

Pantheon Report

Generated at 2019-02-11 22:42:49 (UTC).
Data path: GCE Sydney on `ens4 (local)` → GCE Iowa on `ens4 (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.google.com` and have been applied to correct the timestamps in logs.

System info:

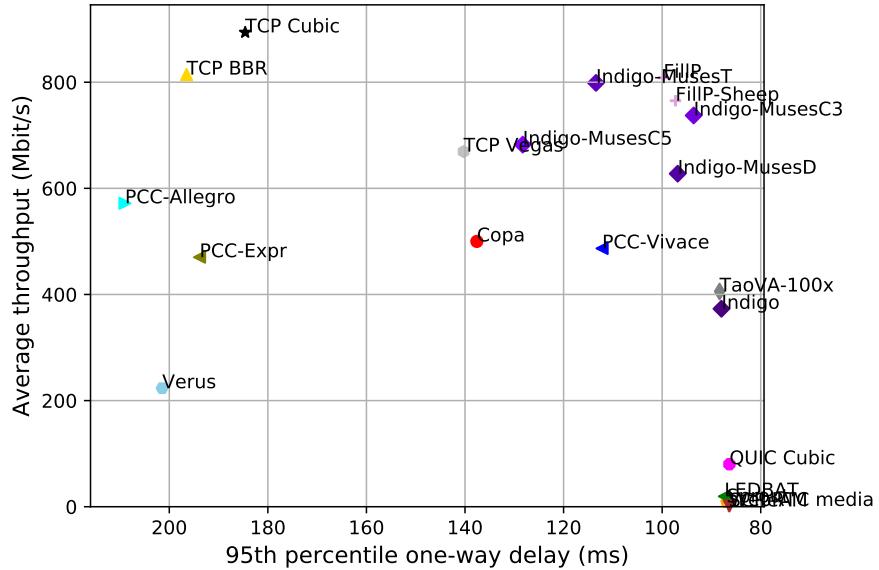
```
Linux 4.15.0-1026-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

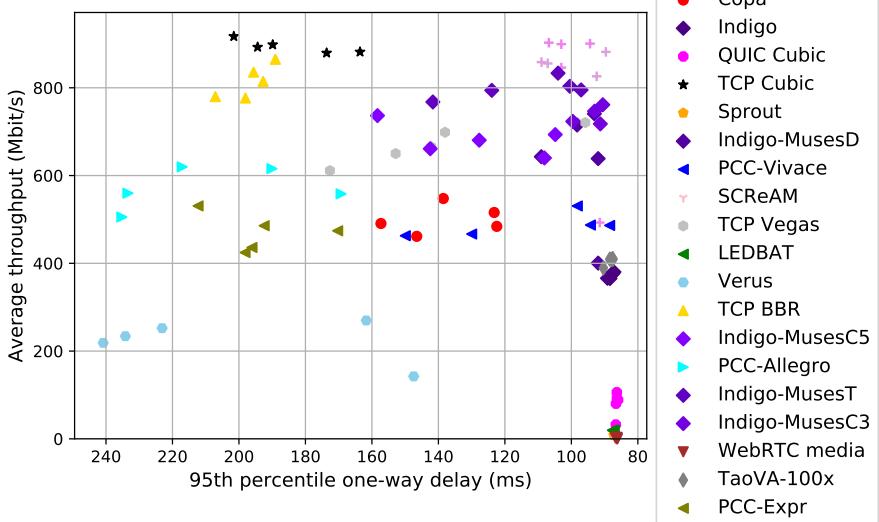
```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
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 GCE Sydney to GCE Iowa, 5 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE Sydney to GCE Iowa, 5 runs of 30s each per scheme
 3 flows with 10s interval between flows



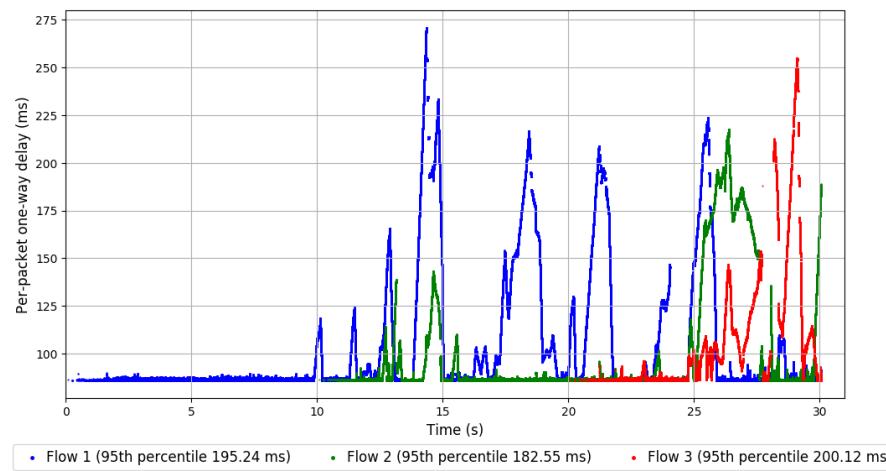
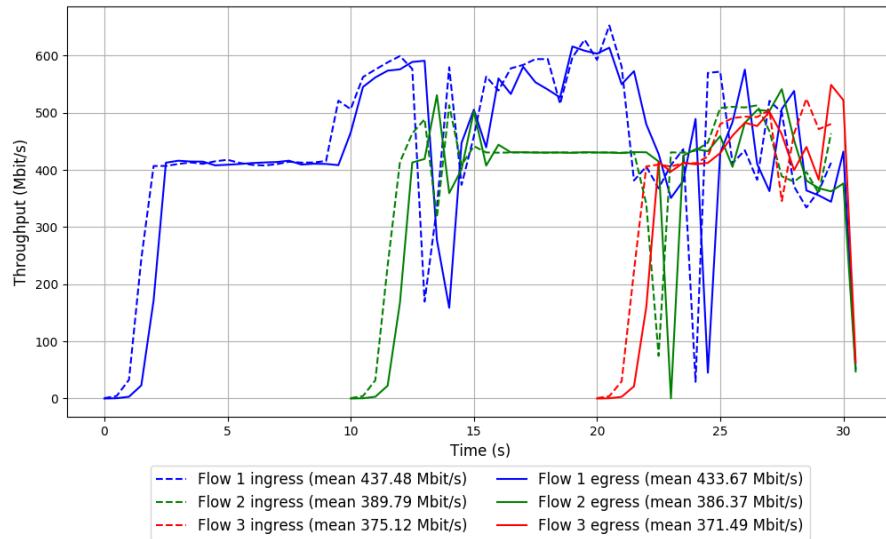
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	428.75	403.87	350.73	193.48	199.06	187.18	1.01	0.94	1.06
Copa	5	278.91	224.21	216.23	126.90	140.66	141.96	0.00	0.16	0.00
TCP Cubic	5	482.90	438.33	357.60	189.97	165.42	162.50	0.10	0.19	0.24
FillP	5	481.95	368.00	246.75	105.44	89.77	89.21	0.29	0.00	0.01
FillP-Sheep	5	461.07	334.47	246.15	100.50	89.49	88.94	0.07	0.01	0.01
Indigo	5	200.13	186.07	154.14	87.77	88.32	87.78	0.00	0.00	0.00
Indigo-MusesC3	4	429.85	356.21	279.81	94.77	93.00	90.60	0.00	0.02	0.01
Indigo-MusesC5	5	427.38	355.62	111.26	130.67	123.14	87.49	0.03	0.05	0.00
Indigo-MusesD	5	386.98	294.32	195.39	98.58	94.63	90.41	0.00	0.02	0.11
Indigo-MusesT	5	479.73	393.58	241.45	120.17	98.71	90.92	0.05	0.06	0.00
LEDBAT	5	12.60	8.35	4.09	87.45	87.25	86.64	0.00	0.00	0.00
PCC-Allegro	5	317.90	267.04	232.28	210.09	142.98	165.23	2.41	0.82	1.07
PCC-Expr	5	267.04	229.11	154.26	196.10	182.73	111.05	3.60	0.81	0.00
QUIC Cubic	5	37.86	47.58	32.71	86.31	86.21	86.30	0.00	0.00	0.00
SCReAM	5	0.22	0.22	0.22	86.42	86.27	86.41	0.00	0.00	0.00
Sprout	5	4.34	4.30	3.03	86.97	86.84	86.84	0.00	0.00	0.18
TaoVA-100x	5	208.73	201.40	188.24	87.65	88.61	89.85	0.00	0.00	0.00
TCP Vegas	5	333.07	352.74	304.67	127.45	111.21	110.20	0.00	0.08	0.22
Verus	5	135.26	100.01	67.17	171.17	235.40	159.34	0.39	3.11	0.21
PCC-Vivace	5	298.78	205.05	156.36	119.95	94.90	123.51	0.05	0.00	0.00
WebRTC media	5	0.81	0.50	0.21	86.37	86.34	86.27	0.00	0.00	0.02

Run 1: Statistics of TCP BBR

```
Start at: 2019-02-11 16:10:04
End at: 2019-02-11 16:10:34
Local clock offset: 0.178 ms
Remote clock offset: -0.074 ms

# Below is generated by plot.py at 2019-02-11 19:44:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 814.50 Mbit/s
95th percentile per-packet one-way delay: 192.715 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 433.67 Mbit/s
95th percentile per-packet one-way delay: 195.241 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 386.37 Mbit/s
95th percentile per-packet one-way delay: 182.553 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 371.49 Mbit/s
95th percentile per-packet one-way delay: 200.116 ms
Loss rate: 0.98%
```

Run 1: Report of TCP BBR — Data Link

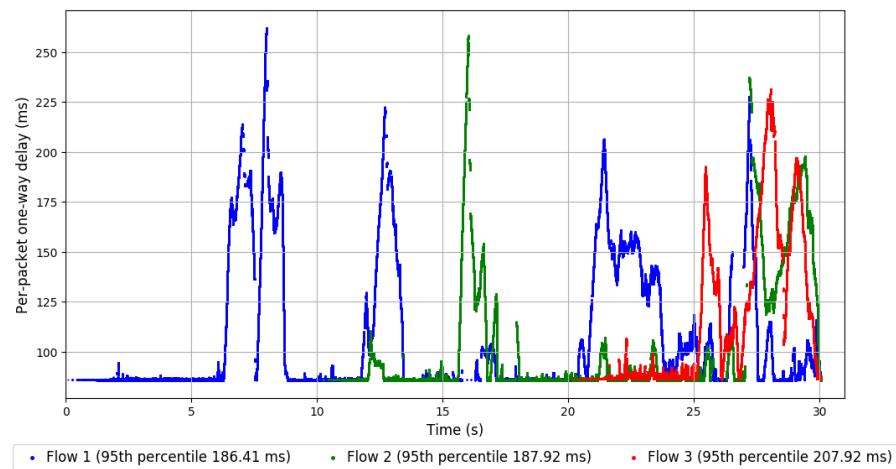
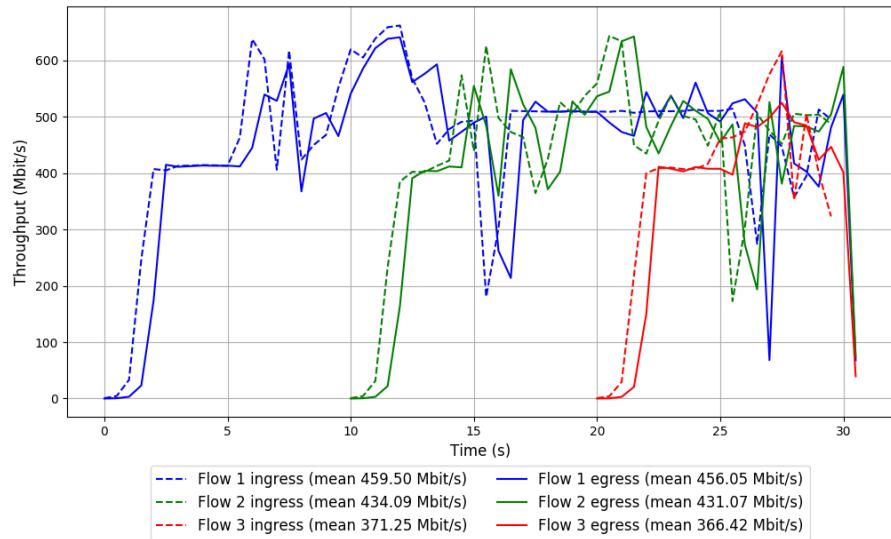


Run 2: Statistics of TCP BBR

```
Start at: 2019-02-11 16:48:10
End at: 2019-02-11 16:48:40
Local clock offset: 0.102 ms
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2019-02-11 19:45:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 864.93 Mbit/s
95th percentile per-packet one-way delay: 189.034 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 456.05 Mbit/s
95th percentile per-packet one-way delay: 186.413 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 431.07 Mbit/s
95th percentile per-packet one-way delay: 187.922 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 366.42 Mbit/s
95th percentile per-packet one-way delay: 207.916 ms
Loss rate: 1.30%
```

Run 2: Report of TCP BBR — Data Link

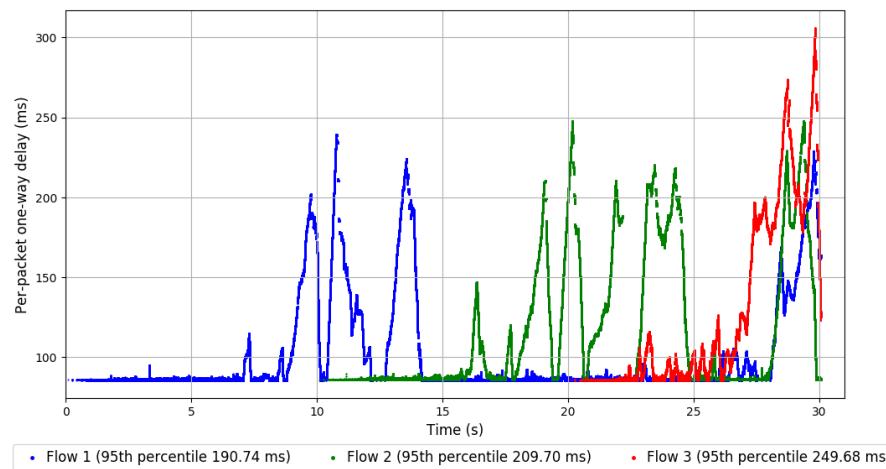
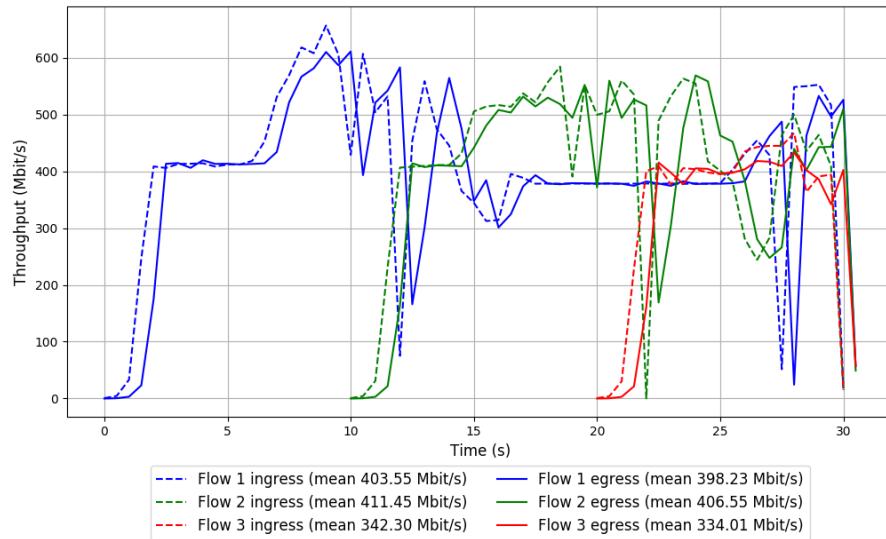


Run 3: Statistics of TCP BBR

```
Start at: 2019-02-11 17:26:59
End at: 2019-02-11 17:27:29
Local clock offset: 0.09 ms
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2019-02-11 19:45:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 779.91 Mbit/s
95th percentile per-packet one-way delay: 207.086 ms
Loss rate: 1.67%
-- Flow 1:
Average throughput: 398.23 Mbit/s
95th percentile per-packet one-way delay: 190.740 ms
Loss rate: 1.48%
-- Flow 2:
Average throughput: 406.55 Mbit/s
95th percentile per-packet one-way delay: 209.704 ms
Loss rate: 1.44%
-- Flow 3:
Average throughput: 334.01 Mbit/s
95th percentile per-packet one-way delay: 249.678 ms
Loss rate: 2.90%
```

Run 3: Report of TCP BBR — Data Link

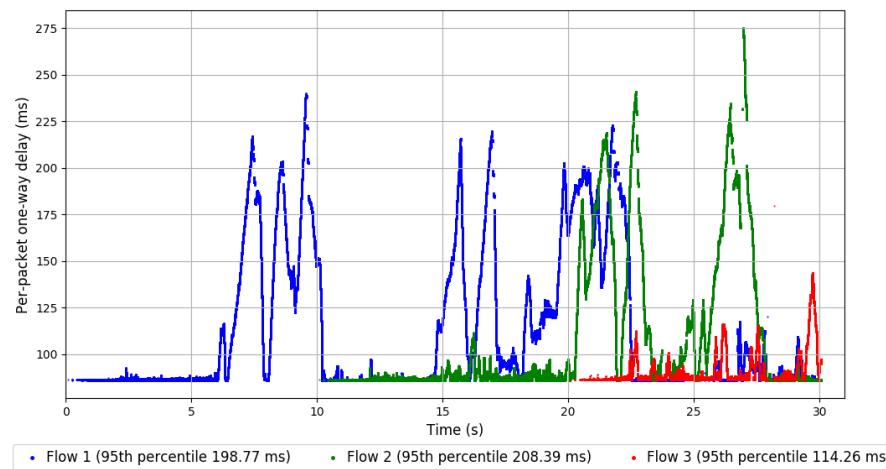
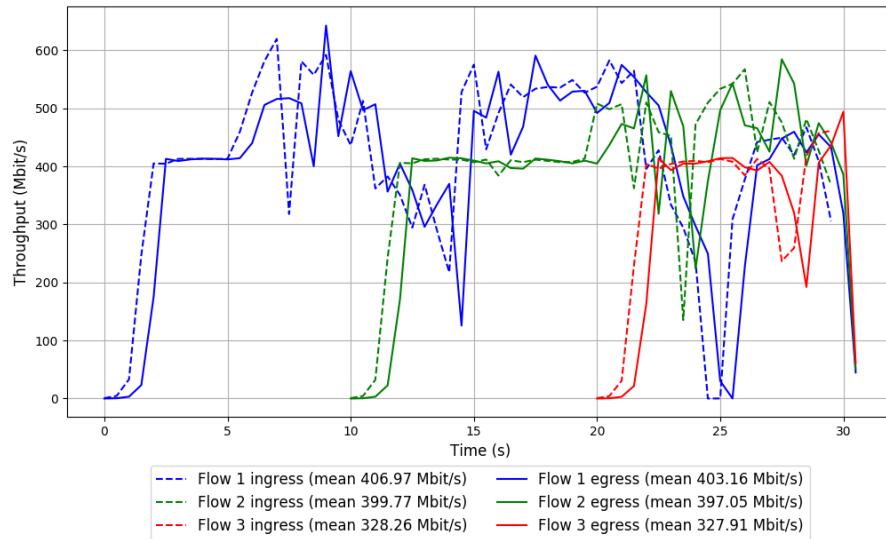


Run 4: Statistics of TCP BBR

```
Start at: 2019-02-11 18:04:22
End at: 2019-02-11 18:04:52
Local clock offset: -0.087 ms
Remote clock offset: -0.087 ms

# Below is generated by plot.py at 2019-02-11 19:45:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 776.69 Mbit/s
95th percentile per-packet one-way delay: 198.048 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 403.16 Mbit/s
95th percentile per-packet one-way delay: 198.766 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 397.05 Mbit/s
95th percentile per-packet one-way delay: 208.386 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 327.91 Mbit/s
95th percentile per-packet one-way delay: 114.259 ms
Loss rate: 0.10%
```

Run 4: Report of TCP BBR — Data Link

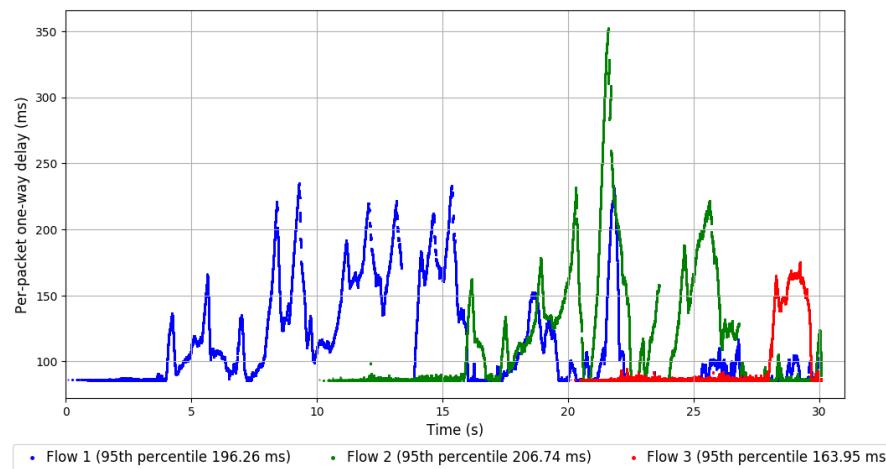
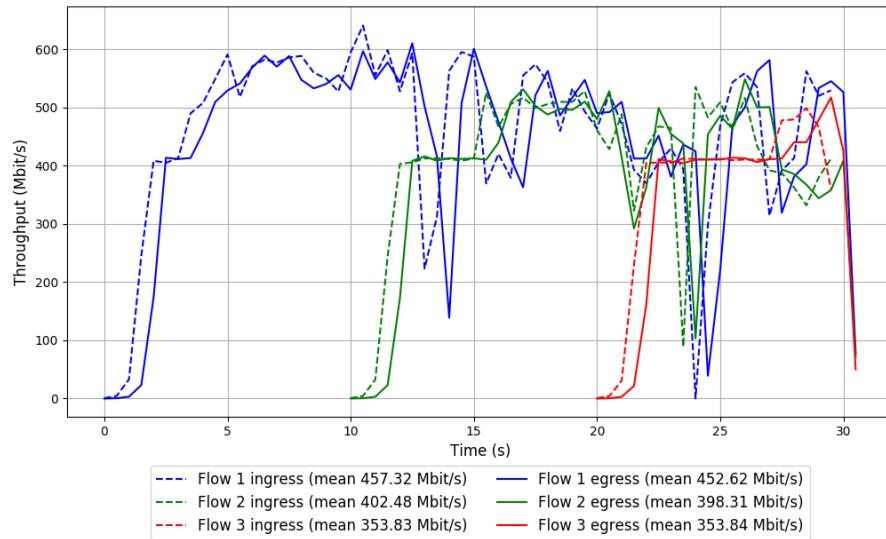


Run 5: Statistics of TCP BBR

```
Start at: 2019-02-11 18:41:47
End at: 2019-02-11 18:42:17
Local clock offset: -0.04 ms
Remote clock offset: -0.104 ms

# Below is generated by plot.py at 2019-02-11 19:45:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 835.64 Mbit/s
95th percentile per-packet one-way delay: 195.598 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 452.62 Mbit/s
95th percentile per-packet one-way delay: 196.261 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 398.31 Mbit/s
95th percentile per-packet one-way delay: 206.744 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 353.84 Mbit/s
95th percentile per-packet one-way delay: 163.946 ms
Loss rate: 0.00%
```

Run 5: Report of TCP BBR — Data Link

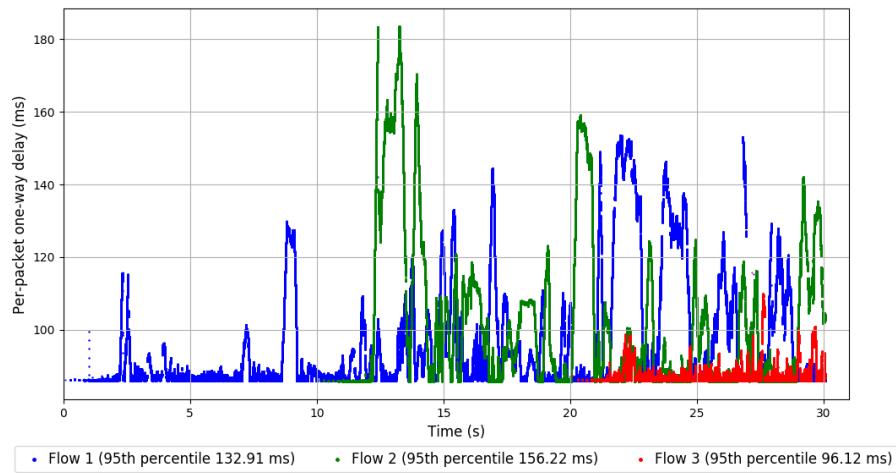
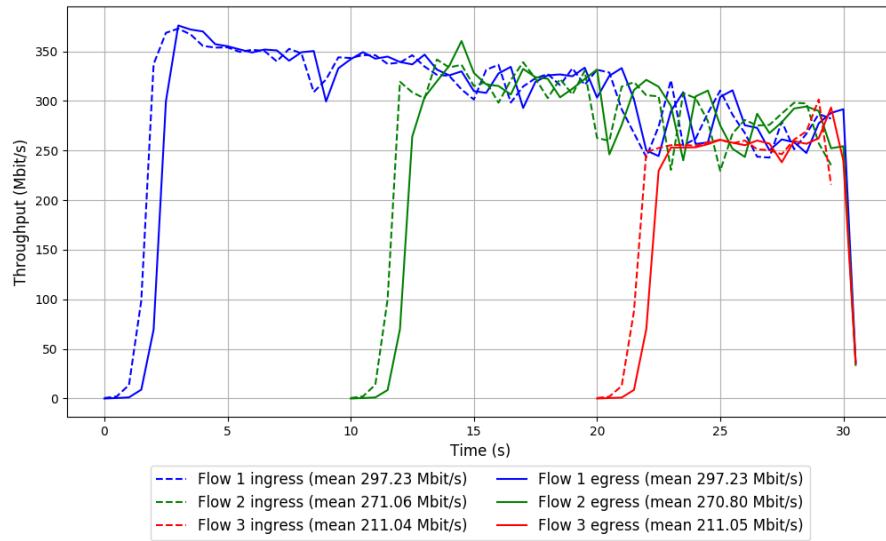


Run 1: Statistics of Copa

```
Start at: 2019-02-11 16:26:09
End at: 2019-02-11 16:26:39
Local clock offset: 0.164 ms
Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2019-02-11 19:48:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 547.68 Mbit/s
95th percentile per-packet one-way delay: 138.525 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 297.23 Mbit/s
95th percentile per-packet one-way delay: 132.913 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 270.80 Mbit/s
95th percentile per-packet one-way delay: 156.215 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 211.05 Mbit/s
95th percentile per-packet one-way delay: 96.121 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link

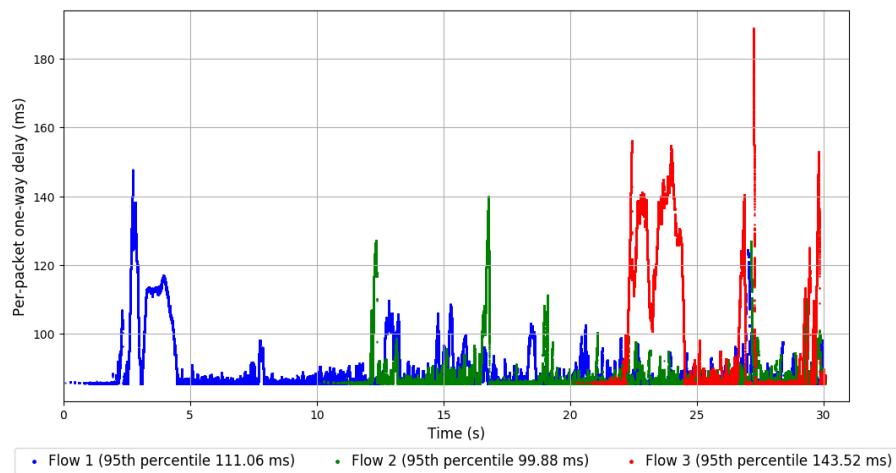
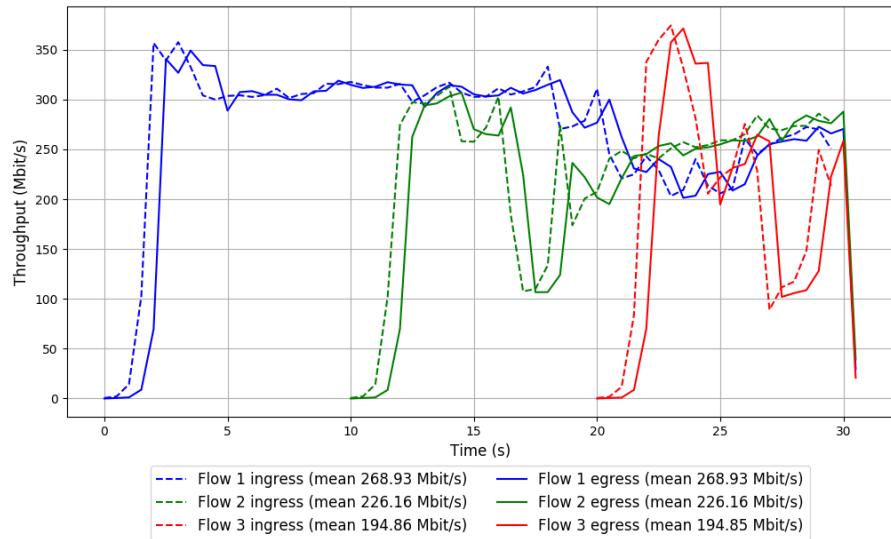


Run 2: Statistics of Copa

```
Start at: 2019-02-11 17:05:14
End at: 2019-02-11 17:05:44
Local clock offset: 0.1 ms
Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2019-02-11 19:48:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 484.20 Mbit/s
95th percentile per-packet one-way delay: 122.440 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 268.93 Mbit/s
95th percentile per-packet one-way delay: 111.055 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 226.16 Mbit/s
95th percentile per-packet one-way delay: 99.879 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 194.85 Mbit/s
95th percentile per-packet one-way delay: 143.520 ms
Loss rate: 0.00%
```

Run 2: Report of Copa — Data Link

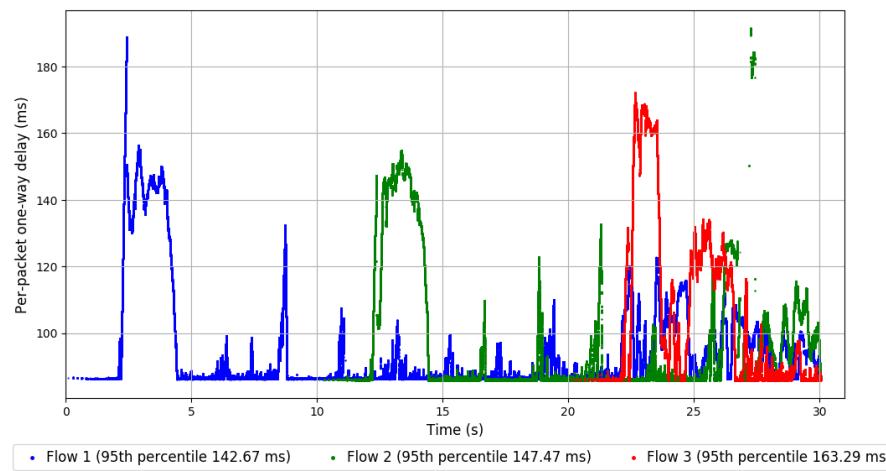
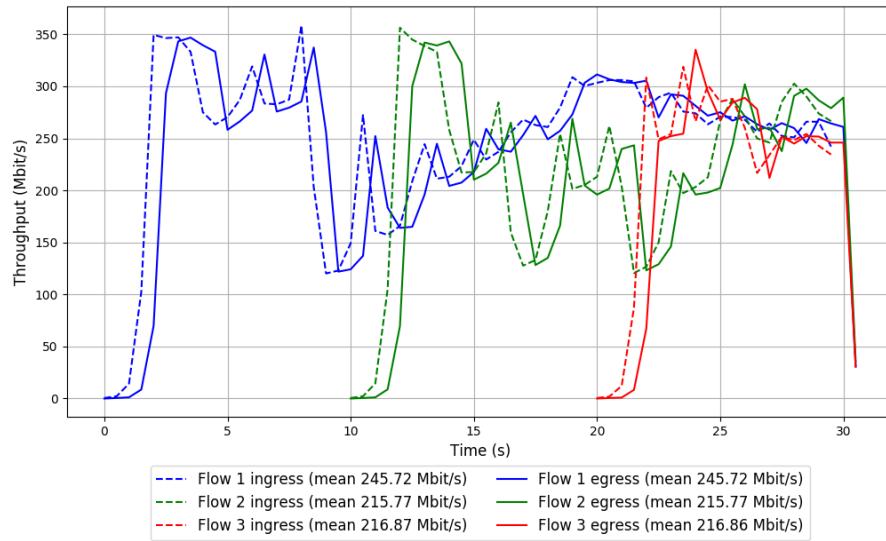


Run 3: Statistics of Copa

```
Start at: 2019-02-11 17:43:09
End at: 2019-02-11 17:43:39
Local clock offset: -0.07 ms
Remote clock offset: -0.103 ms

# Below is generated by plot.py at 2019-02-11 19:48:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 461.46 Mbit/s
95th percentile per-packet one-way delay: 146.515 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 245.72 Mbit/s
95th percentile per-packet one-way delay: 142.667 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 215.77 Mbit/s
95th percentile per-packet one-way delay: 147.466 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 216.86 Mbit/s
95th percentile per-packet one-way delay: 163.292 ms
Loss rate: 0.00%
```

Run 3: Report of Copa — Data Link

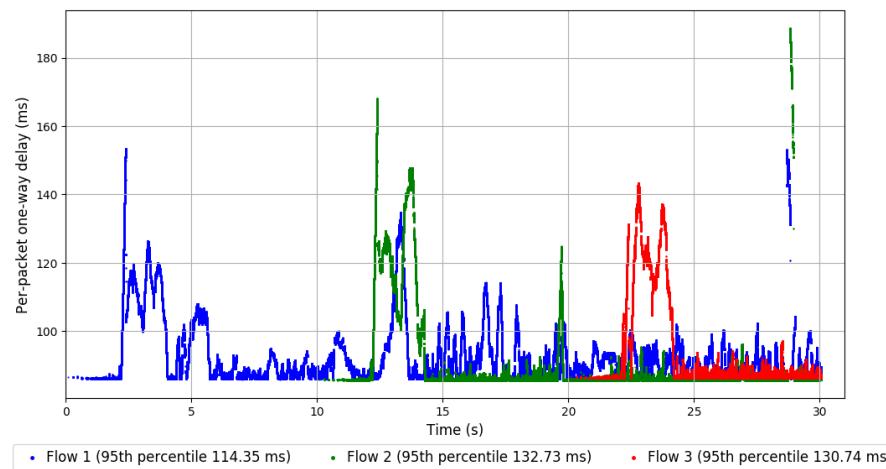
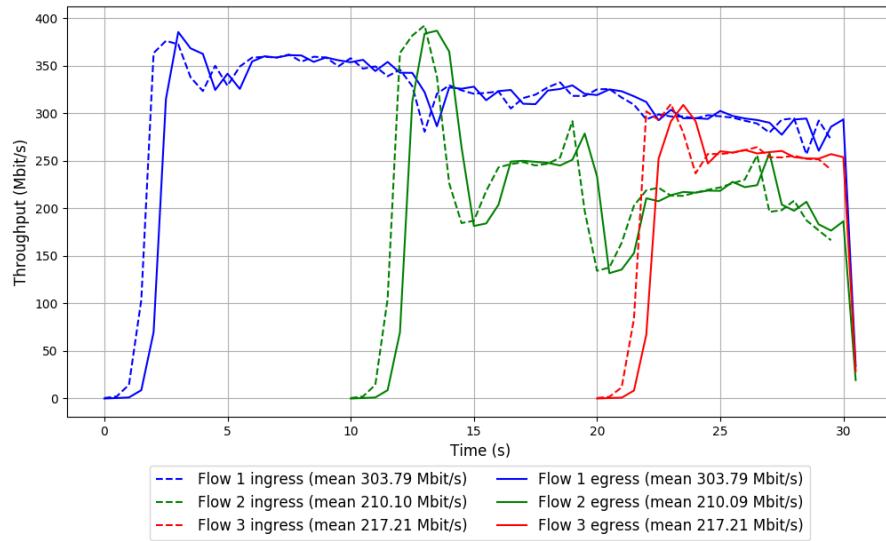


Run 4: Statistics of Copa

```
Start at: 2019-02-11 18:20:31
End at: 2019-02-11 18:21:01
Local clock offset: 0.256 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2019-02-11 20:07:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 515.83 Mbit/s
95th percentile per-packet one-way delay: 123.217 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 303.79 Mbit/s
95th percentile per-packet one-way delay: 114.348 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 210.09 Mbit/s
95th percentile per-packet one-way delay: 132.734 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 217.21 Mbit/s
95th percentile per-packet one-way delay: 130.738 ms
Loss rate: 0.00%
```

Run 4: Report of Copa — Data Link

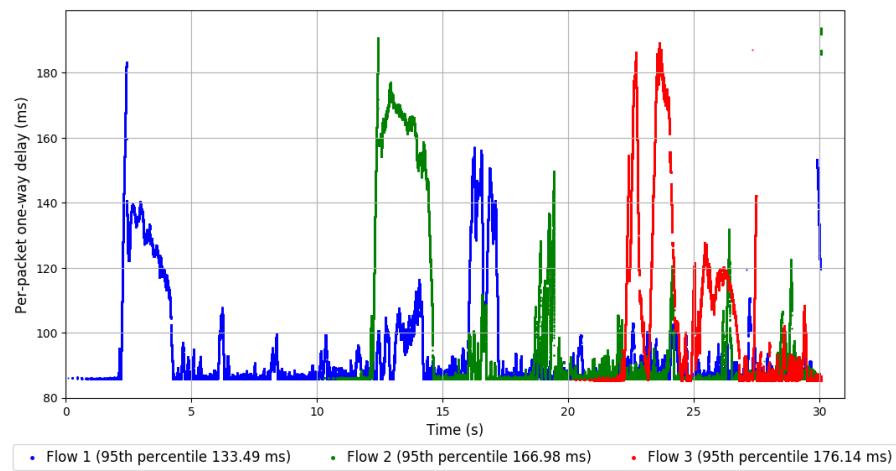
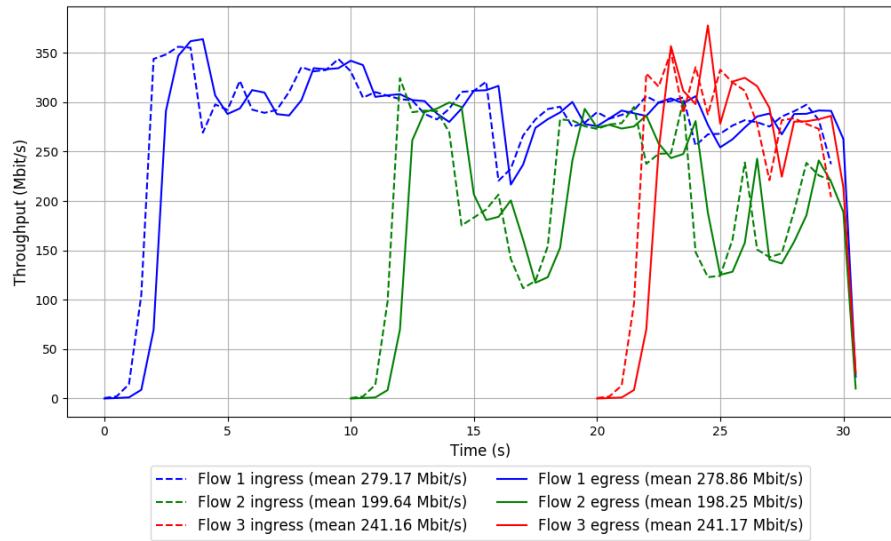


Run 5: Statistics of Copa

```
Start at: 2019-02-11 18:57:56
End at: 2019-02-11 18:58:26
Local clock offset: 0.379 ms
Remote clock offset: -0.086 ms

# Below is generated by plot.py at 2019-02-11 20:07:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 490.73 Mbit/s
95th percentile per-packet one-way delay: 157.284 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 278.86 Mbit/s
95th percentile per-packet one-way delay: 133.493 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 198.25 Mbit/s
95th percentile per-packet one-way delay: 166.982 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 241.17 Mbit/s
95th percentile per-packet one-way delay: 176.139 ms
Loss rate: 0.00%
```

Run 5: Report of Copa — Data Link

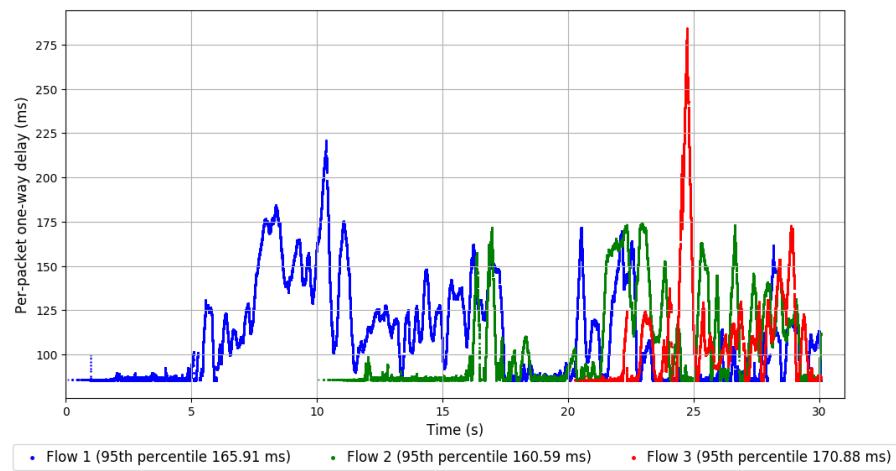
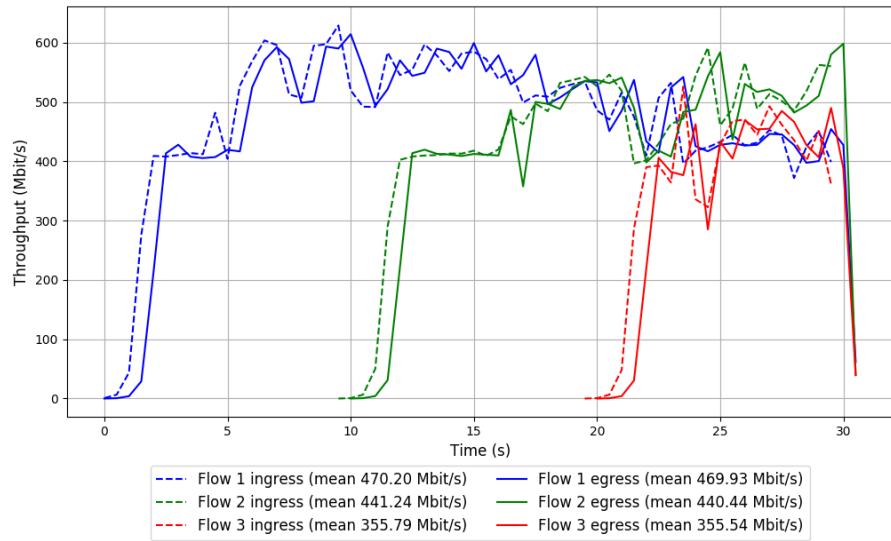


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-02-11 16:08:01
End at: 2019-02-11 16:08:31
Local clock offset: 0.407 ms
Remote clock offset: -0.101 ms

# Below is generated by plot.py at 2019-02-11 20:07:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 881.76 Mbit/s
95th percentile per-packet one-way delay: 163.582 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 469.93 Mbit/s
95th percentile per-packet one-way delay: 165.909 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 440.44 Mbit/s
95th percentile per-packet one-way delay: 160.594 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 355.54 Mbit/s
95th percentile per-packet one-way delay: 170.875 ms
Loss rate: 0.06%
```

Run 1: Report of TCP Cubic — Data Link

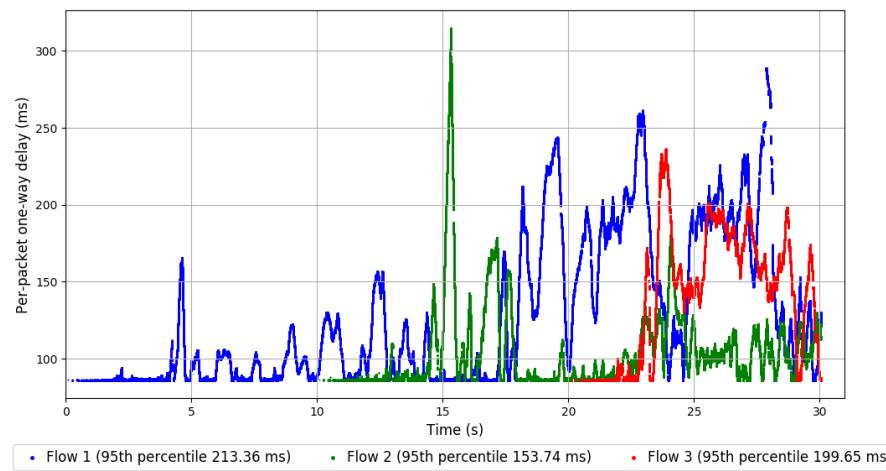
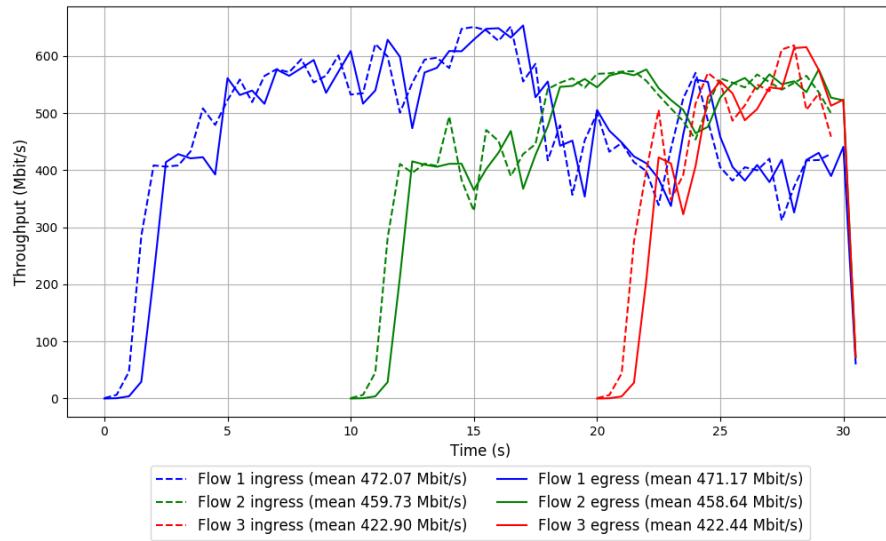


Run 2: Statistics of TCP Cubic

```
Start at: 2019-02-11 16:45:50
End at: 2019-02-11 16:46:20
Local clock offset: 0.265 ms
Remote clock offset: -0.006 ms

# Below is generated by plot.py at 2019-02-11 20:07:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 917.13 Mbit/s
95th percentile per-packet one-way delay: 201.549 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 471.17 Mbit/s
95th percentile per-packet one-way delay: 213.356 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 458.64 Mbit/s
95th percentile per-packet one-way delay: 153.739 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 422.44 Mbit/s
95th percentile per-packet one-way delay: 199.651 ms
Loss rate: 0.11%
```

Run 2: Report of TCP Cubic — Data Link

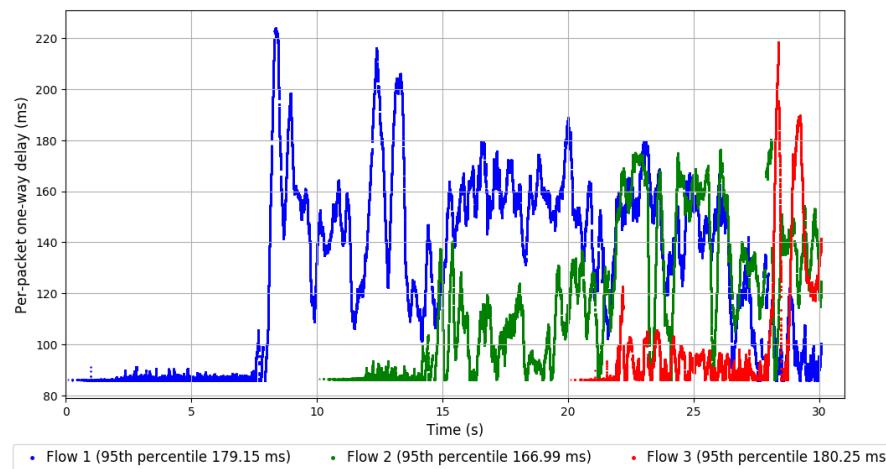
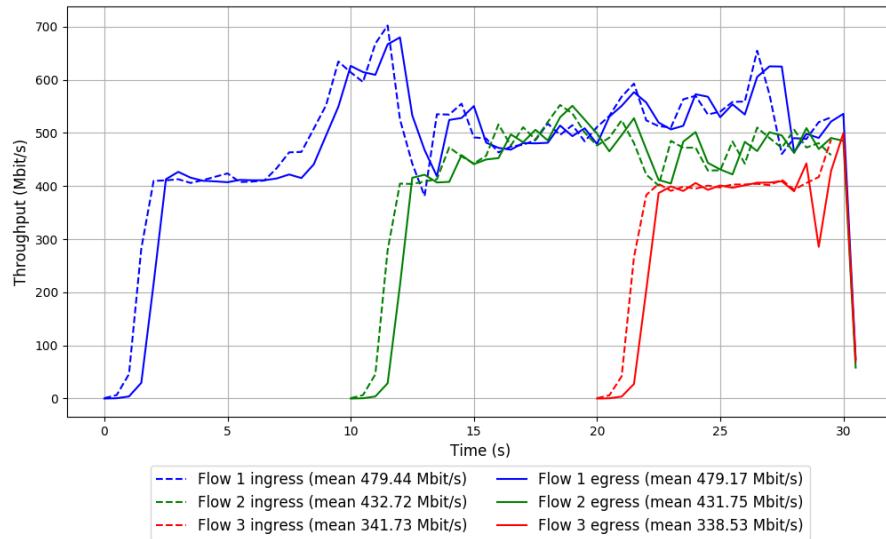


Run 3: Statistics of TCP Cubic

```
Start at: 2019-02-11 17:24:48
End at: 2019-02-11 17:25:18
Local clock offset: -0.114 ms
Remote clock offset: 0.02 ms

# Below is generated by plot.py at 2019-02-11 20:07:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 879.39 Mbit/s
95th percentile per-packet one-way delay: 173.629 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 479.17 Mbit/s
95th percentile per-packet one-way delay: 179.152 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 431.75 Mbit/s
95th percentile per-packet one-way delay: 166.991 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 338.53 Mbit/s
95th percentile per-packet one-way delay: 180.247 ms
Loss rate: 0.93%
```

Run 3: Report of TCP Cubic — Data Link

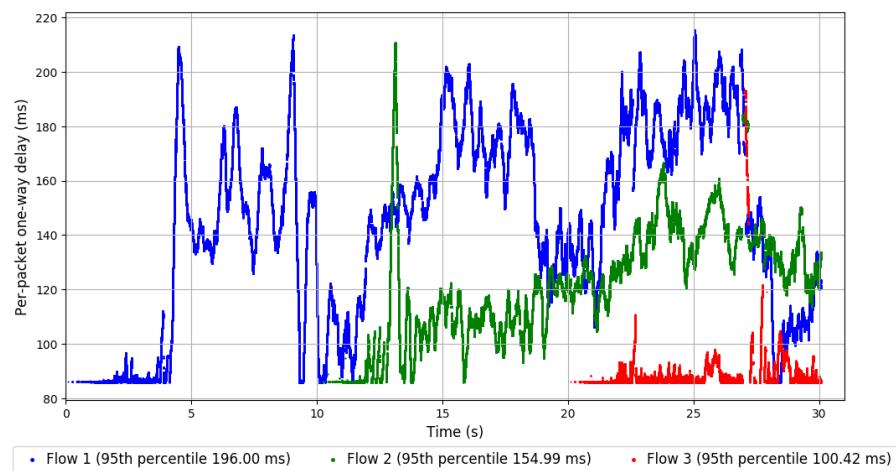
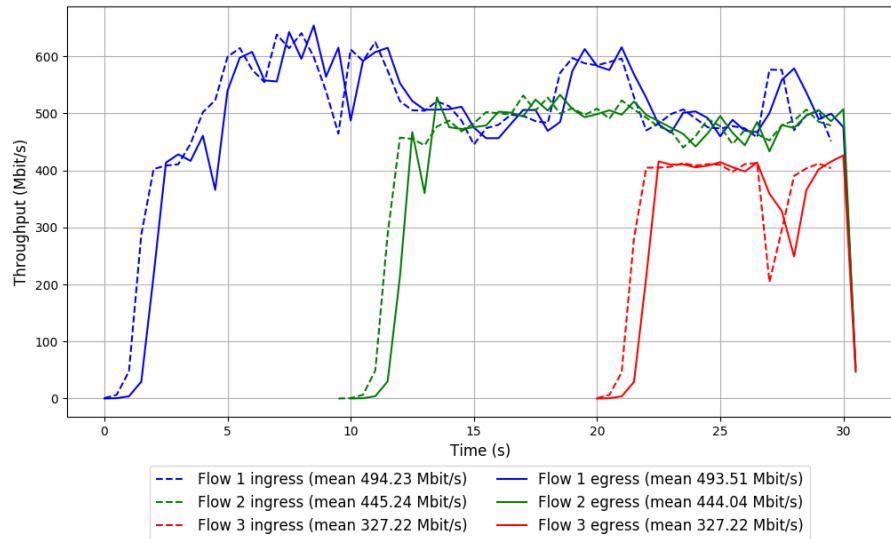


Run 4: Statistics of TCP Cubic

```
Start at: 2019-02-11 18:02:16
End at: 2019-02-11 18:02:46
Local clock offset: -0.072 ms
Remote clock offset: -0.124 ms

# Below is generated by plot.py at 2019-02-11 20:07:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 898.23 Mbit/s
95th percentile per-packet one-way delay: 189.849 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 493.51 Mbit/s
95th percentile per-packet one-way delay: 196.003 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 444.04 Mbit/s
95th percentile per-packet one-way delay: 154.986 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 327.22 Mbit/s
95th percentile per-packet one-way delay: 100.423 ms
Loss rate: 0.00%
```

Run 4: Report of TCP Cubic — Data Link

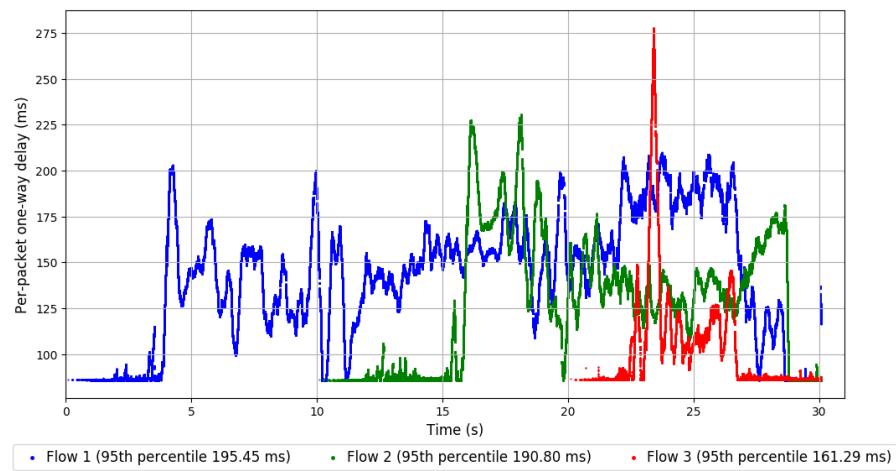
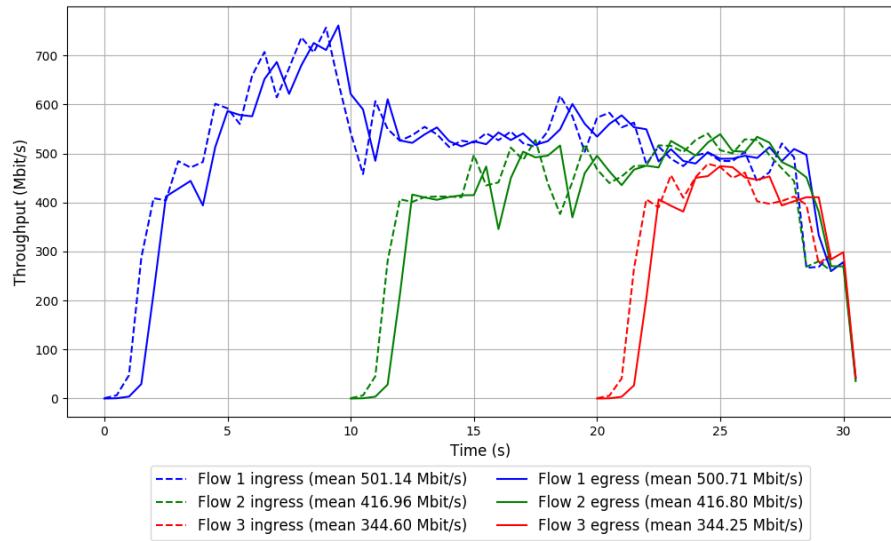


Run 5: Statistics of TCP Cubic

```
Start at: 2019-02-11 18:39:43
End at: 2019-02-11 18:40:13
Local clock offset: -0.04 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2019-02-11 20:08:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 892.74 Mbit/s
95th percentile per-packet one-way delay: 194.386 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 500.71 Mbit/s
95th percentile per-packet one-way delay: 195.452 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 416.80 Mbit/s
95th percentile per-packet one-way delay: 190.802 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 344.25 Mbit/s
95th percentile per-packet one-way delay: 161.286 ms
Loss rate: 0.11%
```

Run 5: Report of TCP Cubic — Data Link

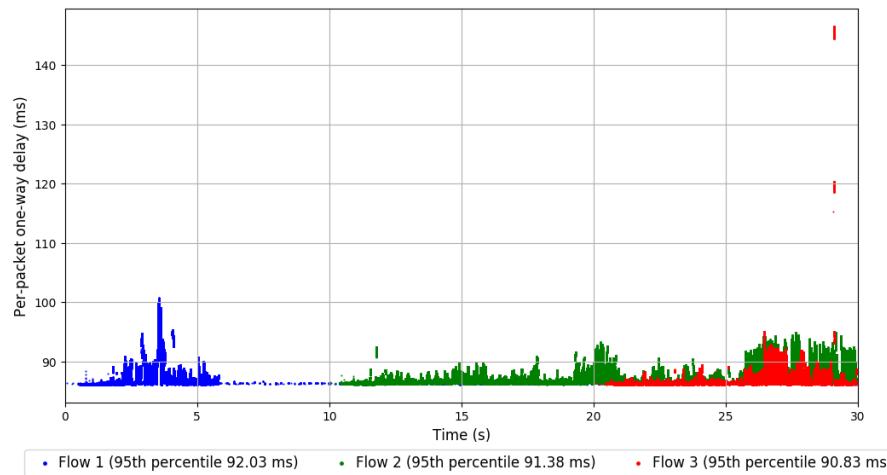
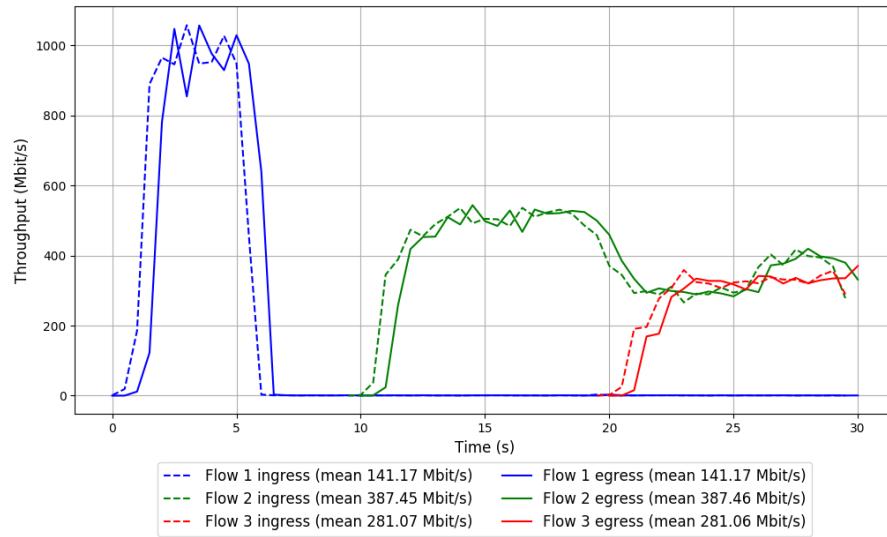


```
Run 1: Statistics of FillP

Start at: 2019-02-11 16:22:37
End at: 2019-02-11 16:23:07
Local clock offset: -0.259 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2019-02-11 20:08:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 492.80 Mbit/s
95th percentile per-packet one-way delay: 91.471 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 141.17 Mbit/s
95th percentile per-packet one-way delay: 92.033 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 387.46 Mbit/s
95th percentile per-packet one-way delay: 91.377 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 281.06 Mbit/s
95th percentile per-packet one-way delay: 90.826 ms
Loss rate: 0.00%
```

Run 1: Report of FillP — Data Link

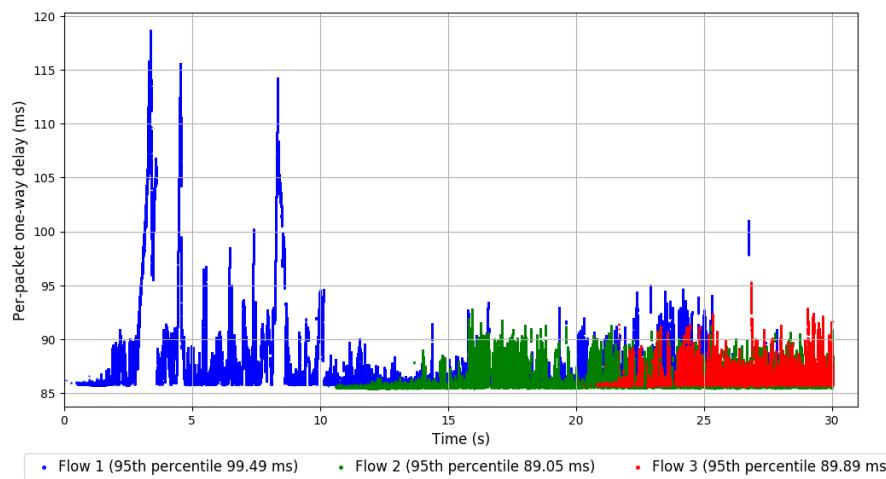
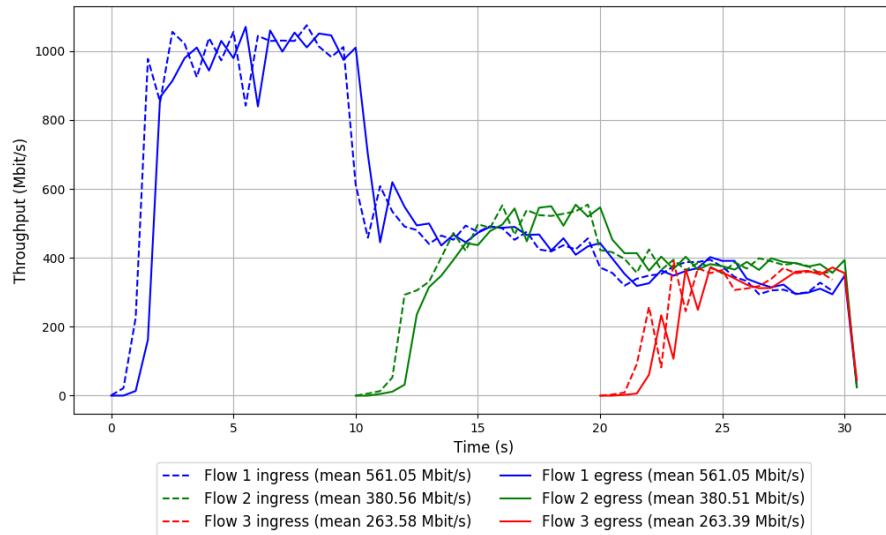


Run 2: Statistics of FillP

```
Start at: 2019-02-11 17:01:09
End at: 2019-02-11 17:01:39
Local clock offset: 0.366 ms
Remote clock offset: 0.013 ms

# Below is generated by plot.py at 2019-02-11 20:31:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 900.57 Mbit/s
95th percentile per-packet one-way delay: 94.380 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 561.05 Mbit/s
95th percentile per-packet one-way delay: 99.491 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 380.51 Mbit/s
95th percentile per-packet one-way delay: 89.050 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 263.39 Mbit/s
95th percentile per-packet one-way delay: 89.886 ms
Loss rate: 0.03%
```

Run 2: Report of FillP — Data Link

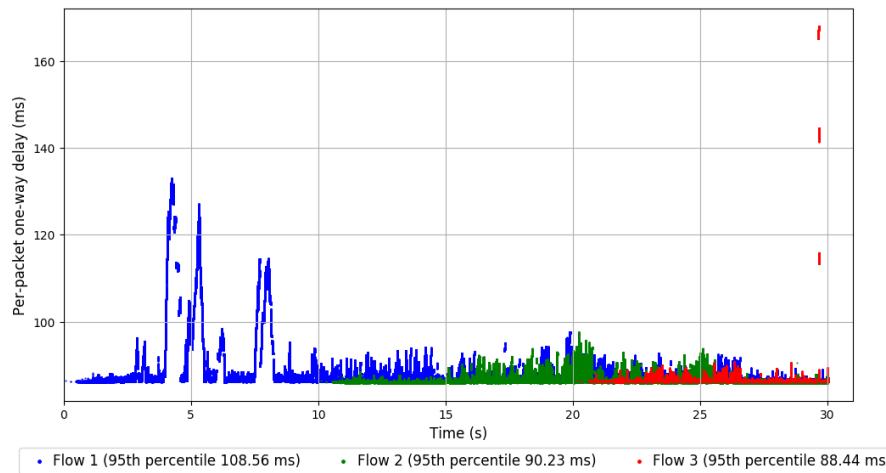
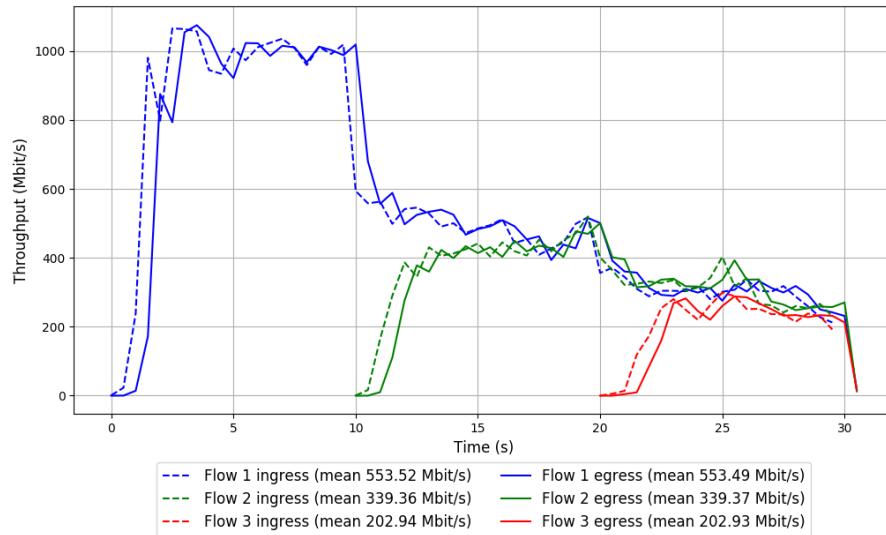


Run 3: Statistics of FillP

```
Start at: 2019-02-11 17:39:22
End at: 2019-02-11 17:39:52
Local clock offset: -0.084 ms
Remote clock offset: -0.124 ms

# Below is generated by plot.py at 2019-02-11 20:32:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 846.00 Mbit/s
95th percentile per-packet one-way delay: 103.018 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 553.49 Mbit/s
95th percentile per-packet one-way delay: 108.565 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 339.37 Mbit/s
95th percentile per-packet one-way delay: 90.230 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 202.93 Mbit/s
95th percentile per-packet one-way delay: 88.438 ms
Loss rate: 0.01%
```

Run 3: Report of FillP — Data Link

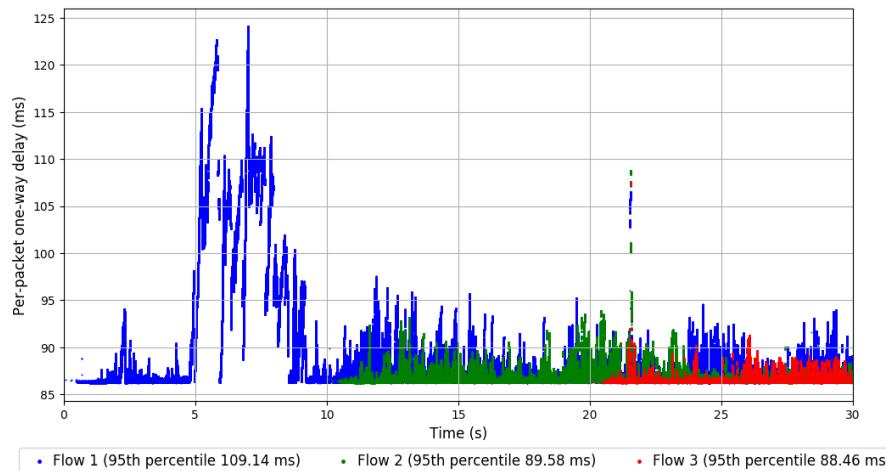
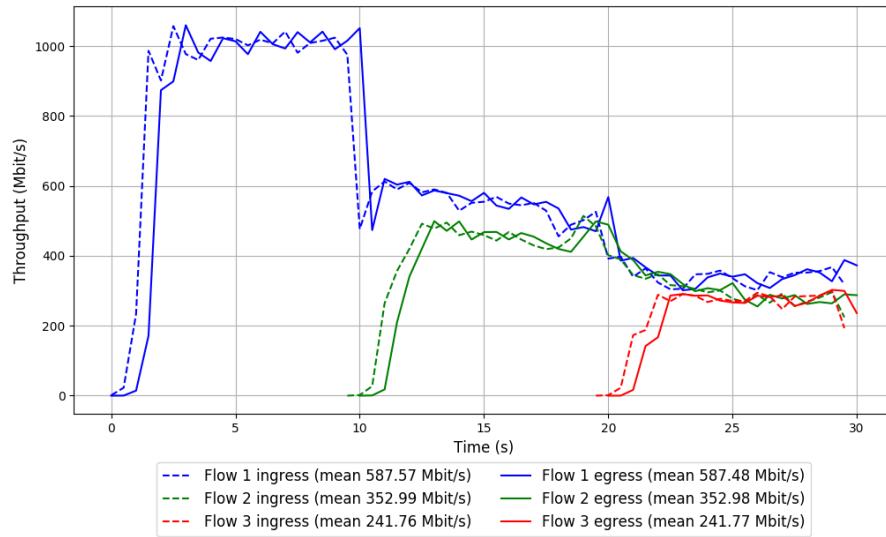


Run 4: Statistics of FillP

```
Start at: 2019-02-11 18:16:40
End at: 2019-02-11 18:17:10
Local clock offset: -0.008 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2019-02-11 20:34:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 902.78 Mbit/s
95th percentile per-packet one-way delay: 106.775 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 587.48 Mbit/s
95th percentile per-packet one-way delay: 109.139 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 352.98 Mbit/s
95th percentile per-packet one-way delay: 89.578 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 241.77 Mbit/s
95th percentile per-packet one-way delay: 88.458 ms
Loss rate: 0.00%
```

Run 4: Report of FillP — Data Link

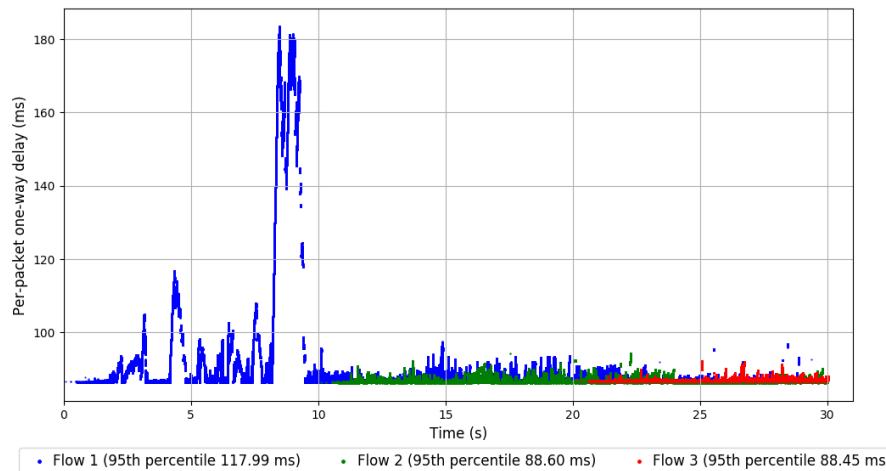
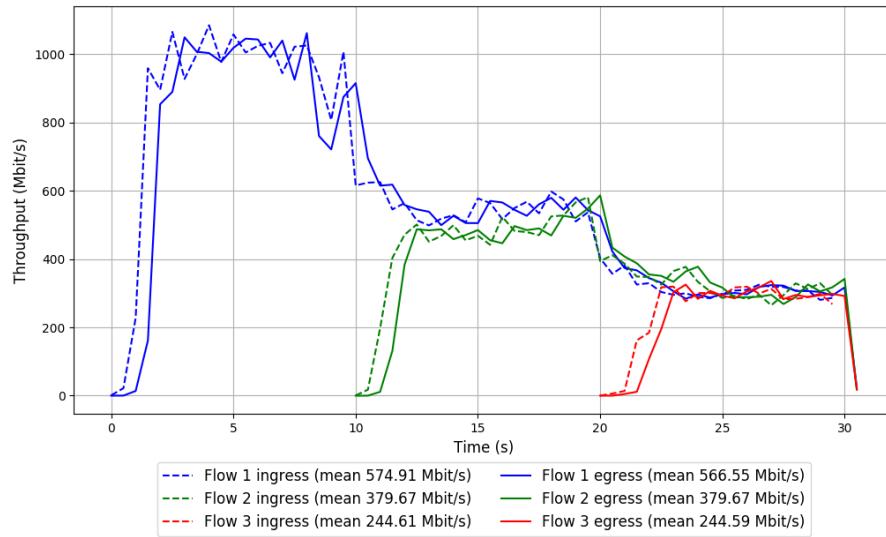


```
Run 5: Statistics of FillP
```

```
Start at: 2019-02-11 18:54:03
End at: 2019-02-11 18:54:33
Local clock offset: -0.428 ms
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2019-02-11 20:34:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 899.42 Mbit/s
95th percentile per-packet one-way delay: 103.024 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 566.55 Mbit/s
95th percentile per-packet one-way delay: 117.986 ms
Loss rate: 1.45%
-- Flow 2:
Average throughput: 379.67 Mbit/s
95th percentile per-packet one-way delay: 88.596 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 244.59 Mbit/s
95th percentile per-packet one-way delay: 88.453 ms
Loss rate: 0.00%
```

Run 5: Report of FillP — Data Link

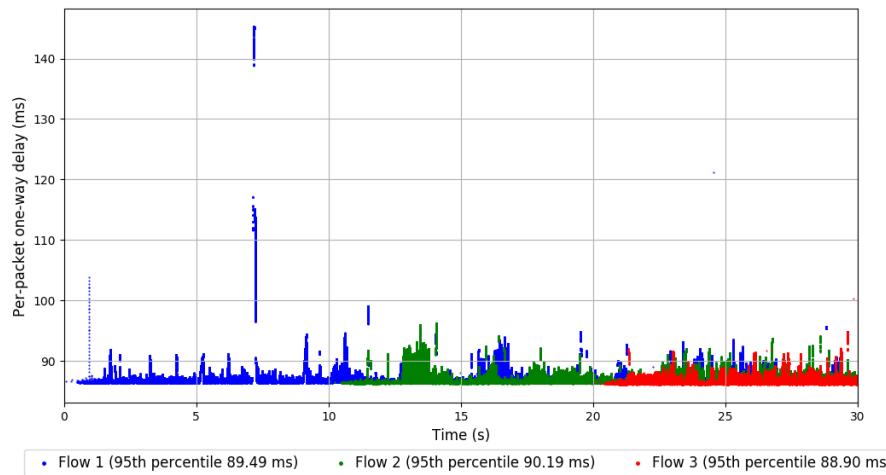
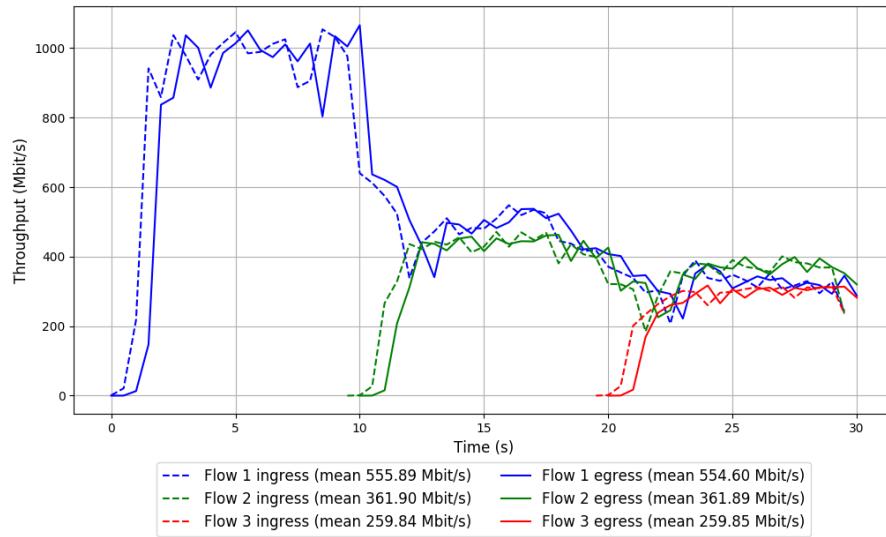


Run 1: Statistics of FillP-Sheep

```
Start at: 2019-02-11 16:16:00
End at: 2019-02-11 16:16:30
Local clock offset: -0.263 ms
Remote clock offset: -0.072 ms

# Below is generated by plot.py at 2019-02-11 20:34:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 881.81 Mbit/s
95th percentile per-packet one-way delay: 89.625 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 554.60 Mbit/s
95th percentile per-packet one-way delay: 89.491 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 361.89 Mbit/s
95th percentile per-packet one-way delay: 90.188 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 259.85 Mbit/s
95th percentile per-packet one-way delay: 88.901 ms
Loss rate: 0.00%
```

Run 1: Report of FillP-Sheep — Data Link

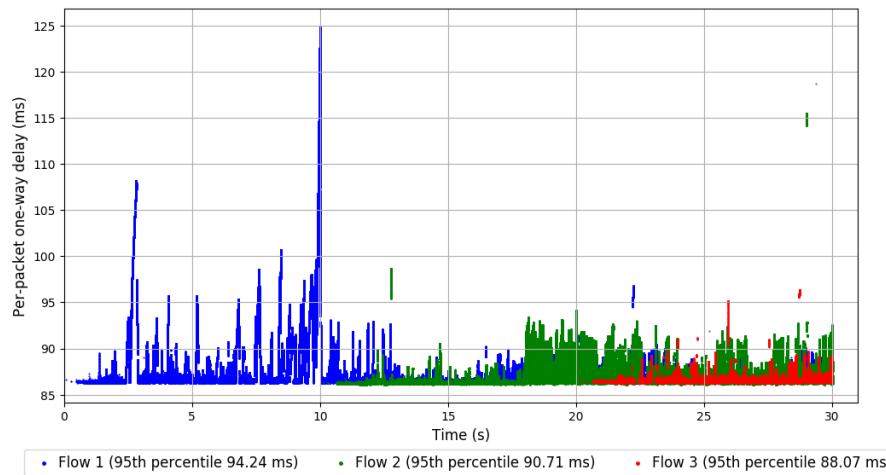
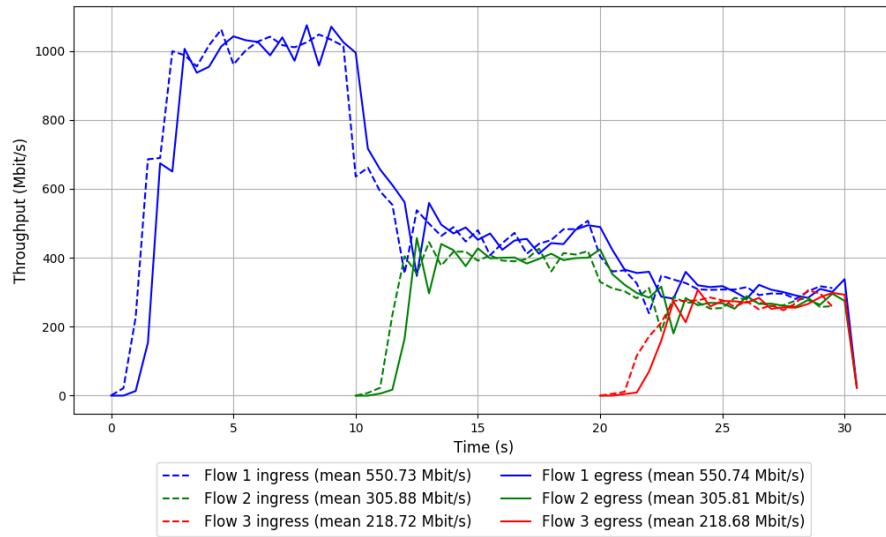


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-02-11 16:54:41
End at: 2019-02-11 16:55:11
Local clock offset: -0.252 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2019-02-11 20:34:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 826.15 Mbit/s
95th percentile per-packet one-way delay: 92.378 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 550.74 Mbit/s
95th percentile per-packet one-way delay: 94.240 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 305.81 Mbit/s
95th percentile per-packet one-way delay: 90.707 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 218.68 Mbit/s
95th percentile per-packet one-way delay: 88.069 ms
Loss rate: 0.00%
```

Run 2: Report of FillP-Sheep — Data Link

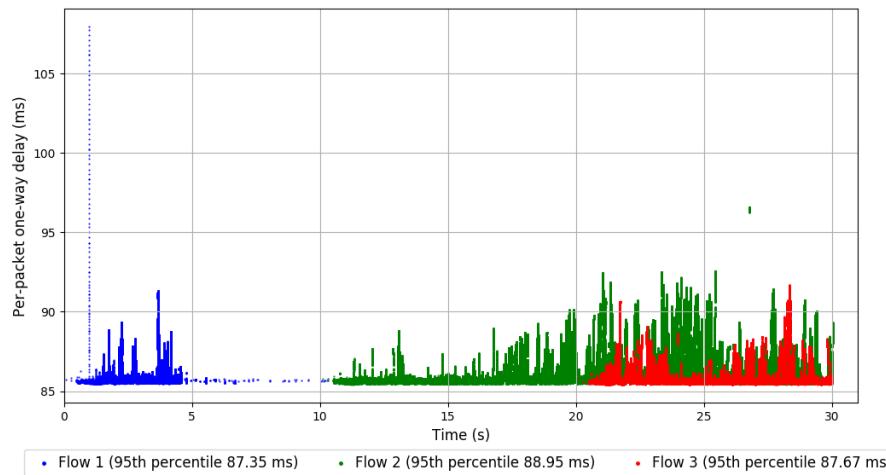
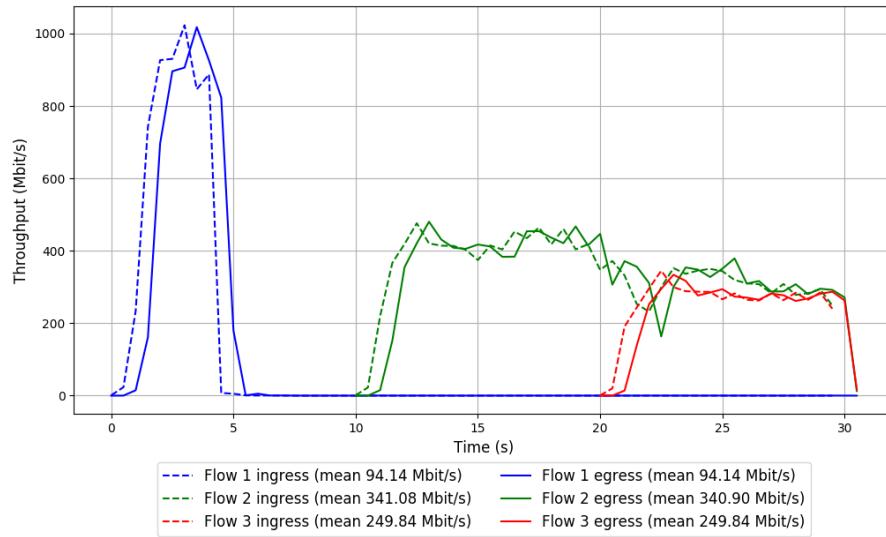


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-02-11 17:33:20
End at: 2019-02-11 17:33:50
Local clock offset: 0.335 ms
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2019-02-11 20:34:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 403.69 Mbit/s
95th percentile per-packet one-way delay: 88.383 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 94.14 Mbit/s
95th percentile per-packet one-way delay: 87.350 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 340.90 Mbit/s
95th percentile per-packet one-way delay: 88.947 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 249.84 Mbit/s
95th percentile per-packet one-way delay: 87.675 ms
Loss rate: 0.00%
```

Run 3: Report of FillP-Sheep — Data Link

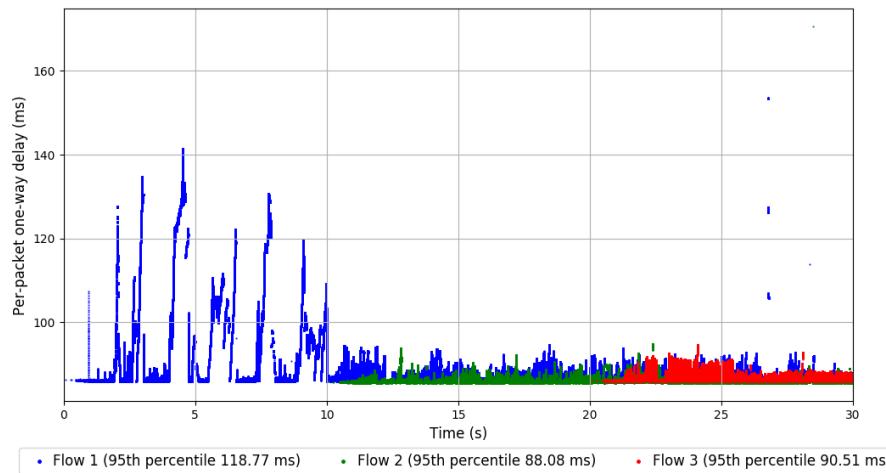
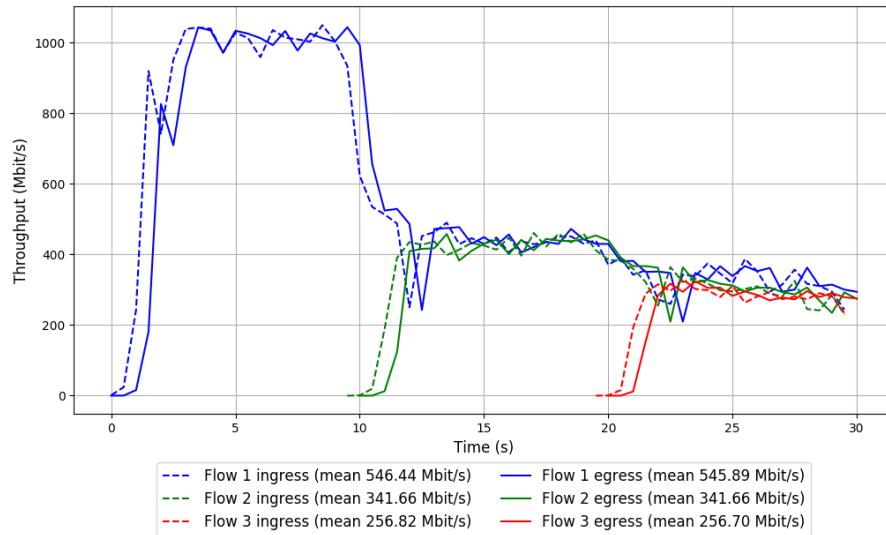


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-02-11 18:10:20
End at: 2019-02-11 18:10:50
Local clock offset: 0.29 ms
Remote clock offset: -0.053 ms

# Below is generated by plot.py at 2019-02-11 20:34:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 858.51 Mbit/s
95th percentile per-packet one-way delay: 108.993 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 545.89 Mbit/s
95th percentile per-packet one-way delay: 118.773 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 341.66 Mbit/s
95th percentile per-packet one-way delay: 88.084 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 256.70 Mbit/s
95th percentile per-packet one-way delay: 90.512 ms
Loss rate: 0.05%
```

Run 4: Report of FillP-Sheep — Data Link

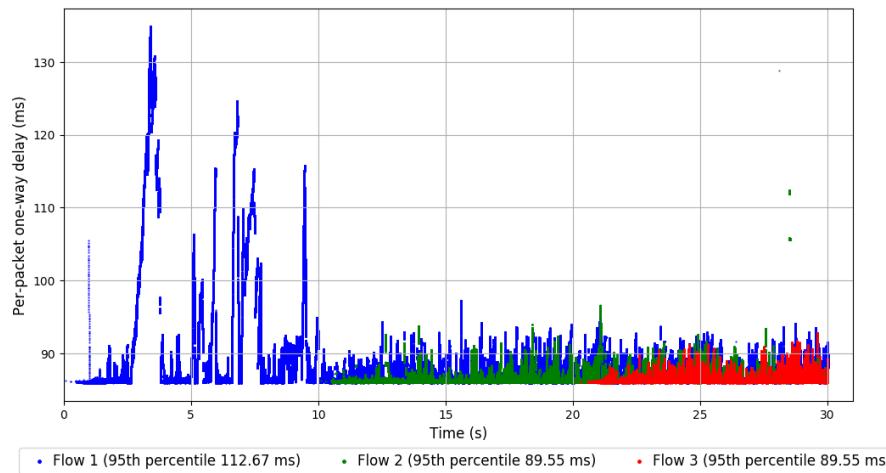
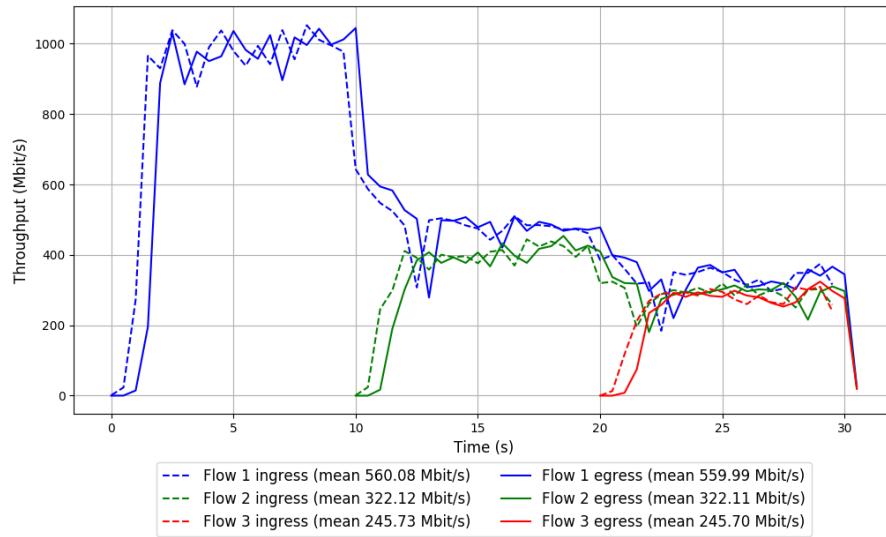


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-02-11 18:47:45
End at: 2019-02-11 18:48:15
Local clock offset: -0.152 ms
Remote clock offset: -0.058 ms

# Below is generated by plot.py at 2019-02-11 20:45:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 855.47 Mbit/s
95th percentile per-packet one-way delay: 107.116 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 559.99 Mbit/s
95th percentile per-packet one-way delay: 112.668 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 322.11 Mbit/s
95th percentile per-packet one-way delay: 89.545 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 245.70 Mbit/s
95th percentile per-packet one-way delay: 89.553 ms
Loss rate: 0.00%
```

Run 5: Report of FillP-Sheep — Data Link

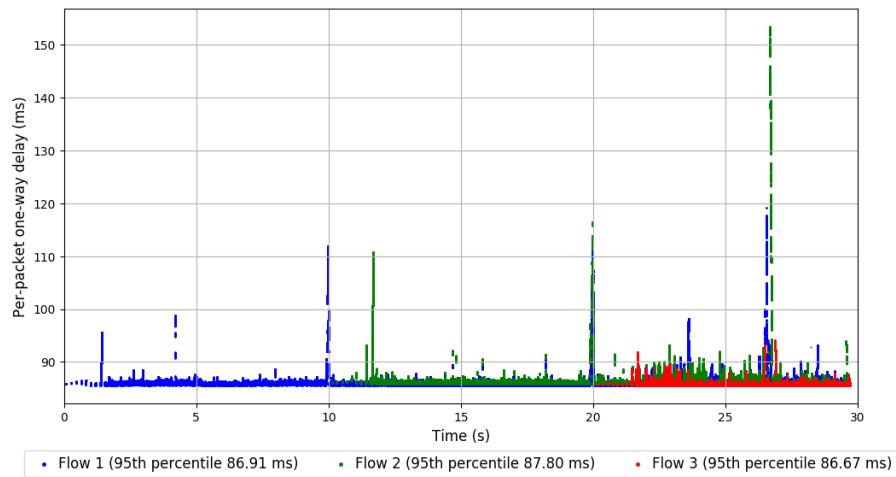
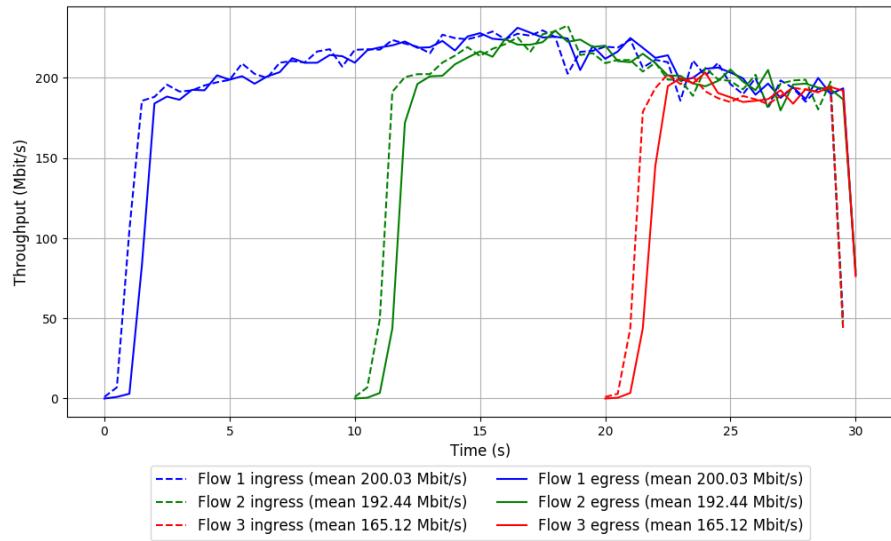


Run 1: Statistics of Indigo

```
Start at: 2019-02-11 16:06:07
End at: 2019-02-11 16:06:37
Local clock offset: 0.223 ms
Remote clock offset: -0.107 ms

# Below is generated by plot.py at 2019-02-11 20:50:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 380.34 Mbit/s
95th percentile per-packet one-way delay: 87.194 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 200.03 Mbit/s
95th percentile per-packet one-way delay: 86.912 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 192.44 Mbit/s
95th percentile per-packet one-way delay: 87.796 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 165.12 Mbit/s
95th percentile per-packet one-way delay: 86.665 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link

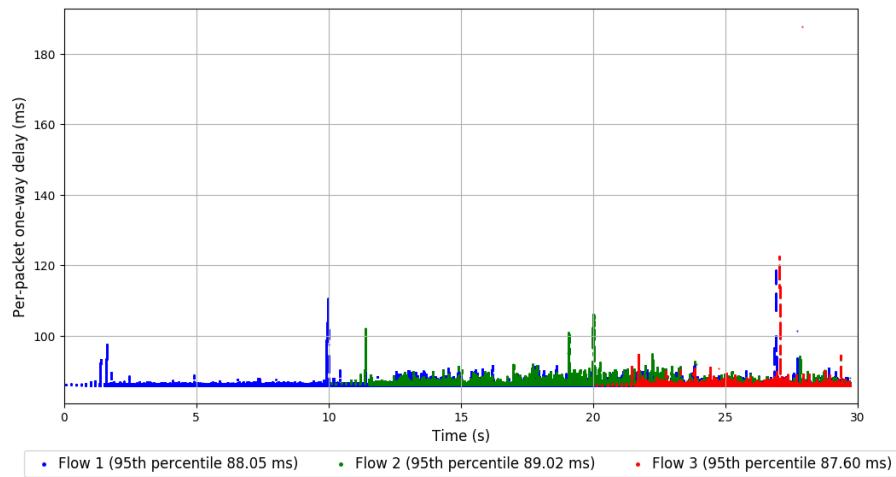
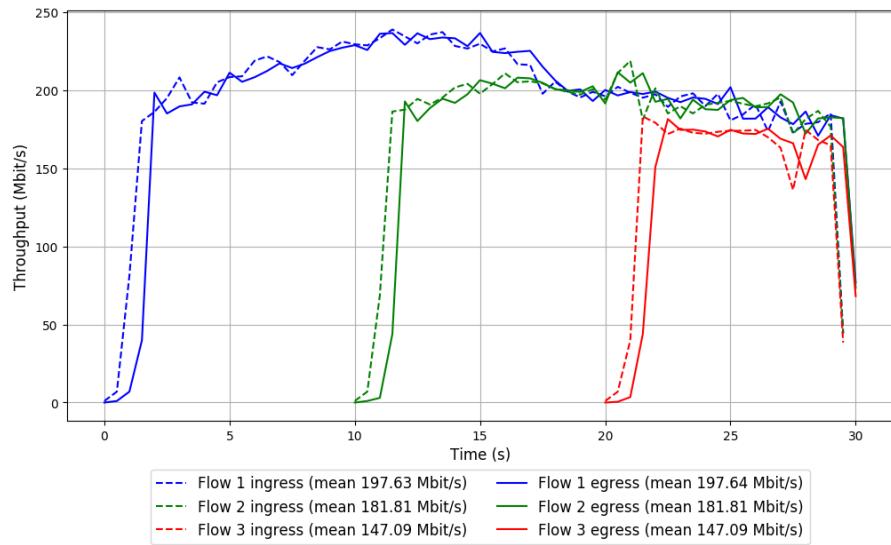


Run 2: Statistics of Indigo

```
Start at: 2019-02-11 16:43:42
End at: 2019-02-11 16:44:12
Local clock offset: 0.092 ms
Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2019-02-11 20:50:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 365.45 Mbit/s
95th percentile per-packet one-way delay: 88.376 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 197.64 Mbit/s
95th percentile per-packet one-way delay: 88.049 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 181.81 Mbit/s
95th percentile per-packet one-way delay: 89.015 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 147.09 Mbit/s
95th percentile per-packet one-way delay: 87.603 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo — Data Link

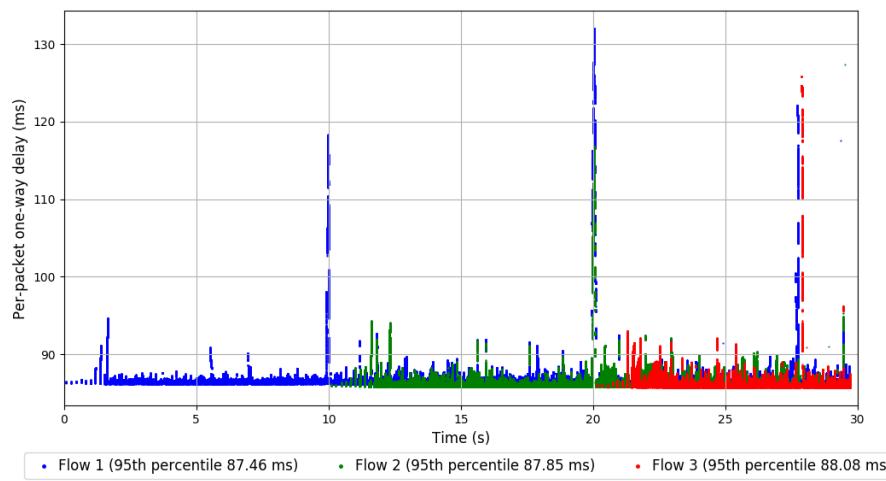
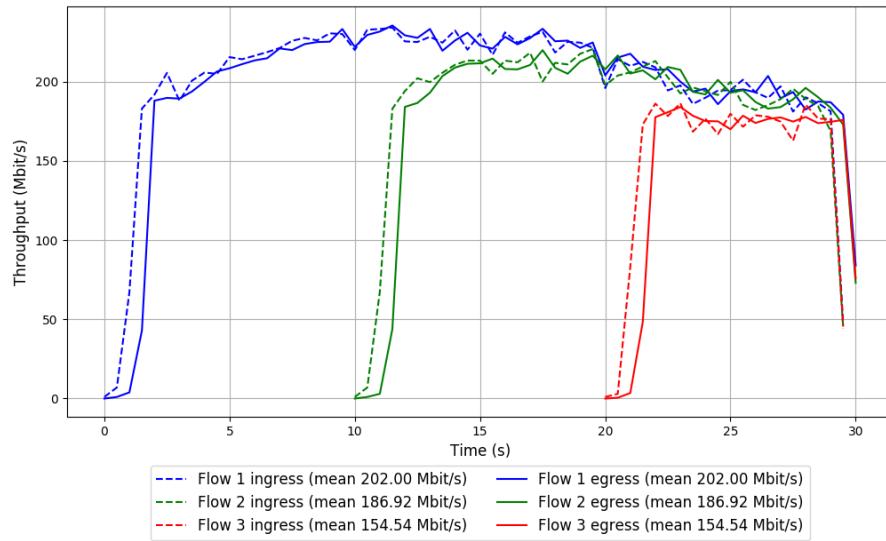


Run 3: Statistics of Indigo

```
Start at: 2019-02-11 17:22:55
End at: 2019-02-11 17:23:25
Local clock offset: -0.118 ms
Remote clock offset: 0.049 ms

# Below is generated by plot.py at 2019-02-11 20:50:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 375.59 Mbit/s
95th percentile per-packet one-way delay: 87.661 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 202.00 Mbit/s
95th percentile per-packet one-way delay: 87.456 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 186.92 Mbit/s
95th percentile per-packet one-way delay: 87.854 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 154.54 Mbit/s
95th percentile per-packet one-way delay: 88.076 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo — Data Link

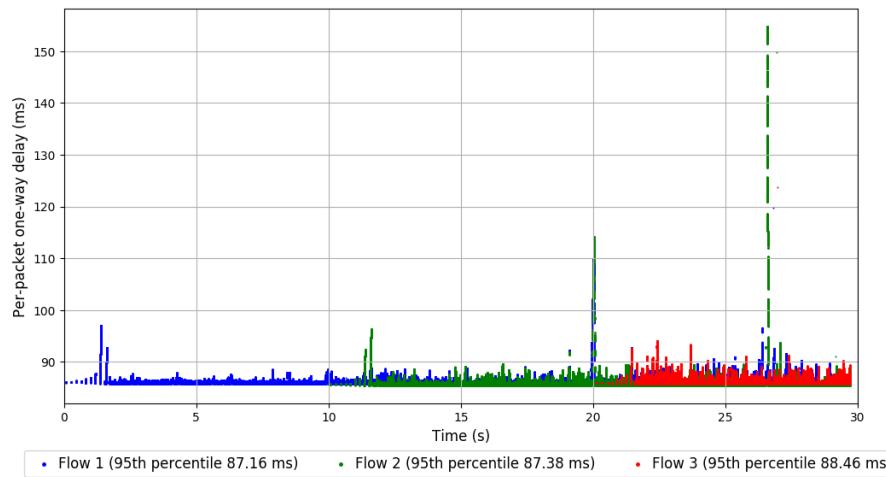
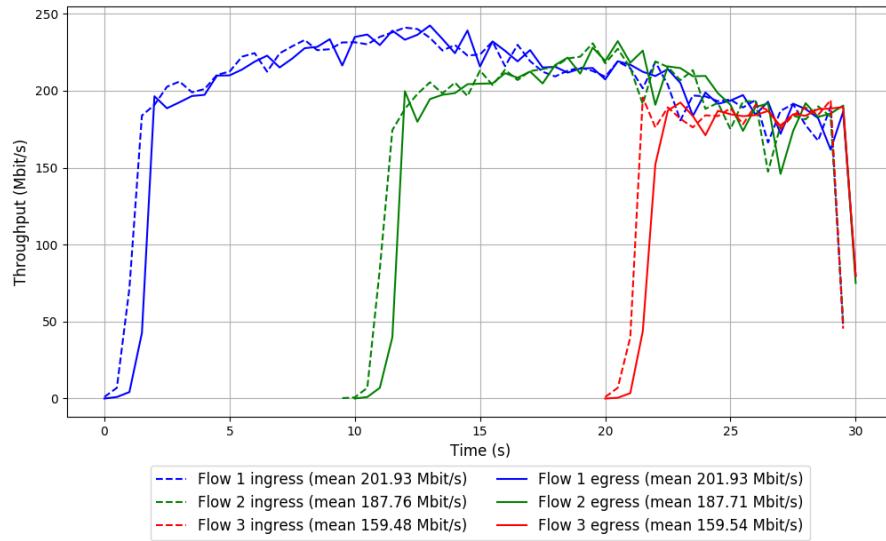


Run 4: Statistics of Indigo

```
Start at: 2019-02-11 18:00:23
End at: 2019-02-11 18:00:53
Local clock offset: 0.341 ms
Remote clock offset: -0.144 ms

# Below is generated by plot.py at 2019-02-11 20:52:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 377.80 Mbit/s
95th percentile per-packet one-way delay: 87.483 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 201.93 Mbit/s
95th percentile per-packet one-way delay: 87.163 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 187.71 Mbit/s
95th percentile per-packet one-way delay: 87.380 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 159.54 Mbit/s
95th percentile per-packet one-way delay: 88.459 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo — Data Link

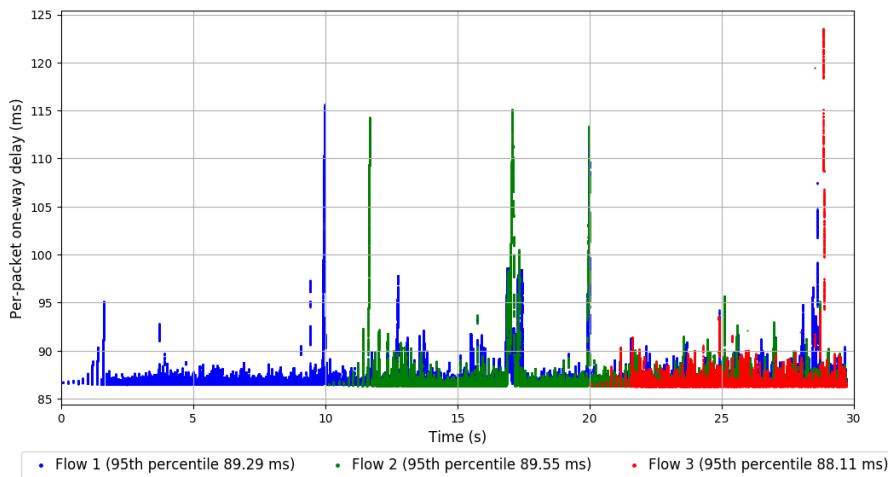
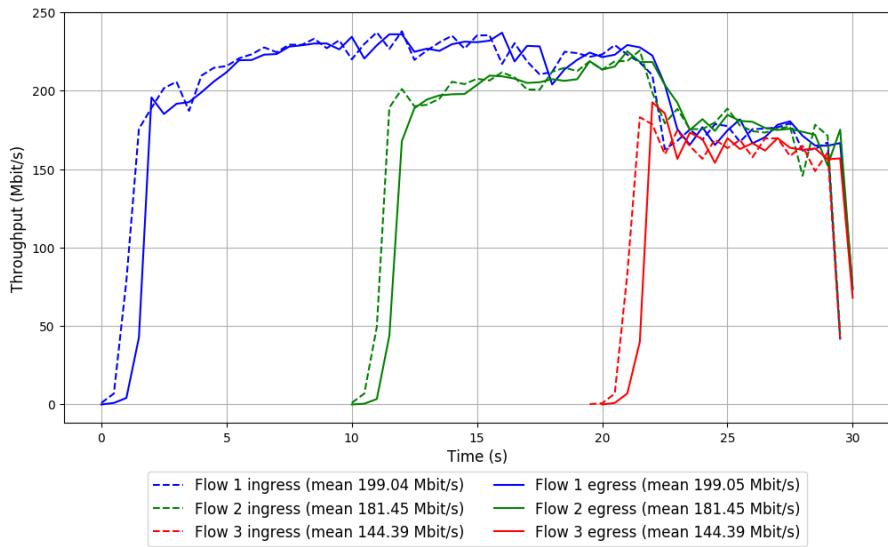


Run 5: Statistics of Indigo

```
Start at: 2019-02-11 18:37:51
End at: 2019-02-11 18:38:21
Local clock offset: -0.415 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2019-02-11 20:52:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 365.94 Mbit/s
95th percentile per-packet one-way delay: 89.129 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 199.05 Mbit/s
95th percentile per-packet one-way delay: 89.292 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 181.45 Mbit/s
95th percentile per-packet one-way delay: 89.553 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 144.39 Mbit/s
95th percentile per-packet one-way delay: 88.115 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo — Data Link



Run 1: Statistics of Indigo-MusesC3

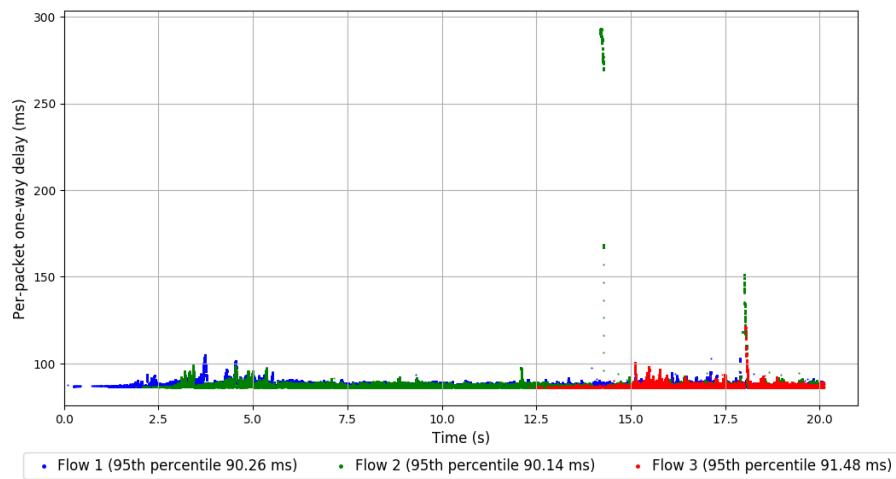
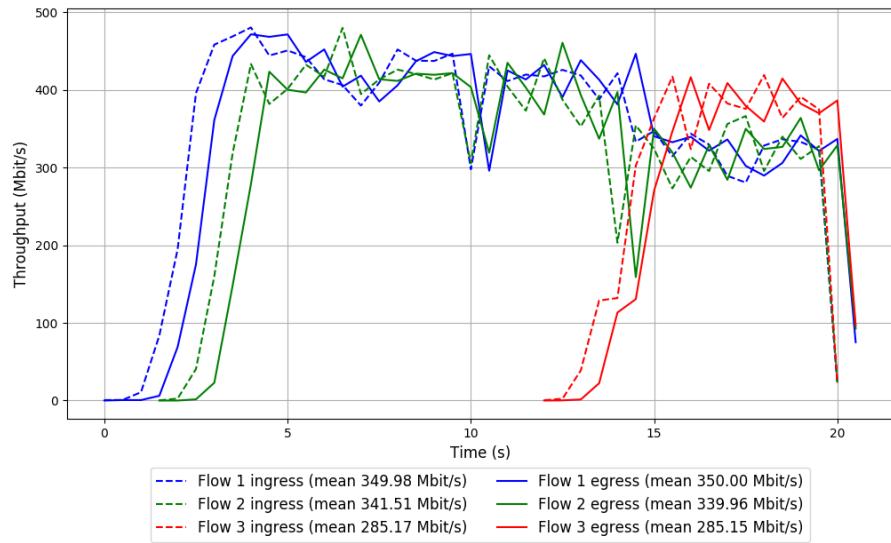
Start at: 2019-02-11 16:02:35

End at: 2019-02-11 16:03:05

Local clock offset: -0.374 ms

Remote clock offset: -0.072 ms

Run 1: Report of Indigo-MusesC3 — Data Link

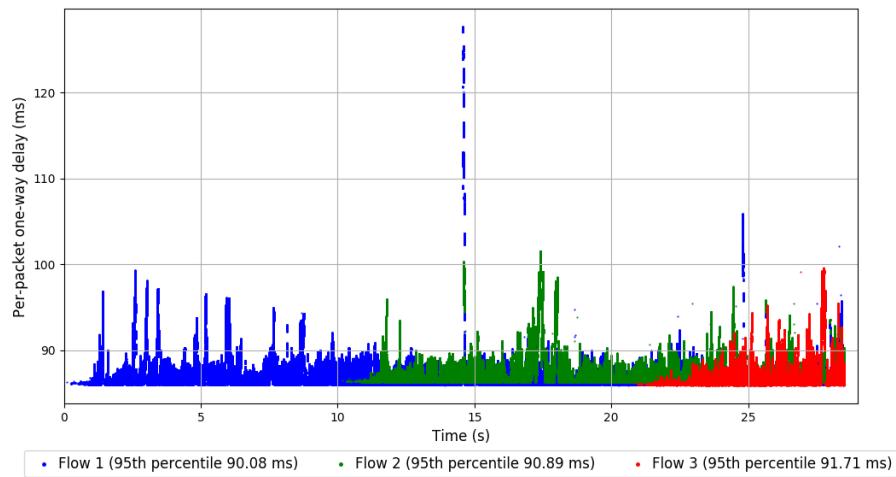
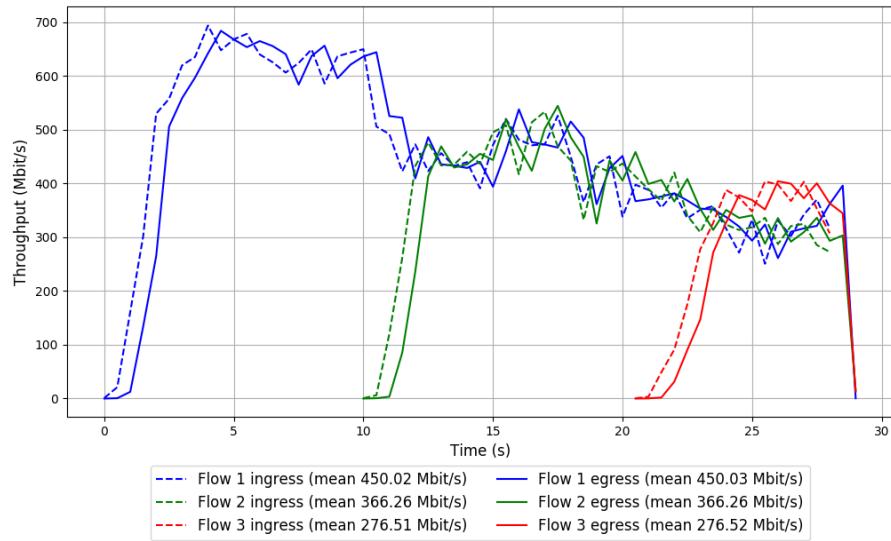


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-02-11 16:39:41
End at: 2019-02-11 16:40:11
Local clock offset: 0.006 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2019-02-11 20:53:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 761.36 Mbit/s
95th percentile per-packet one-way delay: 90.542 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 450.03 Mbit/s
95th percentile per-packet one-way delay: 90.078 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 366.26 Mbit/s
95th percentile per-packet one-way delay: 90.894 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 276.52 Mbit/s
95th percentile per-packet one-way delay: 91.710 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesC3 — Data Link

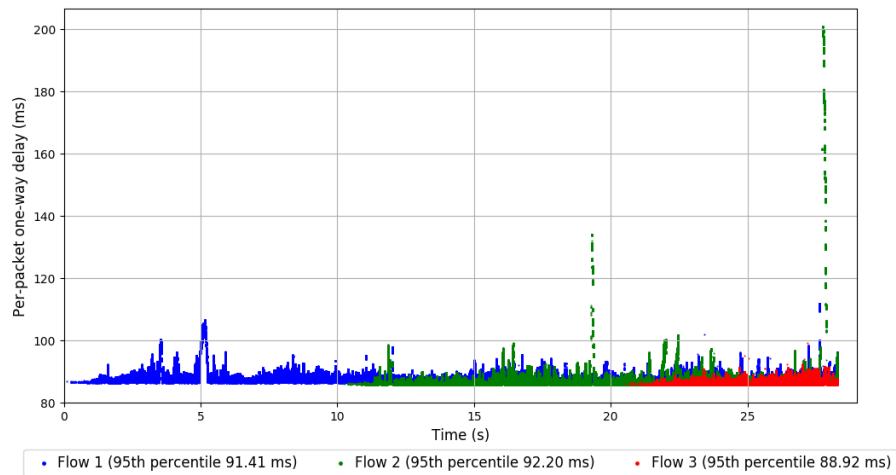
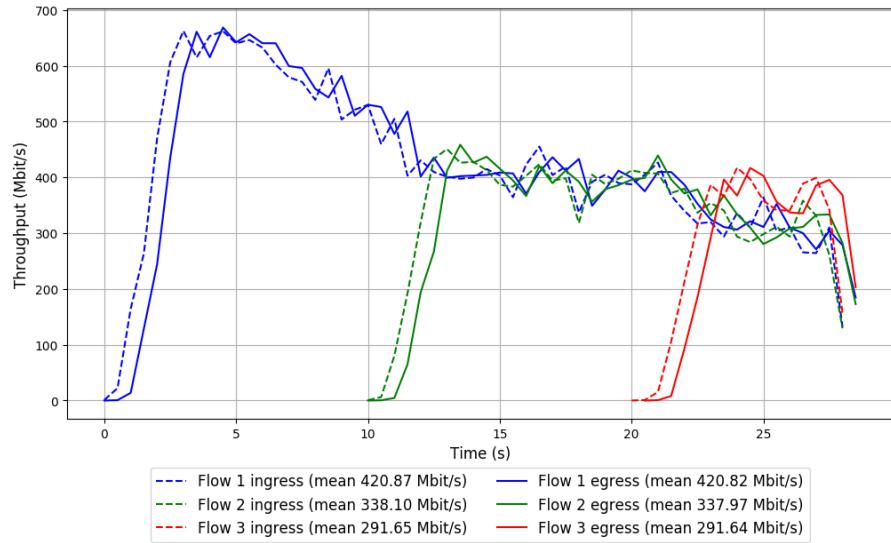


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-02-11 17:19:06
End at: 2019-02-11 17:19:36
Local clock offset: -0.118 ms
Remote clock offset: 0.043 ms

# Below is generated by plot.py at 2019-02-11 21:03:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 717.76 Mbit/s
95th percentile per-packet one-way delay: 91.290 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 420.82 Mbit/s
95th percentile per-packet one-way delay: 91.407 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 337.97 Mbit/s
95th percentile per-packet one-way delay: 92.200 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 291.64 Mbit/s
95th percentile per-packet one-way delay: 88.917 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesC3 — Data Link

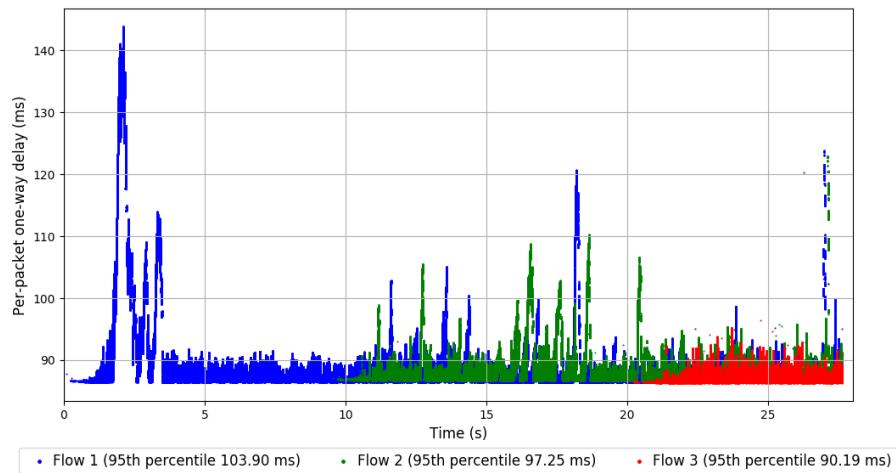
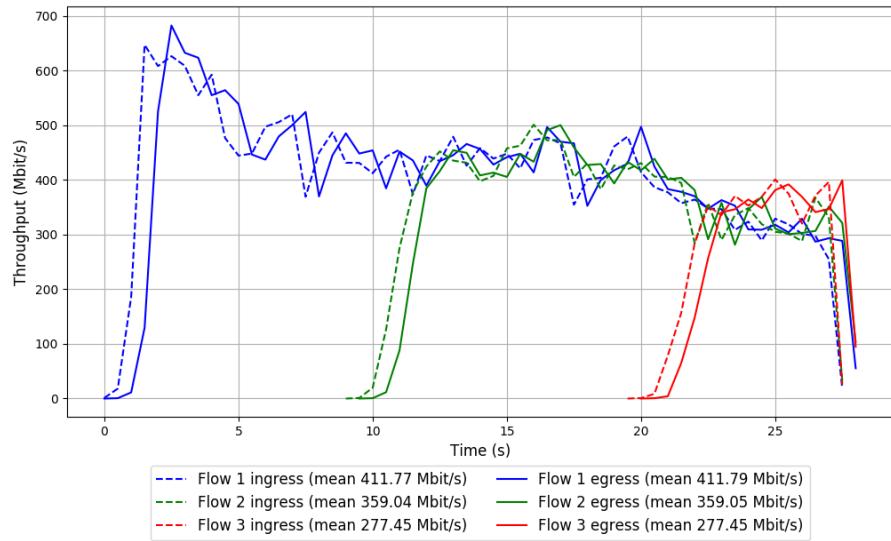


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-02-11 17:56:38
End at: 2019-02-11 17:57:08
Local clock offset: -0.507 ms
Remote clock offset: -0.119 ms

# Below is generated by plot.py at 2019-02-11 21:05:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 723.44 Mbit/s
95th percentile per-packet one-way delay: 99.579 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 411.79 Mbit/s
95th percentile per-packet one-way delay: 103.896 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 359.05 Mbit/s
95th percentile per-packet one-way delay: 97.248 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 277.45 Mbit/s
95th percentile per-packet one-way delay: 90.187 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesC3 — Data Link

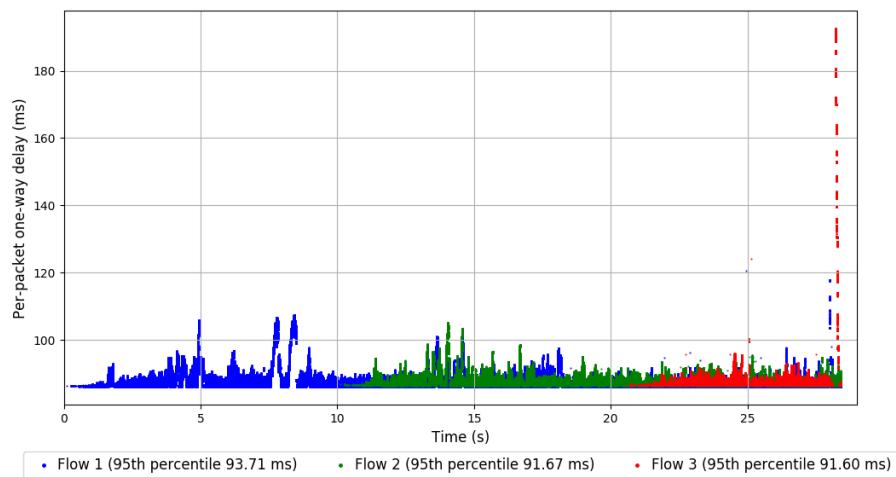
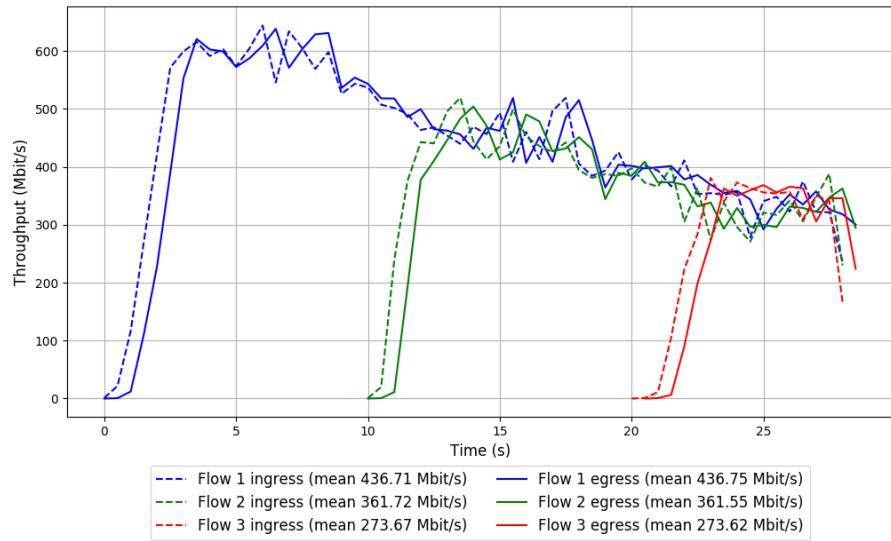


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-02-11 18:34:21
End at: 2019-02-11 18:34:51
Local clock offset: -0.177 ms
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2019-02-11 21:08:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 746.68 Mbit/s
95th percentile per-packet one-way delay: 93.016 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 436.75 Mbit/s
95th percentile per-packet one-way delay: 93.706 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 361.55 Mbit/s
95th percentile per-packet one-way delay: 91.665 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 273.62 Mbit/s
95th percentile per-packet one-way delay: 91.598 ms
Loss rate: 0.02%
```

Run 5: Report of Indigo-MusesC3 — Data Link

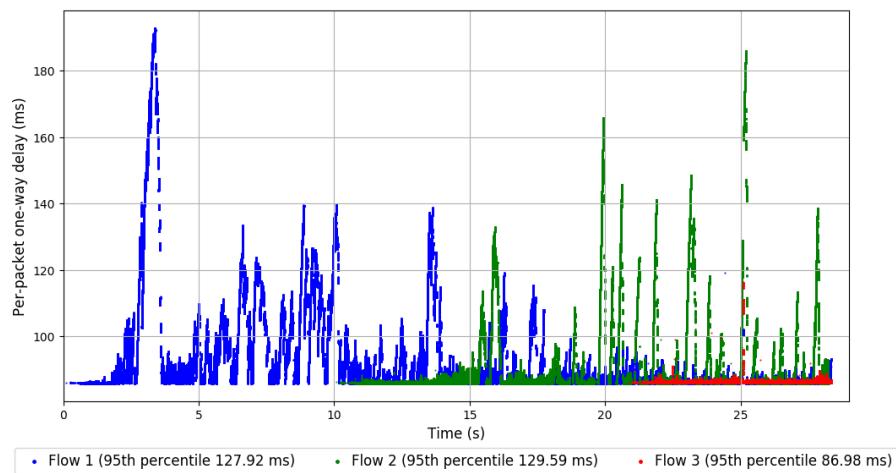
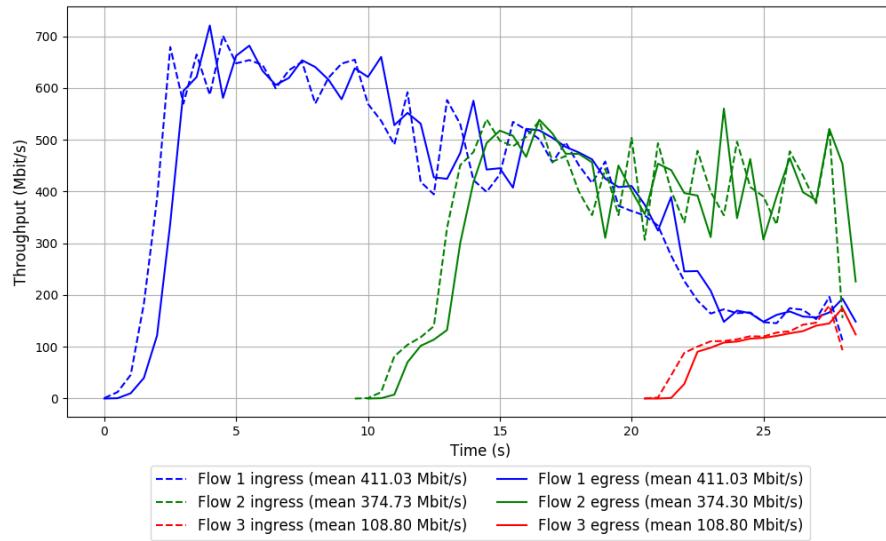


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-02-11 16:28:20
End at: 2019-02-11 16:28:50
Local clock offset: 0.028 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2019-02-11 21:08:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 680.58 Mbit/s
95th percentile per-packet one-way delay: 127.713 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 411.03 Mbit/s
95th percentile per-packet one-way delay: 127.921 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 374.30 Mbit/s
95th percentile per-packet one-way delay: 129.592 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 108.80 Mbit/s
95th percentile per-packet one-way delay: 86.980 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesC5 — Data Link

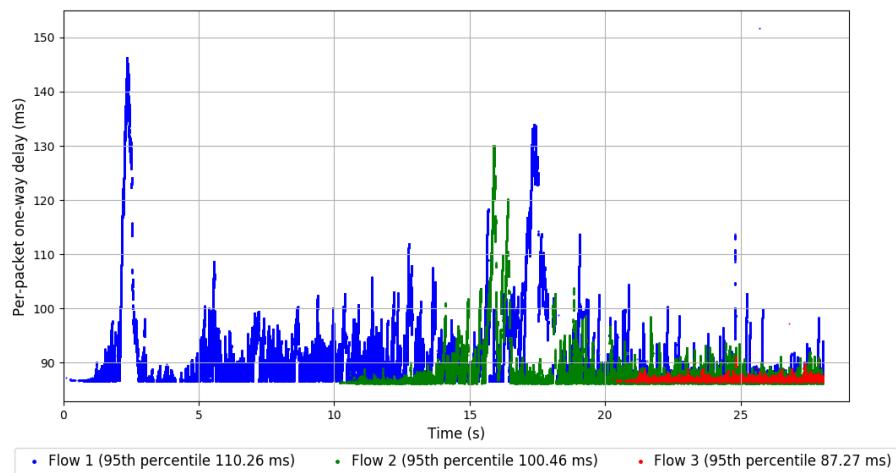
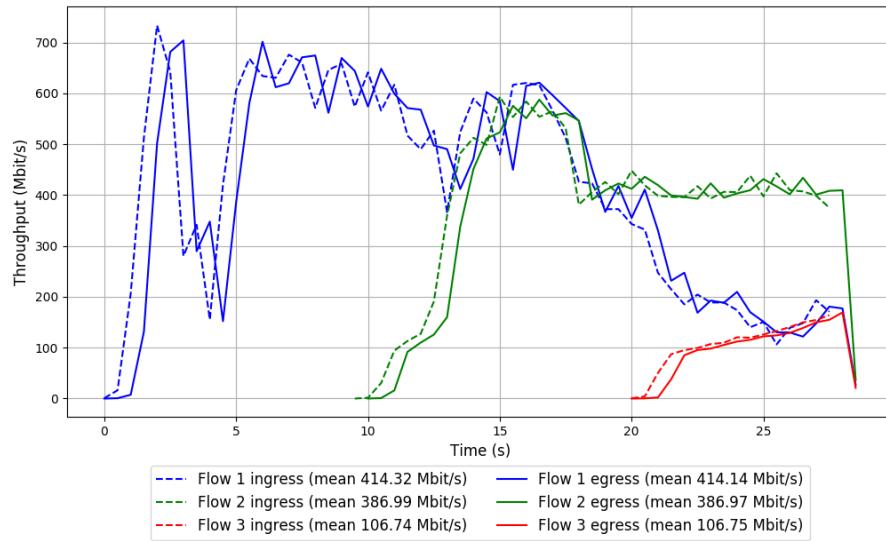


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-02-11 17:07:28
End at: 2019-02-11 17:07:58
Local clock offset: -0.335 ms
Remote clock offset: 0.05 ms

# Below is generated by plot.py at 2019-02-11 21:08:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 693.37 Mbit/s
95th percentile per-packet one-way delay: 104.848 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 414.14 Mbit/s
95th percentile per-packet one-way delay: 110.256 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 386.97 Mbit/s
95th percentile per-packet one-way delay: 100.462 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 106.75 Mbit/s
95th percentile per-packet one-way delay: 87.265 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesC5 — Data Link

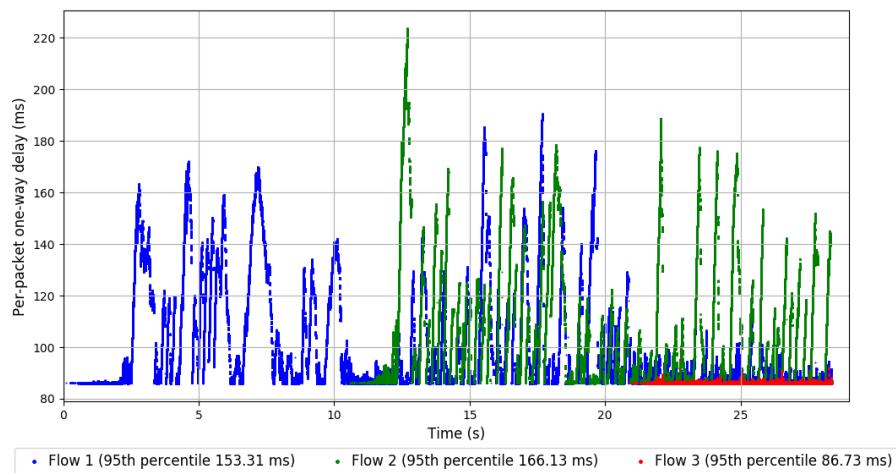
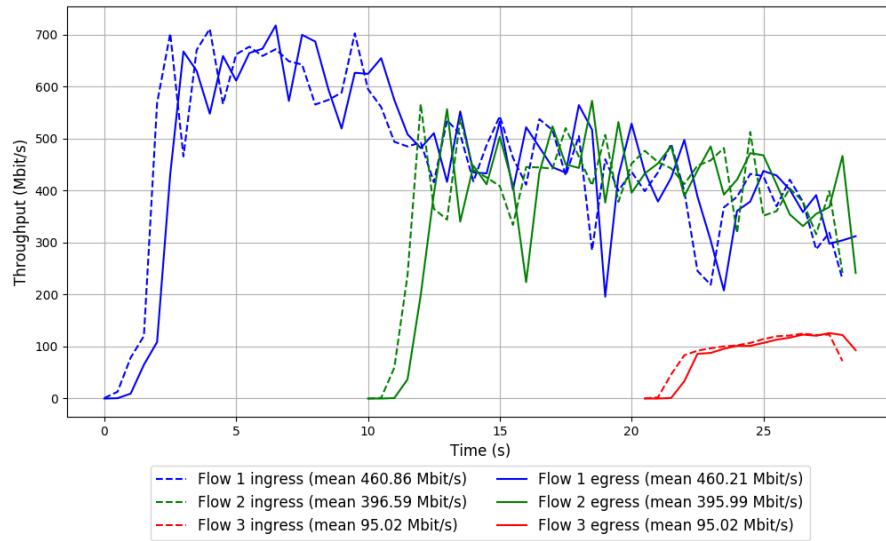


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-02-11 17:45:12
End at: 2019-02-11 17:45:42
Local clock offset: -0.039 ms
Remote clock offset: -0.099 ms

# Below is generated by plot.py at 2019-02-11 21:10:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 736.57 Mbit/s
95th percentile per-packet one-way delay: 158.326 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 460.21 Mbit/s
95th percentile per-packet one-way delay: 153.312 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 395.99 Mbit/s
95th percentile per-packet one-way delay: 166.135 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 95.02 Mbit/s
95th percentile per-packet one-way delay: 86.735 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesC5 — Data Link

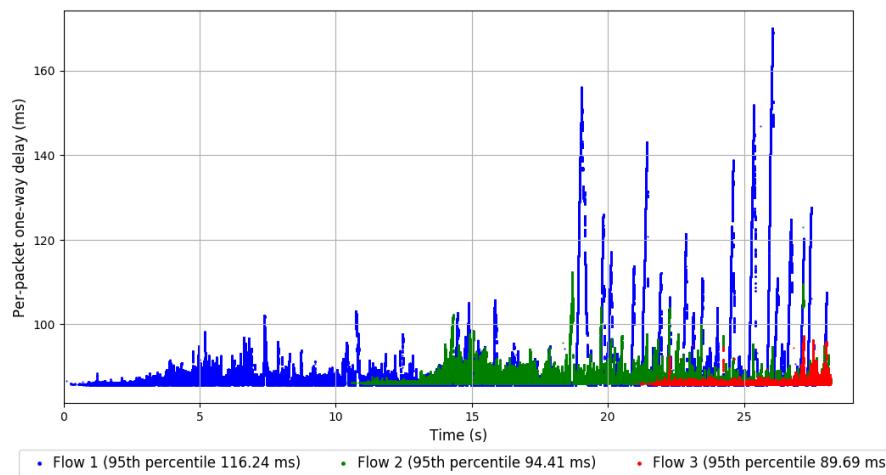
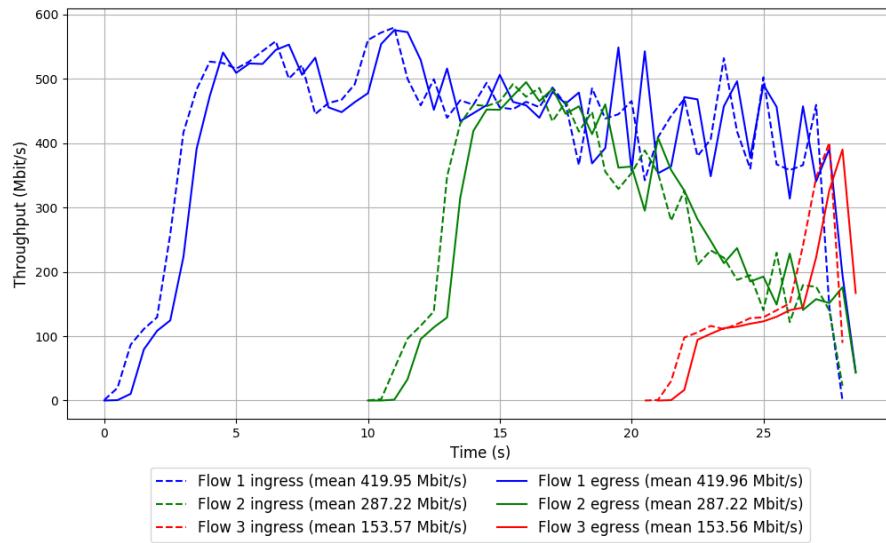


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-02-11 18:22:39
End at: 2019-02-11 18:23:09
Local clock offset: 0.27 ms
Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2019-02-11 21:10:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 640.09 Mbit/s
95th percentile per-packet one-way delay: 108.103 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 419.96 Mbit/s
95th percentile per-packet one-way delay: 116.236 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 287.22 Mbit/s
95th percentile per-packet one-way delay: 94.413 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 153.56 Mbit/s
95th percentile per-packet one-way delay: 89.693 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesC5 — Data Link

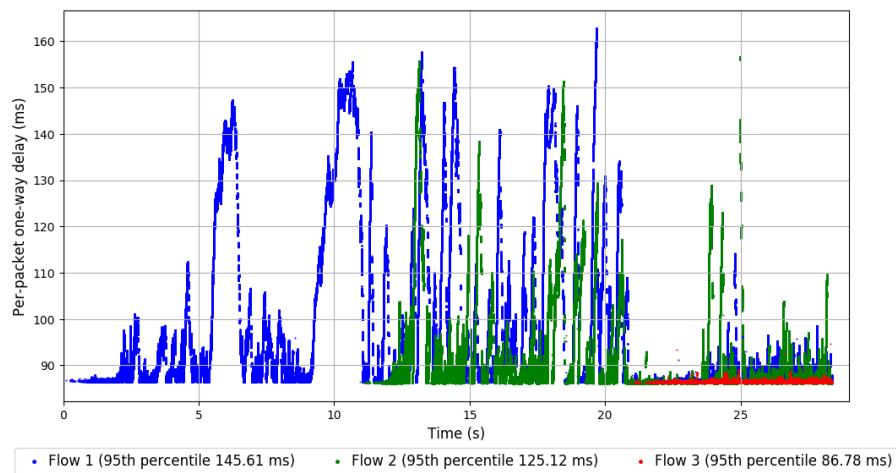
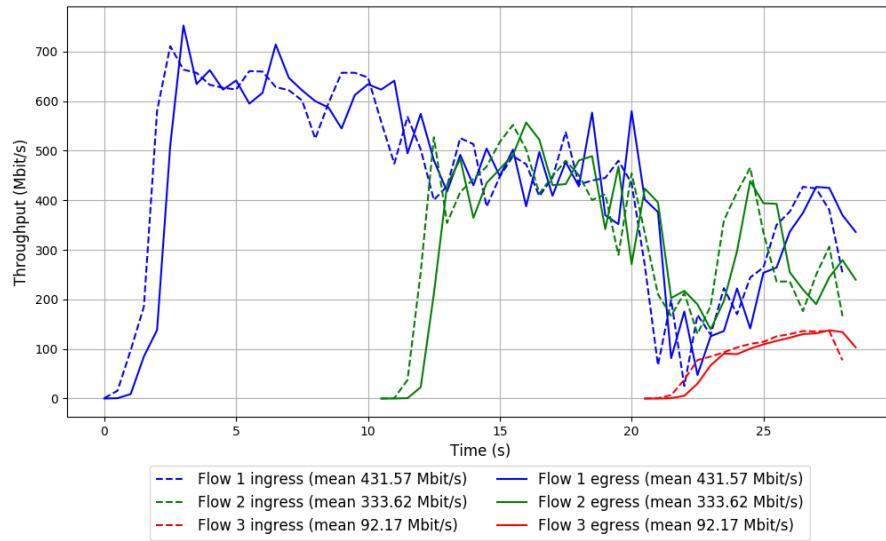


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-02-11 19:00:03
End at: 2019-02-11 19:00:33
Local clock offset: -0.368 ms
Remote clock offset: -0.102 ms

# Below is generated by plot.py at 2019-02-11 21:10:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 661.08 Mbit/s
95th percentile per-packet one-way delay: 142.445 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 431.57 Mbit/s
95th percentile per-packet one-way delay: 145.613 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 333.62 Mbit/s
95th percentile per-packet one-way delay: 125.118 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 92.17 Mbit/s
95th percentile per-packet one-way delay: 86.783 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesC5 — Data Link

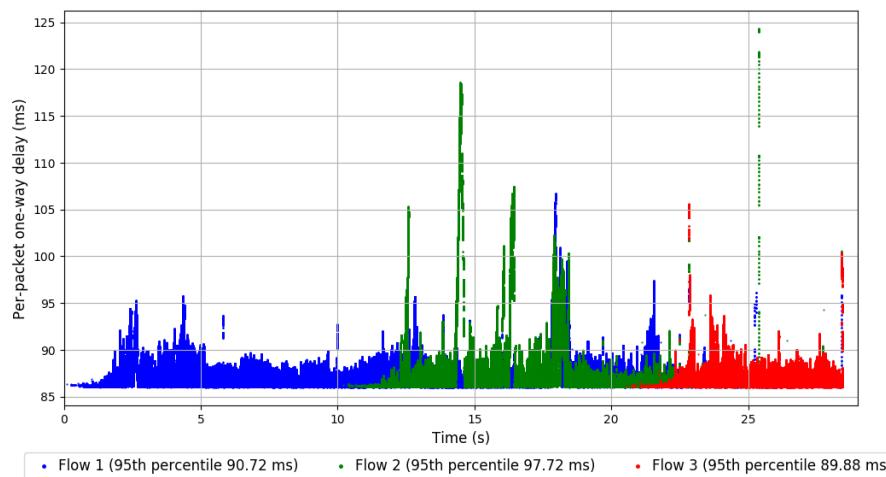
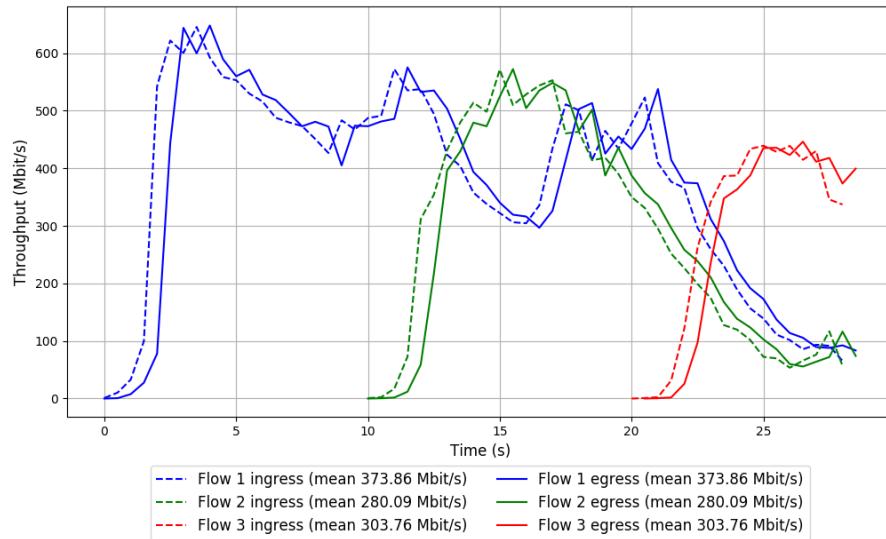


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-02-11 16:04:19
End at: 2019-02-11 16:04:49
Local clock offset: -0.174 ms
Remote clock offset: -0.086 ms

# Below is generated by plot.py at 2019-02-11 21:18:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 638.59 Mbit/s
95th percentile per-packet one-way delay: 91.939 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 373.86 Mbit/s
95th percentile per-packet one-way delay: 90.724 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 280.09 Mbit/s
95th percentile per-packet one-way delay: 97.725 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 303.76 Mbit/s
95th percentile per-packet one-way delay: 89.884 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesD — Data Link

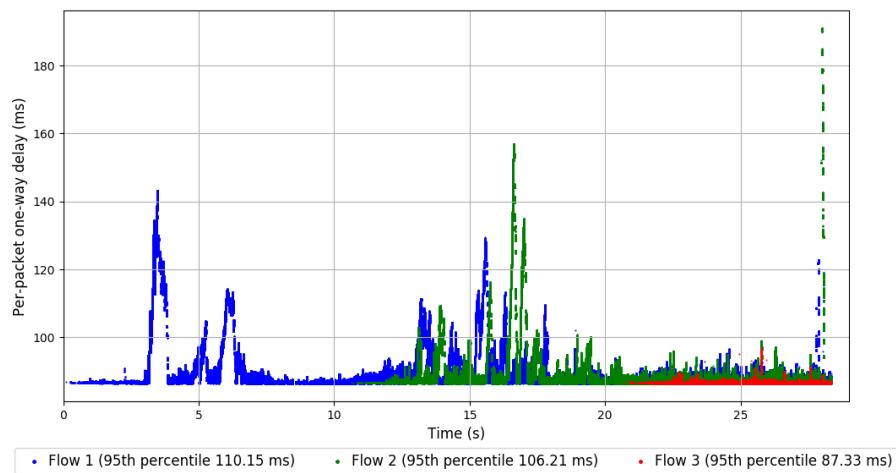
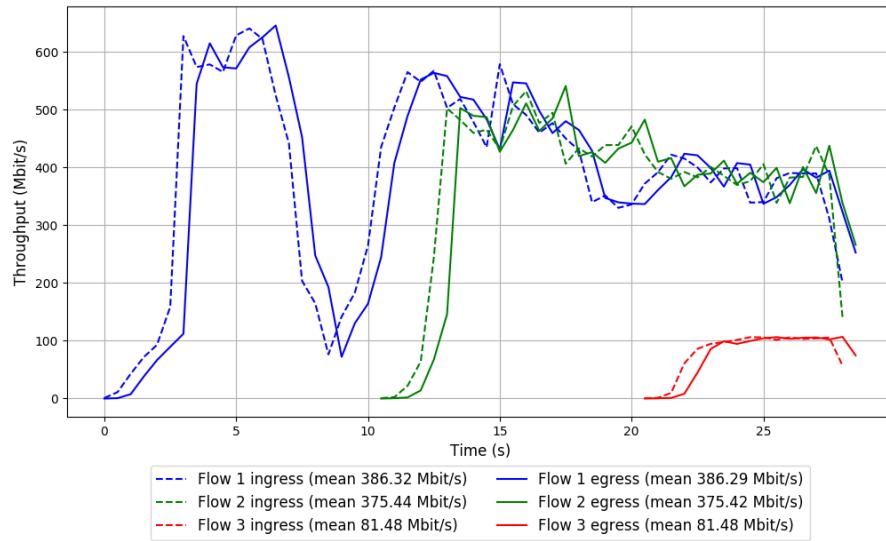


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-02-11 16:41:51
End at: 2019-02-11 16:42:21
Local clock offset: -0.396 ms
Remote clock offset: -0.002 ms

# Below is generated by plot.py at 2019-02-11 21:20:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 642.95 Mbit/s
95th percentile per-packet one-way delay: 109.032 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 386.29 Mbit/s
95th percentile per-packet one-way delay: 110.154 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 375.42 Mbit/s
95th percentile per-packet one-way delay: 106.213 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 81.48 Mbit/s
95th percentile per-packet one-way delay: 87.328 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesD — Data Link

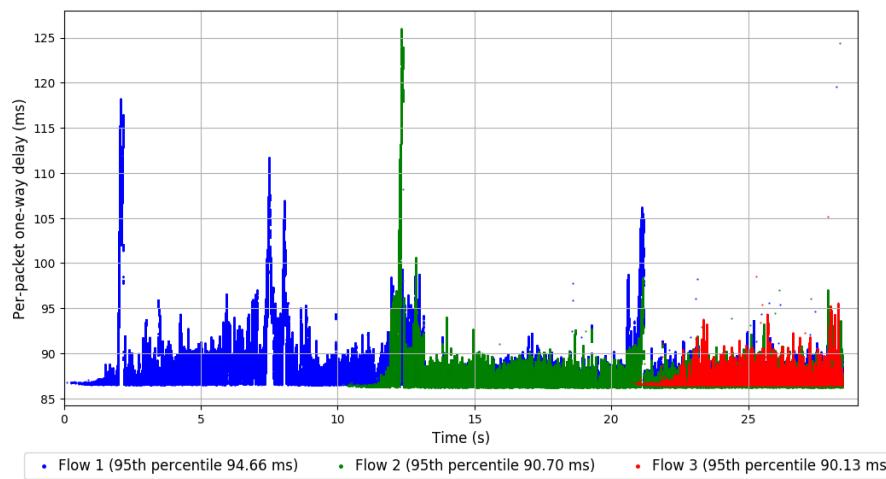
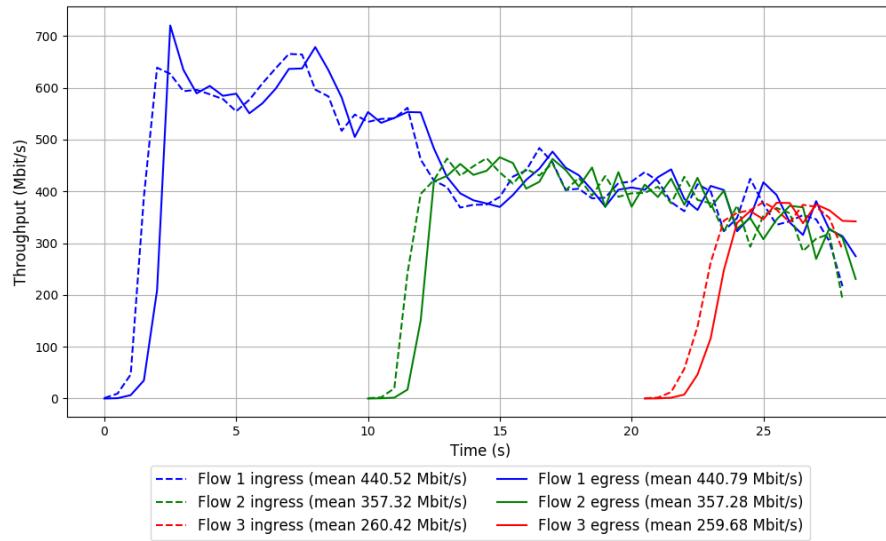


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-02-11 17:21:00
End at: 2019-02-11 17:21:31
Local clock offset: -0.325 ms
Remote clock offset: 0.196 ms

# Below is generated by plot.py at 2019-02-11 21:25:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 740.76 Mbit/s
95th percentile per-packet one-way delay: 93.084 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 440.79 Mbit/s
95th percentile per-packet one-way delay: 94.663 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 357.28 Mbit/s
95th percentile per-packet one-way delay: 90.703 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 259.68 Mbit/s
95th percentile per-packet one-way delay: 90.133 ms
Loss rate: 0.48%
```

Run 3: Report of Indigo-MusesD — Data Link

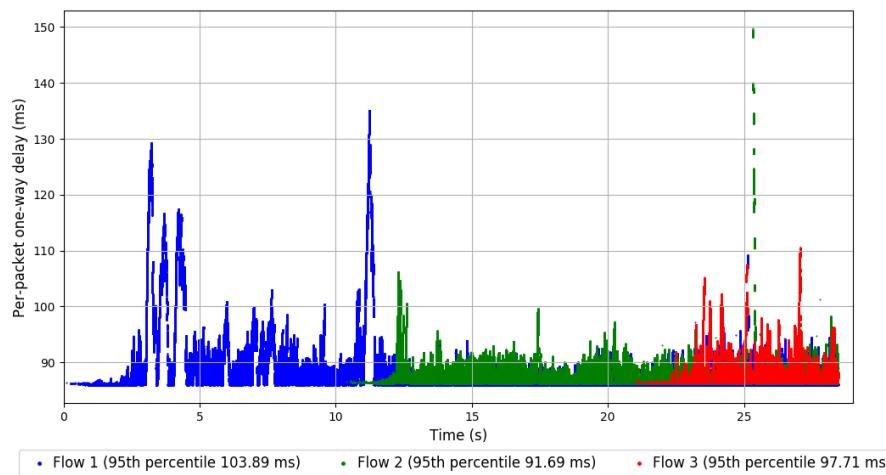
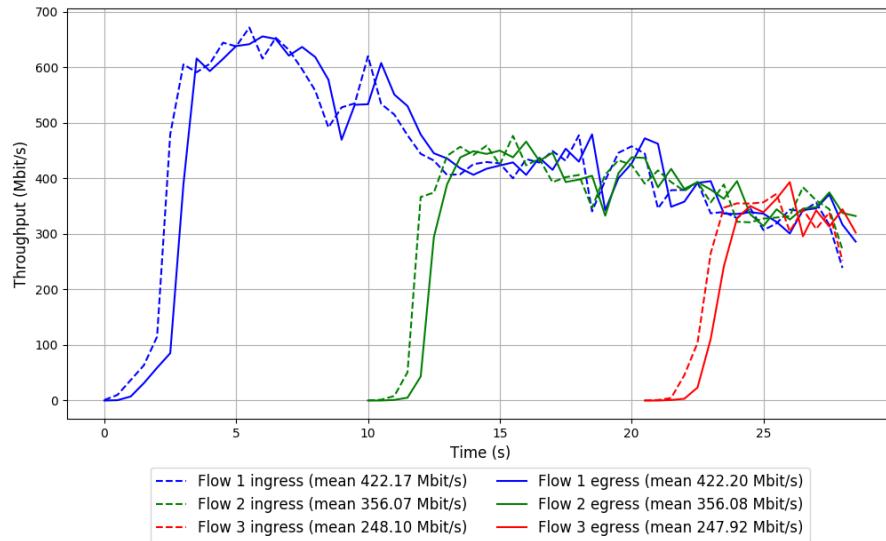


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-02-11 17:58:30
End at: 2019-02-11 17:59:00
Local clock offset: -0.171 ms
Remote clock offset: -0.172 ms

# Below is generated by plot.py at 2019-02-11 21:25:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 715.14 Mbit/s
95th percentile per-packet one-way delay: 98.271 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 422.20 Mbit/s
95th percentile per-packet one-way delay: 103.891 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 356.08 Mbit/s
95th percentile per-packet one-way delay: 91.687 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 247.92 Mbit/s
95th percentile per-packet one-way delay: 97.709 ms
Loss rate: 0.06%
```

Run 4: Report of Indigo-MusesD — Data Link

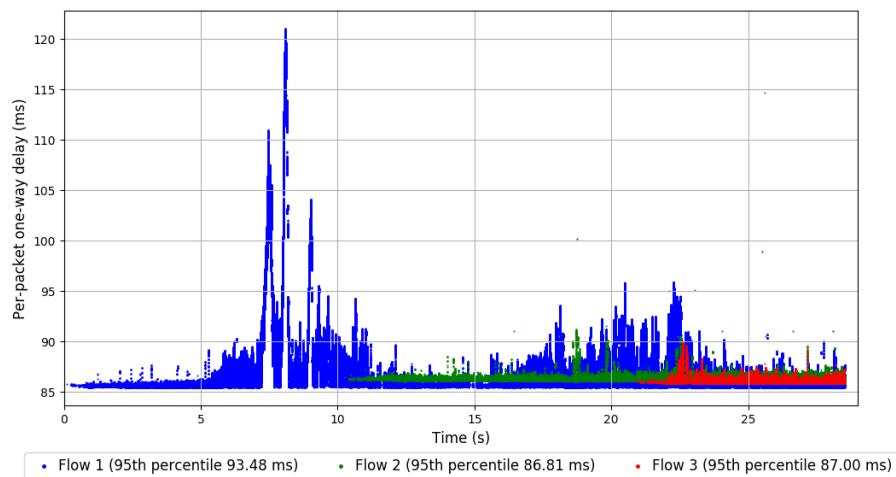
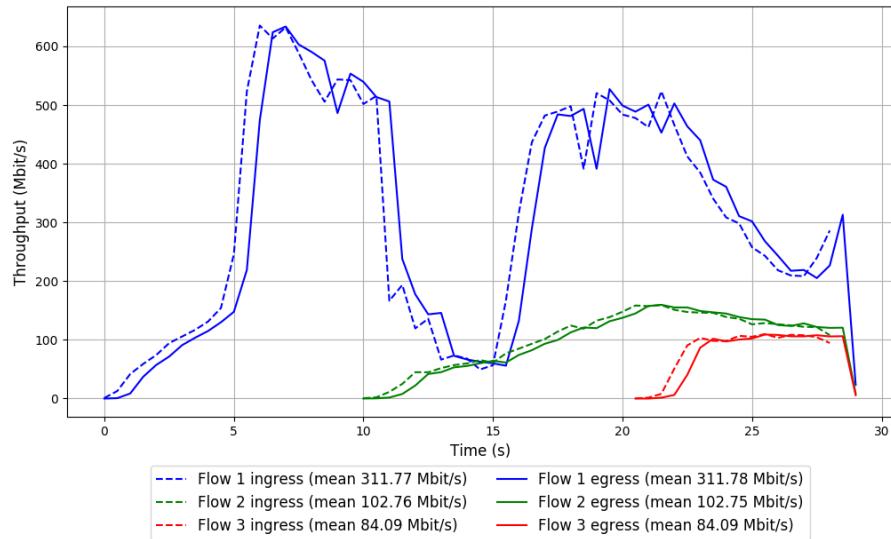


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-02-11 18:36:14
End at: 2019-02-11 18:36:44
Local clock offset: 0.36 ms
Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2019-02-11 21:25:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 400.47 Mbit/s
95th percentile per-packet one-way delay: 91.940 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 311.78 Mbit/s
95th percentile per-packet one-way delay: 93.483 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 102.75 Mbit/s
95th percentile per-packet one-way delay: 86.811 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 84.09 Mbit/s
95th percentile per-packet one-way delay: 86.997 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesD — Data Link

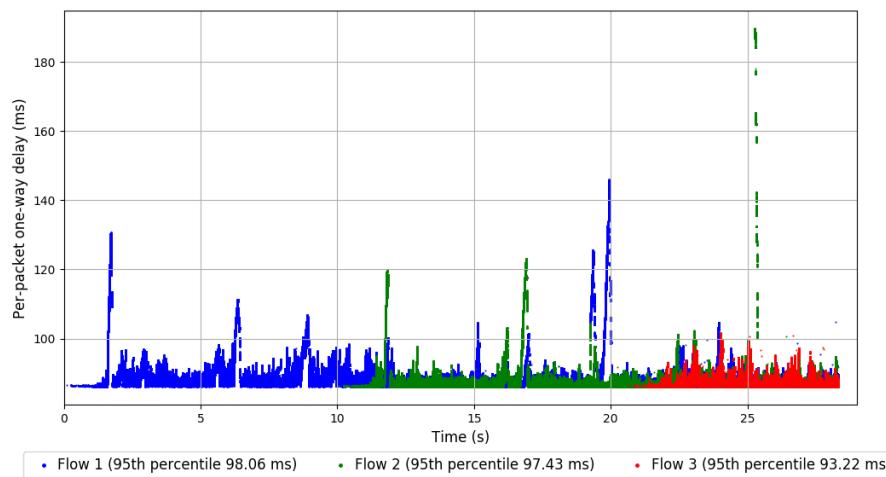
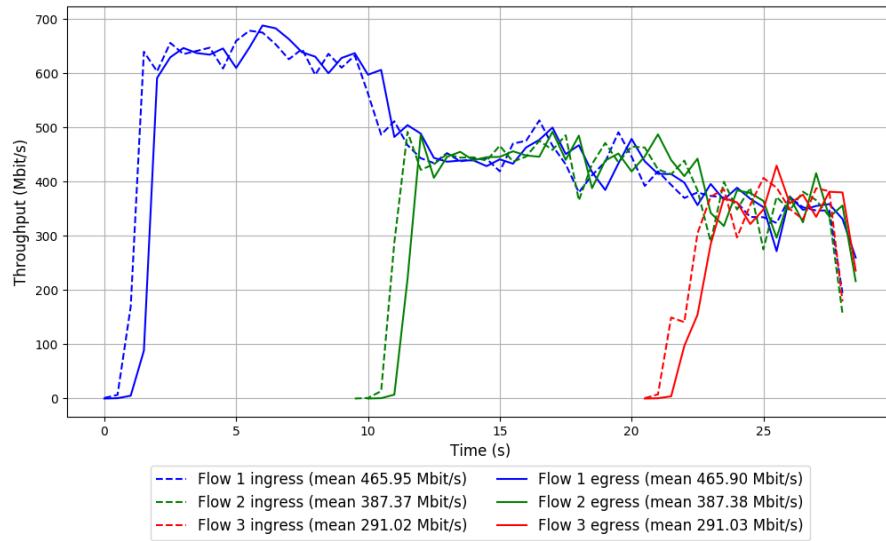


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-02-11 16:19:26
End at: 2019-02-11 16:19:56
Local clock offset: -0.261 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2019-02-11 21:27:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 795.11 Mbit/s
95th percentile per-packet one-way delay: 97.068 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 465.90 Mbit/s
95th percentile per-packet one-way delay: 98.058 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 387.38 Mbit/s
95th percentile per-packet one-way delay: 97.429 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 291.03 Mbit/s
95th percentile per-packet one-way delay: 93.225 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesT — Data Link

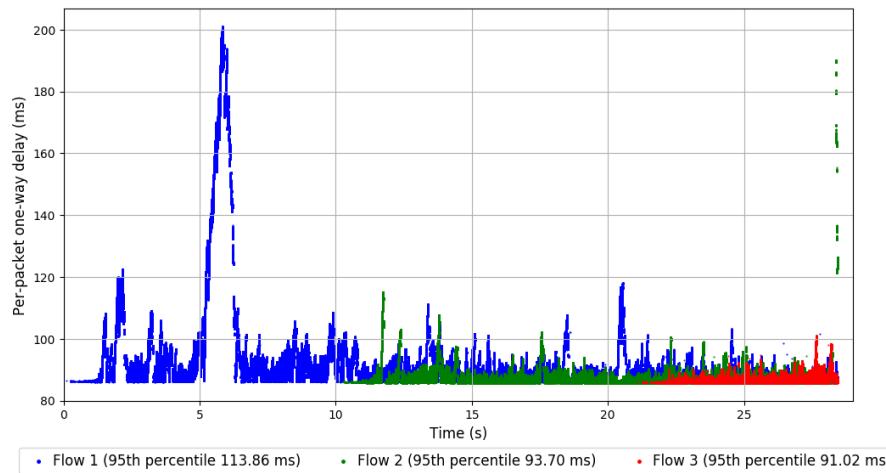
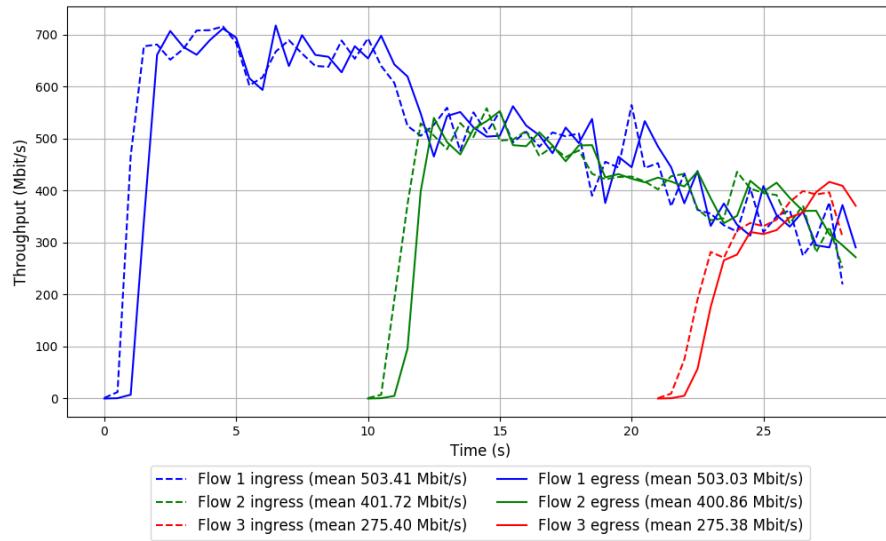


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-02-11 16:57:52
End at: 2019-02-11 16:58:22
Local clock offset: 0.18 ms
Remote clock offset: 0.041 ms

# Below is generated by plot.py at 2019-02-11 21:30:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 833.30 Mbit/s
95th percentile per-packet one-way delay: 104.012 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 503.03 Mbit/s
95th percentile per-packet one-way delay: 113.858 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 400.86 Mbit/s
95th percentile per-packet one-way delay: 93.703 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 275.38 Mbit/s
95th percentile per-packet one-way delay: 91.023 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesT — Data Link

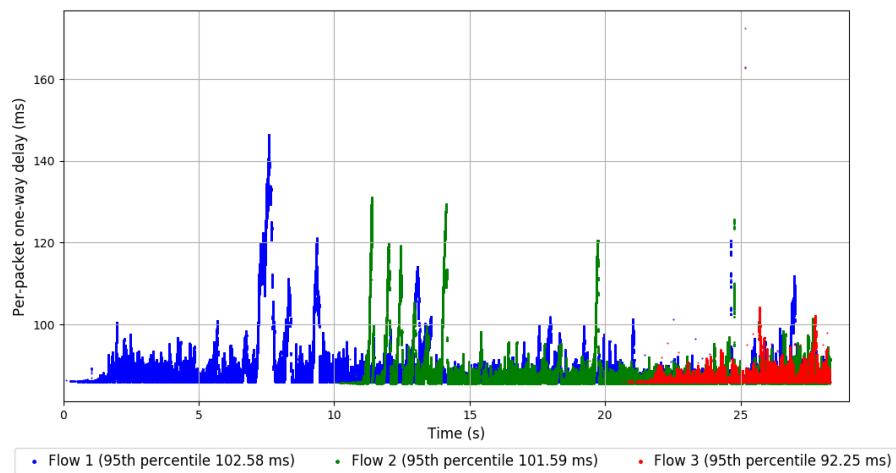
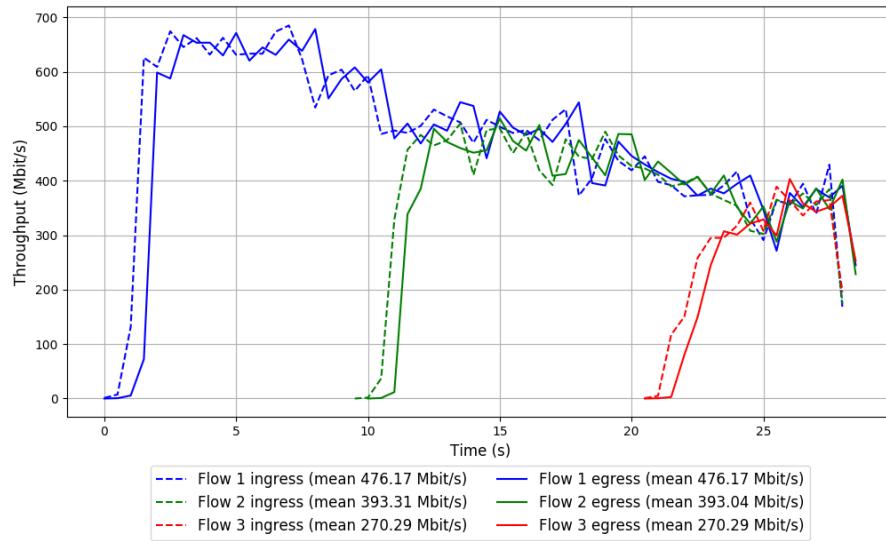


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-02-11 17:36:10
End at: 2019-02-11 17:36:40
Local clock offset: 0.281 ms
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2019-02-11 21:30:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 803.40 Mbit/s
95th percentile per-packet one-way delay: 100.443 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 476.17 Mbit/s
95th percentile per-packet one-way delay: 102.583 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 393.04 Mbit/s
95th percentile per-packet one-way delay: 101.587 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 270.29 Mbit/s
95th percentile per-packet one-way delay: 92.254 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesT — Data Link

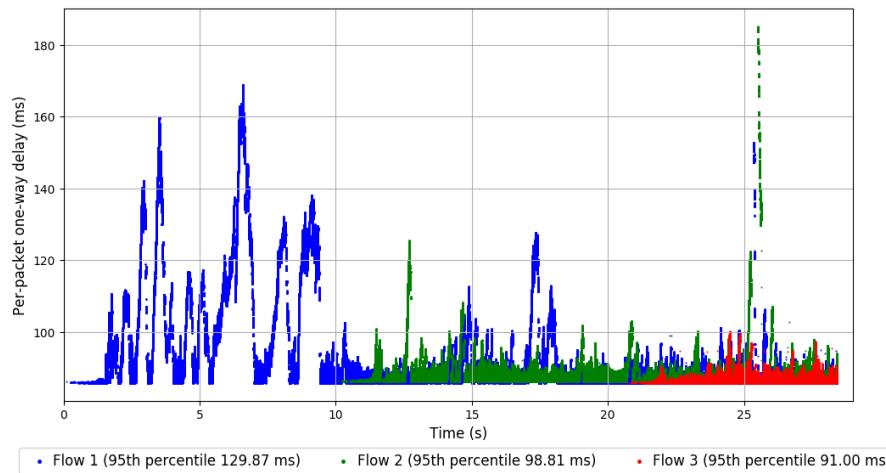
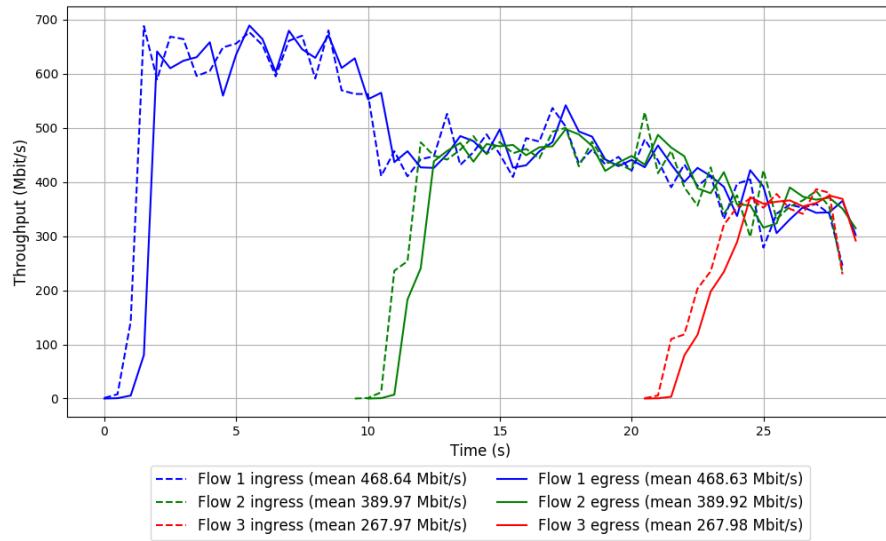


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-02-11 18:13:29
End at: 2019-02-11 18:13:59
Local clock offset: 0.007 ms
Remote clock offset: -0.1 ms

# Below is generated by plot.py at 2019-02-11 21:36:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 794.16 Mbit/s
95th percentile per-packet one-way delay: 123.939 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 468.63 Mbit/s
95th percentile per-packet one-way delay: 129.869 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 389.92 Mbit/s
95th percentile per-packet one-way delay: 98.807 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 267.98 Mbit/s
95th percentile per-packet one-way delay: 91.005 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesT — Data Link

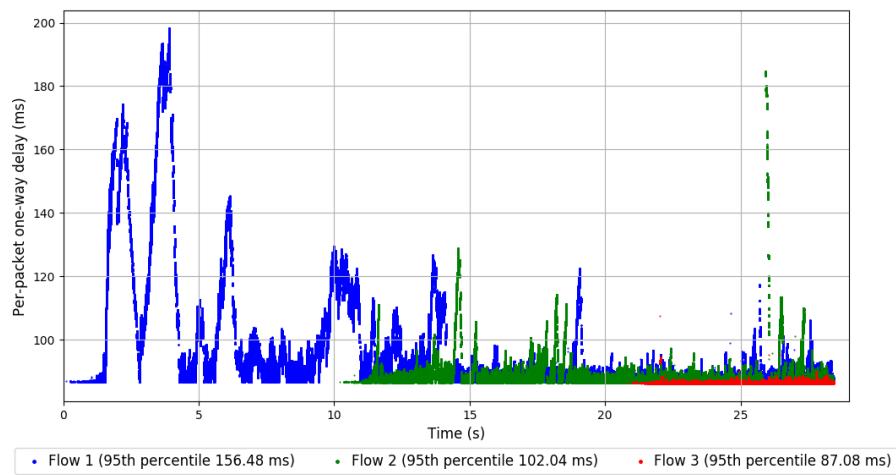
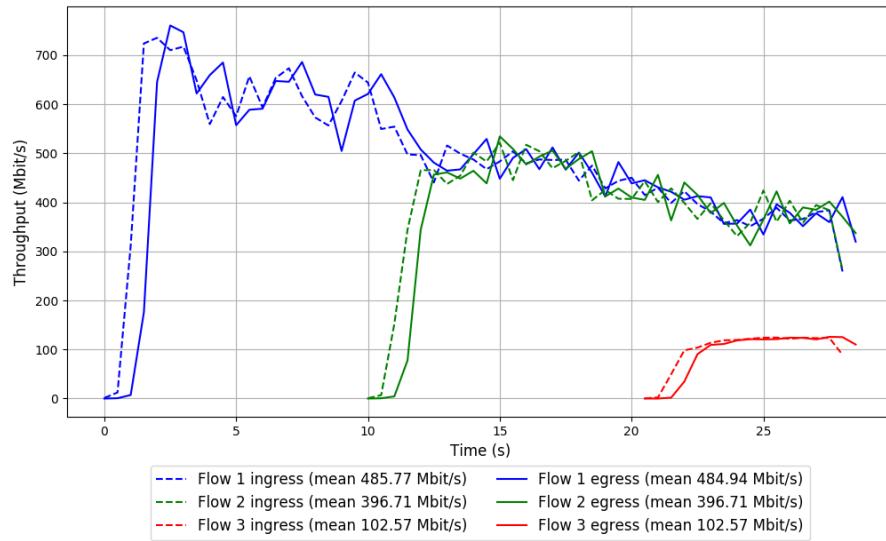


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-02-11 18:50:52
End at: 2019-02-11 18:51:22
Local clock offset: -0.438 ms
Remote clock offset: -0.093 ms

# Below is generated by plot.py at 2019-02-11 21:37:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 767.70 Mbit/s
95th percentile per-packet one-way delay: 141.662 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 484.94 Mbit/s
95th percentile per-packet one-way delay: 156.479 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 396.71 Mbit/s
95th percentile per-packet one-way delay: 102.037 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 102.57 Mbit/s
95th percentile per-packet one-way delay: 87.076 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesT — Data Link

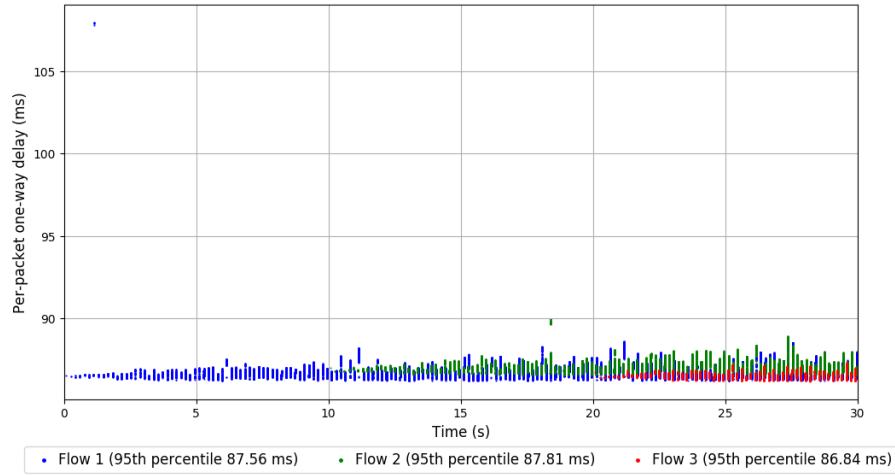
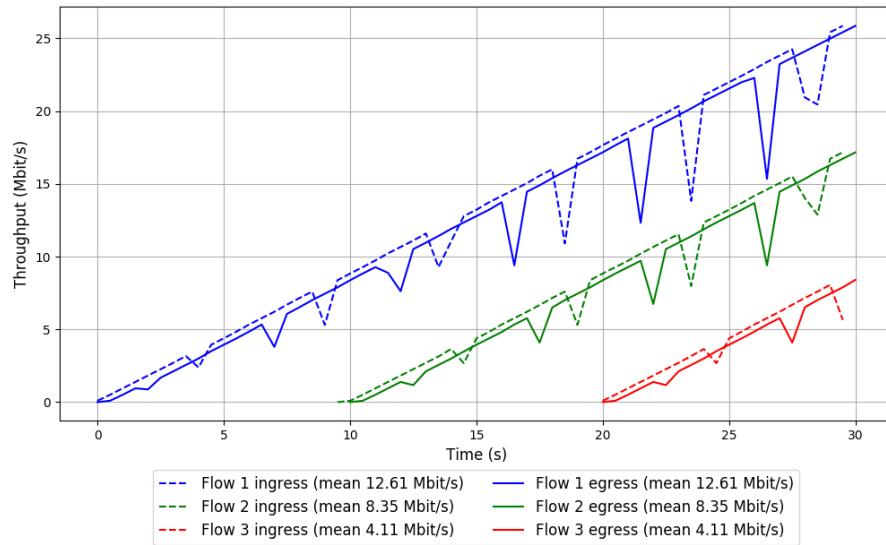


```
Run 1: Statistics of LEDBAT
```

```
Start at: 2019-02-11 16:30:10
End at: 2019-02-11 16:30:40
Local clock offset: -0.366 ms
Remote clock offset: -0.042 ms

# Below is generated by plot.py at 2019-02-11 21:37:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.52 Mbit/s
95th percentile per-packet one-way delay: 87.644 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 87.559 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.35 Mbit/s
95th percentile per-packet one-way delay: 87.807 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 86.840 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

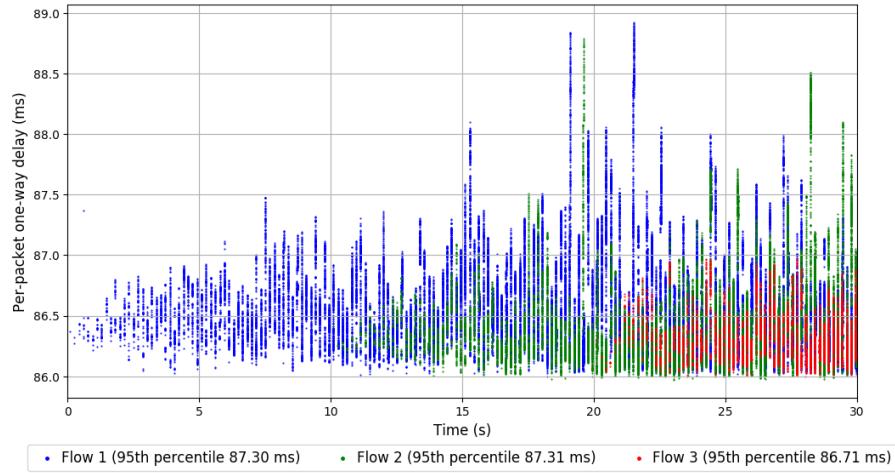
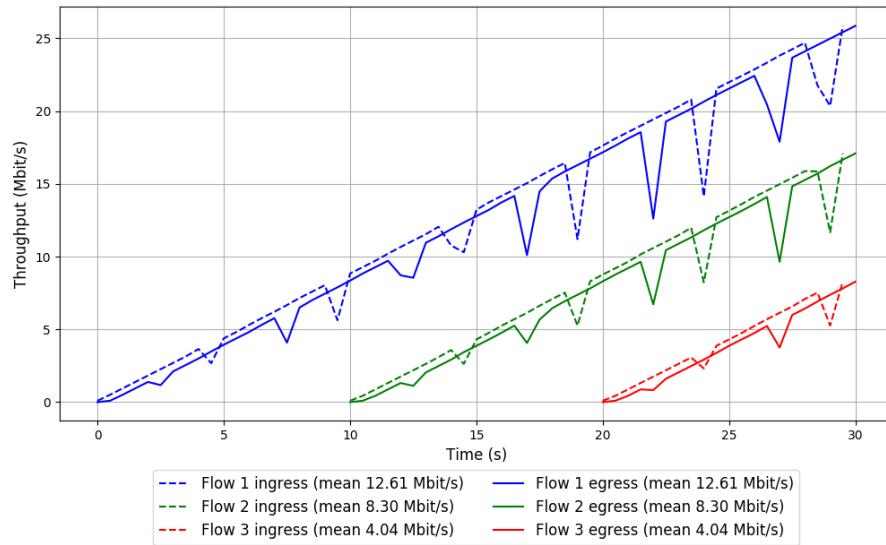


Run 2: Statistics of LEDBAT

```
Start at: 2019-02-11 17:09:19
End at: 2019-02-11 17:09:49
Local clock offset: -0.258 ms
Remote clock offset: 0.04 ms

# Below is generated by plot.py at 2019-02-11 21:37:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.45 Mbit/s
95th percentile per-packet one-way delay: 87.279 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 87.303 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.30 Mbit/s
95th percentile per-packet one-way delay: 87.312 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.04 Mbit/s
95th percentile per-packet one-way delay: 86.713 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link

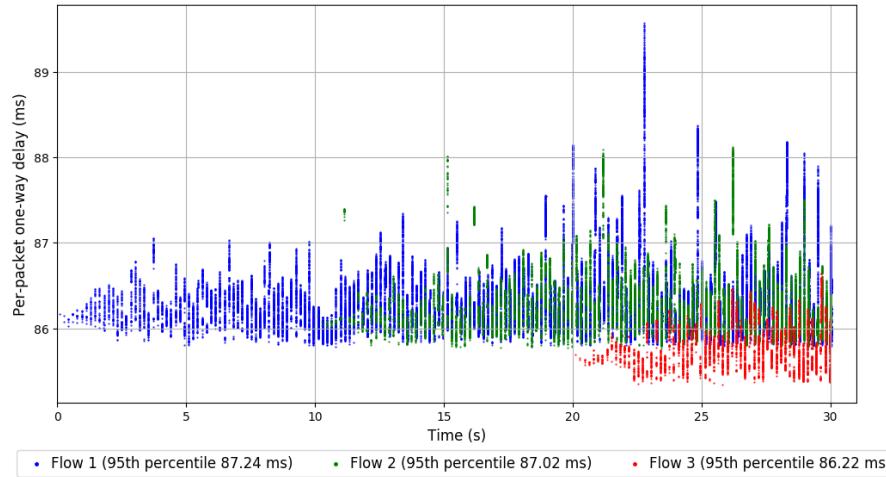
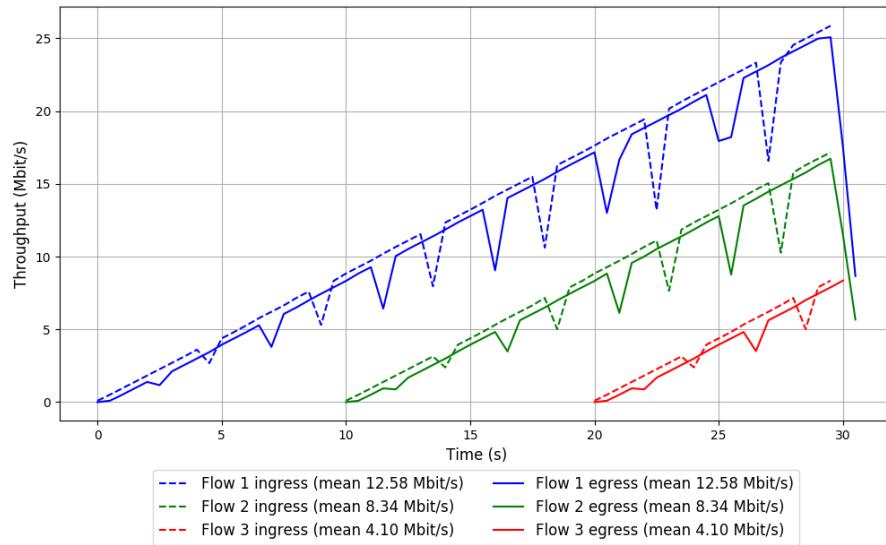


Run 3: Statistics of LEDBAT

```
Start at: 2019-02-11 17:47:06
End at: 2019-02-11 17:47:36
Local clock offset: 0.366 ms
Remote clock offset: -0.124 ms

# Below is generated by plot.py at 2019-02-11 21:37:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.48 Mbit/s
95th percentile per-packet one-way delay: 87.157 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.58 Mbit/s
95th percentile per-packet one-way delay: 87.240 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.34 Mbit/s
95th percentile per-packet one-way delay: 87.020 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 86.225 ms
Loss rate: 0.00%
```

Run 3: Report of LEDBAT — Data Link

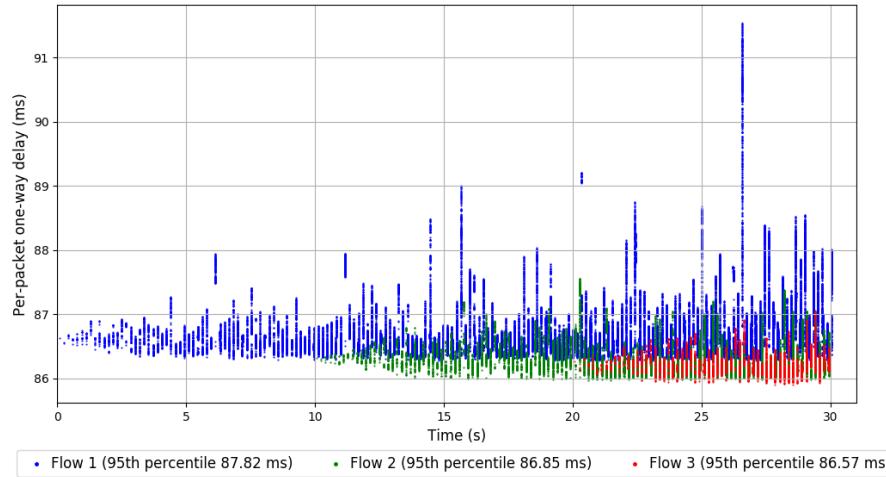
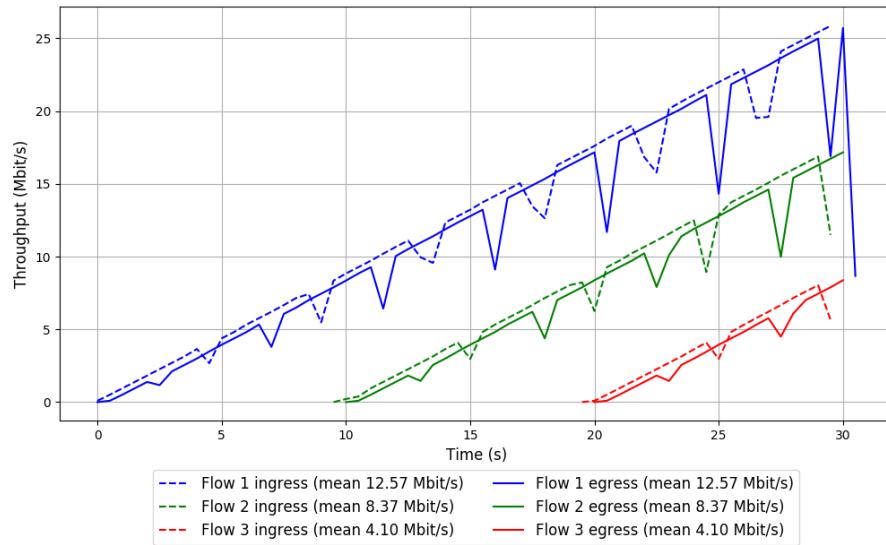


Run 4: Statistics of LEDBAT

```
Start at: 2019-02-11 18:24:27
End at: 2019-02-11 18:24:57
Local clock offset: -0.009 ms
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2019-02-11 21:37:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.48 Mbit/s
95th percentile per-packet one-way delay: 87.587 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.57 Mbit/s
95th percentile per-packet one-way delay: 87.816 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.37 Mbit/s
95th percentile per-packet one-way delay: 86.847 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 86.569 ms
Loss rate: 0.00%
```

Run 4: Report of LEDBAT — Data Link

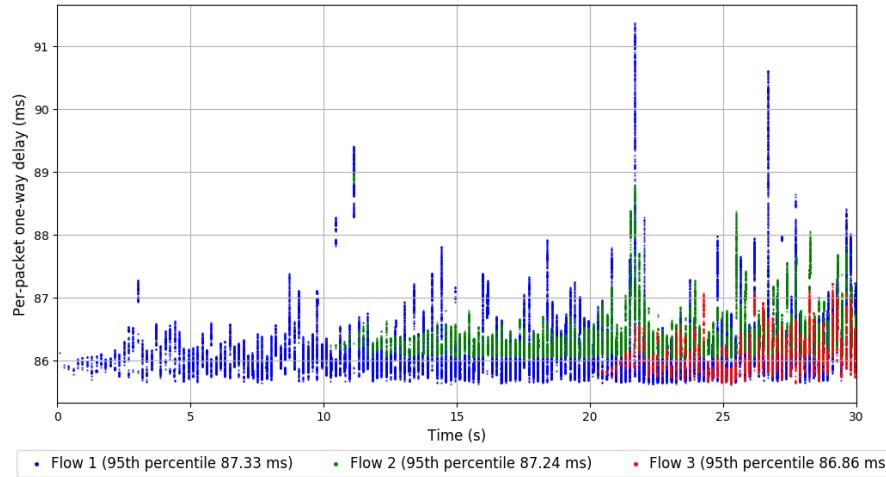
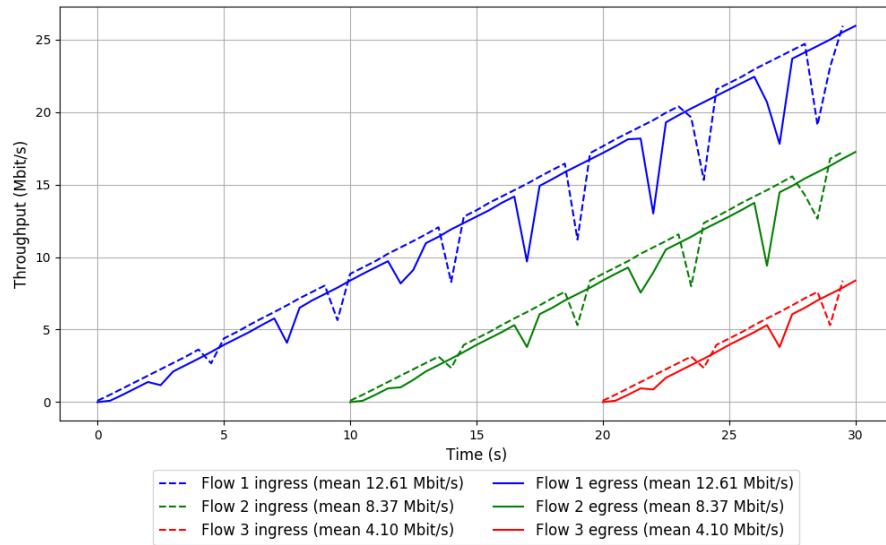


Run 5: Statistics of LEDBAT

```
Start at: 2019-02-11 19:01:52
End at: 2019-02-11 19:02:22
Local clock offset: 0.114 ms
Remote clock offset: -0.1 ms

# Below is generated by plot.py at 2019-02-11 21:37:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.53 Mbit/s
95th percentile per-packet one-way delay: 87.244 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 87.331 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.37 Mbit/s
95th percentile per-packet one-way delay: 87.240 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 86.858 ms
Loss rate: 0.00%
```

Run 5: Report of LEDBAT — Data Link

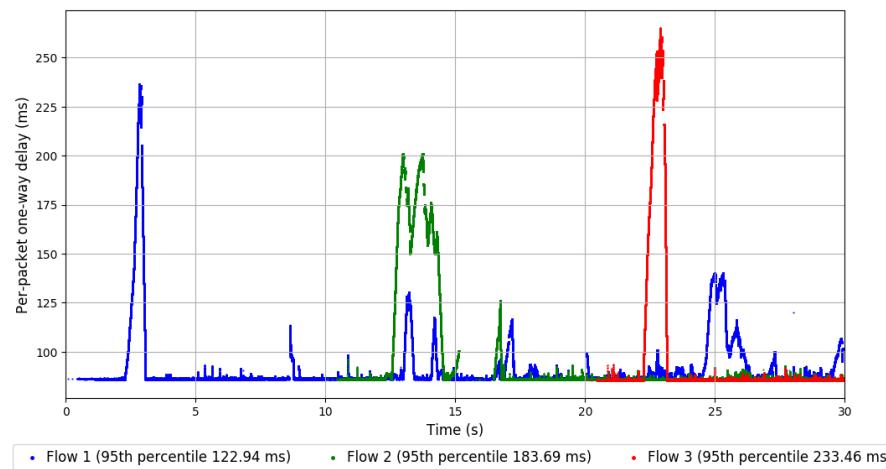
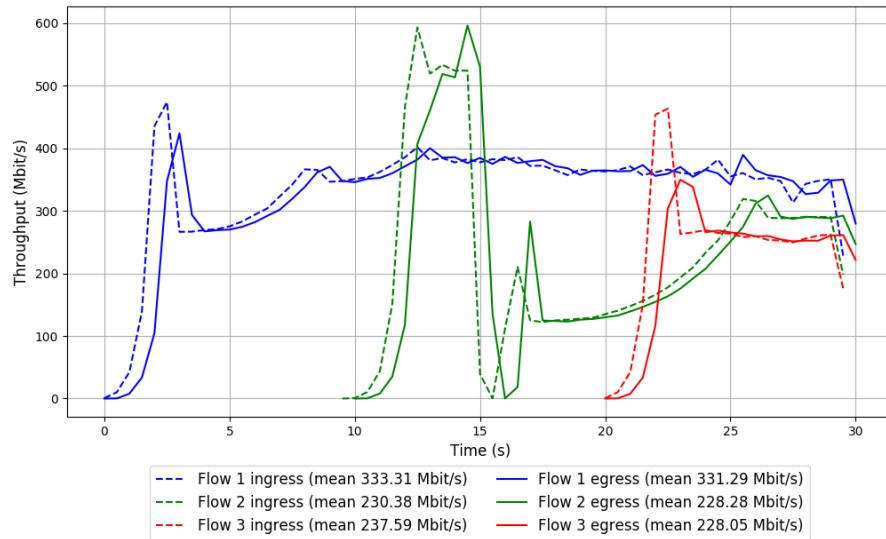


Run 1: Statistics of PCC-Allegro

```
Start at: 2019-02-11 16:12:08
End at: 2019-02-11 16:12:38
Local clock offset: 0.416 ms
Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2019-02-11 21:51:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 558.27 Mbit/s
95th percentile per-packet one-way delay: 169.262 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 331.29 Mbit/s
95th percentile per-packet one-way delay: 122.937 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 228.28 Mbit/s
95th percentile per-packet one-way delay: 183.686 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 228.05 Mbit/s
95th percentile per-packet one-way delay: 233.464 ms
Loss rate: 4.02%
```

Run 1: Report of PCC-Allegro — Data Link

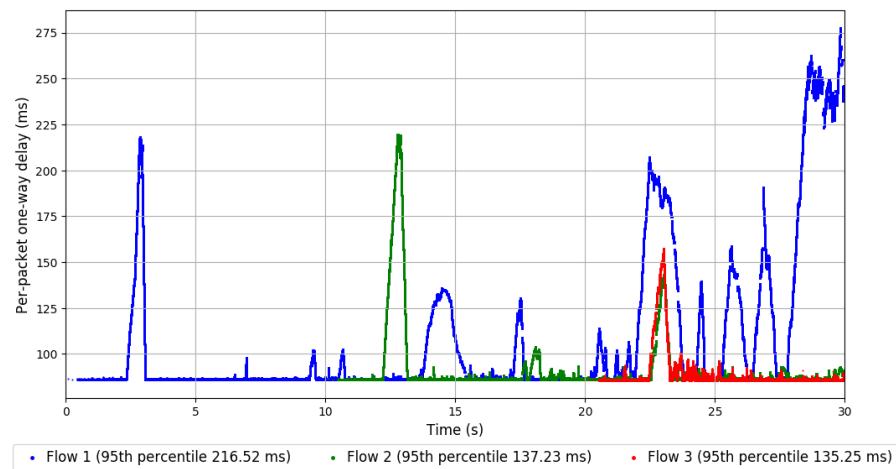
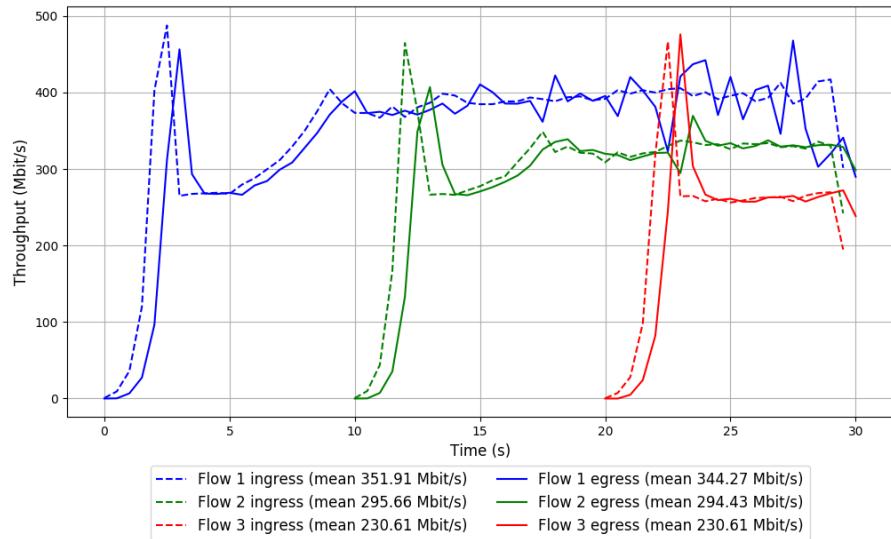


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-02-11 16:50:30
End at: 2019-02-11 16:51:00
Local clock offset: 0.232 ms
Remote clock offset: -0.002 ms

# Below is generated by plot.py at 2019-02-11 21:55:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 615.77 Mbit/s
95th percentile per-packet one-way delay: 190.062 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 344.27 Mbit/s
95th percentile per-packet one-way delay: 216.524 ms
Loss rate: 2.17%
-- Flow 2:
Average throughput: 294.43 Mbit/s
95th percentile per-packet one-way delay: 137.227 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 230.61 Mbit/s
95th percentile per-packet one-way delay: 135.254 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Allegro — Data Link

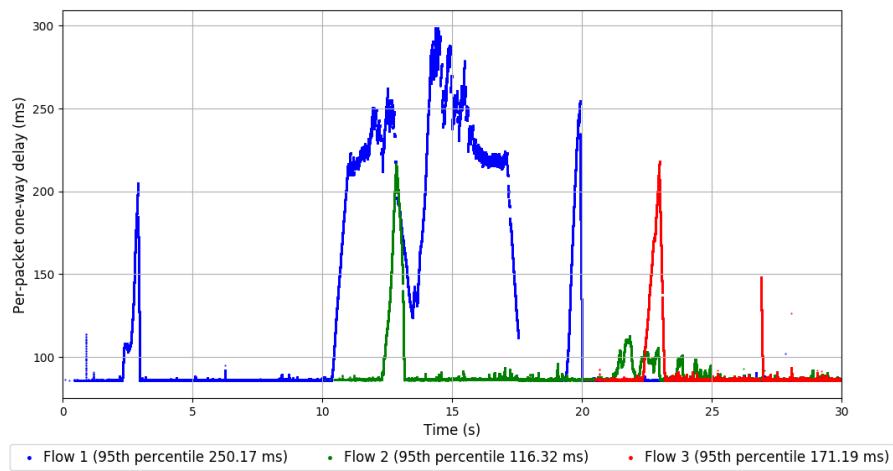
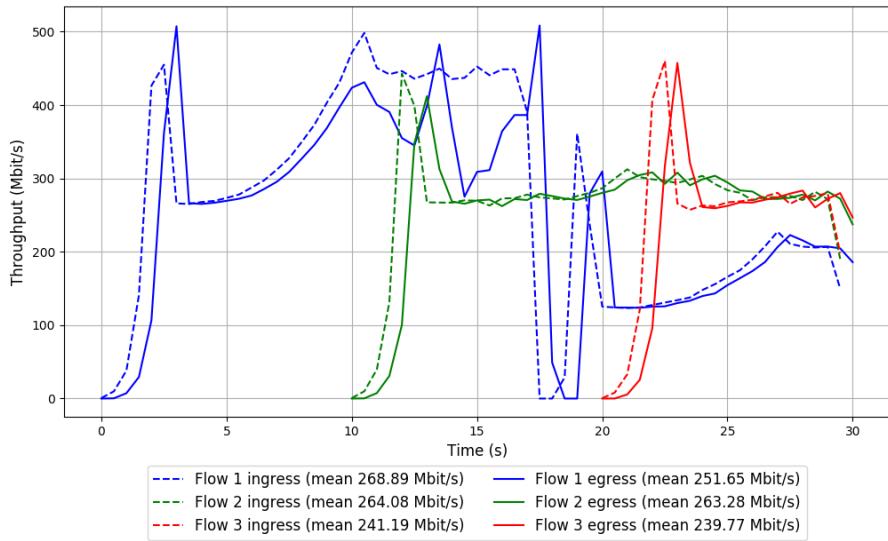


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-02-11 17:29:16
End at: 2019-02-11 17:29:46
Local clock offset: -0.081 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2019-02-11 21:55:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 505.47 Mbit/s
95th percentile per-packet one-way delay: 235.218 ms
Loss rate: 3.50%
-- Flow 1:
Average throughput: 251.65 Mbit/s
95th percentile per-packet one-way delay: 250.166 ms
Loss rate: 6.45%
-- Flow 2:
Average throughput: 263.28 Mbit/s
95th percentile per-packet one-way delay: 116.320 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 239.77 Mbit/s
95th percentile per-packet one-way delay: 171.185 ms
Loss rate: 0.59%
```

Run 3: Report of PCC-Allegro — Data Link

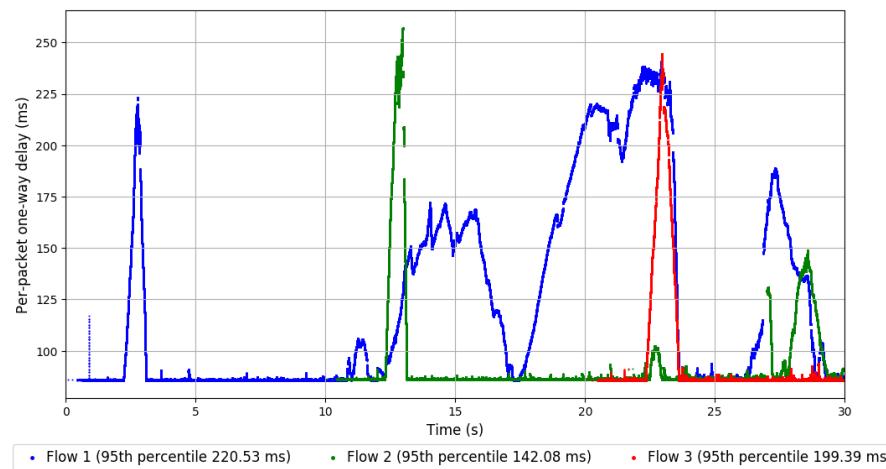
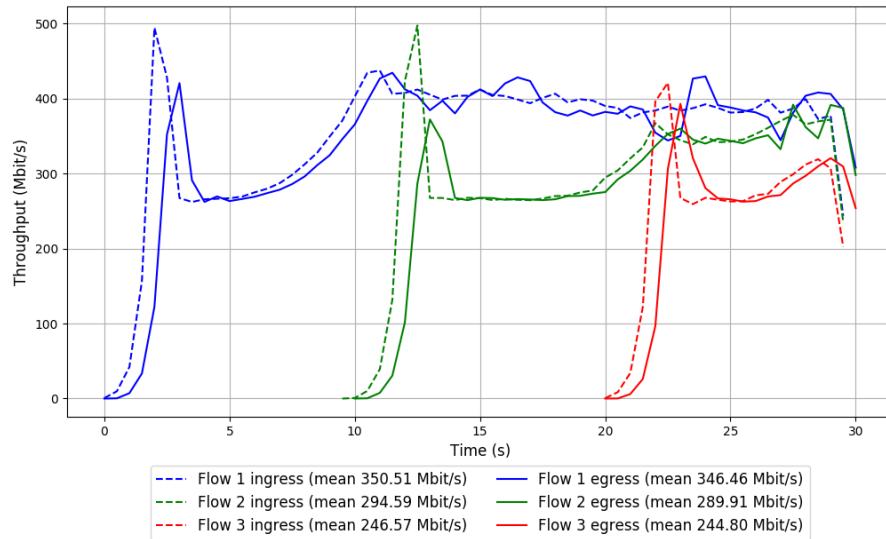


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-02-11 18:06:23
End at: 2019-02-11 18:06:53
Local clock offset: 0.202 ms
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2019-02-11 21:59:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 619.80 Mbit/s
95th percentile per-packet one-way delay: 217.063 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 346.46 Mbit/s
95th percentile per-packet one-way delay: 220.526 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 289.91 Mbit/s
95th percentile per-packet one-way delay: 142.083 ms
Loss rate: 1.58%
-- Flow 3:
Average throughput: 244.80 Mbit/s
95th percentile per-packet one-way delay: 199.394 ms
Loss rate: 0.72%
```

Run 4: Report of PCC-Allegro — Data Link

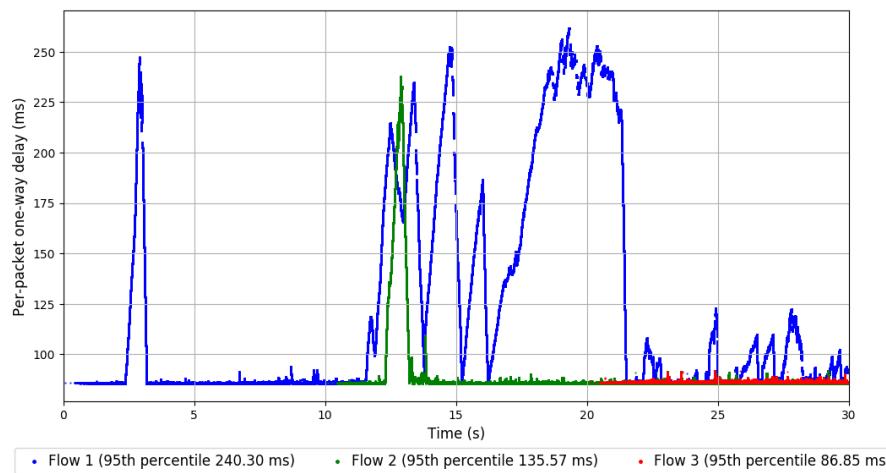
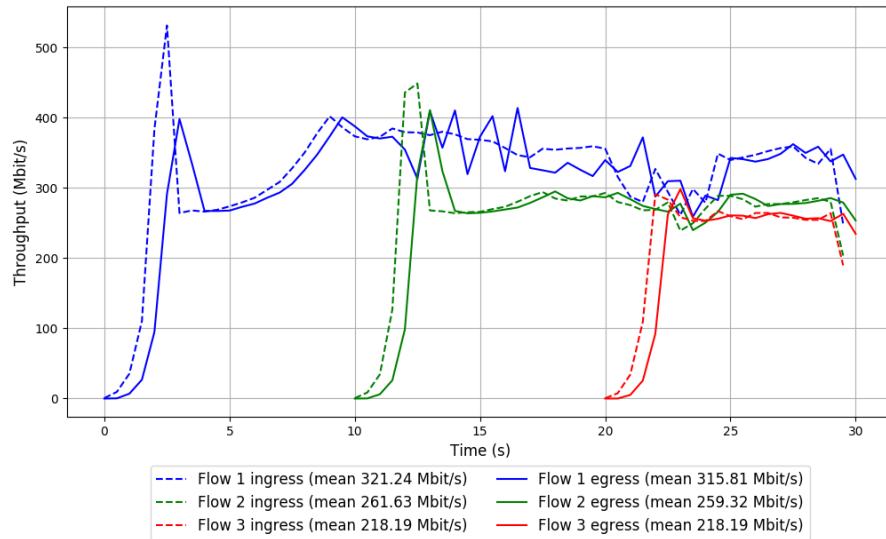


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-02-11 18:43:52
End at: 2019-02-11 18:44:22
Local clock offset: 0.225 ms
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2019-02-11 21:59:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 559.72 Mbit/s
95th percentile per-packet one-way delay: 233.384 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 315.81 Mbit/s
95th percentile per-packet one-way delay: 240.298 ms
Loss rate: 1.68%
-- Flow 2:
Average throughput: 259.32 Mbit/s
95th percentile per-packet one-way delay: 135.568 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 218.19 Mbit/s
95th percentile per-packet one-way delay: 86.851 ms
Loss rate: 0.00%
```

Run 5: Report of PCC-Allegro — Data Link

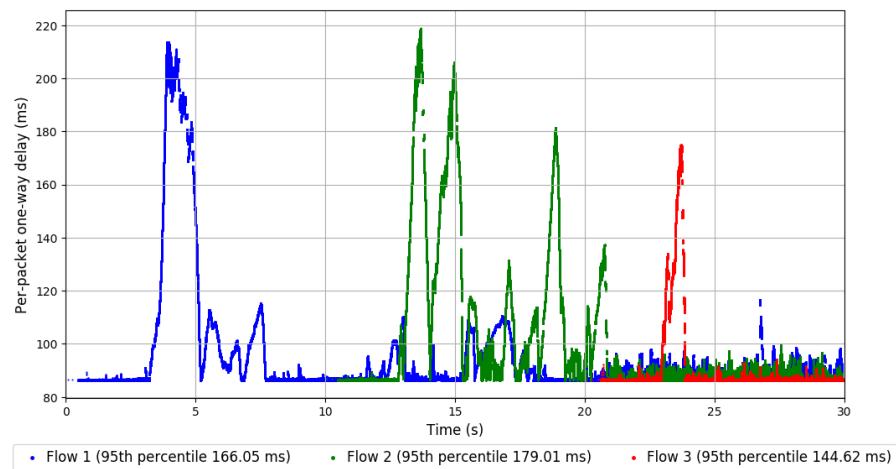
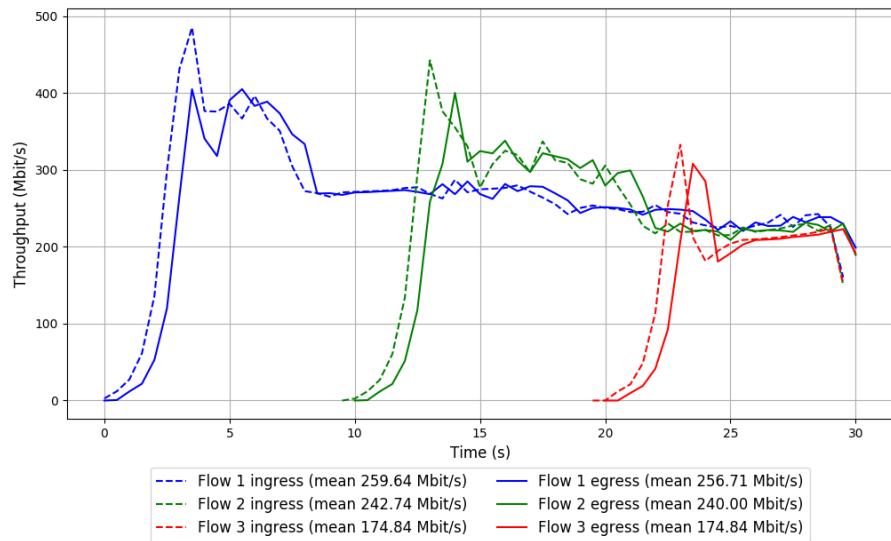


```
Run 1: Statistics of PCC-Expr
```

```
Start at: 2019-02-11 16:31:27
End at: 2019-02-11 16:31:57
Local clock offset: -0.387 ms
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2019-02-11 21:59:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 474.10 Mbit/s
95th percentile per-packet one-way delay: 170.313 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 256.71 Mbit/s
95th percentile per-packet one-way delay: 166.048 ms
Loss rate: 1.13%
-- Flow 2:
Average throughput: 240.00 Mbit/s
95th percentile per-packet one-way delay: 179.006 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 174.84 Mbit/s
95th percentile per-packet one-way delay: 144.624 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Expr — Data Link

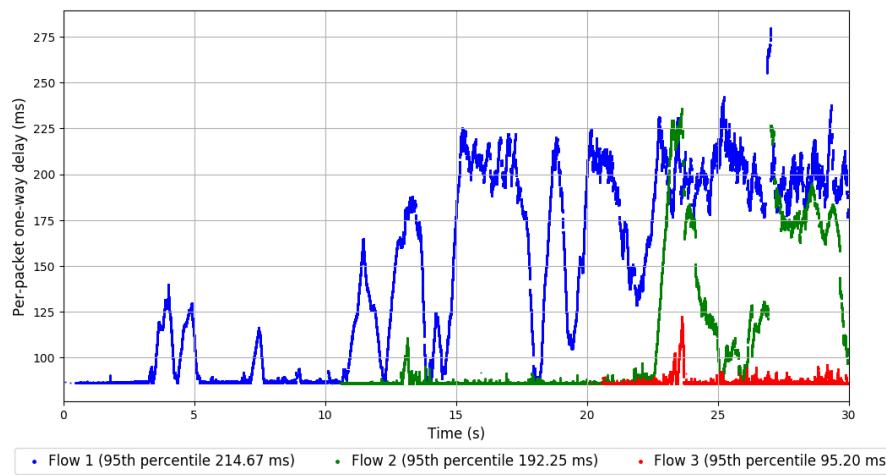
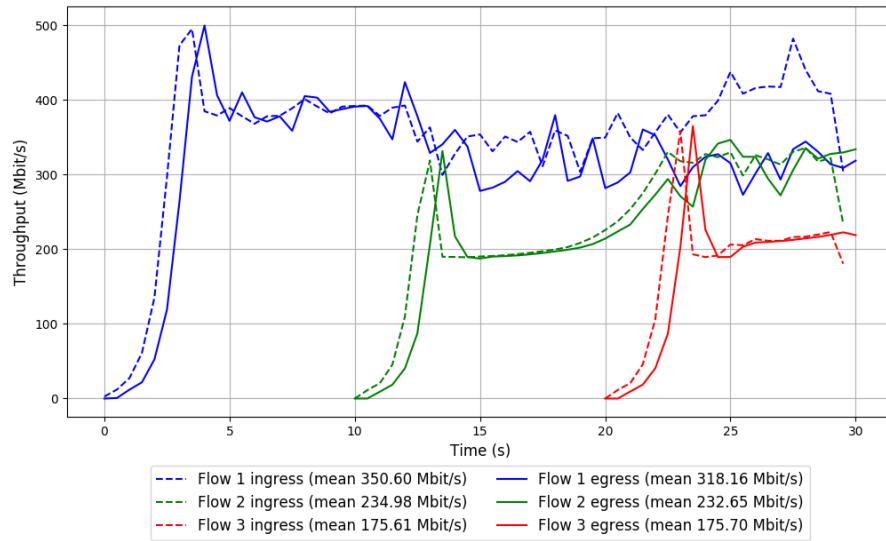


Run 2: Statistics of PCC-Expr

```
Start at: 2019-02-11 17:10:36
End at: 2019-02-11 17:11:06
Local clock offset: -0.099 ms
Remote clock offset: 0.057 ms

# Below is generated by plot.py at 2019-02-11 22:03:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 530.78 Mbit/s
95th percentile per-packet one-way delay: 212.307 ms
Loss rate: 6.01%
-- Flow 1:
Average throughput: 318.16 Mbit/s
95th percentile per-packet one-way delay: 214.673 ms
Loss rate: 9.24%
-- Flow 2:
Average throughput: 232.65 Mbit/s
95th percentile per-packet one-way delay: 192.252 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 175.70 Mbit/s
95th percentile per-packet one-way delay: 95.196 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Expr — Data Link

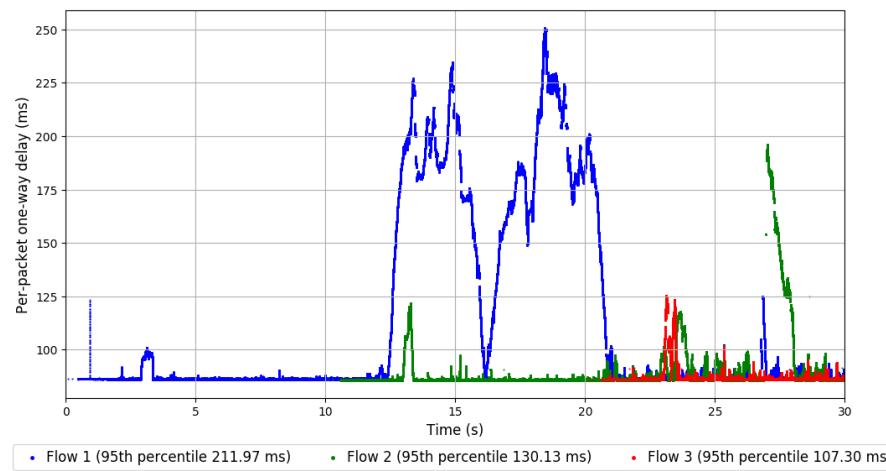
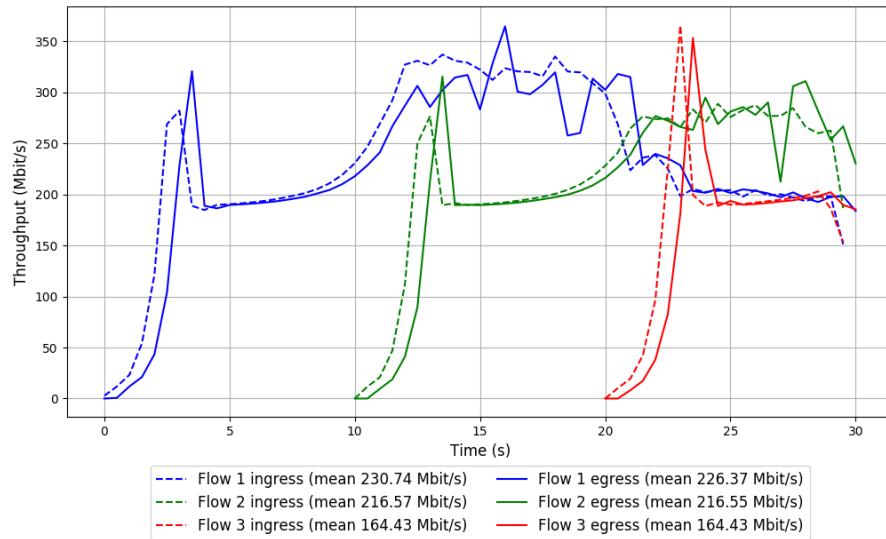


Run 3: Statistics of PCC-Expr

```
Start at: 2019-02-11 17:48:23
End at: 2019-02-11 17:48:53
Local clock offset: -0.035 ms
Remote clock offset: -0.134 ms

# Below is generated by plot.py at 2019-02-11 22:03:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 424.59 Mbit/s
95th percentile per-packet one-way delay: 198.170 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 226.37 Mbit/s
95th percentile per-packet one-way delay: 211.972 ms
Loss rate: 1.89%
-- Flow 2:
Average throughput: 216.55 Mbit/s
95th percentile per-packet one-way delay: 130.129 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 164.43 Mbit/s
95th percentile per-packet one-way delay: 107.296 ms
Loss rate: 0.00%
```

Run 3: Report of PCC-Expr — Data Link

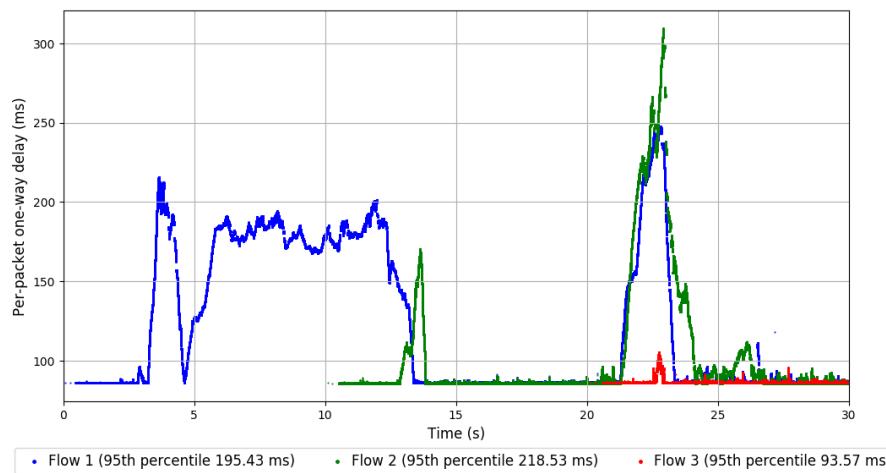
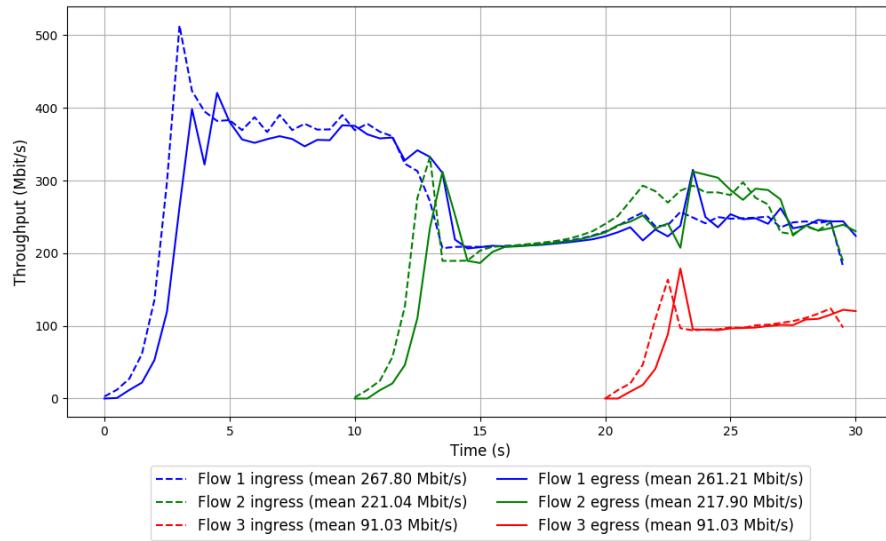


Run 4: Statistics of PCC-Expr

```
Start at: 2019-02-11 18:25:45
End at: 2019-02-11 18:26:15
Local clock offset: 0.307 ms
Remote clock offset: -0.115 ms

# Below is generated by plot.py at 2019-02-11 22:10:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 436.07 Mbit/s
95th percentile per-packet one-way delay: 196.091 ms
Loss rate: 1.95%
-- Flow 1:
Average throughput: 261.21 Mbit/s
95th percentile per-packet one-way delay: 195.428 ms
Loss rate: 2.46%
-- Flow 2:
Average throughput: 217.90 Mbit/s
95th percentile per-packet one-way delay: 218.530 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 91.03 Mbit/s
95th percentile per-packet one-way delay: 93.572 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Expr — Data Link

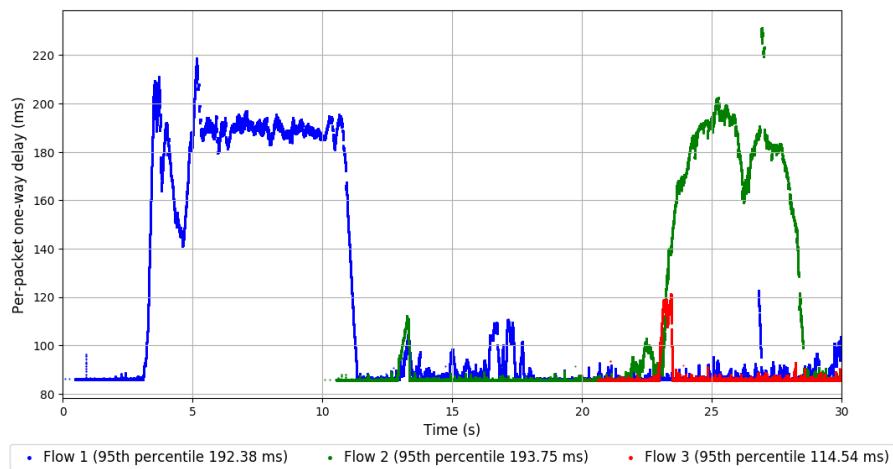
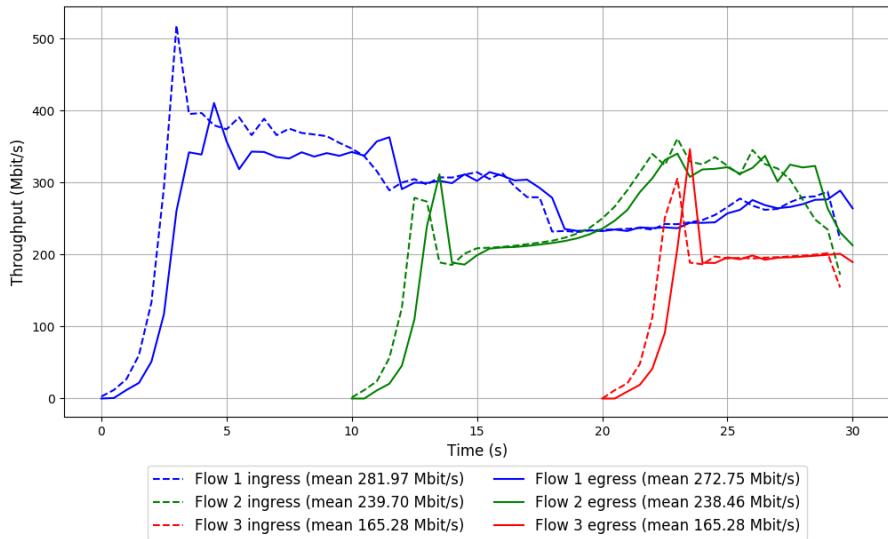


Run 5: Statistics of PCC-Expr

```
Start at: 2019-02-11 19:03:09
End at: 2019-02-11 19:03:39
Local clock offset: 0.307 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2019-02-11 22:16:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 485.67 Mbit/s
95th percentile per-packet one-way delay: 192.425 ms
Loss rate: 2.03%
-- Flow 1:
Average throughput: 272.75 Mbit/s
95th percentile per-packet one-way delay: 192.381 ms
Loss rate: 3.27%
-- Flow 2:
Average throughput: 238.46 Mbit/s
95th percentile per-packet one-way delay: 193.750 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 165.28 Mbit/s
95th percentile per-packet one-way delay: 114.538 ms
Loss rate: 0.00%
```

Run 5: Report of PCC-Expr — Data Link

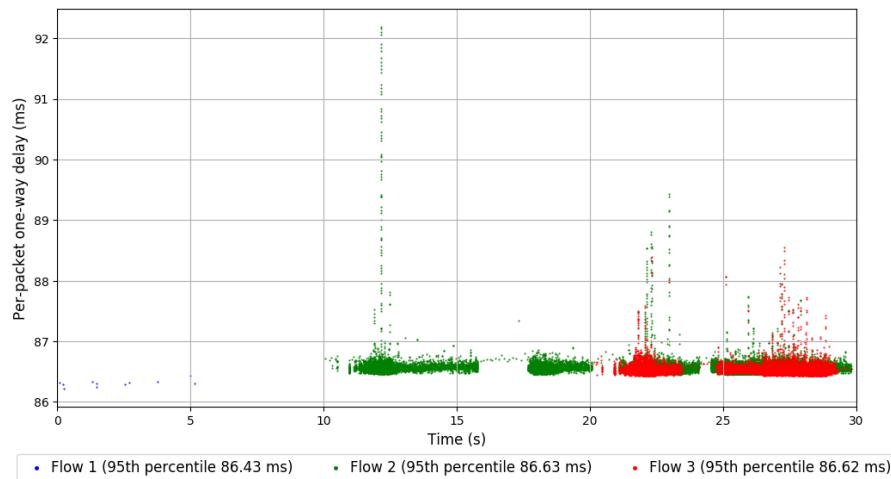
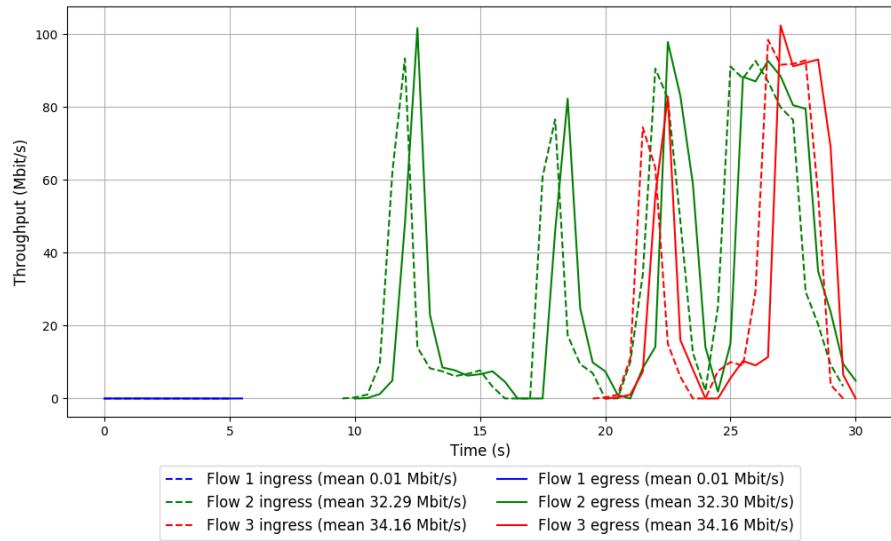


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2019-02-11 16:01:18
End at: 2019-02-11 16:01:48
Local clock offset: -0.273 ms
Remote clock offset: -0.064 ms

# Below is generated by plot.py at 2019-02-11 22:16:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 32.58 Mbit/s
95th percentile per-packet one-way delay: 86.629 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 86.434 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.30 Mbit/s
95th percentile per-packet one-way delay: 86.633 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 34.16 Mbit/s
95th percentile per-packet one-way delay: 86.618 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link

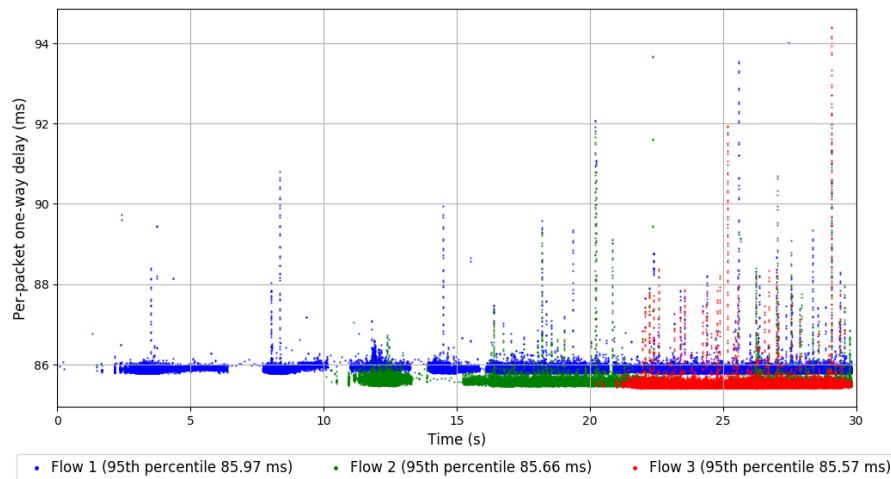
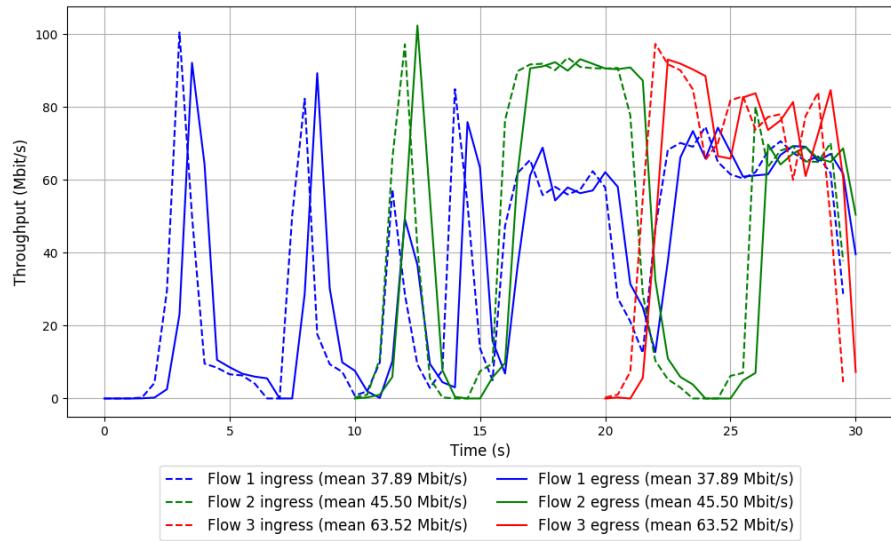


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-02-11 16:38:18
End at: 2019-02-11 16:38:48
Local clock offset: 0.503 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2019-02-11 22:16:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.79 Mbit/s
95th percentile per-packet one-way delay: 85.934 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 37.89 Mbit/s
95th percentile per-packet one-way delay: 85.975 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 45.50 Mbit/s
95th percentile per-packet one-way delay: 85.660 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 63.52 Mbit/s
95th percentile per-packet one-way delay: 85.570 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link

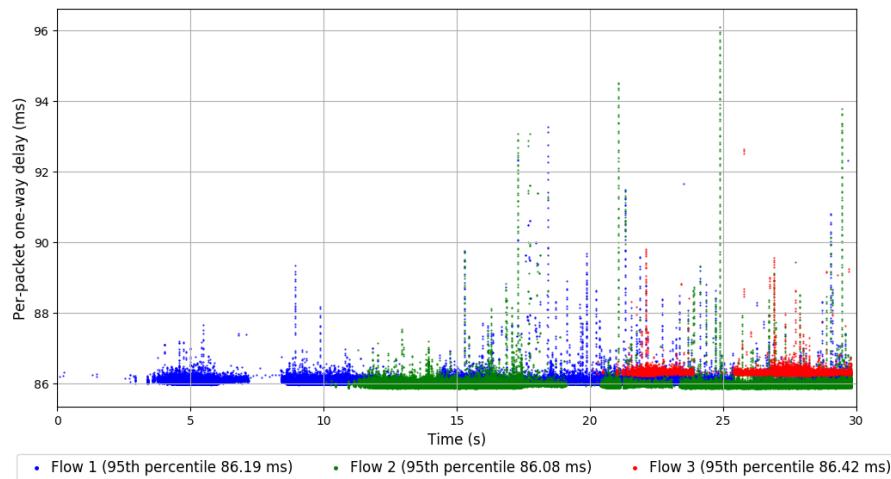
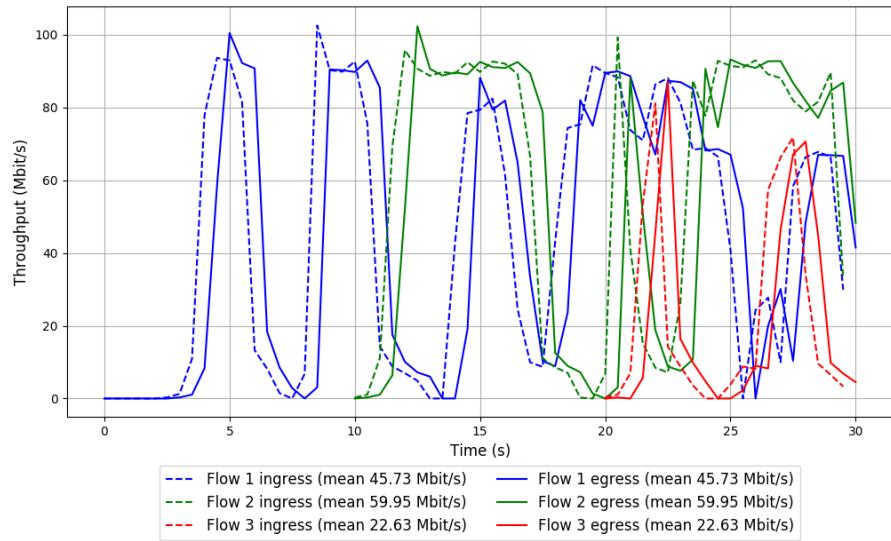


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-02-11 17:17:43
End at: 2019-02-11 17:18:13
Local clock offset: -0.076 ms
Remote clock offset: 0.063 ms

# Below is generated by plot.py at 2019-02-11 22:16:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.88 Mbit/s
95th percentile per-packet one-way delay: 86.305 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.73 Mbit/s
95th percentile per-packet one-way delay: 86.185 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.95 Mbit/s
95th percentile per-packet one-way delay: 86.083 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 22.63 Mbit/s
95th percentile per-packet one-way delay: 86.421 ms
Loss rate: 0.00%
```

Run 3: Report of QUIC Cubic — Data Link

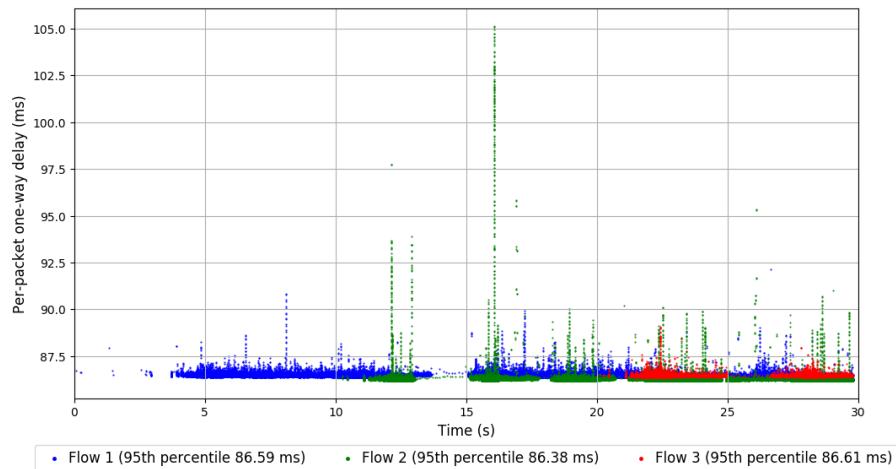
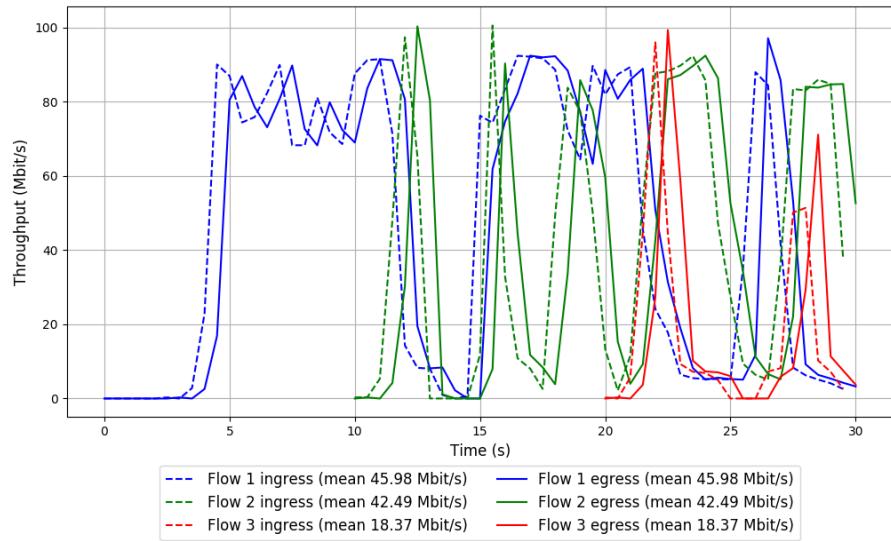


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-02-11 17:55:18
End at: 2019-02-11 17:55:48
Local clock offset: -0.425 ms
Remote clock offset: -0.185 ms

# Below is generated by plot.py at 2019-02-11 22:16:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.16 Mbit/s
95th percentile per-packet one-way delay: 86.571 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.98 Mbit/s
95th percentile per-packet one-way delay: 86.592 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.49 Mbit/s
95th percentile per-packet one-way delay: 86.380 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 18.37 Mbit/s
95th percentile per-packet one-way delay: 86.610 ms
Loss rate: 0.00%
```

Run 4: Report of QUIC Cubic — Data Link

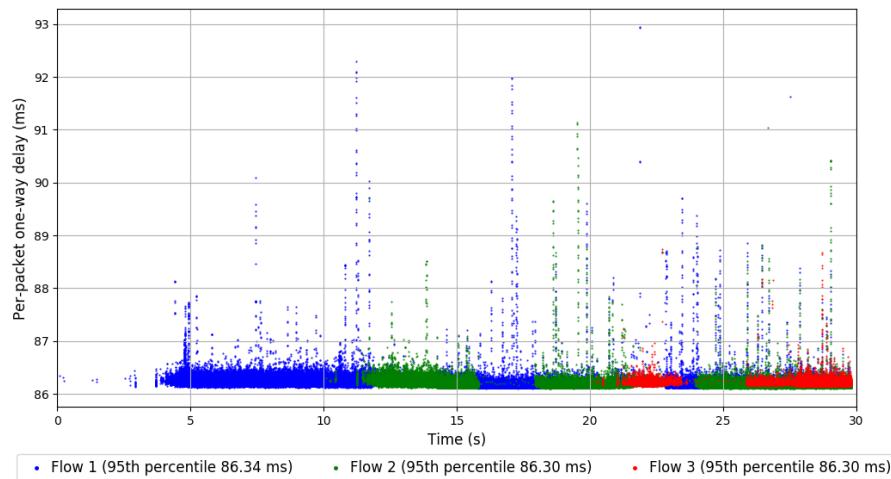
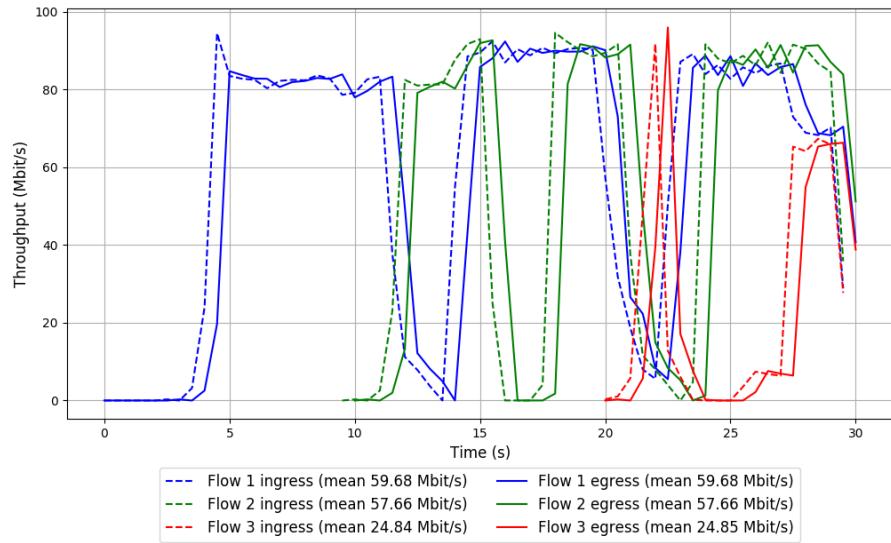


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-02-11 18:32:58
End at: 2019-02-11 18:33:28
Local clock offset: -0.234 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2019-02-11 22:16:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 106.04 Mbit/s
95th percentile per-packet one-way delay: 86.326 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.68 Mbit/s
95th percentile per-packet one-way delay: 86.341 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 57.66 Mbit/s
95th percentile per-packet one-way delay: 86.304 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.85 Mbit/s
95th percentile per-packet one-way delay: 86.303 ms
Loss rate: 0.00%
```

Run 5: Report of QUIC Cubic — Data Link

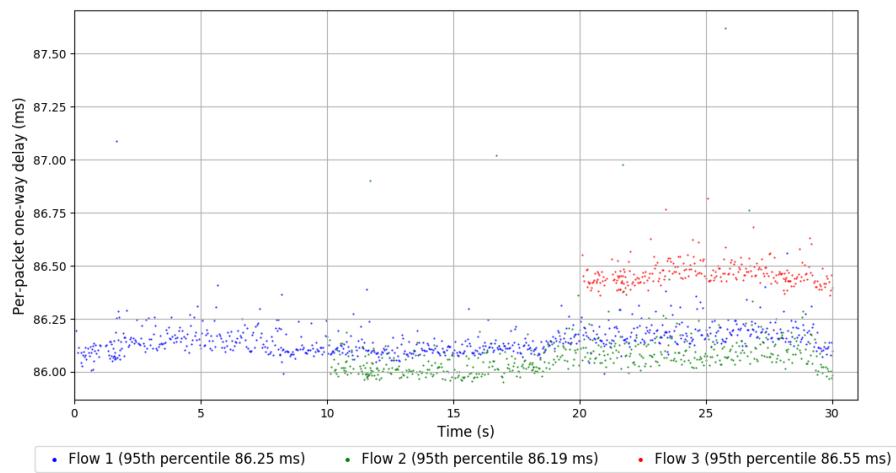
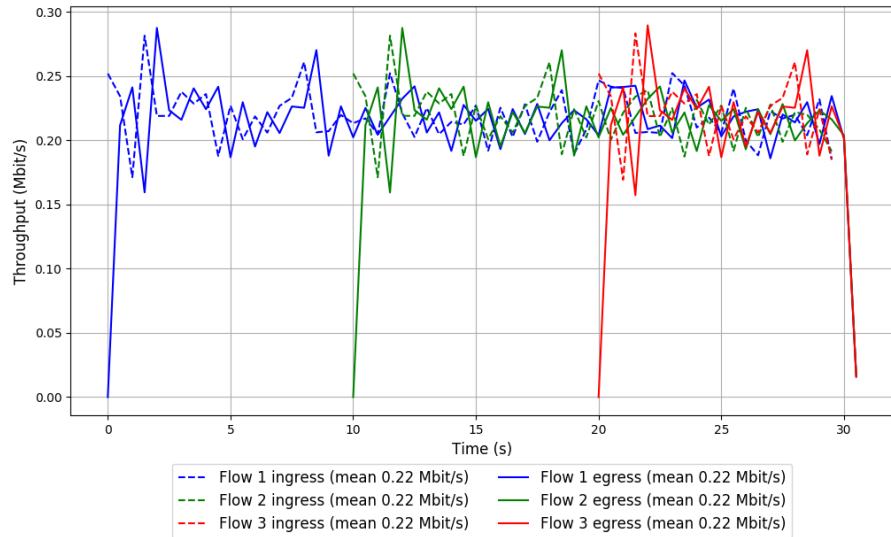


```
Run 1: Statistics of SCReAM

Start at: 2019-02-11 16:21:23
End at: 2019-02-11 16:21:53
Local clock offset: 0.03 ms
Remote clock offset: -0.043 ms

# Below is generated by plot.py at 2019-02-11 22:16:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.482 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.253 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.186 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.552 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

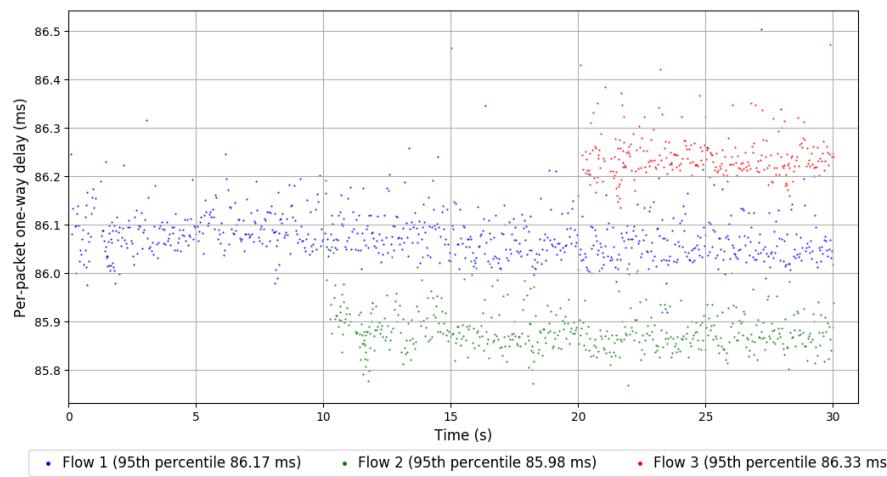
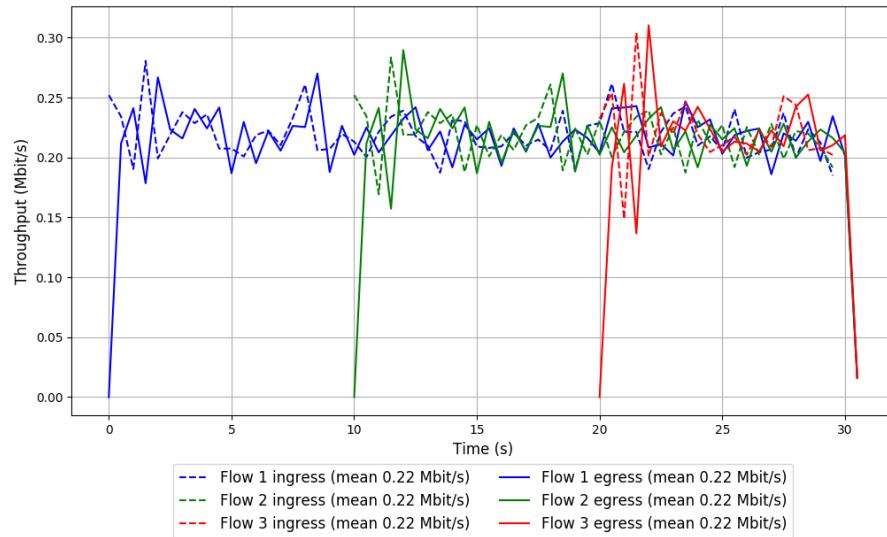


Run 2: Statistics of SCReAM

```
Start at: 2019-02-11 16:59:55
End at: 2019-02-11 17:00:25
Local clock offset: 0.137 ms
Remote clock offset: 0.046 ms

# Below is generated by plot.py at 2019-02-11 22:16:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.255 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.170 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.985 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.332 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

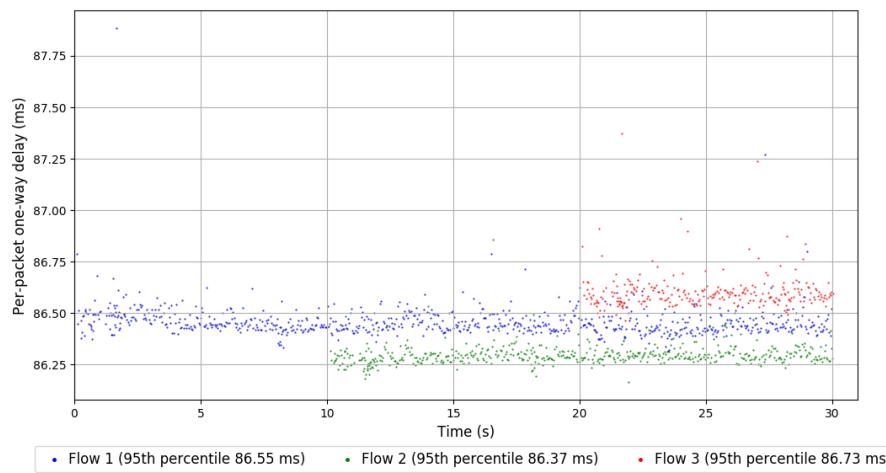
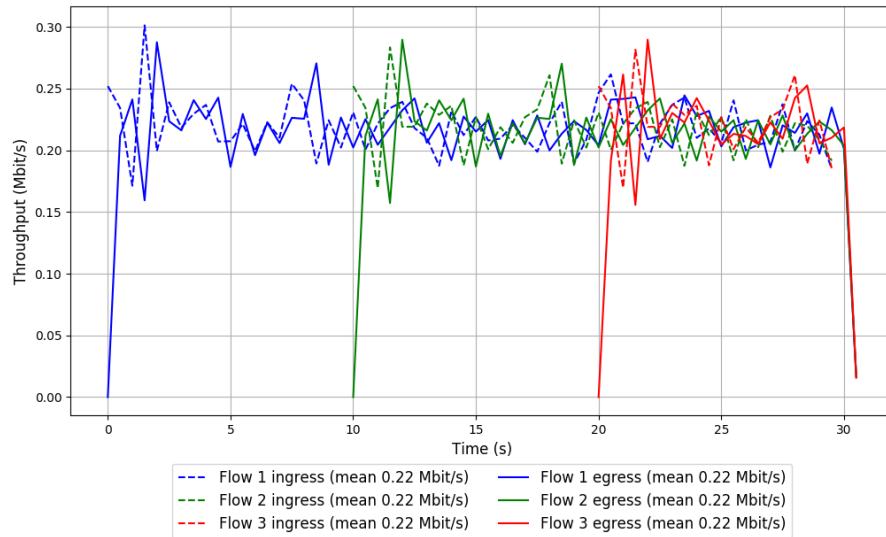


Run 3: Statistics of SCReAM

```
Start at: 2019-02-11 17:38:08
End at: 2019-02-11 17:38:38
Local clock offset: -0.31 ms
Remote clock offset: -0.093 ms

# Below is generated by plot.py at 2019-02-11 22:16:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.620 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.546 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.373 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.729 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

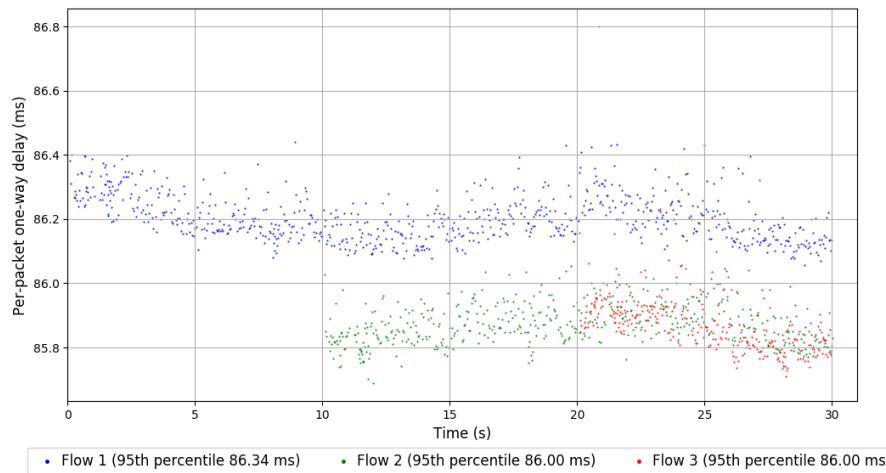
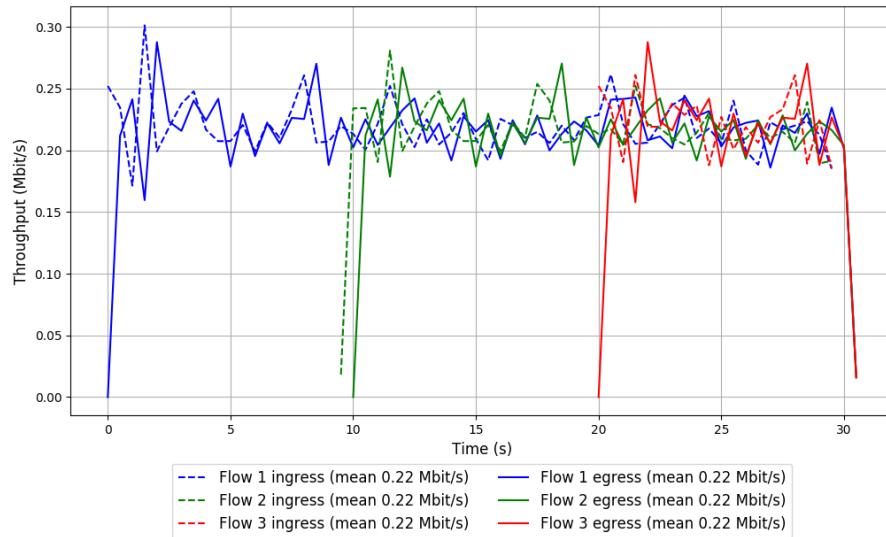


Run 4: Statistics of SCReAM

```
Start at: 2019-02-11 18:15:25
End at: 2019-02-11 18:15:55
Local clock offset: 0.261 ms
Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2019-02-11 22:16:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.307 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.342 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.996 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.998 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

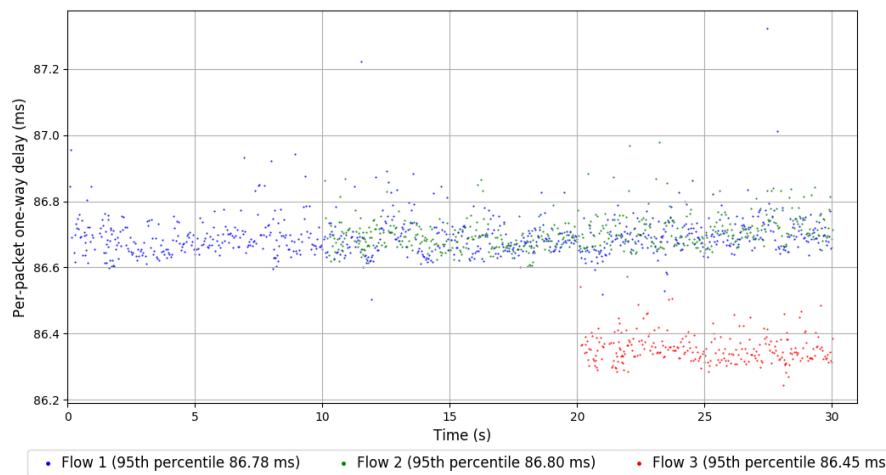
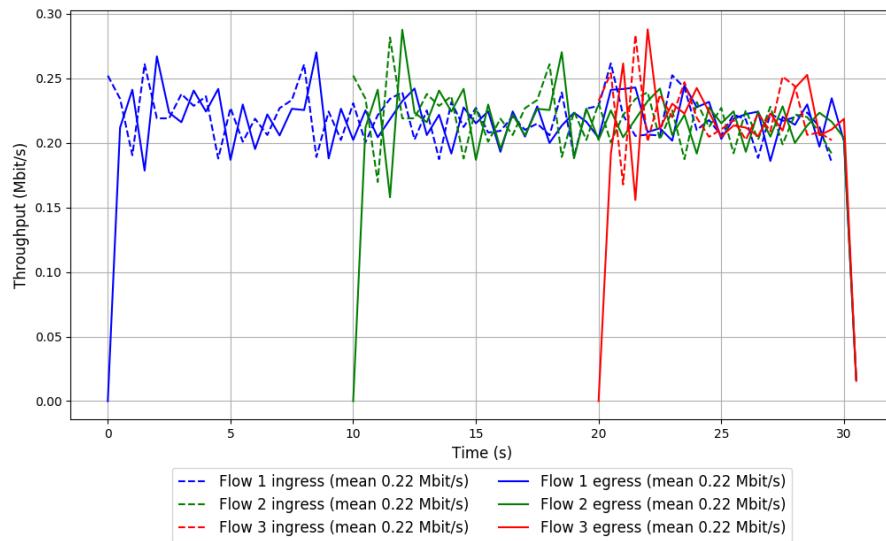


Run 5: Statistics of SCReAM

```
Start at: 2019-02-11 18:52:48
End at: 2019-02-11 18:53:18
Local clock offset: -0.304 ms
Remote clock offset: -0.075 ms

# Below is generated by plot.py at 2019-02-11 22:16:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.779 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.785 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.798 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.447 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

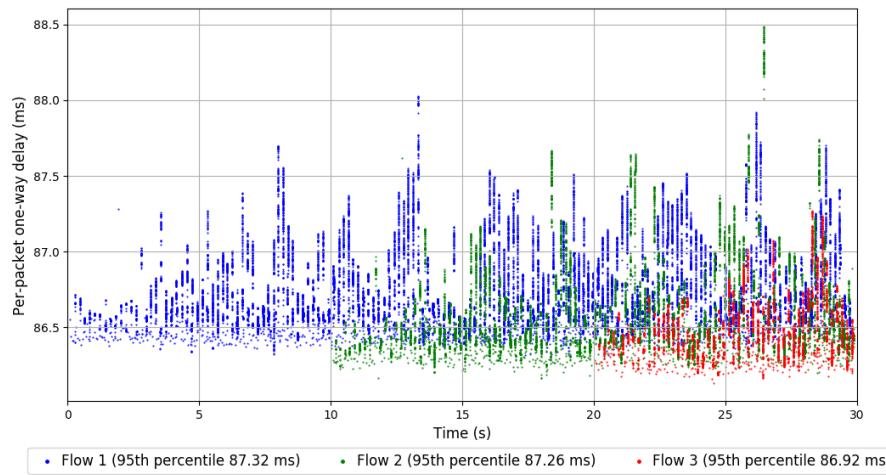
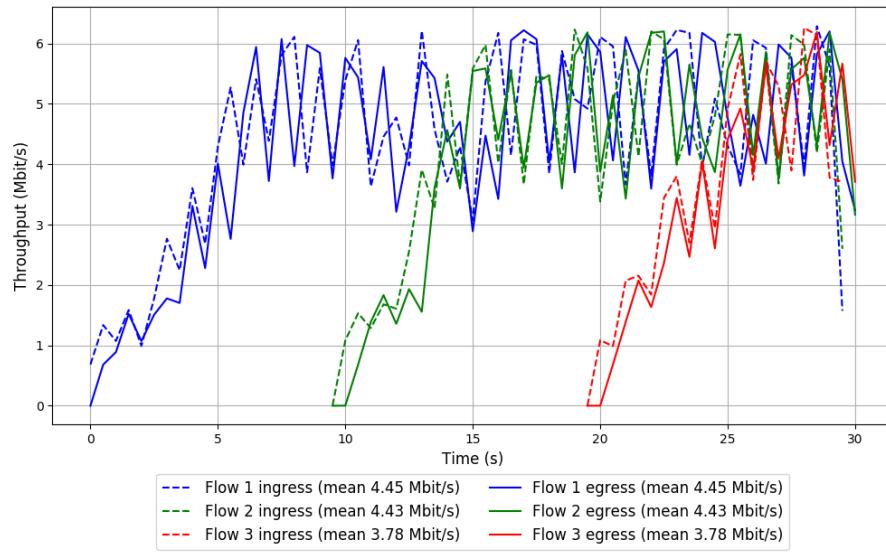


Run 1: Statistics of Sprout

```
Start at: 2019-02-11 16:33:29
End at: 2019-02-11 16:33:59
Local clock offset: -0.188 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2019-02-11 22:16:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.64 Mbit/s
95th percentile per-packet one-way delay: 87.277 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.45 Mbit/s
95th percentile per-packet one-way delay: 87.321 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.43 Mbit/s
95th percentile per-packet one-way delay: 87.263 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.78 Mbit/s
95th percentile per-packet one-way delay: 86.925 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

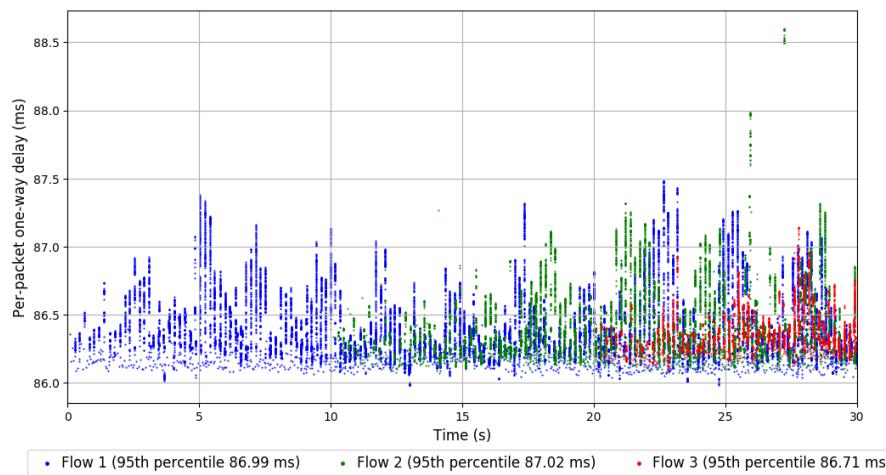
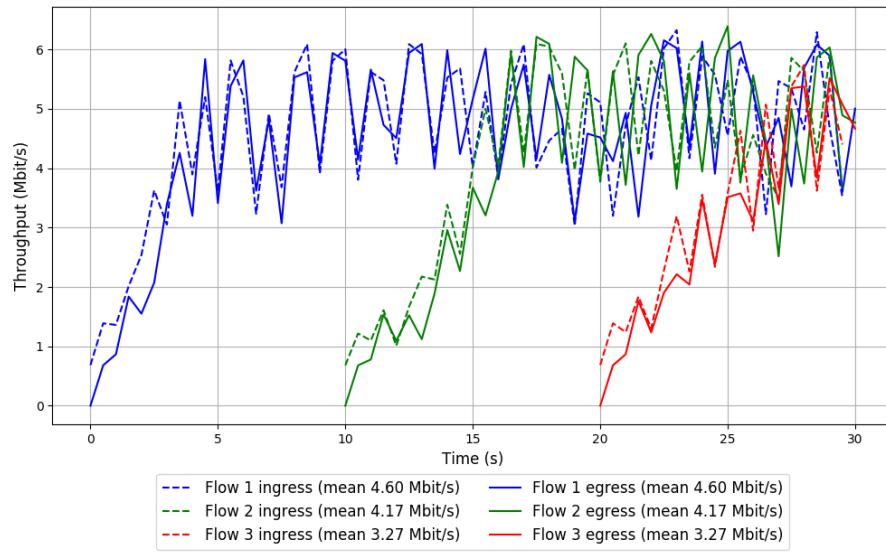


Run 2: Statistics of Sprout

```
Start at: 2019-02-11 17:12:46
End at: 2019-02-11 17:13:16
Local clock offset: -0.229 ms
Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2019-02-11 22:16:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.45 Mbit/s
95th percentile per-packet one-way delay: 86.981 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.60 Mbit/s
95th percentile per-packet one-way delay: 86.990 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.17 Mbit/s
95th percentile per-packet one-way delay: 87.021 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.27 Mbit/s
95th percentile per-packet one-way delay: 86.713 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

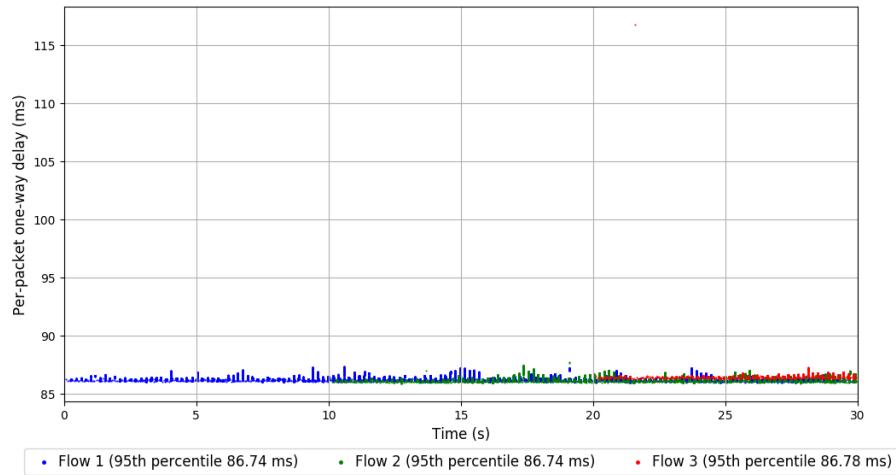
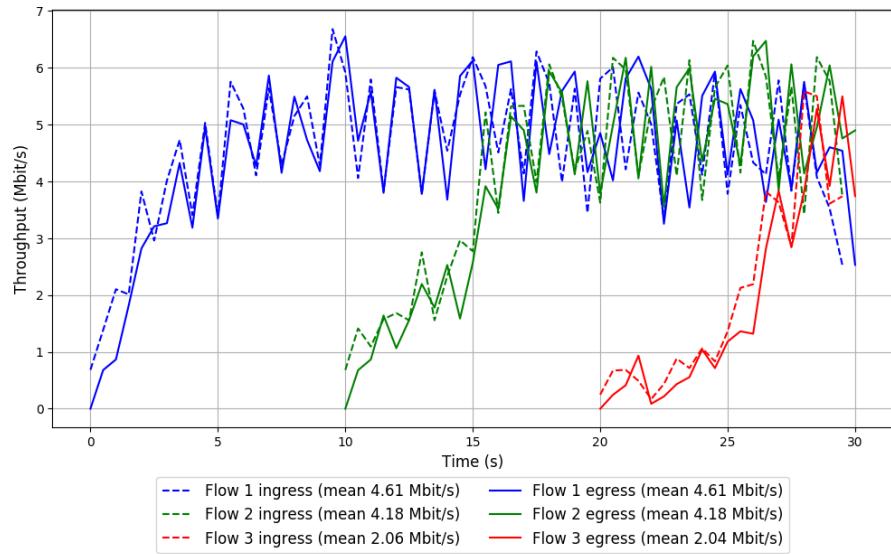


Run 3: Statistics of Sprout

```
Start at: 2019-02-11 17:50:22
End at: 2019-02-11 17:50:52
Local clock offset: -0.13 ms
Remote clock offset: -0.154 ms

# Below is generated by plot.py at 2019-02-11 22:16:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.07 Mbit/s
95th percentile per-packet one-way delay: 86.751 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 4.61 Mbit/s
95th percentile per-packet one-way delay: 86.742 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.18 Mbit/s
95th percentile per-packet one-way delay: 86.742 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 86.776 ms
Loss rate: 0.90%
```

Run 3: Report of Sprout — Data Link

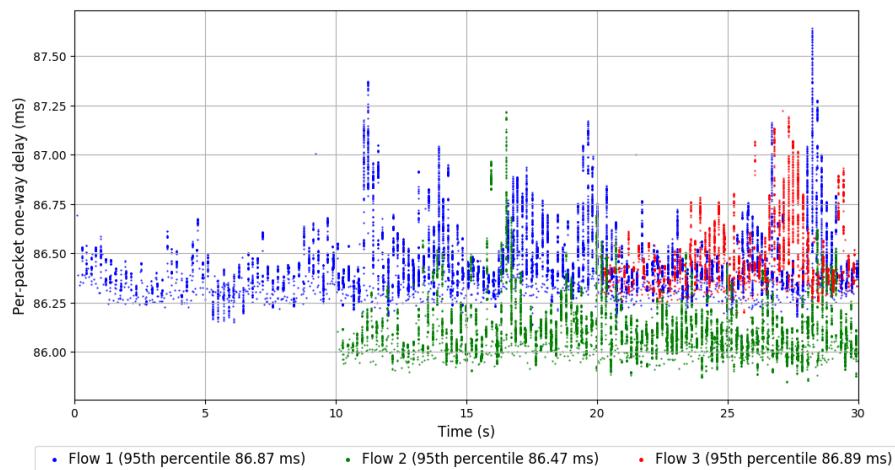
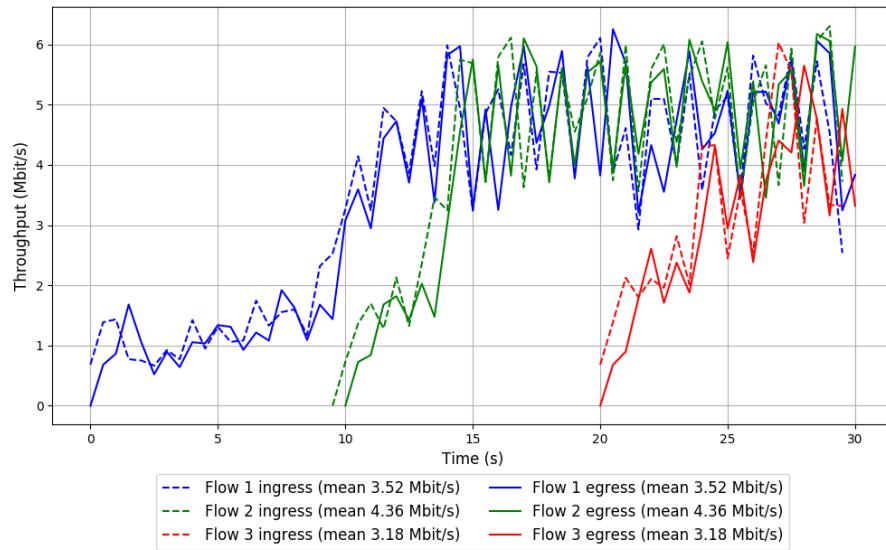


Run 4: Statistics of Sprout

```
Start at: 2019-02-11 18:28:01
End at: 2019-02-11 18:28:31
Local clock offset: 0.122 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2019-02-11 22:16:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.47 Mbit/s
95th percentile per-packet one-way delay: 86.799 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.52 Mbit/s
95th percentile per-packet one-way delay: 86.873 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.36 Mbit/s
95th percentile per-packet one-way delay: 86.468 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.18 Mbit/s
95th percentile per-packet one-way delay: 86.885 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

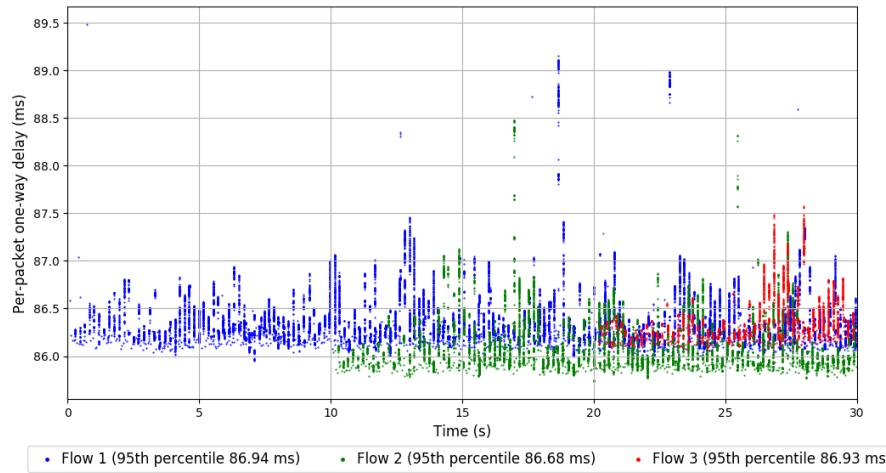
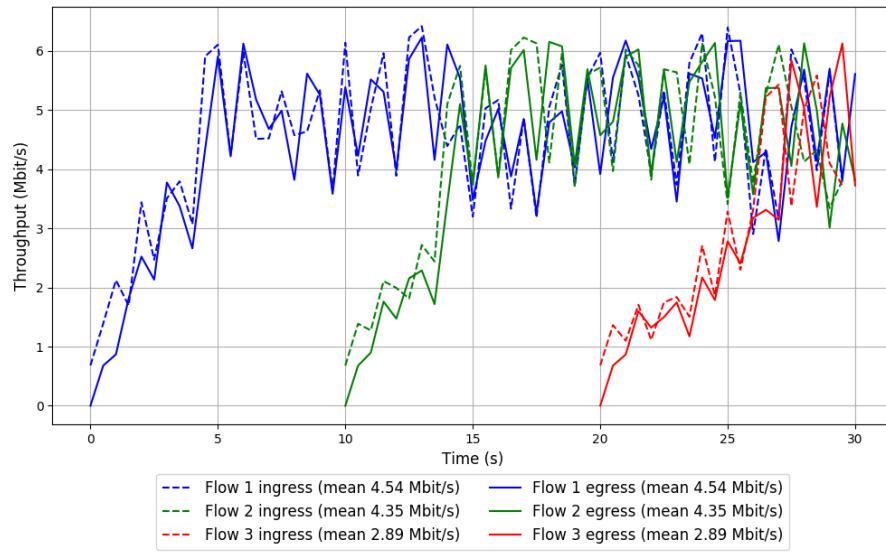


Run 5: Statistics of Sprout

```
Start at: 2019-02-11 19:05:15
End at: 2019-02-11 19:05:45
Local clock offset: 0.153 ms
Remote clock offset: -0.079 ms

# Below is generated by plot.py at 2019-02-11 22:16:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.38 Mbit/s
95th percentile per-packet one-way delay: 86.864 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.54 Mbit/s
95th percentile per-packet one-way delay: 86.944 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.35 Mbit/s
95th percentile per-packet one-way delay: 86.683 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.89 Mbit/s
95th percentile per-packet one-way delay: 86.926 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

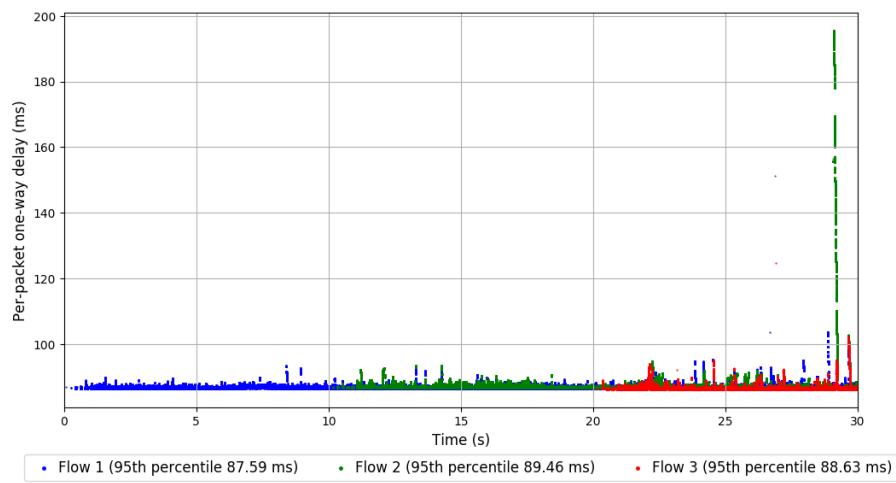
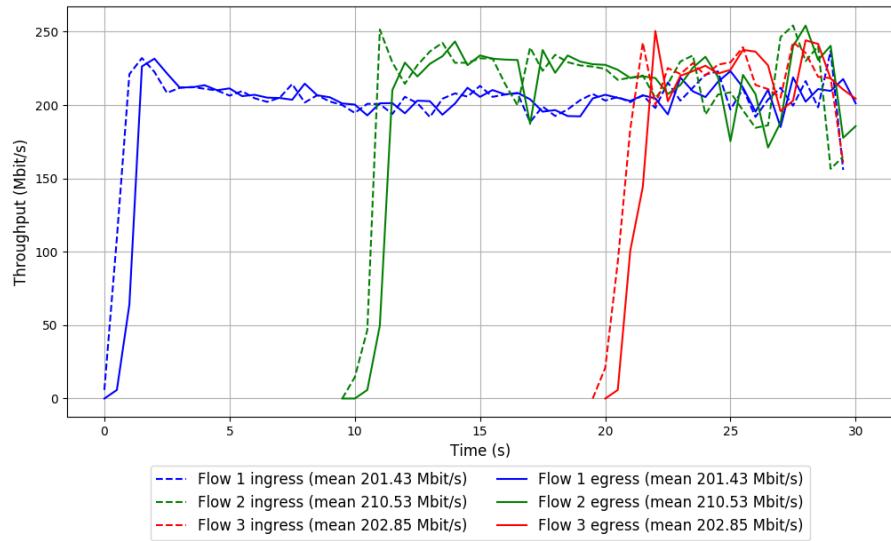


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-02-11 16:14:04
End at: 2019-02-11 16:14:34
Local clock offset: -0.427 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2019-02-11 22:19:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 409.71 Mbit/s
95th percentile per-packet one-way delay: 88.433 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 201.43 Mbit/s
95th percentile per-packet one-way delay: 87.592 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 210.53 Mbit/s
95th percentile per-packet one-way delay: 89.461 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 202.85 Mbit/s
95th percentile per-packet one-way delay: 88.632 ms
Loss rate: 0.00%
```

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

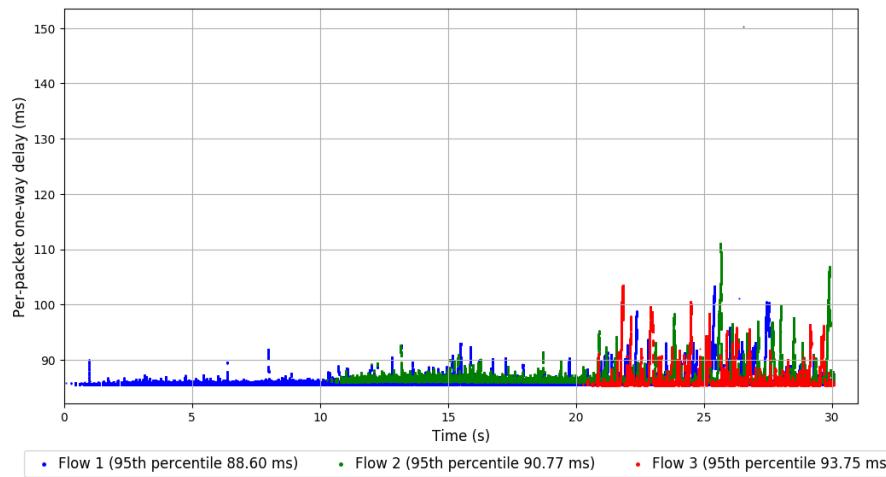
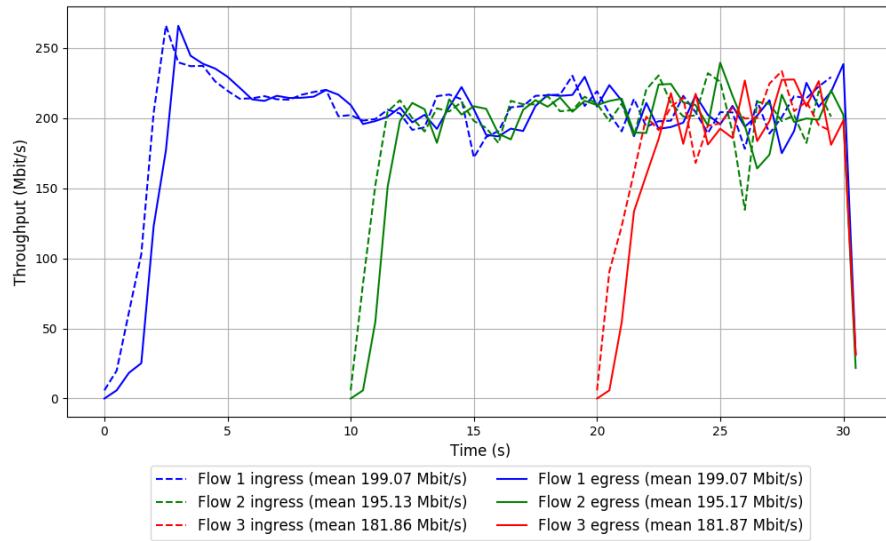


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-02-11 16:52:39
End at: 2019-02-11 16:53:09
Local clock offset: 0.411 ms
Remote clock offset: -0.022 ms

# Below is generated by plot.py at 2019-02-11 22:19:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 389.49 Mbit/s
95th percentile per-packet one-way delay: 90.353 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 199.07 Mbit/s
95th percentile per-packet one-way delay: 88.599 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 195.17 Mbit/s
95th percentile per-packet one-way delay: 90.773 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 181.87 Mbit/s
95th percentile per-packet one-way delay: 93.754 ms
Loss rate: 0.00%
```

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

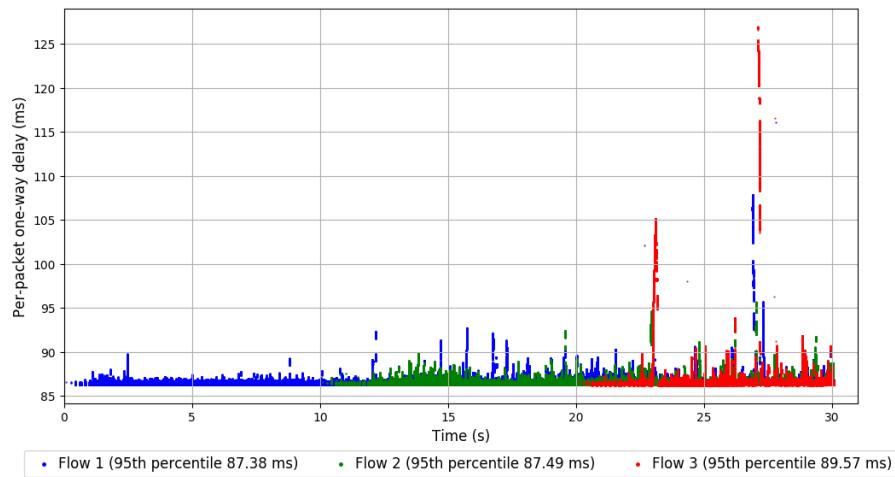
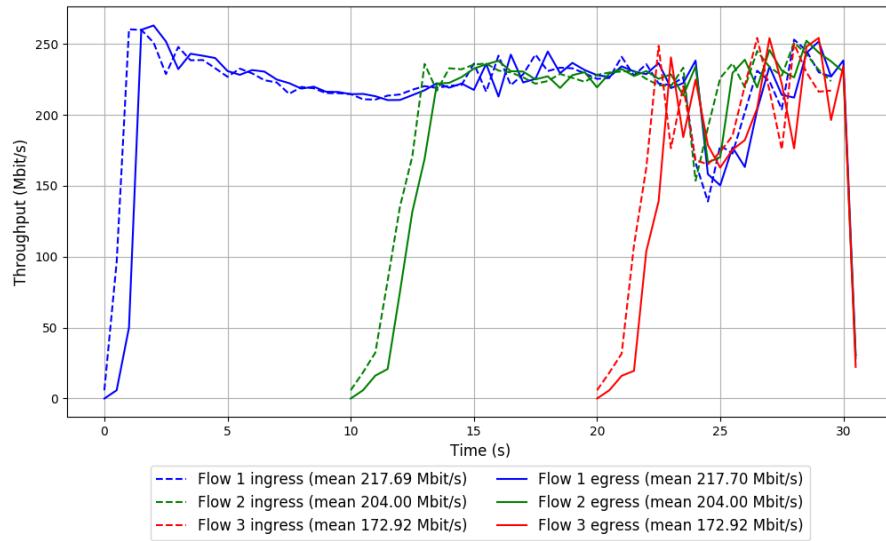


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-02-11 17:31:20
End at: 2019-02-11 17:31:50
Local clock offset: -0.514 ms
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2019-02-11 22:20:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 411.04 Mbit/s
95th percentile per-packet one-way delay: 87.568 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 217.70 Mbit/s
95th percentile per-packet one-way delay: 87.377 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 204.00 Mbit/s
95th percentile per-packet one-way delay: 87.492 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 172.92 Mbit/s
95th percentile per-packet one-way delay: 89.567 ms
Loss rate: 0.00%
```

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

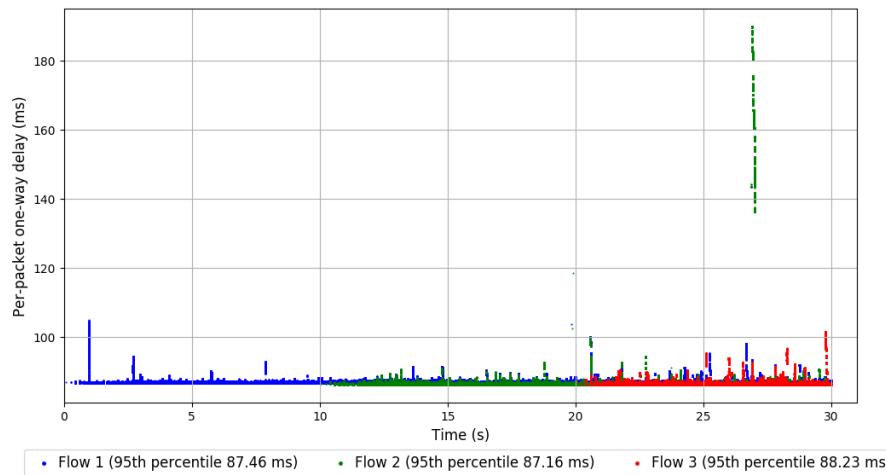
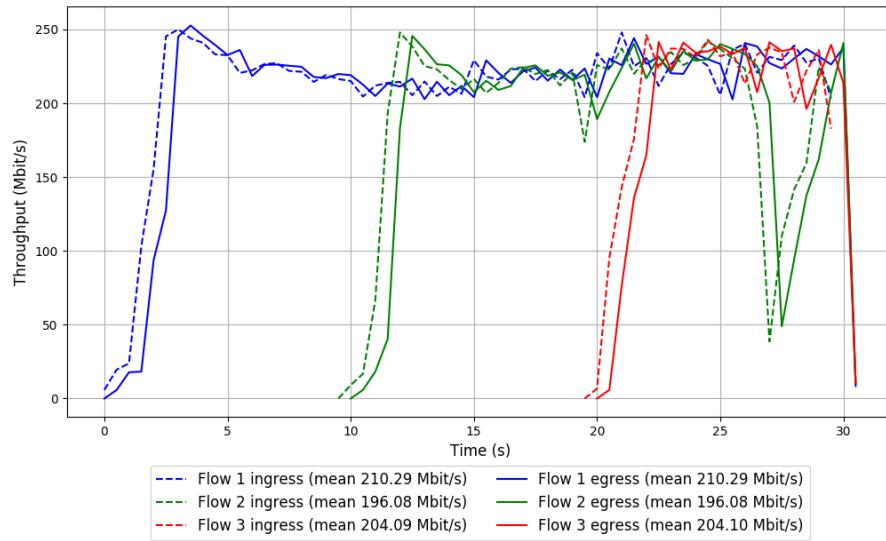


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-02-11 18:08:24
End at: 2019-02-11 18:08:54
Local clock offset: -0.448 ms
Remote clock offset: -0.094 ms

# Below is generated by plot.py at 2019-02-11 22:20:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 408.96 Mbit/s
95th percentile per-packet one-way delay: 87.493 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 210.29 Mbit/s
95th percentile per-packet one-way delay: 87.459 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 196.08 Mbit/s
95th percentile per-packet one-way delay: 87.163 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 204.10 Mbit/s
95th percentile per-packet one-way delay: 88.226 ms
Loss rate: 0.00%
```

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

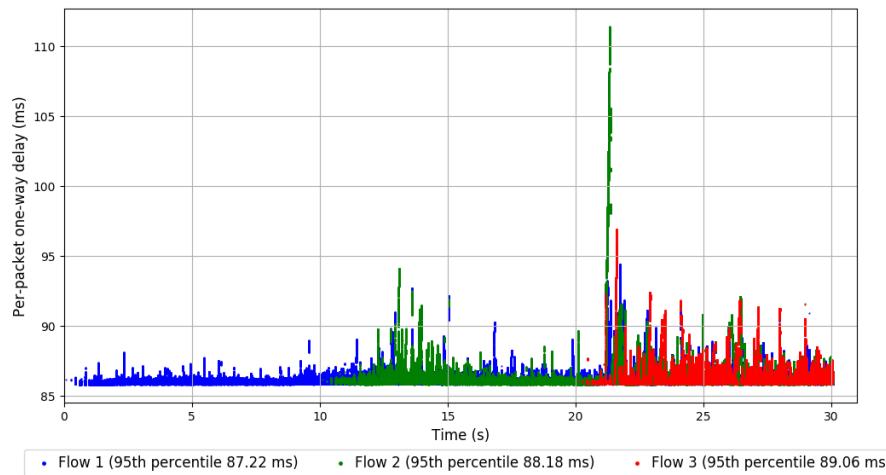
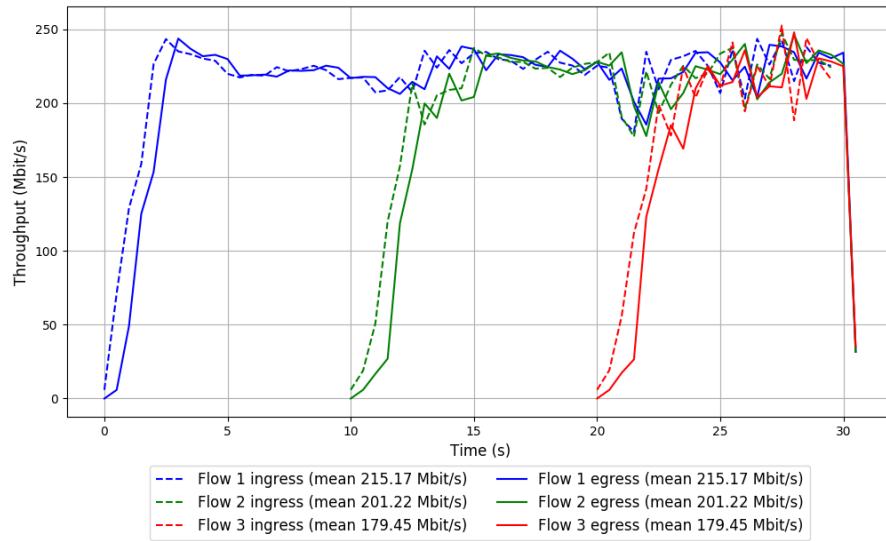


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-02-11 18:45:48
End at: 2019-02-11 18:46:18
Local clock offset: -0.019 ms
Remote clock offset: -0.096 ms

# Below is generated by plot.py at 2019-02-11 22:21:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 408.79 Mbit/s
95th percentile per-packet one-way delay: 87.916 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 215.17 Mbit/s
95th percentile per-packet one-way delay: 87.224 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 201.22 Mbit/s
95th percentile per-packet one-way delay: 88.177 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 179.45 Mbit/s
95th percentile per-packet one-way delay: 89.064 ms
Loss rate: 0.00%
```

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

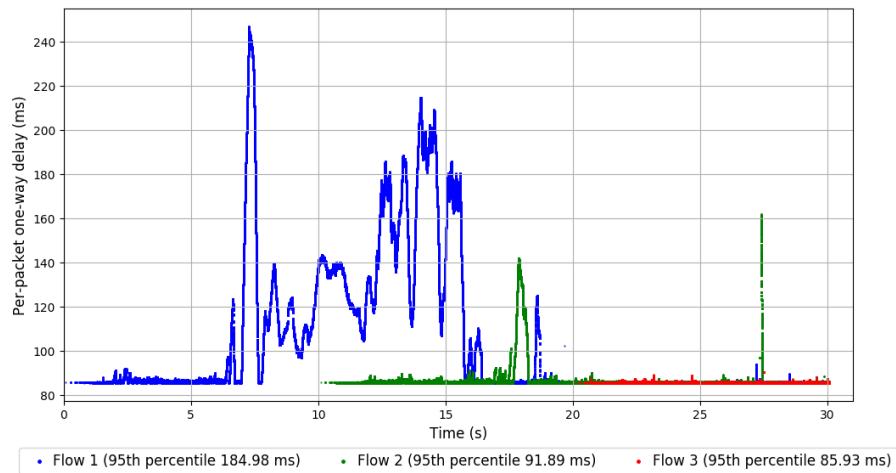
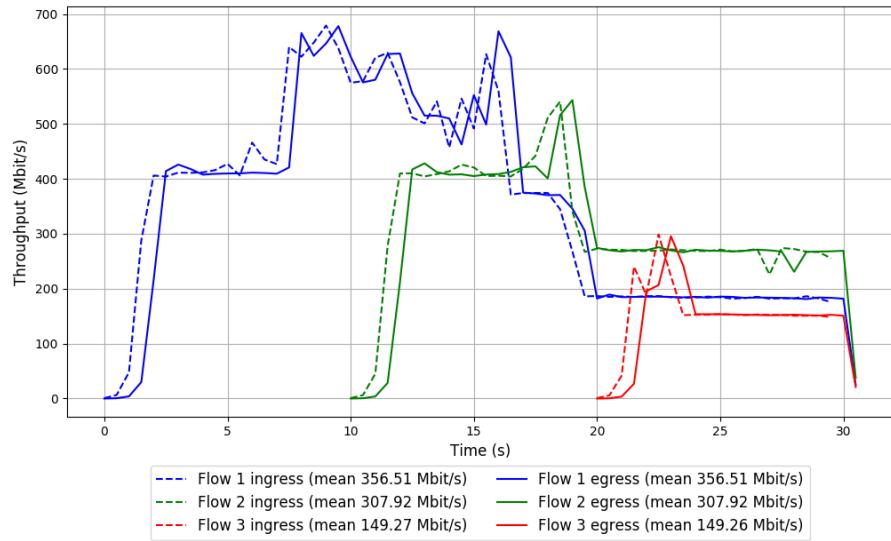


Run 1: Statistics of TCP Vegas

```
Start at: 2019-02-11 16:24:17
End at: 2019-02-11 16:24:47
Local clock offset: 0.342 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2019-02-11 22:21:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 611.22 Mbit/s
95th percentile per-packet one-way delay: 172.648 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 356.51 Mbit/s
95th percentile per-packet one-way delay: 184.981 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 307.92 Mbit/s
95th percentile per-packet one-way delay: 91.889 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 149.26 Mbit/s
95th percentile per-packet one-way delay: 85.934 ms
Loss rate: 0.00%
```

Run 1: Report of TCP Vegas — Data Link

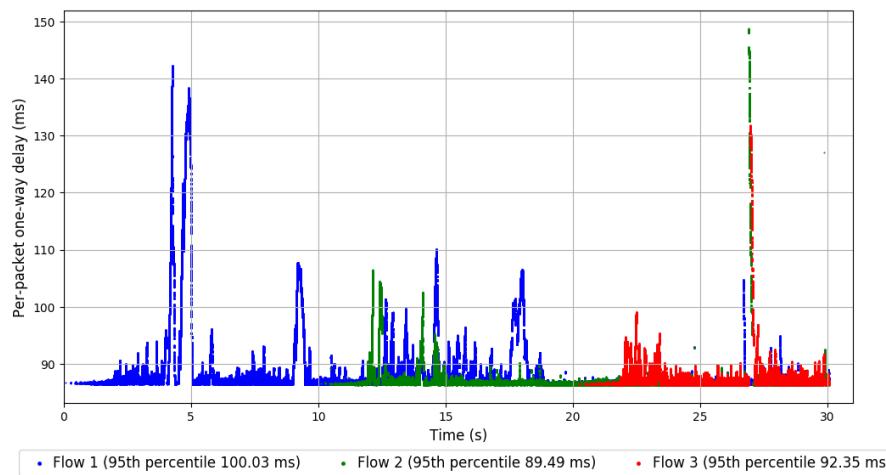
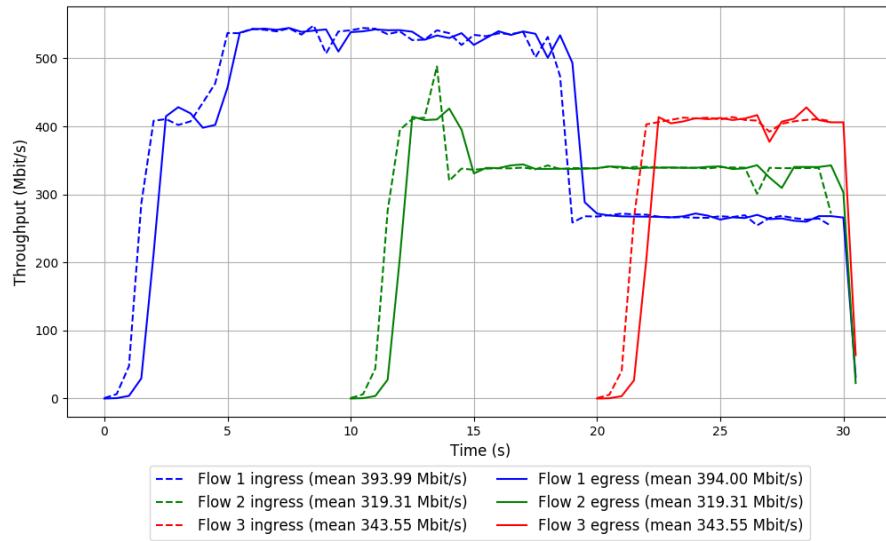


Run 2: Statistics of TCP Vegas

```
Start at: 2019-02-11 17:03:13
End at: 2019-02-11 17:03:43
Local clock offset: -0.484 ms
Remote clock offset: 0.034 ms

# Below is generated by plot.py at 2019-02-11 22:31:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 720.77 Mbit/s
95th percentile per-packet one-way delay: 95.793 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 394.00 Mbit/s
95th percentile per-packet one-way delay: 100.027 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 319.31 Mbit/s
95th percentile per-packet one-way delay: 89.492 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 343.55 Mbit/s
95th percentile per-packet one-way delay: 92.346 ms
Loss rate: 0.00%
```

Run 2: Report of TCP Vegas — Data Link

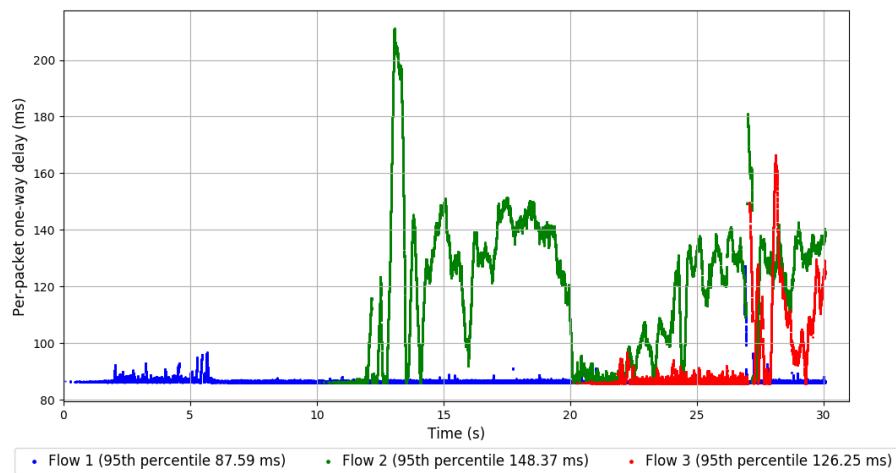
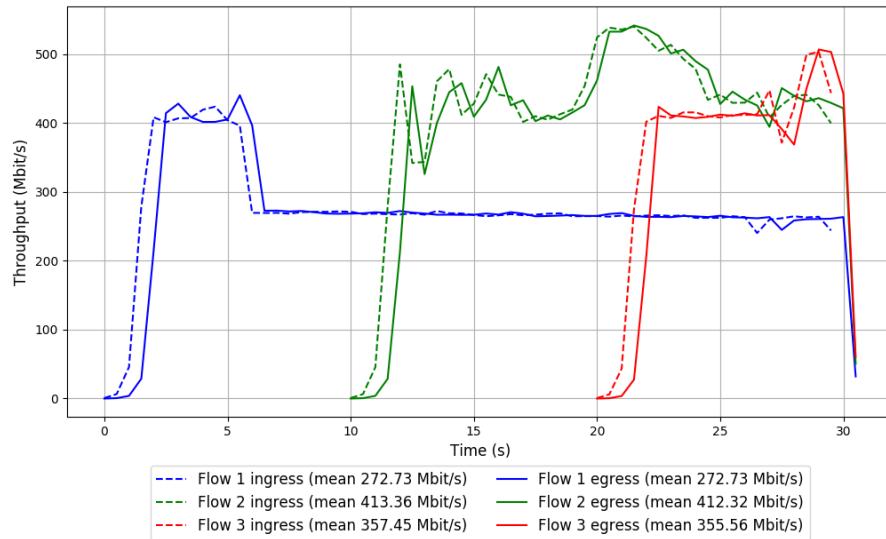


Run 3: Statistics of TCP Vegas

```
Start at: 2019-02-11 17:41:16
End at: 2019-02-11 17:41:46
Local clock offset: 0.094 ms
Remote clock offset: -0.084 ms

# Below is generated by plot.py at 2019-02-11 22:33:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 665.52 Mbit/s
95th percentile per-packet one-way delay: 142.147 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 272.73 Mbit/s
95th percentile per-packet one-way delay: 87.593 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 412.32 Mbit/s
95th percentile per-packet one-way delay: 148.366 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 355.56 Mbit/s
95th percentile per-packet one-way delay: 126.252 ms
Loss rate: 0.51%
```

Run 3: Report of TCP Vegas — Data Link

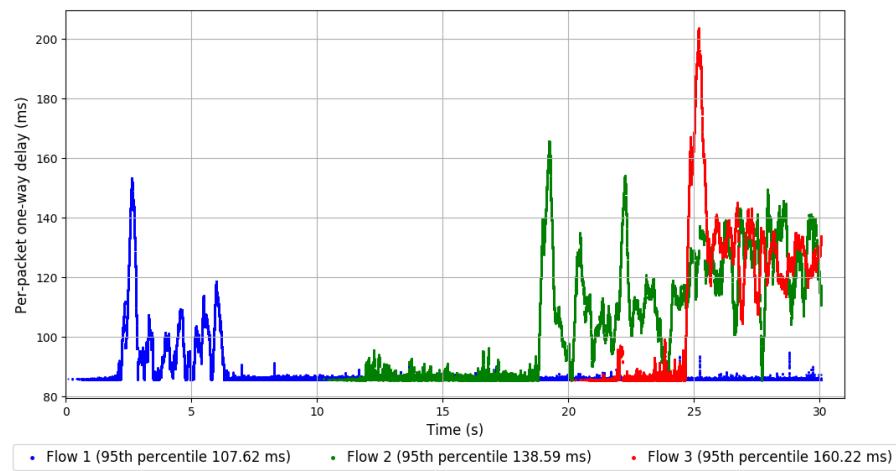
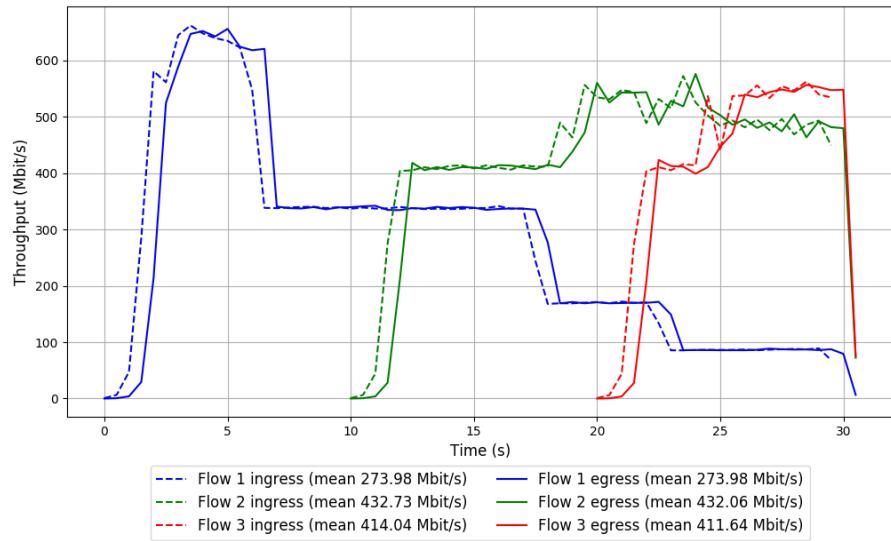


Run 4: Statistics of TCP Vegas

```
Start at: 2019-02-11 18:18:37
End at: 2019-02-11 18:19:07
Local clock offset: 0.309 ms
Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2019-02-11 22:37:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 698.61 Mbit/s
95th percentile per-packet one-way delay: 138.003 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 273.98 Mbit/s
95th percentile per-packet one-way delay: 107.616 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 432.06 Mbit/s
95th percentile per-packet one-way delay: 138.592 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 411.64 Mbit/s
95th percentile per-packet one-way delay: 160.220 ms
Loss rate: 0.57%
```

Run 4: Report of TCP Vegas — Data Link

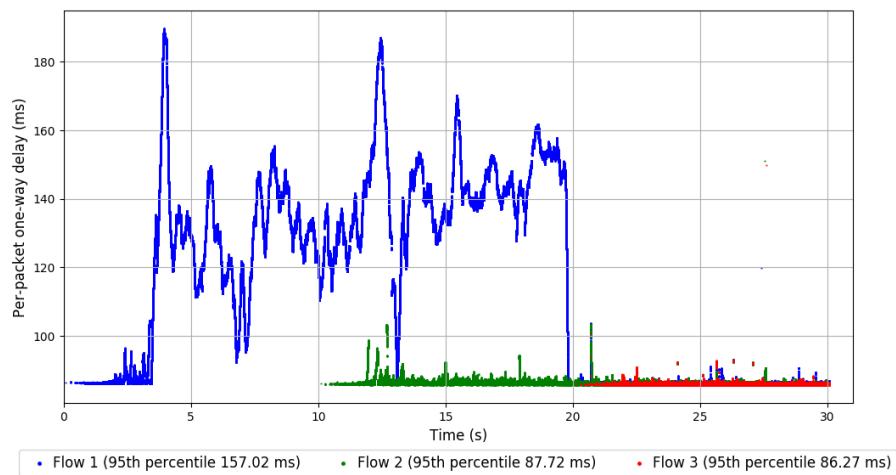
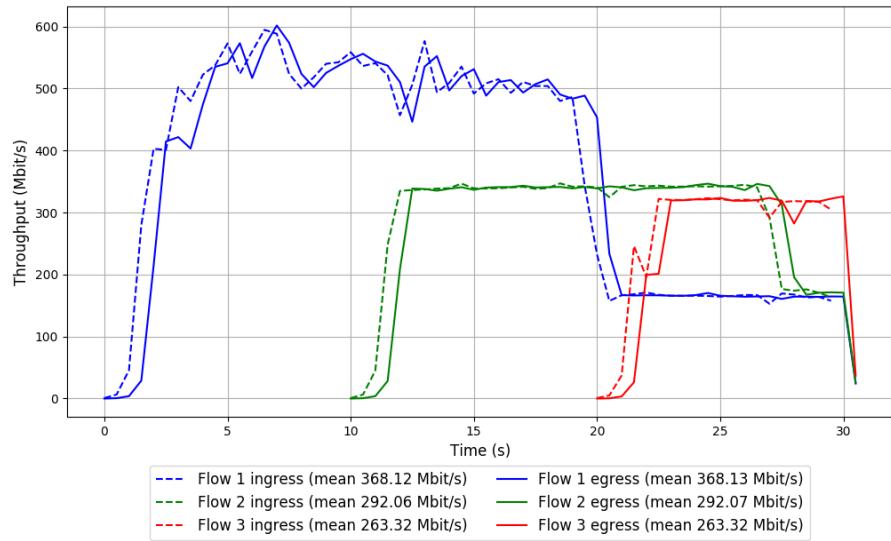


Run 5: Statistics of TCP Vegas

```
Start at: 2019-02-11 18:56:02
End at: 2019-02-11 18:56:32
Local clock offset: 0.186 ms
Remote clock offset: -0.075 ms

# Below is generated by plot.py at 2019-02-11 22:37:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 650.06 Mbit/s
95th percentile per-packet one-way delay: 152.855 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 368.13 Mbit/s
95th percentile per-packet one-way delay: 157.021 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 292.07 Mbit/s
95th percentile per-packet one-way delay: 87.720 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 263.32 Mbit/s
95th percentile per-packet one-way delay: 86.265 ms
Loss rate: 0.00%
```

Run 5: Report of TCP Vegas — Data Link

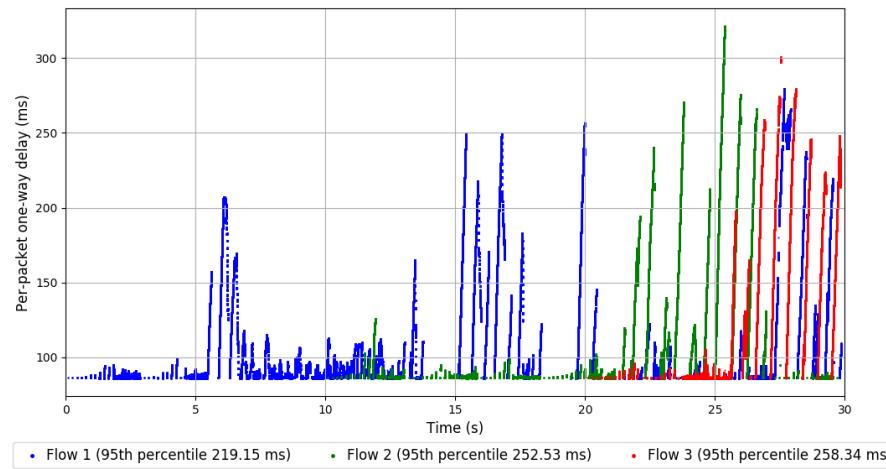
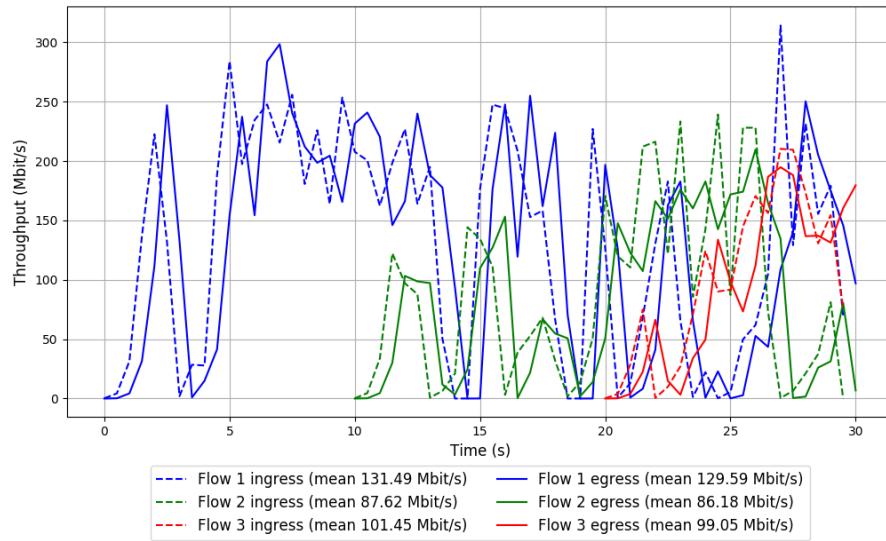


Run 1: Statistics of Verus

```
Start at: 2019-02-11 16:34:45
End at: 2019-02-11 16:35:15
Local clock offset: 0.035 ms
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2019-02-11 22:37:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 218.70 Mbit/s
95th percentile per-packet one-way delay: 240.842 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 129.59 Mbit/s
95th percentile per-packet one-way delay: 219.148 ms
Loss rate: 1.41%
-- Flow 2:
Average throughput: 86.18 Mbit/s
95th percentile per-packet one-way delay: 252.531 ms
Loss rate: 1.64%
-- Flow 3:
Average throughput: 99.05 Mbit/s
95th percentile per-packet one-way delay: 258.341 ms
Loss rate: 1.07%
```

Run 1: Report of Verus — Data Link

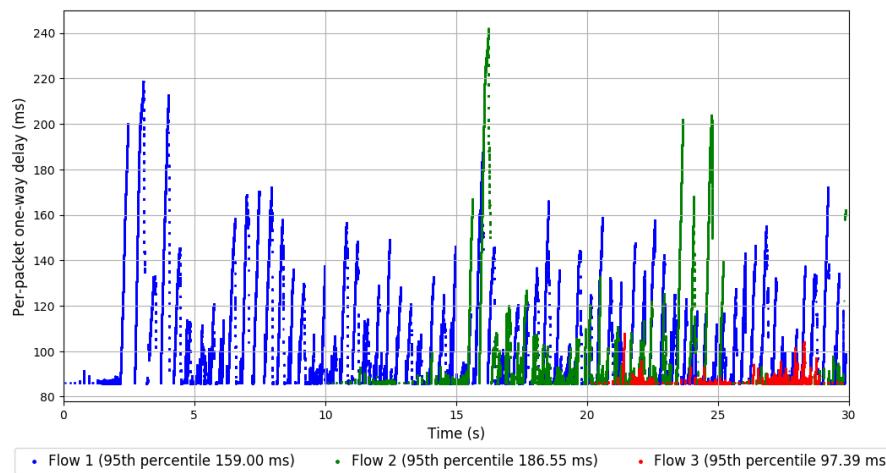
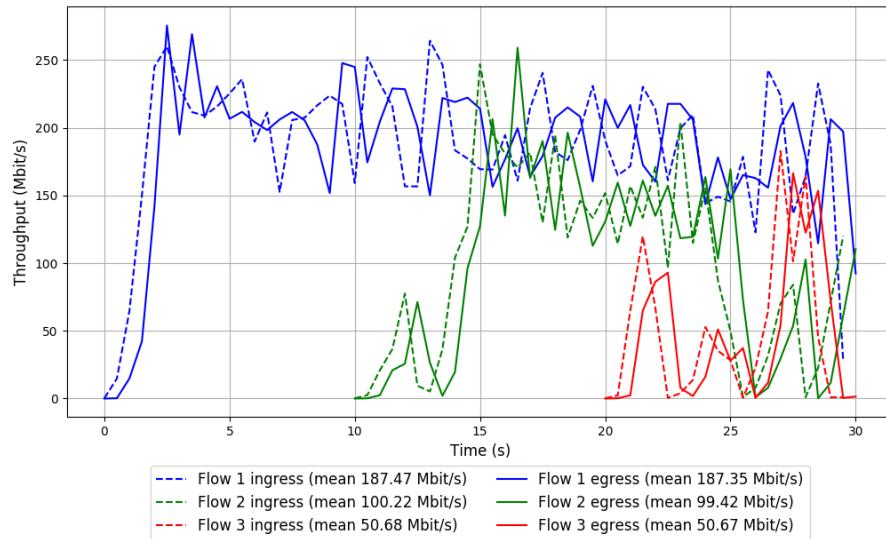


Run 2: Statistics of Verus

```
Start at: 2019-02-11 17:14:02
End at: 2019-02-11 17:14:32
Local clock offset: -0.119 ms
Remote clock offset: -0.006 ms

# Below is generated by plot.py at 2019-02-11 22:37:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 269.68 Mbit/s
95th percentile per-packet one-way delay: 161.708 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 187.35 Mbit/s
95th percentile per-packet one-way delay: 159.001 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 99.42 Mbit/s
95th percentile per-packet one-way delay: 186.552 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 50.67 Mbit/s
95th percentile per-packet one-way delay: 97.389 ms
Loss rate: 0.00%
```

Run 2: Report of Verus — Data Link

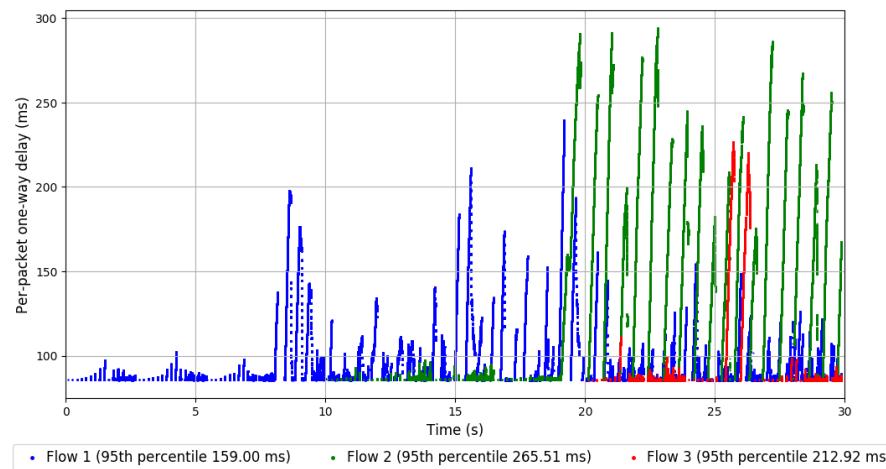
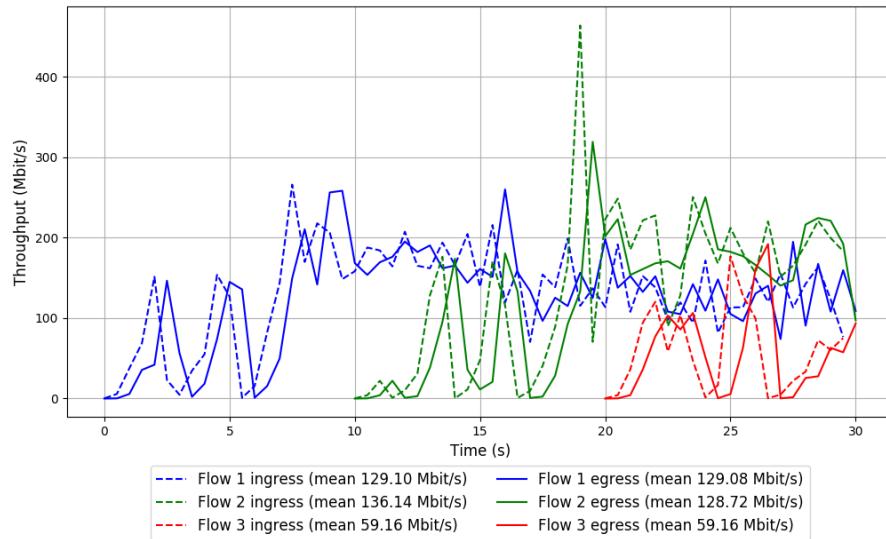


Run 3: Statistics of Verus

```
Start at: 2019-02-11 17:51:38
End at: 2019-02-11 17:52:08
Local clock offset: 0.312 ms
Remote clock offset: -0.116 ms

# Below is generated by plot.py at 2019-02-11 22:37:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 233.94 Mbit/s
95th percentile per-packet one-way delay: 234.169 ms
Loss rate: 2.07%
-- Flow 1:
Average throughput: 129.08 Mbit/s
95th percentile per-packet one-way delay: 159.004 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 128.72 Mbit/s
95th percentile per-packet one-way delay: 265.512 ms
Loss rate: 5.46%
-- Flow 3:
Average throughput: 59.16 Mbit/s
95th percentile per-packet one-way delay: 212.923 ms
Loss rate: 0.00%
```

Run 3: Report of Verus — Data Link

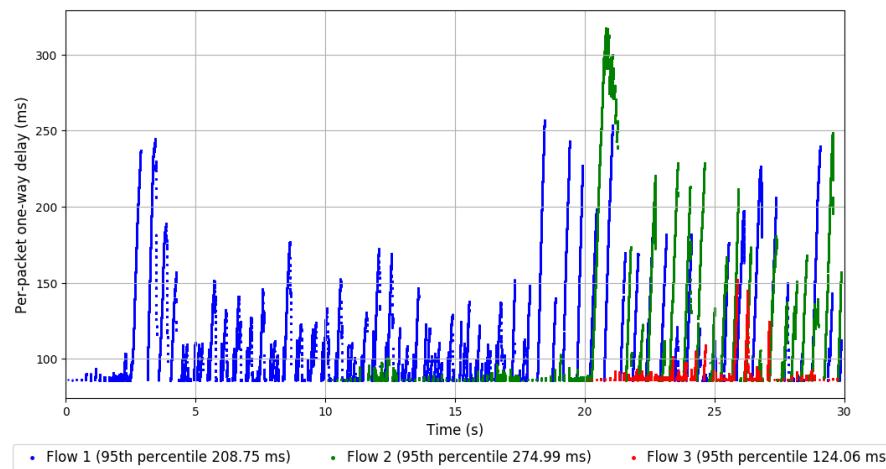
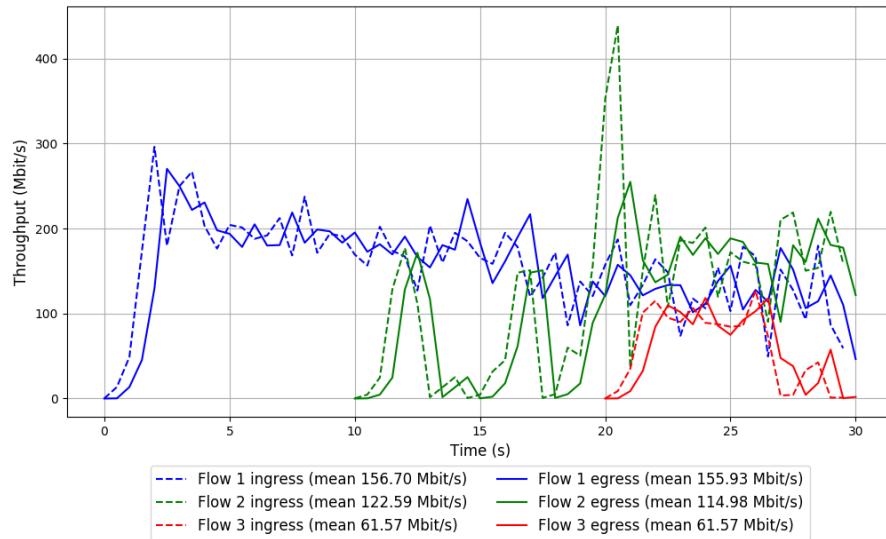


Run 4: Statistics of Verus

```
Start at: 2019-02-11 18:29:17
End at: 2019-02-11 18:29:47
Local clock offset: 0.023 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2019-02-11 22:37:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 252.17 Mbit/s
95th percentile per-packet one-way delay: 223.109 ms
Loss rate: 2.25%
-- Flow 1:
Average throughput: 155.93 Mbit/s
95th percentile per-packet one-way delay: 208.751 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 114.98 Mbit/s
95th percentile per-packet one-way delay: 274.986 ms
Loss rate: 6.20%
-- Flow 3:
Average throughput: 61.57 Mbit/s
95th percentile per-packet one-way delay: 124.056 ms
Loss rate: 0.00%
```

Run 4: Report of Verus — Data Link

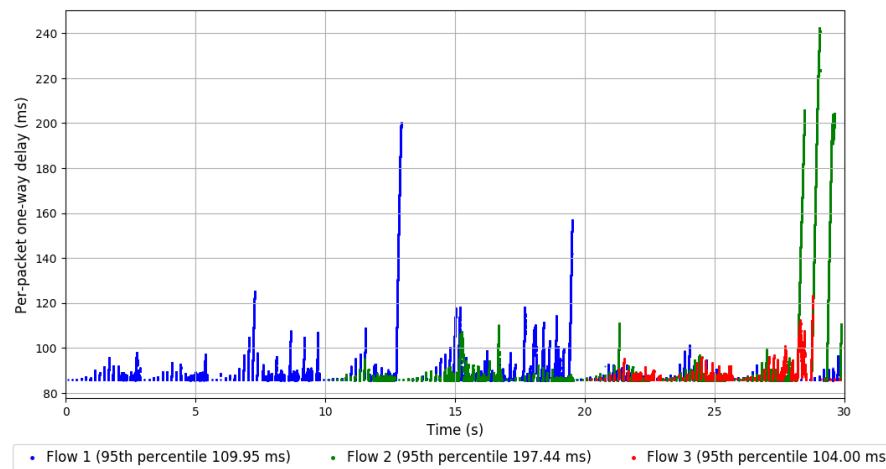
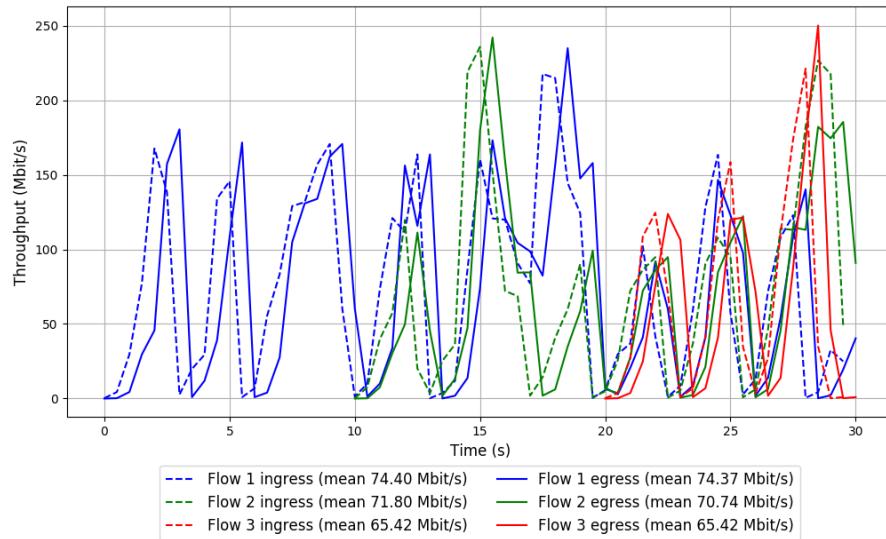


Run 5: Statistics of Verus

```
Start at: 2019-02-11 19:06:30
End at: 2019-02-11 19:07:00
Local clock offset: 0.259 ms
Remote clock offset: -0.102 ms

# Below is generated by plot.py at 2019-02-11 22:37:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 142.36 Mbit/s
95th percentile per-packet one-way delay: 147.426 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 74.37 Mbit/s
95th percentile per-packet one-way delay: 109.955 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 70.74 Mbit/s
95th percentile per-packet one-way delay: 197.436 ms
Loss rate: 1.47%
-- Flow 3:
Average throughput: 65.42 Mbit/s
95th percentile per-packet one-way delay: 103.997 ms
Loss rate: 0.00%
```

Run 5: Report of Verus — Data Link

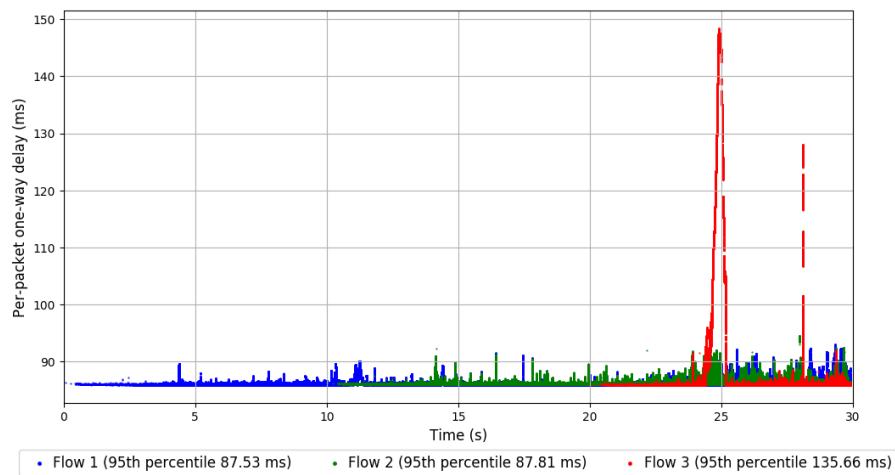
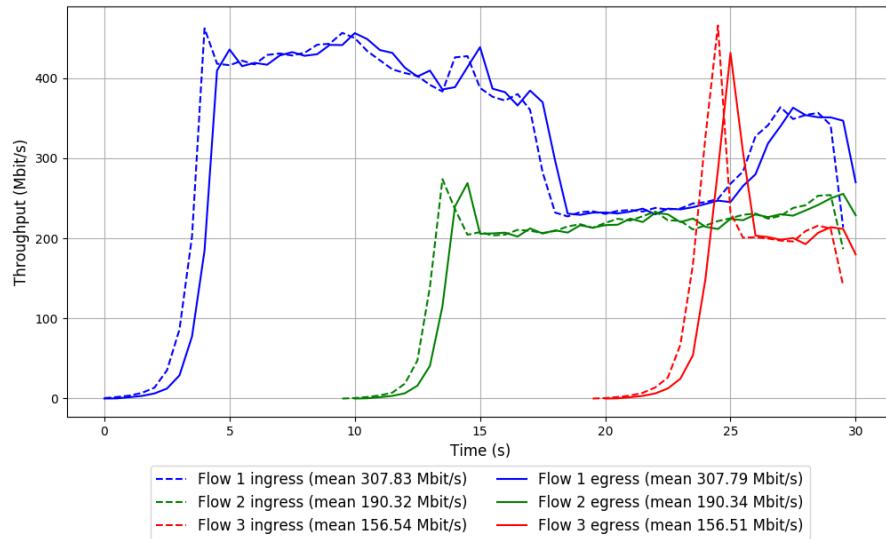


Run 1: Statistics of PCC-Vivace

```
Start at: 2019-02-11 15:59:26
End at: 2019-02-11 15:59:56
Local clock offset: -0.056 ms
Remote clock offset: -0.062 ms

# Below is generated by plot.py at 2019-02-11 22:41:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 486.24 Mbit/s
95th percentile per-packet one-way delay: 88.489 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 307.79 Mbit/s
95th percentile per-packet one-way delay: 87.531 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 190.34 Mbit/s
95th percentile per-packet one-way delay: 87.806 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 156.51 Mbit/s
95th percentile per-packet one-way delay: 135.662 ms
Loss rate: 0.02%
```

Run 1: Report of PCC-Vivace — Data Link

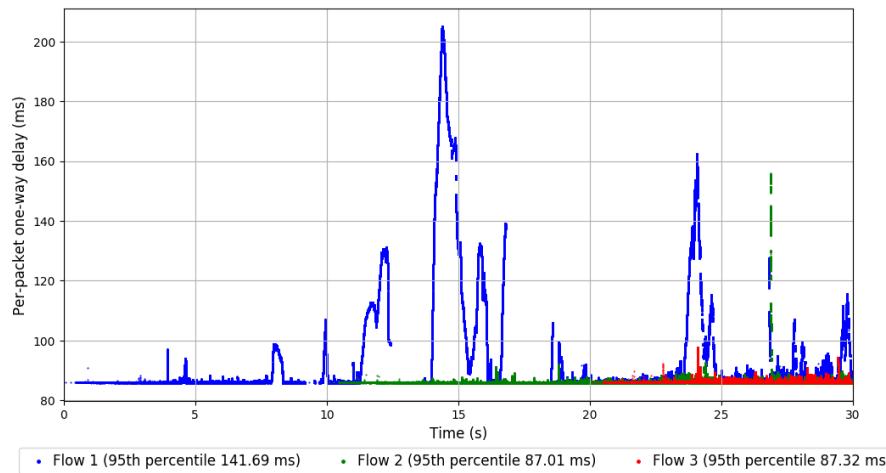
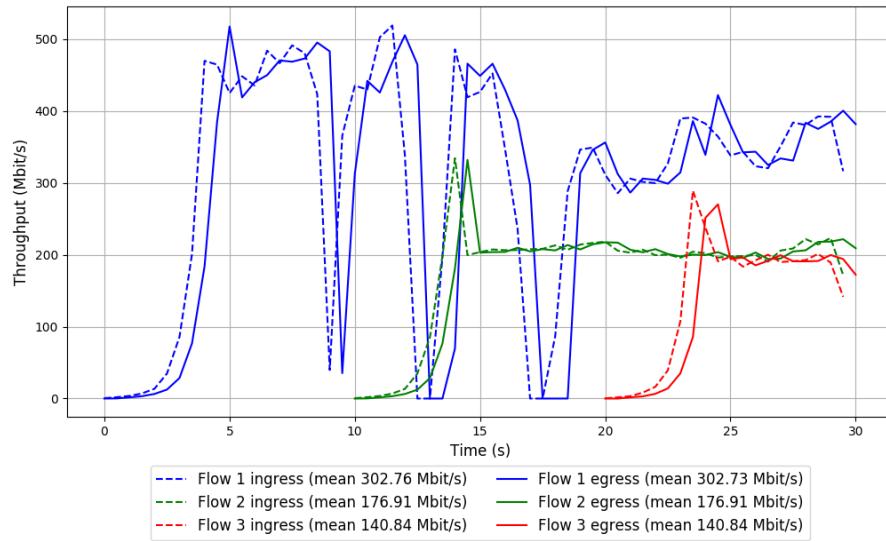


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-02-11 16:36:24
End at: 2019-02-11 16:36:54
Local clock offset: 0.044 ms
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2019-02-11 22:41:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 466.76 Mbit/s
95th percentile per-packet one-way delay: 129.995 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 302.73 Mbit/s
95th percentile per-packet one-way delay: 141.695 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 176.91 Mbit/s
95th percentile per-packet one-way delay: 87.010 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 140.84 Mbit/s
95th percentile per-packet one-way delay: 87.322 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Vivace — Data Link

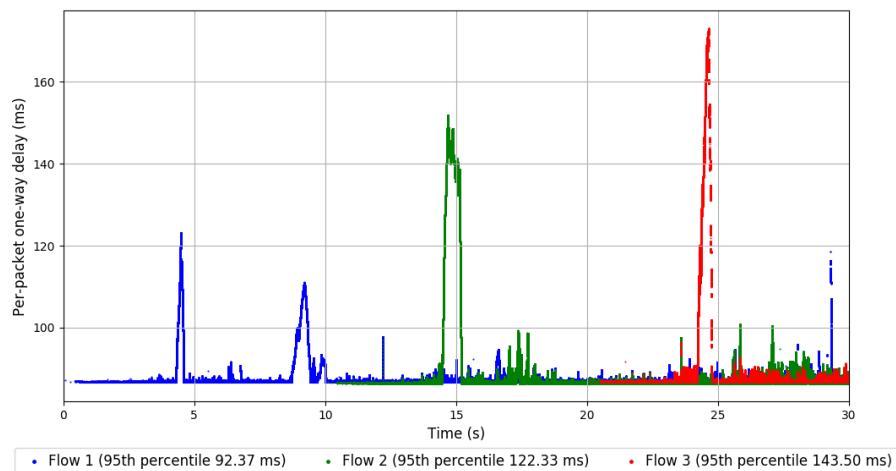
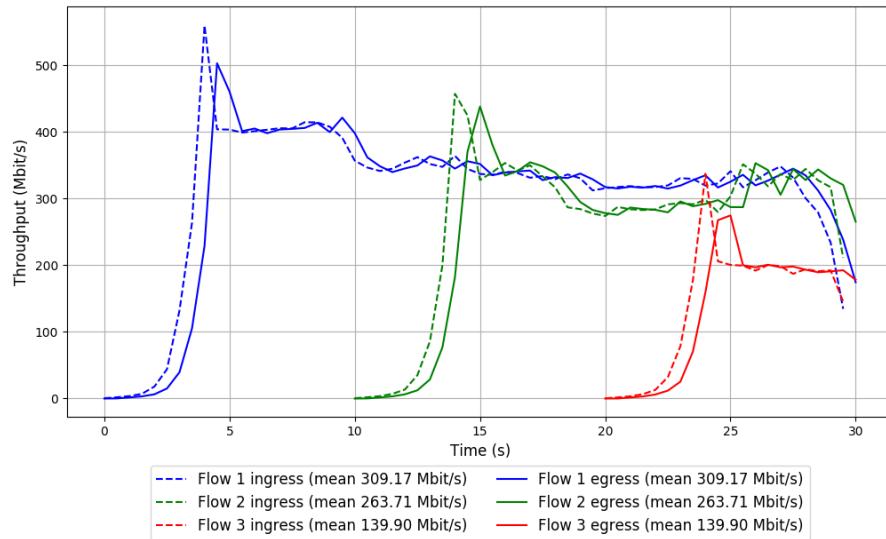


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-02-11 17:15:45
End at: 2019-02-11 17:16:15
Local clock offset: -0.532 ms
Remote clock offset: 0.05 ms

# Below is generated by plot.py at 2019-02-11 22:42:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 530.70 Mbit/s
95th percentile per-packet one-way delay: 98.221 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 309.17 Mbit/s
95th percentile per-packet one-way delay: 92.372 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 263.71 Mbit/s
95th percentile per-packet one-way delay: 122.330 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 139.90 Mbit/s
95th percentile per-packet one-way delay: 143.504 ms
Loss rate: 0.00%
```

Run 3: Report of PCC-Vivace — Data Link

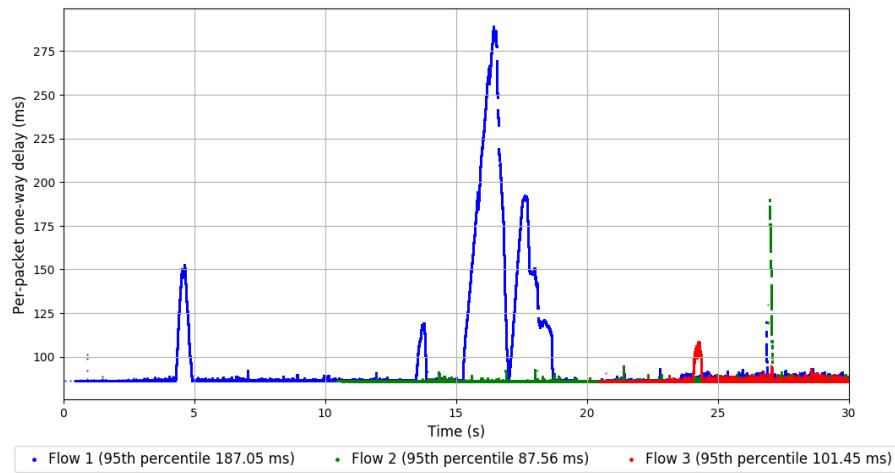
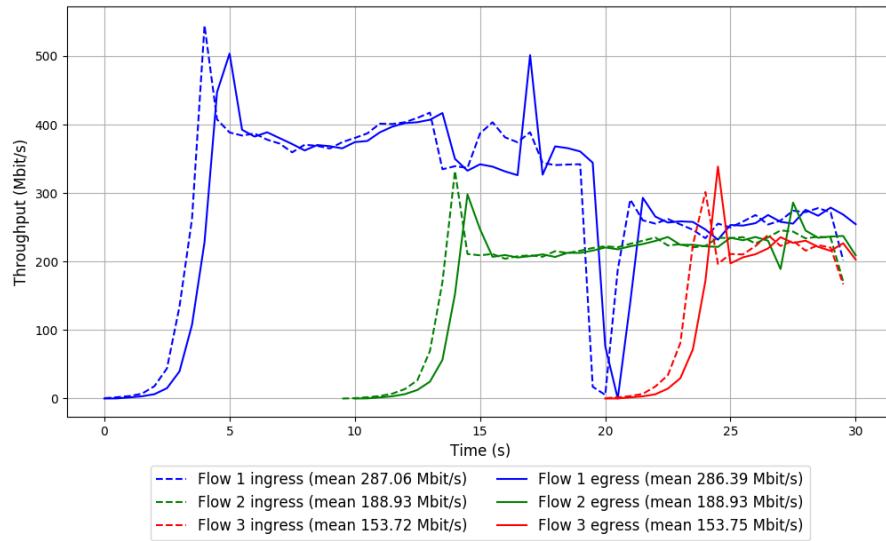


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-02-11 17:53:25
End at: 2019-02-11 17:53:55
Local clock offset: -0.084 ms
Remote clock offset: -0.131 ms

# Below is generated by plot.py at 2019-02-11 22:42:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 462.85 Mbit/s
95th percentile per-packet one-way delay: 149.962 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 286.39 Mbit/s
95th percentile per-packet one-way delay: 187.051 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 188.93 Mbit/s
95th percentile per-packet one-way delay: 87.565 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 153.75 Mbit/s
95th percentile per-packet one-way delay: 101.455 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Vivace — Data Link

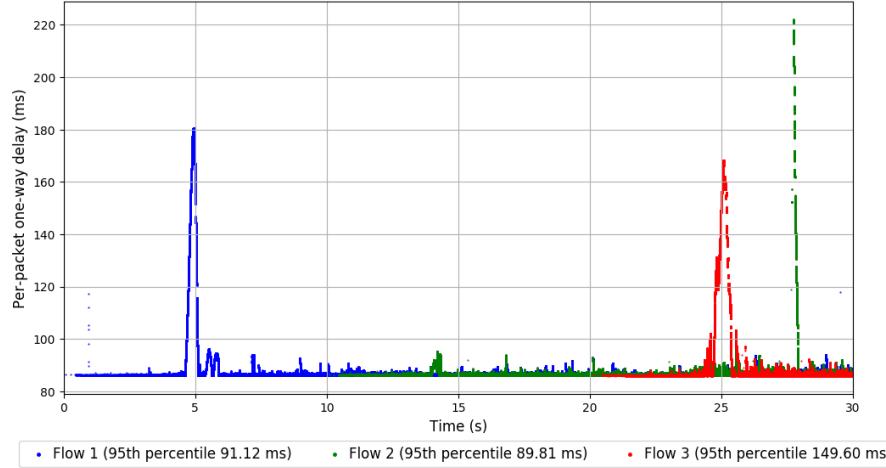
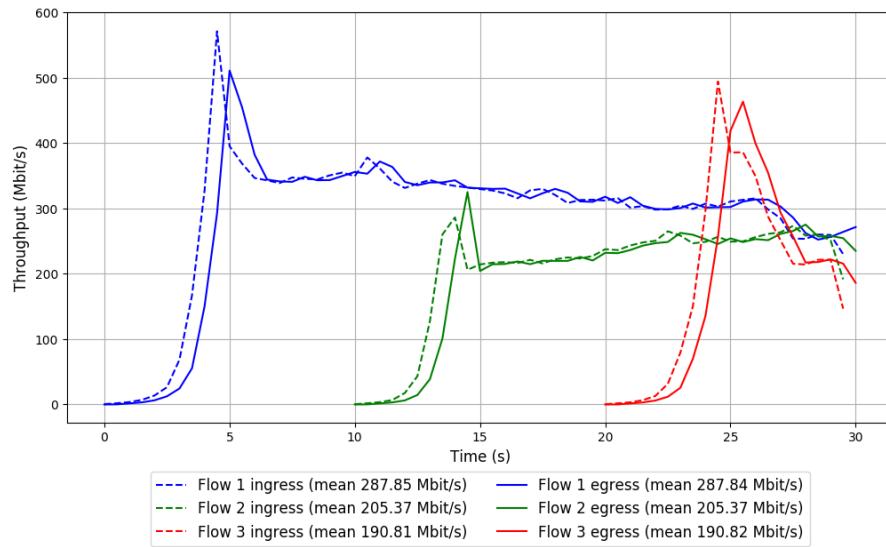


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-02-11 18:31:02
End at: 2019-02-11 18:31:32
Local clock offset: 0.032 ms
Remote clock offset: -0.049 ms

# Below is generated by plot.py at 2019-02-11 22:42:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 487.24 Mbit/s
95th percentile per-packet one-way delay: 94.270 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 287.84 Mbit/s
95th percentile per-packet one-way delay: 91.123 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 205.37 Mbit/s
95th percentile per-packet one-way delay: 89.811 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 190.82 Mbit/s
95th percentile per-packet one-way delay: 149.598 ms
Loss rate: 0.00%
```

Run 5: Report of PCC-Vivace — Data Link

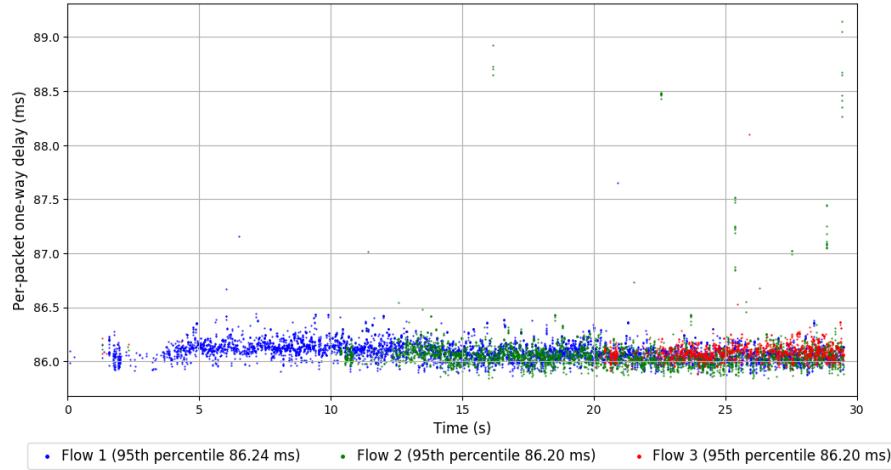
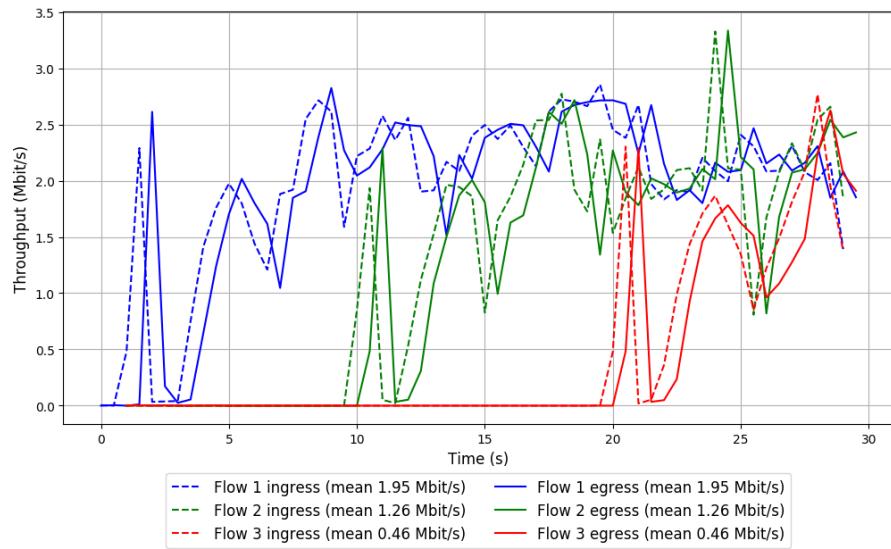


Run 1: Statistics of WebRTC media

```
Start at: 2019-02-11 16:18:11
End at: 2019-02-11 16:18:41
Local clock offset: 0.003 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2019-02-11 22:42:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.60 Mbit/s
95th percentile per-packet one-way delay: 86.224 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 86.239 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.26 Mbit/s
95th percentile per-packet one-way delay: 86.203 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 86.205 ms
Loss rate: 0.08%
```

Run 1: Report of WebRTC media — Data Link

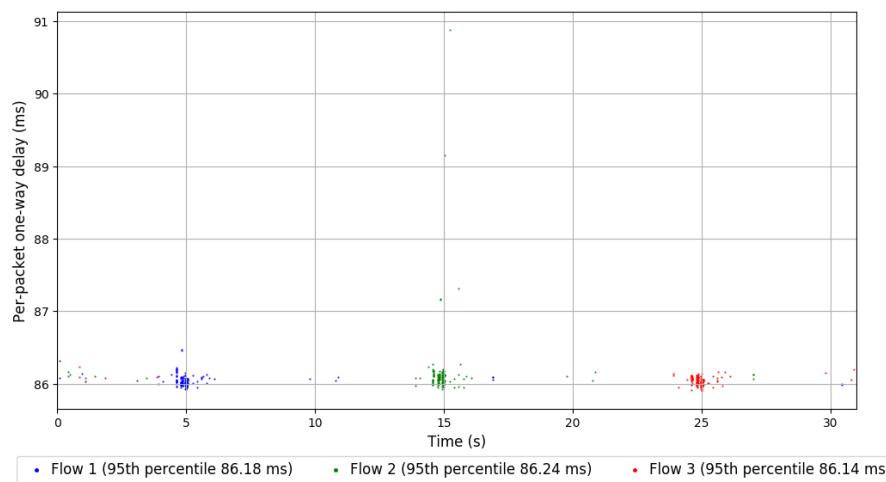
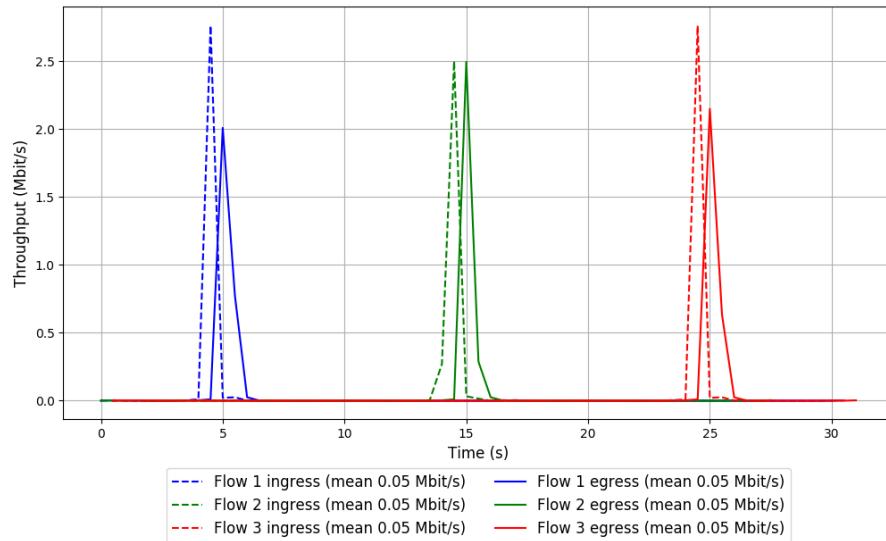


Run 2: Statistics of WebRTC media

```
Start at: 2019-02-11 16:56:37
End at: 2019-02-11 16:57:07
Local clock offset: -0.02 ms
Remote clock offset: 0.014 ms

# Below is generated by plot.py at 2019-02-11 22:42:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.181 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.180 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.236 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.137 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

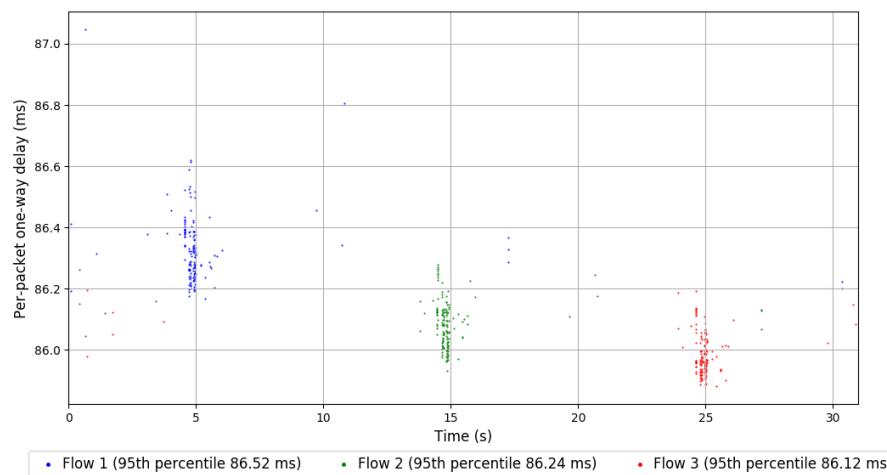
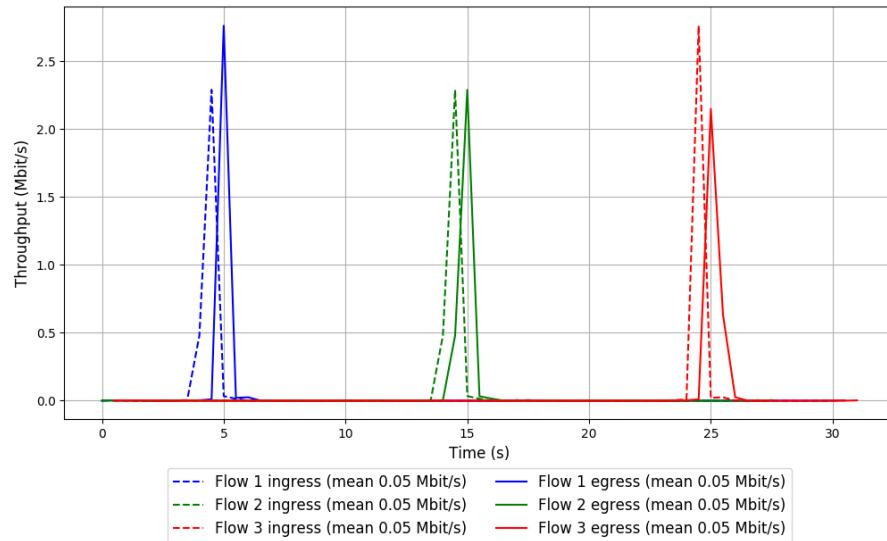


Run 3: Statistics of WebRTC media

```
Start at: 2019-02-11 17:34:56
End at: 2019-02-11 17:35:26
Local clock offset: -0.068 ms
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2019-02-11 22:42:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.416 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.515 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.243 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.125 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

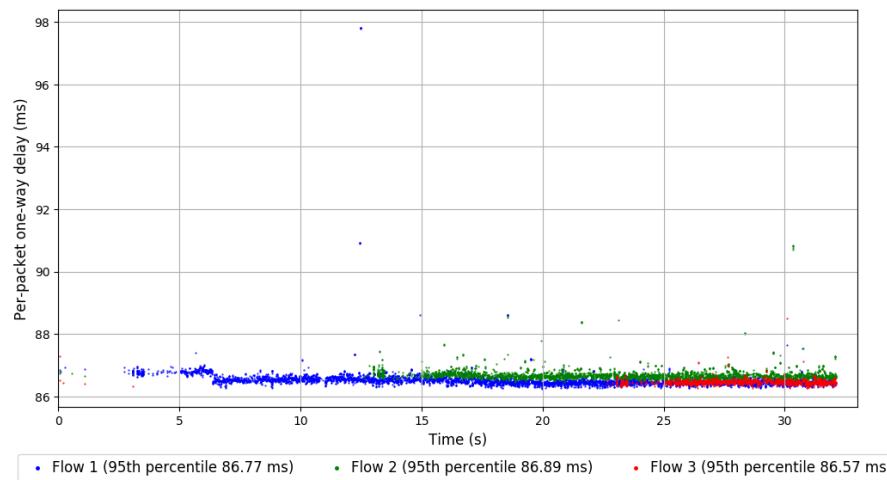
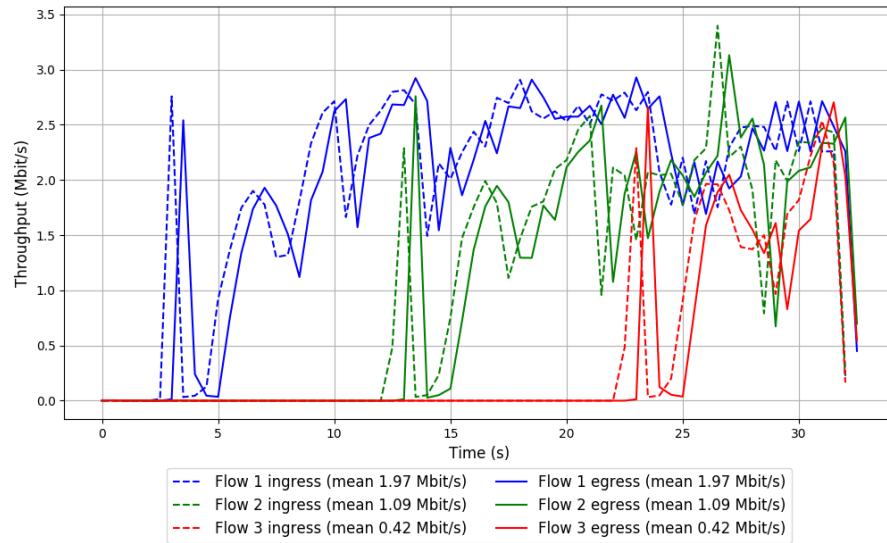


Run 4: Statistics of WebRTC media

```
Start at: 2019-02-11 18:12:13
End at: 2019-02-11 18:12:43
Local clock offset: -0.43 ms
Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2019-02-11 22:42:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.49 Mbit/s
95th percentile per-packet one-way delay: 86.798 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 86.766 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.09 Mbit/s
95th percentile per-packet one-way delay: 86.886 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 86.566 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

```
Start at: 2019-02-11 18:49:38
End at: 2019-02-11 18:50:08
Local clock offset: -0.034 ms
Remote clock offset: -0.085 ms

# Below is generated by plot.py at 2019-02-11 22:42:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 86.207 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.133 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.147 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.297 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

