

Pantheon Report

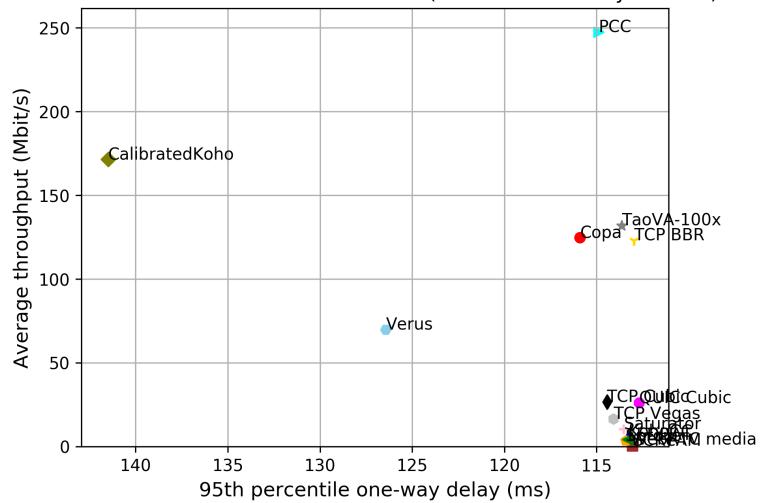
Generated at 2017-08-21 04:55:12 (UTC).
Data path: GCE Tokyo Ethernet (*remote*) → GCE London Ethernet (*local*).
Repeated the test of 15 congestion control schemes 10 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).

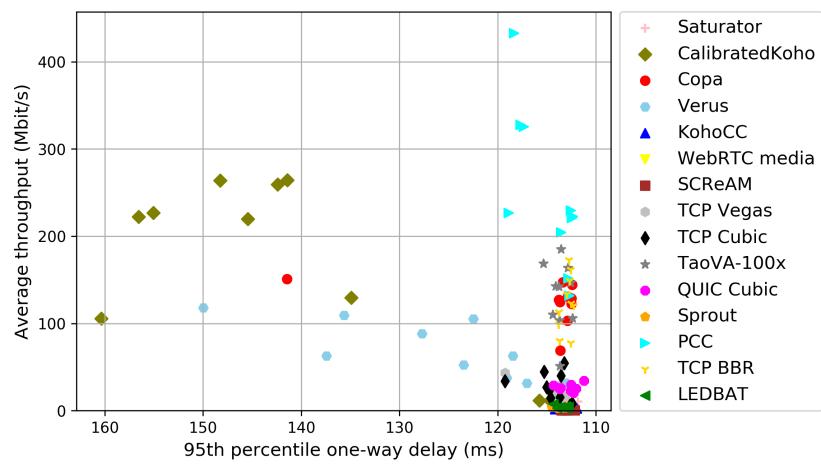
Git summary:

```
branch: master @ e43be7582298d552838afcfc6382342bf187fbbd6
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/genericCC @ dae96123232f1bcb37725348fa2378691ce26725
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-stimuli @ fc73a85ca16c34366d1888dc8a0d0d88d4ebf2a7
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
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/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2ef6e088d91066a9f023df375eee2665089ce
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/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from GCE Tokyo Ethernet to GCE London Ethernet, 10 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE Tokyo Ethernet to GCE London Ethernet, 10 runs of 30s each per scheme
 3 flows with 10s interval between flows



| scheme | # runs | mean avg tput (Mbit/s) | | | mean 95th-%ile delay (ms) | | | mean loss rate (%) | | |
|----------------|--------|------------------------|--------|--------|---------------------------|--------|--------|--------------------|--------|--------|
| | | flow 1 | flow 2 | flow 3 | flow 1 | flow 2 | flow 3 | flow 1 | flow 2 | flow 3 |
| TCP BBR | 10 | 63.91 | 62.45 | 55.40 | 112.66 | 112.92 | 113.08 | 6.25 | 10.37 | 12.61 |
| CalibratedKoho | 10 | 125.56 | 63.04 | 12.69 | 135.07 | 128.72 | 115.88 | 26.89 | 33.28 | 39.54 |
| Copa | 10 | 83.69 | 60.54 | 26.44 | 116.22 | 112.79 | 113.05 | 9.24 | 5.68 | 23.55 |
| TCP Cubic | 10 | 10.61 | 15.45 | 18.21 | 113.18 | 113.96 | 114.53 | 2.84 | 4.24 | 8.83 |
| KohoCC | 10 | 2.90 | 3.02 | 3.82 | 113.16 | 113.19 | 113.26 | 43.25 | 40.10 | 21.77 |
| LEDBAT | 10 | 2.29 | 2.06 | 1.62 | 113.22 | 113.20 | 113.26 | 2.86 | 2.94 | 4.42 |
| PCC | 10 | 166.93 | 89.45 | 67.72 | 114.00 | 113.74 | 115.41 | 25.92 | 27.45 | 21.97 |
| QUIC Cubic | 10 | 0.05 | 25.14 | 29.47 | 111.79 | 111.65 | 112.26 | 0.00 | 0.68 | 2.89 |
| Saturator | 10 | 58.73 | 6.59 | 63.85 | 300.15 | 113.56 | 113.30 | 23.71 | 26.04 | 30.12 |
| SCReAM | 10 | 0.21 | 0.19 | 0.22 | 112.15 | 112.37 | 112.60 | 0.72 | 1.05 | 2.13 |
| Sprout | 10 | 1.90 | 1.58 | 1.60 | 113.37 | 113.21 | 113.18 | 1.97 | 3.63 | 4.52 |
| TaoVA-100x | 10 | 116.80 | 68.13 | 38.37 | 113.31 | 113.68 | 113.22 | 12.16 | 4.65 | 7.50 |
| TCP Vegas | 10 | 4.73 | 12.41 | 11.31 | 113.69 | 113.80 | 113.53 | 3.59 | 2.35 | 6.75 |
| Verus | 10 | 37.91 | 35.53 | 29.81 | 123.09 | 123.61 | 118.20 | 52.47 | 34.37 | 23.44 |
| WebRTC media | 8 | 0.36 | 1.11 | 0.34 | 113.19 | 112.84 | 113.36 | 0.46 | 1.26 | 7.43 |

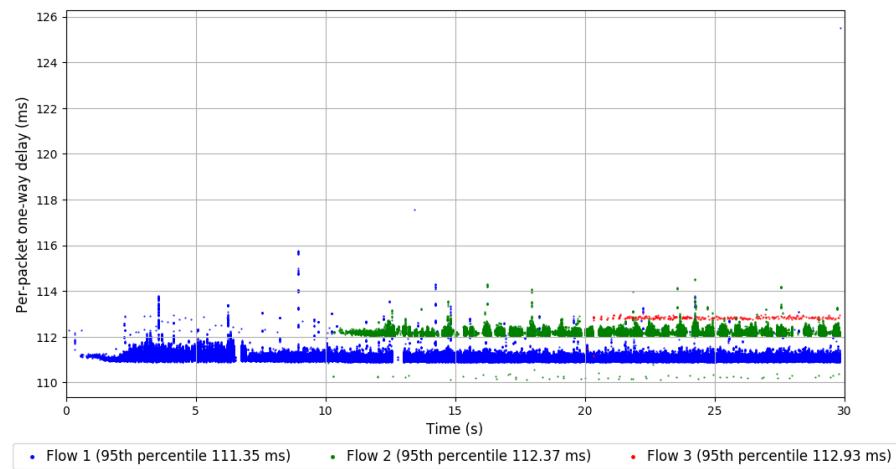
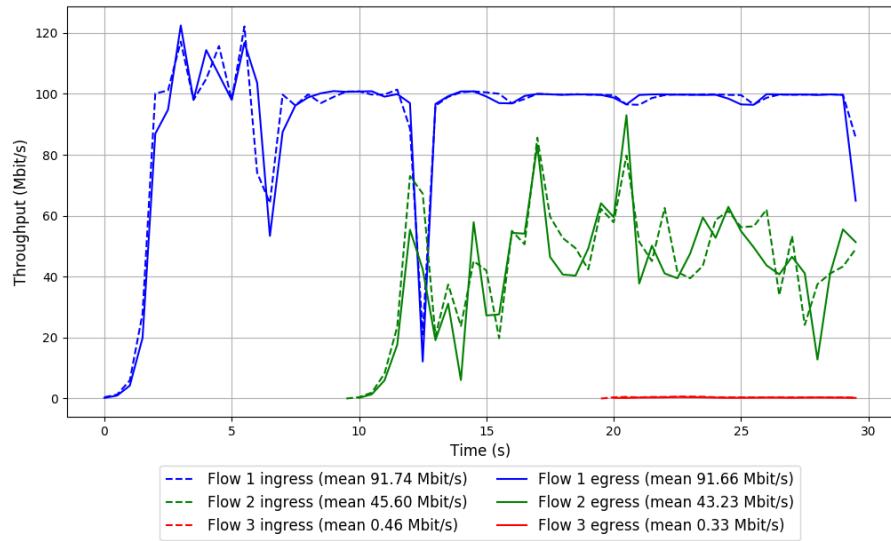
```
Run 1: Statistics of TCP BBR
```

```
Start at: 2017-08-20 23:49:01
```

```
End at: 2017-08-20 23:49:31
```

```
# Below is generated by plot.py at 2017-08-21 04:34:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 120.45 Mbit/s
95th percentile per-packet one-way delay: 112.262 ms
Loss rate: 2.19%
-- Flow 1:
Average throughput: 91.66 Mbit/s
95th percentile per-packet one-way delay: 111.354 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 43.23 Mbit/s
95th percentile per-packet one-way delay: 112.368 ms
Loss rate: 6.26%
-- Flow 3:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 112.931 ms
Loss rate: 30.45%
```

Run 1: Report of TCP BBR — Data Link



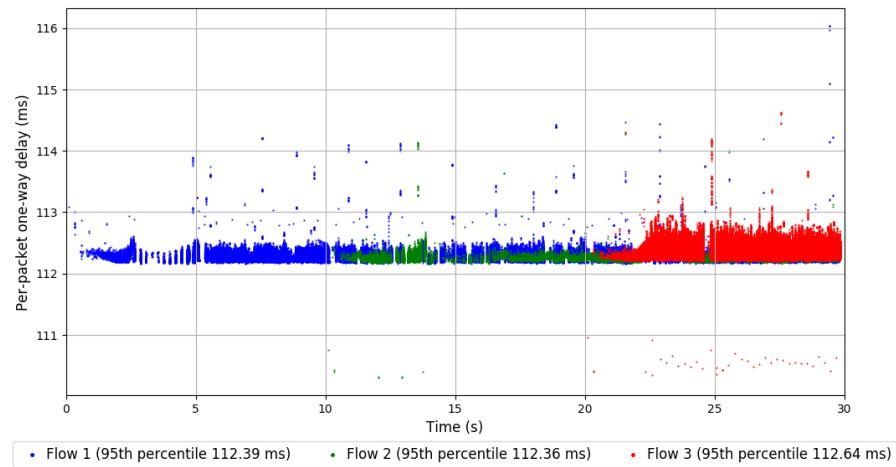
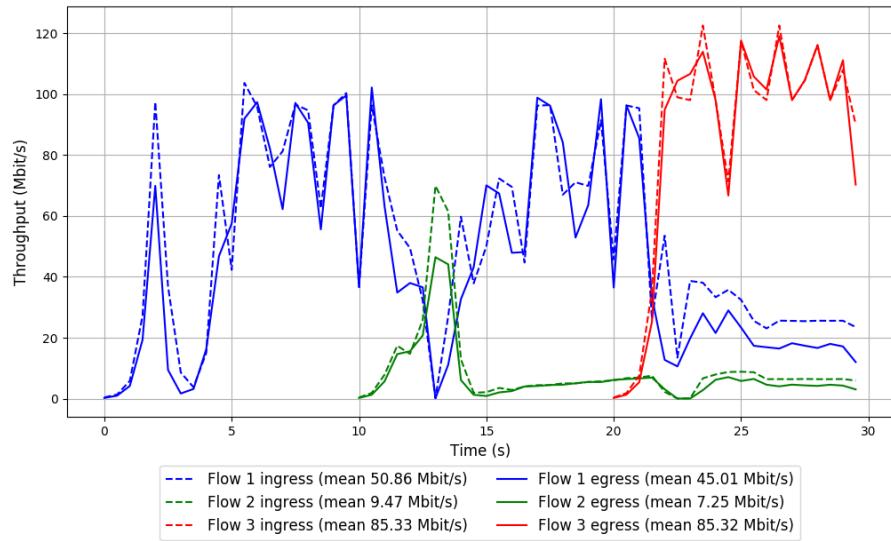
Run 2: Statistics of TCP BBR

Start at: 2017-08-21 00:01:38

End at: 2017-08-21 00:02:08

```
# Below is generated by plot.py at 2017-08-21 04:34:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.68 Mbit/s
95th percentile per-packet one-way delay: 112.566 ms
Loss rate: 9.90%
-- Flow 1:
Average throughput: 45.01 Mbit/s
95th percentile per-packet one-way delay: 112.392 ms
Loss rate: 12.27%
-- Flow 2:
Average throughput: 7.25 Mbit/s
95th percentile per-packet one-way delay: 112.365 ms
Loss rate: 24.43%
-- Flow 3:
Average throughput: 85.32 Mbit/s
95th percentile per-packet one-way delay: 112.639 ms
Loss rate: 2.42%
```

Run 2: Report of TCP BBR — Data Link



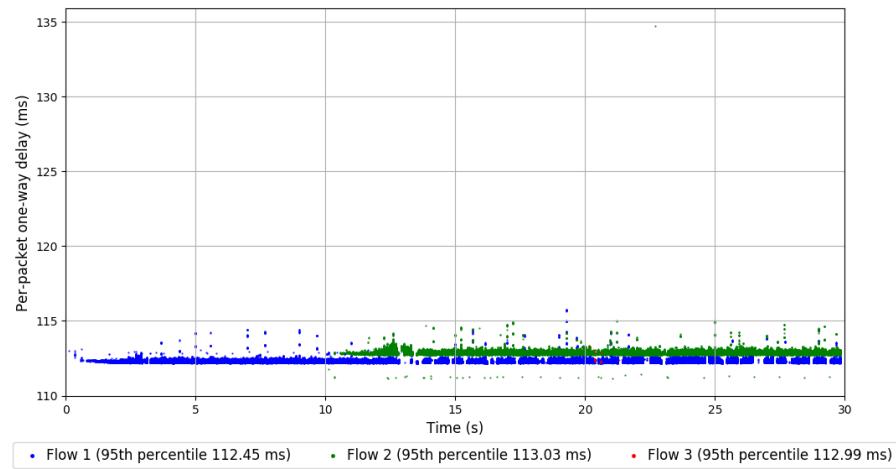
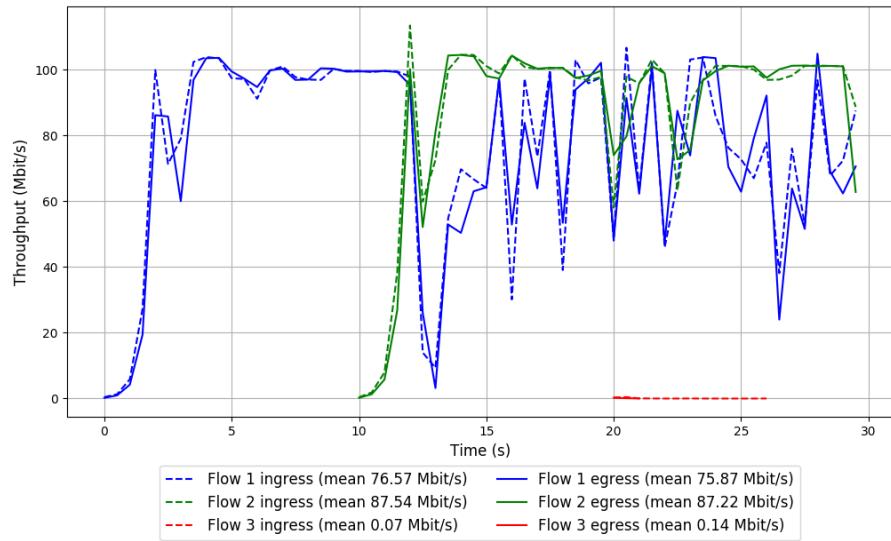
Run 3: Statistics of TCP BBR

Start at: 2017-08-21 00:14:40

End at: 2017-08-21 00:15:10

```
# Below is generated by plot.py at 2017-08-21 04:34:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 133.75 Mbit/s
95th percentile per-packet one-way delay: 112.968 ms
Loss rate: 1.62%
-- Flow 1:
Average throughput: 75.87 Mbit/s
95th percentile per-packet one-way delay: 112.453 ms
Loss rate: 1.71%
-- Flow 2:
Average throughput: 87.22 Mbit/s
95th percentile per-packet one-way delay: 113.031 ms
Loss rate: 1.49%
-- Flow 3:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 112.988 ms
Loss rate: 60.63%
```

Run 3: Report of TCP BBR — Data Link



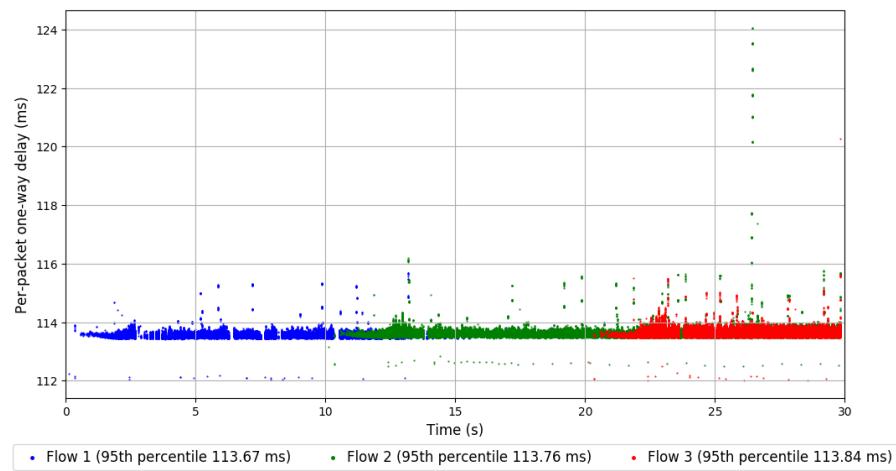
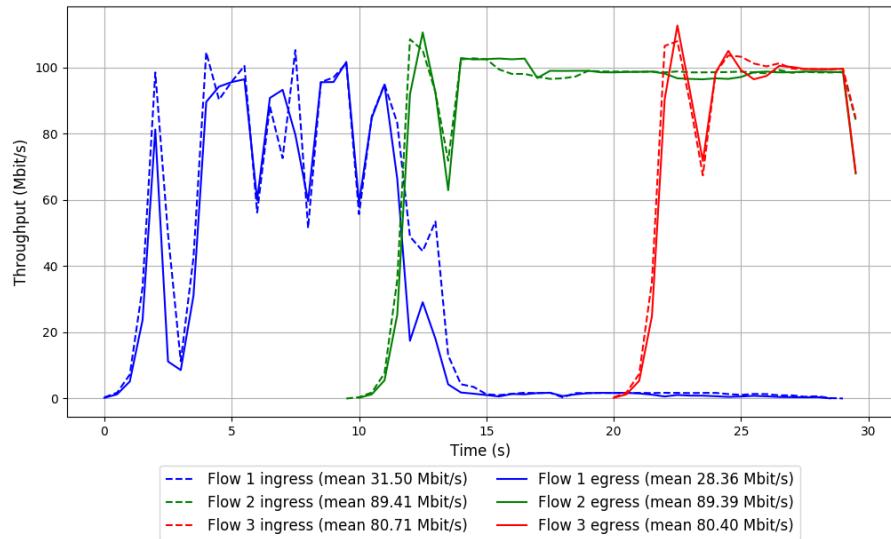
Run 4: Statistics of TCP BBR

Start at: 2017-08-21 00:27:45

End at: 2017-08-21 00:28:15

```
# Below is generated by plot.py at 2017-08-21 04:34:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 112.83 Mbit/s
95th percentile per-packet one-way delay: 113.768 ms
Loss rate: 4.24%
-- Flow 1:
Average throughput: 28.36 Mbit/s
95th percentile per-packet one-way delay: 113.670 ms
Loss rate: 11.43%
-- Flow 2:
Average throughput: 89.39 Mbit/s
95th percentile per-packet one-way delay: 113.759 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 80.40 Mbit/s
95th percentile per-packet one-way delay: 113.839 ms
Loss rate: 2.73%
```

Run 4: Report of TCP BBR — Data Link



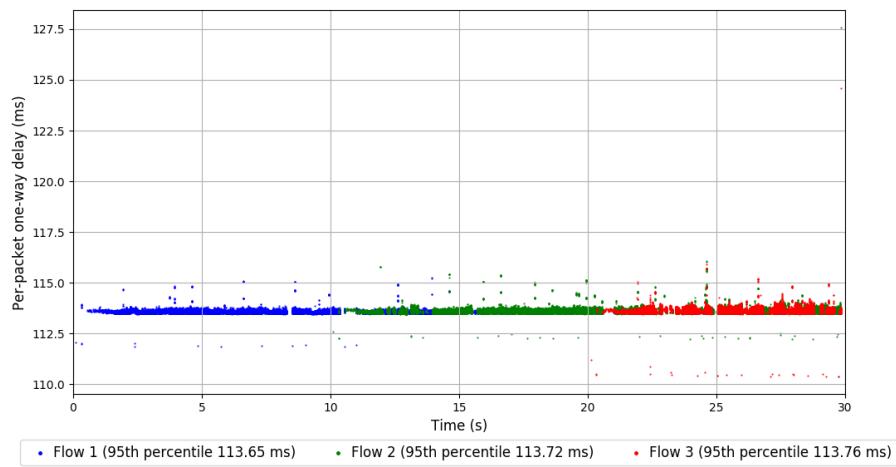
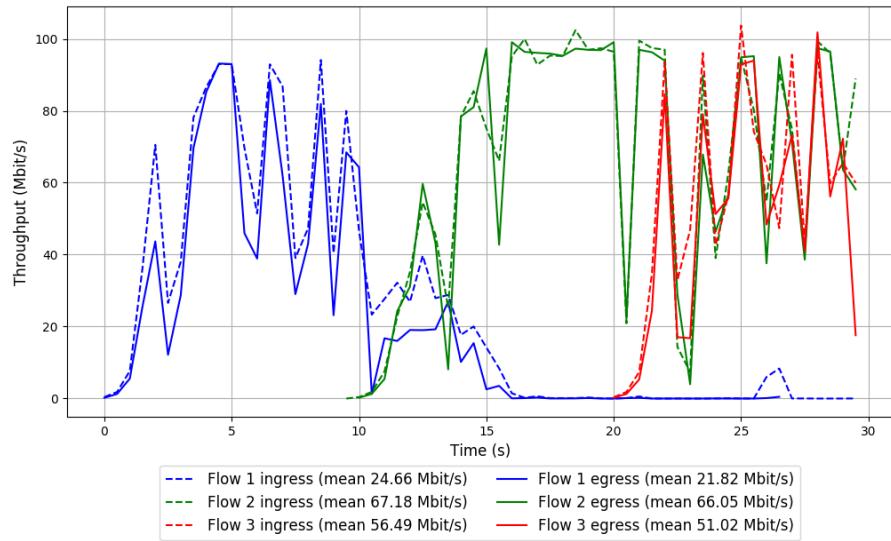
Run 5: Statistics of TCP BBR

Start at: 2017-08-21 00:40:51

End at: 2017-08-21 00:41:21

```
# Below is generated by plot.py at 2017-08-21 04:34:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.95 Mbit/s
95th percentile per-packet one-way delay: 113.715 ms
Loss rate: 9.79%
-- Flow 1:
Average throughput: 21.82 Mbit/s
95th percentile per-packet one-way delay: 113.648 ms
Loss rate: 21.19%
-- Flow 2:
Average throughput: 66.05 Mbit/s
95th percentile per-packet one-way delay: 113.717 ms
Loss rate: 2.79%
-- Flow 3:
Average throughput: 51.02 Mbit/s
95th percentile per-packet one-way delay: 113.763 ms
Loss rate: 11.64%
```

Run 5: Report of TCP BBR — Data Link



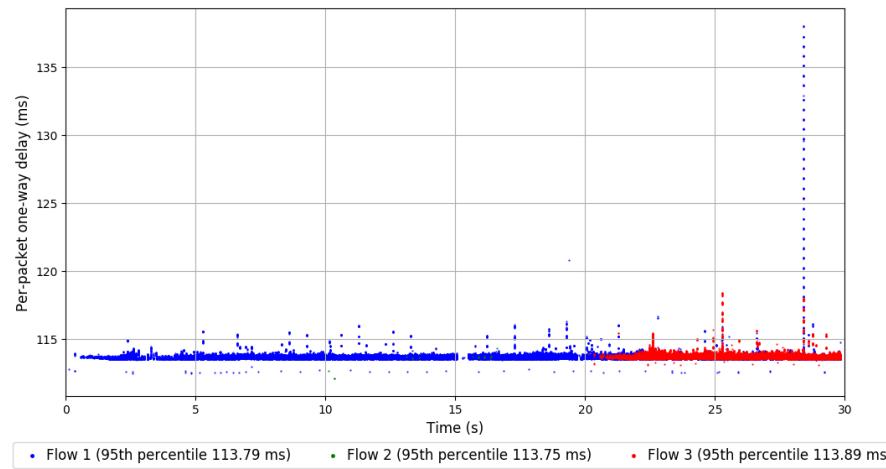
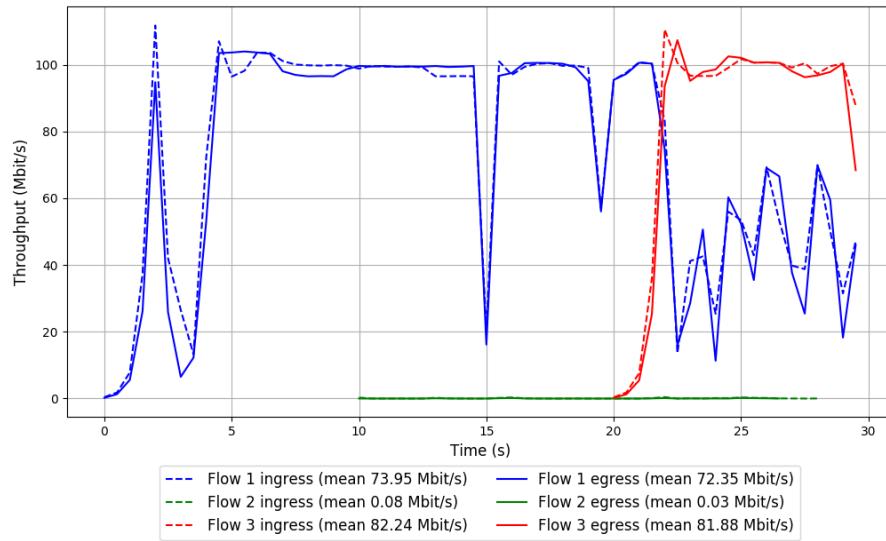
Run 6: Statistics of TCP BBR

Start at: 2017-08-21 00:53:44

End at: 2017-08-21 00:54:14

```
# Below is generated by plot.py at 2017-08-21 04:34:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.10 Mbit/s
95th percentile per-packet one-way delay: 113.824 ms
Loss rate: 2.93%
-- Flow 1:
Average throughput: 72.35 Mbit/s
95th percentile per-packet one-way delay: 113.789 ms
Loss rate: 2.95%
-- Flow 2:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 113.755 ms
Loss rate: 63.60%
-- Flow 3:
Average throughput: 81.88 Mbit/s
95th percentile per-packet one-way delay: 113.888 ms
Loss rate: 2.78%
```

Run 6: Report of TCP BBR — Data Link



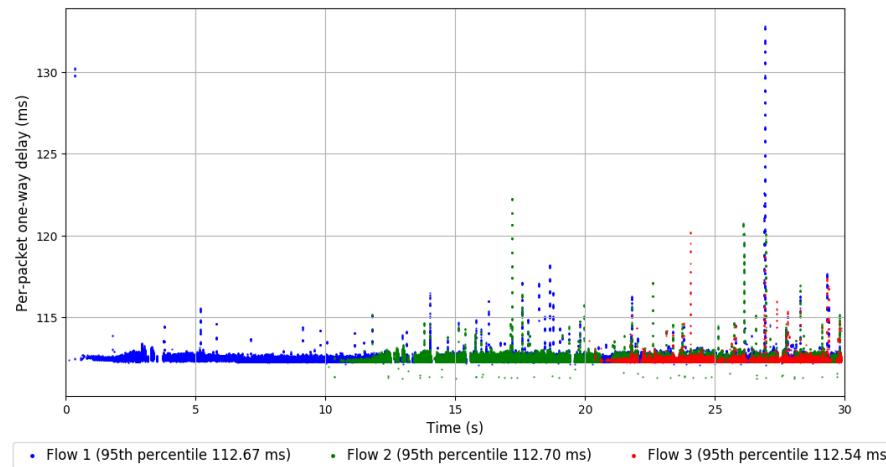
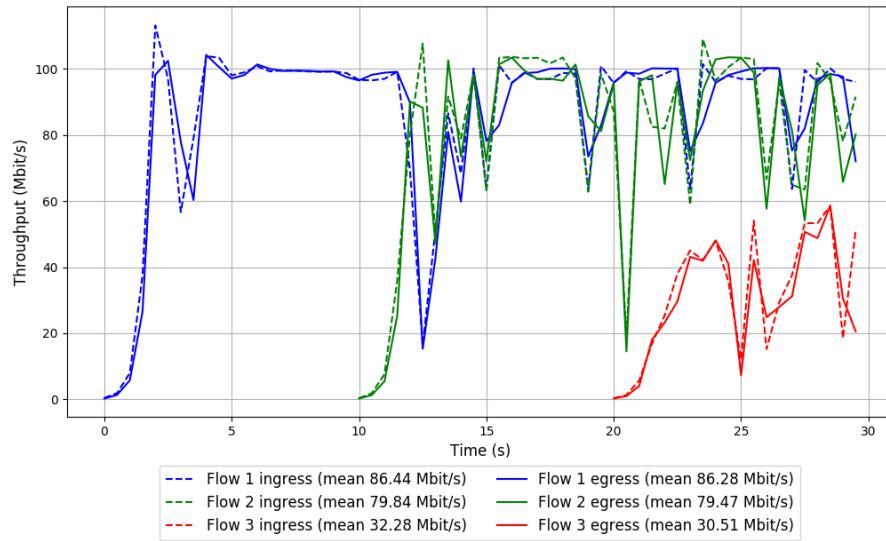
Run 7: Statistics of TCP BBR

Start at: 2017-08-21 01:06:54

End at: 2017-08-21 01:07:24

```
# Below is generated by plot.py at 2017-08-21 04:35:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 148.93 Mbit/s
95th percentile per-packet one-way delay: 112.678 ms
Loss rate: 1.70%
-- Flow 1:
Average throughput: 86.28 Mbit/s
95th percentile per-packet one-way delay: 112.670 ms
Loss rate: 1.04%
-- Flow 2:
Average throughput: 79.47 Mbit/s
95th percentile per-packet one-way delay: 112.703 ms
Loss rate: 1.58%
-- Flow 3:
Average throughput: 30.51 Mbit/s
95th percentile per-packet one-way delay: 112.536 ms
Loss rate: 7.61%
```

Run 7: Report of TCP BBR — Data Link



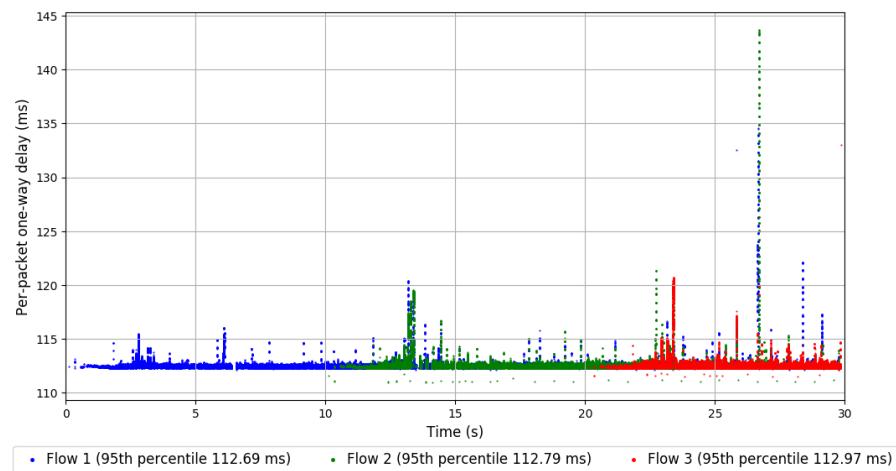
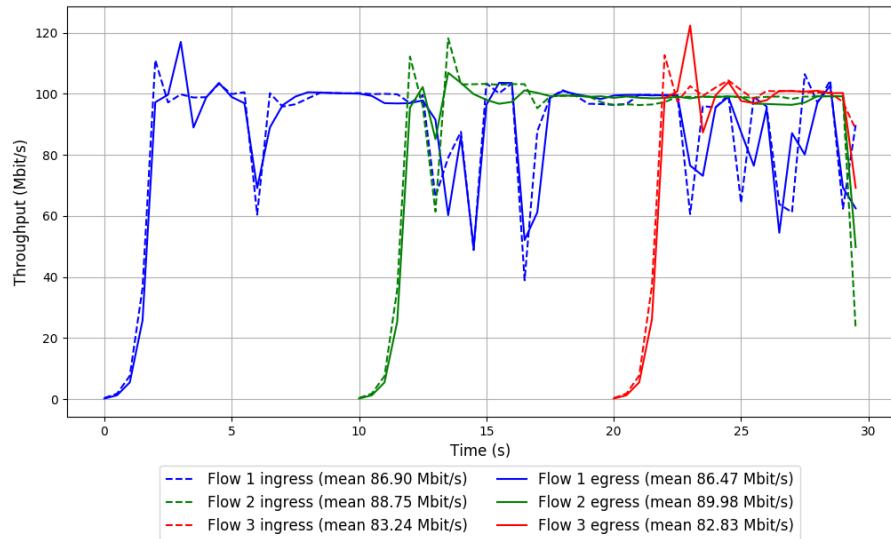
Run 8: Statistics of TCP BBR

Start at: 2017-08-21 01:20:01

End at: 2017-08-21 01:20:31

```
# Below is generated by plot.py at 2017-08-21 04:35:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 172.81 Mbit/s
95th percentile per-packet one-way delay: 112.766 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 86.47 Mbit/s
95th percentile per-packet one-way delay: 112.685 ms
Loss rate: 1.32%
-- Flow 2:
Average throughput: 89.98 Mbit/s
95th percentile per-packet one-way delay: 112.787 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 82.83 Mbit/s
95th percentile per-packet one-way delay: 112.972 ms
Loss rate: 2.62%
```

Run 8: Report of TCP BBR — Data Link



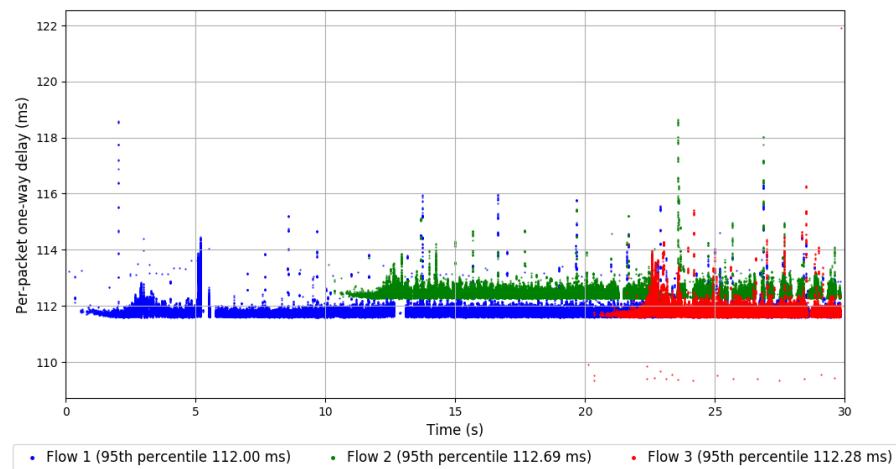
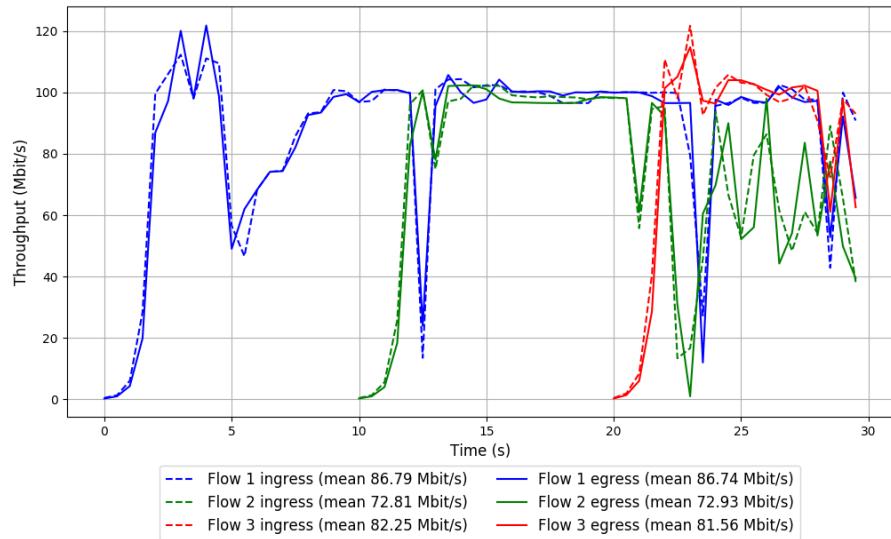
Run 9: Statistics of TCP BBR

Start at: 2017-08-21 01:32:56

End at: 2017-08-21 01:33:26

```
# Below is generated by plot.py at 2017-08-21 04:35:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 161.69 Mbit/s
95th percentile per-packet one-way delay: 112.575 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 86.74 Mbit/s
95th percentile per-packet one-way delay: 111.997 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 72.93 Mbit/s
95th percentile per-packet one-way delay: 112.691 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 81.56 Mbit/s
95th percentile per-packet one-way delay: 112.285 ms
Loss rate: 3.08%
```

Run 9: Report of TCP BBR — Data Link



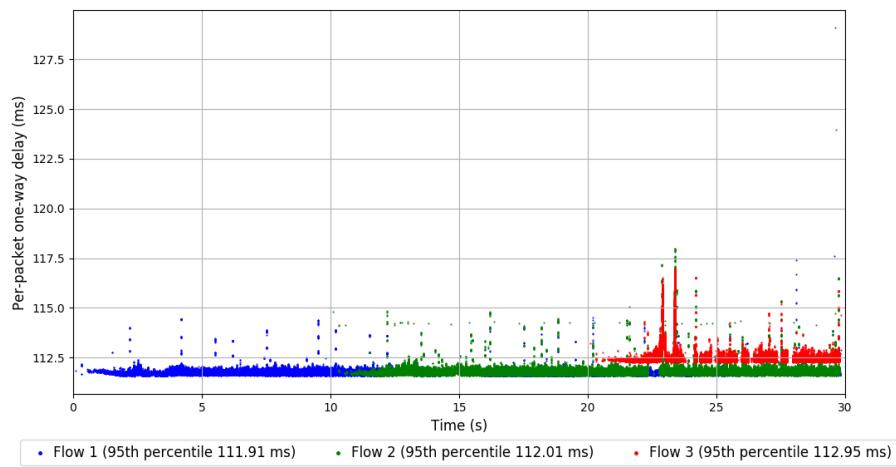
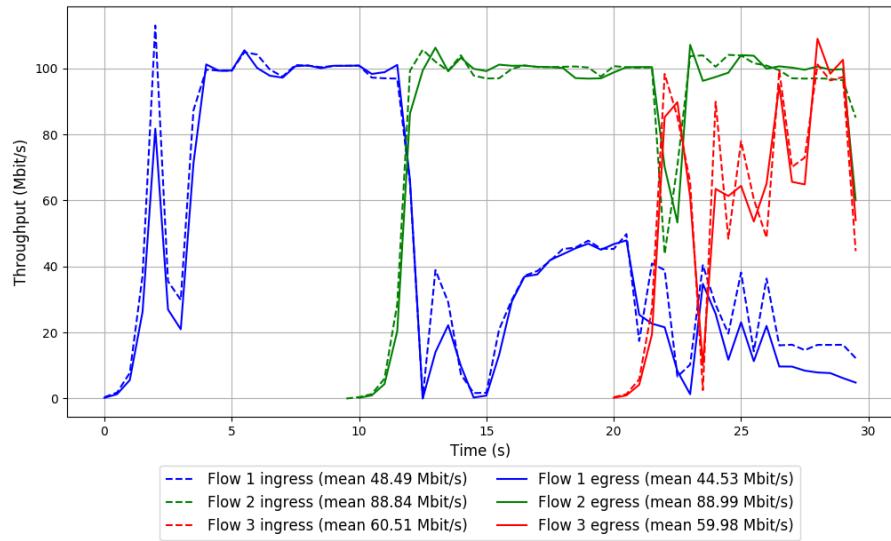
Run 10: Statistics of TCP BBR

Start at: 2017-08-21 01:45:51

End at: 2017-08-21 01:46:21

```
# Below is generated by plot.py at 2017-08-21 04:35:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 123.05 Mbit/s
95th percentile per-packet one-way delay: 112.547 ms
Loss rate: 4.18%
-- Flow 1:
Average throughput: 44.53 Mbit/s
95th percentile per-packet one-way delay: 111.905 ms
Loss rate: 8.84%
-- Flow 2:
Average throughput: 88.99 Mbit/s
95th percentile per-packet one-way delay: 112.006 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 59.98 Mbit/s
95th percentile per-packet one-way delay: 112.952 ms
Loss rate: 2.16%
```

Run 10: Report of TCP BBR — Data Link

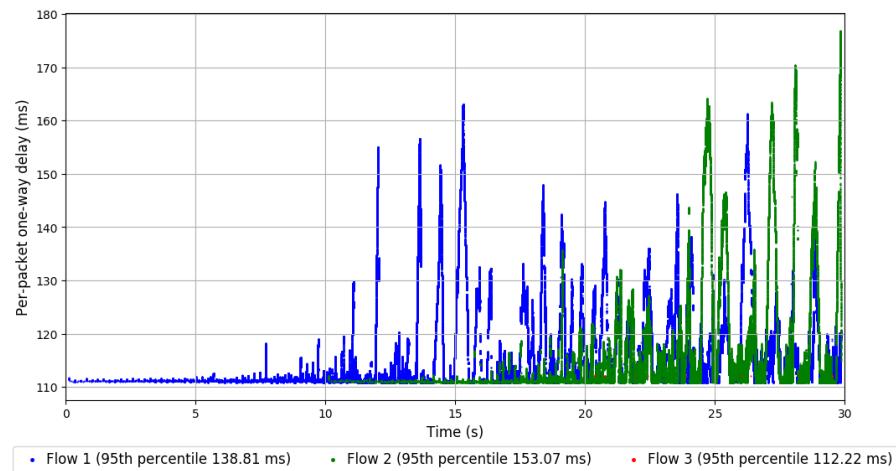
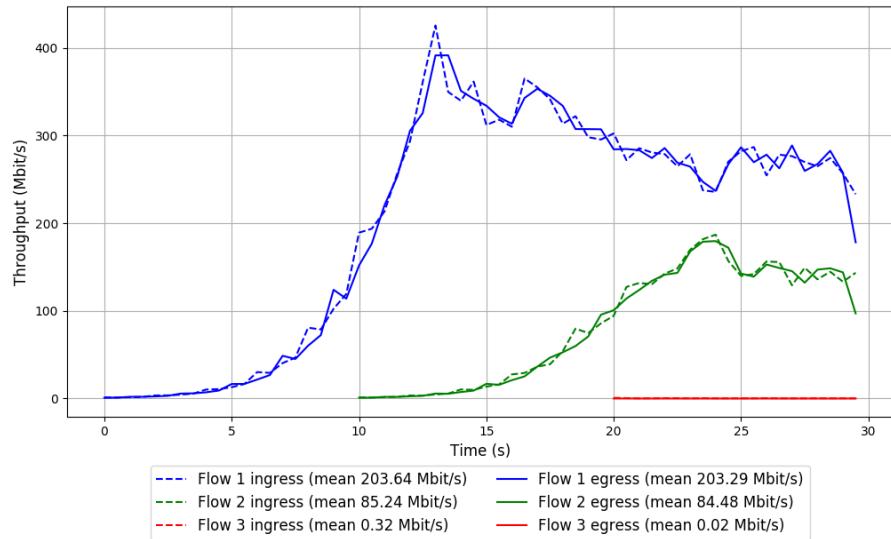


```
Run 1: Statistics of CalibratedKoho

Start at: 2017-08-20 23:43:50
End at: 2017-08-20 23:44:20

# Below is generated by plot.py at 2017-08-21 04:36:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 259.29 Mbit/s
95th percentile per-packet one-way delay: 142.419 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 203.29 Mbit/s
95th percentile per-packet one-way delay: 138.808 ms
Loss rate: 0.91%
-- Flow 2:
Average throughput: 84.48 Mbit/s
95th percentile per-packet one-way delay: 153.068 ms
Loss rate: 1.94%
-- Flow 3:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 112.218 ms
Loss rate: 95.44%
```

Run 1: Report of CalibratedKoho — Data Link



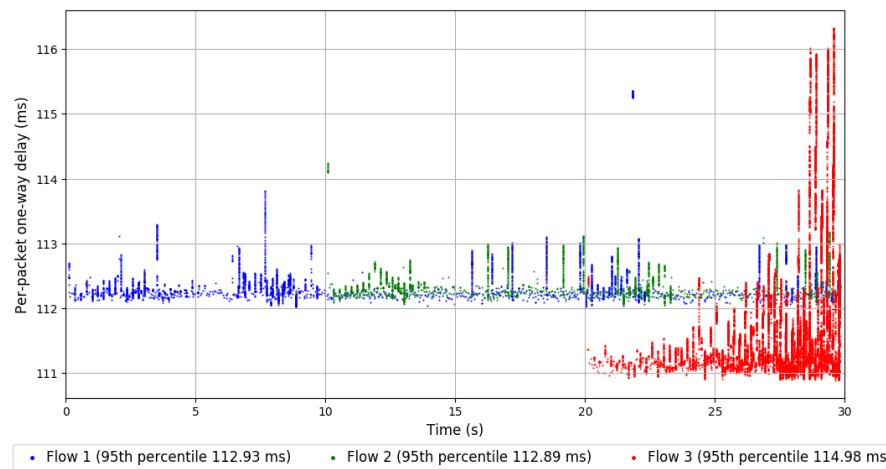
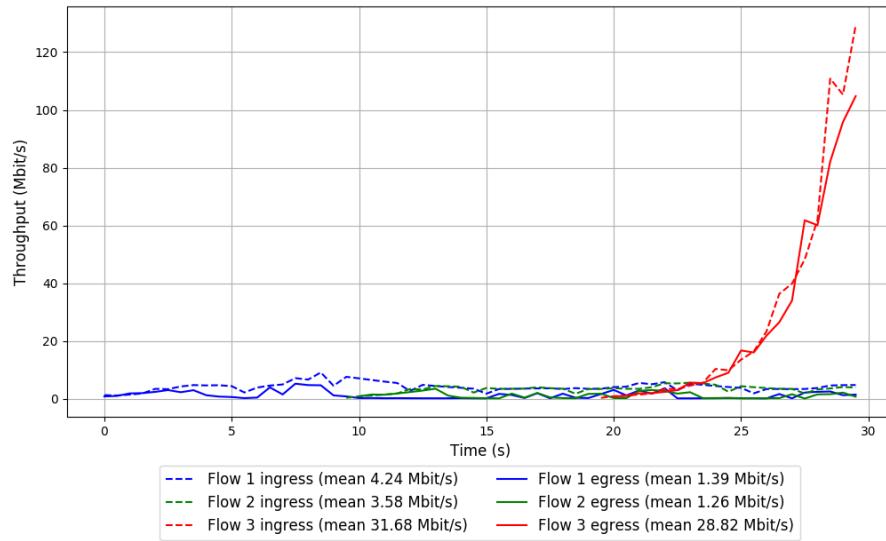
```
Run 2: Statistics of CalibratedKoho
```

```
Start at: 2017-08-20 23:56:42
```

```
End at: 2017-08-20 23:57:12
```

```
# Below is generated by plot.py at 2017-08-21 04:36:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.63 Mbit/s
95th percentile per-packet one-way delay: 114.649 ms
Loss rate: 32.59%
-- Flow 1:
Average throughput: 1.39 Mbit/s
95th percentile per-packet one-way delay: 112.927 ms
Loss rate: 67.50%
-- Flow 2:
Average throughput: 1.26 Mbit/s
95th percentile per-packet one-way delay: 112.892 ms
Loss rate: 65.25%
-- Flow 3:
Average throughput: 28.82 Mbit/s
95th percentile per-packet one-way delay: 114.983 ms
Loss rate: 11.08%
```

Run 2: Report of CalibratedKoho — Data Link



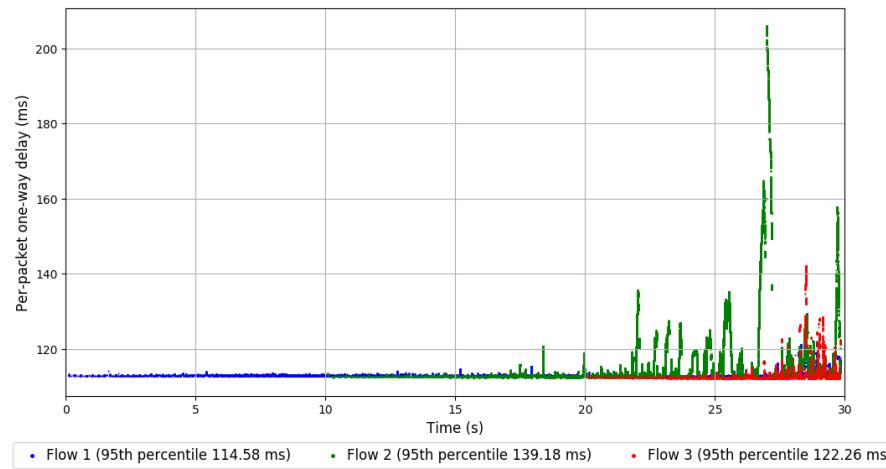
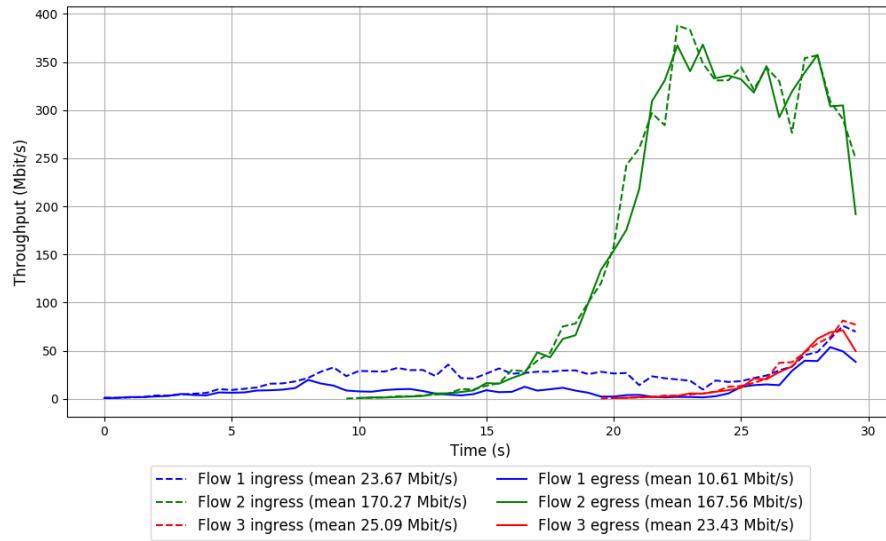
```
Run 3: Statistics of CalibratedKoho
```

```
Start at: 2017-08-21 00:09:35
```

```
End at: 2017-08-21 00:10:05
```

```
# Below is generated by plot.py at 2017-08-21 04:36:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 129.51 Mbit/s
95th percentile per-packet one-way delay: 134.929 ms
Loss rate: 11.64%
-- Flow 1:
Average throughput: 10.61 Mbit/s
95th percentile per-packet one-way delay: 114.576 ms
Loss rate: 55.48%
-- Flow 2:
Average throughput: 167.56 Mbit/s
95th percentile per-packet one-way delay: 139.175 ms
Loss rate: 2.70%
-- Flow 3:
Average throughput: 23.43 Mbit/s
95th percentile per-packet one-way delay: 122.260 ms
Loss rate: 8.75%
```

Run 3: Report of CalibratedKoho — Data Link



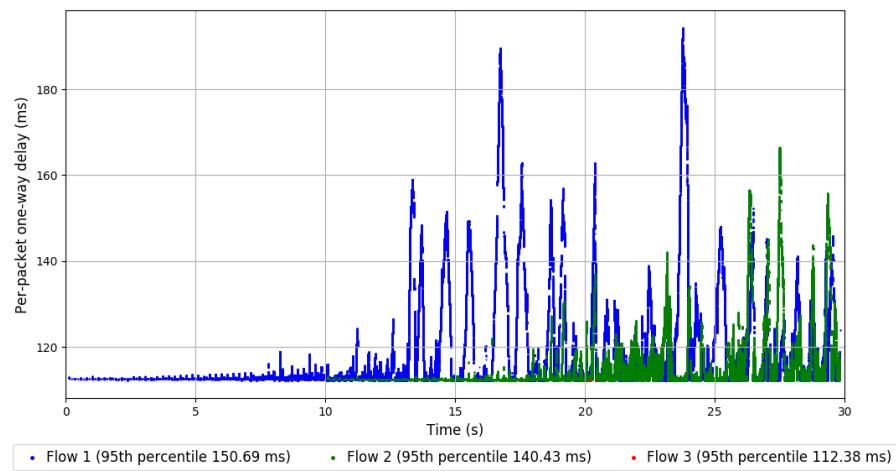
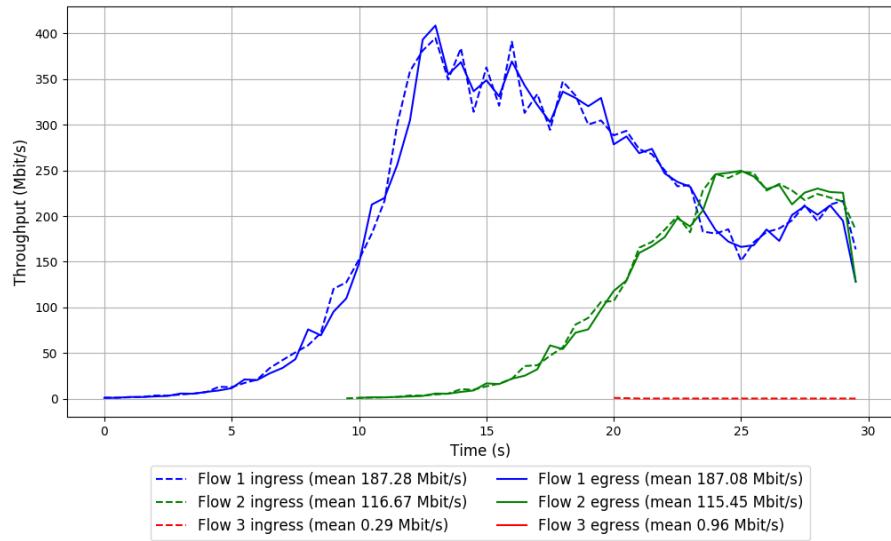
```
Run 4: Statistics of CalibratedKoho
```

```
Start at: 2017-08-21 00:22:33
```

```
End at: 2017-08-21 00:23:03
```

```
# Below is generated by plot.py at 2017-08-21 04:37:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 263.72 Mbit/s
95th percentile per-packet one-way delay: 148.240 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 187.08 Mbit/s
95th percentile per-packet one-way delay: 150.689 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 115.45 Mbit/s
95th percentile per-packet one-way delay: 140.425 ms
Loss rate: 2.16%
-- Flow 3:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 112.380 ms
Loss rate: 92.47%
```

Run 4: Report of CalibratedKoho — Data Link



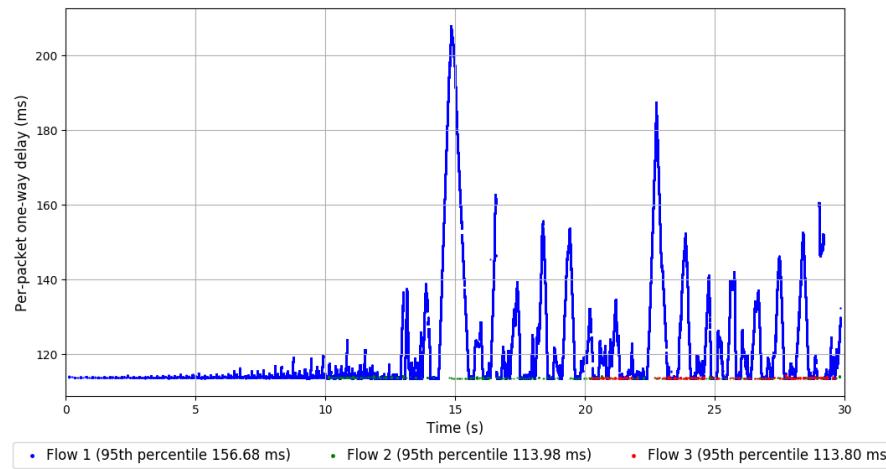
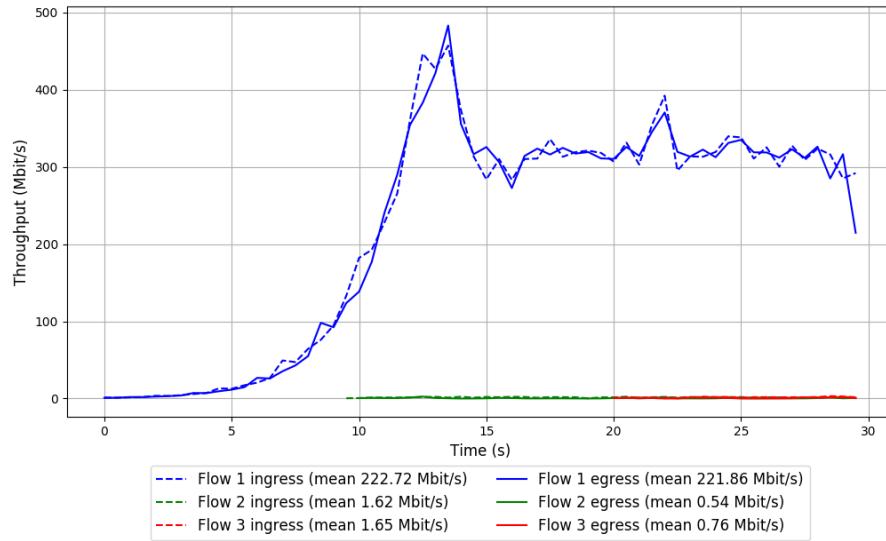
```
Run 5: Statistics of CalibratedKoho
```

```
Start at: 2017-08-21 00:35:37
```

```
End at: 2017-08-21 00:36:07
```

```
# Below is generated by plot.py at 2017-08-21 04:37:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 222.45 Mbit/s
95th percentile per-packet one-way delay: 156.574 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 221.86 Mbit/s
95th percentile per-packet one-way delay: 156.682 ms
Loss rate: 1.14%
-- Flow 2:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 113.985 ms
Loss rate: 67.06%
-- Flow 3:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 113.795 ms
Loss rate: 55.50%
```

Run 5: Report of CalibratedKoho — Data Link



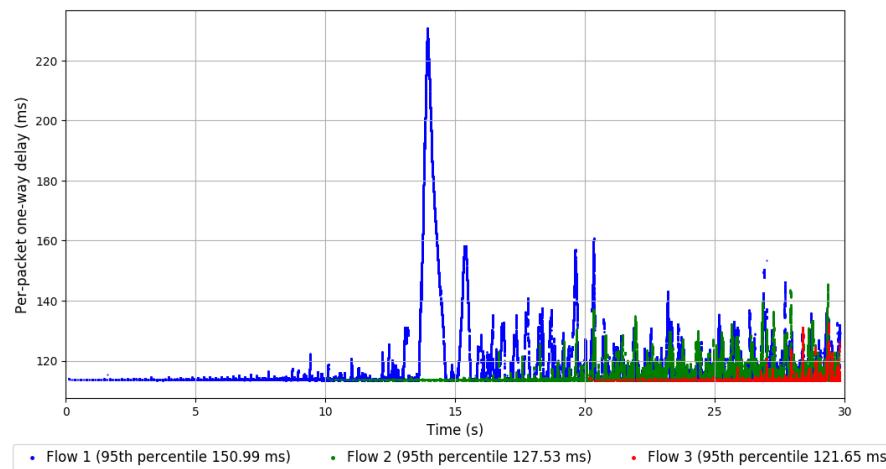
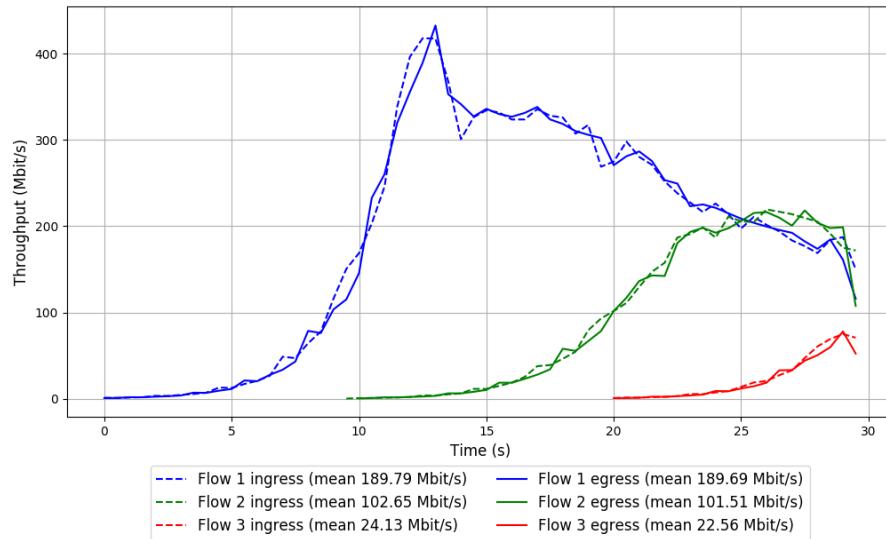
```
Run 6: Statistics of CalibratedKoho
```

```
Start at: 2017-08-21 00:48:29
```

```
End at: 2017-08-21 00:48:59
```

```
# Below is generated by plot.py at 2017-08-21 04:38:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 264.41 Mbit/s
95th percentile per-packet one-way delay: 141.430 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 189.69 Mbit/s
95th percentile per-packet one-way delay: 150.994 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 101.51 Mbit/s
95th percentile per-packet one-way delay: 127.534 ms
Loss rate: 2.23%
-- Flow 3:
Average throughput: 22.56 Mbit/s
95th percentile per-packet one-way delay: 121.647 ms
Loss rate: 8.64%
```

Run 6: Report of CalibratedKoho — Data Link



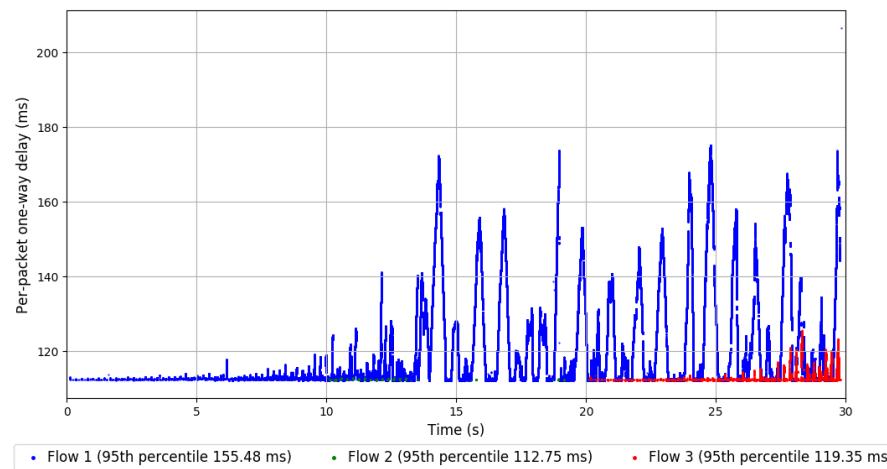
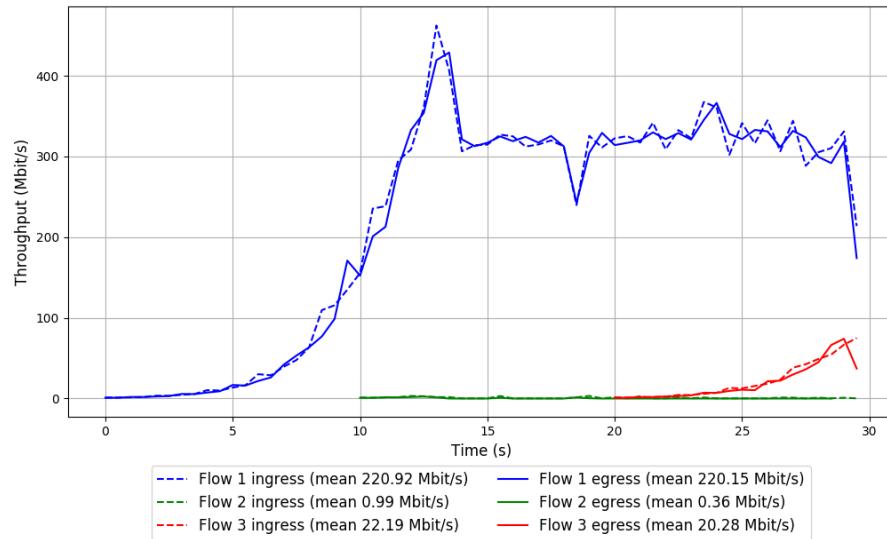
Run 7: Statistics of CalibratedKoho

Start at: 2017-08-21 01:01:36

End at: 2017-08-21 01:02:06

```
# Below is generated by plot.py at 2017-08-21 04:38:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 226.98 Mbit/s
95th percentile per-packet one-way delay: 155.054 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 220.15 Mbit/s
95th percentile per-packet one-way delay: 155.478 ms
Loss rate: 1.06%
-- Flow 2:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 112.752 ms
Loss rate: 65.51%
-- Flow 3:
Average throughput: 20.28 Mbit/s
95th percentile per-packet one-way delay: 119.353 ms
Loss rate: 10.69%
```

Run 7: Report of CalibratedKoho — Data Link



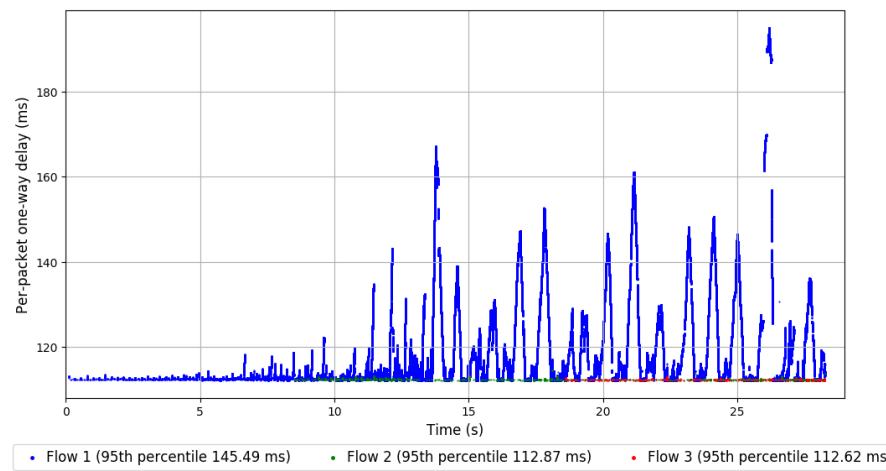
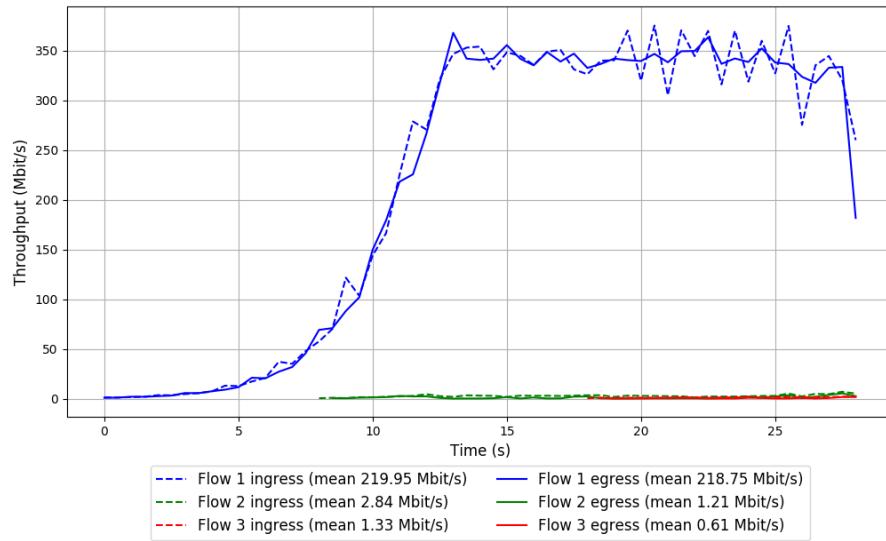
Run 8: Statistics of CalibratedKoho

Start at: 2017-08-21 01:14:52

End at: 2017-08-21 01:15:22

```
# Below is generated by plot.py at 2017-08-21 04:38:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 219.79 Mbit/s
95th percentile per-packet one-way delay: 145.447 ms
Loss rate: 1.95%
-- Flow 1:
Average throughput: 218.75 Mbit/s
95th percentile per-packet one-way delay: 145.493 ms
Loss rate: 1.33%
-- Flow 2:
Average throughput: 1.21 Mbit/s
95th percentile per-packet one-way delay: 112.872 ms
Loss rate: 57.60%
-- Flow 3:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 112.618 ms
Loss rate: 55.53%
```

Run 8: Report of CalibratedKoho — Data Link



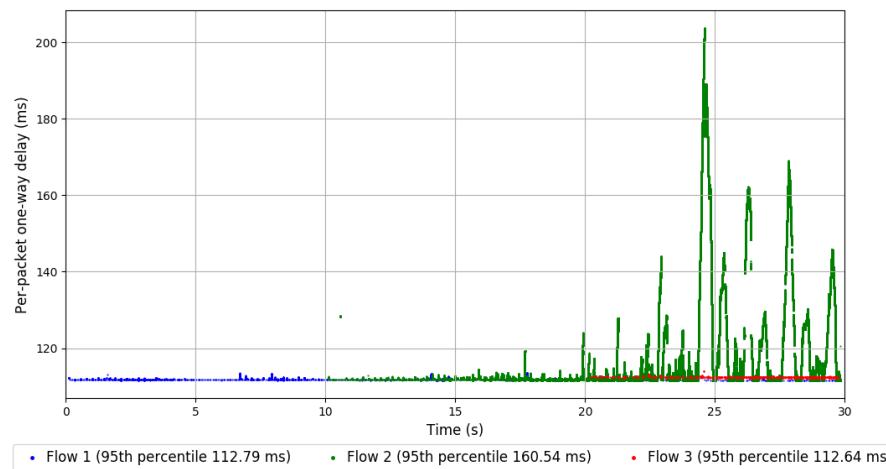
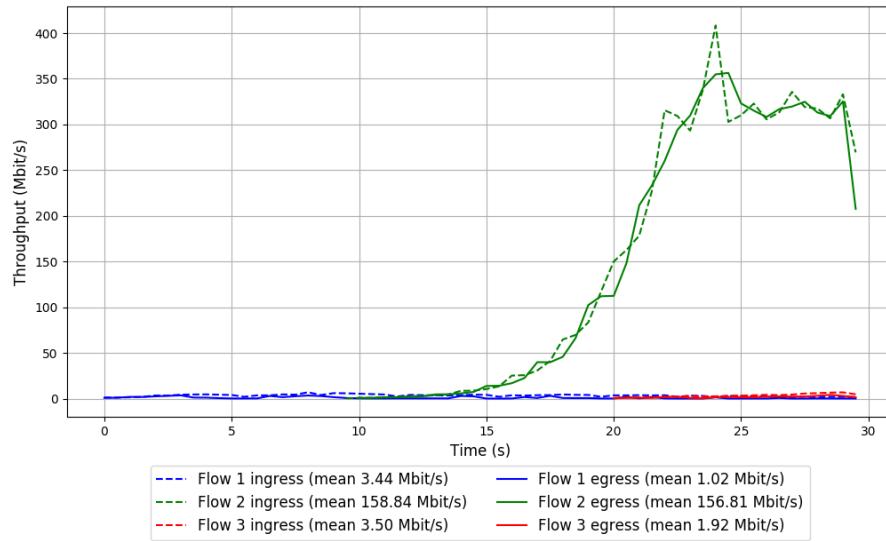
```
Run 9: Statistics of CalibratedKoho
```

```
Start at: 2017-08-21 01:27:54
```

```
End at: 2017-08-21 01:28:24
```

```
# Below is generated by plot.py at 2017-08-21 04:38:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 105.74 Mbit/s
95th percentile per-packet one-way delay: 160.371 ms
Loss rate: 4.92%
-- Flow 1:
Average throughput: 1.02 Mbit/s
95th percentile per-packet one-way delay: 112.791 ms
Loss rate: 70.42%
-- Flow 2:
Average throughput: 156.81 Mbit/s
95th percentile per-packet one-way delay: 160.541 ms
Loss rate: 2.33%
-- Flow 3:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 112.639 ms
Loss rate: 47.06%
```

Run 9: Report of CalibratedKoho — Data Link

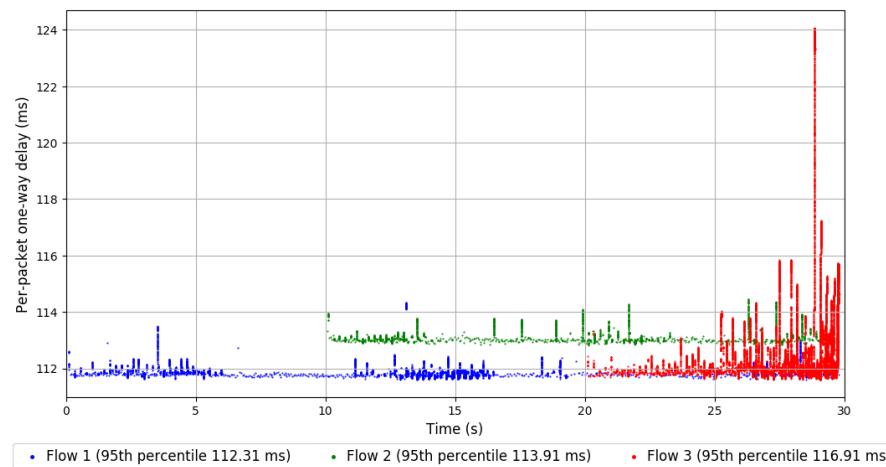
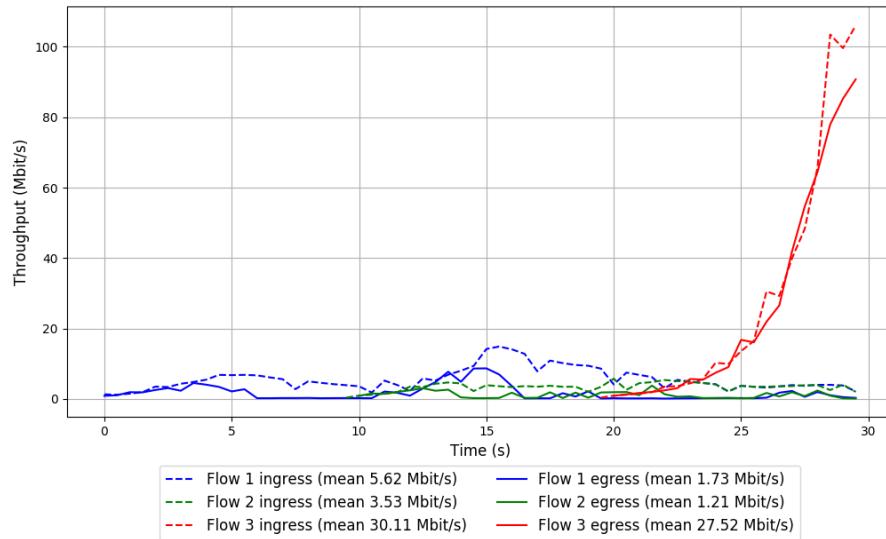


```
Run 10: Statistics of CalibratedKoho

Start at: 2017-08-21 01:41:00
End at: 2017-08-21 01:41:30

# Below is generated by plot.py at 2017-08-21 04:38:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.54 Mbit/s
95th percentile per-packet one-way delay: 115.736 ms
Loss rate: 36.10%
-- Flow 1:
Average throughput: 1.73 Mbit/s
95th percentile per-packet one-way delay: 112.310 ms
Loss rate: 69.46%
-- Flow 2:
Average throughput: 1.21 Mbit/s
95th percentile per-packet one-way delay: 113.910 ms
Loss rate: 66.03%
-- Flow 3:
Average throughput: 27.52 Mbit/s
95th percentile per-packet one-way delay: 116.906 ms
Loss rate: 10.22%
```

Run 10: Report of CalibratedKoho — Data Link



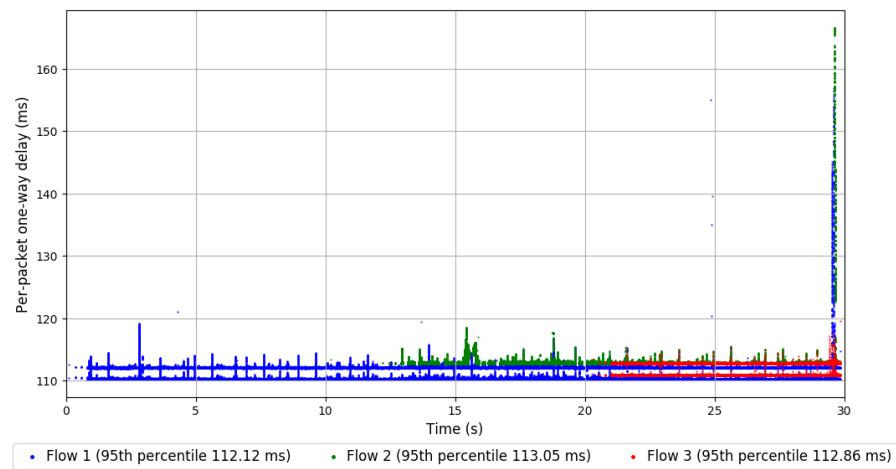
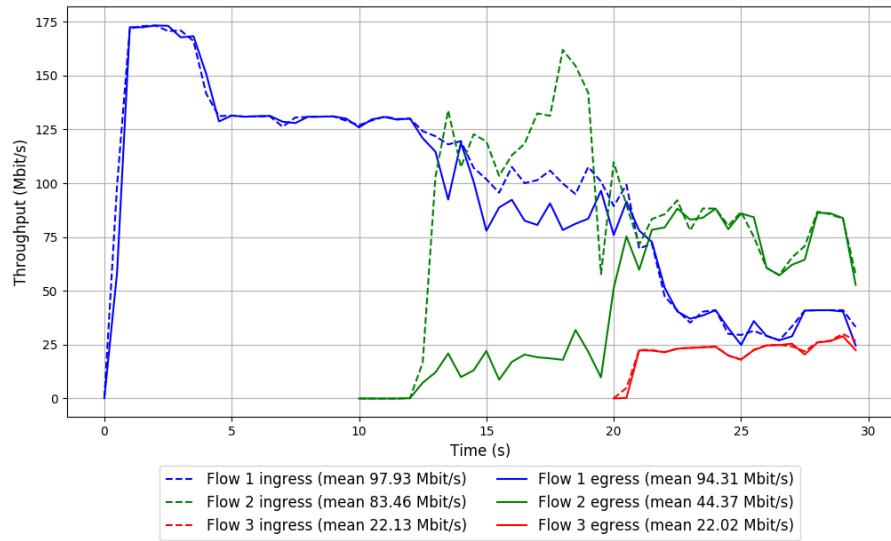
Run 1: Statistics of Copa

Start at: 2017-08-20 23:42:46

End at: 2017-08-20 23:43:16

```
# Below is generated by plot.py at 2017-08-21 04:39:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 130.64 Mbit/s
95th percentile per-packet one-way delay: 112.851 ms
Loss rate: 19.18%
-- Flow 1:
Average throughput: 94.31 Mbit/s
95th percentile per-packet one-way delay: 112.117 ms
Loss rate: 4.41%
-- Flow 2:
Average throughput: 44.37 Mbit/s
95th percentile per-packet one-way delay: 113.053 ms
Loss rate: 47.47%
-- Flow 3:
Average throughput: 22.02 Mbit/s
95th percentile per-packet one-way delay: 112.861 ms
Loss rate: 2.72%
```

Run 1: Report of Copa — Data Link



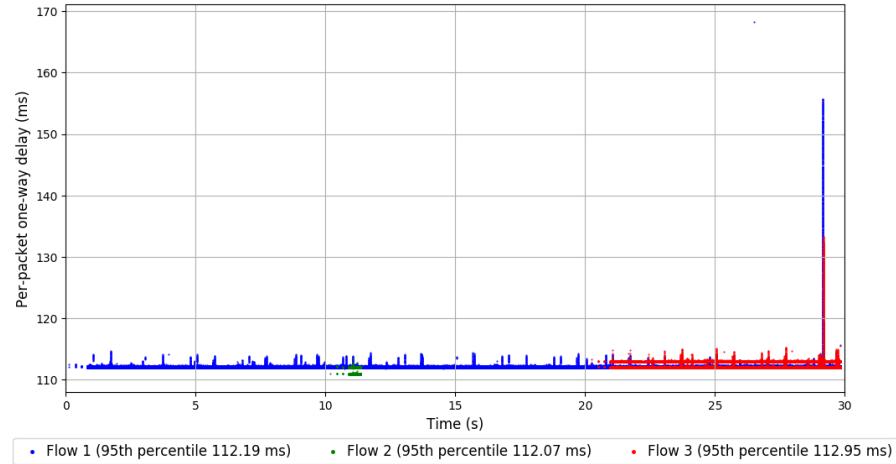
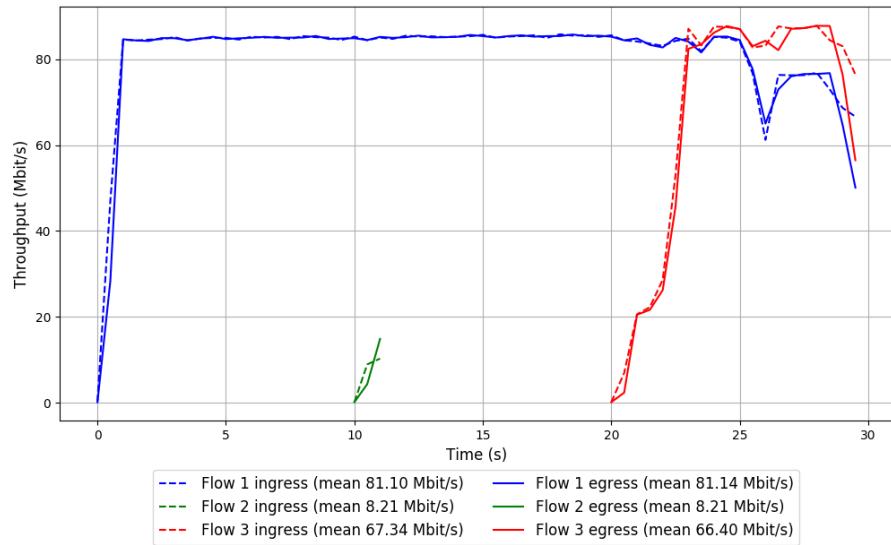
Run 2: Statistics of Copa

Start at: 2017-08-20 23:55:44

End at: 2017-08-20 23:56:14

```
# Below is generated by plot.py at 2017-08-21 04:39:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 102.93 Mbit/s
95th percentile per-packet one-way delay: 112.894 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 81.14 Mbit/s
95th percentile per-packet one-way delay: 112.195 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 8.21 Mbit/s
95th percentile per-packet one-way delay: 112.074 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 66.40 Mbit/s
95th percentile per-packet one-way delay: 112.955 ms
Loss rate: 3.63%
```

Run 2: Report of Copa — Data Link



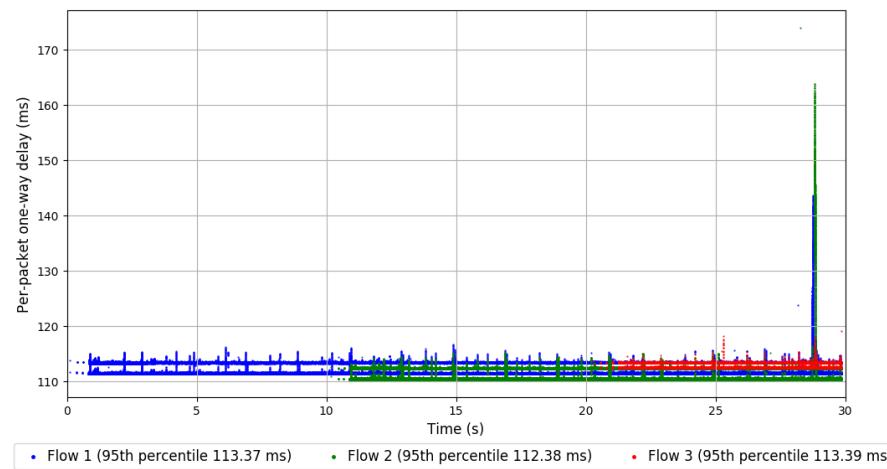
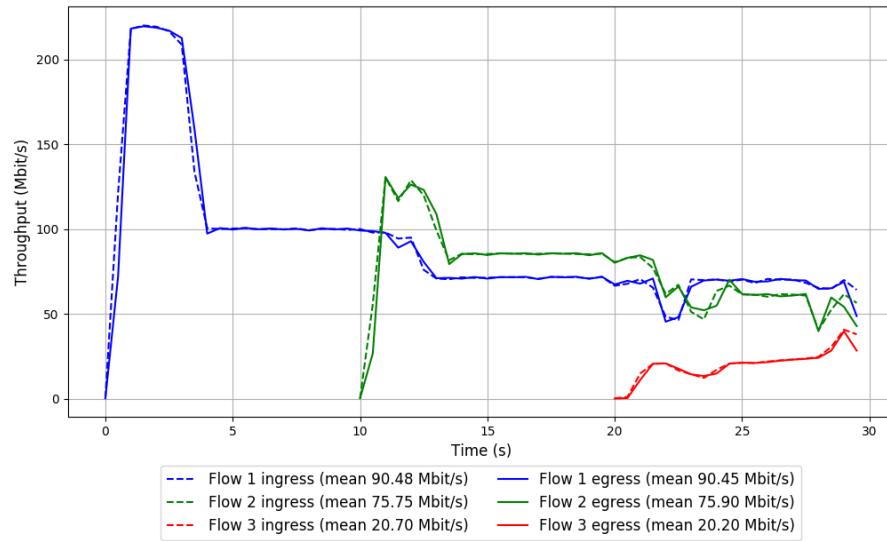
Run 3: Statistics of Copa

Start at: 2017-08-21 00:08:30

End at: 2017-08-21 00:09:00

```
# Below is generated by plot.py at 2017-08-21 04:40:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 147.12 Mbit/s
95th percentile per-packet one-way delay: 113.358 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 90.45 Mbit/s
95th percentile per-packet one-way delay: 113.373 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 75.90 Mbit/s
95th percentile per-packet one-way delay: 112.378 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 20.20 Mbit/s
95th percentile per-packet one-way delay: 113.388 ms
Loss rate: 4.64%
```

Run 3: Report of Copa — Data Link



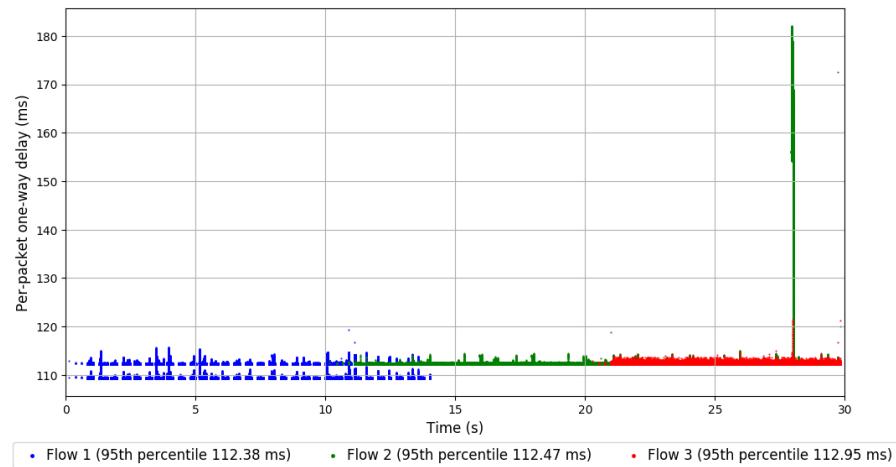
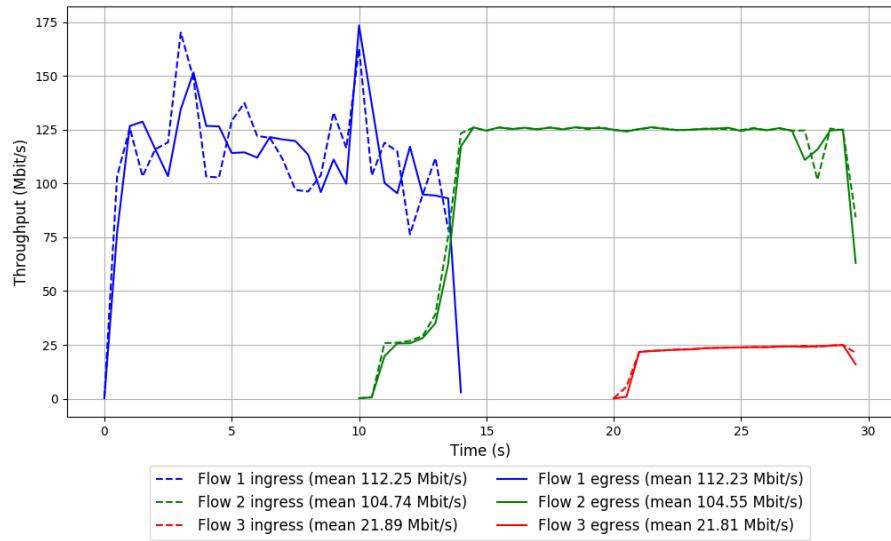
Run 4: Statistics of Copa

Start at: 2017-08-21 00:21:33

End at: 2017-08-21 00:22:03

```
# Below is generated by plot.py at 2017-08-21 04:40:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.78 Mbit/s
95th percentile per-packet one-way delay: 112.481 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 112.23 Mbit/s
95th percentile per-packet one-way delay: 112.382 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 104.55 Mbit/s
95th percentile per-packet one-way delay: 112.472 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 21.81 Mbit/s
95th percentile per-packet one-way delay: 112.955 ms
Loss rate: 2.57%
```

Run 4: Report of Copa — Data Link



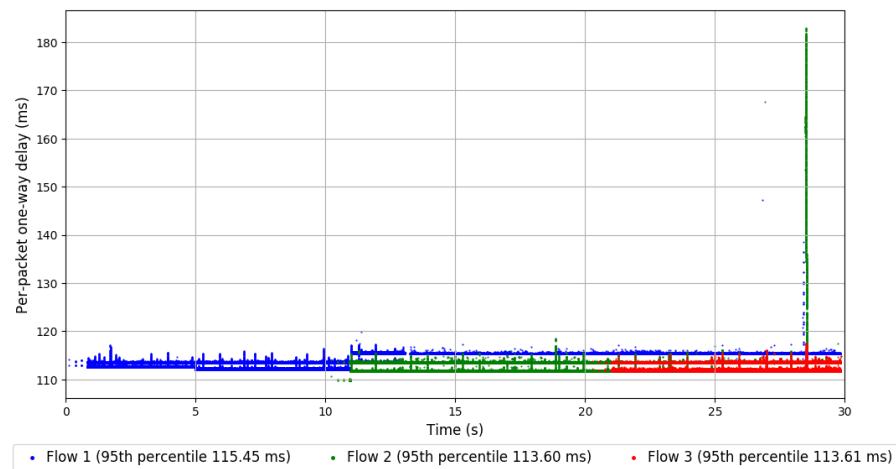
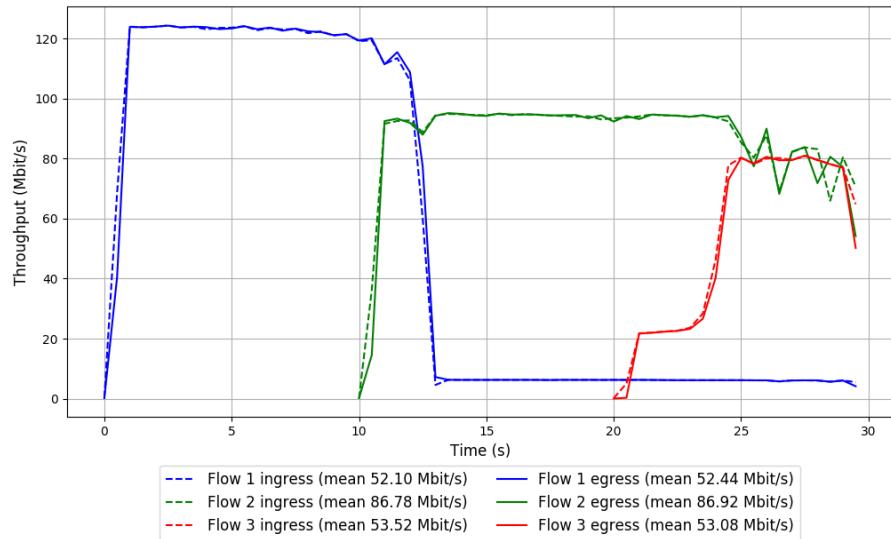
Run 5: Statistics of Copa

Start at: 2017-08-21 00:34:35

End at: 2017-08-21 00:35:05

```
# Below is generated by plot.py at 2017-08-21 04:41:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 126.94 Mbit/s
95th percentile per-packet one-way delay: 113.760 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 52.44 Mbit/s
95th percentile per-packet one-way delay: 115.448 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 86.92 Mbit/s
95th percentile per-packet one-way delay: 113.602 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 53.08 Mbit/s
95th percentile per-packet one-way delay: 113.612 ms
Loss rate: 3.14%
```

Run 5: Report of Copa — Data Link



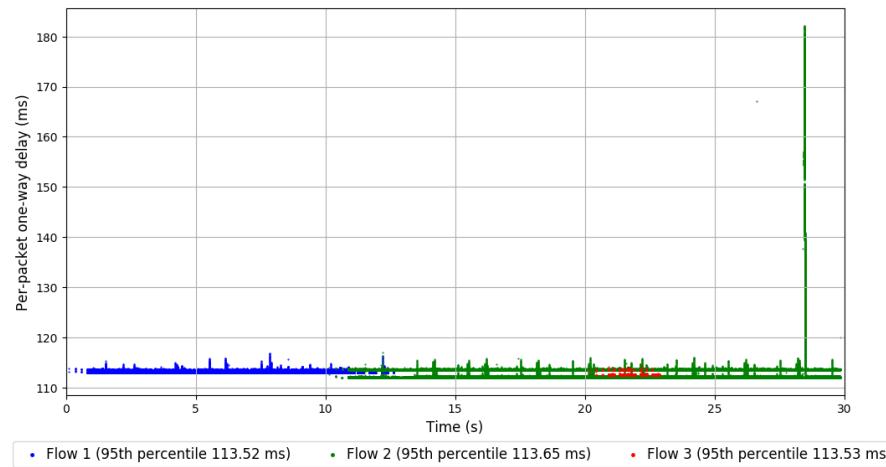
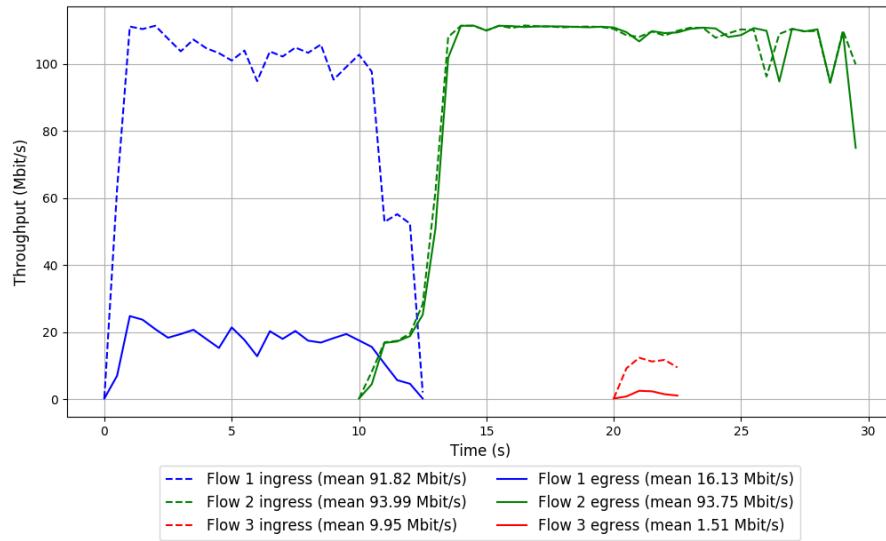
Run 6: Statistics of Copa

Start at: 2017-08-21 00:47:33

End at: 2017-08-21 00:48:03

```
# Below is generated by plot.py at 2017-08-21 04:41:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.05 Mbit/s
95th percentile per-packet one-way delay: 113.637 ms
Loss rate: 32.64%
-- Flow 1:
Average throughput: 16.13 Mbit/s
95th percentile per-packet one-way delay: 113.517 ms
Loss rate: 82.43%
-- Flow 2:
Average throughput: 93.75 Mbit/s
95th percentile per-packet one-way delay: 113.646 ms
Loss rate: 1.34%
-- Flow 3:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 113.525 ms
Loss rate: 84.85%
```

Run 6: Report of Copa — Data Link



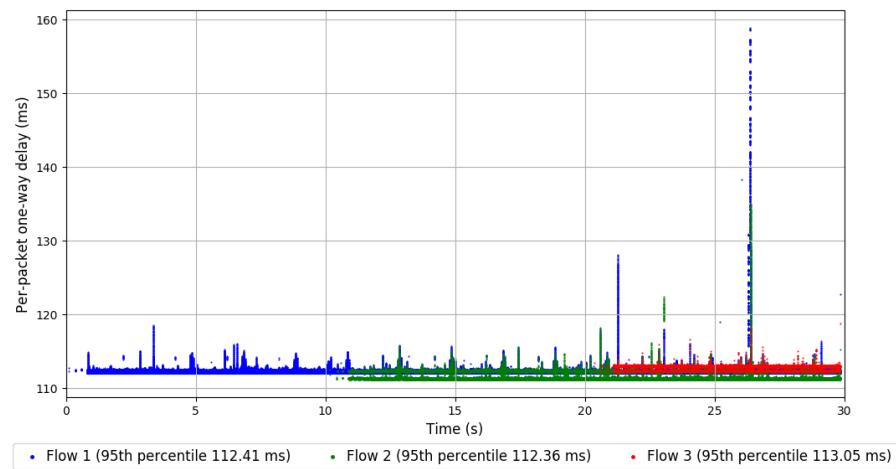
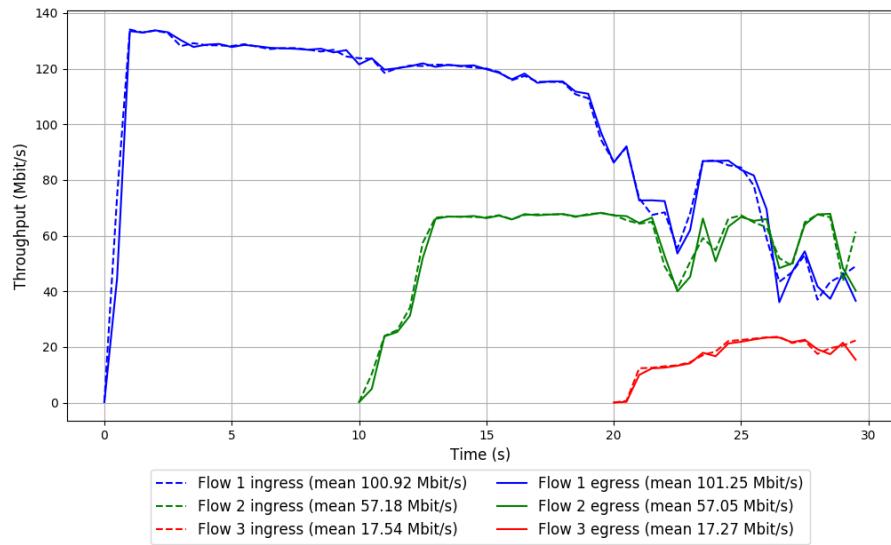
Run 7: Statistics of Copa

Start at: 2017-08-21 01:00:32

End at: 2017-08-21 01:01:02

```
# Below is generated by plot.py at 2017-08-21 04:41:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 144.48 Mbit/s
95th percentile per-packet one-way delay: 112.442 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 101.25 Mbit/s
95th percentile per-packet one-way delay: 112.414 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 57.05 Mbit/s
95th percentile per-packet one-way delay: 112.361 ms
Loss rate: 1.34%
-- Flow 3:
Average throughput: 17.27 Mbit/s
95th percentile per-packet one-way delay: 113.046 ms
Loss rate: 3.77%
```

Run 7: Report of Copa — Data Link



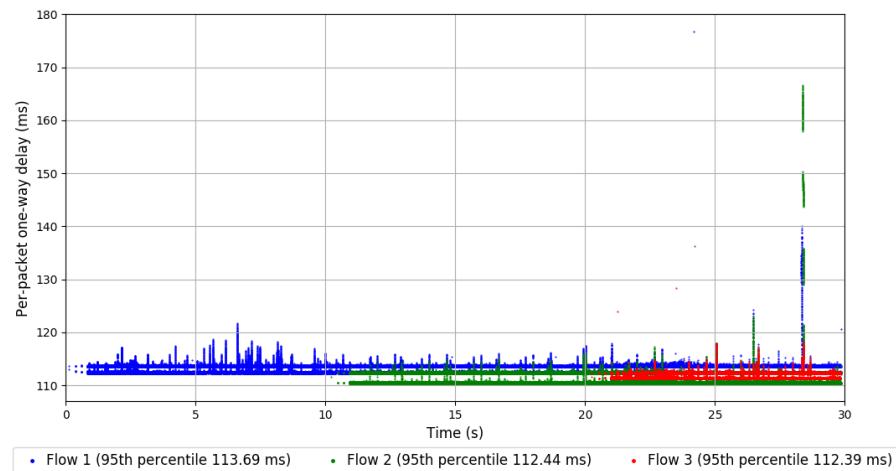
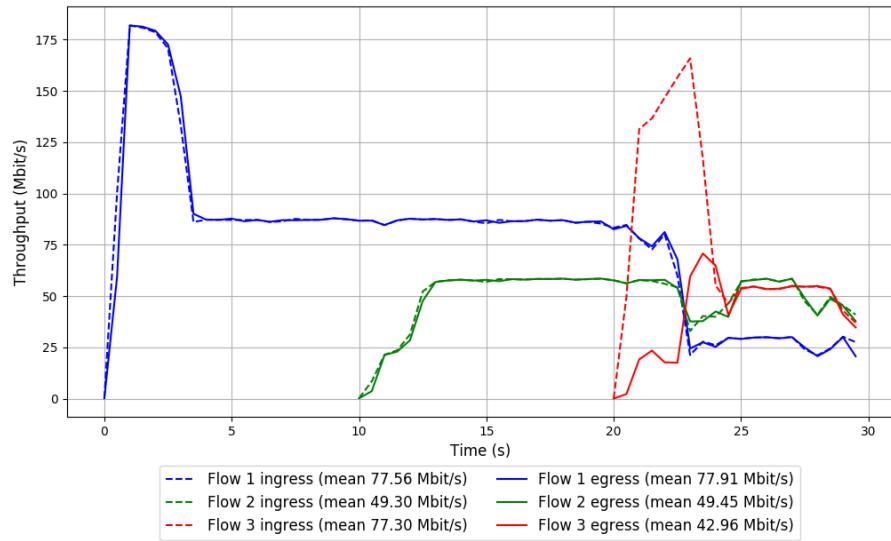
Run 8: Statistics of Copa

Start at: 2017-08-21 01:13:49

End at: 2017-08-21 01:14:19

```
# Below is generated by plot.py at 2017-08-21 04:41:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 124.44 Mbit/s
95th percentile per-packet one-way delay: 113.662 ms
Loss rate: 8.91%
-- Flow 1:
Average throughput: 77.91 Mbit/s
95th percentile per-packet one-way delay: 113.691 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 49.45 Mbit/s
95th percentile per-packet one-way delay: 112.435 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 42.96 Mbit/s
95th percentile per-packet one-way delay: 112.393 ms
Loss rate: 45.71%
```

Run 8: Report of Copa — Data Link



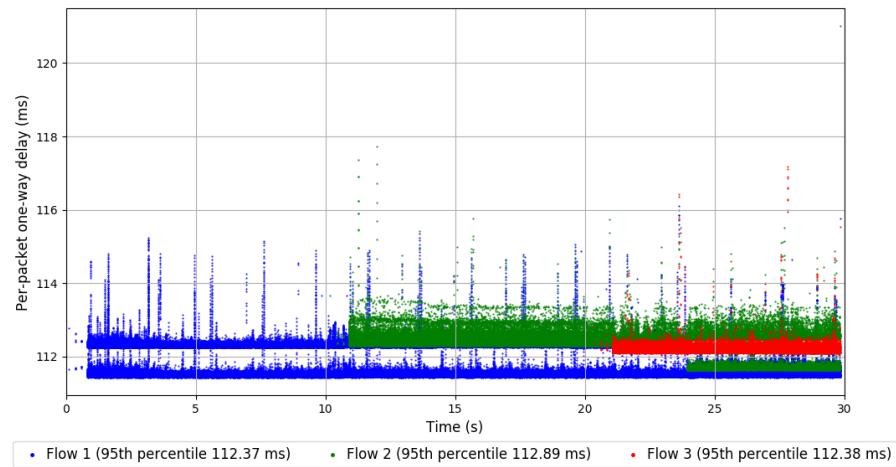
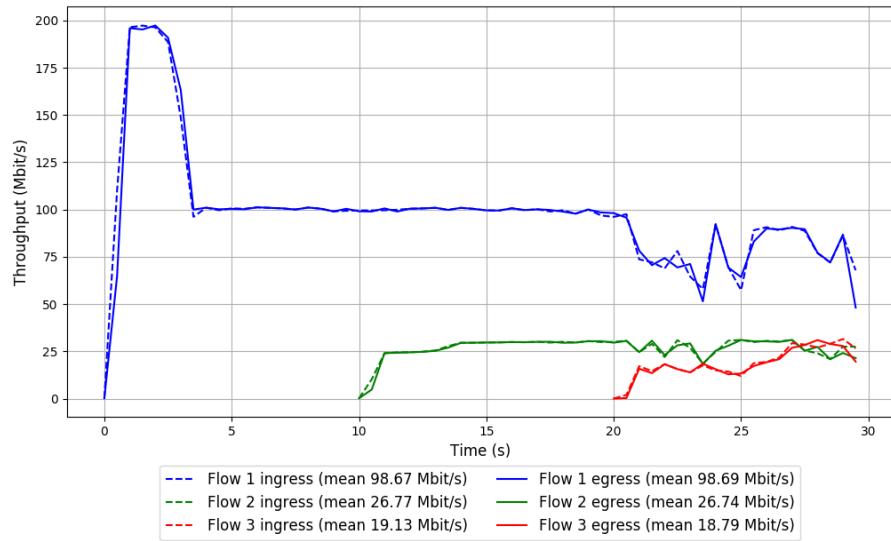
Run 9: Statistics of Copa

Start at: 2017-08-21 01:26:52

End at: 2017-08-21 01:27:22

```
# Below is generated by plot.py at 2017-08-21 04:42:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 122.36 Mbit/s
95th percentile per-packet one-way delay: 112.513 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 98.69 Mbit/s
95th percentile per-packet one-way delay: 112.373 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 26.74 Mbit/s
95th percentile per-packet one-way delay: 112.895 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 18.79 Mbit/s
95th percentile per-packet one-way delay: 112.383 ms
Loss rate: 4.03%
```

Run 9: Report of Copa — Data Link



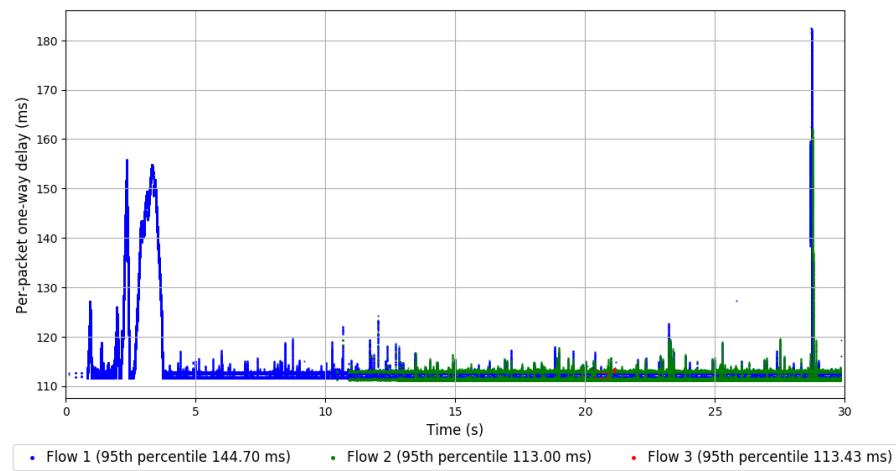
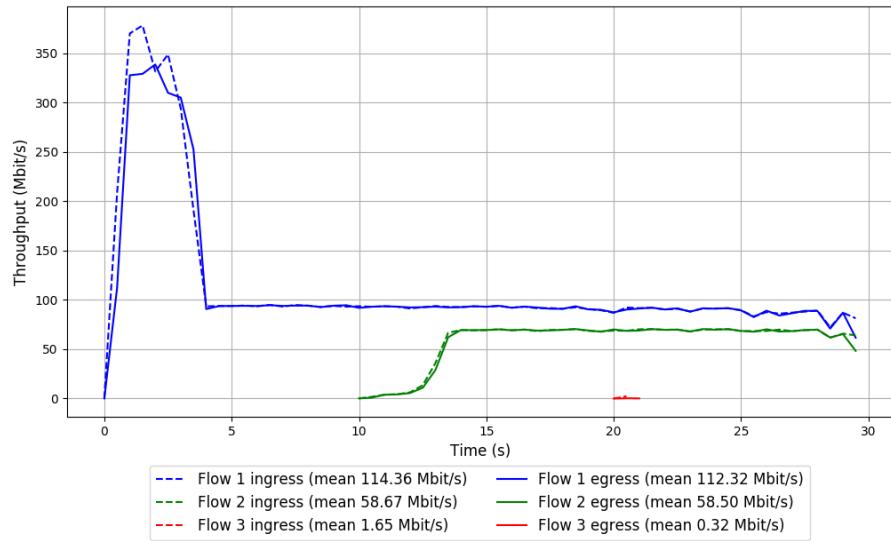
Run 10: Statistics of Copa

Start at: 2017-08-21 01:39:56

End at: 2017-08-21 01:40:26

```
# Below is generated by plot.py at 2017-08-21 04:42:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 151.02 Mbit/s
95th percentile per-packet one-way delay: 141.459 ms
Loss rate: 2.25%
-- Flow 1:
Average throughput: 112.32 Mbit/s
95th percentile per-packet one-way delay: 144.704 ms
Loss rate: 2.52%
-- Flow 2:
Average throughput: 58.50 Mbit/s
95th percentile per-packet one-way delay: 112.999 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 113.431 ms
Loss rate: 80.43%
```

Run 10: Report of Copa — Data Link

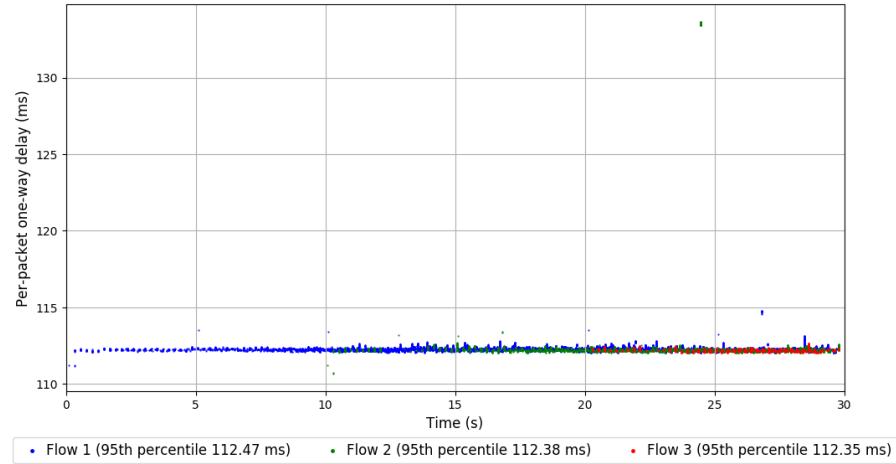
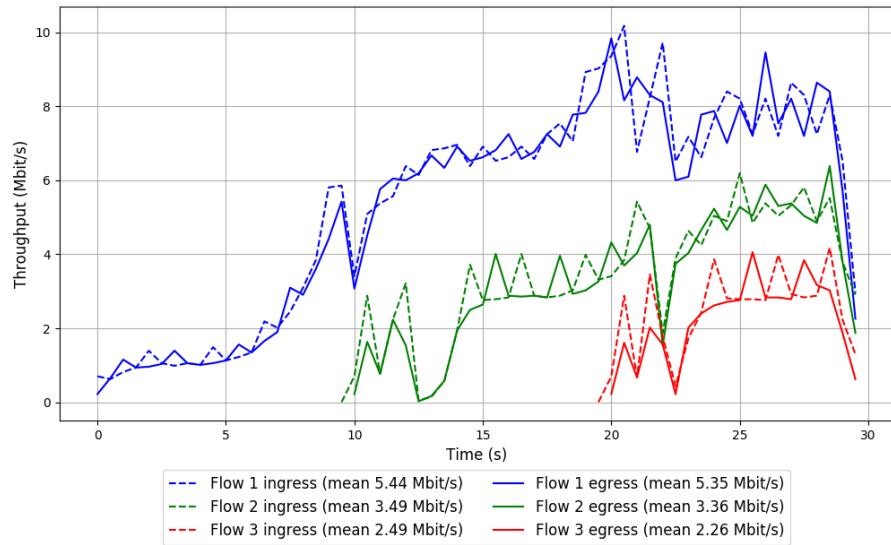


```
Run 1: Statistics of TCP Cubic

Start at: 2017-08-20 23:47:26
End at: 2017-08-20 23:47:56

# Below is generated by plot.py at 2017-08-21 04:42:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.31 Mbit/s
95th percentile per-packet one-way delay: 112.437 ms
Loss rate: 3.88%
-- Flow 1:
Average throughput: 5.35 Mbit/s
95th percentile per-packet one-way delay: 112.465 ms
Loss rate: 2.32%
-- Flow 2:
Average throughput: 3.36 Mbit/s
95th percentile per-packet one-way delay: 112.375 ms
Loss rate: 4.88%
-- Flow 3:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 112.348 ms
Loss rate: 11.27%
```

Run 1: Report of TCP Cubic — Data Link



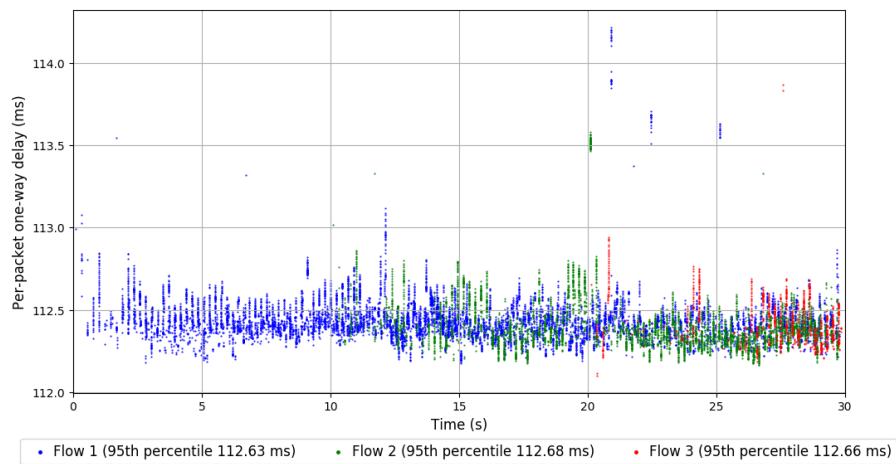
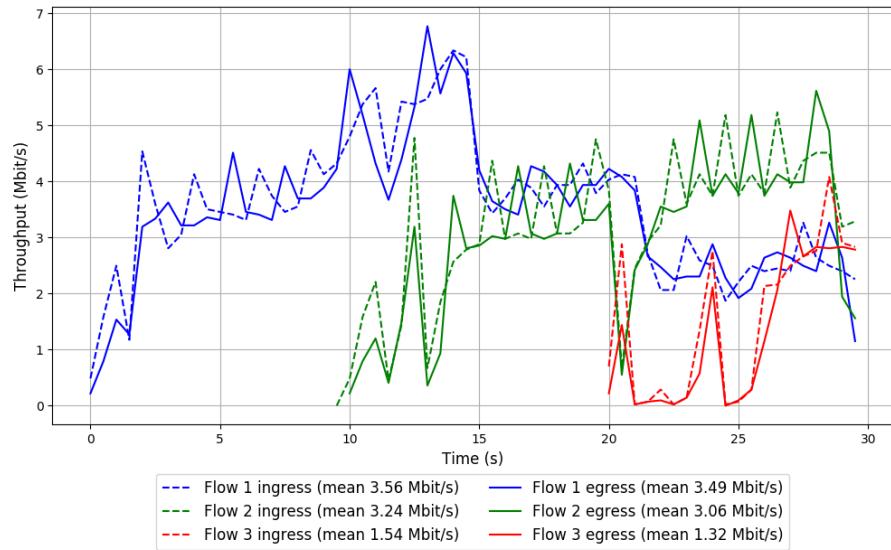
Run 2: Statistics of TCP Cubic

Start at: 2017-08-21 00:00:03

End at: 2017-08-21 00:00:33

```
# Below is generated by plot.py at 2017-08-21 04:42:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.93 Mbit/s
95th percentile per-packet one-way delay: 112.646 ms
Loss rate: 5.24%
-- Flow 1:
Average throughput: 3.49 Mbit/s
95th percentile per-packet one-way delay: 112.629 ms
Loss rate: 2.83%
-- Flow 2:
Average throughput: 3.06 Mbit/s
95th percentile per-packet one-way delay: 112.676 ms
Loss rate: 6.64%
-- Flow 3:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 112.658 ms
Loss rate: 16.13%
```

Run 2: Report of TCP Cubic — Data Link



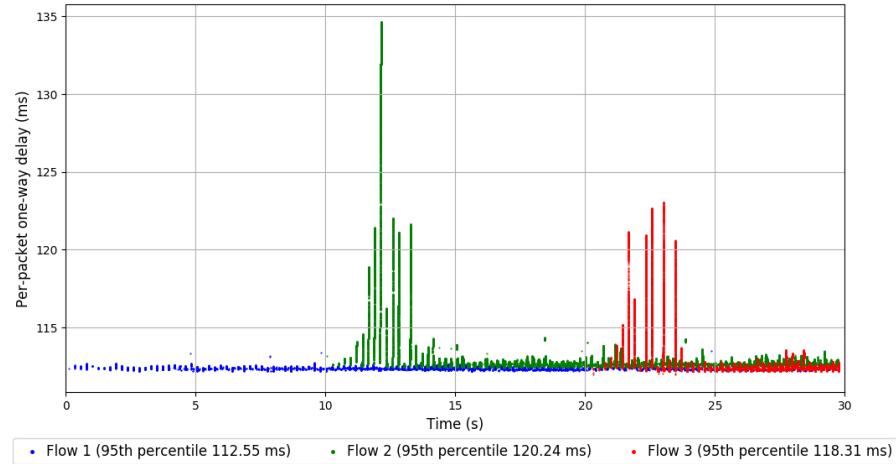
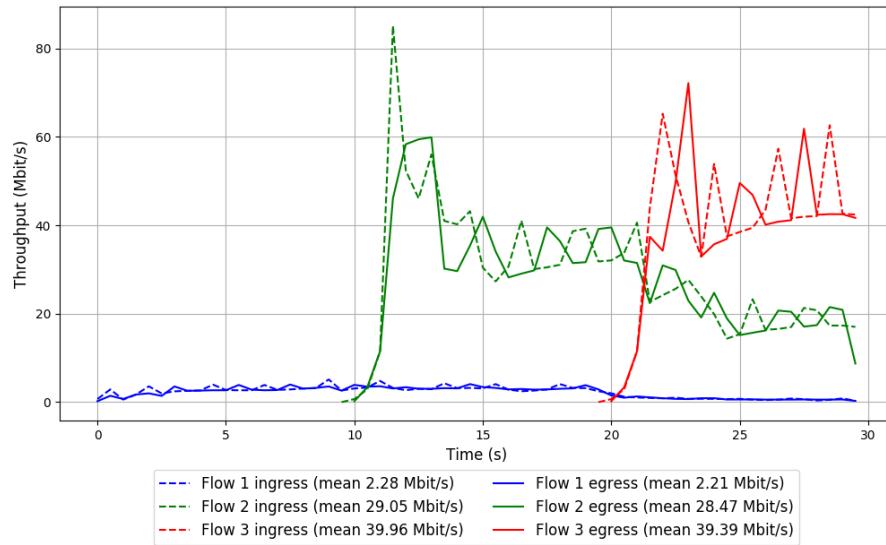
Run 3: Statistics of TCP Cubic

Start at: 2017-08-21 00:13:03

End at: 2017-08-21 00:13:33

```
# Below is generated by plot.py at 2017-08-21 04:42:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 33.98 Mbit/s
95th percentile per-packet one-way delay: 119.271 ms
Loss rate: 3.35%
-- Flow 1:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 112.545 ms
Loss rate: 3.70%
-- Flow 2:
Average throughput: 28.47 Mbit/s
95th percentile per-packet one-way delay: 120.242 ms
Loss rate: 3.10%
-- Flow 3:
Average throughput: 39.39 Mbit/s
95th percentile per-packet one-way delay: 118.309 ms
Loss rate: 3.67%
```

Run 3: Report of TCP Cubic — Data Link

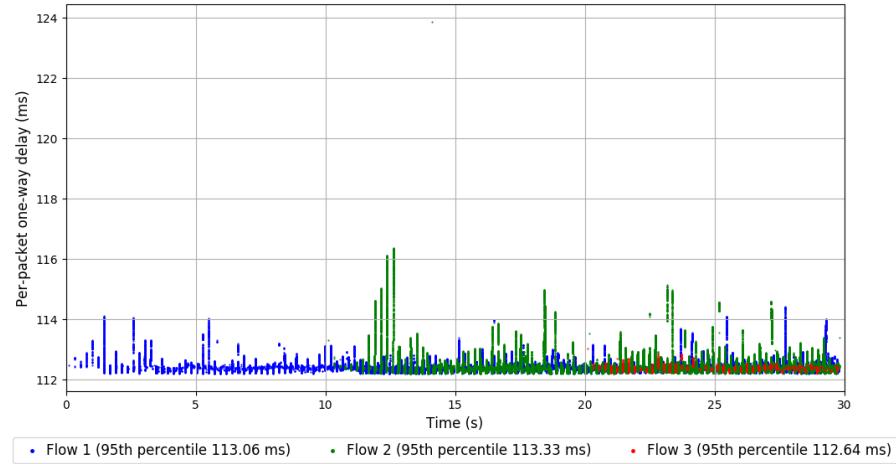
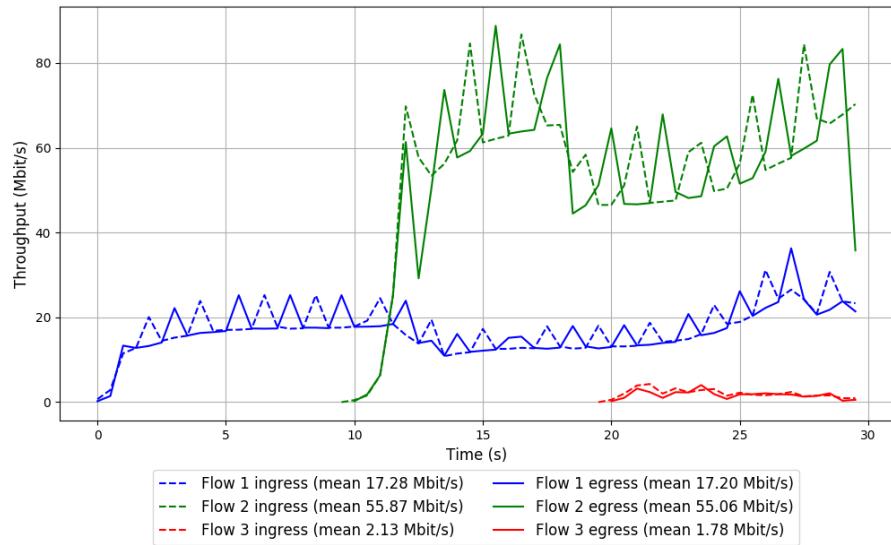


```
Run 4: Statistics of TCP Cubic

Start at: 2017-08-21 00:26:08
End at: 2017-08-21 00:26:38

# Below is generated by plot.py at 2017-08-21 04:42:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.30 Mbit/s
95th percentile per-packet one-way delay: 113.233 ms
Loss rate: 2.37%
-- Flow 1:
Average throughput: 17.20 Mbit/s
95th percentile per-packet one-way delay: 113.058 ms
Loss rate: 1.21%
-- Flow 2:
Average throughput: 55.06 Mbit/s
95th percentile per-packet one-way delay: 113.335 ms
Loss rate: 2.60%
-- Flow 3:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 112.640 ms
Loss rate: 18.36%
```

Run 4: Report of TCP Cubic — Data Link



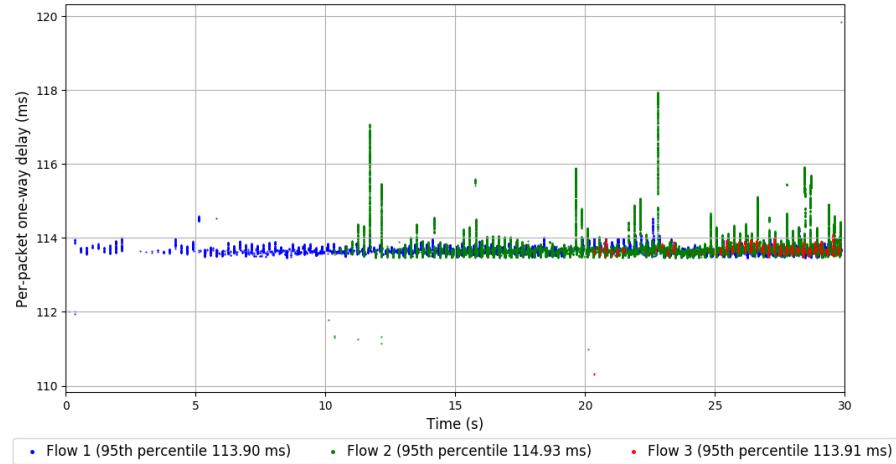
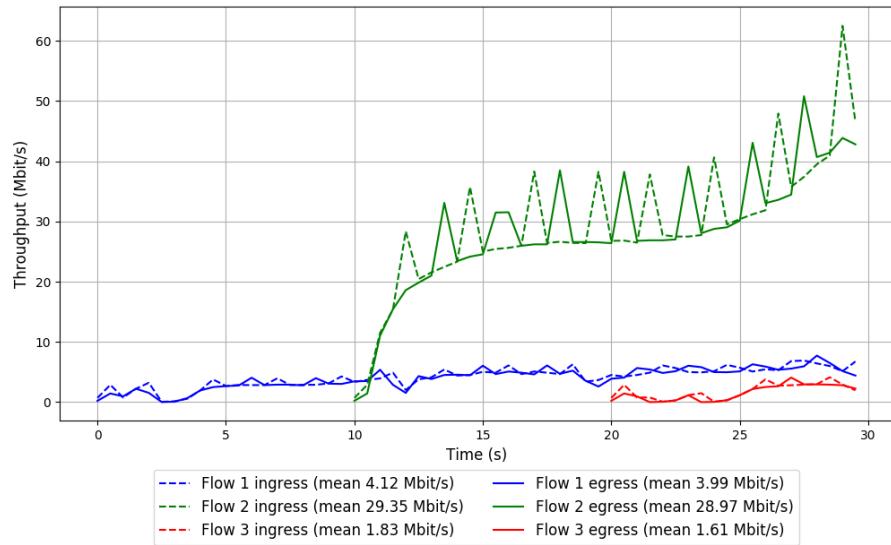
Run 5: Statistics of TCP Cubic

Start at: 2017-08-21 00:39:15

End at: 2017-08-21 00:39:45

```
# Below is generated by plot.py at 2017-08-21 04:42:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.74 Mbit/s
95th percentile per-packet one-way delay: 114.719 ms
Loss rate: 2.80%
-- Flow 1:
Average throughput: 3.99 Mbit/s
95th percentile per-packet one-way delay: 113.902 ms
Loss rate: 3.93%
-- Flow 2:
Average throughput: 28.97 Mbit/s
95th percentile per-packet one-way delay: 114.931 ms
Loss rate: 2.21%
-- Flow 3:
Average throughput: 1.61 Mbit/s
95th percentile per-packet one-way delay: 113.907 ms
Loss rate: 14.11%
```

Run 5: Report of TCP Cubic — Data Link



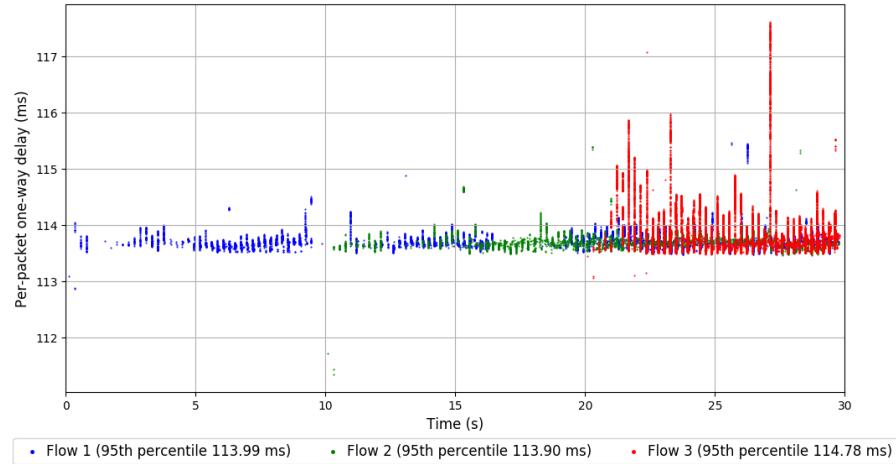
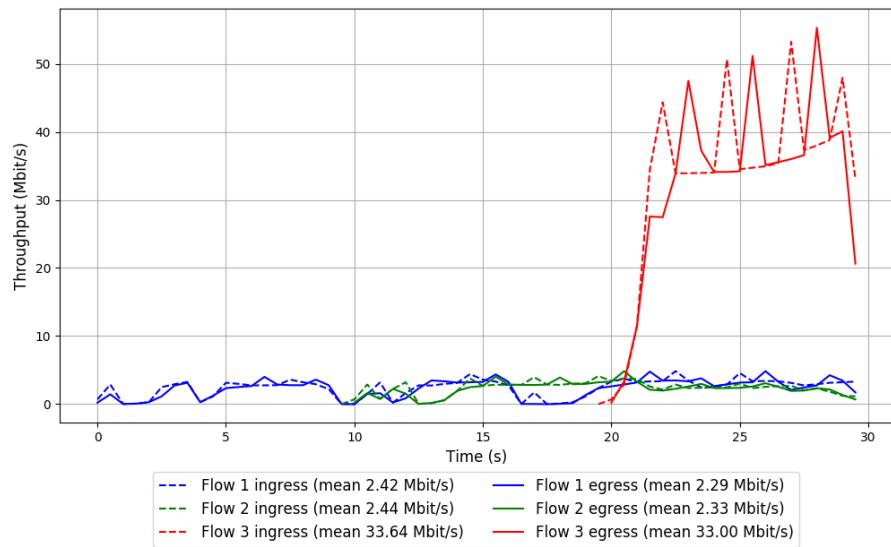
Run 6: Statistics of TCP Cubic

Start at: 2017-08-21 00:52:09

End at: 2017-08-21 00:52:39

```
# Below is generated by plot.py at 2017-08-21 04:42:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.63 Mbit/s
95th percentile per-packet one-way delay: 114.625 ms
Loss rate: 4.60%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 113.992 ms
Loss rate: 6.09%
-- Flow 2:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 113.904 ms
Loss rate: 5.57%
-- Flow 3:
Average throughput: 33.00 Mbit/s
95th percentile per-packet one-way delay: 114.775 ms
Loss rate: 4.14%
```

Run 6: Report of TCP Cubic — Data Link



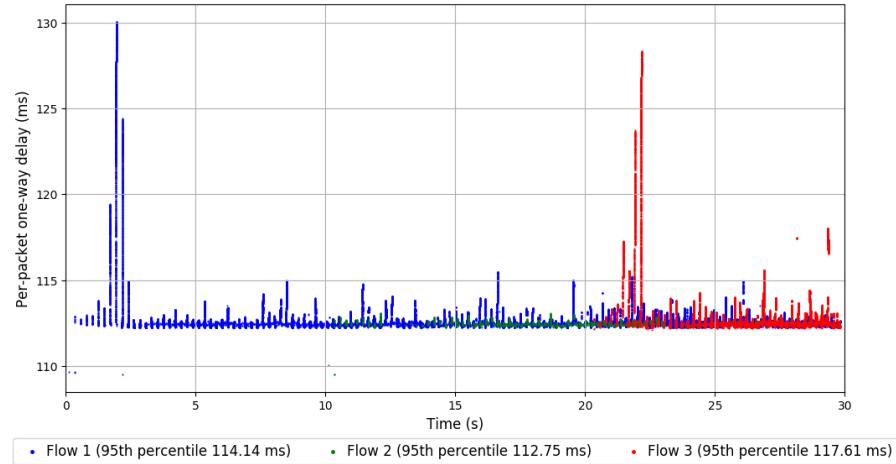
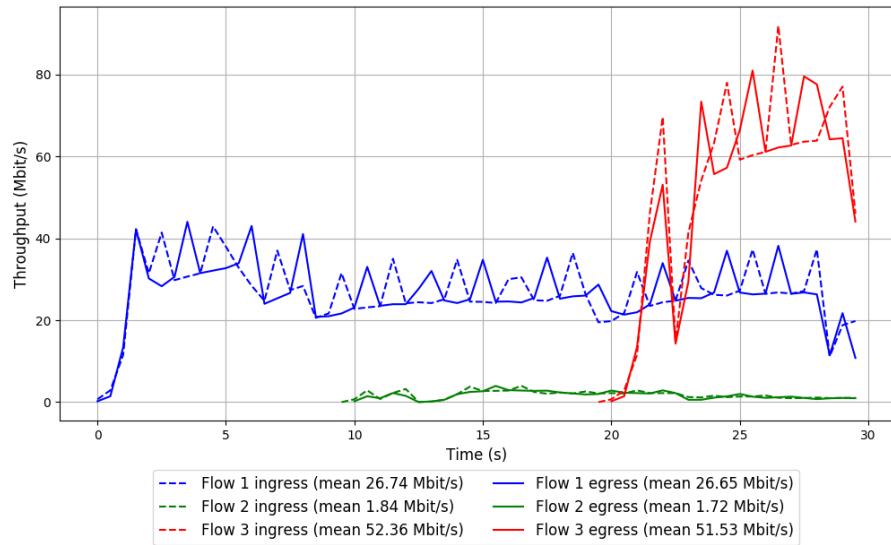
Run 7: Statistics of TCP Cubic

Start at: 2017-08-21 01:05:16

End at: 2017-08-21 01:05:46

```
# Below is generated by plot.py at 2017-08-21 04:43:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 44.62 Mbit/s
95th percentile per-packet one-way delay: 115.265 ms
Loss rate: 2.35%
-- Flow 1:
Average throughput: 26.65 Mbit/s
95th percentile per-packet one-way delay: 114.139 ms
Loss rate: 1.17%
-- Flow 2:
Average throughput: 1.72 Mbit/s
95th percentile per-packet one-way delay: 112.755 ms
Loss rate: 7.17%
-- Flow 3:
Average throughput: 51.53 Mbit/s
95th percentile per-packet one-way delay: 117.612 ms
Loss rate: 3.82%
```

Run 7: Report of TCP Cubic — Data Link



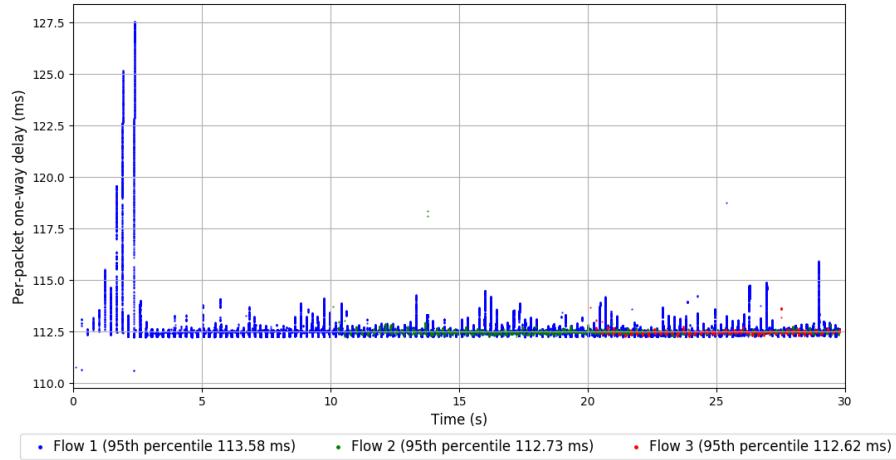
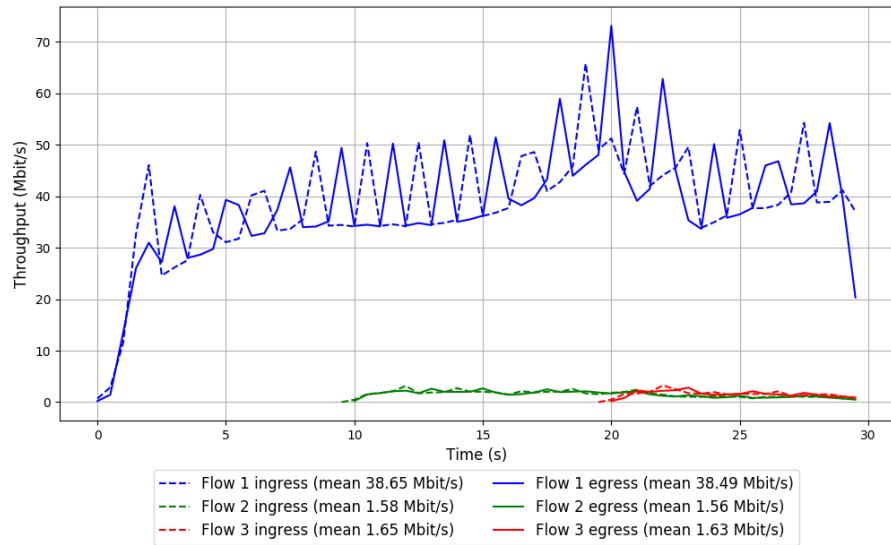
Run 8: Statistics of TCP Cubic

Start at: 2017-08-21 01:18:24

End at: 2017-08-21 01:18:54

```
# Below is generated by plot.py at 2017-08-21 04:43:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.06 Mbit/s
95th percentile per-packet one-way delay: 113.543 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 38.49 Mbit/s
95th percentile per-packet one-way delay: 113.585 ms
Loss rate: 1.13%
-- Flow 2:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 112.726 ms
Loss rate: 2.49%
-- Flow 3:
Average throughput: 1.63 Mbit/s
95th percentile per-packet one-way delay: 112.622 ms
Loss rate: 3.73%
```

Run 8: Report of TCP Cubic — Data Link



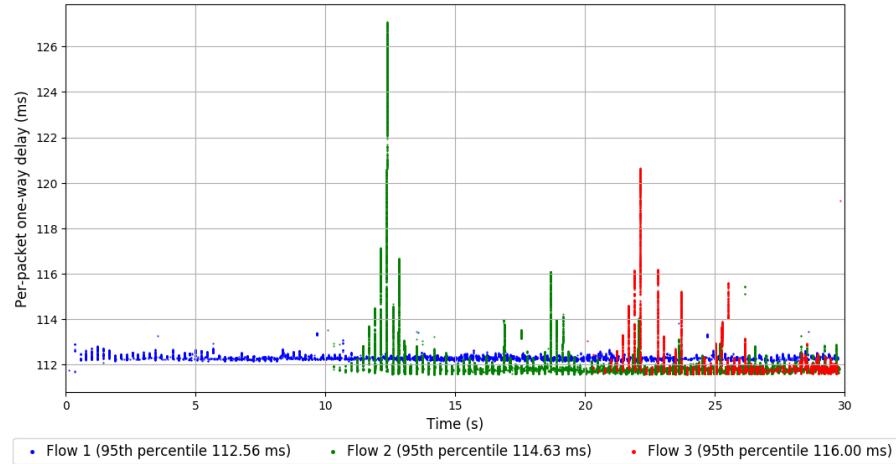
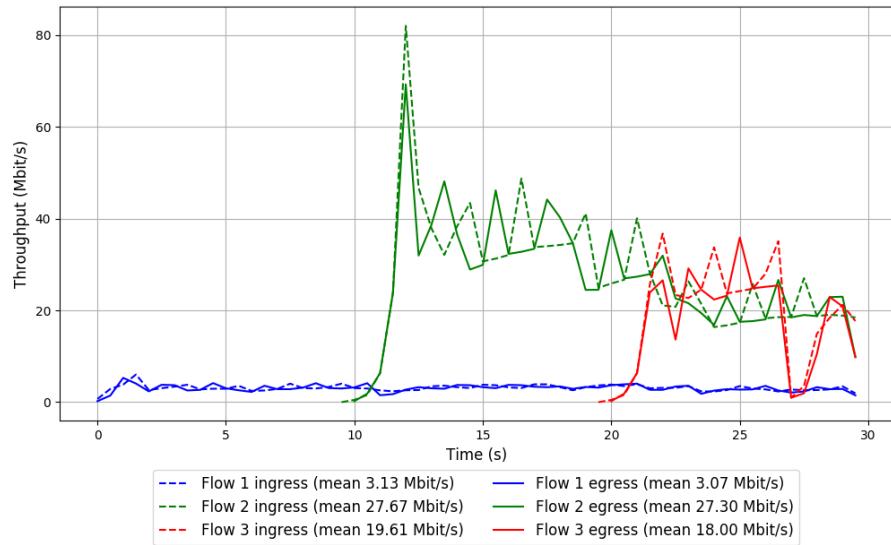
Run 9: Statistics of TCP Cubic

Start at: 2017-08-21 01:31:20

End at: 2017-08-21 01:31:50

```
# Below is generated by plot.py at 2017-08-21 04:43:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.06 Mbit/s
95th percentile per-packet one-way delay: 115.012 ms
Loss rate: 4.17%
-- Flow 1:
Average throughput: 3.07 Mbit/s
95th percentile per-packet one-way delay: 112.558 ms
Loss rate: 2.84%
-- Flow 2:
Average throughput: 27.30 Mbit/s
95th percentile per-packet one-way delay: 114.630 ms
Loss rate: 2.45%
-- Flow 3:
Average throughput: 18.00 Mbit/s
95th percentile per-packet one-way delay: 116.000 ms
Loss rate: 9.69%
```

Run 9: Report of TCP Cubic — Data Link



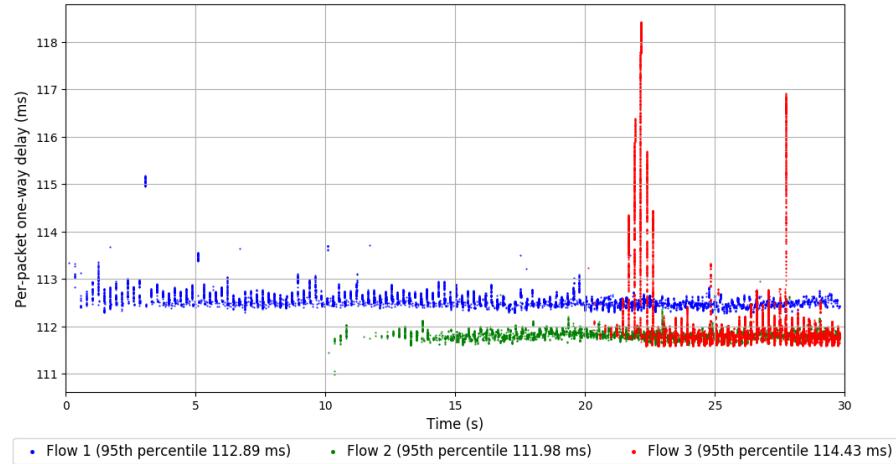
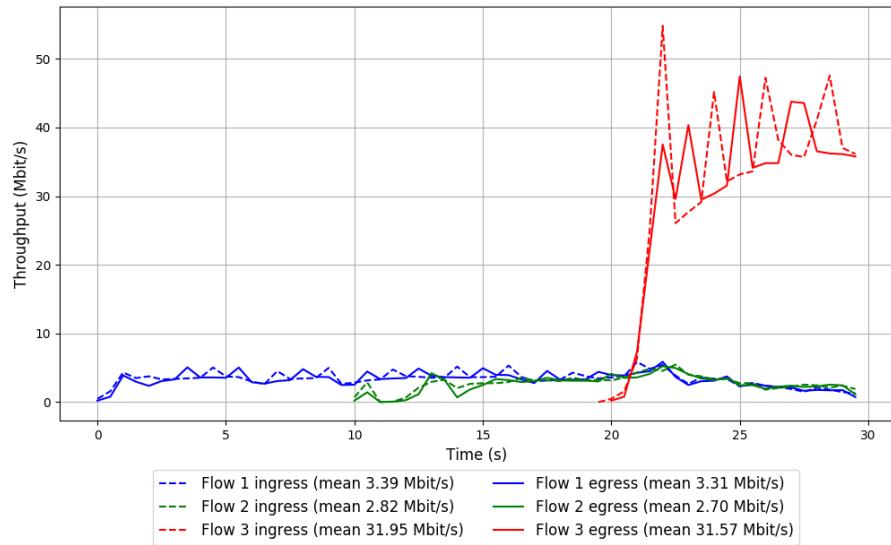
Run 10: Statistics of TCP Cubic

Start at: 2017-08-21 01:44:16

End at: 2017-08-21 01:44:46

```
# Below is generated by plot.py at 2017-08-21 04:43:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.42 Mbit/s
95th percentile per-packet one-way delay: 113.677 ms
Loss rate: 3.59%
-- Flow 1:
Average throughput: 3.31 Mbit/s
95th percentile per-packet one-way delay: 112.885 ms
Loss rate: 3.17%
-- Flow 2:
Average throughput: 2.70 Mbit/s
95th percentile per-packet one-way delay: 111.976 ms
Loss rate: 5.32%
-- Flow 3:
Average throughput: 31.57 Mbit/s
95th percentile per-packet one-way delay: 114.429 ms
Loss rate: 3.42%
```

Run 10: Report of TCP Cubic — Data Link



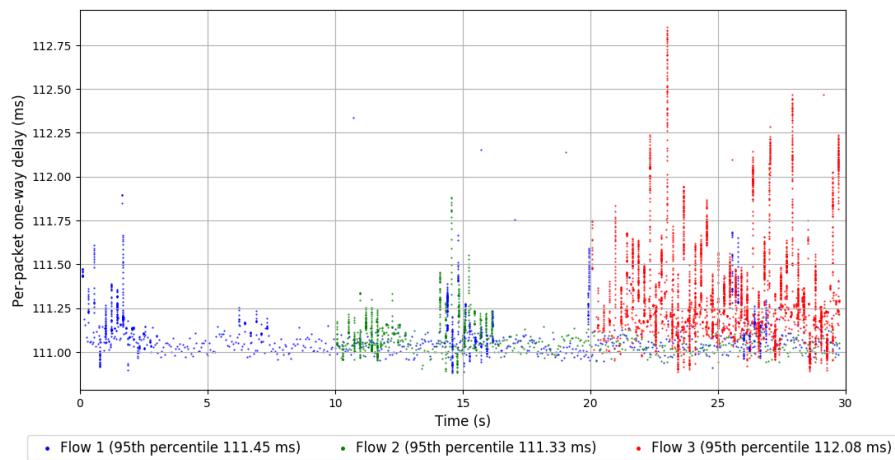
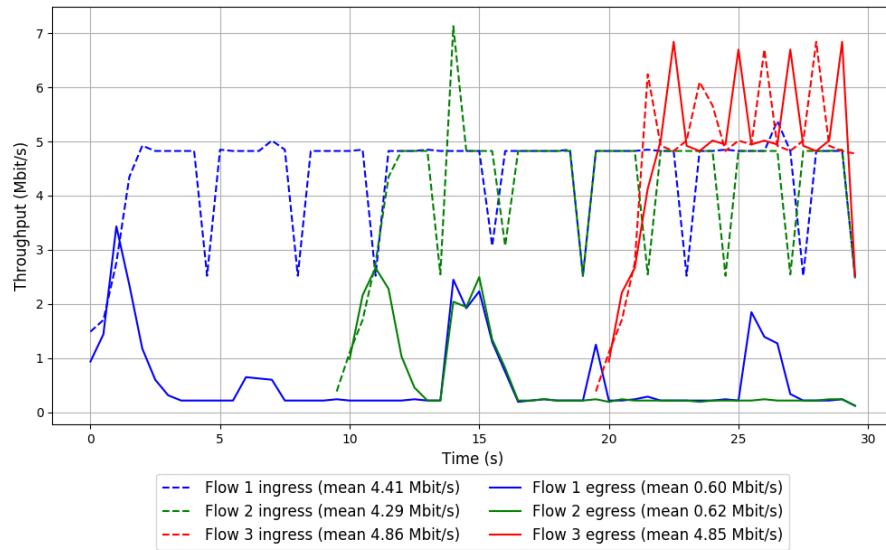
```
Run 1: Statistics of KohoCC
```

```
Start at: 2017-08-20 23:48:14
```

```
End at: 2017-08-20 23:48:44
```

```
# Below is generated by plot.py at 2017-08-21 04:43:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.60 Mbit/s
95th percentile per-packet one-way delay: 111.962 ms
Loss rate: 70.98%
-- Flow 1:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 111.452 ms
Loss rate: 86.49%
-- Flow 2:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 111.334 ms
Loss rate: 85.66%
-- Flow 3:
Average throughput: 4.85 Mbit/s
95th percentile per-packet one-way delay: 112.075 ms
Loss rate: 2.49%
```

Run 1: Report of KohoCC — Data Link



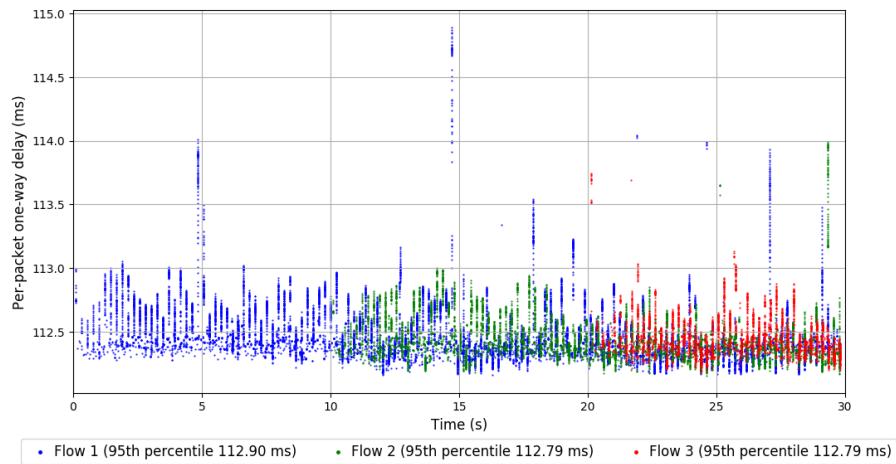
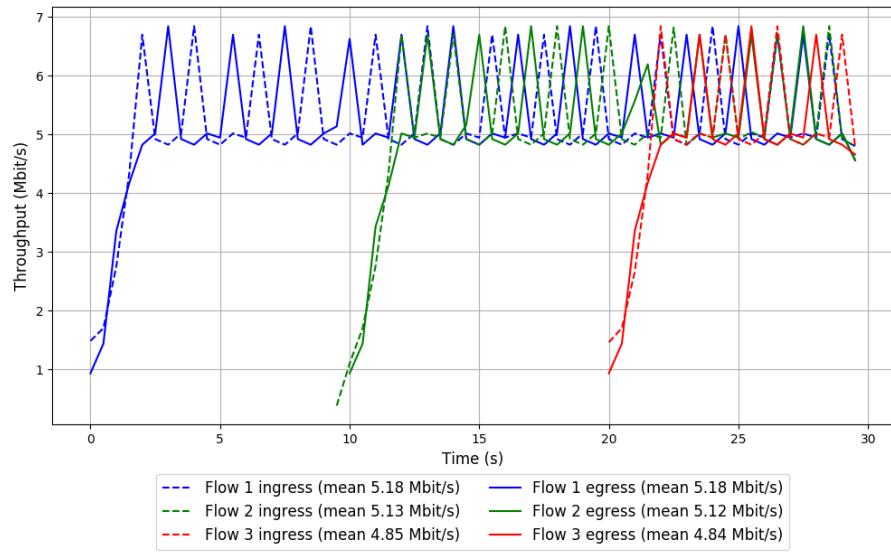
Run 2: Statistics of KohoCC

Start at: 2017-08-21 00:00:50

End at: 2017-08-21 00:01:20

```
# Below is generated by plot.py at 2017-08-21 04:43:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.15 Mbit/s
95th percentile per-packet one-way delay: 112.842 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 5.18 Mbit/s
95th percentile per-packet one-way delay: 112.901 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 5.12 Mbit/s
95th percentile per-packet one-way delay: 112.790 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 4.84 Mbit/s
95th percentile per-packet one-way delay: 112.789 ms
Loss rate: 2.50%
```

Run 2: Report of KohoCC — Data Link



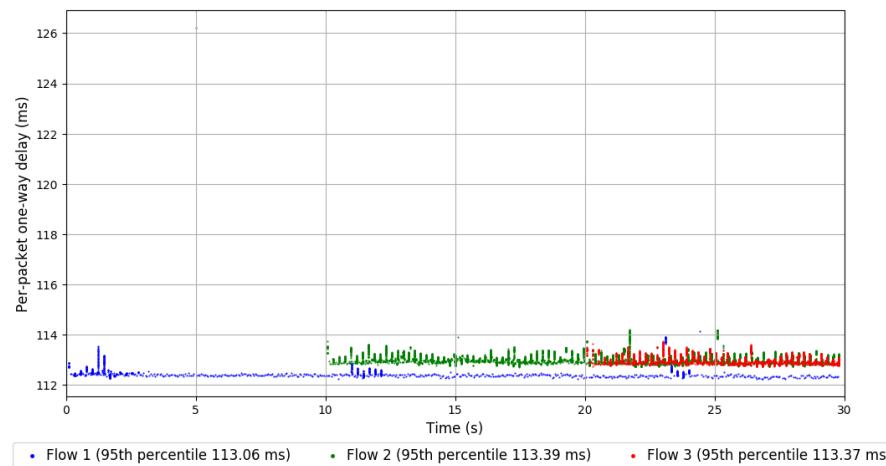
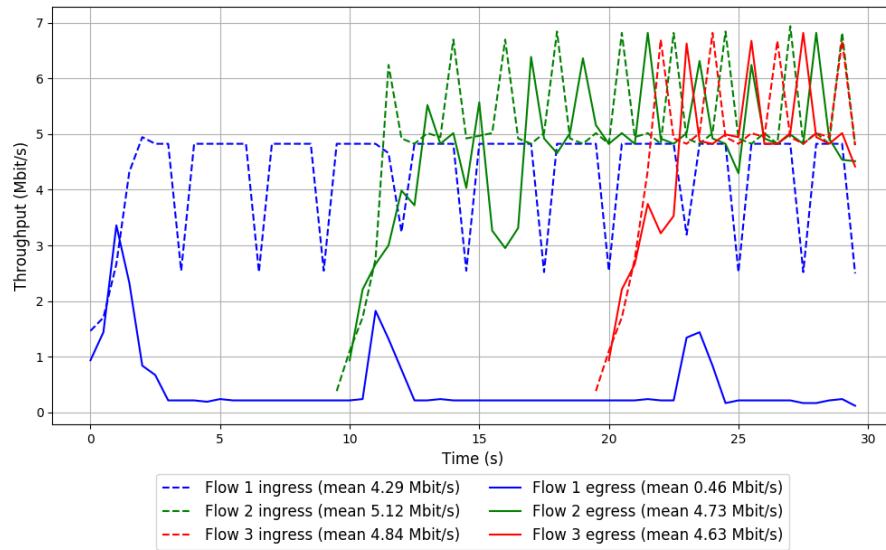
Run 3: Statistics of KohoCC

Start at: 2017-08-21 00:13:52

End at: 2017-08-21 00:14:22

```
# Below is generated by plot.py at 2017-08-21 04:43:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.12 Mbit/s
95th percentile per-packet one-way delay: 113.382 ms
Loss rate: 45.41%
-- Flow 1:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 113.056 ms
Loss rate: 89.34%
-- Flow 2:
Average throughput: 4.73 Mbit/s
95th percentile per-packet one-way delay: 113.394 ms
Loss rate: 8.58%
-- Flow 3:
Average throughput: 4.63 Mbit/s
95th percentile per-packet one-way delay: 113.374 ms
Loss rate: 6.51%
```

Run 3: Report of KohoCC — Data Link



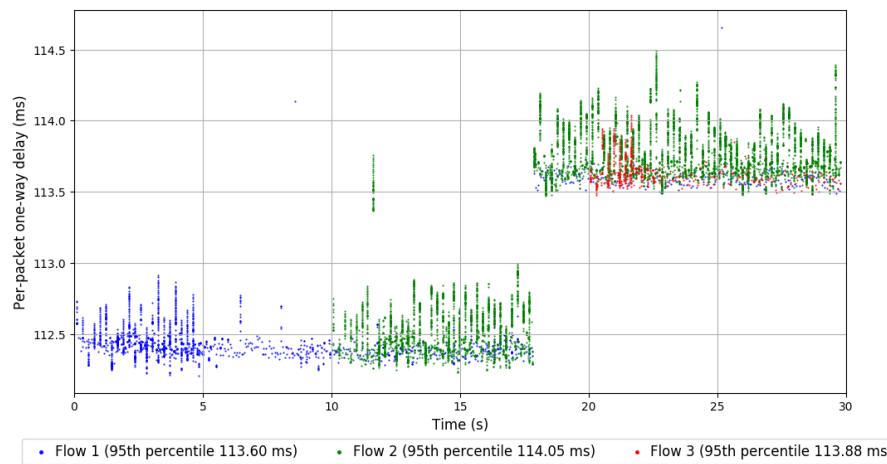
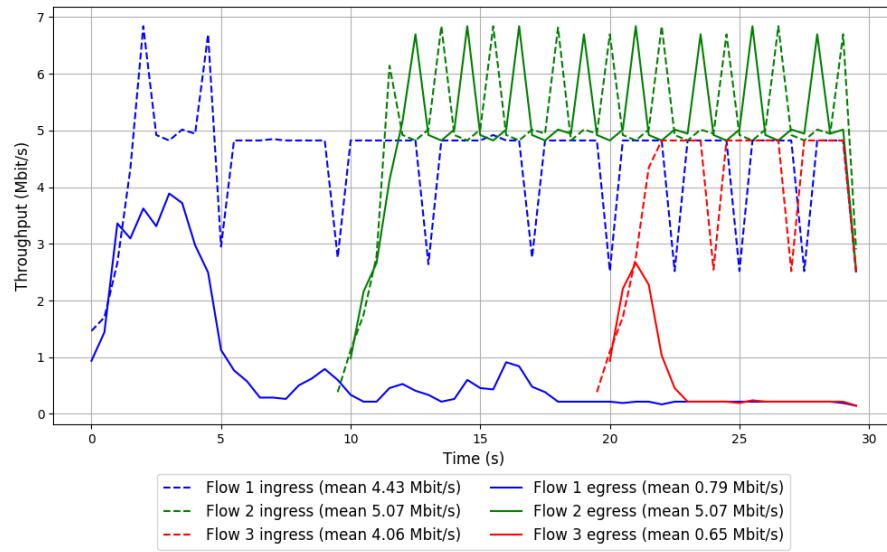
Run 4: Statistics of KohoCC

Start at: 2017-08-21 00:26:58

End at: 2017-08-21 00:27:28

```
# Below is generated by plot.py at 2017-08-21 04:43:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.37 Mbit/s
95th percentile per-packet one-way delay: 114.037 ms
Loss rate: 52.69%
-- Flow 1:
Average throughput: 0.79 Mbit/s
95th percentile per-packet one-way delay: 113.596 ms
Loss rate: 82.35%
-- Flow 2:
Average throughput: 5.07 Mbit/s
95th percentile per-packet one-way delay: 114.052 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 113.883 ms
Loss rate: 84.45%
```

Run 4: Report of KohoCC — Data Link



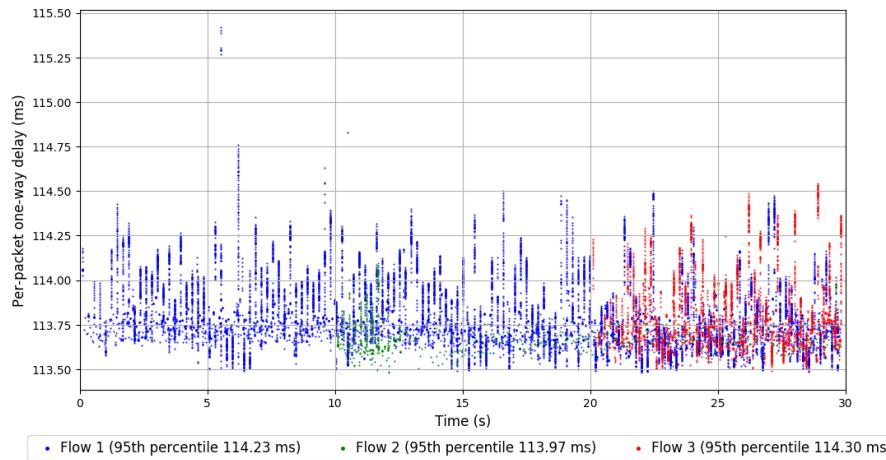
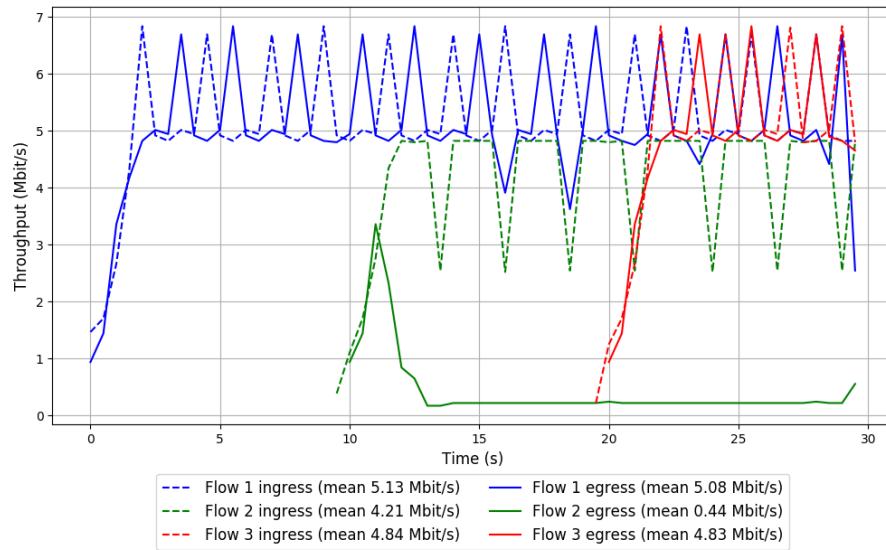
Run 5: Statistics of KohoCC

Start at: 2017-08-21 00:40:03

End at: 2017-08-21 00:40:33

```
# Below is generated by plot.py at 2017-08-21 04:43:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.94 Mbit/s
95th percentile per-packet one-way delay: 114.244 ms
Loss rate: 27.86%
-- Flow 1:
Average throughput: 5.08 Mbit/s
95th percentile per-packet one-way delay: 114.233 ms
Loss rate: 2.00%
-- Flow 2:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 113.969 ms
Loss rate: 89.76%
-- Flow 3:
Average throughput: 4.83 Mbit/s
95th percentile per-packet one-way delay: 114.295 ms
Loss rate: 2.52%
```

Run 5: Report of KohoCC — Data Link



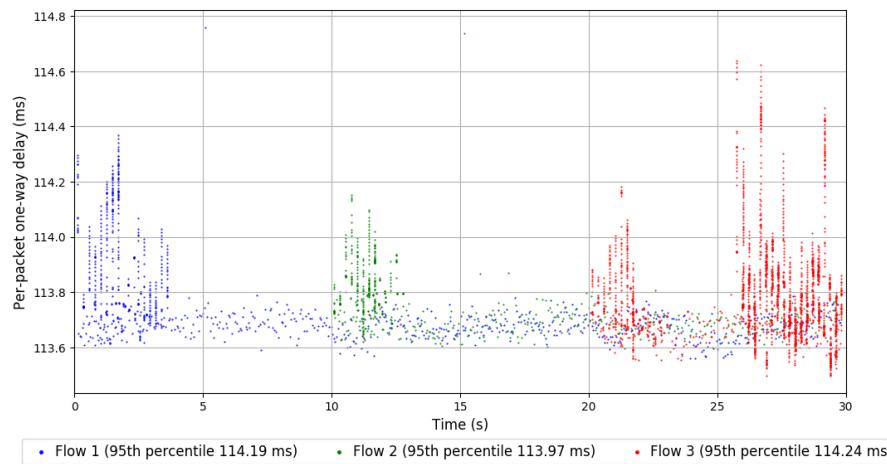
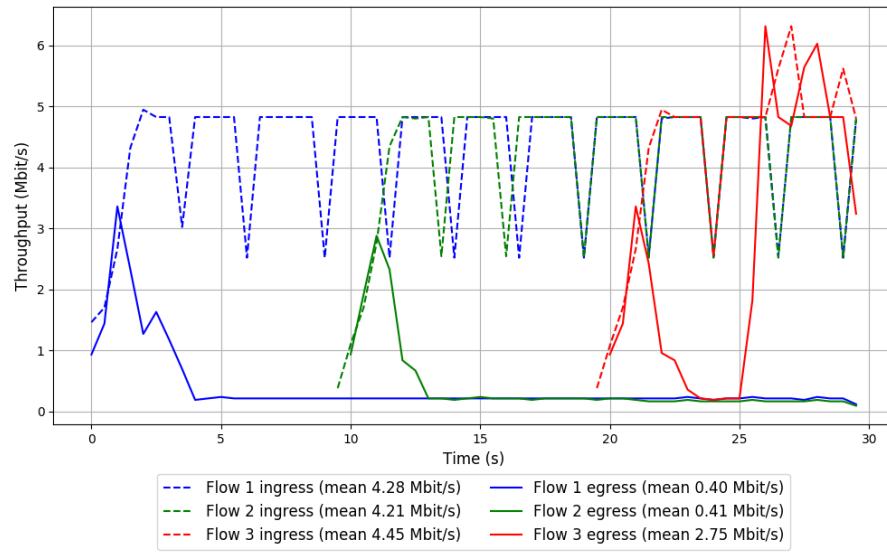
Run 6: Statistics of KohoCC

Start at: 2017-08-21 00:52:57

End at: 2017-08-21 00:53:27

```
# Below is generated by plot.py at 2017-08-21 04:43:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 114.171 ms
Loss rate: 81.75%
-- Flow 1:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 114.192 ms
Loss rate: 90.61%
-- Flow 2:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 113.968 ms
Loss rate: 90.45%
-- Flow 3:
Average throughput: 2.75 Mbit/s
95th percentile per-packet one-way delay: 114.237 ms
Loss rate: 39.53%
```

Run 6: Report of KohoCC — Data Link



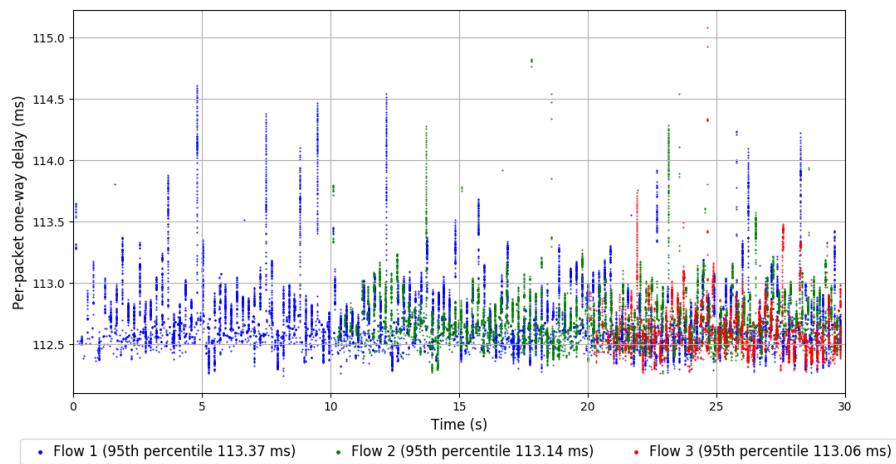
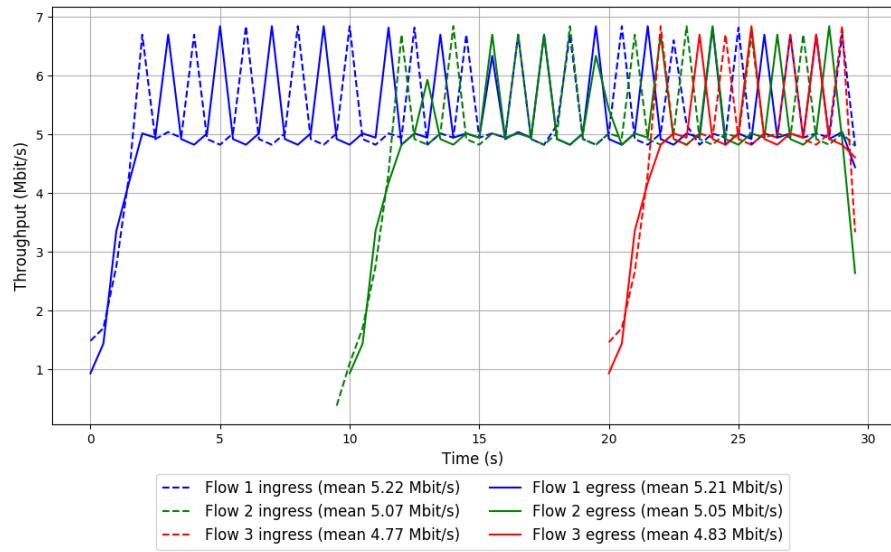
Run 7: Statistics of KohoCC

Start at: 2017-08-21 01:06:05

End at: 2017-08-21 01:06:35

```
# Below is generated by plot.py at 2017-08-21 04:43:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.13 Mbit/s
95th percentile per-packet one-way delay: 113.256 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 5.21 Mbit/s
95th percentile per-packet one-way delay: 113.367 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 5.05 Mbit/s
95th percentile per-packet one-way delay: 113.144 ms
Loss rate: 1.64%
-- Flow 3:
Average throughput: 4.83 Mbit/s
95th percentile per-packet one-way delay: 113.055 ms
Loss rate: 1.04%
```

Run 7: Report of KohoCC — Data Link



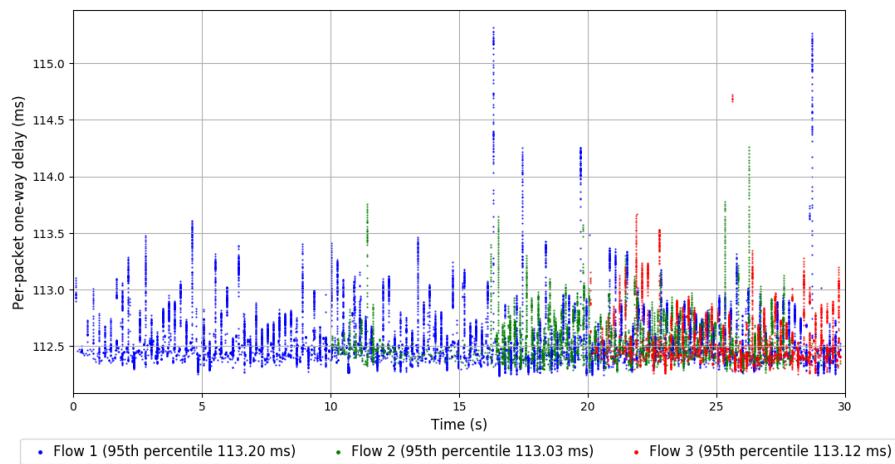
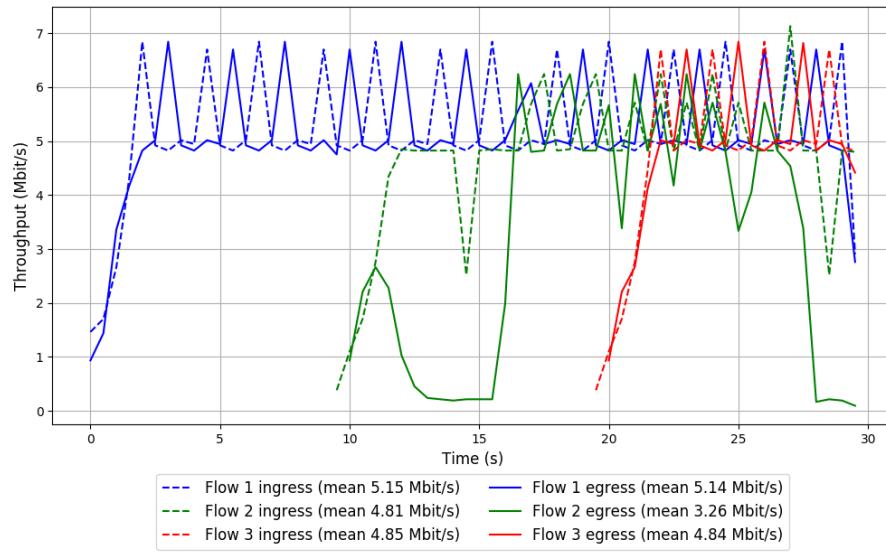
```
Run 8: Statistics of KohoCC
```

```
Start at: 2017-08-21 01:19:14
```

```
End at: 2017-08-21 01:19:44
```

```
# Below is generated by plot.py at 2017-08-21 04:43:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.89 Mbit/s
95th percentile per-packet one-way delay: 113.143 ms
Loss rate: 11.47%
-- Flow 1:
Average throughput: 5.14 Mbit/s
95th percentile per-packet one-way delay: 113.196 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 3.26 Mbit/s
95th percentile per-packet one-way delay: 113.027 ms
Loss rate: 33.05%
-- Flow 3:
Average throughput: 4.84 Mbit/s
95th percentile per-packet one-way delay: 113.124 ms
Loss rate: 2.49%
```

Run 8: Report of KohoCC — Data Link



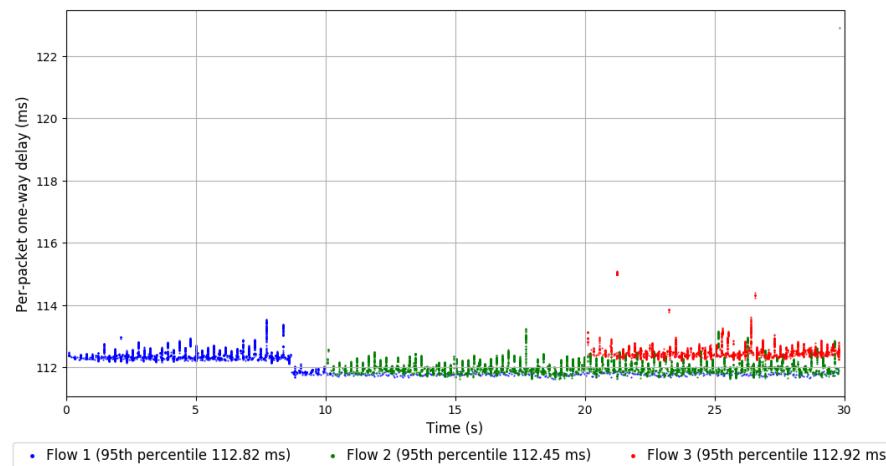
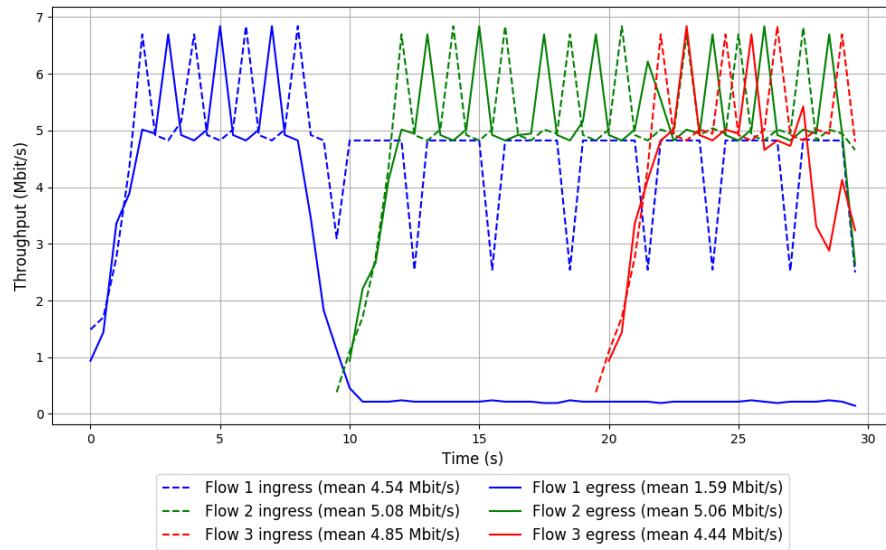
Run 9: Statistics of KohoCC

Start at: 2017-08-21 01:32:08

End at: 2017-08-21 01:32:38

```
# Below is generated by plot.py at 2017-08-21 04:43:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.40 Mbit/s
95th percentile per-packet one-way delay: 112.762 ms
Loss rate: 33.28%
-- Flow 1:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 112.822 ms
Loss rate: 65.22%
-- Flow 2:
Average throughput: 5.06 Mbit/s
95th percentile per-packet one-way delay: 112.453 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 4.44 Mbit/s
95th percentile per-packet one-way delay: 112.921 ms
Loss rate: 10.45%
```

Run 9: Report of KohoCC — Data Link



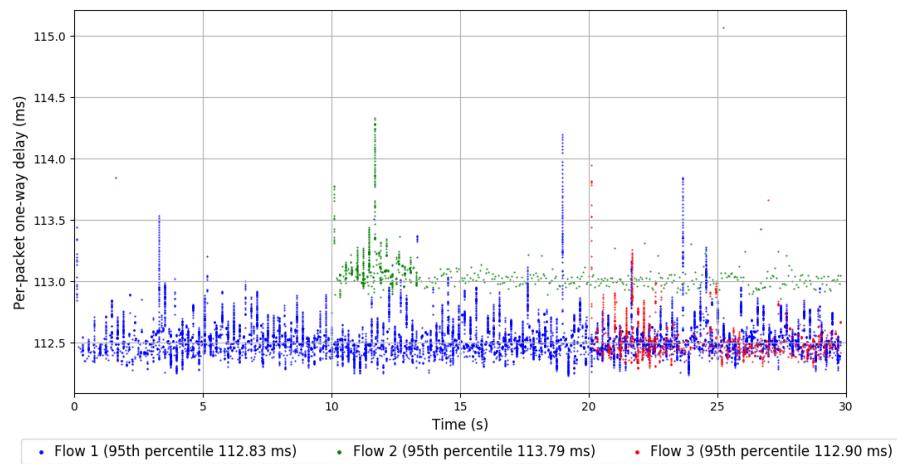
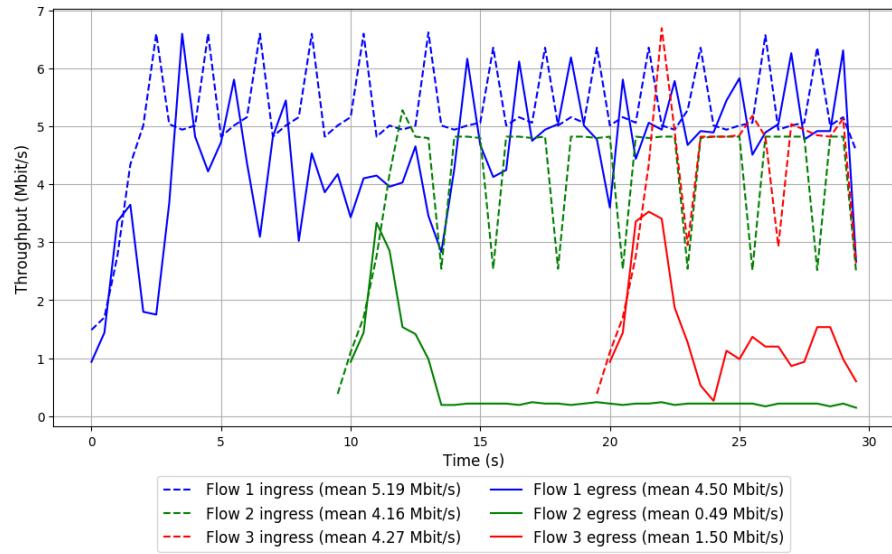
Run 10: Statistics of KohoCC

Start at: 2017-08-21 01:45:04

End at: 2017-08-21 01:45:34

```
# Below is generated by plot.py at 2017-08-21 04:43:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.31 Mbit/s
95th percentile per-packet one-way delay: 113.050 ms
Loss rate: 43.79%
-- Flow 1:
Average throughput: 4.50 Mbit/s
95th percentile per-packet one-way delay: 112.832 ms
Loss rate: 14.02%
-- Flow 2:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 113.787 ms
Loss rate: 88.30%
-- Flow 3:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 112.896 ms
Loss rate: 65.77%
```

Run 10: Report of KohoCC — Data Link



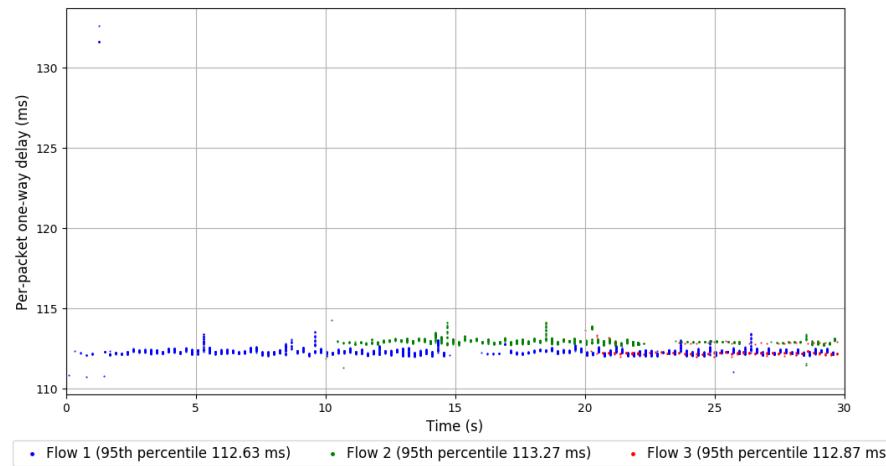
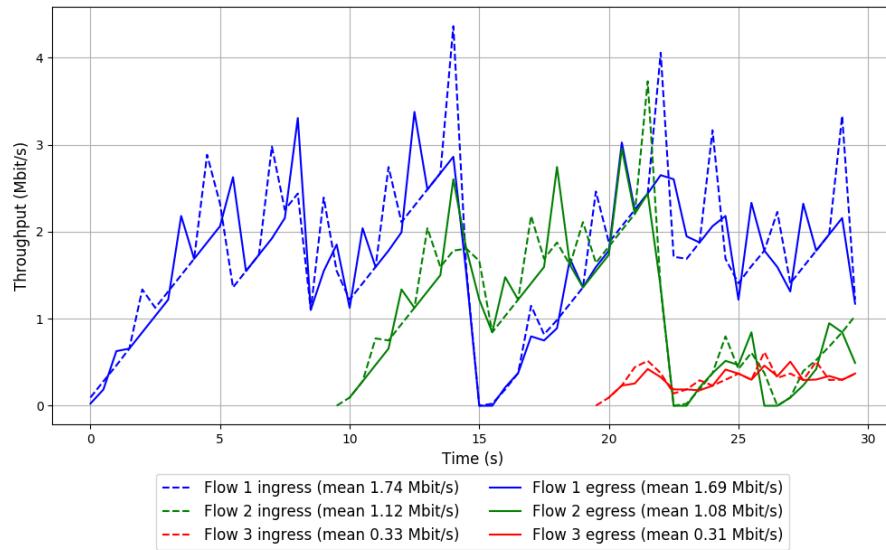
```
Run 1: Statistics of LEDBAT
```

```
Start at: 2017-08-20 23:45:47
```

```
End at: 2017-08-20 23:46:17
```

```
# Below is generated by plot.py at 2017-08-21 04:43:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.50 Mbit/s
95th percentile per-packet one-way delay: 113.086 ms
Loss rate: 3.89%
-- Flow 1:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 112.626 ms
Loss rate: 3.27%
-- Flow 2:
Average throughput: 1.08 Mbit/s
95th percentile per-packet one-way delay: 113.266 ms
Loss rate: 4.90%
-- Flow 3:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 112.868 ms
Loss rate: 6.73%
```

Run 1: Report of LEDBAT — Data Link



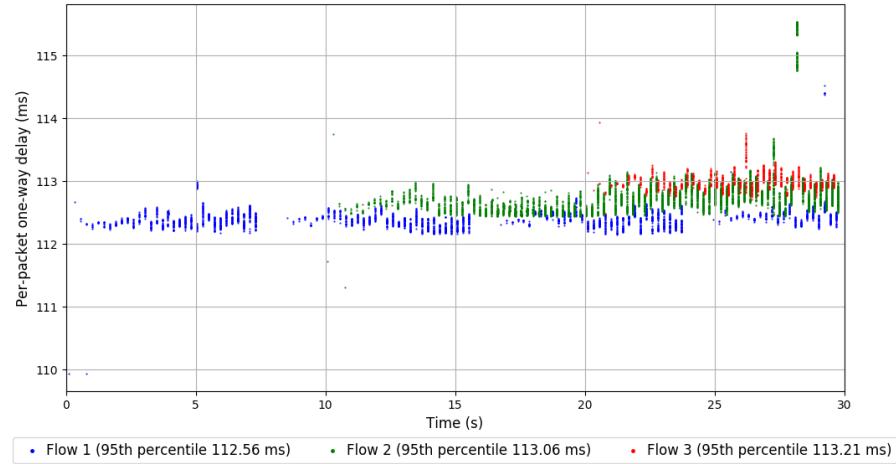
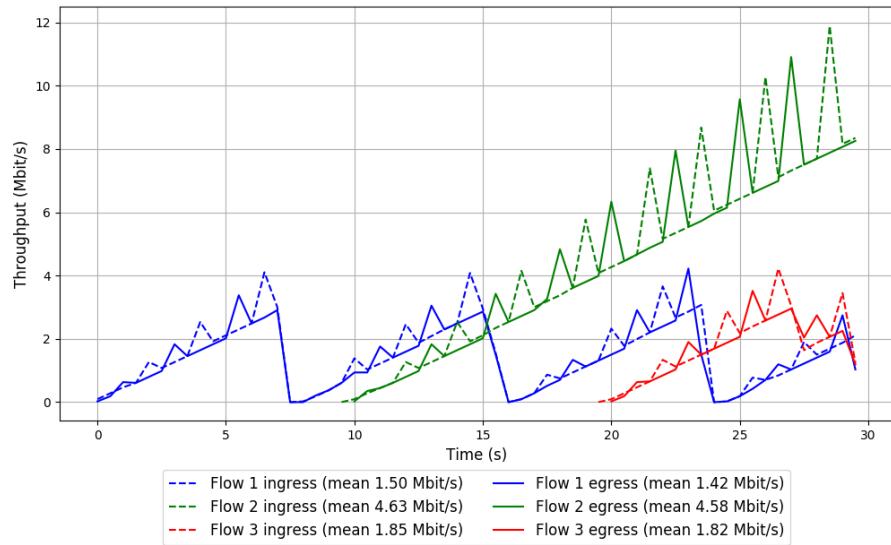
Run 2: Statistics of LEDBAT

Start at: 2017-08-20 23:58:19

End at: 2017-08-20 23:58:49

```
# Below is generated by plot.py at 2017-08-21 04:43:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.03 Mbit/s
95th percentile per-packet one-way delay: 113.087 ms
Loss rate: 3.69%
-- Flow 1:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 112.561 ms
Loss rate: 6.39%
-- Flow 2:
Average throughput: 4.58 Mbit/s
95th percentile per-packet one-way delay: 113.059 ms
Loss rate: 2.28%
-- Flow 3:
Average throughput: 1.82 Mbit/s
95th percentile per-packet one-way delay: 113.207 ms
Loss rate: 4.23%
```

Run 2: Report of LEDBAT — Data Link



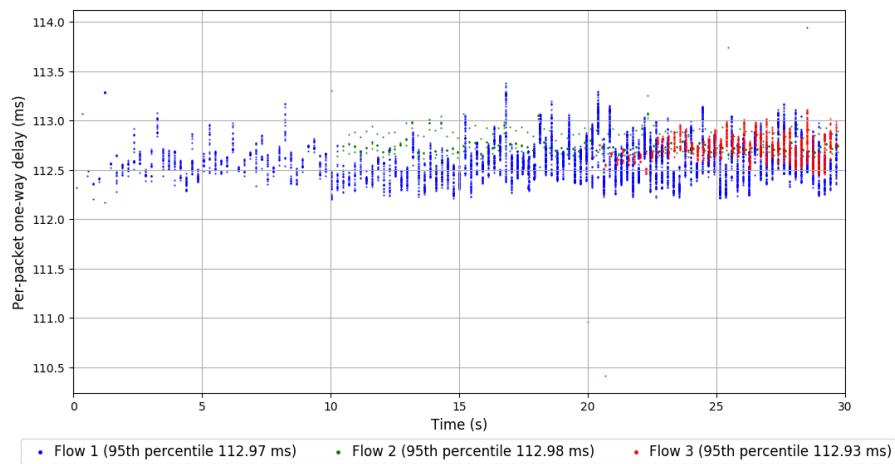
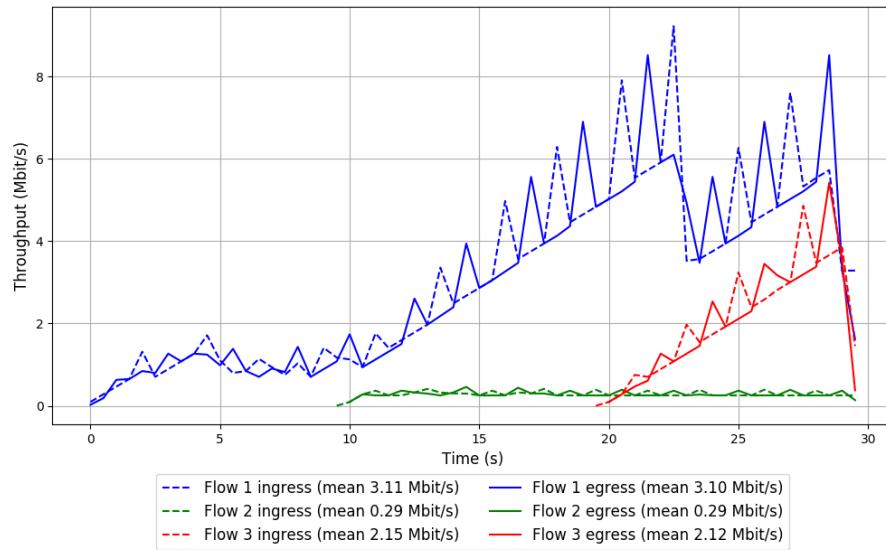
Run 3: Statistics of LEDBAT

Start at: 2017-08-21 00:11:22

End at: 2017-08-21 00:11:52

```
# Below is generated by plot.py at 2017-08-21 04:43:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.98 Mbit/s
95th percentile per-packet one-way delay: 112.959 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 3.10 Mbit/s
95th percentile per-packet one-way delay: 112.971 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 112.978 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 112.926 ms
Loss rate: 3.32%
```

Run 3: Report of LEDBAT — Data Link



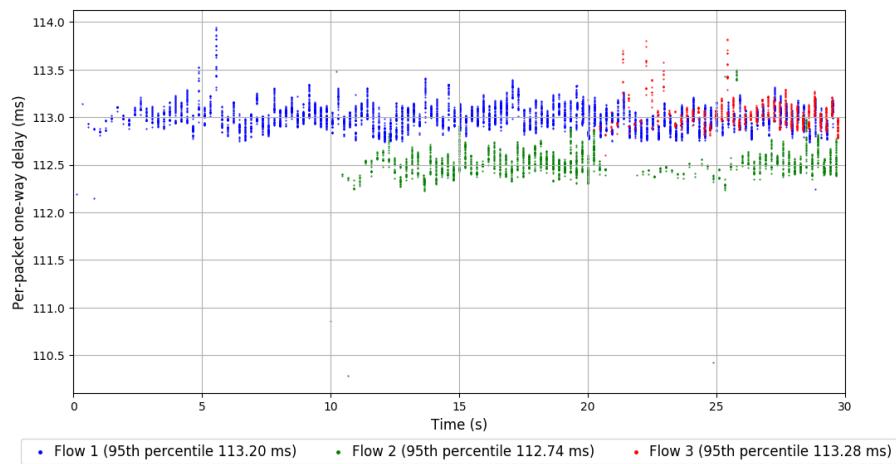
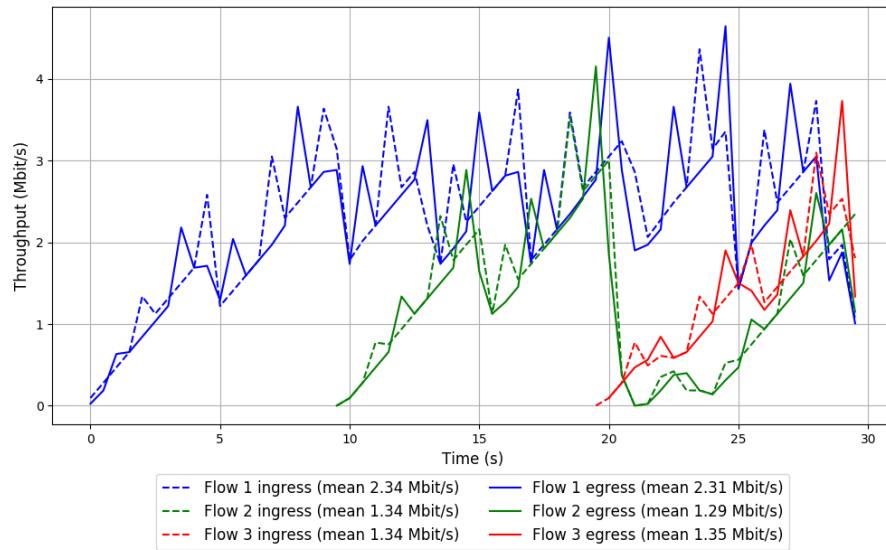
Run 4: Statistics of LEDBAT

Start at: 2017-08-21 00:24:31

End at: 2017-08-21 00:25:01

```
# Below is generated by plot.py at 2017-08-21 04:43:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.59 Mbit/s
95th percentile per-packet one-way delay: 113.188 ms
Loss rate: 2.61%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 113.200 ms
Loss rate: 1.71%
-- Flow 2:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 112.742 ms
Loss rate: 5.36%
-- Flow 3:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 113.282 ms
Loss rate: 1.76%
```

Run 4: Report of LEDBAT — Data Link



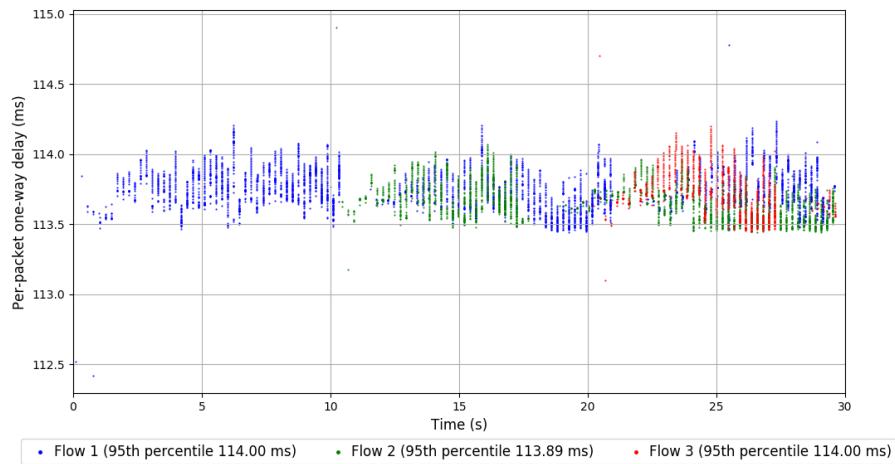
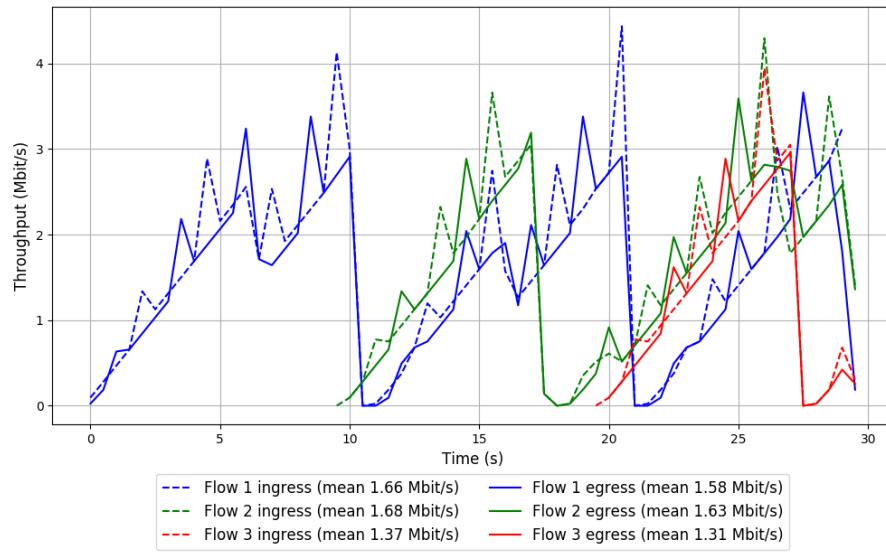
Run 5: Statistics of LEDBAT

Start at: 2017-08-21 00:37:31

End at: 2017-08-21 00:38:01

```
# Below is generated by plot.py at 2017-08-21 04:43:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.08 Mbit/s
95th percentile per-packet one-way delay: 113.975 ms
Loss rate: 5.05%
-- Flow 1:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 113.999 ms
Loss rate: 4.98%
-- Flow 2:
Average throughput: 1.63 Mbit/s
95th percentile per-packet one-way delay: 113.892 ms
Loss rate: 4.41%
-- Flow 3:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 114.004 ms
Loss rate: 6.88%
```

Run 5: Report of LEDBAT — Data Link



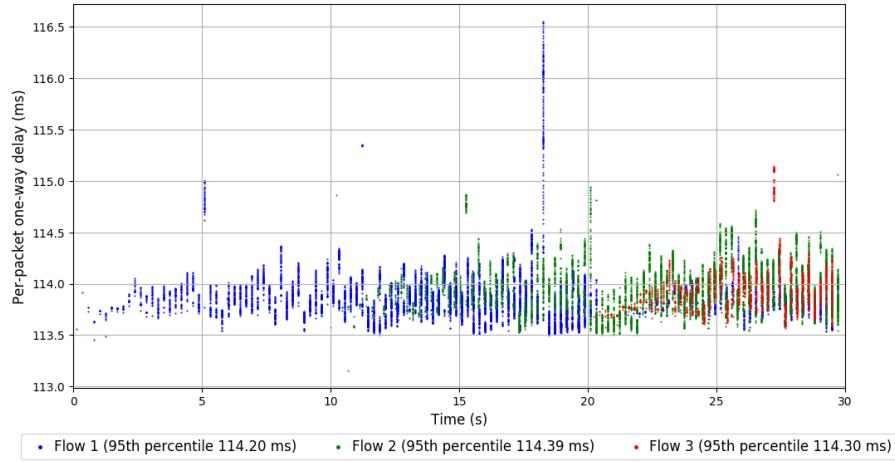
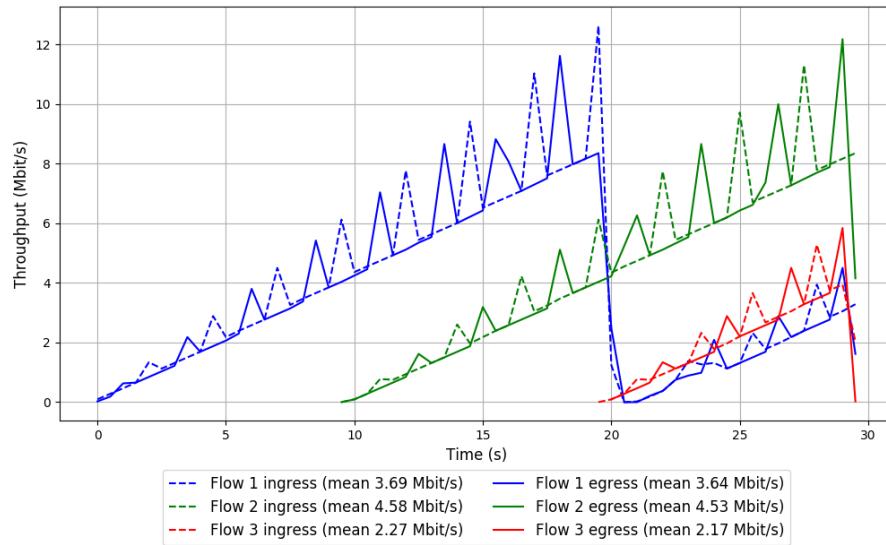
Run 6: Statistics of LEDBAT

Start at: 2017-08-21 00:50:28

End at: 2017-08-21 00:50:58

```
# Below is generated by plot.py at 2017-08-21 04:43:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.36 Mbit/s
95th percentile per-packet one-way delay: 114.315 ms
Loss rate: 2.44%
-- Flow 1:
Average throughput: 3.64 Mbit/s
95th percentile per-packet one-way delay: 114.205 ms
Loss rate: 2.13%
-- Flow 2:
Average throughput: 4.53 Mbit/s
95th percentile per-packet one-way delay: 114.387 ms
Loss rate: 2.30%
-- Flow 3:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 114.295 ms
Loss rate: 4.57%
```

Run 6: Report of LEDBAT — Data Link



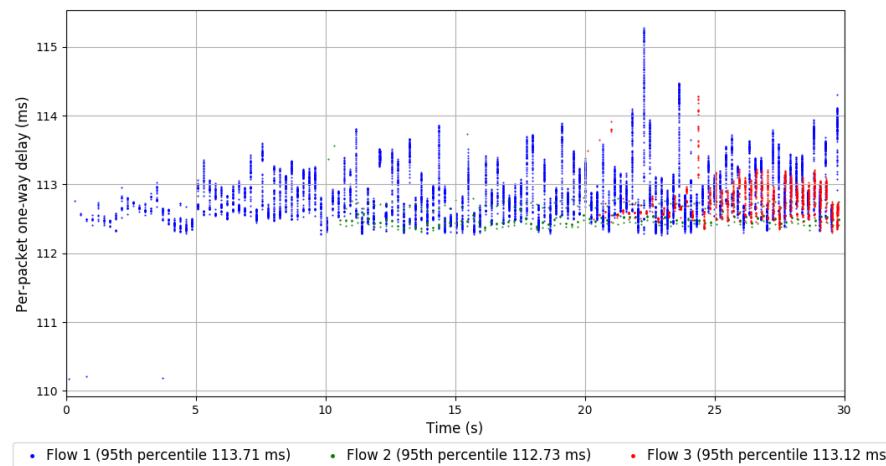
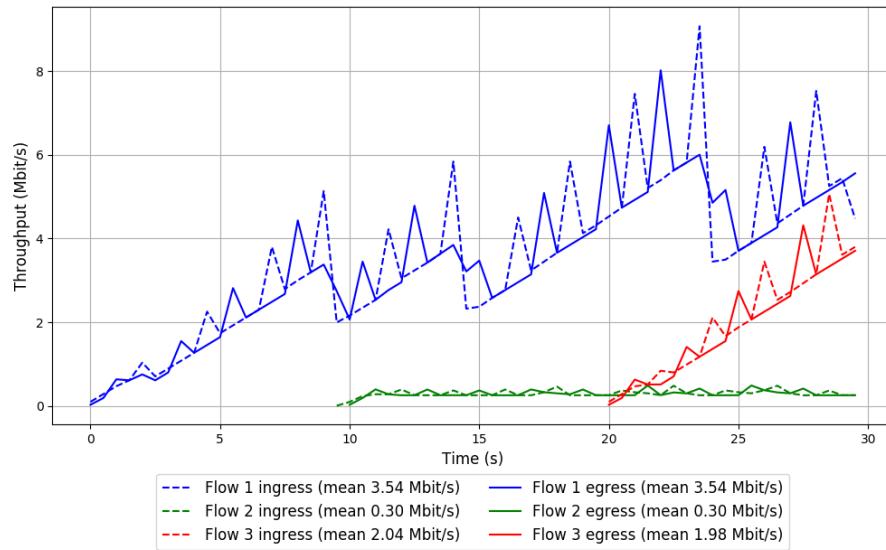
Run 7: Statistics of LEDBAT

Start at: 2017-08-21 01:03:31

End at: 2017-08-21 01:04:01

```
# Below is generated by plot.py at 2017-08-21 04:43:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.37 Mbit/s
95th percentile per-packet one-way delay: 113.645 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 3.54 Mbit/s
95th percentile per-packet one-way delay: 113.710 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 112.734 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 113.124 ms
Loss rate: 4.79%
```

Run 7: Report of LEDBAT — Data Link



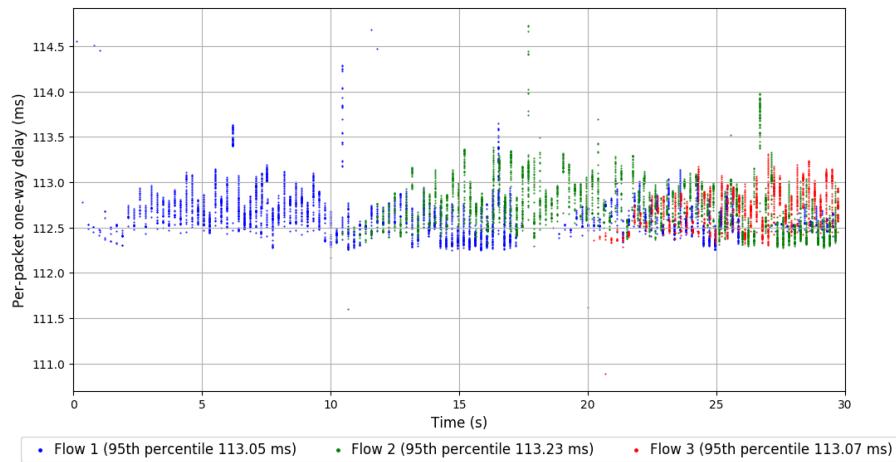
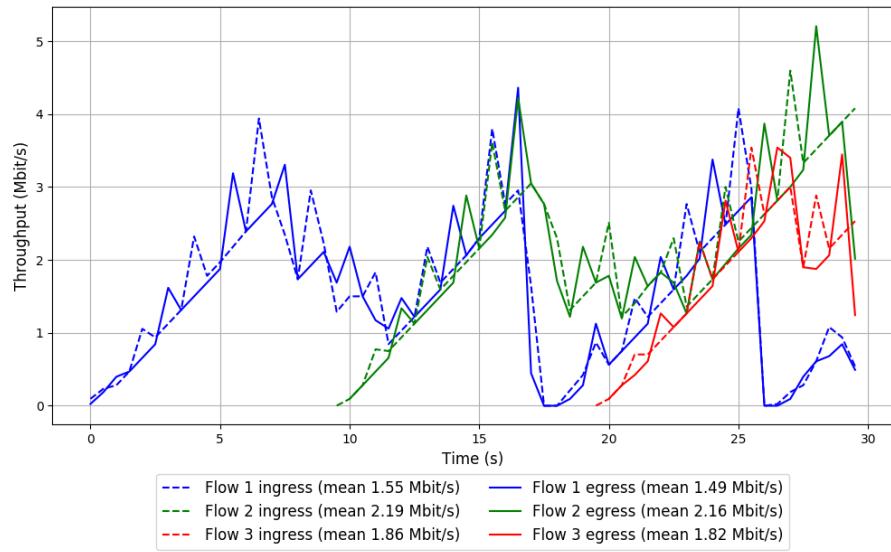
Run 8: Statistics of LEDBAT

Start at: 2017-08-21 01:16:45

End at: 2017-08-21 01:17:15

```
# Below is generated by plot.py at 2017-08-21 04:43:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.52 Mbit/s
95th percentile per-packet one-way delay: 113.136 ms
Loss rate: 3.48%
-- Flow 1:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 113.050 ms
Loss rate: 4.17%
-- Flow 2:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 113.226 ms
Loss rate: 2.50%
-- Flow 3:
Average throughput: 1.82 Mbit/s
95th percentile per-packet one-way delay: 113.074 ms
Loss rate: 4.07%
```

Run 8: Report of LEDBAT — Data Link



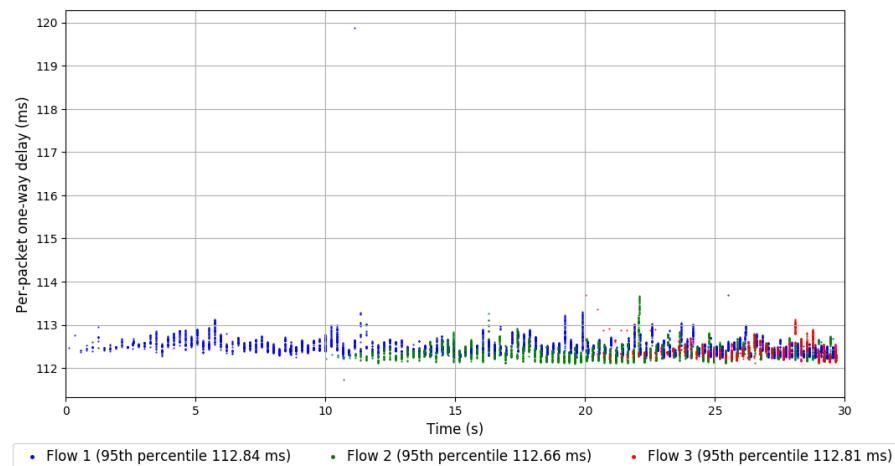
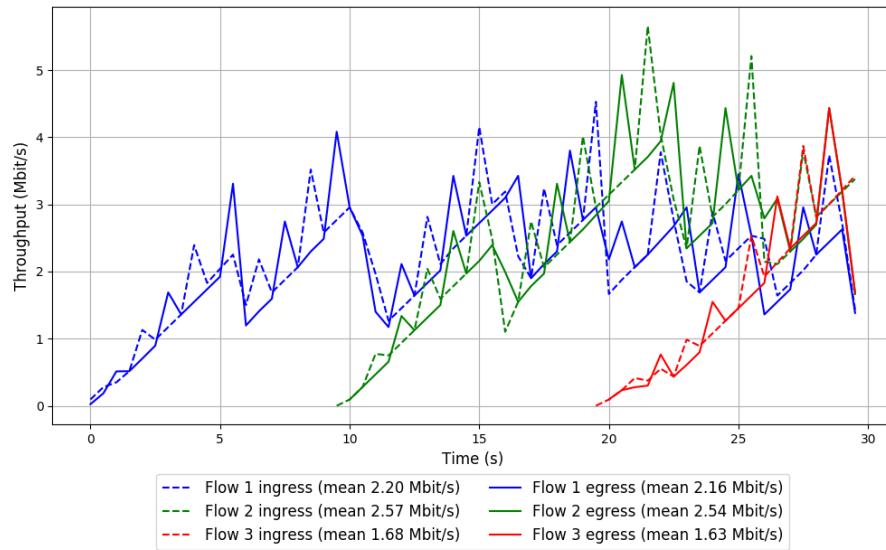
Run 9: Statistics of LEDBAT

Start at: 2017-08-21 01:29:39

End at: 2017-08-21 01:30:09

```
# Below is generated by plot.py at 2017-08-21 04:43:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.37 Mbit/s
95th percentile per-packet one-way delay: 112.789 ms
Loss rate: 2.77%
-- Flow 1:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 112.840 ms
Loss rate: 2.36%
-- Flow 2:
Average throughput: 2.54 Mbit/s
95th percentile per-packet one-way delay: 112.661 ms
Loss rate: 2.50%
-- Flow 3:
Average throughput: 1.63 Mbit/s
95th percentile per-packet one-way delay: 112.812 ms
Loss rate: 5.25%
```

Run 9: Report of LEDBAT — Data Link



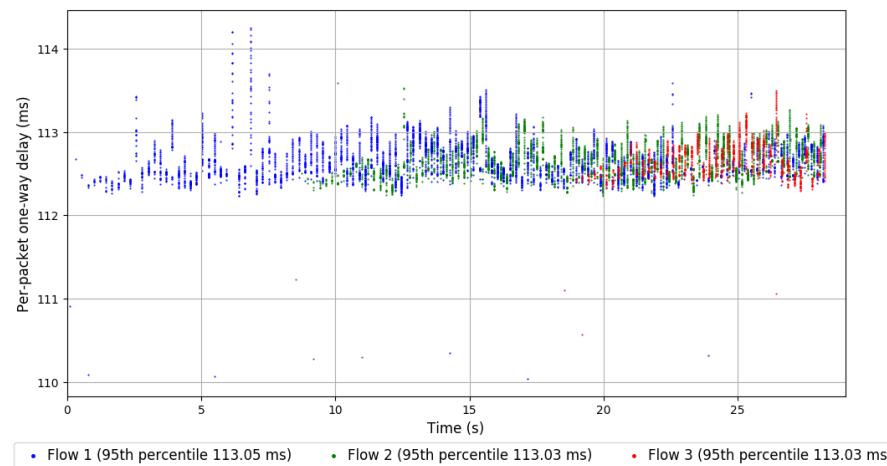
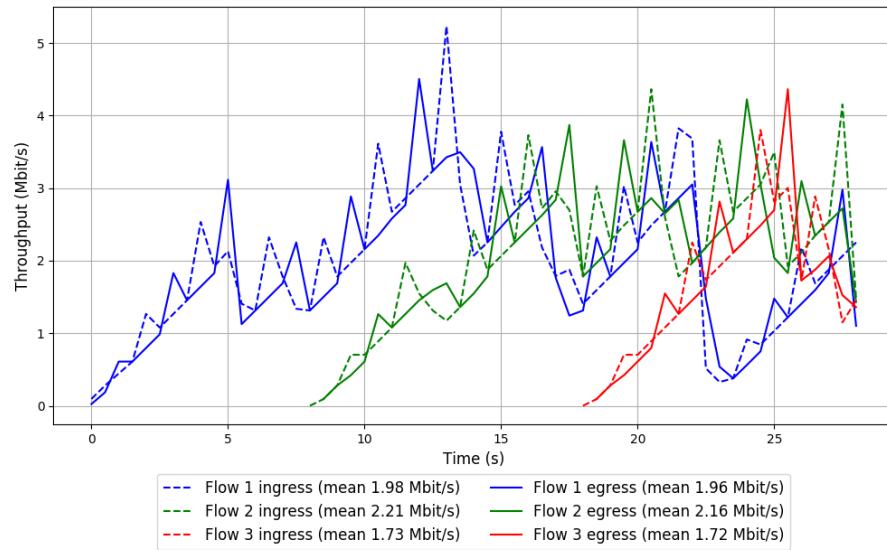
Run 10: Statistics of LEDBAT

Start at: 2017-08-21 01:42:38

End at: 2017-08-21 01:43:08

```
# Below is generated by plot.py at 2017-08-21 04:43:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.05 Mbit/s
95th percentile per-packet one-way delay: 113.039 ms
Loss rate: 2.49%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 113.051 ms
Loss rate: 1.92%
-- Flow 2:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 113.031 ms
Loss rate: 3.17%
-- Flow 3:
Average throughput: 1.72 Mbit/s
95th percentile per-packet one-way delay: 113.027 ms
Loss rate: 2.60%
```

Run 10: Report of LEDBAT — Data Link

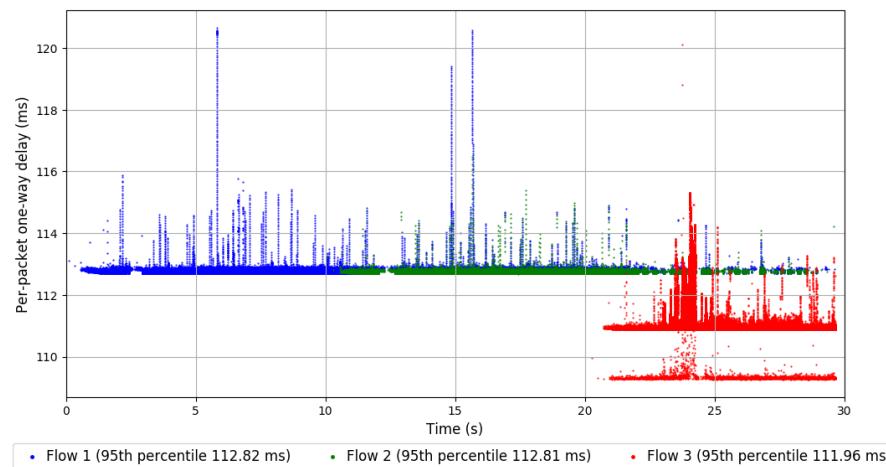
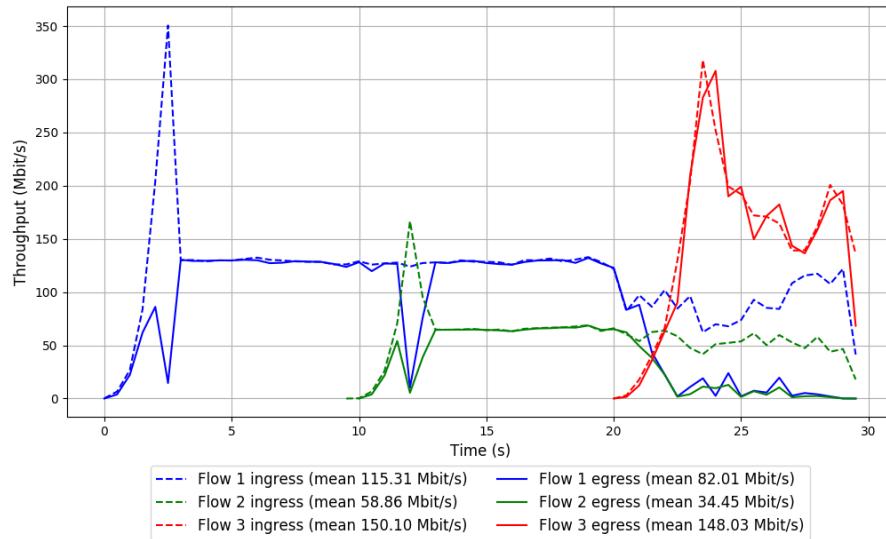


```
Run 1: Statistics of PCC

Start at: 2017-08-20 23:53:16
End at: 2017-08-20 23:53:46

# Below is generated by plot.py at 2017-08-21 04:44:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 151.69 Mbit/s
95th percentile per-packet one-way delay: 112.812 ms
Loss rate: 25.81%
-- Flow 1:
Average throughput: 82.01 Mbit/s
95th percentile per-packet one-way delay: 112.824 ms
Loss rate: 29.52%
-- Flow 2:
Average throughput: 34.45 Mbit/s
95th percentile per-packet one-way delay: 112.809 ms
Loss rate: 42.35%
-- Flow 3:
Average throughput: 148.03 Mbit/s
95th percentile per-packet one-way delay: 111.961 ms
Loss rate: 3.62%
```

Run 1: Report of PCC — Data Link



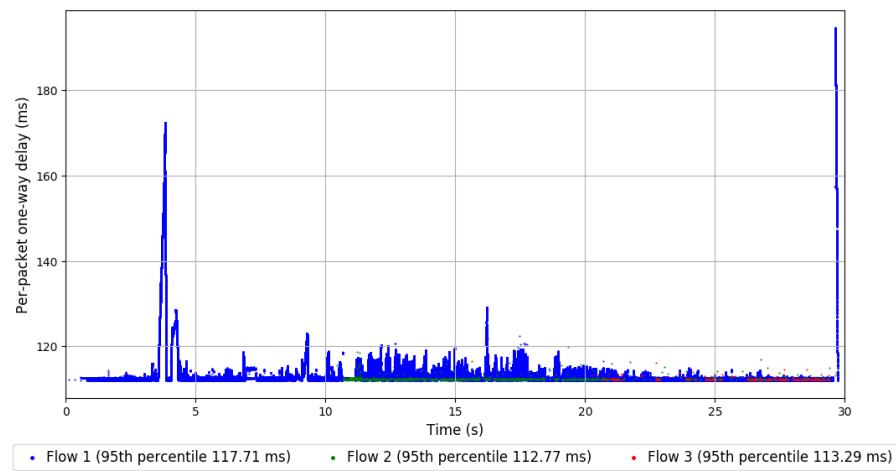
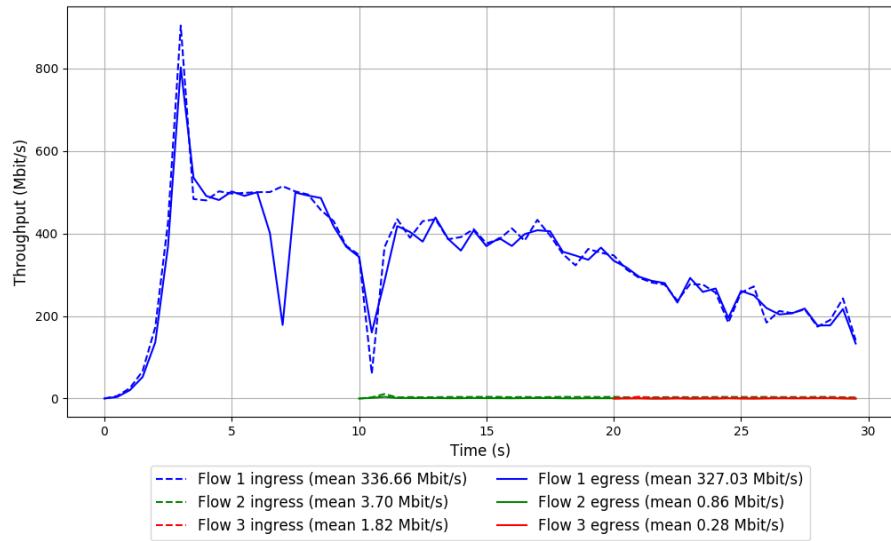
Run 2: Statistics of PCC

Start at: 2017-08-21 00:05:55

End at: 2017-08-21 00:06:25

```
# Below is generated by plot.py at 2017-08-21 04:44:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 327.69 Mbit/s
95th percentile per-packet one-way delay: 117.697 ms
Loss rate: 4.26%
-- Flow 1:
Average throughput: 327.03 Mbit/s
95th percentile per-packet one-way delay: 117.707 ms
Loss rate: 3.59%
-- Flow 2:
Average throughput: 0.86 Mbit/s
95th percentile per-packet one-way delay: 112.768 ms
Loss rate: 77.11%
-- Flow 3:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 113.294 ms
Loss rate: 85.04%
```

Run 2: Report of PCC — Data Link



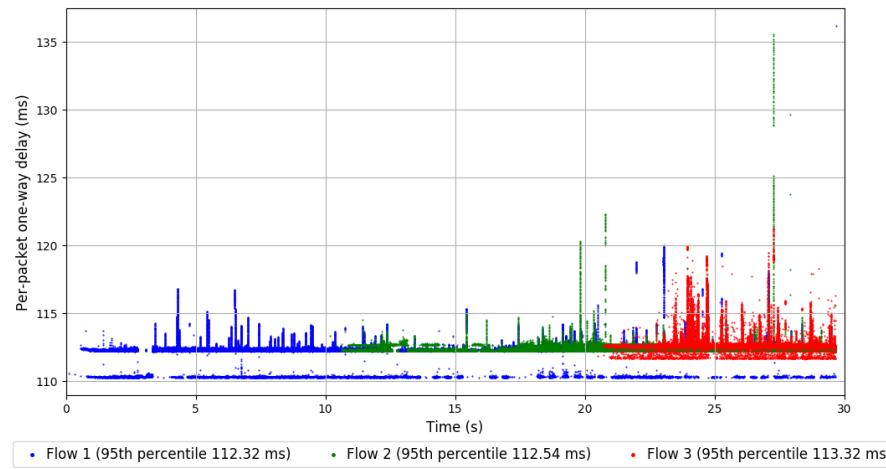
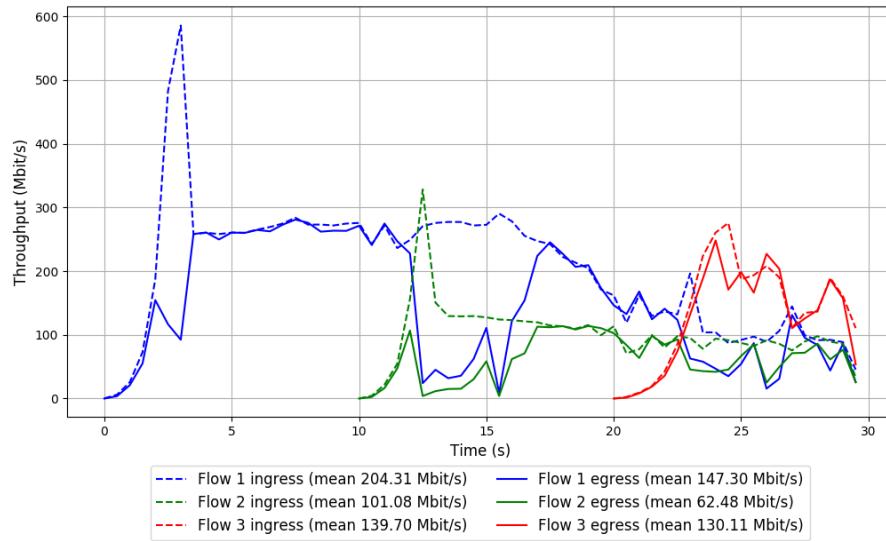
Run 3: Statistics of PCC

Start at: 2017-08-21 00:19:00

End at: 2017-08-21 00:19:30

```
# Below is generated by plot.py at 2017-08-21 04:45:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 229.83 Mbit/s
95th percentile per-packet one-way delay: 112.573 ms
Loss rate: 27.85%
-- Flow 1:
Average throughput: 147.30 Mbit/s
95th percentile per-packet one-way delay: 112.323 ms
Loss rate: 28.39%
-- Flow 2:
Average throughput: 62.48 Mbit/s
95th percentile per-packet one-way delay: 112.537 ms
Loss rate: 38.92%
-- Flow 3:
Average throughput: 130.11 Mbit/s
95th percentile per-packet one-way delay: 113.316 ms
Loss rate: 9.02%
```

Run 3: Report of PCC — Data Link



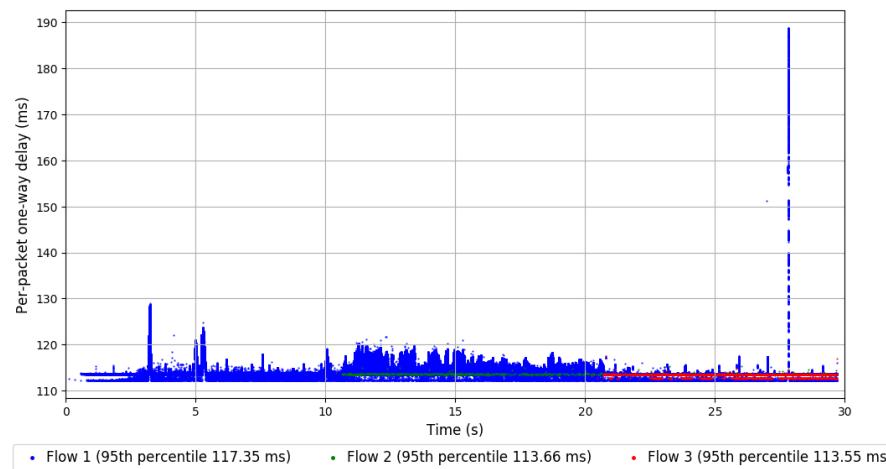
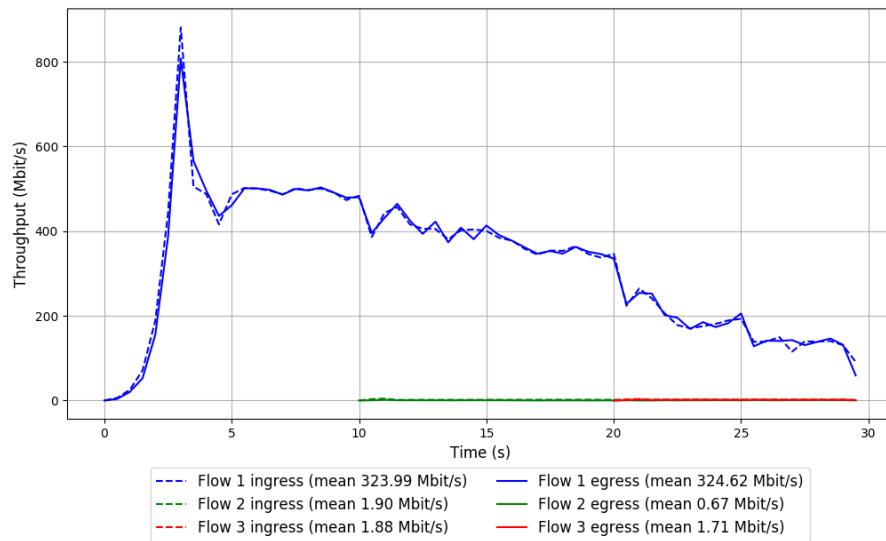
Run 4: Statistics of PCC

Start at: 2017-08-21 00:32:01

End at: 2017-08-21 00:32:31

```
# Below is generated by plot.py at 2017-08-21 04:45:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 325.59 Mbit/s
95th percentile per-packet one-way delay: 117.345 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 324.62 Mbit/s
95th percentile per-packet one-way delay: 117.349 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 113.655 ms
Loss rate: 65.32%
-- Flow 3:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 113.553 ms
Loss rate: 11.29%
```

Run 4: Report of PCC — Data Link



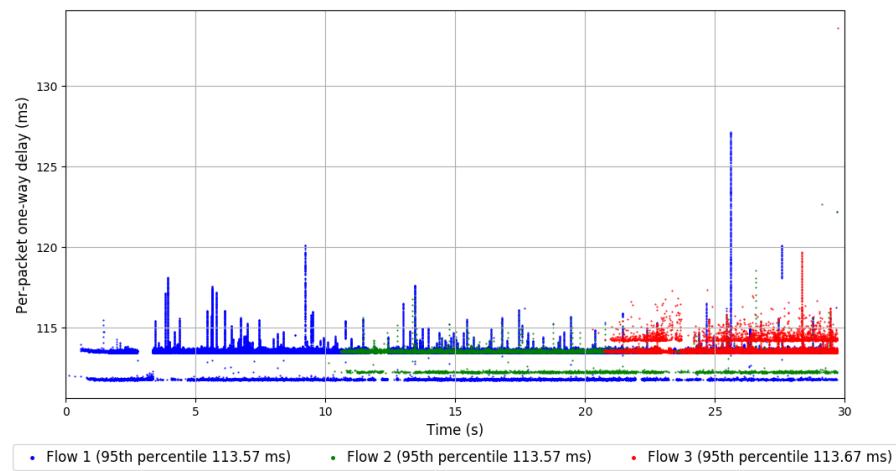
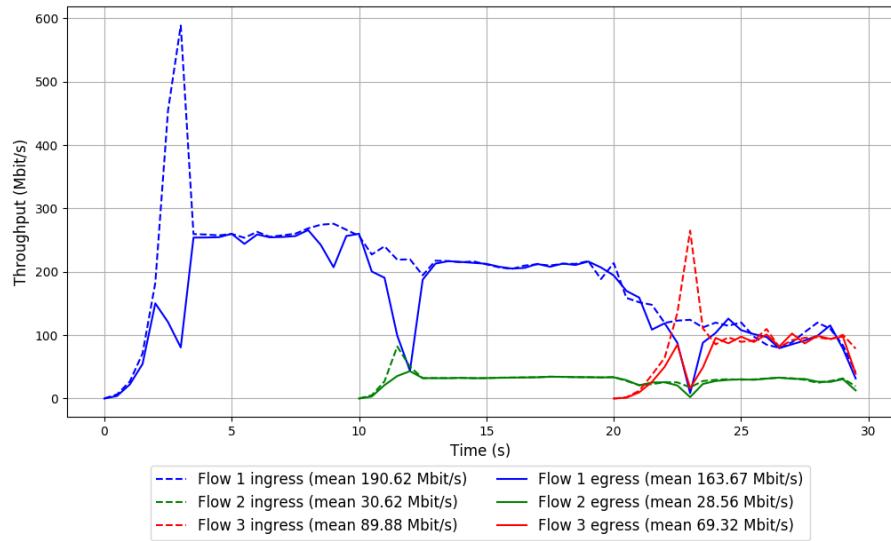
Run 5: Statistics of PCC

Start at: 2017-08-21 00:45:02

End at: 2017-08-21 00:45:32

```
# Below is generated by plot.py at 2017-08-21 04:45:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 204.61 Mbit/s
95th percentile per-packet one-way delay: 113.575 ms
Loss rate: 15.37%
-- Flow 1:
Average throughput: 163.67 Mbit/s
95th percentile per-packet one-way delay: 113.571 ms
Loss rate: 14.76%
-- Flow 2:
Average throughput: 28.56 Mbit/s
95th percentile per-packet one-way delay: 113.569 ms
Loss rate: 7.75%
-- Flow 3:
Average throughput: 69.32 Mbit/s
95th percentile per-packet one-way delay: 113.665 ms
Loss rate: 24.64%
```

Run 5: Report of PCC — Data Link



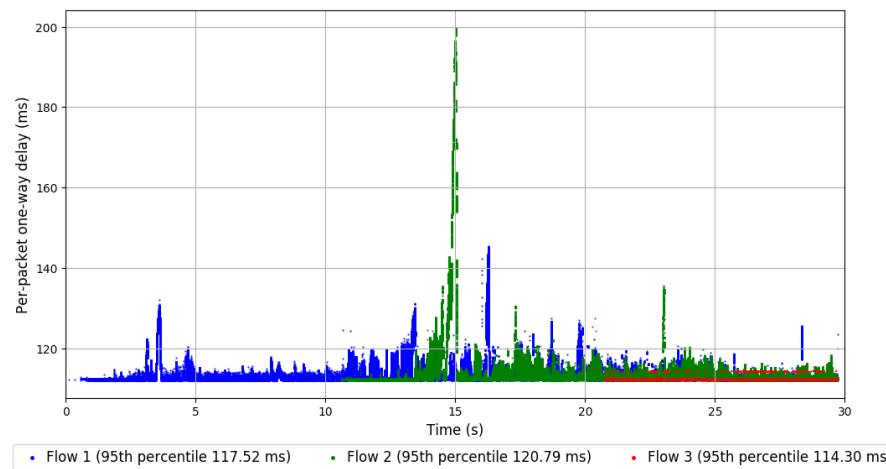
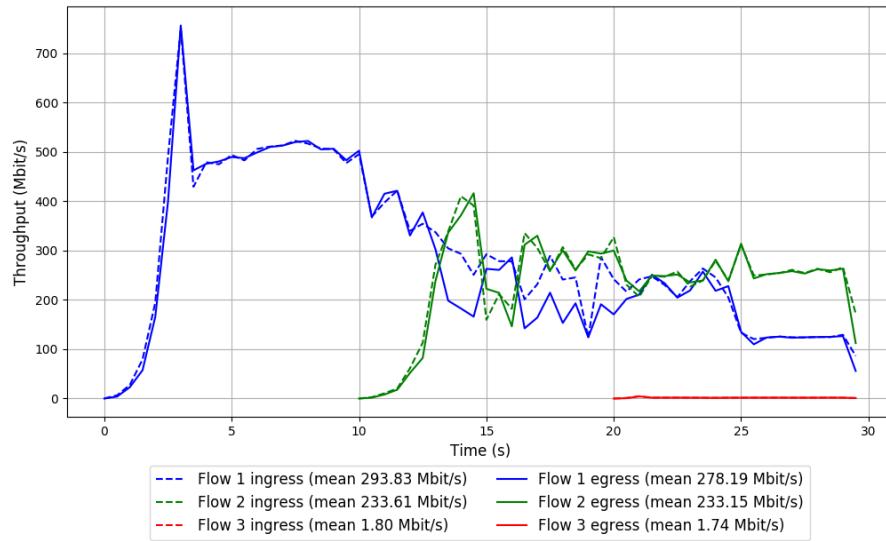
Run 6: Statistics of PCC

Start at: 2017-08-21 00:57:50

End at: 2017-08-21 00:58:20

```
# Below is generated by plot.py at 2017-08-21 04:47:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 432.87 Mbit/s
95th percentile per-packet one-way delay: 118.357 ms
Loss rate: 4.44%
-- Flow 1:
Average throughput: 278.19 Mbit/s
95th percentile per-packet one-way delay: 117.523 ms
Loss rate: 6.06%
-- Flow 2:
Average throughput: 233.15 Mbit/s
95th percentile per-packet one-way delay: 120.787 ms
Loss rate: 1.35%
-- Flow 3:
Average throughput: 1.74 Mbit/s
95th percentile per-packet one-way delay: 114.296 ms
Loss rate: 5.35%
```

Run 6: Report of PCC — Data Link



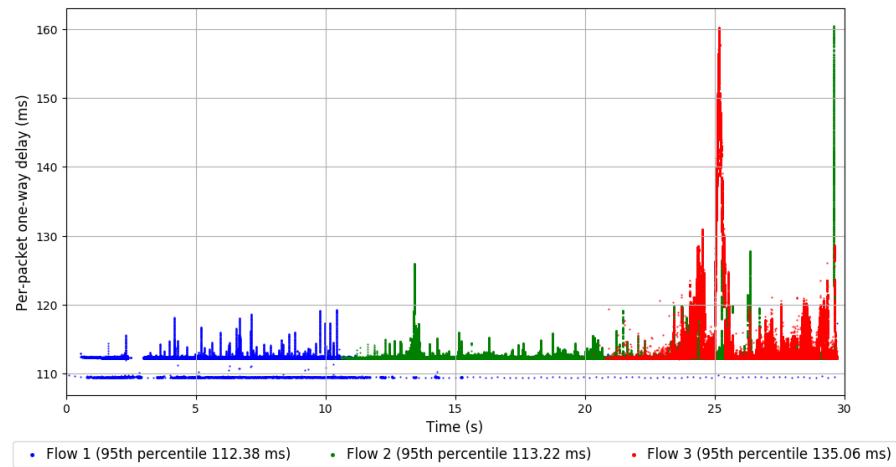
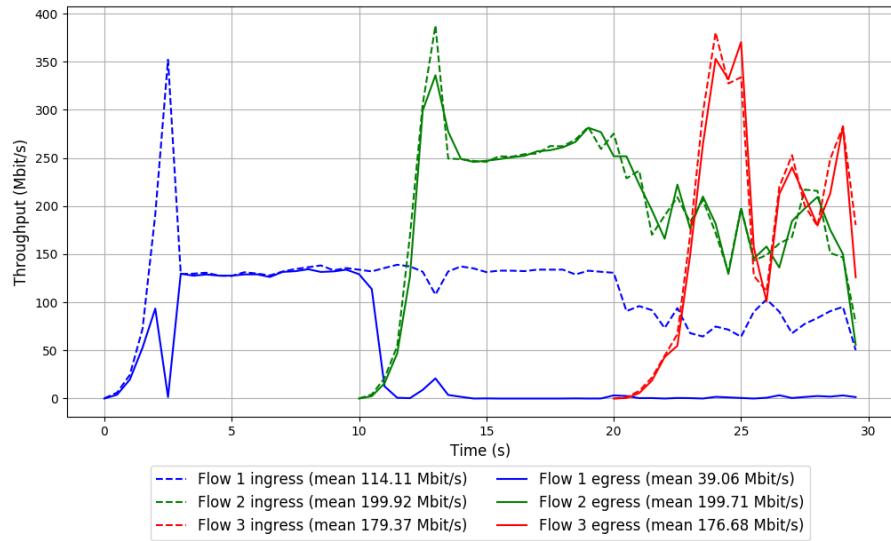
Run 7: Statistics of PCC

Start at: 2017-08-21 01:11:13

End at: 2017-08-21 01:11:43

```
# Below is generated by plot.py at 2017-08-21 04:47:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 227.02 Mbit/s
95th percentile per-packet one-way delay: 118.900 ms
Loss rate: 26.03%
-- Flow 1:
Average throughput: 39.06 Mbit/s
95th percentile per-packet one-way delay: 112.379 ms
Loss rate: 66.02%
-- Flow 2:
Average throughput: 199.71 Mbit/s
95th percentile per-packet one-way delay: 113.221 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 176.68 Mbit/s
95th percentile per-packet one-way delay: 135.063 ms
Loss rate: 4.04%
```

Run 7: Report of PCC — Data Link



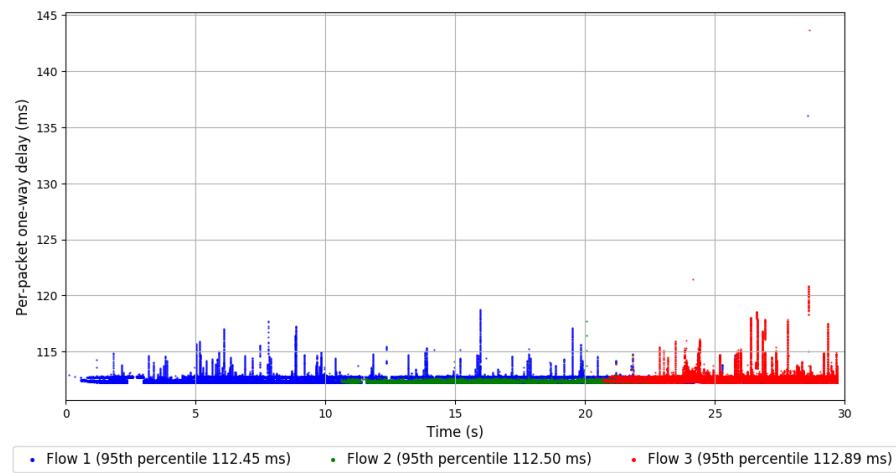
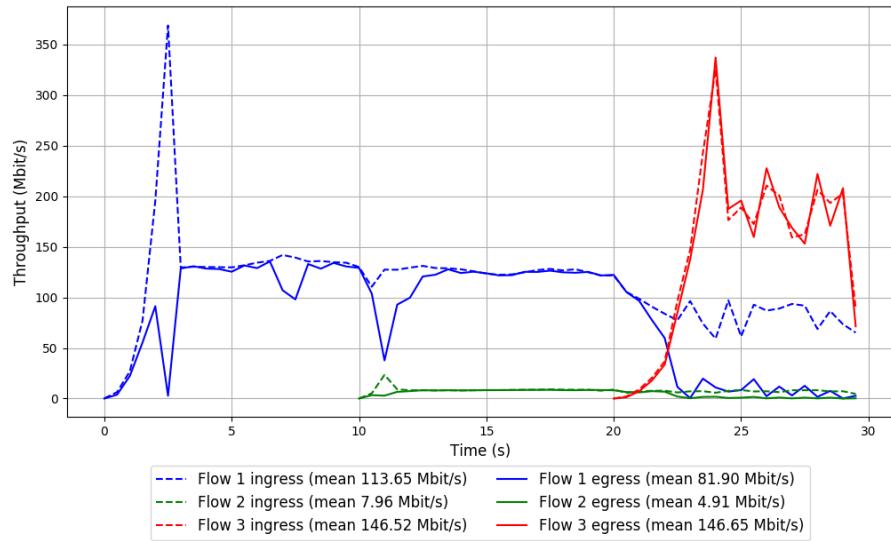
Run 8: Statistics of PCC

Start at: 2017-08-21 01:24:25

End at: 2017-08-21 01:24:55

```
# Below is generated by plot.py at 2017-08-21 04:47:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 132.08 Mbit/s
95th percentile per-packet one-way delay: 112.700 ms
Loss rate: 21.30%
-- Flow 1:
Average throughput: 81.90 Mbit/s
95th percentile per-packet one-way delay: 112.447 ms
Loss rate: 28.48%
-- Flow 2:
Average throughput: 4.91 Mbit/s
95th percentile per-packet one-way delay: 112.500 ms
Loss rate: 39.09%
-- Flow 3:
Average throughput: 146.65 Mbit/s
95th percentile per-packet one-way delay: 112.895 ms
Loss rate: 2.21%
```

Run 8: Report of PCC — Data Link



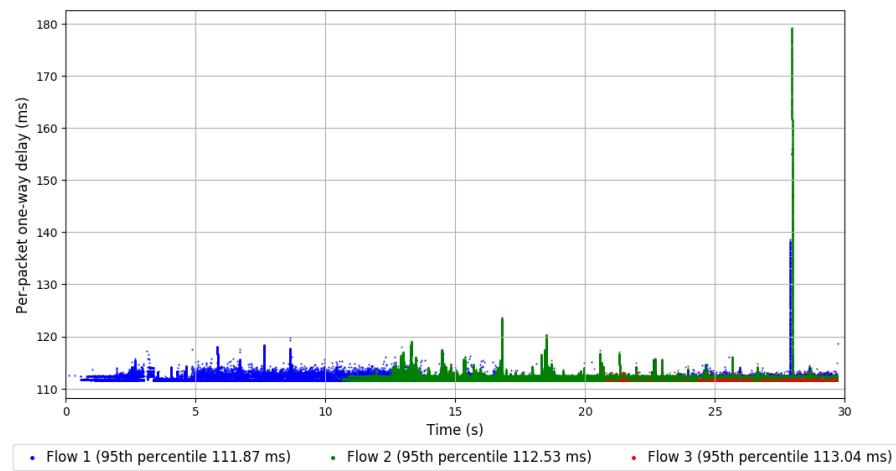
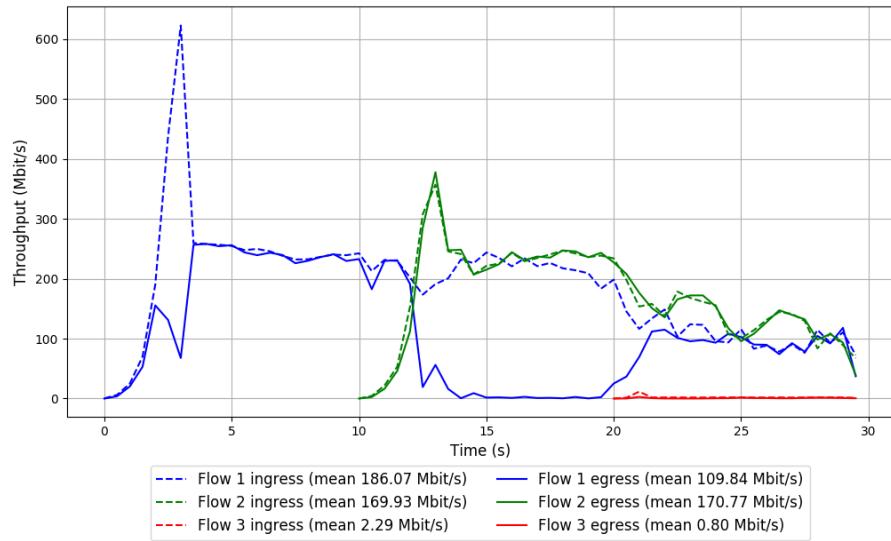
Run 9: Statistics of PCC

Start at: 2017-08-21 01:37:23

End at: 2017-08-21 01:37:53

```
# Below is generated by plot.py at 2017-08-21 04:47:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 222.78 Mbit/s
95th percentile per-packet one-way delay: 112.355 ms
Loss rate: 26.13%
-- Flow 1:
Average throughput: 109.84 Mbit/s
95th percentile per-packet one-way delay: 111.874 ms
Loss rate: 41.40%
-- Flow 2:
Average throughput: 170.77 Mbit/s
95th percentile per-packet one-way delay: 112.526 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 0.80 Mbit/s
95th percentile per-packet one-way delay: 113.044 ms
Loss rate: 65.99%
```

Run 9: Report of PCC — Data Link



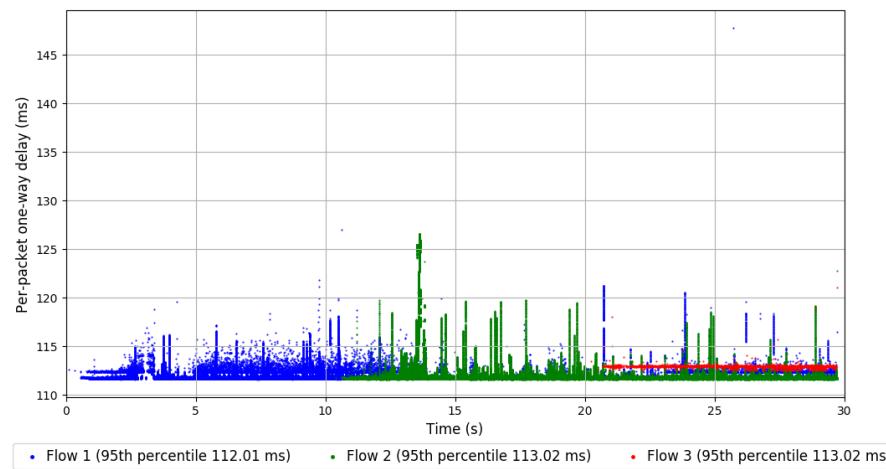
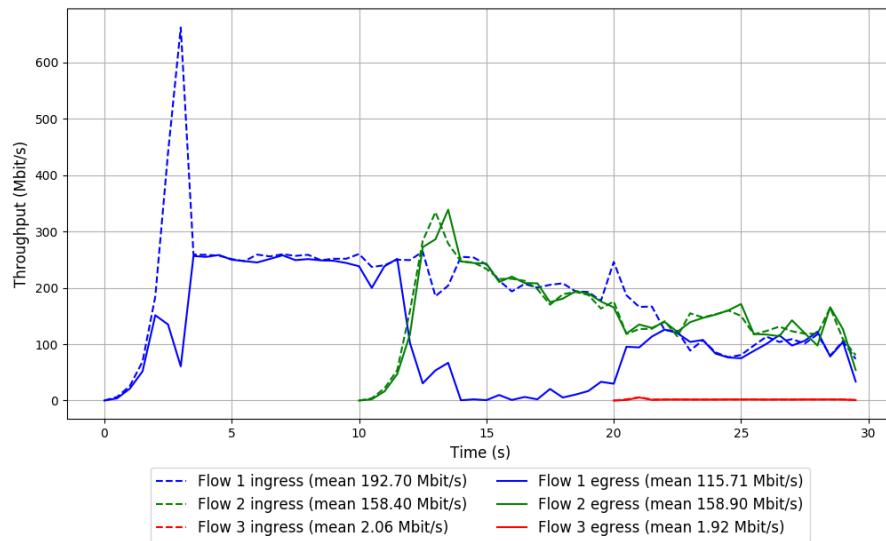
Run 10: Statistics of PCC

Start at: 2017-08-21 01:50:11

End at: 2017-08-21 01:50:41

```
# Below is generated by plot.py at 2017-08-21 04:48:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 221.23 Mbit/s
95th percentile per-packet one-way delay: 112.460 ms
Loss rate: 26.38%
-- Flow 1:
Average throughput: 115.71 Mbit/s
95th percentile per-packet one-way delay: 112.006 ms
Loss rate: 40.39%
-- Flow 2:
Average throughput: 158.90 Mbit/s
95th percentile per-packet one-way delay: 113.024 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 113.022 ms
Loss rate: 8.48%
```

Run 10: Report of PCC — Data Link

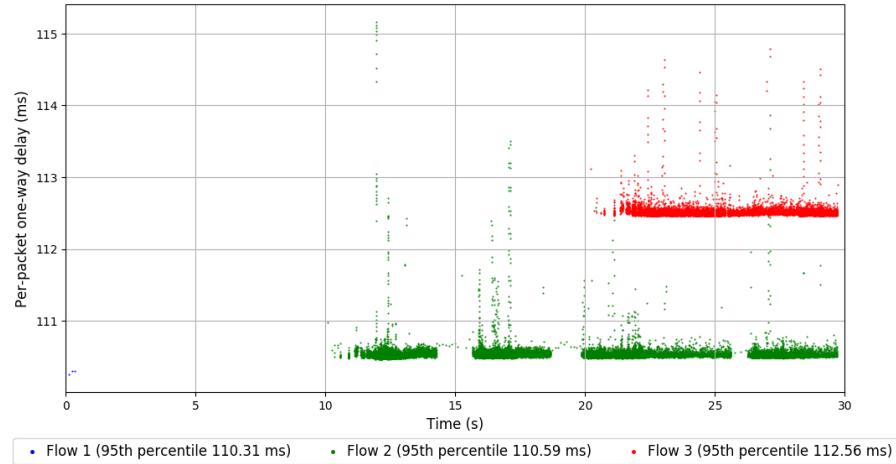
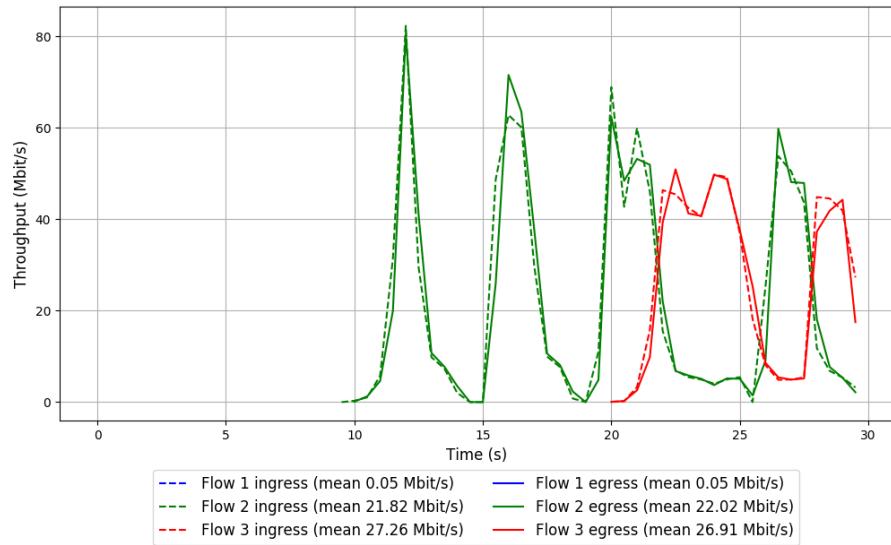


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-08-20 23:44:58
End at: 2017-08-20 23:45:28

# Below is generated by plot.py at 2017-08-21 04:48:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.24 Mbit/s
95th percentile per-packet one-way delay: 112.520 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 110.306 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 22.02 Mbit/s
95th percentile per-packet one-way delay: 110.594 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 26.91 Mbit/s
95th percentile per-packet one-way delay: 112.555 ms
Loss rate: 3.57%
```

Run 1: Report of QUIC Cubic — Data Link



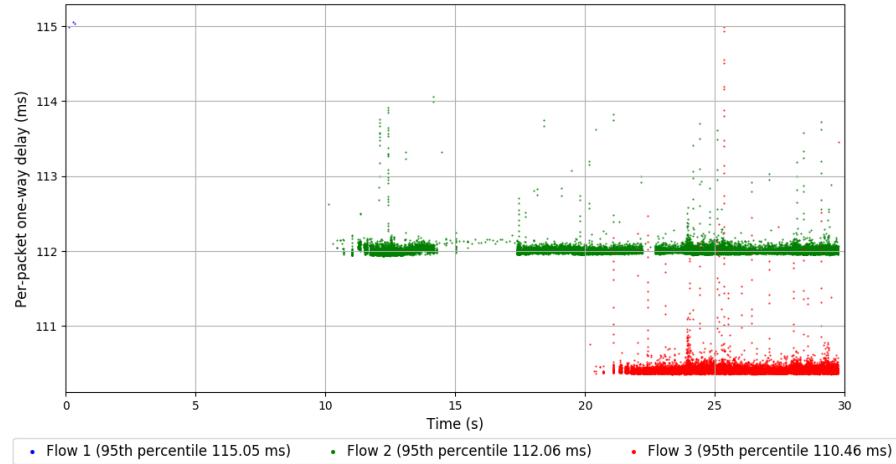
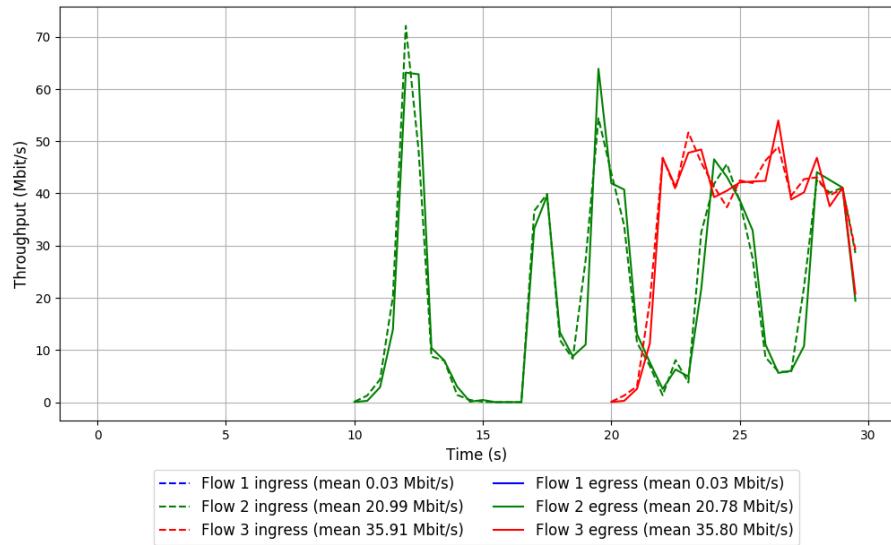
Run 2: Statistics of QUIC Cubic

Start at: 2017-08-20 23:57:30

End at: 2017-08-20 23:58:00

```
# Below is generated by plot.py at 2017-08-21 04:48:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 25.30 Mbit/s
95th percentile per-packet one-way delay: 112.037 ms
Loss rate: 2.33%
-- Flow 1:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 115.052 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 20.78 Mbit/s
95th percentile per-packet one-way delay: 112.058 ms
Loss rate: 2.13%
-- Flow 3:
Average throughput: 35.80 Mbit/s
95th percentile per-packet one-way delay: 110.464 ms
Loss rate: 2.57%
```

Run 2: Report of QUIC Cubic — Data Link



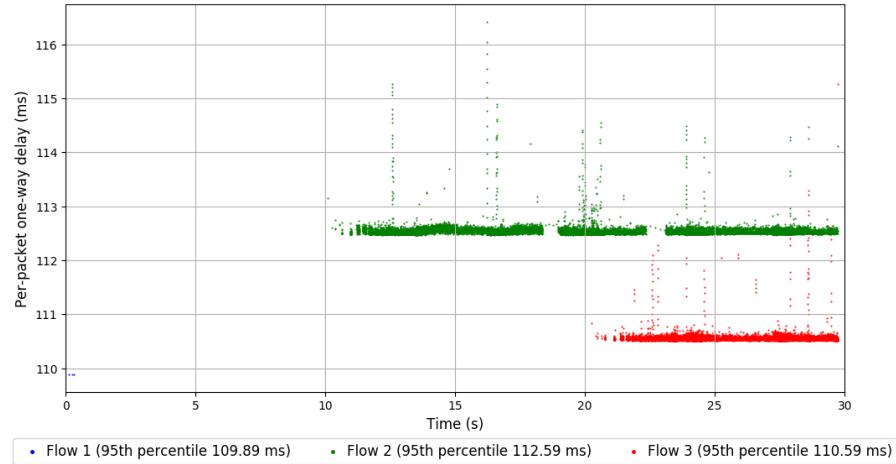
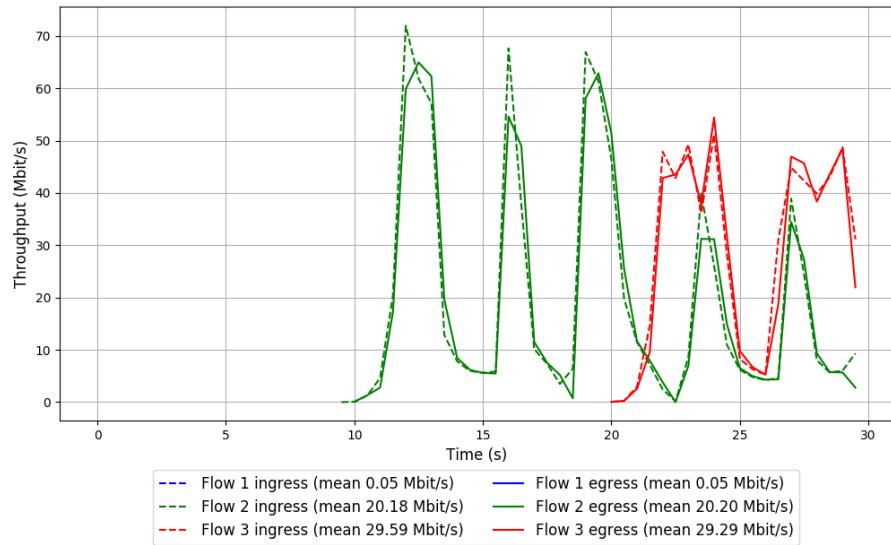
Run 3: Statistics of QUIC Cubic

Start at: 2017-08-21 00:10:33

End at: 2017-08-21 00:11:03

```
# Below is generated by plot.py at 2017-08-21 04:48:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 22.77 Mbit/s
95th percentile per-packet one-way delay: 112.574 ms
Loss rate: 1.96%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 109.893 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 20.20 Mbit/s
95th percentile per-packet one-way delay: 112.593 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 29.29 Mbit/s
95th percentile per-packet one-way delay: 110.590 ms
Loss rate: 3.25%
```

Run 3: Report of QUIC Cubic — Data Link



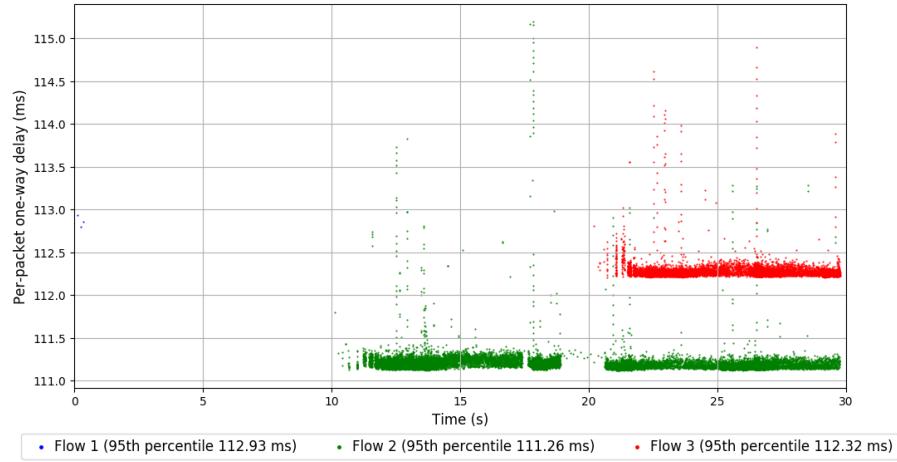
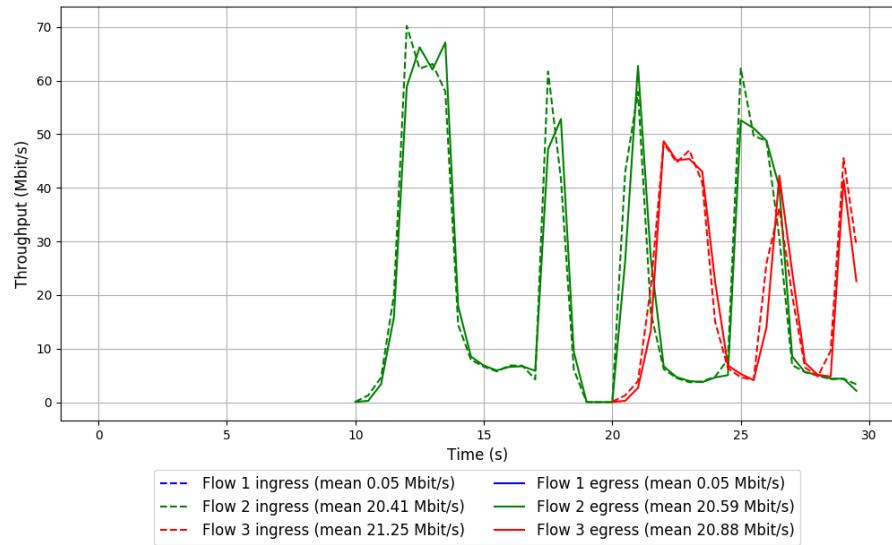
Run 4: Statistics of QUIC Cubic

Start at: 2017-08-21 00:23:42

End at: 2017-08-21 00:24:12

```
# Below is generated by plot.py at 2017-08-21 04:48:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.37 Mbit/s
95th percentile per-packet one-way delay: 112.281 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 112.932 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 20.59 Mbit/s
95th percentile per-packet one-way delay: 111.258 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 20.88 Mbit/s
95th percentile per-packet one-way delay: 112.321 ms
Loss rate: 3.97%
```

Run 4: Report of QUIC Cubic — Data Link



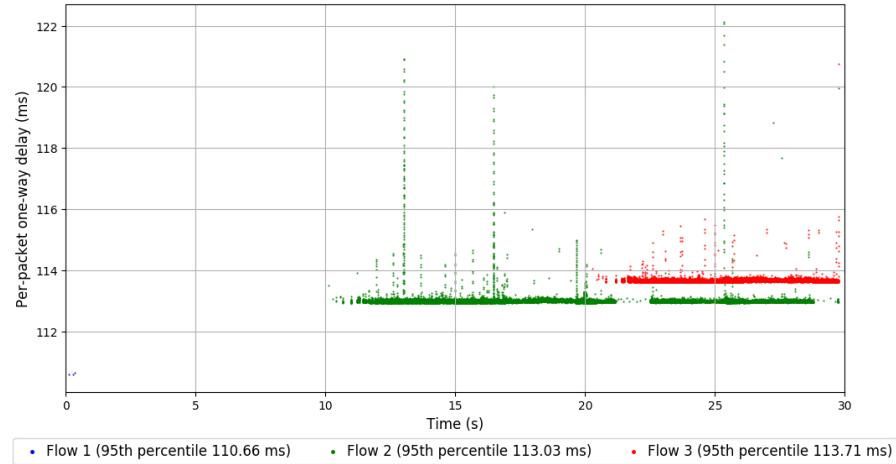
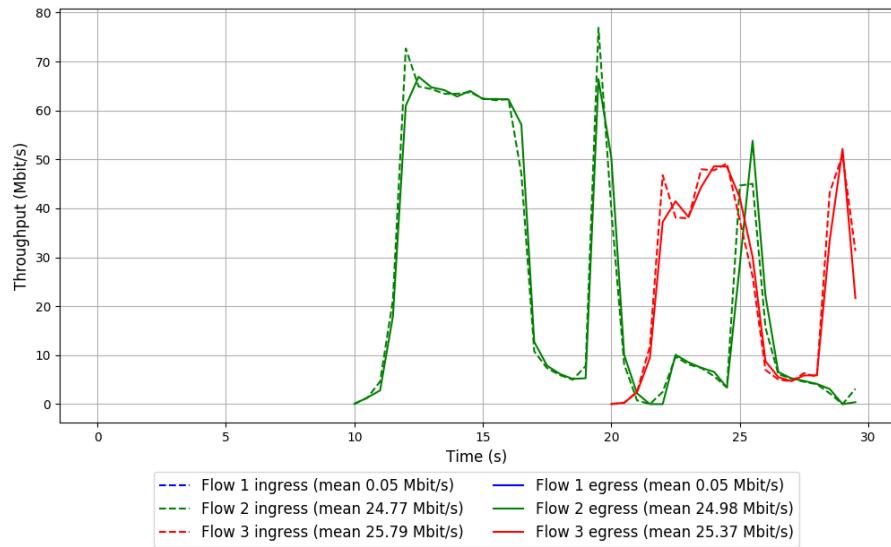
Run 5: Statistics of QUIC Cubic

Start at: 2017-08-21 00:36:42

End at: 2017-08-21 00:37:12

```
# Below is generated by plot.py at 2017-08-21 04:48:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 24.65 Mbit/s
95th percentile per-packet one-way delay: 113.674 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 110.656 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.98 Mbit/s
95th percentile per-packet one-way delay: 113.033 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 25.37 Mbit/s
95th percentile per-packet one-way delay: 113.713 ms
Loss rate: 3.88%
```

Run 5: Report of QUIC Cubic — Data Link



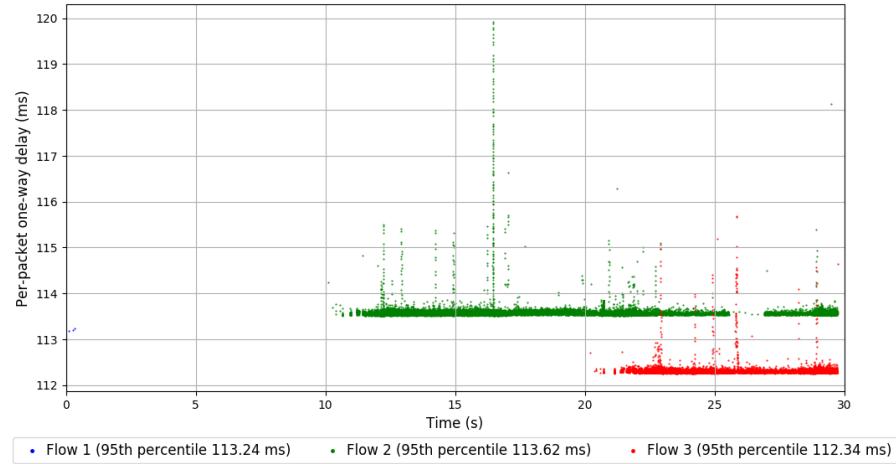
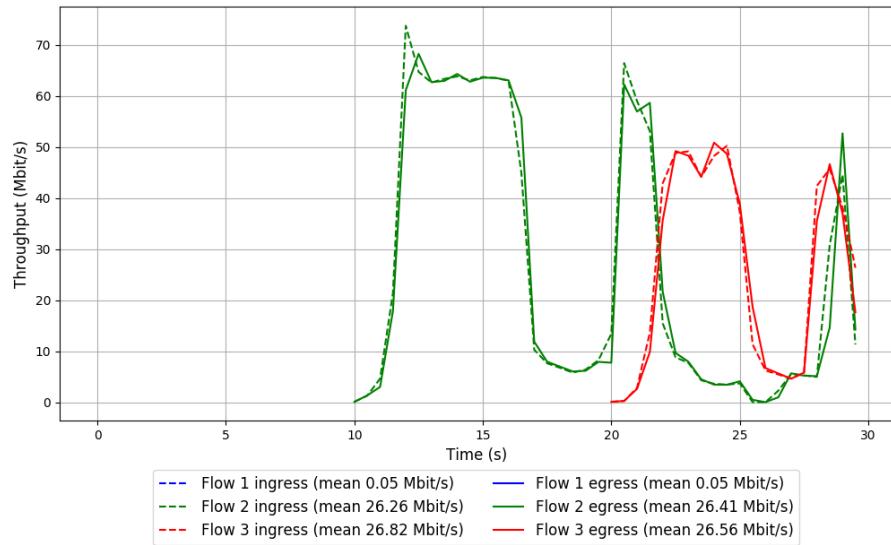
Run 6: Statistics of QUIC Cubic

Start at: 2017-08-21 00:49:38

End at: 2017-08-21 00:50:08

```
# Below is generated by plot.py at 2017-08-21 04:48:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 26.04 Mbit/s
95th percentile per-packet one-way delay: 113.603 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 113.241 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 26.41 Mbit/s
95th percentile per-packet one-way delay: 113.617 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 26.56 Mbit/s
95th percentile per-packet one-way delay: 112.340 ms
Loss rate: 3.25%
```

Run 6: Report of QUIC Cubic — Data Link

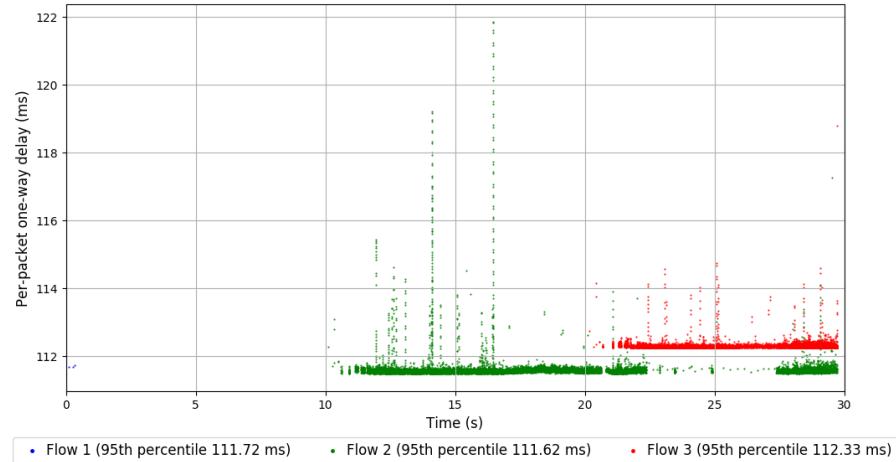
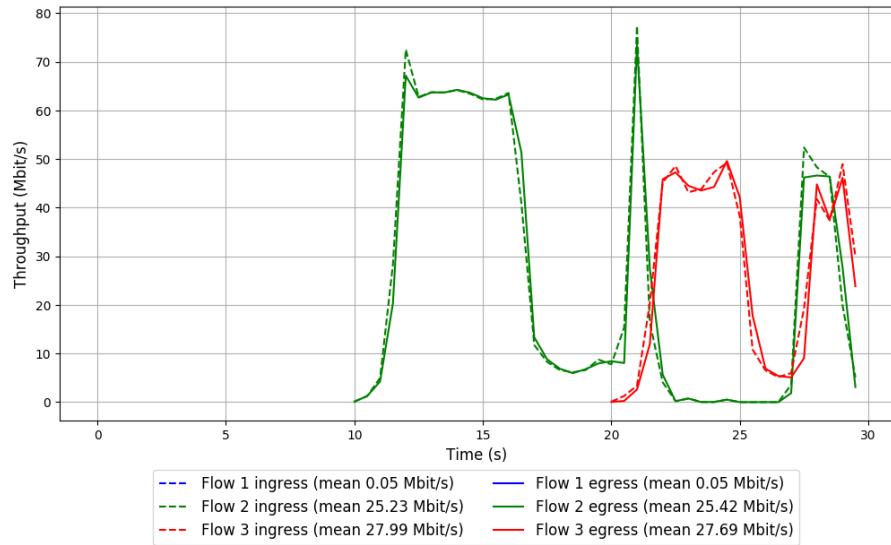


```
Run 7: Statistics of QUIC Cubic

Start at: 2017-08-21 01:02:42
End at: 2017-08-21 01:03:12

# Below is generated by plot.py at 2017-08-21 04:48:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 25.76 Mbit/s
95th percentile per-packet one-way delay: 112.300 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 111.725 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 25.42 Mbit/s
95th percentile per-packet one-way delay: 111.623 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 27.69 Mbit/s
95th percentile per-packet one-way delay: 112.331 ms
Loss rate: 3.27%
```

Run 7: Report of QUIC Cubic — Data Link



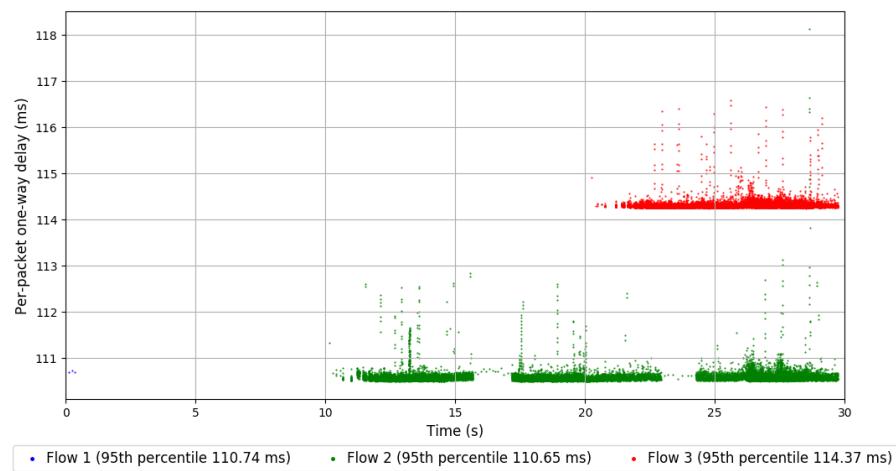
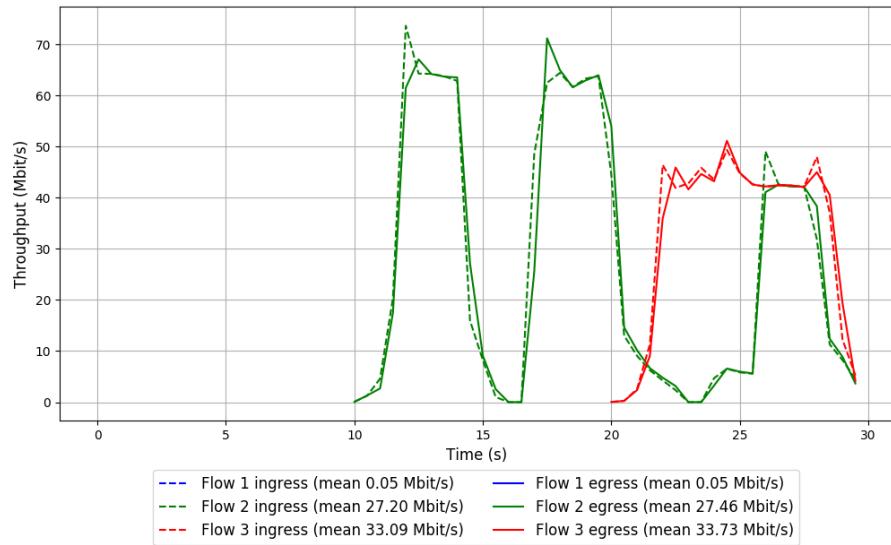
Run 8: Statistics of QUIC Cubic

Start at: 2017-08-21 01:15:56

End at: 2017-08-21 01:16:26

```
# Below is generated by plot.py at 2017-08-21 04:48:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 28.97 Mbit/s
95th percentile per-packet one-way delay: 114.327 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 110.737 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.46 Mbit/s
95th percentile per-packet one-way delay: 110.651 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 33.73 Mbit/s
95th percentile per-packet one-way delay: 114.367 ms
Loss rate: 0.50%
```

Run 8: Report of QUIC Cubic — Data Link



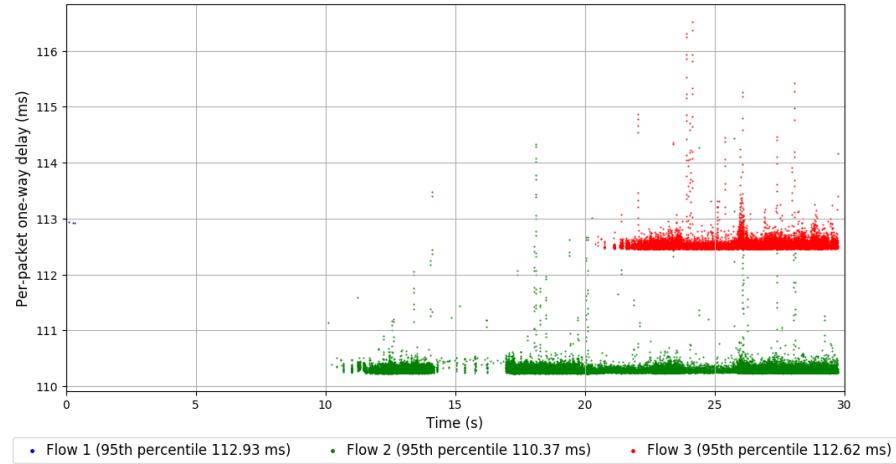
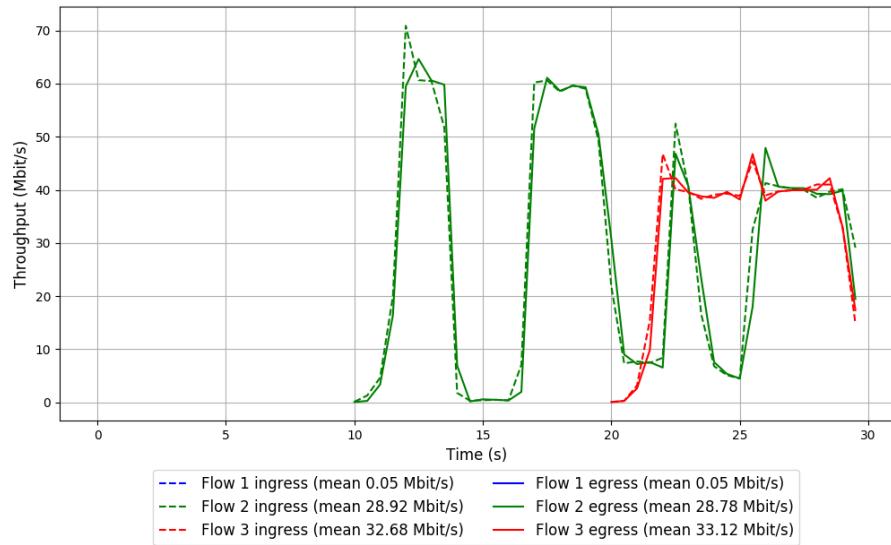
Run 9: Statistics of QUIC Cubic

Start at: 2017-08-21 01:28:49

End at: 2017-08-21 01:29:19

```
# Below is generated by plot.py at 2017-08-21 04:48:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 29.66 Mbit/s
95th percentile per-packet one-way delay: 112.547 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 112.934 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 28.78 Mbit/s
95th percentile per-packet one-way delay: 110.374 ms
Loss rate: 1.59%
-- Flow 3:
Average throughput: 33.12 Mbit/s
95th percentile per-packet one-way delay: 112.617 ms
Loss rate: 0.98%
```

Run 9: Report of QUIC Cubic — Data Link



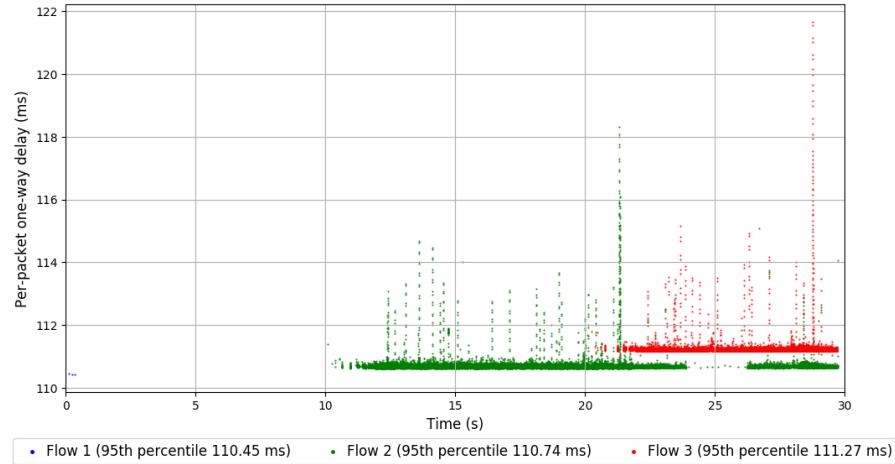
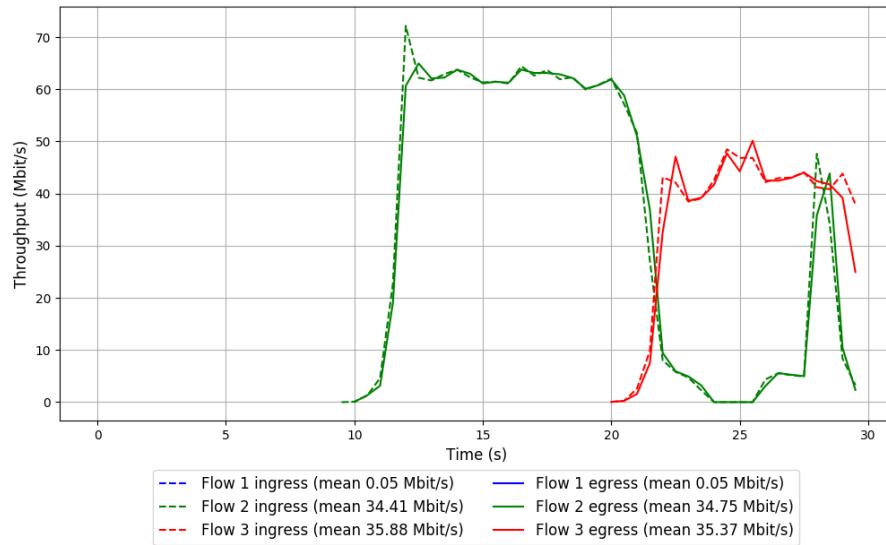
Run 10: Statistics of QUIC Cubic

Start at: 2017-08-21 01:41:48

End at: 2017-08-21 01:42:18

```
# Below is generated by plot.py at 2017-08-21 04:48:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.35 Mbit/s
95th percentile per-packet one-way delay: 111.235 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 110.455 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 34.75 Mbit/s
95th percentile per-packet one-way delay: 110.742 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 35.37 Mbit/s
95th percentile per-packet one-way delay: 111.268 ms
Loss rate: 3.65%
```

Run 10: Report of QUIC Cubic — Data Link

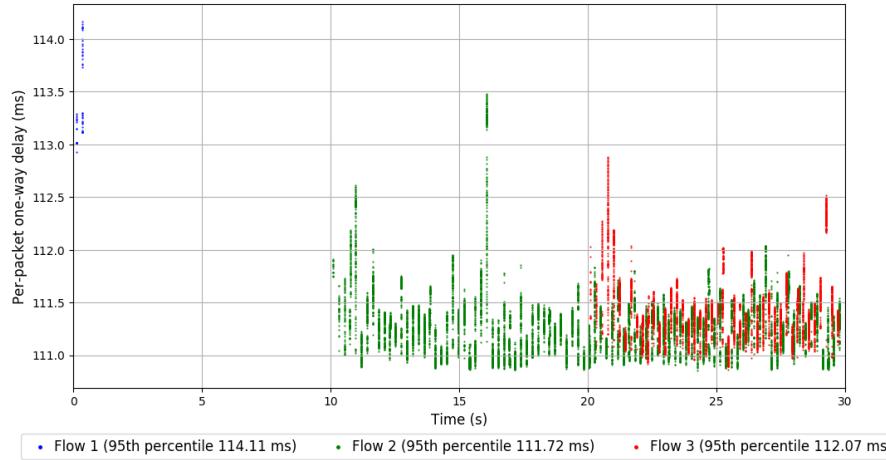
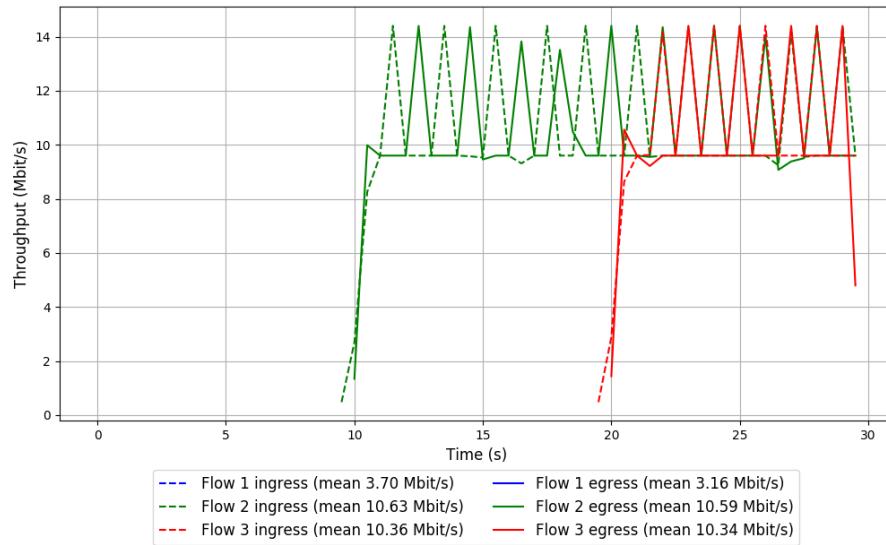


```
Run 1: Statistics of Saturator

Start at: 2017-08-20 23:52:28
End at: 2017-08-20 23:52:58

# Below is generated by plot.py at 2017-08-21 04:48:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.41 Mbit/s
95th percentile per-packet one-way delay: 111.832 ms
Loss rate: 2.04%
-- Flow 1:
Average throughput: 3.16 Mbit/s
95th percentile per-packet one-way delay: 114.112 ms
Loss rate: 57.14%
-- Flow 2:
Average throughput: 10.59 Mbit/s
95th percentile per-packet one-way delay: 111.717 ms
Loss rate: 1.41%
-- Flow 3:
Average throughput: 10.34 Mbit/s
95th percentile per-packet one-way delay: 112.073 ms
Loss rate: 2.45%
```

Run 1: Report of Saturator — Data Link



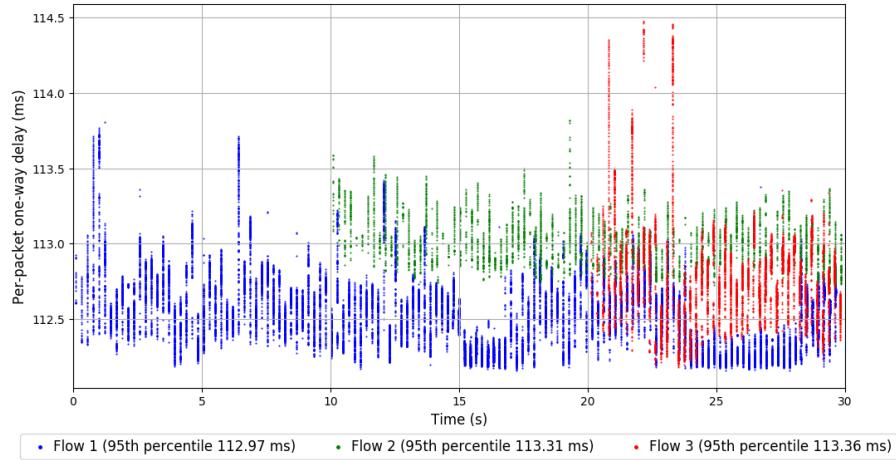
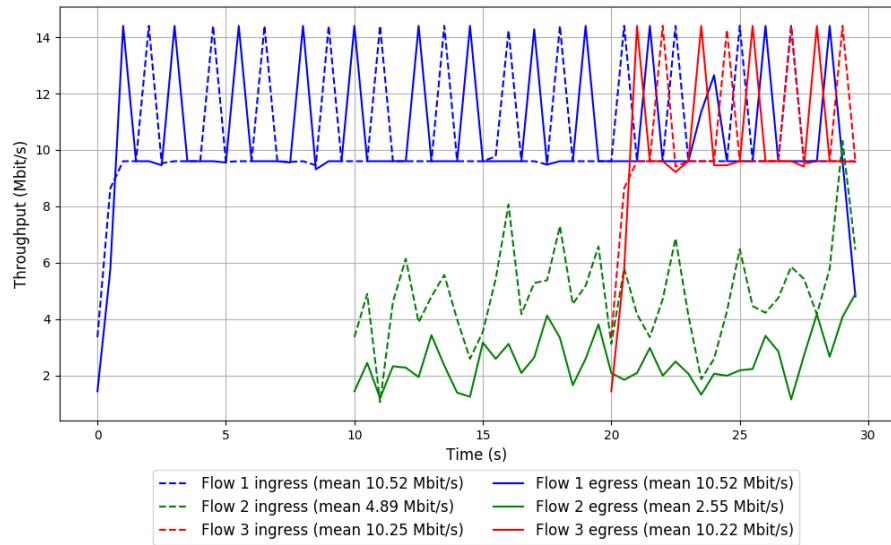
Run 2: Statistics of Saturator

Start at: 2017-08-21 00:05:07

End at: 2017-08-21 00:05:37

```
# Below is generated by plot.py at 2017-08-21 04:48:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.47 Mbit/s
95th percentile per-packet one-way delay: 113.155 ms
Loss rate: 10.26%
-- Flow 1:
Average throughput: 10.52 Mbit/s
95th percentile per-packet one-way delay: 112.970 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 2.55 Mbit/s
95th percentile per-packet one-way delay: 113.311 ms
Loss rate: 48.52%
-- Flow 3:
Average throughput: 10.22 Mbit/s
95th percentile per-packet one-way delay: 113.358 ms
Loss rate: 2.57%
```

Run 2: Report of Saturator — Data Link



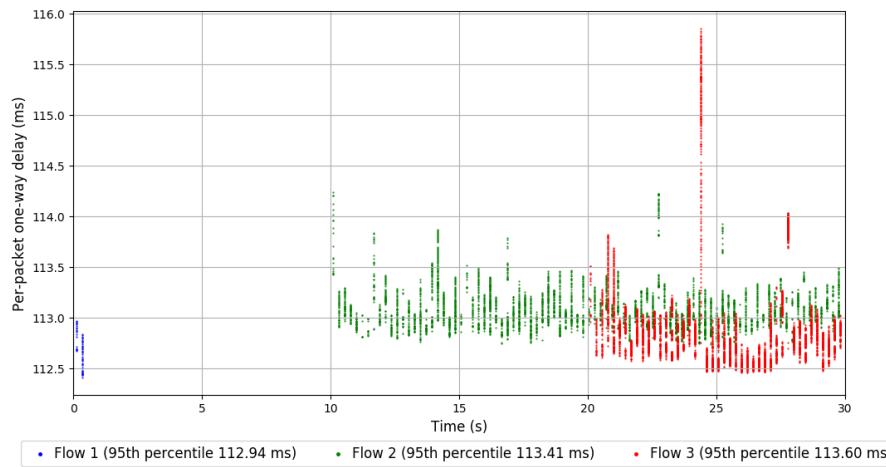
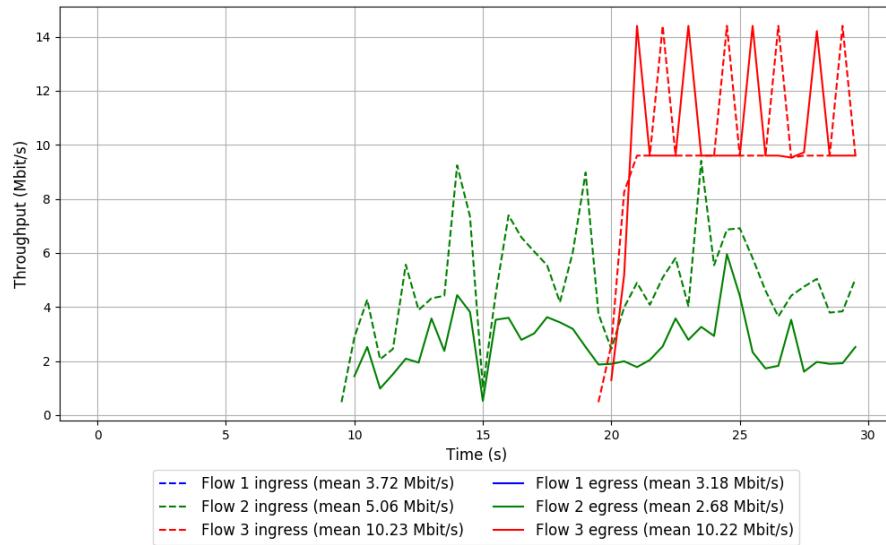
Run 3: Statistics of Saturator

Start at: 2017-08-21 00:18:13

End at: 2017-08-21 00:18:43

```
# Below is generated by plot.py at 2017-08-21 04:48:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.14 Mbit/s
95th percentile per-packet one-way delay: 113.443 ms
Loss rate: 25.14%
-- Flow 1:
Average throughput: 3.18 Mbit/s
95th percentile per-packet one-way delay: 112.937 ms
Loss rate: 57.14%
-- Flow 2:
Average throughput: 2.68 Mbit/s
95th percentile per-packet one-way delay: 113.413 ms
Loss rate: 47.59%
-- Flow 3:
Average throughput: 10.22 Mbit/s
95th percentile per-packet one-way delay: 113.596 ms
Loss rate: 2.42%
```

Run 3: Report of Saturator — Data Link



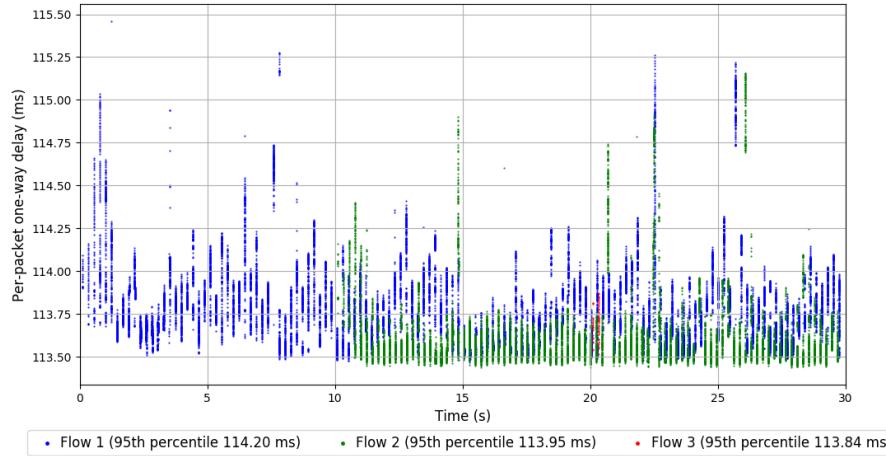
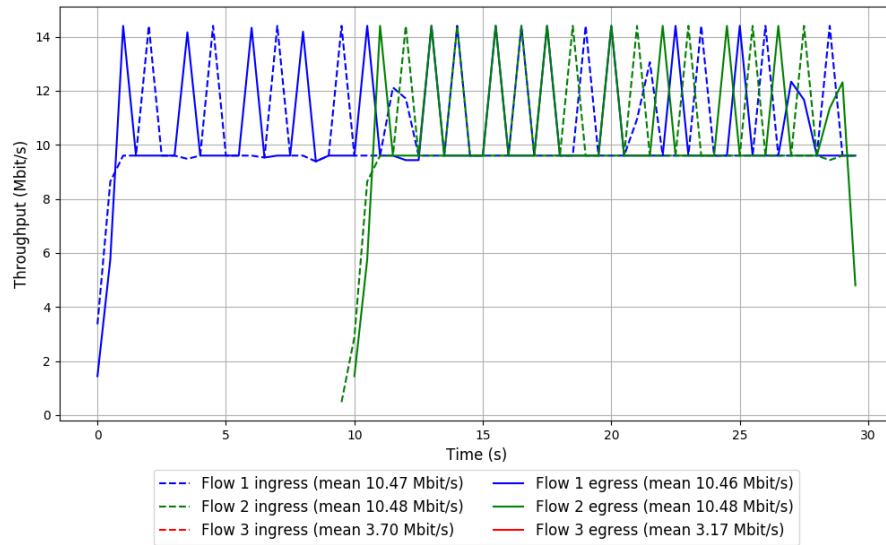
Run 4: Statistics of Saturator

Start at: 2017-08-21 00:31:13

End at: 2017-08-21 00:31:43

```
# Below is generated by plot.py at 2017-08-21 04:48:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.40 Mbit/s
95th percentile per-packet one-way delay: 114.174 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 10.46 Mbit/s
95th percentile per-packet one-way delay: 114.201 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 10.48 Mbit/s
95th percentile per-packet one-way delay: 113.955 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 3.17 Mbit/s
95th percentile per-packet one-way delay: 113.845 ms
Loss rate: 57.14%
```

Run 4: Report of Saturator — Data Link



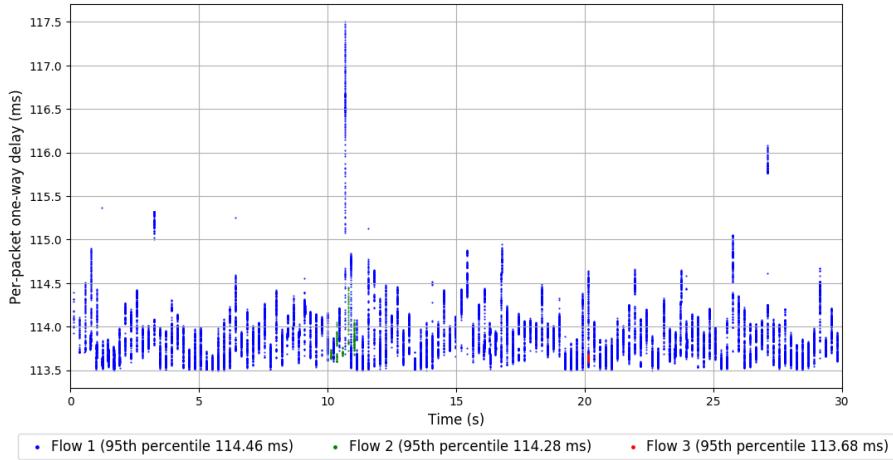
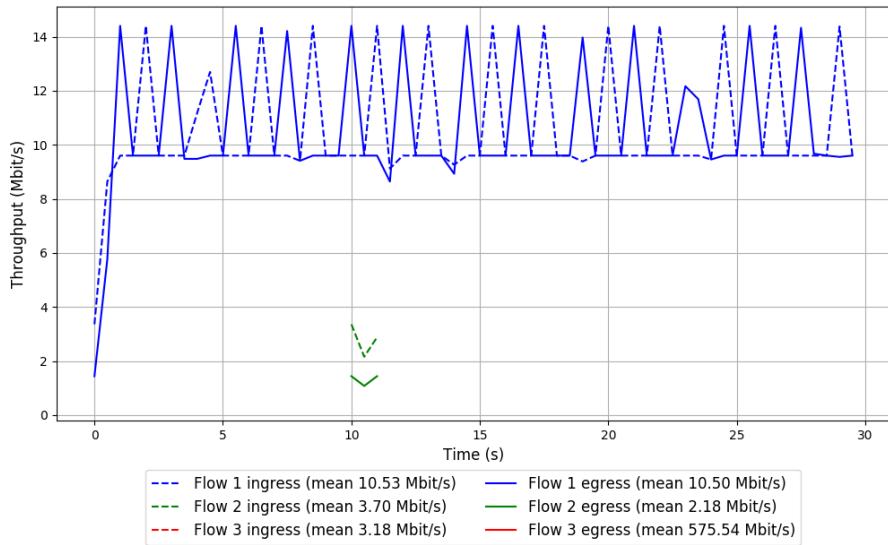
Run 5: Statistics of Saturator

Start at: 2017-08-21 00:44:14

End at: 2017-08-21 00:44:44

```
# Below is generated by plot.py at 2017-08-21 04:48:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.58 Mbit/s
95th percentile per-packet one-way delay: 114.458 ms
Loss rate: 1.83%
-- Flow 1:
Average throughput: 10.50 Mbit/s
95th percentile per-packet one-way delay: 114.460 ms
Loss rate: 1.00%
-- Flow 2:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 114.279 ms
Loss rate: 52.86%
-- Flow 3:
Average throughput: 575.54 Mbit/s
95th percentile per-packet one-way delay: 113.679 ms
Loss rate: 66.67%
```

Run 5: Report of Saturator — Data Link



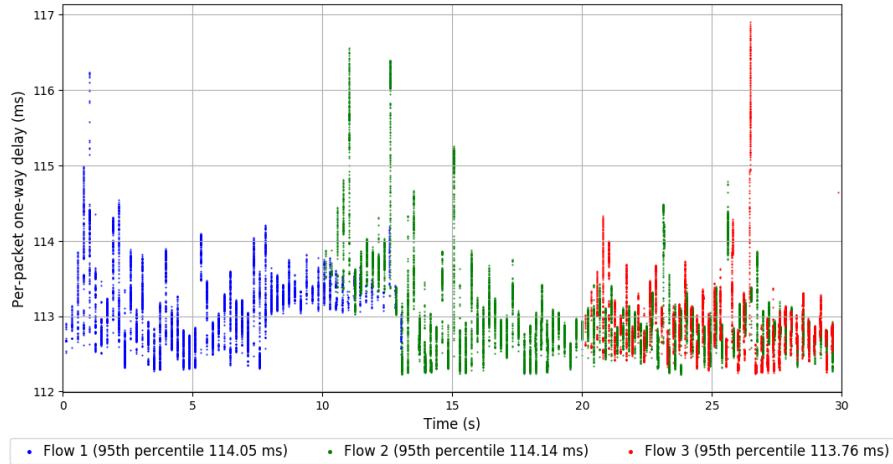
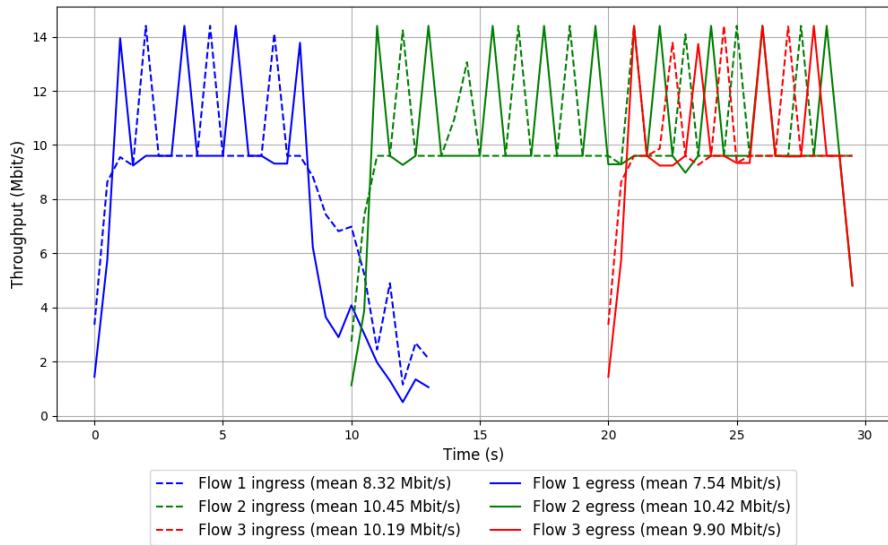
Run 6: Statistics of Saturator

Start at: 2017-08-21 00:57:03

End at: 2017-08-21 00:57:33

```
# Below is generated by plot.py at 2017-08-21 04:48:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.34 Mbit/s
95th percentile per-packet one-way delay: 114.015 ms
Loss rate: 4.29%
-- Flow 1:
Average throughput: 7.54 Mbit/s
95th percentile per-packet one-way delay: 114.048 ms
Loss rate: 10.94%
-- Flow 2:
Average throughput: 10.42 Mbit/s
95th percentile per-packet one-way delay: 114.145 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 9.90 Mbit/s
95th percentile per-packet one-way delay: 113.762 ms
Loss rate: 2.91%
```

Run 6: Report of Saturator — Data Link



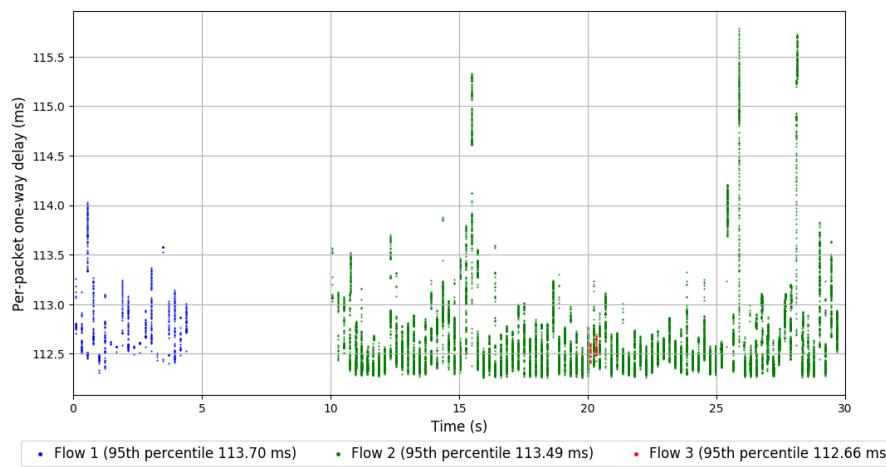
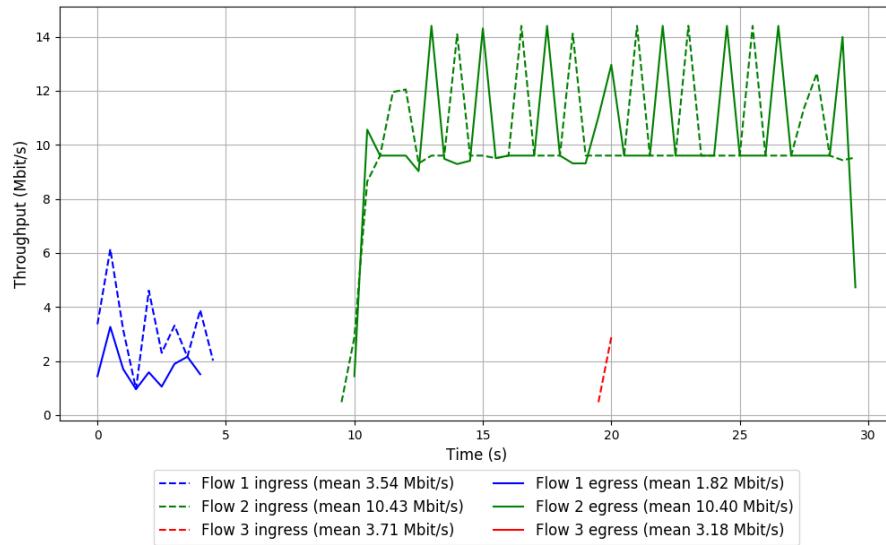
Run 7: Statistics of Saturator

Start at: 2017-08-21 01:10:26

End at: 2017-08-21 01:10:56

```
# Below is generated by plot.py at 2017-08-21 04:48:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.18 Mbit/s
95th percentile per-packet one-way delay: 113.516 ms
Loss rate: 5.41%
-- Flow 1:
Average throughput: 1.82 Mbit/s
95th percentile per-packet one-way delay: 113.705 ms
Loss rate: 51.20%
-- Flow 2:
Average throughput: 10.40 Mbit/s
95th percentile per-packet one-way delay: 113.487 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 3.18 Mbit/s
95th percentile per-packet one-way delay: 112.658 ms
Loss rate: 57.14%
```

Run 7: Report of Saturator — Data Link



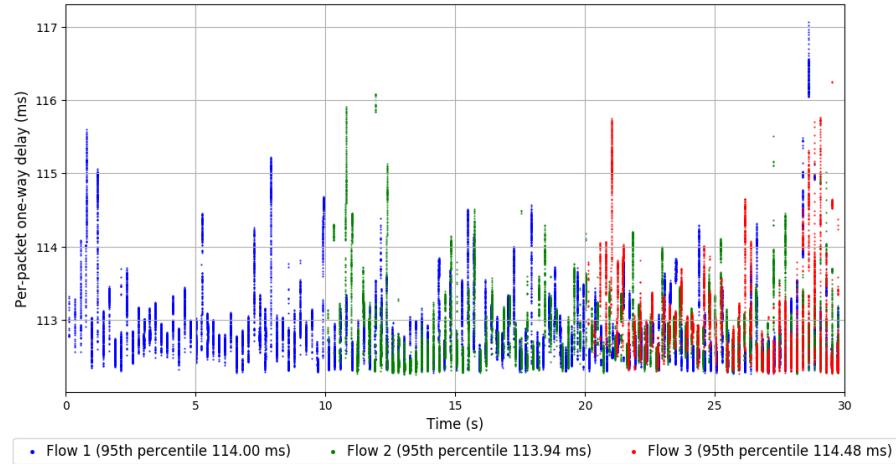
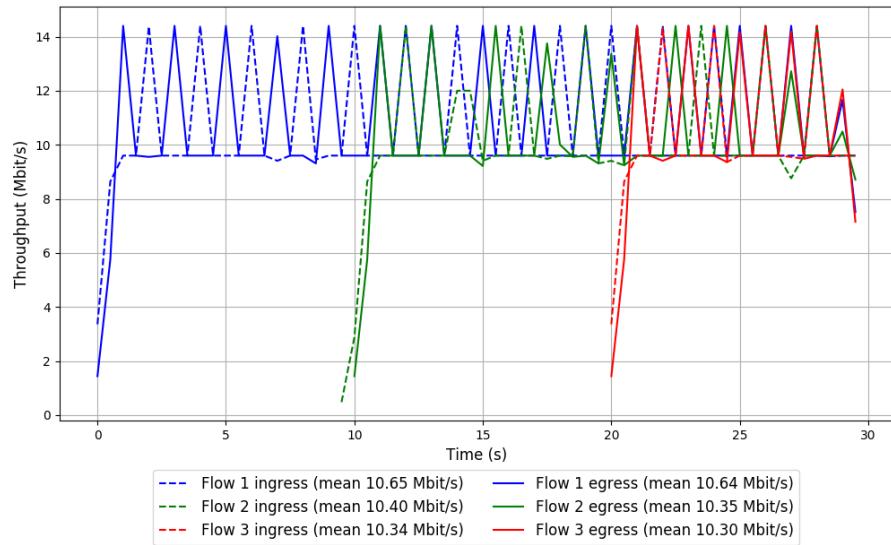
Run 8: Statistics of Saturator

Start at: 2017-08-21 01:23:37

End at: 2017-08-21 01:24:07

```
# Below is generated by plot.py at 2017-08-21 04:48:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.85 Mbit/s
95th percentile per-packet one-way delay: 114.036 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 10.64 Mbit/s
95th percentile per-packet one-way delay: 114.005 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 10.35 Mbit/s
95th percentile per-packet one-way delay: 113.942 ms
Loss rate: 1.65%
-- Flow 3:
Average throughput: 10.30 Mbit/s
95th percentile per-packet one-way delay: 114.480 ms
Loss rate: 2.61%
```

Run 8: Report of Saturator — Data Link



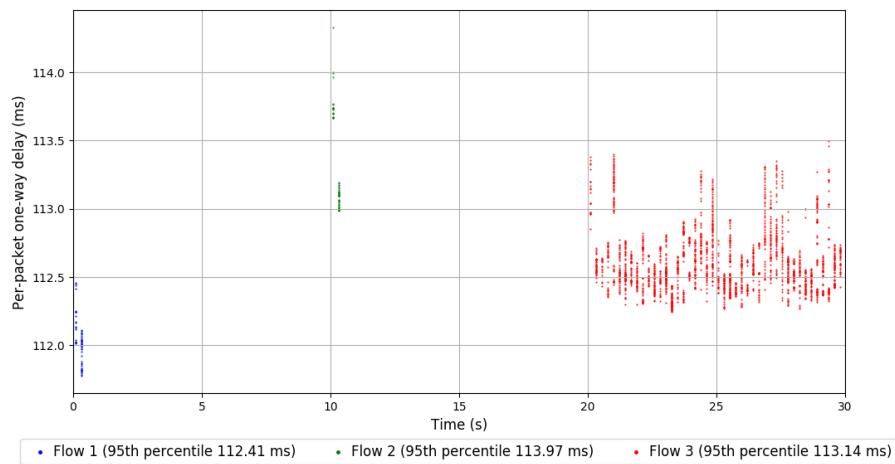
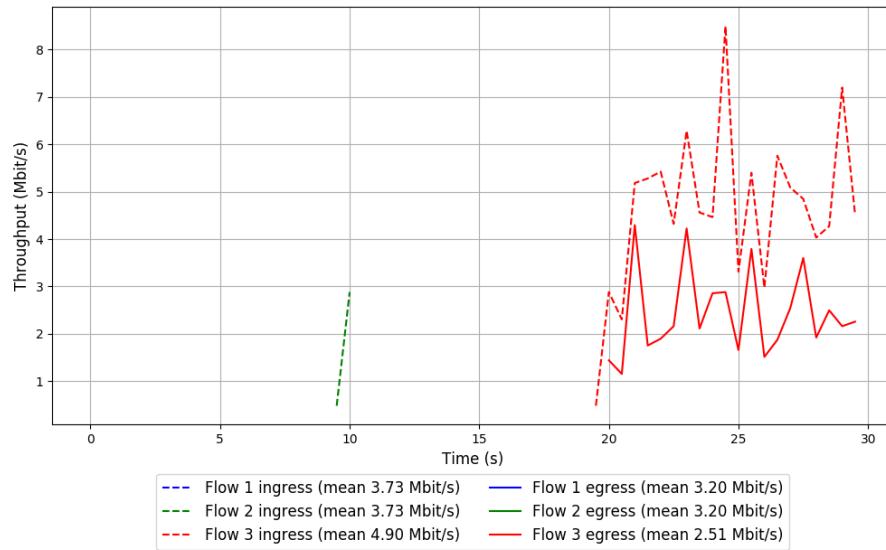
Run 9: Statistics of Saturator

Start at: 2017-08-21 01:36:36

End at: 2017-08-21 01:37:06

```
# Below is generated by plot.py at 2017-08-21 04:48:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.87 Mbit/s
95th percentile per-packet one-way delay: 113.173 ms
Loss rate: 50.43%
-- Flow 1:
Average throughput: 3.20 Mbit/s
95th percentile per-packet one-way delay: 112.413 ms
Loss rate: 57.14%
-- Flow 2:
Average throughput: 3.20 Mbit/s
95th percentile per-packet one-way delay: 113.965 ms
Loss rate: 57.14%
-- Flow 3:
Average throughput: 2.51 Mbit/s
95th percentile per-packet one-way delay: 113.140 ms
Loss rate: 49.96%
```

Run 9: Report of Saturator — Data Link



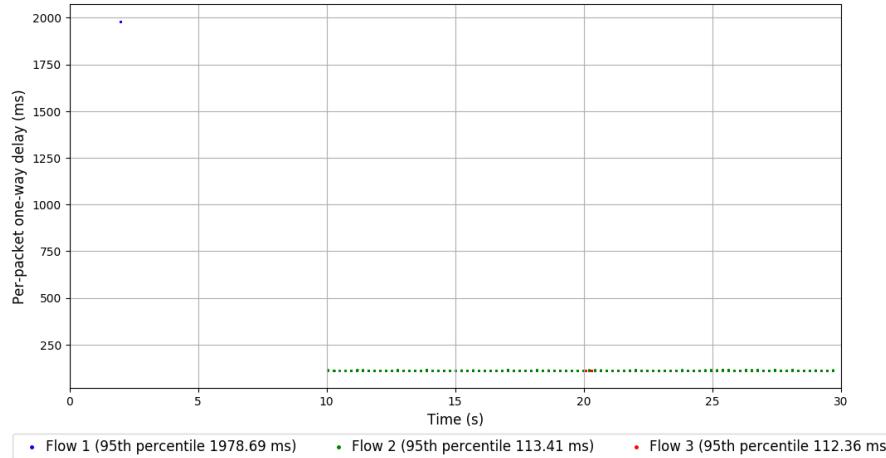
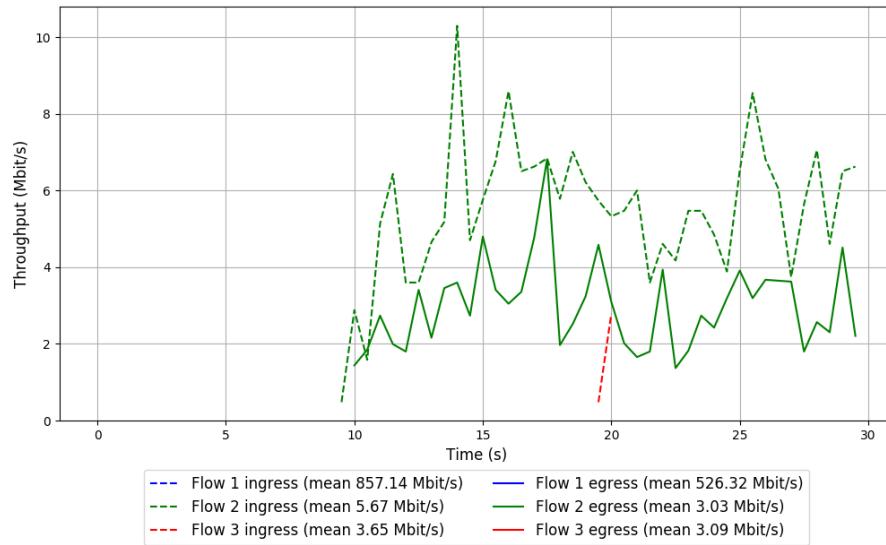
Run 10: Statistics of Saturator

Start at: 2017-08-21 01:49:25

End at: 2017-08-21 01:49:55

```
# Below is generated by plot.py at 2017-08-21 04:48:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 113.434 ms
Loss rate: 47.16%
-- Flow 1:
Average throughput: 526.32 Mbit/s
95th percentile per-packet one-way delay: 1978.687 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.03 Mbit/s
95th percentile per-packet one-way delay: 113.414 ms
Loss rate: 47.11%
-- Flow 3:
Average throughput: 3.09 Mbit/s
95th percentile per-packet one-way delay: 112.363 ms
Loss rate: 57.35%
```

Run 10: Report of Saturator — Data Link

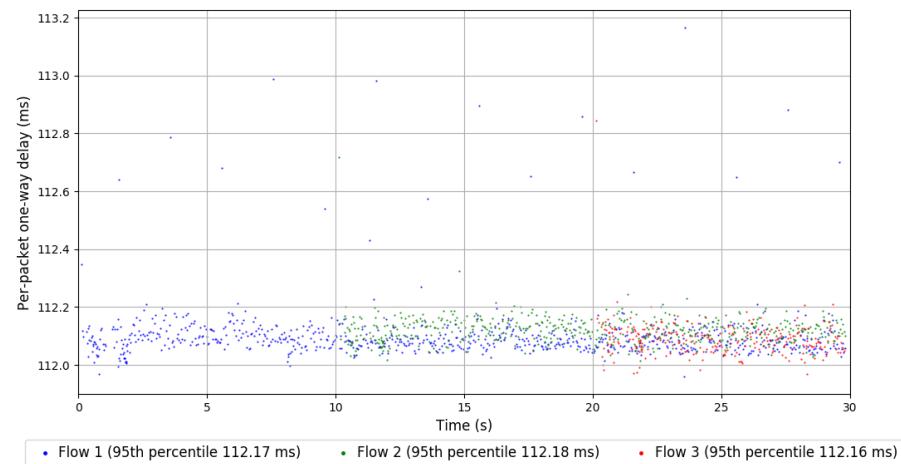
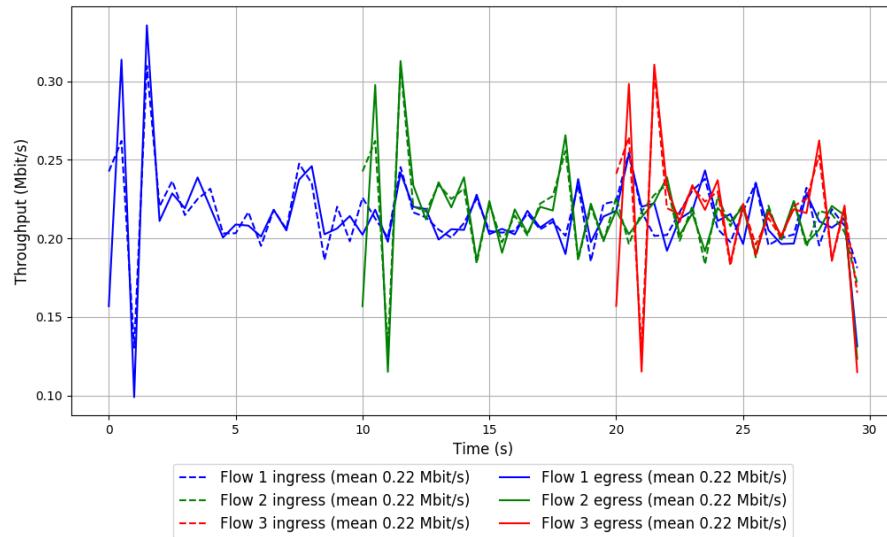


```
Run 1: Statistics of SCReAM

Start at: 2017-08-20 23:41:11
End at: 2017-08-20 23:41:41

# Below is generated by plot.py at 2017-08-21 04:48:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.176 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.172 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.182 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.158 ms
Loss rate: 2.25%
```

Run 1: Report of SCReAM — Data Link



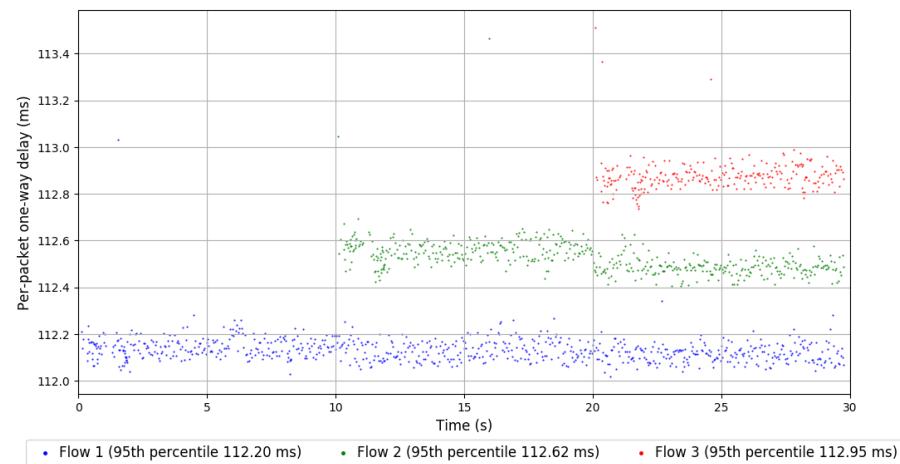
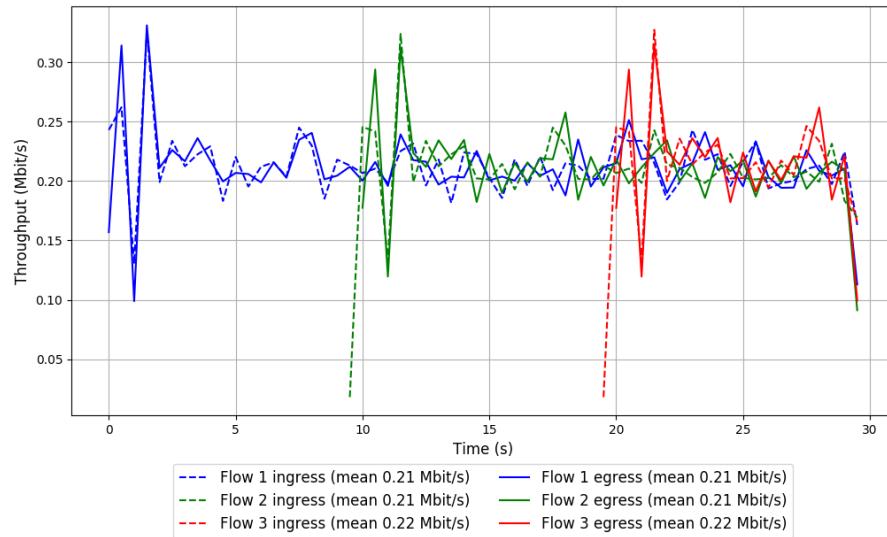
Run 2: Statistics of SCReAM

Start at: 2017-08-20 23:54:11

End at: 2017-08-20 23:54:41

```
# Below is generated by plot.py at 2017-08-21 04:48:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.895 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.205 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.619 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.951 ms
Loss rate: 2.25%
```

Run 2: Report of SCReAM — Data Link



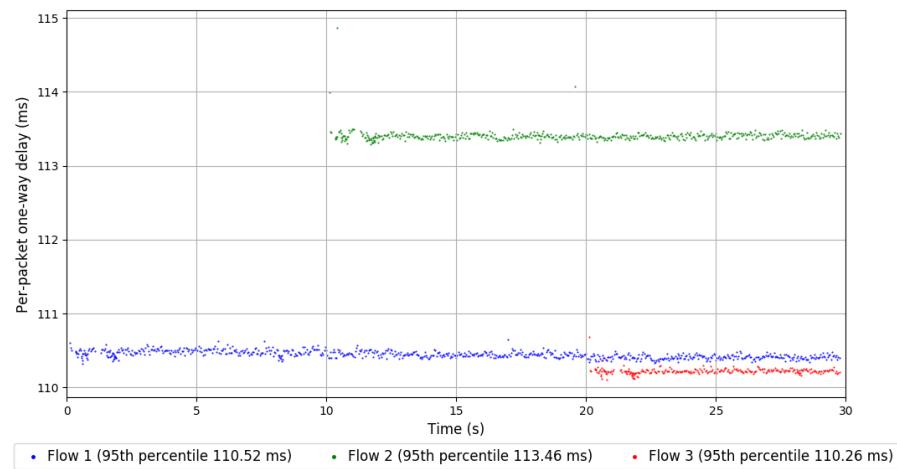
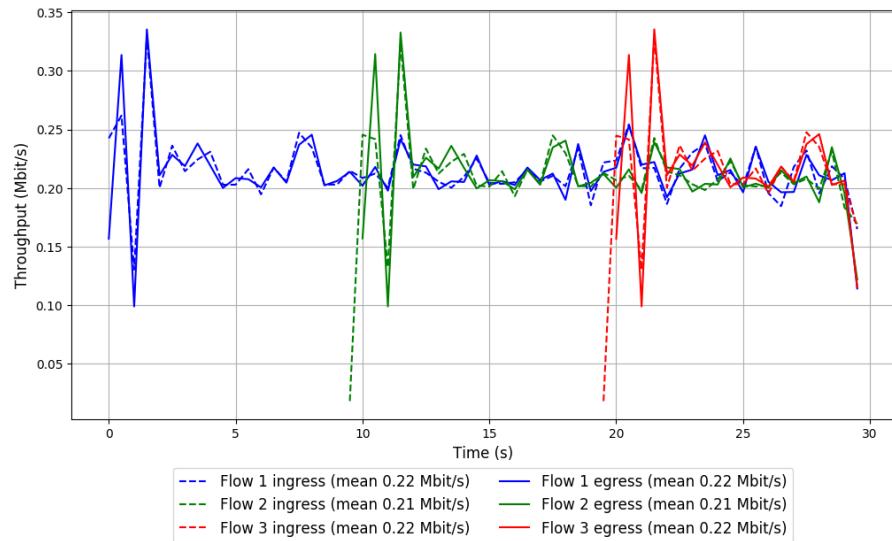
Run 3: Statistics of SCReAM

Start at: 2017-08-21 00:06:57

End at: 2017-08-21 00:07:27

```
# Below is generated by plot.py at 2017-08-21 04:48:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 113.435 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.524 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.456 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.263 ms
Loss rate: 2.25%
```

Run 3: Report of SCReAM — Data Link



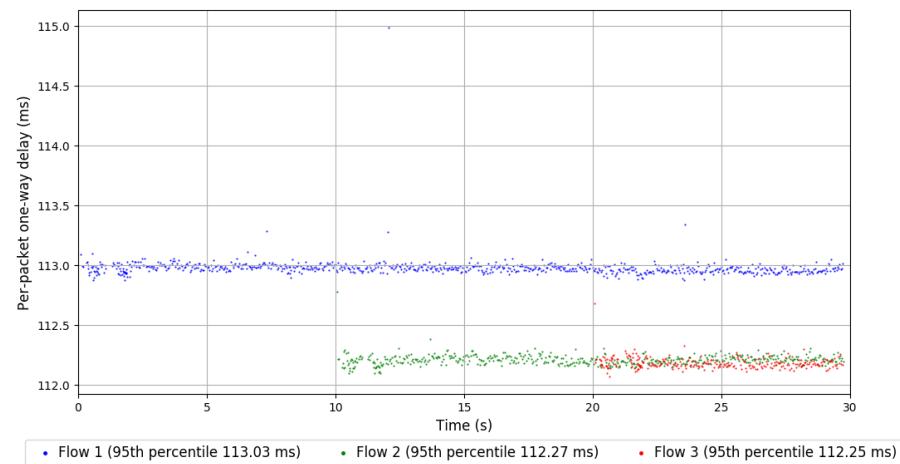
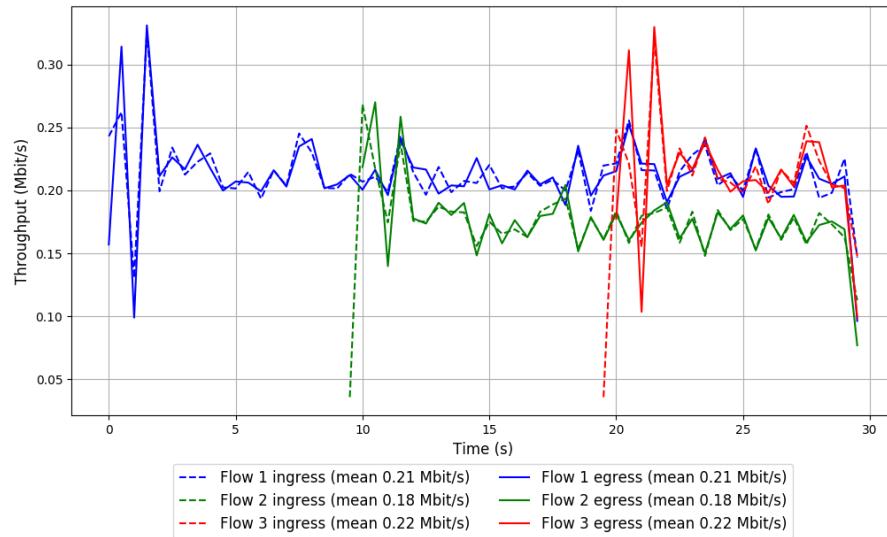
Run 4: Statistics of SCReAM

Start at: 2017-08-21 00:20:00

End at: 2017-08-21 00:20:30

```
# Below is generated by plot.py at 2017-08-21 04:48:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 113.016 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.028 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 112.266 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.249 ms
Loss rate: 2.25%
```

Run 4: Report of SCReAM — Data Link



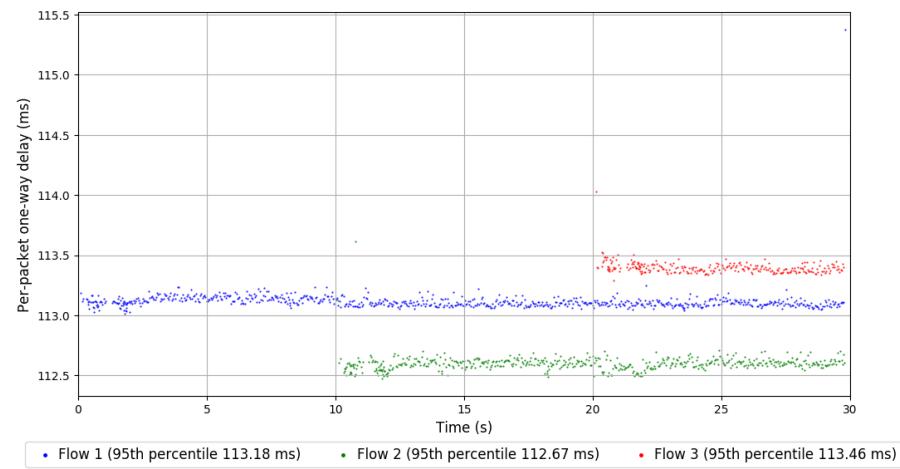
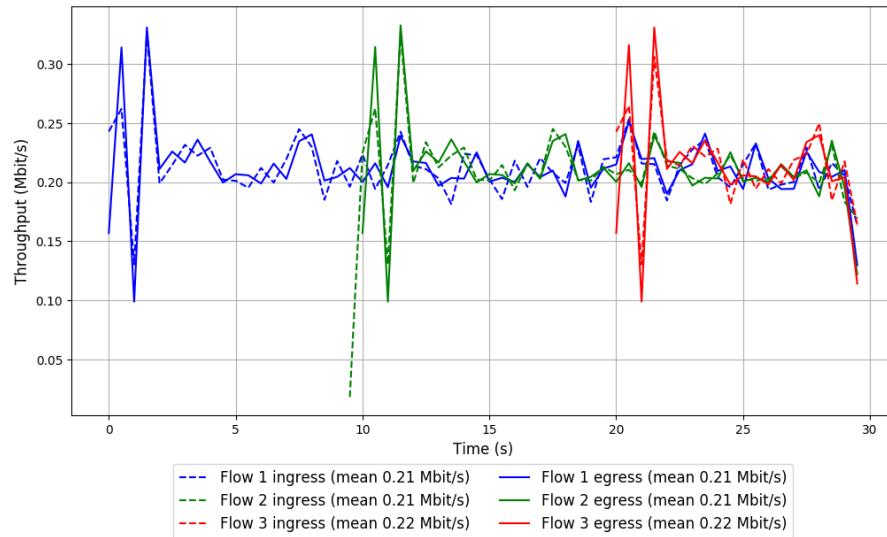
Run 5: Statistics of SCReAM

Start at: 2017-08-21 00:33:02

End at: 2017-08-21 00:33:32

```
# Below is generated by plot.py at 2017-08-21 04:48:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 113.409 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.179 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.668 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.460 ms
Loss rate: 2.25%
```

Run 5: Report of SCReAM — Data Link



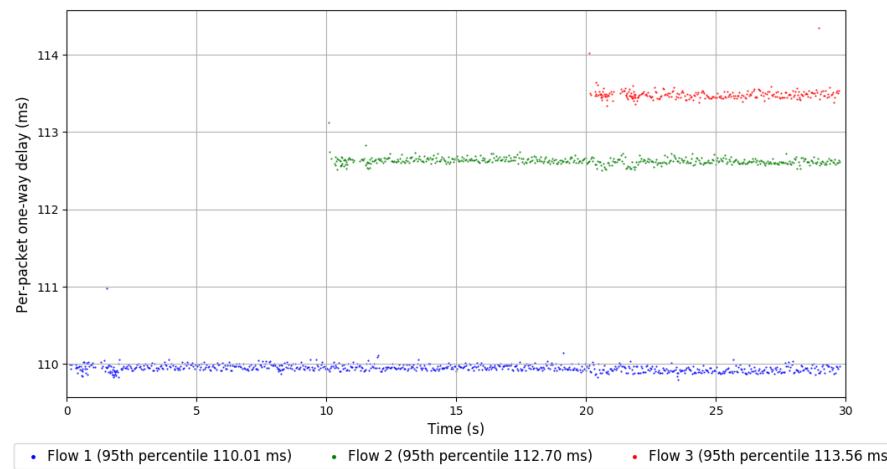
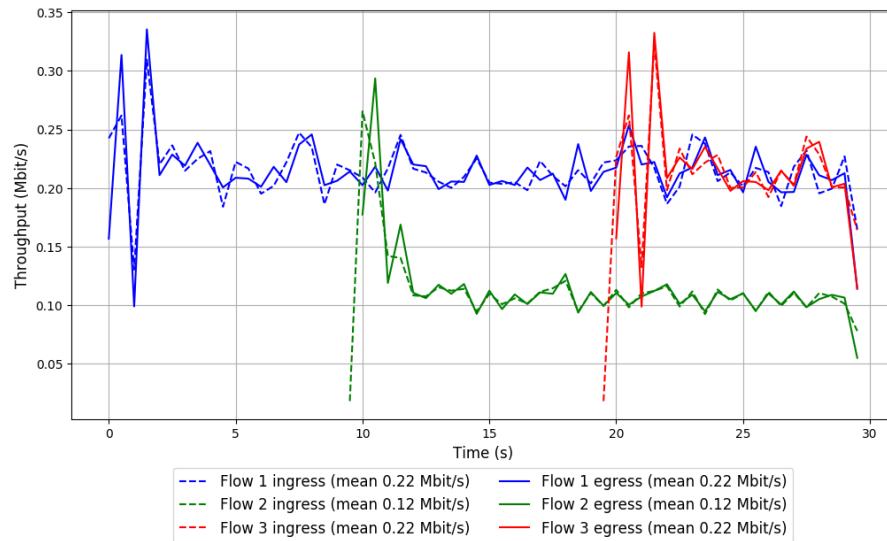
Run 6: Statistics of SCReAM

Start at: 2017-08-21 00:46:00

End at: 2017-08-21 00:46:30

```
# Below is generated by plot.py at 2017-08-21 04:48:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 113.509 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.014 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 112.696 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.563 ms
Loss rate: 2.25%
```

Run 6: Report of SCReAM — Data Link



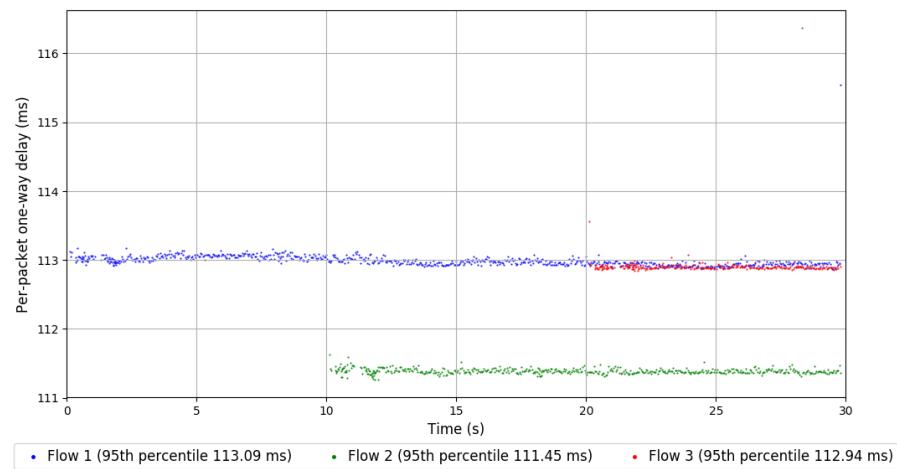
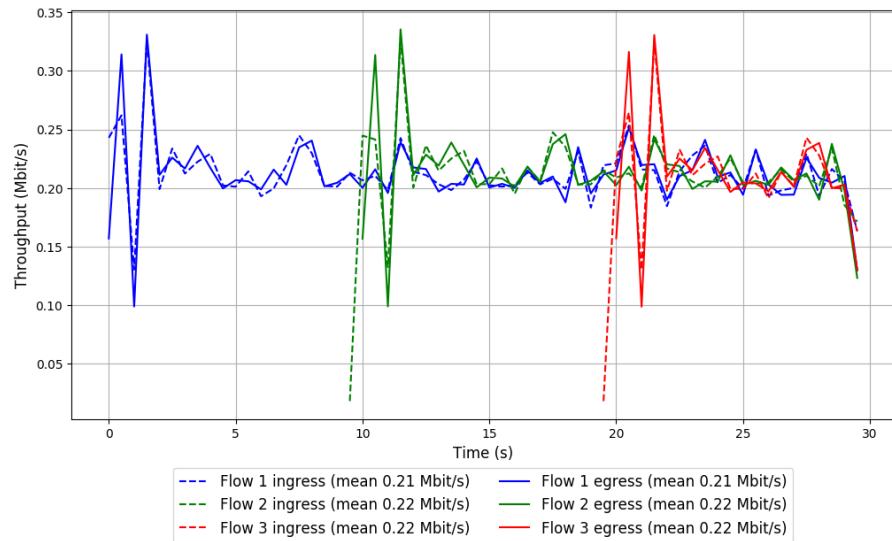
Run 7: Statistics of SCReAM

Start at: 2017-08-21 00:58:58

End at: 2017-08-21 00:59:28

```
# Below is generated by plot.py at 2017-08-21 04:48:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 113.073 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.091 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.454 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.943 ms
Loss rate: 1.86%
```

Run 7: Report of SCReAM — Data Link



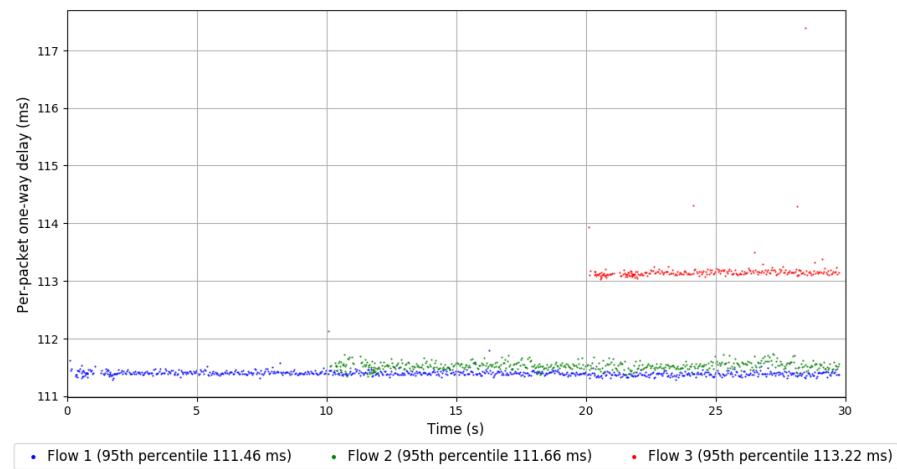
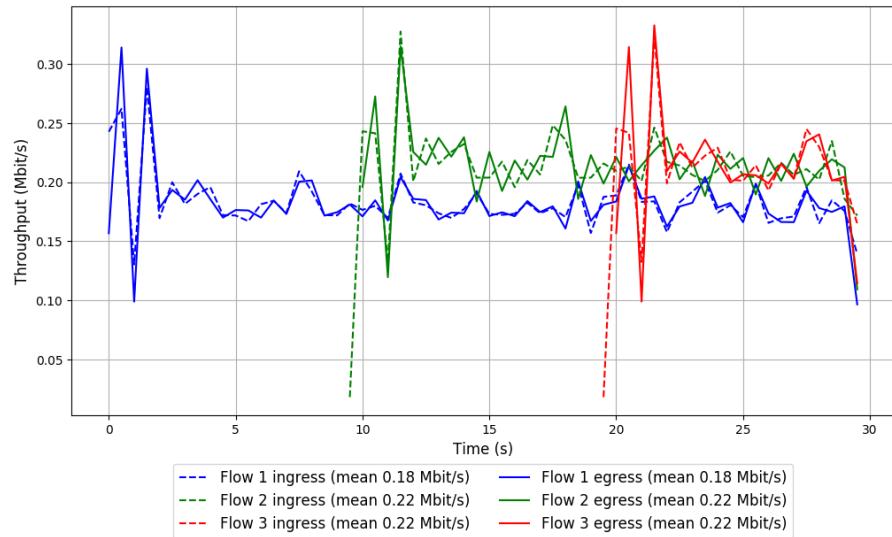
Run 8: Statistics of SCReAM

Start at: 2017-08-21 01:12:13

End at: 2017-08-21 01:12:43

```
# Below is generated by plot.py at 2017-08-21 04:48:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 113.161 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 111.459 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.659 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.219 ms
Loss rate: 2.25%
```

Run 8: Report of SCReAM — Data Link



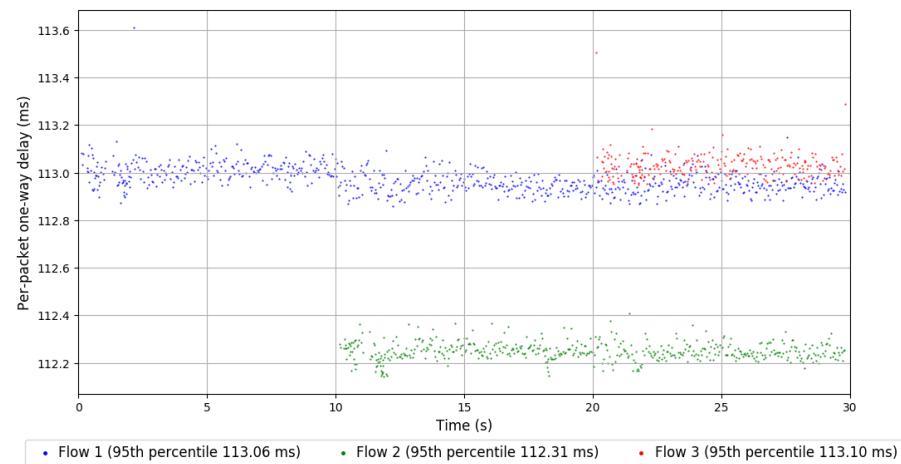
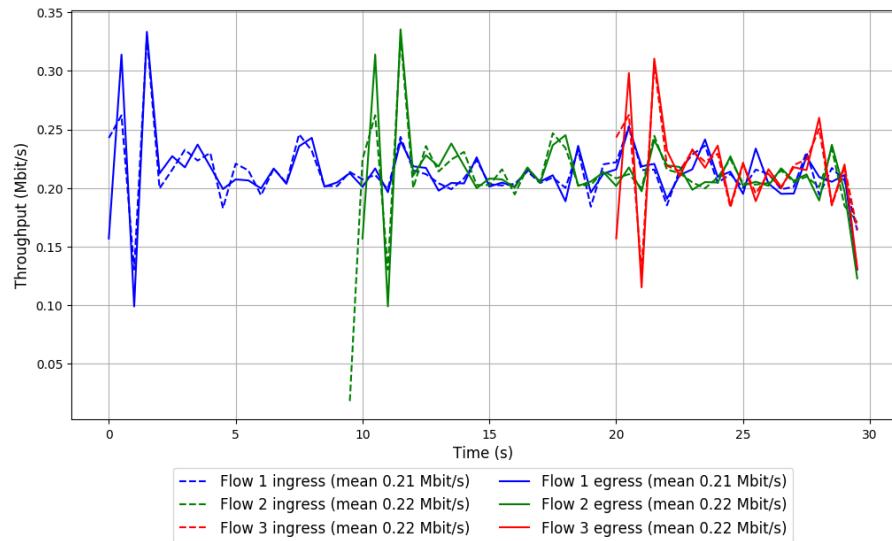
Run 9: Statistics of SCReAM

Start at: 2017-08-21 01:25:19

End at: 2017-08-21 01:25:49

```
# Below is generated by plot.py at 2017-08-21 04:48:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 113.064 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.061 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.311 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.100 ms
Loss rate: 1.86%
```

Run 9: Report of SCReAM — Data Link



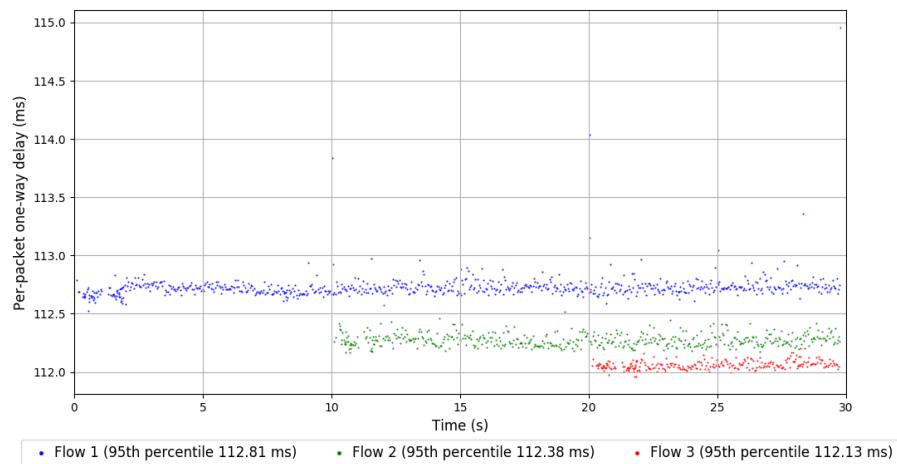
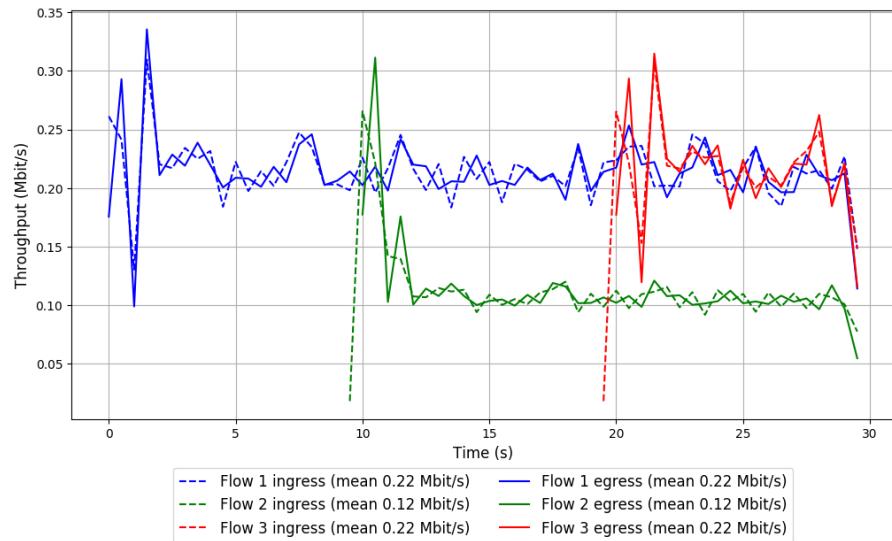
Run 10: Statistics of SCReAM

Start at: 2017-08-21 01:38:23

End at: 2017-08-21 01:38:53

```
# Below is generated by plot.py at 2017-08-21 04:48:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 112.786 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.808 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 112.384 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.132 ms
Loss rate: 1.86%
```

Run 10: Report of SCReAM — Data Link



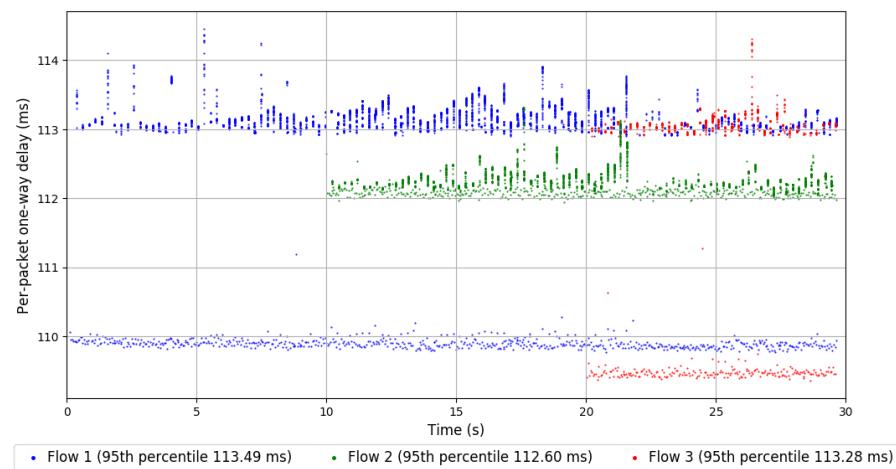
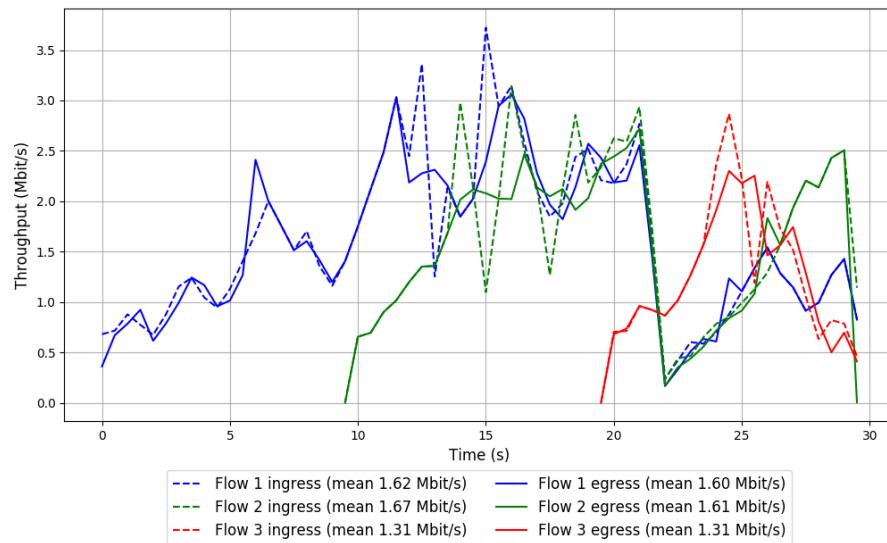
Run 1: Statistics of Sprout

Start at: 2017-08-20 23:50:56

End at: 2017-08-20 23:51:26

```
# Below is generated by plot.py at 2017-08-21 04:48:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.09 Mbit/s
95th percentile per-packet one-way delay: 113.385 ms
Loss rate: 3.02%
-- Flow 1:
Average throughput: 1.60 Mbit/s
95th percentile per-packet one-way delay: 113.486 ms
Loss rate: 1.88%
-- Flow 2:
Average throughput: 1.61 Mbit/s
95th percentile per-packet one-way delay: 112.601 ms
Loss rate: 4.76%
-- Flow 3:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 113.285 ms
Loss rate: 2.79%
```

Run 1: Report of Sprout — Data Link



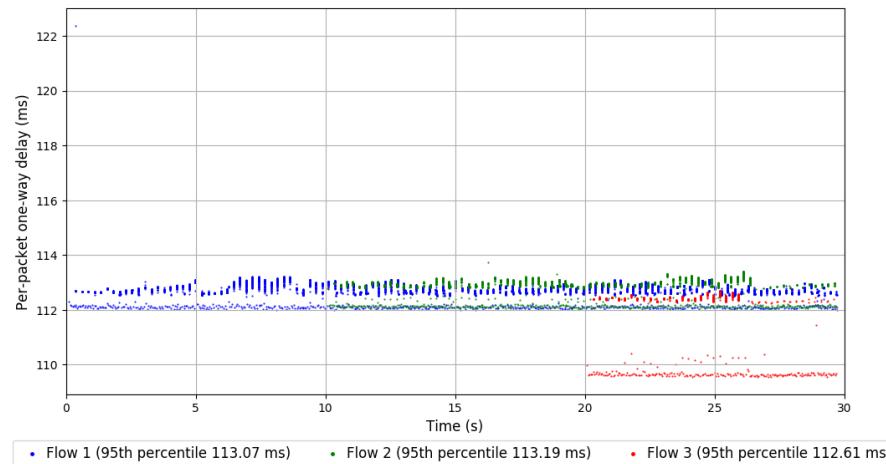
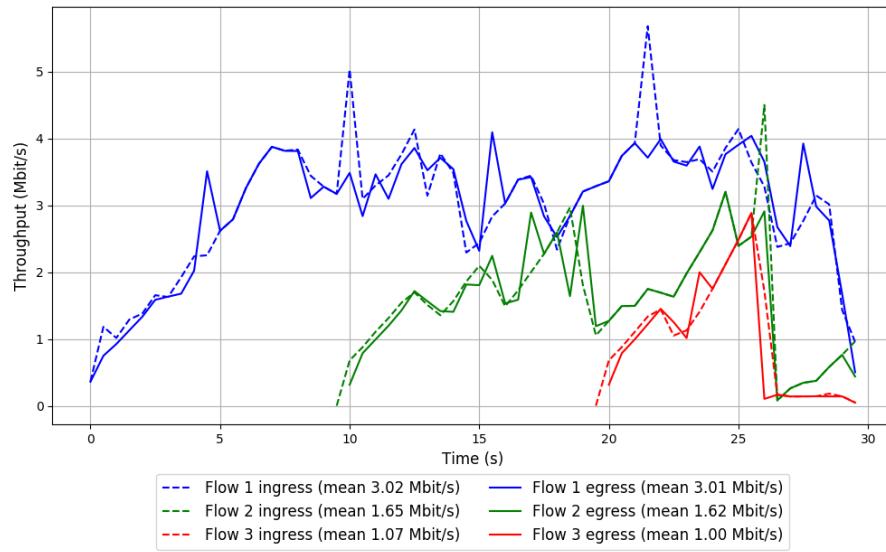
Run 2: Statistics of Sprout

Start at: 2017-08-21 00:03:34

End at: 2017-08-21 00:04:04

```
# Below is generated by plot.py at 2017-08-21 04:49:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.41 Mbit/s
95th percentile per-packet one-way delay: 113.122 ms
Loss rate: 2.02%
-- Flow 1:
Average throughput: 3.01 Mbit/s
95th percentile per-packet one-way delay: 113.069 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 1.62 Mbit/s
95th percentile per-packet one-way delay: 113.189 ms
Loss rate: 3.23%
-- Flow 3:
Average throughput: 1.00 Mbit/s
95th percentile per-packet one-way delay: 112.614 ms
Loss rate: 7.92%
```

Run 2: Report of Sprout — Data Link



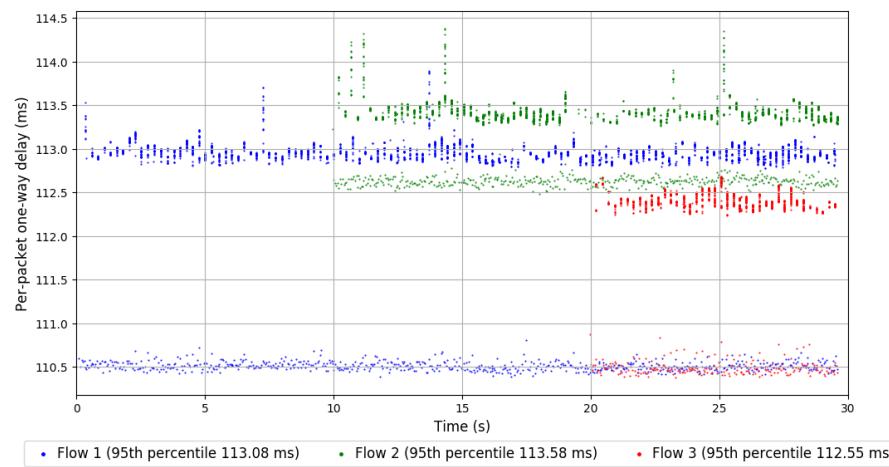
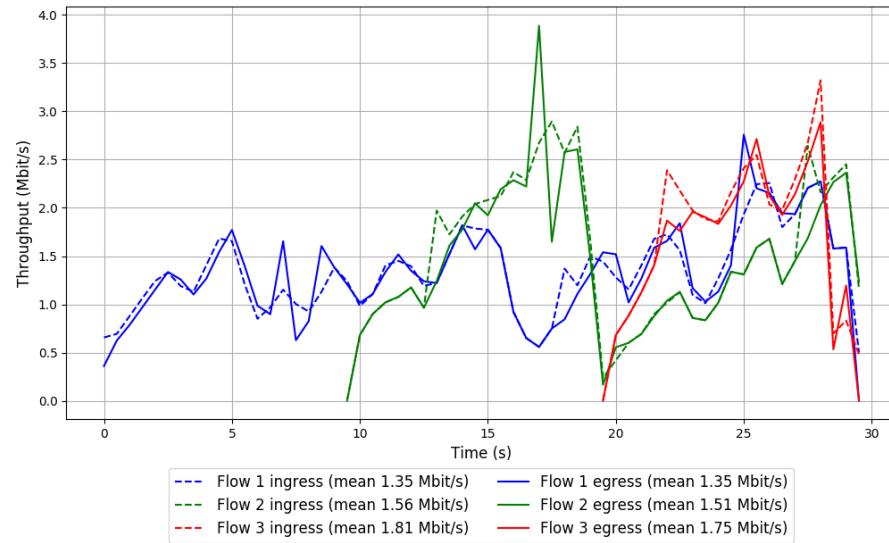
Run 3: Statistics of Sprout

Start at: 2017-08-21 00:16:40

End at: 2017-08-21 00:17:10

```
# Below is generated by plot.py at 2017-08-21 04:49:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.93 Mbit/s
95th percentile per-packet one-way delay: 113.493 ms
Loss rate: 3.12%
-- Flow 1:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 113.081 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 113.584 ms
Loss rate: 4.44%
-- Flow 3:
Average throughput: 1.75 Mbit/s
95th percentile per-packet one-way delay: 112.554 ms
Loss rate: 5.85%
```

Run 3: Report of Sprout — Data Link



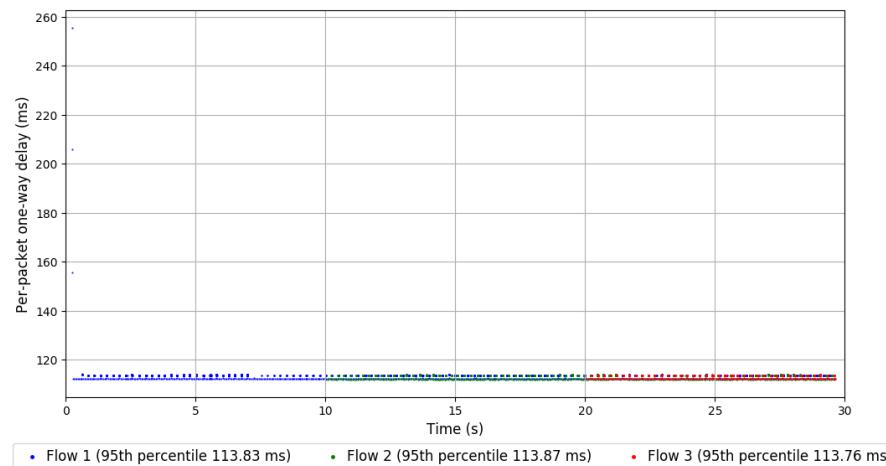
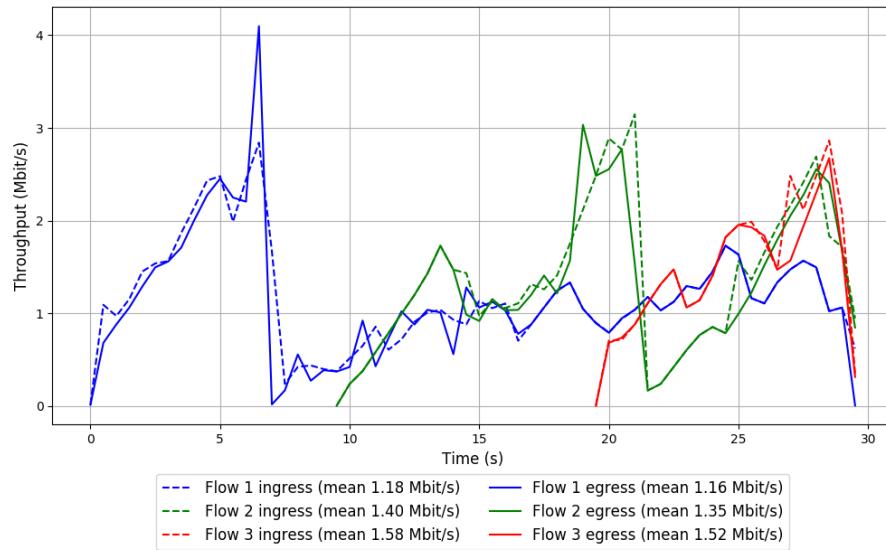
Run 4: Statistics of Sprout

Start at: 2017-08-21 00:29:41

End at: 2017-08-21 00:30:11

```
# Below is generated by plot.py at 2017-08-21 04:49:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.56 Mbit/s
95th percentile per-packet one-way delay: 113.831 ms
Loss rate: 4.46%
-- Flow 1:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 113.828 ms
Loss rate: 3.14%
-- Flow 2:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 113.871 ms
Loss rate: 5.18%
-- Flow 3:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 113.758 ms
Loss rate: 6.13%
```

Run 4: Report of Sprout — Data Link



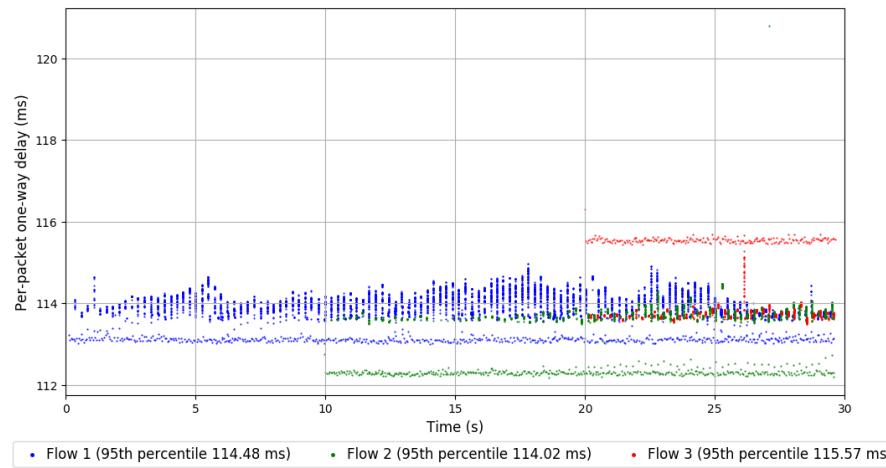
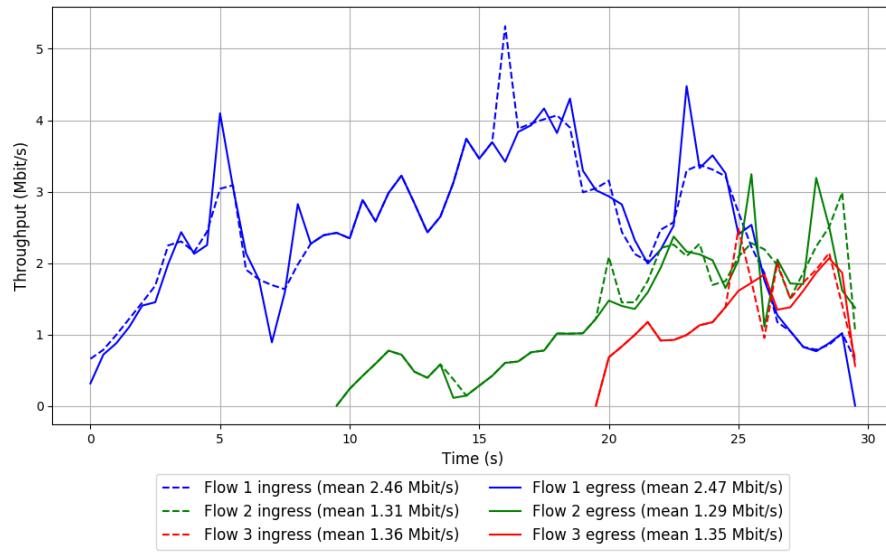
Run 5: Statistics of Sprout

Start at: 2017-08-21 00:42:42

End at: 2017-08-21 00:43:12

```
# Below is generated by plot.py at 2017-08-21 04:49:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.77 Mbit/s
95th percentile per-packet one-way delay: 114.504 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 2.47 Mbit/s
95th percentile per-packet one-way delay: 114.483 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 114.016 ms
Loss rate: 2.53%
-- Flow 3:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 115.570 ms
Loss rate: 2.50%
```

Run 5: Report of Sprout — Data Link



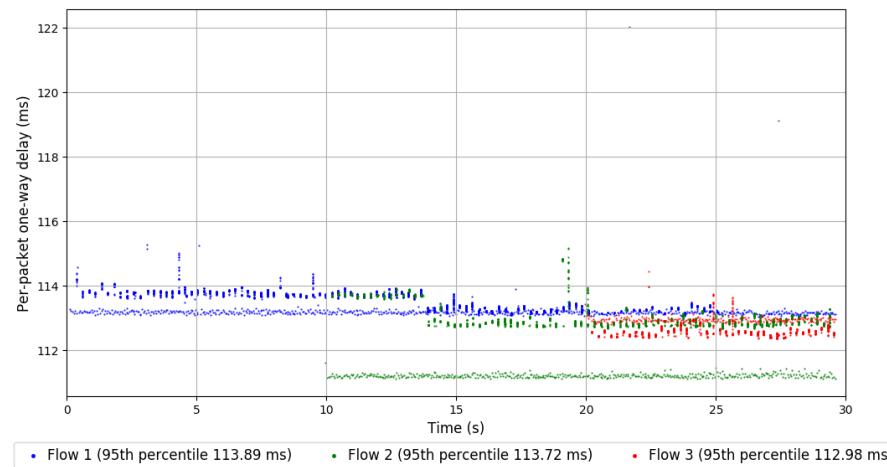
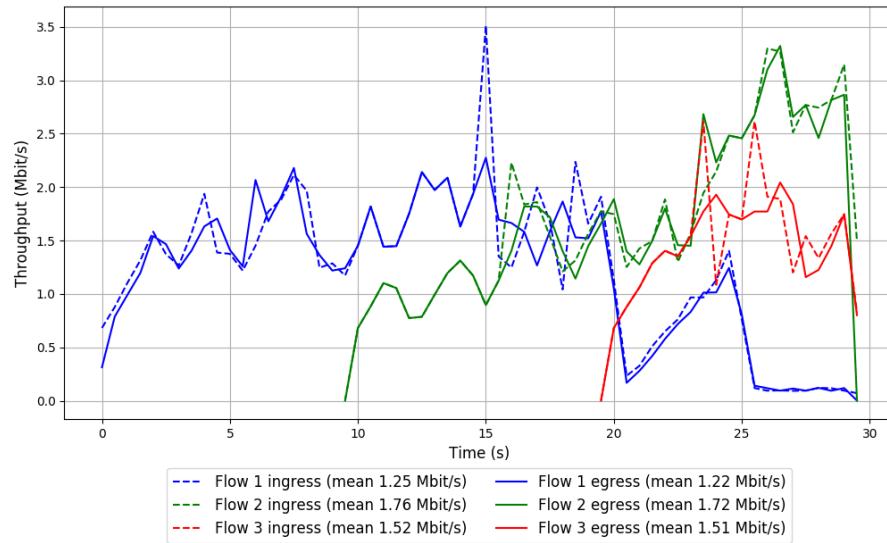
Run 6: Statistics of Sprout

Start at: 2017-08-21 00:55:30

End at: 2017-08-21 00:56:00

```
# Below is generated by plot.py at 2017-08-21 04:49:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.86 Mbit/s
95th percentile per-packet one-way delay: 113.843 ms
Loss rate: 3.15%
-- Flow 1:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 113.895 ms
Loss rate: 3.48%
-- Flow 2:
Average throughput: 1.72 Mbit/s
95th percentile per-packet one-way delay: 113.717 ms
Loss rate: 2.96%
-- Flow 3:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 112.982 ms
Loss rate: 2.76%
```

Run 6: Report of Sprout — Data Link



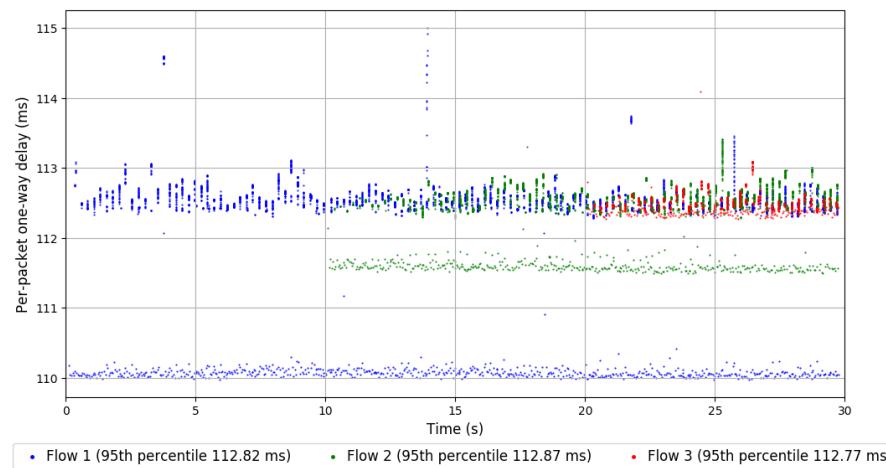
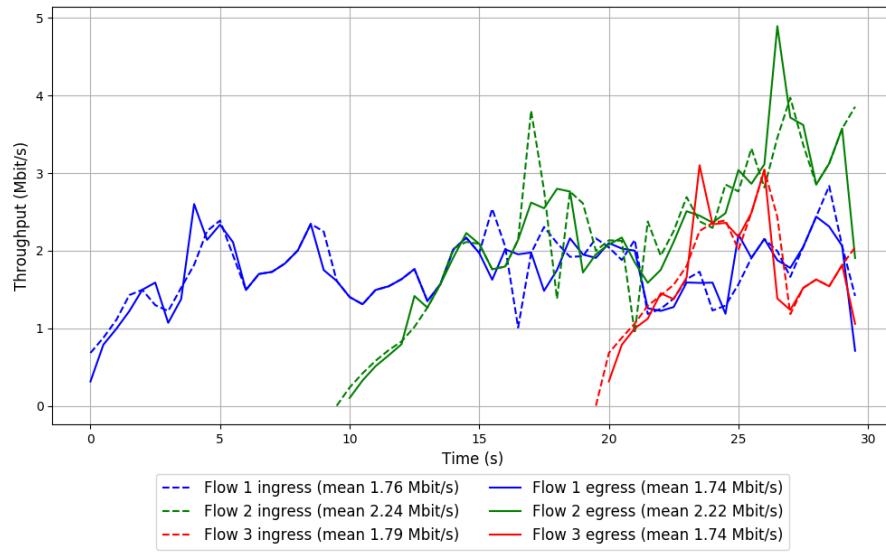
Run 7: Statistics of Sprout

Start at: 2017-08-21 01:08:53

End at: 2017-08-21 01:09:23

```
# Below is generated by plot.py at 2017-08-21 04:49:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.77 Mbit/s
95th percentile per-packet one-way delay: 112.854 ms
Loss rate: 2.68%
-- Flow 1:
Average throughput: 1.74 Mbit/s
95th percentile per-packet one-way delay: 112.821 ms
Loss rate: 2.08%
-- Flow 2:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 112.872 ms
Loss rate: 2.19%
-- Flow 3:
Average throughput: 1.74 Mbit/s
95th percentile per-packet one-way delay: 112.773 ms
Loss rate: 5.67%
```

Run 7: Report of Sprout — Data Link



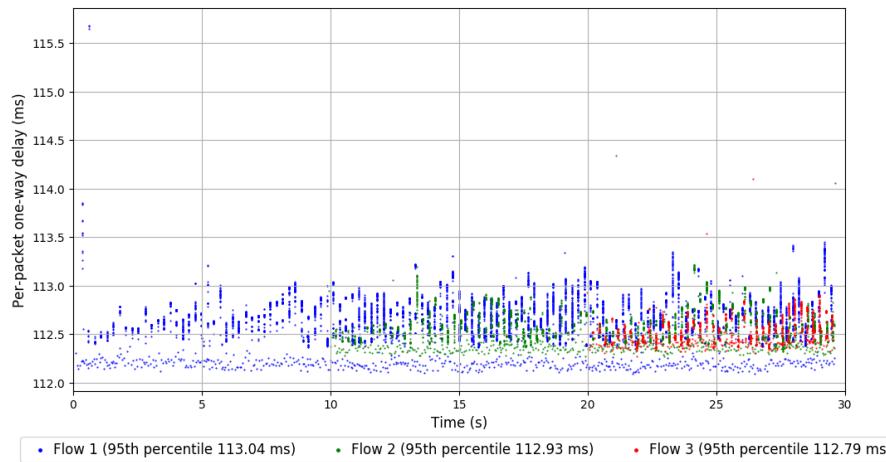
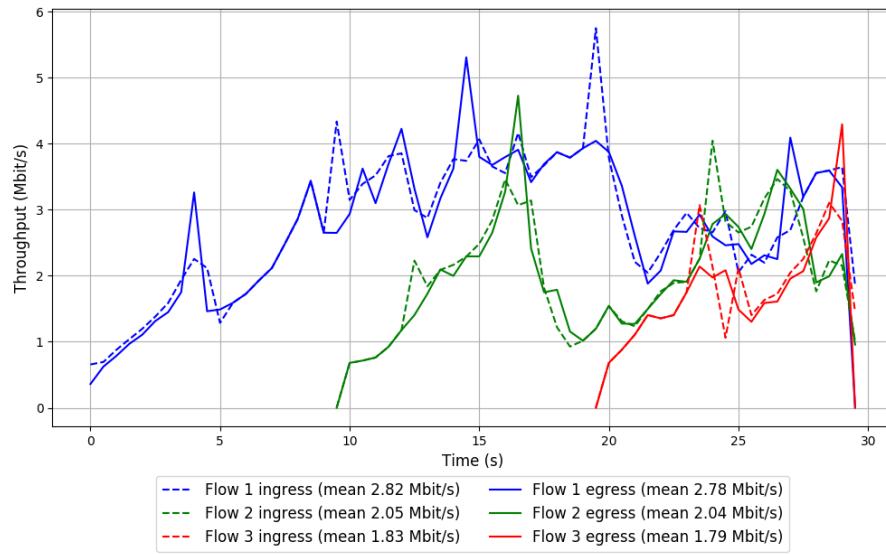
Run 8: Statistics of Sprout

Start at: 2017-08-21 01:22:04

End at: 2017-08-21 01:22:34

```
# Below is generated by plot.py at 2017-08-21 04:49:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.72 Mbit/s
95th percentile per-packet one-way delay: 113.005 ms
Loss rate: 2.28%
-- Flow 1:
Average throughput: 2.78 Mbit/s
95th percentile per-packet one-way delay: 113.040 ms
Loss rate: 2.37%
-- Flow 2:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 112.927 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 112.793 ms
Loss rate: 4.23%
```

Run 8: Report of Sprout — Data Link



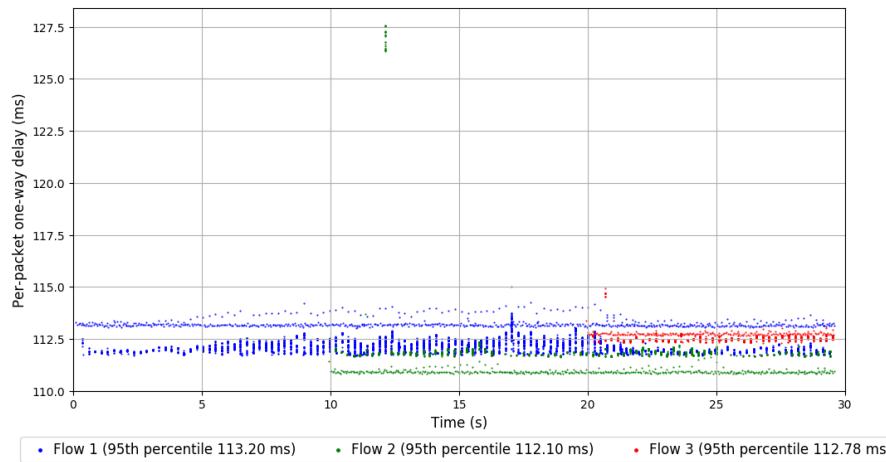
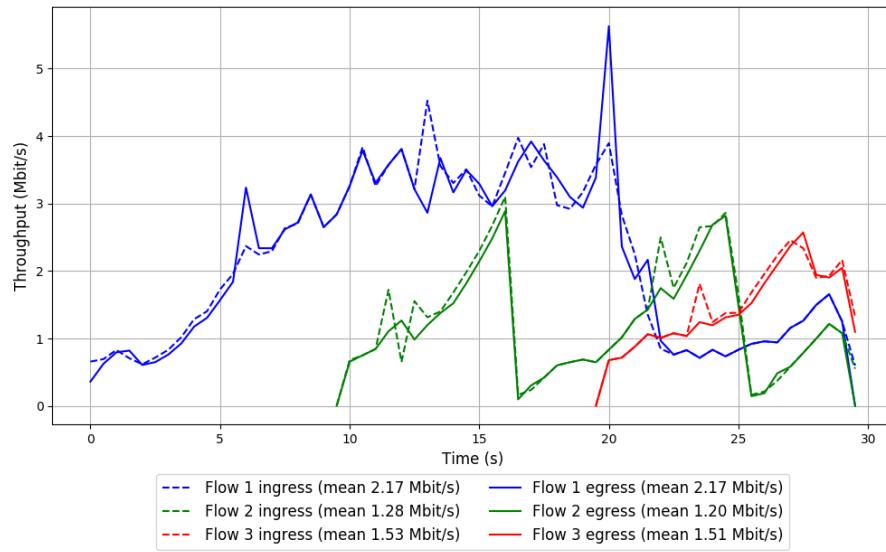
Run 9: Statistics of Sprout

Start at: 2017-08-21 01:35:04

End at: 2017-08-21 01:35:34

```
# Below is generated by plot.py at 2017-08-21 04:49:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.46 Mbit/s
95th percentile per-packet one-way delay: 113.165 ms
Loss rate: 2.70%
-- Flow 1:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 113.202 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 112.103 ms
Loss rate: 7.34%
-- Flow 3:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 112.780 ms
Loss rate: 4.39%
```

Run 9: Report of Sprout — Data Link



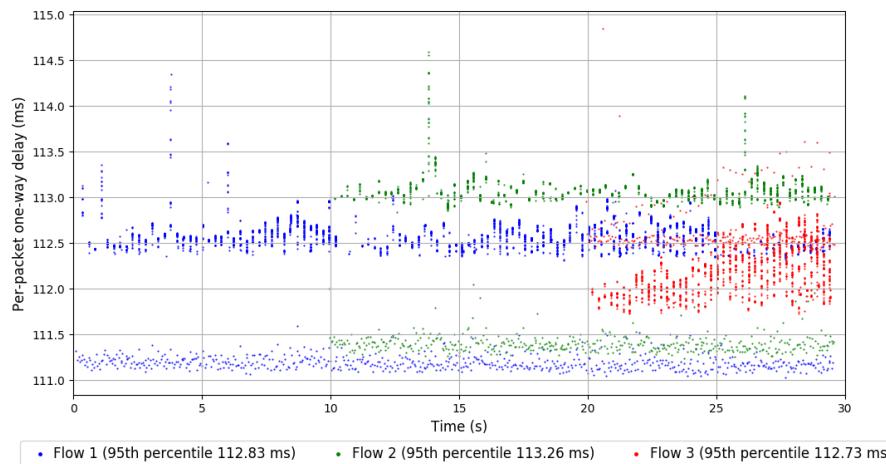
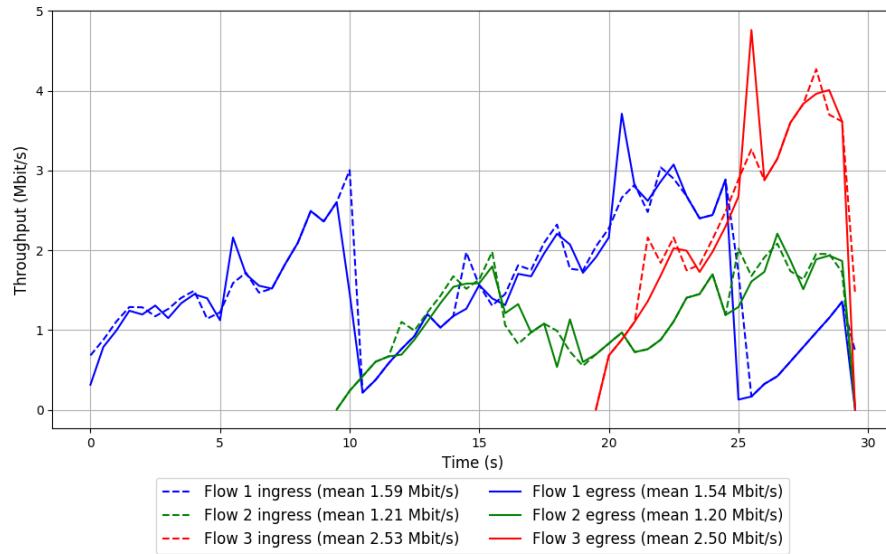
Run 10: Statistics of Sprout

Start at: 2017-08-21 01:47:52

End at: 2017-08-21 01:48:22

```
# Below is generated by plot.py at 2017-08-21 04:49:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.15 Mbit/s
95th percentile per-packet one-way delay: 113.145 ms
Loss rate: 3.36%
-- Flow 1:
Average throughput: 1.54 Mbit/s
95th percentile per-packet one-way delay: 112.830 ms
Loss rate: 4.09%
-- Flow 2:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 113.256 ms
Loss rate: 2.38%
-- Flow 3:
Average throughput: 2.50 Mbit/s
95th percentile per-packet one-way delay: 112.731 ms
Loss rate: 2.94%
```

Run 10: Report of Sprout — Data Link



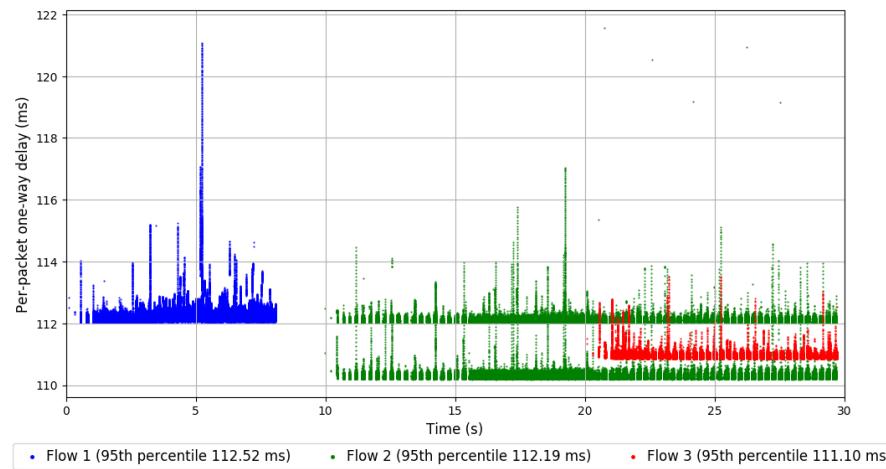
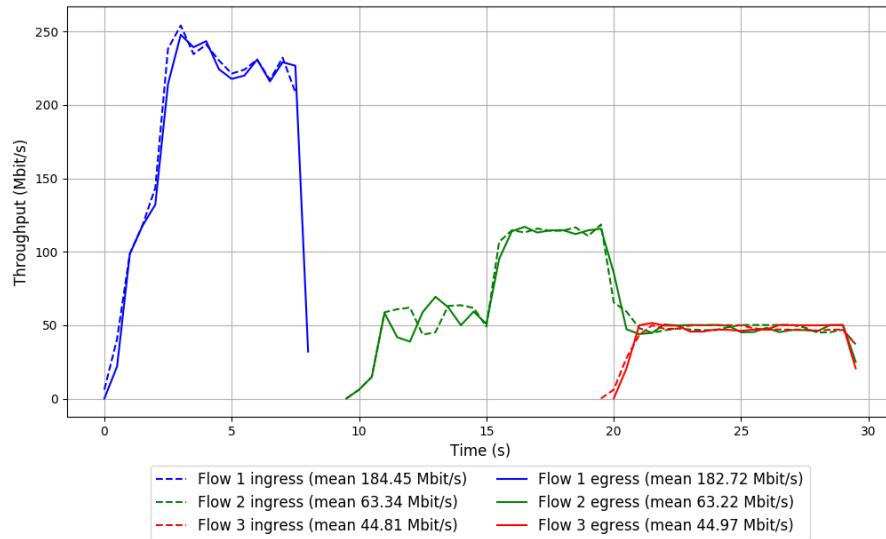
Run 1: Statistics of TaoVA-100x

Start at: 2017-08-20 23:49:56

End at: 2017-08-20 23:50:26

```
# Below is generated by plot.py at 2017-08-21 04:49:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 105.87 Mbit/s
95th percentile per-packet one-way delay: 112.395 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 182.72 Mbit/s
95th percentile per-packet one-way delay: 112.520 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 63.22 Mbit/s
95th percentile per-packet one-way delay: 112.185 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 44.97 Mbit/s
95th percentile per-packet one-way delay: 111.099 ms
Loss rate: 1.93%
```

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



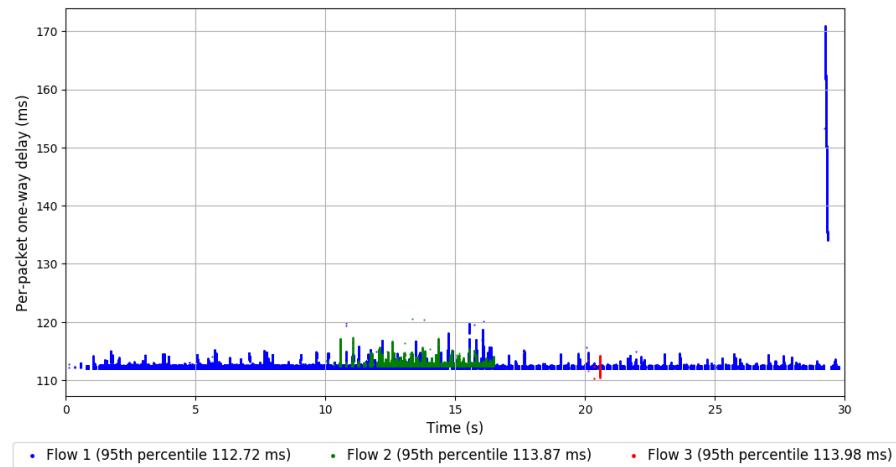
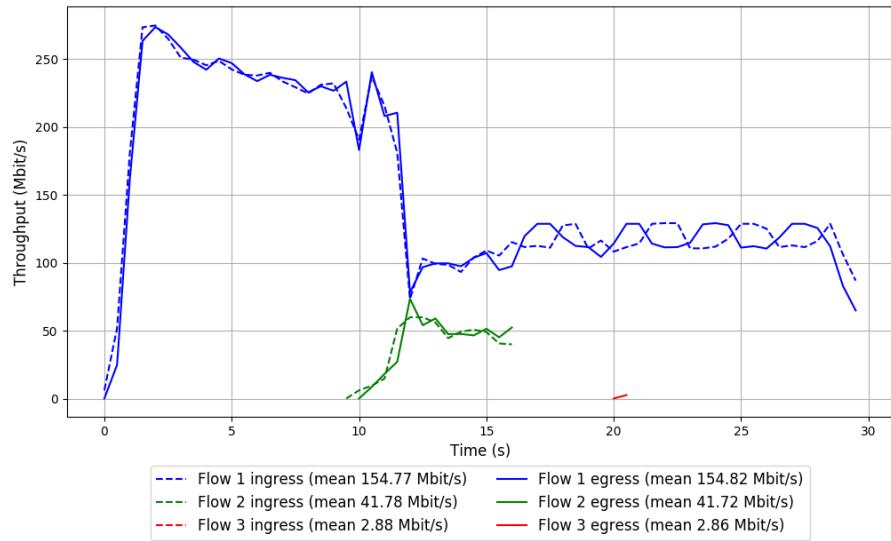
Run 2: Statistics of TaoVA-100x

Start at: 2017-08-21 00:02:30

End at: 2017-08-21 00:03:00

```
# Below is generated by plot.py at 2017-08-21 04:50:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 163.82 Mbit/s
95th percentile per-packet one-way delay: 112.878 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 154.82 Mbit/s
95th percentile per-packet one-way delay: 112.716 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 41.72 Mbit/s
95th percentile per-packet one-way delay: 113.872 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 2.86 Mbit/s
95th percentile per-packet one-way delay: 113.985 ms
Loss rate: 0.00%
```

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



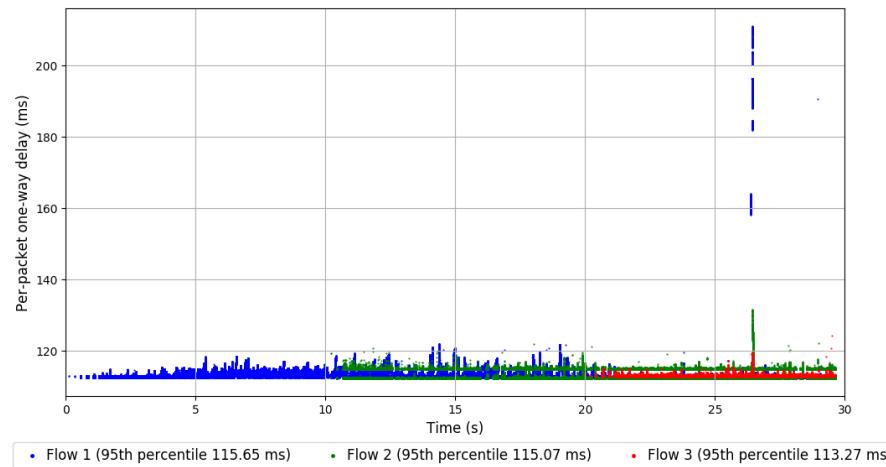
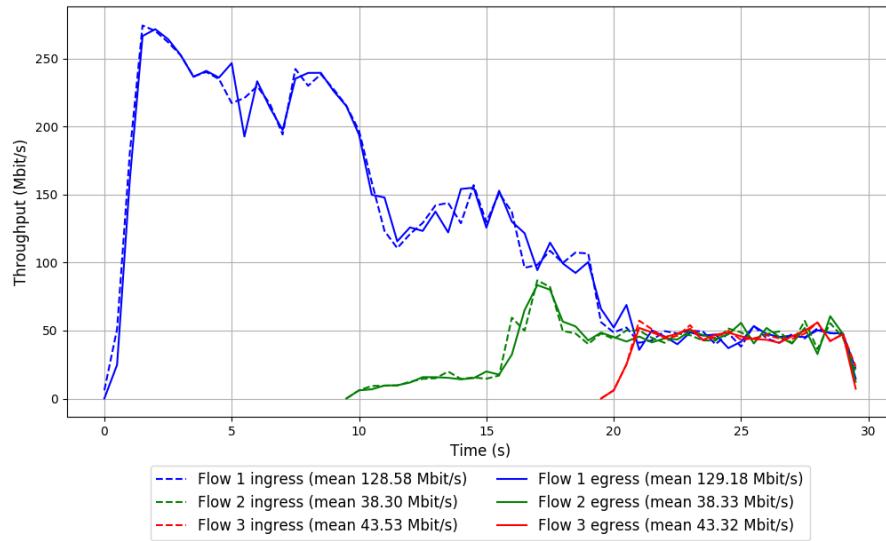
Run 3: Statistics of TaoVA-100x

Start at: 2017-08-21 00:15:35

End at: 2017-08-21 00:16:05

```
# Below is generated by plot.py at 2017-08-21 04:50:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 168.88 Mbit/s
95th percentile per-packet one-way delay: 115.351 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 129.18 Mbit/s
95th percentile per-packet one-way delay: 115.653 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 38.33 Mbit/s
95th percentile per-packet one-way delay: 115.069 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 43.32 Mbit/s
95th percentile per-packet one-way delay: 113.268 ms
Loss rate: 2.76%
```

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



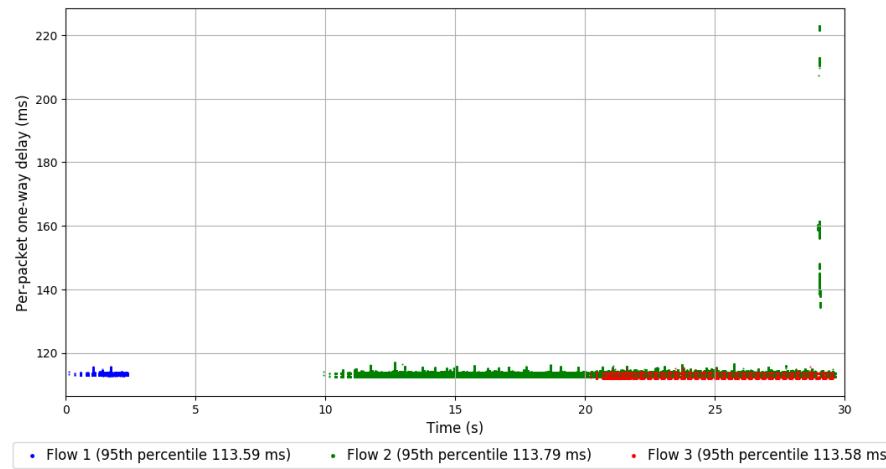
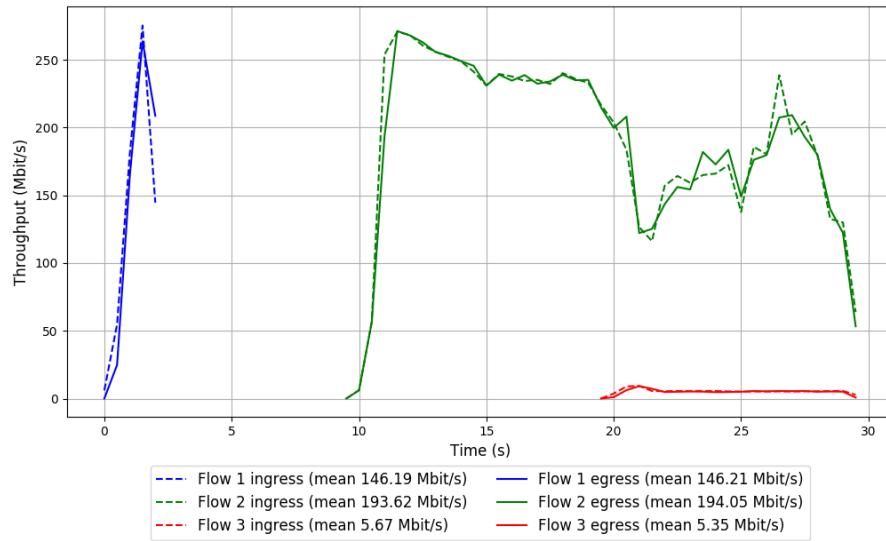
Run 4: Statistics of TaoVA-100x

Start at: 2017-08-21 00:28:39

End at: 2017-08-21 00:29:09

```
# Below is generated by plot.py at 2017-08-21 04:50:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 142.47 Mbit/s
95th percentile per-packet one-way delay: 113.774 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 146.21 Mbit/s
95th percentile per-packet one-way delay: 113.593 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 194.05 Mbit/s
95th percentile per-packet one-way delay: 113.790 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 5.35 Mbit/s
95th percentile per-packet one-way delay: 113.583 ms
Loss rate: 8.21%
```

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



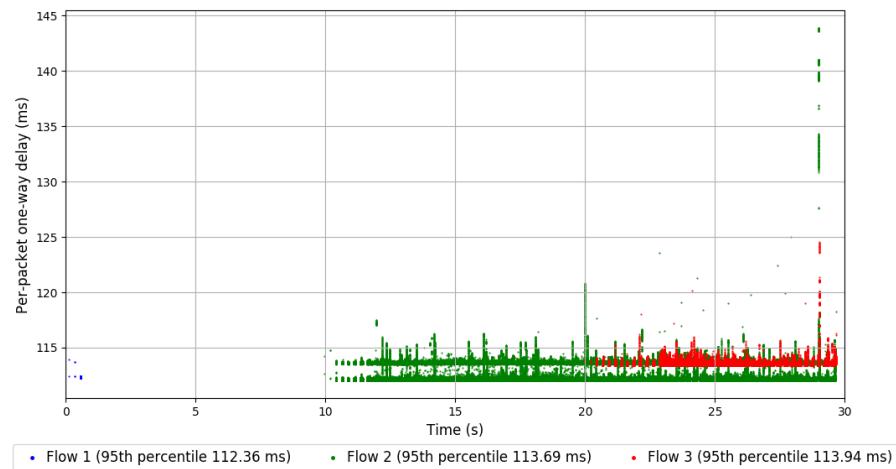
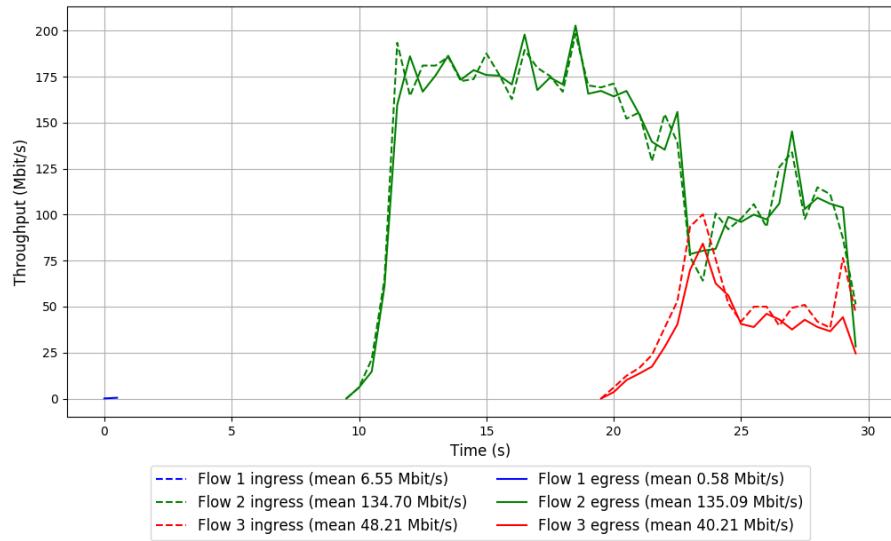
Run 5: Statistics of TaoVA-100x

Start at: 2017-08-21 00:41:43

End at: 2017-08-21 00:42:13

```
# Below is generated by plot.py at 2017-08-21 04:51:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 103.36 Mbit/s
95th percentile per-packet one-way delay: 113.718 ms
Loss rate: 3.61%
-- Flow 1:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 112.363 ms
Loss rate: 91.17%
-- Flow 2:
Average throughput: 135.09 Mbit/s
95th percentile per-packet one-way delay: 113.686 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 40.21 Mbit/s
95th percentile per-packet one-way delay: 113.936 ms
Loss rate: 18.53%
```

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



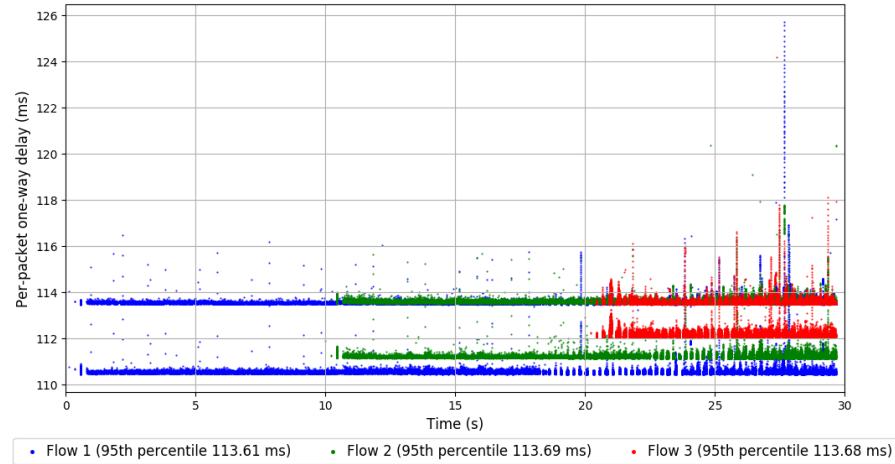
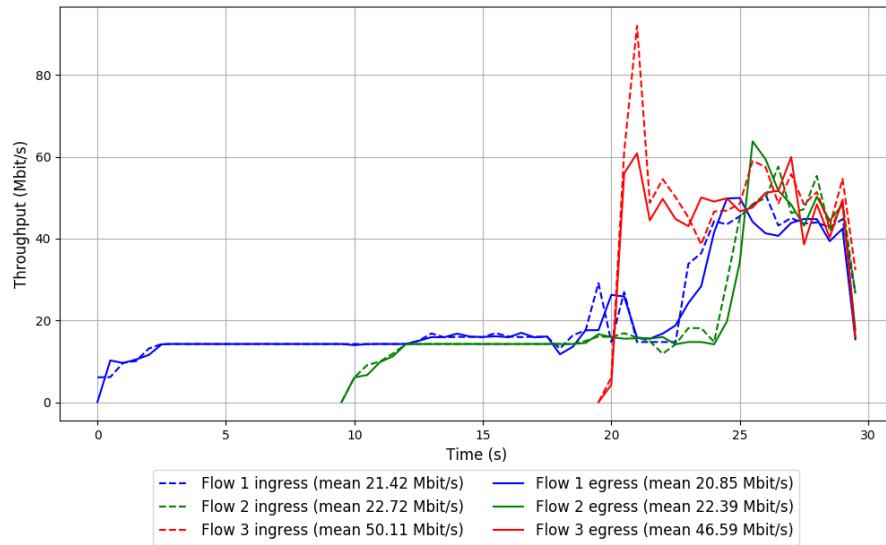
Run 6: Statistics of TaoVA-100x

Start at: 2017-08-21 00:54:37

End at: 2017-08-21 00:55:07

```
# Below is generated by plot.py at 2017-08-21 04:51:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 51.02 Mbit/s
95th percentile per-packet one-way delay: 113.658 ms
Loss rate: 4.83%
-- Flow 1:
Average throughput: 20.85 Mbit/s
95th percentile per-packet one-way delay: 113.611 ms
Loss rate: 3.36%
-- Flow 2:
Average throughput: 22.39 Mbit/s
95th percentile per-packet one-way delay: 113.691 ms
Loss rate: 2.55%
-- Flow 3:
Average throughput: 46.59 Mbit/s
95th percentile per-packet one-way delay: 113.677 ms
Loss rate: 8.80%
```

Run 6: Report of TaoVA-100x — Data Link



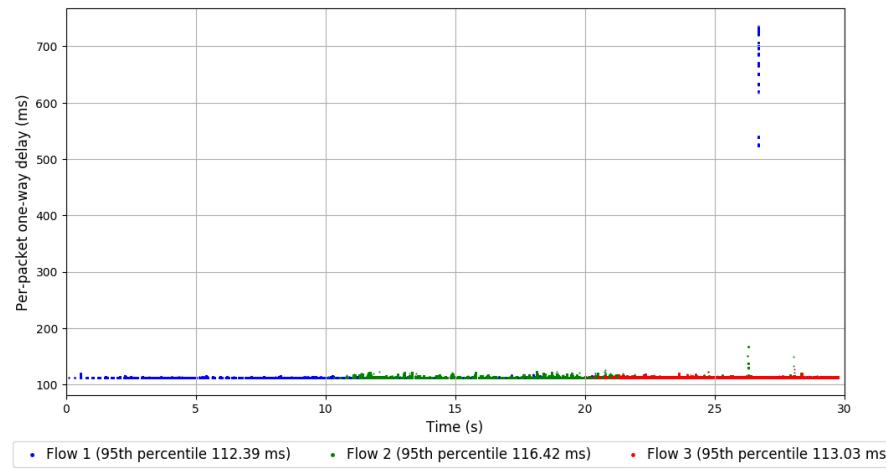
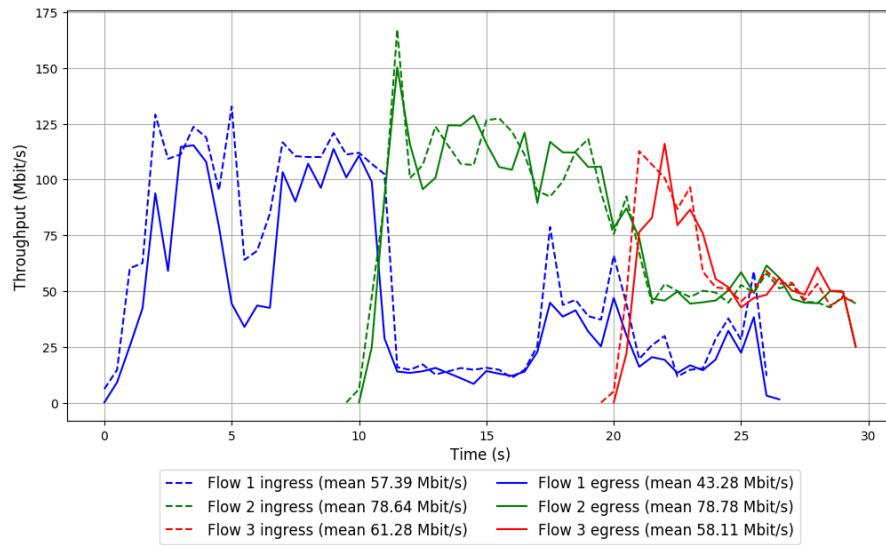
Run 7: Statistics of TaoVA-100x

Start at: 2017-08-21 01:07:51

End at: 2017-08-21 01:08:21

```
# Below is generated by plot.py at 2017-08-21 04:51:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 109.97 Mbit/s
95th percentile per-packet one-way delay: 114.393 ms
Loss rate: 11.24%
-- Flow 1:
Average throughput: 43.28 Mbit/s
95th percentile per-packet one-way delay: 112.391 ms
Loss rate: 23.39%
-- Flow 2:
Average throughput: 78.78 Mbit/s
95th percentile per-packet one-way delay: 116.425 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 58.11 Mbit/s
95th percentile per-packet one-way delay: 113.025 ms
Loss rate: 7.48%
```

Run 7: Report of TaoVA-100x — Data Link



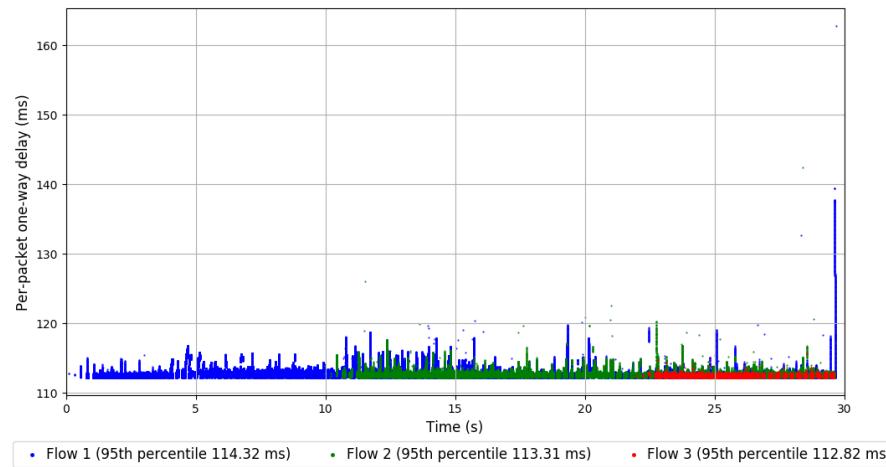
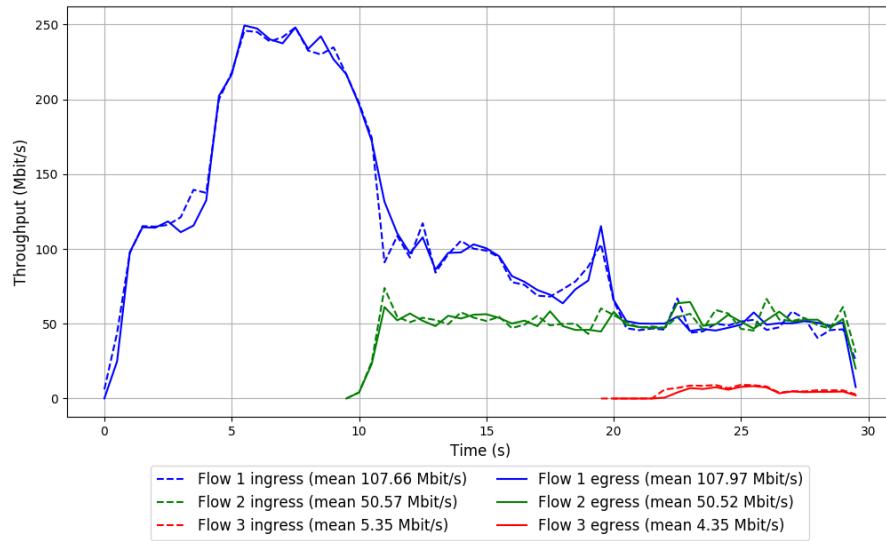
Run 8: Statistics of TaoVA-100x

Start at: 2017-08-21 01:21:00

End at: 2017-08-21 01:21:30

```
# Below is generated by plot.py at 2017-08-21 04:52:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 142.91 Mbit/s
95th percentile per-packet one-way delay: 114.090 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 107.97 Mbit/s
95th percentile per-packet one-way delay: 114.318 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 50.52 Mbit/s
95th percentile per-packet one-way delay: 113.311 ms
Loss rate: 1.47%
-- Flow 3:
Average throughput: 4.35 Mbit/s
95th percentile per-packet one-way delay: 112.824 ms
Loss rate: 21.02%
```

Run 8: Report of TaoVA-100x — Data Link



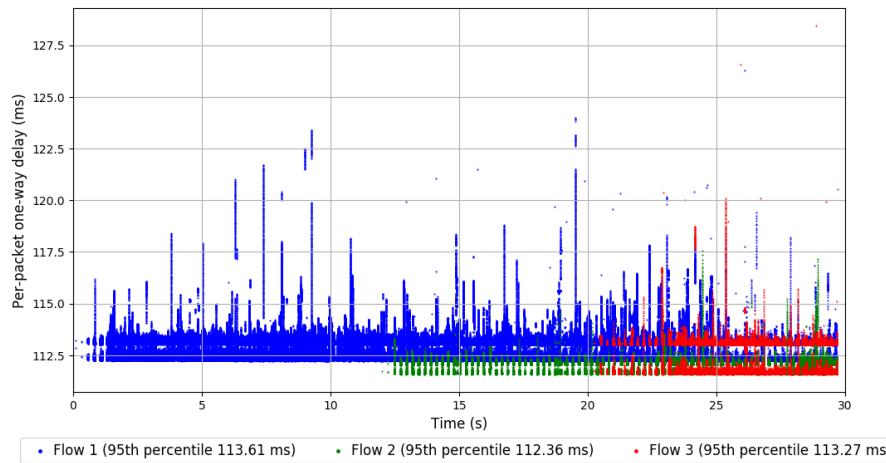
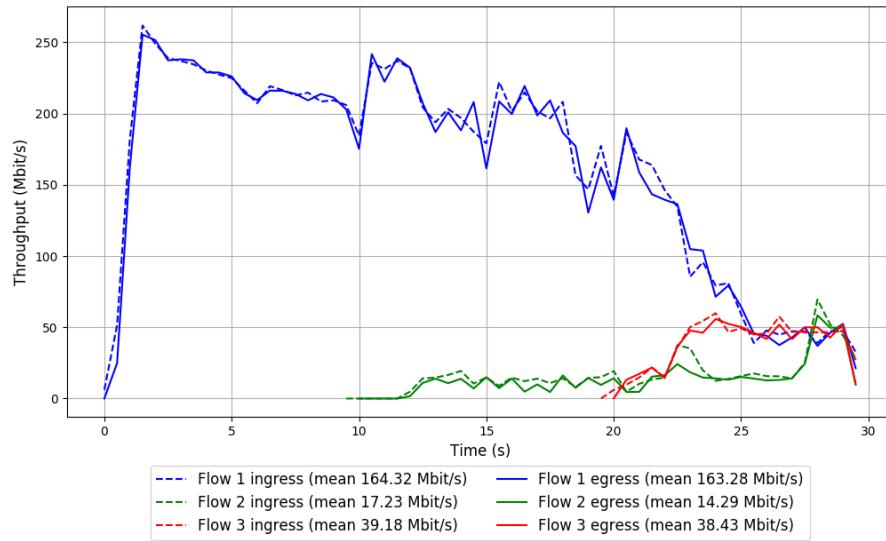
Run 9: Statistics of TaoVA-100x

Start at: 2017-08-21 01:33:54

End at: 2017-08-21 01:34:24

```
# Below is generated by plot.py at 2017-08-21 04:53:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 185.27 Mbit/s
95th percentile per-packet one-way delay: 113.562 ms
Loss rate: 2.60%
-- Flow 1:
Average throughput: 163.28 Mbit/s
95th percentile per-packet one-way delay: 113.614 ms
Loss rate: 1.41%
-- Flow 2:
Average throughput: 14.29 Mbit/s
95th percentile per-packet one-way delay: 112.364 ms
Loss rate: 17.97%
-- Flow 3:
Average throughput: 38.43 Mbit/s
95th percentile per-packet one-way delay: 113.271 ms
Loss rate: 3.97%
```

Run 9: Report of TaoVA-100x — Data Link



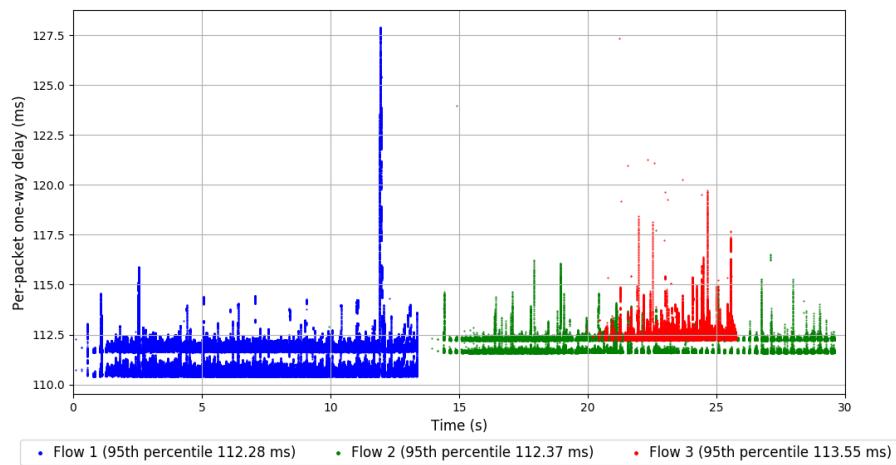
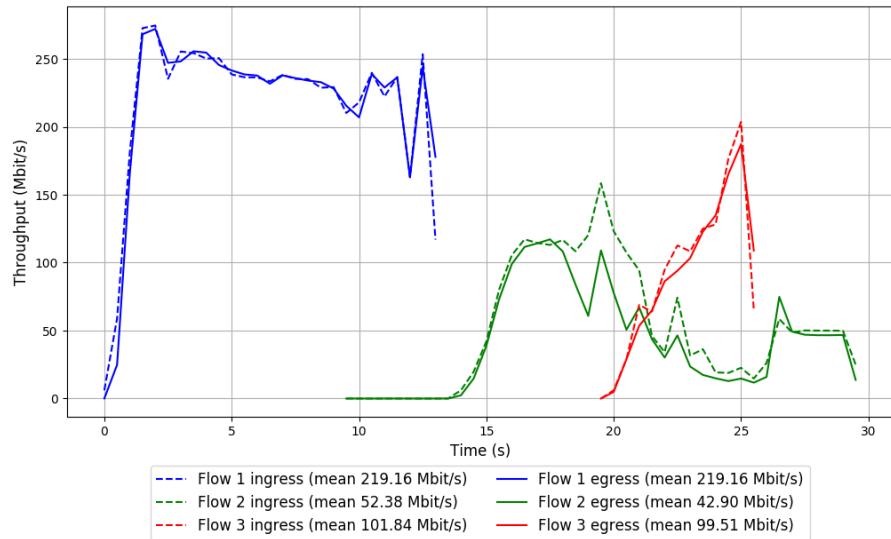
Run 10: Statistics of TaoVA-100x

Start at: 2017-08-21 01:46:46

End at: 2017-08-21 01:47:16

```
# Below is generated by plot.py at 2017-08-21 04:53:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 146.78 Mbit/s
95th percentile per-packet one-way delay: 112.584 ms
Loss rate: 4.70%
-- Flow 1:
Average throughput: 219.16 Mbit/s
95th percentile per-packet one-way delay: 112.284 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.90 Mbit/s
95th percentile per-packet one-way delay: 112.373 ms
Loss rate: 19.15%
-- Flow 3:
Average throughput: 99.51 Mbit/s
95th percentile per-packet one-way delay: 113.550 ms
Loss rate: 2.30%
```

Run 10: Report of TaoVA-100x — Data Link



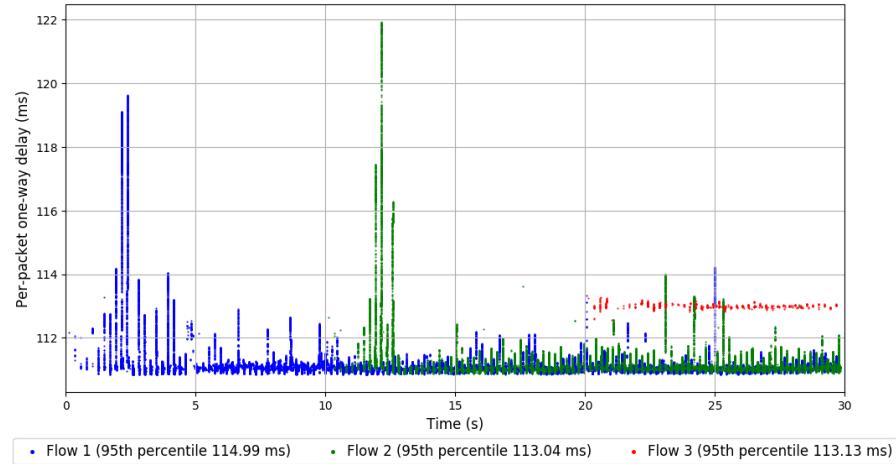
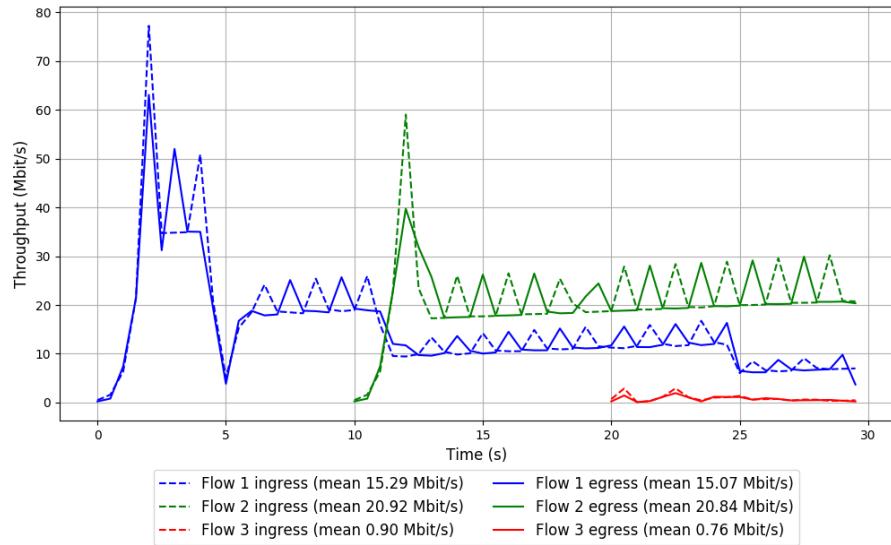
Run 1: Statistics of TCP Vegas

Start at: 2017-08-20 23:41:57

End at: 2017-08-20 23:42:27

```
# Below is generated by plot.py at 2017-08-21 04:53:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 29.13 Mbit/s
95th percentile per-packet one-way delay: 113.684 ms
Loss rate: 2.04%
-- Flow 1:
Average throughput: 15.07 Mbit/s
95th percentile per-packet one-way delay: 114.991 ms
Loss rate: 2.20%
-- Flow 2:
Average throughput: 20.84 Mbit/s
95th percentile per-packet one-way delay: 113.042 ms
Loss rate: 1.53%
-- Flow 3:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 113.134 ms
Loss rate: 18.18%
```

Run 1: Report of TCP Vegas — Data Link



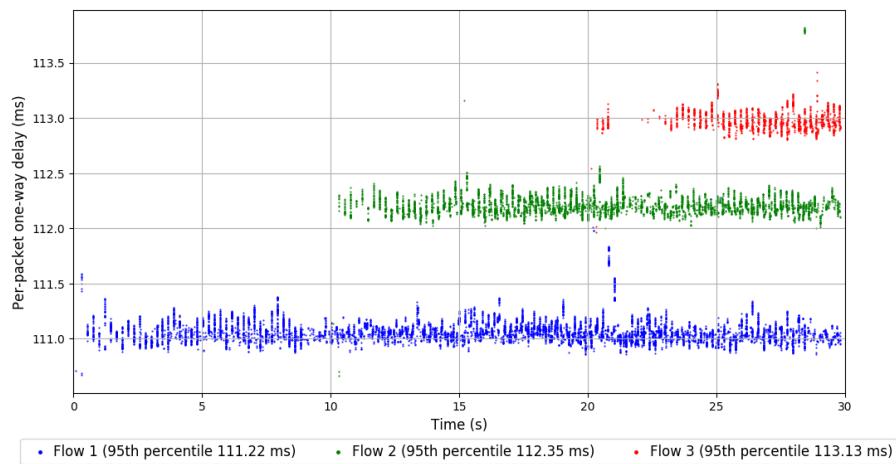
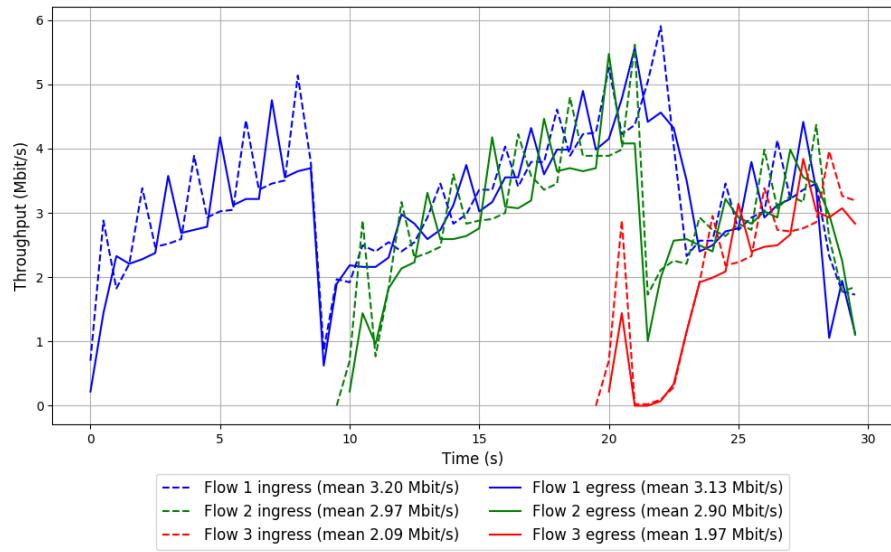
Run 2: Statistics of TCP Vegas

Start at: 2017-08-20 23:54:57

End at: 2017-08-20 23:55:27

```
# Below is generated by plot.py at 2017-08-21 04:53:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.70 Mbit/s
95th percentile per-packet one-way delay: 112.990 ms
Loss rate: 3.83%
-- Flow 1:
Average throughput: 3.13 Mbit/s
95th percentile per-packet one-way delay: 111.224 ms
Loss rate: 2.93%
-- Flow 2:
Average throughput: 2.90 Mbit/s
95th percentile per-packet one-way delay: 112.348 ms
Loss rate: 3.64%
-- Flow 3:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 113.127 ms
Loss rate: 8.53%
```

Run 2: Report of TCP Vegas — Data Link



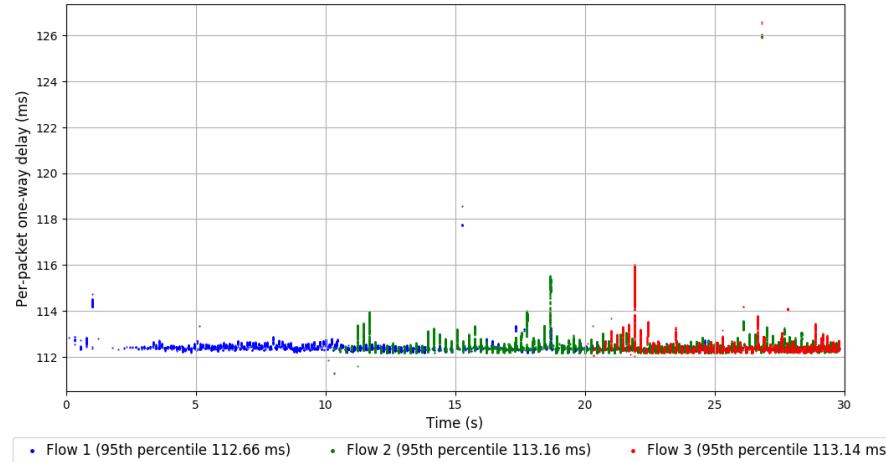
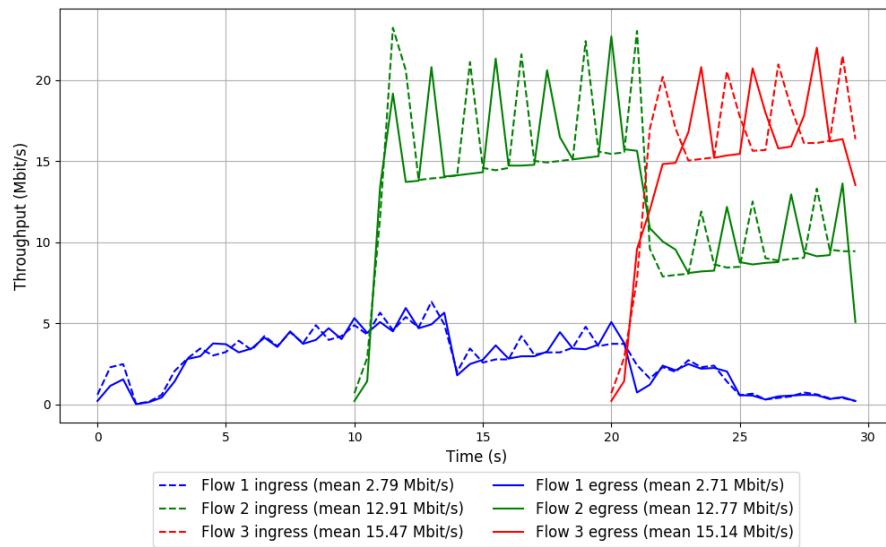
Run 3: Statistics of TCP Vegas

Start at: 2017-08-21 00:07:43

End at: 2017-08-21 00:08:13

```
# Below is generated by plot.py at 2017-08-21 04:53:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.11 Mbit/s
95th percentile per-packet one-way delay: 113.107 ms
Loss rate: 3.09%
-- Flow 1:
Average throughput: 2.71 Mbit/s
95th percentile per-packet one-way delay: 112.655 ms
Loss rate: 3.62%
-- Flow 2:
Average throughput: 12.77 Mbit/s
95th percentile per-packet one-way delay: 113.163 ms
Loss rate: 2.19%
-- Flow 3:
Average throughput: 15.14 Mbit/s
95th percentile per-packet one-way delay: 113.136 ms
Loss rate: 4.33%
```

Run 3: Report of TCP Vegas — Data Link



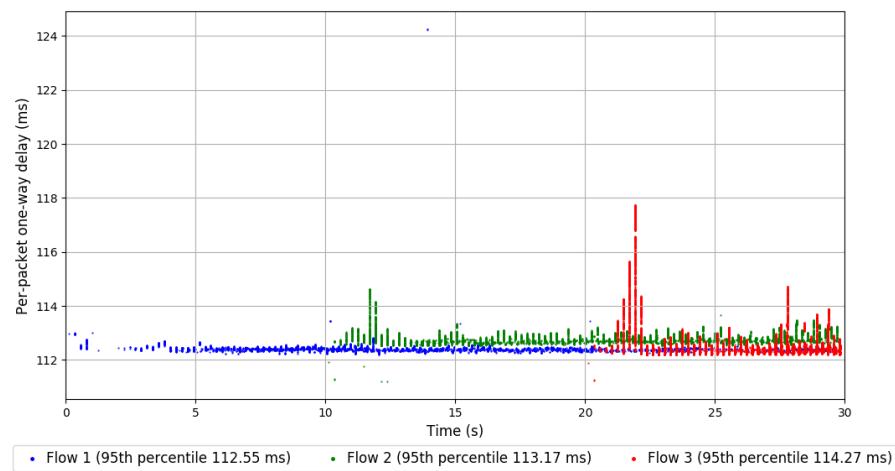
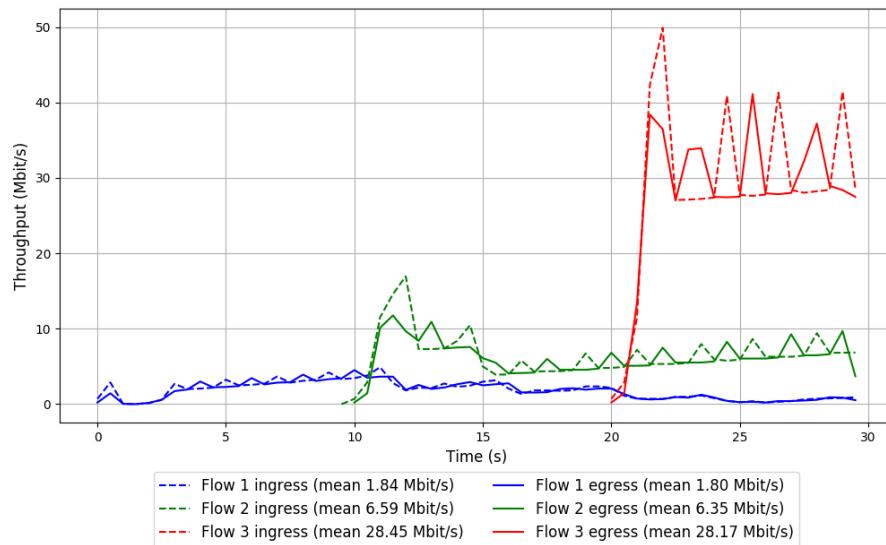
Run 4: Statistics of TCP Vegas

Start at: 2017-08-21 00:20:46

End at: 2017-08-21 00:21:16

```
# Below is generated by plot.py at 2017-08-21 04:53:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.20 Mbit/s
95th percentile per-packet one-way delay: 113.690 ms
Loss rate: 3.67%
-- Flow 1:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 112.548 ms
Loss rate: 3.01%
-- Flow 2:
Average throughput: 6.35 Mbit/s
95th percentile per-packet one-way delay: 113.172 ms
Loss rate: 4.91%
-- Flow 3:
Average throughput: 28.17 Mbit/s
95th percentile per-packet one-way delay: 114.273 ms
Loss rate: 3.22%
```

Run 4: Report of TCP Vegas — Data Link



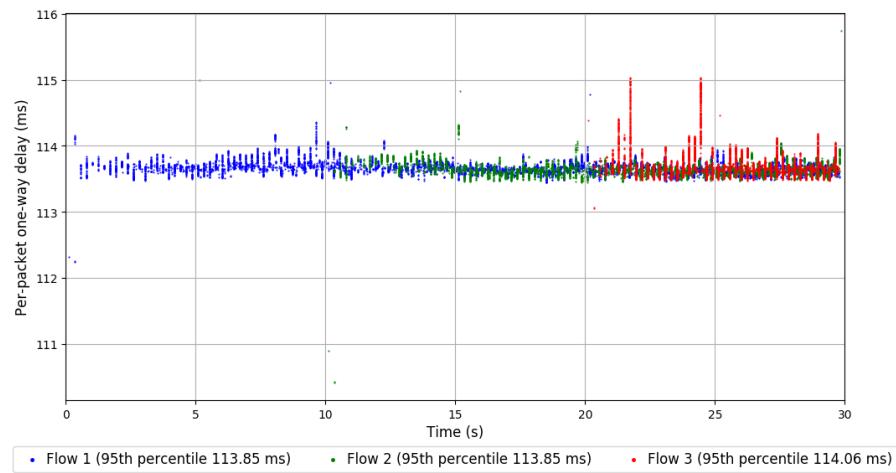
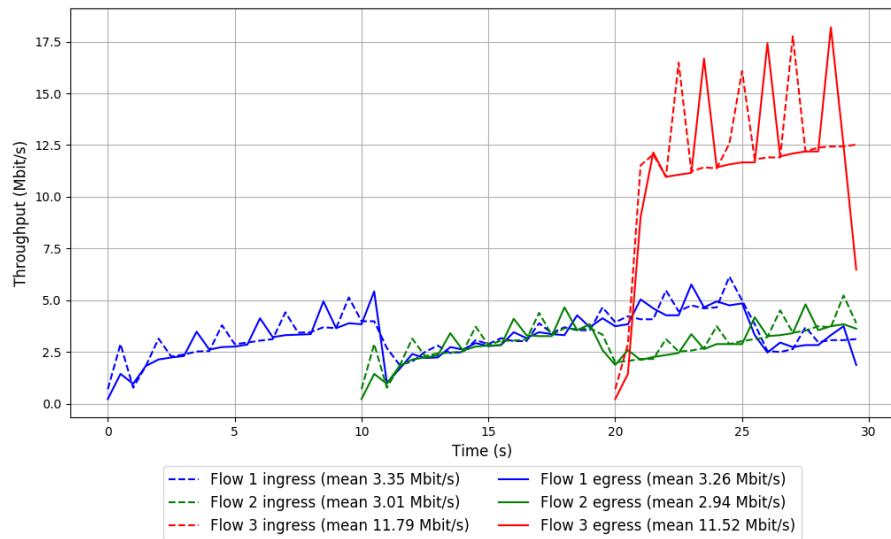
Run 5: Statistics of TCP Vegas

Start at: 2017-08-21 00:33:49

End at: 2017-08-21 00:34:19

```
# Below is generated by plot.py at 2017-08-21 04:53:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.94 Mbit/s
95th percentile per-packet one-way delay: 113.935 ms
Loss rate: 3.80%
-- Flow 1:
Average throughput: 3.26 Mbit/s
95th percentile per-packet one-way delay: 113.847 ms
Loss rate: 3.24%
-- Flow 2:
Average throughput: 2.94 Mbit/s
95th percentile per-packet one-way delay: 113.848 ms
Loss rate: 3.26%
-- Flow 3:
Average throughput: 11.52 Mbit/s
95th percentile per-packet one-way delay: 114.061 ms
Loss rate: 4.56%
```

Run 5: Report of TCP Vegas — Data Link



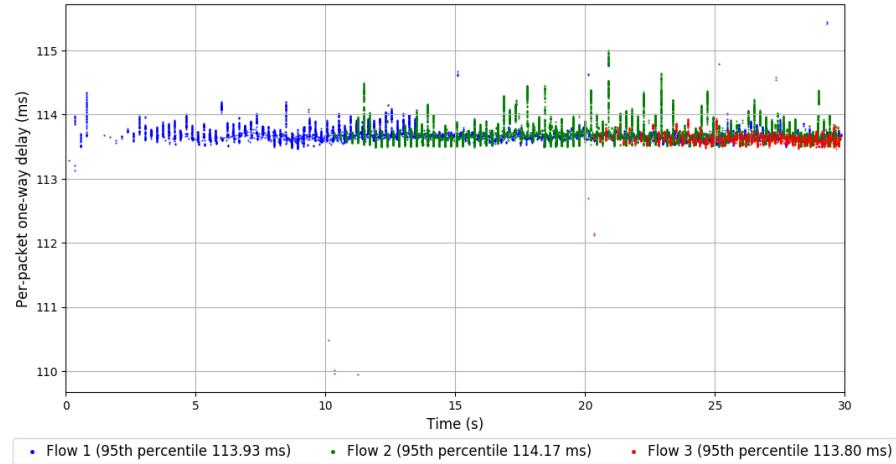
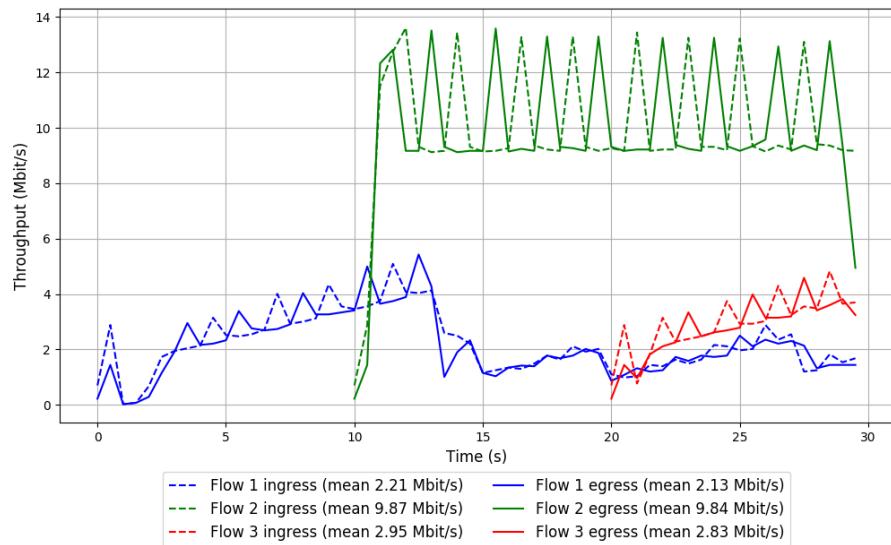
Run 6: Statistics of TCP Vegas

Start at: 2017-08-21 00:46:46

End at: 2017-08-21 00:47:16

```
# Below is generated by plot.py at 2017-08-21 04:53:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.57 Mbit/s
95th percentile per-packet one-way delay: 114.083 ms
Loss rate: 2.50%
-- Flow 1:
Average throughput: 2.13 Mbit/s
95th percentile per-packet one-way delay: 113.926 ms
Loss rate: 4.07%
-- Flow 2:
Average throughput: 9.84 Mbit/s
95th percentile per-packet one-way delay: 114.175 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 2.83 Mbit/s
95th percentile per-packet one-way delay: 113.797 ms
Loss rate: 6.16%
```

Run 6: Report of TCP Vegas — Data Link



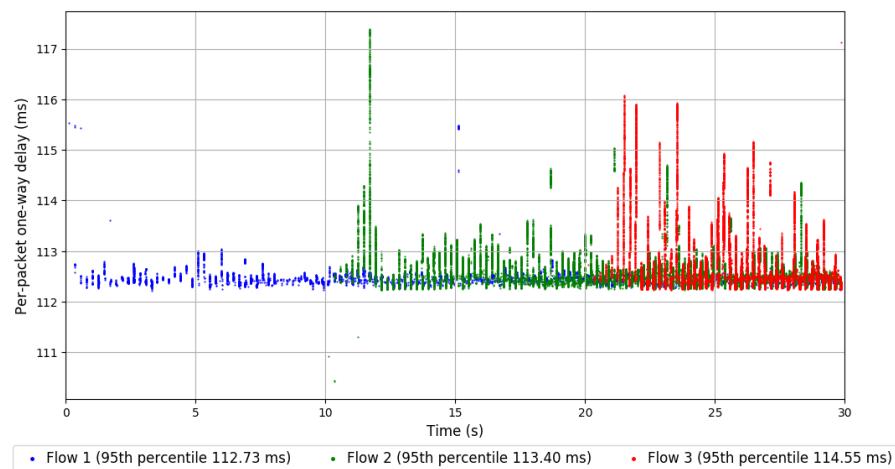
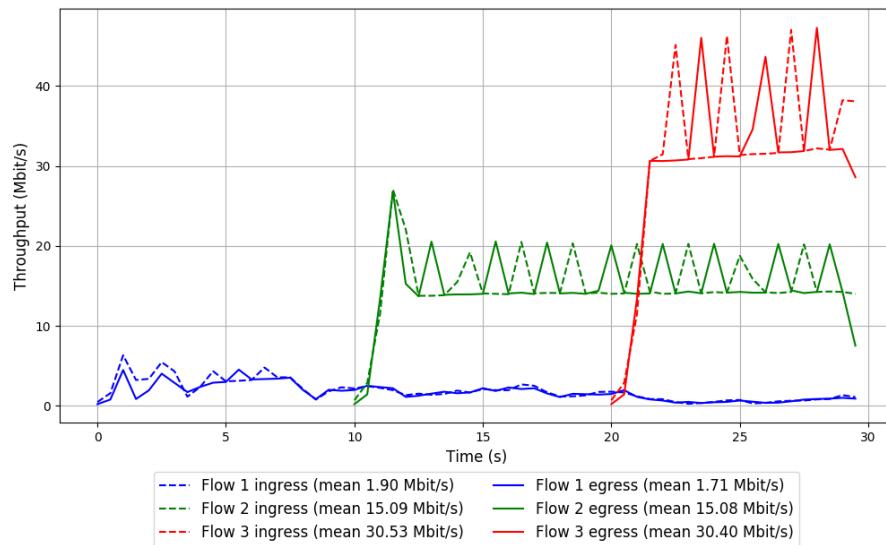
Run 7: Statistics of TCP Vegas

Start at: 2017-08-21 00:59:44

End at: 2017-08-21 01:00:14

```
# Below is generated by plot.py at 2017-08-21 04:53:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.63 Mbit/s
95th percentile per-packet one-way delay: 114.054 ms
Loss rate: 2.71%
-- Flow 1:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 112.731 ms
Loss rate: 11.10%
-- Flow 2:
Average throughput: 15.08 Mbit/s
95th percentile per-packet one-way delay: 113.404 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 30.40 Mbit/s
95th percentile per-packet one-way delay: 114.551 ms
Loss rate: 2.64%
```

Run 7: Report of TCP Vegas — Data Link



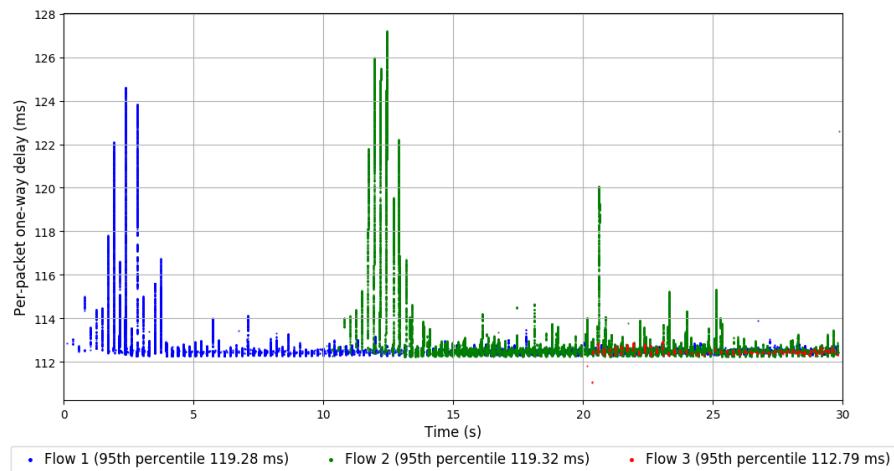
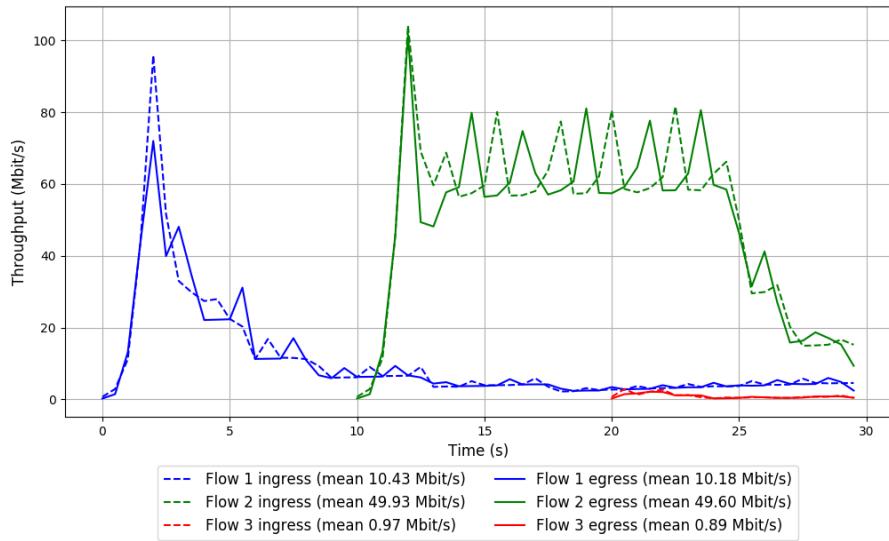
Run 8: Statistics of TCP Vegas

Start at: 2017-08-21 01:12:59

End at: 2017-08-21 01:13:29

```
# Below is generated by plot.py at 2017-08-21 04:53:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 43.37 Mbit/s
95th percentile per-packet one-way delay: 119.264 ms
Loss rate: 1.97%
-- Flow 1:
Average throughput: 10.18 Mbit/s
95th percentile per-packet one-way delay: 119.276 ms
Loss rate: 3.11%
-- Flow 2:
Average throughput: 49.60 Mbit/s
95th percentile per-packet one-way delay: 119.321 ms
Loss rate: 1.53%
-- Flow 3:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: 112.786 ms
Loss rate: 10.71%
```

Run 8: Report of TCP Vegas — Data Link



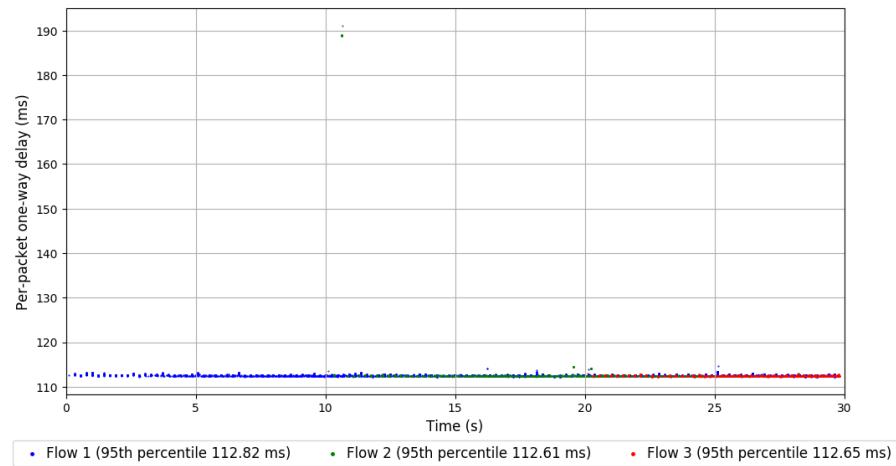
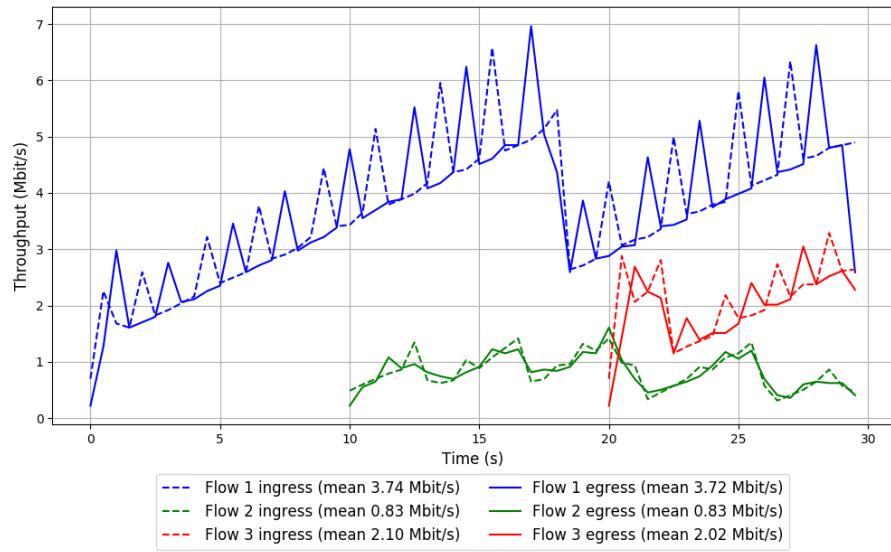
Run 9: Statistics of TCP Vegas

Start at: 2017-08-21 01:26:05

End at: 2017-08-21 01:26:35

```
# Below is generated by plot.py at 2017-08-21 04:53:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.93 Mbit/s
95th percentile per-packet one-way delay: 112.794 ms
Loss rate: 2.01%
-- Flow 1:
Average throughput: 3.72 Mbit/s
95th percentile per-packet one-way delay: 112.824 ms
Loss rate: 1.22%
-- Flow 2:
Average throughput: 0.83 Mbit/s
95th percentile per-packet one-way delay: 112.606 ms
Loss rate: 1.73%
-- Flow 3:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 112.650 ms
Loss rate: 6.48%
```

Run 9: Report of TCP Vegas — Data Link



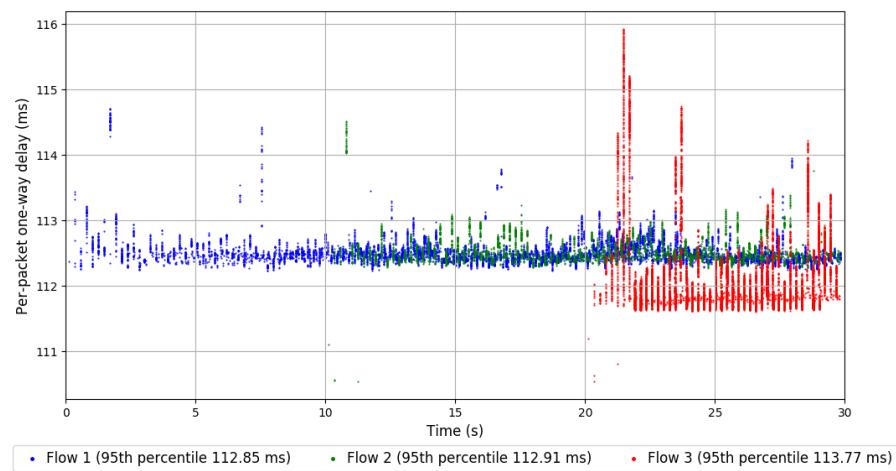
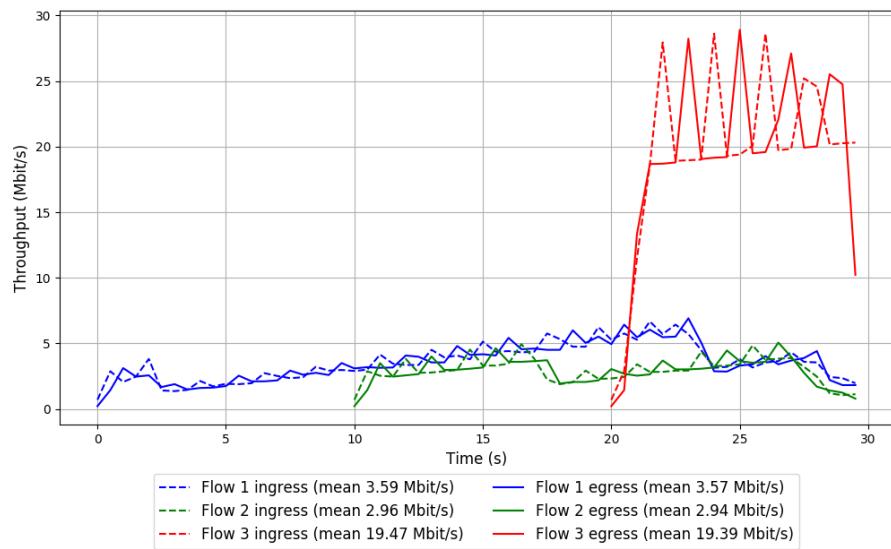
Run 10: Statistics of TCP Vegas

Start at: 2017-08-21 01:39:09

End at: 2017-08-21 01:39:39

```
# Below is generated by plot.py at 2017-08-21 04:53:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.81 Mbit/s
95th percentile per-packet one-way delay: 113.238 ms
Loss rate: 2.19%
-- Flow 1:
Average throughput: 3.57 Mbit/s
95th percentile per-packet one-way delay: 112.846 ms
Loss rate: 1.44%
-- Flow 2:
Average throughput: 2.94 Mbit/s
95th percentile per-packet one-way delay: 112.910 ms
Loss rate: 2.05%
-- Flow 3:
Average throughput: 19.39 Mbit/s
95th percentile per-packet one-way delay: 113.765 ms
Loss rate: 2.65%
```

Run 10: Report of TCP Vegas — Data Link



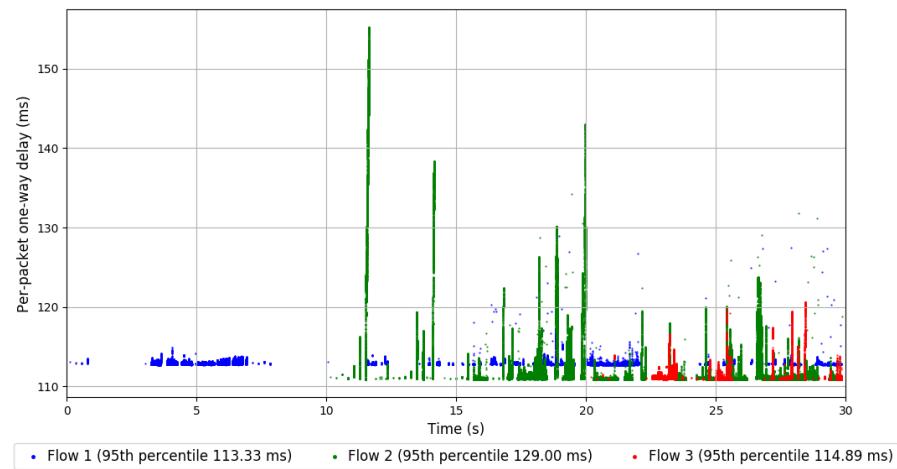
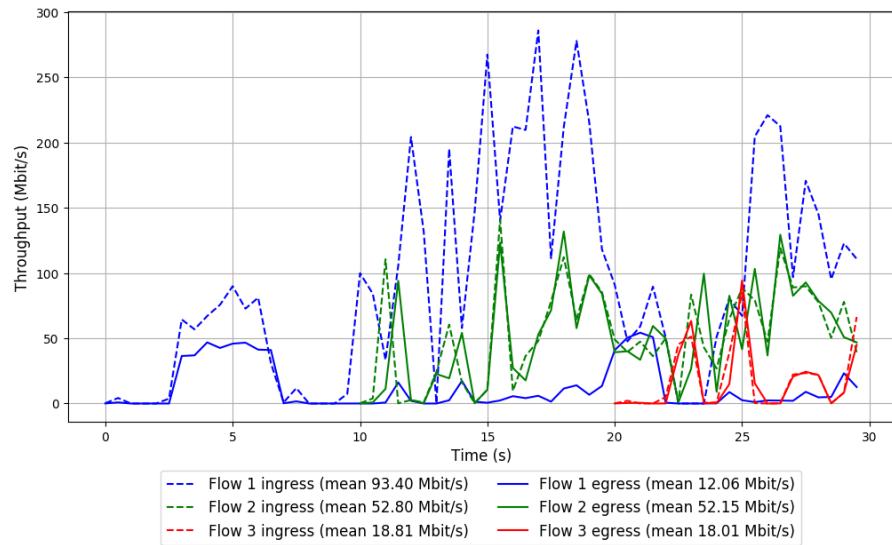
Run 1: Statistics of Verus

Start at: 2017-08-20 23:46:34

End at: 2017-08-20 23:47:04

```
# Below is generated by plot.py at 2017-08-21 04:53:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.46 Mbit/s
95th percentile per-packet one-way delay: 123.451 ms
Loss rate: 61.35%
-- Flow 1:
Average throughput: 12.06 Mbit/s
95th percentile per-packet one-way delay: 113.330 ms
Loss rate: 87.18%
-- Flow 2:
Average throughput: 52.15 Mbit/s
95th percentile per-packet one-way delay: 128.998 ms
Loss rate: 2.37%
-- Flow 3:
Average throughput: 18.01 Mbit/s
95th percentile per-packet one-way delay: 114.889 ms
Loss rate: 6.51%
```

Run 1: Report of Verus — Data Link



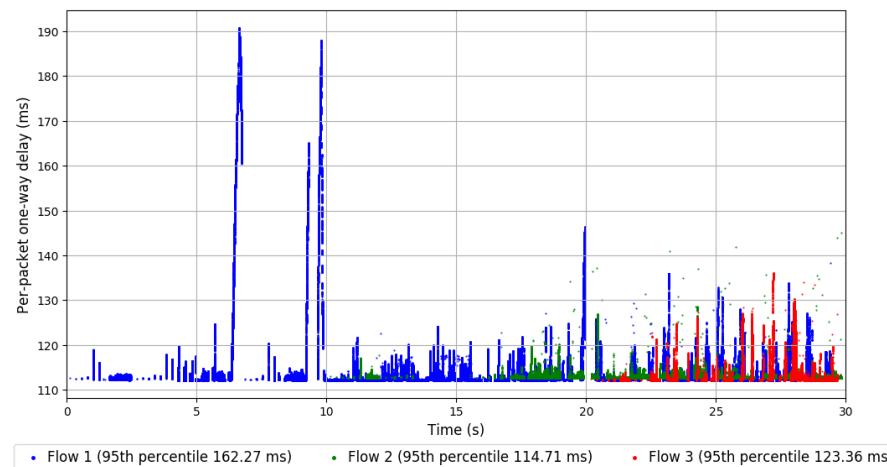
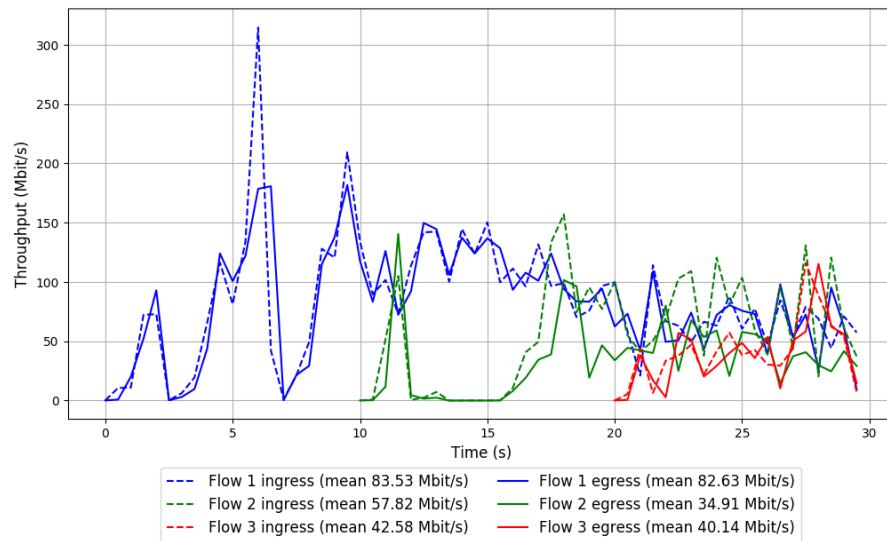
Run 2: Statistics of Verus

Start at: 2017-08-20 23:59:06

End at: 2017-08-20 23:59:36

```
# Below is generated by plot.py at 2017-08-21 04:54:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 117.96 Mbit/s
95th percentile per-packet one-way delay: 149.966 ms
Loss rate: 13.39%
-- Flow 1:
Average throughput: 82.63 Mbit/s
95th percentile per-packet one-way delay: 162.272 ms
Loss rate: 2.55%
-- Flow 2:
Average throughput: 34.91 Mbit/s
95th percentile per-packet one-way delay: 114.710 ms
Loss rate: 39.85%
-- Flow 3:
Average throughput: 40.14 Mbit/s
95th percentile per-packet one-way delay: 123.361 ms
Loss rate: 5.73%
```

Run 2: Report of Verus — Data Link



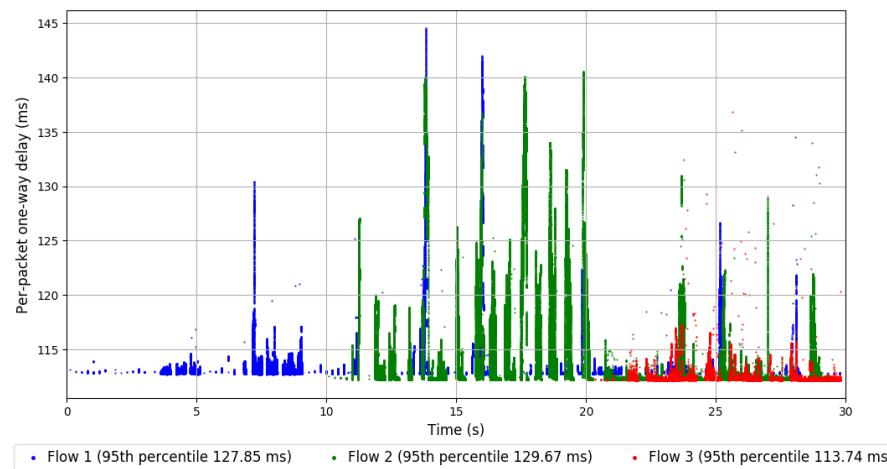
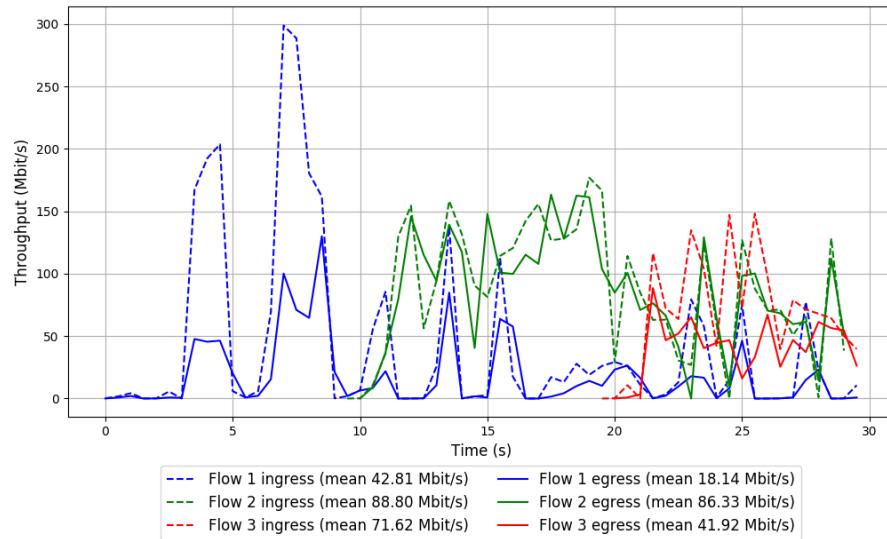
Run 3: Statistics of Verus

Start at: 2017-08-21 00:12:09

End at: 2017-08-21 00:12:39

```
# Below is generated by plot.py at 2017-08-21 04:54:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.20 Mbit/s
95th percentile per-packet one-way delay: 127.707 ms
Loss rate: 29.46%
-- Flow 1:
Average throughput: 18.14 Mbit/s
95th percentile per-packet one-way delay: 127.847 ms
Loss rate: 57.97%
-- Flow 2:
Average throughput: 86.33 Mbit/s
95th percentile per-packet one-way delay: 129.666 ms
Loss rate: 2.79%
-- Flow 3:
Average throughput: 41.92 Mbit/s
95th percentile per-packet one-way delay: 113.738 ms
Loss rate: 42.78%
```

Run 3: Report of Verus — Data Link



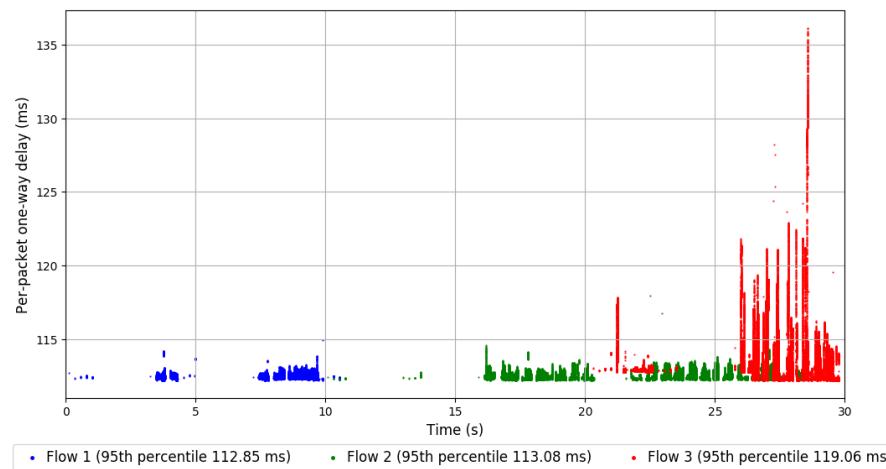
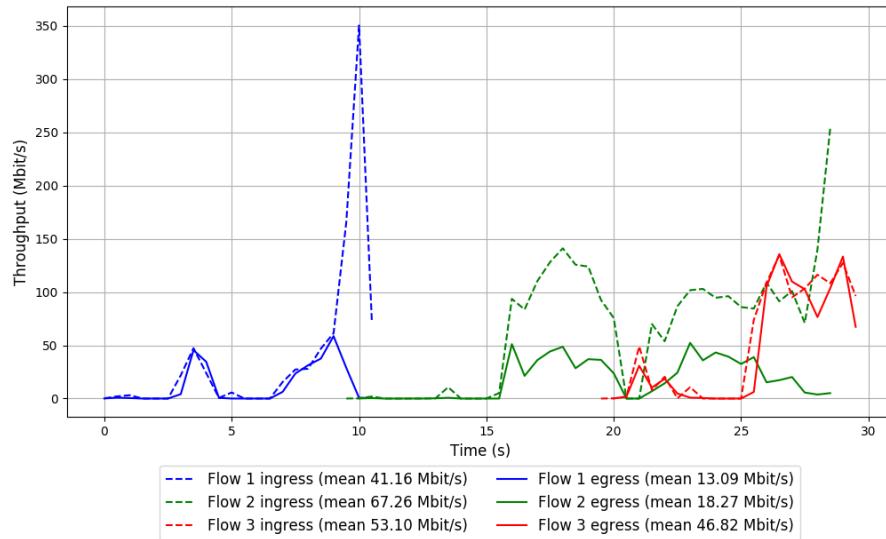
Run 4: Statistics of Verus

Start at: 2017-08-21 00:25:17

End at: 2017-08-21 00:25:47

```
# Below is generated by plot.py at 2017-08-21 04:54:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.41 Mbit/s
95th percentile per-packet one-way delay: 117.025 ms
Loss rate: 58.22%
-- Flow 1:
Average throughput: 13.09 Mbit/s
95th percentile per-packet one-way delay: 112.854 ms
Loss rate: 68.72%
-- Flow 2:
Average throughput: 18.27 Mbit/s
95th percentile per-packet one-way delay: 113.083 ms
Loss rate: 73.05%
-- Flow 3:
Average throughput: 46.82 Mbit/s
95th percentile per-packet one-way delay: 119.065 ms
Loss rate: 13.85%
```

Run 4: Report of Verus — Data Link



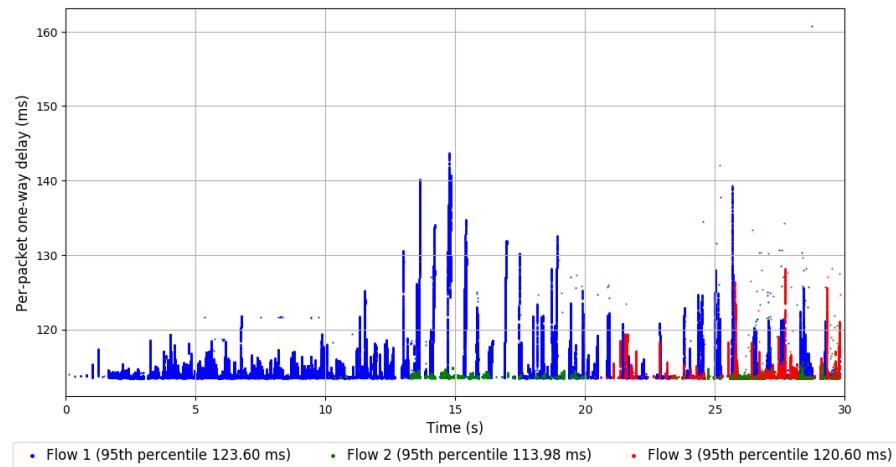
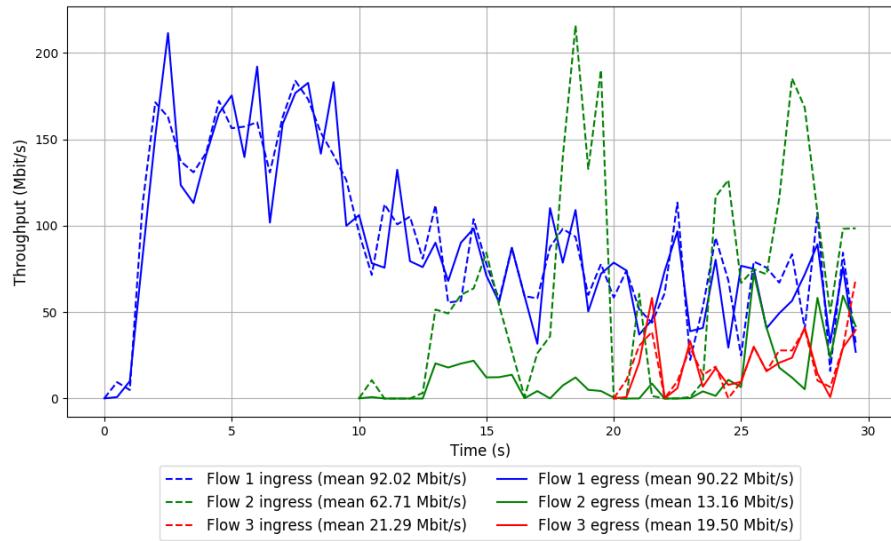
Run 5: Statistics of Verus

Start at: 2017-08-21 00:38:17

End at: 2017-08-21 00:38:47

```
# Below is generated by plot.py at 2017-08-21 04:54:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 105.27 Mbit/s
95th percentile per-packet one-way delay: 122.481 ms
Loss rate: 25.59%
-- Flow 1:
Average throughput: 90.22 Mbit/s
95th percentile per-packet one-way delay: 123.597 ms
Loss rate: 2.34%
-- Flow 2:
Average throughput: 13.16 Mbit/s
95th percentile per-packet one-way delay: 113.982 ms
Loss rate: 79.27%
-- Flow 3:
Average throughput: 19.50 Mbit/s
95th percentile per-packet one-way delay: 120.602 ms
Loss rate: 10.00%
```

Run 5: Report of Verus — Data Link



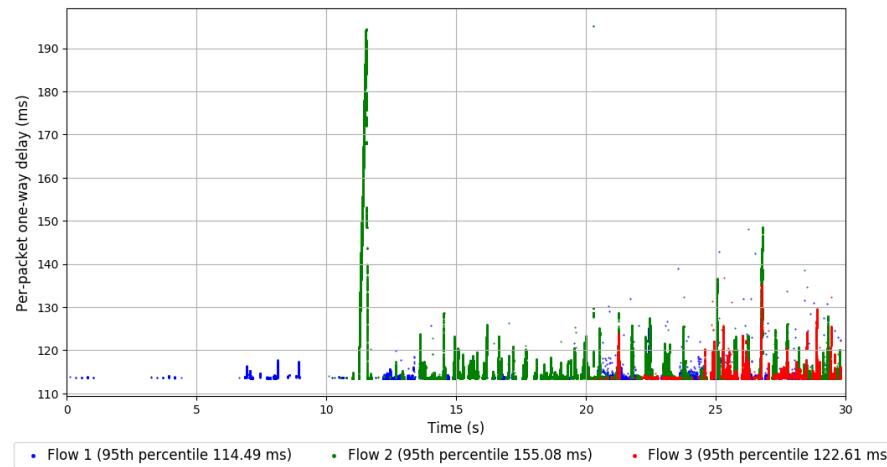
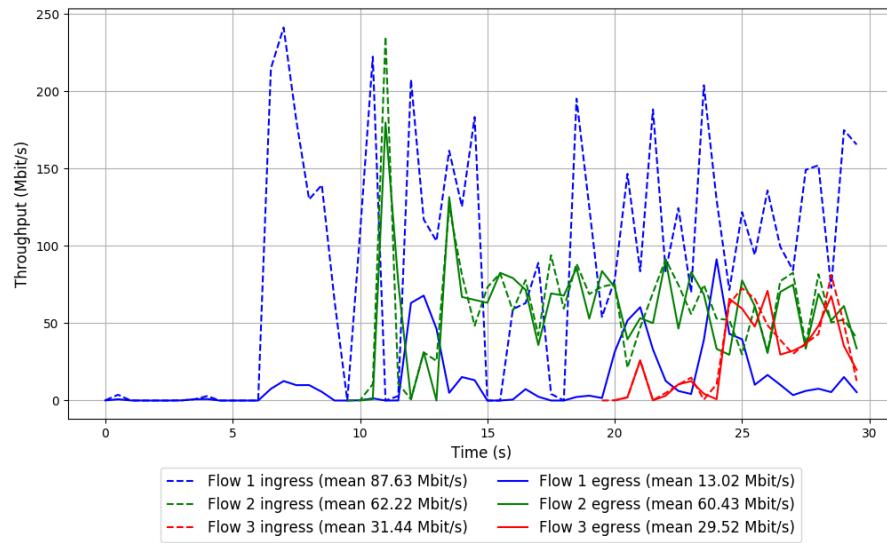
Run 6: Statistics of Verus

Start at: 2017-08-21 00:51:15

End at: 2017-08-21 00:51:45

```
# Below is generated by plot.py at 2017-08-21 04:54:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.71 Mbit/s
95th percentile per-packet one-way delay: 137.424 ms
Loss rate: 55.10%
-- Flow 1:
Average throughput: 13.02 Mbit/s
95th percentile per-packet one-way delay: 114.487 ms
Loss rate: 85.23%
-- Flow 2:
Average throughput: 60.43 Mbit/s
95th percentile per-packet one-way delay: 155.081 ms
Loss rate: 2.85%
-- Flow 3:
Average throughput: 29.52 Mbit/s
95th percentile per-packet one-way delay: 122.608 ms
Loss rate: 6.42%
```

Run 6: Report of Verus — Data Link



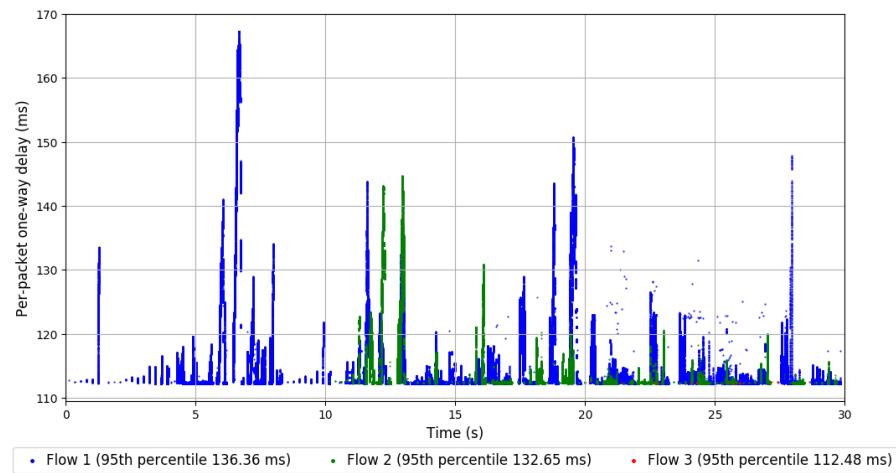
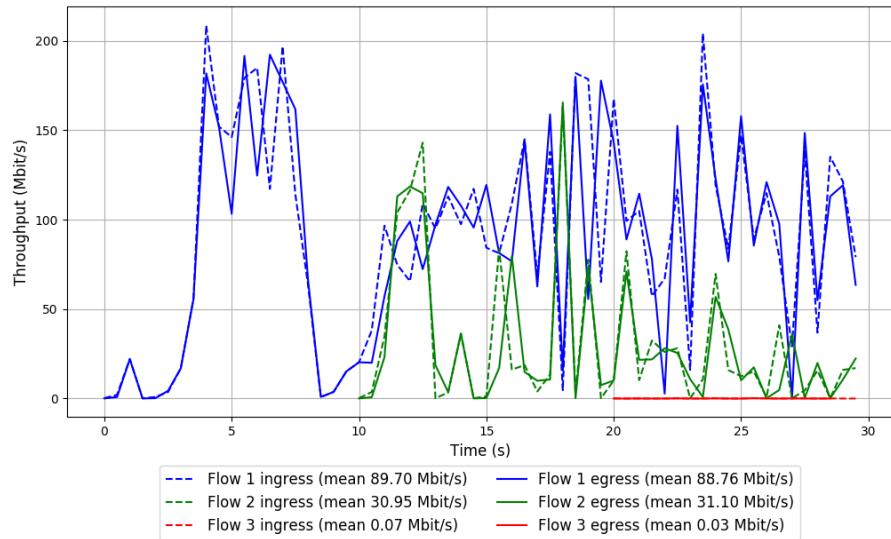
Run 7: Statistics of Verus

Start at: 2017-08-21 01:04:18

End at: 2017-08-21 01:04:48

```
# Below is generated by plot.py at 2017-08-21 04:54:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 109.21 Mbit/s
95th percentile per-packet one-way delay: 135.652 ms
Loss rate: 1.74%
-- Flow 1:
Average throughput: 88.76 Mbit/s
95th percentile per-packet one-way delay: 136.364 ms
Loss rate: 1.81%
-- Flow 2:
Average throughput: 31.10 Mbit/s
95th percentile per-packet one-way delay: 132.645 ms
Loss rate: 1.35%
-- Flow 3:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 112.484 ms
Loss rate: 64.81%
```

Run 7: Report of Verus — Data Link



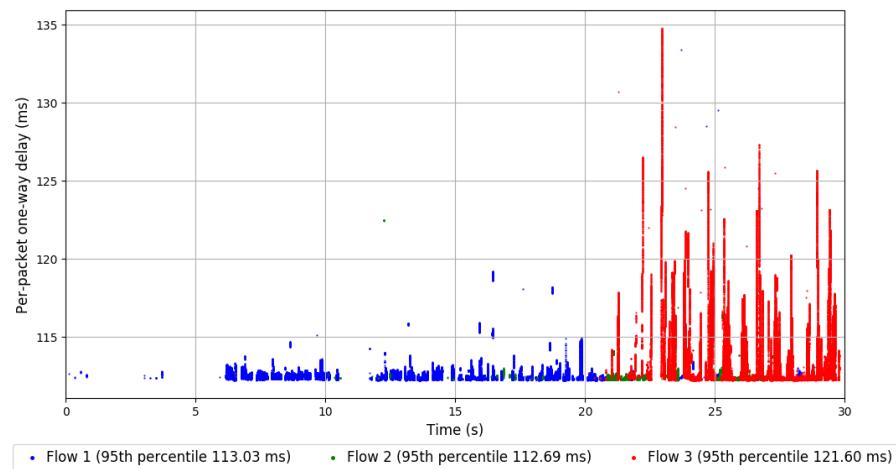
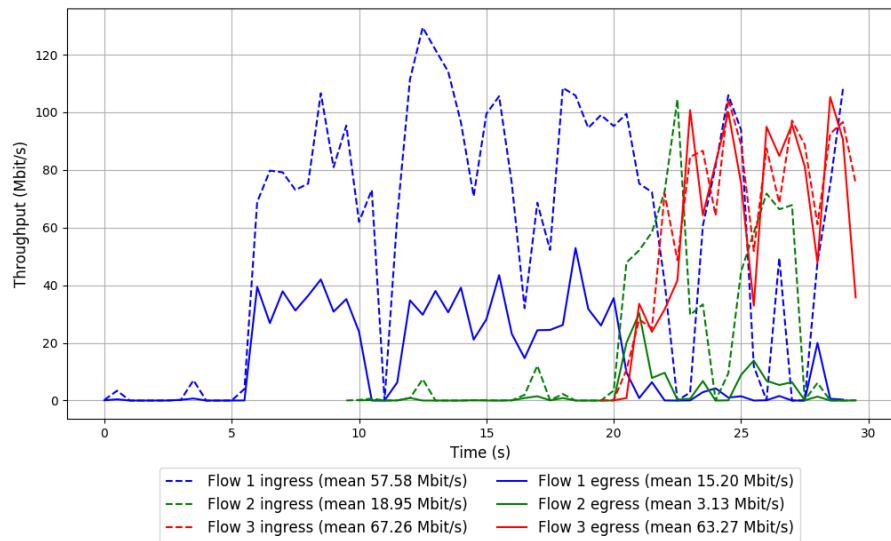
Run 8: Statistics of Verus

Start at: 2017-08-21 01:17:32

End at: 2017-08-21 01:18:02

```
# Below is generated by plot.py at 2017-08-21 04:54:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.61 Mbit/s
95th percentile per-packet one-way delay: 119.094 ms
Loss rate: 59.15%
-- Flow 1:
Average throughput: 15.20 Mbit/s
95th percentile per-packet one-way delay: 113.034 ms
Loss rate: 73.80%
-- Flow 2:
Average throughput: 3.13 Mbit/s
95th percentile per-packet one-way delay: 112.688 ms
Loss rate: 83.67%
-- Flow 3:
Average throughput: 63.27 Mbit/s
95th percentile per-packet one-way delay: 121.599 ms
Loss rate: 8.18%
```

Run 8: Report of Verus — Data Link



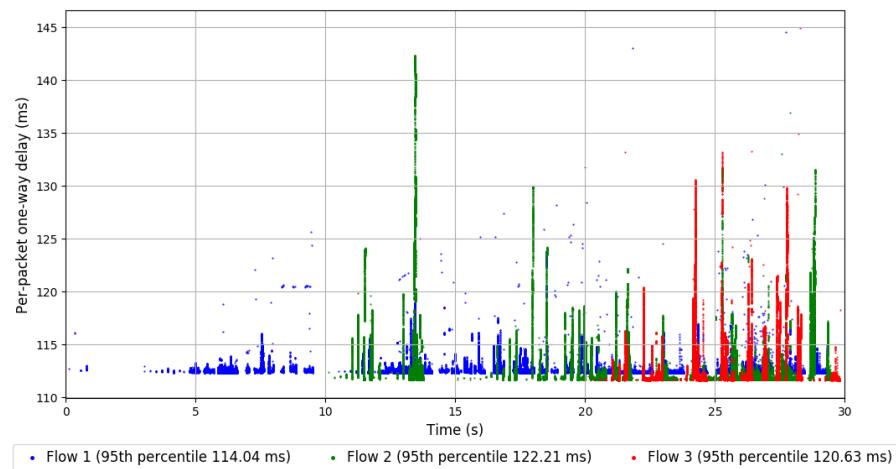
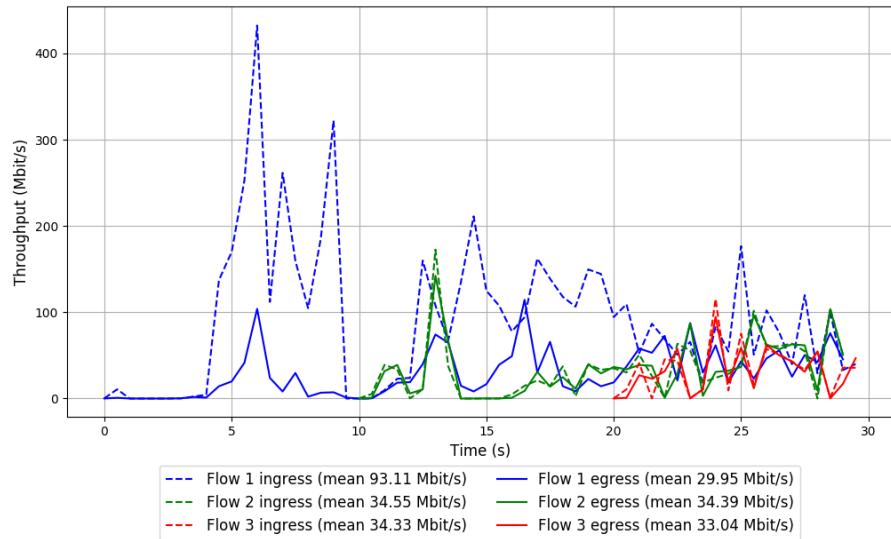
Run 9: Statistics of Verus

Start at: 2017-08-21 01:30:26

End at: 2017-08-21 01:30:56

```
# Below is generated by plot.py at 2017-08-21 04:54:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.65 Mbit/s
95th percentile per-packet one-way delay: 118.457 ms
Loss rate: 50.95%
-- Flow 1:
Average throughput: 29.95 Mbit/s
95th percentile per-packet one-way delay: 114.039 ms
Loss rate: 68.56%
-- Flow 2:
Average throughput: 34.39 Mbit/s
95th percentile per-packet one-way delay: 122.208 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 33.04 Mbit/s
95th percentile per-packet one-way delay: 120.626 ms
Loss rate: 5.81%
```

Run 9: Report of Verus — Data Link



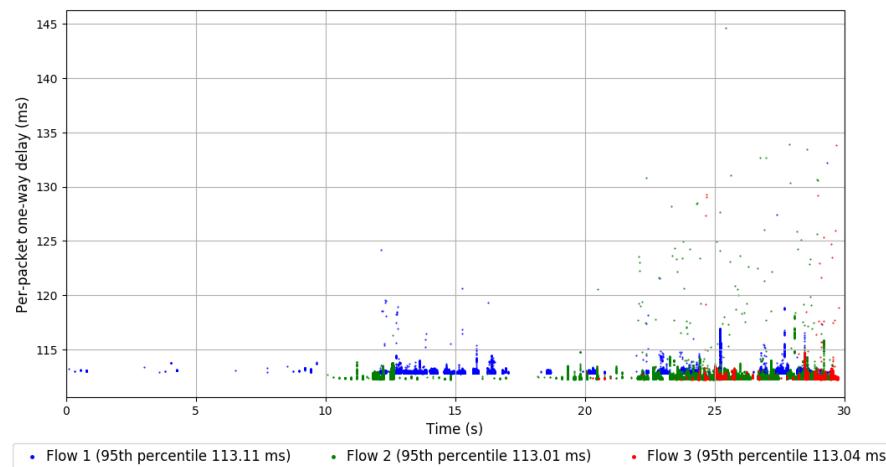
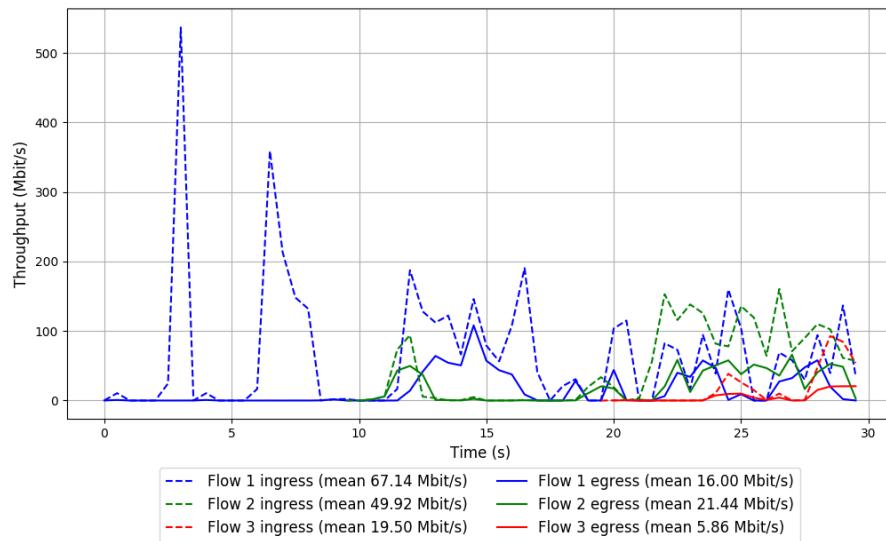
Run 10: Statistics of Verus

Start at: 2017-08-21 01:43:25

End at: 2017-08-21 01:43:55

```
# Below is generated by plot.py at 2017-08-21 04:55:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.84 Mbit/s
95th percentile per-packet one-way delay: 113.090 ms
Loss rate: 70.41%
-- Flow 1:
Average throughput: 16.00 Mbit/s
95th percentile per-packet one-way delay: 113.108 ms
Loss rate: 76.57%
-- Flow 2:
Average throughput: 21.44 Mbit/s
95th percentile per-packet one-way delay: 113.008 ms
Loss rate: 58.02%
-- Flow 3:
Average throughput: 5.86 Mbit/s
95th percentile per-packet one-way delay: 113.042 ms
Loss rate: 70.29%
```

Run 10: Report of Verus — Data Link

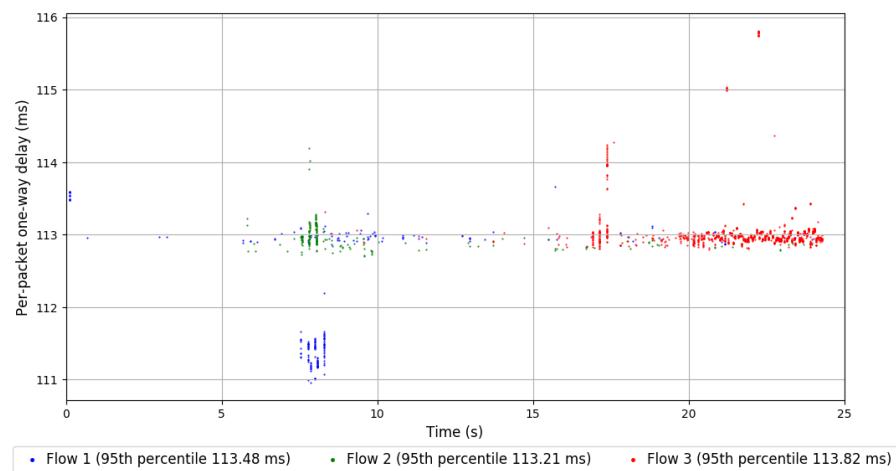
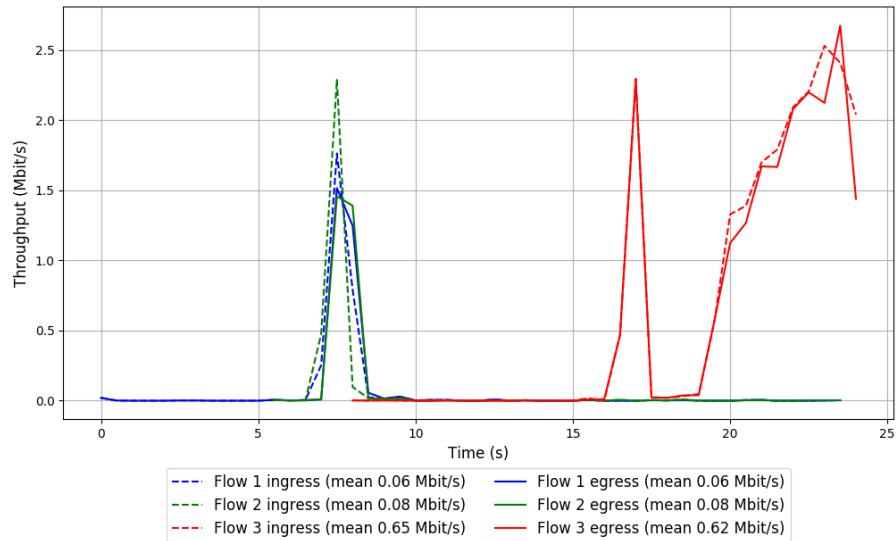


```
Run 1: Statistics of WebRTC media

Start at: 2017-08-20 23:51:42
End at: 2017-08-20 23:52:12

# Below is generated by plot.py at 2017-08-21 04:55:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 113.481 ms
Loss rate: 4.63%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 113.482 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 113.211 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 113.819 ms
Loss rate: 5.94%
```

Run 1: Report of WebRTC media — Data Link



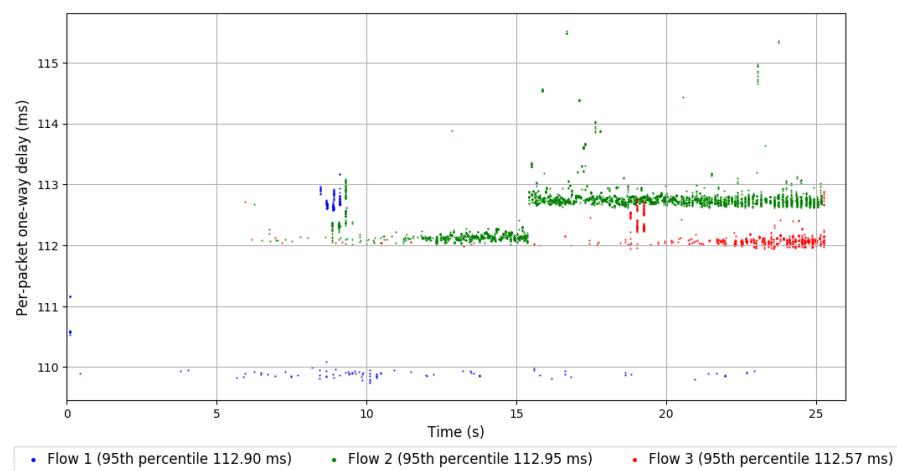
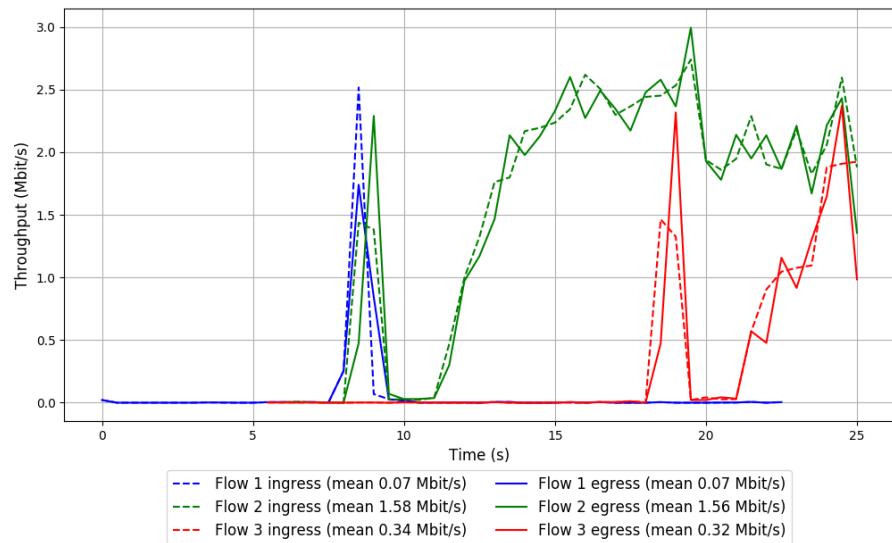
Run 2: Statistics of WebRTC media

Start at: 2017-08-21 00:04:21

End at: 2017-08-21 00:04:51

```
# Below is generated by plot.py at 2017-08-21 04:55:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 112.913 ms
Loss rate: 2.75%
-- Flow 1:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 112.898 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 112.955 ms
Loss rate: 1.87%
-- Flow 3:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 112.569 ms
Loss rate: 7.34%
```

Run 2: Report of WebRTC media — Data Link



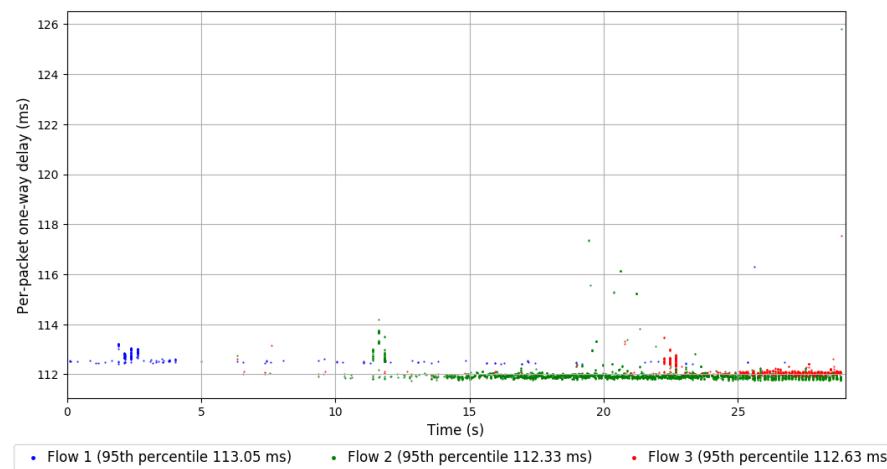
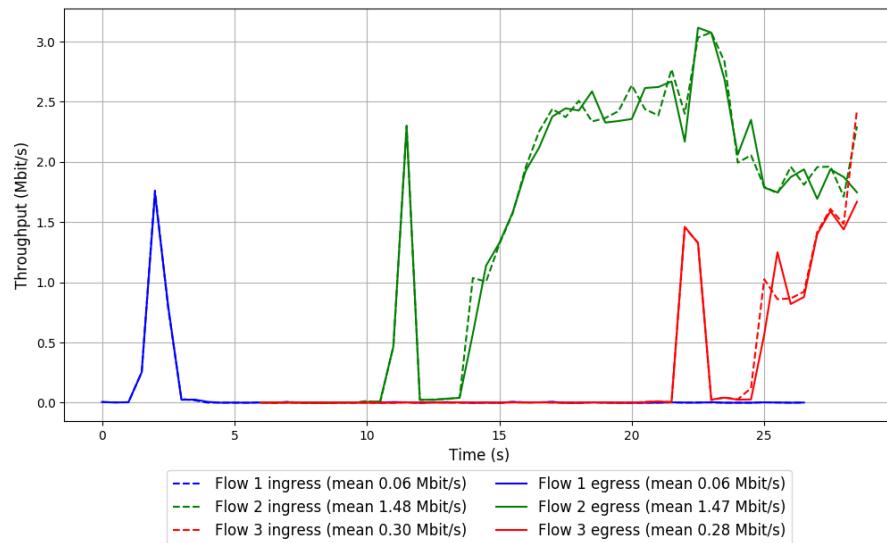
Run 3: Statistics of WebRTC media

Start at: 2017-08-21 00:17:27

End at: 2017-08-21 00:17:57

```
# Below is generated by plot.py at 2017-08-21 04:55:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 112.681 ms
Loss rate: 2.45%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 113.052 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 112.326 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 112.628 ms
Loss rate: 8.02%
```

Run 3: Report of WebRTC media — Data Link



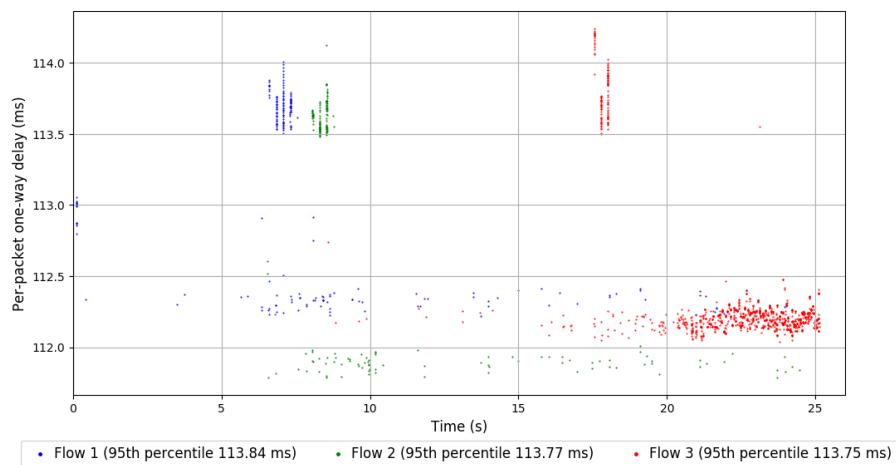
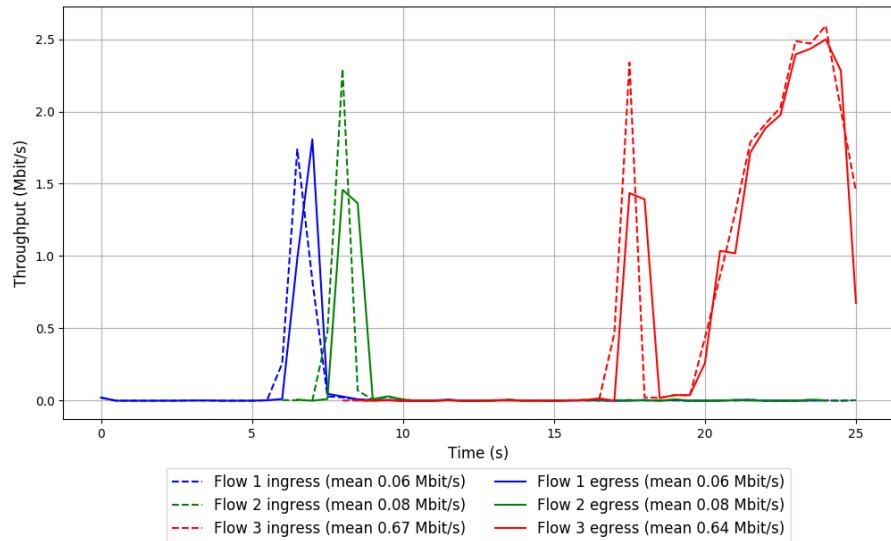
Run 4: Statistics of WebRTC media

Start at: 2017-08-21 00:30:27

End at: 2017-08-21 00:30:57

```
# Below is generated by plot.py at 2017-08-21 04:55:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 113.793 ms
Loss rate: 4.11%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 113.841 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 113.765 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 113.747 ms
Loss rate: 5.17%
```

Run 4: Report of WebRTC media — Data Link

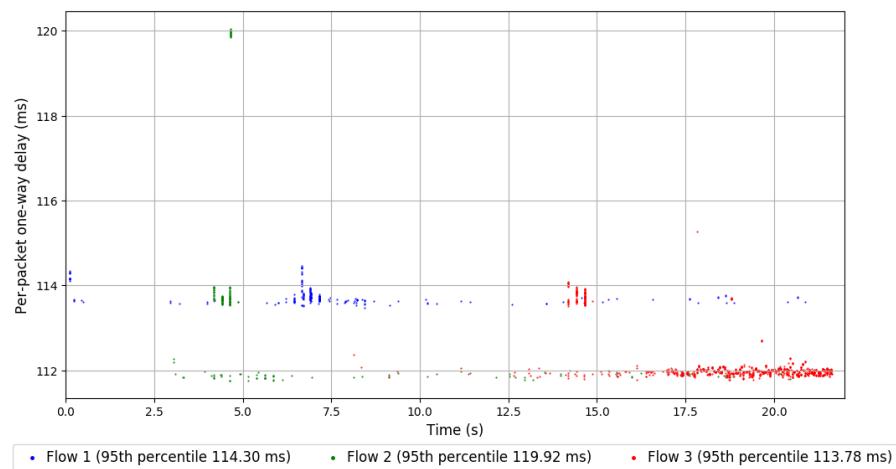
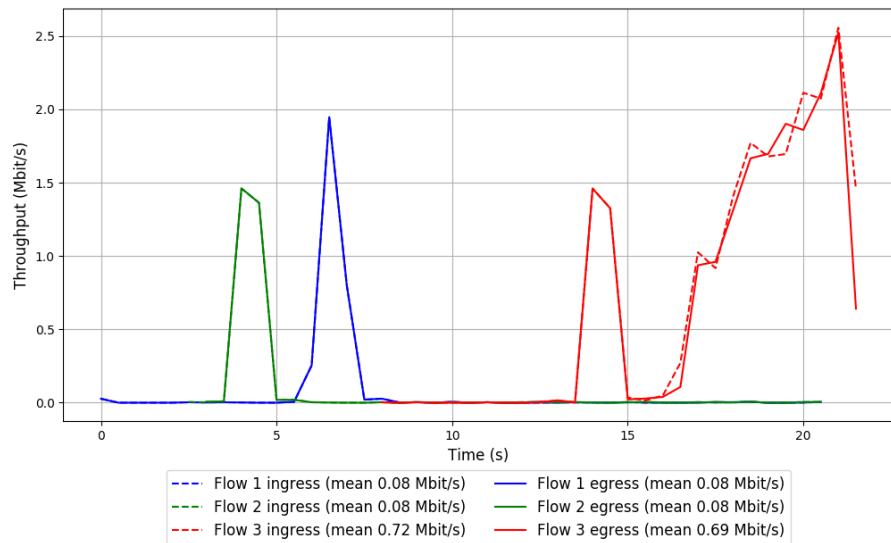


Run 5: Statistics of WebRTC media

Start at: 2017-08-21 00:43:28

End at: 2017-08-21 00:43:58

Run 5: Report of WebRTC media — Data Link

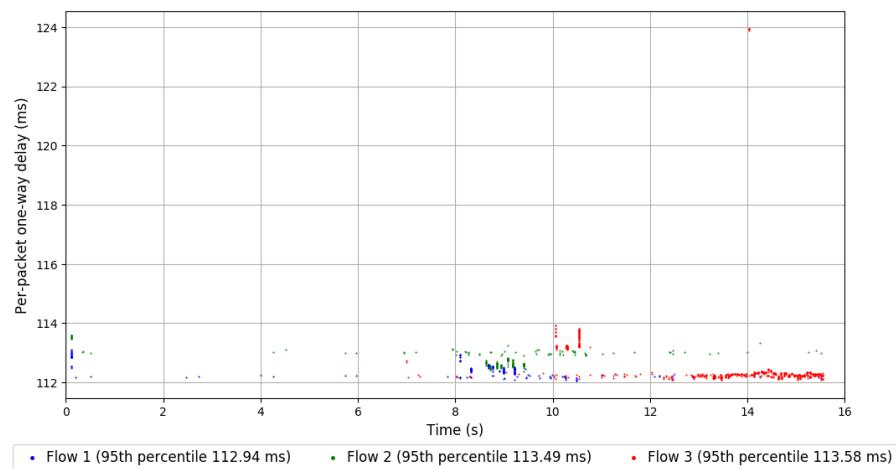
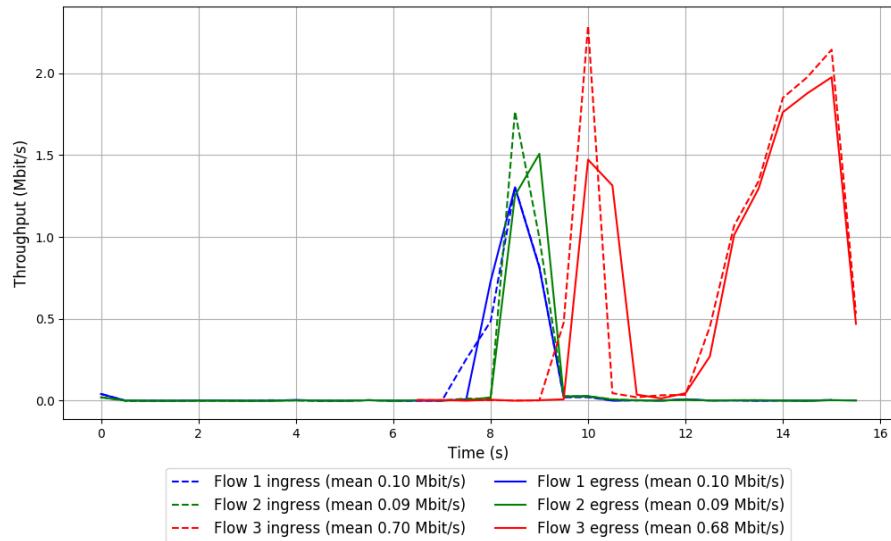


Run 6: Statistics of WebRTC media

Start at: 2017-08-21 00:56:16

End at: 2017-08-21 00:56:46

Run 6: Report of WebRTC media — Data Link



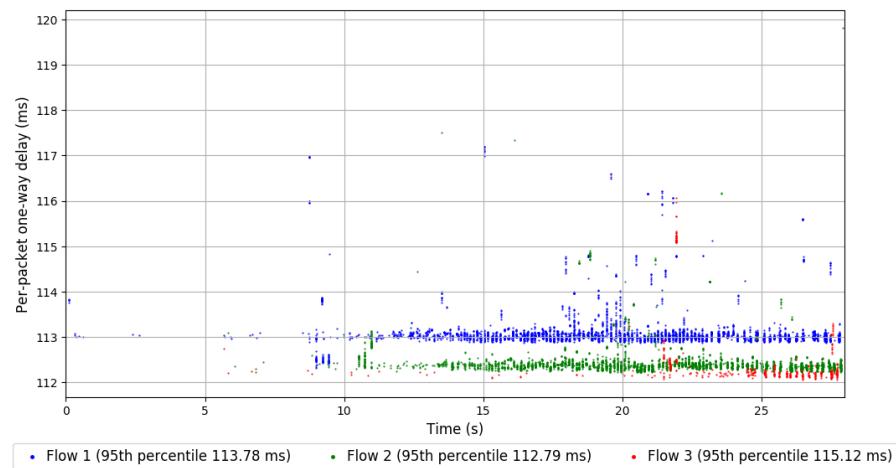
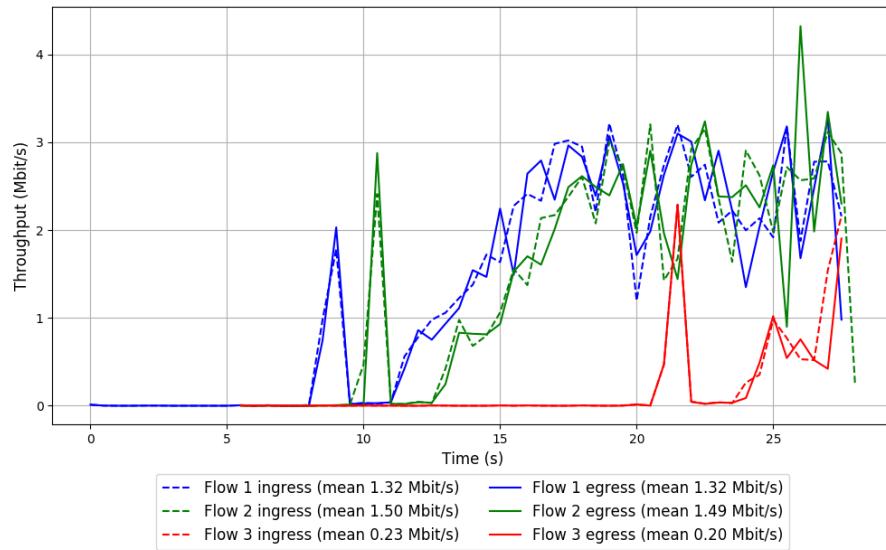
Run 7: Statistics of WebRTC media

Start at: 2017-08-21 01:09:39

End at: 2017-08-21 01:10:09

```
# Below is generated by plot.py at 2017-08-21 04:55:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.65 Mbit/s
95th percentile per-packet one-way delay: 113.345 ms
Loss rate: 2.52%
-- Flow 1:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 113.784 ms
Loss rate: 1.59%
-- Flow 2:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 112.789 ms
Loss rate: 1.86%
-- Flow 3:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 115.121 ms
Loss rate: 13.66%
```

Run 7: Report of WebRTC media — Data Link

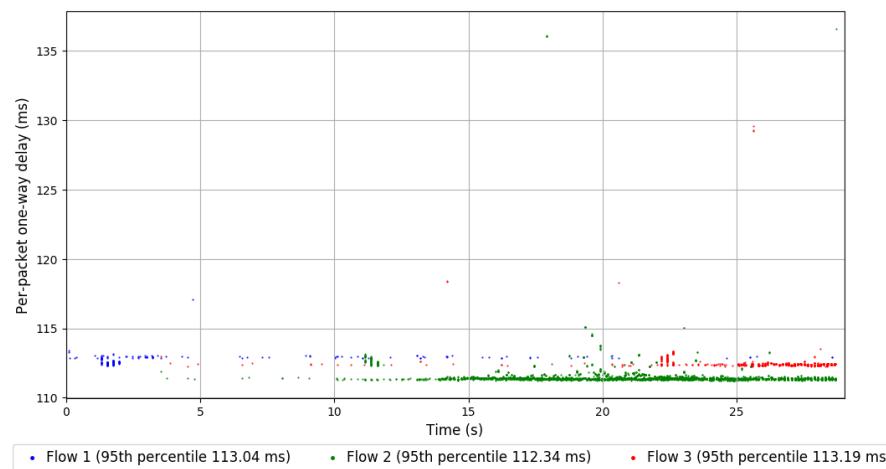
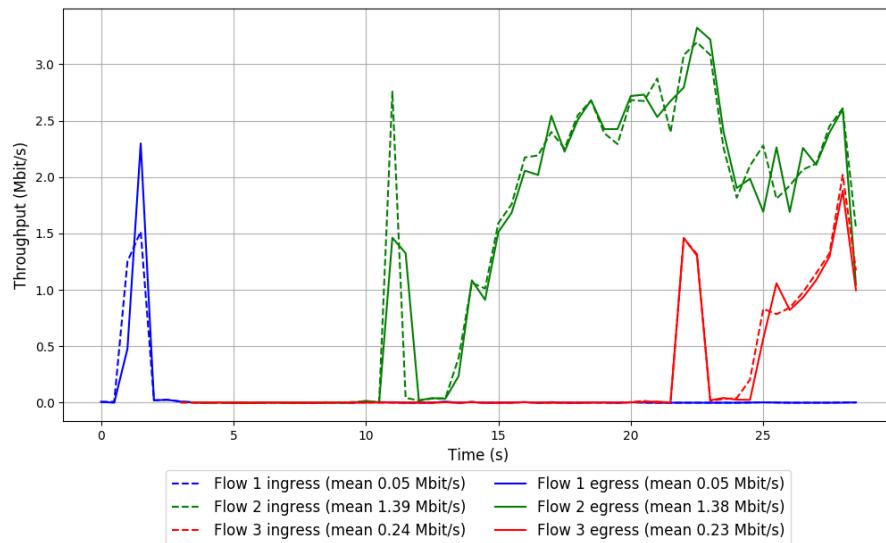


```
Run 8: Statistics of WebRTC media

Start at: 2017-08-21 01:22:51
End at: 2017-08-21 01:23:21

# Below is generated by plot.py at 2017-08-21 04:55:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 112.823 ms
Loss rate: 2.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 113.040 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 1.38 Mbit/s
95th percentile per-packet one-way delay: 112.341 ms
Loss rate: 1.52%
-- Flow 3:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 113.195 ms
Loss rate: 5.40%
```

Run 8: Report of WebRTC media — Data Link



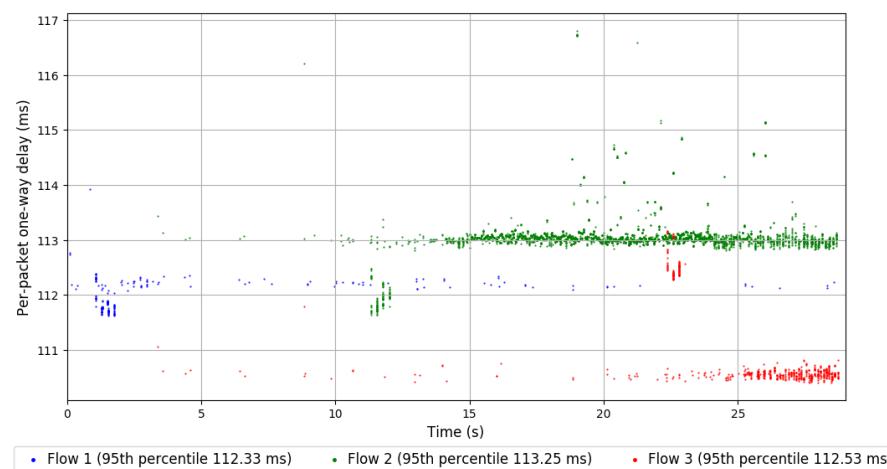
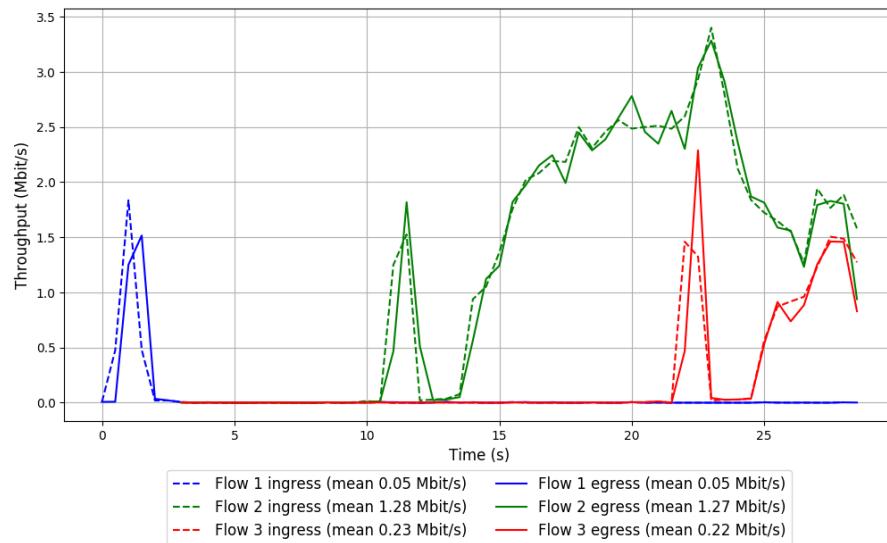
Run 9: Statistics of WebRTC media

Start at: 2017-08-21 01:35:50

End at: 2017-08-21 01:36:20

```
# Below is generated by plot.py at 2017-08-21 04:55:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.37 Mbit/s
95th percentile per-packet one-way delay: 113.194 ms
Loss rate: 2.32%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 112.330 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 113.253 ms
Loss rate: 1.69%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.531 ms
Loss rate: 6.38%
```

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-08-21 01:48:38

End at: 2017-08-21 01:49:08

```
# Below is generated by plot.py at 2017-08-21 04:55:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.56 Mbit/s
95th percentile per-packet one-way delay: 112.978 ms
Loss rate: 2.19%
-- Flow 1:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 113.096 ms
Loss rate: 1.92%
-- Flow 2:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 112.083 ms
Loss rate: 1.64%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.291 ms
Loss rate: 7.55%
```

Run 10: Report of WebRTC media — Data Link

