Pantheon Report

Generated at 2018-04-11 01:54:52 (UTC).

Data path: India Ethernet (*remote*) →AWS India 1 Ethernet (*local*).

Repeated the test of 17 congestion control schemes 10 times.

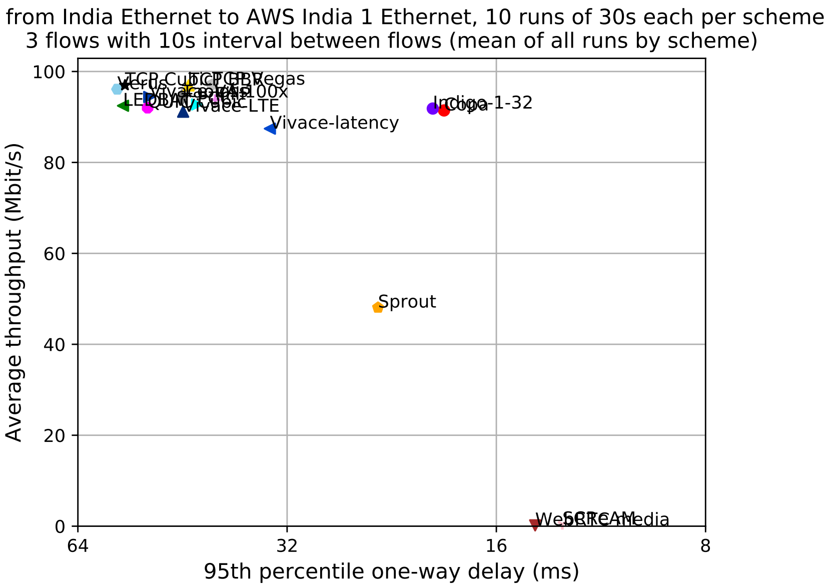
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

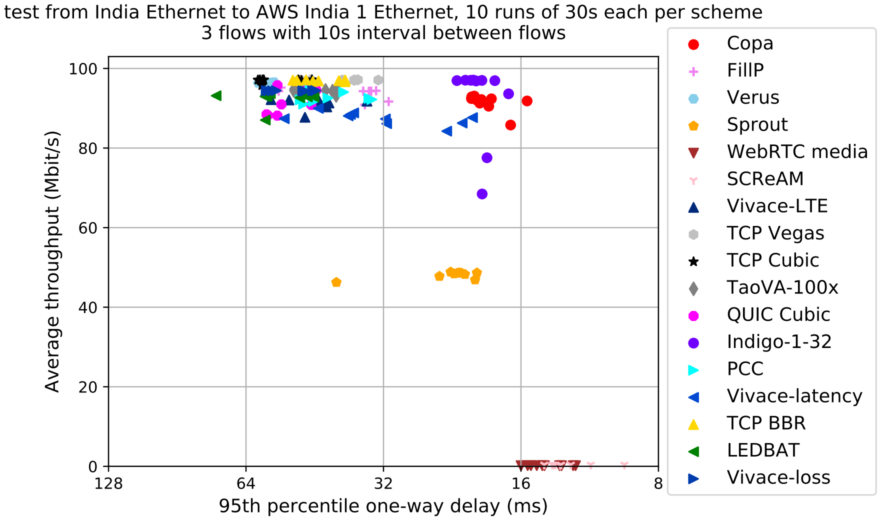
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

NTP offsets were measured against `nets.org.sg` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: master @ eb420b5be9bafccd22cf68b99ff5a2000462fc59
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/fillp @ 11f8c46a2bf1dc797253db7e8ca04076272b2a44
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 @ f271183af822eee5d0031620f4bebf38aedc5581
```


test from India Ethernet to AWS India 1 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)
100
80
60
40
20
0
64
32
16
8
TCP Cubic
TCP BBR
TCP Vegas
Verus
TaoVA-100x
LEDBAT
QUIC Cubic
Vivace-LTE
Vivace-latency
Indigo-1-32
Copa
Sprout
WebRTC media
SCReAM


test from India Ethernet to AWS India 1 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)
100
80
60
40
20
0
128
64
32
16
8
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

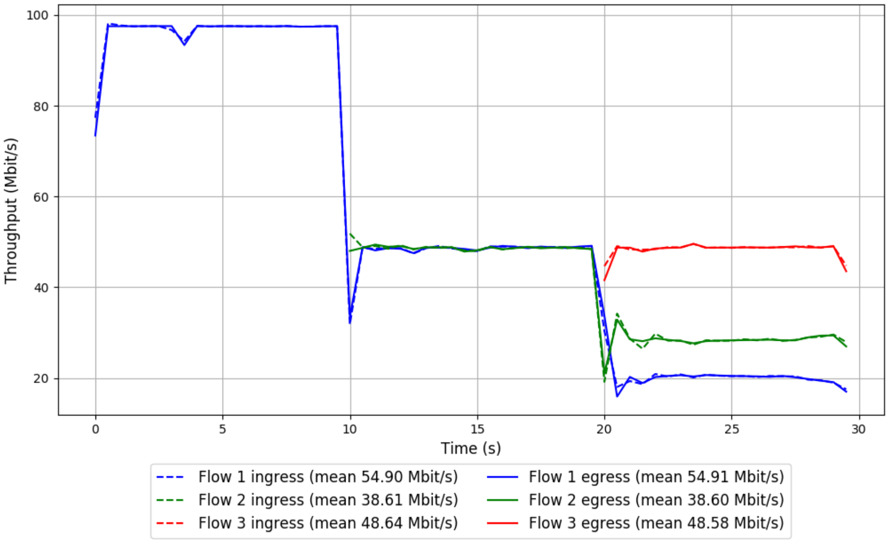
		mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
scheme	# runs	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	58.29	42.88	30.56	43.13	39.91	49.57	0.10	0.21	0.48
TCP Cubic	10	57.81	42.88	32.14	54.69	45.71	50.34	0.15	0.24	0.63
LEDBAT	10	56.50	38.37	31.55	52.84	50.92	47.03	0.13	0.32	0.75
PCC	10	61.42	34.10	26.34	42.44	41.42	40.45	0.07	0.19	0.34
QUIC Cubic	10	54.34	41.05	31.66	48.51	46.58	46.73	0.11	0.23	0.63
SCReAM	10	0.20	0.20	0.22	12.86	12.85	12.83	0.16	0.11	0.21
WebRTC media	10	0.06	0.06	0.05	13.98	14.16	13.94	0.03	0.00	0.07
Sprout	10	24.16	24.16	23.85	24.23	21.55	22.11	0.11	0.19	0.44
TaoVA-100x	10	57.63	38.98	32.42	41.61	44.04	42.35	0.09	0.21	0.54
TCP Vegas	10	63.07	35.16	33.16	39.04	37.36	36.13	0.09	0.10	1.02
Verus	10	58.15	42.71	29.06	47.70	50.46	53.03	0.12	0.22	0.53
Copa	10	56.35	38.47	28.65	18.28	19.68	20.31	0.07	0.14	0.37
FillP	10	50.88	44.08	41.10	38.28	35.33	44.75	0.11	0.37	0.48
Indigo-1-32	10	51.43	44.70	32.87	21.51	19.65	19.61	0.07	0.14	0.35
Vivace-latency	10	59.08	31.53	22.52	33.42	35.56	27.31	0.06	0.15	0.55
Vivace-loss	10	59.09	38.71	29.15	46.05	48.45	48.87	0.11	0.21	0.65
Vivace-LTE	10	56.59	38.95	26.41	42.81	44.34	34.94	0.15	0.24	0.42

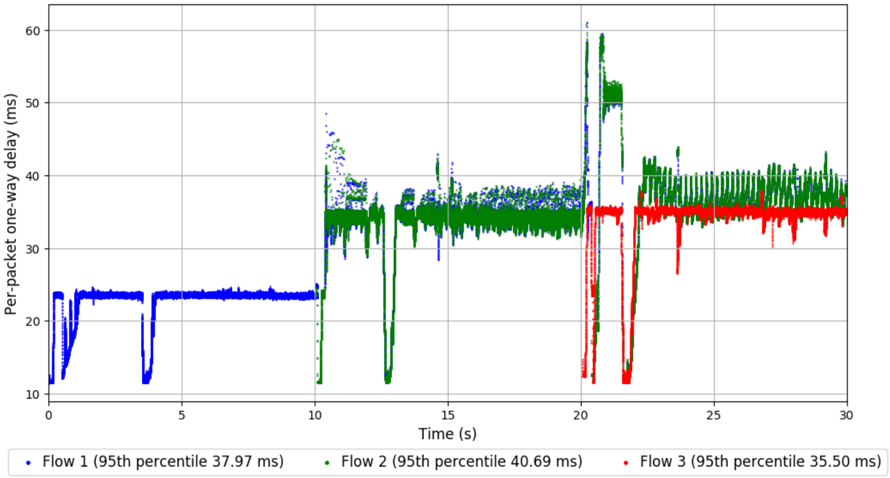
```
Run 1: Statistics of TCP BBR

Start at: 2018-04-10 18:08:35
End at: 2018-04-10 18:09:05
Local clock offset: -1.854 ms
Remote clock offset: -1.189 ms

# Below is generated by plot.py at 2018-04-11 01:26:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.66 Mbit/s
95th percentile per-packet one-way delay: 38.862 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 54.91 Mbit/s
95th percentile per-packet one-way delay: 37.973 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 38.60 Mbit/s
95th percentile per-packet one-way delay: 40.691 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 48.58 Mbit/s
95th percentile per-packet one-way delay: 35.498 ms
Loss rate: 0.48%
```

Run 1: Report of TCP BBR — Data Link



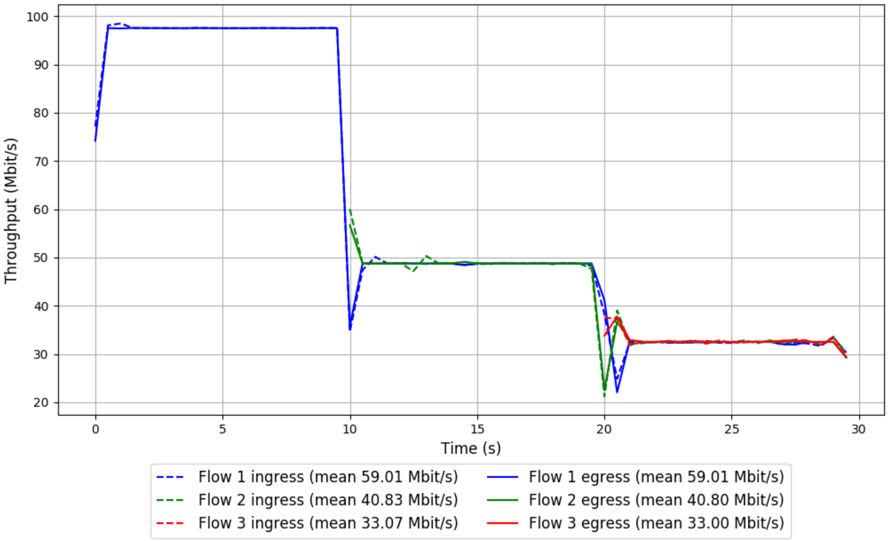


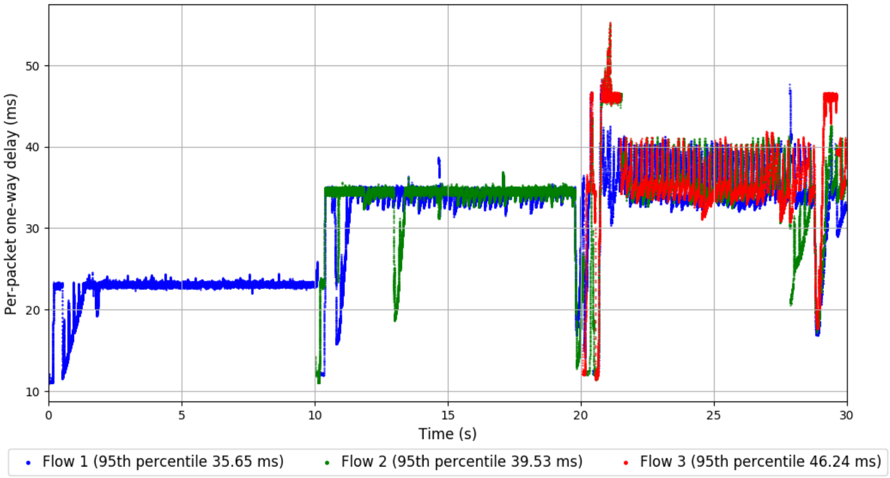
```
Run 2: Statistics of TCP BBR

Start at: 2018-04-10 18:31:26
End at: 2018-04-10 18:31:56
Local clock offset: -2.844 ms
Remote clock offset: 6.777 ms

# Below is generated by plot.py at 2018-04-11 01:26:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.09 Mbit/s
95th percentile per-packet one-way delay: 38.849 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 59.01 Mbit/s
95th percentile per-packet one-way delay: 35.652 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 40.80 Mbit/s
95th percentile per-packet one-way delay: 39.530 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 33.00 Mbit/s
95th percentile per-packet one-way delay: 46.245 ms
Loss rate: 0.47%
```

Run 2: Report of TCP BBR — Data Link



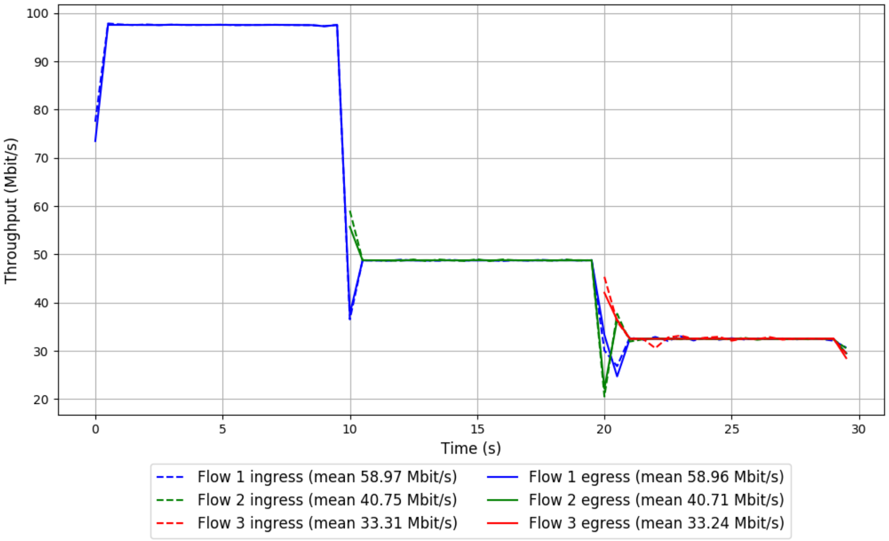


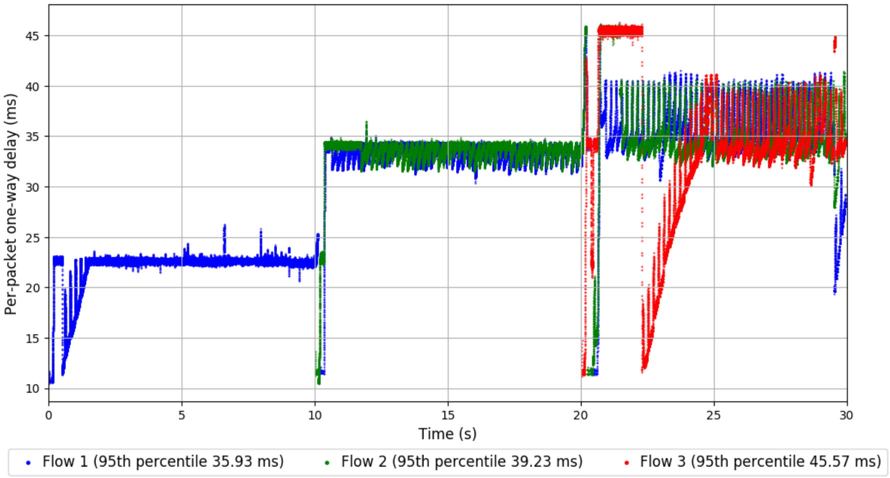
```
Run 3: Statistics of TCP BBR

Start at: 2018-04-10 18:53:31
End at: 2018-04-10 18:54:01
Local clock offset: -0.197 ms
Remote clock offset: 6.796 ms

# Below is generated by plot.py at 2018-04-11 01:26:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.08 Mbit/s
95th percentile per-packet one-way delay: 38.806 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 58.96 Mbit/s
95th percentile per-packet one-way delay: 35.930 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 40.71 Mbit/s
95th percentile per-packet one-way delay: 39.234 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 33.24 Mbit/s
95th percentile per-packet one-way delay: 45.574 ms
Loss rate: 0.47%
```

Run 3: Report of TCP BBR — Data Link



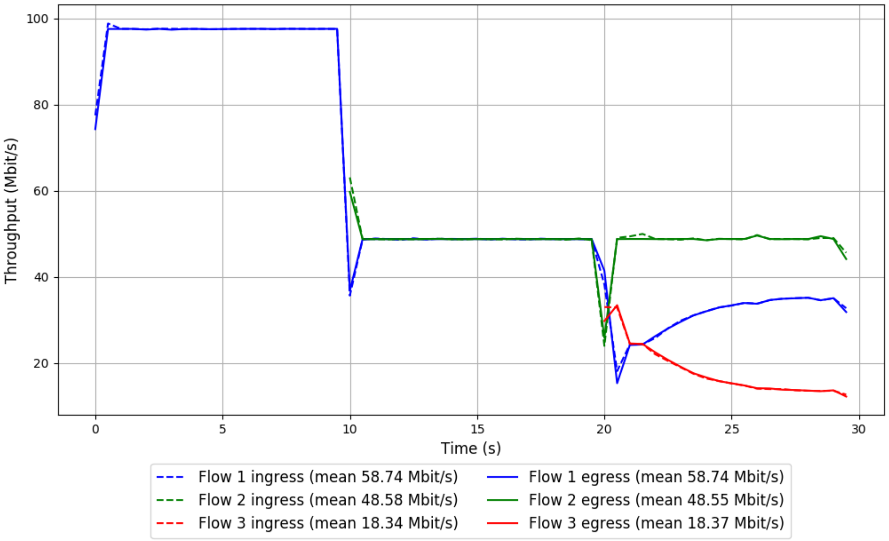


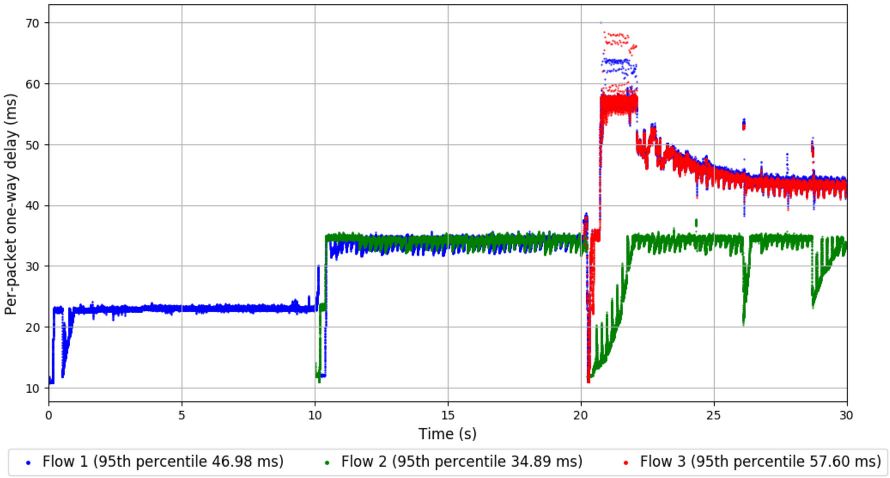
```
Run 4: Statistics of TCP BBR

Start at: 2018-04-10 19:15:40
End at: 2018-04-10 19:16:10
Local clock offset: 1.481 ms
Remote clock offset: 3.931 ms

# Below is generated by plot.py at 2018-04-11 01:26:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.13 Mbit/s
95th percentile per-packet one-way delay: 47.276 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 58.74 Mbit/s
95th percentile per-packet one-way delay: 46.983 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 48.55 Mbit/s
95th percentile per-packet one-way delay: 34.890 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 18.37 Mbit/s
95th percentile per-packet one-way delay: 57.604 ms
Loss rate: 0.43%
```

Run 4: Report of TCP BBR — Data Link



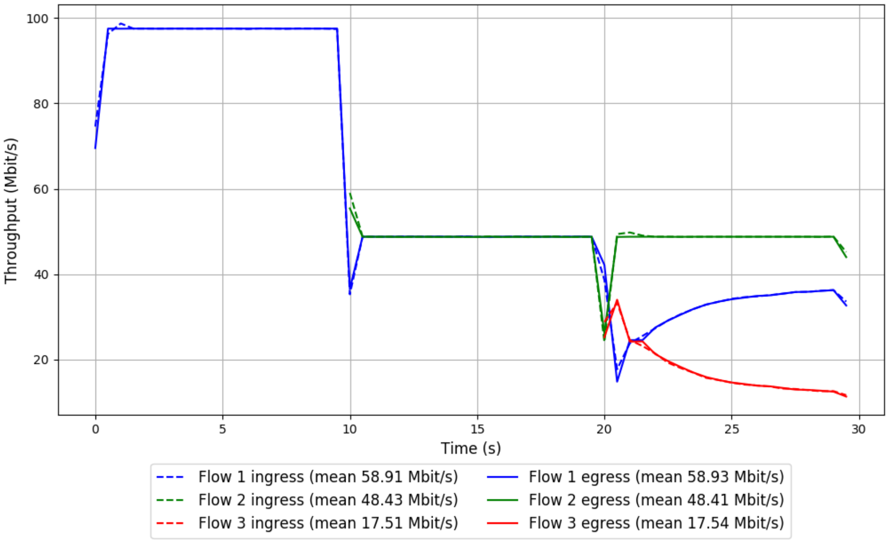


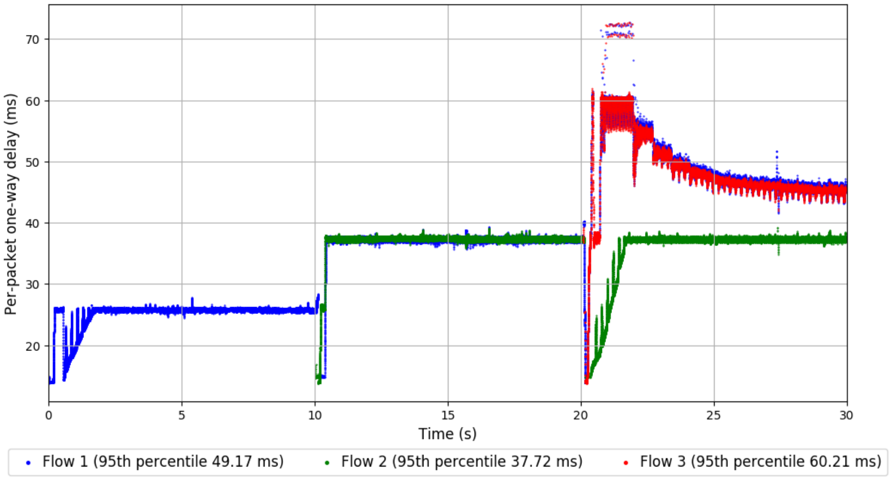
```
Run 5: Statistics of TCP BBR

Start at: 2018-04-10 19:37:22
End at: 2018-04-10 19:37:52
Local clock offset: 1.549 ms
Remote clock offset: -1.452 ms

# Below is generated by plot.py at 2018-04-11 01:26:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.95 Mbit/s
95th percentile per-packet one-way delay: 49.564 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 58.93 Mbit/s
95th percentile per-packet one-way delay: 49.167 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 48.41 Mbit/s
95th percentile per-packet one-way delay: 37.719 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 17.54 Mbit/s
95th percentile per-packet one-way delay: 60.210 ms
Loss rate: 0.43%
```

Run 5: Report of TCP BBR — Data Link



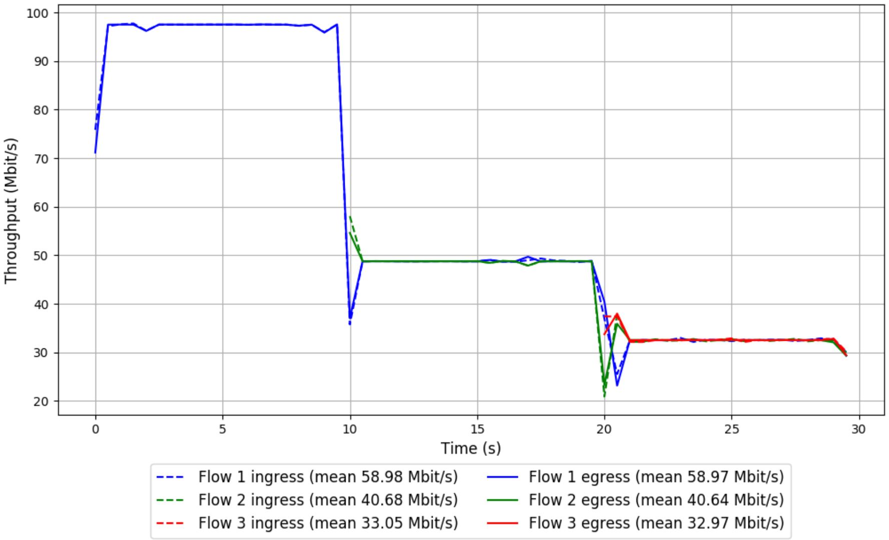


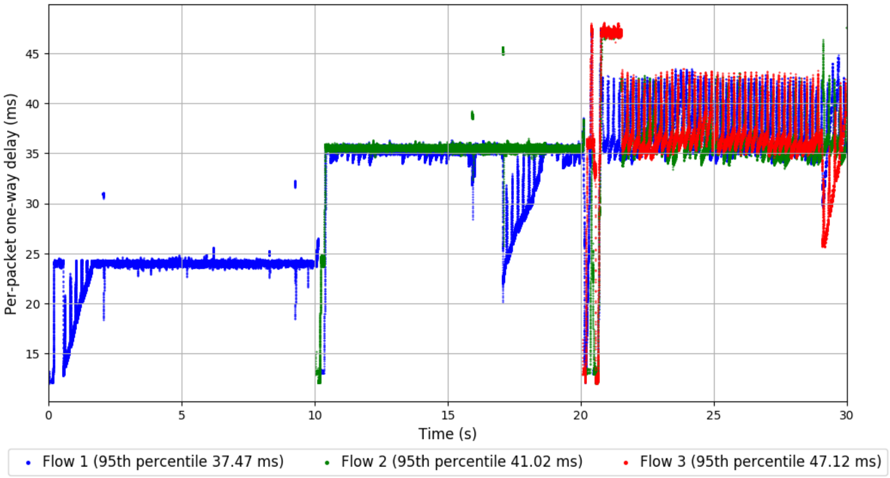
```
Run 6: Statistics of TCP BBR

Start at: 2018-04-10 19:59:14
End at: 2018-04-10 19:59:44
Local clock offset: 0.869 ms
Remote clock offset: -4.001 ms

# Below is generated by plot.py at 2018-04-11 01:26:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.94 Mbit/s
95th percentile per-packet one-way delay: 40.072 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 58.97 Mbit/s
95th percentile per-packet one-way delay: 37.472 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 40.64 Mbit/s
95th percentile per-packet one-way delay: 41.016 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 32.97 Mbit/s
95th percentile per-packet one-way delay: 47.118 ms
Loss rate: 0.50%
```

Run 6: Report of TCP BBR — Data Link



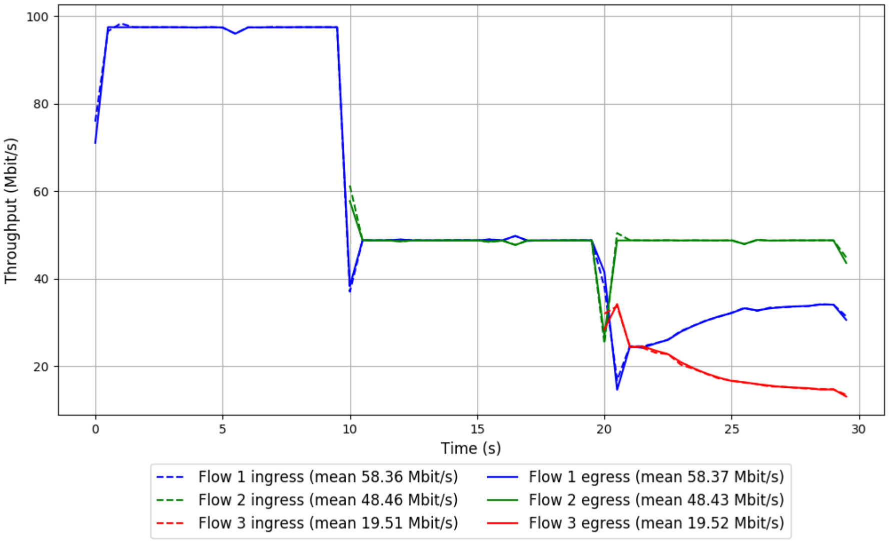


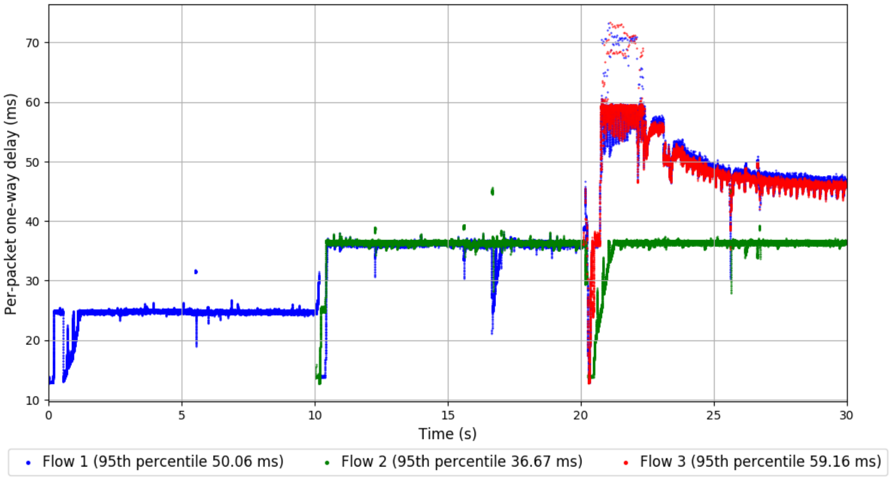
```
Run 7: Statistics of TCP BBR

Start at: 2018-04-10 20:21:00
End at: 2018-04-10 20:21:30
Local clock offset: 0.958 ms
Remote clock offset: -7.434 ms

# Below is generated by plot.py at 2018-04-11 01:26:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.05 Mbit/s
95th percentile per-packet one-way delay: 50.531 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 58.37 Mbit/s
95th percentile per-packet one-way delay: 50.062 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 48.43 Mbit/s
95th percentile per-packet one-way delay: 36.671 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 19.52 Mbit/s
95th percentile per-packet one-way delay: 59.160 ms
Loss rate: 0.46%
```

Run 7: Report of TCP BBR — Data Link



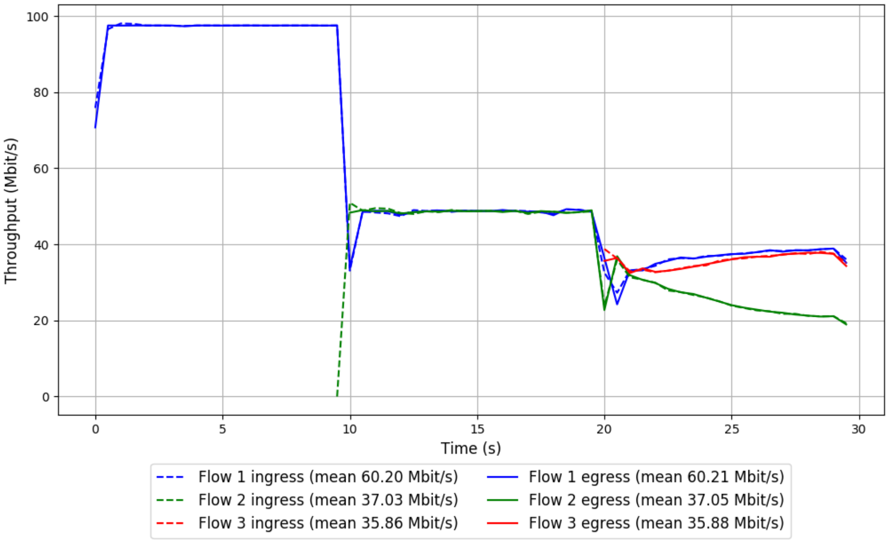


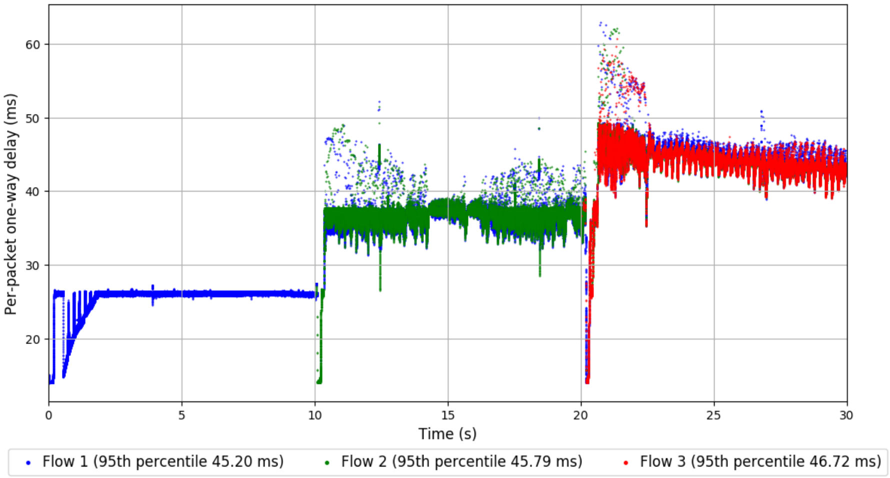
```
Run 8: Statistics of TCP BBR

Start at: 2018-04-10 20:42:45
End at: 2018-04-10 20:43:15
Local clock offset: 1.004 ms
Remote clock offset: -5.176 ms

# Below is generated by plot.py at 2018-04-11 01:26:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.74 Mbit/s
95th percentile per-packet one-way delay: 45.692 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 60.21 Mbit/s
95th percentile per-packet one-way delay: 45.195 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 37.05 Mbit/s
95th percentile per-packet one-way delay: 45.794 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 35.88 Mbit/s
95th percentile per-packet one-way delay: 46.721 ms
Loss rate: 0.59%
```

Run 8: Report of TCP BBR — Data Link



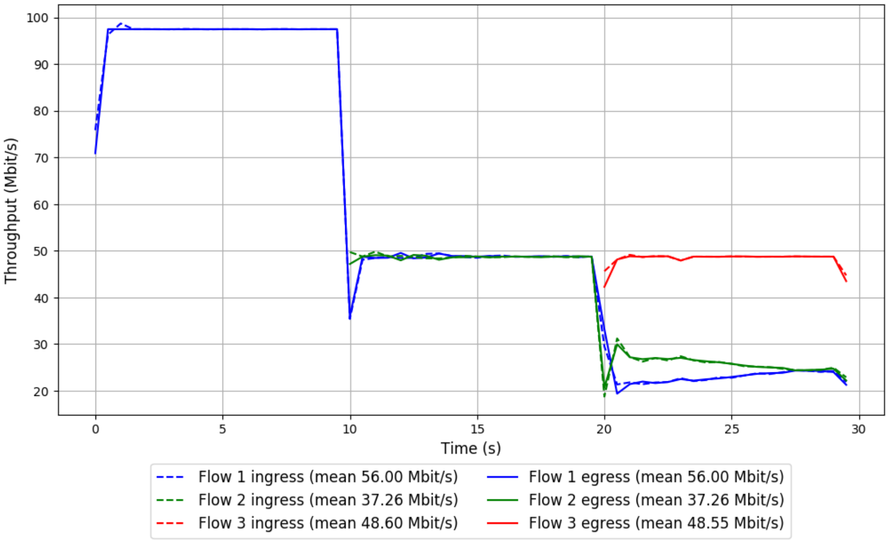


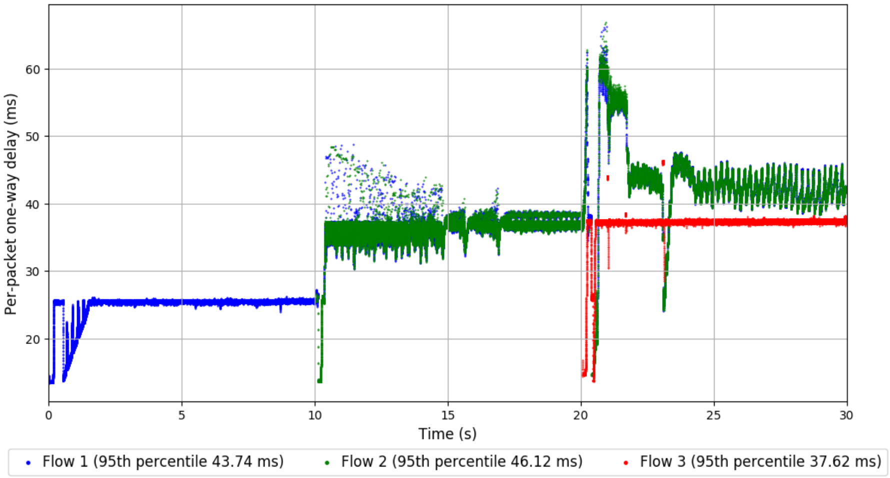
```
Run 9: Statistics of TCP BBR

Start at: 2018-04-10 21:03:58
End at: 2018-04-10 21:04:28
Local clock offset: 0.664 ms
Remote clock offset: -3.173 ms

# Below is generated by plot.py at 2018-04-11 01:27:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.86 Mbit/s
95th percentile per-packet one-way delay: 44.404 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 56.00 Mbit/s
95th percentile per-packet one-way delay: 43.742 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 37.26 Mbit/s
95th percentile per-packet one-way delay: 46.123 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 48.55 Mbit/s
95th percentile per-packet one-way delay: 37.619 ms
Loss rate: 0.50%
```

Run 9: Report of TCP BBR — Data Link



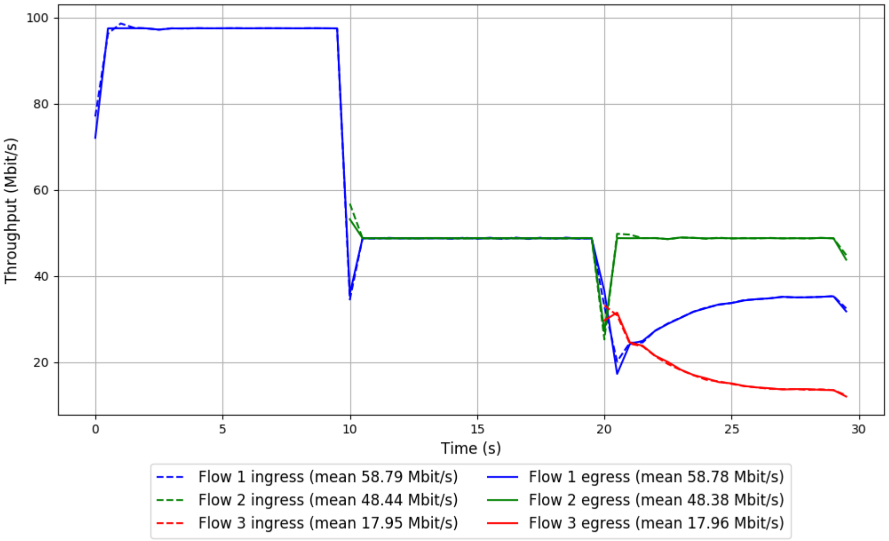


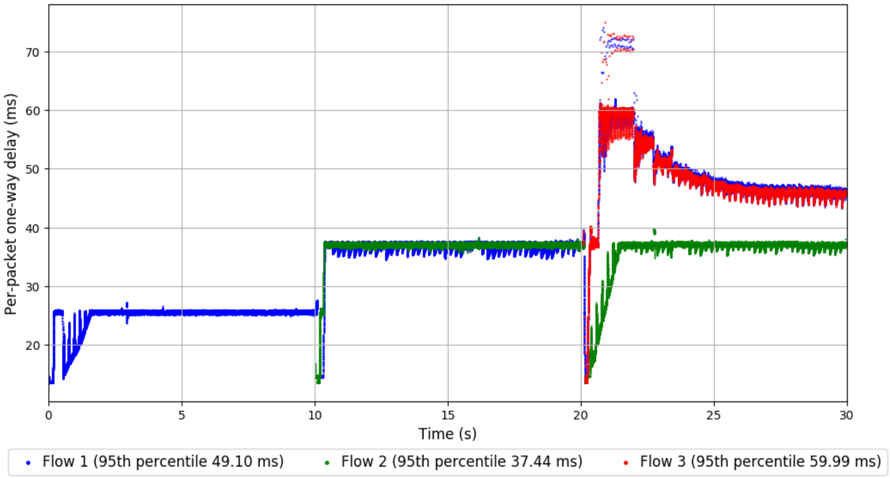
```
Run 10: Statistics of TCP BBR

Start at: 2018-04-10 21:25:08
End at: 2018-04-10 21:25:38
Local clock offset: 0.086 ms
Remote clock offset: 2.708 ms

# Below is generated by plot.py at 2018-04-11 01:27:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.92 Mbit/s
95th percentile per-packet one-way delay: 49.484 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 58.78 Mbit/s
95th percentile per-packet one-way delay: 49.102 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 48.38 Mbit/s
95th percentile per-packet one-way delay: 37.440 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 17.96 Mbit/s
95th percentile per-packet one-way delay: 59.994 ms
Loss rate: 0.43%
```

Run 10: Report of TCP BBR — Data Link



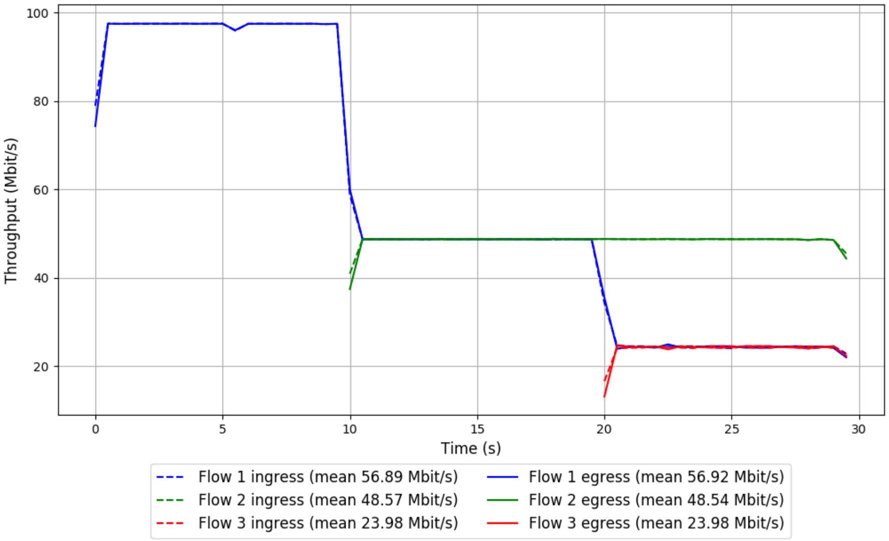


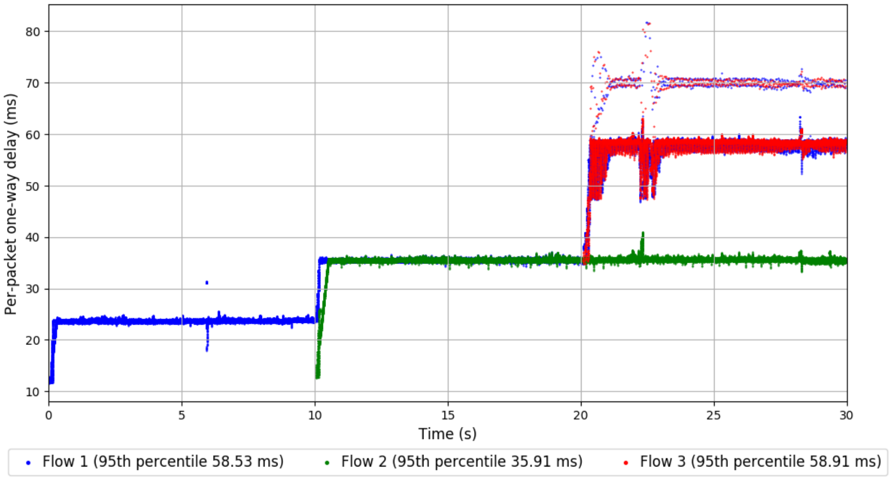
```
Run 1: Statistics of TCP Cubic

Start at: 2018-04-10 18:15:56
End at: 2018-04-10 18:16:26
Local clock offset: -1.602 ms
Remote clock offset: 1.251 ms

# Below is generated by plot.py at 2018-04-11 01:27:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.14 Mbit/s
95th percentile per-packet one-way delay: 58.585 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 56.92 Mbit/s
95th percentile per-packet one-way delay: 58.531 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 48.54 Mbit/s
95th percentile per-packet one-way delay: 35.915 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 23.98 Mbit/s
95th percentile per-packet one-way delay: 58.910 ms
Loss rate: 0.70%
```

Run 1: Report of TCP Cubic — Data Link



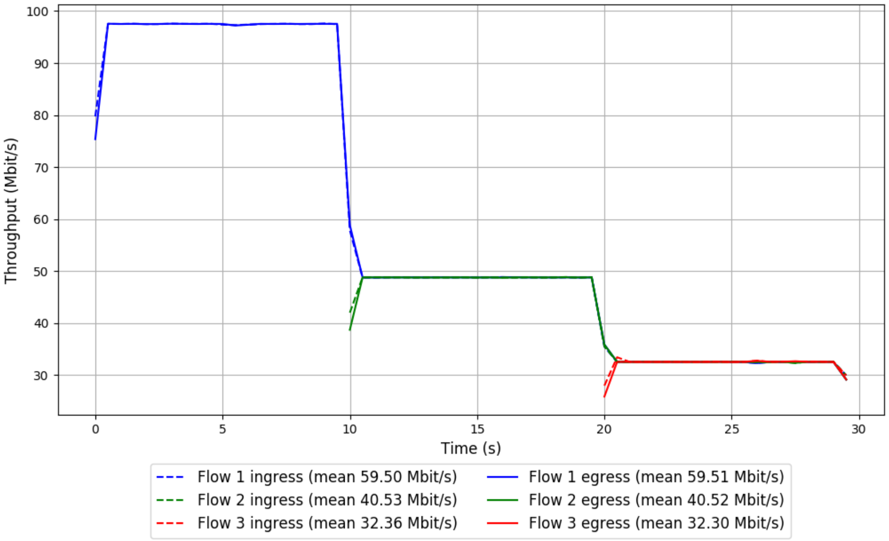


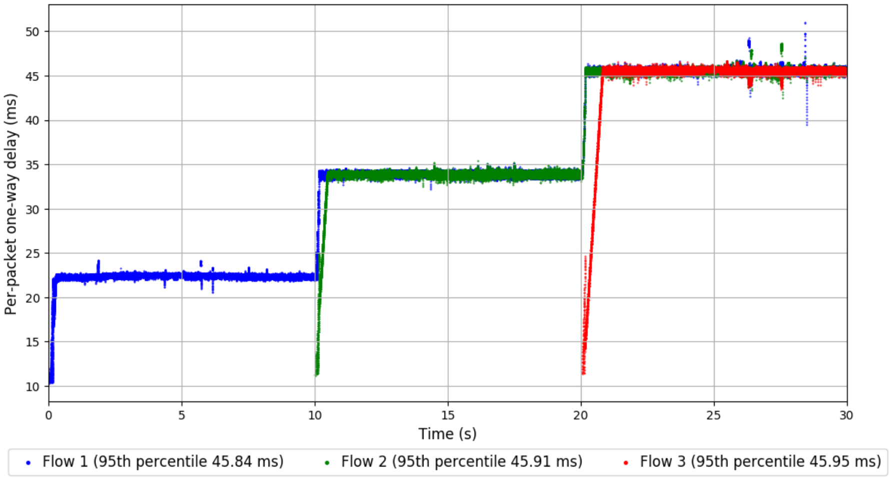
```
Run 2: Statistics of TCP Cubic

Start at: 2018-04-10 18:38:37
End at: 2018-04-10 18:39:07
Local clock offset: -3.265 ms
Remote clock offset: 8.58 ms

# Below is generated by plot.py at 2018-04-11 01:27:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.18 Mbit/s
95th percentile per-packet one-way delay: 45.900 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 59.51 Mbit/s
95th percentile per-packet one-way delay: 45.836 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 40.52 Mbit/s
95th percentile per-packet one-way delay: 45.913 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 32.30 Mbit/s
95th percentile per-packet one-way delay: 45.955 ms
Loss rate: 0.58%
```

Run 2: Report of TCP Cubic — Data Link



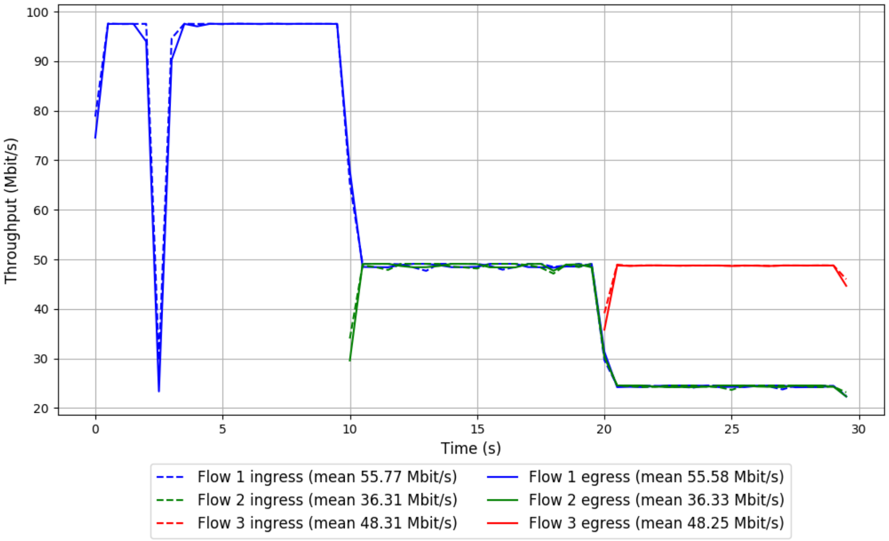


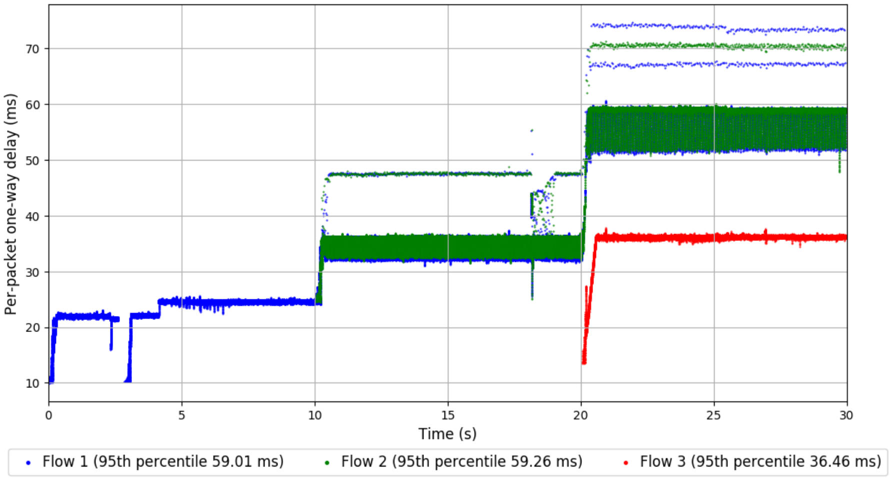
```
Run 3: Statistics of TCP Cubic

Start at: 2018-04-10 19:00:41
End at: 2018-04-10 19:01:11
Local clock offset: 0.554 ms
Remote clock offset: 5.508 ms

# Below is generated by plot.py at 2018-04-11 01:27:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.72 Mbit/s
95th percentile per-packet one-way delay: 59.081 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 55.58 Mbit/s
95th percentile per-packet one-way delay: 59.009 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 36.33 Mbit/s
95th percentile per-packet one-way delay: 59.256 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 48.25 Mbit/s
95th percentile per-packet one-way delay: 36.461 ms
Loss rate: 0.51%
```

Run 3: Report of TCP Cubic — Data Link



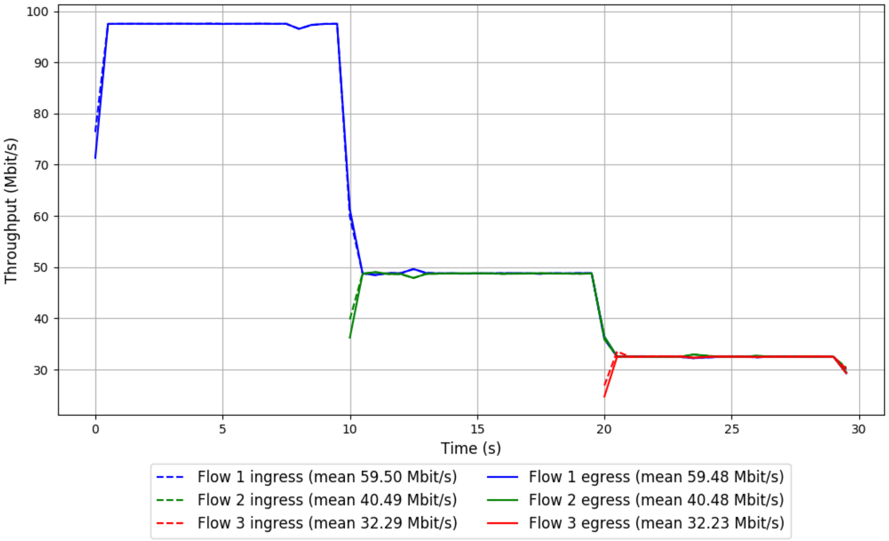


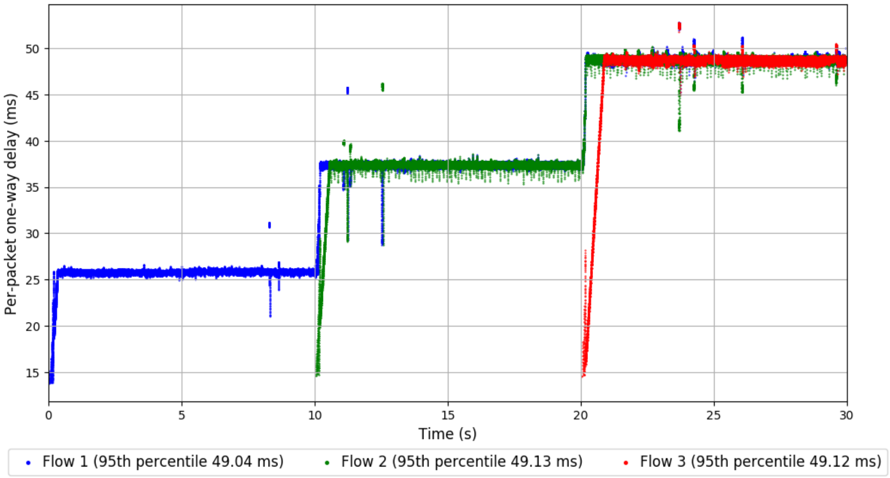
```
Run 4: Statistics of TCP Cubic

Start at: 2018-04-10 19:22:53
End at: 2018-04-10 19:23:23
Local clock offset: 1.264 ms
Remote clock offset: 2.787 ms

# Below is generated by plot.py at 2018-04-11 01:27:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.10 Mbit/s
95th percentile per-packet one-way delay: 49.091 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 59.48 Mbit/s
95th percentile per-packet one-way delay: 49.041 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 40.48 Mbit/s
95th percentile per-packet one-way delay: 49.131 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 32.23 Mbit/s
95th percentile per-packet one-way delay: 49.123 ms
Loss rate: 0.62%
```

Run 4: Report of TCP Cubic — Data Link



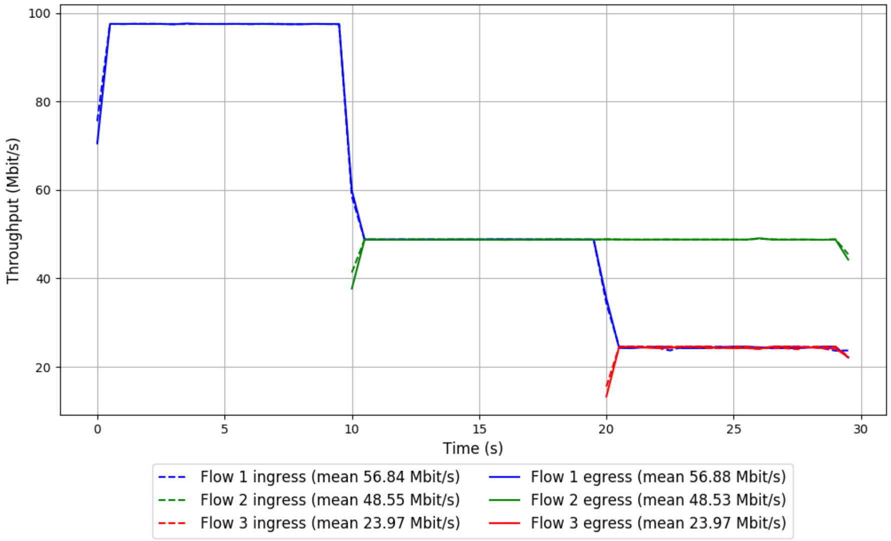


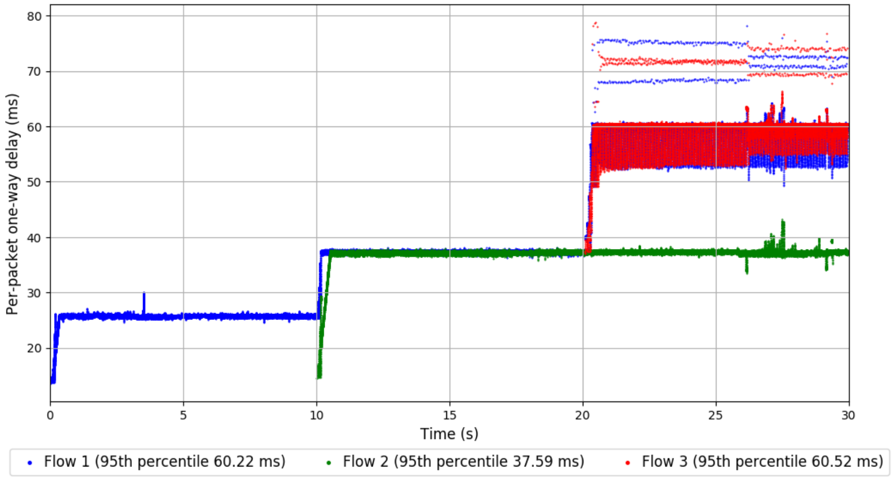
```
Run 5: Statistics of TCP Cubic

Start at: 2018-04-10 19:44:28
End at: 2018-04-10 19:44:58
Local clock offset: 1.322 ms
Remote clock offset: -2.541 ms

# Below is generated by plot.py at 2018-04-11 01:27:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.12 Mbit/s
95th percentile per-packet one-way delay: 60.277 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 56.88 Mbit/s
95th percentile per-packet one-way delay: 60.216 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 48.53 Mbit/s
95th percentile per-packet one-way delay: 37.585 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 23.97 Mbit/s
95th percentile per-packet one-way delay: 60.520 ms
Loss rate: 0.69%
```

Run 5: Report of TCP Cubic — Data Link



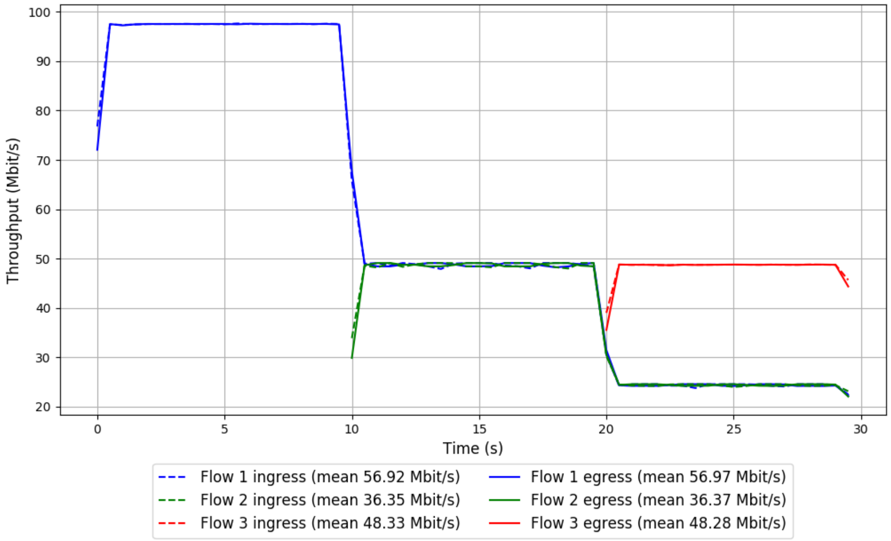


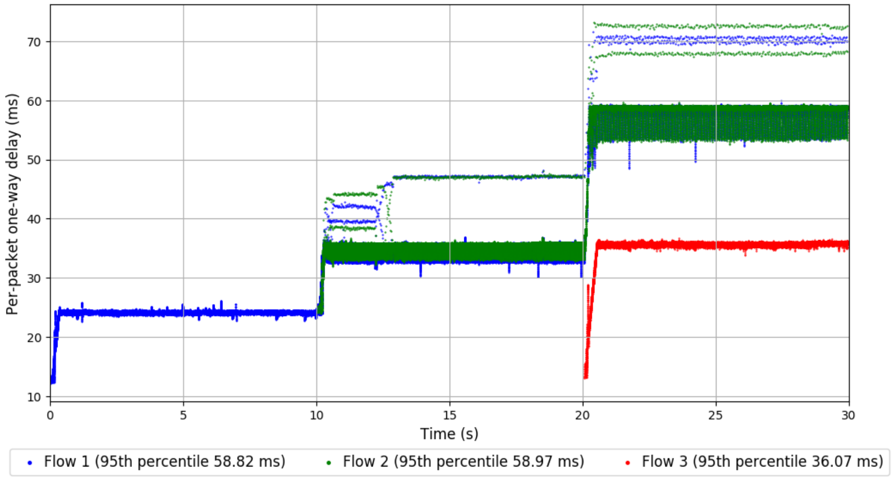
```
Run 6: Statistics of TCP Cubic

Start at: 2018-04-10 20:06:29
End at: 2018-04-10 20:06:59
Local clock offset: 0.805 ms
Remote clock offset: -5.487 ms

# Below is generated by plot.py at 2018-04-11 01:27:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.13 Mbit/s
95th percentile per-packet one-way delay: 58.867 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 56.97 Mbit/s
95th percentile per-packet one-way delay: 58.824 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 36.37 Mbit/s
95th percentile per-packet one-way delay: 58.968 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 48.28 Mbit/s
95th percentile per-packet one-way delay: 36.074 ms
Loss rate: 0.50%
```

Run 6: Report of TCP Cubic — Data Link



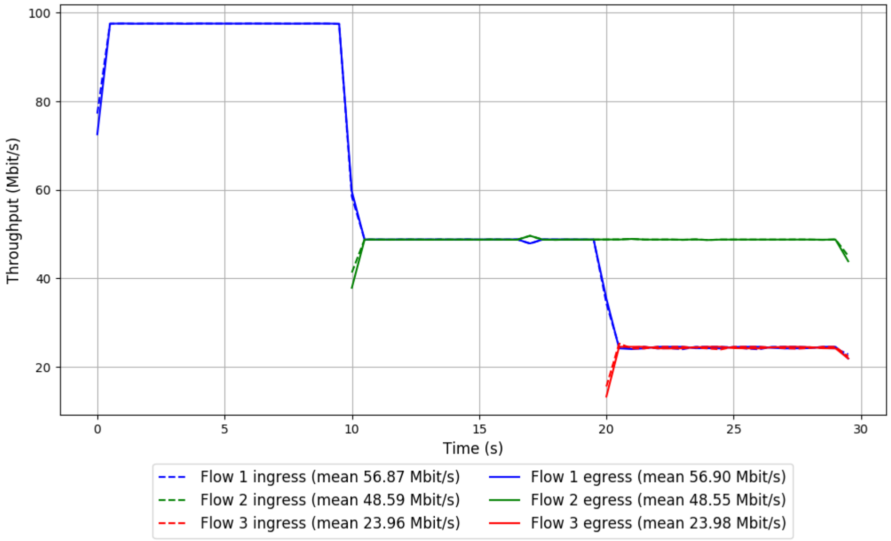


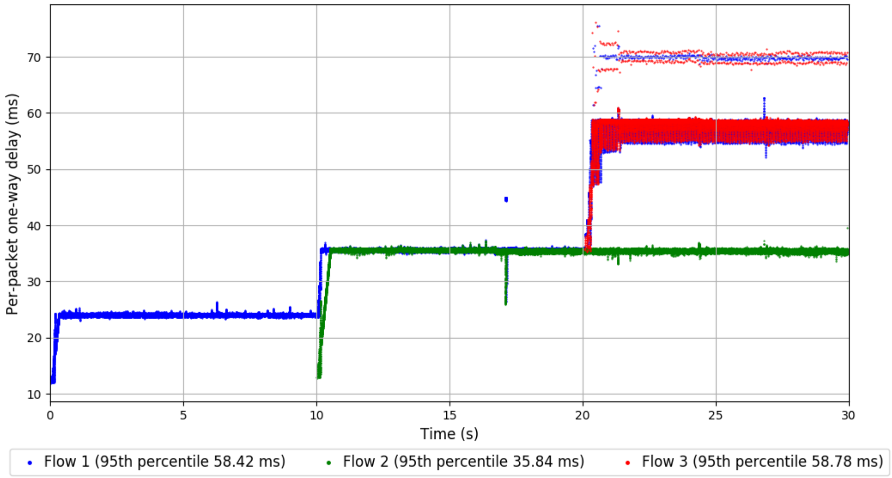
```
Run 7: Statistics of TCP Cubic

Start at: 2018-04-10 20:27:59
End at: 2018-04-10 20:28:29
Local clock offset: 0.738 ms
Remote clock offset: -7.481 ms

# Below is generated by plot.py at 2018-04-11 01:29:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.14 Mbit/s
95th percentile per-packet one-way delay: 58.482 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 56.90 Mbit/s
95th percentile per-packet one-way delay: 58.422 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 48.55 Mbit/s
95th percentile per-packet one-way delay: 35.841 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 23.98 Mbit/s
95th percentile per-packet one-way delay: 58.780 ms
Loss rate: 0.71%
```

Run 7: Report of TCP Cubic — Data Link



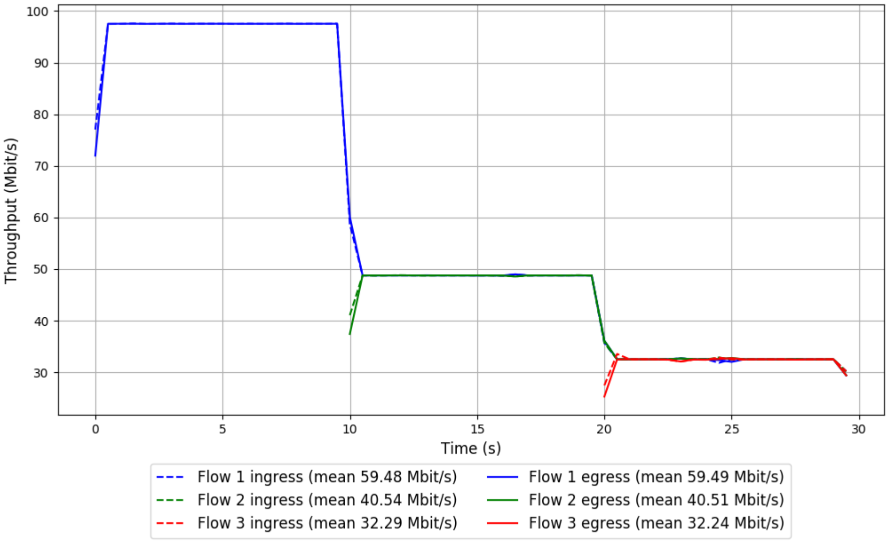


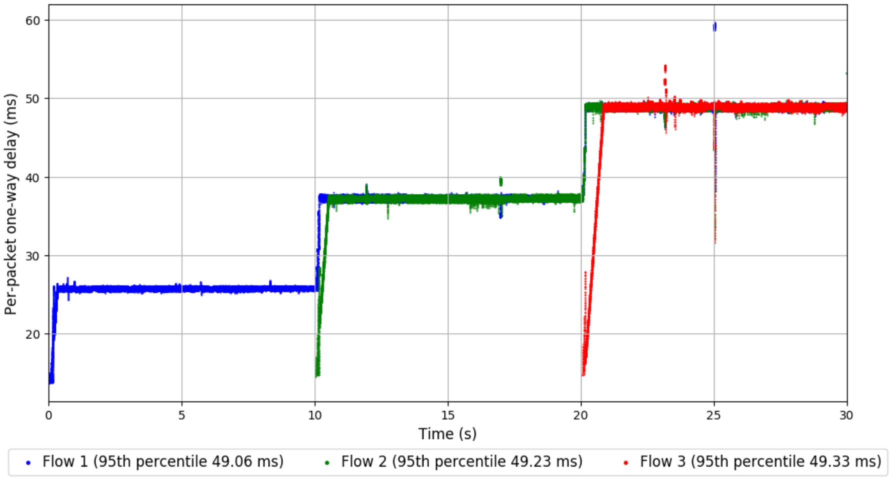
```
Run 8: Statistics of TCP Cubic

Start at: 2018-04-10 20:49:45
End at: 2018-04-10 20:50:15
Local clock offset: 1.272 ms
Remote clock offset: -4.115 ms

# Below is generated by plot.py at 2018-04-11 01:29:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.13 Mbit/s
95th percentile per-packet one-way delay: 49.211 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 59.49 Mbit/s
95th percentile per-packet one-way delay: 49.058 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 40.51 Mbit/s
95th percentile per-packet one-way delay: 49.234 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 32.24 Mbit/s
95th percentile per-packet one-way delay: 49.326 ms
Loss rate: 0.62%
```

Run 8: Report of TCP Cubic — Data Link



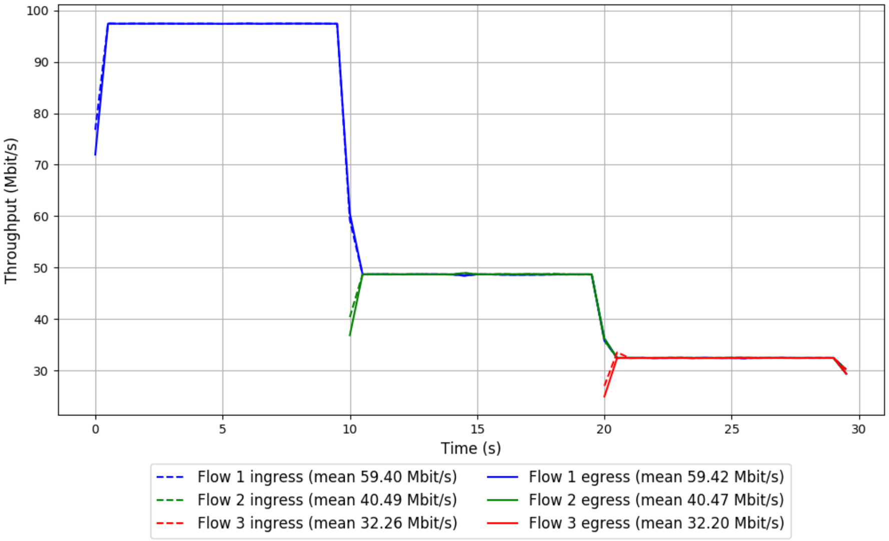


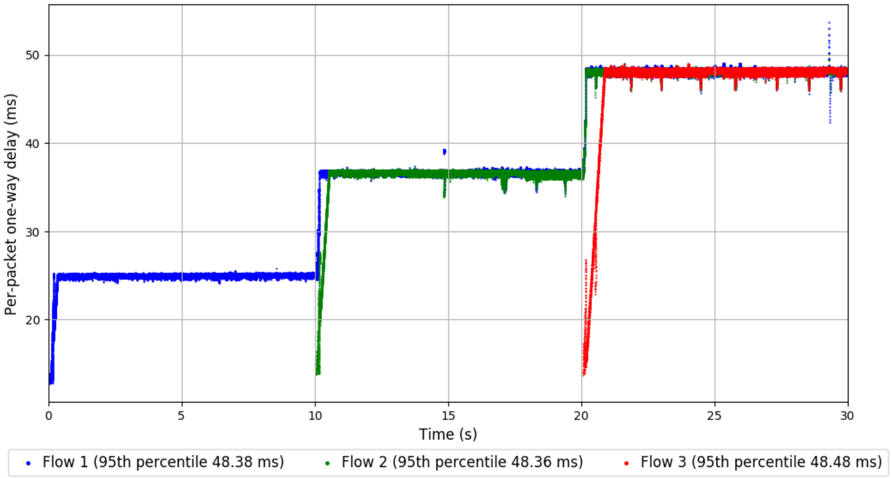
```
Run 9: Statistics of TCP Cubic

Start at: 2018-04-10 21:10:58
End at: 2018-04-10 21:11:28
Local clock offset: 0.012 ms
Remote clock offset: 0.163 ms

# Below is generated by plot.py at 2018-04-11 01:29:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.02 Mbit/s
95th percentile per-packet one-way delay: 48.402 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 59.42 Mbit/s
95th percentile per-packet one-way delay: 48.375 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 40.47 Mbit/s
95th percentile per-packet one-way delay: 48.357 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 32.20 Mbit/s
95th percentile per-packet one-way delay: 48.478 ms
Loss rate: 0.61%
```

Run 9: Report of TCP Cubic — Data Link



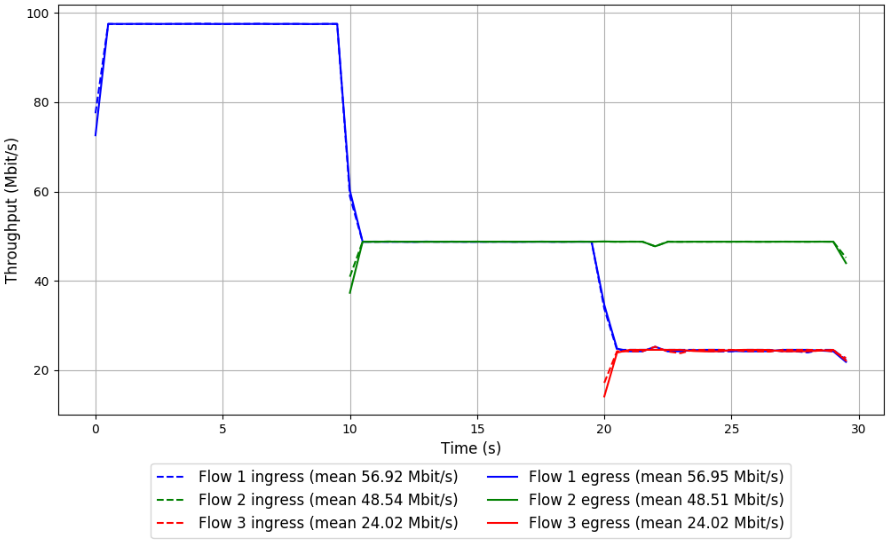


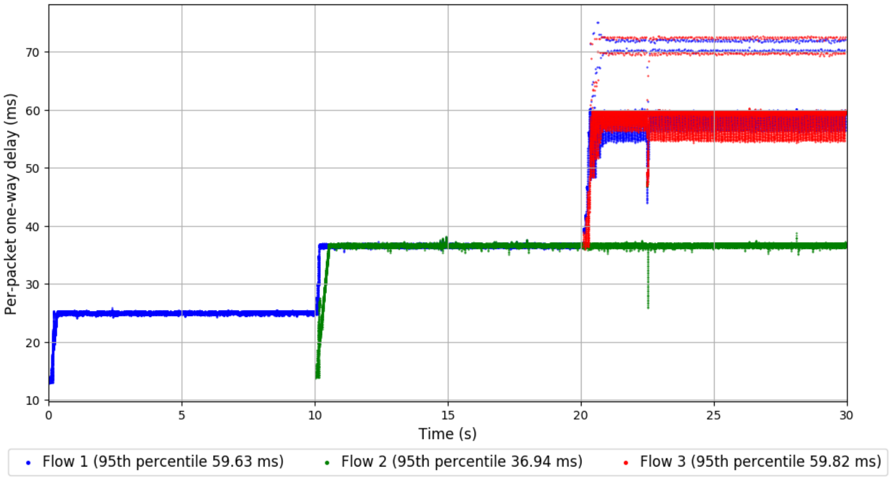
```
Run 10: Statistics of TCP Cubic

Start at: 2018-04-10 21:32:10
End at: 2018-04-10 21:32:40
Local clock offset: -0.332 ms
Remote clock offset: 4.2 ms

# Below is generated by plot.py at 2018-04-11 01:29:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.16 Mbit/s
95th percentile per-packet one-way delay: 59.677 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 56.95 Mbit/s
95th percentile per-packet one-way delay: 59.626 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 48.51 Mbit/s
95th percentile per-packet one-way delay: 36.936 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 24.02 Mbit/s
95th percentile per-packet one-way delay: 59.817 ms
Loss rate: 0.77%
```

Run 10: Report of TCP Cubic — Data Link



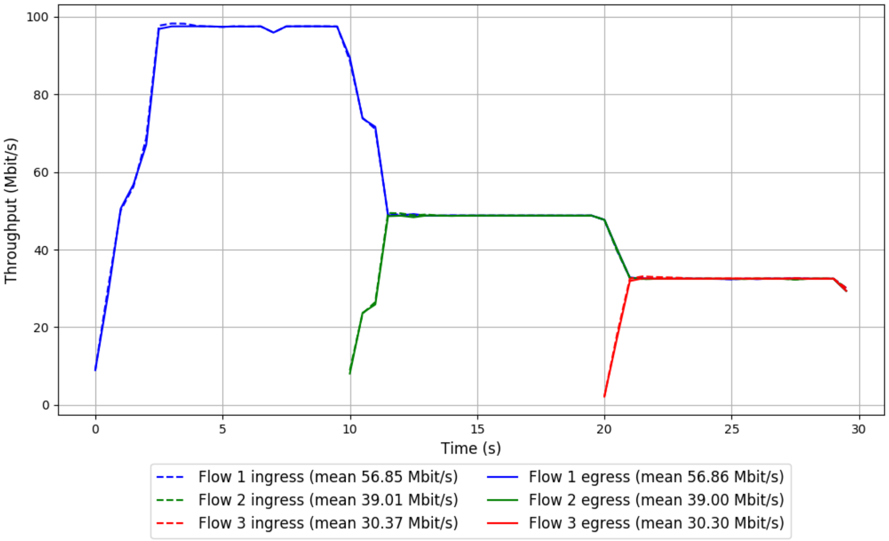


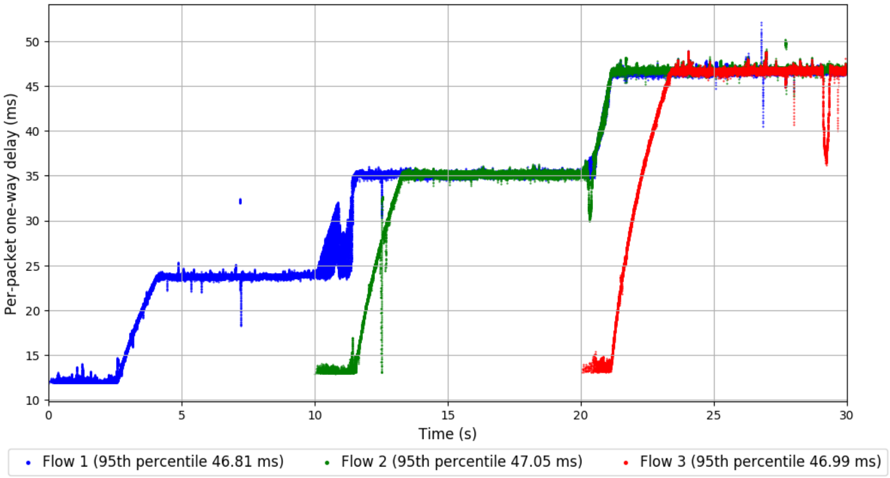
```
Run 1: Statistics of LEDBAT

Start at: 2018-04-10 18:13:34
End at: 2018-04-10 18:14:04
Local clock offset: -1.573 ms
Remote clock offset: -0.731 ms

# Below is generated by plot.py at 2018-04-11 01:29:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.86 Mbit/s
95th percentile per-packet one-way delay: 46.947 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 56.86 Mbit/s
95th percentile per-packet one-way delay: 46.810 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 39.00 Mbit/s
95th percentile per-packet one-way delay: 47.050 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 30.30 Mbit/s
95th percentile per-packet one-way delay: 46.988 ms
Loss rate: 0.62%
```

Run 1: Report of LEDBAT — Data Link



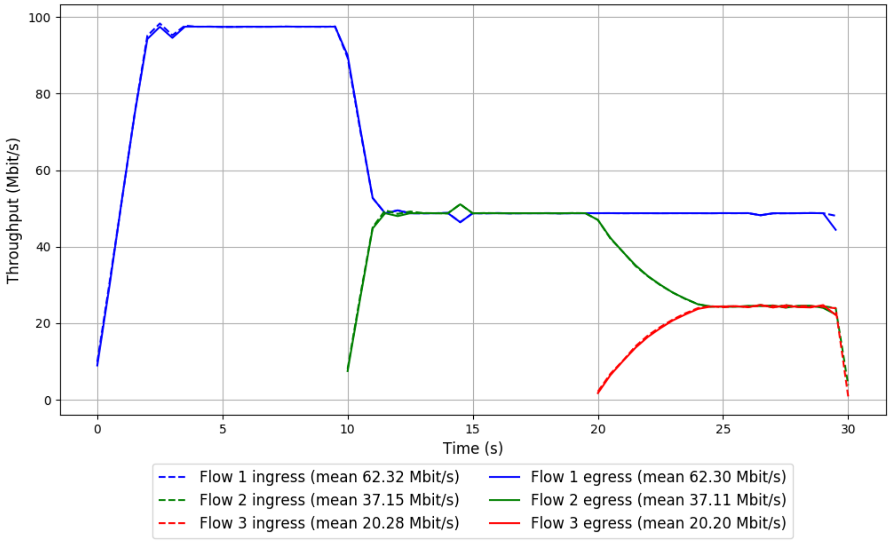


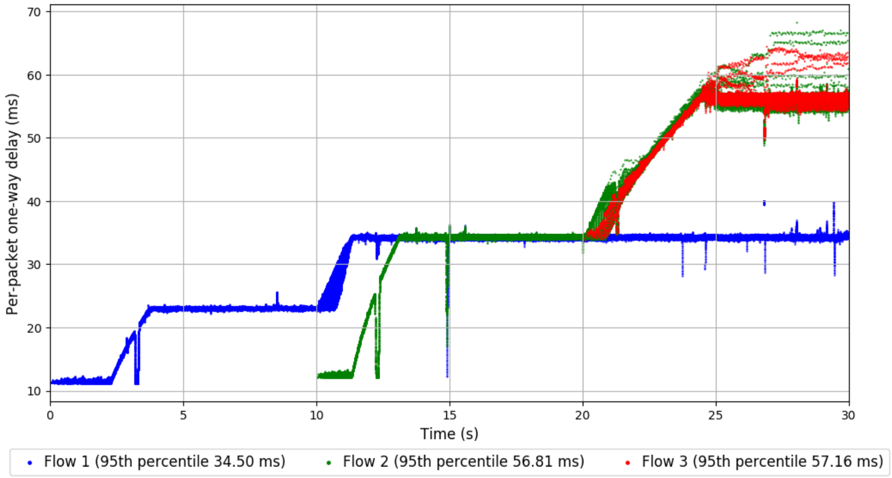
```
Run 2: Statistics of LEDBAT

Start at: 2018-04-10 18:36:13
End at: 2018-04-10 18:36:43
Local clock offset: -2.157 ms
Remote clock offset: 8.338 ms

# Below is generated by plot.py at 2018-04-11 01:29:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.68 Mbit/s
95th percentile per-packet one-way delay: 56.615 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 62.30 Mbit/s
95th percentile per-packet one-way delay: 34.504 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 37.11 Mbit/s
95th percentile per-packet one-way delay: 56.815 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 20.20 Mbit/s
95th percentile per-packet one-way delay: 57.157 ms
Loss rate: 1.29%
```

Run 2: Report of LEDBAT — Data Link



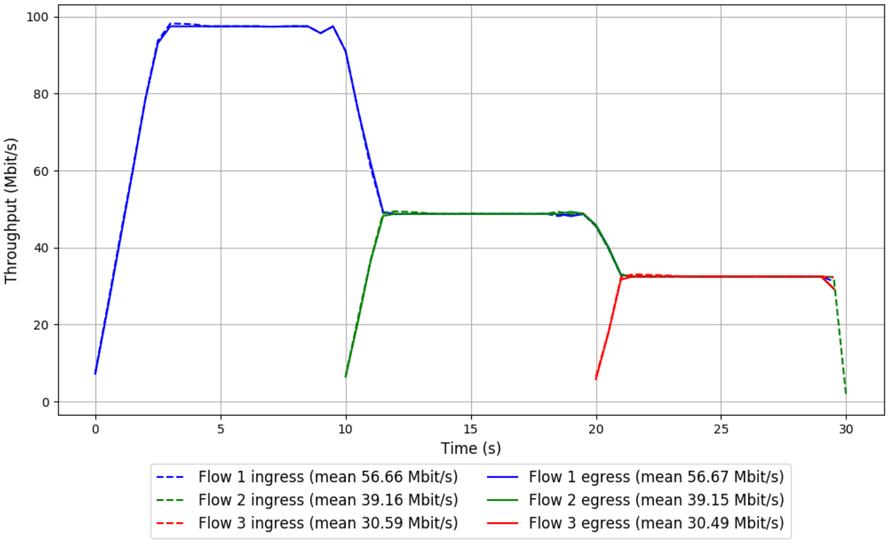


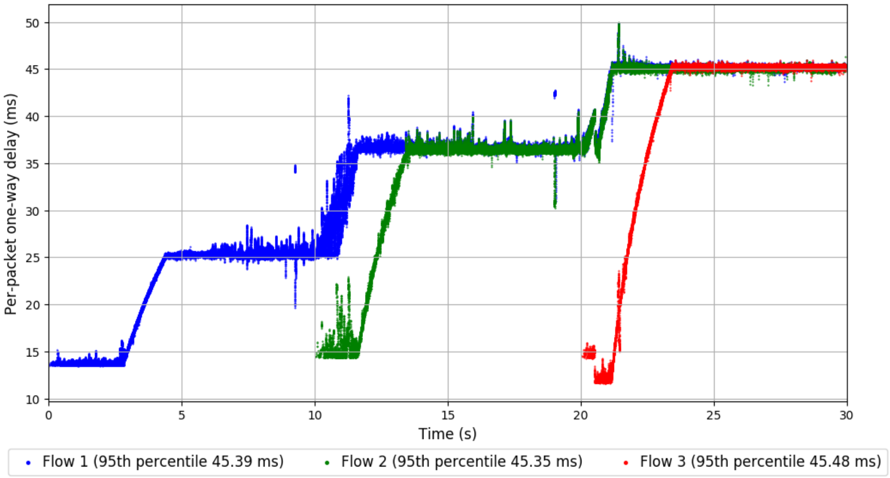
```
Run 3: Statistics of LEDBAT

Start at: 2018-04-10 18:58:23
End at: 2018-04-10 18:58:53
Local clock offset: 0.155 ms
Remote clock offset: 4.874 ms

# Below is generated by plot.py at 2018-04-11 01:29:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.82 Mbit/s
95th percentile per-packet one-way delay: 45.410 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 56.67 Mbit/s
95th percentile per-packet one-way delay: 45.391 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 39.15 Mbit/s
95th percentile per-packet one-way delay: 45.354 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 30.49 Mbit/s
95th percentile per-packet one-way delay: 45.476 ms
Loss rate: 0.95%
```

Run 3: Report of LEDBAT — Data Link



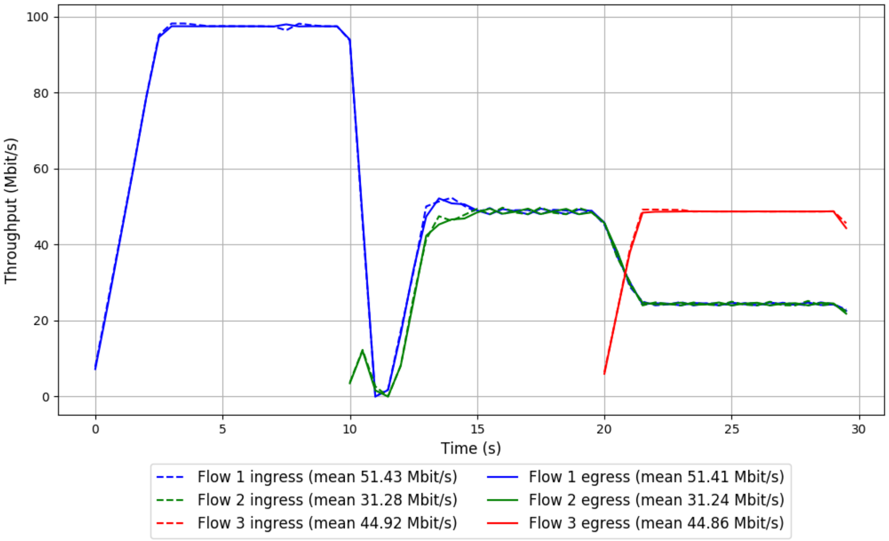


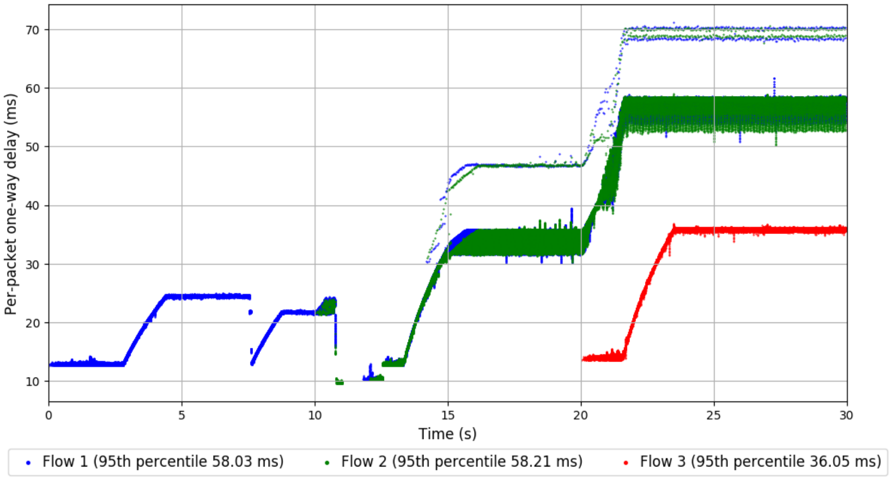
```
Run 4: Statistics of LEDBAT

Start at: 2018-04-10 19:20:33
End at: 2018-04-10 19:21:03
Local clock offset: -0.52 ms
Remote clock offset: 3.002 ms

# Below is generated by plot.py at 2018-04-11 01:29:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.04 Mbit/s
95th percentile per-packet one-way delay: 58.067 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 51.41 Mbit/s
95th percentile per-packet one-way delay: 58.033 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 31.24 Mbit/s
95th percentile per-packet one-way delay: 58.211 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 44.86 Mbit/s
95th percentile per-packet one-way delay: 36.050 ms
Loss rate: 0.53%
```

Run 4: Report of LEDBAT — Data Link



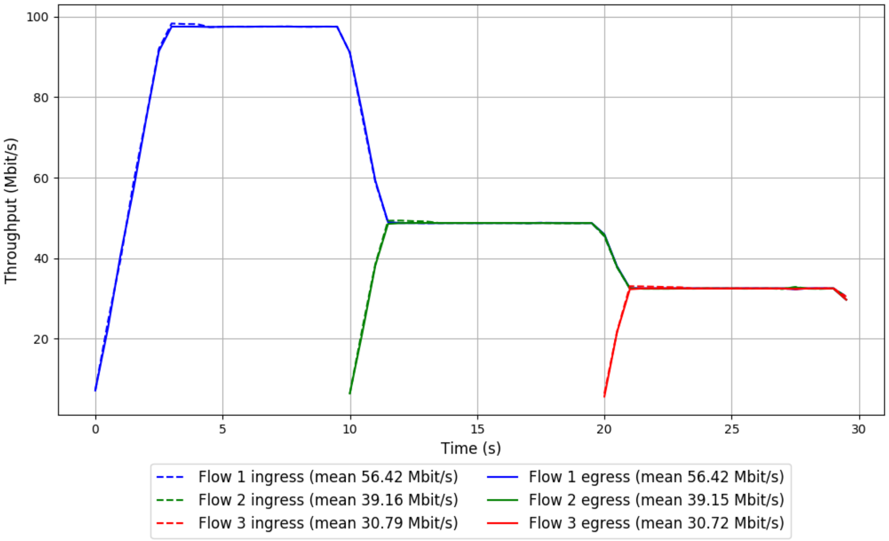


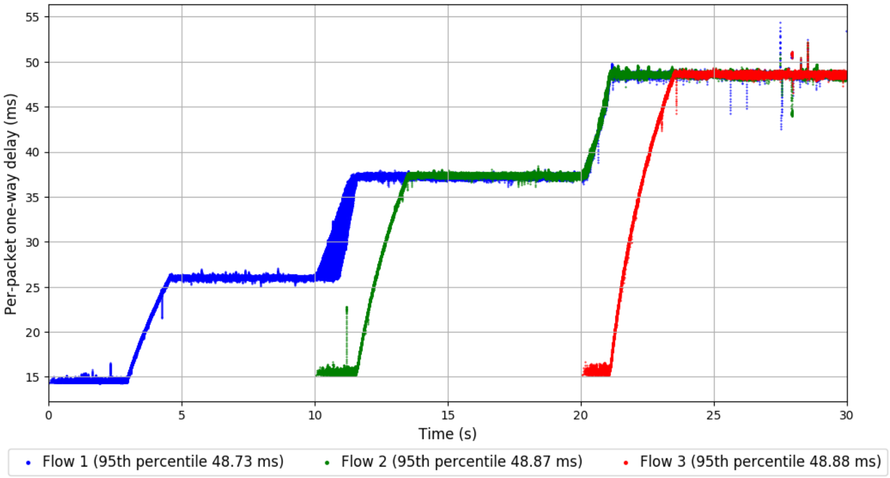
```
Run 5: Statistics of LEDBAT

Start at: 2018-04-10 19:42:09
End at: 2018-04-10 19:42:39
Local clock offset: 1.183 ms
Remote clock offset: -3.013 ms

# Below is generated by plot.py at 2018-04-11 01:30:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.65 Mbit/s
95th percentile per-packet one-way delay: 48.807 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 56.42 Mbit/s
95th percentile per-packet one-way delay: 48.733 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 39.15 Mbit/s
95th percentile per-packet one-way delay: 48.874 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 30.72 Mbit/s
95th percentile per-packet one-way delay: 48.884 ms
Loss rate: 0.64%
```

Run 5: Report of LEDBAT — Data Link



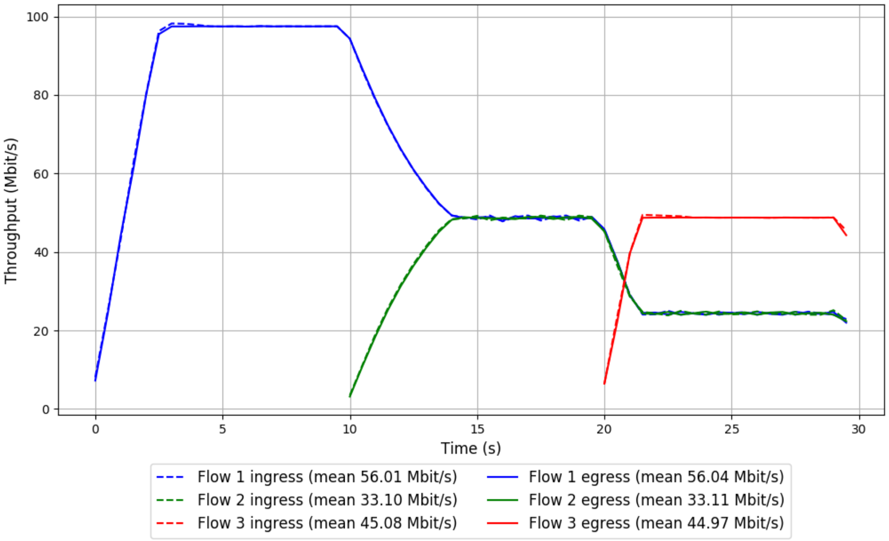


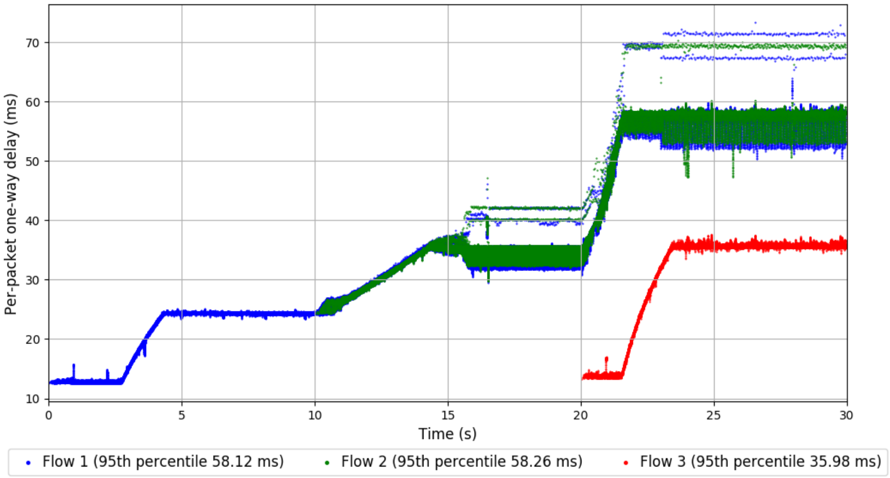
```
Run 6: Statistics of LEDBAT

Start at: 2018-04-10 20:04:04
End at: 2018-04-10 20:04:34
Local clock offset: 0.736 ms
Remote clock offset: -5.485 ms

# Below is generated by plot.py at 2018-04-11 01:30:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.95 Mbit/s
95th percentile per-packet one-way delay: 58.160 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 56.04 Mbit/s
95th percentile per-packet one-way delay: 58.121 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 33.11 Mbit/s
95th percentile per-packet one-way delay: 58.259 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 44.97 Mbit/s
95th percentile per-packet one-way delay: 35.978 ms
Loss rate: 0.53%
```

Run 6: Report of LEDBAT — Data Link



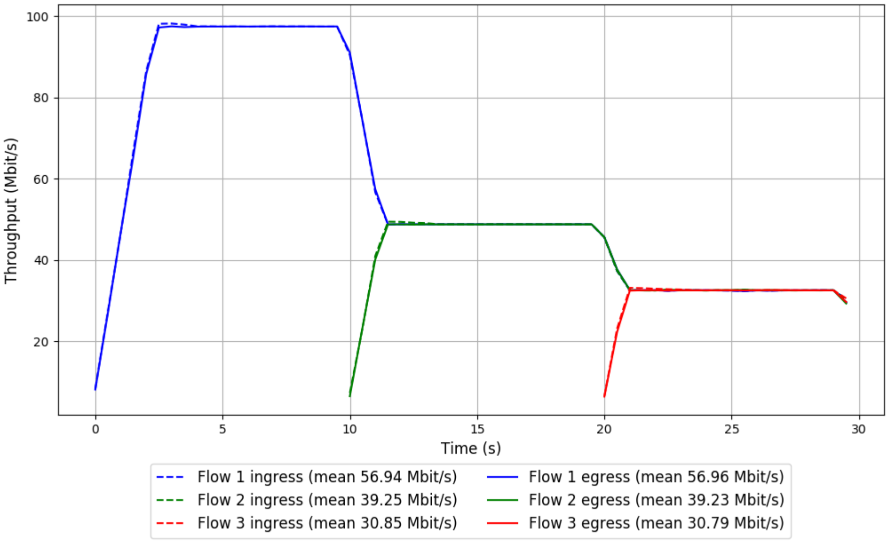


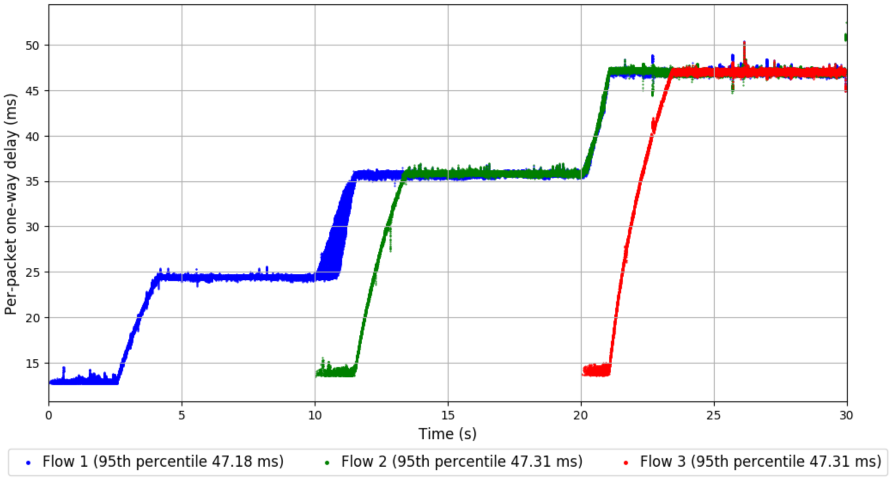
```
Run 7: Statistics of LEDBAT

Start at: 2018-04-10 20:25:42
End at: 2018-04-10 20:26:12
Local clock offset: 1.546 ms
Remote clock offset: -7.362 ms

# Below is generated by plot.py at 2018-04-11 01:30:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.26 Mbit/s
95th percentile per-packet one-way delay: 47.255 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 56.96 Mbit/s
95th percentile per-packet one-way delay: 47.178 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 39.23 Mbit/s
95th percentile per-packet one-way delay: 47.313 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 30.79 Mbit/s
95th percentile per-packet one-way delay: 47.306 ms
Loss rate: 0.64%
```

Run 7: Report of LEDBAT — Data Link



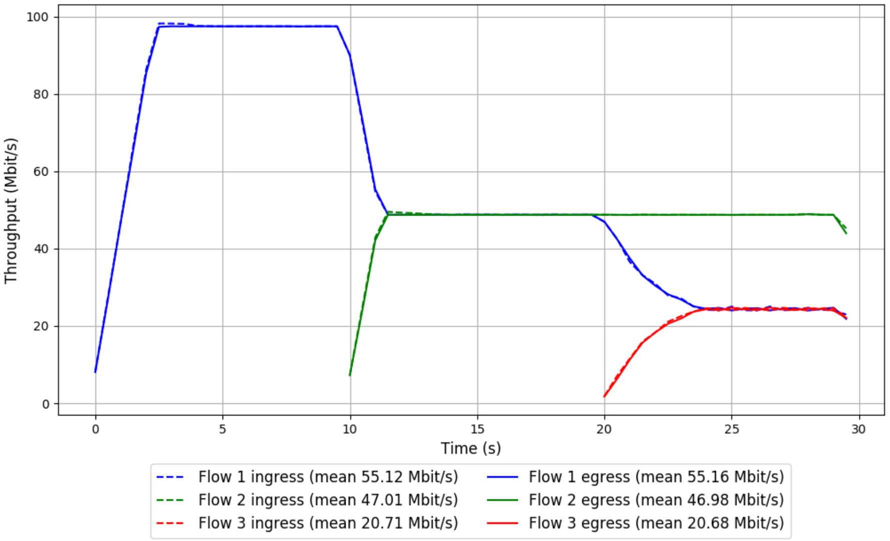


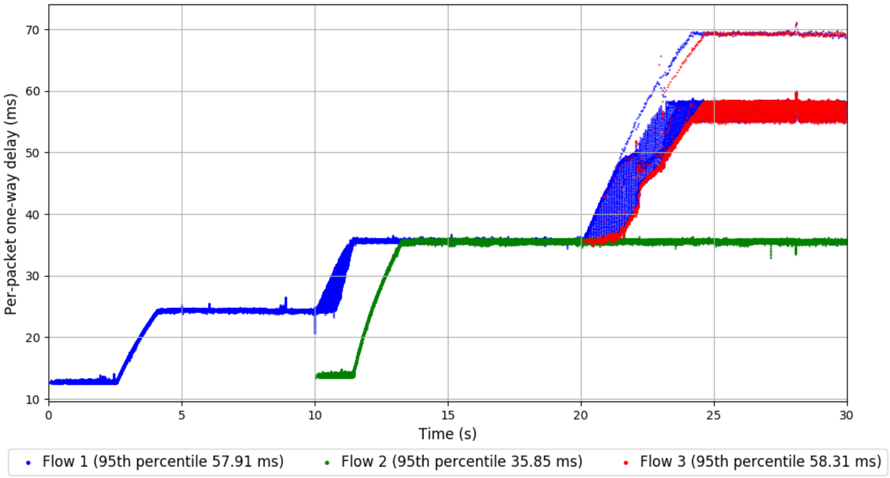
```
Run 8: Statistics of LEDBAT

Start at: 2018-04-10 20:47:28
End at: 2018-04-10 20:47:58
Local clock offset: 0.854 ms
Remote clock offset: -3.387 ms

# Below is generated by plot.py at 2018-04-11 01:30:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.26 Mbit/s
95th percentile per-packet one-way delay: 57.978 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 55.16 Mbit/s
95th percentile per-packet one-way delay: 57.913 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 46.98 Mbit/s
95th percentile per-packet one-way delay: 35.847 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 20.68 Mbit/s
95th percentile per-packet one-way delay: 58.310 ms
Loss rate: 0.86%
```

Run 8: Report of LEDBAT — Data Link



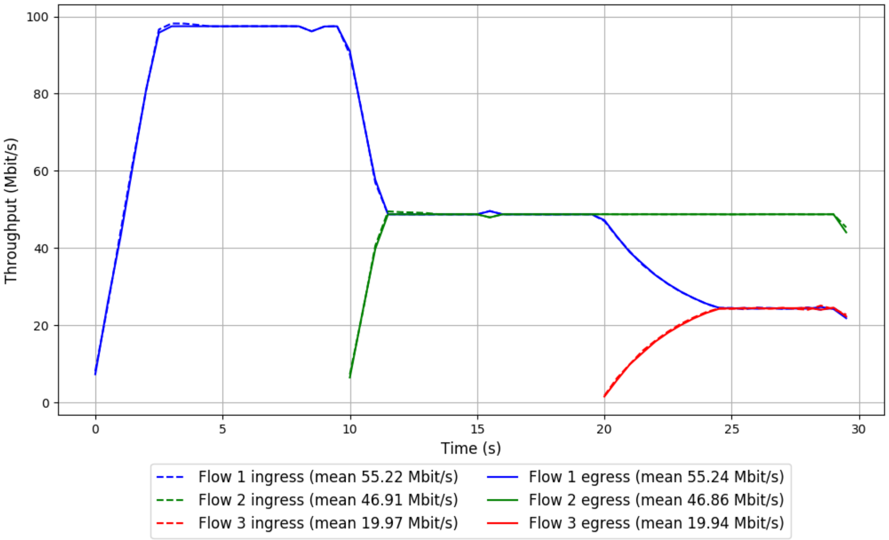


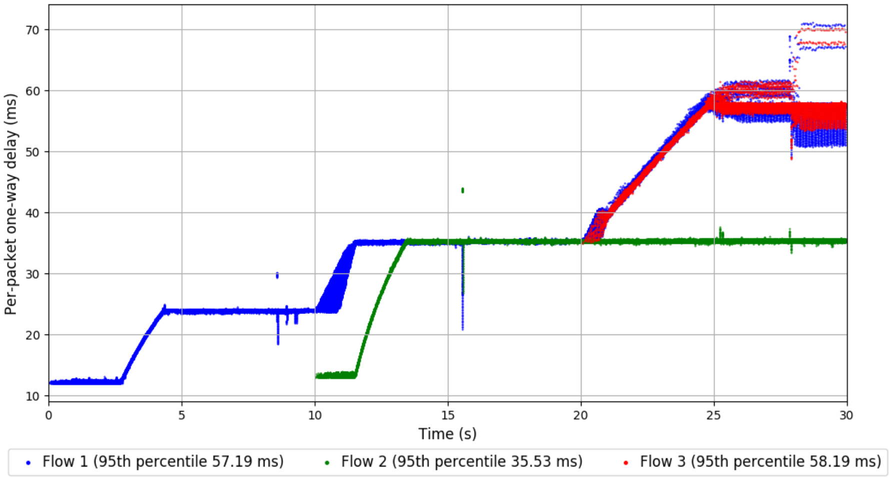
```
Run 9: Statistics of LEDBAT

Start at: 2018-04-10 21:08:41
End at: 2018-04-10 21:09:11
Local clock offset: 0.015 ms
Remote clock offset: 0.144 ms

# Below is generated by plot.py at 2018-04-11 01:30:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.00 Mbit/s
95th percentile per-packet one-way delay: 57.511 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 55.24 Mbit/s
95th percentile per-packet one-way delay: 57.191 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 46.86 Mbit/s
95th percentile per-packet one-way delay: 35.526 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 19.94 Mbit/s
95th percentile per-packet one-way delay: 58.190 ms
Loss rate: 0.85%
```

Run 9: Report of LEDBAT — Data Link



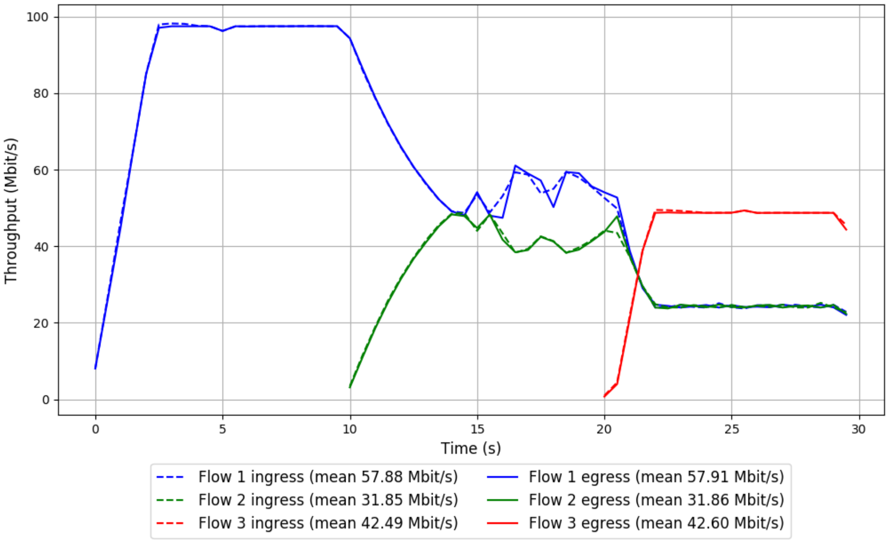


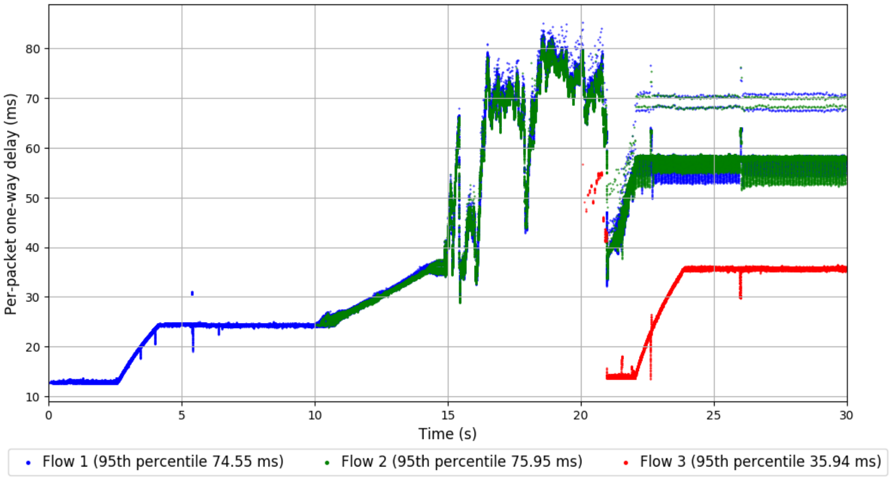
```
Run 10: Statistics of LEDBAT

Start at: 2018-04-10 21:29:53
End at: 2018-04-10 21:30:23
Local clock offset: 0.026 ms
Remote clock offset: 4.588 ms

# Below is generated by plot.py at 2018-04-11 01:30:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.15 Mbit/s
95th percentile per-packet one-way delay: 74.406 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 57.91 Mbit/s
95th percentile per-packet one-way delay: 74.551 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 31.86 Mbit/s
95th percentile per-packet one-way delay: 75.953 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 42.60 Mbit/s
95th percentile per-packet one-way delay: 35.943 ms
Loss rate: 0.55%
```

Run 10: Report of LEDBAT — Data Link



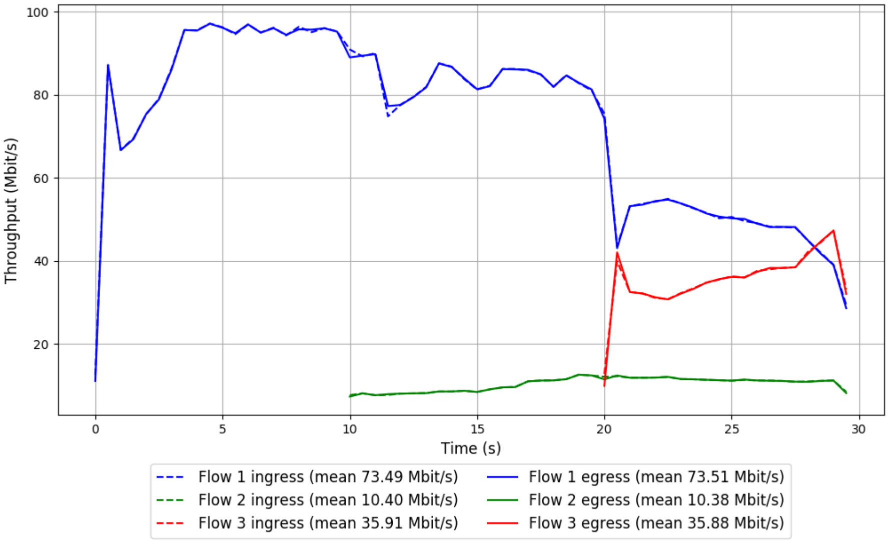


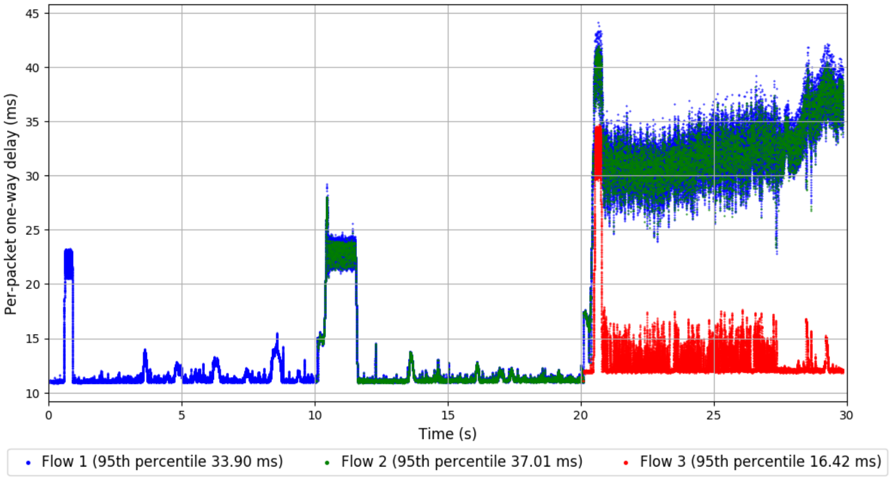
```
Run 1: Statistics of PCC

Start at: 2018-04-10 18:12:23
End at: 2018-04-10 18:12:53
Local clock offset: -1.485 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2018-04-11 01:30:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.20 Mbit/s
95th percentile per-packet one-way delay: 33.935 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 73.51 Mbit/s
95th percentile per-packet one-way delay: 33.901 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 10.38 Mbit/s
95th percentile per-packet one-way delay: 37.012 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 35.88 Mbit/s
95th percentile per-packet one-way delay: 16.421 ms
Loss rate: 0.31%
```

Run 1: Report of PCC — Data Link



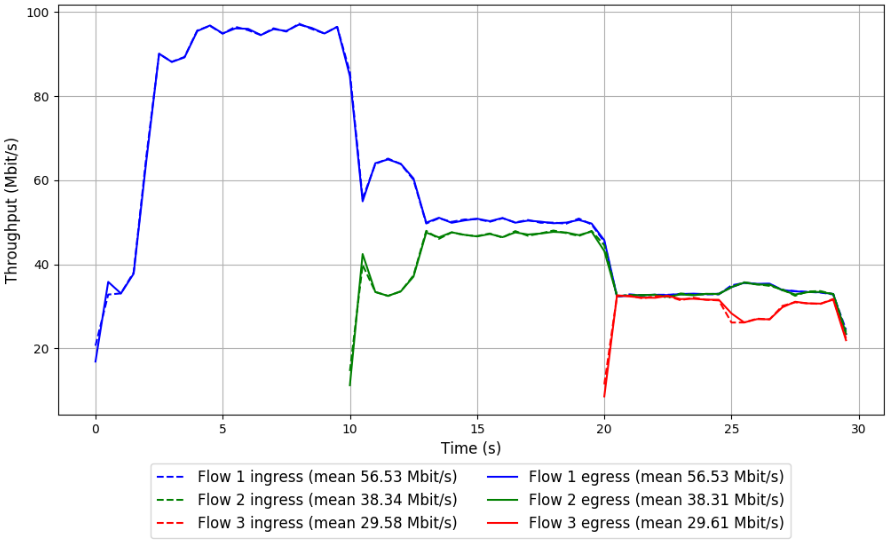


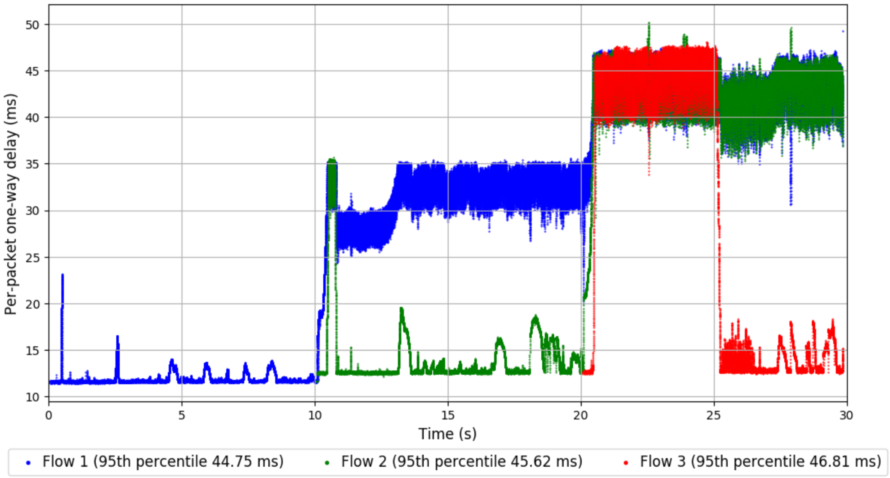
```
Run 2: Statistics of PCC

Start at: 2018-04-10 18:35:04
End at: 2018-04-10 18:35:34
Local clock offset: -2.887 ms
Remote clock offset: 6.983 ms

# Below is generated by plot.py at 2018-04-11 01:30:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.70 Mbit/s
95th percentile per-packet one-way delay: 45.565 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 56.53 Mbit/s
95th percentile per-packet one-way delay: 44.746 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 38.31 Mbit/s
95th percentile per-packet one-way delay: 45.621 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 29.61 Mbit/s
95th percentile per-packet one-way delay: 46.807 ms
Loss rate: 0.25%
```

Run 2: Report of PCC — Data Link



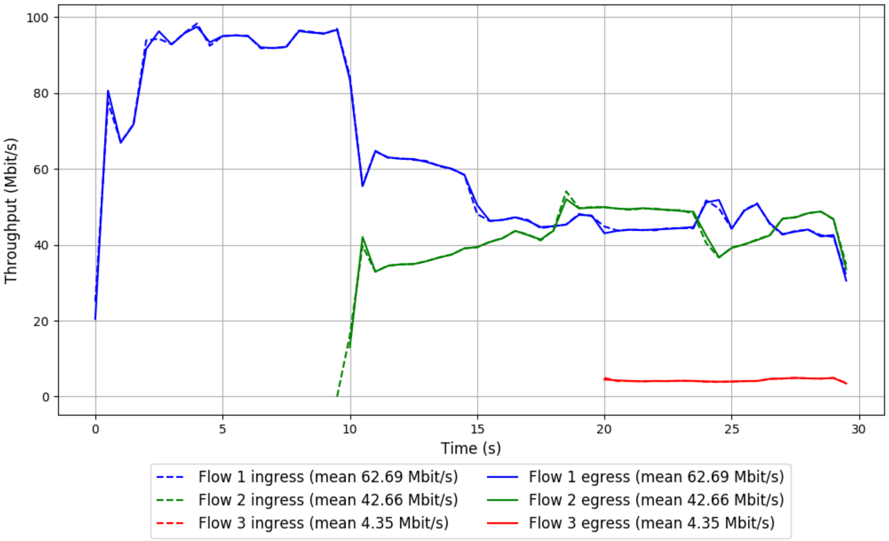


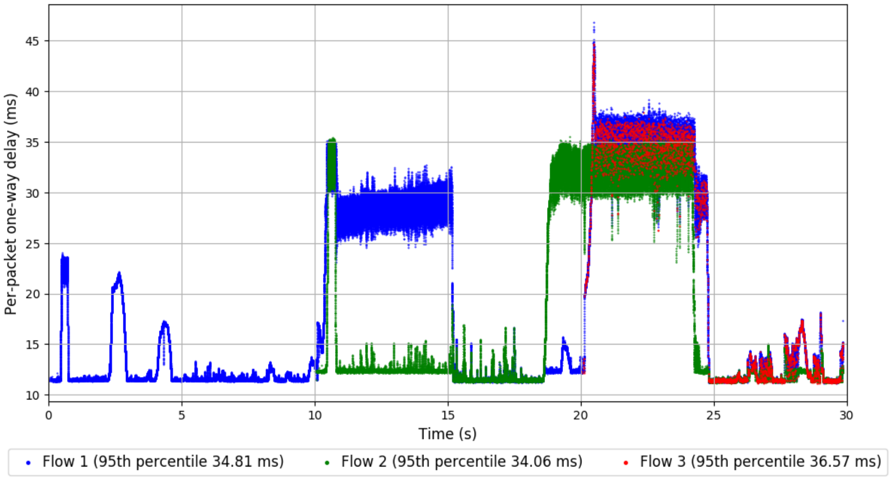
```
Run 3: Statistics of PCC

Start at: 2018-04-10 18:57:12
End at: 2018-04-10 18:57:42
Local clock offset: 0.892 ms
Remote clock offset: 5.404 ms

# Below is generated by plot.py at 2018-04-11 01:32:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.49 Mbit/s
95th percentile per-packet one-way delay: 34.436 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 62.69 Mbit/s
95th percentile per-packet one-way delay: 34.807 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 42.66 Mbit/s
95th percentile per-packet one-way delay: 34.057 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 4.35 Mbit/s
95th percentile per-packet one-way delay: 36.570 ms
Loss rate: 0.27%
```

Run 3: Report of PCC — Data Link



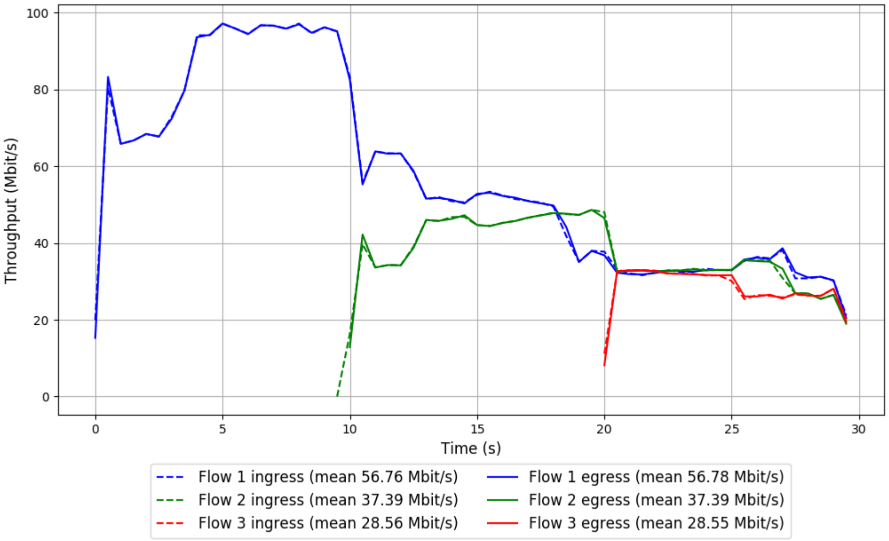


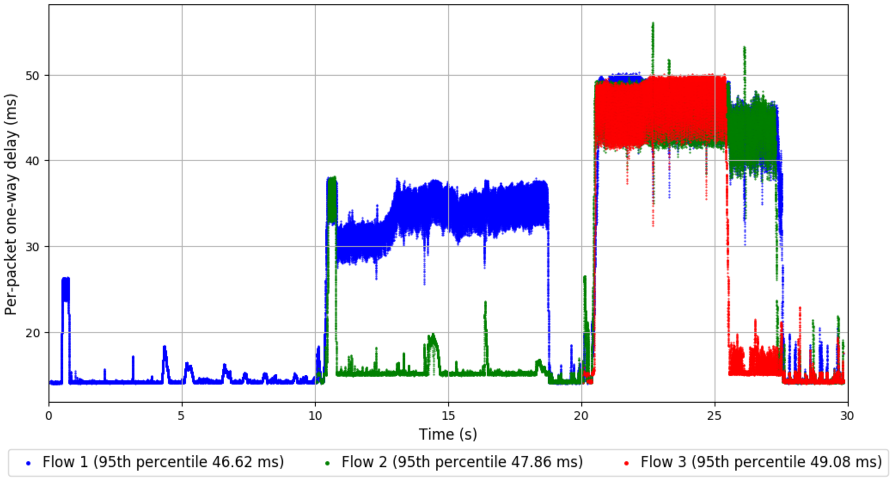
```
Run 4: Statistics of PCC

Start at: 2018-04-10 19:19:21
End at: 2018-04-10 19:19:51
Local clock offset: 0.048 ms
Remote clock offset: 2.035 ms

# Below is generated by plot.py at 2018-04-11 01:32:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.05 Mbit/s
95th percentile per-packet one-way delay: 47.854 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 56.78 Mbit/s
95th percentile per-packet one-way delay: 46.624 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 37.39 Mbit/s
95th percentile per-packet one-way delay: 47.861 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 28.55 Mbit/s
95th percentile per-packet one-way delay: 49.077 ms
Loss rate: 0.26%
```

Run 4: Report of PCC — Data Link



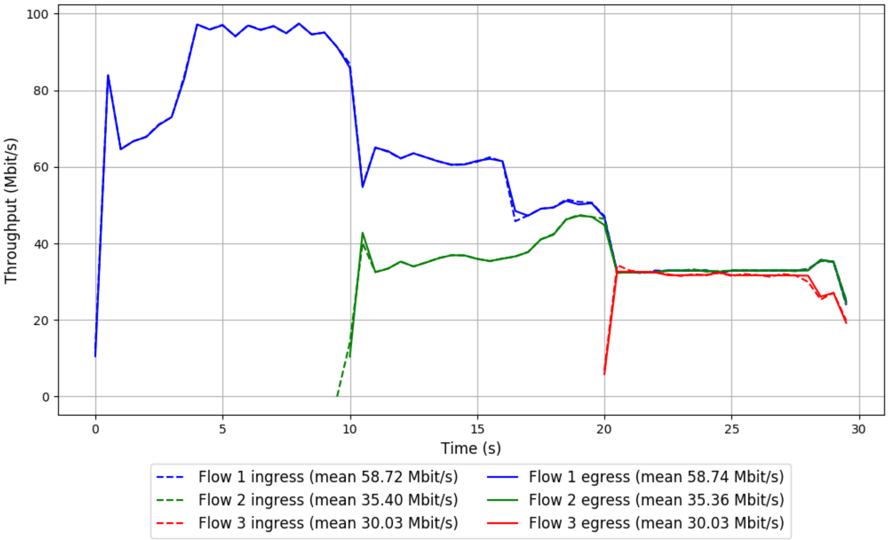


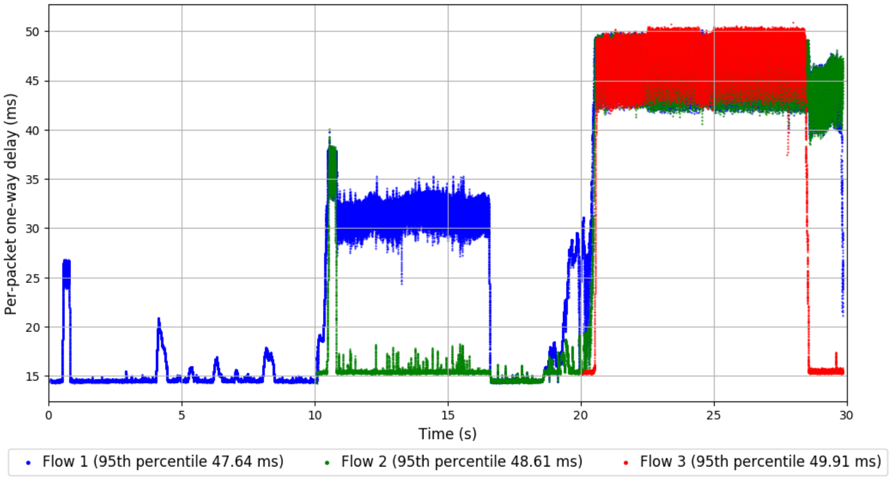
```
Run 5: Statistics of PCC

Start at: 2018-04-10 19:41:00
End at: 2018-04-10 19:41:30
Local clock offset: 1.789 ms
Remote clock offset: -2.409 ms

# Below is generated by plot.py at 2018-04-11 01:32:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.12 Mbit/s
95th percentile per-packet one-way delay: 48.688 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 58.74 Mbit/s
95th percentile per-packet one-way delay: 47.640 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 35.36 Mbit/s
95th percentile per-packet one-way delay: 48.609 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 30.03 Mbit/s
95th percentile per-packet one-way delay: 49.914 ms
Loss rate: 0.25%
```

Run 5: Report of PCC — Data Link



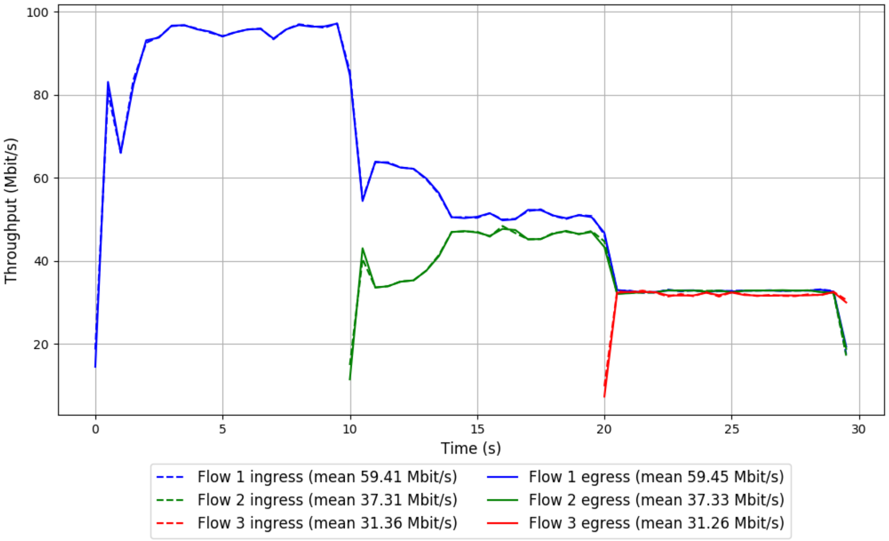


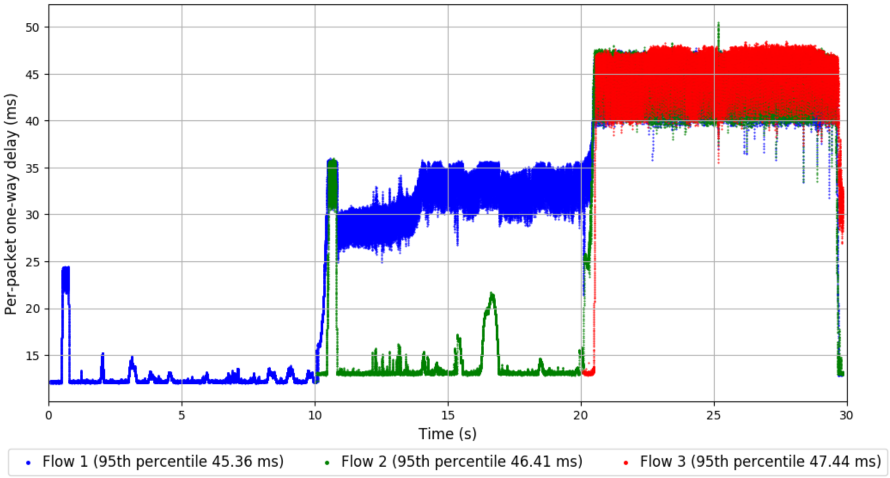
```
Run 6: Statistics of PCC

Start at: 2018-04-10 20:02:55
End at: 2018-04-10 20:03:25
Local clock offset: 0.712 ms
Remote clock offset: -4.916 ms

# Below is generated by plot.py at 2018-04-11 01:32:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.54 Mbit/s
95th percentile per-packet one-way delay: 46.385 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 59.45 Mbit/s
95th percentile per-packet one-way delay: 45.362 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 37.33 Mbit/s
95th percentile per-packet one-way delay: 46.405 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 31.26 Mbit/s
95th percentile per-packet one-way delay: 47.441 ms
Loss rate: 0.57%
```

Run 6: Report of PCC — Data Link



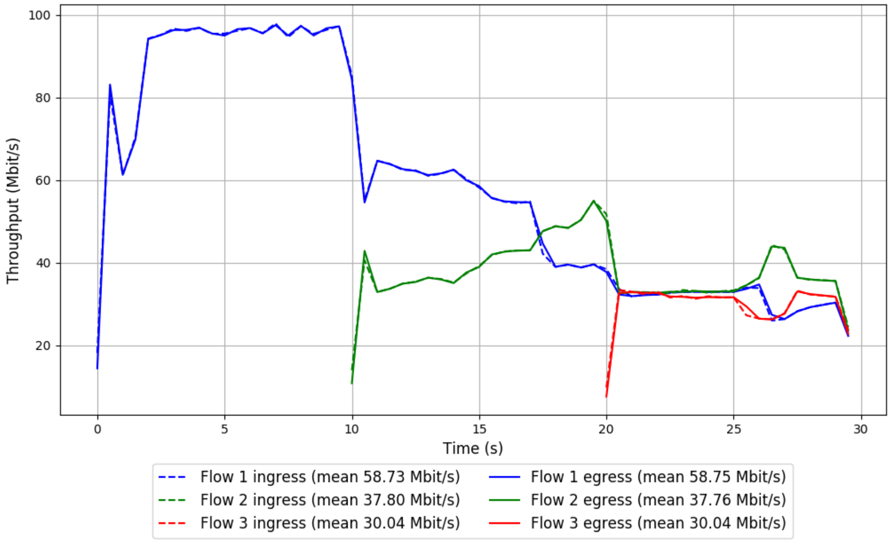


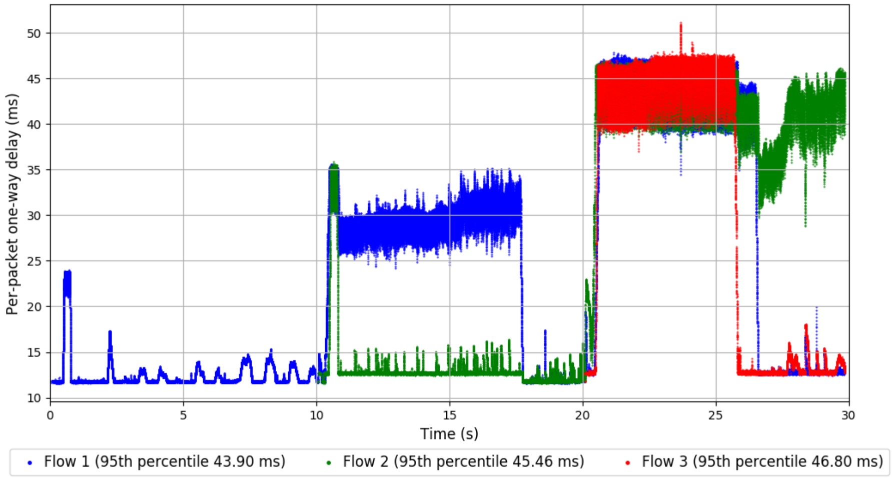
```
Run 7: Statistics of PCC

Start at: 2018-04-10 20:24:33
End at: 2018-04-10 20:25:03
Local clock offset: 0.558 ms
Remote clock offset: -7.277 ms

# Below is generated by plot.py at 2018-04-11 01:32:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.73 Mbit/s
95th percentile per-packet one-way delay: 45.392 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 58.75 Mbit/s
95th percentile per-packet one-way delay: 43.904 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 37.76 Mbit/s
95th percentile per-packet one-way delay: 45.456 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 30.04 Mbit/s
95th percentile per-packet one-way delay: 46.803 ms
Loss rate: 0.28%
```

Run 7: Report of PCC — Data Link



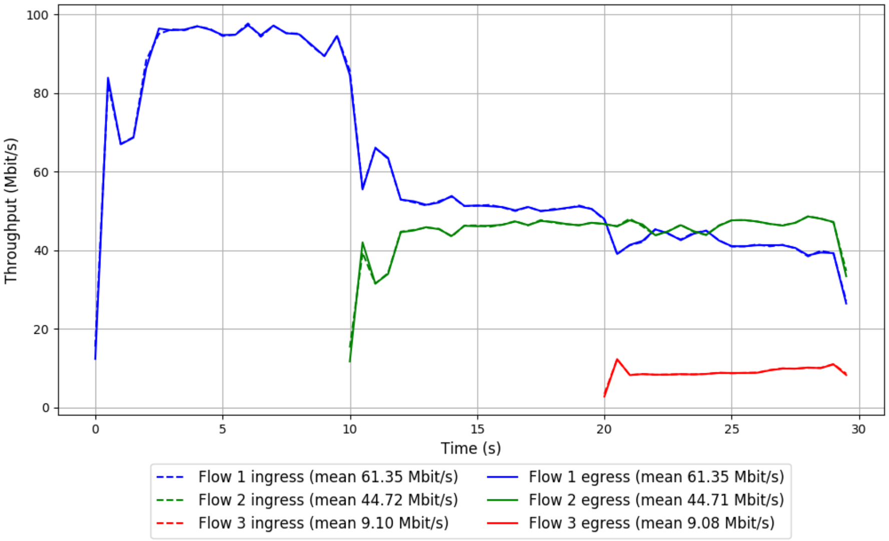


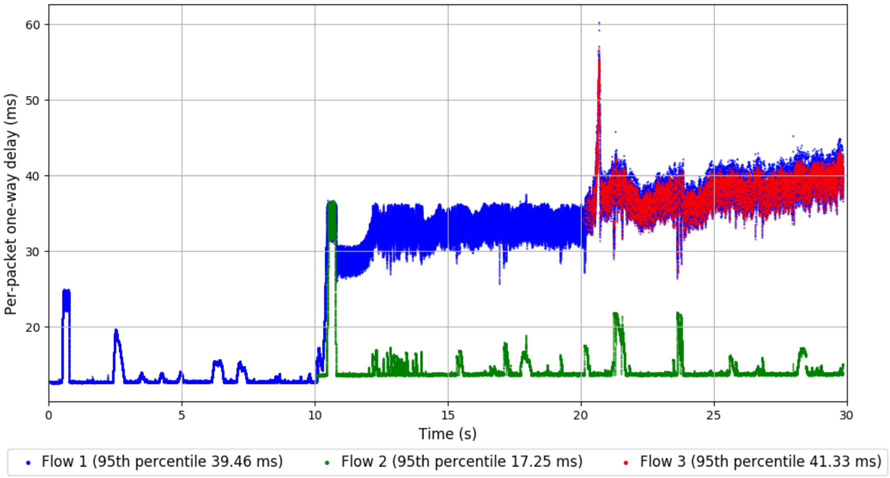
```
Run 8: Statistics of PCC

Start at: 2018-04-10 20:46:19
End at: 2018-04-10 20:46:49
Local clock offset: 1.06 ms
Remote clock offset: -3.497 ms

# Below is generated by plot.py at 2018-04-11 01:32:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.05 Mbit/s
95th percentile per-packet one-way delay: 39.122 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 61.35 Mbit/s
95th percentile per-packet one-way delay: 39.460 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 44.71 Mbit/s
95th percentile per-packet one-way delay: 17.247 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 9.08 Mbit/s
95th percentile per-packet one-way delay: 41.330 ms
Loss rate: 0.67%
```

Run 8: Report of PCC — Data Link



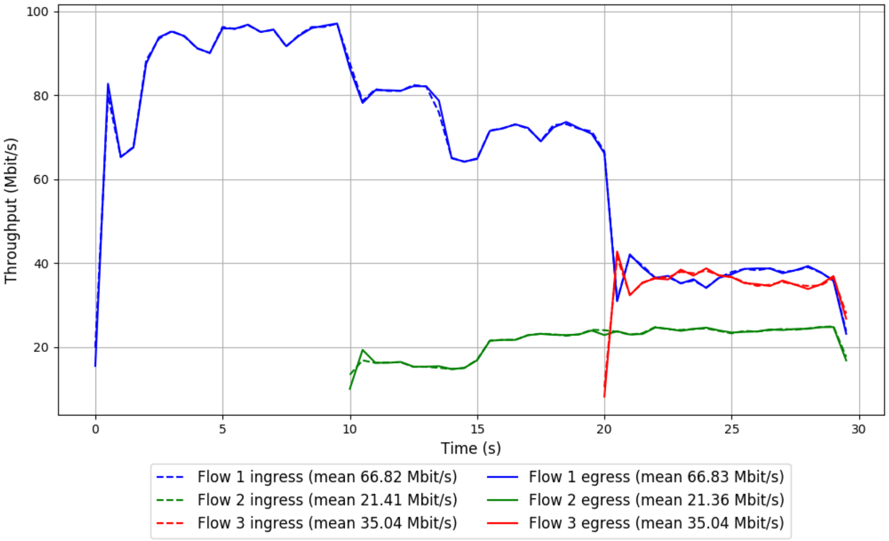


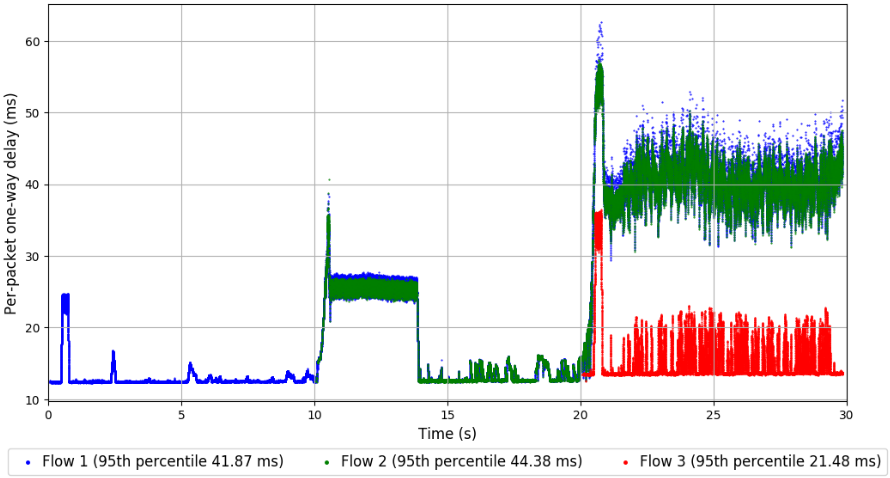
```
Run 9: Statistics of PCC

Start at: 2018-04-10 21:07:32
End at: 2018-04-10 21:08:02
Local clock offset: 0.295 ms
Remote clock offset: -0.575 ms

# Below is generated by plot.py at 2018-04-11 01:32:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.54 Mbit/s
95th percentile per-packet one-way delay: 42.338 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 66.83 Mbit/s
95th percentile per-packet one-way delay: 41.872 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 21.36 Mbit/s
95th percentile per-packet one-way delay: 44.381 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 35.04 Mbit/s
95th percentile per-packet one-way delay: 21.479 ms
Loss rate: 0.32%
```

Run 9: Report of PCC — Data Link



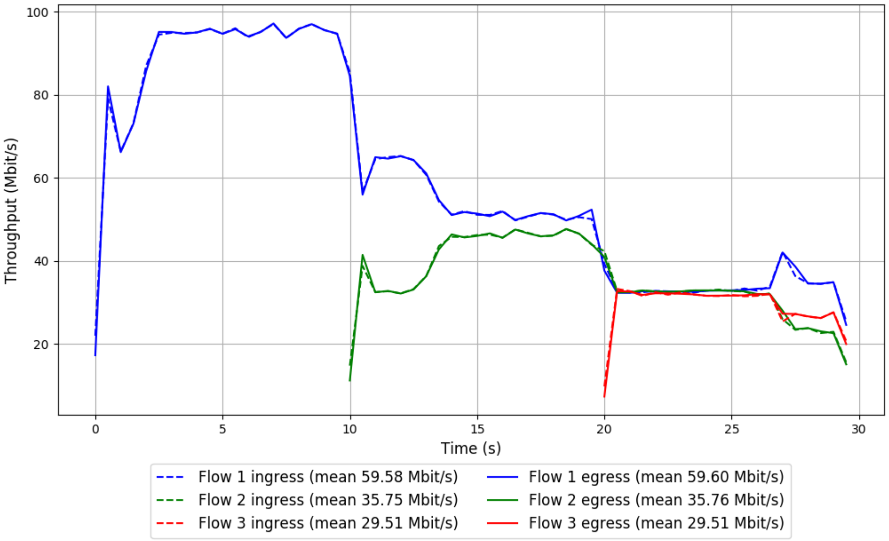


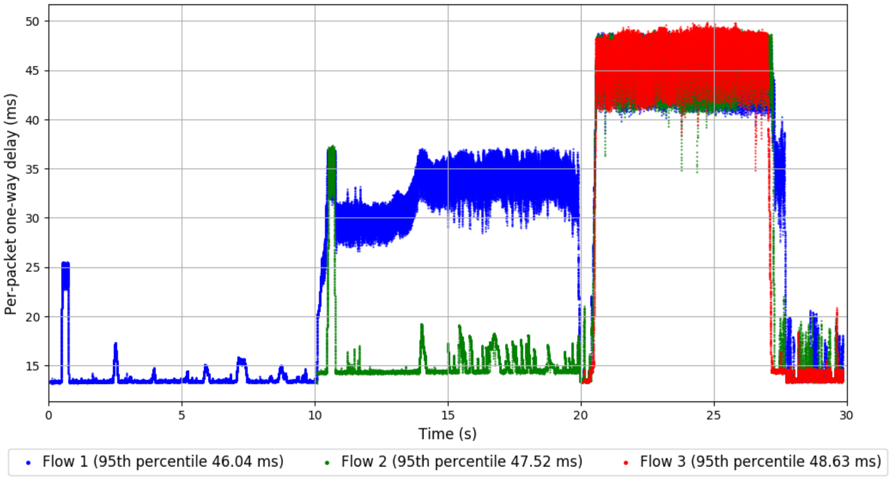
```
Run 10: Statistics of PCC

Start at: 2018-04-10 21:28:45
End at: 2018-04-10 21:29:15
Local clock offset: -0.195 ms
Remote clock offset: 3.432 ms

# Below is generated by plot.py at 2018-04-11 01:32:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.06 Mbit/s
95th percentile per-packet one-way delay: 47.404 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 59.60 Mbit/s
95th percentile per-packet one-way delay: 46.042 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 35.76 Mbit/s
95th percentile per-packet one-way delay: 47.516 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 29.51 Mbit/s
95th percentile per-packet one-way delay: 48.633 ms
Loss rate: 0.26%
```

Run 10: Report of PCC — Data Link



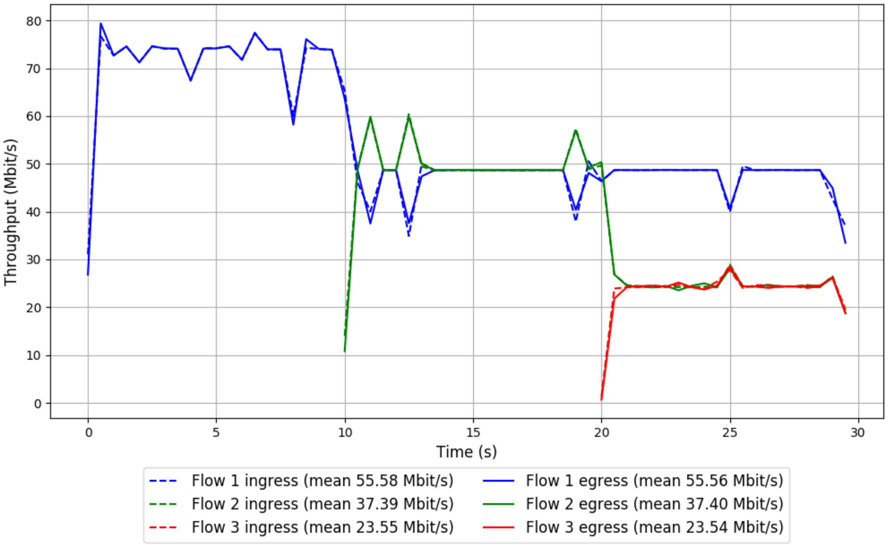


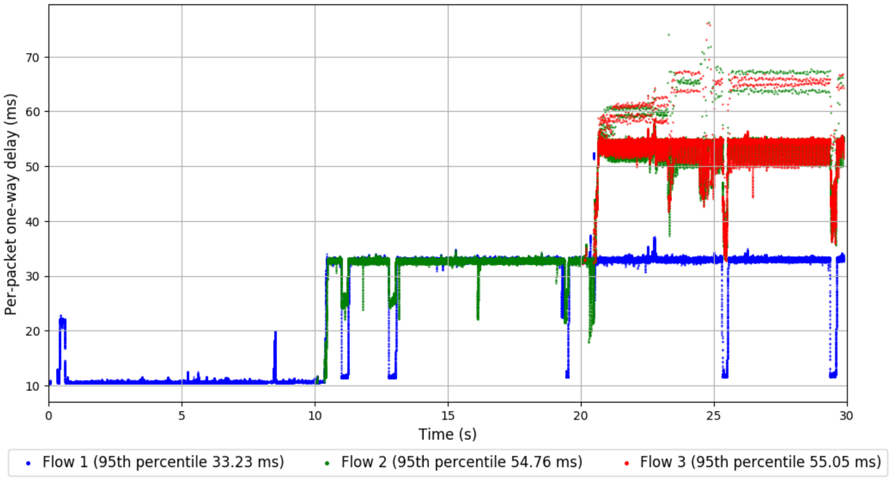
```
Run 1: Statistics of QUIC Cubic

Start at: 2018-04-10 18:17:14
End at: 2018-04-10 18:17:44
Local clock offset: -1.75 ms
Remote clock offset: 3.131 ms

# Below is generated by plot.py at 2018-04-11 01:33:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.14 Mbit/s
95th percentile per-packet one-way delay: 54.646 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 55.56 Mbit/s
95th percentile per-packet one-way delay: 33.232 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 37.40 Mbit/s
95th percentile per-packet one-way delay: 54.761 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 23.54 Mbit/s
95th percentile per-packet one-way delay: 55.051 ms
Loss rate: 0.71%
```

Run 1: Report of QUIC Cubic — Data Link



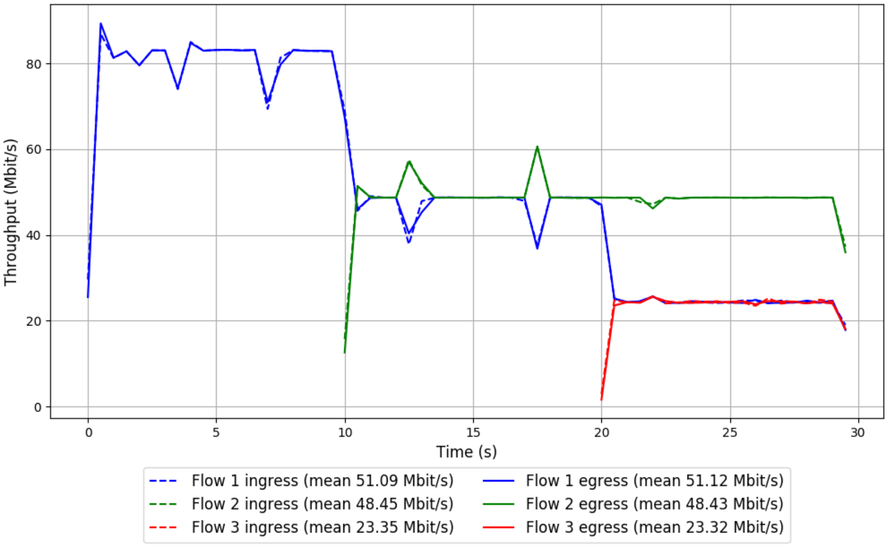


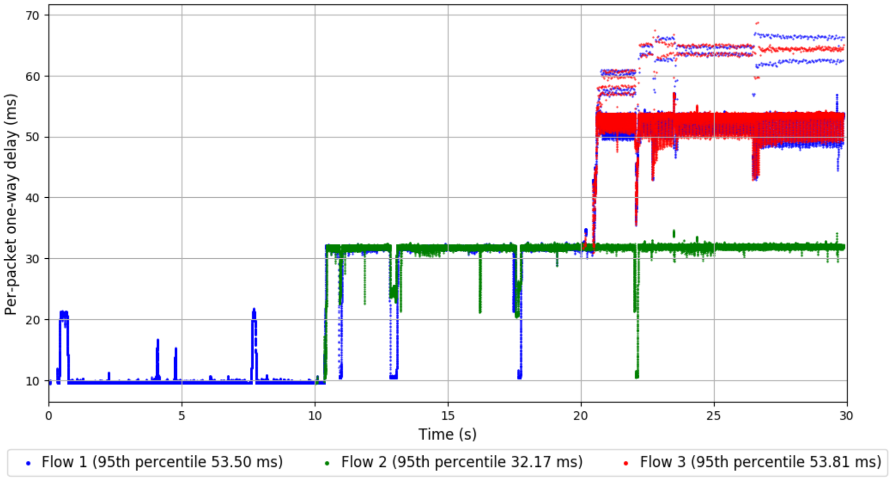
```
Run 2: Statistics of QUIC Cubic

Start at: 2018-04-10 18:39:48
End at: 2018-04-10 18:40:18
Local clock offset: -3.202 ms
Remote clock offset: 9.794 ms

# Below is generated by plot.py at 2018-04-11 01:33:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.97 Mbit/s
95th percentile per-packet one-way delay: 53.542 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 51.12 Mbit/s
95th percentile per-packet one-way delay: 53.498 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 48.43 Mbit/s
95th percentile per-packet one-way delay: 32.168 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 23.32 Mbit/s
95th percentile per-packet one-way delay: 53.808 ms
Loss rate: 0.65%
```

Run 2: Report of QUIC Cubic — Data Link



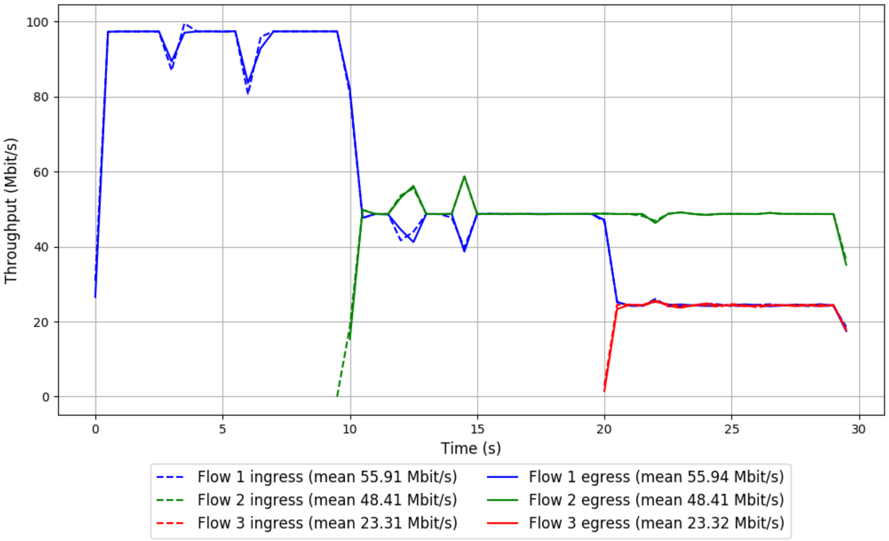


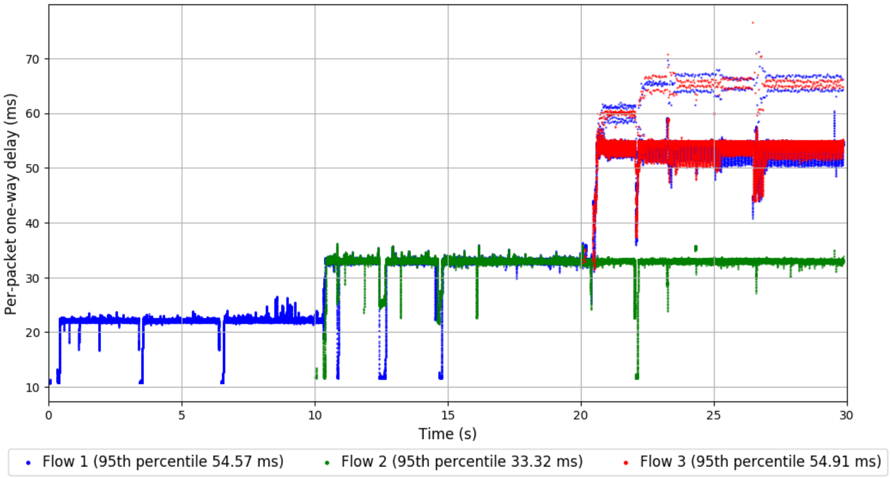
```
Run 3: Statistics of QUIC Cubic

Start at: 2018-04-10 19:01:59
End at: 2018-04-10 19:02:29
Local clock offset: 0.889 ms
Remote clock offset: 4.79 ms

# Below is generated by plot.py at 2018-04-11 01:33:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.78 Mbit/s
95th percentile per-packet one-way delay: 54.619 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 55.94 Mbit/s
95th percentile per-packet one-way delay: 54.570 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 48.41 Mbit/s
95th percentile per-packet one-way delay: 33.316 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 23.32 Mbit/s
95th percentile per-packet one-way delay: 54.915 ms
Loss rate: 0.72%
```

Run 3: Report of QUIC Cubic — Data Link



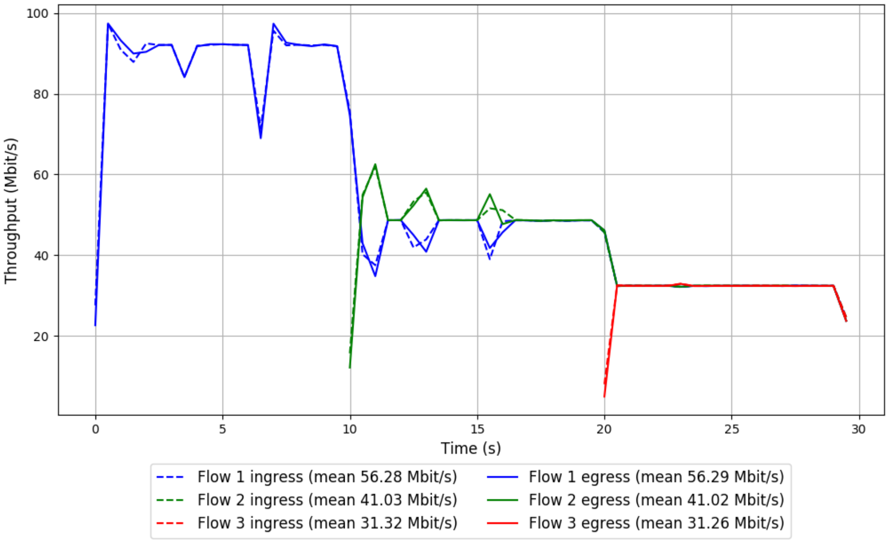


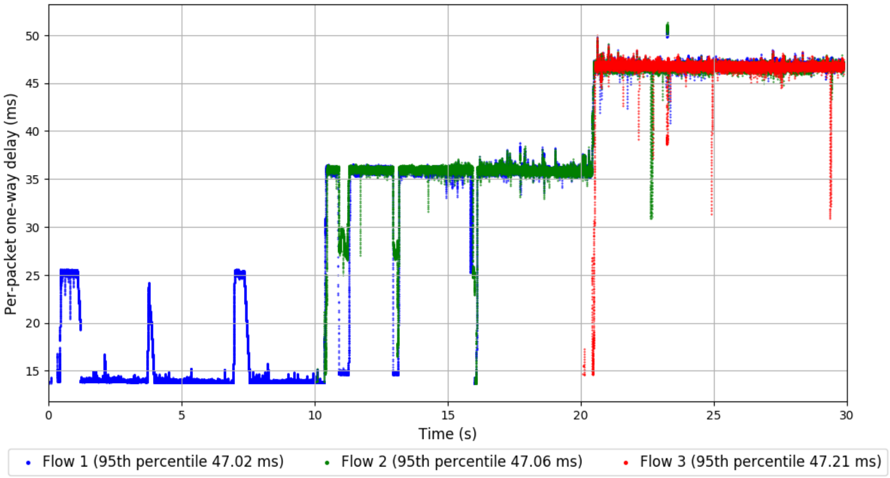
```
Run 4: Statistics of QUIC Cubic

Start at: 2018-04-10 19:24:04
End at: 2018-04-10 19:24:34
Local clock offset: 0.801 ms
Remote clock offset: 1.711 ms

# Below is generated by plot.py at 2018-04-11 01:33:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.83 Mbit/s
95th percentile per-packet one-way delay: 47.093 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 56.29 Mbit/s
95th percentile per-packet one-way delay: 47.019 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 41.02 Mbit/s
95th percentile per-packet one-way delay: 47.057 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 31.26 Mbit/s
95th percentile per-packet one-way delay: 47.214 ms
Loss rate: 0.63%
```

Run 4: Report of QUIC Cubic — Data Link



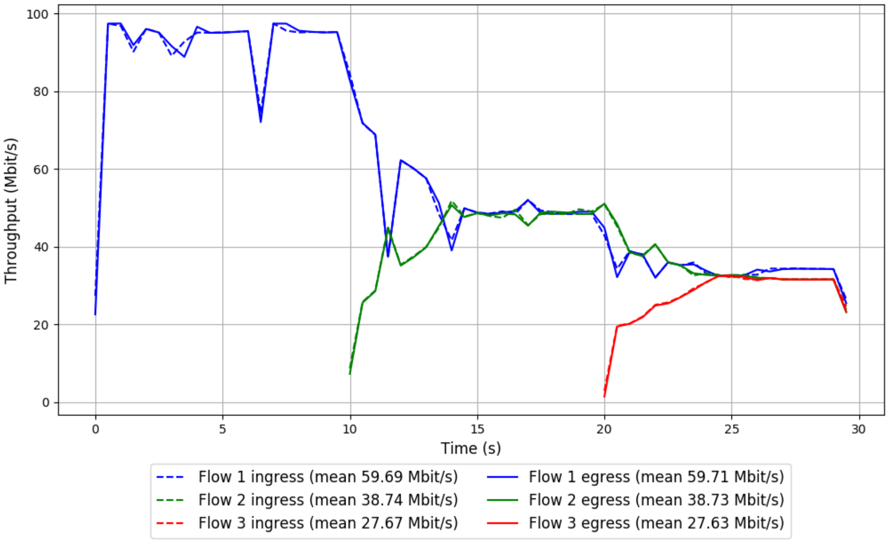


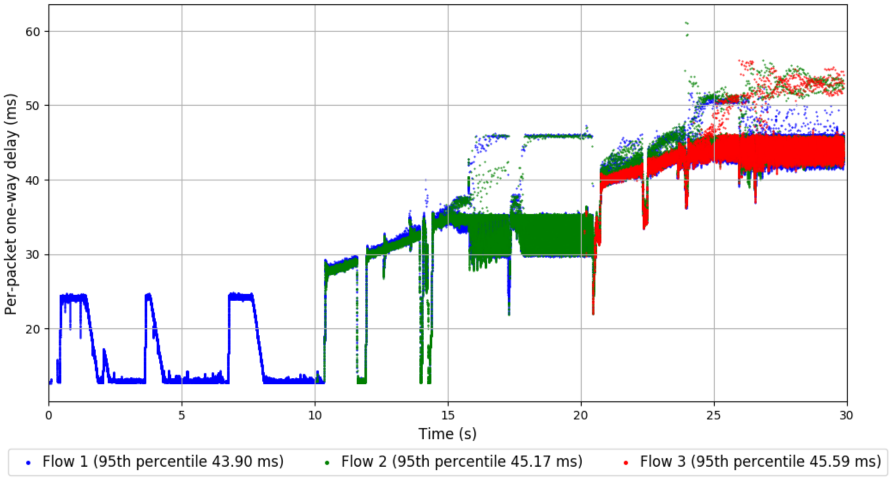
```
Run 5: Statistics of QUIC Cubic

Start at: 2018-04-10 19:45:49
End at: 2018-04-10 19:46:19
Local clock offset: 1.335 ms
Remote clock offset: -1.762 ms

# Below is generated by plot.py at 2018-04-11 01:33:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.50 Mbit/s
95th percentile per-packet one-way delay: 44.917 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 59.71 Mbit/s
95th percentile per-packet one-way delay: 43.896 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 38.73 Mbit/s
95th percentile per-packet one-way delay: 45.167 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 27.63 Mbit/s
95th percentile per-packet one-way delay: 45.585 ms
Loss rate: 0.76%
```

Run 5: Report of QUIC Cubic — Data Link



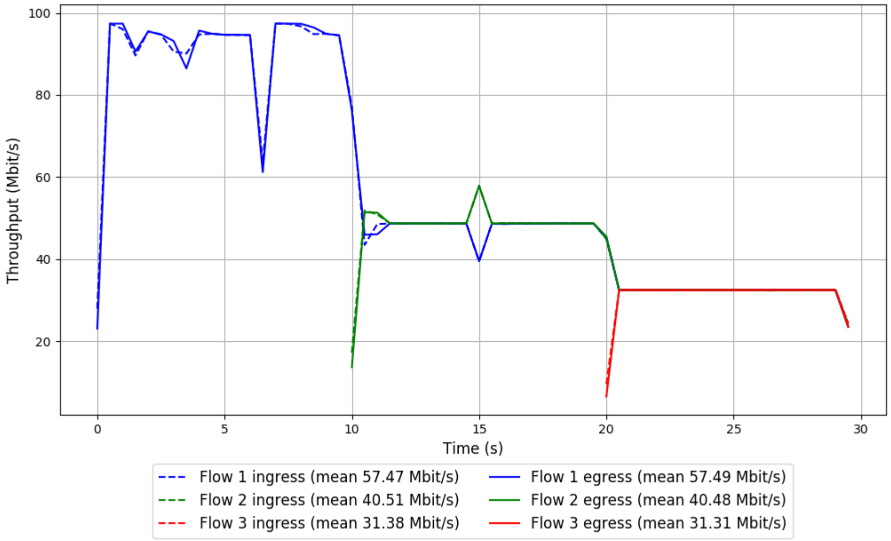


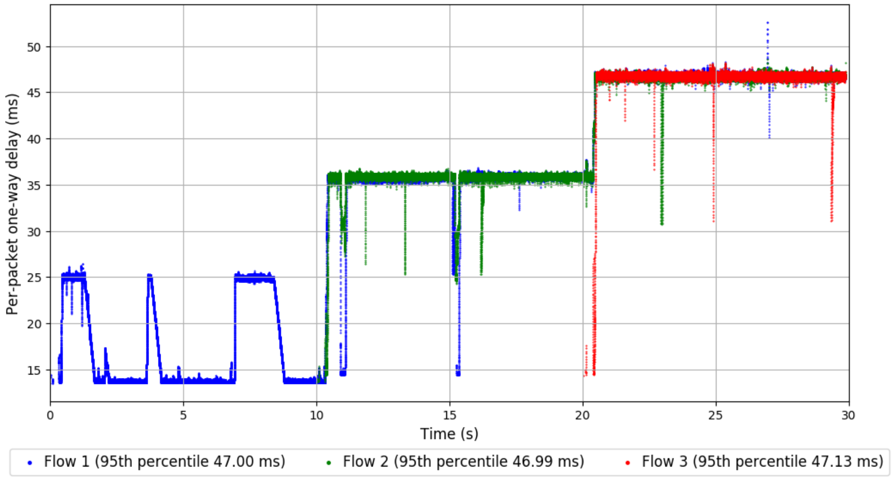
```
Run 6: Statistics of QUIC Cubic

Start at: 2018-04-10 20:07:41
End at: 2018-04-10 20:08:11
Local clock offset: 1.522 ms
Remote clock offset: -6.324 ms

# Below is generated by plot.py at 2018-04-11 01:33:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.69 Mbit/s
95th percentile per-packet one-way delay: 47.046 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 57.49 Mbit/s
95th percentile per-packet one-way delay: 47.002 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 40.48 Mbit/s
95th percentile per-packet one-way delay: 46.990 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 31.31 Mbit/s
95th percentile per-packet one-way delay: 47.133 ms
Loss rate: 0.61%
```

Run 6: Report of QUIC Cubic — Data Link



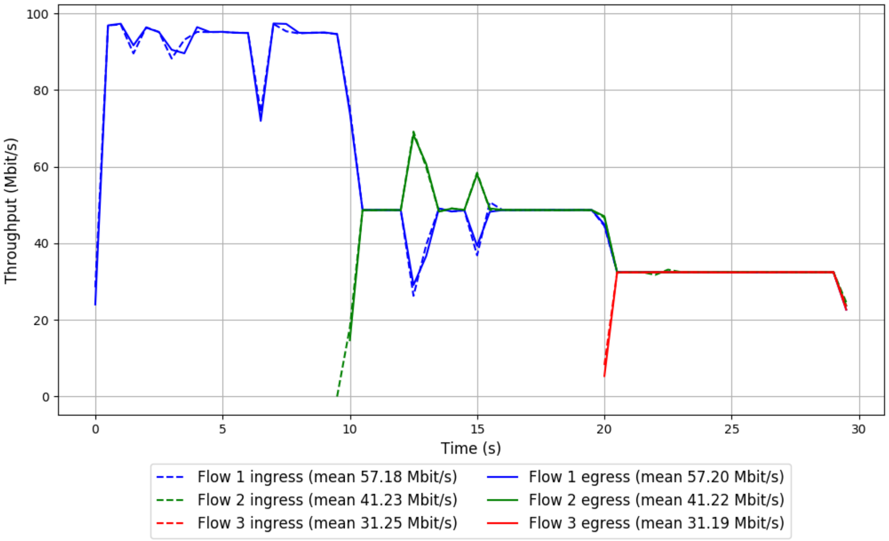


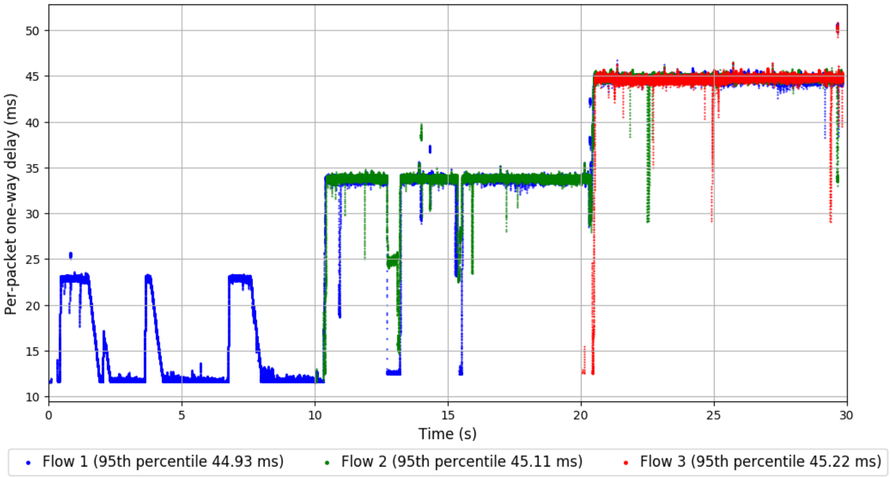
```
Run 7: Statistics of QUIC Cubic

Start at: 2018-04-10 20:29:13
End at: 2018-04-10 20:29:43
Local clock offset: 0.453 ms
Remote clock offset: -7.464 ms

# Below is generated by plot.py at 2018-04-11 01:33:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.86 Mbit/s
95th percentile per-packet one-way delay: 45.067 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 57.20 Mbit/s
95th percentile per-packet one-way delay: 44.926 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 41.22 Mbit/s
95th percentile per-packet one-way delay: 45.113 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 31.19 Mbit/s
95th percentile per-packet one-way delay: 45.216 ms
Loss rate: 0.62%
```

Run 7: Report of QUIC Cubic — Data Link



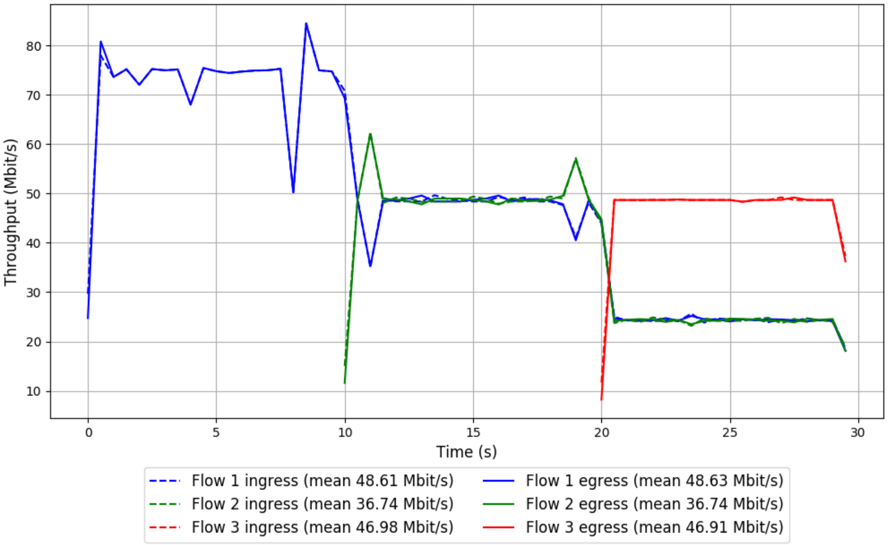


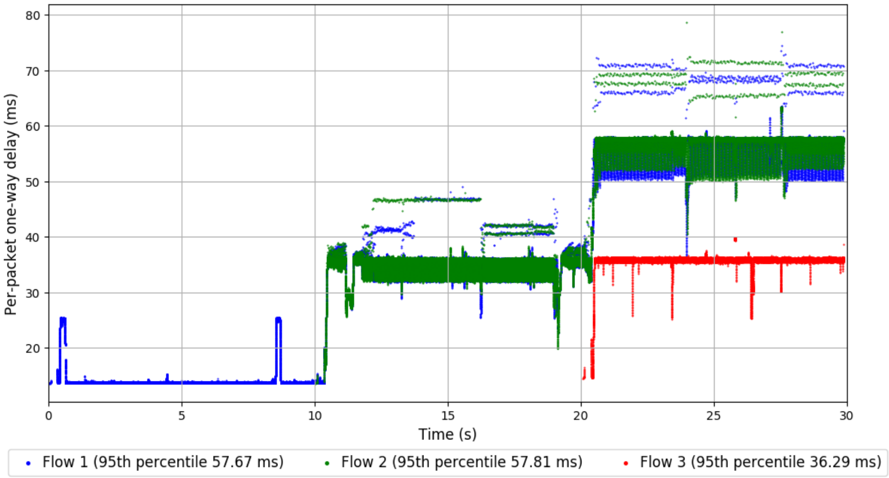
```
Run 8: Statistics of QUIC Cubic

Start at: 2018-04-10 20:50:56
End at: 2018-04-10 20:51:26
Local clock offset: 1.082 ms
Remote clock offset: -4.173 ms

# Below is generated by plot.py at 2018-04-11 01:33:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.46 Mbit/s
95th percentile per-packet one-way delay: 57.697 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 48.63 Mbit/s
95th percentile per-packet one-way delay: 57.674 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 36.74 Mbit/s
95th percentile per-packet one-way delay: 57.807 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 46.91 Mbit/s
95th percentile per-packet one-way delay: 36.288 ms
Loss rate: 0.50%
```

Run 8: Report of QUIC Cubic — Data Link



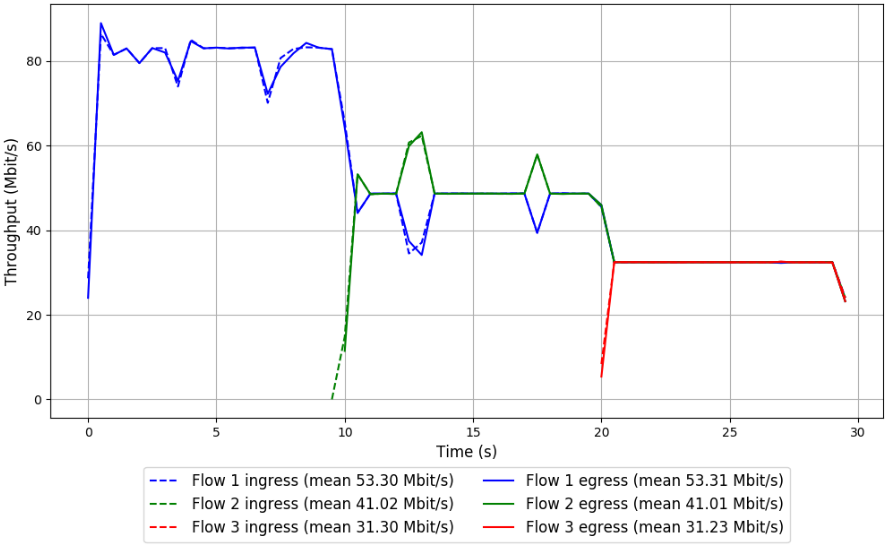


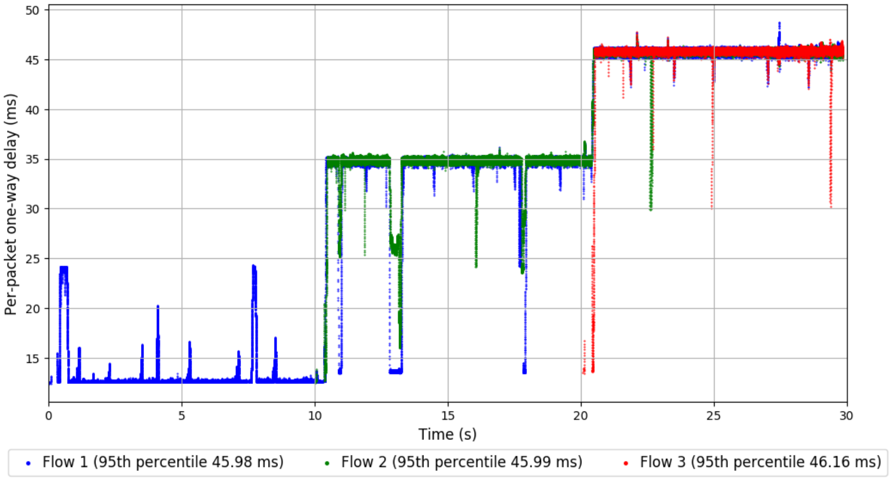
```
Run 9: Statistics of QUIC Cubic

Start at: 2018-04-10 21:12:08
End at: 2018-04-10 21:12:38
Local clock offset: 0.284 ms
Remote clock offset: 1.118 ms

# Below is generated by plot.py at 2018-04-11 01:35:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.84 Mbit/s
95th percentile per-packet one-way delay: 46.038 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 53.31 Mbit/s
95th percentile per-packet one-way delay: 45.985 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 41.01 Mbit/s
95th percentile per-packet one-way delay: 45.986 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 31.23 Mbit/s
95th percentile per-packet one-way delay: 46.155 ms
Loss rate: 0.62%
```

Run 9: Report of QUIC Cubic — Data Link



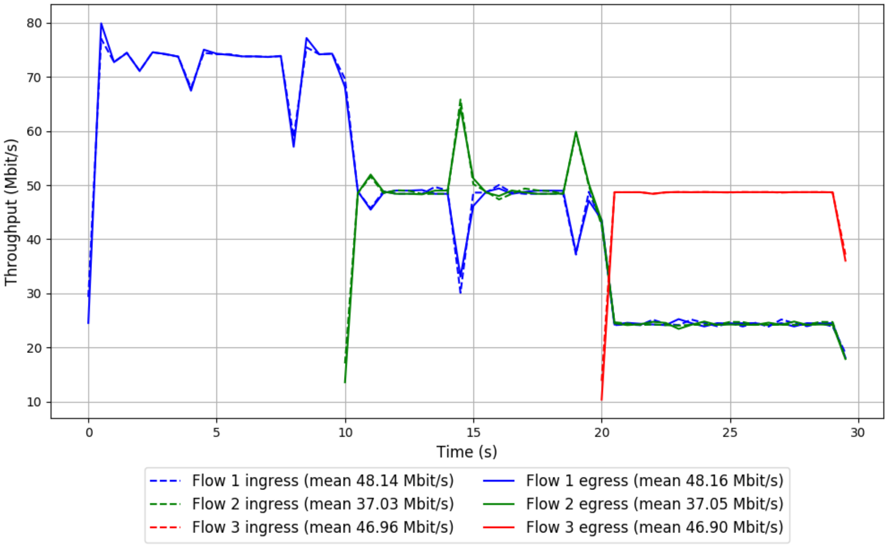


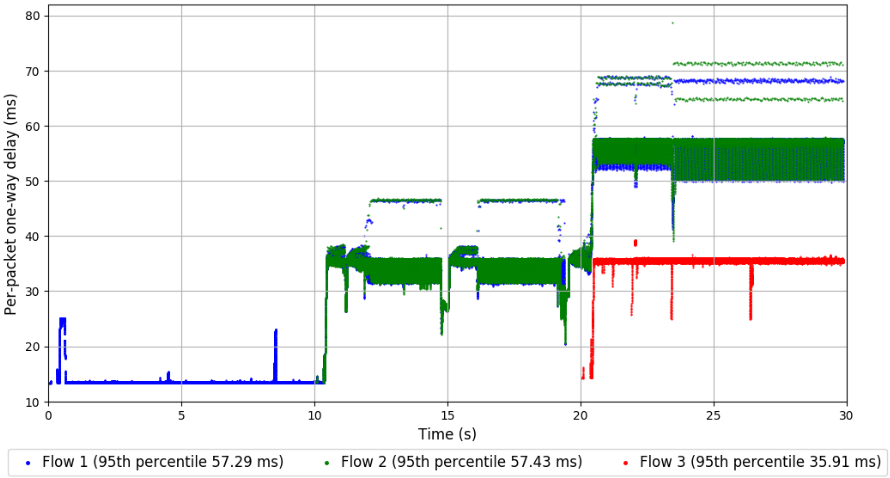
```
Run 10: Statistics of QUIC Cubic

Start at: 2018-04-10 21:33:20
End at: 2018-04-10 21:33:50
Local clock offset: 0.341 ms
Remote clock offset: 4.639 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.22 Mbit/s
95th percentile per-packet one-way delay: 57.315 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 48.16 Mbit/s
95th percentile per-packet one-way delay: 57.292 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 37.05 Mbit/s
95th percentile per-packet one-way delay: 57.427 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 46.90 Mbit/s
95th percentile per-packet one-way delay: 35.912 ms
Loss rate: 0.49%
```

Run 10: Report of QUIC Cubic — Data Link



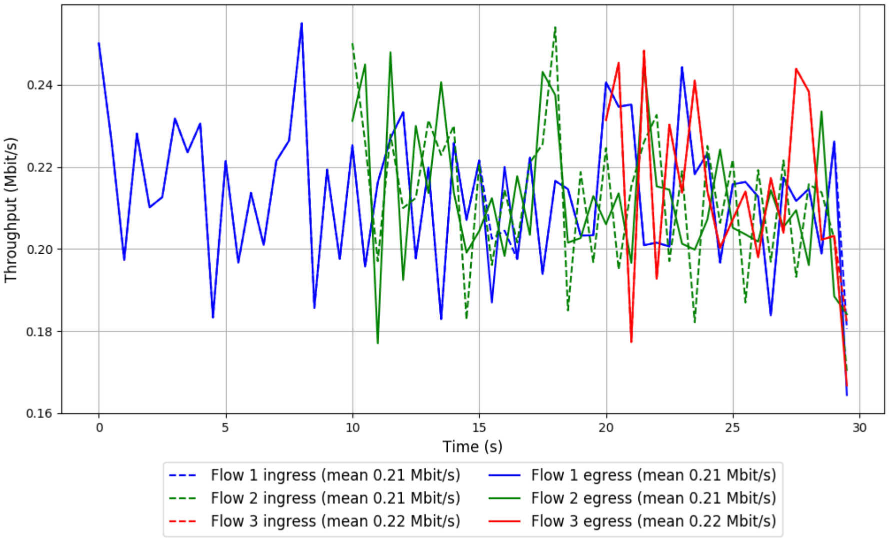


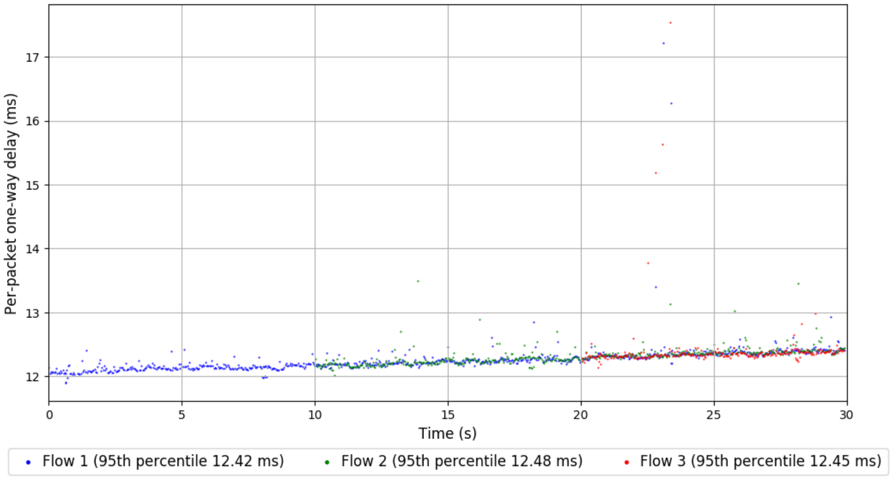
```
Run 1: Statistics of SCReAM

Start at: 2018-04-10 18:14:50
End at: 2018-04-10 18:15:20
Local clock offset: -1.305 ms
Remote clock offset: 0.484 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 12.442 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 12.420 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 12.476 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 12.451 ms
Loss rate: 0.35%
```

Run 1: Report of SCReAM — Data Link



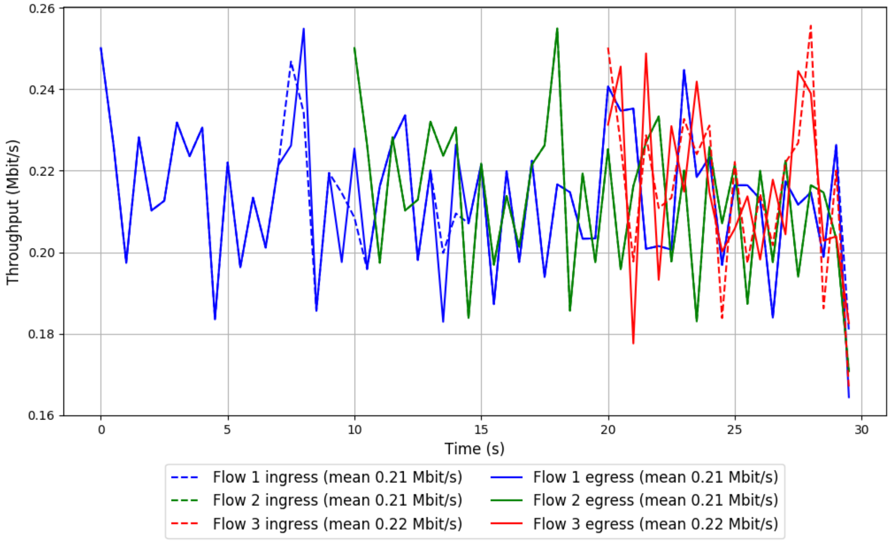


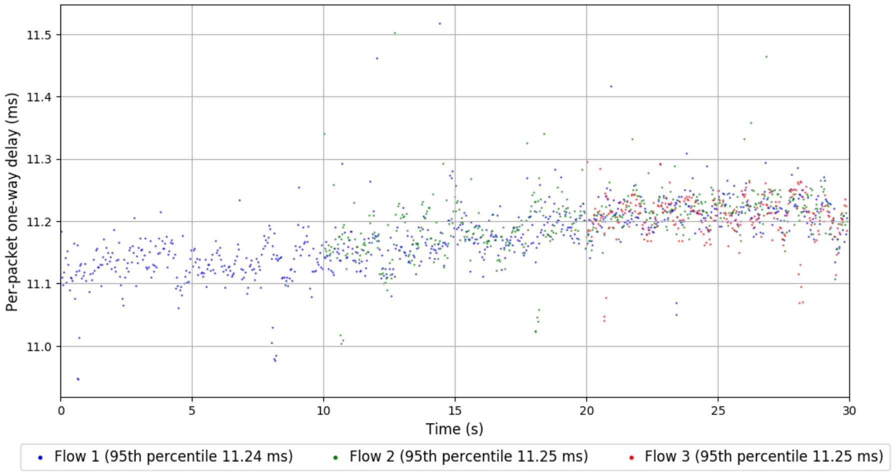
```
Run 2: Statistics of SCReAM

Start at: 2018-04-10 18:37:32
End at: 2018-04-10 18:38:02
Local clock offset: -2.538 ms
Remote clock offset: 8.379 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 11.251 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 11.245 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 11.252 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 11.251 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link



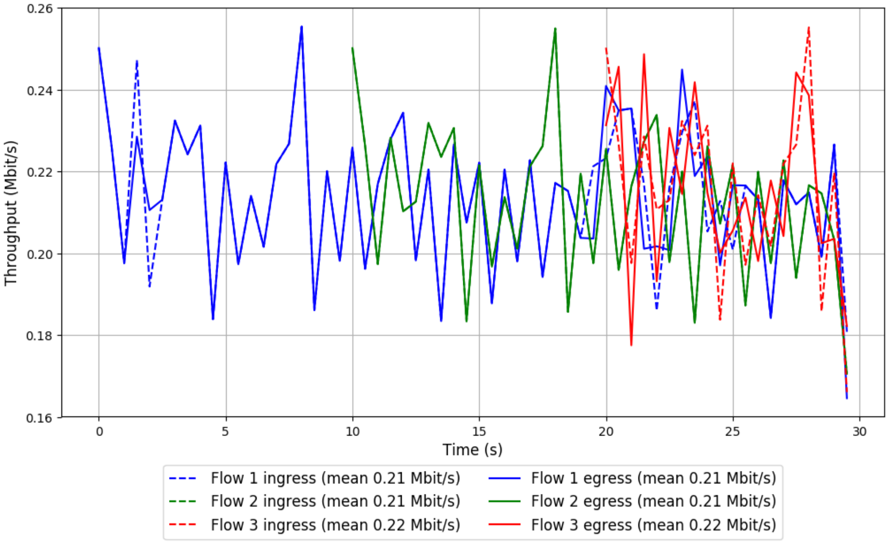


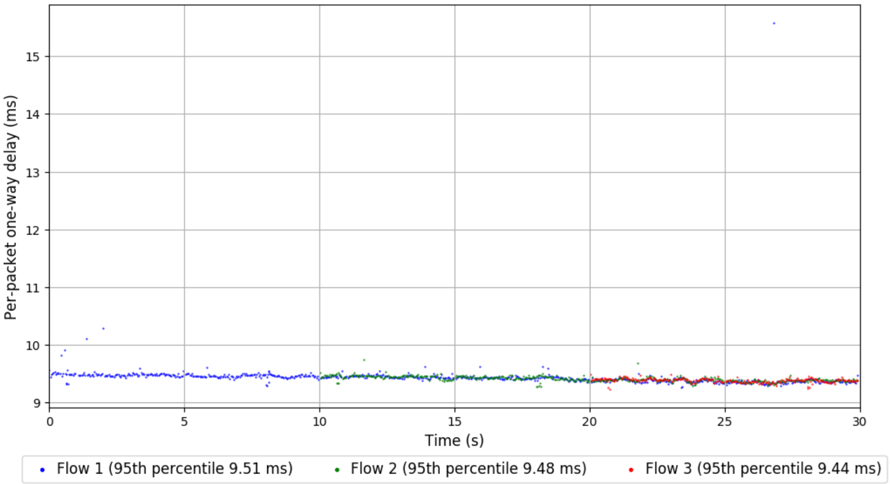
```
Run 3: Statistics of SCReAM

Start at: 2018-04-10 18:59:36
End at: 2018-04-10 19:00:06
Local clock offset: 0.16 ms
Remote clock offset: 5.963 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 9.495 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 9.507 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 9.476 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 9.442 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link



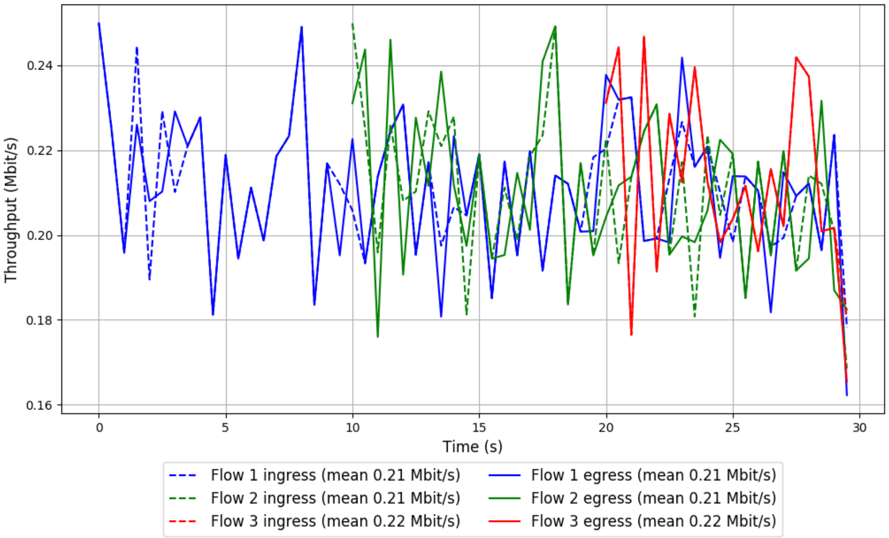


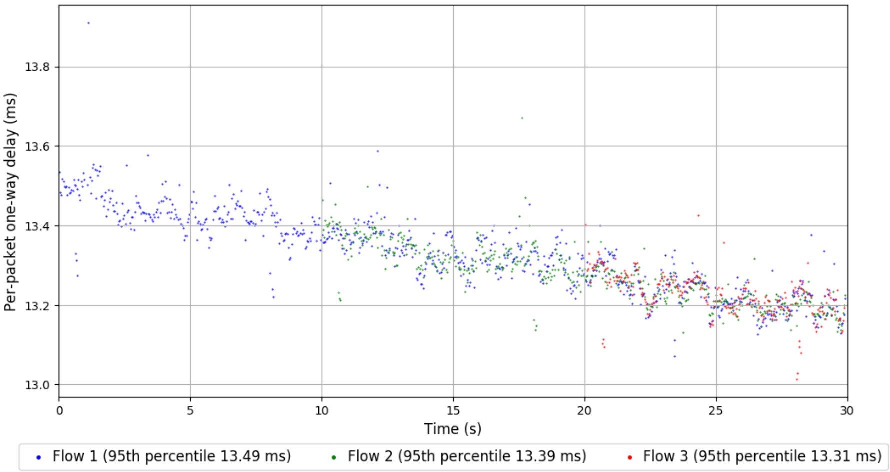
```
Run 4: Statistics of SCReAM

Start at: 2018-04-10 19:21:47
End at: 2018-04-10 19:22:17
Local clock offset: 1.218 ms
Remote clock offset: 3.857 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 13.461 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 13.490 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 13.393 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 13.306 ms
Loss rate: 0.35%
```

Run 4: Report of SCReAM — Data Link



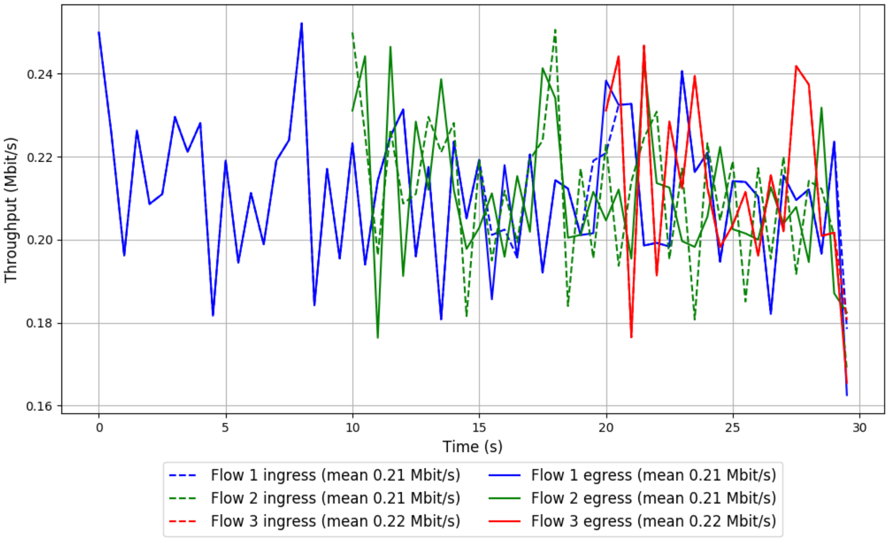


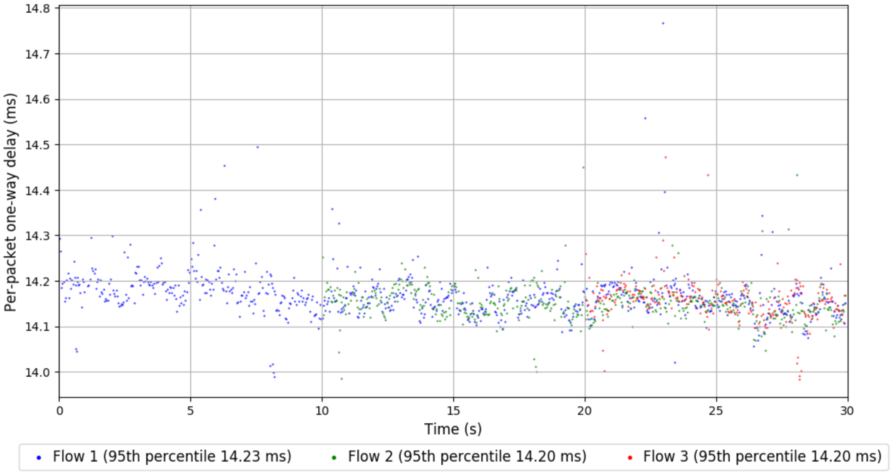
```
Run 5: Statistics of SCReAM

Start at: 2018-04-10 19:43:22
End at: 2018-04-10 19:43:52
Local clock offset: 1.611 ms
Remote clock offset: -2.555 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 14.223 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 14.230 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 14.197 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 14.204 ms
Loss rate: 0.35%
```

Run 5: Report of SCReAM — Data Link



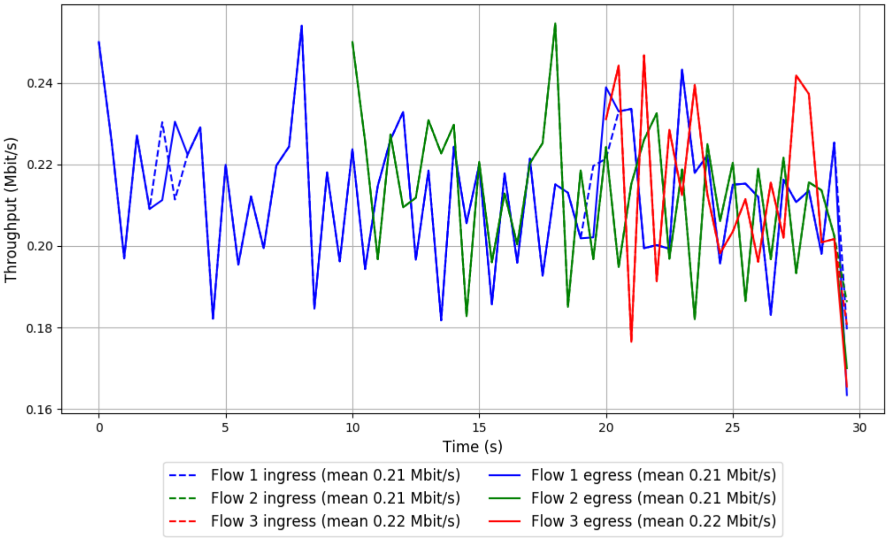


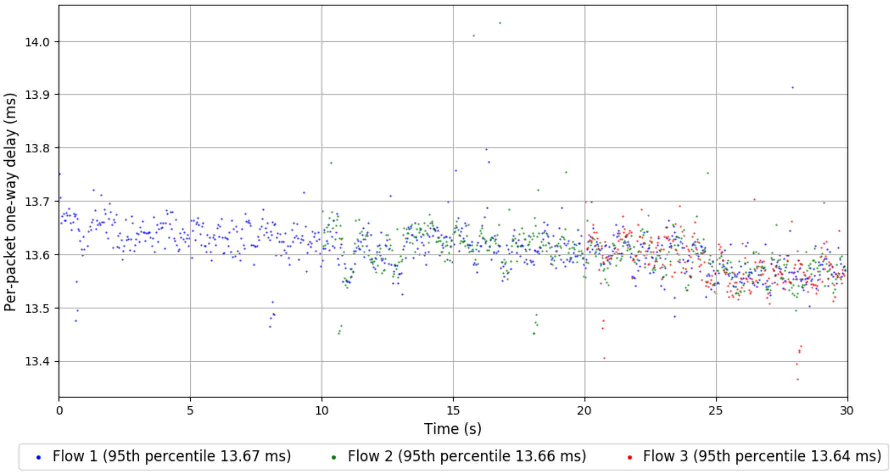
```
Run 6: Statistics of SCReAM

Start at: 2018-04-10 20:05:23
End at: 2018-04-10 20:05:53
Local clock offset: 1.464 ms
Remote clock offset: -5.973 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 13.664 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 13.670 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 13.657 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 13.645 ms
Loss rate: 0.35%
```

Run 6: Report of SCReAM — Data Link



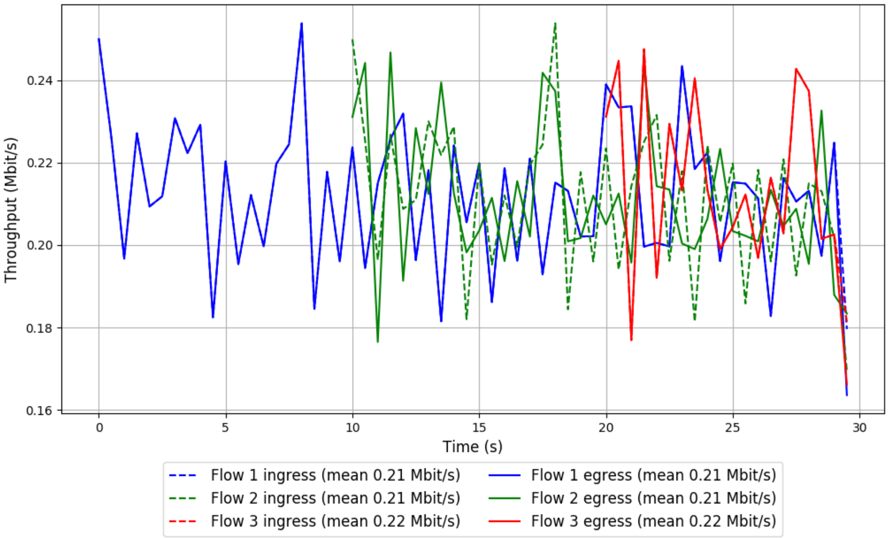


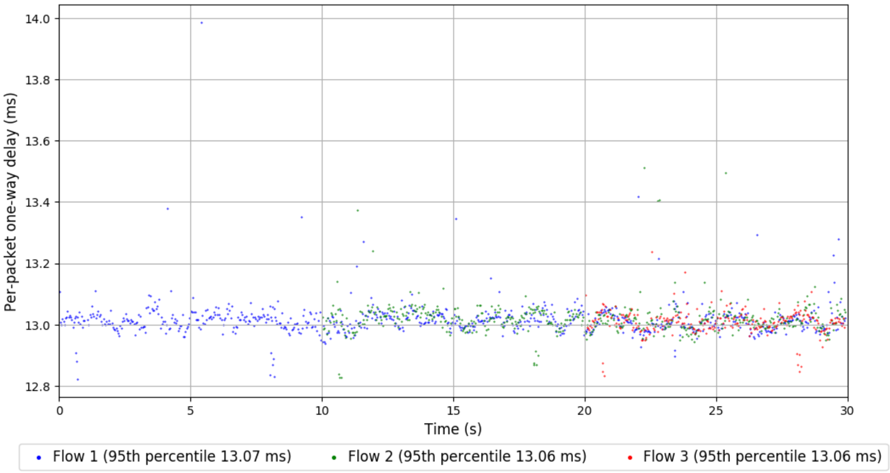
```
Run 7: Statistics of SCReAM

Start at: 2018-04-10 20:26:54
End at: 2018-04-10 20:27:24
Local clock offset: 0.711 ms
Remote clock offset: -8.488 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 13.068 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 13.069 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 13.065 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 13.064 ms
Loss rate: 0.35%
```

Run 7: Report of SCReAM — Data Link



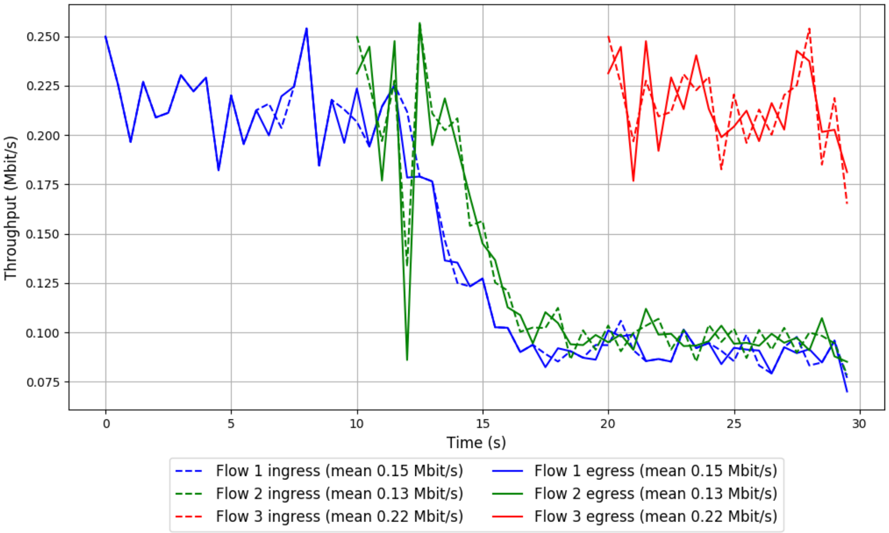


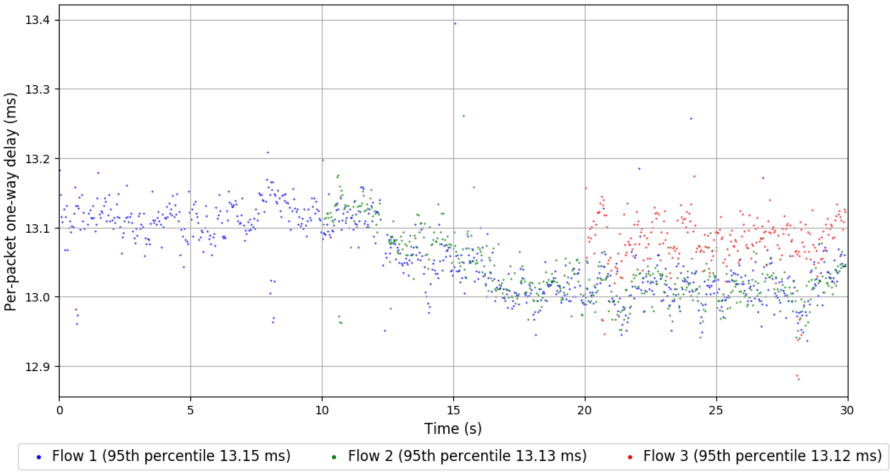
```
Run 8: Statistics of SCReAM

Start at: 2018-04-10 20:48:40
End at: 2018-04-10 20:49:10
Local clock offset: 1.255 ms
Remote clock offset: -3.42 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 13.137 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 13.146 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 13.132 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 13.124 ms
Loss rate: 0.00%
```

Run 8: Report of SCReAM — Data Link



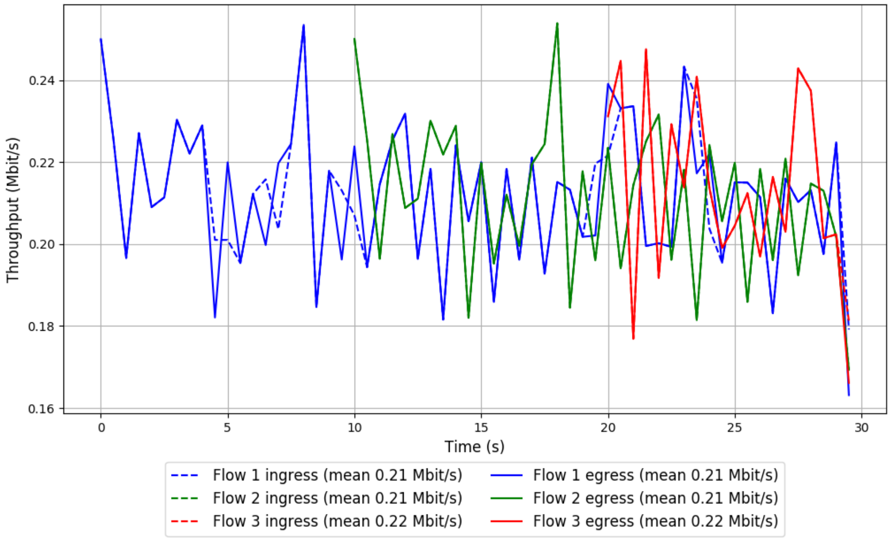


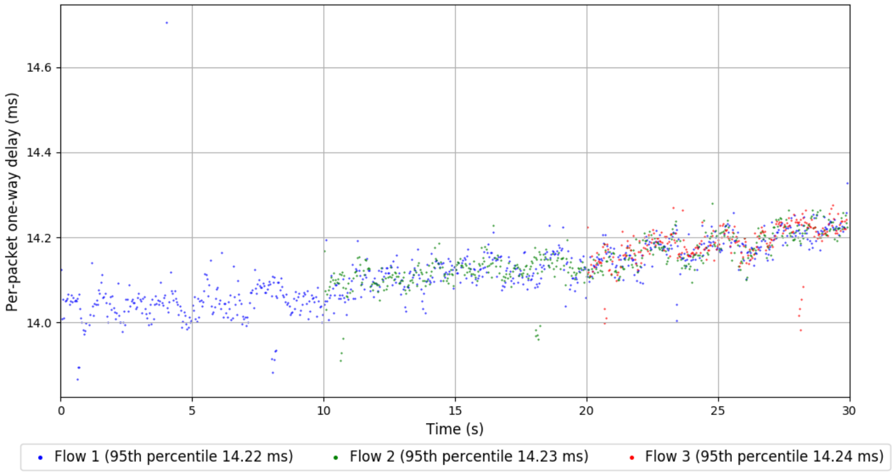
```
Run 9: Statistics of SCReAM

Start at: 2018-04-10 21:09:52
End at: 2018-04-10 21:10:23
Local clock offset: 0.641 ms
Remote clock offset: -0.758 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 14.232 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 14.223 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 14.230 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 14.242 ms
Loss rate: 0.35%
```

Run 9: Report of SCReAM — Data Link



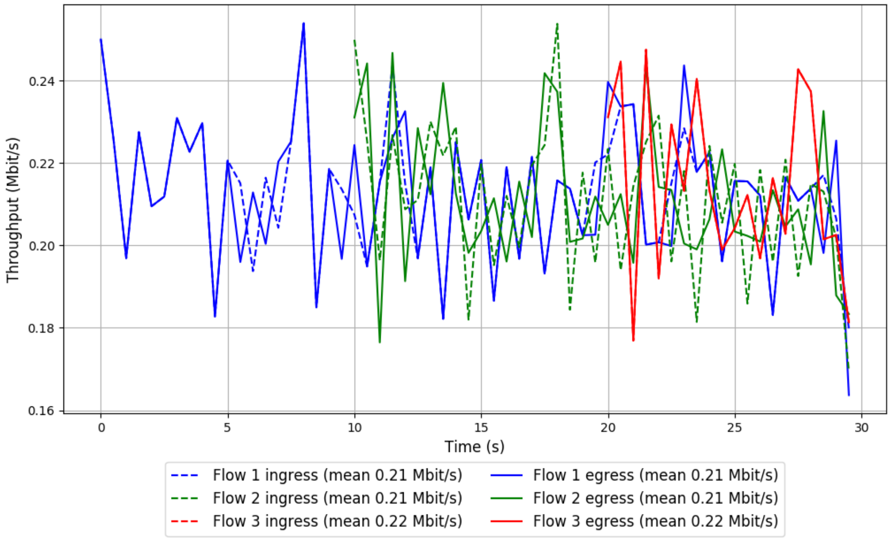


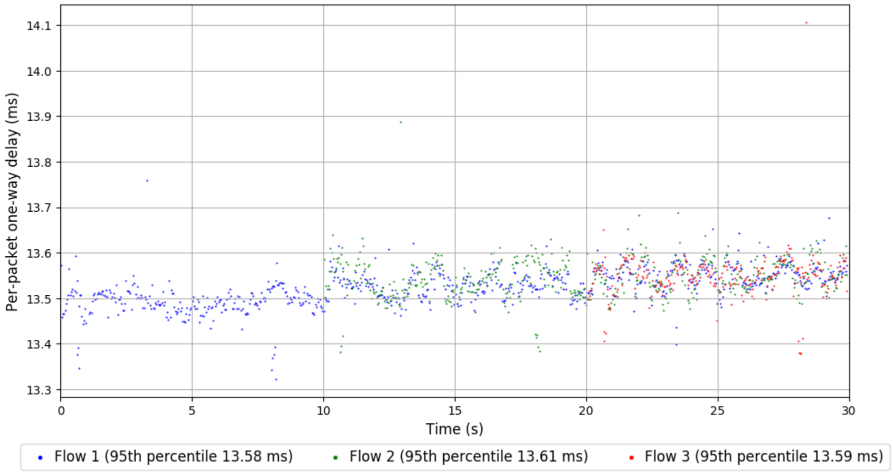
```
Run 10: Statistics of SCReAM

Start at: 2018-04-10 21:31:05
End at: 2018-04-10 21:31:35
Local clock offset: 0.052 ms
Remote clock offset: 3.958 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 13.596 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 13.581 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 13.609 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 13.593 ms
Loss rate: 0.00%
```

Run 10: Report of SCReAM — Data Link



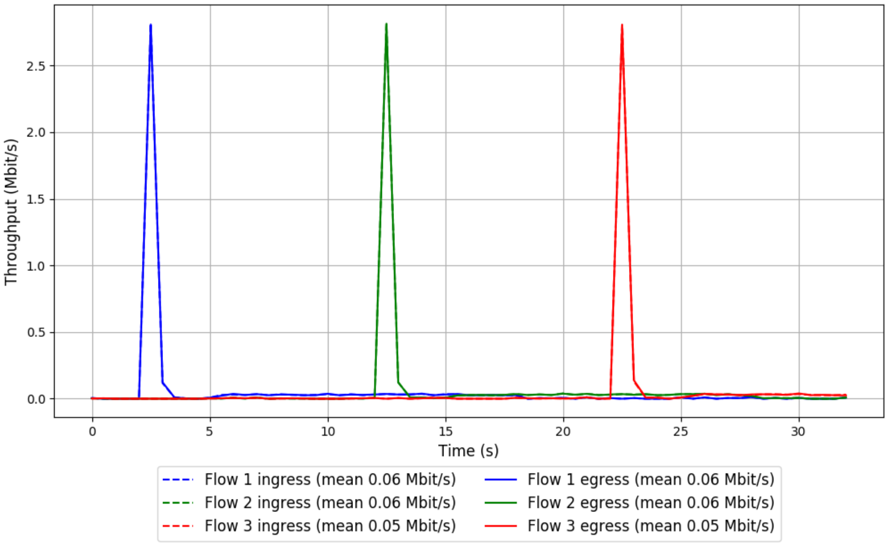


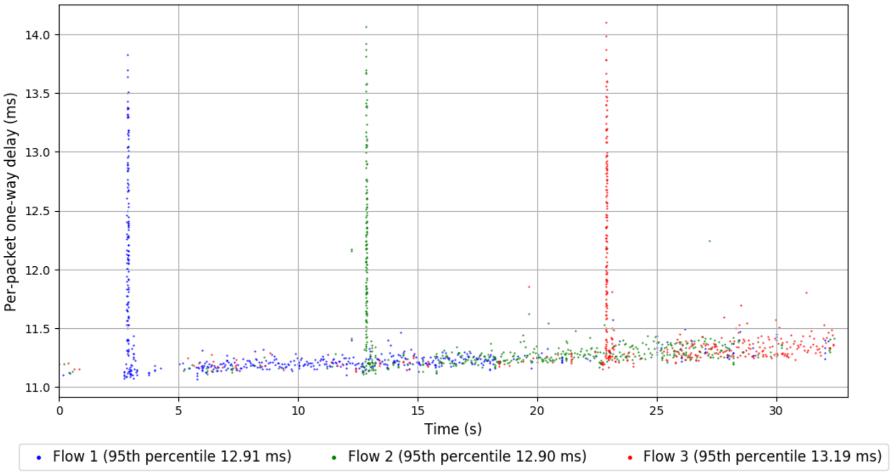
```
Run 1: Statistics of WebRTC media

Start at: 2018-04-10 18:26:28
End at: 2018-04-10 18:26:58
Local clock offset: -1.687 ms
Remote clock offset: 6.436 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 13.040 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 12.906 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 12.900 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 13.193 ms
Loss rate: 0.15%
```

Run 1: Report of WebRTC media — Data Link



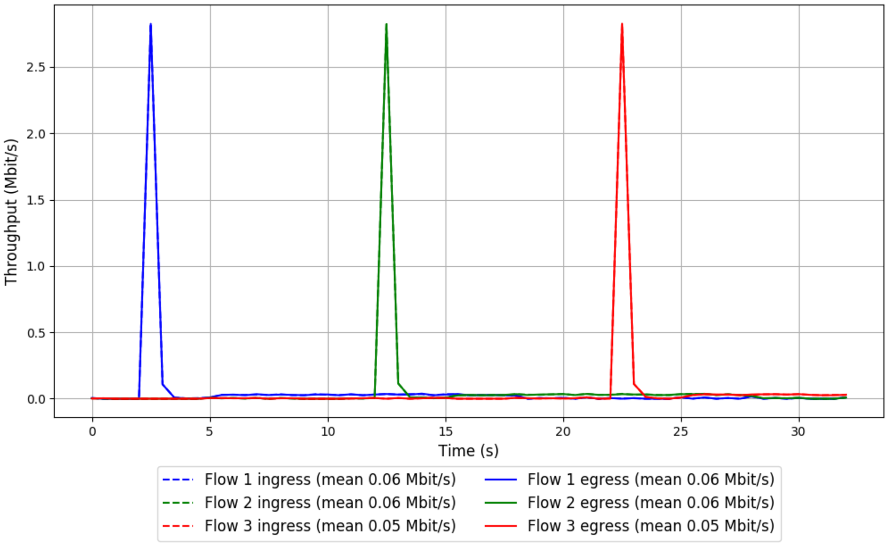


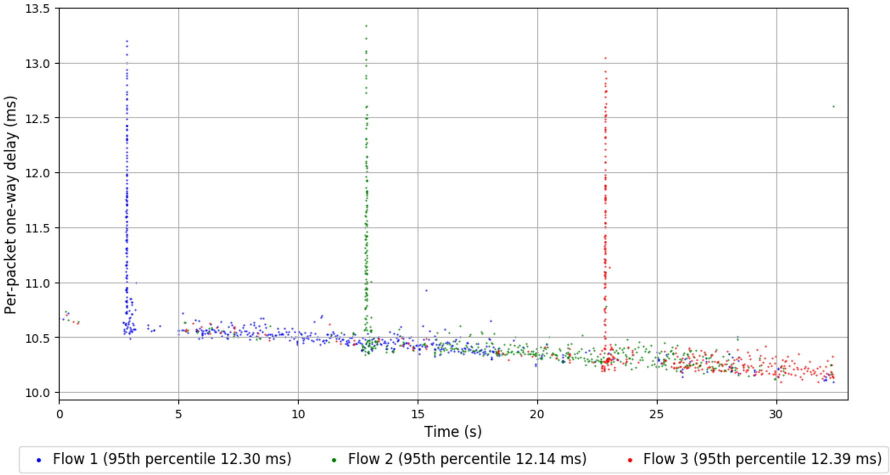
```
Run 2: Statistics of WebRTC media

Start at: 2018-04-10 18:48:30
End at: 2018-04-10 18:49:00
Local clock offset: -0.81 ms
Remote clock offset: 9.632 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 12.299 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 12.300 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 12.139 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 12.386 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link



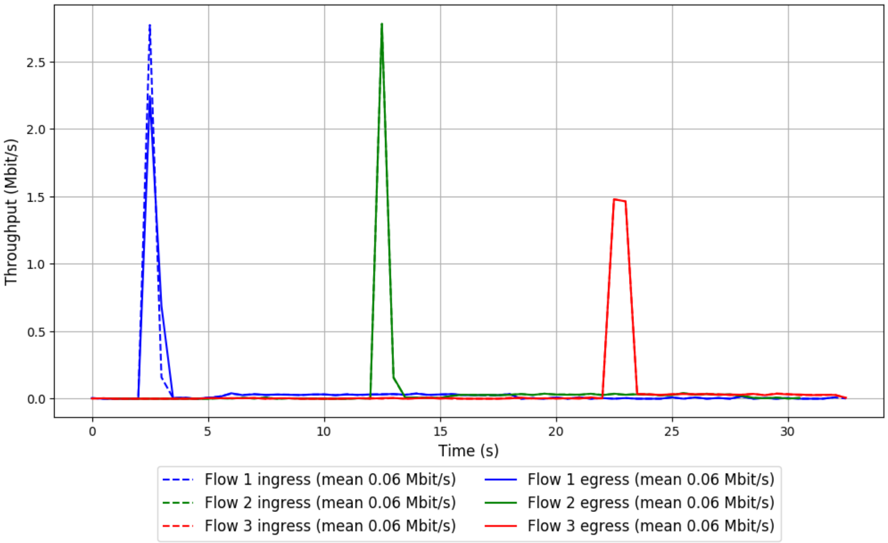


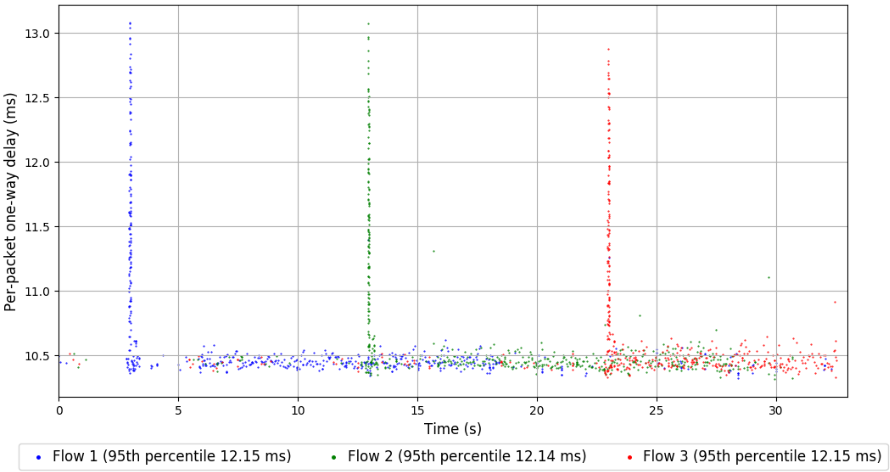
```
Run 3: Statistics of WebRTC media

Start at: 2018-04-10 19:10:42
End at: 2018-04-10 19:11:12
Local clock offset: 0.703 ms
Remote clock offset: 3.764 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 12.151 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 12.149 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 12.142 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 12.151 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link



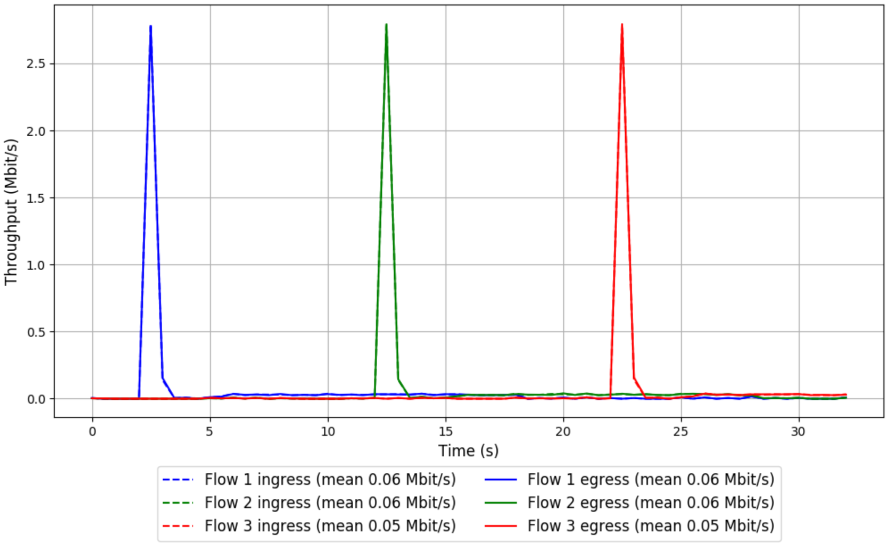


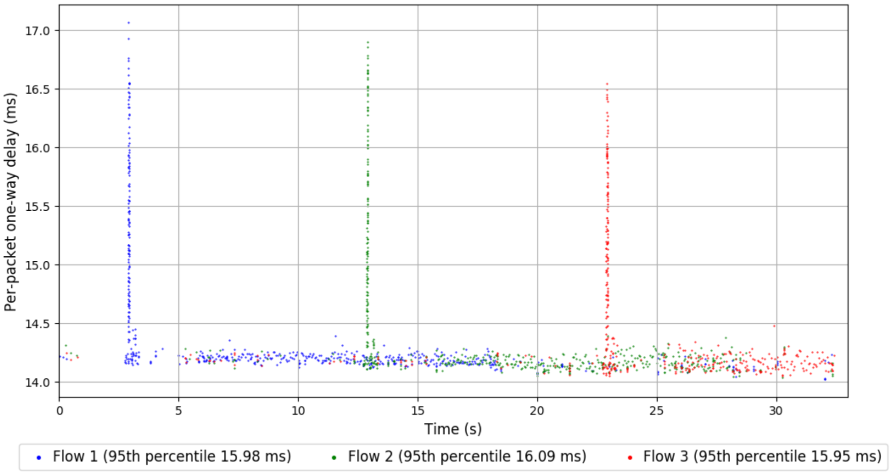
```
Run 4: Statistics of WebRTC media

Start at: 2018-04-10 19:32:30
End at: 2018-04-10 19:33:00
Local clock offset: 1.424 ms
Remote clock offset: -1.13 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 15.995 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 15.978 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 16.092 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 15.946 ms
Loss rate: 0.08%
```

Run 4: Report of WebRTC media — Data Link



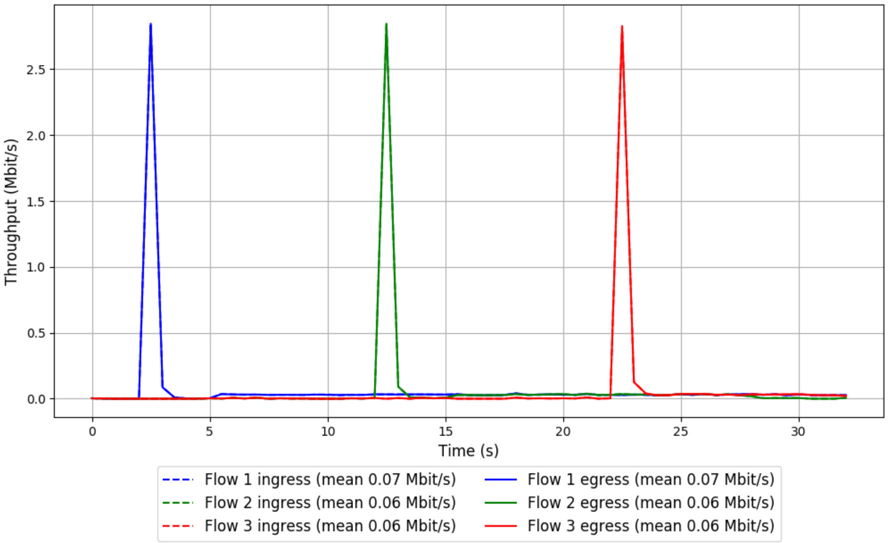


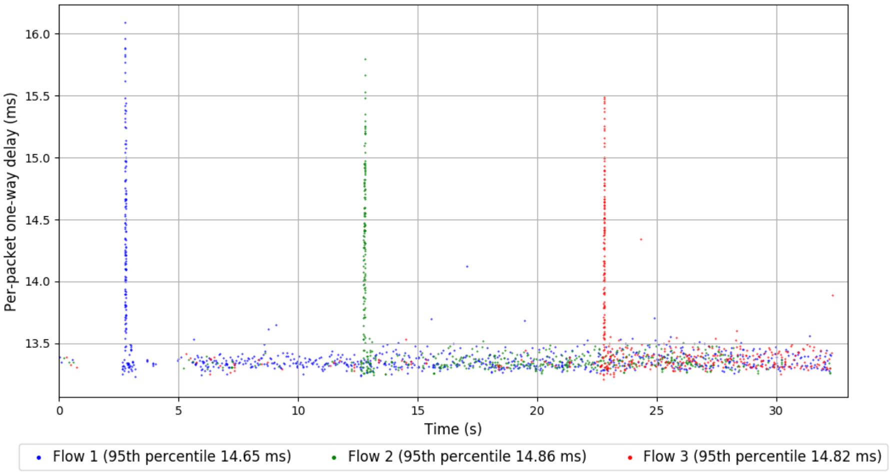
```
Run 5: Statistics of WebRTC media

Start at: 2018-04-10 19:54:24
End at: 2018-04-10 19:54:54
Local clock offset: 1.365 ms
Remote clock offset: -2.92 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 14.774 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 14.651 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 14.858 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 14.818 ms
Loss rate: 0.12%
```

Run 5: Report of WebRTC media — Data Link



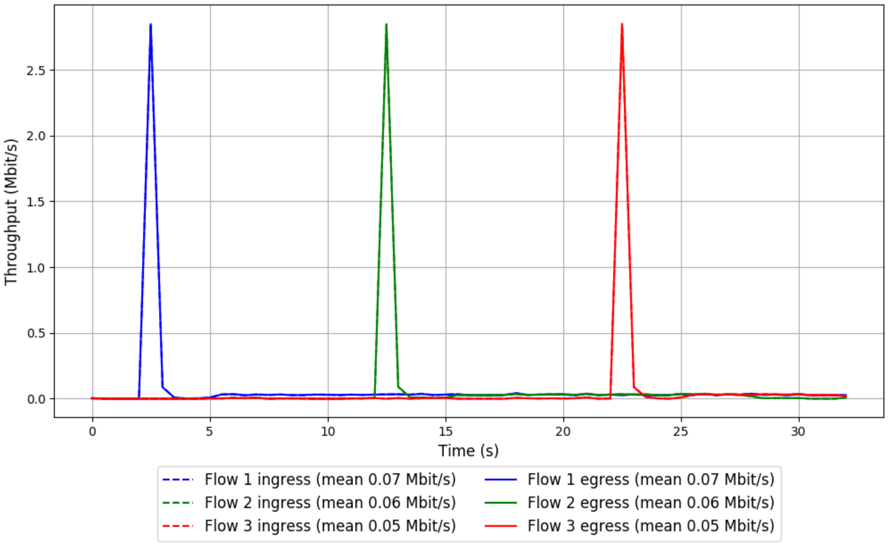


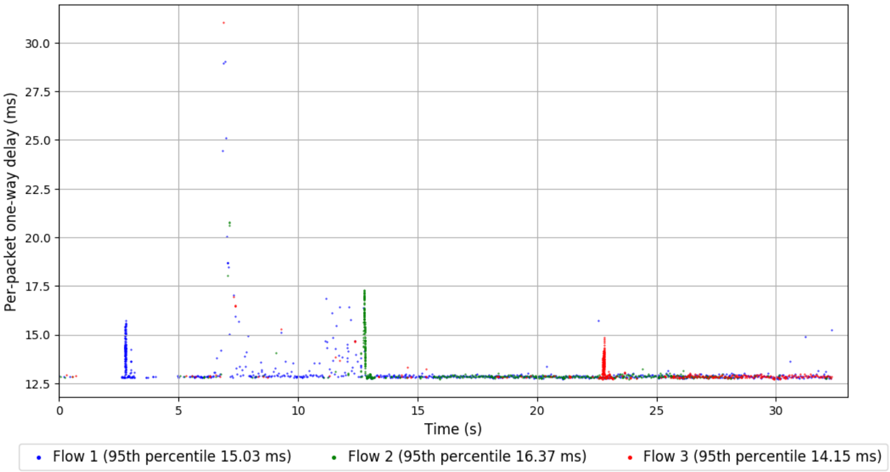
```
Run 6: Statistics of WebRTC media

Start at: 2018-04-10 20:16:12
End at: 2018-04-10 20:16:42
Local clock offset: 1.373 ms
Remote clock offset: -6.759 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 15.471 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 15.029 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 16.374 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 14.153 ms
Loss rate: 0.08%
```

Run 6: Report of WebRTC media — Data Link



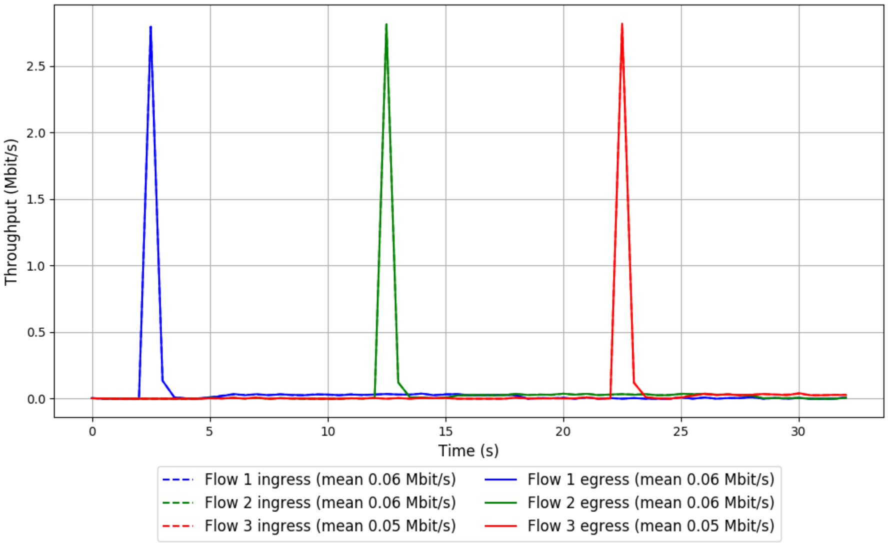


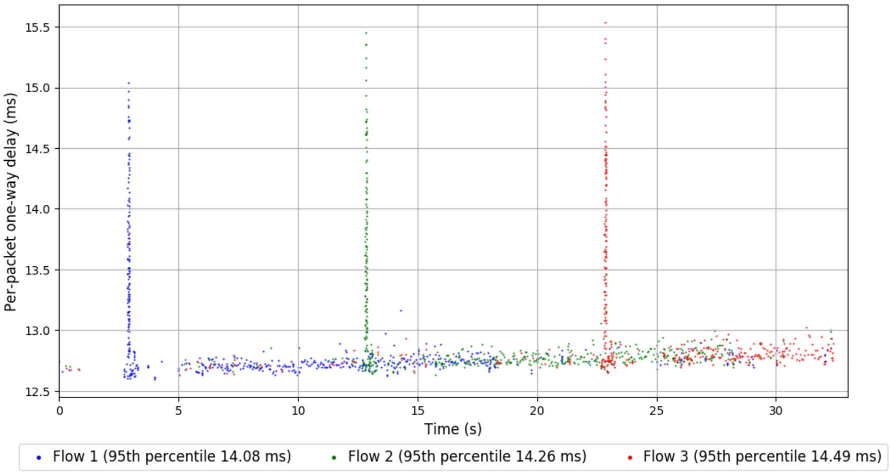
```
Run 7: Statistics of WebRTC media

Start at: 2018-04-10 20:37:55
End at: 2018-04-10 20:38:25
Local clock offset: 0.885 ms
Remote clock offset: -4.916 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 14.365 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 14.076 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 14.258 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 14.486 ms
Loss rate: 0.08%
```

Run 7: Report of WebRTC media — Data Link



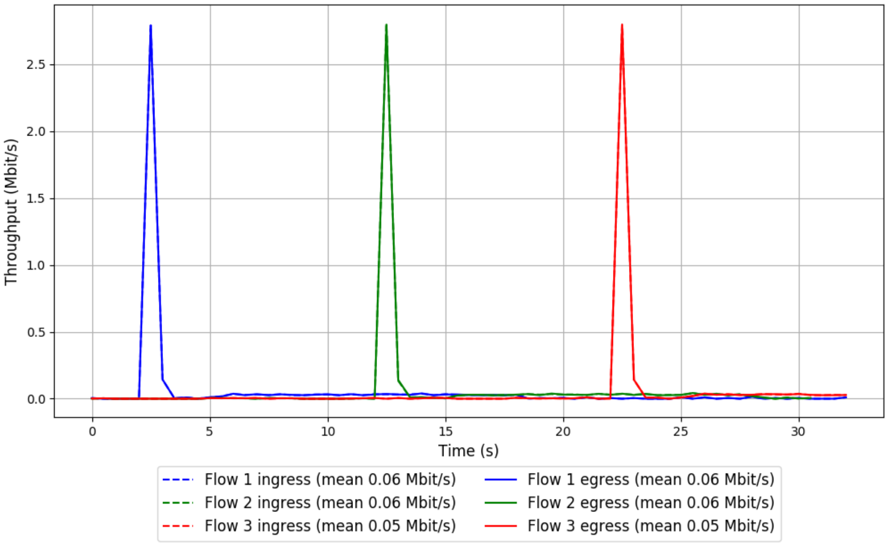


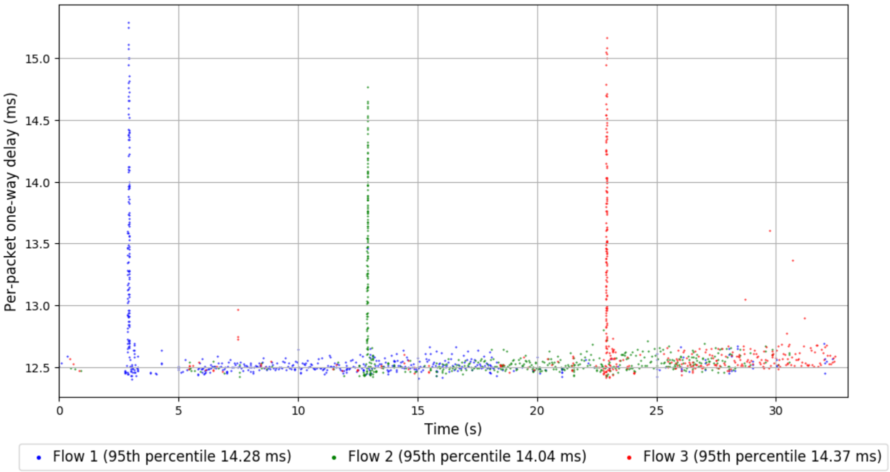
```
Run 8: Statistics of WebRTC media

Start at: 2018-04-10 20:59:13
End at: 2018-04-10 20:59:43
Local clock offset: 0.559 ms
Remote clock offset: -2.888 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 14.211 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 14.279 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 14.039 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 14.366 ms
Loss rate: 0.05%
```

Run 8: Report of WebRTC media — Data Link



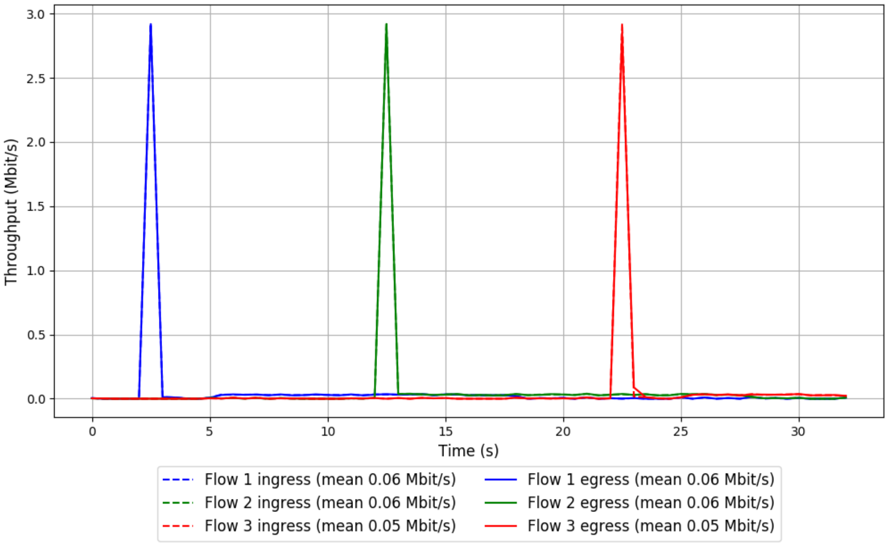


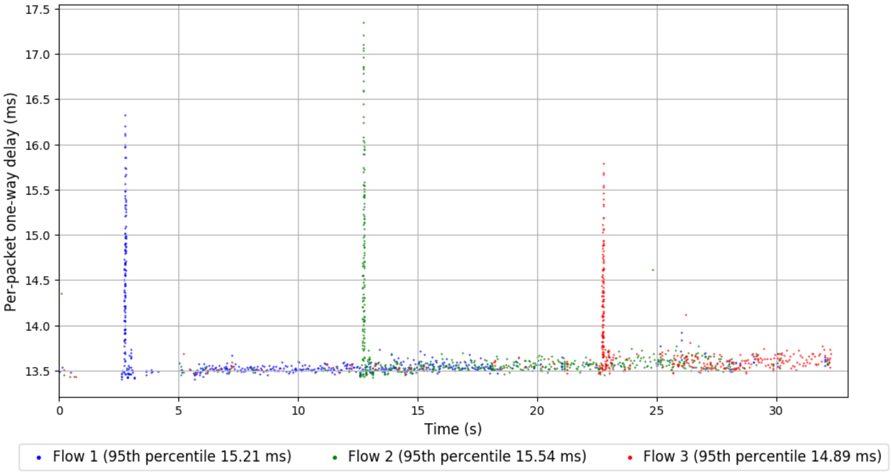
```
Run 9: Statistics of WebRTC media

Start at: 2018-04-10 21:20:24
End at: 2018-04-10 21:20:54
Local clock offset: 0.685 ms
Remote clock offset: 2.418 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 15.215 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 15.212 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 15.542 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 14.887 ms
Loss rate: 0.00%
```

Run 9: Report of WebRTC media — Data Link



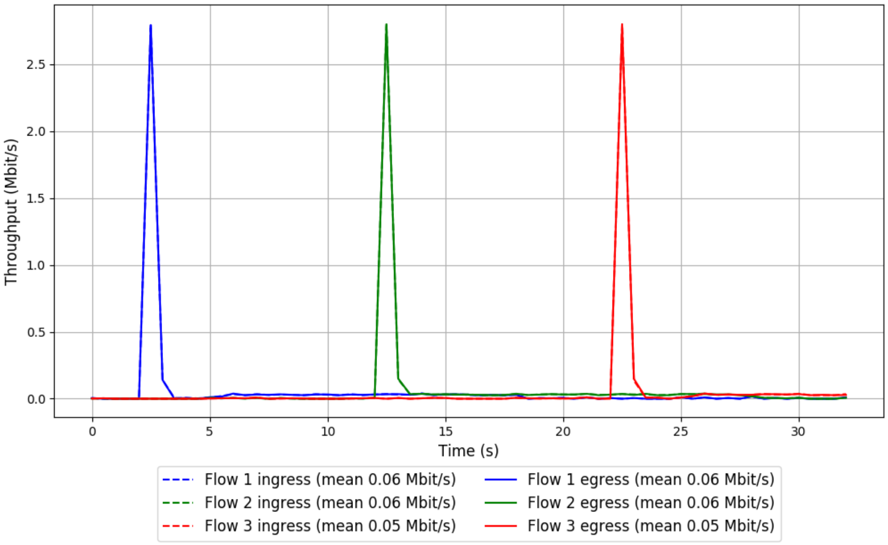


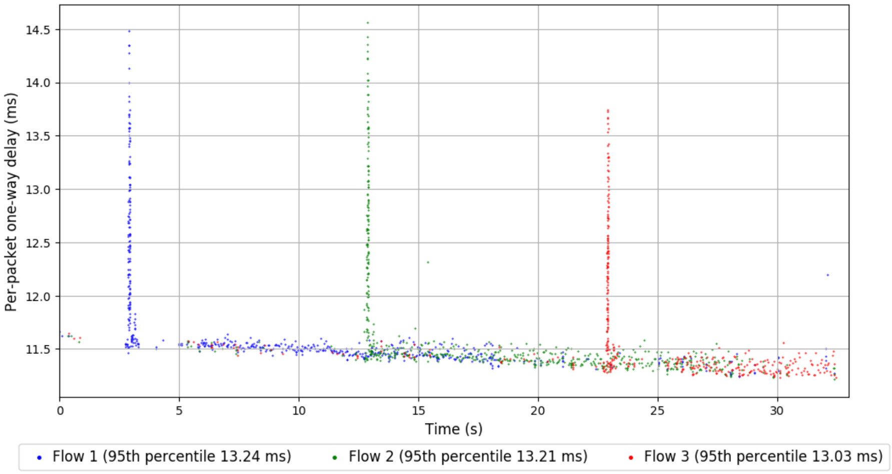
```
Run 10: Statistics of WebRTC media

Start at: 2018-04-10 21:41:35
End at: 2018-04-10 21:42:05
Local clock offset: -0.072 ms
Remote clock offset: 3.282 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 13.172 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 13.238 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 13.215 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 13.028 ms
Loss rate: 0.19%
```

Run 10: Report of WebRTC media — Data Link



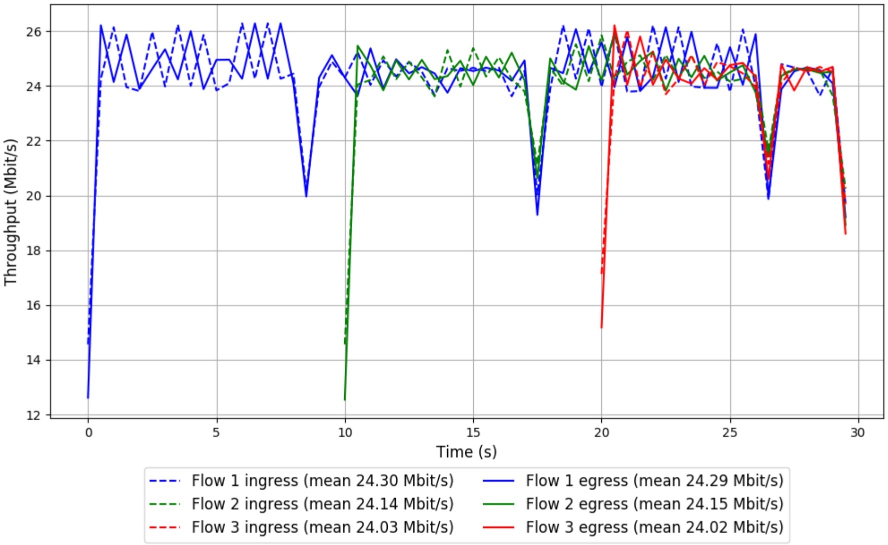


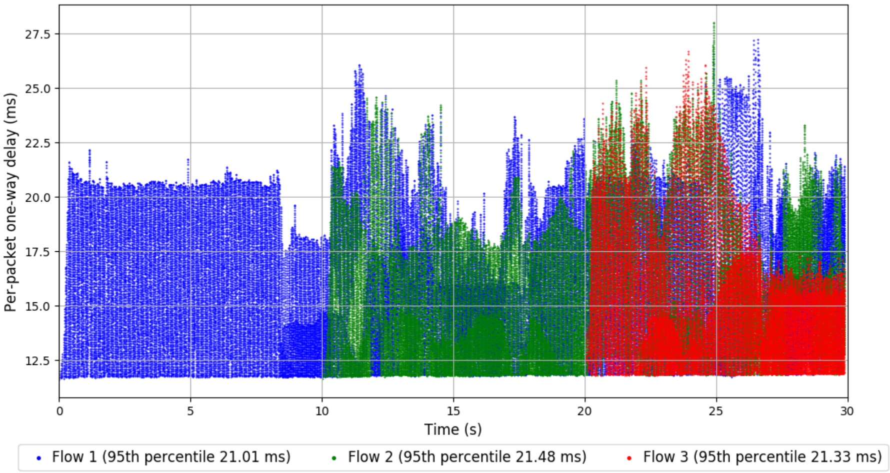
```
Run 1: Statistics of Sprout

Start at: 2018-04-10 18:25:19
End at: 2018-04-10 18:25:49
Local clock offset: -1.904 ms
Remote clock offset: 5.383 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.26 Mbit/s
95th percentile per-packet one-way delay: 21.226 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 24.29 Mbit/s
95th percentile per-packet one-way delay: 21.012 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 24.15 Mbit/s
95th percentile per-packet one-way delay: 21.476 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 24.02 Mbit/s
95th percentile per-packet one-way delay: 21.328 ms
Loss rate: 0.41%
```

Run 1: Report of Sprout — Data Link



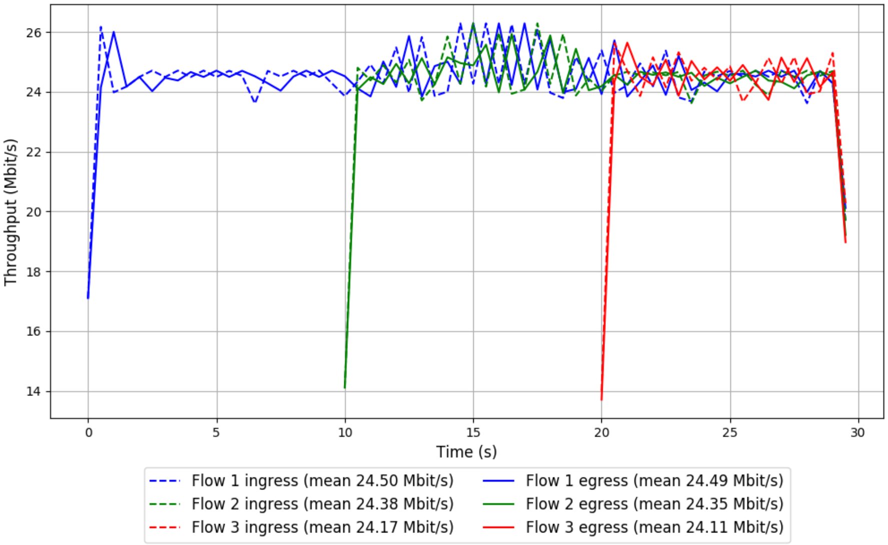


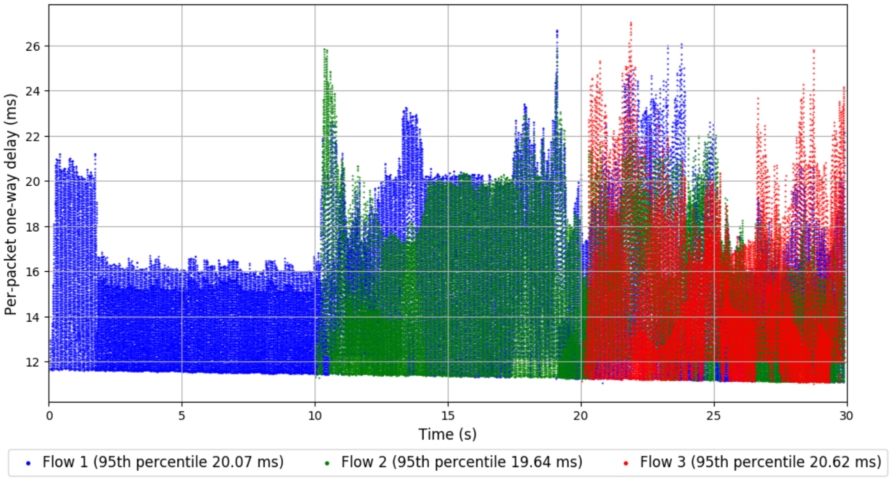
```
Run 2: Statistics of Sprout

Start at: 2018-04-10 18:47:21
End at: 2018-04-10 18:47:51
Local clock offset: -1.572 ms
Remote clock offset: 9.158 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.63 Mbit/s
95th percentile per-packet one-way delay: 19.980 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 24.49 Mbit/s
95th percentile per-packet one-way delay: 20.068 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.35 Mbit/s
95th percentile per-packet one-way delay: 19.645 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 24.11 Mbit/s
95th percentile per-packet one-way delay: 20.619 ms
Loss rate: 0.41%
```

Run 2: Report of Sprout — Data Link



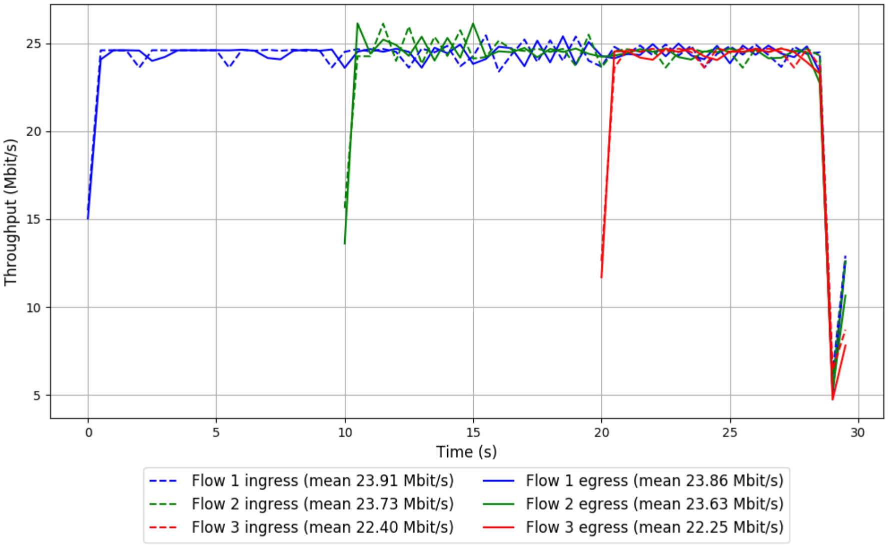


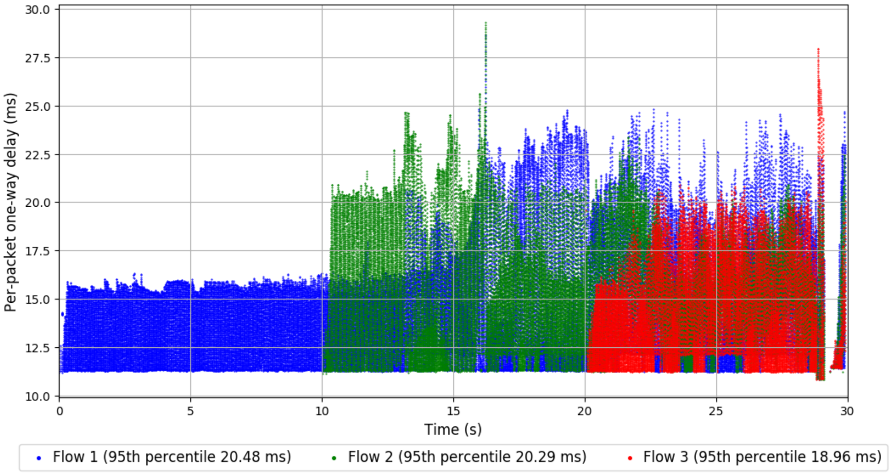
```
Run 3: Statistics of Sprout

Start at: 2018-04-10 19:09:34
End at: 2018-04-10 19:10:04
Local clock offset: 1.566 ms
Remote clock offset: 4.028 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.89 Mbit/s
95th percentile per-packet one-way delay: 20.166 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 23.86 Mbit/s
95th percentile per-packet one-way delay: 20.483 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 23.63 Mbit/s
95th percentile per-packet one-way delay: 20.286 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 22.25 Mbit/s
95th percentile per-packet one-way delay: 18.959 ms
Loss rate: 0.86%
```

Run 3: Report of Sprout — Data Link



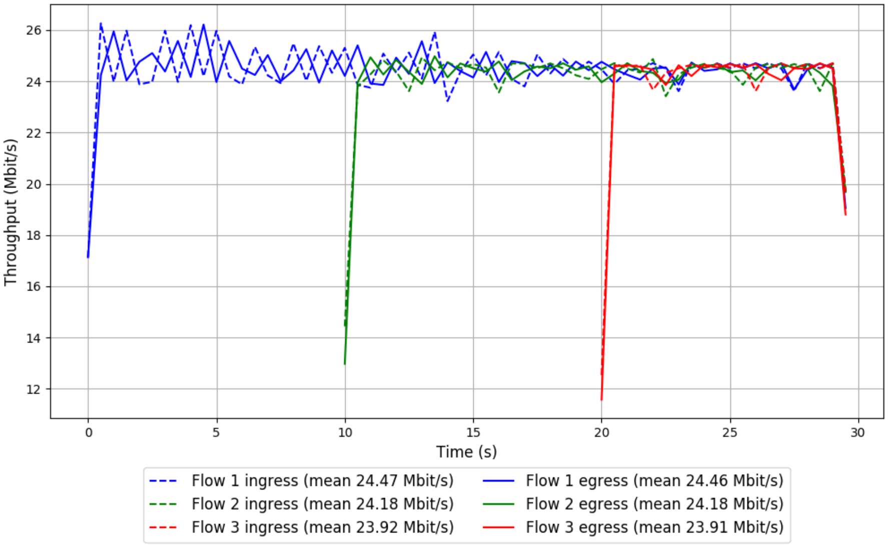


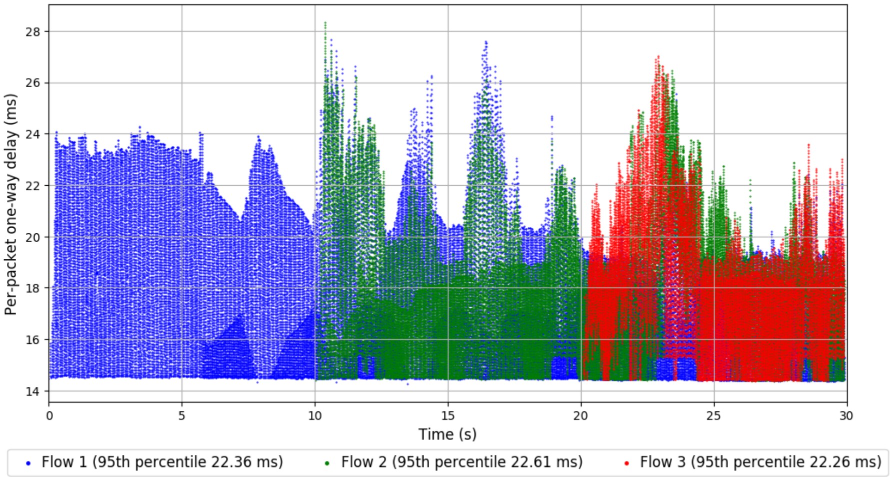
```
Run 4: Statistics of Sprout

Start at: 2018-04-10 19:31:23
End at: 2018-04-10 19:31:53
Local clock offset: 1.711 ms
Remote clock offset: -0.759 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.41 Mbit/s
95th percentile per-packet one-way delay: 22.418 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 24.46 Mbit/s
95th percentile per-packet one-way delay: 22.362 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 24.18 Mbit/s
95th percentile per-packet one-way delay: 22.614 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 23.91 Mbit/s
95th percentile per-packet one-way delay: 22.262 ms
Loss rate: 0.42%
```

Run 4: Report of Sprout — Data Link



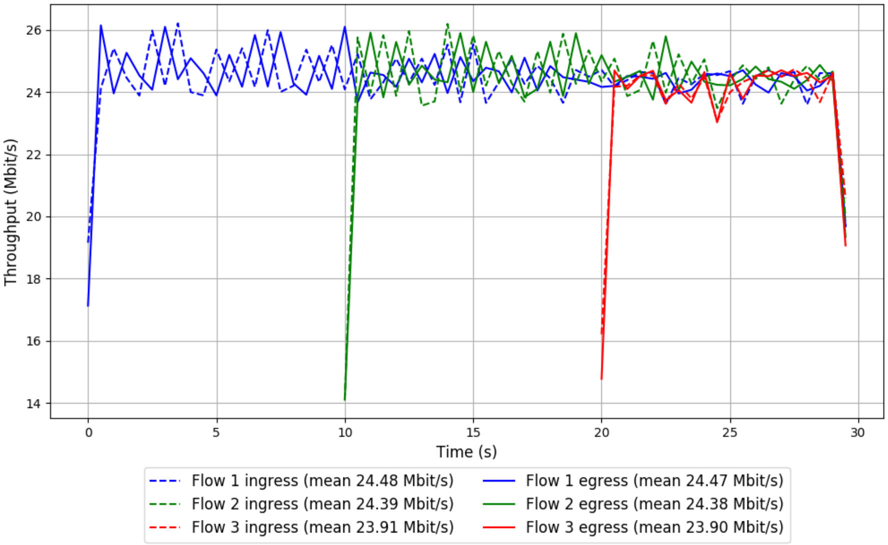


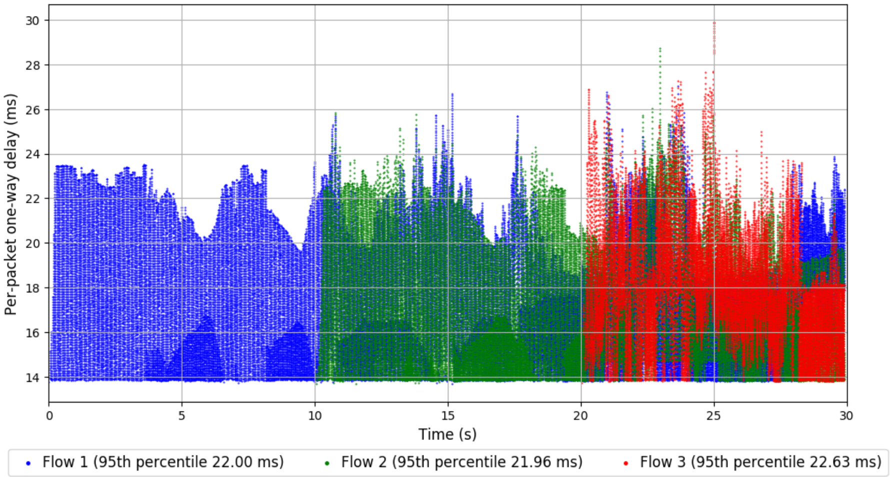
```
Run 5: Statistics of Sprout

Start at: 2018-04-10 19:53:17
End at: 2018-04-10 19:53:47
Local clock offset: 1.073 ms
Remote clock offset: -3.544 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.56 Mbit/s
95th percentile per-packet one-way delay: 22.078 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 24.47 Mbit/s
95th percentile per-packet one-way delay: 22.004 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 24.38 Mbit/s
95th percentile per-packet one-way delay: 21.957 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 23.90 Mbit/s
95th percentile per-packet one-way delay: 22.626 ms
Loss rate: 0.40%
```

Run 5: Report of Sprout — Data Link



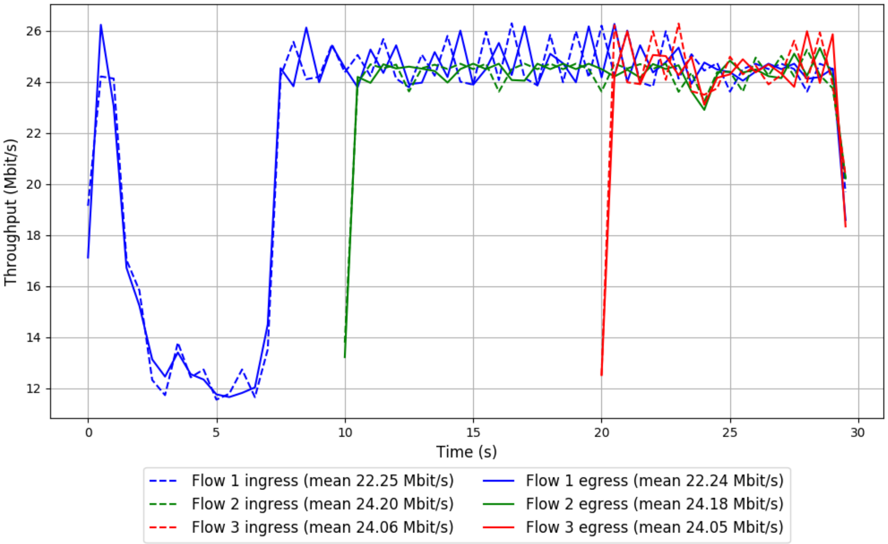


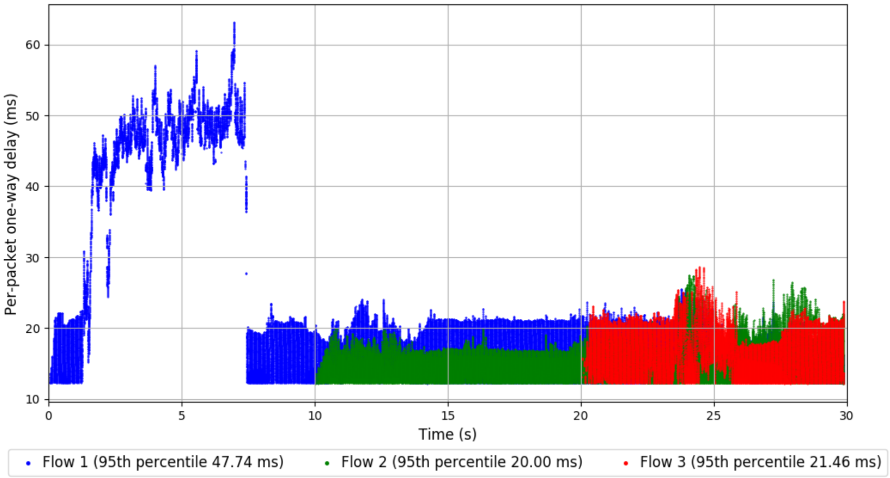
```
Run 6: Statistics of Sprout

Start at: 2018-04-10 20:15:04
End at: 2018-04-10 20:15:34
Local clock offset: 0.861 ms
Remote clock offset: -6.474 ms

# Below is generated by plot.py at 2018-04-11 01:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.24 Mbit/s
95th percentile per-packet one-way delay: 40.572 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 22.24 Mbit/s
95th percentile per-packet one-way delay: 47.738 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 24.18 Mbit/s
95th percentile per-packet one-way delay: 20.000 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.05 Mbit/s
95th percentile per-packet one-way delay: 21.459 ms
Loss rate: 0.42%
```

Run 6: Report of Sprout — Data Link



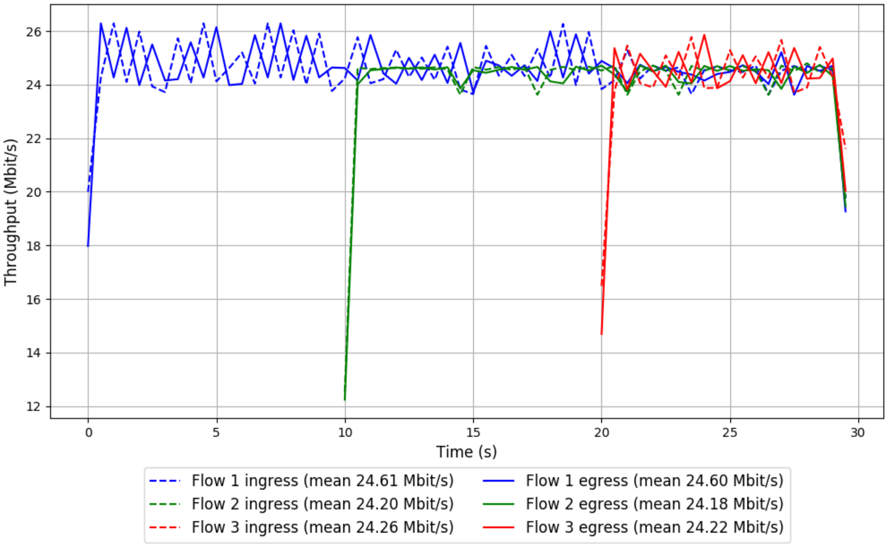


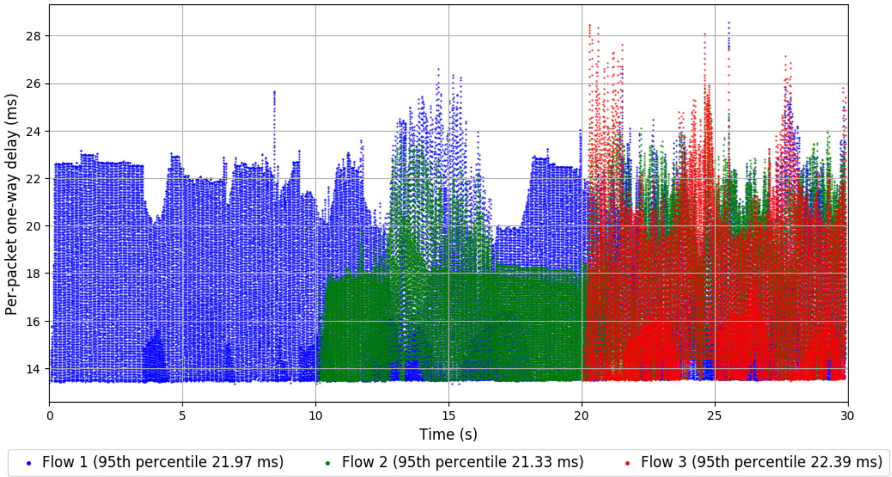
```
Run 7: Statistics of Sprout

Start at: 2018-04-10 20:36:47
End at: 2018-04-10 20:37:17
Local clock offset: 1.304 ms
Remote clock offset: -5.399 ms

# Below is generated by plot.py at 2018-04-11 01:35:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.67 Mbit/s
95th percentile per-packet one-way delay: 21.836 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 24.60 Mbit/s
95th percentile per-packet one-way delay: 21.971 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 24.18 Mbit/s
95th percentile per-packet one-way delay: 21.326 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 24.22 Mbit/s
95th percentile per-packet one-way delay: 22.387 ms
Loss rate: 0.42%
```

Run 7: Report of Sprout — Data Link



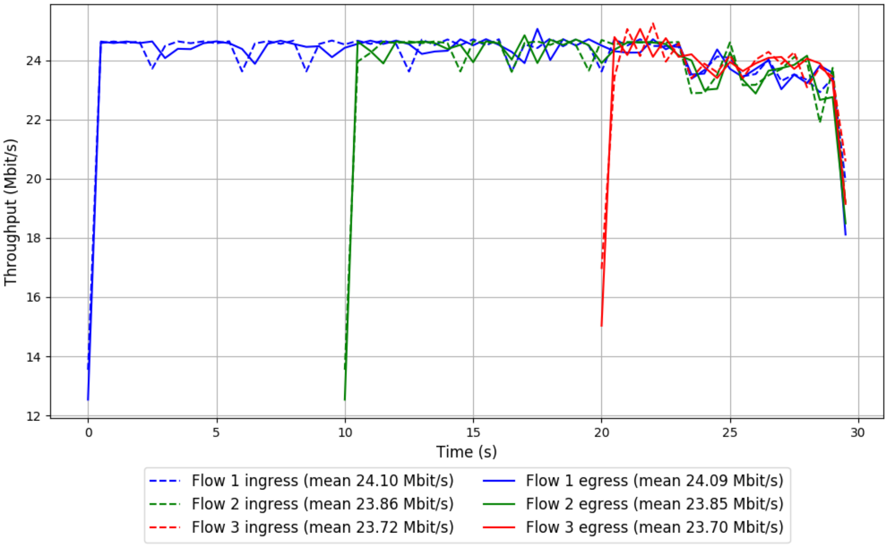


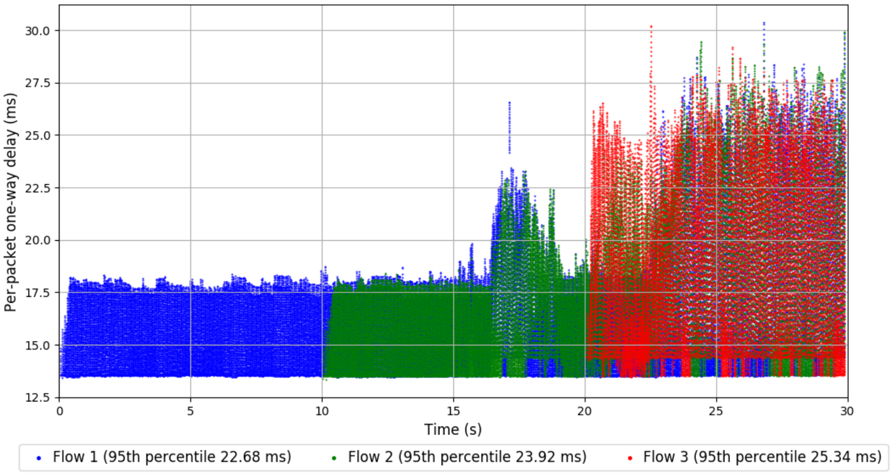
```
Run 8: Statistics of Sprout

Start at: 2018-04-10 20:58:06
End at: 2018-04-10 20:58:36
Local clock offset: 0.946 ms
Remote clock offset: -3.439 ms

# Below is generated by plot.py at 2018-04-11 01:35:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.77 Mbit/s
95th percentile per-packet one-way delay: 24.131 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 24.09 Mbit/s
95th percentile per-packet one-way delay: 22.675 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 23.85 Mbit/s
95th percentile per-packet one-way delay: 23.923 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 23.70 Mbit/s
95th percentile per-packet one-way delay: 25.344 ms
Loss rate: 0.42%
```

Run 8: Report of Sprout — Data Link



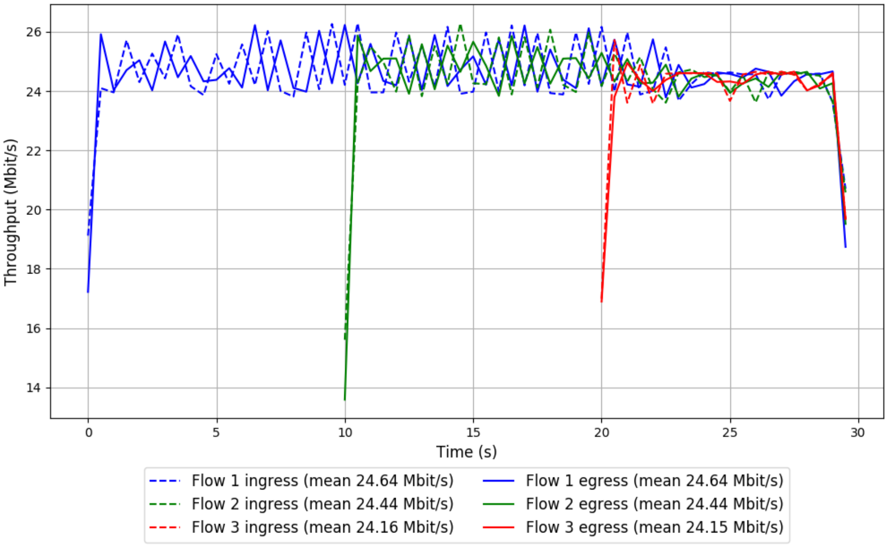


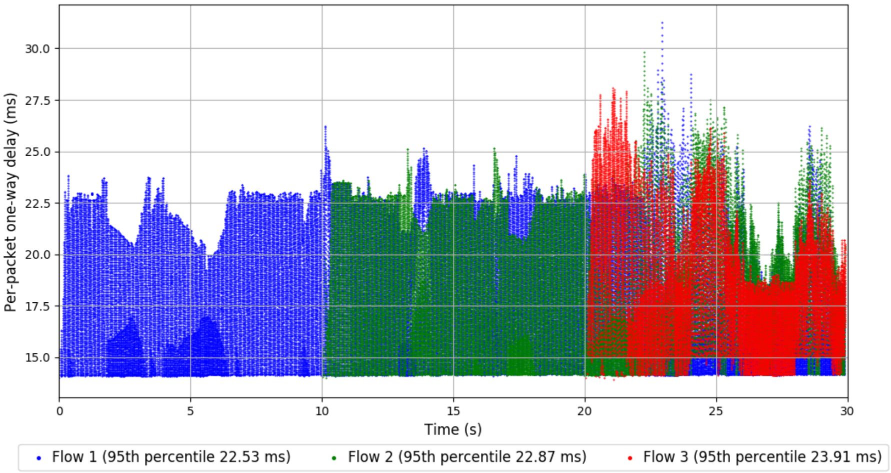
```
Run 9: Statistics of Sprout

Start at: 2018-04-10 21:19:17
End at: 2018-04-10 21:19:47
Local clock offset: 0.823 ms
Remote clock offset: 1.881 ms

# Below is generated by plot.py at 2018-04-11 01:35:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.85 Mbit/s
95th percentile per-packet one-way delay: 22.808 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 24.64 Mbit/s
95th percentile per-packet one-way delay: 22.526 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 24.44 Mbit/s
95th percentile per-packet one-way delay: 22.869 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 24.15 Mbit/s
95th percentile per-packet one-way delay: 23.908 ms
Loss rate: 0.19%
```

Run 9: Report of Sprout — Data Link



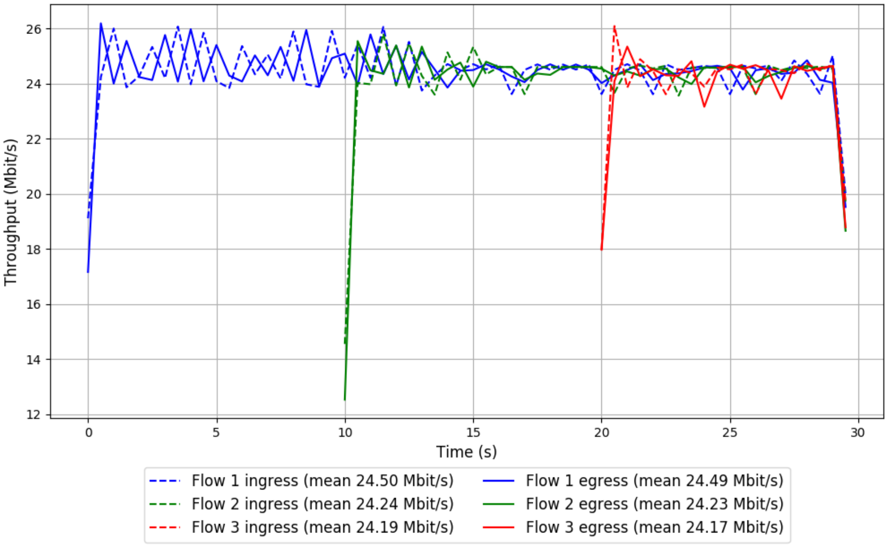


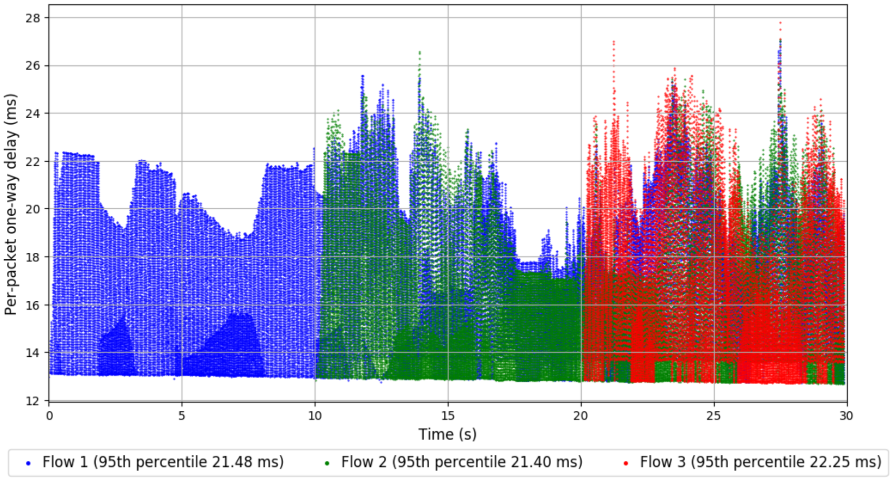
```
Run 10: Statistics of Sprout

Start at: 2018-04-10 21:40:27
End at: 2018-04-10 21:40:57
Local clock offset: 0.254 ms
Remote clock offset: 3.051 ms

# Below is generated by plot.py at 2018-04-11 01:35:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.57 Mbit/s
95th percentile per-packet one-way delay: 21.585 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 24.49 Mbit/s
95th percentile per-packet one-way delay: 21.483 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 24.23 Mbit/s
95th percentile per-packet one-way delay: 21.399 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 24.17 Mbit/s
95th percentile per-packet one-way delay: 22.255 ms
Loss rate: 0.41%
```

Run 10: Report of Sprout — Data Link



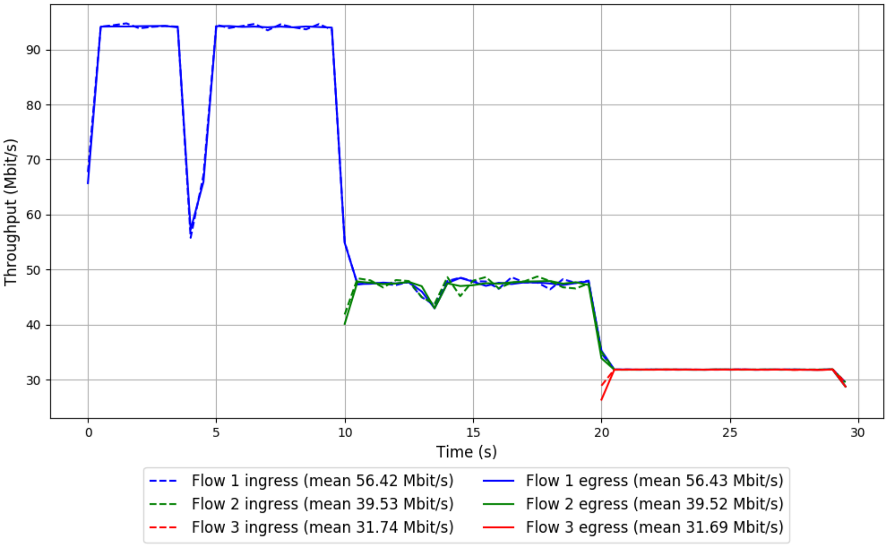


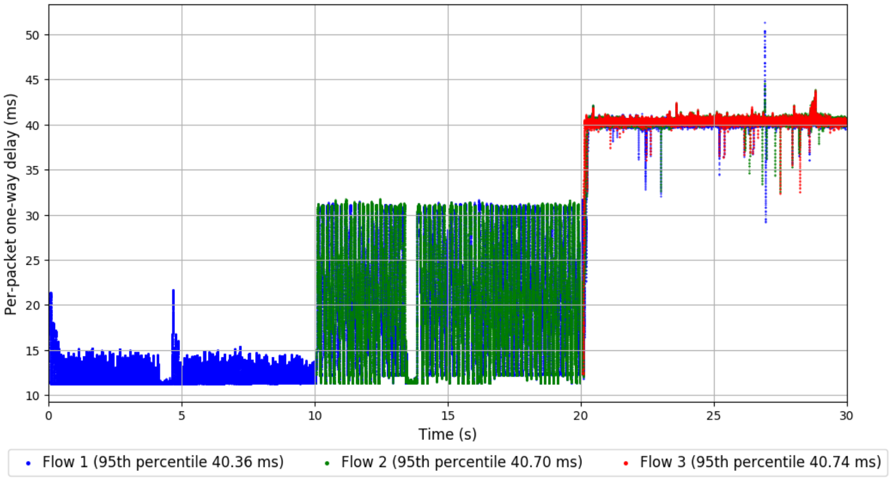
```
Run 1: Statistics of TaoVA-100x

Start at: 2018-04-10 18:23:53
End at: 2018-04-10 18:24:23
Local clock offset: -2.065 ms
Remote clock offset: 5.098 ms

# Below is generated by plot.py at 2018-04-11 01:37:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.22 Mbit/s
95th percentile per-packet one-way delay: 40.621 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 56.43 Mbit/s
95th percentile per-packet one-way delay: 40.363 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 39.52 Mbit/s
95th percentile per-packet one-way delay: 40.701 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 31.69 Mbit/s
95th percentile per-packet one-way delay: 40.742 ms
Loss rate: 0.53%
```

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



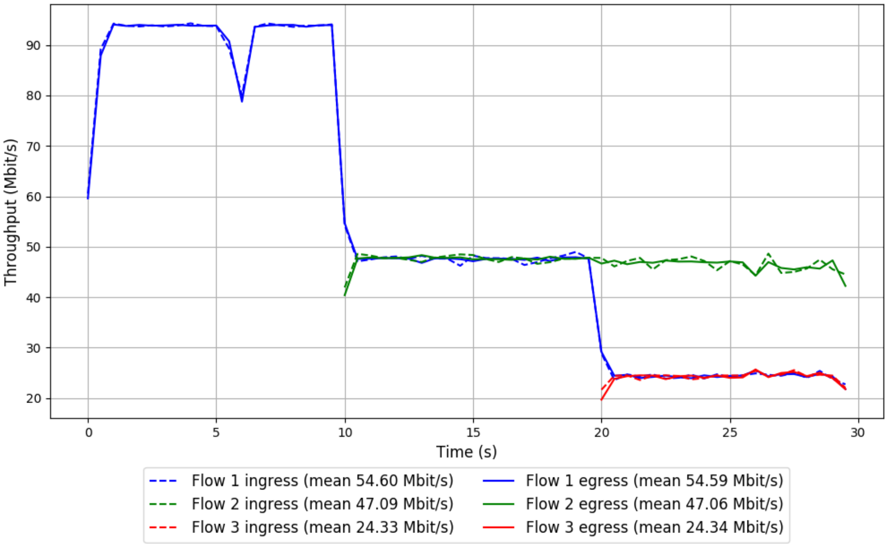


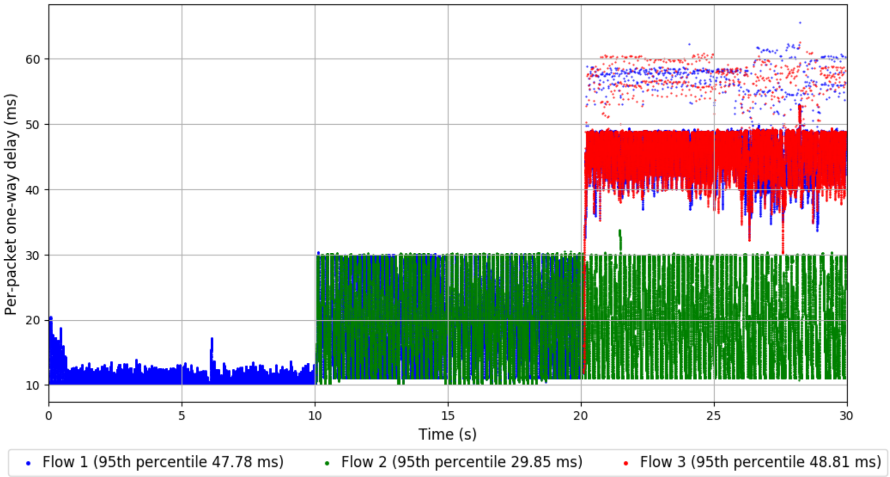
```
Run 2: Statistics of TaoVA-100x

Start at: 2018-04-10 18:45:56
End at: 2018-04-10 18:46:26
Local clock offset: -1.6 ms
Remote clock offset: 10.655 ms

# Below is generated by plot.py at 2018-04-11 01:37:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.94 Mbit/s
95th percentile per-packet one-way delay: 48.008 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 54.59 Mbit/s
95th percentile per-packet one-way delay: 47.785 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 47.06 Mbit/s
95th percentile per-packet one-way delay: 29.850 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 24.34 Mbit/s
95th percentile per-packet one-way delay: 48.808 ms
Loss rate: 0.61%
```

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



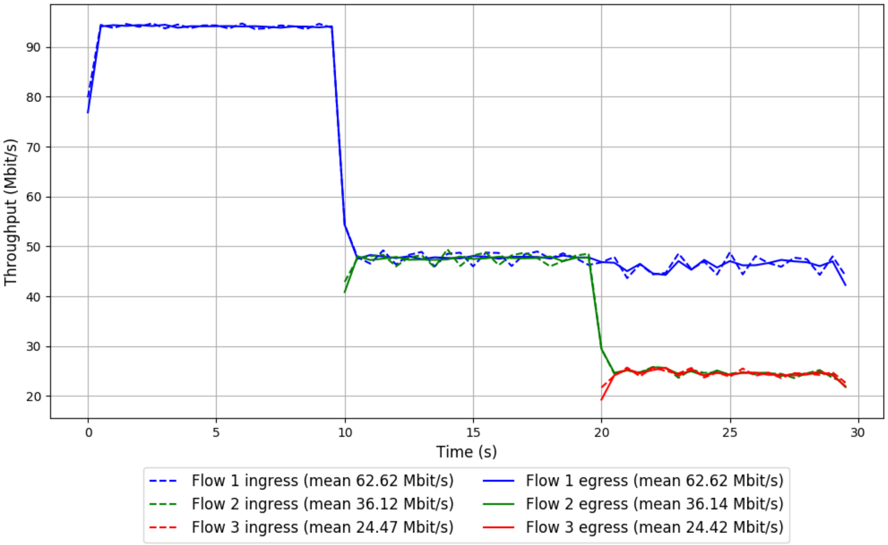


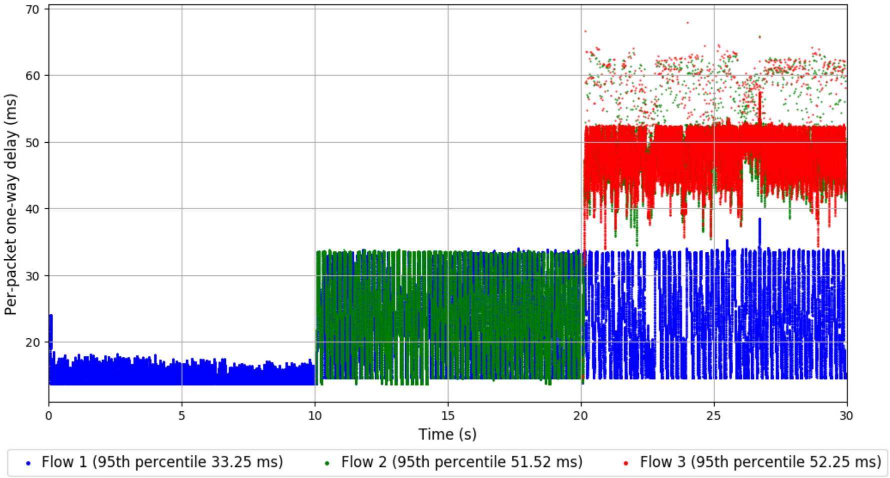
```
Run 3: Statistics of TaoVA-100x

Start at: 2018-04-10 19:08:11
End at: 2018-04-10 19:08:41
Local clock offset: 1.404 ms
Remote clock offset: 4.092 ms

# Below is generated by plot.py at 2018-04-11 01:37:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.76 Mbit/s
95th percentile per-packet one-way delay: 50.295 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 62.62 Mbit/s
95th percentile per-packet one-way delay: 33.249 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 36.14 Mbit/s
95th percentile per-packet one-way delay: 51.515 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 24.42 Mbit/s
95th percentile per-packet one-way delay: 52.250 ms
Loss rate: 0.67%
```

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



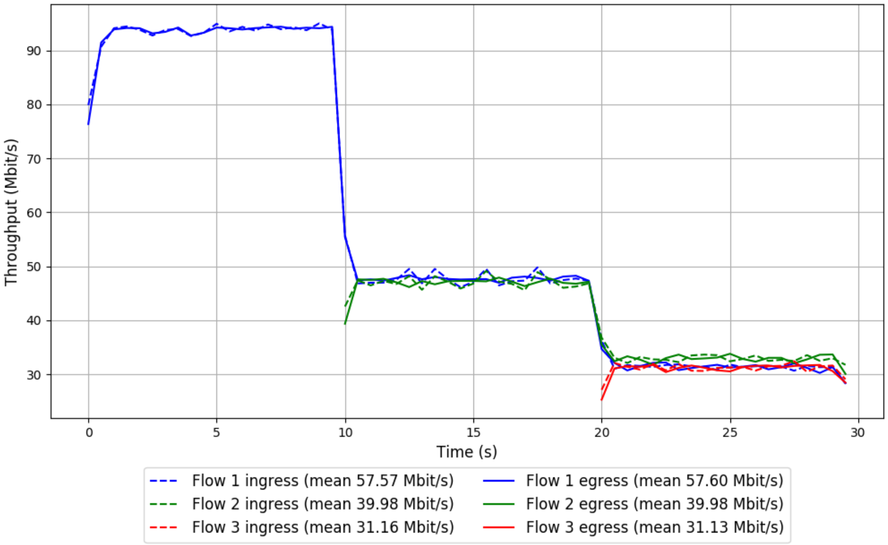


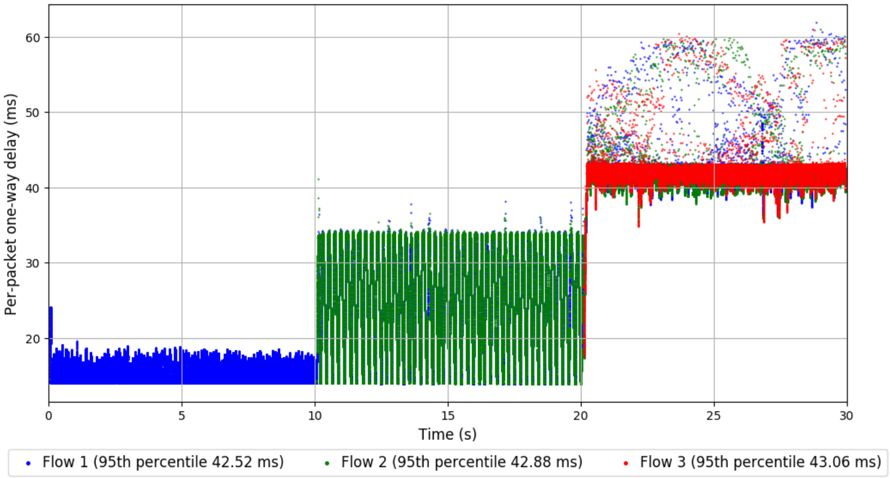
```
Run 4: Statistics of TaoVA-100x

Start at: 2018-04-10 19:30:07
End at: 2018-04-10 19:30:37
Local clock offset: 1.152 ms
Remote clock offset: -0.525 ms

# Below is generated by plot.py at 2018-04-11 01:37:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.47 Mbit/s
95th percentile per-packet one-way delay: 42.856 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 57.60 Mbit/s
95th percentile per-packet one-way delay: 42.519 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 39.98 Mbit/s
95th percentile per-packet one-way delay: 42.877 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 31.13 Mbit/s
95th percentile per-packet one-way delay: 43.062 ms
Loss rate: 0.55%
```

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



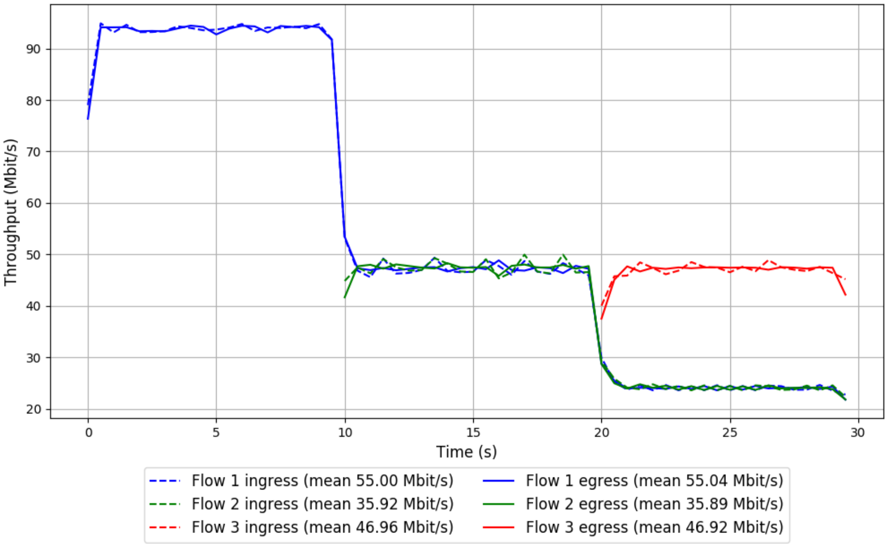


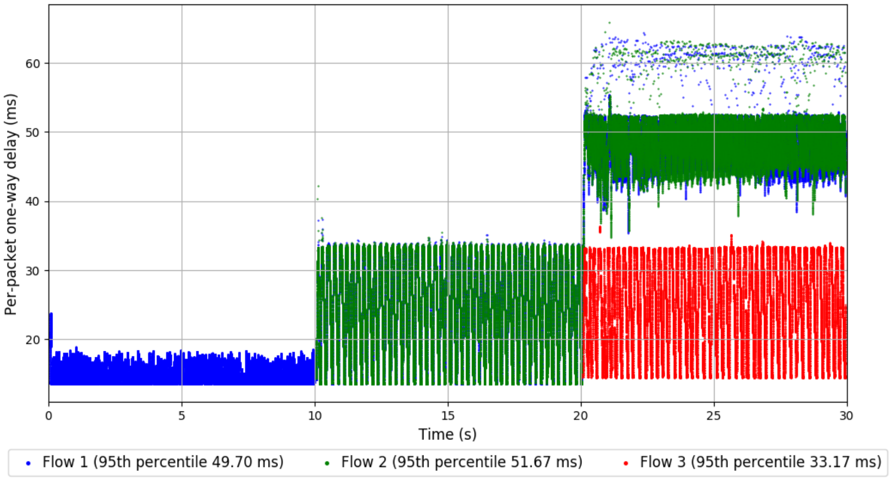
```
Run 5: Statistics of TaoVA-100x

Start at: 2018-04-10 19:51:59
End at: 2018-04-10 19:52:29
Local clock offset: 1.622 ms
Remote clock offset: -2.766 ms

# Below is generated by plot.py at 2018-04-11 01:38:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.46 Mbit/s
95th percentile per-packet one-way delay: 50.293 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 55.04 Mbit/s
95th percentile per-packet one-way delay: 49.701 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 35.89 Mbit/s
95th percentile per-packet one-way delay: 51.672 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 46.92 Mbit/s
95th percentile per-packet one-way delay: 33.170 ms
Loss rate: 0.46%
```

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



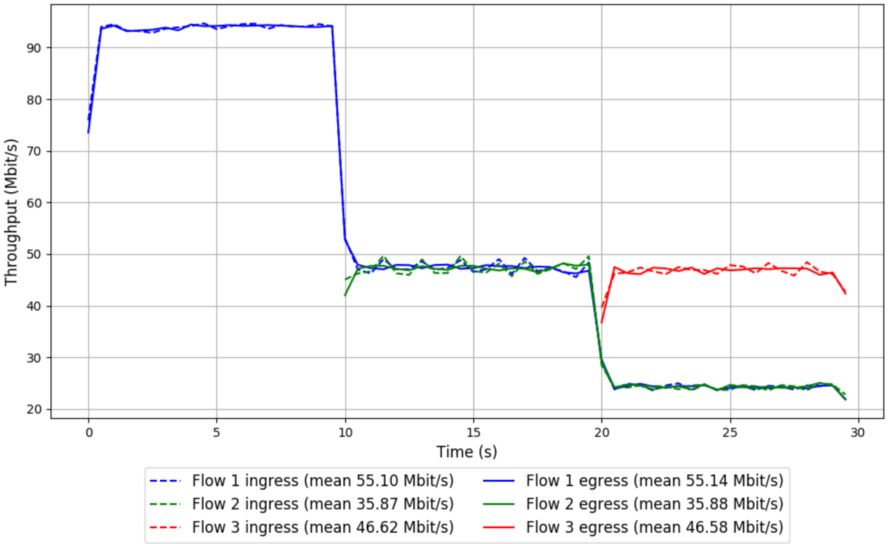


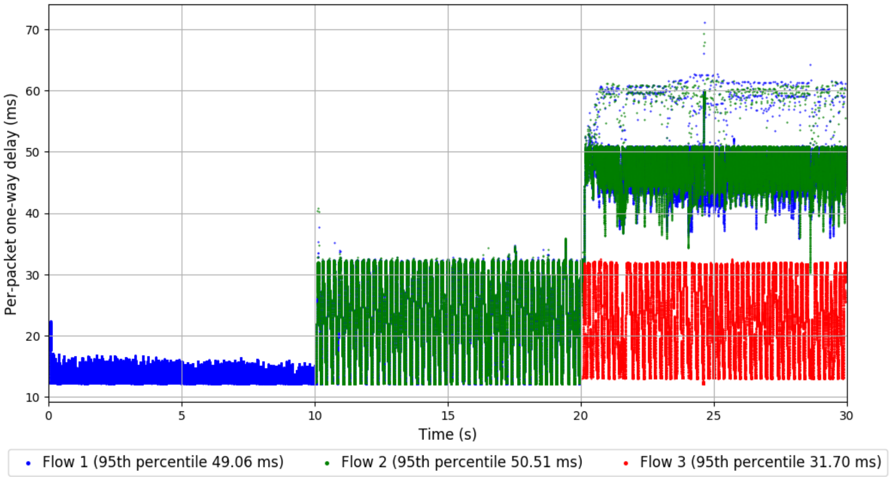
```
Run 6: Statistics of TaoVA-100x

Start at: 2018-04-10 20:13:45
End at: 2018-04-10 20:14:15
Local clock offset: 1.259 ms
Remote clock offset: -5.926 ms

# Below is generated by plot.py at 2018-04-11 01:38:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.42 Mbit/s
95th percentile per-packet one-way delay: 49.454 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 55.14 Mbit/s
95th percentile per-packet one-way delay: 49.065 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 35.88 Mbit/s
95th percentile per-packet one-way delay: 50.506 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 46.58 Mbit/s
95th percentile per-packet one-way delay: 31.697 ms
Loss rate: 0.33%
```

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



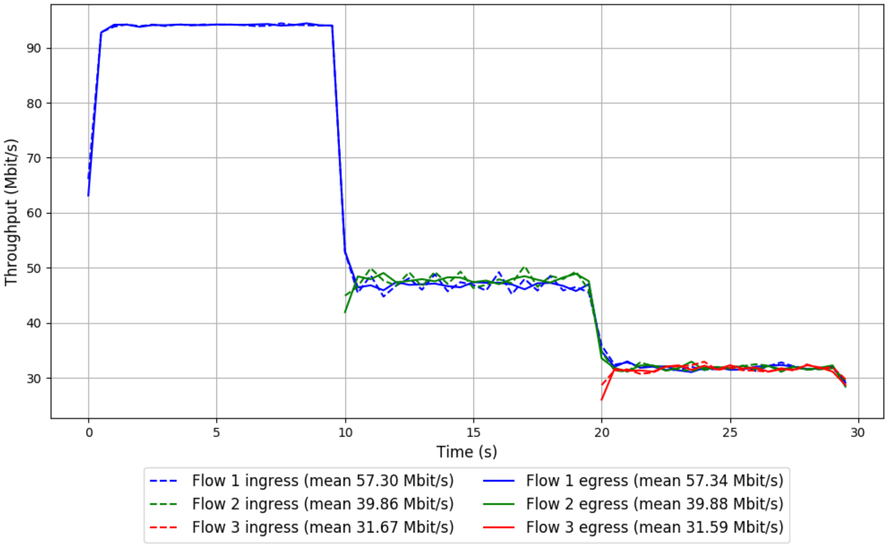


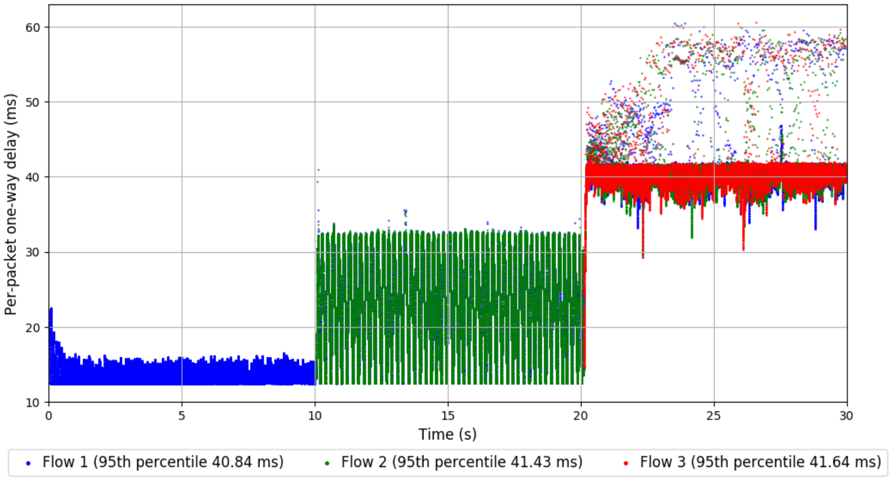
```
Run 7: Statistics of TaoVA-100x

Start at: 2018-04-10 20:35:29
End at: 2018-04-10 20:35:59
Local clock offset: 0.344 ms
Remote clock offset: -5.714 ms

# Below is generated by plot.py at 2018-04-11 01:38:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.29 Mbit/s
95th percentile per-packet one-way delay: 41.370 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 57.34 Mbit/s
95th percentile per-packet one-way delay: 40.841 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 39.88 Mbit/s
95th percentile per-packet one-way delay: 41.432 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 31.59 Mbit/s
95th percentile per-packet one-way delay: 41.644 ms
Loss rate: 0.57%
```

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



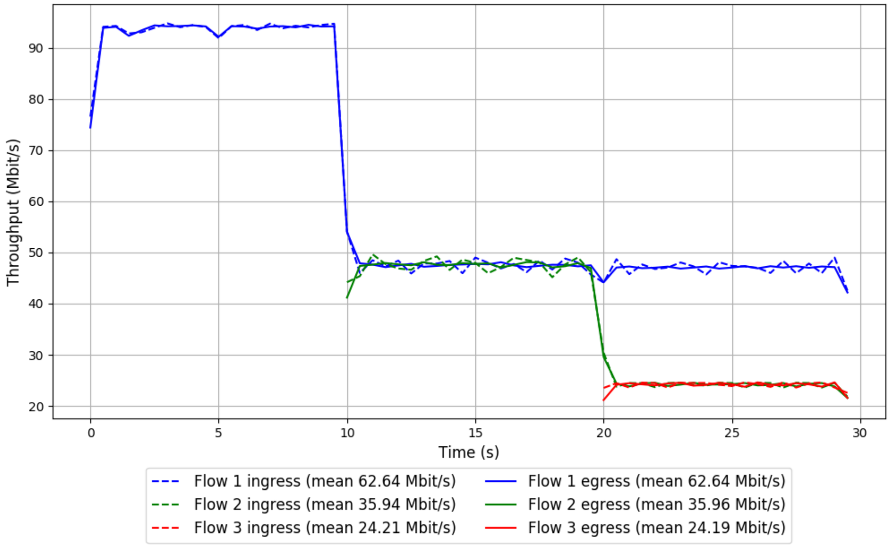


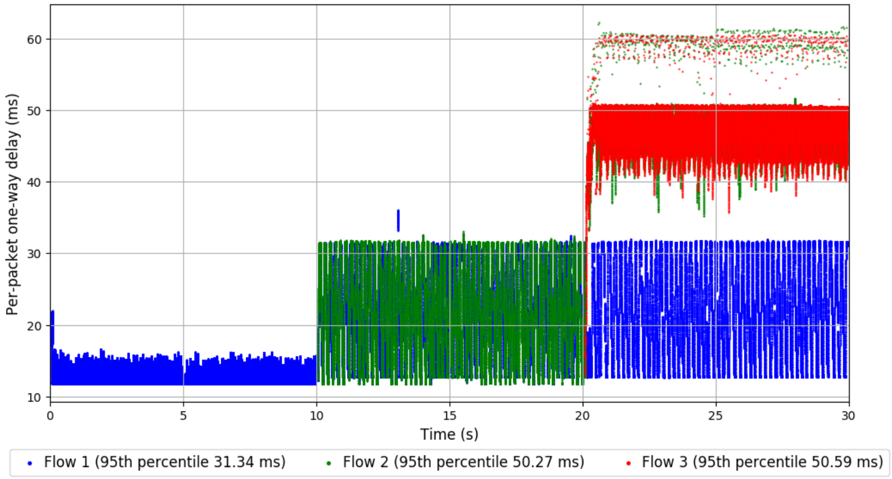
```
Run 8: Statistics of TaoVA-100x

Start at: 2018-04-10 20:56:51
End at: 2018-04-10 20:57:21
Local clock offset: 0.446 ms
Remote clock offset: -2.385 ms

# Below is generated by plot.py at 2018-04-11 01:38:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.56 Mbit/s
95th percentile per-packet one-way delay: 48.971 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 62.64 Mbit/s
95th percentile per-packet one-way delay: 31.340 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 35.96 Mbit/s
95th percentile per-packet one-way delay: 50.270 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 24.19 Mbit/s
95th percentile per-packet one-way delay: 50.586 ms
Loss rate: 0.58%
```

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



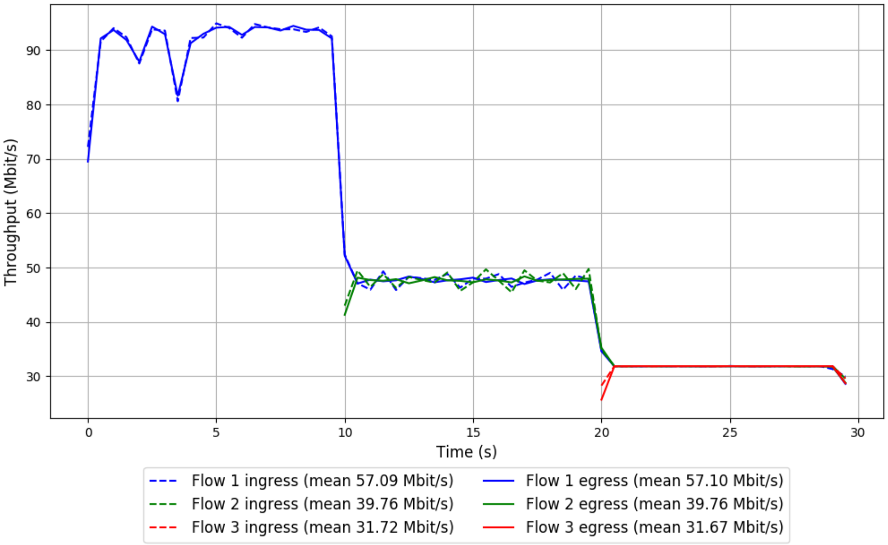


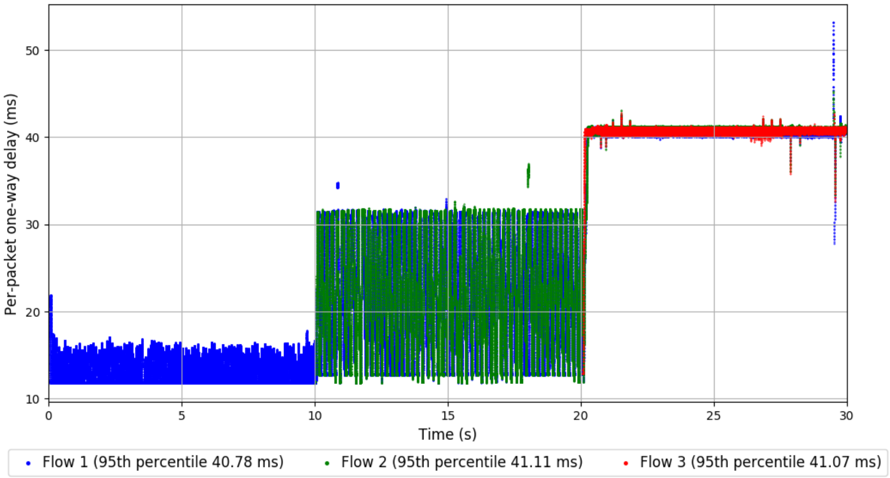
```
Run 9: Statistics of TaoVA-100x

Start at: 2018-04-10 21:18:03
End at: 2018-04-10 21:18:33
Local clock offset: 0.397 ms
Remote clock offset: 3.468 ms

# Below is generated by plot.py at 2018-04-11 01:39:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.05 Mbit/s
95th percentile per-packet one-way delay: 41.029 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 57.10 Mbit/s
95th percentile per-packet one-way delay: 40.779 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 39.76 Mbit/s
95th percentile per-packet one-way delay: 41.108 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 31.67 Mbit/s
95th percentile per-packet one-way delay: 41.074 ms
Loss rate: 0.55%
```

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



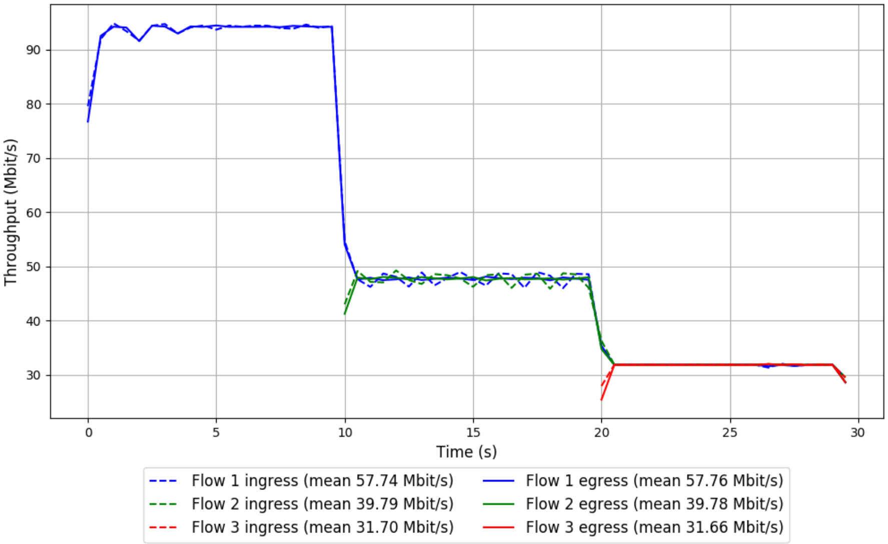


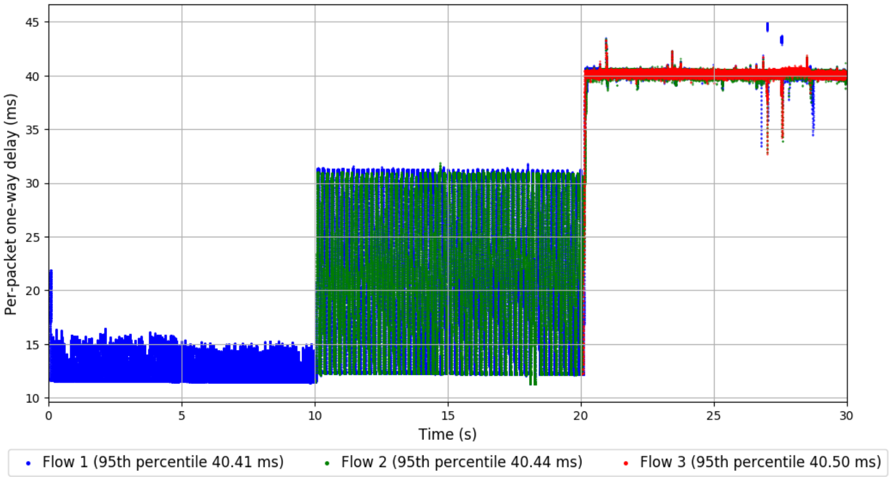
```
Run 10: Statistics of TaoVA-100x

Start at: 2018-04-10 21:39:13
End at: 2018-04-10 21:39:43
Local clock offset: -0.228 ms
Remote clock offset: 5.023 ms

# Below is generated by plot.py at 2018-04-11 01:39:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.72 Mbit/s
95th percentile per-packet one-way delay: 40.440 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 57.76 Mbit/s
95th percentile per-packet one-way delay: 40.411 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 39.78 Mbit/s
95th percentile per-packet one-way delay: 40.438 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 31.66 Mbit/s
95th percentile per-packet one-way delay: 40.501 ms
Loss rate: 0.55%
```

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



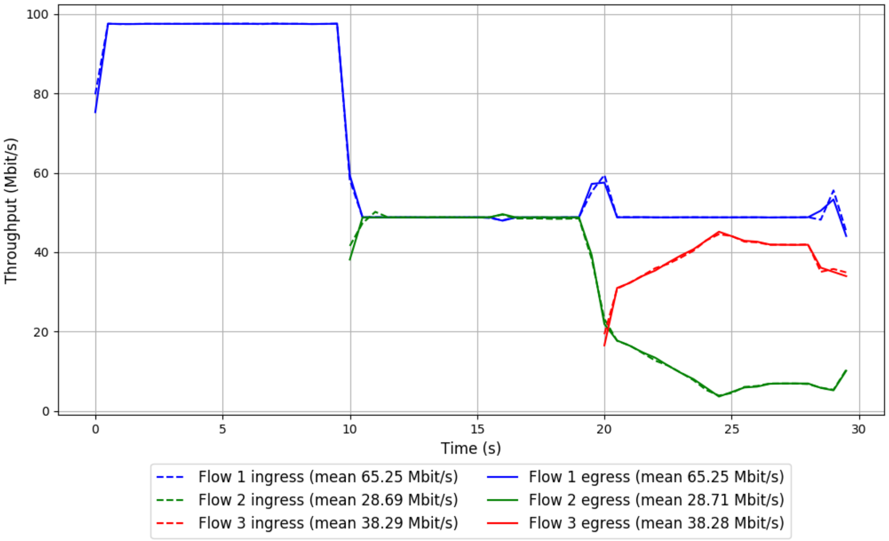


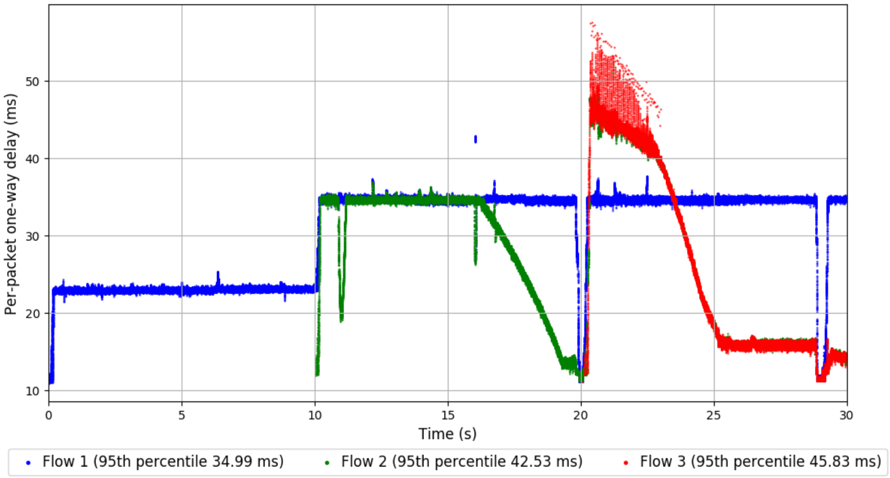
```
Run 1: Statistics of TCP Vegas

Start at: 2018-04-10 18:18:31
End at: 2018-04-10 18:19:01
Local clock offset: -2.591 ms
Remote clock offset: 2.466 ms

# Below is generated by plot.py at 2018-04-11 01:39:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.99 Mbit/s
95th percentile per-packet one-way delay: 37.067 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 65.25 Mbit/s
95th percentile per-packet one-way delay: 34.986 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 28.71 Mbit/s
95th percentile per-packet one-way delay: 42.534 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 38.28 Mbit/s
95th percentile per-packet one-way delay: 45.827 ms
Loss rate: 0.25%
```

Run 1: Report of TCP Vegas — Data Link



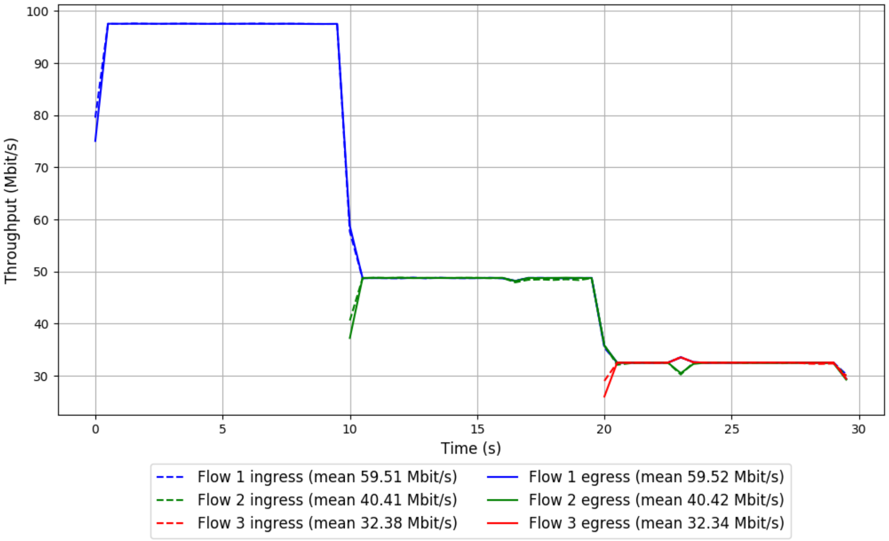


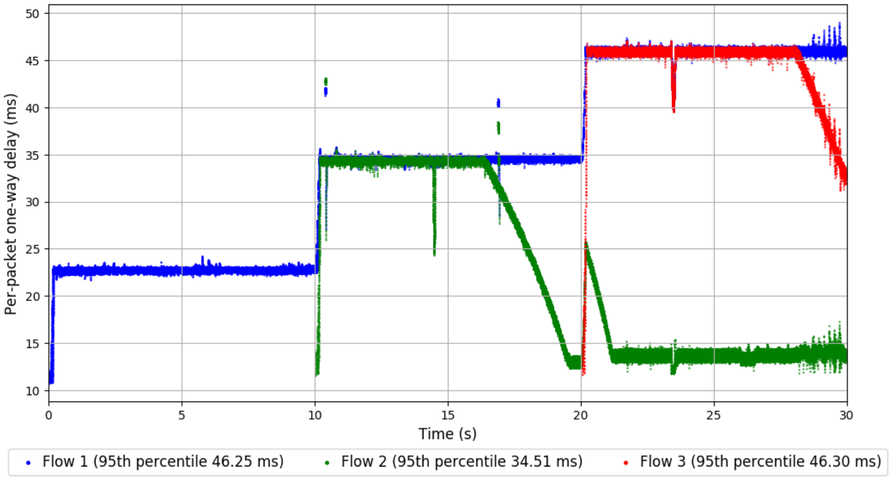
```
Run 2: Statistics of TCP Vegas

Start at: 2018-04-10 18:40:59
End at: 2018-04-10 18:41:29
Local clock offset: -3.47 ms
Remote clock offset: 8.474 ms

# Below is generated by plot.py at 2018-04-11 01:39:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.14 Mbit/s
95th percentile per-packet one-way delay: 46.232 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 59.52 Mbit/s
95th percentile per-packet one-way delay: 46.254 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 40.42 Mbit/s
95th percentile per-packet one-way delay: 34.511 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 32.34 Mbit/s
95th percentile per-packet one-way delay: 46.304 ms
Loss rate: 0.45%
```

Run 2: Report of TCP Vegas — Data Link



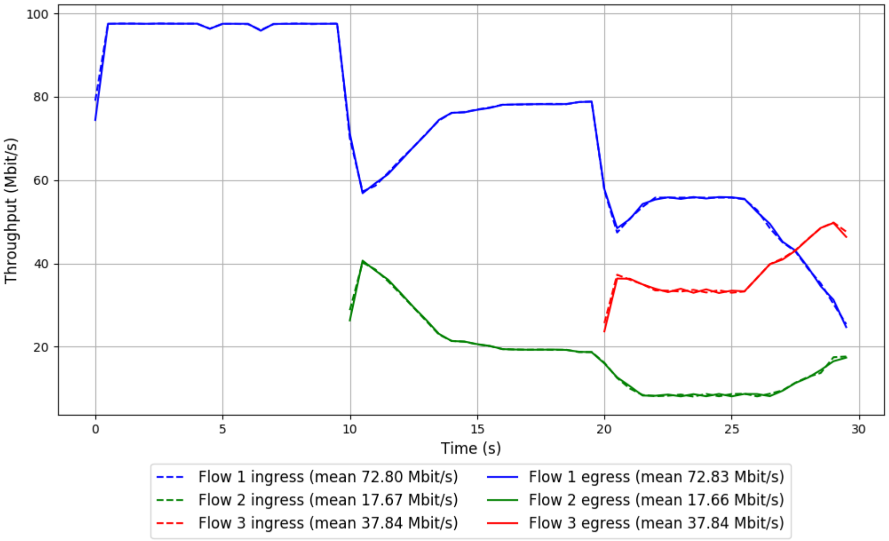


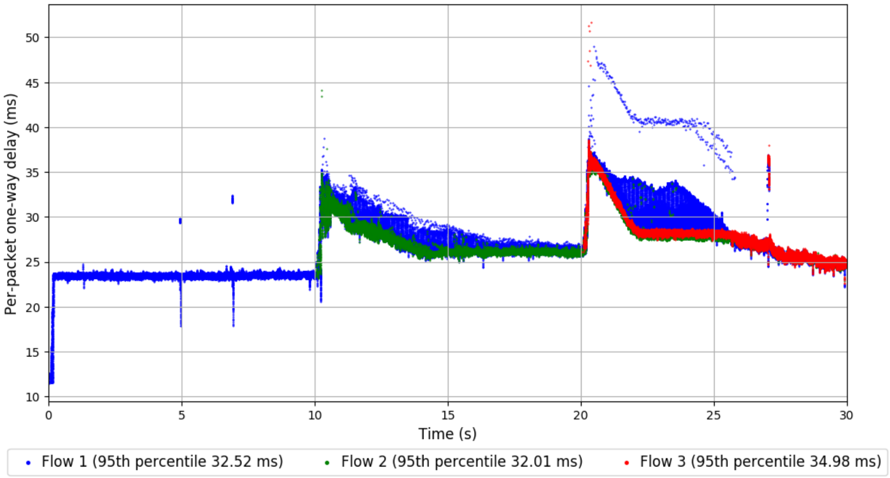
```
Run 3: Statistics of TCP Vegas

Start at: 2018-04-10 19:03:14
End at: 2018-04-10 19:03:44
Local clock offset: 1.357 ms
Remote clock offset: 4.315 ms

# Below is generated by plot.py at 2018-04-11 01:39:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.09 Mbit/s
95th percentile per-packet one-way delay: 32.856 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 72.83 Mbit/s
95th percentile per-packet one-way delay: 32.517 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 17.66 Mbit/s
95th percentile per-packet one-way delay: 32.012 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 37.84 Mbit/s
95th percentile per-packet one-way delay: 34.985 ms
Loss rate: 0.50%
```

Run 3: Report of TCP Vegas — Data Link



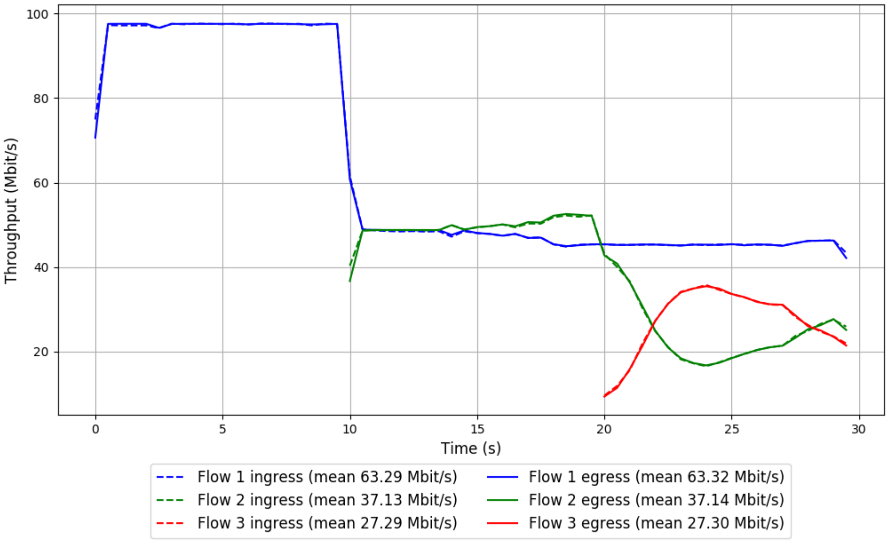


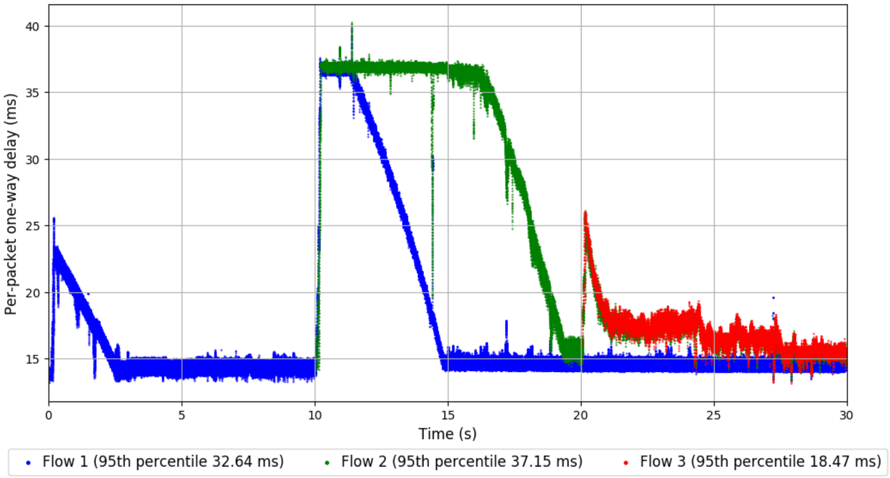
```
Run 4: Statistics of TCP Vegas

Start at: 2018-04-10 19:25:14
End at: 2018-04-10 19:25:44
Local clock offset: 1.241 ms
Remote clock offset: 2.057 ms

# Below is generated by plot.py at 2018-04-11 01:39:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.09 Mbit/s
95th percentile per-packet one-way delay: 36.954 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 63.32 Mbit/s
95th percentile per-packet one-way delay: 32.636 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 37.14 Mbit/s
95th percentile per-packet one-way delay: 37.148 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 27.30 Mbit/s
95th percentile per-packet one-way delay: 18.470 ms
Loss rate: 0.24%
```

Run 4: Report of TCP Vegas — Data Link



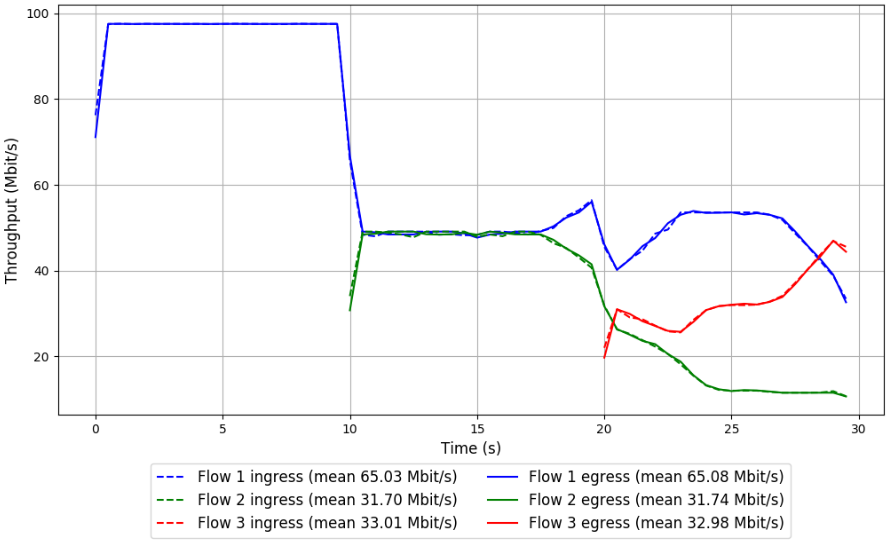


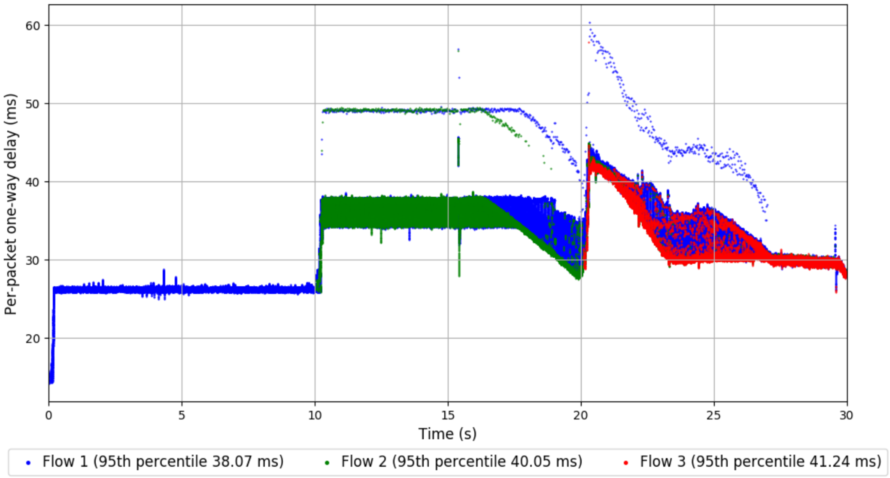
```
Run 5: Statistics of TCP Vegas

Start at: 2018-04-10 19:47:04
End at: 2018-04-10 19:47:34
Local clock offset: 1.58 ms
Remote clock offset: -3.08 ms

# Below is generated by plot.py at 2018-04-11 01:39:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.10 Mbit/s
95th percentile per-packet one-way delay: 39.381 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 65.08 Mbit/s
95th percentile per-packet one-way delay: 38.071 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 31.74 Mbit/s
95th percentile per-packet one-way delay: 40.045 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 32.98 Mbit/s
95th percentile per-packet one-way delay: 41.237 ms
Loss rate: 0.60%
```

Run 5: Report of TCP Vegas — Data Link



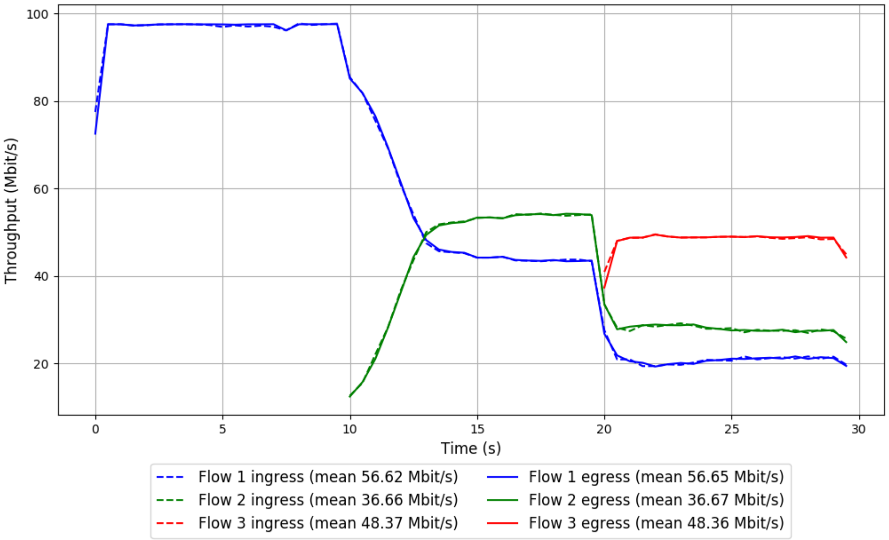


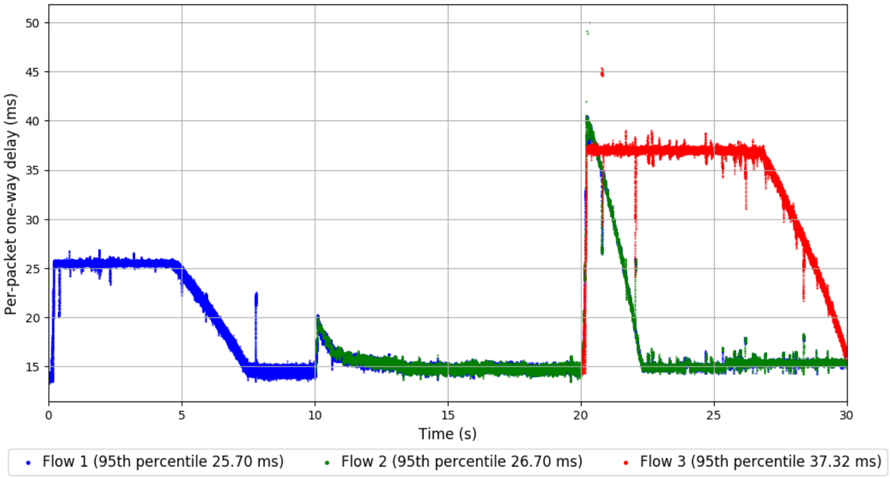
```
Run 6: Statistics of TCP Vegas

Start at: 2018-04-10 20:08:53
End at: 2018-04-10 20:09:23
Local clock offset: 1.203 ms
Remote clock offset: -6.625 ms

# Below is generated by plot.py at 2018-04-11 01:39:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.10 Mbit/s
95th percentile per-packet one-way delay: 37.125 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 56.65 Mbit/s
95th percentile per-packet one-way delay: 25.702 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 36.67 Mbit/s
95th percentile per-packet one-way delay: 26.698 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 48.36 Mbit/s
95th percentile per-packet one-way delay: 37.324 ms
Loss rate: 0.28%
```

Run 6: Report of TCP Vegas — Data Link



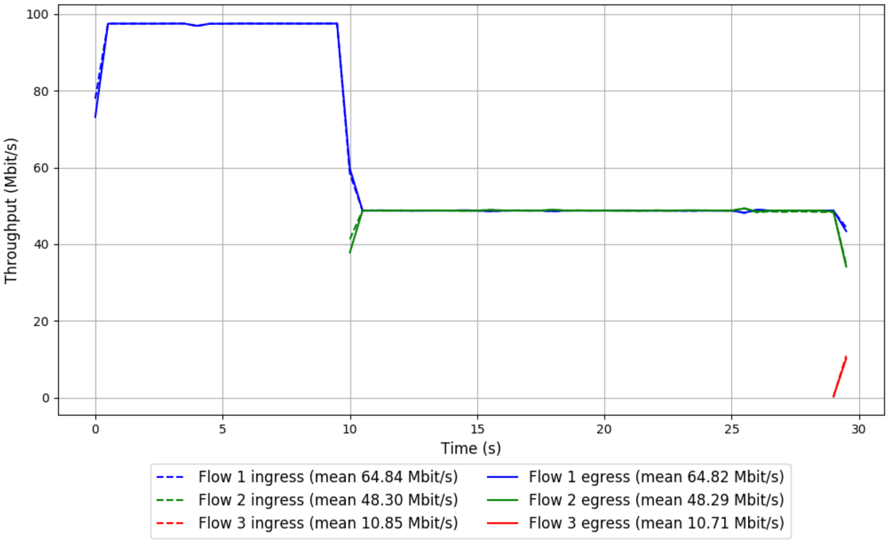


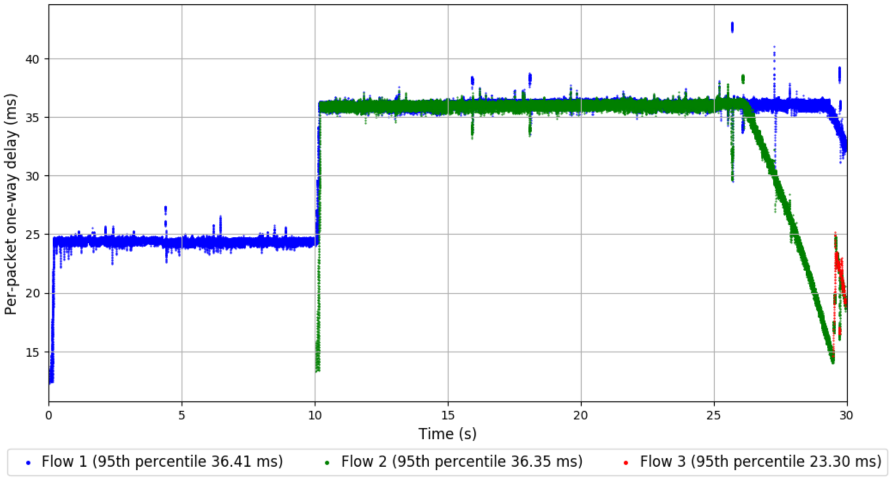
```
Run 7: Statistics of TCP Vegas

Start at: 2018-04-10 20:30:33
End at: 2018-04-10 20:31:03
Local clock offset: 0.565 ms
Remote clock offset: -7.668 ms

# Below is generated by plot.py at 2018-04-11 01:40:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.14 Mbit/s
95th percentile per-packet one-way delay: 36.388 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 64.82 Mbit/s
95th percentile per-packet one-way delay: 36.407 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 48.29 Mbit/s
95th percentile per-packet one-way delay: 36.346 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 10.71 Mbit/s
95th percentile per-packet one-way delay: 23.305 ms
Loss rate: 6.48%
```

Run 7: Report of TCP Vegas — Data Link



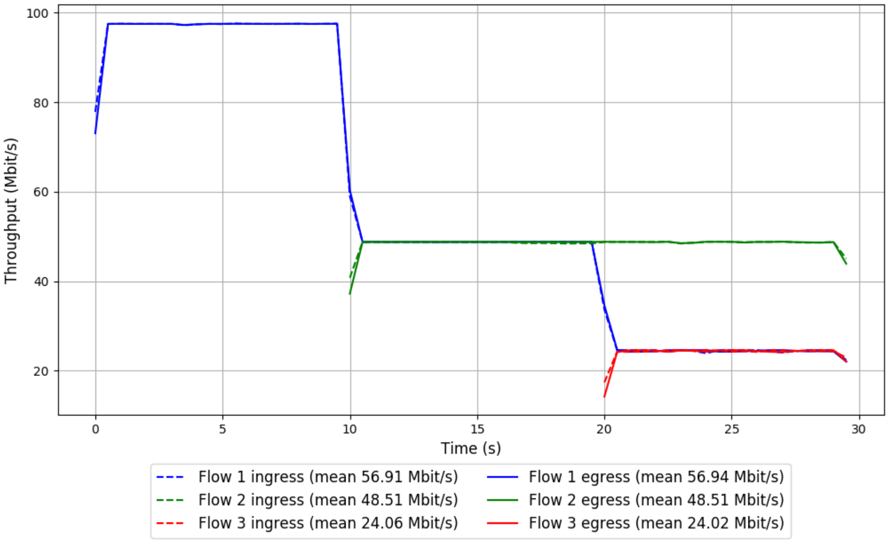


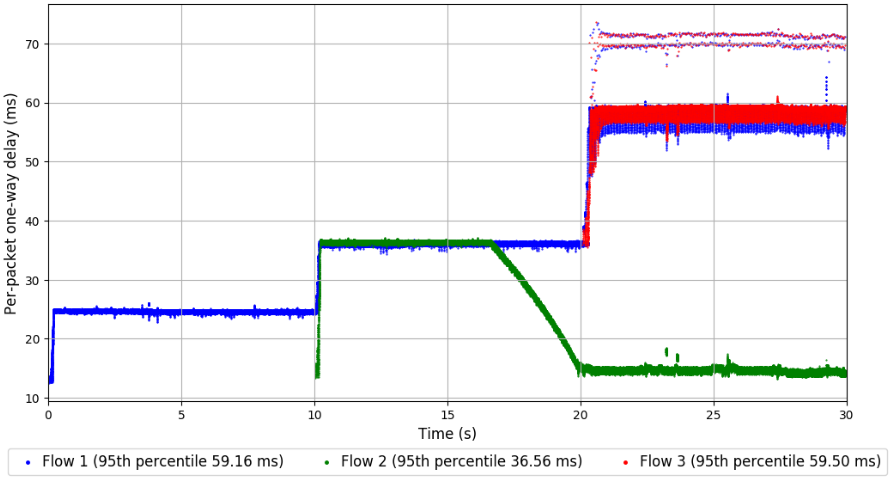
```
Run 8: Statistics of TCP Vegas

Start at: 2018-04-10 20:52:06
End at: 2018-04-10 20:52:36
Local clock offset: 0.536 ms
Remote clock offset: -3.558 ms

# Below is generated by plot.py at 2018-04-11 01:40:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.15 Mbit/s
95th percentile per-packet one-way delay: 59.202 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 56.94 Mbit/s
95th percentile per-packet one-way delay: 59.160 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 48.51 Mbit/s
95th percentile per-packet one-way delay: 36.558 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 24.02 Mbit/s
95th percentile per-packet one-way delay: 59.503 ms
Loss rate: 0.74%
```

Run 8: Report of TCP Vegas — Data Link



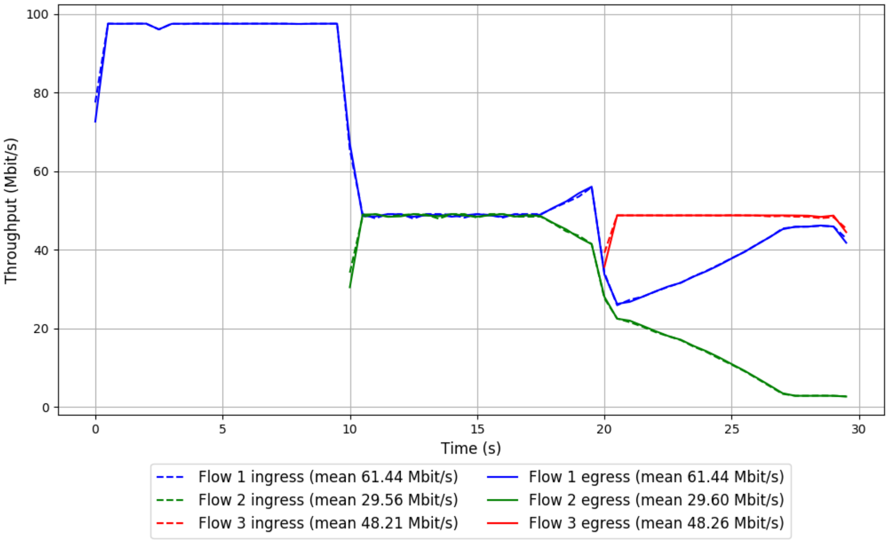


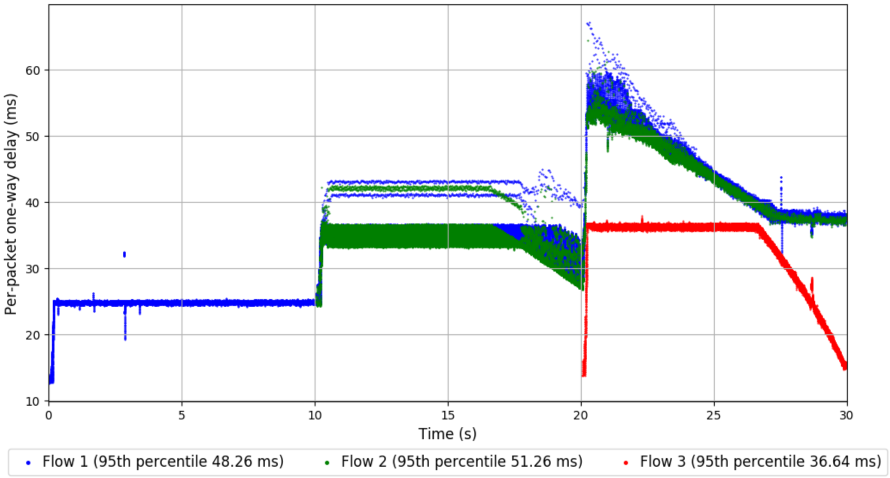
```
Run 9: Statistics of TCP Vegas

Start at: 2018-04-10 21:13:18
End at: 2018-04-10 21:13:48
Local clock offset: 0.404 ms
Remote clock offset: 1.439 ms

# Below is generated by plot.py at 2018-04-11 01:41:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.13 Mbit/s
95th percentile per-packet one-way delay: 48.573 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 61.44 Mbit/s
95th percentile per-packet one-way delay: 48.255 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 29.60 Mbit/s
95th percentile per-packet one-way delay: 51.262 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 48.26 Mbit/s
95th percentile per-packet one-way delay: 36.644 ms
Loss rate: 0.28%
```

Run 9: Report of TCP Vegas — Data Link



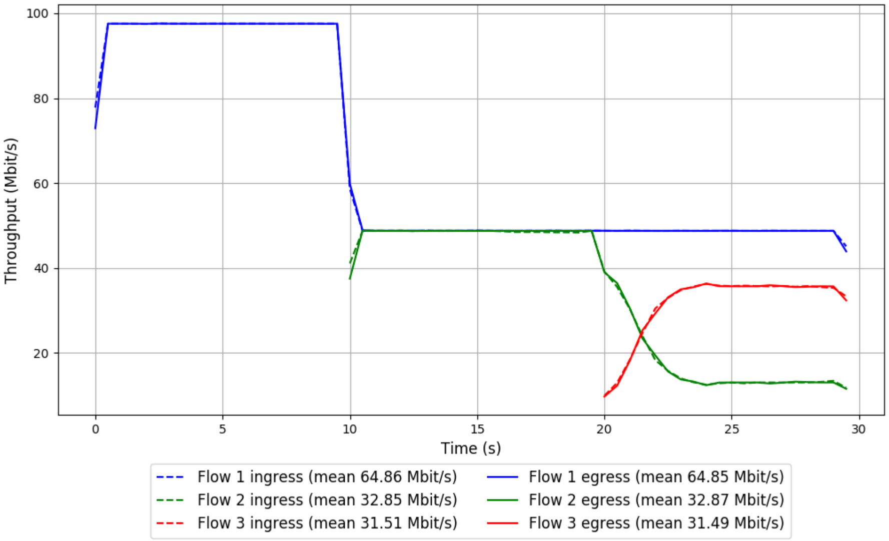


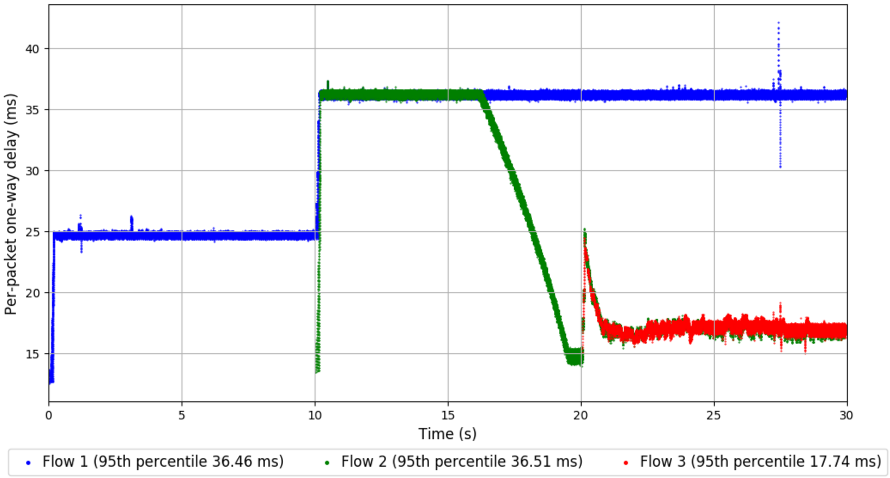
```
Run 10: Statistics of TCP Vegas

Start at: 2018-04-10 21:34:29
End at: 2018-04-10 21:34:59
Local clock offset: -0.123 ms
Remote clock offset: 5.005 ms

# Below is generated by plot.py at 2018-04-11 01:41:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.16 Mbit/s
95th percentile per-packet one-way delay: 36.464 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 64.85 Mbit/s
95th percentile per-packet one-way delay: 36.459 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 32.87 Mbit/s
95th percentile per-packet one-way delay: 36.506 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 31.49 Mbit/s
95th percentile per-packet one-way delay: 17.743 ms
Loss rate: 0.33%
```

Run 10: Report of TCP Vegas — Data Link



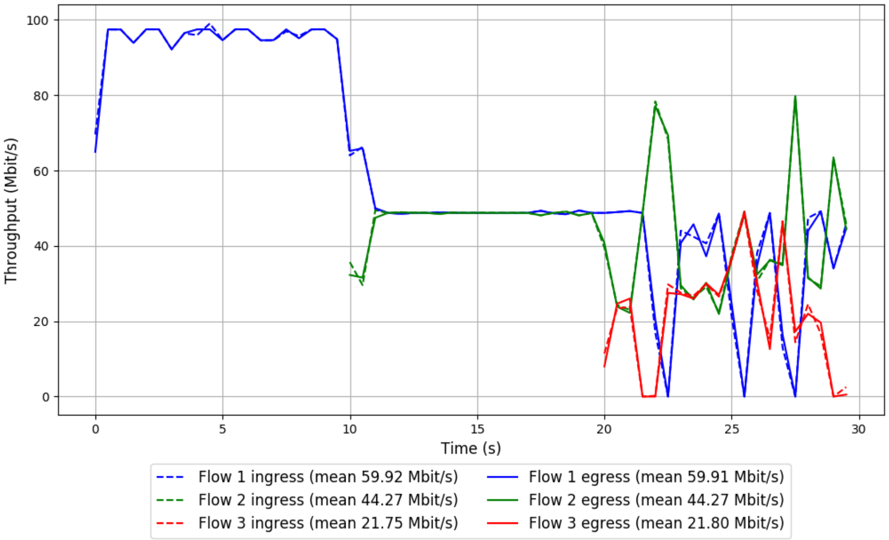


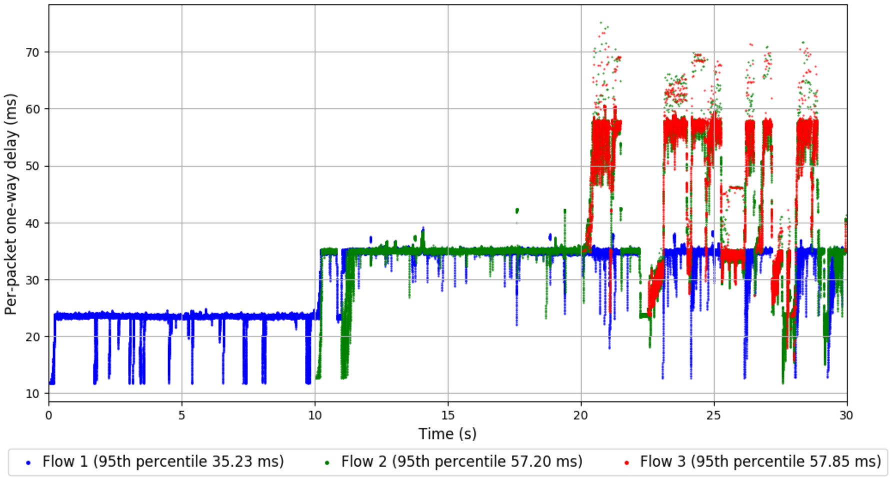
```
Run 1: Statistics of Verus

Start at: 2018-04-10 18:09:50
End at: 2018-04-10 18:10:20
Local clock offset: -2.213 ms
Remote clock offset: -1.644 ms

# Below is generated by plot.py at 2018-04-11 01:41:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.56 Mbit/s
95th percentile per-packet one-way delay: 55.562 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 59.91 Mbit/s
95th percentile per-packet one-way delay: 35.228 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 44.27 Mbit/s
95th percentile per-packet one-way delay: 57.205 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 21.80 Mbit/s
95th percentile per-packet one-way delay: 57.852 ms
Loss rate: 0.46%
```

Run 1: Report of Verus — Data Link



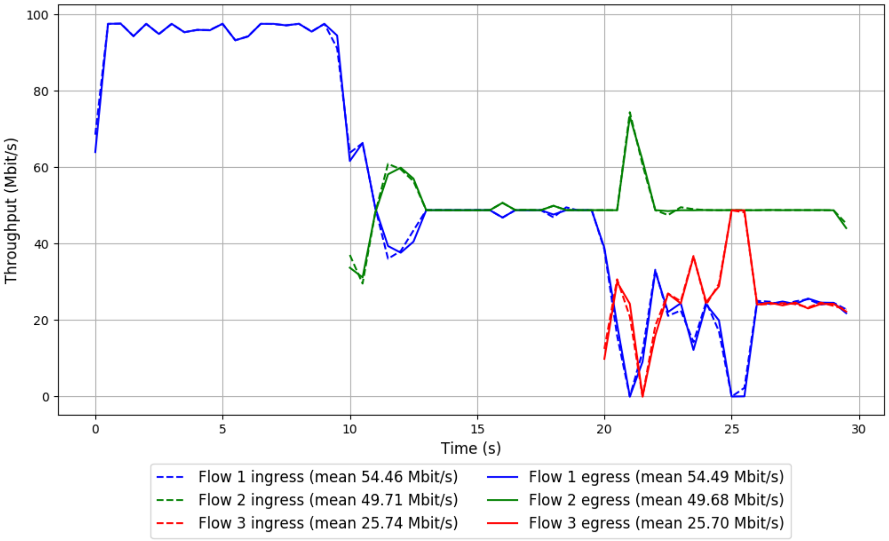


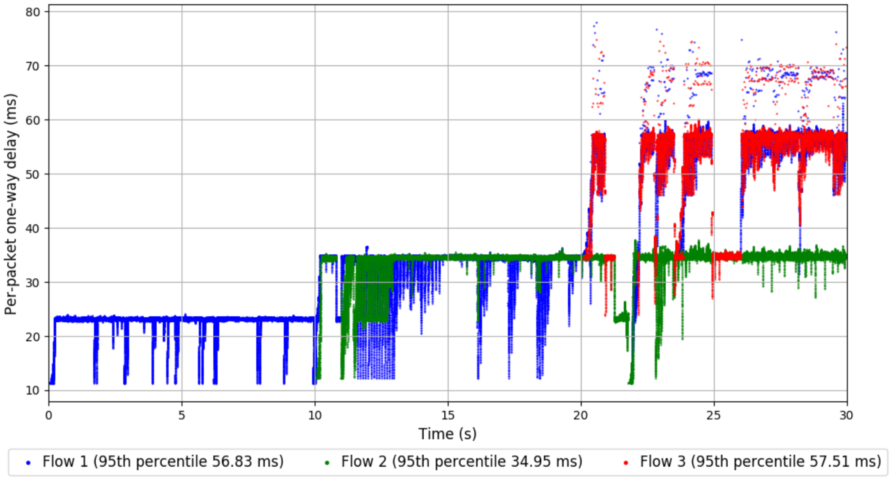
```
Run 2: Statistics of Verus

Start at: 2018-04-10 18:32:38
End at: 2018-04-10 18:33:08
Local clock offset: -2.205 ms
Remote clock offset: 7.516 ms

# Below is generated by plot.py at 2018-04-11 01:41:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.07 Mbit/s
95th percentile per-packet one-way delay: 56.978 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 54.49 Mbit/s
95th percentile per-packet one-way delay: 56.825 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 49.68 Mbit/s
95th percentile per-packet one-way delay: 34.952 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 25.70 Mbit/s
95th percentile per-packet one-way delay: 57.514 ms
Loss rate: 0.64%
```

Run 2: Report of Verus — Data Link



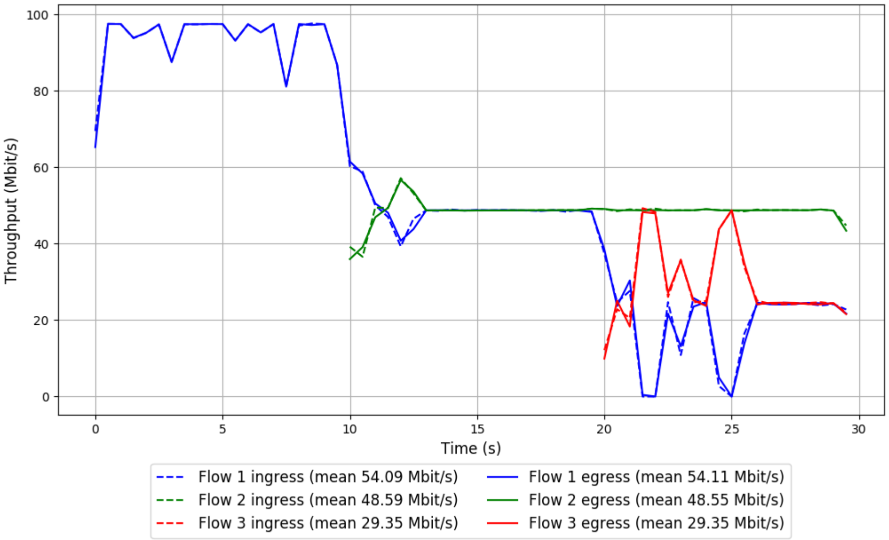


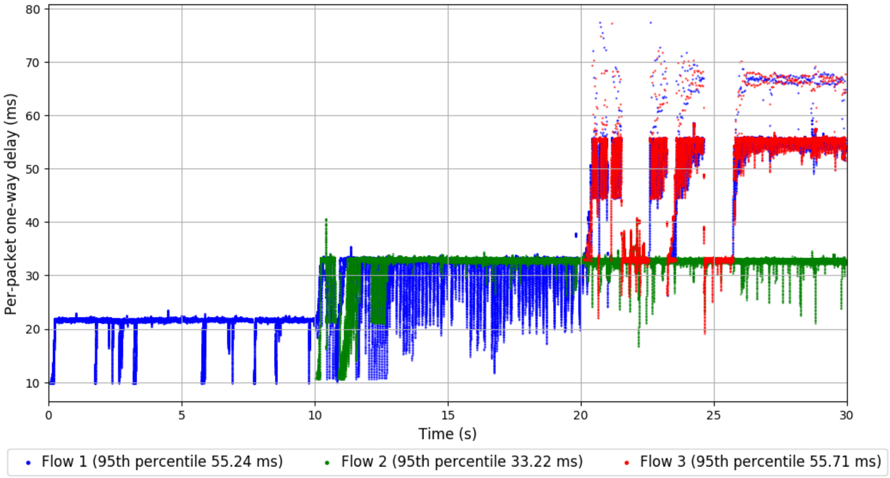
```
Run 3: Statistics of Verus

Start at: 2018-04-10 18:54:45
End at: 2018-04-10 18:55:15
Local clock offset: -0.037 ms
Remote clock offset: 7.147 ms

# Below is generated by plot.py at 2018-04-11 01:41:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.13 Mbit/s
95th percentile per-packet one-way delay: 55.328 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 54.11 Mbit/s
95th percentile per-packet one-way delay: 55.237 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 48.55 Mbit/s
95th percentile per-packet one-way delay: 33.222 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 29.35 Mbit/s
95th percentile per-packet one-way delay: 55.708 ms
Loss rate: 0.65%
```

Run 3: Report of Verus — Data Link



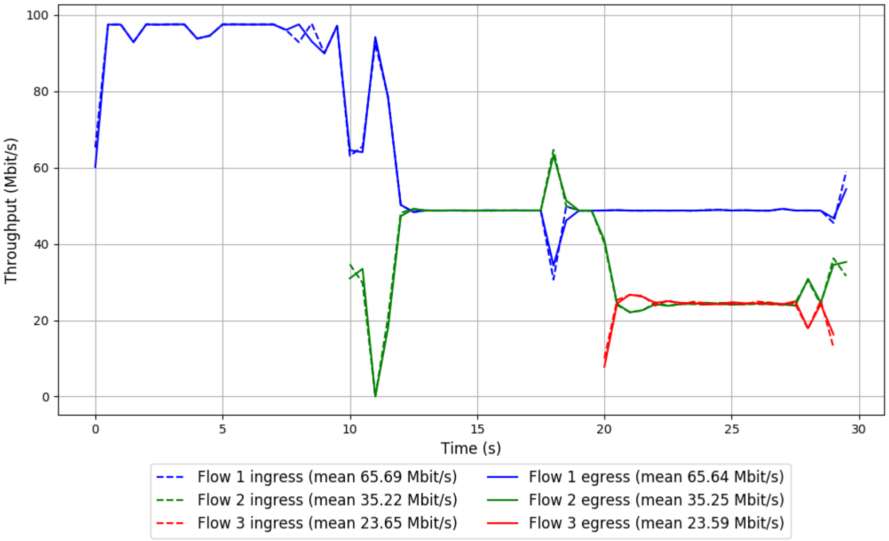


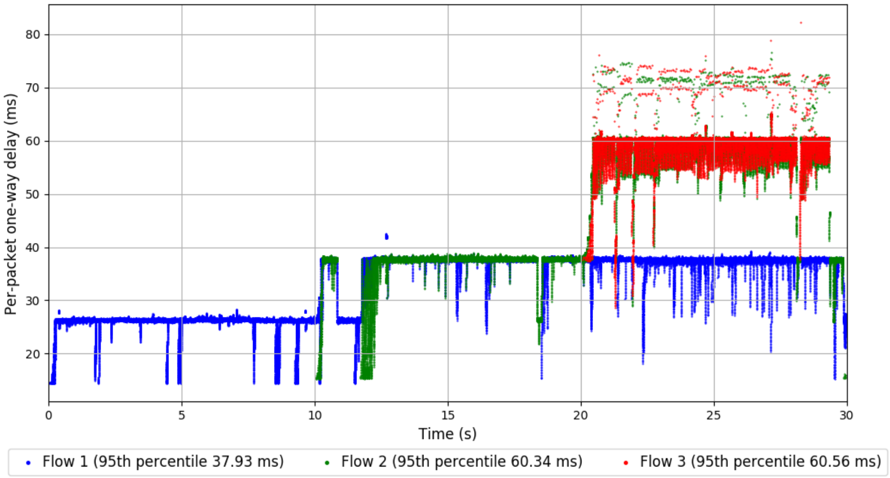
```
Run 4: Statistics of Verus

Start at: 2018-04-10 19:16:54
End at: 2018-04-10 19:17:24
Local clock offset: 2.031 ms
Remote clock offset: 3.667 ms

# Below is generated by plot.py at 2018-04-11 01:41:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.38 Mbit/s
95th percentile per-packet one-way delay: 60.147 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 65.64 Mbit/s
95th percentile per-packet one-way delay: 37.931 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 35.25 Mbit/s
95th percentile per-packet one-way delay: 60.341 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 23.59 Mbit/s
95th percentile per-packet one-way delay: 60.560 ms
Loss rate: 0.00%
```

Run 4: Report of Verus — Data Link



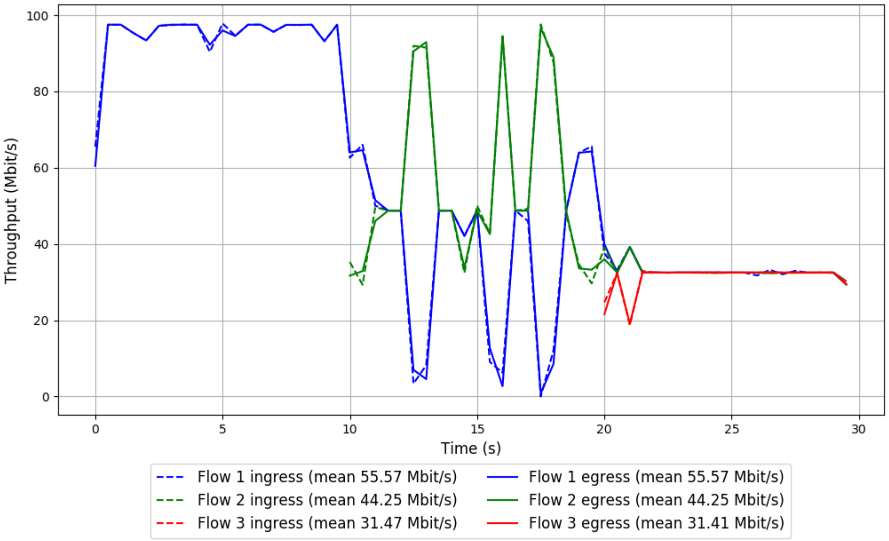


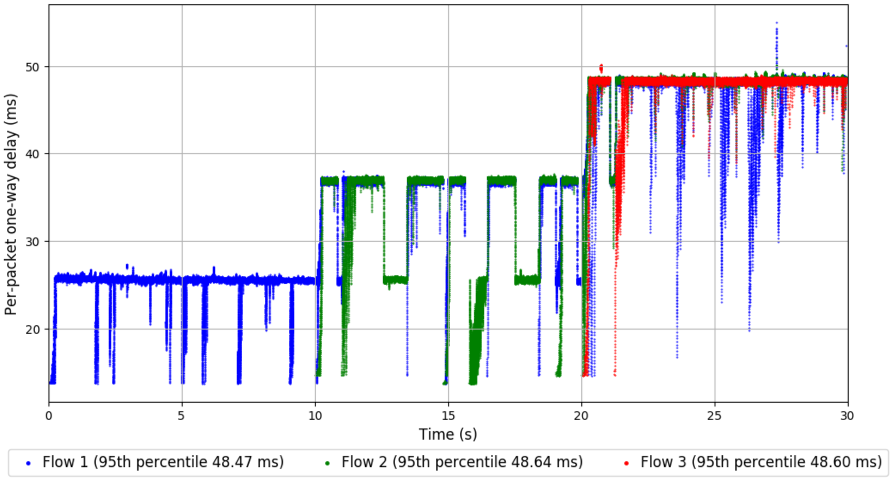
```
Run 5: Statistics of Verus

Start at: 2018-04-10 19:38:34
End at: 2018-04-10 19:39:04
Local clock offset: 1.332 ms
Remote clock offset: -1.713 ms

# Below is generated by plot.py at 2018-04-11 01:42:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.43 Mbit/s
95th percentile per-packet one-way delay: 48.569 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 55.57 Mbit/s
95th percentile per-packet one-way delay: 48.470 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 44.25 Mbit/s
95th percentile per-packet one-way delay: 48.641 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 31.41 Mbit/s
95th percentile per-packet one-way delay: 48.597 ms
Loss rate: 0.63%
```

Run 5: Report of Verus — Data Link



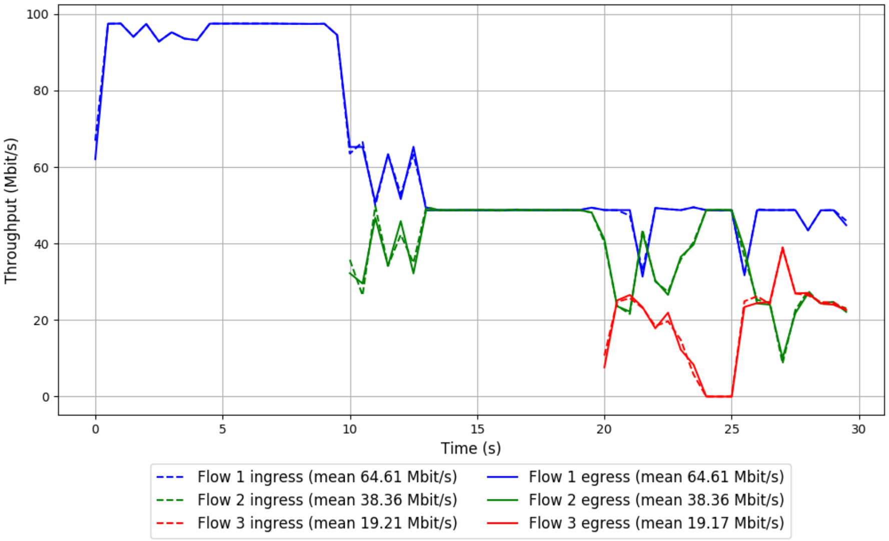


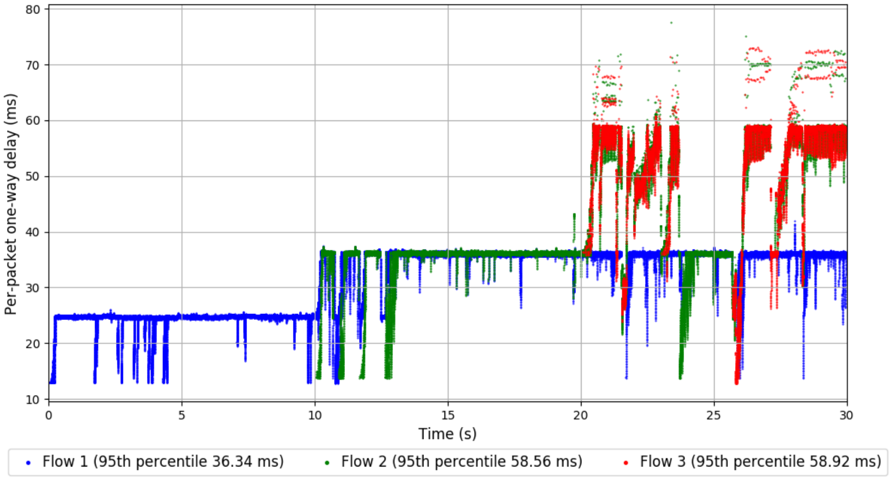
```
Run 6: Statistics of Verus

Start at: 2018-04-10 20:00:29
End at: 2018-04-10 20:00:59
Local clock offset: 1.277 ms
Remote clock offset: -4.694 ms

# Below is generated by plot.py at 2018-04-11 01:42:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.46 Mbit/s
95th percentile per-packet one-way delay: 57.283 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 64.61 Mbit/s
95th percentile per-packet one-way delay: 36.338 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 38.36 Mbit/s
95th percentile per-packet one-way delay: 58.562 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 19.17 Mbit/s
95th percentile per-packet one-way delay: 58.916 ms
Loss rate: 0.93%
```

Run 6: Report of Verus — Data Link



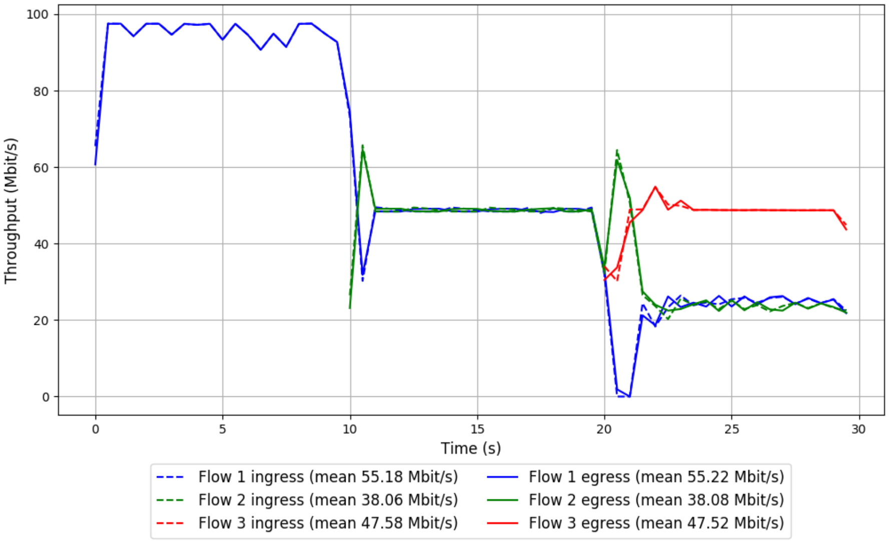


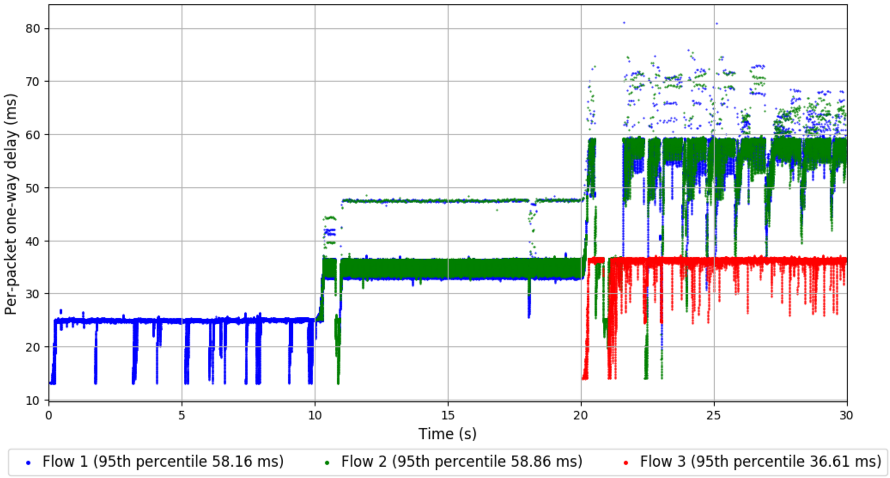
```
Run 7: Statistics of Verus

Start at: 2018-04-10 20:22:11
End at: 2018-04-10 20:22:41
Local clock offset: 1.271 ms
Remote clock offset: -7.575 ms

# Below is generated by plot.py at 2018-04-11 01:42:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.28 Mbit/s
95th percentile per-packet one-way delay: 58.517 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 55.22 Mbit/s
95th percentile per-packet one-way delay: 58.162 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 38.08 Mbit/s
95th percentile per-packet one-way delay: 58.863 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 47.52 Mbit/s
95th percentile per-packet one-way delay: 36.613 ms
Loss rate: 0.50%
```

Run 7: Report of Verus — Data Link



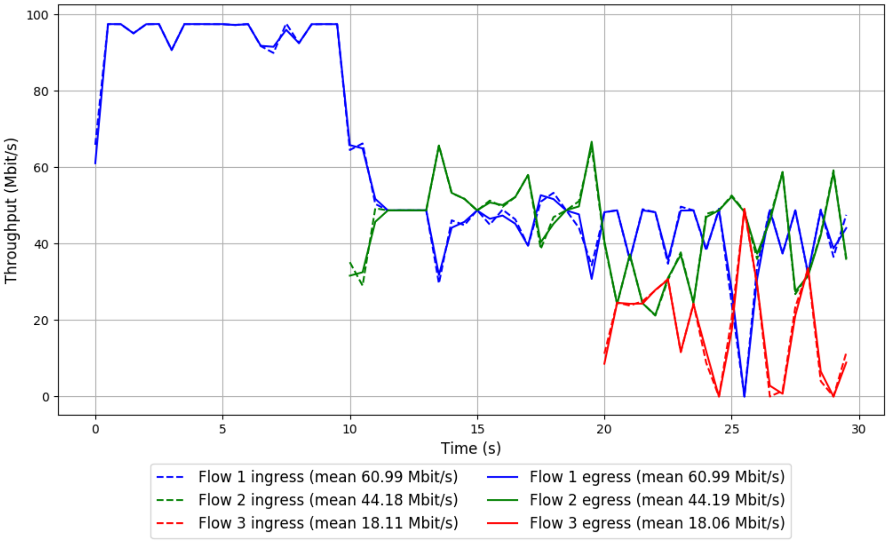


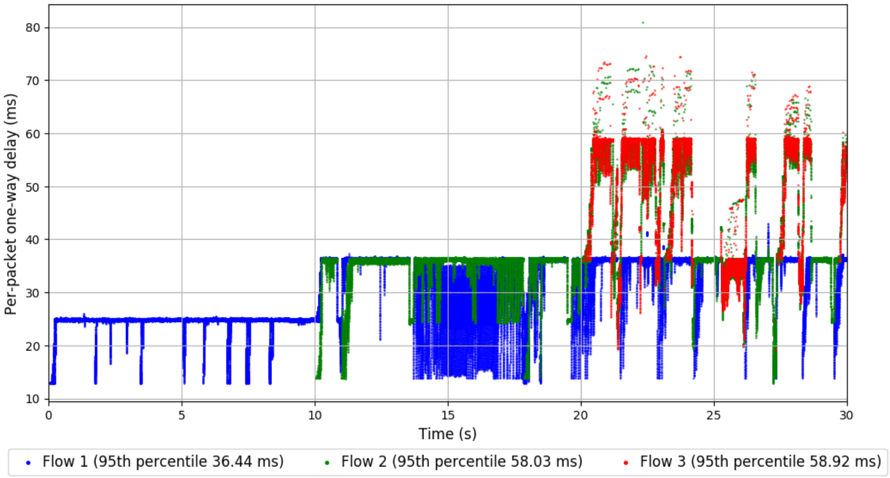
```
Run 8: Statistics of Verus

Start at: 2018-04-10 20:43:57
End at: 2018-04-10 20:44:27
Local clock offset: 1.276 ms
Remote clock offset: -3.528 ms

# Below is generated by plot.py at 2018-04-11 01:42:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.37 Mbit/s
95th percentile per-packet one-way delay: 55.773 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 60.99 Mbit/s
95th percentile per-packet one-way delay: 36.439 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 44.19 Mbit/s
95th percentile per-packet one-way delay: 58.027 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 18.06 Mbit/s
95th percentile per-packet one-way delay: 58.925 ms
Loss rate: 0.70%
```

Run 8: Report of Verus — Data Link



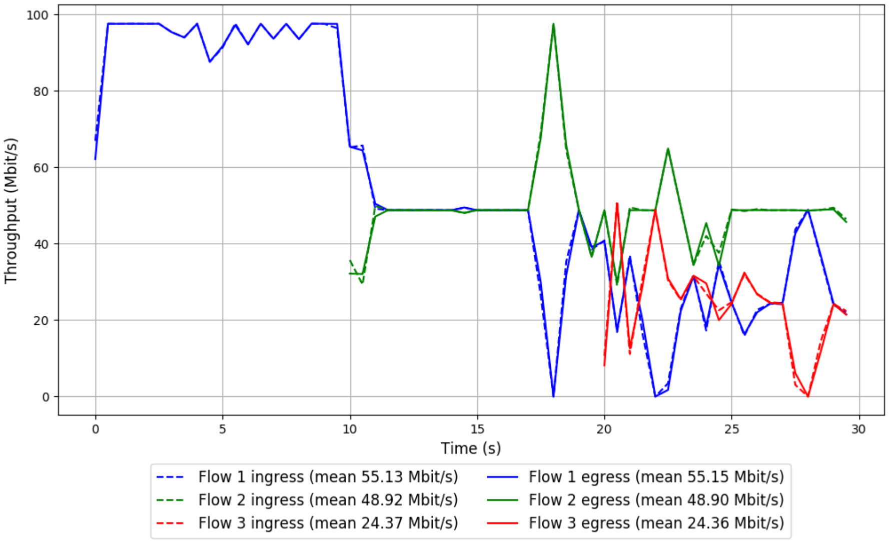


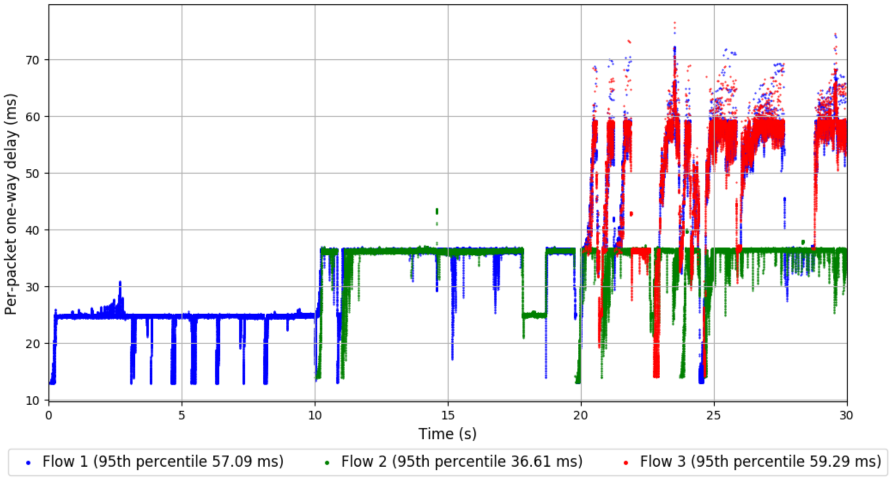
```
Run 9: Statistics of Verus

Start at: 2018-04-10 21:05:08
End at: 2018-04-10 21:05:38
Local clock offset: 0.775 ms
Remote clock offset: -1.748 ms

# Below is generated by plot.py at 2018-04-11 01:42:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.76 Mbit/s
95th percentile per-packet one-way delay: 57.656 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 55.15 Mbit/s
95th percentile per-packet one-way delay: 57.085 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 48.90 Mbit/s
95th percentile per-packet one-way delay: 36.610 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 24.36 Mbit/s
95th percentile per-packet one-way delay: 59.288 ms
Loss rate: 0.77%
```

Run 9: Report of Verus — Data Link



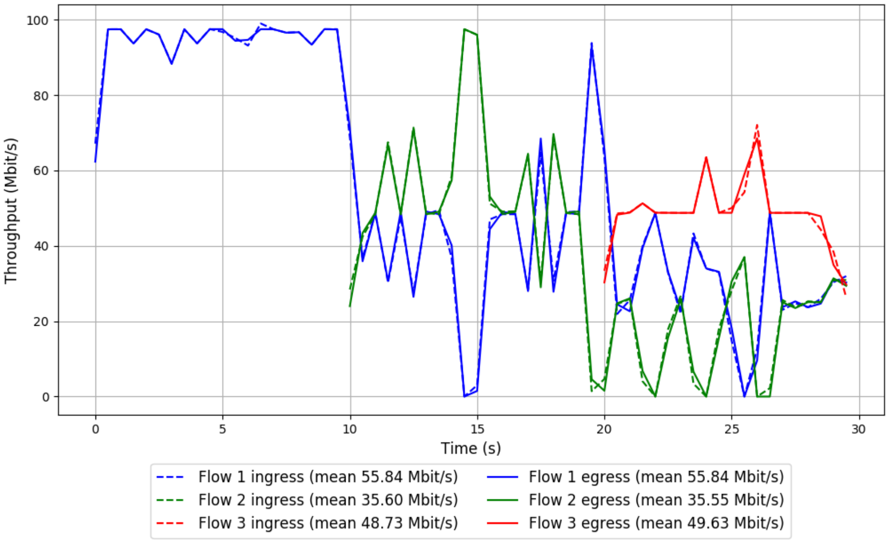


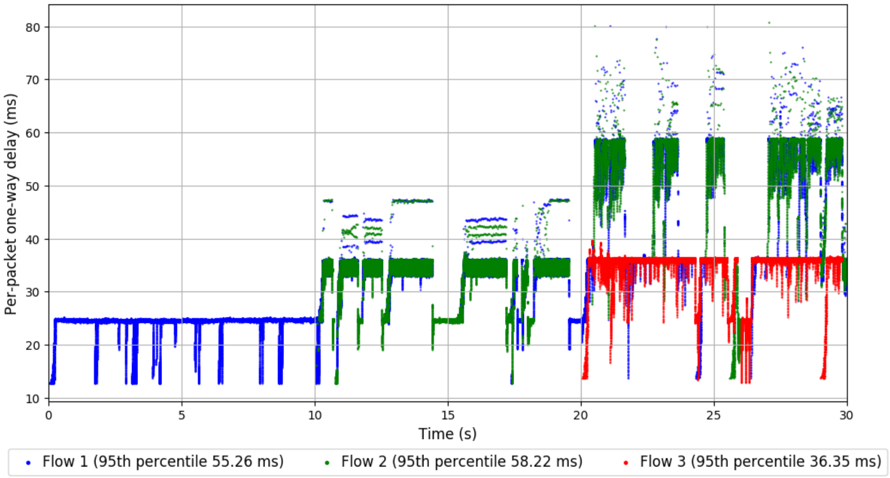
```
Run 10: Statistics of Verus

Start at: 2018-04-10 21:26:22
End at: 2018-04-10 21:26:52
Local clock offset: -0.213 ms
Remote clock offset: 3.613 ms

# Below is generated by plot.py at 2018-04-11 01:42:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.67 Mbit/s
95th percentile per-packet one-way delay: 55.951 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 55.84 Mbit/s
95th percentile per-packet one-way delay: 55.258 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 35.55 Mbit/s
95th percentile per-packet one-way delay: 58.224 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 49.63 Mbit/s
95th percentile per-packet one-way delay: 36.354 ms
Loss rate: 0.00%
```

Run 10: Report of Verus — Data Link



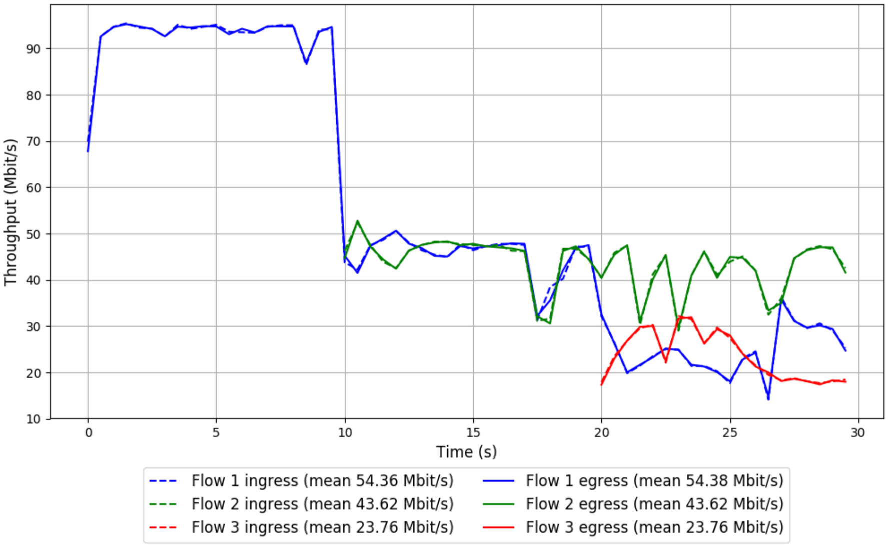


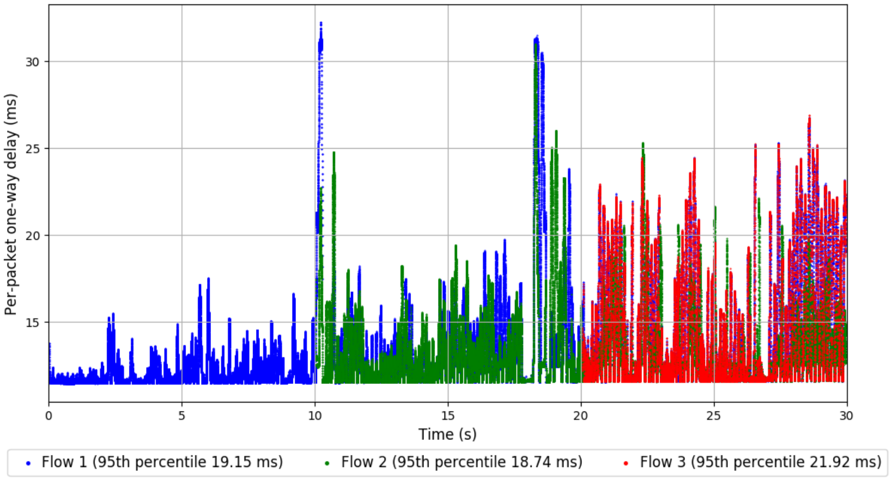
```
Run 1: Statistics of Copa

Start at: 2018-04-10 18:27:34
End at: 2018-04-10 18:28:04
Local clock offset: -2.584 ms
Remote clock offset: 5.654 ms

# Below is generated by plot.py at 2018-04-11 01:43:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.29 Mbit/s
95th percentile per-packet one-way delay: 19.694 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 54.38 Mbit/s
95th percentile per-packet one-way delay: 19.147 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 43.62 Mbit/s
95th percentile per-packet one-way delay: 18.737 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 23.76 Mbit/s
95th percentile per-packet one-way delay: 21.923 ms
Loss rate: 0.22%
```

Run 1: Report of Copa — Data Link



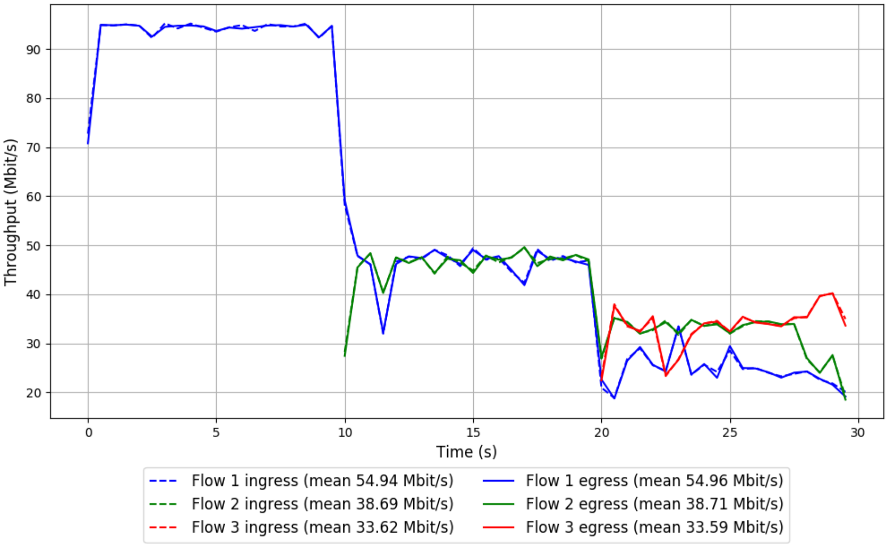


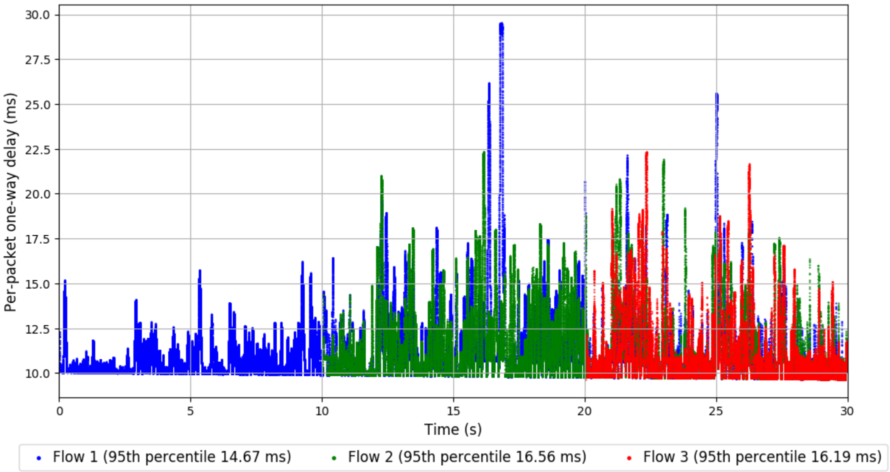
```
Run 2: Statistics of Copa

Start at: 2018-04-10 18:49:36
End at: 2018-04-10 18:50:06
Local clock offset: -1.273 ms
Remote clock offset: 8.835 ms

# Below is generated by plot.py at 2018-04-11 01:43:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.84 Mbit/s
95th percentile per-packet one-way delay: 15.513 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 54.96 Mbit/s
95th percentile per-packet one-way delay: 14.666 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 38.71 Mbit/s
95th percentile per-packet one-way delay: 16.561 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 33.59 Mbit/s
95th percentile per-packet one-way delay: 16.193 ms
Loss rate: 0.32%
```

Run 2: Report of Copa — Data Link



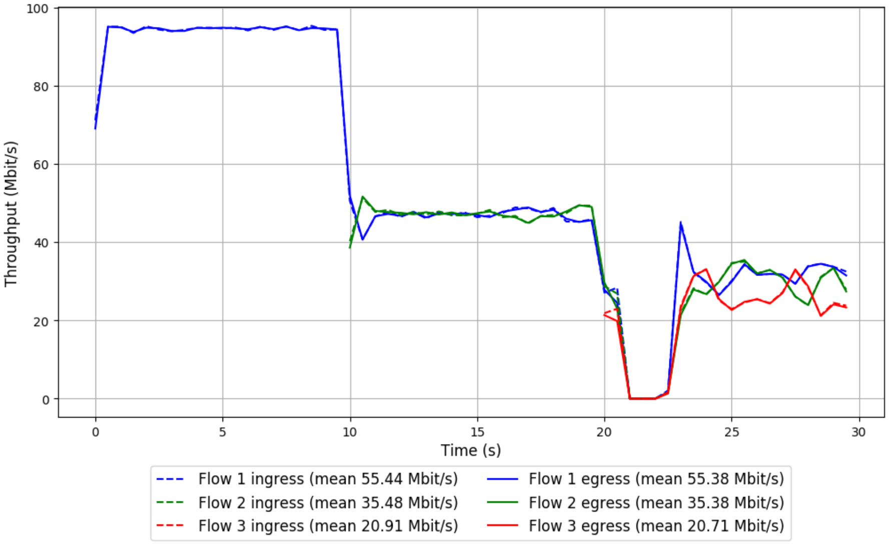


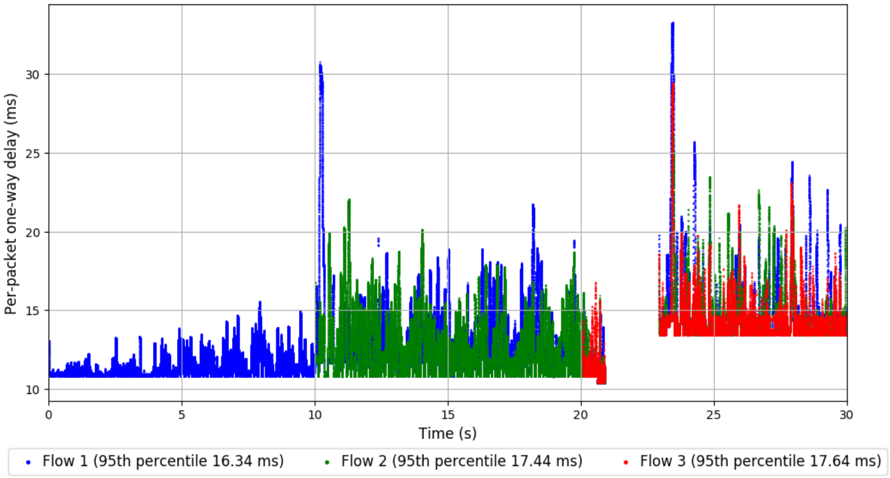
```
Run 3: Statistics of Copa

Start at: 2018-04-10 19:11:47
End at: 2018-04-10 19:12:17
Local clock offset: 0.877 ms
Remote clock offset: 3.55 ms

# Below is generated by plot.py at 2018-04-11 01:44:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.78 Mbit/s
95th percentile per-packet one-way delay: 16.856 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 55.38 Mbit/s
95th percentile per-packet one-way delay: 16.342 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 35.38 Mbit/s
95th percentile per-packet one-way delay: 17.444 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 20.71 Mbit/s
95th percentile per-packet one-way delay: 17.641 ms
Loss rate: 1.24%
```

Run 3: Report of Copa — Data Link



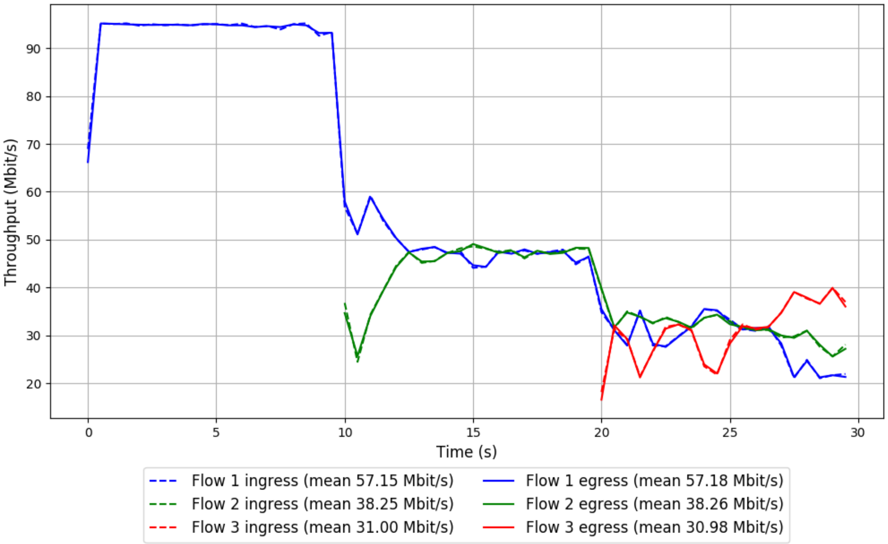


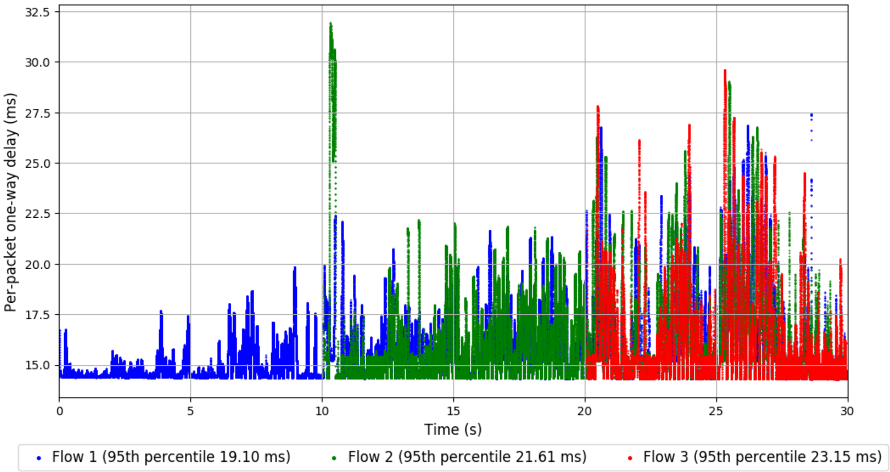
```
Run 4: Statistics of Copa

Start at: 2018-04-10 19:33:35
End at: 2018-04-10 19:34:06
Local clock offset: 1.57 ms
Remote clock offset: -1.306 ms

# Below is generated by plot.py at 2018-04-11 01:44:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.87 Mbit/s
95th percentile per-packet one-way delay: 20.510 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 57.18 Mbit/s
95th percentile per-packet one-way delay: 19.098 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 38.26 Mbit/s
95th percentile per-packet one-way delay: 21.613 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 30.98 Mbit/s
95th percentile per-packet one-way delay: 23.151 ms
Loss rate: 0.35%
```

Run 4: Report of Copa — Data Link



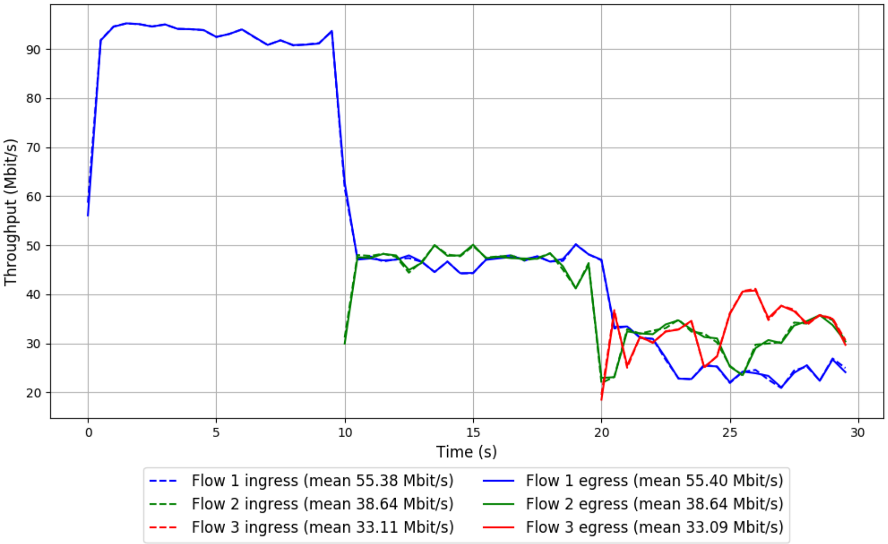


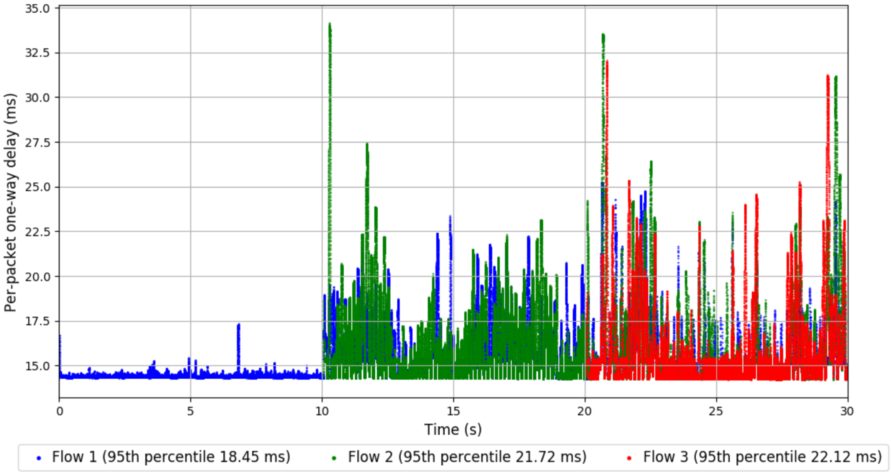
```
Run 5: Statistics of Copa

Start at: 2018-04-10 19:55:30
End at: 2018-04-10 19:56:00
Local clock offset: 1.425 ms
Remote clock offset: -3.794 ms

# Below is generated by plot.py at 2018-04-11 01:45:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.05 Mbit/s
95th percentile per-packet one-way delay: 19.987 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 55.40 Mbit/s
95th percentile per-packet one-way delay: 18.454 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 38.64 Mbit/s
95th percentile per-packet one-way delay: 21.721 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 33.09 Mbit/s
95th percentile per-packet one-way delay: 22.119 ms
Loss rate: 0.33%
```

Run 5: Report of Copa — Data Link



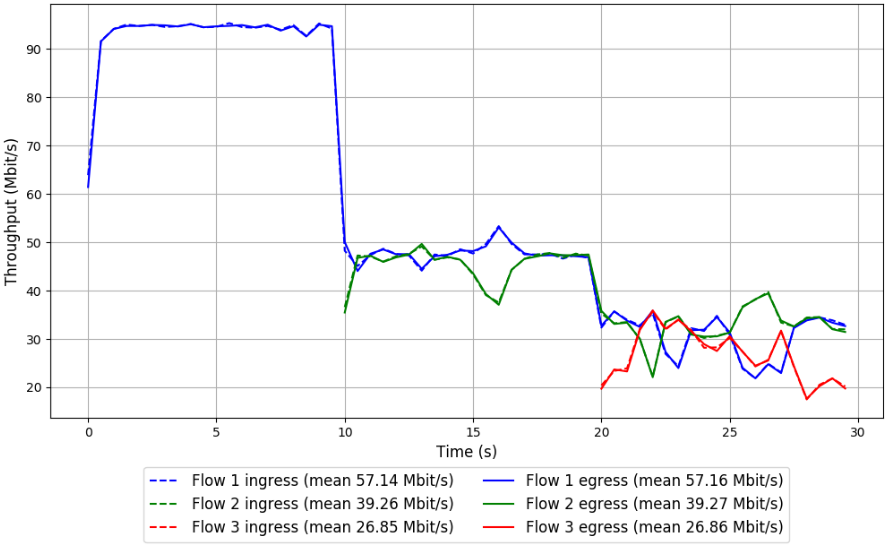


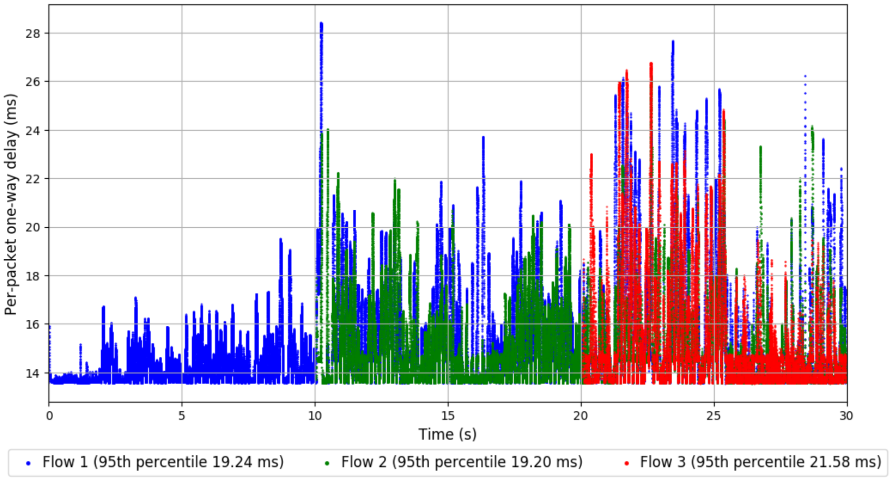
```
Run 6: Statistics of Copa

Start at: 2018-04-10 20:17:18
End at: 2018-04-10 20:17:48
Local clock offset: 1.393 ms
Remote clock offset: -7.477 ms

# Below is generated by plot.py at 2018-04-11 01:45:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.18 Mbit/s
95th percentile per-packet one-way delay: 19.533 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 57.16 Mbit/s
95th percentile per-packet one-way delay: 19.243 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 39.27 Mbit/s
95th percentile per-packet one-way delay: 19.205 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 26.86 Mbit/s
95th percentile per-packet one-way delay: 21.584 ms
Loss rate: 0.21%
```

Run 6: Report of Copa — Data Link



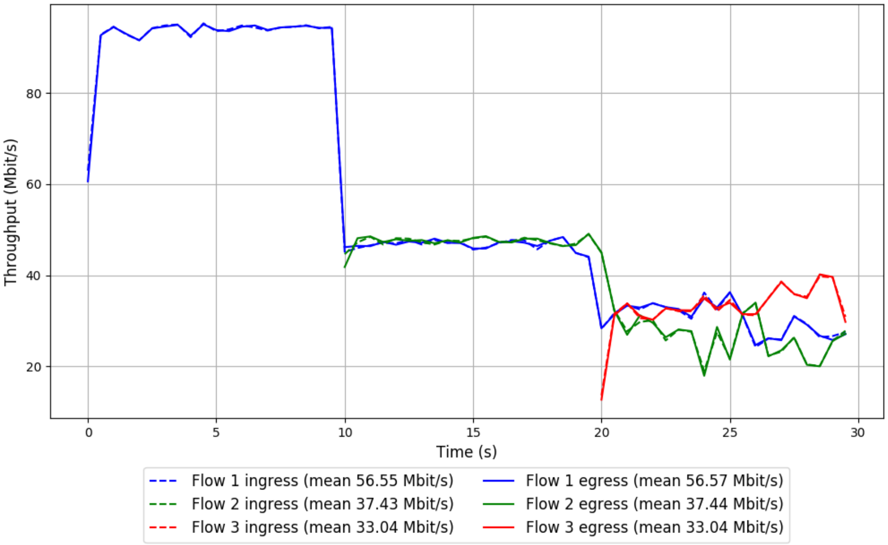


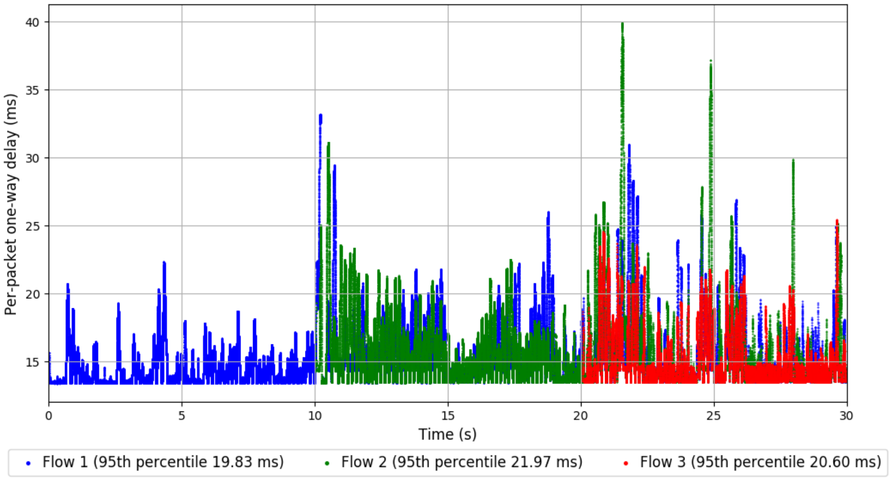
```
Run 7: Statistics of Copa

Start at: 2018-04-10 20:39:00
End at: 2018-04-10 20:39:30
Local clock offset: 1.136 ms
Remote clock offset: -5.103 ms

# Below is generated by plot.py at 2018-04-11 01:45:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.43 Mbit/s
95th percentile per-packet one-way delay: 20.540 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 56.57 Mbit/s
95th percentile per-packet one-way delay: 19.826 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 37.44 Mbit/s
95th percentile per-packet one-way delay: 21.968 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 33.04 Mbit/s
95th percentile per-packet one-way delay: 20.601 ms
Loss rate: 0.29%
```

Run 7: Report of Copa — Data Link



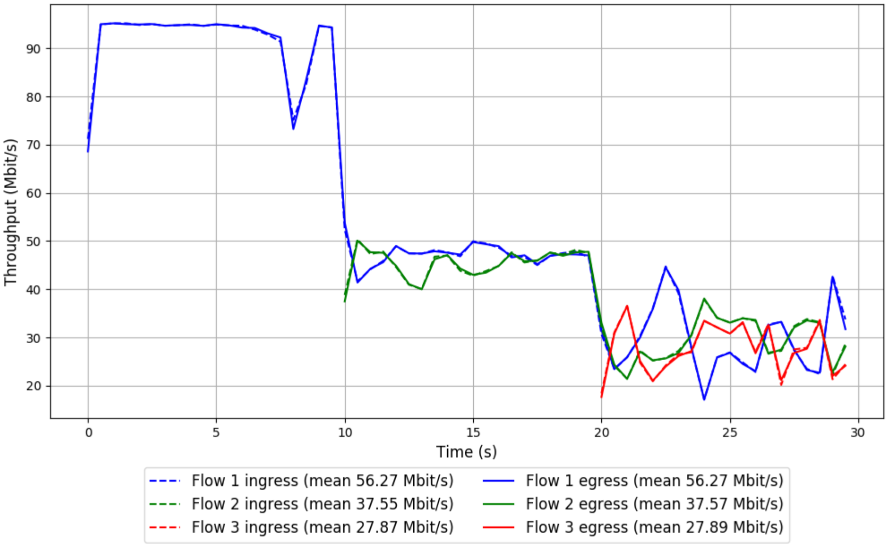


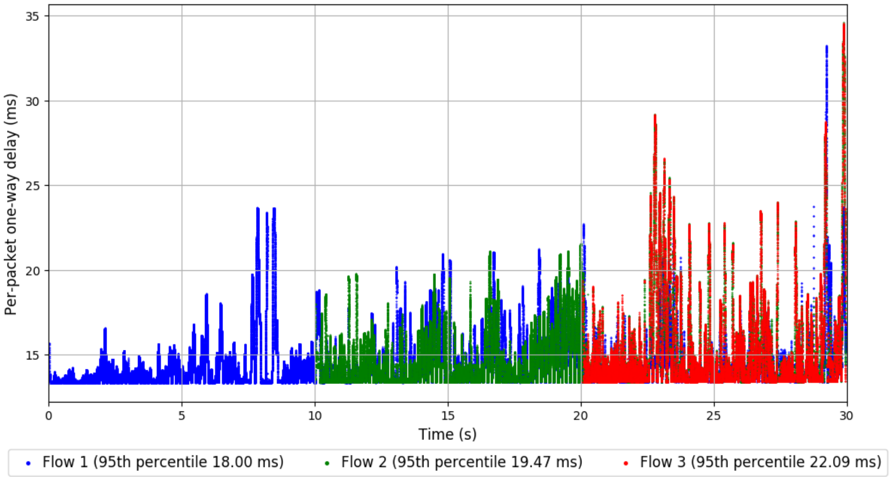
```
Run 8: Statistics of Copa

Start at: 2018-04-10 21:00:18
End at: 2018-04-10 21:00:48
Local clock offset: 1.335 ms
Remote clock offset: -2.784 ms

# Below is generated by plot.py at 2018-04-11 01:45:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.51 Mbit/s
95th percentile per-packet one-way delay: 18.820 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 56.27 Mbit/s
95th percentile per-packet one-way delay: 17.998 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 37.57 Mbit/s
95th percentile per-packet one-way delay: 19.474 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 27.89 Mbit/s
95th percentile per-packet one-way delay: 22.093 ms
Loss rate: 0.19%
```

Run 8: Report of Copa — Data Link



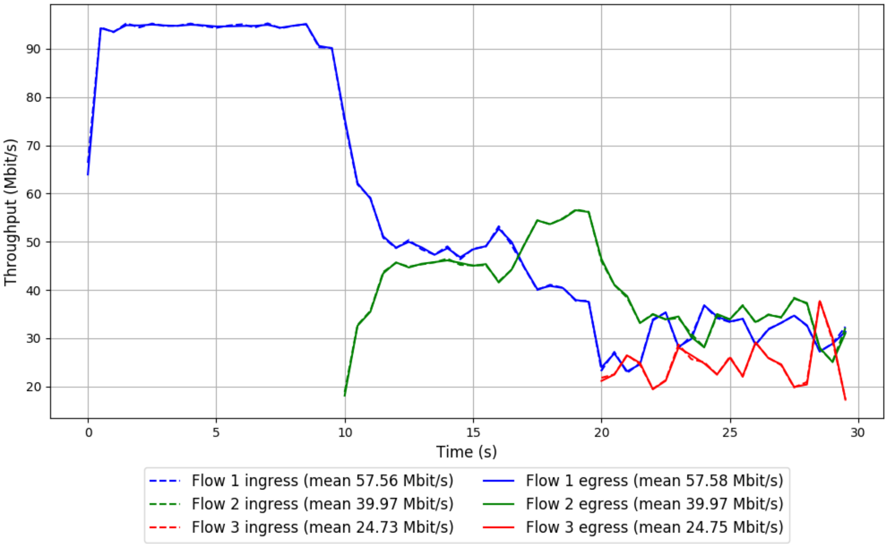


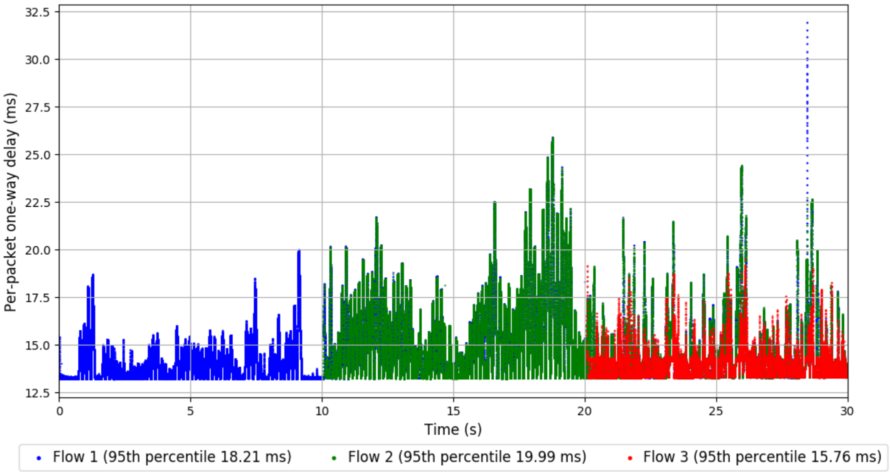
```
Run 9: Statistics of Copa

Start at: 2018-04-10 21:21:30
End at: 2018-04-10 21:22:00
Local clock offset: 0.721 ms
Remote clock offset: 3.008 ms

# Below is generated by plot.py at 2018-04-11 01:46:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.37 Mbit/s
95th percentile per-packet one-way delay: 18.571 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 57.58 Mbit/s
95th percentile per-packet one-way delay: 18.206 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 39.97 Mbit/s
95th percentile per-packet one-way delay: 19.992 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 24.75 Mbit/s
95th percentile per-packet one-way delay: 15.756 ms
Loss rate: 0.15%
```

Run 9: Report of Copa — Data Link



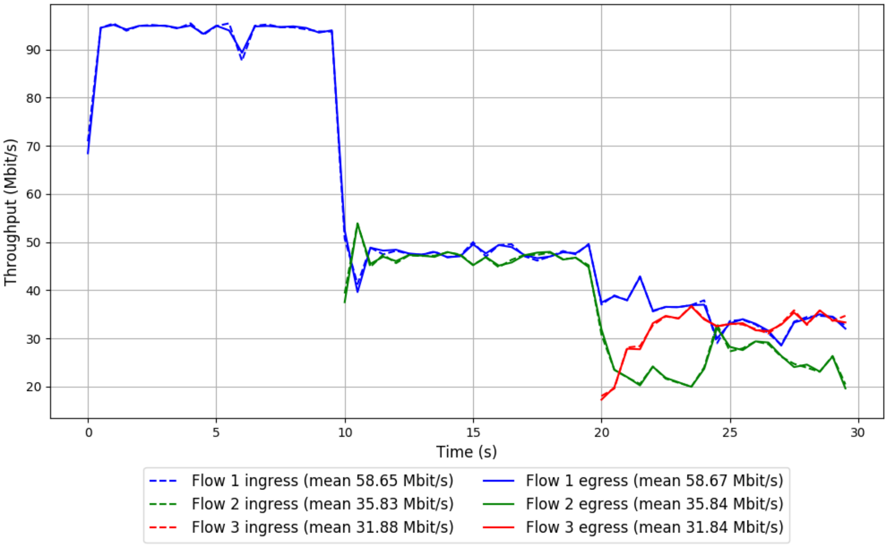


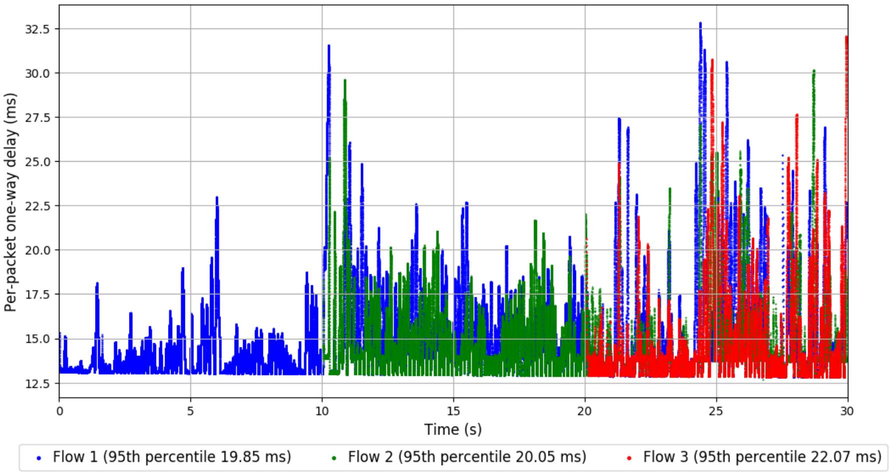
```
Run 10: Statistics of Copa

Start at: 2018-04-10 21:42:41
End at: 2018-04-10 21:43:11
Local clock offset: 0.663 ms
Remote clock offset: 1.922 ms

# Below is generated by plot.py at 2018-04-11 01:46:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.06 Mbit/s
95th percentile per-packet one-way delay: 20.245 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 58.67 Mbit/s
95th percentile per-packet one-way delay: 19.848 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 35.84 Mbit/s
95th percentile per-packet one-way delay: 20.051 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 31.84 Mbit/s
95th percentile per-packet one-way delay: 22.068 ms
Loss rate: 0.38%
```

Run 10: Report of Copa — Data Link



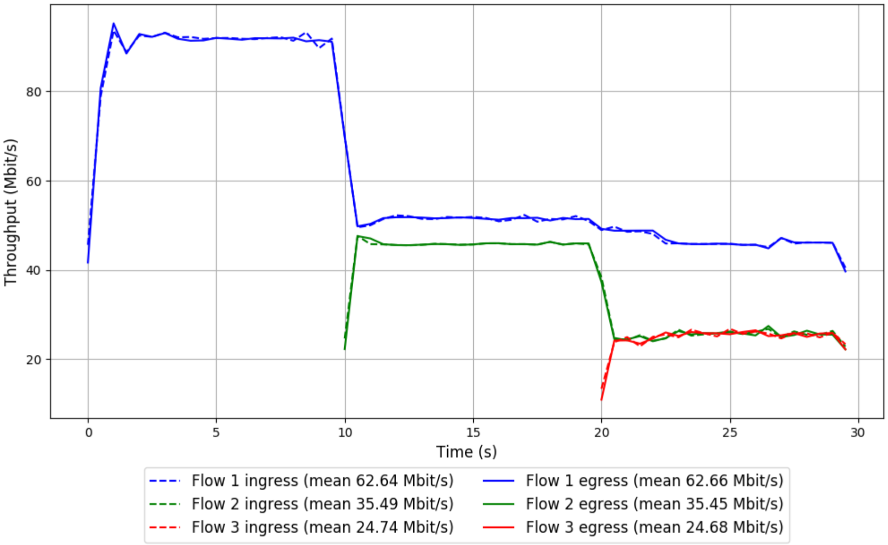


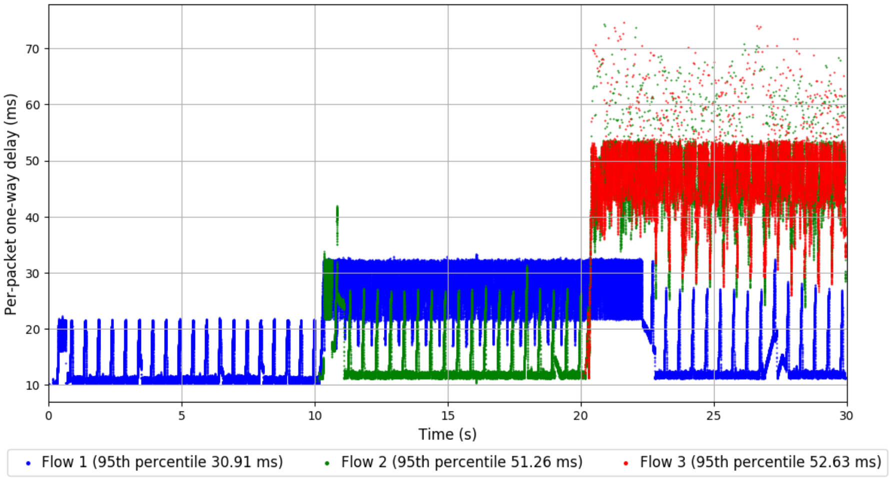
```
Run 1: Statistics of FillP

Start at: 2018-04-10 18:11:12
End at: 2018-04-10 18:11:42
Local clock offset: -2.25 ms
Remote clock offset: -0.185 ms

# Below is generated by plot.py at 2018-04-11 01:46:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.41 Mbit/s
95th percentile per-packet one-way delay: 49.540 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 62.66 Mbit/s
95th percentile per-packet one-way delay: 30.910 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 35.45 Mbit/s
95th percentile per-packet one-way delay: 51.258 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 24.68 Mbit/s
95th percentile per-packet one-way delay: 52.635 ms
Loss rate: 0.66%
```

Run 1: Report of FillP — Data Link



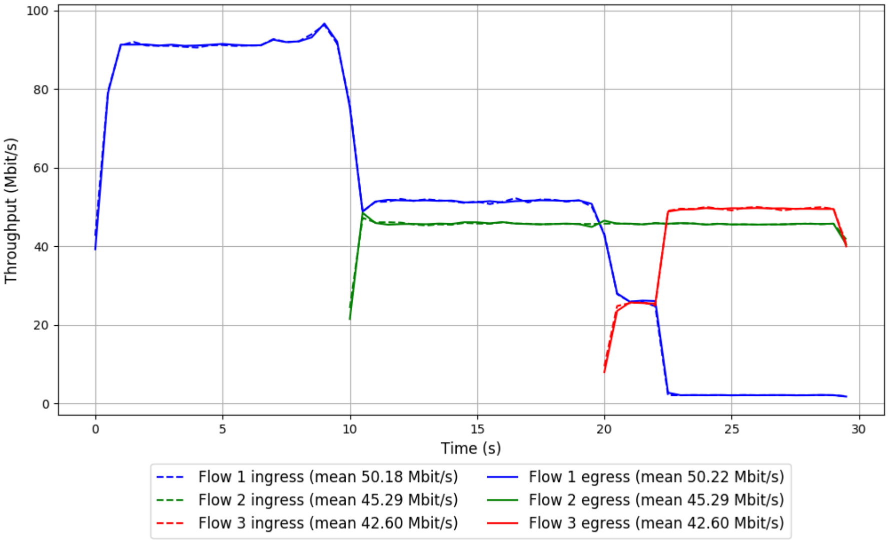


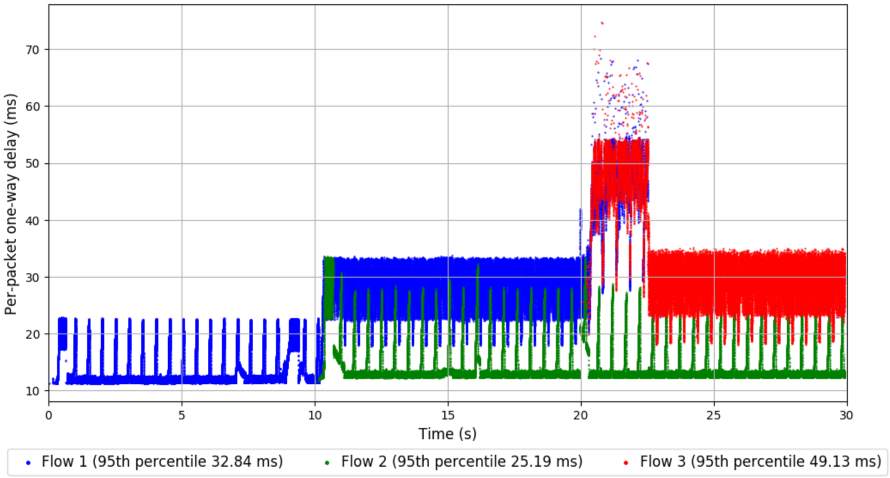
```
Run 2: Statistics of FillP

Start at: 2018-04-10 18:33:54
End at: 2018-04-10 18:34:24
Local clock offset: -2.574 ms
Remote clock offset: 7.323 ms

# Below is generated by plot.py at 2018-04-11 01:46:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.40 Mbit/s
95th percentile per-packet one-way delay: 33.214 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 50.22 Mbit/s
95th percentile per-packet one-way delay: 32.841 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 45.29 Mbit/s
95th percentile per-packet one-way delay: 25.189 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 42.60 Mbit/s
95th percentile per-packet one-way delay: 49.132 ms
Loss rate: 0.45%
```

Run 2: Report of FillP — Data Link



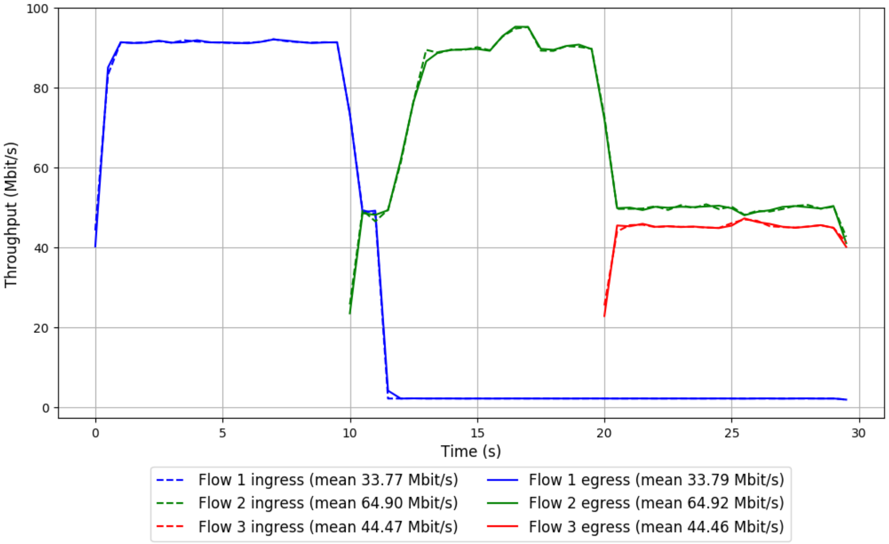


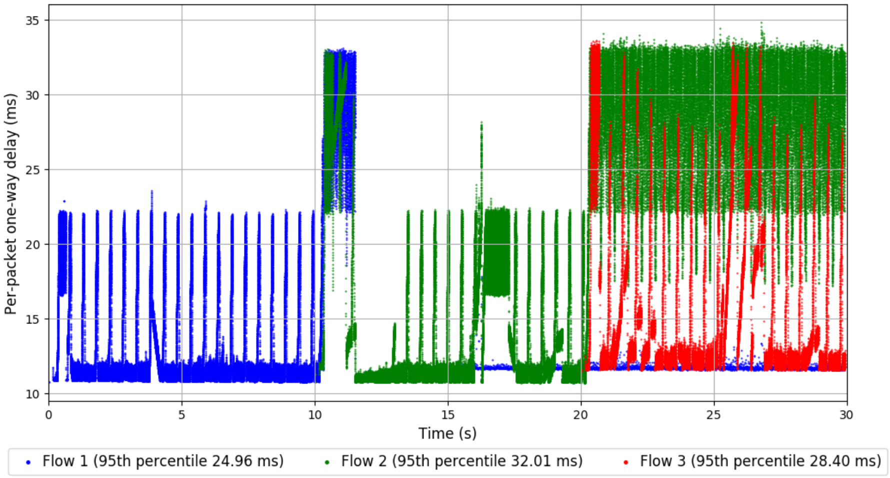
```
Run 3: Statistics of FillP

Start at: 2018-04-10 18:55:59
End at: 2018-04-10 18:56:29
Local clock offset: -0.059 ms
Remote clock offset: 5.555 ms

# Below is generated by plot.py at 2018-04-11 01:46:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.69 Mbit/s
95th percentile per-packet one-way delay: 31.179 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 33.79 Mbit/s
95th percentile per-packet one-way delay: 24.960 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 64.92 Mbit/s
95th percentile per-packet one-way delay: 32.007 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 44.46 Mbit/s
95th percentile per-packet one-way delay: 28.404 ms
Loss rate: 0.26%
```

Run 3: Report of FillP — Data Link



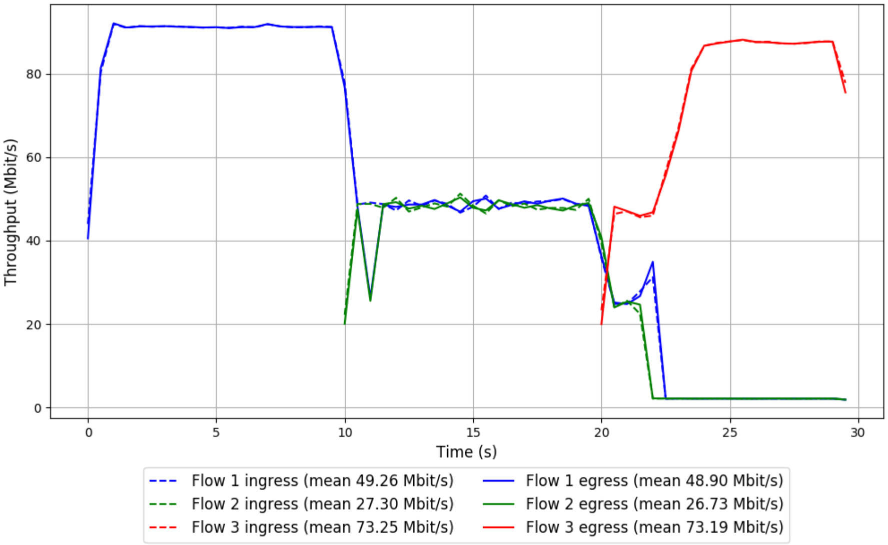


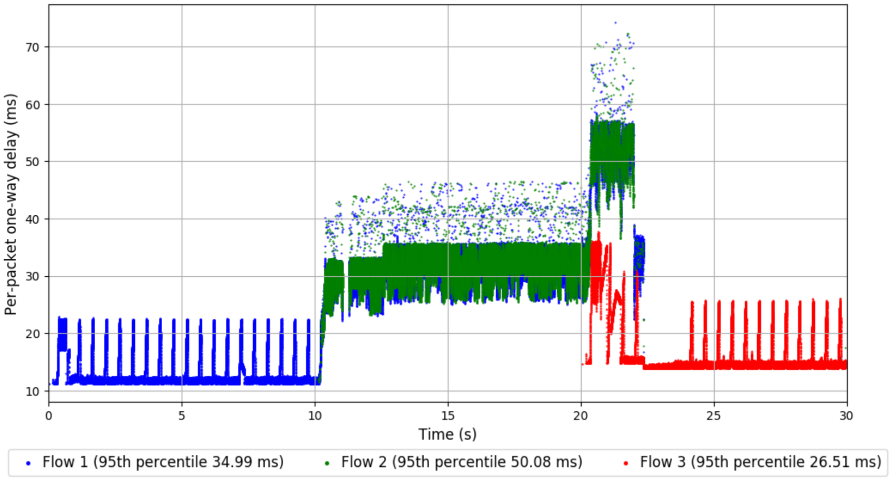
```
Run 4: Statistics of FillP

Start at: 2018-04-10 19:18:11
End at: 2018-04-10 19:18:41
Local clock offset: 1.347 ms
Remote clock offset: 3.558 ms

# Below is generated by plot.py at 2018-04-11 01:46:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.87 Mbit/s
95th percentile per-packet one-way delay: 35.153 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 48.90 Mbit/s
95th percentile per-packet one-way delay: 34.995 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 26.73 Mbit/s
95th percentile per-packet one-way delay: 50.081 ms
Loss rate: 2.17%
-- Flow 3:
Average throughput: 73.19 Mbit/s
95th percentile per-packet one-way delay: 26.507 ms
Loss rate: 0.34%
```

Run 4: Report of FillP — Data Link



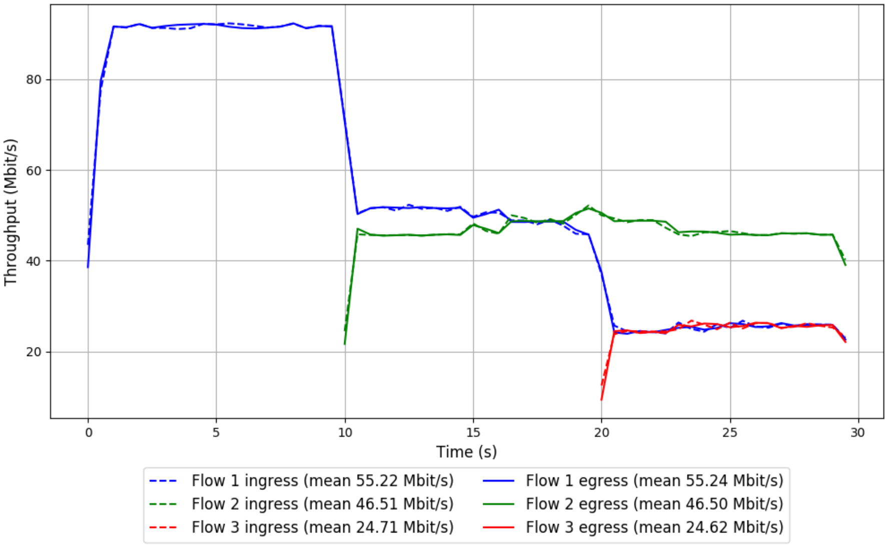


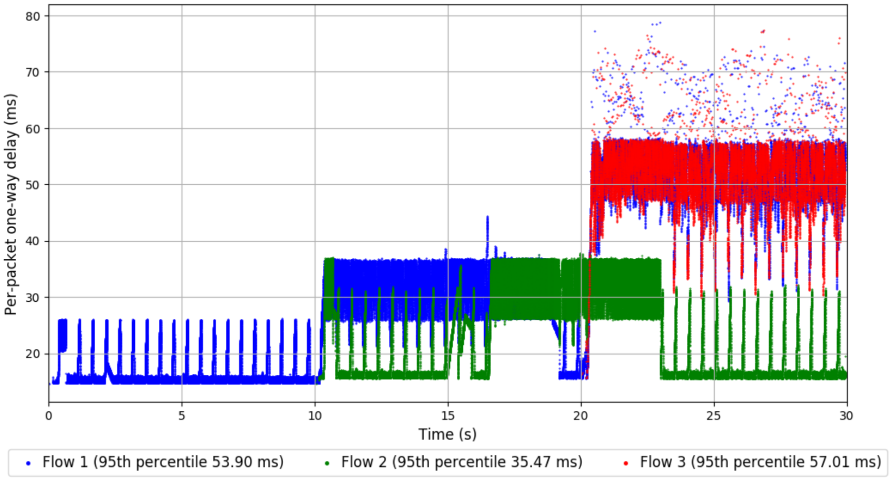
```
Run 5: Statistics of FillP

Start at: 2018-04-10 19:39:49
End at: 2018-04-10 19:40:19
Local clock offset: 1.509 ms
Remote clock offset: -2.75 ms

# Below is generated by plot.py at 2018-04-11 01:46:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.31 Mbit/s
95th percentile per-packet one-way delay: 54.291 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 55.24 Mbit/s
95th percentile per-packet one-way delay: 53.902 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 46.50 Mbit/s
95th percentile per-packet one-way delay: 35.474 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 24.62 Mbit/s
95th percentile per-packet one-way delay: 57.009 ms
Loss rate: 0.75%
```

Run 5: Report of FillP — Data Link



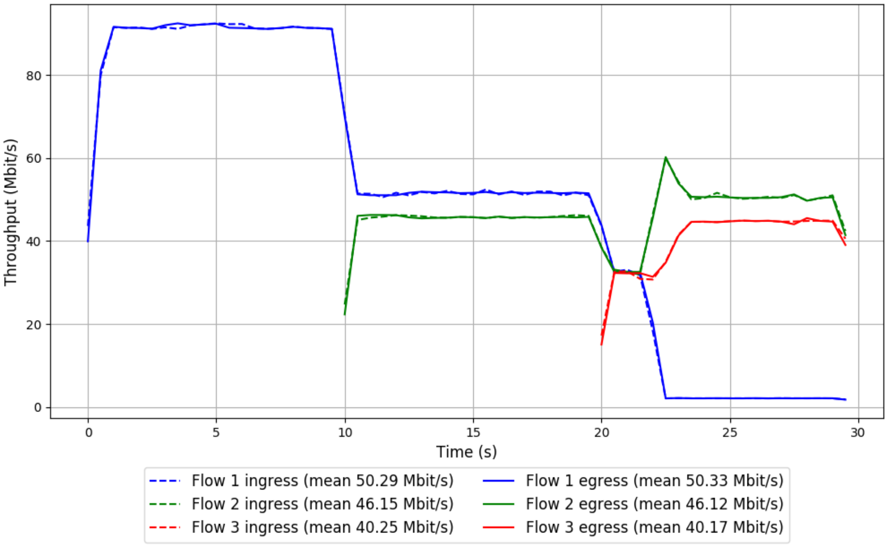


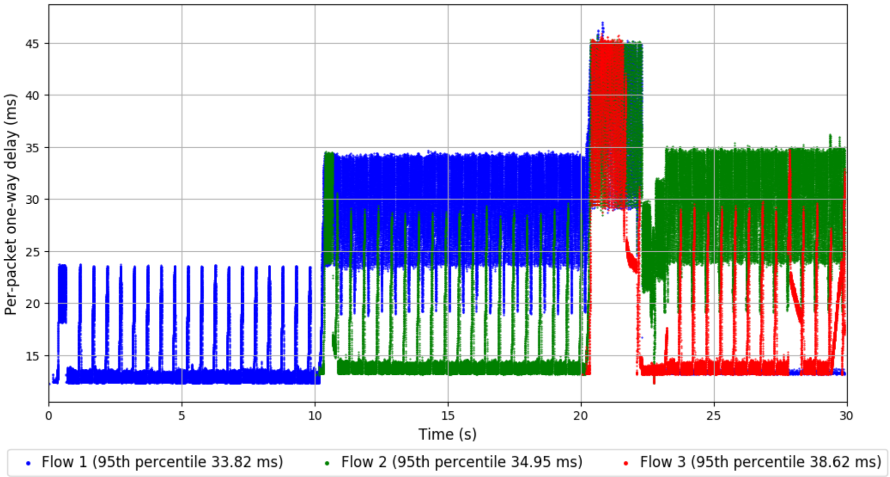
```
Run 6: Statistics of FillP

Start at: 2018-04-10 20:01:46
End at: 2018-04-10 20:02:16
Local clock offset: 0.783 ms
Remote clock offset: -4.86 ms

# Below is generated by plot.py at 2018-04-11 01:46:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.27 Mbit/s
95th percentile per-packet one-way delay: 34.453 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 50.33 Mbit/s
95th percentile per-packet one-way delay: 33.817 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 46.12 Mbit/s
95th percentile per-packet one-way delay: 34.952 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 40.17 Mbit/s
95th percentile per-packet one-way delay: 38.621 ms
Loss rate: 0.38%
```

Run 6: Report of FillP — Data Link



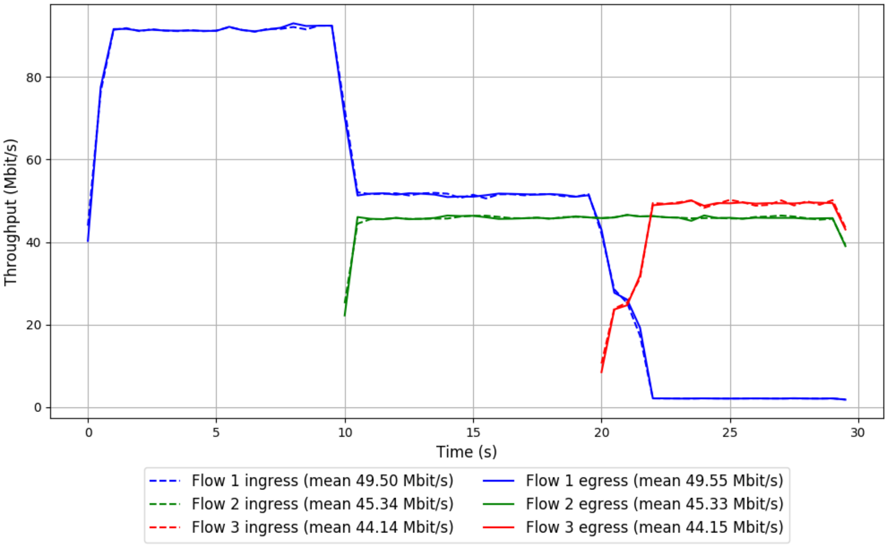


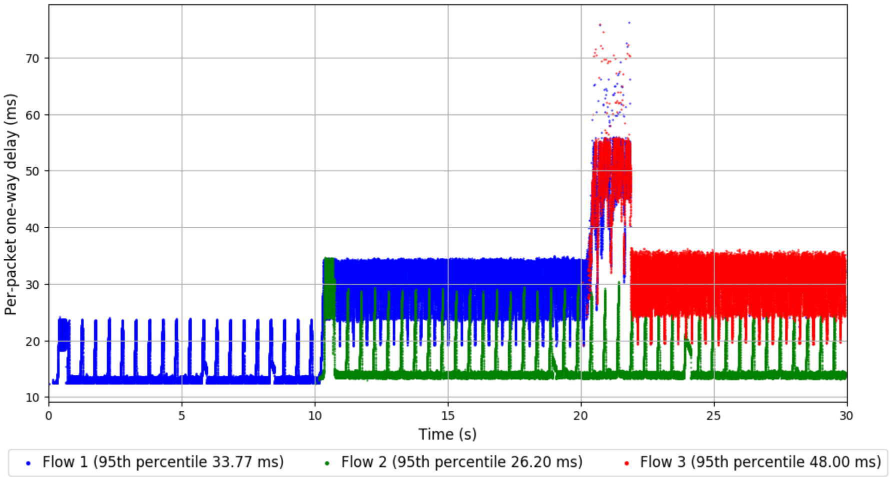
```
Run 7: Statistics of FillP

Start at: 2018-04-10 20:23:24
End at: 2018-04-10 20:23:54
Local clock offset: 0.956 ms
Remote clock offset: -7.511 ms

# Below is generated by plot.py at 2018-04-11 01:47:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.29 Mbit/s
95th percentile per-packet one-way delay: 34.053 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 49.55 Mbit/s
95th percentile per-packet one-way delay: 33.766 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 45.33 Mbit/s
95th percentile per-packet one-way delay: 26.203 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 44.15 Mbit/s
95th percentile per-packet one-way delay: 48.004 ms
Loss rate: 0.41%
```

Run 7: Report of FillP — Data Link



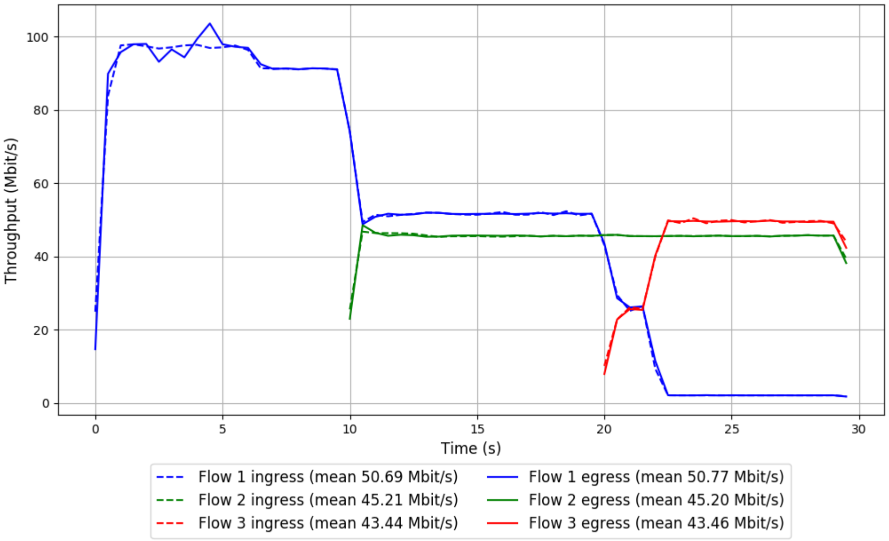


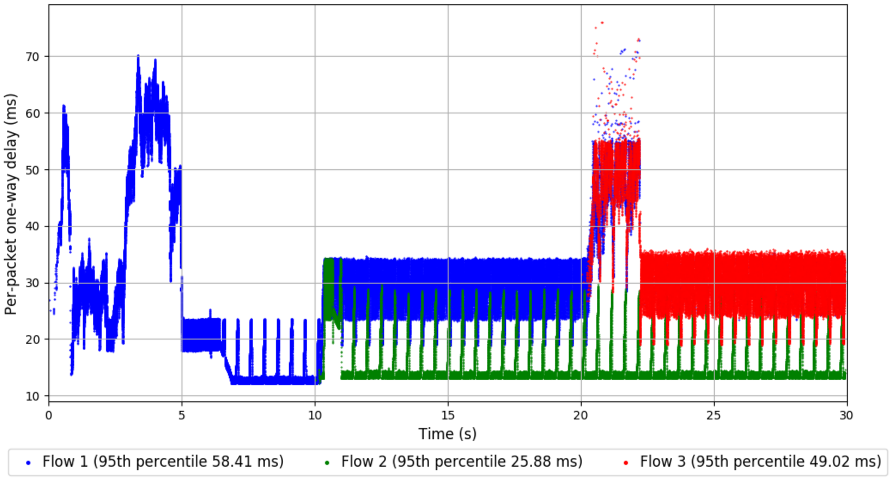
```
Run 8: Statistics of FillP

Start at: 2018-04-10 20:45:09
End at: 2018-04-10 20:45:39
Local clock offset: 0.722 ms
Remote clock offset: -3.398 ms

# Below is generated by plot.py at 2018-04-11 01:48:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.20 Mbit/s
95th percentile per-packet one-way delay: 53.646 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 50.77 Mbit/s
95th percentile per-packet one-way delay: 58.413 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 45.20 Mbit/s
95th percentile per-packet one-way delay: 25.876 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 43.46 Mbit/s
95th percentile per-packet one-way delay: 49.020 ms
Loss rate: 0.50%
```

Run 8: Report of FillP — Data Link



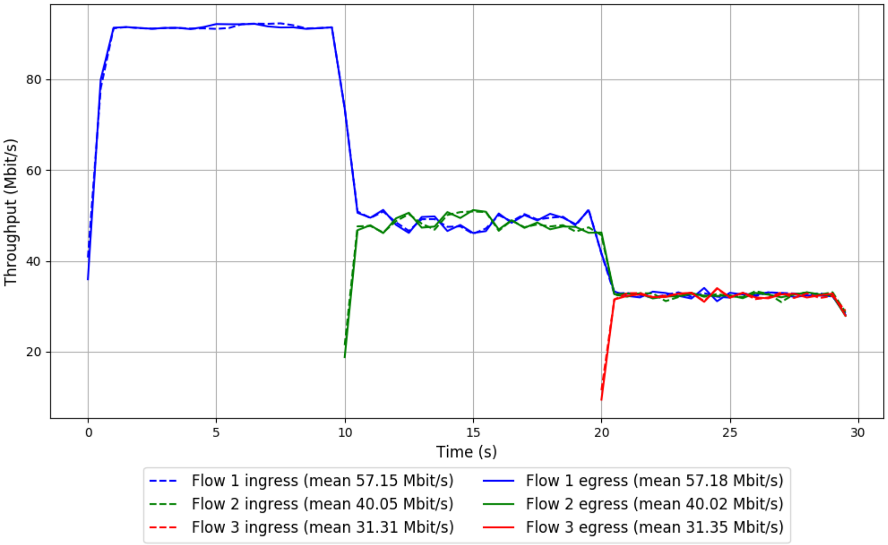


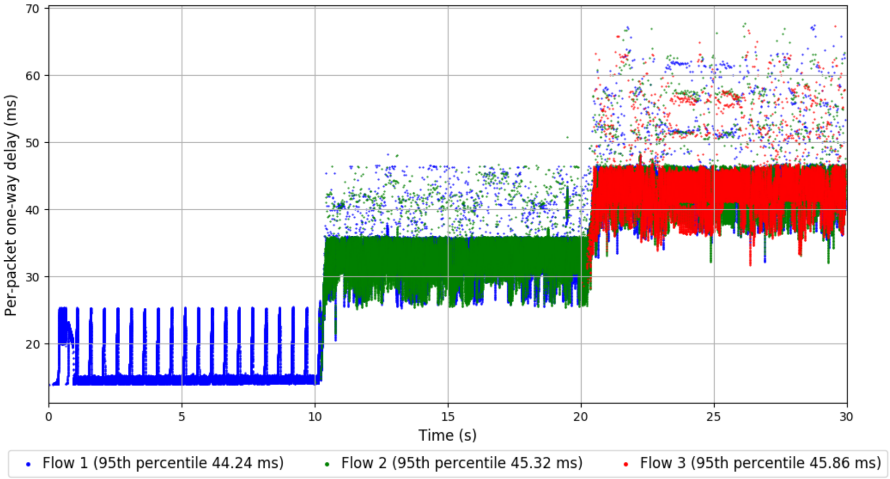
```
Run 9: Statistics of FillP

Start at: 2018-04-10 21:06:22
End at: 2018-04-10 21:06:52
Local clock offset: 0.851 ms
Remote clock offset: -2.088 ms

# Below is generated by plot.py at 2018-04-11 01:48:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.16 Mbit/s
95th percentile per-packet one-way delay: 45.053 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 57.18 Mbit/s
95th percentile per-packet one-way delay: 44.243 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 40.02 Mbit/s
95th percentile per-packet one-way delay: 45.320 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 31.35 Mbit/s
95th percentile per-packet one-way delay: 45.860 ms
Loss rate: 0.51%
```

Run 9: Report of FillP — Data Link



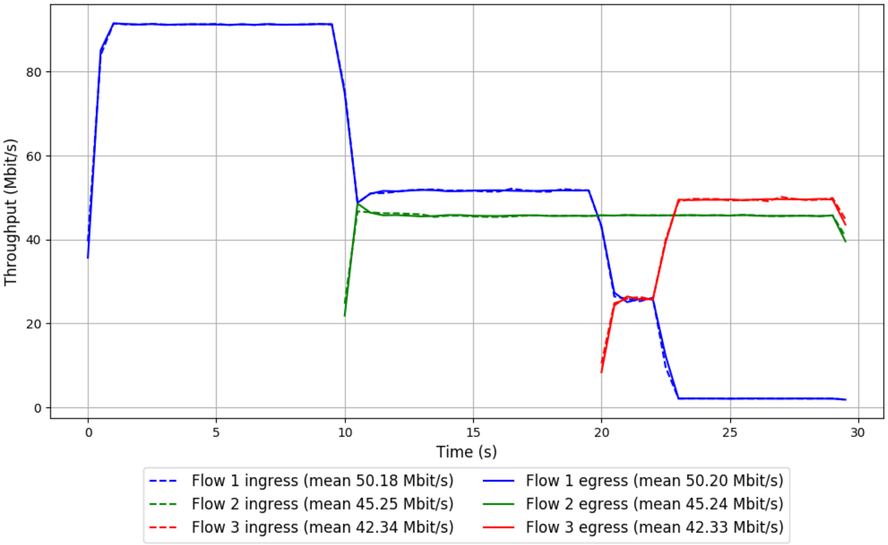


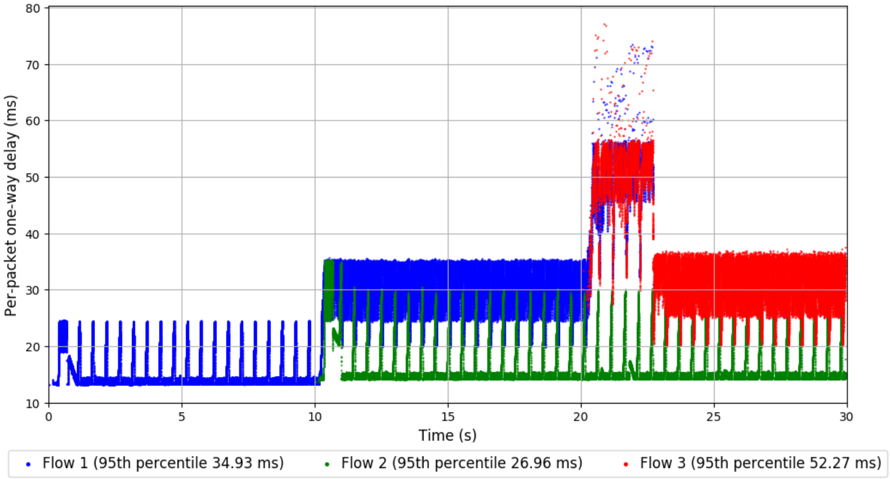
```
Run 10: Statistics of FillP

Start at: 2018-04-10 21:27:35
End at: 2018-04-10 21:28:05
Local clock offset: -0.532 ms
Remote clock offset: 3.061 ms

# Below is generated by plot.py at 2018-04-11 01:48:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.29 Mbit/s
95th percentile per-packet one-way delay: 35.443 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 50.20 Mbit/s
95th percentile per-packet one-way delay: 34.932 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 45.24 Mbit/s
95th percentile per-packet one-way delay: 26.957 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 42.33 Mbit/s
95th percentile per-packet one-way delay: 52.274 ms
Loss rate: 0.53%
```

Run 10: Report of FillP — Data Link



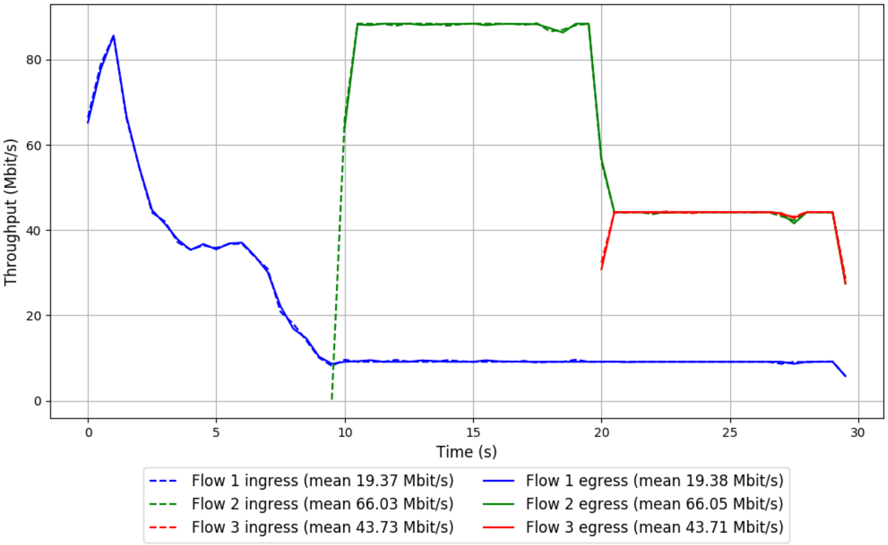


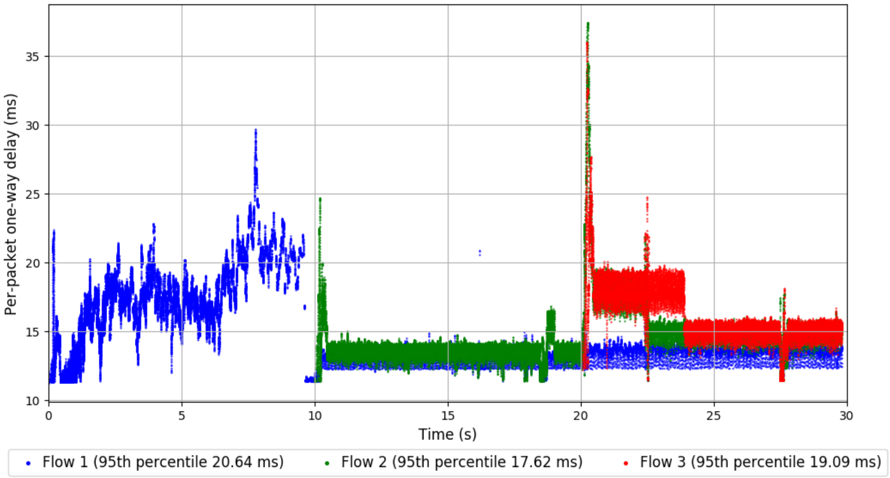
```
Run 1: Statistics of Indigo-1-32

Start at: 2018-04-10 18:30:06
End at: 2018-04-10 18:30:36
Local clock offset: -2.74 ms
Remote clock offset: 6.254 ms

# Below is generated by plot.py at 2018-04-11 01:48:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.56 Mbit/s
95th percentile per-packet one-way delay: 18.989 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 19.38 Mbit/s
95th percentile per-packet one-way delay: 20.639 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 66.05 Mbit/s
95th percentile per-packet one-way delay: 17.622 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 43.71 Mbit/s
95th percentile per-packet one-way delay: 19.085 ms
Loss rate: 0.28%
```

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



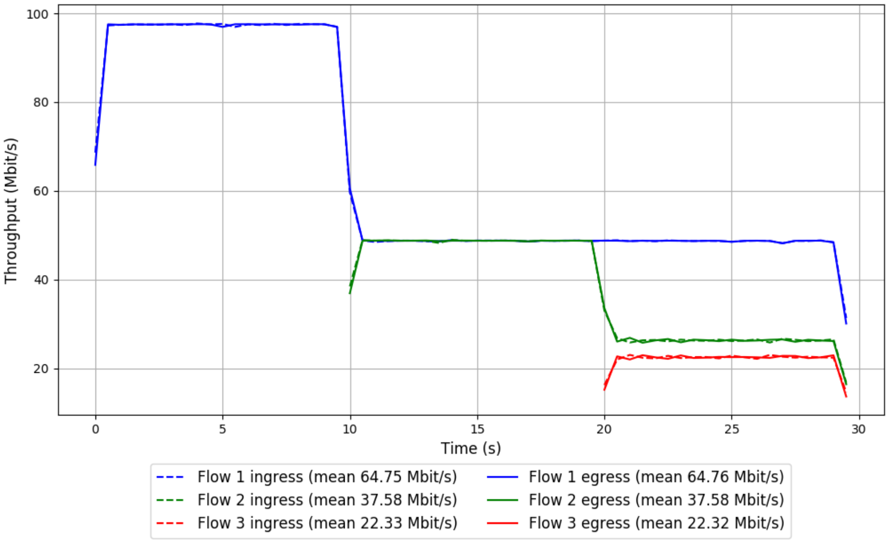


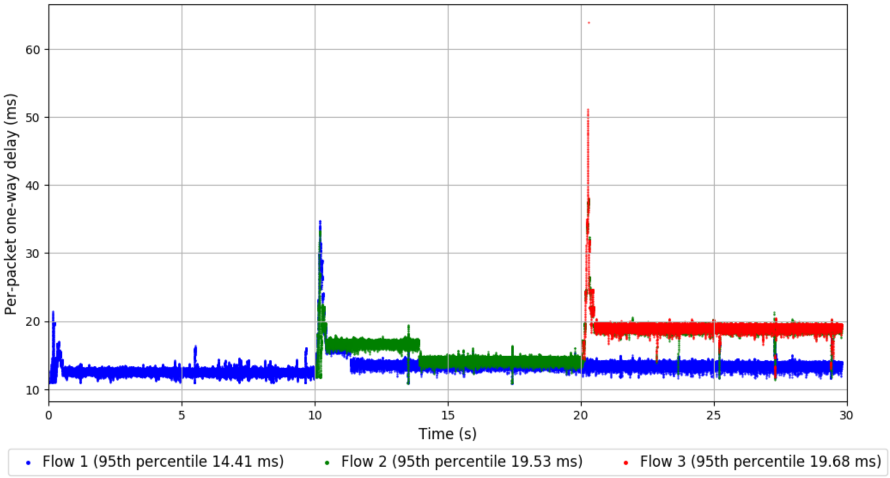
```
Run 2: Statistics of Indigo-1-32

Start at: 2018-04-10 18:52:12
End at: 2018-04-10 18:52:42
Local clock offset: -0.345 ms
Remote clock offset: 6.97 ms

# Below is generated by plot.py at 2018-04-11 01:48:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.00 Mbit/s
95th percentile per-packet one-way delay: 19.484 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 64.76 Mbit/s
95th percentile per-packet one-way delay: 14.409 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 37.58 Mbit/s
95th percentile per-packet one-way delay: 19.534 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 22.32 Mbit/s
95th percentile per-packet one-way delay: 19.681 ms
Loss rate: 0.32%
```

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



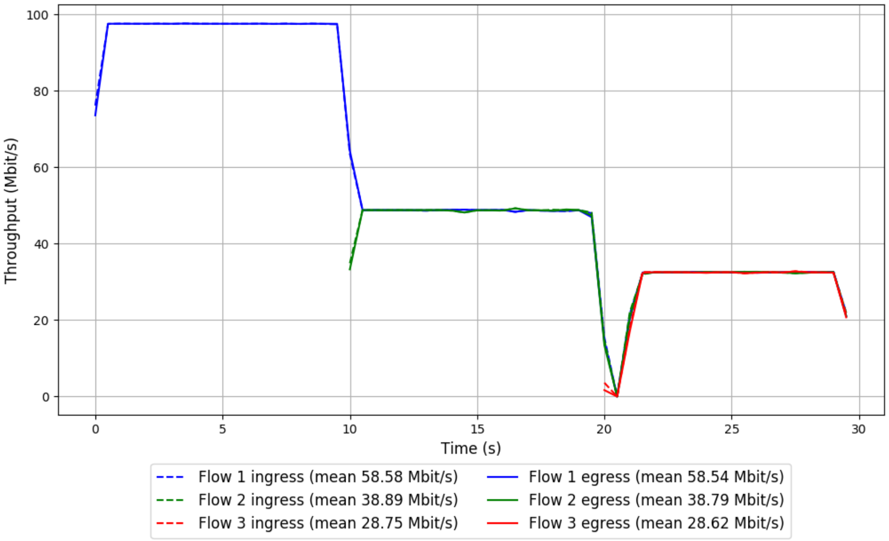


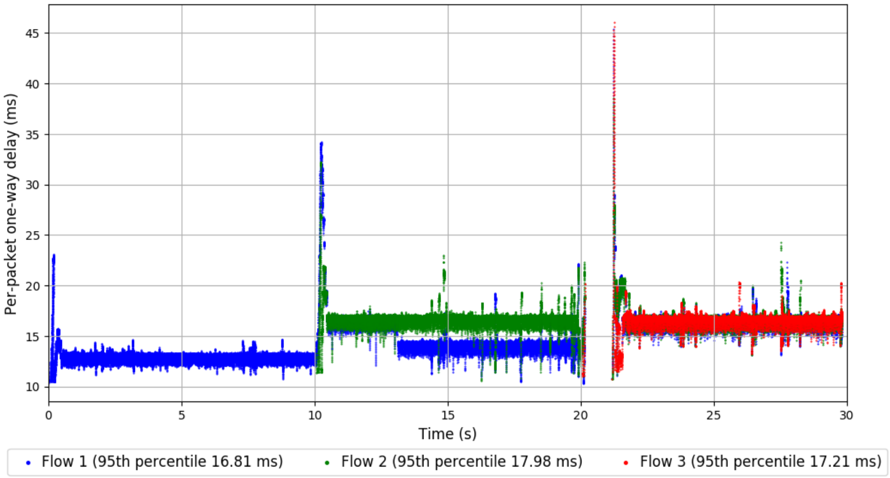
```
Run 3: Statistics of Indigo-1-32

Start at: 2018-04-10 19:14:23
End at: 2018-04-10 19:14:53
Local clock offset: 1.661 ms
Remote clock offset: 4.53 ms

# Below is generated by plot.py at 2018-04-11 01:48:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.62 Mbit/s
95th percentile per-packet one-way delay: 17.031 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 58.54 Mbit/s
95th percentile per-packet one-way delay: 16.806 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 38.79 Mbit/s
95th percentile per-packet one-way delay: 17.977 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 28.62 Mbit/s
95th percentile per-packet one-way delay: 17.213 ms
Loss rate: 0.68%
```

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



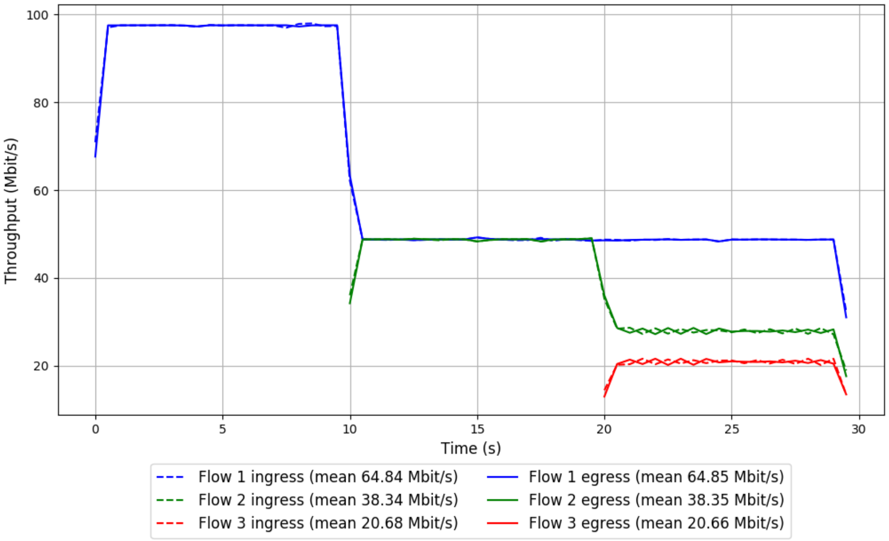


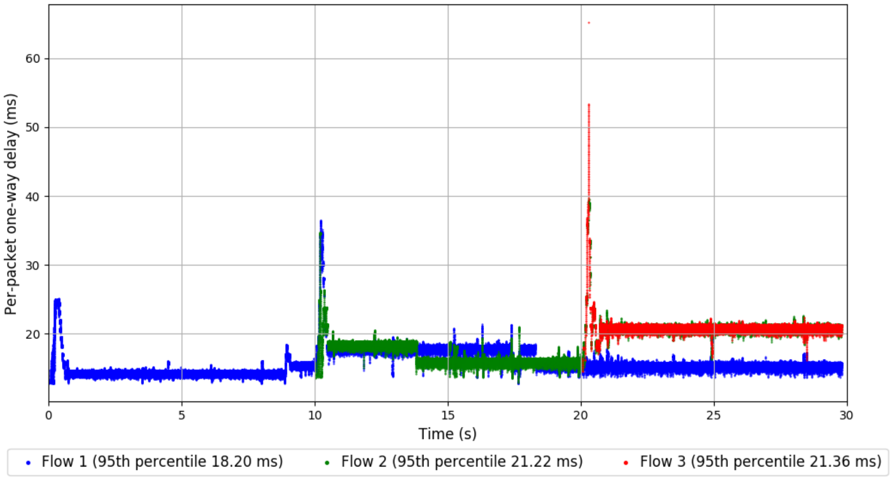
```
Run 4: Statistics of Indigo-1-32

Start at: 2018-04-10 19:36:07
End at: 2018-04-10 19:36:37
Local clock offset: 1.036 ms
Remote clock offset: -0.631 ms

# Below is generated by plot.py at 2018-04-11 01:48:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.05 Mbit/s
95th percentile per-packet one-way delay: 21.173 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 64.85 Mbit/s
95th percentile per-packet one-way delay: 18.199 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 38.35 Mbit/s
95th percentile per-packet one-way delay: 21.223 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 20.66 Mbit/s
95th percentile per-packet one-way delay: 21.356 ms
Loss rate: 0.34%
```

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



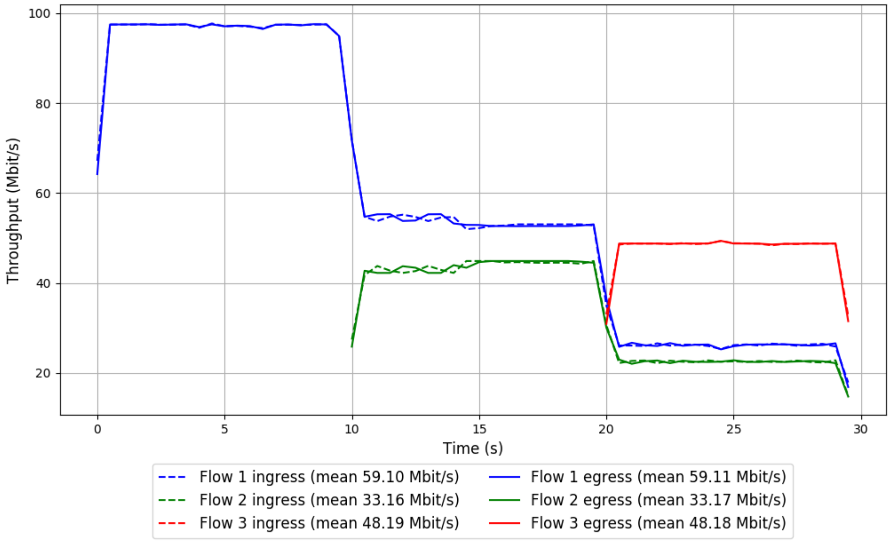


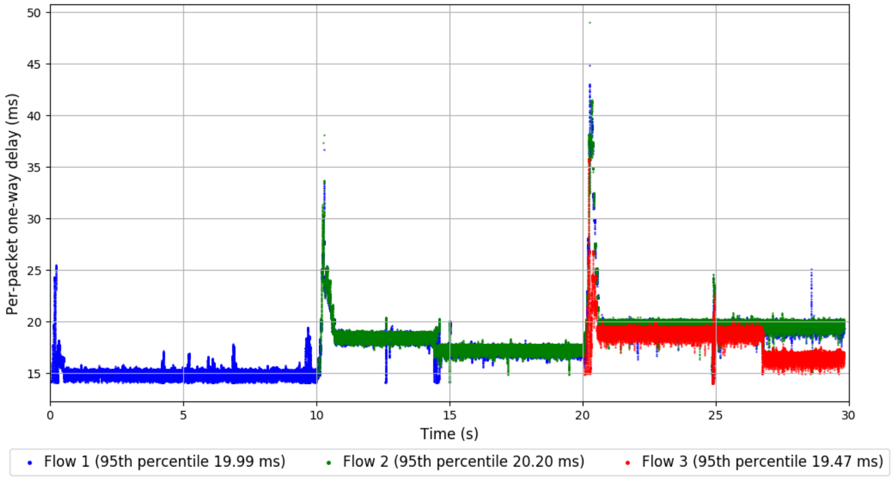
```
Run 5: Statistics of Indigo-1-32

Start at: 2018-04-10 19:58:00
End at: 2018-04-10 19:58:30
Local clock offset: 1.388 ms
Remote clock offset: -4.246 ms

# Below is generated by plot.py at 2018-04-11 01:49:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.86 Mbit/s
95th percentile per-packet one-way delay: 20.057 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 59.11 Mbit/s
95th percentile per-packet one-way delay: 19.987 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 33.17 Mbit/s
95th percentile per-packet one-way delay: 20.195 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 48.18 Mbit/s
95th percentile per-packet one-way delay: 19.473 ms
Loss rate: 0.30%
```

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



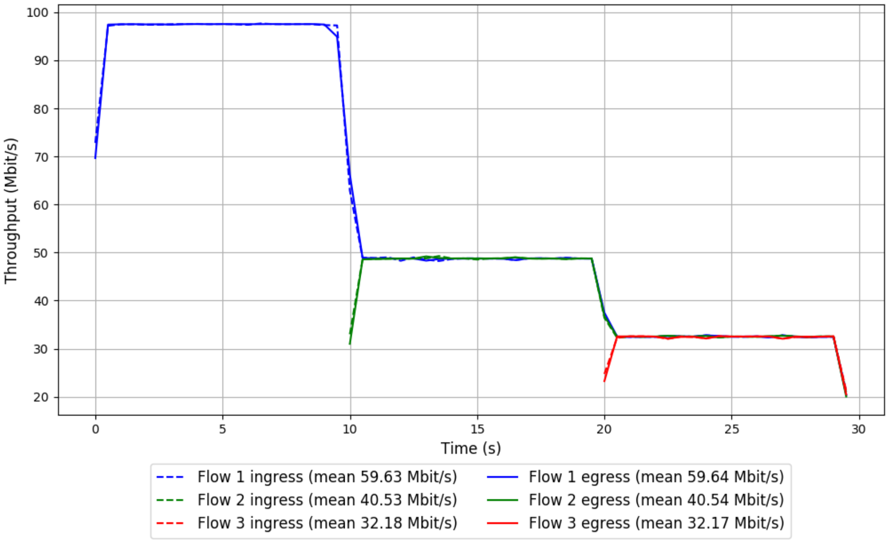


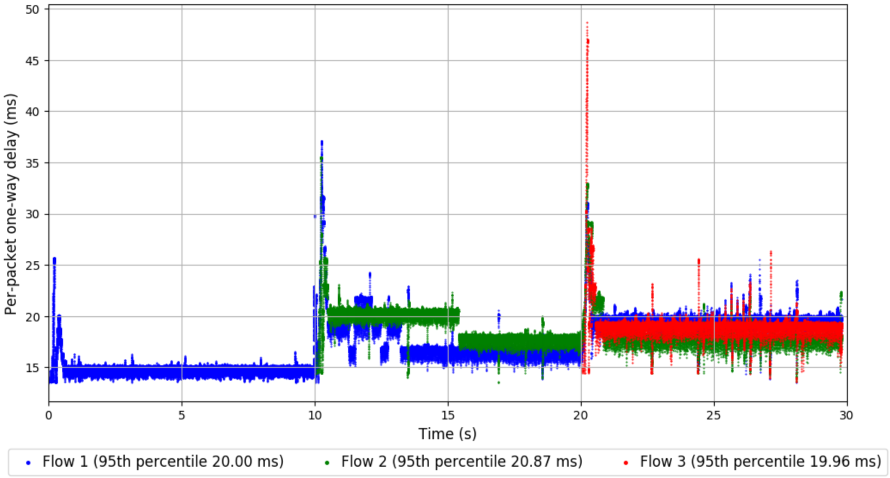
```
Run 6: Statistics of Indigo-1-32

Start at: 2018-04-10 20:19:48
End at: 2018-04-10 20:20:18
Local clock offset: 1.161 ms
Remote clock offset: -7.86 ms

# Below is generated by plot.py at 2018-04-11 01:49:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.02 Mbit/s
95th percentile per-packet one-way delay: 20.605 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 59.64 Mbit/s
95th percentile per-packet one-way delay: 19.998 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 40.54 Mbit/s
95th percentile per-packet one-way delay: 20.869 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 32.17 Mbit/s
95th percentile per-packet one-way delay: 19.959 ms
Loss rate: 0.32%
```

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



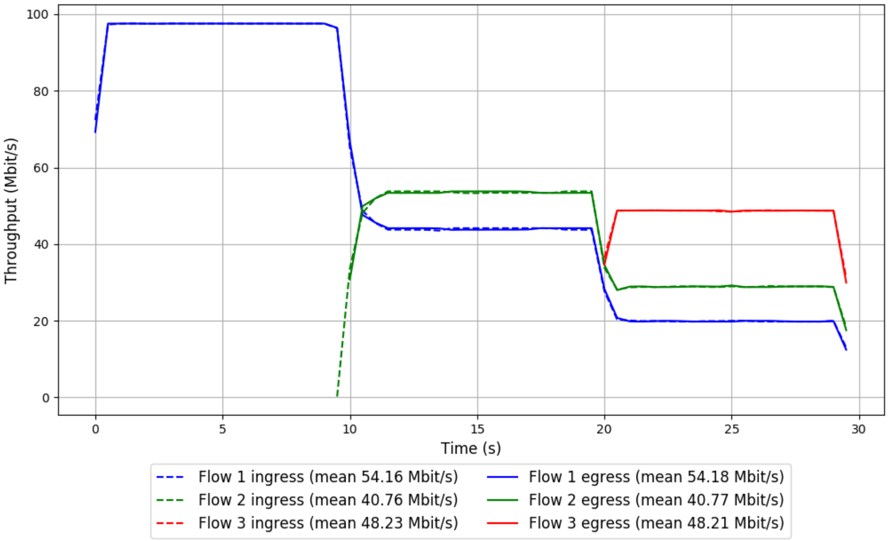


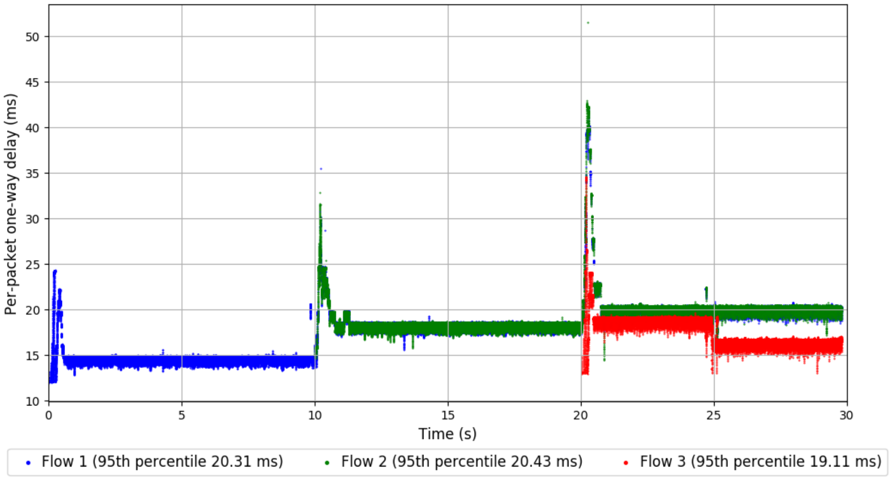
```
Run 7: Statistics of Indigo-1-32

Start at: 2018-04-10 20:41:30
End at: 2018-04-10 20:42:00
Local clock offset: 0.929 ms
Remote clock offset: -3.405 ms

# Below is generated by plot.py at 2018-04-11 01:49:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.07 Mbit/s
95th percentile per-packet one-way delay: 20.343 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 54.18 Mbit/s
95th percentile per-packet one-way delay: 20.312 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 40.77 Mbit/s
95th percentile per-packet one-way delay: 20.429 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 48.21 Mbit/s
95th percentile per-packet one-way delay: 19.108 ms
Loss rate: 0.30%
```

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



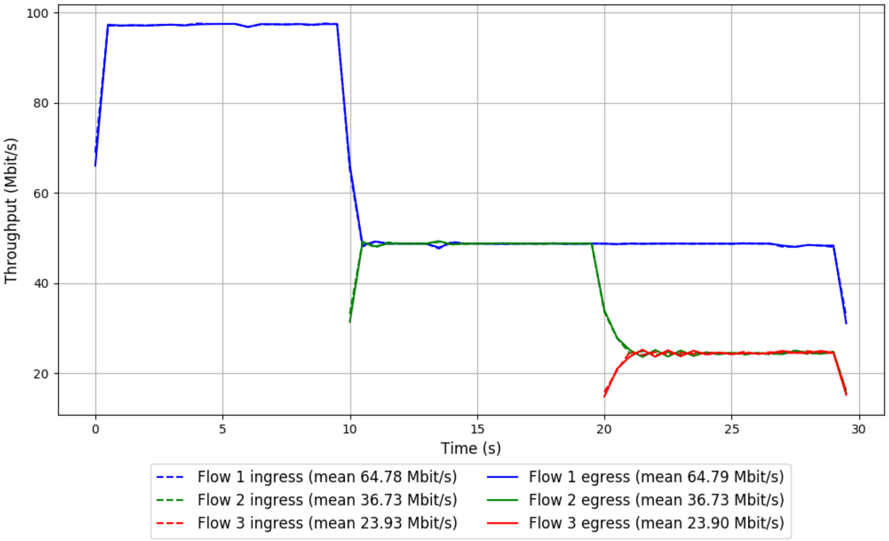


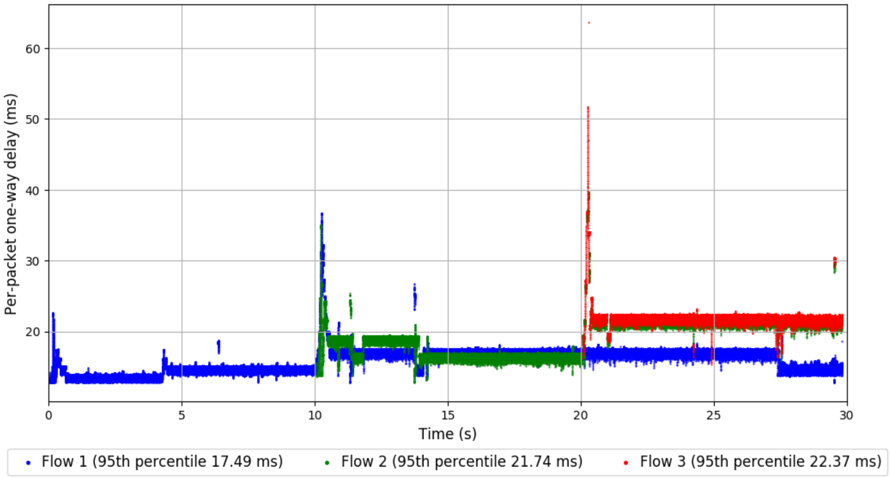
```
Run 8: Statistics of Indigo-1-32

Start at: 2018-04-10 21:02:45
End at: 2018-04-10 21:03:15
Local clock offset: 0.874 ms
Remote clock offset: -2.412 ms

# Below is generated by plot.py at 2018-04-11 01:49:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.96 Mbit/s
95th percentile per-packet one-way delay: 22.098 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 64.79 Mbit/s
95th percentile per-packet one-way delay: 17.491 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 36.73 Mbit/s
95th percentile per-packet one-way delay: 21.736 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 23.90 Mbit/s
95th percentile per-packet one-way delay: 22.370 ms
Loss rate: 0.34%
```

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



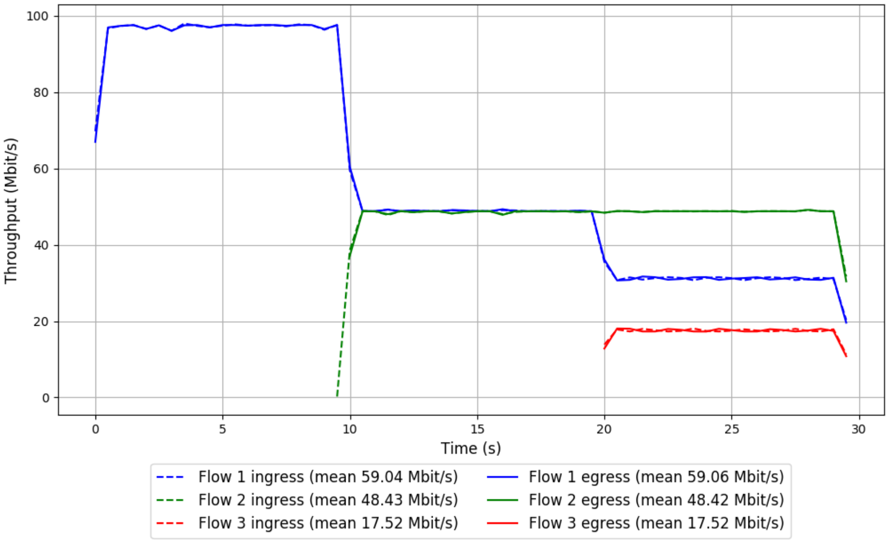


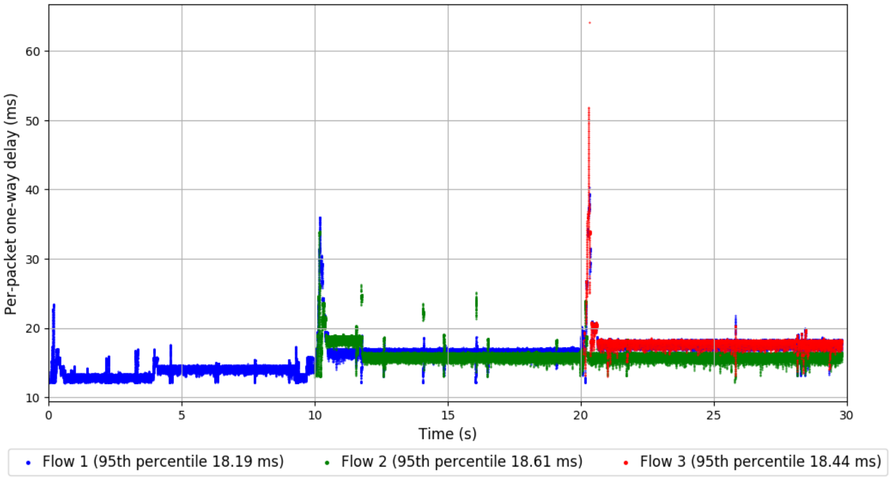
```
Run 9: Statistics of Indigo-1-32

Start at: 2018-04-10 21:23:55
End at: 2018-04-10 21:24:25
Local clock offset: -0.149 ms
Remote clock offset: 3.74 ms

# Below is generated by plot.py at 2018-04-11 01:49:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.94 Mbit/s
95th percentile per-packet one-way delay: 18.253 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 59.06 Mbit/s
95th percentile per-packet one-way delay: 18.191 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 48.42 Mbit/s
95th percentile per-packet one-way delay: 18.615 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 17.52 Mbit/s
95th percentile per-packet one-way delay: 18.443 ms
Loss rate: 0.32%
```

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



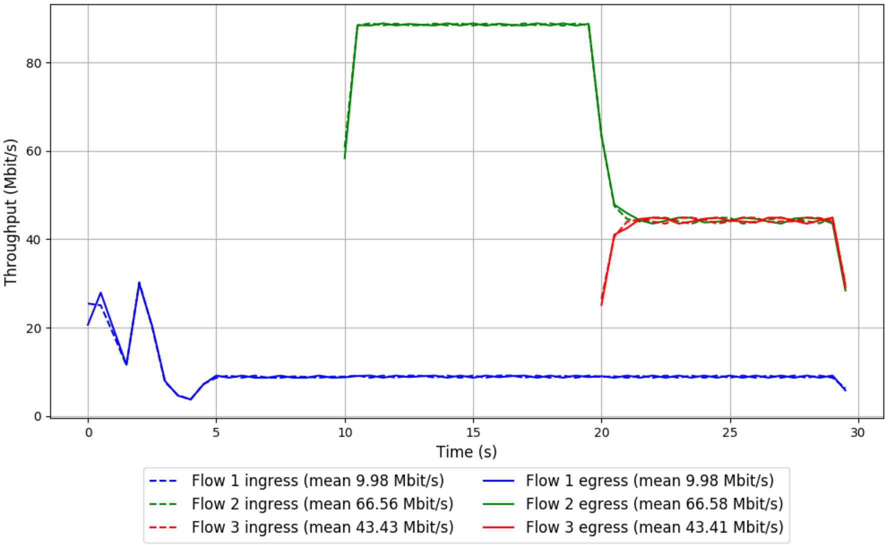


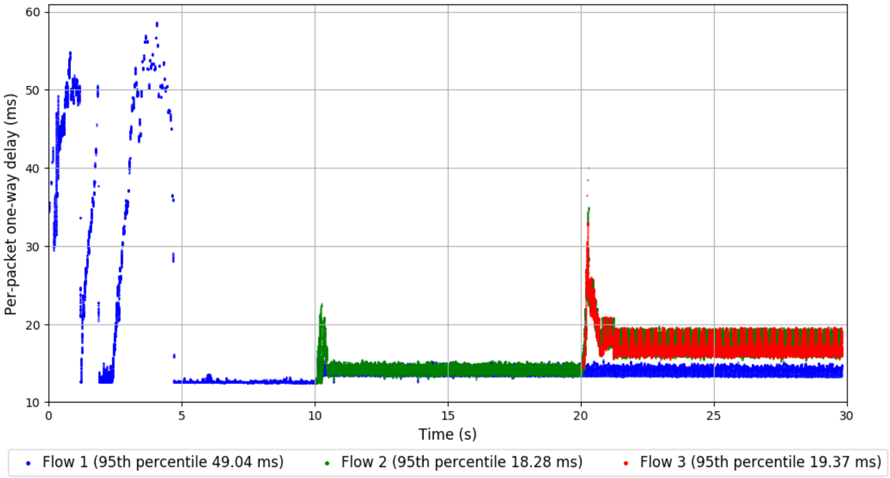
```
Run 10: Statistics of Indigo-1-32

Start at: 2018-04-10 21:45:10
End at: 2018-04-10 21:45:40
Local clock offset: 0.908 ms
Remote clock offset: 1.413 ms

# Below is generated by plot.py at 2018-04-11 01:49:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.45 Mbit/s
95th percentile per-packet one-way delay: 19.458 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 9.98 Mbit/s
95th percentile per-packet one-way delay: 49.036 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 66.58 Mbit/s
95th percentile per-packet one-way delay: 18.280 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 43.41 Mbit/s
95th percentile per-packet one-way delay: 19.366 ms
Loss rate: 0.31%
```

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



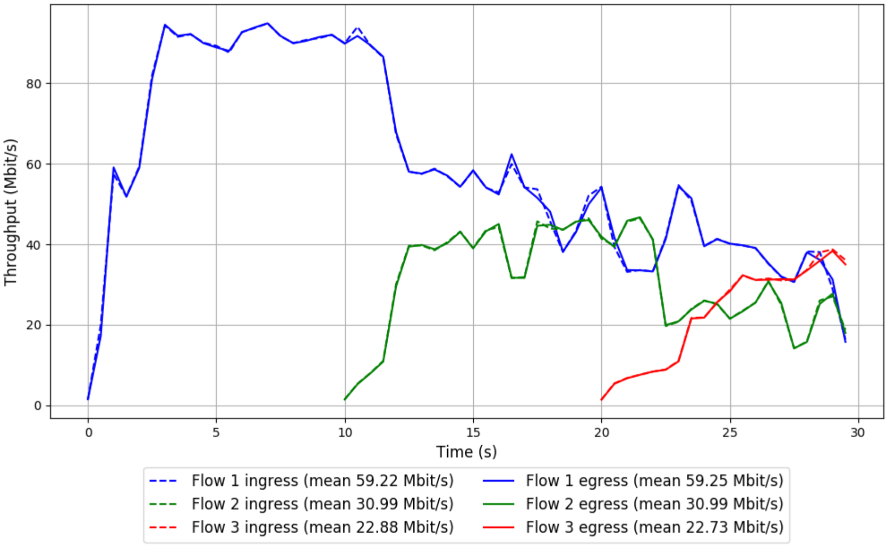


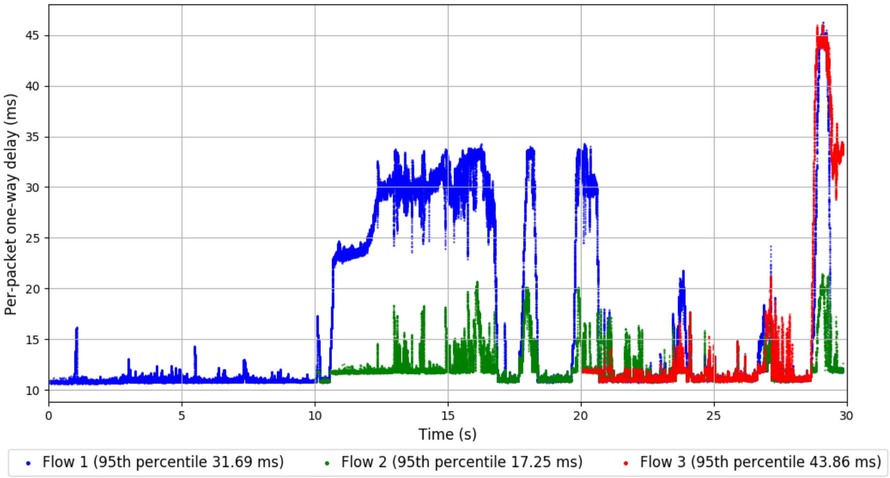
```
Run 1: Statistics of Vivace-latency

Start at: 2018-04-10 18:22:26
End at: 2018-04-10 18:22:56
Local clock offset: -1.86 ms
Remote clock offset: 5.213 ms

# Below is generated by plot.py at 2018-04-11 01:49:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.32 Mbit/s
95th percentile per-packet one-way delay: 31.694 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 59.25 Mbit/s
95th percentile per-packet one-way delay: 31.690 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 30.99 Mbit/s
95th percentile per-packet one-way delay: 17.249 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 22.73 Mbit/s
95th percentile per-packet one-way delay: 43.857 ms
Loss rate: 0.97%
```

Run 1: Report of Vivace-latency — Data Link



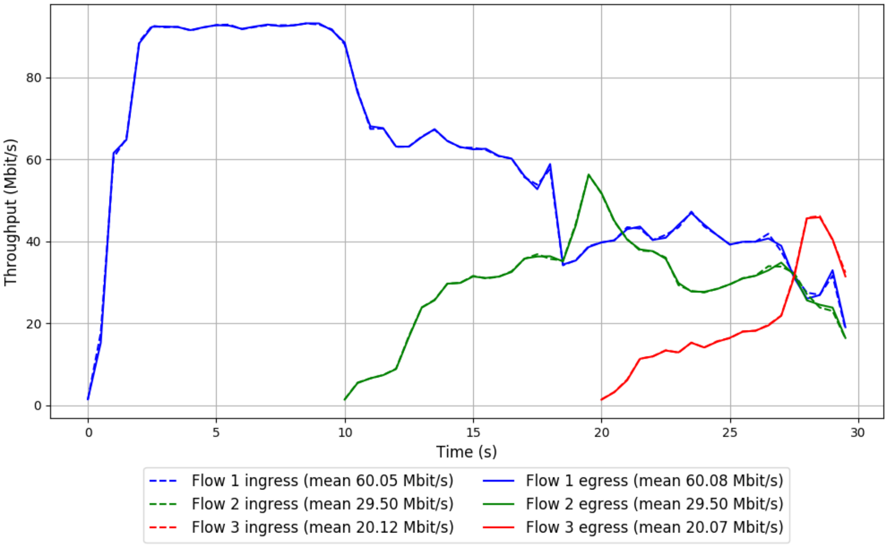


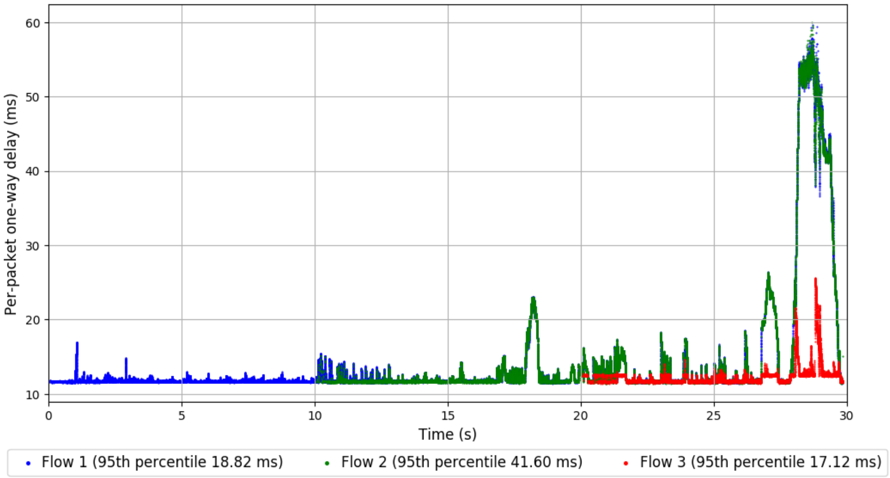
```
Run 2: Statistics of Vivace-latency

Start at: 2018-04-10 18:44:35
End at: 2018-04-10 18:45:05
Local clock offset: -2.913 ms
Remote clock offset: 8.221 ms

# Below is generated by plot.py at 2018-04-11 01:49:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.28 Mbit/s
95th percentile per-packet one-way delay: 21.520 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 60.08 Mbit/s
95th percentile per-packet one-way delay: 18.816 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 29.50 Mbit/s
95th percentile per-packet one-way delay: 41.602 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 20.07 Mbit/s
95th percentile per-packet one-way delay: 17.123 ms
Loss rate: 0.55%
```

Run 2: Report of Vivace-latency — Data Link



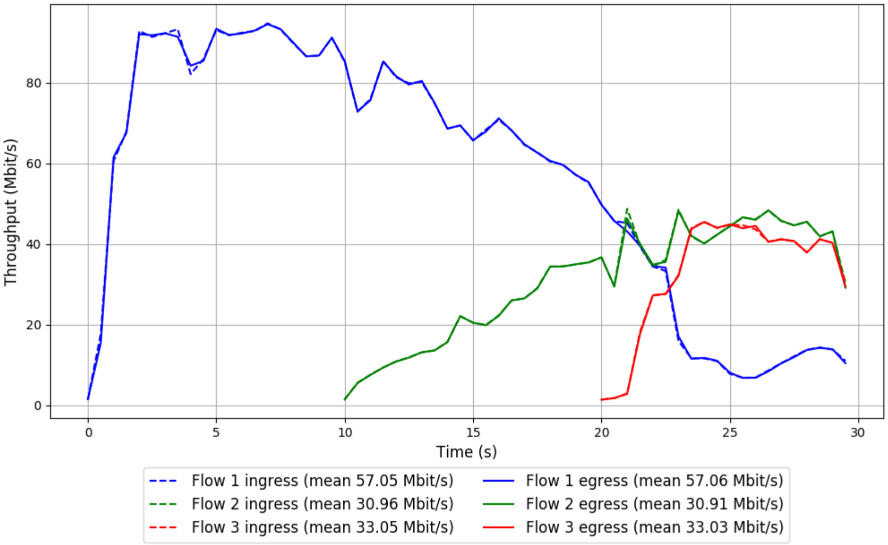


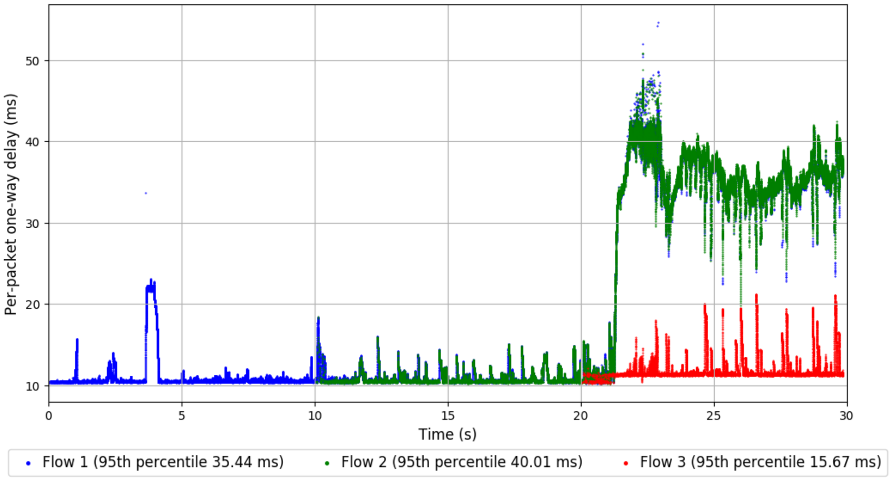
```
Run 3: Statistics of Vivace-latency

Start at: 2018-04-10 19:06:54
End at: 2018-04-10 19:07:24
Local clock offset: 0.912 ms
Remote clock offset: 4.376 ms

# Below is generated by plot.py at 2018-04-11 01:50:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.46 Mbit/s
95th percentile per-packet one-way delay: 37.792 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 57.06 Mbit/s
95th percentile per-packet one-way delay: 35.435 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 30.91 Mbit/s
95th percentile per-packet one-way delay: 40.013 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 33.03 Mbit/s
95th percentile per-packet one-way delay: 15.674 ms
Loss rate: 0.30%
```

Run 3: Report of Vivace-latency — Data Link



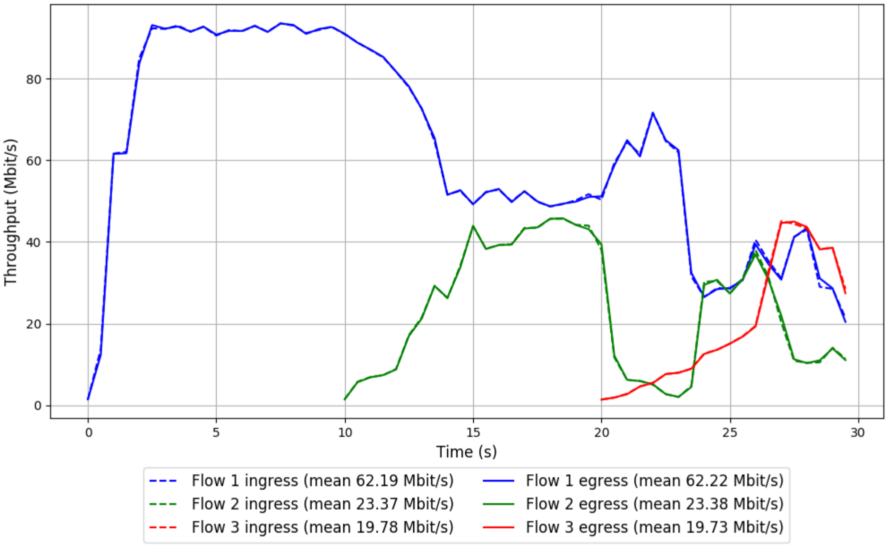


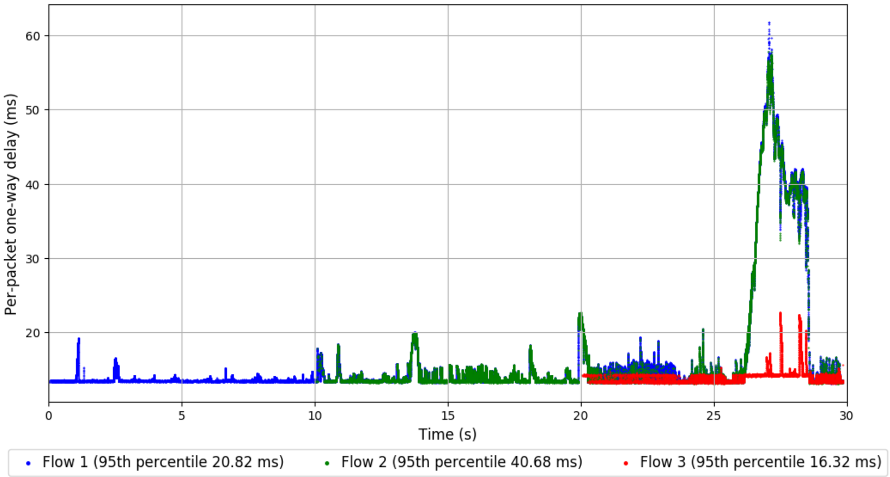
```
Run 4: Statistics of Vivace-latency

Start at: 2018-04-10 19:28:55
End at: 2018-04-10 19:29:25
Local clock offset: 1.287 ms
Remote clock offset: 0.564 ms

# Below is generated by plot.py at 2018-04-11 01:50:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.24 Mbit/s
95th percentile per-packet one-way delay: 23.264 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 62.22 Mbit/s
95th percentile per-packet one-way delay: 20.819 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 23.38 Mbit/s
95th percentile per-packet one-way delay: 40.681 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 19.73 Mbit/s
95th percentile per-packet one-way delay: 16.324 ms
Loss rate: 0.54%
```

Run 4: Report of Vivace-latency — Data Link



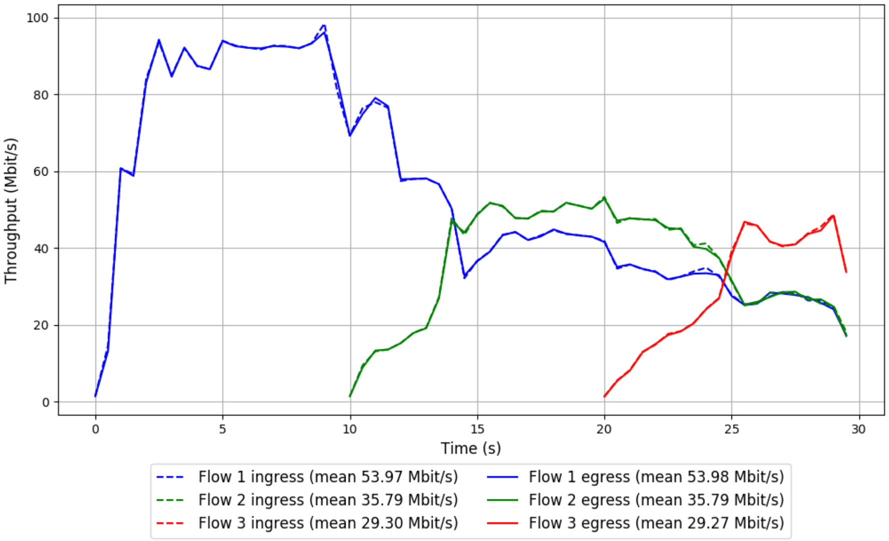


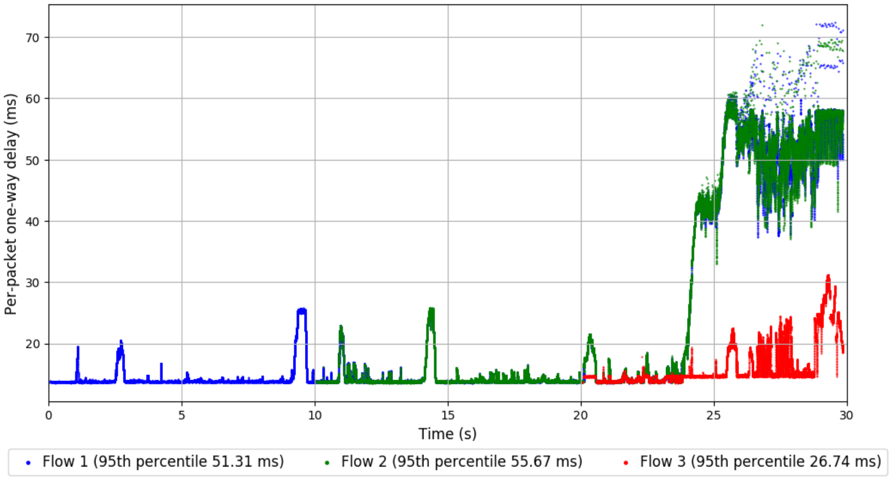
```
Run 5: Statistics of Vivace-latency

Start at: 2018-04-10 19:50:45
End at: 2018-04-10 19:51:15
Local clock offset: 1.7 ms
Remote clock offset: -2.777 ms

# Below is generated by plot.py at 2018-04-11 01:50:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.38 Mbit/s
95th percentile per-packet one-way delay: 52.768 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 53.98 Mbit/s
95th percentile per-packet one-way delay: 51.312 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 35.79 Mbit/s
95th percentile per-packet one-way delay: 55.670 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 29.27 Mbit/s
95th percentile per-packet one-way delay: 26.740 ms
Loss rate: 0.47%
```

Run 5: Report of Vivace-latency — Data Link



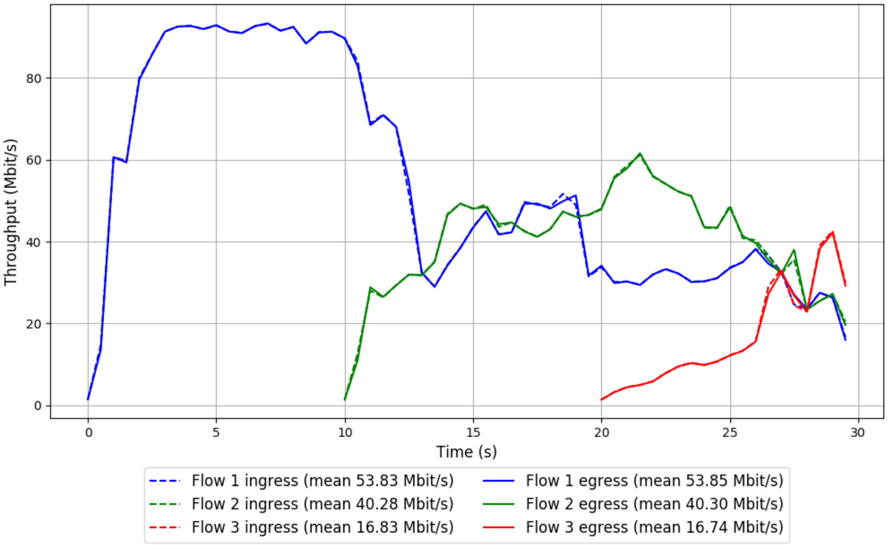


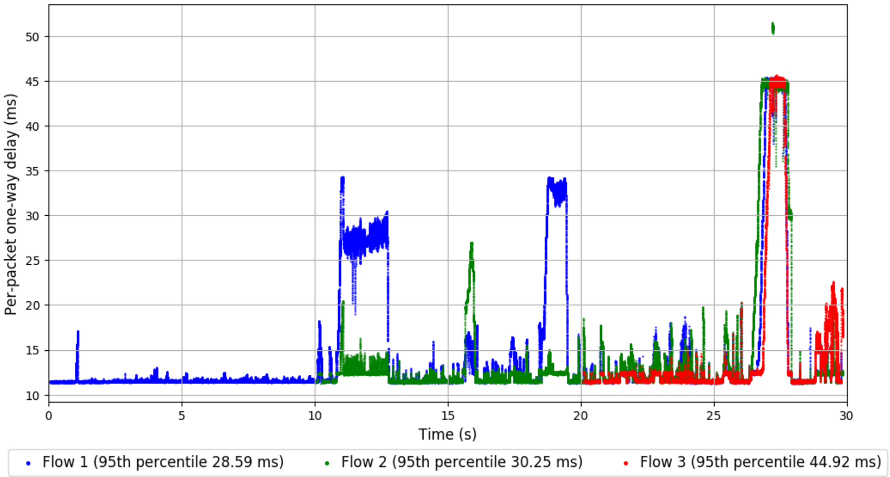
```
Run 6: Statistics of Vivace-latency

Start at: 2018-04-10 20:12:31
End at: 2018-04-10 20:13:01
Local clock offset: 0.815 ms
Remote clock offset: -5.521 ms

# Below is generated by plot.py at 2018-04-11 01:51:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.12 Mbit/s
95th percentile per-packet one-way delay: 31.493 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 53.85 Mbit/s
95th percentile per-packet one-way delay: 28.592 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 40.30 Mbit/s
95th percentile per-packet one-way delay: 30.248 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 16.74 Mbit/s
95th percentile per-packet one-way delay: 44.918 ms
Loss rate: 0.76%
```

Run 6: Report of Vivace-latency — Data Link



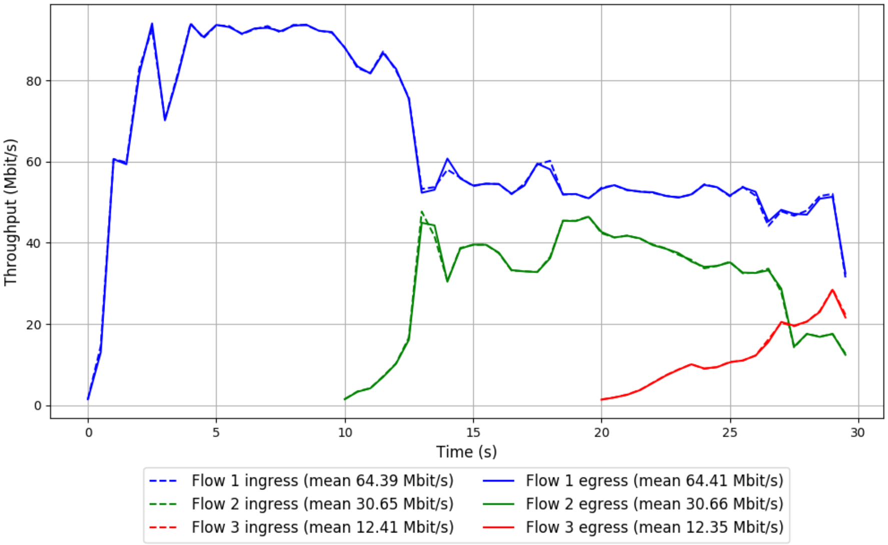


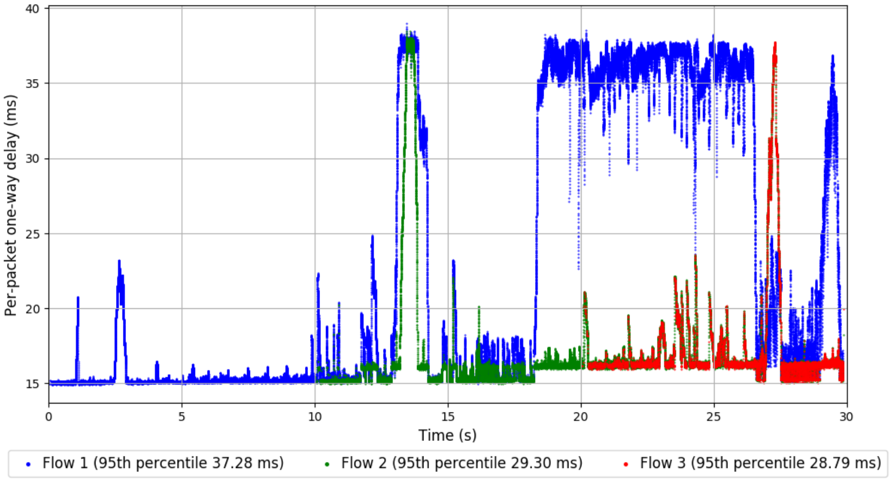
```
Run 7: Statistics of Vivace-latency

Start at: 2018-04-10 20:34:13
End at: 2018-04-10 20:34:43
Local clock offset: -4.334 ms
Remote clock offset: -13.457 ms

# Below is generated by plot.py at 2018-04-11 01:51:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.83 Mbit/s
95th percentile per-packet one-way delay: 37.185 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 64.41 Mbit/s
95th percentile per-packet one-way delay: 37.282 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 30.66 Mbit/s
95th percentile per-packet one-way delay: 29.296 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 12.35 Mbit/s
95th percentile per-packet one-way delay: 28.790 ms
Loss rate: 0.69%
```

Run 7: Report of Vivace-latency — Data Link



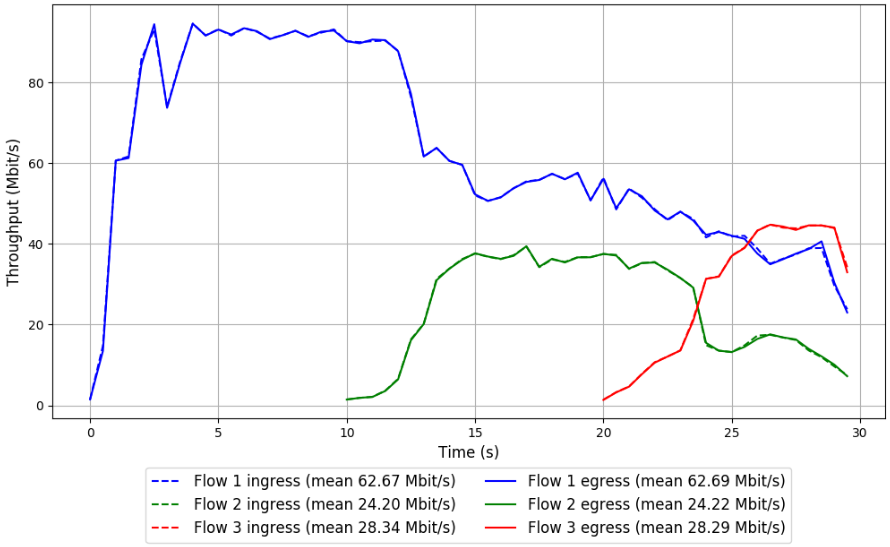


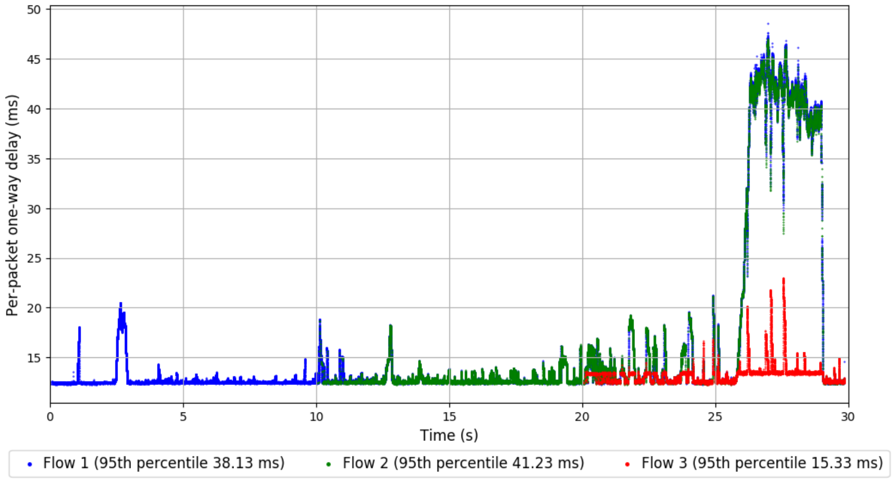
```
Run 8: Statistics of Vivace-latency

Start at: 2018-04-10 20:55:39
End at: 2018-04-10 20:56:09
Local clock offset: 0.488 ms
Remote clock offset: -3.051 ms

# Below is generated by plot.py at 2018-04-11 01:51:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.08 Mbit/s
95th percentile per-packet one-way delay: 38.229 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 62.69 Mbit/s
95th percentile per-packet one-way delay: 38.126 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 24.22 Mbit/s
95th percentile per-packet one-way delay: 41.234 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 28.29 Mbit/s
95th percentile per-packet one-way delay: 15.331 ms
Loss rate: 0.42%
```

Run 8: Report of Vivace-latency — Data Link



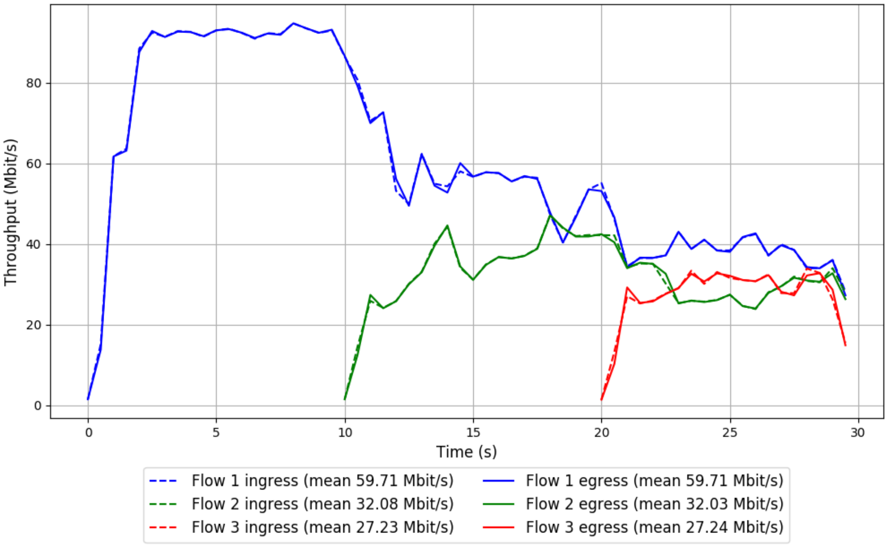


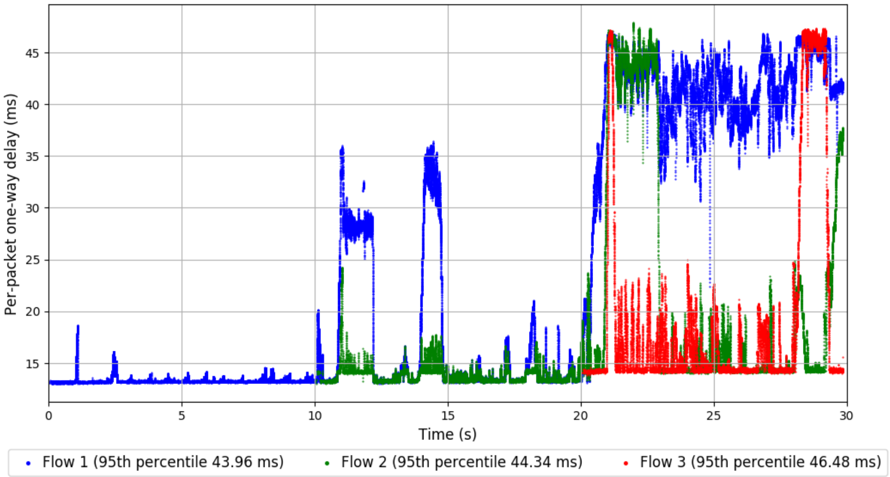
```
Run 9: Statistics of Vivace-latency

Start at: 2018-04-10 21:16:51
End at: 2018-04-10 21:17:21
Local clock offset: -0.431 ms
Remote clock offset: 1.013 ms

# Below is generated by plot.py at 2018-04-11 01:51:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.96 Mbit/s
95th percentile per-packet one-way delay: 44.443 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 59.71 Mbit/s
95th percentile per-packet one-way delay: 43.964 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 32.03 Mbit/s
95th percentile per-packet one-way delay: 44.343 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 27.24 Mbit/s
95th percentile per-packet one-way delay: 46.480 ms
Loss rate: 0.23%
```

Run 9: Report of Vivace-latency — Data Link



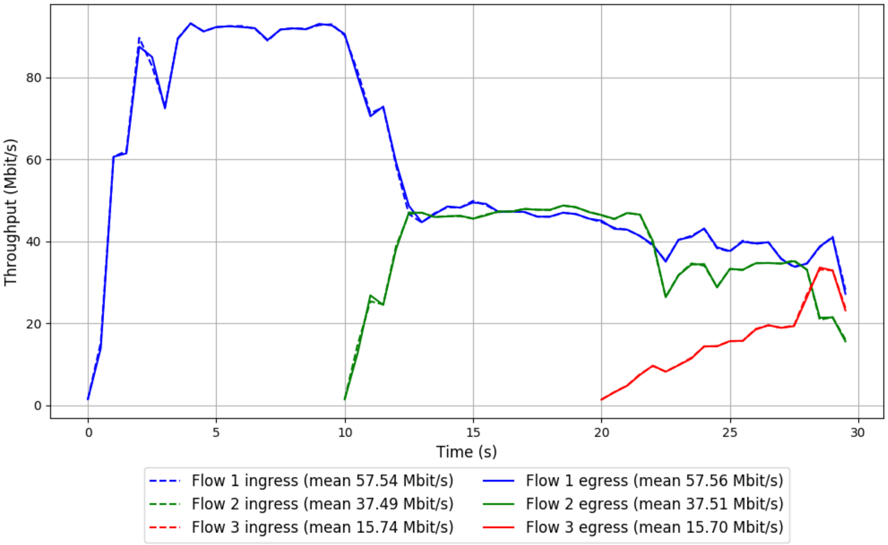


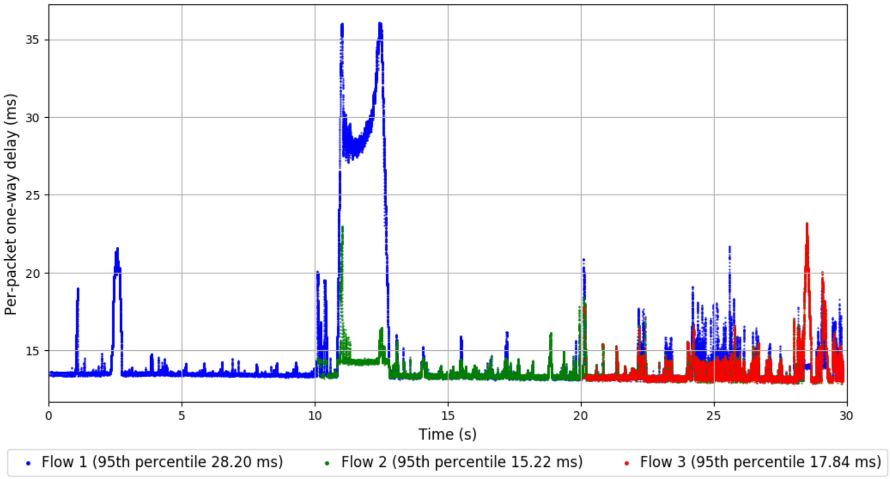
```
Run 10: Statistics of Vivace-latency

Start at: 2018-04-10 21:38:02
End at: 2018-04-10 21:38:32
Local clock offset: 0.602 ms
Remote clock offset: 5.012 ms

# Below is generated by plot.py at 2018-04-11 01:51:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.65 Mbit/s
95th percentile per-packet one-way delay: 20.428 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 57.56 Mbit/s
95th percentile per-packet one-way delay: 28.204 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 37.51 Mbit/s
95th percentile per-packet one-way delay: 15.217 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 15.70 Mbit/s
95th percentile per-packet one-way delay: 17.841 ms
Loss rate: 0.53%
```

Run 10: Report of Vivace-latency — Data Link



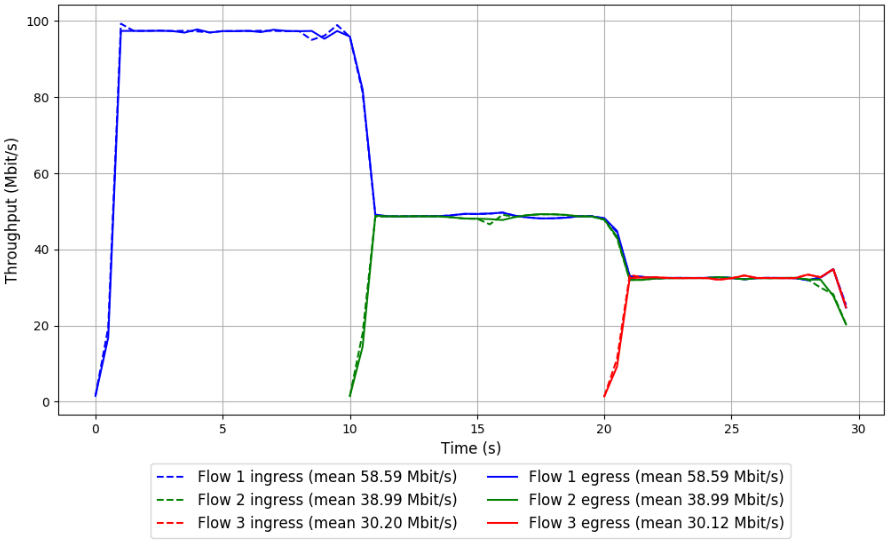


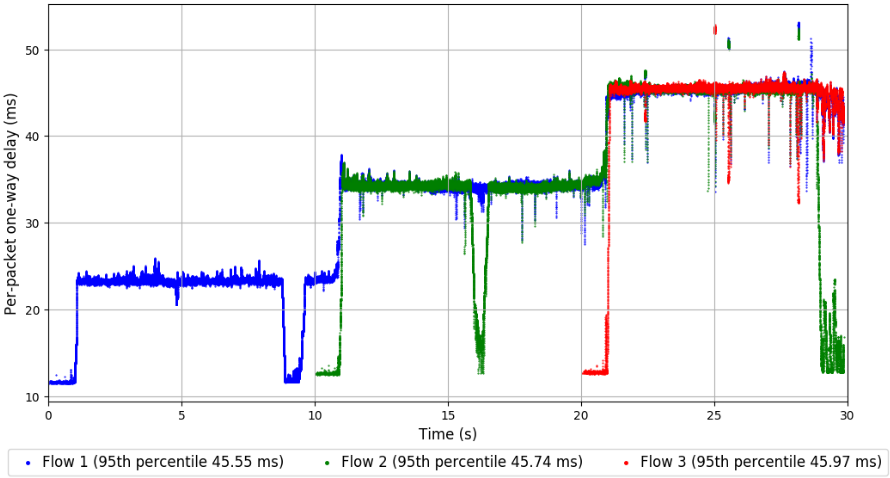
```
Run 1: Statistics of Vivace-loss

Start at: 2018-04-10 18:19:46
End at: 2018-04-10 18:20:16
Local clock offset: -2.002 ms
Remote clock offset: 3.05 ms

# Below is generated by plot.py at 2018-04-11 01:52:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.40 Mbit/s
95th percentile per-packet one-way delay: 45.740 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 58.59 Mbit/s
95th percentile per-packet one-way delay: 45.547 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 38.99 Mbit/s
95th percentile per-packet one-way delay: 45.743 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 30.12 Mbit/s
95th percentile per-packet one-way delay: 45.970 ms
Loss rate: 0.54%
```

Run 1: Report of Vivace-loss — Data Link



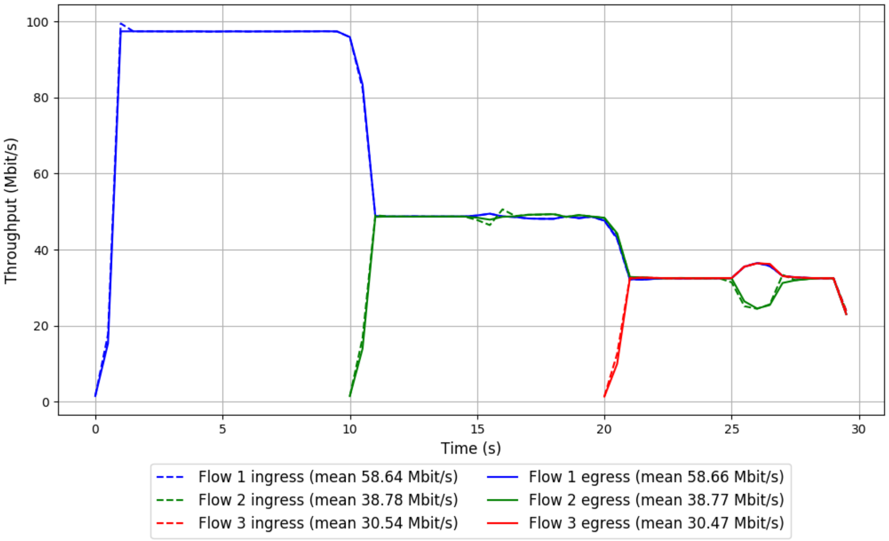


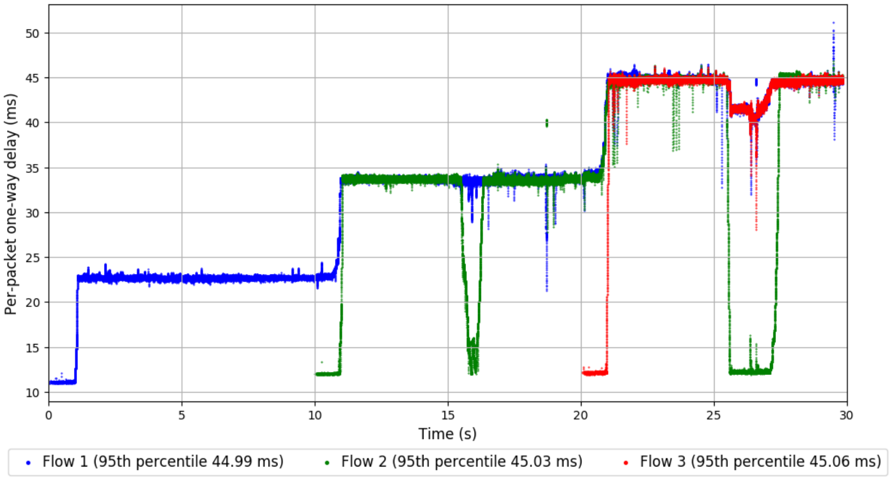
```
Run 2: Statistics of Vivace-loss

Start at: 2018-04-10 18:42:11
End at: 2018-04-10 18:42:41
Local clock offset: -3.509 ms
Remote clock offset: 8.365 ms

# Below is generated by plot.py at 2018-04-11 01:52:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.45 Mbit/s
95th percentile per-packet one-way delay: 45.020 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 58.66 Mbit/s
95th percentile per-packet one-way delay: 44.990 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 38.77 Mbit/s
95th percentile per-packet one-way delay: 45.034 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 30.47 Mbit/s
95th percentile per-packet one-way delay: 45.060 ms
Loss rate: 0.62%
```

Run 2: Report of Vivace-loss — Data Link



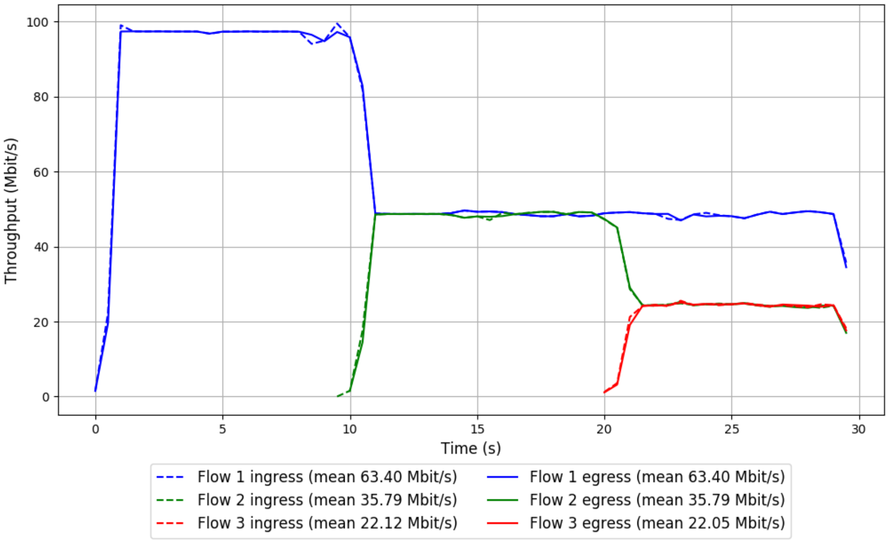


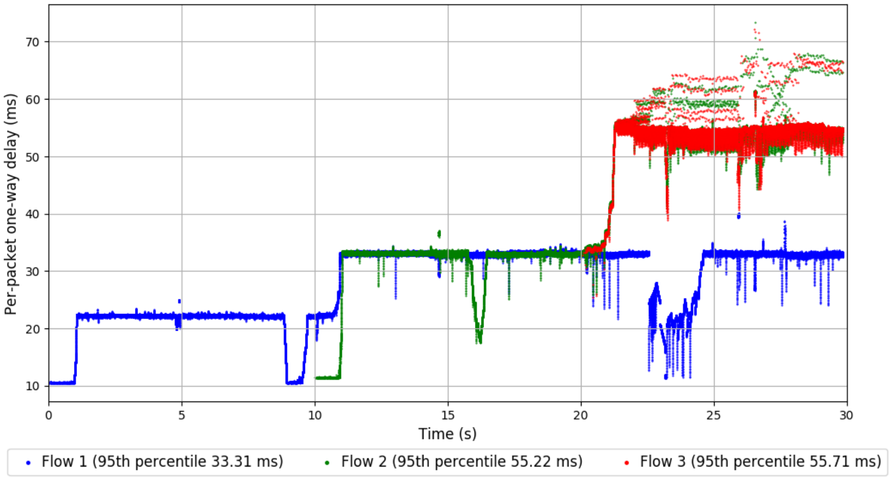
```
Run 3: Statistics of Vivace-loss

Start at: 2018-04-10 19:04:25
End at: 2018-04-10 19:04:55
Local clock offset: 0.853 ms
Remote clock offset: 4.614 ms

# Below is generated by plot.py at 2018-04-11 01:52:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.44 Mbit/s
95th percentile per-packet one-way delay: 54.923 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 63.40 Mbit/s
95th percentile per-packet one-way delay: 33.309 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 35.79 Mbit/s
95th percentile per-packet one-way delay: 55.216 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 22.05 Mbit/s
95th percentile per-packet one-way delay: 55.712 ms
Loss rate: 0.76%
```

Run 3: Report of Vivace-loss — Data Link



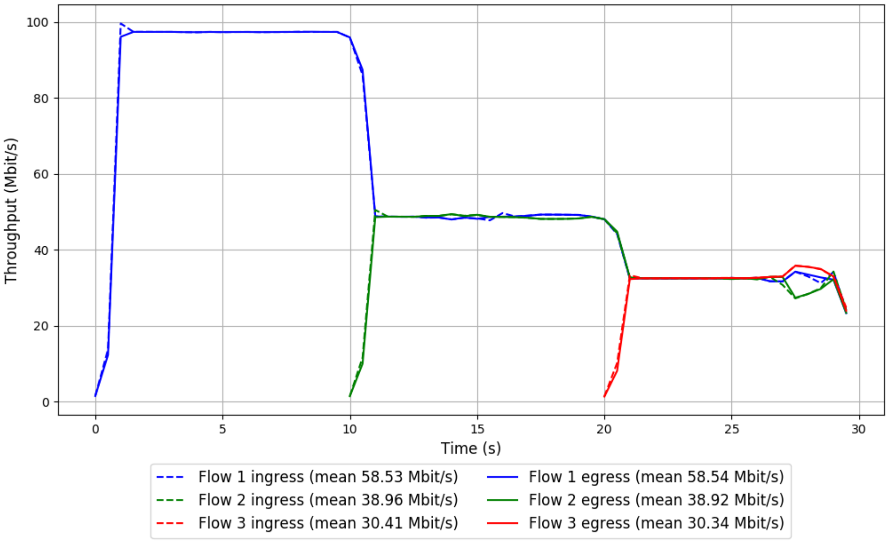


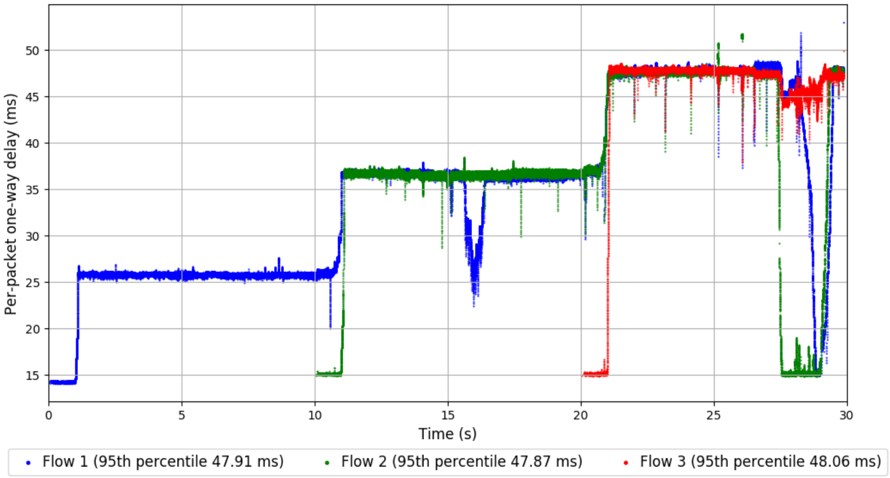
```
Run 4: Statistics of Vivace-loss

Start at: 2018-04-10 19:26:25
End at: 2018-04-10 19:26:55
Local clock offset: 1.573 ms
Remote clock offset: 0.979 ms

# Below is generated by plot.py at 2018-04-11 01:52:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.36 Mbit/s
95th percentile per-packet one-way delay: 47.947 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 58.54 Mbit/s
95th percentile per-packet one-way delay: 47.909 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 38.92 Mbit/s
95th percentile per-packet one-way delay: 47.870 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 30.34 Mbit/s
95th percentile per-packet one-way delay: 48.058 ms
Loss rate: 0.66%
```

Run 4: Report of Vivace-loss — Data Link



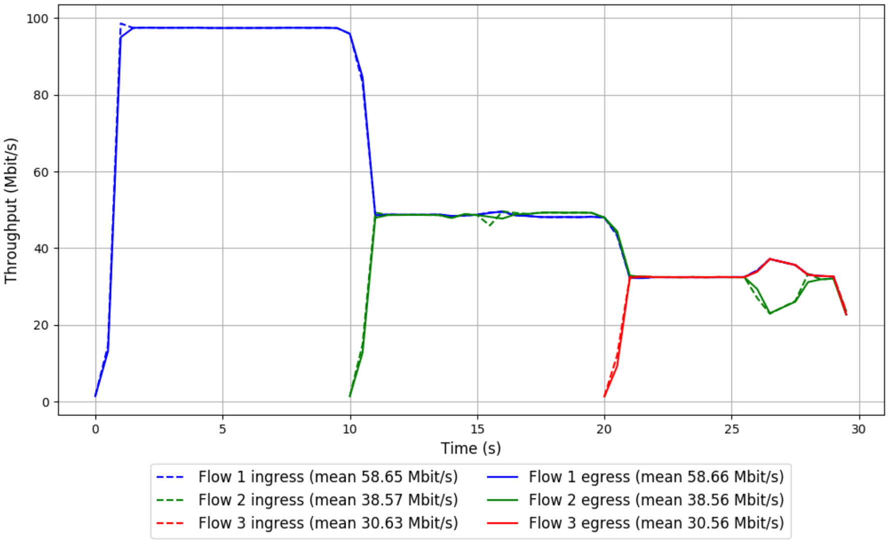


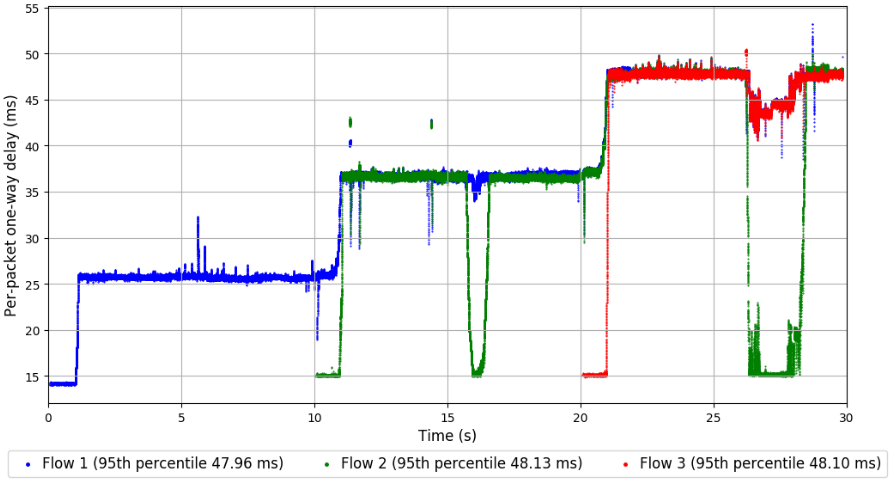
```
Run 5: Statistics of Vivace-loss

Start at: 2018-04-10 19:48:16
End at: 2018-04-10 19:48:46
Local clock offset: 1.349 ms
Remote clock offset: -3.386 ms

# Below is generated by plot.py at 2018-04-11 01:52:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.34 Mbit/s
95th percentile per-packet one-way delay: 48.055 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 58.66 Mbit/s
95th percentile per-packet one-way delay: 47.964 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 38.56 Mbit/s
95th percentile per-packet one-way delay: 48.134 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 30.56 Mbit/s
95th percentile per-packet one-way delay: 48.099 ms
Loss rate: 0.65%
```

Run 5: Report of Vivace-loss — Data Link



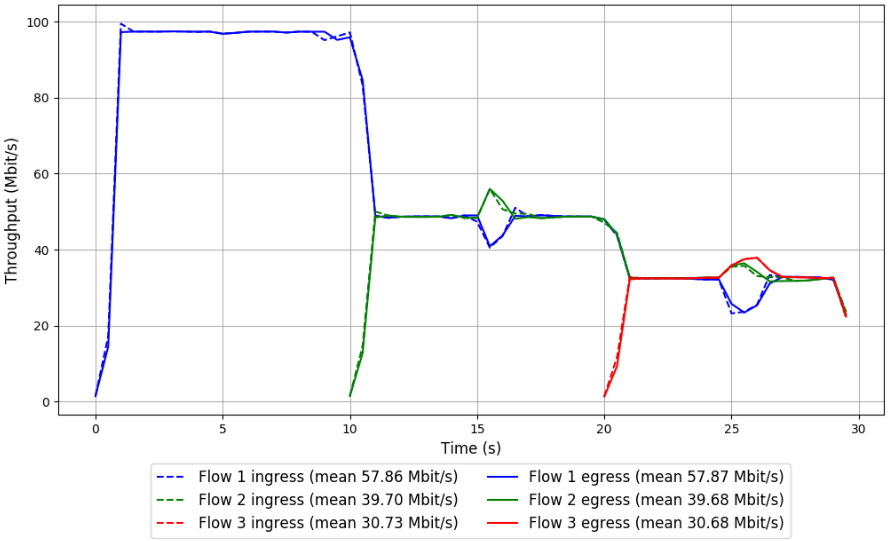


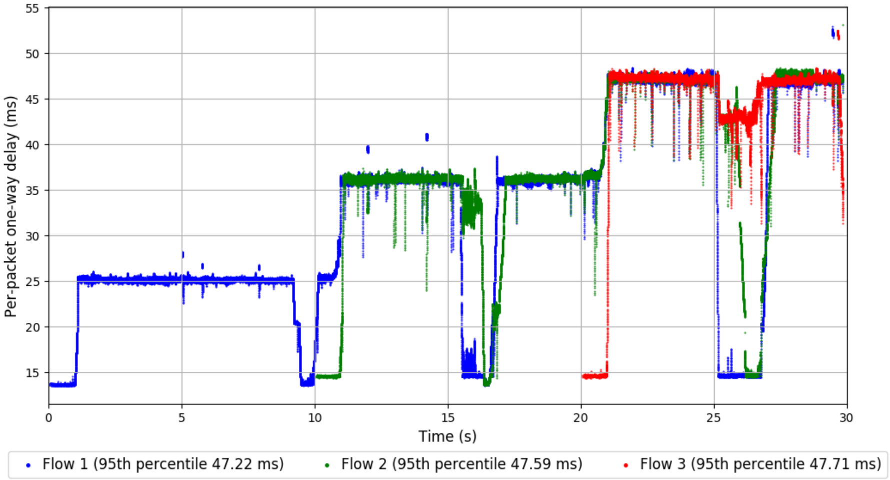
```
Run 6: Statistics of Vivace-loss

Start at: 2018-04-10 20:10:04
End at: 2018-04-10 20:10:34
Local clock offset: 1.457 ms
Remote clock offset: -6.768 ms

# Below is generated by plot.py at 2018-04-11 01:52:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.32 Mbit/s
95th percentile per-packet one-way delay: 47.497 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 57.87 Mbit/s
95th percentile per-packet one-way delay: 47.221 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 39.68 Mbit/s
95th percentile per-packet one-way delay: 47.589 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 30.68 Mbit/s
95th percentile per-packet one-way delay: 47.711 ms
Loss rate: 0.46%
```

Run 6: Report of Vivace-loss — Data Link



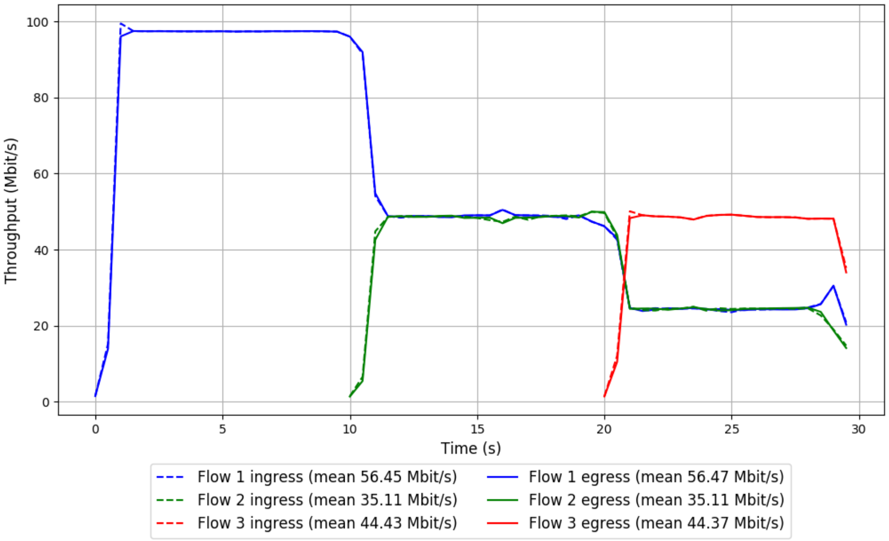


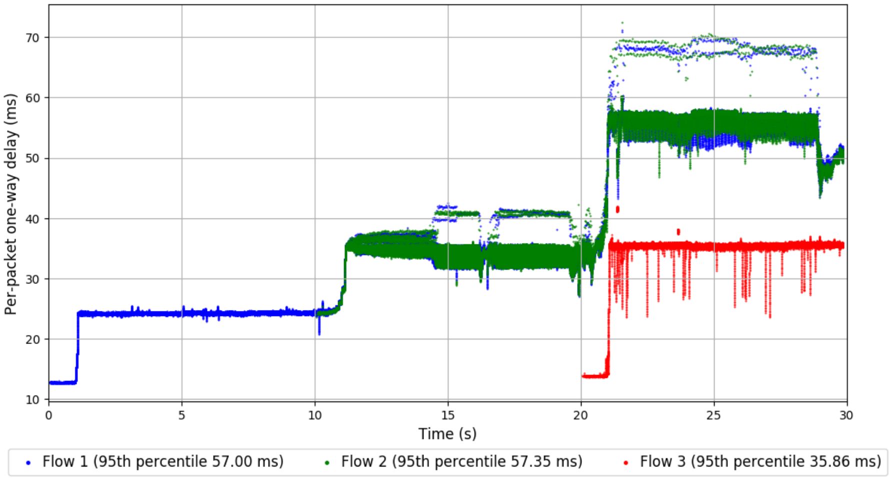
```
Run 7: Statistics of Vivace-loss

Start at: 2018-04-10 20:31:46
End at: 2018-04-10 20:32:16
Local clock offset: 1.377 ms
Remote clock offset: -6.606 ms

# Below is generated by plot.py at 2018-04-11 01:52:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.39 Mbit/s
95th percentile per-packet one-way delay: 57.083 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 56.47 Mbit/s
95th percentile per-packet one-way delay: 57.001 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 35.11 Mbit/s
95th percentile per-packet one-way delay: 57.355 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 44.37 Mbit/s
95th percentile per-packet one-way delay: 35.861 ms
Loss rate: 0.53%
```

Run 7: Report of Vivace-loss — Data Link



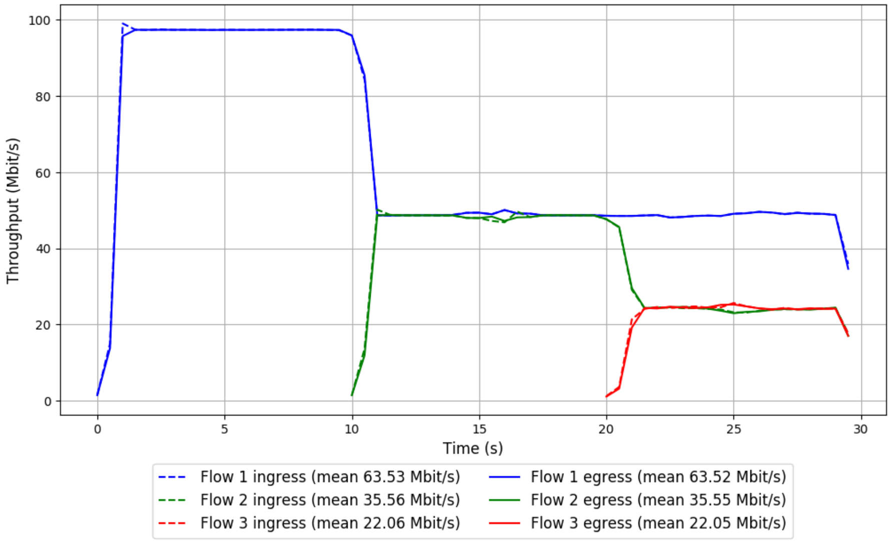


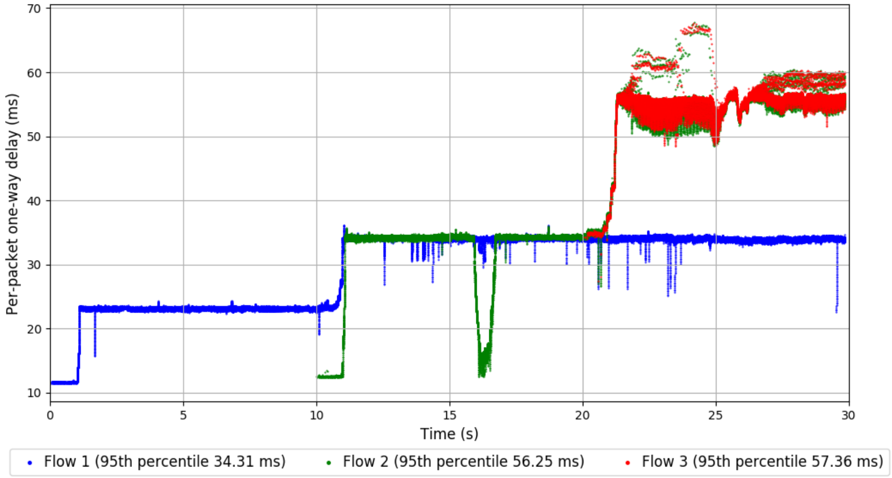
```
Run 8: Statistics of Vivace-loss

Start at: 2018-04-10 20:53:16
End at: 2018-04-10 20:53:46
Local clock offset: 0.526 ms
Remote clock offset: -2.447 ms

# Below is generated by plot.py at 2018-04-11 01:52:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.39 Mbit/s
95th percentile per-packet one-way delay: 55.976 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 63.52 Mbit/s
95th percentile per-packet one-way delay: 34.313 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 35.55 Mbit/s
95th percentile per-packet one-way delay: 56.253 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 22.05 Mbit/s
95th percentile per-packet one-way delay: 57.359 ms
Loss rate: 0.78%
```

Run 8: Report of Vivace-loss — Data Link



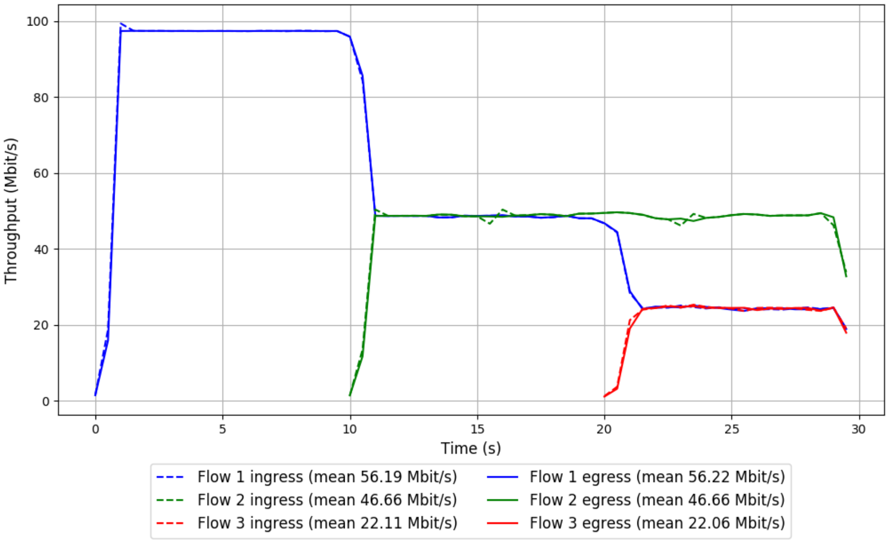


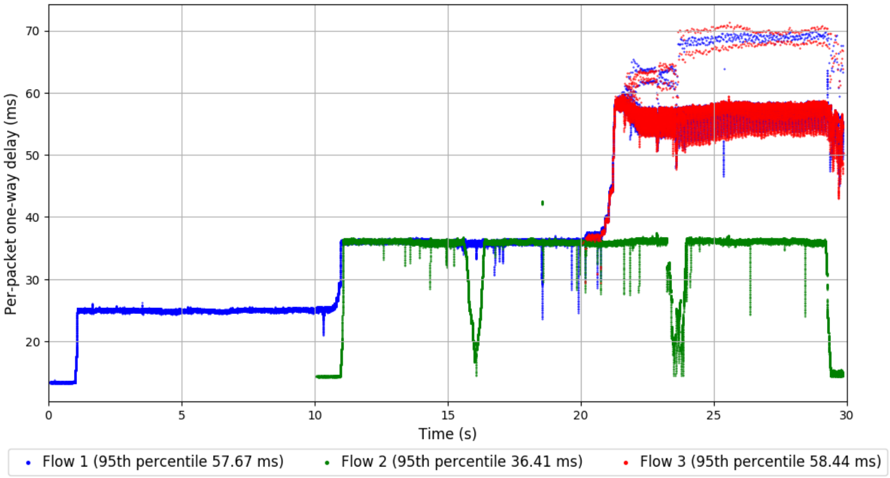
```
Run 9: Statistics of Vivace-loss

Start at: 2018-04-10 21:14:28
End at: 2018-04-10 21:14:58
Local clock offset: 0.507 ms
Remote clock offset: 1.25 ms

# Below is generated by plot.py at 2018-04-11 01:53:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.45 Mbit/s
95th percentile per-packet one-way delay: 57.803 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 56.22 Mbit/s
95th percentile per-packet one-way delay: 57.673 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 46.66 Mbit/s
95th percentile per-packet one-way delay: 36.405 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 22.06 Mbit/s
95th percentile per-packet one-way delay: 58.437 ms
Loss rate: 0.81%
```

Run 9: Report of Vivace-loss — Data Link



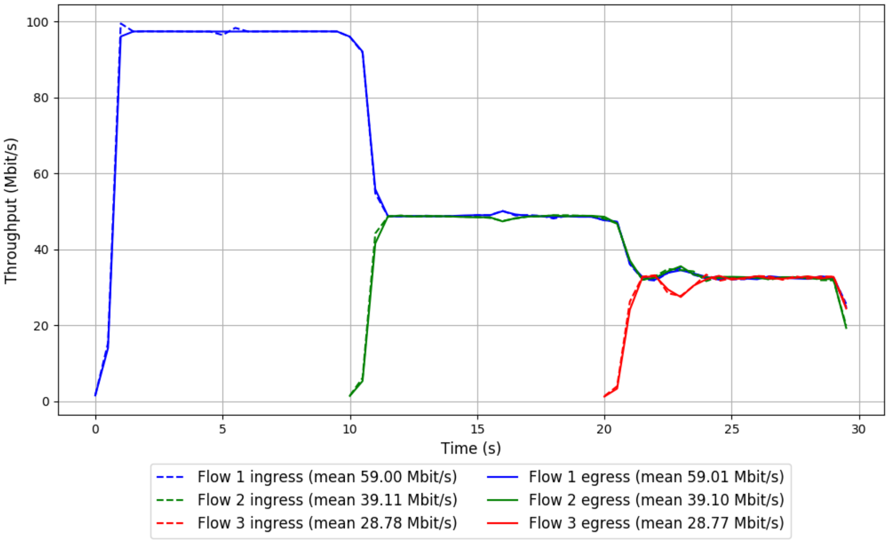


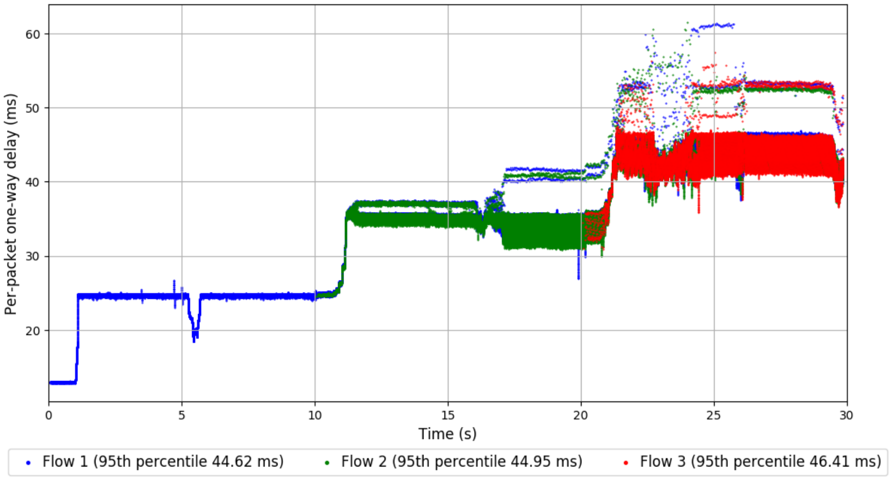
```
Run 10: Statistics of Vivace-loss

Start at: 2018-04-10 21:35:39
End at: 2018-04-10 21:36:09
Local clock offset: 0.544 ms
Remote clock offset: 5.358 ms

# Below is generated by plot.py at 2018-04-11 01:53:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.41 Mbit/s
95th percentile per-packet one-way delay: 45.210 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 59.01 Mbit/s
95th percentile per-packet one-way delay: 44.622 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 39.10 Mbit/s
95th percentile per-packet one-way delay: 44.948 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 28.77 Mbit/s
95th percentile per-packet one-way delay: 46.414 ms
Loss rate: 0.66%
```

Run 10: Report of Vivace-loss — Data Link



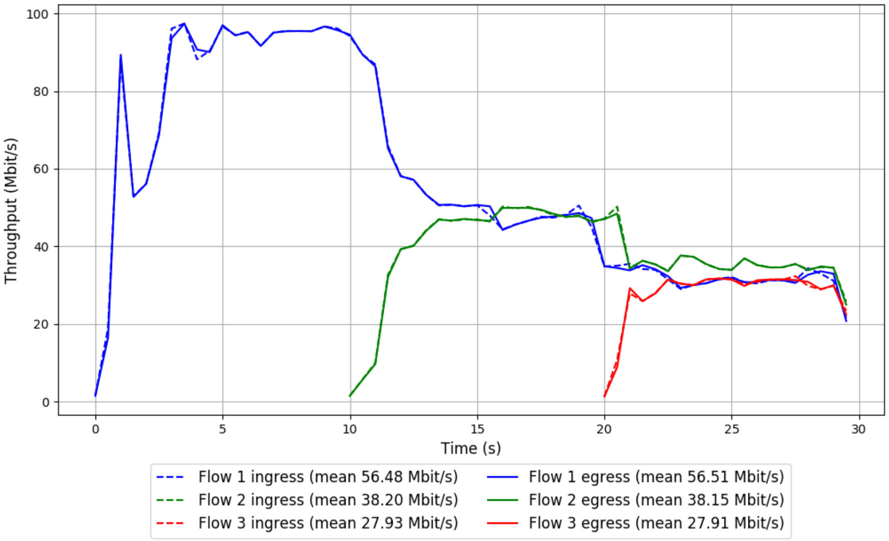


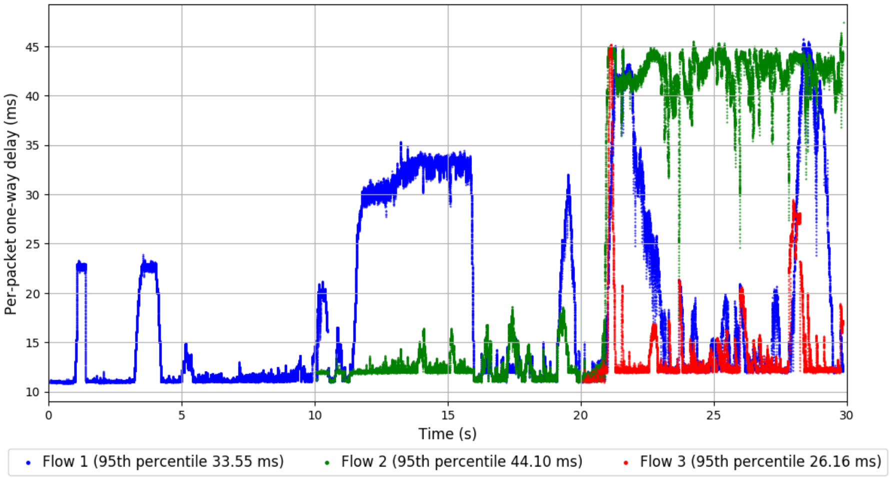
```
Run 1: Statistics of Vivace-LTE

Start at: 2018-04-10 18:28:53
End at: 2018-04-10 18:29:23
Local clock offset: -2.196 ms
Remote clock offset: 6.808 ms

# Below is generated by plot.py at 2018-04-11 01:53:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.03 Mbit/s
95th percentile per-packet one-way delay: 43.169 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 56.51 Mbit/s
95th percentile per-packet one-way delay: 33.555 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 38.15 Mbit/s
95th percentile per-packet one-way delay: 44.104 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 27.91 Mbit/s
95th percentile per-packet one-way delay: 26.157 ms
Loss rate: 0.31%
```

Run 1: Report of Vivace-LTE — Data Link



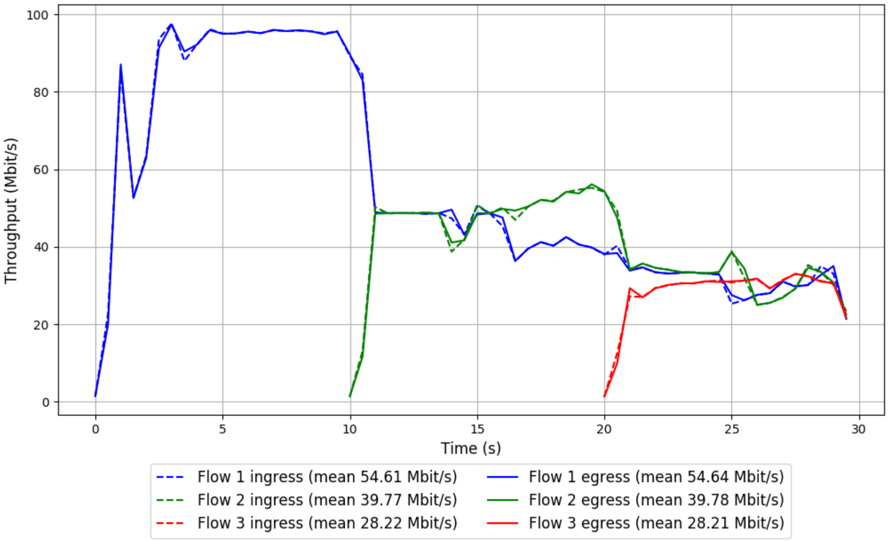


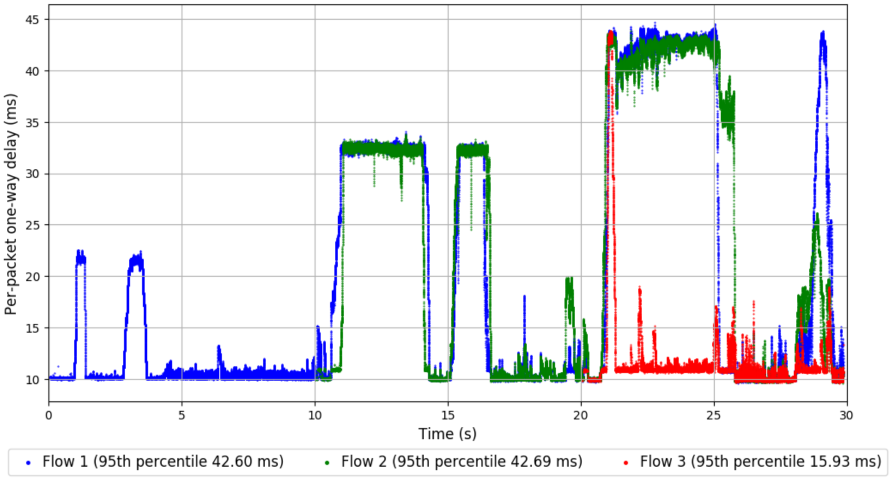
```
Run 2: Statistics of Vivace-LTE

Start at: 2018-04-10 18:50:58
End at: 2018-04-10 18:51:28
Local clock offset: -0.888 ms
Remote clock offset: 8.092 ms

# Below is generated by plot.py at 2018-04-11 01:54:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.34 Mbit/s
95th percentile per-packet one-way delay: 42.583 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 54.64 Mbit/s
95th percentile per-packet one-way delay: 42.602 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 39.78 Mbit/s
95th percentile per-packet one-way delay: 42.689 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 28.21 Mbit/s
95th percentile per-packet one-way delay: 15.934 ms
Loss rate: 0.29%
```

Run 2: Report of Vivace-LTE — Data Link



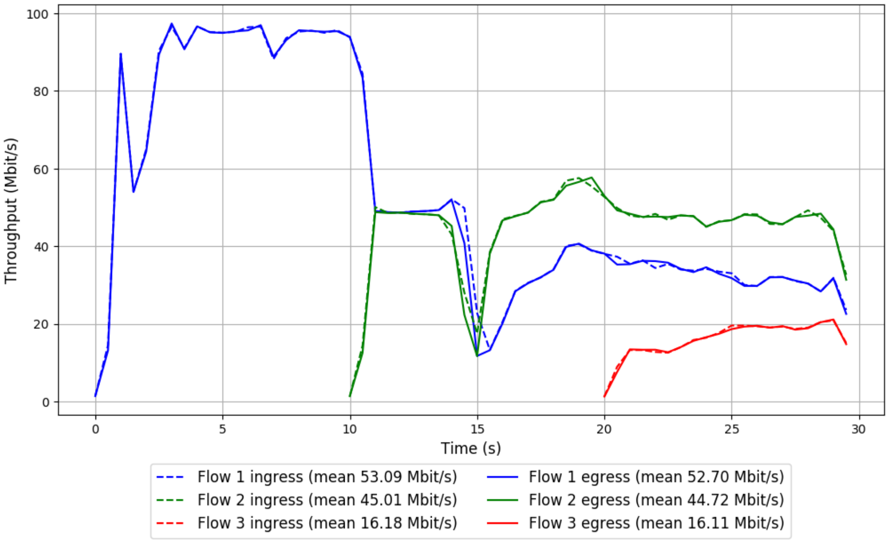


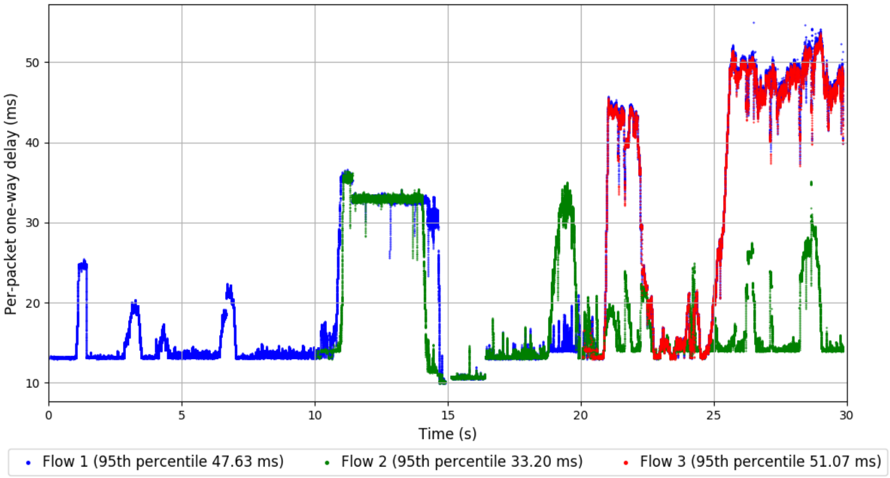
```
Run 3: Statistics of Vivace-LTE

Start at: 2018-04-10 19:13:06
End at: 2018-04-10 19:13:36
Local clock offset: 1.094 ms
Remote clock offset: 4.044 ms

# Below is generated by plot.py at 2018-04-11 01:54:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.72 Mbit/s
95th percentile per-packet one-way delay: 47.542 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 52.70 Mbit/s
95th percentile per-packet one-way delay: 47.628 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 44.72 Mbit/s
95th percentile per-packet one-way delay: 33.196 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 16.11 Mbit/s
95th percentile per-packet one-way delay: 51.072 ms
Loss rate: 0.68%
```

Run 3: Report of Vivace-LTE — Data Link



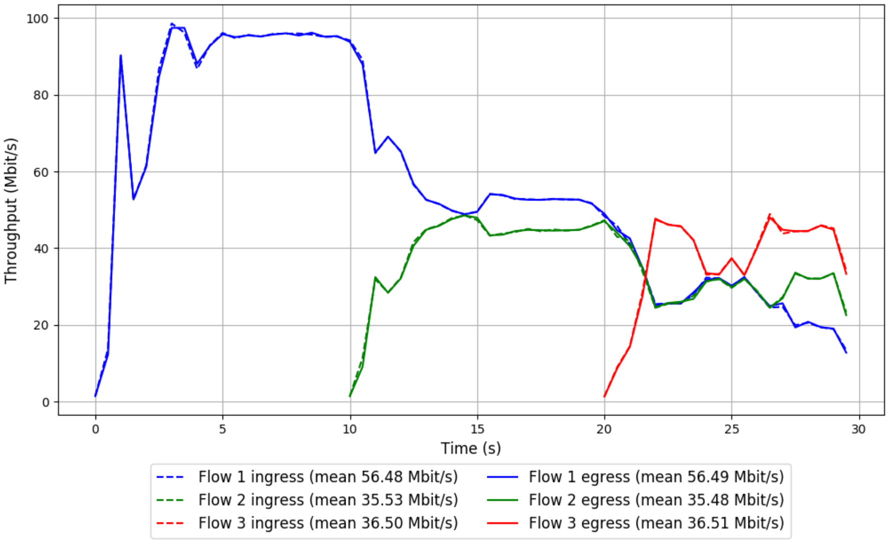


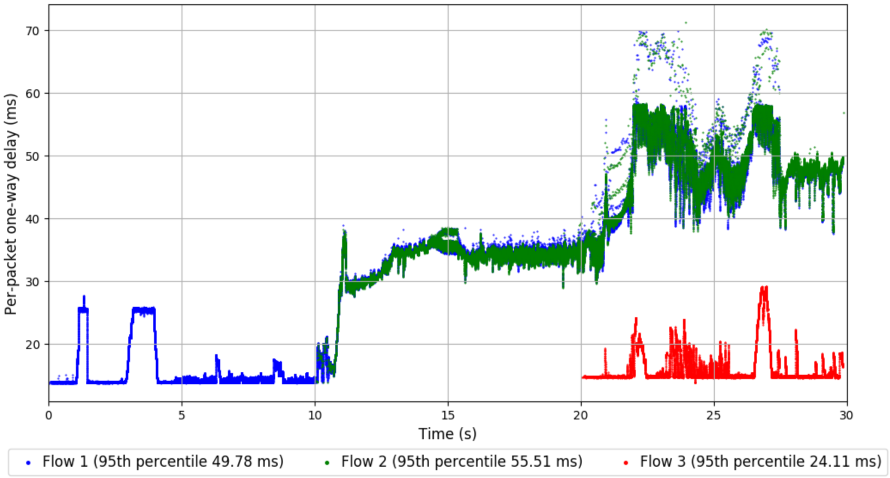
```
Run 4: Statistics of Vivace-LTE

Start at: 2018-04-10 19:34:54
End at: 2018-04-10 19:35:24
Local clock offset: 1.482 ms
Remote clock offset: -1.112 ms

# Below is generated by plot.py at 2018-04-11 01:54:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.07 Mbit/s
95th percentile per-packet one-way delay: 51.514 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 56.49 Mbit/s
95th percentile per-packet one-way delay: 49.778 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 35.48 Mbit/s
95th percentile per-packet one-way delay: 55.514 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 36.51 Mbit/s
95th percentile per-packet one-way delay: 24.109 ms
Loss rate: 0.36%
```

Run 4: Report of Vivace-LTE — Data Link



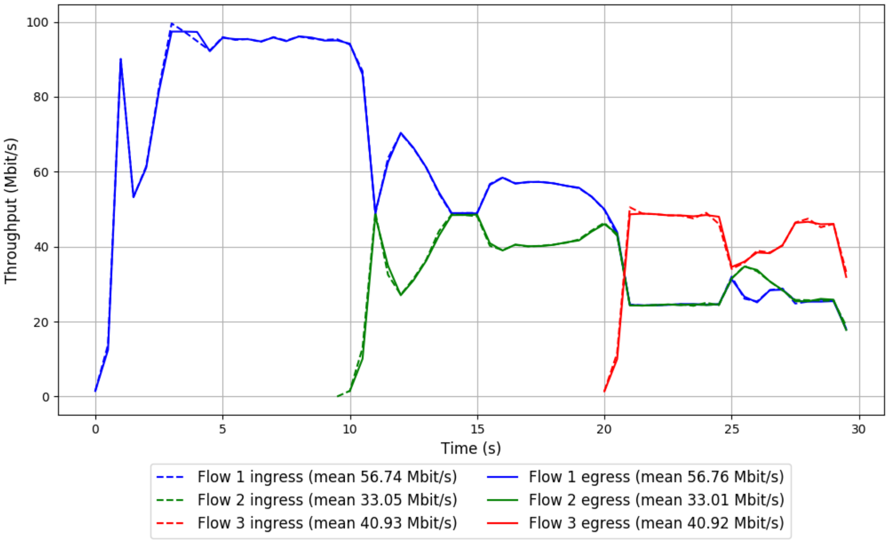


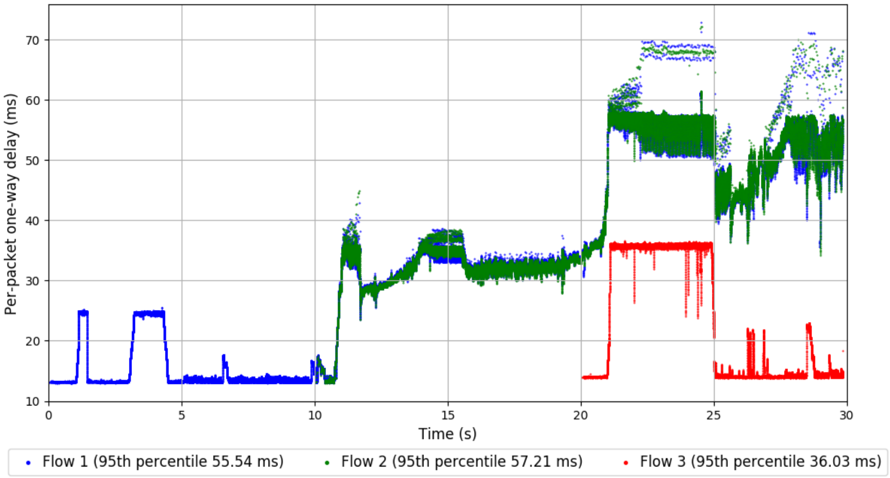
```
Run 5: Statistics of Vivace-LTE

Start at: 2018-04-10 19:56:47
End at: 2018-04-10 19:57:17
Local clock offset: 1.598 ms
Remote clock offset: -2.808 ms

# Below is generated by plot.py at 2018-04-11 01:54:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.16 Mbit/s
95th percentile per-packet one-way delay: 56.397 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 56.76 Mbit/s
95th percentile per-packet one-way delay: 55.540 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 33.01 Mbit/s
95th percentile per-packet one-way delay: 57.206 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 40.92 Mbit/s
95th percentile per-packet one-way delay: 36.032 ms
Loss rate: 0.34%
```

Run 5: Report of Vivace-LTE — Data Link



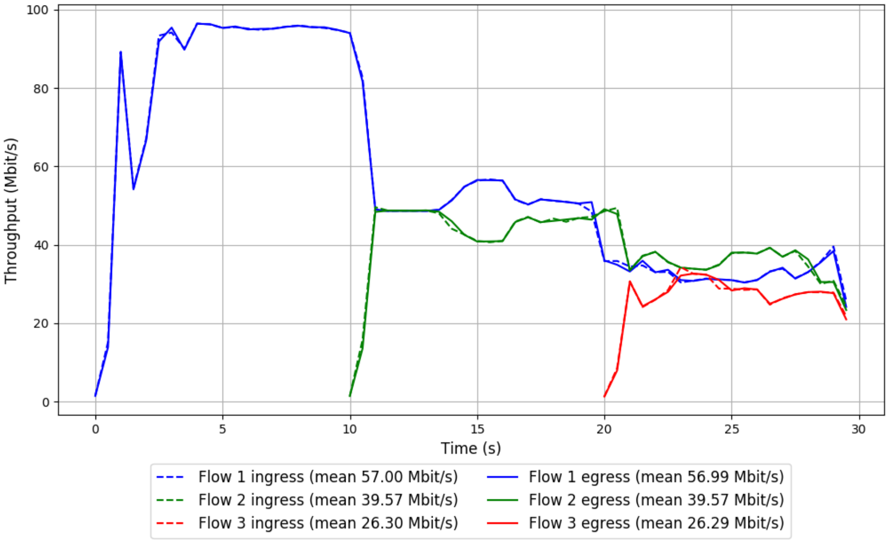


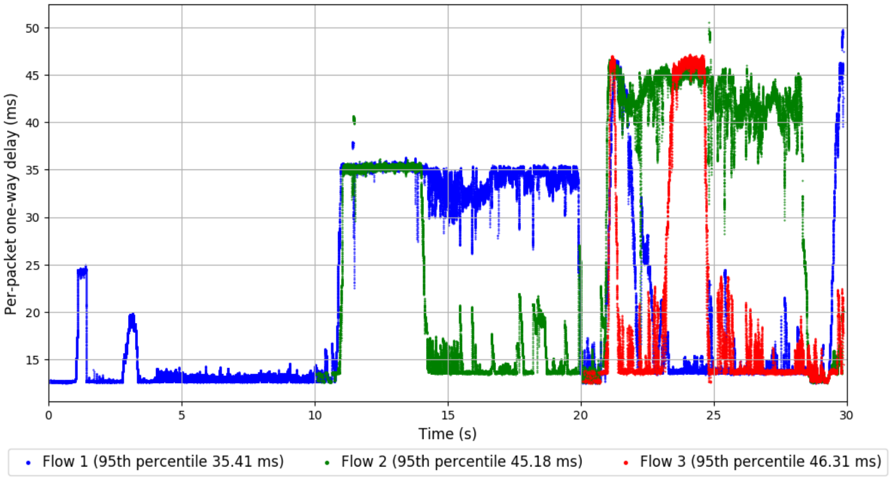
```
Run 6: Statistics of Vivace-LTE

Start at: 2018-04-10 20:18:35
End at: 2018-04-10 20:19:05
Local clock offset: 0.635 ms
Remote clock offset: -7.431 ms

# Below is generated by plot.py at 2018-04-11 01:54:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.92 Mbit/s
95th percentile per-packet one-way delay: 44.318 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 56.99 Mbit/s
95th percentile per-packet one-way delay: 35.406 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 39.57 Mbit/s
95th percentile per-packet one-way delay: 45.177 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 26.29 Mbit/s
95th percentile per-packet one-way delay: 46.311 ms
Loss rate: 0.31%
```

Run 6: Report of Vivace-LTE — Data Link



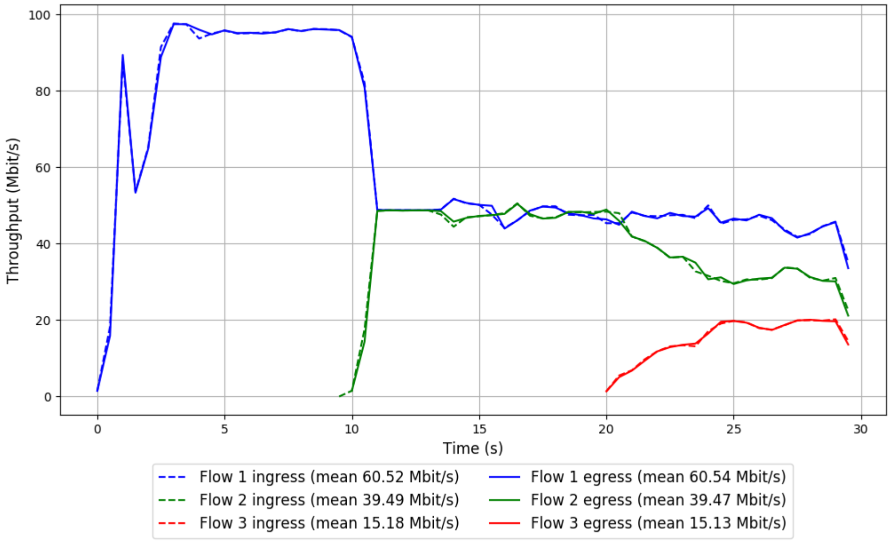


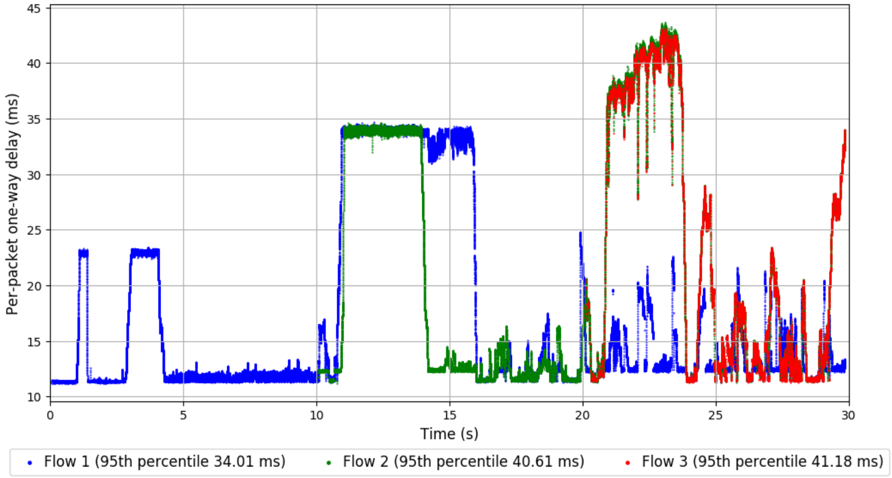
```
Run 7: Statistics of Vivace-LTE

Start at: 2018-04-10 20:40:16
End at: 2018-04-10 20:40:46
Local clock offset: 0.622 ms
Remote clock offset: -3.336 ms

# Below is generated by plot.py at 2018-04-11 01:54:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.76 Mbit/s
95th percentile per-packet one-way delay: 34.778 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 60.54 Mbit/s
95th percentile per-packet one-way delay: 34.010 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 39.47 Mbit/s
95th percentile per-packet one-way delay: 40.610 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 15.13 Mbit/s
95th percentile per-packet one-way delay: 41.177 ms
Loss rate: 0.65%
```

Run 7: Report of Vivace-LTE — Data Link



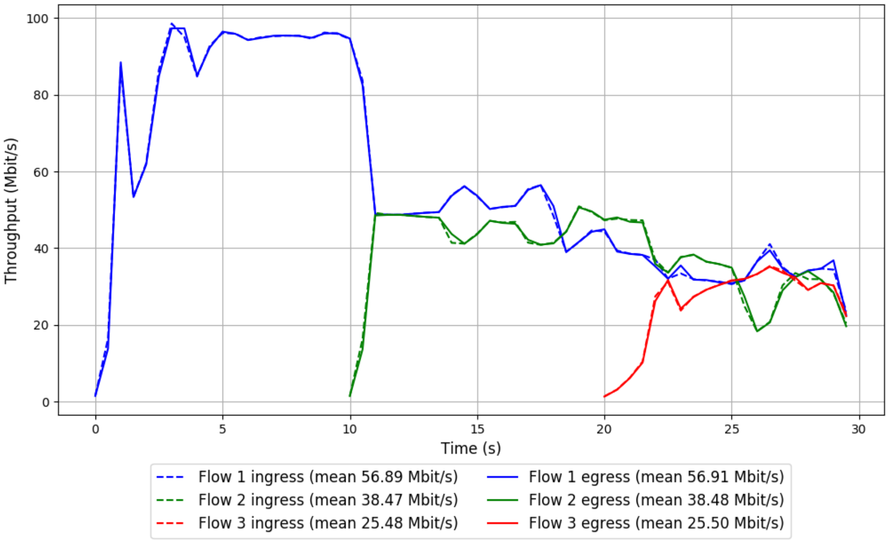


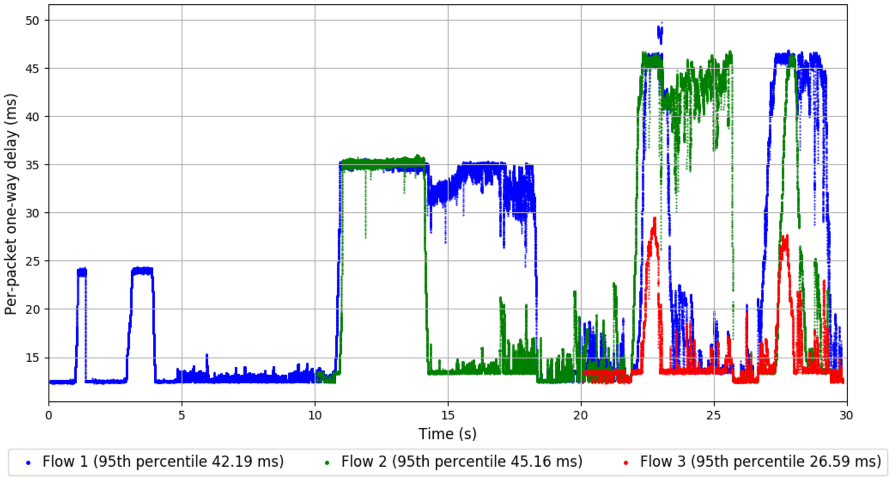
```
Run 8: Statistics of Vivace-LTE

Start at: 2018-04-10 21:01:32
End at: 2018-04-10 21:02:02
Local clock offset: 0.923 ms
Remote clock offset: -2.174 ms

# Below is generated by plot.py at 2018-04-11 01:54:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.86 Mbit/s
95th percentile per-packet one-way delay: 43.859 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 56.91 Mbit/s
95th percentile per-packet one-way delay: 42.191 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 38.48 Mbit/s
95th percentile per-packet one-way delay: 45.165 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 25.50 Mbit/s
95th percentile per-packet one-way delay: 26.593 ms
Loss rate: 0.31%
```

Run 8: Report of Vivace-LTE — Data Link



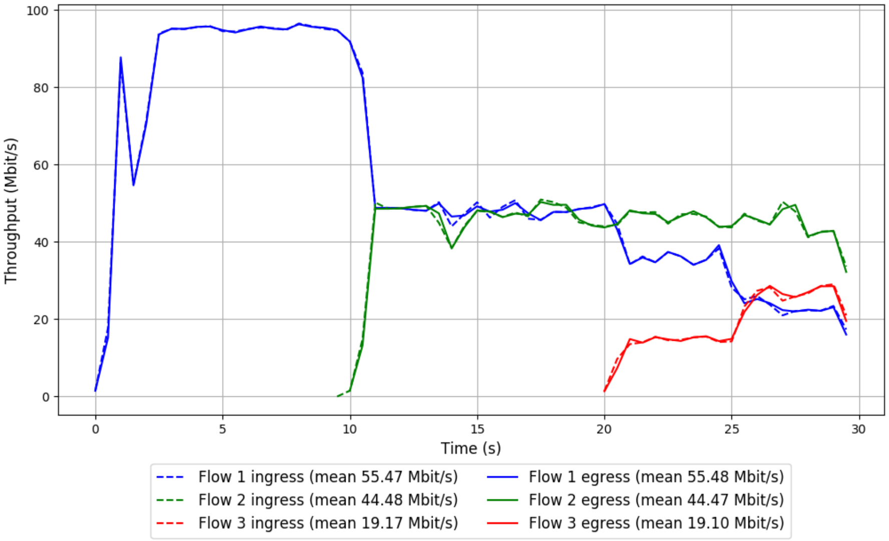


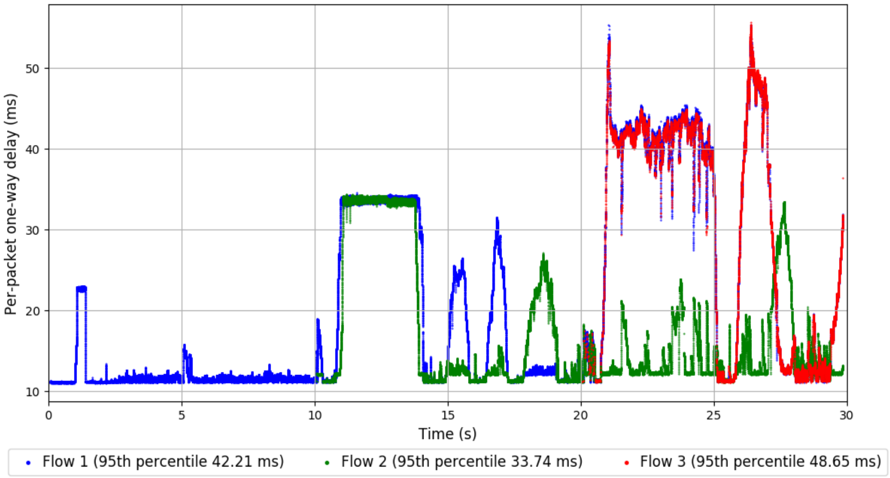
```
Run 9: Statistics of Vivace-LTE

Start at: 2018-04-10 21:22:43
End at: 2018-04-10 21:23:14
Local clock offset: -0.328 ms
Remote clock offset: 4.217 ms

# Below is generated by plot.py at 2018-04-11 01:54:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.32 Mbit/s
95th percentile per-packet one-way delay: 42.109 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 55.48 Mbit/s
95th percentile per-packet one-way delay: 42.207 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 44.47 Mbit/s
95th percentile per-packet one-way delay: 33.745 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 19.10 Mbit/s
95th percentile per-packet one-way delay: 48.653 ms
Loss rate: 0.70%
```

Run 9: Report of Vivace-LTE — Data Link



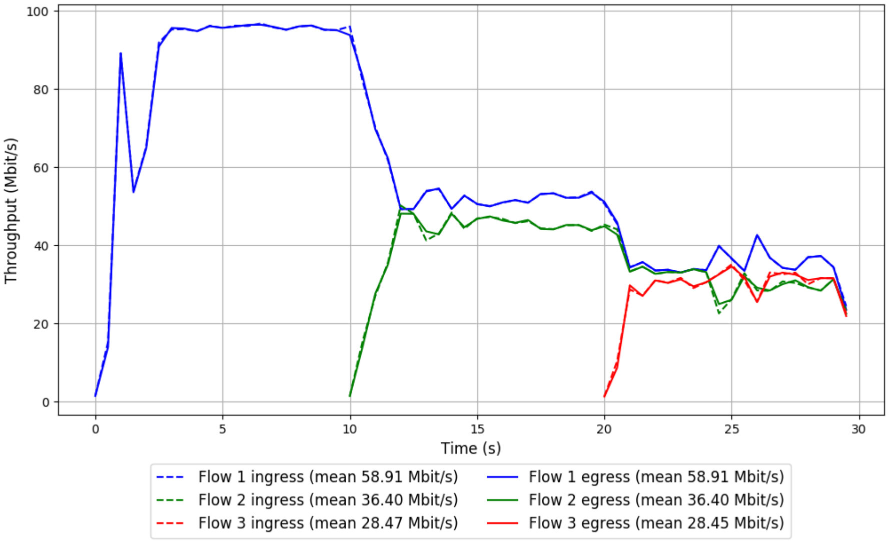


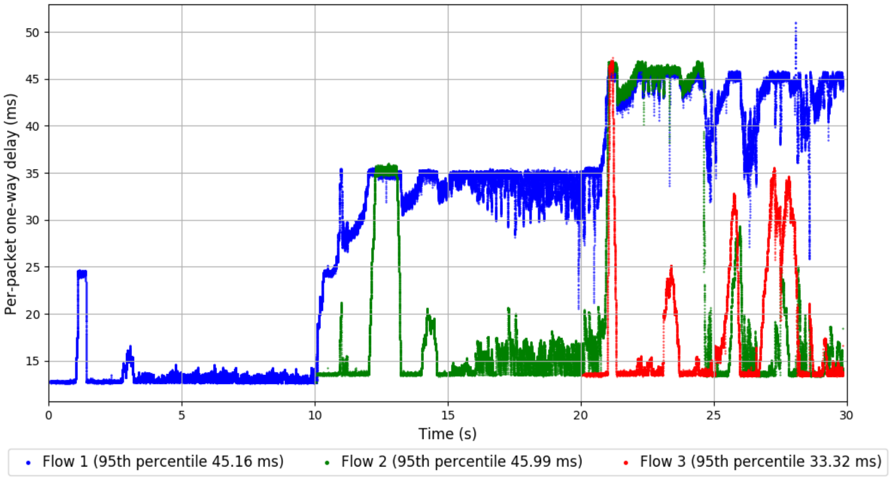
```
Run 10: Statistics of Vivace-LTE

Start at: 2018-04-10 21:43:57
End at: 2018-04-10 21:44:27
Local clock offset: 0.351 ms
Remote clock offset: 1.234 ms

# Below is generated by plot.py at 2018-04-11 01:54:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.45 Mbit/s
95th percentile per-packet one-way delay: 45.326 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 58.91 Mbit/s
95th percentile per-packet one-way delay: 45.162 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 36.40 Mbit/s
95th percentile per-packet one-way delay: 45.994 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 28.45 Mbit/s
95th percentile per-packet one-way delay: 33.317 ms
Loss rate: 0.28%
```

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 58.91 Mbit/s)
Flow 2 ingress (mean 36.40 Mbit/s)
Flow 3 ingress (mean 28.47 Mbit/s)
Flow 1 egress (mean 58.91 Mbit/s)
Flow 2 egress (mean 36.40 Mbit/s)
Flow 3 egress (mean 28.45 Mbit/s)


Per-packet one-way delay (ms)
15
20
25
30
35
40
45
50
Time (s)
0
5
10
15
20
25
30
Flow 1 (95th percentile 45.16 ms)
Flow 2 (95th percentile 45.99 ms)
Flow 3 (95th percentile 33.32 ms)