Pantheon Report

Generated at 2017-08-31 18:55:51 (UTC).

Data path: GCE Iowa Ethernet (*local*) →GCE Sydney Ethernet (*remote*).

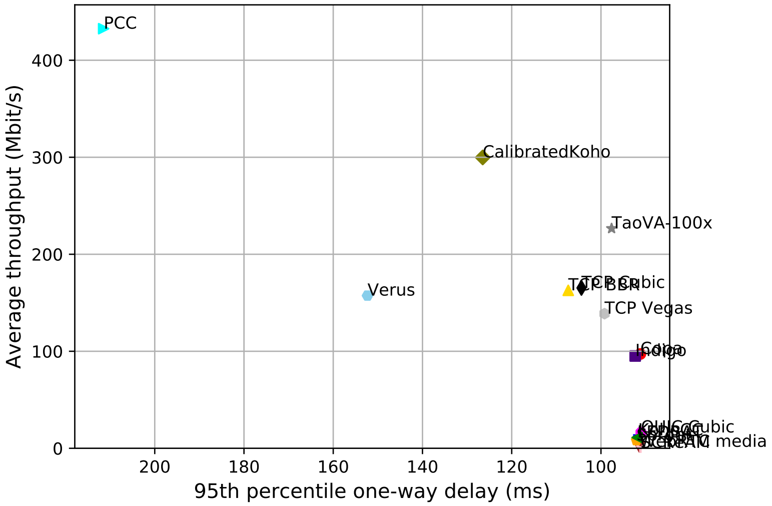
Repeated the test of 15 congestion control schemes 10 times.

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

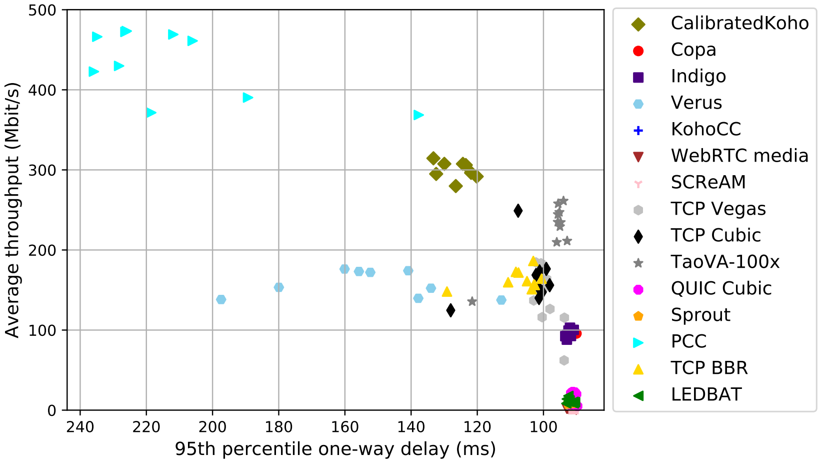
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

Tested BBR with qdisc of Fair Queuing (`fq`), and other schemes with the default Linux qdisc (`pfifo_fast`).

```
Git summary:
branch: master @ 5ea146acdebe79f5b9acfb2d9044554a7d2582ea
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ 7ddb4adf480966042c0438984cb22a298bfa635f
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
 M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
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 @ 6f2efe6e088d91066a9f023df375eee2665089ce
 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 Iowa Ethernet to GCE Sydney Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



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

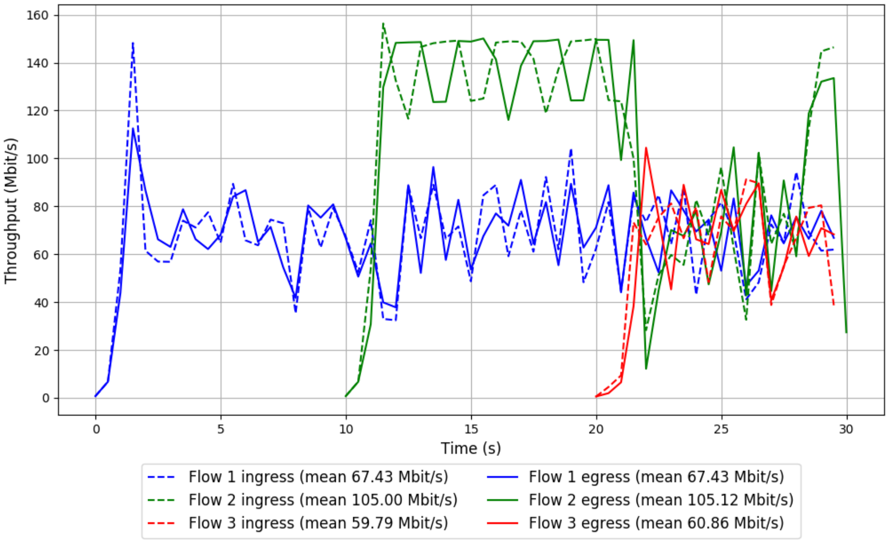
scheme	# runs	mean avg tput (Mbit/s) flow 1	flow 2	flow 3	mean 95th-%ile delay (ms) flow 1	flow 2	flow 3	mean loss rate (%) flow 1	flow 2	flow 3
TCP BBR	10	73.63	89.95	89.52	106.44	107.71	107.79	0.03	0.04	0.00
CalibratedKoho	8	207.39	115.77	46.19	128.69	123.51	109.18	0.01	0.04	0.25
Copa	6	56.76	48.33	39.04	91.10	91.16	92.34	0.00	0.00	7.70
TCP Cubic	9	87.50	80.79	72.75	103.73	103.97	115.27	0.02	0.04	0.40
Indigo	10	16.43	85.49	68.85	91.98	92.33	92.69	0.00	0.01	0.05
KohoCC	10	6.73	6.65	6.39	91.72	91.64	91.67	0.00	0.08	0.02
LEDBAT	10	6.09	6.09	3.02	91.84	91.84	91.90	0.06	0.01	0.06
PCC	10	315.34	105.51	143.60	214.84	193.51	184.39	1.18	0.54	0.48
QUIC Cubic	10	0.06	15.76	18.92	91.03	91.06	90.93	0.00	0.01	0.00
SCReAM	10	0.22	0.21	0.22	91.07	90.78	90.96	0.00	0.00	0.00
Sprout	10	4.30	4.06	3.20	92.06	92.04	91.96	0.01	0.02	0.00
TaoVA-100x	10	146.58	113.12	80.23	96.67	98.15	106.22	0.00	0.01	0.04
TCP Vegas	10	67.59	79.04	56.01	97.32	99.27	100.39	0.02	0.00	0.07
Verus	9	96.70	64.76	55.65	148.43	159.80	139.89	0.00	0.07	0.00
WebRTC media	9	0.06	1.64	0.40	91.49	91.36	92.11	0.00	0.00	0.00

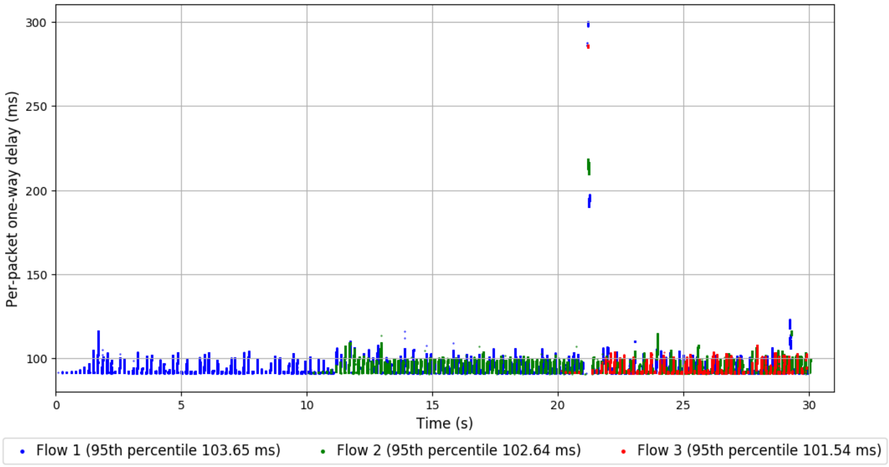
```
Run 1: Statistics of TCP BBR

Start at: 2017-08-31 14:52:06
End at: 2017-08-31 14:52:36

# Below is generated by plot.py at 2017-08-31 18:27:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 157.07 Mbit/s
95th percentile per-packet one-way delay: 102.841 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.43 Mbit/s
95th percentile per-packet one-way delay: 103.649 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 105.12 Mbit/s
95th percentile per-packet one-way delay: 102.640 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 60.86 Mbit/s
95th percentile per-packet one-way delay: 101.541 ms
Loss rate: 0.00%
```

Run 1: Report of TCP BBR — Data Link



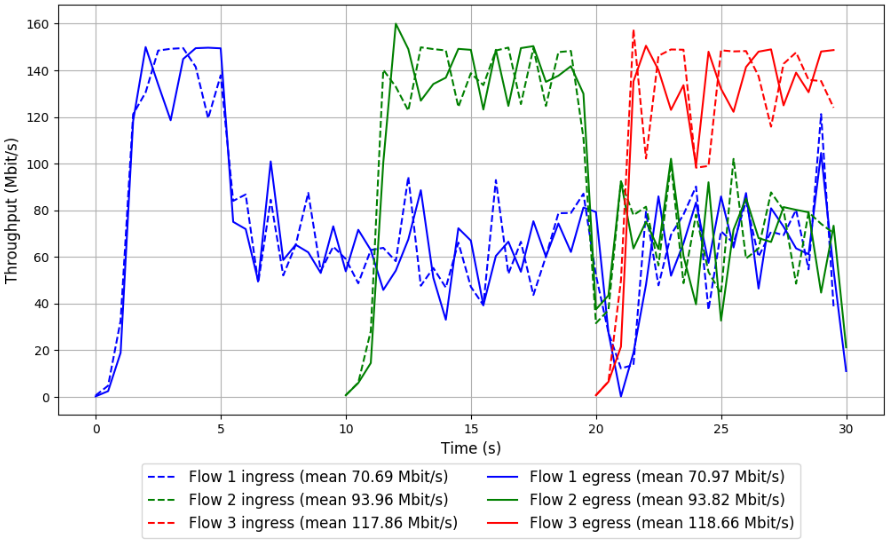


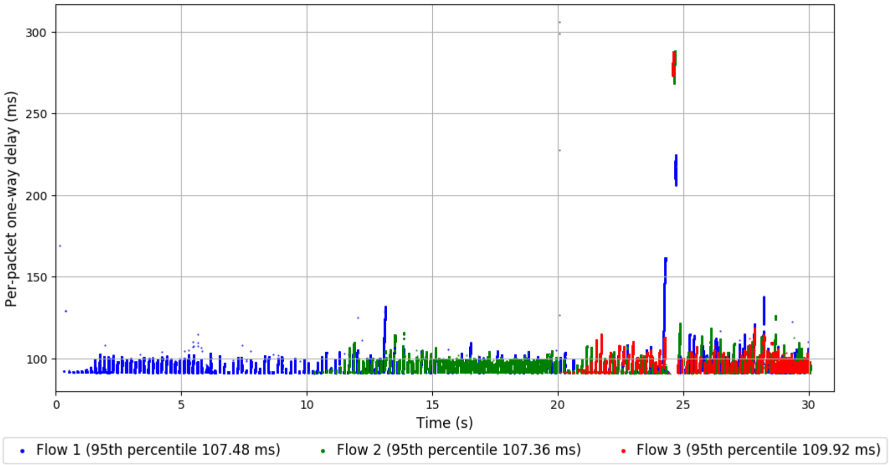
```
Run 2: Statistics of TCP BBR

Start at: 2017-08-31 15:05:03
End at: 2017-08-31 15:05:33

# Below is generated by plot.py at 2017-08-31 18:27:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 172.73 Mbit/s
95th percentile per-packet one-way delay: 108.330 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 70.97 Mbit/s
95th percentile per-packet one-way delay: 107.482 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 93.82 Mbit/s
95th percentile per-packet one-way delay: 107.362 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 118.66 Mbit/s
95th percentile per-packet one-way delay: 109.915 ms
Loss rate: 0.00%
```

Run 2: Report of TCP BBR — Data Link



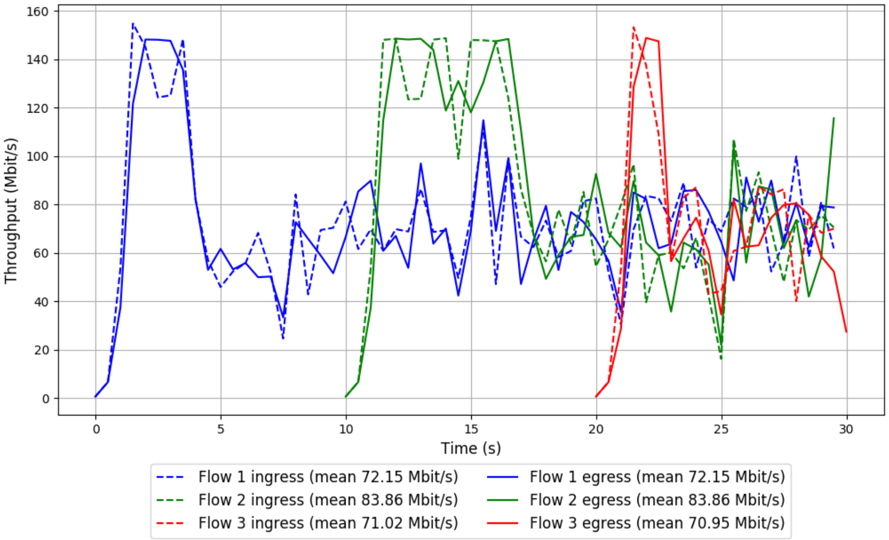


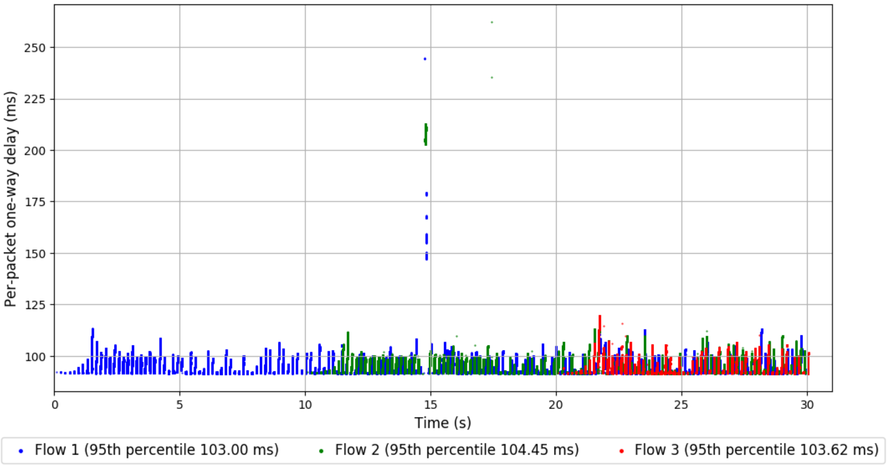
```
Run 3: Statistics of TCP BBR

Start at: 2017-08-31 15:18:13
End at: 2017-08-31 15:18:43

# Below is generated by plot.py at 2017-08-31 18:27:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 150.95 Mbit/s
95th percentile per-packet one-way delay: 103.546 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 72.15 Mbit/s
95th percentile per-packet one-way delay: 102.997 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 83.86 Mbit/s
95th percentile per-packet one-way delay: 104.449 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 70.95 Mbit/s
95th percentile per-packet one-way delay: 103.624 ms
Loss rate: 0.00%
```

Run 3: Report of TCP BBR — Data Link



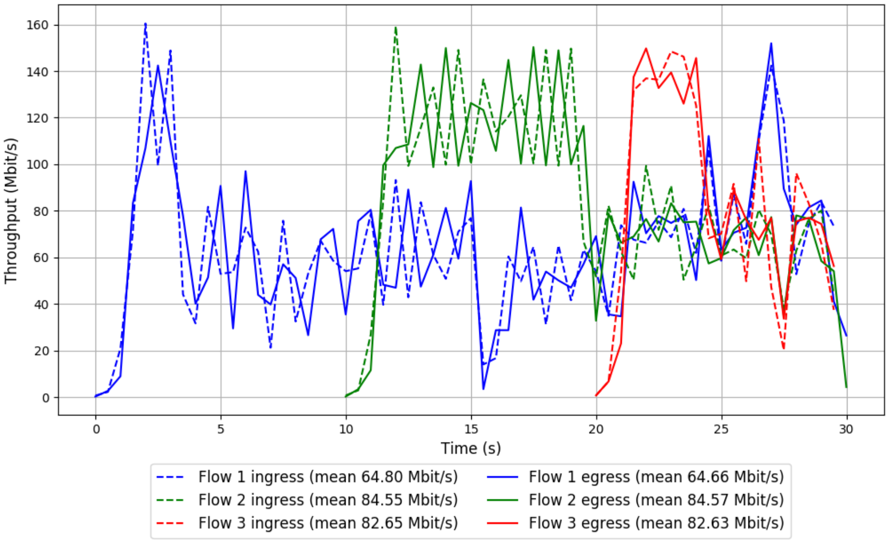


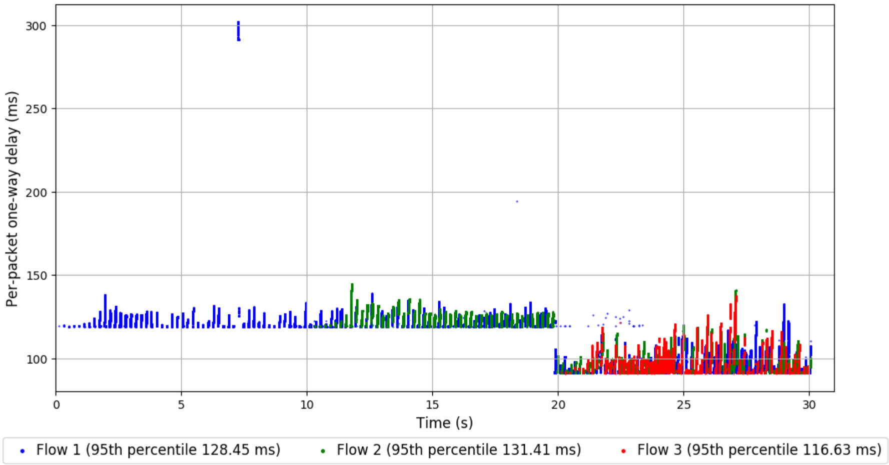
```
Run 4: Statistics of TCP BBR

Start at: 2017-08-31 15:32:20
End at: 2017-08-31 15:32:50

# Below is generated by plot.py at 2017-08-31 18:27:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 148.12 Mbit/s
95th percentile per-packet one-way delay: 129.154 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 64.66 Mbit/s
95th percentile per-packet one-way delay: 128.447 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 84.57 Mbit/s
95th percentile per-packet one-way delay: 131.408 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 82.63 Mbit/s
95th percentile per-packet one-way delay: 116.634 ms
Loss rate: 0.02%
```

Run 4: Report of TCP BBR — Data Link



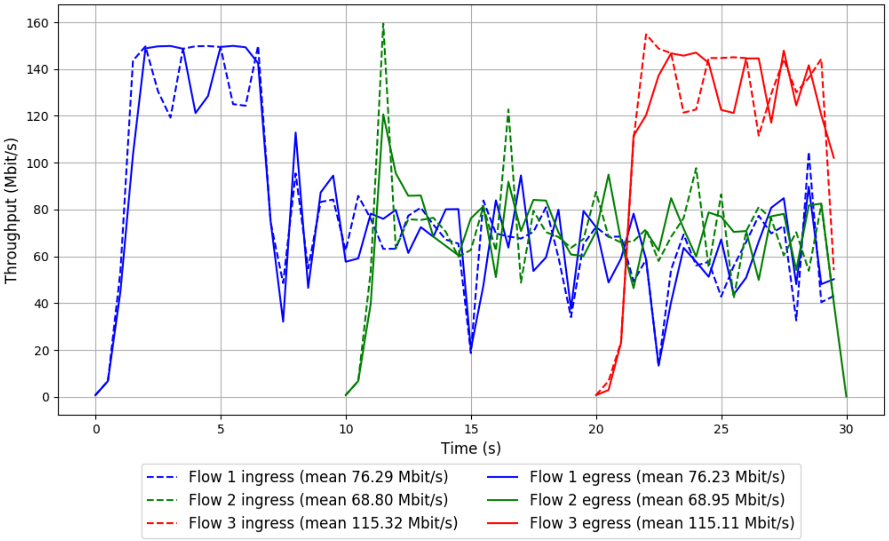


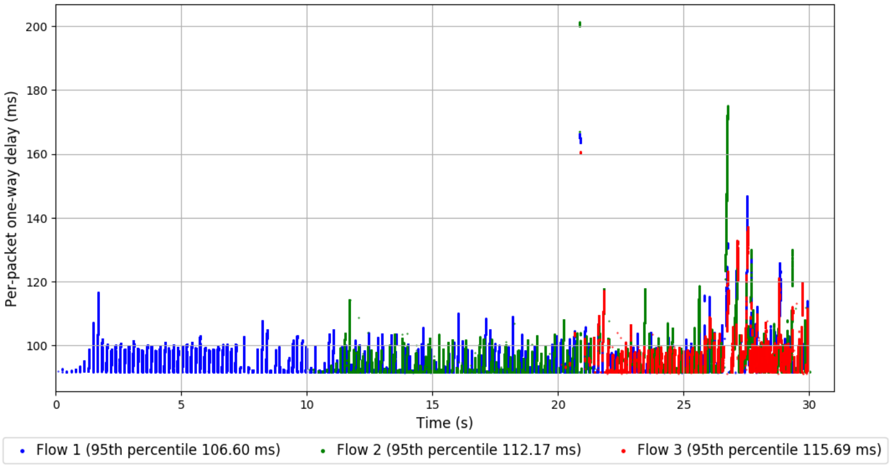
```
Run 5: Statistics of TCP BBR

Start at: 2017-08-31 15:45:07
End at: 2017-08-31 15:45:37

# Below is generated by plot.py at 2017-08-31 18:28:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 159.69 Mbit/s
95th percentile per-packet one-way delay: 110.674 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 76.23 Mbit/s
95th percentile per-packet one-way delay: 106.603 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 68.95 Mbit/s
95th percentile per-packet one-way delay: 112.166 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 115.11 Mbit/s
95th percentile per-packet one-way delay: 115.694 ms
Loss rate: 0.00%
```

Run 5: Report of TCP BBR — Data Link



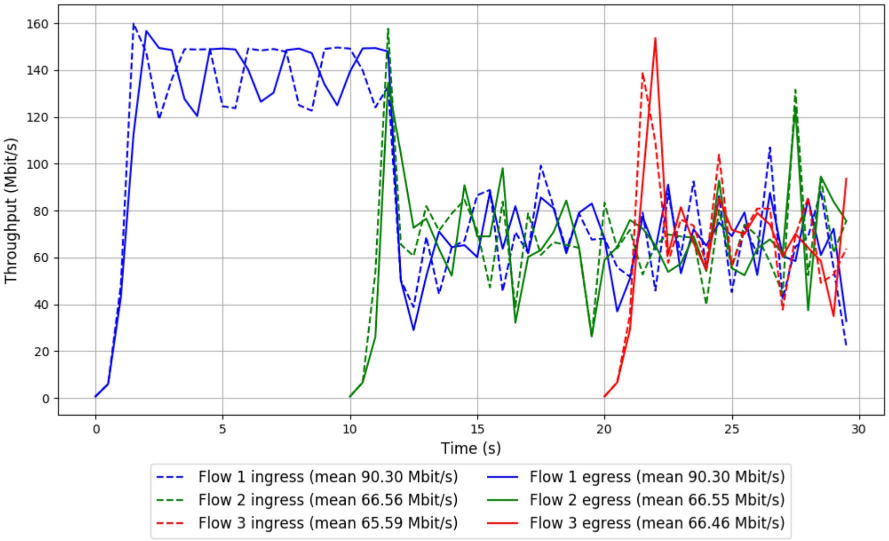


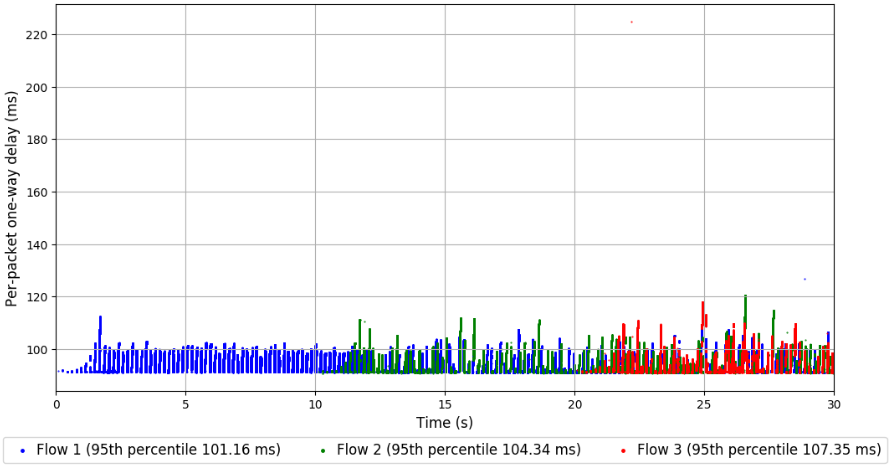
```
Run 6: Statistics of TCP BBR

Start at: 2017-08-31 15:58:13
End at: 2017-08-31 15:58:43

# Below is generated by plot.py at 2017-08-31 18:28:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 156.25 Mbit/s
95th percentile per-packet one-way delay: 102.607 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 90.30 Mbit/s
95th percentile per-packet one-way delay: 101.159 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 66.55 Mbit/s
95th percentile per-packet one-way delay: 104.341 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 66.46 Mbit/s
95th percentile per-packet one-way delay: 107.352 ms
Loss rate: 0.00%
```

Run 6: Report of TCP BBR — Data Link



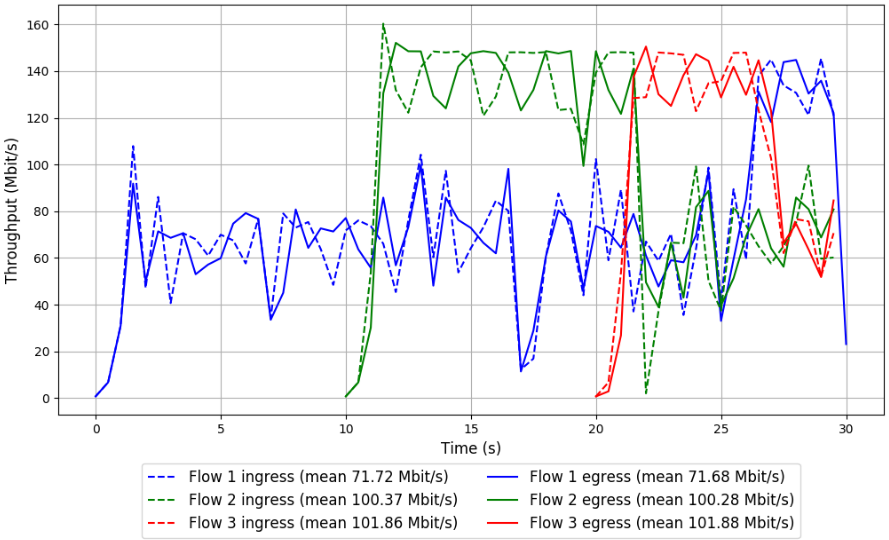


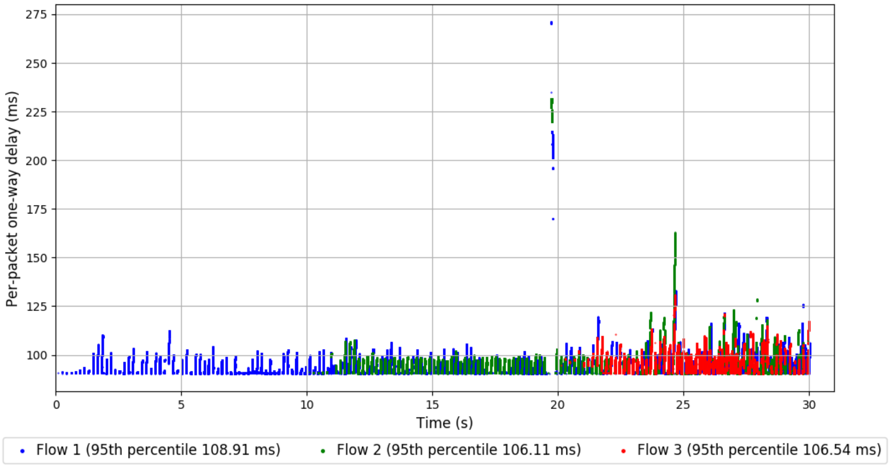
```
Run 7: Statistics of TCP BBR

Start at: 2017-08-31 16:11:08
End at: 2017-08-31 16:11:38

# Below is generated by plot.py at 2017-08-31 18:28:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 171.83 Mbit/s
95th percentile per-packet one-way delay: 107.548 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 71.68 Mbit/s
95th percentile per-packet one-way delay: 108.913 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 100.28 Mbit/s
95th percentile per-packet one-way delay: 106.113 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 101.88 Mbit/s
95th percentile per-packet one-way delay: 106.543 ms
Loss rate: 0.02%
```

Run 7: Report of TCP BBR — Data Link



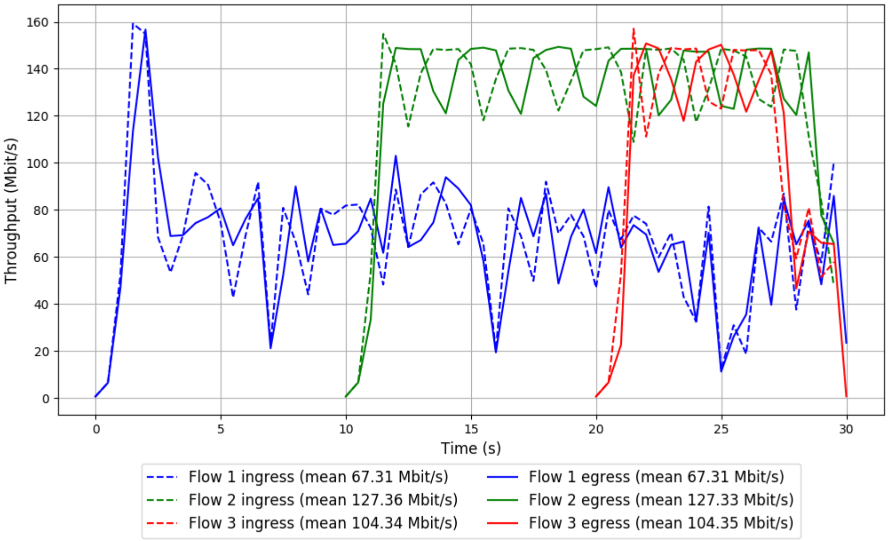


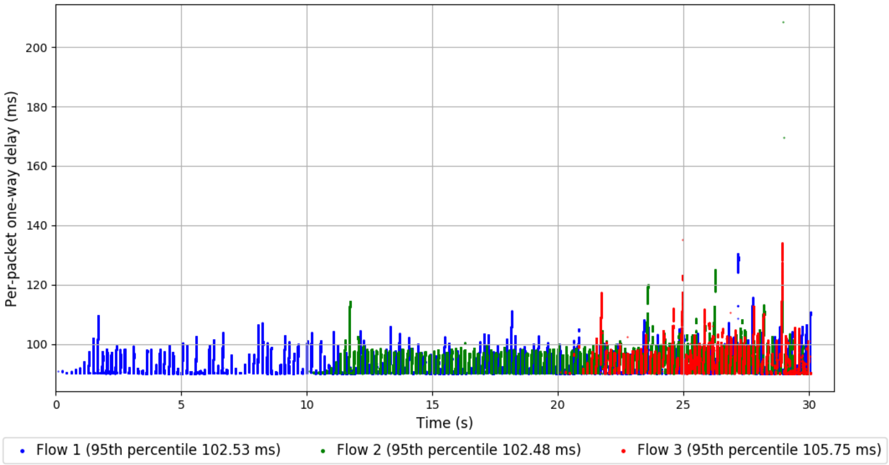
```
Run 8: Statistics of TCP BBR

Start at: 2017-08-31 16:24:06
End at: 2017-08-31 16:24:36

# Below is generated by plot.py at 2017-08-31 18:28:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 186.29 Mbit/s
95th percentile per-packet one-way delay: 103.070 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.31 Mbit/s
95th percentile per-packet one-way delay: 102.527 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 127.33 Mbit/s
95th percentile per-packet one-way delay: 102.485 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 104.35 Mbit/s
95th percentile per-packet one-way delay: 105.751 ms
Loss rate: 0.00%
```

Run 8: Report of TCP BBR — Data Link



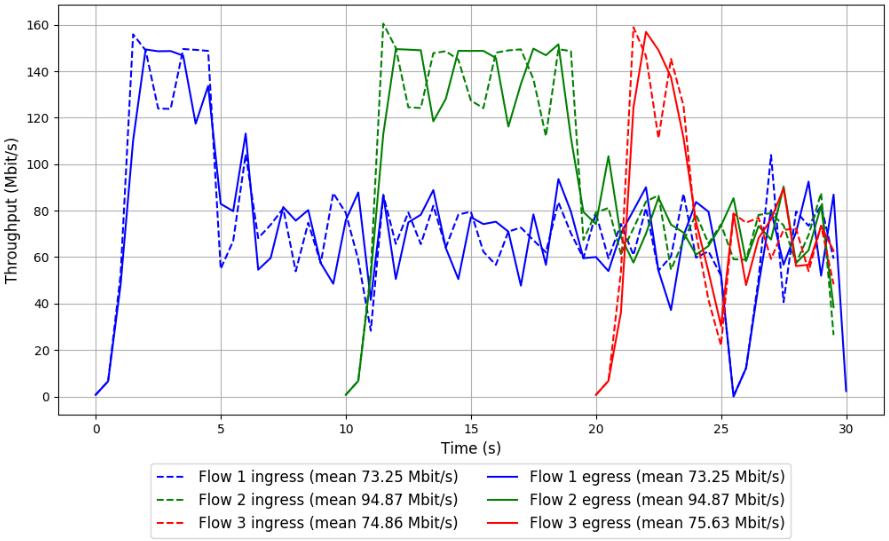


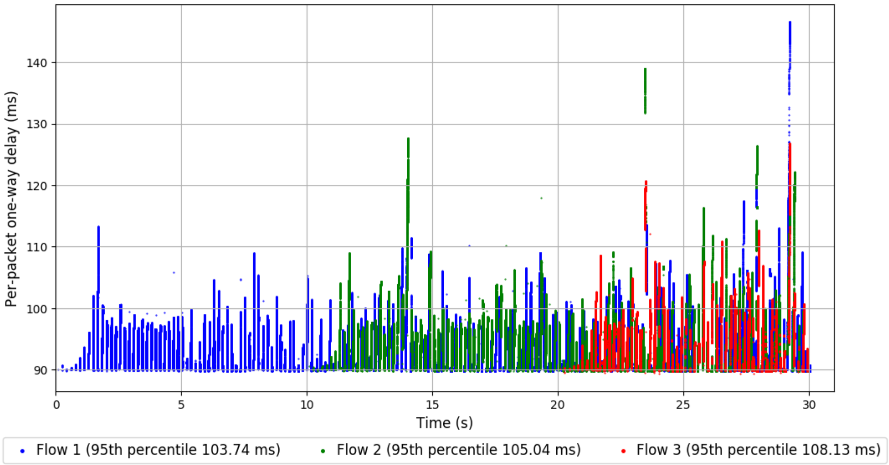
```
Run 9: Statistics of TCP BBR

Start at: 2017-08-31 16:37:04
End at: 2017-08-31 16:37:34

# Below is generated by plot.py at 2017-08-31 18:29:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 161.06 Mbit/s
95th percentile per-packet one-way delay: 104.971 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 73.25 Mbit/s
95th percentile per-packet one-way delay: 103.741 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 94.87 Mbit/s
95th percentile per-packet one-way delay: 105.038 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 75.63 Mbit/s
95th percentile per-packet one-way delay: 108.130 ms
Loss rate: 0.00%
```

Run 9: Report of TCP BBR — Data Link



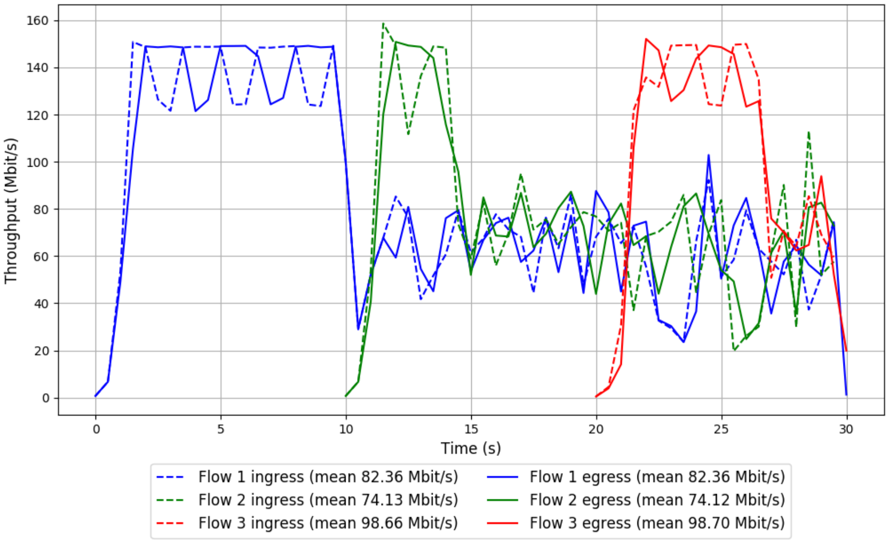


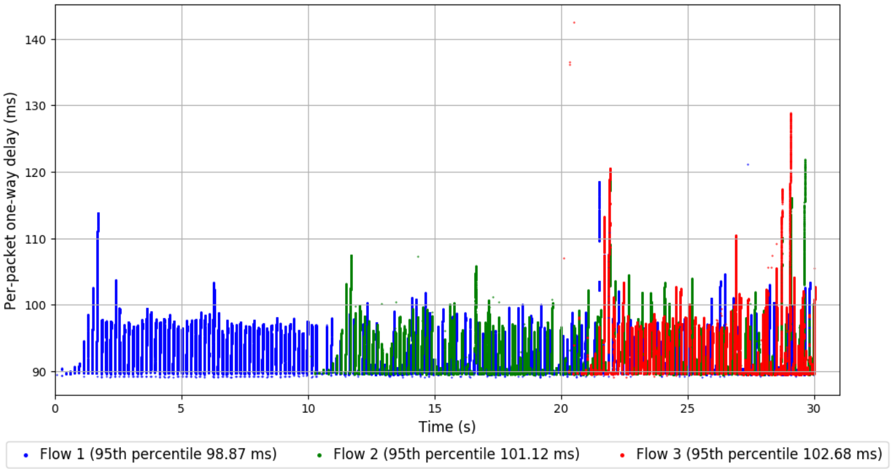
```
Run 10: Statistics of TCP BBR

Start at: 2017-08-31 16:49:58
End at: 2017-08-31 16:50:28

# Below is generated by plot.py at 2017-08-31 18:29:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 164.20 Mbit/s
95th percentile per-packet one-way delay: 100.557 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 82.36 Mbit/s
95th percentile per-packet one-way delay: 98.866 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 74.12 Mbit/s
95th percentile per-packet one-way delay: 101.121 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 98.70 Mbit/s
95th percentile per-packet one-way delay: 102.676 ms
Loss rate: 0.00%
```

Run 10: Report of TCP BBR — Data Link



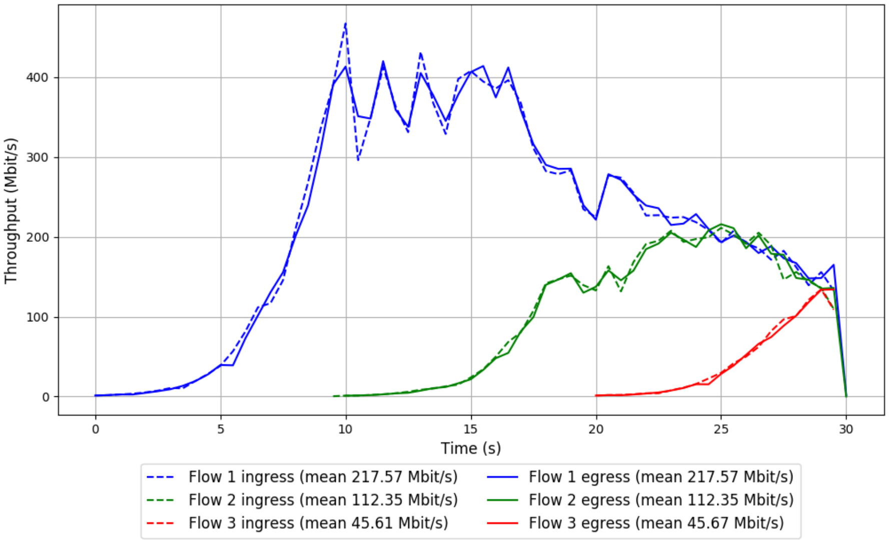


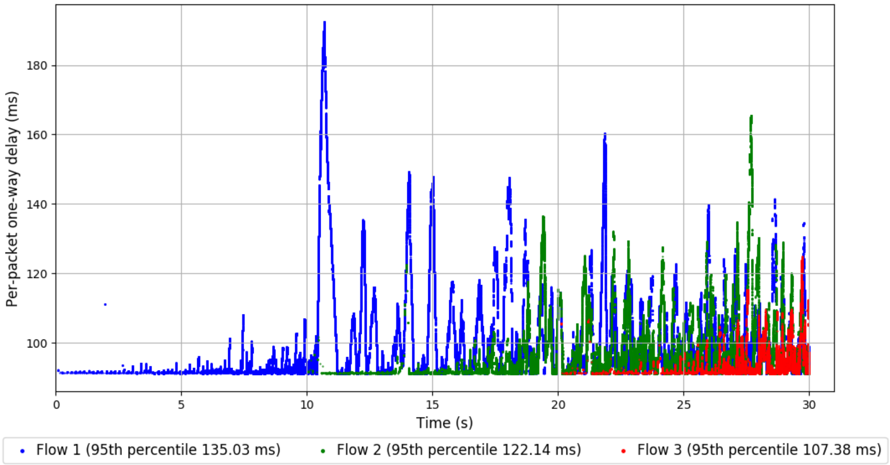
```
Run 1: Statistics of CalibratedKoho

Start at: 2017-08-31 14:41:26
End at: 2017-08-31 14:41:56

# Below is generated by plot.py at 2017-08-31 18:30:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 307.55 Mbit/s
95th percentile per-packet one-way delay: 129.955 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 217.57 Mbit/s
95th percentile per-packet one-way delay: 135.025 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 112.35 Mbit/s
95th percentile per-packet one-way delay: 122.137 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 45.67 Mbit/s
95th percentile per-packet one-way delay: 107.377 ms
Loss rate: 0.00%
```

Run 1: Report of CalibratedKoho — Data Link

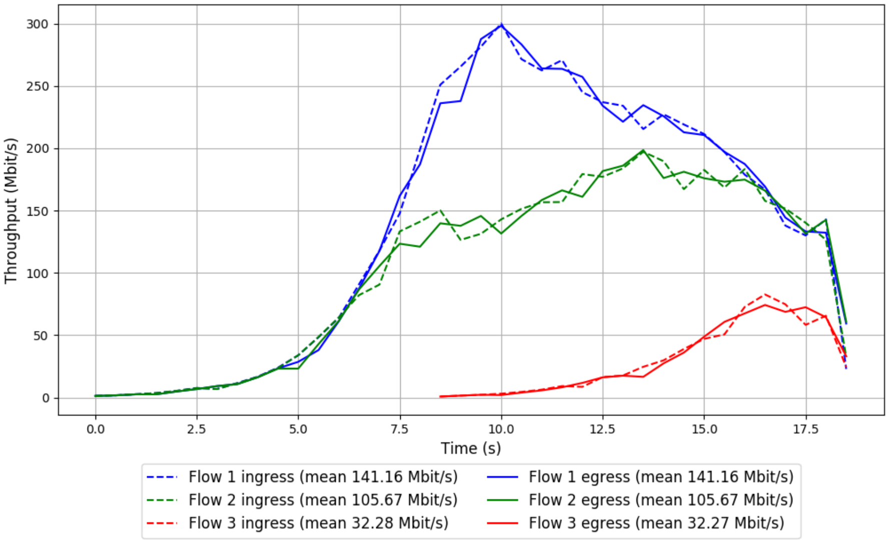


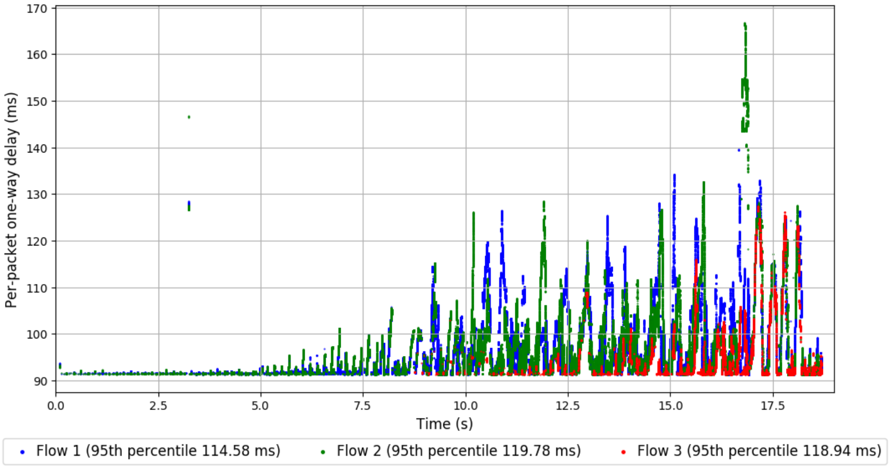


```
Run 2: Statistics of CalibratedKoho

Start at: 2017-08-31 14:55:13
End at: 2017-08-31 14:55:43
```

Run 2: Report of CalibratedKoho — Data Link

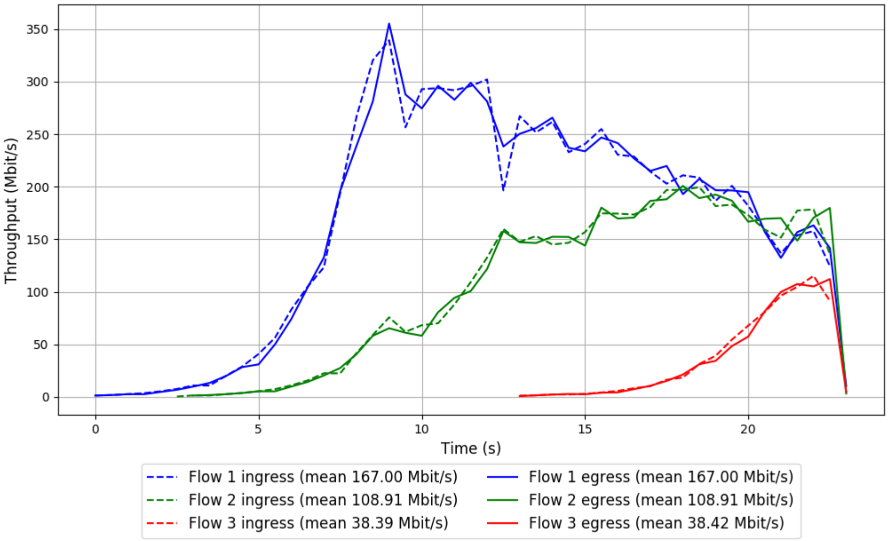


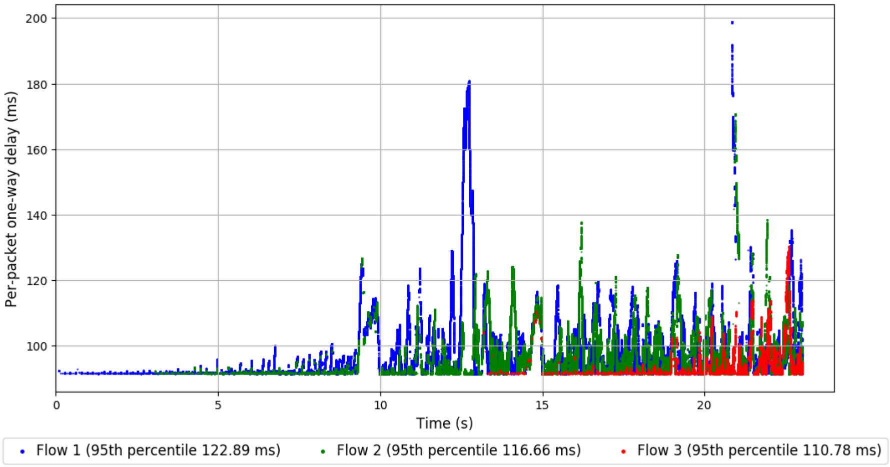


```
Run 3: Statistics of CalibratedKoho

Start at: 2017-08-31 15:08:09
End at: 2017-08-31 15:08:39
```

Run 3: Report of CalibratedKoho — Data Link



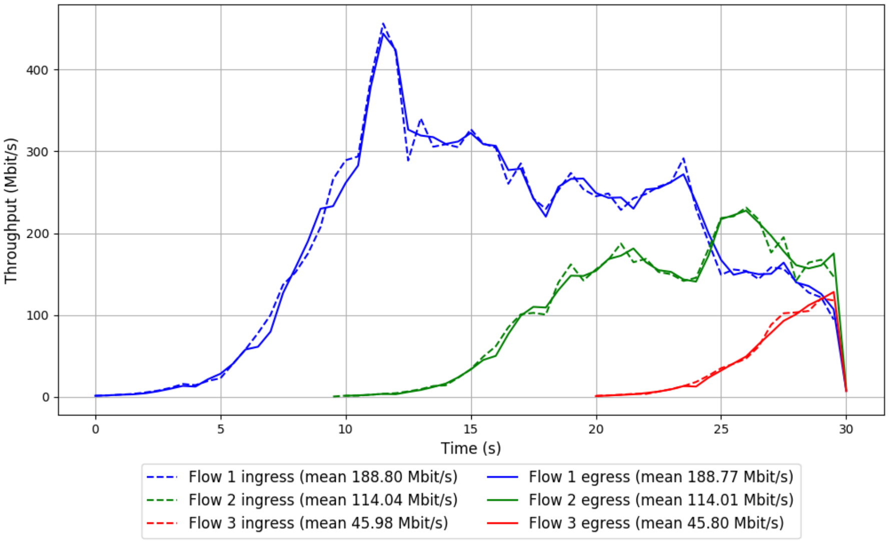


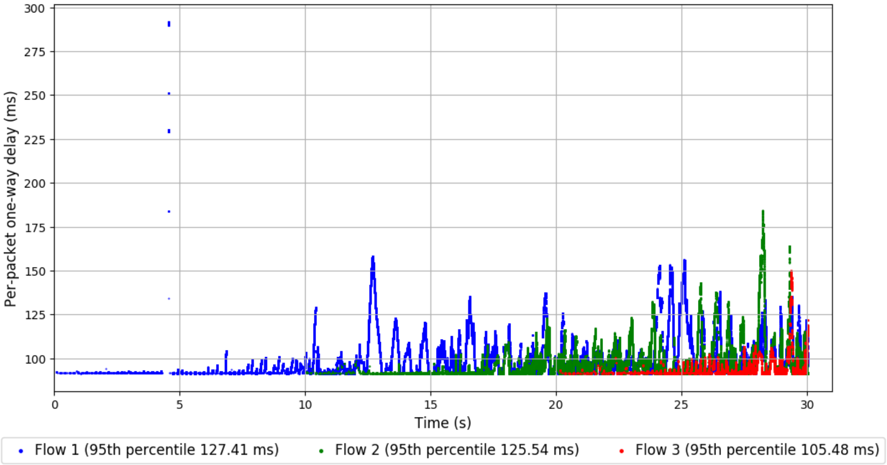
```
Run 4: Statistics of CalibratedKoho

Start at: 2017-08-31 15:21:23
End at: 2017-08-31 15:21:53

# Below is generated by plot.py at 2017-08-31 18:31:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 279.84 Mbit/s
95th percentile per-packet one-way delay: 126.494 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 188.77 Mbit/s
95th percentile per-packet one-way delay: 127.410 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 114.01 Mbit/s
95th percentile per-packet one-way delay: 125.538 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 45.80 Mbit/s
95th percentile per-packet one-way delay: 105.478 ms
Loss rate: 0.33%
```

Run 4: Report of CalibratedKoho — Data Link



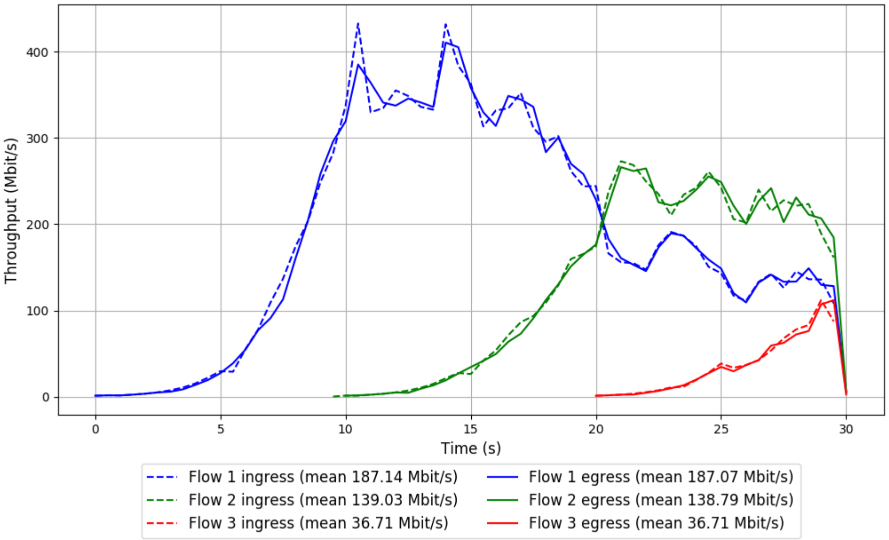


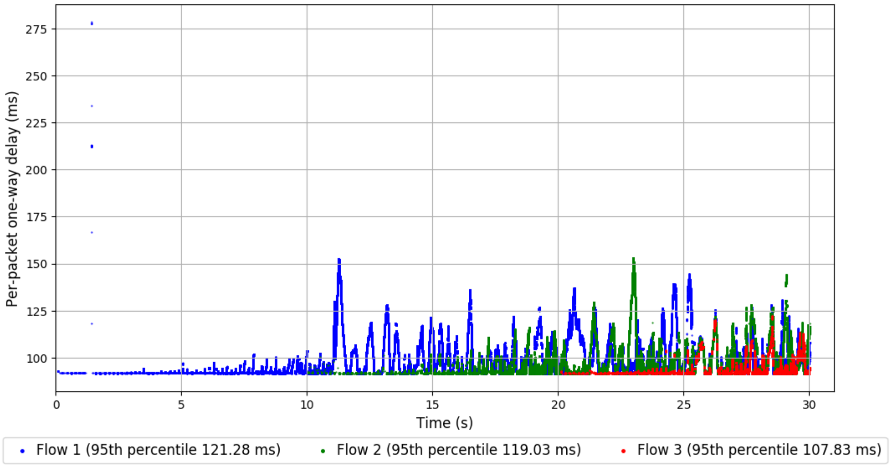
```
Run 5: Statistics of CalibratedKoho

Start at: 2017-08-31 15:35:26
End at: 2017-08-31 15:35:56

# Below is generated by plot.py at 2017-08-31 18:31:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 291.73 Mbit/s
95th percentile per-packet one-way delay: 120.176 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 187.07 Mbit/s
95th percentile per-packet one-way delay: 121.277 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 138.79 Mbit/s
95th percentile per-packet one-way delay: 119.029 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 36.71 Mbit/s
95th percentile per-packet one-way delay: 107.830 ms
Loss rate: 0.00%
```

Run 5: Report of CalibratedKoho — Data Link



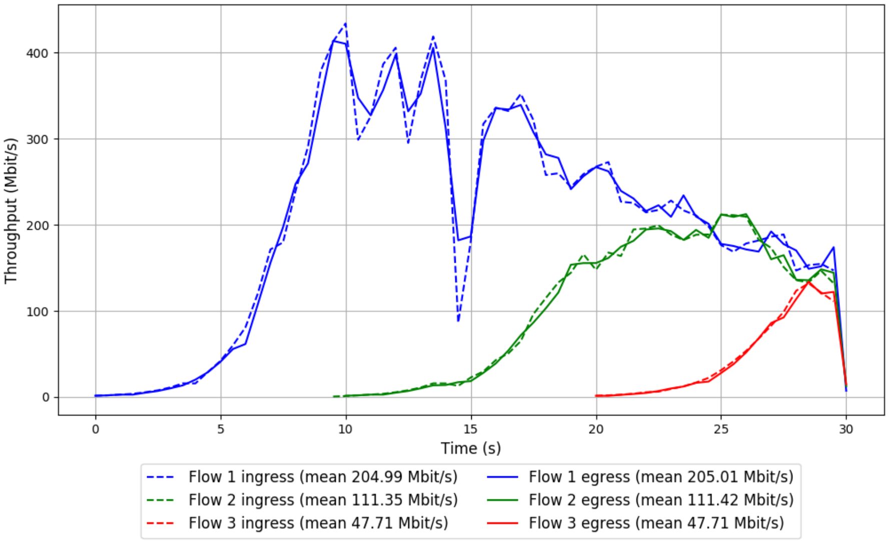


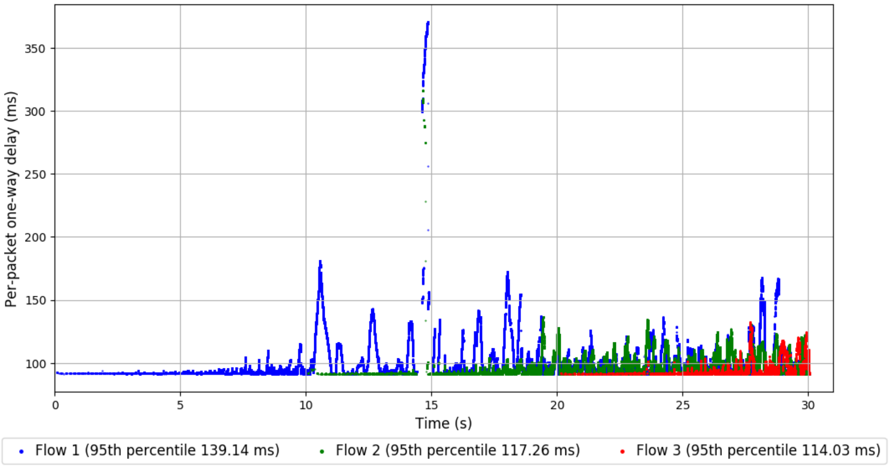
```
Run 6: Statistics of CalibratedKoho

Start at: 2017-08-31 15:48:13
End at: 2017-08-31 15:48:43

# Below is generated by plot.py at 2017-08-31 18:31:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 294.97 Mbit/s
95th percentile per-packet one-way delay: 132.424 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 205.01 Mbit/s
95th percentile per-packet one-way delay: 139.138 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 111.42 Mbit/s
95th percentile per-packet one-way delay: 117.260 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 47.71 Mbit/s
95th percentile per-packet one-way delay: 114.035 ms
Loss rate: 0.02%
```

Run 6: Report of CalibratedKoho — Data Link



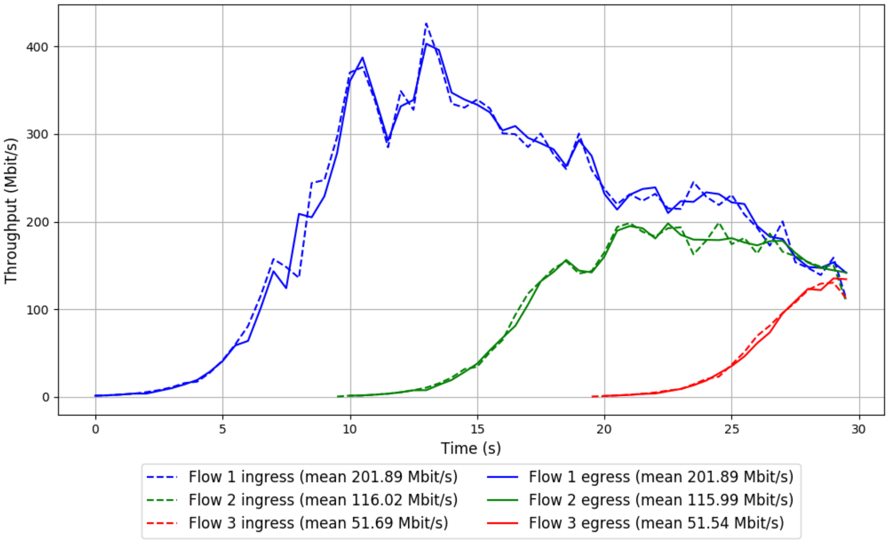


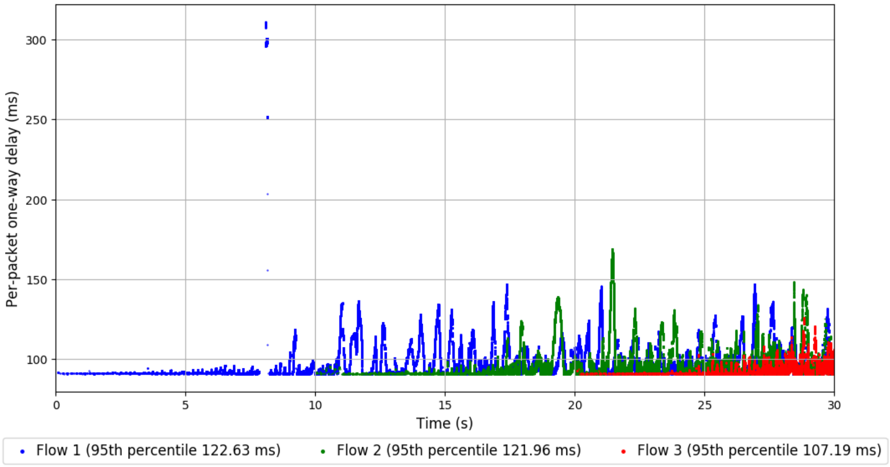
```
Run 7: Statistics of CalibratedKoho

Start at: 2017-08-31 16:01:19
End at: 2017-08-31 16:01:49

# Below is generated by plot.py at 2017-08-31 18:32:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 296.34 Mbit/s
95th percentile per-packet one-way delay: 121.872 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 201.89 Mbit/s
95th percentile per-packet one-way delay: 122.634 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 115.99 Mbit/s
95th percentile per-packet one-way delay: 121.964 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 51.54 Mbit/s
95th percentile per-packet one-way delay: 107.193 ms
Loss rate: 0.28%
```

Run 7: Report of CalibratedKoho — Data Link



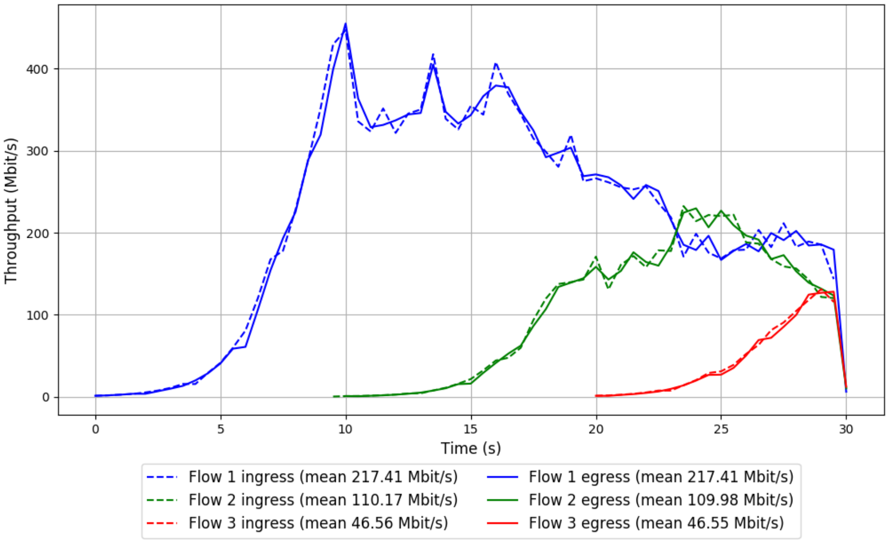


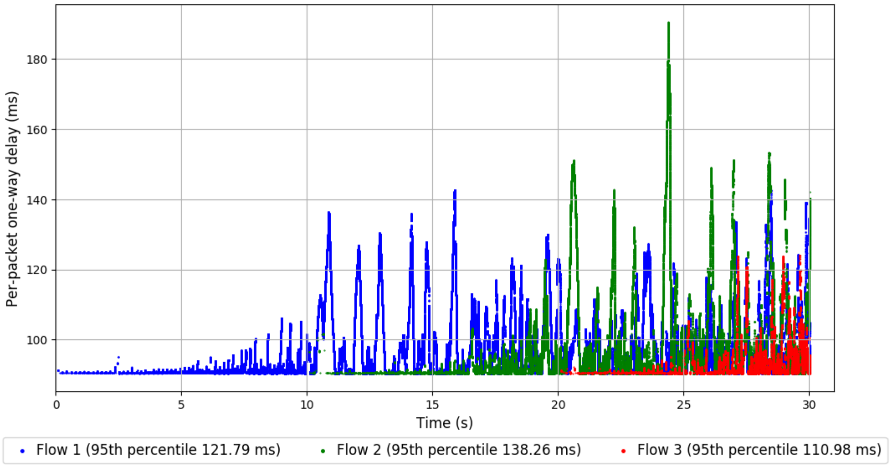
```
Run 8: Statistics of CalibratedKoho

Start at: 2017-08-31 16:14:14
End at: 2017-08-31 16:14:44

# Below is generated by plot.py at 2017-08-31 18:32:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 306.05 Mbit/s
95th percentile per-packet one-way delay: 123.472 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 217.41 Mbit/s
95th percentile per-packet one-way delay: 121.788 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 109.98 Mbit/s
95th percentile per-packet one-way delay: 138.260 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 46.55 Mbit/s
95th percentile per-packet one-way delay: 110.977 ms
Loss rate: 0.00%
```

Run 8: Report of CalibratedKoho — Data Link



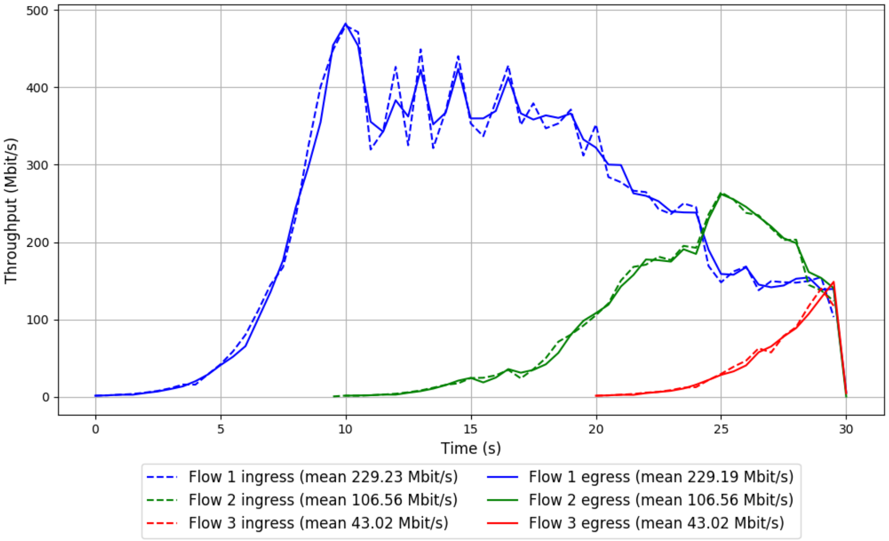


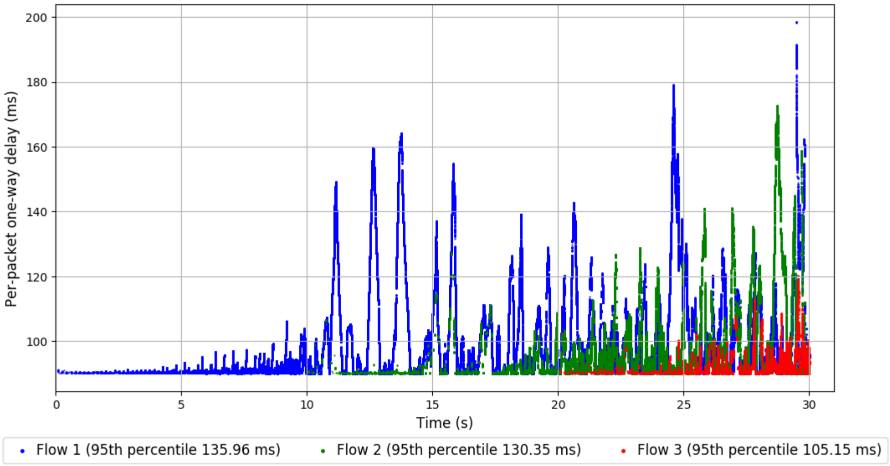
```
Run 9: Statistics of CalibratedKoho

Start at: 2017-08-31 16:27:13
End at: 2017-08-31 16:27:43

# Below is generated by plot.py at 2017-08-31 18:32:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 314.48 Mbit/s
95th percentile per-packet one-way delay: 133.251 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 229.19 Mbit/s
95th percentile per-packet one-way delay: 135.957 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 106.56 Mbit/s
95th percentile per-packet one-way delay: 130.349 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 43.02 Mbit/s
95th percentile per-packet one-way delay: 105.153 ms
Loss rate: 0.00%
```

Run 9: Report of CalibratedKoho — Data Link



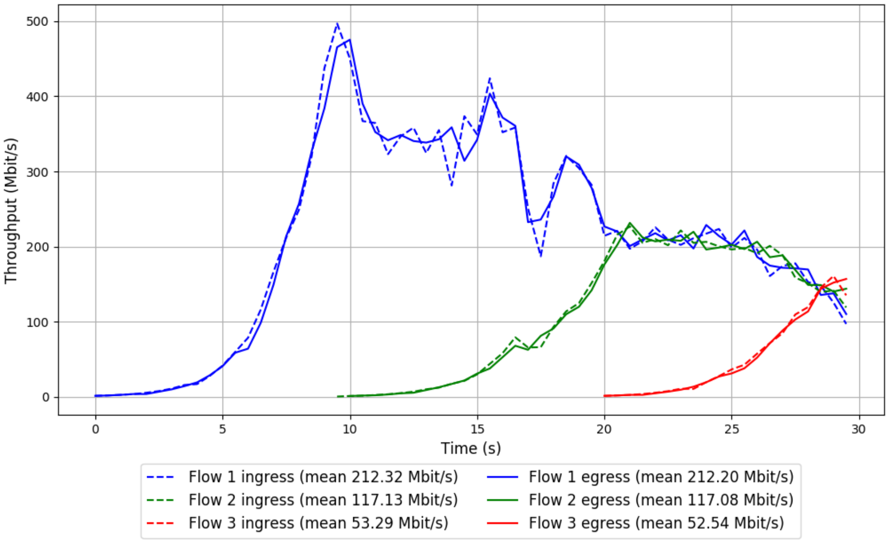


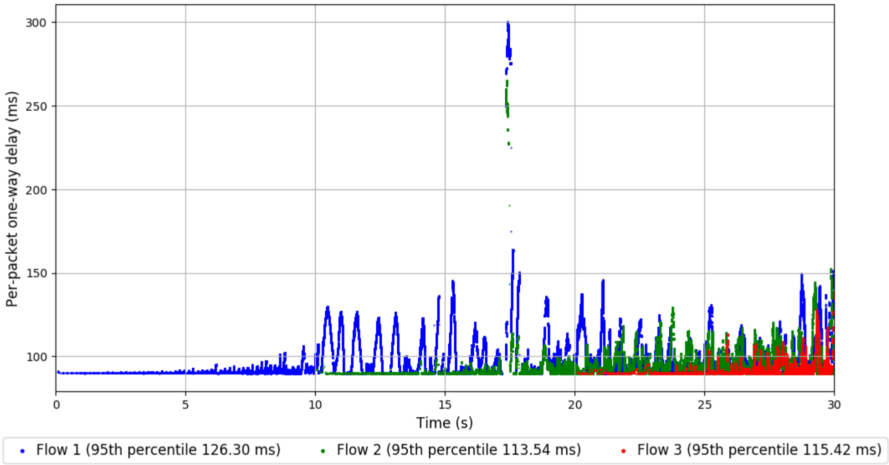
```
Run 10: Statistics of CalibratedKoho

Start at: 2017-08-31 16:40:10
End at: 2017-08-31 16:40:40

# Below is generated by plot.py at 2017-08-31 18:33:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 307.53 Mbit/s
95th percentile per-packet one-way delay: 124.342 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 212.20 Mbit/s
95th percentile per-packet one-way delay: 126.303 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 117.08 Mbit/s
95th percentile per-packet one-way delay: 113.541 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 52.54 Mbit/s
95th percentile per-packet one-way delay: 115.418 ms
Loss rate: 1.35%
```

Run 10: Report of CalibratedKoho — Data Link



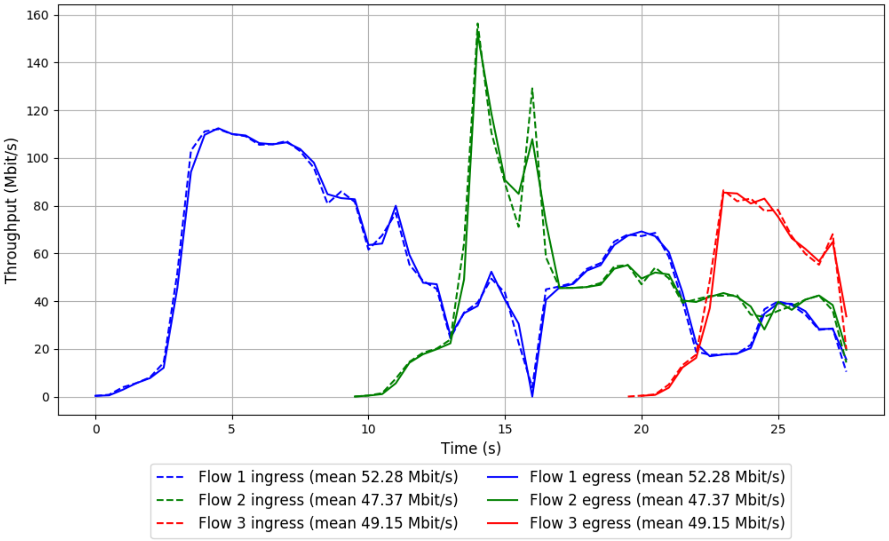


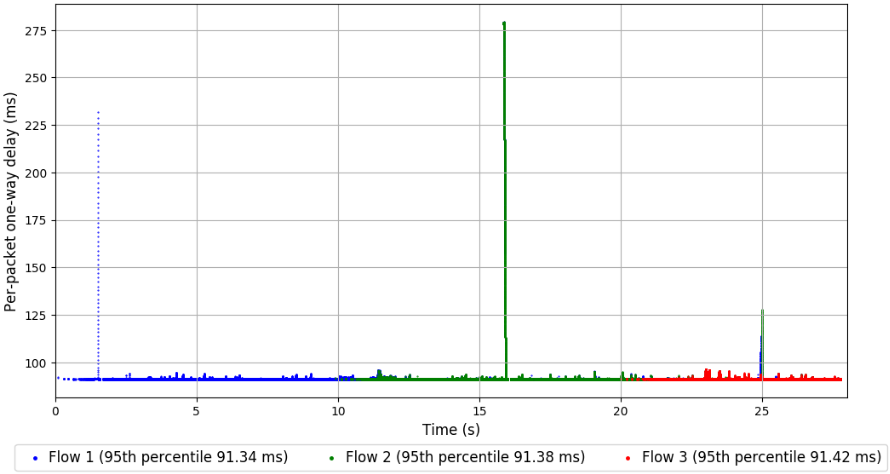
```
Run 1: Statistics of Copa

Start at: 2017-08-31 14:46:09
End at: 2017-08-31 14:46:39

# Below is generated by plot.py at 2017-08-31 18:33:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.64 Mbit/s
95th percentile per-packet one-way delay: 91.359 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.28 Mbit/s
95th percentile per-packet one-way delay: 91.336 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 47.37 Mbit/s
95th percentile per-packet one-way delay: 91.379 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.15 Mbit/s
95th percentile per-packet one-way delay: 91.417 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link

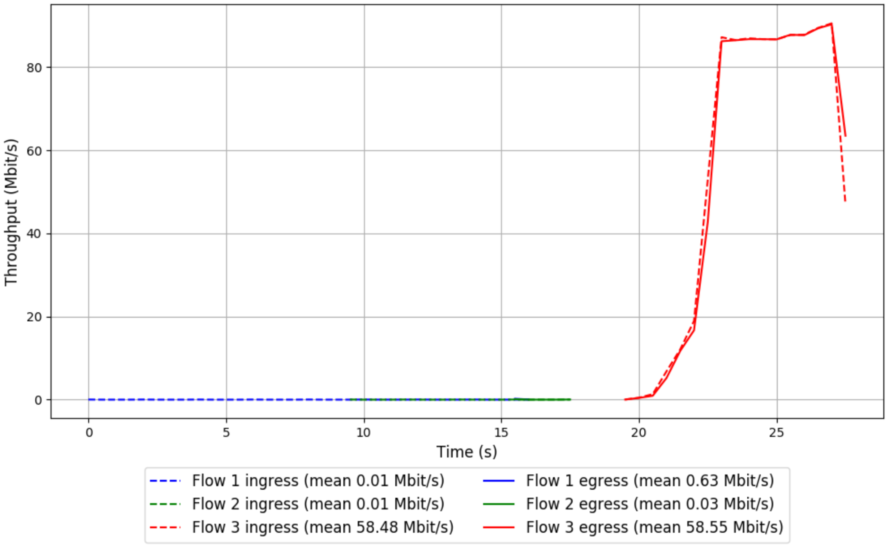


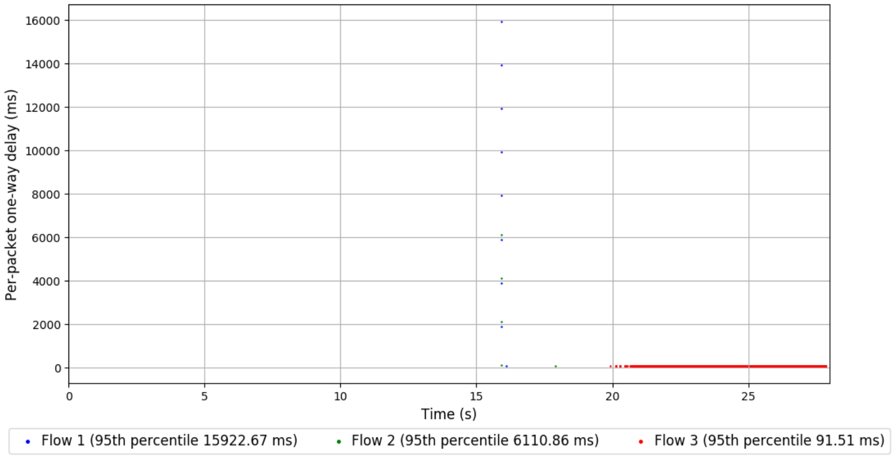


```
Run 2: Statistics of Copa

Start at: 2017-08-31 14:59:35
End at: 2017-08-31 15:00:05
```

Run 2: Report of Copa — Data Link



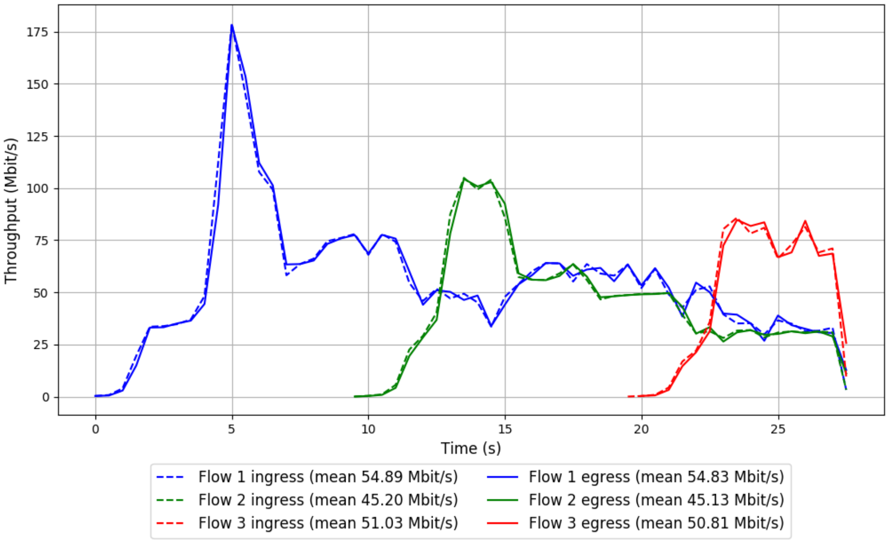


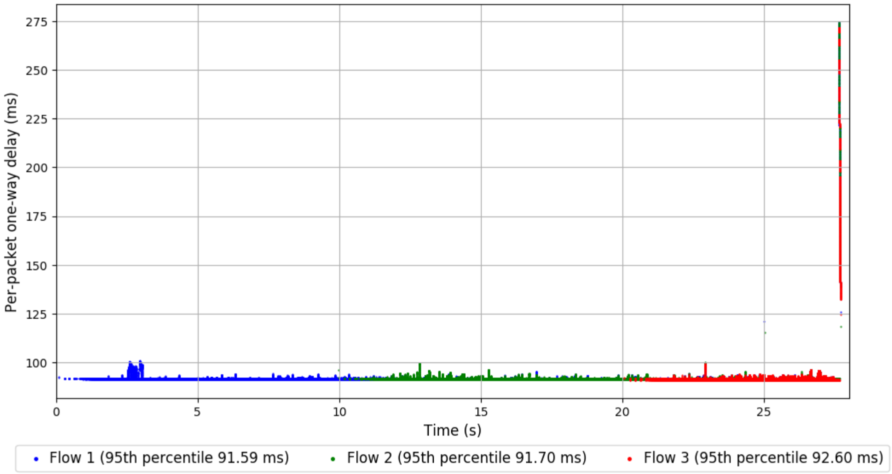
```
Run 3: Statistics of Copa

Start at: 2017-08-31 15:12:28
End at: 2017-08-31 15:12:58

# Below is generated by plot.py at 2017-08-31 18:34:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.85 Mbit/s
95th percentile per-packet one-way delay: 91.751 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.83 Mbit/s
95th percentile per-packet one-way delay: 91.588 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 45.13 Mbit/s
95th percentile per-packet one-way delay: 91.699 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 50.81 Mbit/s
95th percentile per-packet one-way delay: 92.597 ms
Loss rate: 0.00%
```

Run 3: Report of Copa — Data Link



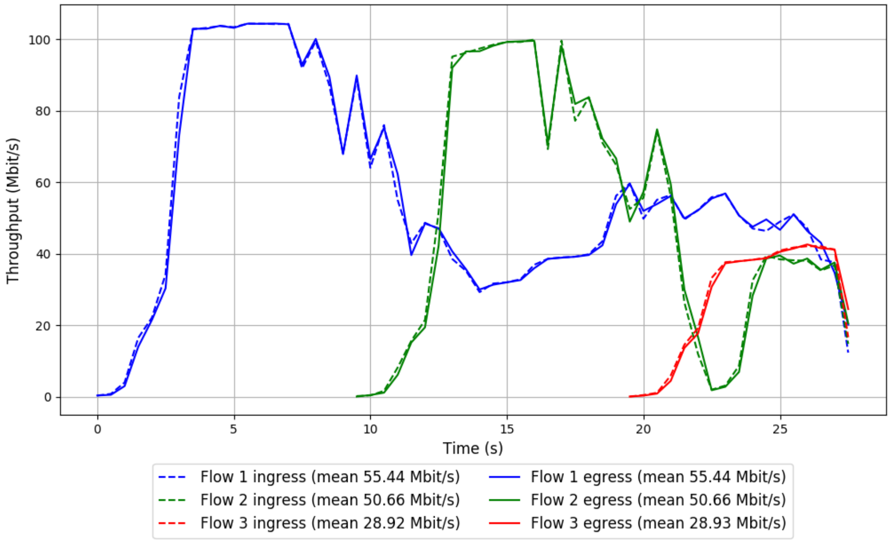


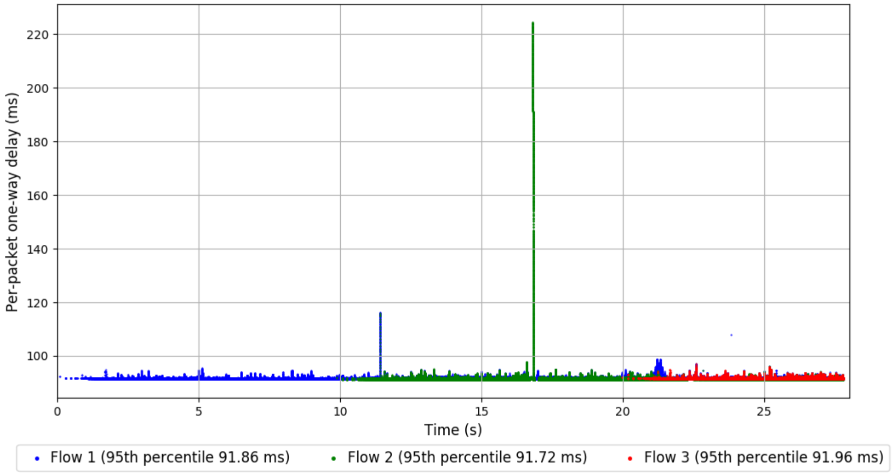
```
Run 4: Statistics of Copa

Start at: 2017-08-31 15:26:45
End at: 2017-08-31 15:27:15

# Below is generated by plot.py at 2017-08-31 18:34:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.37 Mbit/s
95th percentile per-packet one-way delay: 91.839 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.44 Mbit/s
95th percentile per-packet one-way delay: 91.861 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.66 Mbit/s
95th percentile per-packet one-way delay: 91.723 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 28.93 Mbit/s
95th percentile per-packet one-way delay: 91.960 ms
Loss rate: 0.00%
```

Run 4: Report of Copa — Data Link

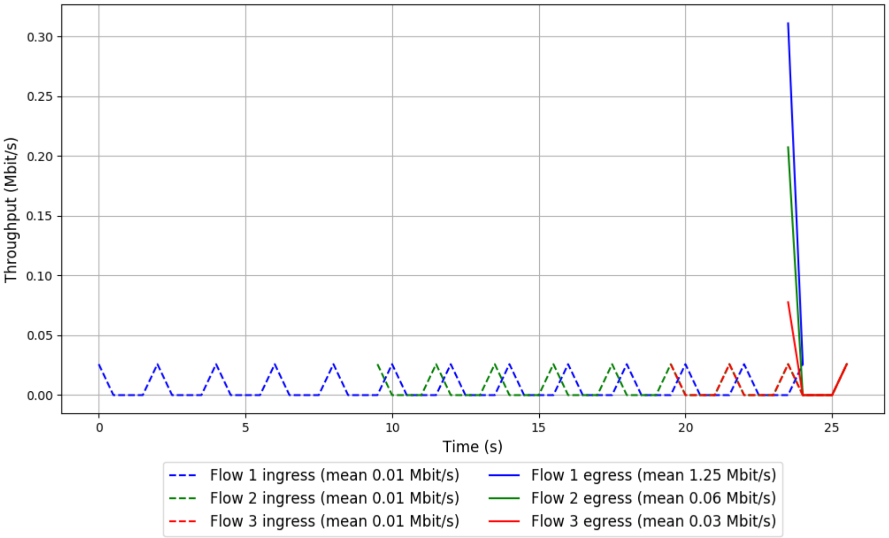


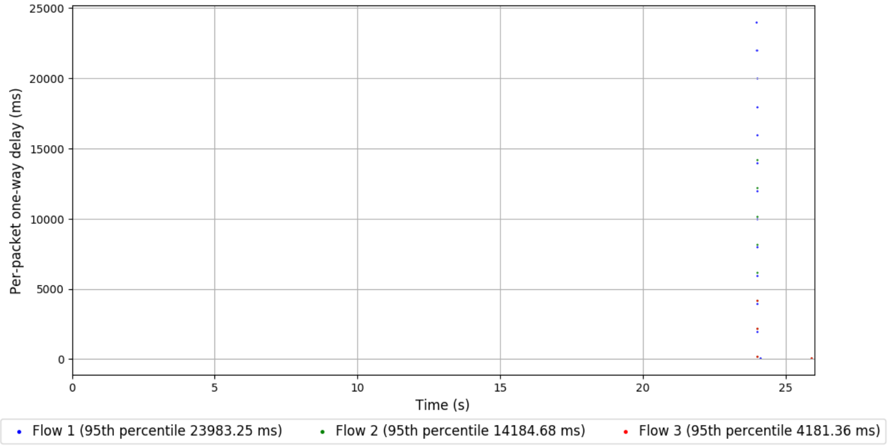


```
Run 5: Statistics of Copa

Start at: 2017-08-31 15:39:50
End at: 2017-08-31 15:40:20
```

Run 5: Report of Copa — Data Link



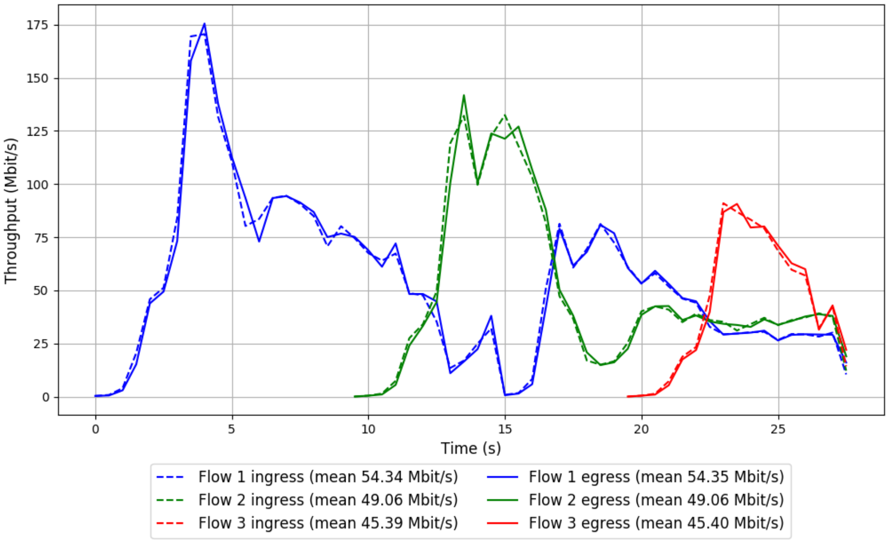


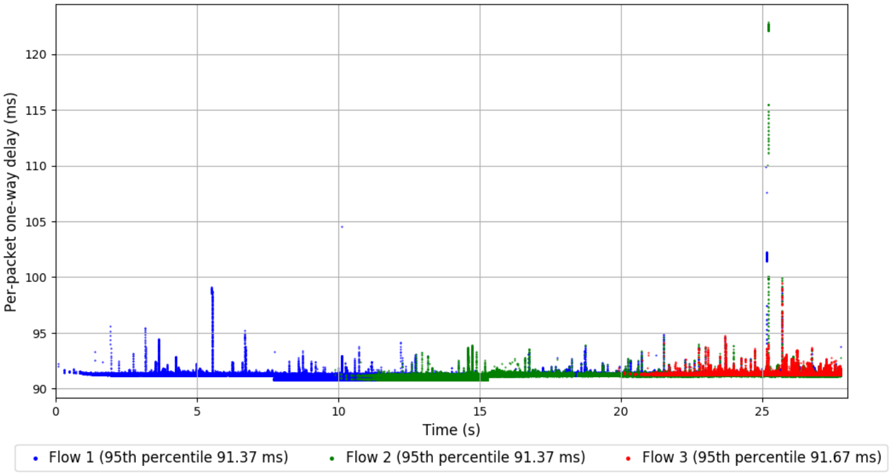
```
Run 6: Statistics of Copa

Start at: 2017-08-31 15:52:37
End at: 2017-08-31 15:53:07

# Below is generated by plot.py at 2017-08-31 18:34:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 98.91 Mbit/s
95th percentile per-packet one-way delay: 91.392 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.35 Mbit/s
95th percentile per-packet one-way delay: 91.372 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.06 Mbit/s
95th percentile per-packet one-way delay: 91.372 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 45.40 Mbit/s
95th percentile per-packet one-way delay: 91.665 ms
Loss rate: 0.00%
```

Run 6: Report of Copa — Data Link





```
Run 7: Statistics of Copa

Start at: 2017-08-31 16:05:44
End at: 2017-08-31 16:06:14
```

Run 7: Report of Copa — Data Link

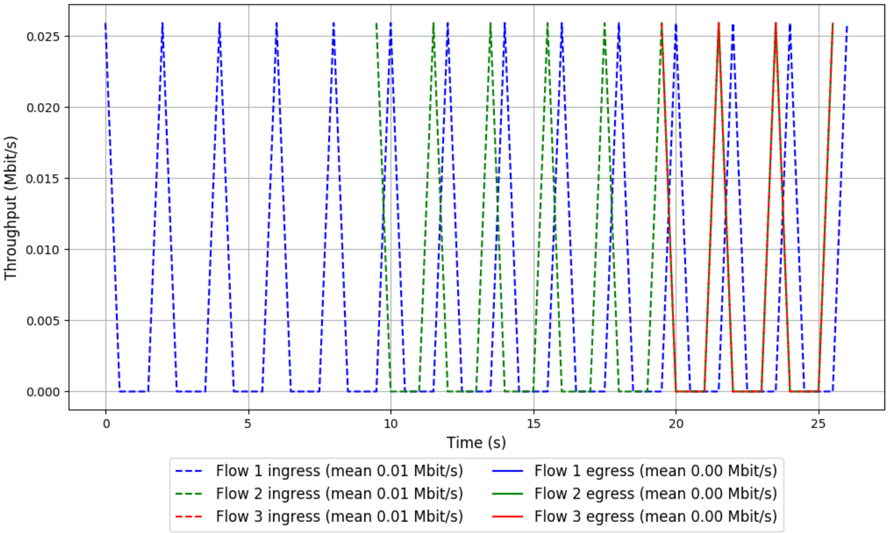


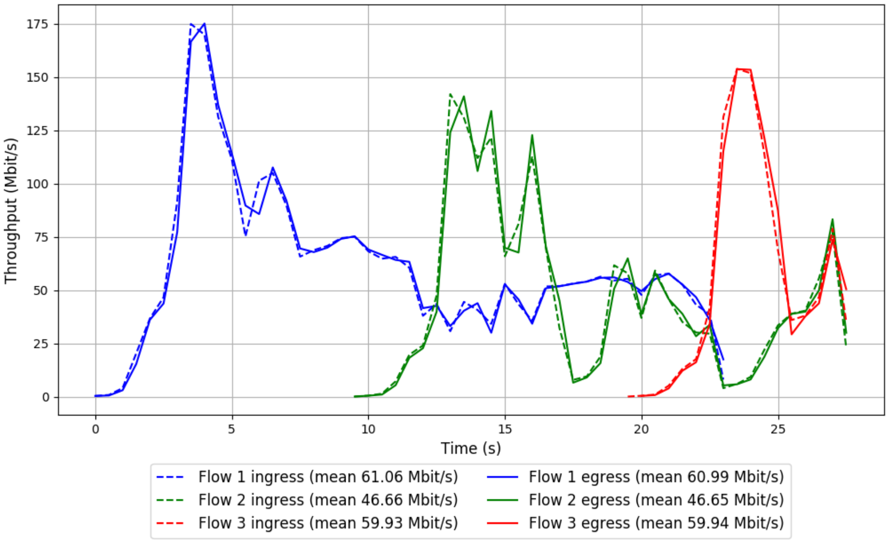
Figure is missing

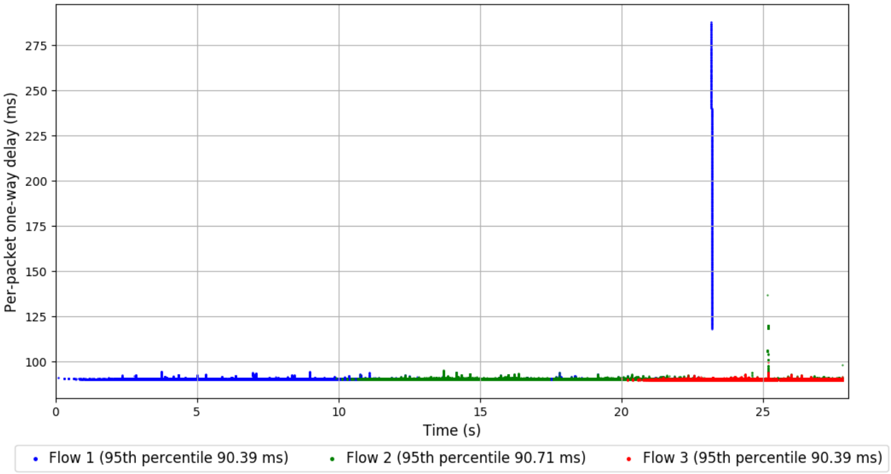
```
Run 8: Statistics of Copa

Start at: 2017-08-31 16:18:40
End at: 2017-08-31 16:19:10

# Below is generated by plot.py at 2017-08-31 18:34:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.80 Mbit/s
95th percentile per-packet one-way delay: 90.666 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 60.99 Mbit/s
95th percentile per-packet one-way delay: 90.394 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 46.65 Mbit/s
95th percentile per-packet one-way delay: 90.712 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 59.94 Mbit/s
95th percentile per-packet one-way delay: 90.393 ms
Loss rate: 0.00%
```

Run 8: Report of Copa — Data Link



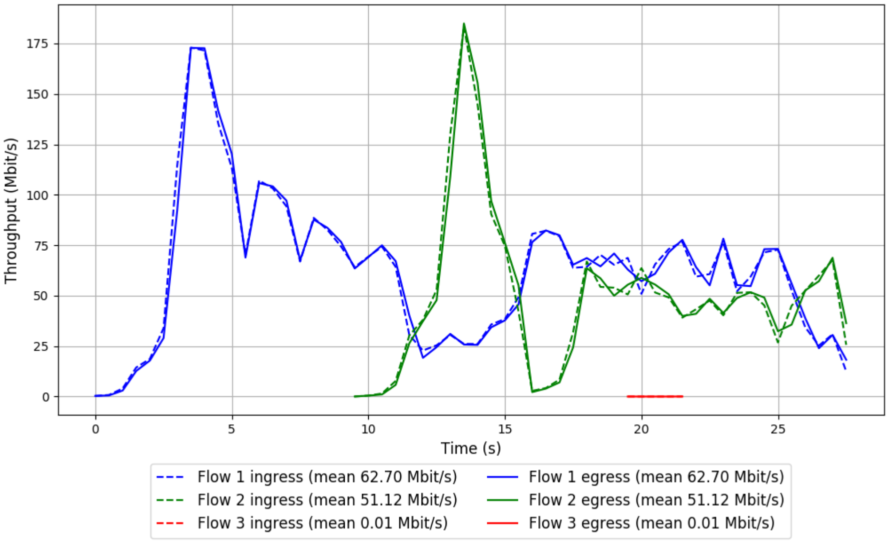


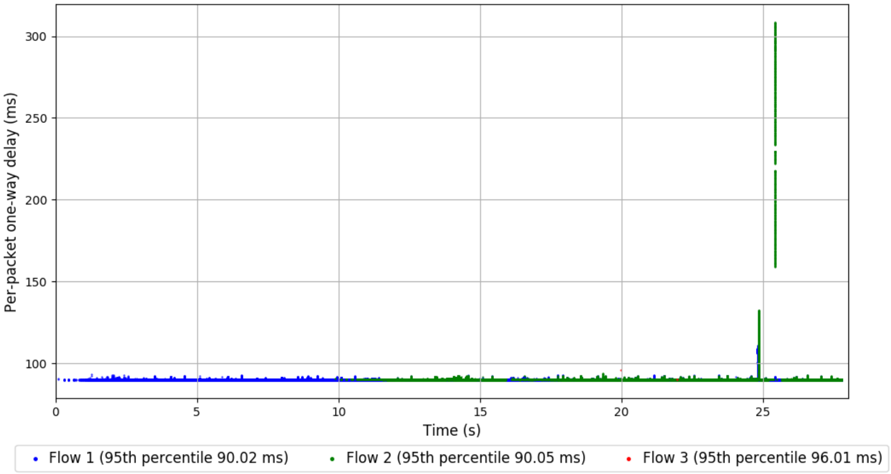
```
Run 9: Statistics of Copa

Start at: 2017-08-31 16:31:37
End at: 2017-08-31 16:32:07

# Below is generated by plot.py at 2017-08-31 18:35:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.74 Mbit/s
95th percentile per-packet one-way delay: 90.028 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 62.70 Mbit/s
95th percentile per-packet one-way delay: 90.020 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 51.12 Mbit/s
95th percentile per-packet one-way delay: 90.047 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 96.007 ms
Loss rate: 46.17%
```

Run 9: Report of Copa — Data Link

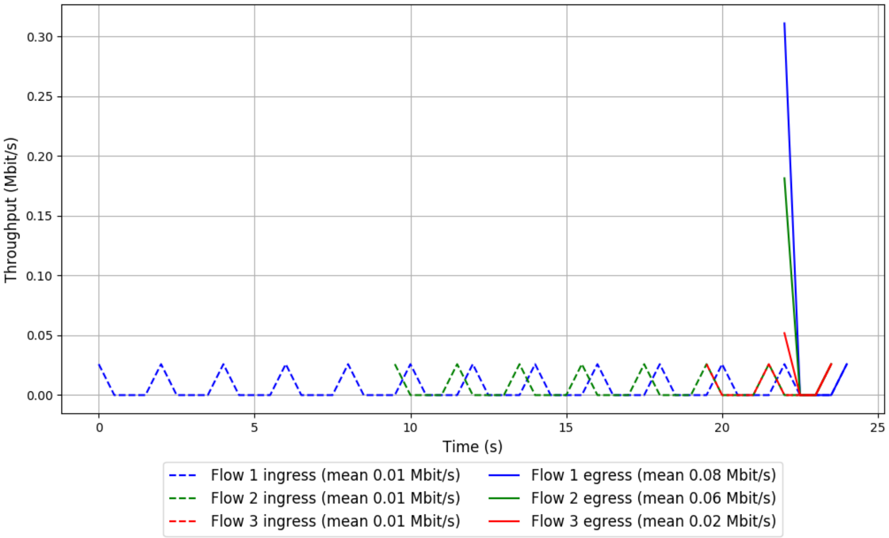


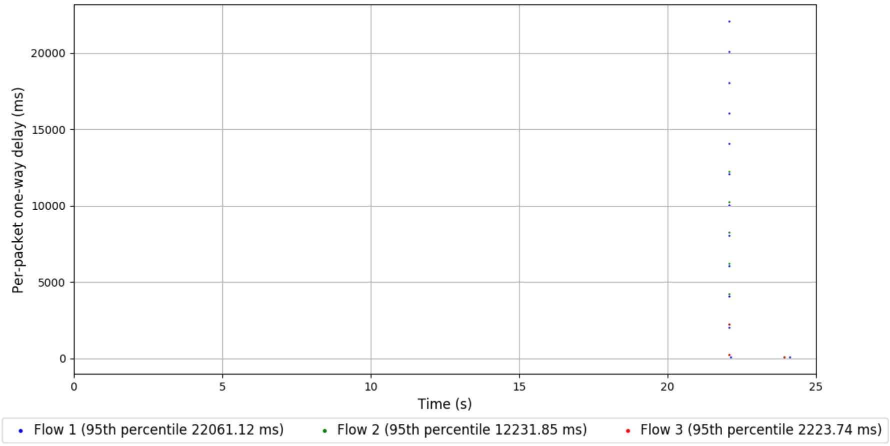


```
Run 10: Statistics of Copa

Start at: 2017-08-31 16:44:32
End at: 2017-08-31 16:45:02
```

Run 10: Report of Copa — Data Link

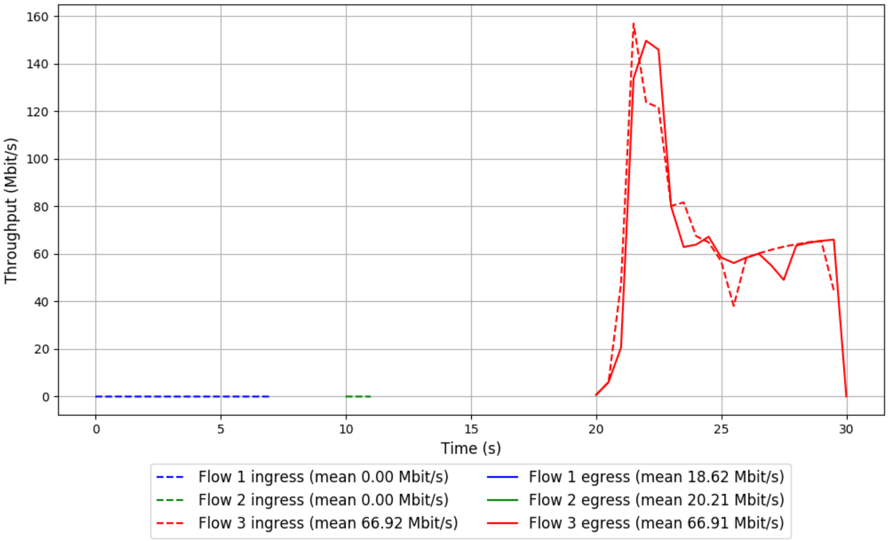


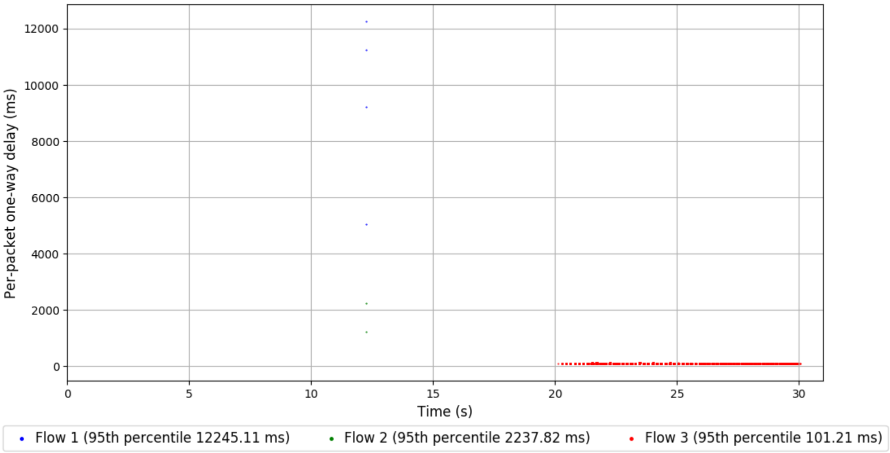


```
Run 1: Statistics of TCP Cubic

Start at: 2017-08-31 14:51:21
End at: 2017-08-31 14:51:51
```

Run 1: Report of TCP Cubic — Data Link



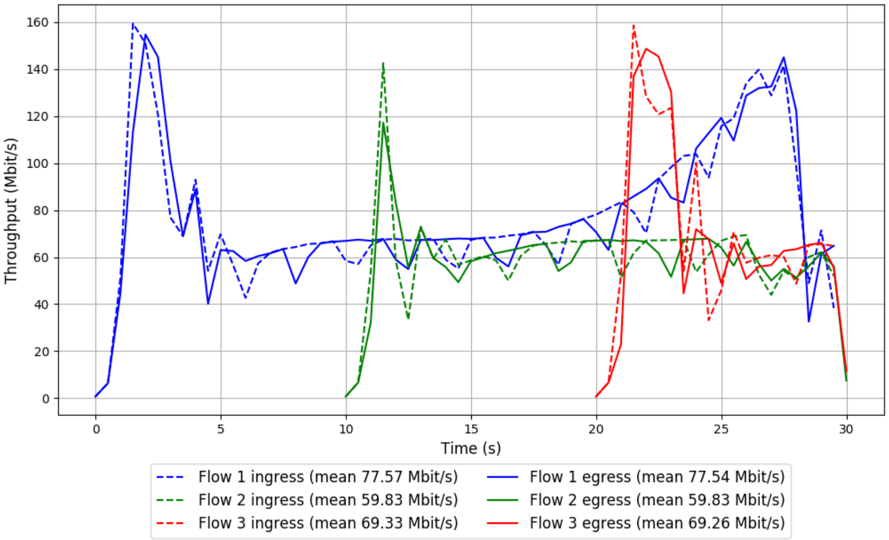


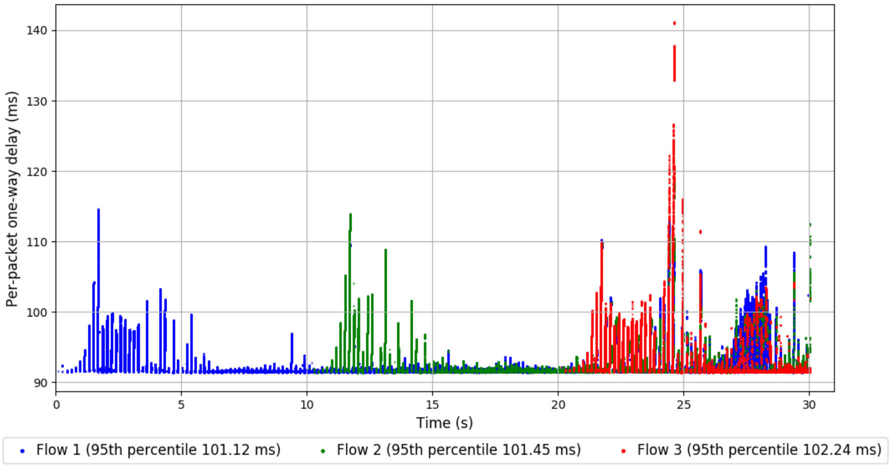
```
Run 2: Statistics of TCP Cubic

Start at: 2017-08-31 15:04:10
End at: 2017-08-31 15:04:40

# Below is generated by plot.py at 2017-08-31 18:35:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 140.04 Mbit/s
95th percentile per-packet one-way delay: 101.339 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 77.54 Mbit/s
95th percentile per-packet one-way delay: 101.120 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 59.83 Mbit/s
95th percentile per-packet one-way delay: 101.451 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 69.26 Mbit/s
95th percentile per-packet one-way delay: 102.238 ms
Loss rate: 0.01%
```

Run 2: Report of TCP Cubic — Data Link



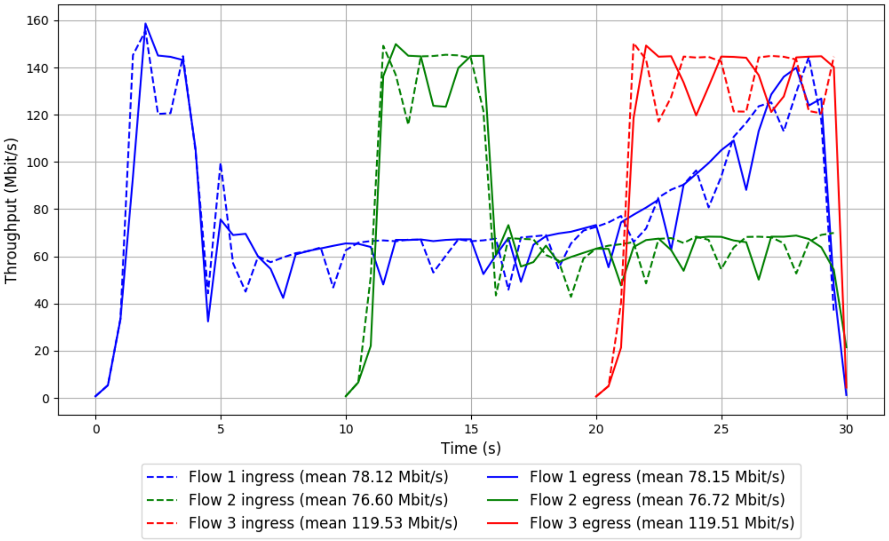


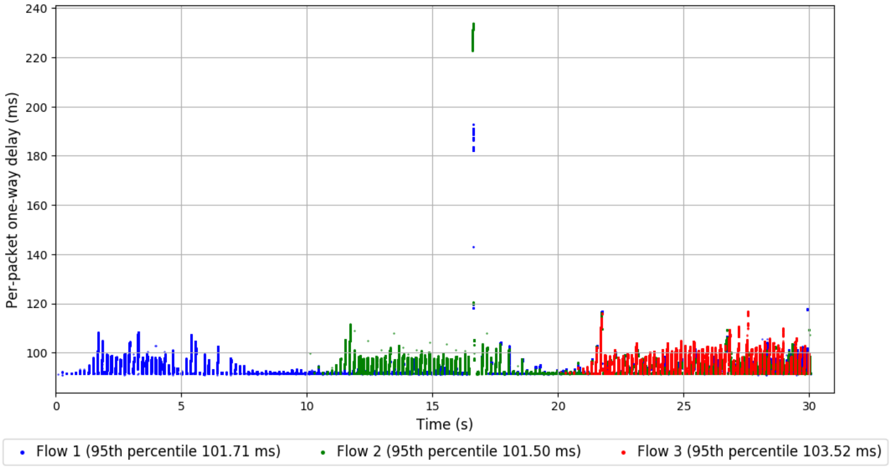
```
Run 3: Statistics of TCP Cubic

Start at: 2017-08-31 15:17:11
End at: 2017-08-31 15:17:41

# Below is generated by plot.py at 2017-08-31 18:35:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 168.70 Mbit/s
95th percentile per-packet one-way delay: 102.259 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 78.15 Mbit/s
95th percentile per-packet one-way delay: 101.713 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 76.72 Mbit/s
95th percentile per-packet one-way delay: 101.505 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 119.51 Mbit/s
95th percentile per-packet one-way delay: 103.521 ms
Loss rate: 0.00%
```

Run 3: Report of TCP Cubic — Data Link



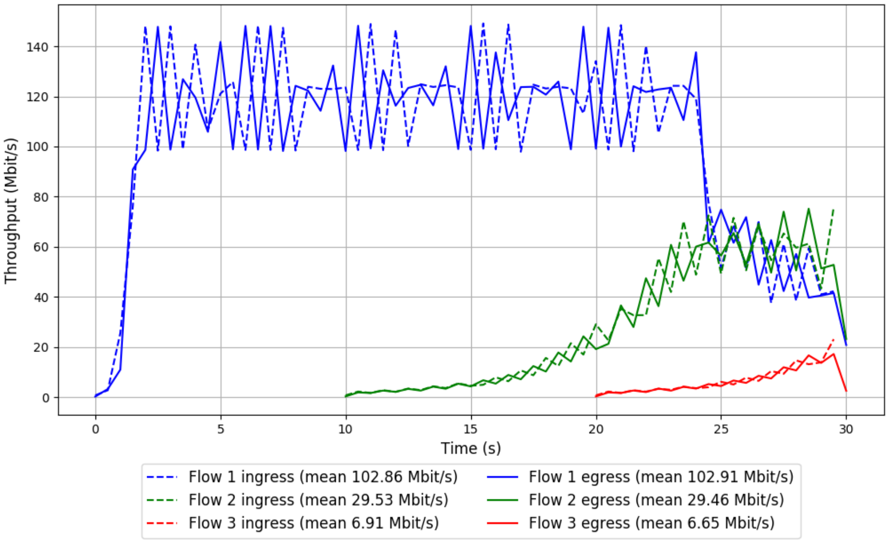


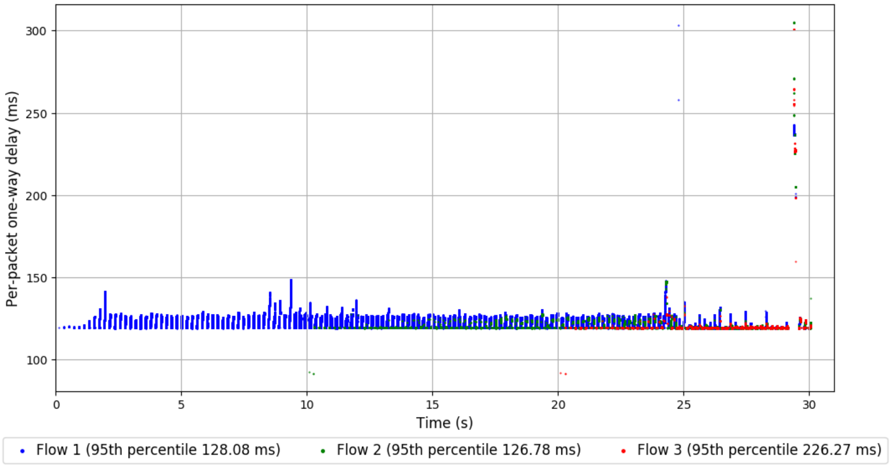
```
Run 4: Statistics of TCP Cubic

Start at: 2017-08-31 15:31:28
End at: 2017-08-31 15:31:58

# Below is generated by plot.py at 2017-08-31 18:35:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 124.68 Mbit/s
95th percentile per-packet one-way delay: 128.023 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 102.91 Mbit/s
95th percentile per-packet one-way delay: 128.084 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 29.46 Mbit/s
95th percentile per-packet one-way delay: 126.775 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 6.65 Mbit/s
95th percentile per-packet one-way delay: 226.272 ms
Loss rate: 3.52%
```

Run 4: Report of TCP Cubic — Data Link



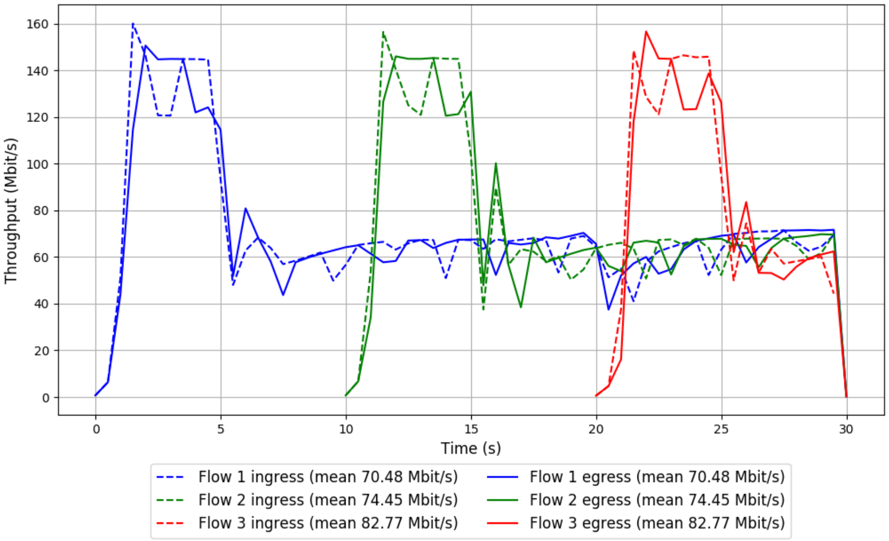


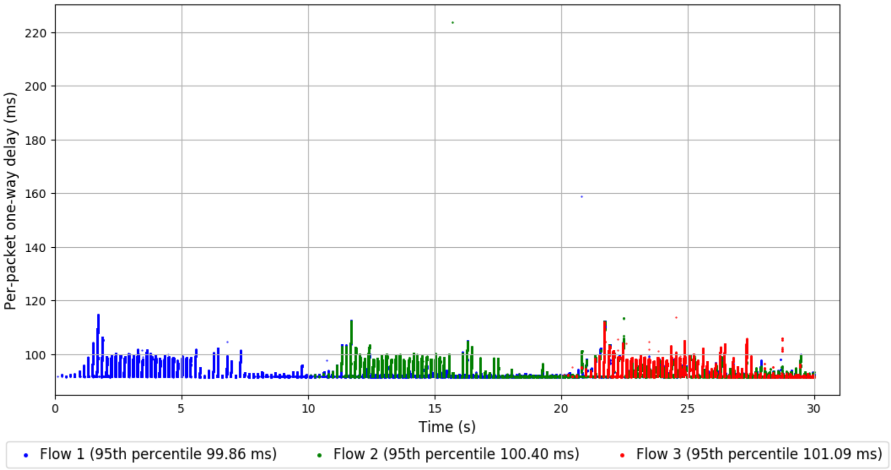
```
Run 5: Statistics of TCP Cubic

Start at: 2017-08-31 15:44:13
End at: 2017-08-31 15:44:43

# Below is generated by plot.py at 2017-08-31 18:35:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 147.38 Mbit/s
95th percentile per-packet one-way delay: 100.355 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 70.48 Mbit/s
95th percentile per-packet one-way delay: 99.865 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 74.45 Mbit/s
95th percentile per-packet one-way delay: 100.397 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 82.77 Mbit/s
95th percentile per-packet one-way delay: 101.091 ms
Loss rate: 0.00%
```

Run 5: Report of TCP Cubic — Data Link



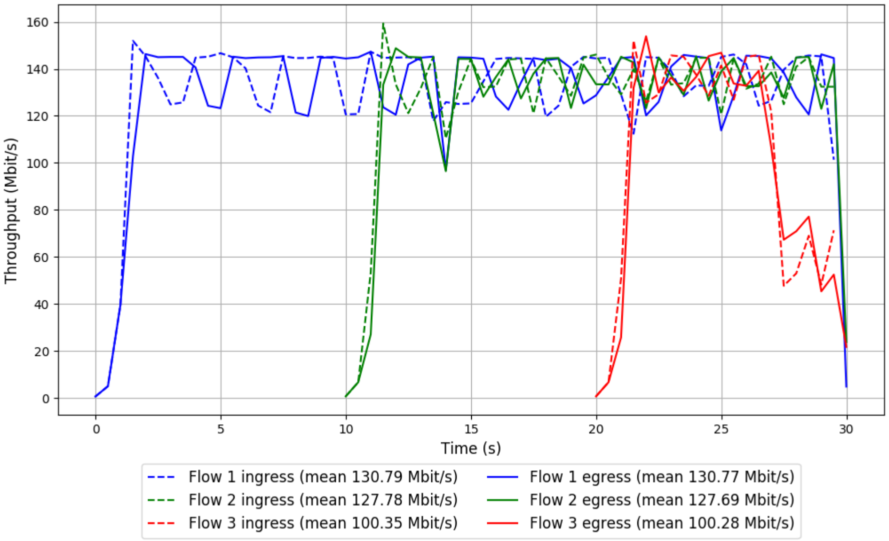


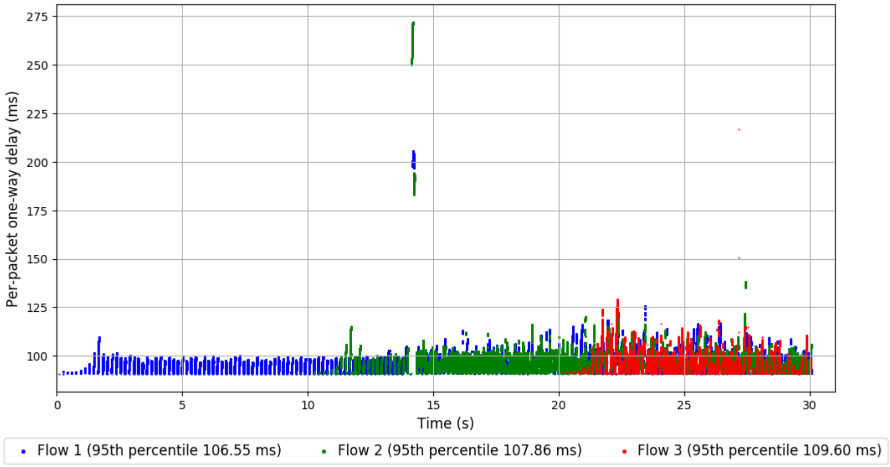
```
Run 6: Statistics of TCP Cubic

Start at: 2017-08-31 15:57:13
End at: 2017-08-31 15:57:43

# Below is generated by plot.py at 2017-08-31 18:36:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 249.02 Mbit/s
95th percentile per-packet one-way delay: 107.645 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 130.77 Mbit/s
95th percentile per-packet one-way delay: 106.550 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 127.69 Mbit/s
95th percentile per-packet one-way delay: 107.865 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 100.28 Mbit/s
95th percentile per-packet one-way delay: 109.600 ms
Loss rate: 0.00%
```

Run 6: Report of TCP Cubic — Data Link



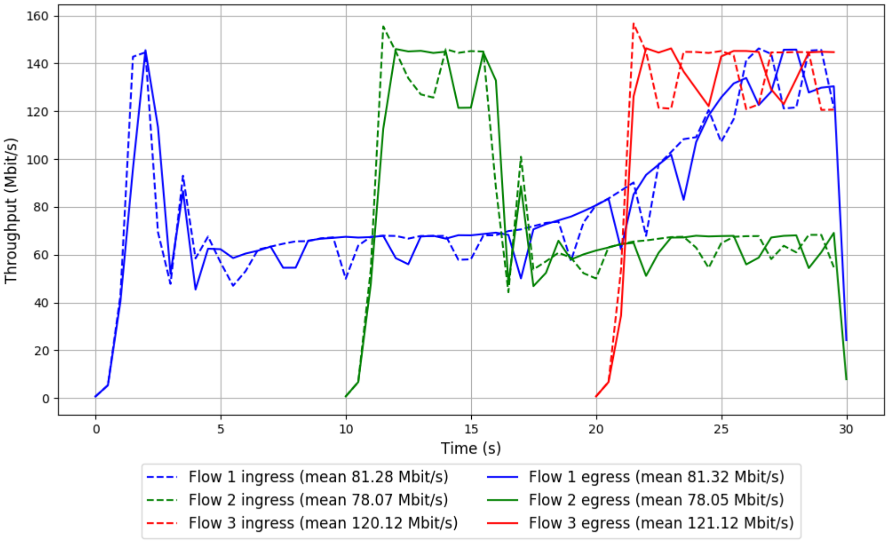


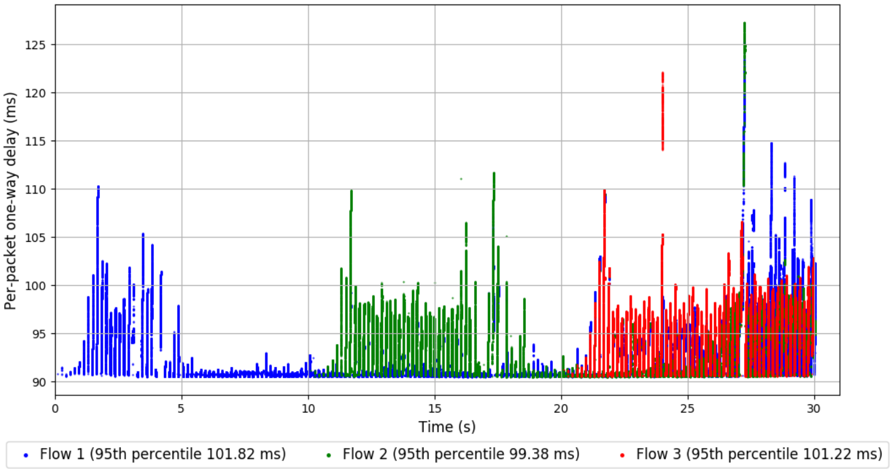
```
Run 7: Statistics of TCP Cubic

Start at: 2017-08-31 16:10:13
End at: 2017-08-31 16:10:43

# Below is generated by plot.py at 2017-08-31 18:36:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 173.22 Mbit/s
95th percentile per-packet one-way delay: 101.180 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 81.32 Mbit/s
95th percentile per-packet one-way delay: 101.819 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 78.05 Mbit/s
95th percentile per-packet one-way delay: 99.384 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 121.12 Mbit/s
95th percentile per-packet one-way delay: 101.221 ms
Loss rate: 0.00%
```

Run 7: Report of TCP Cubic — Data Link



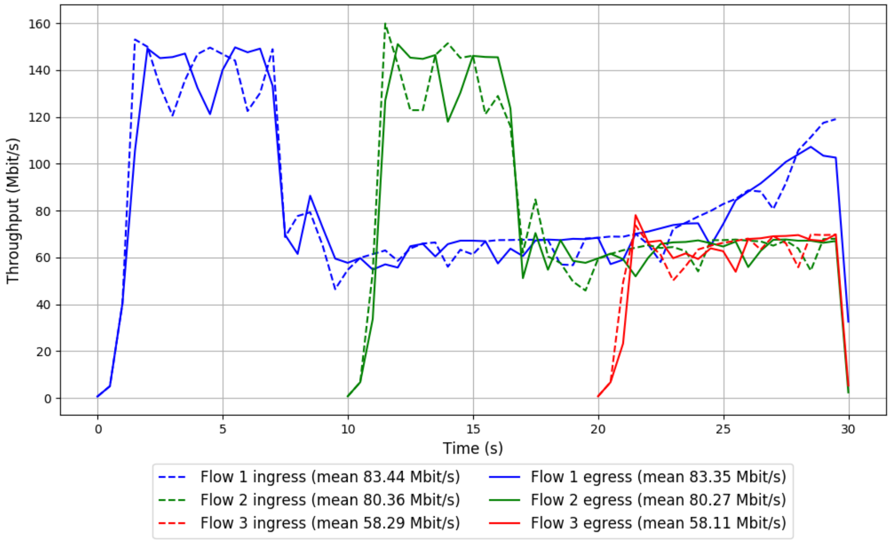


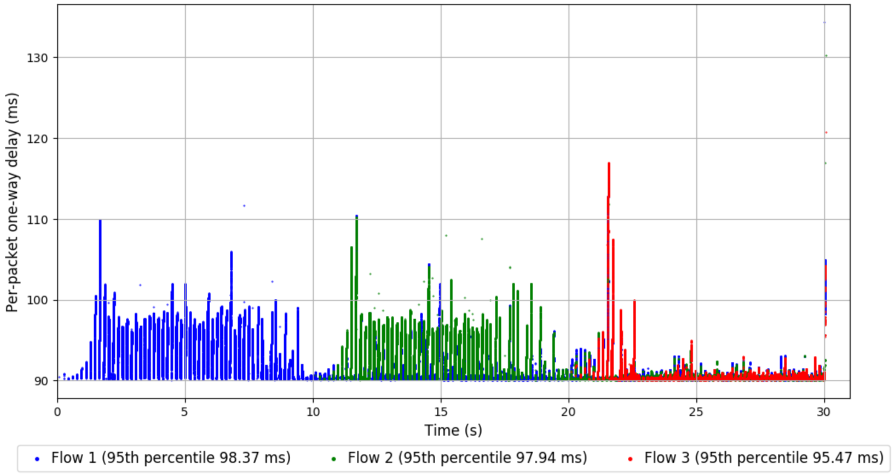
```
Run 8: Statistics of TCP Cubic

Start at: 2017-08-31 16:23:12
End at: 2017-08-31 16:23:42

# Below is generated by plot.py at 2017-08-31 18:36:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 156.04 Mbit/s
95th percentile per-packet one-way delay: 98.128 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 83.35 Mbit/s
95th percentile per-packet one-way delay: 98.367 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 80.27 Mbit/s
95th percentile per-packet one-way delay: 97.937 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 58.11 Mbit/s
95th percentile per-packet one-way delay: 95.472 ms
Loss rate: 0.01%
```

Run 8: Report of TCP Cubic — Data Link



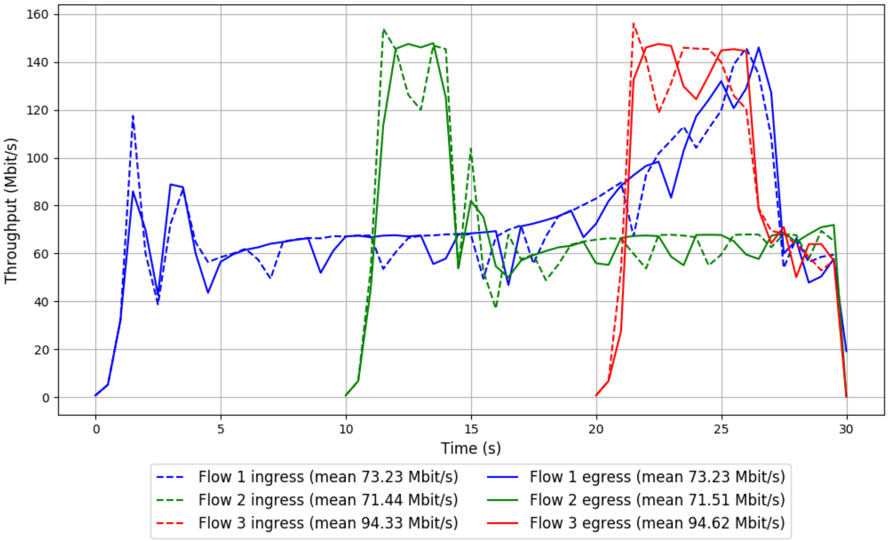


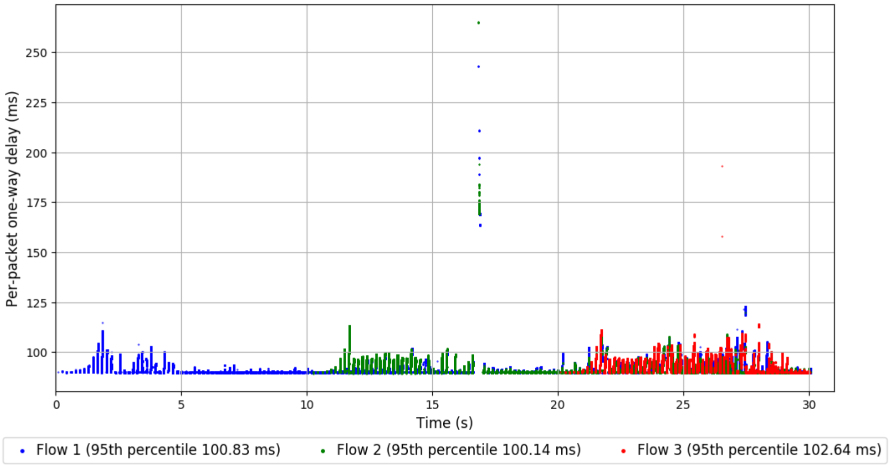
```
Run 9: Statistics of TCP Cubic

Start at: 2017-08-31 16:36:11
End at: 2017-08-31 16:36:41

# Below is generated by plot.py at 2017-08-31 18:36:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 152.22 Mbit/s
95th percentile per-packet one-way delay: 101.326 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 73.23 Mbit/s
95th percentile per-packet one-way delay: 100.829 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 71.51 Mbit/s
95th percentile per-packet one-way delay: 100.137 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 94.62 Mbit/s
95th percentile per-packet one-way delay: 102.643 ms
Loss rate: 0.00%
```

Run 9: Report of TCP Cubic — Data Link



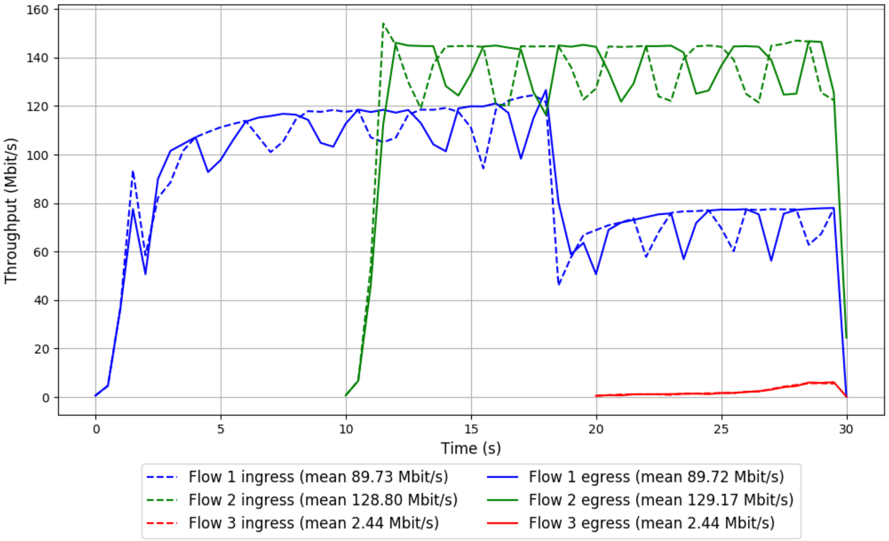


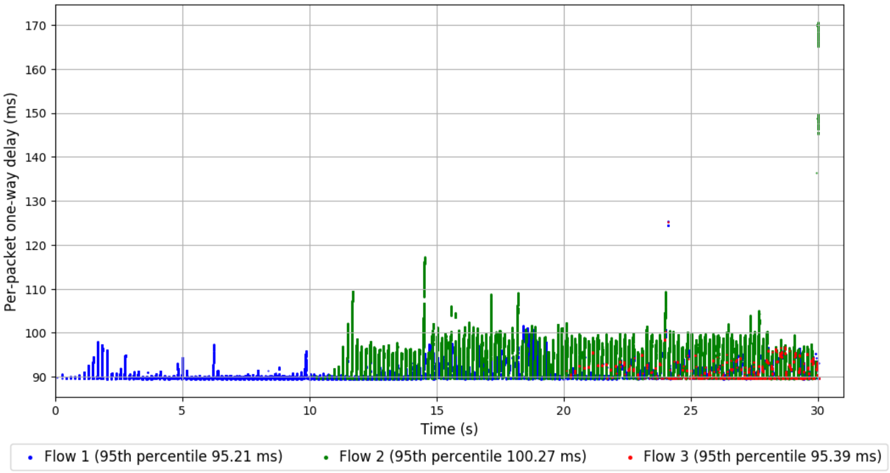
```
Run 10: Statistics of TCP Cubic

Start at: 2017-08-31 16:49:03
End at: 2017-08-31 16:49:33

# Below is generated by plot.py at 2017-08-31 18:37:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 176.39 Mbit/s
95th percentile per-packet one-way delay: 99.142 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 89.72 Mbit/s
95th percentile per-packet one-way delay: 95.206 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 129.17 Mbit/s
95th percentile per-packet one-way delay: 100.273 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.44 Mbit/s
95th percentile per-packet one-way delay: 95.393 ms
Loss rate: 0.10%
```

Run 10: Report of TCP Cubic — Data Link



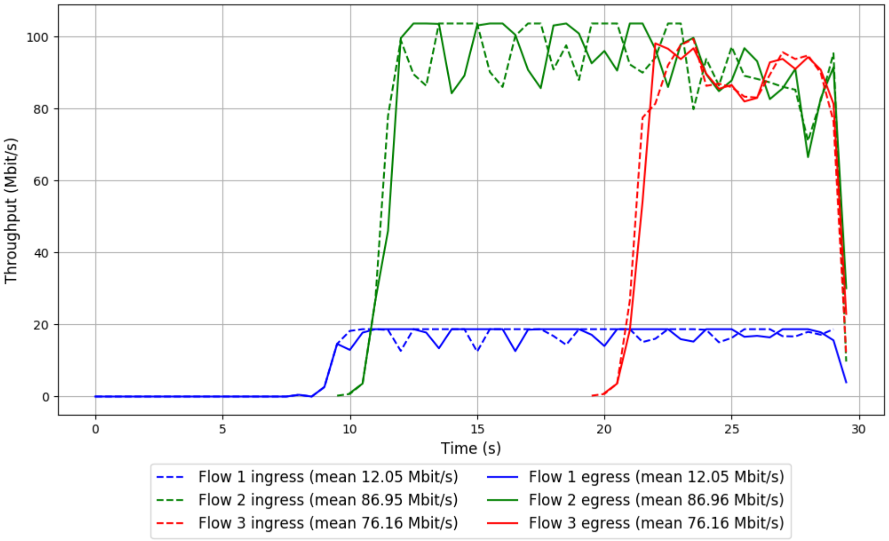


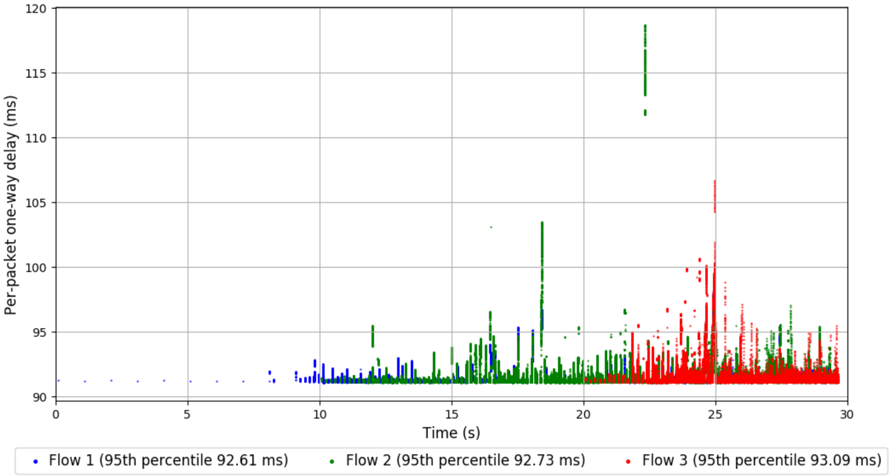
```
Run 1: Statistics of Indigo

Start at: 2017-08-31 14:44:05
End at: 2017-08-31 14:44:35

# Below is generated by plot.py at 2017-08-31 18:37:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.28 Mbit/s
95th percentile per-packet one-way delay: 92.802 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.05 Mbit/s
95th percentile per-packet one-way delay: 92.610 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 86.96 Mbit/s
95th percentile per-packet one-way delay: 92.729 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 76.16 Mbit/s
95th percentile per-packet one-way delay: 93.088 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link



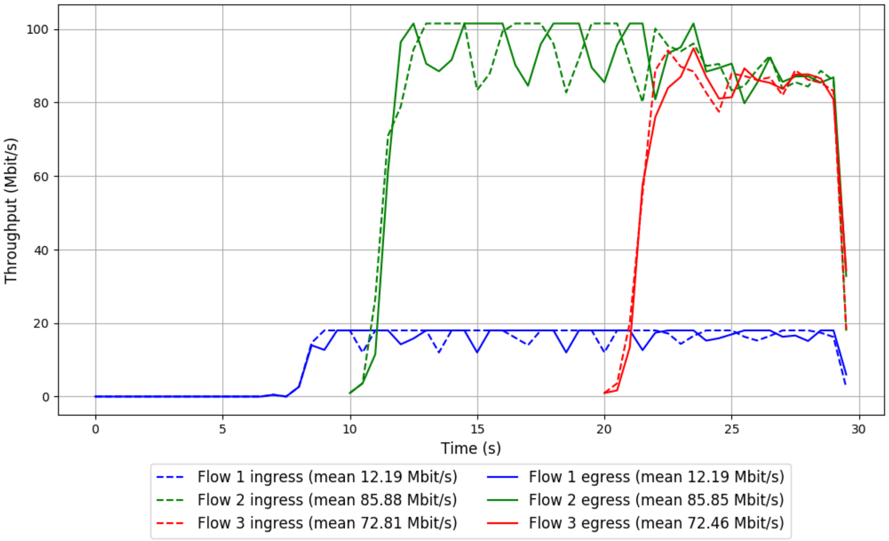


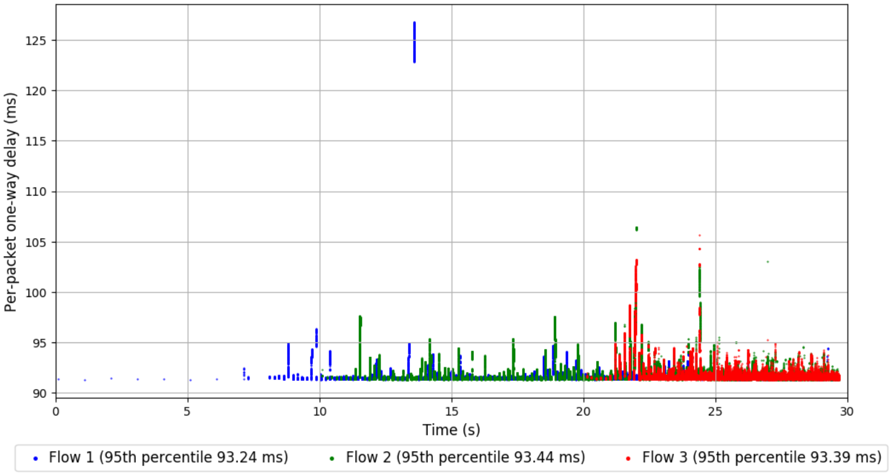
```
Run 2: Statistics of Indigo

Start at: 2017-08-31 14:57:44
End at: 2017-08-31 14:58:14

# Below is generated by plot.py at 2017-08-31 18:37:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.37 Mbit/s
95th percentile per-packet one-way delay: 93.401 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 12.19 Mbit/s
95th percentile per-packet one-way delay: 93.237 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 85.85 Mbit/s
95th percentile per-packet one-way delay: 93.444 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 72.46 Mbit/s
95th percentile per-packet one-way delay: 93.393 ms
Loss rate: 0.48%
```

Run 2: Report of Indigo — Data Link



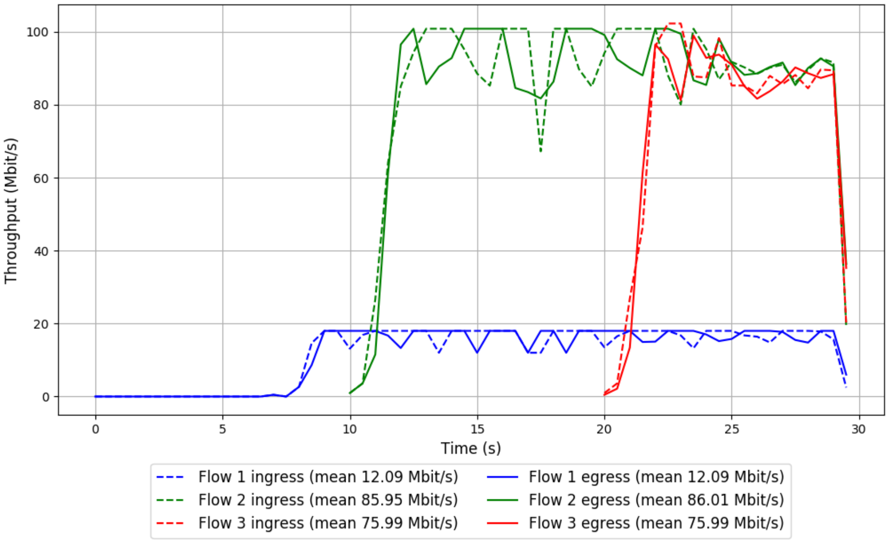


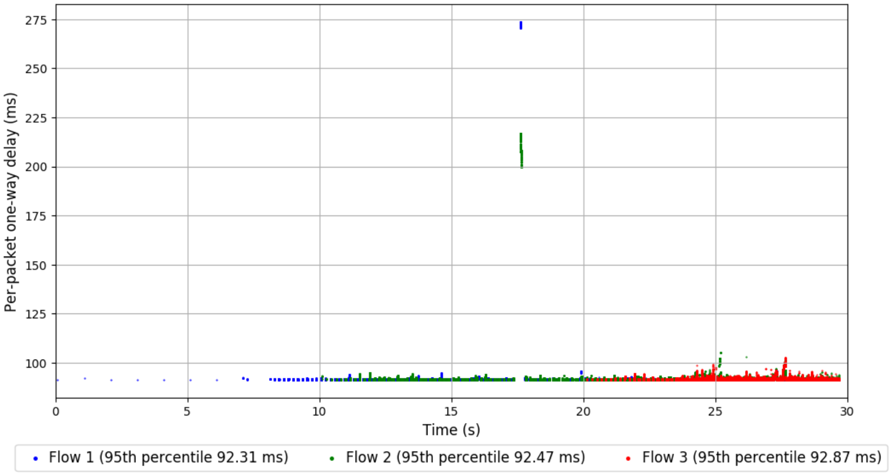
```
Run 3: Statistics of Indigo

Start at: 2017-08-31 15:10:40
End at: 2017-08-31 15:11:10

# Below is generated by plot.py at 2017-08-31 18:37:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.46 Mbit/s
95th percentile per-packet one-way delay: 92.556 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.09 Mbit/s
95th percentile per-packet one-way delay: 92.312 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 86.01 Mbit/s
95th percentile per-packet one-way delay: 92.468 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 75.99 Mbit/s
95th percentile per-packet one-way delay: 92.872 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo — Data Link



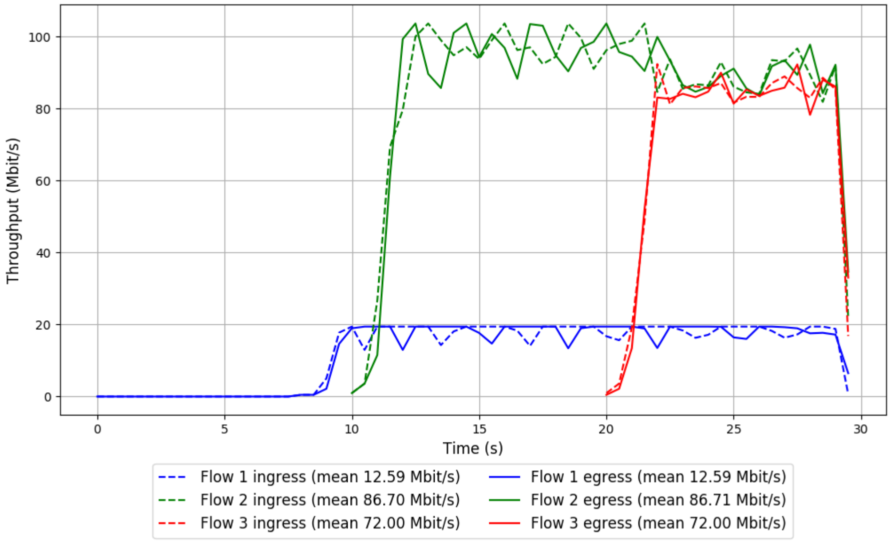


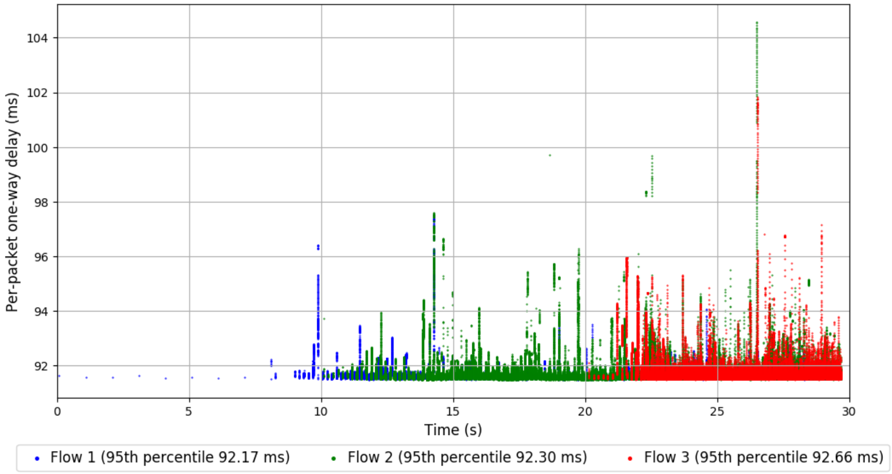
```
Run 4: Statistics of Indigo

Start at: 2017-08-31 15:24:26
End at: 2017-08-31 15:24:56

# Below is generated by plot.py at 2017-08-31 18:37:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.14 Mbit/s
95th percentile per-packet one-way delay: 92.352 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.59 Mbit/s
95th percentile per-packet one-way delay: 92.174 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 86.71 Mbit/s
95th percentile per-packet one-way delay: 92.304 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 72.00 Mbit/s
95th percentile per-packet one-way delay: 92.656 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo — Data Link



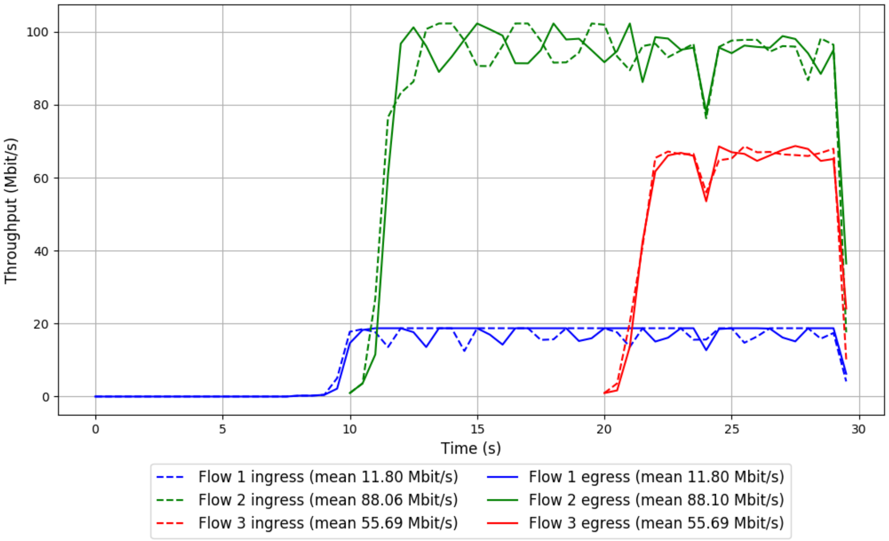


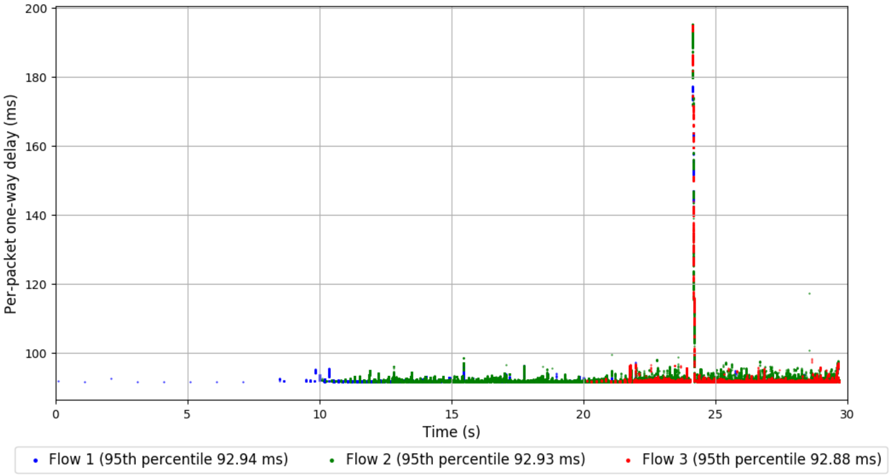
```
Run 5: Statistics of Indigo

Start at: 2017-08-31 15:38:03
End at: 2017-08-31 15:38:33

# Below is generated by plot.py at 2017-08-31 18:37:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.07 Mbit/s
95th percentile per-packet one-way delay: 92.929 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.80 Mbit/s
95th percentile per-packet one-way delay: 92.935 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 88.10 Mbit/s
95th percentile per-packet one-way delay: 92.932 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 55.69 Mbit/s
95th percentile per-packet one-way delay: 92.876 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo — Data Link



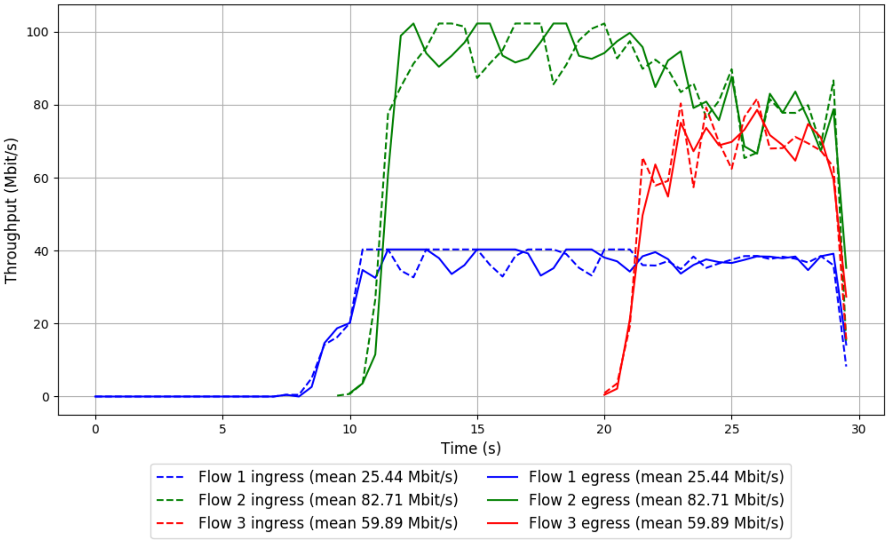


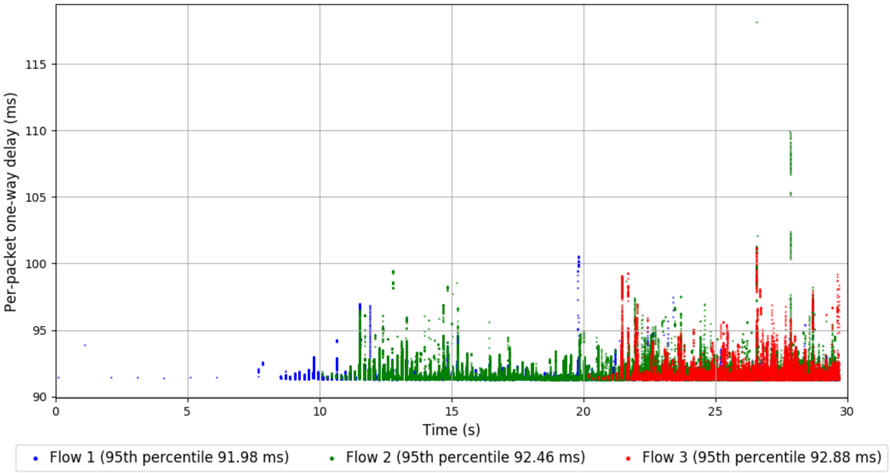
```
Run 6: Statistics of Indigo

Start at: 2017-08-31 15:50:49
End at: 2017-08-31 15:51:19

# Below is generated by plot.py at 2017-08-31 18:38:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.39 Mbit/s
95th percentile per-packet one-way delay: 92.432 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 25.44 Mbit/s
95th percentile per-packet one-way delay: 91.985 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 82.71 Mbit/s
95th percentile per-packet one-way delay: 92.463 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 59.89 Mbit/s
95th percentile per-packet one-way delay: 92.881 ms
Loss rate: 0.00%
```

Run 6: Report of Indigo — Data Link



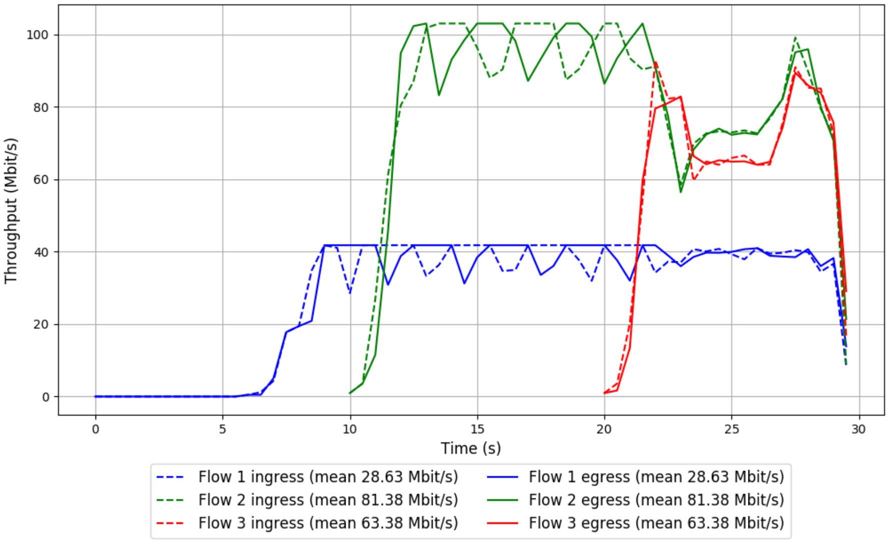


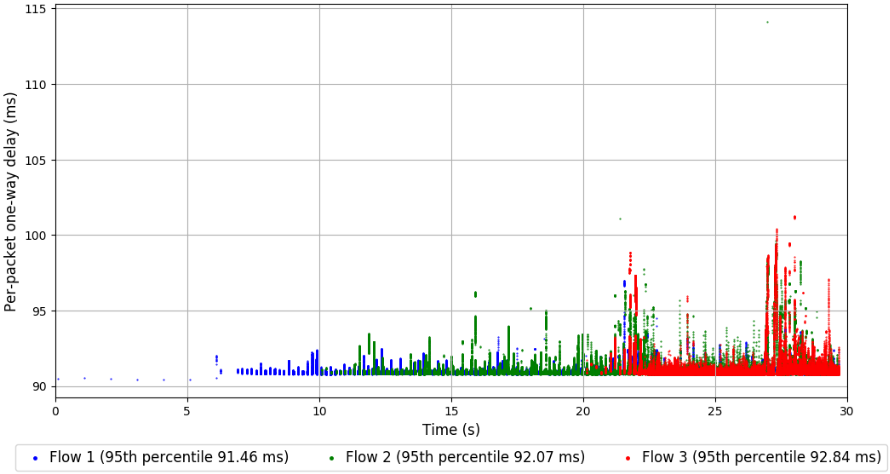
```
Run 7: Statistics of Indigo

Start at: 2017-08-31 16:03:56
End at: 2017-08-31 16:04:26

# Below is generated by plot.py at 2017-08-31 18:38:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 102.92 Mbit/s
95th percentile per-packet one-way delay: 91.983 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 28.63 Mbit/s
95th percentile per-packet one-way delay: 91.458 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 81.38 Mbit/s
95th percentile per-packet one-way delay: 92.067 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 63.38 Mbit/s
95th percentile per-packet one-way delay: 92.836 ms
Loss rate: 0.00%
```

Run 7: Report of Indigo — Data Link



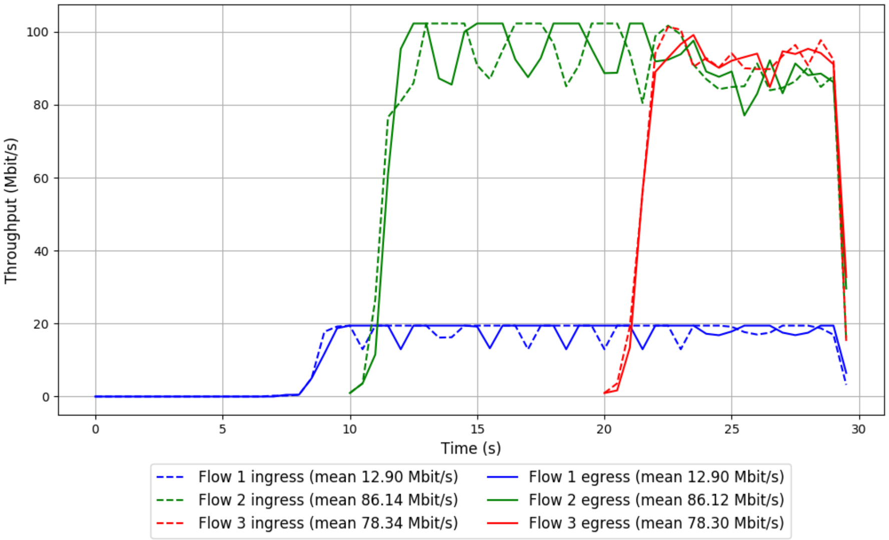


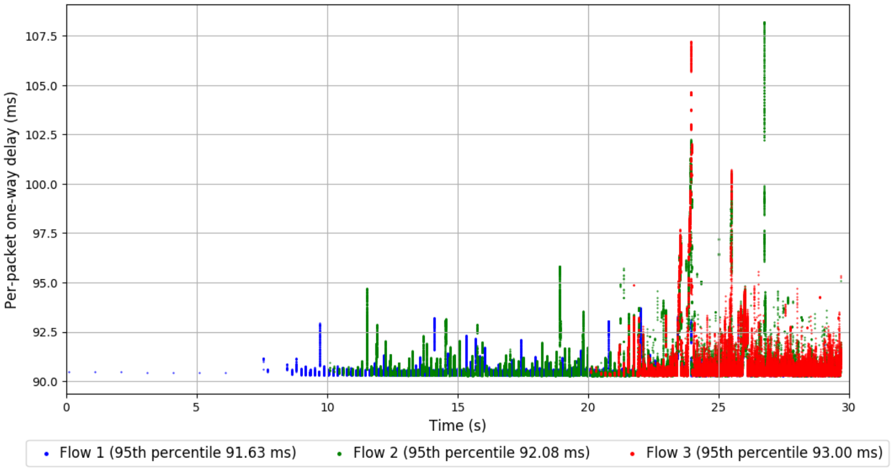
```
Run 8: Statistics of Indigo

Start at: 2017-08-31 16:16:52
End at: 2017-08-31 16:17:22

# Below is generated by plot.py at 2017-08-31 18:38:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.17 Mbit/s
95th percentile per-packet one-way delay: 92.228 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 12.90 Mbit/s
95th percentile per-packet one-way delay: 91.630 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 86.12 Mbit/s
95th percentile per-packet one-way delay: 92.080 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 78.30 Mbit/s
95th percentile per-packet one-way delay: 93.005 ms
Loss rate: 0.01%
```

Run 8: Report of Indigo — Data Link



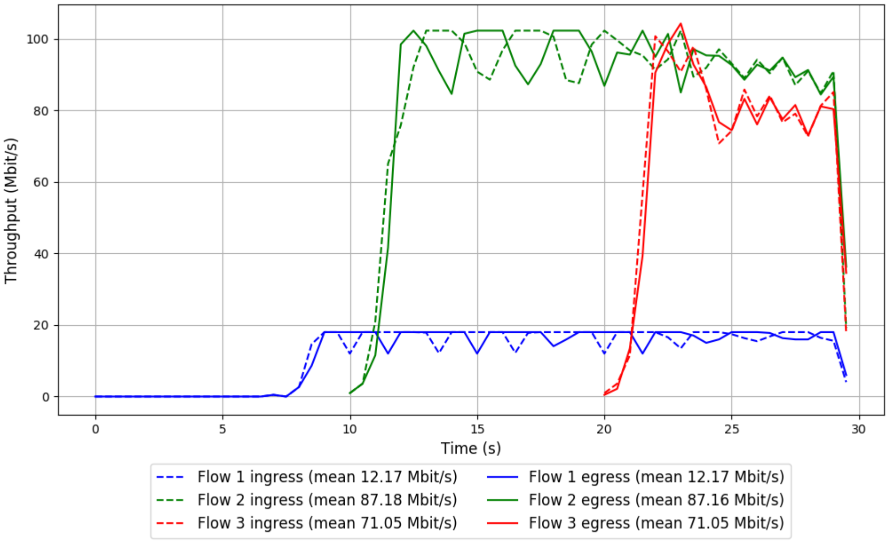


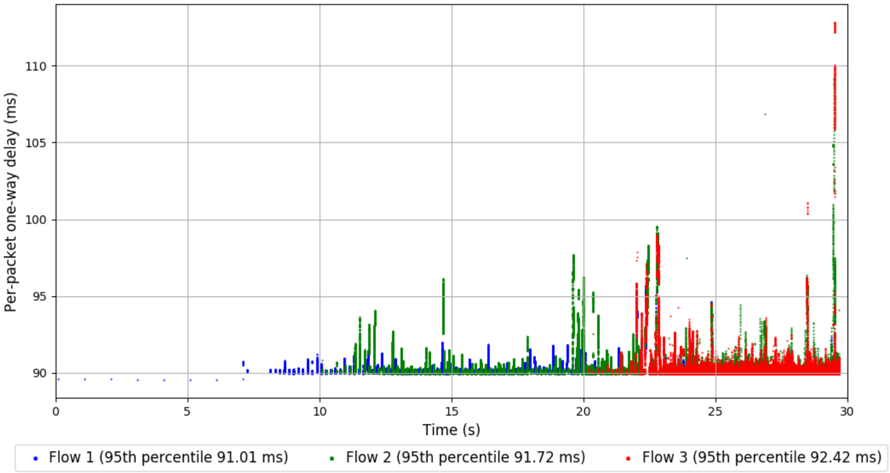
```
Run 9: Statistics of Indigo

Start at: 2017-08-31 16:29:52
End at: 2017-08-31 16:30:22

# Below is generated by plot.py at 2017-08-31 18:38:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.62 Mbit/s
95th percentile per-packet one-way delay: 91.696 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.17 Mbit/s
95th percentile per-packet one-way delay: 91.012 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 87.16 Mbit/s
95th percentile per-packet one-way delay: 91.717 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 71.05 Mbit/s
95th percentile per-packet one-way delay: 92.420 ms
Loss rate: 0.00%
```

Run 9: Report of Indigo — Data Link



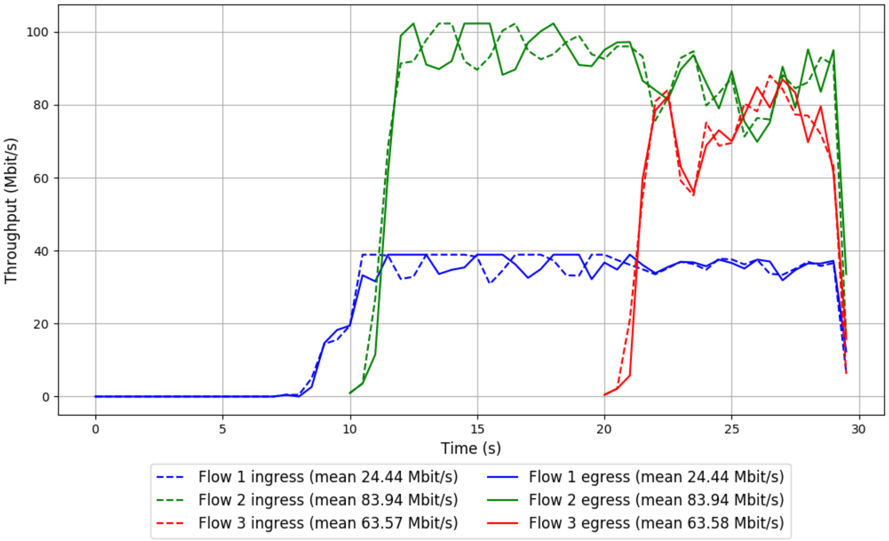


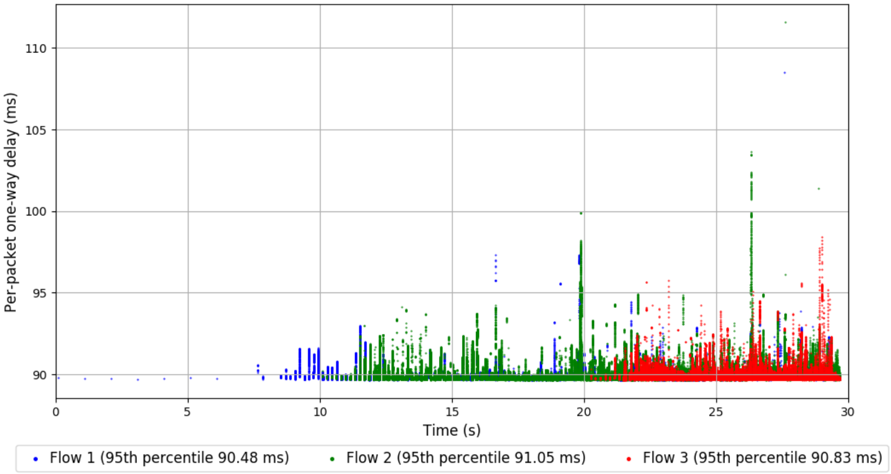
```
Run 10: Statistics of Indigo

Start at: 2017-08-31 16:42:47
End at: 2017-08-31 16:43:17

# Below is generated by plot.py at 2017-08-31 18:38:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.23 Mbit/s
95th percentile per-packet one-way delay: 90.858 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.44 Mbit/s
95th percentile per-packet one-way delay: 90.485 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 83.94 Mbit/s
95th percentile per-packet one-way delay: 91.047 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 63.58 Mbit/s
95th percentile per-packet one-way delay: 90.834 ms
Loss rate: 0.00%
```

Run 10: Report of Indigo — Data Link



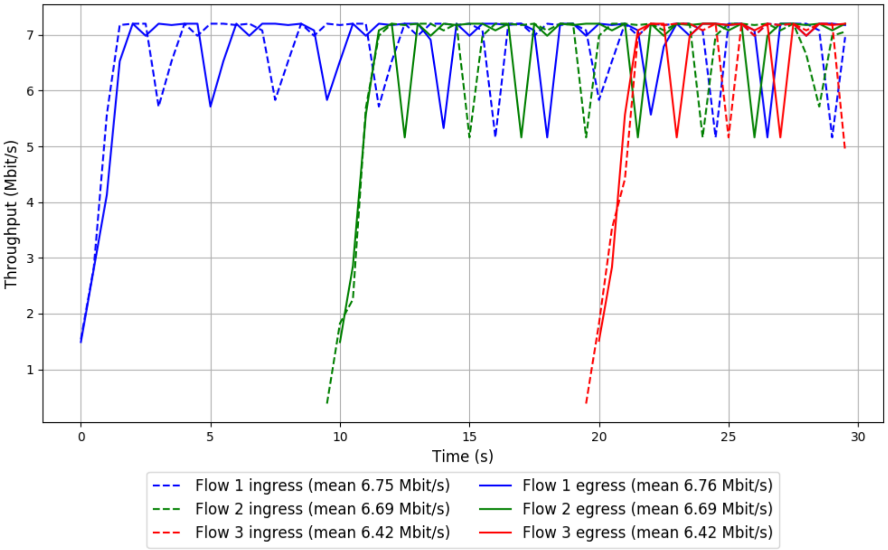


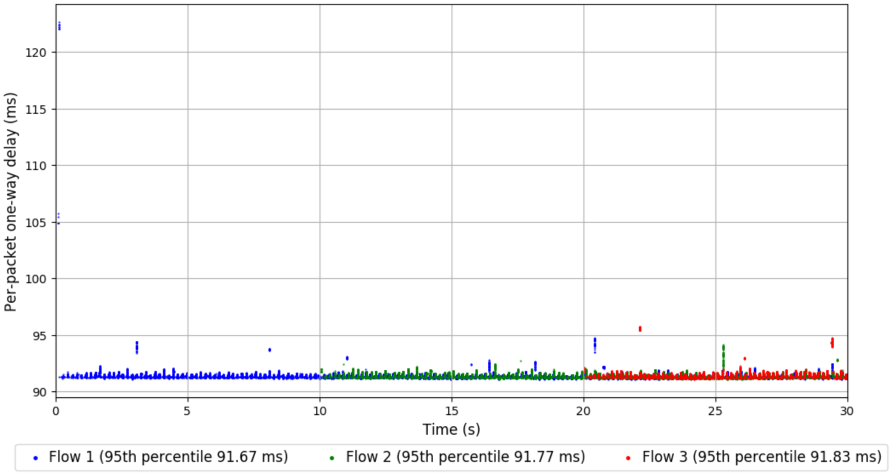
```
Run 1: Statistics of KohoCC

Start at: 2017-08-31 14:43:20
End at: 2017-08-31 14:43:50

# Below is generated by plot.py at 2017-08-31 18:38:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.35 Mbit/s
95th percentile per-packet one-way delay: 91.750 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.76 Mbit/s
95th percentile per-packet one-way delay: 91.670 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.69 Mbit/s
95th percentile per-packet one-way delay: 91.770 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.42 Mbit/s
95th percentile per-packet one-way delay: 91.830 ms
Loss rate: 0.00%
```

Run 1: Report of KohoCC — Data Link



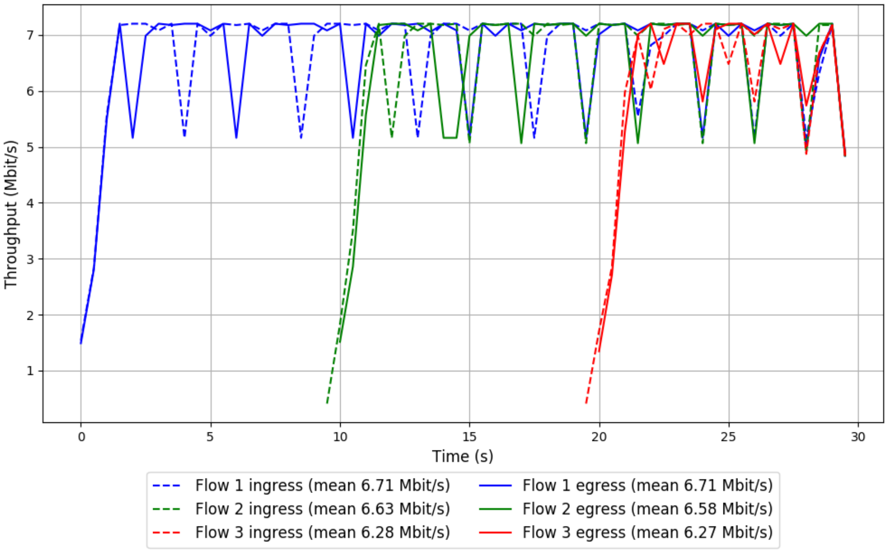


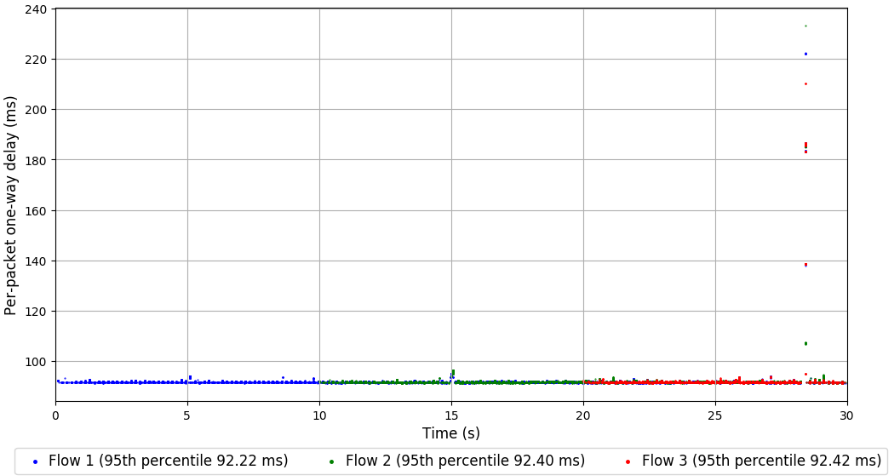
```
Run 2: Statistics of KohoCC

Start at: 2017-08-31 14:56:59
End at: 2017-08-31 14:57:29

# Below is generated by plot.py at 2017-08-31 18:38:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.18 Mbit/s
95th percentile per-packet one-way delay: 92.296 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 6.71 Mbit/s
95th percentile per-packet one-way delay: 92.220 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 6.58 Mbit/s
95th percentile per-packet one-way delay: 92.402 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 6.27 Mbit/s
95th percentile per-packet one-way delay: 92.420 ms
Loss rate: 0.10%
```

Run 2: Report of KohoCC — Data Link



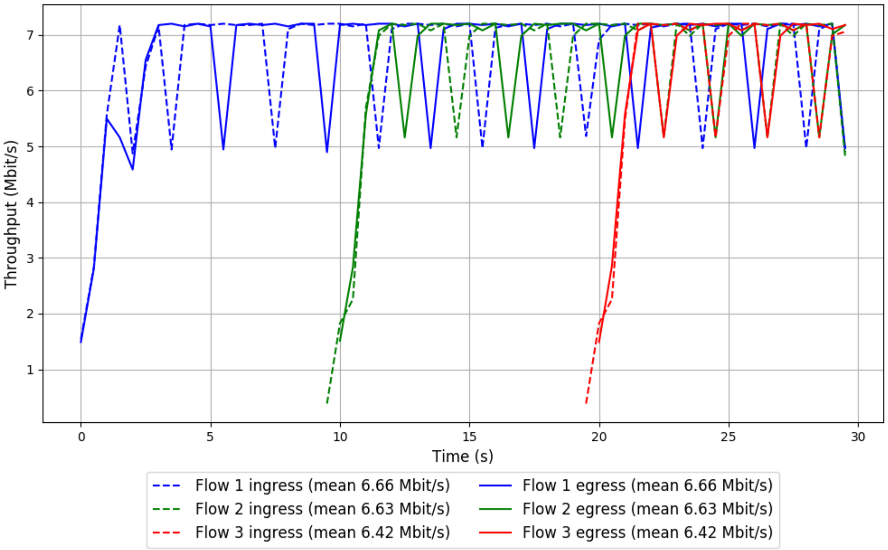


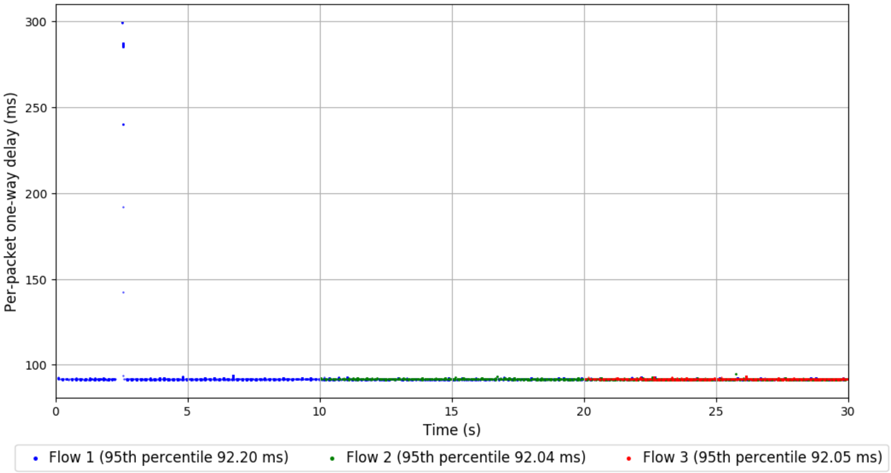
```
Run 3: Statistics of KohoCC

Start at: 2017-08-31 15:09:55
End at: 2017-08-31 15:10:25

# Below is generated by plot.py at 2017-08-31 18:38:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.22 Mbit/s
95th percentile per-packet one-way delay: 92.104 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.66 Mbit/s
95th percentile per-packet one-way delay: 92.196 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.63 Mbit/s
95th percentile per-packet one-way delay: 92.039 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.42 Mbit/s
95th percentile per-packet one-way delay: 92.047 ms
Loss rate: 0.00%
```

Run 3: Report of KohoCC — Data Link



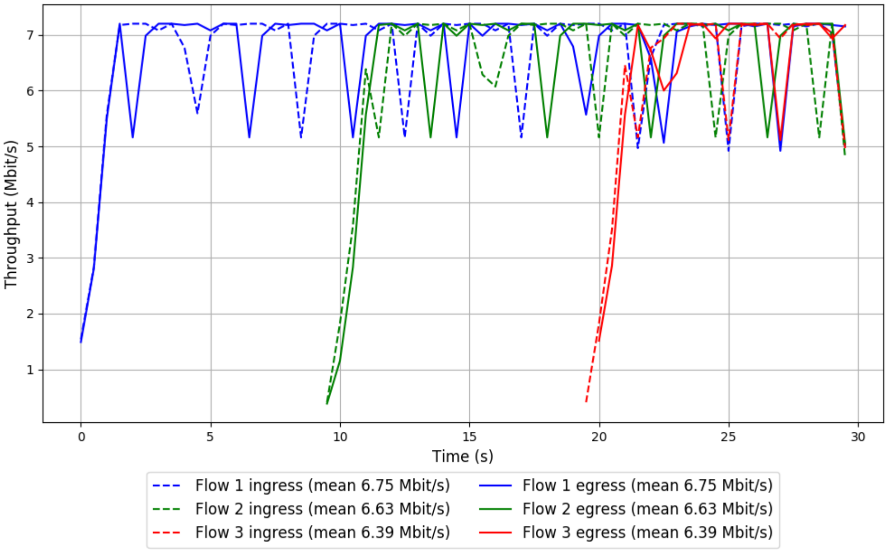


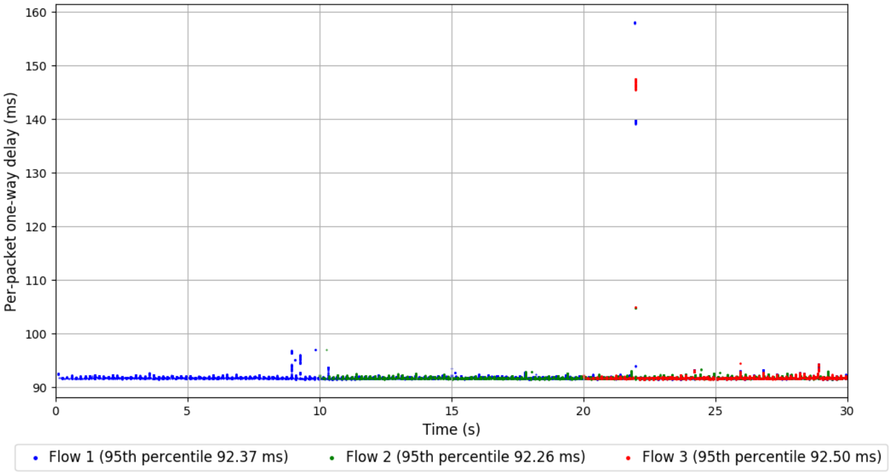
```
Run 4: Statistics of KohoCC

Start at: 2017-08-31 15:23:39
End at: 2017-08-31 15:24:09

# Below is generated by plot.py at 2017-08-31 18:38:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.31 Mbit/s
95th percentile per-packet one-way delay: 92.315 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.75 Mbit/s
95th percentile per-packet one-way delay: 92.372 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.63 Mbit/s
95th percentile per-packet one-way delay: 92.260 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.39 Mbit/s
95th percentile per-packet one-way delay: 92.495 ms
Loss rate: 0.00%
```

Run 4: Report of KohoCC — Data Link



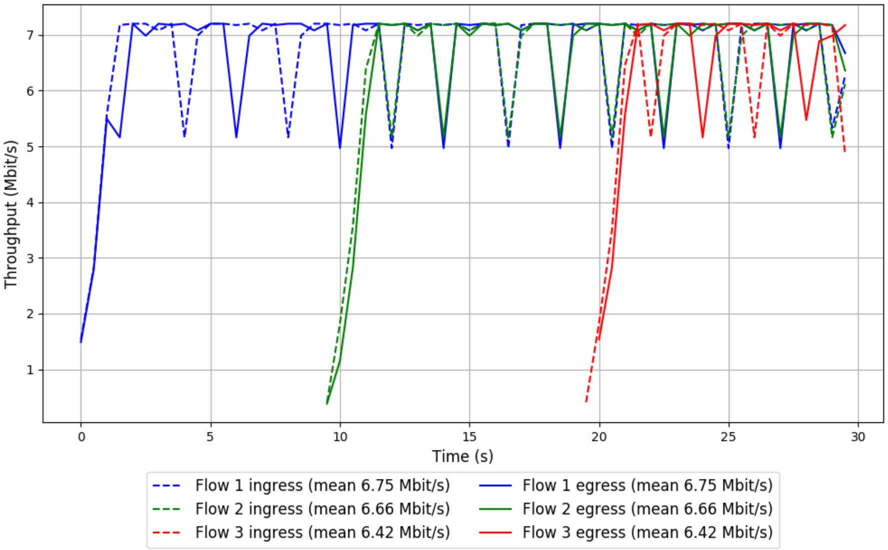


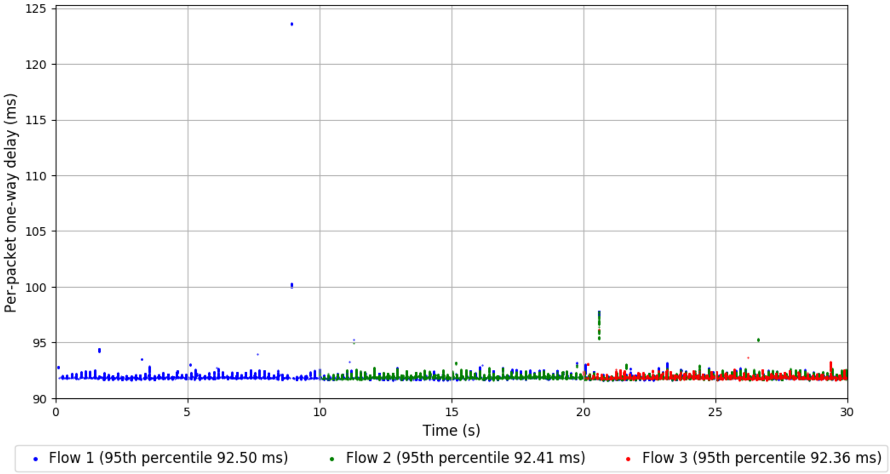
```
Run 5: Statistics of KohoCC

Start at: 2017-08-31 15:37:18
End at: 2017-08-31 15:37:49

# Below is generated by plot.py at 2017-08-31 18:38:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.34 Mbit/s
95th percentile per-packet one-way delay: 92.445 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.75 Mbit/s
95th percentile per-packet one-way delay: 92.501 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.66 Mbit/s
95th percentile per-packet one-way delay: 92.405 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.42 Mbit/s
95th percentile per-packet one-way delay: 92.359 ms
Loss rate: 0.00%
```

Run 5: Report of KohoCC — Data Link



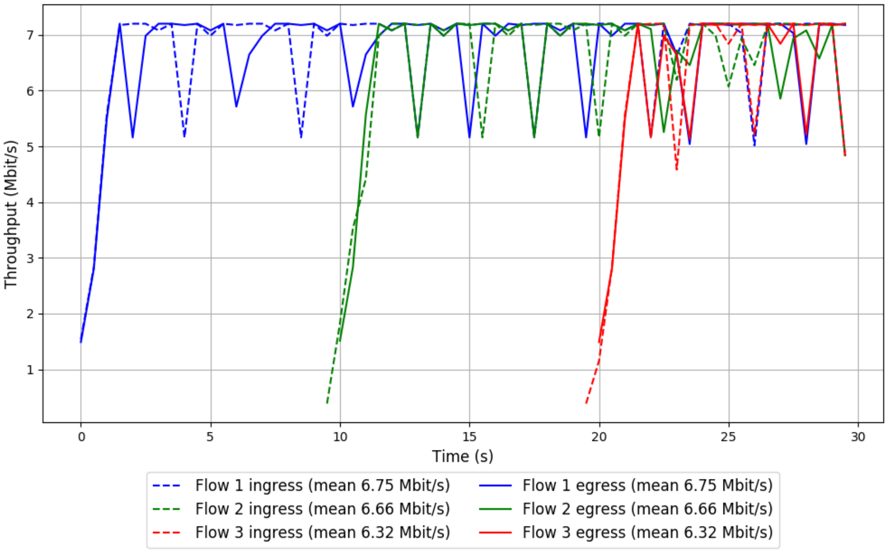


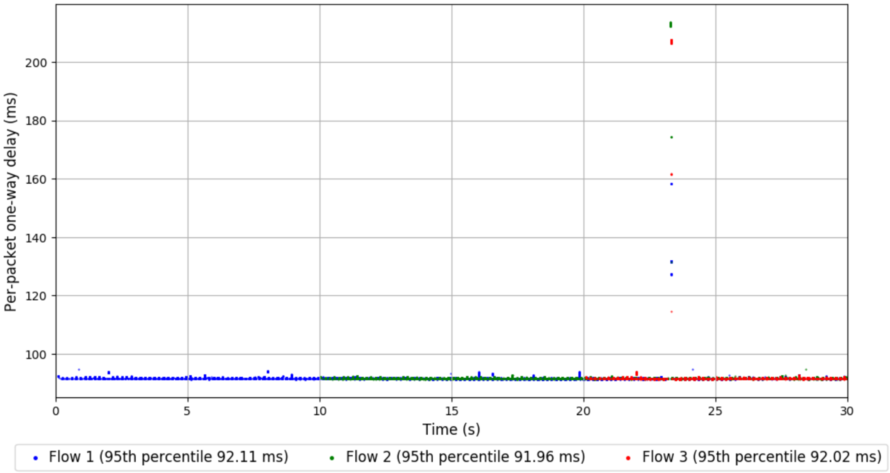
```
Run 6: Statistics of KohoCC

Start at: 2017-08-31 15:50:04
End at: 2017-08-31 15:50:34

# Below is generated by plot.py at 2017-08-31 18:38:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.28 Mbit/s
95th percentile per-packet one-way delay: 92.036 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.75 Mbit/s
95th percentile per-packet one-way delay: 92.107 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.66 Mbit/s
95th percentile per-packet one-way delay: 91.958 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.32 Mbit/s
95th percentile per-packet one-way delay: 92.018 ms
Loss rate: 0.00%
```

Run 6: Report of KohoCC — Data Link



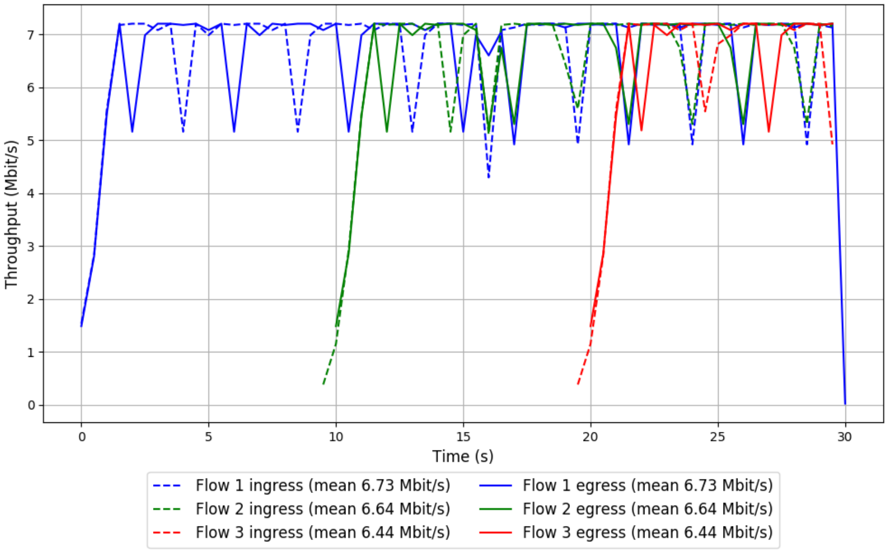


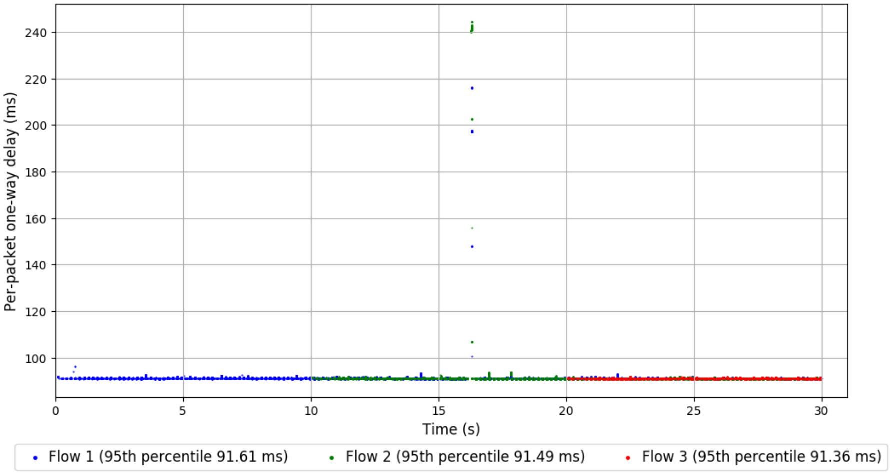
```
Run 7: Statistics of KohoCC

Start at: 2017-08-31 16:03:11
End at: 2017-08-31 16:03:41

# Below is generated by plot.py at 2017-08-31 18:38:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.28 Mbit/s
95th percentile per-packet one-way delay: 91.557 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.73 Mbit/s
95th percentile per-packet one-way delay: 91.611 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.64 Mbit/s
95th percentile per-packet one-way delay: 91.490 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.44 Mbit/s
95th percentile per-packet one-way delay: 91.358 ms
Loss rate: 0.00%
```

Run 7: Report of KohoCC — Data Link



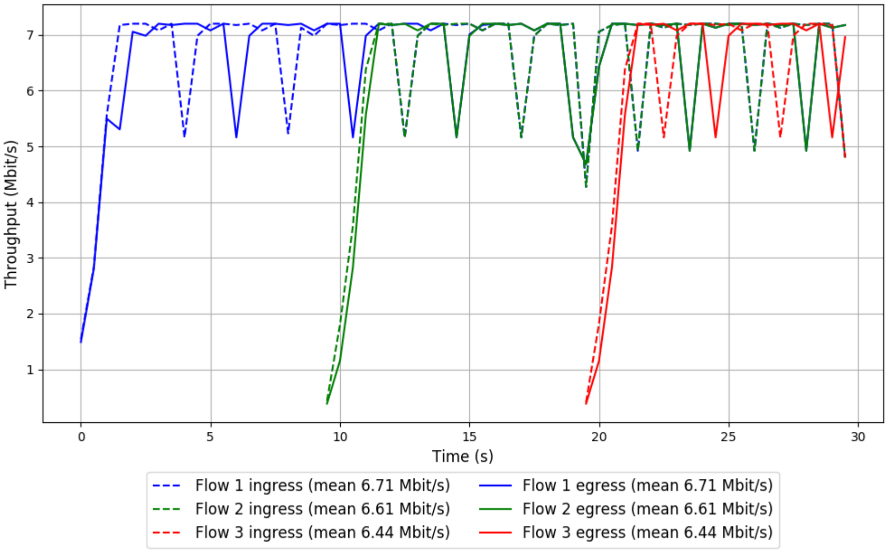


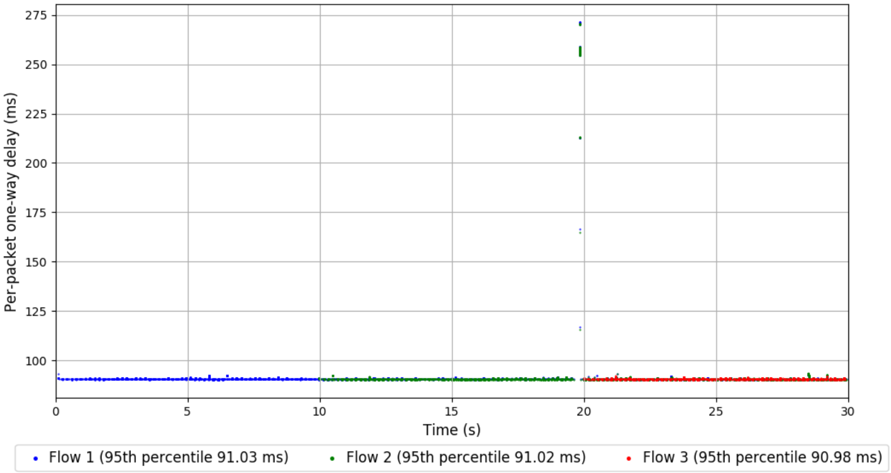
```
Run 8: Statistics of KohoCC

Start at: 2017-08-31 16:16:08
End at: 2017-08-31 16:16:38

# Below is generated by plot.py at 2017-08-31 18:38:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.26 Mbit/s
95th percentile per-packet one-way delay: 91.022 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.71 Mbit/s
95th percentile per-packet one-way delay: 91.035 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.61 Mbit/s
95th percentile per-packet one-way delay: 91.017 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.44 Mbit/s
95th percentile per-packet one-way delay: 90.982 ms
Loss rate: 0.00%
```

Run 8: Report of KohoCC — Data Link



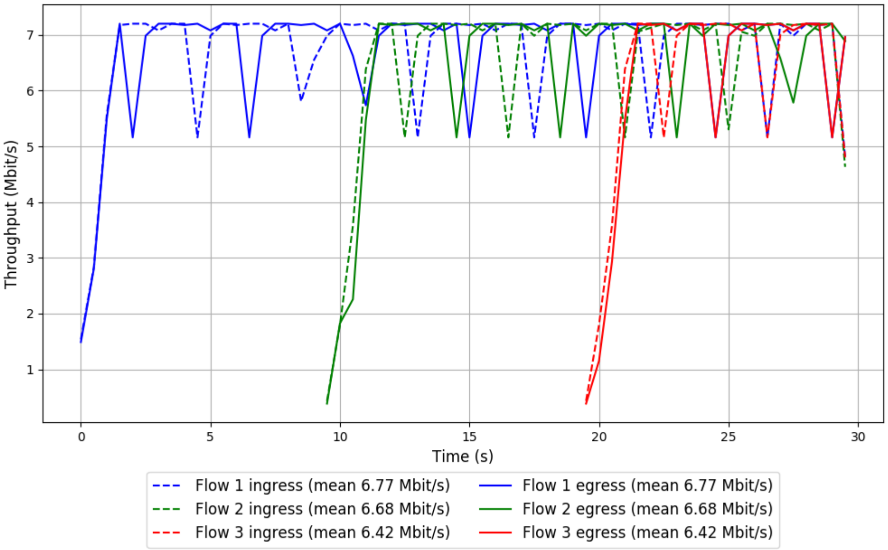


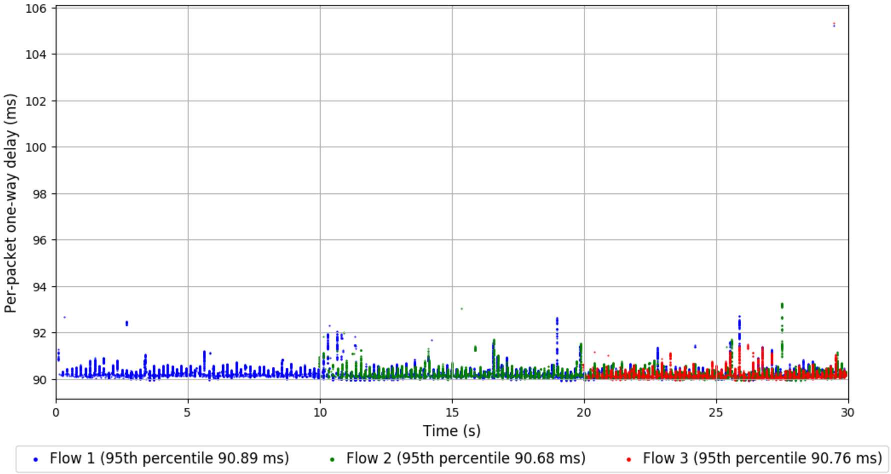
```
Run 9: Statistics of KohoCC

Start at: 2017-08-31 16:29:07
End at: 2017-08-31 16:29:37

# Below is generated by plot.py at 2017-08-31 18:38:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.36 Mbit/s
95th percentile per-packet one-way delay: 90.818 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.77 Mbit/s
95th percentile per-packet one-way delay: 90.893 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.68 Mbit/s
95th percentile per-packet one-way delay: 90.684 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.42 Mbit/s
95th percentile per-packet one-way delay: 90.760 ms
Loss rate: 0.00%
```

Run 9: Report of KohoCC — Data Link



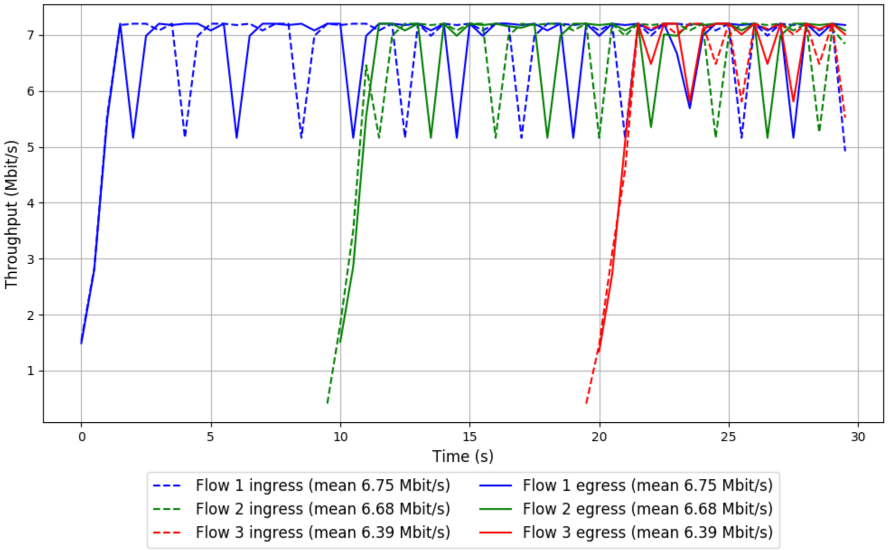


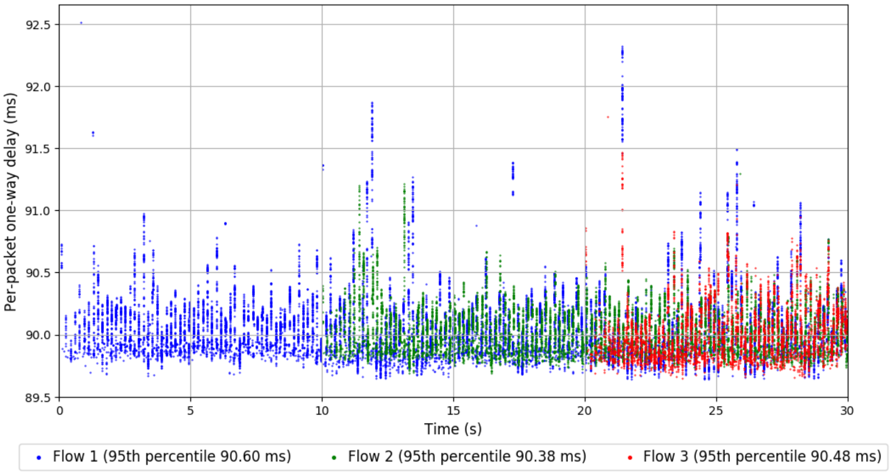
```
Run 10: Statistics of KohoCC

Start at: 2017-08-31 16:42:02
End at: 2017-08-31 16:42:32

# Below is generated by plot.py at 2017-08-31 18:38:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.34 Mbit/s
95th percentile per-packet one-way delay: 90.498 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 6.75 Mbit/s
95th percentile per-packet one-way delay: 90.604 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.68 Mbit/s
95th percentile per-packet one-way delay: 90.377 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.39 Mbit/s
95th percentile per-packet one-way delay: 90.477 ms
Loss rate: 0.09%
```

Run 10: Report of KohoCC — Data Link



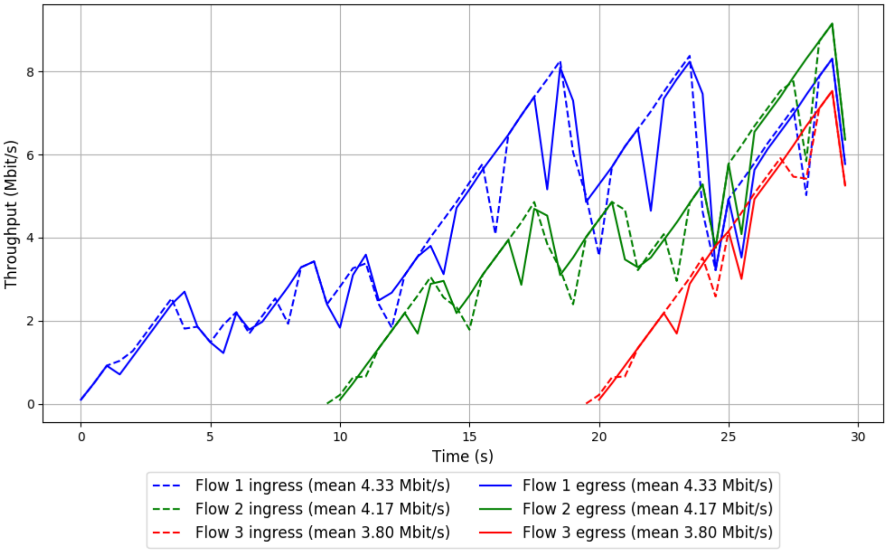


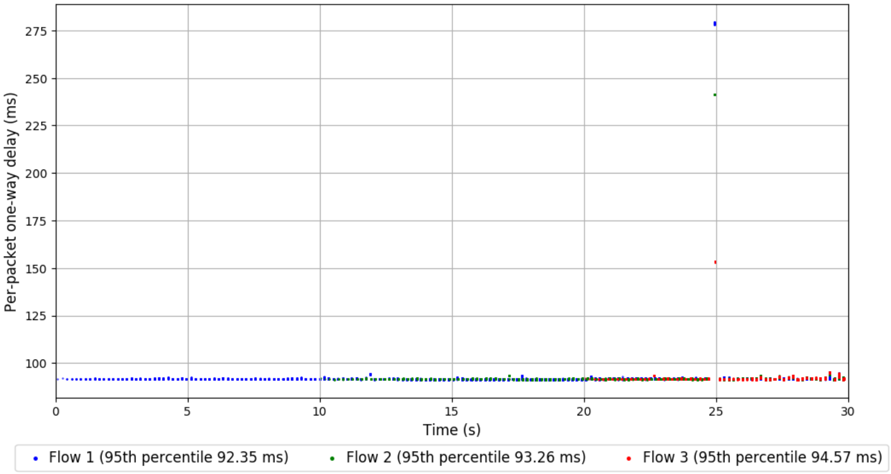
```
Run 1: Statistics of LEDBAT

Start at: 2017-08-31 14:49:33
End at: 2017-08-31 14:50:03

# Below is generated by plot.py at 2017-08-31 18:38:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.36 Mbit/s
95th percentile per-packet one-way delay: 93.080 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.33 Mbit/s
95th percentile per-packet one-way delay: 92.354 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.17 Mbit/s
95th percentile per-packet one-way delay: 93.263 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.80 Mbit/s
95th percentile per-packet one-way delay: 94.572 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link



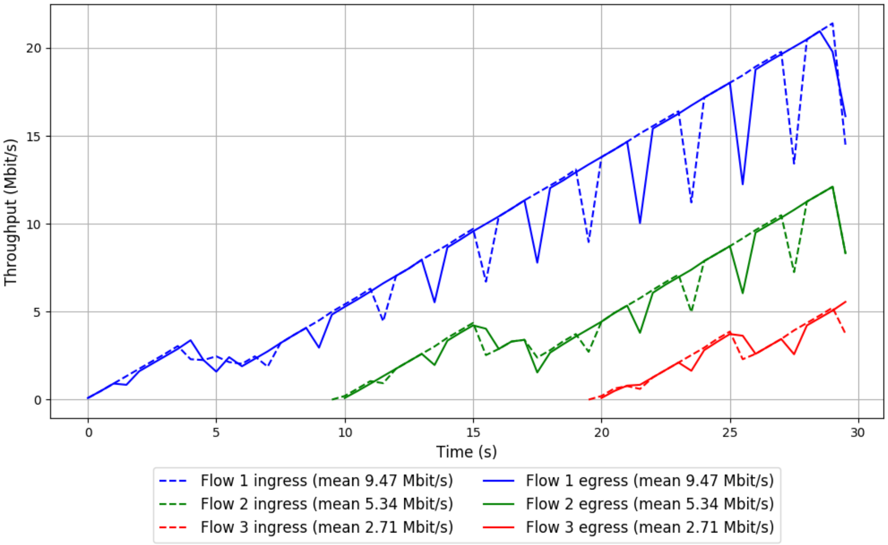


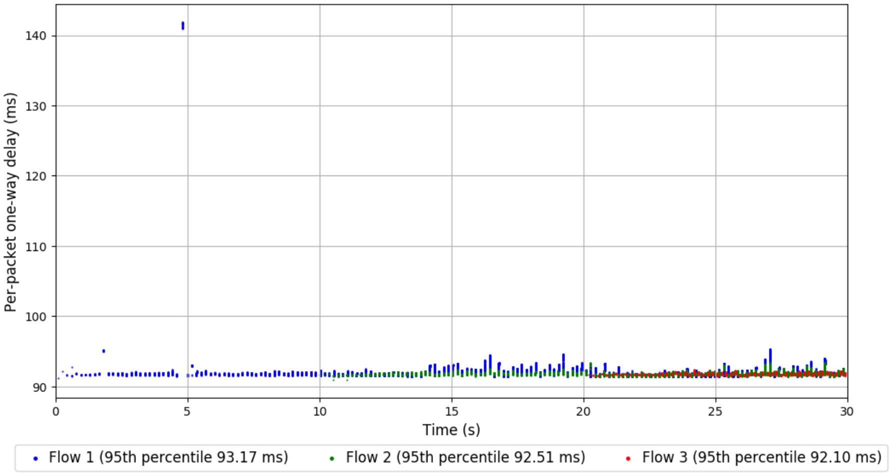
```
Run 2: Statistics of LEDBAT

Start at: 2017-08-31 15:02:23
End at: 2017-08-31 15:02:53

# Below is generated by plot.py at 2017-08-31 18:38:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.90 Mbit/s
95th percentile per-packet one-way delay: 92.957 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.47 Mbit/s
95th percentile per-packet one-way delay: 93.166 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.34 Mbit/s
95th percentile per-packet one-way delay: 92.507 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.71 Mbit/s
95th percentile per-packet one-way delay: 92.096 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



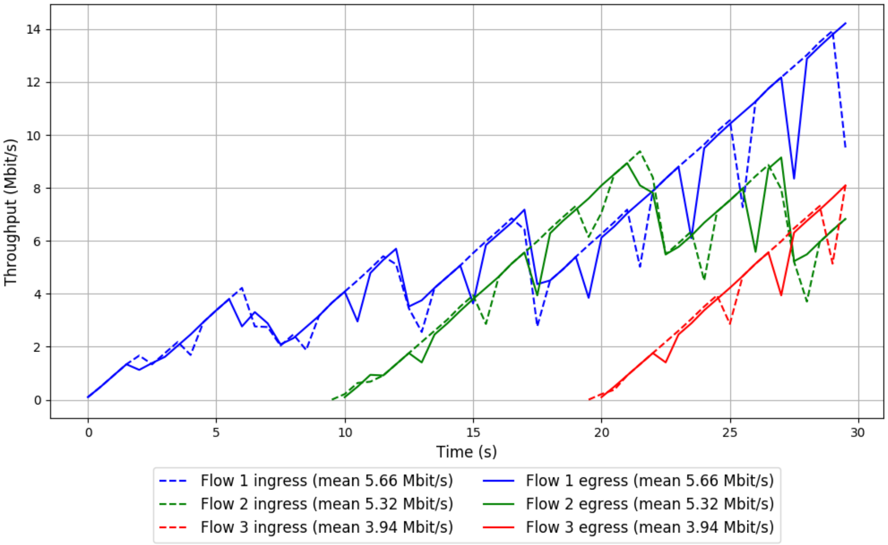


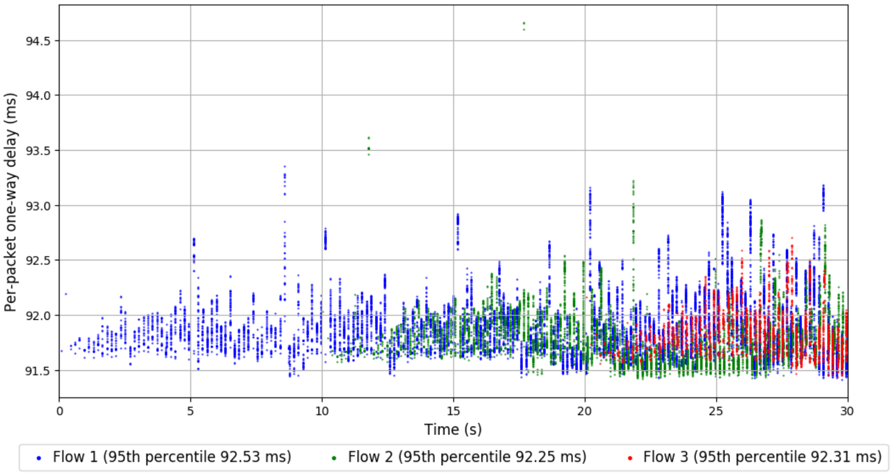
```
Run 3: Statistics of LEDBAT

Start at: 2017-08-31 15:15:23
End at: 2017-08-31 15:15:53

# Below is generated by plot.py at 2017-08-31 18:38:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.51 Mbit/s
95th percentile per-packet one-way delay: 92.409 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.66 Mbit/s
95th percentile per-packet one-way delay: 92.531 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.32 Mbit/s
95th percentile per-packet one-way delay: 92.247 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.94 Mbit/s
95th percentile per-packet one-way delay: 92.315 ms
Loss rate: 0.00%
```

Run 3: Report of LEDBAT — Data Link



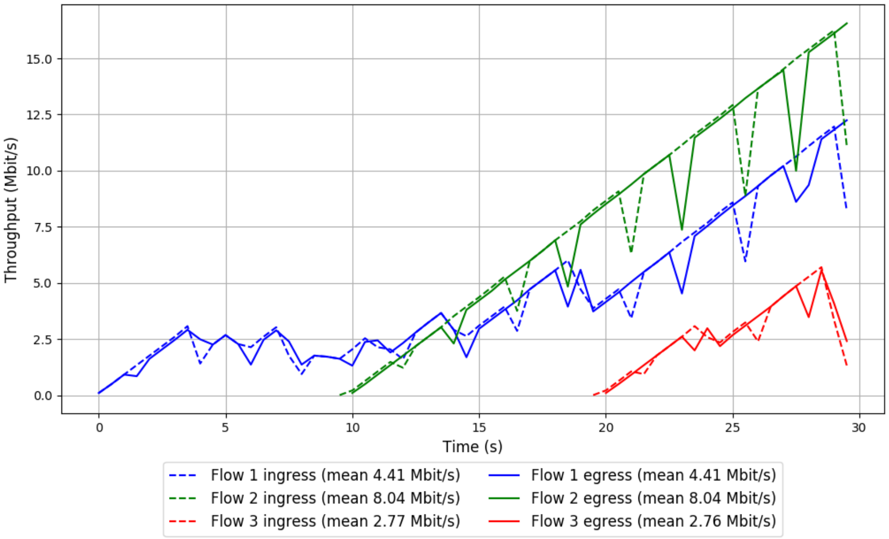


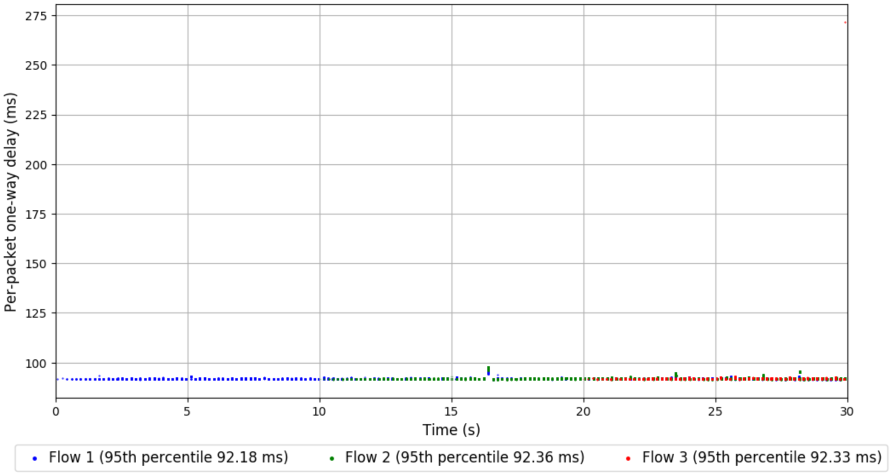
```
Run 4: Statistics of LEDBAT

Start at: 2017-08-31 15:29:43
End at: 2017-08-31 15:30:13

# Below is generated by plot.py at 2017-08-31 18:38:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.69 Mbit/s
95th percentile per-packet one-way delay: 92.267 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 4.41 Mbit/s
95th percentile per-packet one-way delay: 92.176 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.04 Mbit/s
95th percentile per-packet one-way delay: 92.362 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.76 Mbit/s
95th percentile per-packet one-way delay: 92.326 ms
Loss rate: 0.21%
```

Run 4: Report of LEDBAT — Data Link



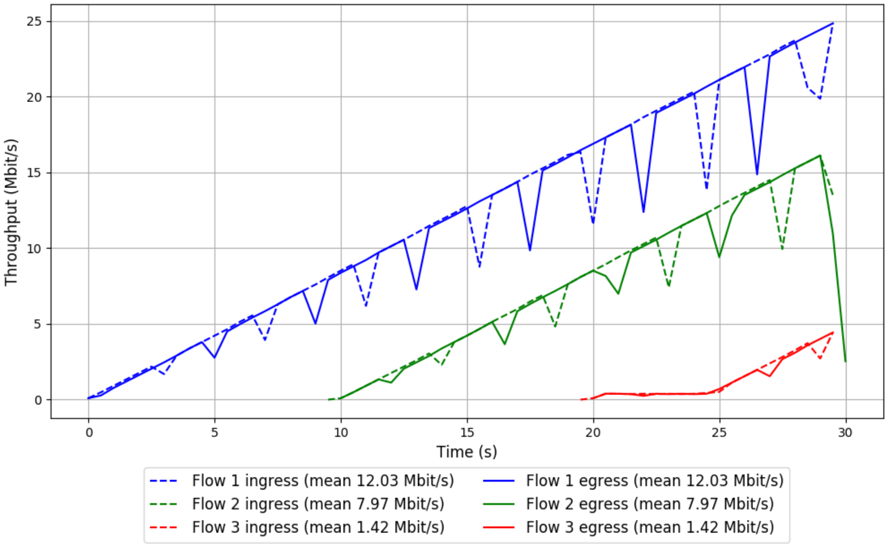


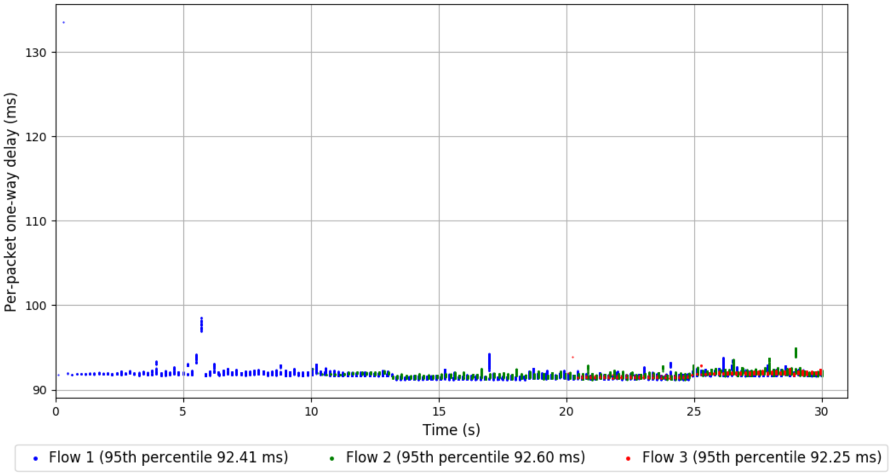
```
Run 5: Statistics of LEDBAT

Start at: 2017-08-31 15:42:27
End at: 2017-08-31 15:42:57

# Below is generated by plot.py at 2017-08-31 18:38:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.78 Mbit/s
95th percentile per-packet one-way delay: 92.471 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.03 Mbit/s
95th percentile per-packet one-way delay: 92.407 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.97 Mbit/s
95th percentile per-packet one-way delay: 92.600 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 92.253 ms
Loss rate: 0.00%
```

Run 5: Report of LEDBAT — Data Link



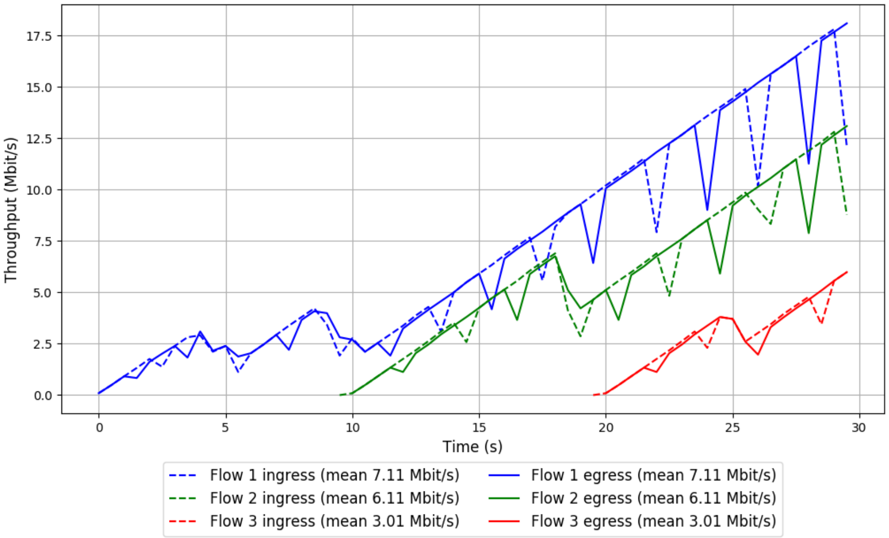


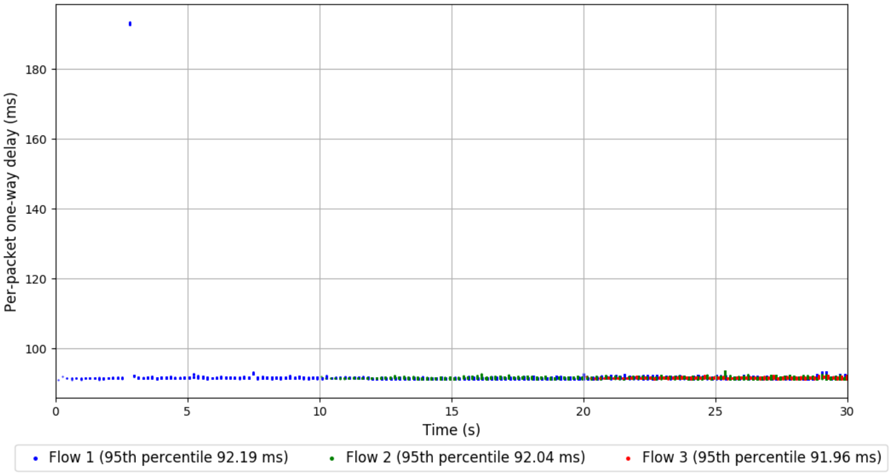
```
Run 6: Statistics of LEDBAT

Start at: 2017-08-31 15:55:25
End at: 2017-08-31 15:55:55

# Below is generated by plot.py at 2017-08-31 18:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.14 Mbit/s
95th percentile per-packet one-way delay: 92.113 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 7.11 Mbit/s
95th percentile per-packet one-way delay: 92.186 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 6.11 Mbit/s
95th percentile per-packet one-way delay: 92.036 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.01 Mbit/s
95th percentile per-packet one-way delay: 91.960 ms
Loss rate: 0.00%
```

Run 6: Report of LEDBAT — Data Link



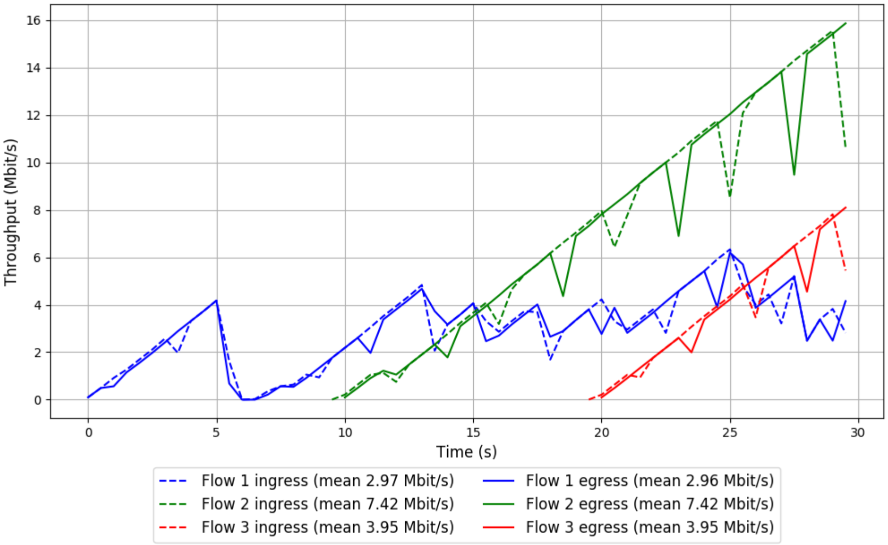


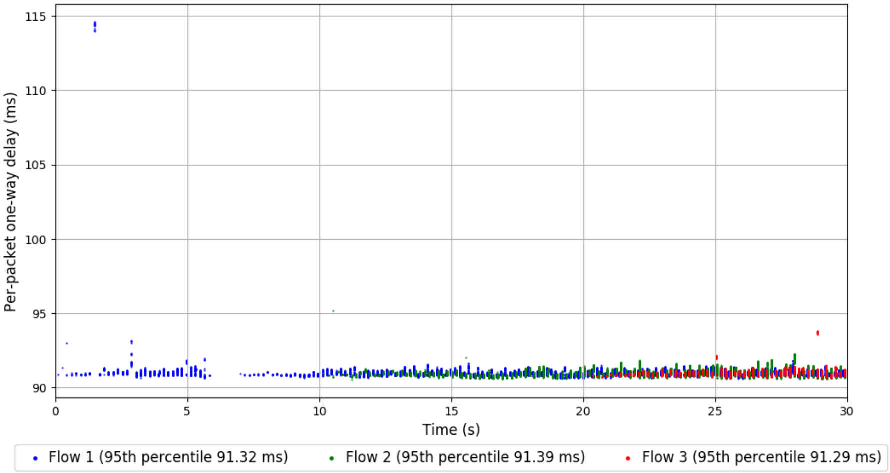
```
Run 7: Statistics of LEDBAT

Start at: 2017-08-31 16:08:26
End at: 2017-08-31 16:08:56

# Below is generated by plot.py at 2017-08-31 18:39:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.22 Mbit/s
95th percentile per-packet one-way delay: 91.353 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 2.96 Mbit/s
95th percentile per-packet one-way delay: 91.320 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 7.42 Mbit/s
95th percentile per-packet one-way delay: 91.392 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.95 Mbit/s
95th percentile per-packet one-way delay: 91.290 ms
Loss rate: 0.00%
```

Run 7: Report of LEDBAT — Data Link



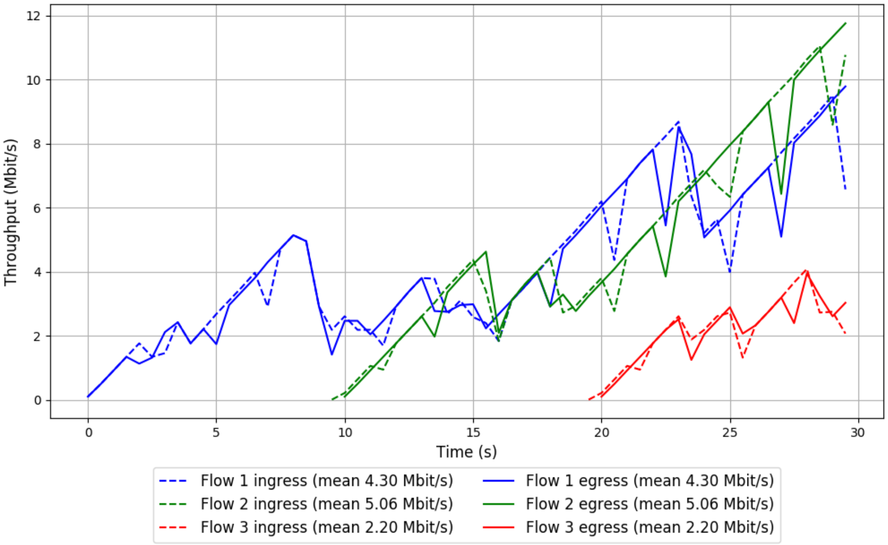


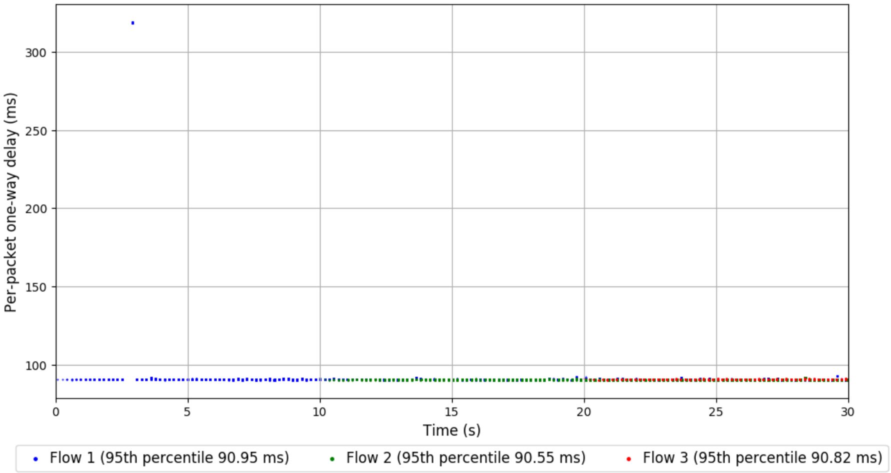
```
Run 8: Statistics of LEDBAT

Start at: 2017-08-31 16:21:25
End at: 2017-08-31 16:21:55

# Below is generated by plot.py at 2017-08-31 18:39:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.40 Mbit/s
95th percentile per-packet one-way delay: 90.842 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 4.30 Mbit/s
95th percentile per-packet one-way delay: 90.946 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.06 Mbit/s
95th percentile per-packet one-way delay: 90.551 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 2.20 Mbit/s
95th percentile per-packet one-way delay: 90.824 ms
Loss rate: 0.38%
```

Run 8: Report of LEDBAT — Data Link



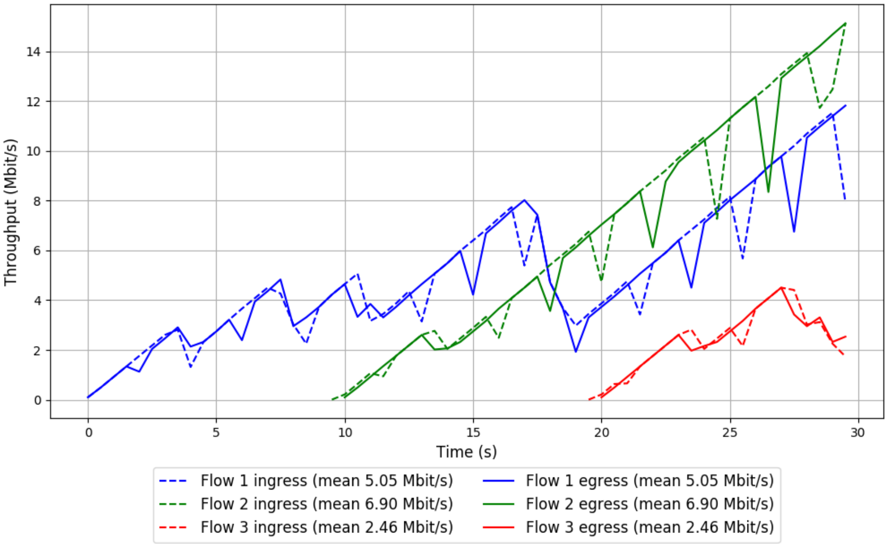


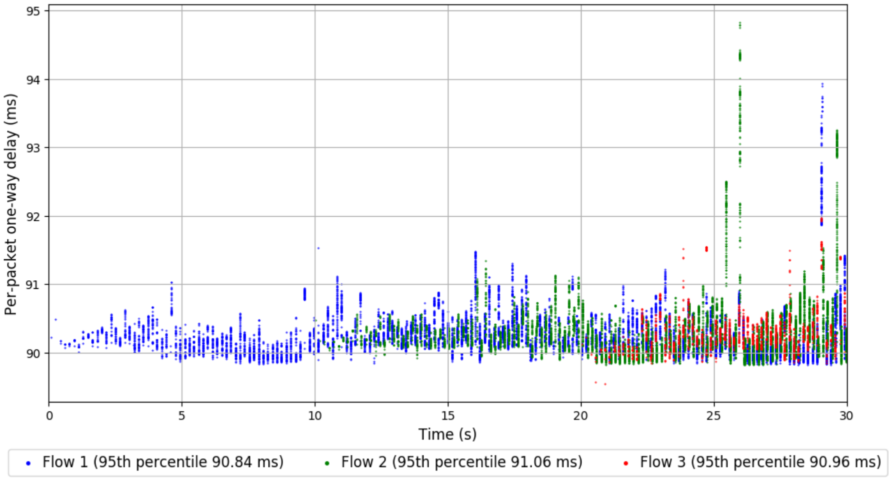
```
Run 9: Statistics of LEDBAT

Start at: 2017-08-31 16:34:26
End at: 2017-08-31 16:34:56

# Below is generated by plot.py at 2017-08-31 18:39:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.45 Mbit/s
95th percentile per-packet one-way delay: 90.905 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.05 Mbit/s
95th percentile per-packet one-way delay: 90.839 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 6.90 Mbit/s
95th percentile per-packet one-way delay: 91.062 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.46 Mbit/s
95th percentile per-packet one-way delay: 90.963 ms
Loss rate: 0.00%
```

Run 9: Report of LEDBAT — Data Link

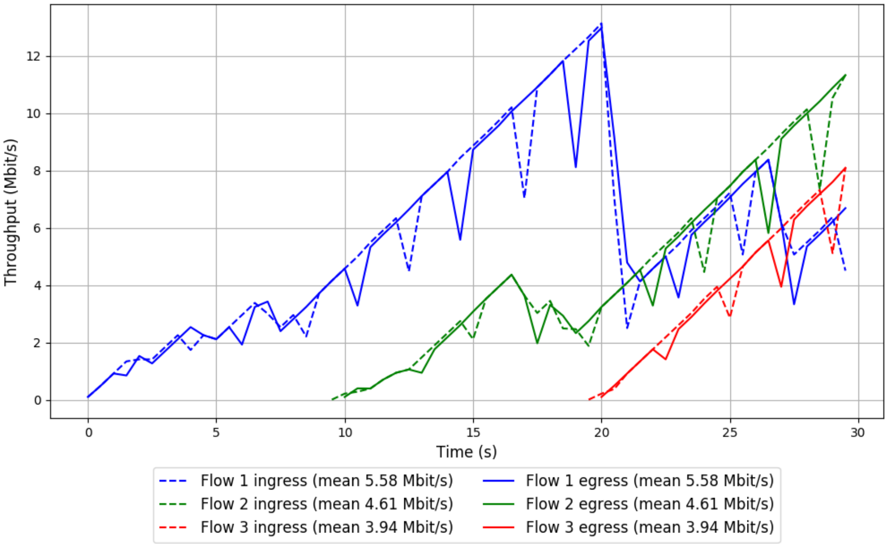




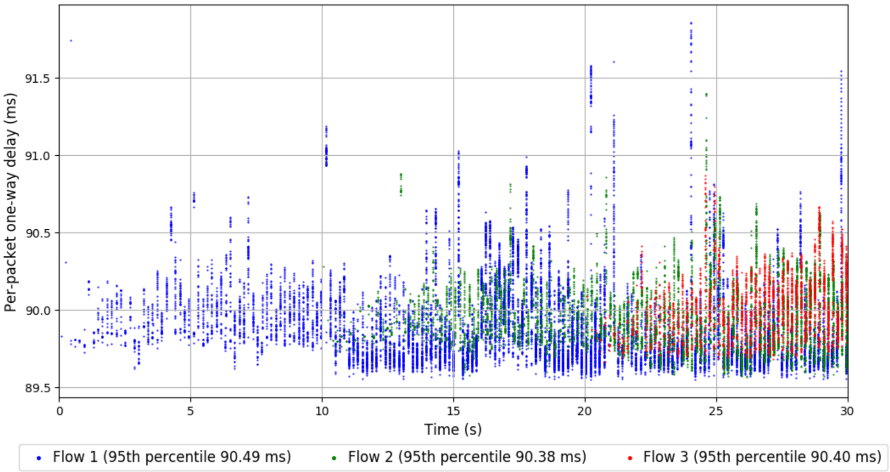
```
Run 10: Statistics of LEDBAT

Start at: 2017-08-31 16:47:19
End at: 2017-08-31 16:47:49

# Below is generated by plot.py at 2017-08-31 18:39:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.95 Mbit/s
95th percentile per-packet one-way delay: 90.446 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 5.58 Mbit/s
95th percentile per-packet one-way delay: 90.492 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 4.61 Mbit/s
95th percentile per-packet one-way delay: 90.378 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 3.94 Mbit/s
95th percentile per-packet one-way delay: 90.396 ms
Loss rate: 0.00%
```



Throughput (Mbit/s)
0
2
4
6
8
10
12
0
5
10
15
20
25
30
Time (s)
Flow 1 ingress (mean 5.58 Mbit/s)
Flow 2 ingress (mean 4.61 Mbit/s)
Flow 3 ingress (mean 3.94 Mbit/s)
Flow 1 egress (mean 5.58 Mbit/s)
Flow 2 egress (mean 4.61 Mbit/s)
Flow 3 egress (mean 3.94 Mbit/s)



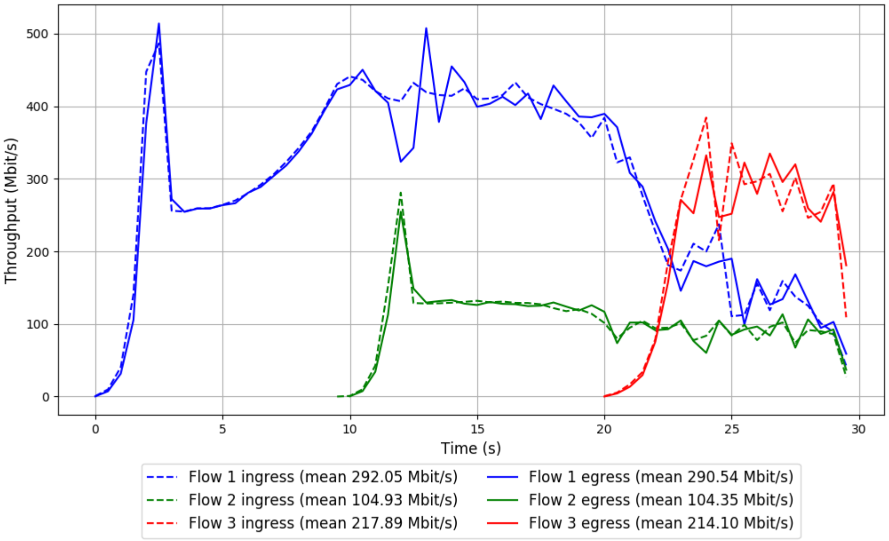
Per-packet one-way delay (ms)
89.5
90.0
90.5
91.0
91.5
0
5
10
15
20
25
30
Time (s)
Flow 1 (95th percentile 90.49 ms)
Flow 2 (95th percentile 90.38 ms)
Flow 3 (95th percentile 90.40 ms)

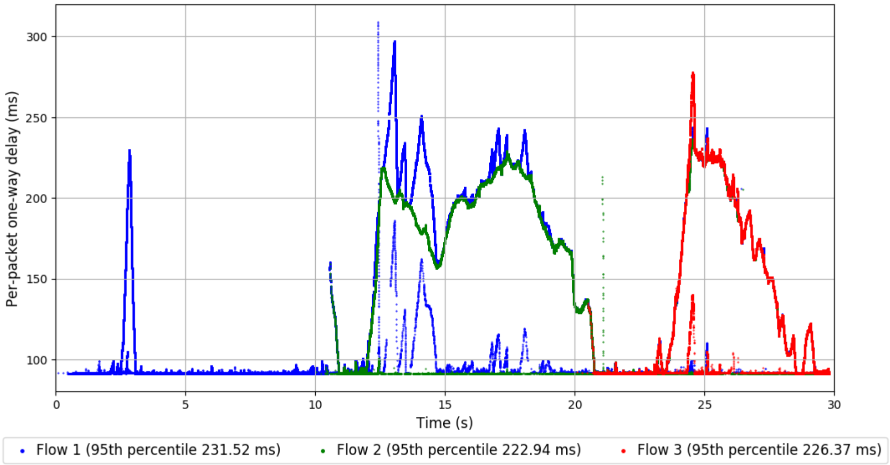
```
Run 1: Statistics of PCC

Start at: 2017-08-31 14:50:17
End at: 2017-08-31 14:50:47

# Below is generated by plot.py at 2017-08-31 18:40:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 429.85 Mbit/s
95th percentile per-packet one-way delay: 228.235 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 290.54 Mbit/s
95th percentile per-packet one-way delay: 231.519 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 104.35 Mbit/s
95th percentile per-packet one-way delay: 222.941 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 214.10 Mbit/s
95th percentile per-packet one-way delay: 226.372 ms
Loss rate: 1.75%
```

Run 1: Report of PCC — Data Link



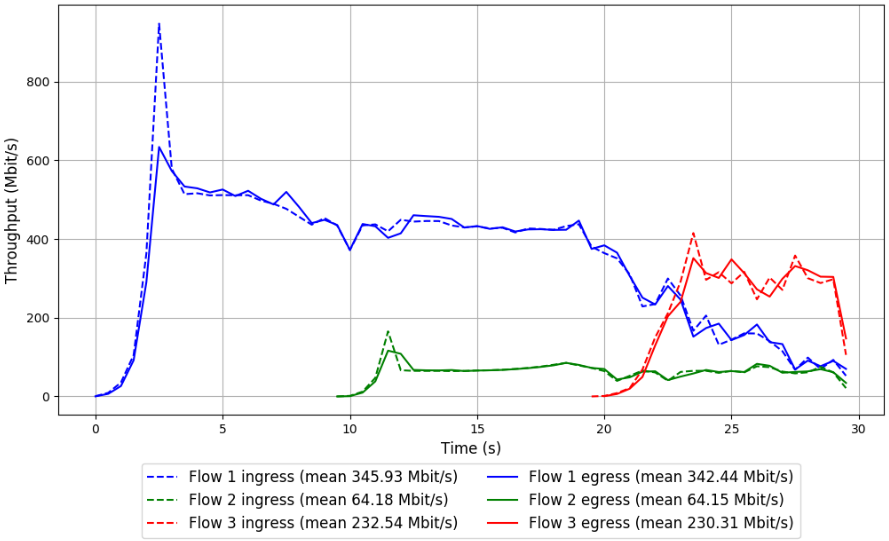


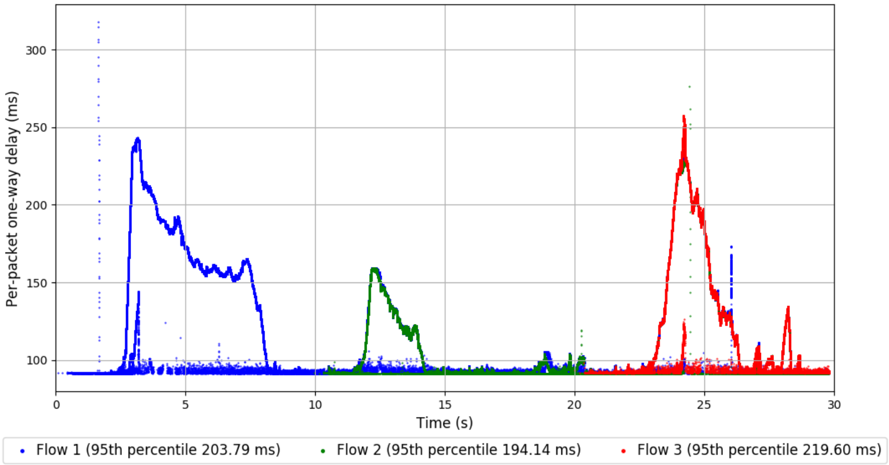
```
Run 2: Statistics of PCC

Start at: 2017-08-31 15:03:07
End at: 2017-08-31 15:03:37

# Below is generated by plot.py at 2017-08-31 18:40:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 461.13 Mbit/s
95th percentile per-packet one-way delay: 206.011 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 342.44 Mbit/s
95th percentile per-packet one-way delay: 203.787 ms
Loss rate: 1.01%
-- Flow 2:
Average throughput: 64.15 Mbit/s
95th percentile per-packet one-way delay: 194.140 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 230.31 Mbit/s
95th percentile per-packet one-way delay: 219.597 ms
Loss rate: 0.97%
```

Run 2: Report of PCC — Data Link



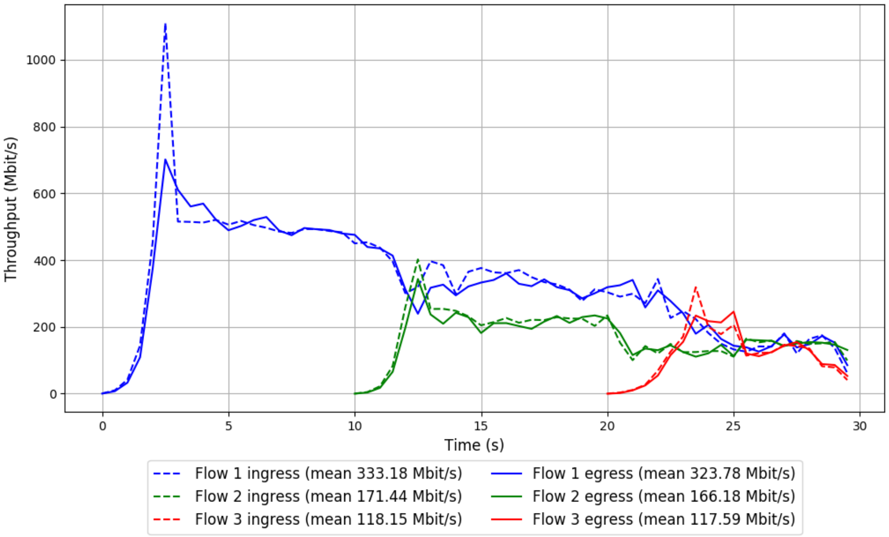


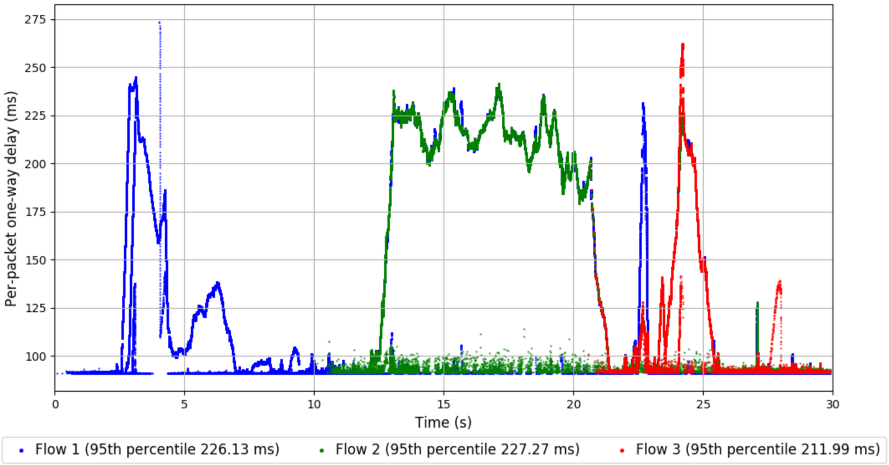
```
Run 3: Statistics of PCC

Start at: 2017-08-31 15:16:07
End at: 2017-08-31 15:16:37

# Below is generated by plot.py at 2017-08-31 18:41:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 472.30 Mbit/s
95th percentile per-packet one-way delay: 226.327 ms
Loss rate: 2.70%
-- Flow 1:
Average throughput: 323.78 Mbit/s
95th percentile per-packet one-way delay: 226.132 ms
Loss rate: 2.82%
-- Flow 2:
Average throughput: 166.18 Mbit/s
95th percentile per-packet one-way delay: 227.271 ms
Loss rate: 3.09%
-- Flow 3:
Average throughput: 117.59 Mbit/s
95th percentile per-packet one-way delay: 211.987 ms
Loss rate: 0.50%
```

Run 3: Report of PCC — Data Link



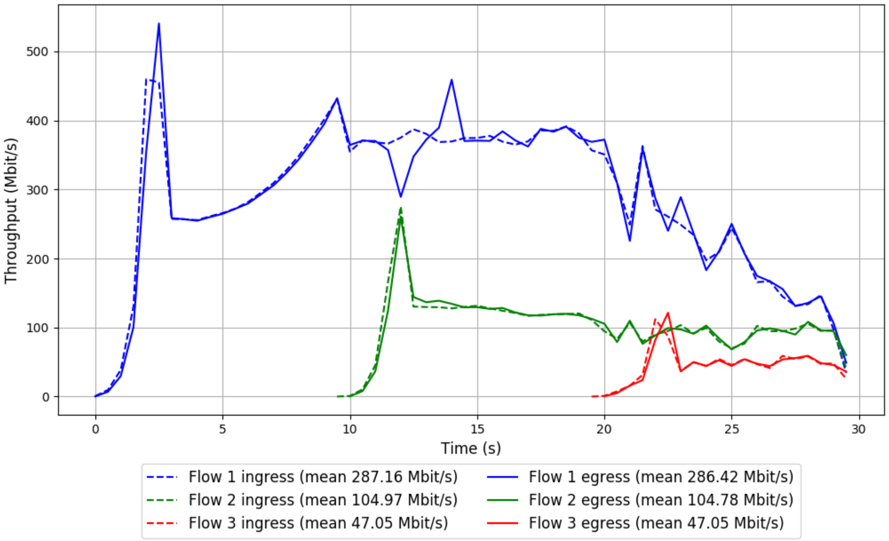


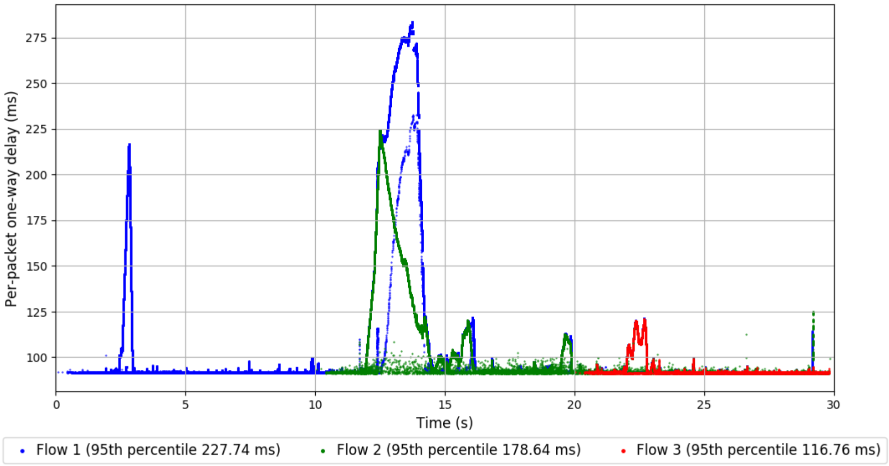
```
Run 4: Statistics of PCC

Start at: 2017-08-31 15:30:27
End at: 2017-08-31 15:30:57

# Below is generated by plot.py at 2017-08-31 18:41:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 371.49 Mbit/s
95th percentile per-packet one-way delay: 218.520 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 286.42 Mbit/s
95th percentile per-packet one-way delay: 227.740 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 104.78 Mbit/s
95th percentile per-packet one-way delay: 178.641 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 47.05 Mbit/s
95th percentile per-packet one-way delay: 116.763 ms
Loss rate: 0.00%
```

Run 4: Report of PCC — Data Link



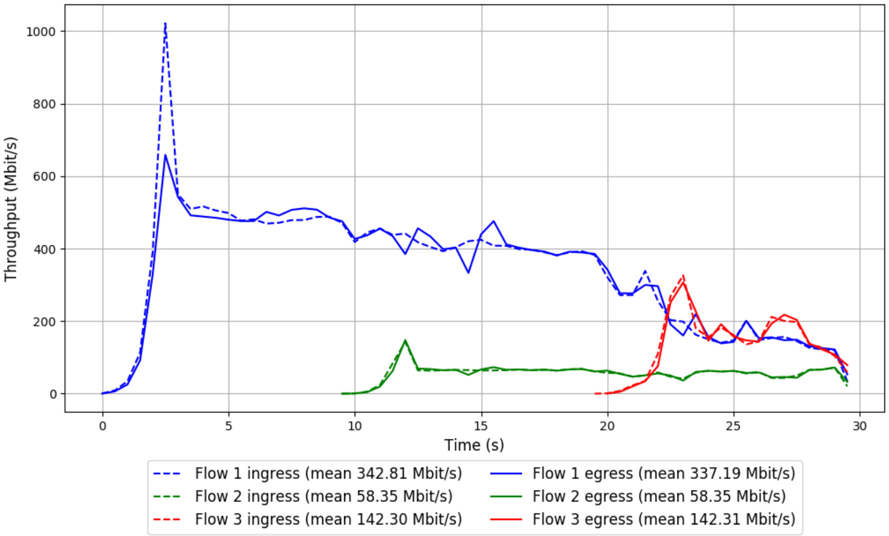


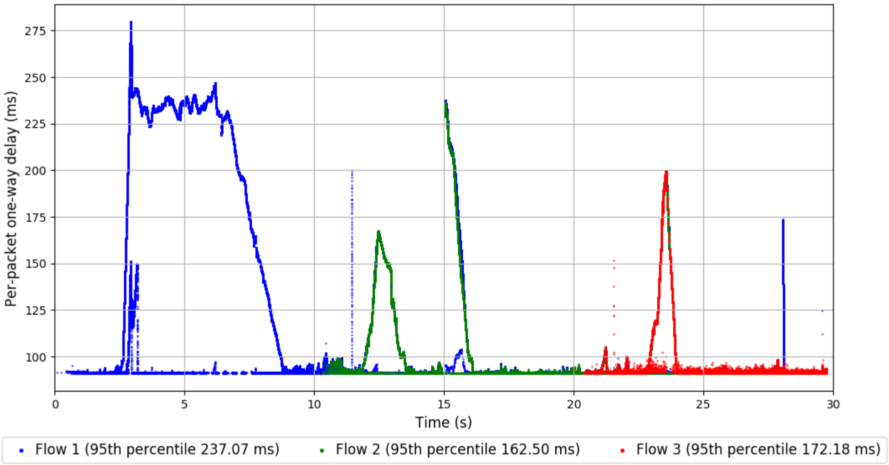
```
Run 5: Statistics of PCC

Start at: 2017-08-31 15:43:12
End at: 2017-08-31 15:43:42

# Below is generated by plot.py at 2017-08-31 18:42:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 422.75 Mbit/s
95th percentile per-packet one-way delay: 235.846 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 337.19 Mbit/s
95th percentile per-packet one-way delay: 237.067 ms
Loss rate: 1.64%
-- Flow 2:
Average throughput: 58.35 Mbit/s
95th percentile per-packet one-way delay: 162.496 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 142.31 Mbit/s
95th percentile per-packet one-way delay: 172.184 ms
Loss rate: 0.00%
```

Run 5: Report of PCC — Data Link



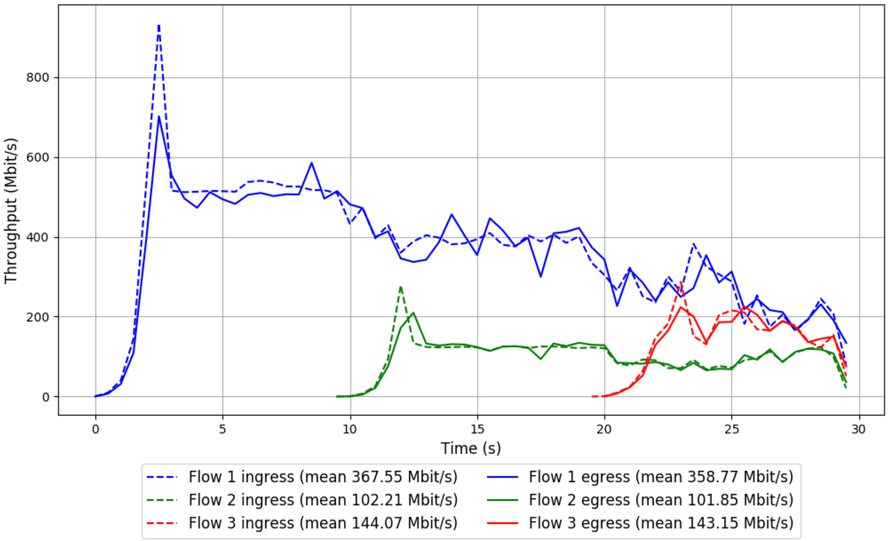


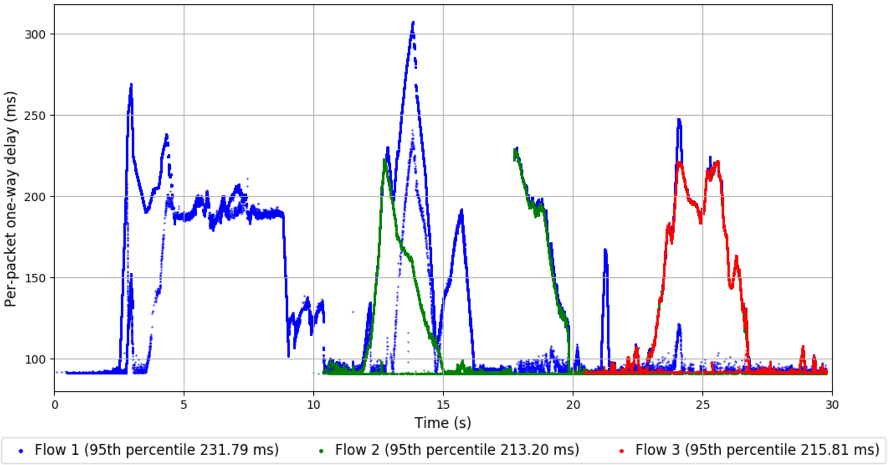
```
Run 6: Statistics of PCC

Start at: 2017-08-31 15:56:10
End at: 2017-08-31 15:56:40

# Below is generated by plot.py at 2017-08-31 18:43:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 473.36 Mbit/s
95th percentile per-packet one-way delay: 225.922 ms
Loss rate: 1.93%
-- Flow 1:
Average throughput: 358.77 Mbit/s
95th percentile per-packet one-way delay: 231.787 ms
Loss rate: 2.39%
-- Flow 2:
Average throughput: 101.85 Mbit/s
95th percentile per-packet one-way delay: 213.198 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 143.15 Mbit/s
95th percentile per-packet one-way delay: 215.808 ms
Loss rate: 0.65%
```

Run 6: Report of PCC — Data Link



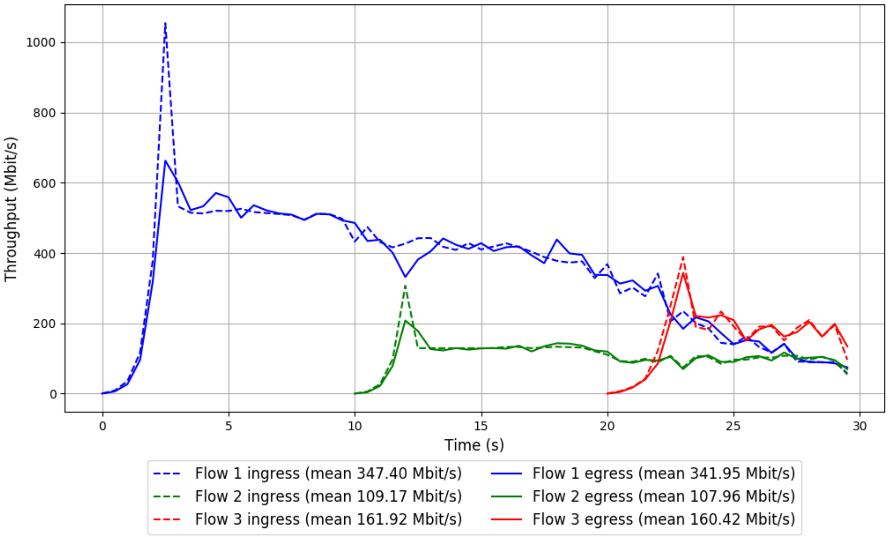


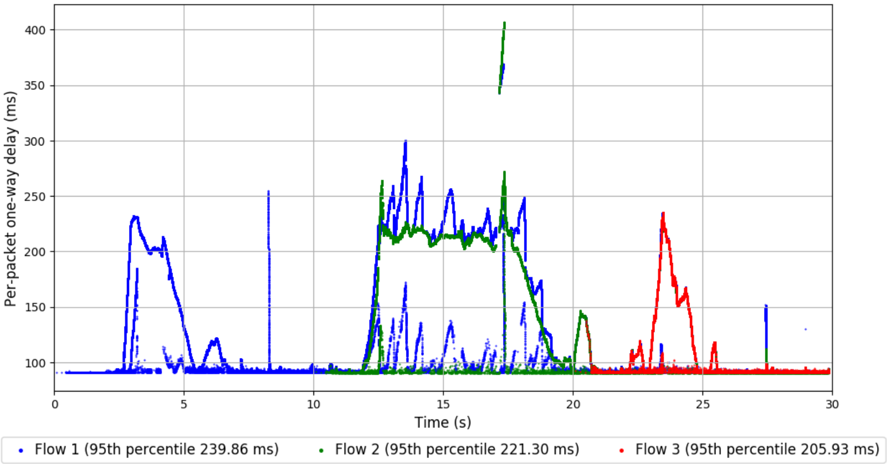
```
Run 7: Statistics of PCC

Start at: 2017-08-31 16:09:10
End at: 2017-08-31 16:09:40

# Below is generated by plot.py at 2017-08-31 18:43:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 466.26 Mbit/s
95th percentile per-packet one-way delay: 234.832 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 341.95 Mbit/s
95th percentile per-packet one-way delay: 239.863 ms
Loss rate: 1.57%
-- Flow 2:
Average throughput: 107.96 Mbit/s
95th percentile per-packet one-way delay: 221.299 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 160.42 Mbit/s
95th percentile per-packet one-way delay: 205.932 ms
Loss rate: 0.94%
```

Run 7: Report of PCC — Data Link



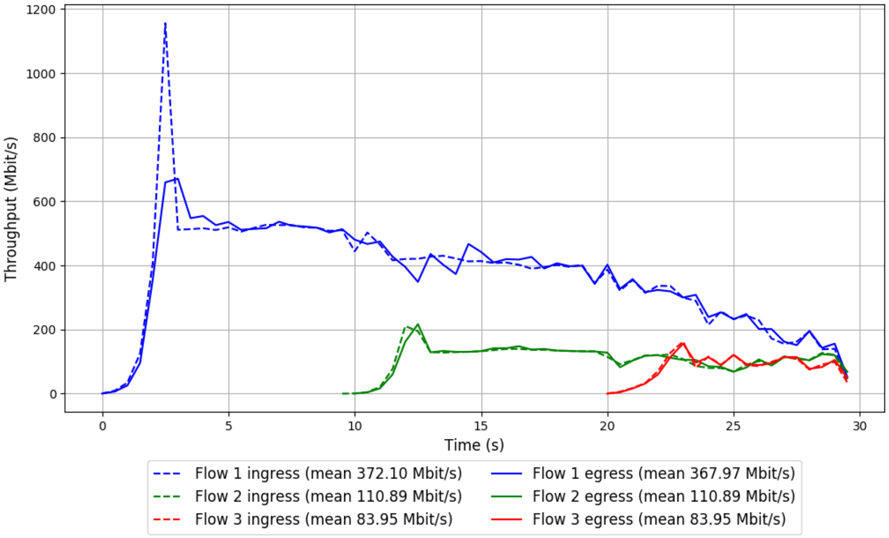


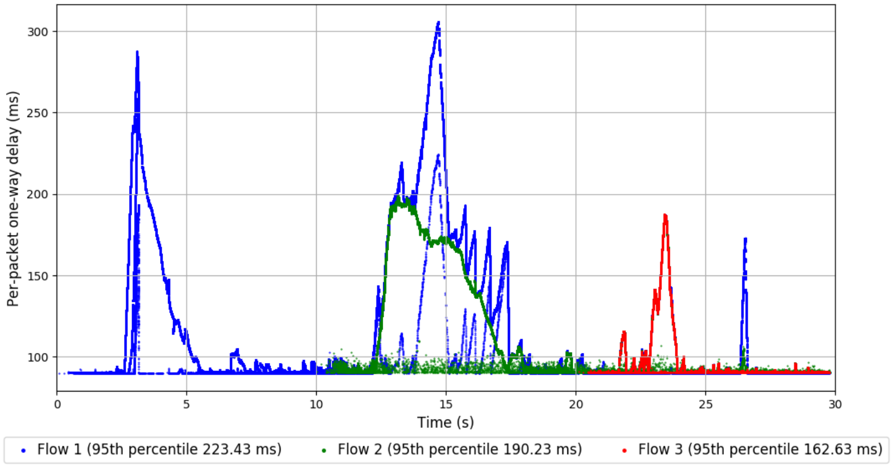
```
Run 8: Statistics of PCC

Start at: 2017-08-31 16:22:09
End at: 2017-08-31 16:22:39

# Below is generated by plot.py at 2017-08-31 18:44:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 469.13 Mbit/s
95th percentile per-packet one-way delay: 211.854 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 367.97 Mbit/s
95th percentile per-packet one-way delay: 223.432 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 110.89 Mbit/s
95th percentile per-packet one-way delay: 190.234 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 83.95 Mbit/s
95th percentile per-packet one-way delay: 162.627 ms
Loss rate: 0.00%
```

Run 8: Report of PCC — Data Link



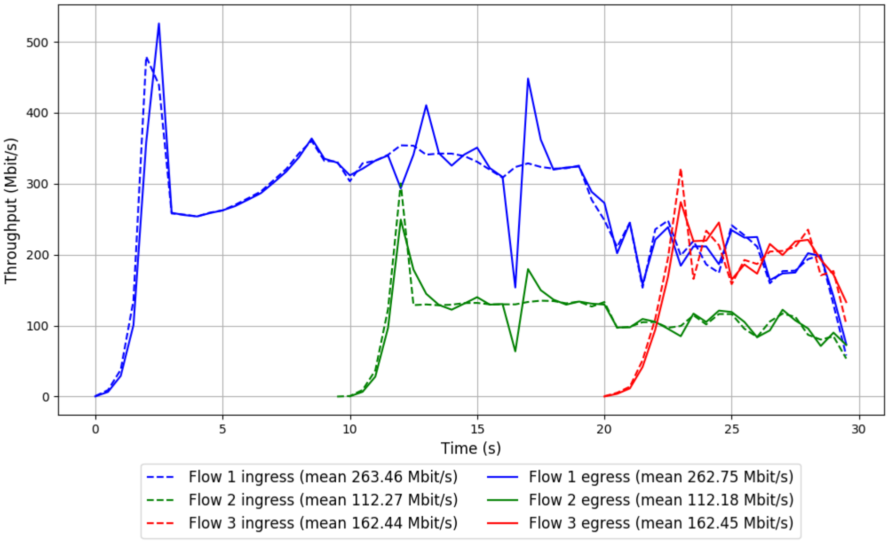


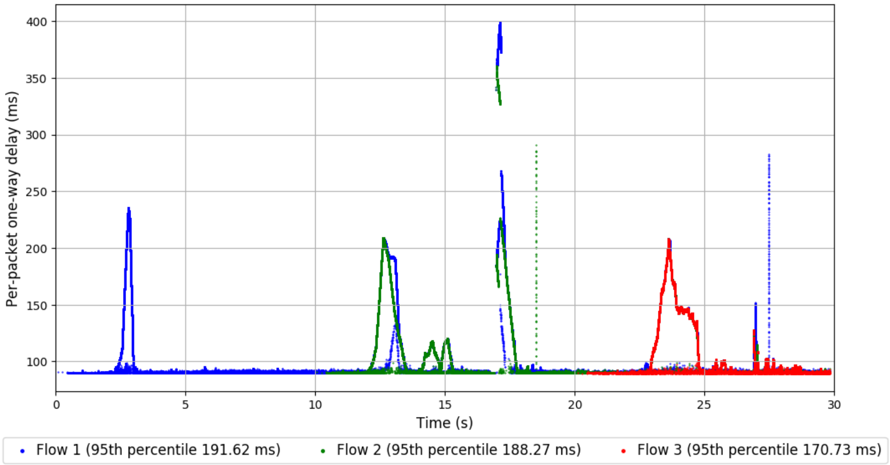
```
Run 9: Statistics of PCC

Start at: 2017-08-31 16:35:10
End at: 2017-08-31 16:35:40

# Below is generated by plot.py at 2017-08-31 18:44:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 390.32 Mbit/s
95th percentile per-packet one-way delay: 189.264 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 262.75 Mbit/s
95th percentile per-packet one-way delay: 191.622 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 112.18 Mbit/s
95th percentile per-packet one-way delay: 188.267 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 162.45 Mbit/s
95th percentile per-packet one-way delay: 170.728 ms
Loss rate: 0.00%
```

Run 9: Report of PCC — Data Link



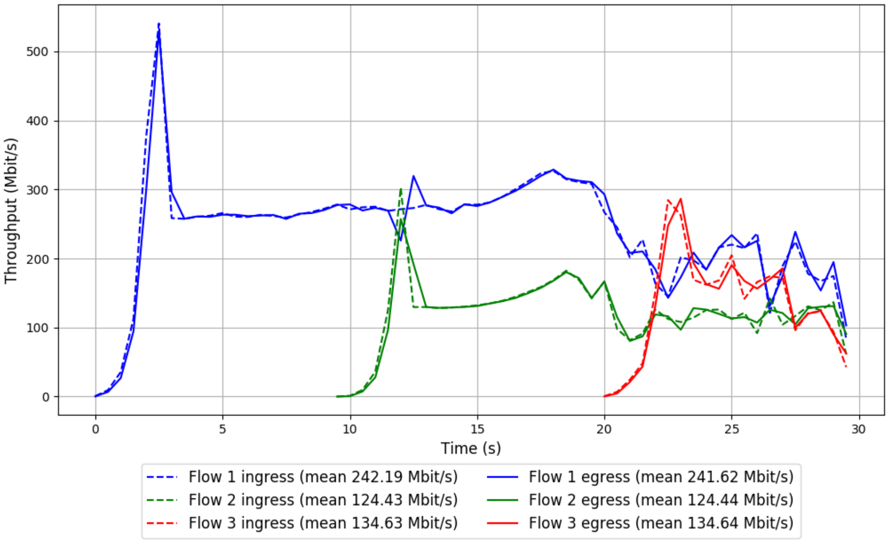


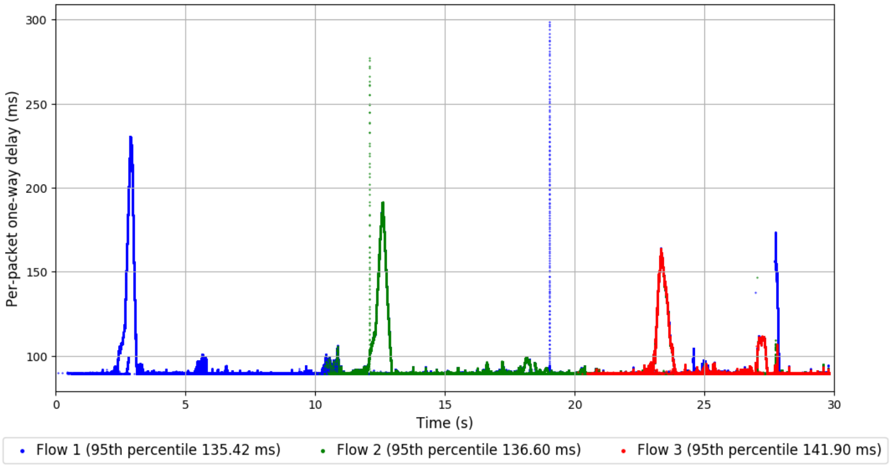
```
Run 10: Statistics of PCC

Start at: 2017-08-31 16:48:04
End at: 2017-08-31 16:48:34

# Below is generated by plot.py at 2017-08-31 18:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 368.57 Mbit/s
95th percentile per-packet one-way delay: 137.667 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 241.62 Mbit/s
95th percentile per-packet one-way delay: 135.423 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 124.44 Mbit/s
95th percentile per-packet one-way delay: 136.599 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 134.64 Mbit/s
95th percentile per-packet one-way delay: 141.897 ms
Loss rate: 0.00%
```

Run 10: Report of PCC — Data Link



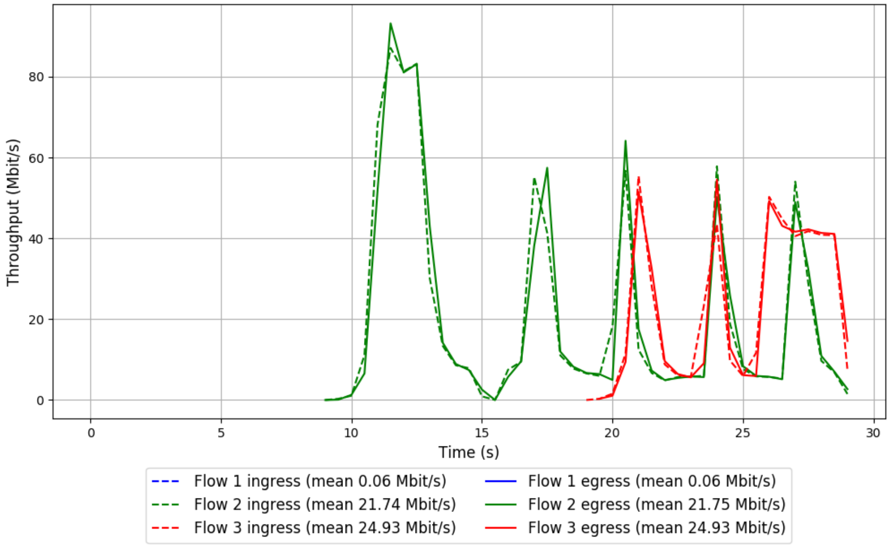


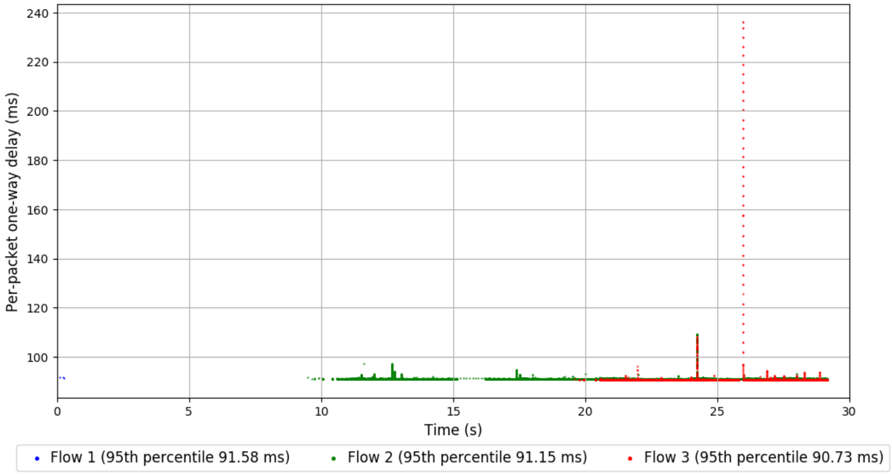
```
Run 1: Statistics of QUIC Cubic

Start at: 2017-08-31 14:42:33
End at: 2017-08-31 14:43:03

# Below is generated by plot.py at 2017-08-31 18:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 22.94 Mbit/s
95th percentile per-packet one-way delay: 91.132 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 91.576 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 21.75 Mbit/s
95th percentile per-packet one-way delay: 91.149 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.93 Mbit/s
95th percentile per-packet one-way delay: 90.732 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link



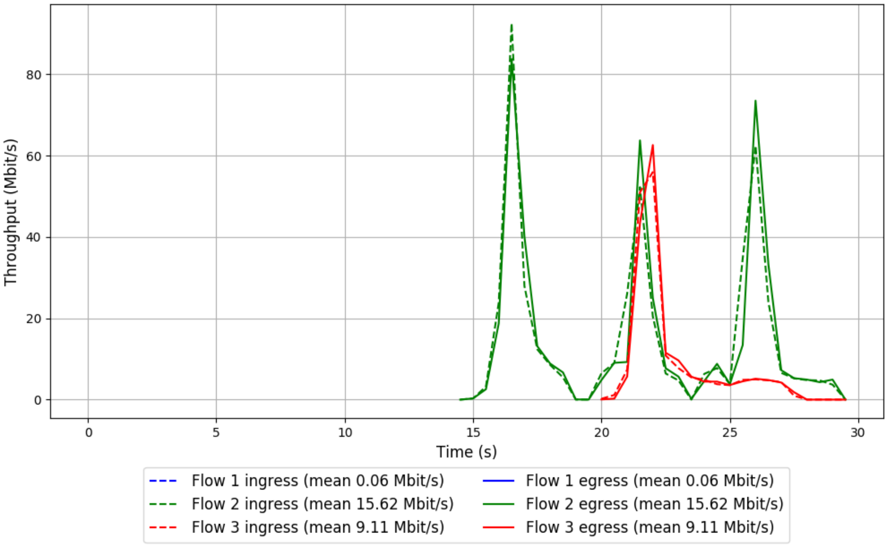


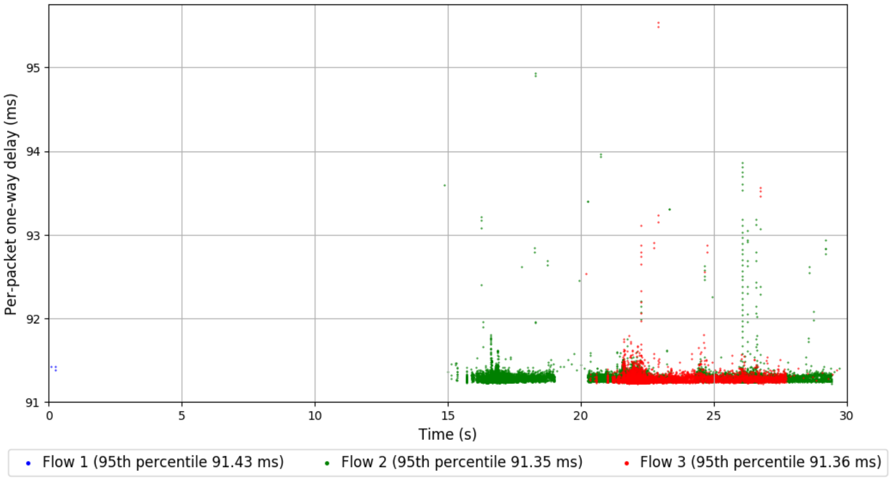
```
Run 2: Statistics of QUIC Cubic

Start at: 2017-08-31 14:56:13
End at: 2017-08-31 14:56:43

# Below is generated by plot.py at 2017-08-31 18:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.73 Mbit/s
95th percentile per-packet one-way delay: 91.354 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 91.428 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.62 Mbit/s
95th percentile per-packet one-way delay: 91.352 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.11 Mbit/s
95th percentile per-packet one-way delay: 91.358 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link



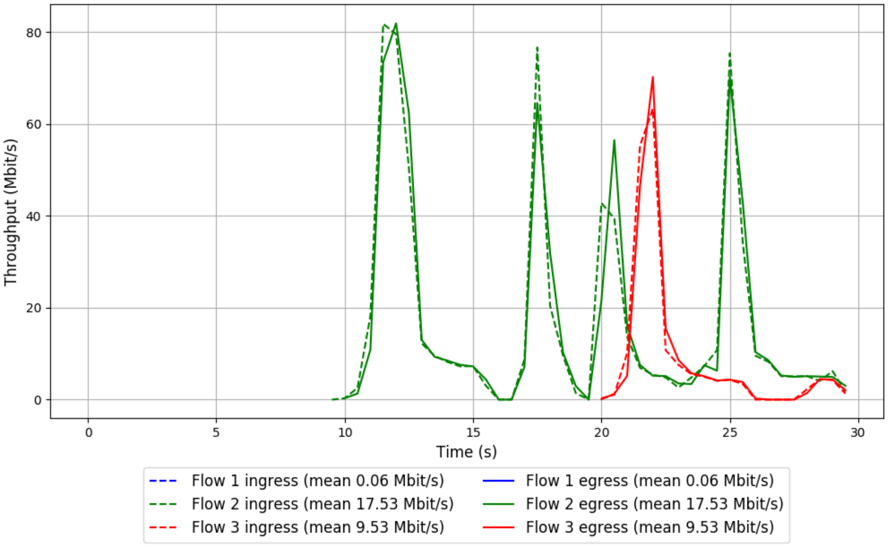


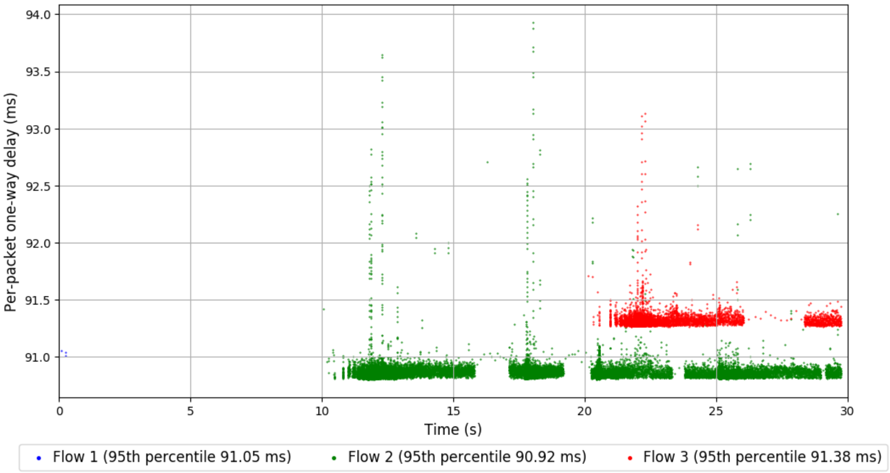
```
Run 3: Statistics of QUIC Cubic

Start at: 2017-08-31 15:09:10
End at: 2017-08-31 15:09:40

# Below is generated by plot.py at 2017-08-31 18:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.73 Mbit/s
95th percentile per-packet one-way delay: 91.325 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 91.052 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 17.53 Mbit/s
95th percentile per-packet one-way delay: 90.922 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.53 Mbit/s
95th percentile per-packet one-way delay: 91.381 ms
Loss rate: 0.00%
```

Run 3: Report of QUIC Cubic — Data Link



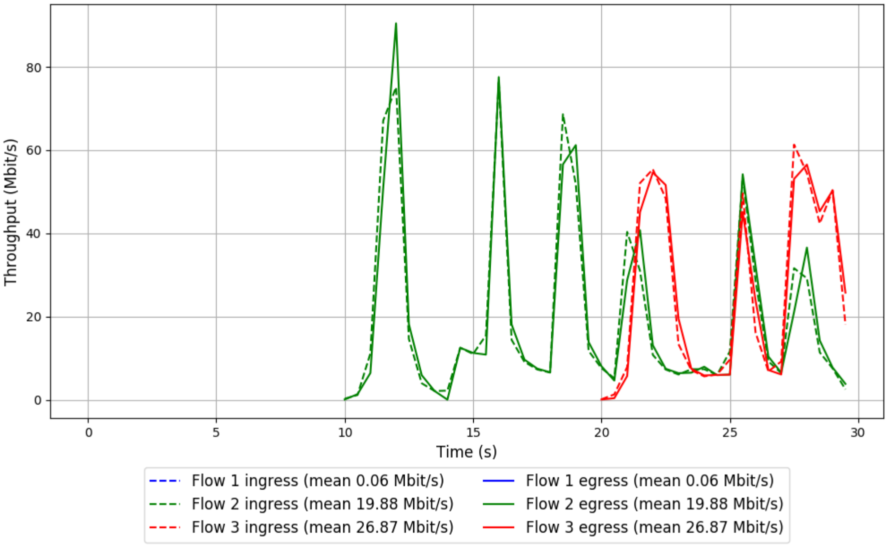


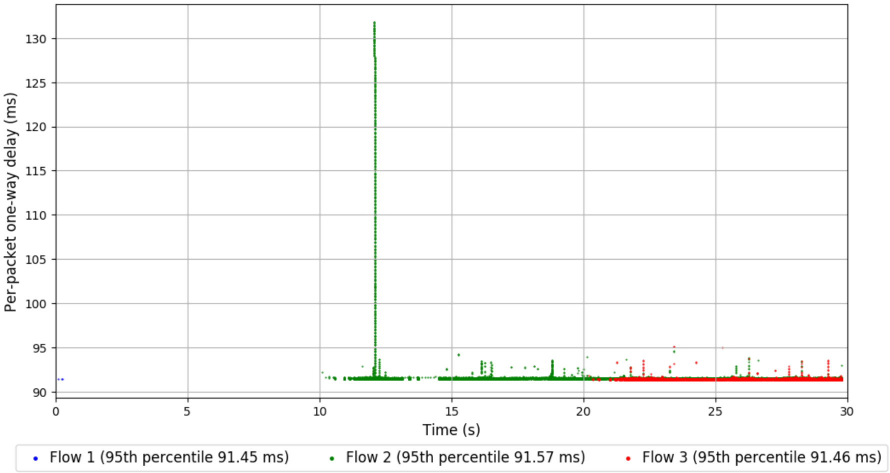
```
Run 4: Statistics of QUIC Cubic

Start at: 2017-08-31 15:22:52
End at: 2017-08-31 15:23:22

# Below is generated by plot.py at 2017-08-31 18:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.86 Mbit/s
95th percentile per-packet one-way delay: 91.550 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 91.455 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 19.88 Mbit/s
95th percentile per-packet one-way delay: 91.570 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 26.87 Mbit/s
95th percentile per-packet one-way delay: 91.463 ms
Loss rate: 0.00%
```

Run 4: Report of QUIC Cubic — Data Link



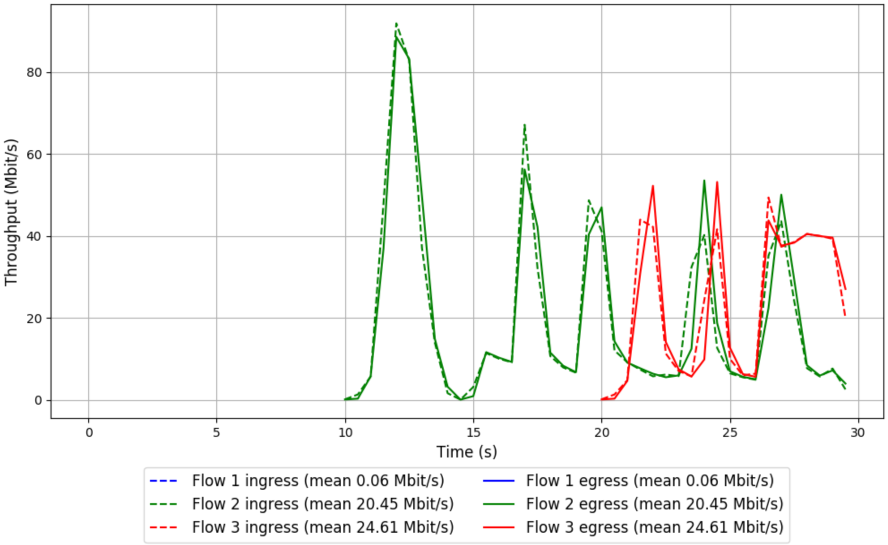


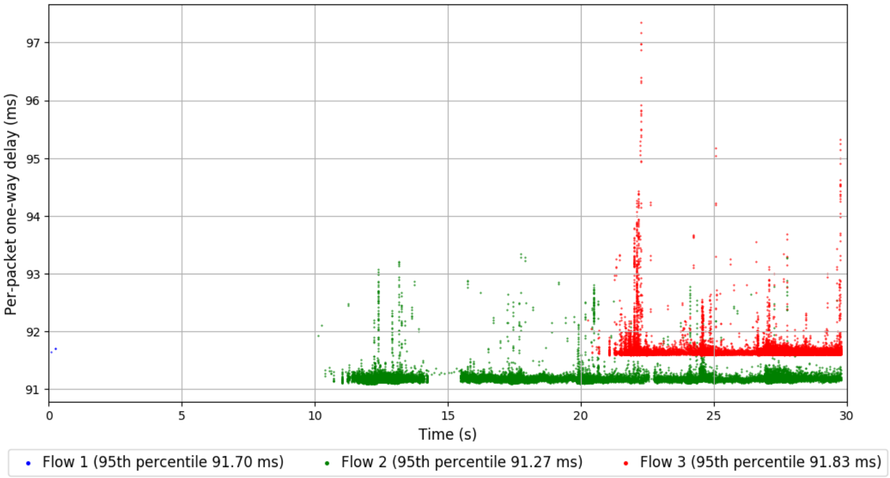
```
Run 5: Statistics of QUIC Cubic

Start at: 2017-08-31 15:36:32
End at: 2017-08-31 15:37:02

# Below is generated by plot.py at 2017-08-31 18:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.44 Mbit/s
95th percentile per-packet one-way delay: 91.695 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 91.701 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 20.45 Mbit/s
95th percentile per-packet one-way delay: 91.266 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.61 Mbit/s
95th percentile per-packet one-way delay: 91.825 ms
Loss rate: 0.00%
```

Run 5: Report of QUIC Cubic — Data Link



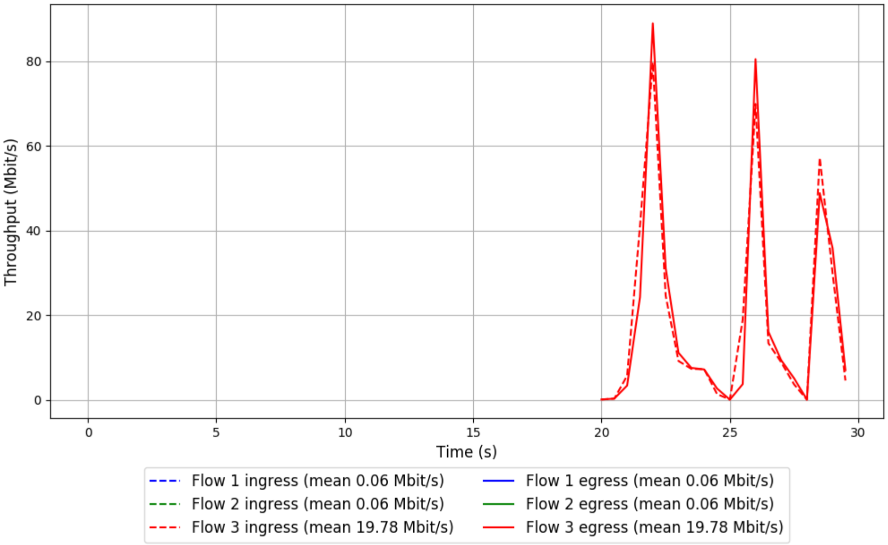


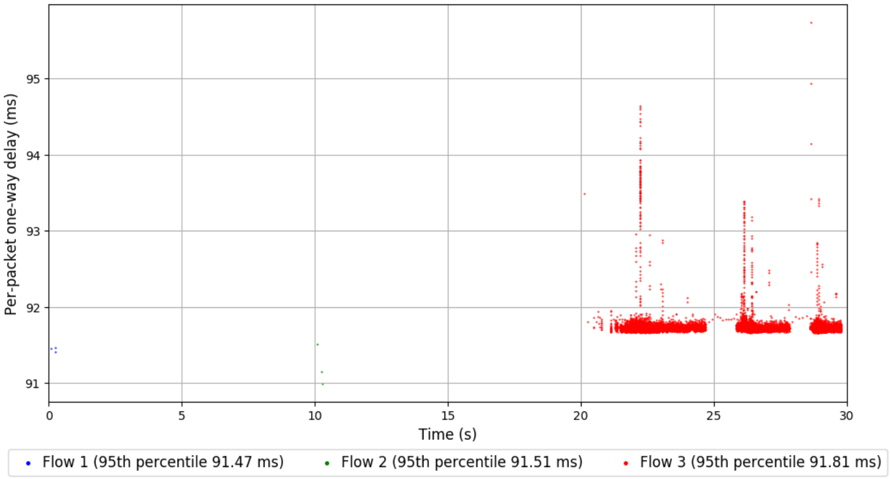
```
Run 6: Statistics of QUIC Cubic

Start at: 2017-08-31 15:49:19
End at: 2017-08-31 15:49:49

# Below is generated by plot.py at 2017-08-31 18:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.44 Mbit/s
95th percentile per-packet one-way delay: 91.805 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 91.469 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 91.513 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.78 Mbit/s
95th percentile per-packet one-way delay: 91.805 ms
Loss rate: 0.00%
```

Run 6: Report of QUIC Cubic — Data Link



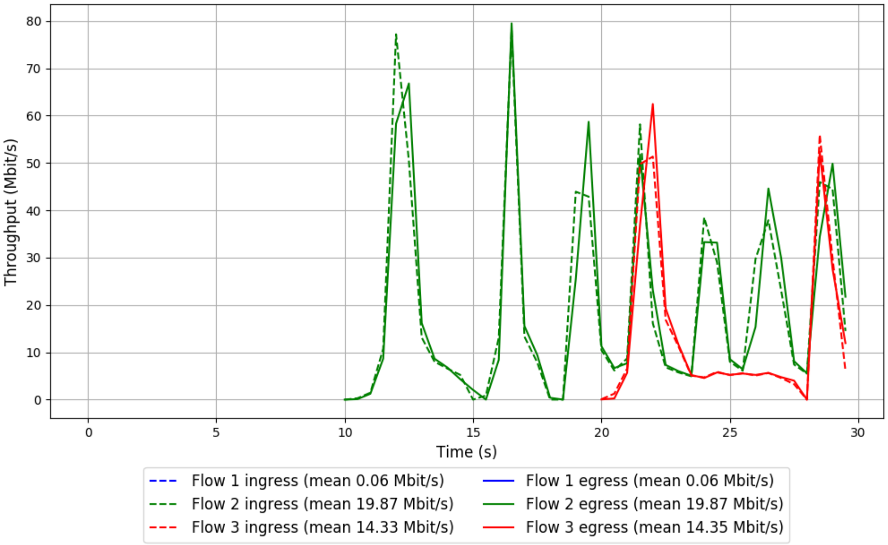


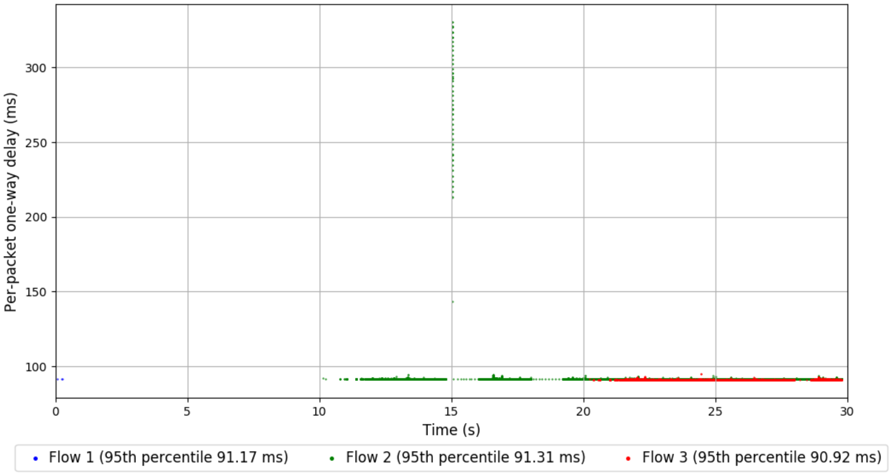
```
Run 7: Statistics of QUIC Cubic

Start at: 2017-08-31 16:02:26
End at: 2017-08-31 16:02:56

# Below is generated by plot.py at 2017-08-31 18:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.76 Mbit/s
95th percentile per-packet one-way delay: 91.302 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 91.166 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 19.87 Mbit/s
95th percentile per-packet one-way delay: 91.315 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 14.35 Mbit/s
95th percentile per-packet one-way delay: 90.925 ms
Loss rate: 0.01%
```

Run 7: Report of QUIC Cubic — Data Link



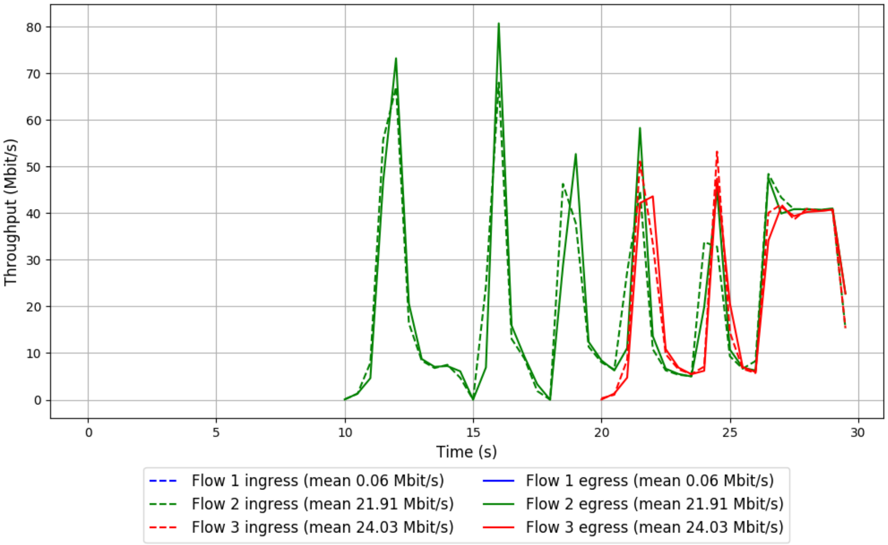


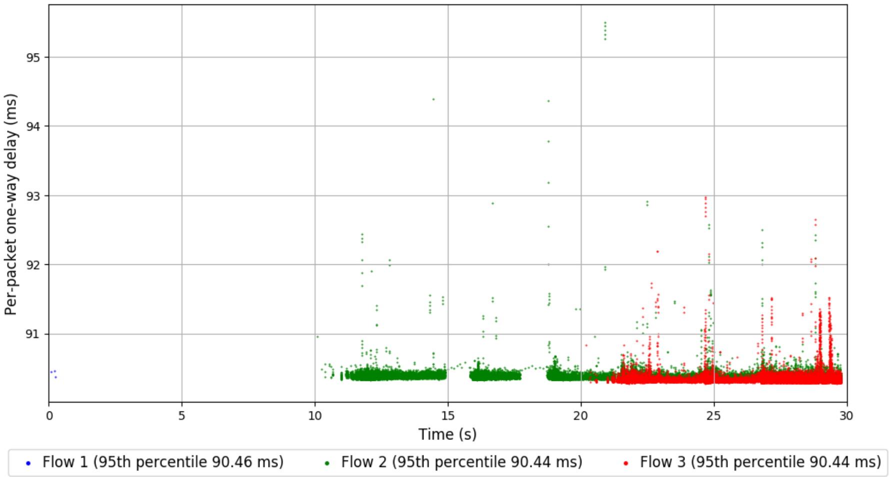
```
Run 8: Statistics of QUIC Cubic

Start at: 2017-08-31 16:15:21
End at: 2017-08-31 16:15:51

# Below is generated by plot.py at 2017-08-31 18:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 22.29 Mbit/s
95th percentile per-packet one-way delay: 90.443 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 90.457 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 21.91 Mbit/s
95th percentile per-packet one-way delay: 90.445 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.03 Mbit/s
95th percentile per-packet one-way delay: 90.435 ms
Loss rate: 0.00%
```

Run 8: Report of QUIC Cubic — Data Link



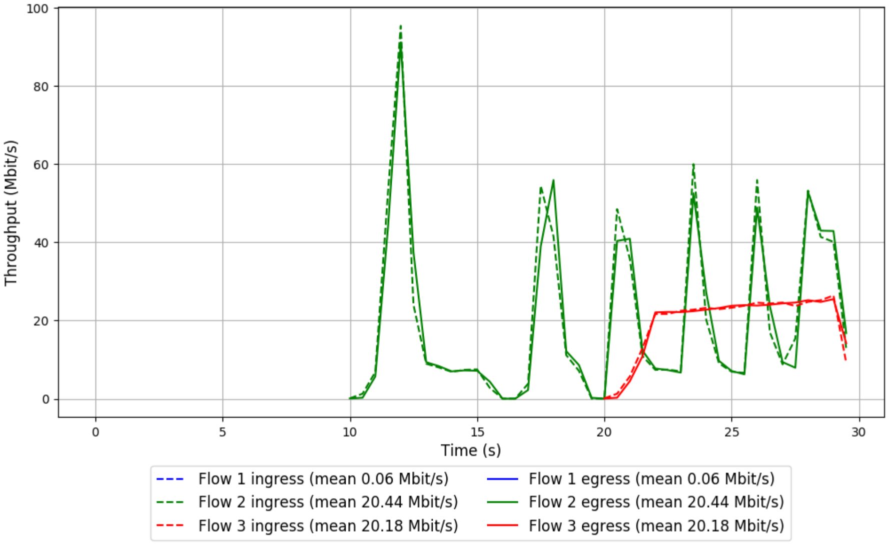


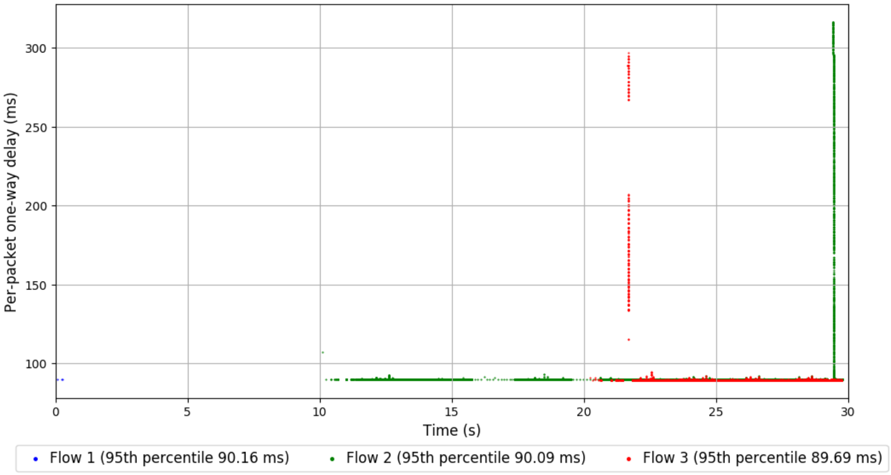
```
Run 9: Statistics of QUIC Cubic

Start at: 2017-08-31 16:28:21
End at: 2017-08-31 16:28:51

# Below is generated by plot.py at 2017-08-31 18:45:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.01 Mbit/s
95th percentile per-packet one-way delay: 90.054 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 90.159 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 20.44 Mbit/s
95th percentile per-packet one-way delay: 90.087 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 20.18 Mbit/s
95th percentile per-packet one-way delay: 89.690 ms
Loss rate: 0.00%
```

Run 9: Report of QUIC Cubic — Data Link



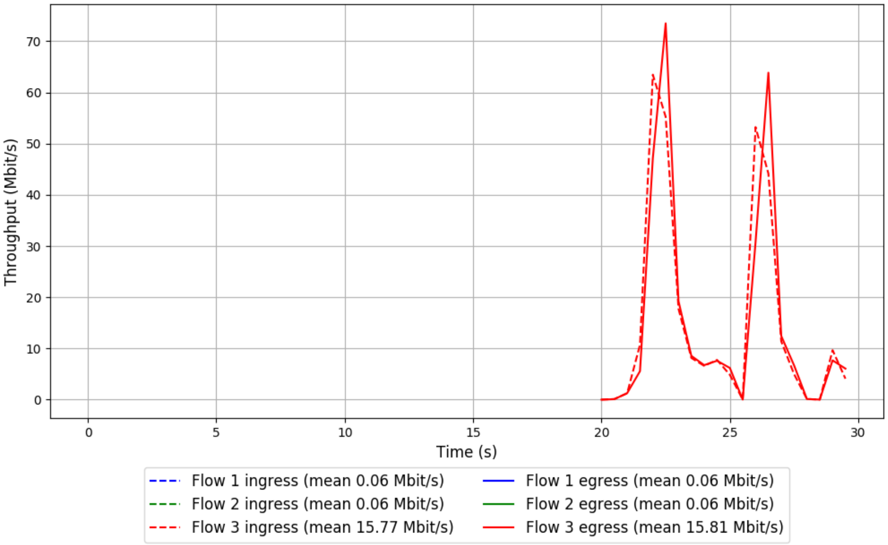


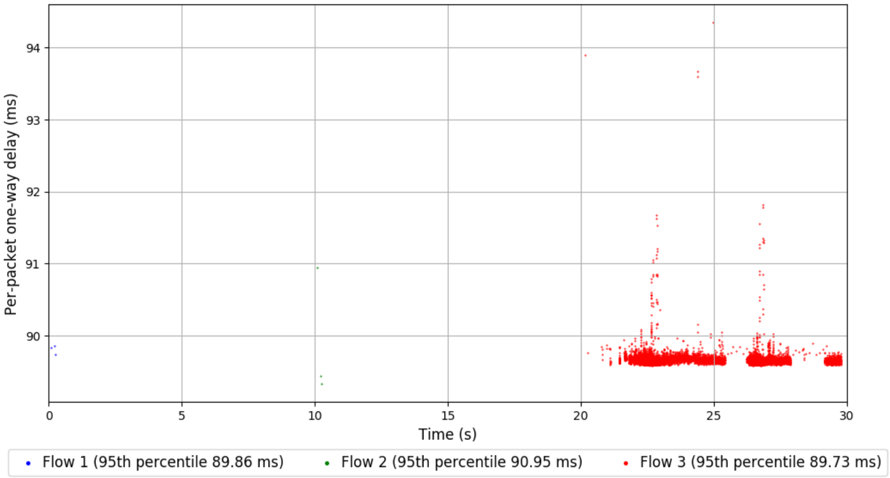
```
Run 10: Statistics of QUIC Cubic

Start at: 2017-08-31 16:41:17
End at: 2017-08-31 16:41:47

# Below is generated by plot.py at 2017-08-31 18:45:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.12 Mbit/s
95th percentile per-packet one-way delay: 89.735 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 89.862 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 90.947 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.81 Mbit/s
95th percentile per-packet one-way delay: 89.735 ms
Loss rate: 0.01%
```

Run 10: Report of QUIC Cubic — Data Link



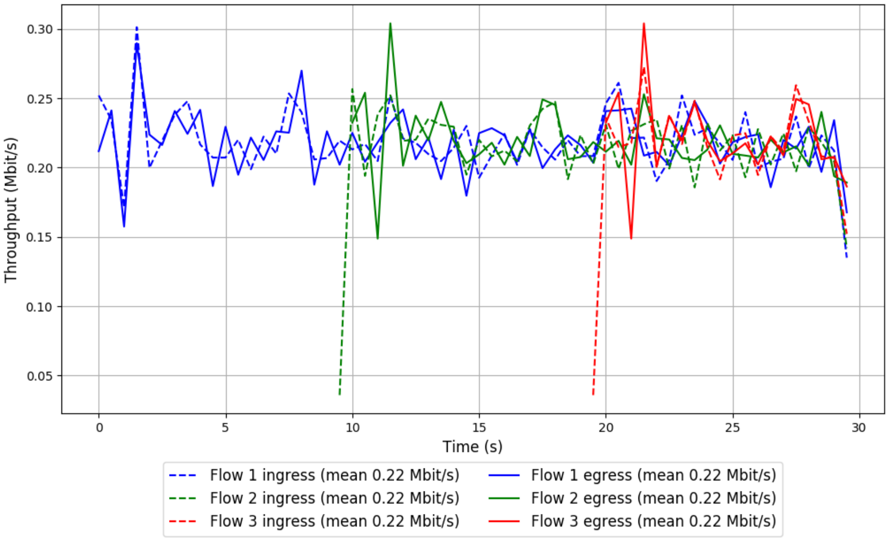


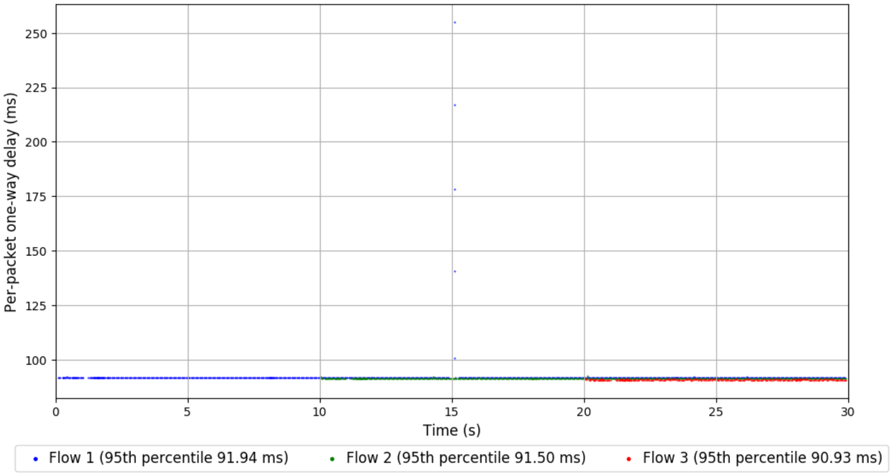
```
Run 1: Statistics of SCReAM

Start at: 2017-08-31 14:53:45
End at: 2017-08-31 14:54:15

# Below is generated by plot.py at 2017-08-31 18:45:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 91.907 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 91.942 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 91.496 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 90.931 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link



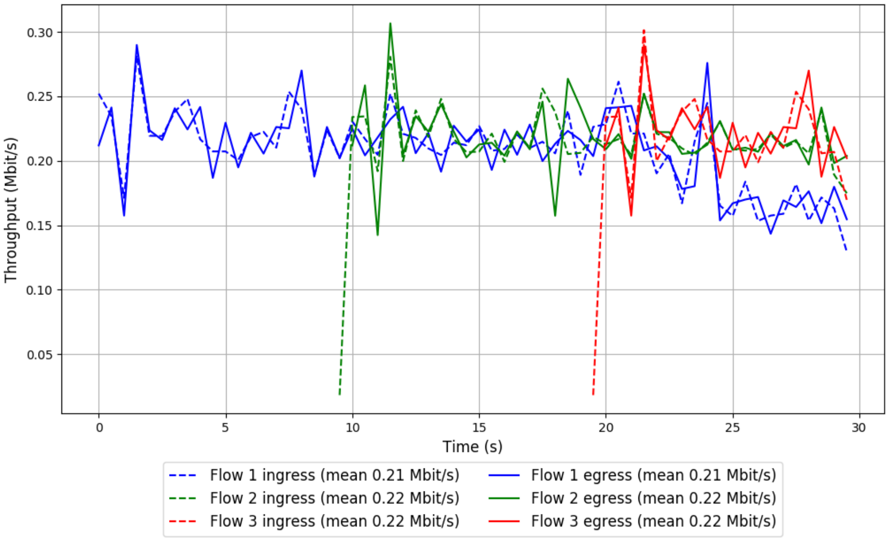


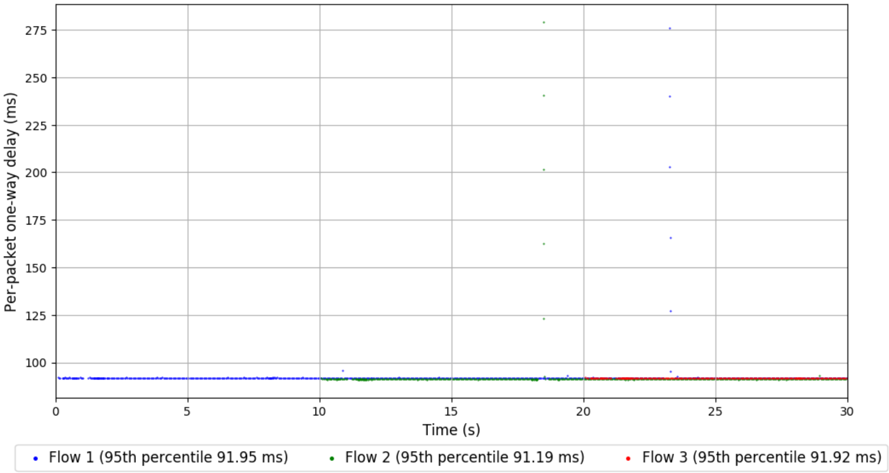
```
Run 2: Statistics of SCReAM

Start at: 2017-08-31 15:06:42
End at: 2017-08-31 15:07:12

# Below is generated by plot.py at 2017-08-31 18:45:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 91.928 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 91.947 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 91.186 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 91.916 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link



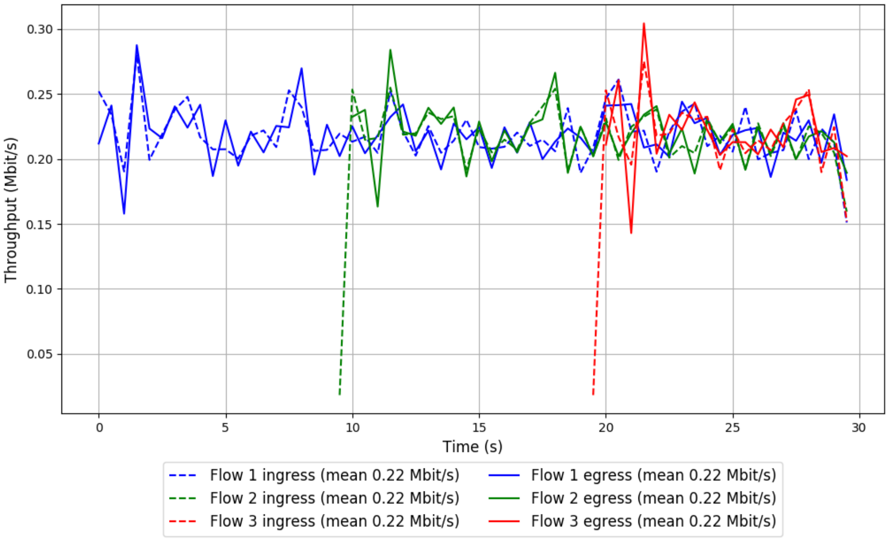


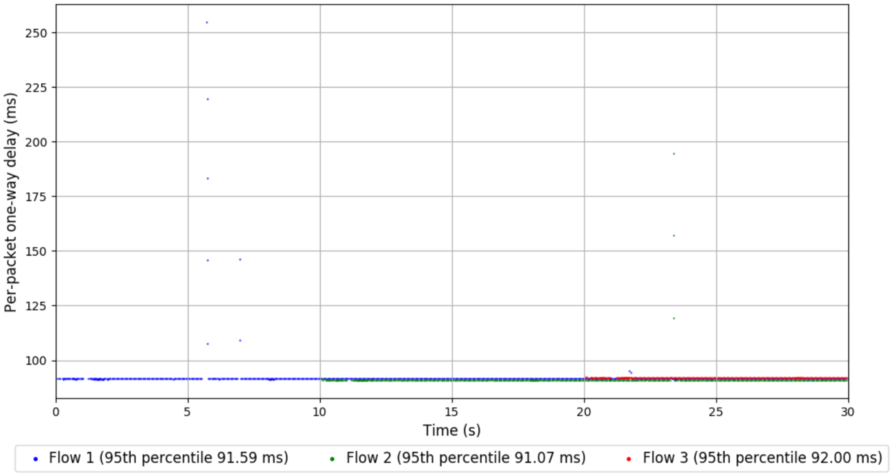
```
Run 3: Statistics of SCReAM

Start at: 2017-08-31 15:19:55
End at: 2017-08-31 15:20:25

# Below is generated by plot.py at 2017-08-31 18:45:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 91.965 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 91.594 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 91.068 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 91.999 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link



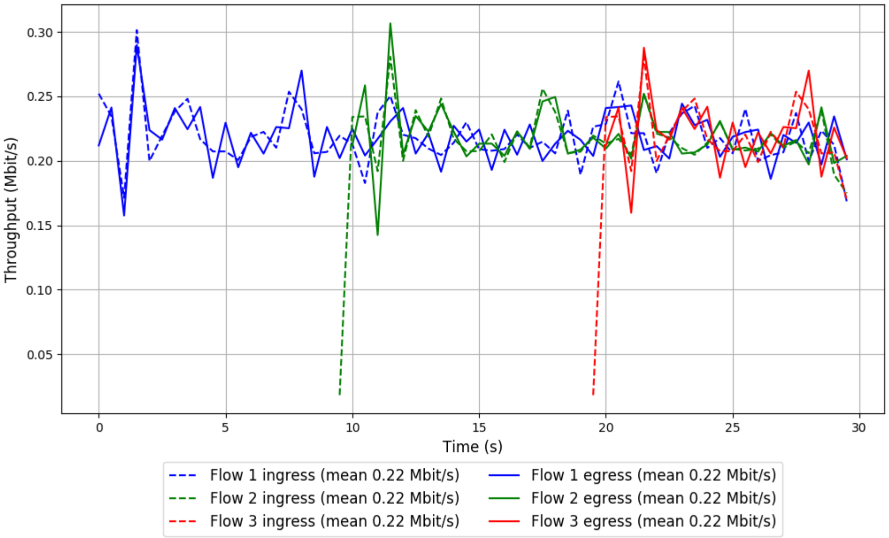


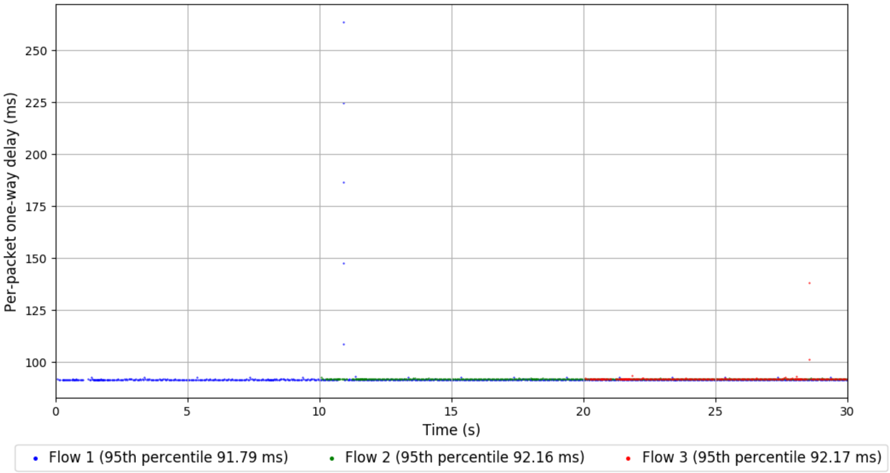
```
Run 4: Statistics of SCReAM

Start at: 2017-08-31 15:33:58
End at: 2017-08-31 15:34:28

# Below is generated by plot.py at 2017-08-31 18:45:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 92.149 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 91.790 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 92.157 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 92.169 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link



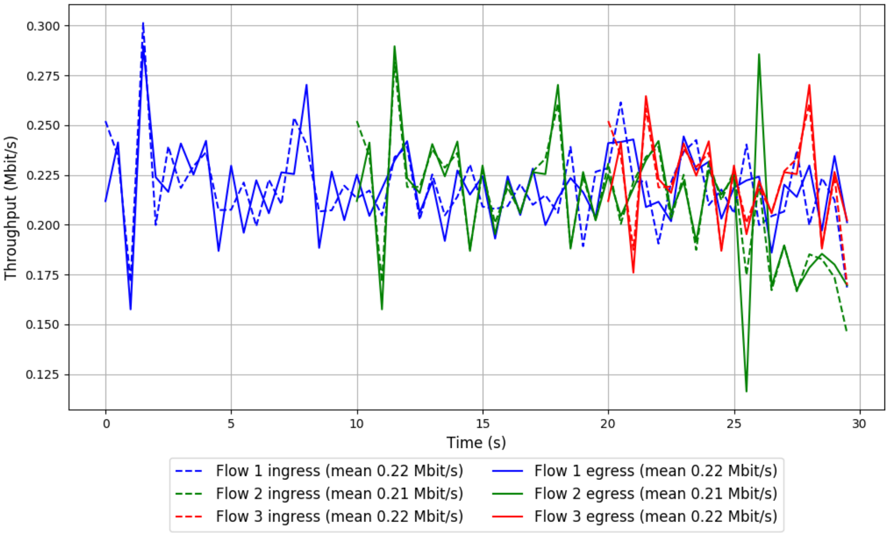


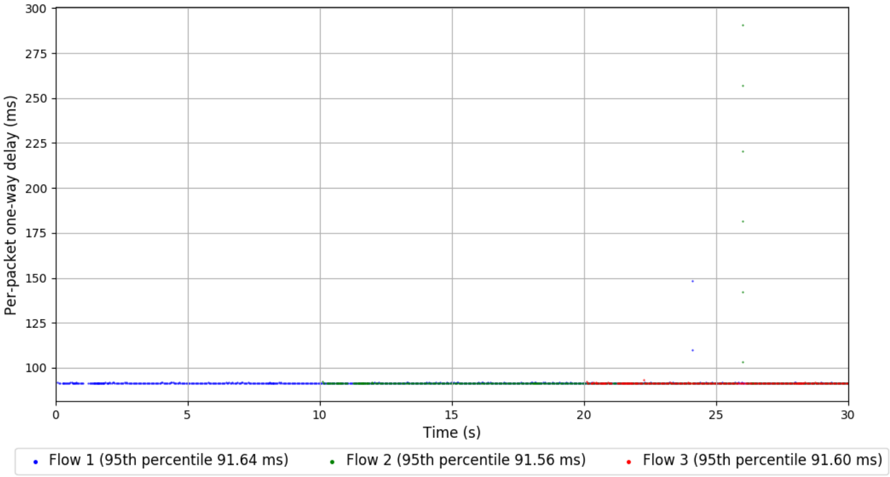
```
Run 5: Statistics of SCReAM

Start at: 2017-08-31 15:46:45
End at: 2017-08-31 15:47:15

# Below is generated by plot.py at 2017-08-31 18:45:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 91.630 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 91.645 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 91.555 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 91.596 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link



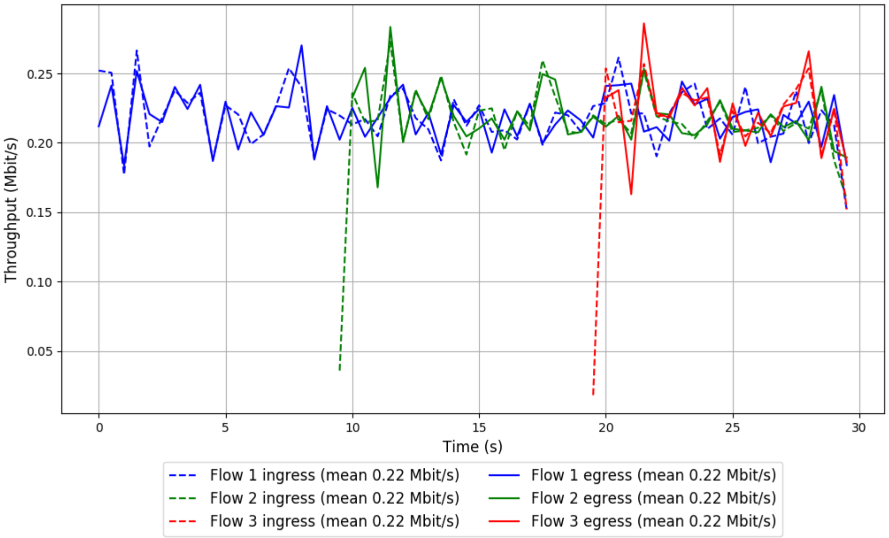


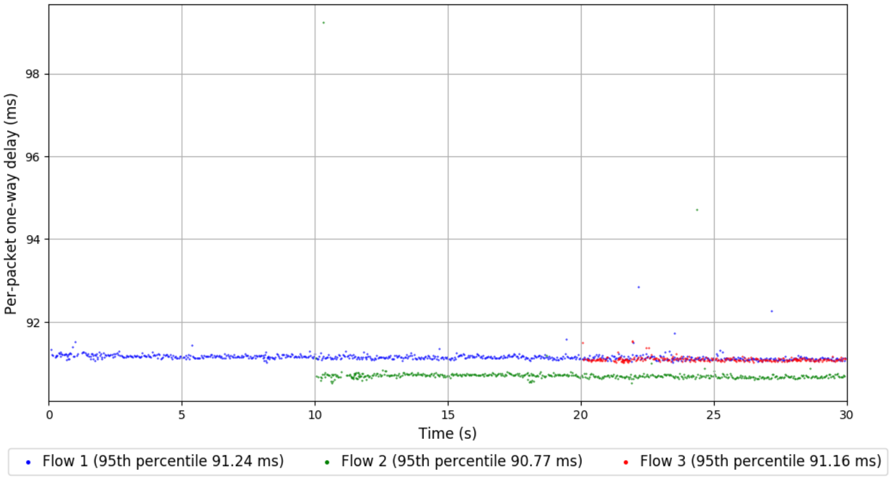
```
Run 6: Statistics of SCReAM

Start at: 2017-08-31 15:59:52
End at: 2017-08-31 16:00:22

# Below is generated by plot.py at 2017-08-31 18:45:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 91.217 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 91.236 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 90.771 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 91.156 ms
Loss rate: 0.00%
```

Run 6: Report of SCReAM — Data Link



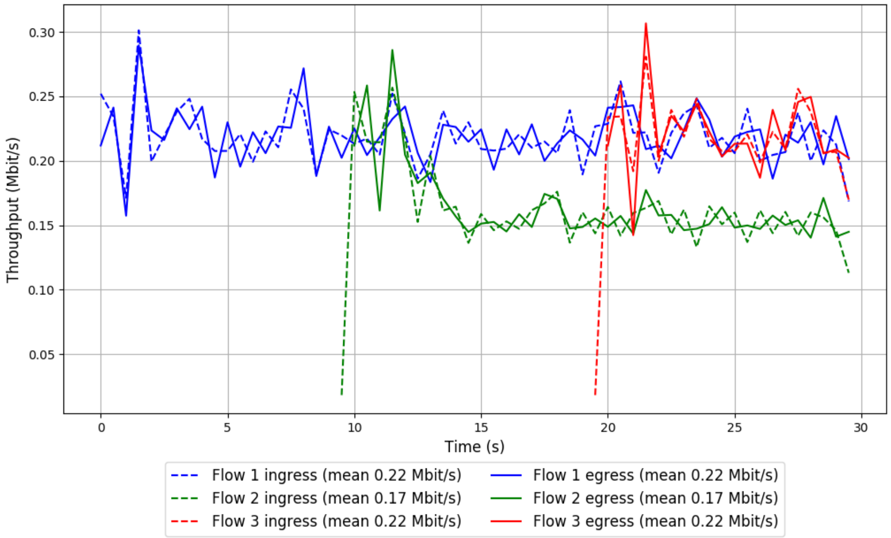


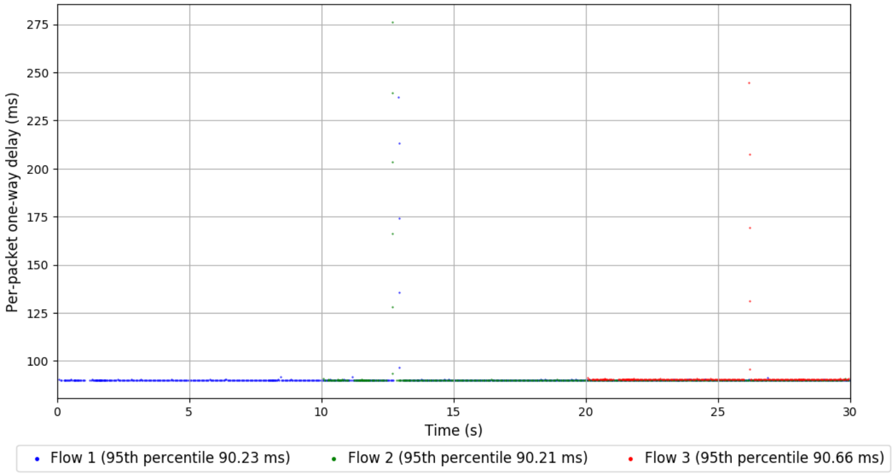
```
Run 7: Statistics of SCReAM

Start at: 2017-08-31 16:12:46
End at: 2017-08-31 16:13:16

# Below is generated by plot.py at 2017-08-31 18:45:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 90.624 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 90.232 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 90.206 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 90.658 ms
Loss rate: 0.00%
```

Run 7: Report of SCReAM — Data Link



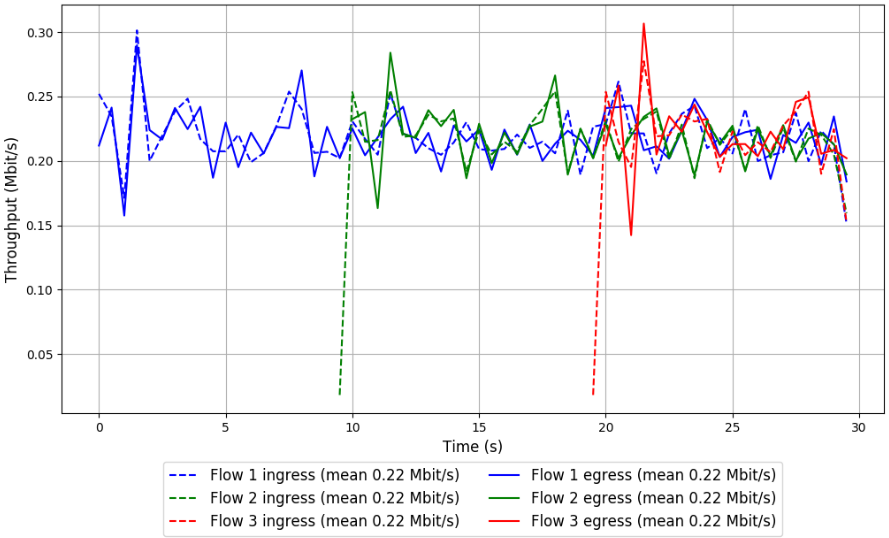


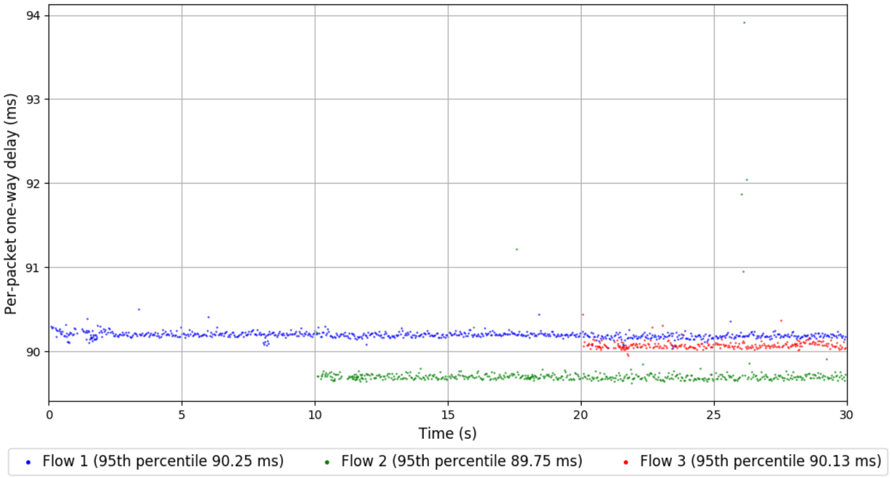
```
Run 8: Statistics of SCReAM

Start at: 2017-08-31 16:25:46
End at: 2017-08-31 16:26:16

# Below is generated by plot.py at 2017-08-31 18:45:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 90.234 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 90.247 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 89.755 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 90.129 ms
Loss rate: 0.00%
```

Run 8: Report of SCReAM — Data Link



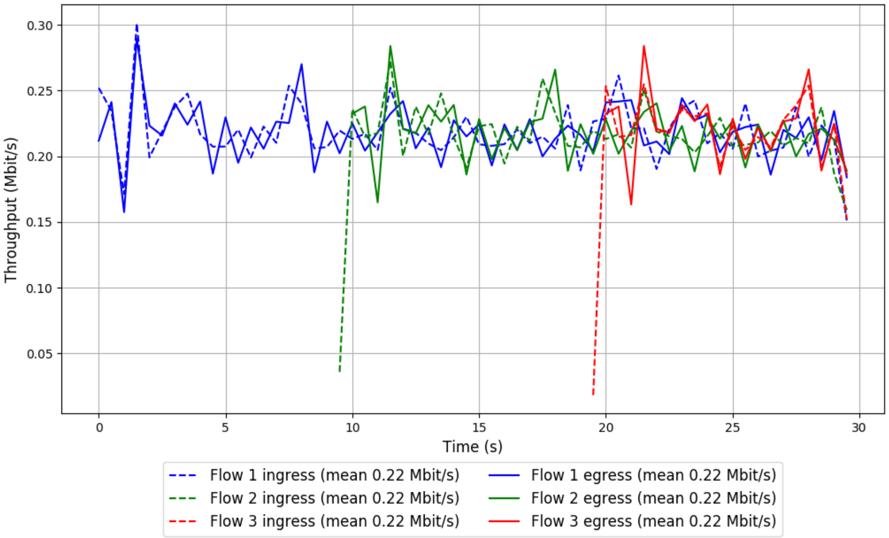


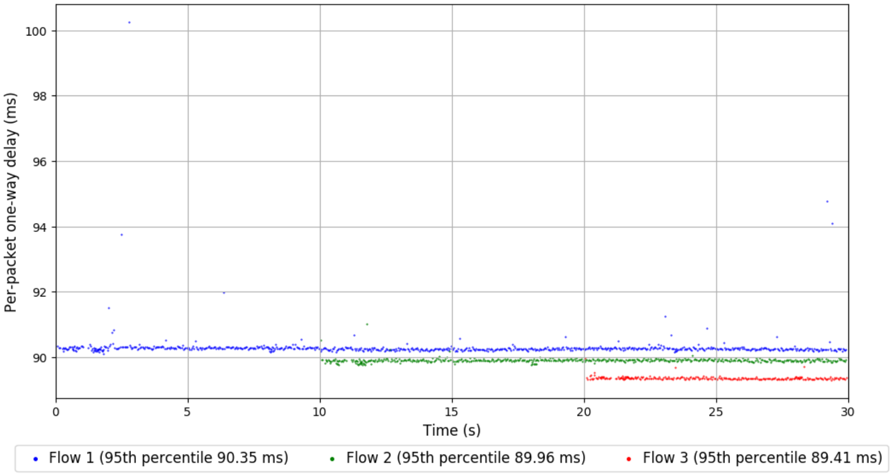
```
Run 9: Statistics of SCReAM

Start at: 2017-08-31 16:38:42
End at: 2017-08-31 16:39:12

# Below is generated by plot.py at 2017-08-31 18:45:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 90.320 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 90.348 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 89.963 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 89.414 ms
Loss rate: 0.00%
```

Run 9: Report of SCReAM — Data Link



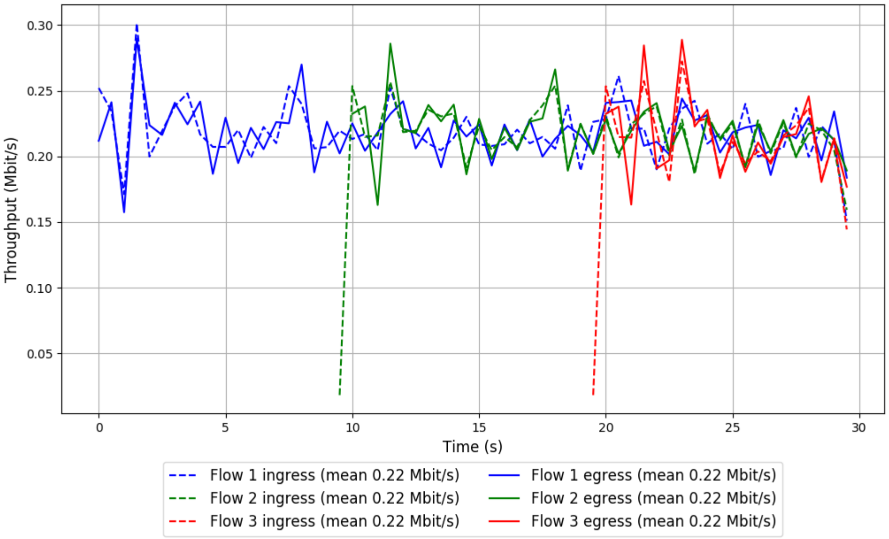


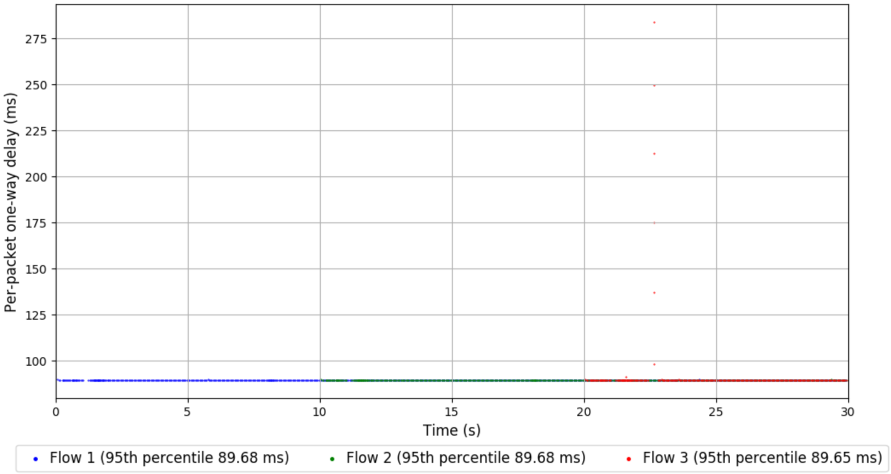
```
Run 10: Statistics of SCReAM

Start at: 2017-08-31 16:51:36
End at: 2017-08-31 16:52:06

# Below is generated by plot.py at 2017-08-31 18:45:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 89.679 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 89.681 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 89.677 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 89.648 ms
Loss rate: 0.00%
```

Run 10: Report of SCReAM — Data Link



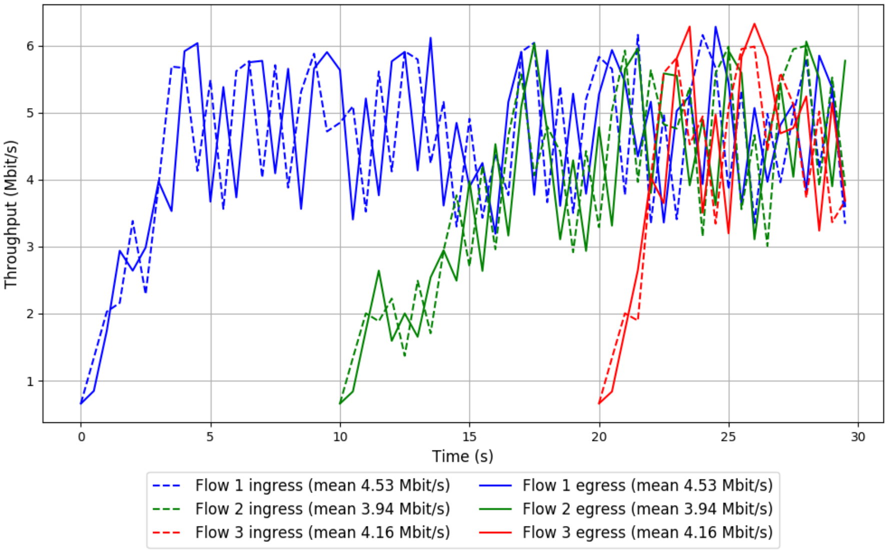


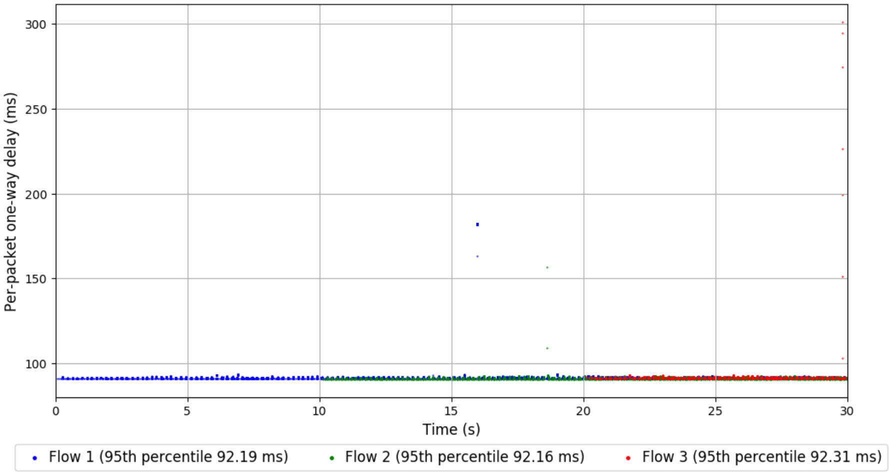
```
Run 1: Statistics of Sprout

Start at: 2017-08-31 14:40:42
End at: 2017-08-31 14:41:12

# Below is generated by plot.py at 2017-08-31 18:45:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.52 Mbit/s
95th percentile per-packet one-way delay: 92.193 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.53 Mbit/s
95th percentile per-packet one-way delay: 92.185 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.94 Mbit/s
95th percentile per-packet one-way delay: 92.160 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.16 Mbit/s
95th percentile per-packet one-way delay: 92.313 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



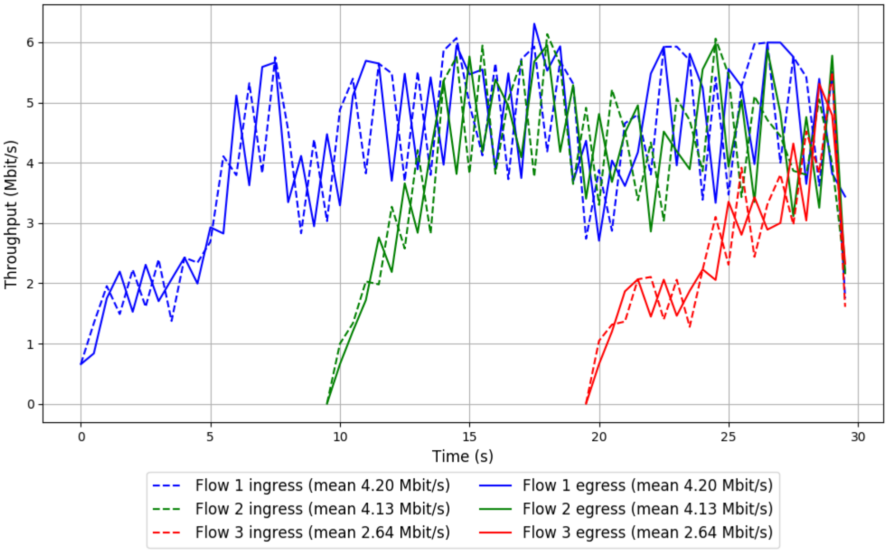


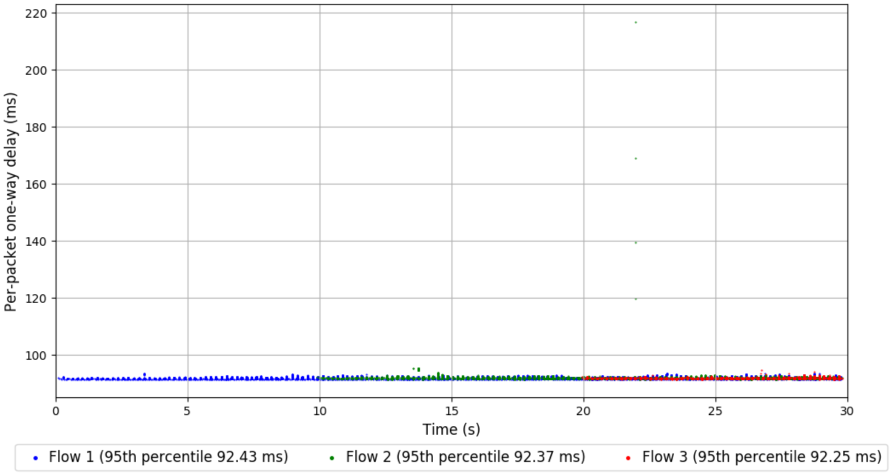
```
Run 2: Statistics of Sprout

Start at: 2017-08-31 14:54:29
End at: 2017-08-31 14:54:59

# Below is generated by plot.py at 2017-08-31 18:45:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.83 Mbit/s
95th percentile per-packet one-way delay: 92.394 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 4.20 Mbit/s
95th percentile per-packet one-way delay: 92.426 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 4.13 Mbit/s
95th percentile per-packet one-way delay: 92.368 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.64 Mbit/s
95th percentile per-packet one-way delay: 92.250 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link



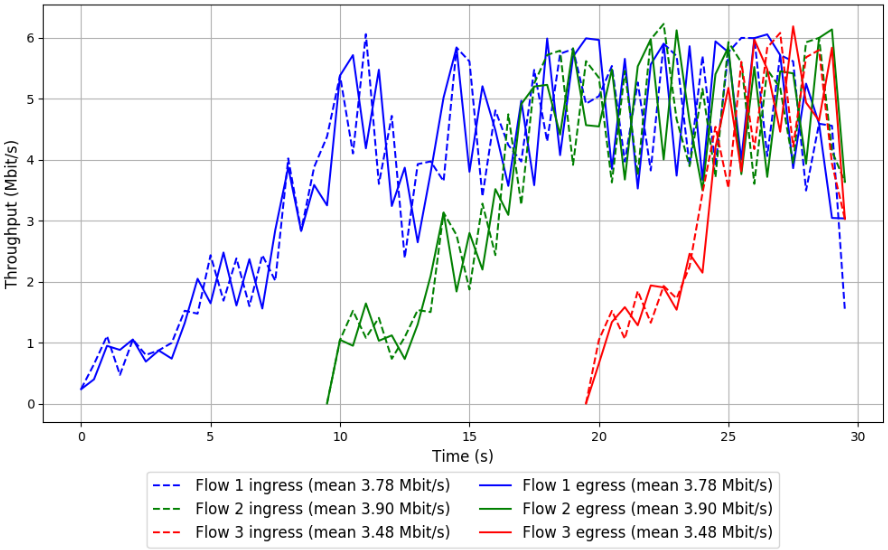


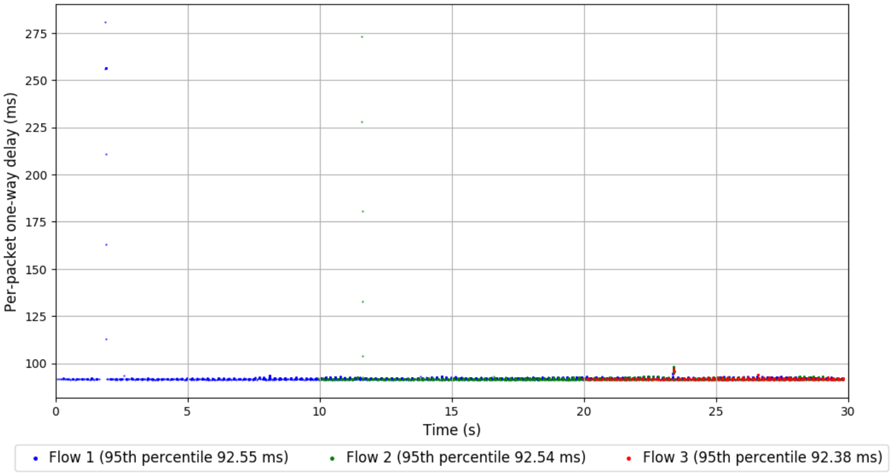
```
Run 3: Statistics of Sprout

Start at: 2017-08-31 15:07:25
End at: 2017-08-31 15:07:55

# Below is generated by plot.py at 2017-08-31 18:45:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.54 Mbit/s
95th percentile per-packet one-way delay: 92.531 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 3.78 Mbit/s
95th percentile per-packet one-way delay: 92.554 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 3.90 Mbit/s
95th percentile per-packet one-way delay: 92.541 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.48 Mbit/s
95th percentile per-packet one-way delay: 92.378 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link



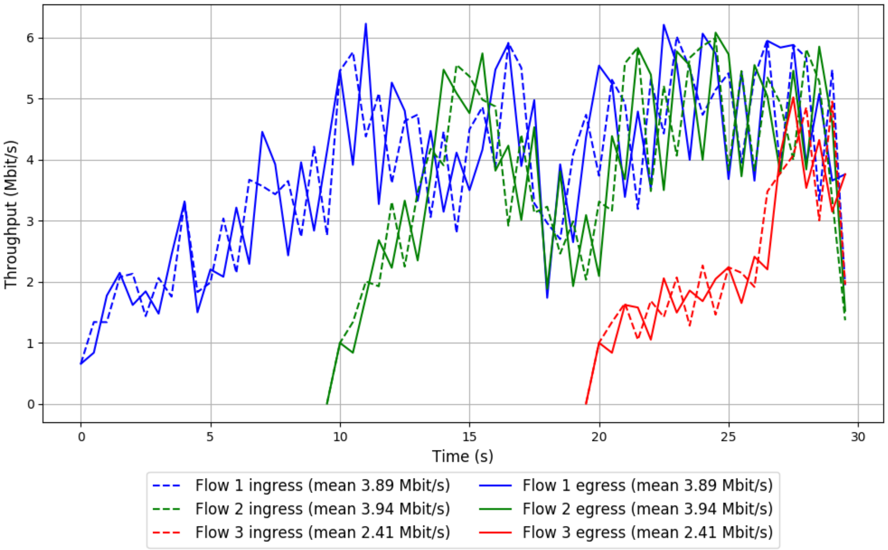


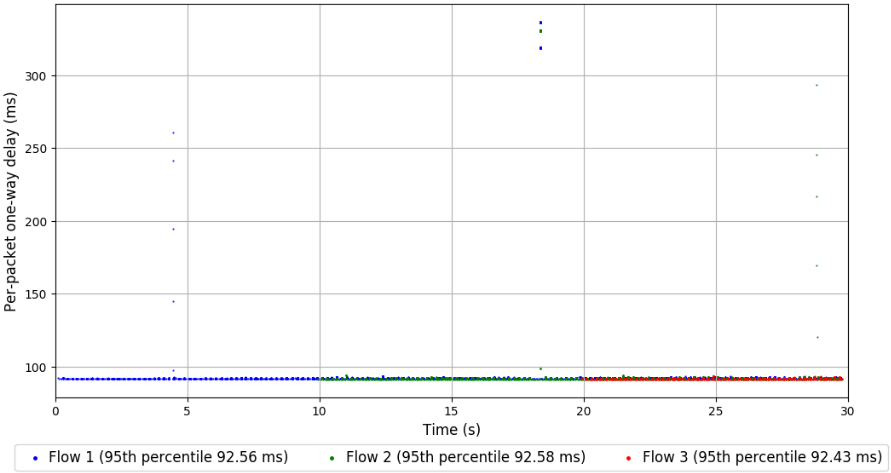
```
Run 4: Statistics of Sprout

Start at: 2017-08-31 15:20:39
End at: 2017-08-31 15:21:09

# Below is generated by plot.py at 2017-08-31 18:45:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.32 Mbit/s
95th percentile per-packet one-way delay: 92.551 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 3.89 Mbit/s
95th percentile per-packet one-way delay: 92.560 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 3.94 Mbit/s
95th percentile per-packet one-way delay: 92.575 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 92.431 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link



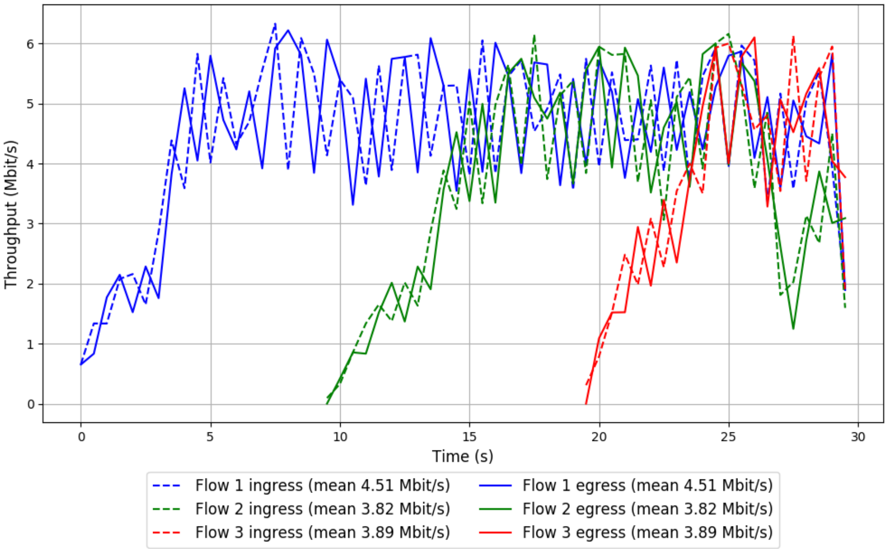


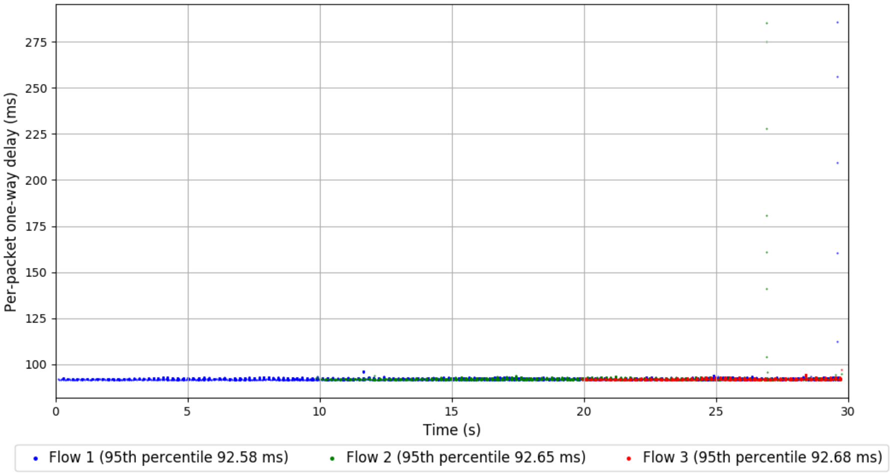
```
Run 5: Statistics of Sprout

Start at: 2017-08-31 15:34:42
End at: 2017-08-31 15:35:12

# Below is generated by plot.py at 2017-08-31 18:45:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.36 Mbit/s
95th percentile per-packet one-way delay: 92.617 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.51 Mbit/s
95th percentile per-packet one-way delay: 92.579 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.82 Mbit/s
95th percentile per-packet one-way delay: 92.652 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.89 Mbit/s
95th percentile per-packet one-way delay: 92.684 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link



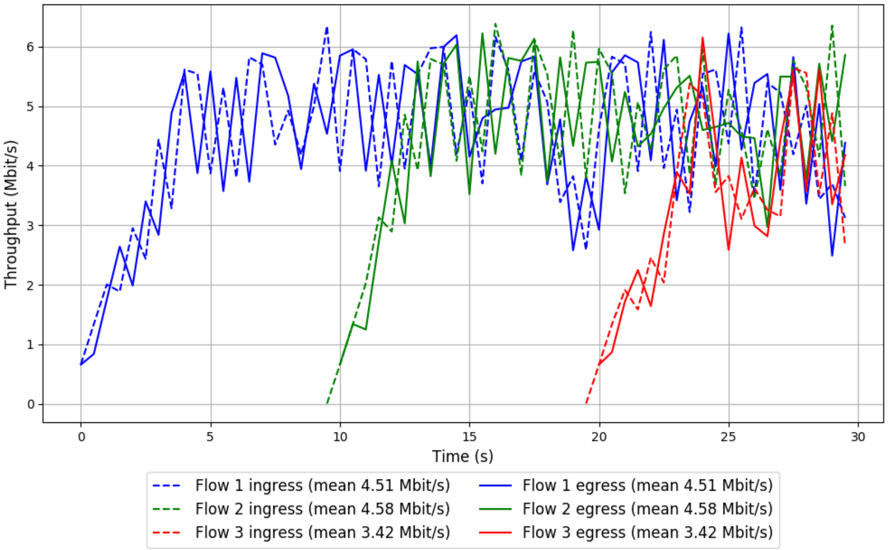


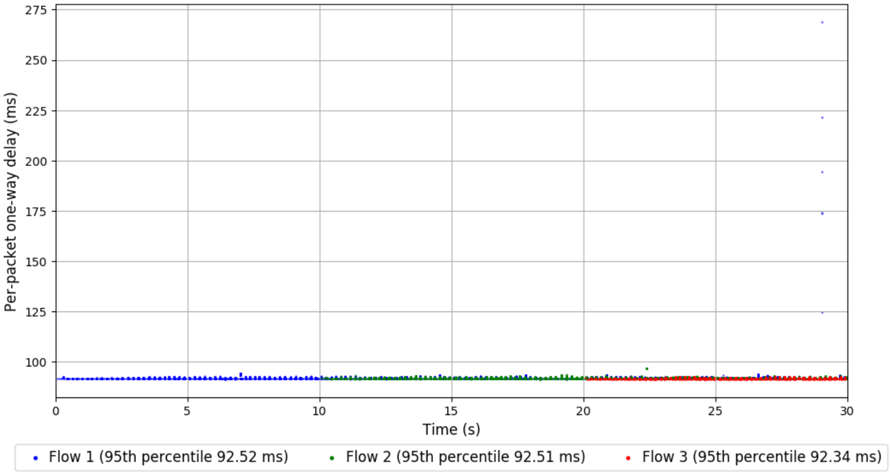
```
Run 6: Statistics of Sprout

Start at: 2017-08-31 15:47:29
End at: 2017-08-31 15:47:59

# Below is generated by plot.py at 2017-08-31 18:45:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.68 Mbit/s
95th percentile per-packet one-way delay: 92.492 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.51 Mbit/s
95th percentile per-packet one-way delay: 92.520 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.58 Mbit/s
95th percentile per-packet one-way delay: 92.512 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.42 Mbit/s
95th percentile per-packet one-way delay: 92.339 ms
Loss rate: 0.00%
```

Run 6: Report of Sprout — Data Link



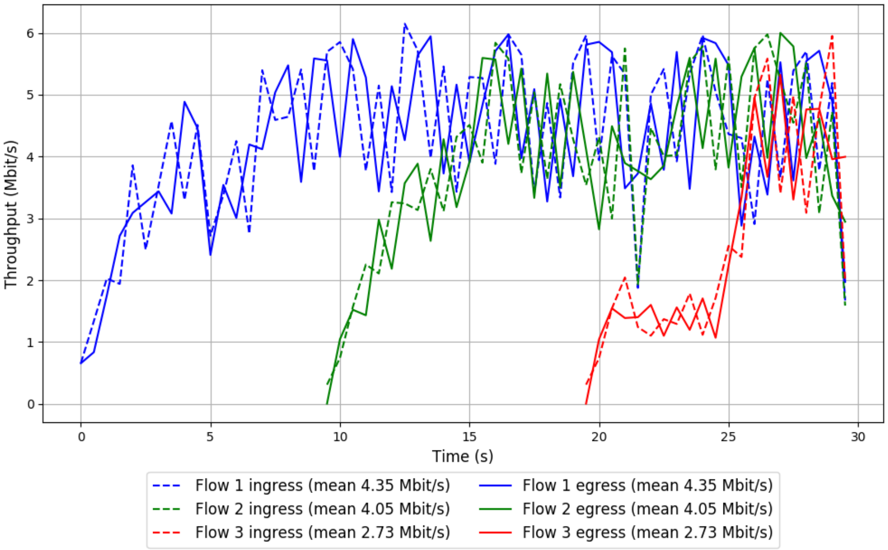


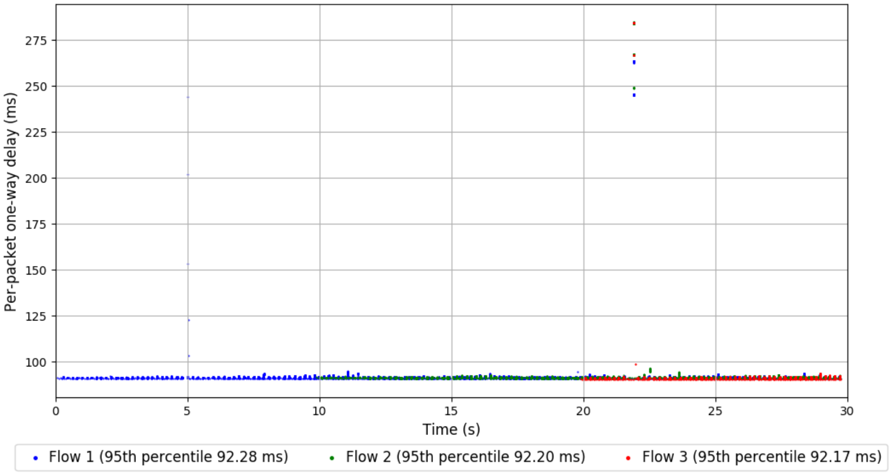
```
Run 7: Statistics of Sprout

Start at: 2017-08-31 16:00:35
End at: 2017-08-31 16:01:05

# Below is generated by plot.py at 2017-08-31 18:45:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.97 Mbit/s
95th percentile per-packet one-way delay: 92.224 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.35 Mbit/s
95th percentile per-packet one-way delay: 92.275 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.05 Mbit/s
95th percentile per-packet one-way delay: 92.197 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.73 Mbit/s
95th percentile per-packet one-way delay: 92.171 ms
Loss rate: 0.00%
```

Run 7: Report of Sprout — Data Link



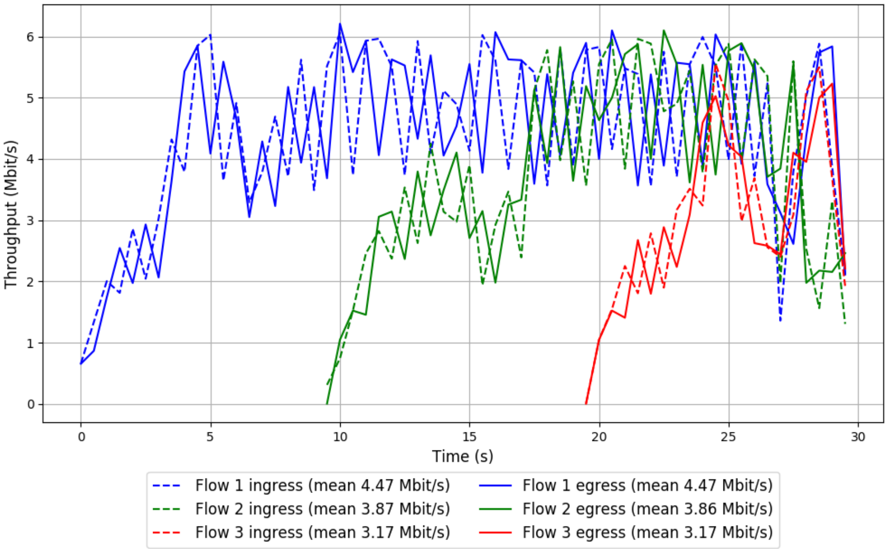


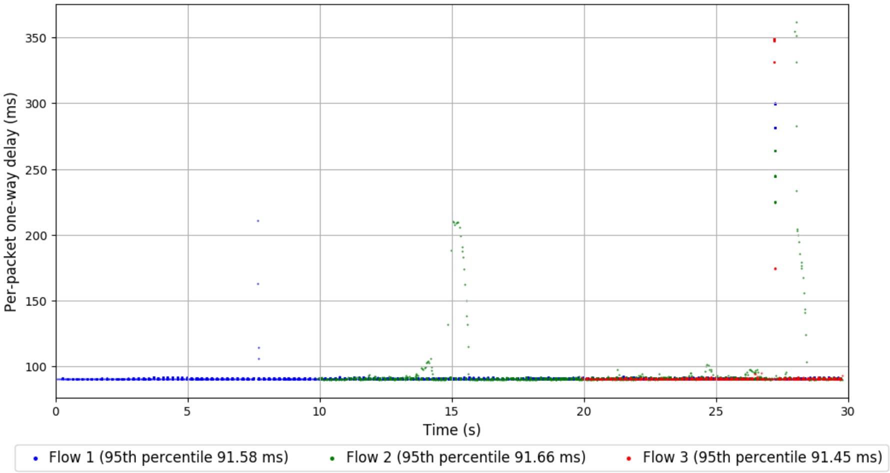
```
Run 8: Statistics of Sprout

Start at: 2017-08-31 16:13:30
End at: 2017-08-31 16:14:00

# Below is generated by plot.py at 2017-08-31 18:45:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.10 Mbit/s
95th percentile per-packet one-way delay: 91.595 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 4.47 Mbit/s
95th percentile per-packet one-way delay: 91.585 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.86 Mbit/s
95th percentile per-packet one-way delay: 91.656 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 3.17 Mbit/s
95th percentile per-packet one-way delay: 91.448 ms
Loss rate: 0.00%
```

Run 8: Report of Sprout — Data Link



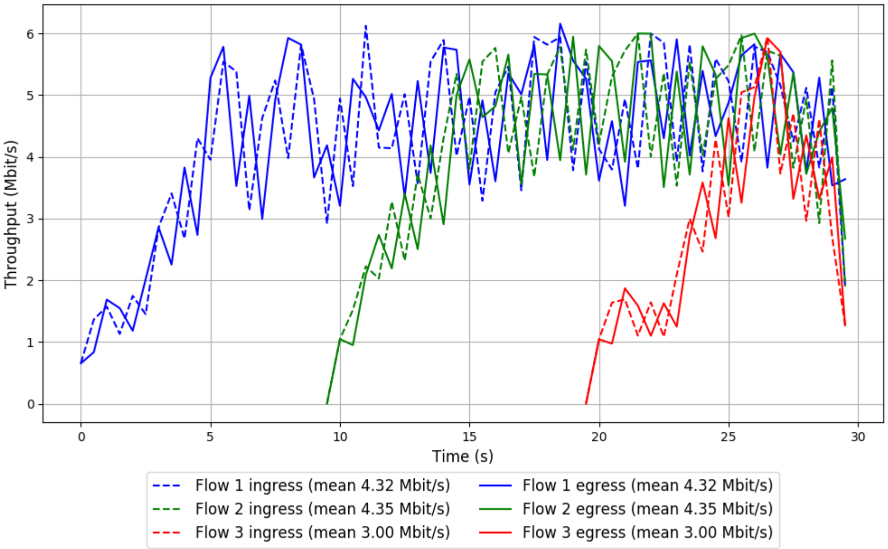


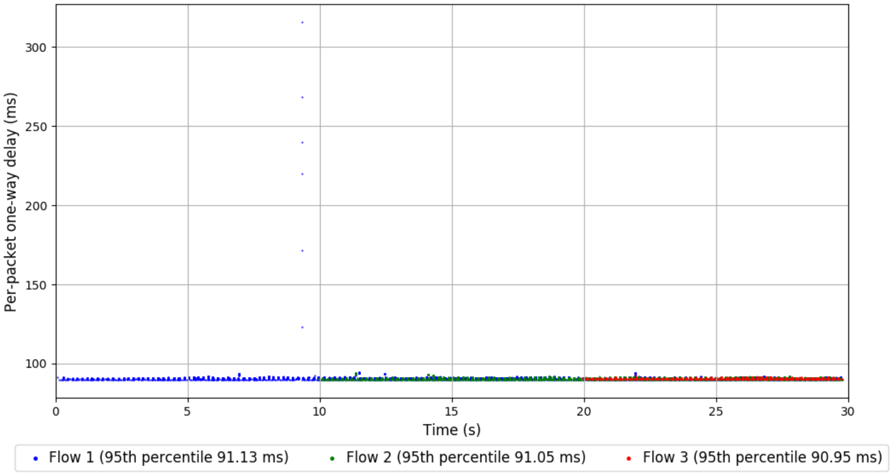
```
Run 9: Statistics of Sprout

Start at: 2017-08-31 16:26:29
End at: 2017-08-31 16:26:59

# Below is generated by plot.py at 2017-08-31 18:45:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.22 Mbit/s
95th percentile per-packet one-way delay: 91.073 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 91.126 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.35 Mbit/s
95th percentile per-packet one-way delay: 91.047 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.00 Mbit/s
95th percentile per-packet one-way delay: 90.950 ms
Loss rate: 0.00%
```

Run 9: Report of Sprout — Data Link



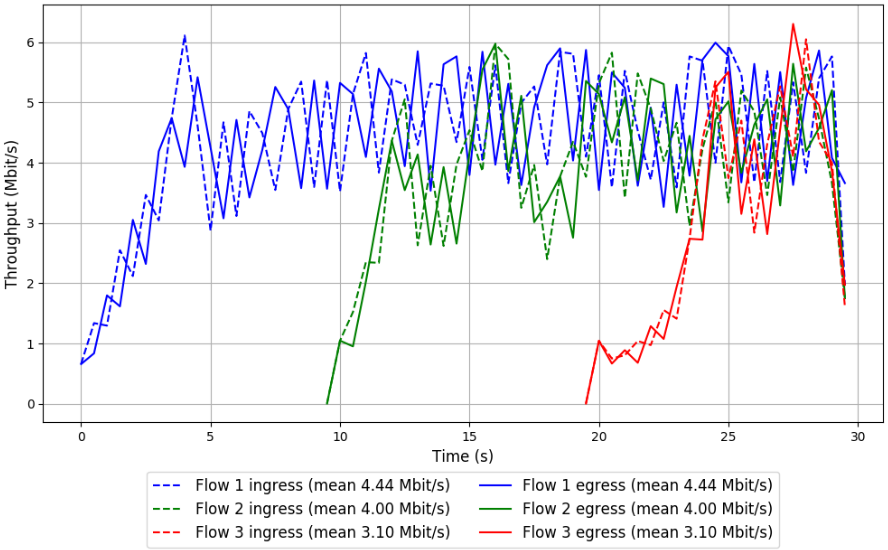


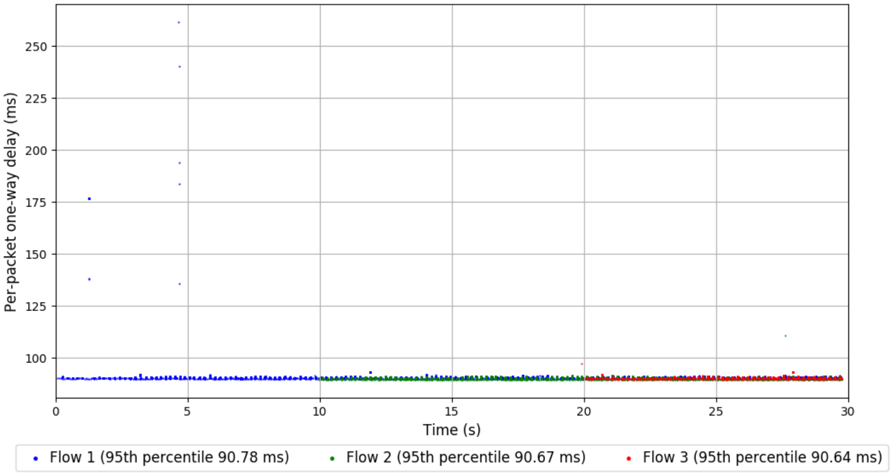
```
Run 10: Statistics of Sprout

Start at: 2017-08-31 16:39:26
End at: 2017-08-31 16:39:56

# Below is generated by plot.py at 2017-08-31 18:45:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.13 Mbit/s
95th percentile per-packet one-way delay: 90.722 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.44 Mbit/s
95th percentile per-packet one-way delay: 90.778 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.00 Mbit/s
95th percentile per-packet one-way delay: 90.665 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.10 Mbit/s
95th percentile per-packet one-way delay: 90.645 ms
Loss rate: 0.00%
```

Run 10: Report of Sprout — Data Link



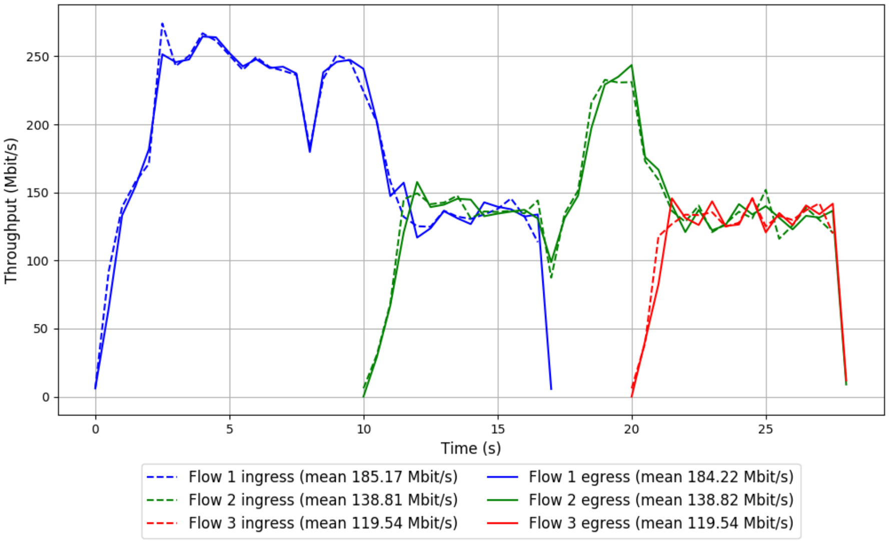


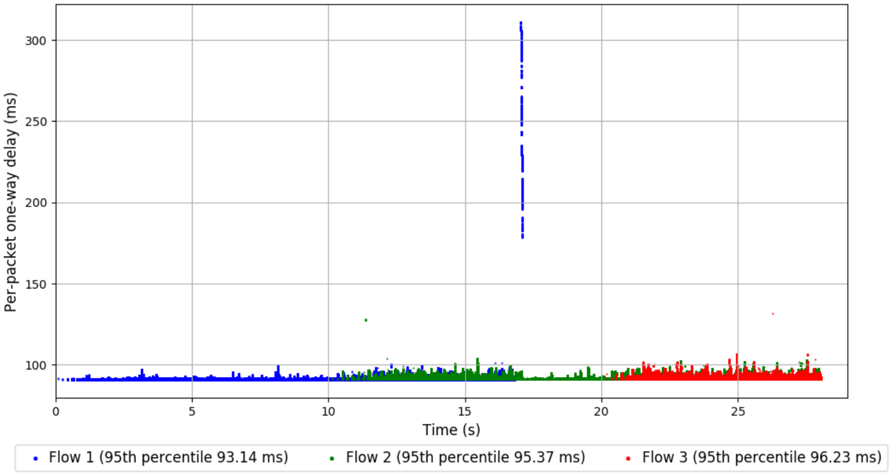
```
Run 1: Statistics of TaoVA-100x

Start at: 2017-08-31 14:47:19
End at: 2017-08-31 14:47:49

# Below is generated by plot.py at 2017-08-31 18:47:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 234.50 Mbit/s
95th percentile per-packet one-way delay: 94.809 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 184.22 Mbit/s
95th percentile per-packet one-way delay: 93.140 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 138.82 Mbit/s
95th percentile per-packet one-way delay: 95.368 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 119.54 Mbit/s
95th percentile per-packet one-way delay: 96.226 ms
Loss rate: 0.00%
```

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



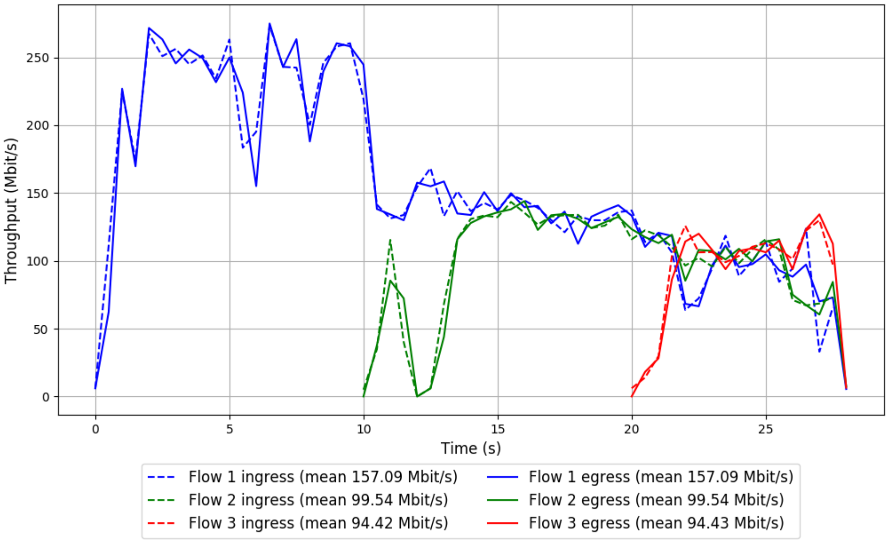


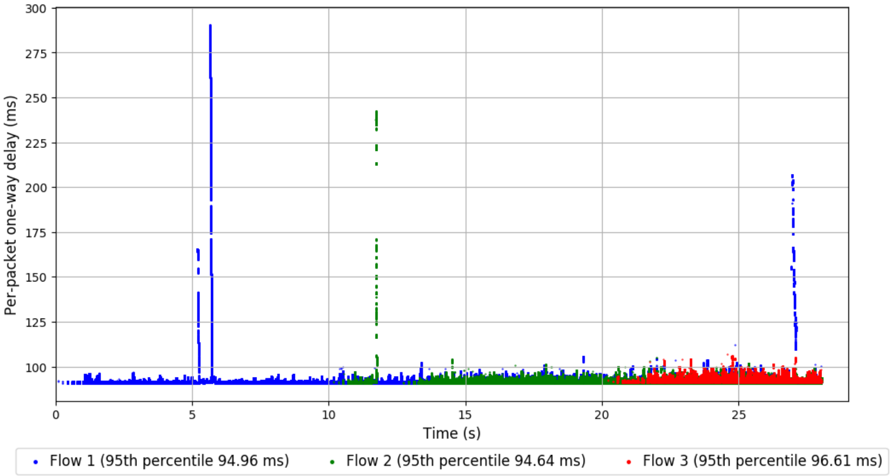
```
Run 2: Statistics of TaoVA-100x

Start at: 2017-08-31 15:00:20
End at: 2017-08-31 15:00:50

# Below is generated by plot.py at 2017-08-31 18:47:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 247.15 Mbit/s
95th percentile per-packet one-way delay: 95.181 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 157.09 Mbit/s
95th percentile per-packet one-way delay: 94.961 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 99.54 Mbit/s
95th percentile per-packet one-way delay: 94.638 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 94.43 Mbit/s
95th percentile per-packet one-way delay: 96.610 ms
Loss rate: 0.00%
```

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



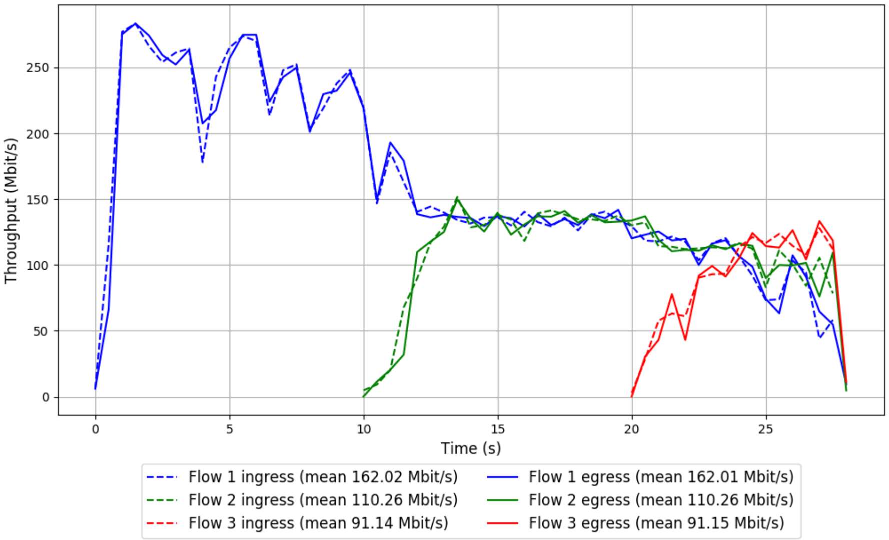


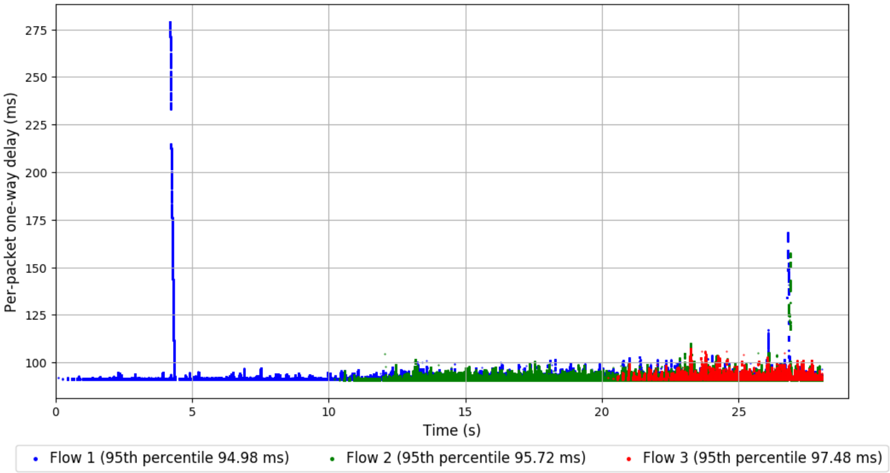
```
Run 3: Statistics of TaoVA-100x

Start at: 2017-08-31 15:13:21
End at: 2017-08-31 15:13:51

# Below is generated by plot.py at 2017-08-31 18:48:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 257.84 Mbit/s
95th percentile per-packet one-way delay: 95.559 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 162.01 Mbit/s
95th percentile per-packet one-way delay: 94.976 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 110.26 Mbit/s
95th percentile per-packet one-way delay: 95.721 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 91.15 Mbit/s
95th percentile per-packet one-way delay: 97.478 ms
Loss rate: 0.00%
```

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



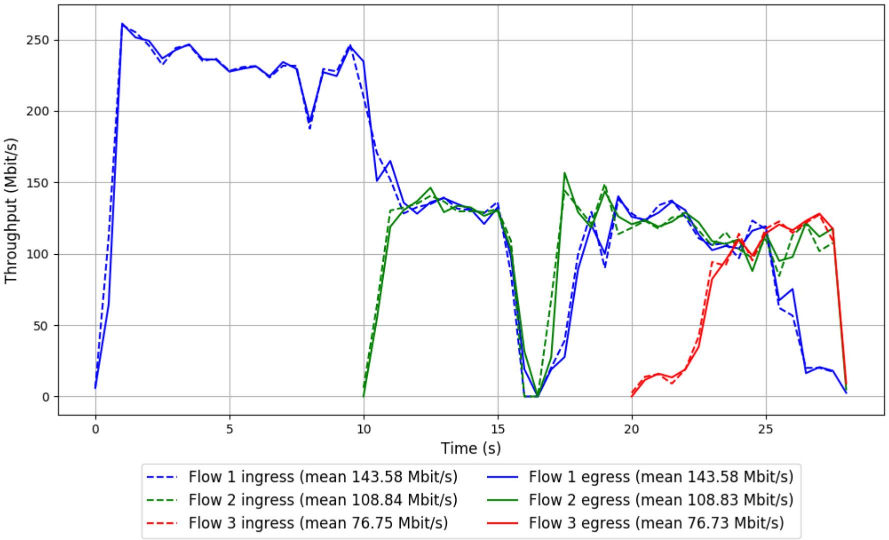


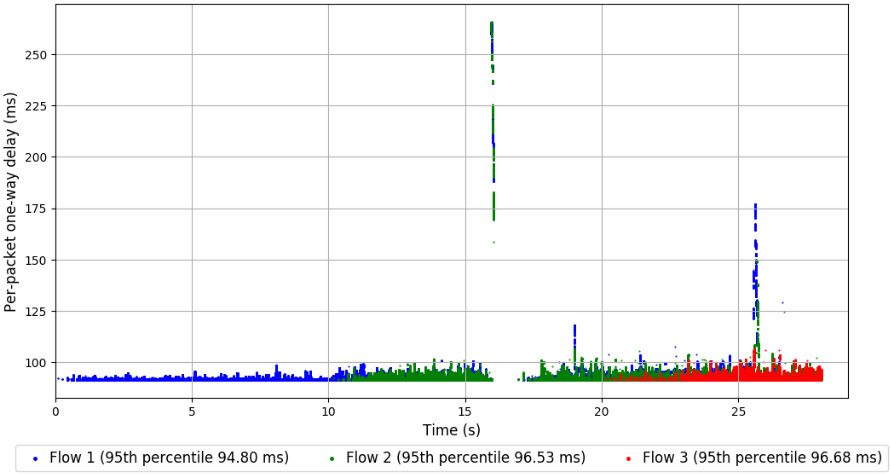
```
Run 4: Statistics of TaoVA-100x

Start at: 2017-08-31 15:27:40
End at: 2017-08-31 15:28:10

# Below is generated by plot.py at 2017-08-31 18:48:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 234.79 Mbit/s
95th percentile per-packet one-way delay: 95.660 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 143.58 Mbit/s
95th percentile per-packet one-way delay: 94.802 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 108.83 Mbit/s
95th percentile per-packet one-way delay: 96.531 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 76.73 Mbit/s
95th percentile per-packet one-way delay: 96.680 ms
Loss rate: 0.00%
```

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



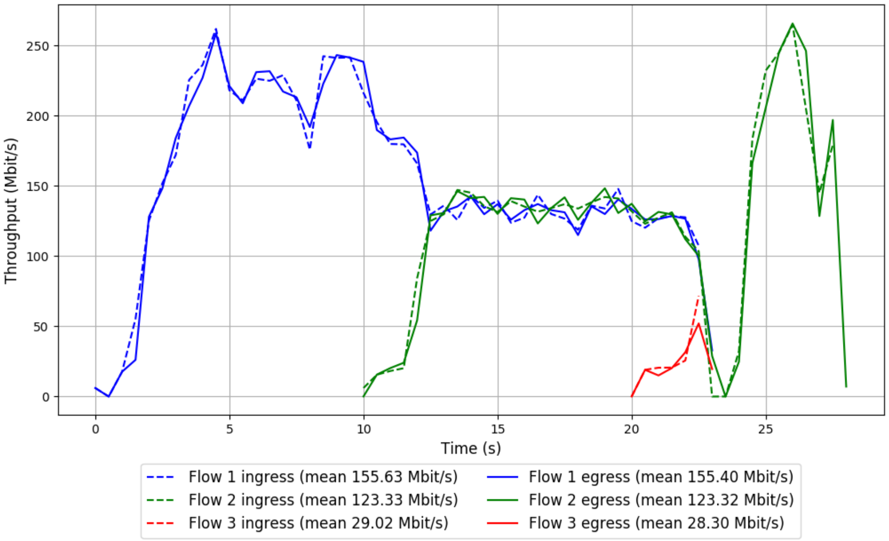


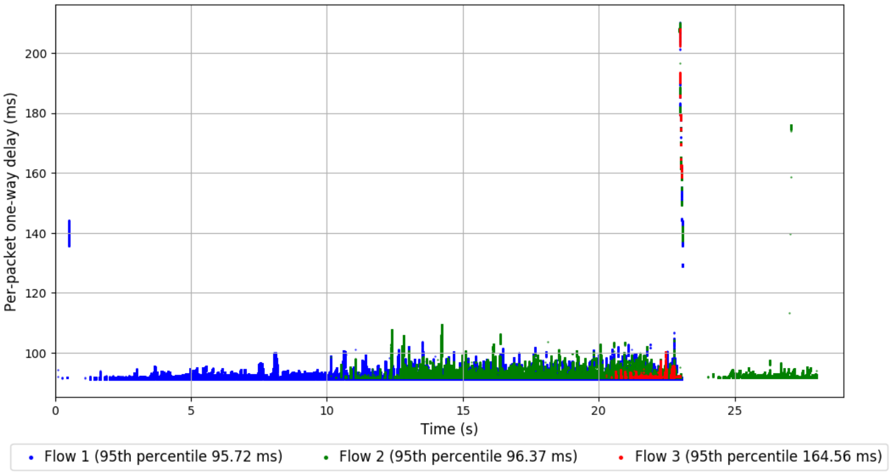
```
Run 5: Statistics of TaoVA-100x

Start at: 2017-08-31 15:40:33
End at: 2017-08-31 15:41:03

# Below is generated by plot.py at 2017-08-31 18:49:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 209.70 Mbit/s
95th percentile per-packet one-way delay: 95.980 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 155.40 Mbit/s
95th percentile per-packet one-way delay: 95.716 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 123.32 Mbit/s
95th percentile per-packet one-way delay: 96.366 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 28.30 Mbit/s
95th percentile per-packet one-way delay: 164.555 ms
Loss rate: 0.00%
```

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



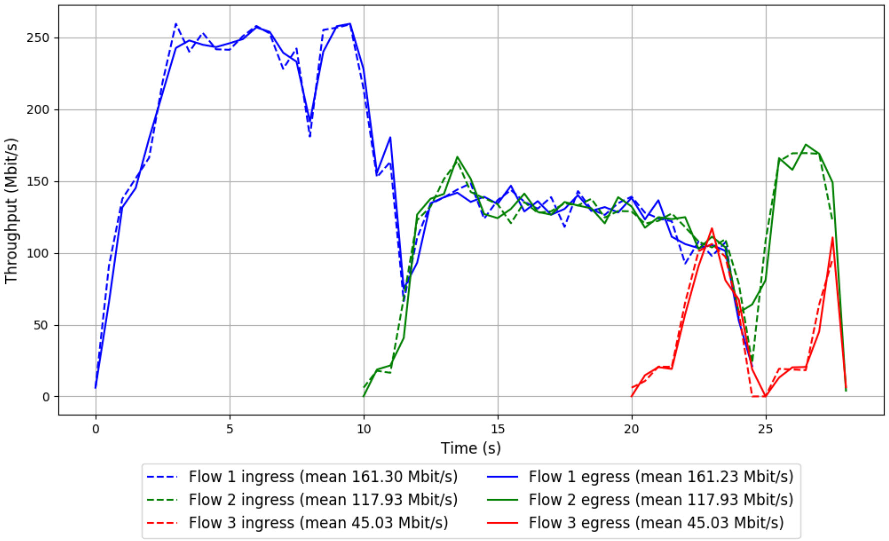


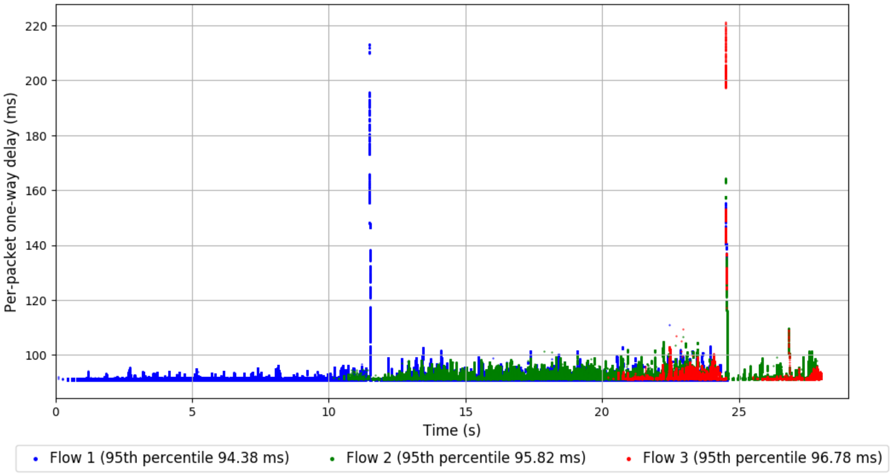
```
Run 6: Statistics of TaoVA-100x

Start at: 2017-08-31 15:53:31
End at: 2017-08-31 15:54:01

# Below is generated by plot.py at 2017-08-31 18:49:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 229.27 Mbit/s
95th percentile per-packet one-way delay: 95.018 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 161.23 Mbit/s
95th percentile per-packet one-way delay: 94.380 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 117.93 Mbit/s
95th percentile per-packet one-way delay: 95.818 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 45.03 Mbit/s
95th percentile per-packet one-way delay: 96.781 ms
Loss rate: 0.00%
```

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



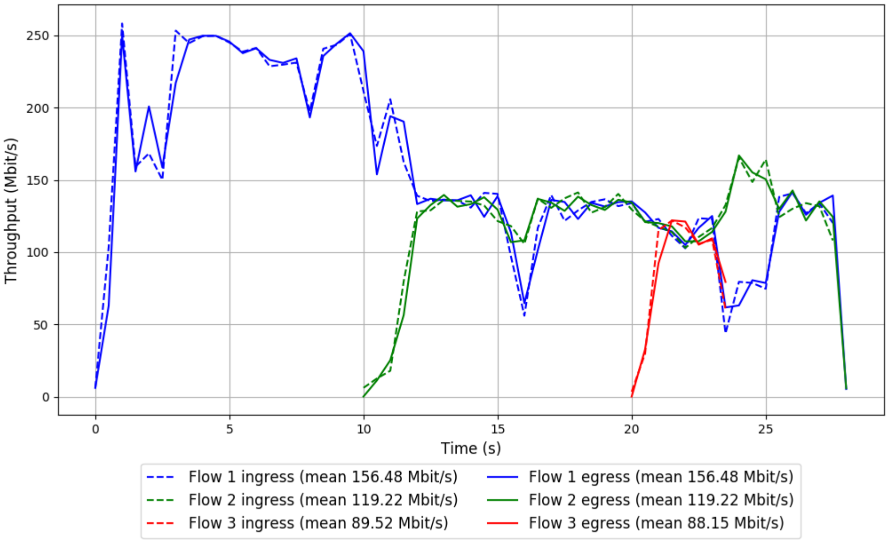


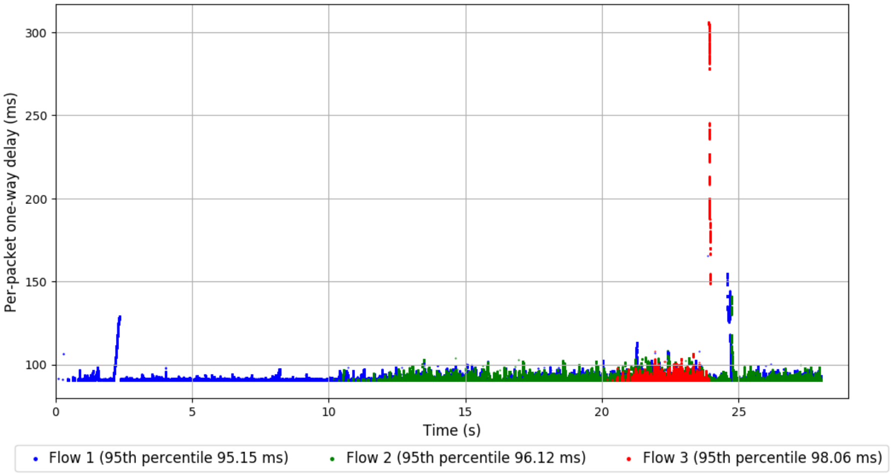
```
Run 7: Statistics of TaoVA-100x

Start at: 2017-08-31 16:06:27
End at: 2017-08-31 16:06:57

# Below is generated by plot.py at 2017-08-31 18:50:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 244.51 Mbit/s
95th percentile per-packet one-way delay: 95.641 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 156.48 Mbit/s
95th percentile per-packet one-way delay: 95.153 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 119.22 Mbit/s
95th percentile per-packet one-way delay: 96.118 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 88.15 Mbit/s
95th percentile per-packet one-way delay: 98.059 ms
Loss rate: 0.00%
```

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



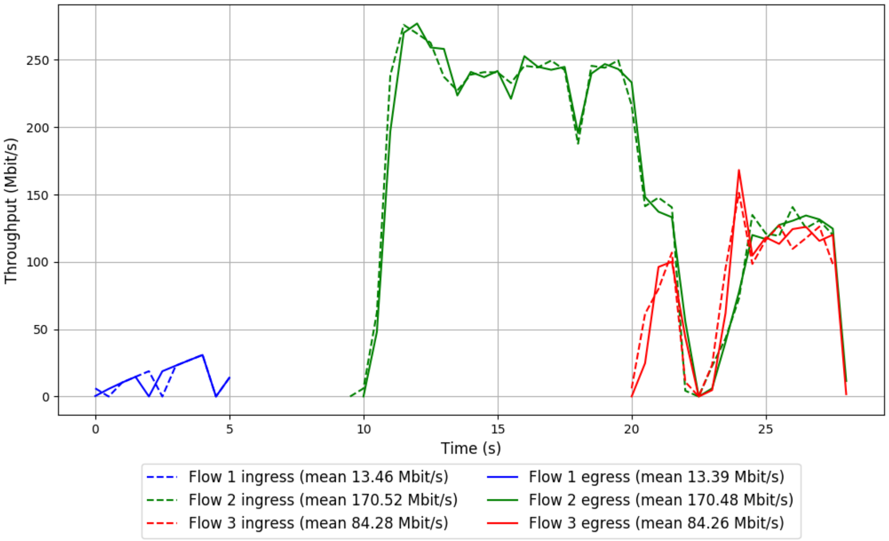


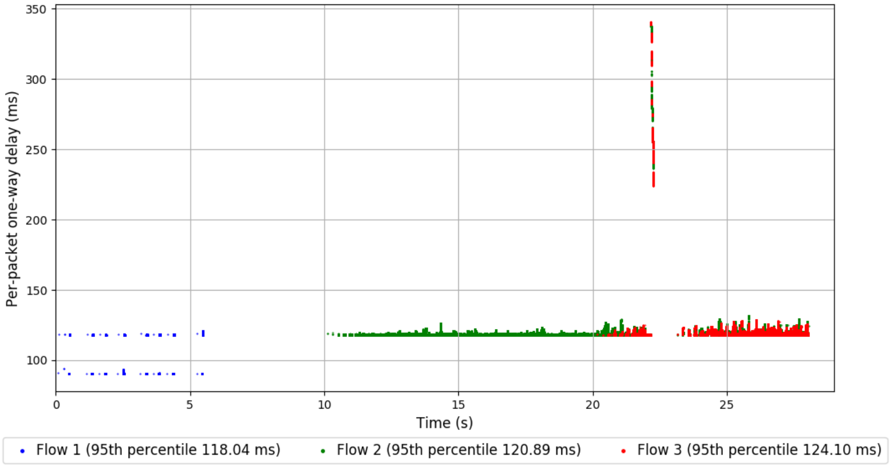
```
Run 8: Statistics of TaoVA-100x

Start at: 2017-08-31 16:19:33
End at: 2017-08-31 16:20:03

# Below is generated by plot.py at 2017-08-31 18:50:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 135.59 Mbit/s
95th percentile per-packet one-way delay: 121.544 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 13.39 Mbit/s
95th percentile per-packet one-way delay: 118.042 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 170.48 Mbit/s
95th percentile per-packet one-way delay: 120.894 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 84.26 Mbit/s
95th percentile per-packet one-way delay: 124.103 ms
Loss rate: 0.36%
```

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



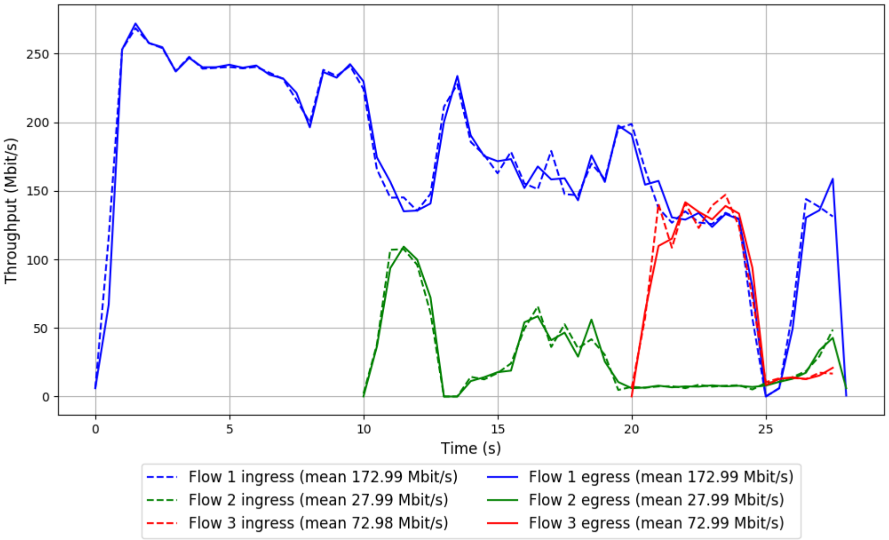


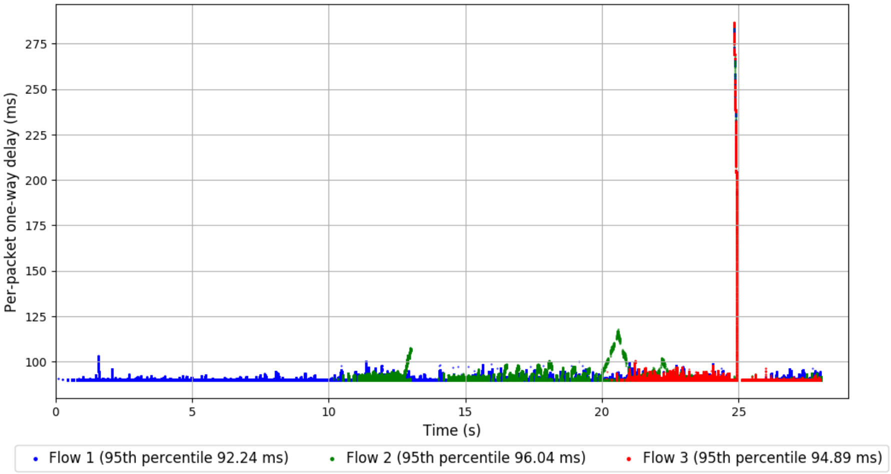
```
Run 9: Statistics of TaoVA-100x

Start at: 2017-08-31 16:32:31
End at: 2017-08-31 16:33:01

# Below is generated by plot.py at 2017-08-31 18:51:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 211.32 Mbit/s
95th percentile per-packet one-way delay: 92.844 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 172.99 Mbit/s
95th percentile per-packet one-way delay: 92.237 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.99 Mbit/s
95th percentile per-packet one-way delay: 96.040 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 72.99 Mbit/s
95th percentile per-packet one-way delay: 94.889 ms
Loss rate: 0.00%
```

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



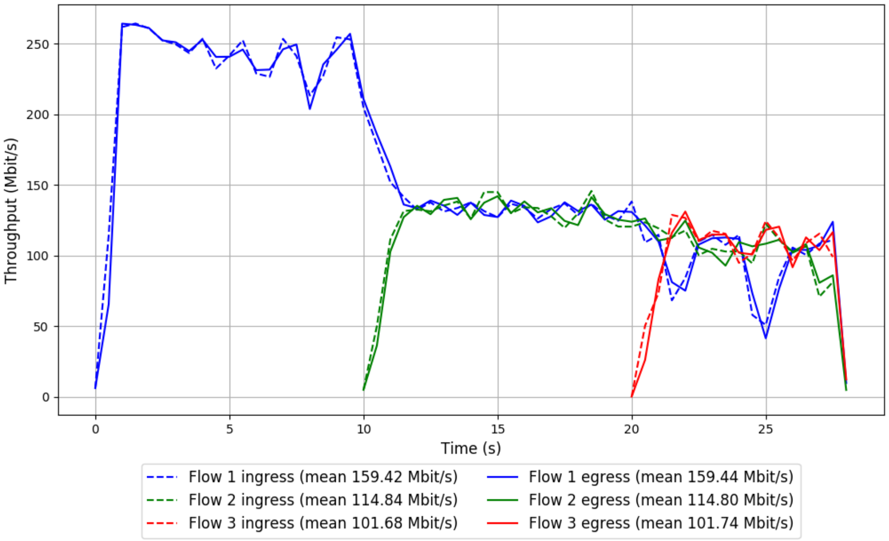


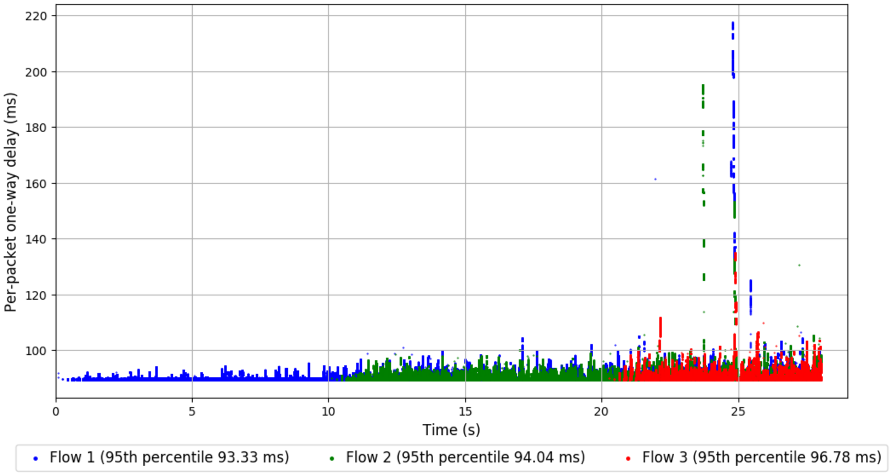
```
Run 10: Statistics of TaoVA-100x

Start at: 2017-08-31 16:45:16
End at: 2017-08-31 16:45:46

# Below is generated by plot.py at 2017-08-31 18:51:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 261.23 Mbit/s
95th percentile per-packet one-way delay: 93.952 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 159.44 Mbit/s
95th percentile per-packet one-way delay: 93.327 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 114.80 Mbit/s
95th percentile per-packet one-way delay: 94.044 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 101.74 Mbit/s
95th percentile per-packet one-way delay: 96.775 ms
Loss rate: 0.00%
```

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



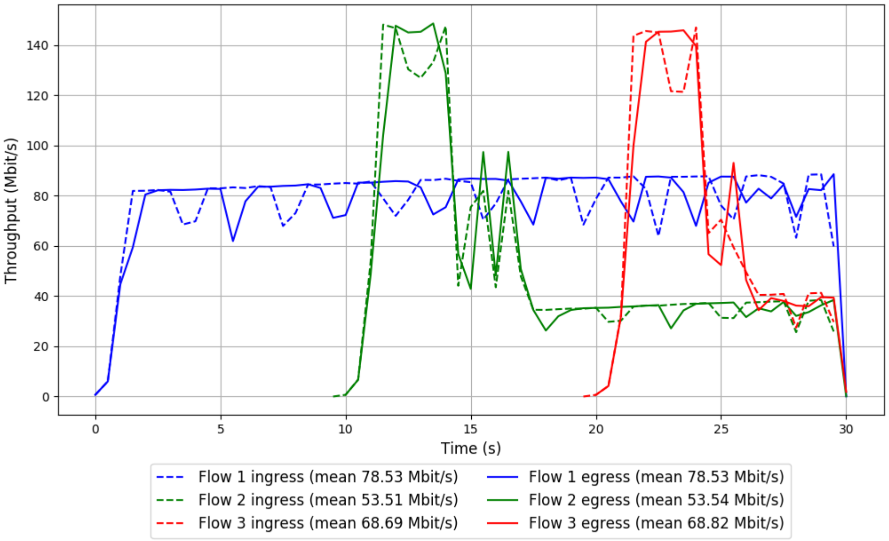


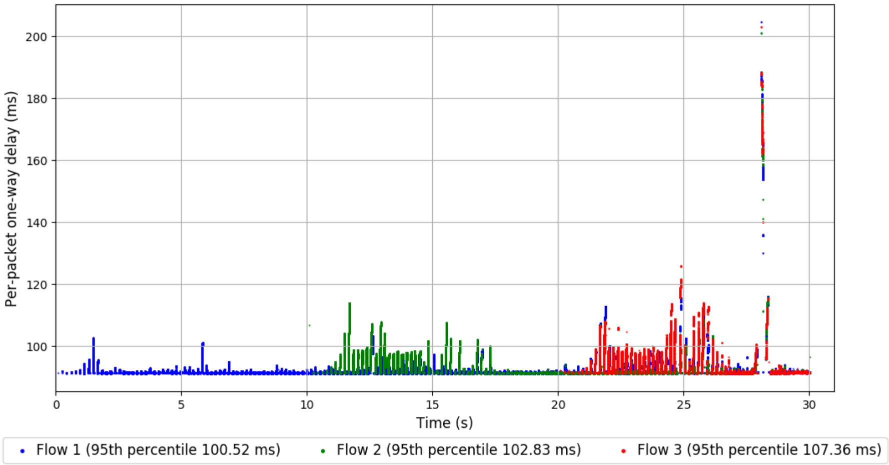
```
Run 1: Statistics of TCP Vegas

Start at: 2017-08-31 14:48:29
End at: 2017-08-31 14:48:59

# Below is generated by plot.py at 2017-08-31 18:51:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 136.97 Mbit/s
95th percentile per-packet one-way delay: 102.937 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 78.53 Mbit/s
95th percentile per-packet one-way delay: 100.518 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 53.54 Mbit/s
95th percentile per-packet one-way delay: 102.831 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 68.82 Mbit/s
95th percentile per-packet one-way delay: 107.356 ms
Loss rate: 0.00%
```

Run 1: Report of TCP Vegas — Data Link



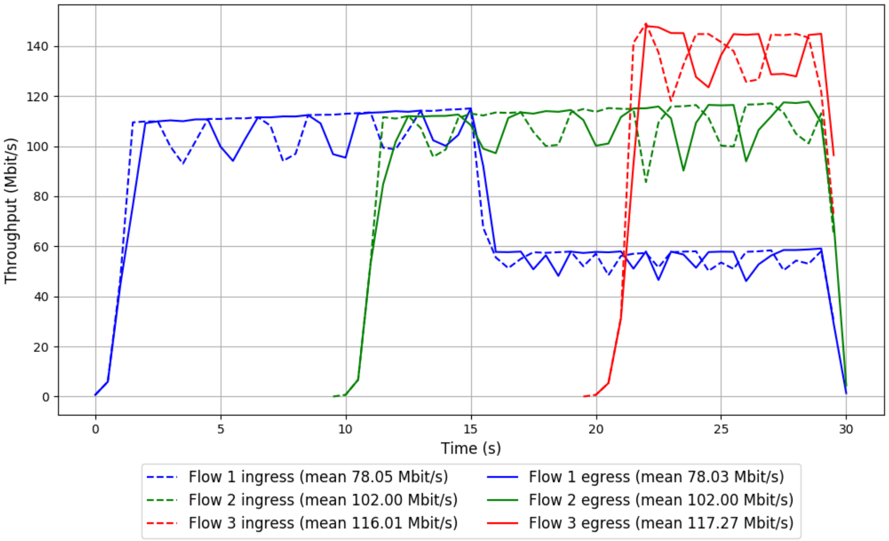


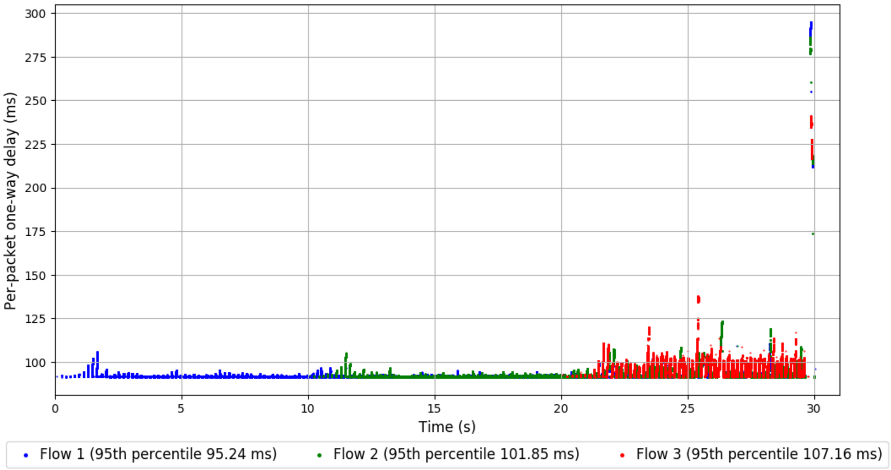
```
Run 2: Statistics of TCP Vegas

Start at: 2017-08-31 15:01:28
End at: 2017-08-31 15:01:58

# Below is generated by plot.py at 2017-08-31 18:52:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 184.50 Mbit/s
95th percentile per-packet one-way delay: 102.276 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 78.03 Mbit/s
95th percentile per-packet one-way delay: 95.239 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 102.00 Mbit/s
95th percentile per-packet one-way delay: 101.854 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 117.27 Mbit/s
95th percentile per-packet one-way delay: 107.155 ms
Loss rate: 0.00%
```

Run 2: Report of TCP Vegas — Data Link



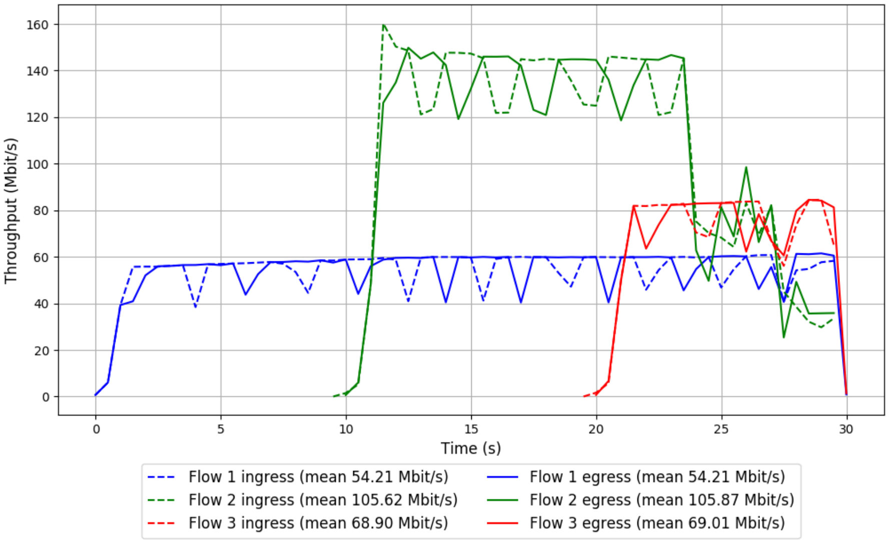


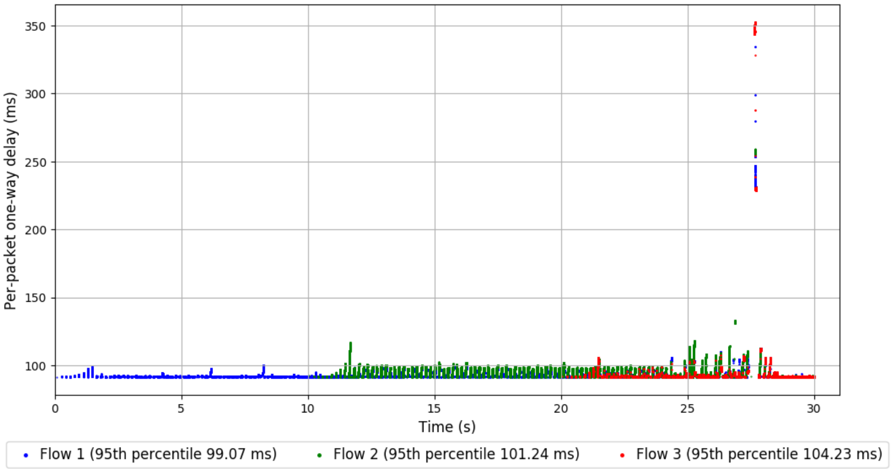
```
Run 3: Statistics of TCP Vegas

Start at: 2017-08-31 15:14:30
End at: 2017-08-31 15:15:00

# Below is generated by plot.py at 2017-08-31 18:52:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 147.64 Mbit/s
95th percentile per-packet one-way delay: 101.024 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.21 Mbit/s
95th percentile per-packet one-way delay: 99.066 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 105.87 Mbit/s
95th percentile per-packet one-way delay: 101.236 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 69.01 Mbit/s
95th percentile per-packet one-way delay: 104.230 ms
Loss rate: 0.00%
```

Run 3: Report of TCP Vegas — Data Link



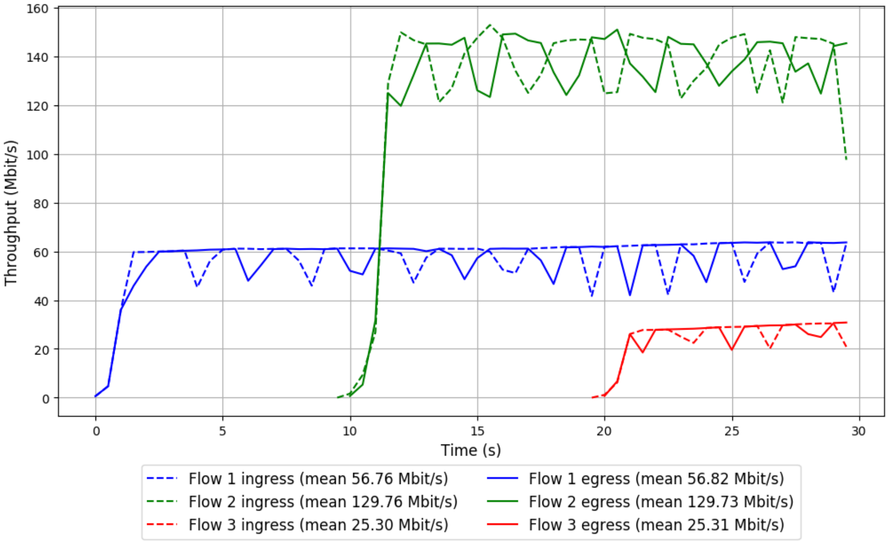


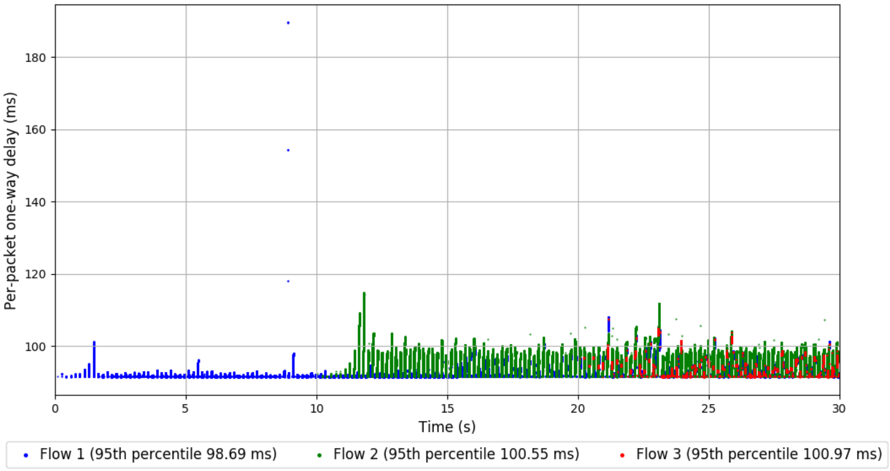
```
Run 4: Statistics of TCP Vegas

Start at: 2017-08-31 15:28:49
End at: 2017-08-31 15:29:19

# Below is generated by plot.py at 2017-08-31 18:52:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 151.55 Mbit/s
95th percentile per-packet one-way delay: 100.141 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 56.82 Mbit/s
95th percentile per-packet one-way delay: 98.694 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 129.73 Mbit/s
95th percentile per-packet one-way delay: 100.546 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 25.31 Mbit/s
95th percentile per-packet one-way delay: 100.971 ms
Loss rate: 0.00%
```

Run 4: Report of TCP Vegas — Data Link



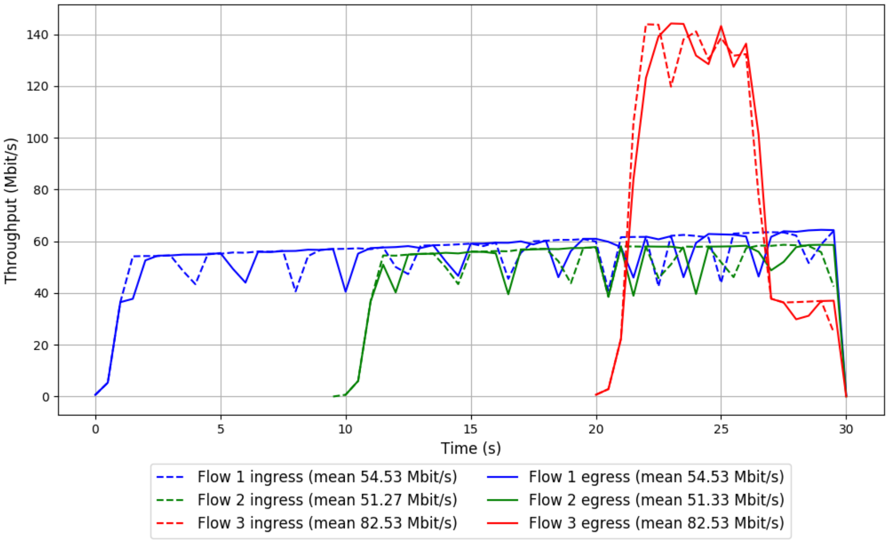


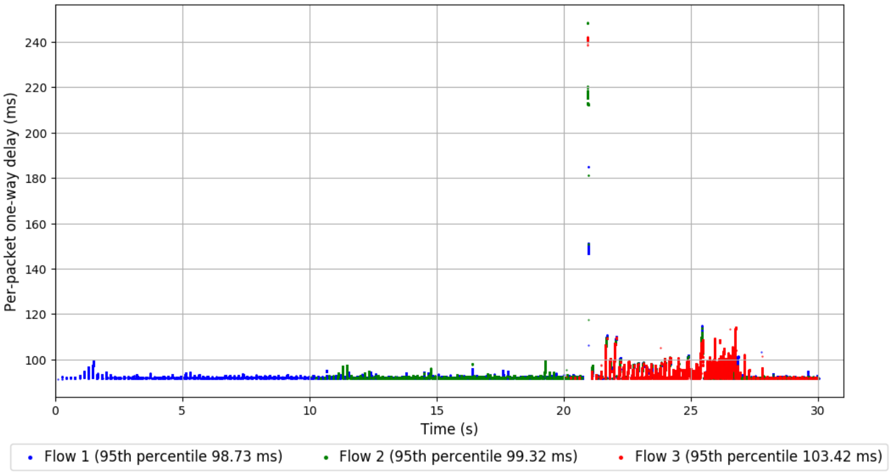
```
Run 5: Statistics of TCP Vegas

Start at: 2017-08-31 15:41:37
End at: 2017-08-31 15:42:07

# Below is generated by plot.py at 2017-08-31 18:52:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 116.06 Mbit/s
95th percentile per-packet one-way delay: 100.398 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.53 Mbit/s
95th percentile per-packet one-way delay: 98.735 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 51.33 Mbit/s
95th percentile per-packet one-way delay: 99.323 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 82.53 Mbit/s
95th percentile per-packet one-way delay: 103.423 ms
Loss rate: 0.01%
```

Run 5: Report of TCP Vegas — Data Link



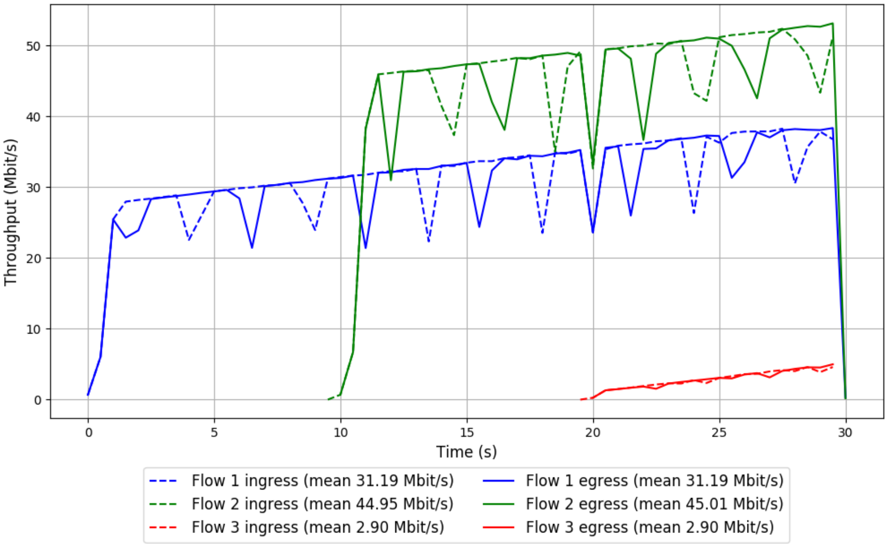


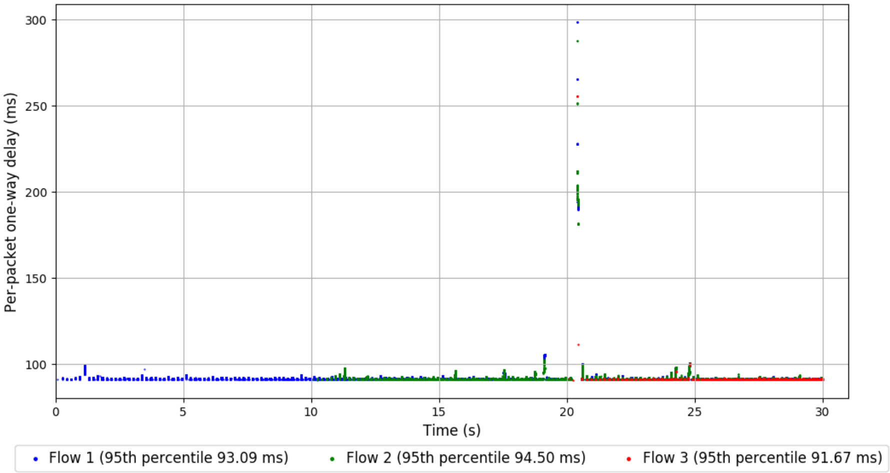
```
Run 6: Statistics of TCP Vegas

Start at: 2017-08-31 15:54:37
End at: 2017-08-31 15:55:07

# Below is generated by plot.py at 2017-08-31 18:52:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.14 Mbit/s
95th percentile per-packet one-way delay: 93.749 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 31.19 Mbit/s
95th percentile per-packet one-way delay: 93.087 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 45.01 Mbit/s
95th percentile per-packet one-way delay: 94.502 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.90 Mbit/s
95th percentile per-packet one-way delay: 91.673 ms
Loss rate: 0.00%
```

Run 6: Report of TCP Vegas — Data Link



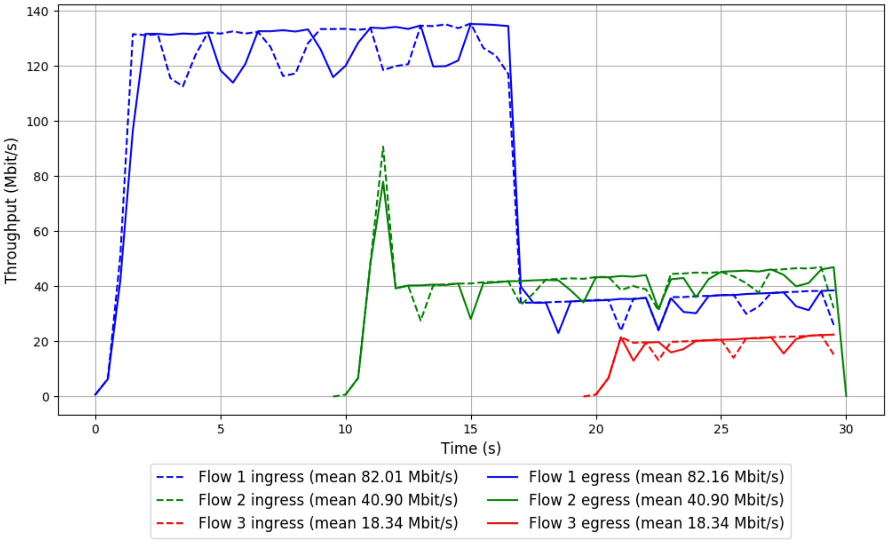


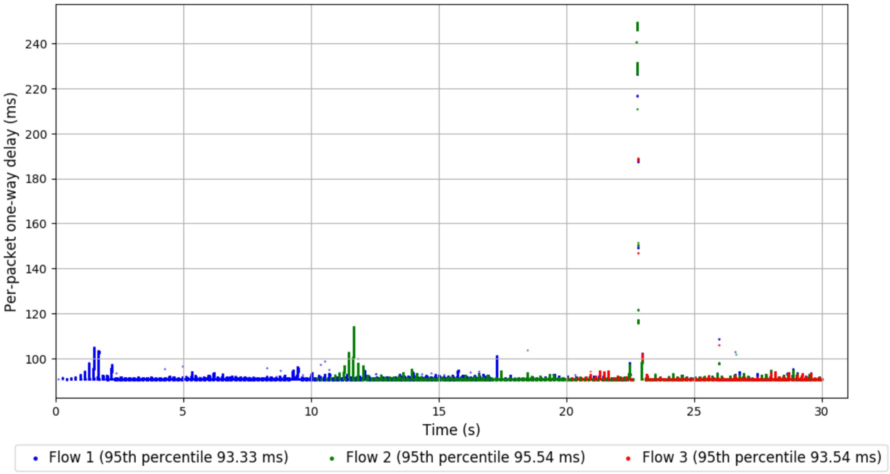
```
Run 7: Statistics of TCP Vegas

Start at: 2017-08-31 16:07:35
End at: 2017-08-31 16:08:05

# Below is generated by plot.py at 2017-08-31 18:52:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 115.43 Mbit/s
95th percentile per-packet one-way delay: 93.672 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 82.16 Mbit/s
95th percentile per-packet one-way delay: 93.329 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.90 Mbit/s
95th percentile per-packet one-way delay: 95.541 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 18.34 Mbit/s
95th percentile per-packet one-way delay: 93.541 ms
Loss rate: 0.01%
```

Run 7: Report of TCP Vegas — Data Link



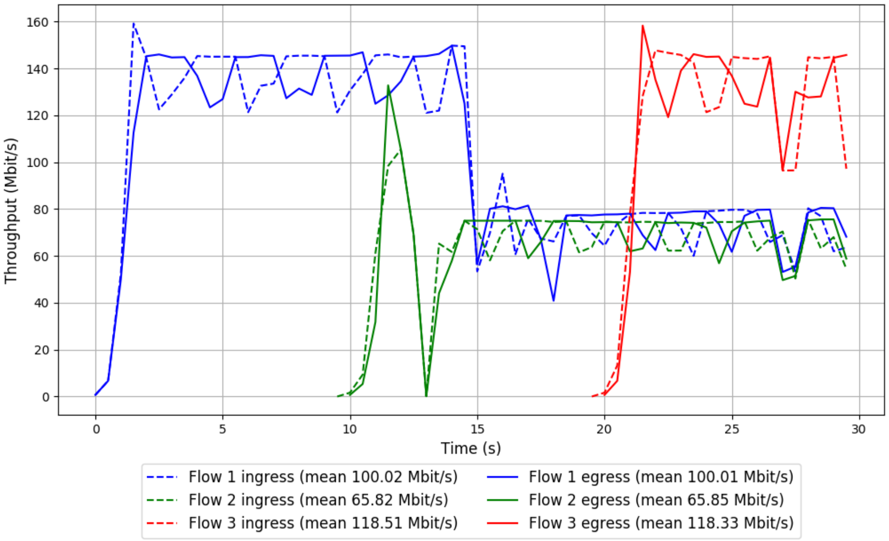


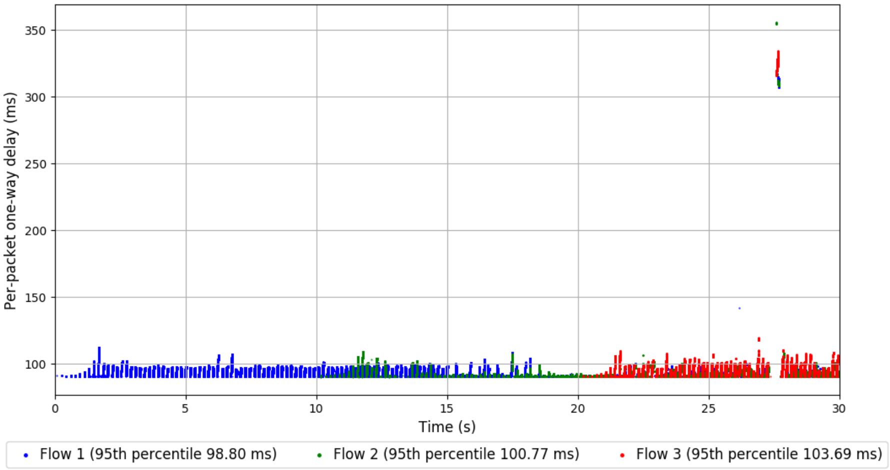
```
Run 8: Statistics of TCP Vegas

Start at: 2017-08-31 16:20:30
End at: 2017-08-31 16:21:00

# Below is generated by plot.py at 2017-08-31 18:53:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 183.34 Mbit/s
95th percentile per-packet one-way delay: 100.745 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 100.01 Mbit/s
95th percentile per-packet one-way delay: 98.795 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 65.85 Mbit/s
95th percentile per-packet one-way delay: 100.766 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 118.33 Mbit/s
95th percentile per-packet one-way delay: 103.690 ms
Loss rate: 0.00%
```

Run 8: Report of TCP Vegas — Data Link



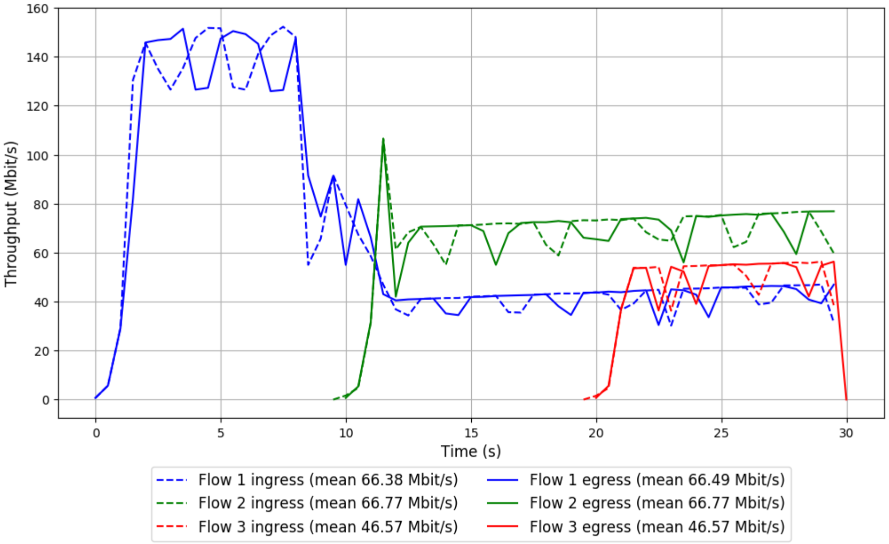


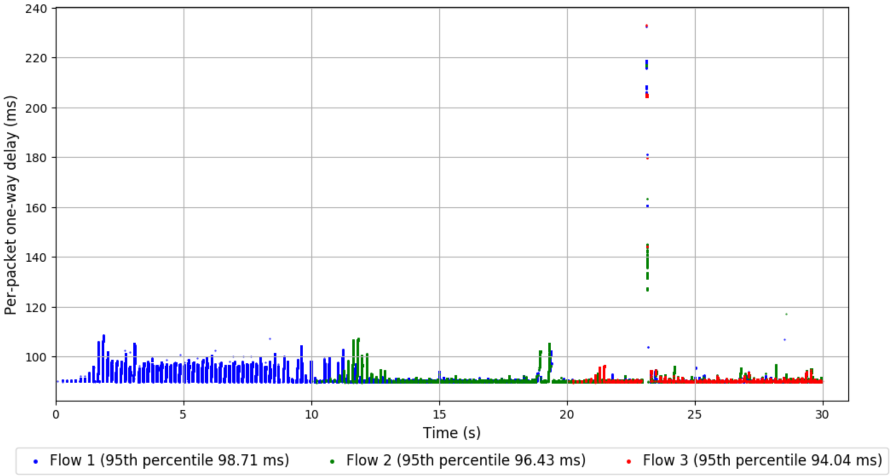
```
Run 9: Statistics of TCP Vegas

Start at: 2017-08-31 16:33:34
End at: 2017-08-31 16:34:04

# Below is generated by plot.py at 2017-08-31 18:53:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 126.36 Mbit/s
95th percentile per-packet one-way delay: 98.038 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.49 Mbit/s
95th percentile per-packet one-way delay: 98.707 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 66.77 Mbit/s
95th percentile per-packet one-way delay: 96.433 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 46.57 Mbit/s
95th percentile per-packet one-way delay: 94.039 ms
Loss rate: 0.00%
```

Run 9: Report of TCP Vegas — Data Link



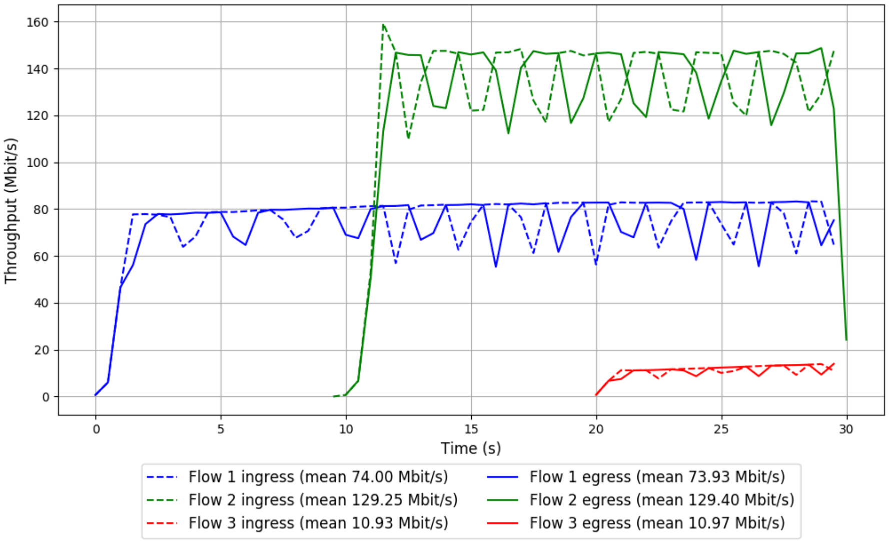


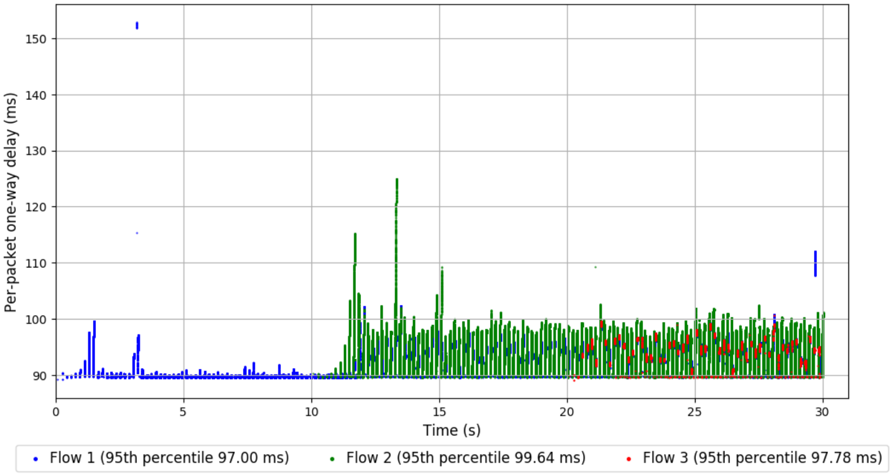
```
Run 10: Statistics of TCP Vegas

Start at: 2017-08-31 16:46:24
End at: 2017-08-31 16:46:54

# Below is generated by plot.py at 2017-08-31 18:53:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 163.65 Mbit/s
95th percentile per-packet one-way delay: 99.032 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 73.93 Mbit/s
95th percentile per-packet one-way delay: 96.997 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 129.40 Mbit/s
95th percentile per-packet one-way delay: 99.639 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 10.97 Mbit/s
95th percentile per-packet one-way delay: 97.783 ms
Loss rate: 0.73%
```

Run 10: Report of TCP Vegas — Data Link



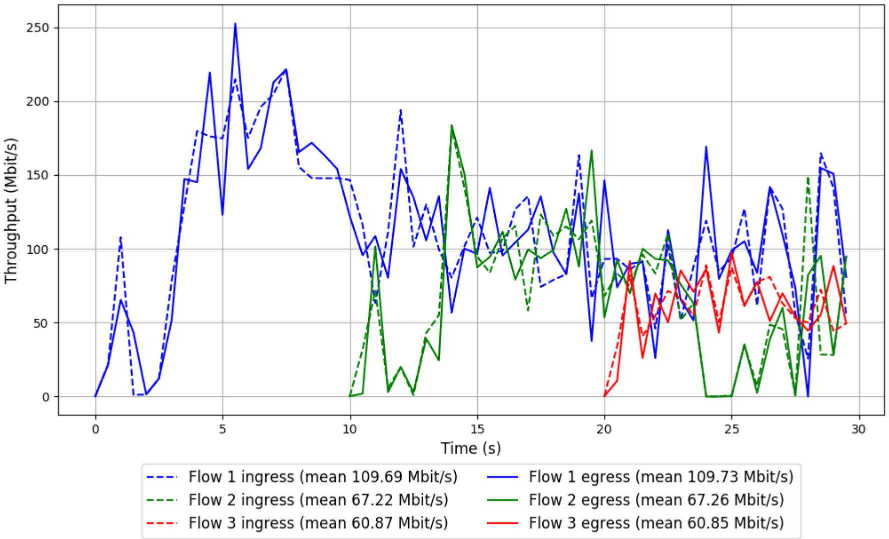


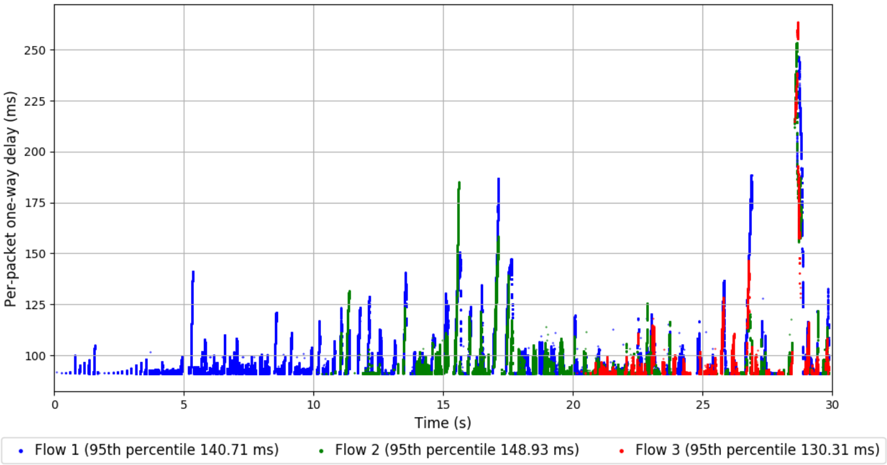
```
Run 1: Statistics of Verus

Start at: 2017-08-31 14:44:59
End at: 2017-08-31 14:45:29

# Below is generated by plot.py at 2017-08-31 18:53:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 174.13 Mbit/s
95th percentile per-packet one-way delay: 140.861 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 109.73 Mbit/s
95th percentile per-packet one-way delay: 140.711 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 67.26 Mbit/s
95th percentile per-packet one-way delay: 148.933 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 60.85 Mbit/s
95th percentile per-packet one-way delay: 130.313 ms
Loss rate: 0.00%
```

Run 1: Report of Verus — Data Link



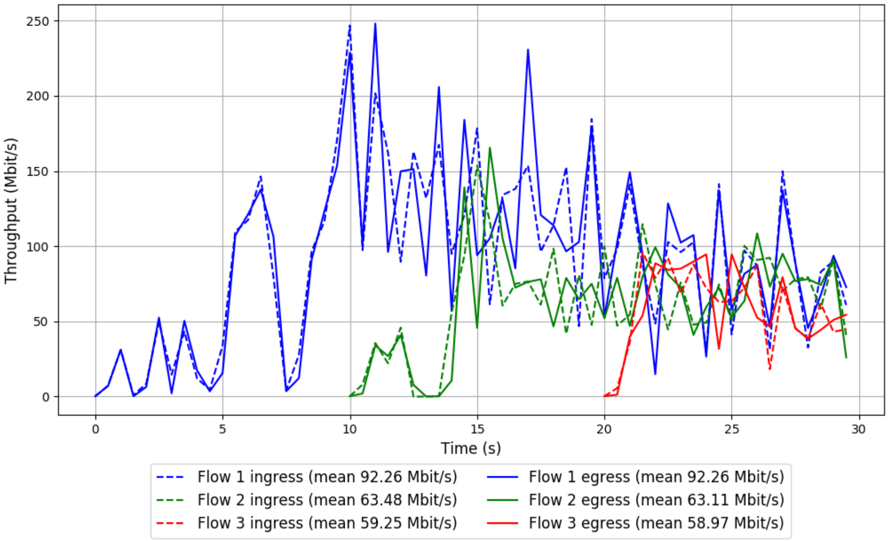


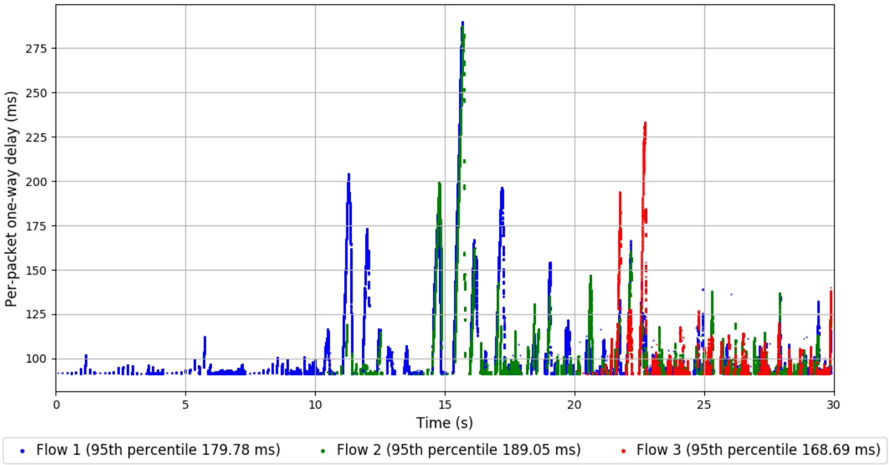
```
Run 2: Statistics of Verus

Start at: 2017-08-31 14:58:37
End at: 2017-08-31 14:59:07

# Below is generated by plot.py at 2017-08-31 18:54:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 153.37 Mbit/s
95th percentile per-packet one-way delay: 179.953 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 92.26 Mbit/s
95th percentile per-packet one-way delay: 179.782 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 63.11 Mbit/s
95th percentile per-packet one-way delay: 189.049 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 58.97 Mbit/s
95th percentile per-packet one-way delay: 168.688 ms
Loss rate: 0.01%
```

Run 2: Report of Verus — Data Link



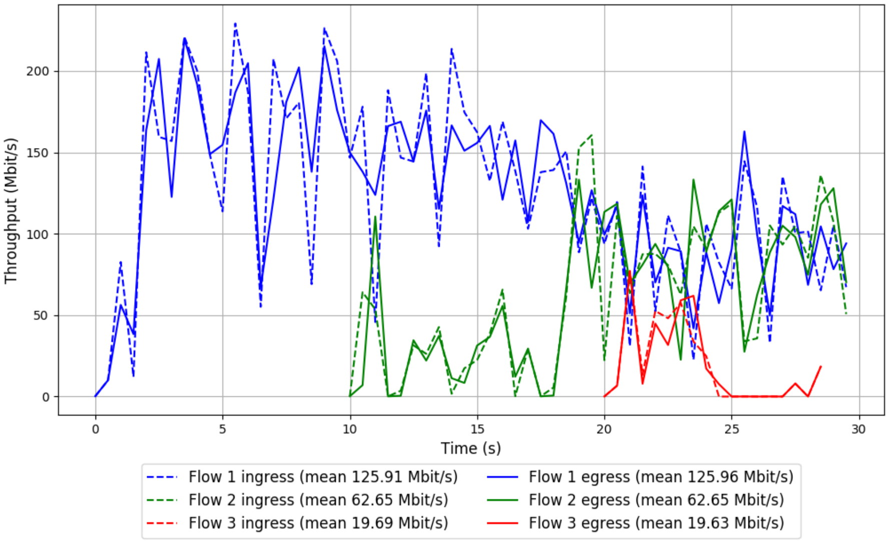


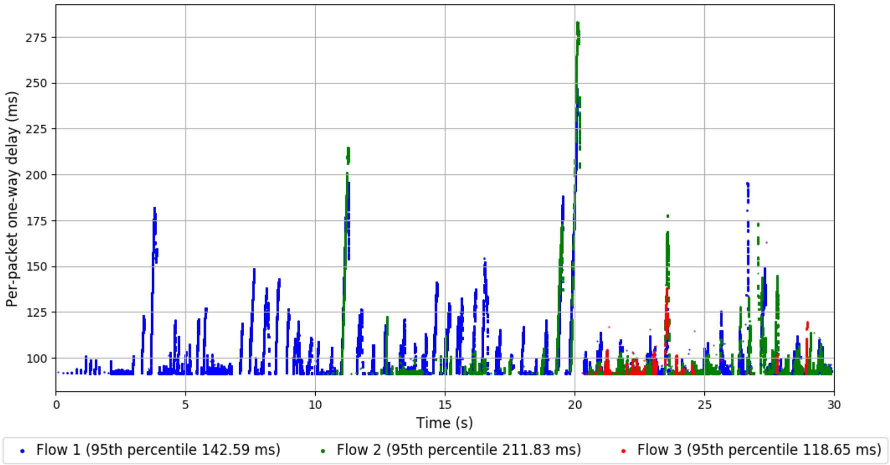
```
Run 3: Statistics of Verus

Start at: 2017-08-31 15:11:30
End at: 2017-08-31 15:12:00

# Below is generated by plot.py at 2017-08-31 18:54:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 173.17 Mbit/s
95th percentile per-packet one-way delay: 155.764 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 125.96 Mbit/s
95th percentile per-packet one-way delay: 142.585 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 62.65 Mbit/s
95th percentile per-packet one-way delay: 211.832 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.63 Mbit/s
95th percentile per-packet one-way delay: 118.646 ms
Loss rate: 0.00%
```

Run 3: Report of Verus — Data Link

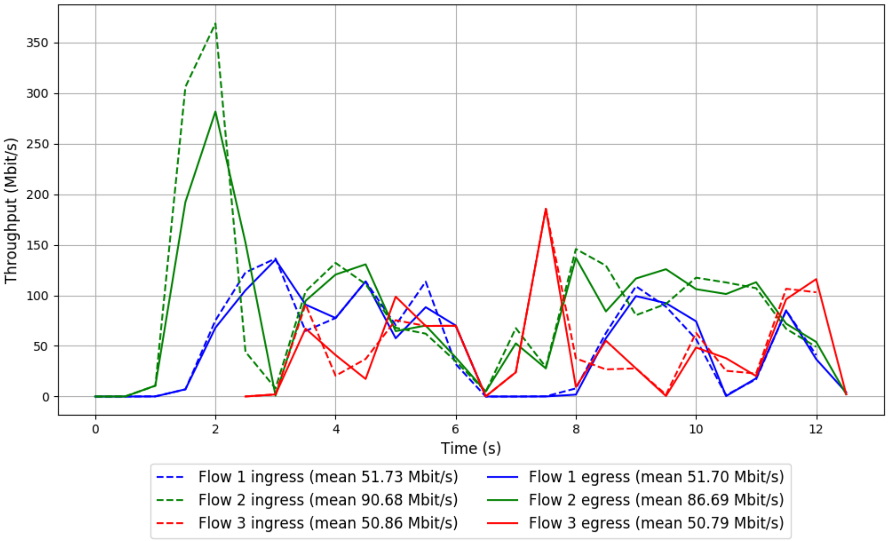


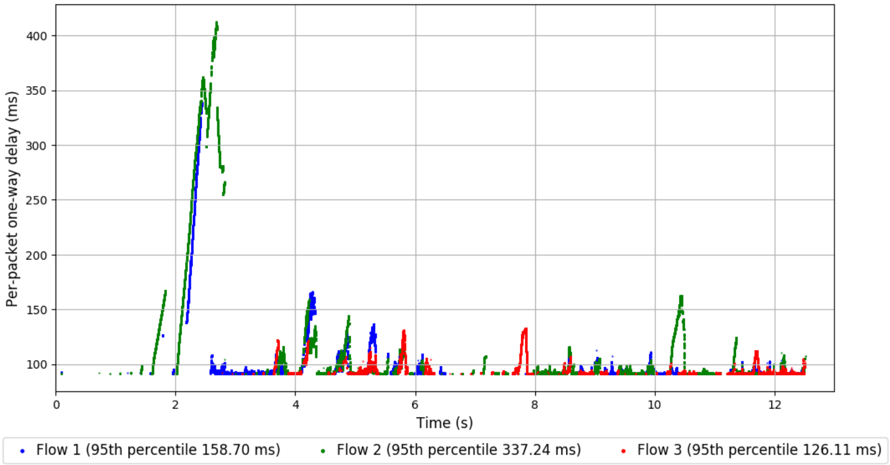


```
Run 4: Statistics of Verus

Start at: 2017-08-31 15:25:50
End at: 2017-08-31 15:26:20
```

Run 4: Report of Verus — Data Link



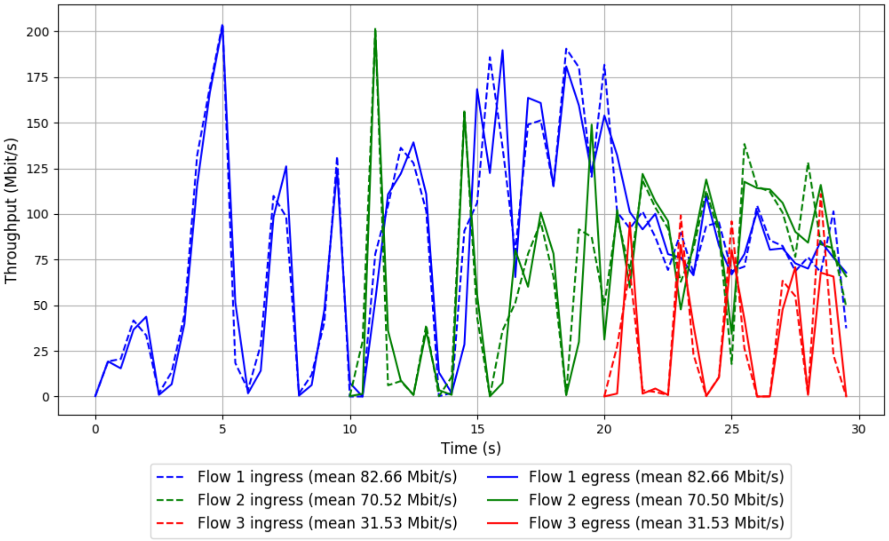


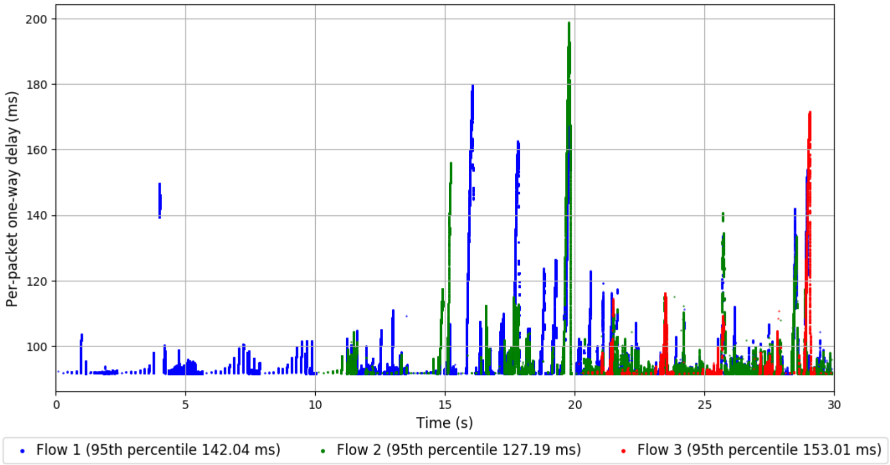
```
Run 5: Statistics of Verus

Start at: 2017-08-31 15:38:53
End at: 2017-08-31 15:39:23

# Below is generated by plot.py at 2017-08-31 18:54:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 139.67 Mbit/s
95th percentile per-packet one-way delay: 137.821 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 82.66 Mbit/s
95th percentile per-packet one-way delay: 142.039 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 70.50 Mbit/s
95th percentile per-packet one-way delay: 127.191 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.53 Mbit/s
95th percentile per-packet one-way delay: 153.009 ms
Loss rate: 0.00%
```

Run 5: Report of Verus — Data Link



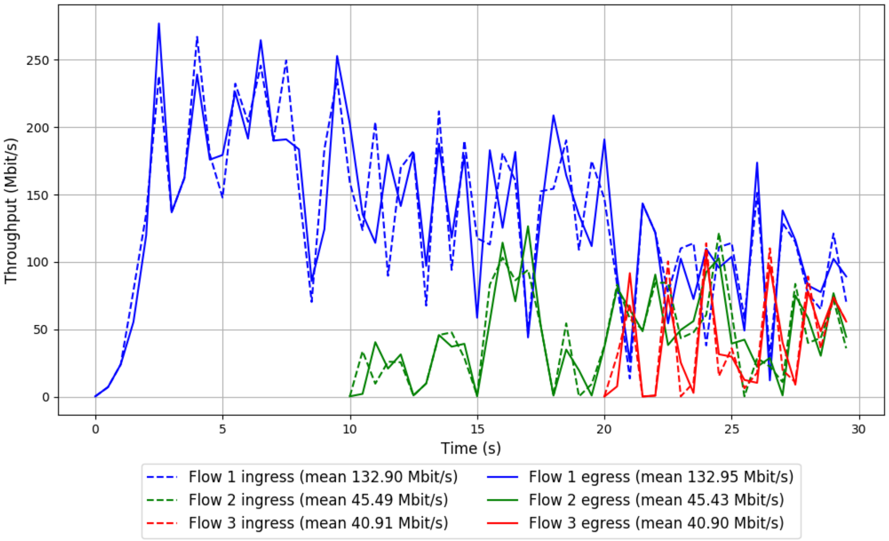


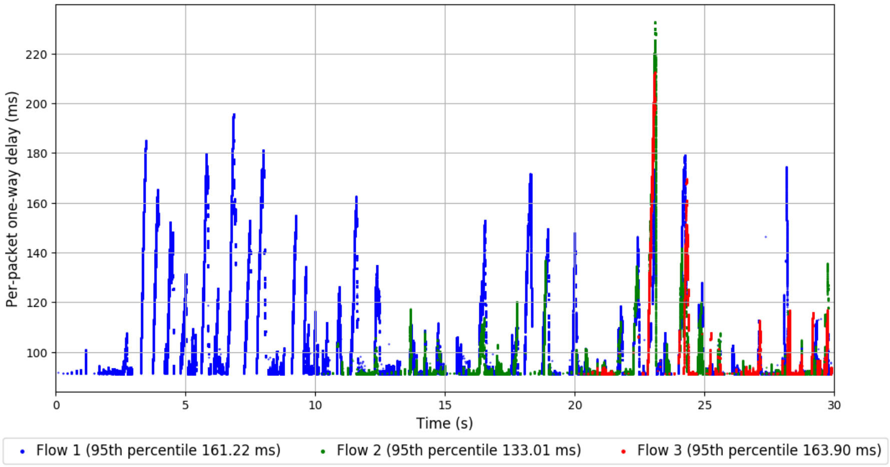
```
Run 6: Statistics of Verus

Start at: 2017-08-31 15:51:40
End at: 2017-08-31 15:52:10

# Below is generated by plot.py at 2017-08-31 18:54:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 176.22 Mbit/s
95th percentile per-packet one-way delay: 160.099 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 132.95 Mbit/s
95th percentile per-packet one-way delay: 161.224 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 45.43 Mbit/s
95th percentile per-packet one-way delay: 133.013 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 40.90 Mbit/s
95th percentile per-packet one-way delay: 163.898 ms
Loss rate: 0.00%
```

Run 6: Report of Verus — Data Link



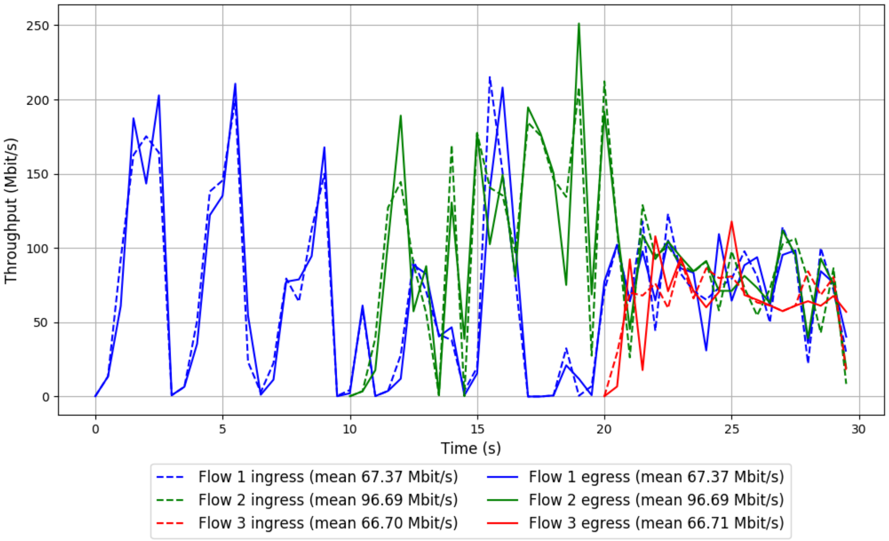


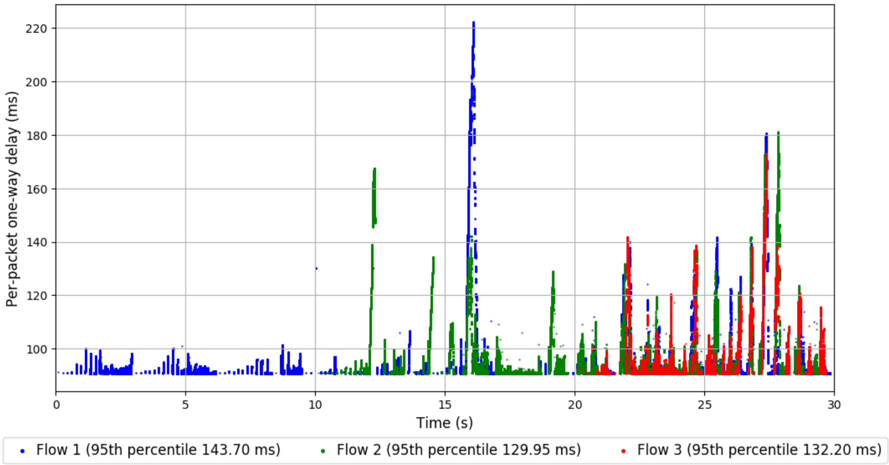
```
Run 7: Statistics of Verus

Start at: 2017-08-31 16:04:47
End at: 2017-08-31 16:05:17

# Below is generated by plot.py at 2017-08-31 18:55:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 152.28 Mbit/s
95th percentile per-packet one-way delay: 133.988 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.37 Mbit/s
95th percentile per-packet one-way delay: 143.697 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 96.69 Mbit/s
95th percentile per-packet one-way delay: 129.948 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 66.71 Mbit/s
95th percentile per-packet one-way delay: 132.203 ms
Loss rate: 0.00%
```

Run 7: Report of Verus — Data Link



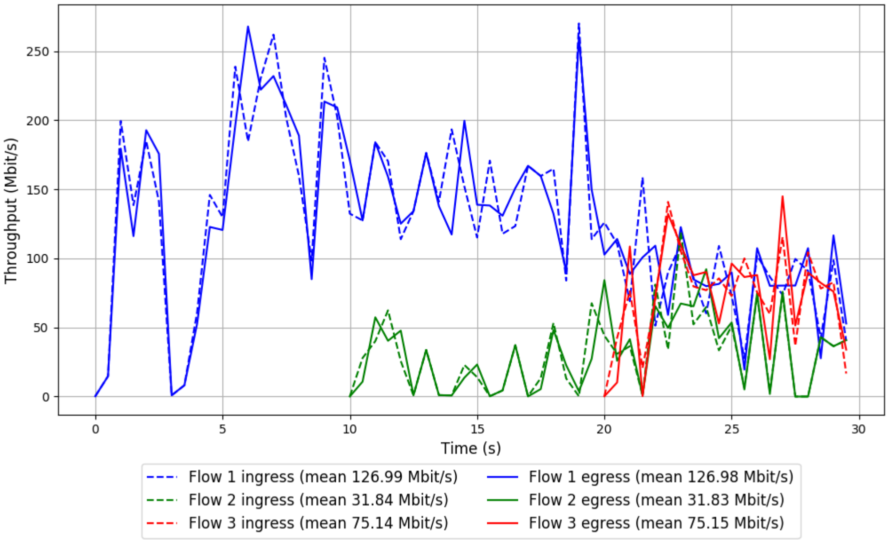


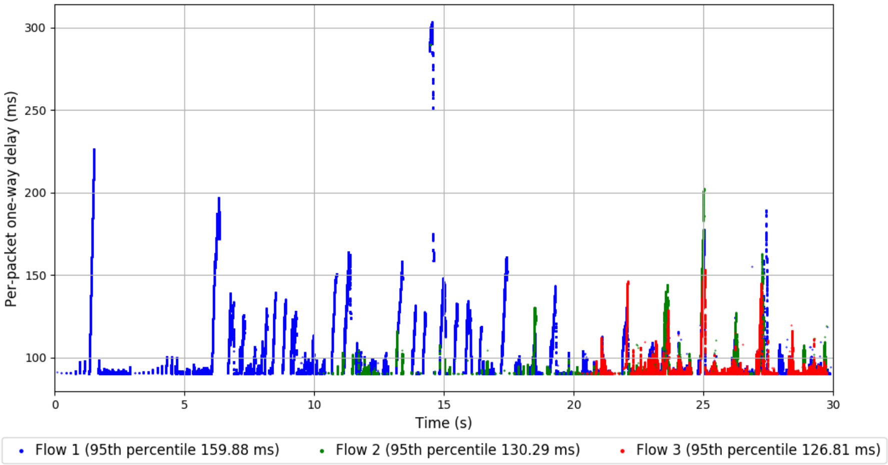
```
Run 8: Statistics of Verus

Start at: 2017-08-31 16:17:43
End at: 2017-08-31 16:18:13

# Below is generated by plot.py at 2017-08-31 18:55:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 172.04 Mbit/s
95th percentile per-packet one-way delay: 152.326 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 126.98 Mbit/s
95th percentile per-packet one-way delay: 159.880 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.83 Mbit/s
95th percentile per-packet one-way delay: 130.295 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 75.15 Mbit/s
95th percentile per-packet one-way delay: 126.813 ms
Loss rate: 0.00%
```

Run 8: Report of Verus — Data Link



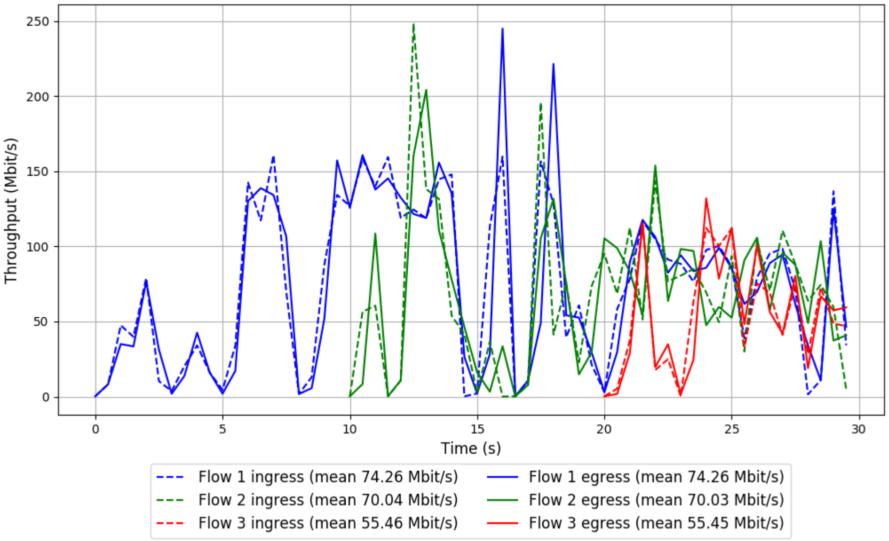


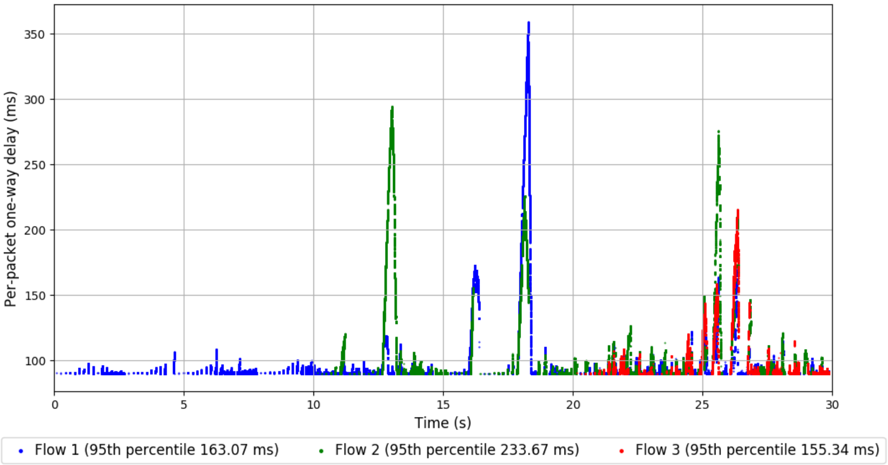
```
Run 9: Statistics of Verus

Start at: 2017-08-31 16:30:43
End at: 2017-08-31 16:31:13

# Below is generated by plot.py at 2017-08-31 18:55:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 138.16 Mbit/s
95th percentile per-packet one-way delay: 197.408 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 74.26 Mbit/s
95th percentile per-packet one-way delay: 163.070 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 70.03 Mbit/s
95th percentile per-packet one-way delay: 233.668 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 55.45 Mbit/s
95th percentile per-packet one-way delay: 155.344 ms
Loss rate: 0.00%
```

Run 9: Report of Verus — Data Link



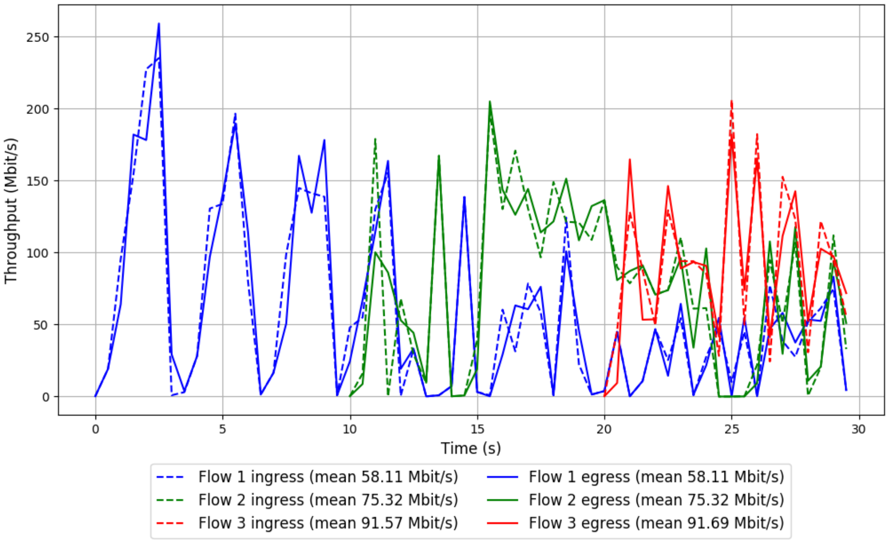


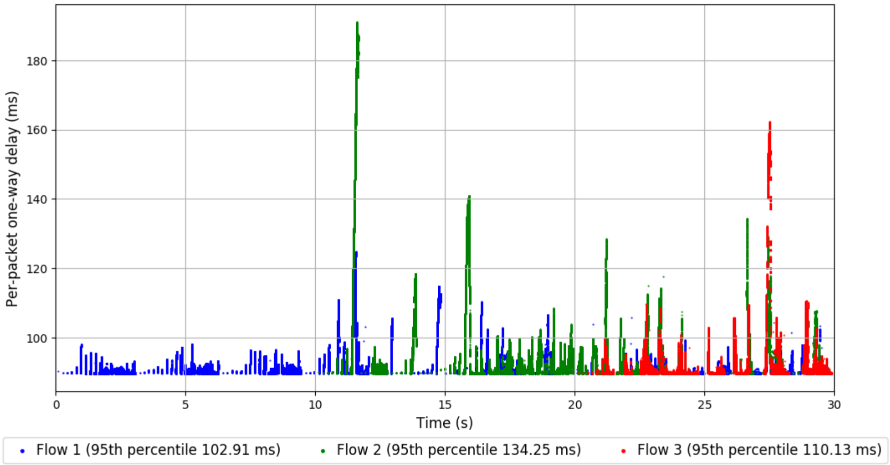
```
Run 10: Statistics of Verus

Start at: 2017-08-31 16:43:38
End at: 2017-08-31 16:44:08

# Below is generated by plot.py at 2017-08-31 18:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 137.51 Mbit/s
95th percentile per-packet one-way delay: 112.723 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.11 Mbit/s
95th percentile per-packet one-way delay: 102.914 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 75.32 Mbit/s
95th percentile per-packet one-way delay: 134.248 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 91.69 Mbit/s
95th percentile per-packet one-way delay: 110.126 ms
Loss rate: 0.00%
```

Run 10: Report of Verus — Data Link

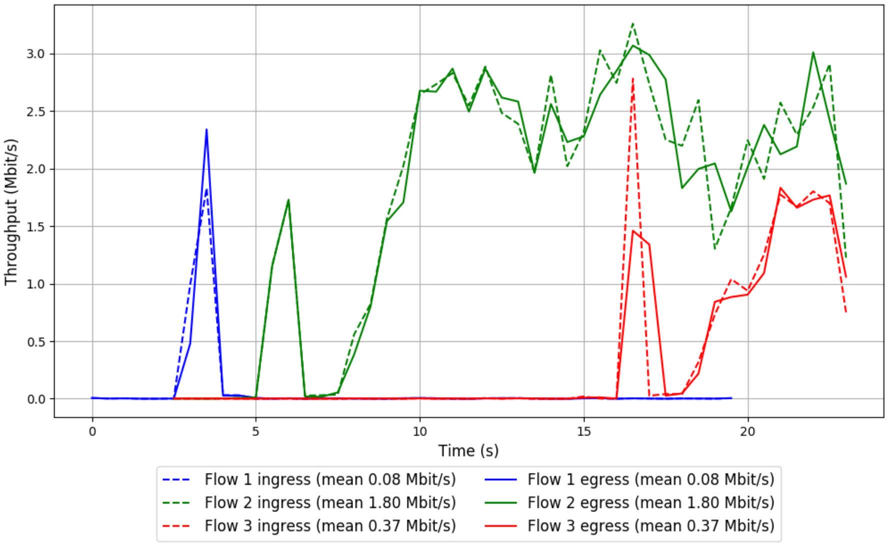


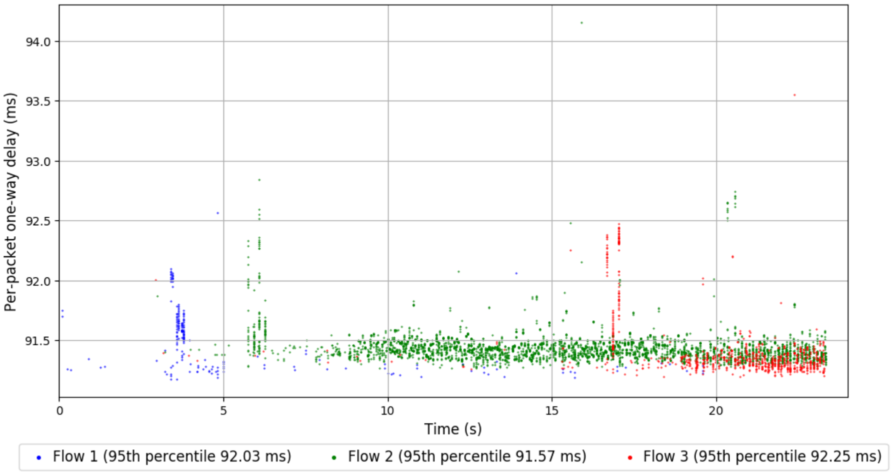


```
Run 1: Statistics of WebRTC media

Start at: 2017-08-31 14:53:01
End at: 2017-08-31 14:53:31
```

Run 1: Report of WebRTC media — Data Link



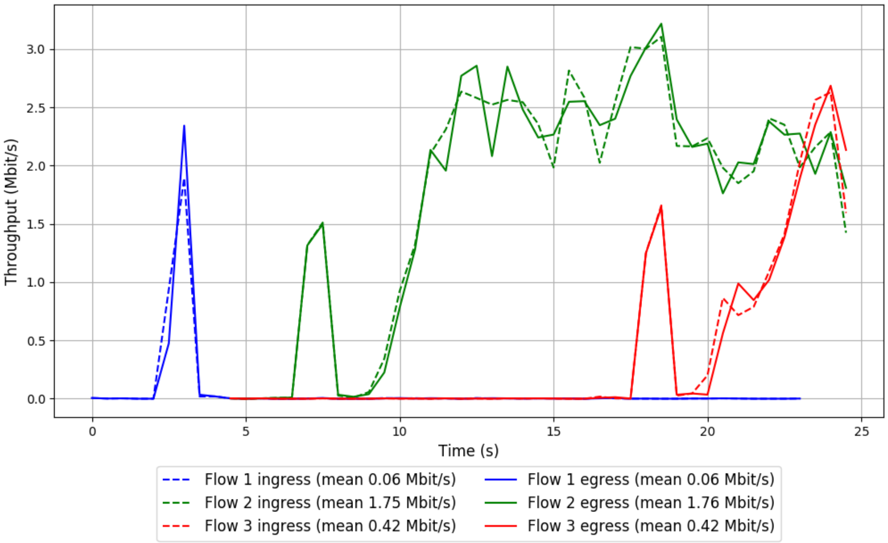


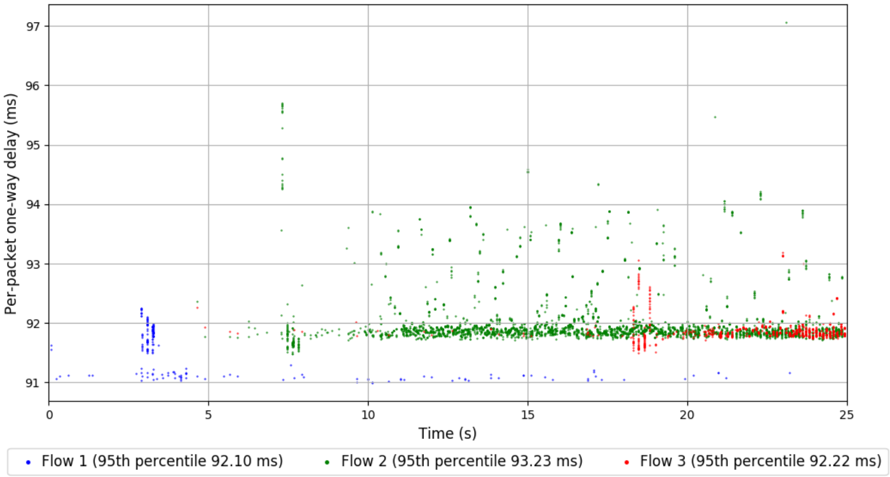
```
Run 2: Statistics of WebRTC media

Start at: 2017-08-31 15:05:58
End at: 2017-08-31 15:06:28

# Below is generated by plot.py at 2017-08-31 18:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.83 Mbit/s
95th percentile per-packet one-way delay: 92.920 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 92.096 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.76 Mbit/s
95th percentile per-packet one-way delay: 93.230 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 92.223 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link



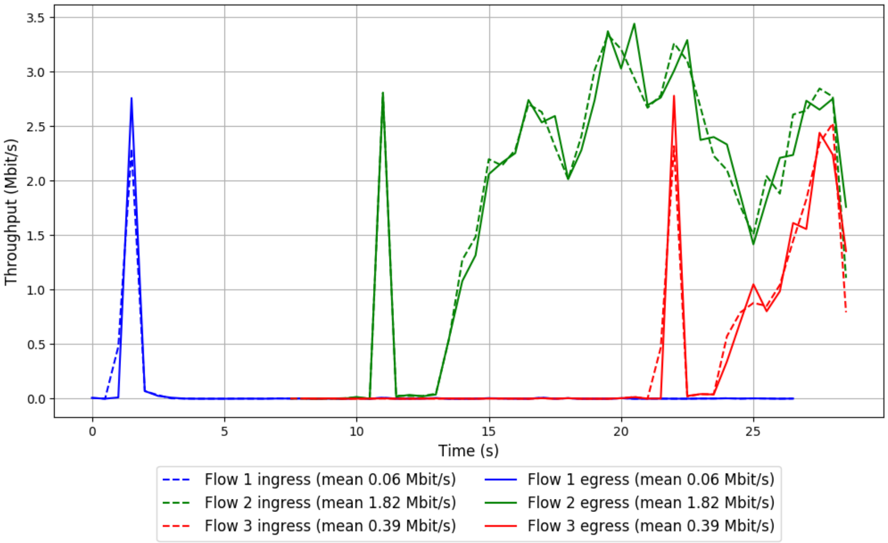


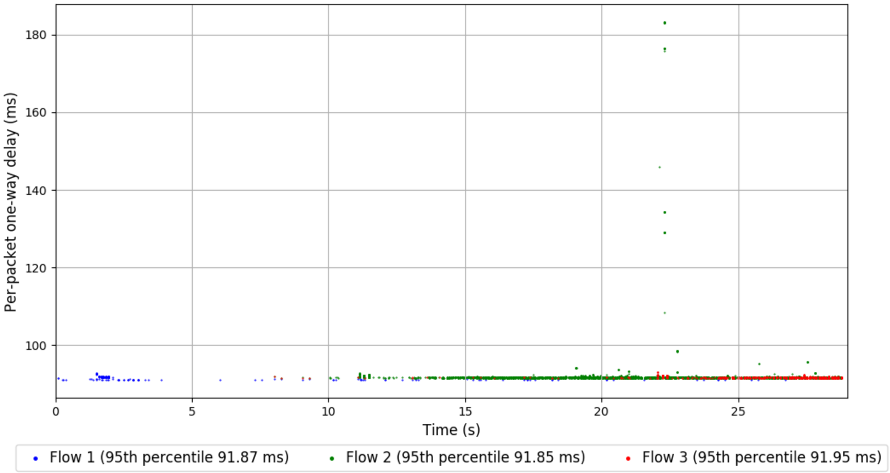
```
Run 3: Statistics of WebRTC media

Start at: 2017-08-31 15:19:12
End at: 2017-08-31 15:19:42

# Below is generated by plot.py at 2017-08-31 18:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.65 Mbit/s
95th percentile per-packet one-way delay: 91.904 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 91.870 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.82 Mbit/s
95th percentile per-packet one-way delay: 91.853 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 91.947 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link



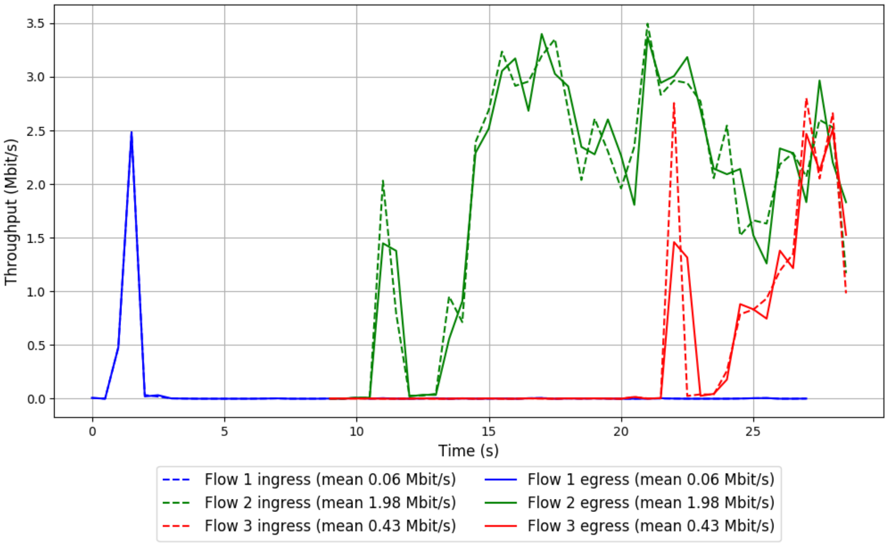


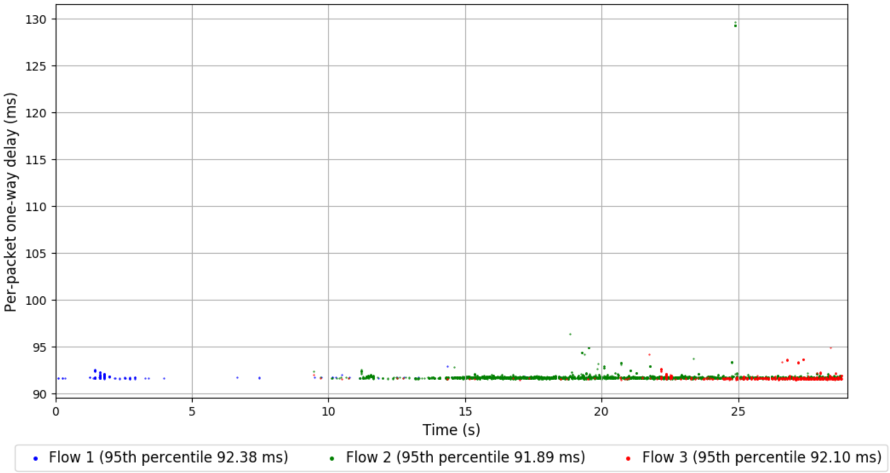
```
Run 4: Statistics of WebRTC media

Start at: 2017-08-31 15:33:14
End at: 2017-08-31 15:33:44

# Below is generated by plot.py at 2017-08-31 18:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.68 Mbit/s
95th percentile per-packet one-way delay: 91.960 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 92.381 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 91.893 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 92.102 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



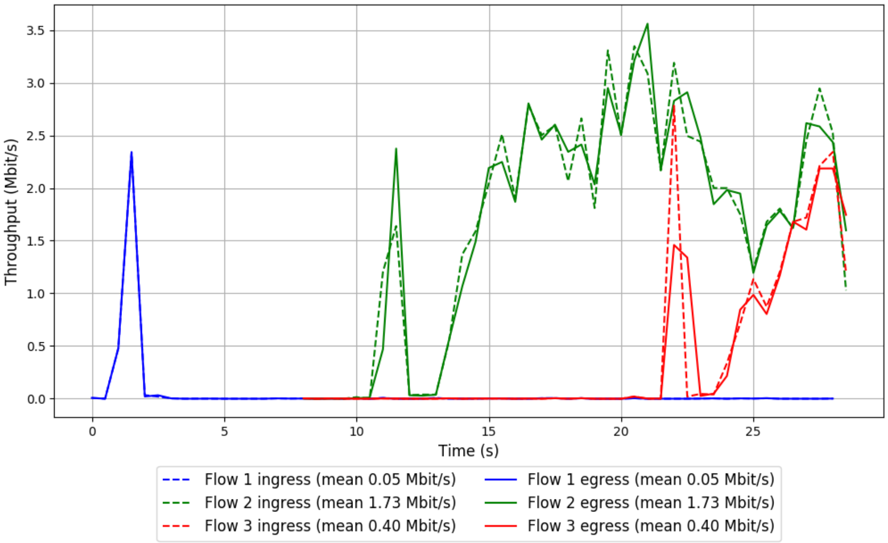


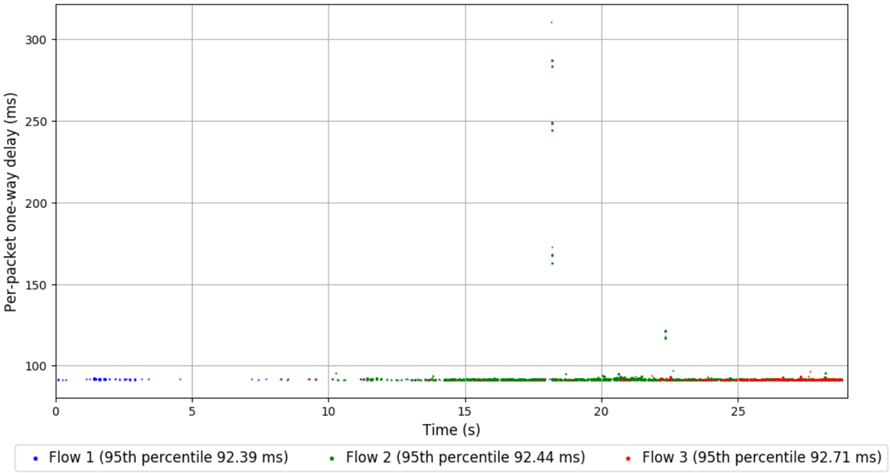
```
Run 5: Statistics of WebRTC media

Start at: 2017-08-31 15:46:02
End at: 2017-08-31 15:46:32

# Below is generated by plot.py at 2017-08-31 18:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 92.476 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 92.385 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.73 Mbit/s
95th percentile per-packet one-way delay: 92.442 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 92.714 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link



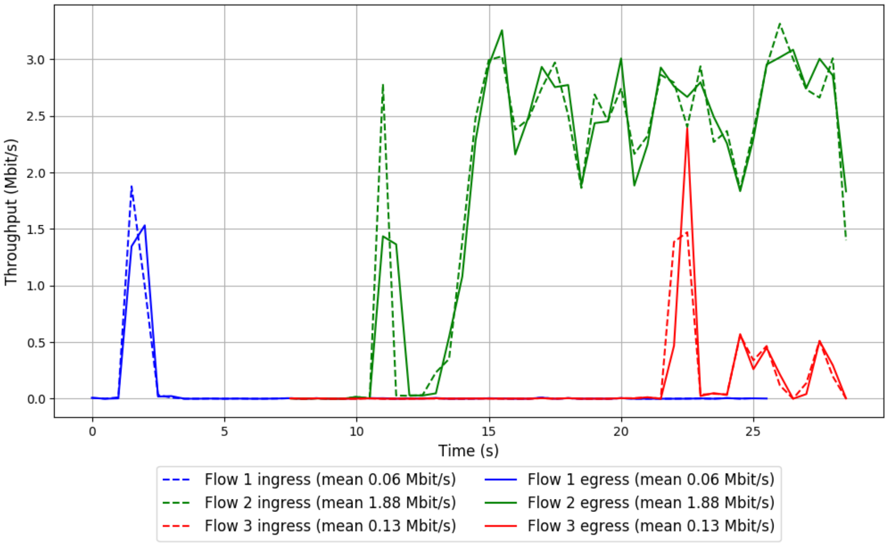


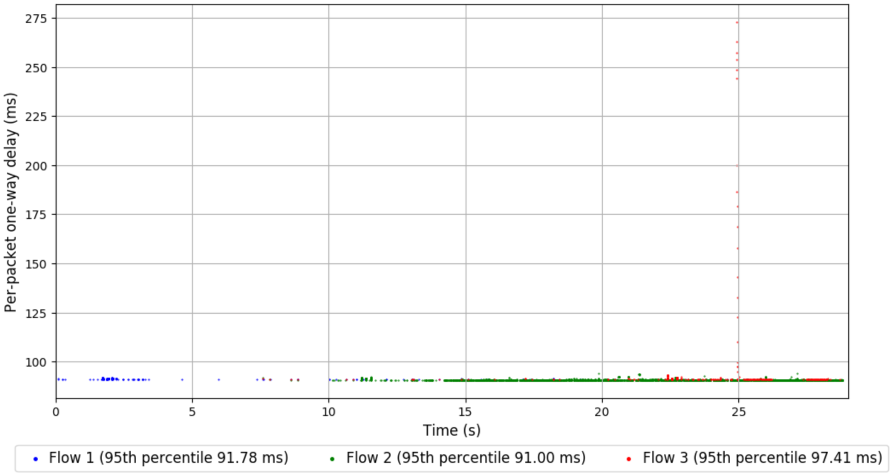
```
Run 6: Statistics of WebRTC media

Start at: 2017-08-31 15:59:08
End at: 2017-08-31 15:59:38

# Below is generated by plot.py at 2017-08-31 18:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.53 Mbit/s
95th percentile per-packet one-way delay: 91.415 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 91.780 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.88 Mbit/s
95th percentile per-packet one-way delay: 90.997 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 97.408 ms
Loss rate: 0.00%
```

Run 6: Report of WebRTC media — Data Link



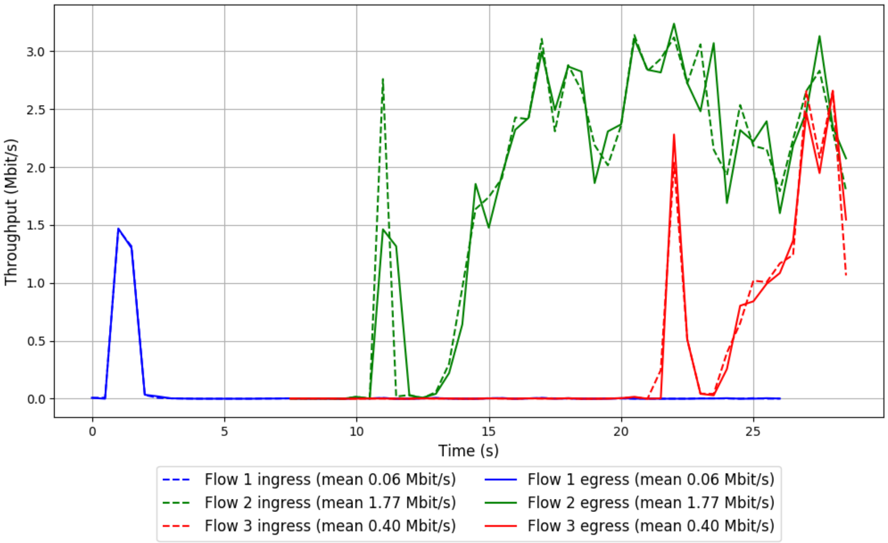


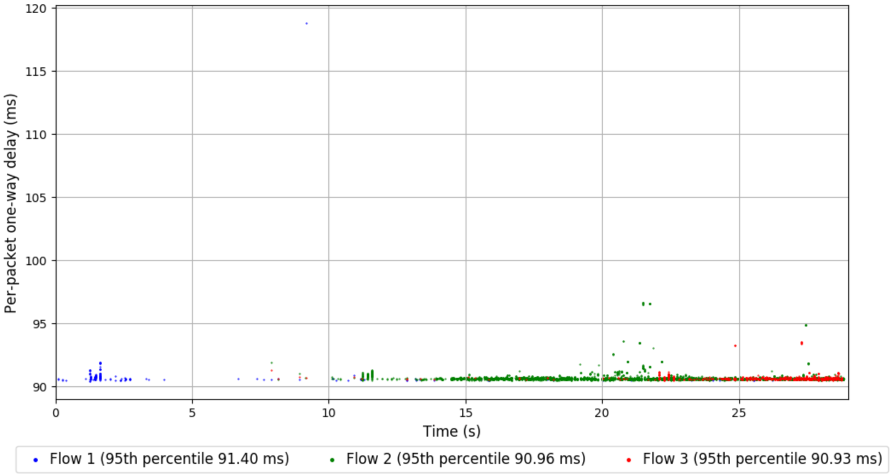
```
Run 7: Statistics of WebRTC media

Start at: 2017-08-31 16:12:03
End at: 2017-08-31 16:12:33

# Below is generated by plot.py at 2017-08-31 18:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.63 Mbit/s
95th percentile per-packet one-way delay: 90.971 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 91.398 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 90.957 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 90.929 ms
Loss rate: 0.00%
```

Run 7: Report of WebRTC media — Data Link



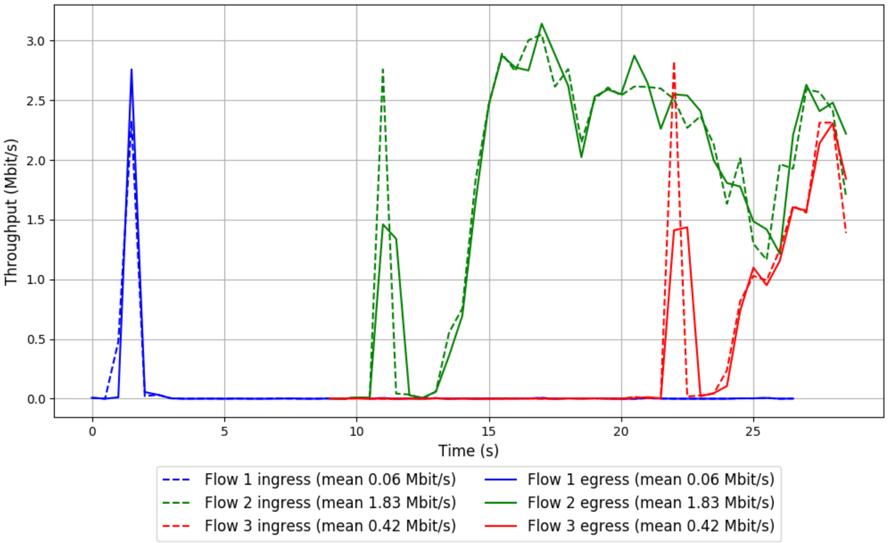


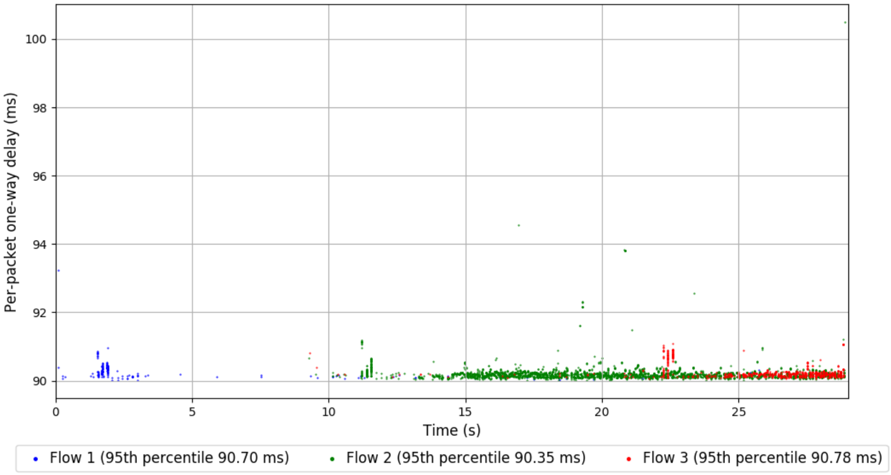
```
Run 8: Statistics of WebRTC media

Start at: 2017-08-31 16:25:02
End at: 2017-08-31 16:25:32

# Below is generated by plot.py at 2017-08-31 18:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 90.443 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 90.703 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.83 Mbit/s
95th percentile per-packet one-way delay: 90.350 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 90.781 ms
Loss rate: 0.00%
```

Run 8: Report of WebRTC media — Data Link



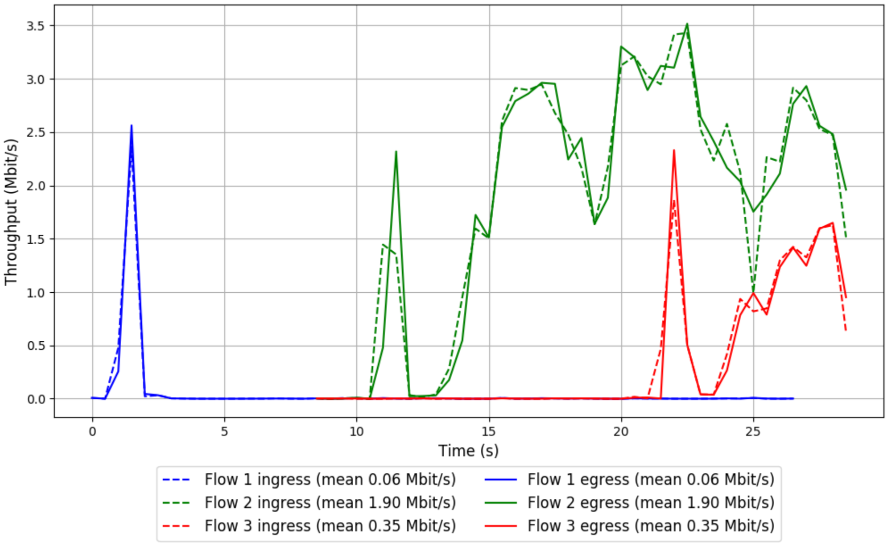


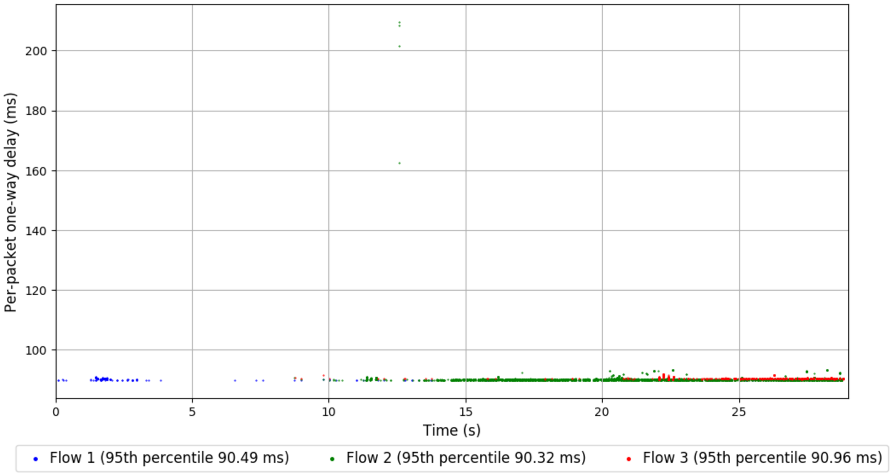
```
Run 9: Statistics of WebRTC media

Start at: 2017-08-31 16:37:59
End at: 2017-08-31 16:38:29

# Below is generated by plot.py at 2017-08-31 18:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.62 Mbit/s
95th percentile per-packet one-way delay: 90.488 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 90.494 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 90.322 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 90.961 ms
Loss rate: 0.00%
```

Run 9: Report of WebRTC media — Data Link



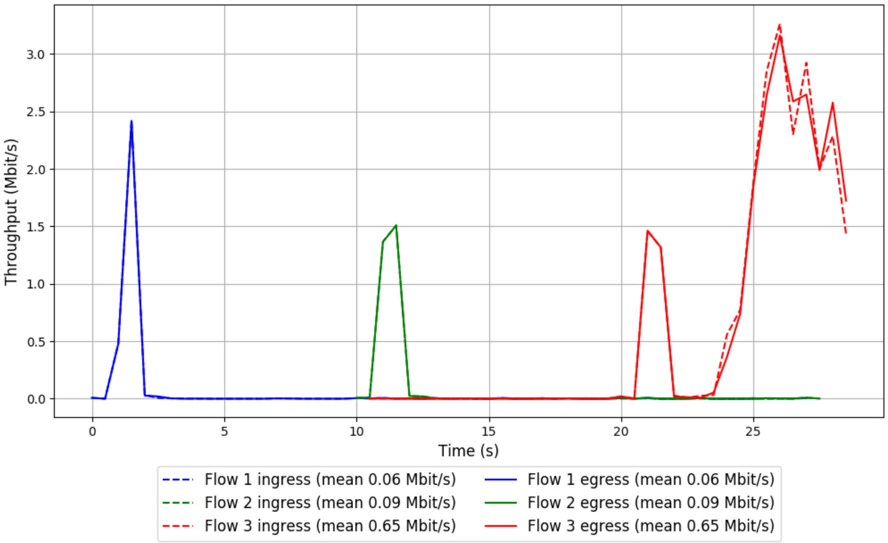


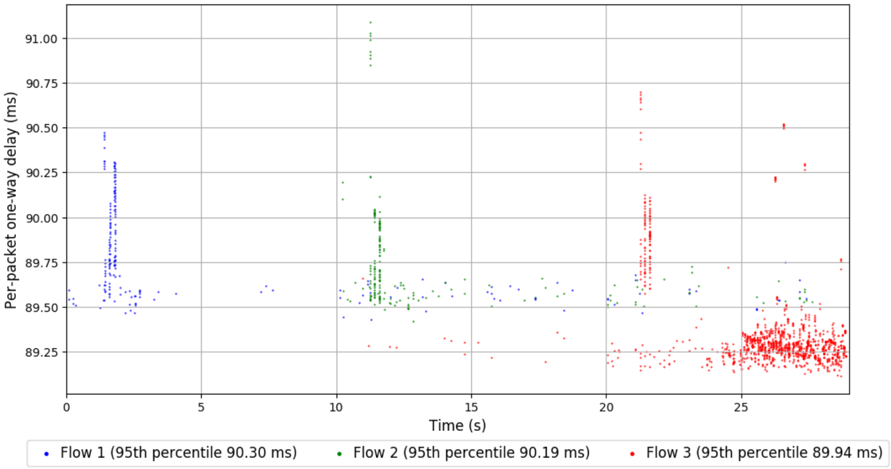
```
Run 10: Statistics of WebRTC media

Start at: 2017-08-31 16:50:53
End at: 2017-08-31 16:51:23

# Below is generated by plot.py at 2017-08-31 18:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 90.093 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 90.299 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 90.195 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 89.939 ms
Loss rate: 0.00%
```

Run 10: Report of WebRTC media — Data Link


Throughput (Mbit/s)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0
5
10
15
20
25
Time (s)
Flow 1 ingress (mean 0.06 Mbit/s)
Flow 2 ingress (mean 0.09 Mbit/s)
Flow 3 ingress (mean 0.65 Mbit/s)
Flow 1 egress (mean 0.06 Mbit/s)
Flow 2 egress (mean 0.09 Mbit/s)
Flow 3 egress (mean 0.65 Mbit/s)


Per-packet one-way delay (ms)
89.25
89.50
89.75
90.00
90.25
90.50
90.75
91.00
0
5
10
15
20
25
Time (s)
Flow 1 (95th percentile 90.30 ms)
Flow 2 (95th percentile 90.19 ms)
Flow 3 (95th percentile 89.94 ms)