Pantheon Report

Generated at 2018-02-28 08:19:30 (UTC).

Data path: Colombia Ethernet (*remote*) →AWS Brazil 2 Ethernet (*local*).

Repeated the test of 17 congestion control schemes 10 times.

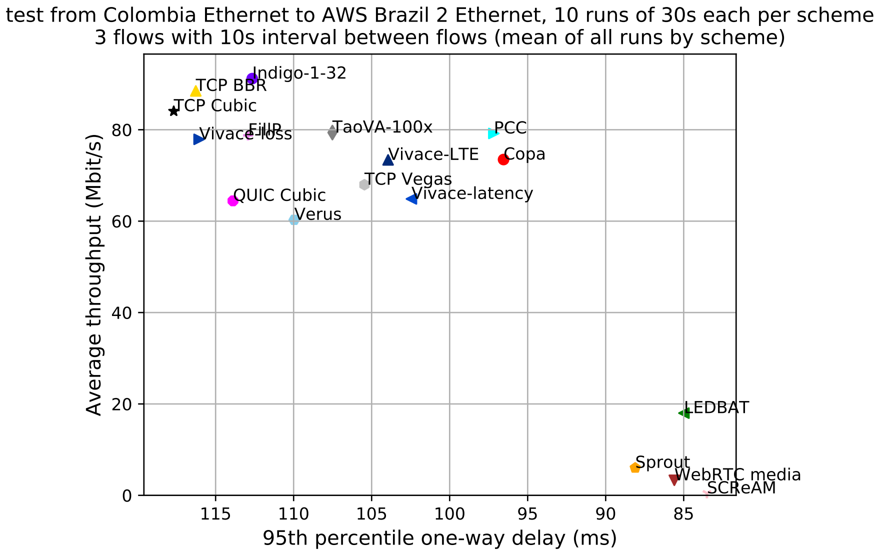
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

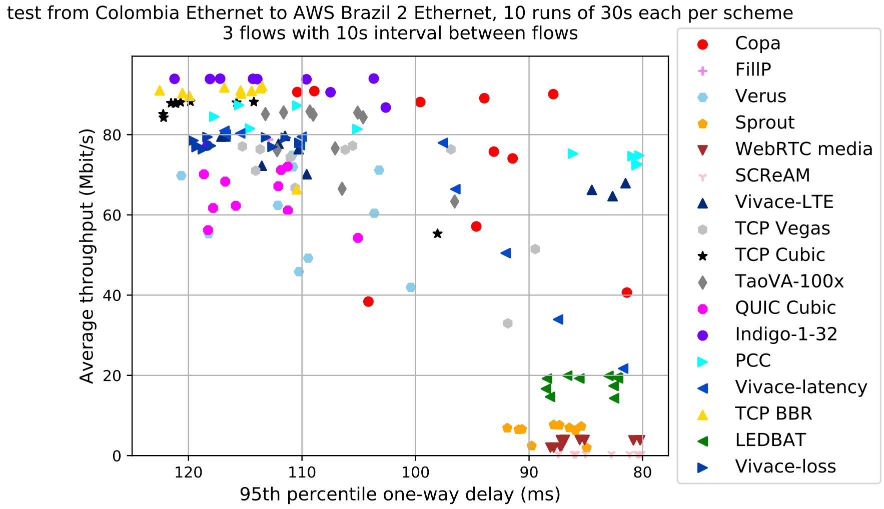
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

NTP offsets were measured against `gps.ntp.br` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
 M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
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/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```


test from Colombia Ethernet to AWS Brazil 2 Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)
Average throughput (Mbit/s)
95th percentile one-way delay (ms)
0
20
40
60
80
115
110
105
100
95
90
85
Indigo-1-32
TCP BBR
TCP Cubic
FillP
Vivace-loss
TaoVA-100x
PCC
Vivace-LTE
Copa
TCP Vegas
Vivace-latency
QUIC Cubic
Verus
LEDBAT
Sprout
WebRTC media
SCReAM


test from Colombia Ethernet to AWS Brazil 2 Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows
Average throughput (Mbit/s)
95th percentile one-way delay (ms)
0
20
40
60
80
120
110
100
90
80
Copa
FillP
Verus
Sprout
WebRTC media
SCReAM
Vivace-LTE
TCP Vegas
TCP Cubic
TaoVA-100x
QUIC Cubic
Indigo-1-32
PCC
Vivace-latency
TCP BBR
LEDBAT
Vivace-loss

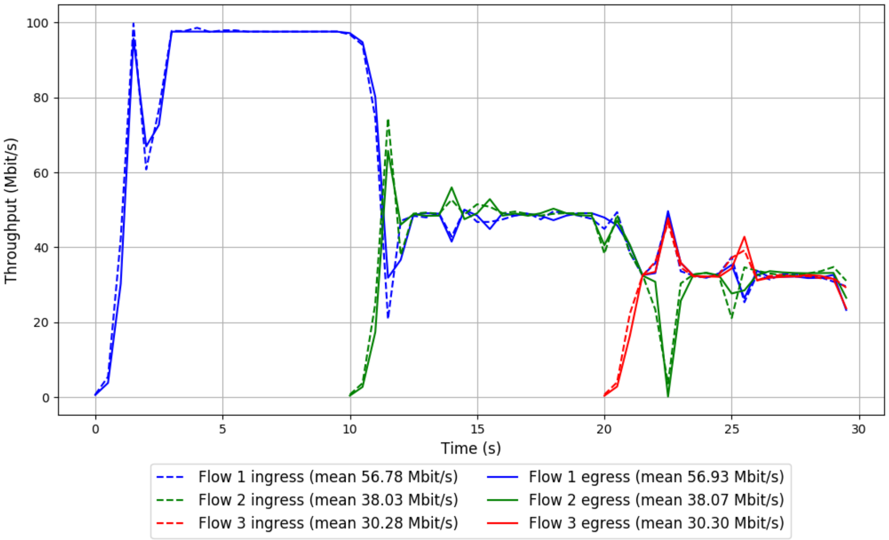
scheme	# runs	mean avg tput (Mbit/s) flow 1	flow 2	flow 3	mean 95th-%ile delay (ms) flow 1	flow 2	flow 3	mean loss rate (%) flow 1	flow 2	flow 3
TCP BBR	10	54.46	37.23	28.59	114.86	116.00	117.30	1.44	2.35	4.09
TCP Cubic	10	50.36	37.09	27.78	117.29	117.50	117.32	0.59	1.40	3.73
LEDBAT	10	11.66	7.75	3.68	84.58	84.83	84.64	1.18	1.77	3.63
PCC	10	62.26	18.50	14.34	96.39	97.21	97.91	2.87	4.04	8.02
QUIC Cubic	10	37.72	27.39	26.29	112.42	114.32	112.46	0.54	1.11	2.24
SCReAM	10	0.22	0.22	0.22	82.70	82.32	82.53	0.68	0.92	1.65
WebRTC media	10	1.48	1.33	0.52	85.21	84.68	85.39	0.60	1.02	2.74
Sprout	10	3.17	3.10	2.46	88.02	87.56	87.29	0.78	1.12	3.07
TaoVA-100x	10	44.73	36.57	31.67	106.21	107.84	108.48	1.29	2.07	3.53
TCP Vegas	10	36.36	35.63	24.30	104.00	105.12	105.89	0.63	0.89	2.09
Verus	10	34.35	29.53	19.93	107.87	110.16	113.58	5.16	6.13	8.89
Copa	10	49.90	25.65	20.01	95.65	96.55	97.42	1.91	3.00	8.14
FillP	1	49.83	34.35	24.75	110.04	112.29	117.00	17.87	17.95	20.36
Indigo-1-32	10	63.50	30.60	23.05	111.73	112.88	114.71	2.09	3.69	6.41
Vivace-latency	10	46.42	21.10	13.67	100.68	103.01	100.07	1.45	3.03	4.52
Vivace-loss	10	49.65	30.56	24.58	115.13	116.21	116.02	1.07	4.79	10.44
Vivace-LTE	10	53.38	22.23	16.22	101.75	104.22	105.10	1.45	2.14	4.34

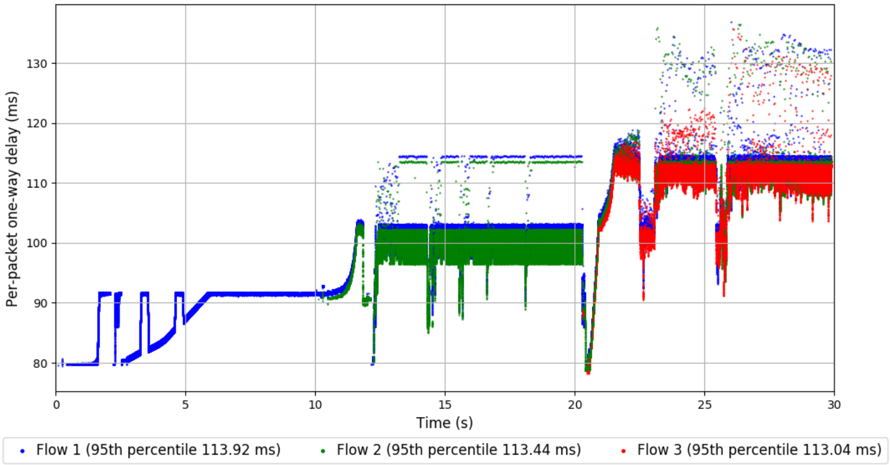
```
Run 1: Statistics of TCP BBR

Start at: 2018-02-28 00:00:40
End at: 2018-02-28 00:01:10
Local clock offset: -3.612 ms
Remote clock offset: -0.732 ms

# Below is generated by plot.py at 2018-02-28 07:59:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.08 Mbit/s
95th percentile per-packet one-way delay: 113.515 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 56.93 Mbit/s
95th percentile per-packet one-way delay: 113.916 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 38.07 Mbit/s
95th percentile per-packet one-way delay: 113.436 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 30.30 Mbit/s
95th percentile per-packet one-way delay: 113.043 ms
Loss rate: 2.06%
```

Run 1: Report of TCP BBR — Data Link



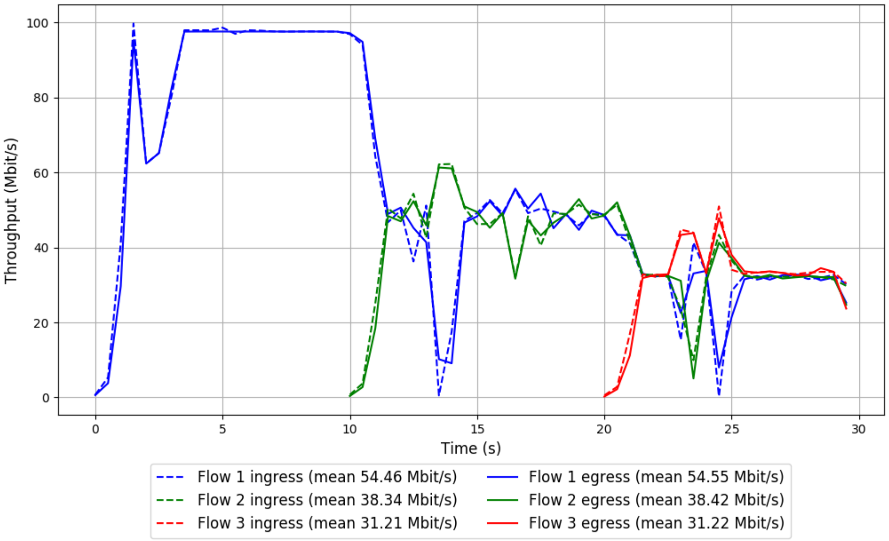


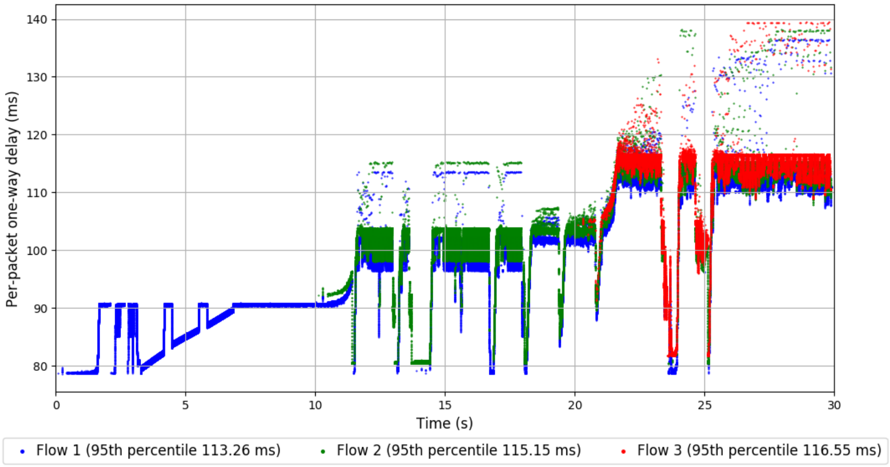
```
Run 2: Statistics of TCP BBR

Start at: 2018-02-28 00:24:08
End at: 2018-02-28 00:24:38
Local clock offset: -2.62 ms
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2018-02-28 07:59:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.23 Mbit/s
95th percentile per-packet one-way delay: 115.361 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 54.55 Mbit/s
95th percentile per-packet one-way delay: 113.260 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 38.42 Mbit/s
95th percentile per-packet one-way delay: 115.152 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 31.22 Mbit/s
95th percentile per-packet one-way delay: 116.546 ms
Loss rate: 2.16%
```

Run 2: Report of TCP BBR — Data Link



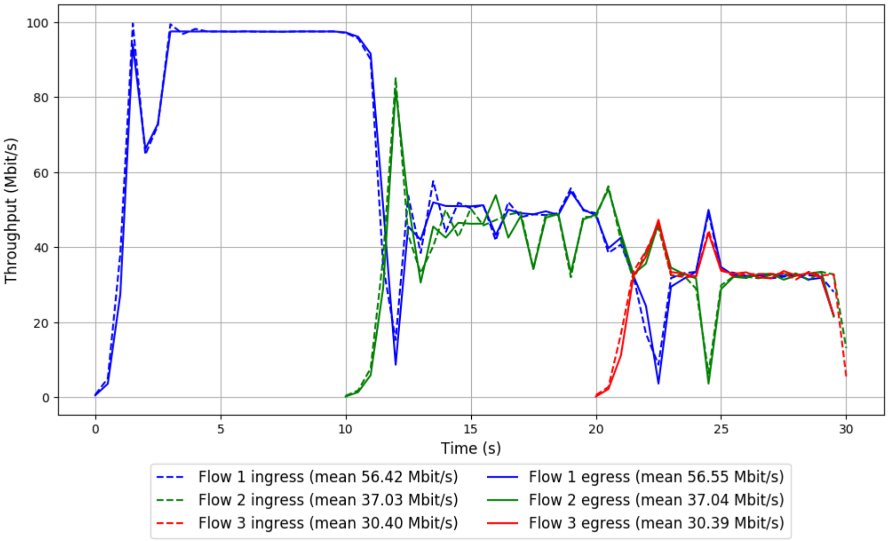


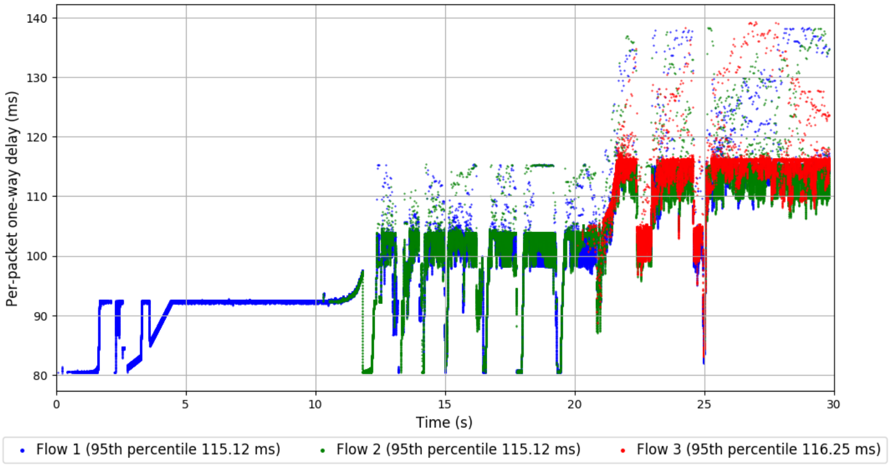
```
Run 3: Statistics of TCP BBR

Start at: 2018-02-28 00:48:10
End at: 2018-02-28 00:48:40
Local clock offset: -3.593 ms
Remote clock offset: 0.094 ms

# Below is generated by plot.py at 2018-02-28 07:59:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.01 Mbit/s
95th percentile per-packet one-way delay: 115.408 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 56.55 Mbit/s
95th percentile per-packet one-way delay: 115.122 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 37.04 Mbit/s
95th percentile per-packet one-way delay: 115.121 ms
Loss rate: 2.08%
-- Flow 3:
Average throughput: 30.39 Mbit/s
95th percentile per-packet one-way delay: 116.251 ms
Loss rate: 3.97%
```

Run 3: Report of TCP BBR — Data Link



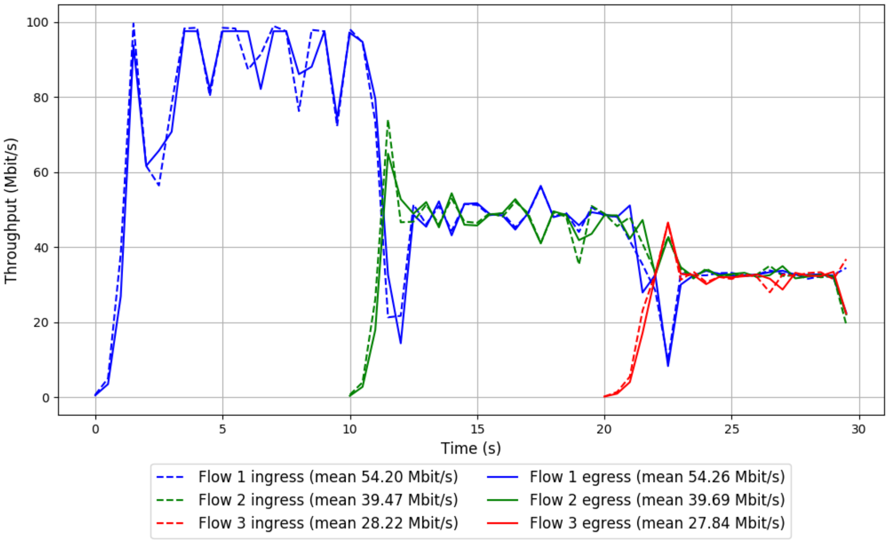


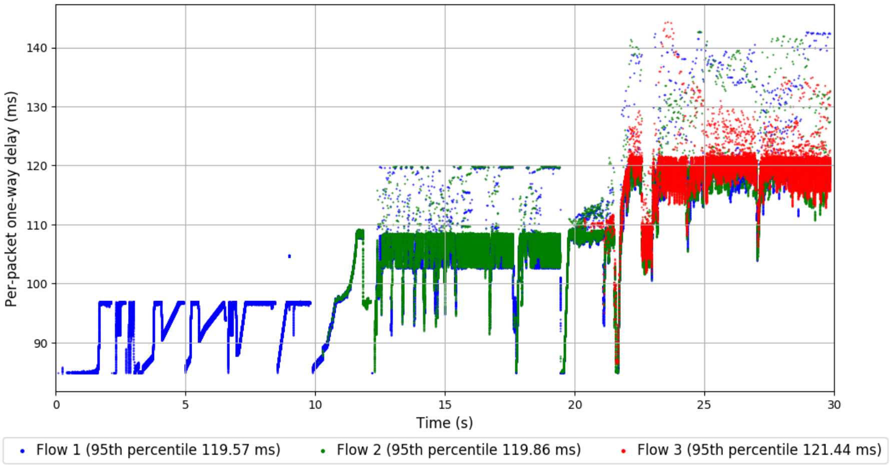
```
Run 4: Statistics of TCP BBR

Start at: 2018-02-28 01:12:29
End at: 2018-02-28 01:12:59
Local clock offset: -4.431 ms
Remote clock offset: -5.66 ms

# Below is generated by plot.py at 2018-02-28 07:59:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.65 Mbit/s
95th percentile per-packet one-way delay: 119.920 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 54.26 Mbit/s
95th percentile per-packet one-way delay: 119.572 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 39.69 Mbit/s
95th percentile per-packet one-way delay: 119.863 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 27.84 Mbit/s
95th percentile per-packet one-way delay: 121.444 ms
Loss rate: 3.80%
```

Run 4: Report of TCP BBR — Data Link



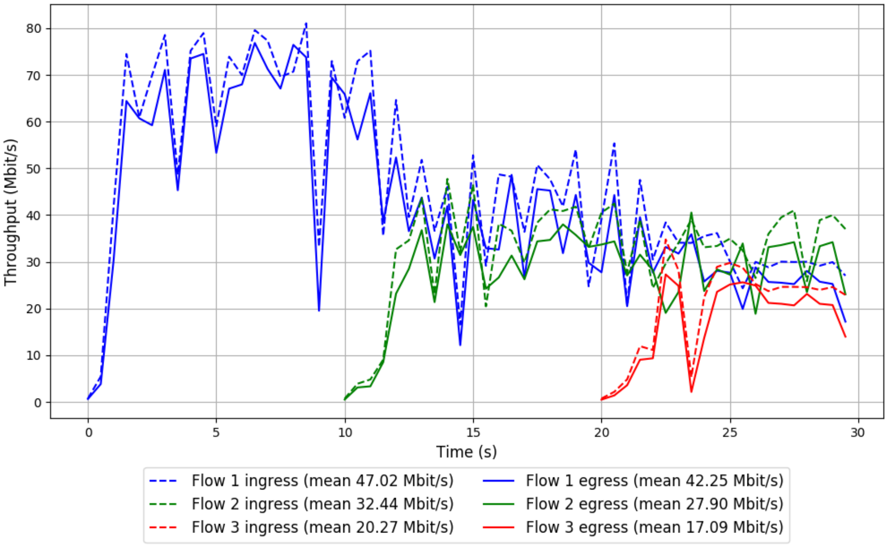


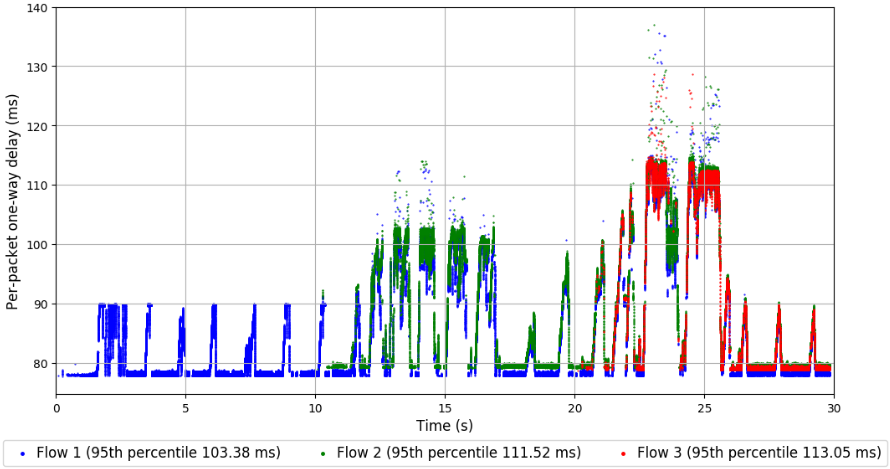
```
Run 5: Statistics of TCP BBR

Start at: 2018-02-28 01:36:45
End at: 2018-02-28 01:37:15
Local clock offset: -4.484 ms
Remote clock offset: 0.824 ms

# Below is generated by plot.py at 2018-02-28 07:59:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.35 Mbit/s
95th percentile per-packet one-way delay: 110.457 ms
Loss rate: 12.52%
-- Flow 1:
Average throughput: 42.25 Mbit/s
95th percentile per-packet one-way delay: 103.375 ms
Loss rate: 10.72%
-- Flow 2:
Average throughput: 27.90 Mbit/s
95th percentile per-packet one-way delay: 111.518 ms
Loss rate: 14.89%
-- Flow 3:
Average throughput: 17.09 Mbit/s
95th percentile per-packet one-way delay: 113.047 ms
Loss rate: 17.47%
```

Run 5: Report of TCP BBR — Data Link



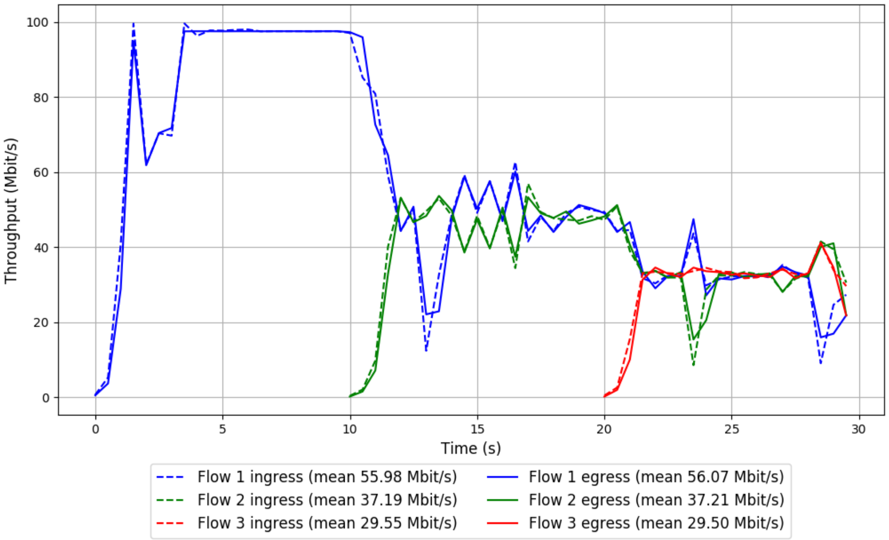


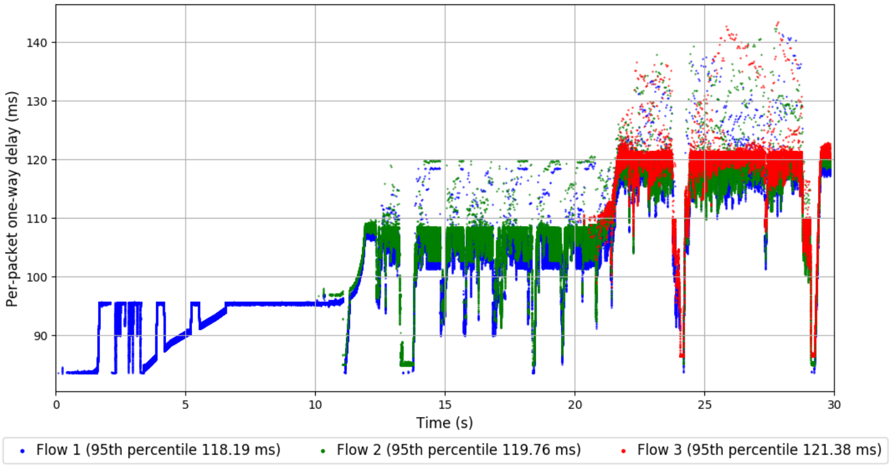
```
Run 6: Statistics of TCP BBR

Start at: 2018-02-28 02:00:59
End at: 2018-02-28 02:01:29
Local clock offset: -3.822 ms
Remote clock offset: -4.882 ms

# Below is generated by plot.py at 2018-02-28 07:59:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.36 Mbit/s
95th percentile per-packet one-way delay: 120.528 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 56.07 Mbit/s
95th percentile per-packet one-way delay: 118.187 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 37.21 Mbit/s
95th percentile per-packet one-way delay: 119.760 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 29.50 Mbit/s
95th percentile per-packet one-way delay: 121.375 ms
Loss rate: 2.67%
```

Run 6: Report of TCP BBR — Data Link



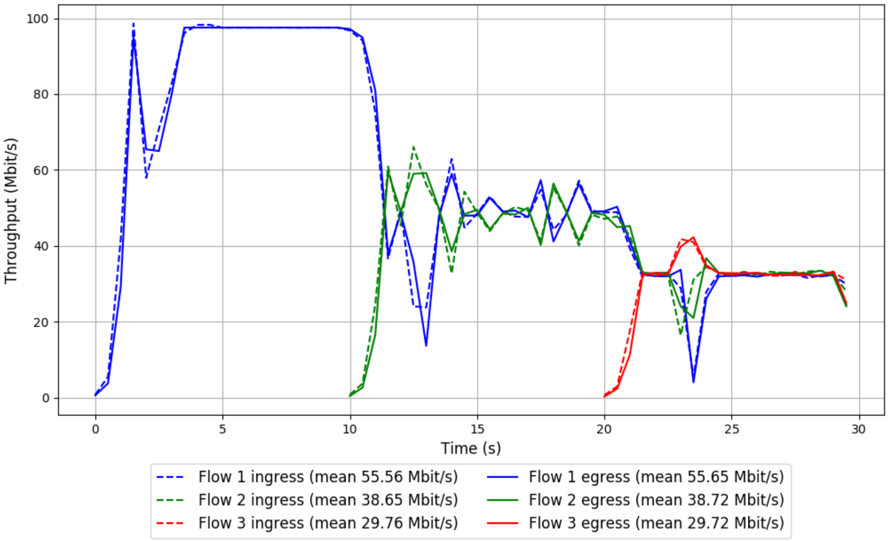


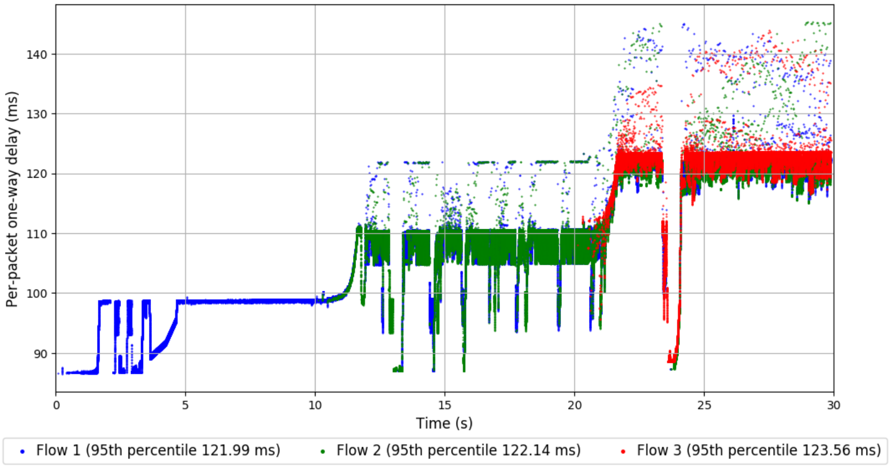
```
Run 7: Statistics of TCP BBR

Start at: 2018-02-28 02:25:08
End at: 2018-02-28 02:25:38
Local clock offset: -11.769 ms
Remote clock offset: -5.644 ms

# Below is generated by plot.py at 2018-02-28 07:59:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.04 Mbit/s
95th percentile per-packet one-way delay: 122.535 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 55.65 Mbit/s
95th percentile per-packet one-way delay: 121.988 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 38.72 Mbit/s
95th percentile per-packet one-way delay: 122.135 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 29.72 Mbit/s
95th percentile per-packet one-way delay: 123.565 ms
Loss rate: 2.26%
```

Run 7: Report of TCP BBR — Data Link



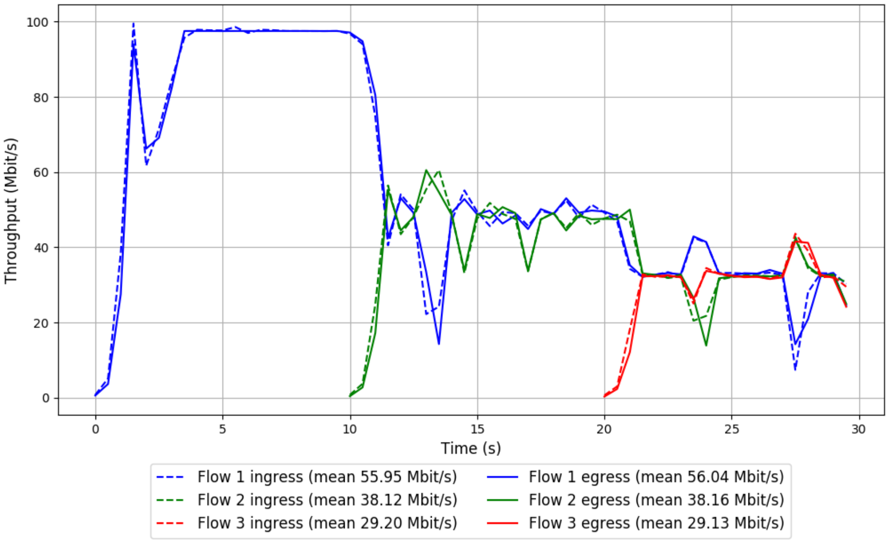


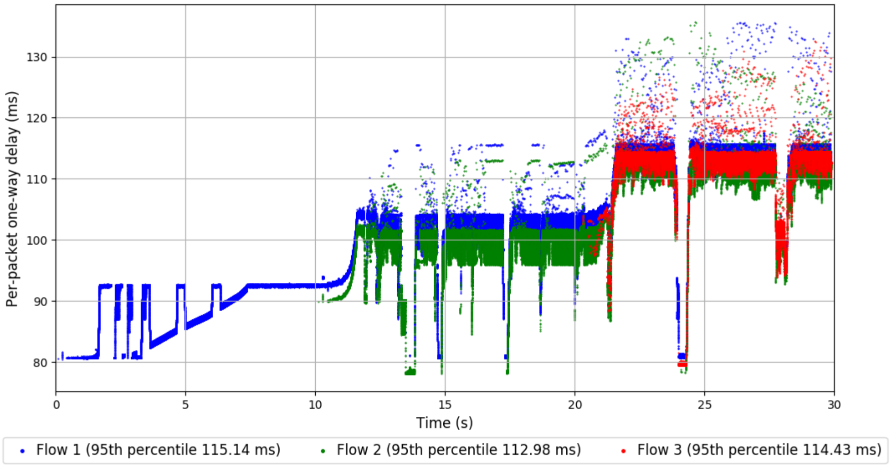
```
Run 8: Statistics of TCP BBR

Start at: 2018-02-28 02:48:51
End at: 2018-02-28 02:49:21
Local clock offset: -30.678 ms
Remote clock offset: 0.399 ms

# Below is generated by plot.py at 2018-02-28 07:59:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.89 Mbit/s
95th percentile per-packet one-way delay: 114.442 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 56.04 Mbit/s
95th percentile per-packet one-way delay: 115.135 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 38.16 Mbit/s
95th percentile per-packet one-way delay: 112.980 ms
Loss rate: 0.86%
-- Flow 3:
Average throughput: 29.13 Mbit/s
95th percentile per-packet one-way delay: 114.427 ms
Loss rate: 2.17%
```

Run 8: Report of TCP BBR — Data Link



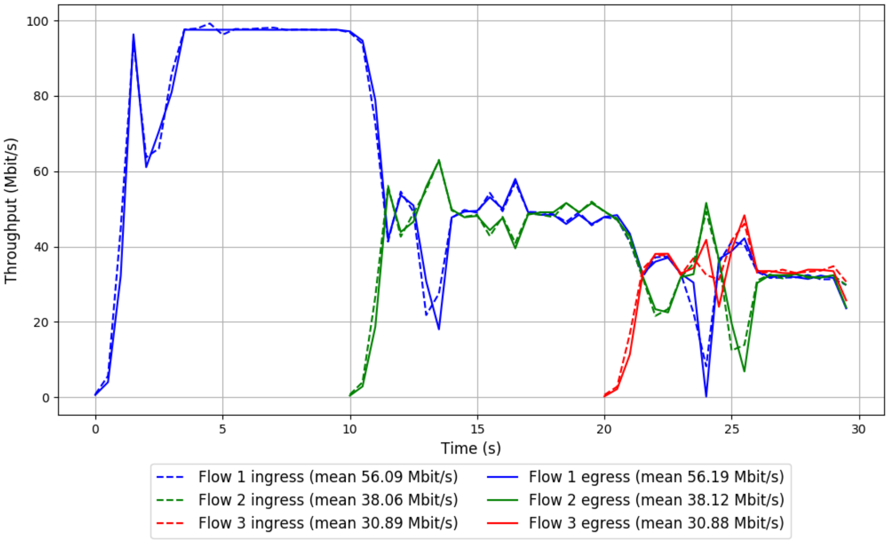


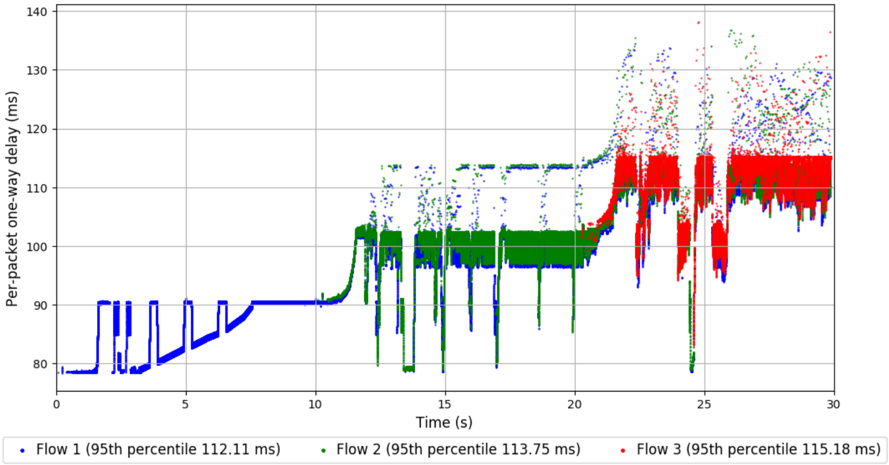
```
Run 9: Statistics of TCP BBR

Start at: 2018-02-28 03:12:23
End at: 2018-02-28 03:12:53
Local clock offset: -38.035 ms
Remote clock offset: -0.137 ms

# Below is generated by plot.py at 2018-02-28 08:00:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.58 Mbit/s
95th percentile per-packet one-way delay: 113.688 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 56.19 Mbit/s
95th percentile per-packet one-way delay: 112.109 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 38.12 Mbit/s
95th percentile per-packet one-way delay: 113.751 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 30.88 Mbit/s
95th percentile per-packet one-way delay: 115.179 ms
Loss rate: 2.14%
```

Run 9: Report of TCP BBR — Data Link



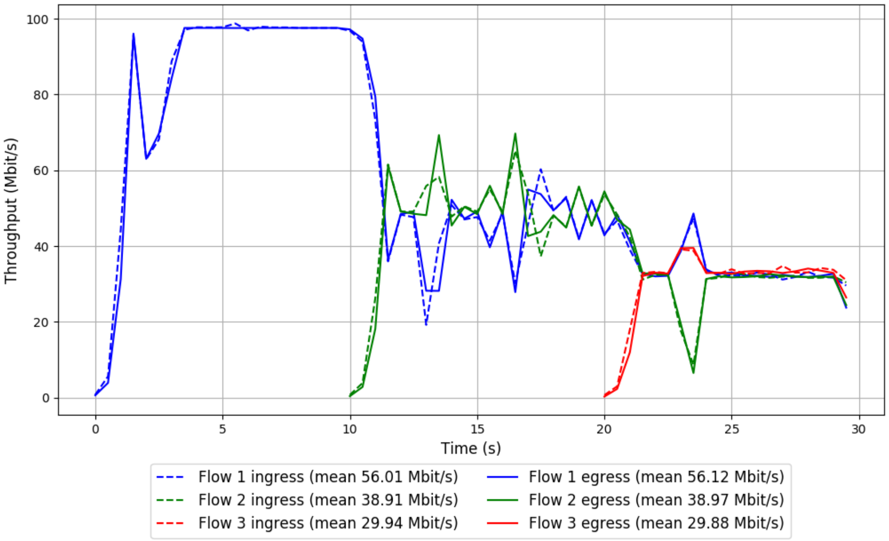


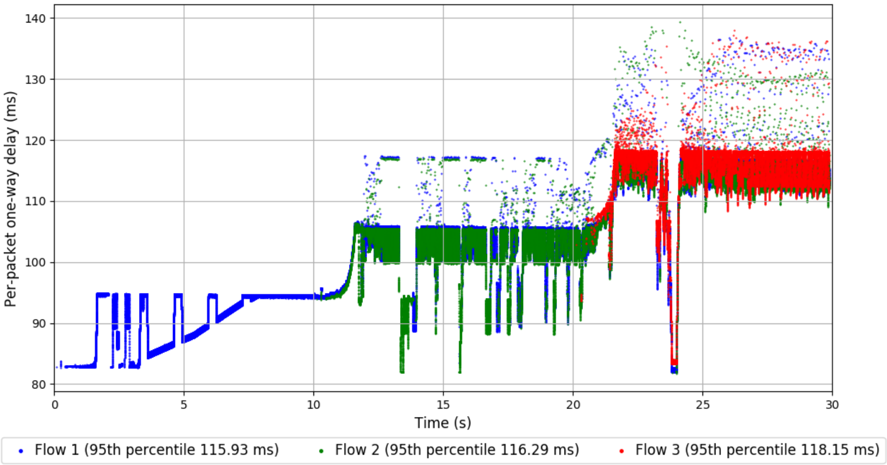
```
Run 10: Statistics of TCP BBR

Start at: 2018-02-28 03:36:17
End at: 2018-02-28 03:36:48
Local clock offset: -20.594 ms
Remote clock offset: -4.774 ms

# Below is generated by plot.py at 2018-02-28 08:01:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.75 Mbit/s
95th percentile per-packet one-way delay: 116.840 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 56.12 Mbit/s
95th percentile per-packet one-way delay: 115.926 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 38.97 Mbit/s
95th percentile per-packet one-way delay: 116.288 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 29.88 Mbit/s
95th percentile per-packet one-way delay: 118.153 ms
Loss rate: 2.23%
```

Run 10: Report of TCP BBR — Data Link



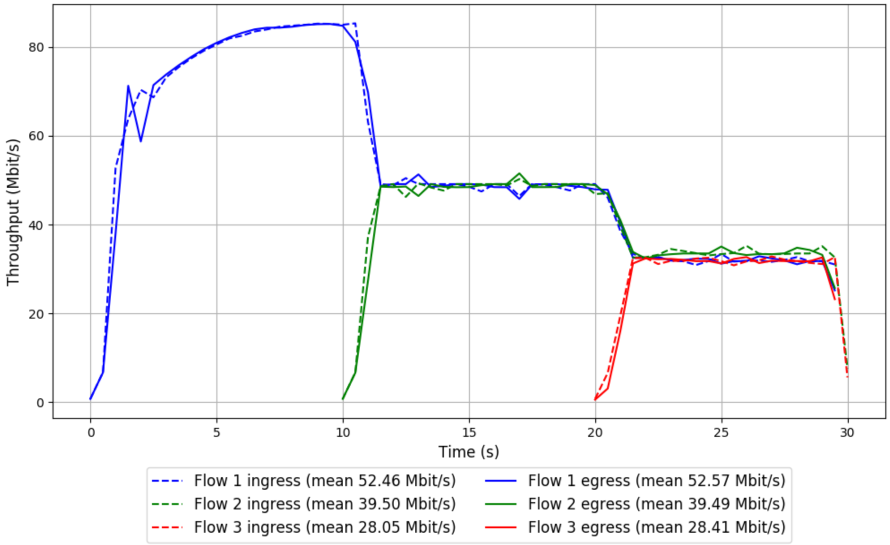


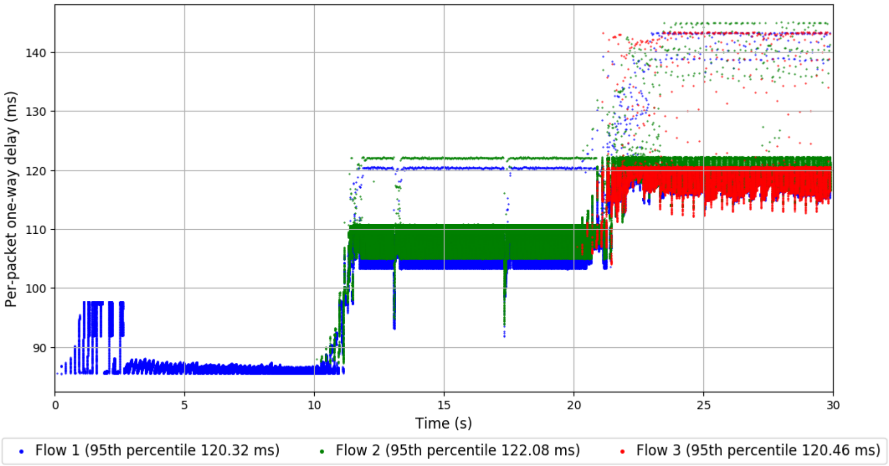
```
Run 1: Statistics of TCP Cubic

Start at: 2018-02-28 00:10:54
End at: 2018-02-28 00:11:24
Local clock offset: -3.104 ms
Remote clock offset: -6.274 ms

# Below is generated by plot.py at 2018-02-28 08:01:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.06 Mbit/s
95th percentile per-packet one-way delay: 120.694 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 52.57 Mbit/s
95th percentile per-packet one-way delay: 120.320 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 39.49 Mbit/s
95th percentile per-packet one-way delay: 122.082 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 28.41 Mbit/s
95th percentile per-packet one-way delay: 120.463 ms
Loss rate: 3.70%
```

Run 1: Report of TCP Cubic — Data Link



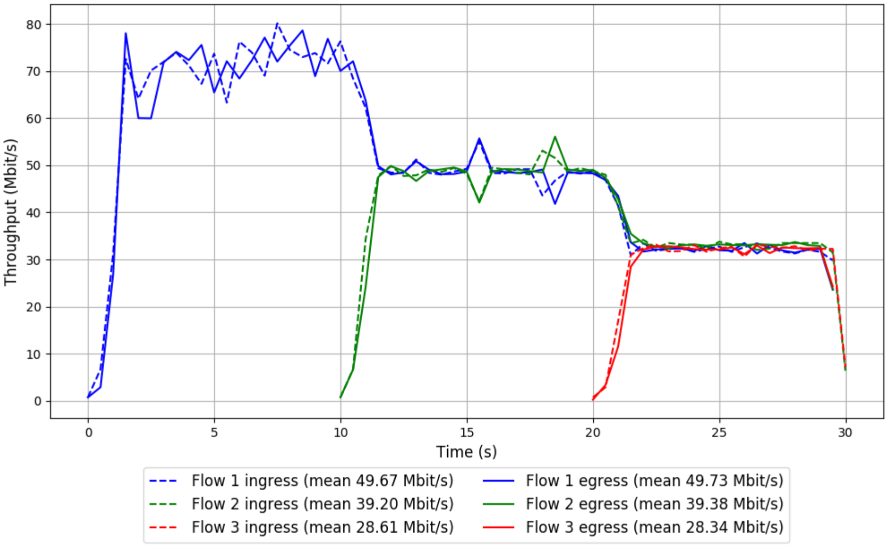


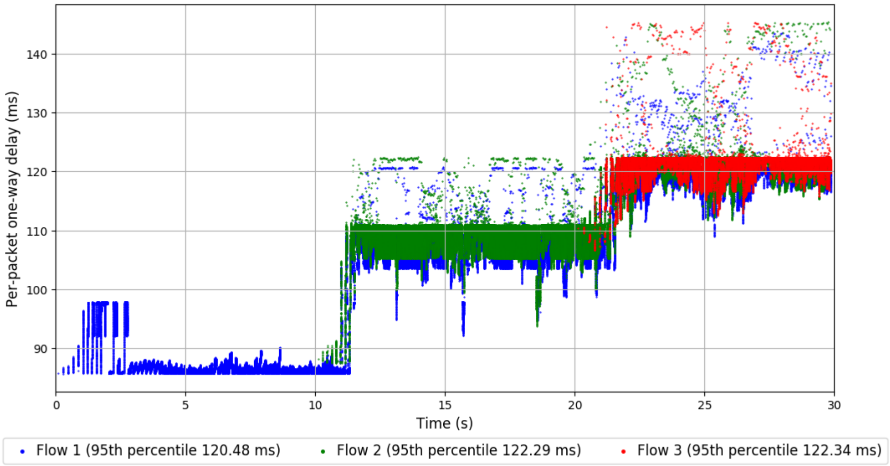
```
Run 2: Statistics of TCP Cubic

Start at: 2018-02-28 00:34:26
End at: 2018-02-28 00:34:56
Local clock offset: -2.23 ms
Remote clock offset: -5.656 ms

# Below is generated by plot.py at 2018-02-28 08:01:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.10 Mbit/s
95th percentile per-packet one-way delay: 122.223 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 49.73 Mbit/s
95th percentile per-packet one-way delay: 120.485 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 39.38 Mbit/s
95th percentile per-packet one-way delay: 122.287 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 28.34 Mbit/s
95th percentile per-packet one-way delay: 122.338 ms
Loss rate: 4.06%
```

Run 2: Report of TCP Cubic — Data Link



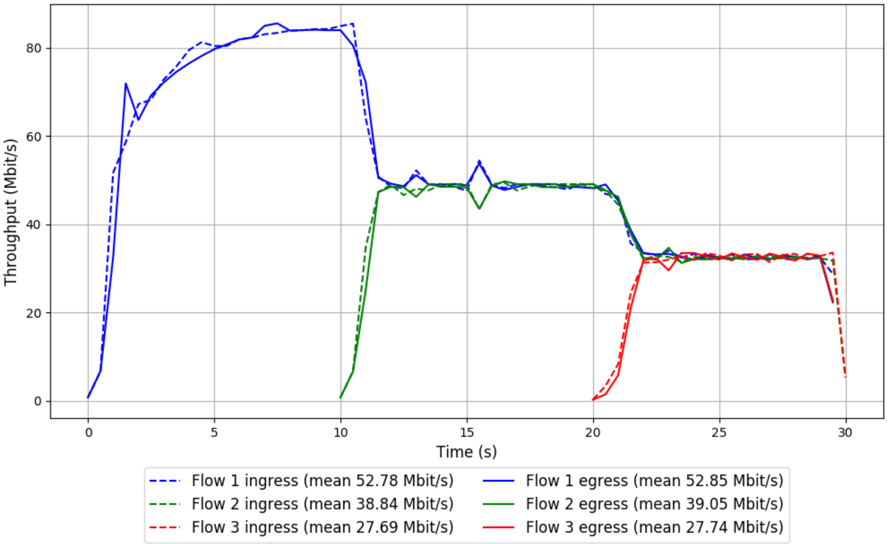


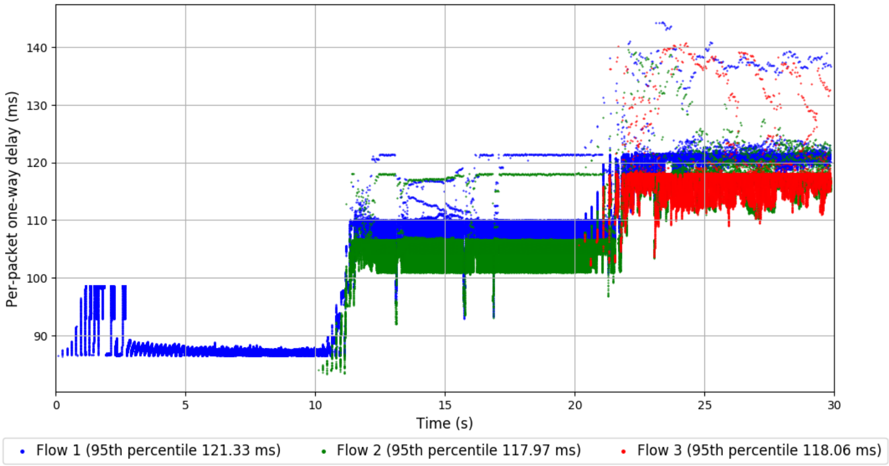
```
Run 3: Statistics of TCP Cubic

Start at: 2018-02-28 00:58:51
End at: 2018-02-28 00:59:21
Local clock offset: -4.136 ms
Remote clock offset: -5.33 ms

# Below is generated by plot.py at 2018-02-28 08:01:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.80 Mbit/s
95th percentile per-packet one-way delay: 121.196 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 52.85 Mbit/s
95th percentile per-packet one-way delay: 121.330 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 39.05 Mbit/s
95th percentile per-packet one-way delay: 117.966 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 27.74 Mbit/s
95th percentile per-packet one-way delay: 118.059 ms
Loss rate: 4.17%
```

Run 3: Report of TCP Cubic — Data Link



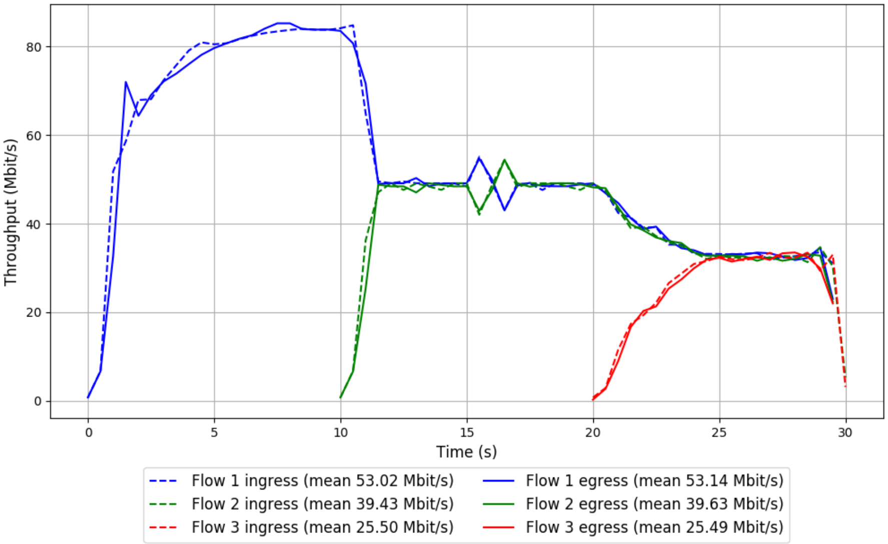


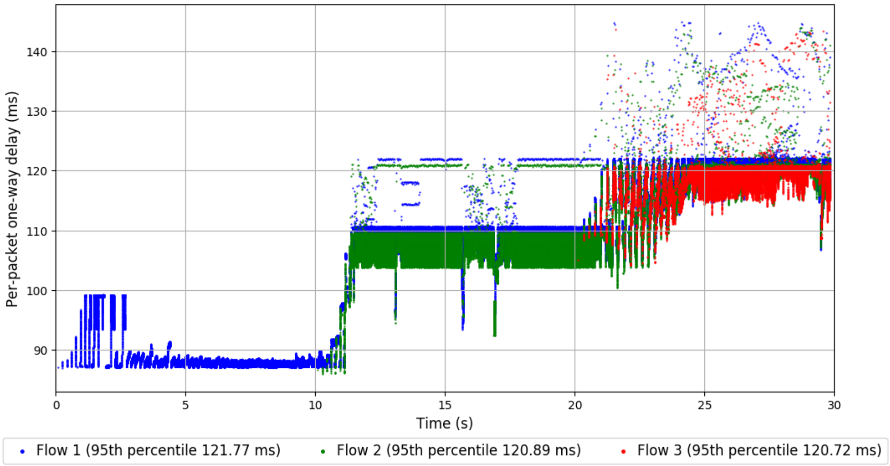
```
Run 4: Statistics of TCP Cubic

Start at: 2018-02-28 01:23:07
End at: 2018-02-28 01:23:37
Local clock offset: -4.4 ms
Remote clock offset: -6.494 ms

# Below is generated by plot.py at 2018-02-28 08:01:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.77 Mbit/s
95th percentile per-packet one-way delay: 121.096 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 53.14 Mbit/s
95th percentile per-packet one-way delay: 121.774 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 39.63 Mbit/s
95th percentile per-packet one-way delay: 120.895 ms
Loss rate: 1.40%
-- Flow 3:
Average throughput: 25.49 Mbit/s
95th percentile per-packet one-way delay: 120.725 ms
Loss rate: 4.10%
```

Run 4: Report of TCP Cubic — Data Link



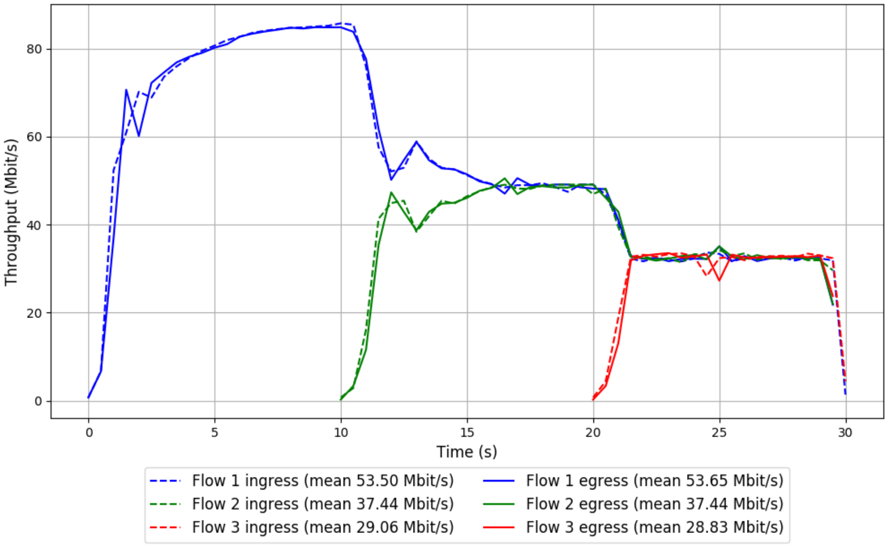


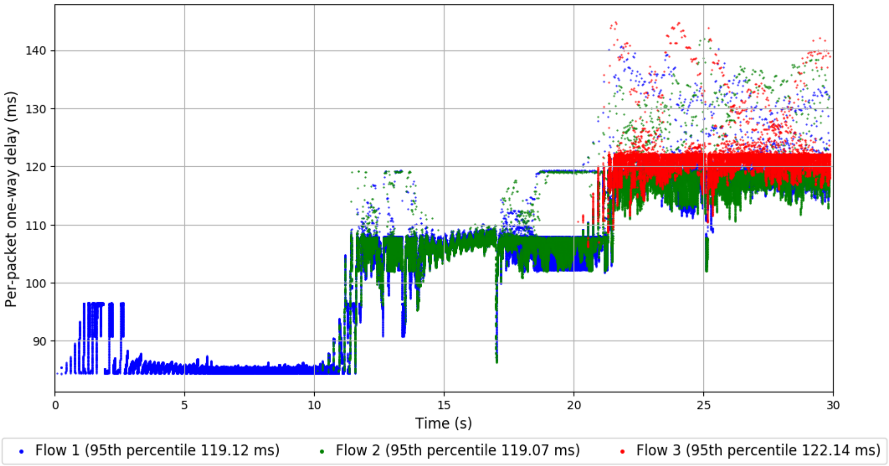
```
Run 5: Statistics of TCP Cubic

Start at: 2018-02-28 01:47:23
End at: 2018-02-28 01:47:53
Local clock offset: -4.523 ms
Remote clock offset: -5.72 ms

# Below is generated by plot.py at 2018-02-28 08:01:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.85 Mbit/s
95th percentile per-packet one-way delay: 121.534 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 53.65 Mbit/s
95th percentile per-packet one-way delay: 119.123 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 37.44 Mbit/s
95th percentile per-packet one-way delay: 119.069 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 28.83 Mbit/s
95th percentile per-packet one-way delay: 122.137 ms
Loss rate: 3.75%
```

Run 5: Report of TCP Cubic — Data Link



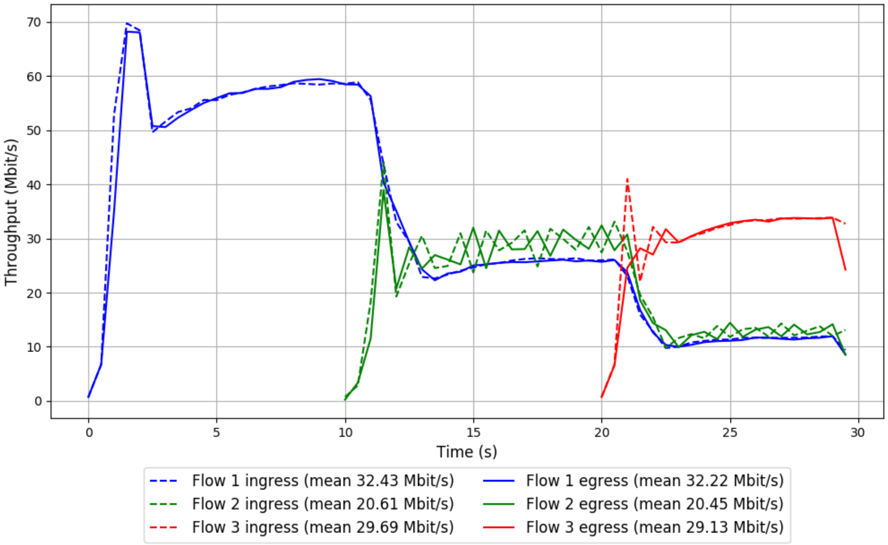


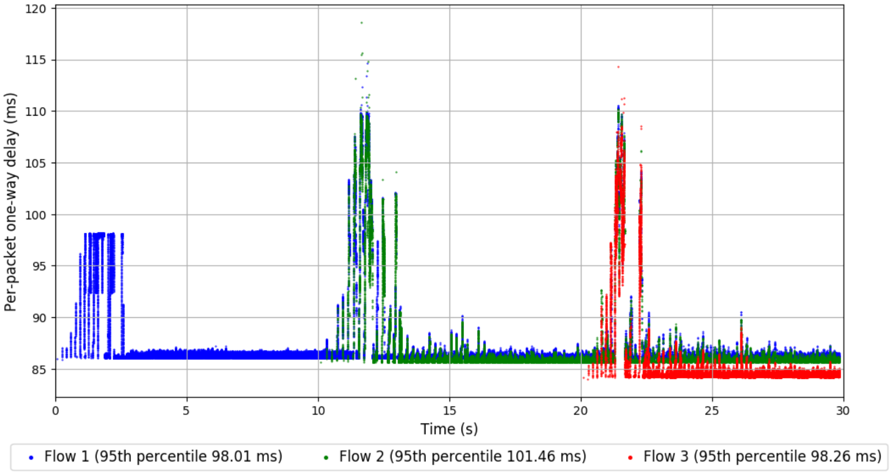
```
Run 6: Statistics of TCP Cubic

Start at: 2018-02-28 02:11:36
End at: 2018-02-28 02:12:06
Local clock offset: -3.593 ms
Remote clock offset: -5.652 ms

# Below is generated by plot.py at 2018-02-28 08:01:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.31 Mbit/s
95th percentile per-packet one-way delay: 98.061 ms
Loss rate: 1.77%
-- Flow 1:
Average throughput: 32.22 Mbit/s
95th percentile per-packet one-way delay: 98.008 ms
Loss rate: 1.21%
-- Flow 2:
Average throughput: 20.45 Mbit/s
95th percentile per-packet one-way delay: 101.459 ms
Loss rate: 1.85%
-- Flow 3:
Average throughput: 29.13 Mbit/s
95th percentile per-packet one-way delay: 98.262 ms
Loss rate: 3.52%
```

Run 6: Report of TCP Cubic — Data Link



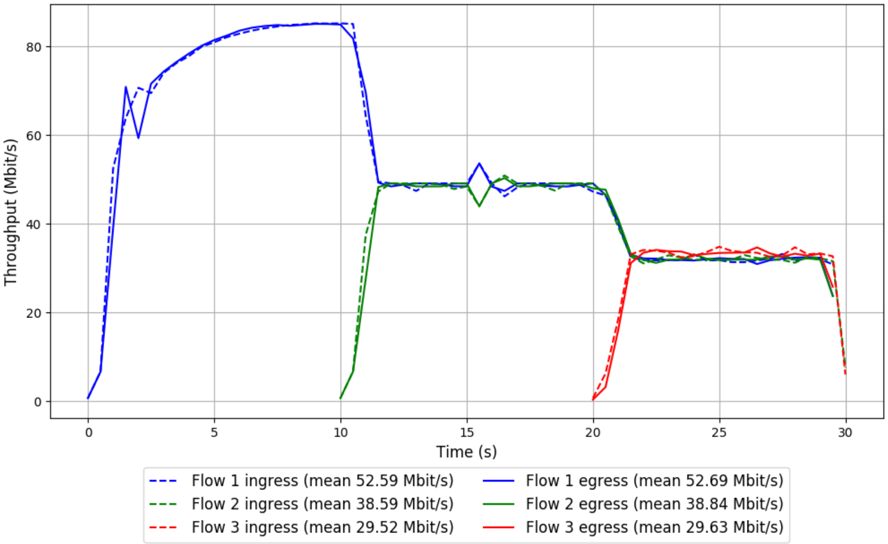


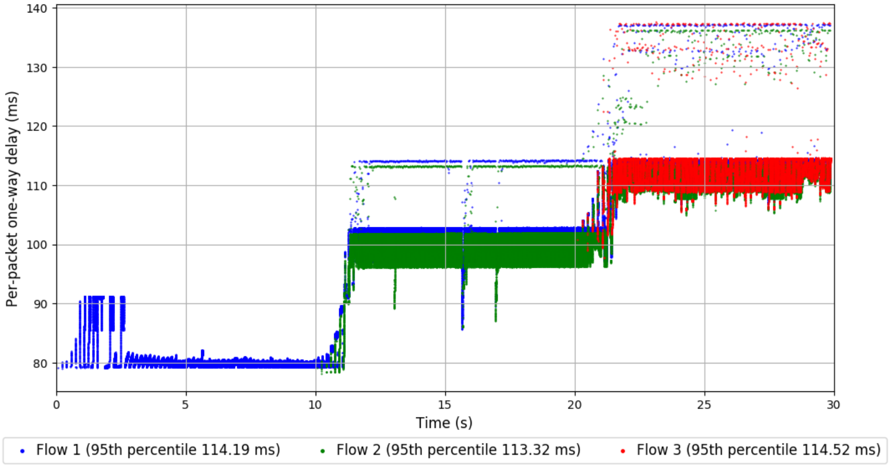
```
Run 7: Statistics of TCP Cubic

Start at: 2018-02-28 02:35:33
End at: 2018-02-28 02:36:03
Local clock offset: -23.815 ms
Remote clock offset: 0.65 ms

# Below is generated by plot.py at 2018-02-28 08:02:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.15 Mbit/s
95th percentile per-packet one-way delay: 114.241 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 52.69 Mbit/s
95th percentile per-packet one-way delay: 114.186 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 38.84 Mbit/s
95th percentile per-packet one-way delay: 113.322 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 29.63 Mbit/s
95th percentile per-packet one-way delay: 114.520 ms
Loss rate: 3.62%
```

Run 7: Report of TCP Cubic — Data Link



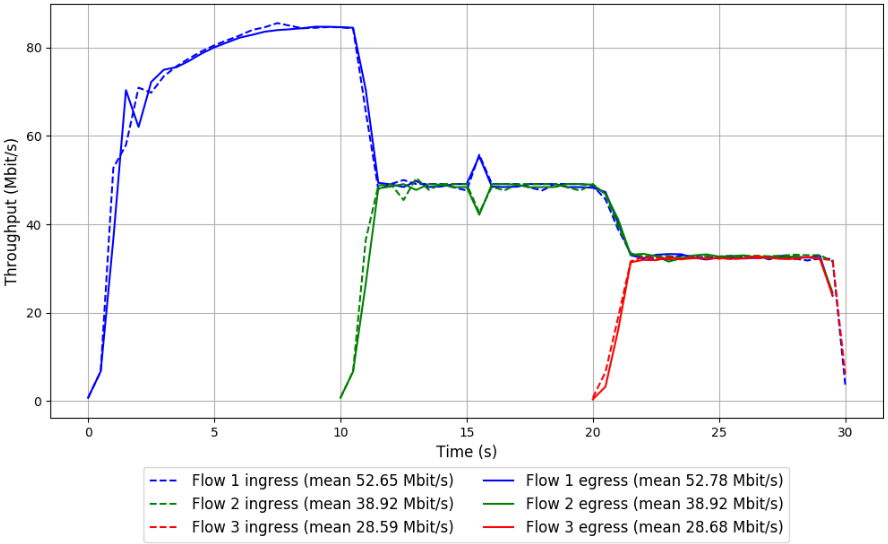


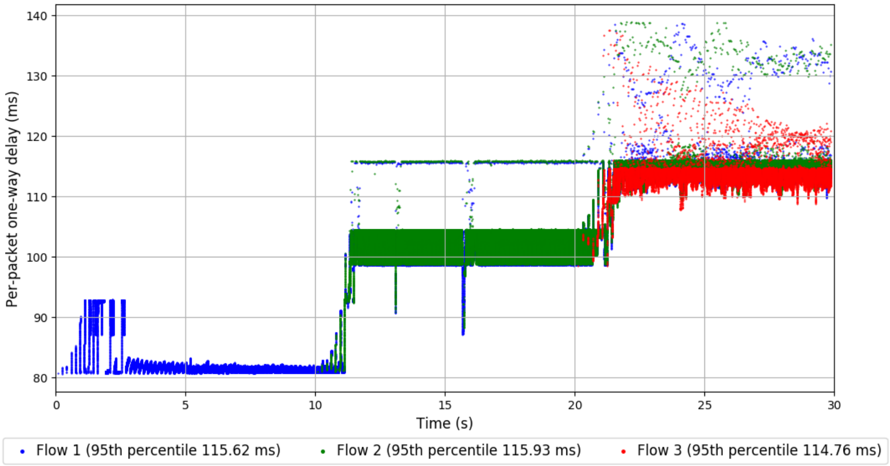
```
Run 8: Statistics of TCP Cubic

Start at: 2018-02-28 02:59:06
End at: 2018-02-28 02:59:36
Local clock offset: -34.14 ms
Remote clock offset: -1.298 ms

# Below is generated by plot.py at 2018-02-28 08:02:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.00 Mbit/s
95th percentile per-packet one-way delay: 115.764 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 52.78 Mbit/s
95th percentile per-packet one-way delay: 115.622 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 38.92 Mbit/s
95th percentile per-packet one-way delay: 115.933 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 28.68 Mbit/s
95th percentile per-packet one-way delay: 114.764 ms
Loss rate: 3.69%
```

Run 8: Report of TCP Cubic — Data Link



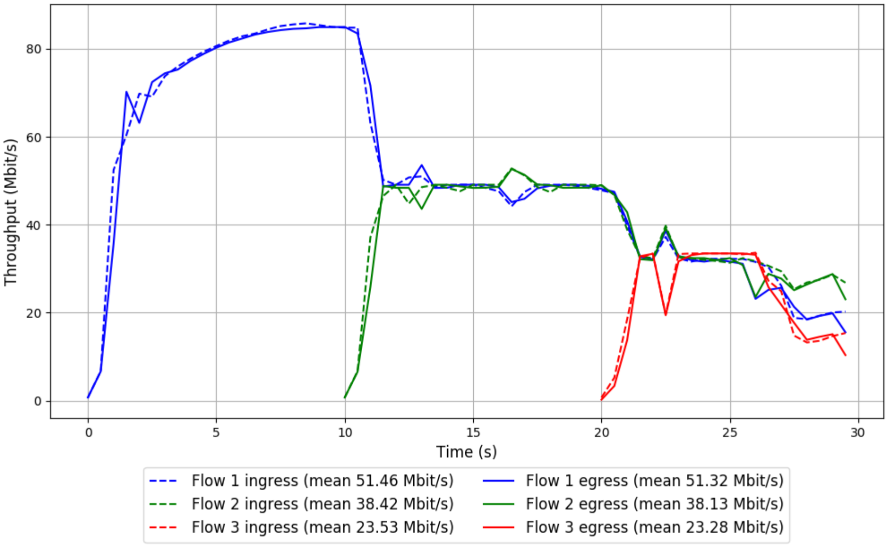


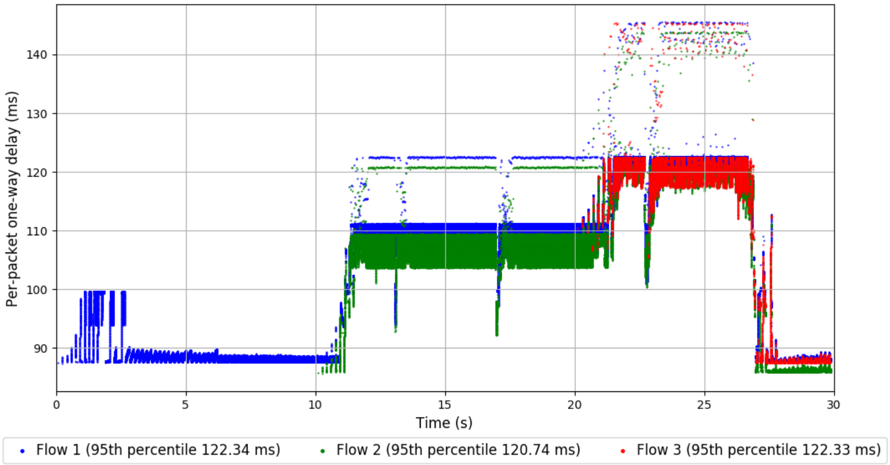
```
Run 9: Statistics of TCP Cubic

Start at: 2018-02-28 03:22:40
End at: 2018-02-28 03:23:10
Local clock offset: -40.991 ms
Remote clock offset: -5.657 ms

# Below is generated by plot.py at 2018-02-28 08:02:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.25 Mbit/s
95th percentile per-packet one-way delay: 122.189 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 51.32 Mbit/s
95th percentile per-packet one-way delay: 122.339 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 38.13 Mbit/s
95th percentile per-packet one-way delay: 120.743 ms
Loss rate: 1.57%
-- Flow 3:
Average throughput: 23.28 Mbit/s
95th percentile per-packet one-way delay: 122.330 ms
Loss rate: 2.97%
```

Run 9: Report of TCP Cubic — Data Link



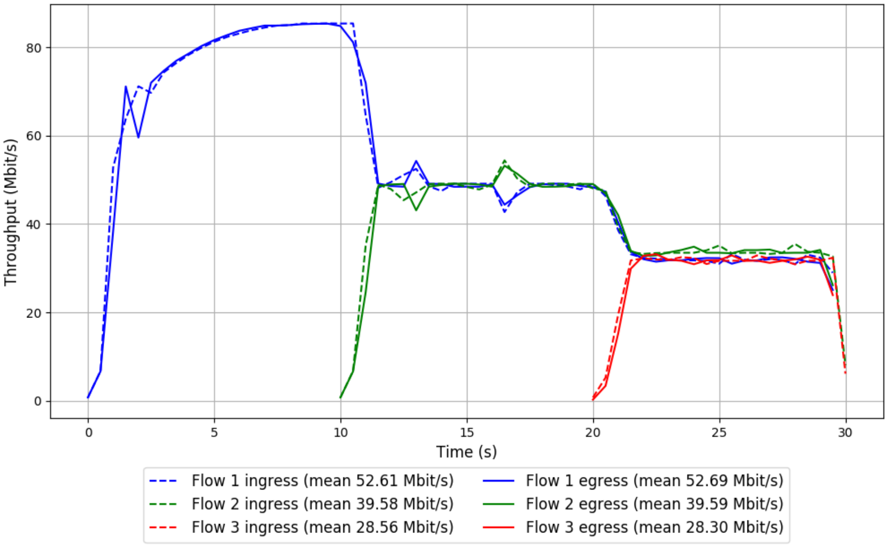


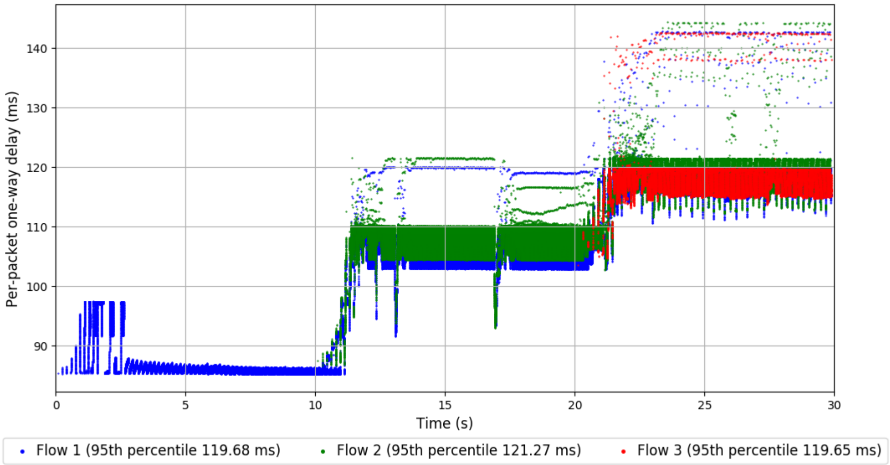
```
Run 10: Statistics of TCP Cubic

Start at: 2018-02-28 03:46:31
End at: 2018-02-28 03:47:01
Local clock offset: -5.692 ms
Remote clock offset: -5.726 ms

# Below is generated by plot.py at 2018-02-28 08:02:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.22 Mbit/s
95th percentile per-packet one-way delay: 119.832 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 52.69 Mbit/s
95th percentile per-packet one-way delay: 119.682 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 39.59 Mbit/s
95th percentile per-packet one-way delay: 121.267 ms
Loss rate: 1.44%
-- Flow 3:
Average throughput: 28.30 Mbit/s
95th percentile per-packet one-way delay: 119.650 ms
Loss rate: 3.71%
```

Run 10: Report of TCP Cubic — Data Link



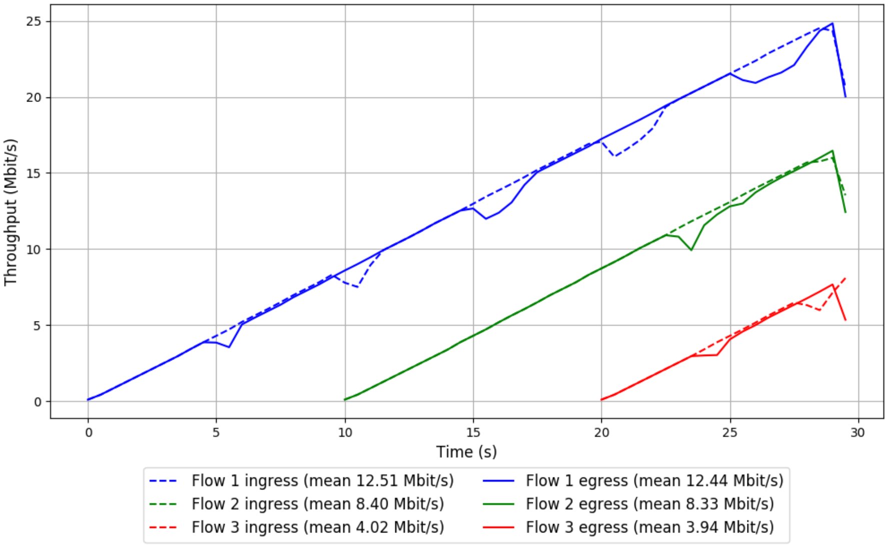


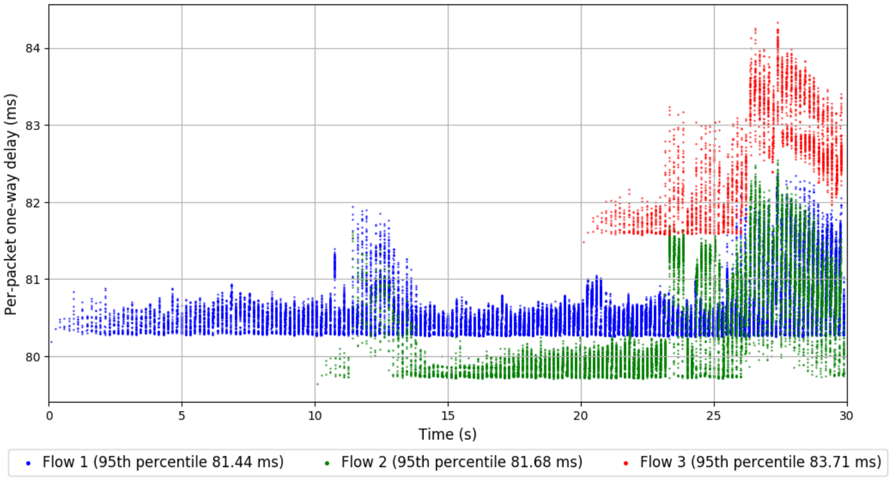
```
Run 1: Statistics of LEDBAT

Start at: 2018-02-28 00:02:00
End at: 2018-02-28 00:02:30
Local clock offset: -3.516 ms
Remote clock offset: -0.634 ms

# Below is generated by plot.py at 2018-02-28 08:02:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.25 Mbit/s
95th percentile per-packet one-way delay: 82.161 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 12.44 Mbit/s
95th percentile per-packet one-way delay: 81.436 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 8.33 Mbit/s
95th percentile per-packet one-way delay: 81.678 ms
Loss rate: 1.69%
-- Flow 3:
Average throughput: 3.94 Mbit/s
95th percentile per-packet one-way delay: 83.712 ms
Loss rate: 3.47%
```

Run 1: Report of LEDBAT — Data Link



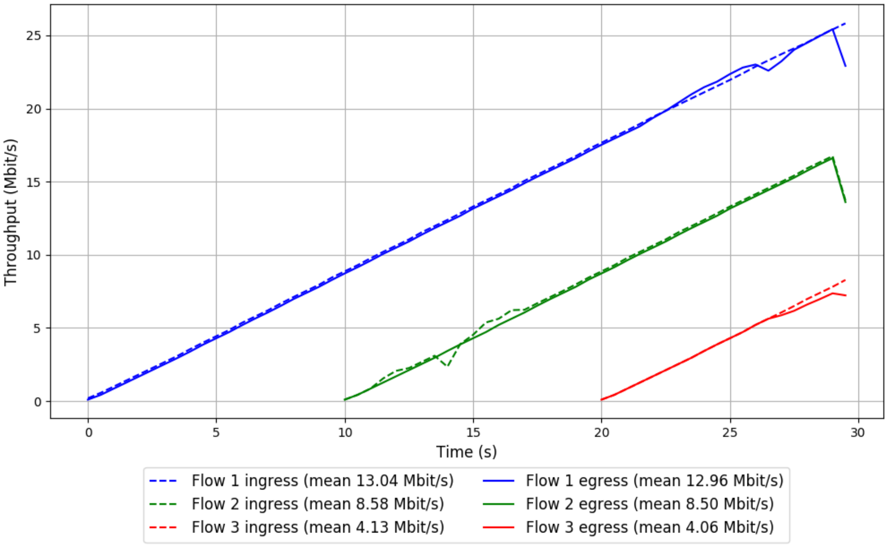


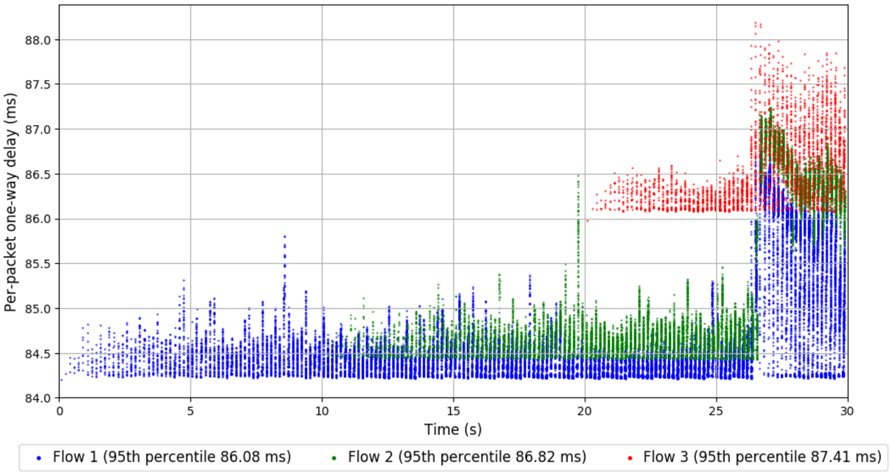
```
Run 2: Statistics of LEDBAT

Start at: 2018-02-28 00:25:27
End at: 2018-02-28 00:25:57
Local clock offset: -2.531 ms
Remote clock offset: -5.741 ms

# Below is generated by plot.py at 2018-02-28 08:02:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.94 Mbit/s
95th percentile per-packet one-way delay: 86.639 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 12.96 Mbit/s
95th percentile per-packet one-way delay: 86.082 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 8.50 Mbit/s
95th percentile per-packet one-way delay: 86.820 ms
Loss rate: 1.68%
-- Flow 3:
Average throughput: 4.06 Mbit/s
95th percentile per-packet one-way delay: 87.414 ms
Loss rate: 3.43%
```

Run 2: Report of LEDBAT — Data Link



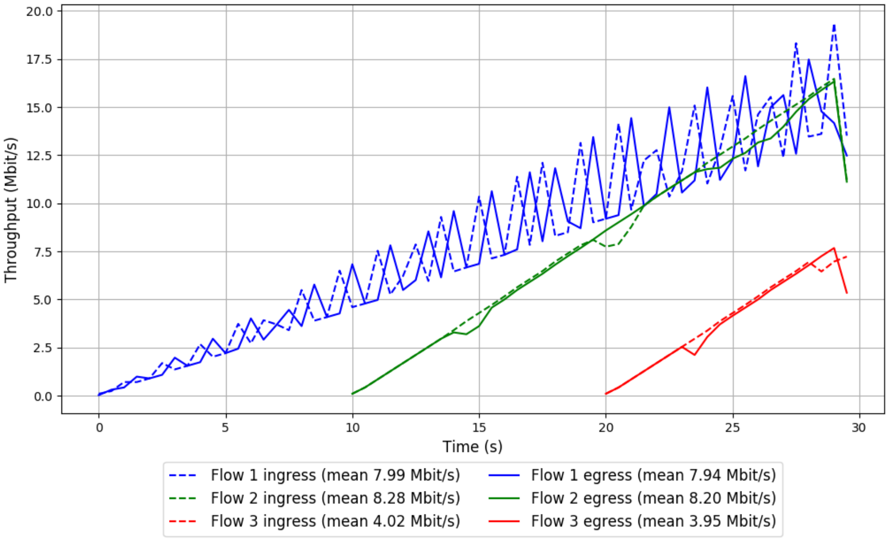


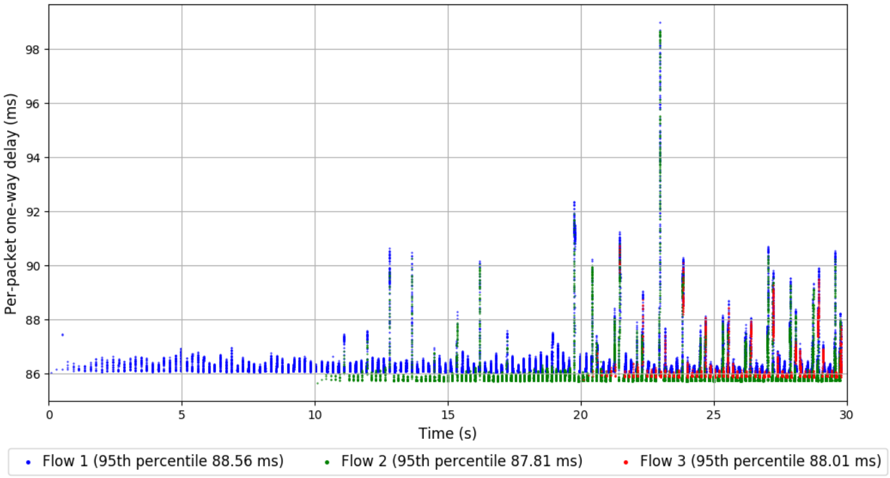
```
Run 3: Statistics of LEDBAT

Start at: 2018-02-28 00:49:33
End at: 2018-02-28 00:50:03
Local clock offset: -3.684 ms
Remote clock offset: -5.651 ms

# Below is generated by plot.py at 2018-02-28 08:02:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.65 Mbit/s
95th percentile per-packet one-way delay: 88.162 ms
Loss rate: 1.71%
-- Flow 1:
Average throughput: 7.94 Mbit/s
95th percentile per-packet one-way delay: 88.556 ms
Loss rate: 1.42%
-- Flow 2:
Average throughput: 8.20 Mbit/s
95th percentile per-packet one-way delay: 87.811 ms
Loss rate: 1.72%
-- Flow 3:
Average throughput: 3.95 Mbit/s
95th percentile per-packet one-way delay: 88.010 ms
Loss rate: 3.47%
```

Run 3: Report of LEDBAT — Data Link



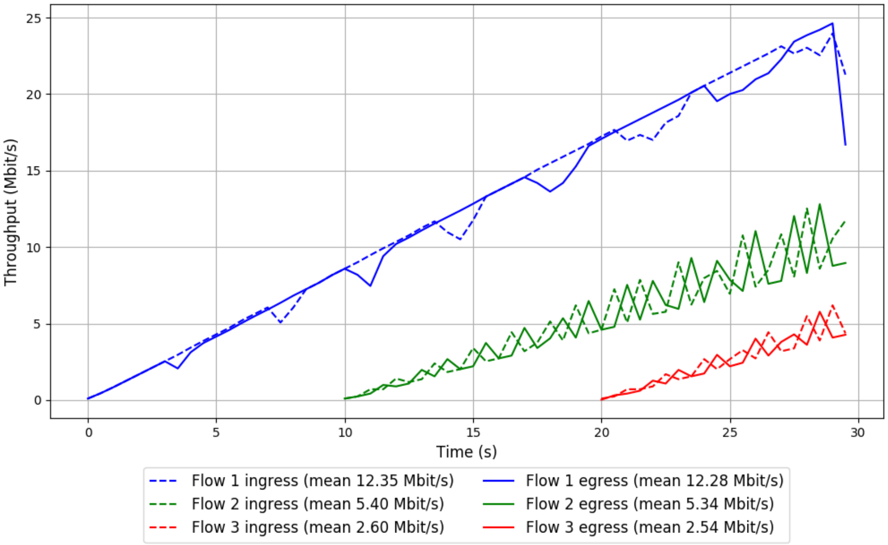


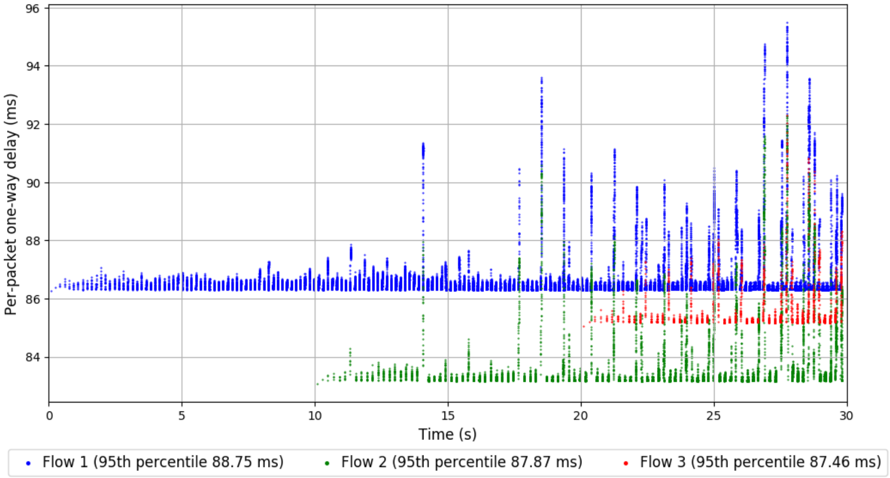
```
Run 4: Statistics of LEDBAT

Start at: 2018-02-28 01:13:52
End at: 2018-02-28 01:14:22
Local clock offset: -4.346 ms
Remote clock offset: -5.572 ms

# Below is generated by plot.py at 2018-02-28 08:02:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.64 Mbit/s
95th percentile per-packet one-way delay: 88.523 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 12.28 Mbit/s
95th percentile per-packet one-way delay: 88.748 ms
Loss rate: 1.14%
-- Flow 2:
Average throughput: 5.34 Mbit/s
95th percentile per-packet one-way delay: 87.870 ms
Loss rate: 2.11%
-- Flow 3:
Average throughput: 2.54 Mbit/s
95th percentile per-packet one-way delay: 87.463 ms
Loss rate: 4.28%
```

Run 4: Report of LEDBAT — Data Link



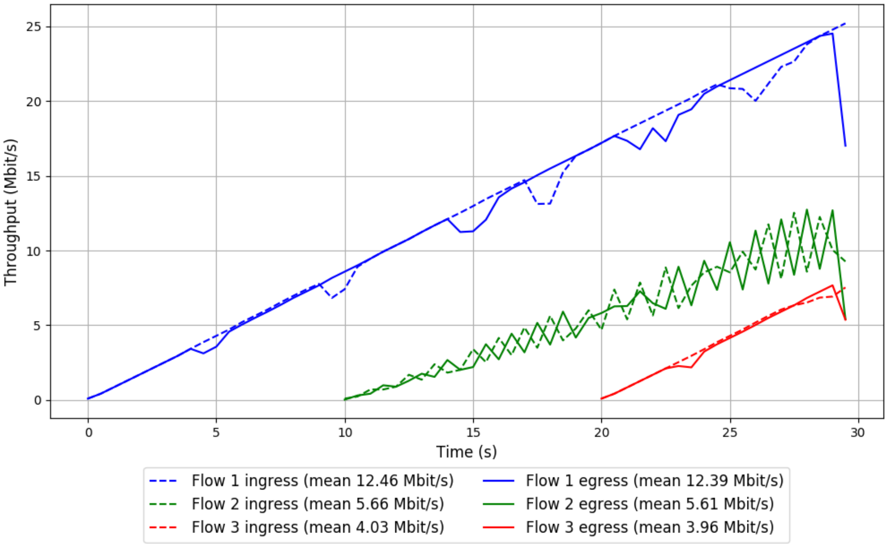


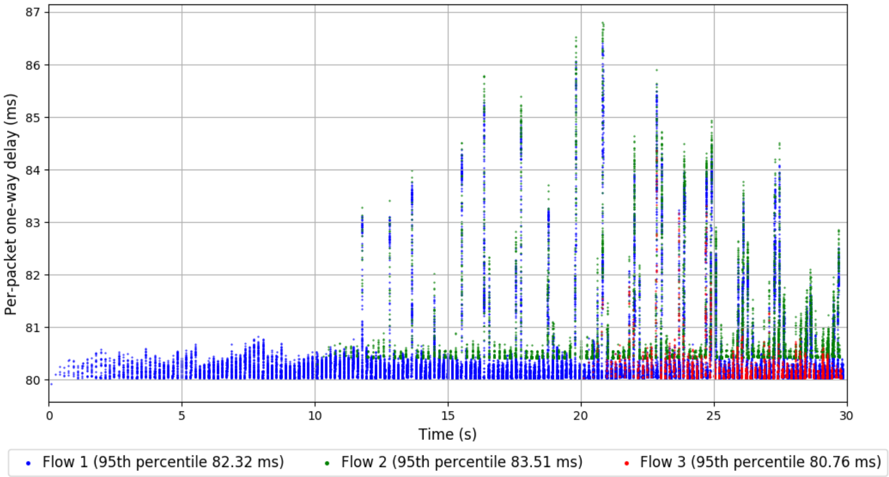
```
Run 5: Statistics of LEDBAT

Start at: 2018-02-28 01:38:08
End at: 2018-02-28 01:38:38
Local clock offset: -4.476 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2018-02-28 08:02:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.37 Mbit/s
95th percentile per-packet one-way delay: 82.557 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 12.39 Mbit/s
95th percentile per-packet one-way delay: 82.319 ms
Loss rate: 1.13%
-- Flow 2:
Average throughput: 5.61 Mbit/s
95th percentile per-packet one-way delay: 83.506 ms
Loss rate: 2.08%
-- Flow 3:
Average throughput: 3.96 Mbit/s
95th percentile per-packet one-way delay: 80.764 ms
Loss rate: 3.49%
```

Run 5: Report of LEDBAT — Data Link



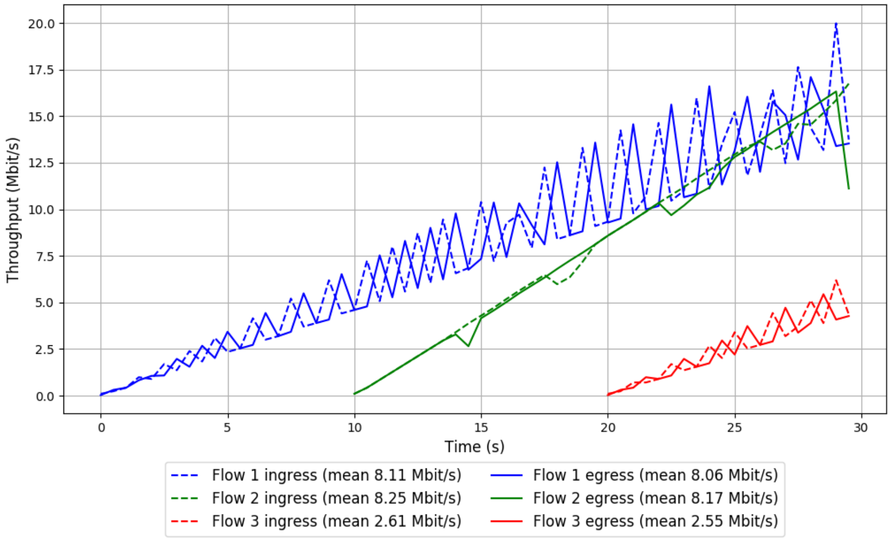


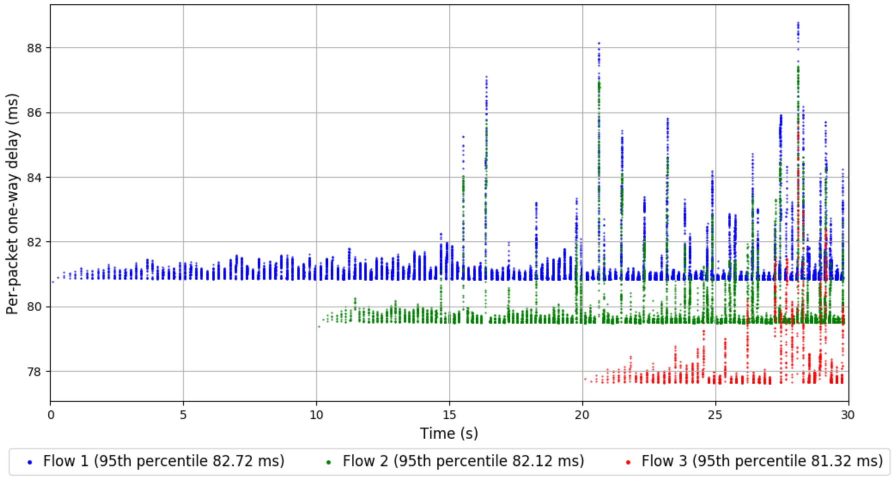
```
Run 6: Statistics of LEDBAT

Start at: 2018-02-28 02:02:21
End at: 2018-02-28 02:02:51
Local clock offset: -3.836 ms
Remote clock offset: 0.89 ms

# Below is generated by plot.py at 2018-02-28 08:02:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.30 Mbit/s
95th percentile per-packet one-way delay: 82.522 ms
Loss rate: 1.70%
-- Flow 1:
Average throughput: 8.06 Mbit/s
95th percentile per-packet one-way delay: 82.718 ms
Loss rate: 1.41%
-- Flow 2:
Average throughput: 8.17 Mbit/s
95th percentile per-packet one-way delay: 82.123 ms
Loss rate: 1.72%
-- Flow 3:
Average throughput: 2.55 Mbit/s
95th percentile per-packet one-way delay: 81.317 ms
Loss rate: 4.28%
```

Run 6: Report of LEDBAT — Data Link



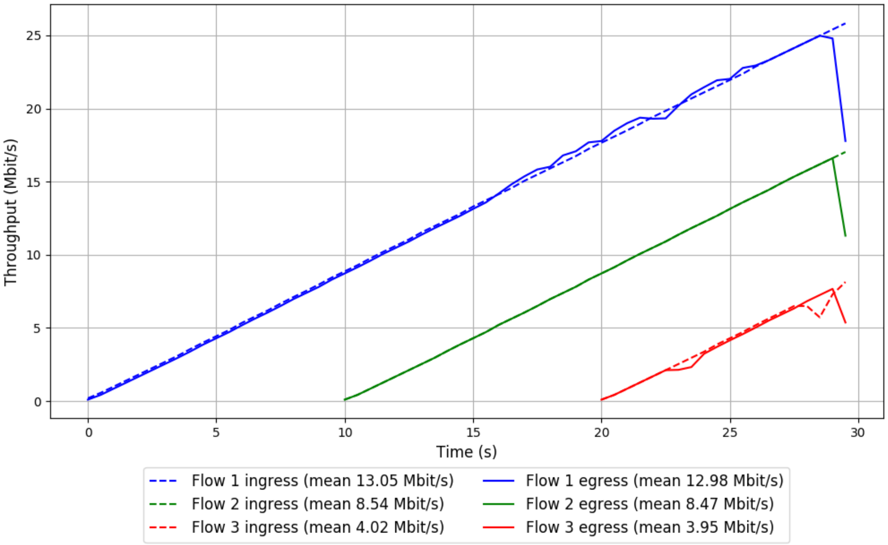


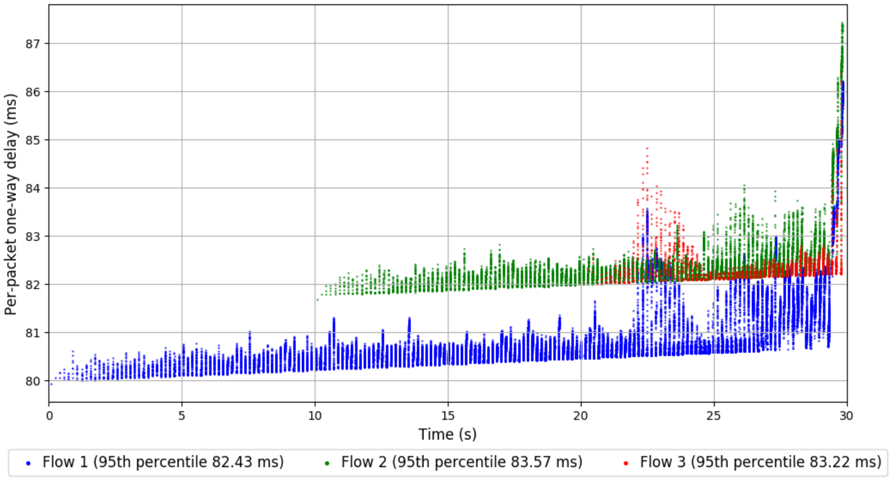
```
Run 7: Statistics of LEDBAT

Start at: 2018-02-28 02:26:28
End at: 2018-02-28 02:26:58
Local clock offset: -14.015 ms
Remote clock offset: -0.826 ms

# Below is generated by plot.py at 2018-02-28 08:02:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.88 Mbit/s
95th percentile per-packet one-way delay: 83.008 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 12.98 Mbit/s
95th percentile per-packet one-way delay: 82.434 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 8.47 Mbit/s
95th percentile per-packet one-way delay: 83.573 ms
Loss rate: 1.68%
-- Flow 3:
Average throughput: 3.95 Mbit/s
95th percentile per-packet one-way delay: 83.217 ms
Loss rate: 3.50%
```

Run 7: Report of LEDBAT — Data Link



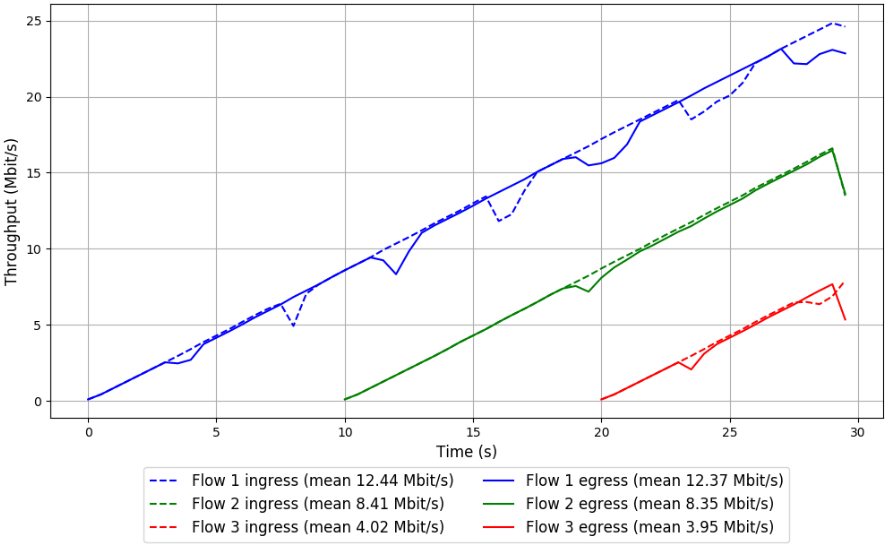


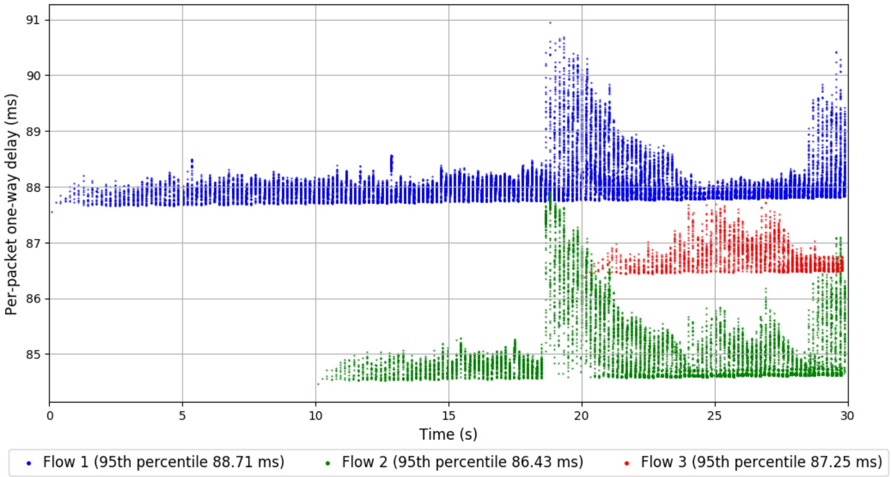
```
Run 8: Statistics of LEDBAT

Start at: 2018-02-28 02:50:10
End at: 2018-02-28 02:50:40
Local clock offset: -31.112 ms
Remote clock offset: -6.173 ms

# Below is generated by plot.py at 2018-02-28 08:02:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.20 Mbit/s
95th percentile per-packet one-way delay: 88.432 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 12.37 Mbit/s
95th percentile per-packet one-way delay: 88.707 ms
Loss rate: 1.12%
-- Flow 2:
Average throughput: 8.35 Mbit/s
95th percentile per-packet one-way delay: 86.432 ms
Loss rate: 1.62%
-- Flow 3:
Average throughput: 3.95 Mbit/s
95th percentile per-packet one-way delay: 87.245 ms
Loss rate: 3.50%
```

Run 8: Report of LEDBAT — Data Link



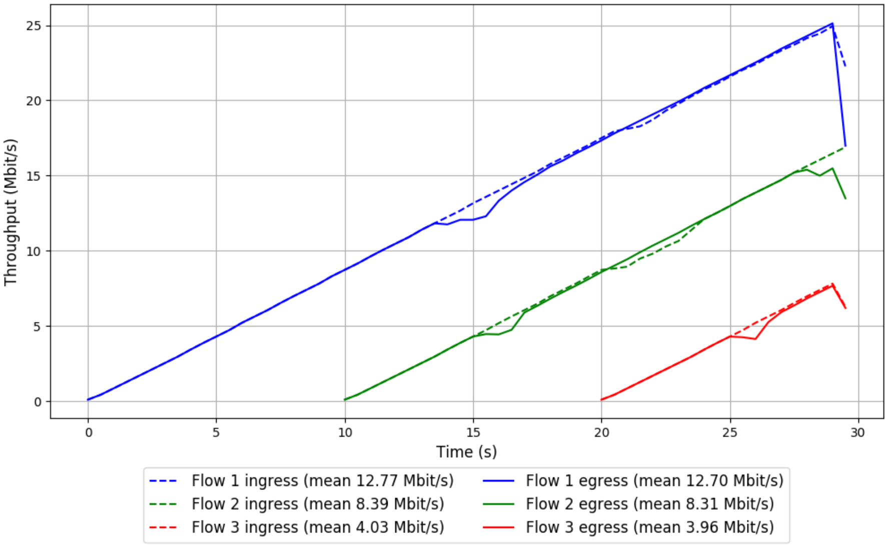


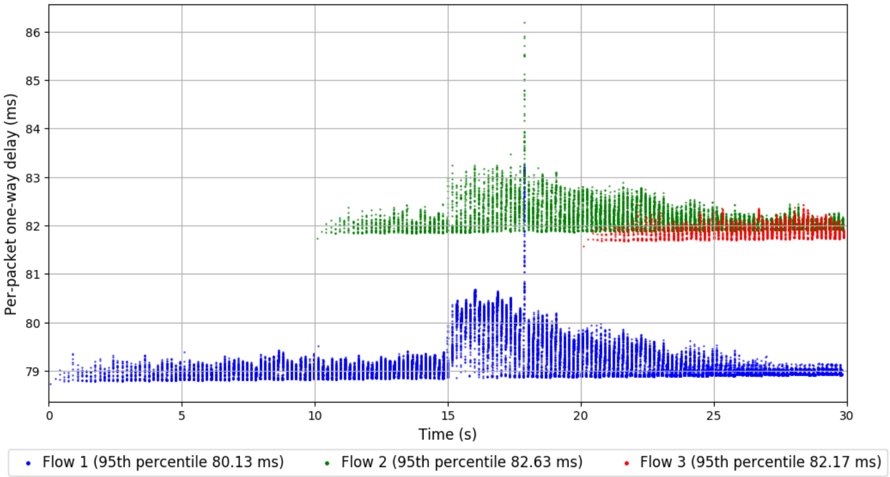
```
Run 9: Statistics of LEDBAT

Start at: 2018-02-28 03:13:43
End at: 2018-02-28 03:14:13
Local clock offset: -38.47 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-02-28 08:02:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.48 Mbit/s
95th percentile per-packet one-way delay: 82.287 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 12.70 Mbit/s
95th percentile per-packet one-way delay: 80.129 ms
Loss rate: 1.12%
-- Flow 2:
Average throughput: 8.31 Mbit/s
95th percentile per-packet one-way delay: 82.631 ms
Loss rate: 1.70%
-- Flow 3:
Average throughput: 3.96 Mbit/s
95th percentile per-packet one-way delay: 82.173 ms
Loss rate: 3.40%
```

Run 9: Report of LEDBAT — Data Link



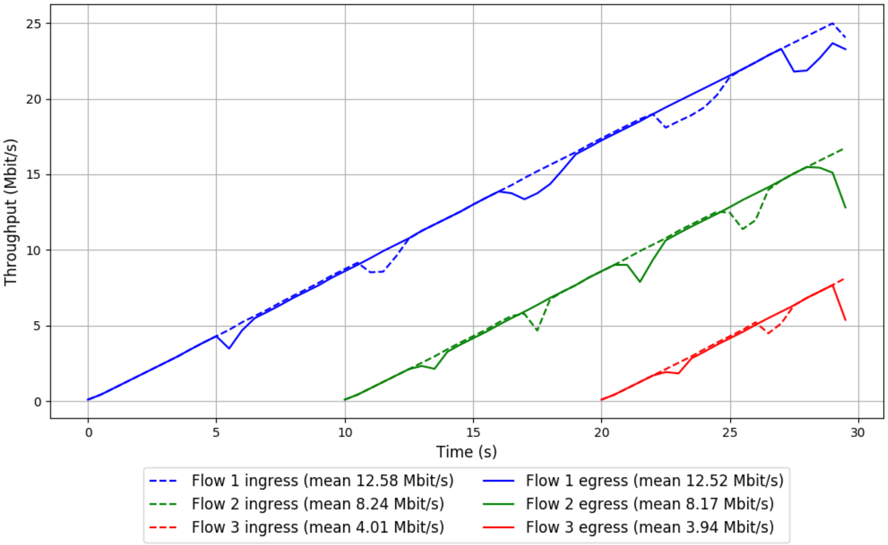


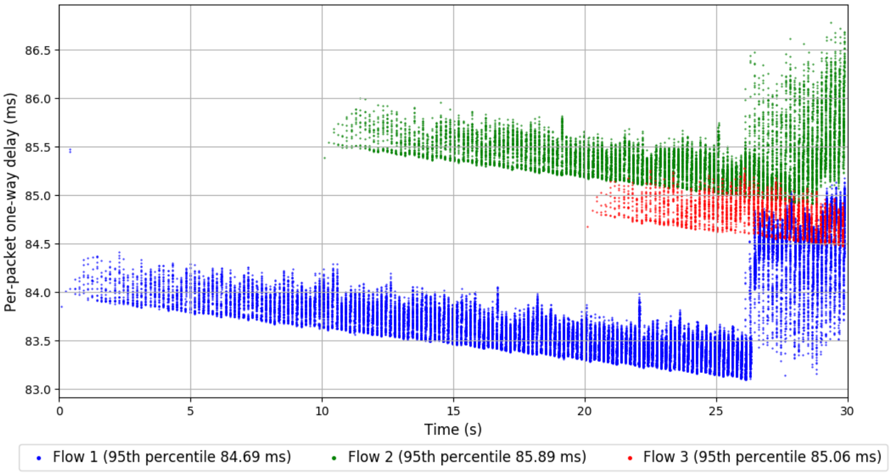
```
Run 10: Statistics of LEDBAT

Start at: 2018-02-28 03:37:37
End at: 2018-02-28 03:38:07
Local clock offset: -17.801 ms
Remote clock offset: -4.638 ms

# Below is generated by plot.py at 2018-02-28 08:02:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.22 Mbit/s
95th percentile per-packet one-way delay: 85.569 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 12.52 Mbit/s
95th percentile per-packet one-way delay: 84.694 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 8.17 Mbit/s
95th percentile per-packet one-way delay: 85.888 ms
Loss rate: 1.71%
-- Flow 3:
Average throughput: 3.94 Mbit/s
95th percentile per-packet one-way delay: 85.058 ms
Loss rate: 3.49%
```

Run 10: Report of LEDBAT — Data Link



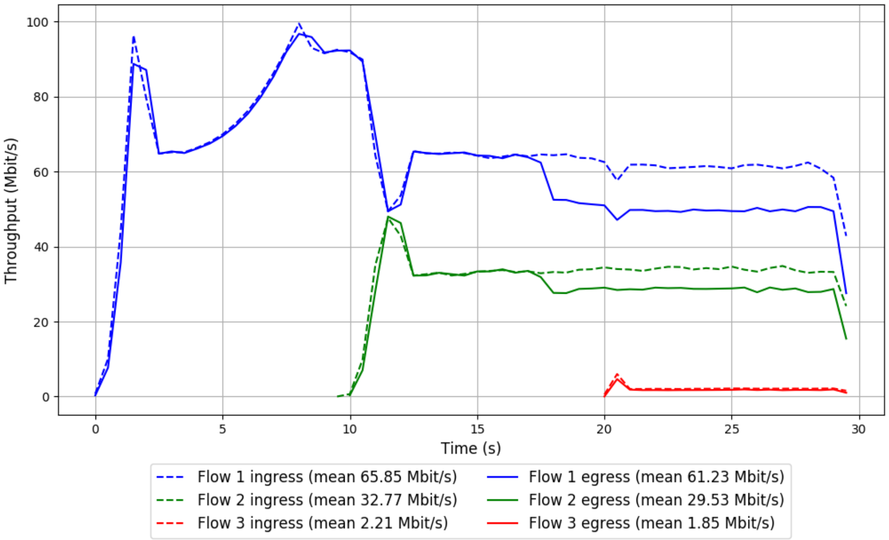


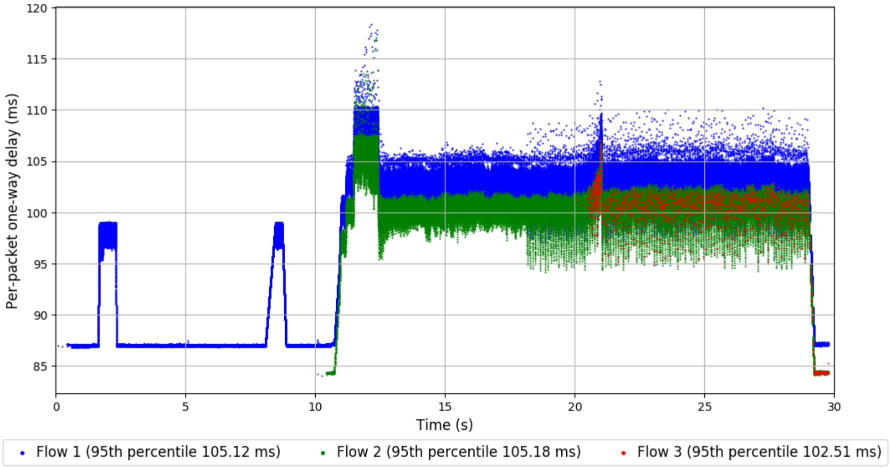
```
Run 1: Statistics of PCC

Start at: 2018-02-28 00:20:13
End at: 2018-02-28 00:20:43
Local clock offset: -2.744 ms
Remote clock offset: -5.976 ms

# Below is generated by plot.py at 2018-02-28 08:03:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.41 Mbit/s
95th percentile per-packet one-way delay: 105.116 ms
Loss rate: 8.40%
-- Flow 1:
Average throughput: 61.23 Mbit/s
95th percentile per-packet one-way delay: 105.116 ms
Loss rate: 7.55%
-- Flow 2:
Average throughput: 29.53 Mbit/s
95th percentile per-packet one-way delay: 105.180 ms
Loss rate: 10.65%
-- Flow 3:
Average throughput: 1.85 Mbit/s
95th percentile per-packet one-way delay: 102.508 ms
Loss rate: 18.00%
```

Run 1: Report of PCC — Data Link



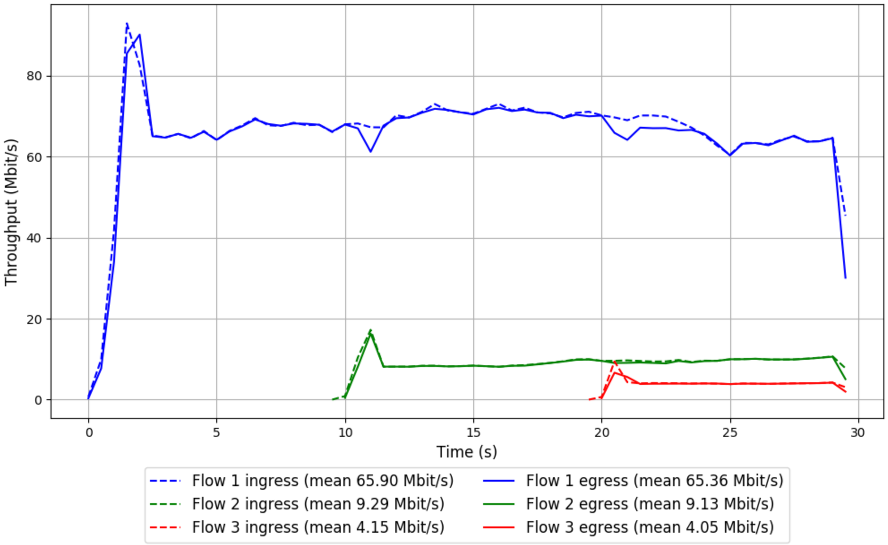


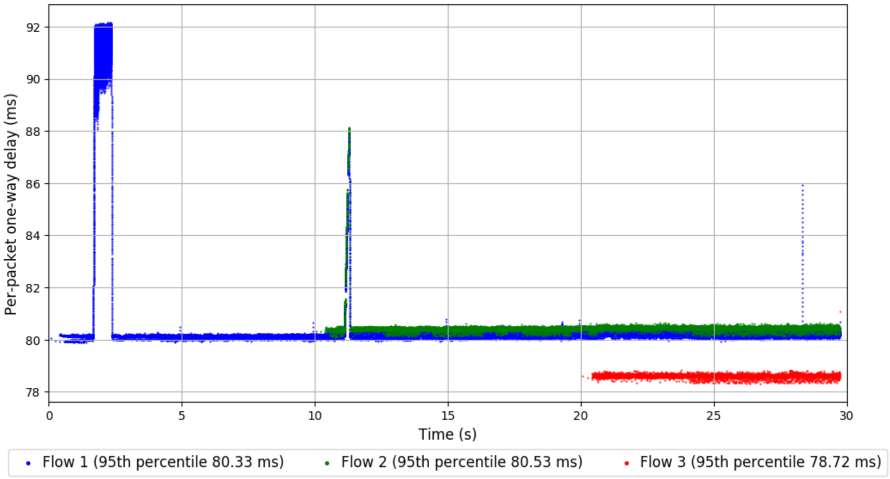
```
Run 2: Statistics of PCC

Start at: 2018-02-28 00:44:03
End at: 2018-02-28 00:44:33
Local clock offset: -3.151 ms
Remote clock offset: 0.265 ms

# Below is generated by plot.py at 2018-02-28 08:03:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.74 Mbit/s
95th percentile per-packet one-way delay: 80.491 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 65.36 Mbit/s
95th percentile per-packet one-way delay: 80.328 ms
Loss rate: 1.49%
-- Flow 2:
Average throughput: 9.13 Mbit/s
95th percentile per-packet one-way delay: 80.532 ms
Loss rate: 2.75%
-- Flow 3:
Average throughput: 4.05 Mbit/s
95th percentile per-packet one-way delay: 78.724 ms
Loss rate: 4.40%
```

Run 2: Report of PCC — Data Link



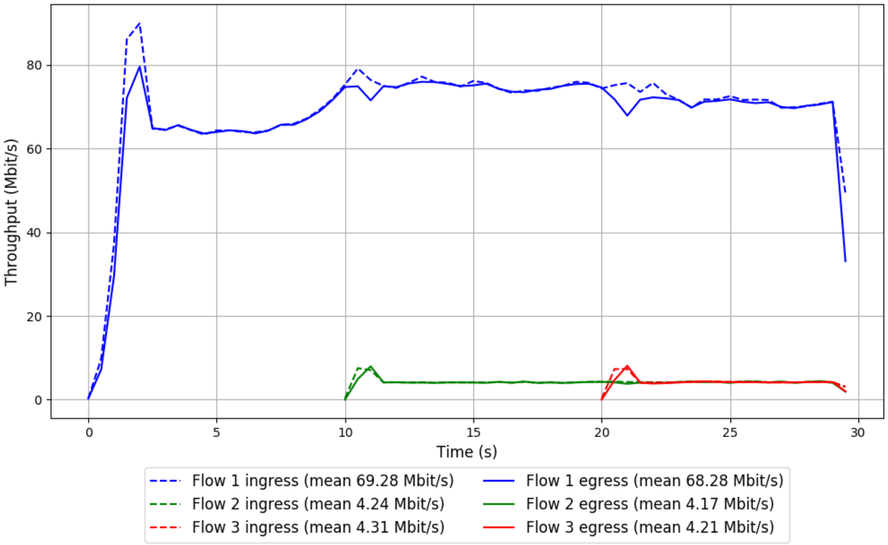


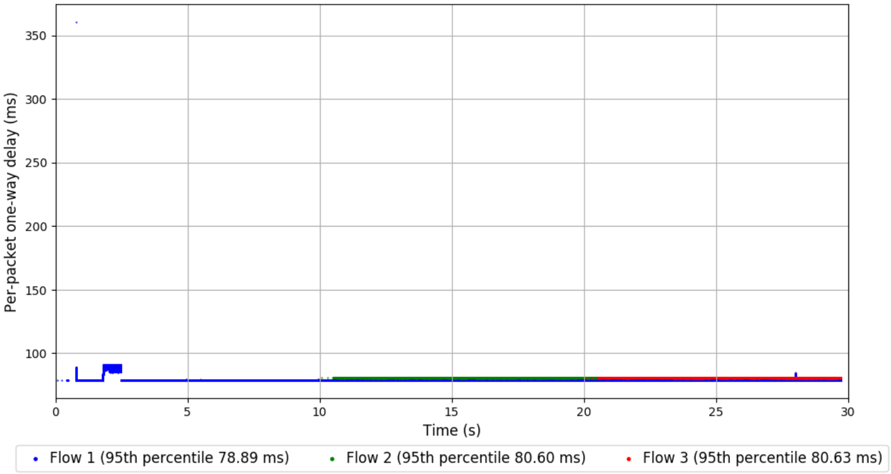
```
Run 3: Statistics of PCC

Start at: 2018-02-28 01:08:24
End at: 2018-02-28 01:08:54
Local clock offset: -4.31 ms
Remote clock offset: -0.814 ms

# Below is generated by plot.py at 2018-02-28 08:03:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.40 Mbit/s
95th percentile per-packet one-way delay: 80.532 ms
Loss rate: 2.15%
-- Flow 1:
Average throughput: 68.28 Mbit/s
95th percentile per-packet one-way delay: 78.892 ms
Loss rate: 2.08%
-- Flow 2:
Average throughput: 4.17 Mbit/s
95th percentile per-packet one-way delay: 80.602 ms
Loss rate: 2.72%
-- Flow 3:
Average throughput: 4.21 Mbit/s
95th percentile per-packet one-way delay: 80.630 ms
Loss rate: 4.50%
```

Run 3: Report of PCC — Data Link



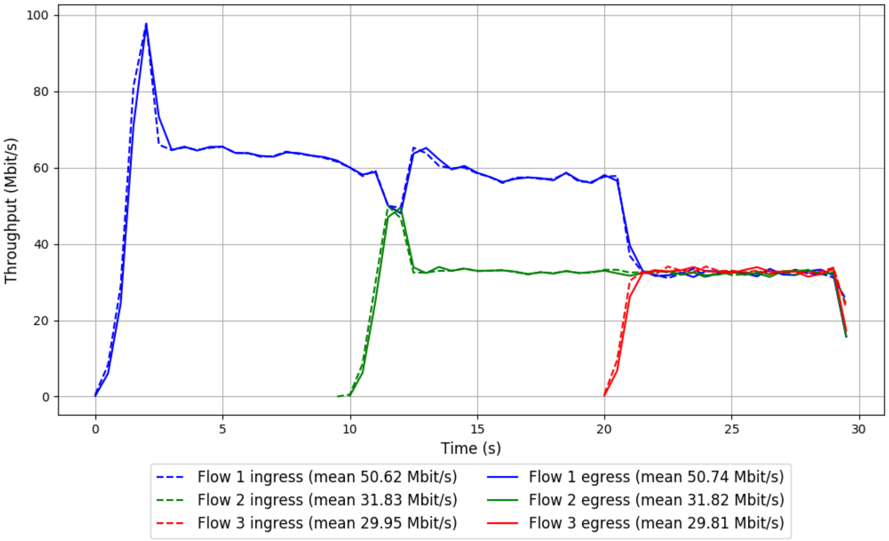


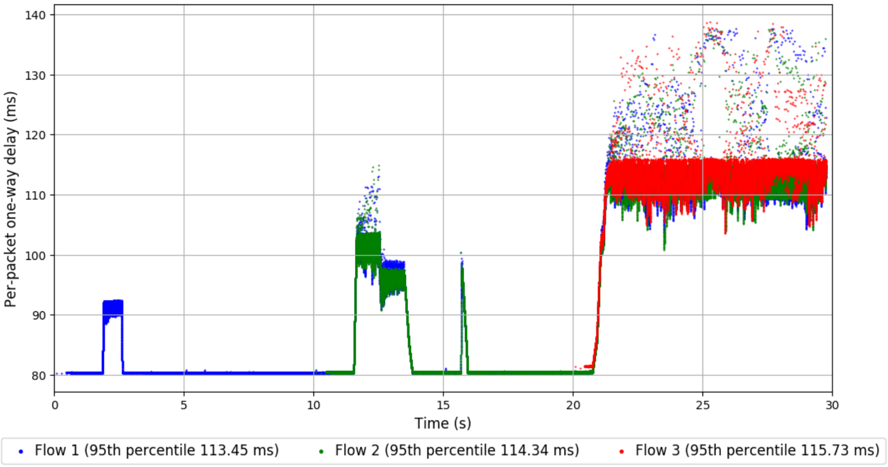
```
Run 4: Statistics of PCC

Start at: 2018-02-28 01:32:40
End at: 2018-02-28 01:33:10
Local clock offset: -4.479 ms
Remote clock offset: -0.212 ms

# Below is generated by plot.py at 2018-02-28 08:03:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.51 Mbit/s
95th percentile per-packet one-way delay: 114.575 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 50.74 Mbit/s
95th percentile per-packet one-way delay: 113.453 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 31.82 Mbit/s
95th percentile per-packet one-way delay: 114.336 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 29.81 Mbit/s
95th percentile per-packet one-way delay: 115.728 ms
Loss rate: 2.44%
```

Run 4: Report of PCC — Data Link



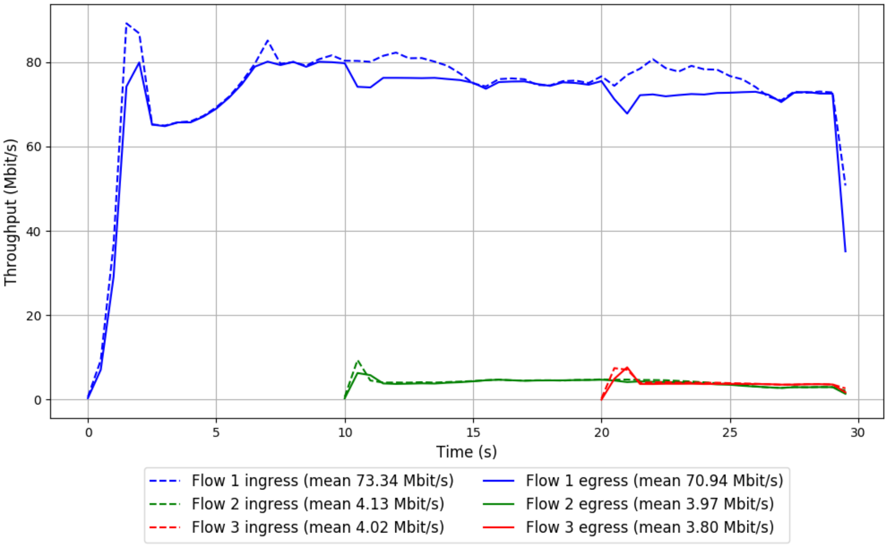


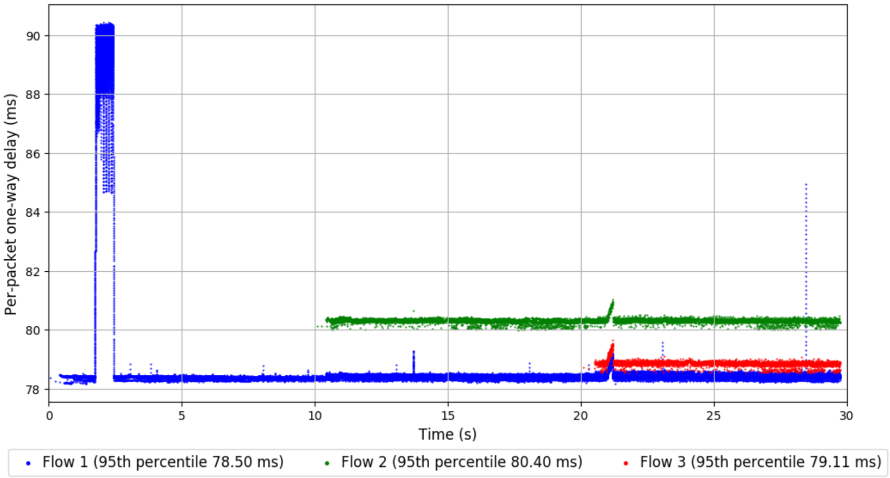
```
Run 5: Statistics of PCC

Start at: 2018-02-28 01:56:53
End at: 2018-02-28 01:57:23
Local clock offset: -3.953 ms
Remote clock offset: 0.021 ms

# Below is generated by plot.py at 2018-02-28 08:03:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.80 Mbit/s
95th percentile per-packet one-way delay: 80.278 ms
Loss rate: 4.00%
-- Flow 1:
Average throughput: 70.94 Mbit/s
95th percentile per-packet one-way delay: 78.496 ms
Loss rate: 3.90%
-- Flow 2:
Average throughput: 3.97 Mbit/s
95th percentile per-packet one-way delay: 80.398 ms
Loss rate: 5.03%
-- Flow 3:
Average throughput: 3.80 Mbit/s
95th percentile per-packet one-way delay: 79.110 ms
Loss rate: 7.32%
```

Run 5: Report of PCC — Data Link



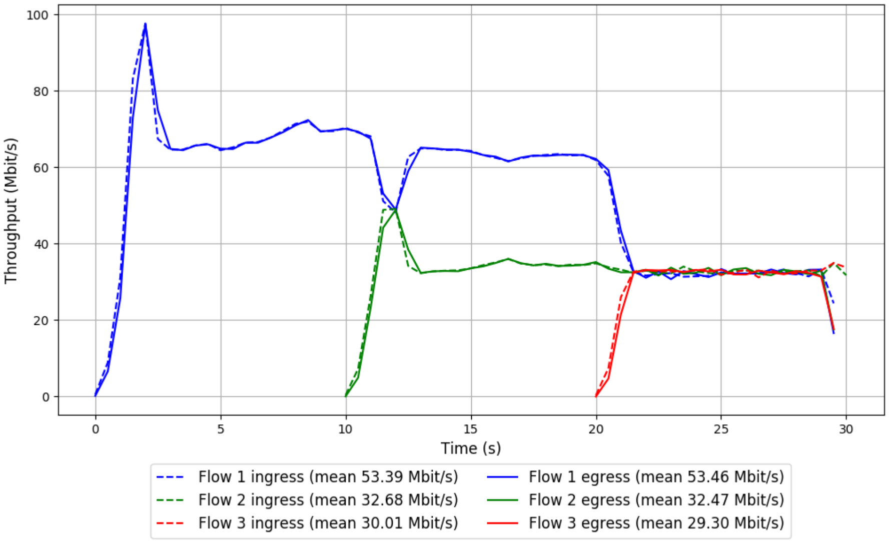


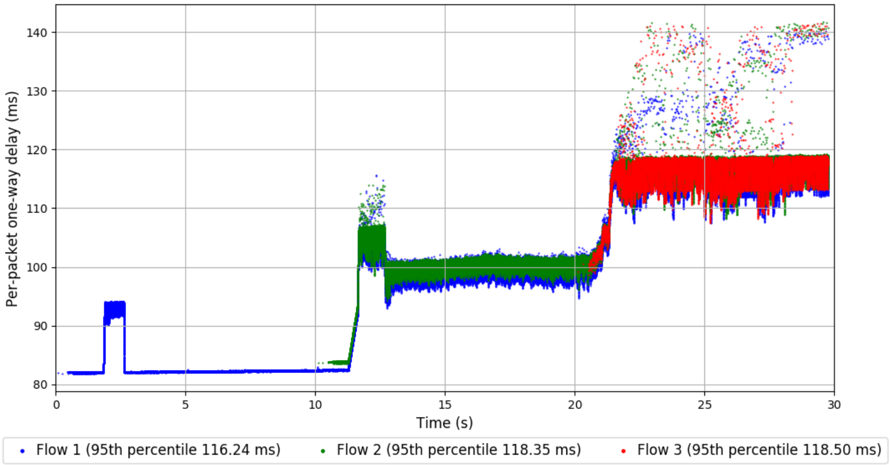
```
Run 6: Statistics of PCC

Start at: 2018-02-28 02:21:05
End at: 2018-02-28 02:21:35
Local clock offset: -3.461 ms
Remote clock offset: -0.853 ms

# Below is generated by plot.py at 2018-02-28 08:03:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.48 Mbit/s
95th percentile per-packet one-way delay: 117.726 ms
Loss rate: 2.54%
-- Flow 1:
Average throughput: 53.46 Mbit/s
95th percentile per-packet one-way delay: 116.243 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 32.47 Mbit/s
95th percentile per-packet one-way delay: 118.349 ms
Loss rate: 4.24%
-- Flow 3:
Average throughput: 29.30 Mbit/s
95th percentile per-packet one-way delay: 118.500 ms
Loss rate: 9.58%
```

Run 6: Report of PCC — Data Link



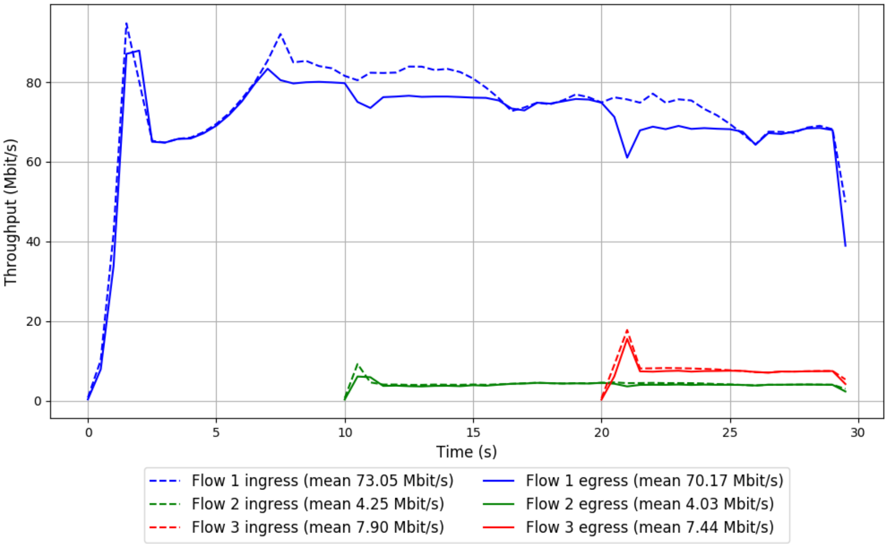


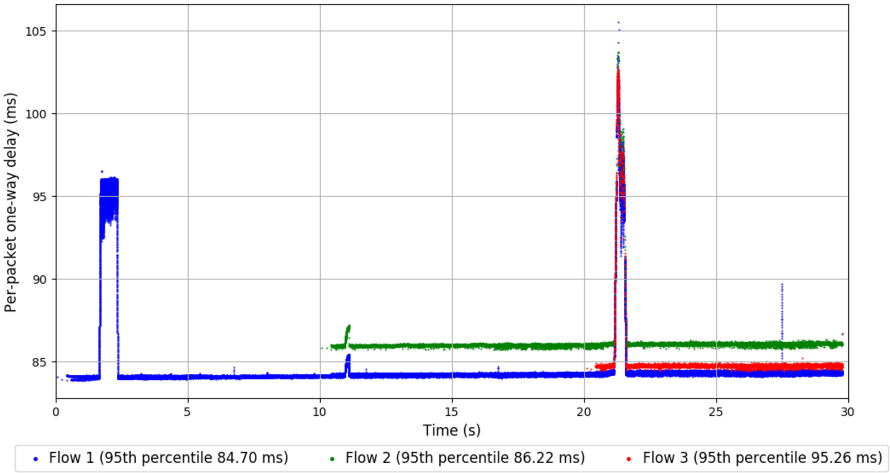
```
Run 7: Statistics of PCC

Start at: 2018-02-28 02:44:55
End at: 2018-02-28 02:45:25
Local clock offset: -29.077 ms
Remote clock offset: -6.031 ms

# Below is generated by plot.py at 2018-02-28 08:03:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.27 Mbit/s
95th percentile per-packet one-way delay: 86.123 ms
Loss rate: 4.61%
-- Flow 1:
Average throughput: 70.17 Mbit/s
95th percentile per-packet one-way delay: 84.704 ms
Loss rate: 4.47%
-- Flow 2:
Average throughput: 4.03 Mbit/s
95th percentile per-packet one-way delay: 86.223 ms
Loss rate: 5.84%
-- Flow 3:
Average throughput: 7.44 Mbit/s
95th percentile per-packet one-way delay: 95.260 ms
Loss rate: 7.44%
```

Run 7: Report of PCC — Data Link



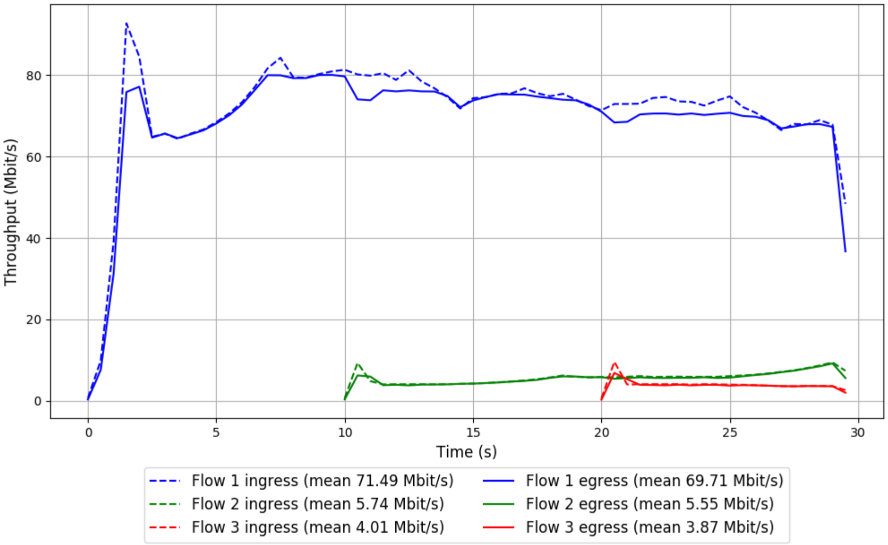


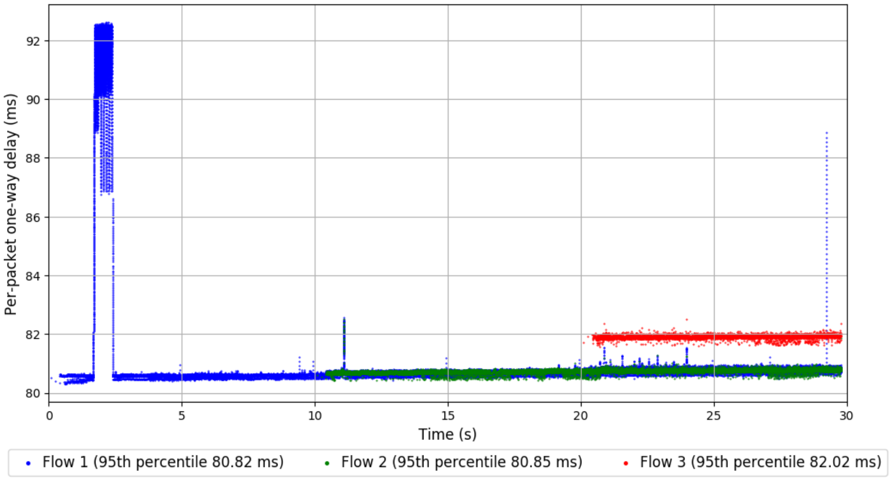
```
Run 8: Statistics of PCC

Start at: 2018-02-28 03:08:26
End at: 2018-02-28 03:08:56
Local clock offset: -36.913 ms
Remote clock offset: -0.311 ms

# Below is generated by plot.py at 2018-02-28 08:03:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.65 Mbit/s
95th percentile per-packet one-way delay: 80.886 ms
Loss rate: 3.14%
-- Flow 1:
Average throughput: 69.71 Mbit/s
95th percentile per-packet one-way delay: 80.822 ms
Loss rate: 3.04%
-- Flow 2:
Average throughput: 5.55 Mbit/s
95th percentile per-packet one-way delay: 80.847 ms
Loss rate: 4.12%
-- Flow 3:
Average throughput: 3.87 Mbit/s
95th percentile per-packet one-way delay: 82.022 ms
Loss rate: 5.23%
```

Run 8: Report of PCC — Data Link



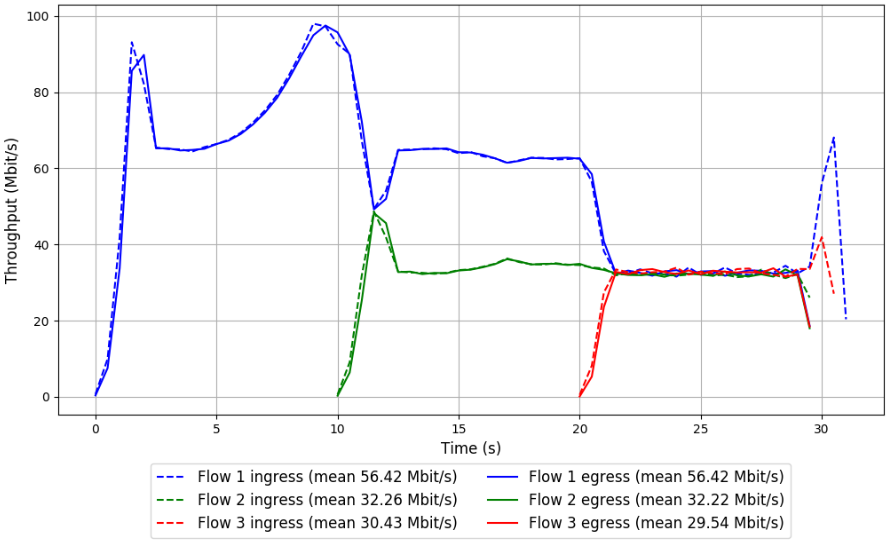


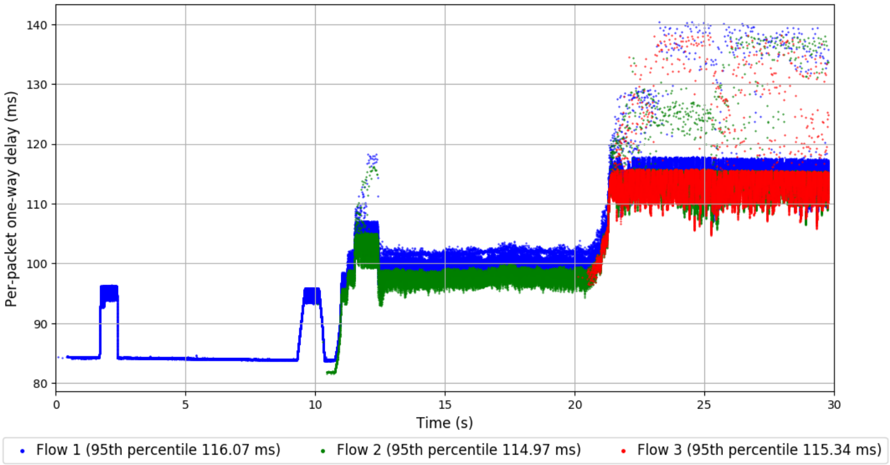
```
Run 9: Statistics of PCC

Start at: 2018-02-28 03:32:19
End at: 2018-02-28 03:32:49
Local clock offset: -32.219 ms
Remote clock offset: -5.662 ms

# Below is generated by plot.py at 2018-02-28 08:04:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.36 Mbit/s
95th percentile per-packet one-way delay: 115.541 ms
Loss rate: 5.02%
-- Flow 1:
Average throughput: 56.42 Mbit/s
95th percentile per-packet one-way delay: 116.066 ms
Loss rate: 4.77%
-- Flow 2:
Average throughput: 32.22 Mbit/s
95th percentile per-packet one-way delay: 114.968 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 29.54 Mbit/s
95th percentile per-packet one-way delay: 115.338 ms
Loss rate: 13.90%
```

Run 9: Report of PCC — Data Link



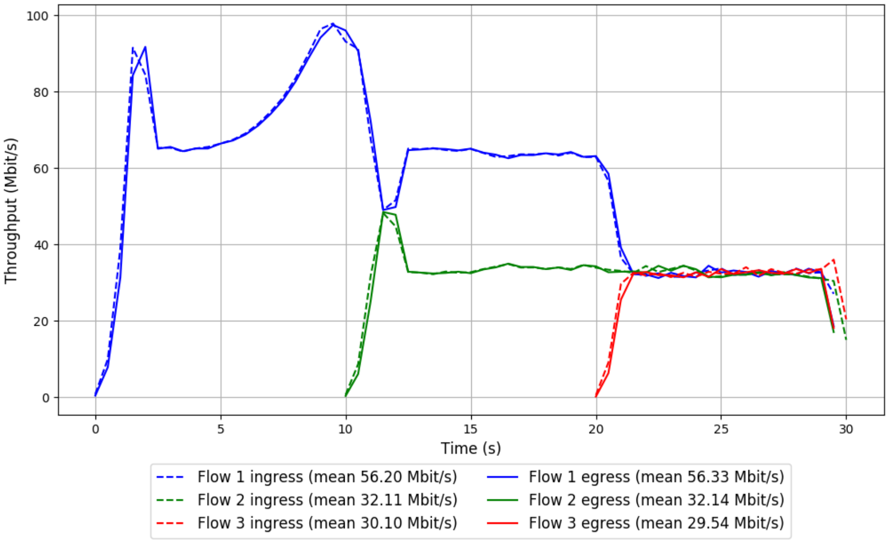


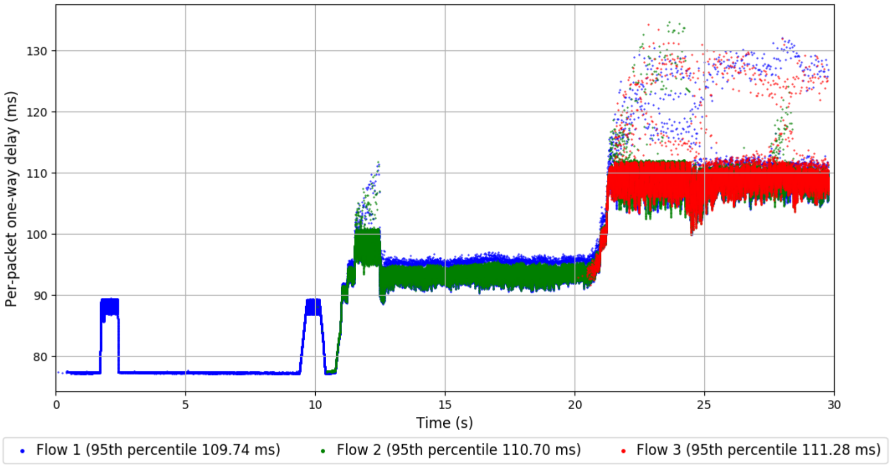
```
Run 10: Statistics of PCC

Start at: 2018-02-28 03:55:49
End at: 2018-02-28 03:56:19
Local clock offset: 1.012 ms
Remote clock offset: 0.557 ms

# Below is generated by plot.py at 2018-02-28 08:04:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.24 Mbit/s
95th percentile per-packet one-way delay: 110.414 ms
Loss rate: 1.82%
-- Flow 1:
Average throughput: 56.33 Mbit/s
95th percentile per-packet one-way delay: 109.736 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 32.14 Mbit/s
95th percentile per-packet one-way delay: 110.704 ms
Loss rate: 2.70%
-- Flow 3:
Average throughput: 29.54 Mbit/s
95th percentile per-packet one-way delay: 111.277 ms
Loss rate: 7.39%
```

Run 10: Report of PCC — Data Link



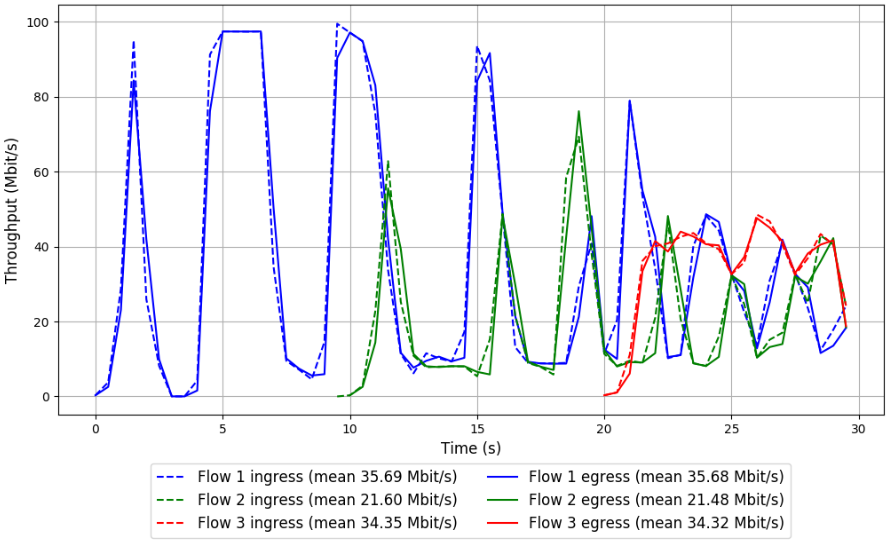


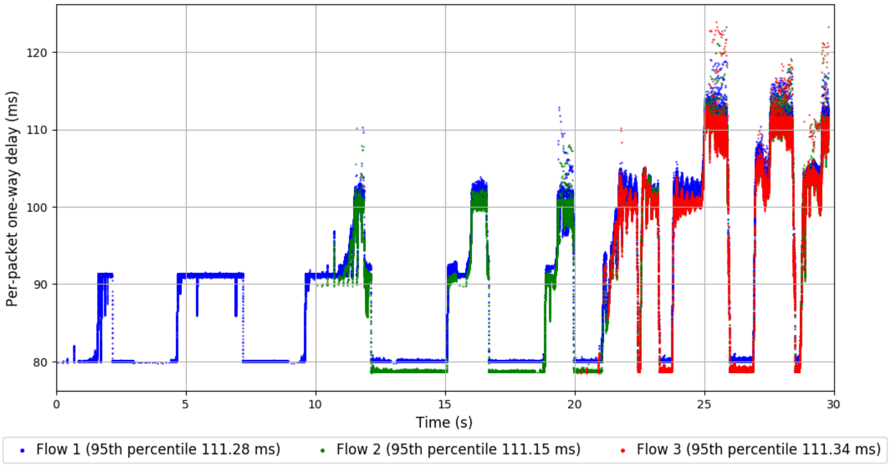
```
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-28 00:08:17
End at: 2018-02-28 00:08:47
Local clock offset: -3.26 ms
Remote clock offset: -0.718 ms

# Below is generated by plot.py at 2018-02-28 08:04:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.11 Mbit/s
95th percentile per-packet one-way delay: 111.249 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 35.68 Mbit/s
95th percentile per-packet one-way delay: 111.281 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 21.48 Mbit/s
95th percentile per-packet one-way delay: 111.151 ms
Loss rate: 1.52%
-- Flow 3:
Average throughput: 34.32 Mbit/s
95th percentile per-packet one-way delay: 111.337 ms
Loss rate: 1.90%
```

Run 1: Report of QUIC Cubic — Data Link



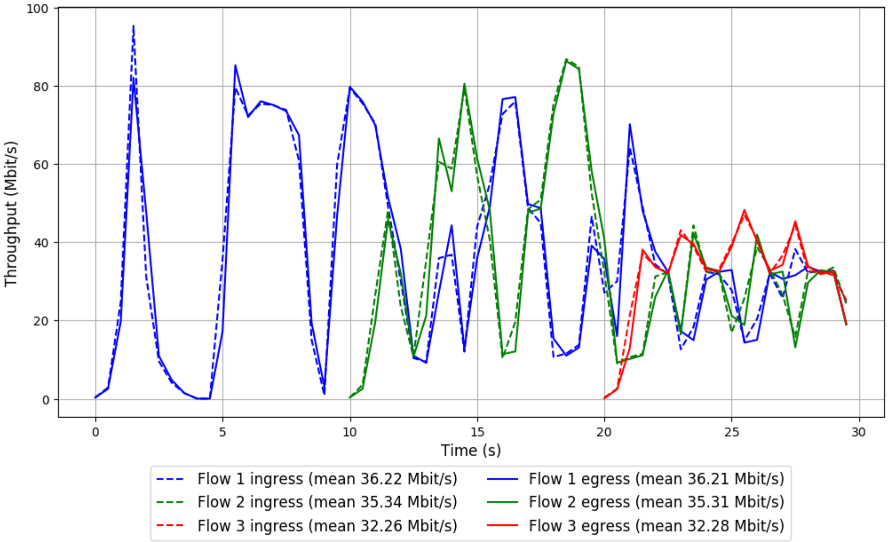


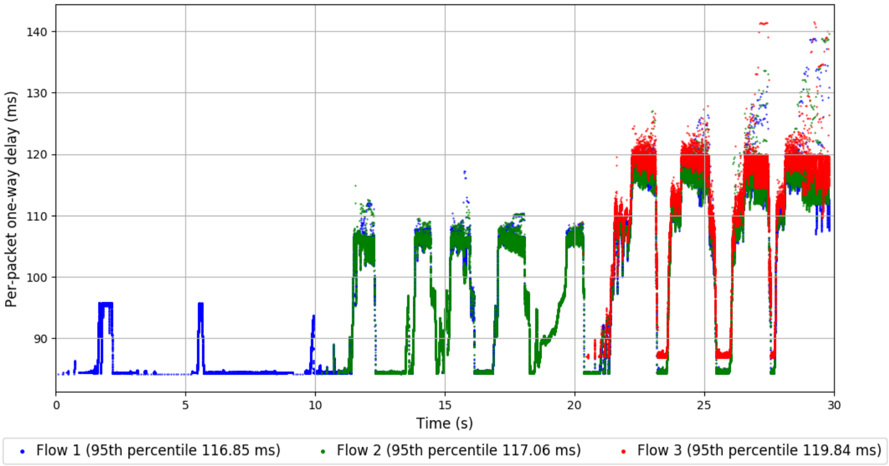
```
Run 2: Statistics of QUIC Cubic

Start at: 2018-02-28 00:31:46
End at: 2018-02-28 00:32:16
Local clock offset: -2.375 ms
Remote clock offset: -5.592 ms

# Below is generated by plot.py at 2018-02-28 08:04:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.13 Mbit/s
95th percentile per-packet one-way delay: 118.638 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 36.21 Mbit/s
95th percentile per-packet one-way delay: 116.850 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 35.31 Mbit/s
95th percentile per-packet one-way delay: 117.056 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 32.28 Mbit/s
95th percentile per-packet one-way delay: 119.842 ms
Loss rate: 2.07%
```

Run 2: Report of QUIC Cubic — Data Link



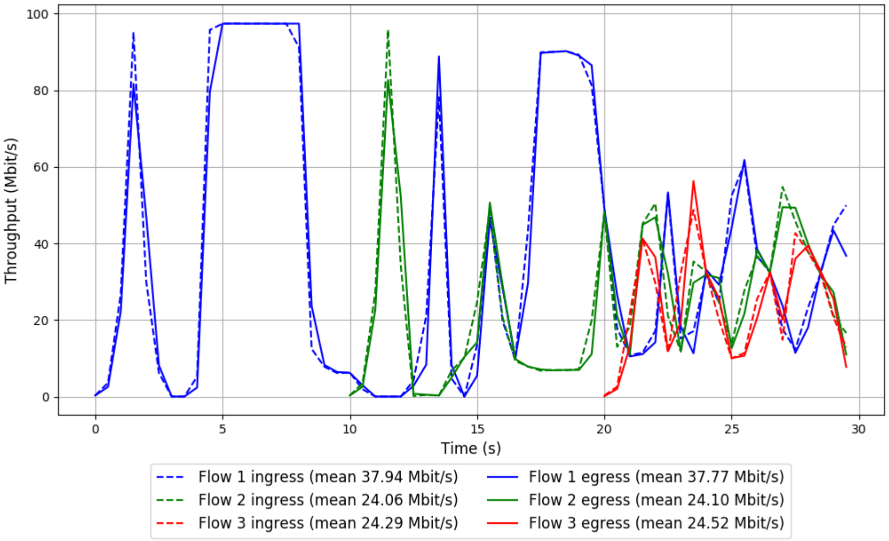


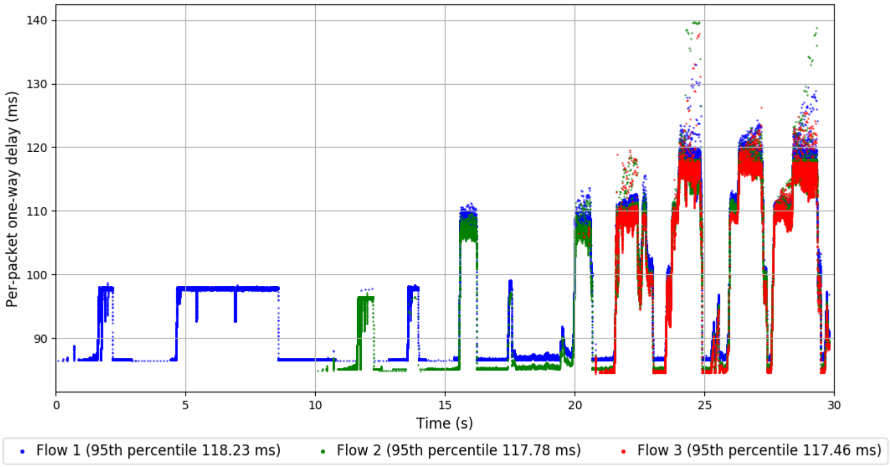
```
Run 3: Statistics of QUIC Cubic

Start at: 2018-02-28 00:56:07
End at: 2018-02-28 00:56:37
Local clock offset: -4.031 ms
Remote clock offset: -5.294 ms

# Below is generated by plot.py at 2018-02-28 08:04:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.72 Mbit/s
95th percentile per-packet one-way delay: 117.834 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 37.77 Mbit/s
95th percentile per-packet one-way delay: 118.228 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 24.10 Mbit/s
95th percentile per-packet one-way delay: 117.781 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 24.52 Mbit/s
95th percentile per-packet one-way delay: 117.462 ms
Loss rate: 1.46%
```

Run 3: Report of QUIC Cubic — Data Link



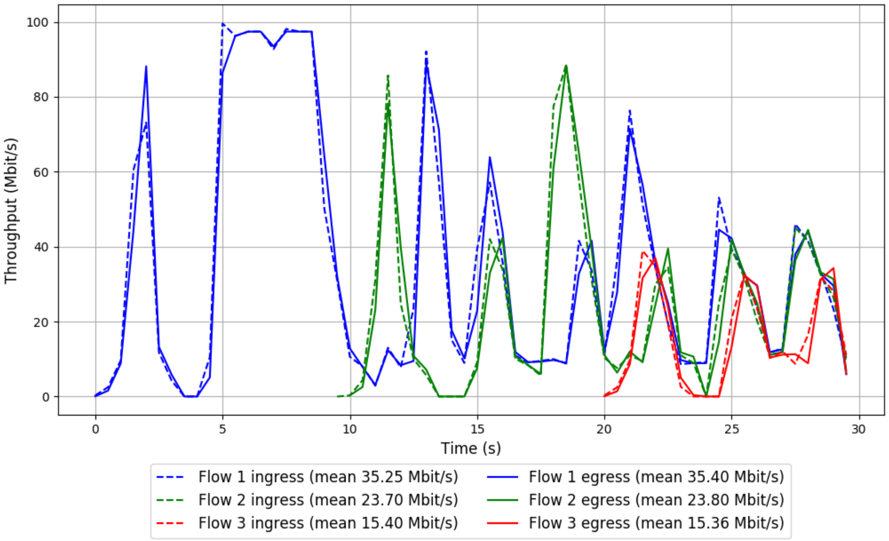


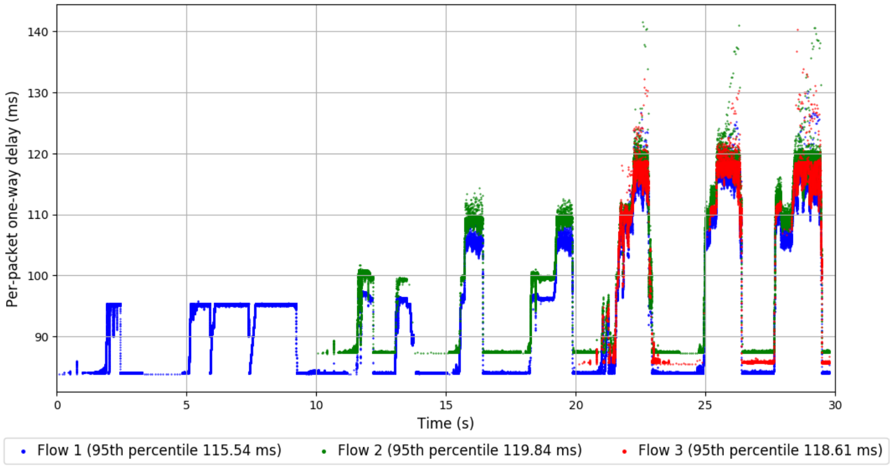
```
Run 4: Statistics of QUIC Cubic

Start at: 2018-02-28 01:20:22
End at: 2018-02-28 01:20:52
Local clock offset: -4.429 ms
Remote clock offset: -6.603 ms

# Below is generated by plot.py at 2018-02-28 08:04:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.20 Mbit/s
95th percentile per-packet one-way delay: 118.273 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 35.40 Mbit/s
95th percentile per-packet one-way delay: 115.536 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 23.80 Mbit/s
95th percentile per-packet one-way delay: 119.842 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 15.36 Mbit/s
95th percentile per-packet one-way delay: 118.615 ms
Loss rate: 2.31%
```

Run 4: Report of QUIC Cubic — Data Link



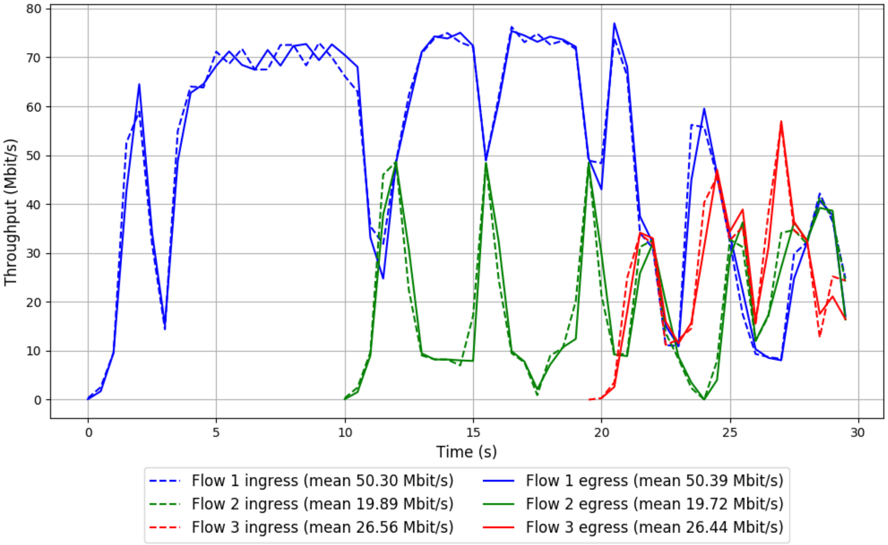


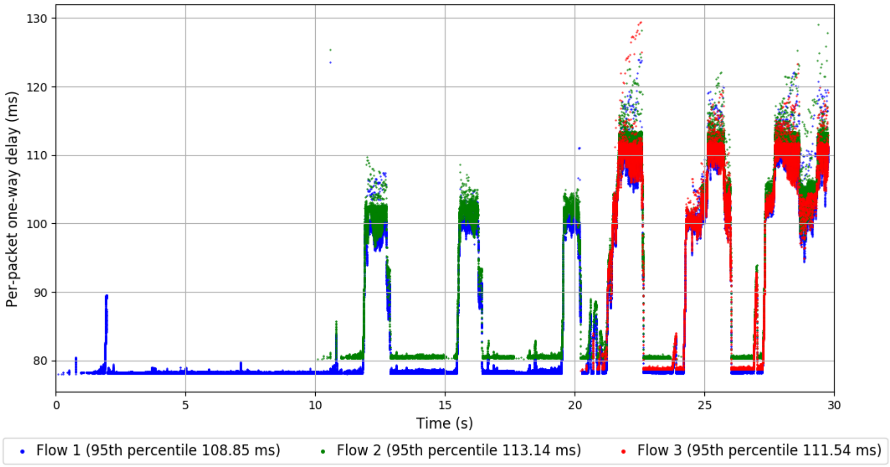
```
Run 5: Statistics of QUIC Cubic

Start at: 2018-02-28 01:44:38
End at: 2018-02-28 01:45:08
Local clock offset: -4.504 ms
Remote clock offset: 0.104 ms

# Below is generated by plot.py at 2018-02-28 08:04:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.05 Mbit/s
95th percentile per-packet one-way delay: 111.264 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 50.39 Mbit/s
95th percentile per-packet one-way delay: 108.854 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 19.72 Mbit/s
95th percentile per-packet one-way delay: 113.143 ms
Loss rate: 1.92%
-- Flow 3:
Average throughput: 26.44 Mbit/s
95th percentile per-packet one-way delay: 111.539 ms
Loss rate: 2.80%
```

Run 5: Report of QUIC Cubic — Data Link



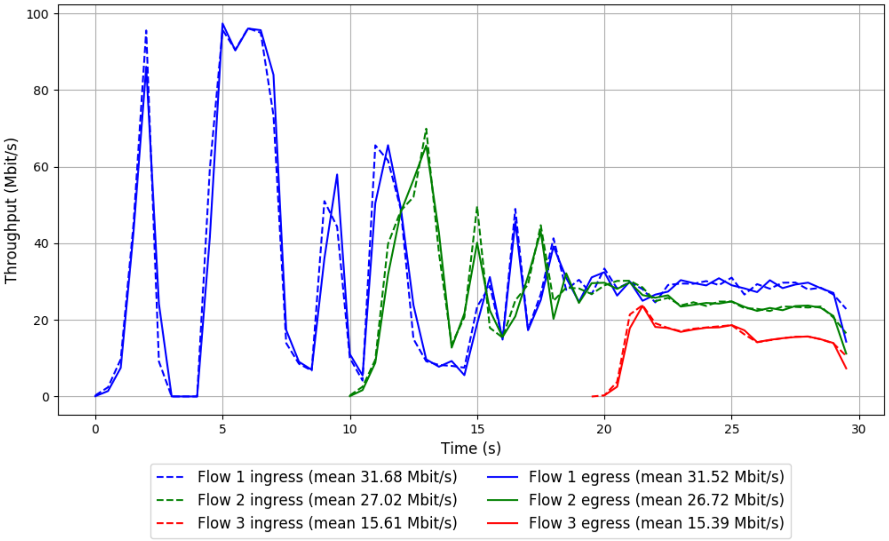


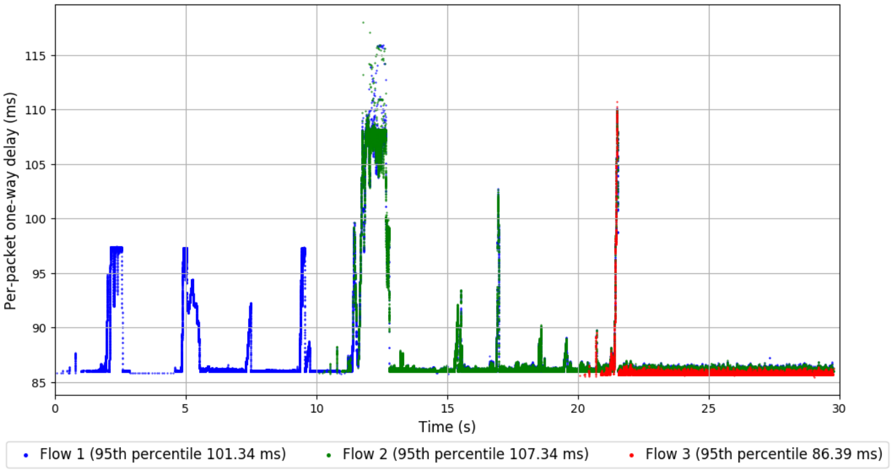
```
Run 6: Statistics of QUIC Cubic

Start at: 2018-02-28 02:08:51
End at: 2018-02-28 02:09:21
Local clock offset: -3.651 ms
Remote clock offset: -5.599 ms

# Below is generated by plot.py at 2018-02-28 08:04:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.26 Mbit/s
95th percentile per-packet one-way delay: 105.077 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 31.52 Mbit/s
95th percentile per-packet one-way delay: 101.338 ms
Loss rate: 1.19%
-- Flow 2:
Average throughput: 26.72 Mbit/s
95th percentile per-packet one-way delay: 107.340 ms
Loss rate: 2.13%
-- Flow 3:
Average throughput: 15.39 Mbit/s
95th percentile per-packet one-way delay: 86.385 ms
Loss rate: 2.84%
```

Run 6: Report of QUIC Cubic — Data Link



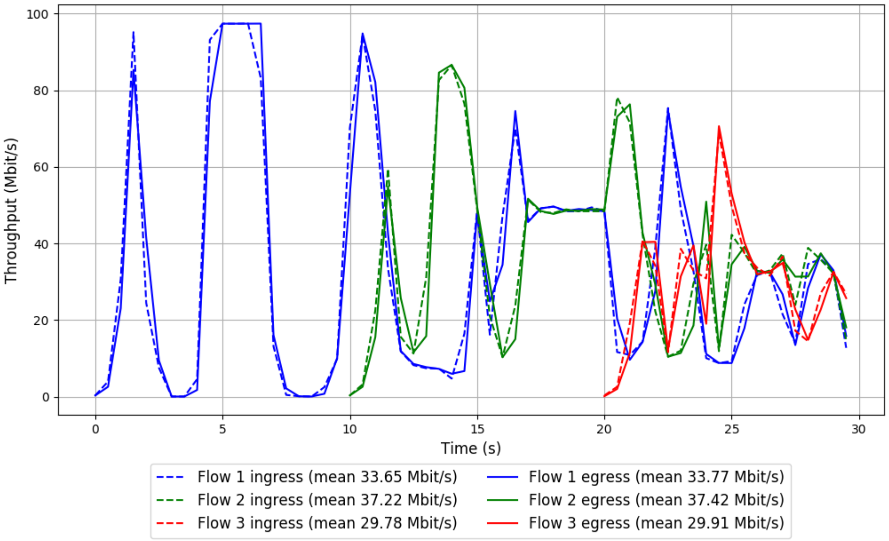


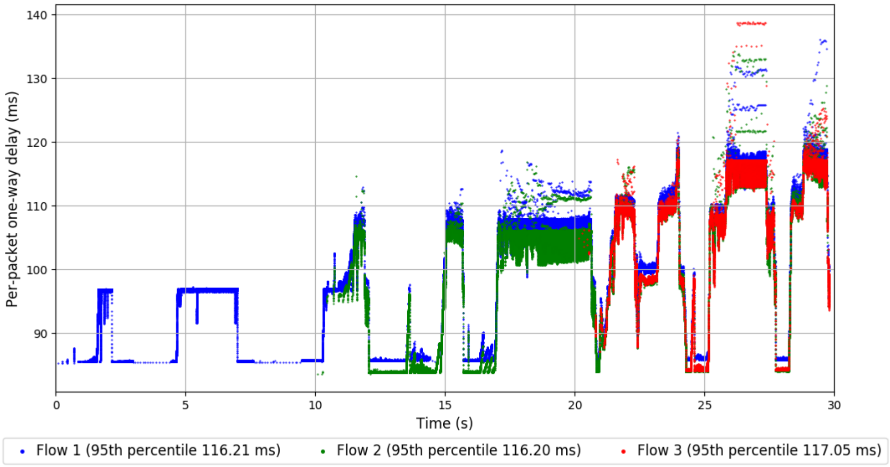
```
Run 7: Statistics of QUIC Cubic

Start at: 2018-02-28 02:32:54
End at: 2018-02-28 02:33:24
Local clock offset: -21.793 ms
Remote clock offset: -4.896 ms

# Below is generated by plot.py at 2018-02-28 08:05:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.31 Mbit/s
95th percentile per-packet one-way delay: 116.764 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 33.77 Mbit/s
95th percentile per-packet one-way delay: 116.209 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 37.42 Mbit/s
95th percentile per-packet one-way delay: 116.201 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 29.91 Mbit/s
95th percentile per-packet one-way delay: 117.051 ms
Loss rate: 1.44%
```

Run 7: Report of QUIC Cubic — Data Link



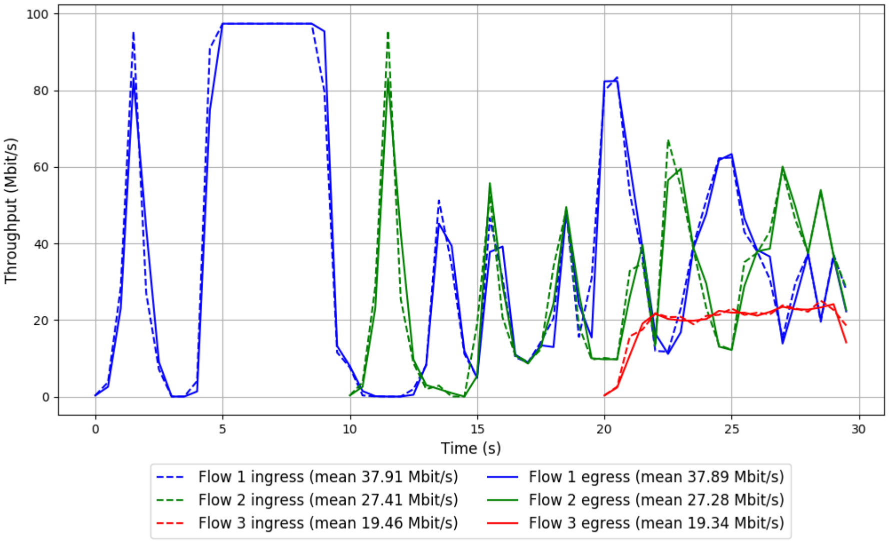


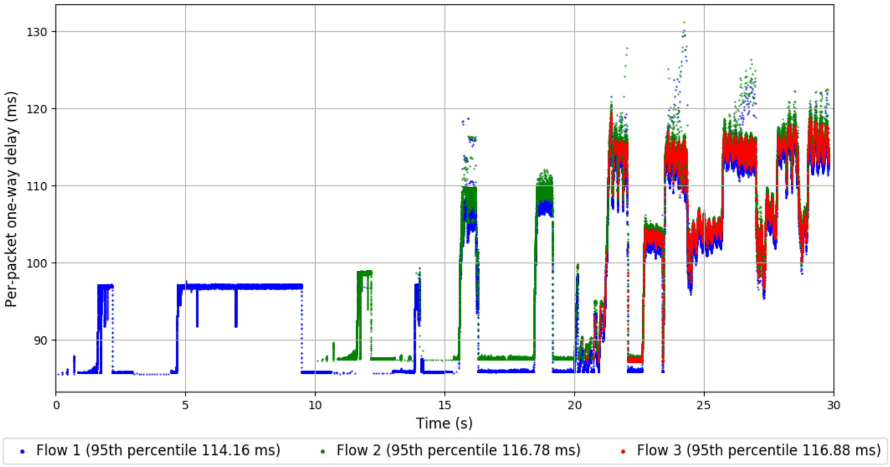
```
Run 8: Statistics of QUIC Cubic

Start at: 2018-02-28 02:56:28
End at: 2018-02-28 02:56:58
Local clock offset: -33.271 ms
Remote clock offset: -6.036 ms

# Below is generated by plot.py at 2018-02-28 08:05:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.28 Mbit/s
95th percentile per-packet one-way delay: 115.833 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 37.89 Mbit/s
95th percentile per-packet one-way delay: 114.157 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 27.28 Mbit/s
95th percentile per-packet one-way delay: 116.775 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 19.34 Mbit/s
95th percentile per-packet one-way delay: 116.881 ms
Loss rate: 2.44%
```

Run 8: Report of QUIC Cubic — Data Link



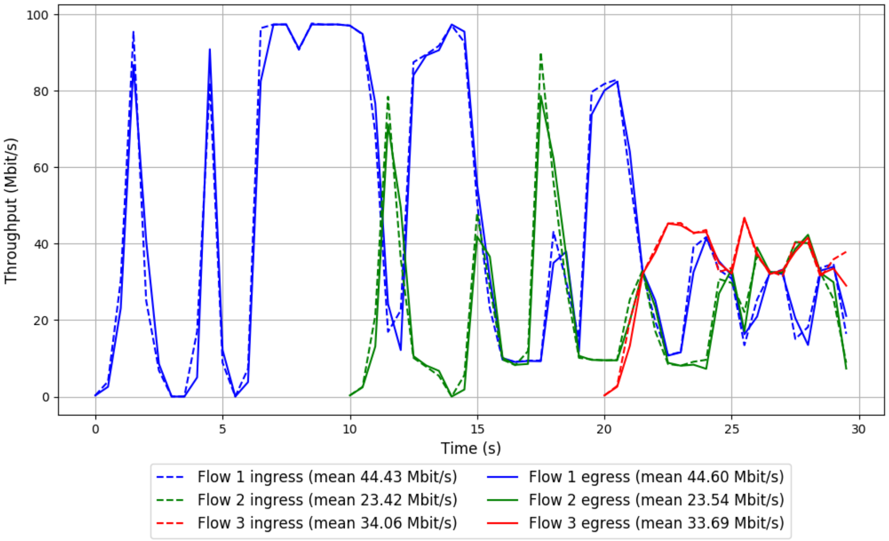


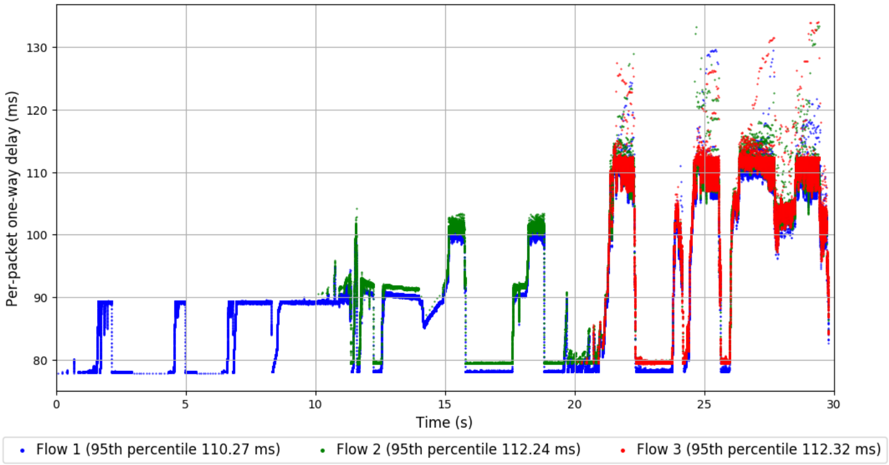
```
Run 9: Statistics of QUIC Cubic

Start at: 2018-02-28 03:20:01
End at: 2018-02-28 03:20:31
Local clock offset: -40.318 ms
Remote clock offset: 0.75 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.18 Mbit/s
95th percentile per-packet one-way delay: 111.848 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 44.60 Mbit/s
95th percentile per-packet one-way delay: 110.268 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 23.54 Mbit/s
95th percentile per-packet one-way delay: 112.242 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 33.69 Mbit/s
95th percentile per-packet one-way delay: 112.320 ms
Loss rate: 2.69%
```

Run 9: Report of QUIC Cubic — Data Link



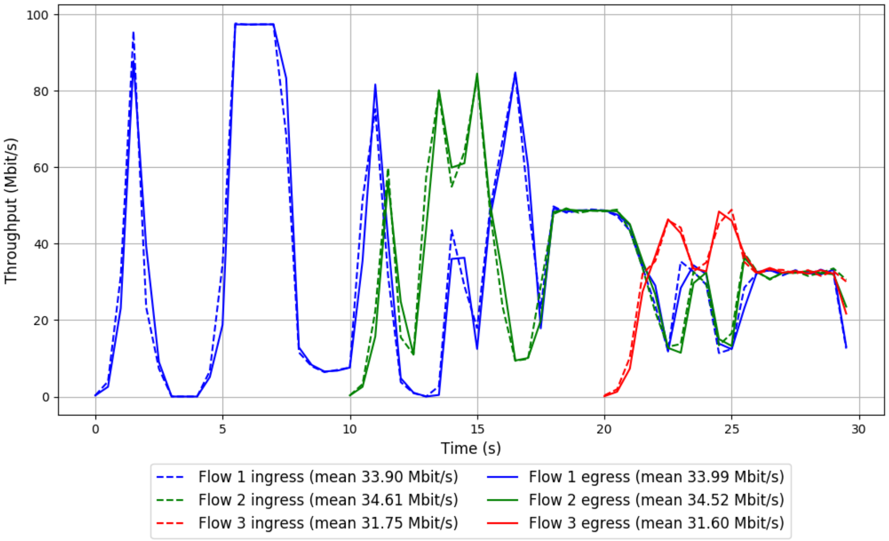


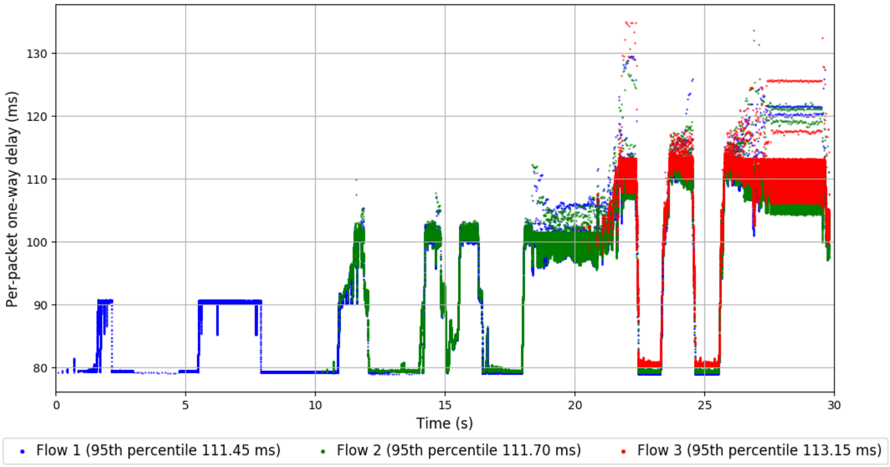
```
Run 10: Statistics of QUIC Cubic

Start at: 2018-02-28 03:43:53
End at: 2018-02-28 03:44:23
Local clock offset: -8.561 ms
Remote clock offset: -0.123 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.15 Mbit/s
95th percentile per-packet one-way delay: 112.085 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 33.99 Mbit/s
95th percentile per-packet one-way delay: 111.448 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 34.52 Mbit/s
95th percentile per-packet one-way delay: 111.697 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 31.60 Mbit/s
95th percentile per-packet one-way delay: 113.151 ms
Loss rate: 2.46%
```

Run 10: Report of QUIC Cubic — Data Link



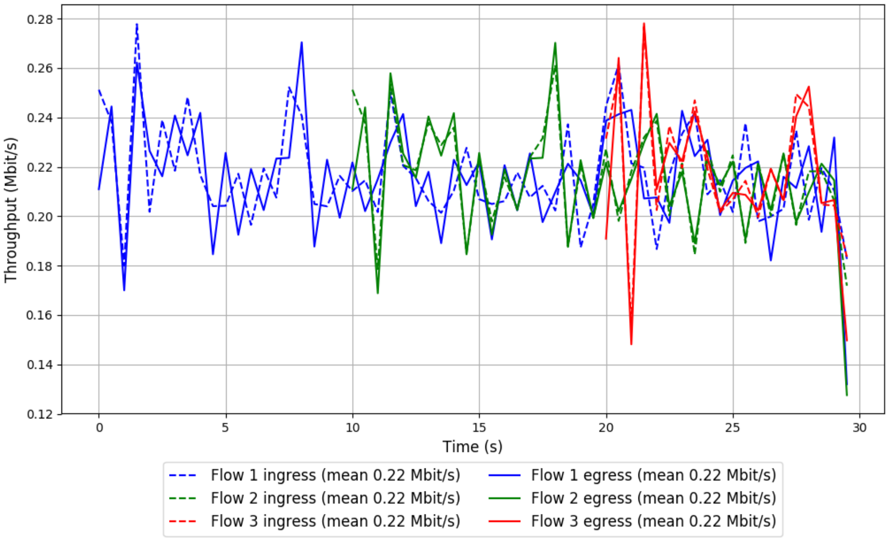


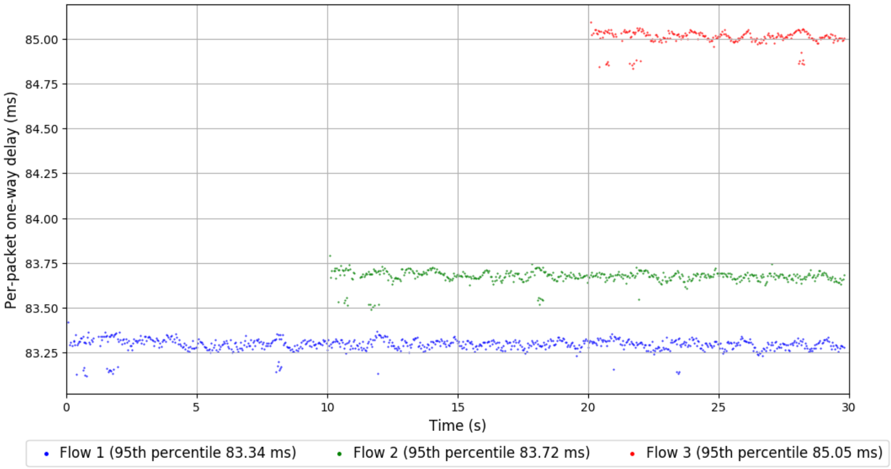
```
Run 1: Statistics of SCReAM

Start at: 2018-02-28 00:05:49
End at: 2018-02-28 00:06:19
Local clock offset: -3.138 ms
Remote clock offset: -5.496 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 85.029 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.340 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.717 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.050 ms
Loss rate: 1.50%
```

Run 1: Report of SCReAM — Data Link



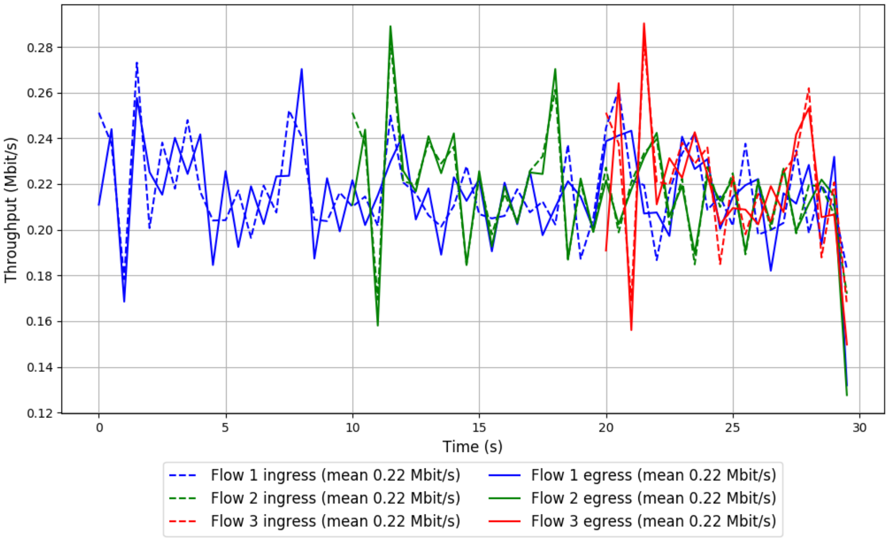


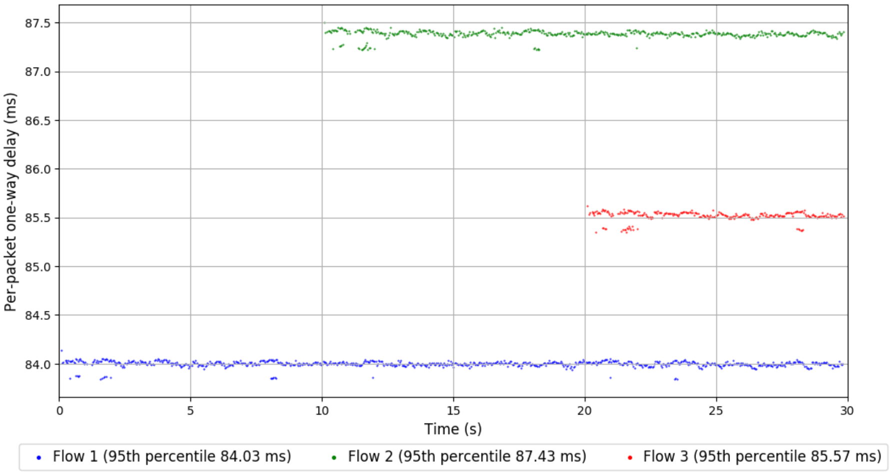
```
Run 2: Statistics of SCReAM

Start at: 2018-02-28 00:29:18
End at: 2018-02-28 00:29:48
Local clock offset: -2.402 ms
Remote clock offset: -5.645 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 87.413 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.035 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.427 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.566 ms
Loss rate: 1.49%
```

Run 2: Report of SCReAM — Data Link



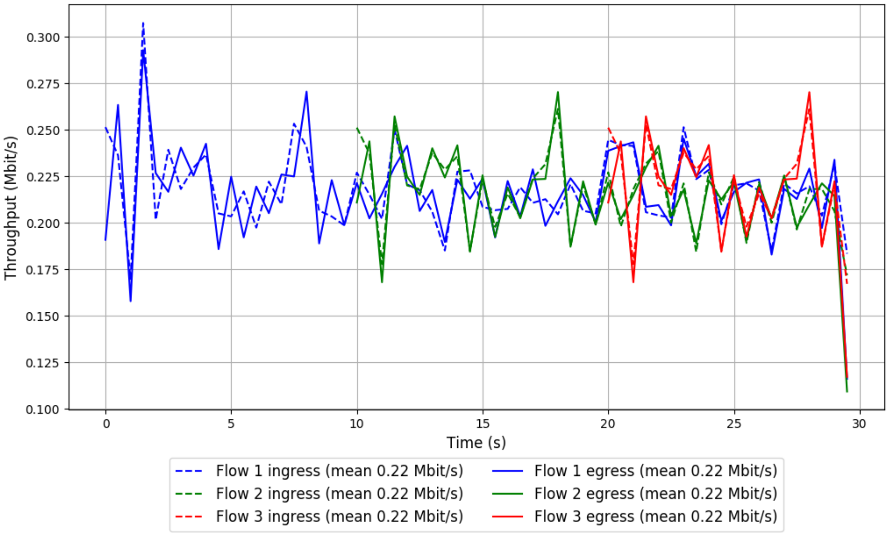


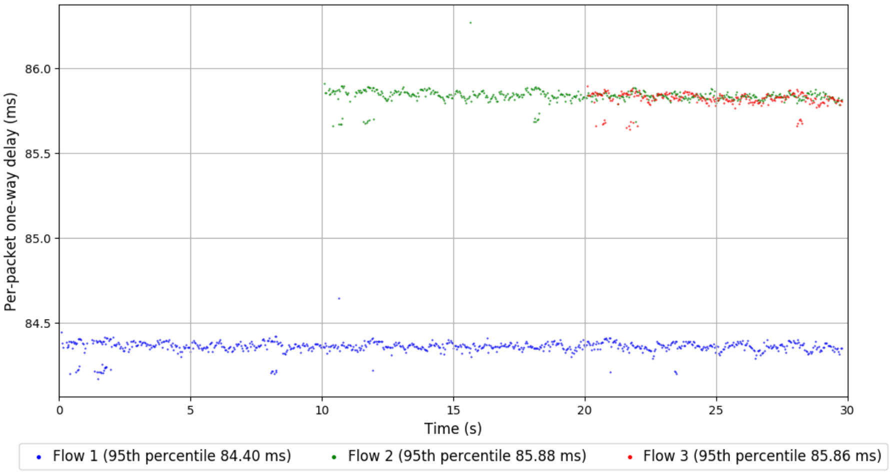
```
Run 3: Statistics of SCReAM

Start at: 2018-02-28 00:53:34
End at: 2018-02-28 00:54:04
Local clock offset: -3.997 ms
Remote clock offset: -5.945 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 85.865 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.398 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.878 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.862 ms
Loss rate: 1.87%
```

Run 3: Report of SCReAM — Data Link



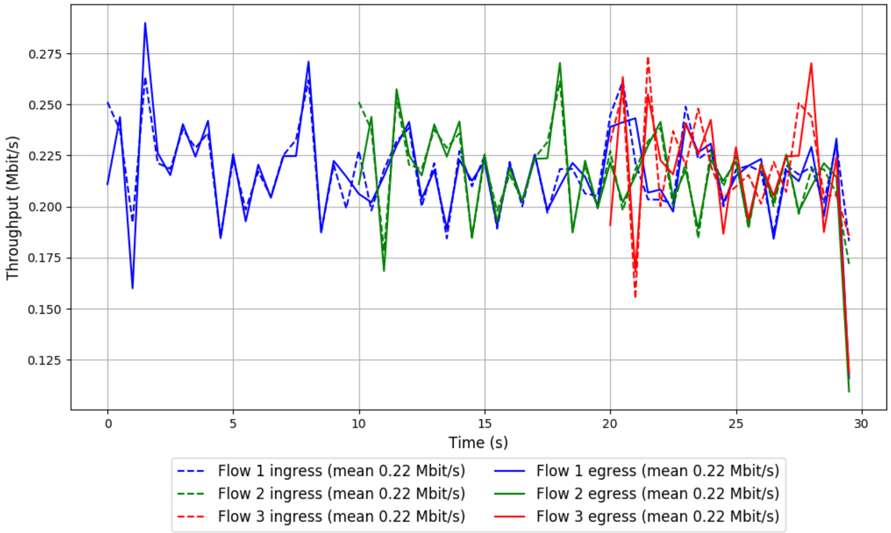


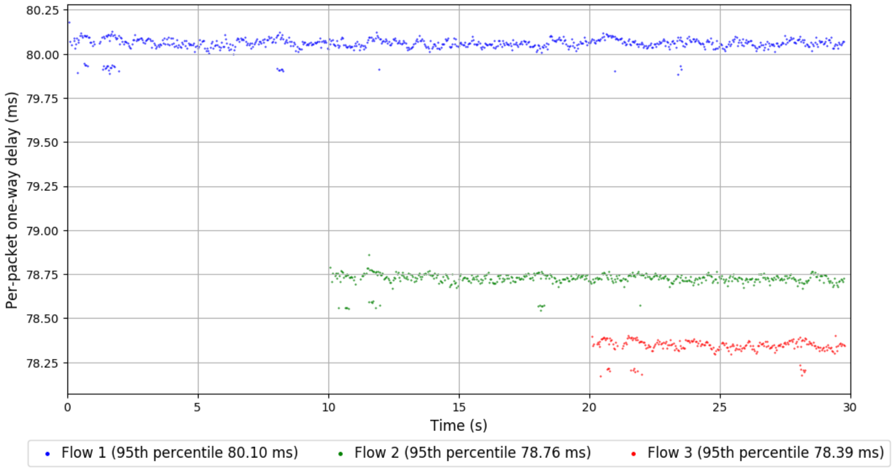
```
Run 4: Statistics of SCReAM

Start at: 2018-02-28 01:17:51
End at: 2018-02-28 01:18:21
Local clock offset: -4.388 ms
Remote clock offset: -0.851 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 80.091 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.099 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 78.762 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 78.388 ms
Loss rate: 1.89%
```

Run 4: Report of SCReAM — Data Link



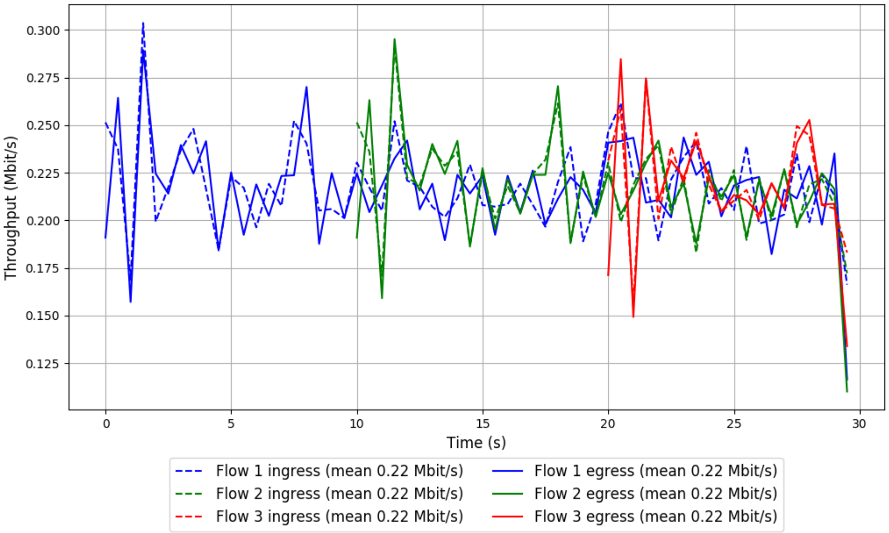


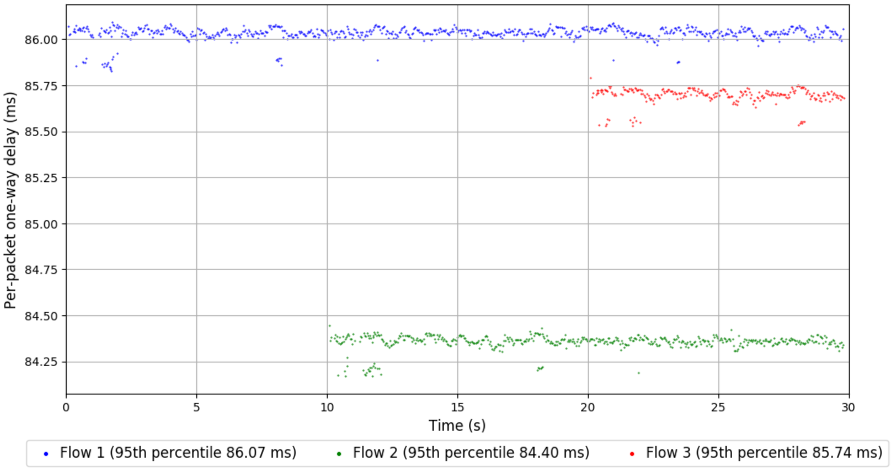
```
Run 5: Statistics of SCReAM

Start at: 2018-02-28 01:42:06
End at: 2018-02-28 01:42:36
Local clock offset: -4.551 ms
Remote clock offset: -5.638 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.065 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.071 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.397 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.737 ms
Loss rate: 1.85%
```

Run 5: Report of SCReAM — Data Link



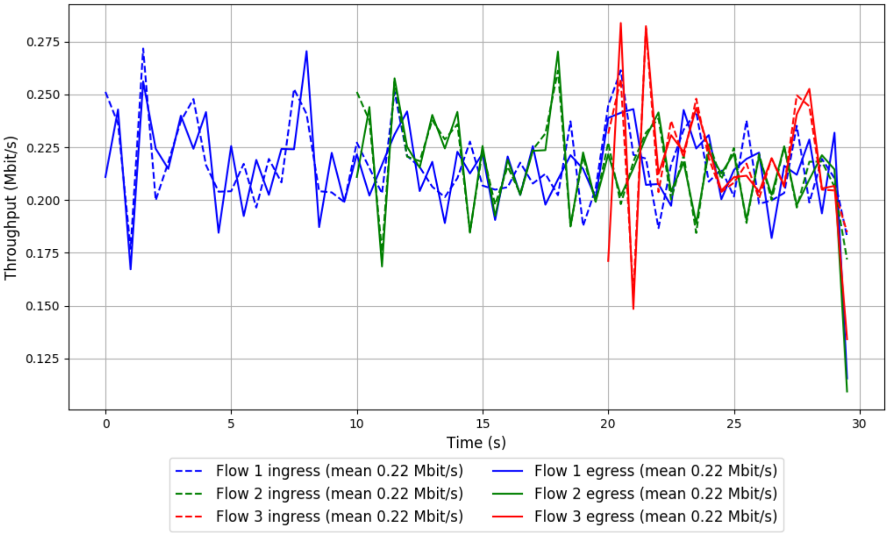


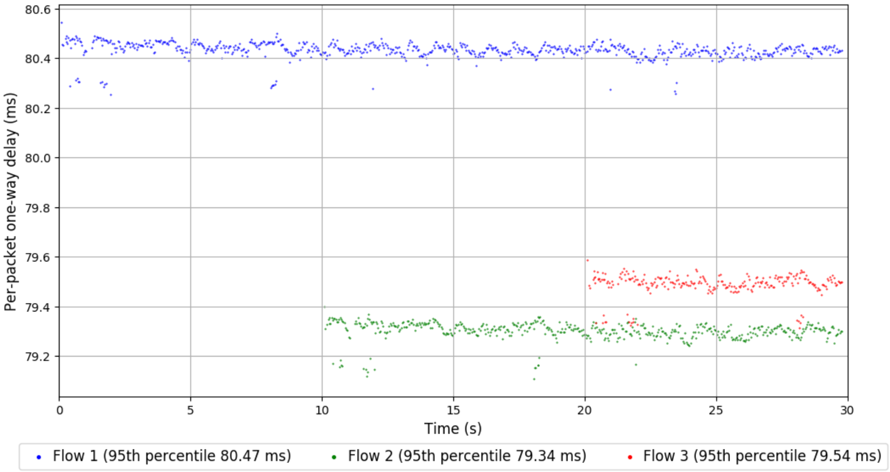
```
Run 6: Statistics of SCReAM

Start at: 2018-02-28 02:06:19
End at: 2018-02-28 02:06:49
Local clock offset: -3.719 ms
Remote clock offset: -0.761 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 80.465 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.472 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.343 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.536 ms
Loss rate: 1.88%
```

Run 6: Report of SCReAM — Data Link



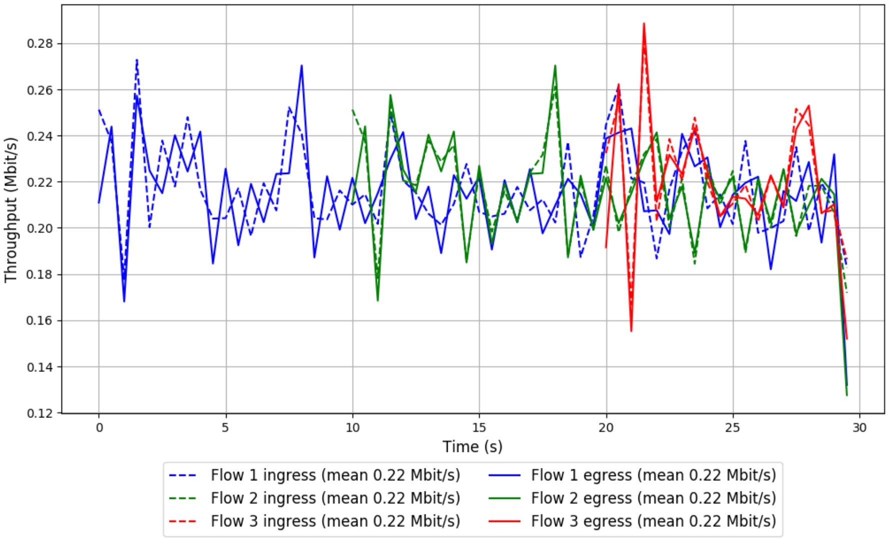


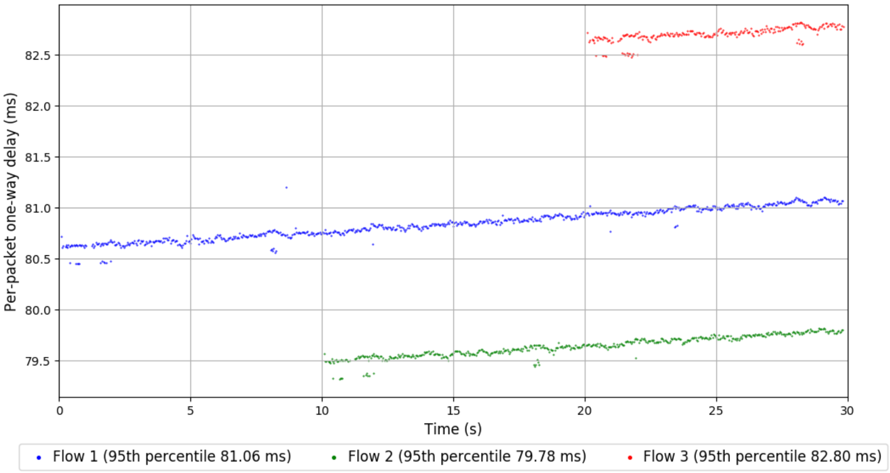
```
Run 7: Statistics of SCReAM

Start at: 2018-02-28 02:30:27
End at: 2018-02-28 02:30:57
Local clock offset: -19.242 ms
Remote clock offset: -0.053 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 82.740 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.055 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.783 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.802 ms
Loss rate: 1.50%
```

Run 7: Report of SCReAM — Data Link



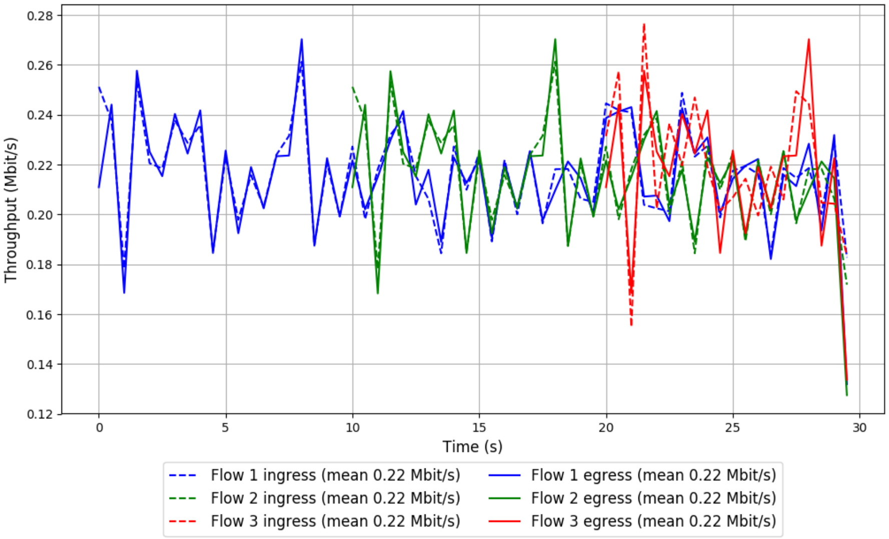


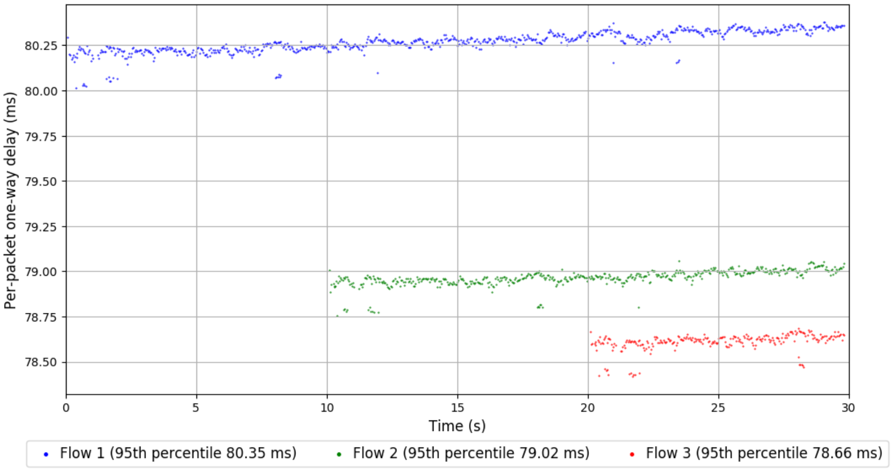
```
Run 8: Statistics of SCReAM

Start at: 2018-02-28 02:54:00
End at: 2018-02-28 02:54:30
Local clock offset: -32.483 ms
Remote clock offset: -0.451 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 80.339 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.352 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.022 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 78.664 ms
Loss rate: 1.50%
```

Run 8: Report of SCReAM — Data Link



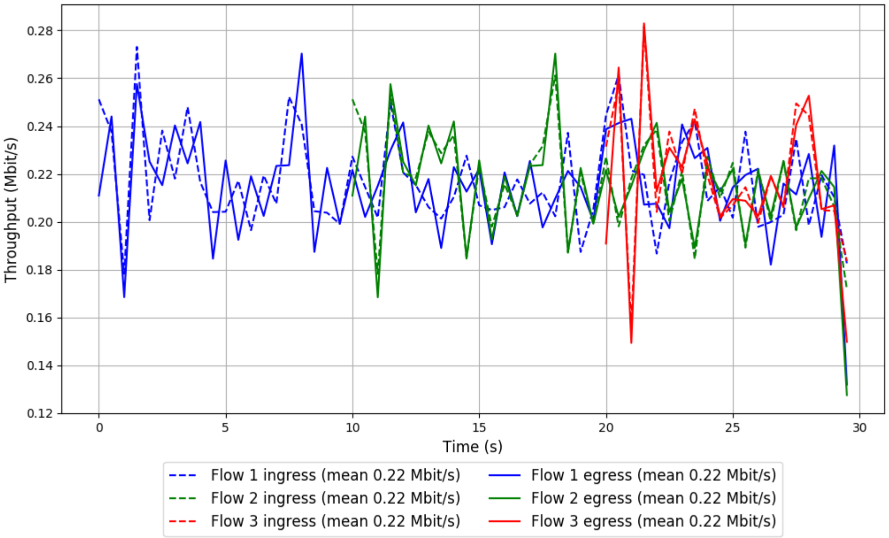


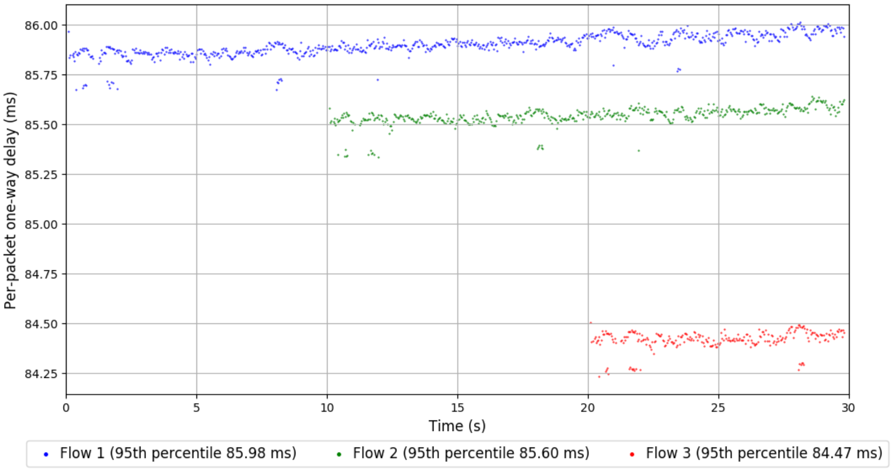
```
Run 9: Statistics of SCReAM

Start at: 2018-02-28 03:17:33
End at: 2018-02-28 03:18:03
Local clock offset: -39.56 ms
Remote clock offset: -5.706 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 85.964 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.976 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.602 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.472 ms
Loss rate: 1.49%
```

Run 9: Report of SCReAM — Data Link



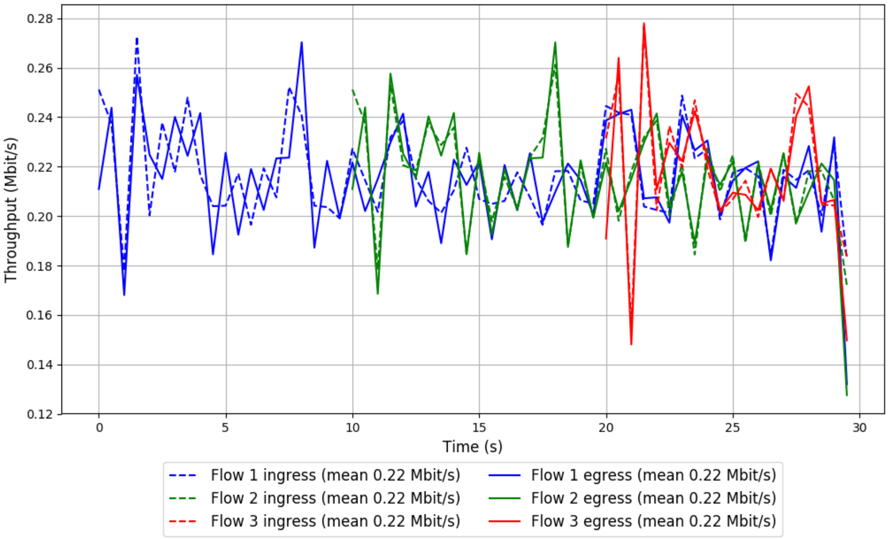


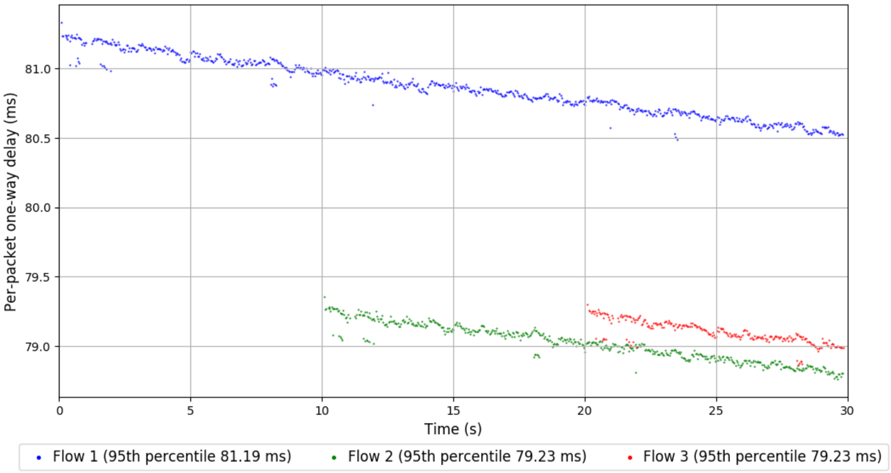
```
Run 10: Statistics of SCReAM

Start at: 2018-02-28 03:41:26
End at: 2018-02-28 03:41:56
Local clock offset: -11.5 ms
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 81.142 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.186 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.227 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.232 ms
Loss rate: 1.50%
```

Run 10: Report of SCReAM — Data Link



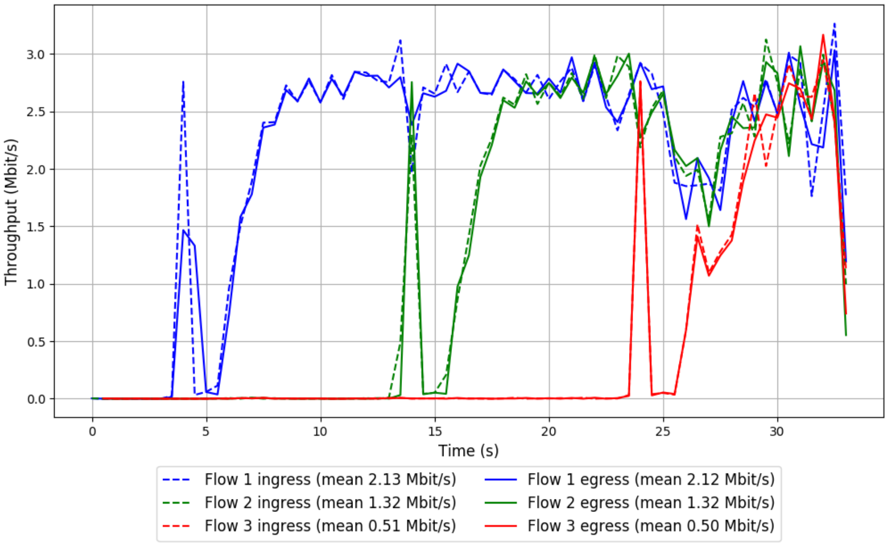


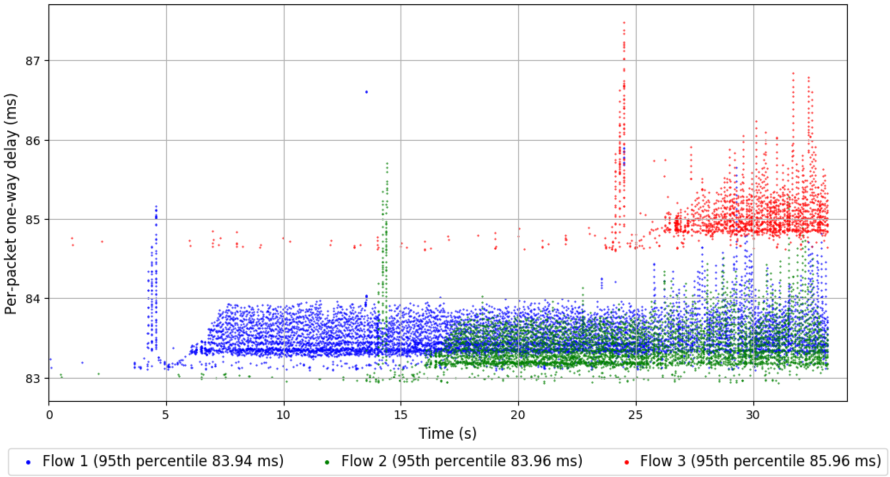
```
Run 1: Statistics of WebRTC media

Start at: 2018-02-28 00:03:15
End at: 2018-02-28 00:03:45
Local clock offset: -3.415 ms
Remote clock offset: -5.485 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.91 Mbit/s
95th percentile per-packet one-way delay: 85.110 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 83.945 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 83.958 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 85.956 ms
Loss rate: 2.28%
```

Run 1: Report of WebRTC media — Data Link



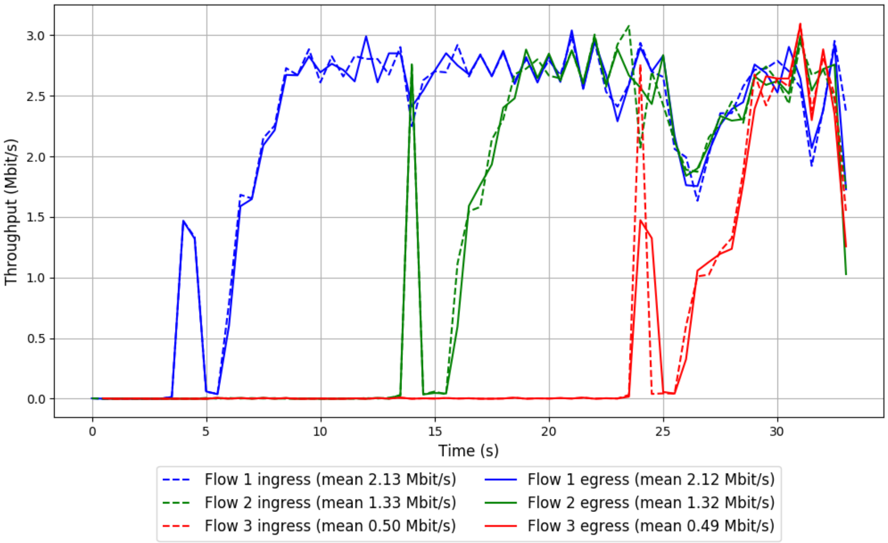


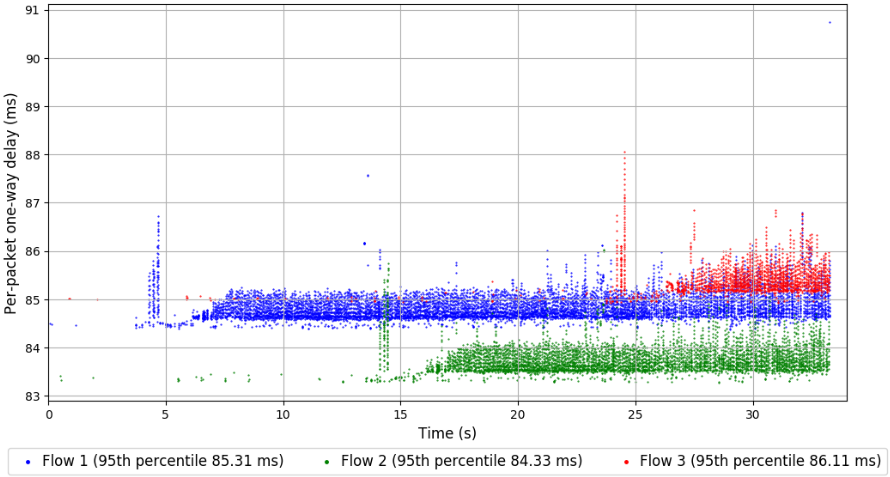
```
Run 2: Statistics of WebRTC media

Start at: 2018-02-28 00:26:43
End at: 2018-02-28 00:27:13
Local clock offset: -2.512 ms
Remote clock offset: -4.797 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.91 Mbit/s
95th percentile per-packet one-way delay: 85.538 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 85.309 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 84.330 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 86.105 ms
Loss rate: 2.37%
```

Run 2: Report of WebRTC media — Data Link



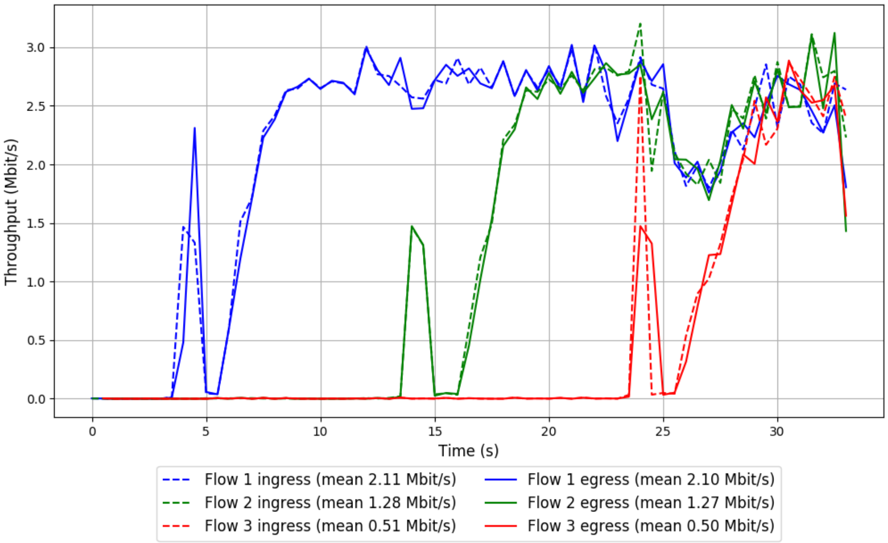


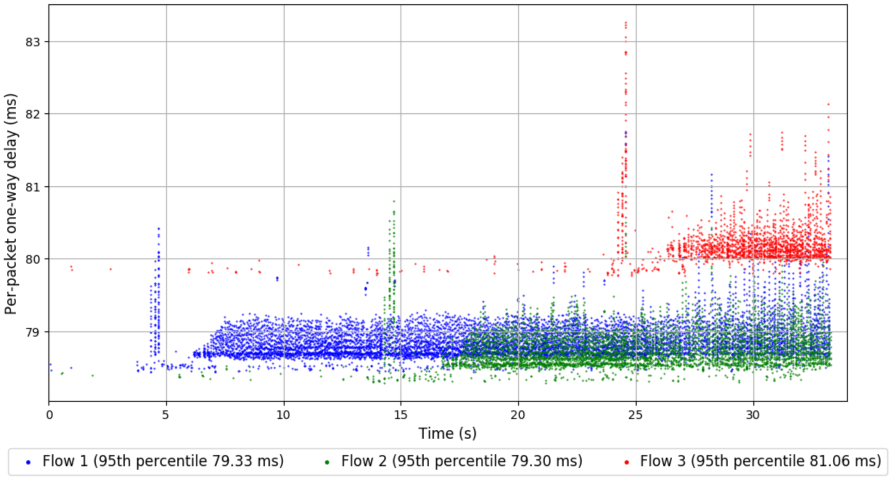
```
Run 3: Statistics of WebRTC media

Start at: 2018-02-28 00:50:51
End at: 2018-02-28 00:51:21
Local clock offset: -3.843 ms
Remote clock offset: -0.072 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.83 Mbit/s
95th percentile per-packet one-way delay: 80.220 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 79.330 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 79.297 ms
Loss rate: 1.44%
-- Flow 3:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 81.055 ms
Loss rate: 3.67%
```

Run 3: Report of WebRTC media — Data Link



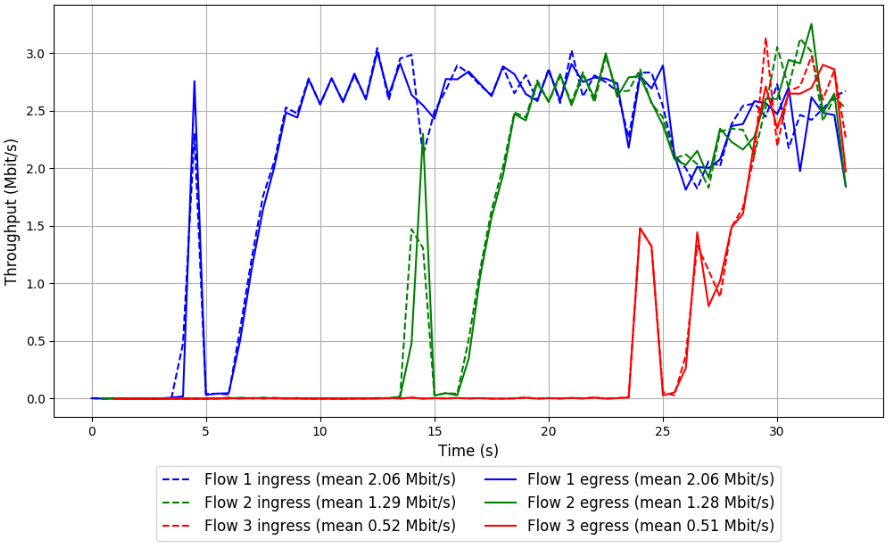


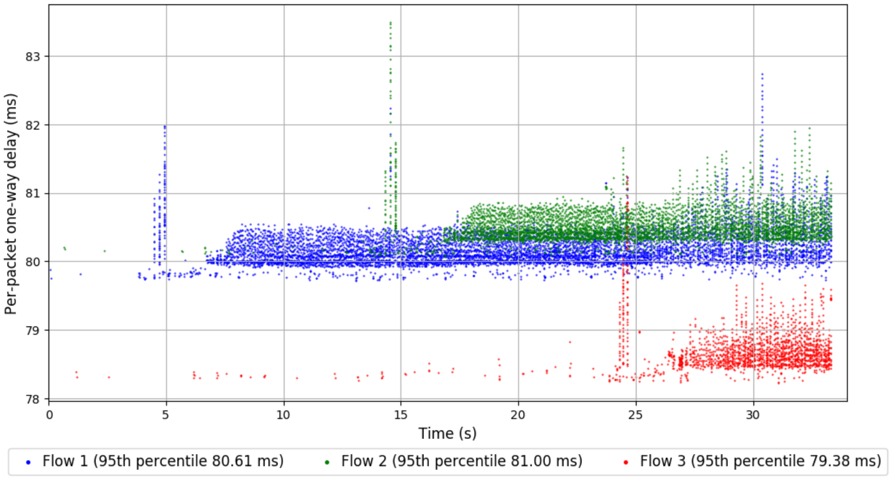
```
Run 4: Statistics of WebRTC media

Start at: 2018-02-28 01:15:10
End at: 2018-02-28 01:15:40
Local clock offset: -4.374 ms
Remote clock offset: -0.929 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.80 Mbit/s
95th percentile per-packet one-way delay: 80.809 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 80.608 ms
Loss rate: 0.96%
-- Flow 2:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 80.999 ms
Loss rate: 1.33%
-- Flow 3:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 79.380 ms
Loss rate: 2.17%
```

Run 4: Report of WebRTC media — Data Link



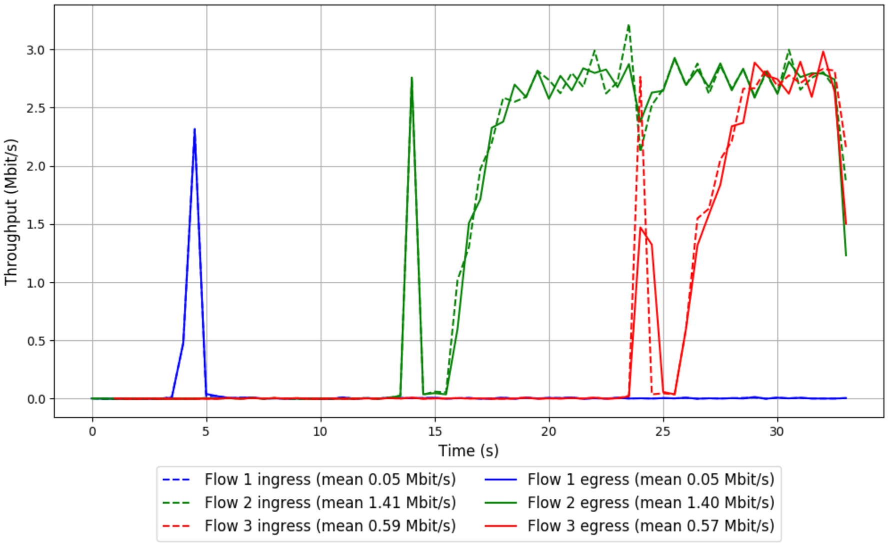


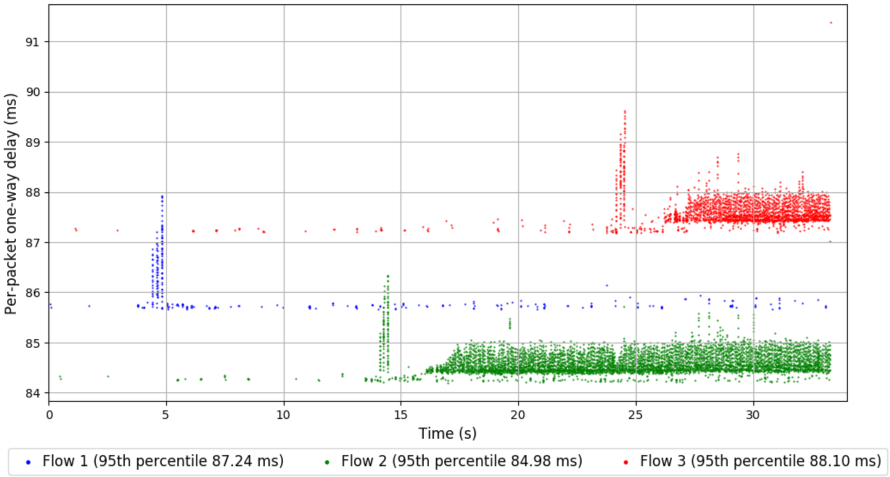
```
Run 5: Statistics of WebRTC media

Start at: 2018-02-28 01:39:25
End at: 2018-02-28 01:39:55
Local clock offset: -4.522 ms
Remote clock offset: -5.702 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 87.828 ms
Loss rate: 1.67%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 87.237 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 84.976 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 88.102 ms
Loss rate: 3.38%
```

Run 5: Report of WebRTC media — Data Link



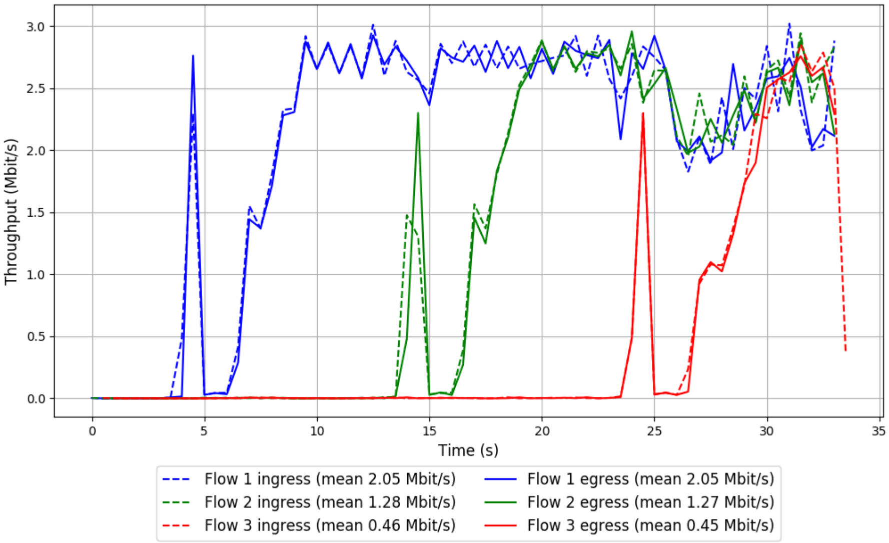


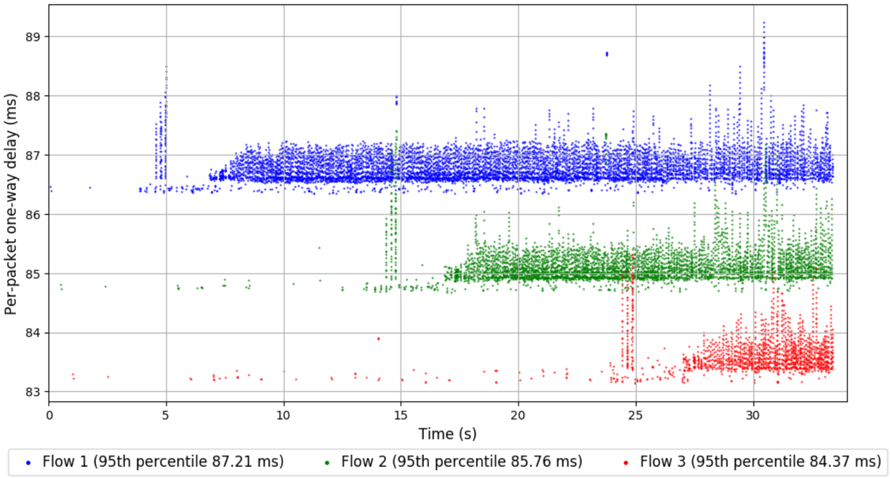
```
Run 6: Statistics of WebRTC media

Start at: 2018-02-28 02:03:39
End at: 2018-02-28 02:04:09
Local clock offset: -3.808 ms
Remote clock offset: -4.849 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.73 Mbit/s
95th percentile per-packet one-way delay: 87.122 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 87.211 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 85.762 ms
Loss rate: 1.37%
-- Flow 3:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 84.372 ms
Loss rate: 3.75%
```

Run 6: Report of WebRTC media — Data Link



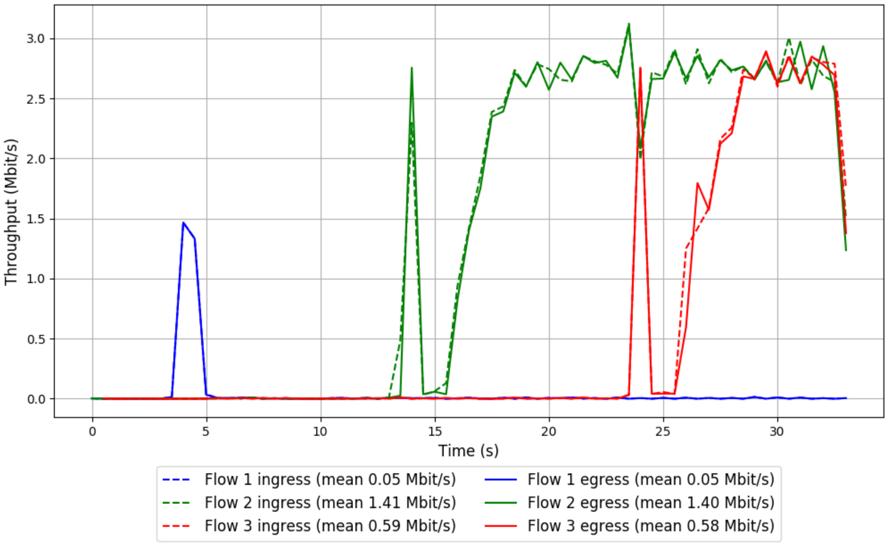


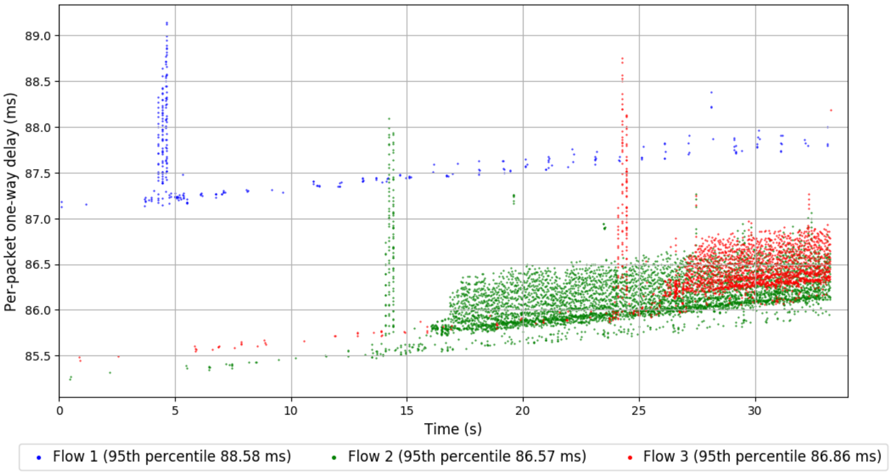
```
Run 7: Statistics of WebRTC media

Start at: 2018-02-28 02:27:43
End at: 2018-02-28 02:28:13
Local clock offset: -15.78 ms
Remote clock offset: -4.793 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 87.209 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 88.575 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 86.574 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 86.859 ms
Loss rate: 2.41%
```

Run 7: Report of WebRTC media — Data Link



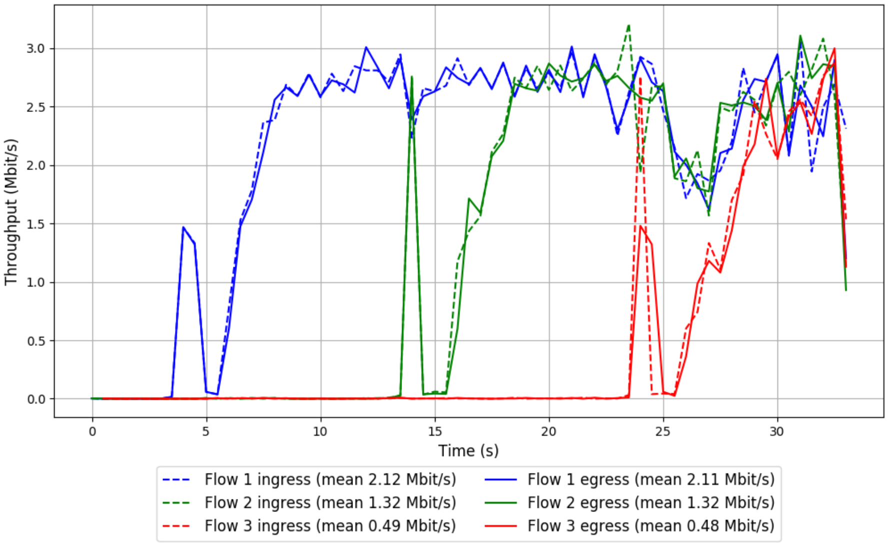


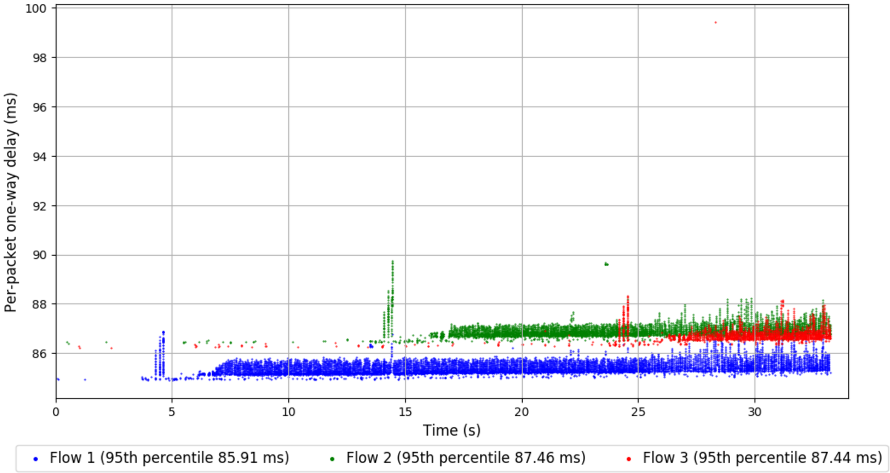
```
Run 8: Statistics of WebRTC media

Start at: 2018-02-28 02:51:25
End at: 2018-02-28 02:51:55
Local clock offset: -31.587 ms
Remote clock offset: -5.156 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 87.197 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 85.908 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 87.456 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 87.440 ms
Loss rate: 2.46%
```

Run 8: Report of WebRTC media — Data Link



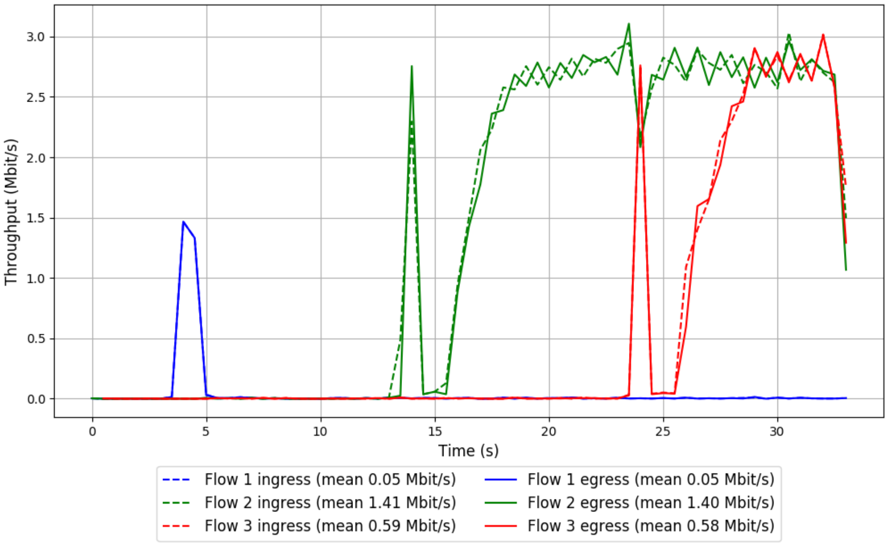


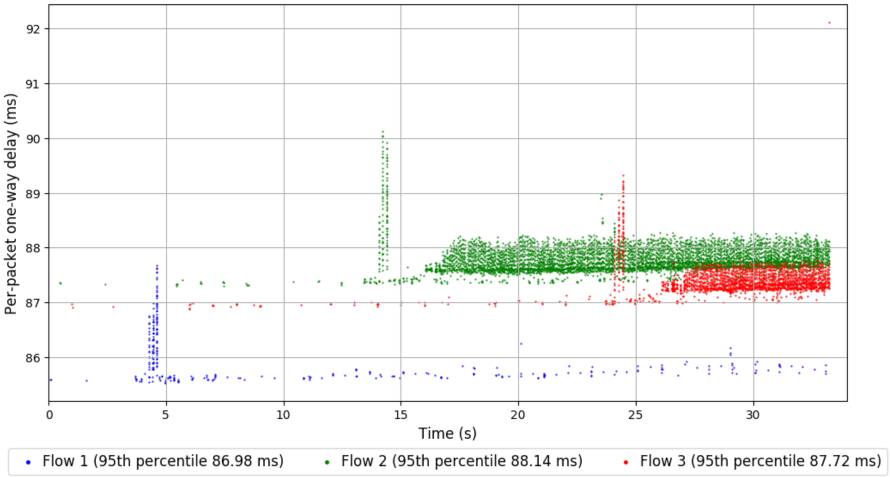
```
Run 9: Statistics of WebRTC media

Start at: 2018-02-28 03:14:58
End at: 2018-02-28 03:15:28
Local clock offset: -38.886 ms
Remote clock offset: -5.766 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 88.116 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.985 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 88.137 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 87.716 ms
Loss rate: 2.34%
```

Run 9: Report of WebRTC media — Data Link



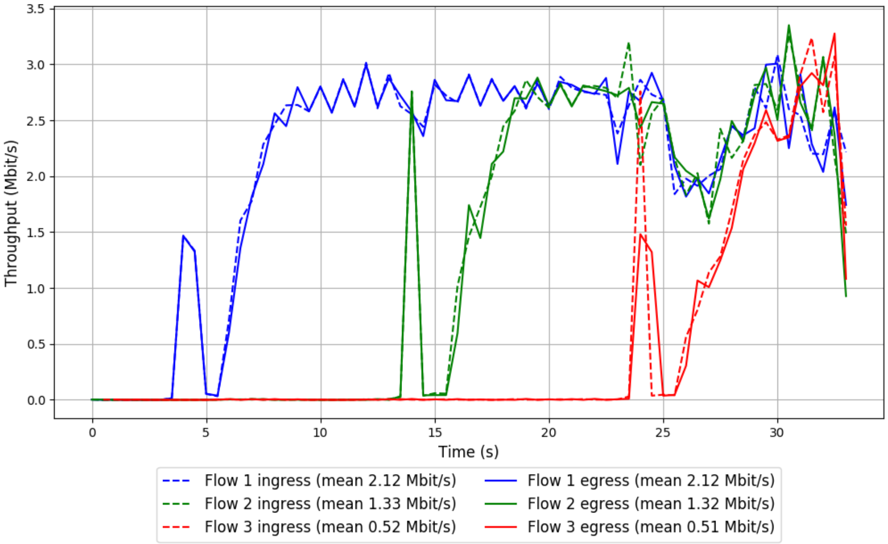


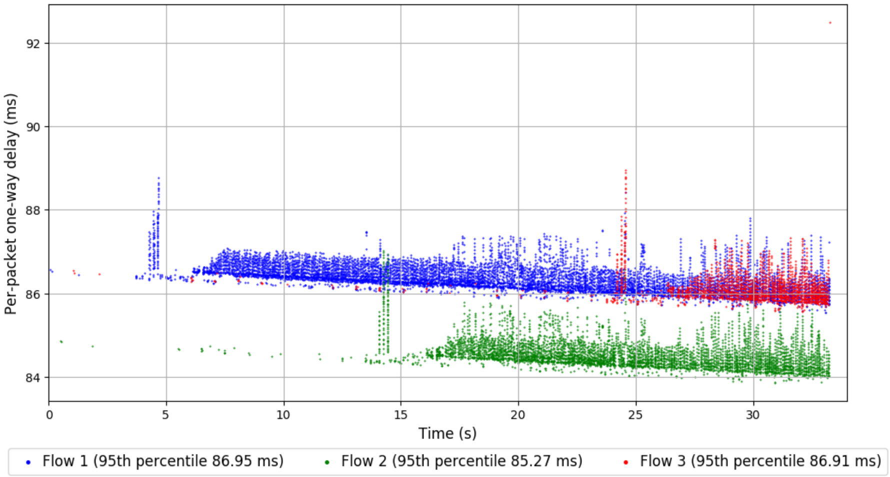
```
Run 10: Statistics of WebRTC media

Start at: 2018-02-28 03:38:52
End at: 2018-02-28 03:39:22
Local clock offset: -15.735 ms
Remote clock offset: -5.666 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.92 Mbit/s
95th percentile per-packet one-way delay: 86.853 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 86.948 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 85.274 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 86.914 ms
Loss rate: 2.56%
```

Run 10: Report of WebRTC media — Data Link



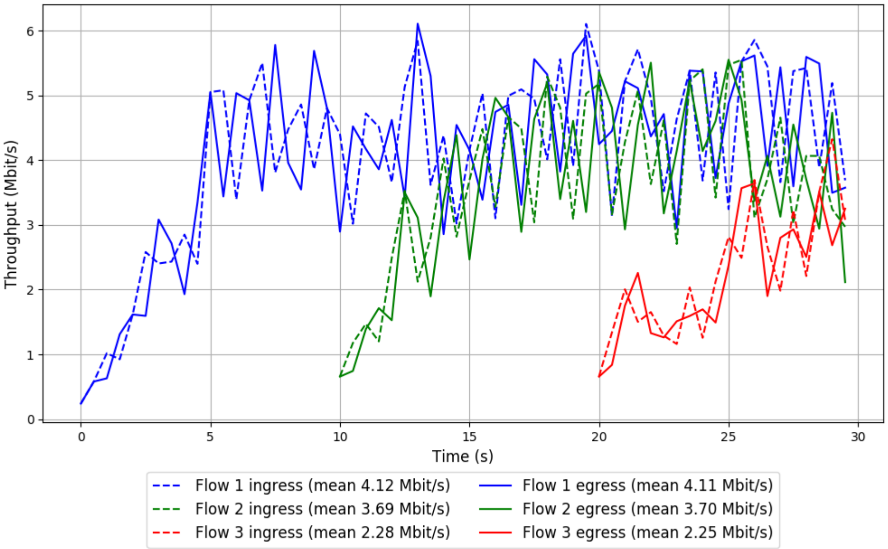


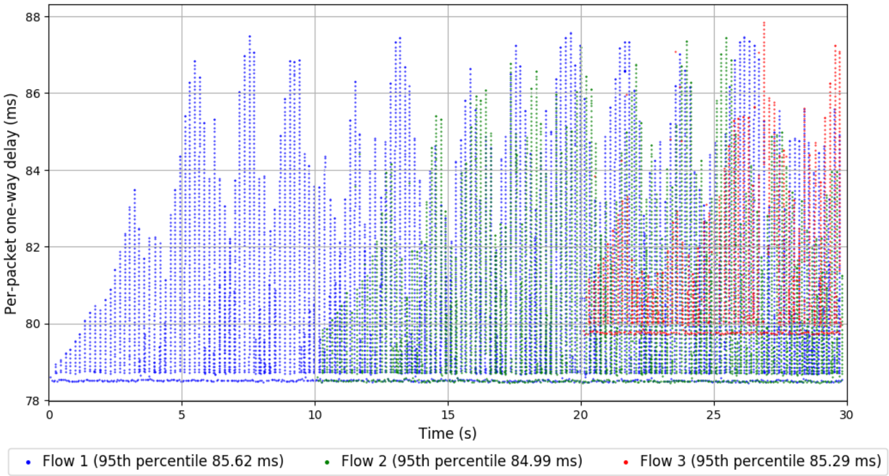
```
Run 1: Statistics of Sprout

Start at: 2018-02-28 00:07:02
End at: 2018-02-28 00:07:32
Local clock offset: -3.26 ms
Remote clock offset: -0.646 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.30 Mbit/s
95th percentile per-packet one-way delay: 85.399 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 85.624 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 3.70 Mbit/s
95th percentile per-packet one-way delay: 84.987 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 85.291 ms
Loss rate: 3.25%
```

Run 1: Report of Sprout — Data Link



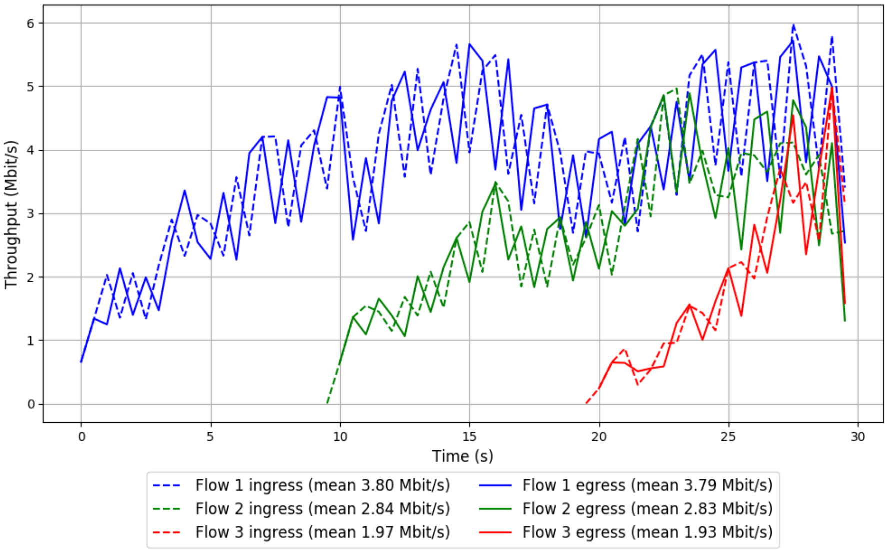


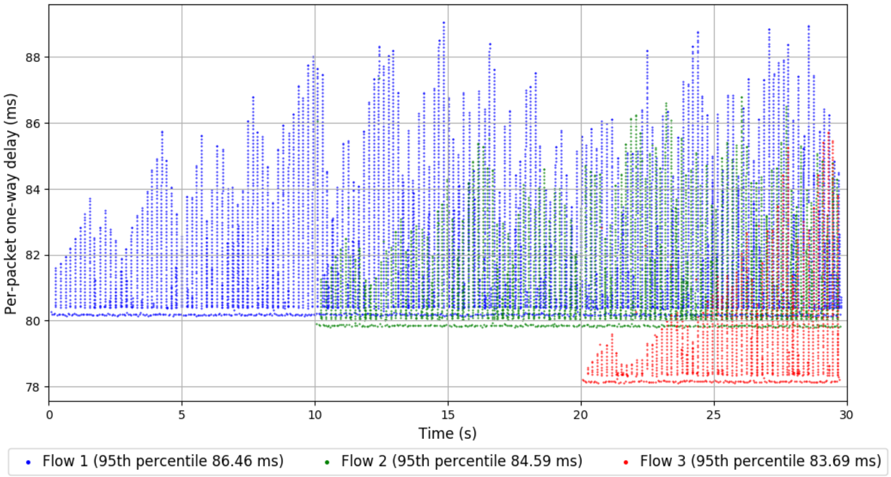
```
Run 2: Statistics of Sprout

Start at: 2018-02-28 00:30:32
End at: 2018-02-28 00:31:02
Local clock offset: -2.333 ms
Remote clock offset: 0.115 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.30 Mbit/s
95th percentile per-packet one-way delay: 85.911 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 3.79 Mbit/s
95th percentile per-packet one-way delay: 86.461 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 2.83 Mbit/s
95th percentile per-packet one-way delay: 84.591 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 83.694 ms
Loss rate: 3.98%
```

Run 2: Report of Sprout — Data Link



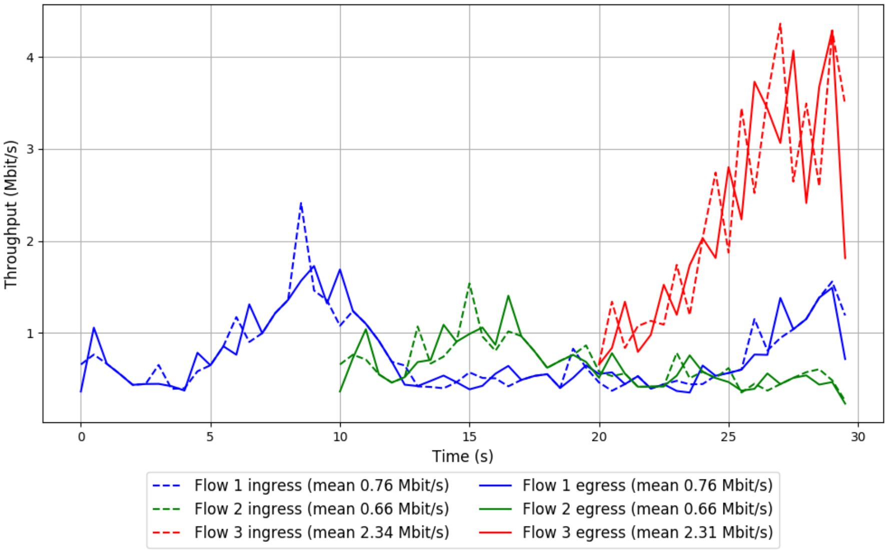


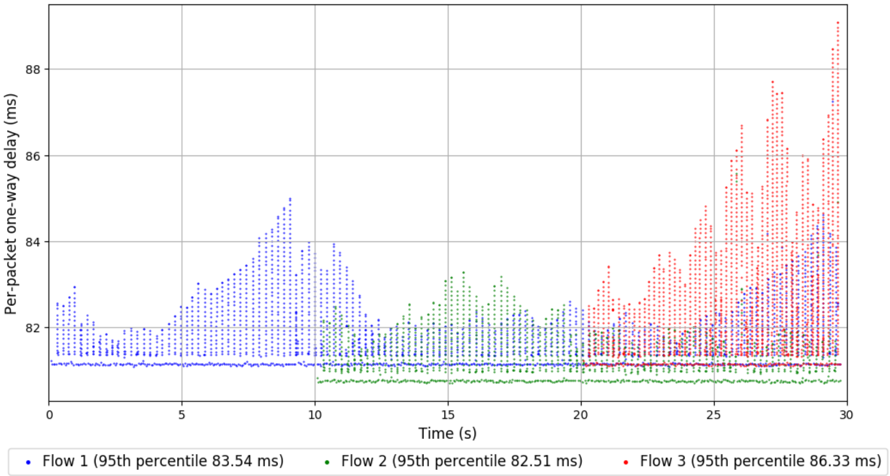
```
Run 3: Statistics of Sprout

Start at: 2018-02-28 00:54:51
End at: 2018-02-28 00:55:21
Local clock offset: -3.989 ms
Remote clock offset: -1.232 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 84.923 ms
Loss rate: 2.10%
-- Flow 1:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 83.541 ms
Loss rate: 1.19%
-- Flow 2:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 82.511 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 86.335 ms
Loss rate: 3.63%
```

Run 3: Report of Sprout — Data Link



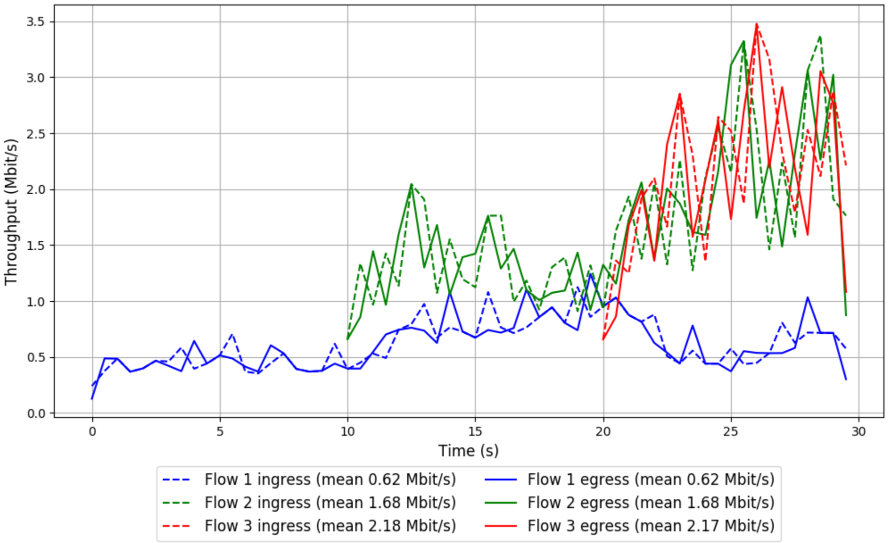


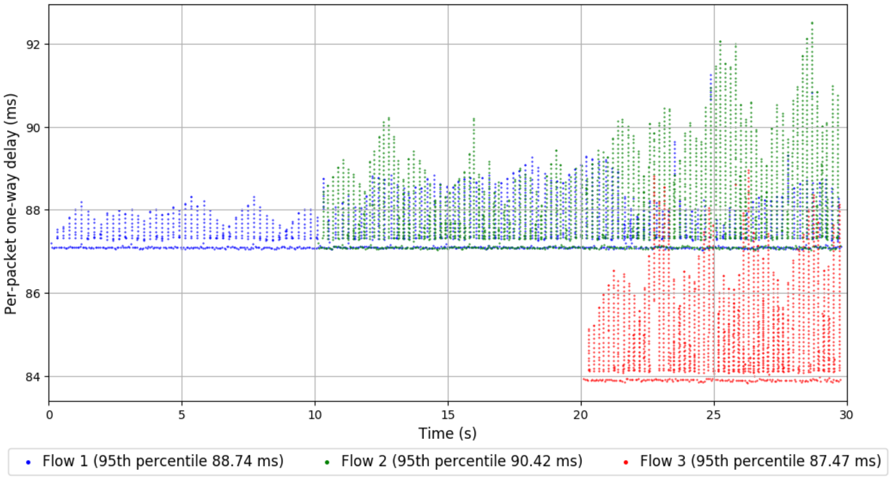
```
Run 4: Statistics of Sprout

Start at: 2018-02-28 01:19:06
End at: 2018-02-28 01:19:37
Local clock offset: -4.404 ms
Remote clock offset: -6.401 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 89.772 ms
Loss rate: 1.64%
-- Flow 1:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 88.737 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 1.68 Mbit/s
95th percentile per-packet one-way delay: 90.425 ms
Loss rate: 1.34%
-- Flow 3:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 87.474 ms
Loss rate: 2.89%
```

Run 4: Report of Sprout — Data Link



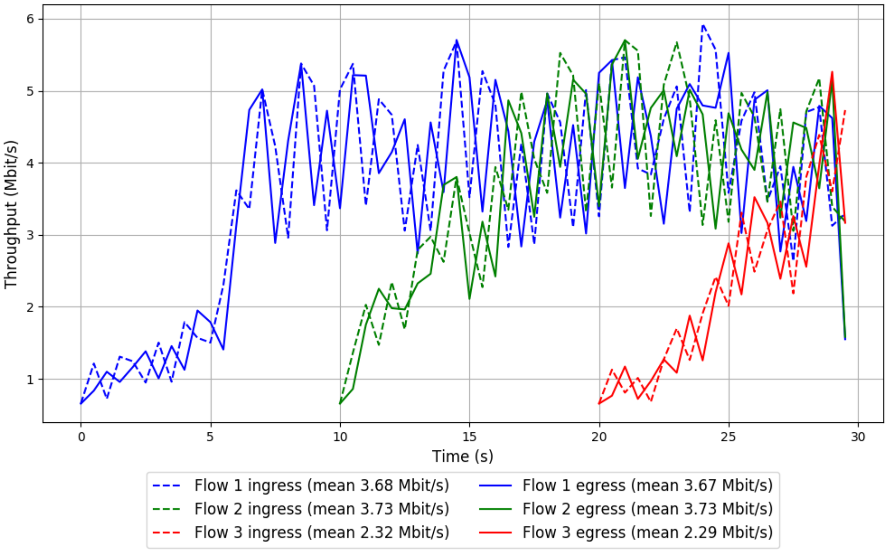


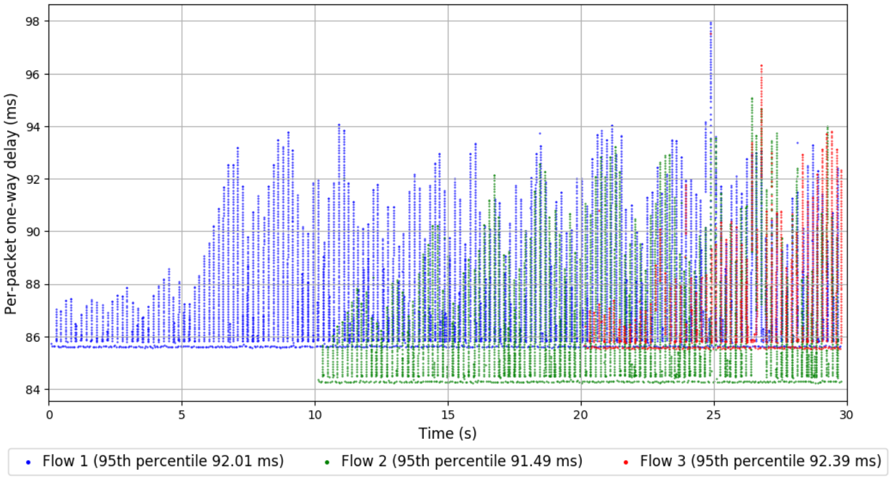
```
Run 5: Statistics of Sprout

Start at: 2018-02-28 01:43:21
End at: 2018-02-28 01:43:51
Local clock offset: -4.534 ms
Remote clock offset: -5.697 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.88 Mbit/s
95th percentile per-packet one-way delay: 91.919 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 3.67 Mbit/s
95th percentile per-packet one-way delay: 92.009 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 3.73 Mbit/s
95th percentile per-packet one-way delay: 91.487 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 92.395 ms
Loss rate: 3.42%
```

Run 5: Report of Sprout — Data Link



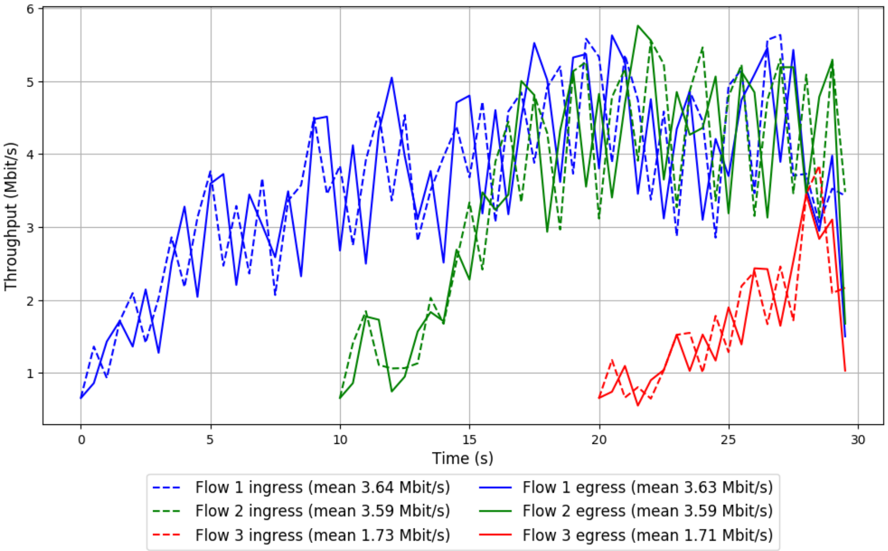


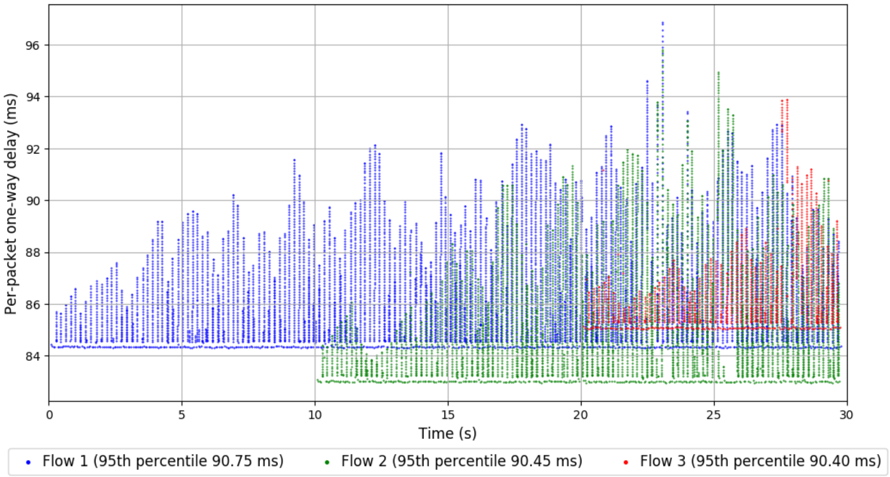
```
Run 6: Statistics of Sprout

Start at: 2018-02-28 02:07:35
End at: 2018-02-28 02:08:05
Local clock offset: -3.664 ms
Remote clock offset: -4.792 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.56 Mbit/s
95th percentile per-packet one-way delay: 90.625 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 3.63 Mbit/s
95th percentile per-packet one-way delay: 90.753 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 3.59 Mbit/s
95th percentile per-packet one-way delay: 90.447 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 90.404 ms
Loss rate: 3.33%
```

Run 6: Report of Sprout — Data Link



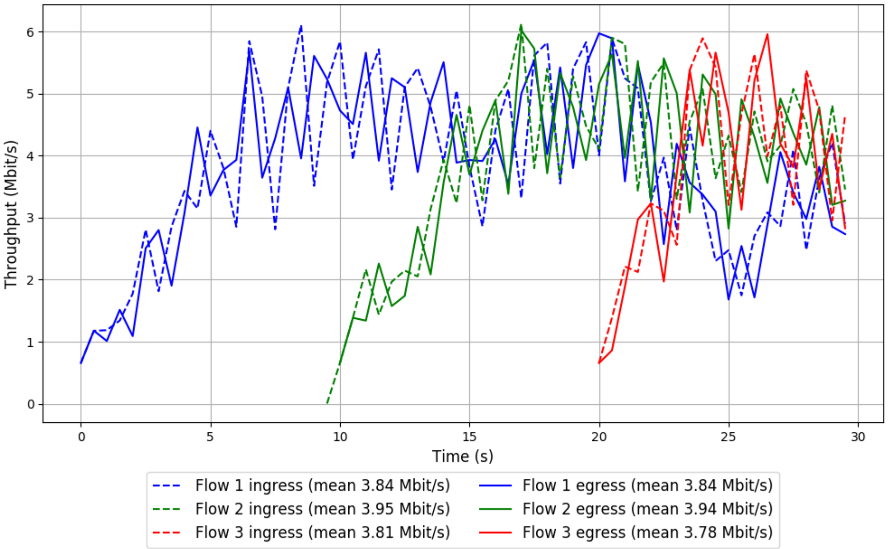


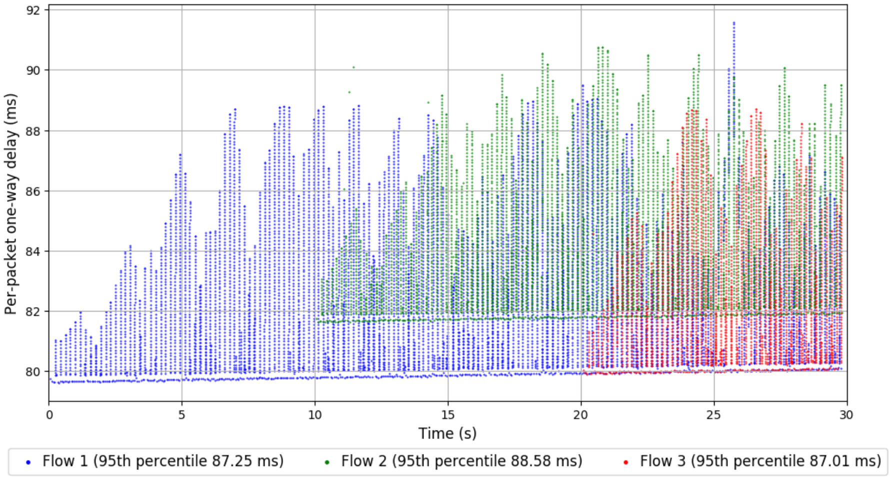
```
Run 7: Statistics of Sprout

Start at: 2018-02-28 02:31:40
End at: 2018-02-28 02:32:10
Local clock offset: -20.628 ms
Remote clock offset: -0.961 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.68 Mbit/s
95th percentile per-packet one-way delay: 87.832 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 3.84 Mbit/s
95th percentile per-packet one-way delay: 87.250 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 3.94 Mbit/s
95th percentile per-packet one-way delay: 88.585 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 3.78 Mbit/s
95th percentile per-packet one-way delay: 87.010 ms
Loss rate: 2.44%
```

Run 7: Report of Sprout — Data Link



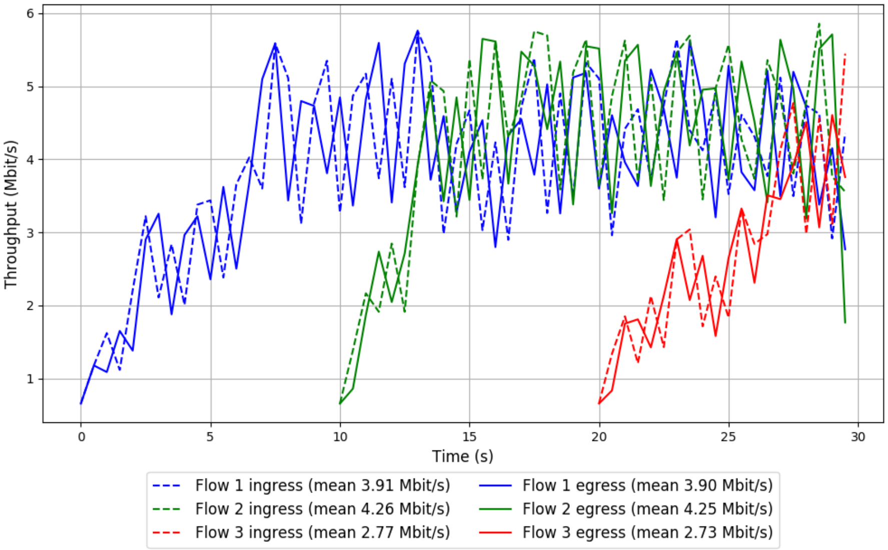


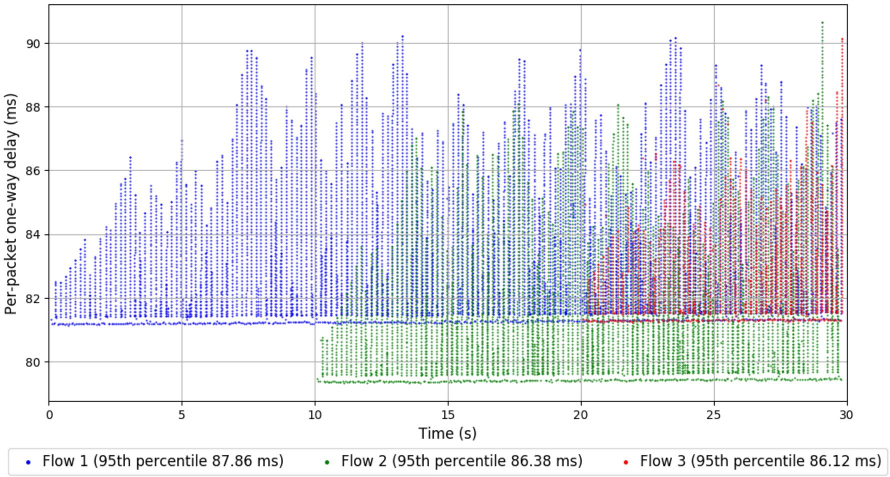
```
Run 8: Statistics of Sprout

Start at: 2018-02-28 02:55:14
End at: 2018-02-28 02:55:44
Local clock offset: -32.89 ms
Remote clock offset: -1.272 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.61 Mbit/s
95th percentile per-packet one-way delay: 87.323 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 3.90 Mbit/s
95th percentile per-packet one-way delay: 87.855 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 4.25 Mbit/s
95th percentile per-packet one-way delay: 86.377 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 2.73 Mbit/s
95th percentile per-packet one-way delay: 86.123 ms
Loss rate: 3.10%
```

Run 8: Report of Sprout — Data Link



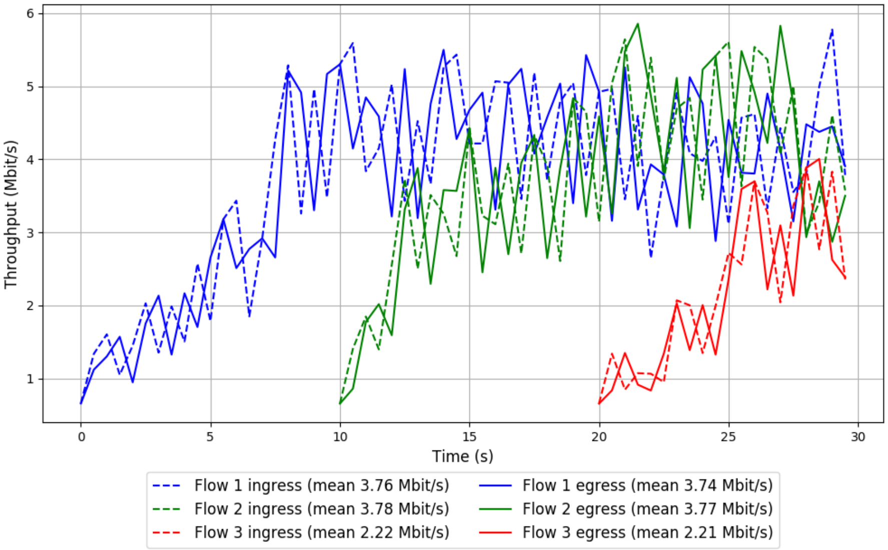


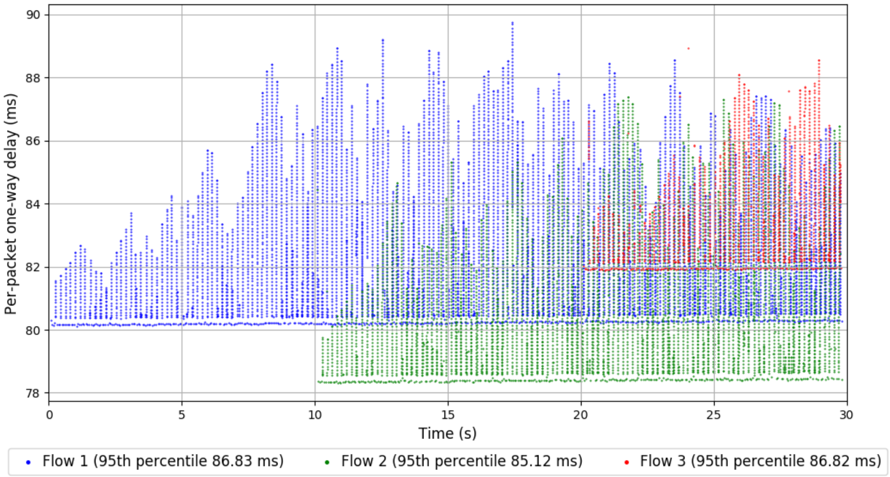
```
Run 9: Statistics of Sprout

Start at: 2018-02-28 03:18:47
End at: 2018-02-28 03:19:17
Local clock offset: -39.874 ms
Remote clock offset: -0.121 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.96 Mbit/s
95th percentile per-packet one-way delay: 86.450 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 3.74 Mbit/s
95th percentile per-packet one-way delay: 86.830 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 3.77 Mbit/s
95th percentile per-packet one-way delay: 85.123 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 86.820 ms
Loss rate: 2.68%
```

Run 9: Report of Sprout — Data Link



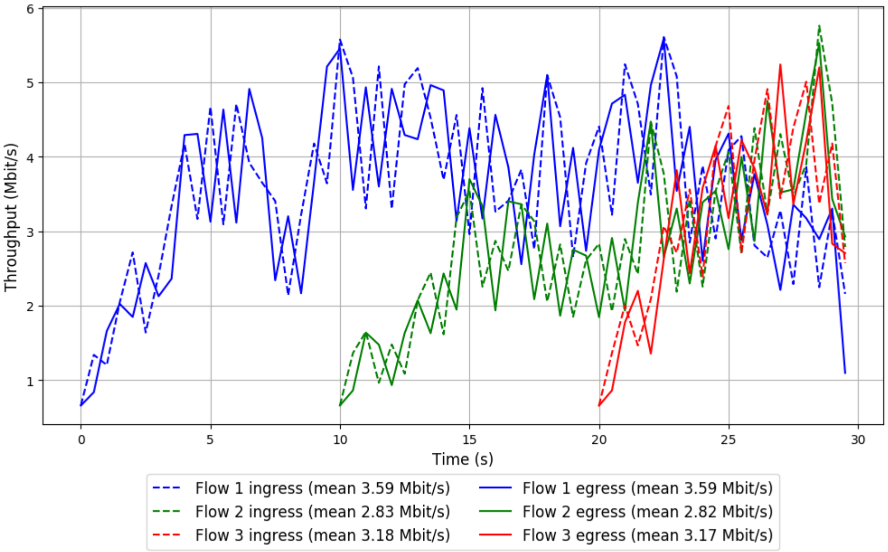


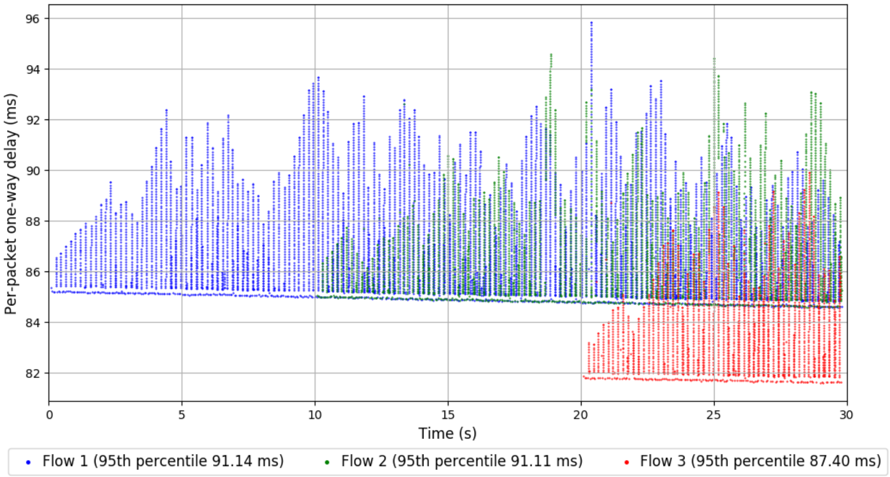
```
Run 10: Statistics of Sprout

Start at: 2018-02-28 03:42:39
End at: 2018-02-28 03:43:09
Local clock offset: -10.096 ms
Remote clock offset: -4.833 ms

# Below is generated by plot.py at 2018-02-28 08:05:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.49 Mbit/s
95th percentile per-packet one-way delay: 90.924 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 3.59 Mbit/s
95th percentile per-packet one-way delay: 91.143 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 2.82 Mbit/s
95th percentile per-packet one-way delay: 91.112 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 3.17 Mbit/s
95th percentile per-packet one-way delay: 87.403 ms
Loss rate: 1.94%
```

Run 10: Report of Sprout — Data Link



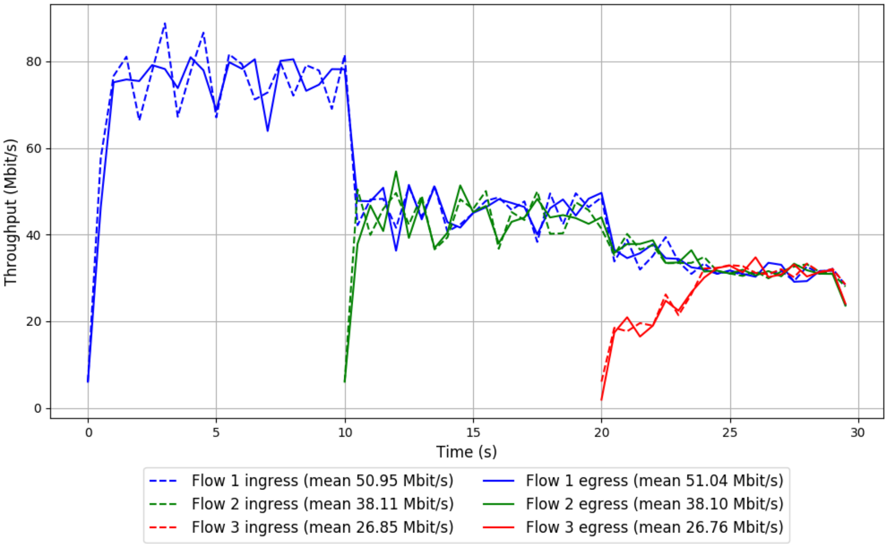


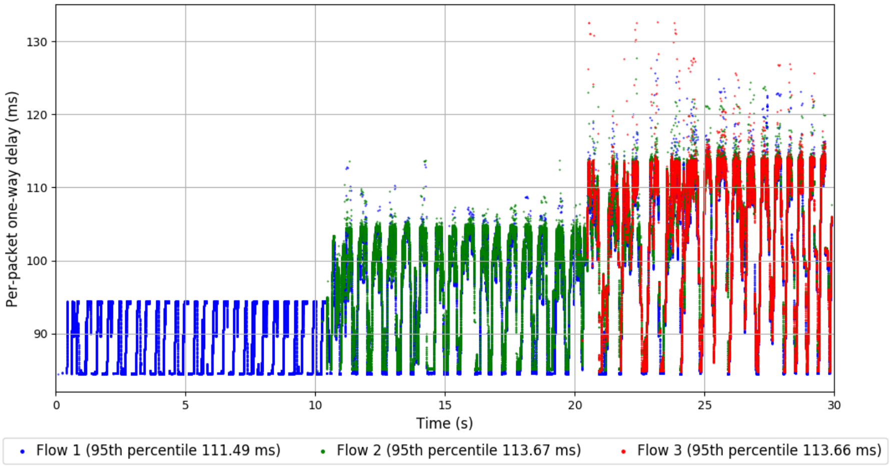
```
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-28 00:17:27
End at: 2018-02-28 00:17:57
Local clock offset: -2.823 ms
Remote clock offset: -5.217 ms

# Below is generated by plot.py at 2018-02-28 08:07:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.12 Mbit/s
95th percentile per-packet one-way delay: 113.222 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 51.04 Mbit/s
95th percentile per-packet one-way delay: 111.492 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 38.10 Mbit/s
95th percentile per-packet one-way delay: 113.665 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 26.76 Mbit/s
95th percentile per-packet one-way delay: 113.662 ms
Loss rate: 2.20%
```

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



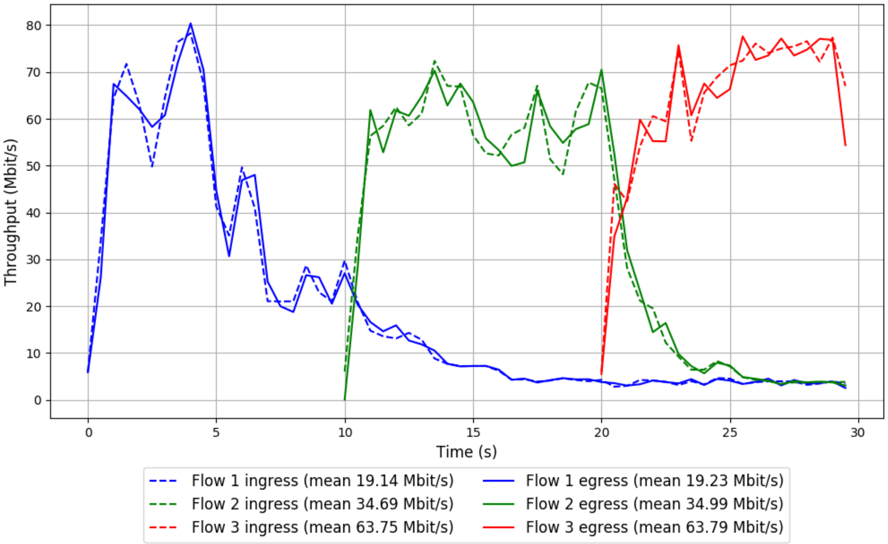


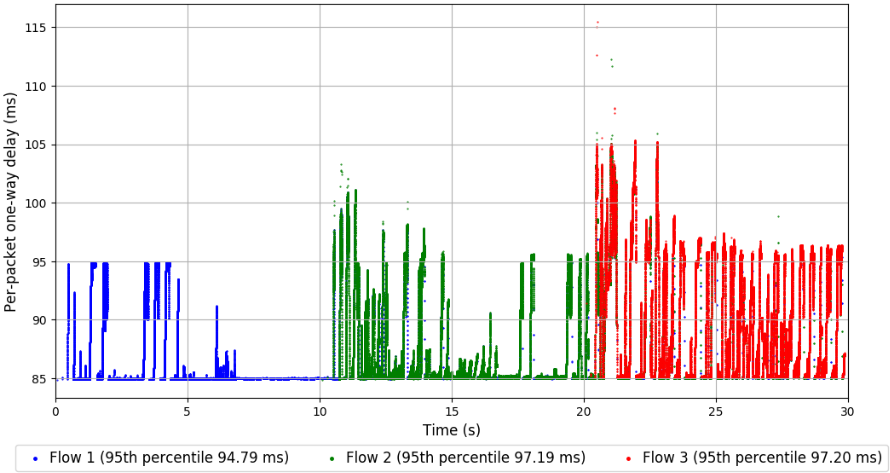
```
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-28 00:41:15
End at: 2018-02-28 00:41:45
Local clock offset: -2.63 ms
Remote clock offset: -4.701 ms

# Below is generated by plot.py at 2018-02-28 08:07:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.36 Mbit/s
95th percentile per-packet one-way delay: 96.552 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 19.23 Mbit/s
95th percentile per-packet one-way delay: 94.787 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 34.99 Mbit/s
95th percentile per-packet one-way delay: 97.190 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 63.79 Mbit/s
95th percentile per-packet one-way delay: 97.202 ms
Loss rate: 1.95%
```

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



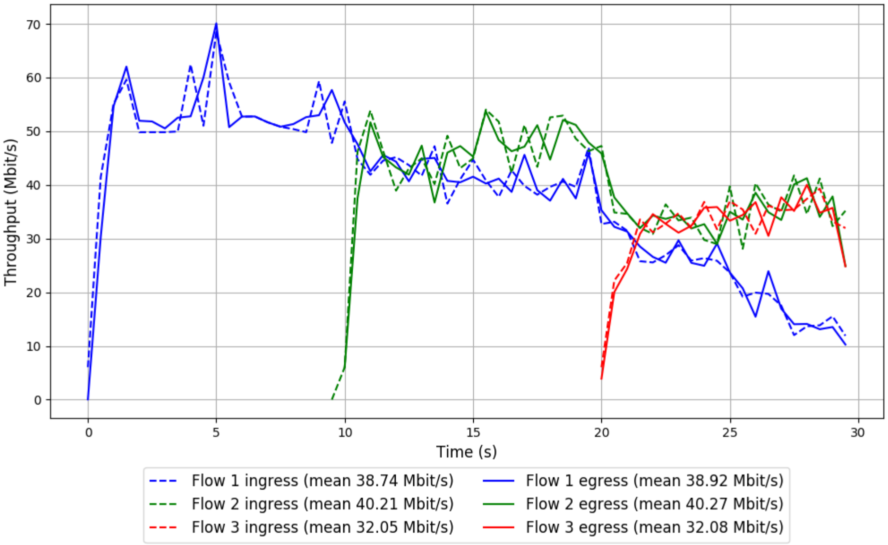


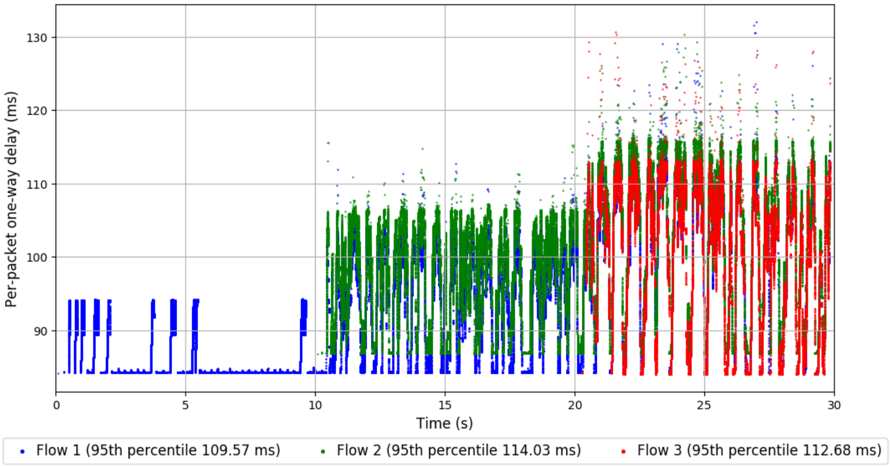
```
Run 3: Statistics of TaoVA-100x

Start at: 2018-02-28 01:05:36
End at: 2018-02-28 01:06:06
Local clock offset: -4.369 ms
Remote clock offset: -6.329 ms

# Below is generated by plot.py at 2018-02-28 08:07:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.14 Mbit/s
95th percentile per-packet one-way delay: 112.192 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 38.92 Mbit/s
95th percentile per-packet one-way delay: 109.569 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 40.27 Mbit/s
95th percentile per-packet one-way delay: 114.027 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 32.08 Mbit/s
95th percentile per-packet one-way delay: 112.683 ms
Loss rate: 2.13%
```

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



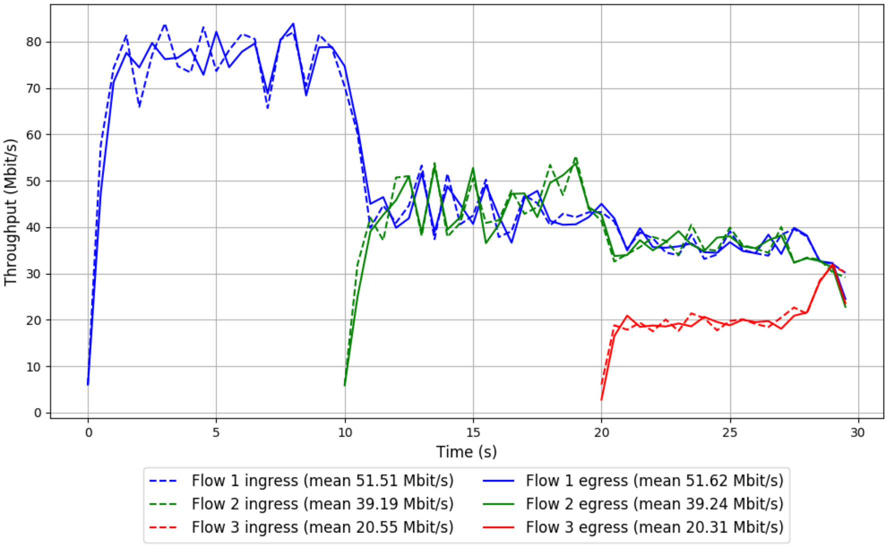


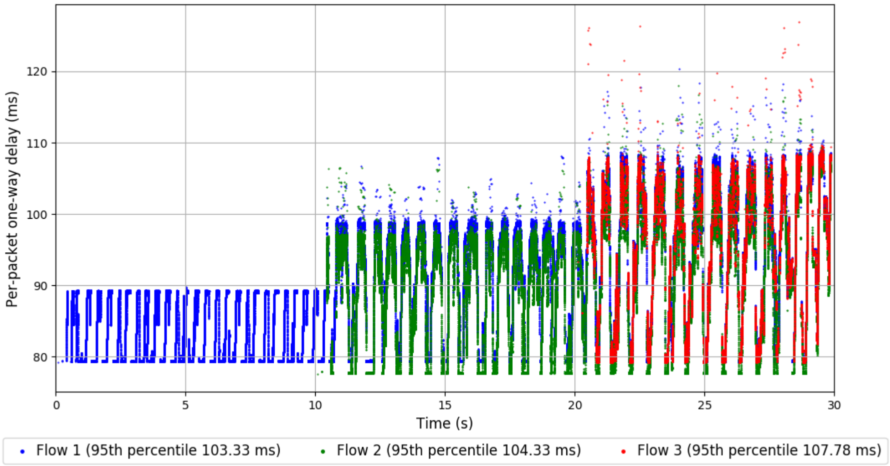
```
Run 4: Statistics of TaoVA-100x

Start at: 2018-02-28 01:29:52
End at: 2018-02-28 01:30:22
Local clock offset: -4.444 ms
Remote clock offset: 0.433 ms

# Below is generated by plot.py at 2018-02-28 08:07:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.33 Mbit/s
95th percentile per-packet one-way delay: 104.611 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 51.62 Mbit/s
95th percentile per-packet one-way delay: 103.328 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 39.24 Mbit/s
95th percentile per-packet one-way delay: 104.335 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 20.31 Mbit/s
95th percentile per-packet one-way delay: 107.781 ms
Loss rate: 3.08%
```

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



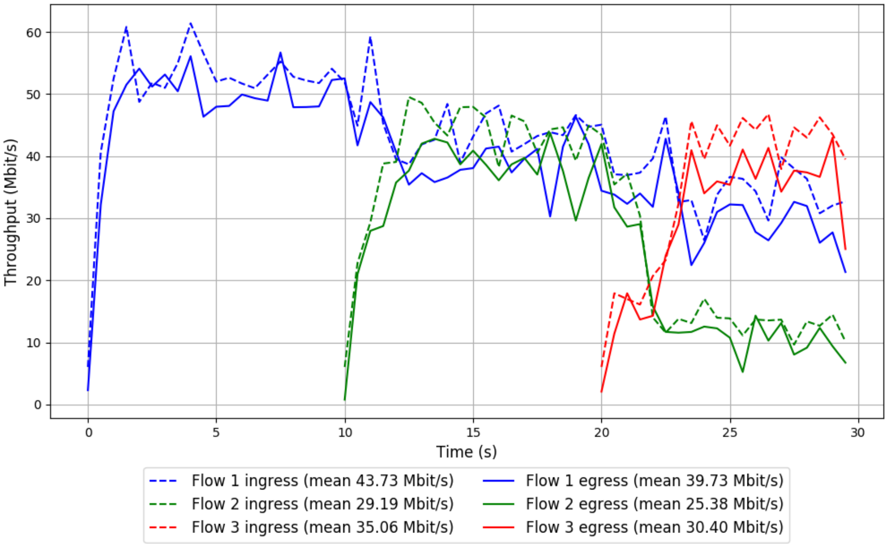


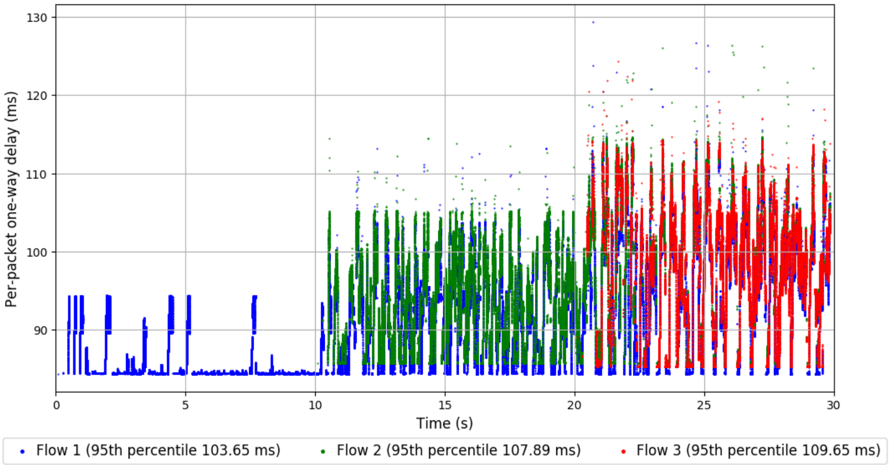
```
Run 5: Statistics of TaoVA-100x

Start at: 2018-02-28 01:54:08
End at: 2018-02-28 01:54:38
Local clock offset: -4.08 ms
Remote clock offset: -5.634 ms

# Below is generated by plot.py at 2018-02-28 08:07:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.50 Mbit/s
95th percentile per-packet one-way delay: 106.468 ms
Loss rate: 11.71%
-- Flow 1:
Average throughput: 39.73 Mbit/s
95th percentile per-packet one-way delay: 103.647 ms
Loss rate: 9.78%
-- Flow 2:
Average throughput: 25.38 Mbit/s
95th percentile per-packet one-way delay: 107.894 ms
Loss rate: 13.96%
-- Flow 3:
Average throughput: 30.40 Mbit/s
95th percentile per-packet one-way delay: 109.647 ms
Loss rate: 15.17%
```

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



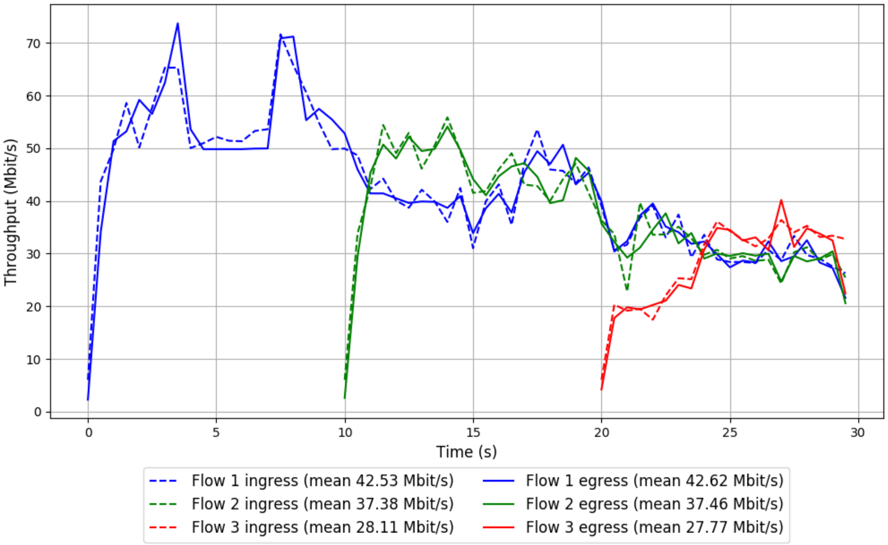


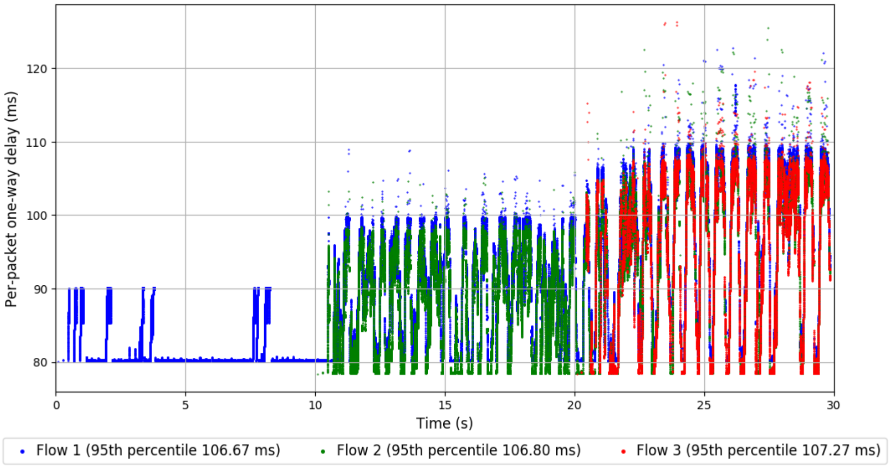
```
Run 6: Statistics of TaoVA-100x

Start at: 2018-02-28 02:18:21
End at: 2018-02-28 02:18:51
Local clock offset: -3.492 ms
Remote clock offset: 0.035 ms

# Below is generated by plot.py at 2018-02-28 08:07:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.58 Mbit/s
95th percentile per-packet one-way delay: 107.078 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 42.62 Mbit/s
95th percentile per-packet one-way delay: 106.666 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 37.46 Mbit/s
95th percentile per-packet one-way delay: 106.801 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 27.77 Mbit/s
95th percentile per-packet one-way delay: 107.274 ms
Loss rate: 3.19%
```

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



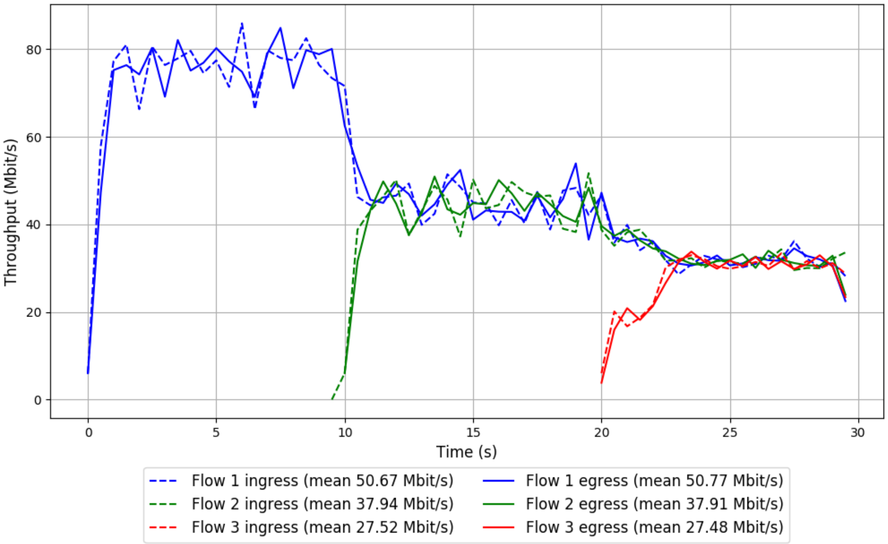


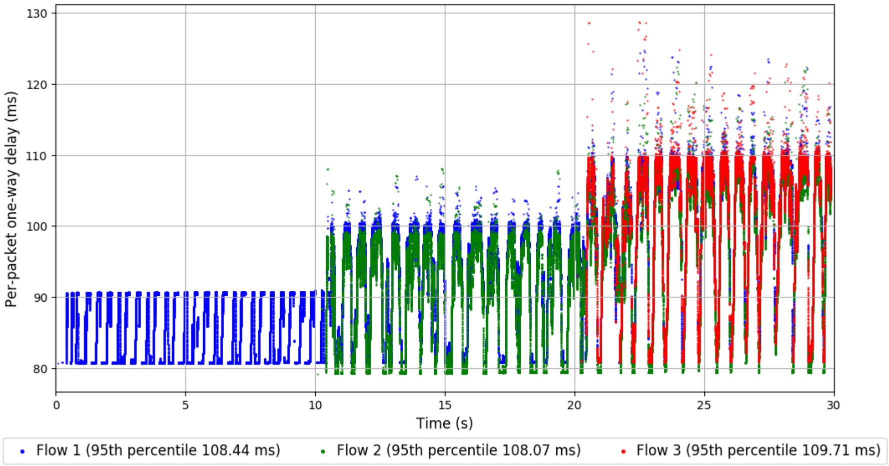
```
Run 7: Statistics of TaoVA-100x

Start at: 2018-02-28 02:42:08
End at: 2018-02-28 02:42:38
Local clock offset: -27.774 ms
Remote clock offset: 0.473 ms

# Below is generated by plot.py at 2018-02-28 08:07:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.97 Mbit/s
95th percentile per-packet one-way delay: 109.012 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 50.77 Mbit/s
95th percentile per-packet one-way delay: 108.437 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 37.91 Mbit/s
95th percentile per-packet one-way delay: 108.072 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 27.48 Mbit/s
95th percentile per-packet one-way delay: 109.713 ms
Loss rate: 1.95%
```

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



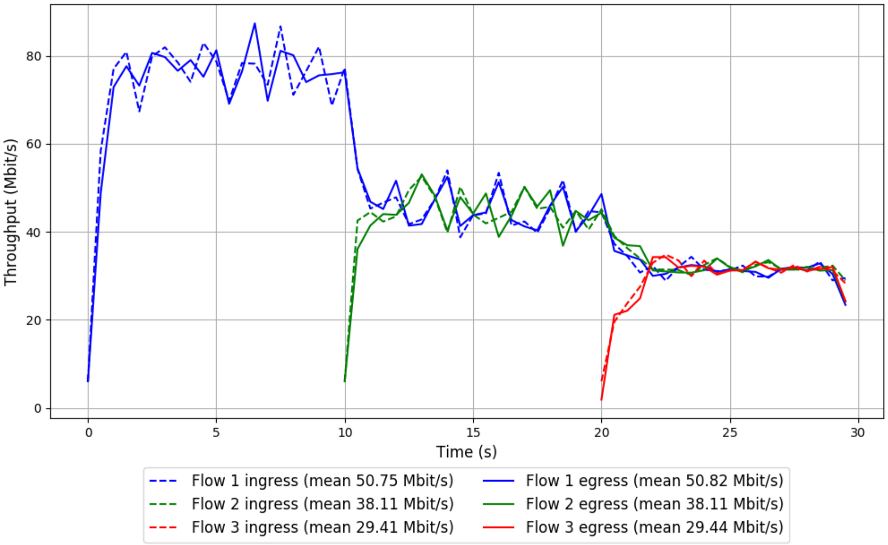


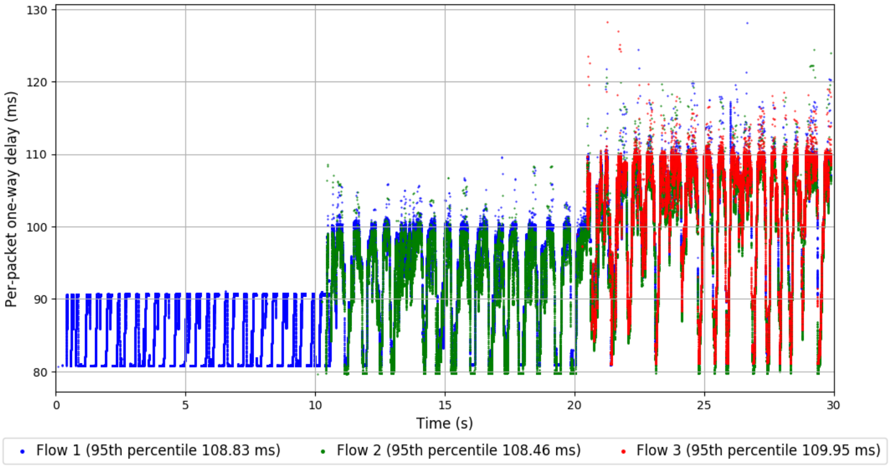
```
Run 8: Statistics of TaoVA-100x

Start at: 2018-02-28 03:05:40
End at: 2018-02-28 03:06:10
Local clock offset: -36.13 ms
Remote clock offset: -1.212 ms

# Below is generated by plot.py at 2018-02-28 08:08:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.78 Mbit/s
95th percentile per-packet one-way delay: 109.303 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 50.82 Mbit/s
95th percentile per-packet one-way delay: 108.835 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 38.11 Mbit/s
95th percentile per-packet one-way delay: 108.456 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 29.44 Mbit/s
95th percentile per-packet one-way delay: 109.950 ms
Loss rate: 1.79%
```

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



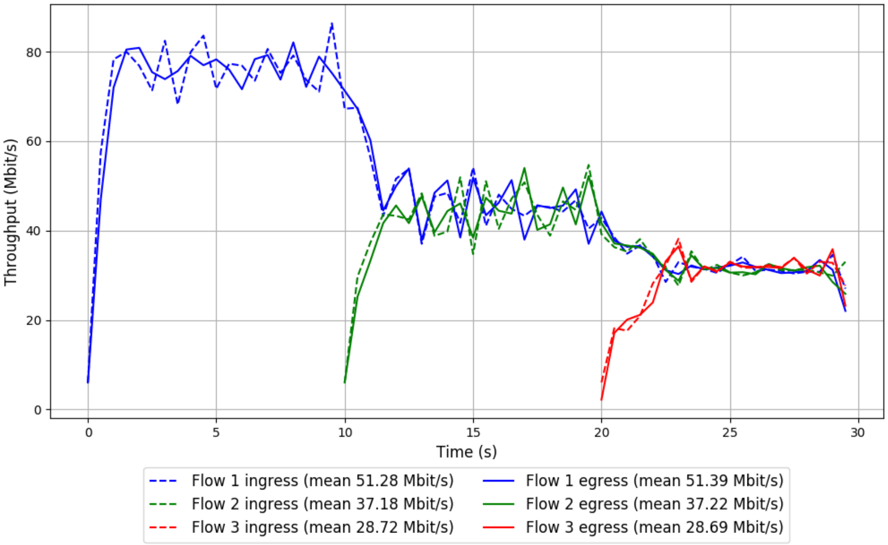


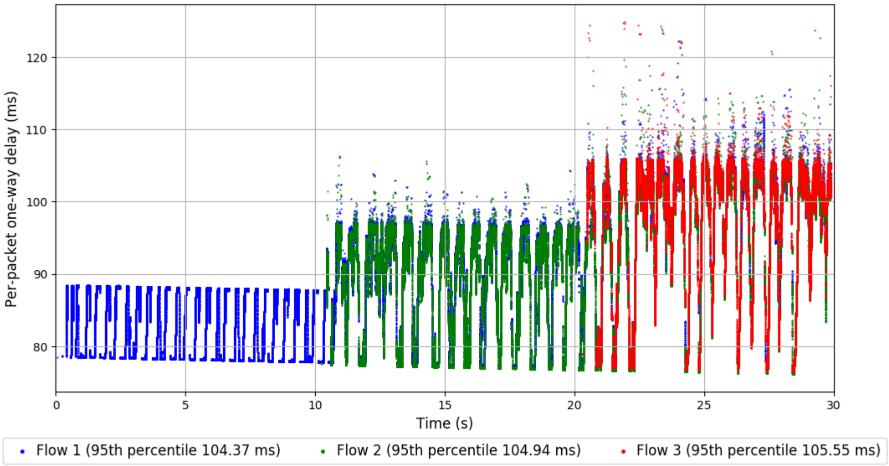
```
Run 9: Statistics of TaoVA-100x

Start at: 2018-02-28 03:29:34
End at: 2018-02-28 03:30:04
Local clock offset: -42.827 ms
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2018-02-28 08:09:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.48 Mbit/s
95th percentile per-packet one-way delay: 105.095 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 51.39 Mbit/s
95th percentile per-packet one-way delay: 104.368 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 37.22 Mbit/s
95th percentile per-packet one-way delay: 104.937 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 28.69 Mbit/s
95th percentile per-packet one-way delay: 105.551 ms
Loss rate: 1.85%
```

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



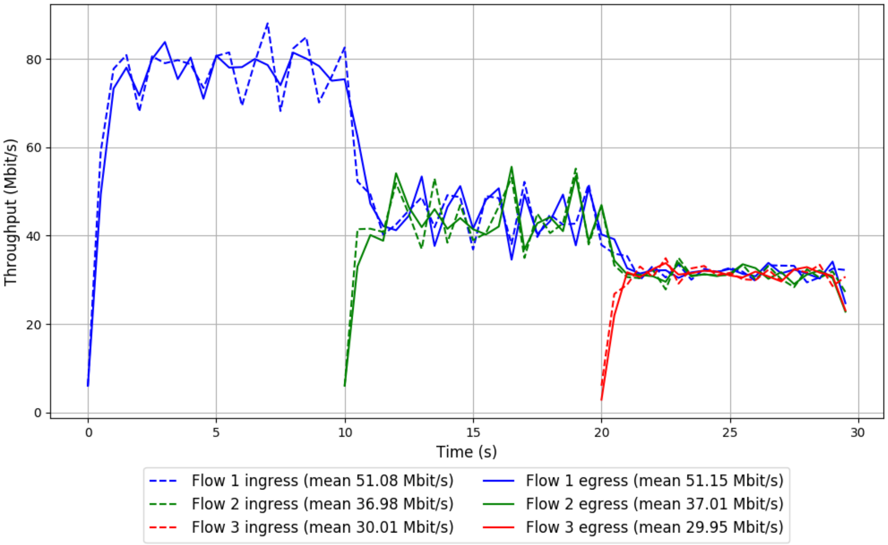


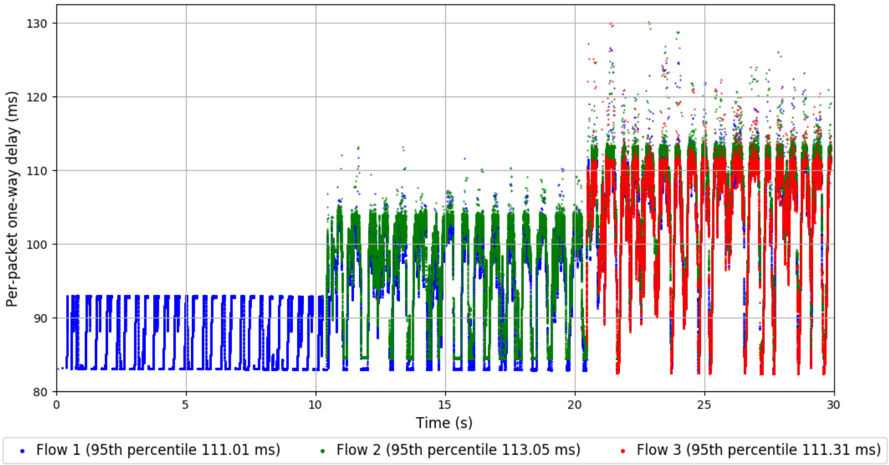
```
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-28 03:53:05
End at: 2018-02-28 03:53:35
Local clock offset: -0.682 ms
Remote clock offset: -4.998 ms

# Below is generated by plot.py at 2018-02-28 08:09:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.54 Mbit/s
95th percentile per-packet one-way delay: 111.617 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 51.15 Mbit/s
95th percentile per-packet one-way delay: 111.006 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 37.01 Mbit/s
95th percentile per-packet one-way delay: 113.052 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 29.95 Mbit/s
95th percentile per-packet one-way delay: 111.310 ms
Loss rate: 2.02%
```

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



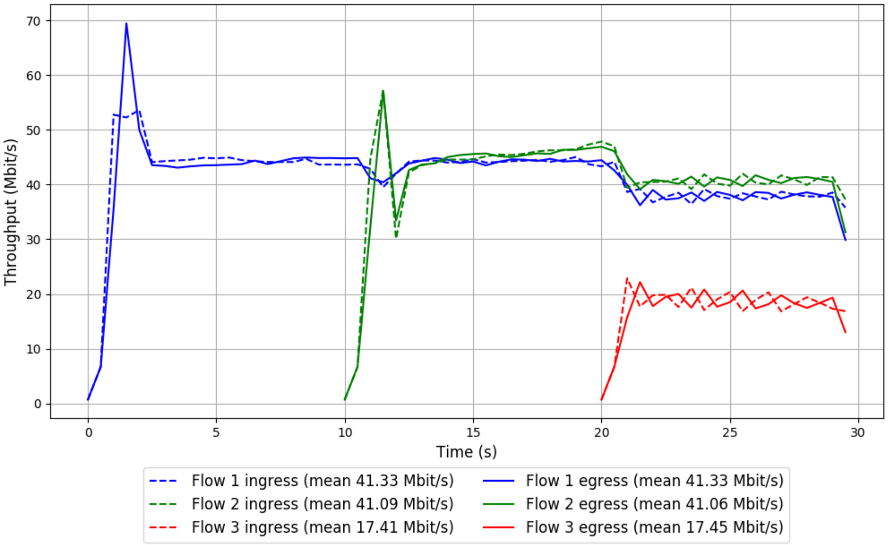


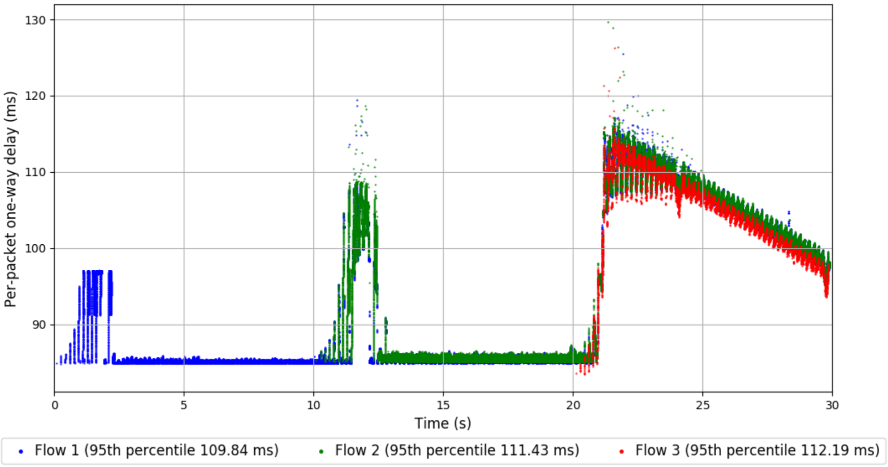
```
Run 1: Statistics of TCP Vegas

Start at: 2018-02-28 00:16:09
End at: 2018-02-28 00:16:39
Local clock offset: -2.907 ms
Remote clock offset: -5.365 ms

# Below is generated by plot.py at 2018-02-28 08:09:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.29 Mbit/s
95th percentile per-packet one-way delay: 111.038 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 41.33 Mbit/s
95th percentile per-packet one-way delay: 109.836 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 41.06 Mbit/s
95th percentile per-packet one-way delay: 111.426 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 17.45 Mbit/s
95th percentile per-packet one-way delay: 112.193 ms
Loss rate: 1.88%
```

Run 1: Report of TCP Vegas — Data Link



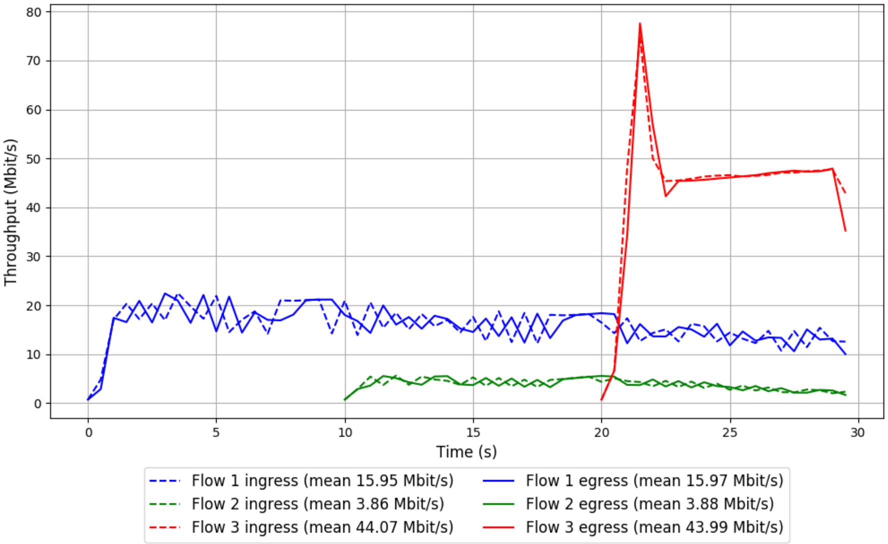


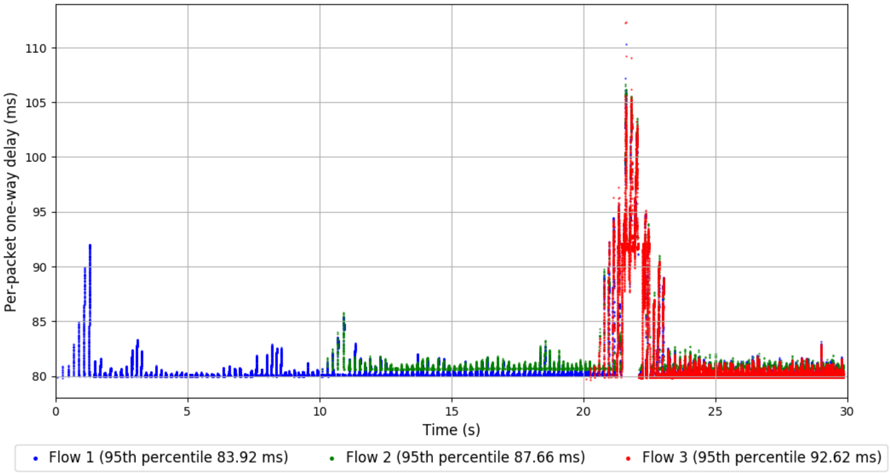
```
Run 2: Statistics of TCP Vegas

Start at: 2018-02-28 00:39:58
End at: 2018-02-28 00:40:28
Local clock offset: -2.352 ms
Remote clock offset: 0.124 ms

# Below is generated by plot.py at 2018-02-28 08:09:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 32.96 Mbit/s
95th percentile per-packet one-way delay: 91.865 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 15.97 Mbit/s
95th percentile per-packet one-way delay: 83.923 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 87.655 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 43.99 Mbit/s
95th percentile per-packet one-way delay: 92.624 ms
Loss rate: 1.86%
```

Run 2: Report of TCP Vegas — Data Link



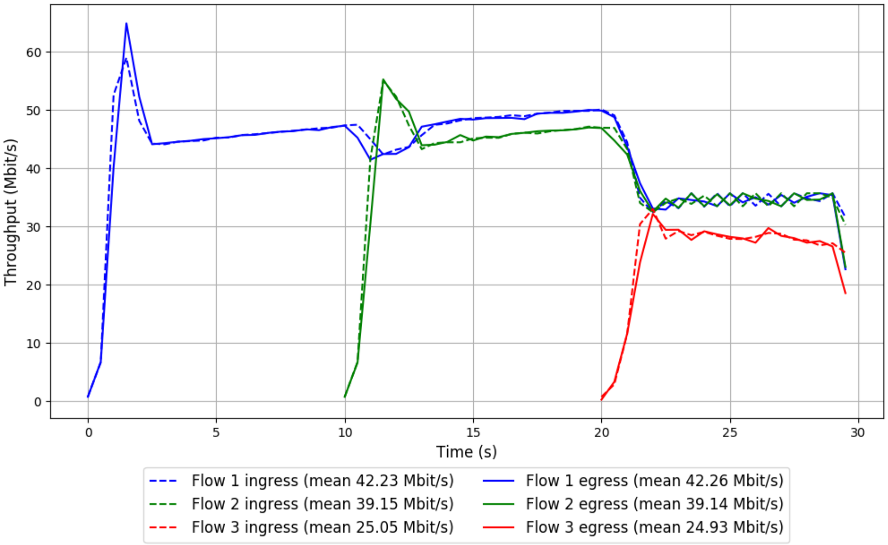


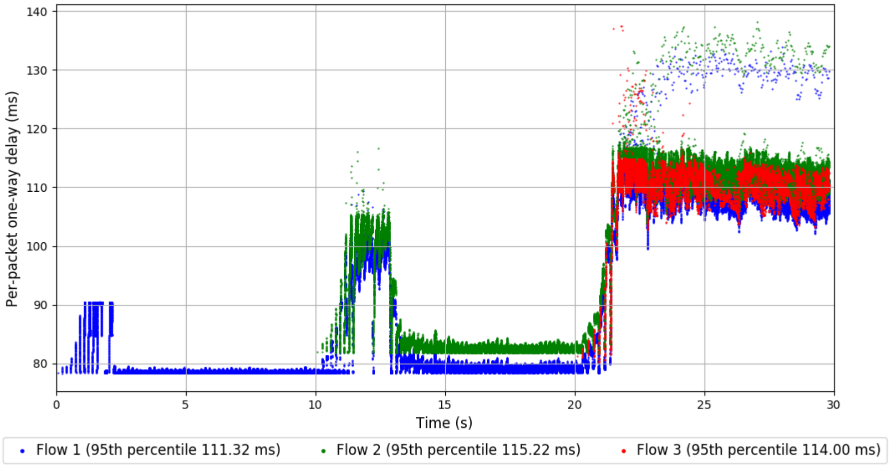
```
Run 3: Statistics of TCP Vegas

Start at: 2018-02-28 01:04:15
End at: 2018-02-28 01:04:45
Local clock offset: -4.256 ms
Remote clock offset: -0.737 ms

# Below is generated by plot.py at 2018-02-28 08:09:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.36 Mbit/s
95th percentile per-packet one-way delay: 113.686 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 42.26 Mbit/s
95th percentile per-packet one-way delay: 111.323 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 39.14 Mbit/s
95th percentile per-packet one-way delay: 115.224 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 24.93 Mbit/s
95th percentile per-packet one-way delay: 114.002 ms
Loss rate: 2.64%
```

Run 3: Report of TCP Vegas — Data Link



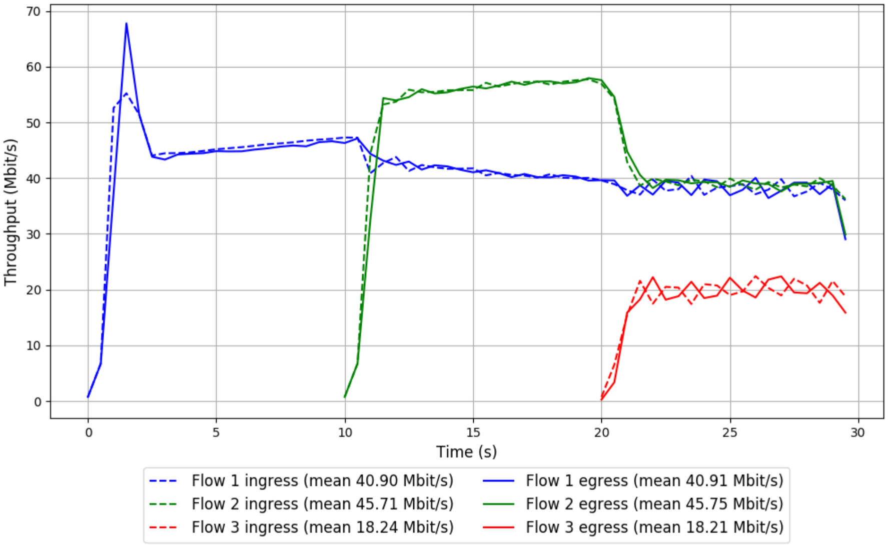


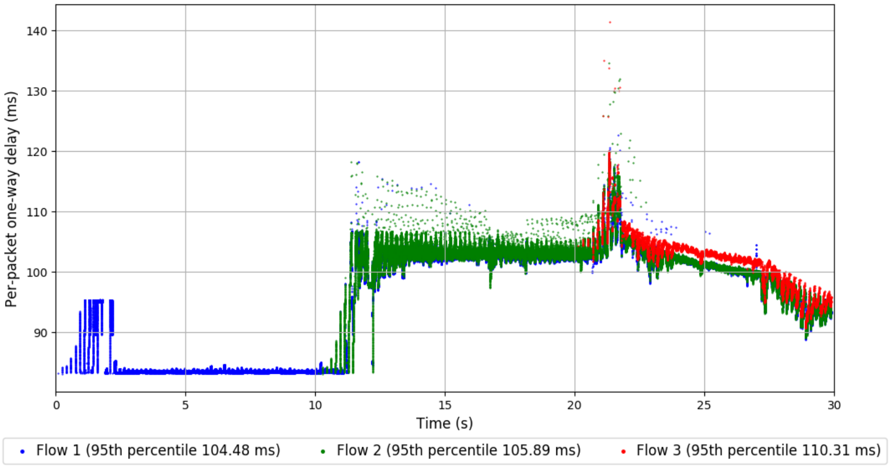
```
Run 4: Statistics of TCP Vegas

Start at: 2018-02-28 01:28:33
End at: 2018-02-28 01:29:03
Local clock offset: -4.467 ms
Remote clock offset: -5.279 ms

# Below is generated by plot.py at 2018-02-28 08:09:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.21 Mbit/s
95th percentile per-packet one-way delay: 105.540 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 40.91 Mbit/s
95th percentile per-packet one-way delay: 104.482 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 45.75 Mbit/s
95th percentile per-packet one-way delay: 105.895 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 18.21 Mbit/s
95th percentile per-packet one-way delay: 110.315 ms
Loss rate: 2.03%
```

Run 4: Report of TCP Vegas — Data Link



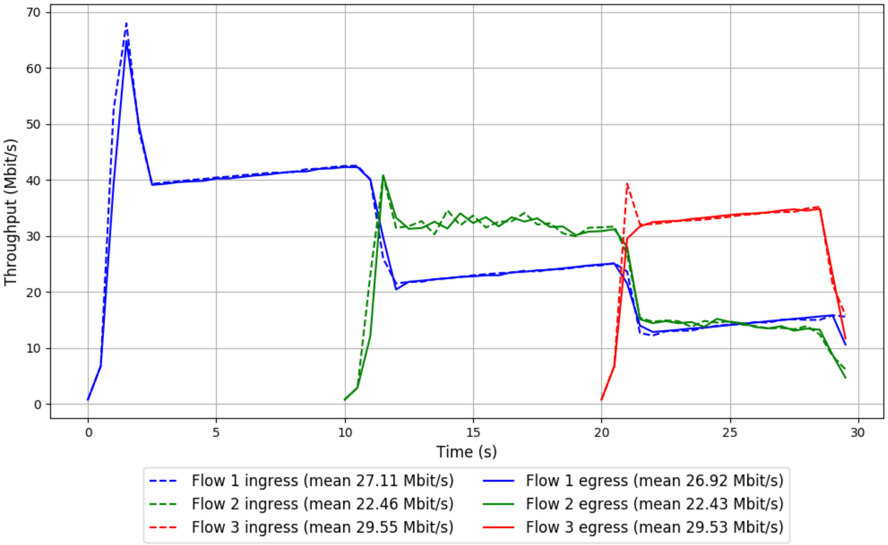


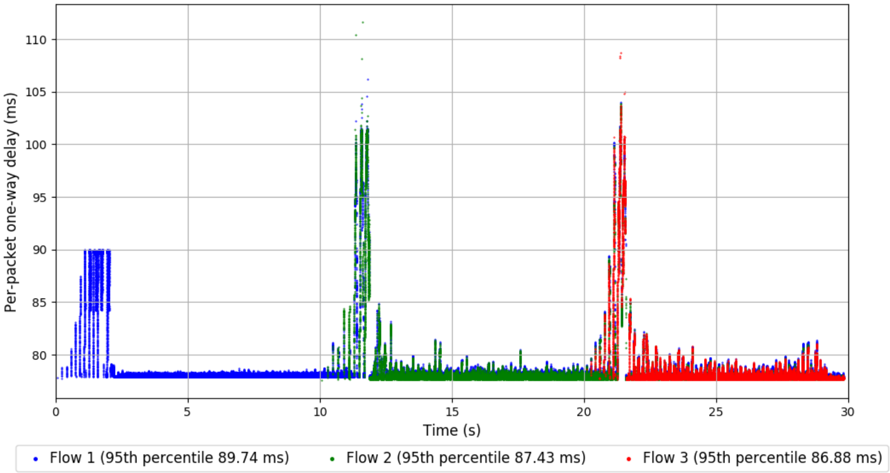
```
Run 5: Statistics of TCP Vegas

Start at: 2018-02-28 01:52:49
End at: 2018-02-28 01:53:19
Local clock offset: -4.1 ms
Remote clock offset: 0.94 ms

# Below is generated by plot.py at 2018-02-28 08:09:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 51.47 Mbit/s
95th percentile per-packet one-way delay: 89.458 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 26.92 Mbit/s
95th percentile per-packet one-way delay: 89.739 ms
Loss rate: 1.25%
-- Flow 2:
Average throughput: 22.43 Mbit/s
95th percentile per-packet one-way delay: 87.432 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 29.53 Mbit/s
95th percentile per-packet one-way delay: 86.880 ms
Loss rate: 1.77%
```

Run 5: Report of TCP Vegas — Data Link



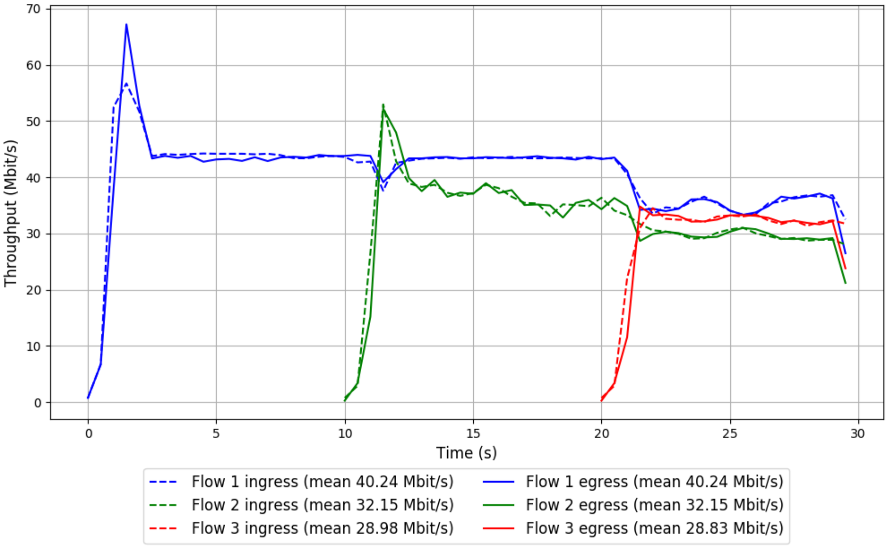


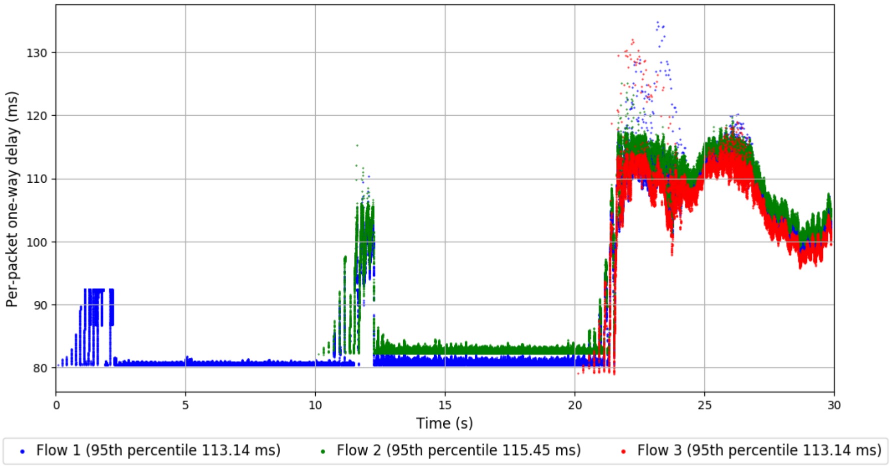
```
Run 6: Statistics of TCP Vegas

Start at: 2018-02-28 02:17:01
End at: 2018-02-28 02:17:31
Local clock offset: -3.599 ms
Remote clock offset: -0.832 ms

# Below is generated by plot.py at 2018-02-28 08:09:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.00 Mbit/s
95th percentile per-packet one-way delay: 114.077 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 40.24 Mbit/s
95th percentile per-packet one-way delay: 113.143 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 32.15 Mbit/s
95th percentile per-packet one-way delay: 115.453 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 28.83 Mbit/s
95th percentile per-packet one-way delay: 113.144 ms
Loss rate: 2.51%
```

Run 6: Report of TCP Vegas — Data Link



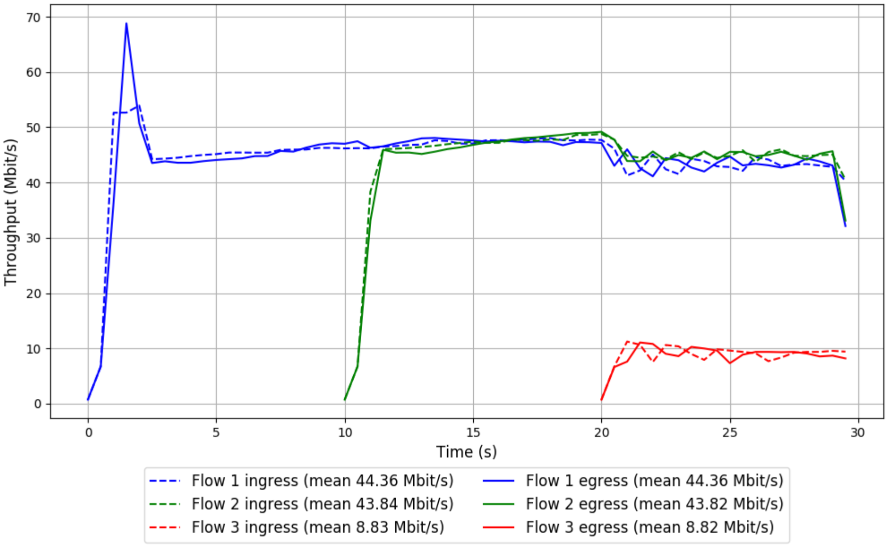


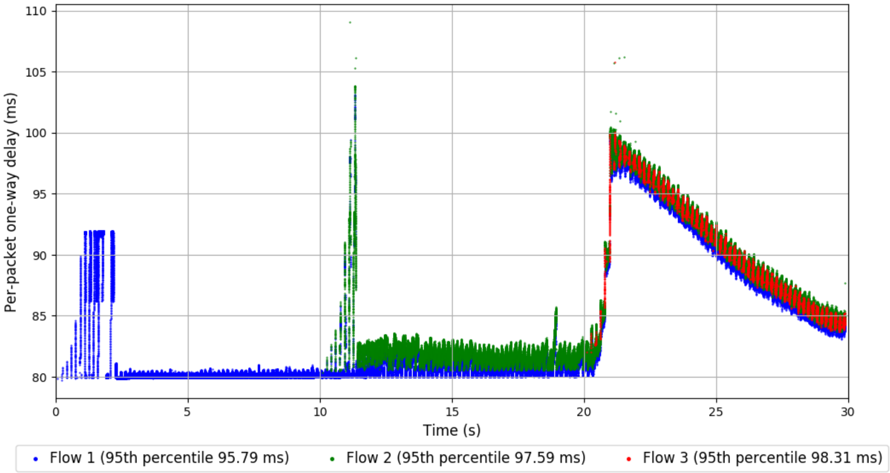
```
Run 7: Statistics of TCP Vegas

Start at: 2018-02-28 02:40:50
End at: 2018-02-28 02:41:20
Local clock offset: -27.154 ms
Remote clock offset: -0.377 ms

# Below is generated by plot.py at 2018-02-28 08:09:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.34 Mbit/s
95th percentile per-packet one-way delay: 96.878 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 44.36 Mbit/s
95th percentile per-packet one-way delay: 95.790 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 43.82 Mbit/s
95th percentile per-packet one-way delay: 97.591 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 8.82 Mbit/s
95th percentile per-packet one-way delay: 98.310 ms
Loss rate: 1.85%
```

Run 7: Report of TCP Vegas — Data Link



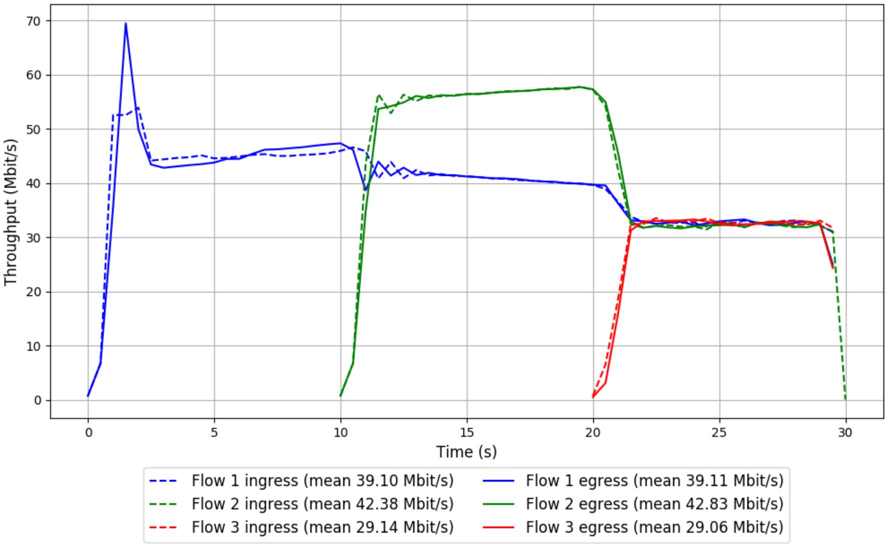


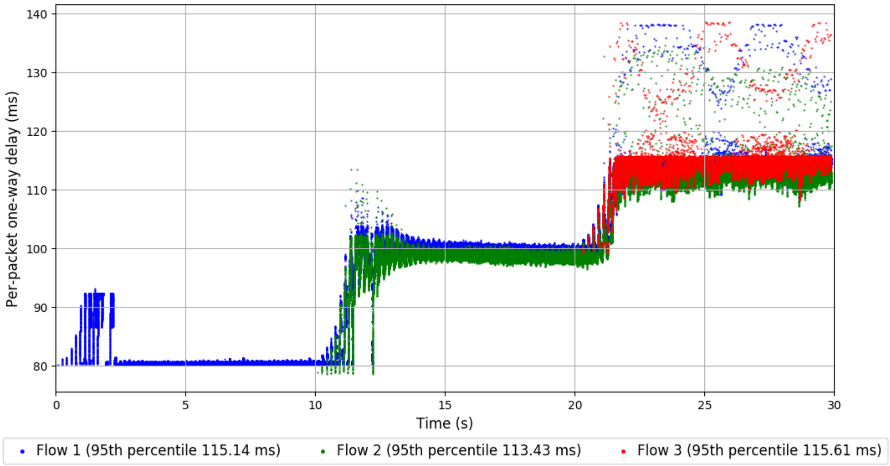
```
Run 8: Statistics of TCP Vegas

Start at: 2018-02-28 03:04:22
End at: 2018-02-28 03:04:52
Local clock offset: -35.775 ms
Remote clock offset: -0.54 ms

# Below is generated by plot.py at 2018-02-28 08:09:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.06 Mbit/s
95th percentile per-packet one-way delay: 115.255 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 39.11 Mbit/s
95th percentile per-packet one-way delay: 115.145 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 42.83 Mbit/s
95th percentile per-packet one-way delay: 113.434 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 29.06 Mbit/s
95th percentile per-packet one-way delay: 115.609 ms
Loss rate: 2.45%
```

Run 8: Report of TCP Vegas — Data Link



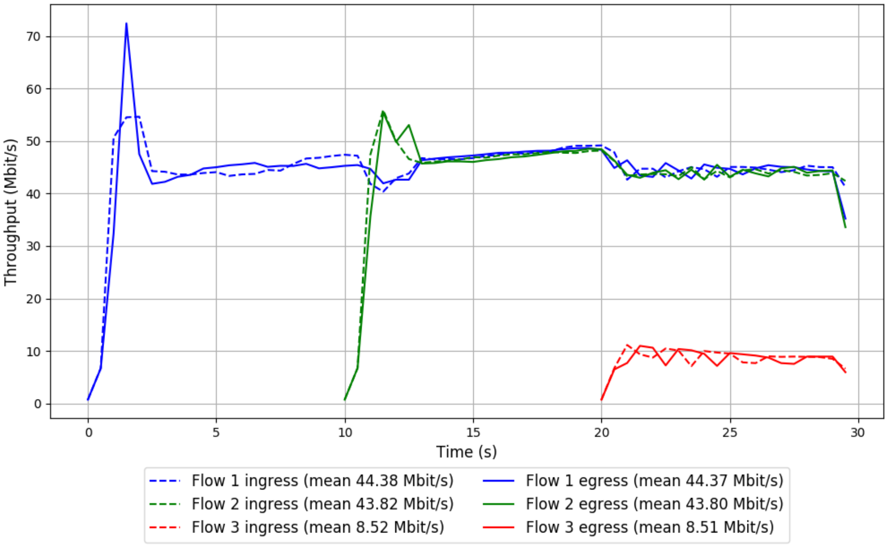


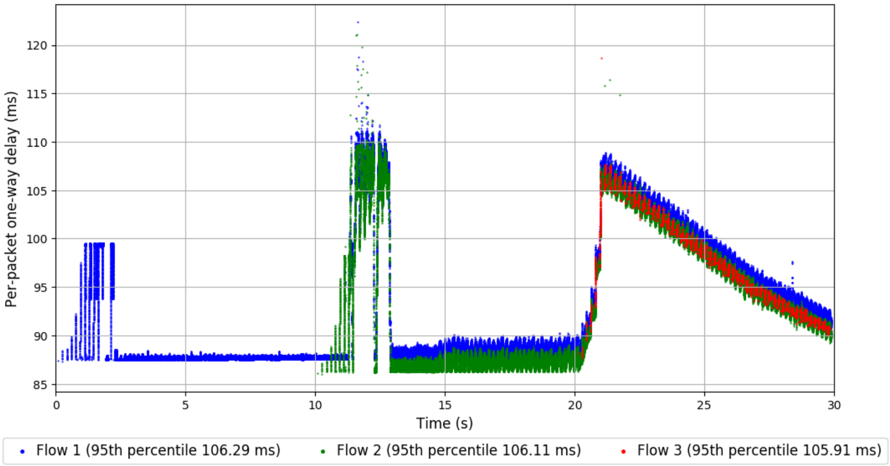
```
Run 9: Statistics of TCP Vegas

Start at: 2018-02-28 03:28:16
End at: 2018-02-28 03:28:46
Local clock offset: -42.716 ms
Remote clock offset: -5.687 ms

# Below is generated by plot.py at 2018-02-28 08:09:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.23 Mbit/s
95th percentile per-packet one-way delay: 106.198 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 44.37 Mbit/s
95th percentile per-packet one-way delay: 106.289 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 43.80 Mbit/s
95th percentile per-packet one-way delay: 106.111 ms
Loss rate: 0.86%
-- Flow 3:
Average throughput: 8.51 Mbit/s
95th percentile per-packet one-way delay: 105.913 ms
Loss rate: 1.79%
```

Run 9: Report of TCP Vegas — Data Link



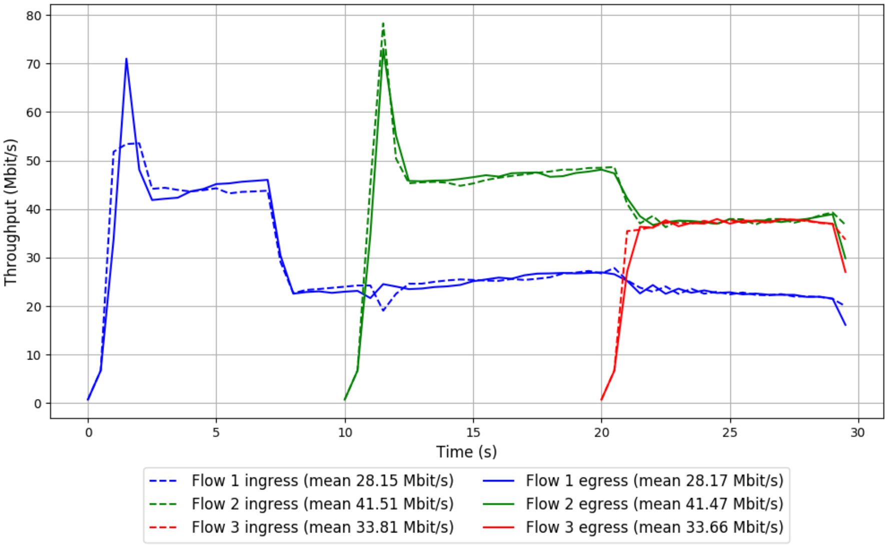


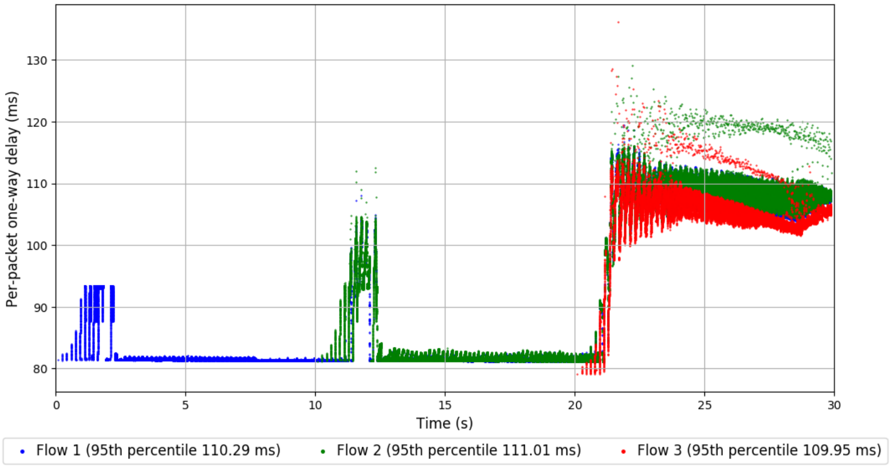
```
Run 10: Statistics of TCP Vegas

Start at: 2018-02-28 03:51:47
End at: 2018-02-28 03:52:17
Local clock offset: -1.437 ms
Remote clock offset: -0.208 ms

# Below is generated by plot.py at 2018-02-28 08:09:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.74 Mbit/s
95th percentile per-packet one-way delay: 110.610 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 28.17 Mbit/s
95th percentile per-packet one-way delay: 110.289 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 41.47 Mbit/s
95th percentile per-packet one-way delay: 111.006 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 33.66 Mbit/s
95th percentile per-packet one-way delay: 109.948 ms
Loss rate: 2.12%
```

Run 10: Report of TCP Vegas — Data Link



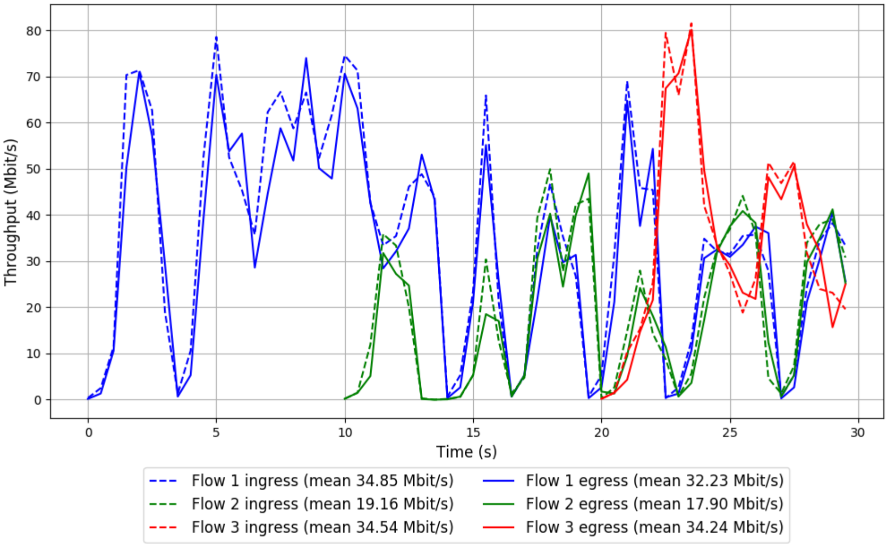


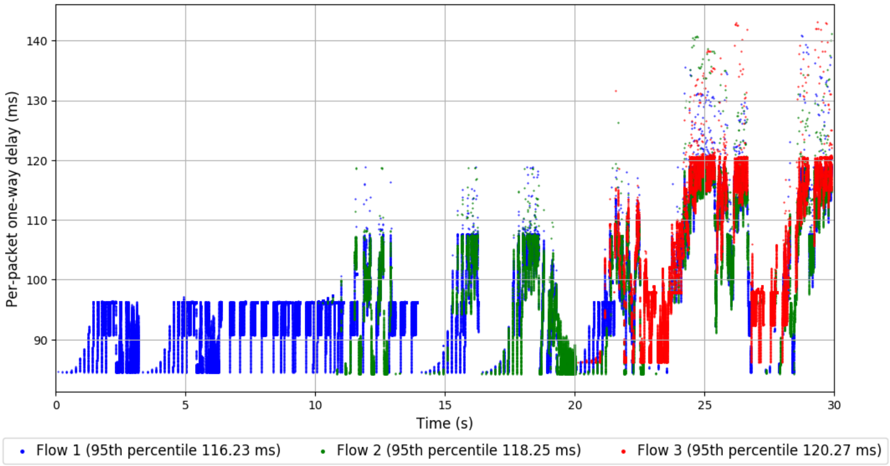
```
Run 1: Statistics of Verus

Start at: 2018-02-28 00:21:30
End at: 2018-02-28 00:22:00
Local clock offset: -2.669 ms
Remote clock offset: -5.923 ms

# Below is generated by plot.py at 2018-02-28 08:09:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.33 Mbit/s
95th percentile per-packet one-way delay: 118.223 ms
Loss rate: 6.48%
-- Flow 1:
Average throughput: 32.23 Mbit/s
95th percentile per-packet one-way delay: 116.234 ms
Loss rate: 8.05%
-- Flow 2:
Average throughput: 17.90 Mbit/s
95th percentile per-packet one-way delay: 118.248 ms
Loss rate: 7.16%
-- Flow 3:
Average throughput: 34.24 Mbit/s
95th percentile per-packet one-way delay: 120.274 ms
Loss rate: 0.85%
```

Run 1: Report of Verus — Data Link



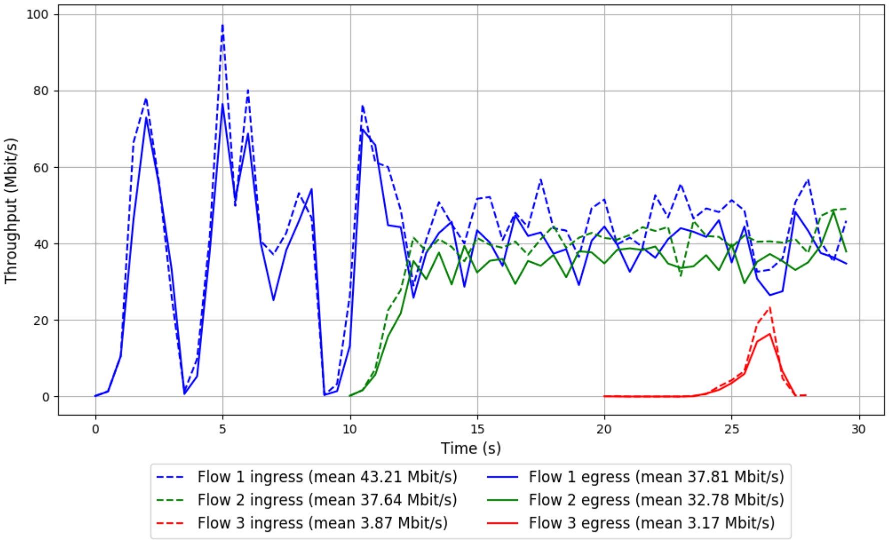


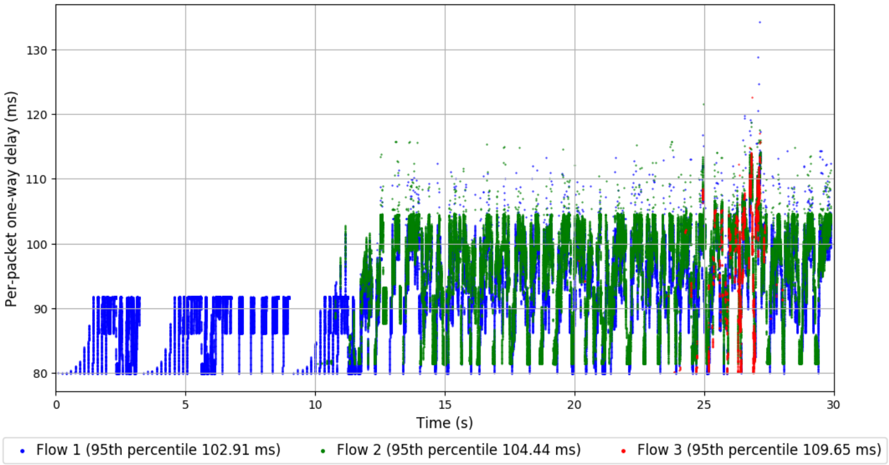
```
Run 2: Statistics of Verus

Start at: 2018-02-28 00:45:23
End at: 2018-02-28 00:45:53
Local clock offset: -3.234 ms
Remote clock offset: 0.231 ms

# Below is generated by plot.py at 2018-02-28 08:10:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.41 Mbit/s
95th percentile per-packet one-way delay: 103.634 ms
Loss rate: 13.44%
-- Flow 1:
Average throughput: 37.81 Mbit/s
95th percentile per-packet one-way delay: 102.914 ms
Loss rate: 13.06%
-- Flow 2:
Average throughput: 32.78 Mbit/s
95th percentile per-packet one-way delay: 104.435 ms
Loss rate: 13.81%
-- Flow 3:
Average throughput: 3.17 Mbit/s
95th percentile per-packet one-way delay: 109.652 ms
Loss rate: 20.27%
```

Run 2: Report of Verus — Data Link



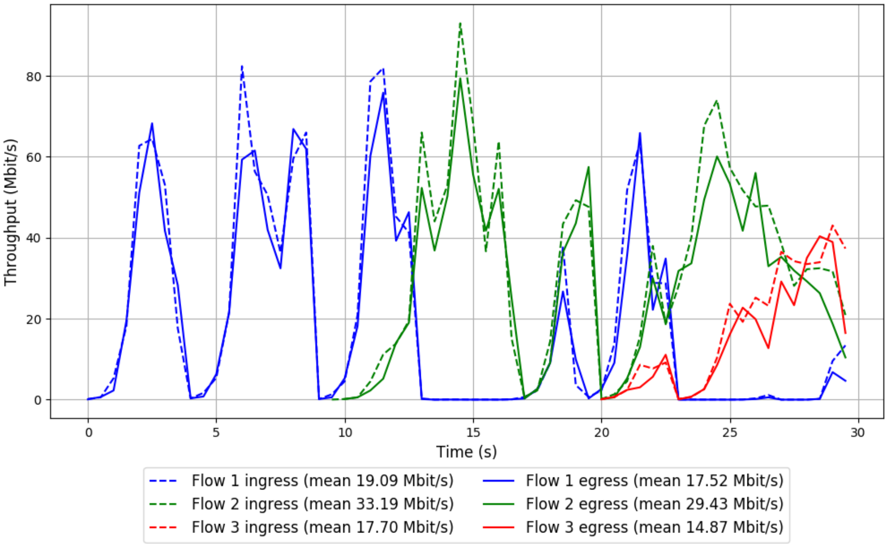


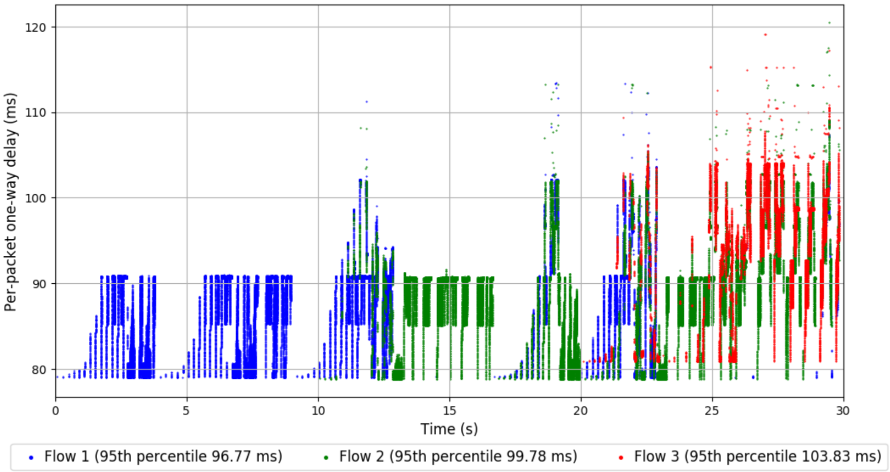
```
Run 3: Statistics of Verus

Start at: 2018-02-28 01:09:44
End at: 2018-02-28 01:10:14
Local clock offset: -4.348 ms
Remote clock offset: 0.056 ms

# Below is generated by plot.py at 2018-02-28 08:10:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.93 Mbit/s
95th percentile per-packet one-way delay: 100.412 ms
Loss rate: 11.55%
-- Flow 1:
Average throughput: 17.52 Mbit/s
95th percentile per-packet one-way delay: 96.771 ms
Loss rate: 8.90%
-- Flow 2:
Average throughput: 29.43 Mbit/s
95th percentile per-packet one-way delay: 99.776 ms
Loss rate: 12.18%
-- Flow 3:
Average throughput: 14.87 Mbit/s
95th percentile per-packet one-way delay: 103.826 ms
Loss rate: 17.77%
```

Run 3: Report of Verus — Data Link



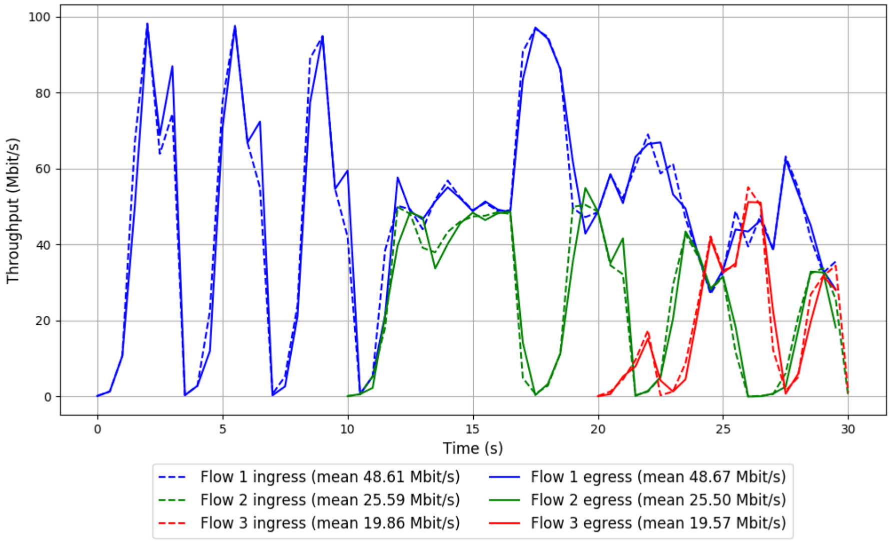


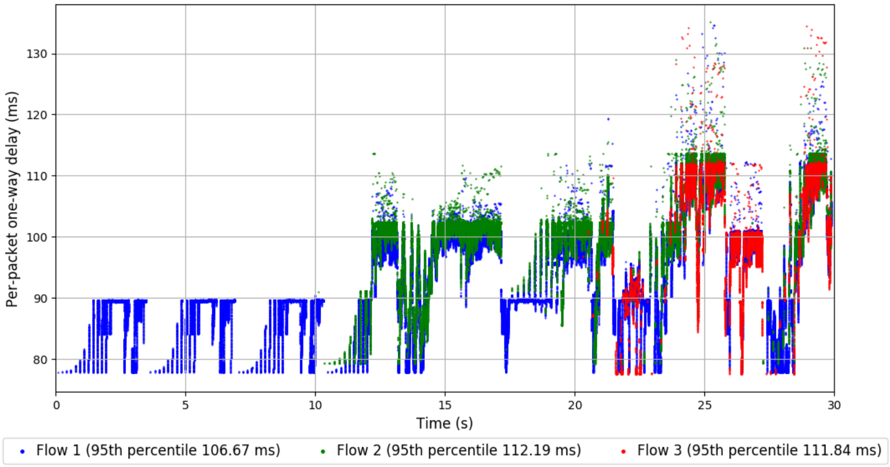
```
Run 4: Statistics of Verus

Start at: 2018-02-28 01:34:00
End at: 2018-02-28 01:34:30
Local clock offset: -4.481 ms
Remote clock offset: 0.653 ms

# Below is generated by plot.py at 2018-02-28 08:10:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.97 Mbit/s
95th percentile per-packet one-way delay: 110.785 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 48.67 Mbit/s
95th percentile per-packet one-way delay: 106.665 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 25.50 Mbit/s
95th percentile per-packet one-way delay: 112.192 ms
Loss rate: 1.48%
-- Flow 3:
Average throughput: 19.57 Mbit/s
95th percentile per-packet one-way delay: 111.843 ms
Loss rate: 3.69%
```

Run 4: Report of Verus — Data Link



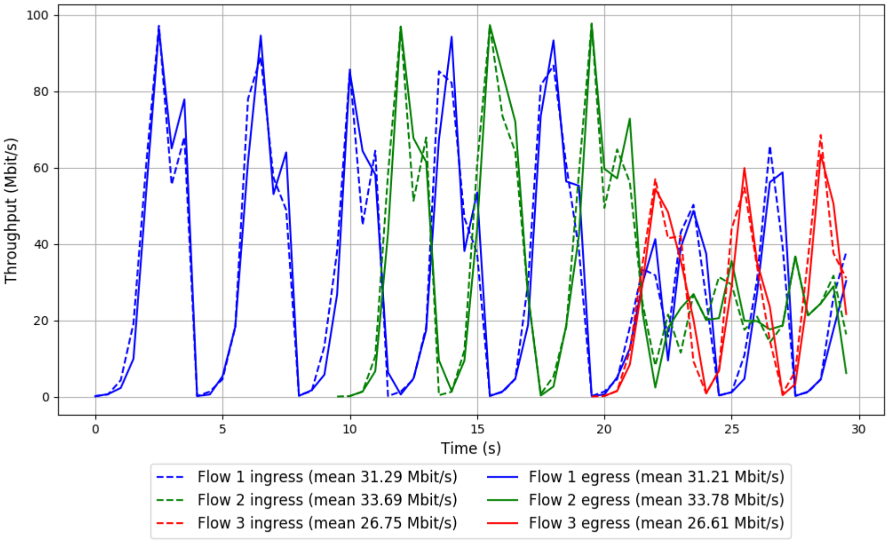


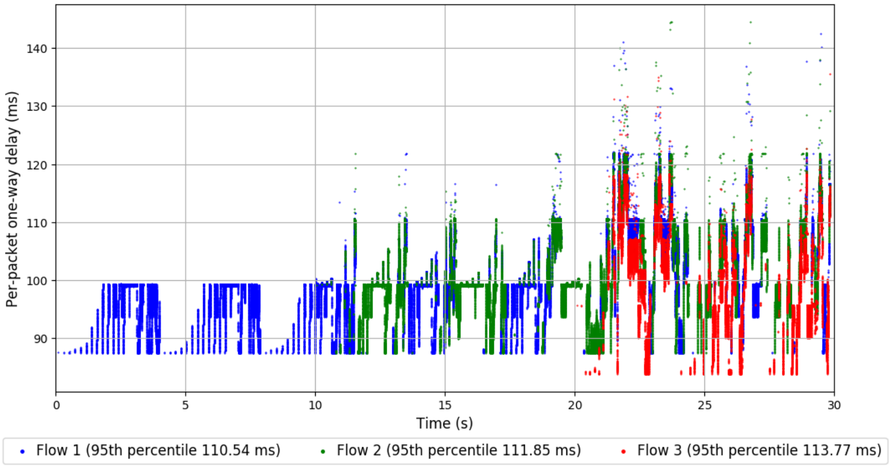
```
Run 5: Statistics of Verus

Start at: 2018-02-28 01:58:13
End at: 2018-02-28 01:58:43
Local clock offset: -3.894 ms
Remote clock offset: -5.644 ms

# Below is generated by plot.py at 2018-02-28 08:10:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.37 Mbit/s
95th percentile per-packet one-way delay: 112.130 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 31.21 Mbit/s
95th percentile per-packet one-way delay: 110.543 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 33.78 Mbit/s
95th percentile per-packet one-way delay: 111.854 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 26.61 Mbit/s
95th percentile per-packet one-way delay: 113.772 ms
Loss rate: 2.82%
```

Run 5: Report of Verus — Data Link



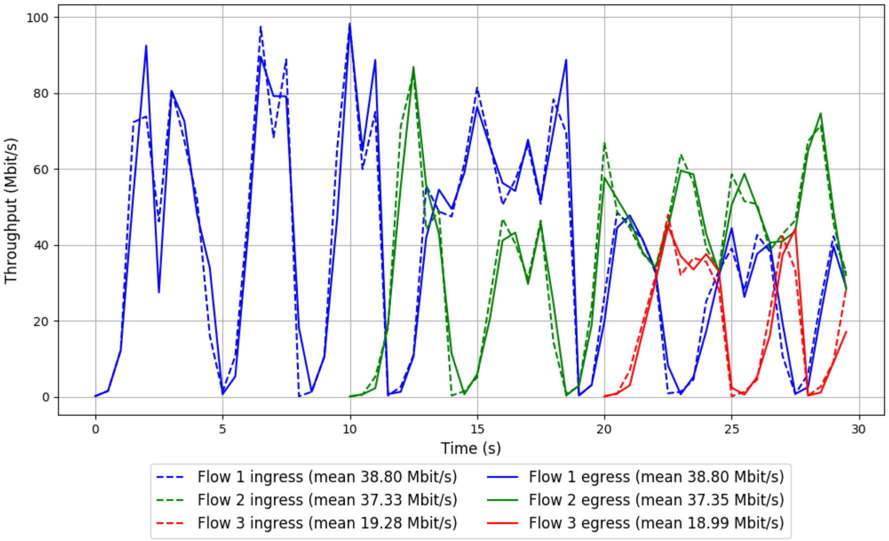


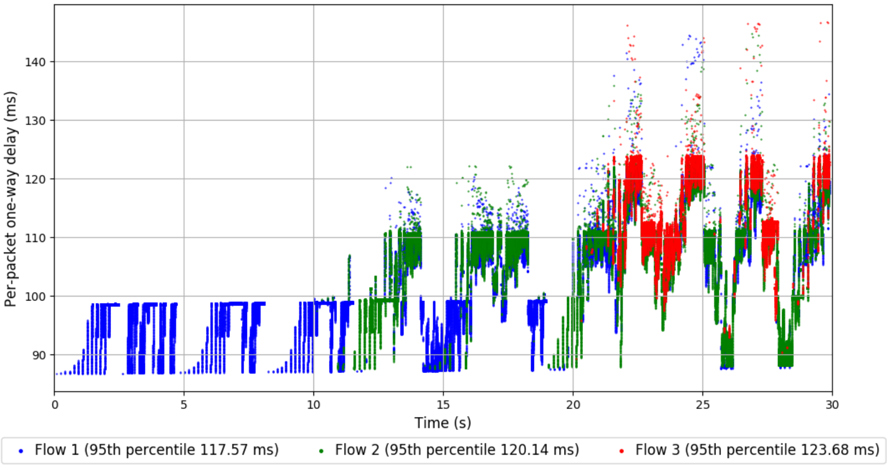
```
Run 6: Statistics of Verus

Start at: 2018-02-28 02:22:25
End at: 2018-02-28 02:22:55
Local clock offset: -5.983 ms
Remote clock offset: -5.641 ms

# Below is generated by plot.py at 2018-02-28 08:10:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.78 Mbit/s
95th percentile per-packet one-way delay: 120.631 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 38.80 Mbit/s
95th percentile per-packet one-way delay: 117.567 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 37.35 Mbit/s
95th percentile per-packet one-way delay: 120.141 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 18.99 Mbit/s
95th percentile per-packet one-way delay: 123.682 ms
Loss rate: 3.45%
```

Run 6: Report of Verus — Data Link



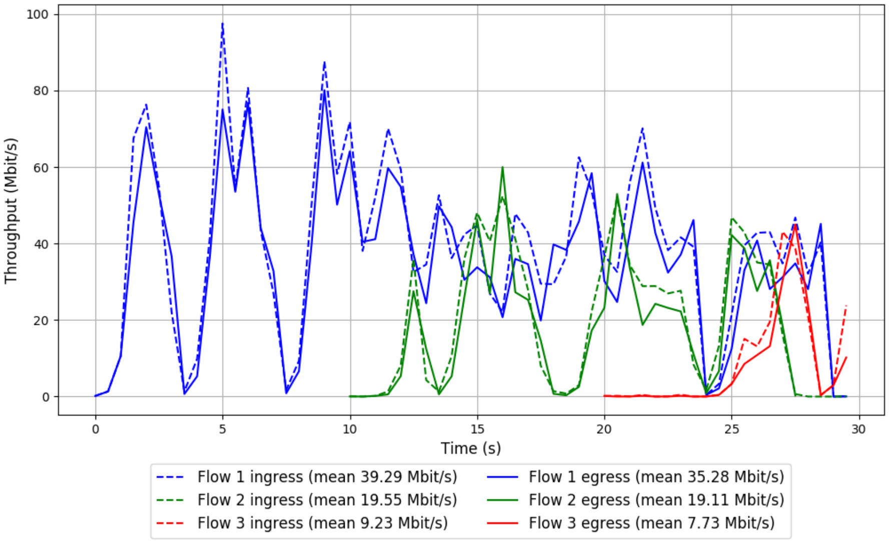


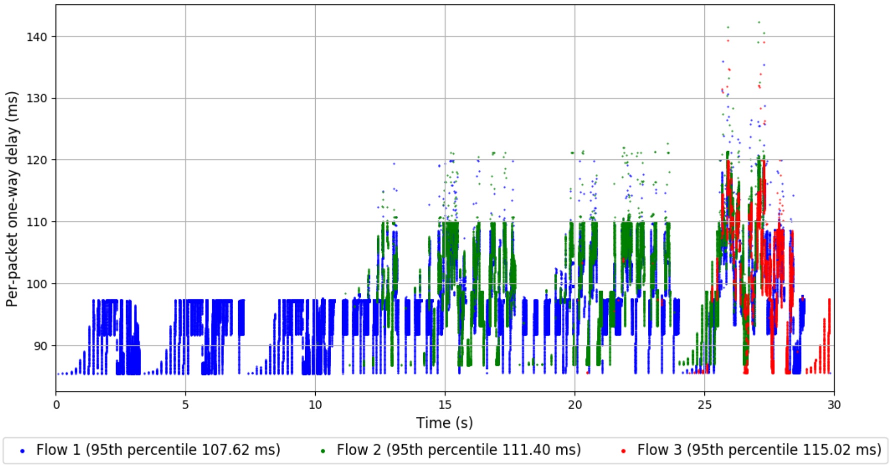
```
Run 7: Statistics of Verus

Start at: 2018-02-28 02:46:12
End at: 2018-02-28 02:46:42
Local clock offset: -29.623 ms
Remote clock offset: -5.24 ms

# Below is generated by plot.py at 2018-02-28 08:10:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.21 Mbit/s
95th percentile per-packet one-way delay: 109.456 ms
Loss rate: 11.59%
-- Flow 1:
Average throughput: 35.28 Mbit/s
95th percentile per-packet one-way delay: 107.618 ms
Loss rate: 10.71%
-- Flow 2:
Average throughput: 19.11 Mbit/s
95th percentile per-packet one-way delay: 111.396 ms
Loss rate: 12.75%
-- Flow 3:
Average throughput: 7.73 Mbit/s
95th percentile per-packet one-way delay: 115.016 ms
Loss rate: 18.03%
```

Run 7: Report of Verus — Data Link



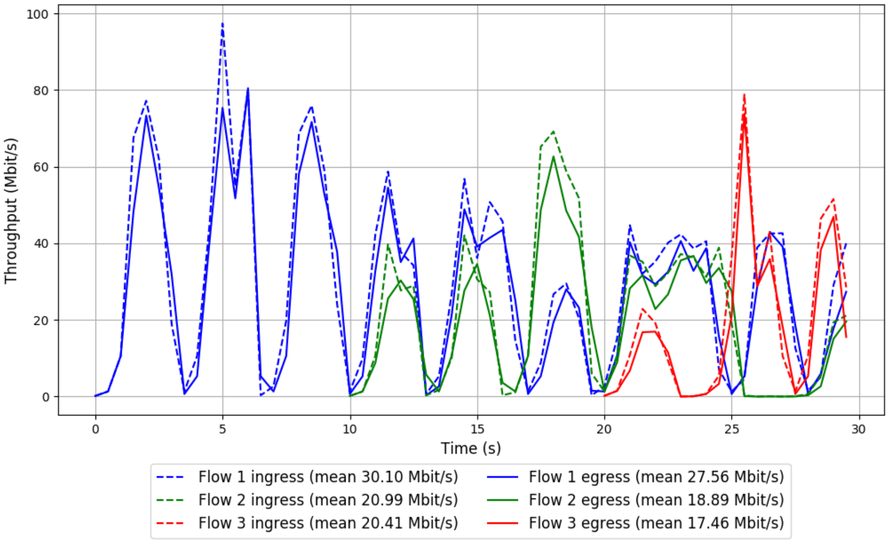


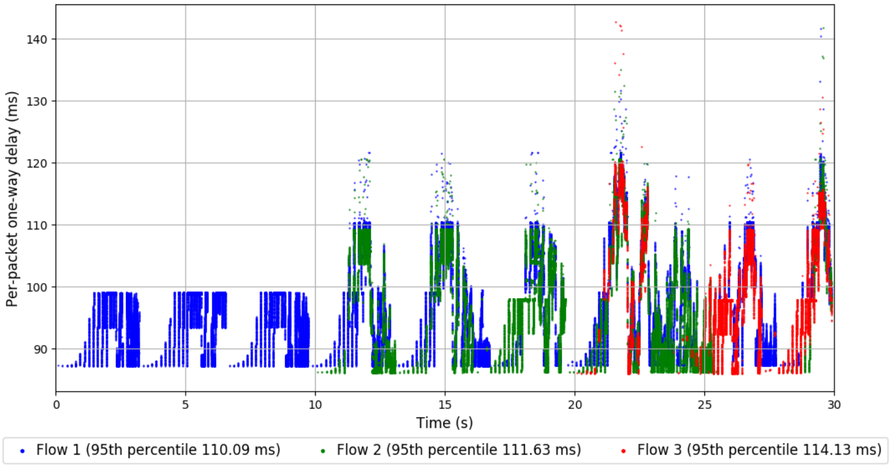
```
Run 8: Statistics of Verus

Start at: 2018-02-28 03:09:43
End at: 2018-02-28 03:10:13
Local clock offset: -37.288 ms
Remote clock offset: -5.879 ms

# Below is generated by plot.py at 2018-02-28 08:10:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 45.85 Mbit/s
95th percentile per-packet one-way delay: 110.271 ms
Loss rate: 10.33%
-- Flow 1:
Average throughput: 27.56 Mbit/s
95th percentile per-packet one-way delay: 110.087 ms
Loss rate: 8.90%
-- Flow 2:
Average throughput: 18.89 Mbit/s
95th percentile per-packet one-way delay: 111.634 ms
Loss rate: 10.76%
-- Flow 3:
Average throughput: 17.46 Mbit/s
95th percentile per-packet one-way delay: 114.129 ms
Loss rate: 15.81%
```

Run 8: Report of Verus — Data Link



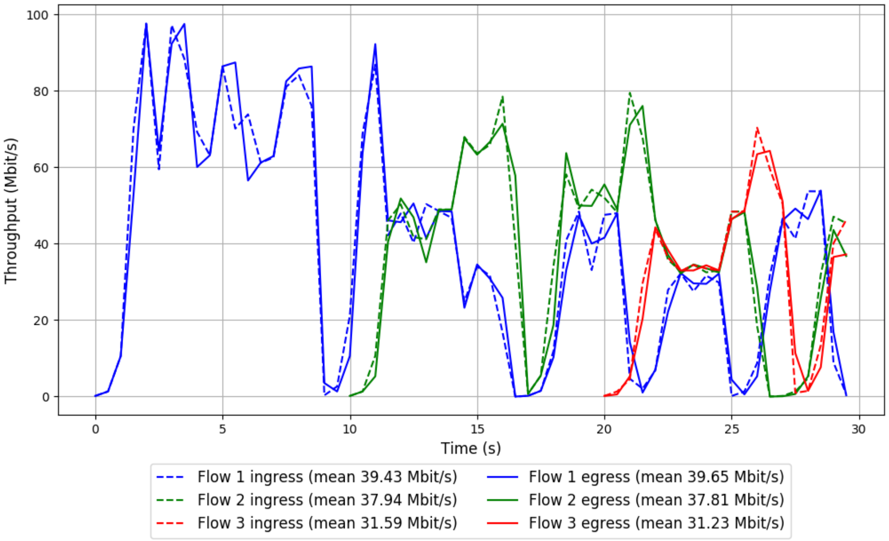


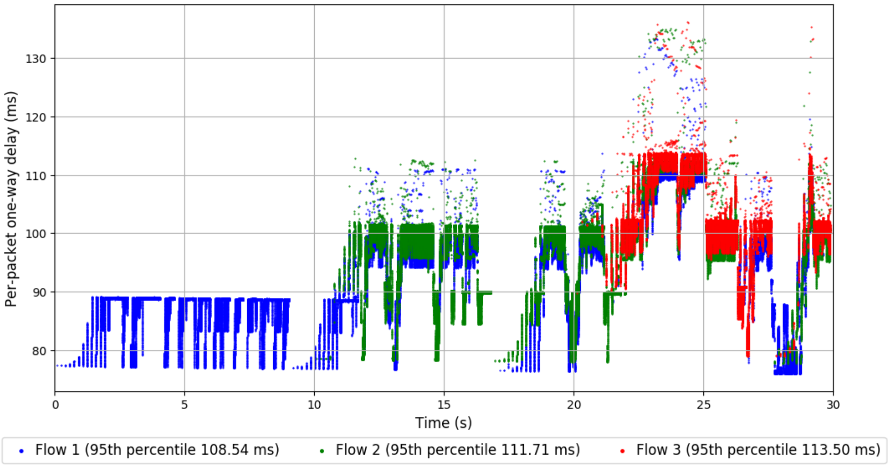
```
Run 9: Statistics of Verus

Start at: 2018-02-28 03:33:38
End at: 2018-02-28 03:34:08
Local clock offset: -27.994 ms
Remote clock offset: 0.026 ms

# Below is generated by plot.py at 2018-02-28 08:11:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.86 Mbit/s
95th percentile per-packet one-way delay: 110.867 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 39.65 Mbit/s
95th percentile per-packet one-way delay: 108.540 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 37.81 Mbit/s
95th percentile per-packet one-way delay: 111.708 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 31.23 Mbit/s
95th percentile per-packet one-way delay: 113.500 ms
Loss rate: 2.92%
```

Run 9: Report of Verus — Data Link



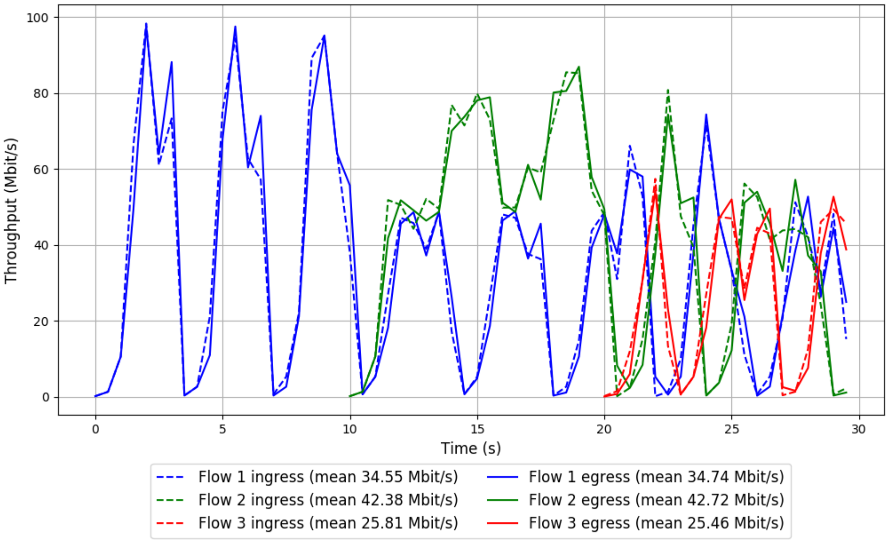


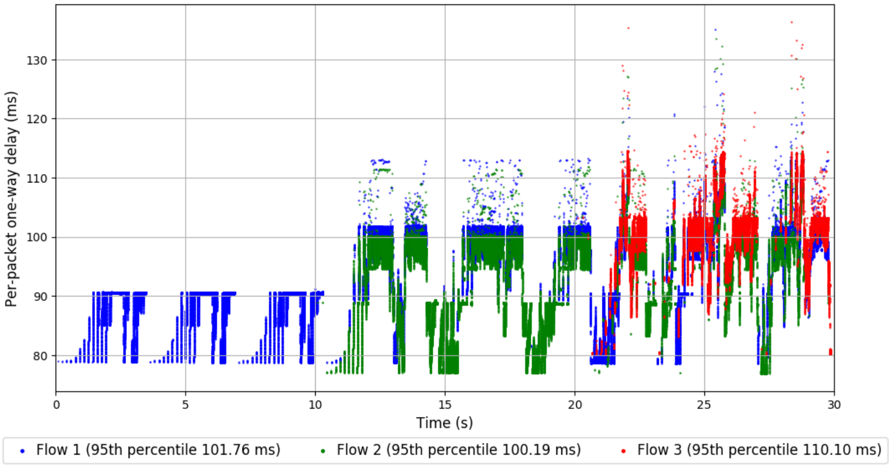
```
Run 10: Statistics of Verus

Start at: 2018-02-28 03:57:06
End at: 2018-02-28 03:57:36
Local clock offset: 1.715 ms
Remote clock offset: 0.649 ms

# Below is generated by plot.py at 2018-02-28 08:11:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.15 Mbit/s
95th percentile per-packet one-way delay: 103.206 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 34.74 Mbit/s
95th percentile per-packet one-way delay: 101.762 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.72 Mbit/s
95th percentile per-packet one-way delay: 100.192 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 25.46 Mbit/s
95th percentile per-packet one-way delay: 110.097 ms
Loss rate: 3.26%
```

Run 10: Report of Verus — Data Link



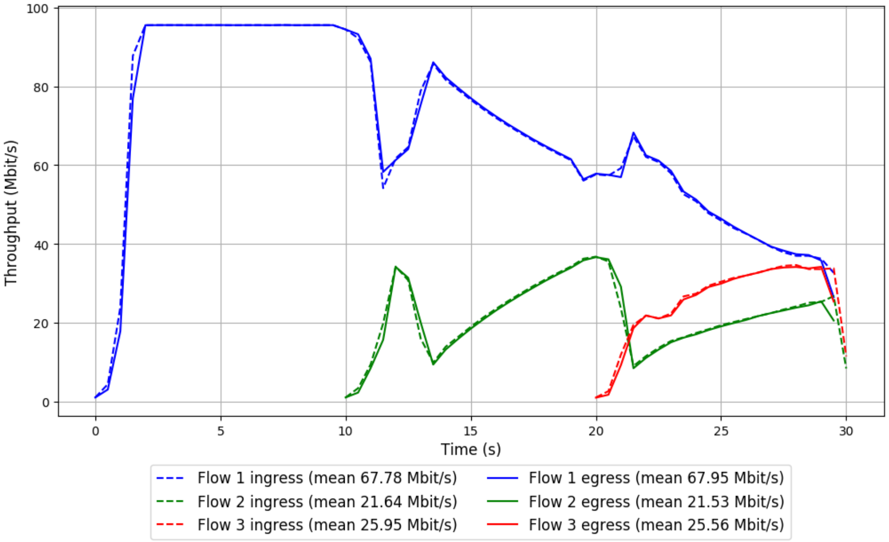


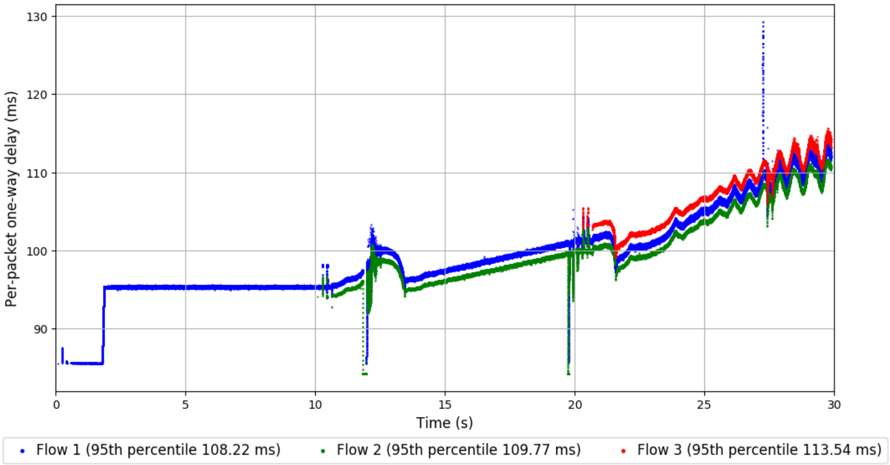
```
Run 1: Statistics of Copa

Start at: 2018-02-28 00:18:49
End at: 2018-02-28 00:19:19
Local clock offset: -2.784 ms
Remote clock offset: -6.007 ms

# Below is generated by plot.py at 2018-02-28 08:12:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.61 Mbit/s
95th percentile per-packet one-way delay: 110.420 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 67.95 Mbit/s
95th percentile per-packet one-way delay: 108.221 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 21.53 Mbit/s
95th percentile per-packet one-way delay: 109.774 ms
Loss rate: 2.33%
-- Flow 3:
Average throughput: 25.56 Mbit/s
95th percentile per-packet one-way delay: 113.538 ms
Loss rate: 5.18%
```

Run 1: Report of Copa — Data Link



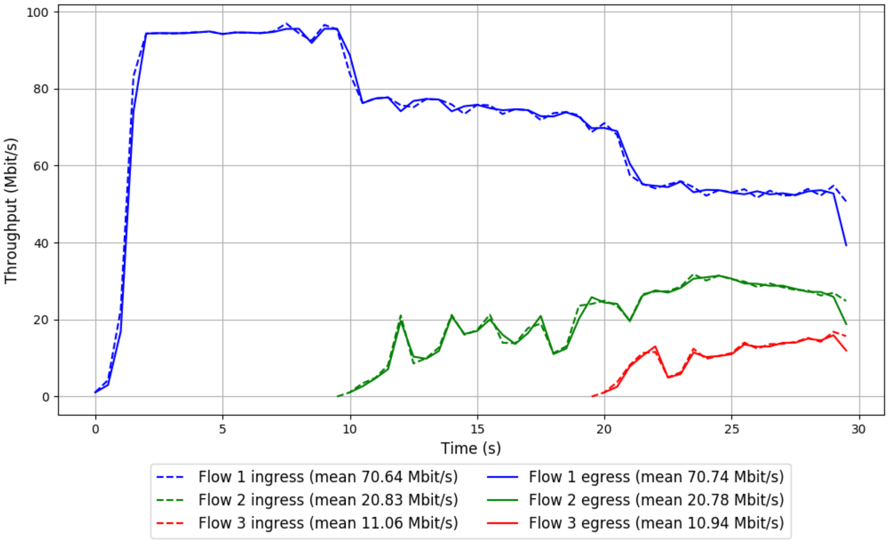


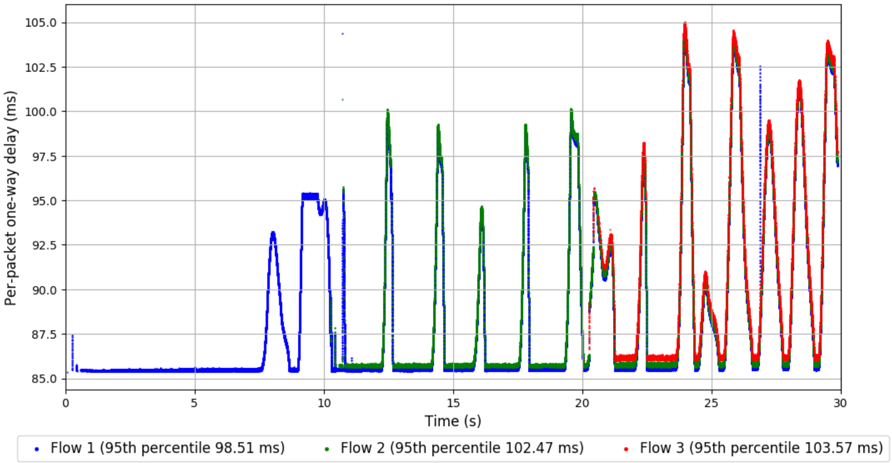
```
Run 2: Statistics of Copa

Start at: 2018-02-28 00:42:38
End at: 2018-02-28 00:43:08
Local clock offset: -2.903 ms
Remote clock offset: -5.536 ms

# Below is generated by plot.py at 2018-02-28 08:12:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.13 Mbit/s
95th percentile per-packet one-way delay: 99.580 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 70.74 Mbit/s
95th percentile per-packet one-way delay: 98.509 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 20.78 Mbit/s
95th percentile per-packet one-way delay: 102.465 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 10.94 Mbit/s
95th percentile per-packet one-way delay: 103.569 ms
Loss rate: 3.23%
```

Run 2: Report of Copa — Data Link



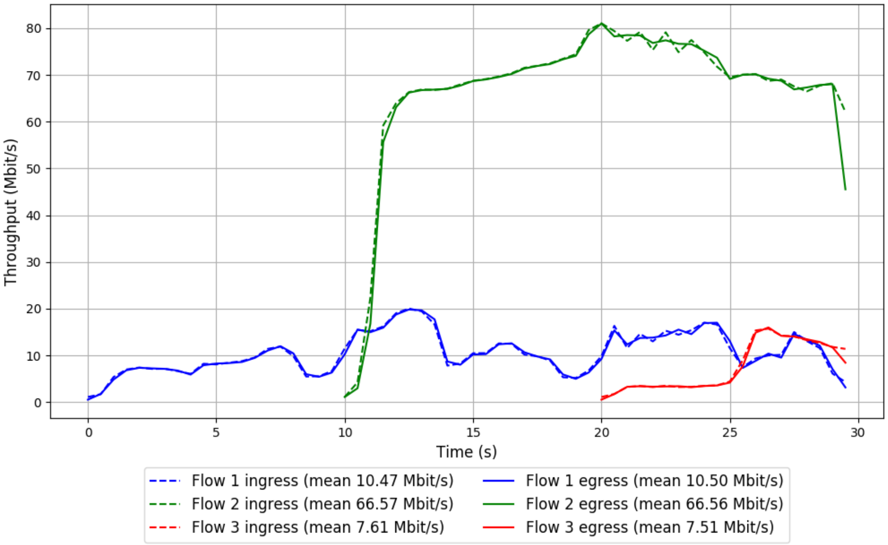


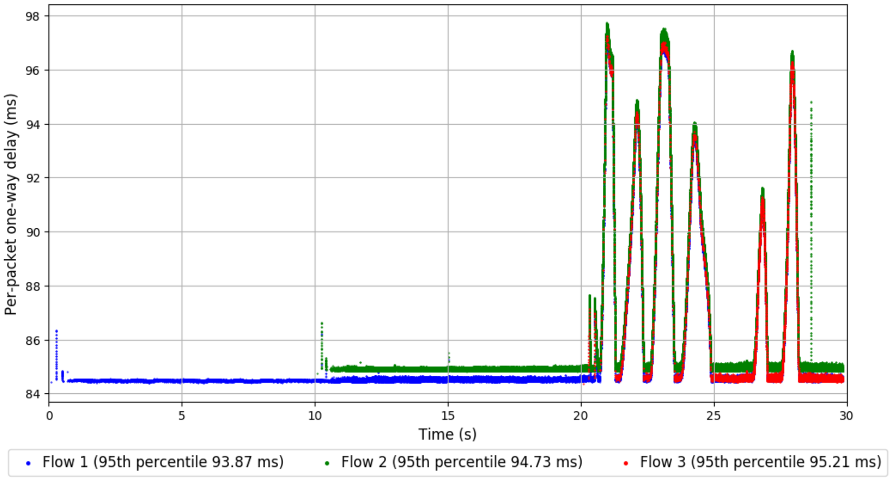
```
Run 3: Statistics of Copa

Start at: 2018-02-28 01:07:01
End at: 2018-02-28 01:07:31
Local clock offset: -4.377 ms
Remote clock offset: -5.608 ms

# Below is generated by plot.py at 2018-02-28 08:12:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.13 Mbit/s
95th percentile per-packet one-way delay: 94.648 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 10.50 Mbit/s
95th percentile per-packet one-way delay: 93.872 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 66.56 Mbit/s
95th percentile per-packet one-way delay: 94.733 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 7.51 Mbit/s
95th percentile per-packet one-way delay: 95.209 ms
Loss rate: 3.37%
```

Run 3: Report of Copa — Data Link



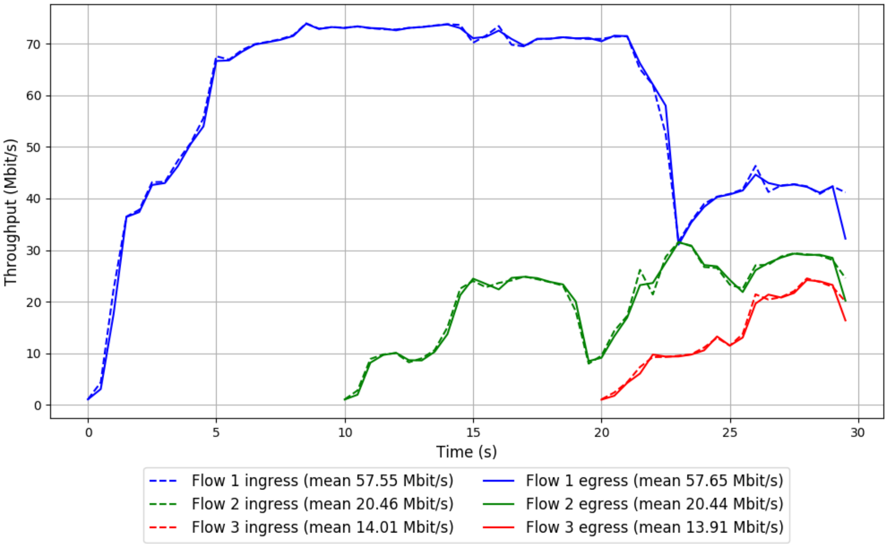


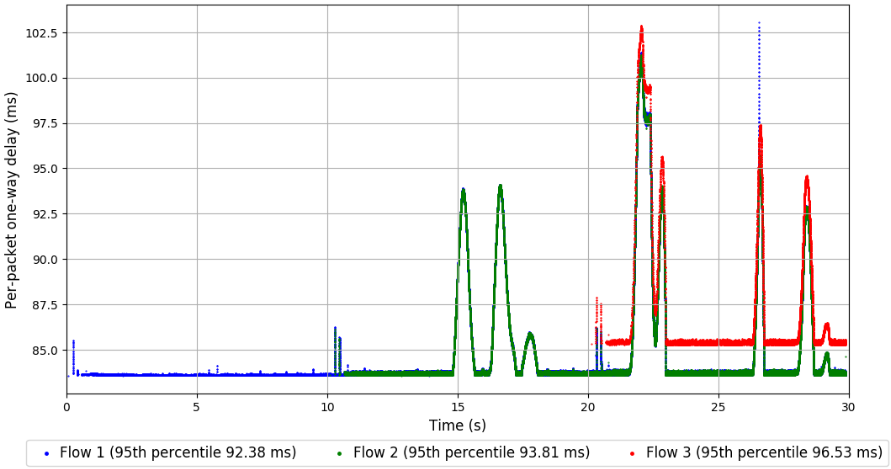
```
Run 4: Statistics of Copa

Start at: 2018-02-28 01:31:17
End at: 2018-02-28 01:31:47
Local clock offset: -4.45 ms
Remote clock offset: -5.121 ms

# Below is generated by plot.py at 2018-02-28 08:12:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.77 Mbit/s
95th percentile per-packet one-way delay: 93.099 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 57.65 Mbit/s
95th percentile per-packet one-way delay: 92.379 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 20.44 Mbit/s
95th percentile per-packet one-way delay: 93.808 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 13.91 Mbit/s
95th percentile per-packet one-way delay: 96.526 ms
Loss rate: 2.67%
```

Run 4: Report of Copa — Data Link



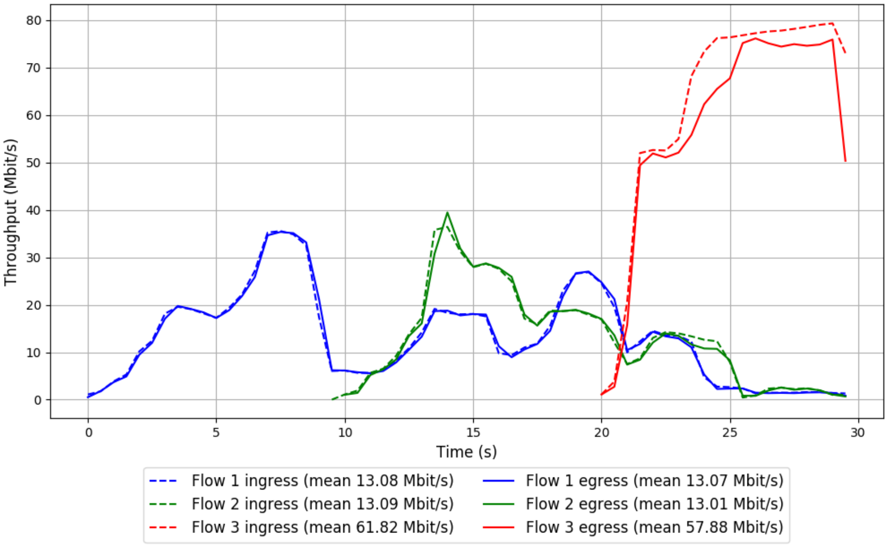


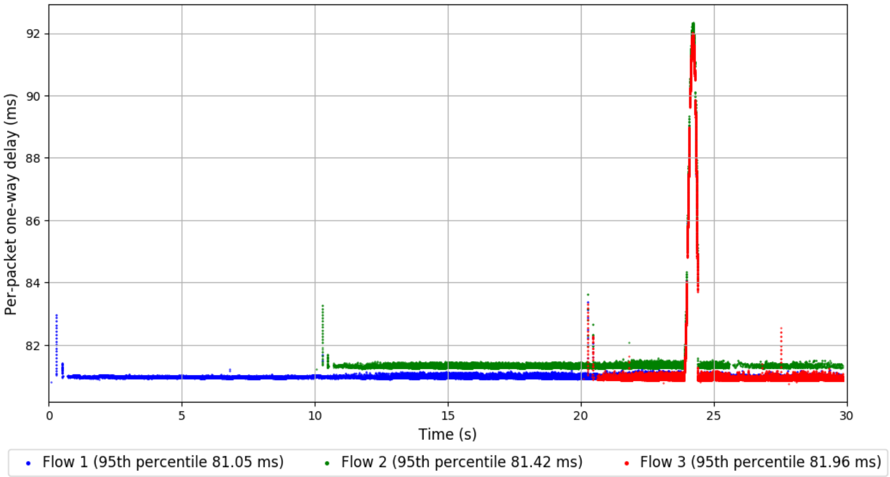
```
Run 5: Statistics of Copa

Start at: 2018-02-28 01:55:33
End at: 2018-02-28 01:56:03
Local clock offset: -4.016 ms
Remote clock offset: -0.806 ms

# Below is generated by plot.py at 2018-02-28 08:12:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.64 Mbit/s
95th percentile per-packet one-way delay: 81.383 ms
Loss rate: 4.60%
-- Flow 1:
Average throughput: 13.07 Mbit/s
95th percentile per-packet one-way delay: 81.054 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 13.01 Mbit/s
95th percentile per-packet one-way delay: 81.415 ms
Loss rate: 1.65%
-- Flow 3:
Average throughput: 57.88 Mbit/s
95th percentile per-packet one-way delay: 81.956 ms
Loss rate: 8.35%
```

Run 5: Report of Copa — Data Link



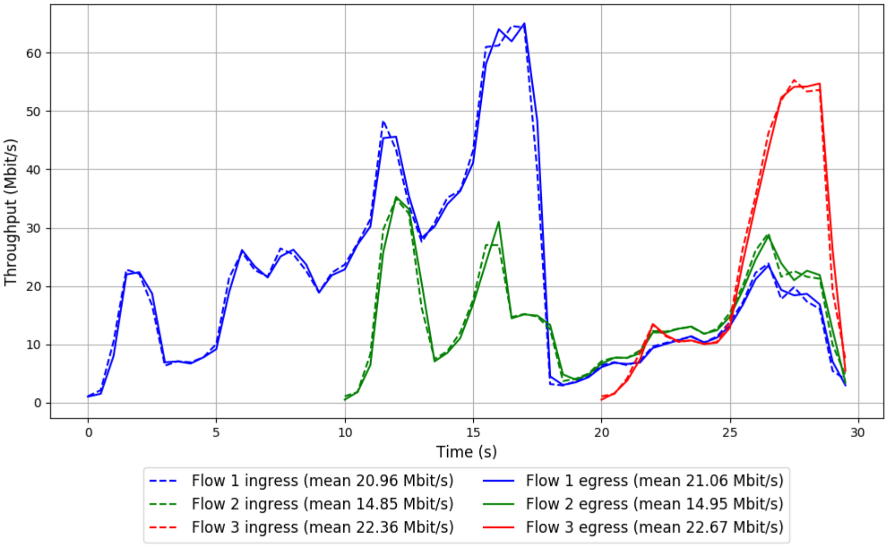


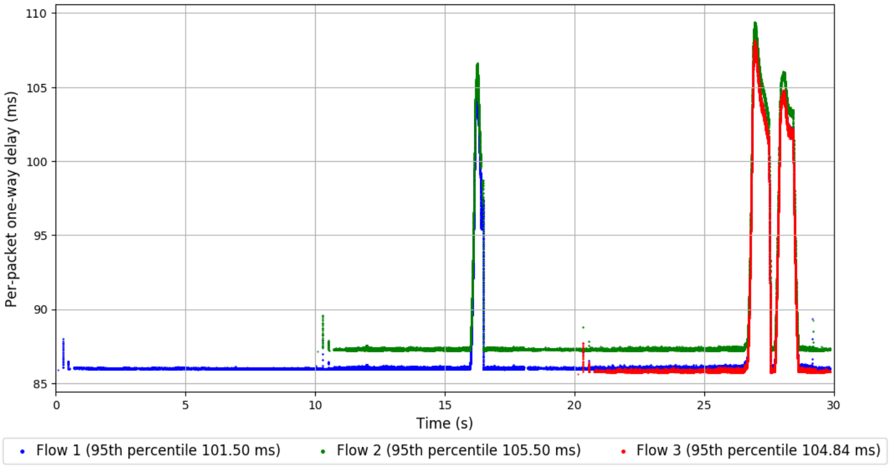
```
Run 6: Statistics of Copa

Start at: 2018-02-28 02:19:45
End at: 2018-02-28 02:20:15
Local clock offset: -3.502 ms
Remote clock offset: -5.734 ms

# Below is generated by plot.py at 2018-02-28 08:12:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.40 Mbit/s
95th percentile per-packet one-way delay: 104.151 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 21.06 Mbit/s
95th percentile per-packet one-way delay: 101.501 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 14.95 Mbit/s
95th percentile per-packet one-way delay: 105.501 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 22.67 Mbit/s
95th percentile per-packet one-way delay: 104.842 ms
Loss rate: 0.75%
```

Run 6: Report of Copa — Data Link



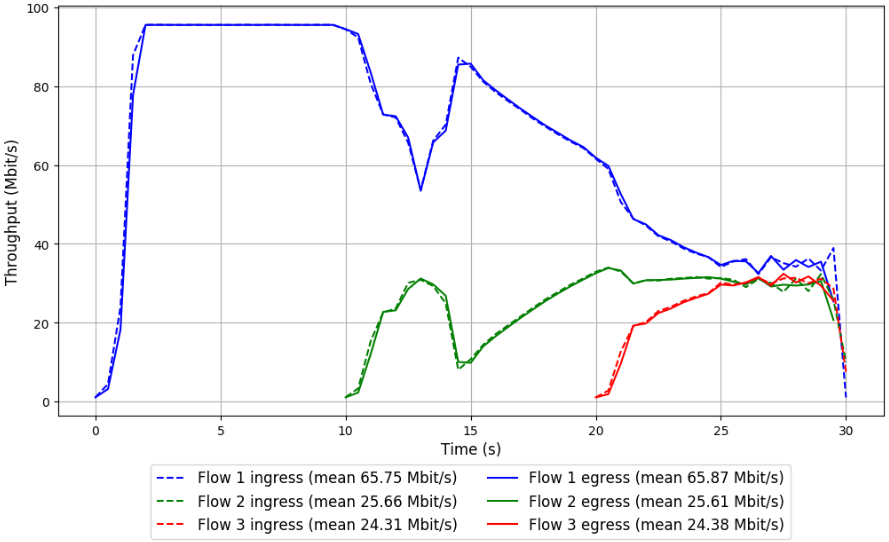


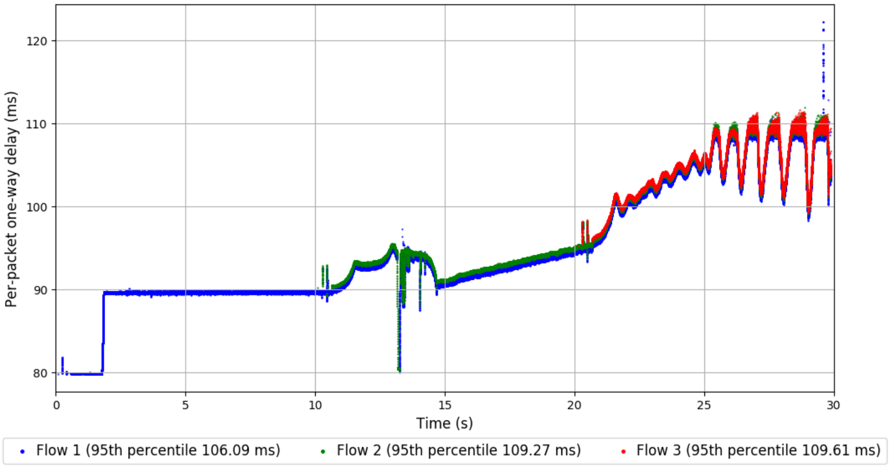
```
Run 7: Statistics of Copa

Start at: 2018-02-28 02:43:31
End at: 2018-02-28 02:44:01
Local clock offset: -28.47 ms
Remote clock offset: -0.431 ms

# Below is generated by plot.py at 2018-02-28 08:13:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.86 Mbit/s
95th percentile per-packet one-way delay: 108.916 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 65.87 Mbit/s
95th percentile per-packet one-way delay: 106.087 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 25.61 Mbit/s
95th percentile per-packet one-way delay: 109.274 ms
Loss rate: 2.13%
-- Flow 3:
Average throughput: 24.38 Mbit/s
95th percentile per-packet one-way delay: 109.615 ms
Loss rate: 3.57%
```

Run 7: Report of Copa — Data Link



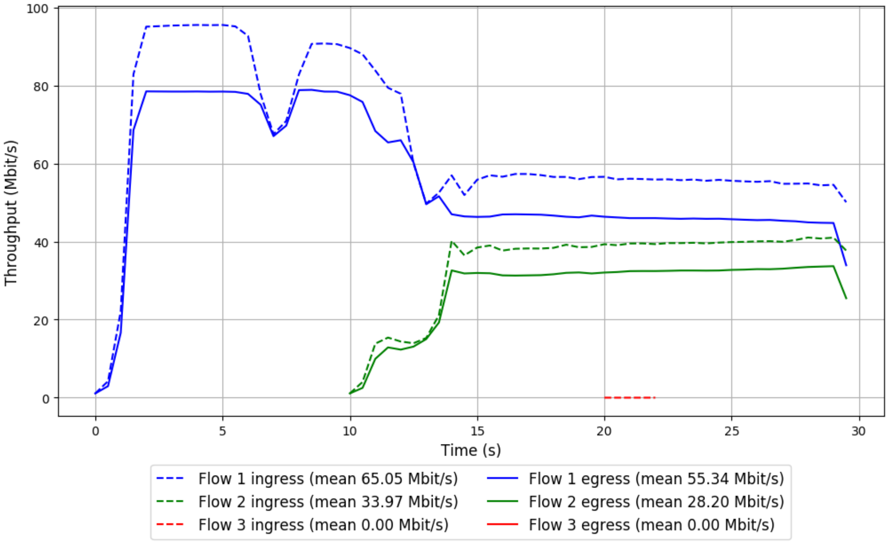


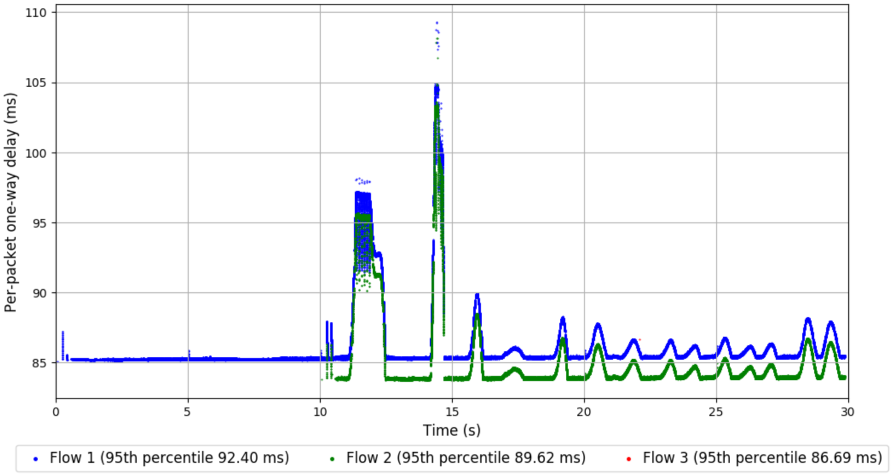
```
Run 8: Statistics of Copa

Start at: 2018-02-28 03:07:03
End at: 2018-02-28 03:07:33
Local clock offset: -36.477 ms
Remote clock offset: -5.153 ms

# Below is generated by plot.py at 2018-02-28 08:13:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.07 Mbit/s
95th percentile per-packet one-way delay: 91.446 ms
Loss rate: 16.03%
-- Flow 1:
Average throughput: 55.34 Mbit/s
95th percentile per-packet one-way delay: 92.401 ms
Loss rate: 15.44%
-- Flow 2:
Average throughput: 28.20 Mbit/s
95th percentile per-packet one-way delay: 89.618 ms
Loss rate: 17.73%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 86.691 ms
Loss rate: 50.00%
```

Run 8: Report of Copa — Data Link



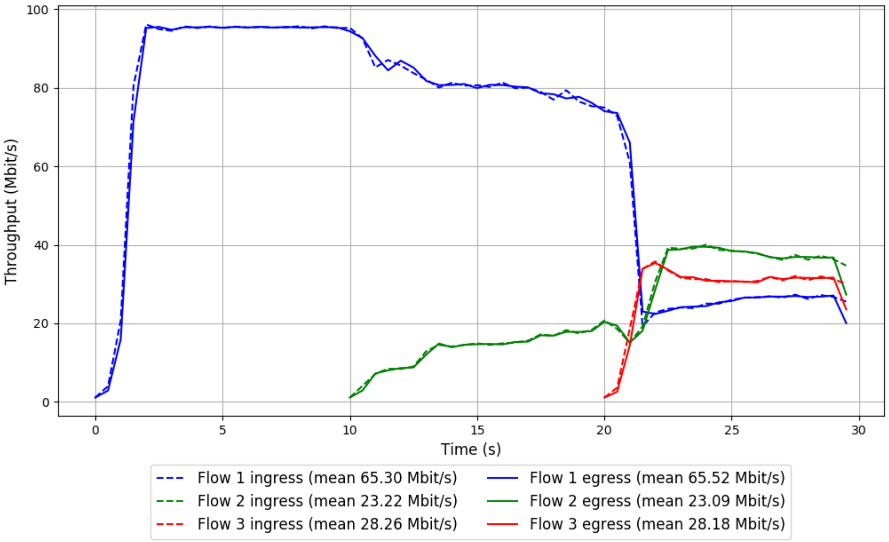


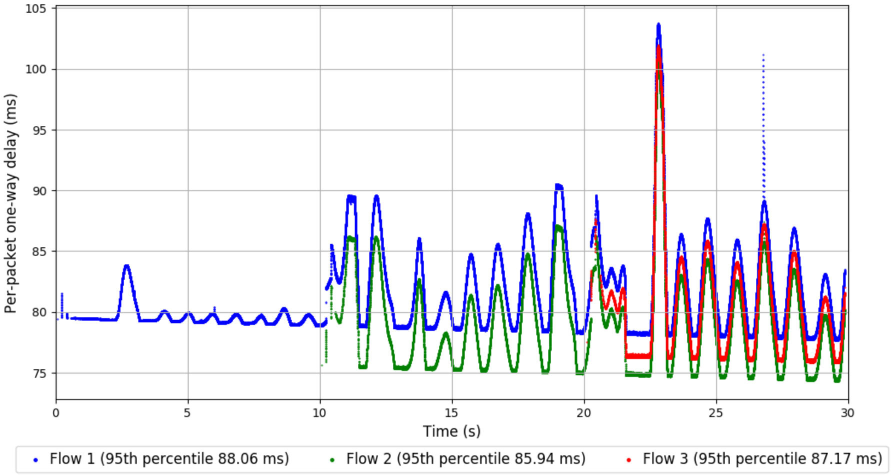
```
Run 9: Statistics of Copa

Start at: 2018-02-28 03:30:57
End at: 2018-02-28 03:31:27
Local clock offset: -37.654 ms
Remote clock offset: -0.028 ms

# Below is generated by plot.py at 2018-02-28 08:14:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.10 Mbit/s
95th percentile per-packet one-way delay: 87.867 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 65.52 Mbit/s
95th percentile per-packet one-way delay: 88.055 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 23.09 Mbit/s
95th percentile per-packet one-way delay: 85.941 ms
Loss rate: 1.38%
-- Flow 3:
Average throughput: 28.18 Mbit/s
95th percentile per-packet one-way delay: 87.172 ms
Loss rate: 1.99%
```

Run 9: Report of Copa — Data Link



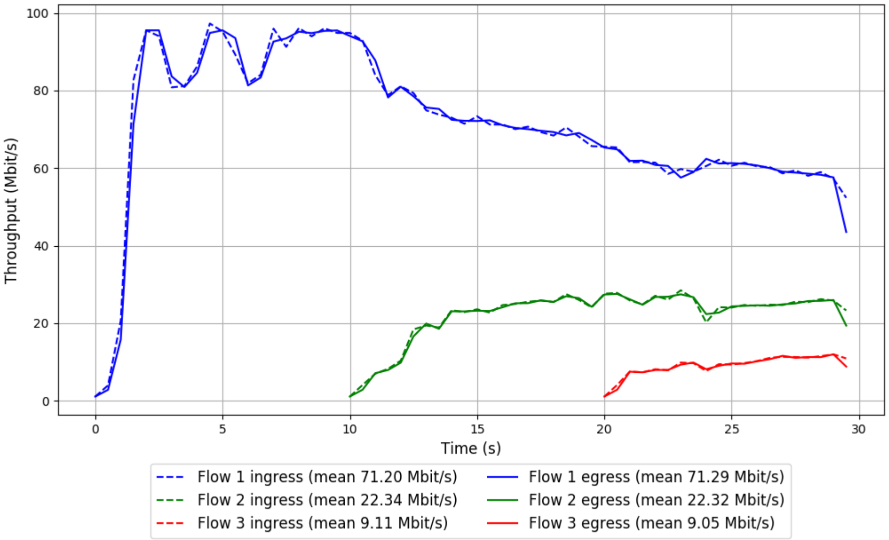


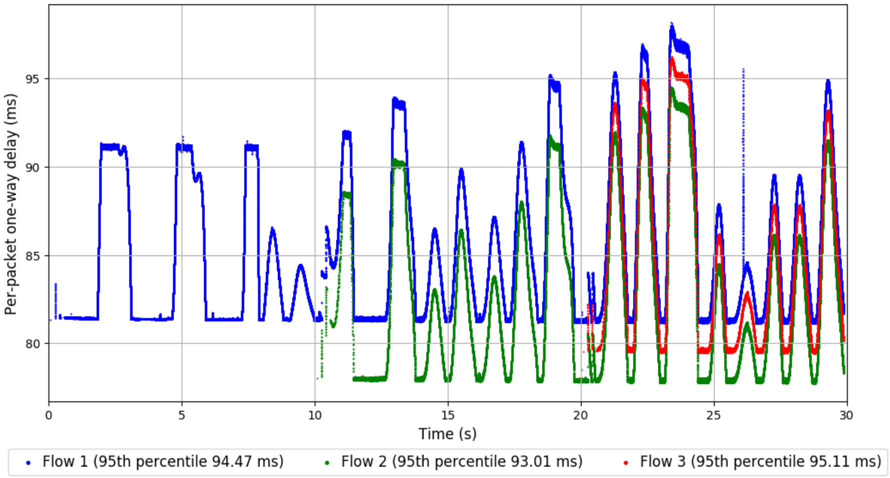
```
Run 10: Statistics of Copa

Start at: 2018-02-28 03:54:27
End at: 2018-02-28 03:54:57
Local clock offset: 0.211 ms
Remote clock offset: -0.231 ms

# Below is generated by plot.py at 2018-02-28 08:14:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.08 Mbit/s
95th percentile per-packet one-way delay: 93.942 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 71.29 Mbit/s
95th percentile per-packet one-way delay: 94.468 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 22.32 Mbit/s
95th percentile per-packet one-way delay: 93.009 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 9.05 Mbit/s
95th percentile per-packet one-way delay: 95.113 ms
Loss rate: 2.29%
```

Run 10: Report of Copa — Data Link





```
Run 1: Statistics of FillP

Start at: 2018-02-28 00:12:13
End at: 2018-02-28 00:12:43
Local clock offset: -3.053 ms
Remote clock offset: -6.44 ms
```

Run 1: Report of FillP — Data Link

Figure is missing

Figure is missing

```
Run 2: Statistics of FillP

Start at: 2018-02-28 00:35:47
End at: 2018-02-28 00:36:17
Local clock offset: -2.166 ms
Remote clock offset: 0.165 ms
```

Run 2: Report of FillP — Data Link

Figure is missing

Figure is missing

```
Run 3: Statistics of FillP

Start at: 2018-02-28 01:00:13
End at: 2018-02-28 01:00:43
Local clock offset: -4.25 ms
Remote clock offset: -5.377 ms
```

Run 3: Report of FillP — Data Link

Figure is missing

Figure is missing

```
Run 4: Statistics of FillP

Start at: 2018-02-28 01:24:32
End at: 2018-02-28 01:25:02
Local clock offset: -4.429 ms
Remote clock offset: -6.333 ms
```

Run 4: Report of FillP — Data Link

Figure is missing

Figure is missing

```
Run 5: Statistics of FillP

Start at: 2018-02-28 01:48:45
End at: 2018-02-28 01:49:15
Local clock offset: -4.398 ms
Remote clock offset: -5.563 ms
```

Run 5: Report of FillP — Data Link

Figure is missing

Figure is missing

```
Run 6: Statistics of FillP

Start at: 2018-02-28 02:12:56
End at: 2018-02-28 02:13:26
Local clock offset: -3.65 ms
Remote clock offset: -4.713 ms
```

Run 6: Report of FillP — Data Link

Figure is missing

Figure is missing

```
Run 7: Statistics of FillP

Start at: 2018-02-28 02:36:52
End at: 2018-02-28 02:37:22
Local clock offset: -24.81 ms
Remote clock offset: -0.214 ms
```

Run 7: Report of FillP — Data Link

Figure is missing

Figure is missing

```
Run 8: Statistics of FillP

Start at: 2018-02-28 03:00:25
End at: 2018-02-28 03:00:55
Local clock offset: -34.453 ms
Remote clock offset: -1.351 ms
```

Run 8: Report of FillP — Data Link

Figure is missing

Figure is missing

```
Run 9: Statistics of FillP

Start at: 2018-02-28 03:23:59
End at: 2018-02-28 03:24:29
Local clock offset: -41.419 ms
Remote clock offset: -5.761 ms
```

Run 9: Report of FillP — Data Link

Figure is missing

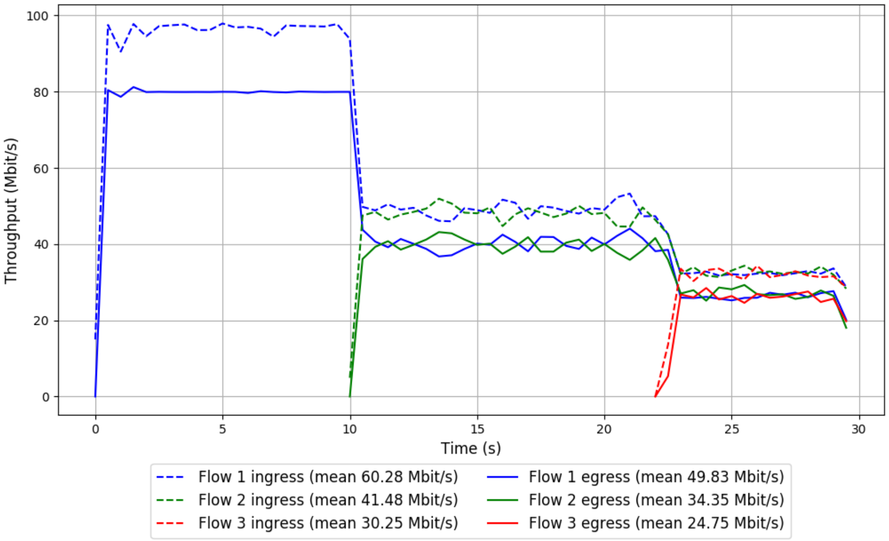
Figure is missing

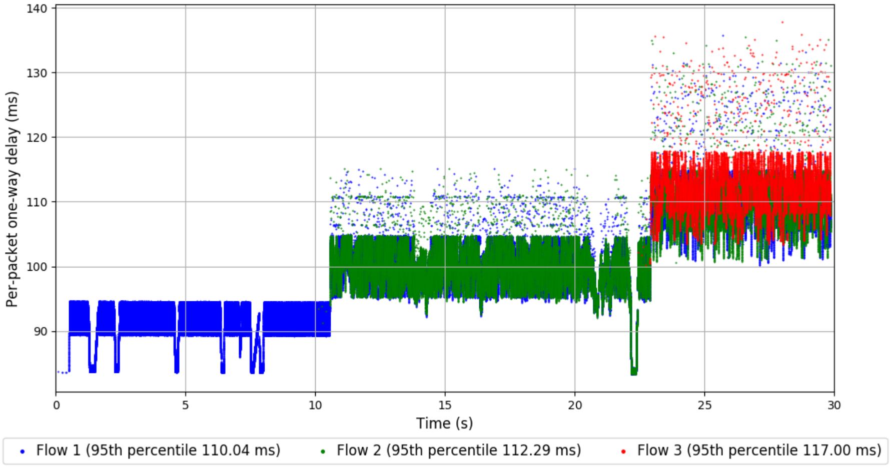
```
Run 10: Statistics of FillP

Start at: 2018-02-28 03:47:50
End at: 2018-02-28 03:48:20
Local clock offset: -4.511 ms
Remote clock offset: -5.774 ms

# Below is generated by plot.py at 2018-02-28 08:14:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.77 Mbit/s
95th percentile per-packet one-way delay: 112.919 ms
Loss rate: 18.09%
-- Flow 1:
Average throughput: 49.83 Mbit/s
95th percentile per-packet one-way delay: 110.036 ms
Loss rate: 17.87%
-- Flow 2:
Average throughput: 34.35 Mbit/s
95th percentile per-packet one-way delay: 112.290 ms
Loss rate: 17.95%
-- Flow 3:
Average throughput: 24.75 Mbit/s
95th percentile per-packet one-way delay: 117.003 ms
Loss rate: 20.36%
```

Run 10: Report of FillP — Data Link



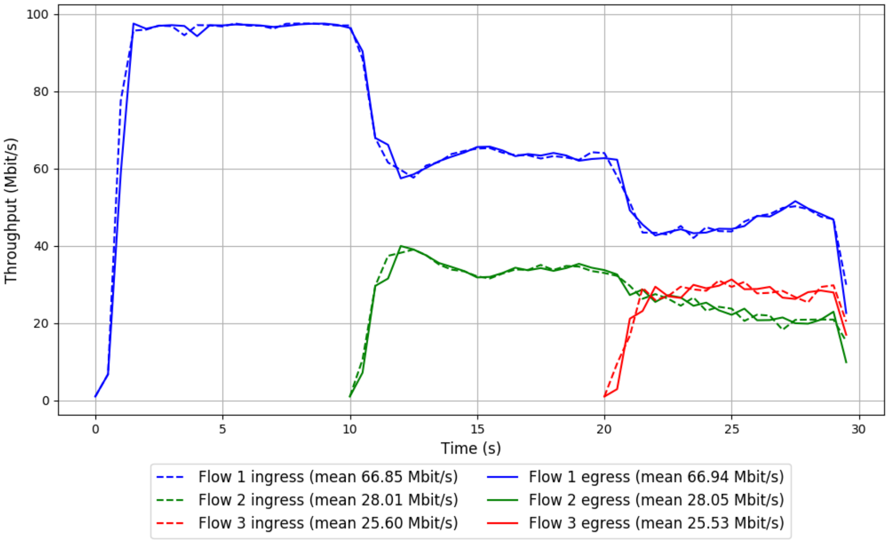


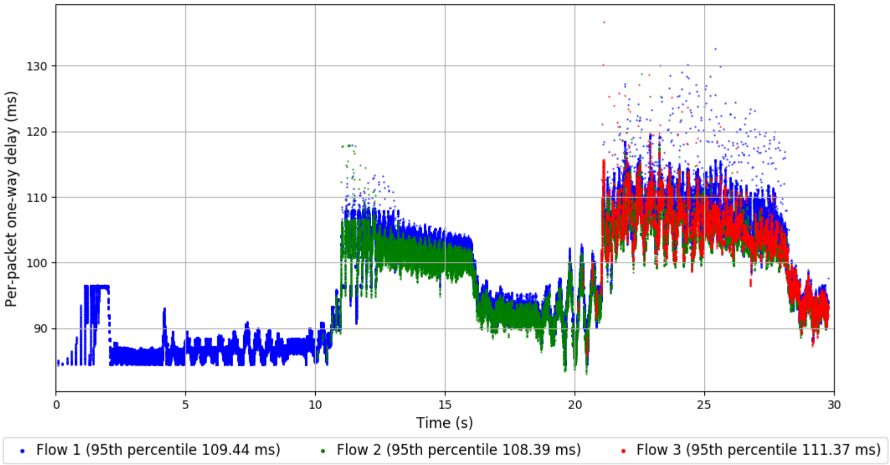
```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-28 00:04:29
End at: 2018-02-28 00:04:59
Local clock offset: -3.422 ms
Remote clock offset: -5.549 ms

# Below is generated by plot.py at 2018-02-28 08:14:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.80 Mbit/s
95th percentile per-packet one-way delay: 109.605 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 66.94 Mbit/s
95th percentile per-packet one-way delay: 109.441 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 28.05 Mbit/s
95th percentile per-packet one-way delay: 108.390 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 25.53 Mbit/s
95th percentile per-packet one-way delay: 111.372 ms
Loss rate: 2.05%
```

Run 1: Report of Indigo-1-32 — Data Link



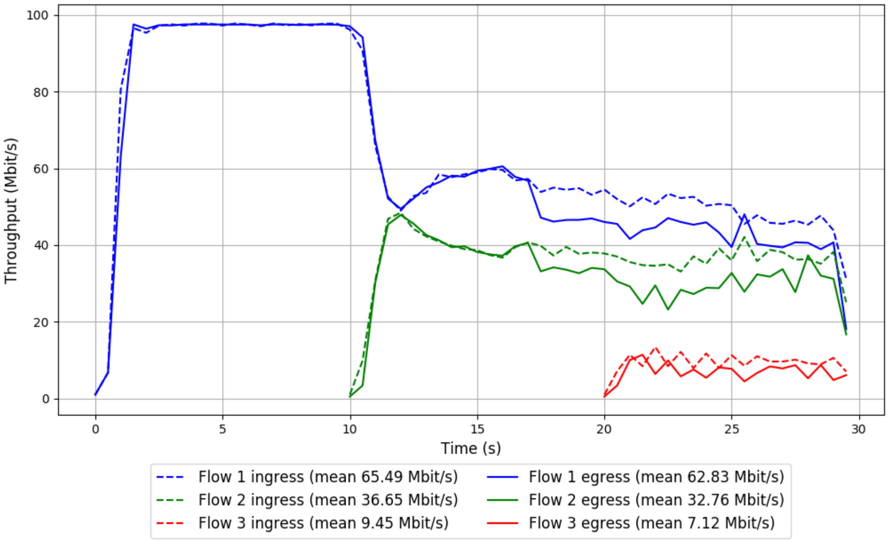


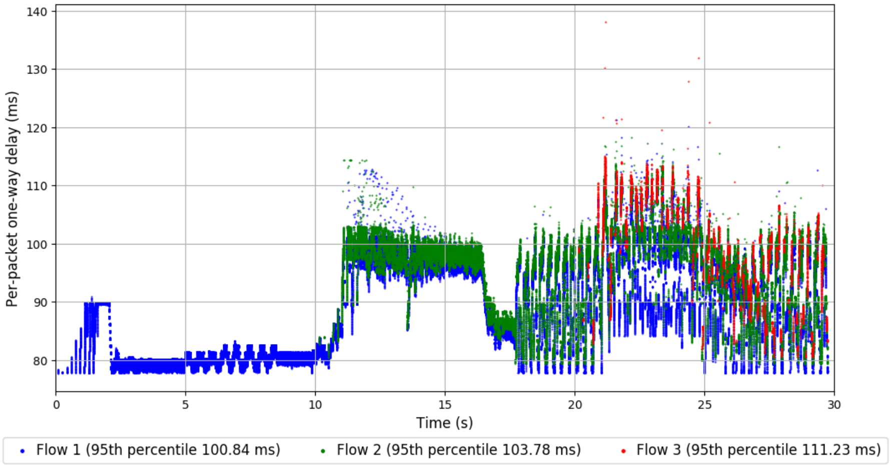
```
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-28 00:27:57
End at: 2018-02-28 00:28:27
Local clock offset: -2.447 ms
Remote clock offset: 0.938 ms

# Below is generated by plot.py at 2018-02-28 08:14:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.76 Mbit/s
95th percentile per-packet one-way delay: 102.620 ms
Loss rate: 7.12%
-- Flow 1:
Average throughput: 62.83 Mbit/s
95th percentile per-packet one-way delay: 100.839 ms
Loss rate: 4.63%
-- Flow 2:
Average throughput: 32.76 Mbit/s
95th percentile per-packet one-way delay: 103.784 ms
Loss rate: 11.40%
-- Flow 3:
Average throughput: 7.12 Mbit/s
95th percentile per-packet one-way delay: 111.232 ms
Loss rate: 26.16%
```

Run 2: Report of Indigo-1-32 — Data Link



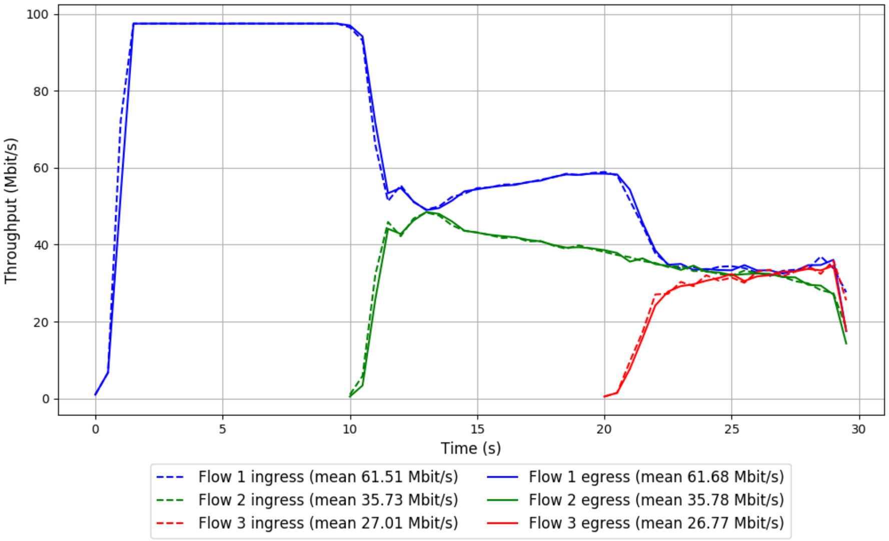


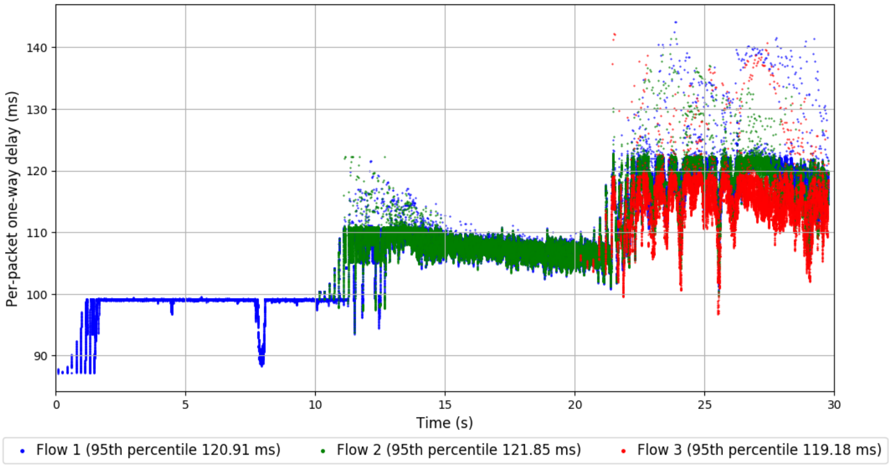
```
Run 3: Statistics of Indigo-1-32

Start at: 2018-02-28 00:52:08
End at: 2018-02-28 00:52:38
Local clock offset: -3.837 ms
Remote clock offset: -5.815 ms

# Below is generated by plot.py at 2018-02-28 08:14:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.91 Mbit/s
95th percentile per-packet one-way delay: 121.228 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 61.68 Mbit/s
95th percentile per-packet one-way delay: 120.911 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 35.78 Mbit/s
95th percentile per-packet one-way delay: 121.848 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 26.77 Mbit/s
95th percentile per-packet one-way delay: 119.178 ms
Loss rate: 3.10%
```

Run 3: Report of Indigo-1-32 — Data Link



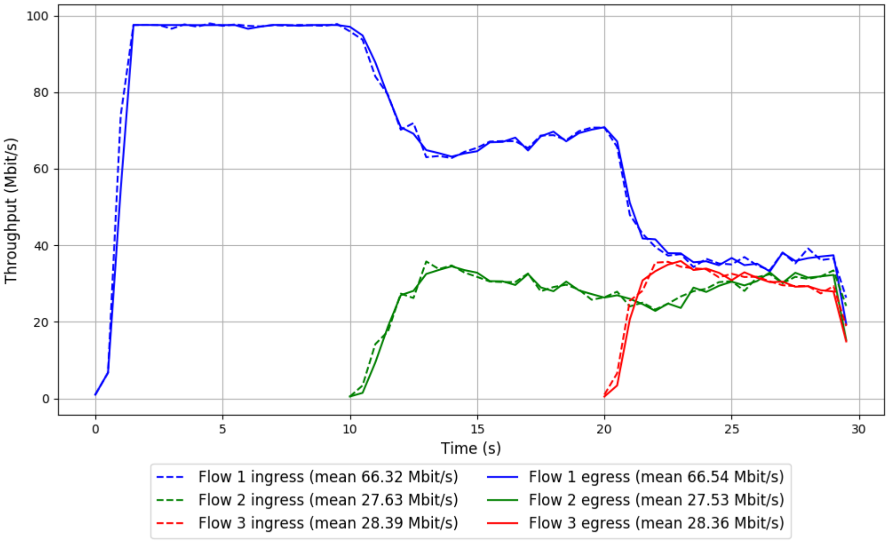


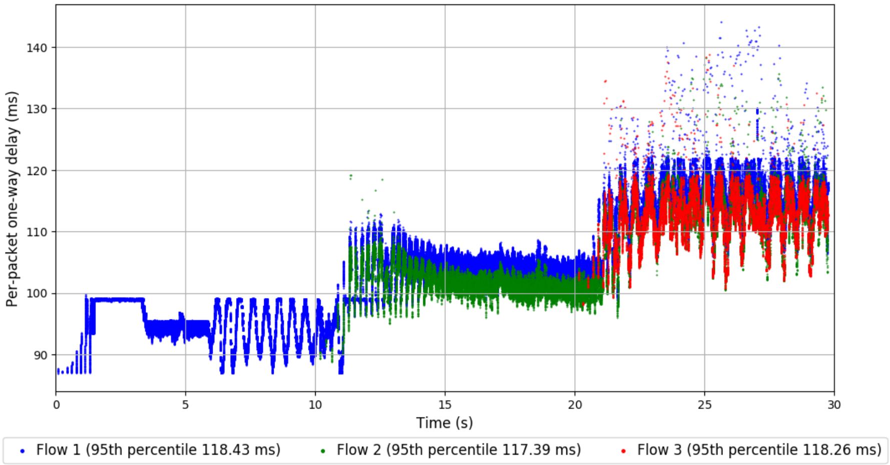
```
Run 4: Statistics of Indigo-1-32

Start at: 2018-02-28 01:16:26
End at: 2018-02-28 01:16:56
Local clock offset: -4.414 ms
Remote clock offset: -6.536 ms

# Below is generated by plot.py at 2018-02-28 08:14:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.87 Mbit/s
95th percentile per-packet one-way delay: 118.107 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 66.54 Mbit/s
95th percentile per-packet one-way delay: 118.432 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 27.53 Mbit/s
95th percentile per-packet one-way delay: 117.387 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 28.36 Mbit/s
95th percentile per-packet one-way delay: 118.258 ms
Loss rate: 2.00%
```

Run 4: Report of Indigo-1-32 — Data Link



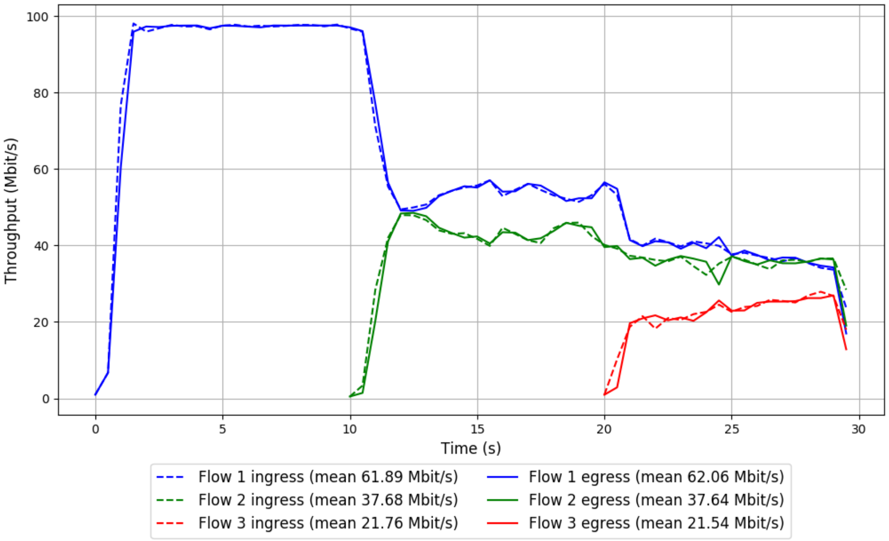


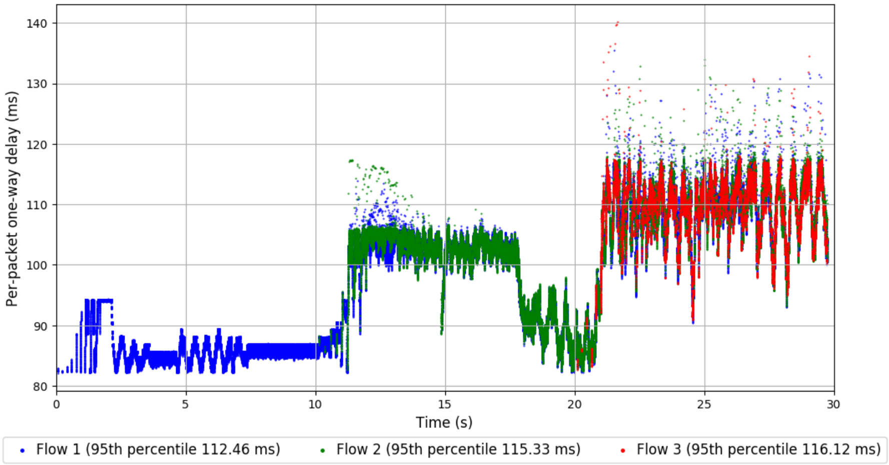
```
Run 5: Statistics of Indigo-1-32

Start at: 2018-02-28 01:40:42
End at: 2018-02-28 01:41:12
Local clock offset: -4.492 ms
Remote clock offset: -0.877 ms

# Below is generated by plot.py at 2018-02-28 08:14:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.91 Mbit/s
95th percentile per-packet one-way delay: 114.317 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 62.06 Mbit/s
95th percentile per-packet one-way delay: 112.460 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 37.64 Mbit/s
95th percentile per-packet one-way delay: 115.327 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 21.54 Mbit/s
95th percentile per-packet one-way delay: 116.122 ms
Loss rate: 2.71%
```

Run 5: Report of Indigo-1-32 — Data Link



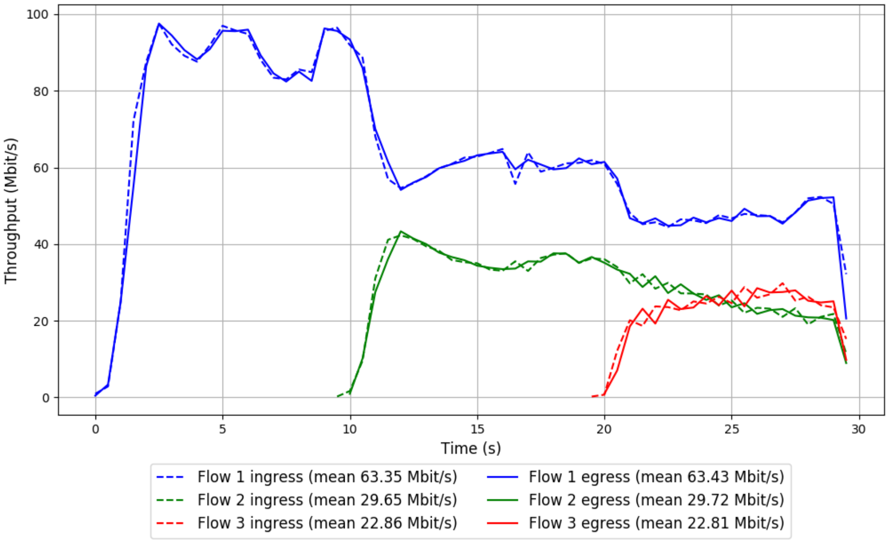


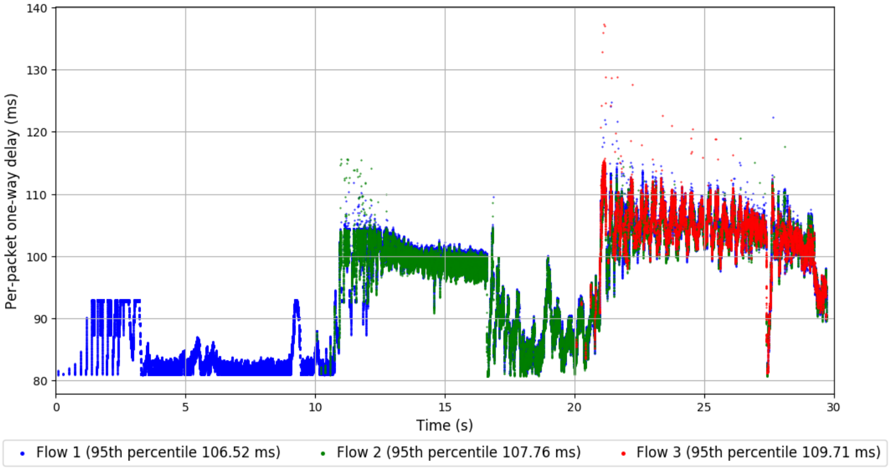
```
Run 6: Statistics of Indigo-1-32

Start at: 2018-02-28 02:04:55
End at: 2018-02-28 02:05:25
Local clock offset: -3.712 ms
Remote clock offset: -0.801 ms

# Below is generated by plot.py at 2018-02-28 08:14:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.57 Mbit/s
95th percentile per-packet one-way delay: 107.487 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 63.43 Mbit/s
95th percentile per-packet one-way delay: 106.515 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 29.72 Mbit/s
95th percentile per-packet one-way delay: 107.761 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 22.81 Mbit/s
95th percentile per-packet one-way delay: 109.706 ms
Loss rate: 2.01%
```

Run 6: Report of Indigo-1-32 — Data Link



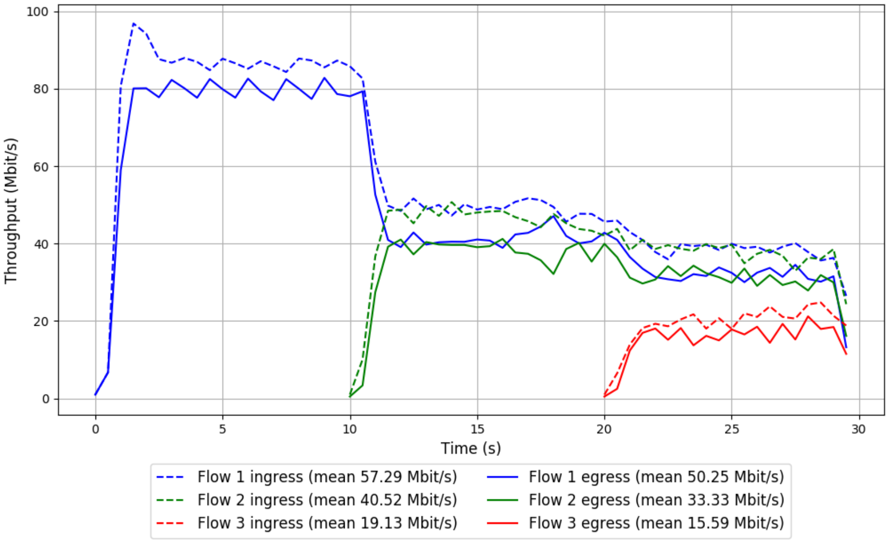


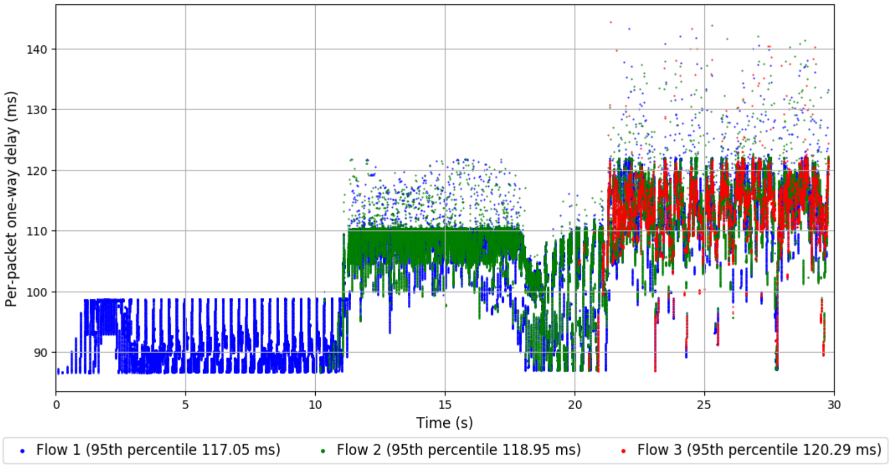
```
Run 7: Statistics of Indigo-1-32

Start at: 2018-02-28 02:28:57
End at: 2018-02-28 02:29:27
Local clock offset: -17.431 ms
Remote clock offset: -5.666 ms

# Below is generated by plot.py at 2018-02-28 08:15:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.28 Mbit/s
95th percentile per-packet one-way delay: 118.335 ms
Loss rate: 15.00%
-- Flow 1:
Average throughput: 50.25 Mbit/s
95th percentile per-packet one-way delay: 117.054 ms
Loss rate: 12.85%
-- Flow 2:
Average throughput: 33.33 Mbit/s
95th percentile per-packet one-way delay: 118.955 ms
Loss rate: 18.42%
-- Flow 3:
Average throughput: 15.59 Mbit/s
95th percentile per-packet one-way delay: 120.288 ms
Loss rate: 19.98%
```

Run 7: Report of Indigo-1-32 — Data Link



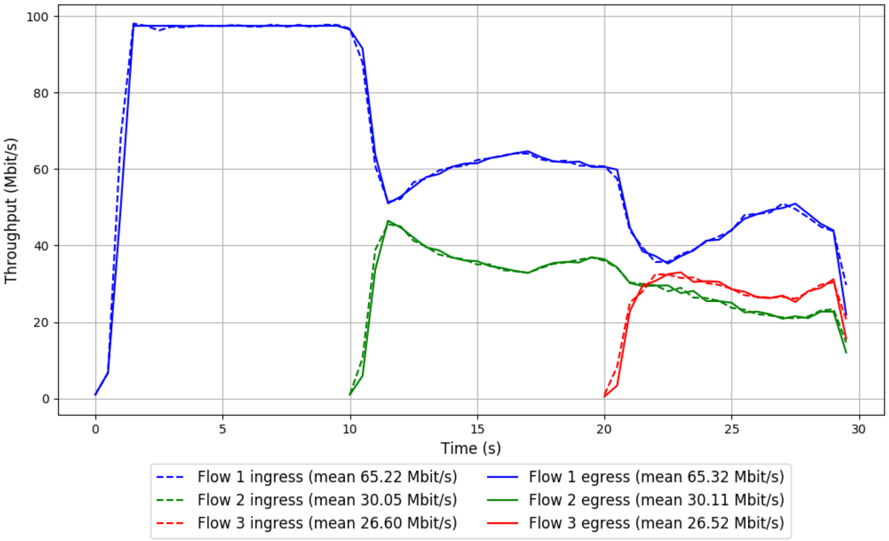


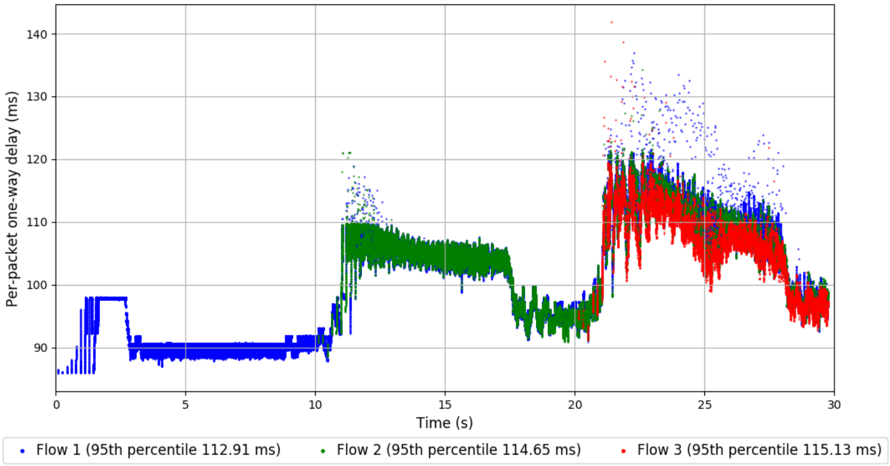
```
Run 8: Statistics of Indigo-1-32

Start at: 2018-02-28 02:52:39
End at: 2018-02-28 02:53:09
Local clock offset: -31.987 ms
Remote clock offset: -6.151 ms

# Below is generated by plot.py at 2018-02-28 08:15:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.84 Mbit/s
95th percentile per-packet one-way delay: 113.939 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 65.32 Mbit/s
95th percentile per-packet one-way delay: 112.914 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 30.11 Mbit/s
95th percentile per-packet one-way delay: 114.646 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 26.52 Mbit/s
95th percentile per-packet one-way delay: 115.132 ms
Loss rate: 2.10%
```

Run 8: Report of Indigo-1-32 — Data Link



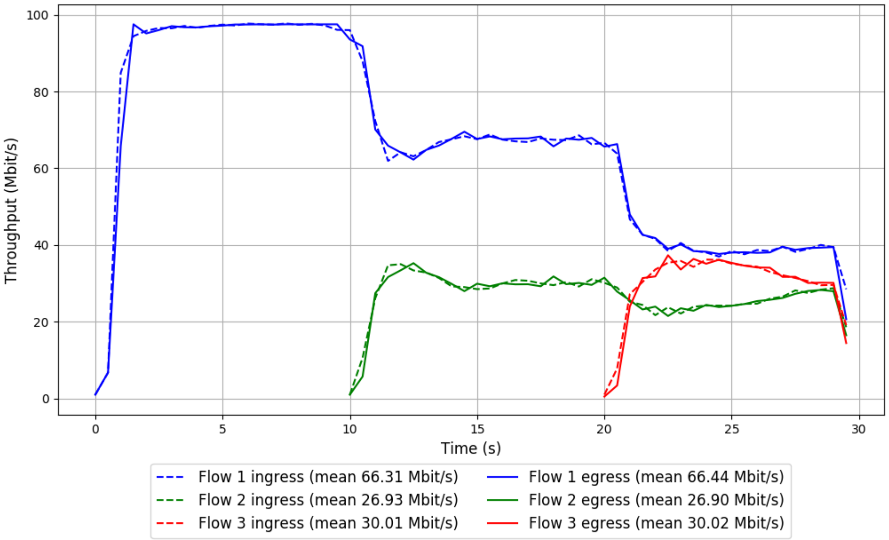


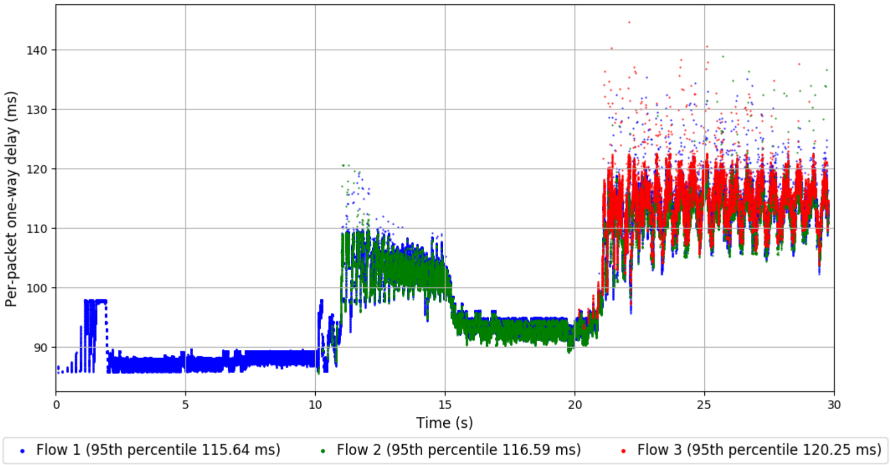
```
Run 9: Statistics of Indigo-1-32

Start at: 2018-02-28 03:16:12
End at: 2018-02-28 03:16:42
Local clock offset: -39.181 ms
Remote clock offset: -5.71 ms

# Below is generated by plot.py at 2018-02-28 08:15:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.96 Mbit/s
95th percentile per-packet one-way delay: 117.209 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 66.44 Mbit/s
95th percentile per-packet one-way delay: 115.639 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 26.90 Mbit/s
95th percentile per-packet one-way delay: 116.589 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 30.02 Mbit/s
95th percentile per-packet one-way delay: 120.252 ms
Loss rate: 1.91%
```

Run 9: Report of Indigo-1-32 — Data Link



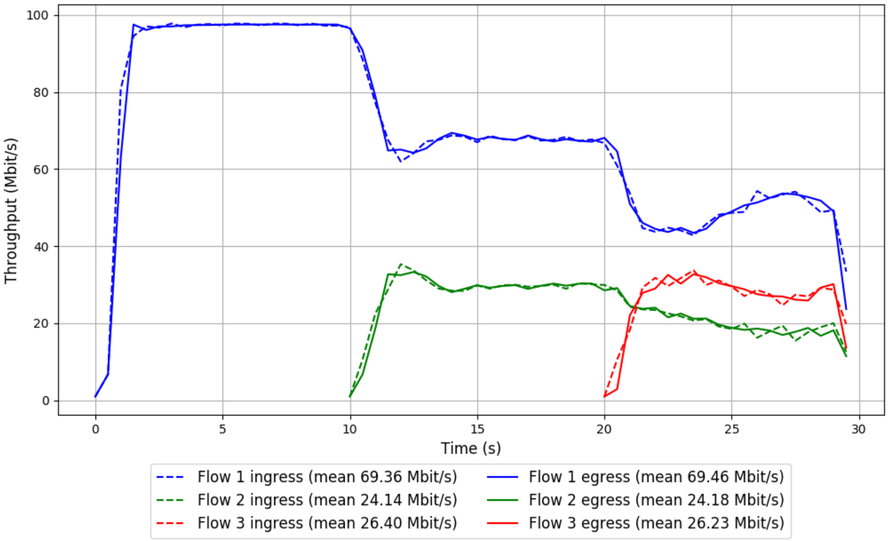


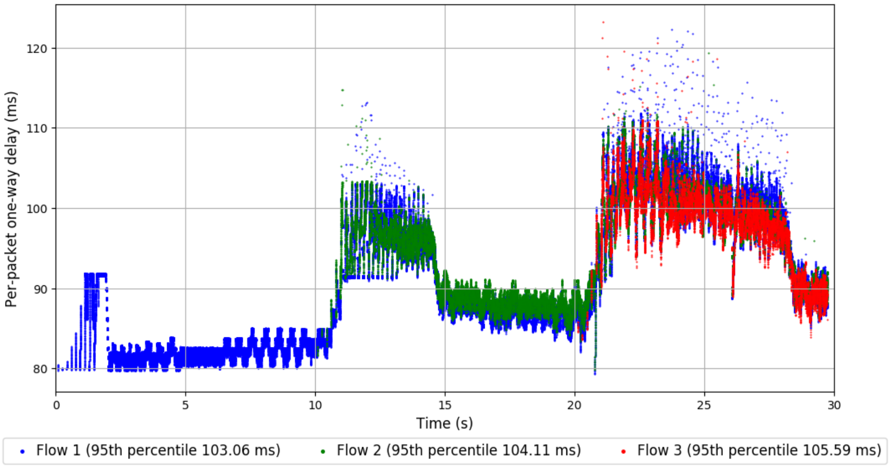
```
Run 10: Statistics of Indigo-1-32

Start at: 2018-02-28 03:40:06
End at: 2018-02-28 03:40:36
Local clock offset: -13.512 ms
Remote clock offset: -0.772 ms

# Below is generated by plot.py at 2018-02-28 08:15:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.98 Mbit/s
95th percentile per-packet one-way delay: 103.679 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 69.46 Mbit/s
95th percentile per-packet one-way delay: 103.061 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 24.18 Mbit/s
95th percentile per-packet one-way delay: 104.115 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 26.23 Mbit/s
95th percentile per-packet one-way delay: 105.591 ms
Loss rate: 2.07%
```

Run 10: Report of Indigo-1-32 — Data Link



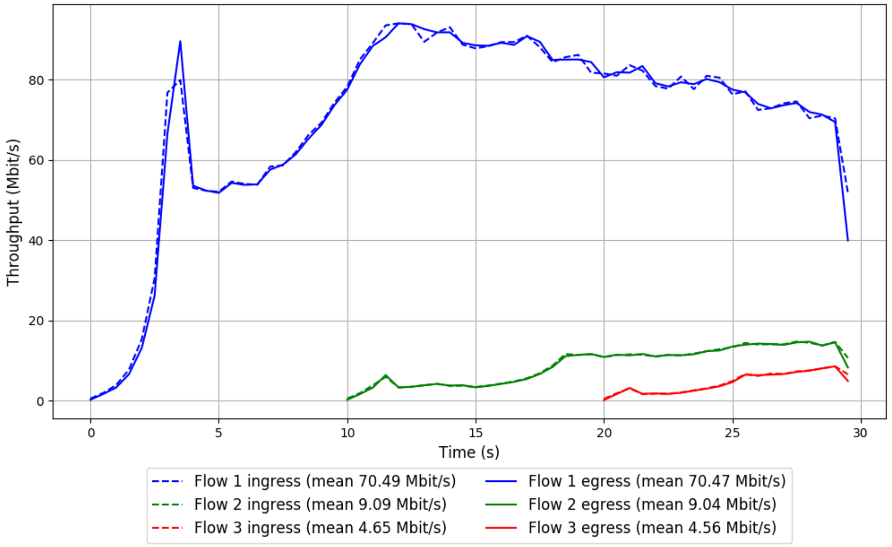


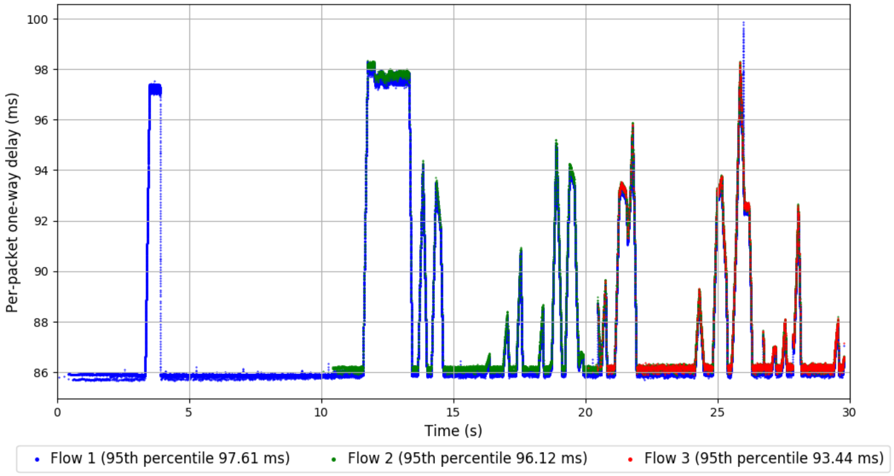
```
Run 1: Statistics of Vivace-latency

Start at: 2018-02-28 00:14:49
End at: 2018-02-28 00:15:19
Local clock offset: -2.951 ms
Remote clock offset: -6.267 ms

# Below is generated by plot.py at 2018-02-28 08:15:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.95 Mbit/s
95th percentile per-packet one-way delay: 97.599 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 70.47 Mbit/s
95th percentile per-packet one-way delay: 97.610 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 9.04 Mbit/s
95th percentile per-packet one-way delay: 96.119 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 4.56 Mbit/s
95th percentile per-packet one-way delay: 93.442 ms
Loss rate: 3.45%
```

Run 1: Report of Vivace-latency — Data Link



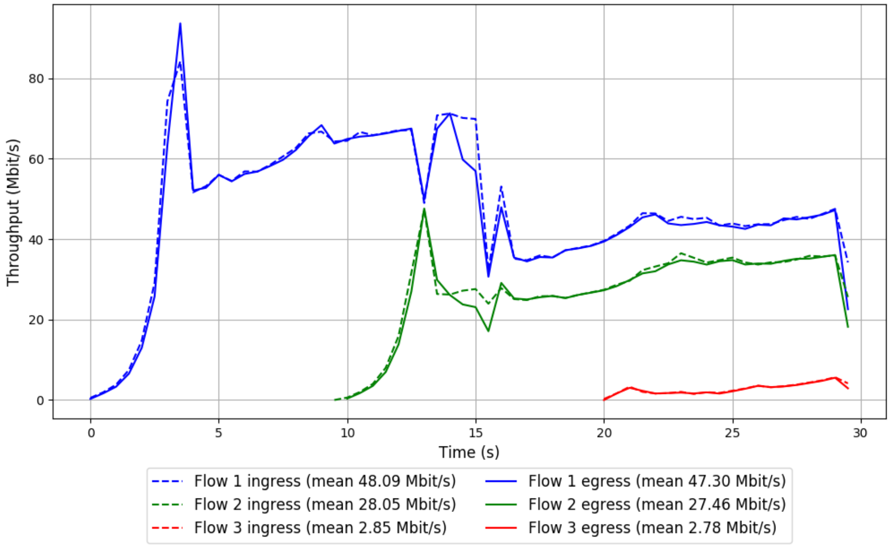


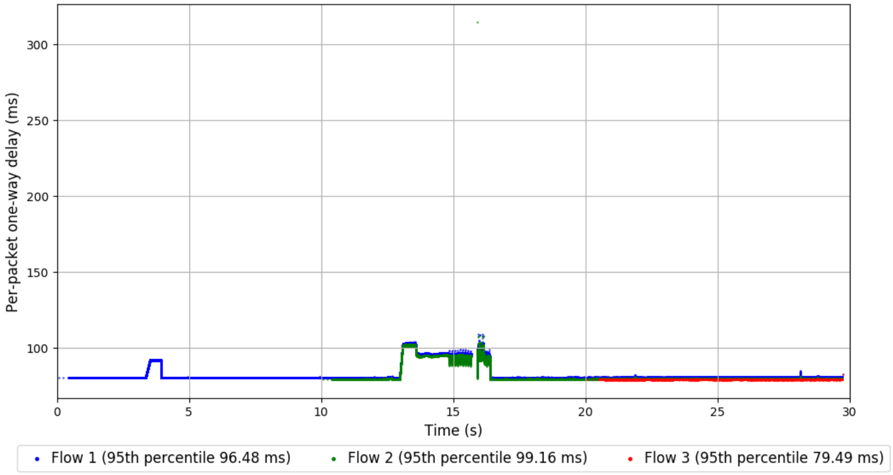
```
Run 2: Statistics of Vivace-latency

Start at: 2018-02-28 00:38:36
End at: 2018-02-28 00:39:06
Local clock offset: -2.085 ms
Remote clock offset: -0.704 ms

# Below is generated by plot.py at 2018-02-28 08:15:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.41 Mbit/s
95th percentile per-packet one-way delay: 96.492 ms
Loss rate: 2.49%
-- Flow 1:
Average throughput: 47.30 Mbit/s
95th percentile per-packet one-way delay: 96.482 ms
Loss rate: 2.25%
-- Flow 2:
Average throughput: 27.46 Mbit/s
95th percentile per-packet one-way delay: 99.159 ms
Loss rate: 3.02%
-- Flow 3:
Average throughput: 2.78 Mbit/s
95th percentile per-packet one-way delay: 79.488 ms
Loss rate: 4.39%
```

Run 2: Report of Vivace-latency — Data Link



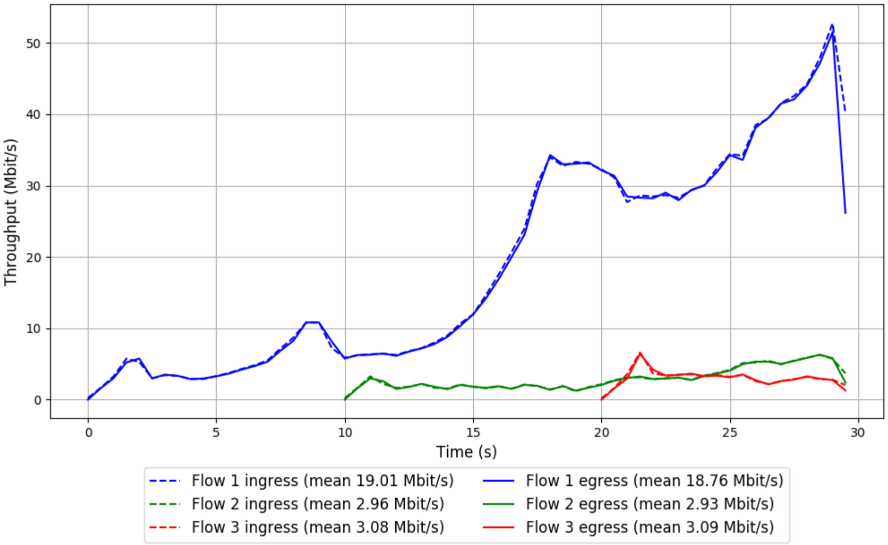


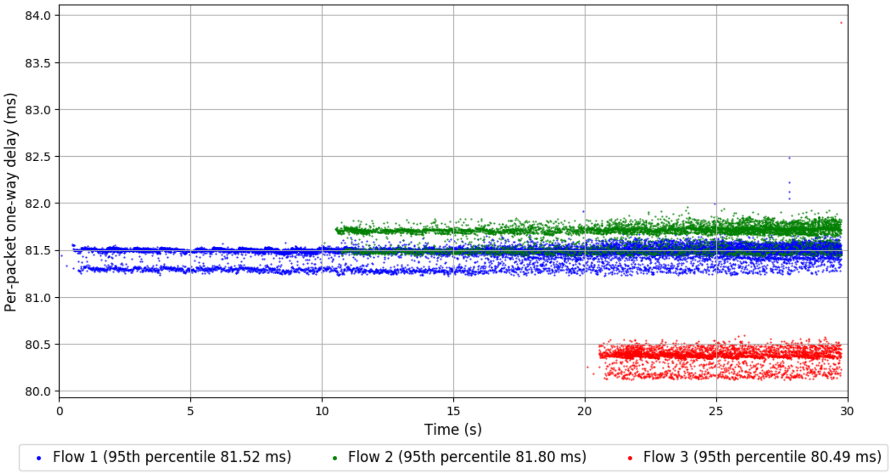
```
Run 3: Statistics of Vivace-latency

Start at: 2018-02-28 01:02:56
End at: 2018-02-28 01:03:26
Local clock offset: -4.231 ms
Remote clock offset: -0.604 ms

# Below is generated by plot.py at 2018-02-28 08:15:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.70 Mbit/s
95th percentile per-packet one-way delay: 81.711 ms
Loss rate: 2.02%
-- Flow 1:
Average throughput: 18.76 Mbit/s
95th percentile per-packet one-way delay: 81.521 ms
Loss rate: 2.05%
-- Flow 2:
Average throughput: 2.93 Mbit/s
95th percentile per-packet one-way delay: 81.801 ms
Loss rate: 1.82%
-- Flow 3:
Average throughput: 3.09 Mbit/s
95th percentile per-packet one-way delay: 80.488 ms
Loss rate: 1.96%
```

Run 3: Report of Vivace-latency — Data Link



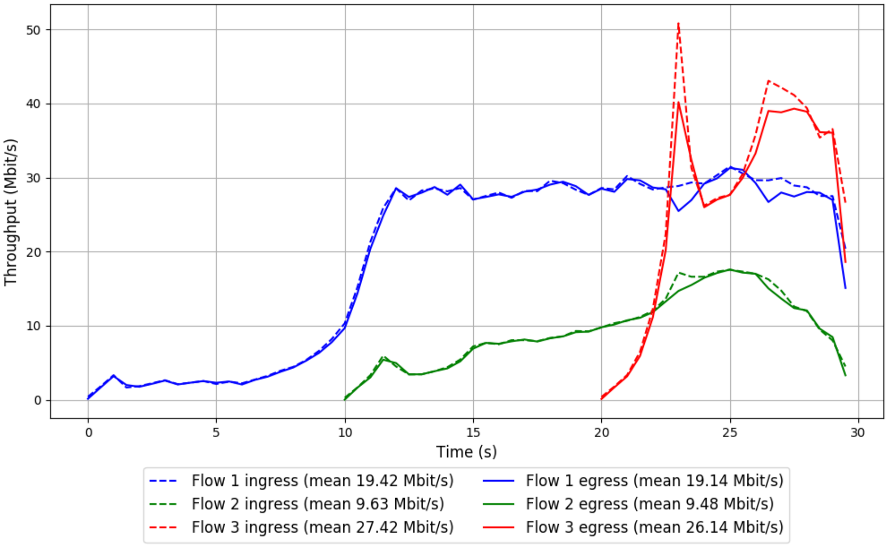


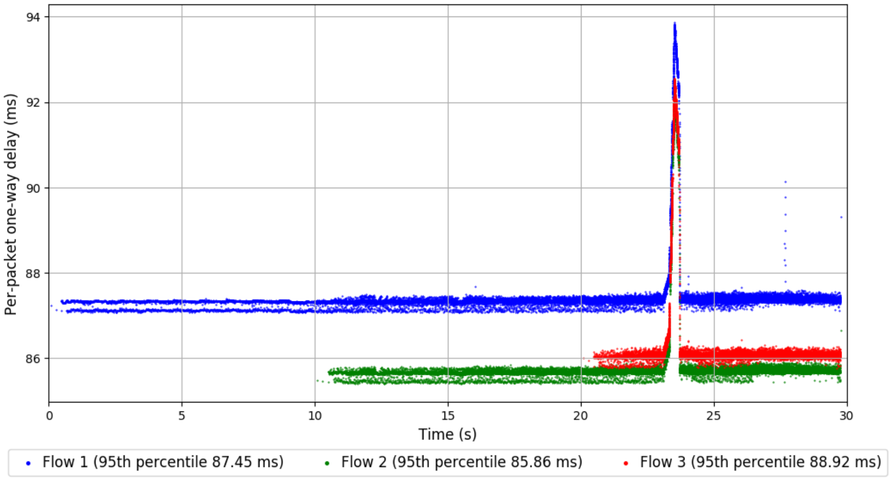
```
Run 4: Statistics of Vivace-latency

Start at: 2018-02-28 01:27:16
End at: 2018-02-28 01:27:46
Local clock offset: -4.51 ms
Remote clock offset: -6.076 ms

# Below is generated by plot.py at 2018-02-28 08:15:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 33.94 Mbit/s
95th percentile per-packet one-way delay: 87.446 ms
Loss rate: 3.28%
-- Flow 1:
Average throughput: 19.14 Mbit/s
95th percentile per-packet one-way delay: 87.451 ms
Loss rate: 2.04%
-- Flow 2:
Average throughput: 9.48 Mbit/s
95th percentile per-packet one-way delay: 85.855 ms
Loss rate: 2.49%
-- Flow 3:
Average throughput: 26.14 Mbit/s
95th percentile per-packet one-way delay: 88.916 ms
Loss rate: 6.48%
```

Run 4: Report of Vivace-latency — Data Link



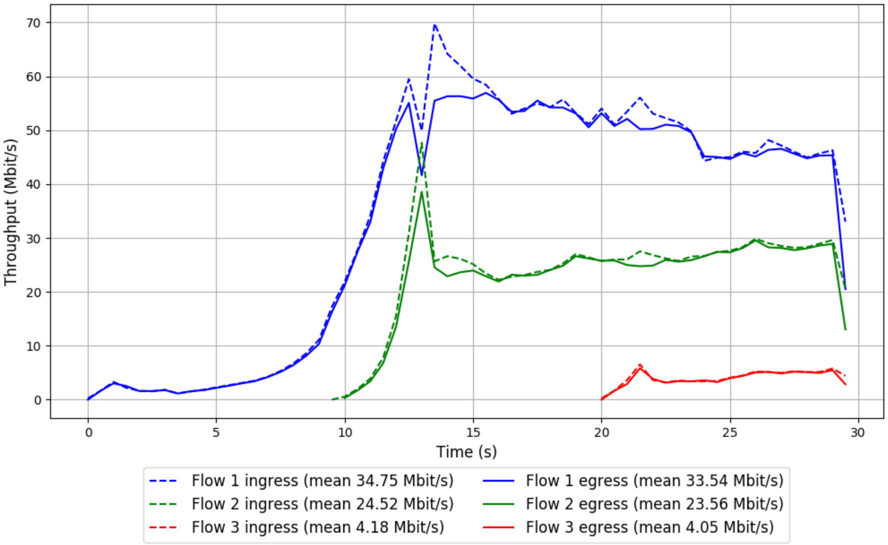


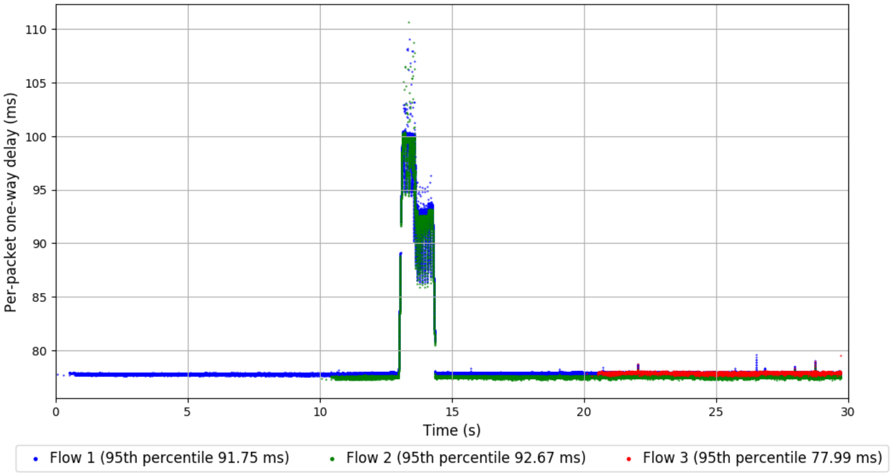
```
Run 5: Statistics of Vivace-latency

Start at: 2018-02-28 01:51:28
End at: 2018-02-28 01:51:58
Local clock offset: -4.205 ms
Remote clock offset: 0.941 ms

# Below is generated by plot.py at 2018-02-28 08:15:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 50.47 Mbit/s
95th percentile per-packet one-way delay: 92.068 ms
Loss rate: 4.40%
-- Flow 1:
Average throughput: 33.54 Mbit/s
95th percentile per-packet one-way delay: 91.747 ms
Loss rate: 4.16%
-- Flow 2:
Average throughput: 23.56 Mbit/s
95th percentile per-packet one-way delay: 92.665 ms
Loss rate: 4.86%
-- Flow 3:
Average throughput: 4.05 Mbit/s
95th percentile per-packet one-way delay: 77.994 ms
Loss rate: 5.11%
```

Run 5: Report of Vivace-latency — Data Link



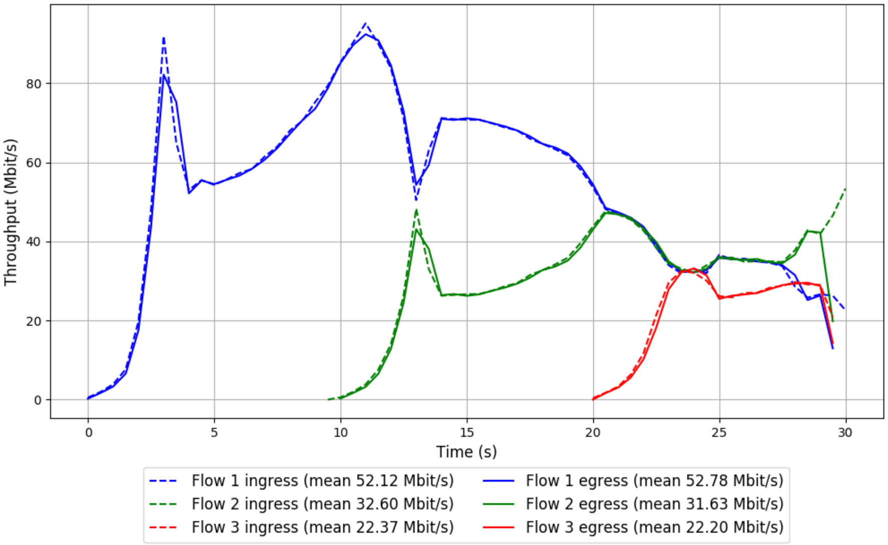


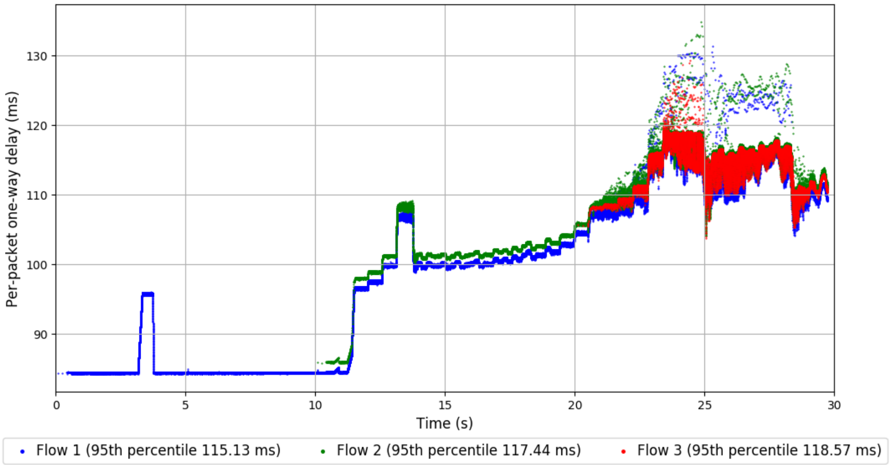
```
Run 6: Statistics of Vivace-latency

Start at: 2018-02-28 02:15:37
End at: 2018-02-28 02:16:07
Local clock offset: -3.637 ms
Remote clock offset: -5.768 ms

# Below is generated by plot.py at 2018-02-28 08:16:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.95 Mbit/s
95th percentile per-packet one-way delay: 116.836 ms
Loss rate: 2.92%
-- Flow 1:
Average throughput: 52.78 Mbit/s
95th percentile per-packet one-way delay: 115.133 ms
Loss rate: 1.33%
-- Flow 2:
Average throughput: 31.63 Mbit/s
95th percentile per-packet one-way delay: 117.444 ms
Loss rate: 6.68%
-- Flow 3:
Average throughput: 22.20 Mbit/s
95th percentile per-packet one-way delay: 118.572 ms
Loss rate: 3.02%
```

Run 6: Report of Vivace-latency — Data Link



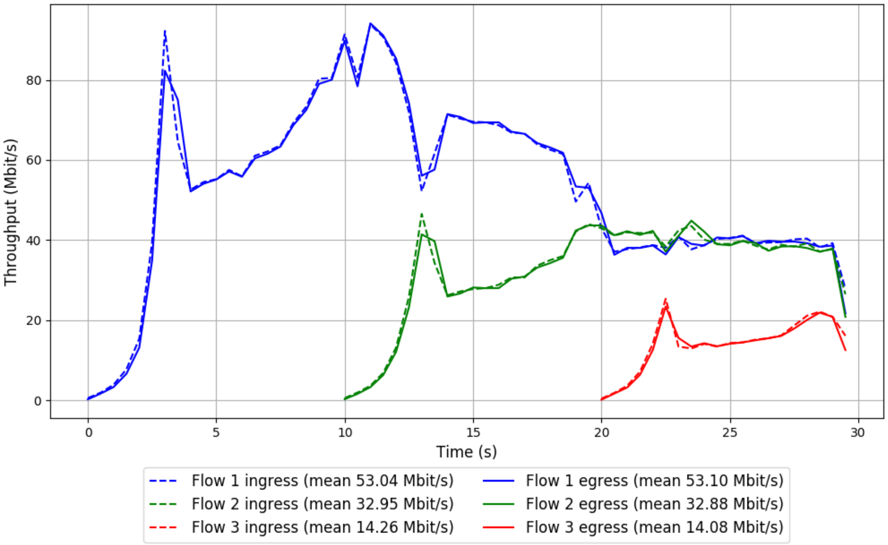


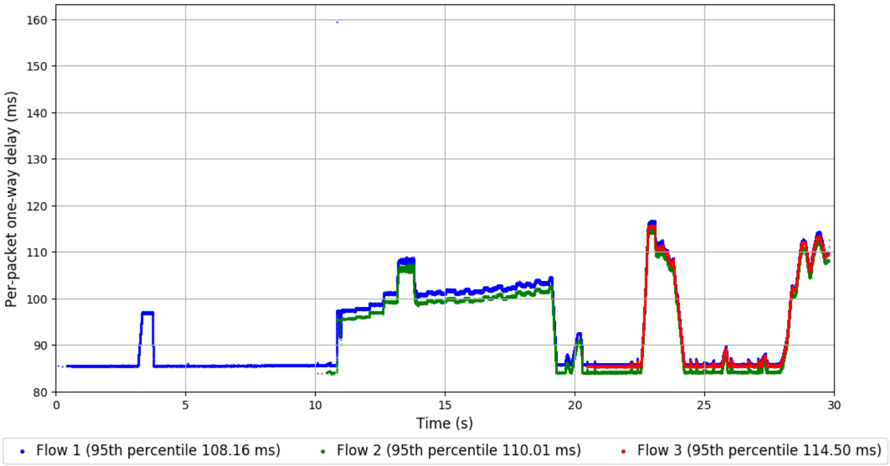
```
Run 7: Statistics of Vivace-latency

Start at: 2018-02-28 02:39:30
End at: 2018-02-28 02:40:00
Local clock offset: -26.311 ms
Remote clock offset: -5.153 ms

# Below is generated by plot.py at 2018-02-28 08:16:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.48 Mbit/s
95th percentile per-packet one-way delay: 110.023 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 53.10 Mbit/s
95th percentile per-packet one-way delay: 108.156 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 32.88 Mbit/s
95th percentile per-packet one-way delay: 110.013 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 14.08 Mbit/s
95th percentile per-packet one-way delay: 114.495 ms
Loss rate: 3.00%
```

Run 7: Report of Vivace-latency — Data Link



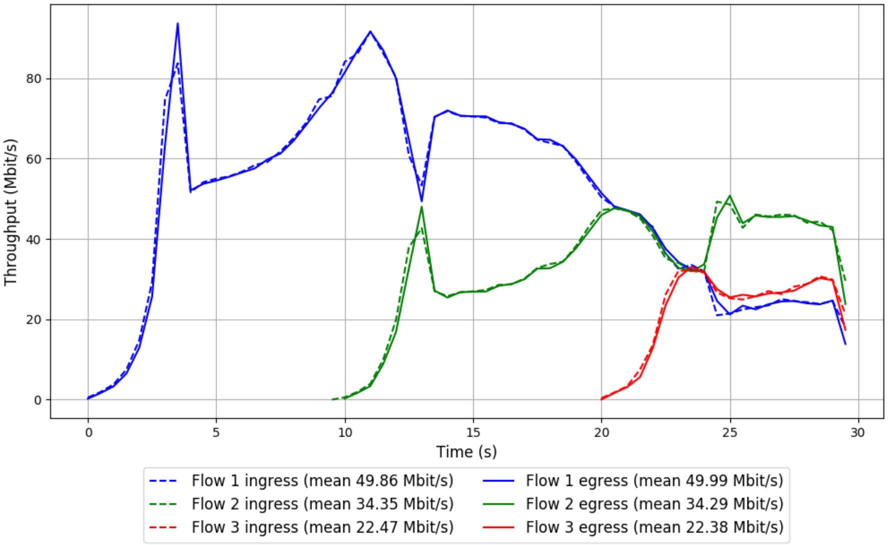


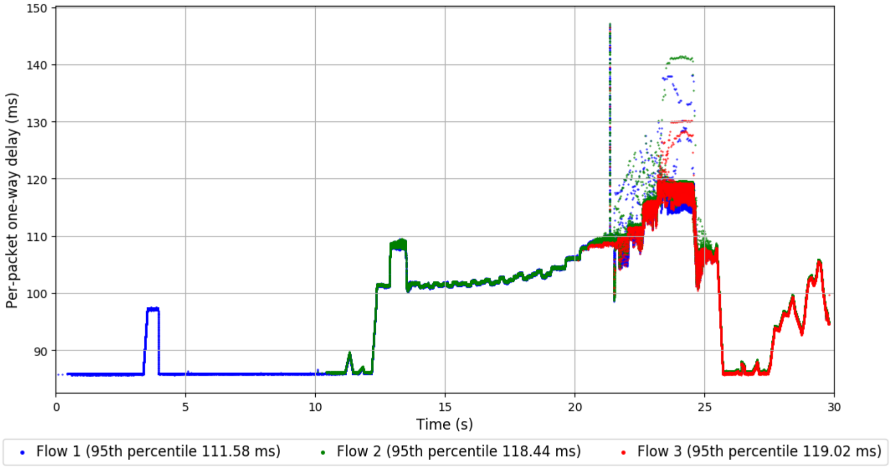
```
Run 8: Statistics of Vivace-latency

Start at: 2018-02-28 03:03:02
End at: 2018-02-28 03:03:32
Local clock offset: -35.338 ms
Remote clock offset: -6.093 ms

# Below is generated by plot.py at 2018-02-28 08:16:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.01 Mbit/s
95th percentile per-packet one-way delay: 116.709 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 49.99 Mbit/s
95th percentile per-packet one-way delay: 111.578 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 34.29 Mbit/s
95th percentile per-packet one-way delay: 118.444 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 22.38 Mbit/s
95th percentile per-packet one-way delay: 119.016 ms
Loss rate: 2.26%
```

Run 8: Report of Vivace-latency — Data Link



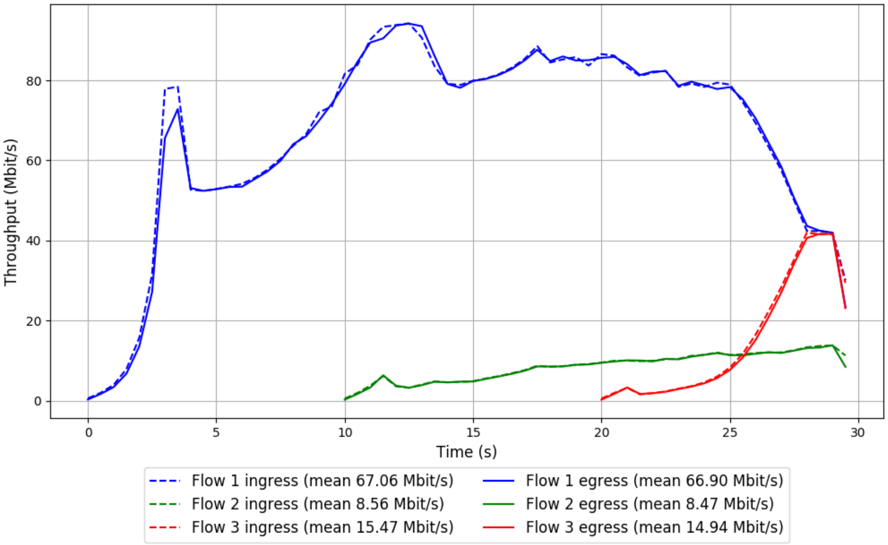


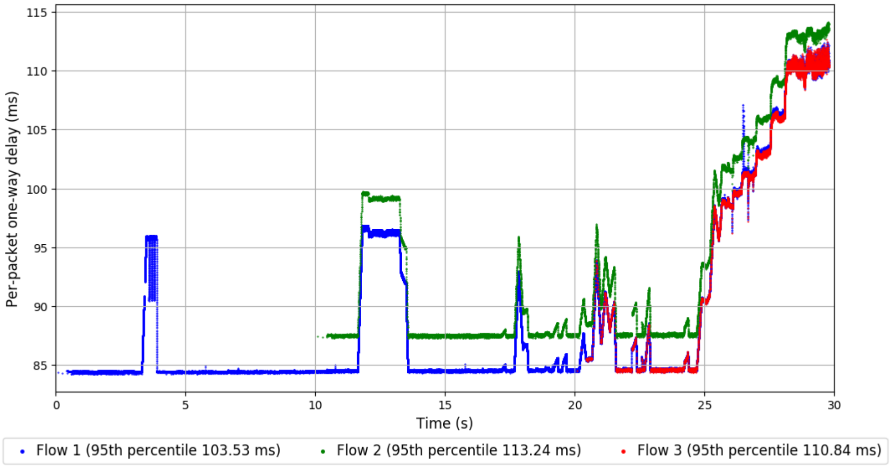
```
Run 9: Statistics of Vivace-latency

Start at: 2018-02-28 03:26:56
End at: 2018-02-28 03:27:26
Local clock offset: -42.318 ms
Remote clock offset: -5.643 ms

# Below is generated by plot.py at 2018-02-28 08:16:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.40 Mbit/s
95th percentile per-packet one-way delay: 110.180 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 66.90 Mbit/s
95th percentile per-packet one-way delay: 103.531 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 8.47 Mbit/s
95th percentile per-packet one-way delay: 113.240 ms
Loss rate: 1.80%
-- Flow 3:
Average throughput: 14.94 Mbit/s
95th percentile per-packet one-way delay: 110.841 ms
Loss rate: 5.06%
```

Run 9: Report of Vivace-latency — Data Link



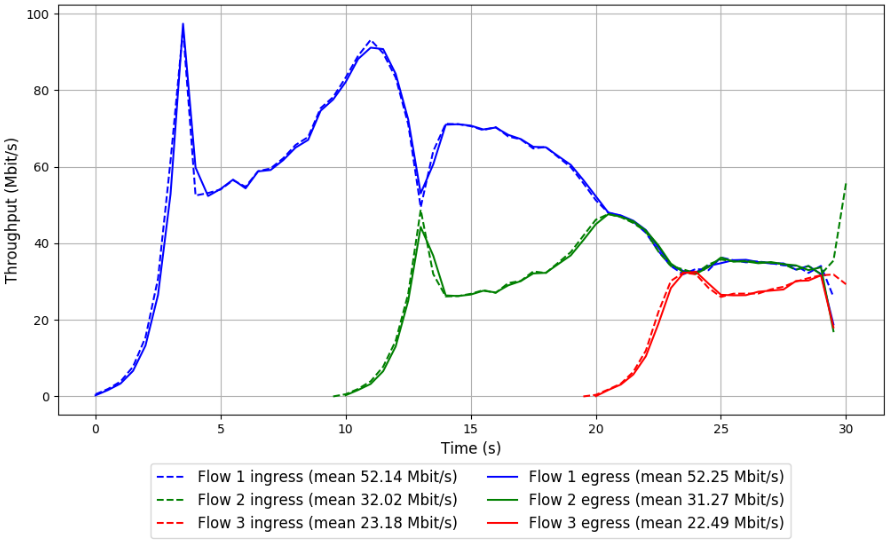


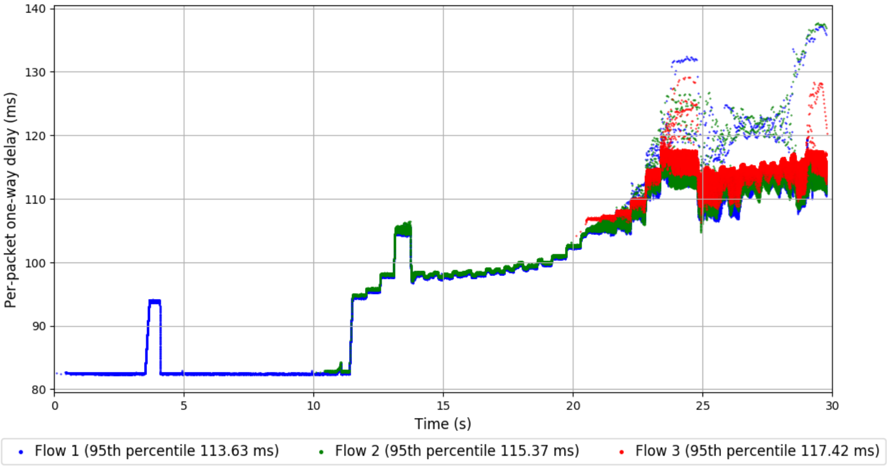
```
Run 10: Statistics of Vivace-latency

Start at: 2018-02-28 03:50:27
End at: 2018-02-28 03:50:57
Local clock offset: -2.412 ms
Remote clock offset: -4.956 ms

# Below is generated by plot.py at 2018-02-28 08:17:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.30 Mbit/s
95th percentile per-packet one-way delay: 115.445 ms
Loss rate: 2.99%
-- Flow 1:
Average throughput: 52.25 Mbit/s
95th percentile per-packet one-way delay: 113.629 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 31.27 Mbit/s
95th percentile per-packet one-way delay: 115.371 ms
Loss rate: 6.14%
-- Flow 3:
Average throughput: 22.49 Mbit/s
95th percentile per-packet one-way delay: 117.421 ms
Loss rate: 10.42%
```

Run 10: Report of Vivace-latency — Data Link



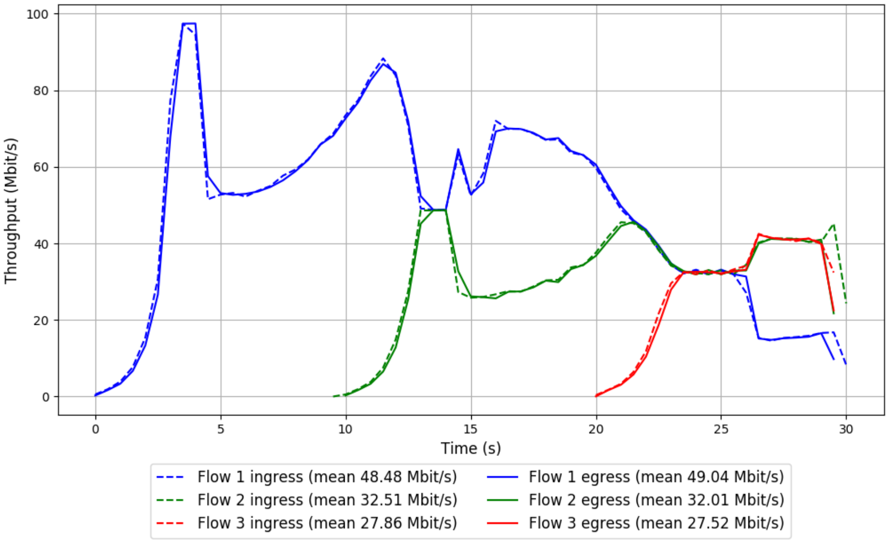


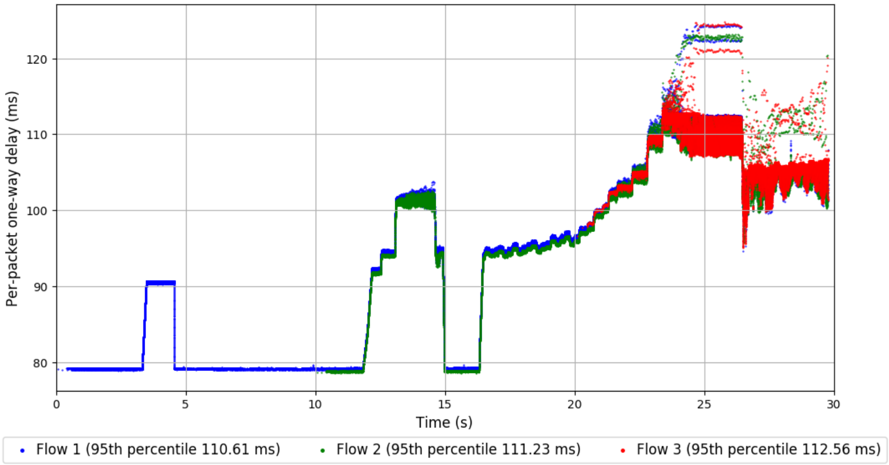
```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-27 23:59:20
End at: 2018-02-27 23:59:50
Local clock offset: -3.649 ms
Remote clock offset: 0.169 ms

# Below is generated by plot.py at 2018-02-28 08:17:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.22 Mbit/s
95th percentile per-packet one-way delay: 111.436 ms
Loss rate: 1.95%
-- Flow 1:
Average throughput: 49.04 Mbit/s
95th percentile per-packet one-way delay: 110.608 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 32.01 Mbit/s
95th percentile per-packet one-way delay: 111.228 ms
Loss rate: 4.24%
-- Flow 3:
Average throughput: 27.52 Mbit/s
95th percentile per-packet one-way delay: 112.562 ms
Loss rate: 3.42%
```

Run 1: Report of Vivace-loss — Data Link



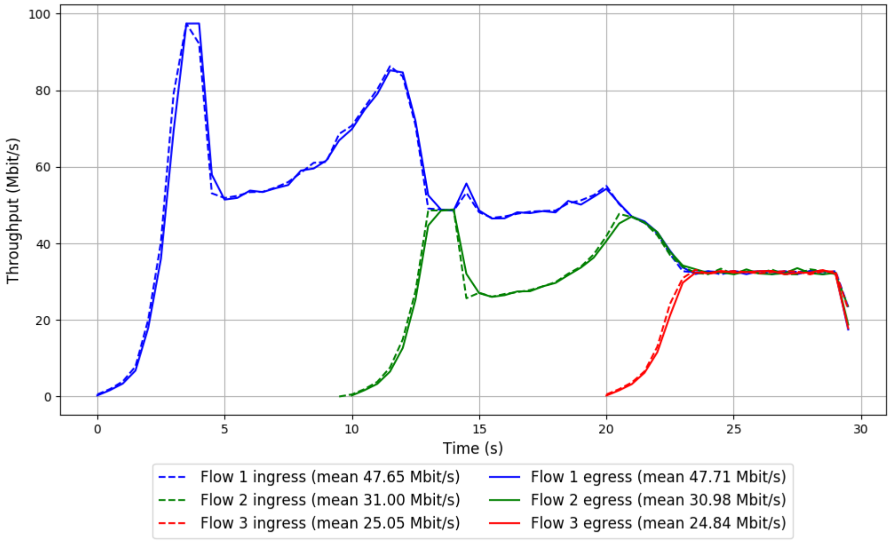


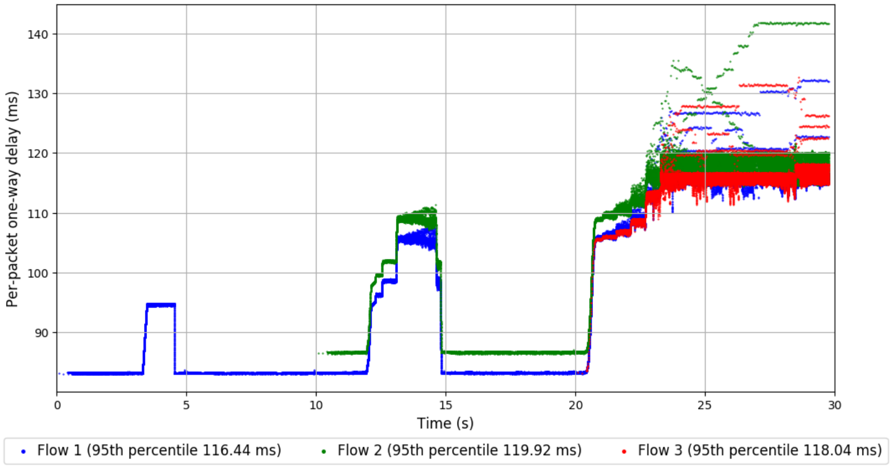
```
Run 2: Statistics of Vivace-loss

Start at: 2018-02-28 00:22:48
End at: 2018-02-28 00:23:18
Local clock offset: -2.63 ms
Remote clock offset: -5.06 ms

# Below is generated by plot.py at 2018-02-28 08:17:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.36 Mbit/s
95th percentile per-packet one-way delay: 118.736 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 47.71 Mbit/s
95th percentile per-packet one-way delay: 116.443 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 30.98 Mbit/s
95th percentile per-packet one-way delay: 119.920 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 24.84 Mbit/s
95th percentile per-packet one-way delay: 118.039 ms
Loss rate: 2.60%
```

Run 2: Report of Vivace-loss — Data Link



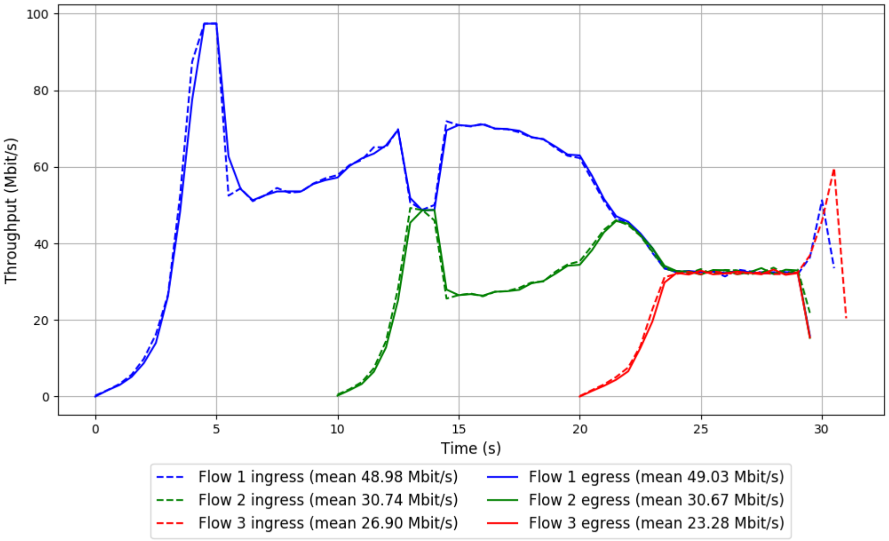


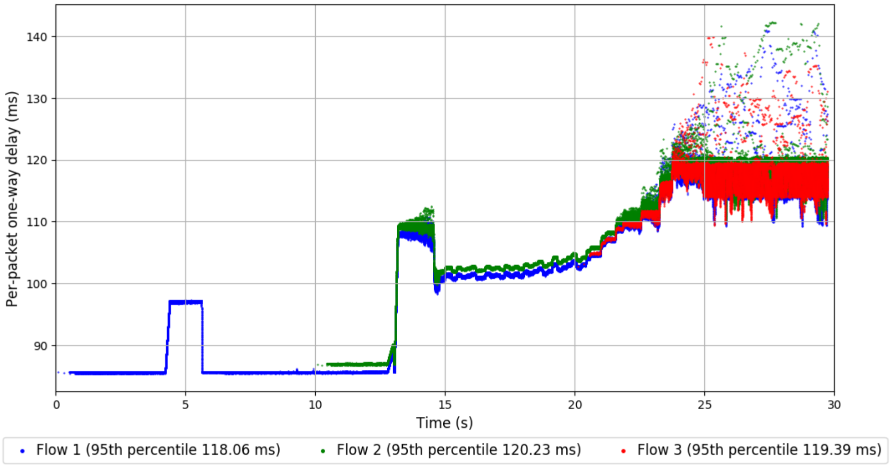
```
Run 3: Statistics of Vivace-loss

Start at: 2018-02-28 00:46:45
End at: 2018-02-28 00:47:15
Local clock offset: -3.44 ms
Remote clock offset: -5.379 ms

# Below is generated by plot.py at 2018-02-28 08:17:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.90 Mbit/s
95th percentile per-packet one-way delay: 119.289 ms
Loss rate: 5.82%
-- Flow 1:
Average throughput: 49.03 Mbit/s
95th percentile per-packet one-way delay: 118.061 ms
Loss rate: 3.75%
-- Flow 2:
Average throughput: 30.67 Mbit/s
95th percentile per-packet one-way delay: 120.233 ms
Loss rate: 1.16%
-- Flow 3:
Average throughput: 23.28 Mbit/s
95th percentile per-packet one-way delay: 119.391 ms
Loss rate: 25.63%
```

Run 3: Report of Vivace-loss — Data Link



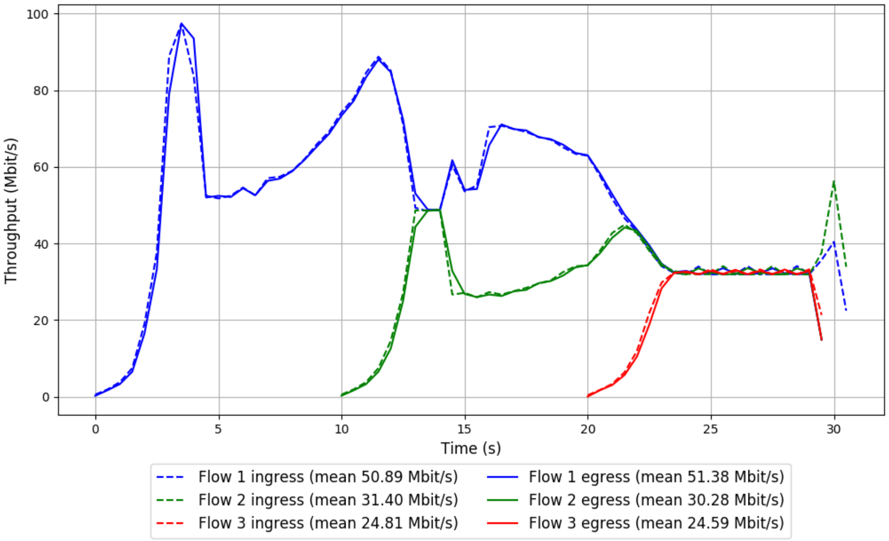


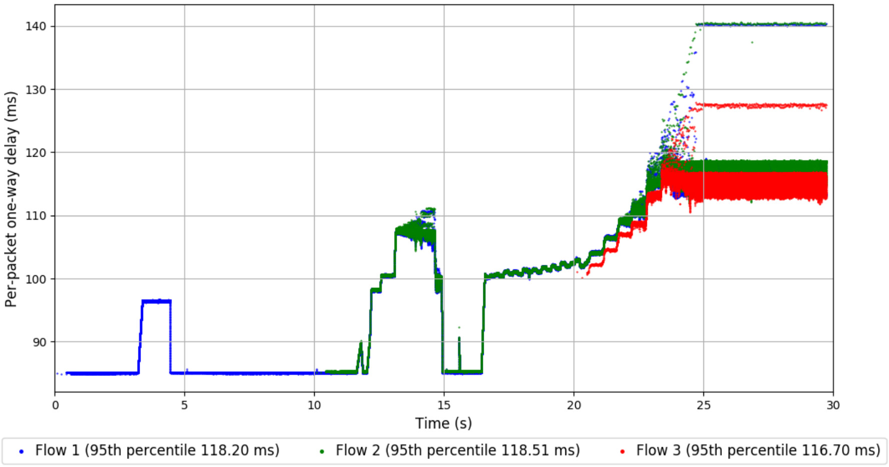
```
Run 4: Statistics of Vivace-loss

Start at: 2018-02-28 01:11:05
End at: 2018-02-28 01:11:35
Local clock offset: -4.365 ms
Remote clock offset: -5.647 ms

# Below is generated by plot.py at 2018-02-28 08:17:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.41 Mbit/s
95th percentile per-packet one-way delay: 118.324 ms
Loss rate: 4.57%
-- Flow 1:
Average throughput: 51.38 Mbit/s
95th percentile per-packet one-way delay: 118.202 ms
Loss rate: 2.93%
-- Flow 2:
Average throughput: 30.28 Mbit/s
95th percentile per-packet one-way delay: 118.507 ms
Loss rate: 9.11%
-- Flow 3:
Average throughput: 24.59 Mbit/s
95th percentile per-packet one-way delay: 116.699 ms
Loss rate: 2.90%
```

Run 4: Report of Vivace-loss — Data Link



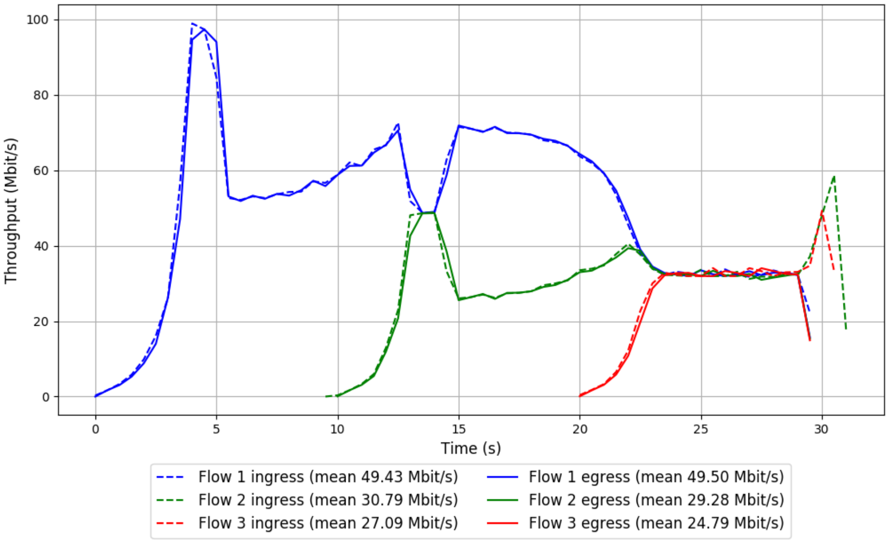


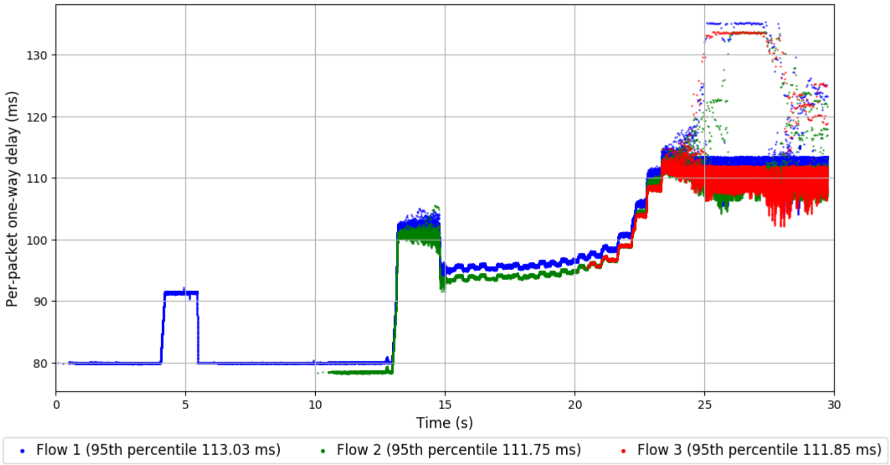
```
Run 5: Statistics of Vivace-loss

Start at: 2018-02-28 01:35:21
End at: 2018-02-28 01:35:51
Local clock offset: -4.56 ms
Remote clock offset: -0.121 ms

# Below is generated by plot.py at 2018-02-28 08:17:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.94 Mbit/s
95th percentile per-packet one-way delay: 112.599 ms
Loss rate: 5.72%
-- Flow 1:
Average throughput: 49.50 Mbit/s
95th percentile per-packet one-way delay: 113.035 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 29.28 Mbit/s
95th percentile per-packet one-way delay: 111.755 ms
Loss rate: 11.74%
-- Flow 3:
Average throughput: 24.79 Mbit/s
95th percentile per-packet one-way delay: 111.852 ms
Loss rate: 18.74%
```

Run 5: Report of Vivace-loss — Data Link



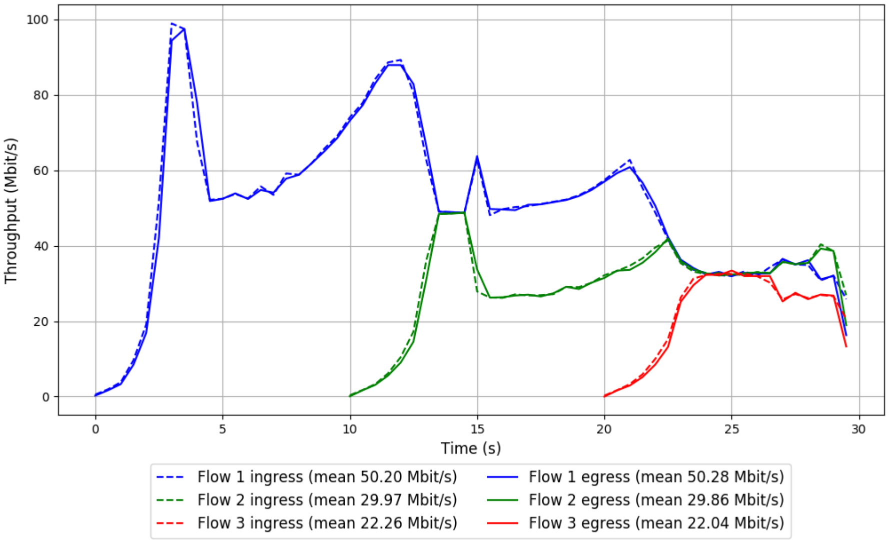


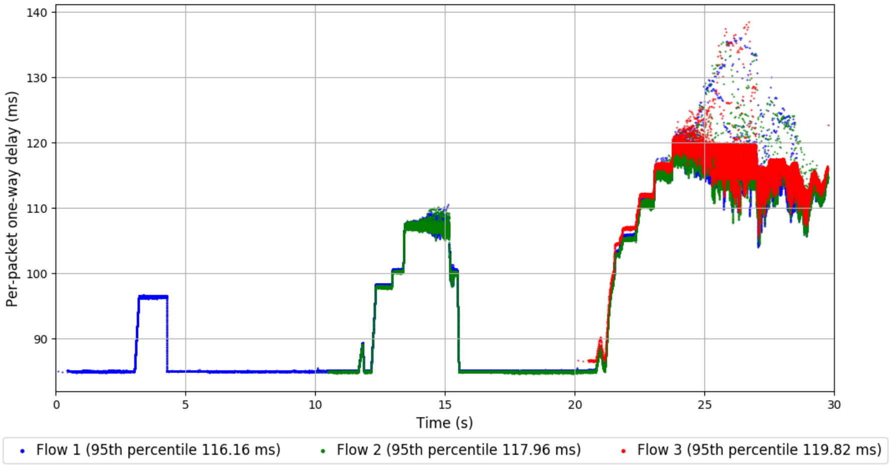
```
Run 6: Statistics of Vivace-loss

Start at: 2018-02-28 01:59:35
End at: 2018-02-28 02:00:05
Local clock offset: -3.88 ms
Remote clock offset: -4.805 ms

# Below is generated by plot.py at 2018-02-28 08:18:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.22 Mbit/s
95th percentile per-packet one-way delay: 118.020 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 50.28 Mbit/s
95th percentile per-packet one-way delay: 116.160 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 29.86 Mbit/s
95th percentile per-packet one-way delay: 117.957 ms
Loss rate: 1.41%
-- Flow 3:
Average throughput: 22.04 Mbit/s
95th percentile per-packet one-way delay: 119.820 ms
Loss rate: 3.05%
```

Run 6: Report of Vivace-loss — Data Link



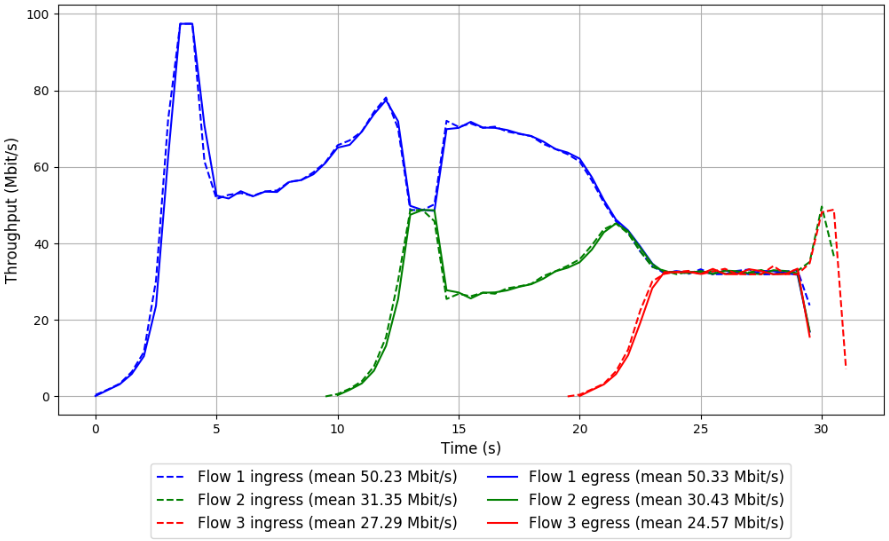


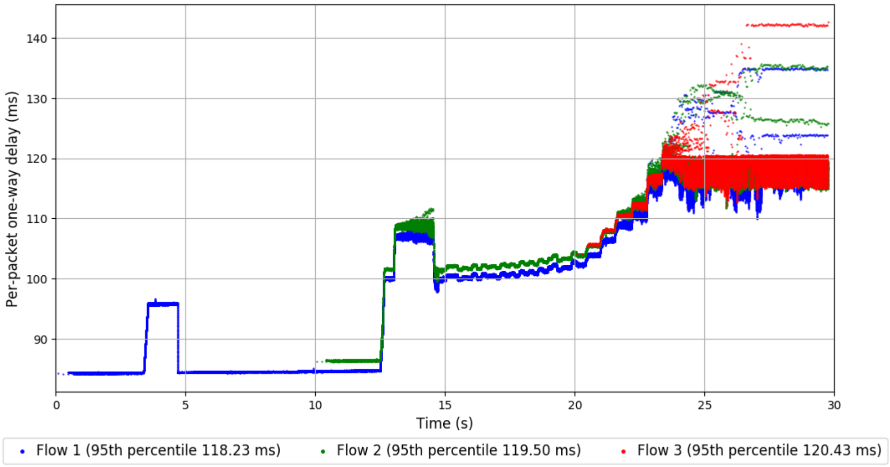
```
Run 7: Statistics of Vivace-loss

Start at: 2018-02-28 02:23:46
End at: 2018-02-28 02:24:16
Local clock offset: -9.073 ms
Remote clock offset: -4.824 ms

# Below is generated by plot.py at 2018-02-28 08:18:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.51 Mbit/s
95th percentile per-packet one-way delay: 119.562 ms
Loss rate: 5.24%
-- Flow 1:
Average throughput: 50.33 Mbit/s
95th percentile per-packet one-way delay: 118.232 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 30.43 Mbit/s
95th percentile per-packet one-way delay: 119.499 ms
Loss rate: 8.54%
-- Flow 3:
Average throughput: 24.57 Mbit/s
95th percentile per-packet one-way delay: 120.429 ms
Loss rate: 21.56%
```

Run 7: Report of Vivace-loss — Data Link



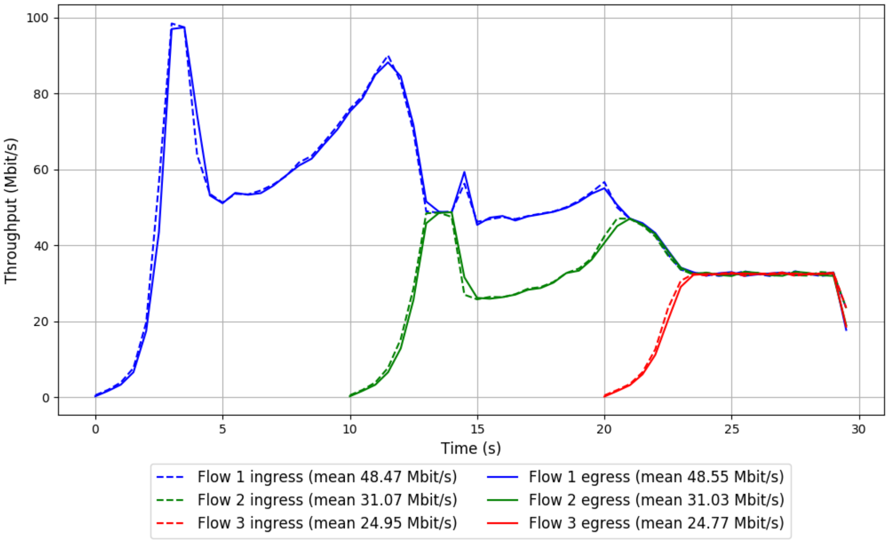


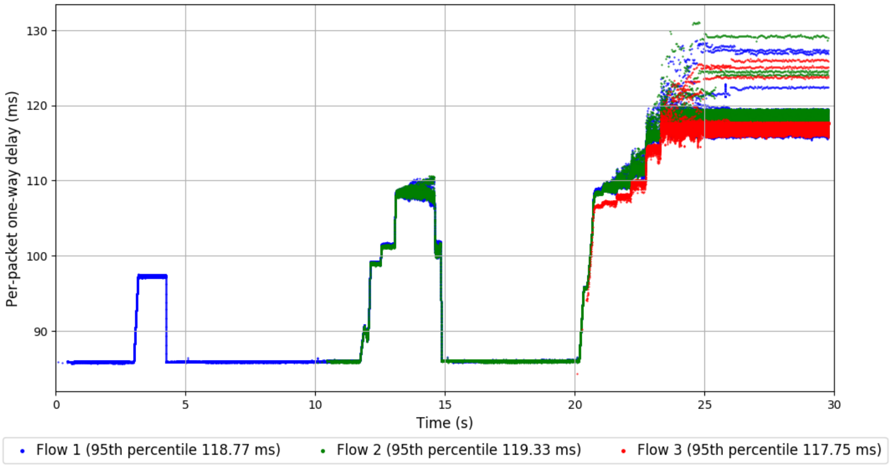
```
Run 8: Statistics of Vivace-loss

Start at: 2018-02-28 02:47:30
End at: 2018-02-28 02:48:00
Local clock offset: -30.045 ms
Remote clock offset: -6.052 ms

# Below is generated by plot.py at 2018-02-28 08:18:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.19 Mbit/s
95th percentile per-packet one-way delay: 119.204 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 48.55 Mbit/s
95th percentile per-packet one-way delay: 118.774 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 31.03 Mbit/s
95th percentile per-packet one-way delay: 119.330 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 24.77 Mbit/s
95th percentile per-packet one-way delay: 117.745 ms
Loss rate: 2.60%
```

Run 8: Report of Vivace-loss — Data Link



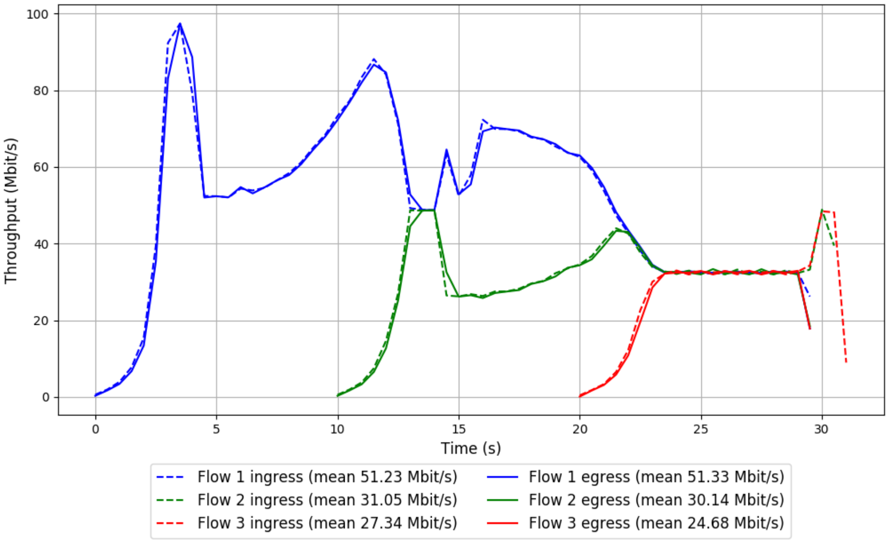


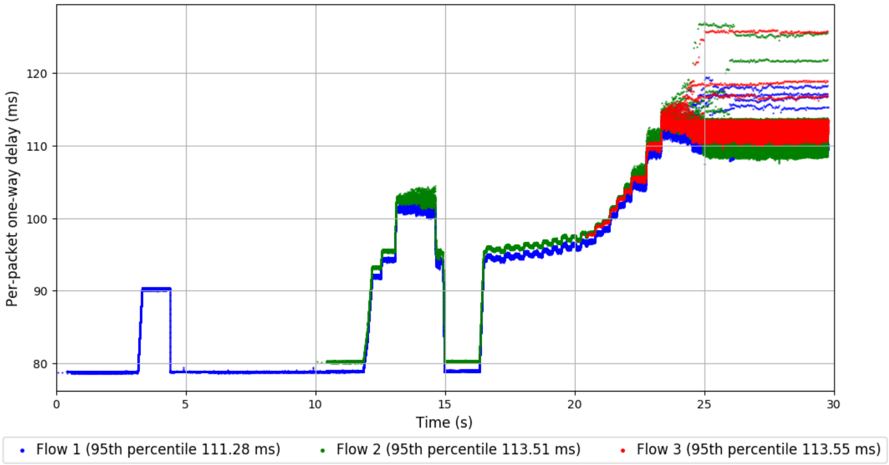
```
Run 9: Statistics of Vivace-loss

Start at: 2018-02-28 03:11:01
End at: 2018-02-28 03:11:31
Local clock offset: -37.697 ms
Remote clock offset: -0.209 ms

# Below is generated by plot.py at 2018-02-28 08:18:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.34 Mbit/s
95th percentile per-packet one-way delay: 113.170 ms
Loss rate: 5.14%
-- Flow 1:
Average throughput: 51.33 Mbit/s
95th percentile per-packet one-way delay: 111.275 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 30.14 Mbit/s
95th percentile per-packet one-way delay: 113.508 ms
Loss rate: 8.55%
-- Flow 3:
Average throughput: 24.68 Mbit/s
95th percentile per-packet one-way delay: 113.550 ms
Loss rate: 21.31%
```

Run 9: Report of Vivace-loss — Data Link



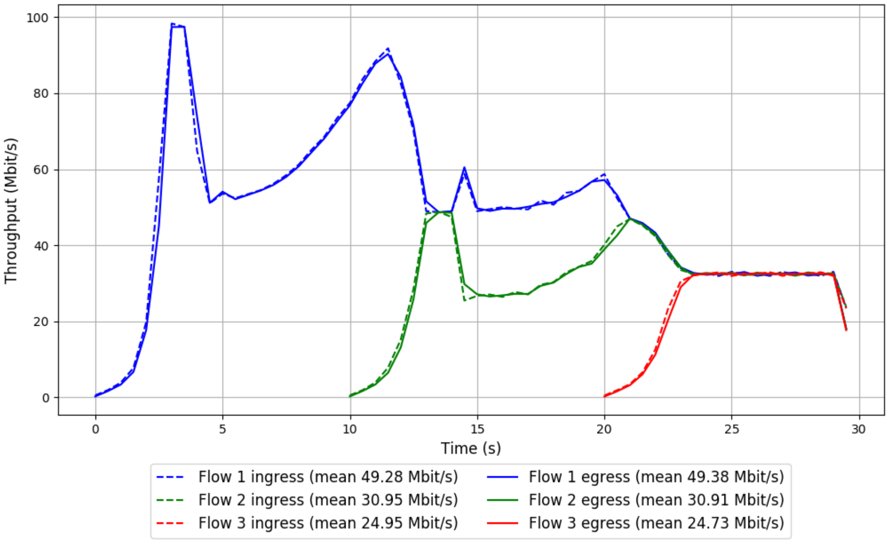


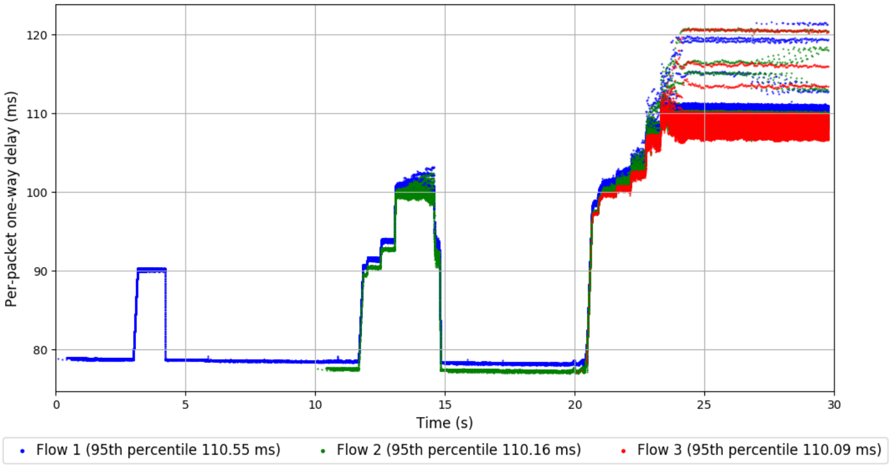
```
Run 10: Statistics of Vivace-loss

Start at: 2018-02-28 03:34:57
End at: 2018-02-28 03:35:27
Local clock offset: -23.833 ms
Remote clock offset: -0.004 ms

# Below is generated by plot.py at 2018-02-28 08:18:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.94 Mbit/s
95th percentile per-packet one-way delay: 110.228 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 49.38 Mbit/s
95th percentile per-packet one-way delay: 110.546 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 30.91 Mbit/s
95th percentile per-packet one-way delay: 110.164 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 24.73 Mbit/s
95th percentile per-packet one-way delay: 110.090 ms
Loss rate: 2.58%
```

Run 10: Report of Vivace-loss — Data Link



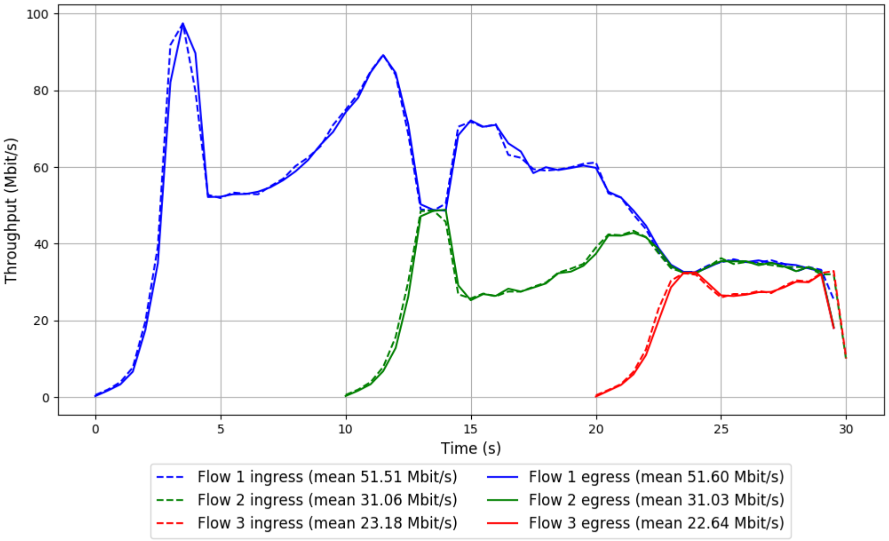


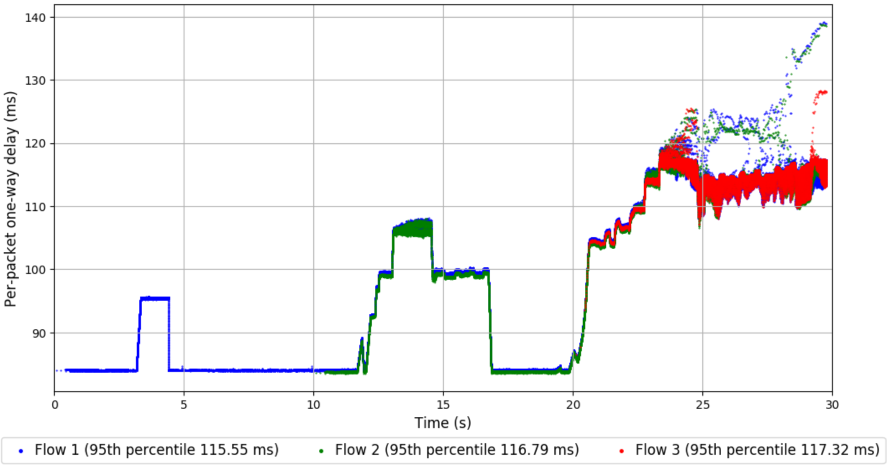
```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-28 00:13:30
End at: 2018-02-28 00:14:00
Local clock offset: -3.07 ms
Remote clock offset: -6.296 ms

# Below is generated by plot.py at 2018-02-28 08:18:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.53 Mbit/s
95th percentile per-packet one-way delay: 116.738 ms
Loss rate: 1.63%
-- Flow 1:
Average throughput: 51.60 Mbit/s
95th percentile per-packet one-way delay: 115.550 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 31.03 Mbit/s
95th percentile per-packet one-way delay: 116.792 ms
Loss rate: 2.47%
-- Flow 3:
Average throughput: 22.64 Mbit/s
95th percentile per-packet one-way delay: 117.316 ms
Loss rate: 6.89%
```

Run 1: Report of Vivace-LTE — Data Link



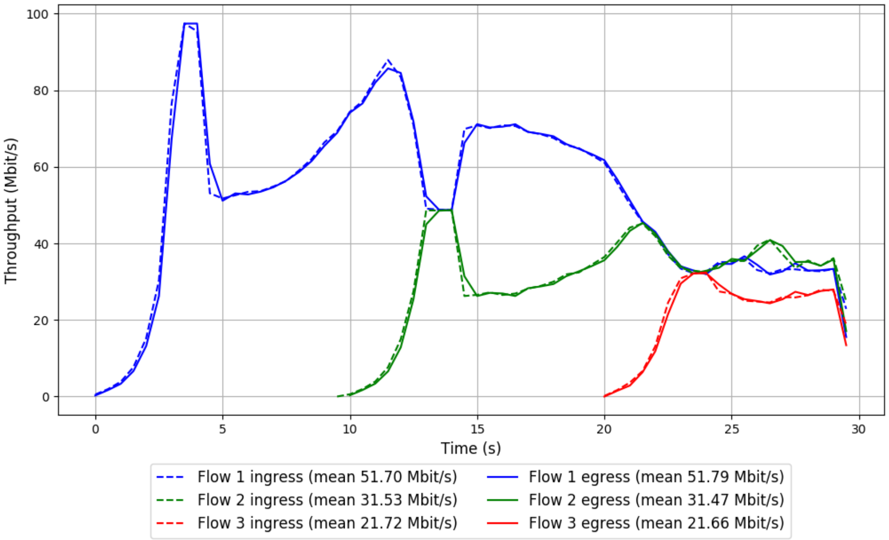


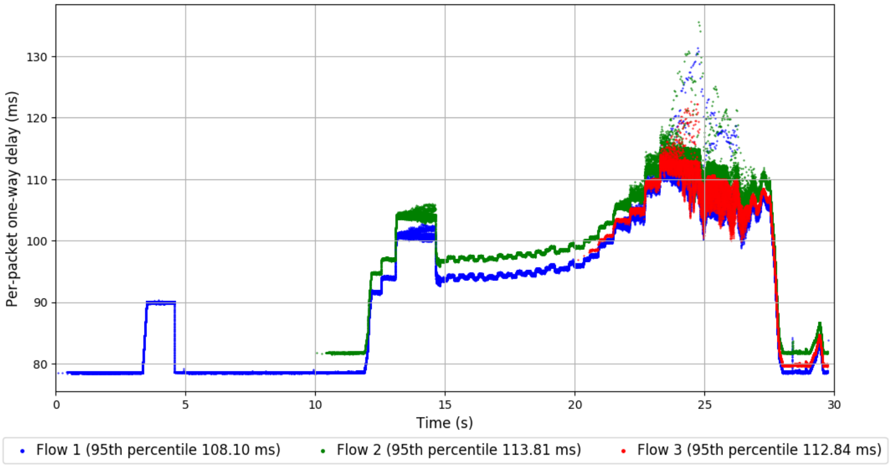
```
Run 2: Statistics of Vivace-LTE

Start at: 2018-02-28 00:37:08
End at: 2018-02-28 00:37:38
Local clock offset: -2.112 ms
Remote clock offset: 0.084 ms

# Below is generated by plot.py at 2018-02-28 08:19:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.69 Mbit/s
95th percentile per-packet one-way delay: 111.494 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 51.79 Mbit/s
95th percentile per-packet one-way delay: 108.096 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 31.47 Mbit/s
95th percentile per-packet one-way delay: 113.810 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 21.66 Mbit/s
95th percentile per-packet one-way delay: 112.838 ms
Loss rate: 2.27%
```

Run 2: Report of Vivace-LTE — Data Link



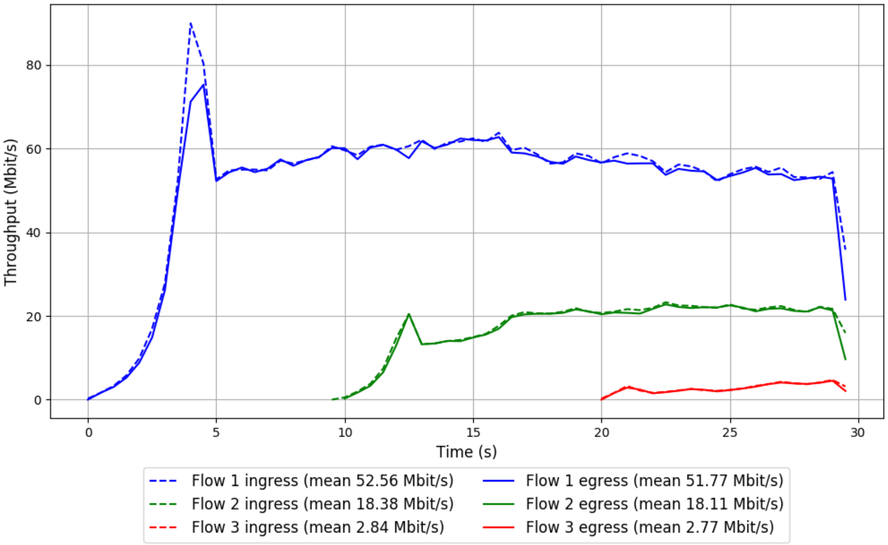


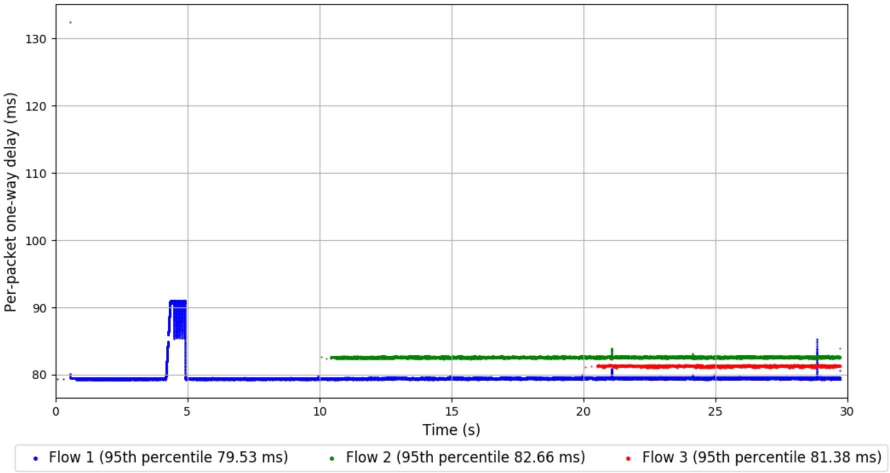
```
Run 3: Statistics of Vivace-LTE

Start at: 2018-02-28 01:01:33
End at: 2018-02-28 01:02:03
Local clock offset: -4.278 ms
Remote clock offset: -1.498 ms

# Below is generated by plot.py at 2018-02-28 08:19:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.67 Mbit/s
95th percentile per-packet one-way delay: 82.642 ms
Loss rate: 2.24%
-- Flow 1:
Average throughput: 51.77 Mbit/s
95th percentile per-packet one-way delay: 79.526 ms
Loss rate: 2.14%
-- Flow 2:
Average throughput: 18.11 Mbit/s
95th percentile per-packet one-way delay: 82.663 ms
Loss rate: 2.51%
-- Flow 3:
Average throughput: 2.77 Mbit/s
95th percentile per-packet one-way delay: 81.382 ms
Loss rate: 4.49%
```

Run 3: Report of Vivace-LTE — Data Link



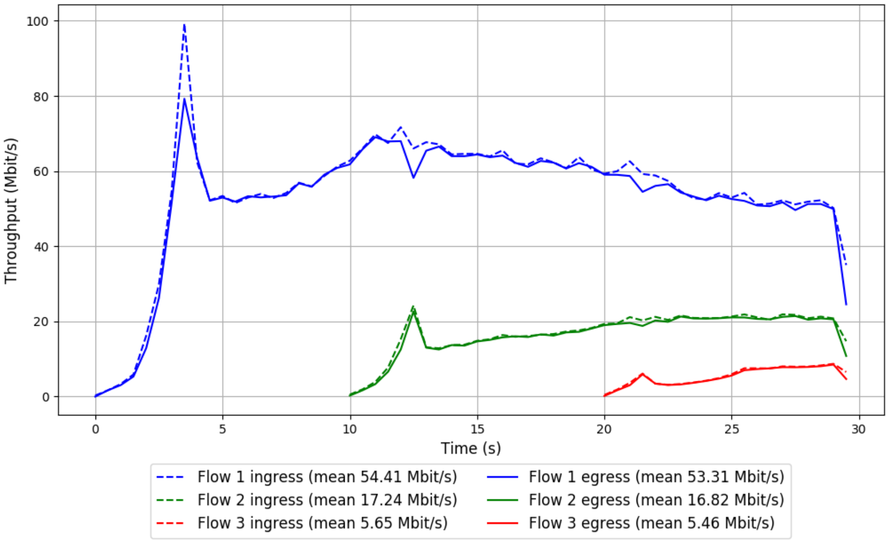


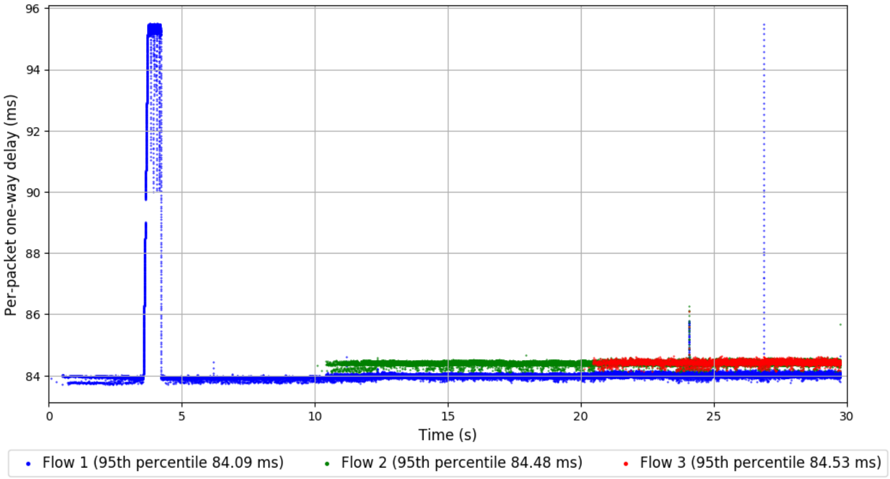
```
Run 4: Statistics of Vivace-LTE

Start at: 2018-02-28 01:25:54
End at: 2018-02-28 01:26:24
Local clock offset: -4.43 ms
Remote clock offset: -6.105 ms

# Below is generated by plot.py at 2018-02-28 08:19:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.23 Mbit/s
95th percentile per-packet one-way delay: 84.470 ms
Loss rate: 2.77%
-- Flow 1:
Average throughput: 53.31 Mbit/s
95th percentile per-packet one-way delay: 84.091 ms
Loss rate: 2.59%
-- Flow 2:
Average throughput: 16.82 Mbit/s
95th percentile per-packet one-way delay: 84.483 ms
Loss rate: 3.26%
-- Flow 3:
Average throughput: 5.46 Mbit/s
95th percentile per-packet one-way delay: 84.530 ms
Loss rate: 5.10%
```

Run 4: Report of Vivace-LTE — Data Link



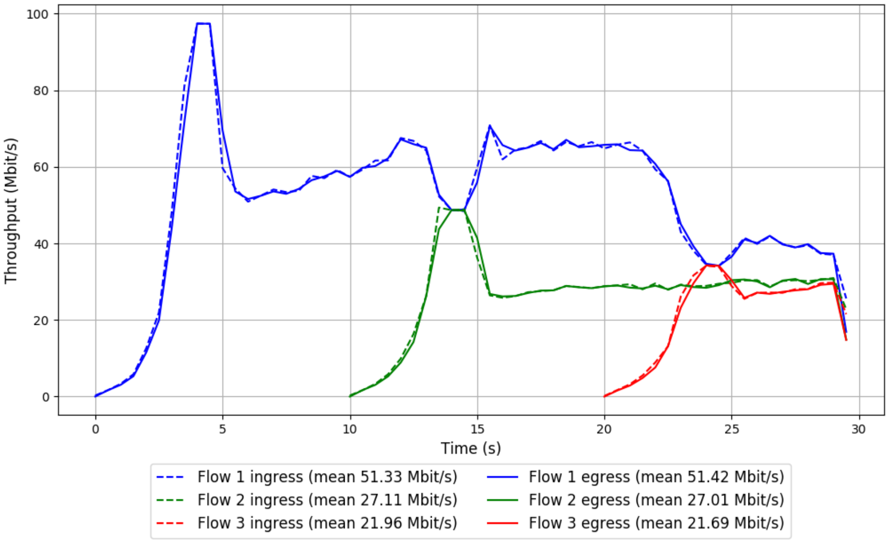


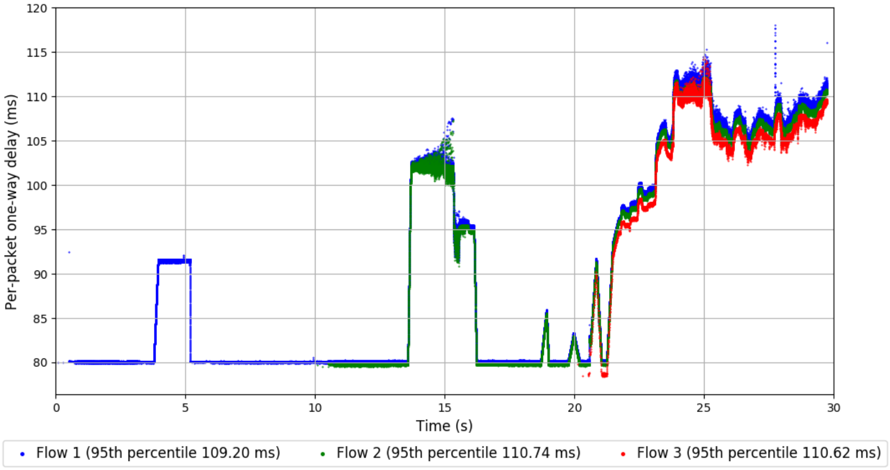
```
Run 5: Statistics of Vivace-LTE

Start at: 2018-02-28 01:50:05
End at: 2018-02-28 01:50:35
Local clock offset: -4.298 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2018-02-28 08:19:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.36 Mbit/s
95th percentile per-packet one-way delay: 110.298 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 51.42 Mbit/s
95th percentile per-packet one-way delay: 109.203 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 27.01 Mbit/s
95th percentile per-packet one-way delay: 110.740 ms
Loss rate: 1.38%
-- Flow 3:
Average throughput: 21.69 Mbit/s
95th percentile per-packet one-way delay: 110.622 ms
Loss rate: 3.08%
```

Run 5: Report of Vivace-LTE — Data Link



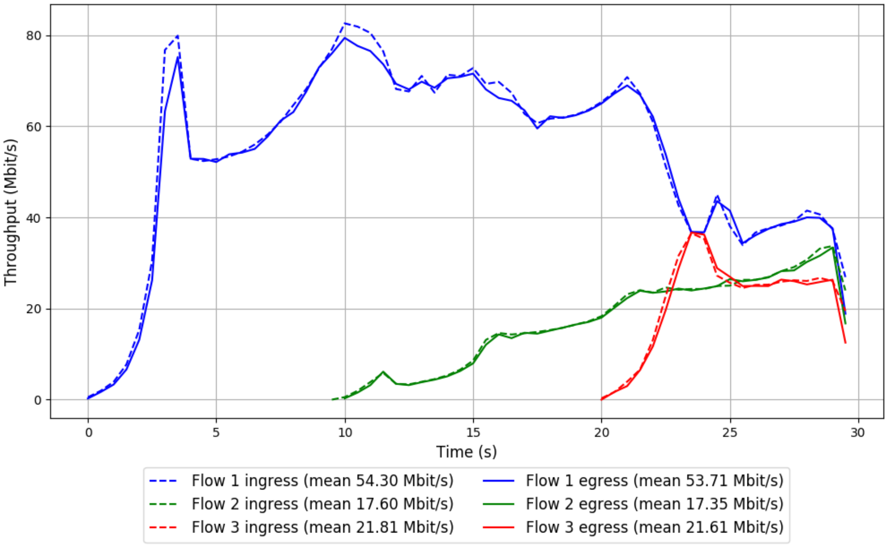


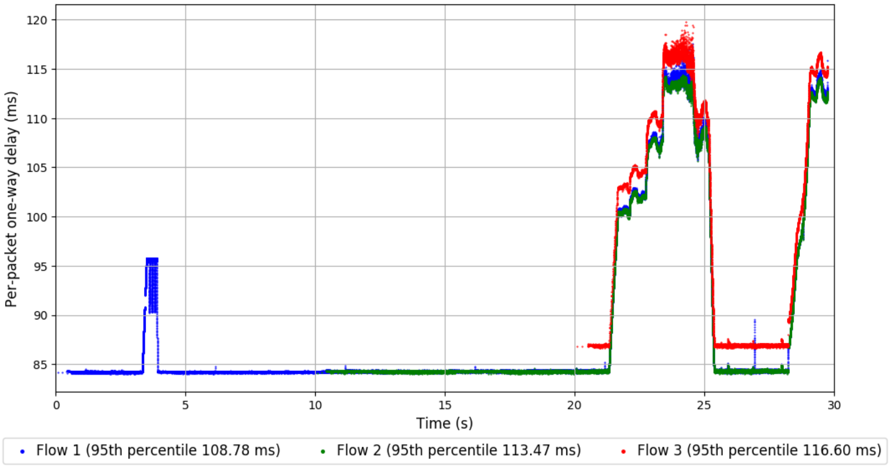
```
Run 6: Statistics of Vivace-LTE

Start at: 2018-02-28 02:14:14
End at: 2018-02-28 02:14:44
Local clock offset: -3.601 ms
Remote clock offset: -5.572 ms

# Below is generated by plot.py at 2018-02-28 08:19:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.24 Mbit/s
95th percentile per-packet one-way delay: 113.542 ms
Loss rate: 2.01%
-- Flow 1:
Average throughput: 53.71 Mbit/s
95th percentile per-packet one-way delay: 108.781 ms
Loss rate: 1.79%
-- Flow 2:
Average throughput: 17.35 Mbit/s
95th percentile per-packet one-way delay: 113.471 ms
Loss rate: 2.46%
-- Flow 3:
Average throughput: 21.61 Mbit/s
95th percentile per-packet one-way delay: 116.597 ms
Loss rate: 2.96%
```

Run 6: Report of Vivace-LTE — Data Link



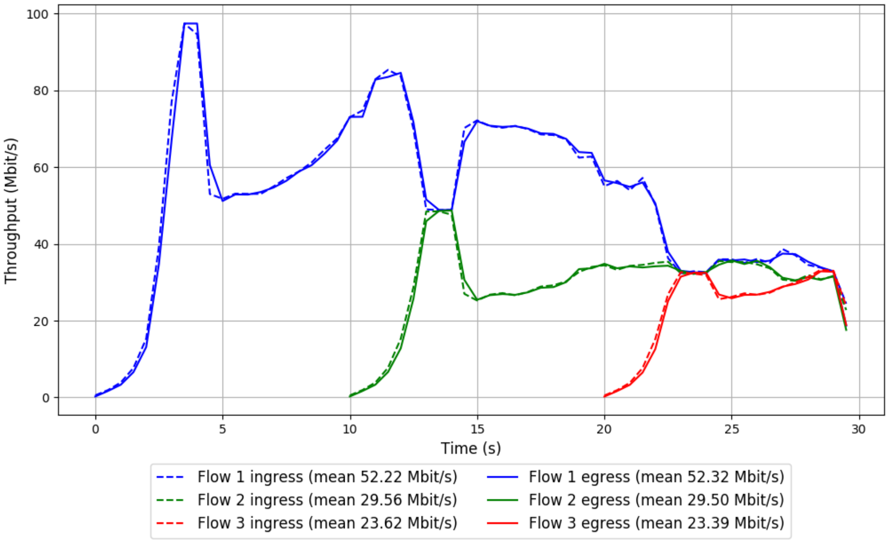


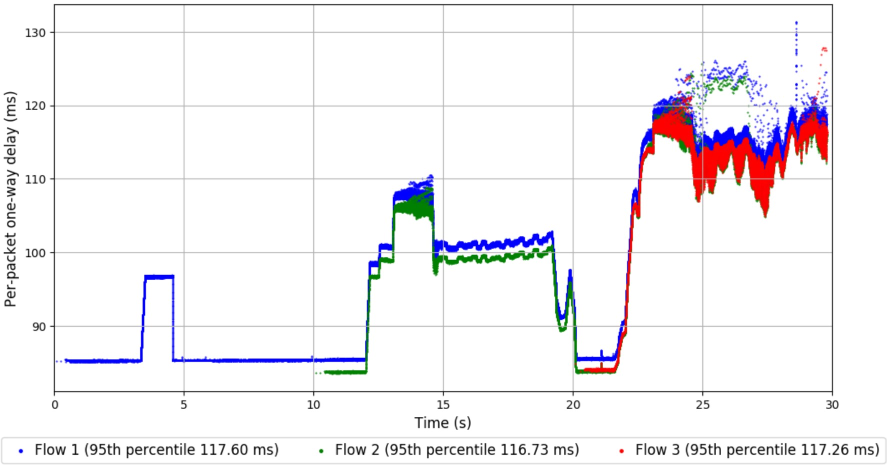
```
Run 7: Statistics of Vivace-LTE

Start at: 2018-02-28 02:38:09
End at: 2018-02-28 02:38:39
Local clock offset: -25.568 ms
Remote clock offset: -5.116 ms

# Below is generated by plot.py at 2018-02-28 08:19:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.50 Mbit/s
95th percentile per-packet one-way delay: 117.102 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 52.32 Mbit/s
95th percentile per-packet one-way delay: 117.596 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 29.50 Mbit/s
95th percentile per-packet one-way delay: 116.726 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 23.39 Mbit/s
95th percentile per-packet one-way delay: 117.259 ms
Loss rate: 2.75%
```

Run 7: Report of Vivace-LTE — Data Link



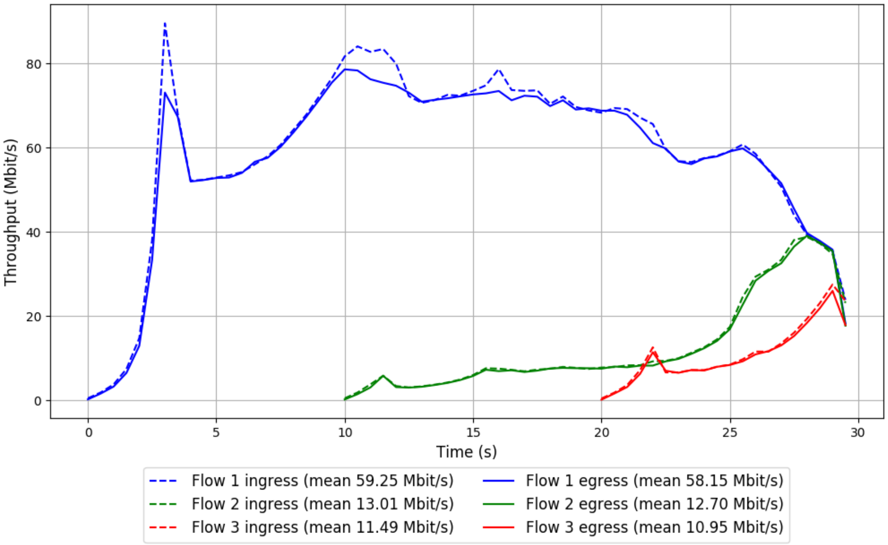


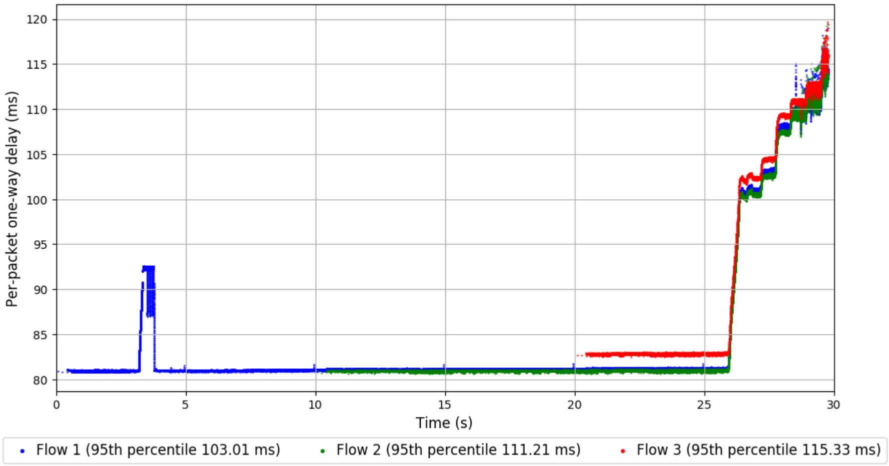
```
Run 8: Statistics of Vivace-LTE

Start at: 2018-02-28 03:01:42
End at: 2018-02-28 03:02:12
Local clock offset: -35.019 ms
Remote clock offset: -1.414 ms

# Below is generated by plot.py at 2018-02-28 08:19:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.13 Mbit/s
95th percentile per-packet one-way delay: 109.585 ms
Loss rate: 2.73%
-- Flow 1:
Average throughput: 58.15 Mbit/s
95th percentile per-packet one-way delay: 103.011 ms
Loss rate: 2.41%
-- Flow 2:
Average throughput: 12.70 Mbit/s
95th percentile per-packet one-way delay: 111.212 ms
Loss rate: 3.26%
-- Flow 3:
Average throughput: 10.95 Mbit/s
95th percentile per-packet one-way delay: 115.327 ms
Loss rate: 6.45%
```

Run 8: Report of Vivace-LTE — Data Link



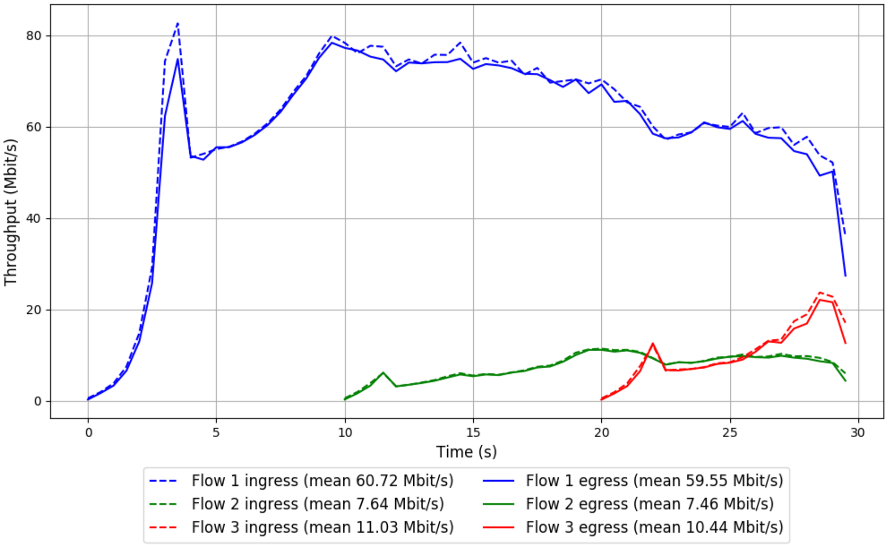


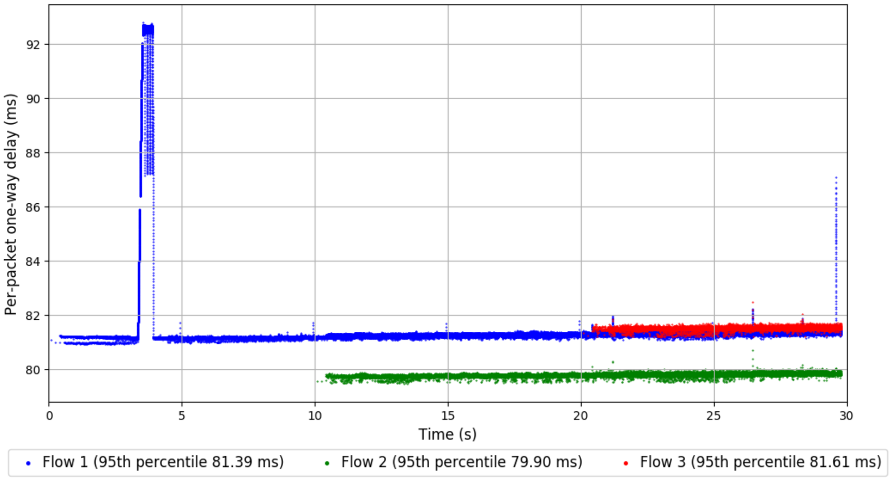
```
Run 9: Statistics of Vivace-LTE

Start at: 2018-02-28 03:25:36
End at: 2018-02-28 03:26:06
Local clock offset: -41.909 ms
Remote clock offset: -0.819 ms

# Below is generated by plot.py at 2018-02-28 08:19:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.90 Mbit/s
95th percentile per-packet one-way delay: 81.502 ms
Loss rate: 2.76%
-- Flow 1:
Average throughput: 59.55 Mbit/s
95th percentile per-packet one-way delay: 81.389 ms
Loss rate: 2.49%
-- Flow 2:
Average throughput: 7.46 Mbit/s
95th percentile per-packet one-way delay: 79.903 ms
Loss rate: 3.10%
-- Flow 3:
Average throughput: 10.44 Mbit/s
95th percentile per-packet one-way delay: 81.607 ms
Loss rate: 6.94%
```

Run 9: Report of Vivace-LTE — Data Link



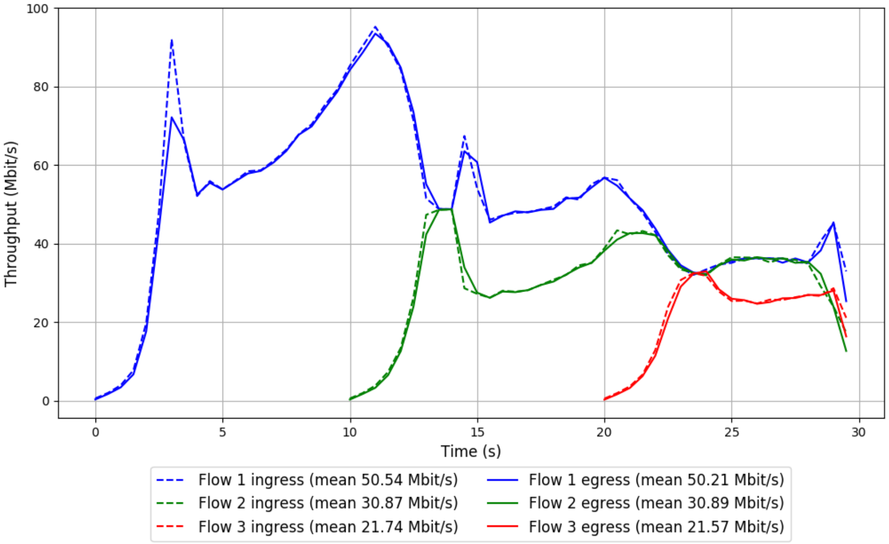


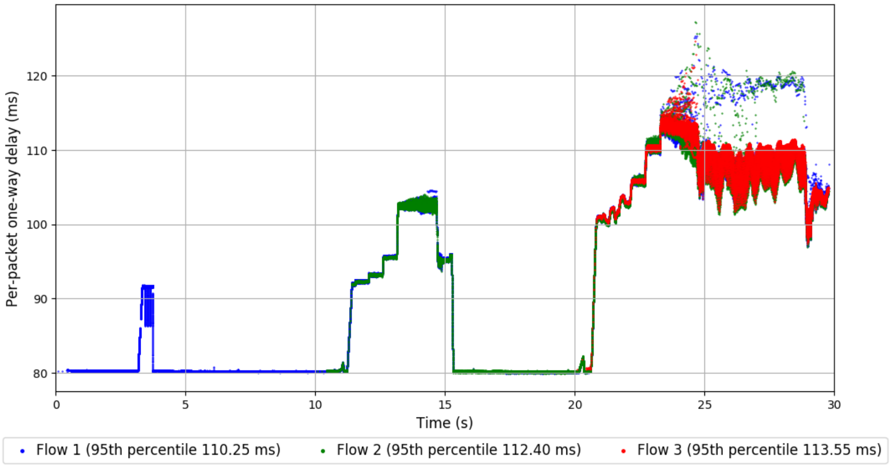
```
Run 10: Statistics of Vivace-LTE

Start at: 2018-02-28 03:49:07
End at: 2018-02-28 03:49:37
Local clock offset: -3.497 ms
Remote clock offset: -0.947 ms

# Below is generated by plot.py at 2018-02-28 08:19:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.73 Mbit/s
95th percentile per-packet one-way delay: 112.069 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 50.21 Mbit/s
95th percentile per-packet one-way delay: 110.245 ms
Loss rate: 1.19%
-- Flow 2:
Average throughput: 30.89 Mbit/s
95th percentile per-packet one-way delay: 112.401 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 21.57 Mbit/s
95th percentile per-packet one-way delay: 113.548 ms
Loss rate: 2.50%
```

Run 10: Report of Vivace-LTE — Data Link


Throughput (Mbit/s)
0
20
40
60
80
100
Time (s)
0
5
10
15
20
25
30
Flow 1 ingress (mean 50.54 Mbit/s)
Flow 2 ingress (mean 30.87 Mbit/s)
Flow 3 ingress (mean 21.74 Mbit/s)
Flow 1 egress (mean 50.21 Mbit/s)
Flow 2 egress (mean 30.89 Mbit/s)
Flow 3 egress (mean 21.57 Mbit/s)


Per-packet one-way delay (ms)
80
90
100
110
120
Time (s)
0
5
10
15
20
25
30
Flow 1 (95th percentile 110.25 ms)
Flow 2 (95th percentile 112.40 ms)
Flow 3 (95th percentile 113.55 ms)