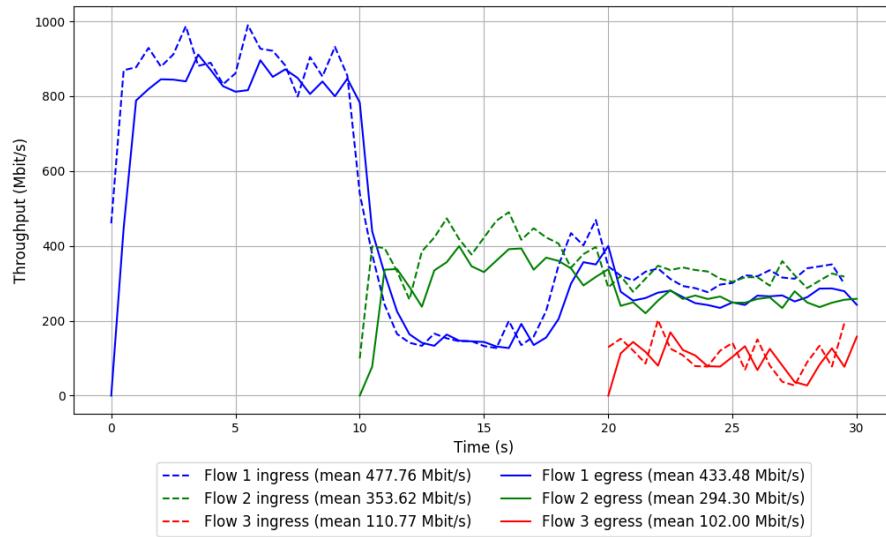


Run 4: Statistics of FillP

```
Start at: 2019-01-17 13:41:29
End at: 2019-01-17 13:41:59
Local clock offset: -0.13 ms
Remote clock offset: -3.307 ms

# Below is generated by plot.py at 2019-01-17 15:05:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 661.18 Mbit/s
95th percentile per-packet one-way delay: 11.410 ms
Loss rate: 11.82%
-- Flow 1:
Average throughput: 433.48 Mbit/s
95th percentile per-packet one-way delay: 13.484 ms
Loss rate: 9.27%
-- Flow 2:
Average throughput: 294.30 Mbit/s
95th percentile per-packet one-way delay: 4.066 ms
Loss rate: 17.60%
-- Flow 3:
Average throughput: 102.00 Mbit/s
95th percentile per-packet one-way delay: 2.627 ms
Loss rate: 7.92%
```

Run 4: Report of FillP — Data Link

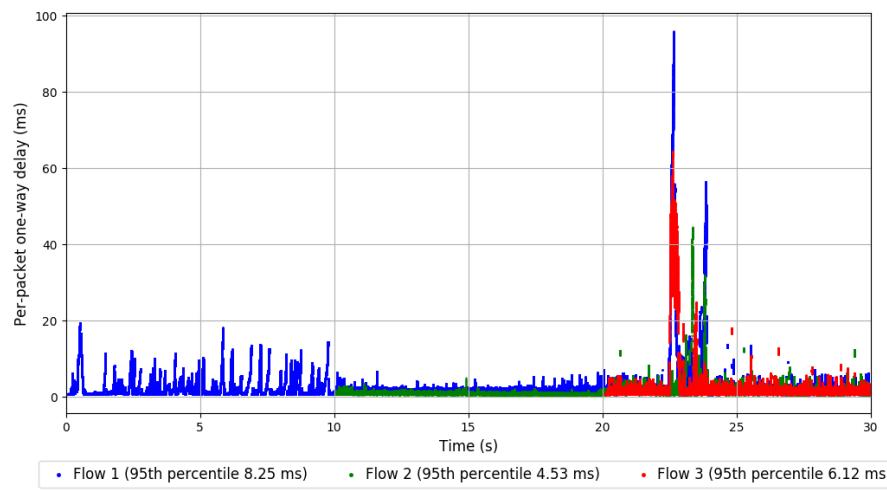
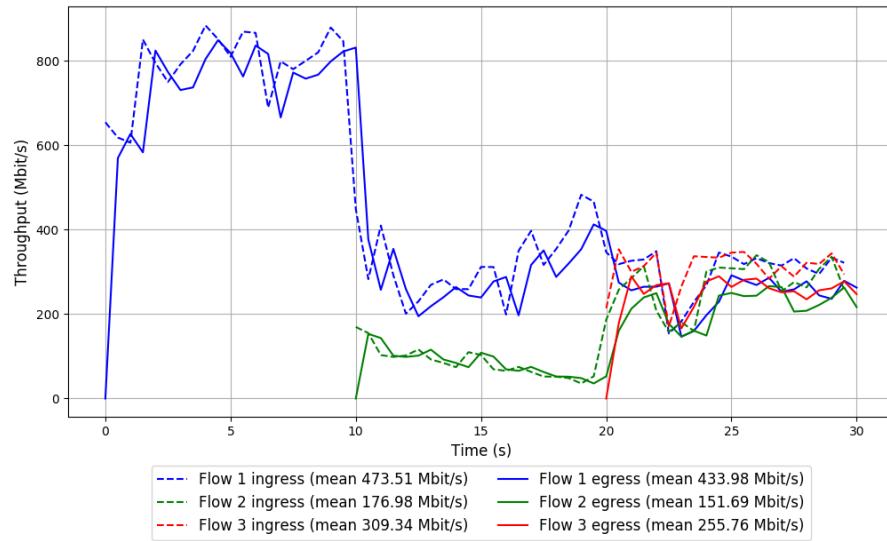


Run 5: Statistics of FillP

```
Start at: 2019-01-17 14:11:37
End at: 2019-01-17 14:12:07
Local clock offset: -0.182 ms
Remote clock offset: 2.047 ms

# Below is generated by plot.py at 2019-01-17 15:05:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 619.71 Mbit/s
95th percentile per-packet one-way delay: 7.548 ms
Loss rate: 10.68%
-- Flow 1:
Average throughput: 433.98 Mbit/s
95th percentile per-packet one-way delay: 8.247 ms
Loss rate: 8.34%
-- Flow 2:
Average throughput: 151.69 Mbit/s
95th percentile per-packet one-way delay: 4.527 ms
Loss rate: 14.29%
-- Flow 3:
Average throughput: 255.76 Mbit/s
95th percentile per-packet one-way delay: 6.124 ms
Loss rate: 17.31%
```

Run 5: Report of FillP — Data Link

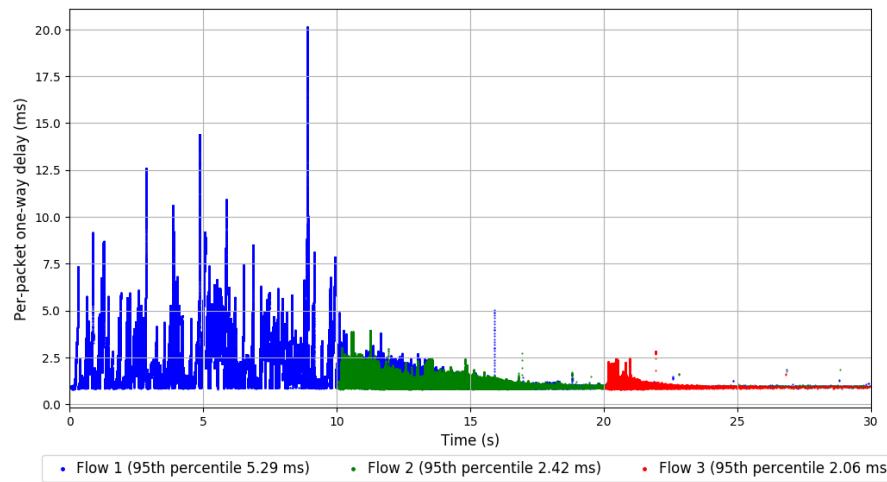
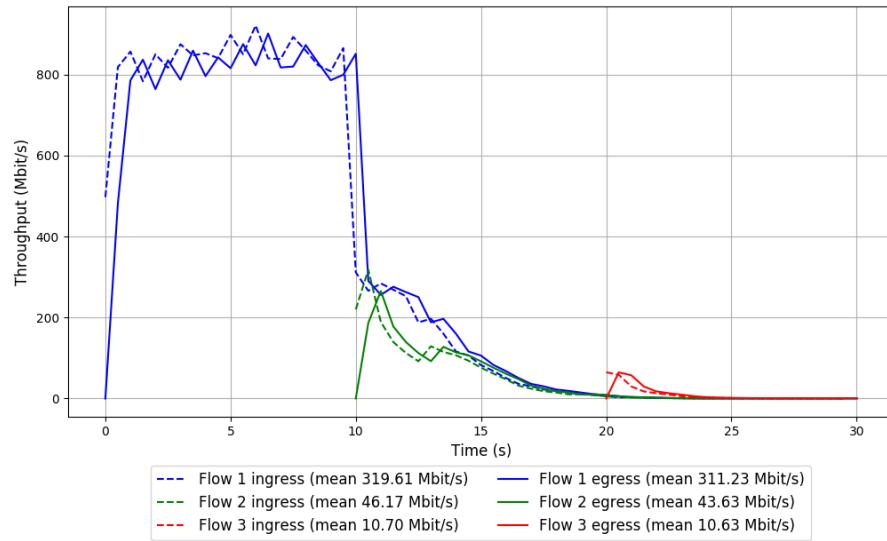


```
Run 1: Statistics of FillP-Sheep
```

```
Start at: 2019-01-17 12:31:25
End at: 2019-01-17 12:31:55
Local clock offset: 2.425 ms
Remote clock offset: 0.058 ms

# Below is generated by plot.py at 2019-01-17 15:05:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 343.78 Mbit/s
95th percentile per-packet one-way delay: 5.152 ms
Loss rate: 2.85%
-- Flow 1:
Average throughput: 311.23 Mbit/s
95th percentile per-packet one-way delay: 5.286 ms
Loss rate: 2.62%
-- Flow 2:
Average throughput: 43.63 Mbit/s
95th percentile per-packet one-way delay: 2.415 ms
Loss rate: 5.51%
-- Flow 3:
Average throughput: 10.63 Mbit/s
95th percentile per-packet one-way delay: 2.063 ms
Loss rate: 0.65%
```

Run 1: Report of FillP-Sheep — Data Link

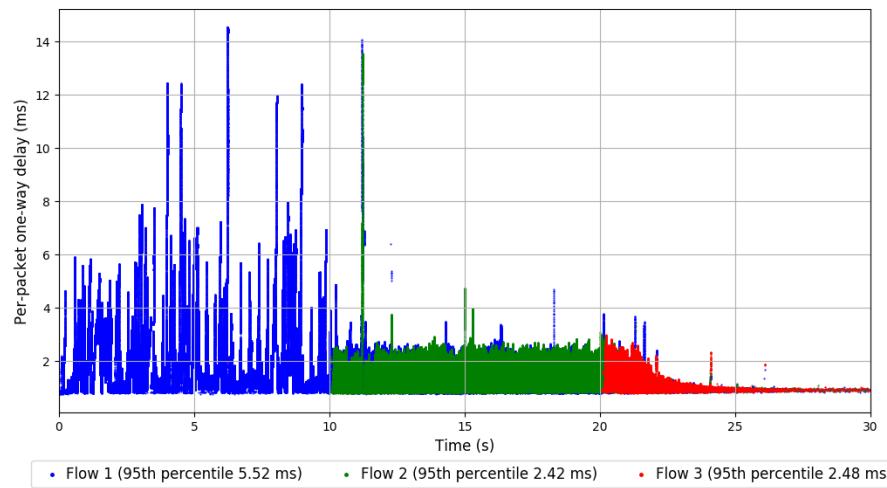
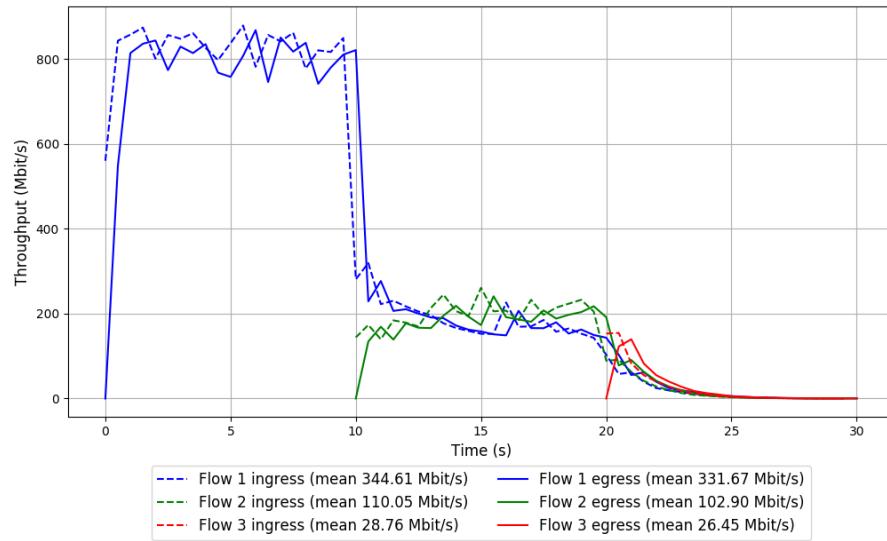


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-01-17 13:01:38
End at: 2019-01-17 13:02:08
Local clock offset: 3.386 ms
Remote clock offset: -2.147 ms

# Below is generated by plot.py at 2019-01-17 15:05:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 408.73 Mbit/s
95th percentile per-packet one-way delay: 5.138 ms
Loss rate: 4.32%
-- Flow 1:
Average throughput: 331.67 Mbit/s
95th percentile per-packet one-way delay: 5.520 ms
Loss rate: 3.75%
-- Flow 2:
Average throughput: 102.90 Mbit/s
95th percentile per-packet one-way delay: 2.418 ms
Loss rate: 6.50%
-- Flow 3:
Average throughput: 26.45 Mbit/s
95th percentile per-packet one-way delay: 2.482 ms
Loss rate: 8.01%
```

Run 2: Report of FillP-Sheep — Data Link

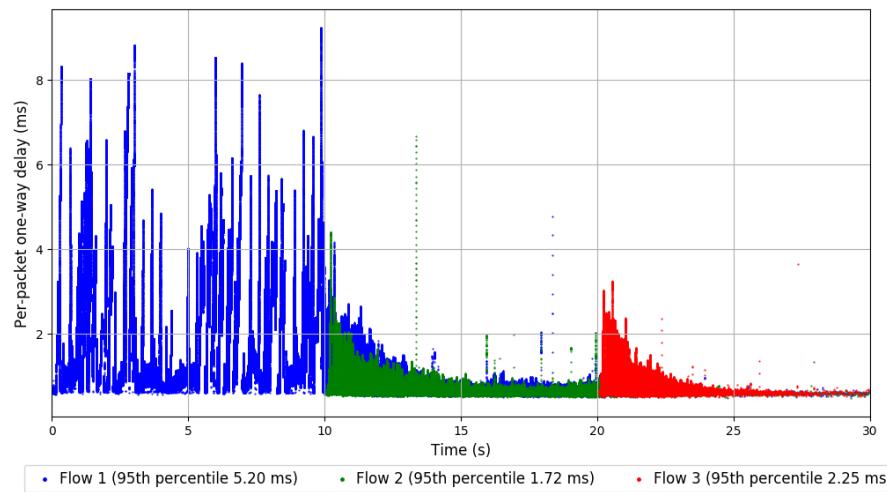
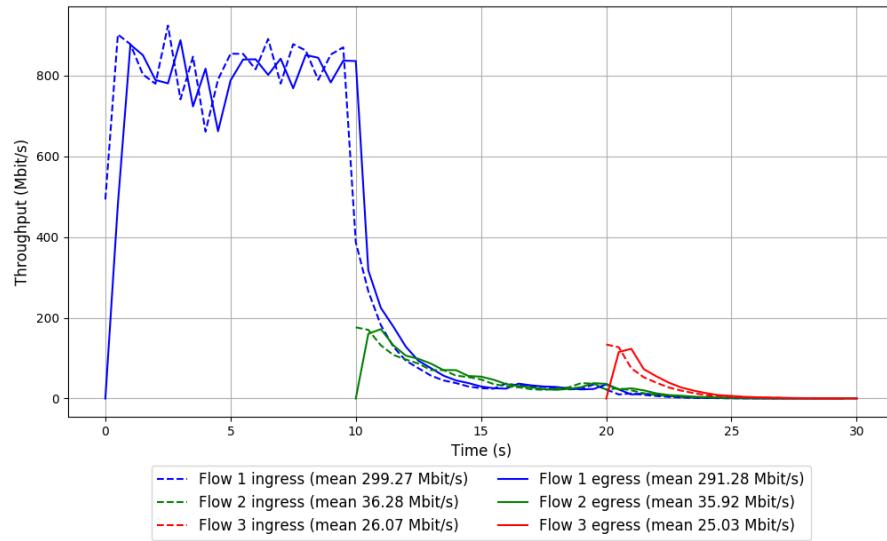


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-01-17 13:31:46
End at: 2019-01-17 13:32:16
Local clock offset: 0.72 ms
Remote clock offset: -3.524 ms

# Below is generated by plot.py at 2019-01-17 15:05:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 323.36 Mbit/s
95th percentile per-packet one-way delay: 5.035 ms
Loss rate: 2.59%
-- Flow 1:
Average throughput: 291.28 Mbit/s
95th percentile per-packet one-way delay: 5.195 ms
Loss rate: 2.67%
-- Flow 2:
Average throughput: 35.92 Mbit/s
95th percentile per-packet one-way delay: 1.723 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 25.03 Mbit/s
95th percentile per-packet one-way delay: 2.251 ms
Loss rate: 4.33%
```

Run 3: Report of FillP-Sheep — Data Link

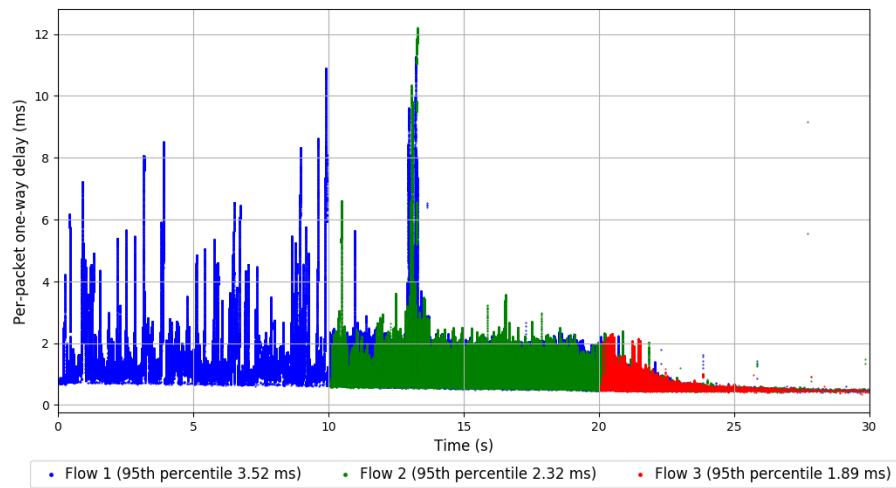
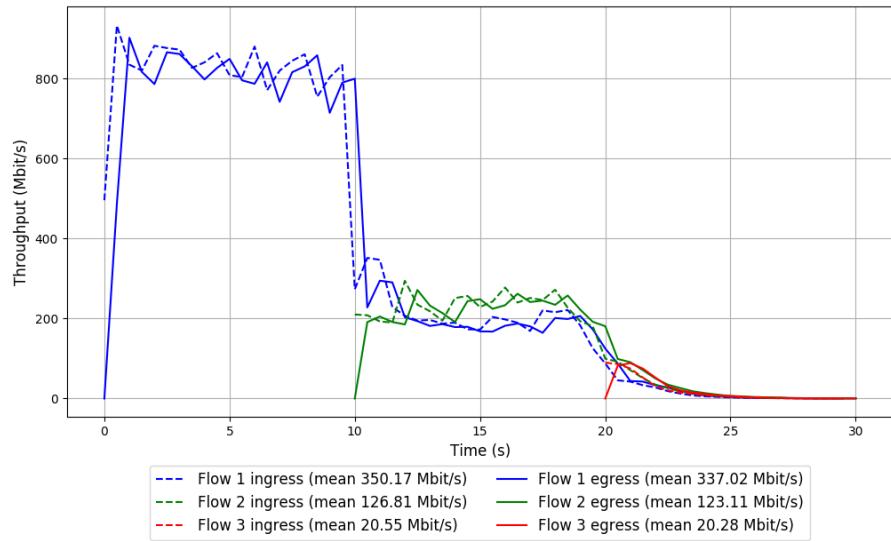


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-01-17 14:01:46
End at: 2019-01-17 14:02:16
Local clock offset: -0.153 ms
Remote clock offset: -1.942 ms

# Below is generated by plot.py at 2019-01-17 15:09:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 425.49 Mbit/s
95th percentile per-packet one-way delay: 3.270 ms
Loss rate: 3.56%
-- Flow 1:
Average throughput: 337.02 Mbit/s
95th percentile per-packet one-way delay: 3.518 ms
Loss rate: 3.76%
-- Flow 2:
Average throughput: 123.11 Mbit/s
95th percentile per-packet one-way delay: 2.323 ms
Loss rate: 2.92%
-- Flow 3:
Average throughput: 20.28 Mbit/s
95th percentile per-packet one-way delay: 1.890 ms
Loss rate: 1.28%
```

Run 4: Report of FillP-Sheep — Data Link

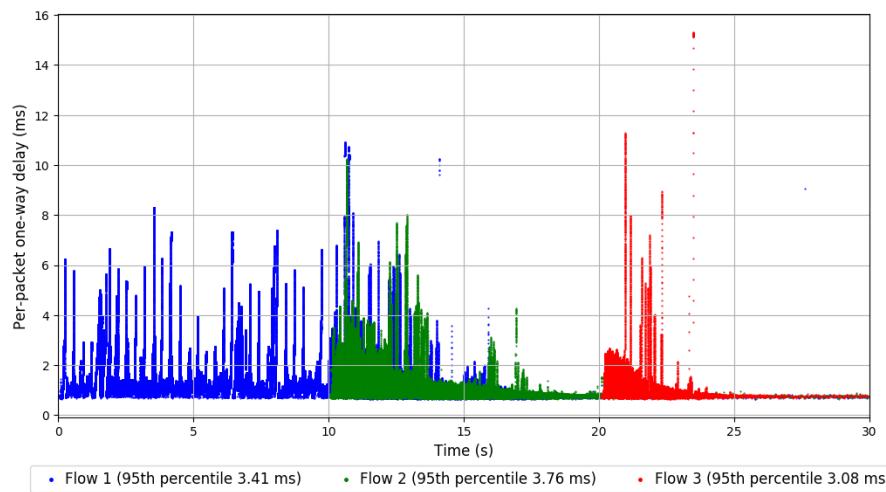
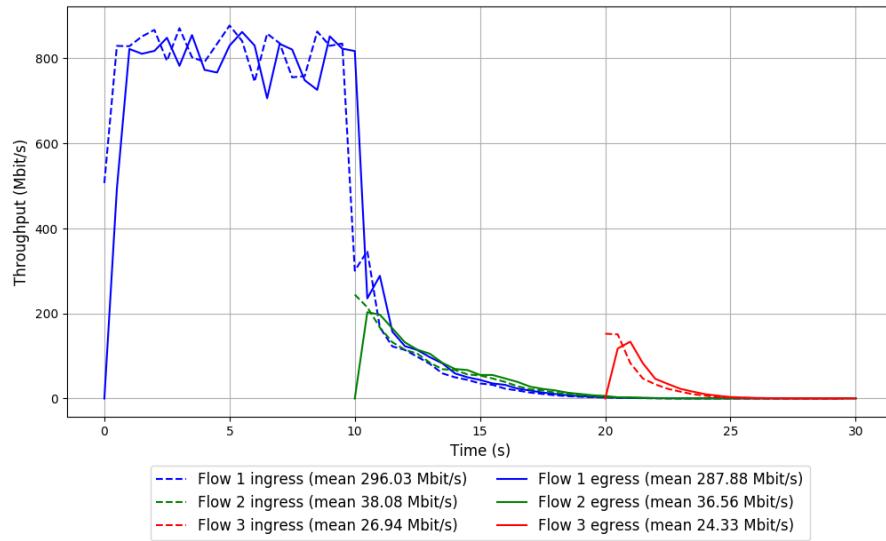


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-01-17 14:31:45
End at: 2019-01-17 14:32:15
Local clock offset: -0.109 ms
Remote clock offset: 5.045 ms

# Below is generated by plot.py at 2019-01-17 15:09:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 320.04 Mbit/s
95th percentile per-packet one-way delay: 3.437 ms
Loss rate: 3.04%
-- Flow 1:
Average throughput: 287.88 Mbit/s
95th percentile per-packet one-way delay: 3.407 ms
Loss rate: 2.76%
-- Flow 2:
Average throughput: 36.56 Mbit/s
95th percentile per-packet one-way delay: 3.759 ms
Loss rate: 4.02%
-- Flow 3:
Average throughput: 24.33 Mbit/s
95th percentile per-packet one-way delay: 3.075 ms
Loss rate: 9.72%
```

Run 5: Report of FillP-Sheep — Data Link

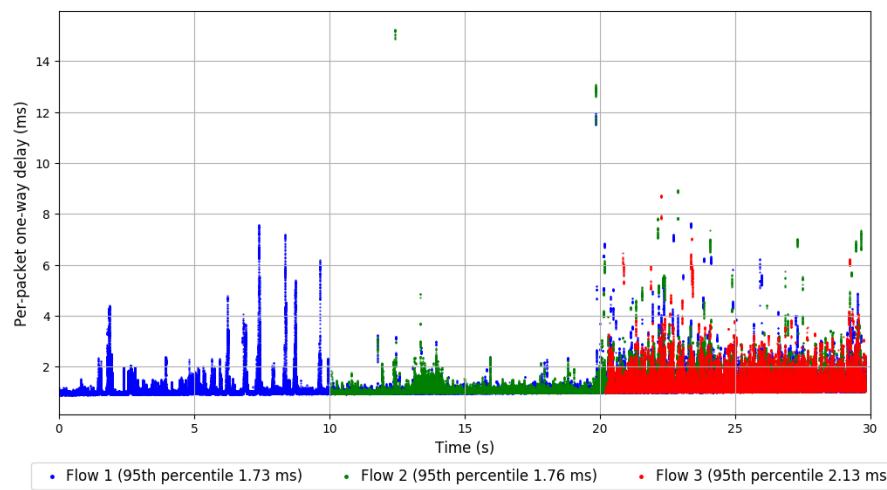
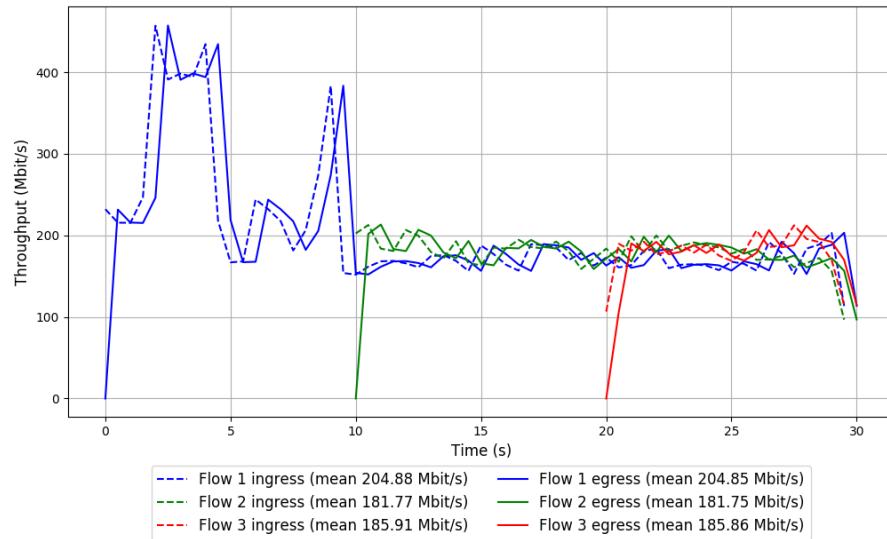


Run 1: Statistics of Indigo

```
Start at: 2019-01-17 12:22:46
End at: 2019-01-17 12:23:16
Local clock offset: 0.682 ms
Remote clock offset: -0.169 ms

# Below is generated by plot.py at 2019-01-17 15:09:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 385.23 Mbit/s
95th percentile per-packet one-way delay: 1.827 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 204.85 Mbit/s
95th percentile per-packet one-way delay: 1.733 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 181.75 Mbit/s
95th percentile per-packet one-way delay: 1.759 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 185.86 Mbit/s
95th percentile per-packet one-way delay: 2.135 ms
Loss rate: 0.02%
```

Run 1: Report of Indigo — Data Link

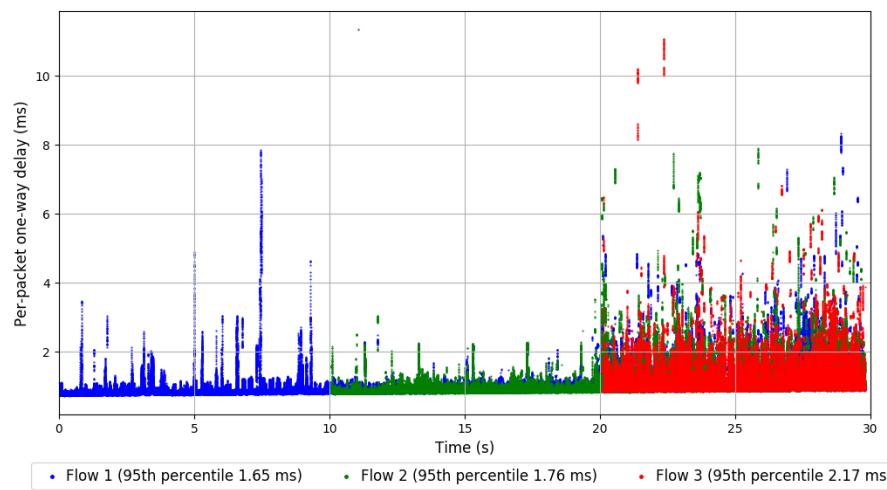
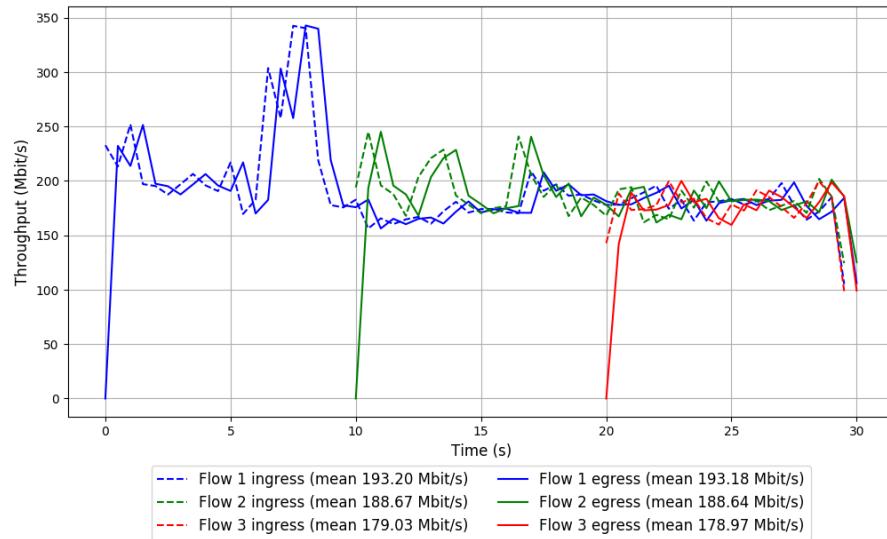


Run 2: Statistics of Indigo

```
Start at: 2019-01-17 12:53:02
End at: 2019-01-17 12:53:32
Local clock offset: 3.618 ms
Remote clock offset: -0.151 ms

# Below is generated by plot.py at 2019-01-17 15:09:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 376.50 Mbit/s
95th percentile per-packet one-way delay: 1.807 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 193.18 Mbit/s
95th percentile per-packet one-way delay: 1.645 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 188.64 Mbit/s
95th percentile per-packet one-way delay: 1.764 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 178.97 Mbit/s
95th percentile per-packet one-way delay: 2.171 ms
Loss rate: 0.01%
```

Run 2: Report of Indigo — Data Link

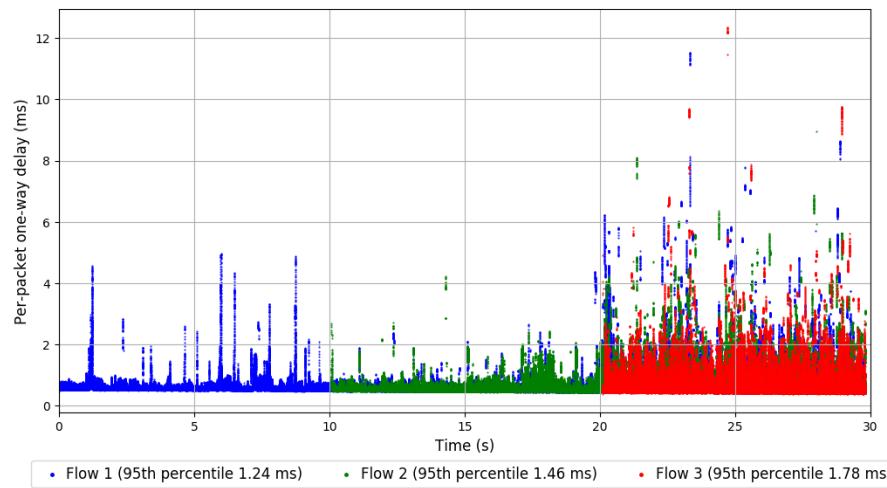
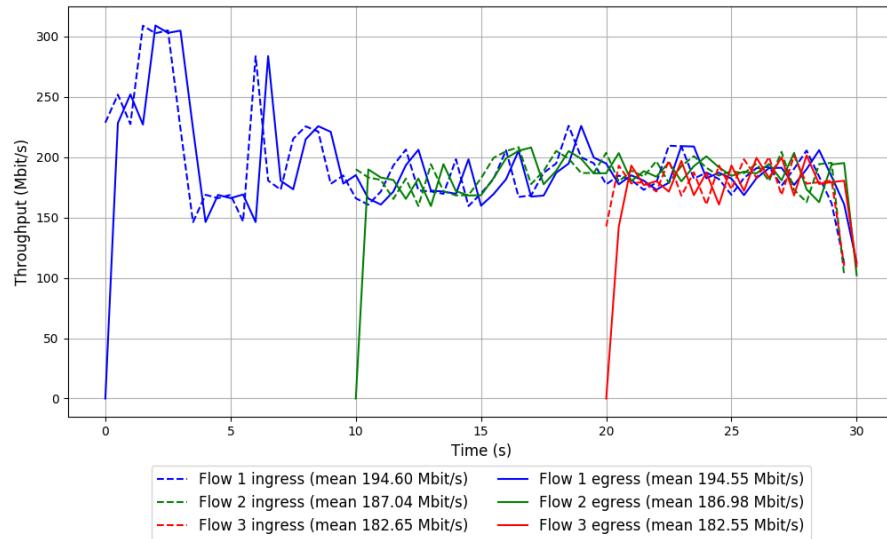


Run 3: Statistics of Indigo

```
Start at: 2019-01-17 13:23:12
End at: 2019-01-17 13:23:42
Local clock offset: 2.542 ms
Remote clock offset: -3.905 ms

# Below is generated by plot.py at 2019-01-17 15:09:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 377.81 Mbit/s
95th percentile per-packet one-way delay: 1.448 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 194.55 Mbit/s
95th percentile per-packet one-way delay: 1.243 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 186.98 Mbit/s
95th percentile per-packet one-way delay: 1.458 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 182.55 Mbit/s
95th percentile per-packet one-way delay: 1.777 ms
Loss rate: 0.05%
```

Run 3: Report of Indigo — Data Link

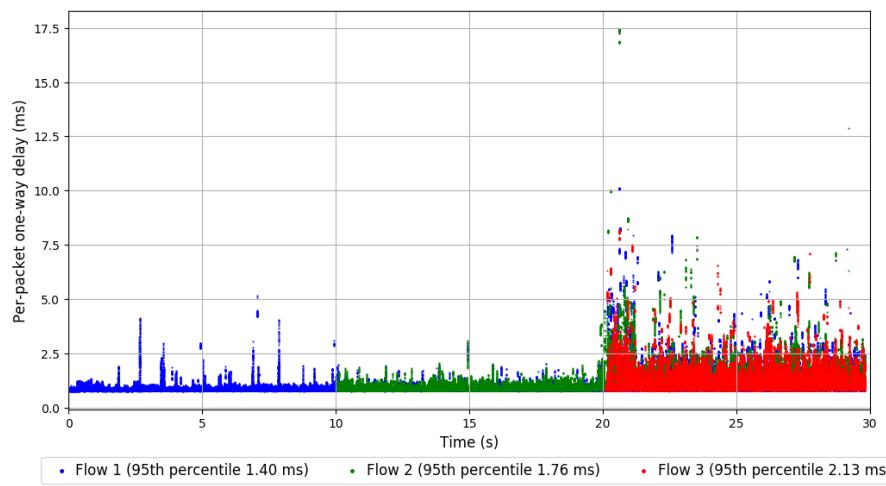
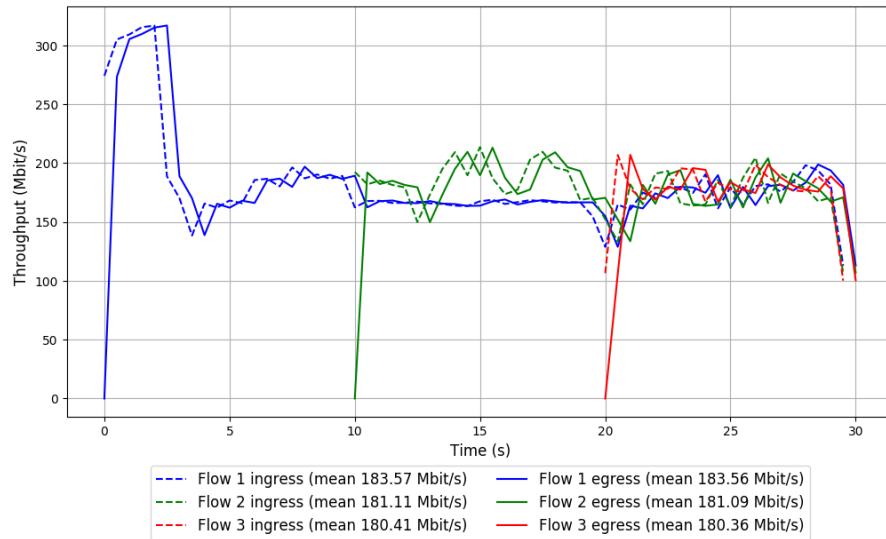


Run 4: Statistics of Indigo

```
Start at: 2019-01-17 13:53:09
End at: 2019-01-17 13:53:39
Local clock offset: -0.354 ms
Remote clock offset: -3.266 ms

# Below is generated by plot.py at 2019-01-17 15:09:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 362.25 Mbit/s
95th percentile per-packet one-way delay: 1.699 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 183.56 Mbit/s
95th percentile per-packet one-way delay: 1.403 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 181.09 Mbit/s
95th percentile per-packet one-way delay: 1.759 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 180.36 Mbit/s
95th percentile per-packet one-way delay: 2.131 ms
Loss rate: 0.03%
```

Run 4: Report of Indigo — Data Link

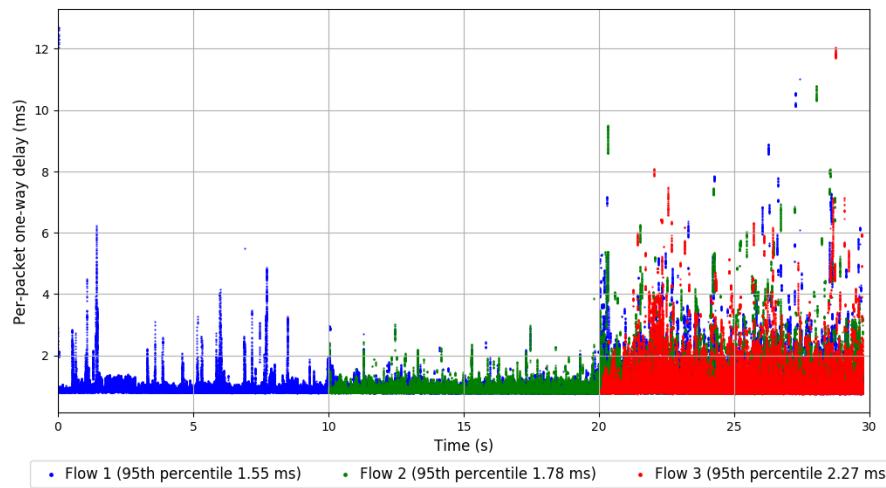
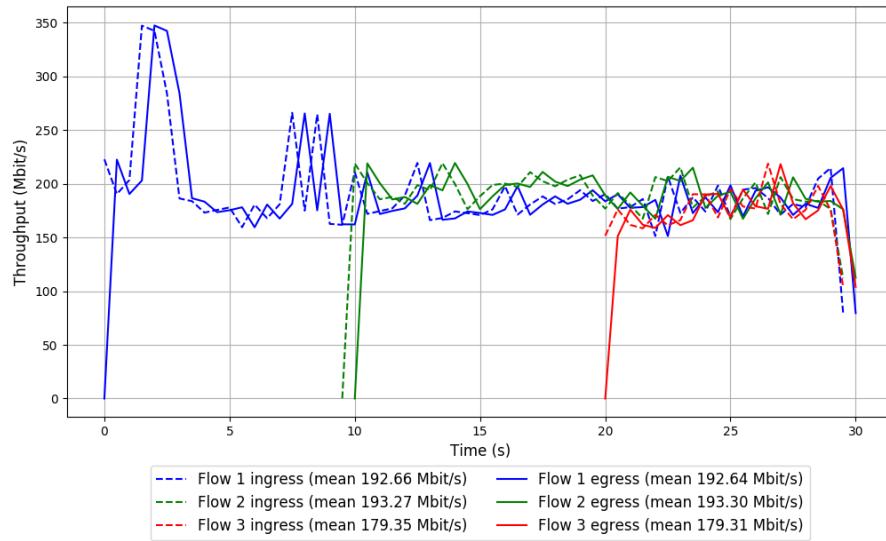


Run 5: Statistics of Indigo

```
Start at: 2019-01-17 14:23:08
End at: 2019-01-17 14:23:38
Local clock offset: -0.193 ms
Remote clock offset: 4.189 ms

# Below is generated by plot.py at 2019-01-17 15:09:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 379.21 Mbit/s
95th percentile per-packet one-way delay: 1.782 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 192.64 Mbit/s
95th percentile per-packet one-way delay: 1.548 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 193.30 Mbit/s
95th percentile per-packet one-way delay: 1.781 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 179.31 Mbit/s
95th percentile per-packet one-way delay: 2.275 ms
Loss rate: 0.01%
```

Run 5: Report of Indigo — Data Link

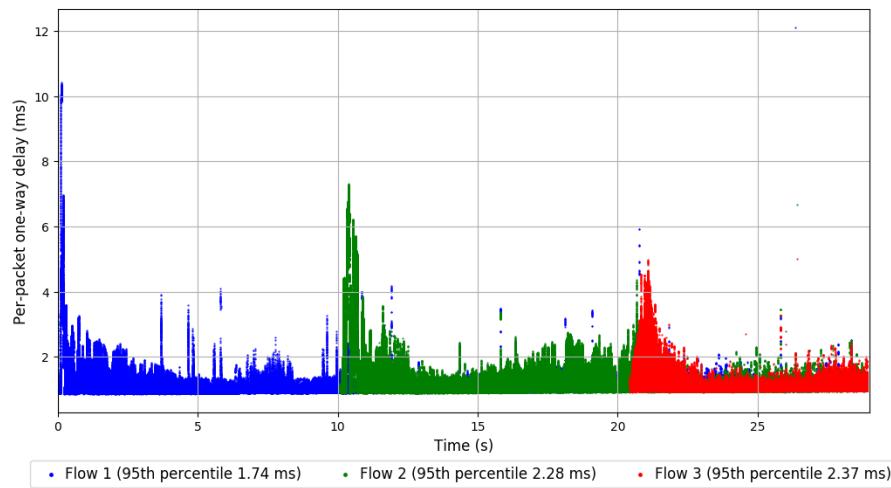
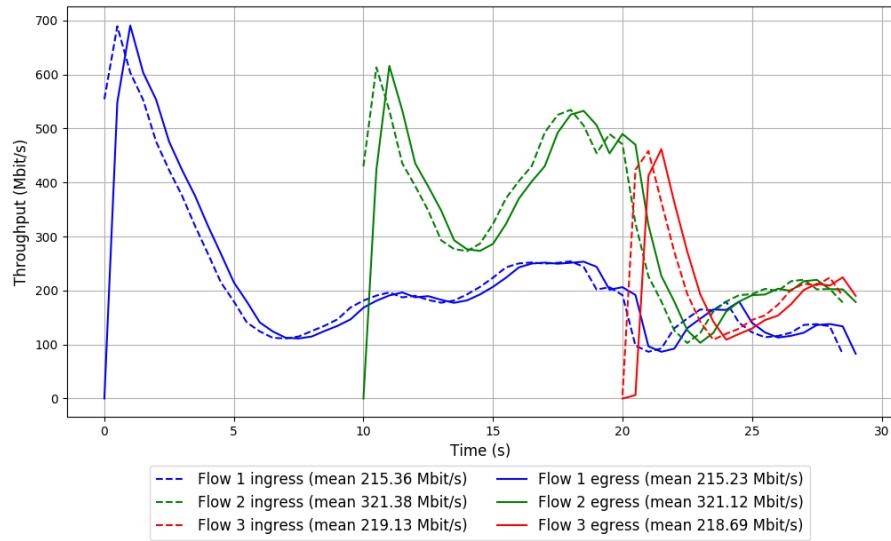


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-01-17 12:24:17
End at: 2019-01-17 12:24:47
Local clock offset: 1.125 ms
Remote clock offset: -0.144 ms

# Below is generated by plot.py at 2019-01-17 15:11:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 488.75 Mbit/s
95th percentile per-packet one-way delay: 2.100 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 215.23 Mbit/s
95th percentile per-packet one-way delay: 1.736 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 321.12 Mbit/s
95th percentile per-packet one-way delay: 2.277 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 218.69 Mbit/s
95th percentile per-packet one-way delay: 2.374 ms
Loss rate: 0.20%
```

Run 1: Report of Indigo-MusesC3 — Data Link

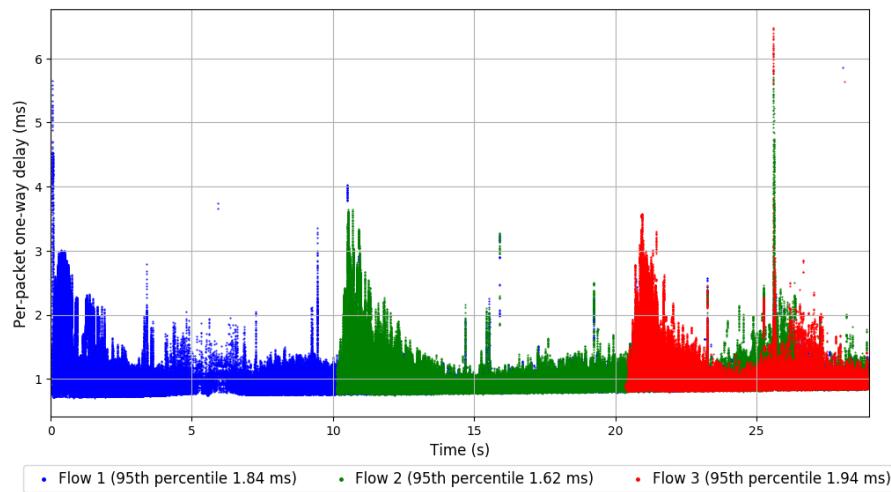
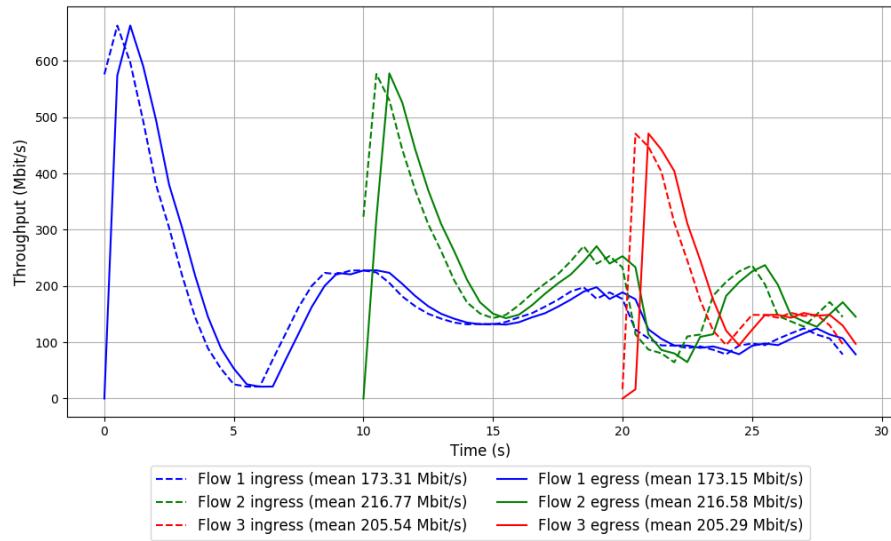


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-01-17 12:54:32
End at: 2019-01-17 12:55:02
Local clock offset: 3.536 ms
Remote clock offset: -0.695 ms

# Below is generated by plot.py at 2019-01-17 15:12:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 374.84 Mbit/s
95th percentile per-packet one-way delay: 1.765 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 173.15 Mbit/s
95th percentile per-packet one-way delay: 1.838 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 216.58 Mbit/s
95th percentile per-packet one-way delay: 1.617 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 205.29 Mbit/s
95th percentile per-packet one-way delay: 1.941 ms
Loss rate: 0.12%
```

Run 2: Report of Indigo-MusesC3 — Data Link

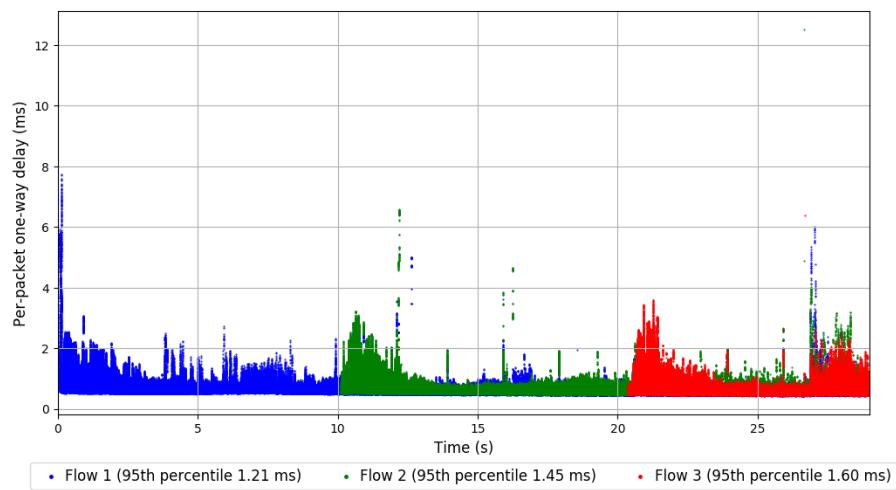
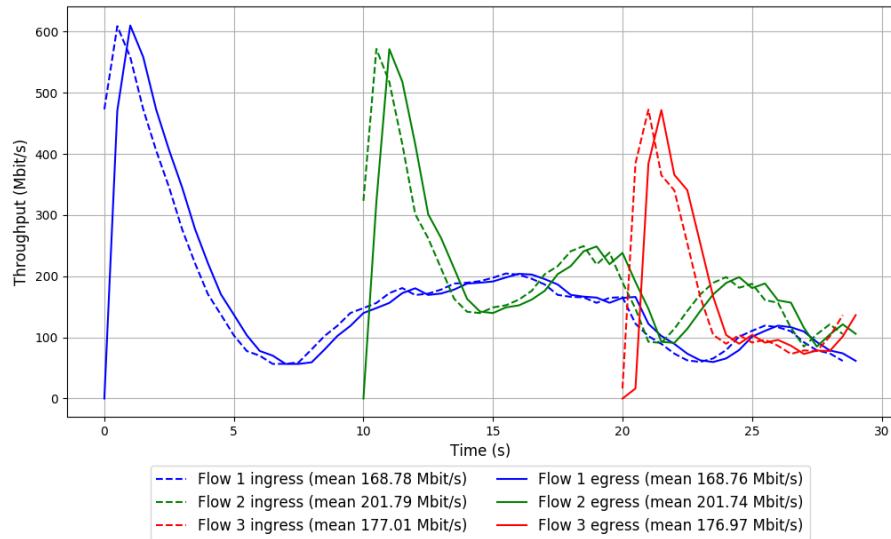


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-01-17 13:24:42
End at: 2019-01-17 13:25:12
Local clock offset: 2.116 ms
Remote clock offset: -3.947 ms

# Below is generated by plot.py at 2019-01-17 15:12:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 352.62 Mbit/s
95th percentile per-packet one-way delay: 1.367 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 168.76 Mbit/s
95th percentile per-packet one-way delay: 1.214 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 201.74 Mbit/s
95th percentile per-packet one-way delay: 1.454 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 176.97 Mbit/s
95th percentile per-packet one-way delay: 1.598 ms
Loss rate: 0.01%
```

Run 3: Report of Indigo-MusesC3 — Data Link

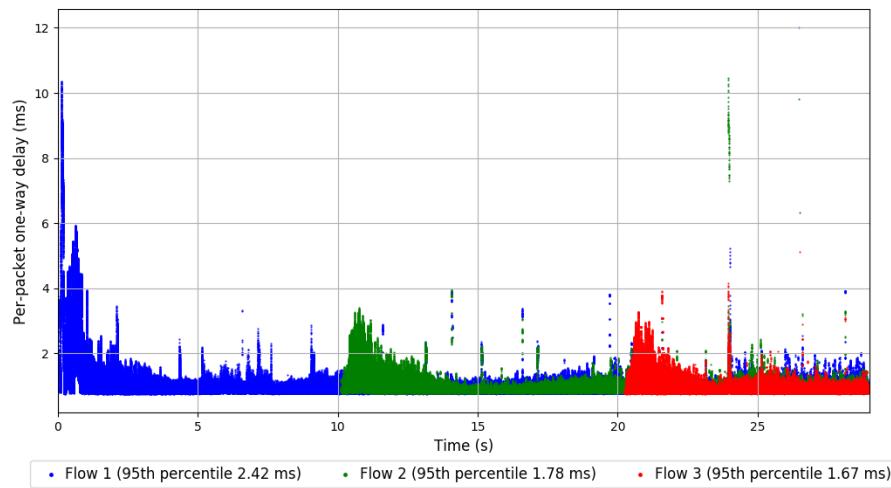
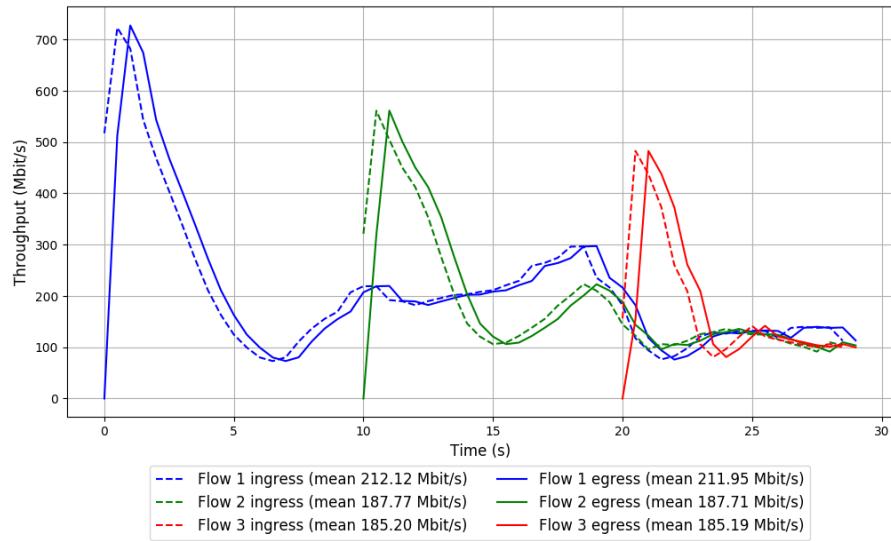


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-01-17 13:54:39
End at: 2019-01-17 13:55:09
Local clock offset: -0.305 ms
Remote clock offset: -3.311 ms

# Below is generated by plot.py at 2019-01-17 15:12:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 389.66 Mbit/s
95th percentile per-packet one-way delay: 2.085 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 211.95 Mbit/s
95th percentile per-packet one-way delay: 2.418 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 187.71 Mbit/s
95th percentile per-packet one-way delay: 1.784 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 185.19 Mbit/s
95th percentile per-packet one-way delay: 1.666 ms
Loss rate: 0.01%
```

Run 4: Report of Indigo-MusesC3 — Data Link

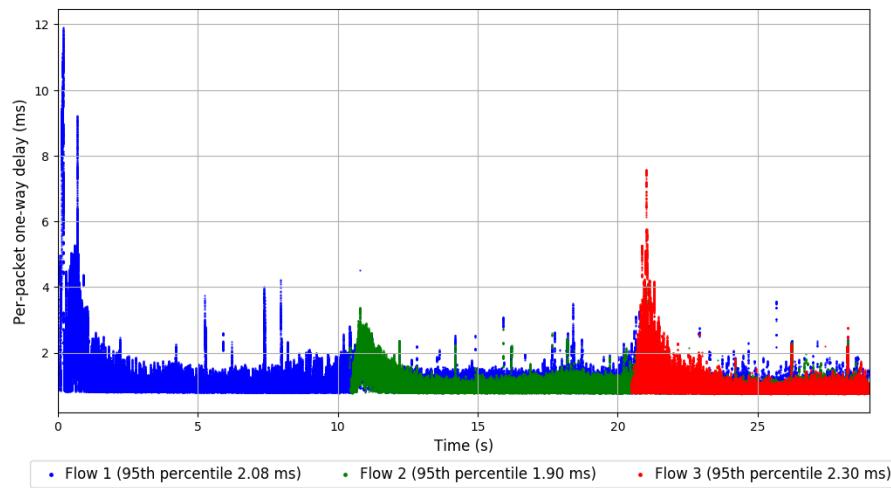
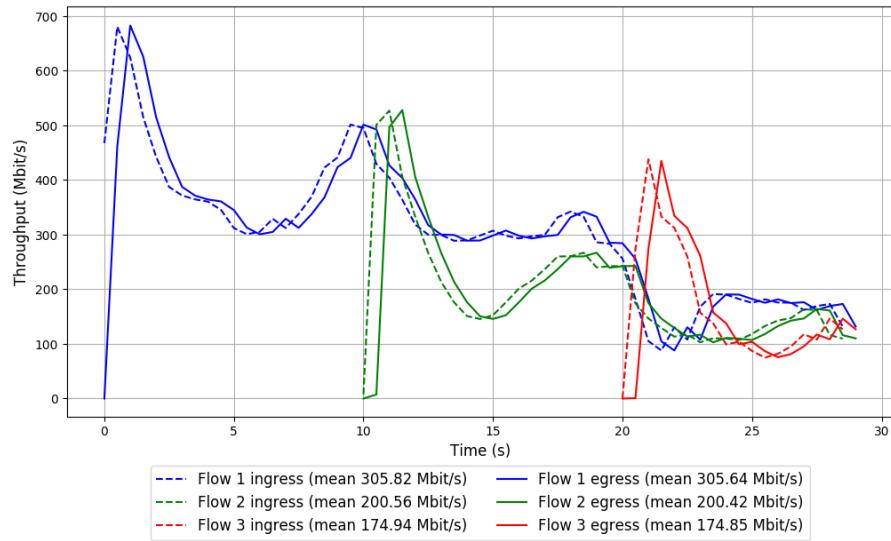


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-01-17 14:24:38
End at: 2019-01-17 14:25:08
Local clock offset: -0.155 ms
Remote clock offset: 4.403 ms

# Below is generated by plot.py at 2019-01-17 15:14:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 484.90 Mbit/s
95th percentile per-packet one-way delay: 2.041 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 305.64 Mbit/s
95th percentile per-packet one-way delay: 2.077 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 200.42 Mbit/s
95th percentile per-packet one-way delay: 1.902 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 174.85 Mbit/s
95th percentile per-packet one-way delay: 2.299 ms
Loss rate: 0.06%
```

Run 5: Report of Indigo-MusesC3 — Data Link

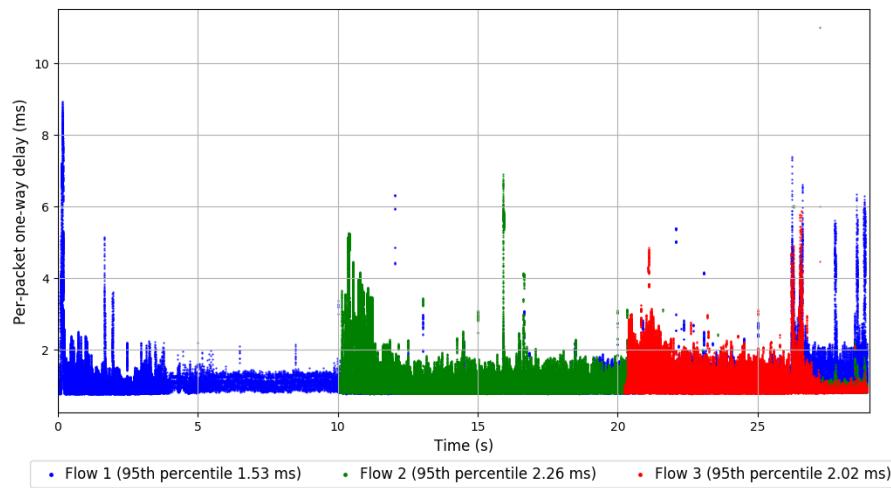
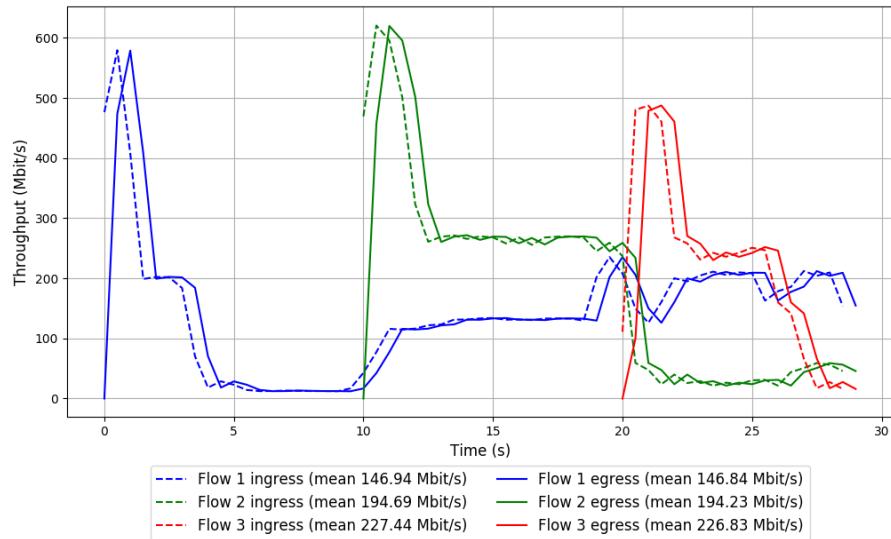


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-01-17 12:35:17
End at: 2019-01-17 12:35:47
Local clock offset: 2.845 ms
Remote clock offset: 0.04 ms

# Below is generated by plot.py at 2019-01-17 15:14:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 341.60 Mbit/s
95th percentile per-packet one-way delay: 1.948 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 146.84 Mbit/s
95th percentile per-packet one-way delay: 1.529 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 194.23 Mbit/s
95th percentile per-packet one-way delay: 2.264 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 226.83 Mbit/s
95th percentile per-packet one-way delay: 2.016 ms
Loss rate: 0.27%
```

Run 1: Report of Indigo-MusesC5 — Data Link

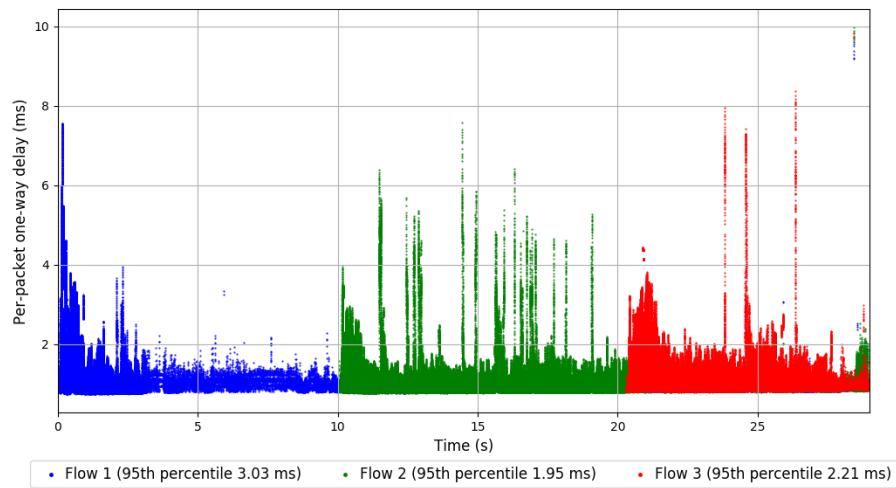
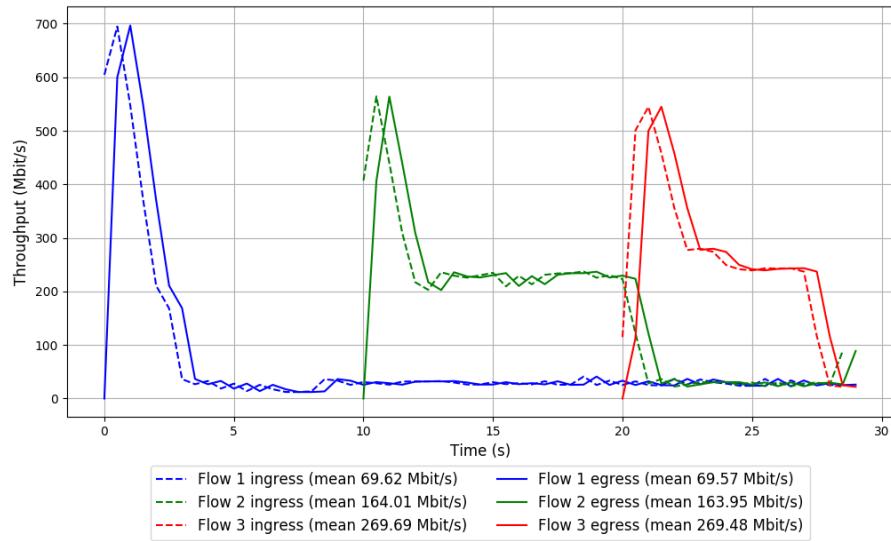


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-01-17 13:05:31
End at: 2019-01-17 13:06:01
Local clock offset: 3.403 ms
Remote clock offset: -2.723 ms

# Below is generated by plot.py at 2019-01-17 15:14:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 257.11 Mbit/s
95th percentile per-packet one-way delay: 2.277 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 69.57 Mbit/s
95th percentile per-packet one-way delay: 3.029 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 163.95 Mbit/s
95th percentile per-packet one-way delay: 1.945 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 269.48 Mbit/s
95th percentile per-packet one-way delay: 2.209 ms
Loss rate: 0.07%
```

Run 2: Report of Indigo-MusesC5 — Data Link

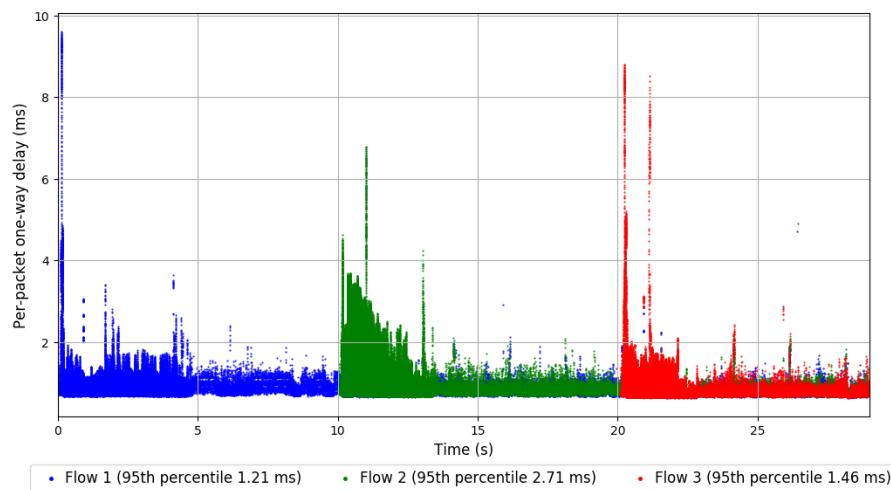
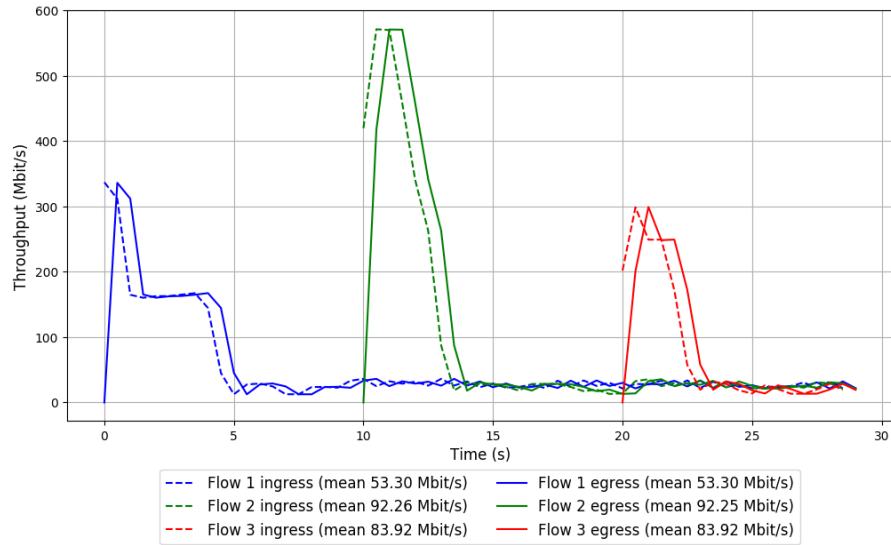


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-01-17 13:35:37
End at: 2019-01-17 13:36:07
Local clock offset: 0.327 ms
Remote clock offset: -3.324 ms

# Below is generated by plot.py at 2019-01-17 15:14:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 139.09 Mbit/s
95th percentile per-packet one-way delay: 2.226 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 53.30 Mbit/s
95th percentile per-packet one-way delay: 1.213 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 92.25 Mbit/s
95th percentile per-packet one-way delay: 2.705 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 83.92 Mbit/s
95th percentile per-packet one-way delay: 1.458 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesC5 — Data Link

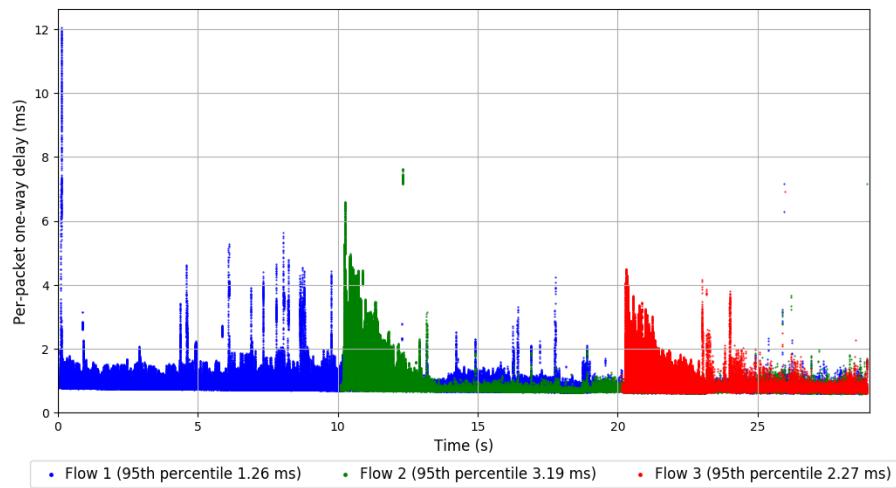
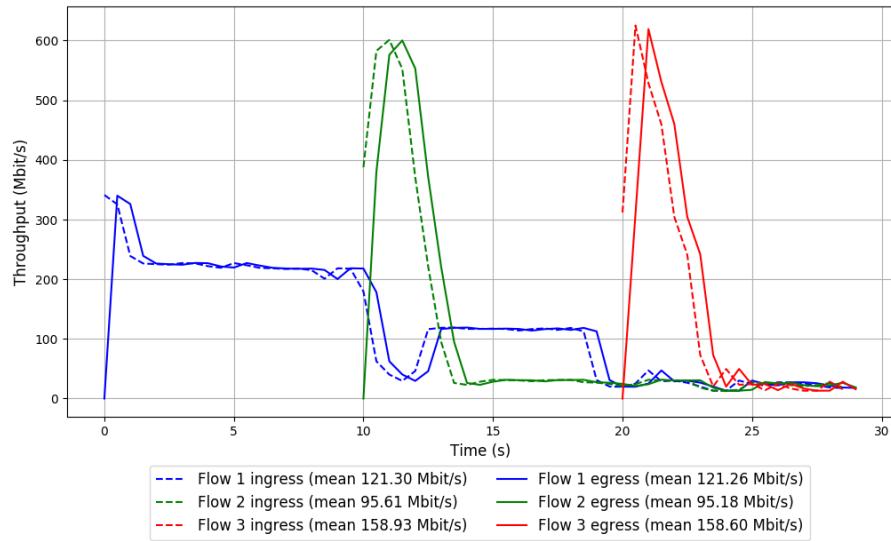


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-01-17 14:05:40
End at: 2019-01-17 14:06:10
Local clock offset: -0.141 ms
Remote clock offset: 0.174 ms

# Below is generated by plot.py at 2019-01-17 15:14:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 231.28 Mbit/s
95th percentile per-packet one-way delay: 2.239 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 121.26 Mbit/s
95th percentile per-packet one-way delay: 1.264 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 95.18 Mbit/s
95th percentile per-packet one-way delay: 3.192 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 158.60 Mbit/s
95th percentile per-packet one-way delay: 2.265 ms
Loss rate: 0.21%
```

Run 4: Report of Indigo-MusesC5 — Data Link

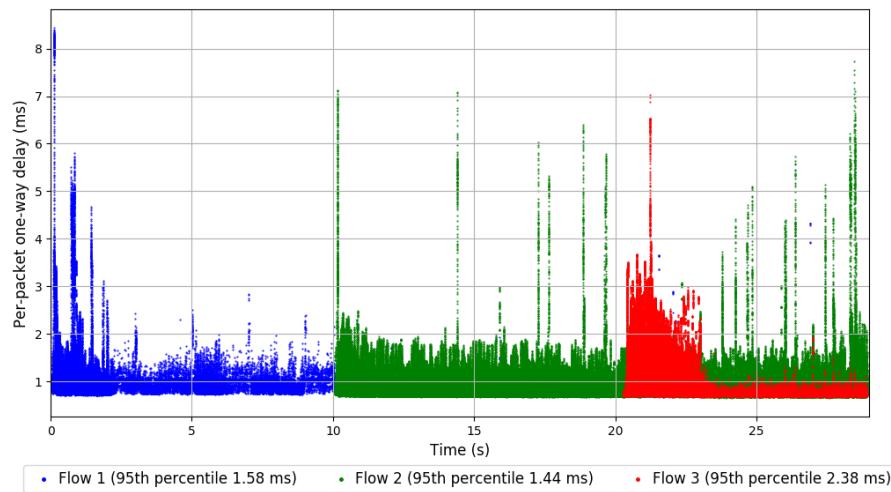
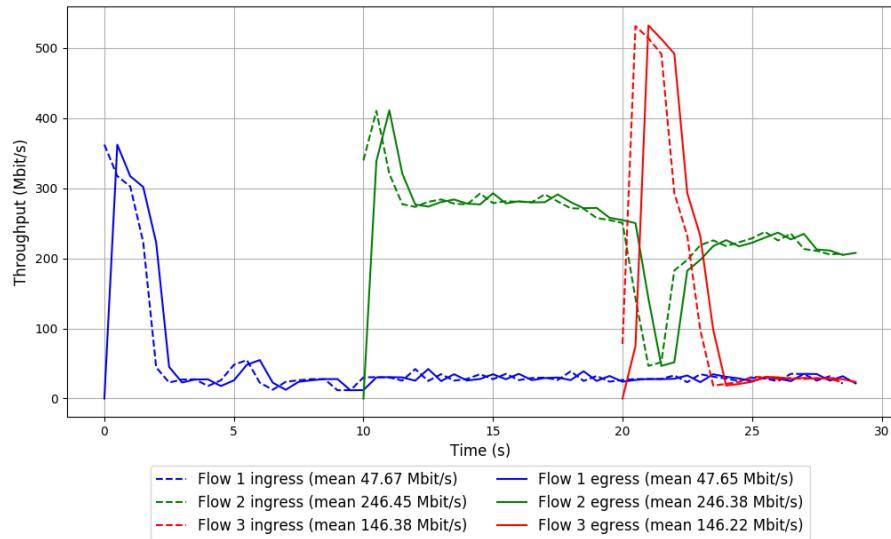


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-01-17 14:35:36
End at: 2019-01-17 14:36:06
Local clock offset: -0.108 ms
Remote clock offset: 5.352 ms

# Below is generated by plot.py at 2019-01-17 15:14:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 252.07 Mbit/s
95th percentile per-packet one-way delay: 1.725 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 47.65 Mbit/s
95th percentile per-packet one-way delay: 1.585 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 246.38 Mbit/s
95th percentile per-packet one-way delay: 1.436 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 146.22 Mbit/s
95th percentile per-packet one-way delay: 2.384 ms
Loss rate: 0.11%
```

Run 5: Report of Indigo-MusesC5 — Data Link

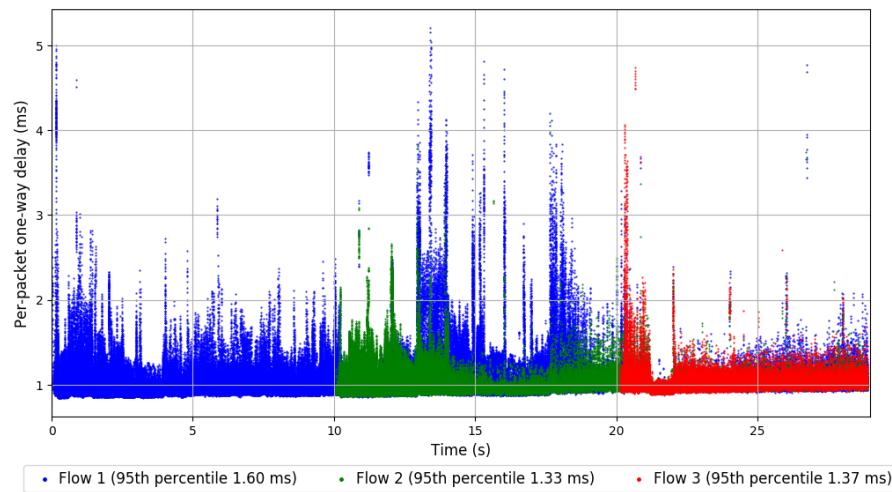
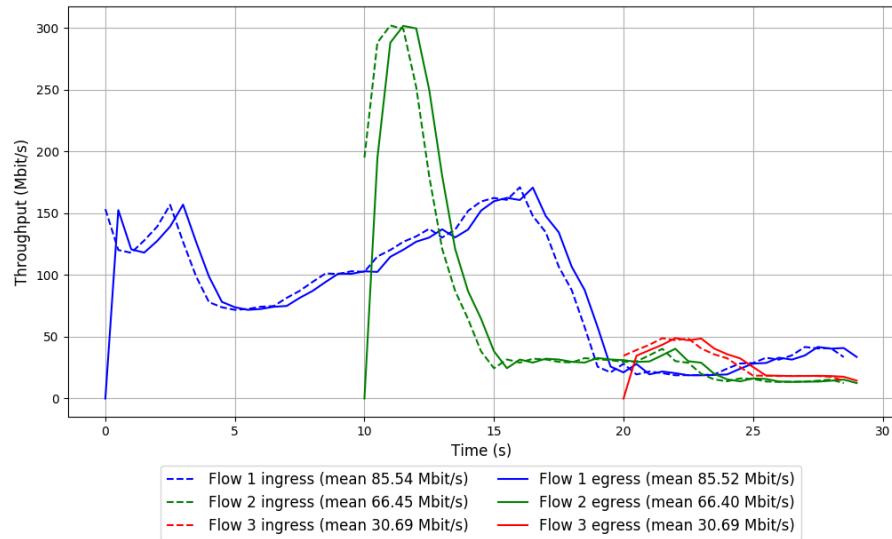


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-01-17 12:30:07
End at: 2019-01-17 12:30:37
Local clock offset: 2.232 ms
Remote clock offset: 0.019 ms

# Below is generated by plot.py at 2019-01-17 15:14:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 138.09 Mbit/s
95th percentile per-packet one-way delay: 1.495 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 85.52 Mbit/s
95th percentile per-packet one-way delay: 1.599 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 66.40 Mbit/s
95th percentile per-packet one-way delay: 1.333 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 30.69 Mbit/s
95th percentile per-packet one-way delay: 1.372 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesD — Data Link

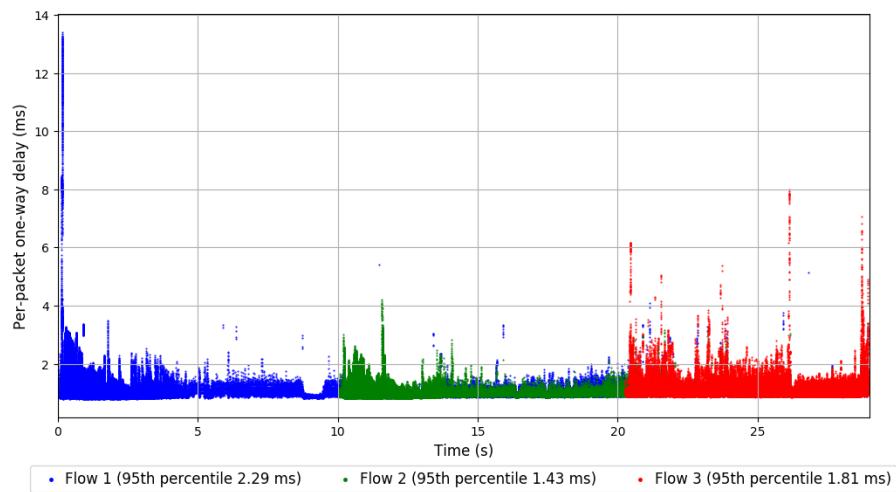
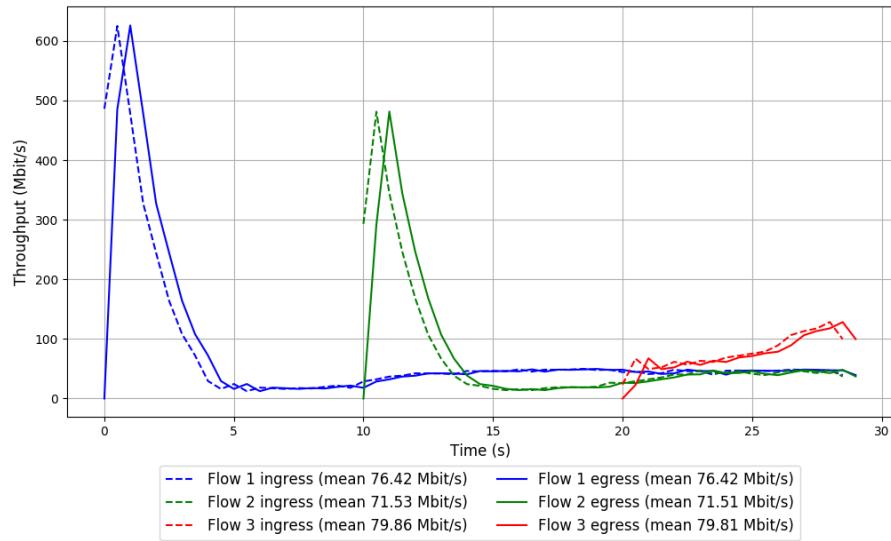


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-01-17 13:00:19
End at: 2019-01-17 13:00:49
Local clock offset: 3.403 ms
Remote clock offset: -1.957 ms

# Below is generated by plot.py at 2019-01-17 15:14:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 146.93 Mbit/s
95th percentile per-packet one-way delay: 1.943 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 76.42 Mbit/s
95th percentile per-packet one-way delay: 2.293 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 71.51 Mbit/s
95th percentile per-packet one-way delay: 1.426 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 79.81 Mbit/s
95th percentile per-packet one-way delay: 1.814 ms
Loss rate: 0.03%
```

Run 2: Report of Indigo-MusesD — Data Link

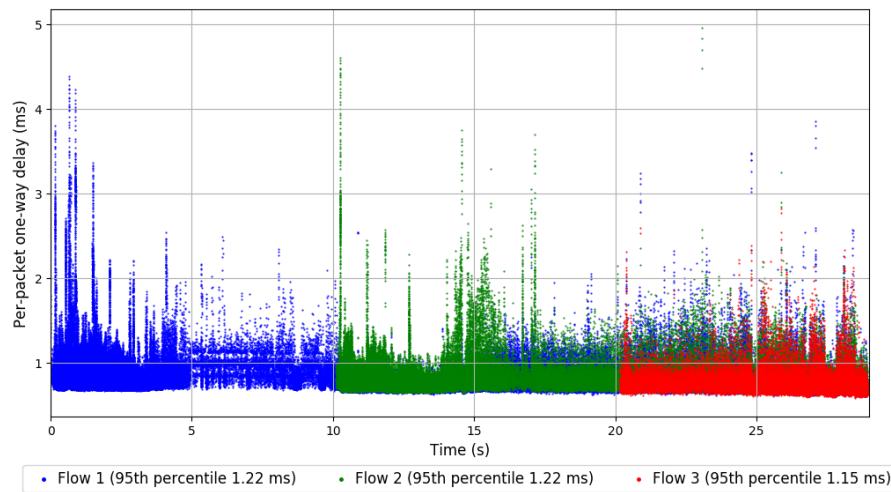
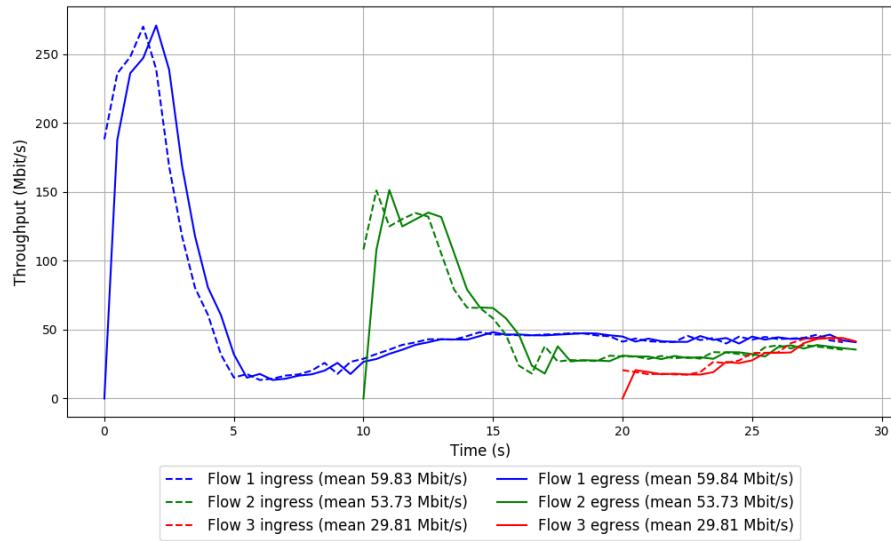


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-01-17 13:30:29
End at: 2019-01-17 13:30:59
Local clock offset: 0.921 ms
Remote clock offset: -3.504 ms

# Below is generated by plot.py at 2019-01-17 15:14:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 103.82 Mbit/s
95th percentile per-packet one-way delay: 1.218 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 59.84 Mbit/s
95th percentile per-packet one-way delay: 1.224 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 53.73 Mbit/s
95th percentile per-packet one-way delay: 1.222 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.81 Mbit/s
95th percentile per-packet one-way delay: 1.145 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesD — Data Link

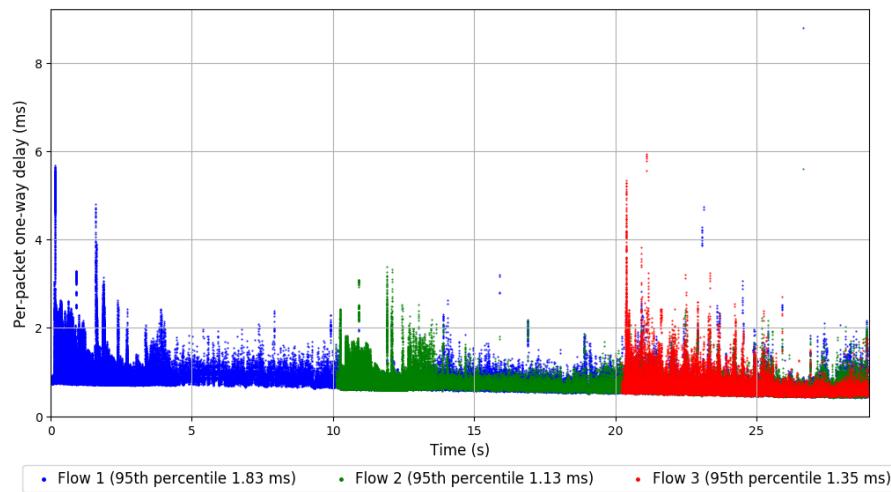
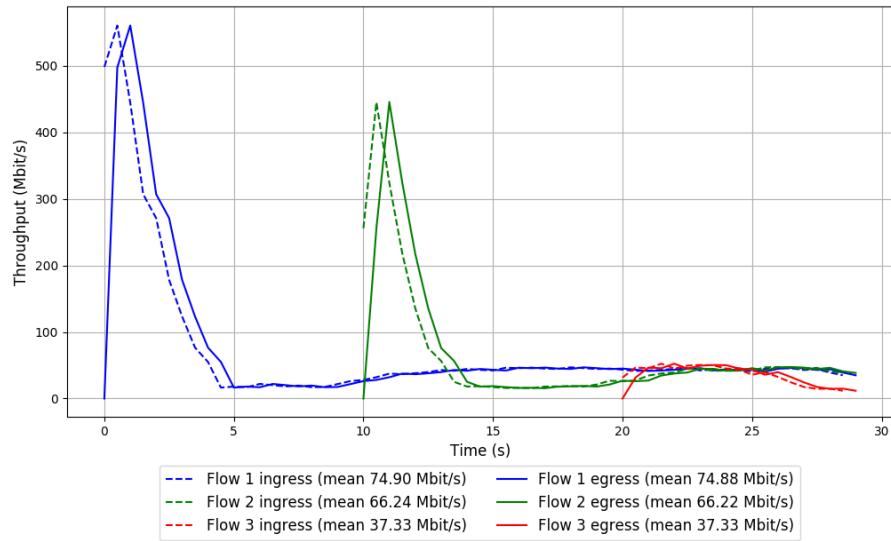


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-01-17 14:00:28
End at: 2019-01-17 14:00:58
Local clock offset: -0.163 ms
Remote clock offset: -2.806 ms

# Below is generated by plot.py at 2019-01-17 15:14:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 129.21 Mbit/s
95th percentile per-packet one-way delay: 1.603 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 74.88 Mbit/s
95th percentile per-packet one-way delay: 1.829 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 66.22 Mbit/s
95th percentile per-packet one-way delay: 1.131 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 37.33 Mbit/s
95th percentile per-packet one-way delay: 1.346 ms
Loss rate: 0.02%
```

Run 4: Report of Indigo-MusesD — Data Link

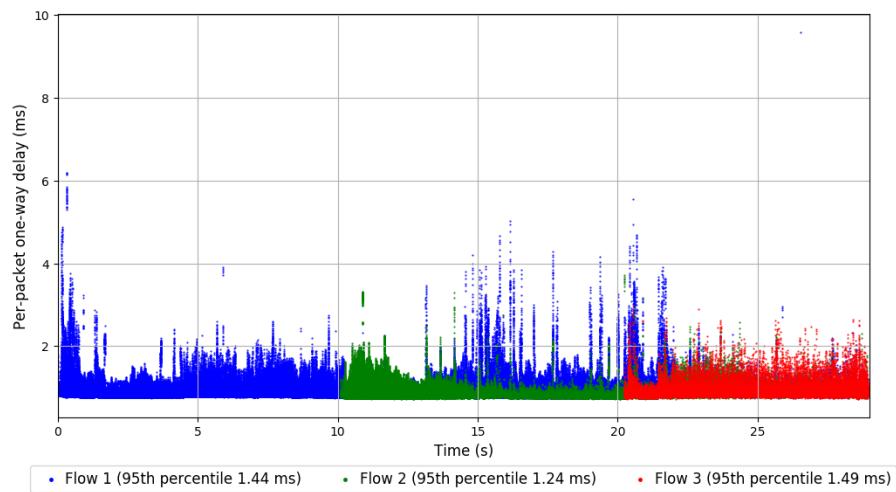
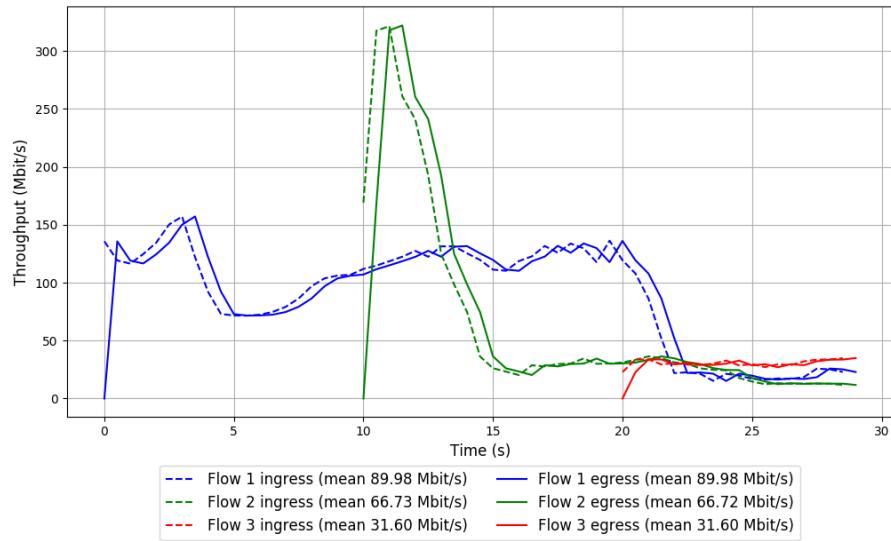


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-01-17 14:30:26
End at: 2019-01-17 14:30:56
Local clock offset: -0.108 ms
Remote clock offset: 4.957 ms

# Below is generated by plot.py at 2019-01-17 15:14:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 142.88 Mbit/s
95th percentile per-packet one-way delay: 1.383 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 89.98 Mbit/s
95th percentile per-packet one-way delay: 1.444 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 66.72 Mbit/s
95th percentile per-packet one-way delay: 1.236 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 31.60 Mbit/s
95th percentile per-packet one-way delay: 1.489 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesD — Data Link

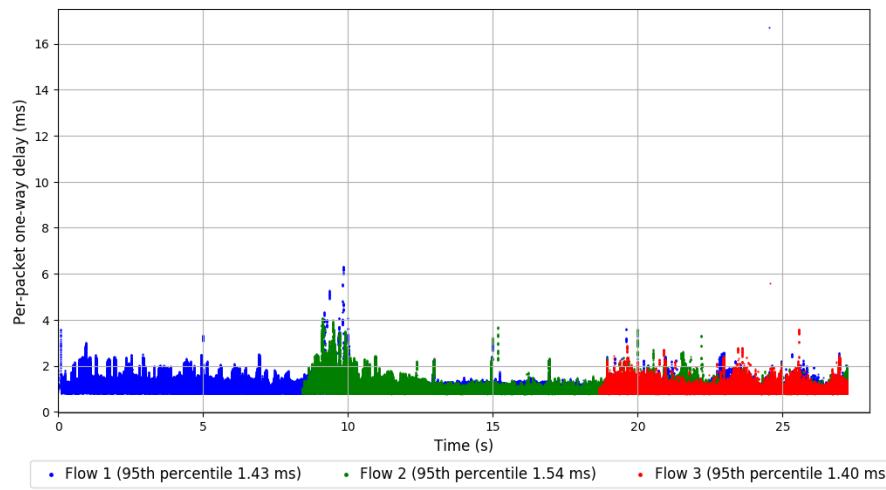
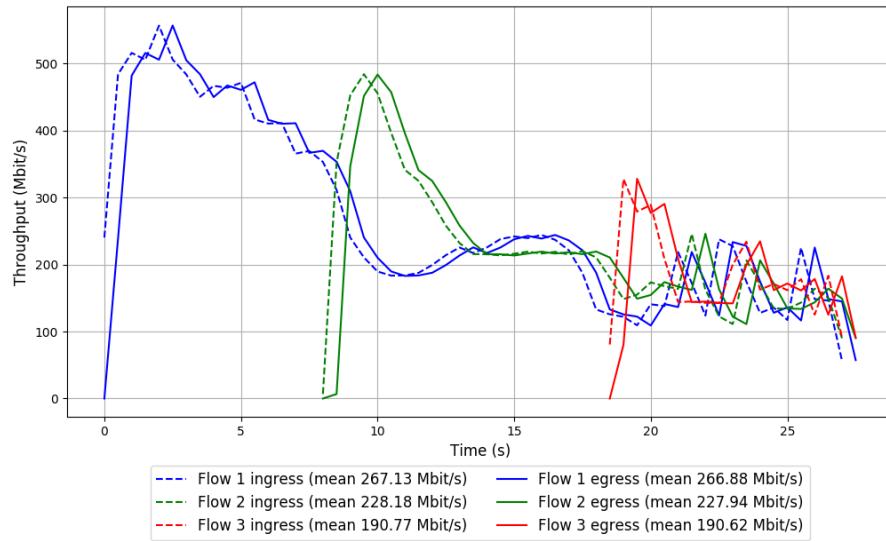


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-01-17 12:12:47
End at: 2019-01-17 12:13:17
Local clock offset: -0.15 ms
Remote clock offset: -0.235 ms

# Below is generated by plot.py at 2019-01-17 15:18:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 484.20 Mbit/s
95th percentile per-packet one-way delay: 1.455 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 266.88 Mbit/s
95th percentile per-packet one-way delay: 1.426 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 227.94 Mbit/s
95th percentile per-packet one-way delay: 1.541 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 190.62 Mbit/s
95th percentile per-packet one-way delay: 1.401 ms
Loss rate: 0.08%
```

Run 1: Report of Indigo-MusesT — Data Link

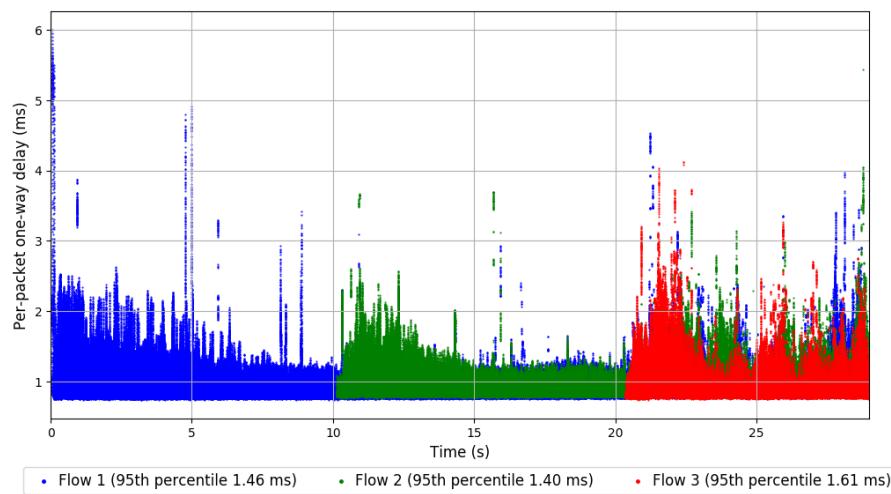
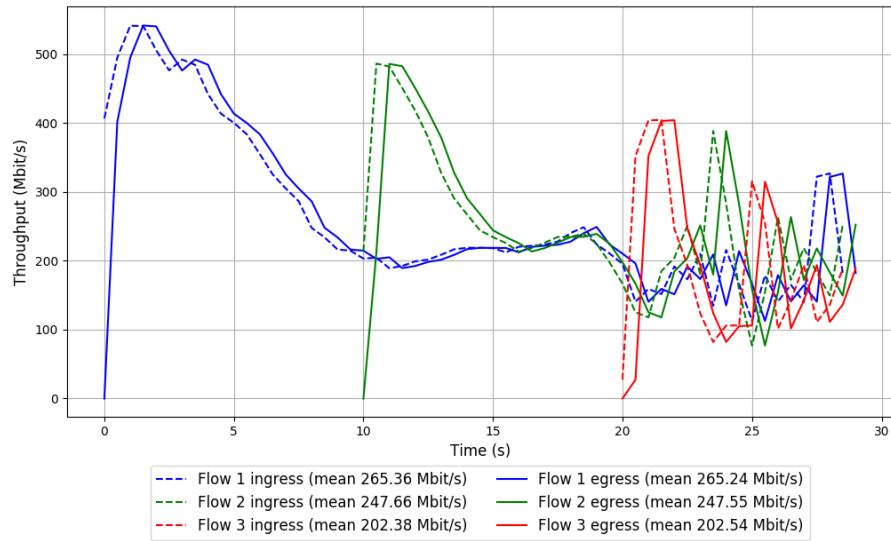


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-01-17 12:42:58
End at: 2019-01-17 12:43:28
Local clock offset: 3.425 ms
Remote clock offset: 0.208 ms

# Below is generated by plot.py at 2019-01-17 15:18:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 486.60 Mbit/s
95th percentile per-packet one-way delay: 1.460 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 265.24 Mbit/s
95th percentile per-packet one-way delay: 1.457 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 247.55 Mbit/s
95th percentile per-packet one-way delay: 1.399 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 202.54 Mbit/s
95th percentile per-packet one-way delay: 1.611 ms
Loss rate: 0.02%
```

Run 2: Report of Indigo-MusesT — Data Link

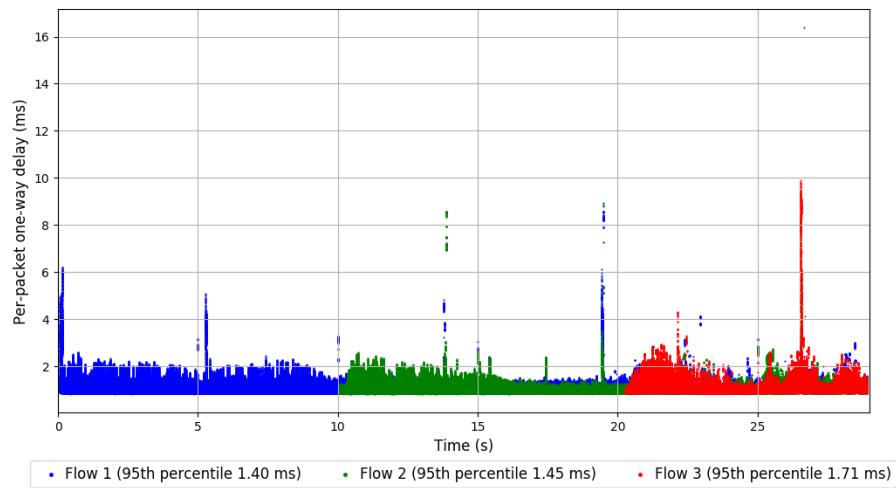
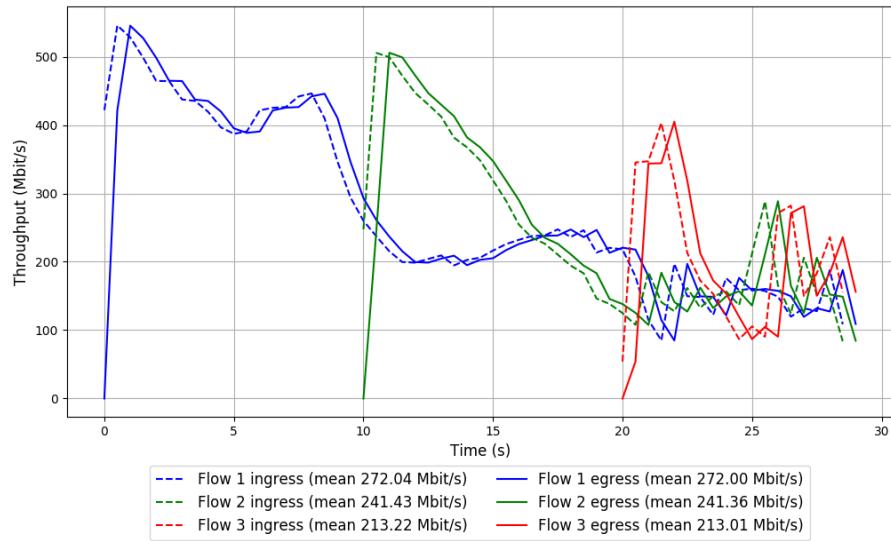


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-01-17 13:13:09
End at: 2019-01-17 13:13:39
Local clock offset: 3.519 ms
Remote clock offset: -3.307 ms

# Below is generated by plot.py at 2019-01-17 15:18:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 493.17 Mbit/s
95th percentile per-packet one-way delay: 1.471 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 272.00 Mbit/s
95th percentile per-packet one-way delay: 1.404 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 241.36 Mbit/s
95th percentile per-packet one-way delay: 1.450 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 213.01 Mbit/s
95th percentile per-packet one-way delay: 1.705 ms
Loss rate: 0.10%
```

Run 3: Report of Indigo-MusesT — Data Link

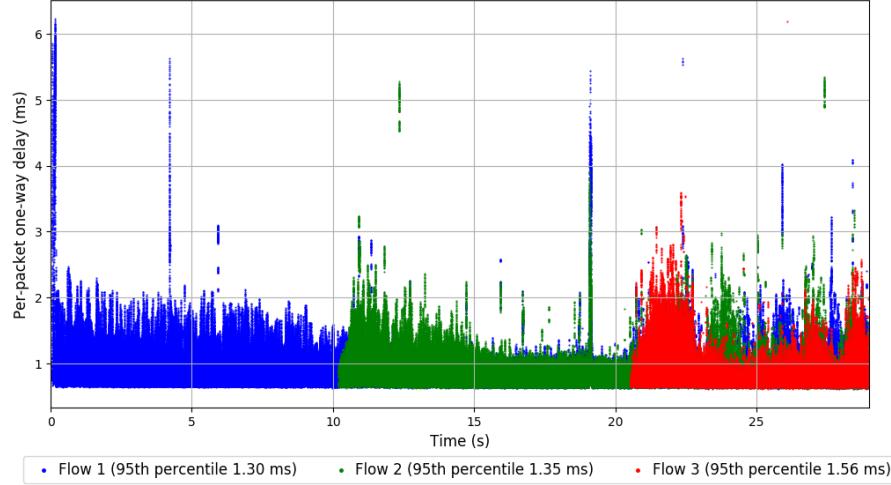
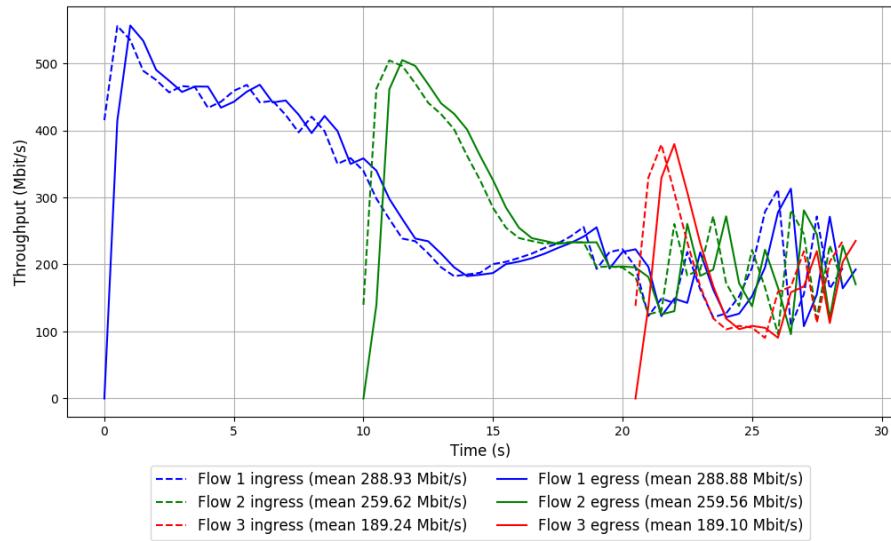


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-01-17 13:43:04
End at: 2019-01-17 13:43:34
Local clock offset: -0.206 ms
Remote clock offset: -3.284 ms

# Below is generated by plot.py at 2019-01-17 15:19:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 511.97 Mbit/s
95th percentile per-packet one-way delay: 1.352 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 288.88 Mbit/s
95th percentile per-packet one-way delay: 1.304 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 259.56 Mbit/s
95th percentile per-packet one-way delay: 1.355 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 189.10 Mbit/s
95th percentile per-packet one-way delay: 1.562 ms
Loss rate: 0.06%
```

Run 4: Report of Indigo-MusesT — Data Link

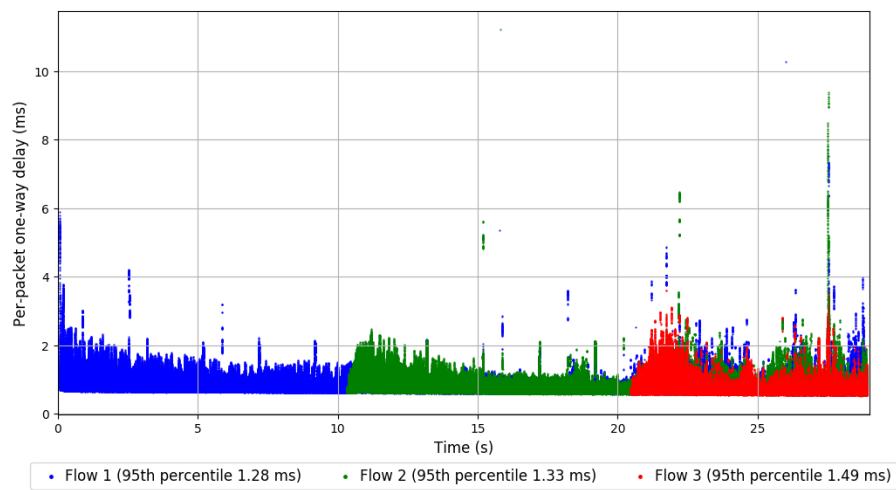
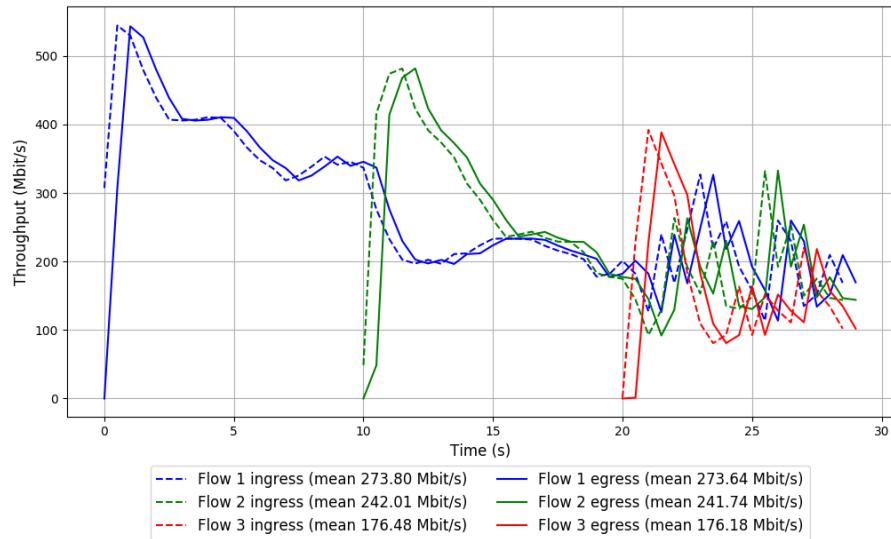


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-01-17 14:13:10
End at: 2019-01-17 14:13:40
Local clock offset: -0.185 ms
Remote clock offset: 2.412 ms

# Below is generated by plot.py at 2019-01-17 15:19:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 480.72 Mbit/s
95th percentile per-packet one-way delay: 1.318 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 273.64 Mbit/s
95th percentile per-packet one-way delay: 1.280 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 241.74 Mbit/s
95th percentile per-packet one-way delay: 1.326 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 176.18 Mbit/s
95th percentile per-packet one-way delay: 1.485 ms
Loss rate: 0.17%
```

Run 5: Report of Indigo-MusesT — Data Link

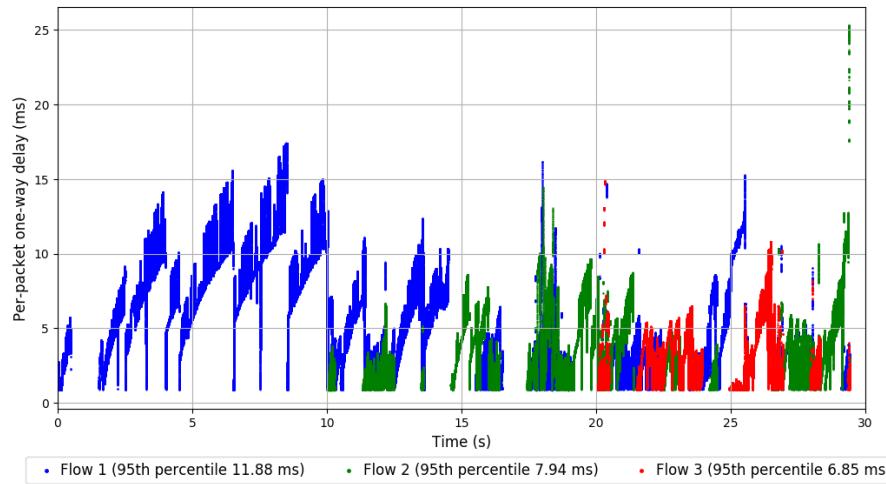
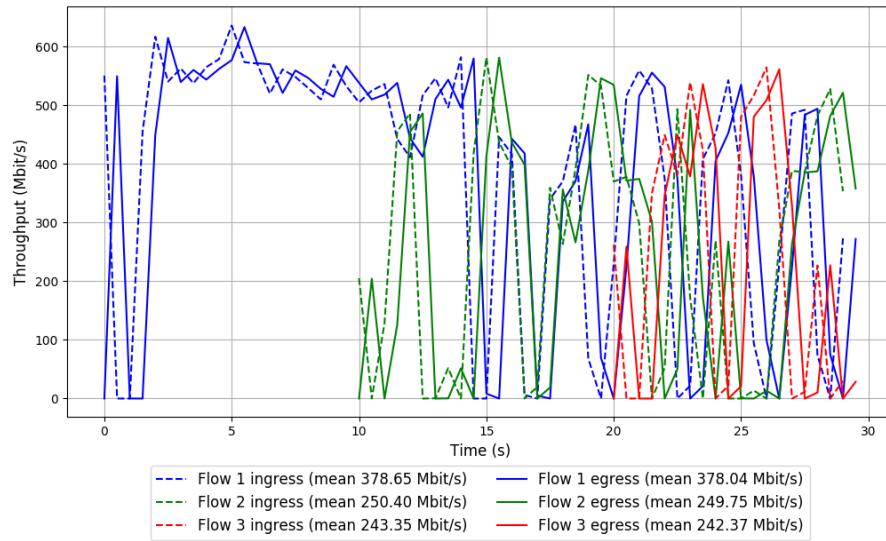


Run 1: Statistics of LEDBAT

```
Start at: 2019-01-17 12:36:42
End at: 2019-01-17 12:37:12
Local clock offset: 2.985 ms
Remote clock offset: 0.183 ms

# Below is generated by plot.py at 2019-01-17 15:20:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 620.32 Mbit/s
95th percentile per-packet one-way delay: 11.128 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 378.04 Mbit/s
95th percentile per-packet one-way delay: 11.881 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 249.75 Mbit/s
95th percentile per-packet one-way delay: 7.942 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 242.37 Mbit/s
95th percentile per-packet one-way delay: 6.847 ms
Loss rate: 0.40%
```

Run 1: Report of LEDBAT — Data Link

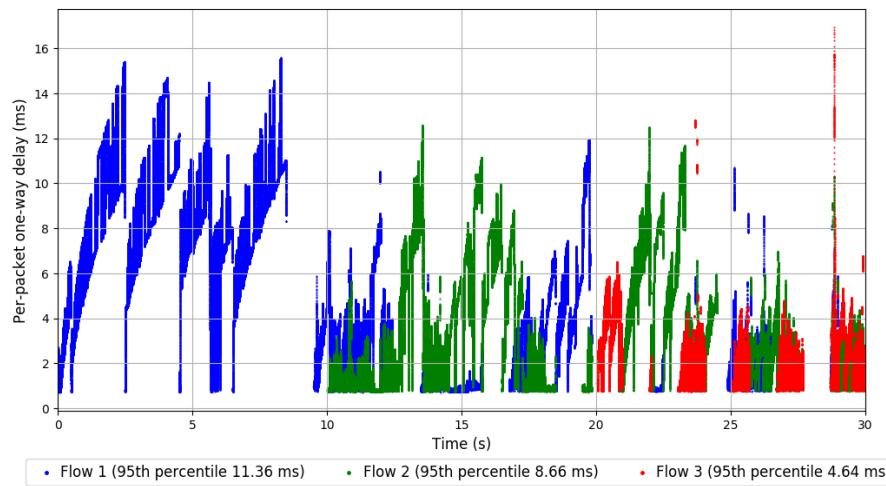
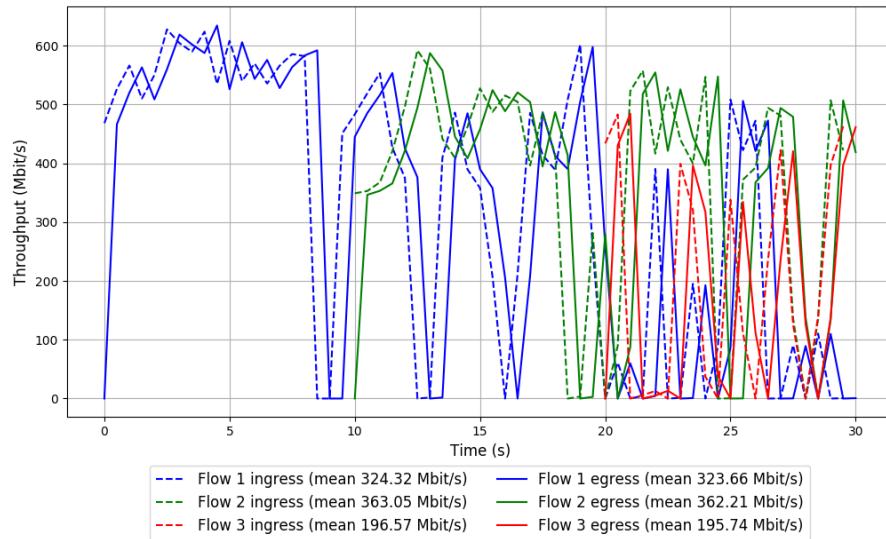


Run 2: Statistics of LEDBAT

```
Start at: 2019-01-17 13:06:54
End at: 2019-01-17 13:07:24
Local clock offset: 3.437 ms
Remote clock offset: -2.903 ms

# Below is generated by plot.py at 2019-01-17 15:21:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 630.09 Mbit/s
95th percentile per-packet one-way delay: 10.626 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 323.66 Mbit/s
95th percentile per-packet one-way delay: 11.364 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 362.21 Mbit/s
95th percentile per-packet one-way delay: 8.663 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 195.74 Mbit/s
95th percentile per-packet one-way delay: 4.642 ms
Loss rate: 0.41%
```

Run 2: Report of LEDBAT — Data Link

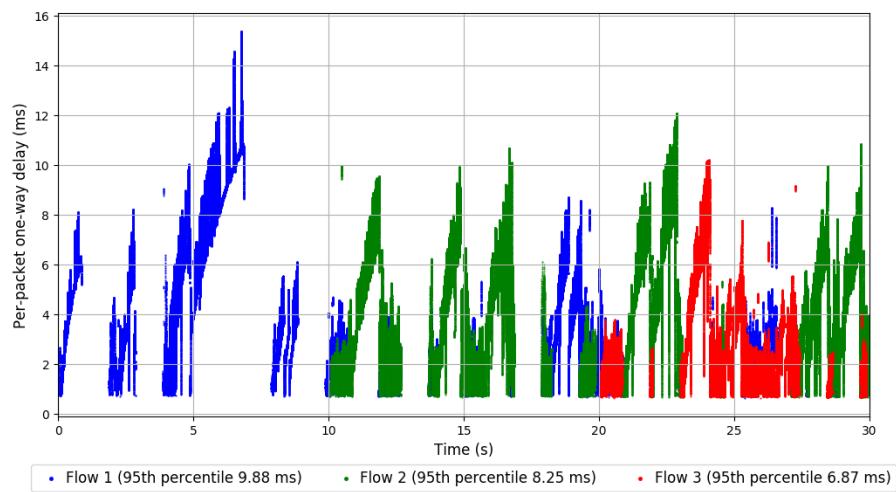
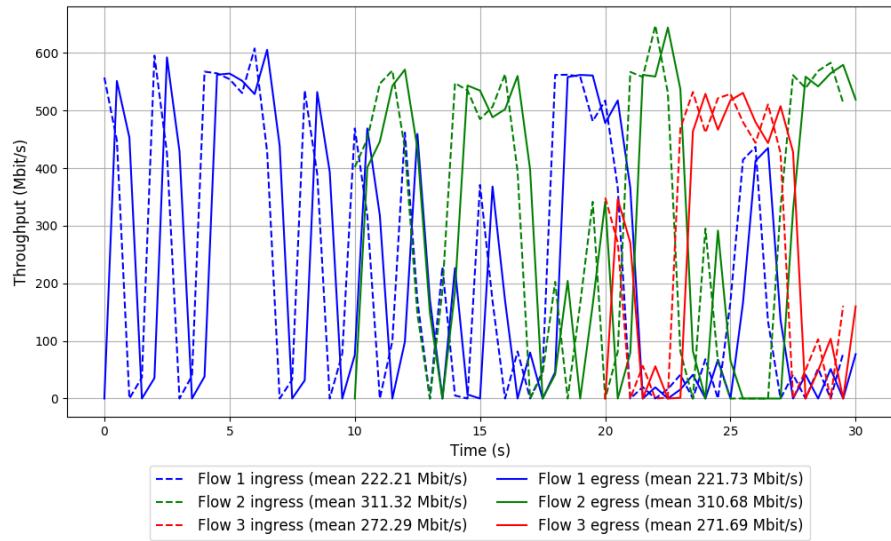


Run 3: Statistics of LEDBAT

```
Start at: 2019-01-17 13:36:55
End at: 2019-01-17 13:37:25
Local clock offset: 0.187 ms
Remote clock offset: -3.289 ms

# Below is generated by plot.py at 2019-01-17 15:21:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 517.94 Mbit/s
95th percentile per-packet one-way delay: 8.832 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 221.73 Mbit/s
95th percentile per-packet one-way delay: 9.884 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 310.68 Mbit/s
95th percentile per-packet one-way delay: 8.250 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 271.69 Mbit/s
95th percentile per-packet one-way delay: 6.867 ms
Loss rate: 0.22%
```

Run 3: Report of LEDBAT — Data Link

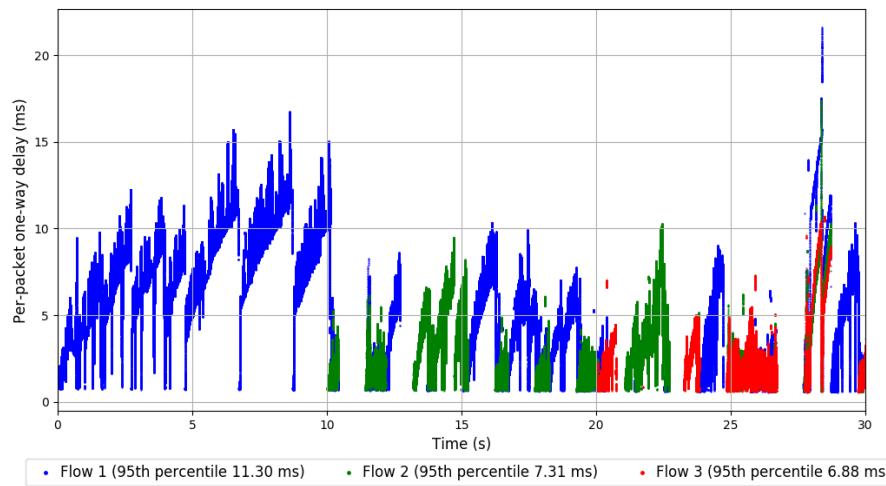
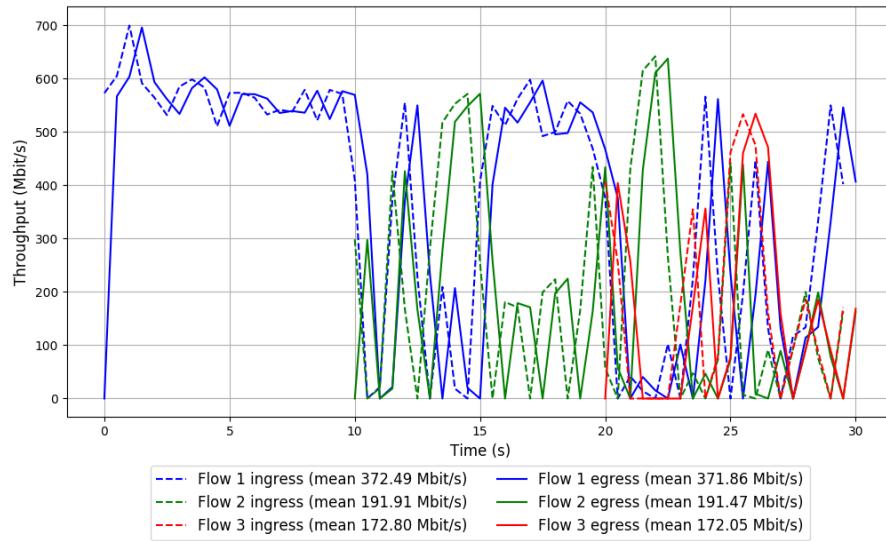


Run 4: Statistics of LEDBAT

```
Start at: 2019-01-17 14:07:01
End at: 2019-01-17 14:07:31
Local clock offset: -0.15 ms
Remote clock offset: 0.685 ms

# Below is generated by plot.py at 2019-01-17 15:24:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 555.45 Mbit/s
95th percentile per-packet one-way delay: 10.823 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 371.86 Mbit/s
95th percentile per-packet one-way delay: 11.303 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 191.47 Mbit/s
95th percentile per-packet one-way delay: 7.307 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 172.05 Mbit/s
95th percentile per-packet one-way delay: 6.885 ms
Loss rate: 0.43%
```

Run 4: Report of LEDBAT — Data Link

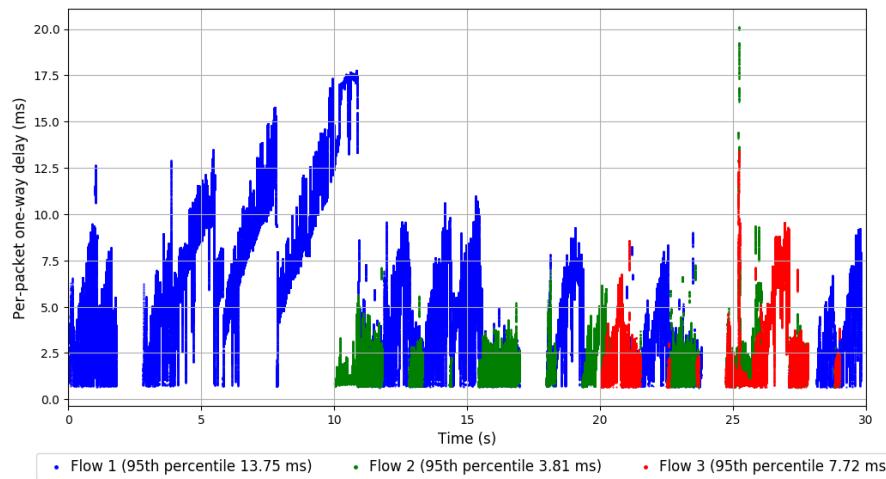
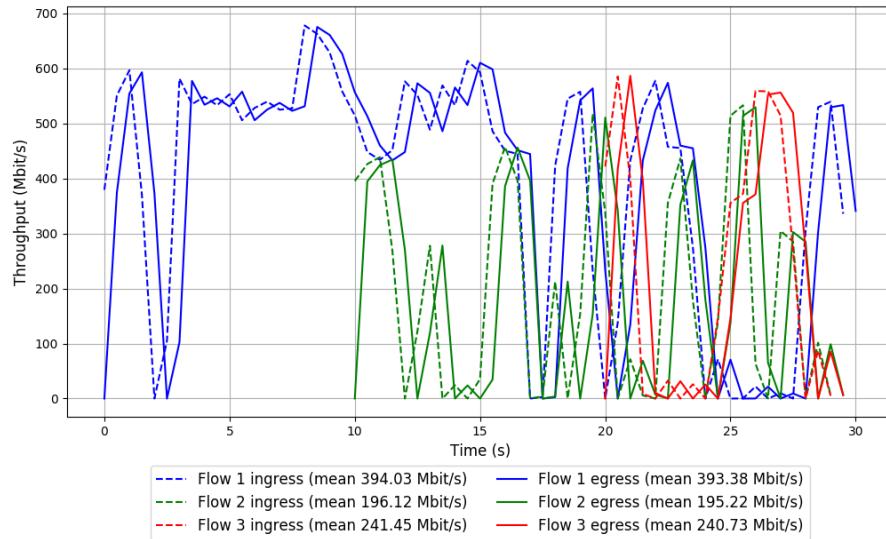


Run 5: Statistics of LEDBAT

```
Start at: 2019-01-17 14:36:58
End at: 2019-01-17 14:37:28
Local clock offset: -0.116 ms
Remote clock offset: 5.456 ms

# Below is generated by plot.py at 2019-01-17 15:25:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 590.34 Mbit/s
95th percentile per-packet one-way delay: 12.037 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 393.38 Mbit/s
95th percentile per-packet one-way delay: 13.747 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 195.22 Mbit/s
95th percentile per-packet one-way delay: 3.810 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 240.73 Mbit/s
95th percentile per-packet one-way delay: 7.720 ms
Loss rate: 0.30%
```

Run 5: Report of LEDBAT — Data Link

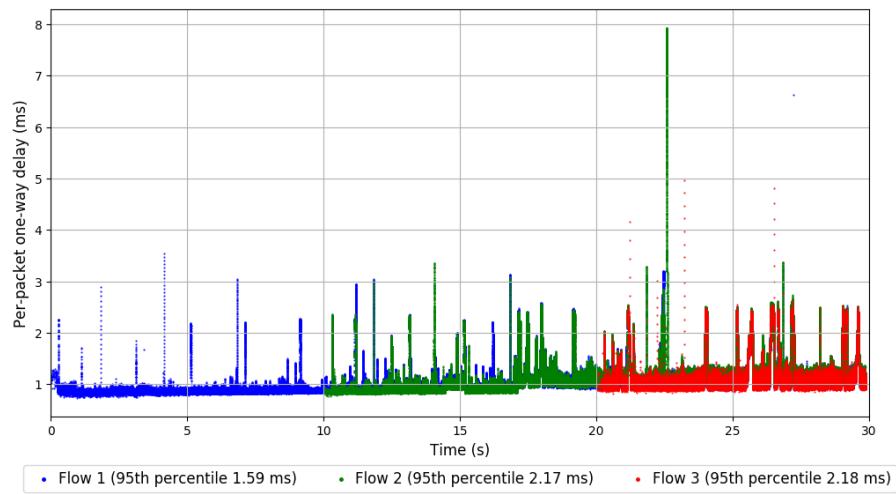
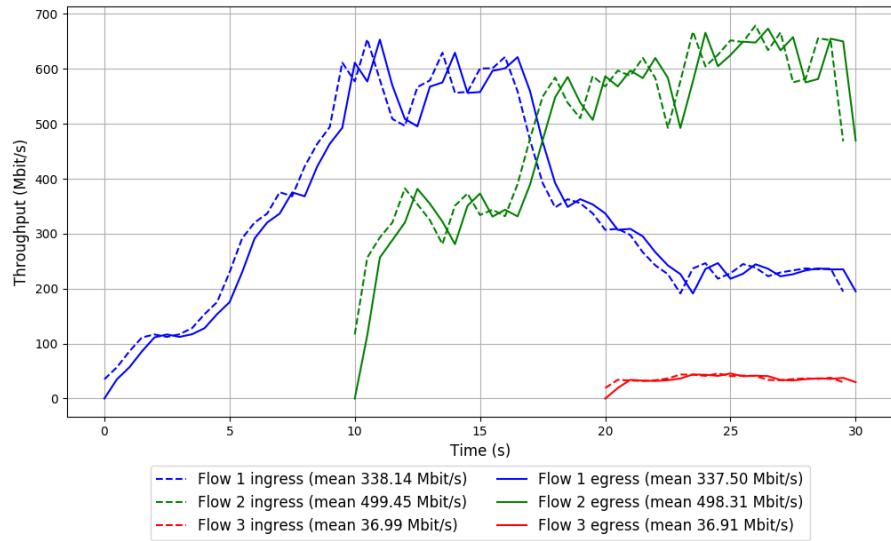


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-01-17 12:28:37
End at: 2019-01-17 12:29:07
Local clock offset: 1.999 ms
Remote clock offset: -0.076 ms

# Below is generated by plot.py at 2019-01-17 15:27:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 680.86 Mbit/s
95th percentile per-packet one-way delay: 1.945 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 337.50 Mbit/s
95th percentile per-packet one-way delay: 1.591 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 498.31 Mbit/s
95th percentile per-packet one-way delay: 2.166 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 36.91 Mbit/s
95th percentile per-packet one-way delay: 2.183 ms
Loss rate: 0.22%
```

Run 1: Report of PCC-Allegro — Data Link

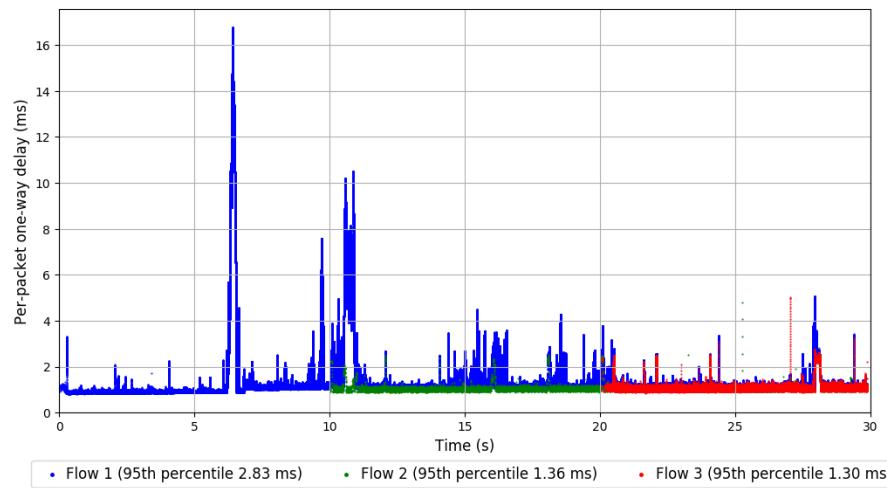
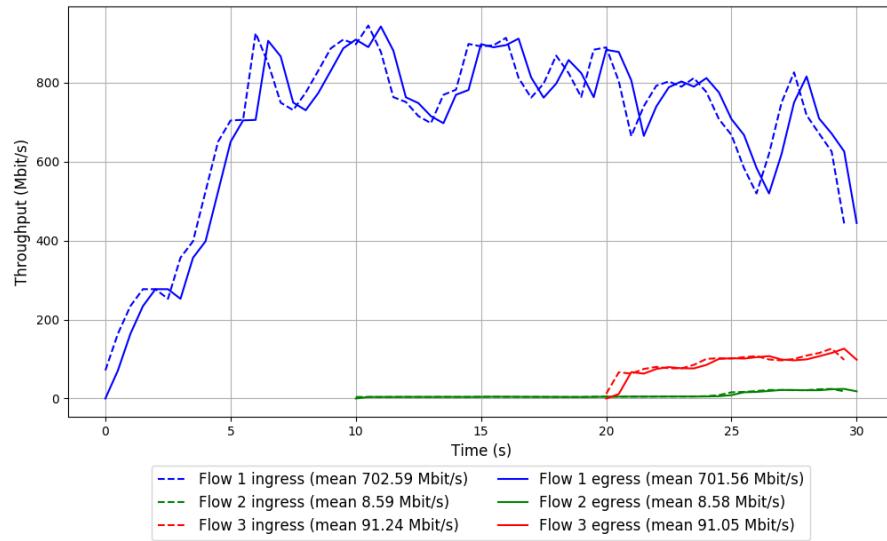


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-01-17 12:58:48
End at: 2019-01-17 12:59:18
Local clock offset: 3.436 ms
Remote clock offset: -1.605 ms

# Below is generated by plot.py at 2019-01-17 15:27:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 737.23 Mbit/s
95th percentile per-packet one-way delay: 2.733 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 701.56 Mbit/s
95th percentile per-packet one-way delay: 2.832 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 8.58 Mbit/s
95th percentile per-packet one-way delay: 1.358 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 91.05 Mbit/s
95th percentile per-packet one-way delay: 1.296 ms
Loss rate: 0.20%
```

Run 2: Report of PCC-Allegro — Data Link

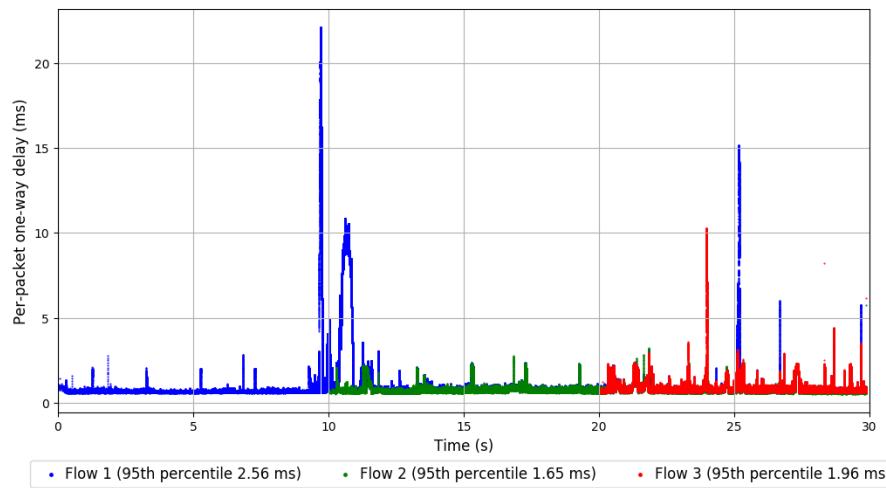
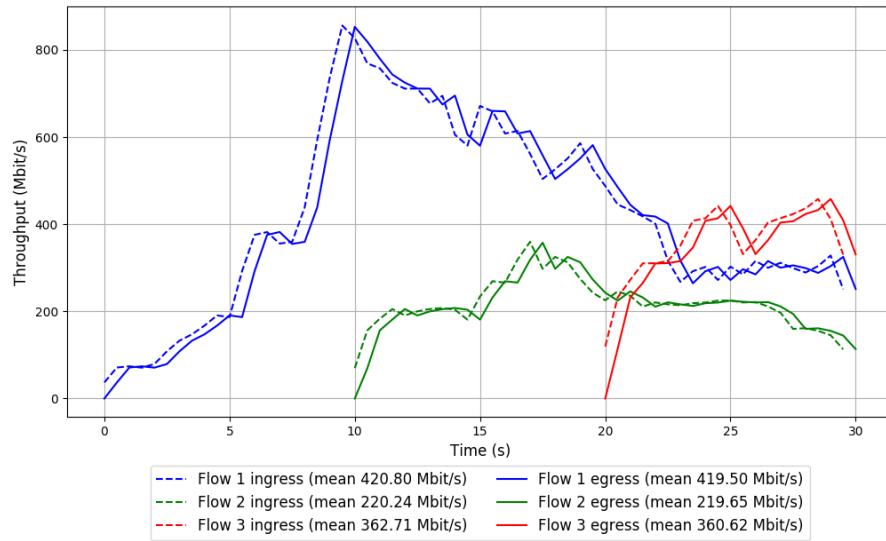


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-01-17 13:28:59
End at: 2019-01-17 13:29:29
Local clock offset: 1.126 ms
Remote clock offset: -3.688 ms

# Below is generated by plot.py at 2019-01-17 15:27:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 684.39 Mbit/s
95th percentile per-packet one-way delay: 2.073 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 419.50 Mbit/s
95th percentile per-packet one-way delay: 2.564 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 219.65 Mbit/s
95th percentile per-packet one-way delay: 1.652 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 360.62 Mbit/s
95th percentile per-packet one-way delay: 1.959 ms
Loss rate: 0.52%
```

Run 3: Report of PCC-Allegro — Data Link

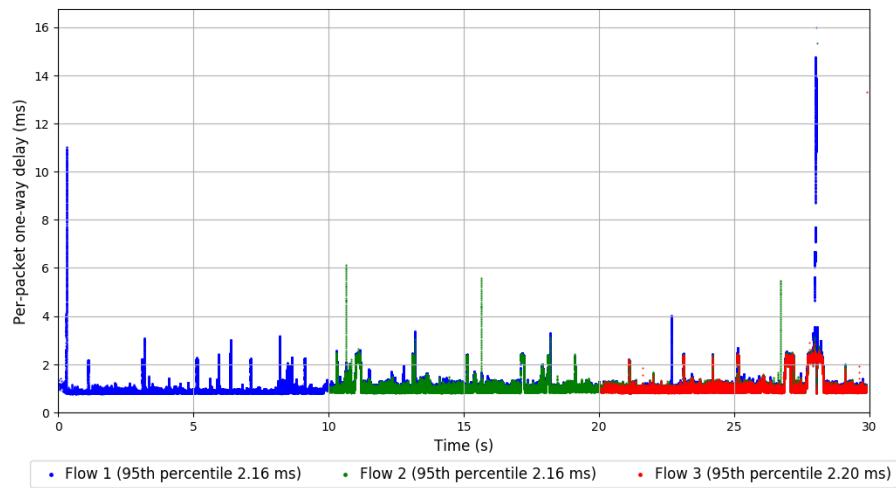
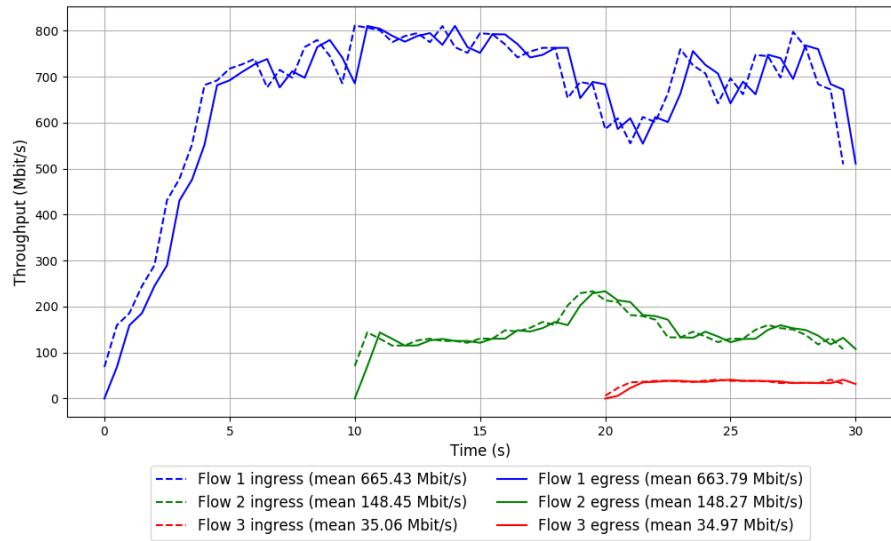


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-01-17 13:58:56
End at: 2019-01-17 13:59:26
Local clock offset: -0.189 ms
Remote clock offset: -3.298 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 773.61 Mbit/s
95th percentile per-packet one-way delay: 2.160 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 663.79 Mbit/s
95th percentile per-packet one-way delay: 2.156 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 148.27 Mbit/s
95th percentile per-packet one-way delay: 2.163 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 34.97 Mbit/s
95th percentile per-packet one-way delay: 2.202 ms
Loss rate: 0.14%
```

Run 4: Report of PCC-Allegro — Data Link

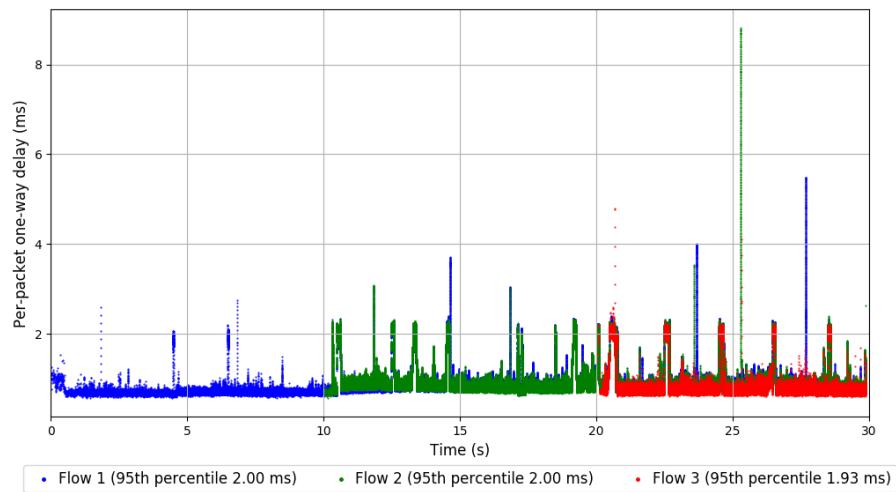
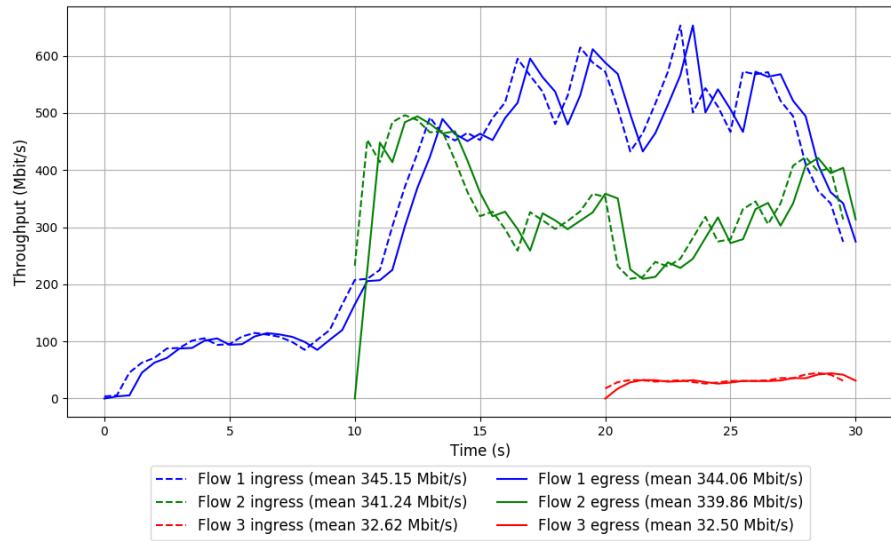


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-01-17 14:28:58
End at: 2019-01-17 14:29:28
Local clock offset: -0.106 ms
Remote clock offset: 4.715 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 580.74 Mbit/s
95th percentile per-packet one-way delay: 2.000 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 344.06 Mbit/s
95th percentile per-packet one-way delay: 2.002 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 339.86 Mbit/s
95th percentile per-packet one-way delay: 2.003 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 32.50 Mbit/s
95th percentile per-packet one-way delay: 1.929 ms
Loss rate: 0.41%
```

Run 5: Report of PCC-Allegro — Data Link

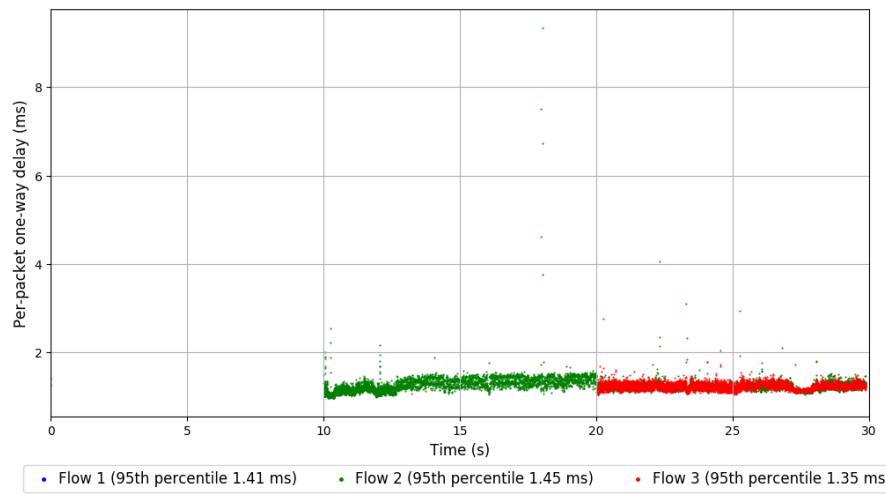
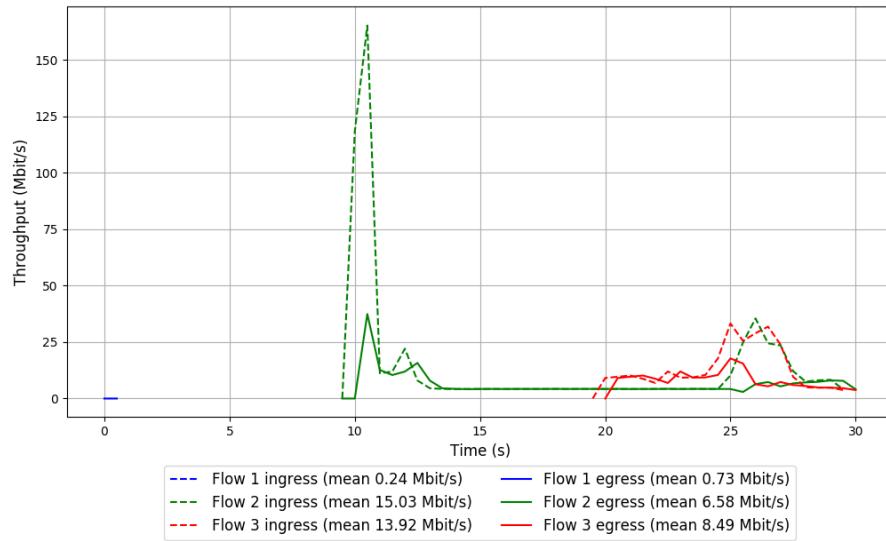


Run 1: Statistics of PCC-Expr

```
Start at: 2019-01-17 12:21:32
End at: 2019-01-17 12:22:02
Local clock offset: 0.281 ms
Remote clock offset: -0.21 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.18 Mbit/s
95th percentile per-packet one-way delay: 1.415 ms
Loss rate: 50.82%
-- Flow 1:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 1.411 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 6.58 Mbit/s
95th percentile per-packet one-way delay: 1.445 ms
Loss rate: 56.24%
-- Flow 3:
Average throughput: 8.49 Mbit/s
95th percentile per-packet one-way delay: 1.350 ms
Loss rate: 39.04%
```

Run 1: Report of PCC-Expr — Data Link

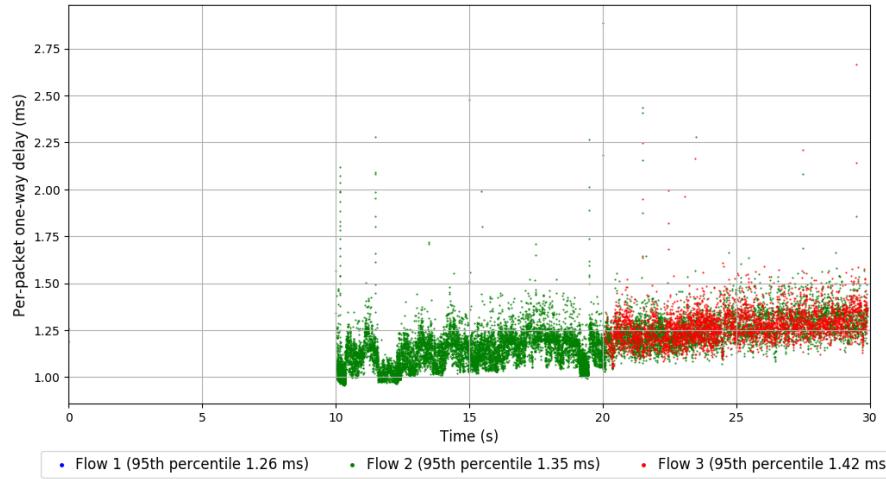
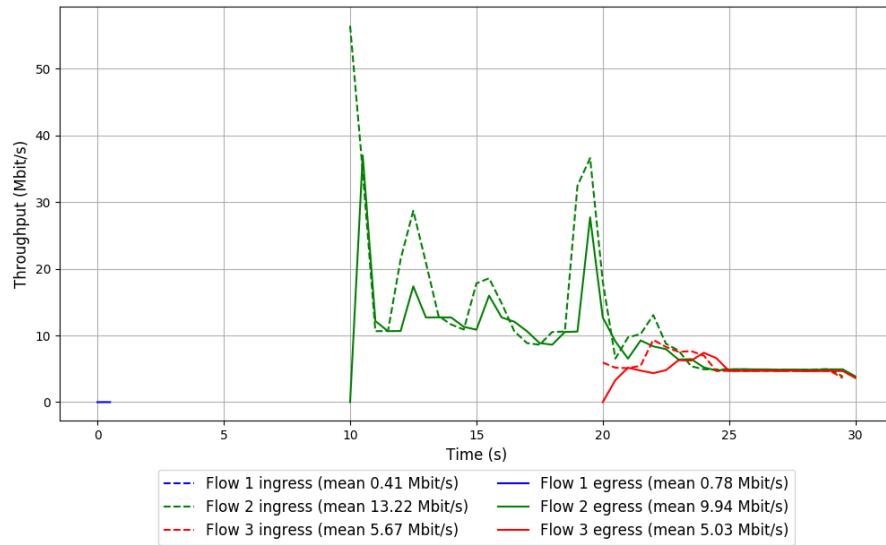


Run 2: Statistics of PCC-Expr

```
Start at: 2019-01-17 12:51:47
End at: 2019-01-17 12:52:17
Local clock offset: 3.687 ms
Remote clock offset: 0.473 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.28 Mbit/s
95th percentile per-packet one-way delay: 1.368 ms
Loss rate: 22.41%
-- Flow 1:
Average throughput: 0.78 Mbit/s
95th percentile per-packet one-way delay: 1.260 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 9.94 Mbit/s
95th percentile per-packet one-way delay: 1.348 ms
Loss rate: 24.78%
-- Flow 3:
Average throughput: 5.03 Mbit/s
95th percentile per-packet one-way delay: 1.416 ms
Loss rate: 11.23%
```

Run 2: Report of PCC-Expr — Data Link

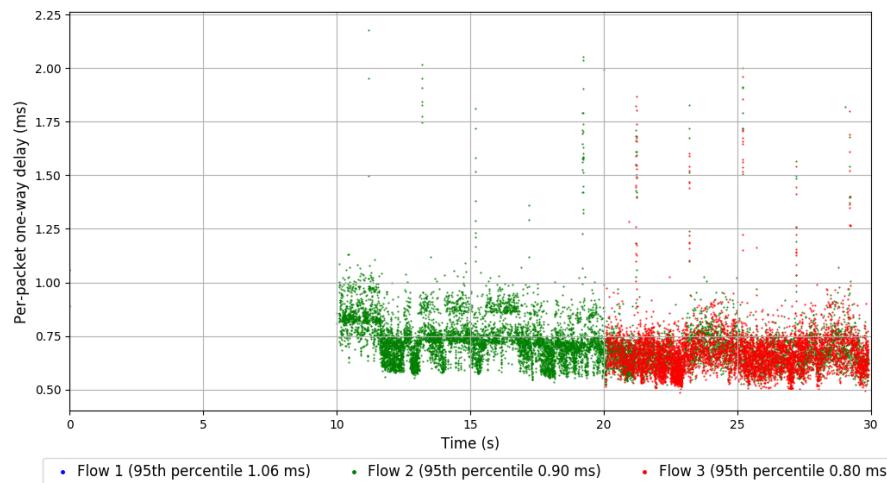
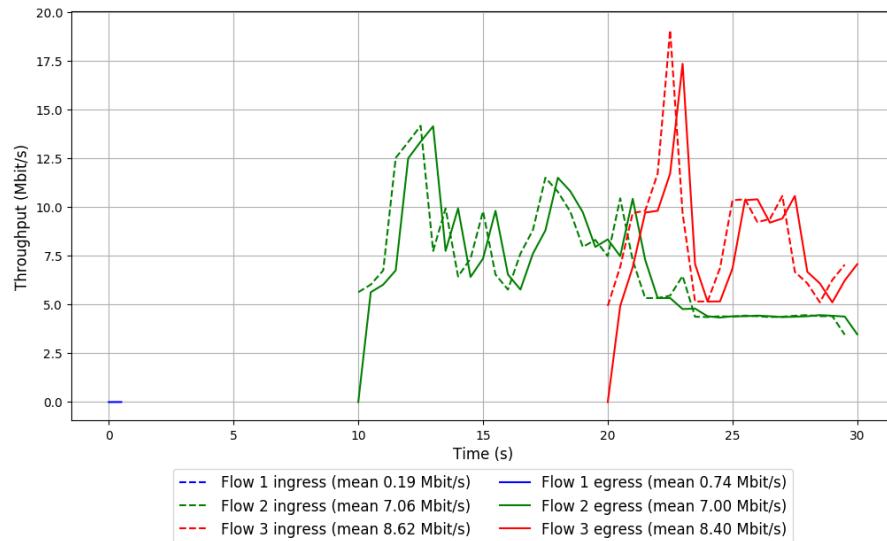


Run 3: Statistics of PCC-Expr

```
Start at: 2019-01-17 13:21:58
End at: 2019-01-17 13:22:28
Local clock offset: 2.921 ms
Remote clock offset: -3.779 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.43 Mbit/s
95th percentile per-packet one-way delay: 0.881 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 0.74 Mbit/s
95th percentile per-packet one-way delay: 1.059 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 7.00 Mbit/s
95th percentile per-packet one-way delay: 0.898 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 8.40 Mbit/s
95th percentile per-packet one-way delay: 0.798 ms
Loss rate: 2.56%
```

Run 3: Report of PCC-Expr — Data Link

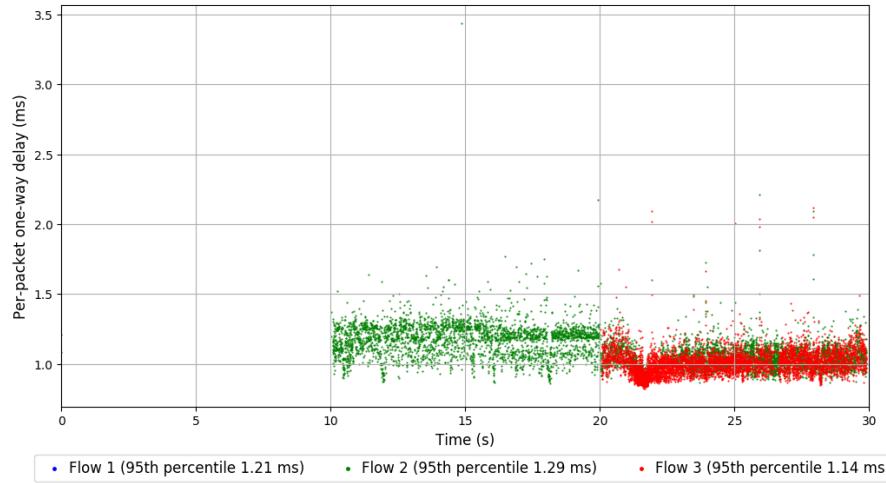
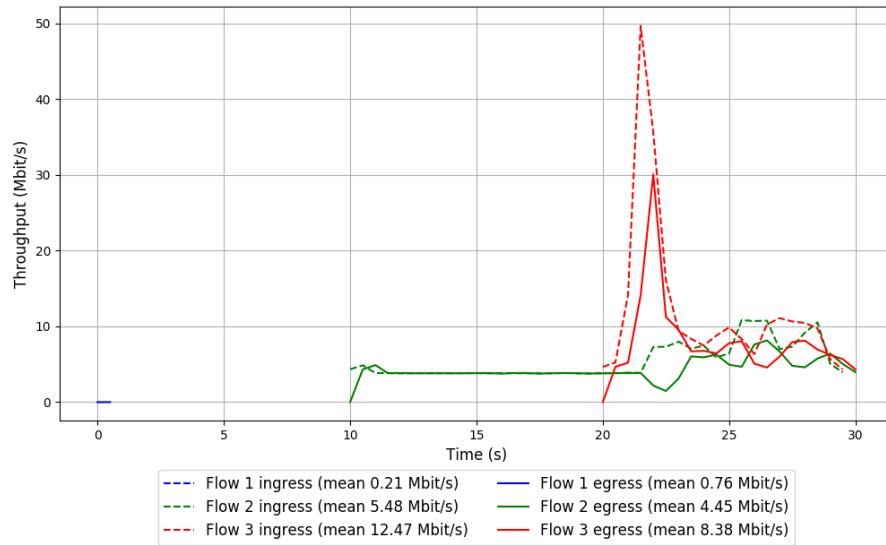


Run 4: Statistics of PCC-Expr

```
Start at: 2019-01-17 13:51:55
End at: 2019-01-17 13:52:25
Local clock offset: -0.435 ms
Remote clock offset: -3.24 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.73 Mbit/s
95th percentile per-packet one-way delay: 1.266 ms
Loss rate: 26.22%
-- Flow 1:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 1.213 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 4.45 Mbit/s
95th percentile per-packet one-way delay: 1.295 ms
Loss rate: 18.82%
-- Flow 3:
Average throughput: 8.38 Mbit/s
95th percentile per-packet one-way delay: 1.138 ms
Loss rate: 32.76%
```

Run 4: Report of PCC-Expr — Data Link

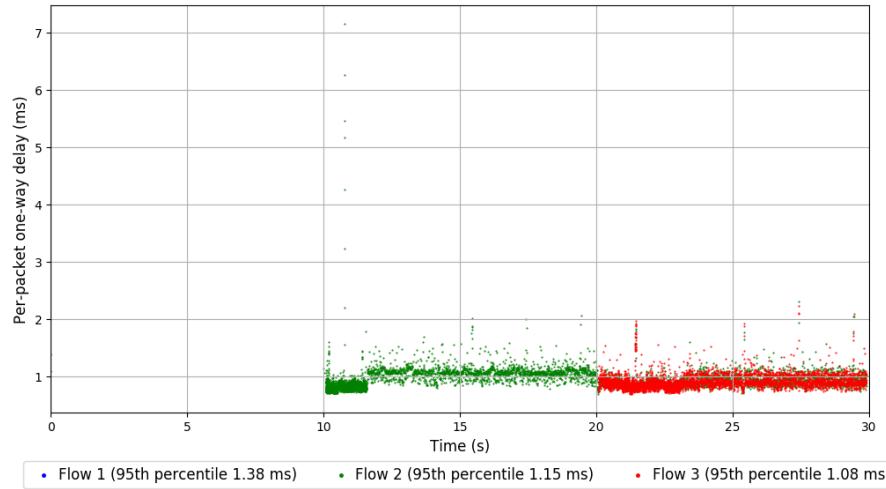
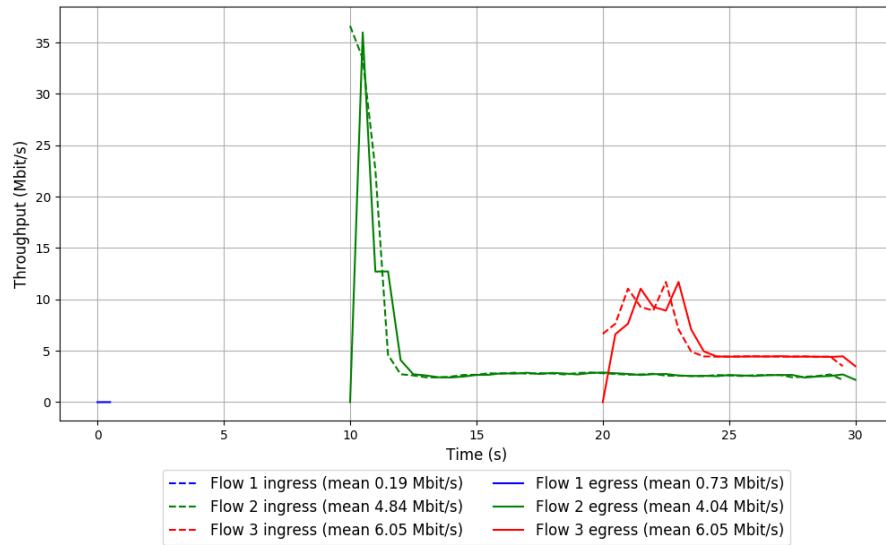


Run 5: Statistics of PCC-Expr

```
Start at: 2019-01-17 14:21:54
End at: 2019-01-17 14:22:24
Local clock offset: -0.208 ms
Remote clock offset: 3.946 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.68 Mbit/s
95th percentile per-packet one-way delay: 1.132 ms
Loss rate: 10.20%
-- Flow 1:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 1.383 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 4.04 Mbit/s
95th percentile per-packet one-way delay: 1.150 ms
Loss rate: 16.53%
-- Flow 3:
Average throughput: 6.05 Mbit/s
95th percentile per-packet one-way delay: 1.078 ms
Loss rate: 0.00%
```

Run 5: Report of PCC-Expr — Data Link

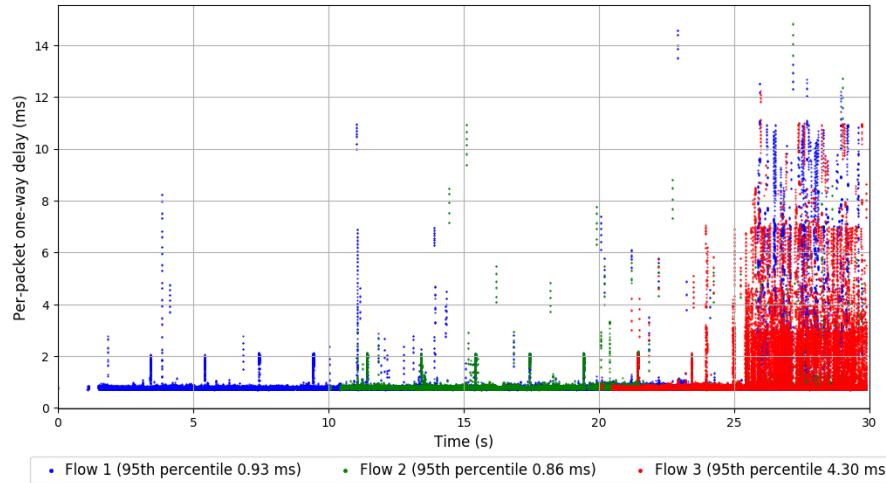
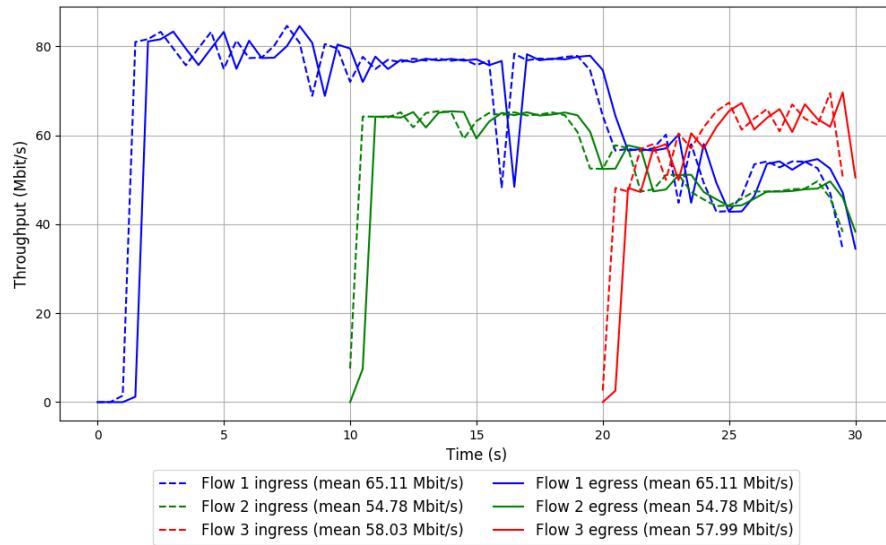


```
Run 1: Statistics of QUIC Cubic

Start at: 2019-01-17 12:16:56
End at: 2019-01-17 12:17:26
Local clock offset: -0.18 ms
Remote clock offset: -0.271 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 120.54 Mbit/s
95th percentile per-packet one-way delay: 1.897 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 65.11 Mbit/s
95th percentile per-packet one-way delay: 0.928 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 54.78 Mbit/s
95th percentile per-packet one-way delay: 0.862 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 57.99 Mbit/s
95th percentile per-packet one-way delay: 4.297 ms
Loss rate: 0.06%
```

Run 1: Report of QUIC Cubic — Data Link

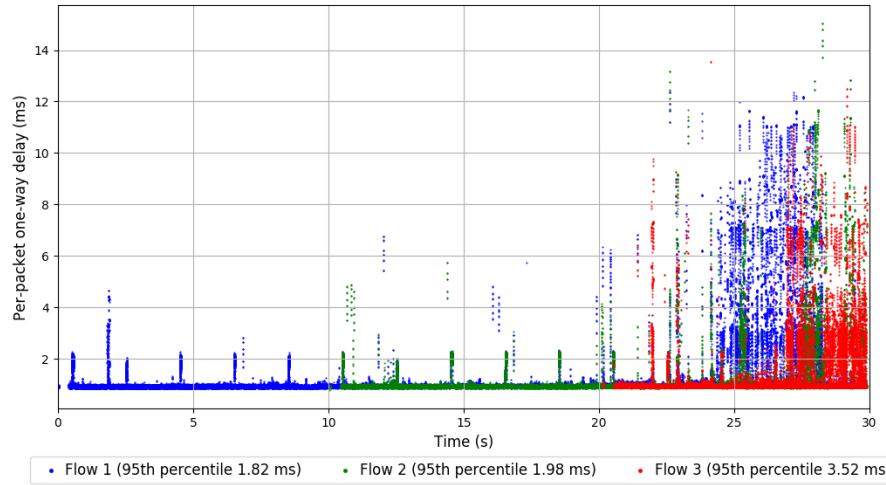
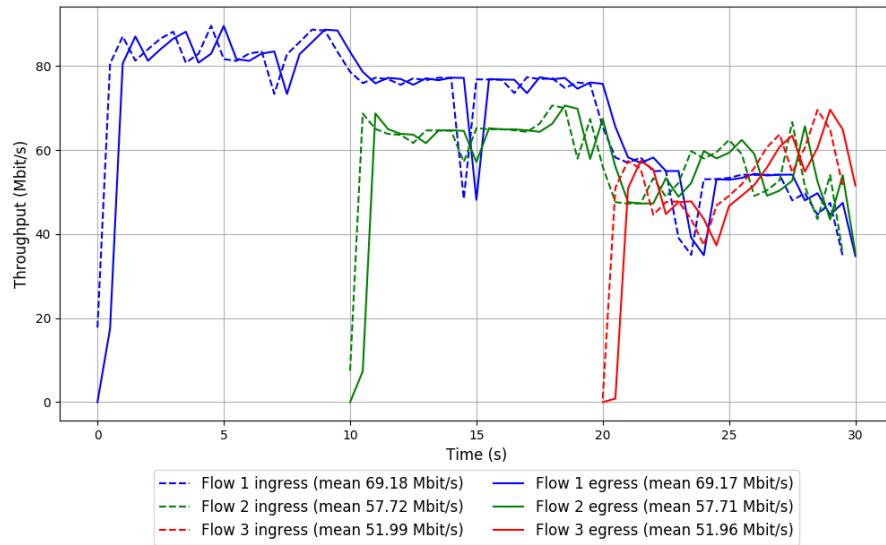


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-01-17 12:47:06
End at: 2019-01-17 12:47:36
Local clock offset: 3.667 ms
Remote clock offset: 0.382 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 124.47 Mbit/s
95th percentile per-packet one-way delay: 2.139 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 69.17 Mbit/s
95th percentile per-packet one-way delay: 1.820 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 57.71 Mbit/s
95th percentile per-packet one-way delay: 1.979 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 51.96 Mbit/s
95th percentile per-packet one-way delay: 3.523 ms
Loss rate: 0.01%
```

Run 2: Report of QUIC Cubic — Data Link

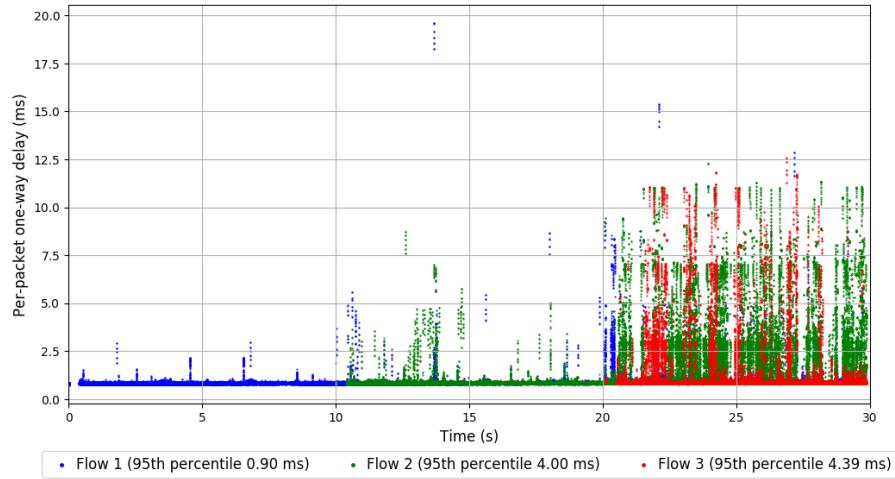
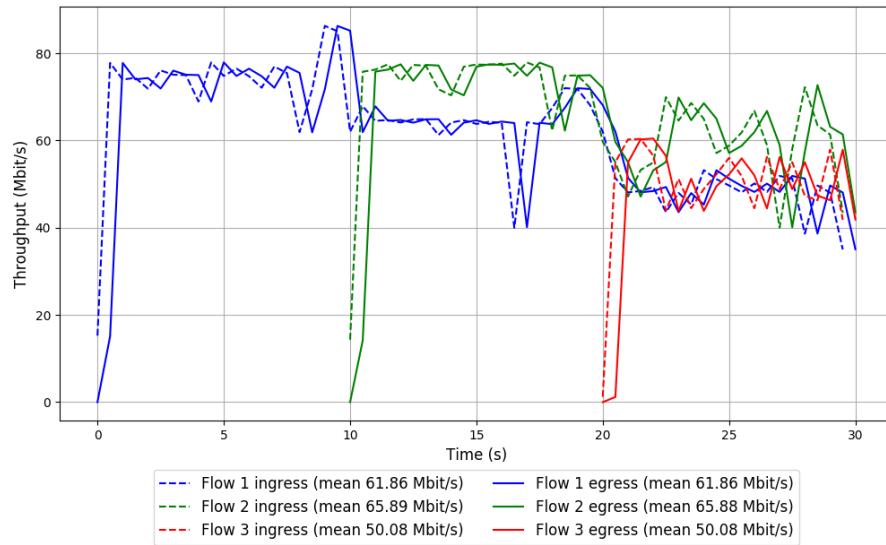


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-01-17 13:17:20
End at: 2019-01-17 13:17:50
Local clock offset: 3.602 ms
Remote clock offset: -3.608 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 122.06 Mbit/s
95th percentile per-packet one-way delay: 2.692 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 61.86 Mbit/s
95th percentile per-packet one-way delay: 0.895 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 65.88 Mbit/s
95th percentile per-packet one-way delay: 4.000 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 50.08 Mbit/s
95th percentile per-packet one-way delay: 4.395 ms
Loss rate: 0.00%
```

Run 3: Report of QUIC Cubic — Data Link

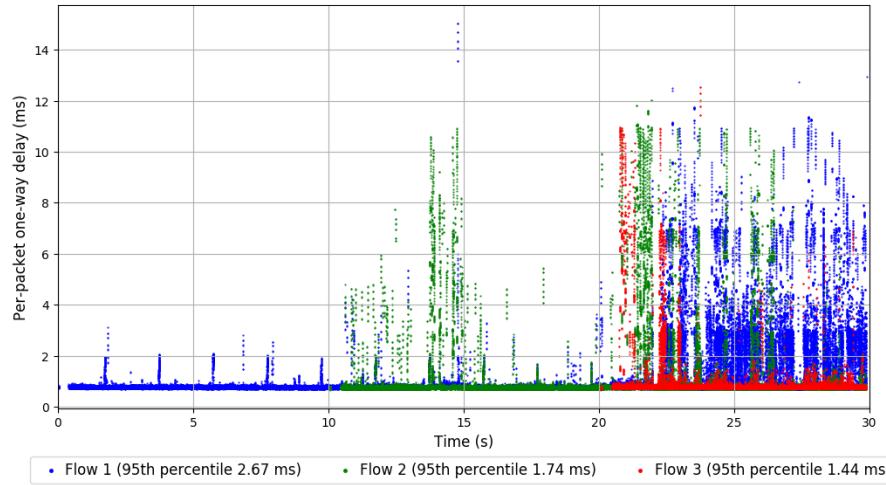
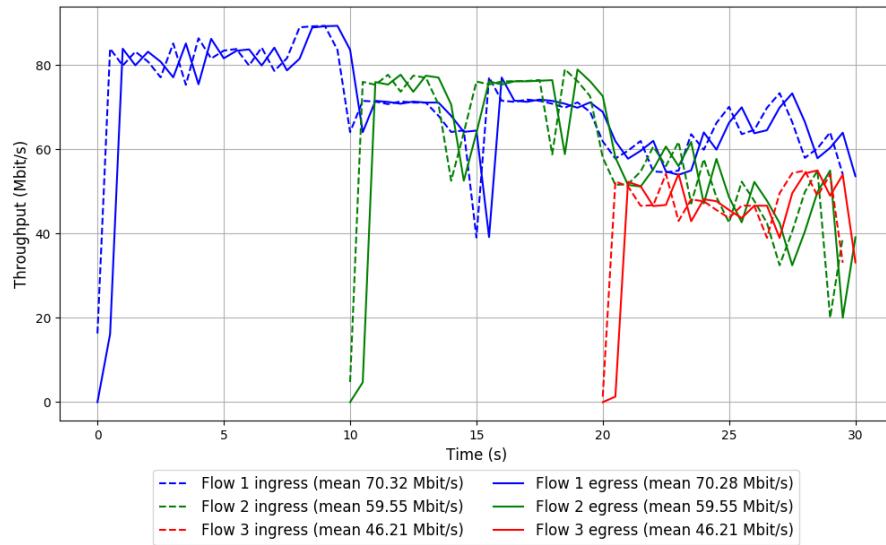


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-01-17 13:47:15
End at: 2019-01-17 13:47:45
Local clock offset: -0.408 ms
Remote clock offset: -3.236 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 124.98 Mbit/s
95th percentile per-packet one-way delay: 2.471 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 70.28 Mbit/s
95th percentile per-packet one-way delay: 2.666 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 59.55 Mbit/s
95th percentile per-packet one-way delay: 1.735 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 46.21 Mbit/s
95th percentile per-packet one-way delay: 1.437 ms
Loss rate: 0.00%
```

Run 4: Report of QUIC Cubic — Data Link

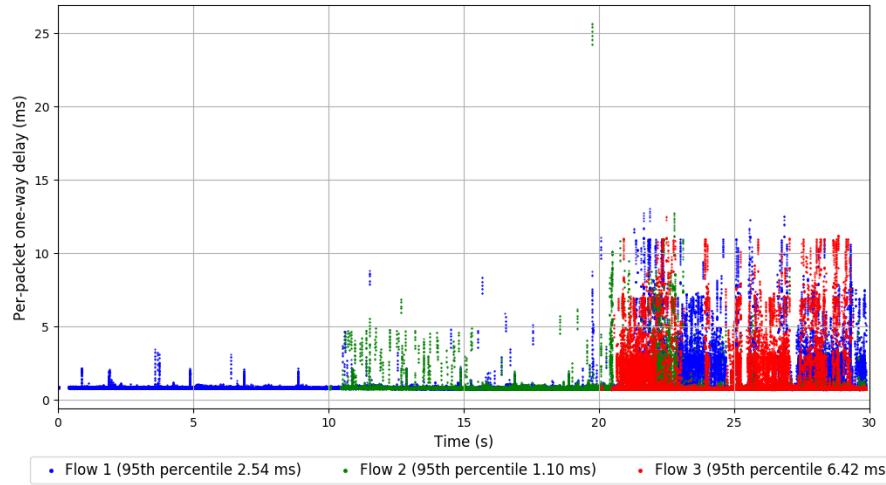
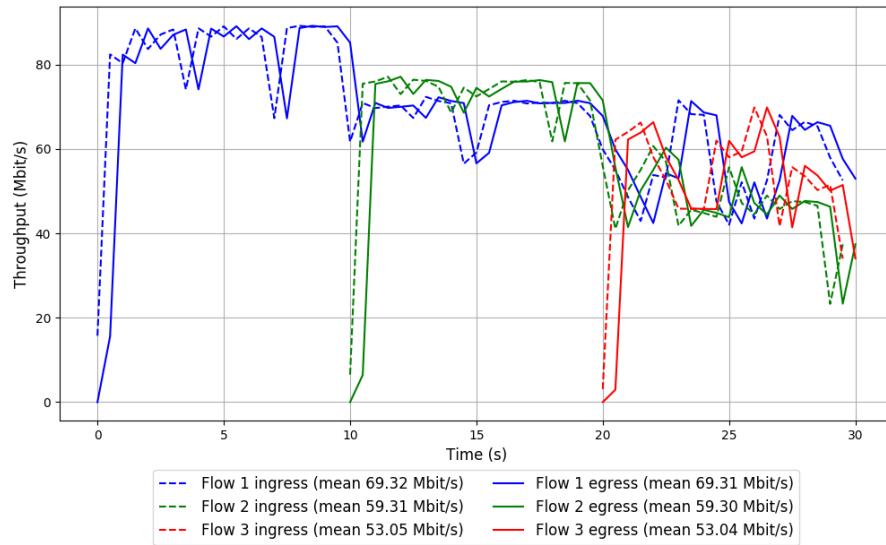


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-01-17 14:17:22
End at: 2019-01-17 14:17:52
Local clock offset: -0.226 ms
Remote clock offset: 3.38 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 126.12 Mbit/s
95th percentile per-packet one-way delay: 2.943 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 69.31 Mbit/s
95th percentile per-packet one-way delay: 2.535 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.30 Mbit/s
95th percentile per-packet one-way delay: 1.103 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 53.04 Mbit/s
95th percentile per-packet one-way delay: 6.418 ms
Loss rate: 0.02%
```

Run 5: Report of QUIC Cubic — Data Link

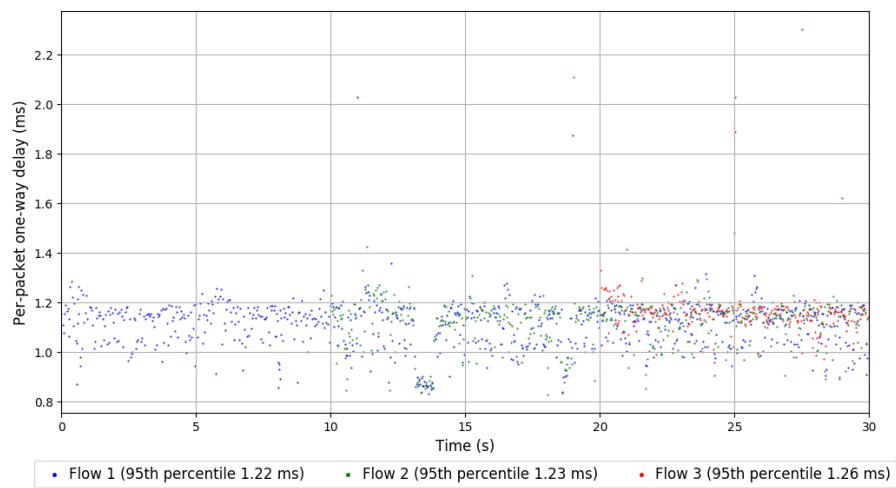
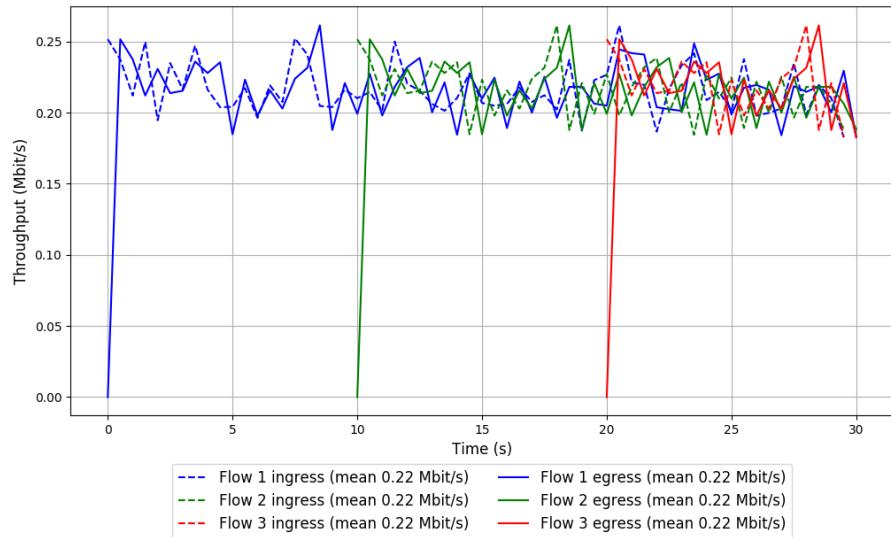


Run 1: Statistics of SCReAM

```
Start at: 2019-01-17 12:14:16
End at: 2019-01-17 12:14:46
Local clock offset: -0.158 ms
Remote clock offset: -0.236 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 1.229 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.218 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.228 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.259 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

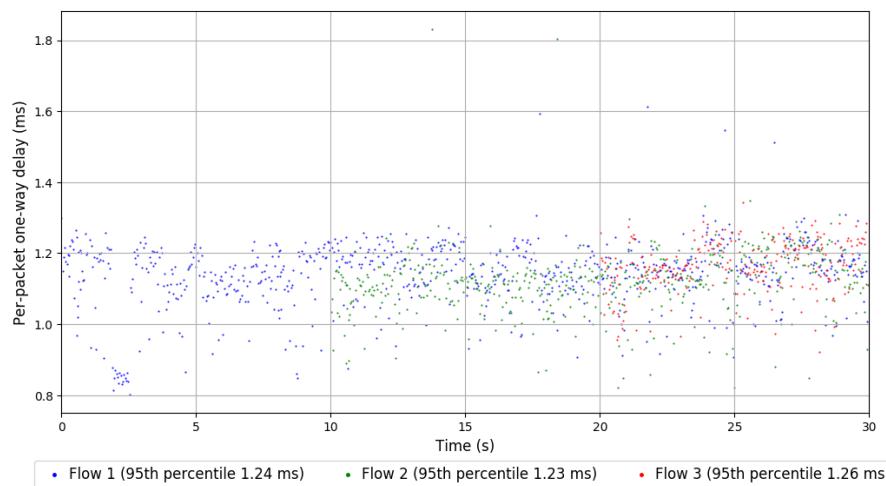
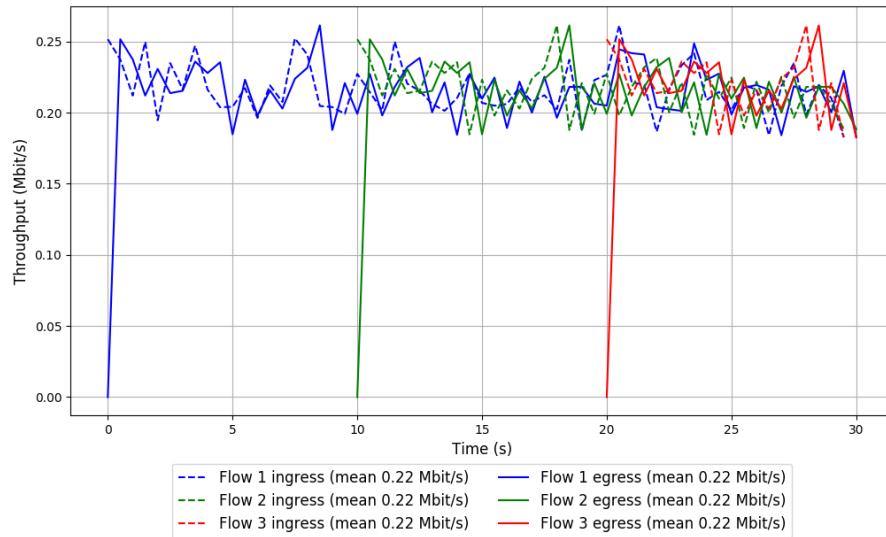


Run 2: Statistics of SCReAM

```
Start at: 2019-01-17 12:44:27
End at: 2019-01-17 12:44:57
Local clock offset: 3.514 ms
Remote clock offset: 0.242 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 1.246 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.244 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.234 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.262 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

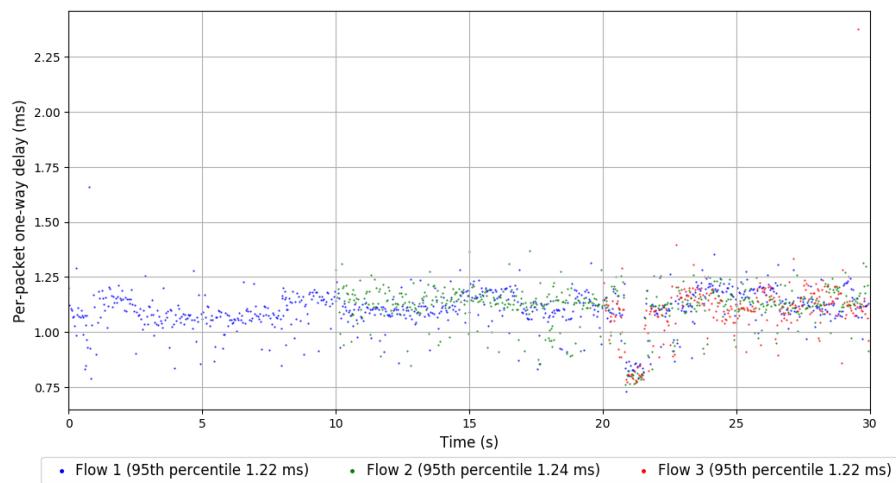
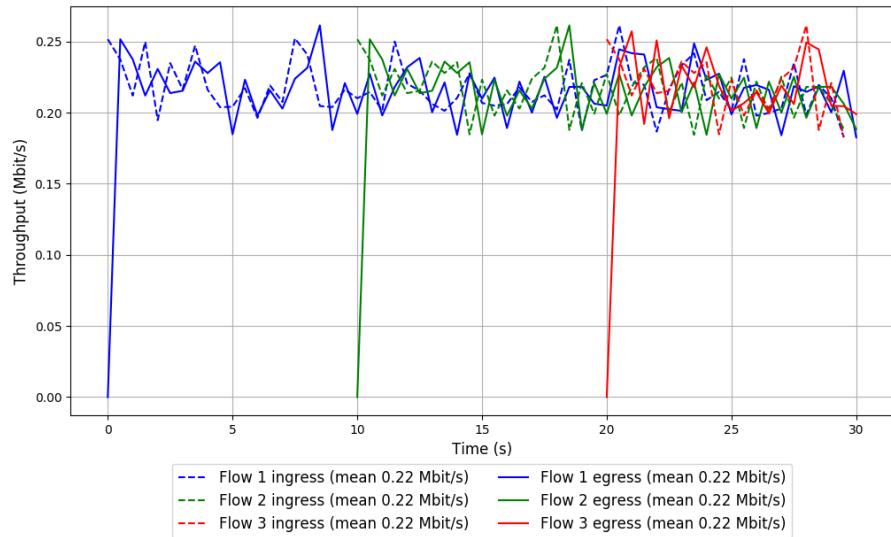


Run 3: Statistics of SCReAM

```
Start at: 2019-01-17 13:14:38
End at: 2019-01-17 13:15:08
Local clock offset: 3.543 ms
Remote clock offset: -3.506 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 1.224 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.222 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.236 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.219 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

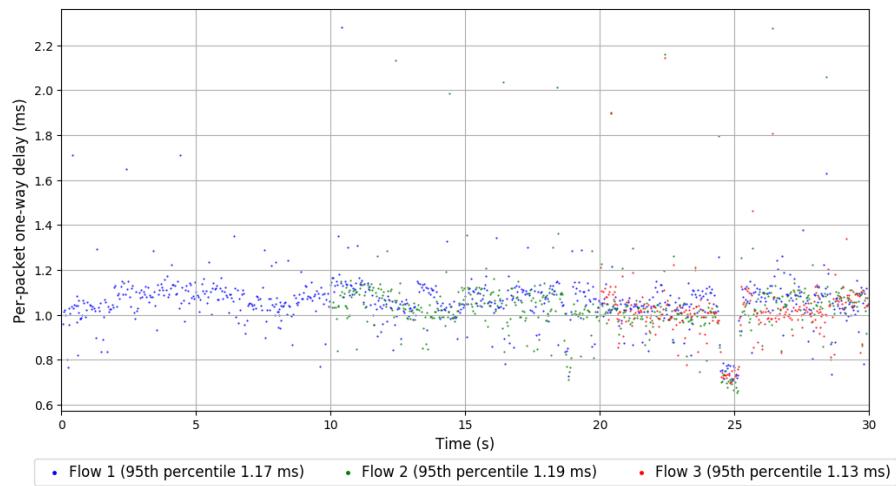
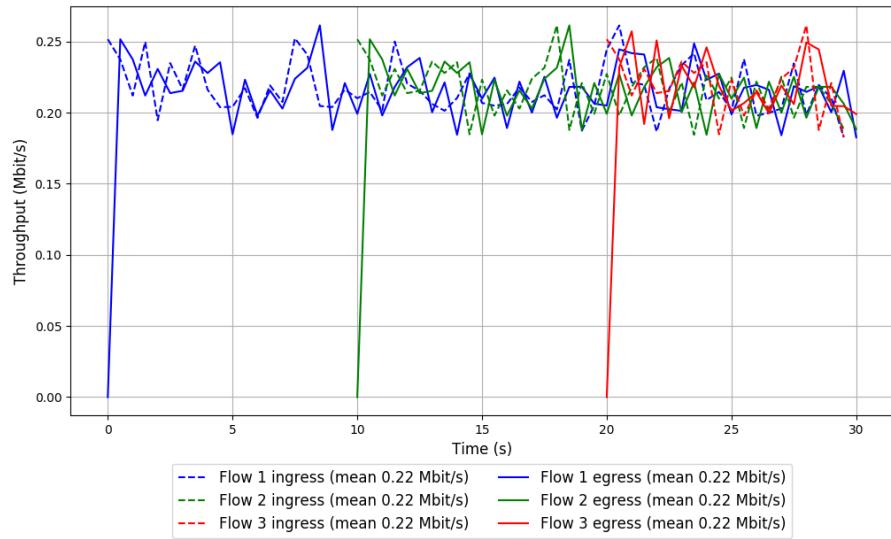


Run 4: Statistics of SCReAM

```
Start at: 2019-01-17 13:44:35
End at: 2019-01-17 13:45:05
Local clock offset: -0.308 ms
Remote clock offset: -3.292 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 1.166 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.172 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.192 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.126 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

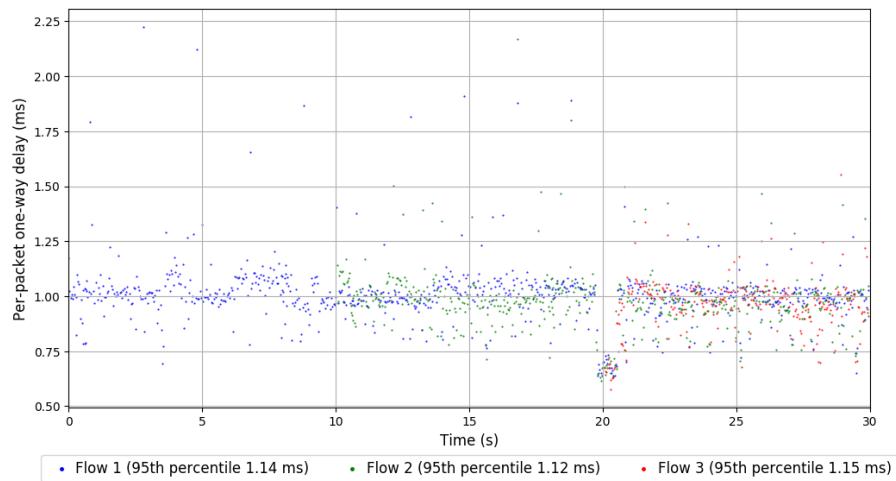
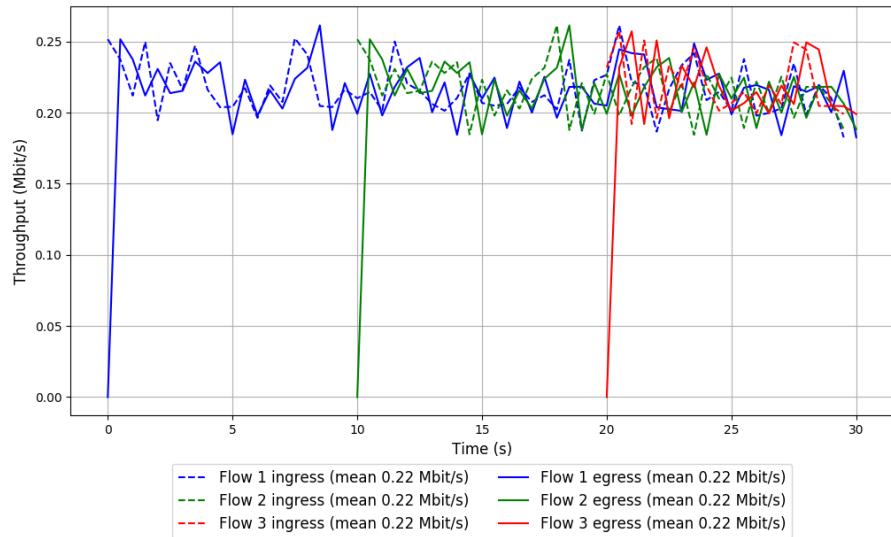


Run 5: Statistics of SCReAM

```
Start at: 2019-01-17 14:14:39
End at: 2019-01-17 14:15:09
Local clock offset: -0.204 ms
Remote clock offset: 2.747 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 1.140 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.142 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.116 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.152 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

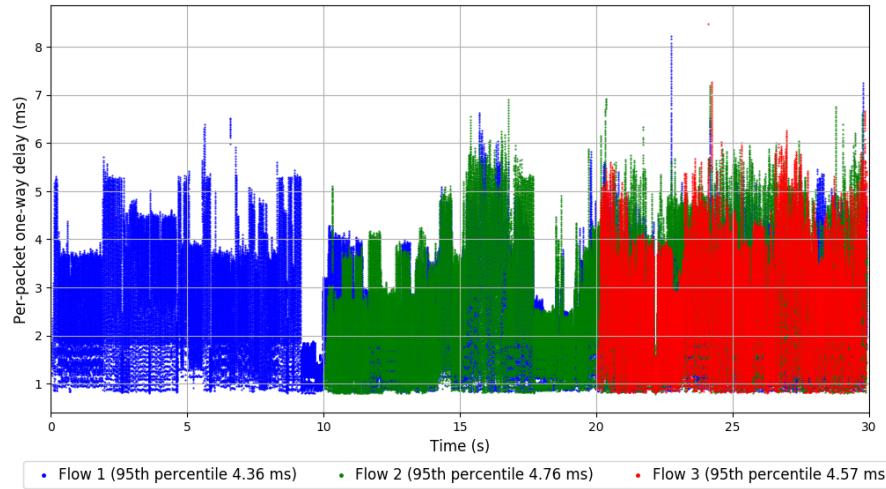
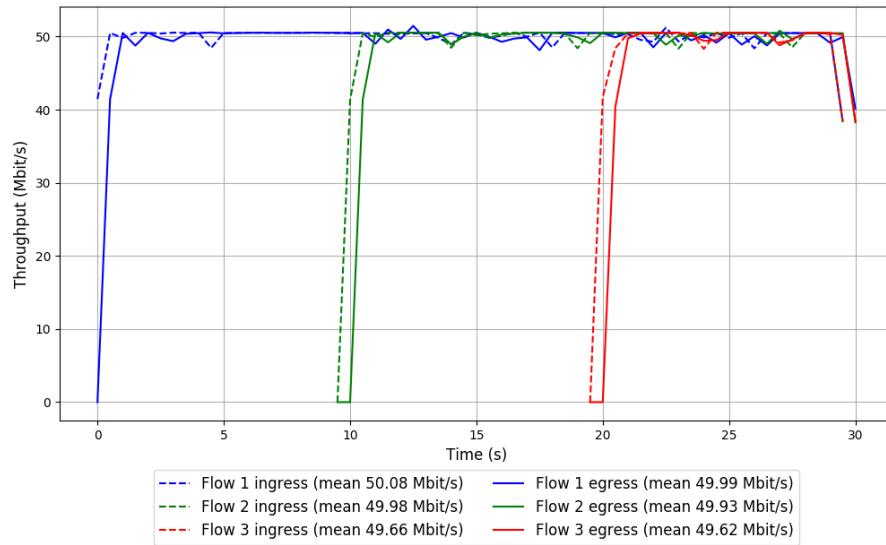


Run 1: Statistics of Sprout

```
Start at: 2019-01-17 12:08:20
End at: 2019-01-17 12:08:50
Local clock offset: -0.14 ms
Remote clock offset: -0.295 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.67 Mbit/s
95th percentile per-packet one-way delay: 4.551 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 49.99 Mbit/s
95th percentile per-packet one-way delay: 4.357 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 49.93 Mbit/s
95th percentile per-packet one-way delay: 4.763 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 49.62 Mbit/s
95th percentile per-packet one-way delay: 4.570 ms
Loss rate: 0.05%
```

Run 1: Report of Sprout — Data Link

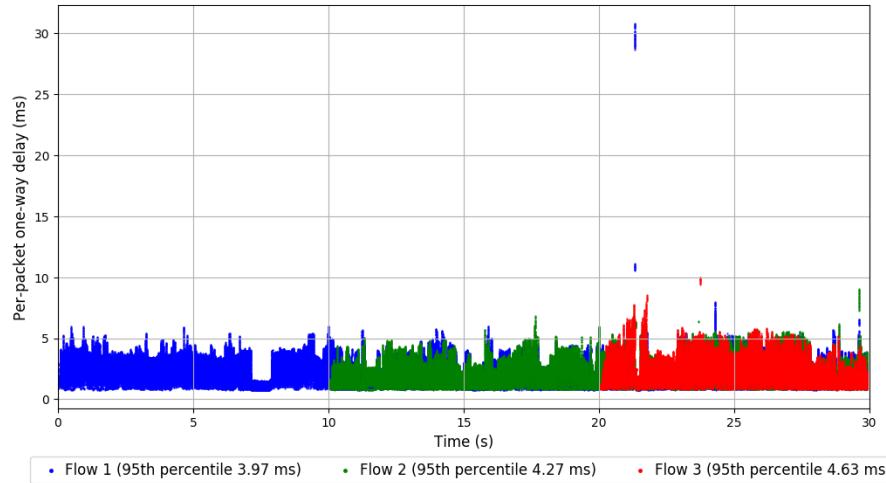
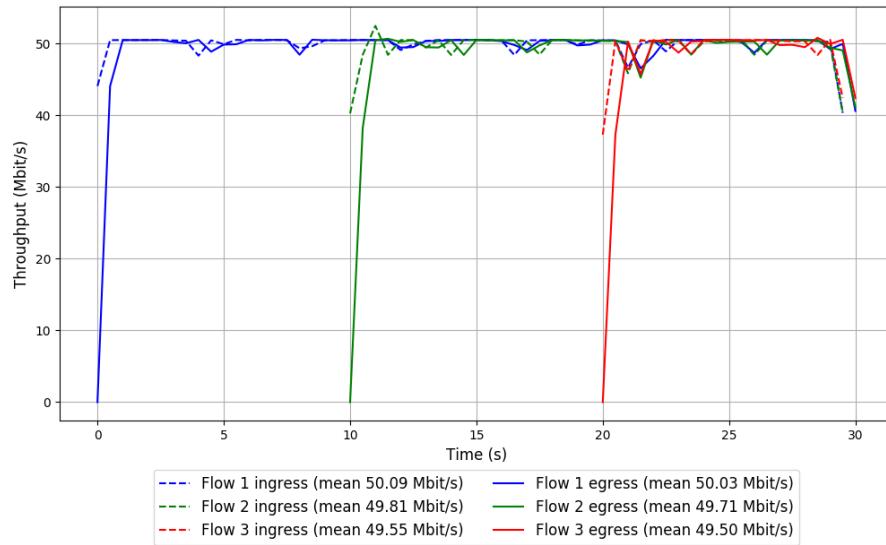


Run 2: Statistics of Sprout

```
Start at: 2019-01-17 12:38:22
End at: 2019-01-17 12:38:52
Local clock offset: 3.104 ms
Remote clock offset: 0.053 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.45 Mbit/s
95th percentile per-packet one-way delay: 4.196 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 50.03 Mbit/s
95th percentile per-packet one-way delay: 3.967 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 49.71 Mbit/s
95th percentile per-packet one-way delay: 4.267 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 49.50 Mbit/s
95th percentile per-packet one-way delay: 4.626 ms
Loss rate: 0.07%
```

Run 2: Report of Sprout — Data Link

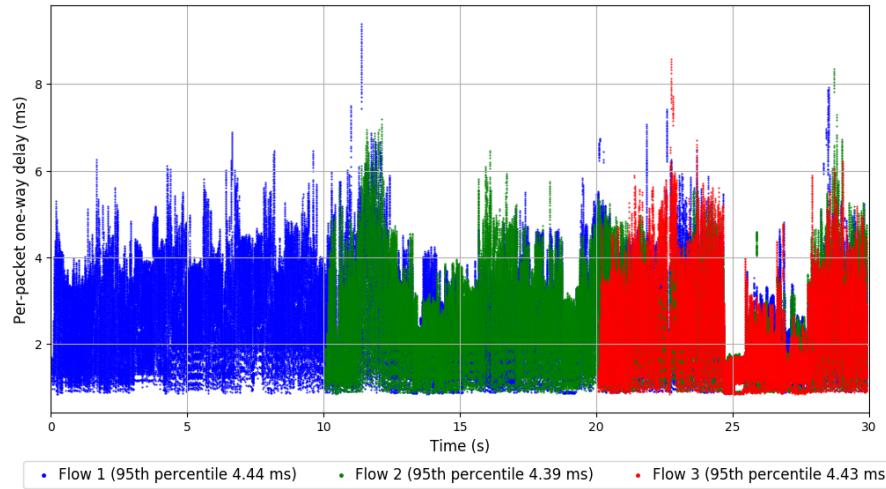
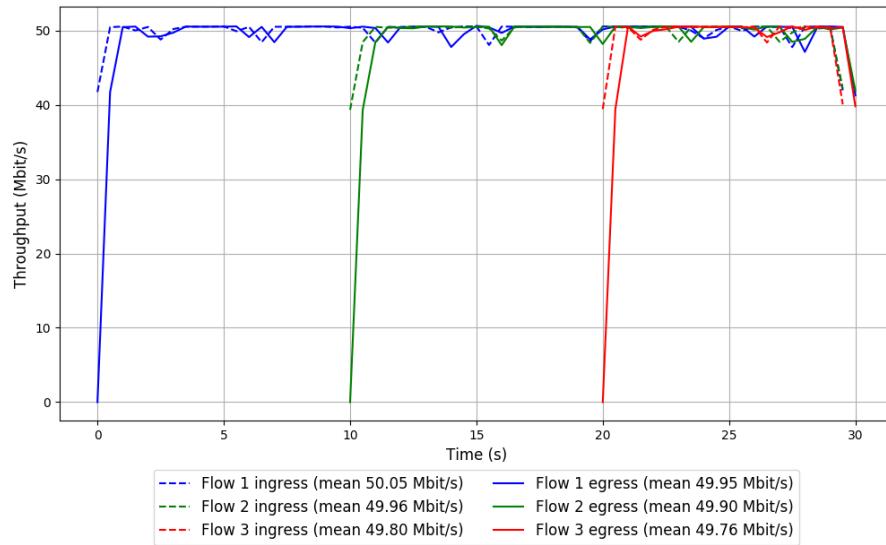


Run 3: Statistics of Sprout

```
Start at: 2019-01-17 13:08:34
End at: 2019-01-17 13:09:04
Local clock offset: 3.441 ms
Remote clock offset: -2.98 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.59 Mbit/s
95th percentile per-packet one-way delay: 4.420 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 49.95 Mbit/s
95th percentile per-packet one-way delay: 4.438 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 49.90 Mbit/s
95th percentile per-packet one-way delay: 4.388 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 49.76 Mbit/s
95th percentile per-packet one-way delay: 4.429 ms
Loss rate: 0.07%
```

Run 3: Report of Sprout — Data Link

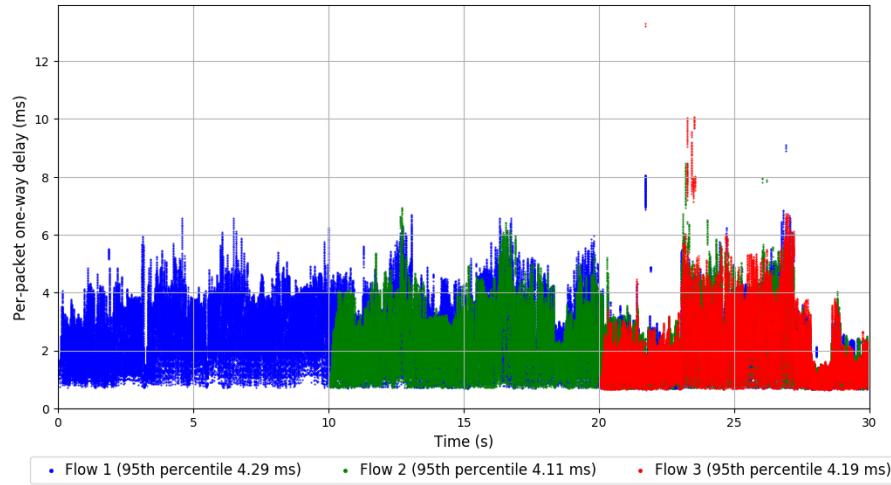
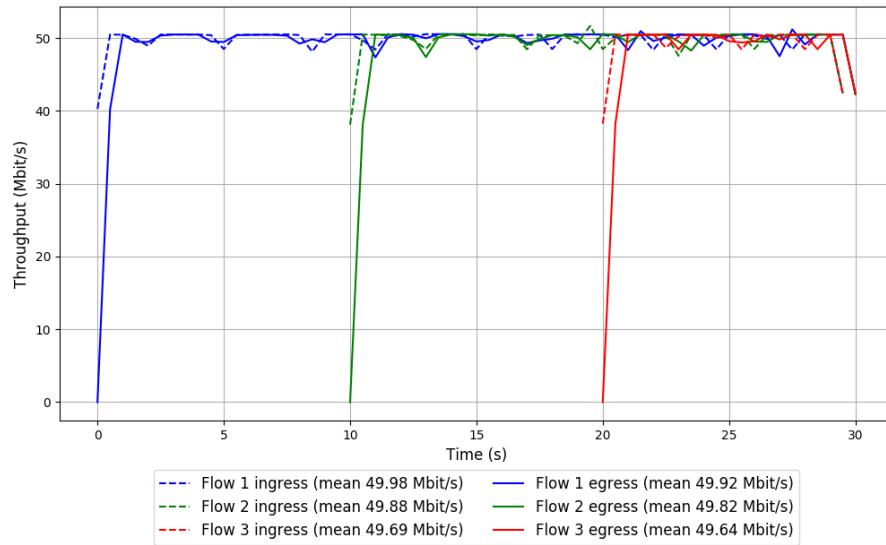


Run 4: Statistics of Sprout

```
Start at: 2019-01-17 13:38:31
End at: 2019-01-17 13:39:01
Local clock offset: 0.055 ms
Remote clock offset: -3.345 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.48 Mbit/s
95th percentile per-packet one-way delay: 4.221 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 49.92 Mbit/s
95th percentile per-packet one-way delay: 4.285 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 49.82 Mbit/s
95th percentile per-packet one-way delay: 4.113 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 49.64 Mbit/s
95th percentile per-packet one-way delay: 4.194 ms
Loss rate: 0.08%
```

Run 4: Report of Sprout — Data Link

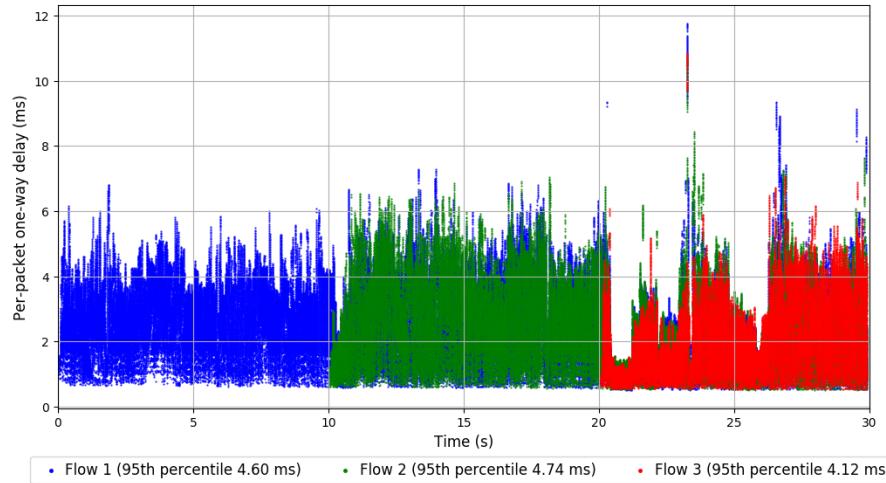
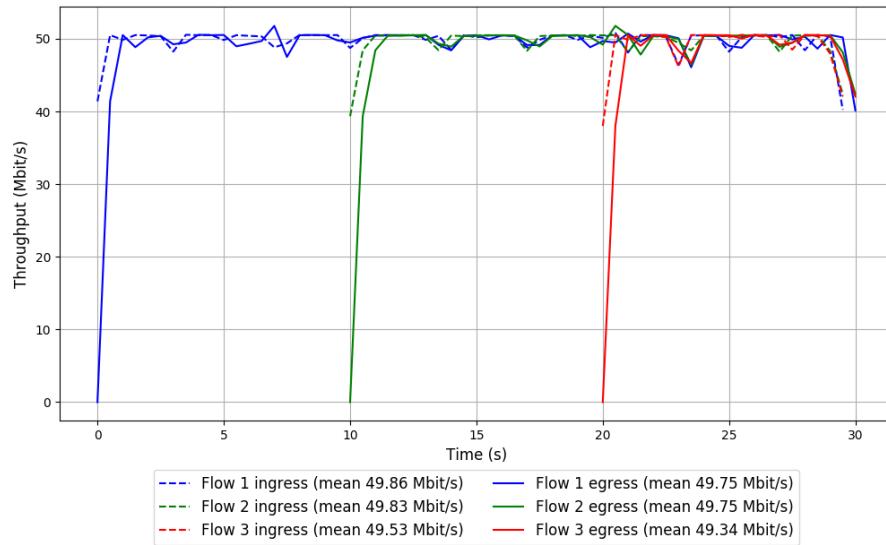


Run 5: Statistics of Sprout

```
Start at: 2019-01-17 14:08:39
End at: 2019-01-17 14:09:09
Local clock offset: -0.146 ms
Remote clock offset: 1.154 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.14 Mbit/s
95th percentile per-packet one-way delay: 4.585 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 49.75 Mbit/s
95th percentile per-packet one-way delay: 4.598 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 49.75 Mbit/s
95th percentile per-packet one-way delay: 4.737 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 49.34 Mbit/s
95th percentile per-packet one-way delay: 4.123 ms
Loss rate: 0.34%
```

Run 5: Report of Sprout — Data Link

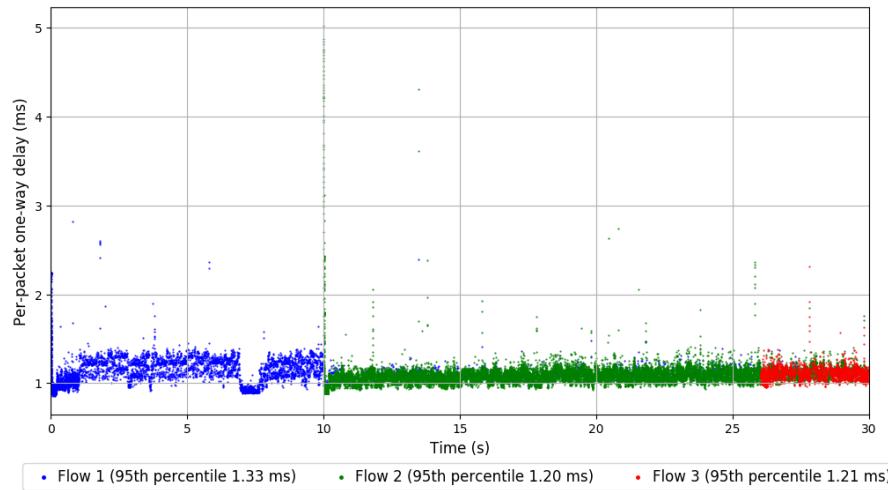
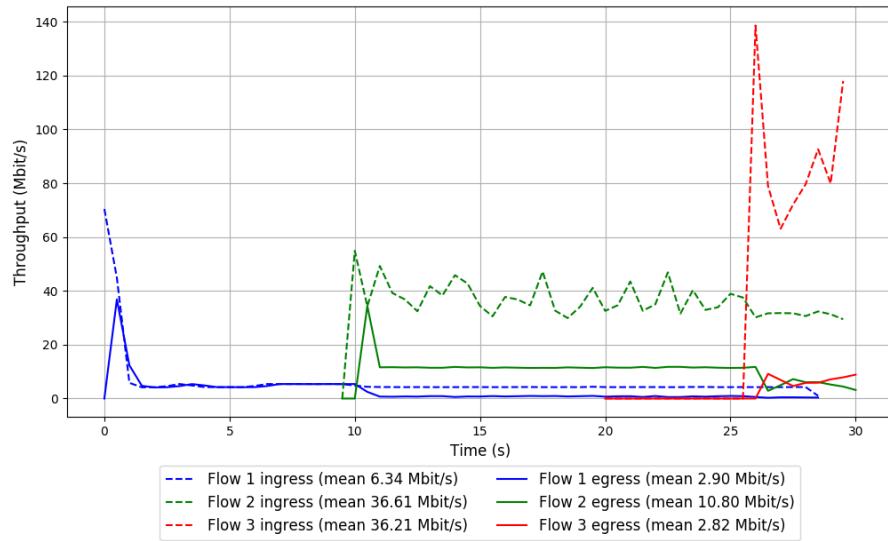


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-01-17 12:27:22
End at: 2019-01-17 12:27:52
Local clock offset: 1.784 ms
Remote clock offset: -0.051 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.90 Mbit/s
95th percentile per-packet one-way delay: 1.266 ms
Loss rate: 74.36%
-- Flow 1:
Average throughput: 2.90 Mbit/s
95th percentile per-packet one-way delay: 1.332 ms
Loss rate: 54.42%
-- Flow 2:
Average throughput: 10.80 Mbit/s
95th percentile per-packet one-way delay: 1.204 ms
Loss rate: 70.49%
-- Flow 3:
Average throughput: 2.82 Mbit/s
95th percentile per-packet one-way delay: 1.211 ms
Loss rate: 92.21%
```

Run 1: Report of TaoVA-100x — Data Link

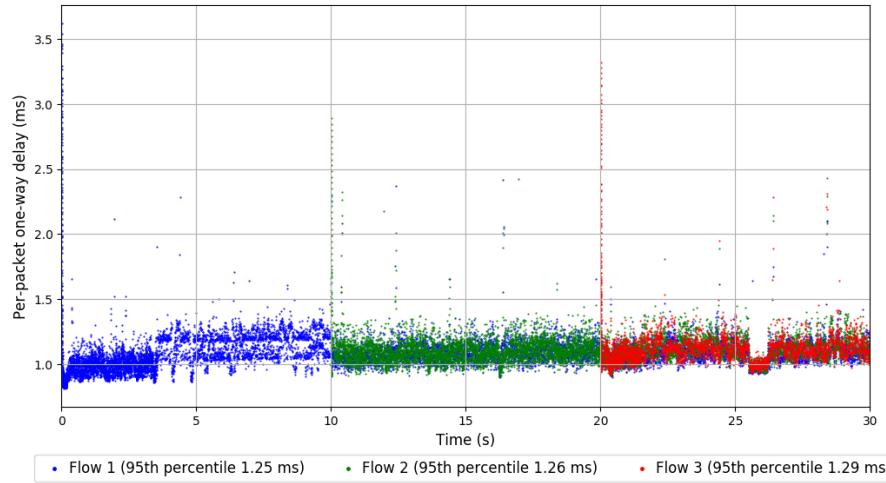
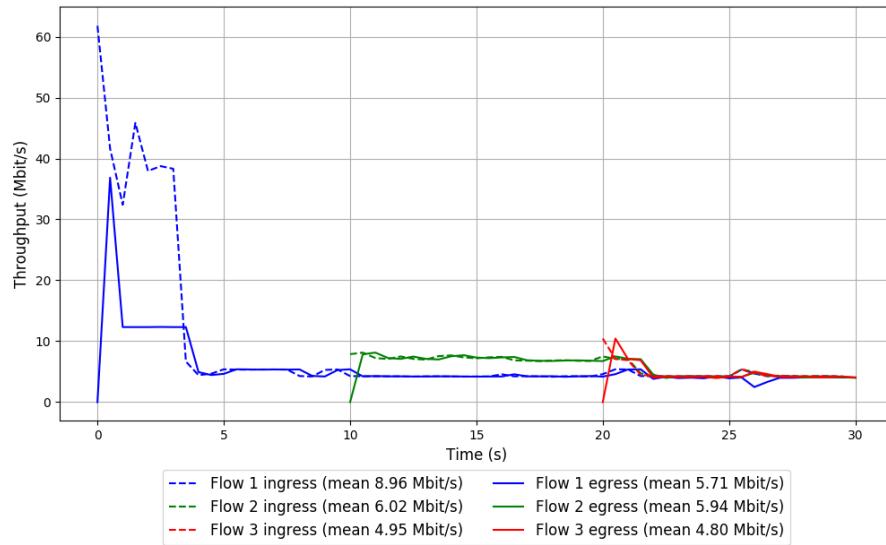


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-01-17 12:57:34
End at: 2019-01-17 12:58:04
Local clock offset: 3.448 ms
Remote clock offset: -1.373 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.27 Mbit/s
95th percentile per-packet one-way delay: 1.261 ms
Loss rate: 22.92%
-- Flow 1:
Average throughput: 5.71 Mbit/s
95th percentile per-packet one-way delay: 1.253 ms
Loss rate: 36.28%
-- Flow 2:
Average throughput: 5.94 Mbit/s
95th percentile per-packet one-way delay: 1.265 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 4.80 Mbit/s
95th percentile per-packet one-way delay: 1.291 ms
Loss rate: 2.90%
```

Run 2: Report of TaoVA-100x — Data Link

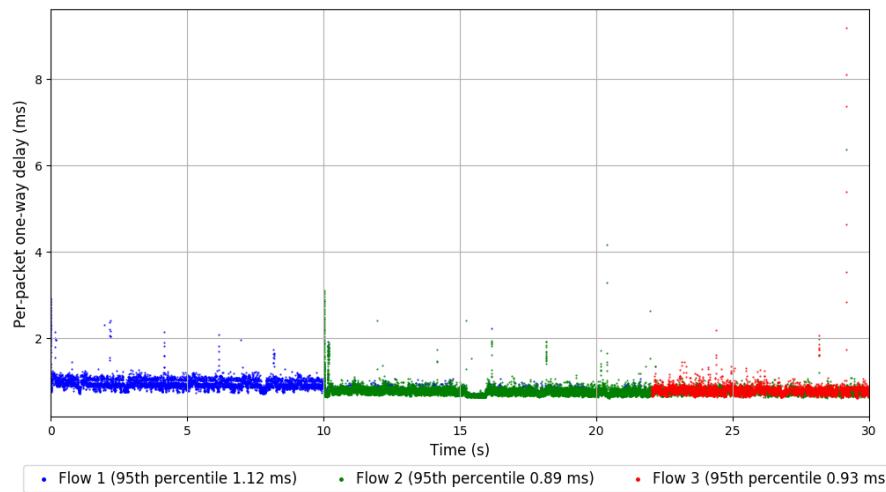
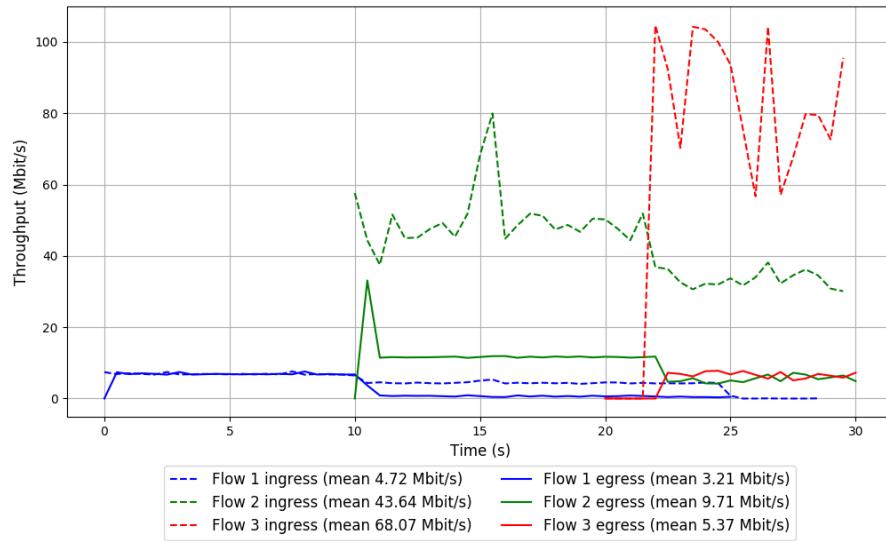


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-01-17 13:27:44
End at: 2019-01-17 13:28:14
Local clock offset: 1.395 ms
Remote clock offset: -3.672 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.93 Mbit/s
95th percentile per-packet one-way delay: 1.039 ms
Loss rate: 80.58%
-- Flow 1:
Average throughput: 3.21 Mbit/s
95th percentile per-packet one-way delay: 1.116 ms
Loss rate: 41.36%
-- Flow 2:
Average throughput: 9.71 Mbit/s
95th percentile per-packet one-way delay: 0.893 ms
Loss rate: 77.75%
-- Flow 3:
Average throughput: 5.37 Mbit/s
95th percentile per-packet one-way delay: 0.929 ms
Loss rate: 92.11%
```

Run 3: Report of TaoVA-100x — Data Link

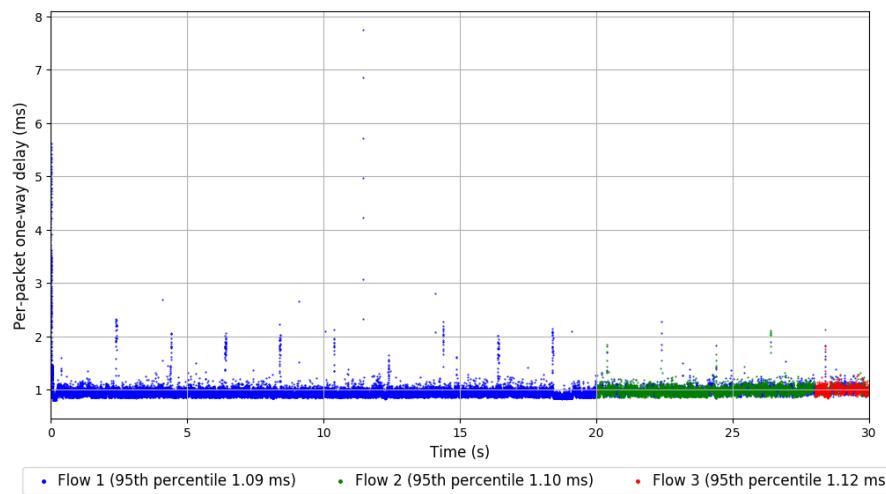
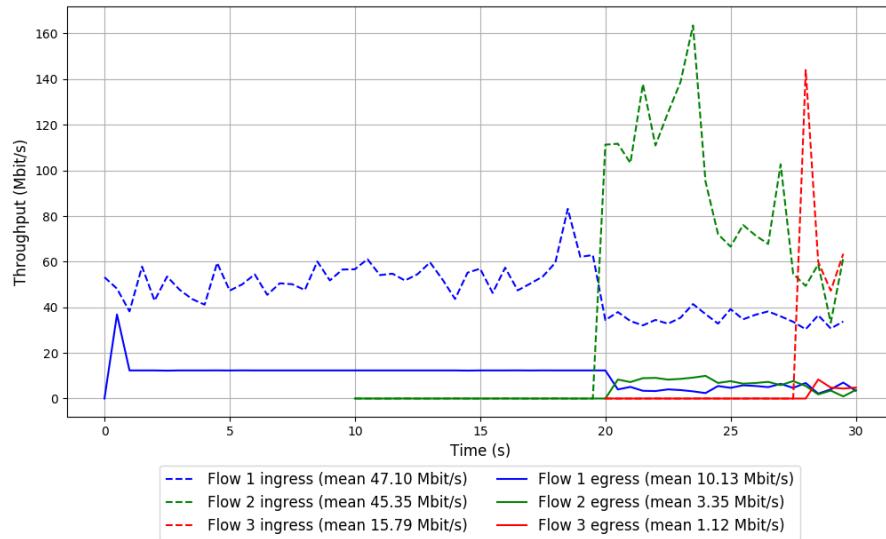


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-01-17 13:57:41
End at: 2019-01-17 13:58:11
Local clock offset: -0.197 ms
Remote clock offset: -3.264 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.73 Mbit/s
95th percentile per-packet one-way delay: 1.096 ms
Loss rate: 84.58%
-- Flow 1:
Average throughput: 10.13 Mbit/s
95th percentile per-packet one-way delay: 1.093 ms
Loss rate: 78.50%
-- Flow 2:
Average throughput: 3.35 Mbit/s
95th percentile per-packet one-way delay: 1.101 ms
Loss rate: 92.62%
-- Flow 3:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 1.116 ms
Loss rate: 92.90%
```

Run 4: Report of TaoVA-100x — Data Link

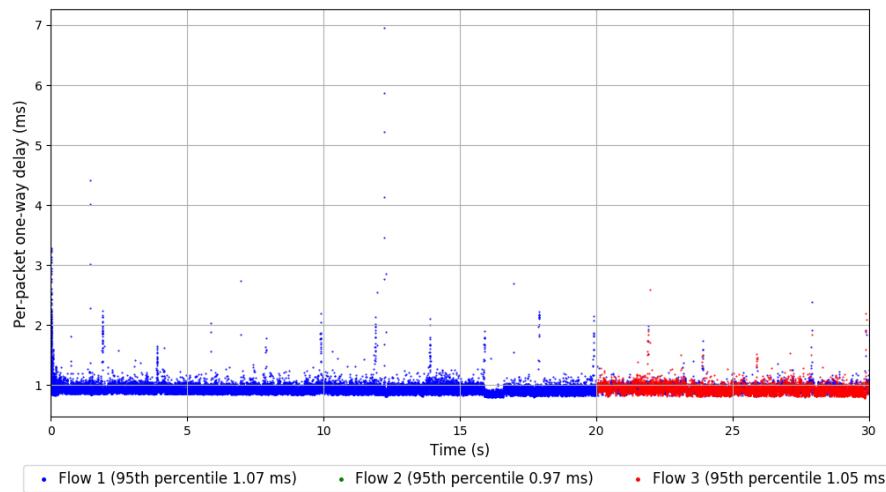
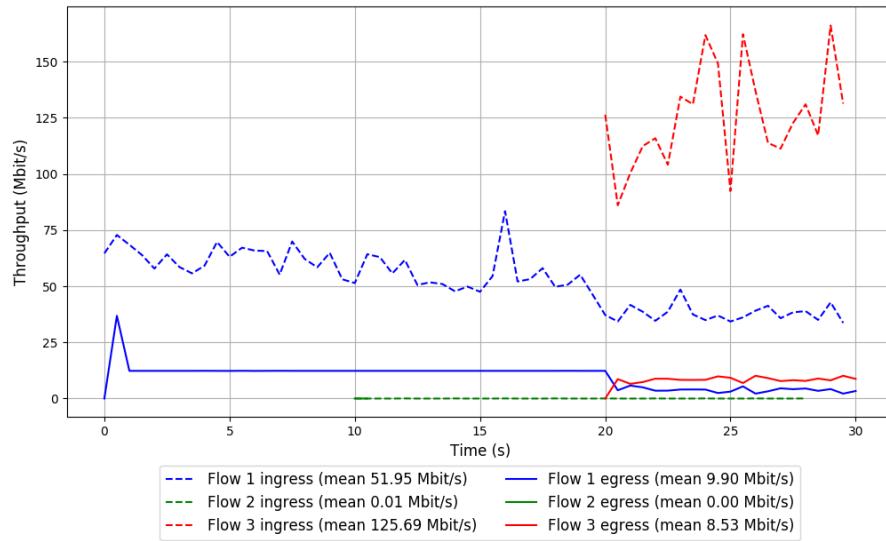


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-01-17 14:27:43
End at: 2019-01-17 14:28:13
Local clock offset: -0.123 ms
Remote clock offset: 4.735 ms

# Below is generated by plot.py at 2019-01-17 15:29:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.73 Mbit/s
95th percentile per-packet one-way delay: 1.067 ms
Loss rate: 86.42%
-- Flow 1:
Average throughput: 9.90 Mbit/s
95th percentile per-packet one-way delay: 1.071 ms
Loss rate: 80.95%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 0.966 ms
Loss rate: 99.58%
-- Flow 3:
Average throughput: 8.53 Mbit/s
95th percentile per-packet one-way delay: 1.052 ms
Loss rate: 93.22%
```

Run 5: Report of TaoVA-100x — Data Link

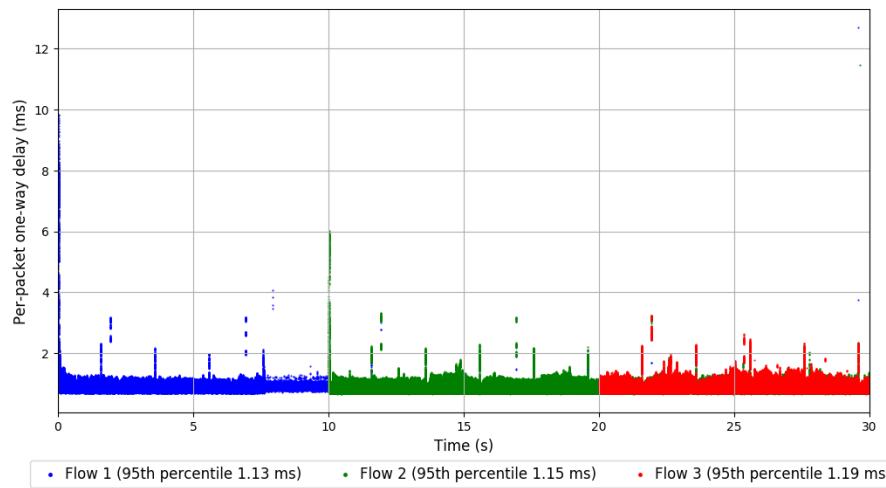
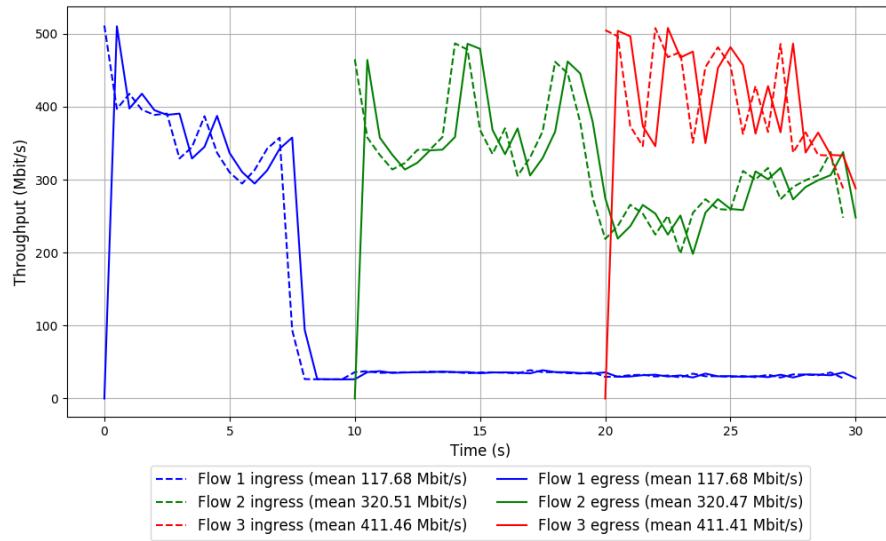


Run 1: Statistics of TCP Vegas

```
Start at: 2019-01-17 12:18:13
End at: 2019-01-17 12:18:43
Local clock offset: -0.177 ms
Remote clock offset: -0.277 ms

# Below is generated by plot.py at 2019-01-17 15:32:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 468.17 Mbit/s
95th percentile per-packet one-way delay: 1.155 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 117.68 Mbit/s
95th percentile per-packet one-way delay: 1.128 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 320.47 Mbit/s
95th percentile per-packet one-way delay: 1.145 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 411.41 Mbit/s
95th percentile per-packet one-way delay: 1.193 ms
Loss rate: 0.02%
```

Run 1: Report of TCP Vegas — Data Link

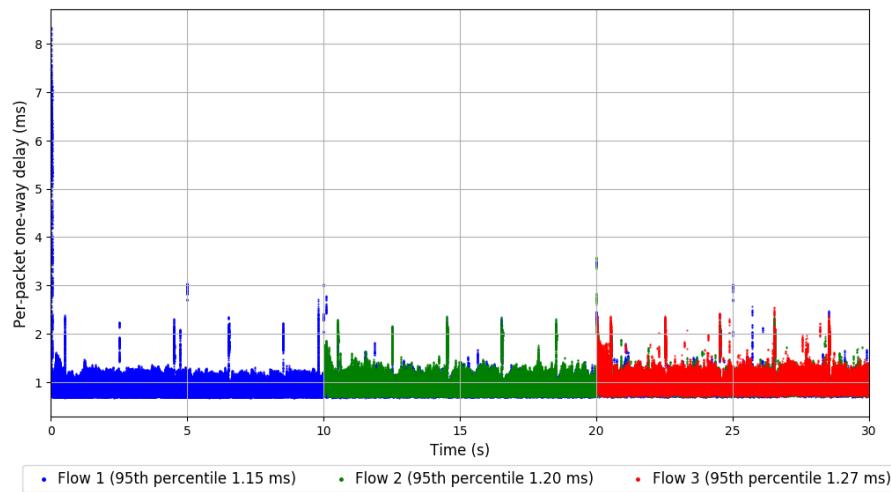
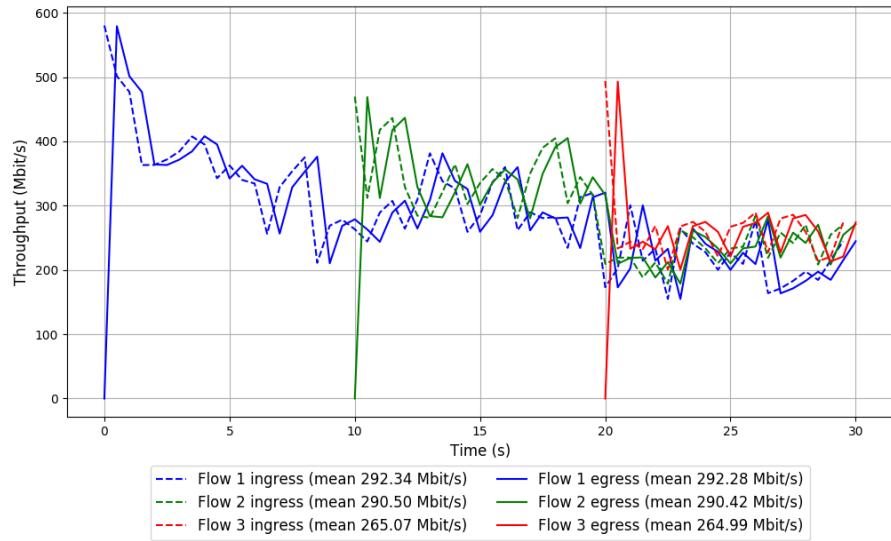


Run 2: Statistics of TCP Vegas

```
Start at: 2019-01-17 12:48:25
End at: 2019-01-17 12:48:55
Local clock offset: 3.747 ms
Remote clock offset: 0.278 ms

# Below is generated by plot.py at 2019-01-17 15:34:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 573.87 Mbit/s
95th percentile per-packet one-way delay: 1.191 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 292.28 Mbit/s
95th percentile per-packet one-way delay: 1.151 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 290.42 Mbit/s
95th percentile per-packet one-way delay: 1.203 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 264.99 Mbit/s
95th percentile per-packet one-way delay: 1.274 ms
Loss rate: 0.03%
```

Run 2: Report of TCP Vegas — Data Link

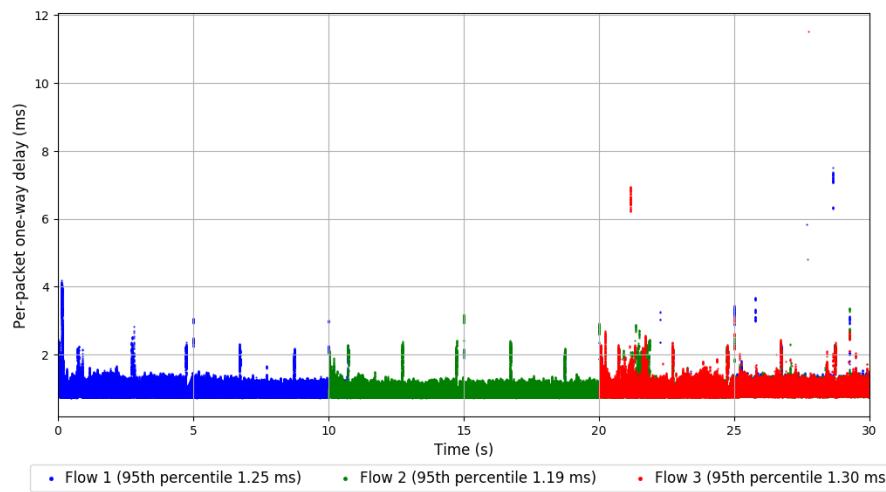
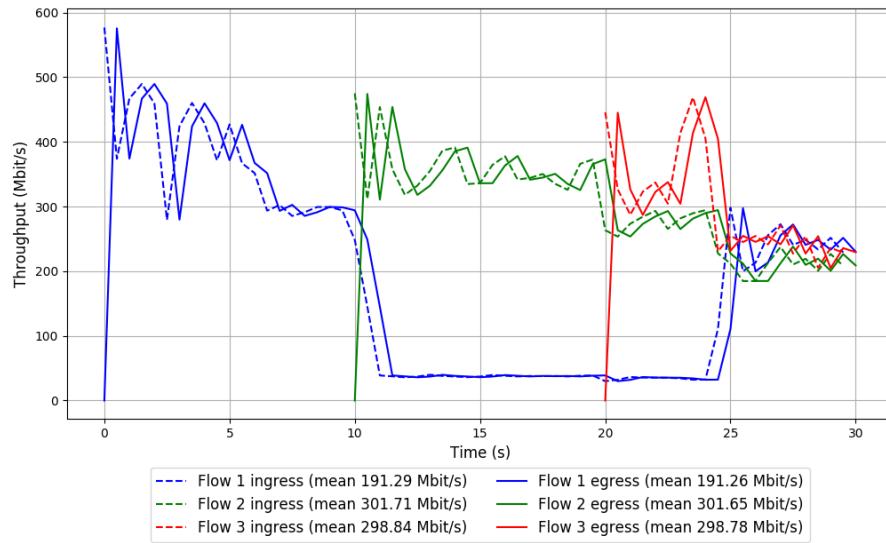


Run 3: Statistics of TCP Vegas

```
Start at: 2019-01-17 13:18:38
End at: 2019-01-17 13:19:08
Local clock offset: 3.626 ms
Remote clock offset: -3.706 ms

# Below is generated by plot.py at 2019-01-17 15:34:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 491.57 Mbit/s
95th percentile per-packet one-way delay: 1.242 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 191.26 Mbit/s
95th percentile per-packet one-way delay: 1.253 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 301.65 Mbit/s
95th percentile per-packet one-way delay: 1.188 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 298.78 Mbit/s
95th percentile per-packet one-way delay: 1.299 ms
Loss rate: 0.02%
```

Run 3: Report of TCP Vegas — Data Link

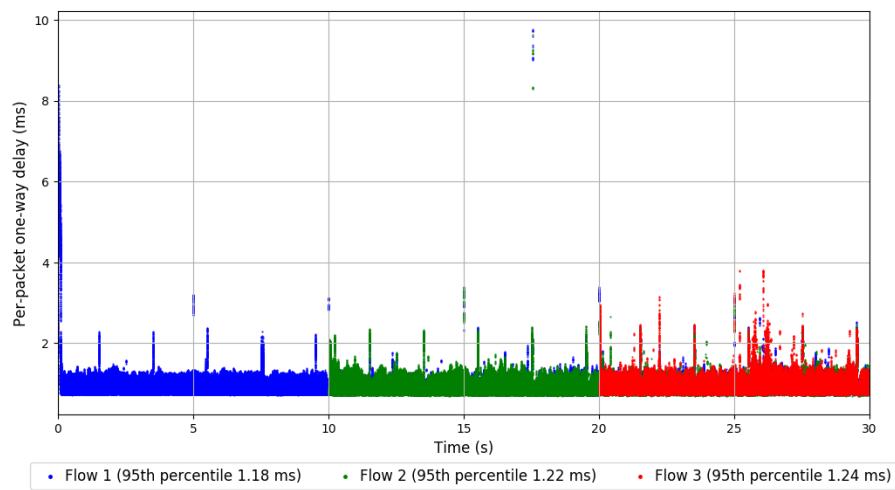
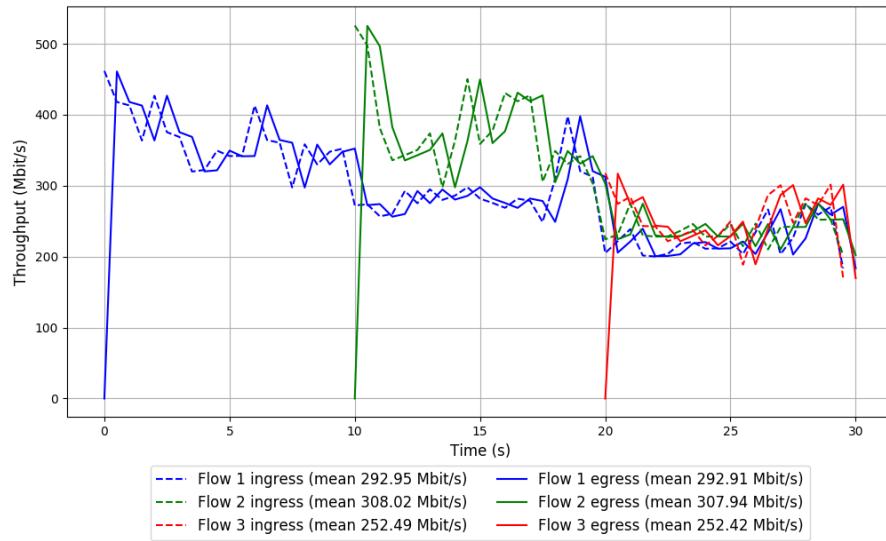


Run 4: Statistics of TCP Vegas

```
Start at: 2019-01-17 13:48:34
End at: 2019-01-17 13:49:04
Local clock offset: -0.461 ms
Remote clock offset: -3.235 ms

# Below is generated by plot.py at 2019-01-17 15:34:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 581.95 Mbit/s
95th percentile per-packet one-way delay: 1.201 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 292.91 Mbit/s
95th percentile per-packet one-way delay: 1.182 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 307.94 Mbit/s
95th percentile per-packet one-way delay: 1.216 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 252.42 Mbit/s
95th percentile per-packet one-way delay: 1.236 ms
Loss rate: 0.03%
```

Run 4: Report of TCP Vegas — Data Link

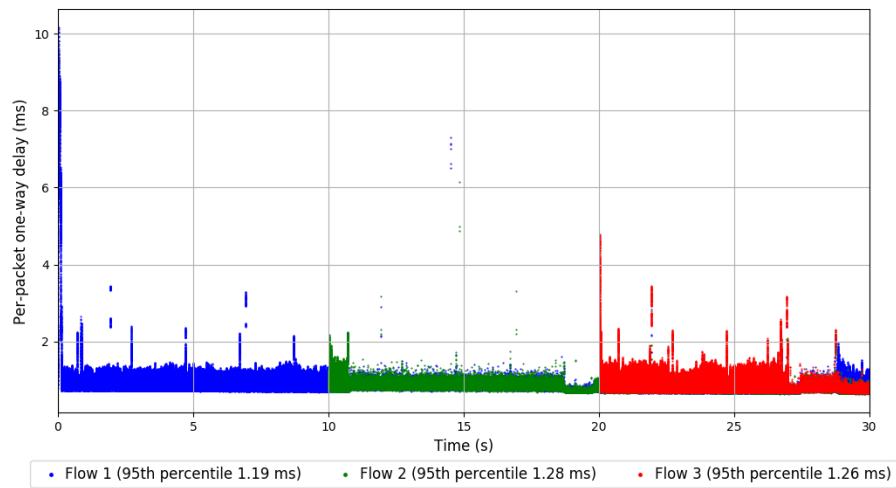
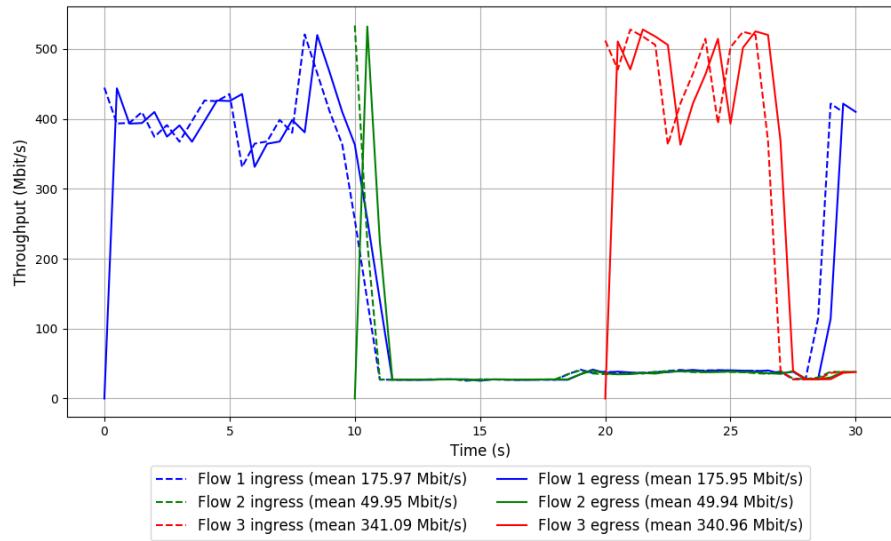


Run 5: Statistics of TCP Vegas

```
Start at: 2019-01-17 14:18:40
End at: 2019-01-17 14:19:10
Local clock offset: -0.234 ms
Remote clock offset: 3.543 ms

# Below is generated by plot.py at 2019-01-17 15:34:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 322.58 Mbit/s
95th percentile per-packet one-way delay: 1.228 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 175.95 Mbit/s
95th percentile per-packet one-way delay: 1.185 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 49.94 Mbit/s
95th percentile per-packet one-way delay: 1.281 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 340.96 Mbit/s
95th percentile per-packet one-way delay: 1.262 ms
Loss rate: 0.04%
```

Run 5: Report of TCP Vegas — Data Link

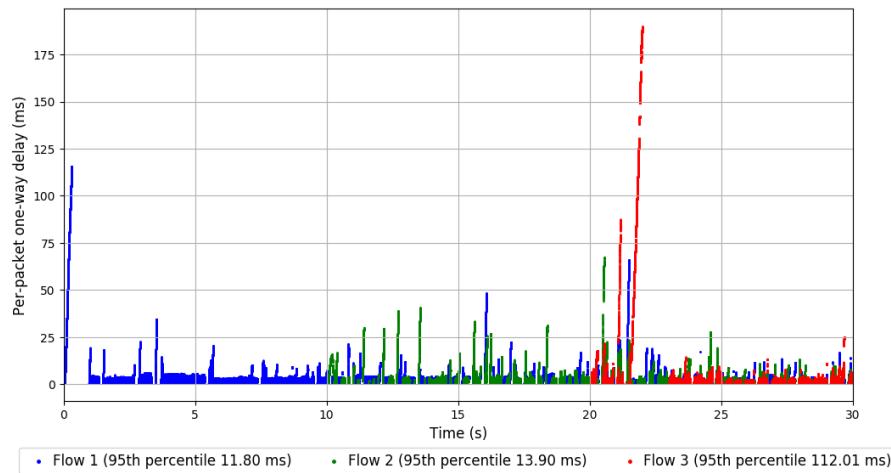
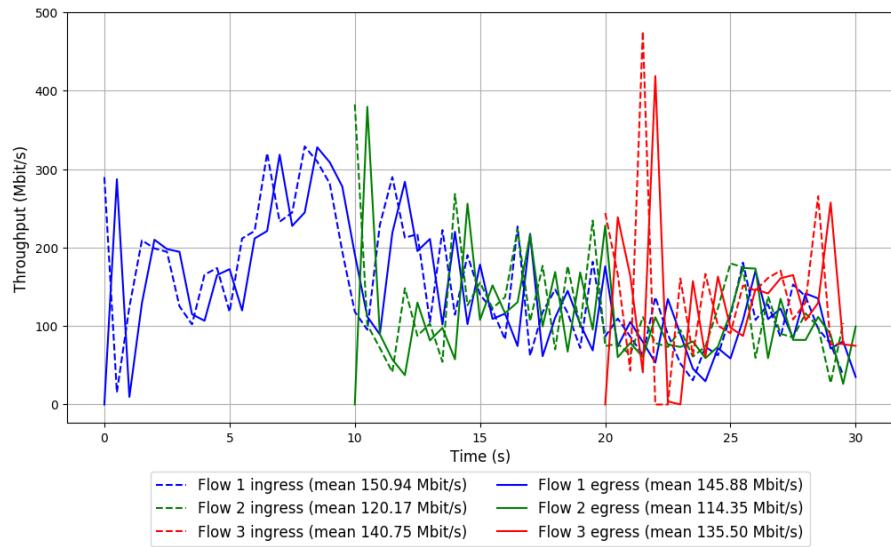


Run 1: Statistics of Verus

```
Start at: 2019-01-17 12:15:30
End at: 2019-01-17 12:16:00
Local clock offset: -0.162 ms
Remote clock offset: -0.332 ms

# Below is generated by plot.py at 2019-01-17 15:34:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 266.72 Mbit/s
95th percentile per-packet one-way delay: 17.574 ms
Loss rate: 3.83%
-- Flow 1:
Average throughput: 145.88 Mbit/s
95th percentile per-packet one-way delay: 11.804 ms
Loss rate: 3.34%
-- Flow 2:
Average throughput: 114.35 Mbit/s
95th percentile per-packet one-way delay: 13.902 ms
Loss rate: 4.84%
-- Flow 3:
Average throughput: 135.50 Mbit/s
95th percentile per-packet one-way delay: 112.013 ms
Loss rate: 3.70%
```

Run 1: Report of Verus — Data Link

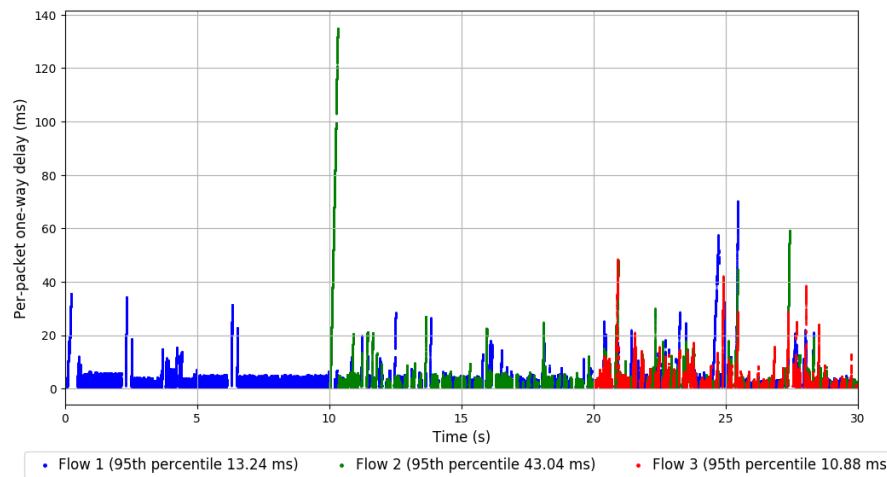
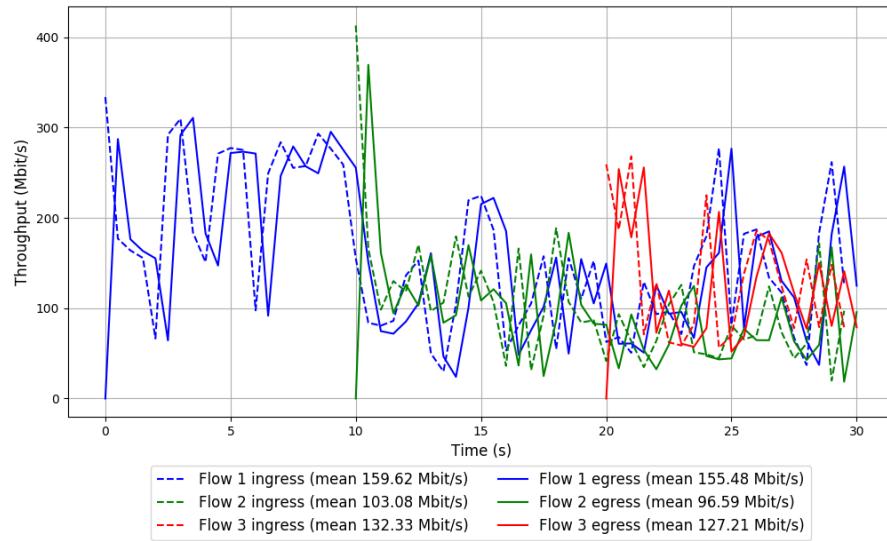


Run 2: Statistics of Verus

```
Start at: 2019-01-17 12:45:41
End at: 2019-01-17 12:46:11
Local clock offset: 3.592 ms
Remote clock offset: 0.249 ms

# Below is generated by plot.py at 2019-01-17 15:34:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 261.97 Mbit/s
95th percentile per-packet one-way delay: 15.716 ms
Loss rate: 3.72%
-- Flow 1:
Average throughput: 155.48 Mbit/s
95th percentile per-packet one-way delay: 13.236 ms
Loss rate: 2.59%
-- Flow 2:
Average throughput: 96.59 Mbit/s
95th percentile per-packet one-way delay: 43.042 ms
Loss rate: 6.28%
-- Flow 3:
Average throughput: 127.21 Mbit/s
95th percentile per-packet one-way delay: 10.884 ms
Loss rate: 3.86%
```

Run 2: Report of Verus — Data Link

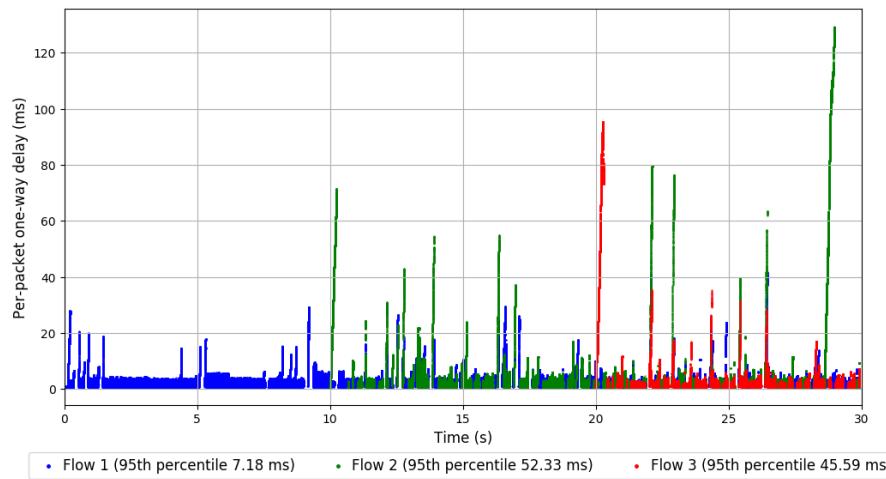
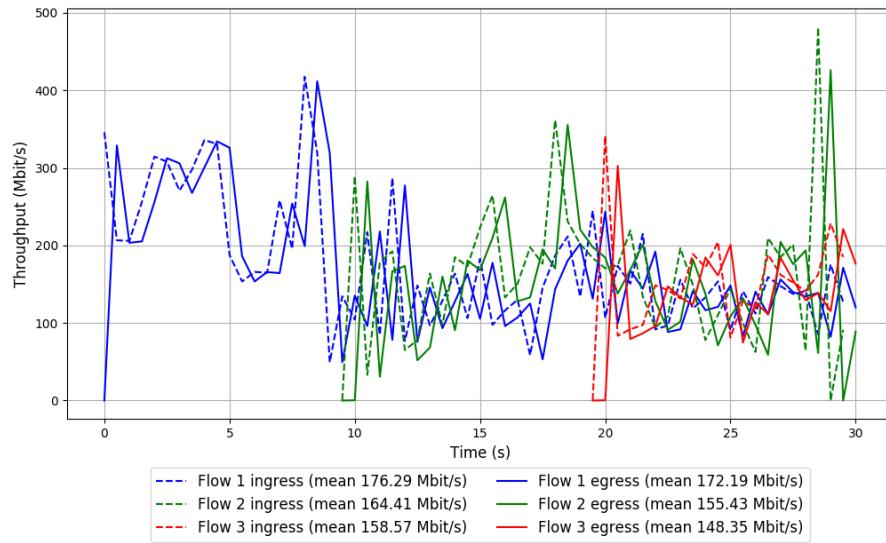


Run 3: Statistics of Verus

```
Start at: 2019-01-17 13:15:52
End at: 2019-01-17 13:16:22
Local clock offset: 3.581 ms
Remote clock offset: -3.553 ms

# Below is generated by plot.py at 2019-01-17 15:34:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 324.94 Mbit/s
95th percentile per-packet one-way delay: 18.053 ms
Loss rate: 3.97%
-- Flow 1:
Average throughput: 172.19 Mbit/s
95th percentile per-packet one-way delay: 7.176 ms
Loss rate: 2.33%
-- Flow 2:
Average throughput: 155.43 Mbit/s
95th percentile per-packet one-way delay: 52.332 ms
Loss rate: 5.46%
-- Flow 3:
Average throughput: 148.35 Mbit/s
95th percentile per-packet one-way delay: 45.595 ms
Loss rate: 6.39%
```

Run 3: Report of Verus — Data Link

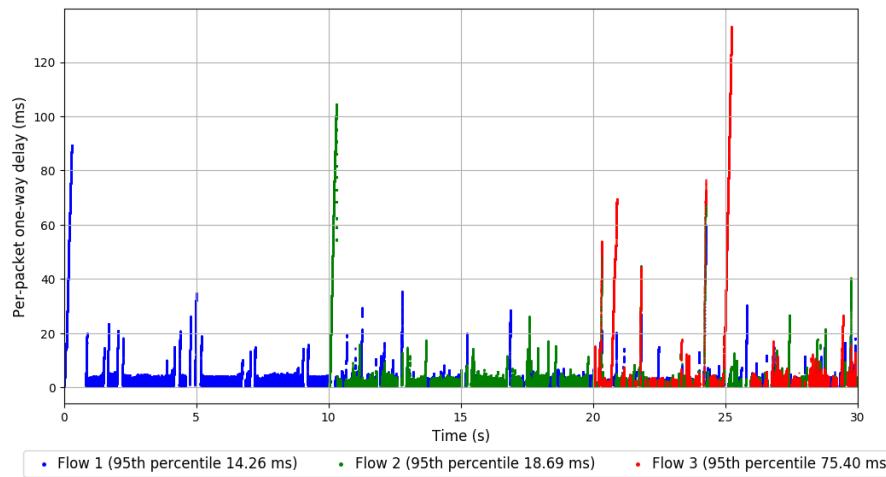
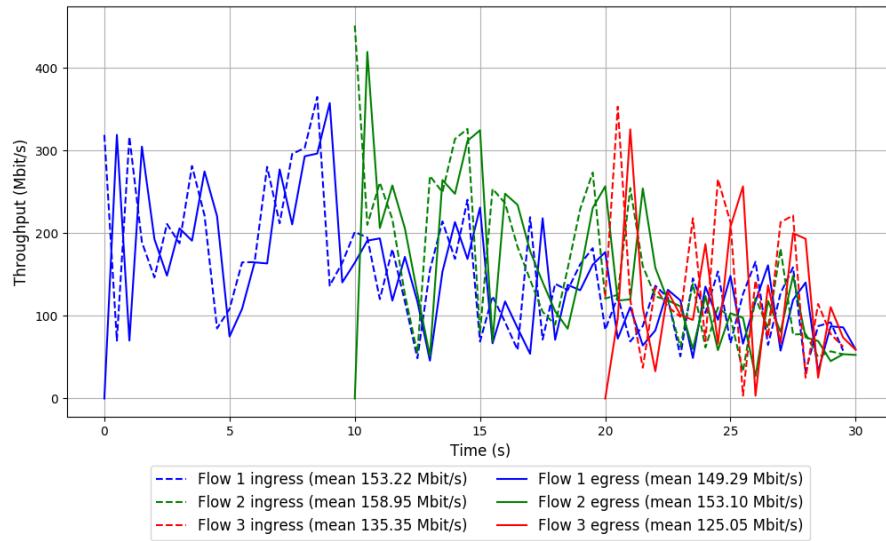


Run 4: Statistics of Verus

```
Start at: 2019-01-17 13:45:48
End at: 2019-01-17 13:46:18
Local clock offset: -0.356 ms
Remote clock offset: -3.2 ms

# Below is generated by plot.py at 2019-01-17 15:34:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 292.39 Mbit/s
95th percentile per-packet one-way delay: 28.904 ms
Loss rate: 3.66%
-- Flow 1:
Average throughput: 149.29 Mbit/s
95th percentile per-packet one-way delay: 14.263 ms
Loss rate: 2.52%
-- Flow 2:
Average throughput: 153.10 Mbit/s
95th percentile per-packet one-way delay: 18.689 ms
Loss rate: 3.68%
-- Flow 3:
Average throughput: 125.05 Mbit/s
95th percentile per-packet one-way delay: 75.399 ms
Loss rate: 7.51%
```

Run 4: Report of Verus — Data Link

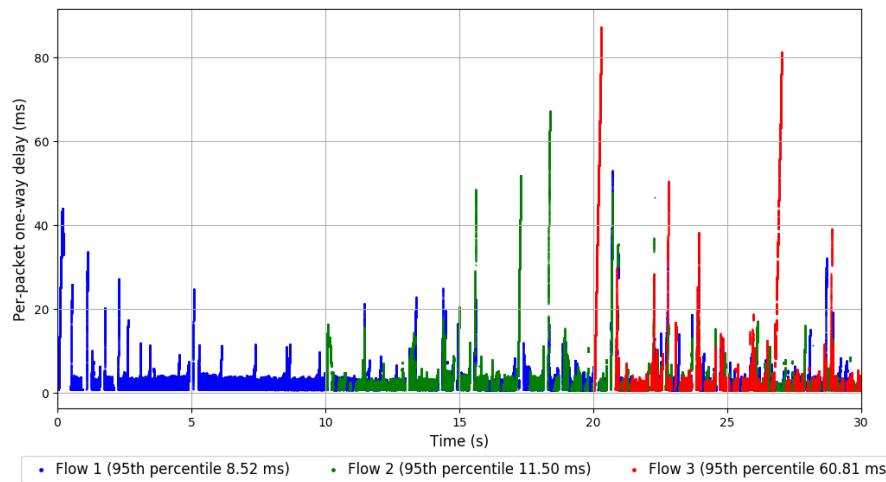
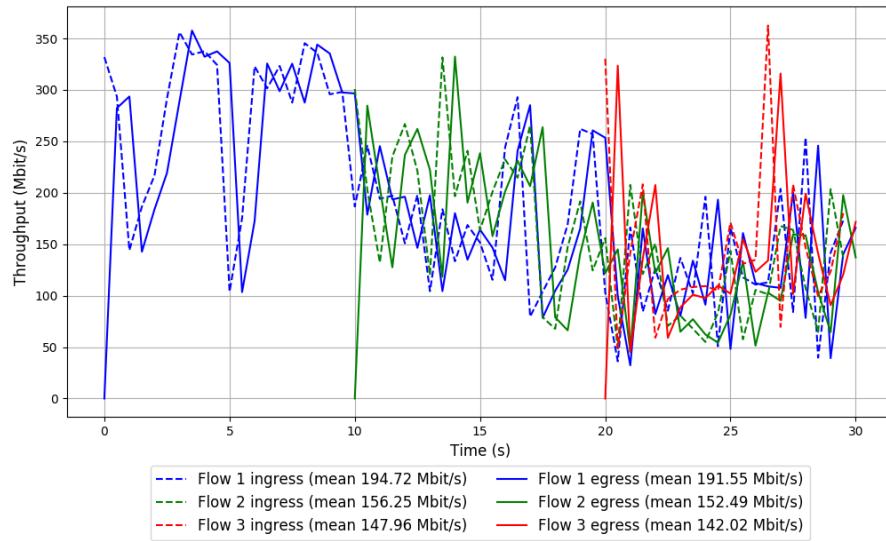


Run 5: Statistics of Verus

```
Start at: 2019-01-17 14:15:53
End at: 2019-01-17 14:16:23
Local clock offset: -0.21 ms
Remote clock offset: 3.042 ms

# Below is generated by plot.py at 2019-01-17 15:35:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 340.03 Mbit/s
95th percentile per-packet one-way delay: 14.995 ms
Loss rate: 2.19%
-- Flow 1:
Average throughput: 191.55 Mbit/s
95th percentile per-packet one-way delay: 8.522 ms
Loss rate: 1.63%
-- Flow 2:
Average throughput: 152.49 Mbit/s
95th percentile per-packet one-way delay: 11.500 ms
Loss rate: 2.40%
-- Flow 3:
Average throughput: 142.02 Mbit/s
95th percentile per-packet one-way delay: 60.806 ms
Loss rate: 4.01%
```

Run 5: Report of Verus — Data Link

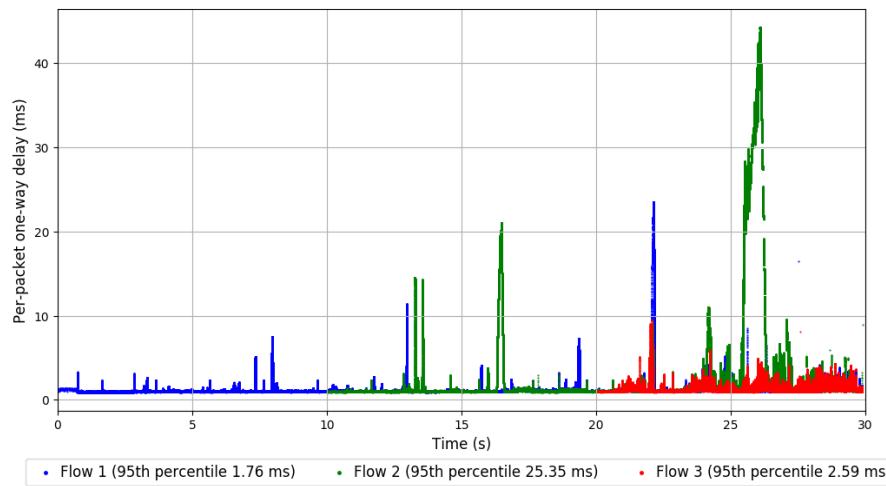
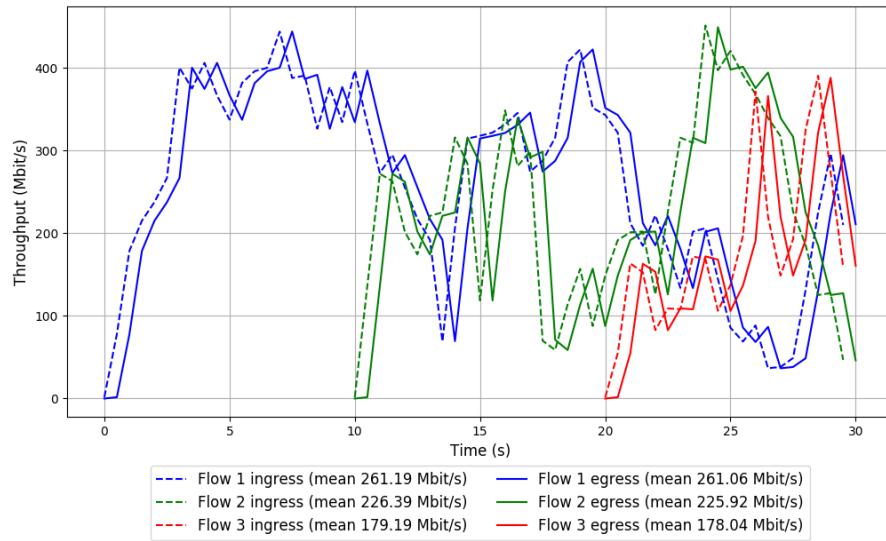


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2019-01-17 12:25:46
End at: 2019-01-17 12:26:16
Local clock offset: 1.452 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2019-01-17 15:36:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 470.04 Mbit/s
95th percentile per-packet one-way delay: 4.544 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 261.06 Mbit/s
95th percentile per-packet one-way delay: 1.764 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 225.92 Mbit/s
95th percentile per-packet one-way delay: 25.354 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 178.04 Mbit/s
95th percentile per-packet one-way delay: 2.589 ms
Loss rate: 0.65%
```

Run 1: Report of PCC-Vivace — Data Link

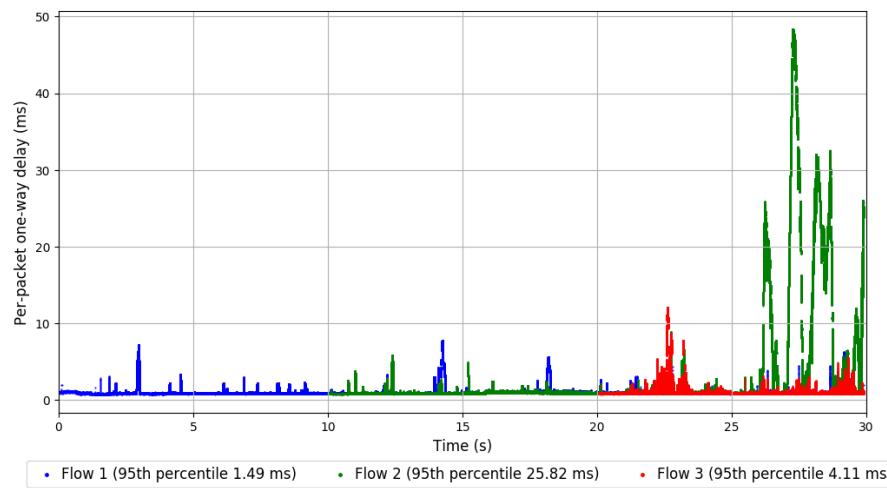
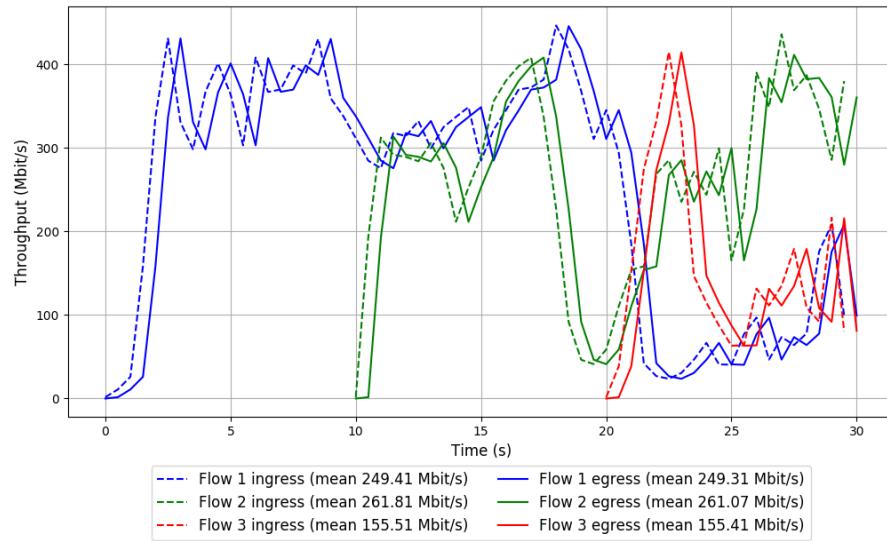


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-01-17 12:55:58
End at: 2019-01-17 12:56:28
Local clock offset: 3.495 ms
Remote clock offset: -1.061 ms

# Below is generated by plot.py at 2019-01-17 15:36:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 474.22 Mbit/s
95th percentile per-packet one-way delay: 10.582 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 249.31 Mbit/s
95th percentile per-packet one-way delay: 1.486 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 261.07 Mbit/s
95th percentile per-packet one-way delay: 25.819 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 155.41 Mbit/s
95th percentile per-packet one-way delay: 4.106 ms
Loss rate: 0.16%
```

Run 2: Report of PCC-Vivace — Data Link

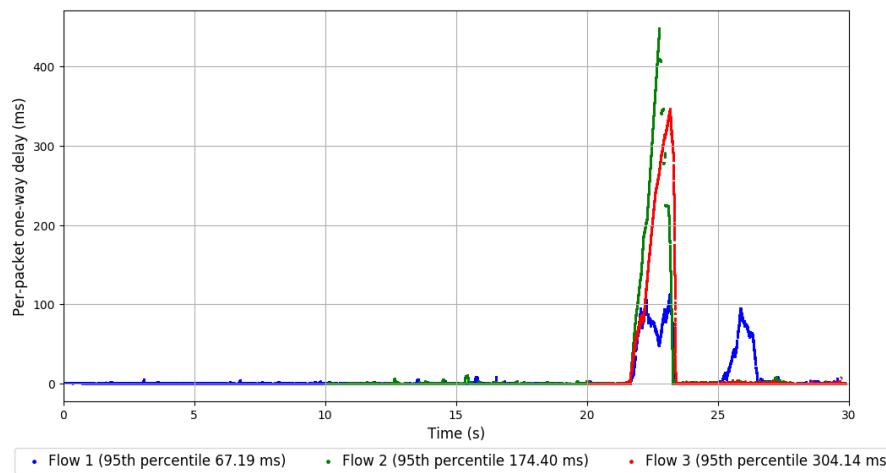
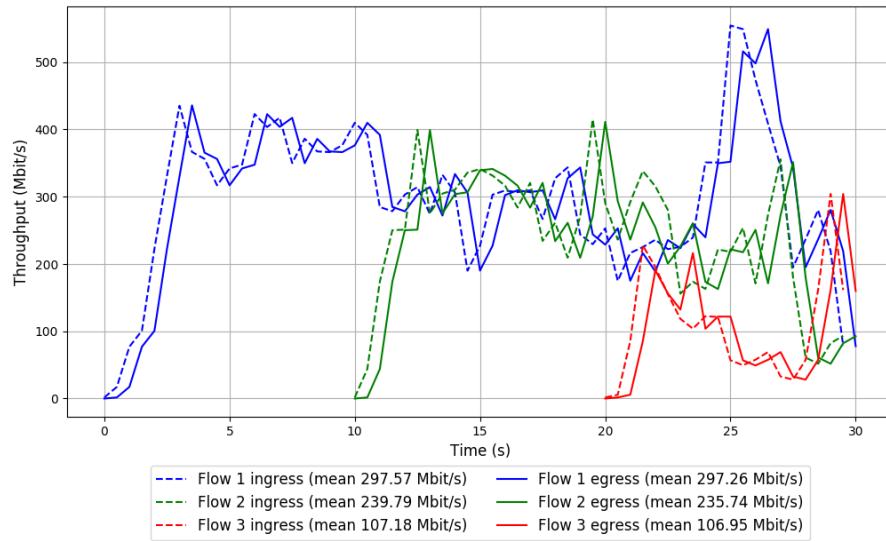


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-01-17 13:26:07
End at: 2019-01-17 13:26:37
Local clock offset: 1.697 ms
Remote clock offset: -3.857 ms

# Below is generated by plot.py at 2019-01-17 15:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 489.37 Mbit/s
95th percentile per-packet one-way delay: 82.137 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 297.26 Mbit/s
95th percentile per-packet one-way delay: 67.193 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 235.74 Mbit/s
95th percentile per-packet one-way delay: 174.396 ms
Loss rate: 1.69%
-- Flow 3:
Average throughput: 106.95 Mbit/s
95th percentile per-packet one-way delay: 304.138 ms
Loss rate: 0.22%
```

Run 3: Report of PCC-Vivace — Data Link

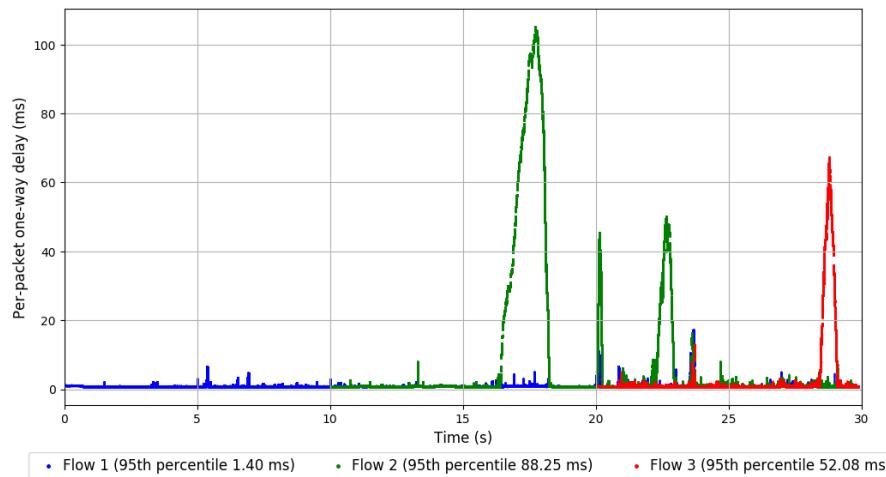
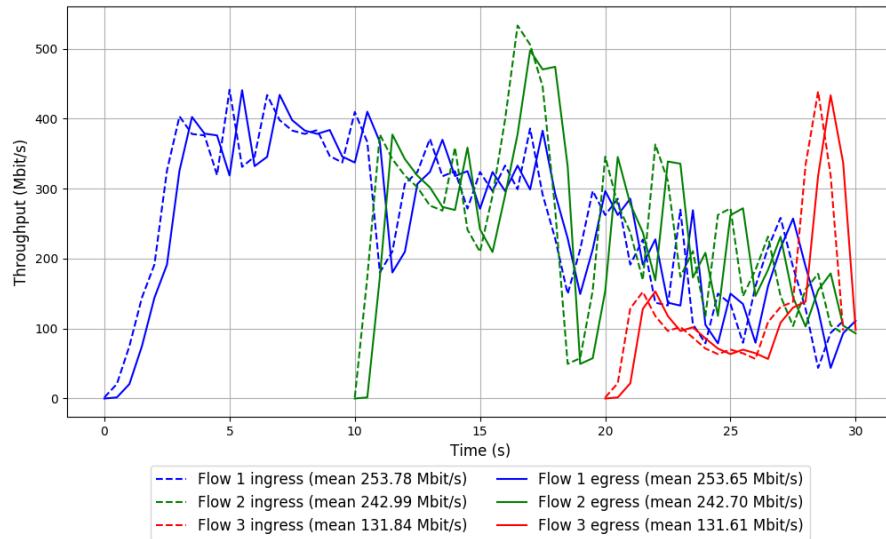


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-01-17 13:56:05
End at: 2019-01-17 13:56:35
Local clock offset: -0.247 ms
Remote clock offset: -3.314 ms

# Below is generated by plot.py at 2019-01-17 15:37:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 458.52 Mbit/s
95th percentile per-packet one-way delay: 46.201 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 253.65 Mbit/s
95th percentile per-packet one-way delay: 1.398 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 242.70 Mbit/s
95th percentile per-packet one-way delay: 88.252 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 131.61 Mbit/s
95th percentile per-packet one-way delay: 52.076 ms
Loss rate: 0.22%
```

Run 4: Report of PCC-Vivace — Data Link

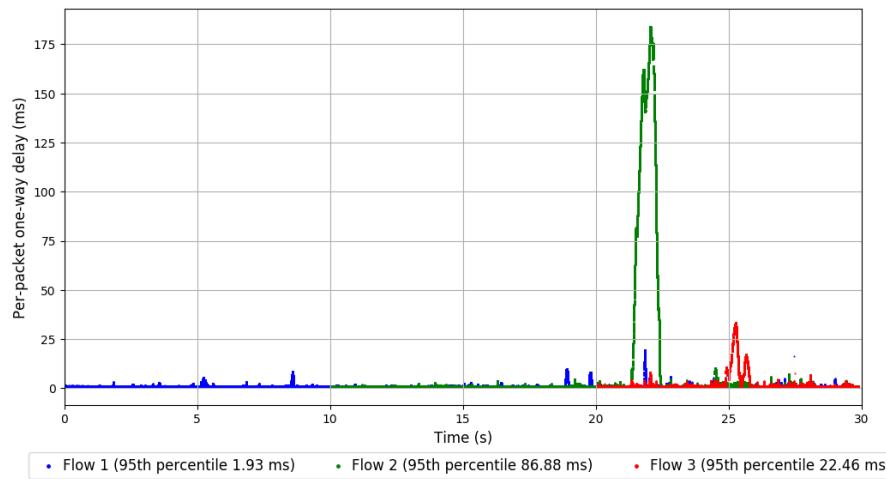
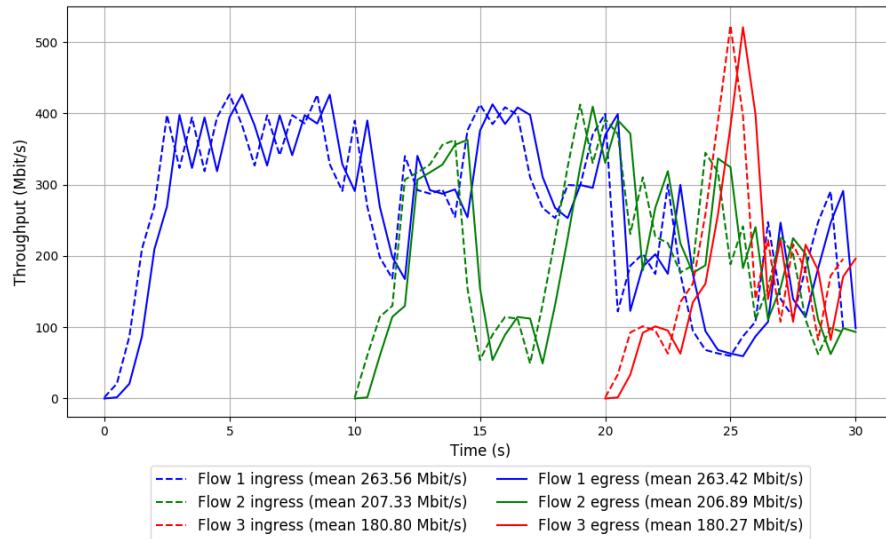


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-01-17 14:26:08
End at: 2019-01-17 14:26:38
Local clock offset: -0.135 ms
Remote clock offset: 4.571 ms

# Below is generated by plot.py at 2019-01-17 15:37:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 460.52 Mbit/s
95th percentile per-packet one-way delay: 7.708 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 263.42 Mbit/s
95th percentile per-packet one-way delay: 1.927 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 206.89 Mbit/s
95th percentile per-packet one-way delay: 86.877 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 180.27 Mbit/s
95th percentile per-packet one-way delay: 22.456 ms
Loss rate: 0.29%
```

Run 5: Report of PCC-Vivace — Data Link

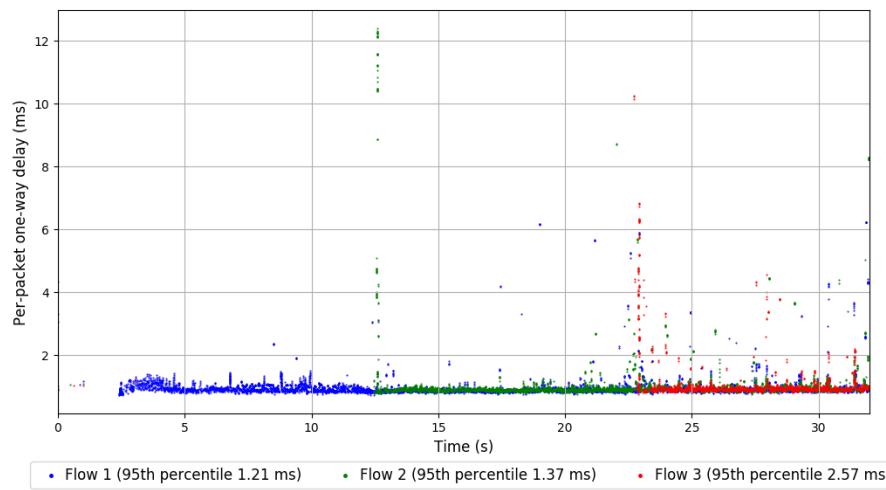
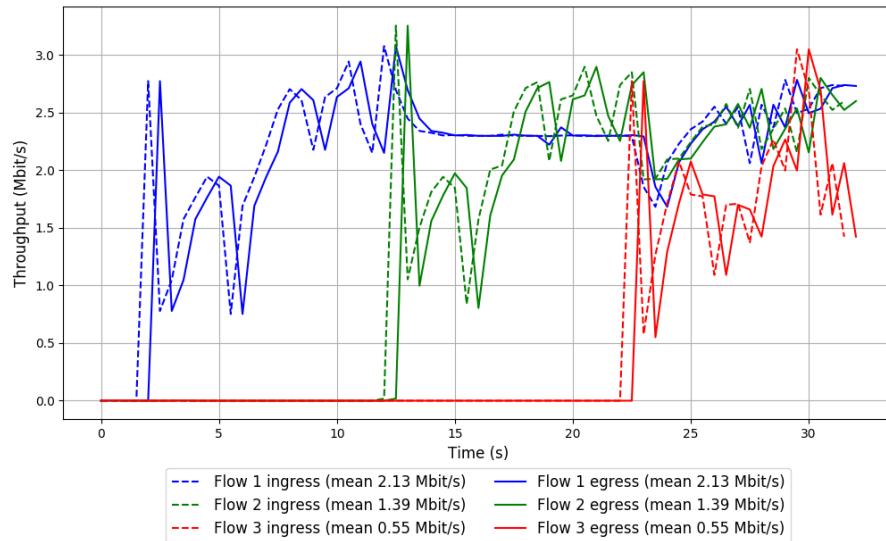


Run 1: Statistics of WebRTC media

```
Start at: 2019-01-17 12:32:49
End at: 2019-01-17 12:33:19
Local clock offset: 2.568 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2019-01-17 15:37:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.07 Mbit/s
95th percentile per-packet one-way delay: 1.323 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.13 Mbit/s
95th percentile per-packet one-way delay: 1.207 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.39 Mbit/s
95th percentile per-packet one-way delay: 1.370 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 2.569 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

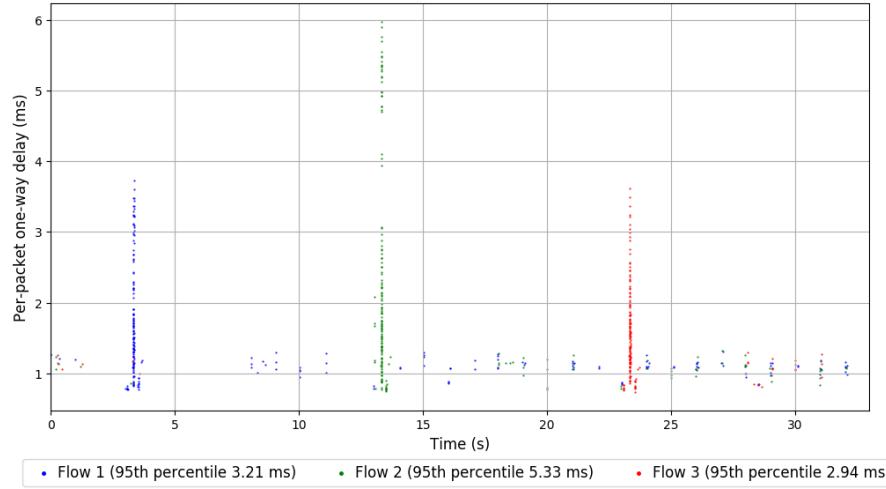
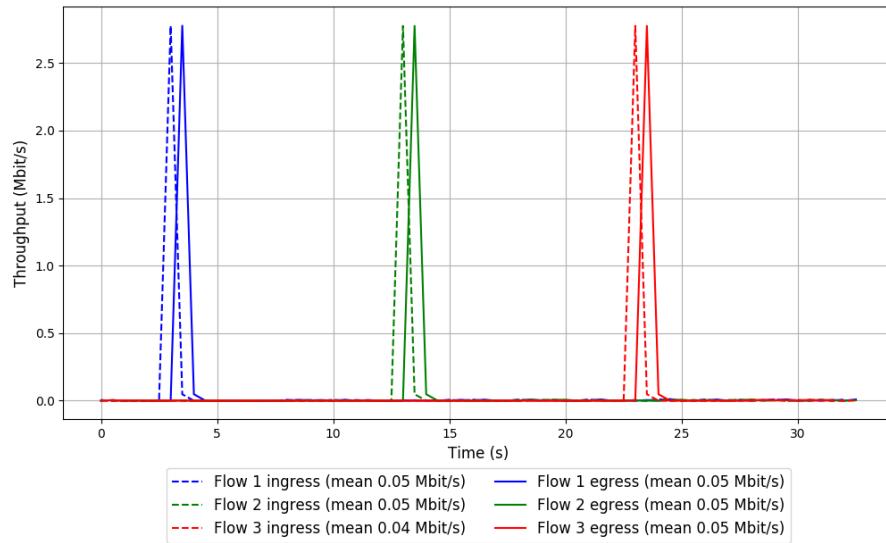


Run 2: Statistics of WebRTC media

```
Start at: 2019-01-17 13:03:04
End at: 2019-01-17 13:03:34
Local clock offset: 3.407 ms
Remote clock offset: -2.396 ms

# Below is generated by plot.py at 2019-01-17 15:37:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 3.597 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 3.212 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 5.335 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 2.935 ms
Loss rate: 0.05%
```

Run 2: Report of WebRTC media — Data Link

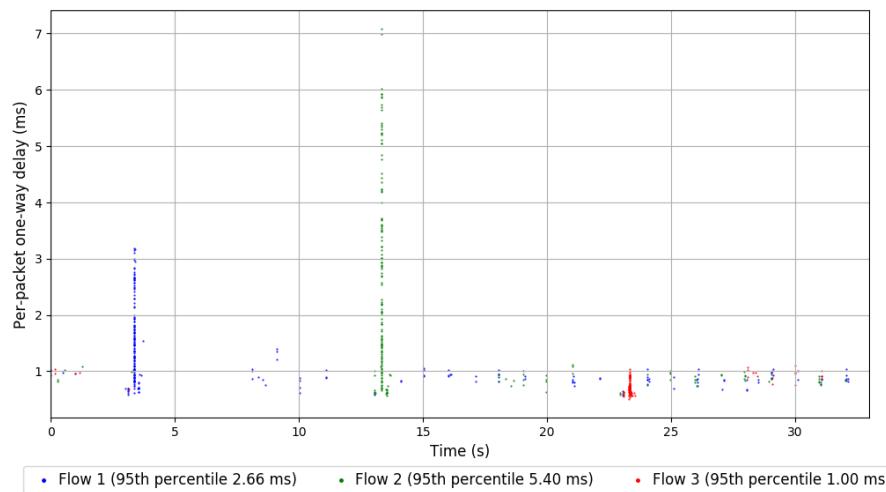
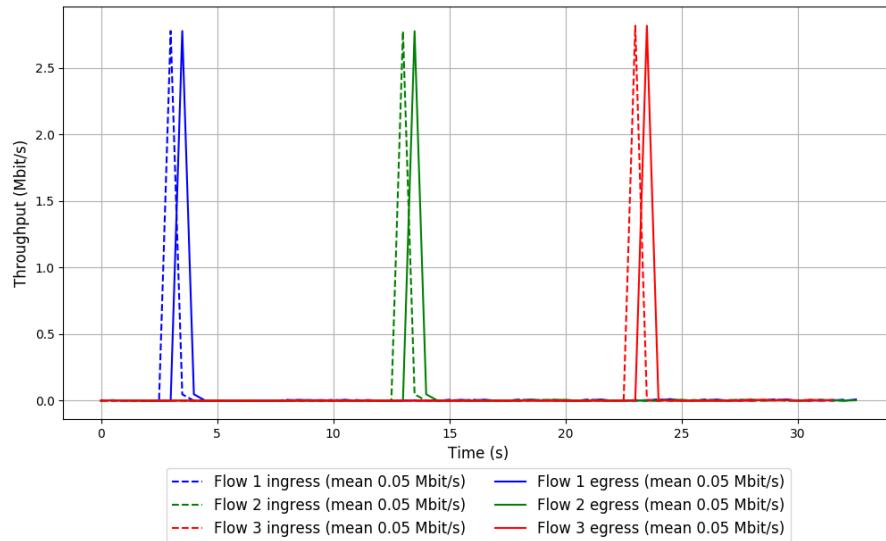


Run 3: Statistics of WebRTC media

```
Start at: 2019-01-17 13:33:09
End at: 2019-01-17 13:38:39
Local clock offset: 0.571 ms
Remote clock offset: -3.458 ms

# Below is generated by plot.py at 2019-01-17 15:37:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 4.001 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 2.664 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 5.401 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 0.998 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

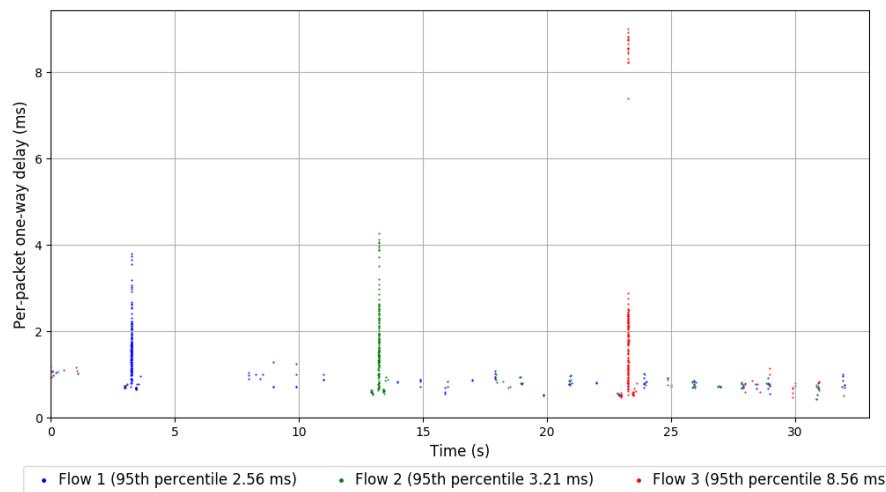
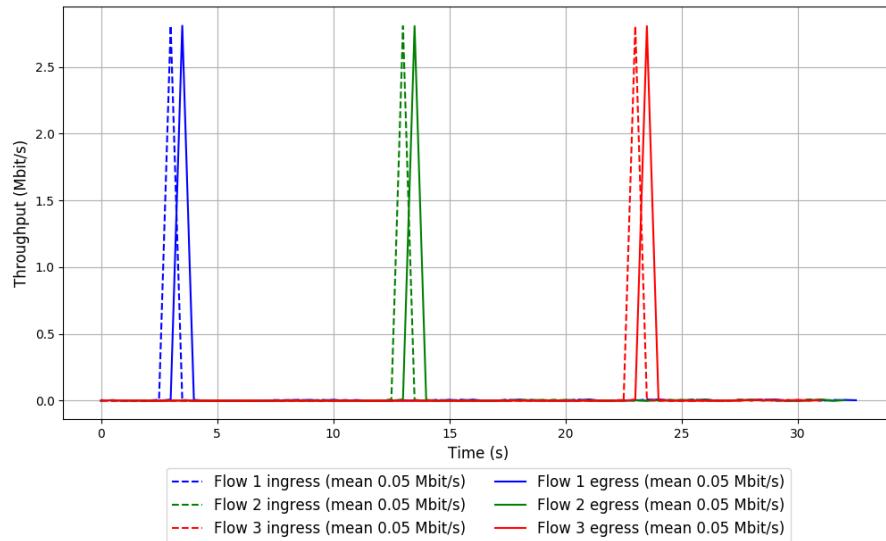


Run 4: Statistics of WebRTC media

```
Start at: 2019-01-17 14:03:12
End at: 2019-01-17 14:03:42
Local clock offset: -0.151 ms
Remote clock offset: -1.118 ms

# Below is generated by plot.py at 2019-01-17 15:37:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 3.552 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 2.555 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 3.210 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 8.560 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



```
Run 5: Statistics of WebRTC media

Start at: 2019-01-17 14:33:08
End at: 2019-01-17 14:33:38
Local clock offset: -0.094 ms
Remote clock offset: 5.215 ms

# Below is generated by plot.py at 2019-01-17 15:37:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 8.019 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 8.776 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 2.708 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.110 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

