

Pantheon Report

Generated at 2019-03-19 18:18:10 (UTC).

Data path: Saudi Arabia on `enp2s0` (*remote*) → AWS India 2 on `ens5` (*local*).

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 `nets.org.sg` and have been applied to correct the timestamps in logs.

System info:

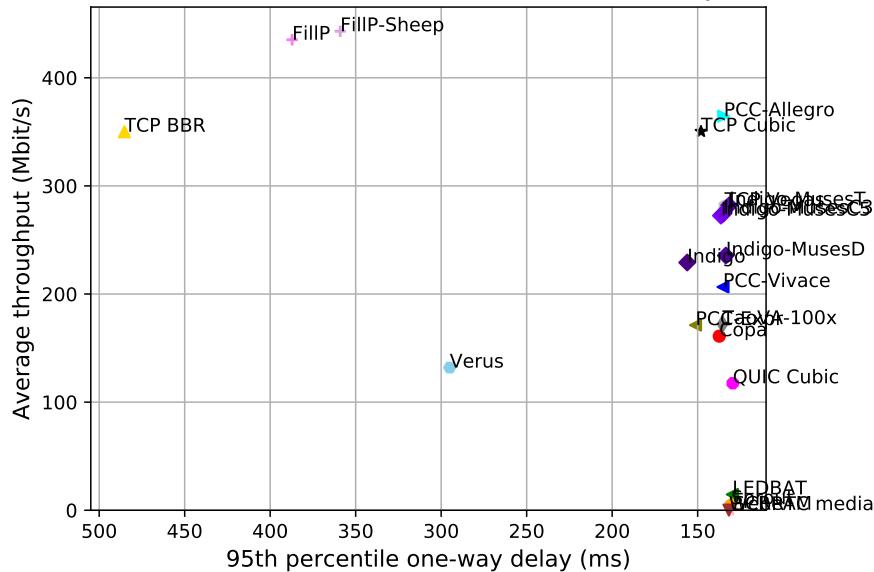
```
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

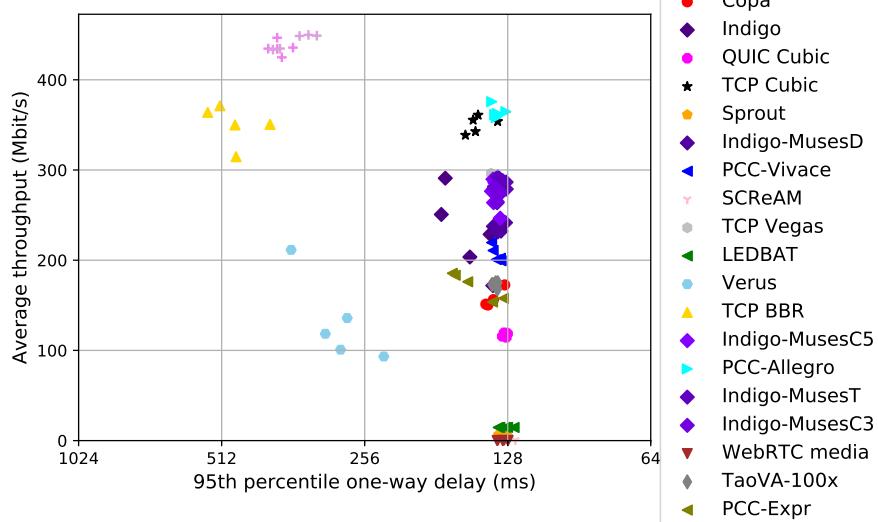
```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fceef56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
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 Saudi Arabia to AWS India 2, 5 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from Saudi Arabia to AWS India 2, 5 runs of 30s each per scheme
 3 flows with 10s interval between flows



4

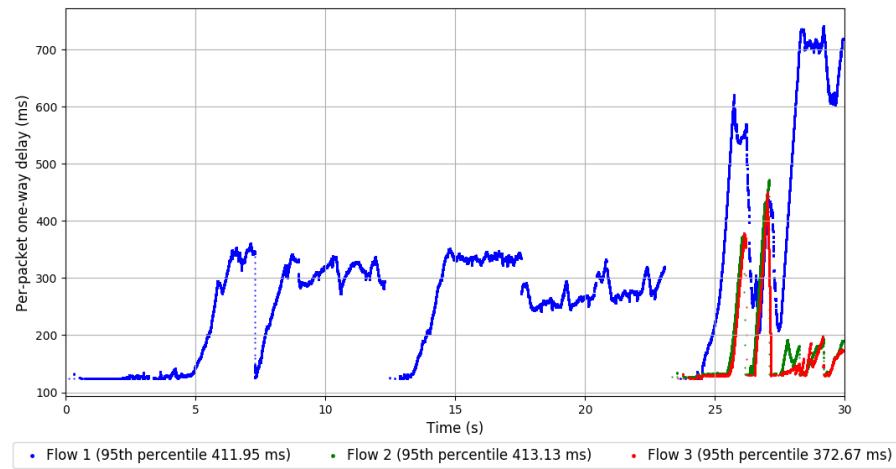
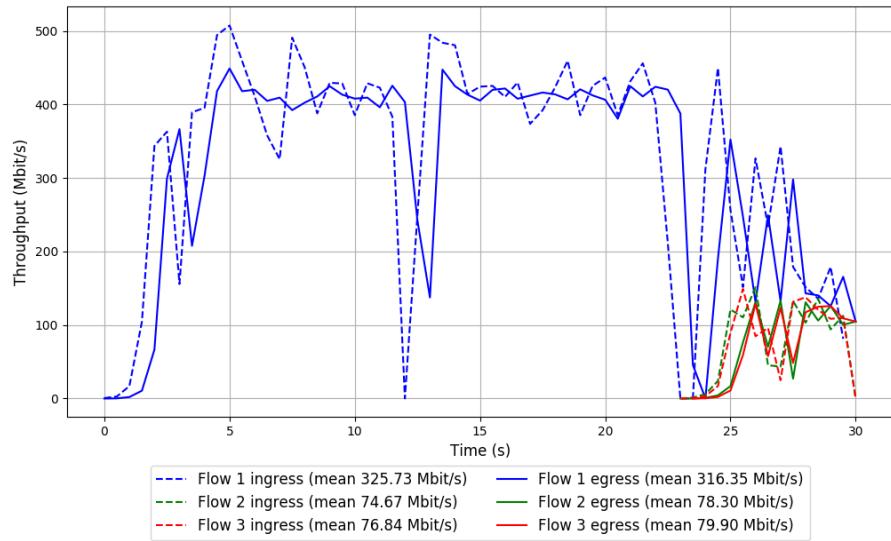
| scheme | # runs | mean avg tput (Mbit/s) | | | mean 95th-%ile delay (ms) | | | mean loss rate (%) | | |
|----------------|--------|------------------------|--------|--------|---------------------------|--------|--------|--------------------|--------|--------|
| | | flow 1 | flow 2 | flow 3 | flow 1 | flow 2 | flow 3 | flow 1 | flow 2 | flow 3 |
| TCP BBR | 5 | 251.03 | 144.05 | 59.98 | 486.99 | 447.35 | 346.15 | 3.78 | 6.63 | 4.47 |
| Copa | 5 | 114.31 | 49.21 | 42.85 | 137.60 | 135.82 | 138.31 | 0.21 | 1.23 | 2.51 |
| TCP Cubic | 5 | 234.26 | 119.29 | 118.81 | 141.00 | 158.66 | 203.22 | 0.38 | 1.62 | 2.67 |
| FillP | 5 | 283.14 | 179.03 | 121.40 | 395.54 | 363.51 | 275.84 | 3.04 | 8.42 | 13.62 |
| FillP-Sheep | 5 | 285.79 | 176.57 | 128.72 | 367.55 | 326.77 | 333.41 | 2.61 | 4.91 | 8.42 |
| Indigo | 5 | 110.77 | 126.52 | 106.28 | 146.25 | 158.95 | 170.66 | 0.67 | 1.03 | 2.51 |
| Indigo-MusesC3 | 5 | 177.14 | 139.73 | 40.18 | 134.25 | 135.97 | 132.76 | 0.22 | 0.67 | 5.63 |
| Indigo-MusesC5 | 5 | 229.49 | 48.76 | 49.90 | 136.80 | 133.05 | 132.63 | 0.25 | 1.61 | 4.08 |
| Indigo-MusesD | 5 | 183.41 | 72.09 | 28.87 | 133.95 | 129.98 | 129.79 | 0.32 | 0.61 | 4.63 |
| Indigo-MusesT | 5 | 204.20 | 99.89 | 61.22 | 131.63 | 130.92 | 131.69 | 0.31 | 1.07 | 3.52 |
| LEDBAT | 5 | 9.55 | 6.24 | 2.99 | 128.64 | 129.78 | 128.65 | 1.28 | 1.96 | 4.00 |
| PCC-Allegro | 5 | 328.01 | 47.32 | 15.96 | 134.75 | 134.67 | 133.88 | 0.63 | 1.68 | 3.22 |
| PCC-Expr | 5 | 157.83 | 16.94 | 6.75 | 156.23 | 133.33 | 132.46 | 0.58 | 1.23 | 2.45 |
| QUIC Cubic | 5 | 62.52 | 56.81 | 52.70 | 128.63 | 128.87 | 129.90 | 0.68 | 1.03 | 2.22 |
| SCReAM | 5 | 0.22 | 0.22 | 0.22 | 128.72 | 128.08 | 129.44 | 0.64 | 1.03 | 1.76 |
| Sprout | 5 | 3.06 | 3.13 | 1.68 | 130.39 | 130.12 | 129.36 | 0.92 | 1.15 | 3.07 |
| TaoVA-100x | 5 | 101.01 | 78.36 | 58.50 | 135.06 | 135.38 | 137.02 | 0.42 | 1.08 | 2.46 |
| TCP Vegas | 5 | 176.53 | 109.74 | 97.57 | 134.24 | 133.24 | 159.58 | 0.31 | 1.13 | 2.14 |
| Verus | 5 | 97.93 | 43.08 | 43.98 | 293.59 | 272.02 | 207.34 | 0.66 | 5.69 | 3.99 |
| PCC-Vivace | 5 | 172.06 | 41.10 | 22.23 | 134.99 | 135.08 | 134.74 | 0.54 | 1.55 | 3.27 |
| WebRTC media | 5 | 0.05 | 0.05 | 0.05 | 131.98 | 132.10 | 132.25 | 0.02 | 0.00 | 0.01 |

Run 1: Statistics of TCP BBR

```
Start at: 2019-03-19 14:29:00
End at: 2019-03-19 14:29:30
Local clock offset: -0.512 ms
Remote clock offset: -31.852 ms

# Below is generated by plot.py at 2019-03-19 17:45:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 350.61 Mbit/s
95th percentile per-packet one-way delay: 404.932 ms
Loss rate: 3.69%
-- Flow 1:
Average throughput: 316.35 Mbit/s
95th percentile per-packet one-way delay: 411.955 ms
Loss rate: 3.51%
-- Flow 2:
Average throughput: 78.30 Mbit/s
95th percentile per-packet one-way delay: 413.134 ms
Loss rate: 4.95%
-- Flow 3:
Average throughput: 79.90 Mbit/s
95th percentile per-packet one-way delay: 372.670 ms
Loss rate: 5.59%
```

Run 1: Report of TCP BBR — Data Link

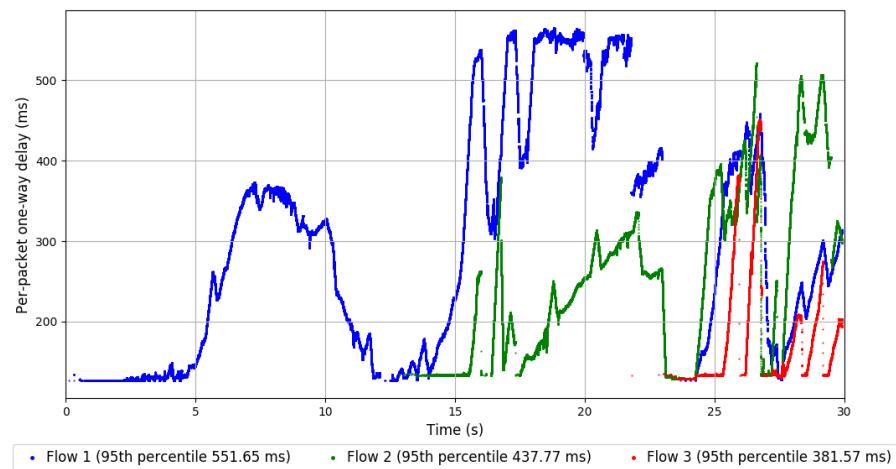
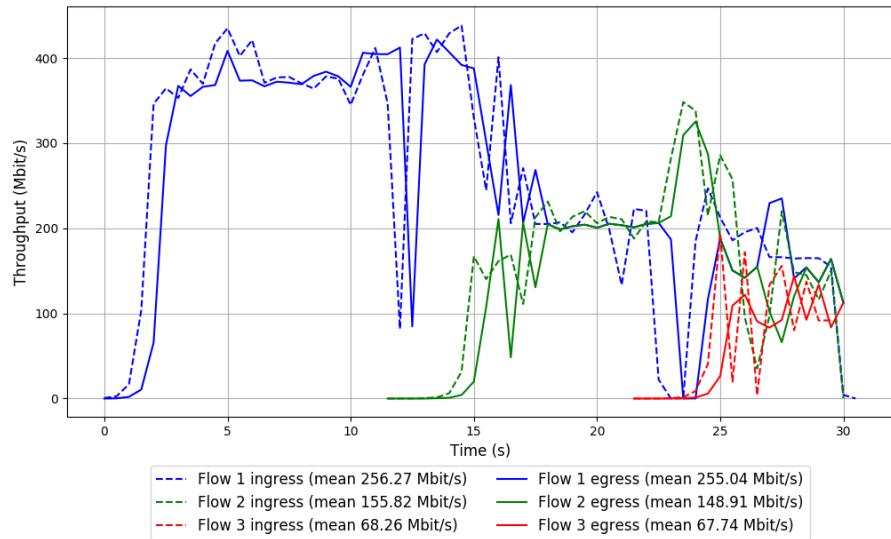


Run 2: Statistics of TCP BBR

```
Start at: 2019-03-19 15:00:45
End at: 2019-03-19 15:01:15
Local clock offset: 0.855 ms
Remote clock offset: -32.387 ms

# Below is generated by plot.py at 2019-03-19 17:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 363.91 Mbit/s
95th percentile per-packet one-way delay: 547.762 ms
Loss rate: 4.16%
-- Flow 1:
Average throughput: 255.04 Mbit/s
95th percentile per-packet one-way delay: 551.648 ms
Loss rate: 2.97%
-- Flow 2:
Average throughput: 148.91 Mbit/s
95th percentile per-packet one-way delay: 437.773 ms
Loss rate: 7.58%
-- Flow 3:
Average throughput: 67.74 Mbit/s
95th percentile per-packet one-way delay: 381.573 ms
Loss rate: 3.06%
```

Run 2: Report of TCP BBR — Data Link

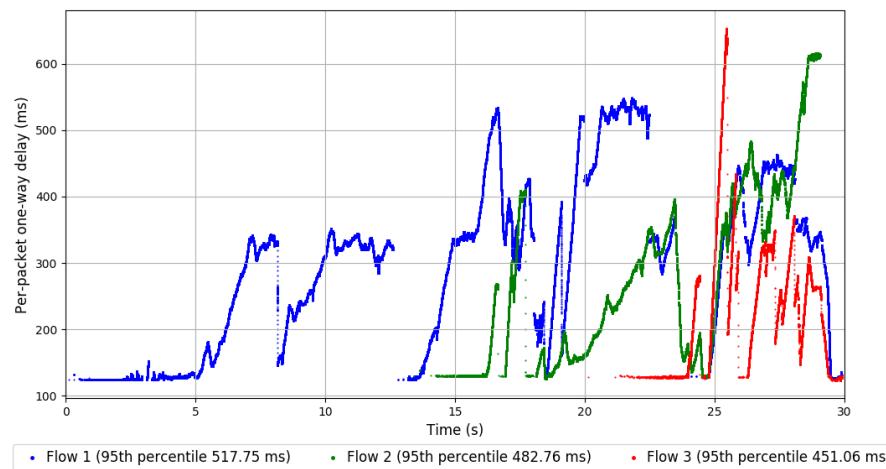
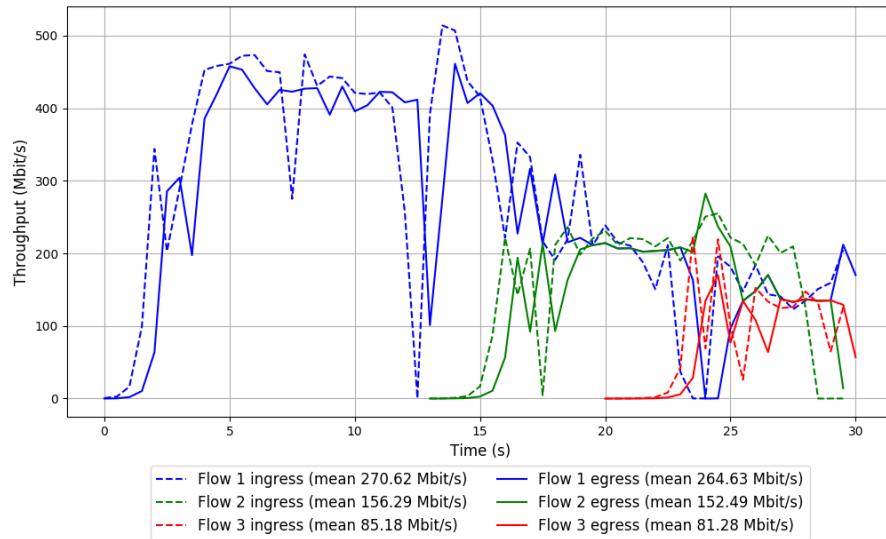


Run 3: Statistics of TCP BBR

```
Start at: 2019-03-19 15:43:18
End at: 2019-03-19 15:43:48
Local clock offset: -0.616 ms
Remote clock offset: -29.613 ms

# Below is generated by plot.py at 2019-03-19 17:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 371.24 Mbit/s
95th percentile per-packet one-way delay: 516.210 ms
Loss rate: 4.18%
-- Flow 1:
Average throughput: 264.63 Mbit/s
95th percentile per-packet one-way delay: 517.751 ms
Loss rate: 2.86%
-- Flow 2:
Average throughput: 152.49 Mbit/s
95th percentile per-packet one-way delay: 482.763 ms
Loss rate: 7.60%
-- Flow 3:
Average throughput: 81.28 Mbit/s
95th percentile per-packet one-way delay: 451.065 ms
Loss rate: 6.49%
```

Run 3: Report of TCP BBR — Data Link

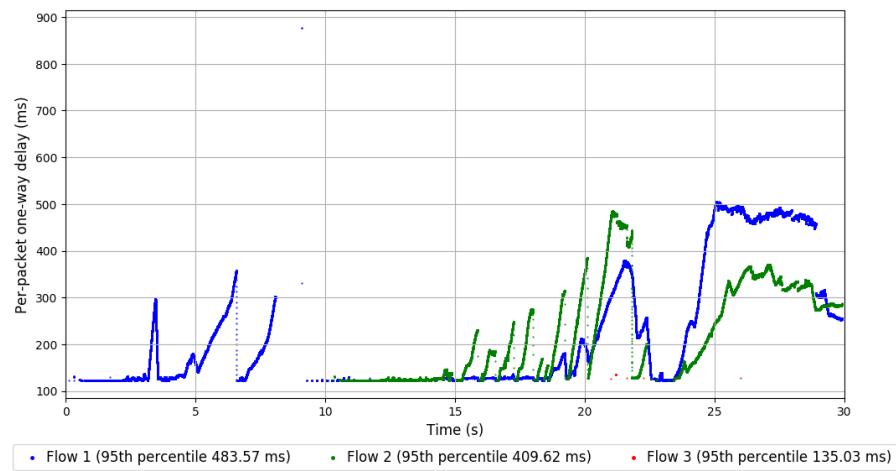
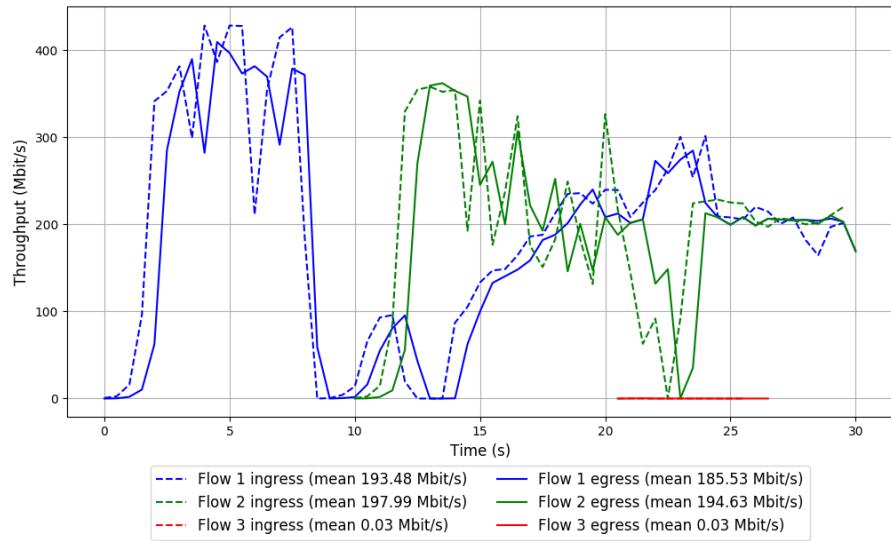


Run 4: Statistics of TCP BBR

```
Start at: 2019-03-19 16:36:52
End at: 2019-03-19 16:37:22
Local clock offset: 0.893 ms
Remote clock offset: -29.885 ms

# Below is generated by plot.py at 2019-03-19 17:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 314.77 Mbit/s
95th percentile per-packet one-way delay: 477.464 ms
Loss rate: 3.90%
-- Flow 1:
Average throughput: 185.53 Mbit/s
95th percentile per-packet one-way delay: 483.572 ms
Loss rate: 4.74%
-- Flow 2:
Average throughput: 194.63 Mbit/s
95th percentile per-packet one-way delay: 409.623 ms
Loss rate: 2.66%
-- Flow 3:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 135.027 ms
Loss rate: 0.00%
```

Run 4: Report of TCP BBR — Data Link

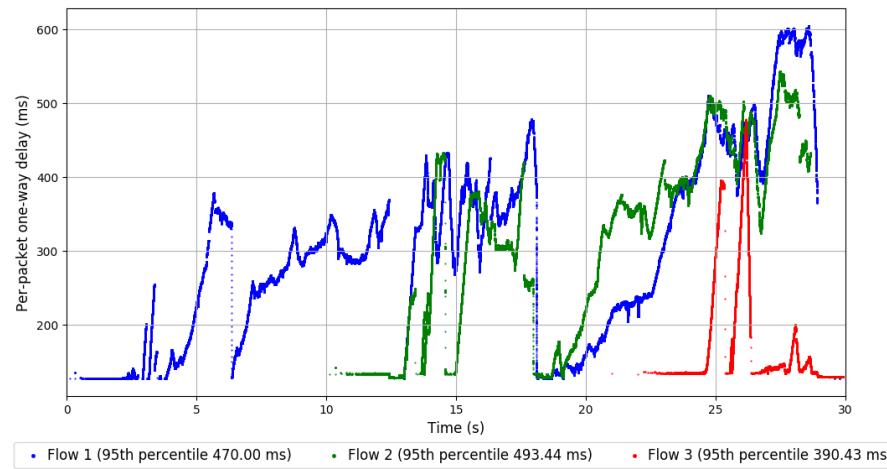
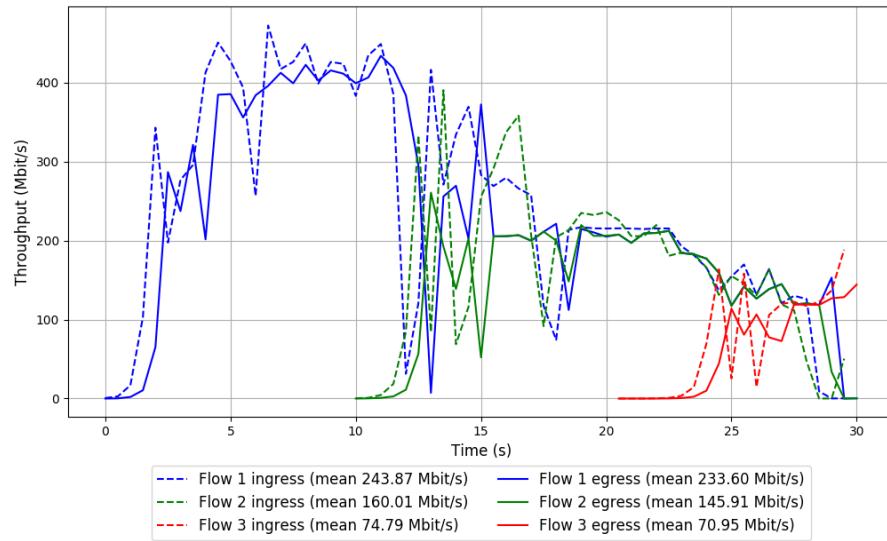


Run 5: Statistics of TCP BBR

```
Start at: 2019-03-19 17:25:08
End at: 2019-03-19 17:25:38
Local clock offset: 0.934 ms
Remote clock offset: -35.04 ms

# Below is generated by plot.py at 2019-03-19 17:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 349.99 Mbit/s
95th percentile per-packet one-way delay: 479.786 ms
Loss rate: 6.56%
-- Flow 1:
Average throughput: 233.60 Mbit/s
95th percentile per-packet one-way delay: 470.002 ms
Loss rate: 4.83%
-- Flow 2:
Average throughput: 145.91 Mbit/s
95th percentile per-packet one-way delay: 493.444 ms
Loss rate: 10.37%
-- Flow 3:
Average throughput: 70.95 Mbit/s
95th percentile per-packet one-way delay: 390.431 ms
Loss rate: 7.21%
```

Run 5: Report of TCP BBR — Data Link

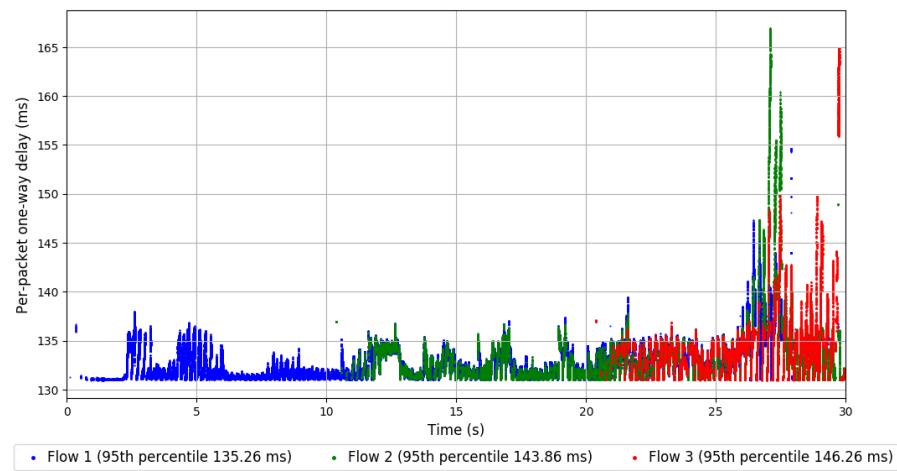
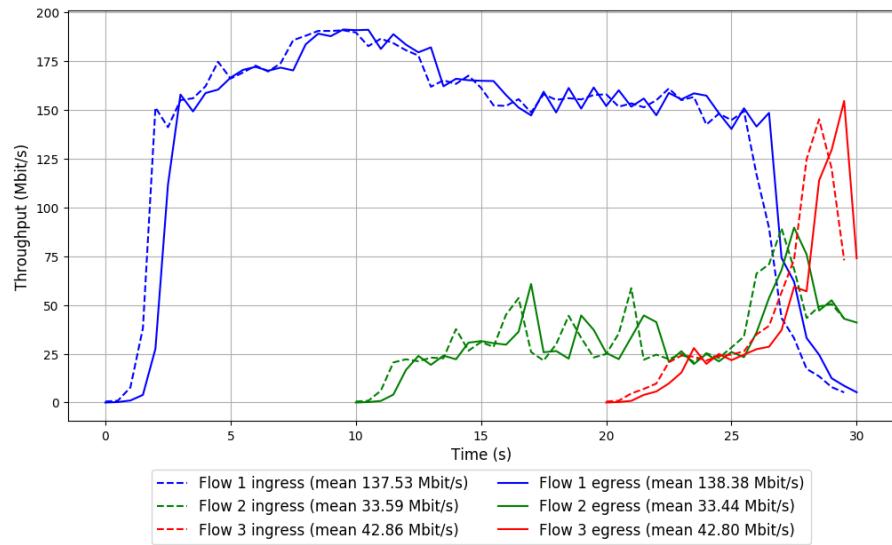


Run 1: Statistics of Copa

```
Start at: 2019-03-19 14:12:52
End at: 2019-03-19 14:13:22
Local clock offset: 3.088 ms
Remote clock offset: -35.157 ms

# Below is generated by plot.py at 2019-03-19 17:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 174.61 Mbit/s
95th percentile per-packet one-way delay: 136.526 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 138.38 Mbit/s
95th percentile per-packet one-way delay: 135.260 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 33.44 Mbit/s
95th percentile per-packet one-way delay: 143.860 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 42.80 Mbit/s
95th percentile per-packet one-way delay: 146.260 ms
Loss rate: 2.09%
```

Run 1: Report of Copa — Data Link

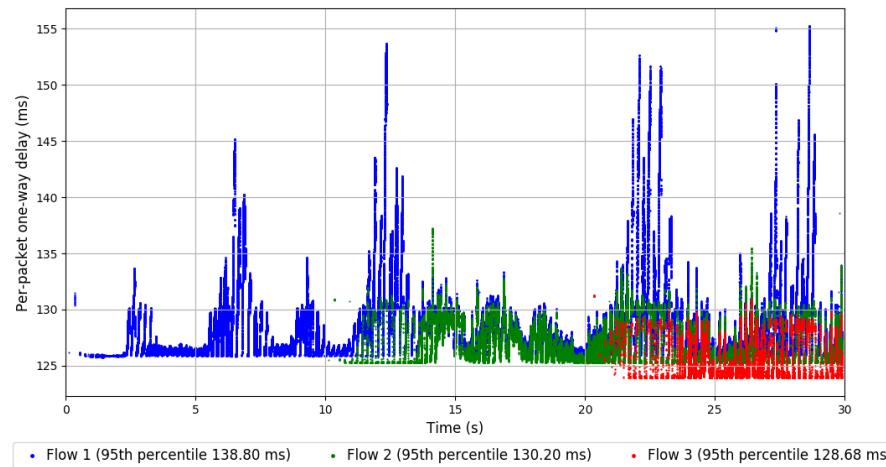
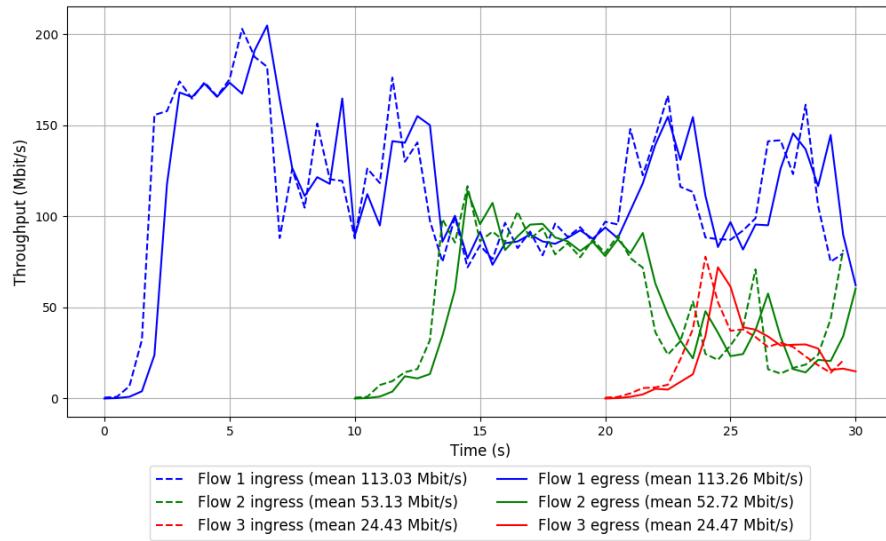


Run 2: Statistics of Copa

```
Start at: 2019-03-19 14:44:30
End at: 2019-03-19 14:45:00
Local clock offset: -0.309 ms
Remote clock offset: -30.207 ms

# Below is generated by plot.py at 2019-03-19 17:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 156.29 Mbit/s
95th percentile per-packet one-way delay: 137.199 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 113.26 Mbit/s
95th percentile per-packet one-way delay: 138.803 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 52.72 Mbit/s
95th percentile per-packet one-way delay: 130.200 ms
Loss rate: 1.76%
-- Flow 3:
Average throughput: 24.47 Mbit/s
95th percentile per-packet one-way delay: 128.680 ms
Loss rate: 1.81%
```

Run 2: Report of Copa — Data Link

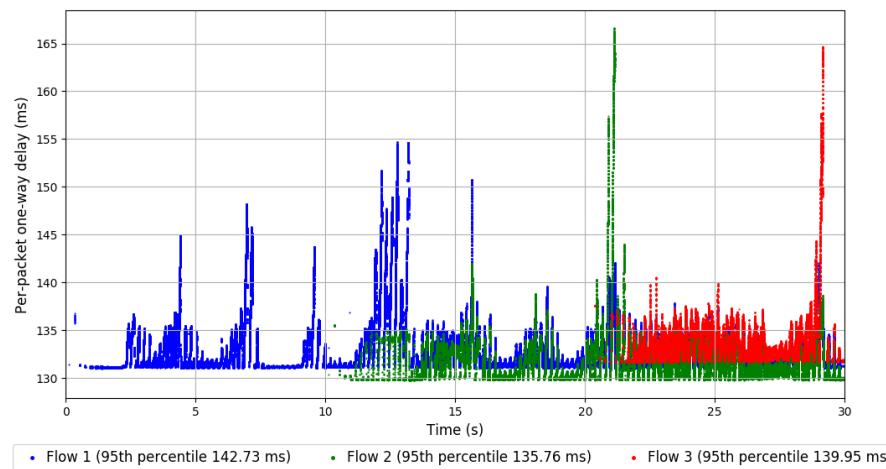
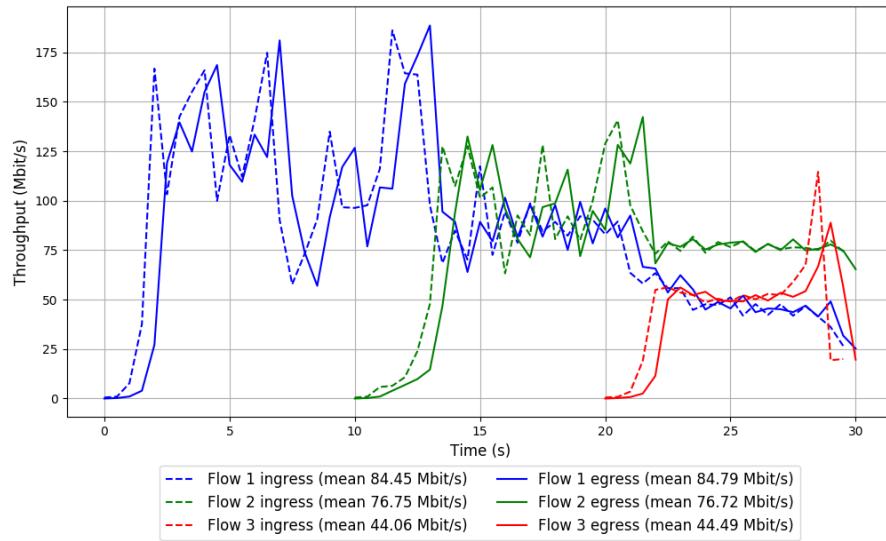


Run 3: Statistics of Copa

```
Start at: 2019-03-19 15:27:13
End at: 2019-03-19 15:27:43
Local clock offset: 0.748 ms
Remote clock offset: -35.62 ms

# Below is generated by plot.py at 2019-03-19 17:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 150.32 Mbit/s
95th percentile per-packet one-way delay: 140.921 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 84.79 Mbit/s
95th percentile per-packet one-way delay: 142.732 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 76.72 Mbit/s
95th percentile per-packet one-way delay: 135.759 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 44.49 Mbit/s
95th percentile per-packet one-way delay: 139.954 ms
Loss rate: 0.98%
```

Run 3: Report of Copa — Data Link

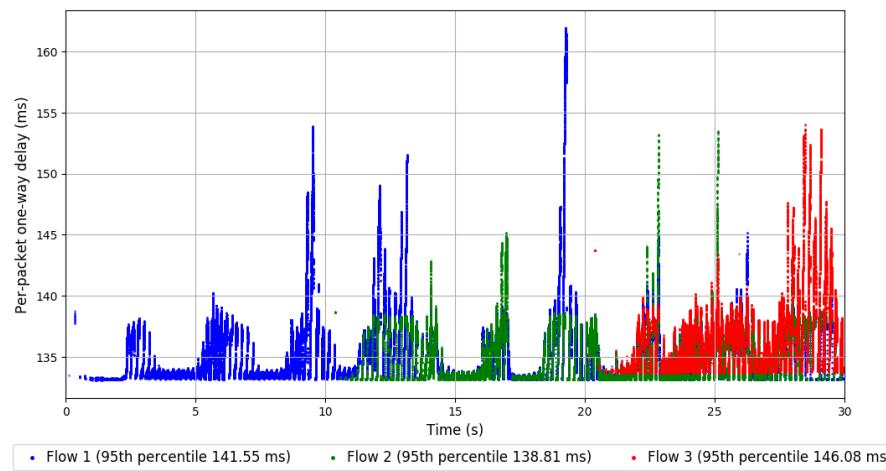
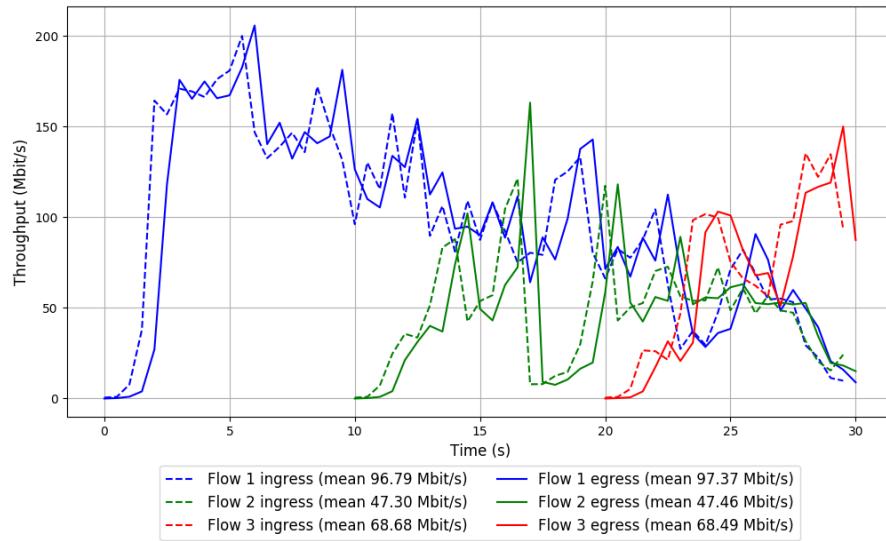


Run 4: Statistics of Copa

```
Start at: 2019-03-19 16:09:33
End at: 2019-03-19 16:10:03
Local clock offset: -0.56 ms
Remote clock offset: -40.094 ms

# Below is generated by plot.py at 2019-03-19 17:47:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 151.29 Mbit/s
95th percentile per-packet one-way delay: 142.317 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 97.37 Mbit/s
95th percentile per-packet one-way delay: 141.552 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 47.46 Mbit/s
95th percentile per-packet one-way delay: 138.808 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 68.49 Mbit/s
95th percentile per-packet one-way delay: 146.084 ms
Loss rate: 2.26%
```

Run 4: Report of Copa — Data Link

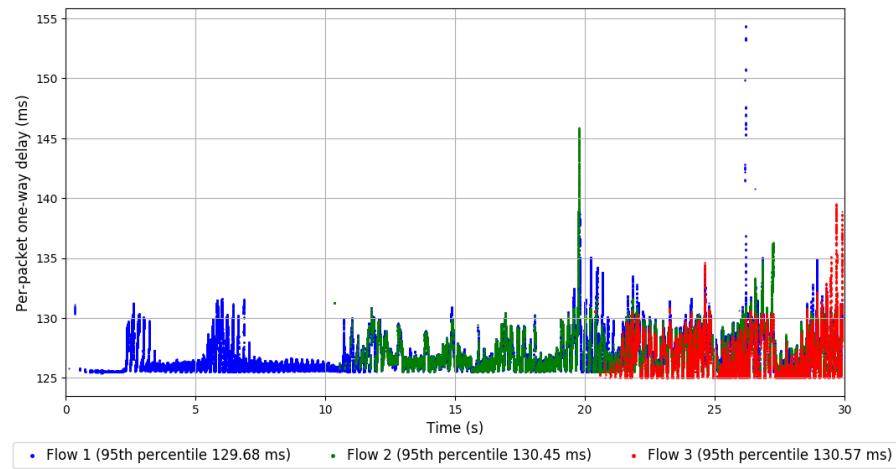
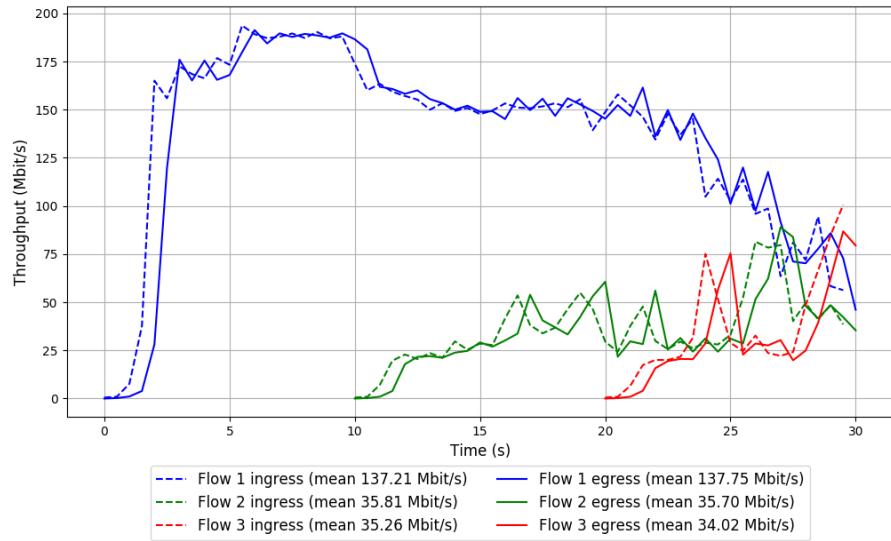


Run 5: Statistics of Copa

```
Start at: 2019-03-19 16:57:36
End at: 2019-03-19 16:58:06
Local clock offset: 1.473 ms
Remote clock offset: -30.145 ms

# Below is generated by plot.py at 2019-03-19 17:48:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 172.59 Mbit/s
95th percentile per-packet one-way delay: 129.859 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 137.75 Mbit/s
95th percentile per-packet one-way delay: 129.677 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 35.70 Mbit/s
95th percentile per-packet one-way delay: 130.449 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 34.02 Mbit/s
95th percentile per-packet one-way delay: 130.568 ms
Loss rate: 5.41%
```

Run 5: Report of Copa — Data Link

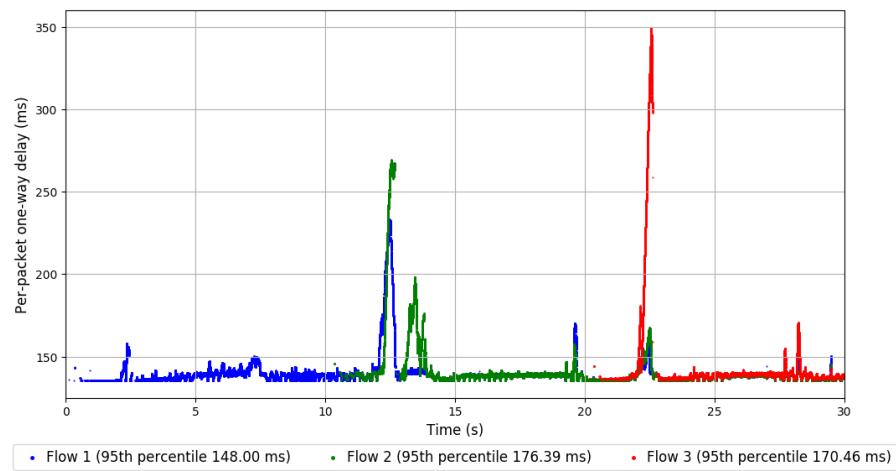
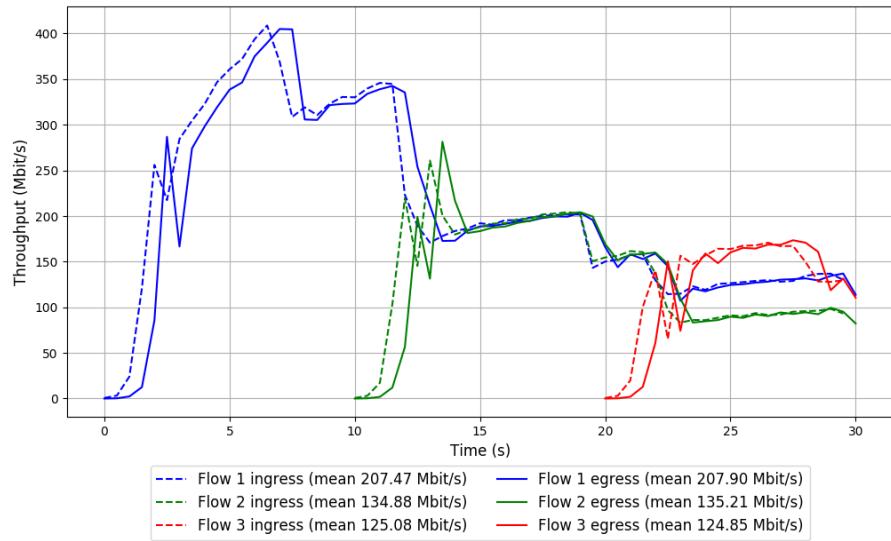


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-03-19 14:39:46
End at: 2019-03-19 14:40:16
Local clock offset: -0.175 ms
Remote clock offset: -40.665 ms

# Below is generated by plot.py at 2019-03-19 17:48:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 338.68 Mbit/s
95th percentile per-packet one-way delay: 157.113 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 207.90 Mbit/s
95th percentile per-packet one-way delay: 147.995 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 135.21 Mbit/s
95th percentile per-packet one-way delay: 176.389 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 124.85 Mbit/s
95th percentile per-packet one-way delay: 170.456 ms
Loss rate: 2.13%
```

Run 1: Report of TCP Cubic — Data Link

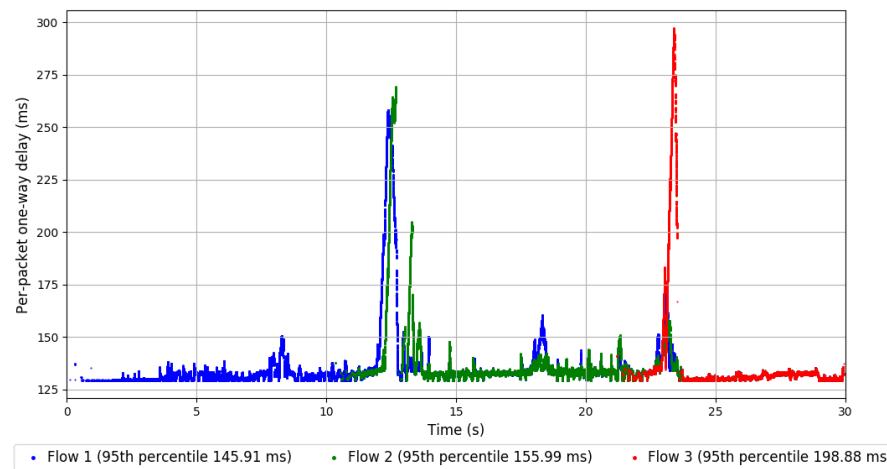
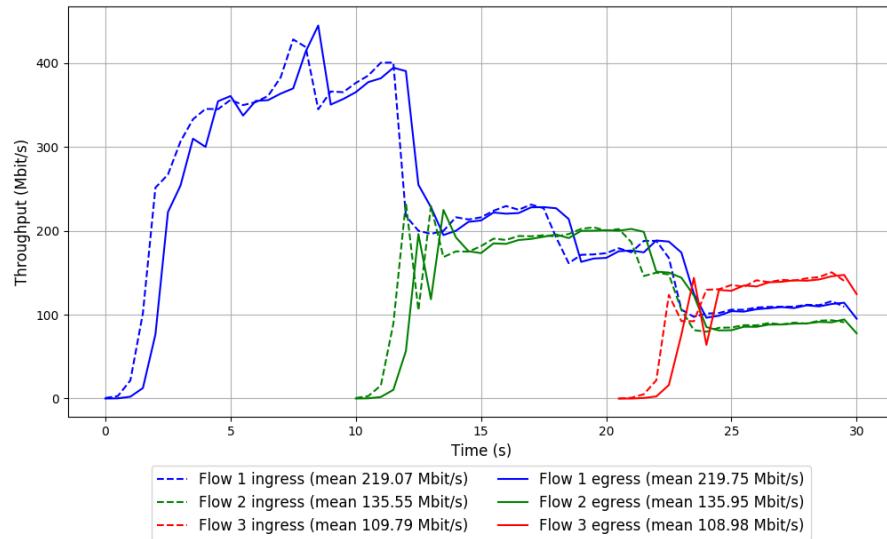


Run 2: Statistics of TCP Cubic

```
Start at: 2019-03-19 15:22:30
End at: 2019-03-19 15:23:00
Local clock offset: 0.169 ms
Remote clock offset: -33.648 ms

# Below is generated by plot.py at 2019-03-19 17:48:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 342.69 Mbit/s
95th percentile per-packet one-way delay: 149.639 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 219.75 Mbit/s
95th percentile per-packet one-way delay: 145.908 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 135.95 Mbit/s
95th percentile per-packet one-way delay: 155.987 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 108.98 Mbit/s
95th percentile per-packet one-way delay: 198.878 ms
Loss rate: 2.85%
```

Run 2: Report of TCP Cubic — Data Link

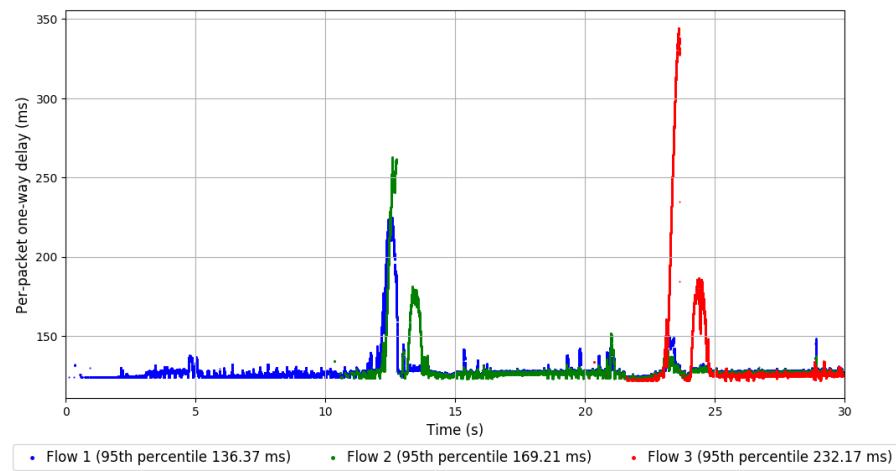
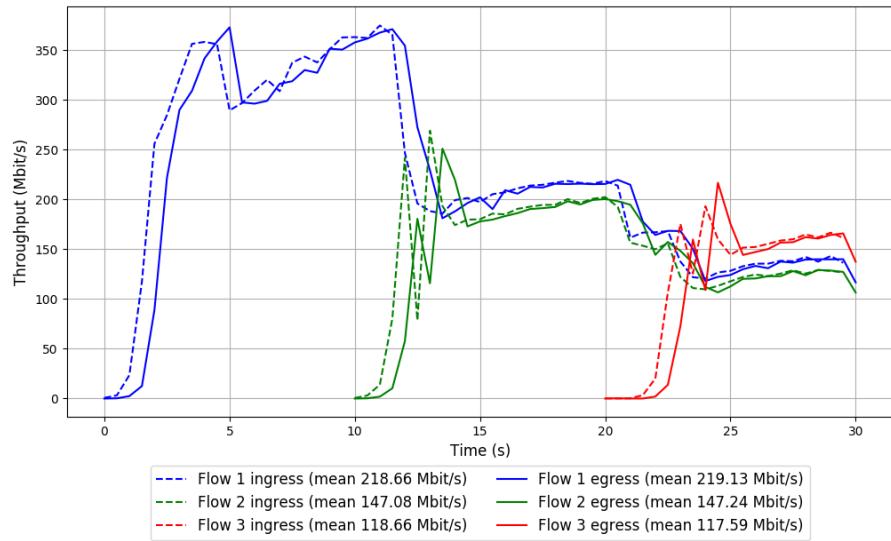


Run 3: Statistics of TCP Cubic

```
Start at: 2019-03-19 15:59:21
End at: 2019-03-19 15:59:51
Local clock offset: -0.357 ms
Remote clock offset: -29.676 ms

# Below is generated by plot.py at 2019-03-19 17:49:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.43 Mbit/s
95th percentile per-packet one-way delay: 151.361 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 219.13 Mbit/s
95th percentile per-packet one-way delay: 136.368 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 147.24 Mbit/s
95th percentile per-packet one-way delay: 169.213 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 117.59 Mbit/s
95th percentile per-packet one-way delay: 232.170 ms
Loss rate: 2.80%
```

Run 3: Report of TCP Cubic — Data Link

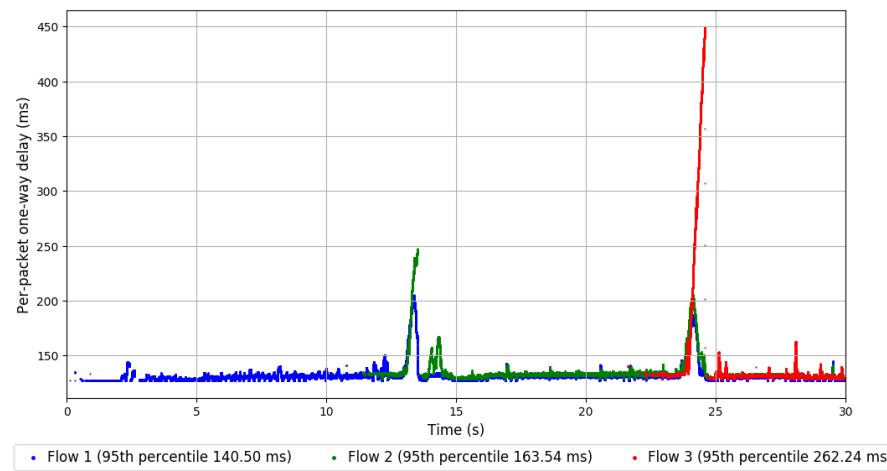
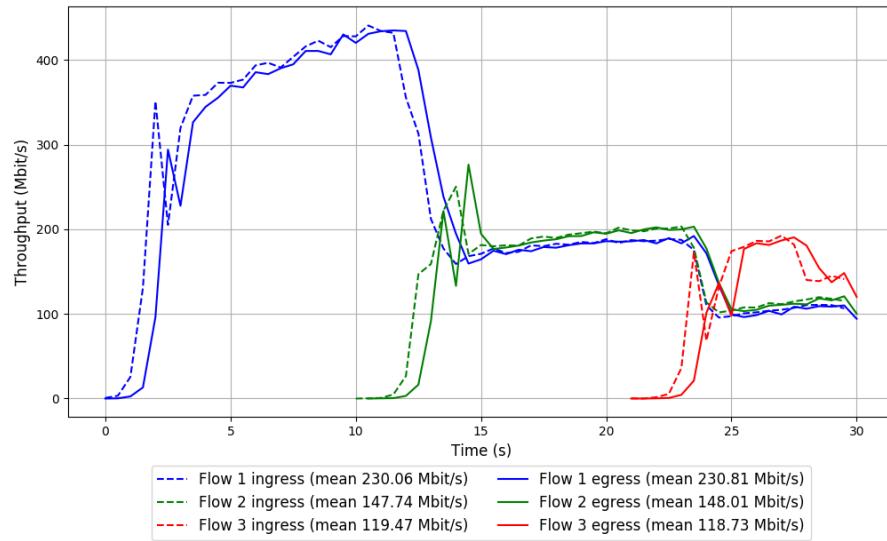


Run 4: Statistics of TCP Cubic

```
Start at: 2019-03-19 16:47:26
End at: 2019-03-19 16:47:56
Local clock offset: 2.535 ms
Remote clock offset: -33.413 ms

# Below is generated by plot.py at 2019-03-19 17:49:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 360.97 Mbit/s
95th percentile per-packet one-way delay: 147.761 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 230.81 Mbit/s
95th percentile per-packet one-way delay: 140.498 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 148.01 Mbit/s
95th percentile per-packet one-way delay: 163.543 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 118.73 Mbit/s
95th percentile per-packet one-way delay: 262.239 ms
Loss rate: 2.87%
```

Run 4: Report of TCP Cubic — Data Link

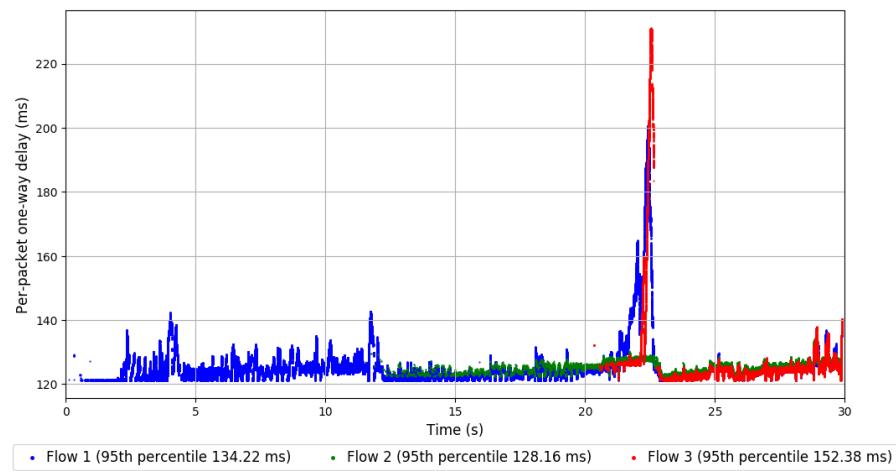
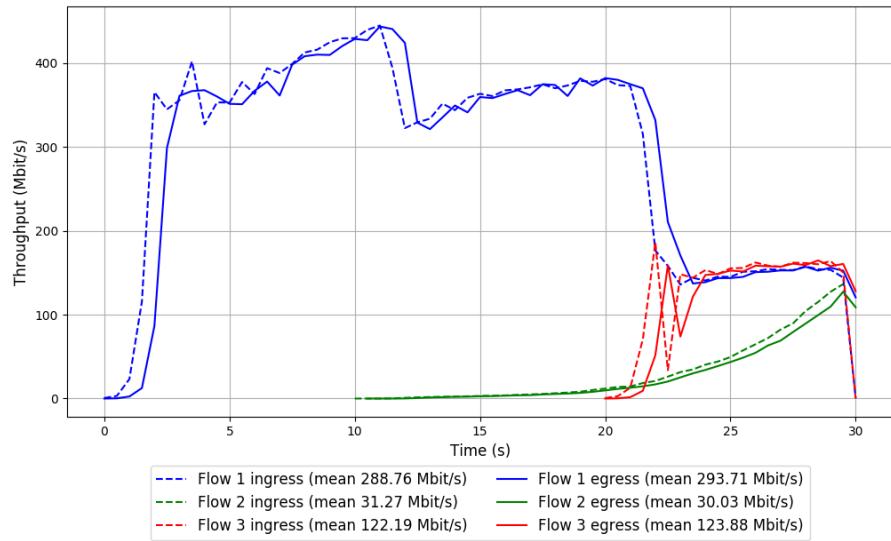


Run 5: Statistics of TCP Cubic

```
Start at: 2019-03-19 17:35:36
End at: 2019-03-19 17:36:06
Local clock offset: 1.448 ms
Remote clock offset: -28.422 ms

# Below is generated by plot.py at 2019-03-19 17:49:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 353.86 Mbit/s
95th percentile per-packet one-way delay: 134.398 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 293.71 Mbit/s
95th percentile per-packet one-way delay: 134.224 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 30.03 Mbit/s
95th percentile per-packet one-way delay: 128.160 ms
Loss rate: 4.95%
-- Flow 3:
Average throughput: 123.88 Mbit/s
95th percentile per-packet one-way delay: 152.377 ms
Loss rate: 2.68%
```

Run 5: Report of TCP Cubic — Data Link

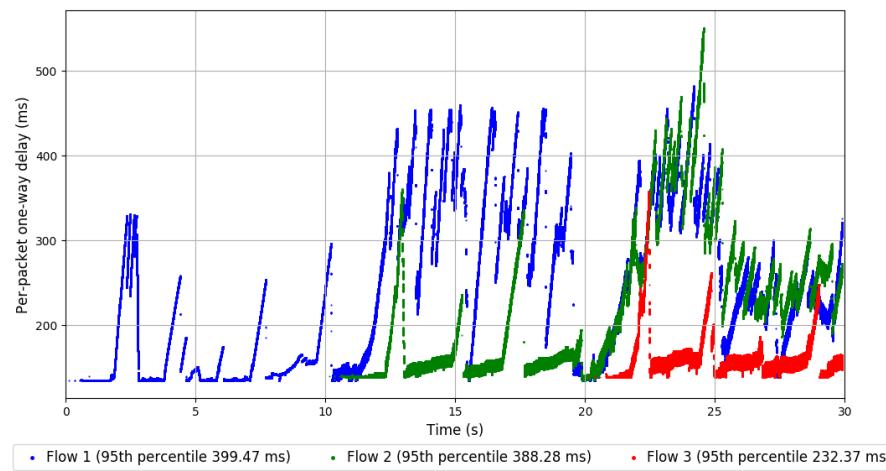
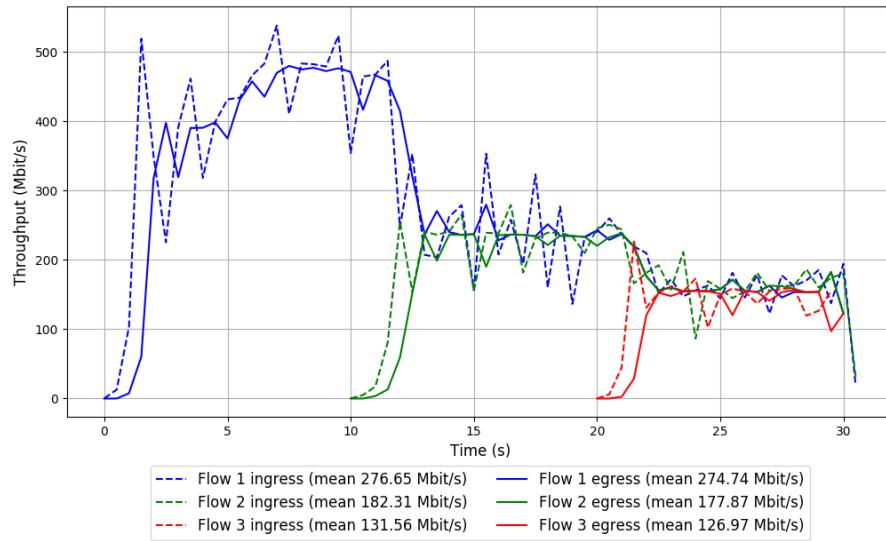


```
Run 1: Statistics of FillP
```

```
Start at: 2019-03-19 14:14:25
End at: 2019-03-19 14:14:55
Local clock offset: 2.344 ms
Remote clock offset: -39.333 ms

# Below is generated by plot.py at 2019-03-19 17:51:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 434.28 Mbit/s
95th percentile per-packet one-way delay: 391.052 ms
Loss rate: 4.31%
-- Flow 1:
Average throughput: 274.74 Mbit/s
95th percentile per-packet one-way delay: 399.474 ms
Loss rate: 3.22%
-- Flow 2:
Average throughput: 177.87 Mbit/s
95th percentile per-packet one-way delay: 388.276 ms
Loss rate: 6.24%
-- Flow 3:
Average throughput: 126.97 Mbit/s
95th percentile per-packet one-way delay: 232.370 ms
Loss rate: 5.77%
```

Run 1: Report of FillP — Data Link

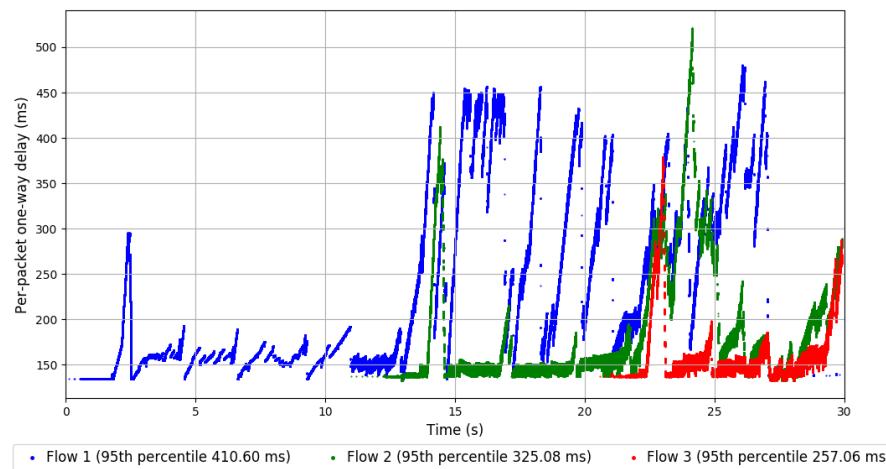
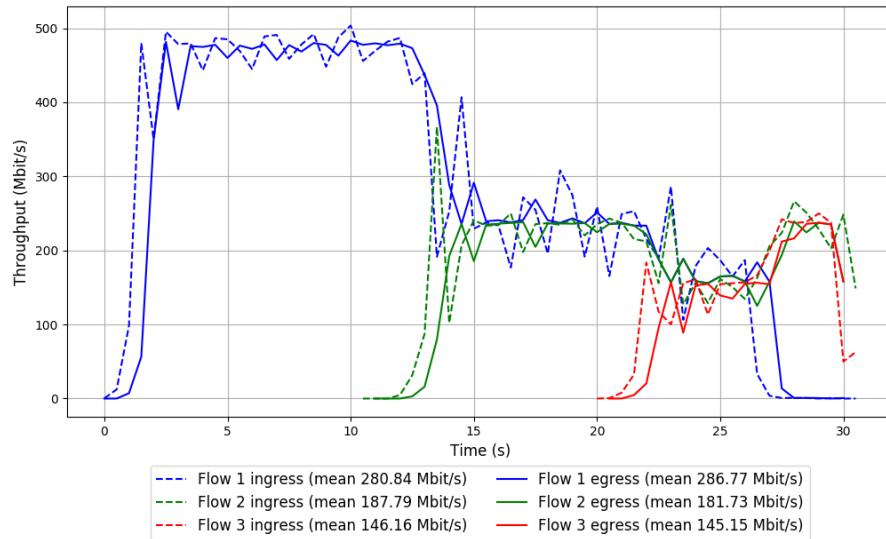


Run 2: Statistics of FillP

```
Start at: 2019-03-19 14:46:02
End at: 2019-03-19 14:46:32
Local clock offset: 1.081 ms
Remote clock offset: -37.945 ms

# Below is generated by plot.py at 2019-03-19 17:54:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 446.63 Mbit/s
95th percentile per-packet one-way delay: 391.239 ms
Loss rate: 4.16%
-- Flow 1:
Average throughput: 286.77 Mbit/s
95th percentile per-packet one-way delay: 410.598 ms
Loss rate: 1.31%
-- Flow 2:
Average throughput: 181.73 Mbit/s
95th percentile per-packet one-way delay: 325.079 ms
Loss rate: 8.22%
-- Flow 3:
Average throughput: 145.15 Mbit/s
95th percentile per-packet one-way delay: 257.060 ms
Loss rate: 10.40%
```

Run 2: Report of FillP — Data Link

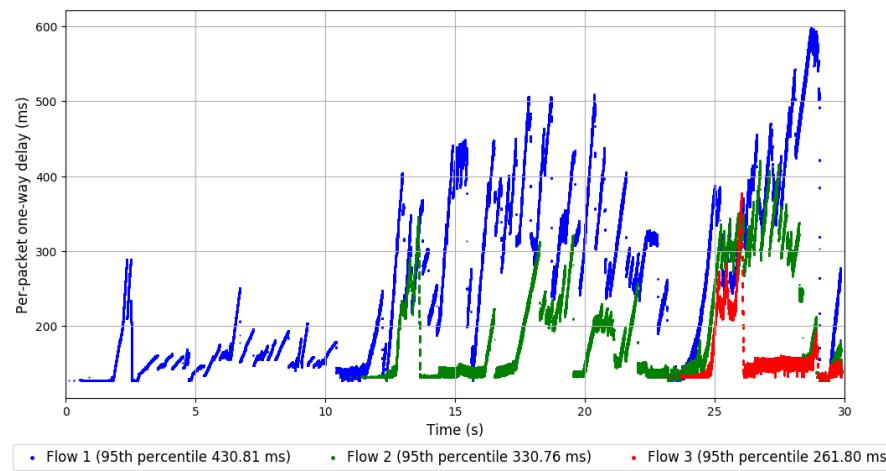
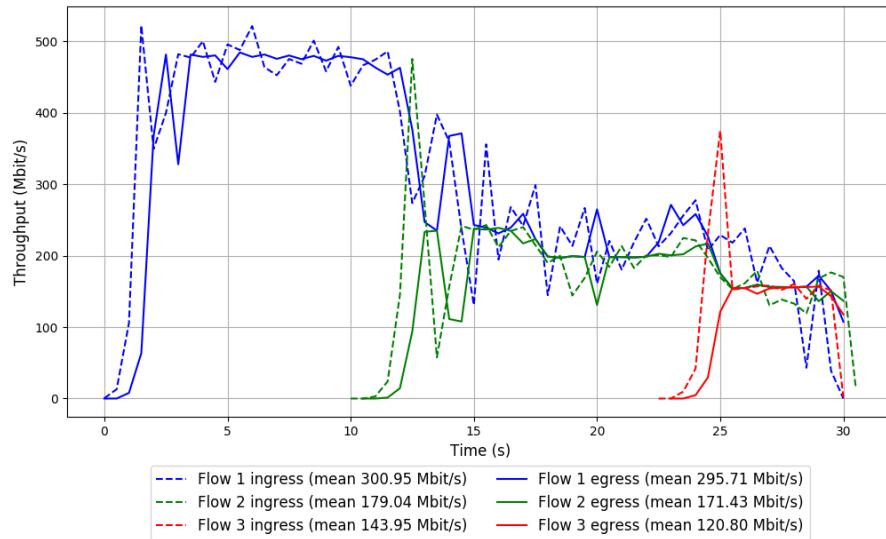


Run 3: Statistics of FillP

```
Start at: 2019-03-19 15:28:45
End at: 2019-03-19 15:29:15
Local clock offset: -0.404 ms
Remote clock offset: -33.325 ms

# Below is generated by plot.py at 2019-03-19 17:54:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 434.55 Mbit/s
95th percentile per-packet one-way delay: 408.595 ms
Loss rate: 5.75%
-- Flow 1:
Average throughput: 295.71 Mbit/s
95th percentile per-packet one-way delay: 430.805 ms
Loss rate: 3.35%
-- Flow 2:
Average throughput: 171.43 Mbit/s
95th percentile per-packet one-way delay: 330.762 ms
Loss rate: 7.99%
-- Flow 3:
Average throughput: 120.80 Mbit/s
95th percentile per-packet one-way delay: 261.795 ms
Loss rate: 19.22%
```

Run 3: Report of FillP — Data Link

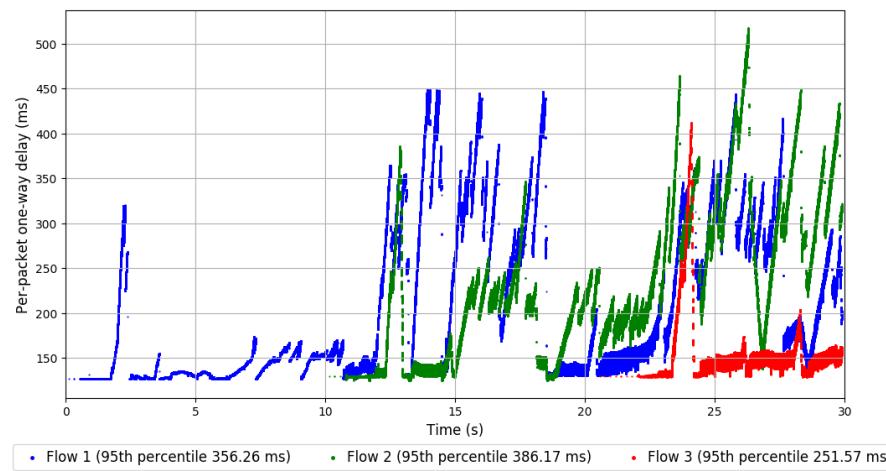
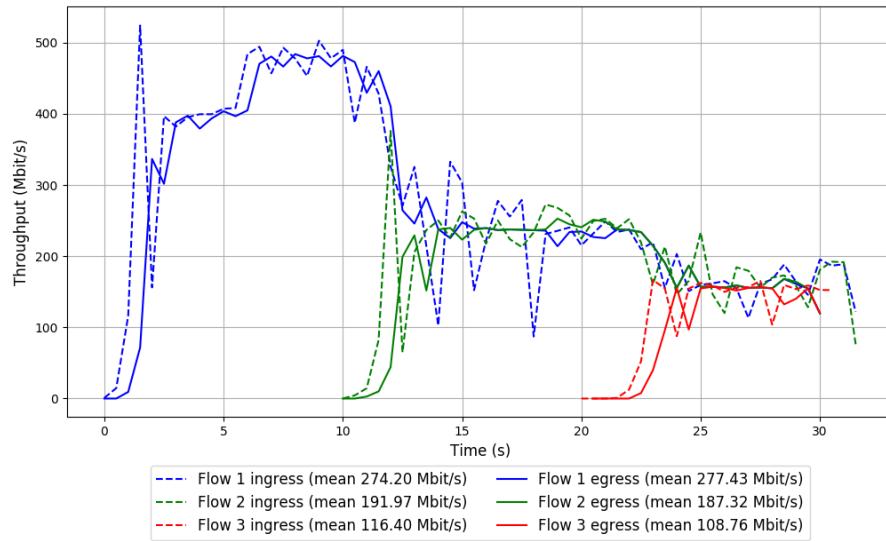


Run 4: Statistics of FillP

```
Start at: 2019-03-19 16:11:04
End at: 2019-03-19 16:11:34
Local clock offset: -1.271 ms
Remote clock offset: -34.487 ms

# Below is generated by plot.py at 2019-03-19 17:54:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 435.68 Mbit/s
95th percentile per-packet one-way delay: 362.366 ms
Loss rate: 8.10%
-- Flow 1:
Average throughput: 277.43 Mbit/s
95th percentile per-packet one-way delay: 356.264 ms
Loss rate: 5.32%
-- Flow 2:
Average throughput: 187.32 Mbit/s
95th percentile per-packet one-way delay: 386.169 ms
Loss rate: 11.16%
-- Flow 3:
Average throughput: 108.76 Mbit/s
95th percentile per-packet one-way delay: 251.575 ms
Loss rate: 17.50%
```

Run 4: Report of FillP — Data Link

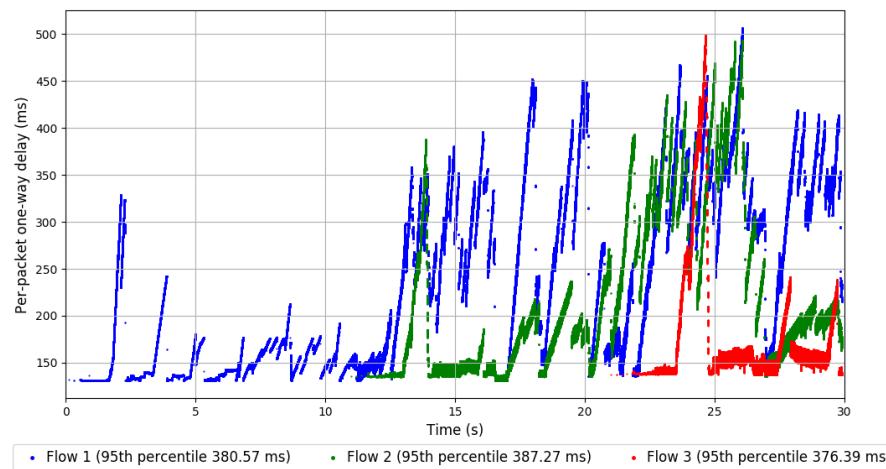
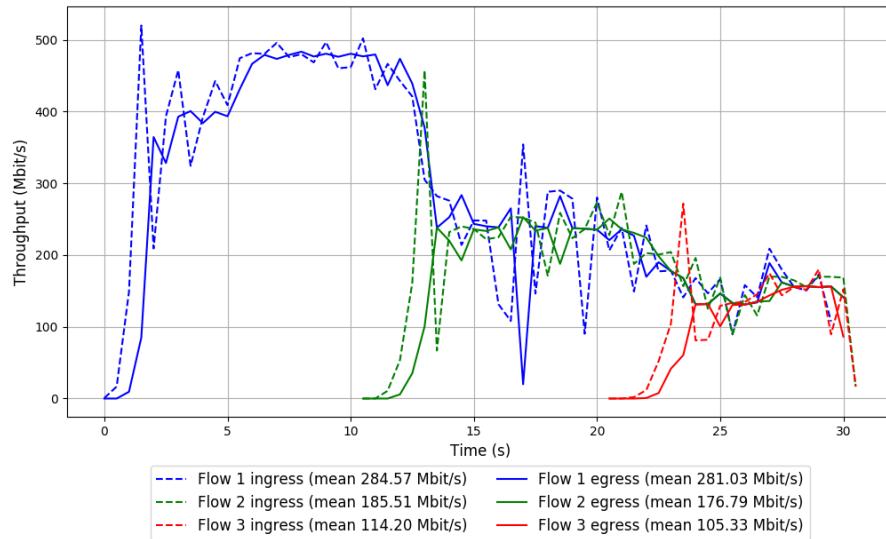


Run 5: Statistics of FillP

```
Start at: 2019-03-19 16:59:18
End at: 2019-03-19 16:59:48
Local clock offset: -0.224 ms
Remote clock offset: -39.102 ms

# Below is generated by plot.py at 2019-03-19 17:54:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 424.87 Mbit/s
95th percentile per-packet one-way delay: 382.511 ms
Loss rate: 4.87%
-- Flow 1:
Average throughput: 281.03 Mbit/s
95th percentile per-packet one-way delay: 380.569 ms
Loss rate: 1.98%
-- Flow 2:
Average throughput: 176.79 Mbit/s
95th percentile per-packet one-way delay: 387.273 ms
Loss rate: 8.51%
-- Flow 3:
Average throughput: 105.33 Mbit/s
95th percentile per-packet one-way delay: 376.387 ms
Loss rate: 15.21%
```

Run 5: Report of FillP — Data Link

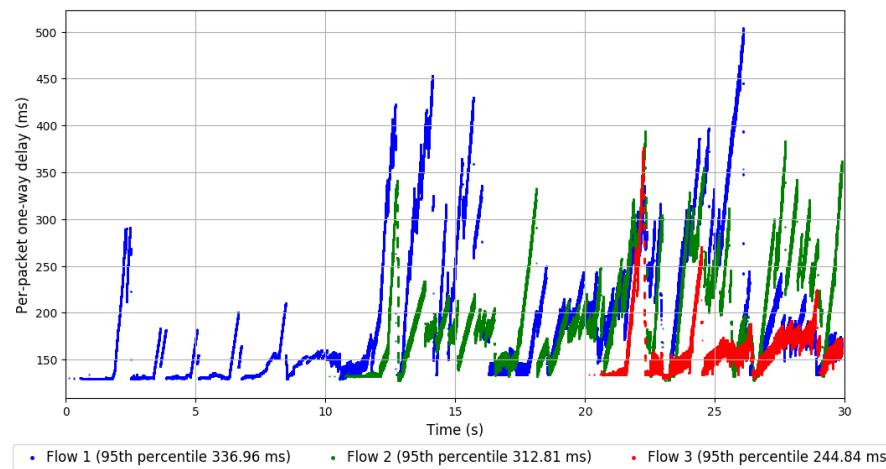
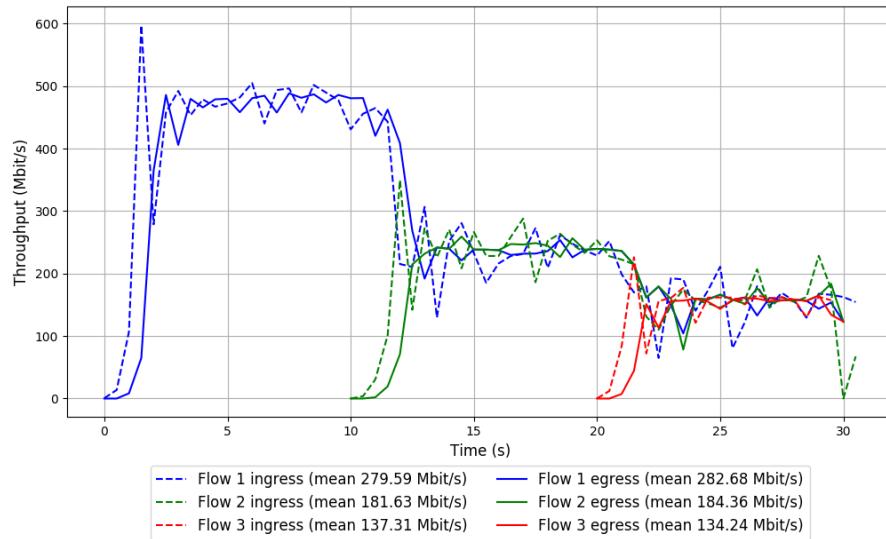


Run 1: Statistics of FillP-Sheep

```
Start at: 2019-03-19 14:17:35
End at: 2019-03-19 14:18:05
Local clock offset: 1.196 ms
Remote clock offset: -35.009 ms

# Below is generated by plot.py at 2019-03-19 17:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 448.93 Mbit/s
95th percentile per-packet one-way delay: 322.847 ms
Loss rate: 3.42%
-- Flow 1:
Average throughput: 282.68 Mbit/s
95th percentile per-packet one-way delay: 336.963 ms
Loss rate: 2.82%
-- Flow 2:
Average throughput: 184.36 Mbit/s
95th percentile per-packet one-way delay: 312.809 ms
Loss rate: 4.38%
-- Flow 3:
Average throughput: 134.24 Mbit/s
95th percentile per-packet one-way delay: 244.837 ms
Loss rate: 4.54%
```

Run 1: Report of FillP-Sheep — Data Link

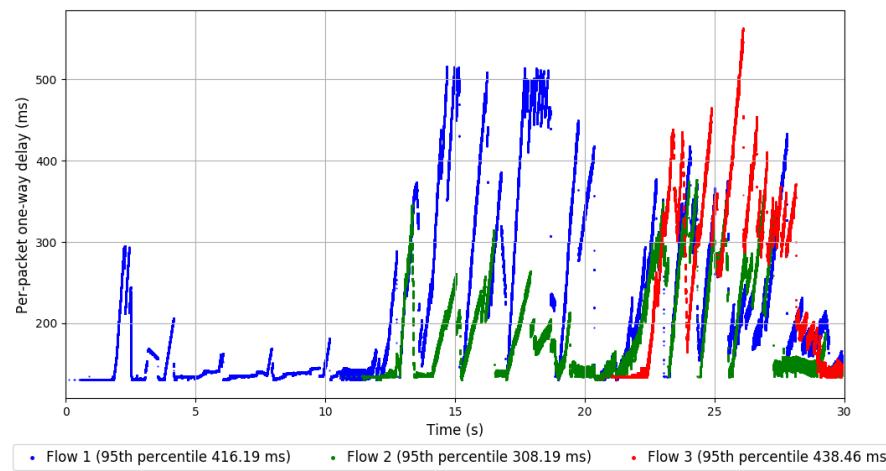
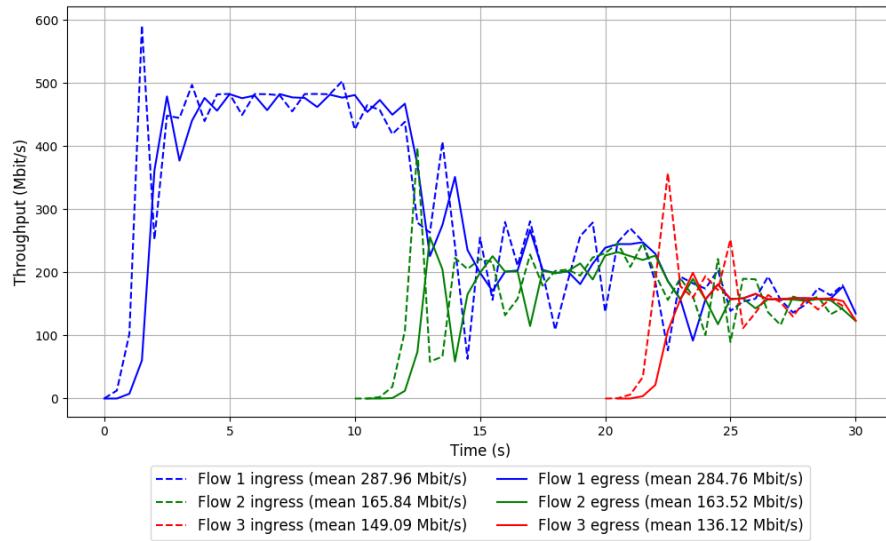


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-03-19 14:49:17
End at: 2019-03-19 14:49:47
Local clock offset: 1.067 ms
Remote clock offset: -33.36 ms

# Below is generated by plot.py at 2019-03-19 17:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 433.48 Mbit/s
95th percentile per-packet one-way delay: 399.395 ms
Loss rate: 2.82%
-- Flow 1:
Average throughput: 284.76 Mbit/s
95th percentile per-packet one-way delay: 416.189 ms
Loss rate: 1.70%
-- Flow 2:
Average throughput: 163.52 Mbit/s
95th percentile per-packet one-way delay: 308.185 ms
Loss rate: 2.38%
-- Flow 3:
Average throughput: 136.12 Mbit/s
95th percentile per-packet one-way delay: 438.458 ms
Loss rate: 10.60%
```

Run 2: Report of FillP-Sheep — Data Link

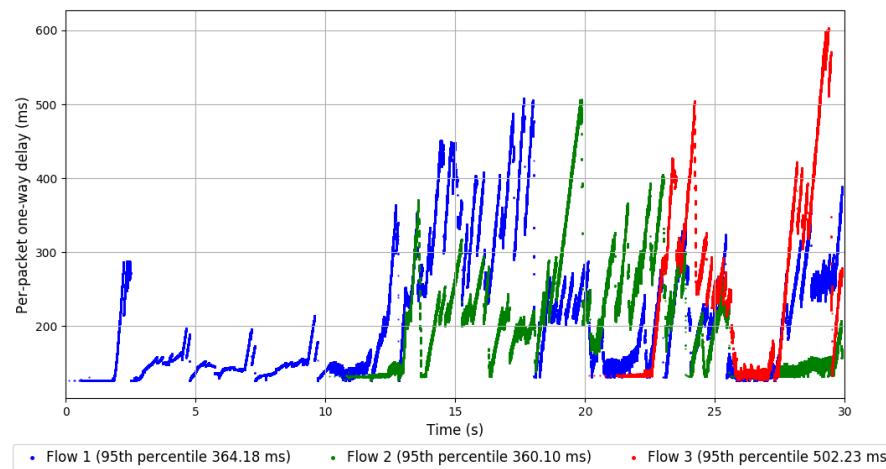
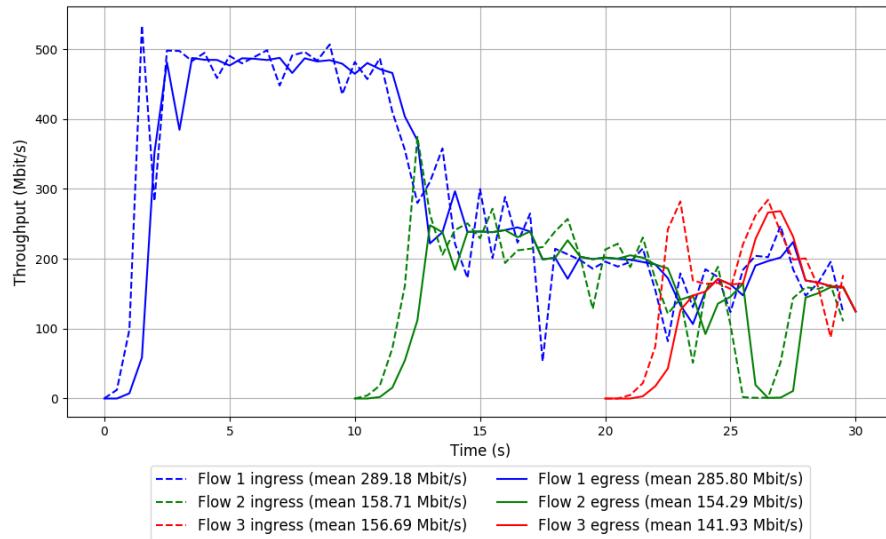


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-03-19 15:31:54
End at: 2019-03-19 15:32:24
Local clock offset: -1.146 ms
Remote clock offset: -33.879 ms

# Below is generated by plot.py at 2019-03-19 17:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 434.60 Mbit/s
95th percentile per-packet one-way delay: 385.871 ms
Loss rate: 3.34%
-- Flow 1:
Average throughput: 285.80 Mbit/s
95th percentile per-packet one-way delay: 364.181 ms
Loss rate: 1.79%
-- Flow 2:
Average throughput: 154.29 Mbit/s
95th percentile per-packet one-way delay: 360.098 ms
Loss rate: 3.77%
-- Flow 3:
Average throughput: 141.93 Mbit/s
95th percentile per-packet one-way delay: 502.232 ms
Loss rate: 11.12%
```

Run 3: Report of FillP-Sheep — Data Link

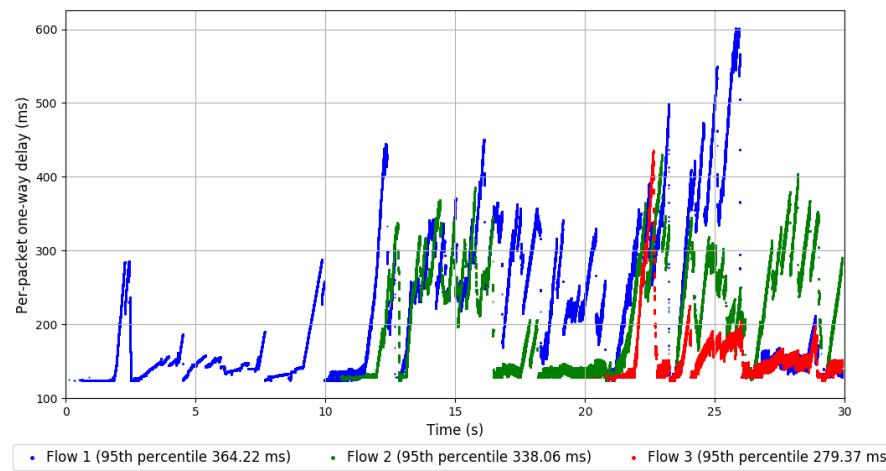
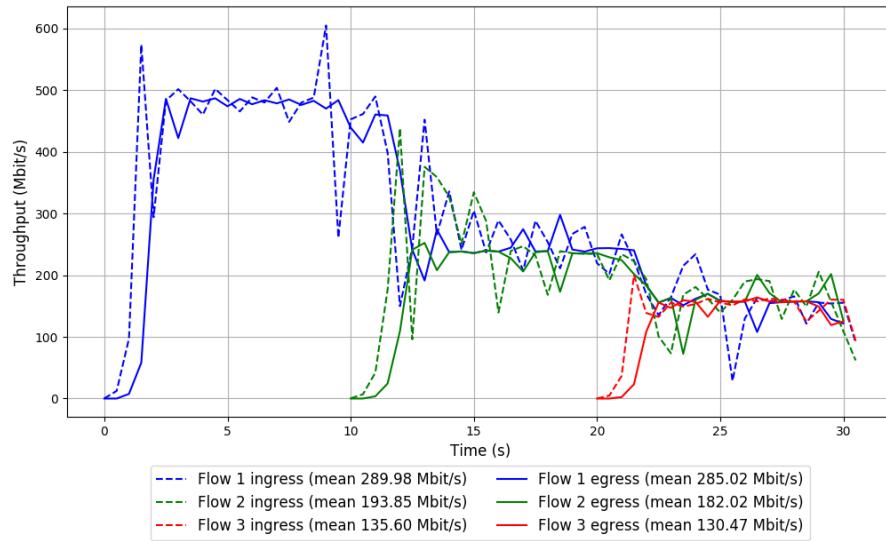


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-03-19 16:19:46
End at: 2019-03-19 16:20:16
Local clock offset: 1.527 ms
Remote clock offset: -30.342 ms

# Below is generated by plot.py at 2019-03-19 17:58:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 448.56 Mbit/s
95th percentile per-packet one-way delay: 350.944 ms
Loss rate: 7.37%
-- Flow 1:
Average throughput: 285.02 Mbit/s
95th percentile per-packet one-way delay: 364.222 ms
Loss rate: 4.97%
-- Flow 2:
Average throughput: 182.02 Mbit/s
95th percentile per-packet one-way delay: 338.058 ms
Loss rate: 10.70%
-- Flow 3:
Average throughput: 130.47 Mbit/s
95th percentile per-packet one-way delay: 279.373 ms
Loss rate: 12.84%
```

Run 4: Report of FillP-Sheep — Data Link

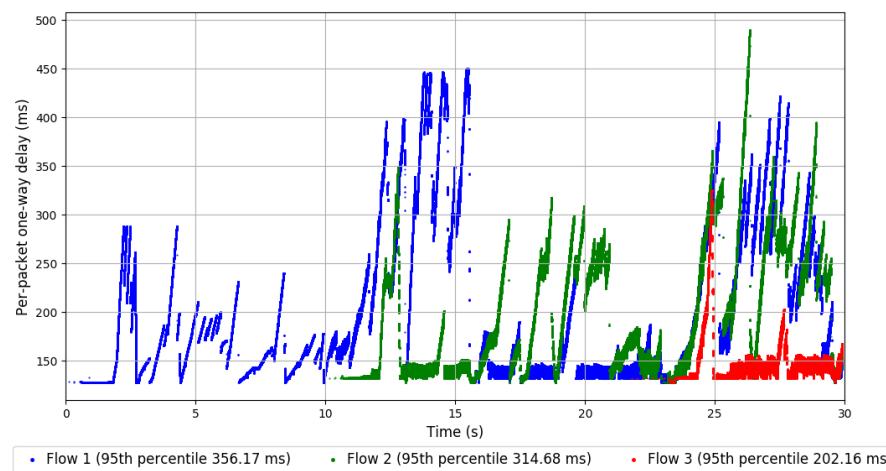
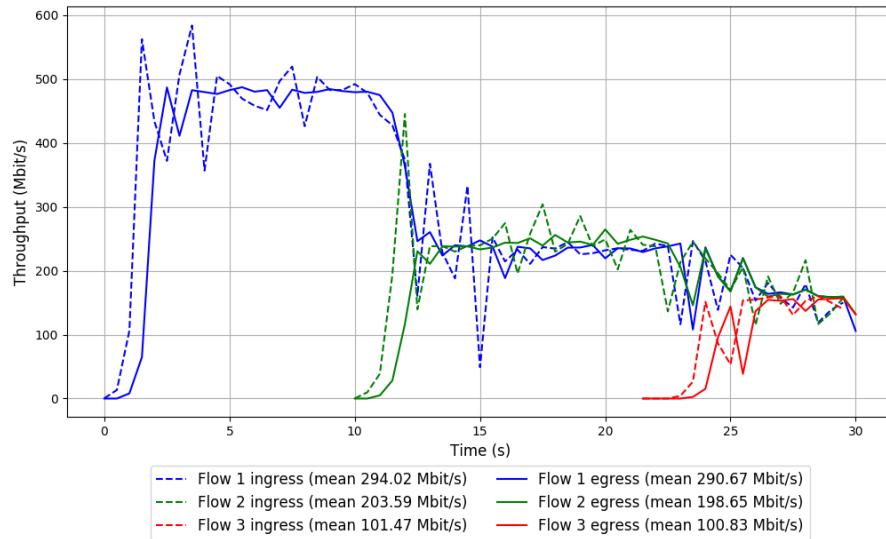


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-03-19 17:08:10
End at: 2019-03-19 17:08:40
Local clock offset: 0.9 ms
Remote clock offset: -34.639 ms

# Below is generated by plot.py at 2019-03-19 18:00:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 449.77 Mbit/s
95th percentile per-packet one-way delay: 336.185 ms
Loss rate: 2.32%
-- Flow 1:
Average throughput: 290.67 Mbit/s
95th percentile per-packet one-way delay: 356.171 ms
Loss rate: 1.78%
-- Flow 2:
Average throughput: 198.65 Mbit/s
95th percentile per-packet one-way delay: 314.676 ms
Loss rate: 3.34%
-- Flow 3:
Average throughput: 100.83 Mbit/s
95th percentile per-packet one-way delay: 202.162 ms
Loss rate: 3.00%
```

Run 5: Report of FillP-Sheep — Data Link

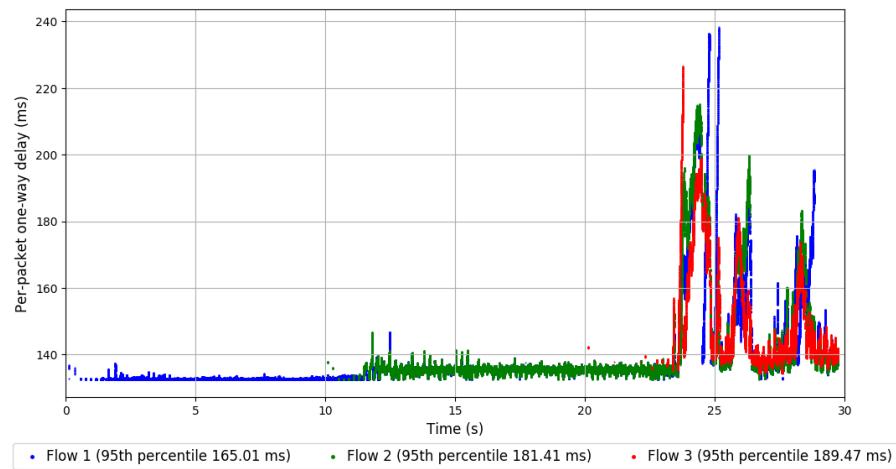
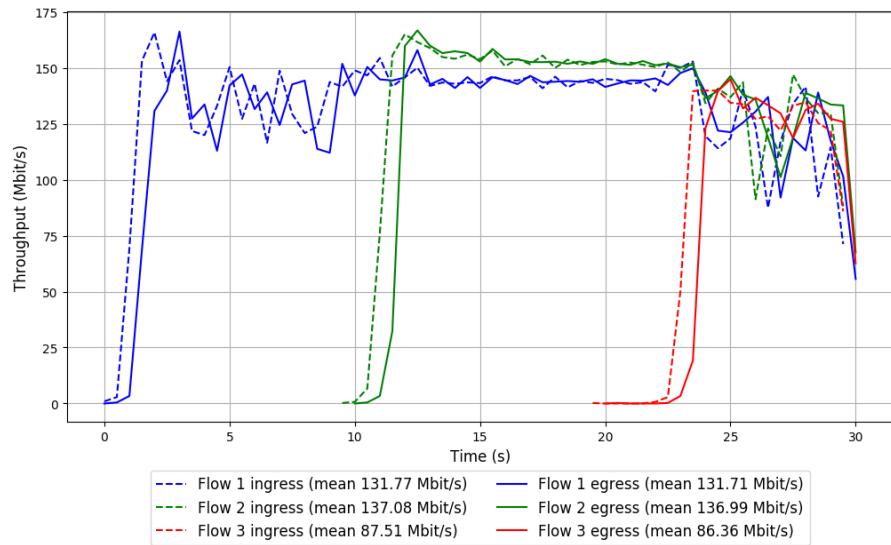


Run 1: Statistics of Indigo

```
Start at: 2019-03-19 14:16:02
End at: 2019-03-19 14:16:32
Local clock offset: 1.37 ms
Remote clock offset: -39.59 ms

# Below is generated by plot.py at 2019-03-19 18:00:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 250.72 Mbit/s
95th percentile per-packet one-way delay: 176.583 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 131.71 Mbit/s
95th percentile per-packet one-way delay: 165.007 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 136.99 Mbit/s
95th percentile per-packet one-way delay: 181.409 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 86.36 Mbit/s
95th percentile per-packet one-way delay: 189.465 ms
Loss rate: 3.39%
```

Run 1: Report of Indigo — Data Link

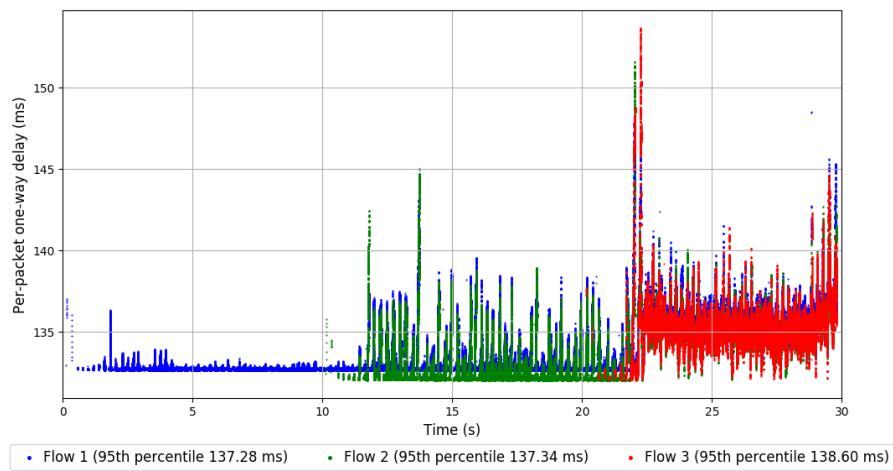
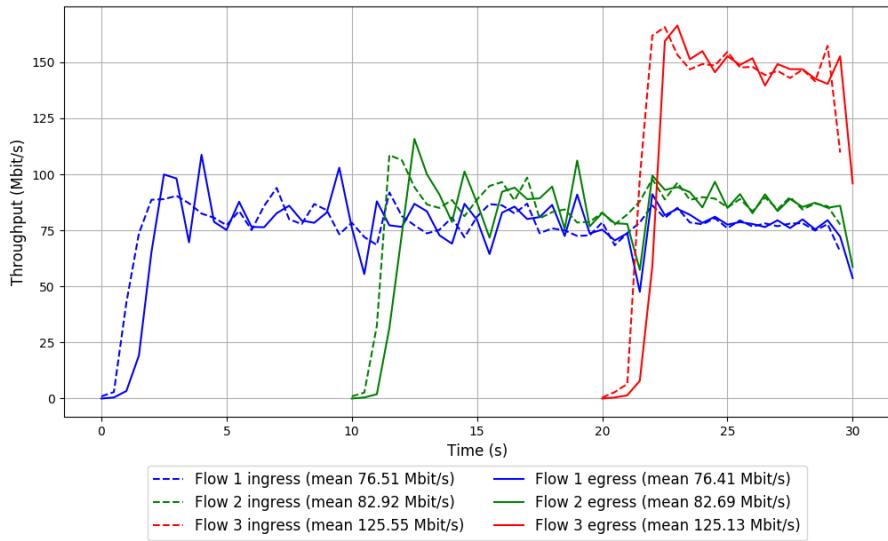


Run 2: Statistics of Indigo

```
Start at: 2019-03-19 14:47:48
End at: 2019-03-19 14:48:18
Local clock offset: -0.792 ms
Remote clock offset: -37.744 ms

# Below is generated by plot.py at 2019-03-19 18:00:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 171.90 Mbit/s
95th percentile per-packet one-way delay: 137.587 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 76.41 Mbit/s
95th percentile per-packet one-way delay: 137.278 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 82.69 Mbit/s
95th percentile per-packet one-way delay: 137.342 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 125.13 Mbit/s
95th percentile per-packet one-way delay: 138.599 ms
Loss rate: 2.38%
```

Run 2: Report of Indigo — Data Link

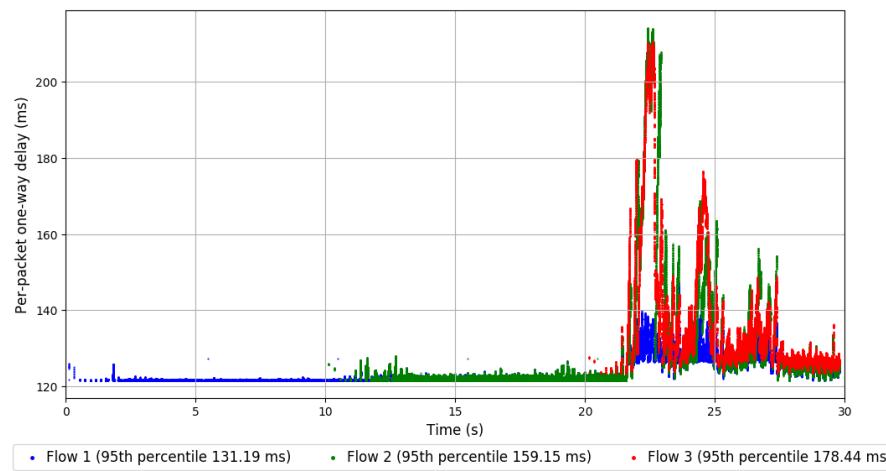
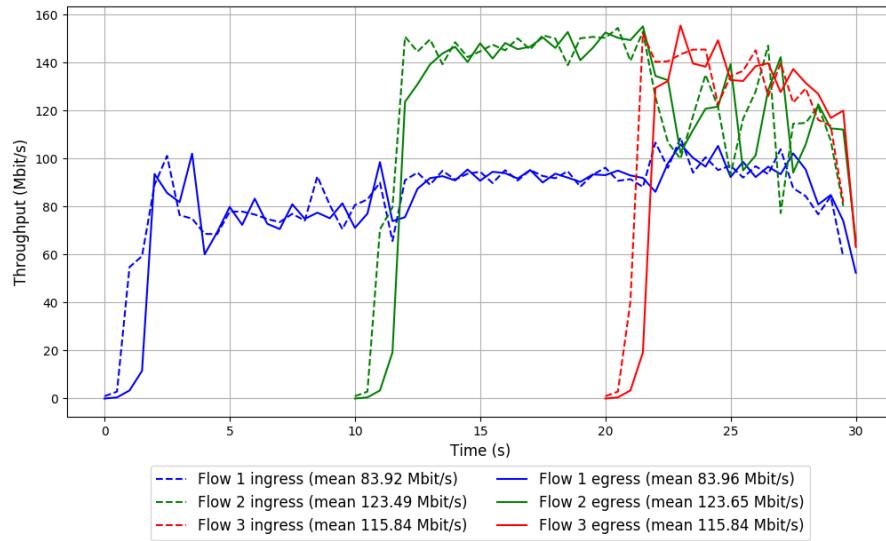


Run 3: Statistics of Indigo

```
Start at: 2019-03-19 15:30:22
End at: 2019-03-19 15:30:53
Local clock offset: -0.758 ms
Remote clock offset: -28.912 ms

# Below is generated by plot.py at 2019-03-19 18:00:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 203.52 Mbit/s
95th percentile per-packet one-way delay: 153.760 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 83.96 Mbit/s
95th percentile per-packet one-way delay: 131.191 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 123.65 Mbit/s
95th percentile per-packet one-way delay: 159.152 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 115.84 Mbit/s
95th percentile per-packet one-way delay: 178.441 ms
Loss rate: 2.00%
```

Run 3: Report of Indigo — Data Link

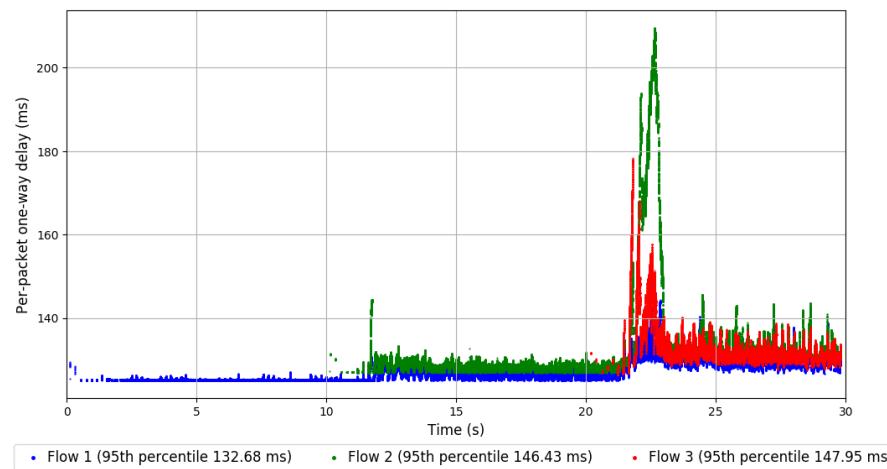
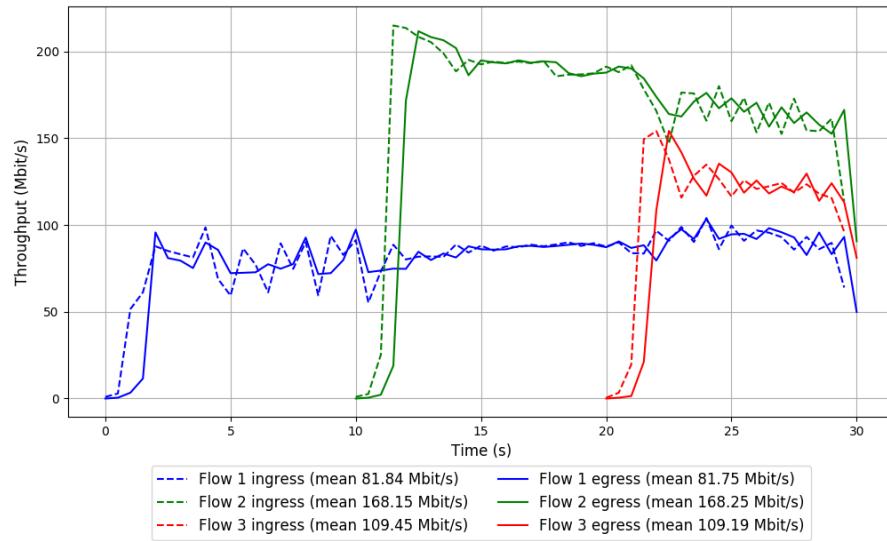


Run 4: Statistics of Indigo

```
Start at: 2019-03-19 16:18:13
End at: 2019-03-19 16:18:43
Local clock offset: -0.069 ms
Remote clock offset: -33.527 ms

# Below is generated by plot.py at 2019-03-19 18:00:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 228.64 Mbit/s
95th percentile per-packet one-way delay: 139.404 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 81.75 Mbit/s
95th percentile per-packet one-way delay: 132.682 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 168.25 Mbit/s
95th percentile per-packet one-way delay: 146.427 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 109.19 Mbit/s
95th percentile per-packet one-way delay: 147.950 ms
Loss rate: 2.29%
```

Run 4: Report of Indigo — Data Link

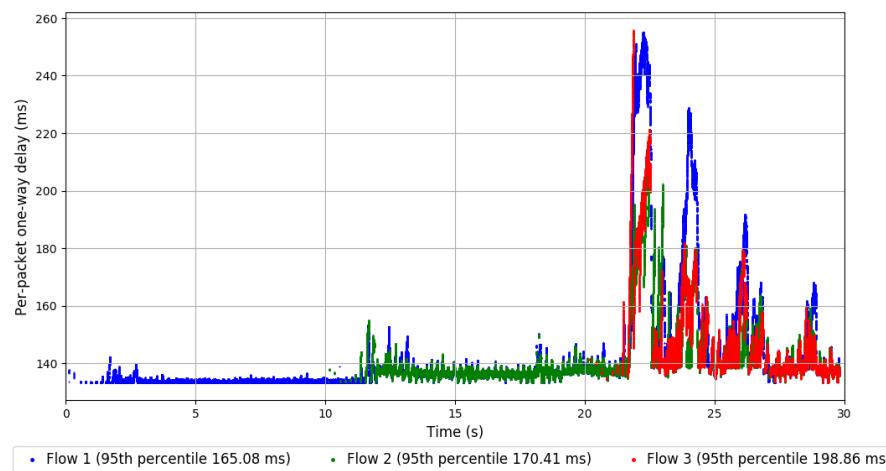
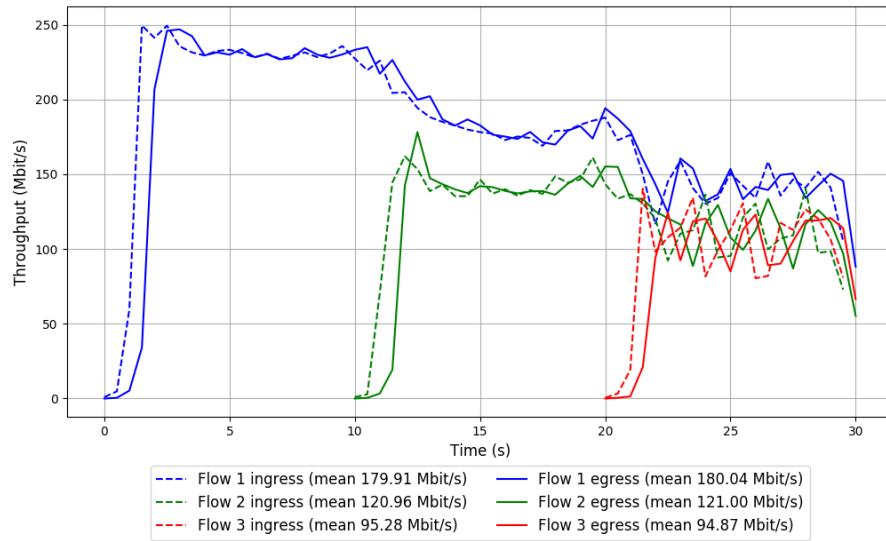


Run 5: Statistics of Indigo

```
Start at: 2019-03-19 17:00:56
End at: 2019-03-19 17:01:26
Local clock offset: 1.899 ms
Remote clock offset: -39.321 ms

# Below is generated by plot.py at 2019-03-19 18:00:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 290.95 Mbit/s
95th percentile per-packet one-way delay: 173.227 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 180.04 Mbit/s
95th percentile per-packet one-way delay: 165.077 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 121.00 Mbit/s
95th percentile per-packet one-way delay: 170.413 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 94.87 Mbit/s
95th percentile per-packet one-way delay: 198.860 ms
Loss rate: 2.48%
```

Run 5: Report of Indigo — Data Link

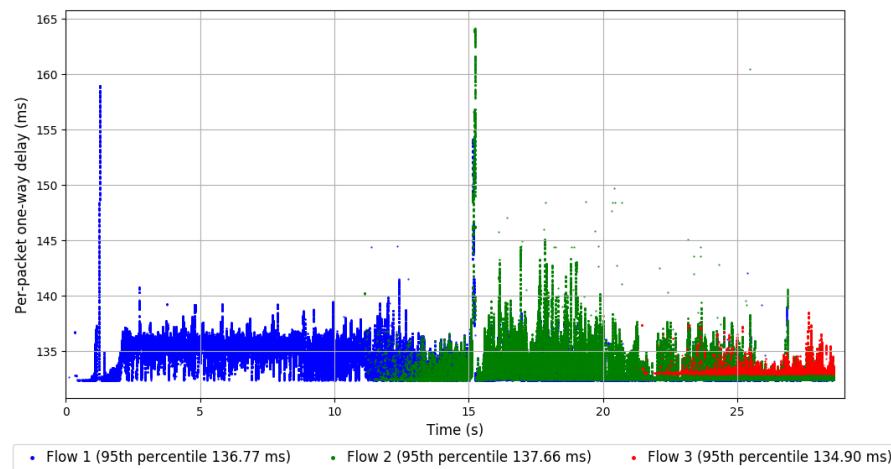
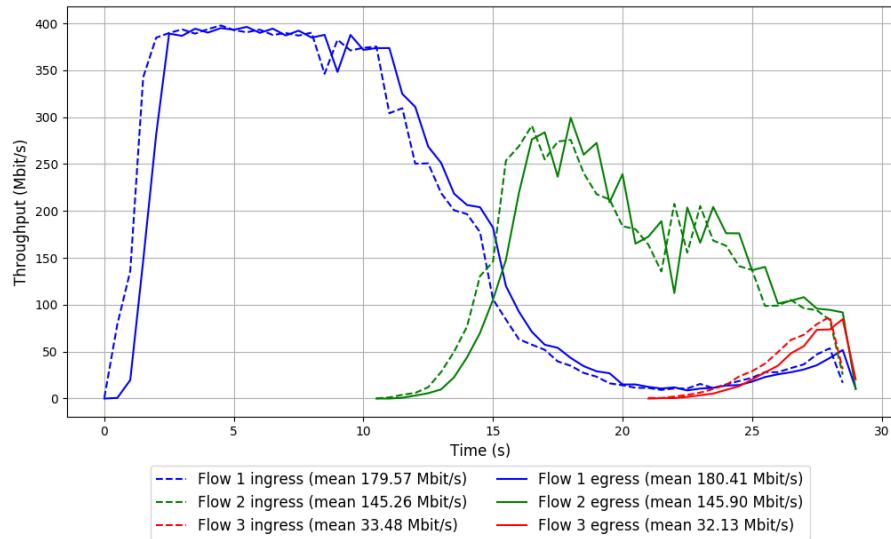


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-03-19 14:35:04
End at: 2019-03-19 14:35:34
Local clock offset: -0.899 ms
Remote clock offset: -38.372 ms

# Below is generated by plot.py at 2019-03-19 18:00:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 279.24 Mbit/s
95th percentile per-packet one-way delay: 136.951 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 180.41 Mbit/s
95th percentile per-packet one-way delay: 136.771 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 145.90 Mbit/s
95th percentile per-packet one-way delay: 137.664 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 32.13 Mbit/s
95th percentile per-packet one-way delay: 134.902 ms
Loss rate: 6.52%
```

Run 1: Report of Indigo-MusesC3 — Data Link

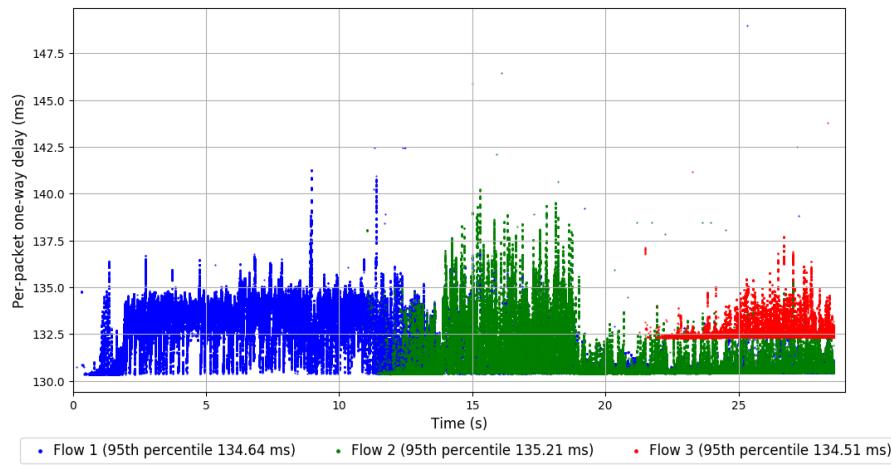
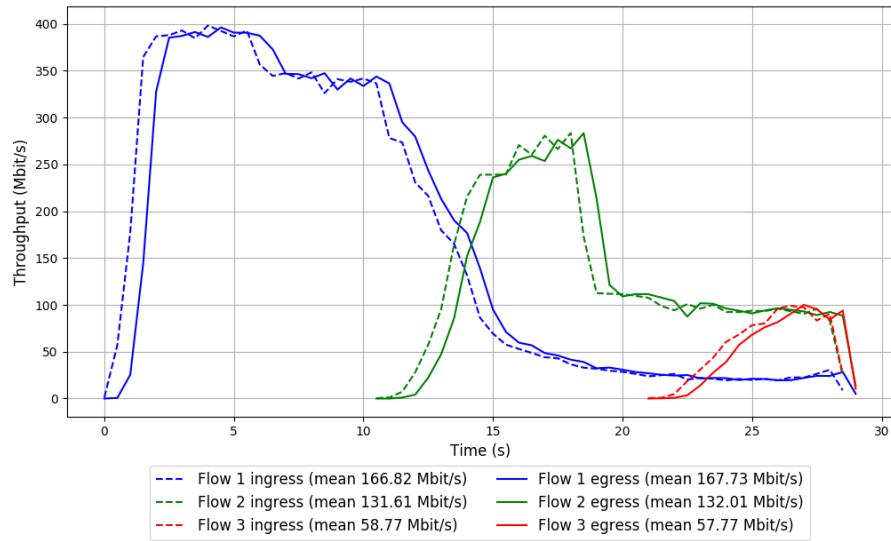


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-03-19 15:18:09
End at: 2019-03-19 15:18:39
Local clock offset: 0.218 ms
Remote clock offset: -36.523 ms

# Below is generated by plot.py at 2019-03-19 18:00:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 264.83 Mbit/s
95th percentile per-packet one-way delay: 134.732 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 167.73 Mbit/s
95th percentile per-packet one-way delay: 134.636 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 132.01 Mbit/s
95th percentile per-packet one-way delay: 135.212 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 57.77 Mbit/s
95th percentile per-packet one-way delay: 134.514 ms
Loss rate: 4.10%
```

Run 2: Report of Indigo-MusesC3 — Data Link

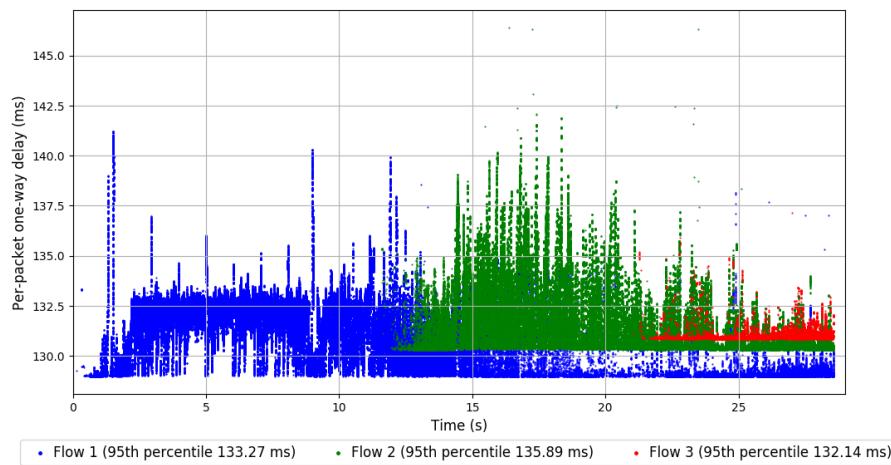
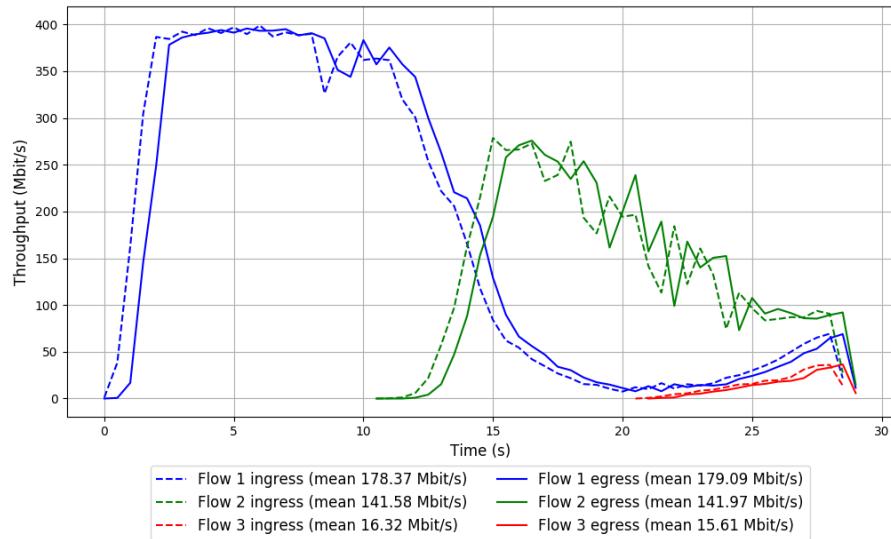


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-03-19 15:49:34
End at: 2019-03-19 15:50:04
Local clock offset: -0.452 ms
Remote clock offset: -36.328 ms

# Below is generated by plot.py at 2019-03-19 18:00:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 271.43 Mbit/s
95th percentile per-packet one-way delay: 134.578 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 179.09 Mbit/s
95th percentile per-packet one-way delay: 133.271 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 141.97 Mbit/s
95th percentile per-packet one-way delay: 135.892 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 15.61 Mbit/s
95th percentile per-packet one-way delay: 132.142 ms
Loss rate: 6.88%
```

Run 3: Report of Indigo-MusesC3 — Data Link

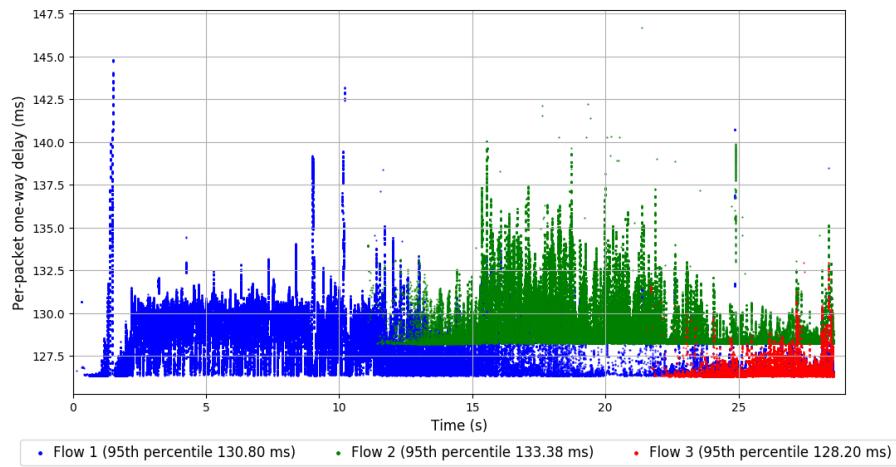
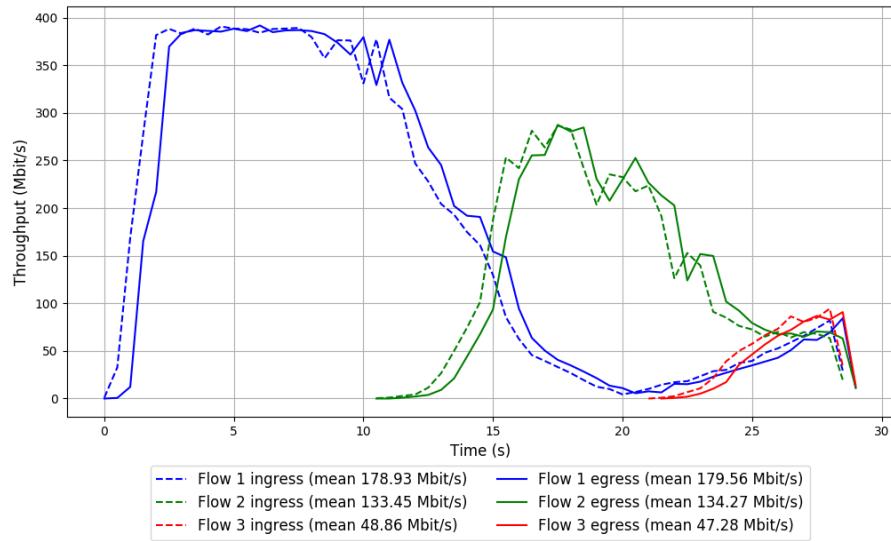


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-03-19 16:43:03
End at: 2019-03-19 16:43:33
Local clock offset: 1.27 ms
Remote clock offset: -34.069 ms

# Below is generated by plot.py at 2019-03-19 18:00:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 274.74 Mbit/s
95th percentile per-packet one-way delay: 132.089 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 179.56 Mbit/s
95th percentile per-packet one-way delay: 130.803 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 134.27 Mbit/s
95th percentile per-packet one-way delay: 133.375 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 47.28 Mbit/s
95th percentile per-packet one-way delay: 128.202 ms
Loss rate: 5.85%
```

Run 4: Report of Indigo-MusesC3 — Data Link

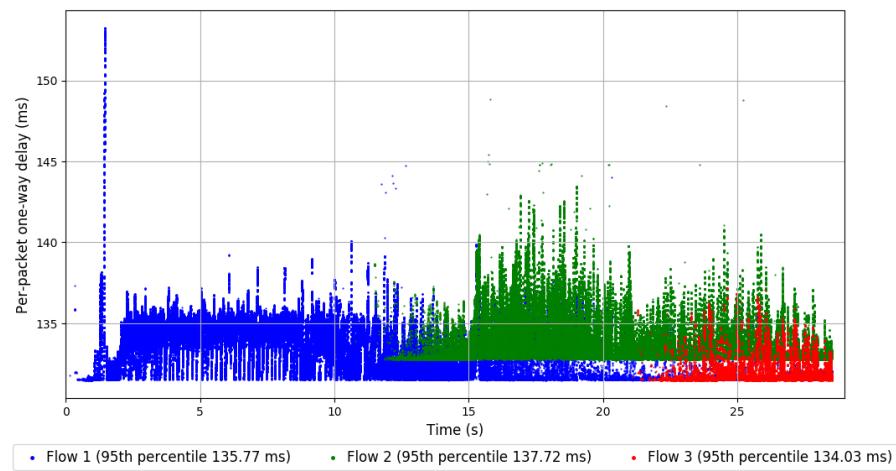
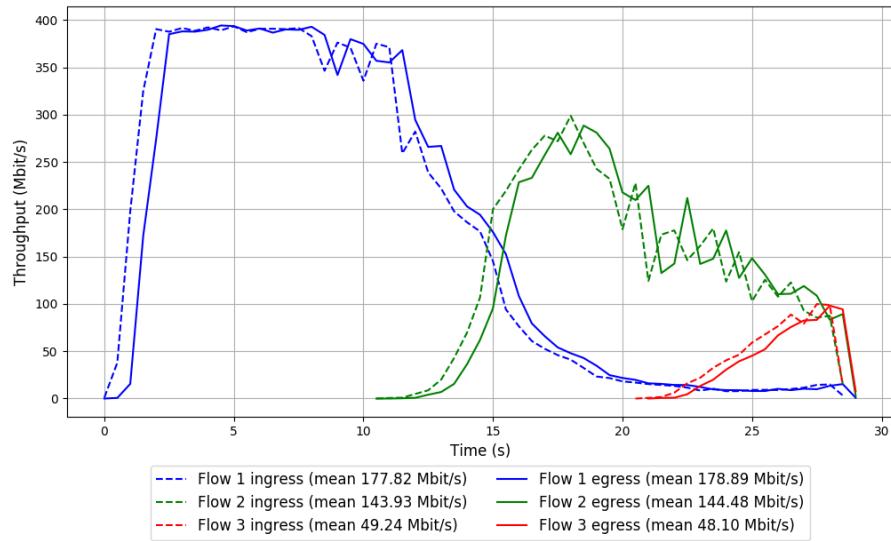


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-03-19 17:31:13
End at: 2019-03-19 17:31:43
Local clock offset: 0.619 ms
Remote clock offset: -39.5 ms

# Below is generated by plot.py at 2019-03-19 18:00:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 281.70 Mbit/s
95th percentile per-packet one-way delay: 136.487 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 178.89 Mbit/s
95th percentile per-packet one-way delay: 135.769 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 144.48 Mbit/s
95th percentile per-packet one-way delay: 137.716 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 48.10 Mbit/s
95th percentile per-packet one-way delay: 134.032 ms
Loss rate: 4.78%
```

Run 5: Report of Indigo-MusesC3 — Data Link

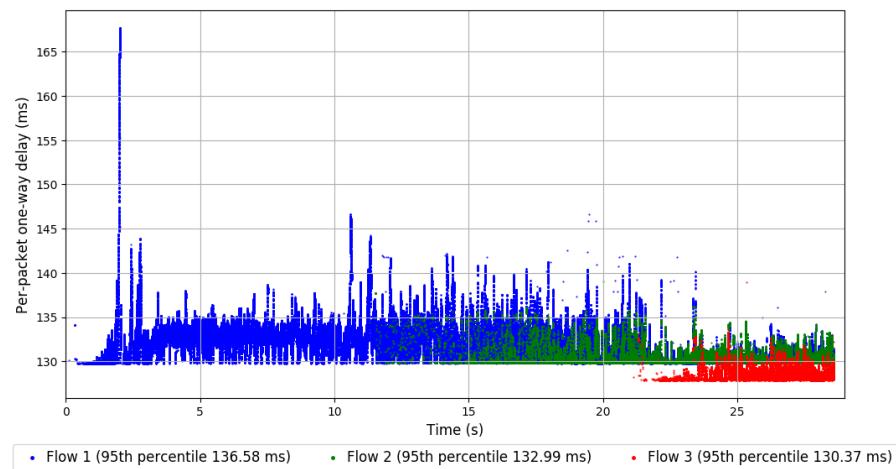
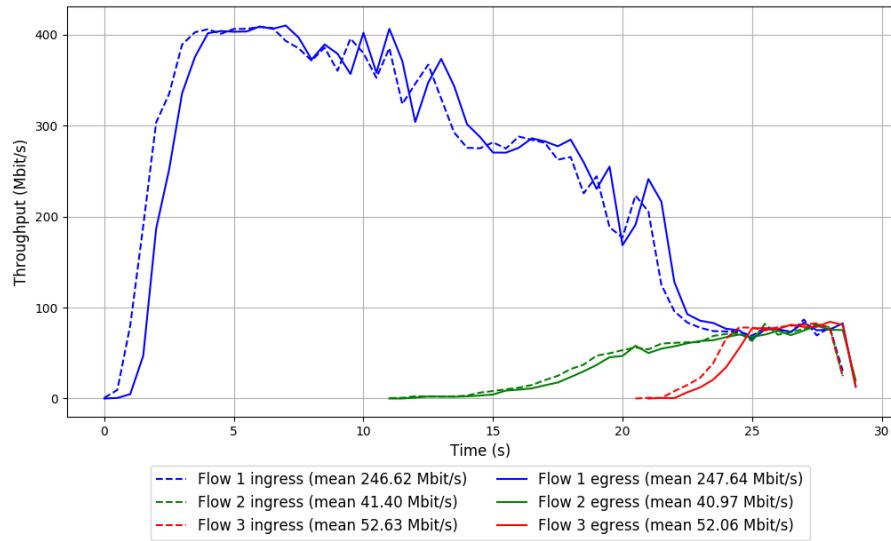


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-03-19 14:36:56
End at: 2019-03-19 14:37:26
Local clock offset: 0.247 ms
Remote clock offset: -33.983 ms

# Below is generated by plot.py at 2019-03-19 18:01:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 286.12 Mbit/s
95th percentile per-packet one-way delay: 136.218 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 247.64 Mbit/s
95th percentile per-packet one-way delay: 136.577 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 40.97 Mbit/s
95th percentile per-packet one-way delay: 132.993 ms
Loss rate: 2.16%
-- Flow 3:
Average throughput: 52.06 Mbit/s
95th percentile per-packet one-way delay: 130.370 ms
Loss rate: 3.51%
```

Run 1: Report of Indigo-MusesC5 — Data Link

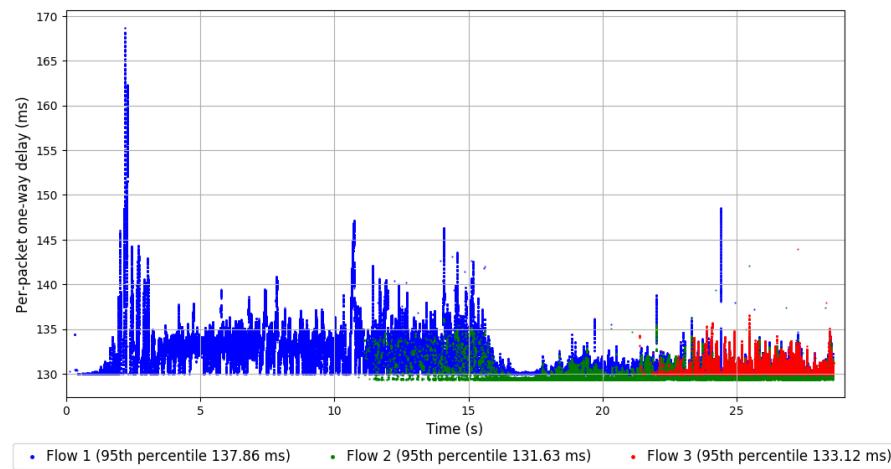
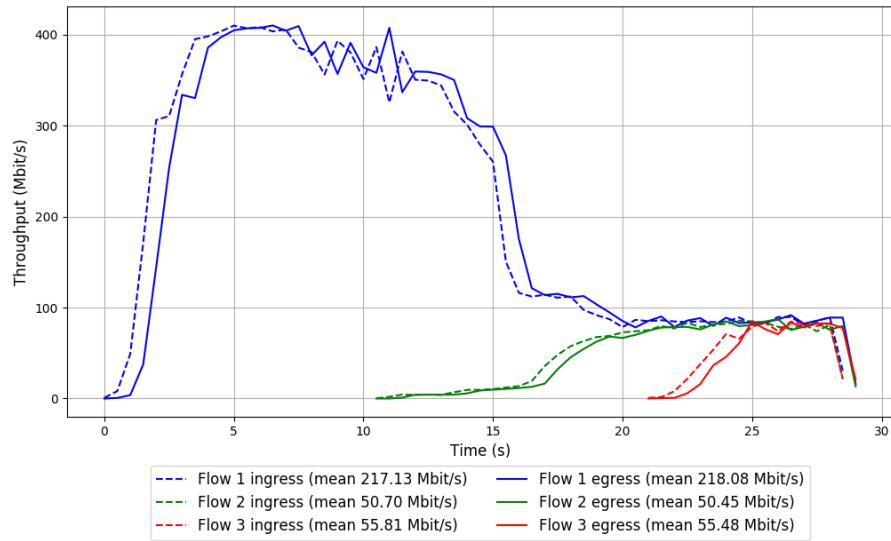


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-03-19 15:19:41
End at: 2019-03-19 15:20:11
Local clock offset: 2.244 ms
Remote clock offset: -32.086 ms

# Below is generated by plot.py at 2019-03-19 18:01:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 263.79 Mbit/s
95th percentile per-packet one-way delay: 137.097 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 218.08 Mbit/s
95th percentile per-packet one-way delay: 137.863 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 50.45 Mbit/s
95th percentile per-packet one-way delay: 131.632 ms
Loss rate: 1.58%
-- Flow 3:
Average throughput: 55.48 Mbit/s
95th percentile per-packet one-way delay: 133.122 ms
Loss rate: 2.85%
```

Run 2: Report of Indigo-MusesC5 — Data Link

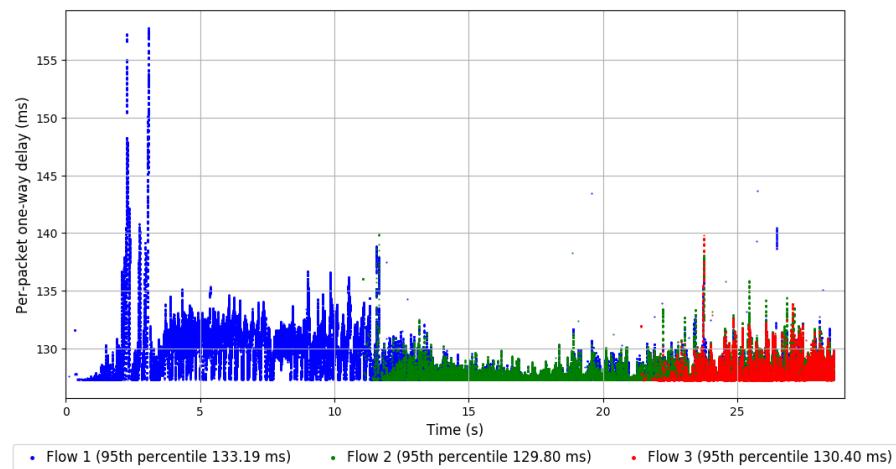
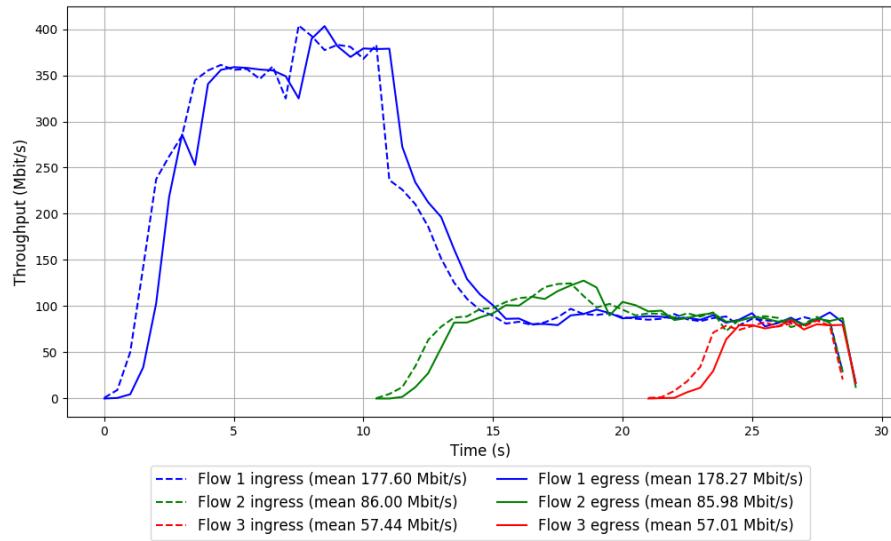


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-03-19 15:51:04
End at: 2019-03-19 15:51:34
Local clock offset: -1.604 ms
Remote clock offset: -35.836 ms

# Below is generated by plot.py at 2019-03-19 18:01:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 246.59 Mbit/s
95th percentile per-packet one-way delay: 132.731 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 178.27 Mbit/s
95th percentile per-packet one-way delay: 133.195 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 85.98 Mbit/s
95th percentile per-packet one-way delay: 129.802 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 57.01 Mbit/s
95th percentile per-packet one-way delay: 130.396 ms
Loss rate: 3.19%
```

Run 3: Report of Indigo-MusesC5 — Data Link

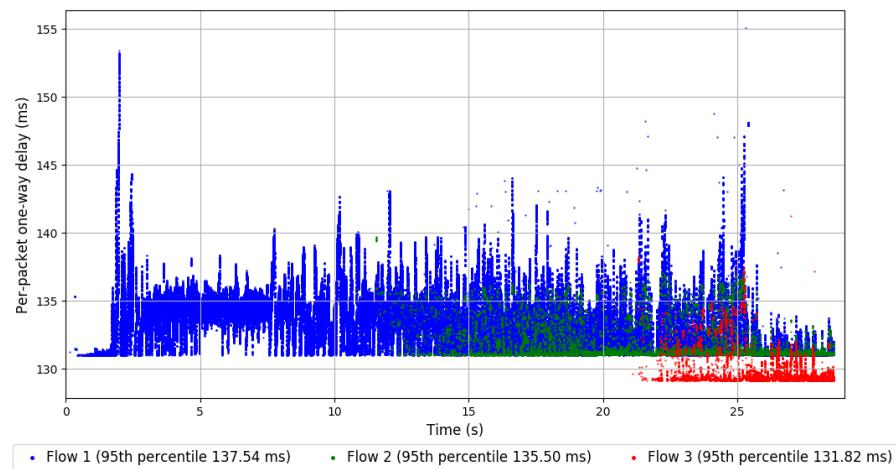
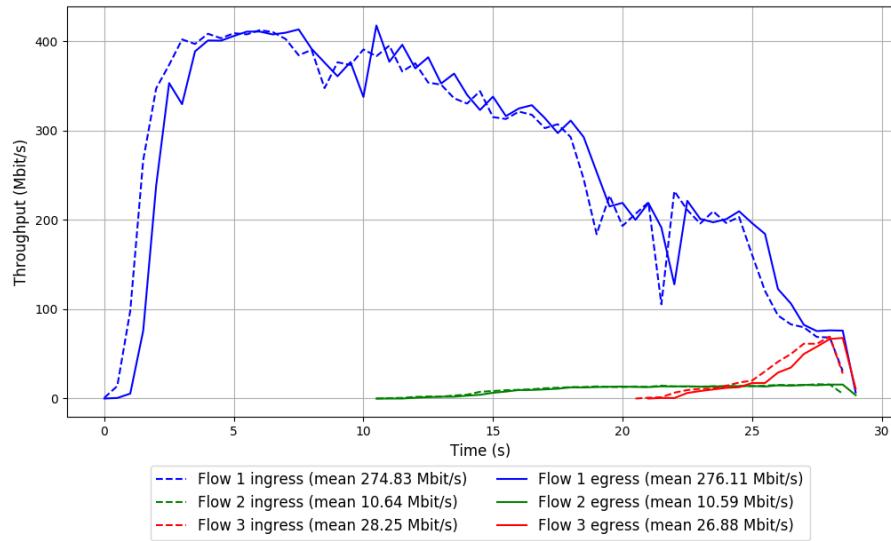


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-03-19 16:44:35
End at: 2019-03-19 16:45:05
Local clock offset: 1.688 ms
Remote clock offset: -36.404 ms

# Below is generated by plot.py at 2019-03-19 18:02:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 289.70 Mbit/s
95th percentile per-packet one-way delay: 137.470 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 276.11 Mbit/s
95th percentile per-packet one-way delay: 137.544 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 10.59 Mbit/s
95th percentile per-packet one-way delay: 135.495 ms
Loss rate: 1.60%
-- Flow 3:
Average throughput: 26.88 Mbit/s
95th percentile per-packet one-way delay: 131.819 ms
Loss rate: 7.29%
```

Run 4: Report of Indigo-MusesC5 — Data Link

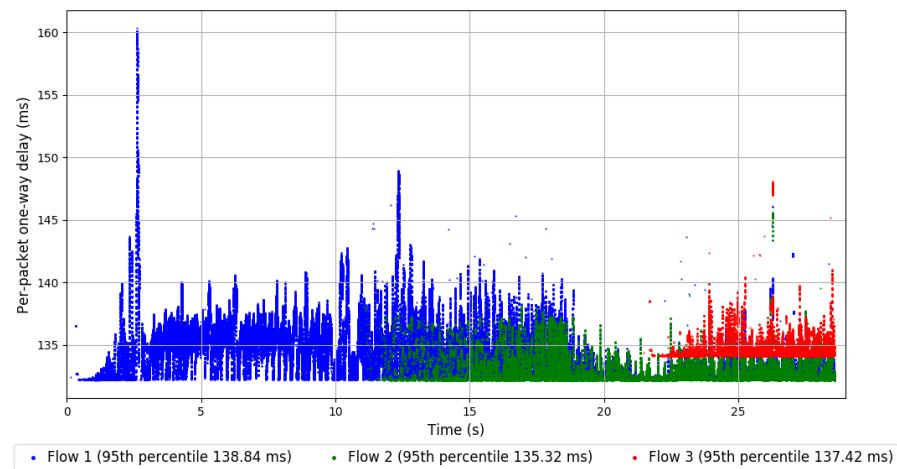
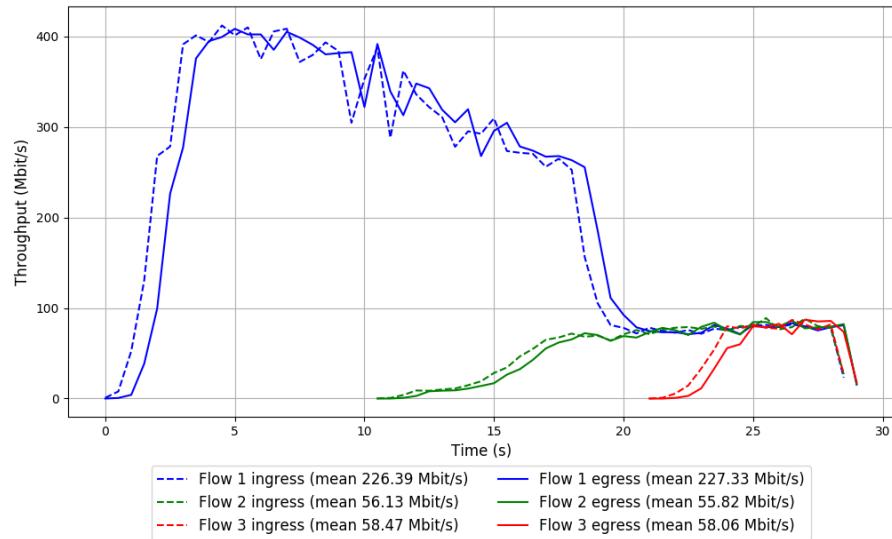


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-03-19 17:32:45
End at: 2019-03-19 17:33:15
Local clock offset: 1.438 ms
Remote clock offset: -39.409 ms

# Below is generated by plot.py at 2019-03-19 18:03:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 276.47 Mbit/s
95th percentile per-packet one-way delay: 138.494 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 227.33 Mbit/s
95th percentile per-packet one-way delay: 138.845 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 55.82 Mbit/s
95th percentile per-packet one-way delay: 135.321 ms
Loss rate: 1.63%
-- Flow 3:
Average throughput: 58.06 Mbit/s
95th percentile per-packet one-way delay: 137.423 ms
Loss rate: 3.54%
```

Run 5: Report of Indigo-MusesC5 — Data Link

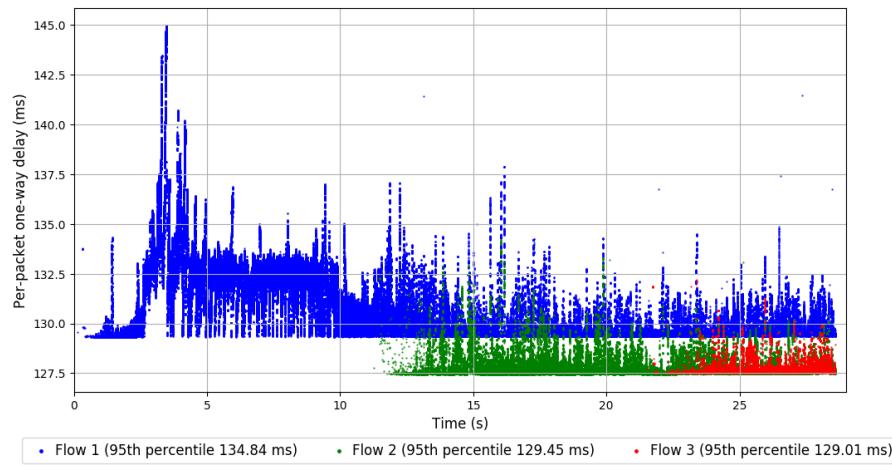
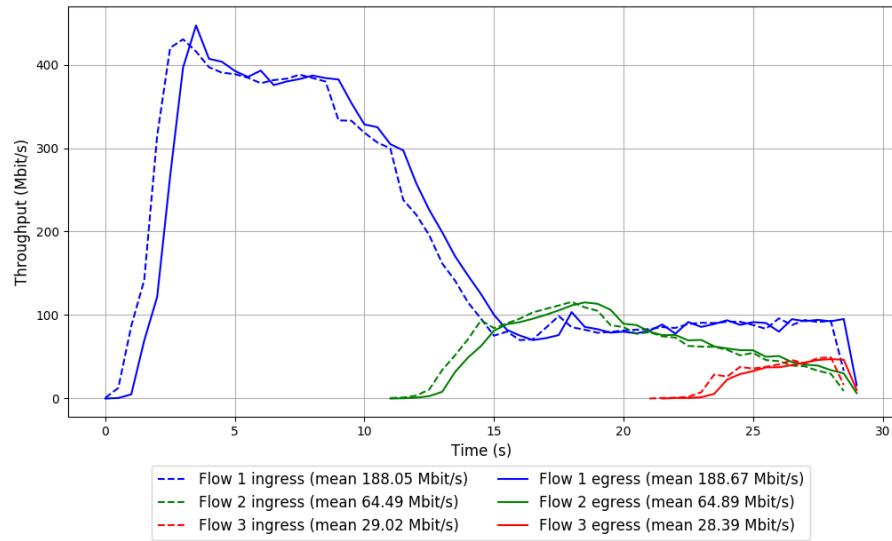


Run 1: Statistics of Indigo-MusesD

```
Start at: 2019-03-19 14:24:49
End at: 2019-03-19 14:25:19
Local clock offset: 1.155 ms
Remote clock offset: -33.539 ms

# Below is generated by plot.py at 2019-03-19 18:03:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 235.19 Mbit/s
95th percentile per-packet one-way delay: 134.380 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 188.67 Mbit/s
95th percentile per-packet one-way delay: 134.842 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 64.89 Mbit/s
95th percentile per-packet one-way delay: 129.452 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 28.39 Mbit/s
95th percentile per-packet one-way delay: 129.007 ms
Loss rate: 4.70%
```

Run 1: Report of Indigo-MusesD — Data Link

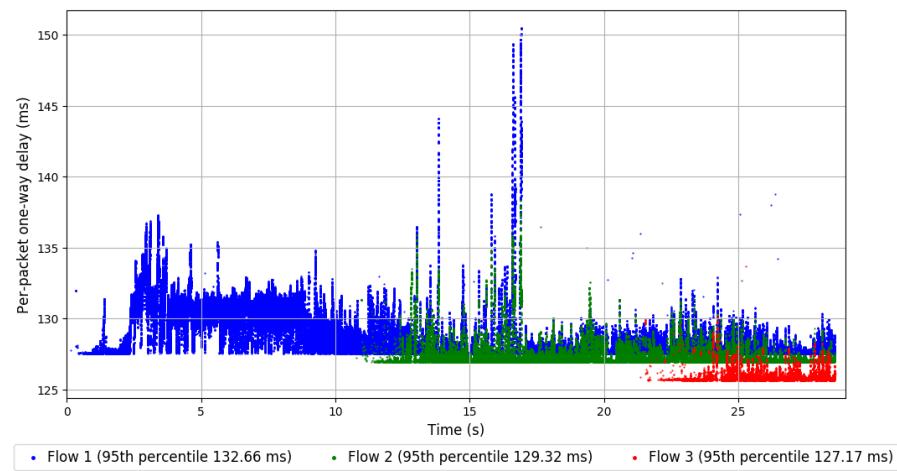
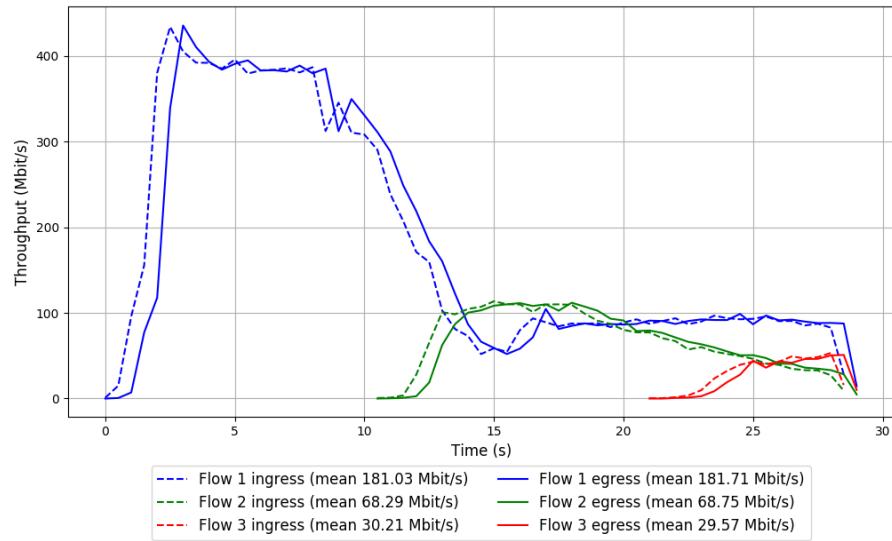


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-03-19 14:56:29
End at: 2019-03-19 14:56:59
Local clock offset: 0.76 ms
Remote clock offset: -31.643 ms

# Below is generated by plot.py at 2019-03-19 18:03:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 232.25 Mbit/s
95th percentile per-packet one-way delay: 132.269 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 181.71 Mbit/s
95th percentile per-packet one-way delay: 132.664 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 68.75 Mbit/s
95th percentile per-packet one-way delay: 129.324 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 29.57 Mbit/s
95th percentile per-packet one-way delay: 127.165 ms
Loss rate: 4.57%
```

Run 2: Report of Indigo-MusesD — Data Link

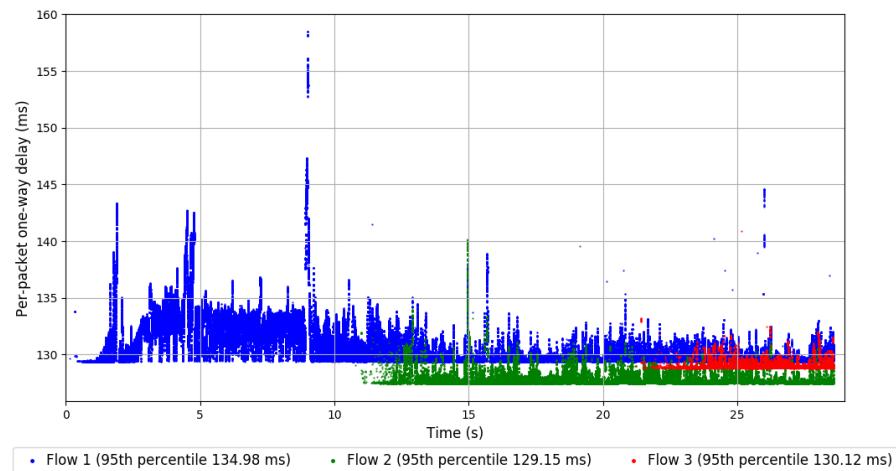
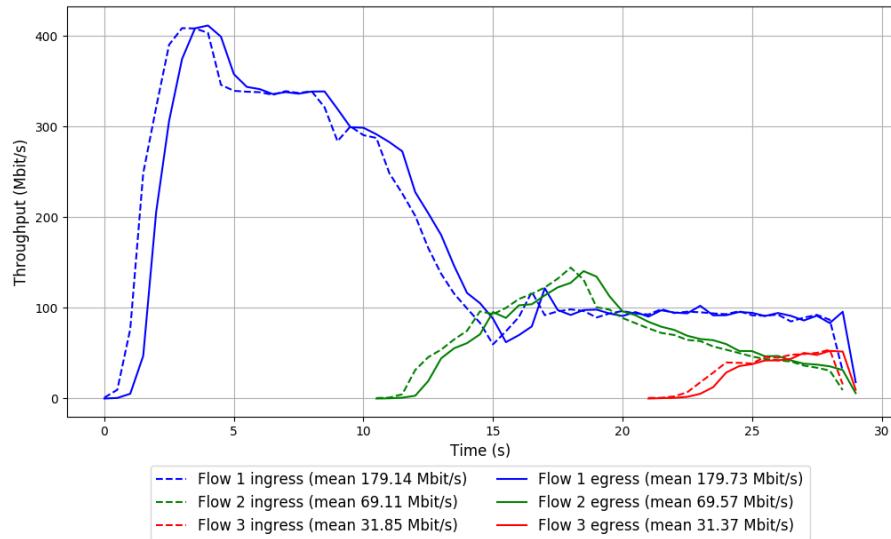


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-03-19 15:39:07
End at: 2019-03-19 15:39:37
Local clock offset: 0.606 ms
Remote clock offset: -33.457 ms

# Below is generated by plot.py at 2019-03-19 18:03:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 231.37 Mbit/s
95th percentile per-packet one-way delay: 134.397 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 179.73 Mbit/s
95th percentile per-packet one-way delay: 134.983 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 69.57 Mbit/s
95th percentile per-packet one-way delay: 129.147 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 31.37 Mbit/s
95th percentile per-packet one-way delay: 130.118 ms
Loss rate: 4.05%
```

Run 3: Report of Indigo-MusesD — Data Link

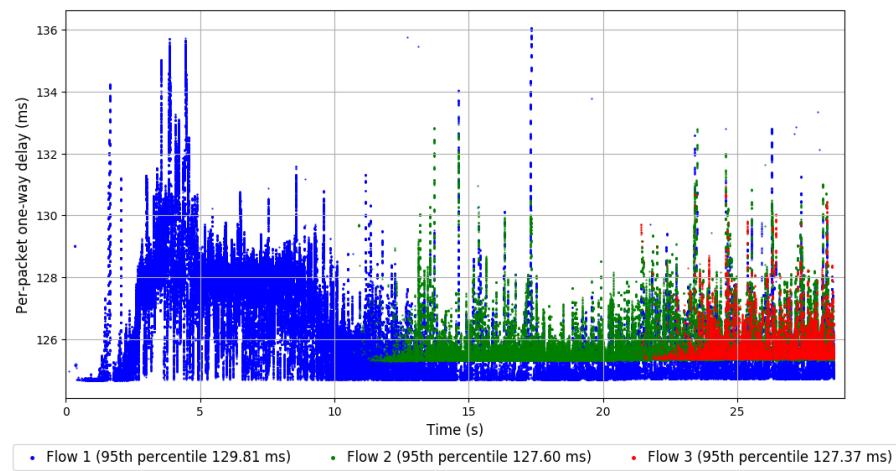
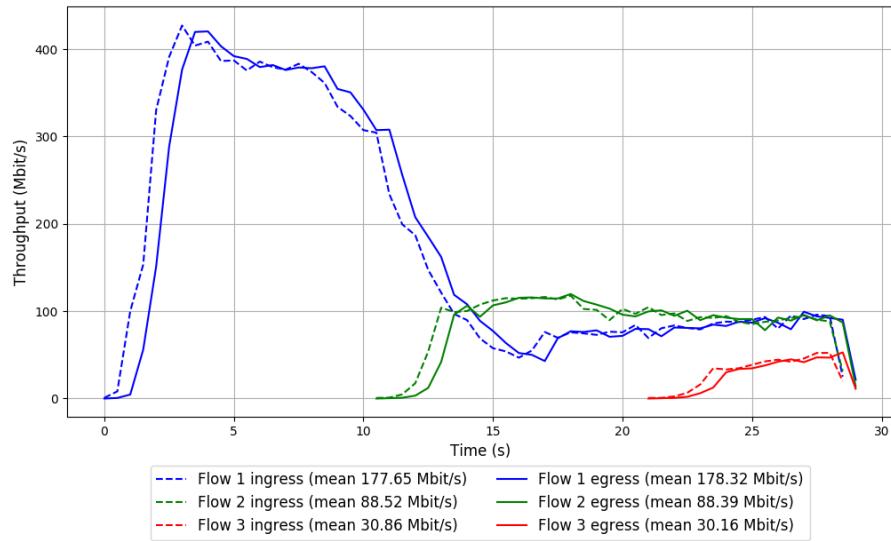


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-03-19 16:32:43
End at: 2019-03-19 16:33:13
Local clock offset: 1.839 ms
Remote clock offset: -31.052 ms

# Below is generated by plot.py at 2019-03-19 18:03:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 241.62 Mbit/s
95th percentile per-packet one-way delay: 129.382 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 178.32 Mbit/s
95th percentile per-packet one-way delay: 129.805 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 88.39 Mbit/s
95th percentile per-packet one-way delay: 127.604 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 30.16 Mbit/s
95th percentile per-packet one-way delay: 127.367 ms
Loss rate: 4.76%
```

Run 4: Report of Indigo-MusesD — Data Link

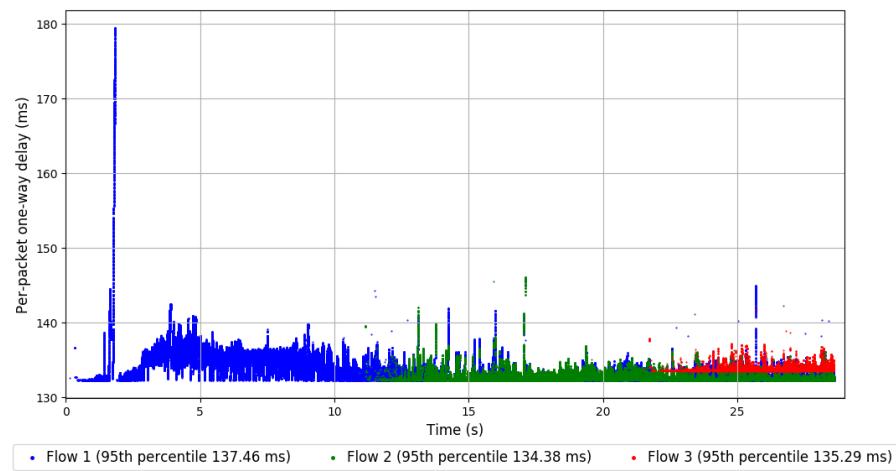
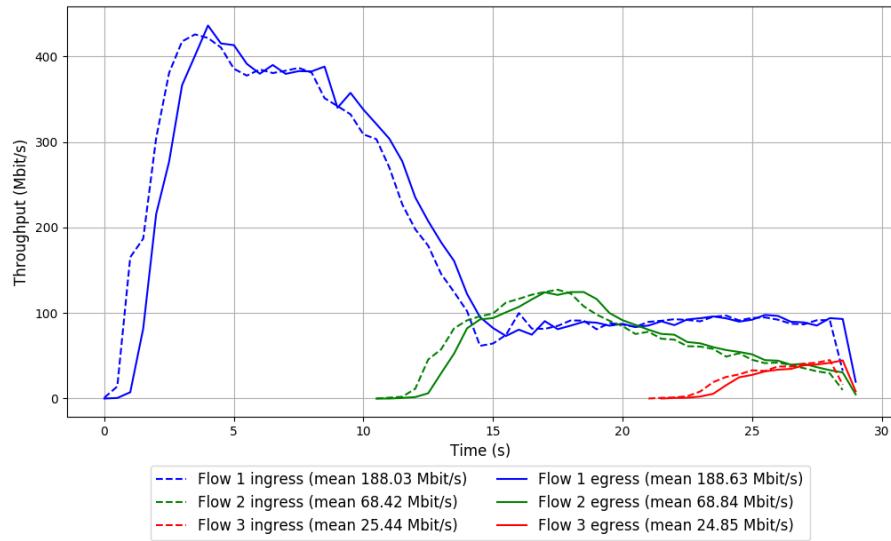


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-03-19 17:20:55
End at: 2019-03-19 17:21:25
Local clock offset: 1.253 ms
Remote clock offset: -39.318 ms

# Below is generated by plot.py at 2019-03-19 18:04:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 237.49 Mbit/s
95th percentile per-packet one-way delay: 137.194 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 188.63 Mbit/s
95th percentile per-packet one-way delay: 137.458 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 68.84 Mbit/s
95th percentile per-packet one-way delay: 134.381 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 24.85 Mbit/s
95th percentile per-packet one-way delay: 135.294 ms
Loss rate: 5.05%
```

Run 5: Report of Indigo-MusesD — Data Link

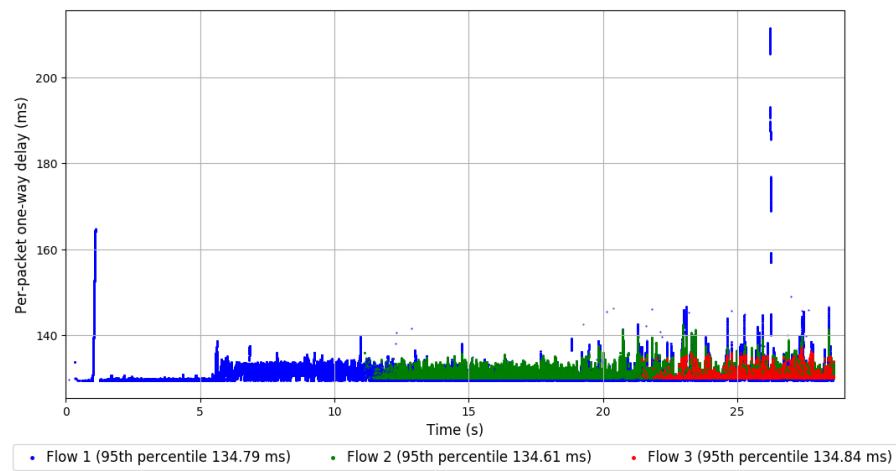
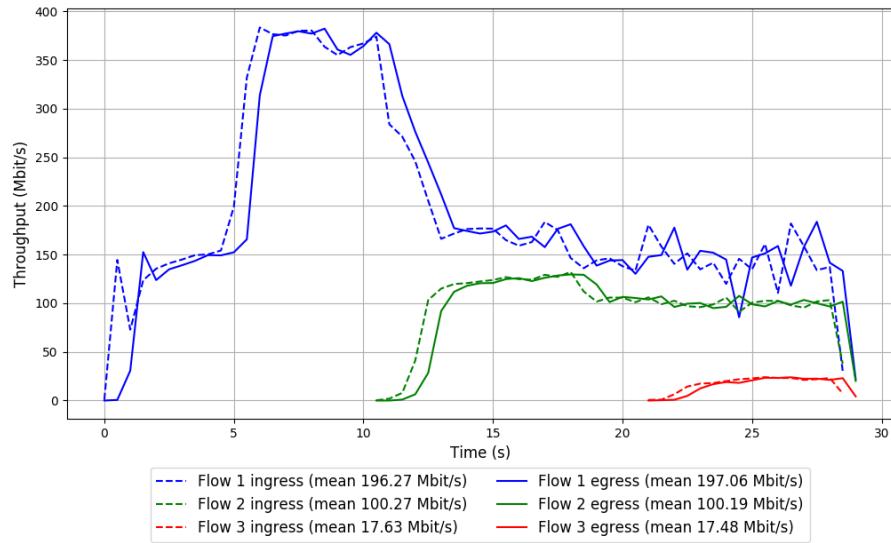


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-03-19 14:20:28
End at: 2019-03-19 14:20:58
Local clock offset: 1.274 ms
Remote clock offset: -34.646 ms

# Below is generated by plot.py at 2019-03-19 18:04:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 263.75 Mbit/s
95th percentile per-packet one-way delay: 134.729 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 197.06 Mbit/s
95th percentile per-packet one-way delay: 134.793 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 100.19 Mbit/s
95th percentile per-packet one-way delay: 134.611 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 17.48 Mbit/s
95th percentile per-packet one-way delay: 134.840 ms
Loss rate: 3.47%
```

Run 1: Report of Indigo-MusesT — Data Link

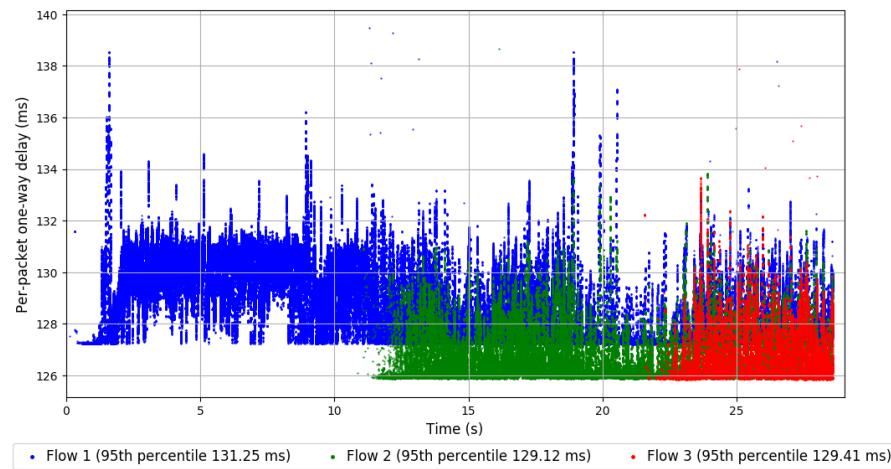
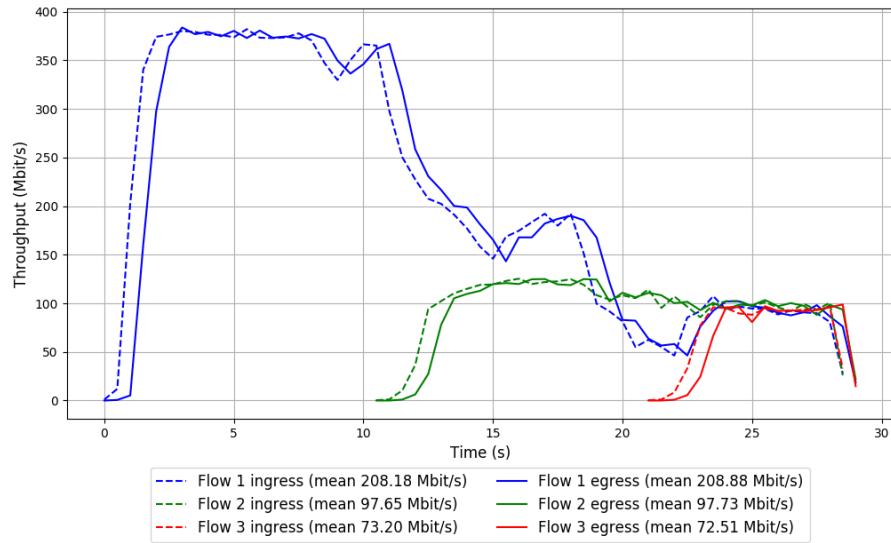


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-03-19 14:52:08
End at: 2019-03-19 14:52:38
Local clock offset: 0.329 ms
Remote clock offset: -32.133 ms

# Below is generated by plot.py at 2019-03-19 18:05:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 288.07 Mbit/s
95th percentile per-packet one-way delay: 131.107 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 208.88 Mbit/s
95th percentile per-packet one-way delay: 131.254 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 97.73 Mbit/s
95th percentile per-packet one-way delay: 129.116 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 72.51 Mbit/s
95th percentile per-packet one-way delay: 129.410 ms
Loss rate: 3.51%
```

Run 2: Report of Indigo-MusesT — Data Link

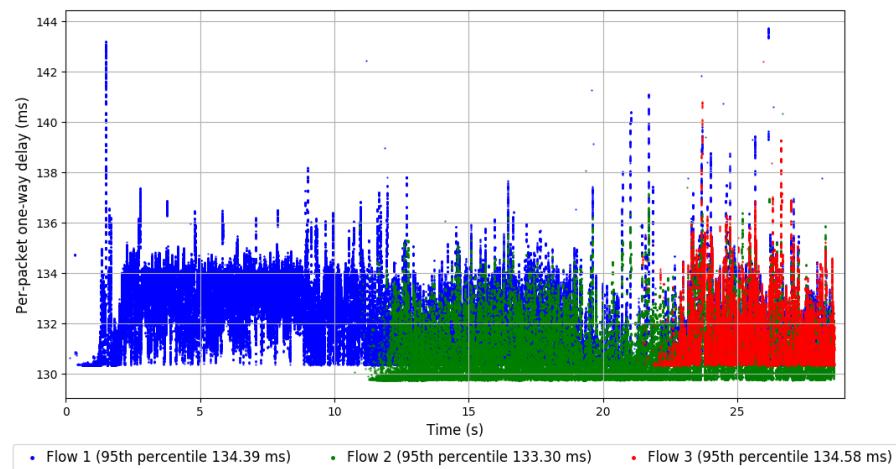
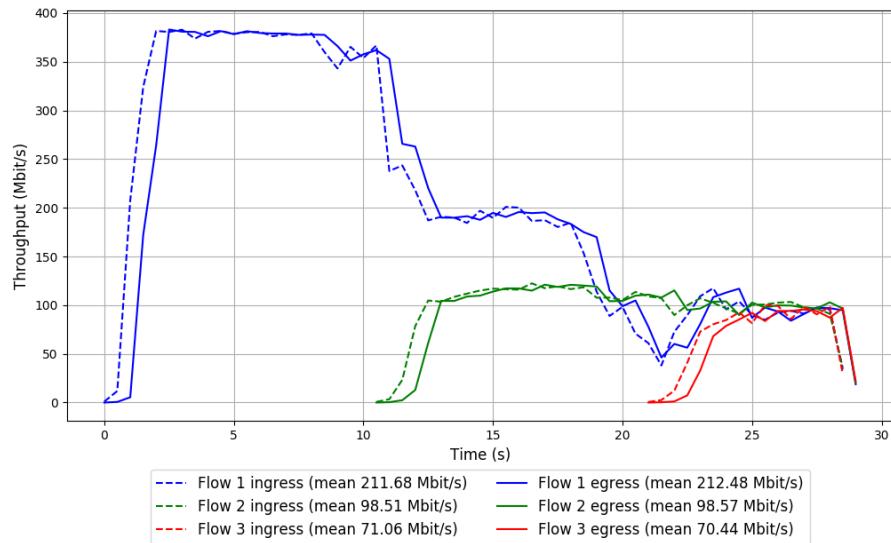


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-03-19 15:34:46
End at: 2019-03-19 15:35:16
Local clock offset: 0.915 ms
Remote clock offset: -34.115 ms

# Below is generated by plot.py at 2019-03-19 18:06:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 292.46 Mbit/s
95th percentile per-packet one-way delay: 134.289 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 212.48 Mbit/s
95th percentile per-packet one-way delay: 134.389 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 98.57 Mbit/s
95th percentile per-packet one-way delay: 133.300 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 70.44 Mbit/s
95th percentile per-packet one-way delay: 134.576 ms
Loss rate: 3.41%
```

Run 3: Report of Indigo-MusesT — Data Link

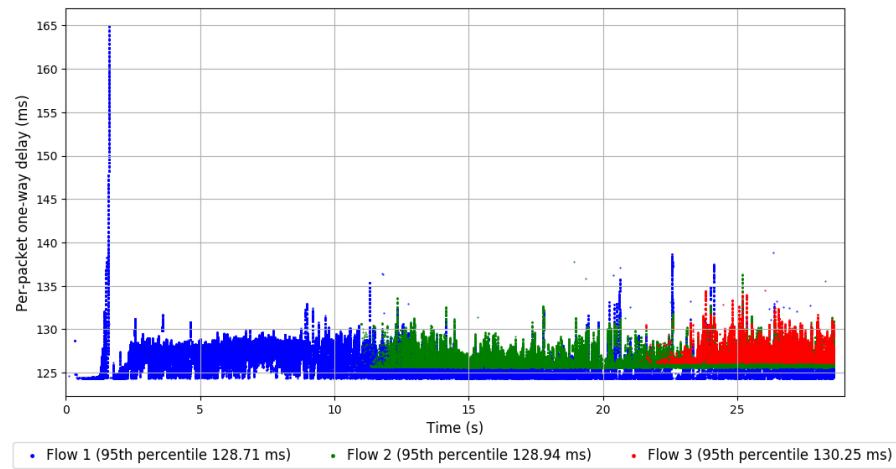
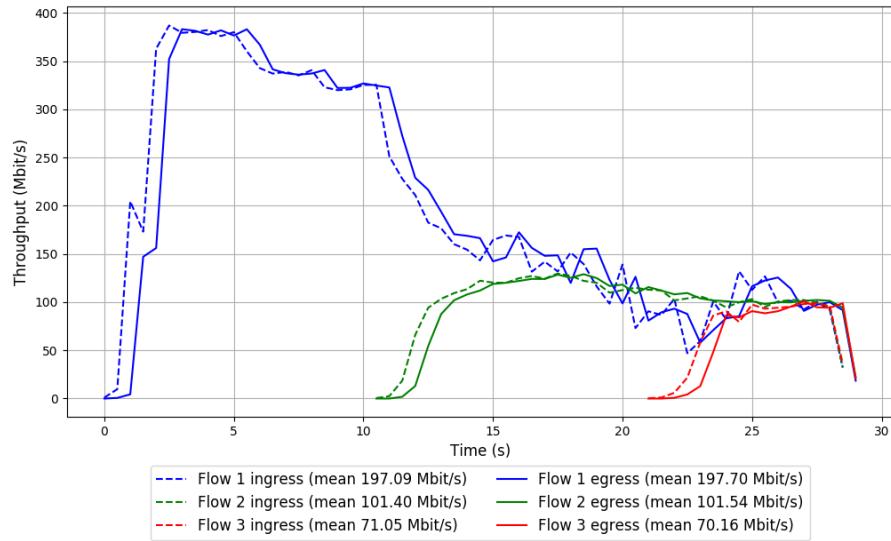


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-03-19 16:28:13
End at: 2019-03-19 16:28:43
Local clock offset: 0.621 ms
Remote clock offset: -33.365 ms

# Below is generated by plot.py at 2019-03-19 18:06:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 278.87 Mbit/s
95th percentile per-packet one-way delay: 128.885 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 197.70 Mbit/s
95th percentile per-packet one-way delay: 128.712 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 101.54 Mbit/s
95th percentile per-packet one-way delay: 128.943 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 70.16 Mbit/s
95th percentile per-packet one-way delay: 130.247 ms
Loss rate: 3.95%
```

Run 4: Report of Indigo-MusesT — Data Link

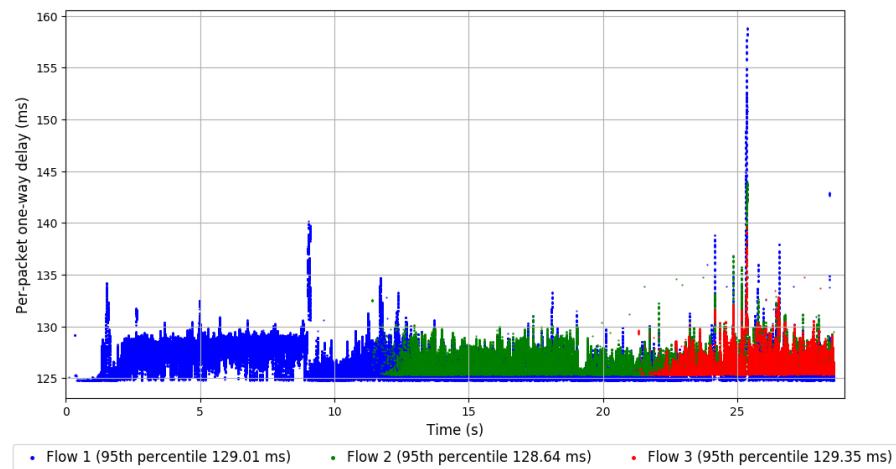
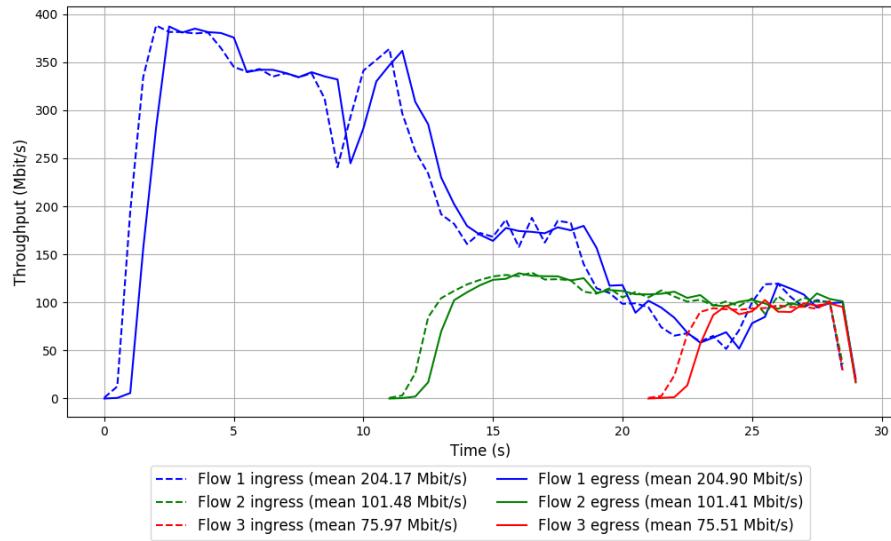


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-03-19 17:11:03
End at: 2019-03-19 17:11:33
Local clock offset: 0.851 ms
Remote clock offset: -30.397 ms

# Below is generated by plot.py at 2019-03-19 18:06:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 286.57 Mbit/s
95th percentile per-packet one-way delay: 128.976 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 204.90 Mbit/s
95th percentile per-packet one-way delay: 129.014 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 101.41 Mbit/s
95th percentile per-packet one-way delay: 128.644 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 75.51 Mbit/s
95th percentile per-packet one-way delay: 129.353 ms
Loss rate: 3.24%
```

Run 5: Report of Indigo-MusesT — Data Link

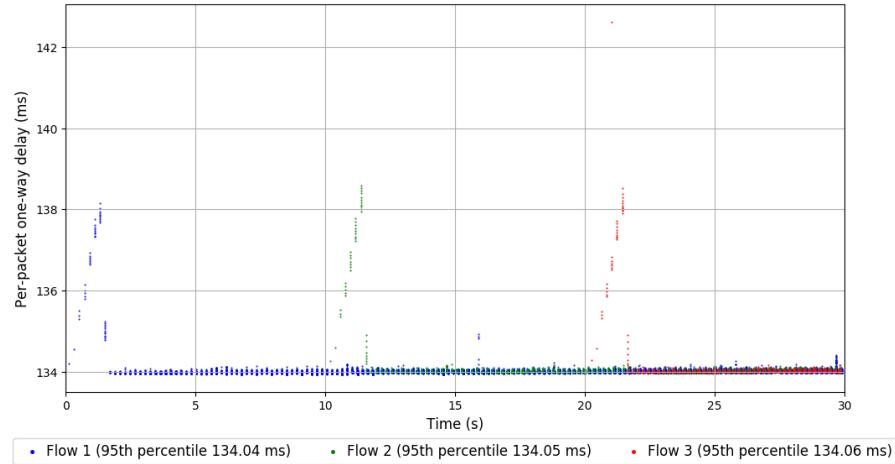
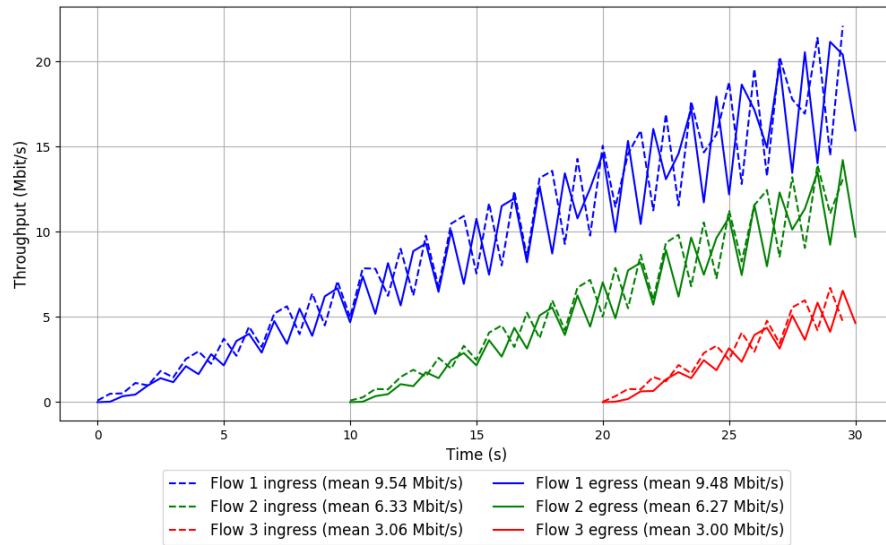


Run 1: Statistics of LEDBAT

```
Start at: 2019-03-19 14:38:26
End at: 2019-03-19 14:38:56
Local clock offset: 0.28 ms
Remote clock offset: -38.01 ms

# Below is generated by plot.py at 2019-03-19 18:06:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.58 Mbit/s
95th percentile per-packet one-way delay: 134.047 ms
Loss rate: 1.67%
-- Flow 1:
Average throughput: 9.48 Mbit/s
95th percentile per-packet one-way delay: 134.041 ms
Loss rate: 1.30%
-- Flow 2:
Average throughput: 6.27 Mbit/s
95th percentile per-packet one-way delay: 134.053 ms
Loss rate: 1.96%
-- Flow 3:
Average throughput: 3.00 Mbit/s
95th percentile per-packet one-way delay: 134.058 ms
Loss rate: 4.01%
```

Run 1: Report of LEDBAT — Data Link

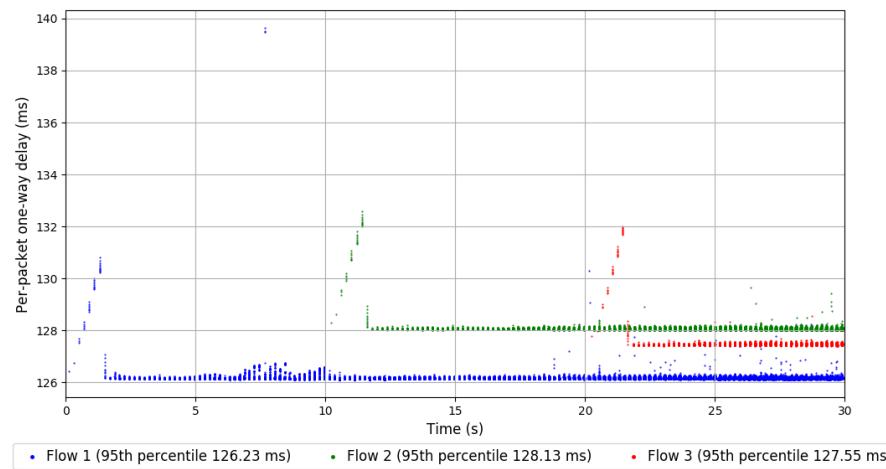
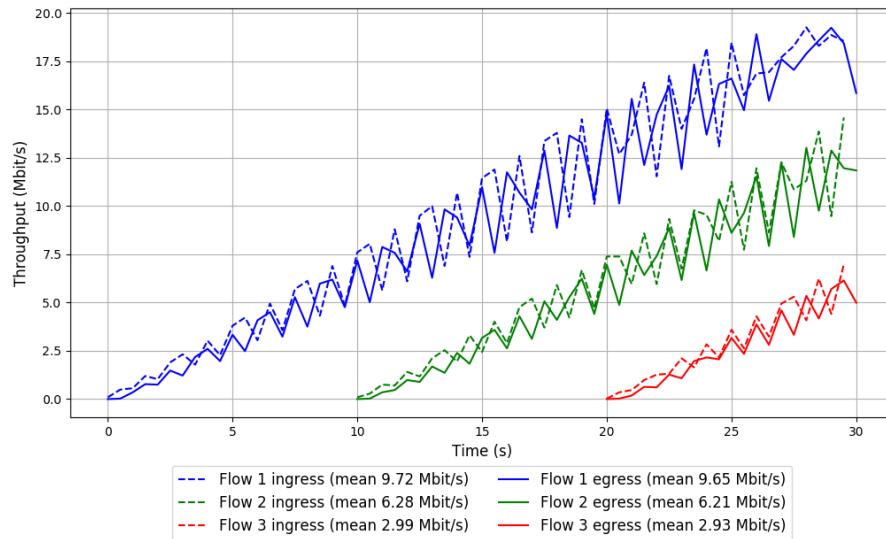


Run 2: Statistics of LEDBAT

```
Start at: 2019-03-19 15:21:11
End at: 2019-03-19 15:21:41
Local clock offset: 1.036 ms
Remote clock offset: -31.389 ms

# Below is generated by plot.py at 2019-03-19 18:06:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.71 Mbit/s
95th percentile per-packet one-way delay: 128.086 ms
Loss rate: 1.66%
-- Flow 1:
Average throughput: 9.65 Mbit/s
95th percentile per-packet one-way delay: 126.234 ms
Loss rate: 1.28%
-- Flow 2:
Average throughput: 6.21 Mbit/s
95th percentile per-packet one-way delay: 128.126 ms
Loss rate: 1.97%
-- Flow 3:
Average throughput: 2.93 Mbit/s
95th percentile per-packet one-way delay: 127.549 ms
Loss rate: 4.03%
```

Run 2: Report of LEDBAT — Data Link

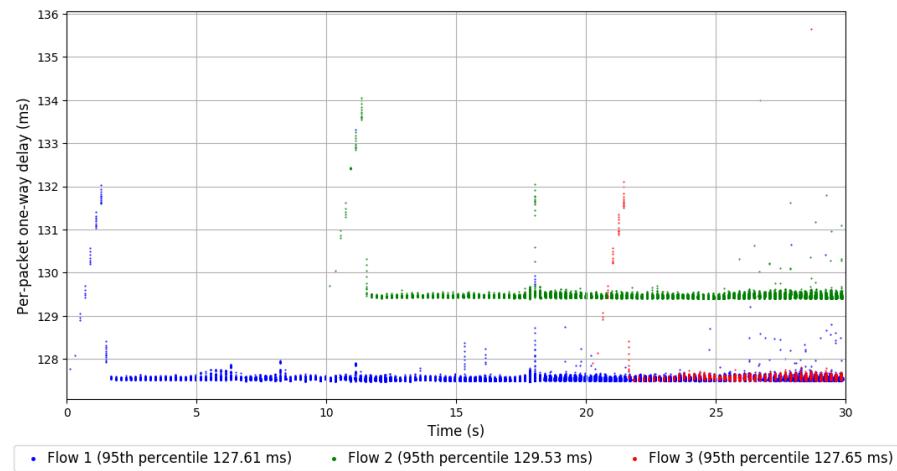
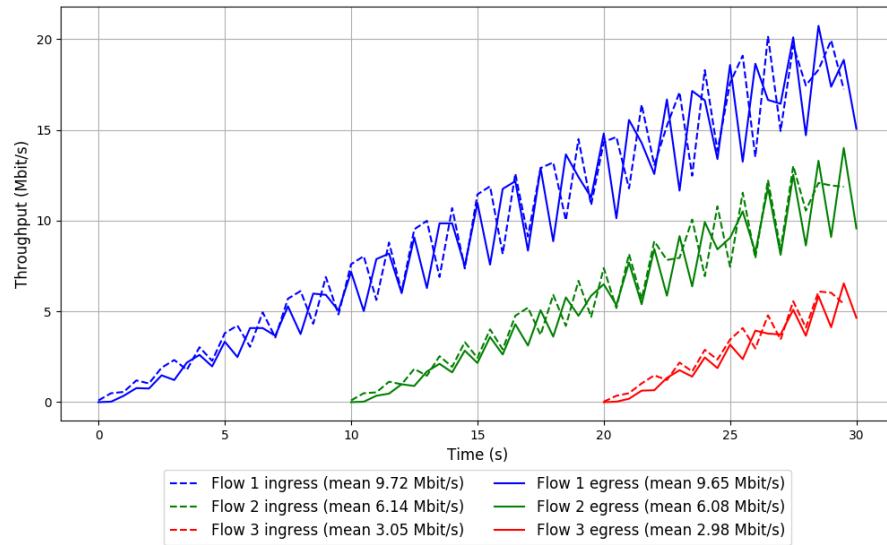


Run 3: Statistics of LEDBAT

```
Start at: 2019-03-19 15:58:01
End at: 2019-03-19 15:58:31
Local clock offset: -0.656 ms
Remote clock offset: -35.468 ms

# Below is generated by plot.py at 2019-03-19 18:06:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.64 Mbit/s
95th percentile per-packet one-way delay: 129.486 ms
Loss rate: 1.66%
-- Flow 1:
Average throughput: 9.65 Mbit/s
95th percentile per-packet one-way delay: 127.605 ms
Loss rate: 1.28%
-- Flow 2:
Average throughput: 6.08 Mbit/s
95th percentile per-packet one-way delay: 129.532 ms
Loss rate: 1.98%
-- Flow 3:
Average throughput: 2.98 Mbit/s
95th percentile per-packet one-way delay: 127.650 ms
Loss rate: 4.01%
```

Run 3: Report of LEDBAT — Data Link

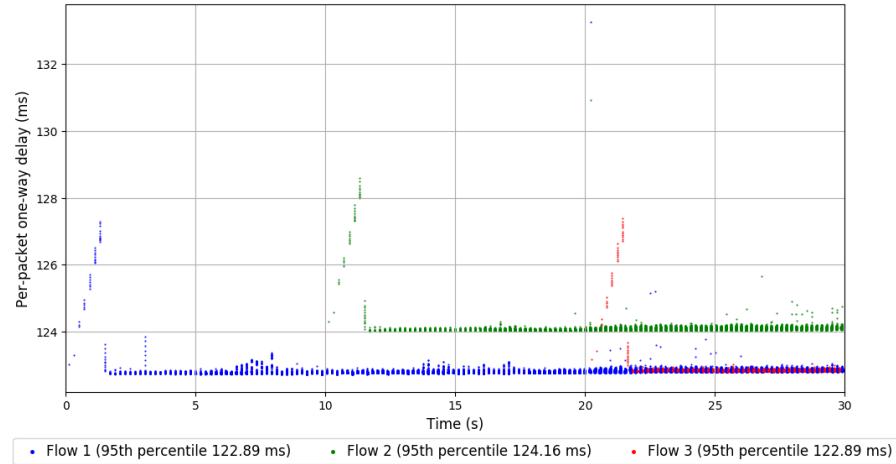
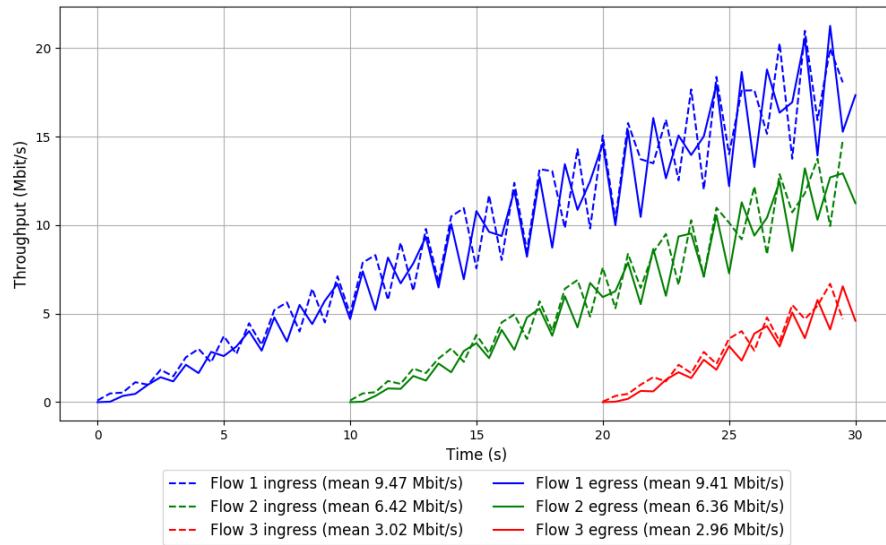


Run 4: Statistics of LEDBAT

```
Start at: 2019-03-19 16:46:07
End at: 2019-03-19 16:46:37
Local clock offset: 1.351 ms
Remote clock offset: -30.183 ms

# Below is generated by plot.py at 2019-03-19 18:06:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.58 Mbit/s
95th percentile per-packet one-way delay: 124.122 ms
Loss rate: 1.64%
-- Flow 1:
Average throughput: 9.41 Mbit/s
95th percentile per-packet one-way delay: 122.893 ms
Loss rate: 1.26%
-- Flow 2:
Average throughput: 6.36 Mbit/s
95th percentile per-packet one-way delay: 124.159 ms
Loss rate: 1.95%
-- Flow 3:
Average throughput: 2.96 Mbit/s
95th percentile per-packet one-way delay: 122.895 ms
Loss rate: 4.02%
```

Run 4: Report of LEDBAT — Data Link

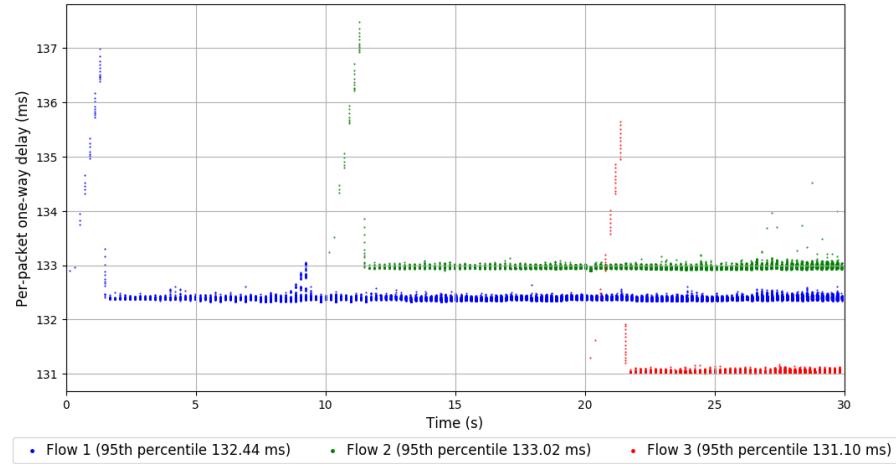
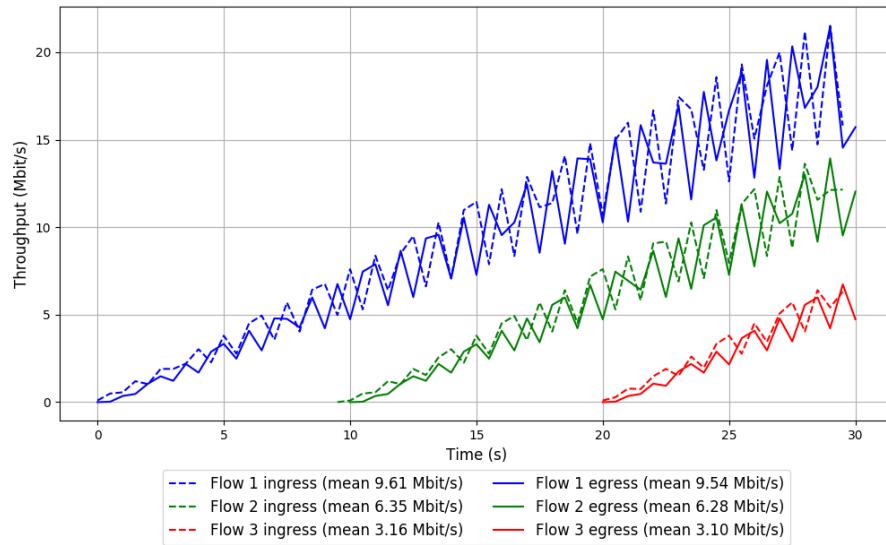


Run 5: Statistics of LEDBAT

```
Start at: 2019-03-19 17:34:17
End at: 2019-03-19 17:34:47
Local clock offset: 1.097 ms
Remote clock offset: -38.561 ms

# Below is generated by plot.py at 2019-03-19 18:06:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.72 Mbit/s
95th percentile per-packet one-way delay: 132.991 ms
Loss rate: 1.66%
-- Flow 1:
Average throughput: 9.54 Mbit/s
95th percentile per-packet one-way delay: 132.436 ms
Loss rate: 1.29%
-- Flow 2:
Average throughput: 6.28 Mbit/s
95th percentile per-packet one-way delay: 133.024 ms
Loss rate: 1.95%
-- Flow 3:
Average throughput: 3.10 Mbit/s
95th percentile per-packet one-way delay: 131.100 ms
Loss rate: 3.93%
```

Run 5: Report of LEDBAT — Data Link

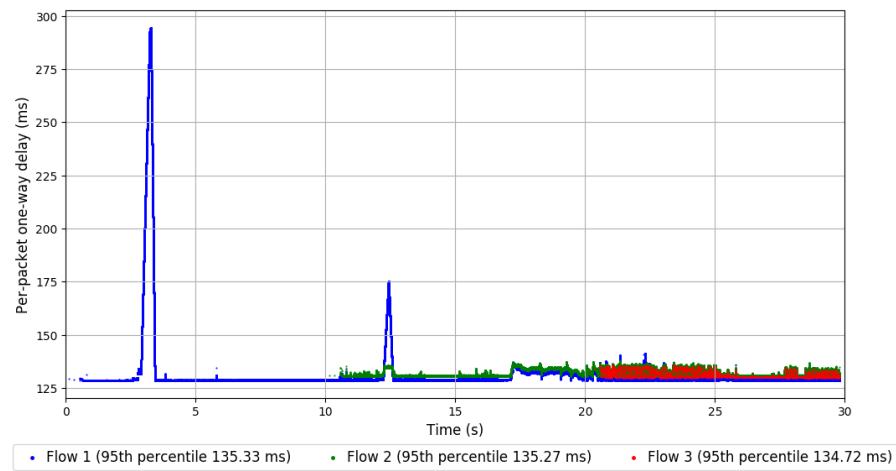
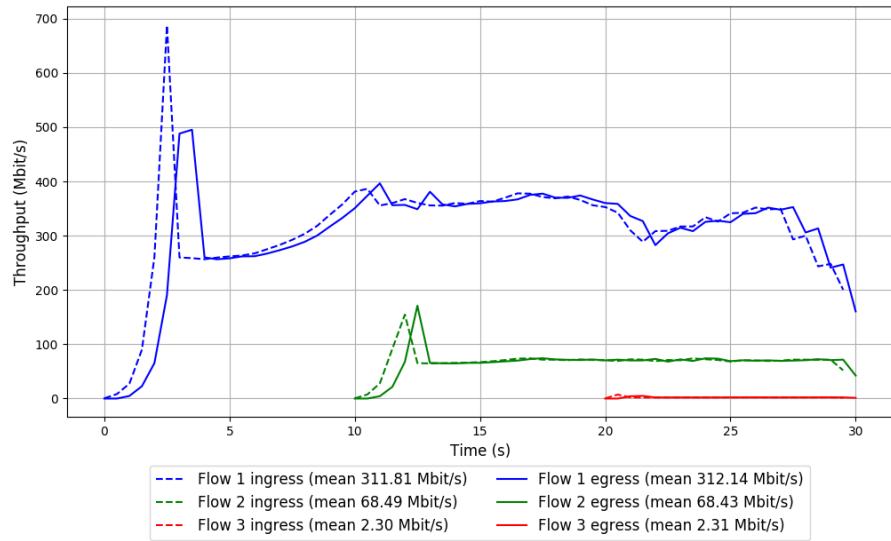


Run 1: Statistics of PCC-Allegro

```
Start at: 2019-03-19 14:30:37
End at: 2019-03-19 14:31:07
Local clock offset: 1.648 ms
Remote clock offset: -33.743 ms

# Below is generated by plot.py at 2019-03-19 18:08:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 358.18 Mbit/s
95th percentile per-packet one-way delay: 135.293 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 312.14 Mbit/s
95th percentile per-packet one-way delay: 135.331 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 68.43 Mbit/s
95th percentile per-packet one-way delay: 135.271 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 134.721 ms
Loss rate: 1.82%
```

Run 1: Report of PCC-Allegro — Data Link

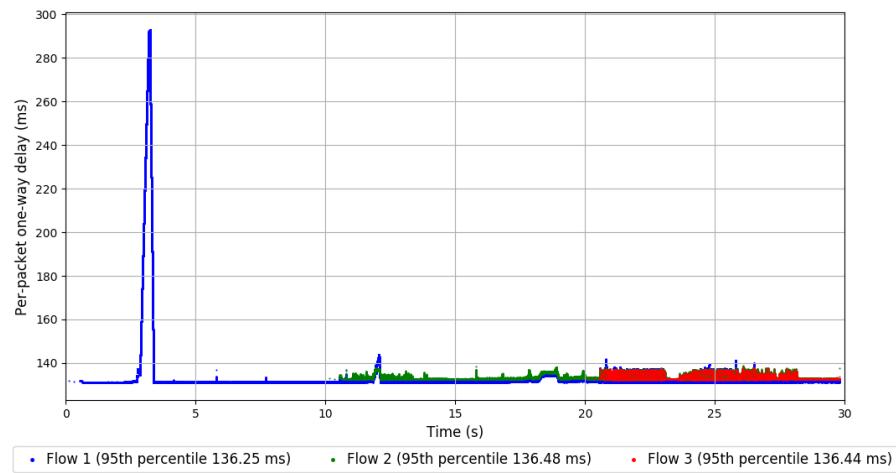
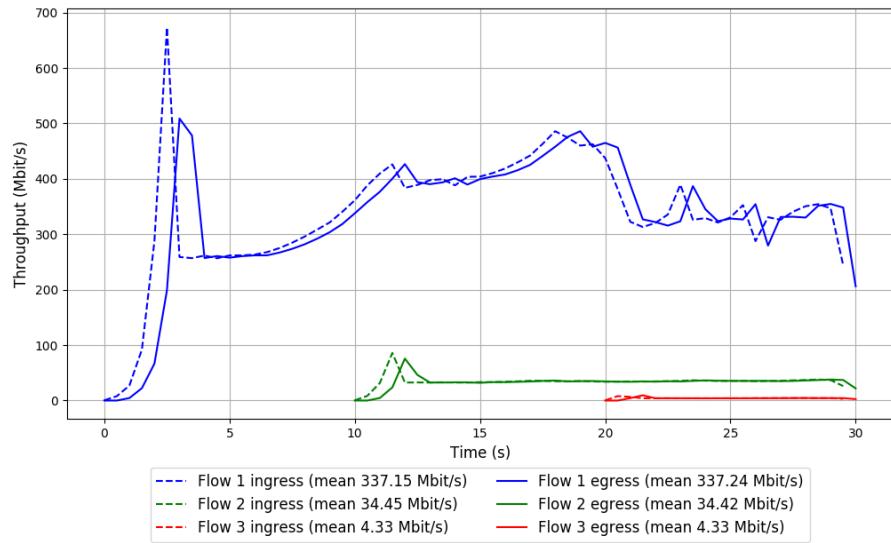


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-03-19 15:08:03
End at: 2019-03-19 15:08:33
Local clock offset: 0.534 ms
Remote clock offset: -37.483 ms

# Below is generated by plot.py at 2019-03-19 18:08:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 361.41 Mbit/s
95th percentile per-packet one-way delay: 136.317 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 337.24 Mbit/s
95th percentile per-packet one-way delay: 136.246 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 34.42 Mbit/s
95th percentile per-packet one-way delay: 136.483 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 4.33 Mbit/s
95th percentile per-packet one-way delay: 136.438 ms
Loss rate: 1.96%
```

Run 2: Report of PCC-Allegro — Data Link

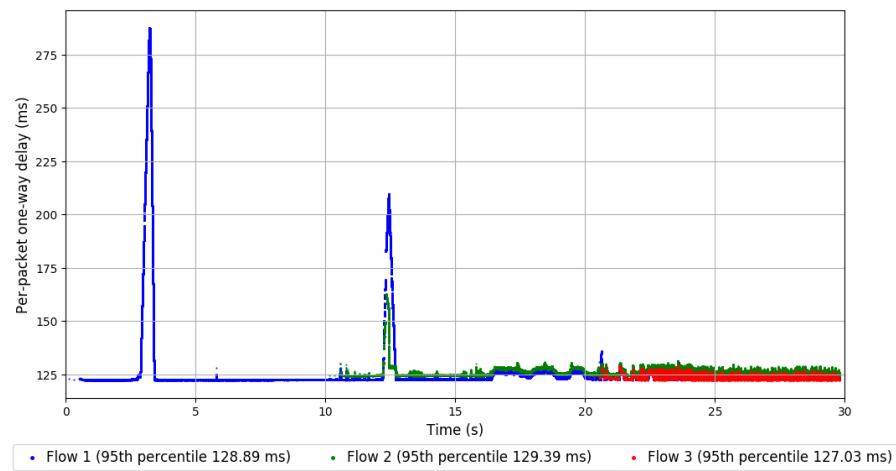
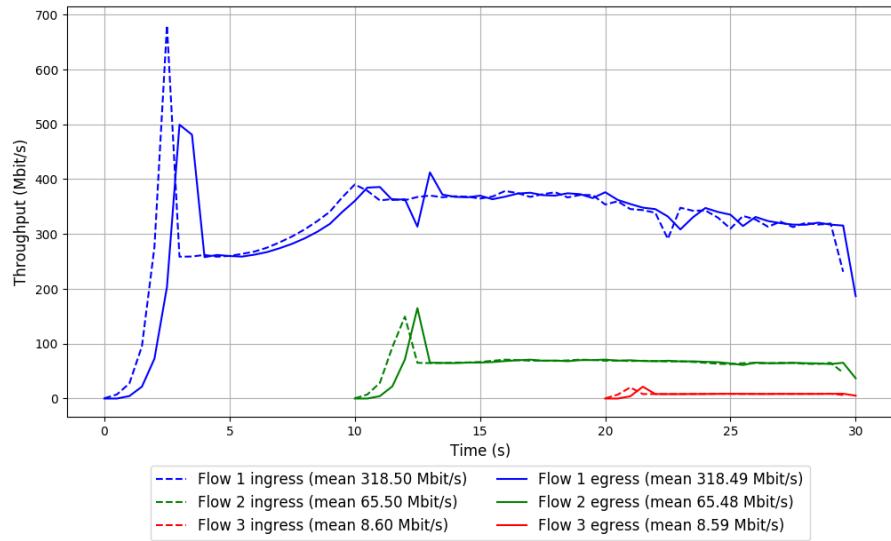


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-03-19 15:45:05
End at: 2019-03-19 15:45:35
Local clock offset: -0.166 ms
Remote clock offset: -29.225 ms

# Below is generated by plot.py at 2019-03-19 18:08:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 364.65 Mbit/s
95th percentile per-packet one-way delay: 129.138 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 318.49 Mbit/s
95th percentile per-packet one-way delay: 128.893 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 65.48 Mbit/s
95th percentile per-packet one-way delay: 129.393 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 8.59 Mbit/s
95th percentile per-packet one-way delay: 127.035 ms
Loss rate: 2.07%
```

Run 3: Report of PCC-Allegro — Data Link

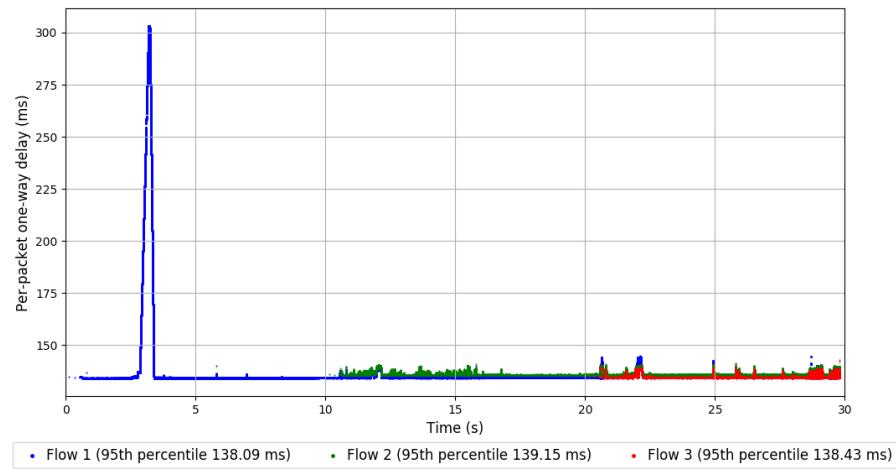
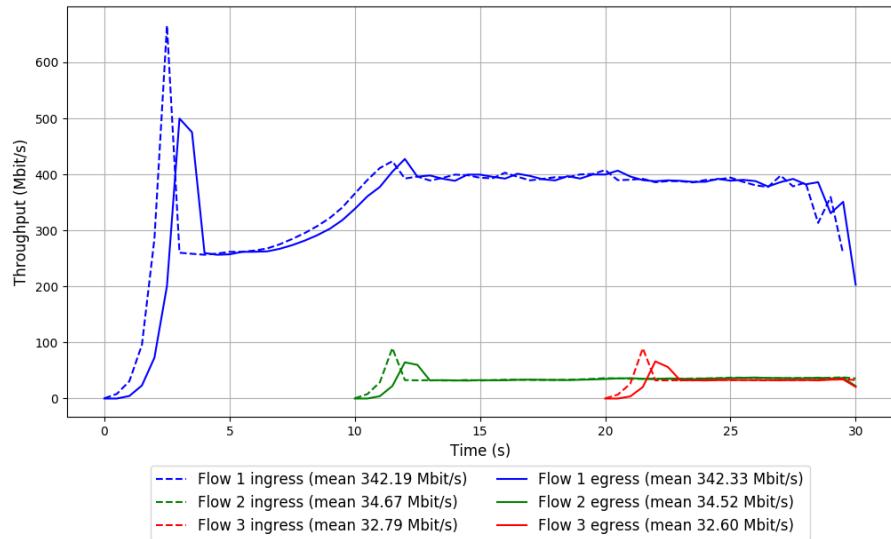


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-03-19 16:38:34
End at: 2019-03-19 16:39:05
Local clock offset: 3.077 ms
Remote clock offset: -40.282 ms

# Below is generated by plot.py at 2019-03-19 18:08:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 375.73 Mbit/s
95th percentile per-packet one-way delay: 138.279 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 342.33 Mbit/s
95th percentile per-packet one-way delay: 138.092 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 34.52 Mbit/s
95th percentile per-packet one-way delay: 139.154 ms
Loss rate: 4.34%
-- Flow 3:
Average throughput: 32.60 Mbit/s
95th percentile per-packet one-way delay: 138.429 ms
Loss rate: 8.25%
```

Run 4: Report of PCC-Allegro — Data Link

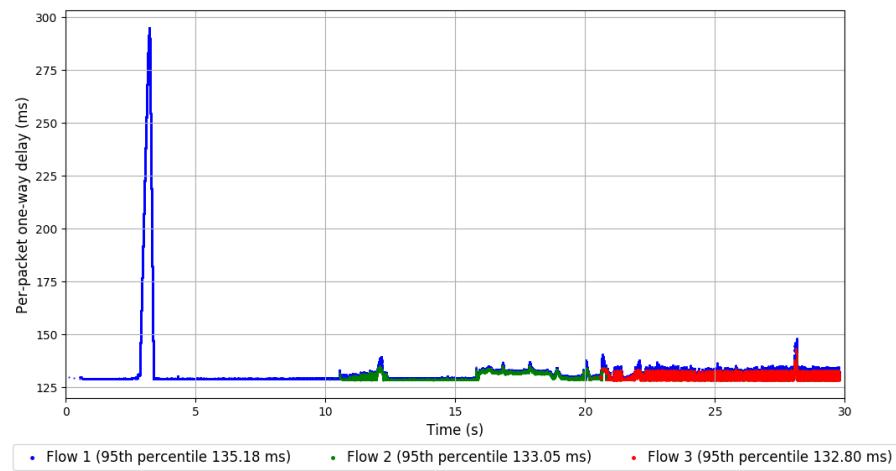
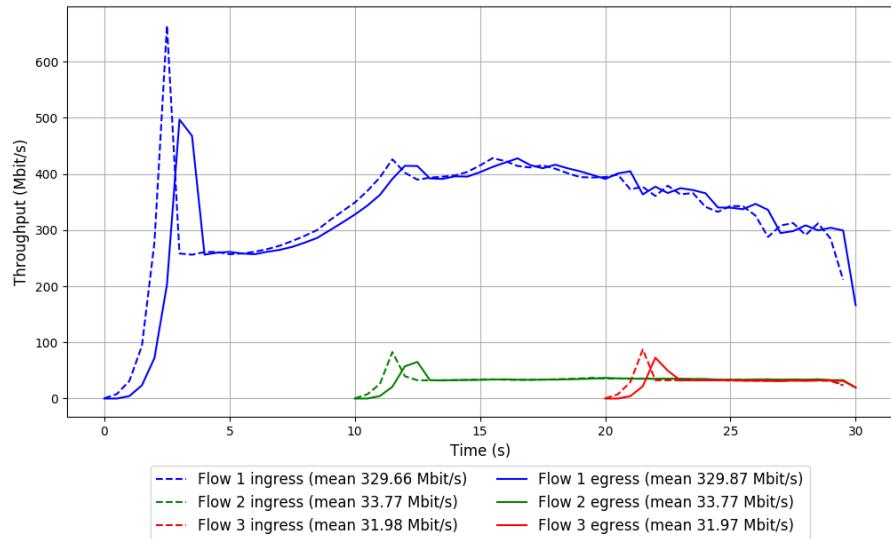


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-03-19 17:26:45
End at: 2019-03-19 17:27:15
Local clock offset: 1.949 ms
Remote clock offset: -33.878 ms

# Below is generated by plot.py at 2019-03-19 18:10:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 362.63 Mbit/s
95th percentile per-packet one-way delay: 134.674 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 329.87 Mbit/s
95th percentile per-packet one-way delay: 135.180 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 33.77 Mbit/s
95th percentile per-packet one-way delay: 133.051 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 31.97 Mbit/s
95th percentile per-packet one-way delay: 132.796 ms
Loss rate: 1.99%
```

Run 5: Report of PCC-Allegro — Data Link

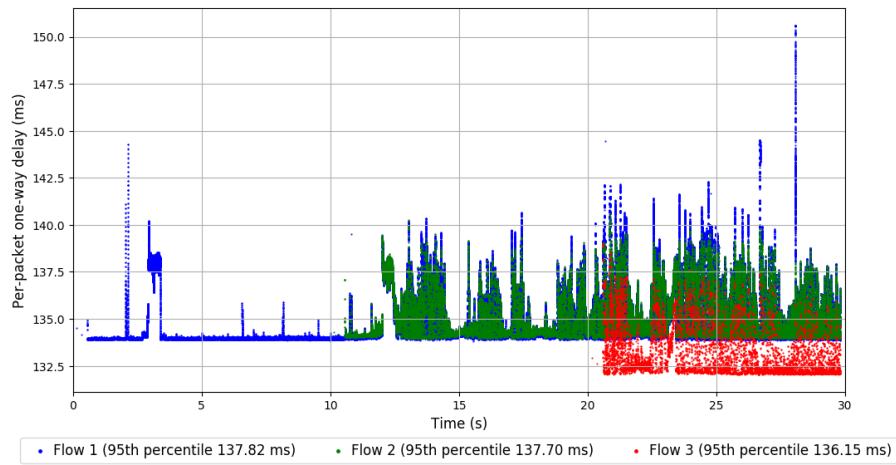
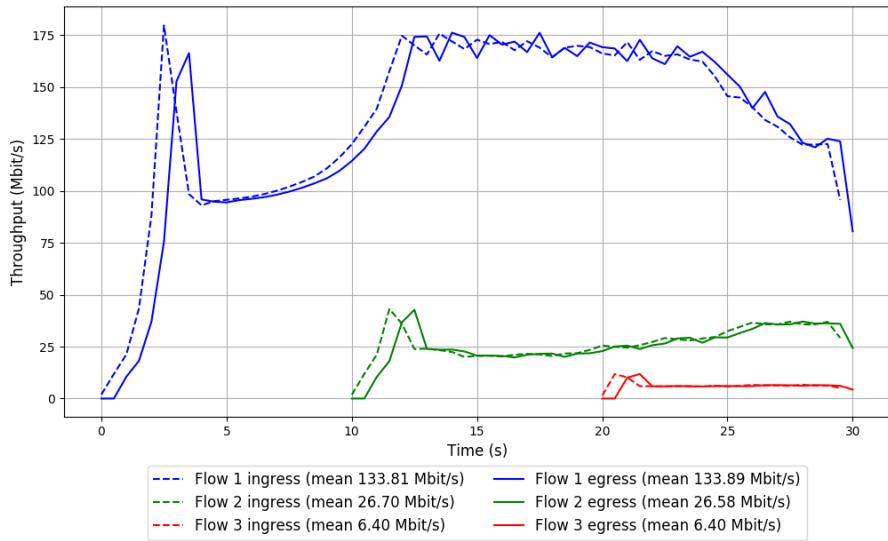


```
Run 1: Statistics of PCC-Expr
```

```
Start at: 2019-03-19 14:11:19
End at: 2019-03-19 14:11:49
Local clock offset: 2.943 ms
Remote clock offset: -37.687 ms

# Below is generated by plot.py at 2019-03-19 18:10:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 153.58 Mbit/s
95th percentile per-packet one-way delay: 137.790 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 133.89 Mbit/s
95th percentile per-packet one-way delay: 137.817 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 26.58 Mbit/s
95th percentile per-packet one-way delay: 137.696 ms
Loss rate: 1.41%
-- Flow 3:
Average throughput: 6.40 Mbit/s
95th percentile per-packet one-way delay: 136.151 ms
Loss rate: 1.99%
```

Run 1: Report of PCC-Expr — Data Link

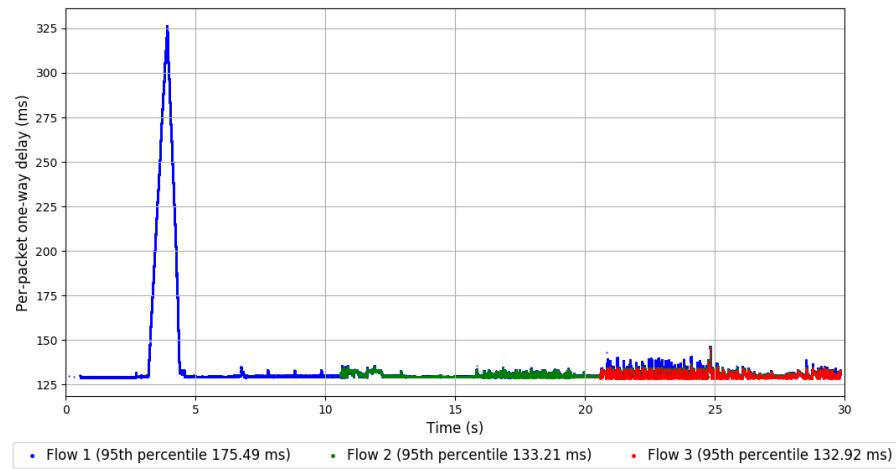
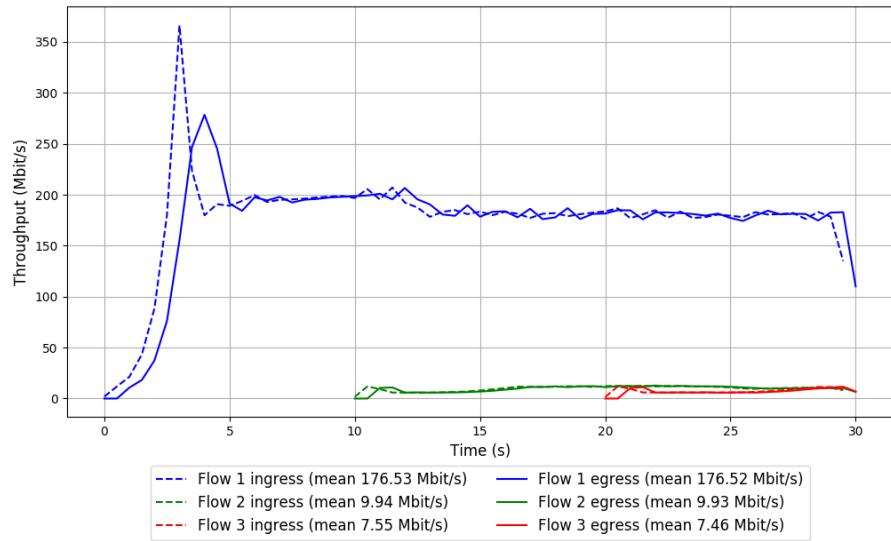


Run 2: Statistics of PCC-Expr

```
Start at: 2019-03-19 14:42:55
End at: 2019-03-19 14:43:25
Local clock offset: 0.495 ms
Remote clock offset: -32.641 ms

# Below is generated by plot.py at 2019-03-19 18:10:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 185.53 Mbit/s
95th percentile per-packet one-way delay: 167.440 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 176.52 Mbit/s
95th percentile per-packet one-way delay: 175.492 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 9.93 Mbit/s
95th percentile per-packet one-way delay: 133.205 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 7.46 Mbit/s
95th percentile per-packet one-way delay: 132.922 ms
Loss rate: 3.18%
```

Run 2: Report of PCC-Expr — Data Link

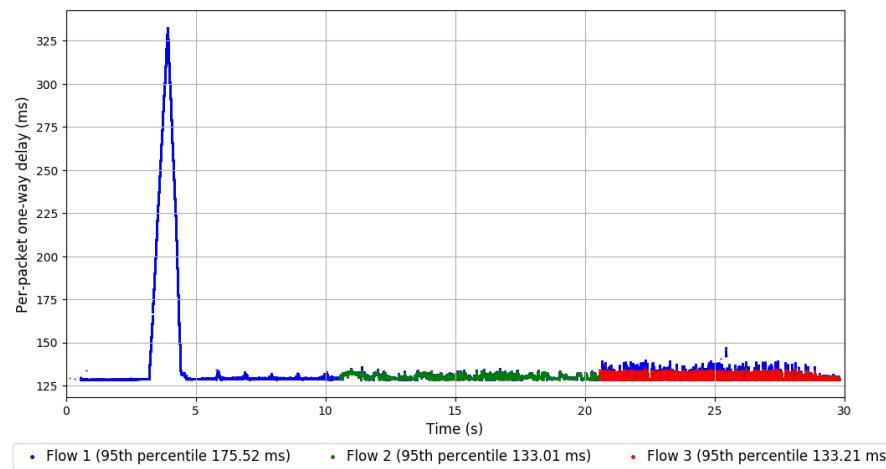
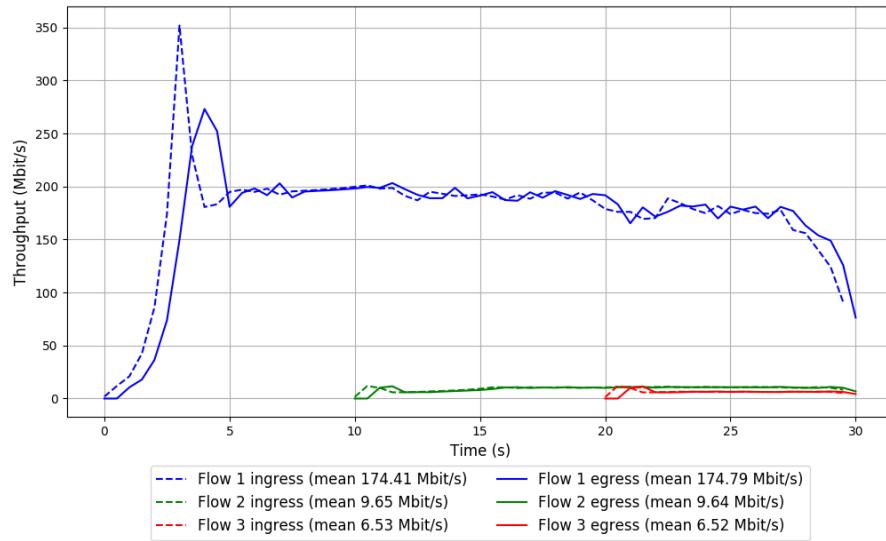


Run 3: Statistics of PCC-Expr

```
Start at: 2019-03-19 15:25:39
End at: 2019-03-19 15:26:09
Local clock offset: 0.297 ms
Remote clock offset: -32.959 ms

# Below is generated by plot.py at 2019-03-19 18:10:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 183.31 Mbit/s
95th percentile per-packet one-way delay: 165.091 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 174.79 Mbit/s
95th percentile per-packet one-way delay: 175.517 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 9.64 Mbit/s
95th percentile per-packet one-way delay: 133.015 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 6.52 Mbit/s
95th percentile per-packet one-way delay: 133.209 ms
Loss rate: 2.07%
```

Run 3: Report of PCC-Expr — Data Link

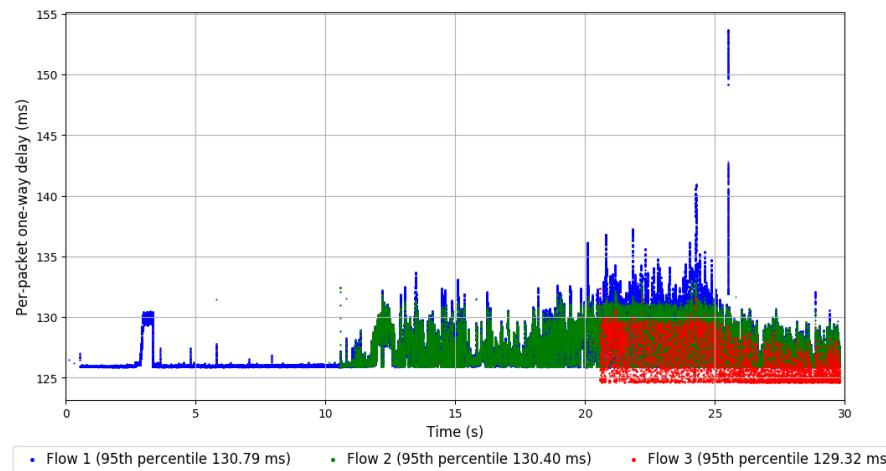
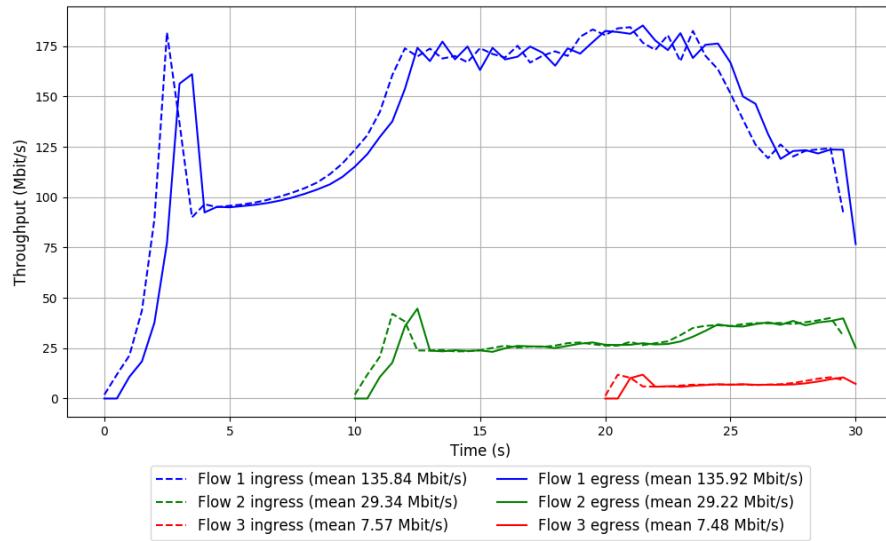


Run 4: Statistics of PCC-Expr

```
Start at: 2019-03-19 16:08:00
End at: 2019-03-19 16:08:30
Local clock offset: -0.702 ms
Remote clock offset: -33.013 ms

# Below is generated by plot.py at 2019-03-19 18:11:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 157.73 Mbit/s
95th percentile per-packet one-way delay: 130.678 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 135.92 Mbit/s
95th percentile per-packet one-way delay: 130.794 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 29.22 Mbit/s
95th percentile per-packet one-way delay: 130.400 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 7.48 Mbit/s
95th percentile per-packet one-way delay: 129.319 ms
Loss rate: 3.14%
```

Run 4: Report of PCC-Expr — Data Link

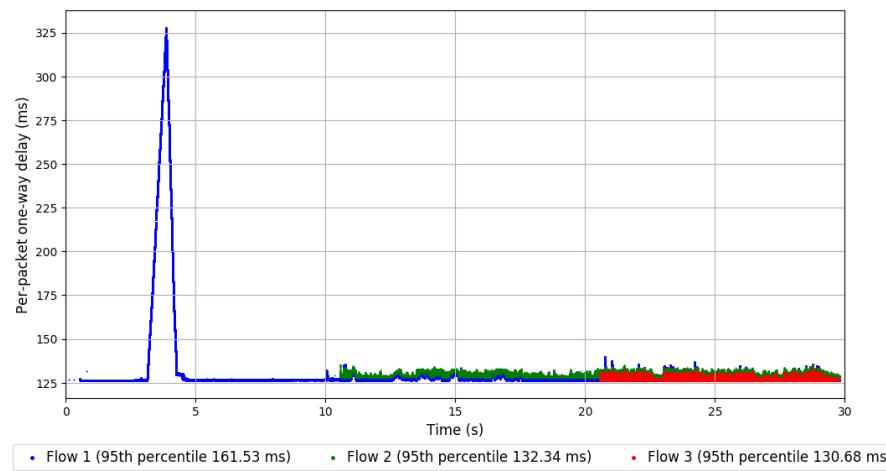
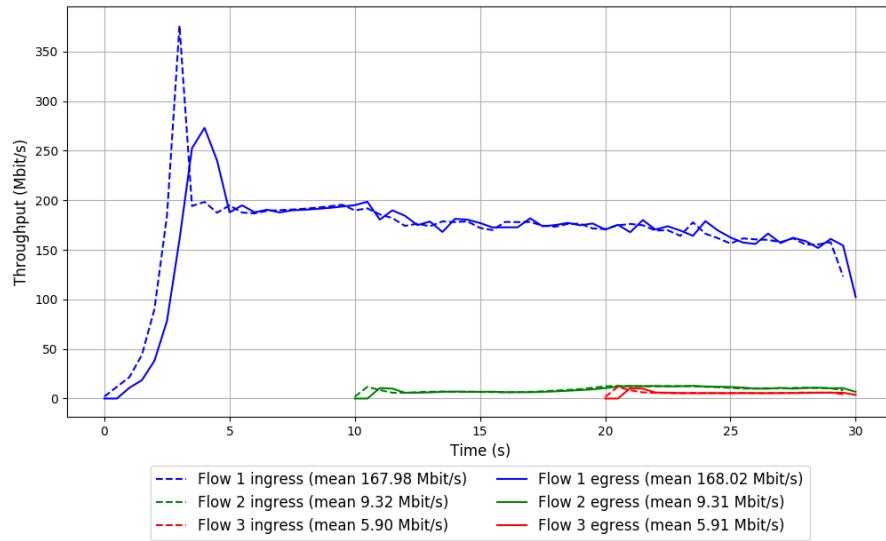


Run 5: Statistics of PCC-Expr

```
Start at: 2019-03-19 16:50:36
End at: 2019-03-19 16:51:06
Local clock offset: 1.69 ms
Remote clock offset: -32.987 ms

# Below is generated by plot.py at 2019-03-19 18:12:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 176.11 Mbit/s
95th percentile per-packet one-way delay: 155.398 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 168.02 Mbit/s
95th percentile per-packet one-way delay: 161.529 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 9.31 Mbit/s
95th percentile per-packet one-way delay: 132.341 ms
Loss rate: 1.16%
-- Flow 3:
Average throughput: 5.91 Mbit/s
95th percentile per-packet one-way delay: 130.683 ms
Loss rate: 1.88%
```

Run 5: Report of PCC-Expr — Data Link

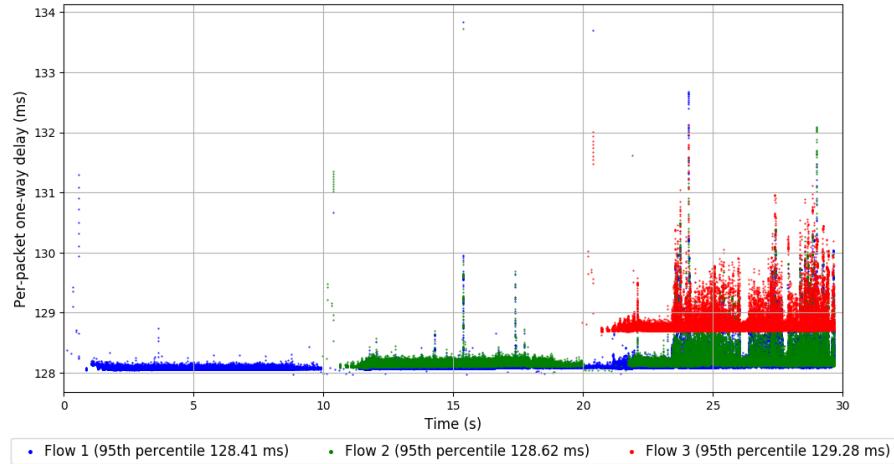
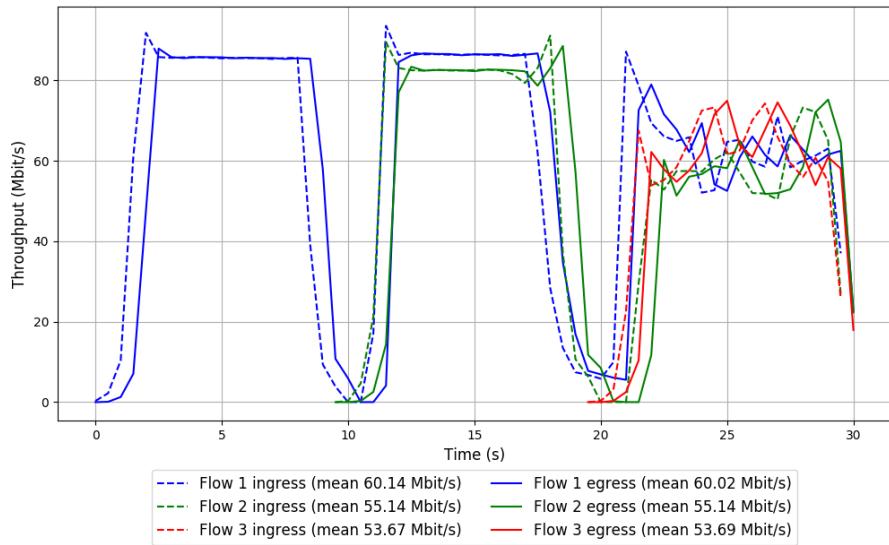


```
Run 1: Statistics of QUIC Cubic
```

```
Start at: 2019-03-19 14:32:08
End at: 2019-03-19 14:32:38
Local clock offset: 0.212 ms
Remote clock offset: -33.222 ms

# Below is generated by plot.py at 2019-03-19 18:12:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 114.45 Mbit/s
95th percentile per-packet one-way delay: 128.818 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 60.02 Mbit/s
95th percentile per-packet one-way delay: 128.415 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 55.14 Mbit/s
95th percentile per-packet one-way delay: 128.615 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 53.69 Mbit/s
95th percentile per-packet one-way delay: 129.280 ms
Loss rate: 1.91%
```

Run 1: Report of QUIC Cubic — Data Link

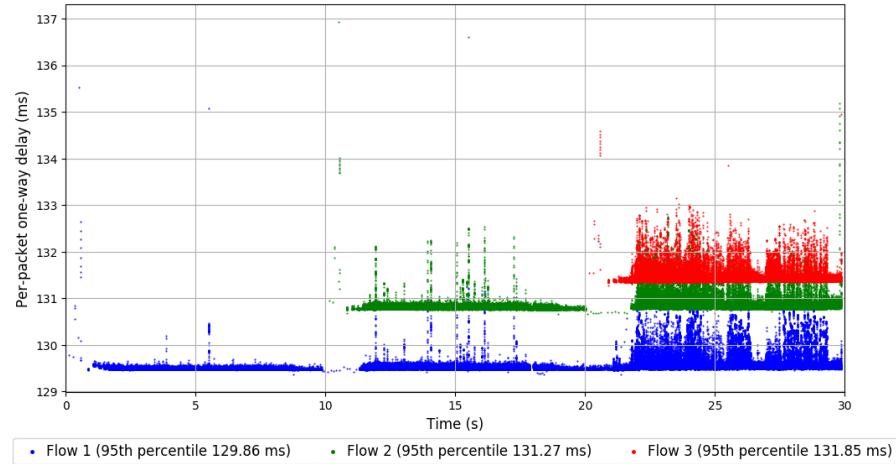
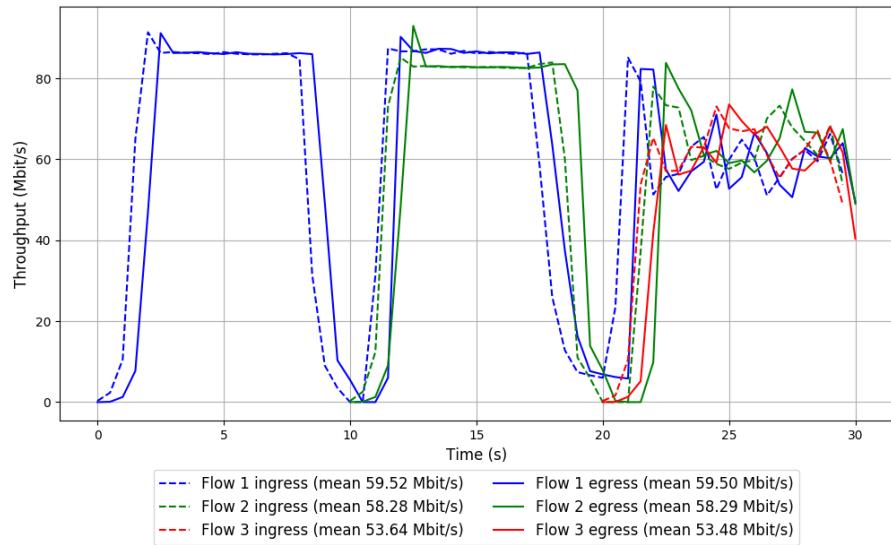


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-03-19 15:09:36
End at: 2019-03-19 15:10:06
Local clock offset: 1.881 ms
Remote clock offset: -34.548 ms

# Below is generated by plot.py at 2019-03-19 18:12:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 115.61 Mbit/s
95th percentile per-packet one-way delay: 131.465 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 59.50 Mbit/s
95th percentile per-packet one-way delay: 129.863 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 58.29 Mbit/s
95th percentile per-packet one-way delay: 131.271 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 53.48 Mbit/s
95th percentile per-packet one-way delay: 131.853 ms
Loss rate: 2.21%
```

Run 2: Report of QUIC Cubic — Data Link

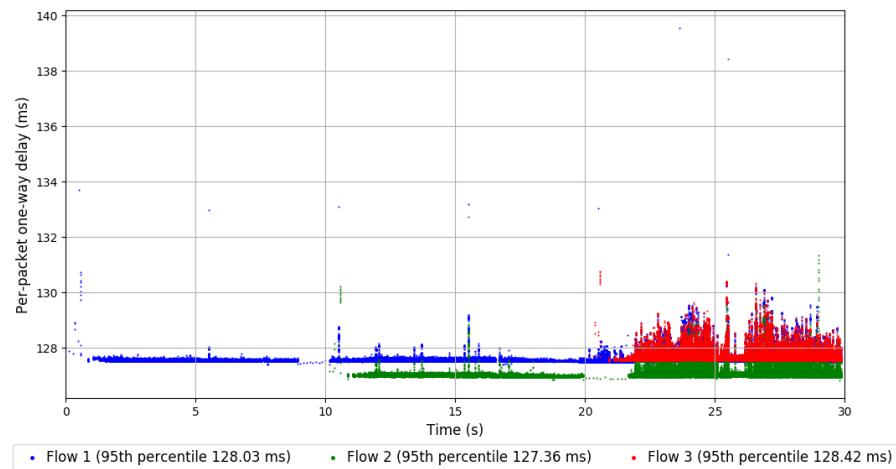
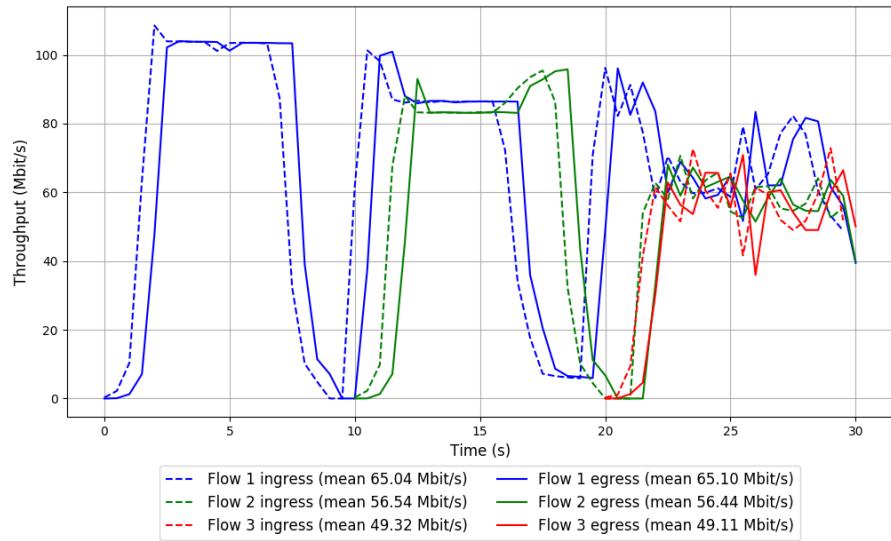


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-03-19 15:46:36
End at: 2019-03-19 15:47:06
Local clock offset: -1.013 ms
Remote clock offset: -33.36 ms

# Below is generated by plot.py at 2019-03-19 18:12:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 118.55 Mbit/s
95th percentile per-packet one-way delay: 128.037 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 65.10 Mbit/s
95th percentile per-packet one-way delay: 128.025 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 56.44 Mbit/s
95th percentile per-packet one-way delay: 127.356 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 49.11 Mbit/s
95th percentile per-packet one-way delay: 128.422 ms
Loss rate: 2.37%
```

Run 3: Report of QUIC Cubic — Data Link

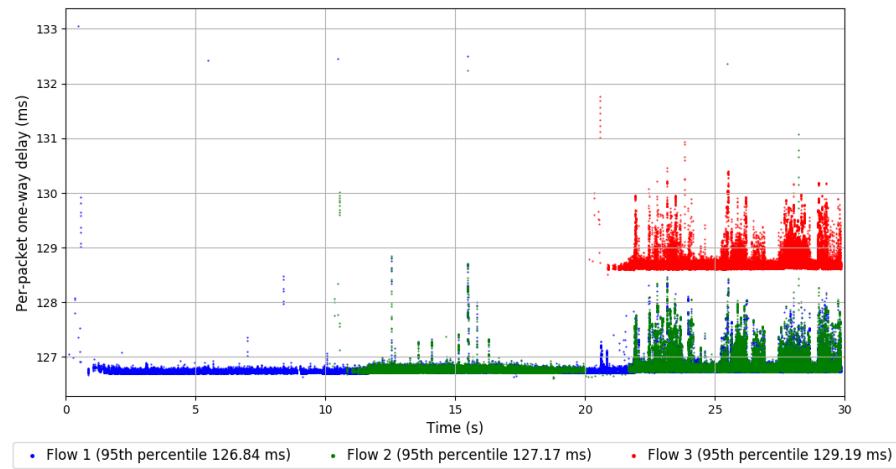
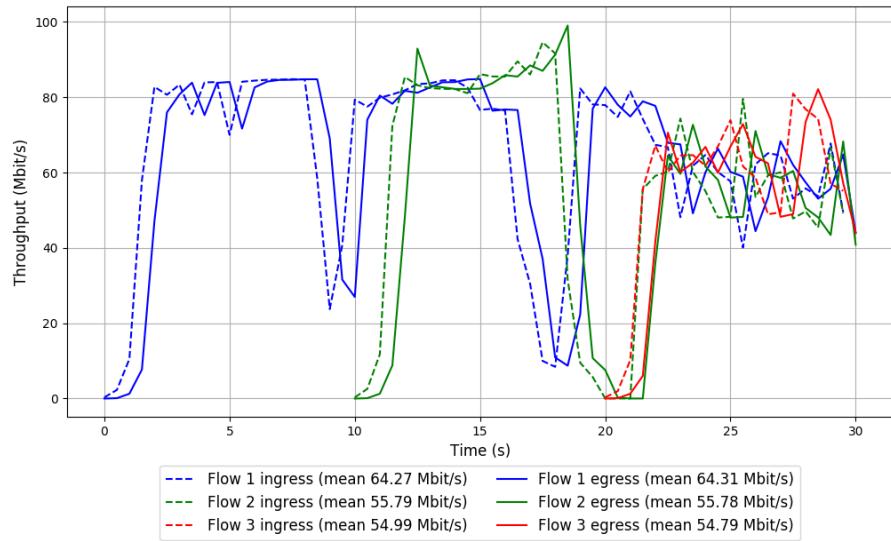


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-03-19 16:40:07
End at: 2019-03-19 16:40:37
Local clock offset: 1.862 ms
Remote clock offset: -33.944 ms

# Below is generated by plot.py at 2019-03-19 18:12:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 119.18 Mbit/s
95th percentile per-packet one-way delay: 128.709 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 64.31 Mbit/s
95th percentile per-packet one-way delay: 126.842 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 55.78 Mbit/s
95th percentile per-packet one-way delay: 127.173 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 54.79 Mbit/s
95th percentile per-packet one-way delay: 129.185 ms
Loss rate: 2.41%
```

Run 4: Report of QUIC Cubic — Data Link

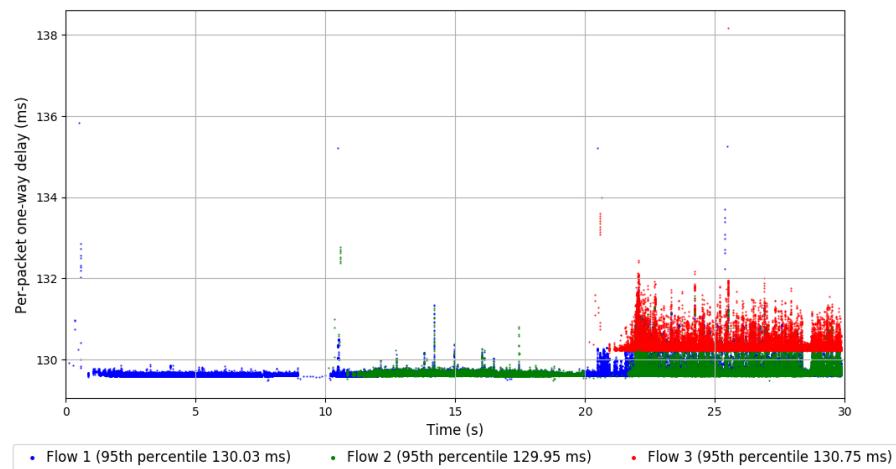
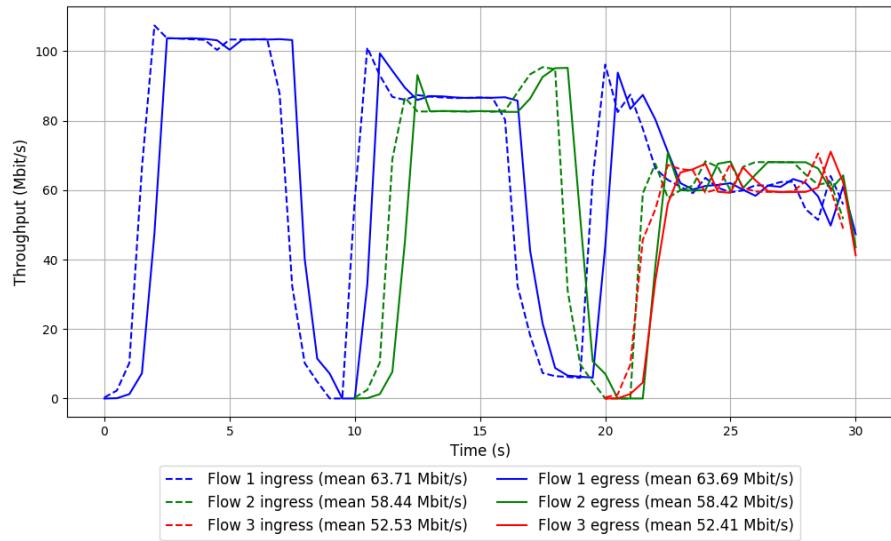


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-03-19 17:28:17
End at: 2019-03-19 17:28:47
Local clock offset: 2.624 ms
Remote clock offset: -34.276 ms

# Below is generated by plot.py at 2019-03-19 18:12:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 119.53 Mbit/s
95th percentile per-packet one-way delay: 130.326 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 63.69 Mbit/s
95th percentile per-packet one-way delay: 130.026 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 58.42 Mbit/s
95th percentile per-packet one-way delay: 129.954 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 52.41 Mbit/s
95th percentile per-packet one-way delay: 130.755 ms
Loss rate: 2.19%
```

Run 5: Report of QUIC Cubic — Data Link

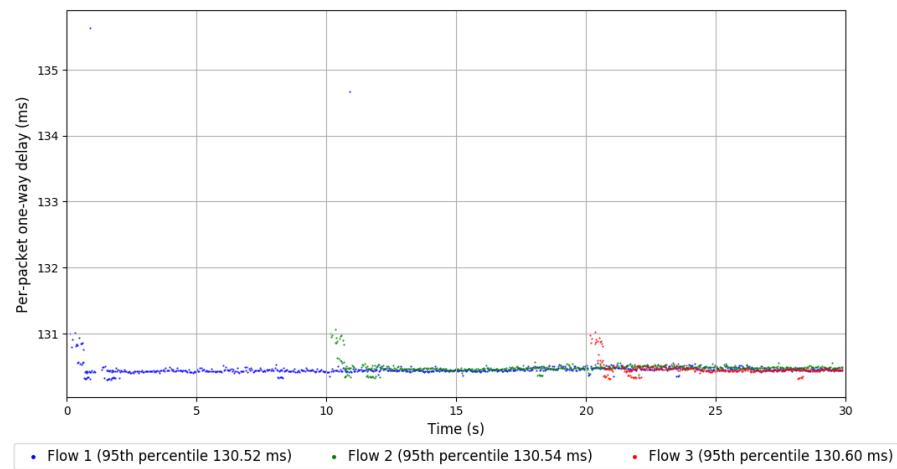
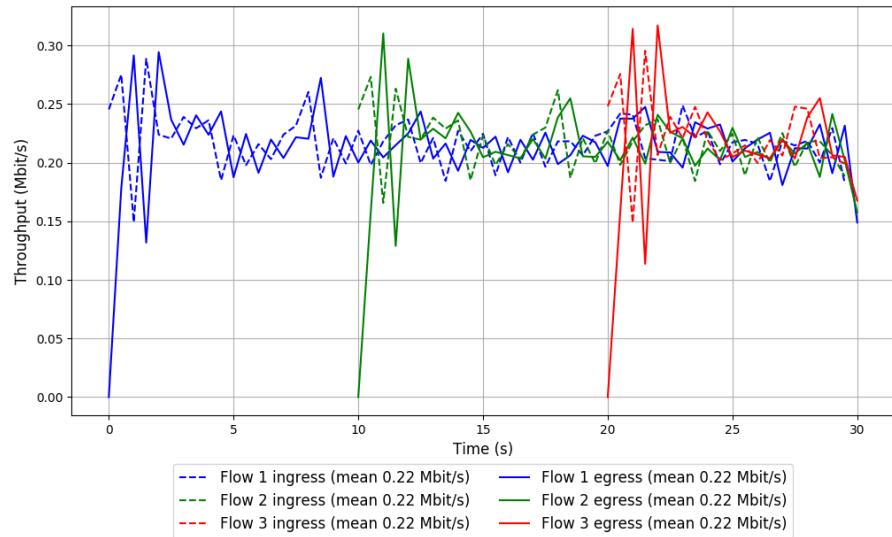


Run 1: Statistics of SCReAM

```
Start at: 2019-03-19 14:27:44
End at: 2019-03-19 14:28:14
Local clock offset: 1.364 ms
Remote clock offset: -34.045 ms

# Below is generated by plot.py at 2019-03-19 18:12:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 130.528 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 130.517 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 130.545 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 130.596 ms
Loss rate: 1.82%
```

Run 1: Report of SCReAM — Data Link

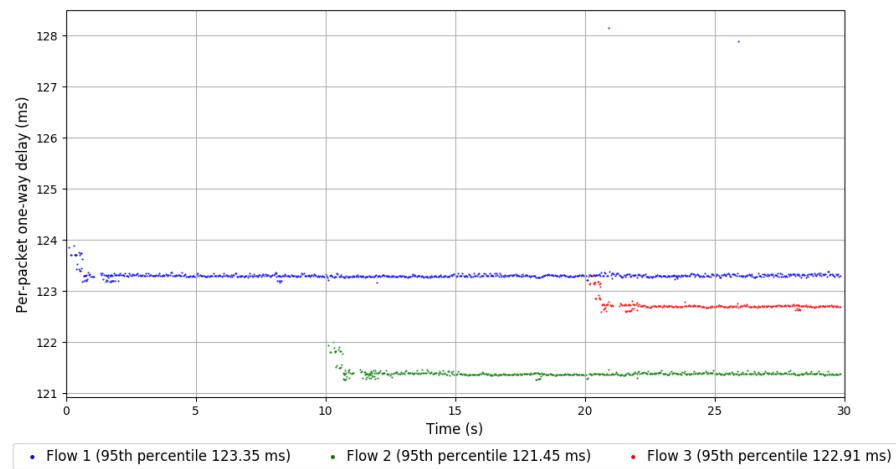
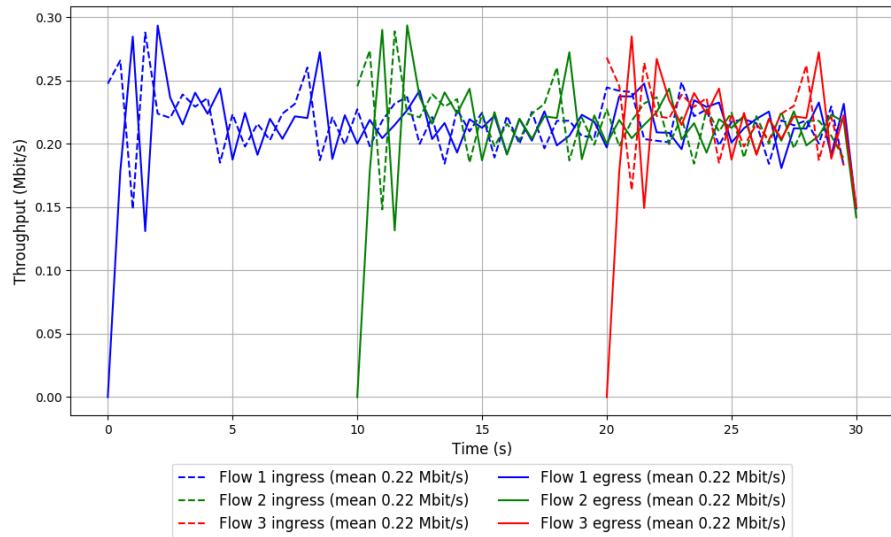


Run 2: Statistics of SCReAM

```
Start at: 2019-03-19 14:59:29
End at: 2019-03-19 14:59:59
Local clock offset: 1.263 ms
Remote clock offset: -26.823 ms

# Below is generated by plot.py at 2019-03-19 18:12:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 123.335 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 123.350 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 121.449 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 122.912 ms
Loss rate: 1.84%
```

Run 2: Report of SCReAM — Data Link

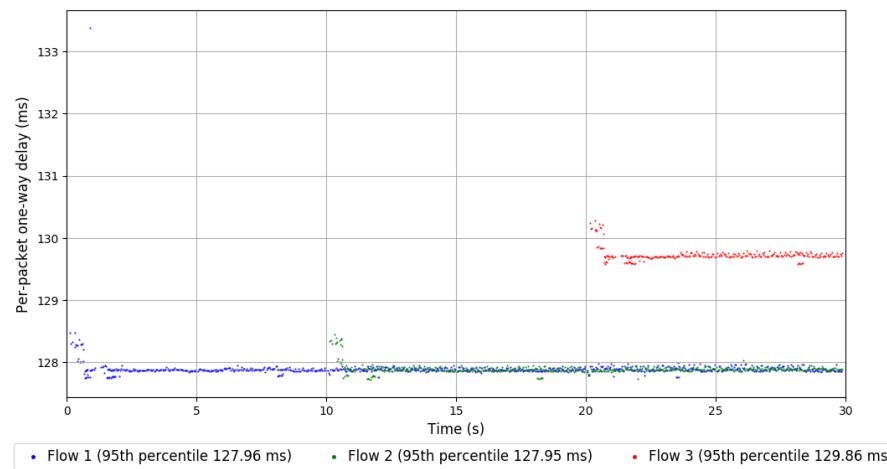
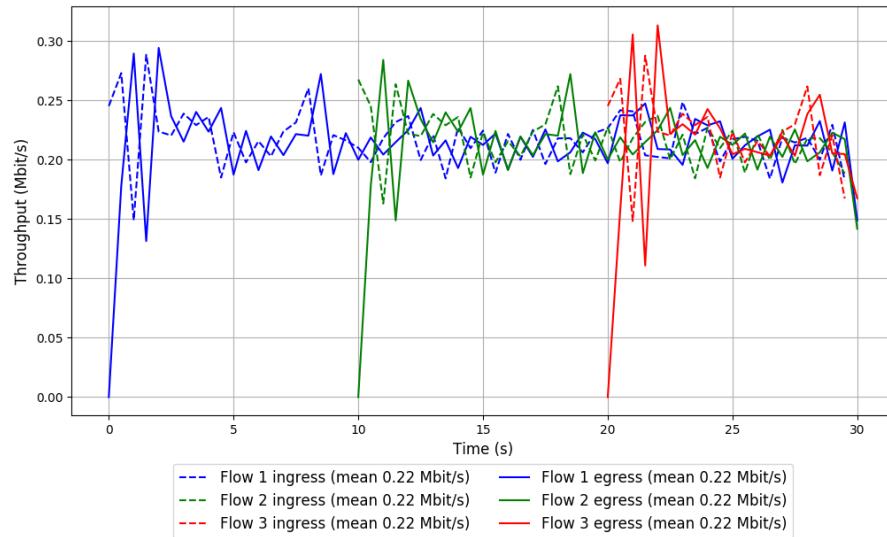


Run 3: Statistics of SCReAM

```
Start at: 2019-03-19 15:42:02
End at: 2019-03-19 15:42:32
Local clock offset: -0.474 ms
Remote clock offset: -34.806 ms

# Below is generated by plot.py at 2019-03-19 18:12:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 129.731 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 127.956 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 127.948 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 129.862 ms
Loss rate: 1.49%
```

Run 3: Report of SCReAM — Data Link

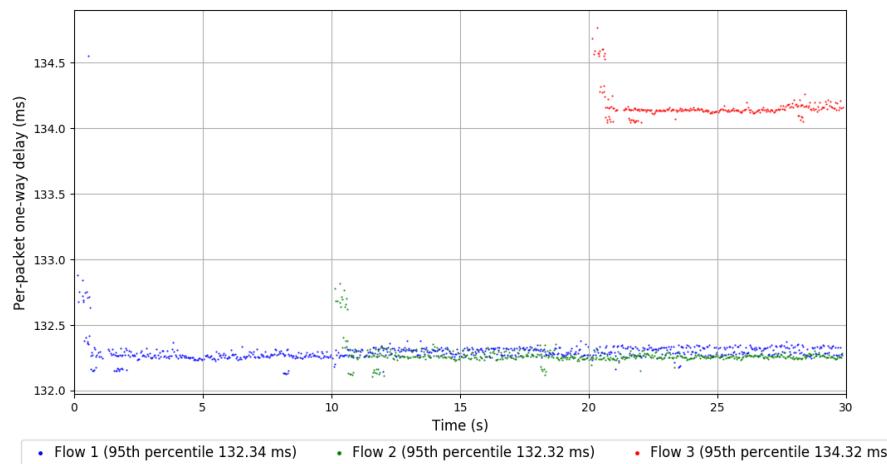
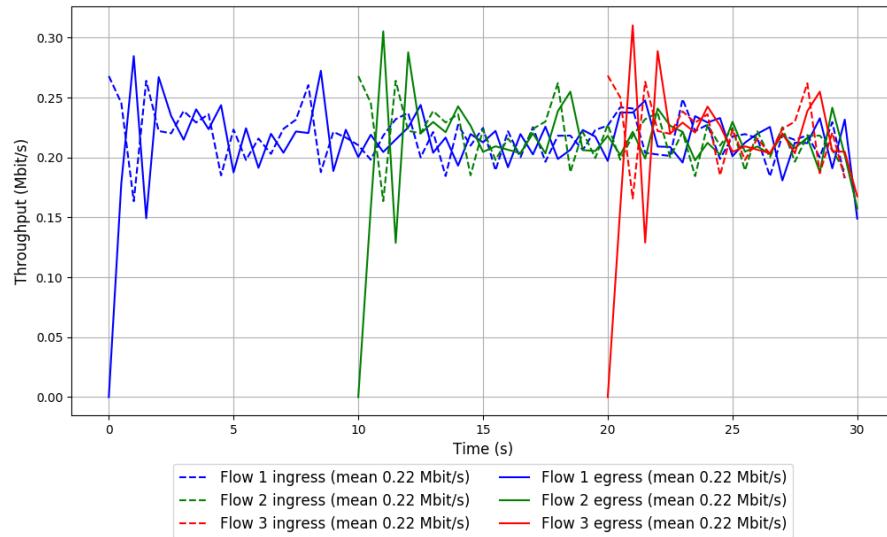


Run 4: Statistics of SCReAM

```
Start at: 2019-03-19 16:35:36
End at: 2019-03-19 16:36:06
Local clock offset: 1.25 ms
Remote clock offset: -40.183 ms

# Below is generated by plot.py at 2019-03-19 18:12:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 134.154 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 132.344 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 132.325 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 134.325 ms
Loss rate: 1.83%
```

Run 4: Report of SCReAM — Data Link

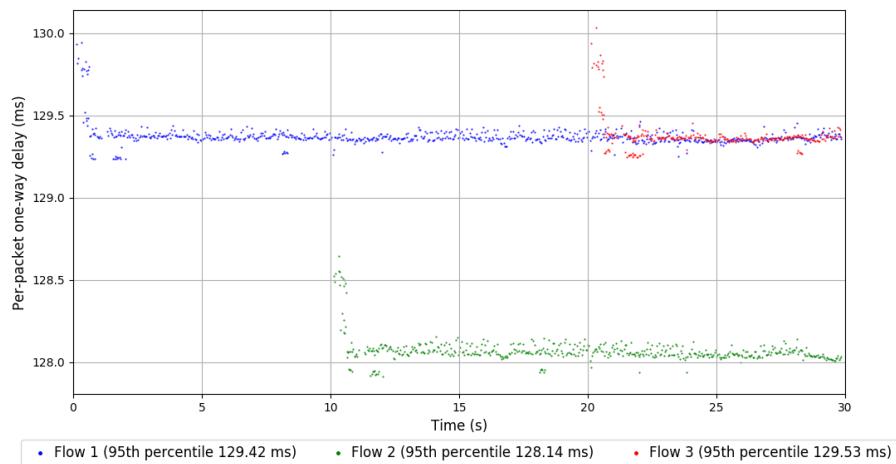
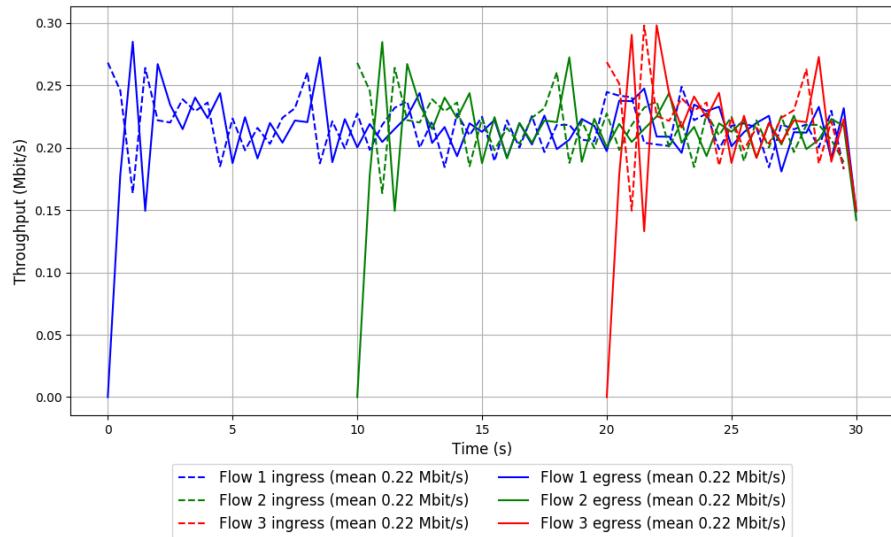


Run 5: Statistics of SCReAM

```
Start at: 2019-03-19 17:23:52
End at: 2019-03-19 17:24:22
Local clock offset: 1.273 ms
Remote clock offset: -35.101 ms

# Below is generated by plot.py at 2019-03-19 18:12:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 129.414 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 129.419 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 128.138 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 129.525 ms
Loss rate: 1.82%
```

Run 5: Report of SCReAM — Data Link

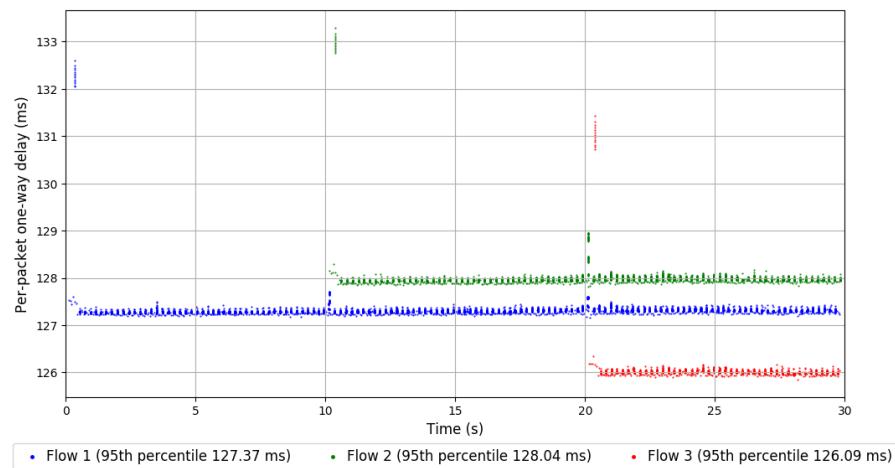
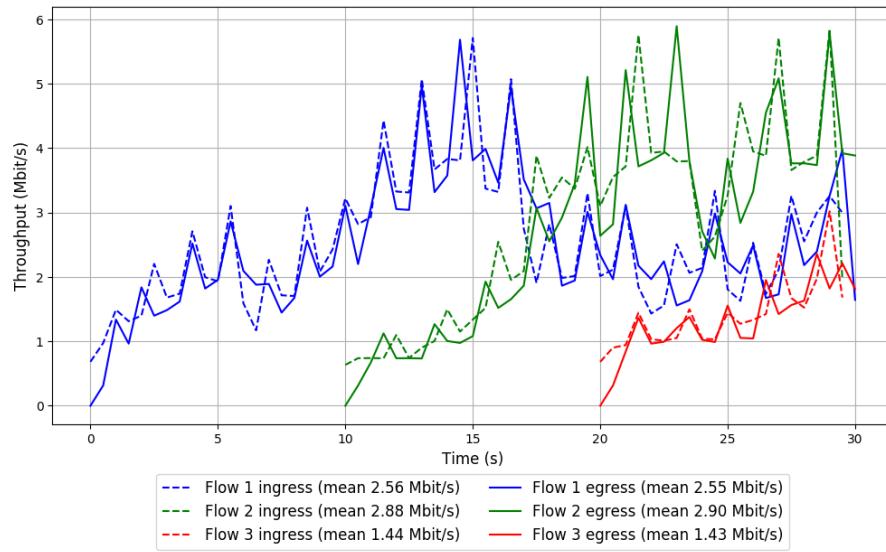


Run 1: Statistics of Sprout

```
Start at: 2019-03-19 14:23:31
End at: 2019-03-19 14:24:01
Local clock offset: 0.356 ms
Remote clock offset: -32.956 ms

# Below is generated by plot.py at 2019-03-19 18:12:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.93 Mbit/s
95th percentile per-packet one-way delay: 128.008 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 2.55 Mbit/s
95th percentile per-packet one-way delay: 127.366 ms
Loss rate: 1.05%
-- Flow 2:
Average throughput: 2.90 Mbit/s
95th percentile per-packet one-way delay: 128.041 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 126.090 ms
Loss rate: 2.92%
```

Run 1: Report of Sprout — Data Link

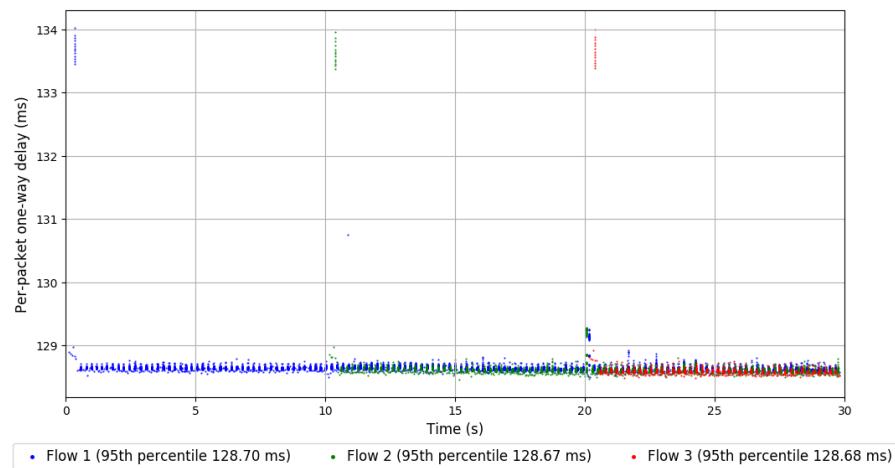
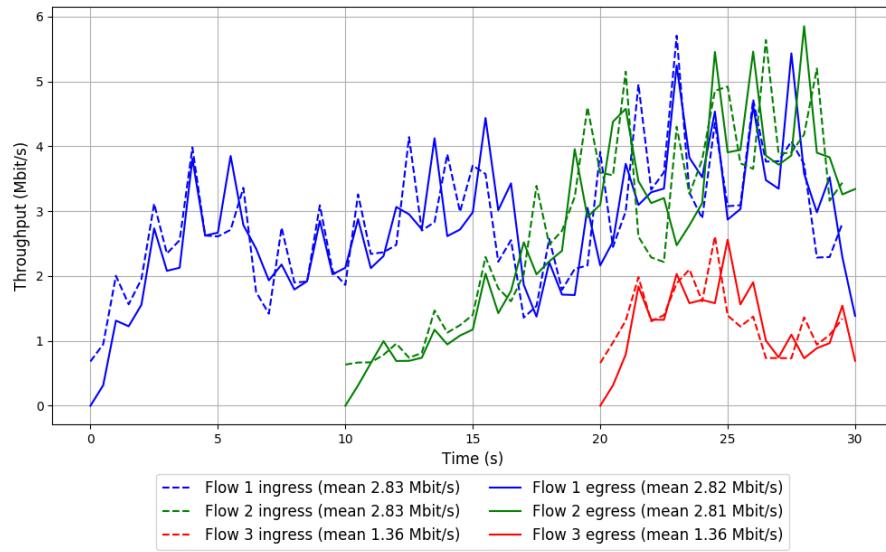


Run 2: Statistics of Sprout

```
Start at: 2019-03-19 14:55:12
End at: 2019-03-19 14:55:42
Local clock offset: 1.647 ms
Remote clock offset: -32.343 ms

# Below is generated by plot.py at 2019-03-19 18:12:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.12 Mbit/s
95th percentile per-packet one-way delay: 128.691 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 2.82 Mbit/s
95th percentile per-packet one-way delay: 128.701 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 2.81 Mbit/s
95th percentile per-packet one-way delay: 128.670 ms
Loss rate: 1.48%
-- Flow 3:
Average throughput: 1.36 Mbit/s
95th percentile per-packet one-way delay: 128.675 ms
Loss rate: 2.43%
```

Run 2: Report of Sprout — Data Link

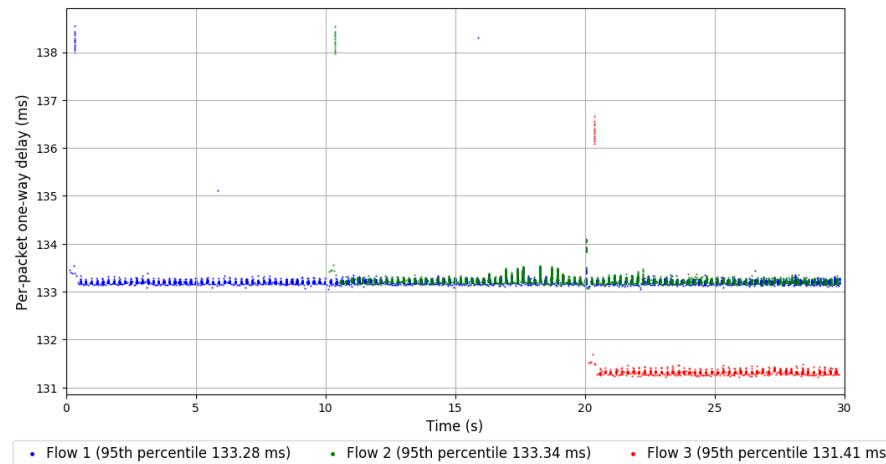
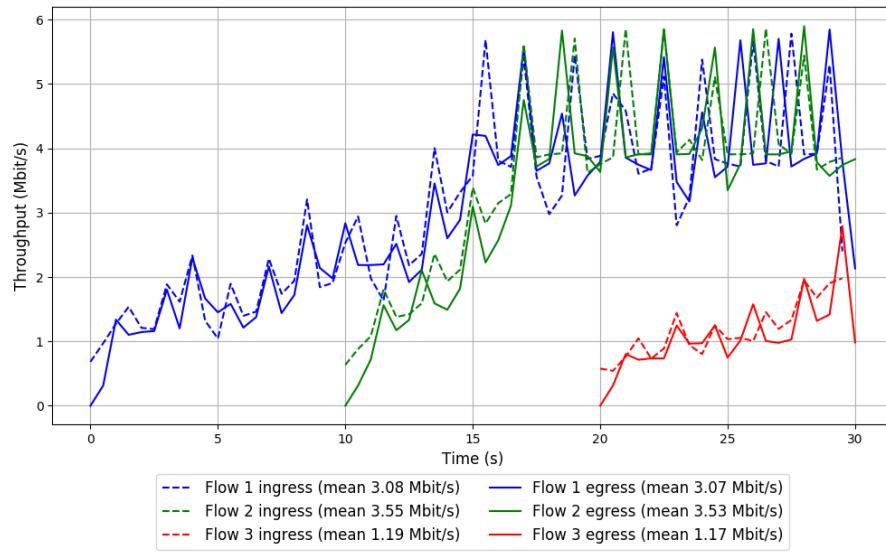


Run 3: Statistics of Sprout

```
Start at: 2019-03-19 15:37:50
End at: 2019-03-19 15:38:20
Local clock offset: -1.196 ms
Remote clock offset: -39.05 ms

# Below is generated by plot.py at 2019-03-19 18:12:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.79 Mbit/s
95th percentile per-packet one-way delay: 133.306 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 3.07 Mbit/s
95th percentile per-packet one-way delay: 133.285 ms
Loss rate: 0.96%
-- Flow 2:
Average throughput: 3.53 Mbit/s
95th percentile per-packet one-way delay: 133.336 ms
Loss rate: 1.37%
-- Flow 3:
Average throughput: 1.17 Mbit/s
95th percentile per-packet one-way delay: 131.405 ms
Loss rate: 4.25%
```

Run 3: Report of Sprout — Data Link

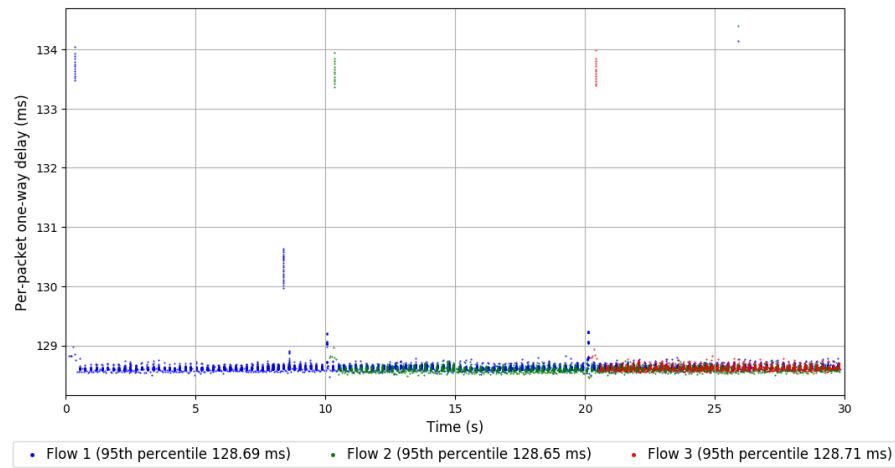
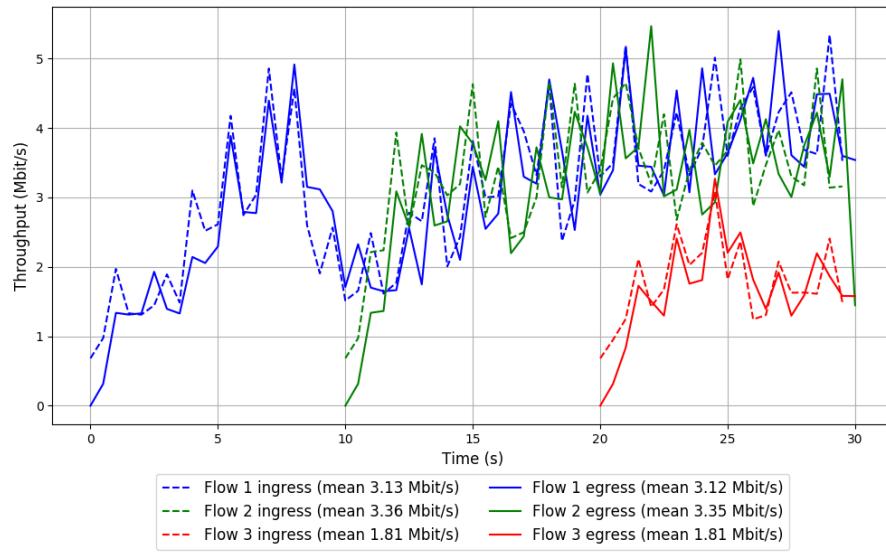


Run 4: Statistics of Sprout

```
Start at: 2019-03-19 16:31:25
End at: 2019-03-19 16:31:55
Local clock offset: 2.072 ms
Remote clock offset: -36.049 ms

# Below is generated by plot.py at 2019-03-19 18:12:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.92 Mbit/s
95th percentile per-packet one-way delay: 128.676 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 3.12 Mbit/s
95th percentile per-packet one-way delay: 128.687 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 3.35 Mbit/s
95th percentile per-packet one-way delay: 128.646 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 1.81 Mbit/s
95th percentile per-packet one-way delay: 128.705 ms
Loss rate: 2.09%
```

Run 4: Report of Sprout — Data Link

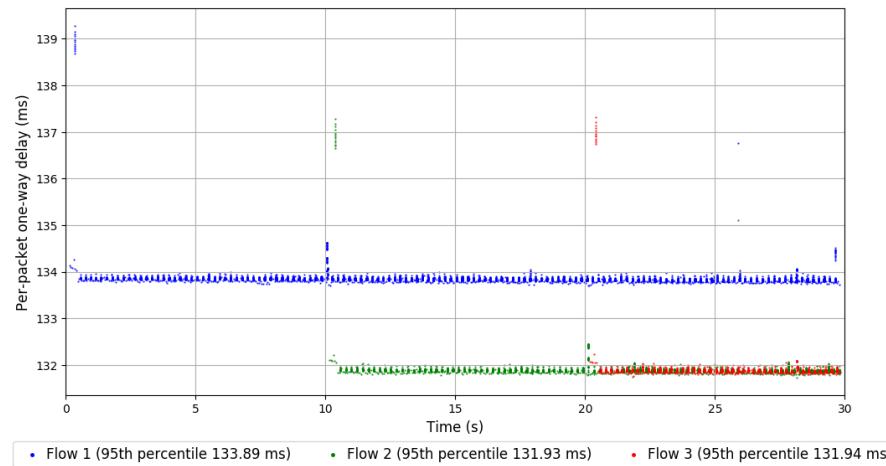
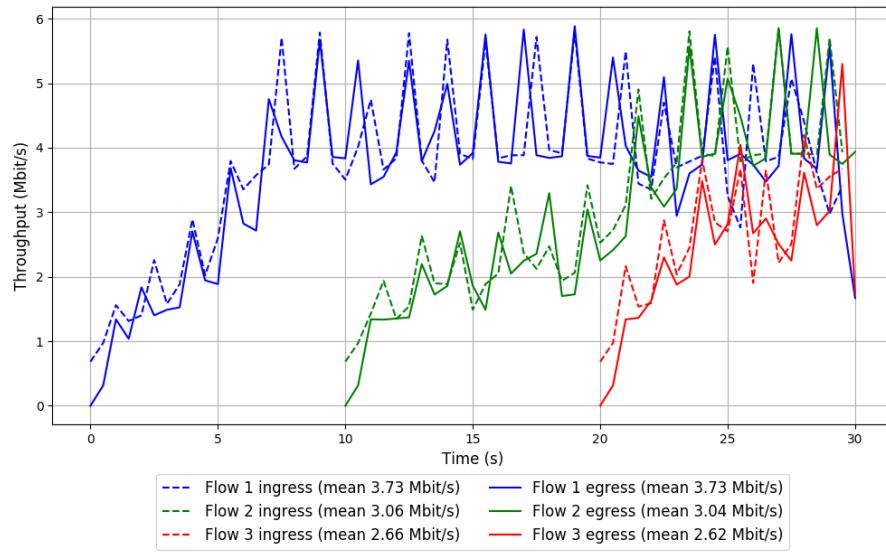


Run 5: Statistics of Sprout

```
Start at: 2019-03-19 17:19:38
End at: 2019-03-19 17:20:08
Local clock offset: -0.167 ms
Remote clock offset: -40.231 ms

# Below is generated by plot.py at 2019-03-19 18:12:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.59 Mbit/s
95th percentile per-packet one-way delay: 133.872 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 3.73 Mbit/s
95th percentile per-packet one-way delay: 133.887 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 3.04 Mbit/s
95th percentile per-packet one-way delay: 131.930 ms
Loss rate: 1.60%
-- Flow 3:
Average throughput: 2.62 Mbit/s
95th percentile per-packet one-way delay: 131.944 ms
Loss rate: 3.68%
```

Run 5: Report of Sprout — Data Link

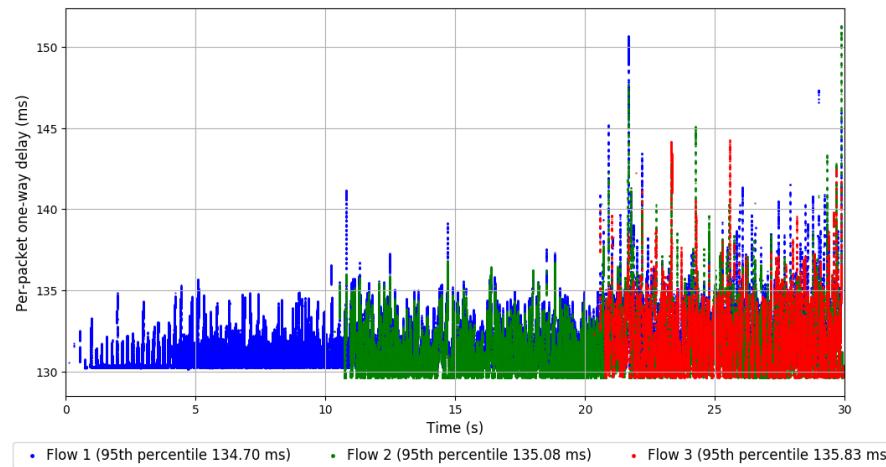
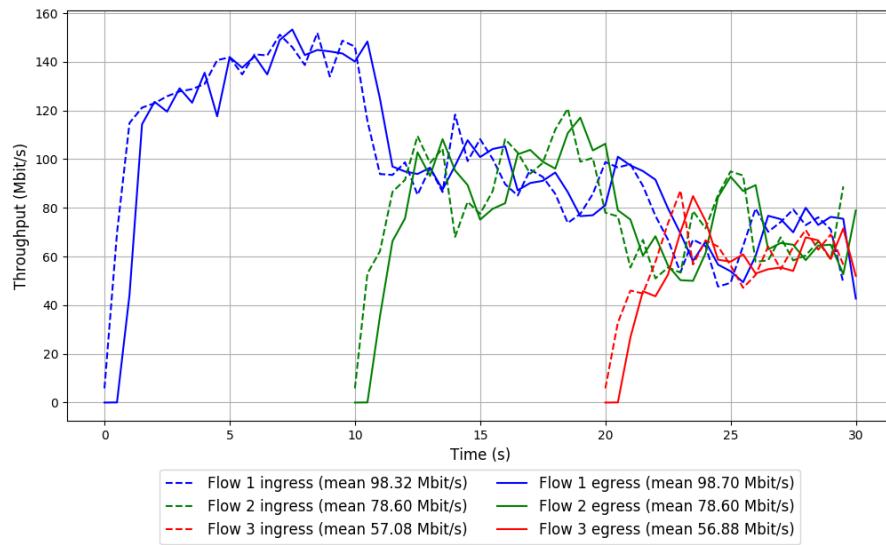


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-03-19 14:09:46
End at: 2019-03-19 14:10:16
Local clock offset: 2.511 ms
Remote clock offset: -34.407 ms

# Below is generated by plot.py at 2019-03-19 18:14:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 169.36 Mbit/s
95th percentile per-packet one-way delay: 134.940 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 98.70 Mbit/s
95th percentile per-packet one-way delay: 134.702 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 78.60 Mbit/s
95th percentile per-packet one-way delay: 135.080 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 56.88 Mbit/s
95th percentile per-packet one-way delay: 135.832 ms
Loss rate: 2.06%
```

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

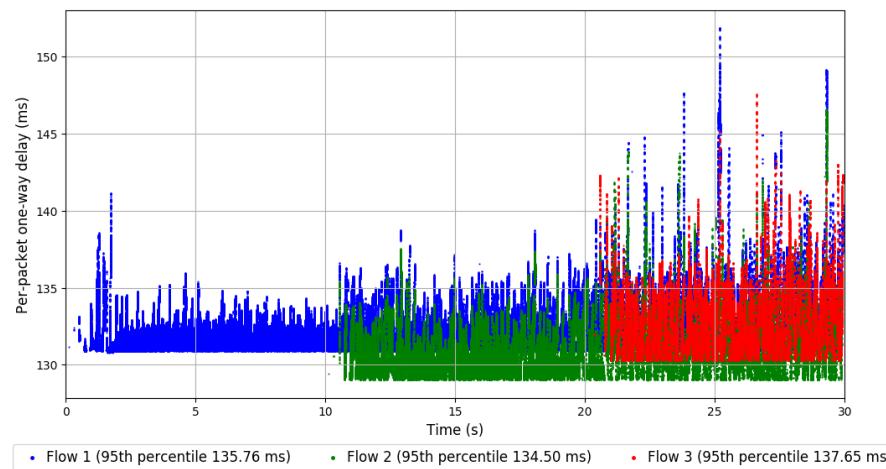
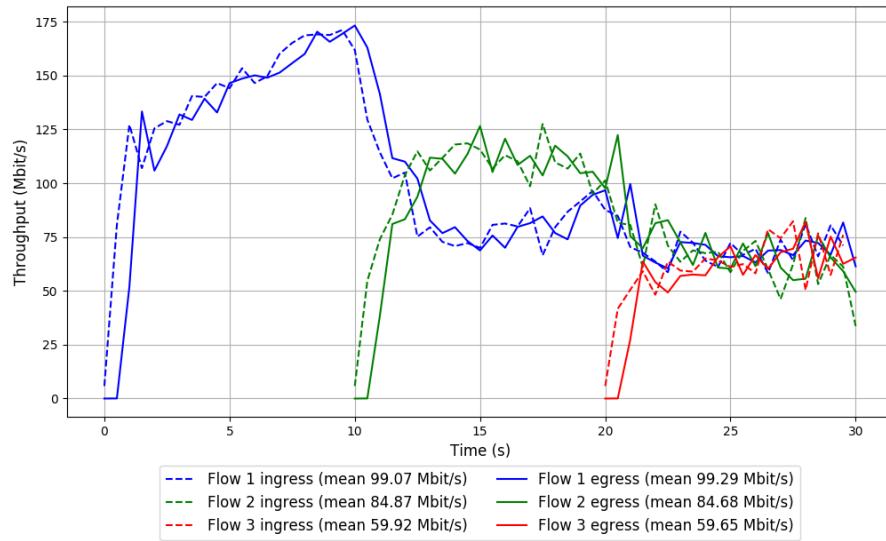


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-03-19 14:41:21
End at: 2019-03-19 14:41:51
Local clock offset: 0.267 ms
Remote clock offset: -34.827 ms

# Below is generated by plot.py at 2019-03-19 18:14:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 175.05 Mbit/s
95th percentile per-packet one-way delay: 135.708 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 99.29 Mbit/s
95th percentile per-packet one-way delay: 135.765 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 84.68 Mbit/s
95th percentile per-packet one-way delay: 134.503 ms
Loss rate: 1.84%
-- Flow 3:
Average throughput: 59.65 Mbit/s
95th percentile per-packet one-way delay: 137.645 ms
Loss rate: 2.40%
```

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

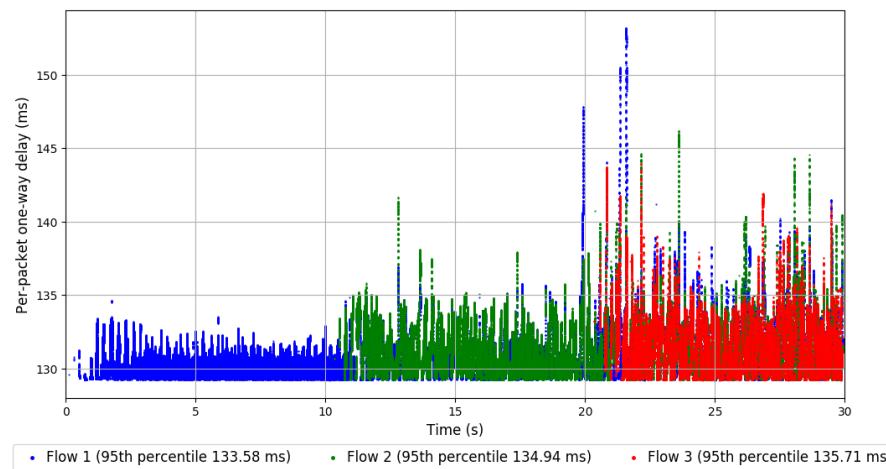
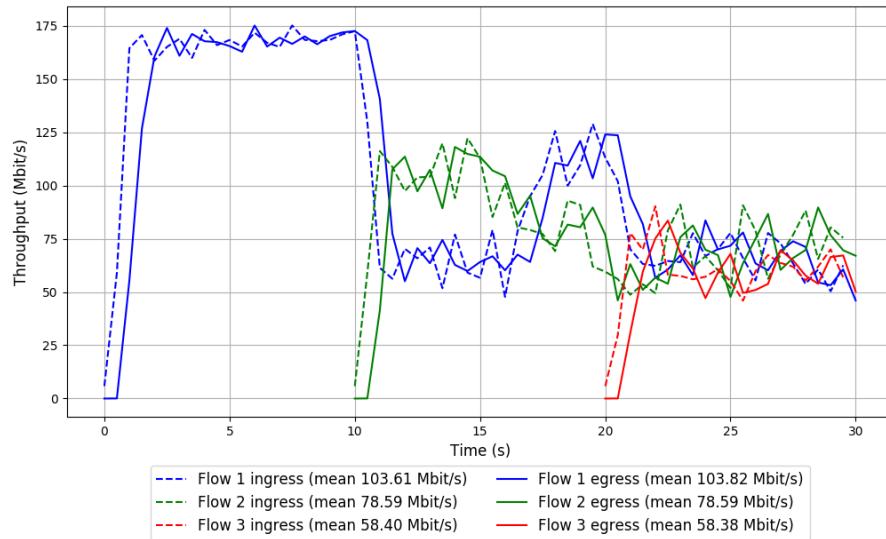


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-03-19 15:24:05
End at: 2019-03-19 15:24:35
Local clock offset: 0.939 ms
Remote clock offset: -33.479 ms

# Below is generated by plot.py at 2019-03-19 18:14:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 175.08 Mbit/s
95th percentile per-packet one-way delay: 134.284 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 103.82 Mbit/s
95th percentile per-packet one-way delay: 133.577 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 78.59 Mbit/s
95th percentile per-packet one-way delay: 134.942 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 58.38 Mbit/s
95th percentile per-packet one-way delay: 135.705 ms
Loss rate: 2.08%
```

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

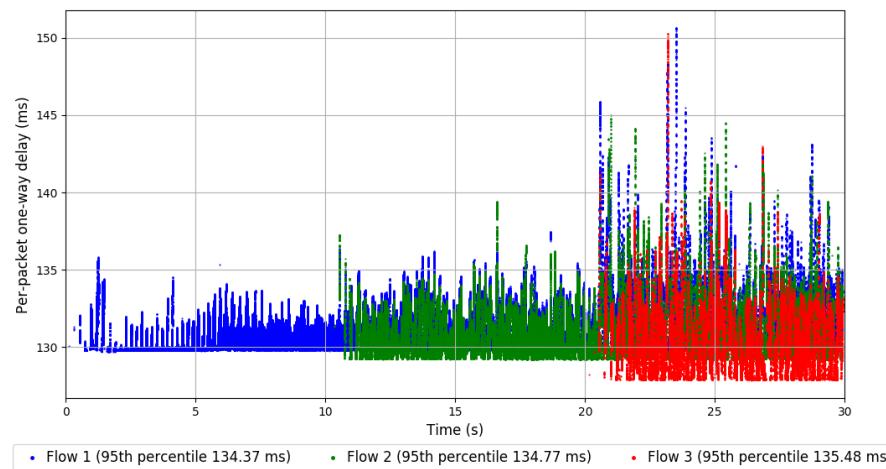
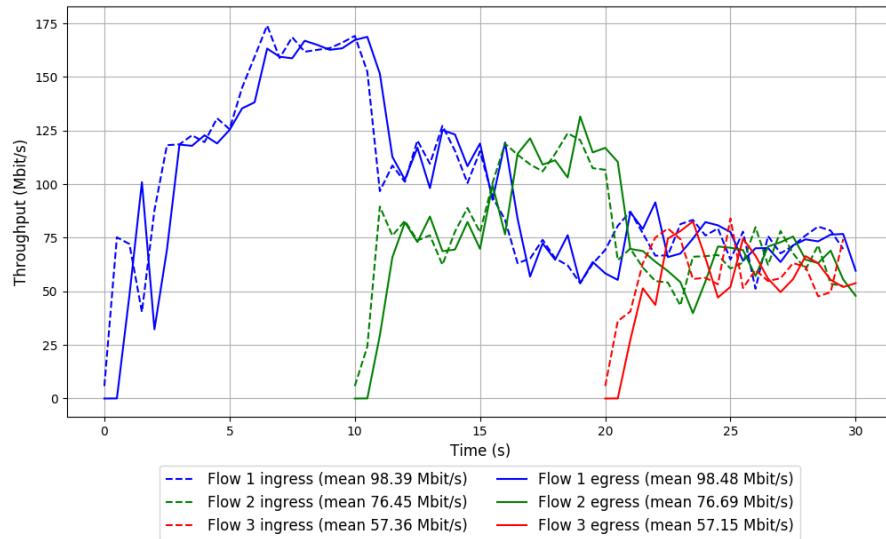


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-03-19 16:00:56
End at: 2019-03-19 16:01:26
Local clock offset: 0.294 ms
Remote clock offset: -35.049 ms

# Below is generated by plot.py at 2019-03-19 18:14:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 168.12 Mbit/s
95th percentile per-packet one-way delay: 134.564 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 98.48 Mbit/s
95th percentile per-packet one-way delay: 134.367 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 76.69 Mbit/s
95th percentile per-packet one-way delay: 134.771 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 57.15 Mbit/s
95th percentile per-packet one-way delay: 135.477 ms
Loss rate: 2.33%
```

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

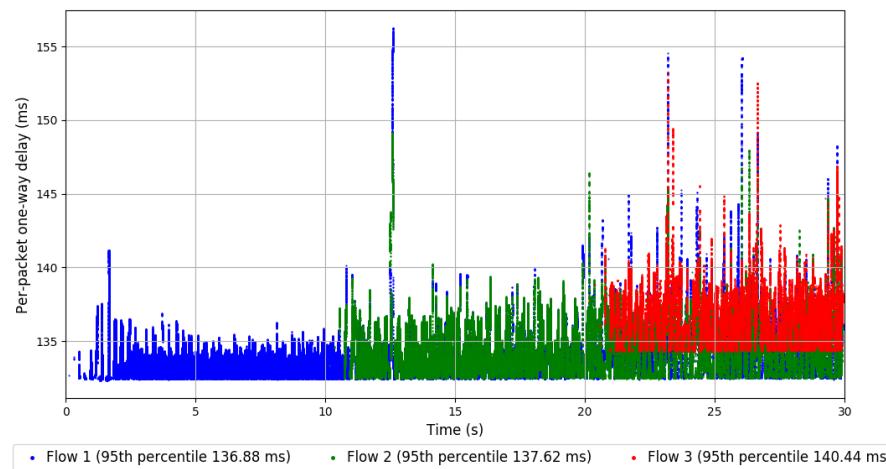
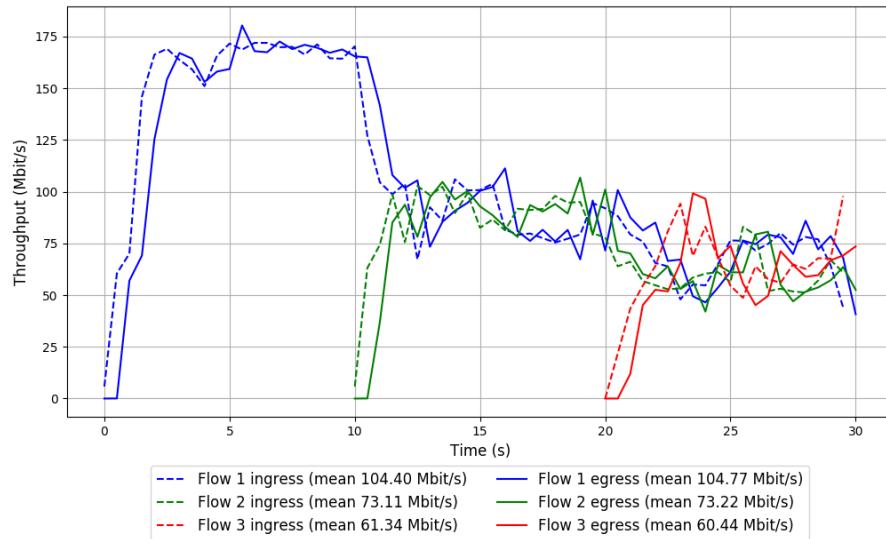


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-03-19 16:49:02
End at: 2019-03-19 16:49:32
Local clock offset: 2.203 ms
Remote clock offset: -38.716 ms

# Below is generated by plot.py at 2019-03-19 18:15:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 173.12 Mbit/s
95th percentile per-packet one-way delay: 138.087 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 104.77 Mbit/s
95th percentile per-packet one-way delay: 136.879 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 73.22 Mbit/s
95th percentile per-packet one-way delay: 137.624 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 60.44 Mbit/s
95th percentile per-packet one-way delay: 140.438 ms
Loss rate: 3.45%
```

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

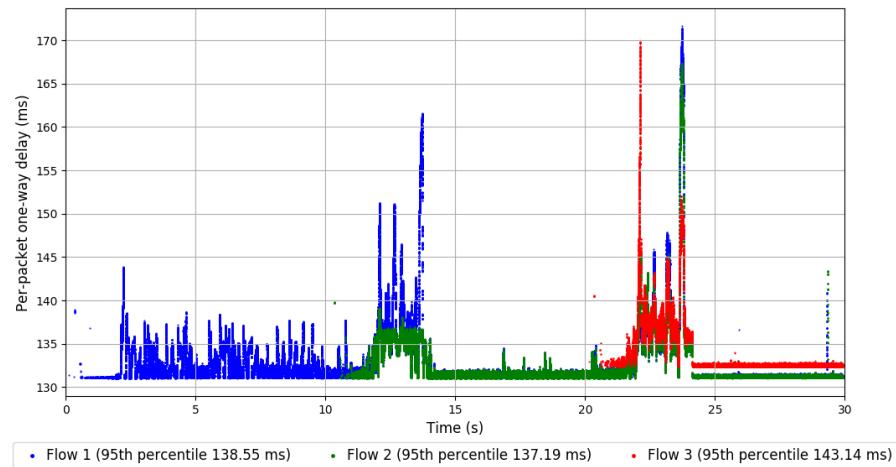
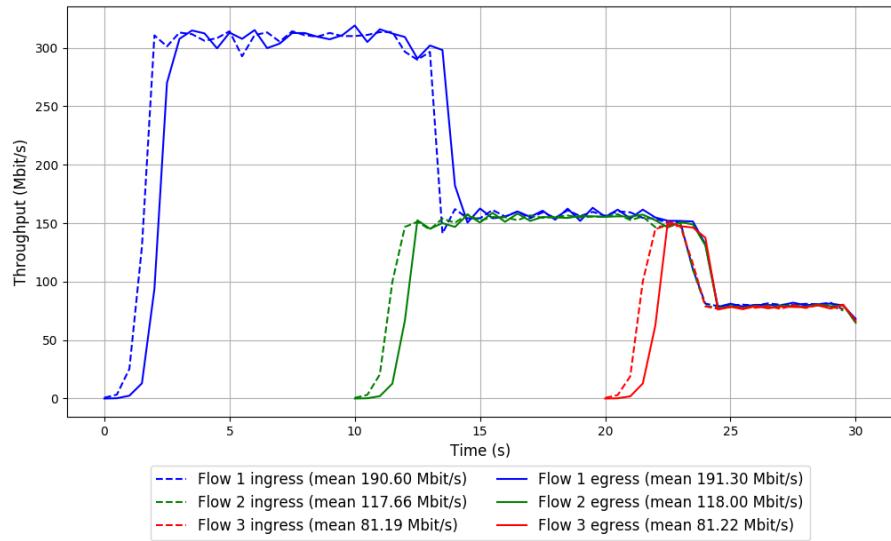


Run 1: Statistics of TCP Vegas

```
Start at: 2019-03-19 14:21:59
End at: 2019-03-19 14:22:29
Local clock offset: -0.1 ms
Remote clock offset: -38.649 ms

# Below is generated by plot.py at 2019-03-19 18:15:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 296.26 Mbit/s
95th percentile per-packet one-way delay: 138.741 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 191.30 Mbit/s
95th percentile per-packet one-way delay: 138.550 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 118.00 Mbit/s
95th percentile per-packet one-way delay: 137.188 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 81.22 Mbit/s
95th percentile per-packet one-way delay: 143.139 ms
Loss rate: 1.90%
```

Run 1: Report of TCP Vegas — Data Link

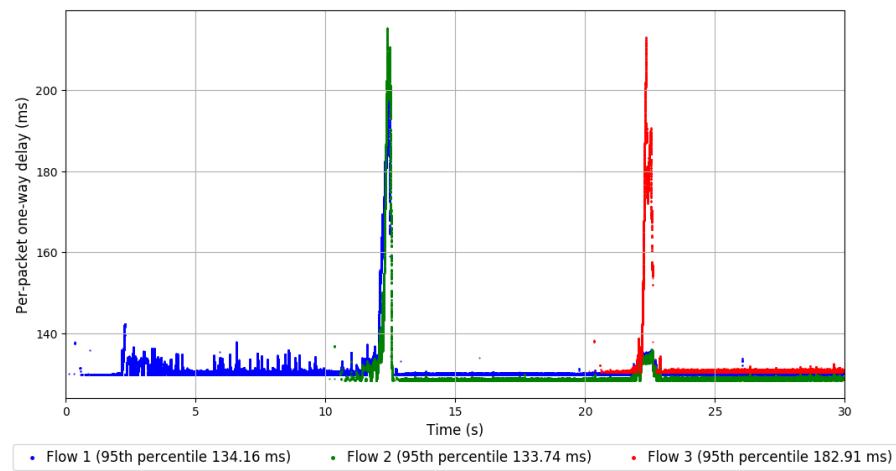
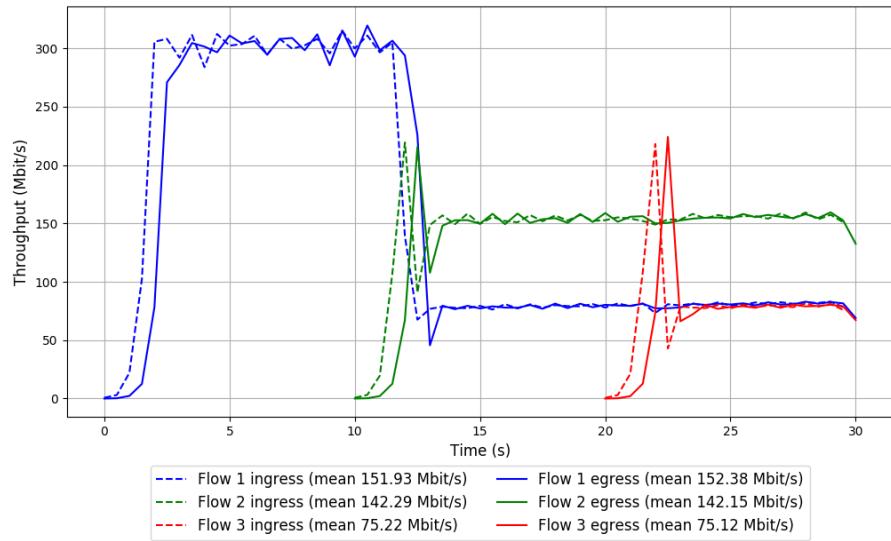


Run 2: Statistics of TCP Vegas

```
Start at: 2019-03-19 14:53:40
End at: 2019-03-19 14:54:10
Local clock offset: 0.696 ms
Remote clock offset: -34.466 ms

# Below is generated by plot.py at 2019-03-19 18:15:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 271.40 Mbit/s
95th percentile per-packet one-way delay: 134.634 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 152.38 Mbit/s
95th percentile per-packet one-way delay: 134.163 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 142.15 Mbit/s
95th percentile per-packet one-way delay: 133.739 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 75.12 Mbit/s
95th percentile per-packet one-way delay: 182.910 ms
Loss rate: 2.08%
```

Run 2: Report of TCP Vegas — Data Link

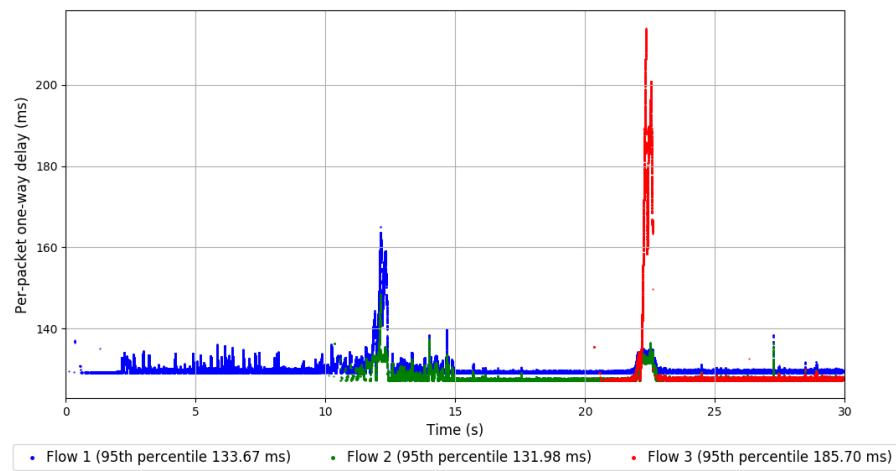
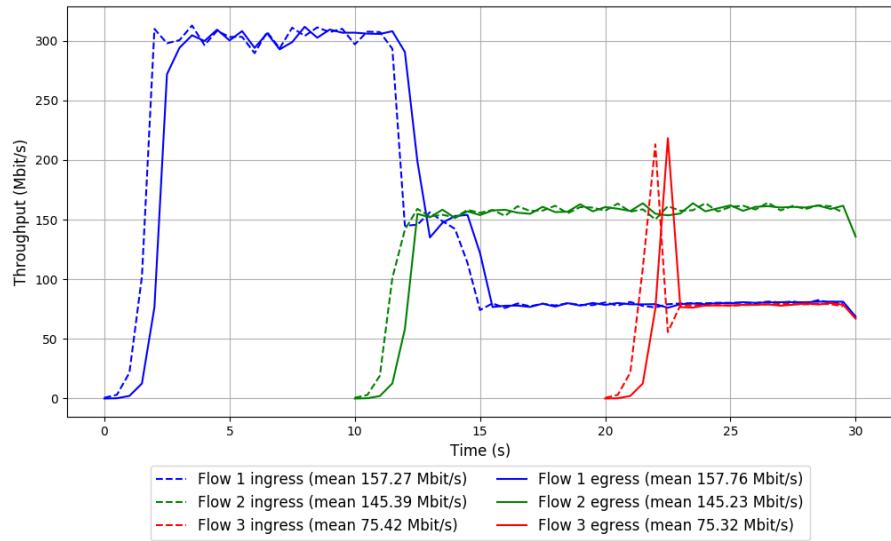


Run 3: Statistics of TCP Vegas

```
Start at: 2019-03-19 15:36:18
End at: 2019-03-19 15:36:48
Local clock offset: 0.109 ms
Remote clock offset: -33.791 ms

# Below is generated by plot.py at 2019-03-19 18:15:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 278.92 Mbit/s
95th percentile per-packet one-way delay: 133.253 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 157.76 Mbit/s
95th percentile per-packet one-way delay: 133.668 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 145.23 Mbit/s
95th percentile per-packet one-way delay: 131.977 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 75.32 Mbit/s
95th percentile per-packet one-way delay: 185.701 ms
Loss rate: 2.05%
```

Run 3: Report of TCP Vegas — Data Link

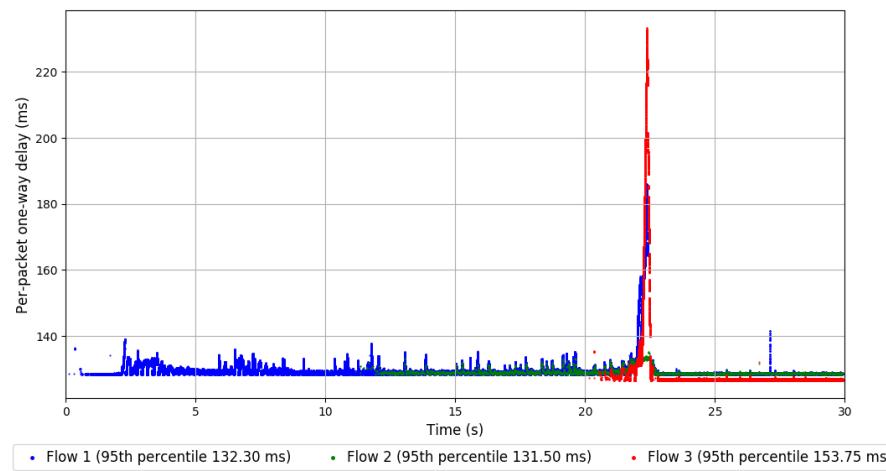
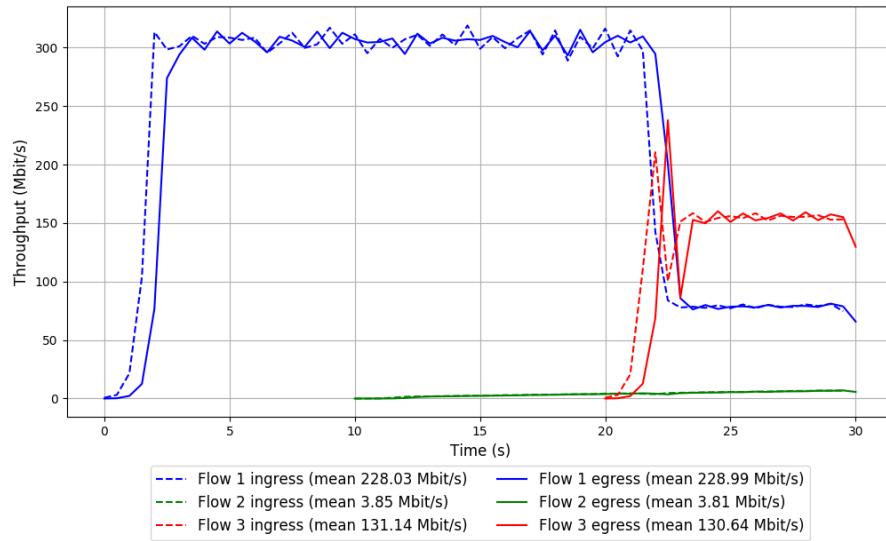


Run 4: Statistics of TCP Vegas

```
Start at: 2019-03-19 16:29:54
End at: 2019-03-19 16:30:24
Local clock offset: 0.041 ms
Remote clock offset: -36.229 ms

# Below is generated by plot.py at 2019-03-19 18:17:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 274.34 Mbit/s
95th percentile per-packet one-way delay: 132.433 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 228.99 Mbit/s
95th percentile per-packet one-way delay: 132.299 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 3.81 Mbit/s
95th percentile per-packet one-way delay: 131.505 ms
Loss rate: 1.80%
-- Flow 3:
Average throughput: 130.64 Mbit/s
95th percentile per-packet one-way delay: 153.748 ms
Loss rate: 2.30%
```

Run 4: Report of TCP Vegas — Data Link

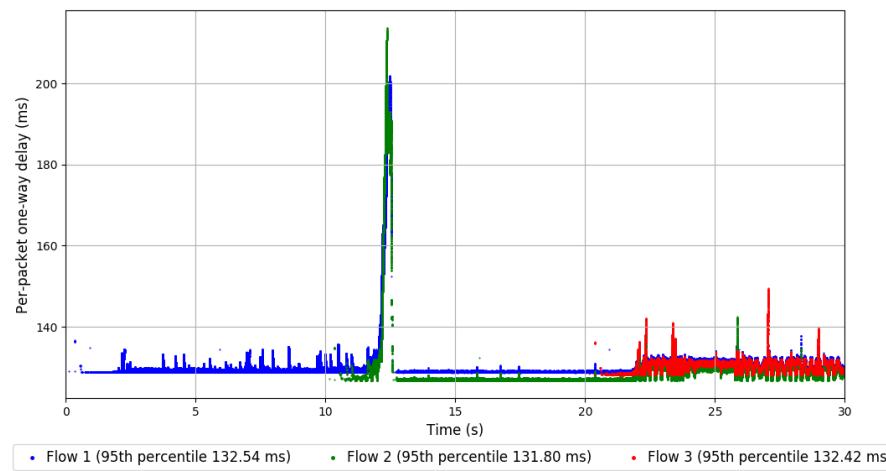
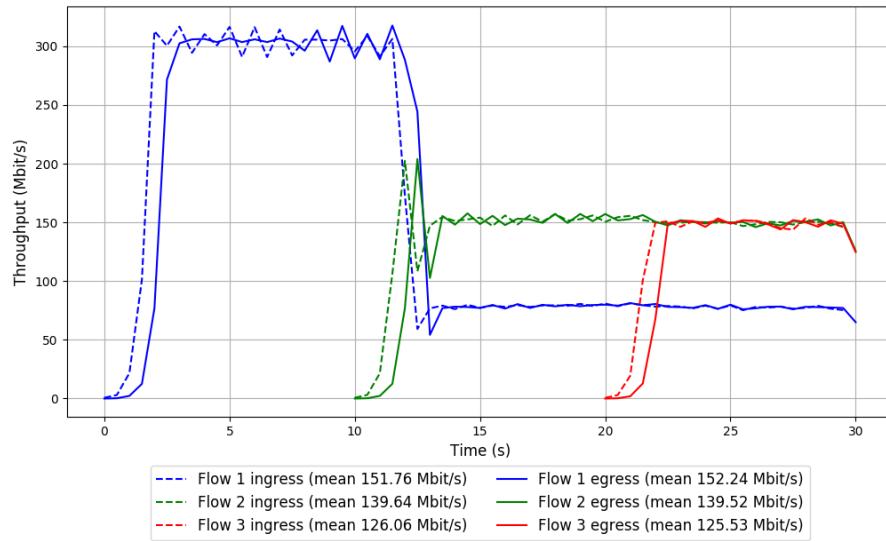


Run 5: Statistics of TCP Vegas

```
Start at: 2019-03-19 17:18:05
End at: 2019-03-19 17:18:35
Local clock offset: -0.087 ms
Remote clock offset: -34.871 ms

# Below is generated by plot.py at 2019-03-19 18:17:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 286.05 Mbit/s
95th percentile per-packet one-way delay: 132.443 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 152.24 Mbit/s
95th percentile per-packet one-way delay: 132.537 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 139.52 Mbit/s
95th percentile per-packet one-way delay: 131.803 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 125.53 Mbit/s
95th percentile per-packet one-way delay: 132.420 ms
Loss rate: 2.36%
```

Run 5: Report of TCP Vegas — Data Link

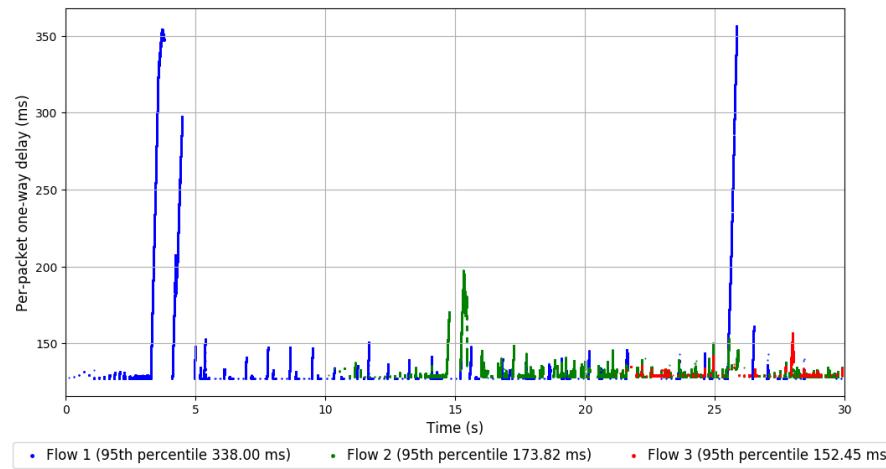
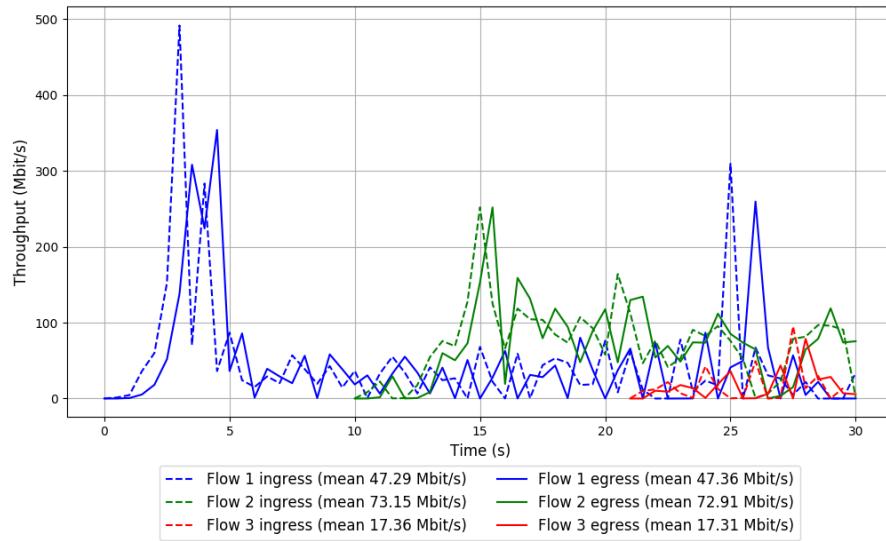


Run 1: Statistics of Verus

```
Start at: 2019-03-19 14:26:19
End at: 2019-03-19 14:26:49
Local clock offset: 0.006 ms
Remote clock offset: -34.321 ms

# Below is generated by plot.py at 2019-03-19 18:17:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.79 Mbit/s
95th percentile per-packet one-way delay: 287.776 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 47.36 Mbit/s
95th percentile per-packet one-way delay: 337.995 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 72.91 Mbit/s
95th percentile per-packet one-way delay: 173.825 ms
Loss rate: 1.53%
-- Flow 3:
Average throughput: 17.31 Mbit/s
95th percentile per-packet one-way delay: 152.453 ms
Loss rate: 2.57%
```

Run 1: Report of Verus — Data Link

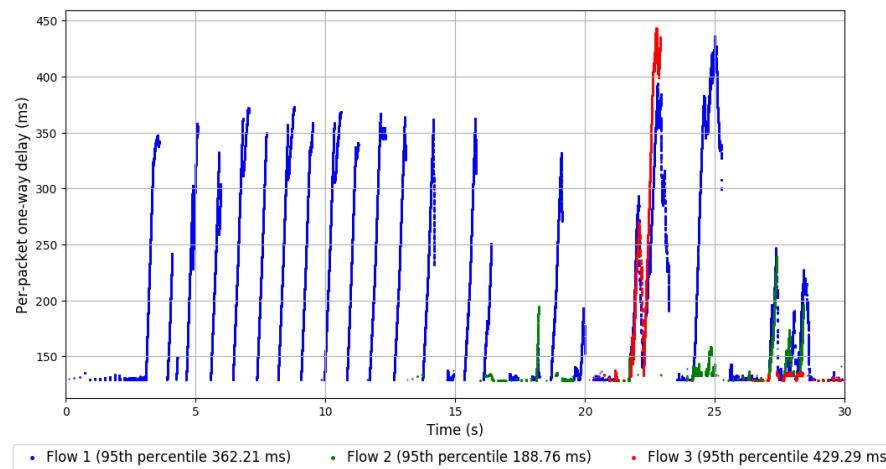
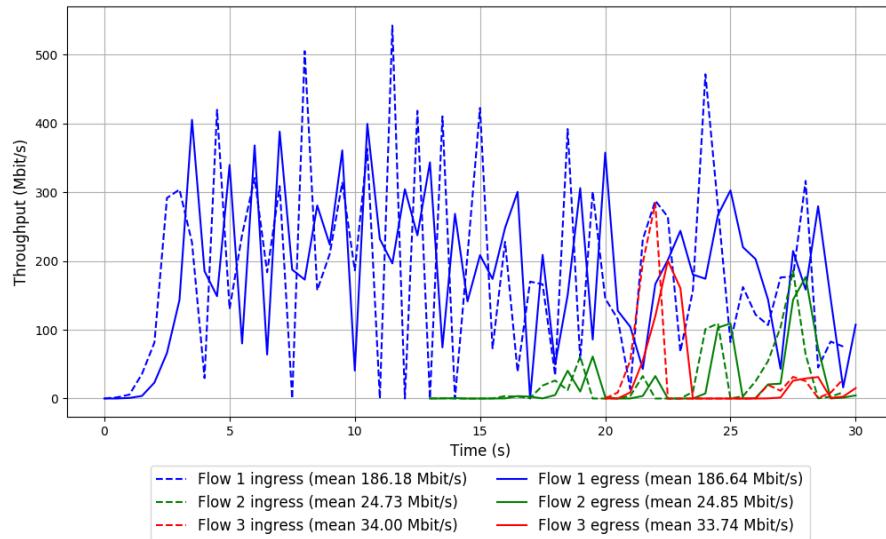


Run 2: Statistics of Verus

```
Start at: 2019-03-19 14:57:58
End at: 2019-03-19 14:58:28
Local clock offset: 0.903 ms
Remote clock offset: -33.325 ms

# Below is generated by plot.py at 2019-03-19 18:17:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 211.45 Mbit/s
95th percentile per-packet one-way delay: 365.603 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 186.64 Mbit/s
95th percentile per-packet one-way delay: 362.210 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 24.85 Mbit/s
95th percentile per-packet one-way delay: 188.756 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 33.74 Mbit/s
95th percentile per-packet one-way delay: 429.286 ms
Loss rate: 2.91%
```

Run 2: Report of Verus — Data Link

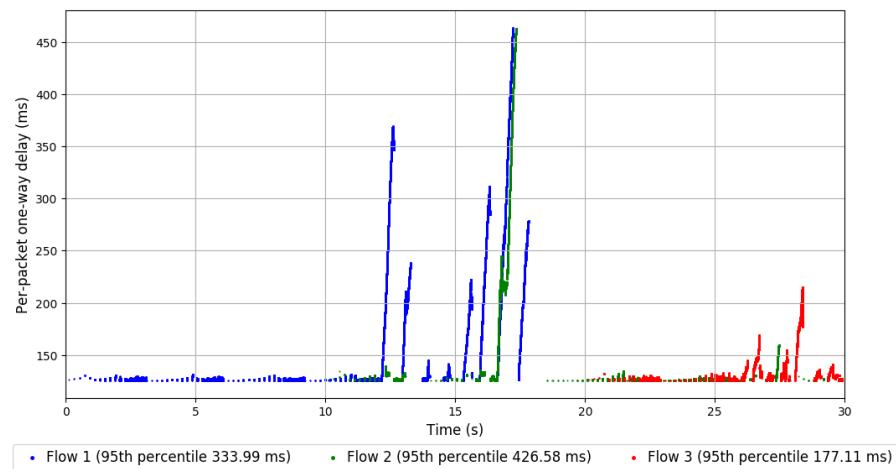
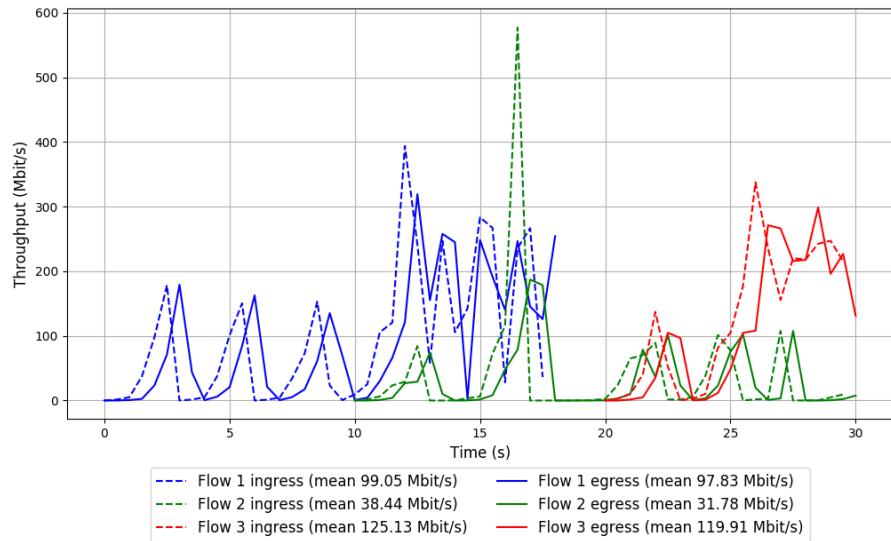


Run 3: Statistics of Verus

```
Start at: 2019-03-19 15:40:37
End at: 2019-03-19 15:41:07
Local clock offset: -1.67 ms
Remote clock offset: -32.885 ms

# Below is generated by plot.py at 2019-03-19 18:17:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 118.41 Mbit/s
95th percentile per-packet one-way delay: 309.742 ms
Loss rate: 5.89%
-- Flow 1:
Average throughput: 97.83 Mbit/s
95th percentile per-packet one-way delay: 333.985 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 31.78 Mbit/s
95th percentile per-packet one-way delay: 426.584 ms
Loss rate: 18.16%
-- Flow 3:
Average throughput: 119.91 Mbit/s
95th percentile per-packet one-way delay: 177.113 ms
Loss rate: 6.07%
```

Run 3: Report of Verus — Data Link

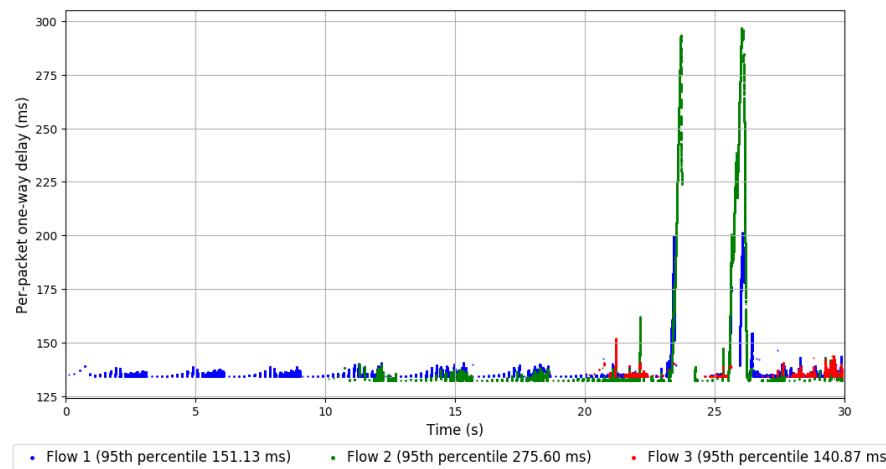
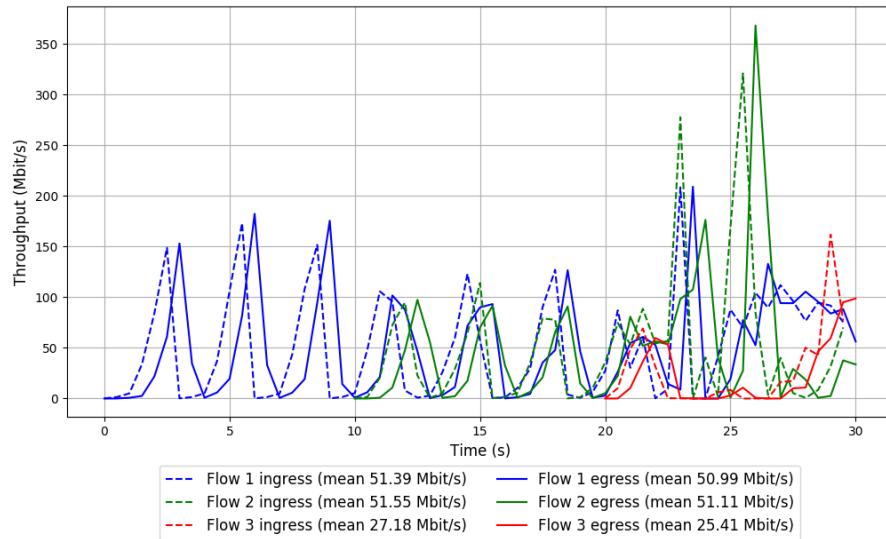


Run 4: Statistics of Verus

```
Start at: 2019-03-19 16:34:12
End at: 2019-03-19 16:34:42
Local clock offset: 2.193 ms
Remote clock offset: -39.493 ms

# Below is generated by plot.py at 2019-03-19 18:17:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.26 Mbit/s
95th percentile per-packet one-way delay: 233.329 ms
Loss rate: 2.15%
-- Flow 1:
Average throughput: 50.99 Mbit/s
95th percentile per-packet one-way delay: 151.134 ms
Loss rate: 1.29%
-- Flow 2:
Average throughput: 51.11 Mbit/s
95th percentile per-packet one-way delay: 275.600 ms
Loss rate: 1.80%
-- Flow 3:
Average throughput: 25.41 Mbit/s
95th percentile per-packet one-way delay: 140.869 ms
Loss rate: 8.34%
```

Run 4: Report of Verus — Data Link

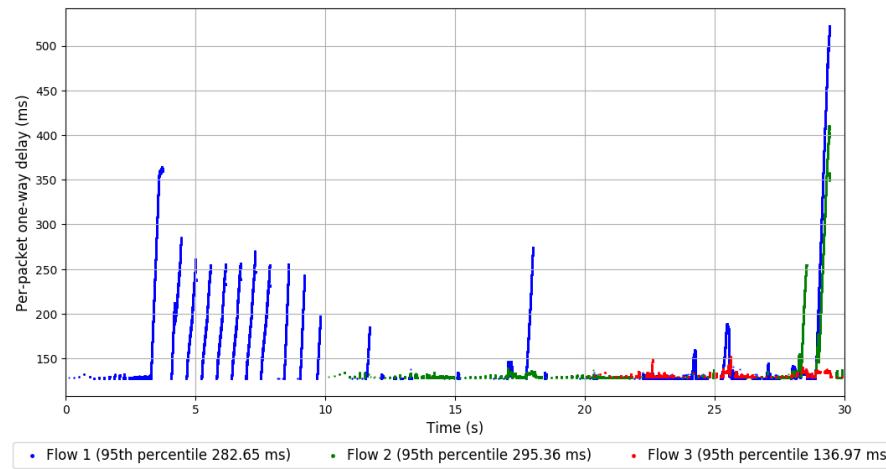
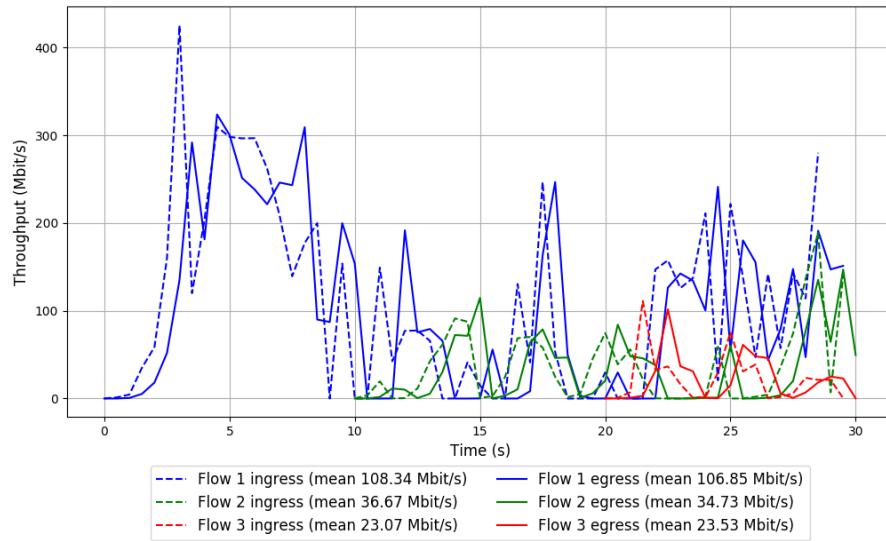


Run 5: Statistics of Verus

```
Start at: 2019-03-19 17:22:24
End at: 2019-03-19 17:22:54
Local clock offset: 1.124 ms
Remote clock offset: -34.714 ms

# Below is generated by plot.py at 2019-03-19 18:17:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 135.87 Mbit/s
95th percentile per-packet one-way delay: 278.615 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 106.85 Mbit/s
95th percentile per-packet one-way delay: 282.647 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 34.73 Mbit/s
95th percentile per-packet one-way delay: 295.356 ms
Loss rate: 6.23%
-- Flow 3:
Average throughput: 23.53 Mbit/s
95th percentile per-packet one-way delay: 136.975 ms
Loss rate: 0.05%
```

Run 5: Report of Verus — Data Link

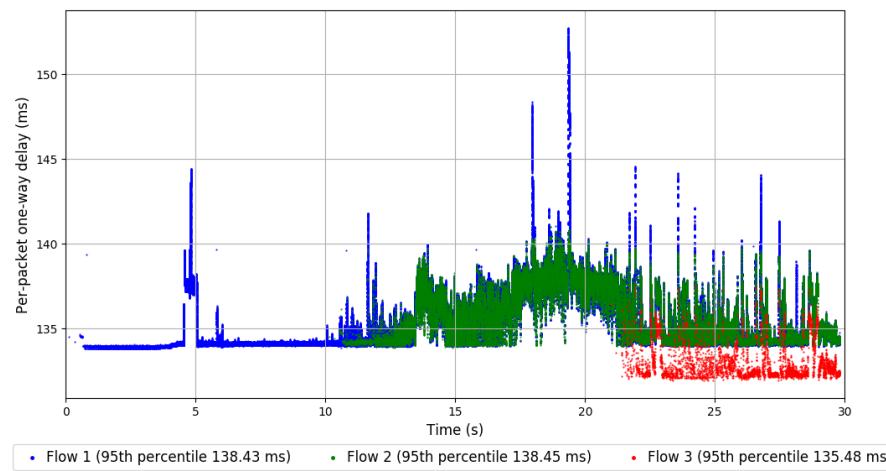
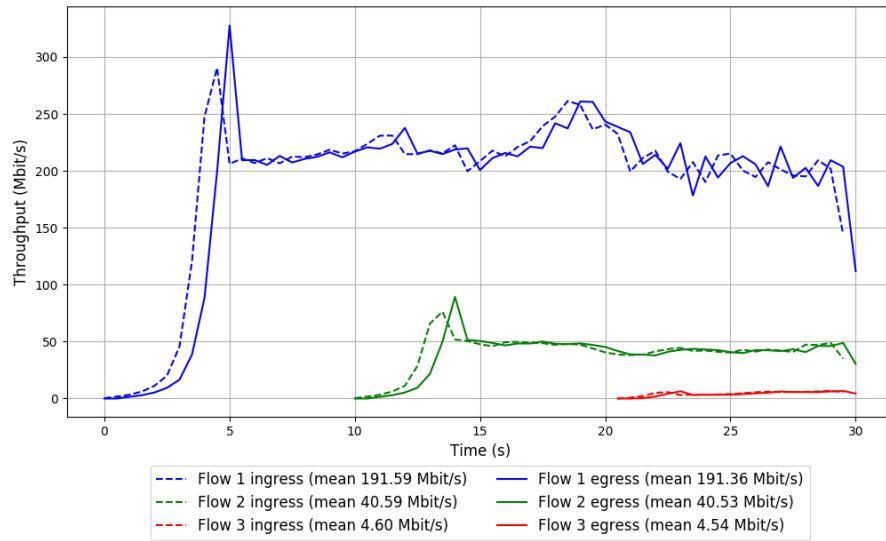


Run 1: Statistics of PCC-Vivace

```
Start at: 2019-03-19 14:33:32
End at: 2019-03-19 14:34:02
Local clock offset: -0.414 ms
Remote clock offset: -39.056 ms

# Below is generated by plot.py at 2019-03-19 18:17:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 219.56 Mbit/s
95th percentile per-packet one-way delay: 138.429 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 191.36 Mbit/s
95th percentile per-packet one-way delay: 138.432 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 40.53 Mbit/s
95th percentile per-packet one-way delay: 138.451 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 4.54 Mbit/s
95th percentile per-packet one-way delay: 135.478 ms
Loss rate: 3.53%
```

Run 1: Report of PCC-Vivace — Data Link

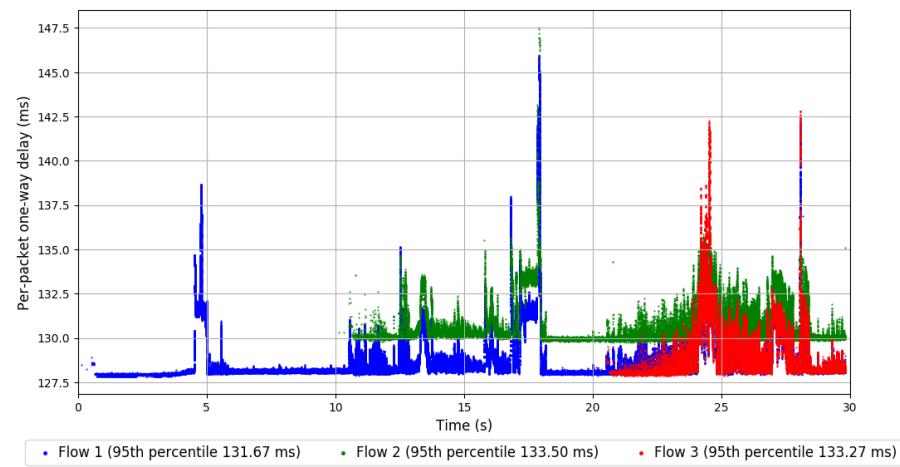
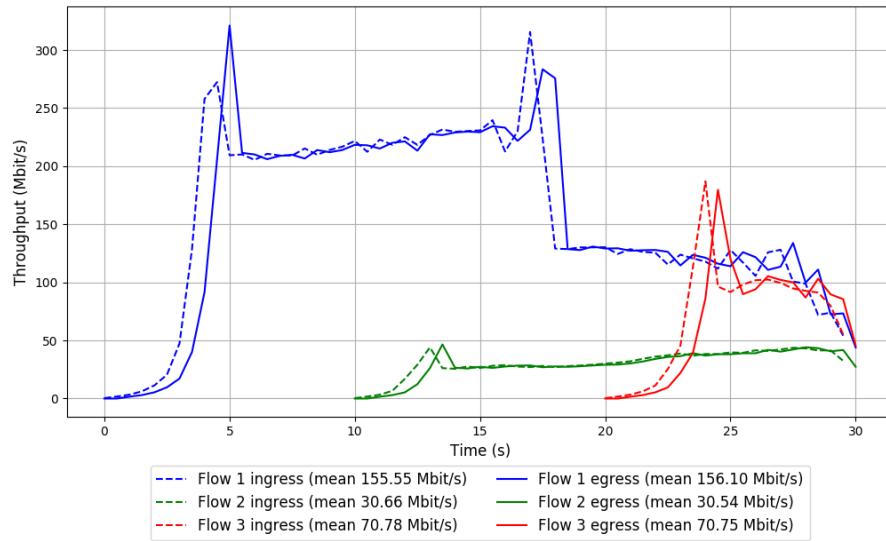


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-03-19 15:11:01
End at: 2019-03-19 15:11:31
Local clock offset: 1.69 ms
Remote clock offset: -33.206 ms

# Below is generated by plot.py at 2019-03-19 18:17:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 199.38 Mbit/s
95th percentile per-packet one-way delay: 132.219 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 156.10 Mbit/s
95th percentile per-packet one-way delay: 131.672 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 30.54 Mbit/s
95th percentile per-packet one-way delay: 133.497 ms
Loss rate: 1.33%
-- Flow 3:
Average throughput: 70.75 Mbit/s
95th percentile per-packet one-way delay: 133.267 ms
Loss rate: 2.03%
```

Run 2: Report of PCC-Vivace — Data Link

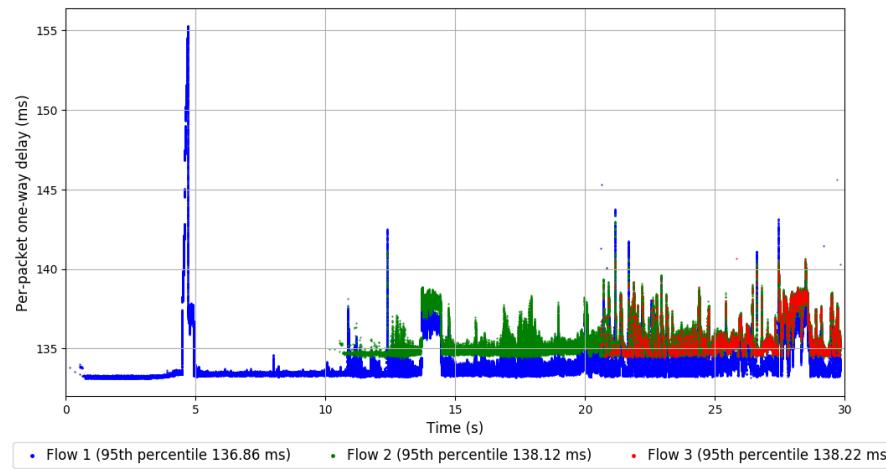
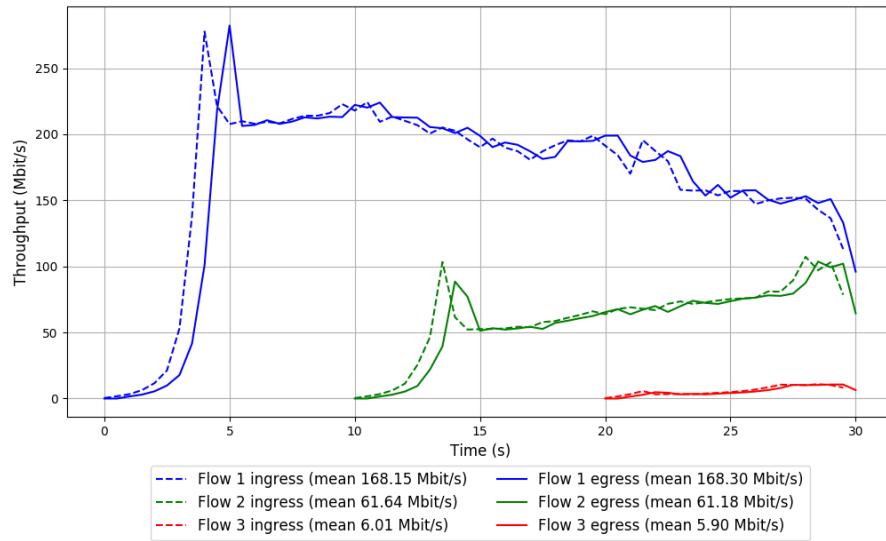


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-03-19 15:48:01
End at: 2019-03-19 15:48:31
Local clock offset: -0.231 ms
Remote clock offset: -40.281 ms

# Below is generated by plot.py at 2019-03-19 18:18:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 210.74 Mbit/s
95th percentile per-packet one-way delay: 137.400 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 168.30 Mbit/s
95th percentile per-packet one-way delay: 136.860 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 61.18 Mbit/s
95th percentile per-packet one-way delay: 138.115 ms
Loss rate: 1.70%
-- Flow 3:
Average throughput: 5.90 Mbit/s
95th percentile per-packet one-way delay: 138.217 ms
Loss rate: 3.79%
```

Run 3: Report of PCC-Vivace — Data Link

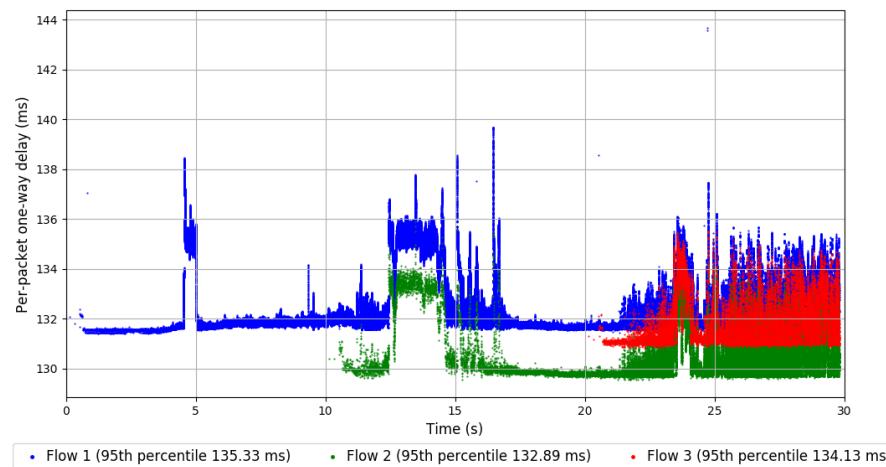
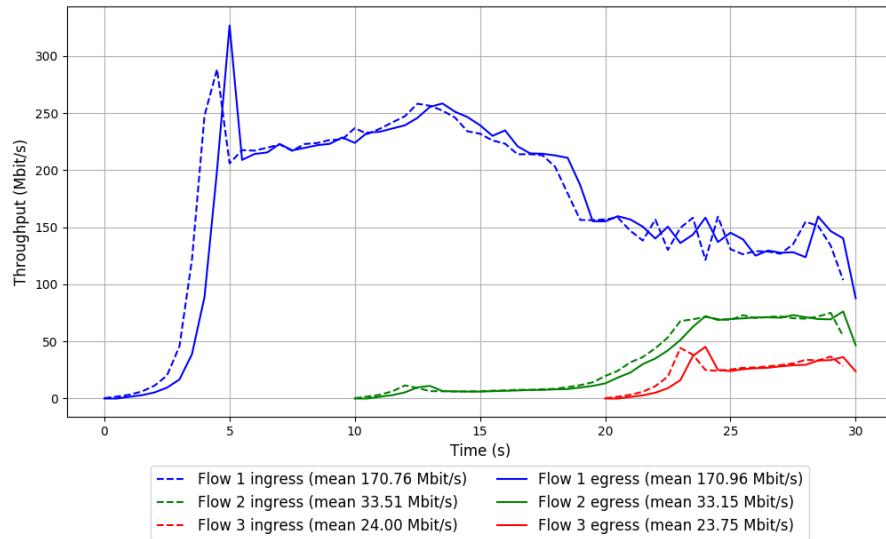


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-03-19 16:41:32
End at: 2019-03-19 16:42:02
Local clock offset: 3.182 ms
Remote clock offset: -35.52 ms

# Below is generated by plot.py at 2019-03-19 18:18:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 200.67 Mbit/s
95th percentile per-packet one-way delay: 135.276 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 170.96 Mbit/s
95th percentile per-packet one-way delay: 135.331 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 33.15 Mbit/s
95th percentile per-packet one-way delay: 132.892 ms
Loss rate: 2.04%
-- Flow 3:
Average throughput: 23.75 Mbit/s
95th percentile per-packet one-way delay: 134.133 ms
Loss rate: 3.00%
```

Run 4: Report of PCC-Vivace — Data Link

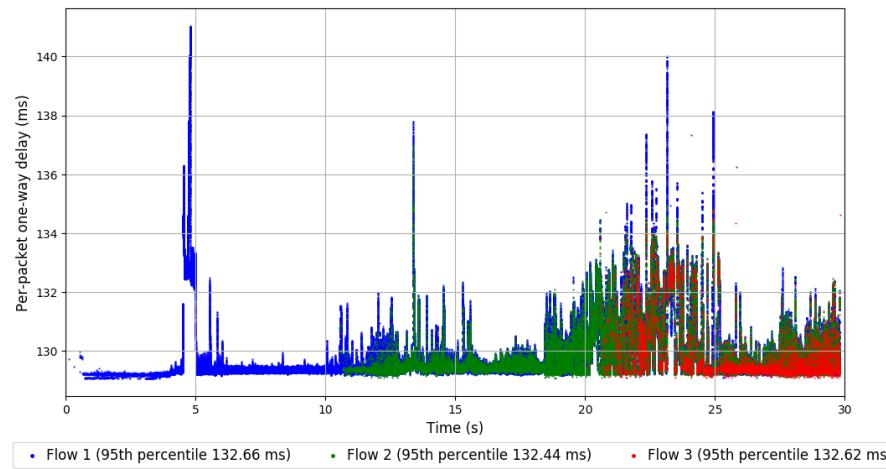
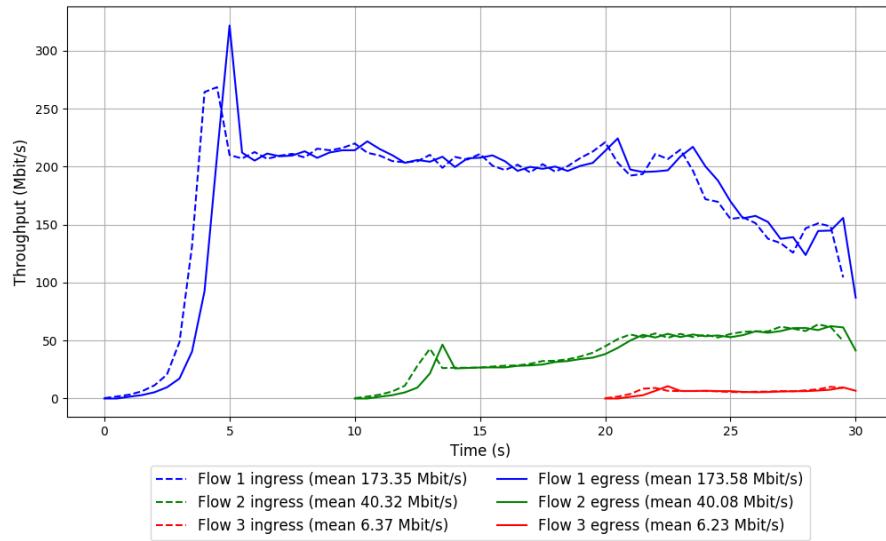


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-03-19 17:29:41
End at: 2019-03-19 17:30:11
Local clock offset: 0.542 ms
Remote clock offset: -36.004 ms

# Below is generated by plot.py at 2019-03-19 18:18:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 202.14 Mbit/s
95th percentile per-packet one-way delay: 132.634 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 173.58 Mbit/s
95th percentile per-packet one-way delay: 132.663 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 40.08 Mbit/s
95th percentile per-packet one-way delay: 132.443 ms
Loss rate: 1.59%
-- Flow 3:
Average throughput: 6.23 Mbit/s
95th percentile per-packet one-way delay: 132.622 ms
Loss rate: 4.01%
```

Run 5: Report of PCC-Vivace — Data Link

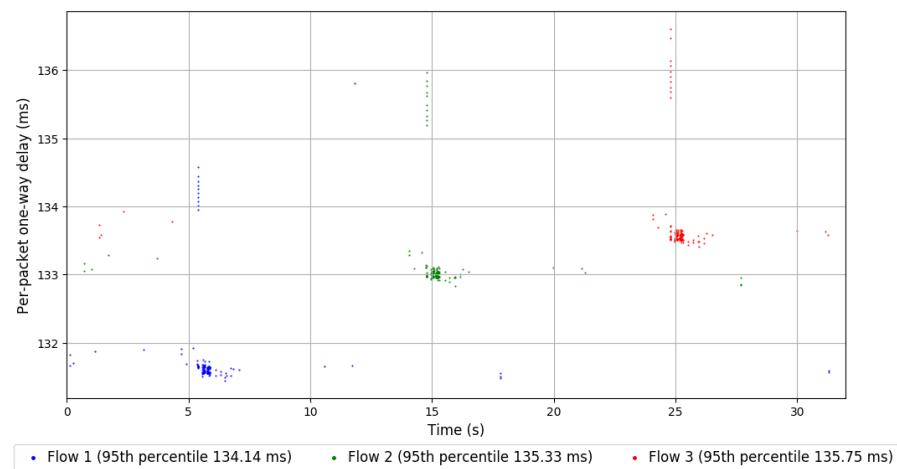
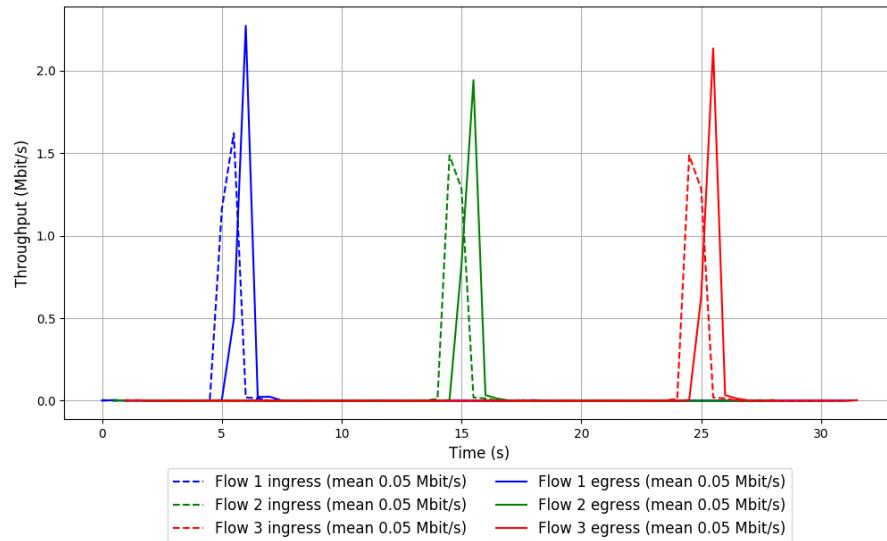


Run 1: Statistics of WebRTC media

```
Start at: 2019-03-19 14:19:13
End at: 2019-03-19 14:19:43
Local clock offset: 0.774 ms
Remote clock offset: -38.676 ms

# Below is generated by plot.py at 2019-03-19 18:18:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 134.437 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 134.138 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 135.329 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 135.751 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

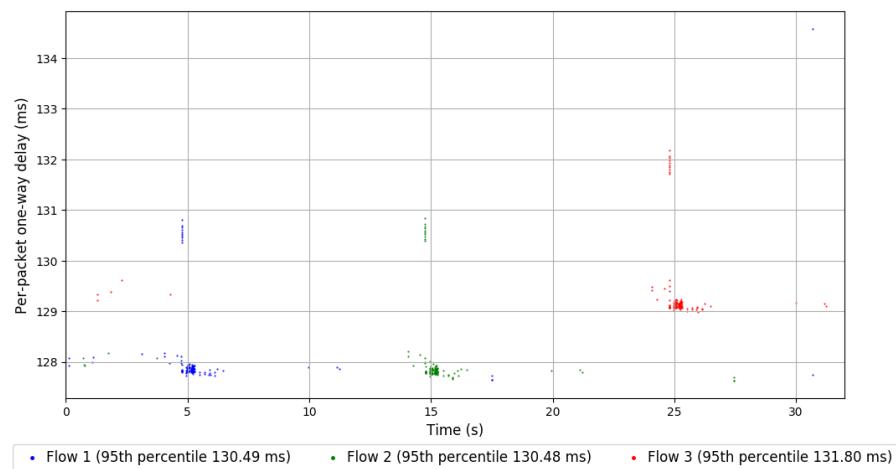
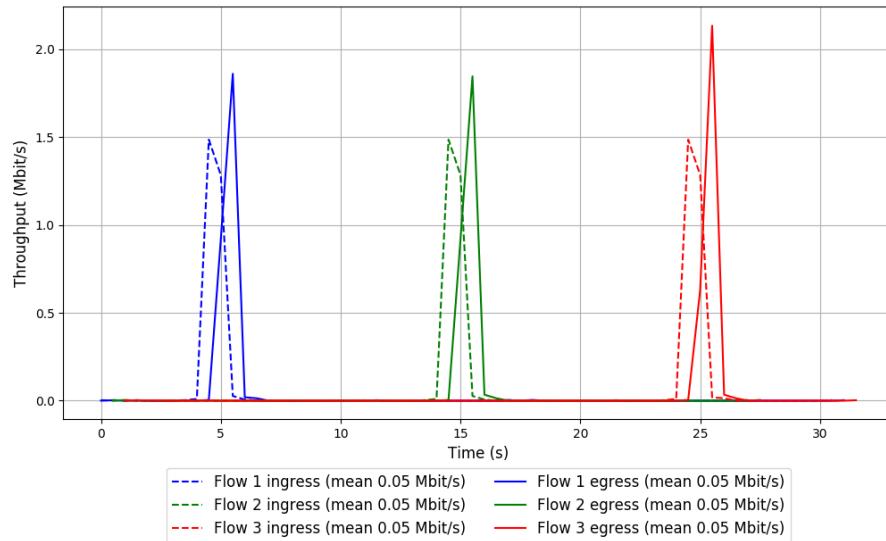


Run 2: Statistics of WebRTC media

```
Start at: 2019-03-19 14:50:53
End at: 2019-03-19 14:51:23
Local clock offset: 1.712 ms
Remote clock offset: -32.528 ms

# Below is generated by plot.py at 2019-03-19 18:18:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 130.519 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 130.487 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 130.481 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 131.803 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

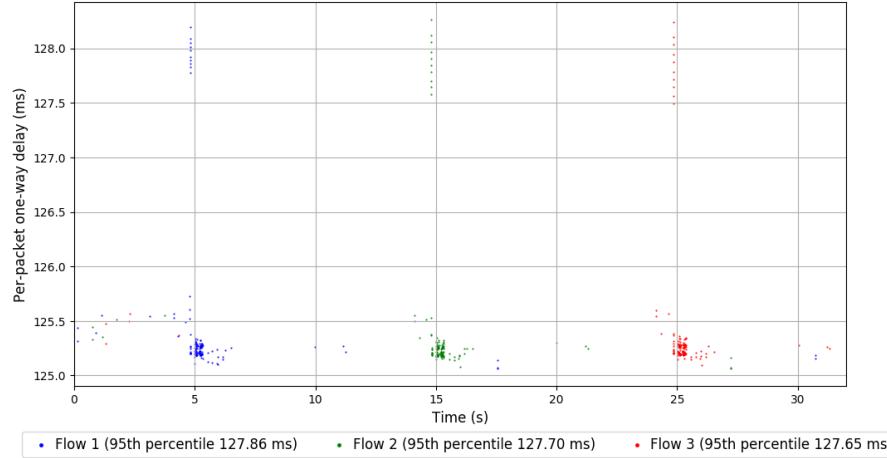
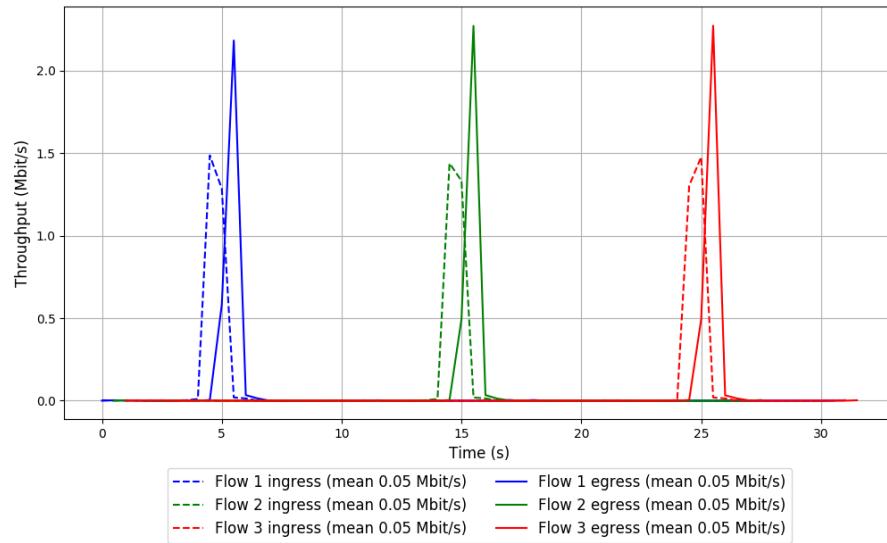


Run 3: Statistics of WebRTC media

```
Start at: 2019-03-19 15:33:30
End at: 2019-03-19 15:34:00
Local clock offset: -0.928 ms
Remote clock offset: -32.673 ms

# Below is generated by plot.py at 2019-03-19 18:18:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 127.776 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 127.856 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 127.702 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 127.646 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

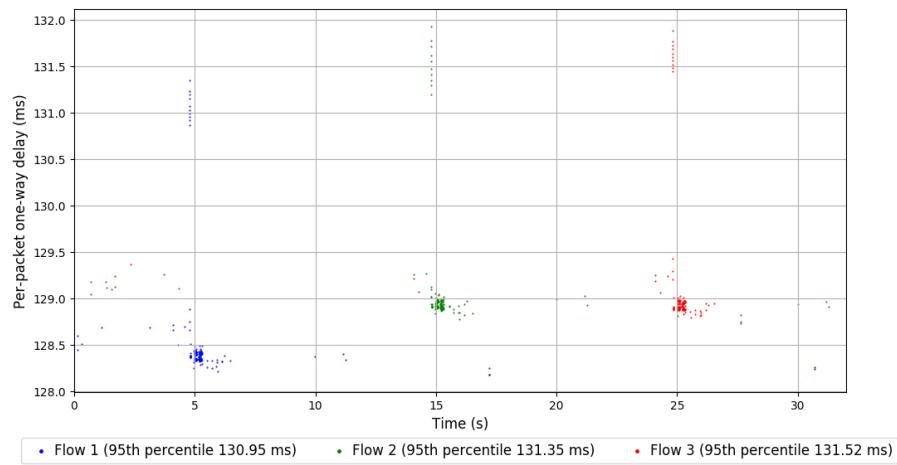
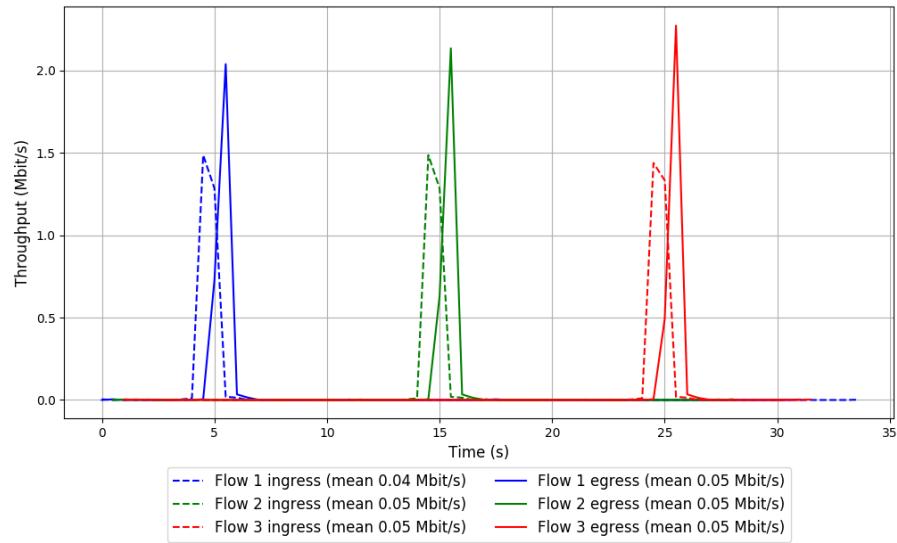


Run 4: Statistics of WebRTC media

```
Start at: 2019-03-19 16:21:24
End at: 2019-03-19 16:21:54
Local clock offset: 0.994 ms
Remote clock offset: -34.863 ms

# Below is generated by plot.py at 2019-03-19 18:18:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 131.195 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 130.954 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 131.350 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 131.517 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

```
Start at: 2019-03-19 17:09:48
End at: 2019-03-19 17:10:18
Local clock offset: 0.644 ms
Remote clock offset: -38.978 ms

# Below is generated by plot.py at 2019-03-19 18:18:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 134.748 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 136.472 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 135.637 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 134.540 ms
Loss rate: 0.05%
```

Run 5: Report of WebRTC media — Data Link

