Pantheon Report

Generated at 2017-12-12 04:39:22 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

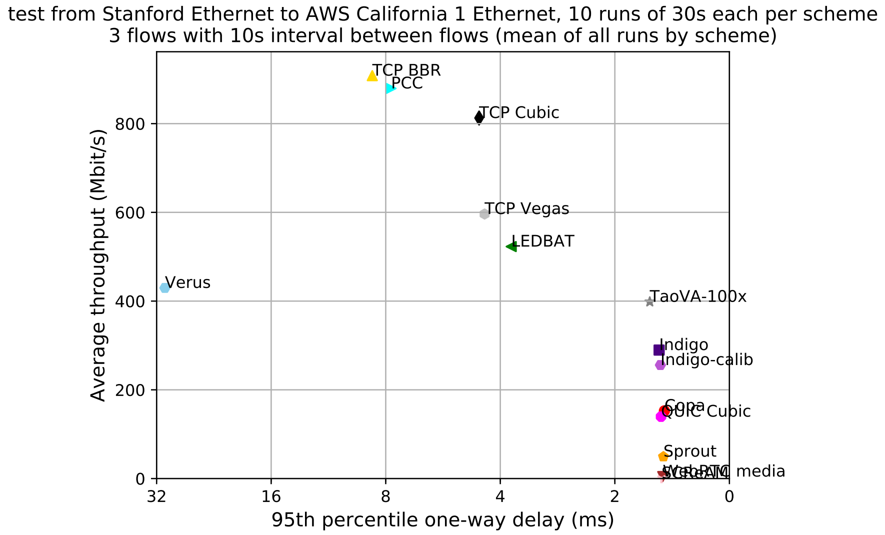
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

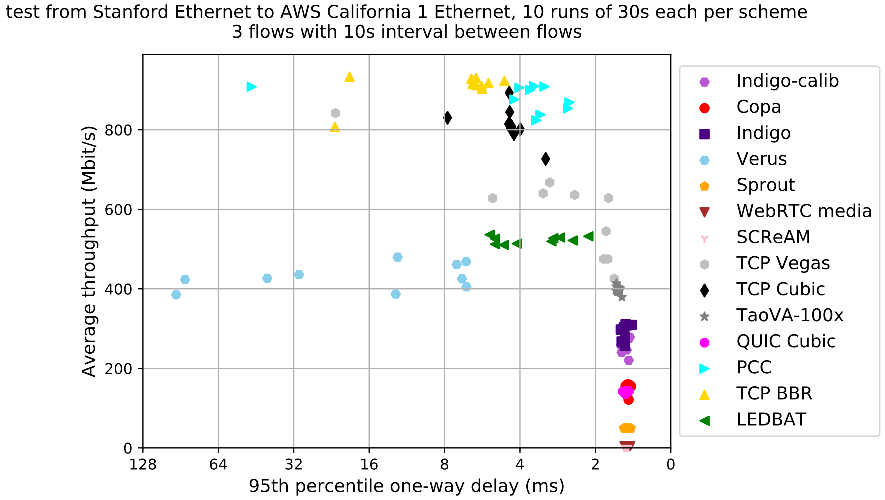
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

NTP offsets were measured against `time.stanford.edu` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fabb936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
 M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

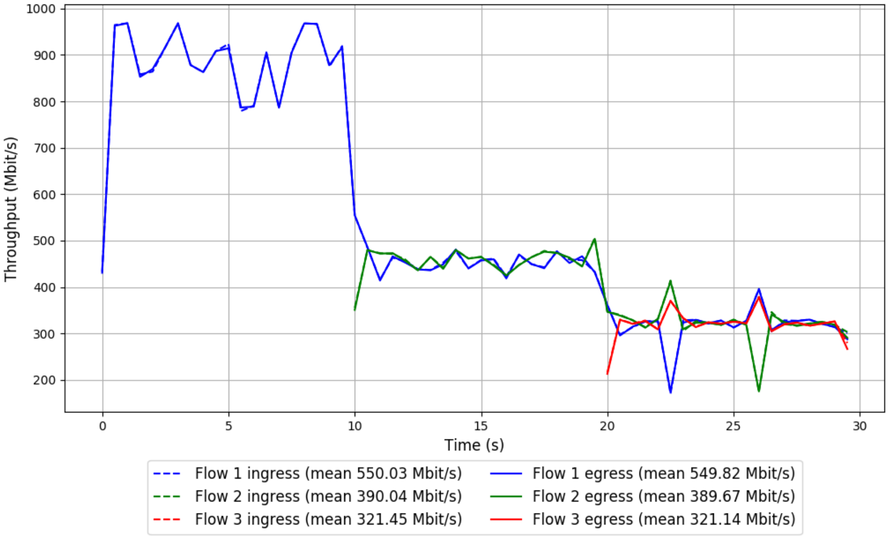

test from Stanford Ethernet to AWS California 1 Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)

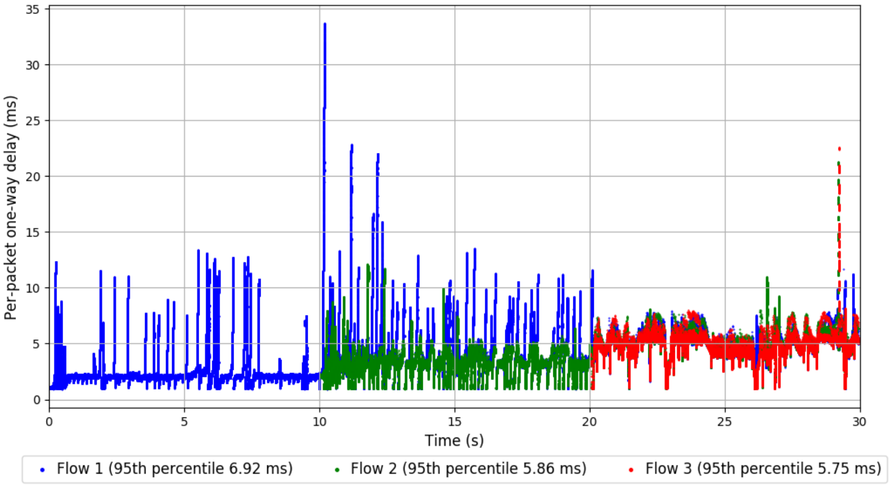

test from Stanford Ethernet to AWS California 1 Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows

scheme	# runs	mean avg tput (Mbit/s) flow 1	flow 2	flow 3	mean 95th-%ile delay (ms) flow 1	flow 2	flow 3	mean loss rate (%) flow 1	flow 2	flow 3
TCP BBR	10	540.87	391.50	322.66	8.02	7.22	5.16	0.07	0.11	0.26
TCP Cubic	10	459.30	383.71	296.10	4.45	4.22	4.50	0.06	0.09	0.23
LEDBAT	10	302.24	248.52	167.84	3.49	3.82	2.41	0.05	0.09	0.25
PCC	10	599.32	331.56	181.87	9.01	3.45	3.42	0.17	0.11	0.21
QUIC Cubic	10	74.40	69.14	58.10	1.19	1.20	1.20	0.06	0.09	0.24
SCReAM	5	0.22	0.22	0.22	1.18	1.19	1.19	0.00	0.00	0.35
WebRTC media	10	2.39	1.50	0.65	1.16	1.17	1.17	0.07	0.25	0.11
Sprout	10	24.86	24.83	24.49	1.16	1.15	1.13	0.05	0.14	0.13
TaoVA-100x	10	224.31	205.81	149.19	1.26	1.45	1.96	0.04	0.06	0.25
TCP Vegas	10	300.35	310.87	268.95	4.32	2.30	2.40	0.05	0.09	0.21
Verus	10	259.53	184.66	144.49	34.82	7.16	4.23	0.57	0.08	0.18
Copa	10	82.89	72.38	83.02	1.13	1.13	1.15	0.05	0.07	0.19
Indigo	10	148.77	155.56	107.43	1.20	1.26	1.25	0.06	0.09	0.21
Indigo-calib	10	133.17	137.51	96.40	1.18	1.24	1.21	0.06	0.10	0.23

```
Run 1: Statistics of TCP BBR

Start at: 2017-12-11 20:05:57
End at: 2017-12-11 20:06:27
Local clock offset: -1.726 ms
Remote clock offset: -2.32 ms

# Below is generated by plot.py at 2017-12-12 03:07:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 915.51 Mbit/s
95th percentile per-packet one-way delay: 6.187 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 549.82 Mbit/s
95th percentile per-packet one-way delay: 6.915 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 389.67 Mbit/s
95th percentile per-packet one-way delay: 5.857 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 321.14 Mbit/s
95th percentile per-packet one-way delay: 5.751 ms
Loss rate: 0.32%
```

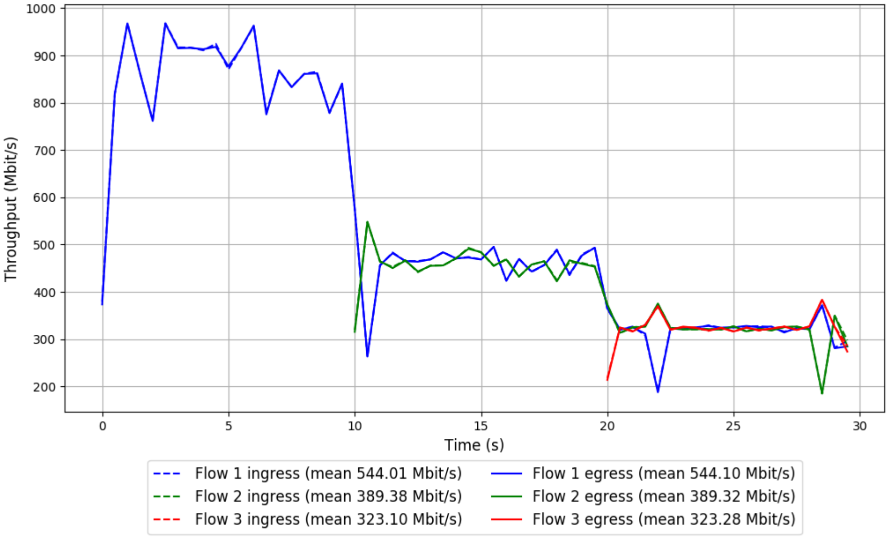
Run 1: Report of TCP BBR — Data Link

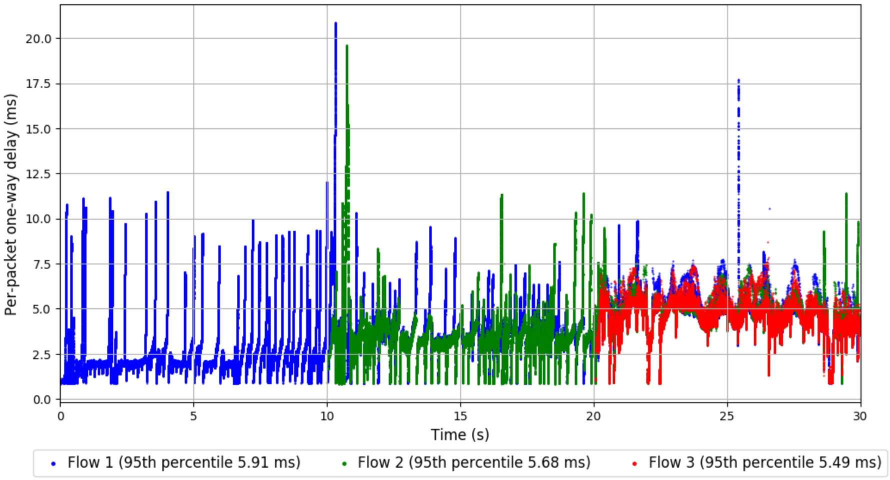




```
Run 2: Statistics of TCP BBR

Start at: 2017-12-11 20:26:50
End at: 2017-12-11 20:27:20
Local clock offset: -1.821 ms
Remote clock offset: -1.793 ms

# Below is generated by plot.py at 2017-12-12 03:07:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 910.25 Mbit/s
95th percentile per-packet one-way delay: 5.691 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 544.10 Mbit/s
95th percentile per-packet one-way delay: 5.908 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 389.32 Mbit/s
95th percentile per-packet one-way delay: 5.680 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 323.28 Mbit/s
95th percentile per-packet one-way delay: 5.491 ms
Loss rate: 0.25%
```

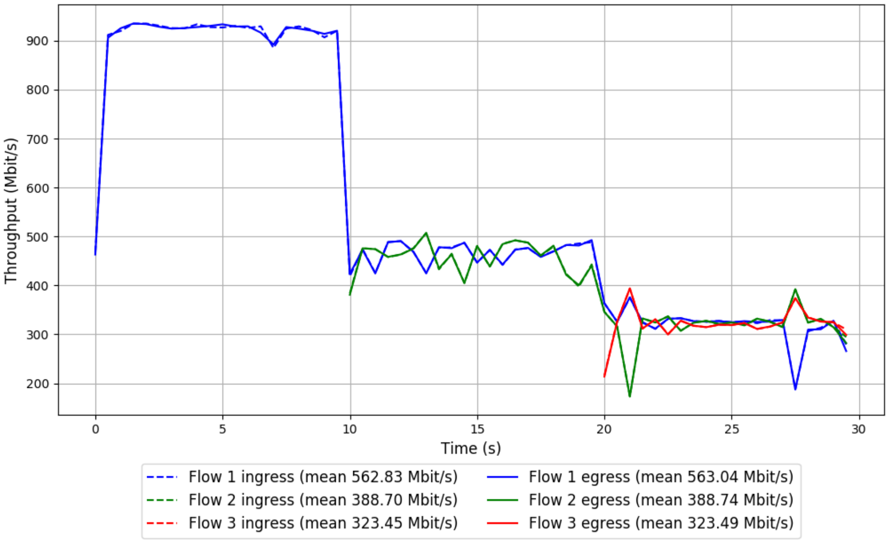
Run 2: Report of TCP BBR — Data Link

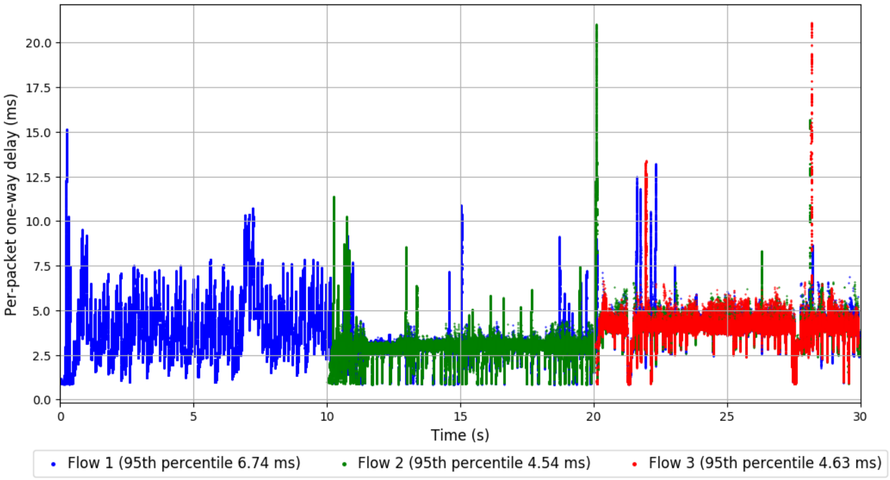




```
Run 3: Statistics of TCP BBR

Start at: 2017-12-11 20:47:19
End at: 2017-12-11 20:47:49
Local clock offset: -1.745 ms
Remote clock offset: -1.633 ms

# Below is generated by plot.py at 2017-12-12 03:07:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 928.74 Mbit/s
95th percentile per-packet one-way delay: 6.253 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 563.04 Mbit/s
95th percentile per-packet one-way delay: 6.739 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 388.74 Mbit/s
95th percentile per-packet one-way delay: 4.542 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 323.49 Mbit/s
95th percentile per-packet one-way delay: 4.626 ms
Loss rate: 0.21%
```

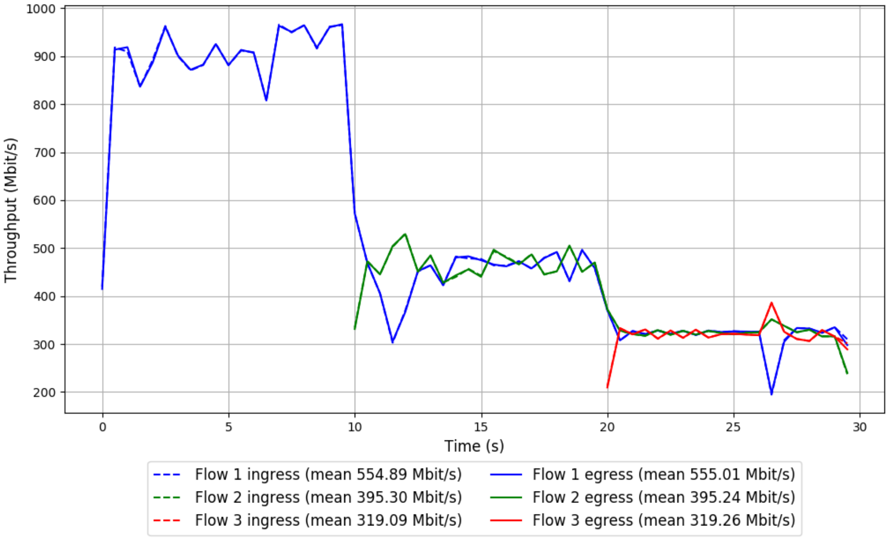
Run 3: Report of TCP BBR — Data Link

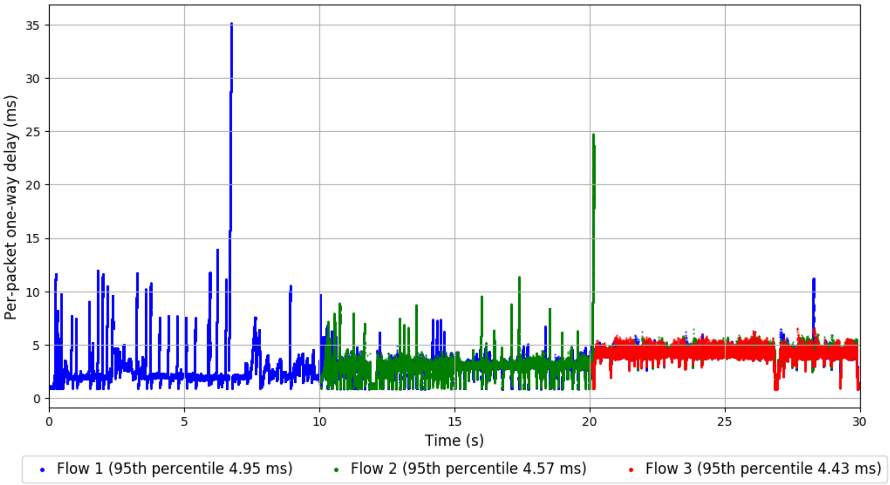




```
Run 4: Statistics of TCP BBR

Start at: 2017-12-11 21:08:00
End at: 2017-12-11 21:08:30
Local clock offset: -1.599 ms
Remote clock offset: -1.411 ms

# Below is generated by plot.py at 2017-12-12 03:07:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 922.91 Mbit/s
95th percentile per-packet one-way delay: 4.616 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 555.01 Mbit/s
95th percentile per-packet one-way delay: 4.947 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 395.24 Mbit/s
95th percentile per-packet one-way delay: 4.570 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 319.26 Mbit/s
95th percentile per-packet one-way delay: 4.426 ms
Loss rate: 0.24%
```

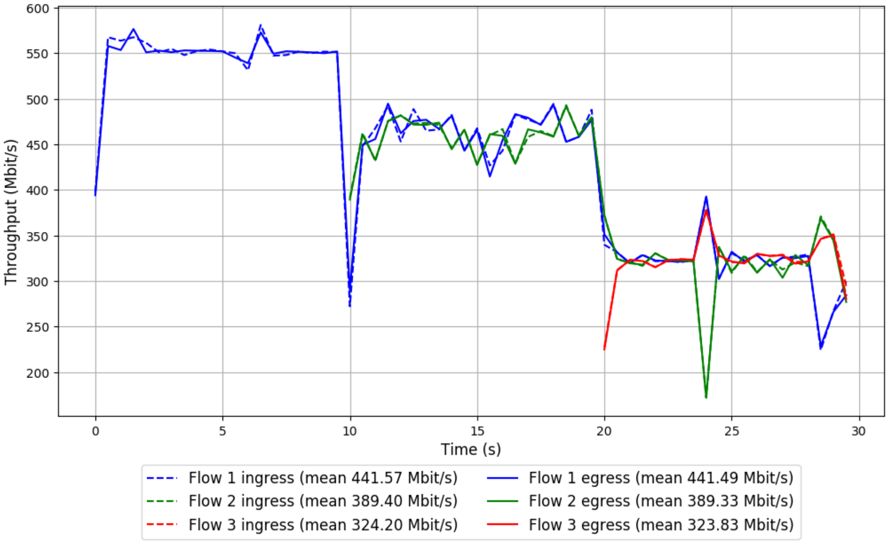
Run 4: Report of TCP BBR — Data Link

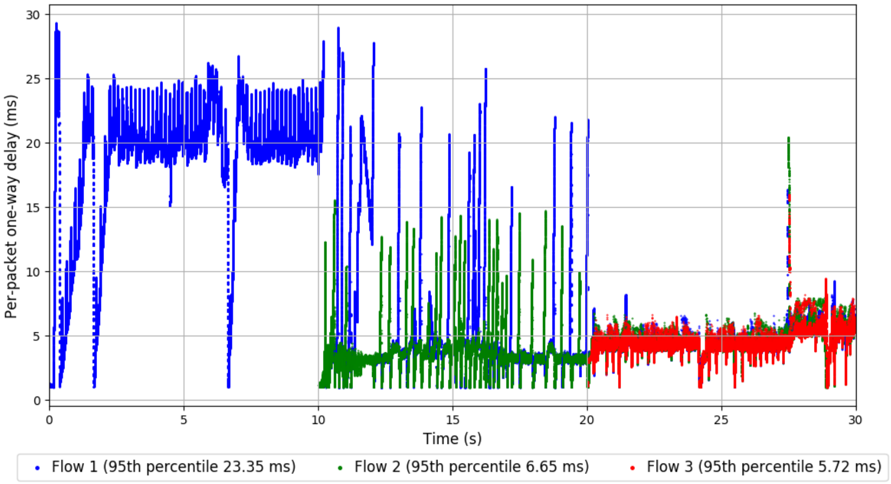




```
Run 5: Statistics of TCP BBR

Start at: 2017-12-11 21:28:38
End at: 2017-12-11 21:29:08
Local clock offset: -1.4 ms
Remote clock offset: -1.149 ms

# Below is generated by plot.py at 2017-12-12 03:07:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 807.90 Mbit/s
95th percentile per-packet one-way delay: 21.896 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 441.49 Mbit/s
95th percentile per-packet one-way delay: 23.346 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 389.33 Mbit/s
95th percentile per-packet one-way delay: 6.646 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 323.83 Mbit/s
95th percentile per-packet one-way delay: 5.721 ms
Loss rate: 0.31%
```

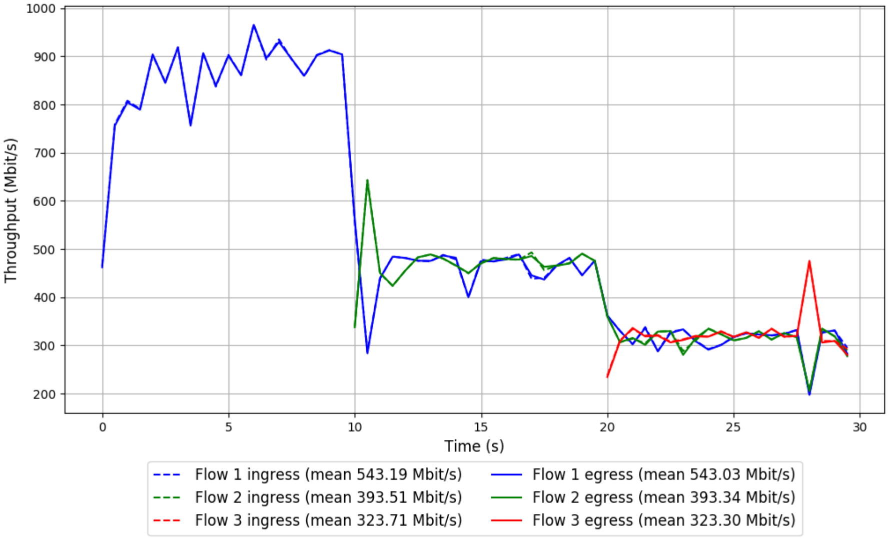
Run 5: Report of TCP BBR — Data Link

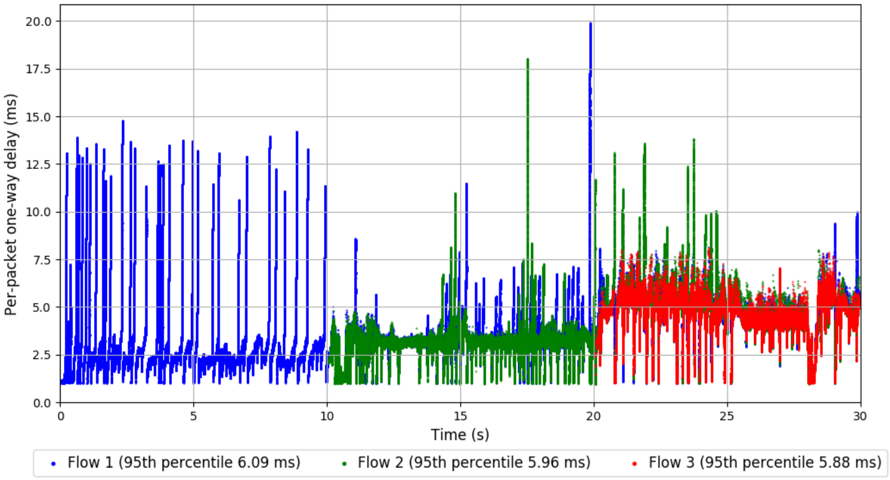




```
Run 6: Statistics of TCP BBR

Start at: 2017-12-11 21:49:14
End at: 2017-12-11 21:49:44
Local clock offset: -0.934 ms
Remote clock offset: -0.492 ms

# Below is generated by plot.py at 2017-12-12 03:07:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 911.95 Mbit/s
95th percentile per-packet one-way delay: 5.980 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 543.03 Mbit/s
95th percentile per-packet one-way delay: 6.086 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 393.34 Mbit/s
95th percentile per-packet one-way delay: 5.956 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 323.30 Mbit/s
95th percentile per-packet one-way delay: 5.877 ms
Loss rate: 0.35%
```

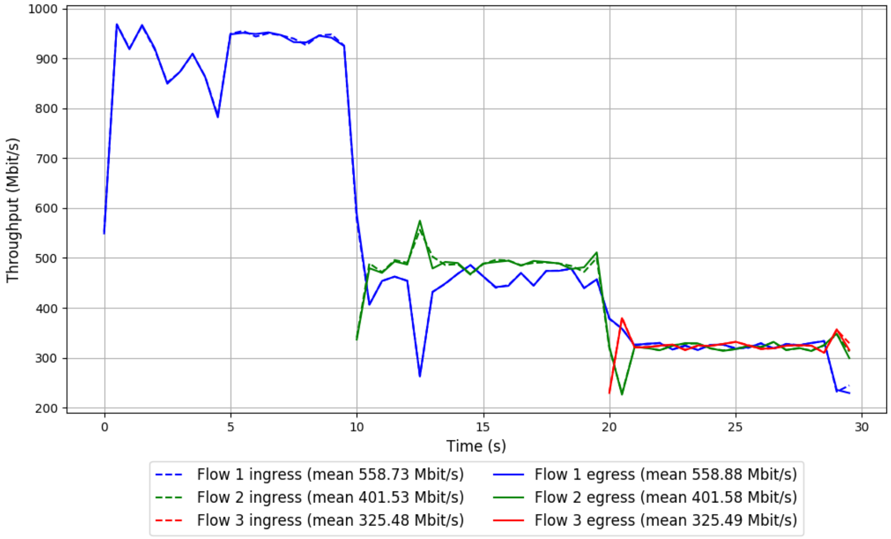
Run 6: Report of TCP BBR — Data Link

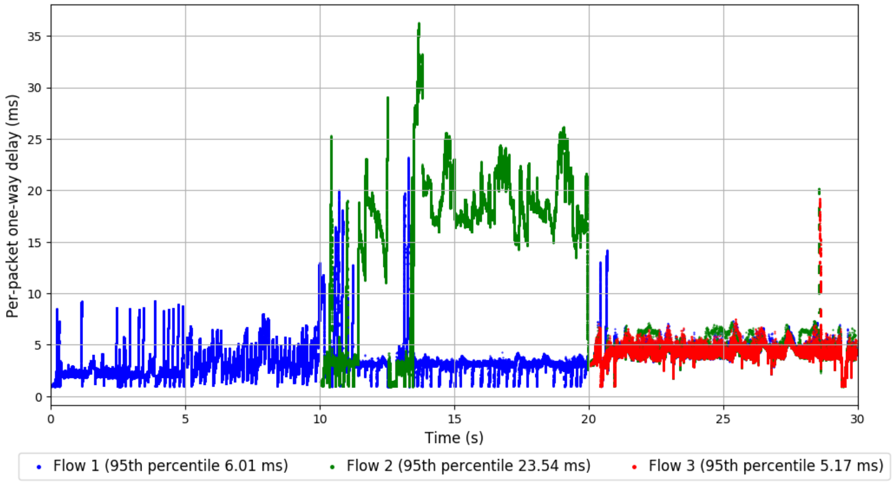




```
Run 7: Statistics of TCP BBR

Start at: 2017-12-11 22:09:44
End at: 2017-12-11 22:10:14
Local clock offset: -0.807 ms
Remote clock offset: -0.191 ms

# Below is generated by plot.py at 2017-12-12 03:08:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 933.76 Mbit/s
95th percentile per-packet one-way delay: 19.142 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 558.88 Mbit/s
95th percentile per-packet one-way delay: 6.006 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 401.58 Mbit/s
95th percentile per-packet one-way delay: 23.539 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 325.49 Mbit/s
95th percentile per-packet one-way delay: 5.172 ms
Loss rate: 0.23%
```

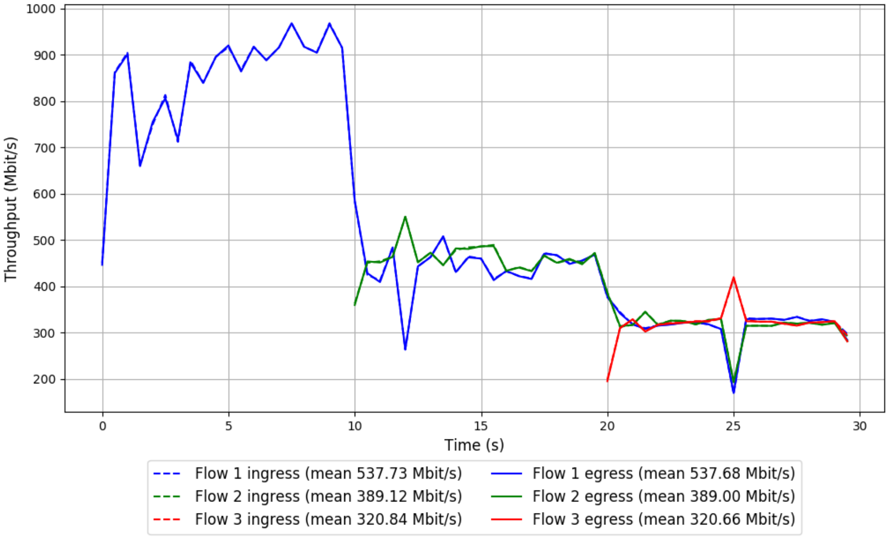
Run 7: Report of TCP BBR — Data Link

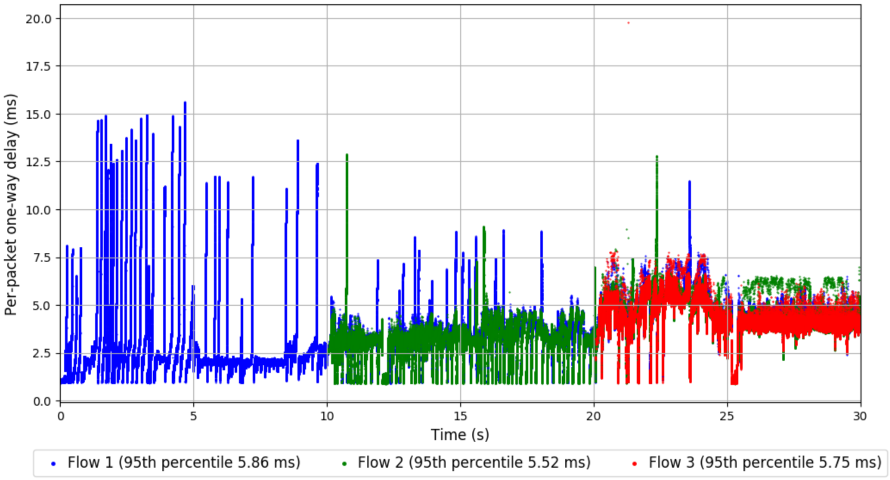




```
Run 8: Statistics of TCP BBR

Start at: 2017-12-11 22:30:25
End at: 2017-12-11 22:30:55
Local clock offset: -0.398 ms
Remote clock offset: -0.007 ms

# Below is generated by plot.py at 2017-12-12 03:08:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 902.63 Mbit/s
95th percentile per-packet one-way delay: 5.673 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 537.68 Mbit/s
95th percentile per-packet one-way delay: 5.856 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 389.00 Mbit/s
95th percentile per-packet one-way delay: 5.520 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 320.66 Mbit/s
95th percentile per-packet one-way delay: 5.755 ms
Loss rate: 0.28%
```

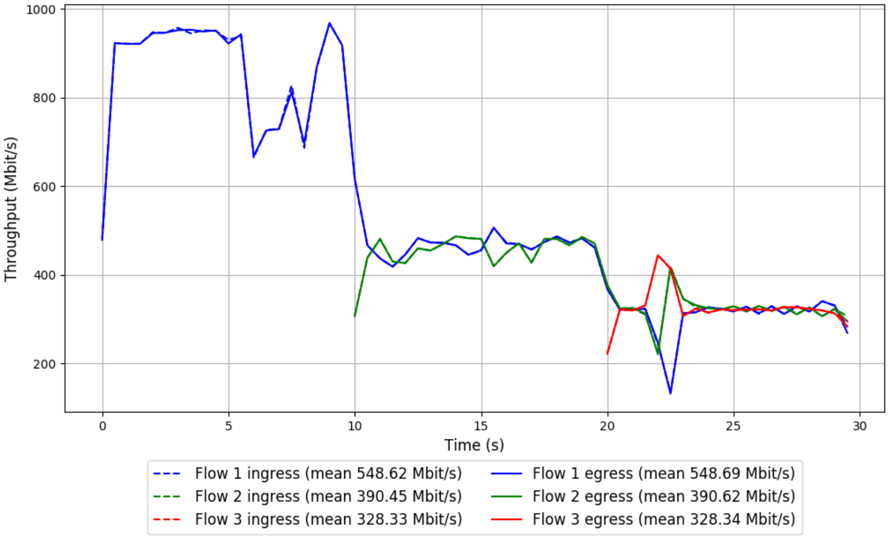
Run 8: Report of TCP BBR — Data Link

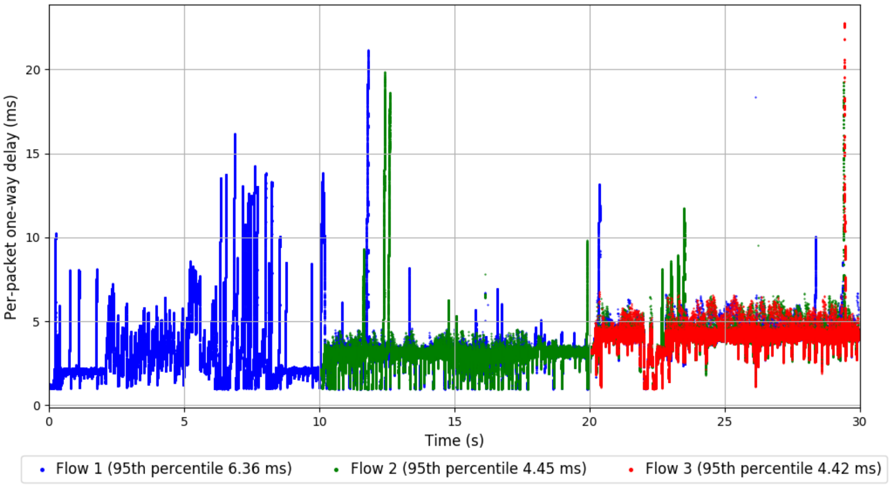




```
Run 9: Statistics of TCP BBR

Start at: 2017-12-11 22:51:06
End at: 2017-12-11 22:51:36
Local clock offset: -0.079 ms
Remote clock offset: -0.273 ms

# Below is generated by plot.py at 2017-12-12 03:19:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 917.34 Mbit/s
95th percentile per-packet one-way delay: 5.346 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 548.69 Mbit/s
95th percentile per-packet one-way delay: 6.361 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 390.62 Mbit/s
95th percentile per-packet one-way delay: 4.453 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 328.34 Mbit/s
95th percentile per-packet one-way delay: 4.415 ms
Loss rate: 0.22%
```

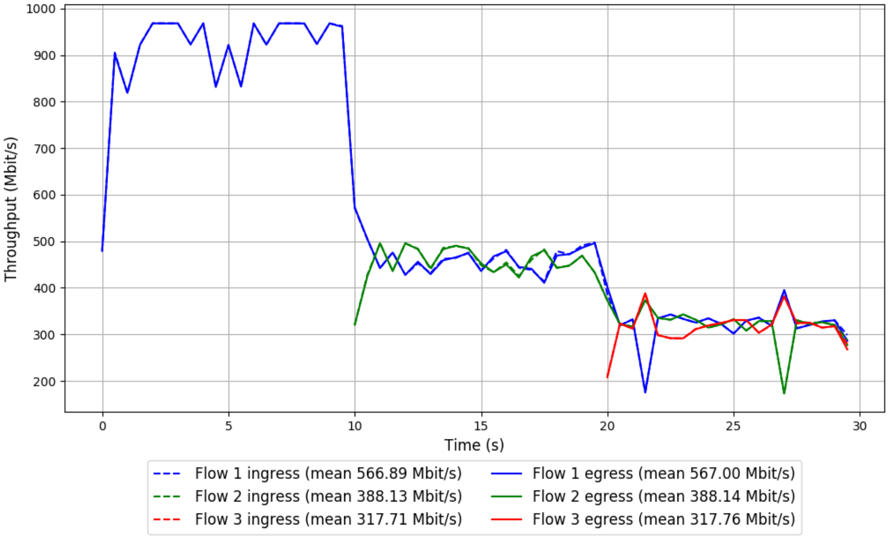
Run 9: Report of TCP BBR — Data Link

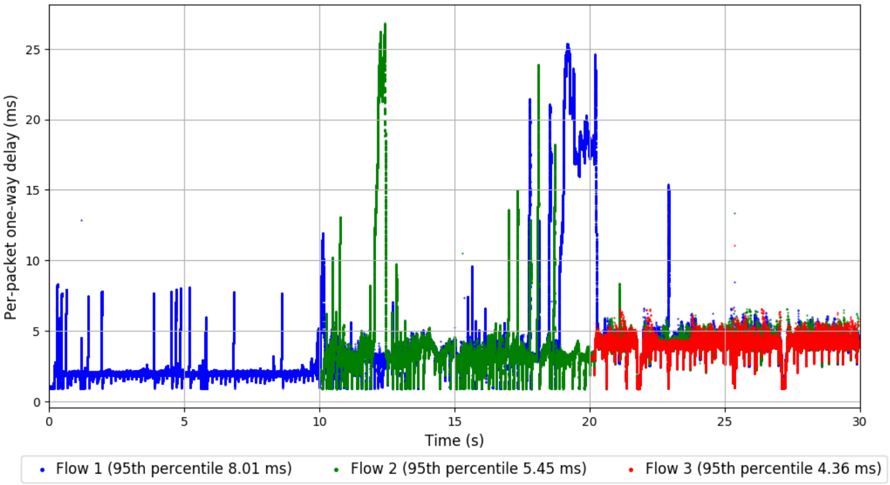




```
Run 10: Statistics of TCP BBR

Start at: 2017-12-11 23:11:47
End at: 2017-12-11 23:12:17
Local clock offset: 0.081 ms
Remote clock offset: -0.174 ms

# Below is generated by plot.py at 2017-12-12 03:20:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 930.35 Mbit/s
95th percentile per-packet one-way delay: 5.994 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 567.00 Mbit/s
95th percentile per-packet one-way delay: 8.005 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 388.14 Mbit/s
95th percentile per-packet one-way delay: 5.452 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 317.76 Mbit/s
95th percentile per-packet one-way delay: 4.355 ms
Loss rate: 0.23%
```

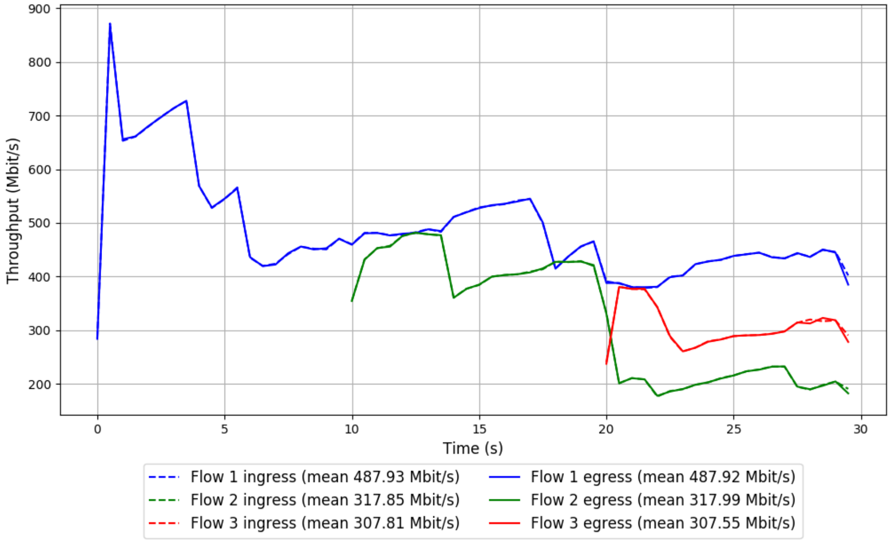
Run 10: Report of TCP BBR — Data Link

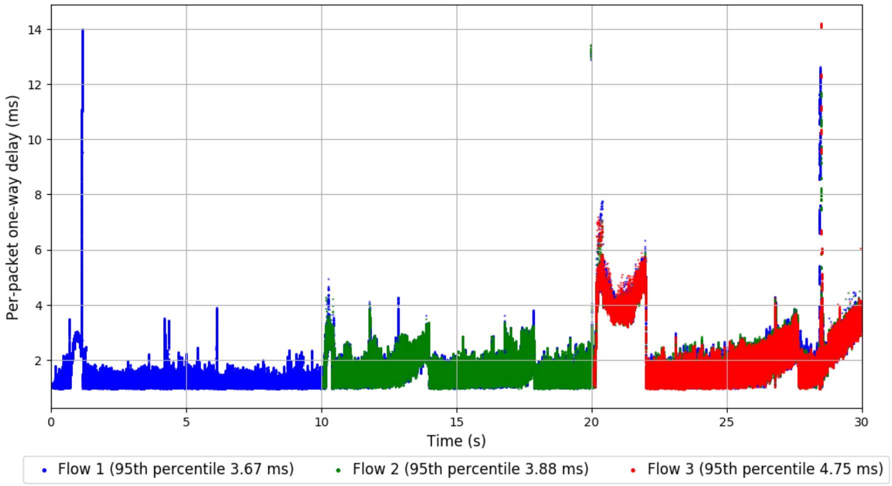




```
Run 1: Statistics of TCP Cubic

Start at: 2017-12-11 20:14:07
End at: 2017-12-11 20:14:37
Local clock offset: -1.87 ms
Remote clock offset: -2.106 ms

# Below is generated by plot.py at 2017-12-12 03:20:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 801.40 Mbit/s
95th percentile per-packet one-way delay: 3.988 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 487.92 Mbit/s
95th percentile per-packet one-way delay: 3.666 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 317.99 Mbit/s
95th percentile per-packet one-way delay: 3.881 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 307.55 Mbit/s
95th percentile per-packet one-way delay: 4.754 ms
Loss rate: 0.24%
```

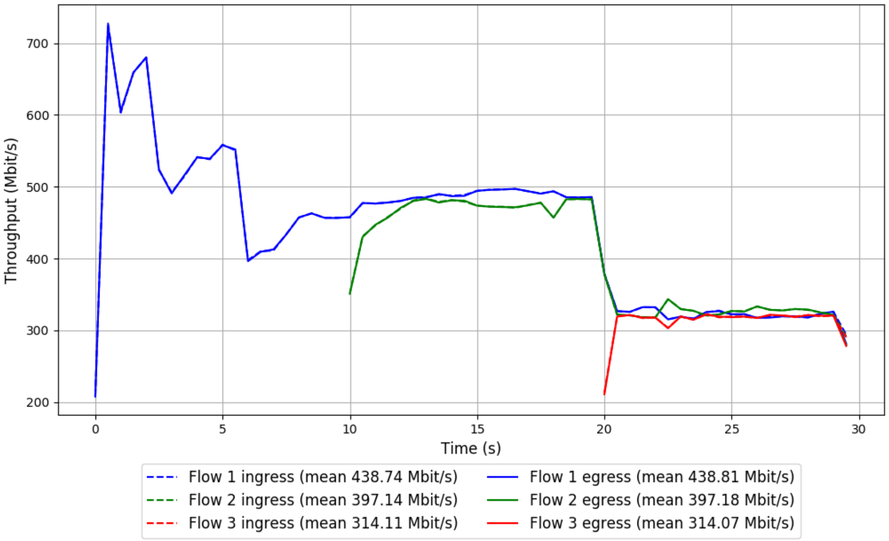
Run 1: Report of TCP Cubic — Data Link

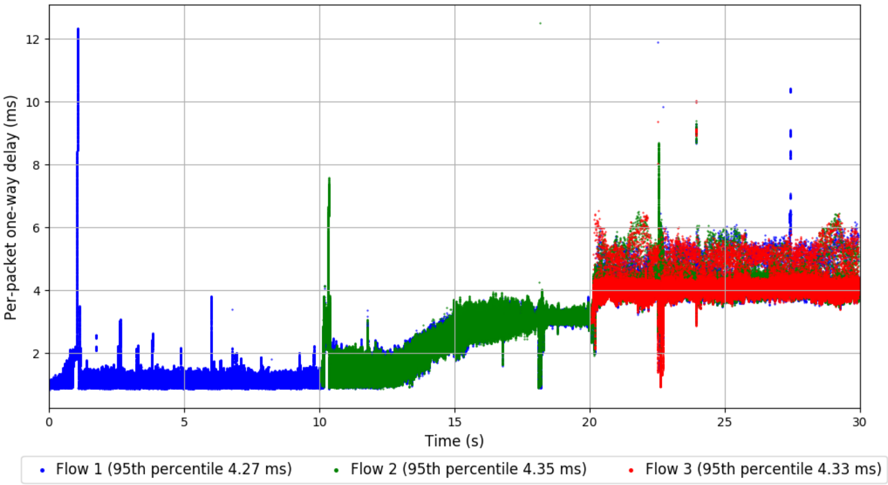




```
Run 2: Statistics of TCP Cubic

Start at: 2017-12-11 20:34:54
End at: 2017-12-11 20:35:24
Local clock offset: -1.748 ms
Remote clock offset: -1.715 ms

# Below is generated by plot.py at 2017-12-12 03:20:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 807.17 Mbit/s
95th percentile per-packet one-way delay: 4.307 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 438.81 Mbit/s
95th percentile per-packet one-way delay: 4.267 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 397.18 Mbit/s
95th percentile per-packet one-way delay: 4.347 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 314.07 Mbit/s
95th percentile per-packet one-way delay: 4.328 ms
Loss rate: 0.23%
```

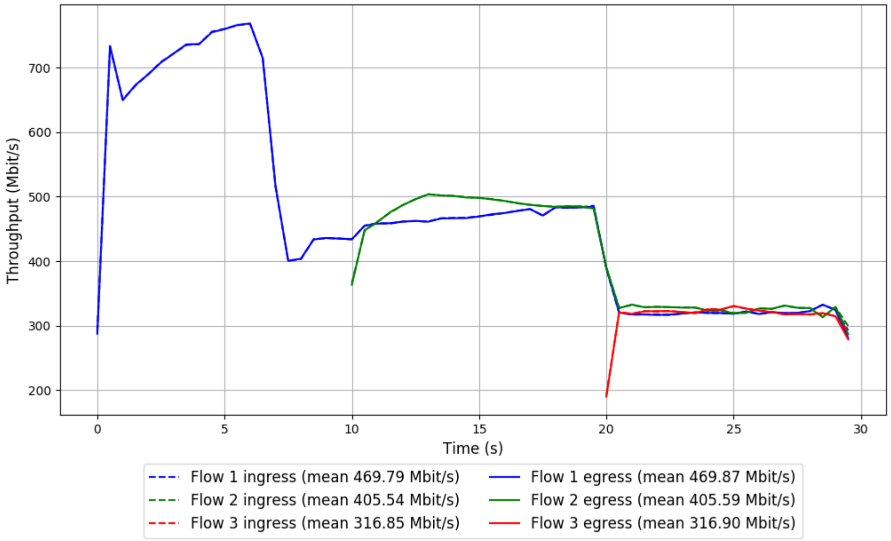
Run 2: Report of TCP Cubic — Data Link

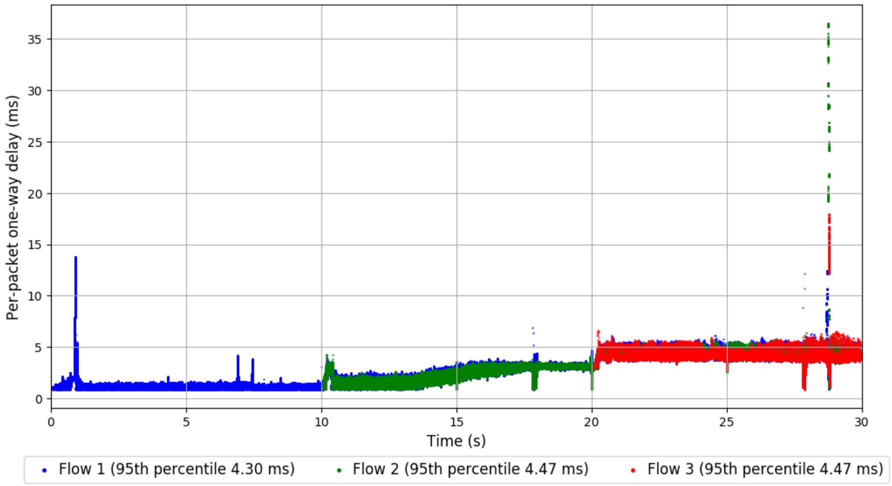




```
Run 3: Statistics of TCP Cubic

Start at: 2017-12-11 20:55:24
End at: 2017-12-11 20:55:54
Local clock offset: -1.705 ms
Remote clock offset: -1.487 ms

# Below is generated by plot.py at 2017-12-12 03:20:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 844.32 Mbit/s
95th percentile per-packet one-way delay: 4.395 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 469.87 Mbit/s
95th percentile per-packet one-way delay: 4.303 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 405.59 Mbit/s
95th percentile per-packet one-way delay: 4.466 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 316.90 Mbit/s
95th percentile per-packet one-way delay: 4.469 ms
Loss rate: 0.24%
```

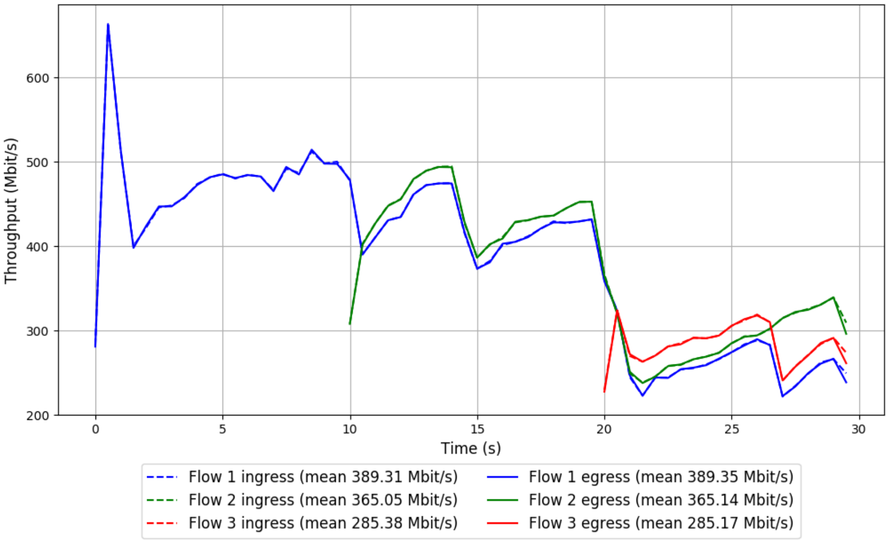
Run 3: Report of TCP Cubic — Data Link

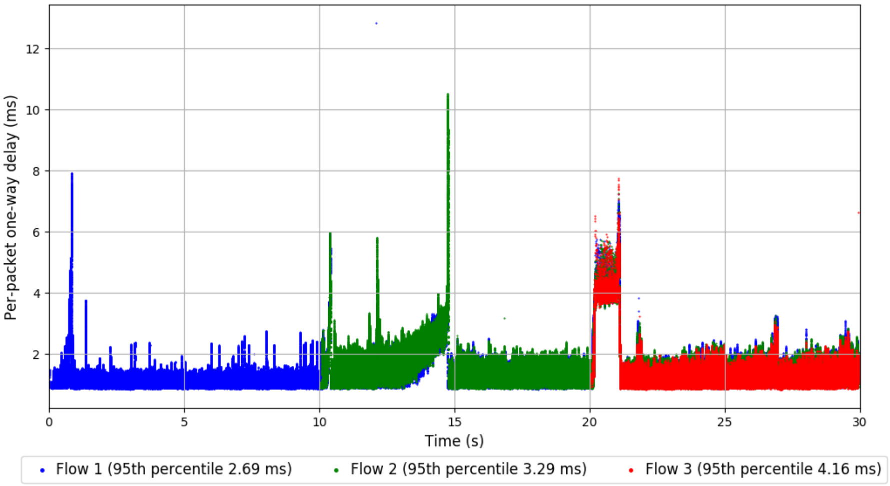




```
Run 4: Statistics of TCP Cubic

Start at: 2017-12-11 21:16:10
End at: 2017-12-11 21:16:40
Local clock offset: -1.587 ms
Remote clock offset: -1.362 ms

# Below is generated by plot.py at 2017-12-12 03:20:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 726.79 Mbit/s
95th percentile per-packet one-way delay: 3.158 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 389.35 Mbit/s
95th percentile per-packet one-way delay: 2.695 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 365.14 Mbit/s
95th percentile per-packet one-way delay: 3.291 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 285.17 Mbit/s
95th percentile per-packet one-way delay: 4.157 ms
Loss rate: 0.23%
```

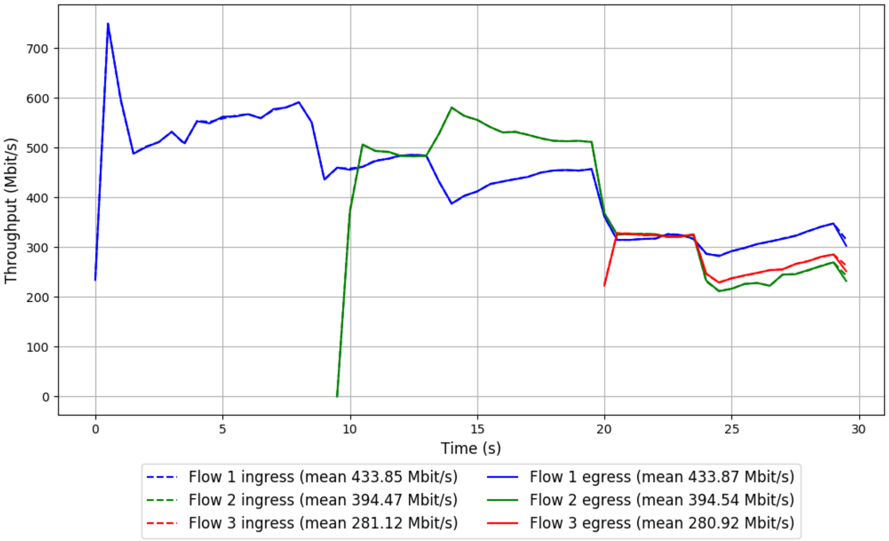
Run 4: Report of TCP Cubic — Data Link

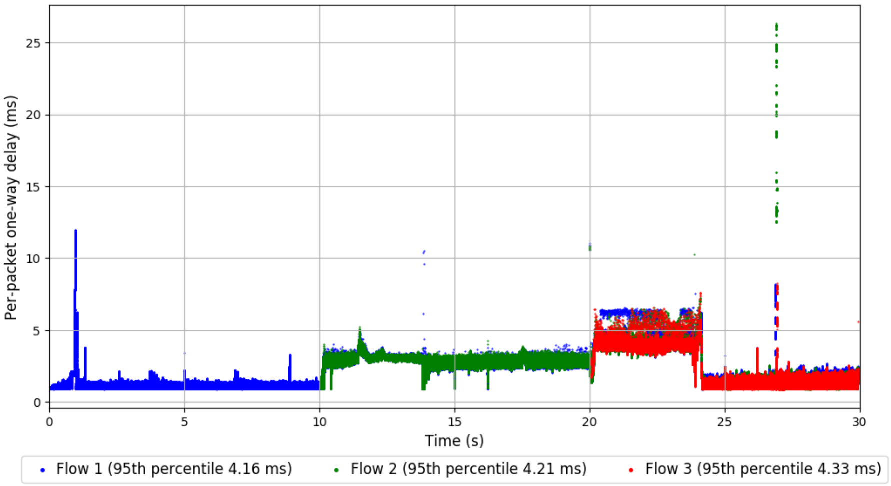




```
Run 5: Statistics of TCP Cubic

Start at: 2017-12-11 21:36:38
End at: 2017-12-11 21:37:08
Local clock offset: -1.256 ms
Remote clock offset: -0.792 ms

# Below is generated by plot.py at 2017-12-12 03:20:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 789.46 Mbit/s
95th percentile per-packet one-way delay: 4.228 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 433.87 Mbit/s
95th percentile per-packet one-way delay: 4.156 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 394.54 Mbit/s
95th percentile per-packet one-way delay: 4.214 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 280.92 Mbit/s
95th percentile per-packet one-way delay: 4.334 ms
Loss rate: 0.23%
```

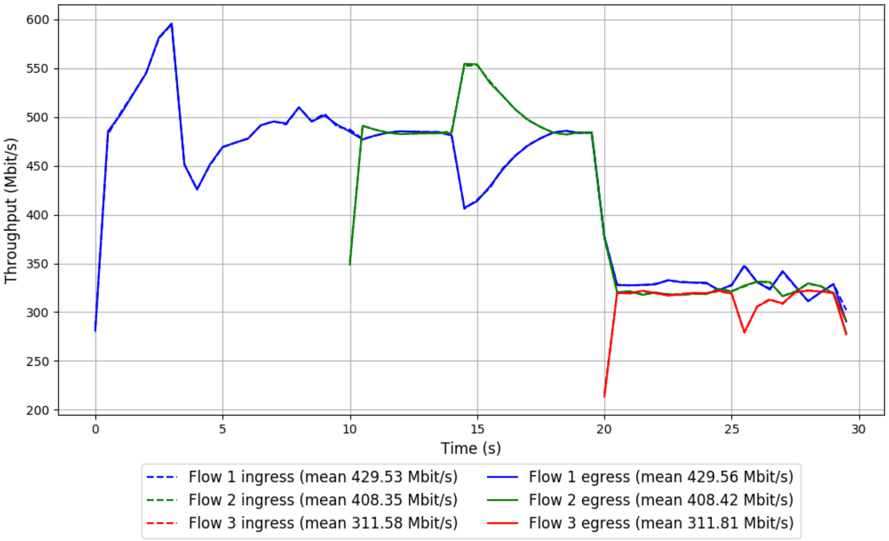
Run 5: Report of TCP Cubic — Data Link

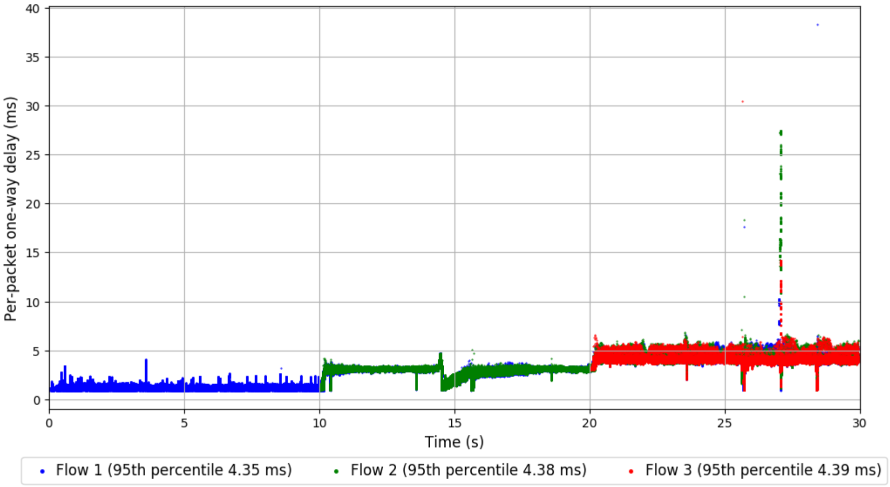




```
Run 6: Statistics of TCP Cubic

Start at: 2017-12-11 21:57:16
End at: 2017-12-11 21:57:46
Local clock offset: -0.917 ms
Remote clock offset: -0.428 ms

# Below is generated by plot.py at 2017-12-12 03:20:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 804.56 Mbit/s
95th percentile per-packet one-way delay: 4.367 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 429.56 Mbit/s
95th percentile per-packet one-way delay: 4.353 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 408.42 Mbit/s
95th percentile per-packet one-way delay: 4.375 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 311.81 Mbit/s
95th percentile per-packet one-way delay: 4.386 ms
Loss rate: 0.24%
```

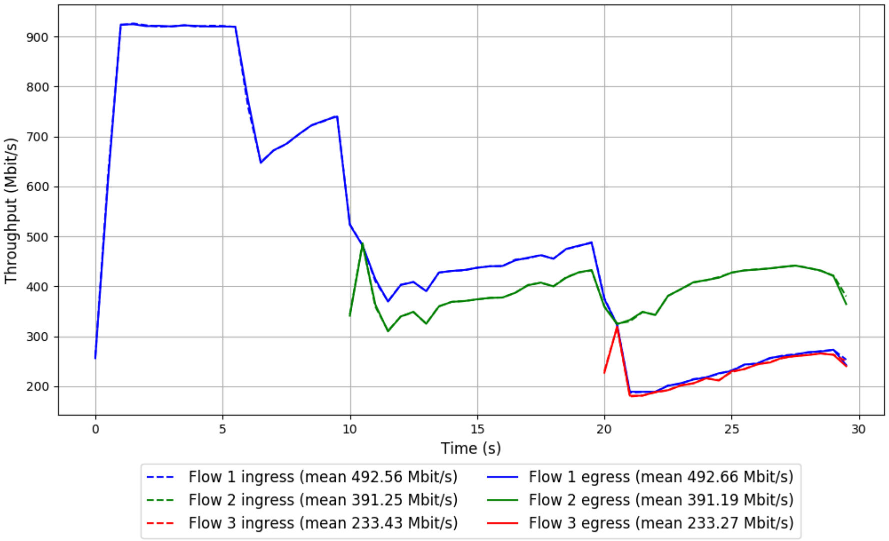
Run 6: Report of TCP Cubic — Data Link

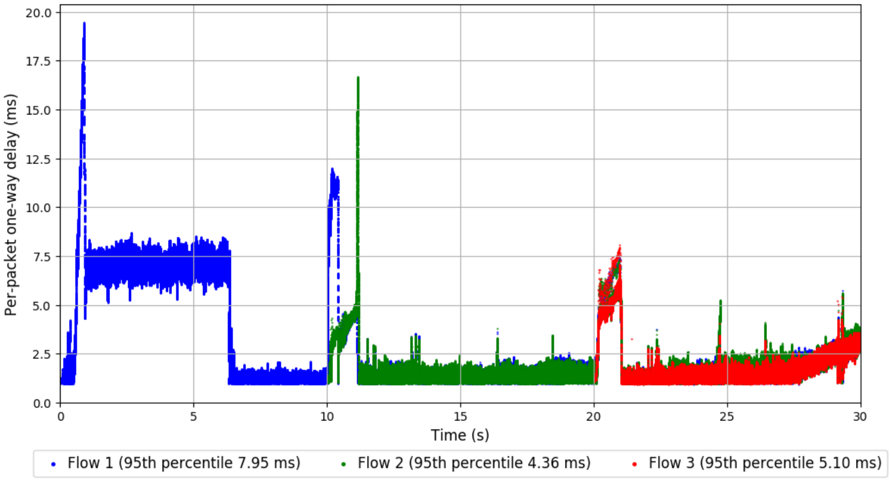




```
Run 7: Statistics of TCP Cubic

Start at: 2017-12-11 22:17:46
End at: 2017-12-11 22:18:16
Local clock offset: -0.562 ms
Remote clock offset: 0.122 ms

# Below is generated by plot.py at 2017-12-12 03:29:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 830.33 Mbit/s
95th percentile per-packet one-way delay: 7.784 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 492.66 Mbit/s
95th percentile per-packet one-way delay: 7.953 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 391.19 Mbit/s
95th percentile per-packet one-way delay: 4.355 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 233.27 Mbit/s
95th percentile per-packet one-way delay: 5.103 ms
Loss rate: 0.26%
```

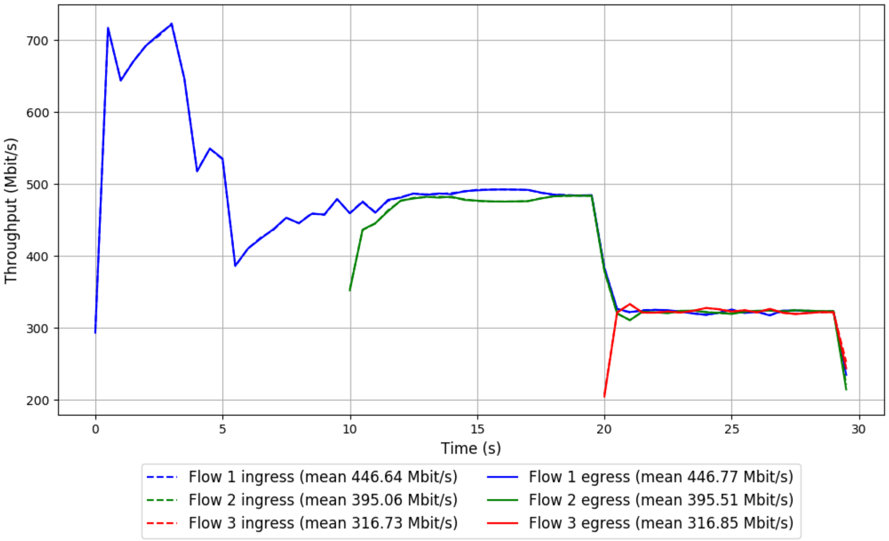
Run 7: Report of TCP Cubic — Data Link

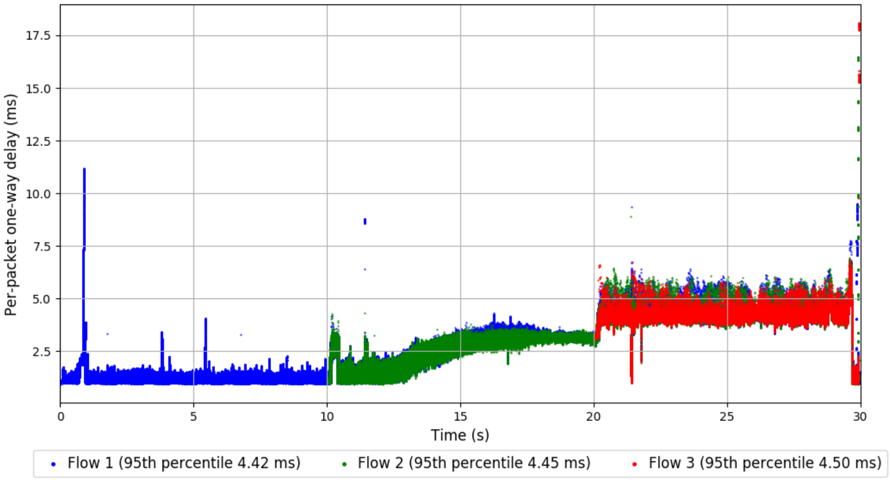




```
Run 8: Statistics of TCP Cubic

Start at: 2017-12-11 22:38:30
End at: 2017-12-11 22:39:00
Local clock offset: -0.269 ms
Remote clock offset: -0.19 ms

# Below is generated by plot.py at 2017-12-12 03:30:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 814.70 Mbit/s
95th percentile per-packet one-way delay: 4.441 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 446.77 Mbit/s
95th percentile per-packet one-way delay: 4.416 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 395.51 Mbit/s
95th percentile per-packet one-way delay: 4.447 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 316.85 Mbit/s
95th percentile per-packet one-way delay: 4.504 ms
Loss rate: 0.18%
```

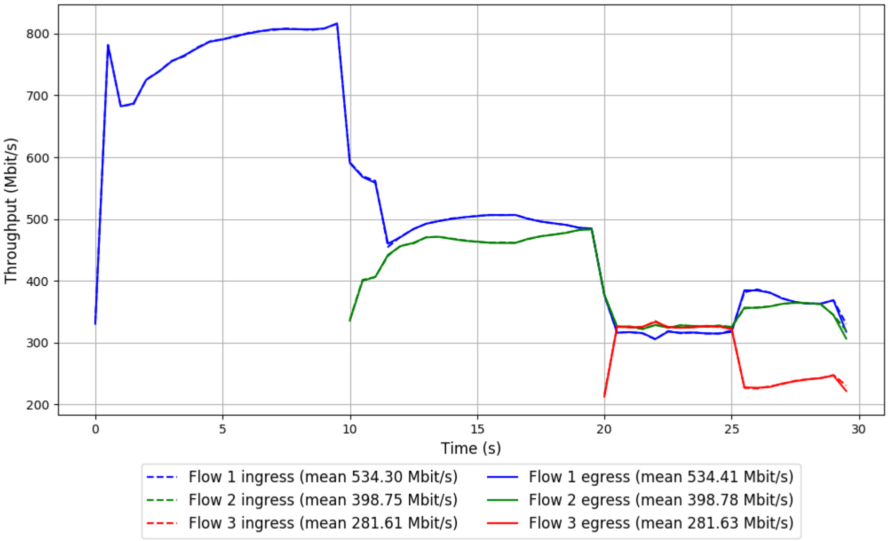
Run 8: Report of TCP Cubic — Data Link

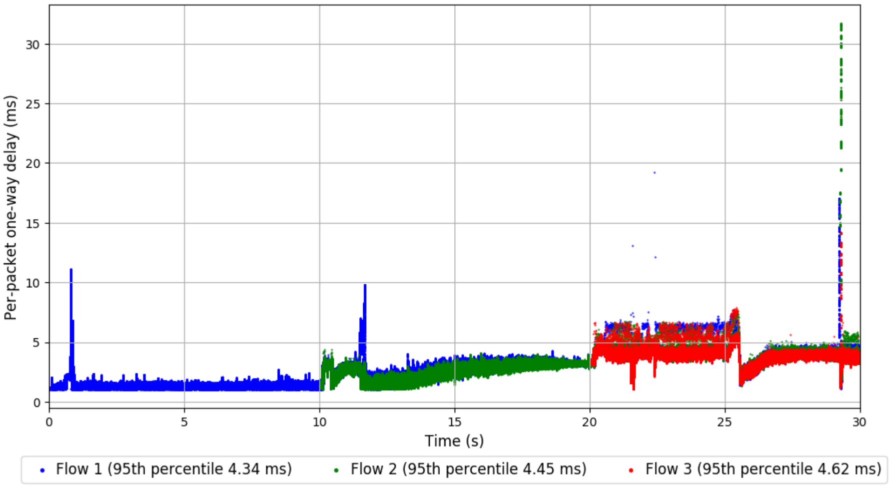




```
Run 9: Statistics of TCP Cubic

Start at: 2017-12-11 22:59:10
End at: 2017-12-11 22:59:40
Local clock offset: 0.049 ms
Remote clock offset: -0.251 ms

# Below is generated by plot.py at 2017-12-12 03:31:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 893.10 Mbit/s
95th percentile per-packet one-way delay: 4.416 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 534.41 Mbit/s
95th percentile per-packet one-way delay: 4.336 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 398.78 Mbit/s
95th percentile per-packet one-way delay: 4.448 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 281.63 Mbit/s
95th percentile per-packet one-way delay: 4.619 ms
Loss rate: 0.21%
```

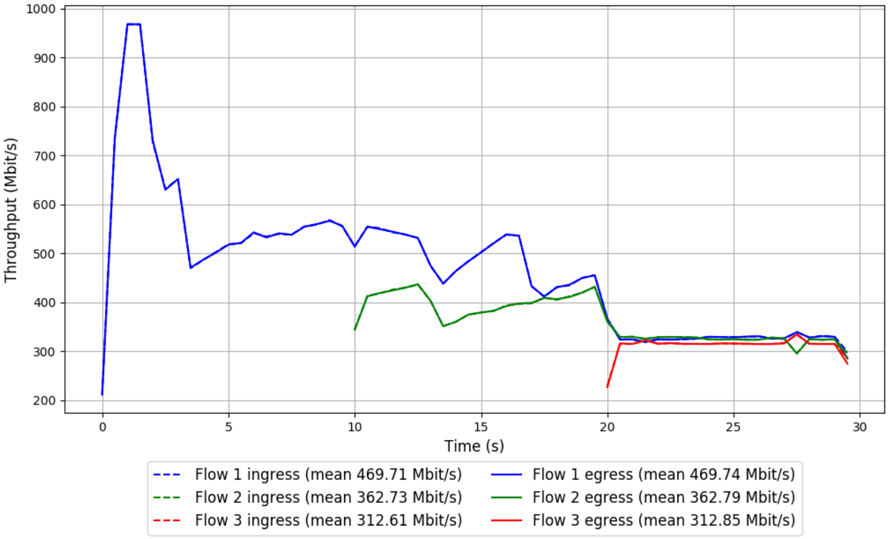
Run 9: Report of TCP Cubic — Data Link

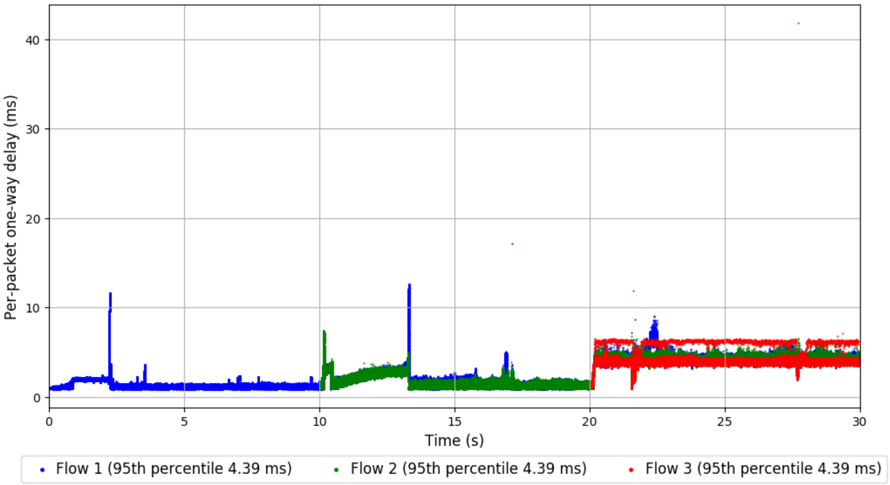




```
Run 10: Statistics of TCP Cubic

Start at: 2017-12-11 23:19:50
End at: 2017-12-11 23:20:20
Local clock offset: 0.093 ms
Remote clock offset: -0.156 ms

# Below is generated by plot.py at 2017-12-12 03:31:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 814.80 Mbit/s
95th percentile per-packet one-way delay: 4.390 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 469.74 Mbit/s
95th percentile per-packet one-way delay: 4.390 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 362.79 Mbit/s
95th percentile per-packet one-way delay: 4.391 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 312.85 Mbit/s
95th percentile per-packet one-way delay: 4.390 ms
Loss rate: 0.22%
```

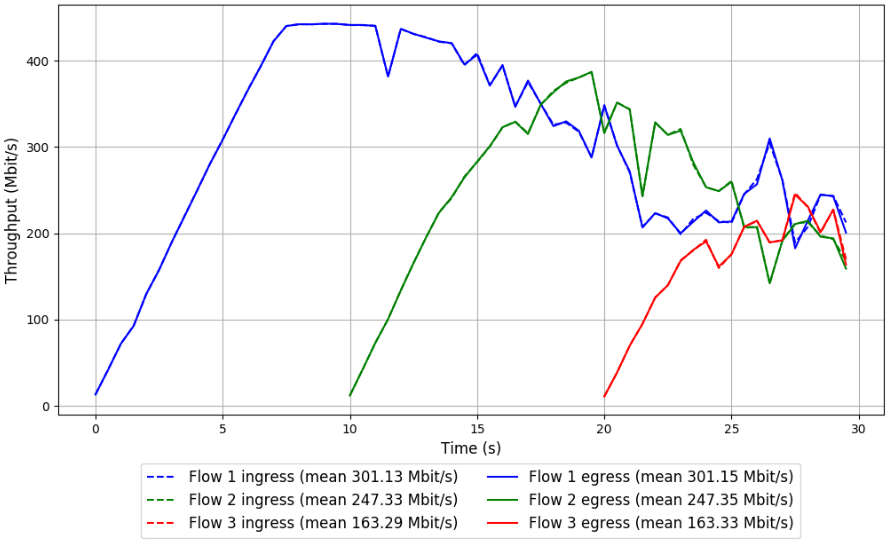
Run 10: Report of TCP Cubic — Data Link

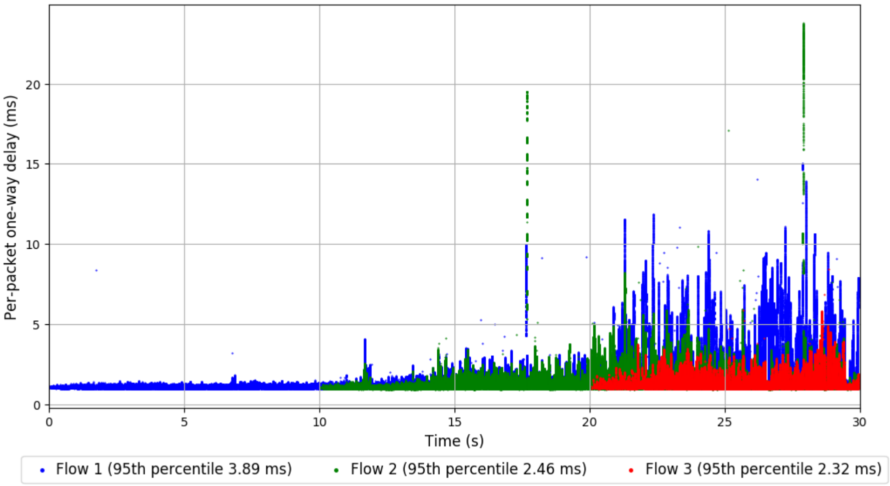




```
Run 1: Statistics of LEDBAT

Start at: 2017-12-11 20:12:30
End at: 2017-12-11 20:13:00
Local clock offset: -1.787 ms
Remote clock offset: -2.077 ms

# Below is generated by plot.py at 2017-12-12 03:31:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 519.47 Mbit/s
95th percentile per-packet one-way delay: 2.996 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 301.15 Mbit/s
95th percentile per-packet one-way delay: 3.890 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 247.35 Mbit/s
95th percentile per-packet one-way delay: 2.461 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 163.33 Mbit/s
95th percentile per-packet one-way delay: 2.323 ms
Loss rate: 0.20%
```

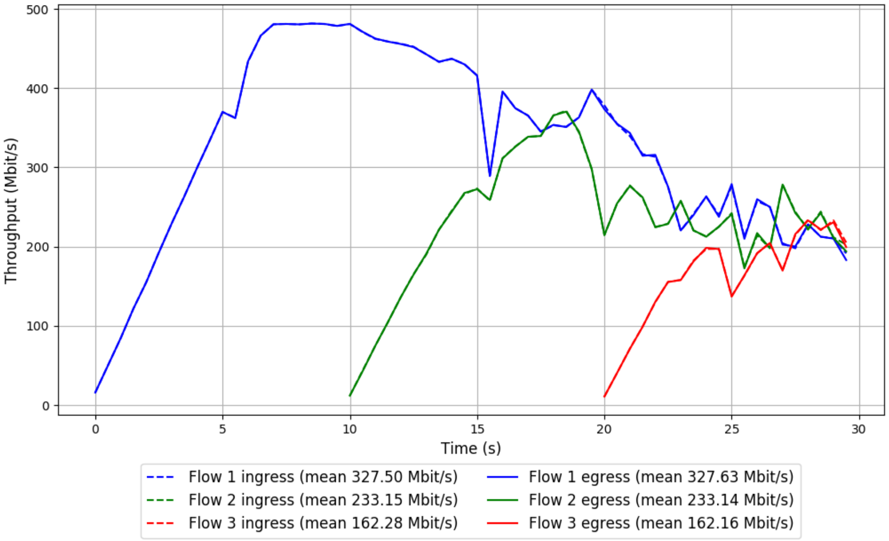
Run 1: Report of LEDBAT — Data Link

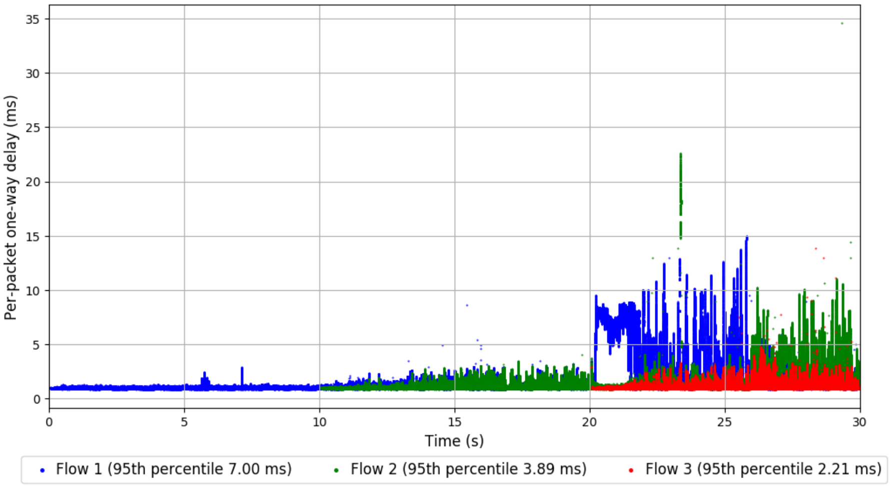




```
Run 2: Statistics of LEDBAT

Start at: 2017-12-11 20:33:16
End at: 2017-12-11 20:33:46
Local clock offset: -1.799 ms
Remote clock offset: -1.757 ms

# Below is generated by plot.py at 2017-12-12 03:31:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 536.23 Mbit/s
95th percentile per-packet one-way delay: 5.288 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 327.63 Mbit/s
95th percentile per-packet one-way delay: 7.003 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 233.14 Mbit/s
95th percentile per-packet one-way delay: 3.888 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 162.16 Mbit/s
95th percentile per-packet one-way delay: 2.208 ms
Loss rate: 0.25%
```

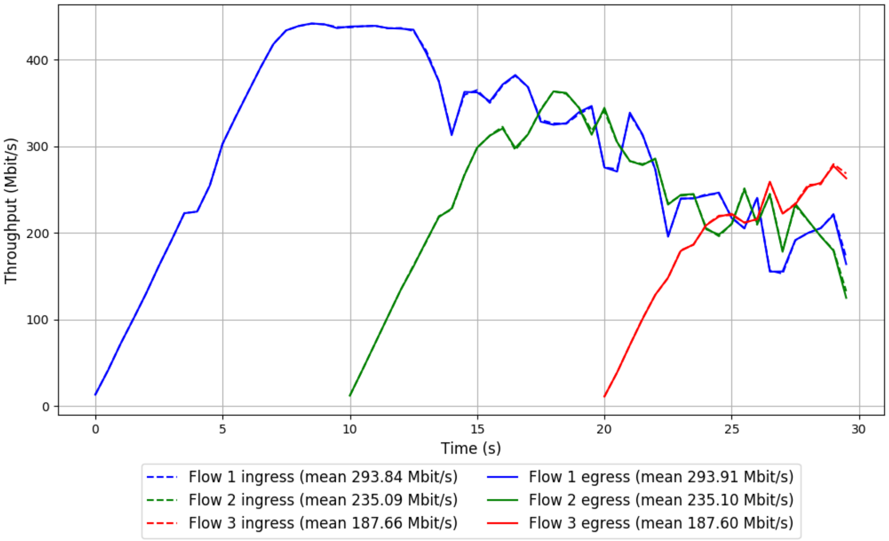
Run 2: Report of LEDBAT — Data Link

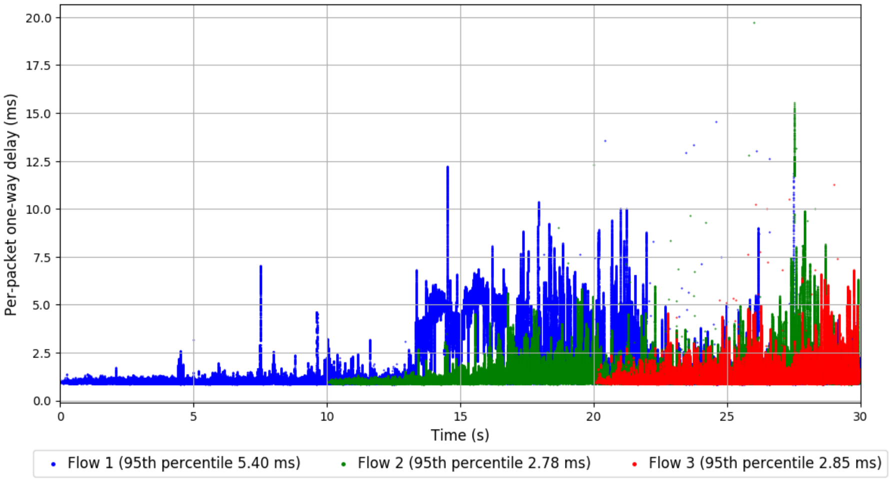




```
Run 3: Statistics of LEDBAT

Start at: 2017-12-11 20:53:47
End at: 2017-12-11 20:54:17
Local clock offset: -1.707 ms
Remote clock offset: -1.442 ms

# Below is generated by plot.py at 2017-12-12 03:31:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 512.21 Mbit/s
95th percentile per-packet one-way delay: 5.038 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 293.91 Mbit/s
95th percentile per-packet one-way delay: 5.397 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 235.10 Mbit/s
95th percentile per-packet one-way delay: 2.782 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 187.60 Mbit/s
95th percentile per-packet one-way delay: 2.846 ms
Loss rate: 0.25%
```

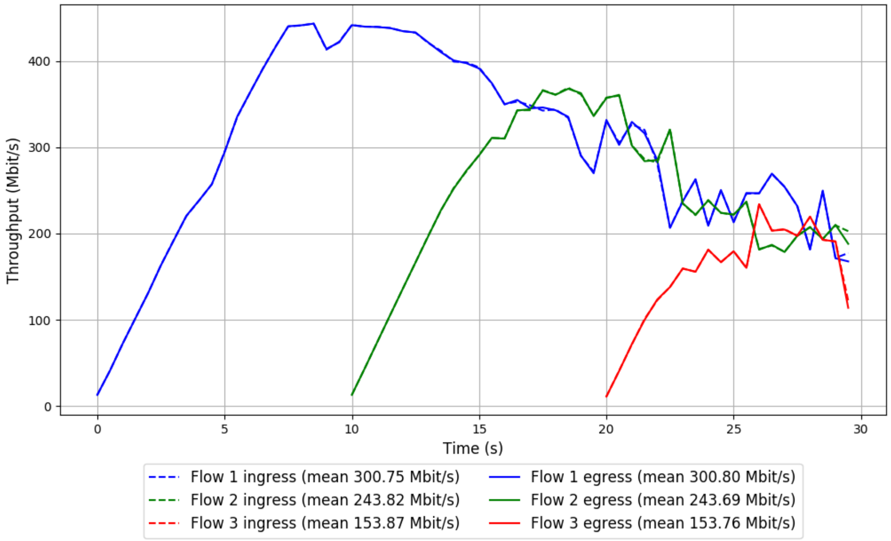
Run 3: Report of LEDBAT — Data Link

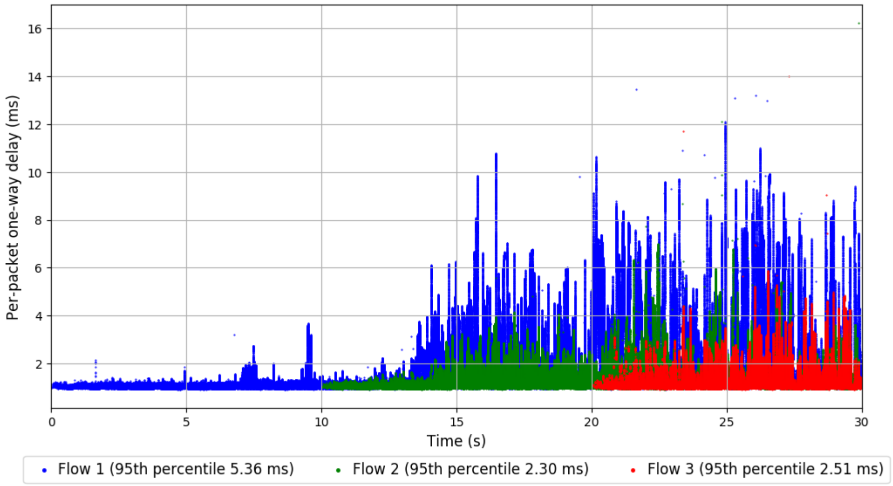




```
Run 4: Statistics of LEDBAT

Start at: 2017-12-11 21:14:32
End at: 2017-12-11 21:15:02
Local clock offset: -1.587 ms
Remote clock offset: -1.456 ms

# Below is generated by plot.py at 2017-12-12 03:31:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 513.75 Mbit/s
95th percentile per-packet one-way delay: 4.124 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 300.80 Mbit/s
95th percentile per-packet one-way delay: 5.364 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 243.69 Mbit/s
95th percentile per-packet one-way delay: 2.298 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 153.76 Mbit/s
95th percentile per-packet one-way delay: 2.508 ms
Loss rate: 0.27%
```

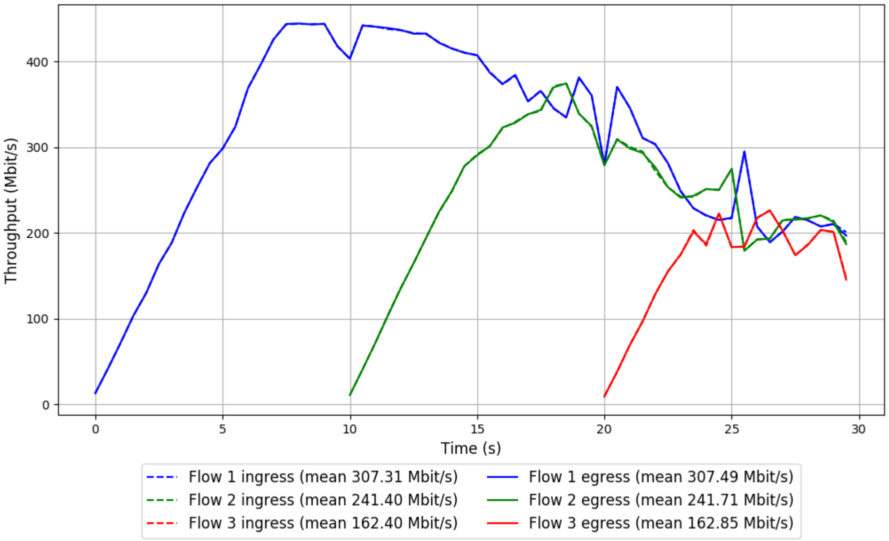
Run 4: Report of LEDBAT — Data Link

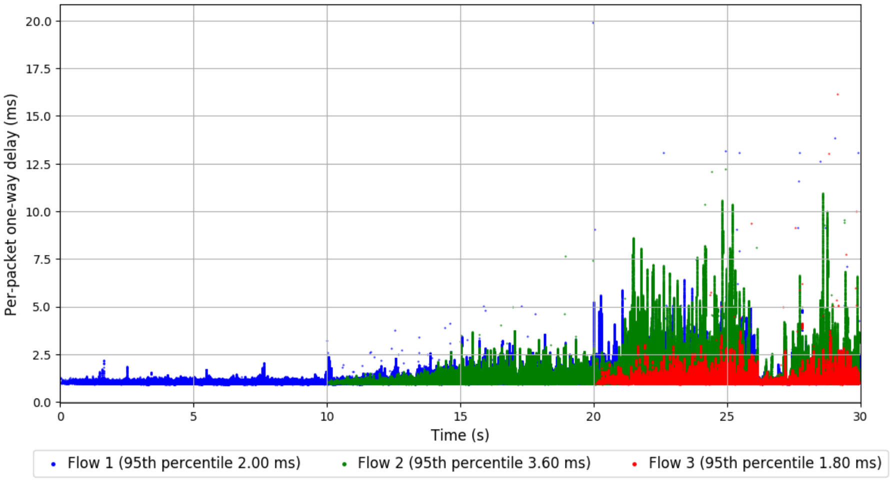




```
Run 5: Statistics of LEDBAT

Start at: 2017-12-11 21:35:02
End at: 2017-12-11 21:35:32
Local clock offset: -1.293 ms
Remote clock offset: -0.921 ms

# Below is generated by plot.py at 2017-12-12 03:33:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 521.62 Mbit/s
95th percentile per-packet one-way delay: 2.464 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 307.49 Mbit/s
95th percentile per-packet one-way delay: 2.003 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 241.71 Mbit/s
95th percentile per-packet one-way delay: 3.598 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 162.85 Mbit/s
95th percentile per-packet one-way delay: 1.799 ms
Loss rate: 0.08%
```

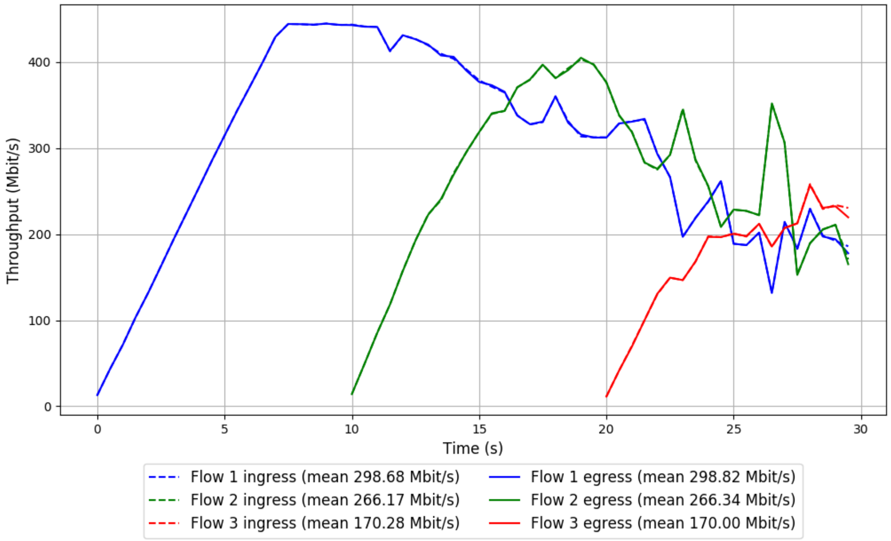
Run 5: Report of LEDBAT — Data Link

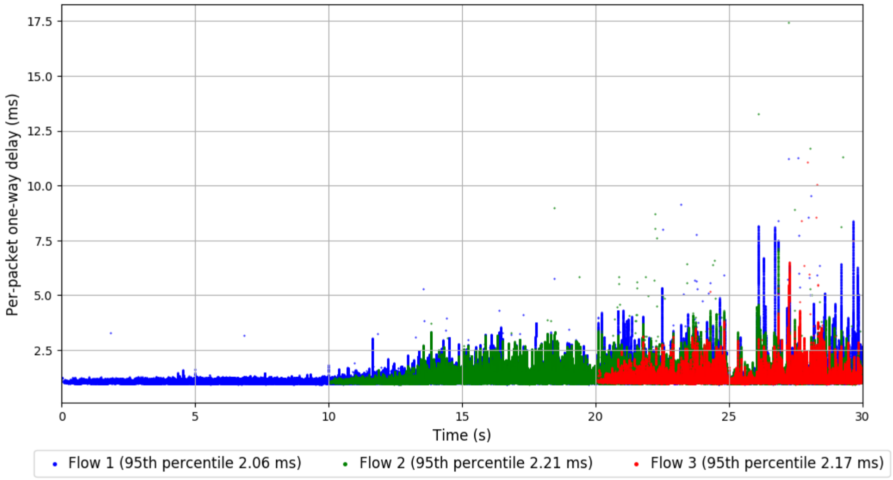




```
Run 6: Statistics of LEDBAT

Start at: 2017-12-11 21:55:40
End at: 2017-12-11 21:56:10
Local clock offset: -0.811 ms
Remote clock offset: -0.419 ms

# Below is generated by plot.py at 2017-12-12 03:34:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 532.09 Mbit/s
95th percentile per-packet one-way delay: 2.134 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 298.82 Mbit/s
95th percentile per-packet one-way delay: 2.064 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 266.34 Mbit/s
95th percentile per-packet one-way delay: 2.212 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 170.00 Mbit/s
95th percentile per-packet one-way delay: 2.168 ms
Loss rate: 0.37%
```

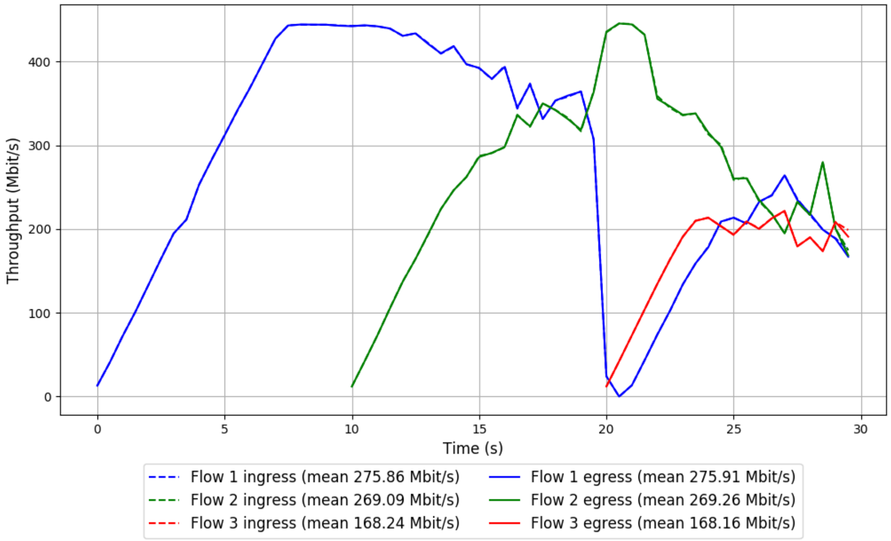
Run 6: Report of LEDBAT — Data Link

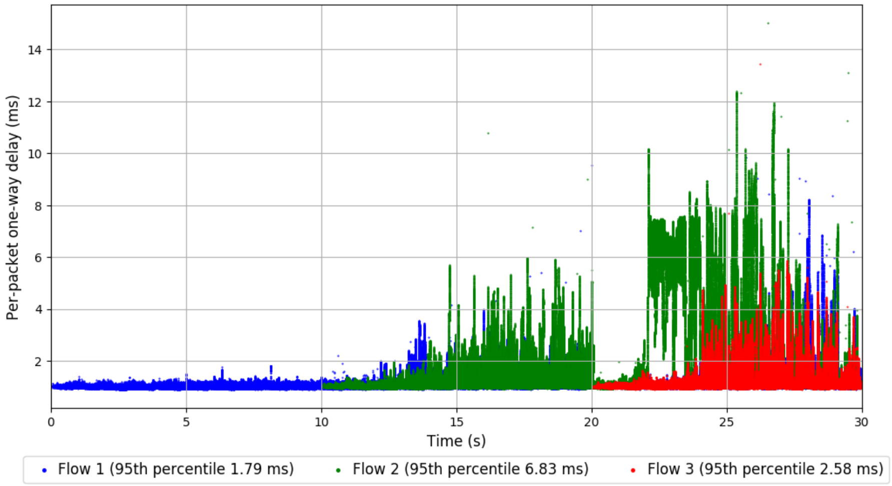




```
Run 7: Statistics of LEDBAT

Start at: 2017-12-11 22:16:09
End at: 2017-12-11 22:16:39
Local clock offset: -0.617 ms
Remote clock offset: 0.086 ms

# Below is generated by plot.py at 2017-12-12 03:34:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 510.48 Mbit/s
95th percentile per-packet one-way delay: 4.646 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 275.91 Mbit/s
95th percentile per-packet one-way delay: 1.793 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 269.26 Mbit/s
95th percentile per-packet one-way delay: 6.830 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 168.16 Mbit/s
95th percentile per-packet one-way delay: 2.581 ms
Loss rate: 0.25%
```

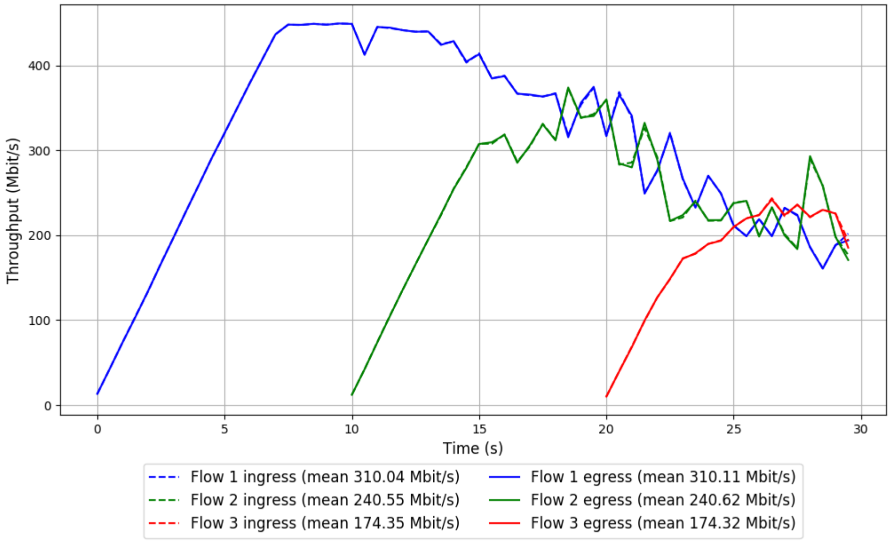
Run 7: Report of LEDBAT — Data Link

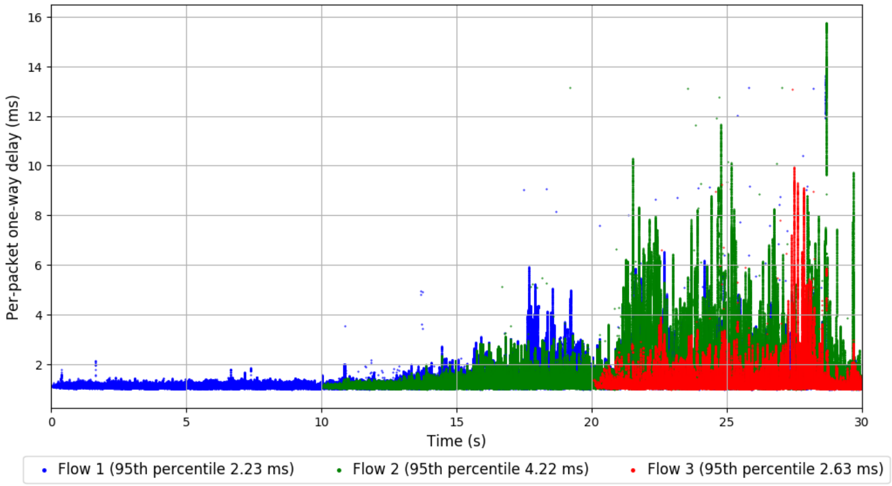




```
Run 8: Statistics of LEDBAT

Start at: 2017-12-11 22:36:54
End at: 2017-12-11 22:37:24
Local clock offset: -0.304 ms
Remote clock offset: -0.238 ms

# Below is generated by plot.py at 2017-12-12 03:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 527.64 Mbit/s
95th percentile per-packet one-way delay: 2.945 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 310.11 Mbit/s
95th percentile per-packet one-way delay: 2.232 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 240.62 Mbit/s
95th percentile per-packet one-way delay: 4.224 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 174.32 Mbit/s
95th percentile per-packet one-way delay: 2.629 ms
Loss rate: 0.25%
```

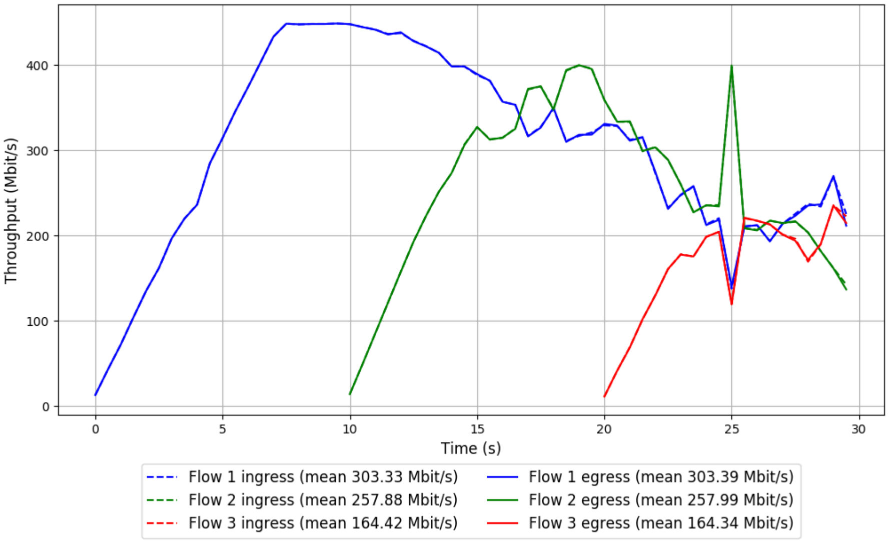
Run 8: Report of LEDBAT — Data Link

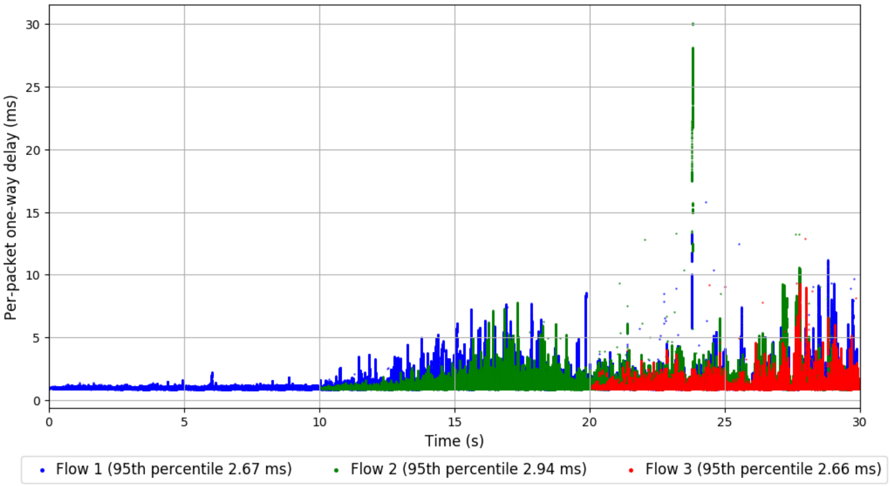




```
Run 9: Statistics of LEDBAT

Start at: 2017-12-11 22:57:33
End at: 2017-12-11 22:58:03
Local clock offset: -0.074 ms
Remote clock offset: -0.224 ms

# Below is generated by plot.py at 2017-12-12 03:36:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 529.10 Mbit/s
95th percentile per-packet one-way delay: 2.770 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 303.39 Mbit/s
95th percentile per-packet one-way delay: 2.674 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 257.99 Mbit/s
95th percentile per-packet one-way delay: 2.938 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 164.34 Mbit/s
95th percentile per-packet one-way delay: 2.660 ms
Loss rate: 0.25%
```

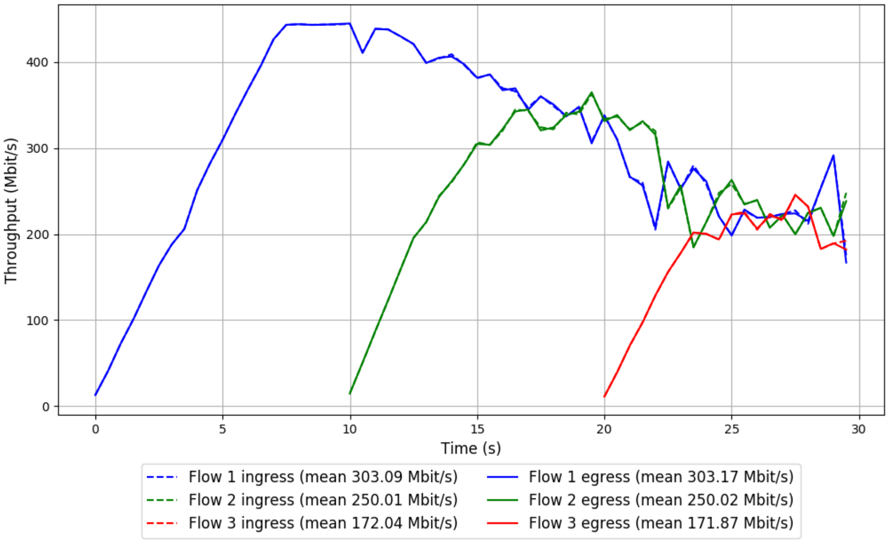
Run 9: Report of LEDBAT — Data Link

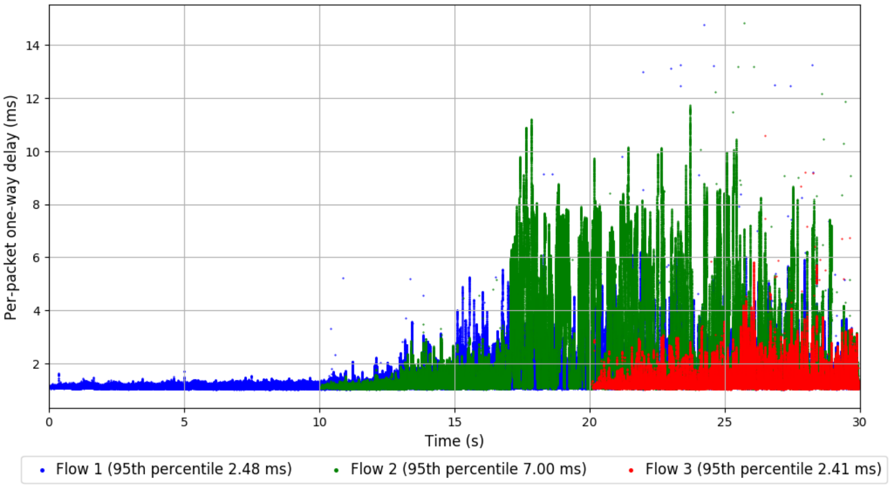




```
Run 10: Statistics of LEDBAT

Start at: 2017-12-11 23:18:13
End at: 2017-12-11 23:18:43
Local clock offset: 0.203 ms
Remote clock offset: -0.208 ms

# Below is generated by plot.py at 2017-12-12 03:37:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 526.25 Mbit/s
95th percentile per-packet one-way delay: 5.041 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 303.17 Mbit/s
95th percentile per-packet one-way delay: 2.483 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 250.02 Mbit/s
95th percentile per-packet one-way delay: 6.996 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 171.87 Mbit/s
95th percentile per-packet one-way delay: 2.406 ms
Loss rate: 0.30%
```

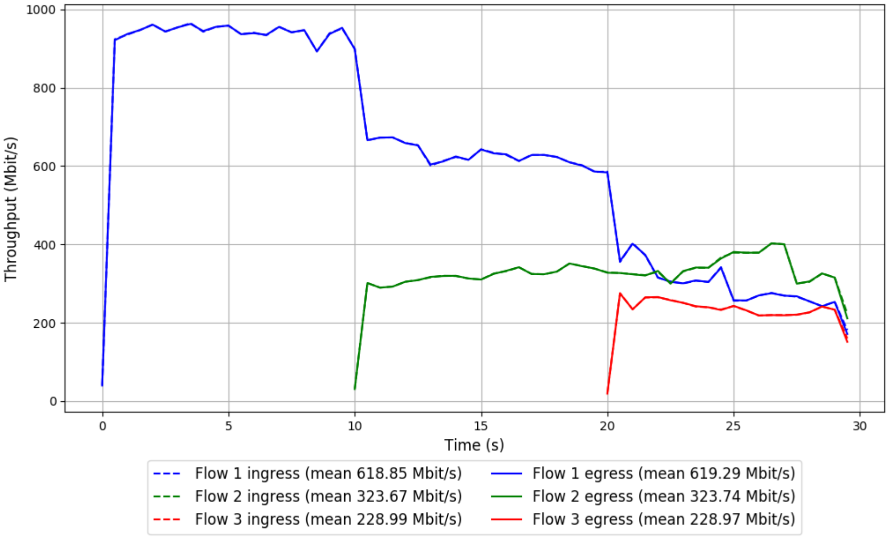
Run 10: Report of LEDBAT — Data Link

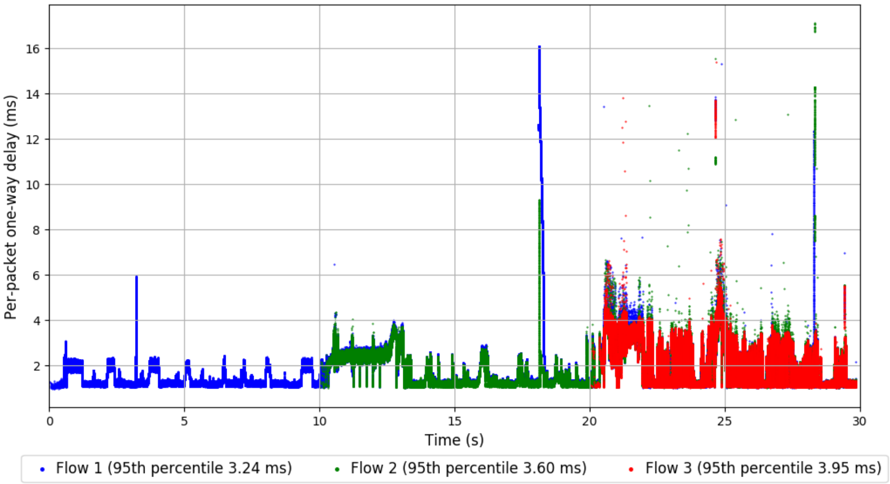




```
Run 1: Statistics of PCC

Start at: 2017-12-11 20:15:51
End at: 2017-12-11 20:16:21
Local clock offset: -1.771 ms
Remote clock offset: -2.045 ms

# Below is generated by plot.py at 2017-12-12 03:42:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 909.51 Mbit/s
95th percentile per-packet one-way delay: 3.504 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 619.29 Mbit/s
95th percentile per-packet one-way delay: 3.240 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 323.74 Mbit/s
95th percentile per-packet one-way delay: 3.603 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 228.97 Mbit/s
95th percentile per-packet one-way delay: 3.950 ms
Loss rate: 0.21%
```

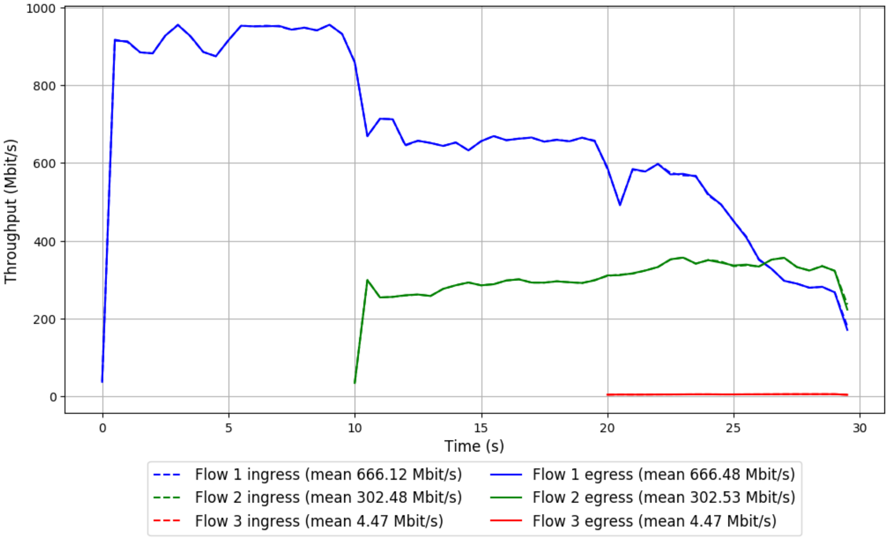
Run 1: Report of PCC — Data Link

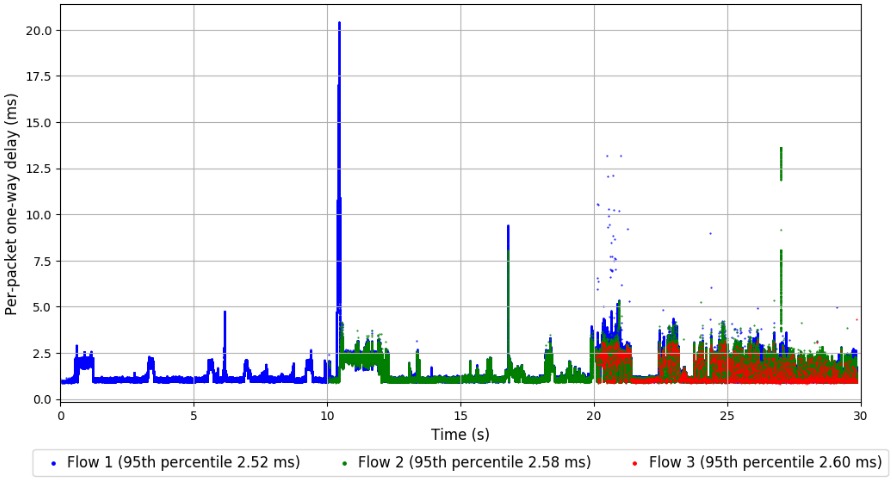




```
Run 2: Statistics of PCC

Start at: 2017-12-11 20:36:37
End at: 2017-12-11 20:37:07
Local clock offset: -1.689 ms
Remote clock offset: -1.687 ms

# Below is generated by plot.py at 2017-12-12 03:42:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 868.75 Mbit/s
95th percentile per-packet one-way delay: 2.538 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 666.48 Mbit/s
95th percentile per-packet one-way delay: 2.521 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 302.53 Mbit/s
95th percentile per-packet one-way delay: 2.585 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 4.47 Mbit/s
95th percentile per-packet one-way delay: 2.596 ms
Loss rate: 0.18%
```

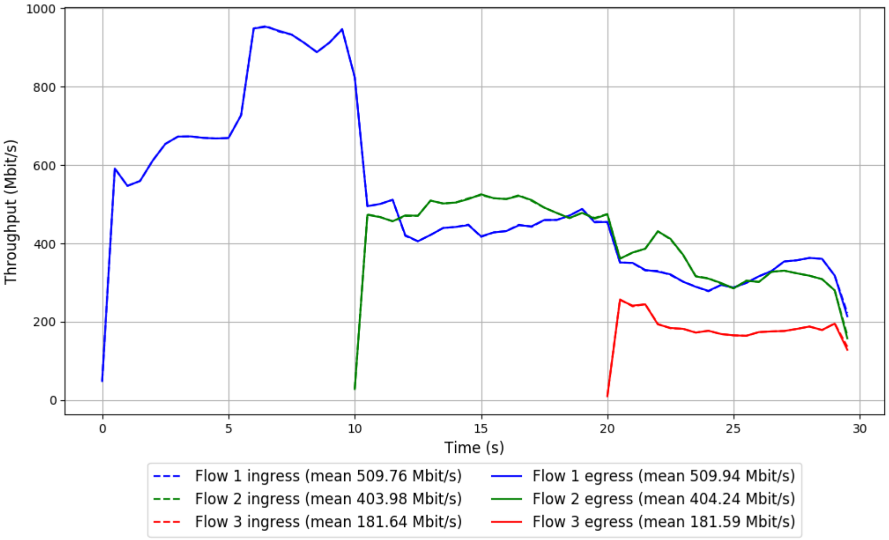
Run 2: Report of PCC — Data Link

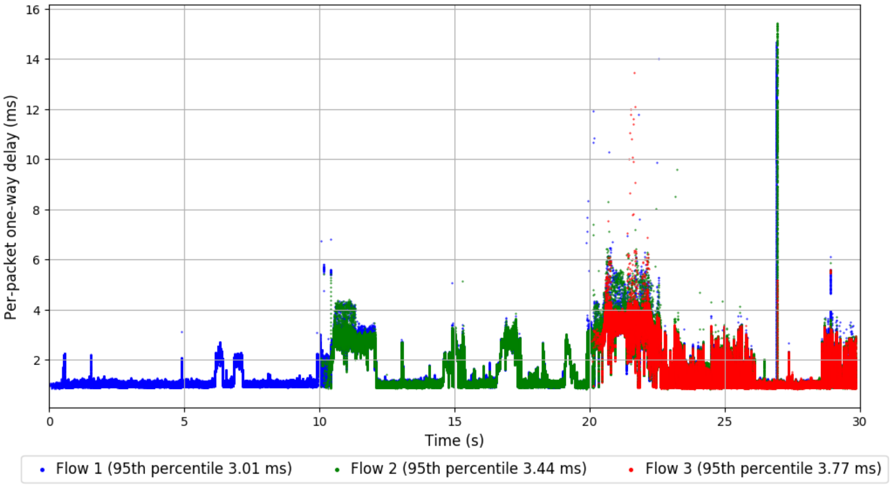




```
Run 3: Statistics of PCC

Start at: 2017-12-11 20:57:09
End at: 2017-12-11 20:57:39
Local clock offset: -1.666 ms
Remote clock offset: -1.443 ms

# Below is generated by plot.py at 2017-12-12 03:45:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 838.00 Mbit/s
95th percentile per-packet one-way delay: 3.312 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 509.94 Mbit/s
95th percentile per-packet one-way delay: 3.010 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 404.24 Mbit/s
95th percentile per-packet one-way delay: 3.442 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 181.59 Mbit/s
95th percentile per-packet one-way delay: 3.774 ms
Loss rate: 0.23%
```

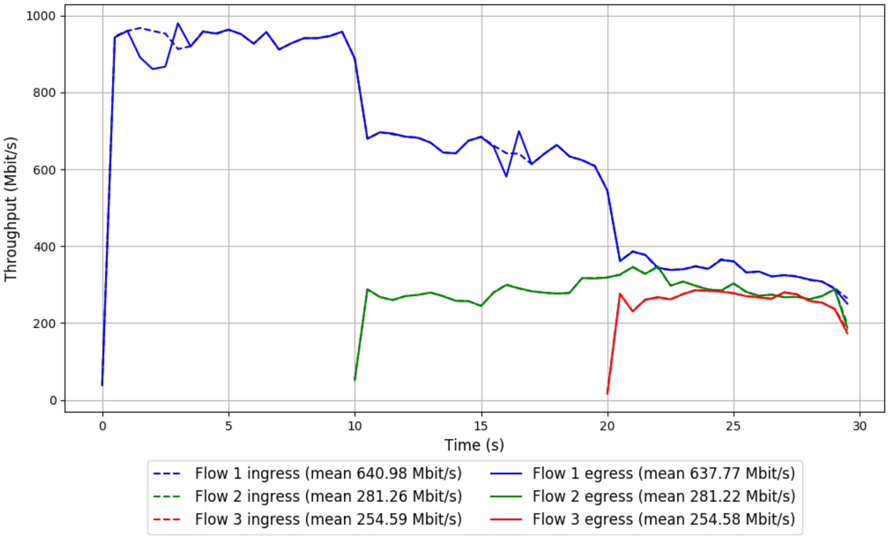
Run 3: Report of PCC — Data Link

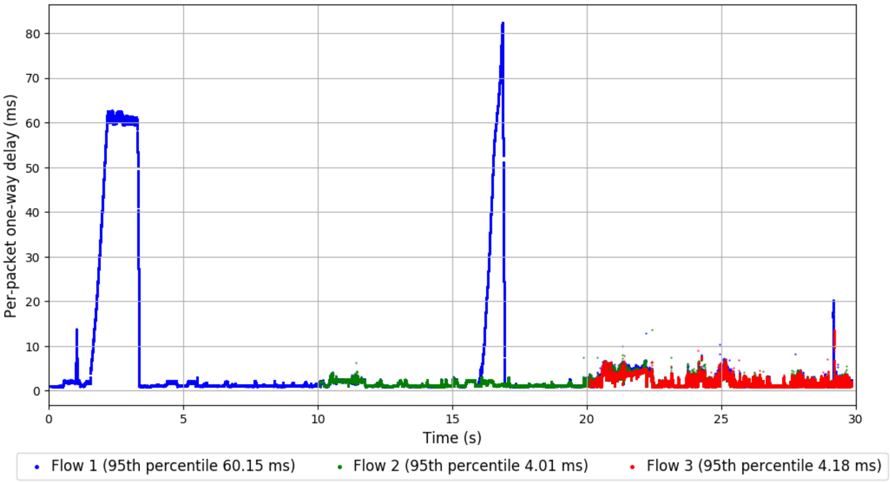




```
Run 4: Statistics of PCC

Start at: 2017-12-11 21:17:50
End at: 2017-12-11 21:18:20
Local clock offset: -1.597 ms
Remote clock offset: -1.437 ms

# Below is generated by plot.py at 2017-12-12 03:47:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 908.35 Mbit/s
95th percentile per-packet one-way delay: 47.053 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 637.77 Mbit/s
95th percentile per-packet one-way delay: 60.152 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 281.22 Mbit/s
95th percentile per-packet one-way delay: 4.015 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 254.58 Mbit/s
95th percentile per-packet one-way delay: 4.182 ms
Loss rate: 0.20%
```

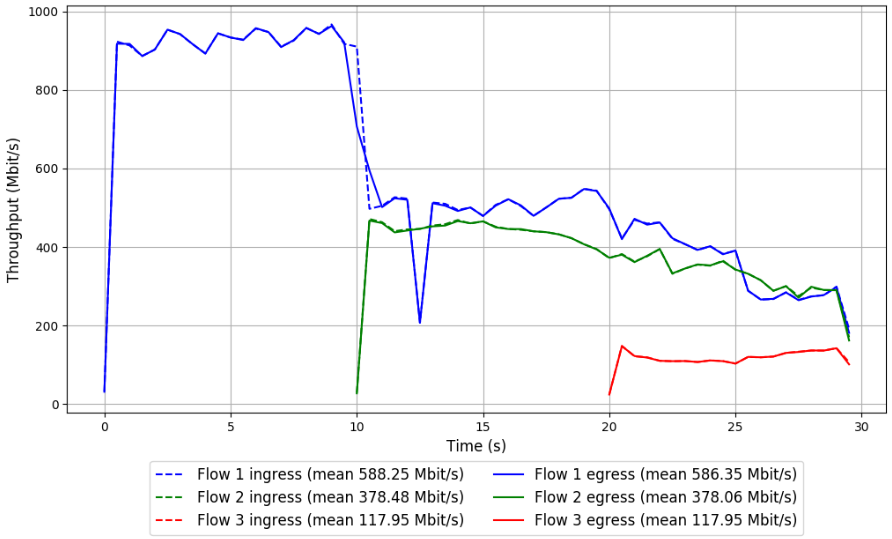
Run 4: Report of PCC — Data Link

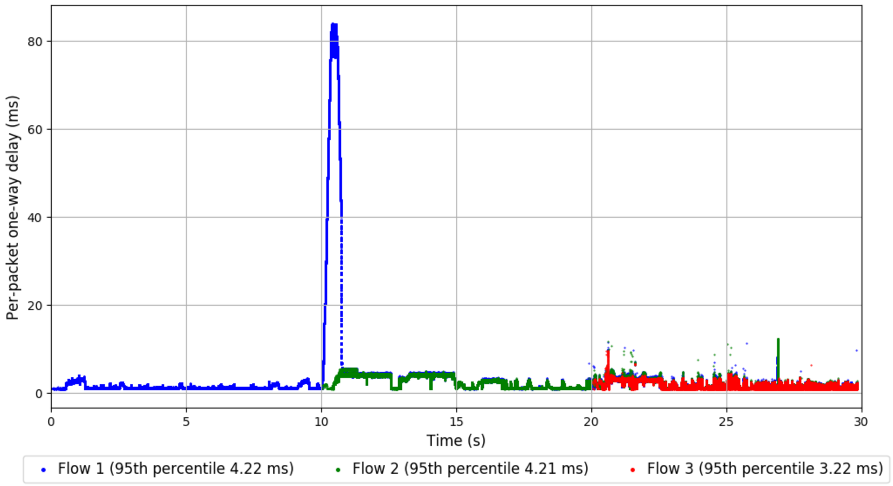




```
Run 5: Statistics of PCC

Start at: 2017-12-11 21:38:21
End at: 2017-12-11 21:38:51
Local clock offset: -1.212 ms
Remote clock offset: -0.702 ms

# Below is generated by plot.py at 2017-12-12 03:47:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 876.18 Mbit/s
95th percentile per-packet one-way delay: 4.208 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 586.35 Mbit/s
95th percentile per-packet one-way delay: 4.224 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 378.06 Mbit/s
95th percentile per-packet one-way delay: 4.206 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 117.95 Mbit/s
95th percentile per-packet one-way delay: 3.223 ms
Loss rate: 0.29%
```

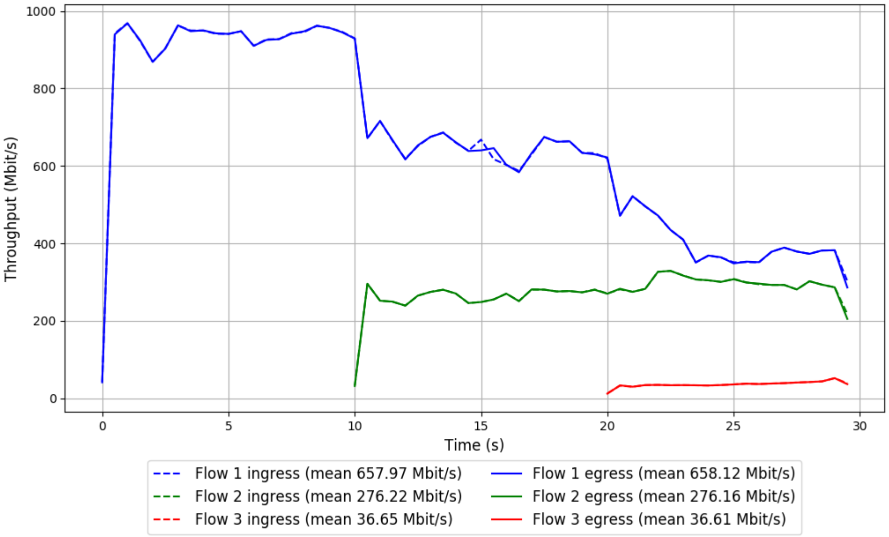
Run 5: Report of PCC — Data Link

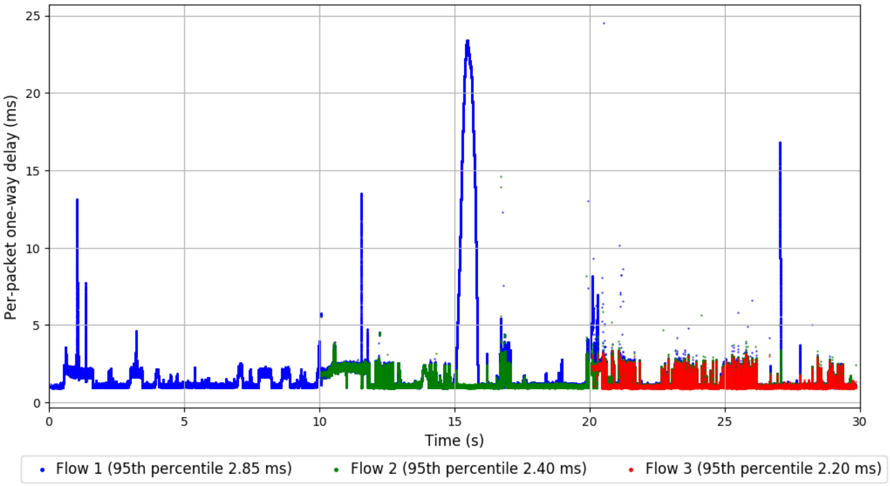




```
Run 6: Statistics of PCC

Start at: 2017-12-11 21:58:59
End at: 2017-12-11 21:59:29
Local clock offset: -0.834 ms
Remote clock offset: -0.352 ms

# Below is generated by plot.py at 2017-12-12 03:47:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 853.63 Mbit/s
95th percentile per-packet one-way delay: 2.570 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 658.12 Mbit/s
95th percentile per-packet one-way delay: 2.847 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 276.16 Mbit/s
95th percentile per-packet one-way delay: 2.396 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 36.61 Mbit/s
95th percentile per-packet one-way delay: 2.204 ms
Loss rate: 0.31%
```

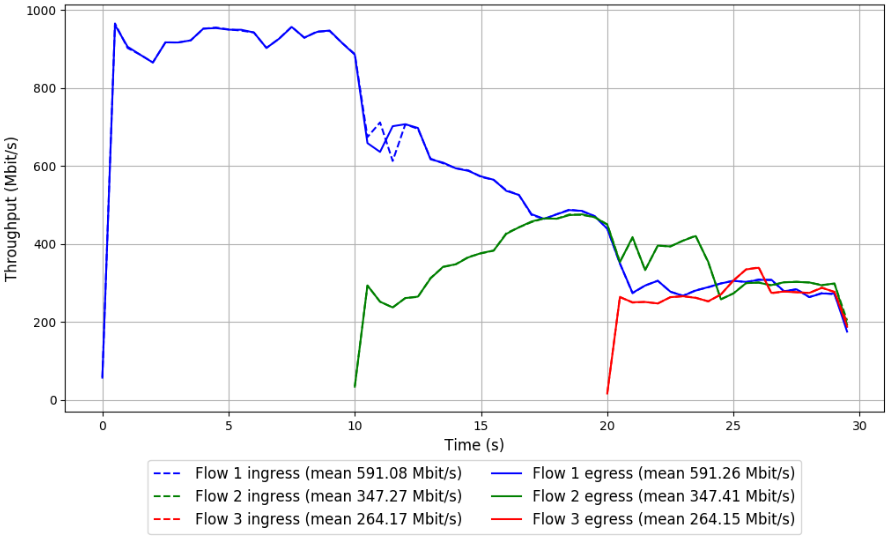
Run 6: Report of PCC — Data Link

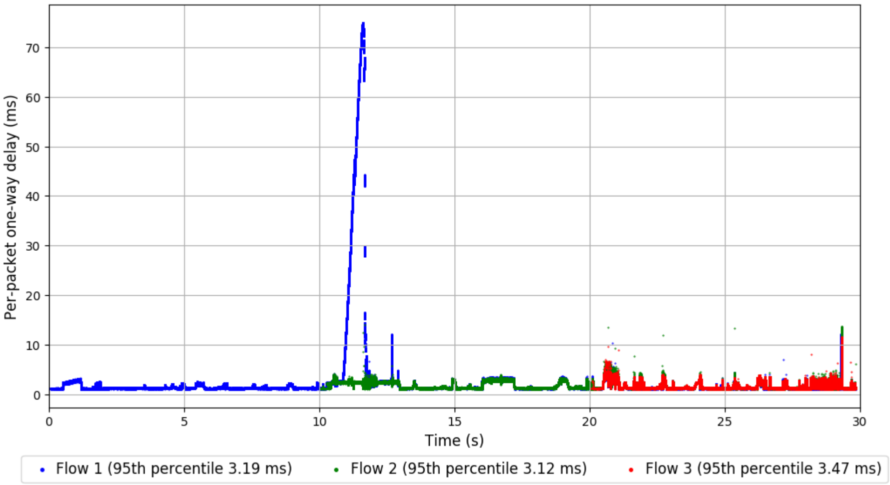




```
Run 7: Statistics of PCC

Start at: 2017-12-11 22:19:30
End at: 2017-12-11 22:20:00
Local clock offset: -0.535 ms
Remote clock offset: 0.073 ms

# Below is generated by plot.py at 2017-12-12 03:50:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 908.69 Mbit/s
95th percentile per-packet one-way delay: 3.193 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 591.26 Mbit/s
95th percentile per-packet one-way delay: 3.189 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 347.41 Mbit/s
95th percentile per-packet one-way delay: 3.119 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 264.15 Mbit/s
95th percentile per-packet one-way delay: 3.468 ms
Loss rate: 0.21%
```

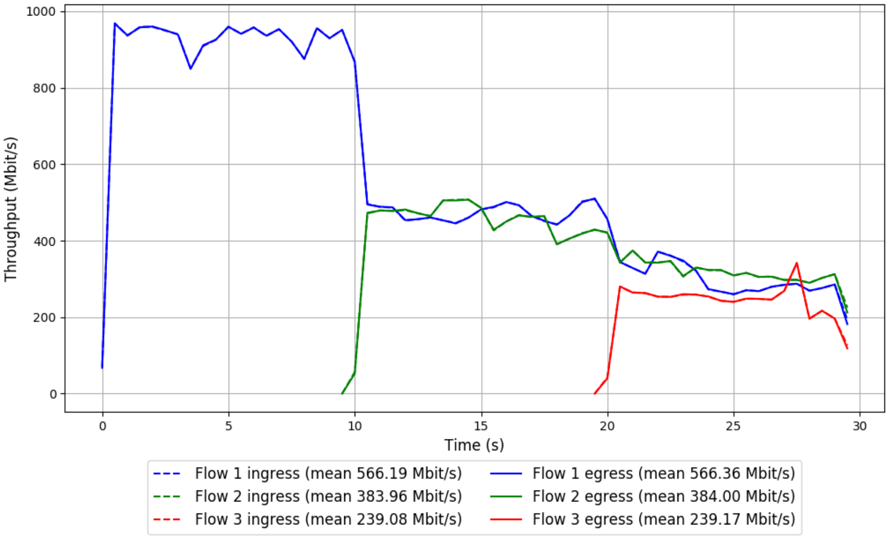
Run 7: Report of PCC — Data Link

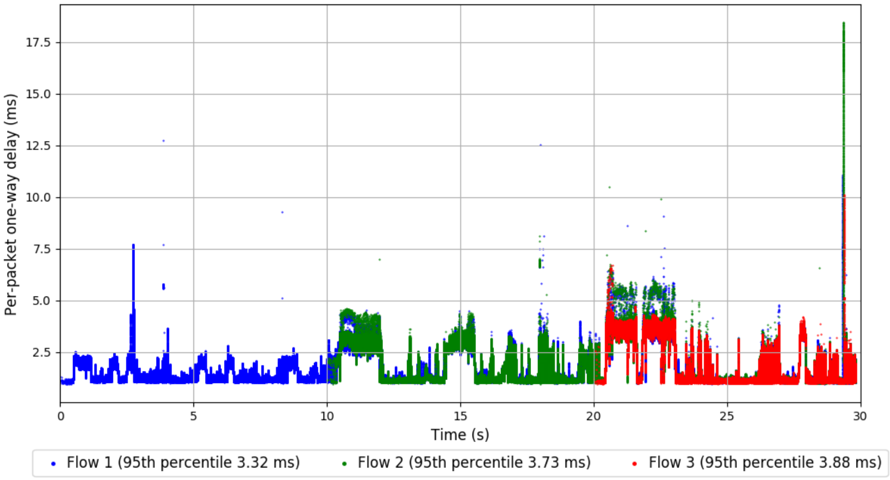




```
Run 8: Statistics of PCC

Start at: 2017-12-11 22:40:14
End at: 2017-12-11 22:40:44
Local clock offset: -0.236 ms
Remote clock offset: -0.255 ms

# Below is generated by plot.py at 2017-12-12 03:50:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 900.43 Mbit/s
95th percentile per-packet one-way delay: 3.641 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 566.36 Mbit/s
95th percentile per-packet one-way delay: 3.317 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 384.00 Mbit/s
95th percentile per-packet one-way delay: 3.730 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 239.17 Mbit/s
95th percentile per-packet one-way delay: 3.876 ms
Loss rate: 0.18%
```

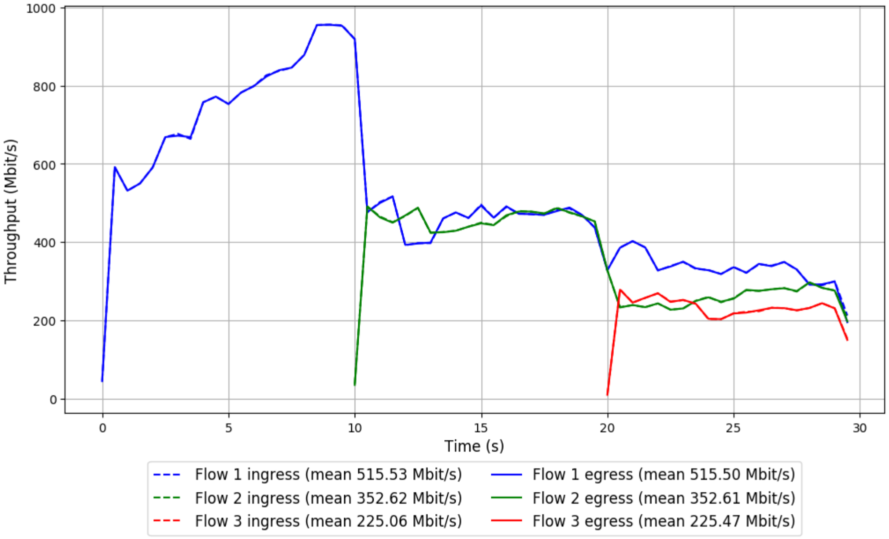
Run 8: Report of PCC — Data Link

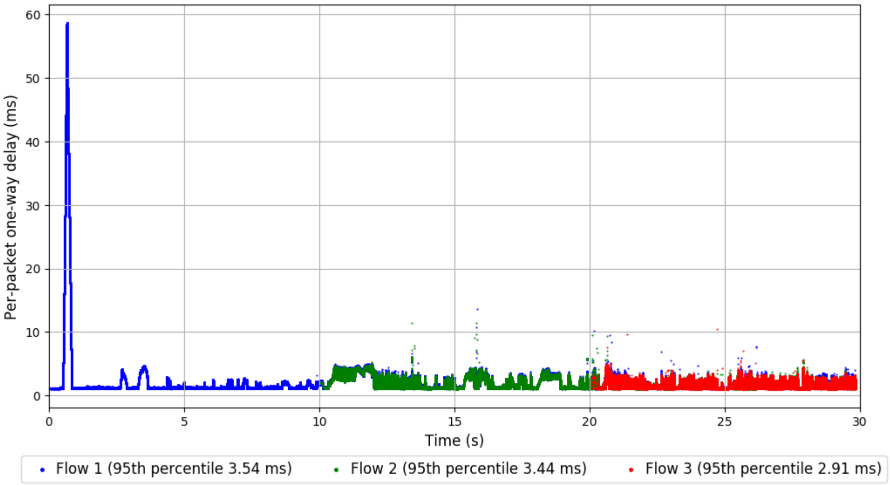




```
Run 9: Statistics of PCC

Start at: 2017-12-11 23:00:57
End at: 2017-12-11 23:01:27
Local clock offset: 0.077 ms
Remote clock offset: -0.242 ms

# Below is generated by plot.py at 2017-12-12 03:55:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 823.76 Mbit/s
95th percentile per-packet one-way delay: 3.440 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 515.50 Mbit/s
95th percentile per-packet one-way delay: 3.543 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 352.61 Mbit/s
95th percentile per-packet one-way delay: 3.443 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 225.47 Mbit/s
95th percentile per-packet one-way delay: 2.913 ms
Loss rate: 0.09%
```

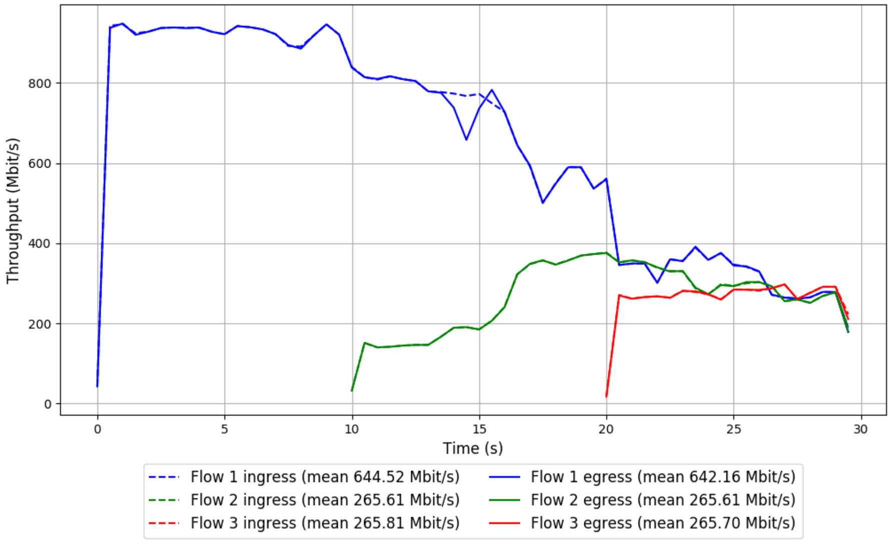
Run 9: Report of PCC — Data Link

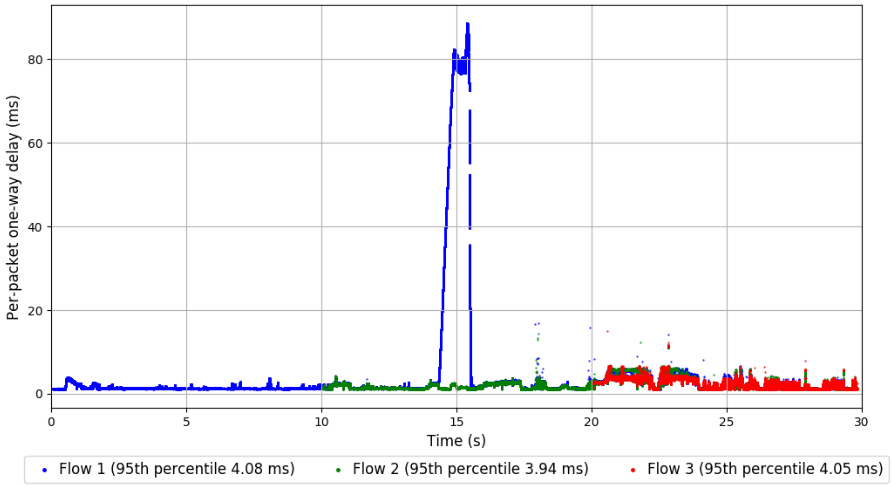




```
Run 10: Statistics of PCC

Start at: 2017-12-11 23:21:34
End at: 2017-12-11 23:22:04
Local clock offset: 0.208 ms
Remote clock offset: -0.177 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 905.83 Mbit/s
95th percentile per-packet one-way delay: 4.018 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 642.16 Mbit/s
95th percentile per-packet one-way delay: 4.079 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 265.61 Mbit/s
95th percentile per-packet one-way delay: 3.941 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 265.70 Mbit/s
95th percentile per-packet one-way delay: 4.047 ms
Loss rate: 0.24%
```

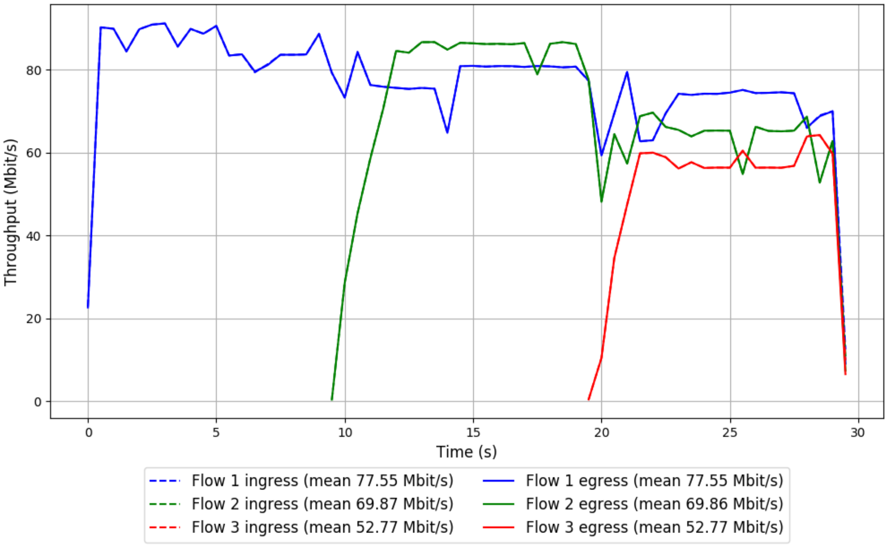
Run 10: Report of PCC — Data Link

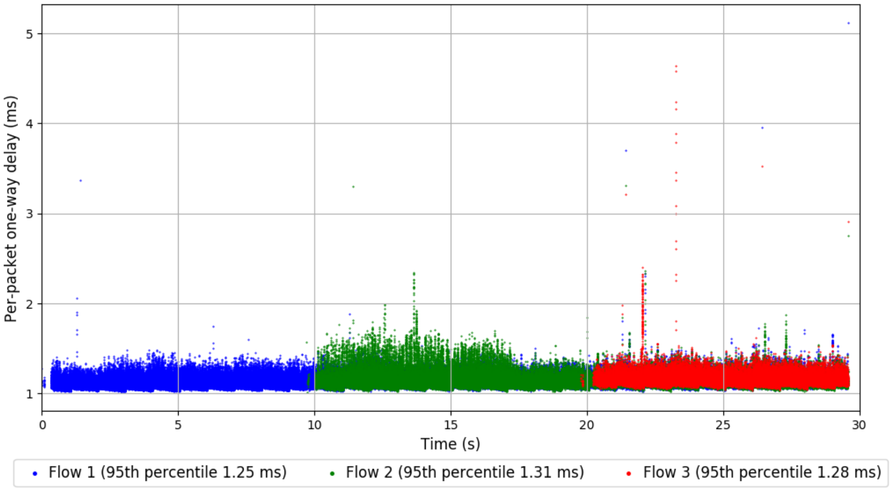




```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-11 19:56:46
End at: 2017-12-11 19:57:16
Local clock offset: -1.41 ms
Remote clock offset: -2.378 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 141.95 Mbit/s
95th percentile per-packet one-way delay: 1.274 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 77.55 Mbit/s
95th percentile per-packet one-way delay: 1.255 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 69.86 Mbit/s
95th percentile per-packet one-way delay: 1.306 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 52.77 Mbit/s
95th percentile per-packet one-way delay: 1.285 ms
Loss rate: 0.34%
```

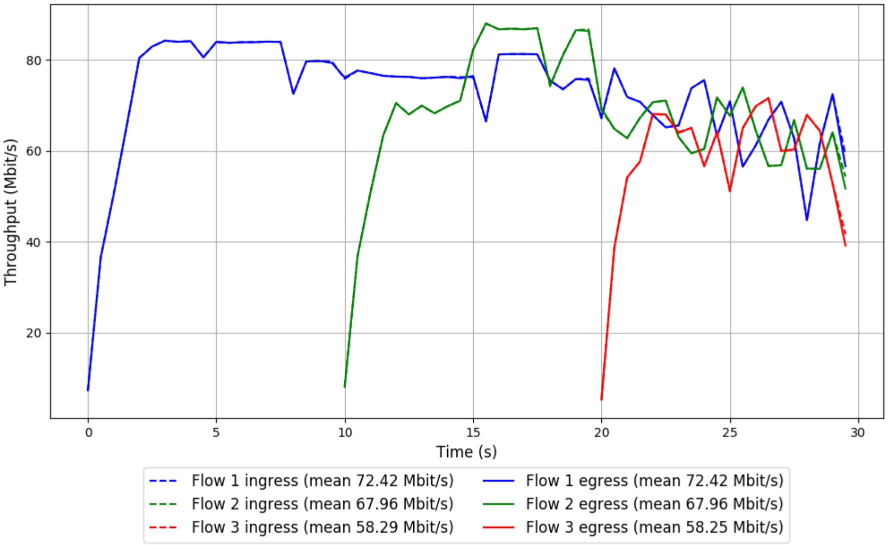
Run 1: Report of QUIC Cubic — Data Link

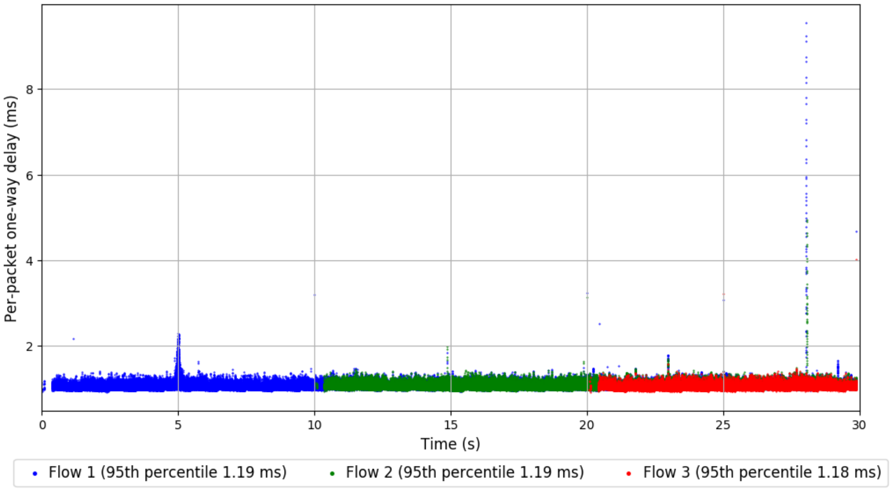




```
Run 2: Statistics of QUIC Cubic

Start at: 2017-12-11 20:17:28
End at: 2017-12-11 20:17:58
Local clock offset: -1.761 ms
Remote clock offset: -1.915 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 136.70 Mbit/s
95th percentile per-packet one-way delay: 1.191 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 72.42 Mbit/s
95th percentile per-packet one-way delay: 1.193 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 67.96 Mbit/s
95th percentile per-packet one-way delay: 1.192 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 58.25 Mbit/s
95th percentile per-packet one-way delay: 1.175 ms
Loss rate: 0.23%
```

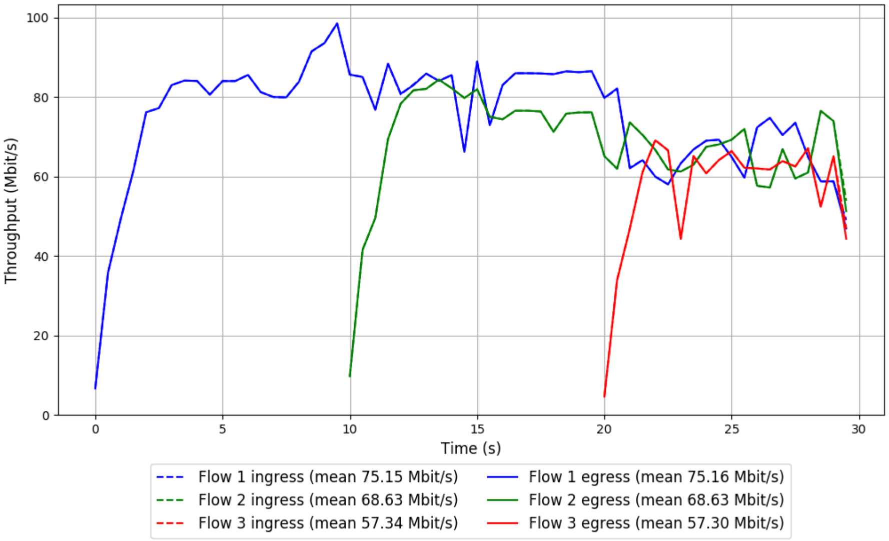
Run 2: Report of QUIC Cubic — Data Link

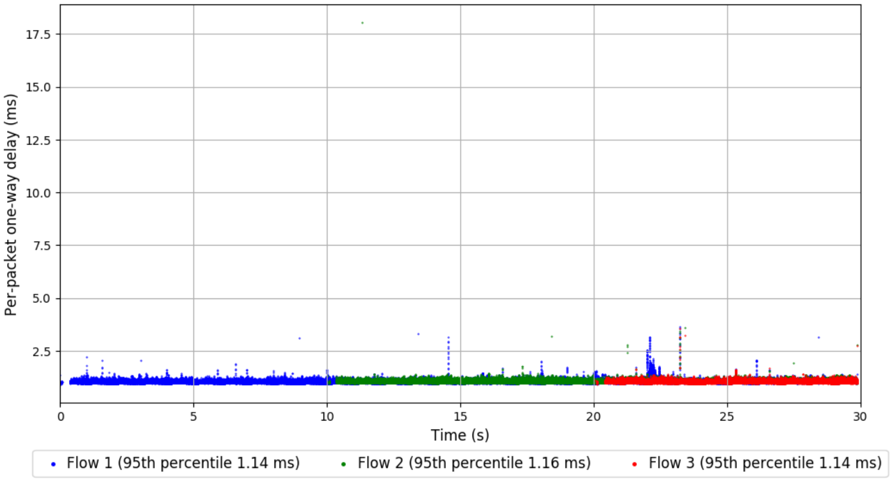




```
Run 3: Statistics of QUIC Cubic

Start at: 2017-12-11 20:38:14
End at: 2017-12-11 20:38:44
Local clock offset: -1.761 ms
Remote clock offset: -1.81 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 139.59 Mbit/s
95th percentile per-packet one-way delay: 1.146 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 75.16 Mbit/s
95th percentile per-packet one-way delay: 1.139 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 68.63 Mbit/s
95th percentile per-packet one-way delay: 1.155 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 57.30 Mbit/s
95th percentile per-packet one-way delay: 1.141 ms
Loss rate: 0.25%
```

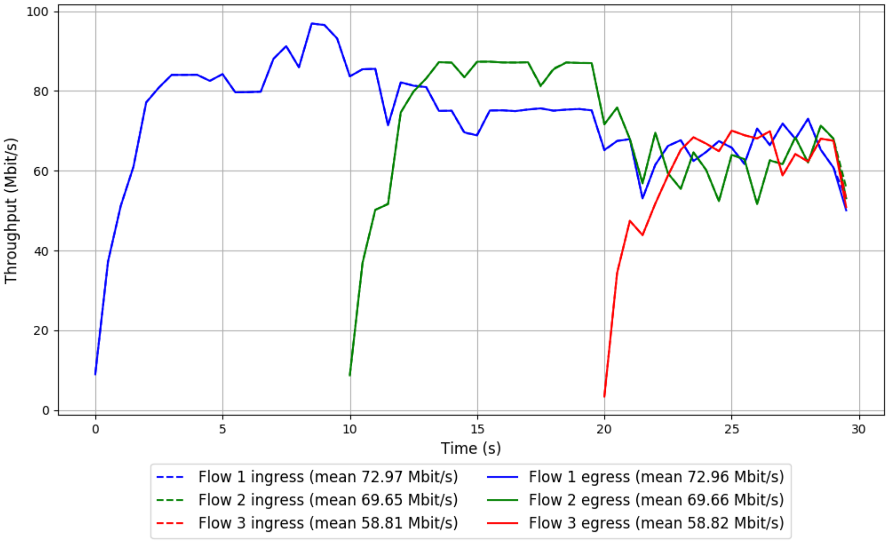
Run 3: Report of QUIC Cubic — Data Link

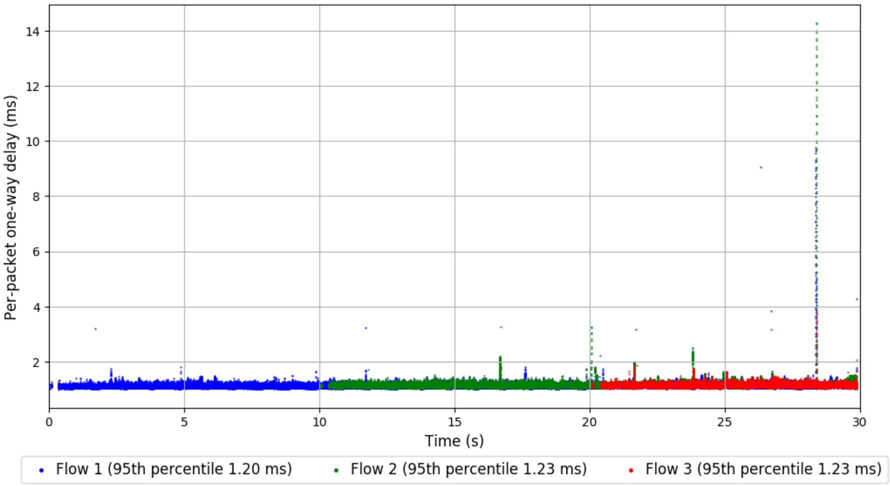




```
Run 4: Statistics of QUIC Cubic

Start at: 2017-12-11 20:58:45
End at: 2017-12-11 20:59:15
Local clock offset: -1.569 ms
Remote clock offset: -1.52 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 138.56 Mbit/s
95th percentile per-packet one-way delay: 1.219 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 72.96 Mbit/s
95th percentile per-packet one-way delay: 1.202 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 69.66 Mbit/s
95th percentile per-packet one-way delay: 1.233 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 58.82 Mbit/s
95th percentile per-packet one-way delay: 1.233 ms
Loss rate: 0.19%
```

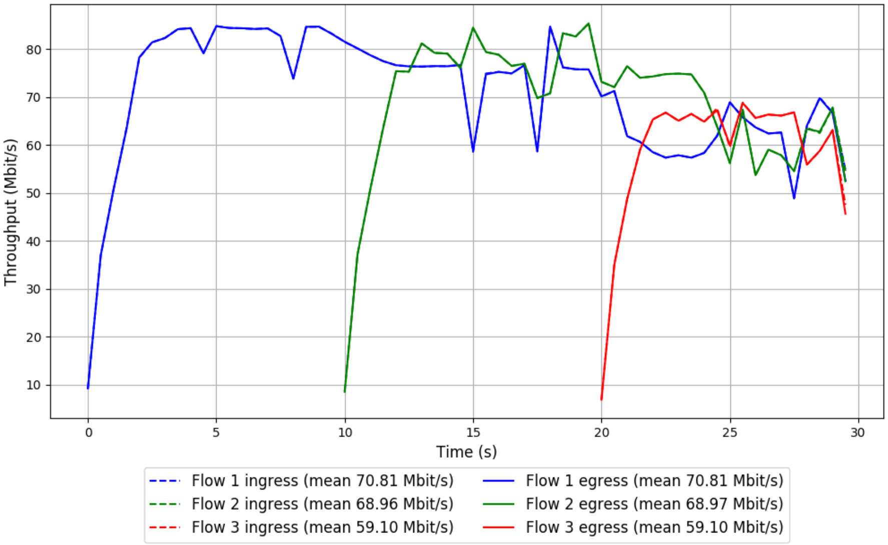
Run 4: Report of QUIC Cubic — Data Link

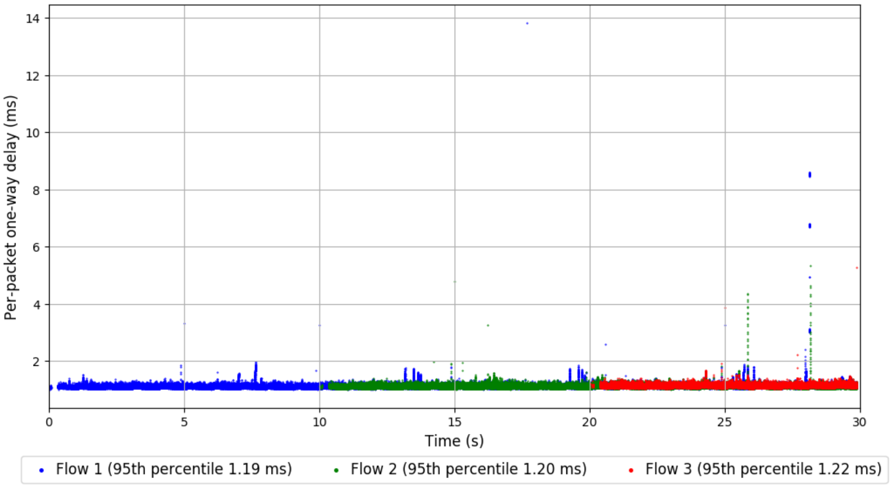




```
Run 5: Statistics of QUIC Cubic

Start at: 2017-12-11 21:19:29
End at: 2017-12-11 21:19:59
Local clock offset: -1.474 ms
Remote clock offset: -1.421 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 136.10 Mbit/s
95th percentile per-packet one-way delay: 1.198 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 70.81 Mbit/s
95th percentile per-packet one-way delay: 1.189 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 68.97 Mbit/s
95th percentile per-packet one-way delay: 1.197 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 59.10 Mbit/s
95th percentile per-packet one-way delay: 1.221 ms
Loss rate: 0.17%
```

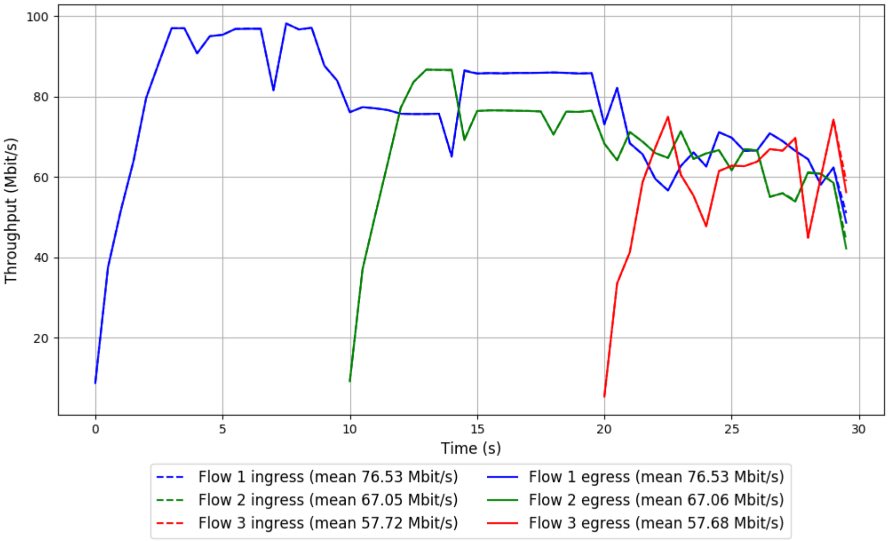
Run 5: Report of QUIC Cubic — Data Link

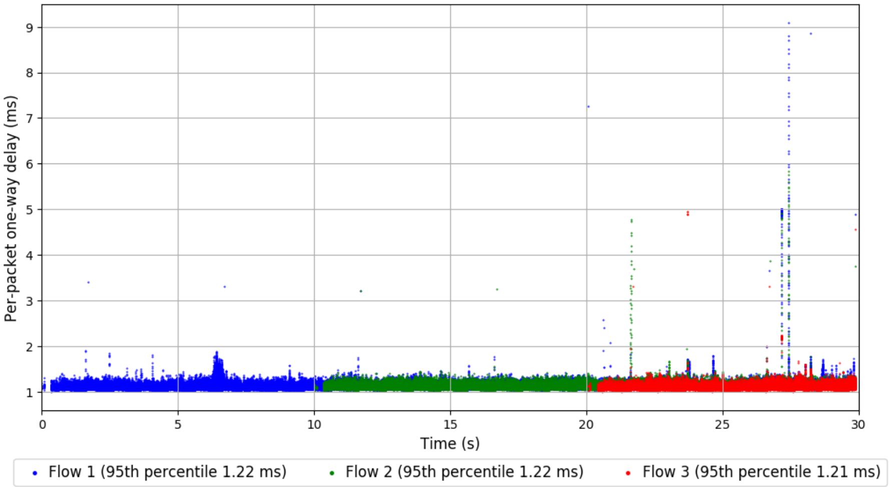




```
Run 6: Statistics of QUIC Cubic

Start at: 2017-12-11 21:39:59
End at: 2017-12-11 21:40:29
Local clock offset: -1.119 ms
Remote clock offset: -0.748 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 140.10 Mbit/s
95th percentile per-packet one-way delay: 1.222 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 76.53 Mbit/s
95th percentile per-packet one-way delay: 1.224 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 67.06 Mbit/s
95th percentile per-packet one-way delay: 1.223 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 57.68 Mbit/s
95th percentile per-packet one-way delay: 1.214 ms
Loss rate: 0.26%
```

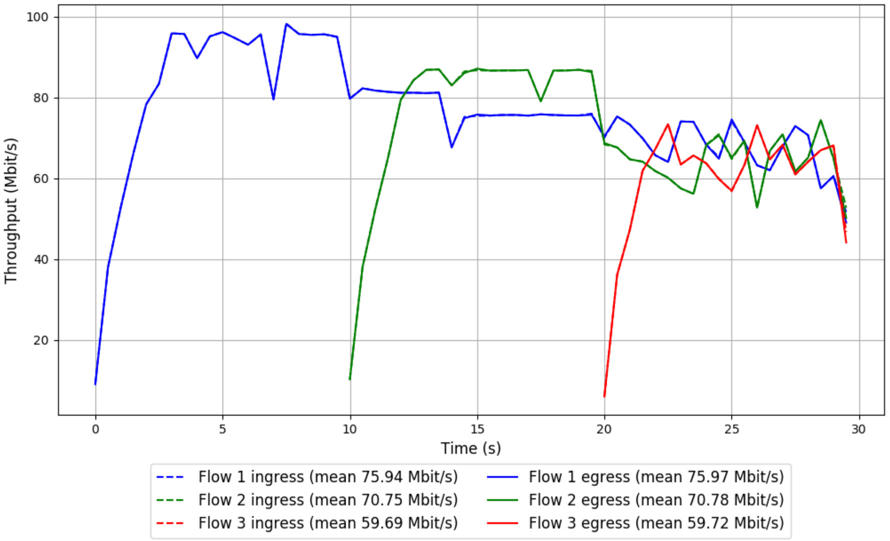
Run 6: Report of QUIC Cubic — Data Link

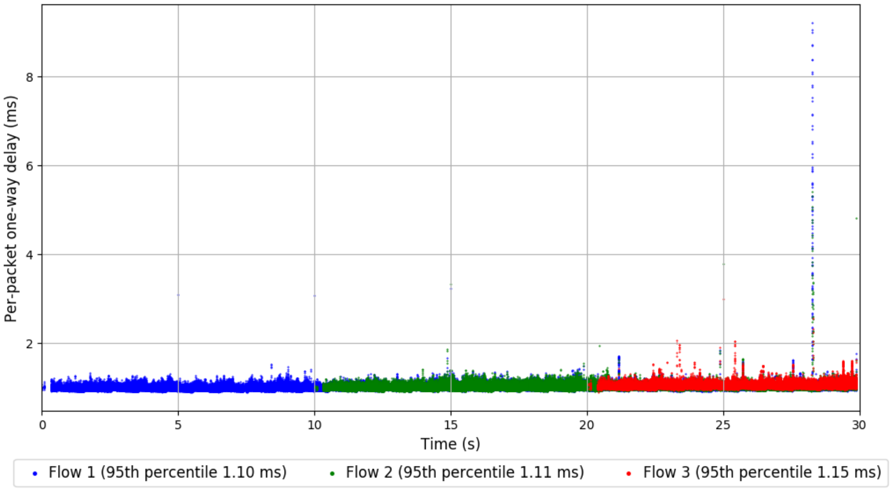




```
Run 7: Statistics of QUIC Cubic

Start at: 2017-12-11 22:00:36
End at: 2017-12-11 22:01:06
Local clock offset: -0.806 ms
Remote clock offset: -0.309 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 142.68 Mbit/s
95th percentile per-packet one-way delay: 1.114 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 75.97 Mbit/s
95th percentile per-packet one-way delay: 1.098 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 70.78 Mbit/s
95th percentile per-packet one-way delay: 1.115 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 59.72 Mbit/s
95th percentile per-packet one-way delay: 1.147 ms
Loss rate: 0.22%
```

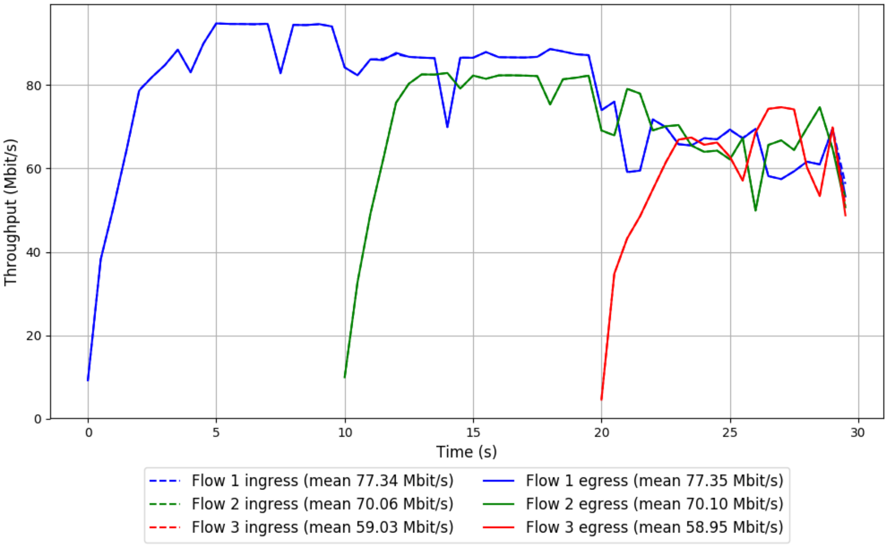
Run 7: Report of QUIC Cubic — Data Link

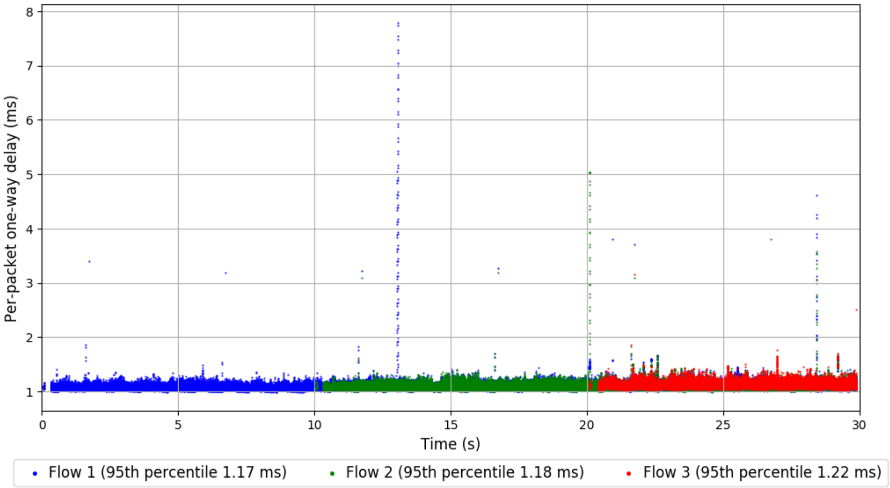




```
Run 8: Statistics of QUIC Cubic

Start at: 2017-12-11 22:21:09
End at: 2017-12-11 22:21:39
Local clock offset: -0.524 ms
Remote clock offset: 0.123 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 143.31 Mbit/s
95th percentile per-packet one-way delay: 1.183 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 77.35 Mbit/s
95th percentile per-packet one-way delay: 1.170 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 70.10 Mbit/s
95th percentile per-packet one-way delay: 1.178 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 58.95 Mbit/s
95th percentile per-packet one-way delay: 1.218 ms
Loss rate: 0.22%
```

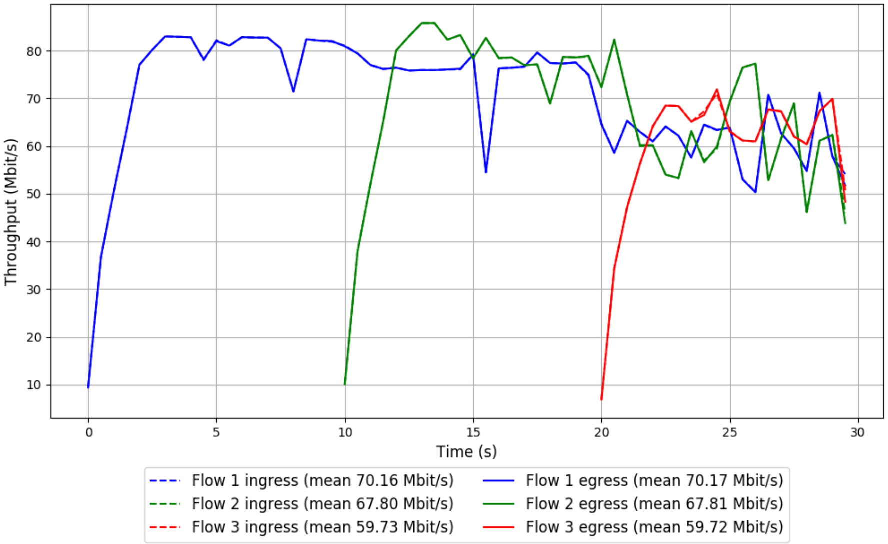
Run 8: Report of QUIC Cubic — Data Link

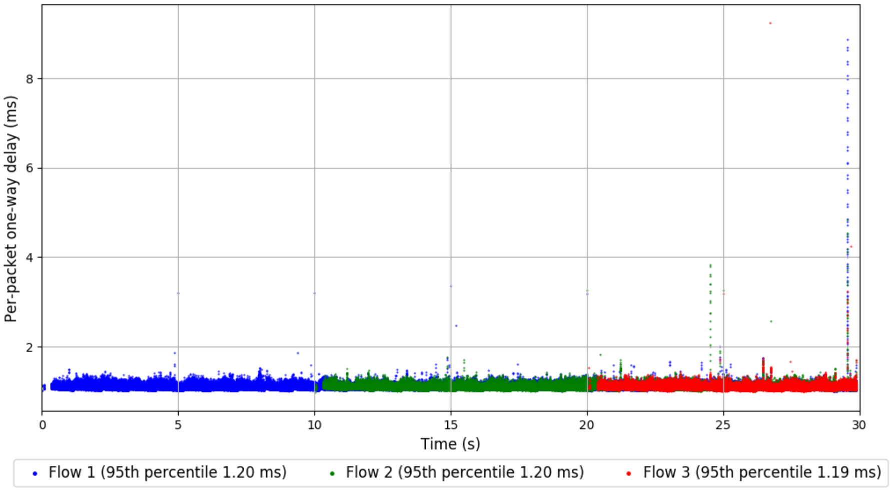




```
Run 9: Statistics of QUIC Cubic

Start at: 2017-12-11 22:41:51
End at: 2017-12-11 22:42:21
Local clock offset: -0.237 ms
Remote clock offset: -0.343 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 134.96 Mbit/s
95th percentile per-packet one-way delay: 1.200 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 70.17 Mbit/s
95th percentile per-packet one-way delay: 1.202 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 67.81 Mbit/s
95th percentile per-packet one-way delay: 1.197 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 59.72 Mbit/s
95th percentile per-packet one-way delay: 1.193 ms
Loss rate: 0.22%
```

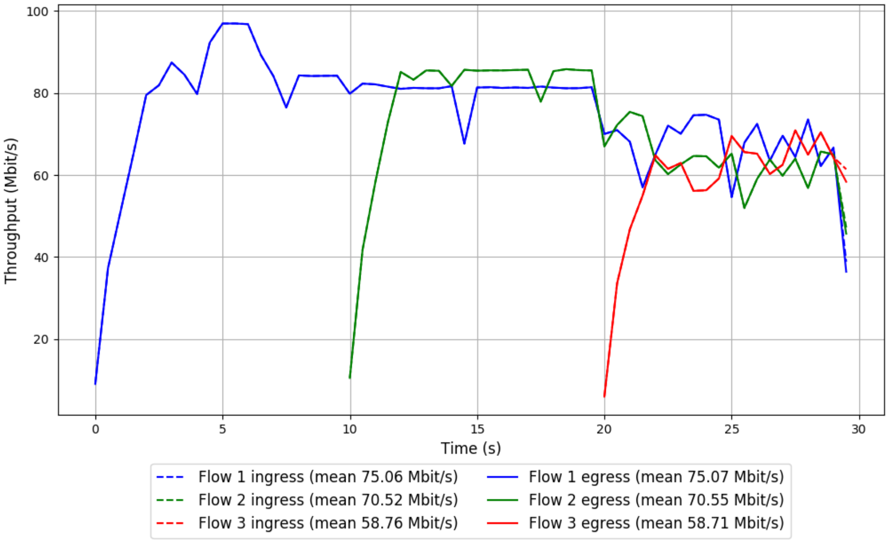
Run 9: Report of QUIC Cubic — Data Link

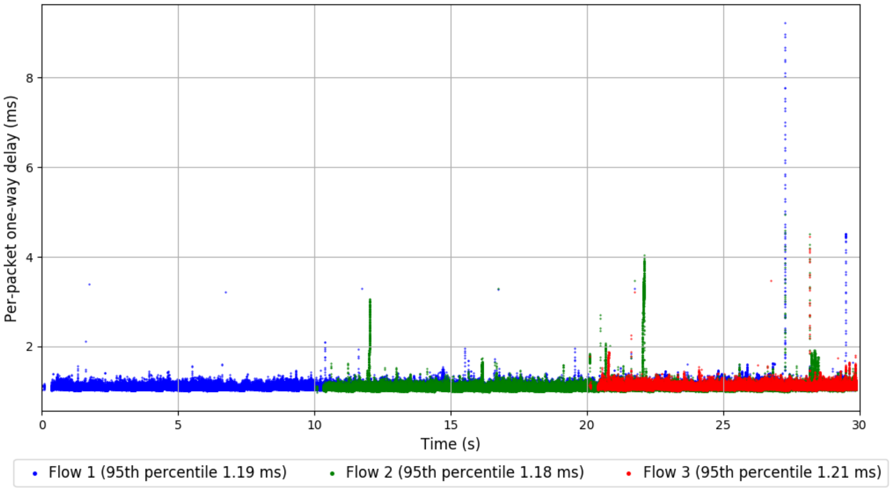




```
Run 10: Statistics of QUIC Cubic

Start at: 2017-12-11 23:02:33
End at: 2017-12-11 23:03:03
Local clock offset: 0.073 ms
Remote clock offset: -0.25 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 141.26 Mbit/s
95th percentile per-packet one-way delay: 1.191 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 75.07 Mbit/s
95th percentile per-packet one-way delay: 1.190 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 70.55 Mbit/s
95th percentile per-packet one-way delay: 1.184 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 58.71 Mbit/s
95th percentile per-packet one-way delay: 1.205 ms
Loss rate: 0.28%
```

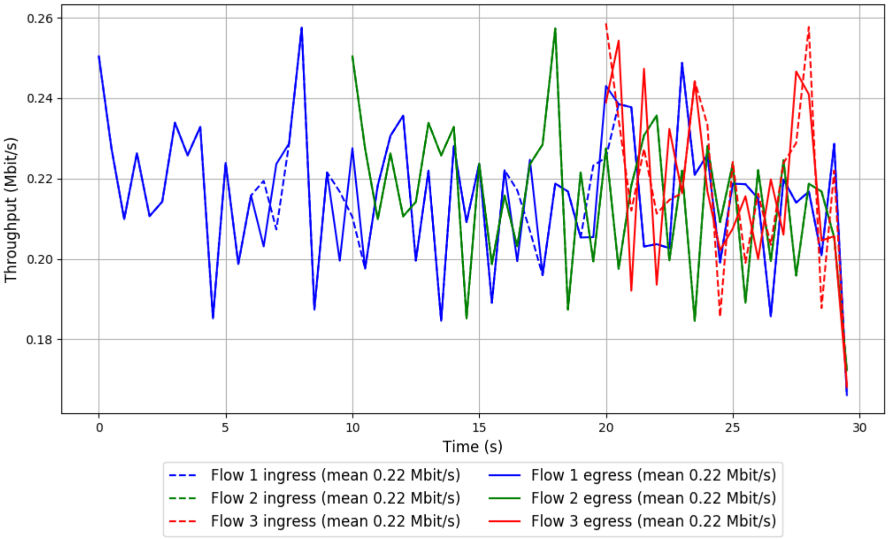
Run 10: Report of QUIC Cubic — Data Link

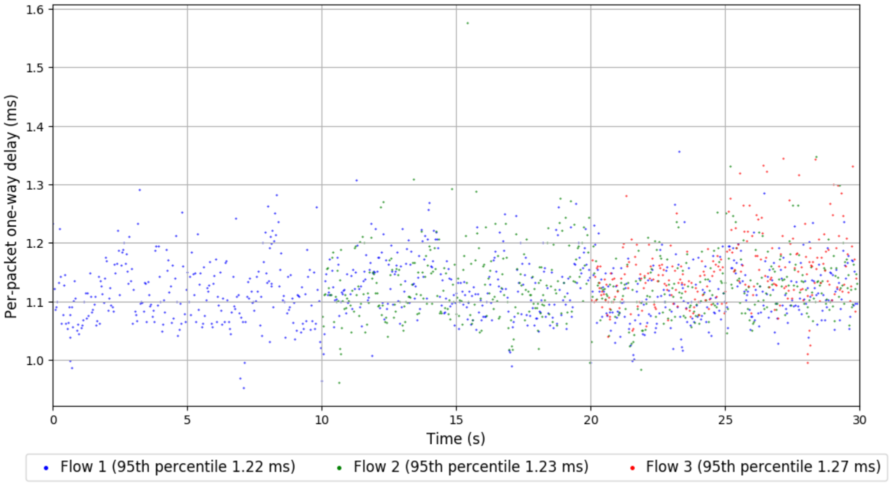




```
Run 1: Statistics of SCReAM

Start at: 2017-12-11 20:03:25
End at: 2017-12-11 20:03:55
Local clock offset: -1.665 ms
Remote clock offset: -2.4 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 1.227 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.219 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.227 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.267 ms
Loss rate: 0.35%
```

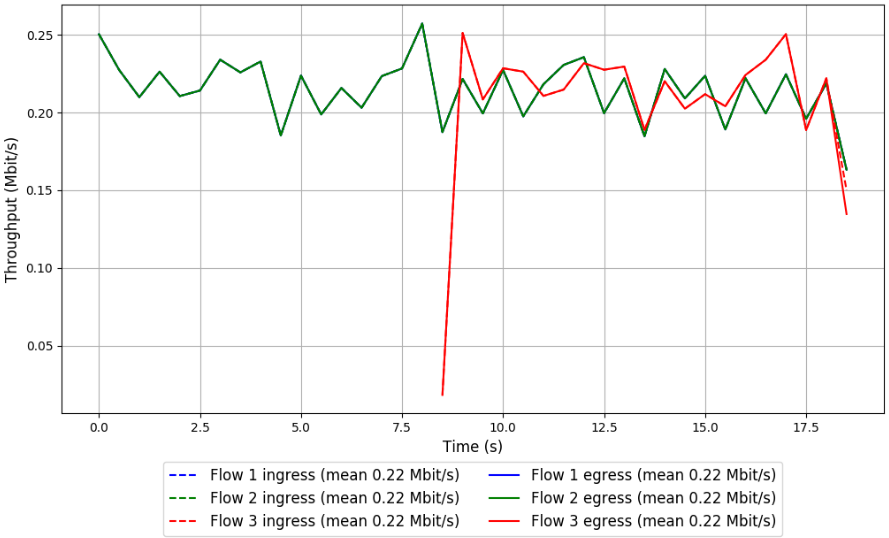
Run 1: Report of SCReAM — Data Link

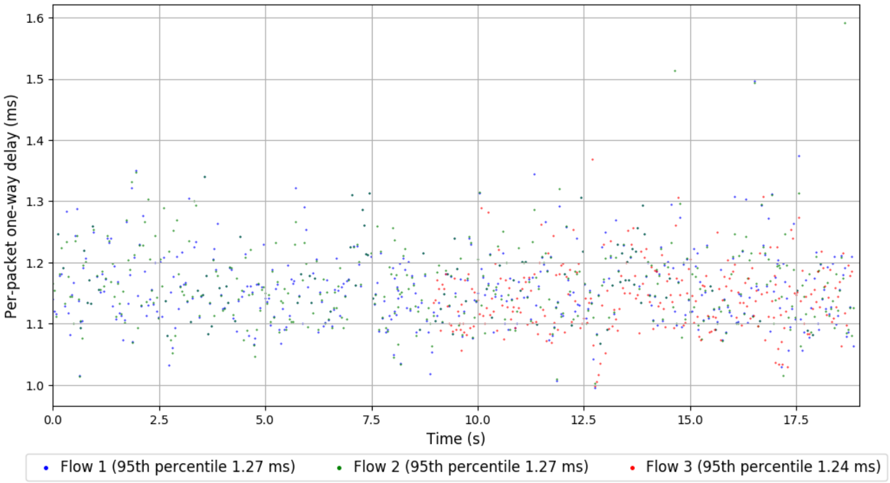




```
Run 2: Statistics of SCReAM

Start at: 2017-12-11 20:24:18
End at: 2017-12-11 20:24:48
Local clock offset: -1.793 ms
Remote clock offset: -1.911 ms
```

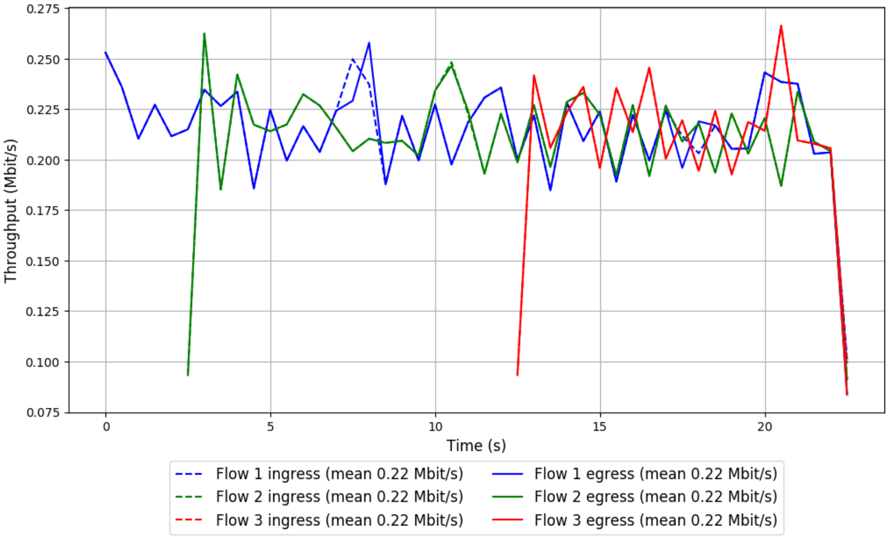
Run 2: Report of SCReAM — Data Link

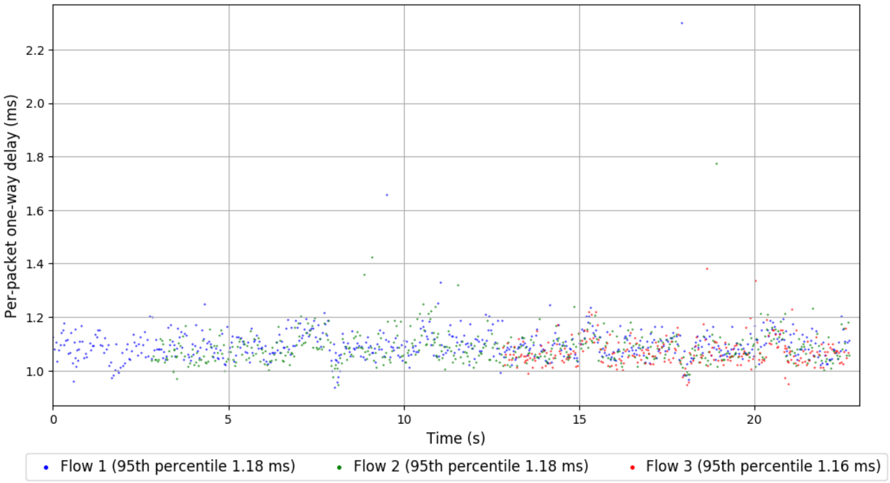




```
Run 3: Statistics of SCReAM

Start at: 2017-12-11 20:44:47
End at: 2017-12-11 20:45:17
Local clock offset: -1.693 ms
Remote clock offset: -1.694 ms
```

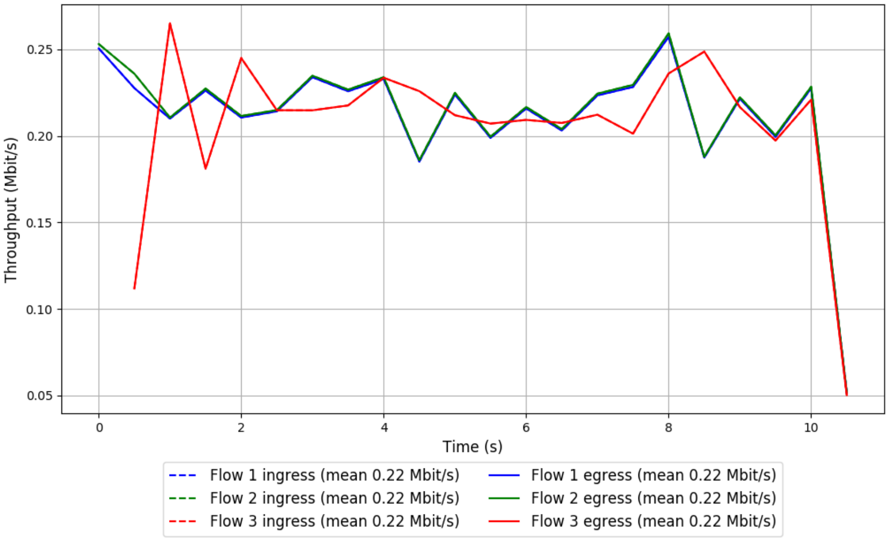
Run 3: Report of SCReAM — Data Link

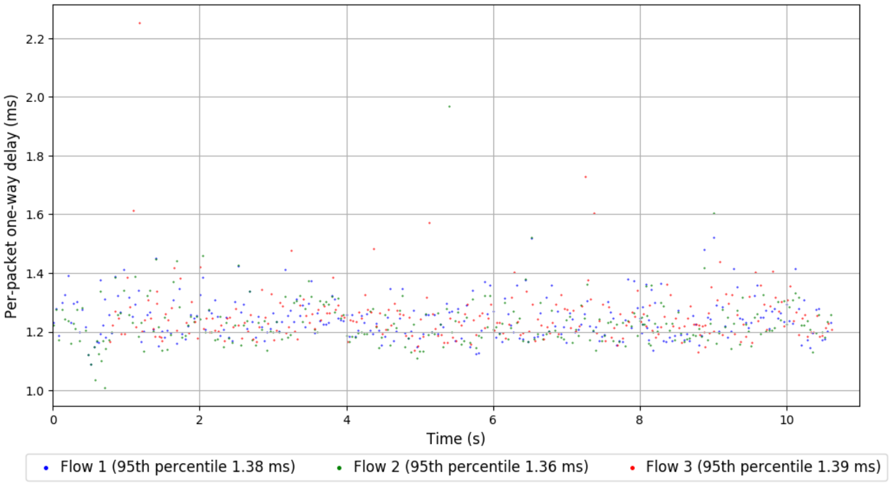




```
Run 4: Statistics of SCReAM

Start at: 2017-12-11 21:05:28
End at: 2017-12-11 21:05:58
Local clock offset: -1.528 ms
Remote clock offset: -1.528 ms
```

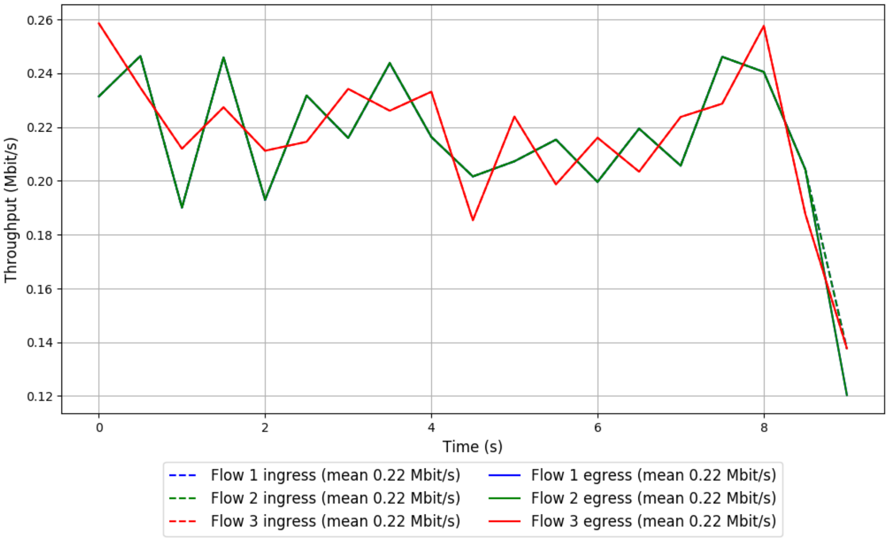
Run 4: Report of SCReAM — Data Link

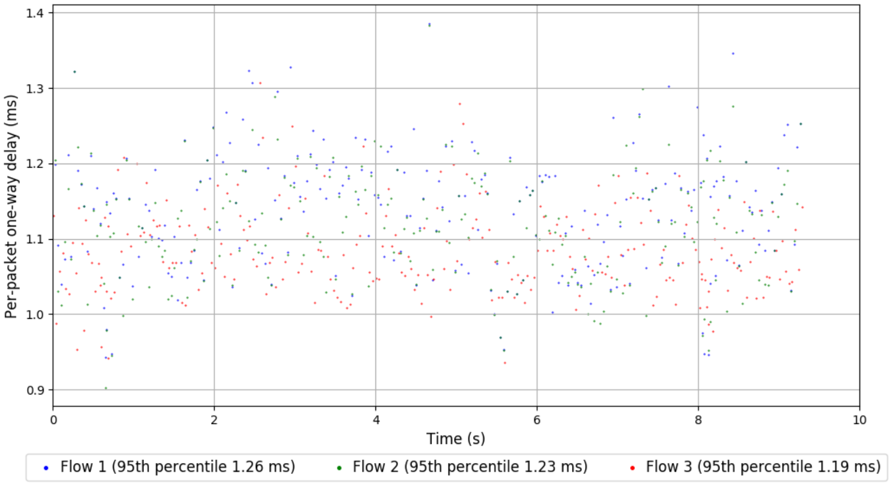




```
Run 5: Statistics of SCReAM

Start at: 2017-12-11 21:26:06
End at: 2017-12-11 21:26:36
Local clock offset: -1.45 ms
Remote clock offset: -1.182 ms
```

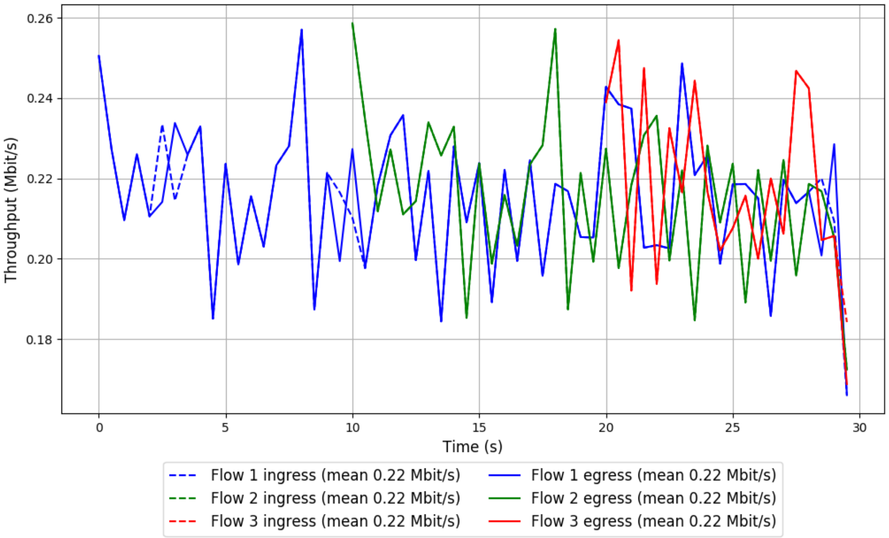
Run 5: Report of SCReAM — Data Link

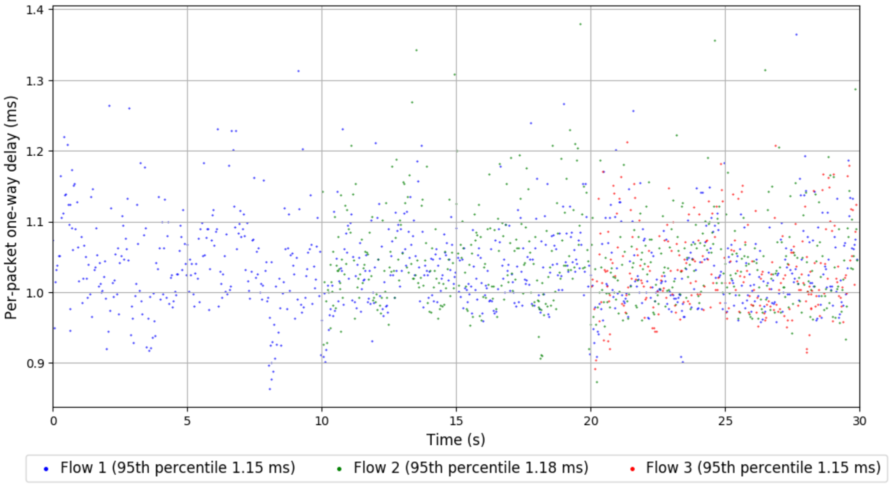




```
Run 6: Statistics of SCReAM

Start at: 2017-12-11 21:46:42
End at: 2017-12-11 21:47:12
Local clock offset: -1.046 ms
Remote clock offset: -0.423 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 1.161 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.154 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.178 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.148 ms
Loss rate: 0.35%
```

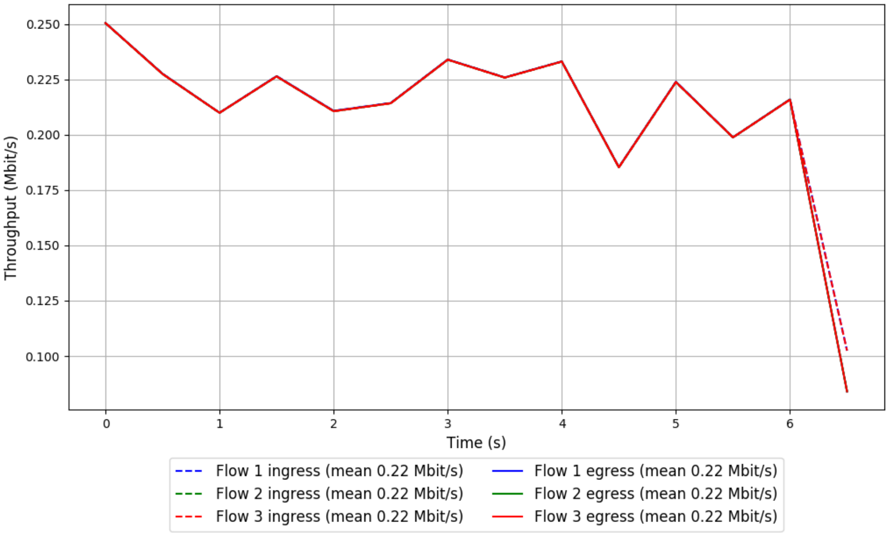
Run 6: Report of SCReAM — Data Link

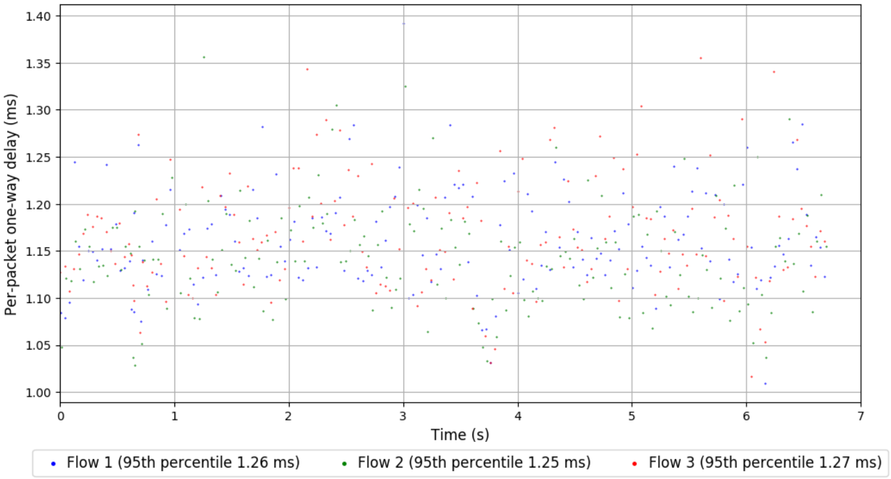




```
Run 7: Statistics of SCReAM

Start at: 2017-12-11 22:07:11
End at: 2017-12-11 22:07:41
Local clock offset: -0.717 ms
Remote clock offset: -0.185 ms
```

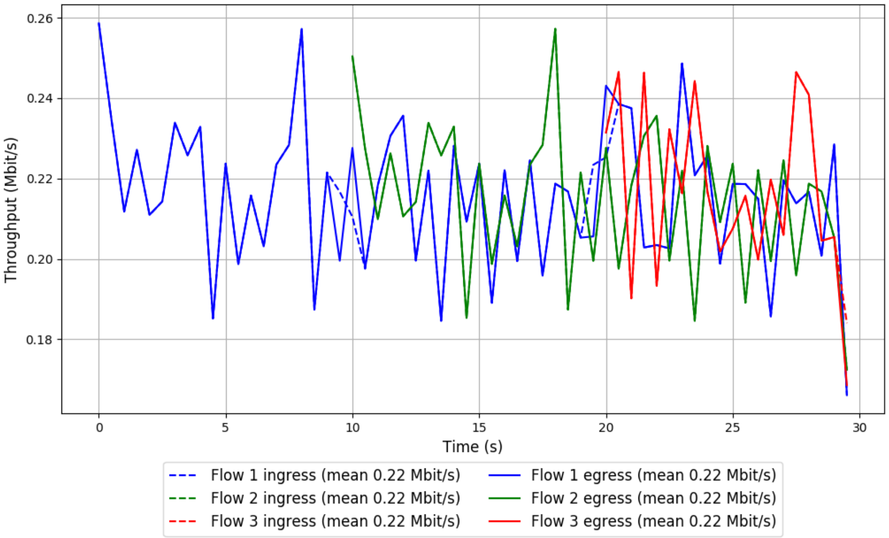
Run 7: Report of SCReAM — Data Link

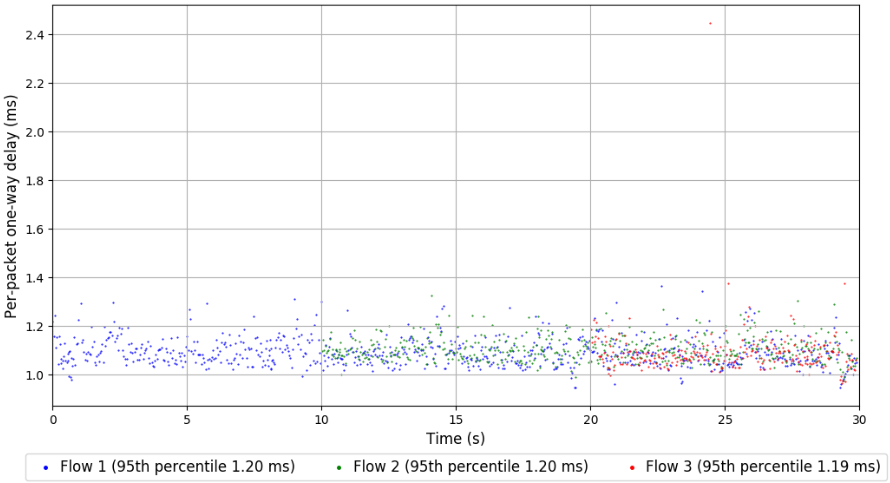




```
Run 8: Statistics of SCReAM

Start at: 2017-12-11 22:27:53
End at: 2017-12-11 22:28:23
Local clock offset: -0.412 ms
Remote clock offset: 0.053 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 1.198 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.198 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.197 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.185 ms
Loss rate: 0.35%
```

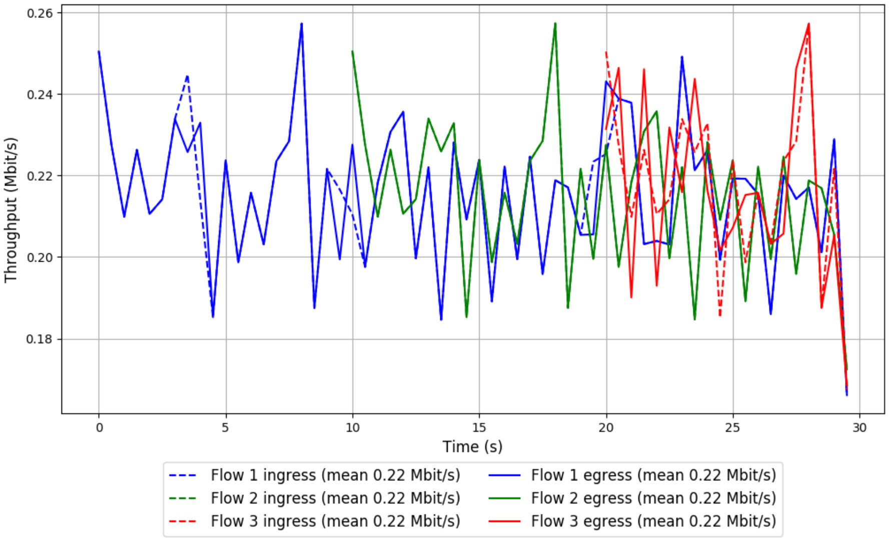
Run 8: Report of SCReAM — Data Link

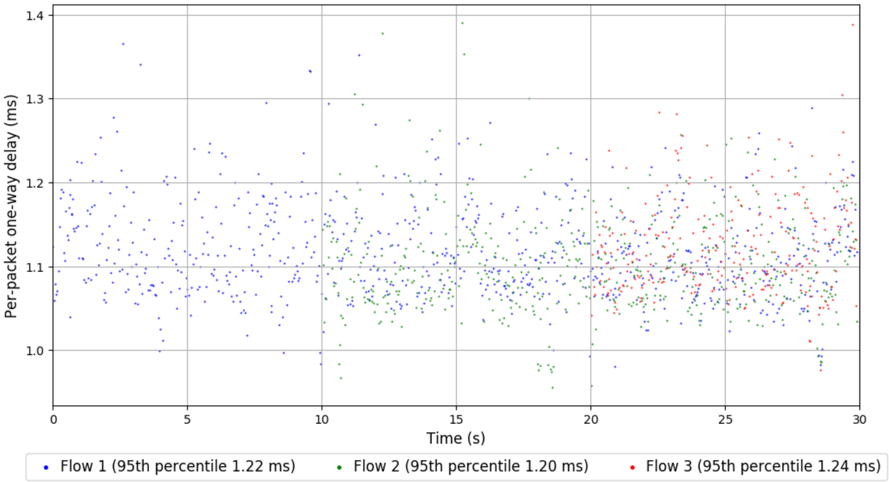




```
Run 9: Statistics of SCReAM

Start at: 2017-12-11 22:48:33
End at: 2017-12-11 22:49:03
Local clock offset: -0.103 ms
Remote clock offset: -0.334 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 1.215 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.218 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.202 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.235 ms
Loss rate: 0.35%
```

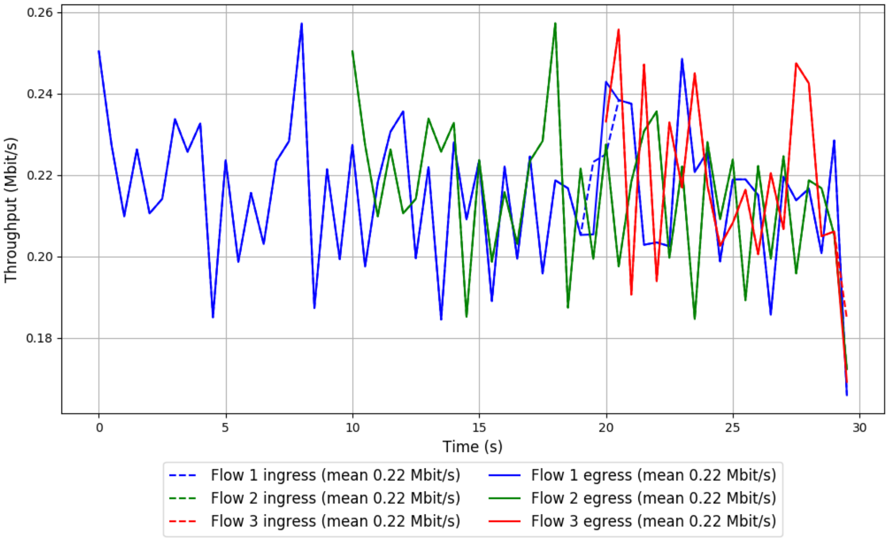
Run 9: Report of SCReAM — Data Link

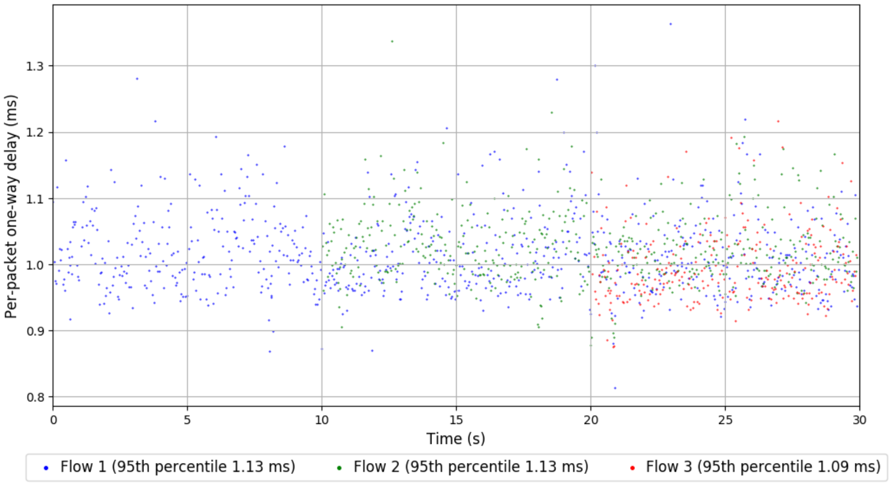




```
Run 10: Statistics of SCReAM

Start at: 2017-12-11 23:09:17
End at: 2017-12-11 23:09:47
Local clock offset: 0.07 ms
Remote clock offset: -0.153 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 1.126 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.130 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.127 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.093 ms
Loss rate: 0.35%
```

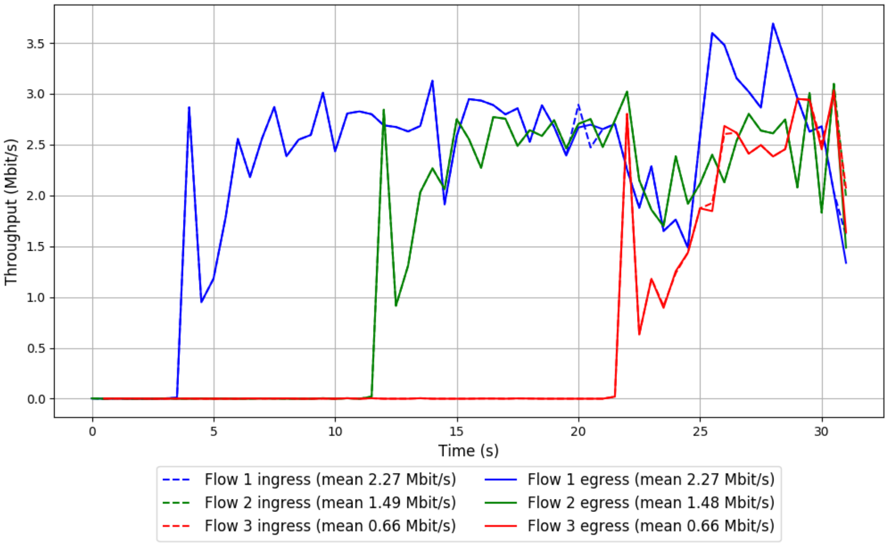
Run 10: Report of SCReAM — Data Link

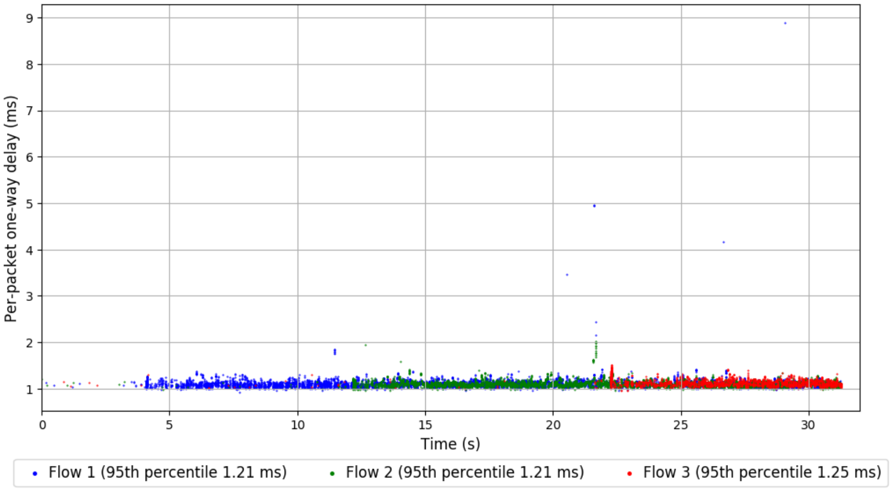




```
Run 1: Statistics of WebRTC media

Start at: 2017-12-11 20:00:49
End at: 2017-12-11 20:01:19
Local clock offset: -1.509 ms
Remote clock offset: -2.349 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.37 Mbit/s
95th percentile per-packet one-way delay: 1.214 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 1.207 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 1.208 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 1.251 ms
Loss rate: 1.06%
```

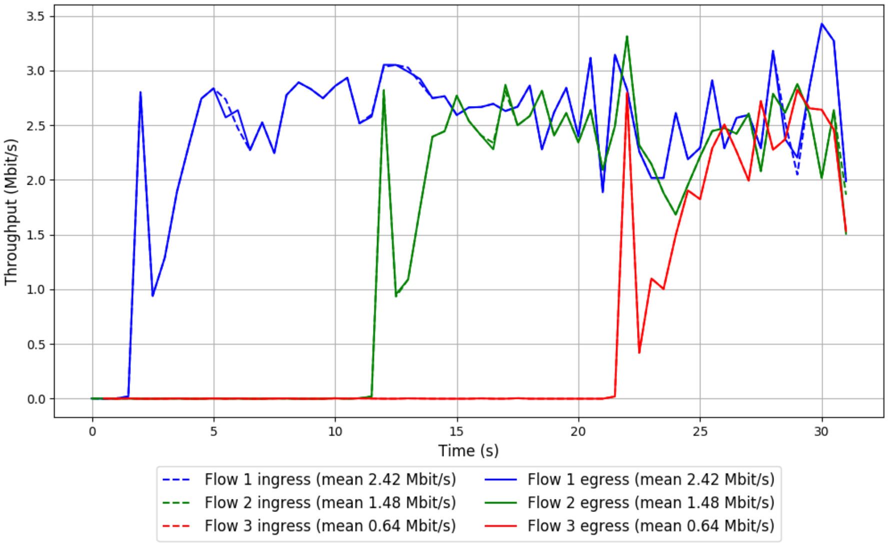
Run 1: Report of WebRTC media — Data Link

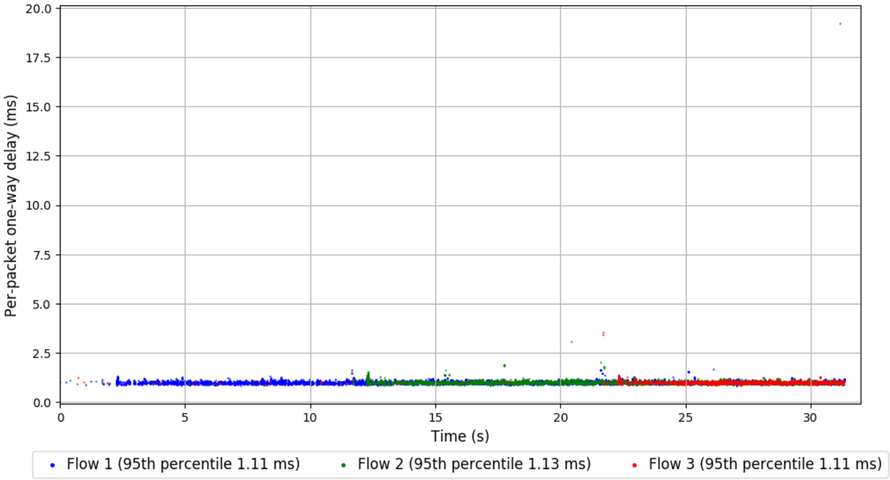




```
Run 2: Statistics of WebRTC media

Start at: 2017-12-11 20:21:42
End at: 2017-12-11 20:22:12
Local clock offset: -1.831 ms
Remote clock offset: -1.875 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.51 Mbit/s
95th percentile per-packet one-way delay: 1.118 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 1.114 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 1.131 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 1.106 ms
Loss rate: 0.00%
```

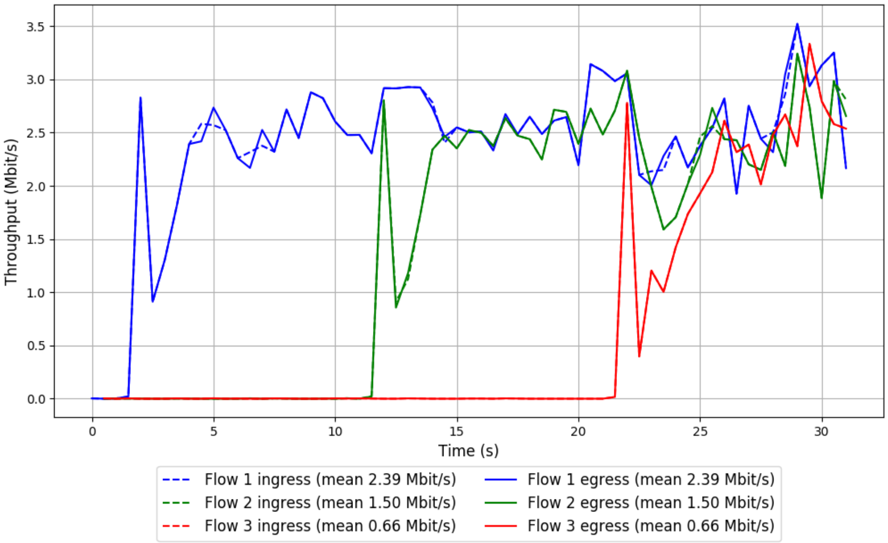
Run 2: Report of WebRTC media — Data Link

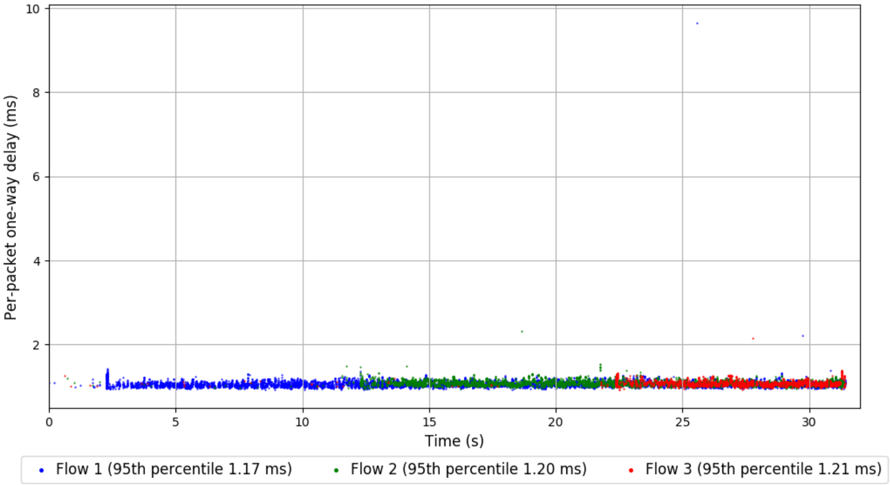




```
Run 3: Statistics of WebRTC media

Start at: 2017-12-11 20:42:11
End at: 2017-12-11 20:42:41
Local clock offset: -1.764 ms
Remote clock offset: -1.814 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.50 Mbit/s
95th percentile per-packet one-way delay: 1.184 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 1.171 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 1.195 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 1.206 ms
Loss rate: 0.00%
```

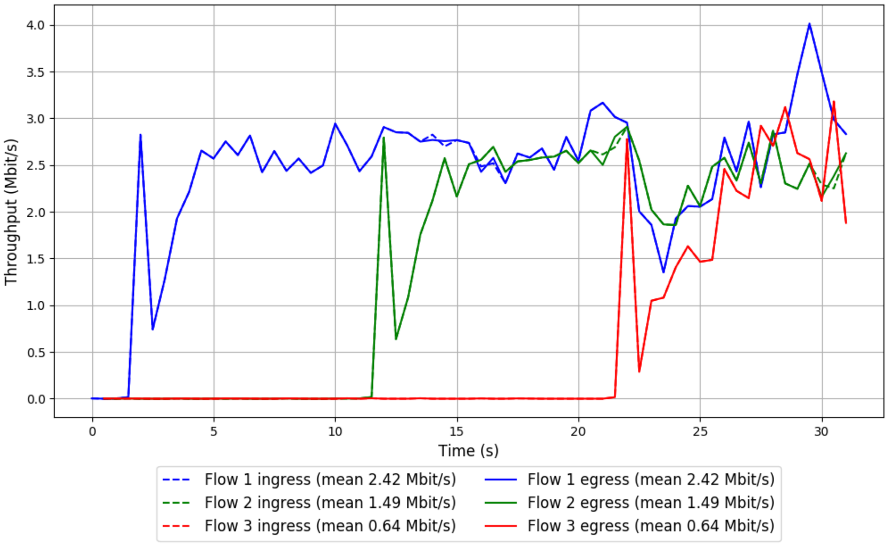
Run 3: Report of WebRTC media — Data Link

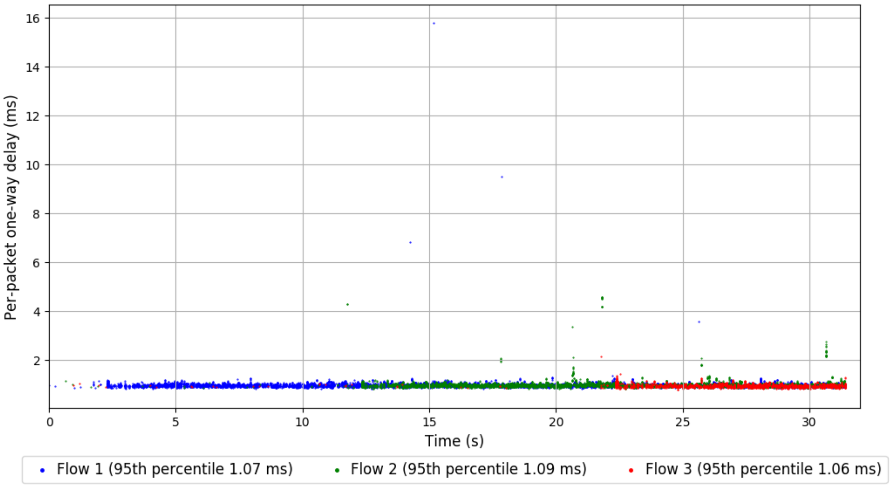




```
Run 4: Statistics of WebRTC media

Start at: 2017-12-11 21:02:50
End at: 2017-12-11 21:03:20
Local clock offset: -1.641 ms
Remote clock offset: -1.421 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.51 Mbit/s
95th percentile per-packet one-way delay: 1.076 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 1.071 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 1.094 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 1.060 ms
Loss rate: 0.00%
```

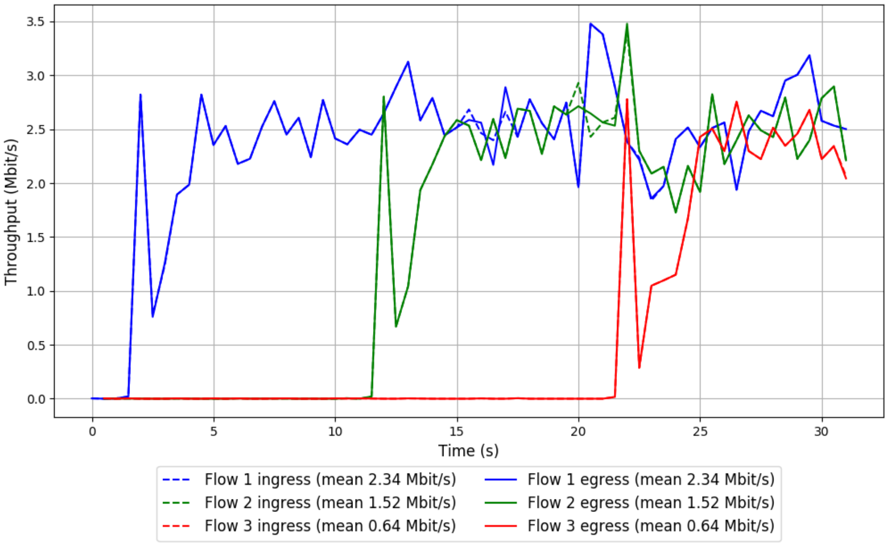
Run 4: Report of WebRTC media — Data Link

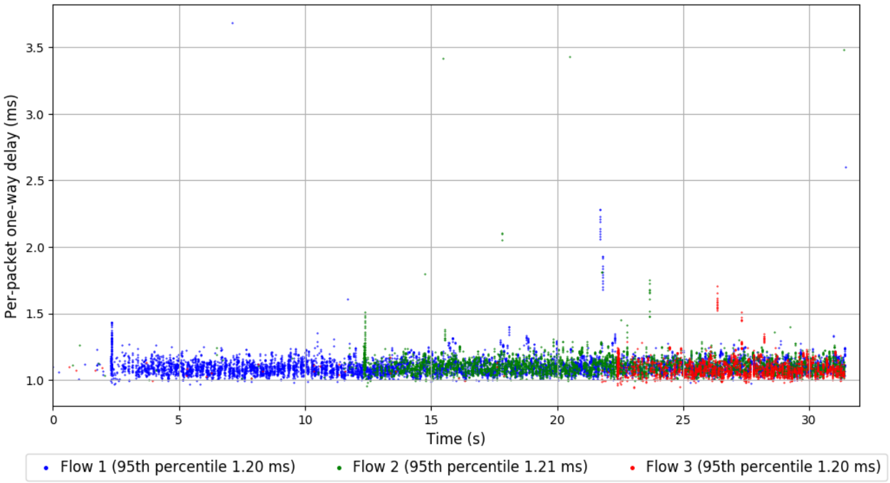




```
Run 5: Statistics of WebRTC media

Start at: 2017-12-11 21:23:28
End at: 2017-12-11 21:23:58
Local clock offset: -1.41 ms
Remote clock offset: -1.282 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.44 Mbit/s
95th percentile per-packet one-way delay: 1.202 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 1.196 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 1.207 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 1.202 ms
Loss rate: 0.06%
```

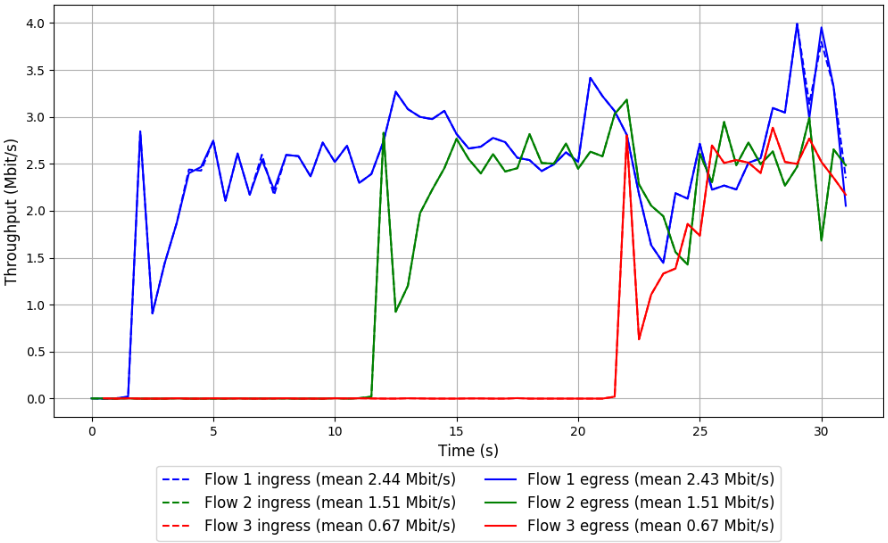
Run 5: Report of WebRTC media — Data Link

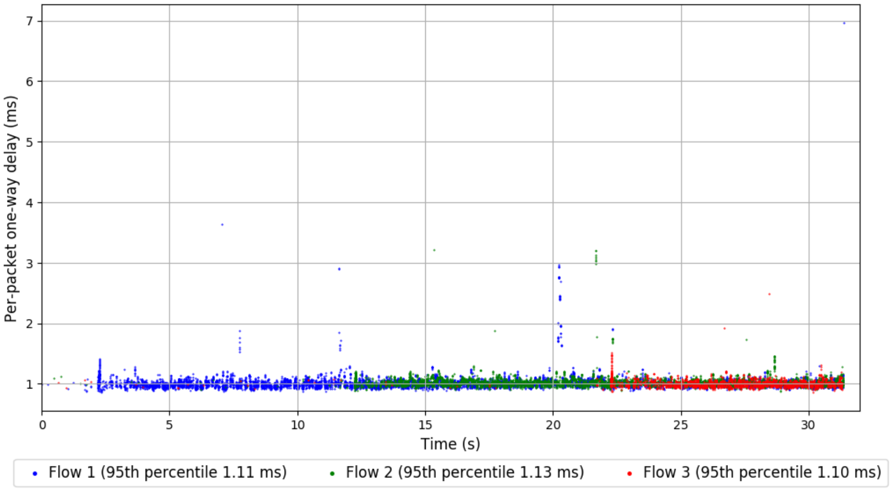




```
Run 6: Statistics of WebRTC media

Start at: 2017-12-11 21:44:04
End at: 2017-12-11 21:44:34
Local clock offset: -1.109 ms
Remote clock offset: -0.56 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.58 Mbit/s
95th percentile per-packet one-way delay: 1.117 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 1.113 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 1.129 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 1.103 ms
Loss rate: 0.00%
```

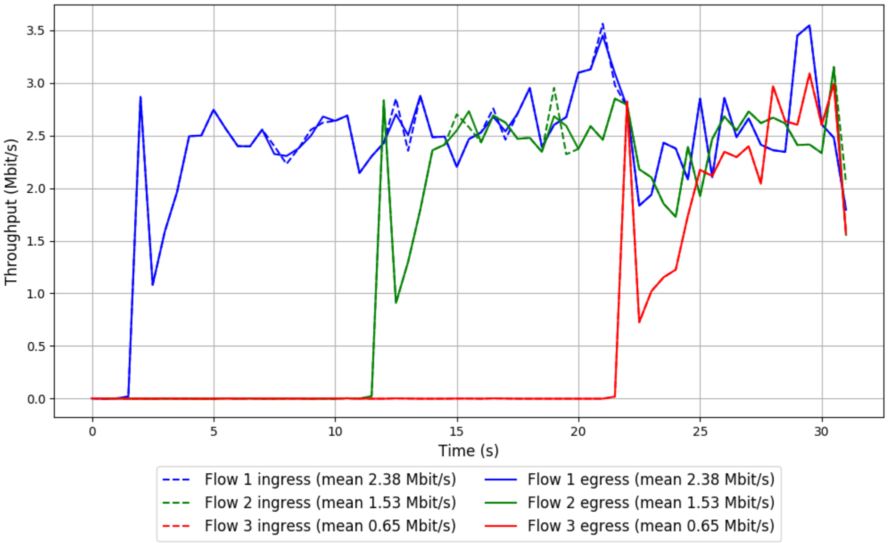
Run 6: Report of WebRTC media — Data Link

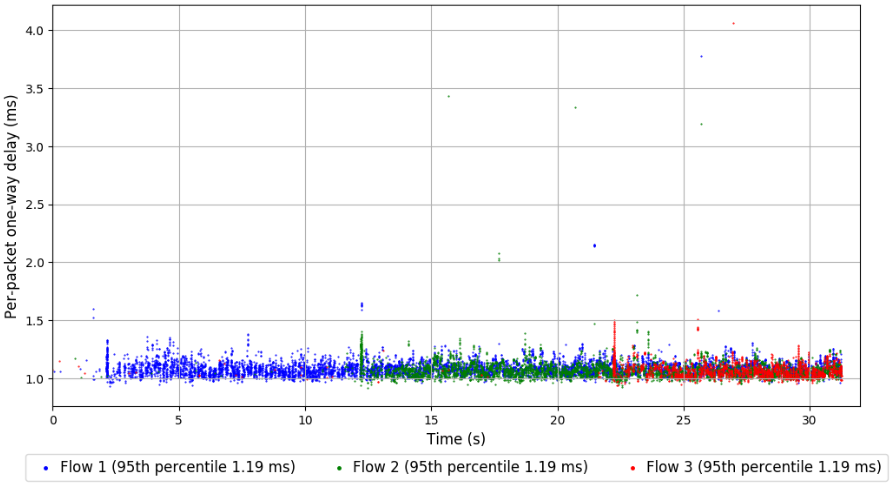




```
Run 7: Statistics of WebRTC media

Start at: 2017-12-11 22:04:35
End at: 2017-12-11 22:05:05
Local clock offset: -0.766 ms
Remote clock offset: -0.255 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.51 Mbit/s
95th percentile per-packet one-way delay: 1.187 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 2.38 Mbit/s
95th percentile per-packet one-way delay: 1.189 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.53 Mbit/s
95th percentile per-packet one-way delay: 1.185 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 1.187 ms
Loss rate: 0.00%
```

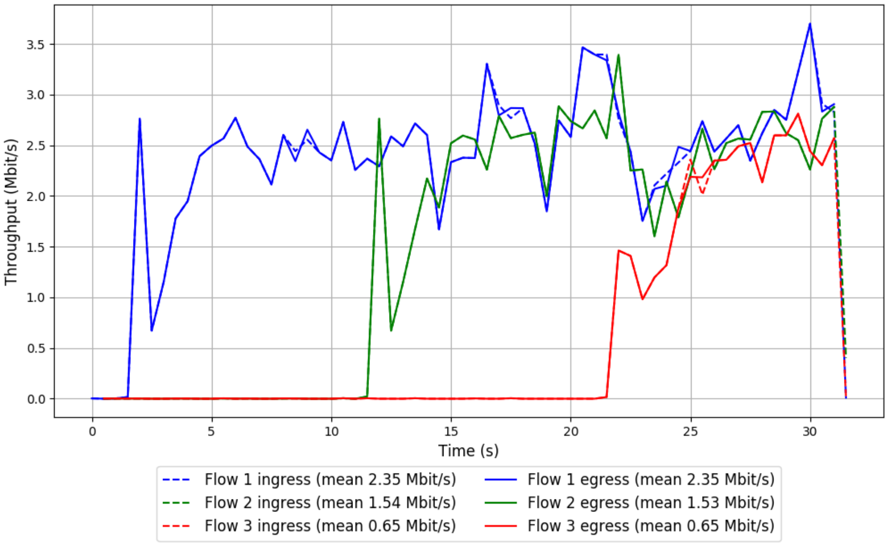
Run 7: Report of WebRTC media — Data Link

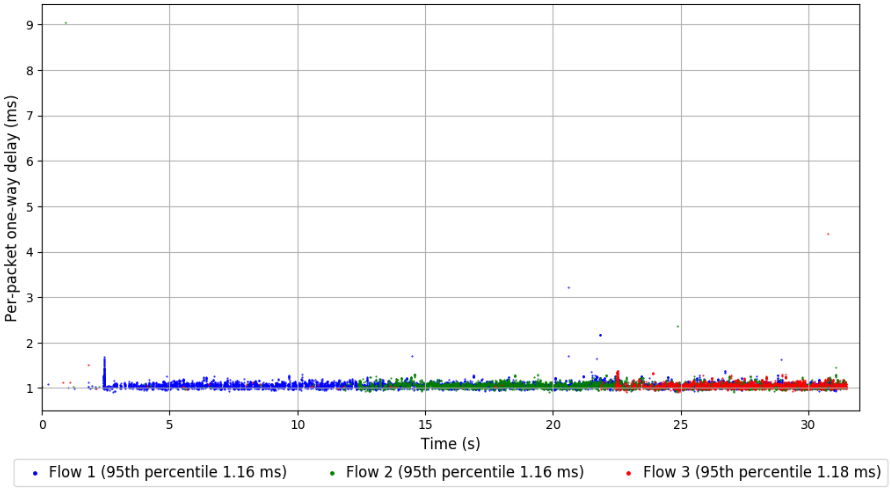




```
Run 8: Statistics of WebRTC media

Start at: 2017-12-11 22:25:14
End at: 2017-12-11 22:25:44
Local clock offset: -0.52 ms
Remote clock offset: 0.038 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.47 Mbit/s
95th percentile per-packet one-way delay: 1.161 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 1.158 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.53 Mbit/s
95th percentile per-packet one-way delay: 1.158 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 1.183 ms
Loss rate: 0.00%
```

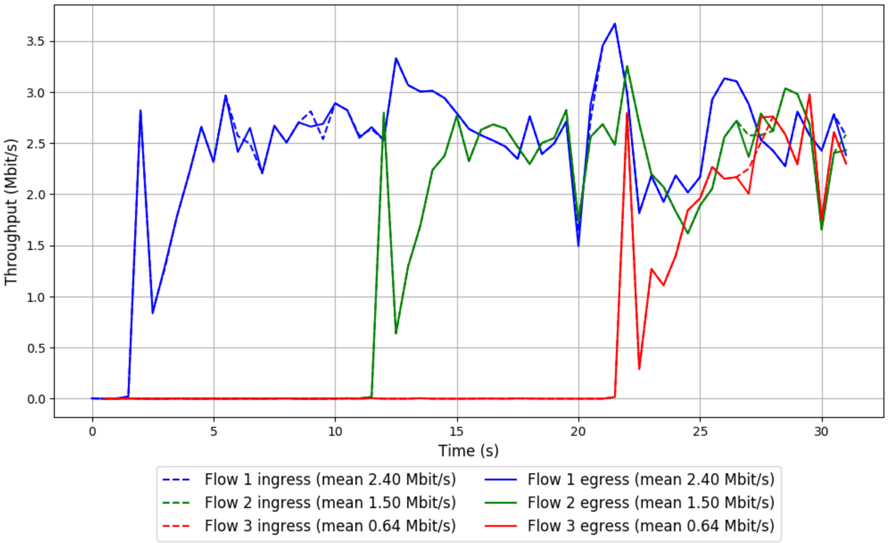
Run 8: Report of WebRTC media — Data Link

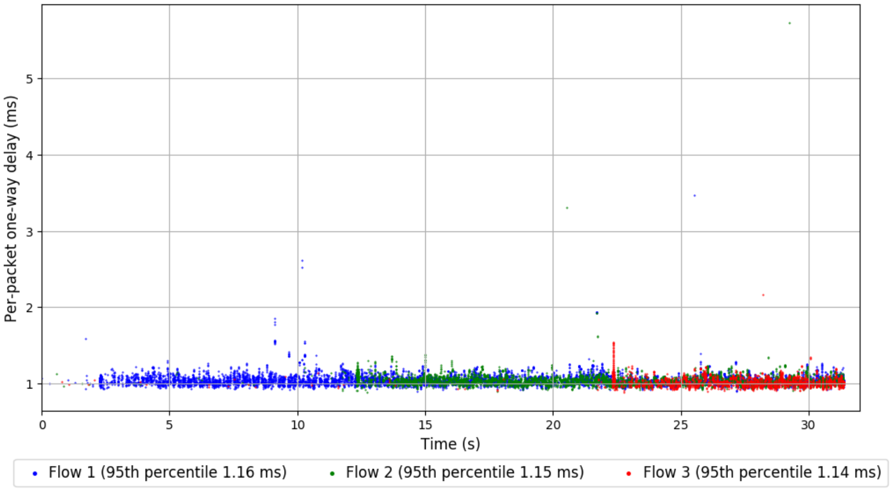




```
Run 9: Statistics of WebRTC media

Start at: 2017-12-11 22:45:58
End at: 2017-12-11 22:46:28
Local clock offset: -0.238 ms
Remote clock offset: -0.398 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.50 Mbit/s
95th percentile per-packet one-way delay: 1.153 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 1.156 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 1.152 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 1.139 ms
Loss rate: 0.01%
```

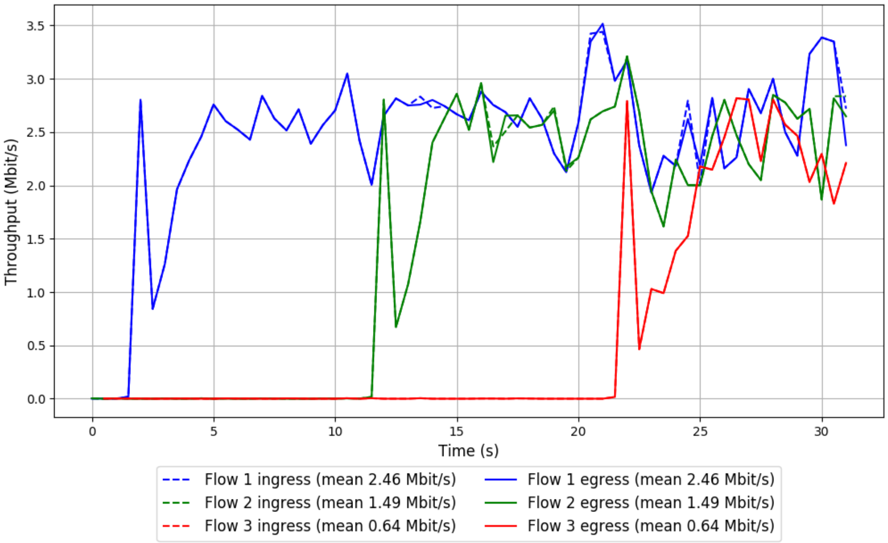
Run 9: Report of WebRTC media — Data Link

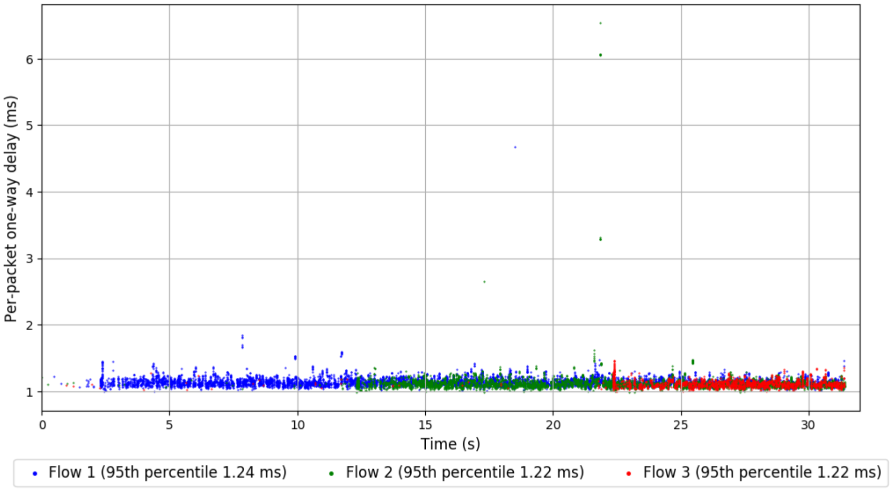




```
Run 10: Statistics of WebRTC media

Start at: 2017-12-11 23:06:39
End at: 2017-12-11 23:07:09
Local clock offset: 0.142 ms
Remote clock offset: -0.255 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.53 Mbit/s
95th percentile per-packet one-way delay: 1.228 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 2.46 Mbit/s
95th percentile per-packet one-way delay: 1.237 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 1.215 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 1.221 ms
Loss rate: 0.00%
```

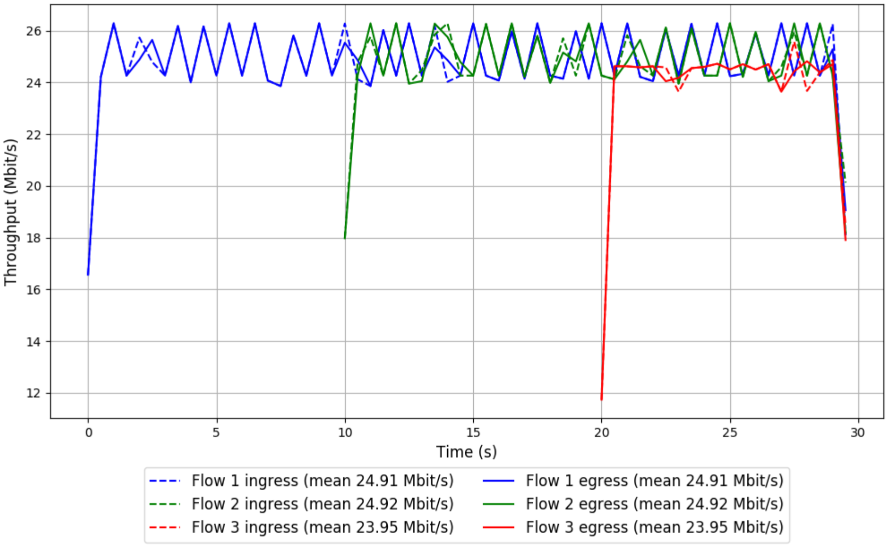
Run 10: Report of WebRTC media — Data Link

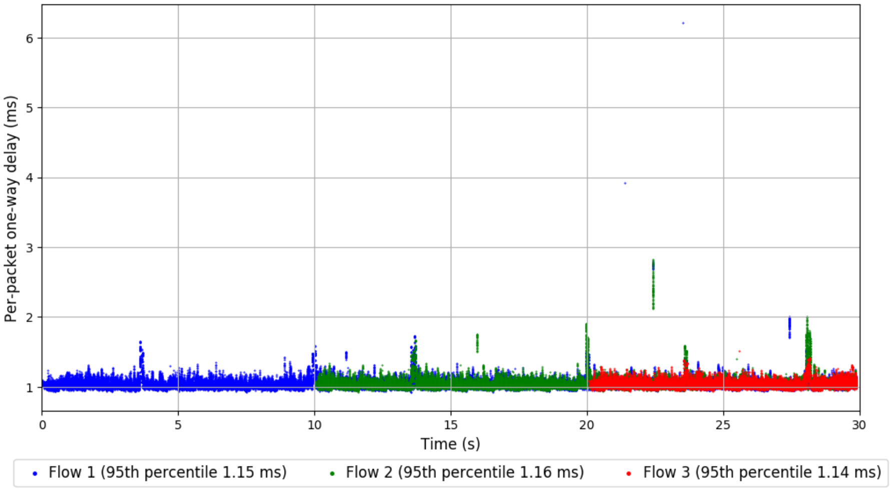




```
Run 1: Statistics of Sprout

Start at: 2017-12-11 19:58:03
End at: 2017-12-11 19:58:33
Local clock offset: -1.536 ms
Remote clock offset: -2.337 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.31 Mbit/s
95th percentile per-packet one-way delay: 1.153 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 24.91 Mbit/s
95th percentile per-packet one-way delay: 1.151 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.92 Mbit/s
95th percentile per-packet one-way delay: 1.161 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 23.95 Mbit/s
95th percentile per-packet one-way delay: 1.144 ms
Loss rate: 0.15%
```

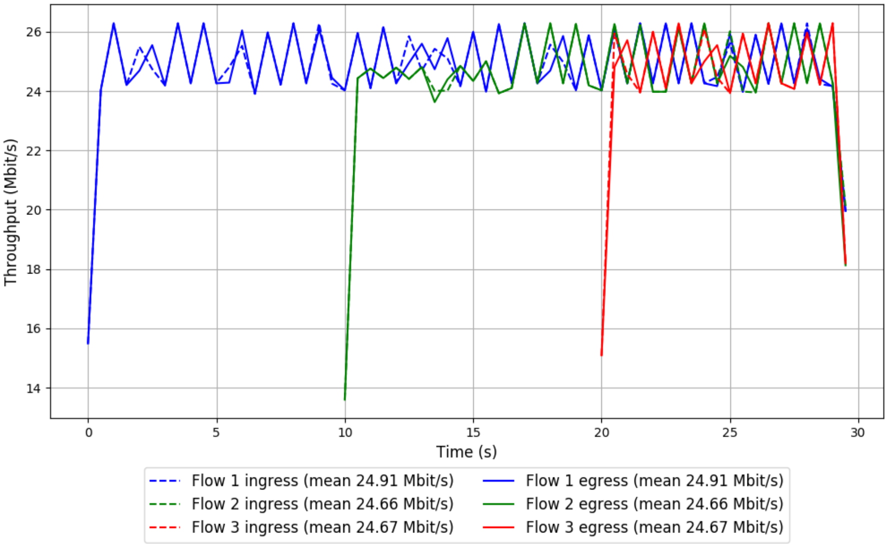
Run 1: Report of Sprout — Data Link

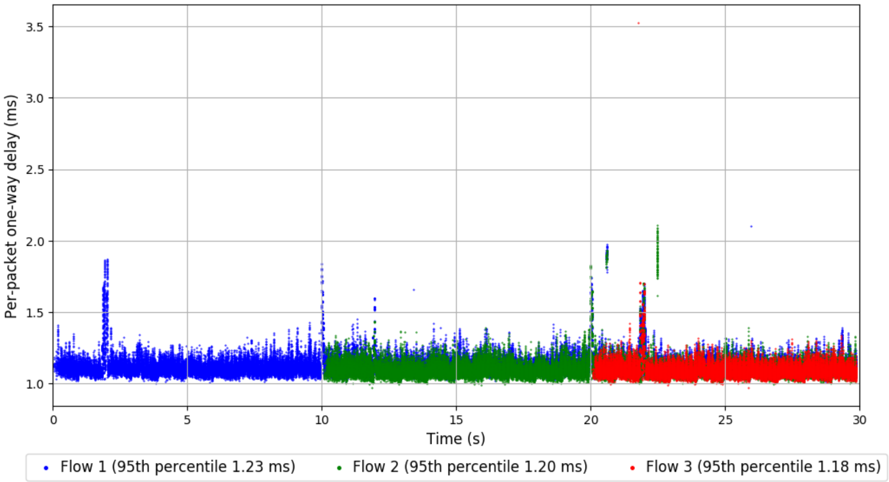




```
Run 2: Statistics of Sprout

Start at: 2017-12-11 20:18:45
End at: 2017-12-11 20:19:15
Local clock offset: -1.745 ms
Remote clock offset: -1.9 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.37 Mbit/s
95th percentile per-packet one-way delay: 1.211 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 24.91 Mbit/s
95th percentile per-packet one-way delay: 1.225 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.66 Mbit/s
95th percentile per-packet one-way delay: 1.198 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 24.67 Mbit/s
95th percentile per-packet one-way delay: 1.182 ms
Loss rate: 0.00%
```

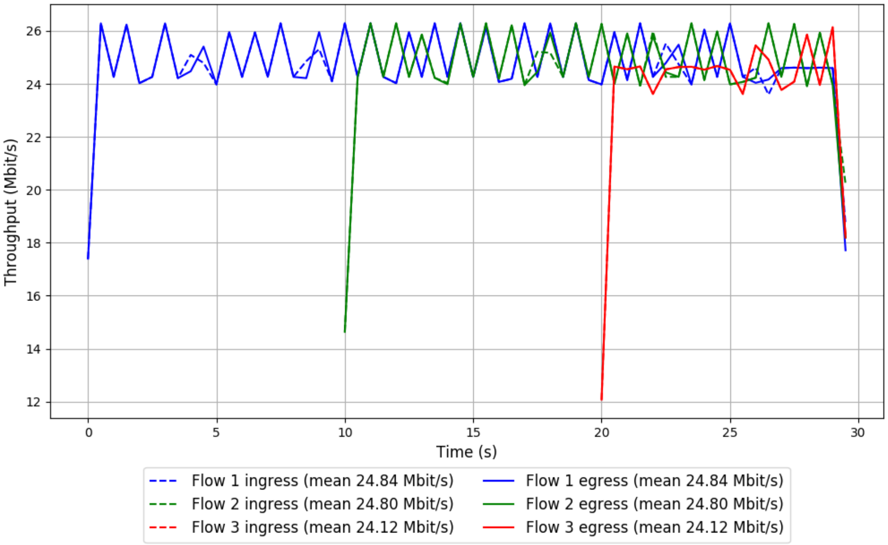
Run 2: Report of Sprout — Data Link

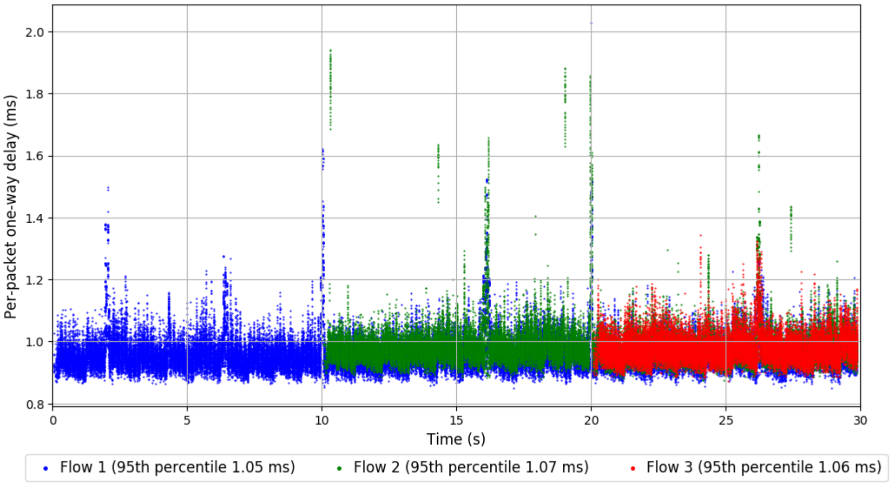




```
Run 3: Statistics of Sprout

Start at: 2017-12-11 20:39:31
End at: 2017-12-11 20:40:01
Local clock offset: -1.756 ms
Remote clock offset: -1.694 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.22 Mbit/s
95th percentile per-packet one-way delay: 1.059 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 24.84 Mbit/s
95th percentile per-packet one-way delay: 1.048 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 24.80 Mbit/s
95th percentile per-packet one-way delay: 1.069 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 24.12 Mbit/s
95th percentile per-packet one-way delay: 1.063 ms
Loss rate: 0.00%
```

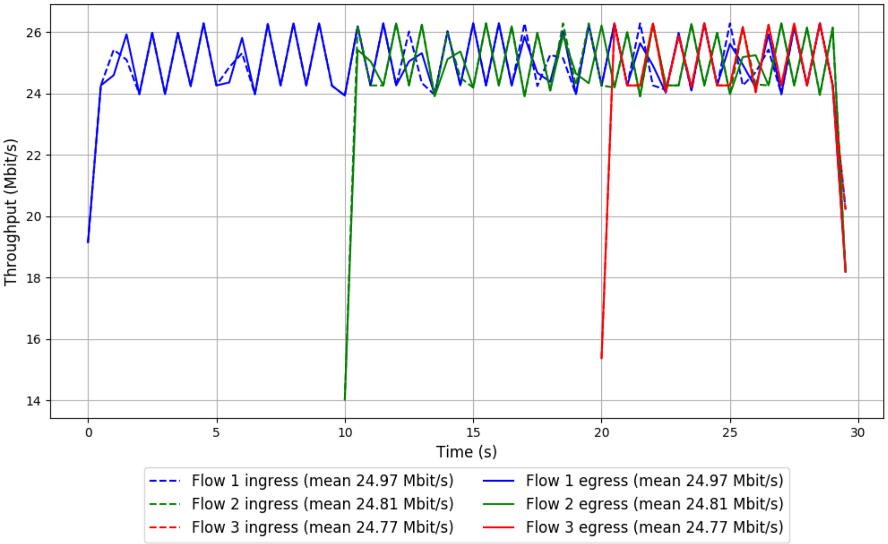
Run 3: Report of Sprout — Data Link

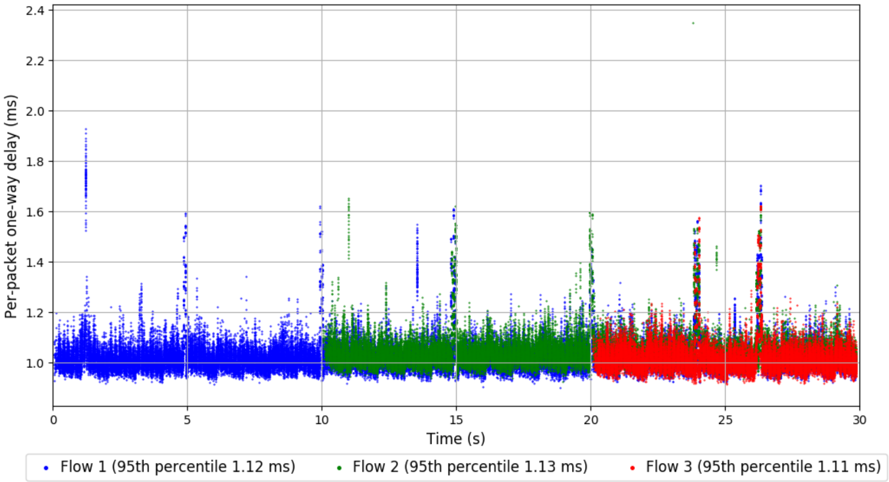




```
Run 4: Statistics of Sprout

Start at: 2017-12-11 21:00:02
End at: 2017-12-11 21:00:32
Local clock offset: -1.654 ms
Remote clock offset: -1.486 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.57 Mbit/s
95th percentile per-packet one-way delay: 1.123 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 24.97 Mbit/s
95th percentile per-packet one-way delay: 1.121 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 24.81 Mbit/s
95th percentile per-packet one-way delay: 1.132 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.77 Mbit/s
95th percentile per-packet one-way delay: 1.108 ms
Loss rate: 0.41%
```

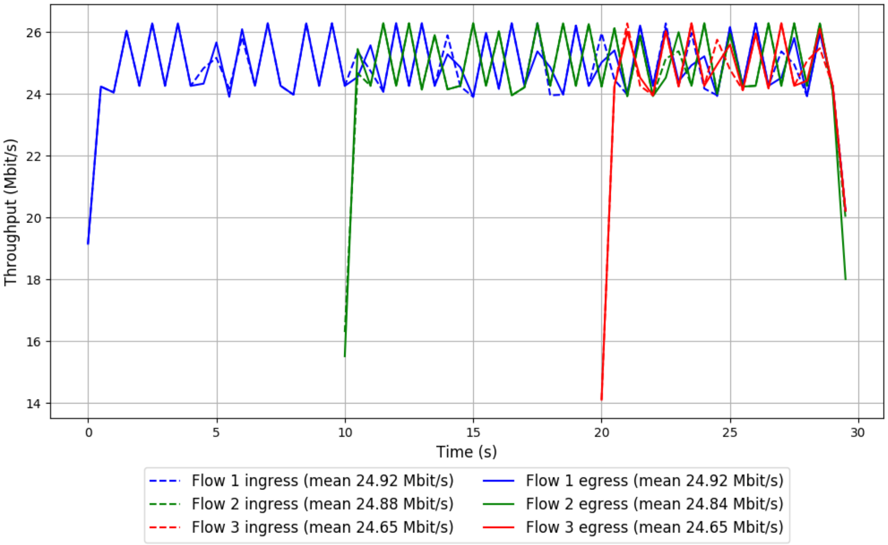
Run 4: Report of Sprout — Data Link

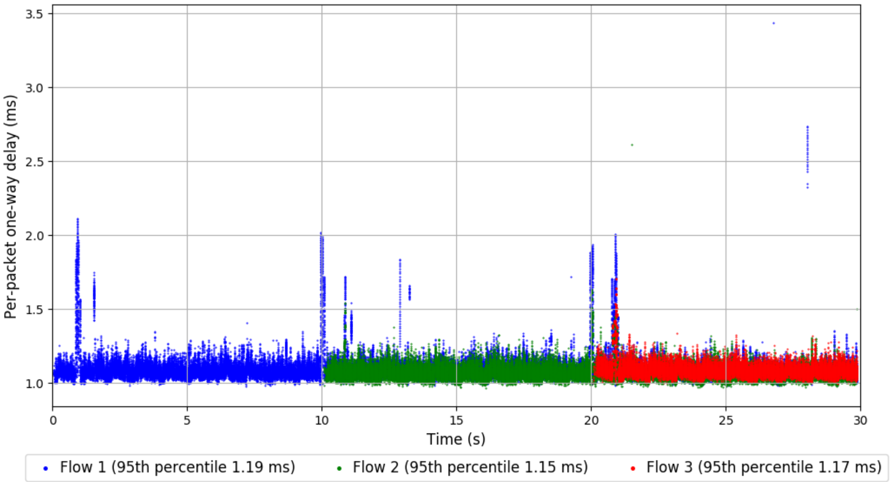




```
Run 5: Statistics of Sprout

Start at: 2017-12-11 21:20:46
End at: 2017-12-11 21:21:16
Local clock offset: -1.54 ms
Remote clock offset: -1.42 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.51 Mbit/s
95th percentile per-packet one-way delay: 1.173 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 24.92 Mbit/s
95th percentile per-packet one-way delay: 1.190 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.84 Mbit/s
95th percentile per-packet one-way delay: 1.153 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 24.65 Mbit/s
95th percentile per-packet one-way delay: 1.167 ms
Loss rate: 0.00%
```

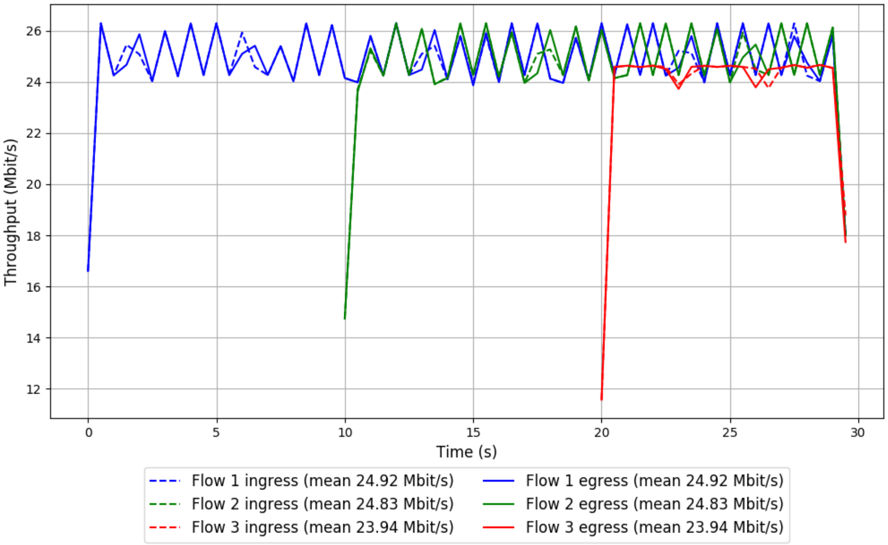
Run 5: Report of Sprout — Data Link

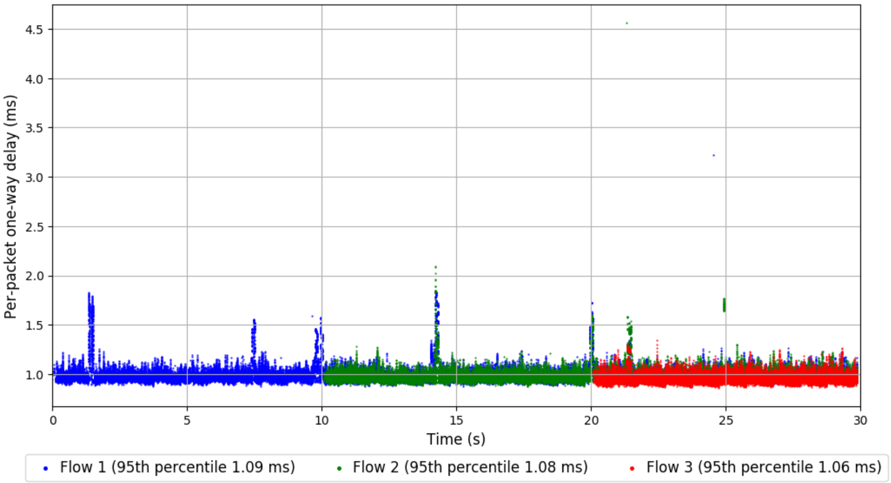




```
Run 6: Statistics of Sprout

Start at: 2017-12-11 21:41:15
End at: 2017-12-11 21:41:45
Local clock offset: -1.163 ms
Remote clock offset: -0.602 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.27 Mbit/s
95th percentile per-packet one-way delay: 1.081 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 24.92 Mbit/s
95th percentile per-packet one-way delay: 1.089 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.83 Mbit/s
95th percentile per-packet one-way delay: 1.080 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.94 Mbit/s
95th percentile per-packet one-way delay: 1.056 ms
Loss rate: 0.22%
```

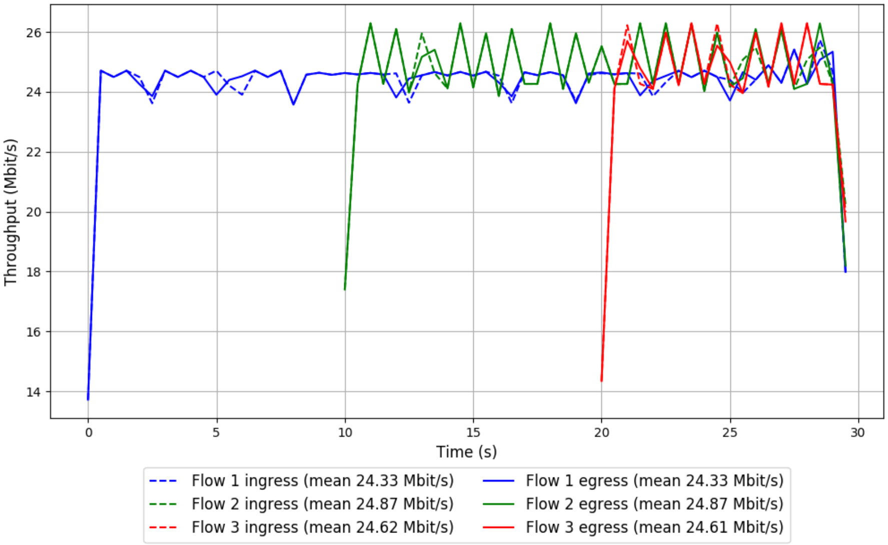
Run 6: Report of Sprout — Data Link

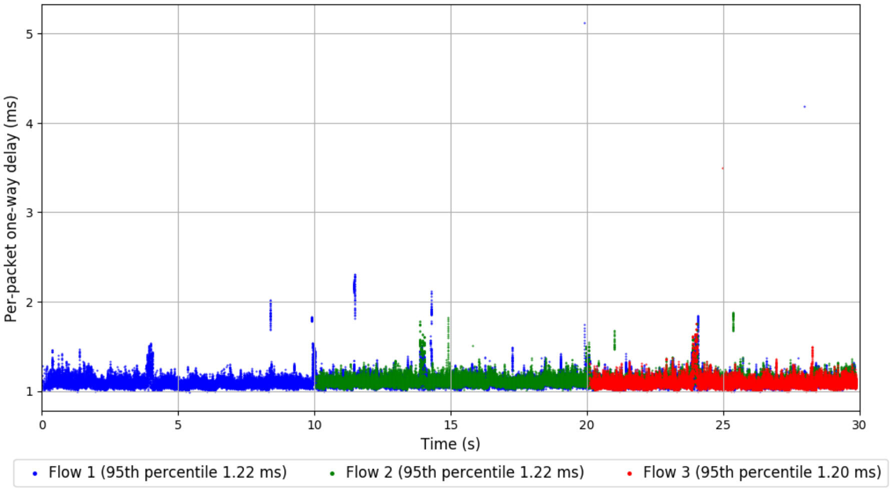




```
Run 7: Statistics of Sprout

Start at: 2017-12-11 22:01:53
End at: 2017-12-11 22:02:23
Local clock offset: -0.801 ms
Remote clock offset: -0.338 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.92 Mbit/s
95th percentile per-packet one-way delay: 1.214 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 24.33 Mbit/s
95th percentile per-packet one-way delay: 1.215 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.87 Mbit/s
95th percentile per-packet one-way delay: 1.218 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 24.61 Mbit/s
95th percentile per-packet one-way delay: 1.198 ms
Loss rate: 0.07%
```

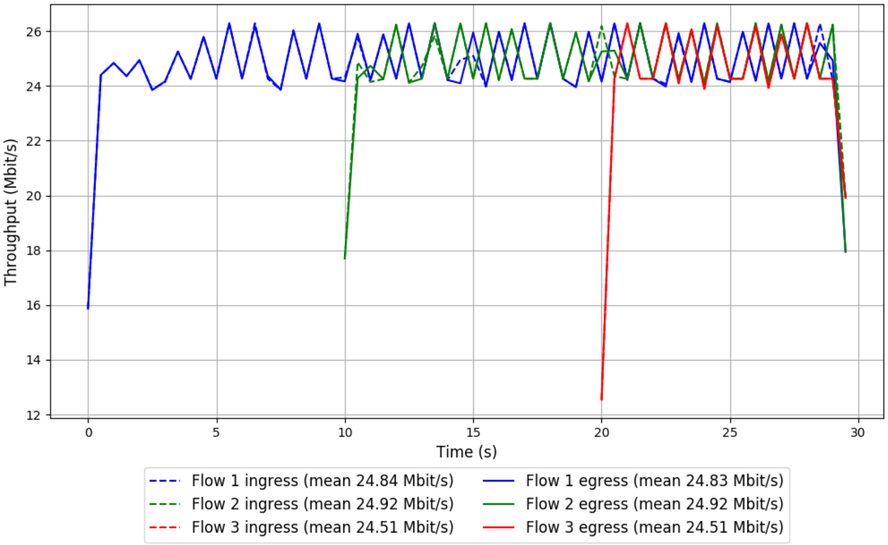
Run 7: Report of Sprout — Data Link

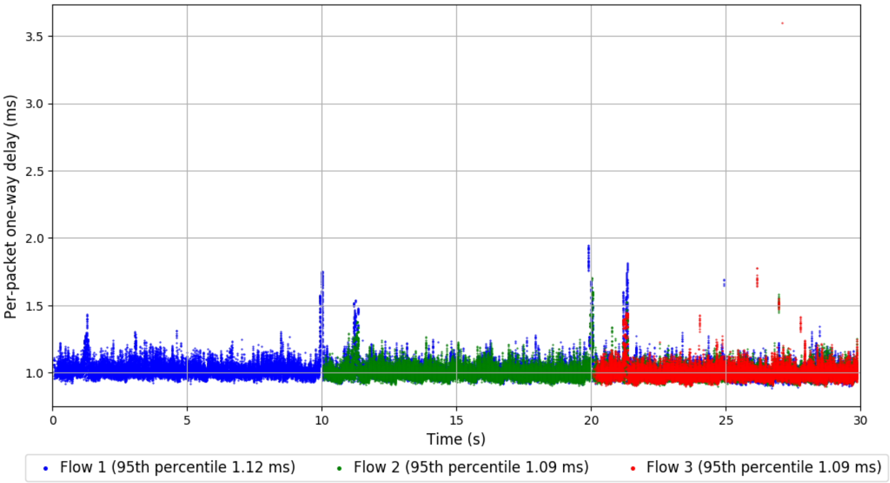




```
Run 8: Statistics of Sprout

Start at: 2017-12-11 22:22:26
End at: 2017-12-11 22:22:56
Local clock offset: -0.589 ms
Remote clock offset: 0.141 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.43 Mbit/s
95th percentile per-packet one-way delay: 1.107 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 24.83 Mbit/s
95th percentile per-packet one-way delay: 1.118 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 24.92 Mbit/s
95th percentile per-packet one-way delay: 1.094 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 24.51 Mbit/s
95th percentile per-packet one-way delay: 1.094 ms
Loss rate: 0.00%
```

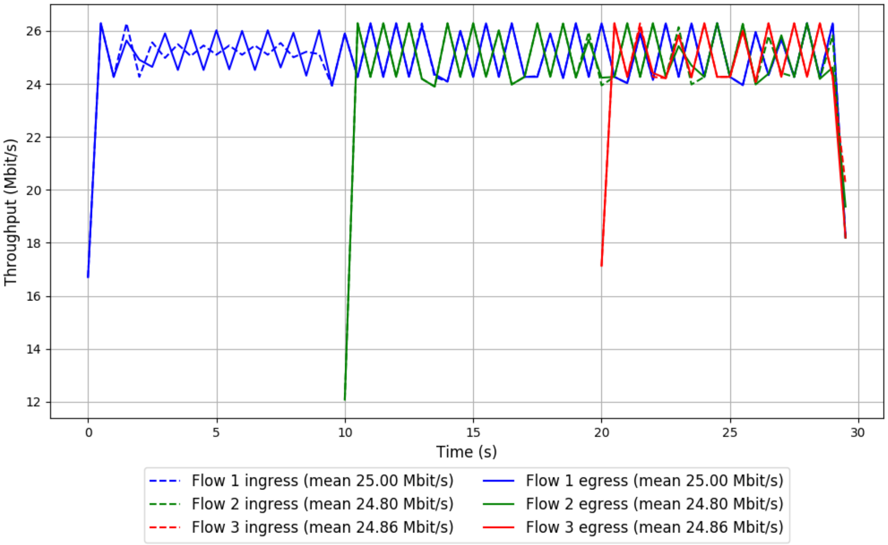
Run 8: Report of Sprout — Data Link

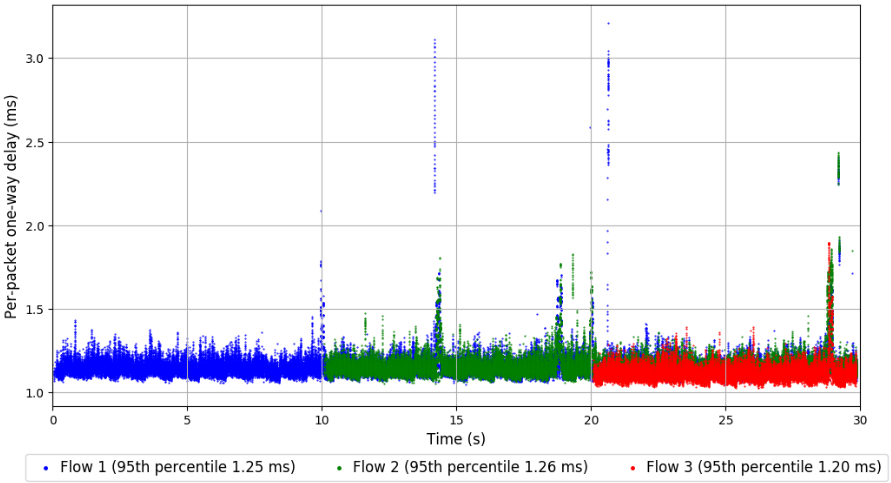




```
Run 9: Statistics of Sprout

Start at: 2017-12-11 22:43:08
End at: 2017-12-11 22:43:38
Local clock offset: -0.189 ms
Remote clock offset: -0.358 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.63 Mbit/s
95th percentile per-packet one-way delay: 1.243 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 25.00 Mbit/s
95th percentile per-packet one-way delay: 1.246 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.80 Mbit/s
95th percentile per-packet one-way delay: 1.257 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.86 Mbit/s
95th percentile per-packet one-way delay: 1.195 ms
Loss rate: 0.41%
```

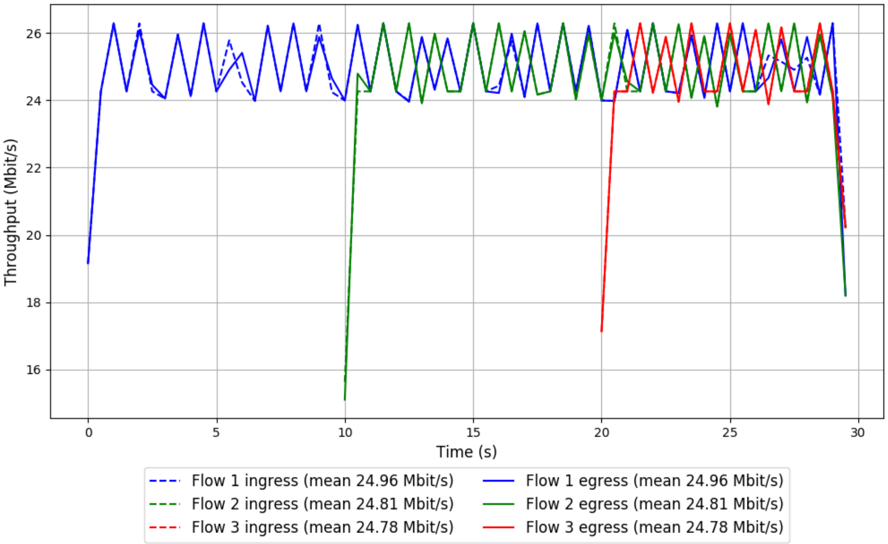
Run 9: Report of Sprout — Data Link

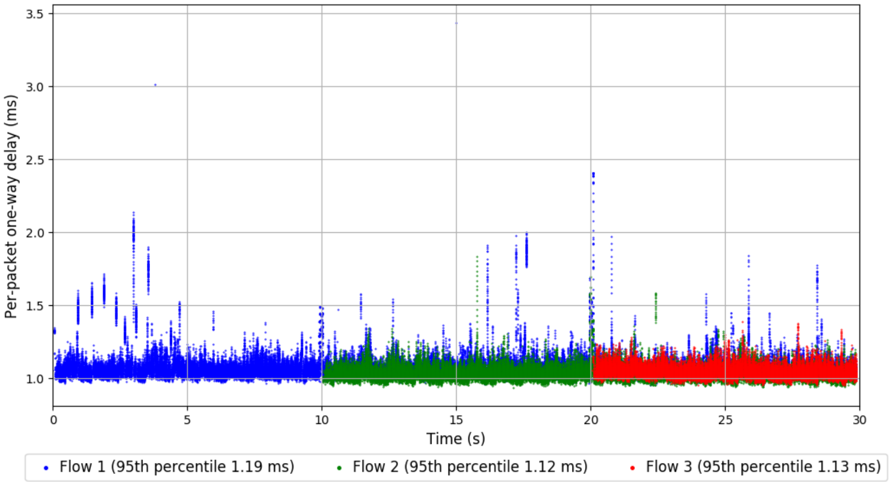




```
Run 10: Statistics of Sprout

Start at: 2017-12-11 23:03:50
End at: 2017-12-11 23:04:20
Local clock offset: 0.022 ms
Remote clock offset: -0.251 ms

# Below is generated by plot.py at 2017-12-12 03:57:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.57 Mbit/s
95th percentile per-packet one-way delay: 1.158 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 24.96 Mbit/s
95th percentile per-packet one-way delay: 1.193 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 24.81 Mbit/s
95th percentile per-packet one-way delay: 1.121 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 24.78 Mbit/s
95th percentile per-packet one-way delay: 1.132 ms
Loss rate: 0.00%
```

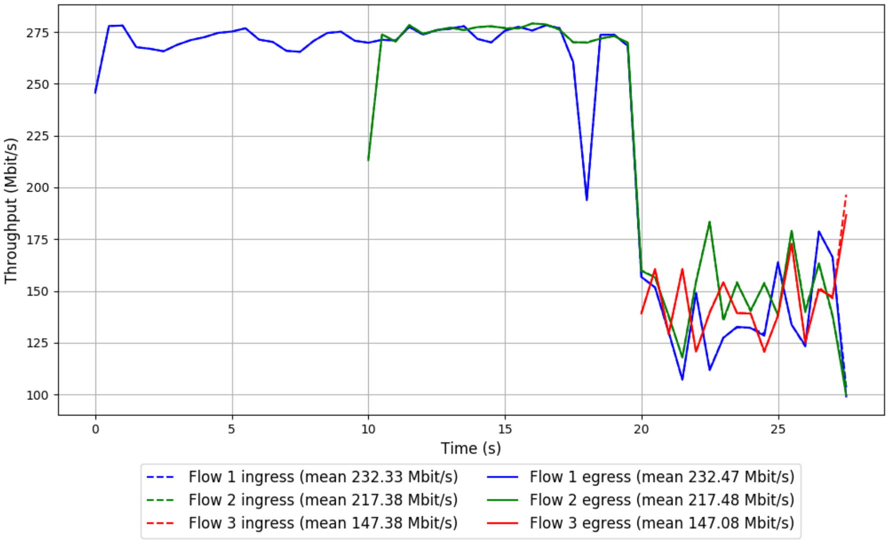
Run 10: Report of Sprout — Data Link

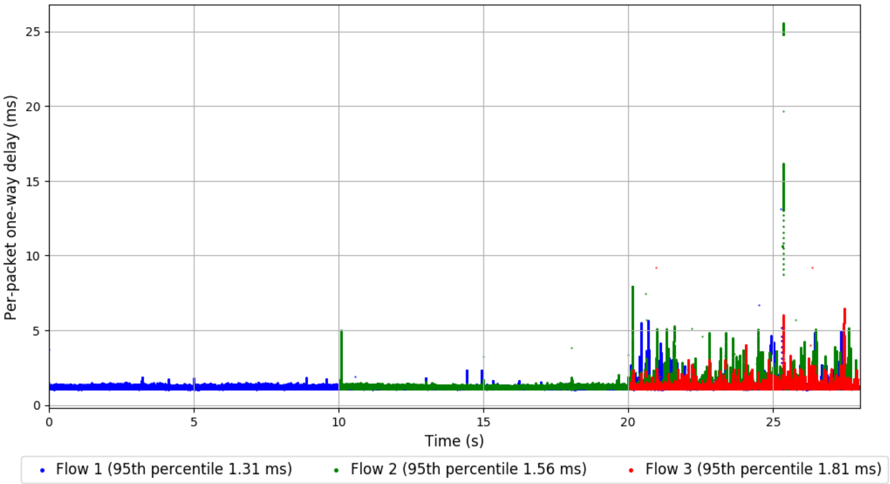




```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-11 20:09:26
End at: 2017-12-11 20:09:56
Local clock offset: -1.735 ms
Remote clock offset: -2.266 ms

# Below is generated by plot.py at 2017-12-12 04:03:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 413.47 Mbit/s
95th percentile per-packet one-way delay: 1.443 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 232.47 Mbit/s
95th percentile per-packet one-way delay: 1.310 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 217.48 Mbit/s
95th percentile per-packet one-way delay: 1.565 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 147.08 Mbit/s
95th percentile per-packet one-way delay: 1.814 ms
Loss rate: 0.43%
```

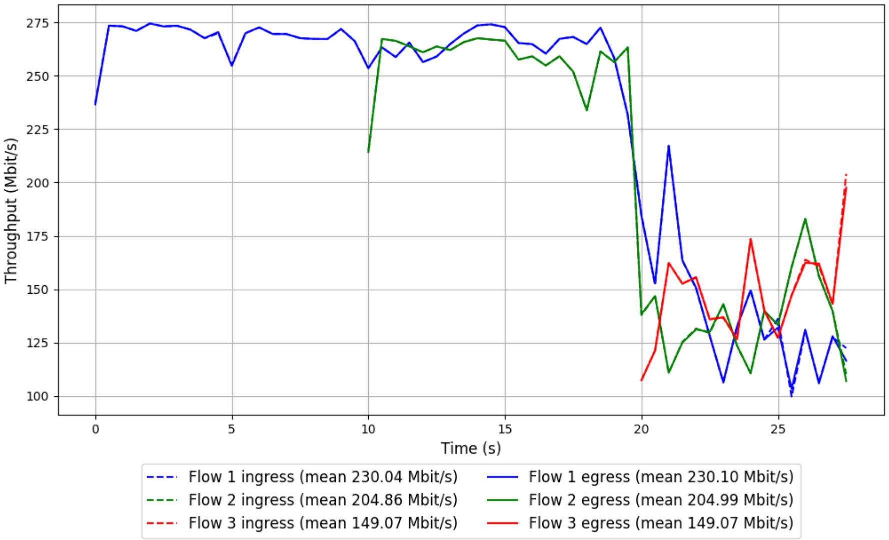
Run 1: Report of TaoVA-100x — Data Link

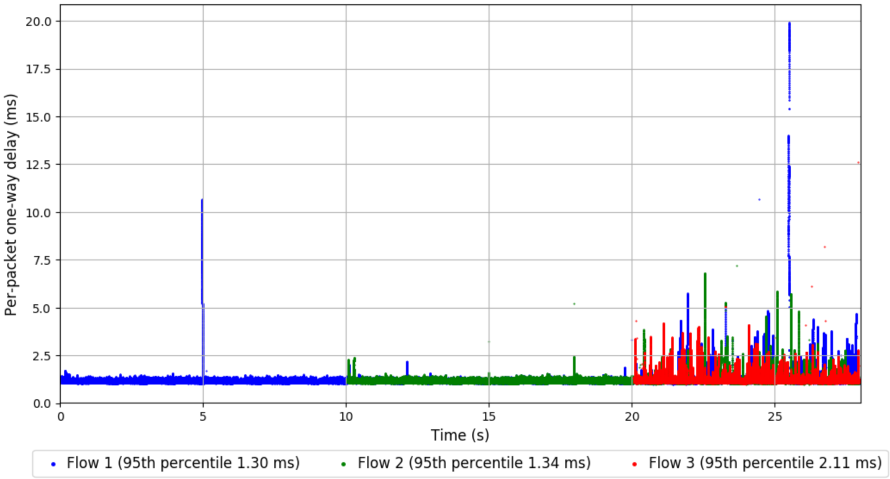




```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-11 20:30:12
End at: 2017-12-11 20:30:42
Local clock offset: -1.722 ms
Remote clock offset: -1.88 ms

# Below is generated by plot.py at 2017-12-12 04:03:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 403.57 Mbit/s
95th percentile per-packet one-way delay: 1.389 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 230.10 Mbit/s
95th percentile per-packet one-way delay: 1.300 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 204.99 Mbit/s
95th percentile per-packet one-way delay: 1.343 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 149.07 Mbit/s
95th percentile per-packet one-way delay: 2.111 ms
Loss rate: 0.29%
```

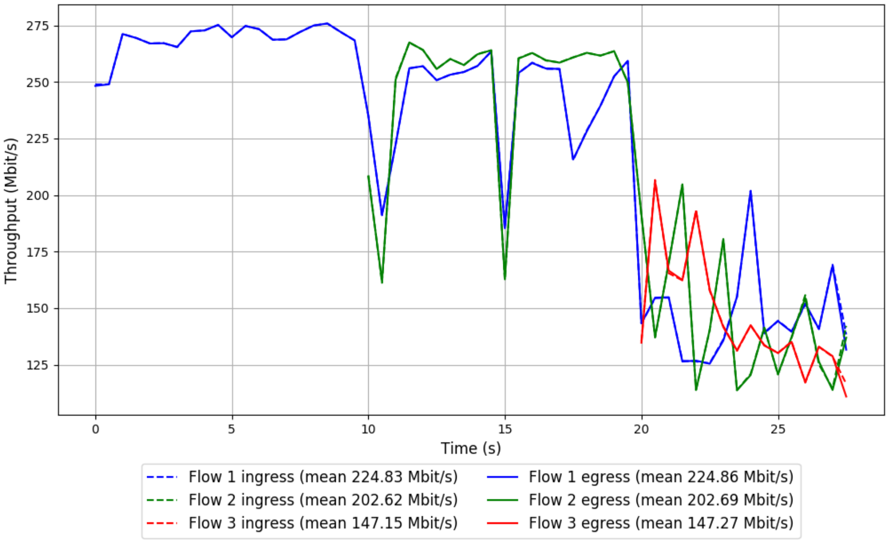
Run 2: Report of TaoVA-100x — Data Link

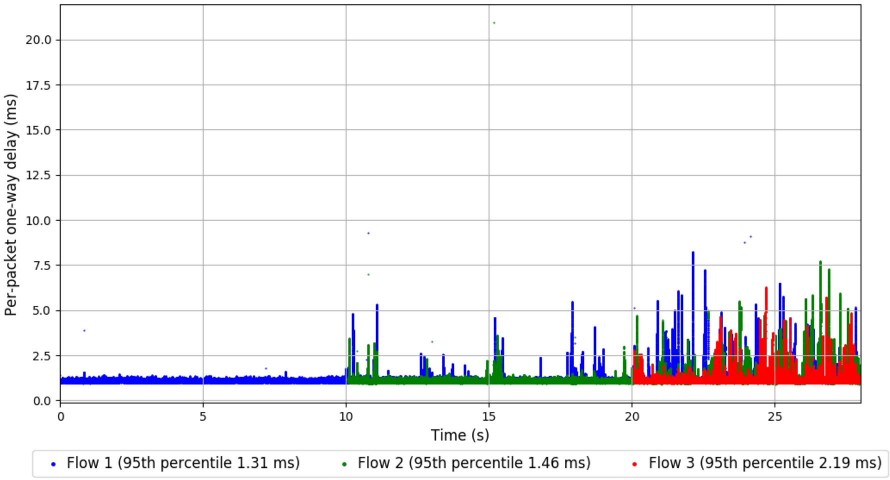




```
Run 3: Statistics of TaoVA-100x

Start at: 2017-12-11 20:50:44
End at: 2017-12-11 20:51:14
Local clock offset: -1.731 ms
Remote clock offset: -1.6 ms

# Below is generated by plot.py at 2017-12-12 04:03:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 396.39 Mbit/s
95th percentile per-packet one-way delay: 1.459 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 224.86 Mbit/s
95th percentile per-packet one-way delay: 1.315 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 202.69 Mbit/s
95th percentile per-packet one-way delay: 1.459 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 147.27 Mbit/s
95th percentile per-packet one-way delay: 2.189 ms
Loss rate: 0.24%
```

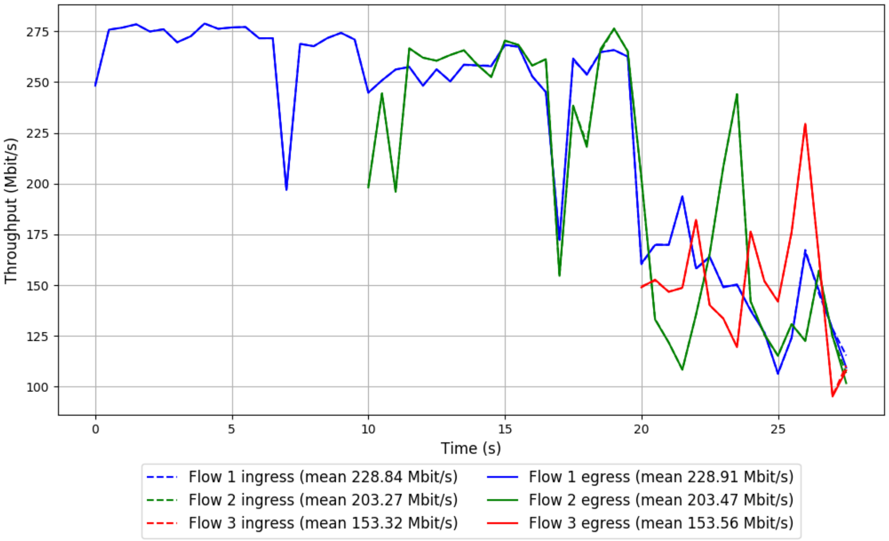
Run 3: Report of TaoVA-100x — Data Link

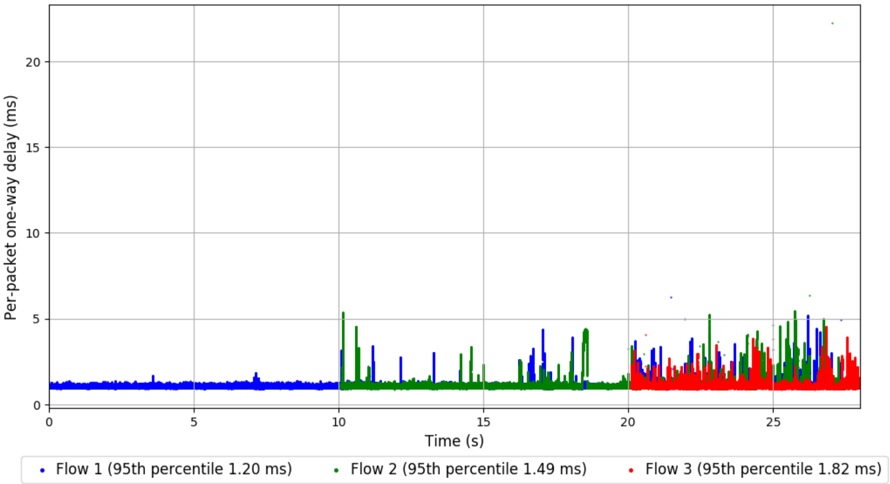




```
Run 4: Statistics of TaoVA-100x

Start at: 2017-12-11 21:11:28
End at: 2017-12-11 21:11:58
Local clock offset: -1.603 ms
Remote clock offset: -1.49 ms

# Below is generated by plot.py at 2017-12-12 04:03:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 402.52 Mbit/s
95th percentile per-packet one-way delay: 1.356 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 228.91 Mbit/s
95th percentile per-packet one-way delay: 1.203 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 203.47 Mbit/s
95th percentile per-packet one-way delay: 1.493 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 153.56 Mbit/s
95th percentile per-packet one-way delay: 1.823 ms
Loss rate: 0.11%
```

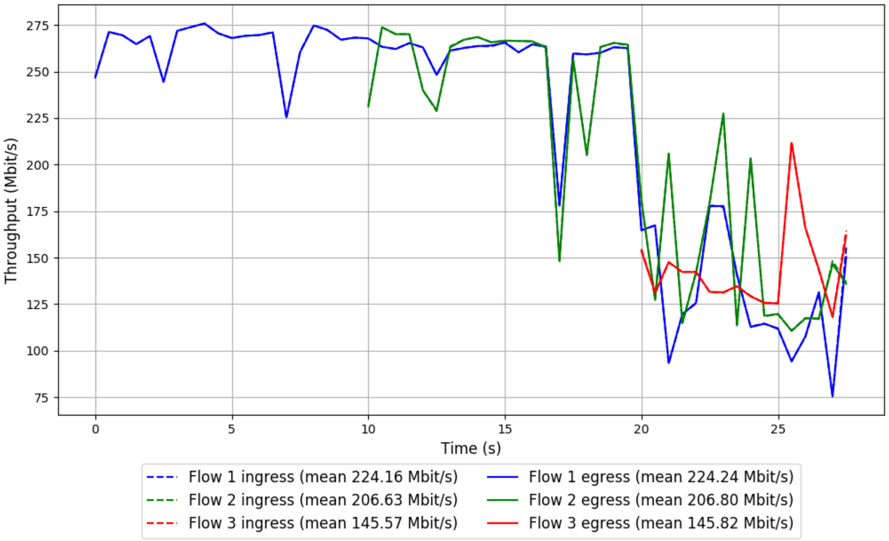
Run 4: Report of TaoVA-100x — Data Link

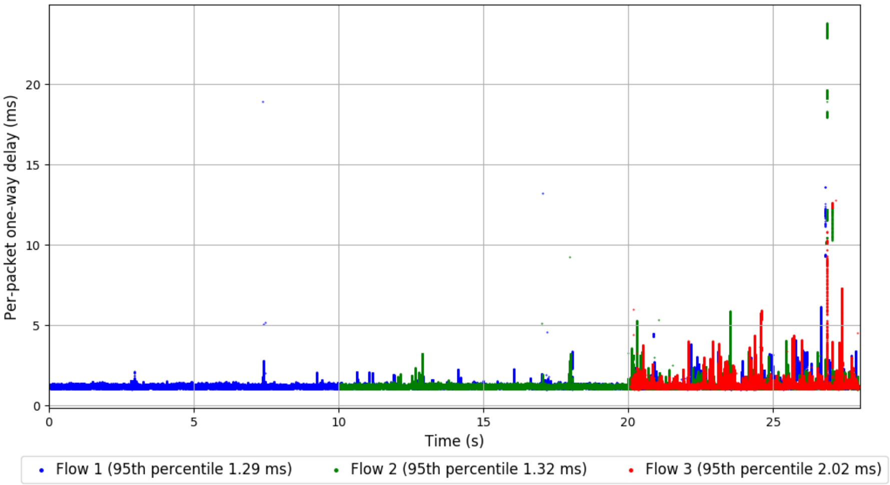




```
Run 5: Statistics of TaoVA-100x

Start at: 2017-12-11 21:31:58
End at: 2017-12-11 21:32:28
Local clock offset: -1.25 ms
Remote clock offset: -1.032 ms

# Below is generated by plot.py at 2017-12-12 04:03:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 397.89 Mbit/s
95th percentile per-packet one-way delay: 1.367 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 224.24 Mbit/s
95th percentile per-packet one-way delay: 1.291 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 206.80 Mbit/s
95th percentile per-packet one-way delay: 1.322 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 145.82 Mbit/s
95th percentile per-packet one-way delay: 2.019 ms
Loss rate: 0.12%
```

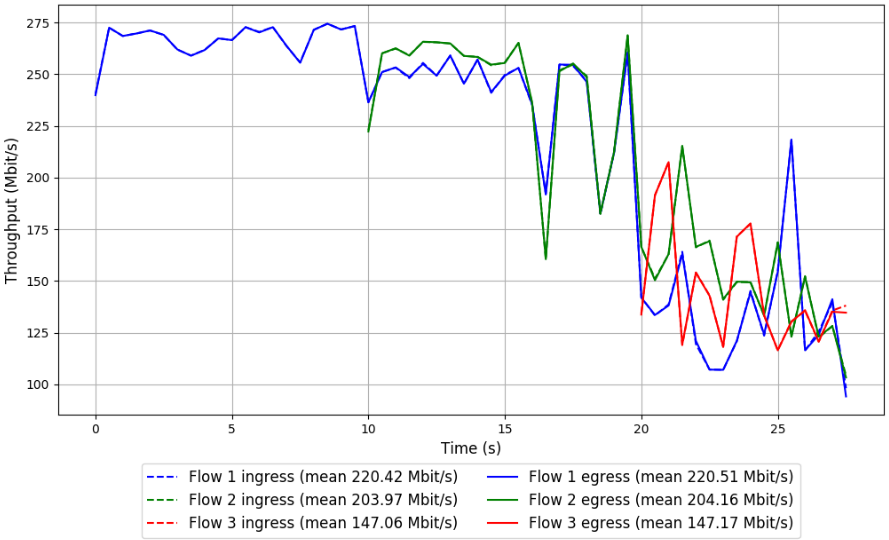
Run 5: Report of TaoVA-100x — Data Link

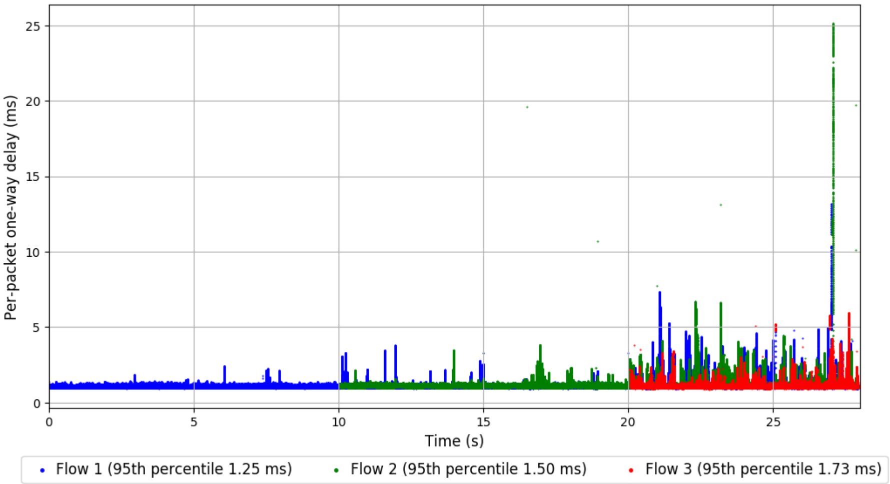




```
Run 6: Statistics of TaoVA-100x

Start at: 2017-12-11 21:52:37
End at: 2017-12-11 21:53:07
Local clock offset: -0.952 ms
Remote clock offset: -0.534 ms

# Below is generated by plot.py at 2017-12-12 04:03:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 392.94 Mbit/s
95th percentile per-packet one-way delay: 1.383 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 220.51 Mbit/s
95th percentile per-packet one-way delay: 1.250 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 204.16 Mbit/s
95th percentile per-packet one-way delay: 1.497 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 147.17 Mbit/s
95th percentile per-packet one-way delay: 1.731 ms
Loss rate: 0.17%
```

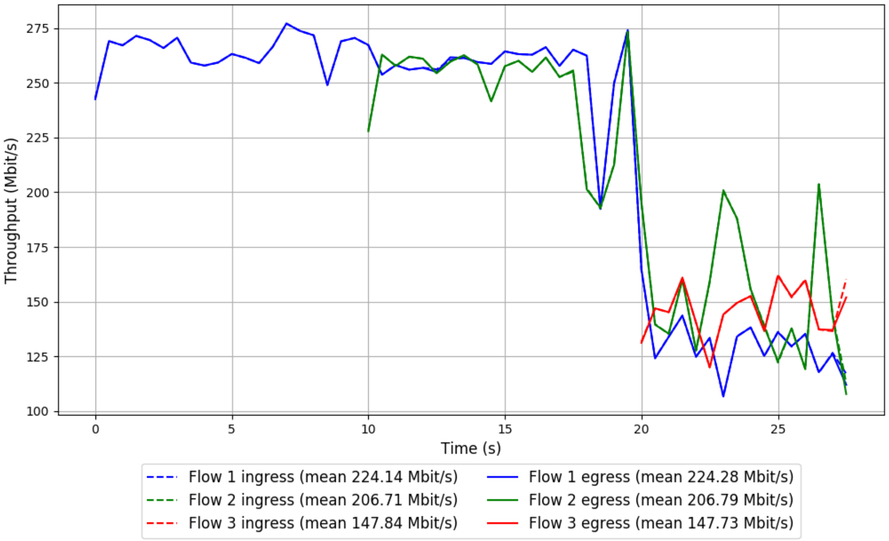
Run 6: Report of TaoVA-100x — Data Link

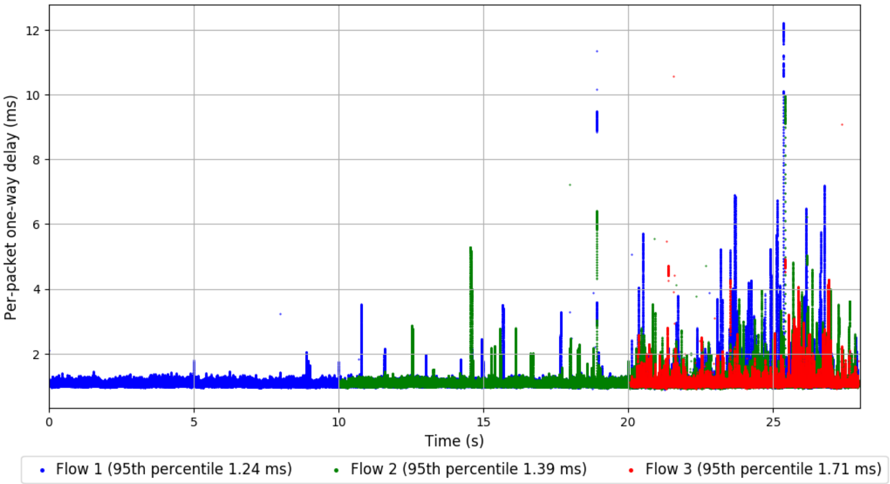




```
Run 7: Statistics of TaoVA-100x

Start at: 2017-12-11 22:13:06
End at: 2017-12-11 22:13:36
Local clock offset: -0.749 ms
Remote clock offset: -0.113 ms

# Below is generated by plot.py at 2017-12-12 04:05:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 398.46 Mbit/s
95th percentile per-packet one-way delay: 1.345 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 224.28 Mbit/s
95th percentile per-packet one-way delay: 1.239 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 206.79 Mbit/s
95th percentile per-packet one-way delay: 1.387 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 147.73 Mbit/s
95th percentile per-packet one-way delay: 1.706 ms
Loss rate: 0.36%
```

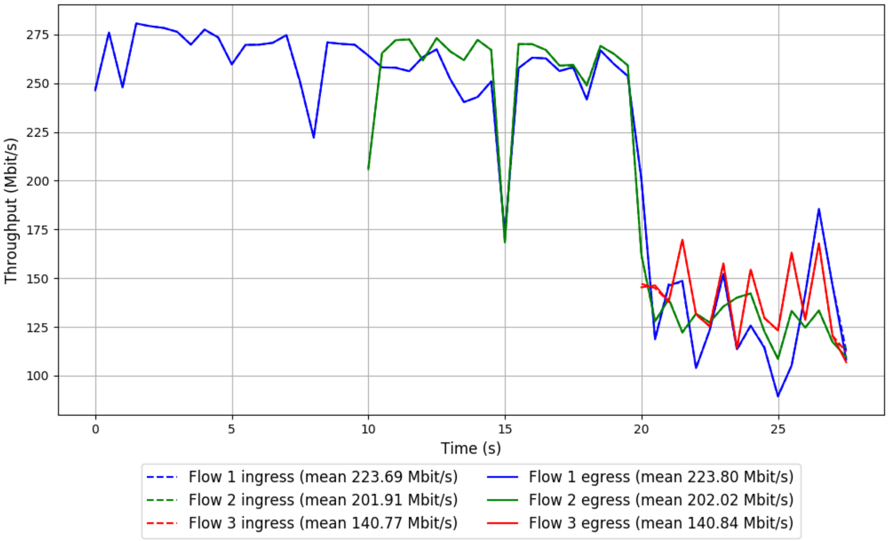
Run 7: Report of TaoVA-100x — Data Link

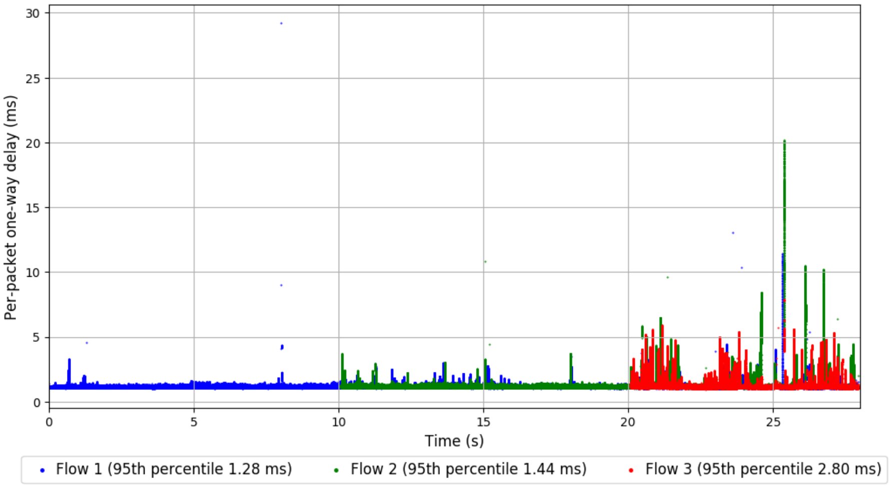




```
Run 8: Statistics of TaoVA-100x

Start at: 2017-12-11 22:33:50
End at: 2017-12-11 22:34:20
Local clock offset: -0.341 ms
Remote clock offset: -0.196 ms

# Below is generated by plot.py at 2017-12-12 04:06:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 393.01 Mbit/s
95th percentile per-packet one-way delay: 1.418 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 223.80 Mbit/s
95th percentile per-packet one-way delay: 1.284 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 202.02 Mbit/s
95th percentile per-packet one-way delay: 1.435 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 140.84 Mbit/s
95th percentile per-packet one-way delay: 2.803 ms
Loss rate: 0.25%
```

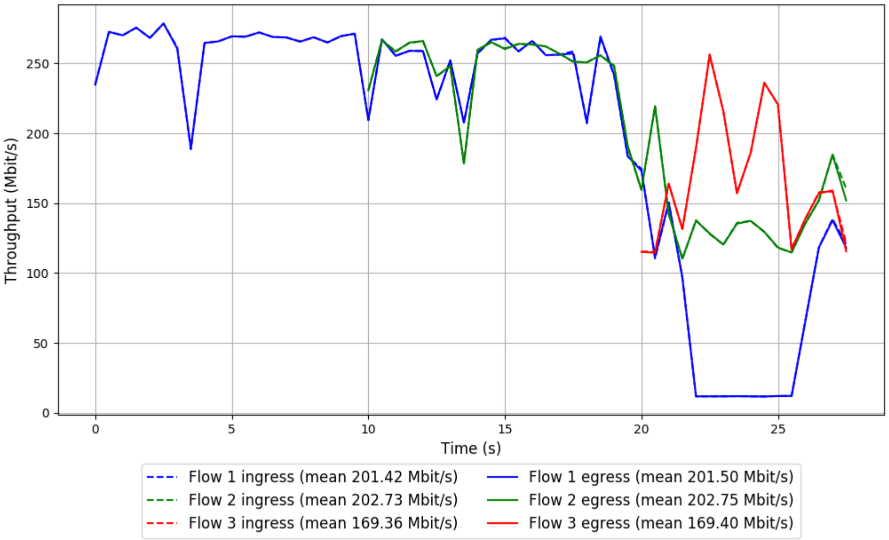
Run 8: Report of TaoVA-100x — Data Link

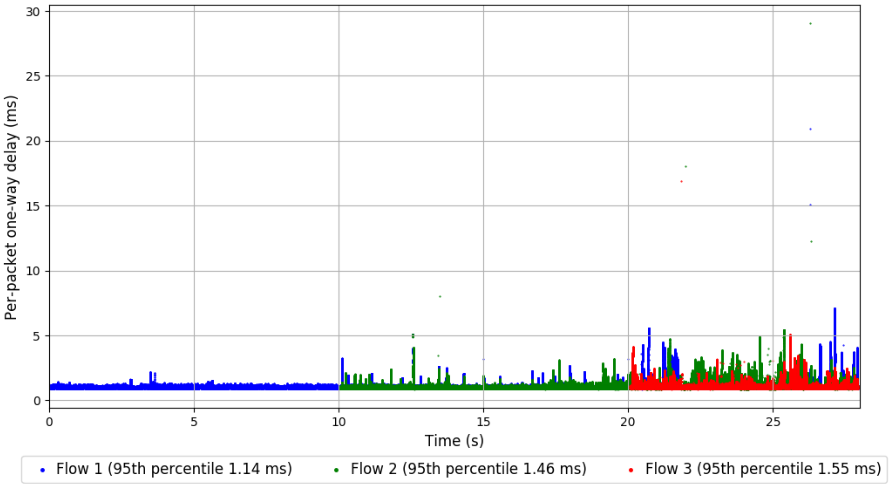




```
Run 9: Statistics of TaoVA-100x

Start at: 2017-12-11 22:54:31
End at: 2017-12-11 22:55:01
Local clock offset: -0.108 ms
Remote clock offset: -0.276 ms

# Below is generated by plot.py at 2017-12-12 04:12:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 379.30 Mbit/s
95th percentile per-packet one-way delay: 1.298 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 201.50 Mbit/s
95th percentile per-packet one-way delay: 1.136 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 202.75 Mbit/s
95th percentile per-packet one-way delay: 1.463 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 169.40 Mbit/s
95th percentile per-packet one-way delay: 1.549 ms
Loss rate: 0.23%
```

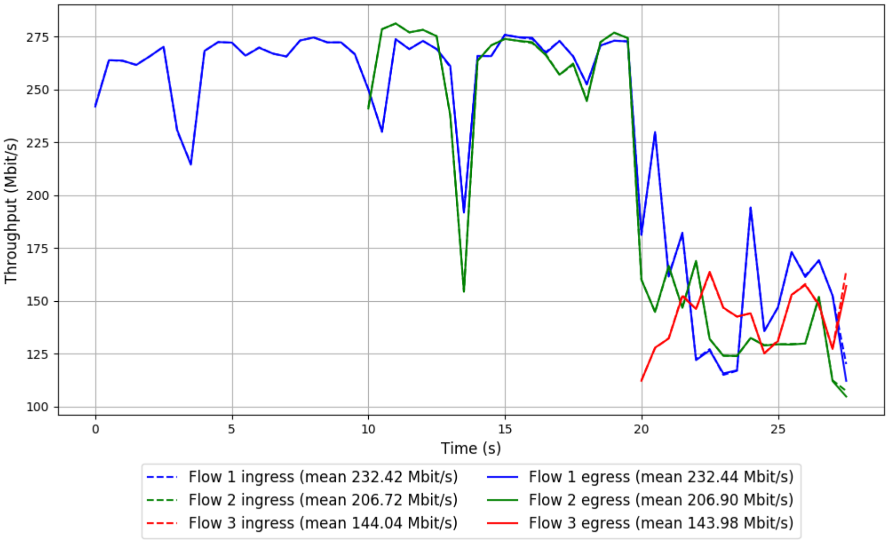
Run 9: Report of TaoVA-100x — Data Link

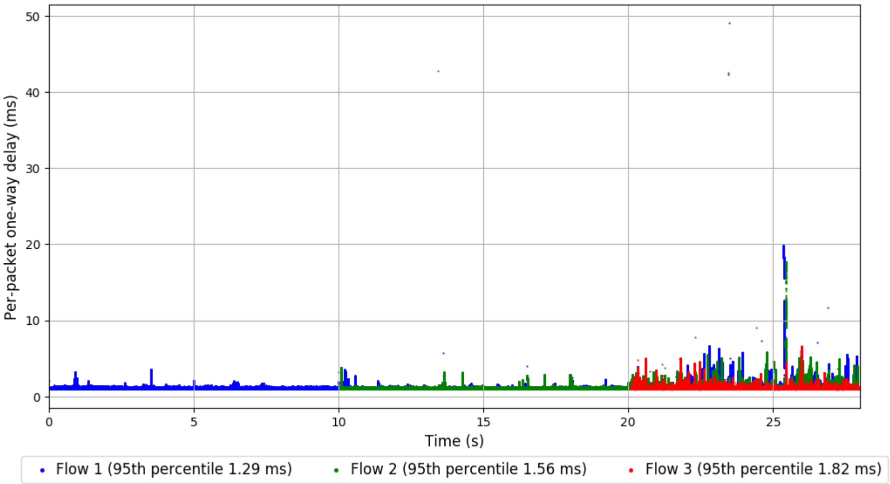




```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-11 23:15:11
End at: 2017-12-11 23:15:41
Local clock offset: 0.191 ms
Remote clock offset: -0.167 ms

# Below is generated by plot.py at 2017-12-12 04:13:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 405.81 Mbit/s
95th percentile per-packet one-way delay: 1.445 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 232.44 Mbit/s
95th percentile per-packet one-way delay: 1.291 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 206.90 Mbit/s
95th percentile per-packet one-way delay: 1.558 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 143.98 Mbit/s
95th percentile per-packet one-way delay: 1.816 ms
Loss rate: 0.31%
```

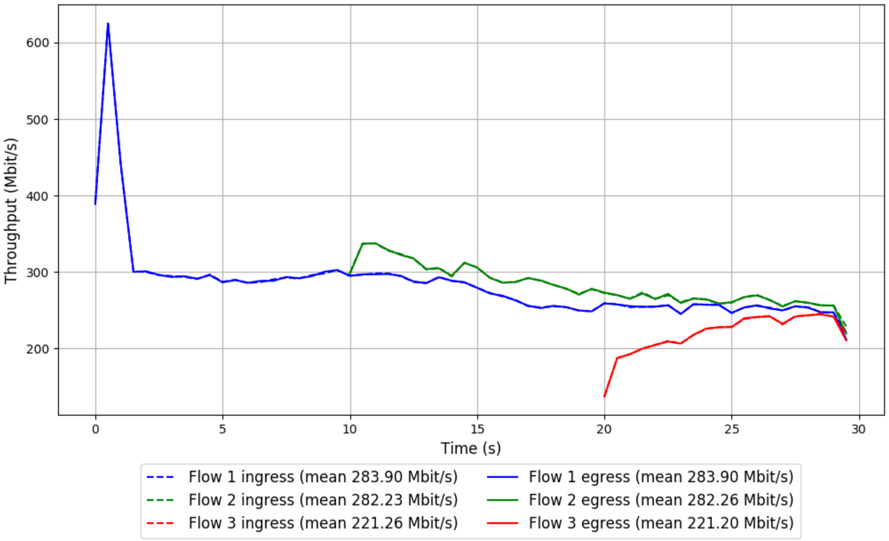
Run 10: Report of TaoVA-100x — Data Link

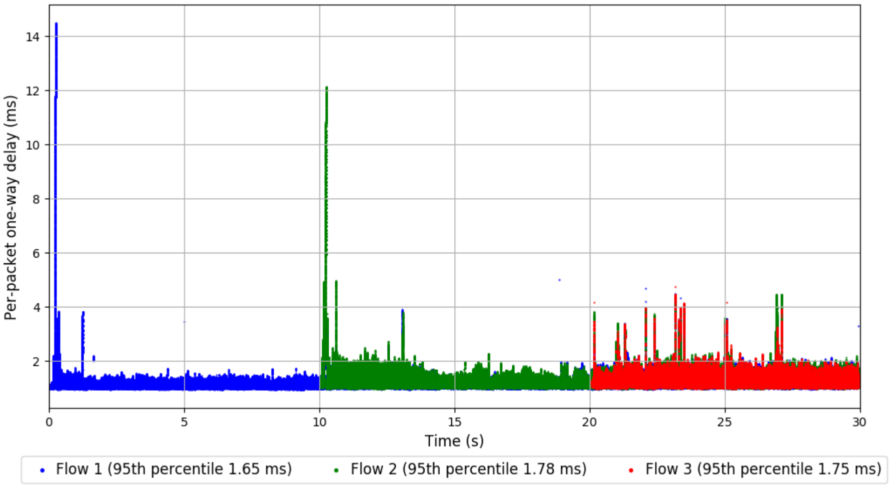




```
Run 1: Statistics of TCP Vegas

Start at: 2017-12-11 19:59:15
End at: 2017-12-11 19:59:45
Local clock offset: -1.475 ms
Remote clock offset: -2.324 ms

# Below is generated by plot.py at 2017-12-12 04:13:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 544.84 Mbit/s
95th percentile per-packet one-way delay: 1.718 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 283.90 Mbit/s
95th percentile per-packet one-way delay: 1.648 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 282.26 Mbit/s
95th percentile per-packet one-way delay: 1.782 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 221.20 Mbit/s
95th percentile per-packet one-way delay: 1.749 ms
Loss rate: 0.23%
```

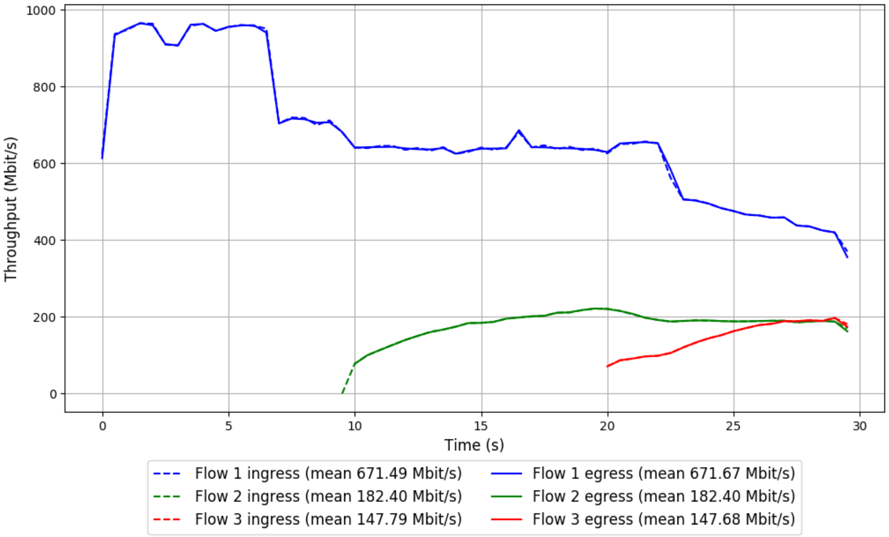
Run 1: Report of TCP Vegas — Data Link

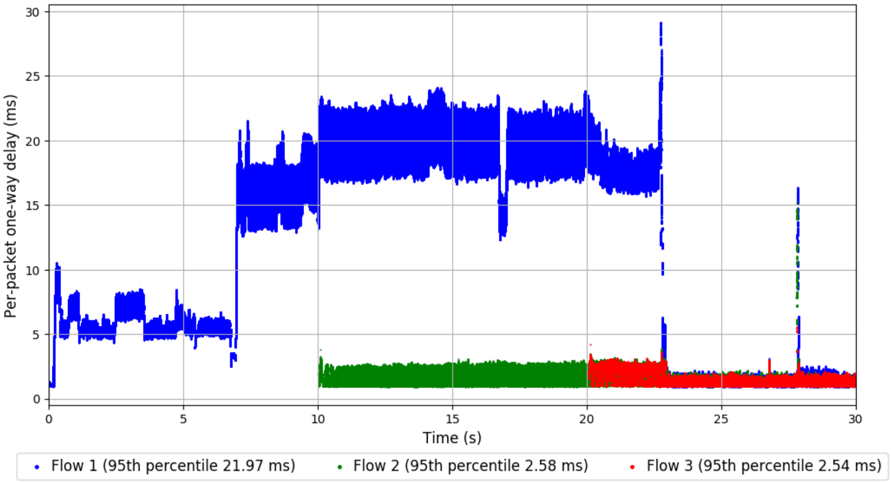




```
Run 2: Statistics of TCP Vegas

Start at: 2017-12-11 20:19:57
End at: 2017-12-11 20:20:27
Local clock offset: -1.832 ms
Remote clock offset: -1.923 ms

# Below is generated by plot.py at 2017-12-12 04:15:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 842.00 Mbit/s
95th percentile per-packet one-way delay: 21.830 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 671.67 Mbit/s
95th percentile per-packet one-way delay: 21.974 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 182.40 Mbit/s
95th percentile per-packet one-way delay: 2.577 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 147.68 Mbit/s
95th percentile per-packet one-way delay: 2.535 ms
Loss rate: 0.27%
```

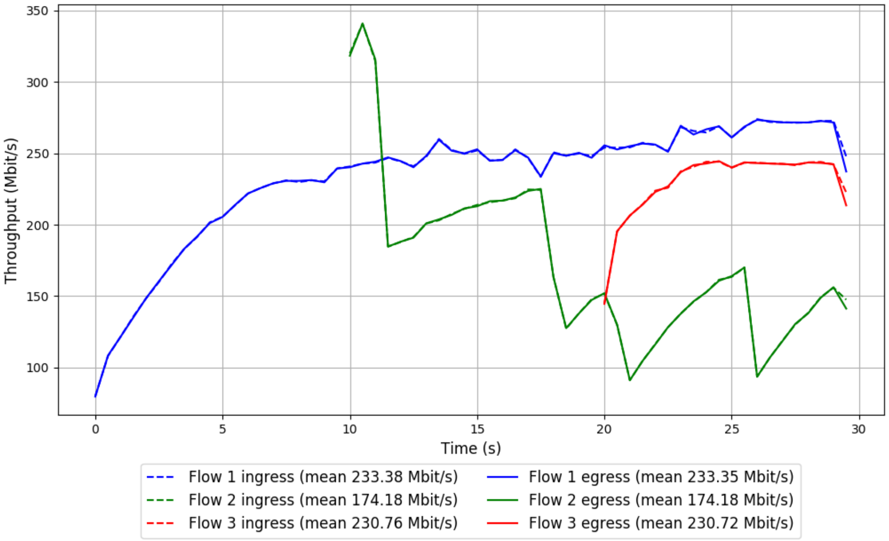
Run 2: Report of TCP Vegas — Data Link

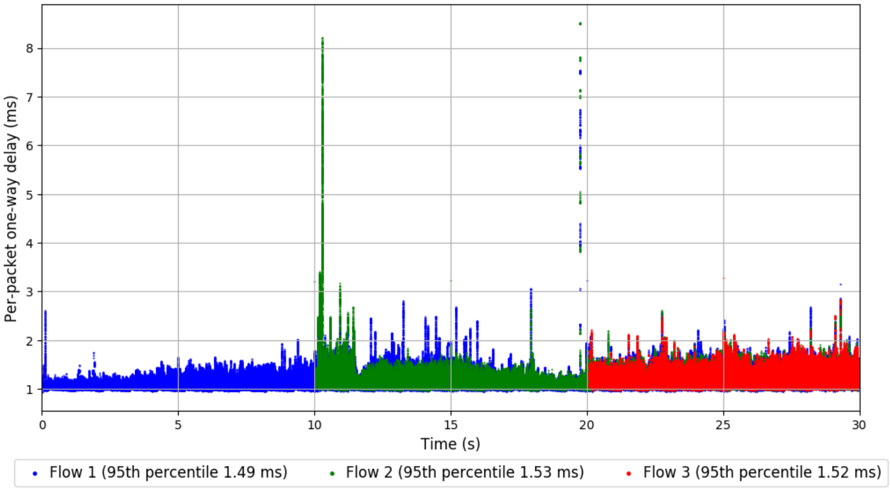




```
Run 3: Statistics of TCP Vegas

Start at: 2017-12-11 20:40:43
End at: 2017-12-11 20:41:13
Local clock offset: -1.752 ms
Remote clock offset: -1.799 ms

# Below is generated by plot.py at 2017-12-12 04:15:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 425.67 Mbit/s
95th percentile per-packet one-way delay: 1.503 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 233.35 Mbit/s
95th percentile per-packet one-way delay: 1.487 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 174.18 Mbit/s
95th percentile per-packet one-way delay: 1.527 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 230.72 Mbit/s
95th percentile per-packet one-way delay: 1.519 ms
Loss rate: 0.22%
```

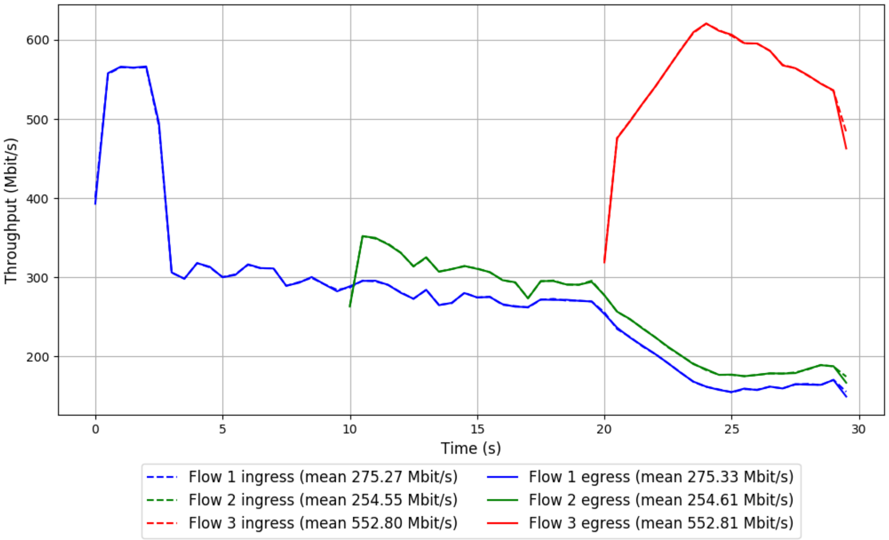
Run 3: Report of TCP Vegas — Data Link

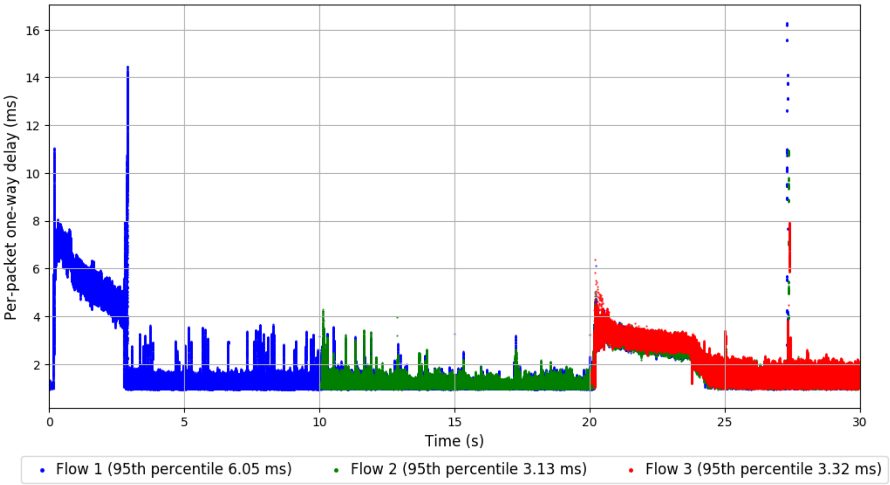




```
Run 4: Statistics of TCP Vegas

Start at: 2017-12-11 21:01:14
End at: 2017-12-11 21:01:44
Local clock offset: -1.649 ms
Remote clock offset: -1.523 ms

# Below is generated by plot.py at 2017-12-12 04:15:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 627.91 Mbit/s
95th percentile per-packet one-way delay: 5.141 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 275.33 Mbit/s
95th percentile per-packet one-way delay: 6.049 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 254.61 Mbit/s
95th percentile per-packet one-way delay: 3.132 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 552.81 Mbit/s
95th percentile per-packet one-way delay: 3.322 ms
Loss rate: 0.20%
```

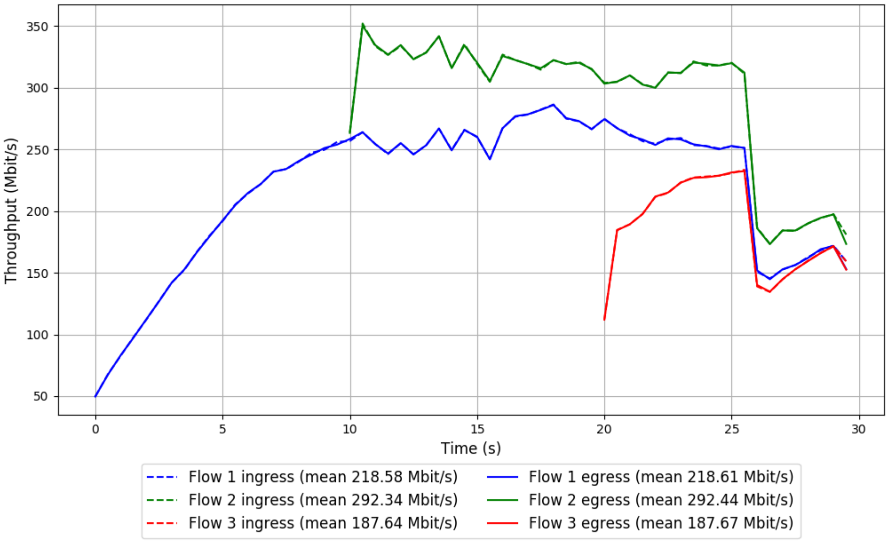
Run 4: Report of TCP Vegas — Data Link

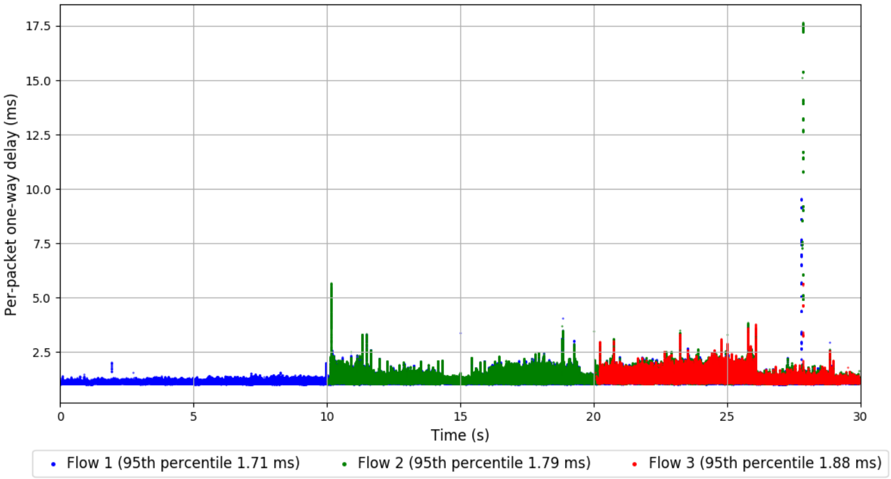




```
Run 5: Statistics of TCP Vegas

Start at: 2017-12-11 21:21:58
End at: 2017-12-11 21:22:28
Local clock offset: -1.447 ms
Remote clock offset: -1.386 ms

# Below is generated by plot.py at 2017-12-12 04:15:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 475.08 Mbit/s
95th percentile per-packet one-way delay: 1.777 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 218.61 Mbit/s
95th percentile per-packet one-way delay: 1.714 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 292.44 Mbit/s
95th percentile per-packet one-way delay: 1.791 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 187.67 Mbit/s
95th percentile per-packet one-way delay: 1.882 ms
Loss rate: 0.19%
```

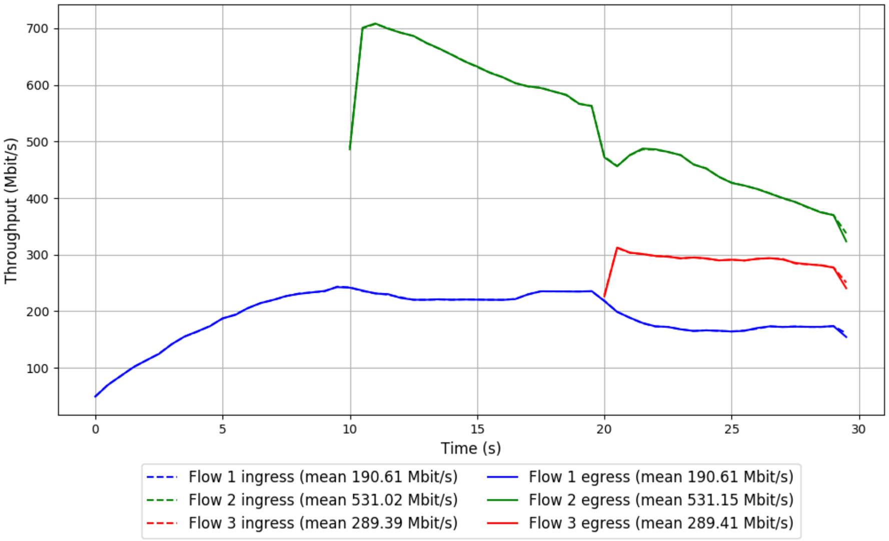
Run 5: Report of TCP Vegas — Data Link

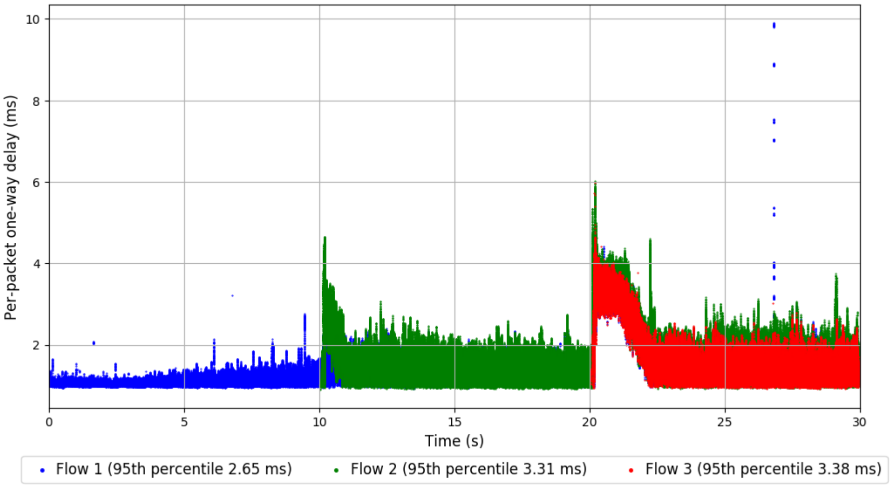




```
Run 6: Statistics of TCP Vegas

Start at: 2017-12-11 21:42:28
End at: 2017-12-11 21:42:58
Local clock offset: -1.14 ms
Remote clock offset: -0.646 ms

# Below is generated by plot.py at 2017-12-12 04:15:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 640.00 Mbit/s
95th percentile per-packet one-way delay: 3.234 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 190.61 Mbit/s
95th percentile per-packet one-way delay: 2.654 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 531.15 Mbit/s
95th percentile per-packet one-way delay: 3.309 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 289.41 Mbit/s
95th percentile per-packet one-way delay: 3.380 ms
Loss rate: 0.19%
```

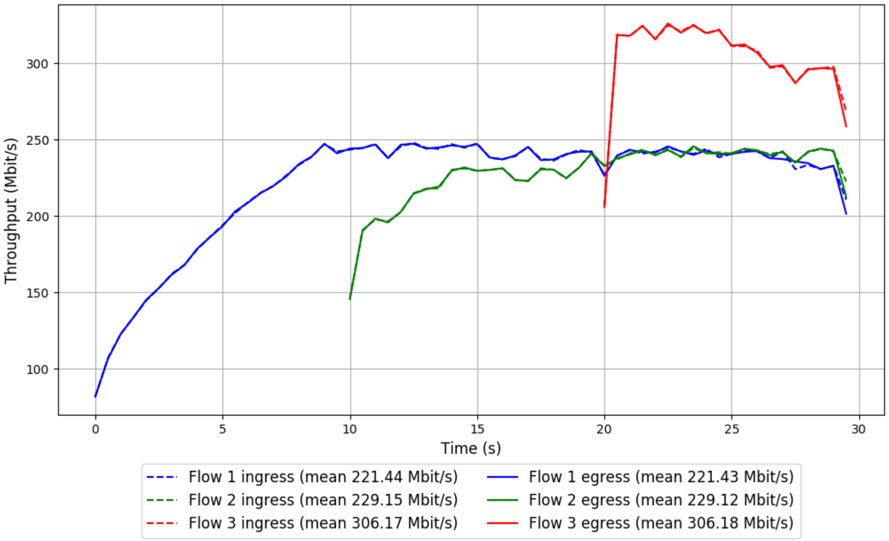
Run 6: Report of TCP Vegas — Data Link

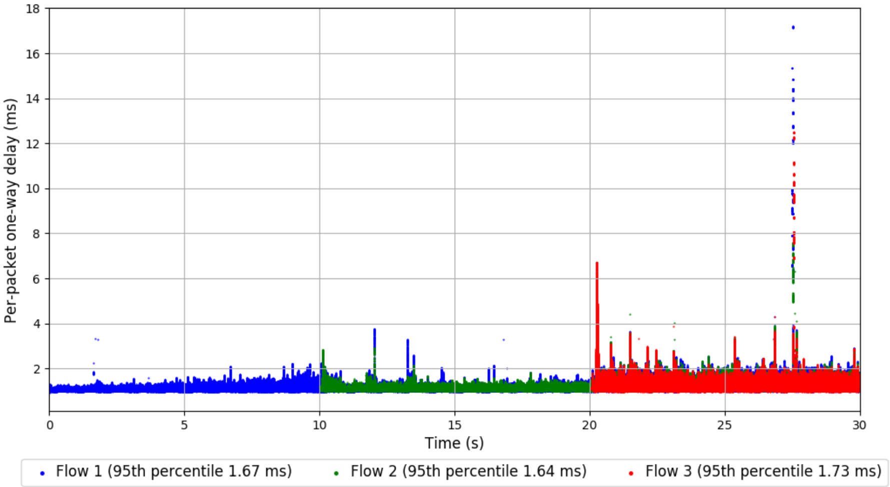




```
Run 7: Statistics of TCP Vegas

Start at: 2017-12-11 22:03:05
End at: 2017-12-11 22:03:35
Local clock offset: -0.758 ms
Remote clock offset: -0.256 ms

# Below is generated by plot.py at 2017-12-12 04:15:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 475.11 Mbit/s
95th percentile per-packet one-way delay: 1.670 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 221.43 Mbit/s
95th percentile per-packet one-way delay: 1.665 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 229.12 Mbit/s
95th percentile per-packet one-way delay: 1.639 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 306.18 Mbit/s
95th percentile per-packet one-way delay: 1.728 ms
Loss rate: 0.19%
```

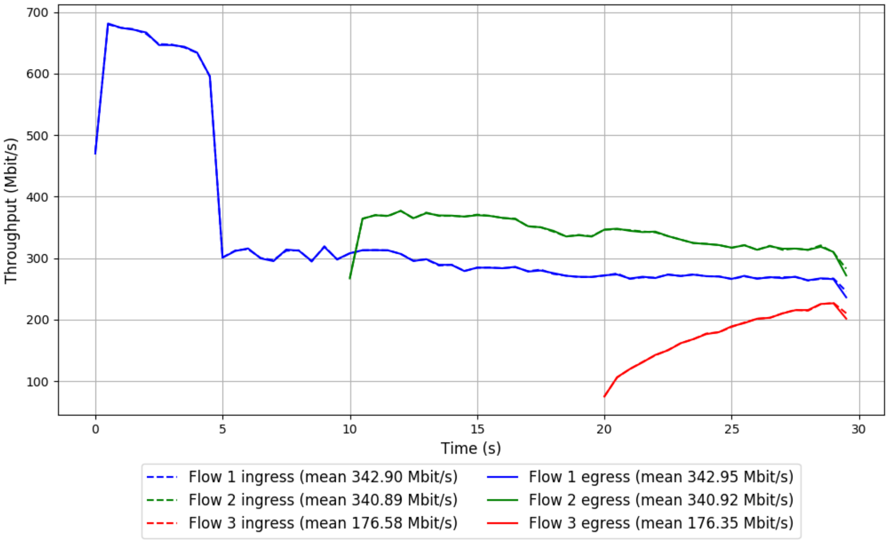
Run 7: Report of TCP Vegas — Data Link

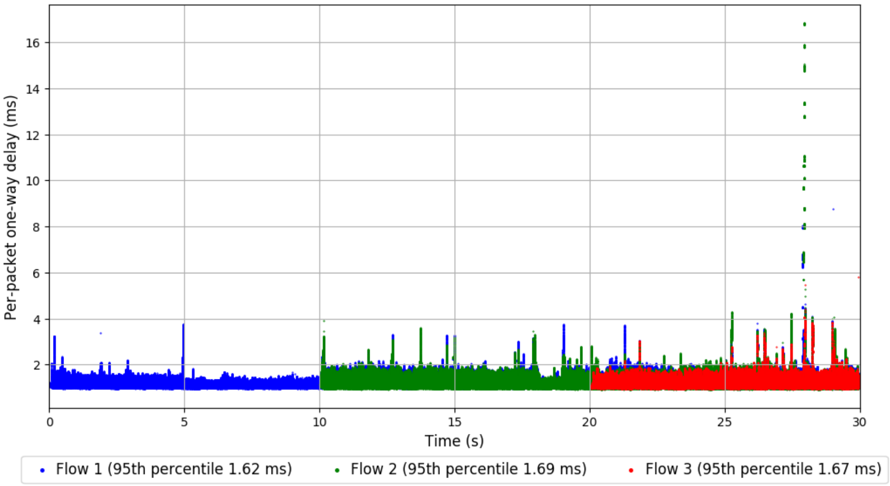




```
Run 8: Statistics of TCP Vegas

Start at: 2017-12-11 22:23:38
End at: 2017-12-11 22:24:08
Local clock offset: -0.486 ms
Remote clock offset: 0.143 ms

# Below is generated by plot.py at 2017-12-12 04:19:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 628.18 Mbit/s
95th percentile per-packet one-way delay: 1.652 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 342.95 Mbit/s
95th percentile per-packet one-way delay: 1.622 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 340.92 Mbit/s
95th percentile per-packet one-way delay: 1.685 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 176.35 Mbit/s
95th percentile per-packet one-way delay: 1.673 ms
Loss rate: 0.27%
```

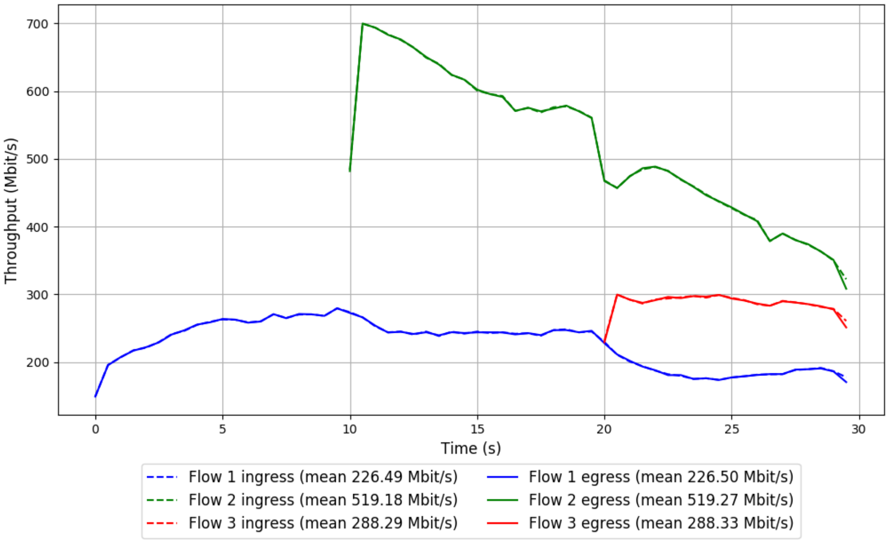
Run 8: Report of TCP Vegas — Data Link

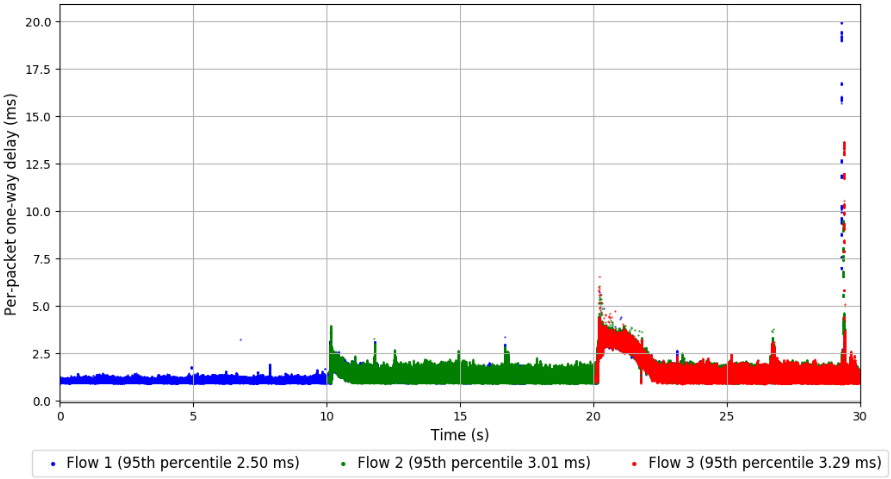




```
Run 9: Statistics of TCP Vegas

Start at: 2017-12-11 22:44:20
End at: 2017-12-11 22:44:50
Local clock offset: -0.265 ms
Remote clock offset: -0.358 ms

# Below is generated by plot.py at 2017-12-12 04:21:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 667.47 Mbit/s
95th percentile per-packet one-way delay: 3.041 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 226.50 Mbit/s
95th percentile per-packet one-way delay: 2.504 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 519.27 Mbit/s
95th percentile per-packet one-way delay: 3.011 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 288.33 Mbit/s
95th percentile per-packet one-way delay: 3.286 ms
Loss rate: 0.19%
```

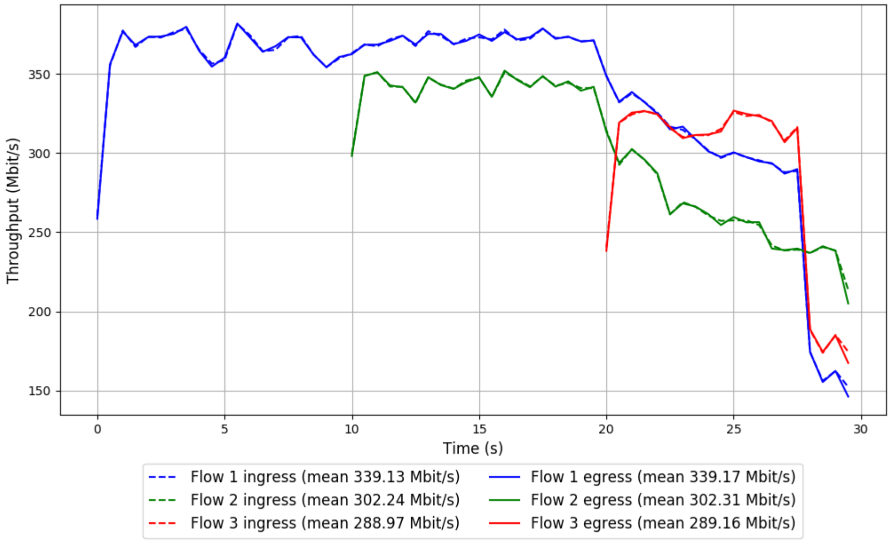
Run 9: Report of TCP Vegas — Data Link

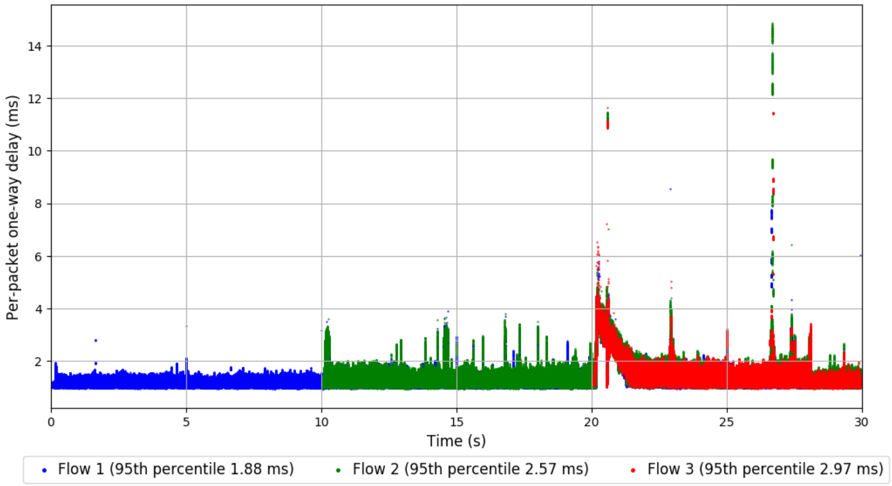




```
Run 10: Statistics of TCP Vegas

Start at: 2017-12-11 23:05:02
End at: 2017-12-11 23:05:32
Local clock offset: 0.043 ms
Remote clock offset: -0.249 ms

# Below is generated by plot.py at 2017-12-12 04:21:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 636.09 Mbit/s
95th percentile per-packet one-way delay: 2.418 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 339.17 Mbit/s
95th percentile per-packet one-way delay: 1.882 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 302.31 Mbit/s
95th percentile per-packet one-way delay: 2.568 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 289.16 Mbit/s
95th percentile per-packet one-way delay: 2.966 ms
Loss rate: 0.14%
```

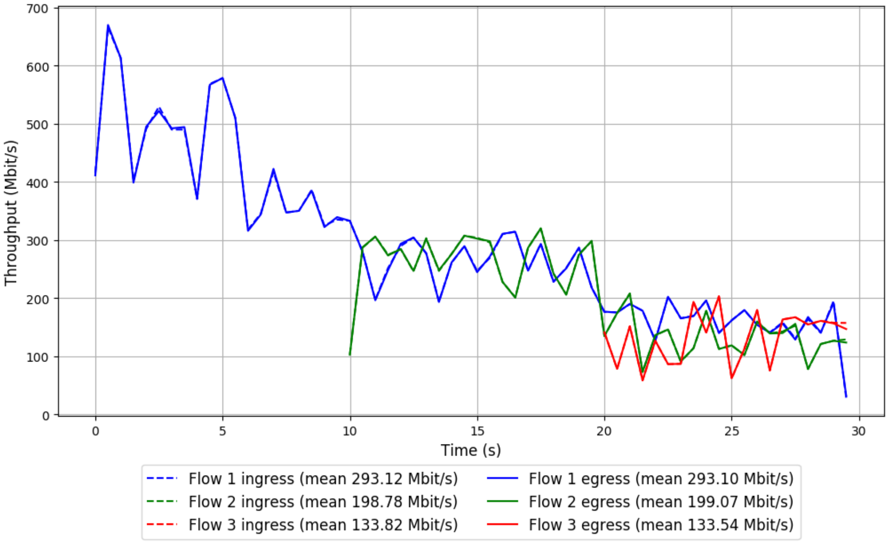
Run 10: Report of TCP Vegas — Data Link

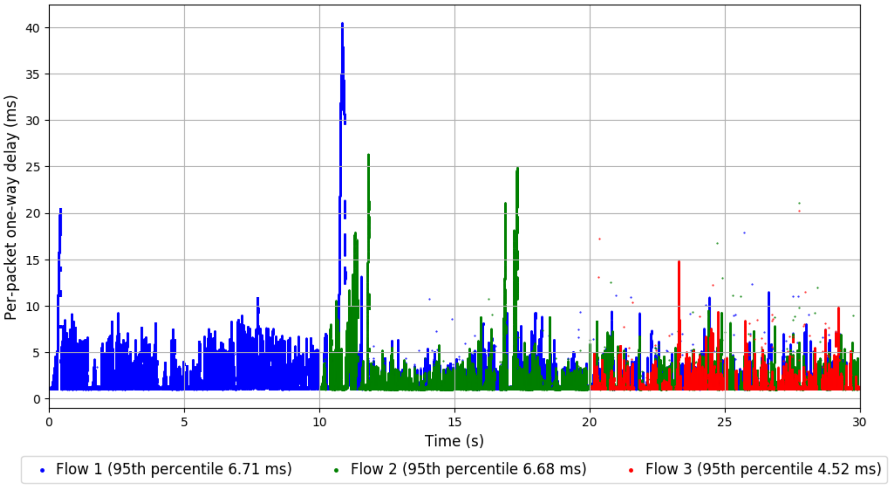




```
Run 1: Statistics of Verus

Start at: 2017-12-11 20:07:49
End at: 2017-12-11 20:08:19
Local clock offset: -1.777 ms
Remote clock offset: -2.304 ms

# Below is generated by plot.py at 2017-12-12 04:21:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 468.23 Mbit/s
95th percentile per-packet one-way delay: 6.559 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 293.10 Mbit/s
95th percentile per-packet one-way delay: 6.715 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 199.07 Mbit/s
95th percentile per-packet one-way delay: 6.678 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 133.54 Mbit/s
95th percentile per-packet one-way delay: 4.516 ms
Loss rate: 0.44%
```

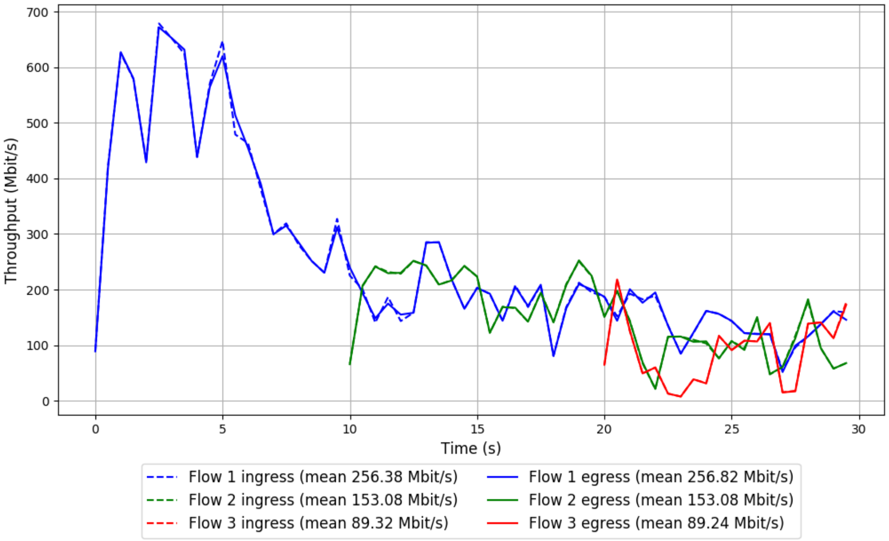
Run 1: Report of Verus — Data Link

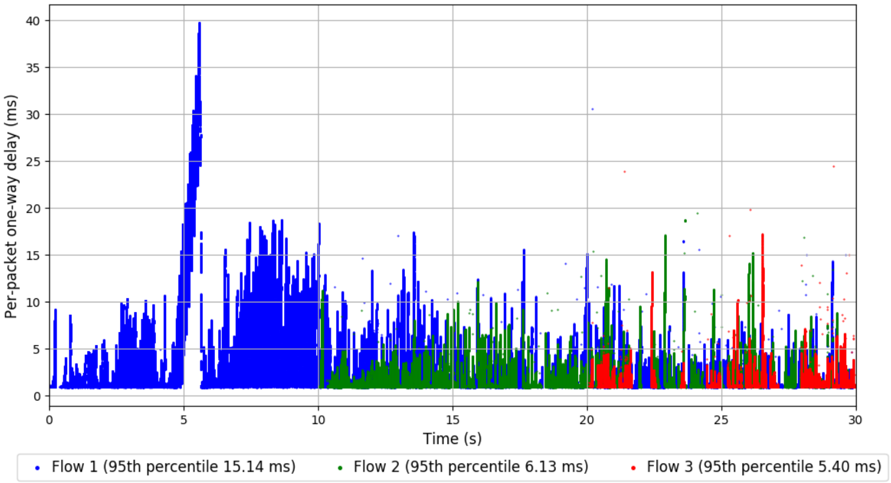




```
Run 2: Statistics of Verus

Start at: 2017-12-11 20:28:40
End at: 2017-12-11 20:29:10
Local clock offset: -1.742 ms
Remote clock offset: -1.777 ms

# Below is generated by plot.py at 2017-12-12 04:21:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 386.87 Mbit/s
95th percentile per-packet one-way delay: 12.535 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 256.82 Mbit/s
95th percentile per-packet one-way delay: 15.144 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 153.08 Mbit/s
95th percentile per-packet one-way delay: 6.128 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 89.24 Mbit/s
95th percentile per-packet one-way delay: 5.402 ms
Loss rate: 0.31%
```

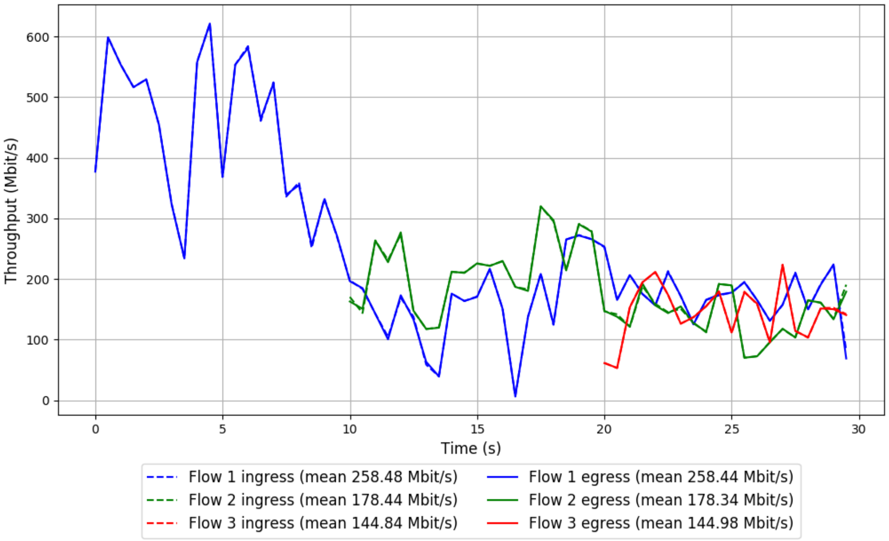
Run 2: Report of Verus — Data Link

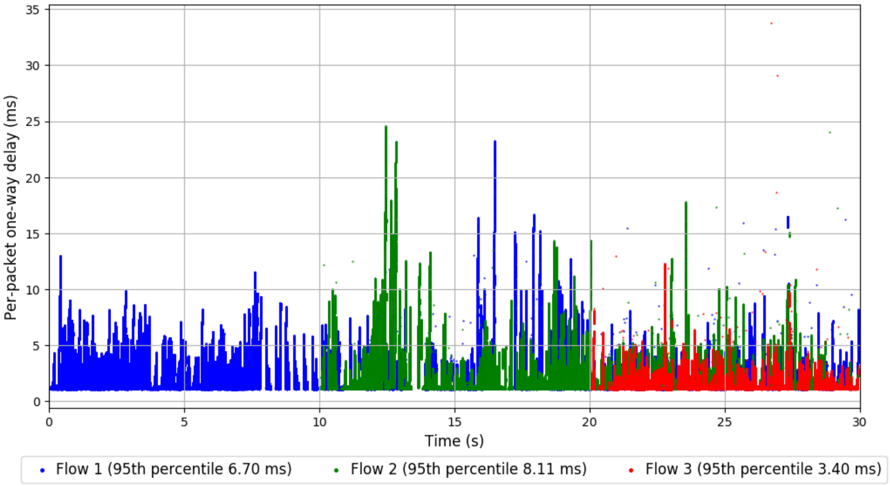




```
Run 3: Statistics of Verus

Start at: 2017-12-11 20:49:10
End at: 2017-12-11 20:49:40
Local clock offset: -1.63 ms
Remote clock offset: -1.669 ms

# Below is generated by plot.py at 2017-12-12 04:21:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 425.13 Mbit/s
95th percentile per-packet one-way delay: 6.819 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 258.44 Mbit/s
95th percentile per-packet one-way delay: 6.703 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 178.34 Mbit/s
95th percentile per-packet one-way delay: 8.106 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 144.98 Mbit/s
95th percentile per-packet one-way delay: 3.398 ms
Loss rate: 0.15%
```

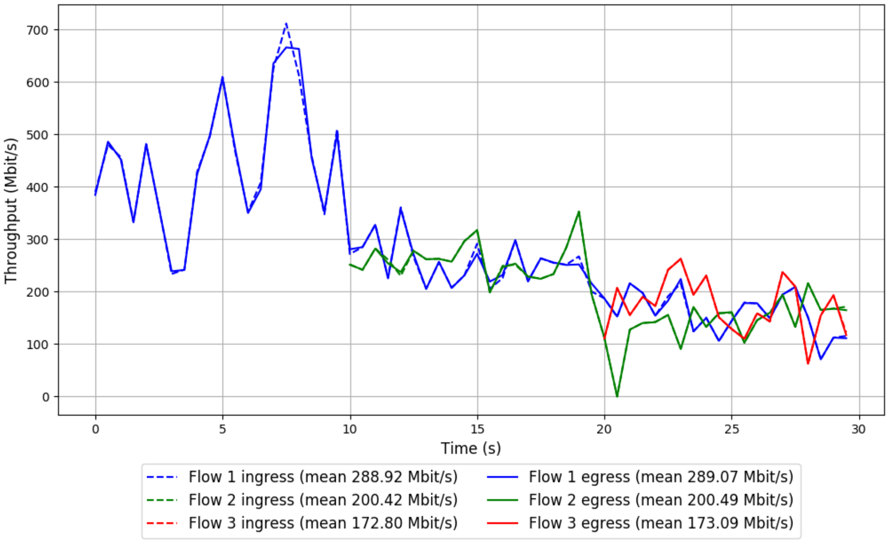
Run 3: Report of Verus — Data Link

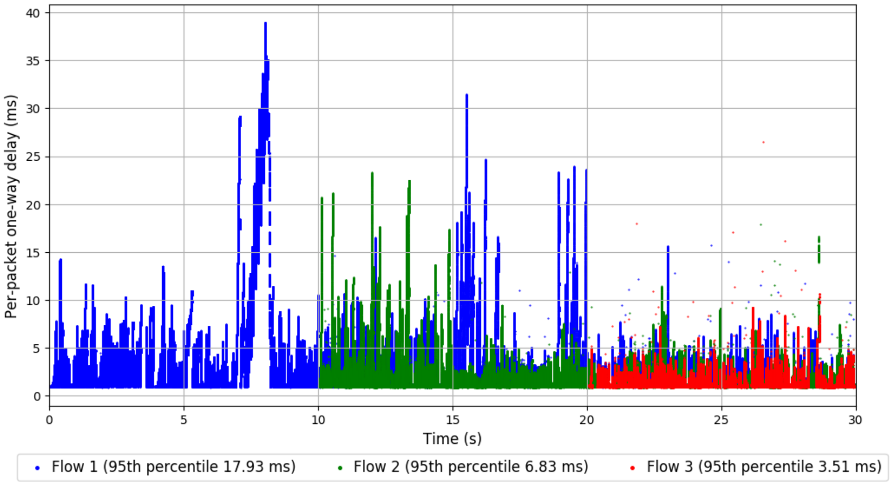




```
Run 4: Statistics of Verus

Start at: 2017-12-11 21:09:51
End at: 2017-12-11 21:10:21
Local clock offset: -1.615 ms
Remote clock offset: -1.456 ms

# Below is generated by plot.py at 2017-12-12 04:22:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 479.83 Mbit/s
95th percentile per-packet one-way delay: 12.316 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 289.07 Mbit/s
95th percentile per-packet one-way delay: 17.931 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 200.49 Mbit/s
95th percentile per-packet one-way delay: 6.825 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 173.09 Mbit/s
95th percentile per-packet one-way delay: 3.506 ms
Loss rate: 0.13%
```

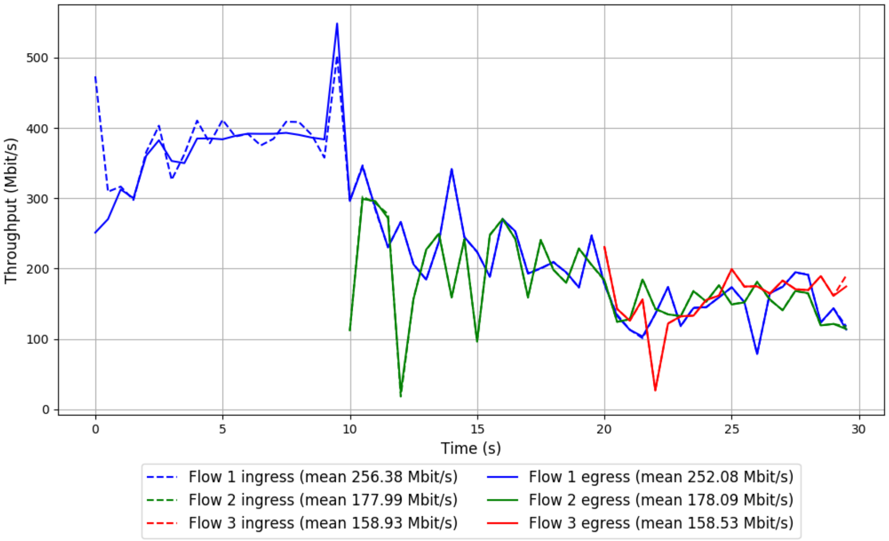
Run 4: Report of Verus — Data Link

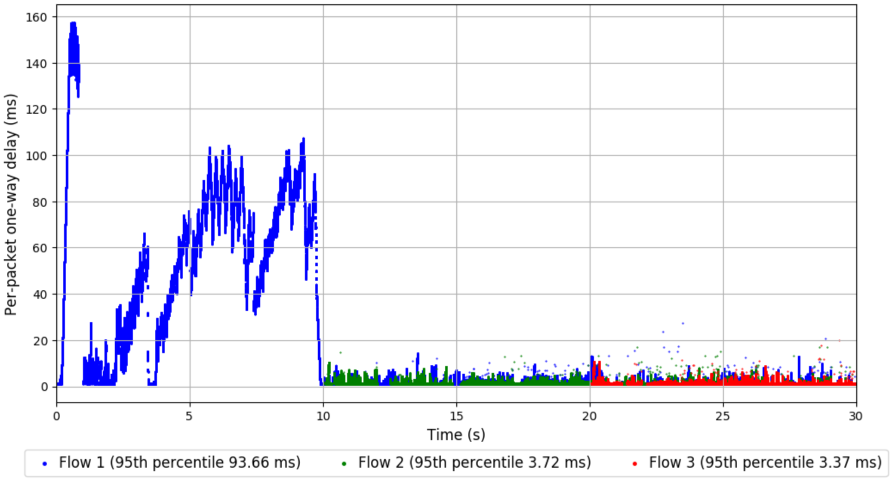




```
Run 5: Statistics of Verus

Start at: 2017-12-11 21:30:24
End at: 2017-12-11 21:30:54
Local clock offset: -1.274 ms
Remote clock offset: -1.079 ms

# Below is generated by plot.py at 2017-12-12 04:22:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 423.11 Mbit/s
95th percentile per-packet one-way delay: 86.895 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 252.08 Mbit/s
95th percentile per-packet one-way delay: 93.664 ms
Loss rate: 1.73%
-- Flow 2:
Average throughput: 178.09 Mbit/s
95th percentile per-packet one-way delay: 3.717 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 158.53 Mbit/s
95th percentile per-packet one-way delay: 3.374 ms
Loss rate: 0.49%
```

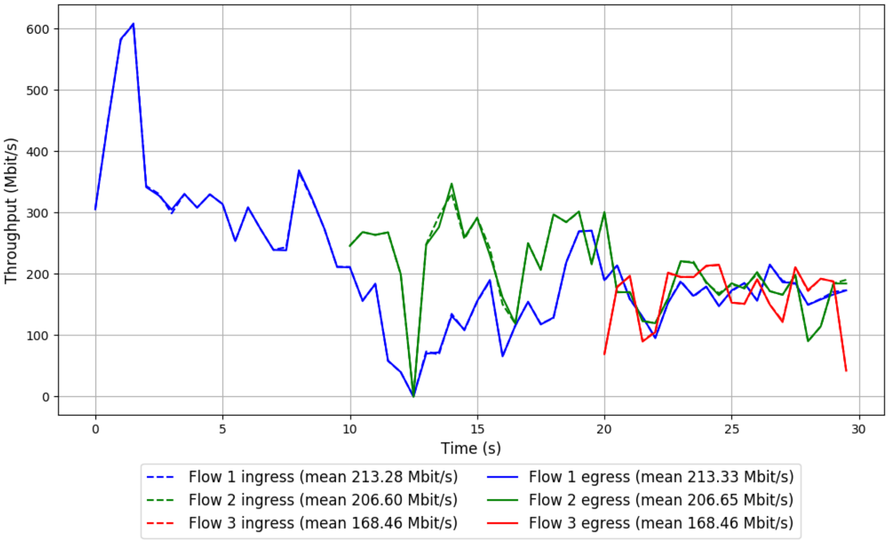
Run 5: Report of Verus — Data Link

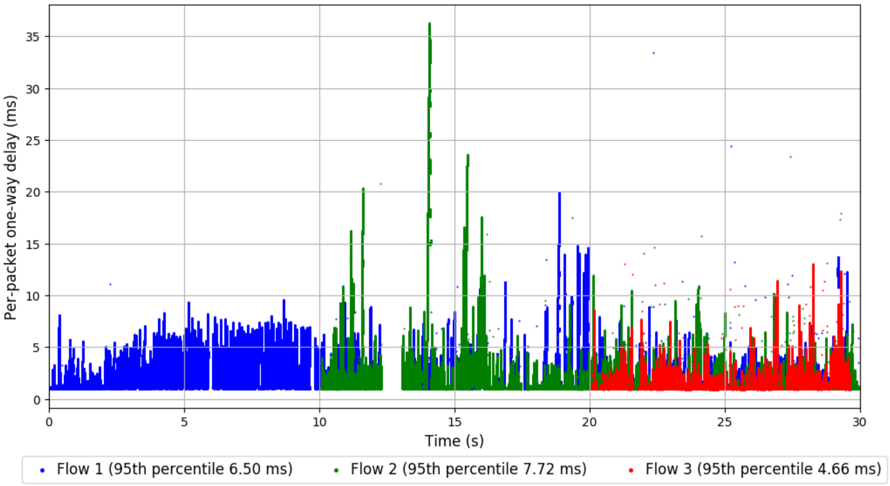




```
Run 6: Statistics of Verus

Start at: 2017-12-11 21:51:05
End at: 2017-12-11 21:51:35
Local clock offset: -0.905 ms
Remote clock offset: -0.459 ms

# Below is generated by plot.py at 2017-12-12 04:24:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 404.91 Mbit/s
95th percentile per-packet one-way delay: 6.541 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 213.33 Mbit/s
95th percentile per-packet one-way delay: 6.500 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 206.65 Mbit/s
95th percentile per-packet one-way delay: 7.725 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 168.46 Mbit/s
95th percentile per-packet one-way delay: 4.656 ms
Loss rate: 0.00%
```

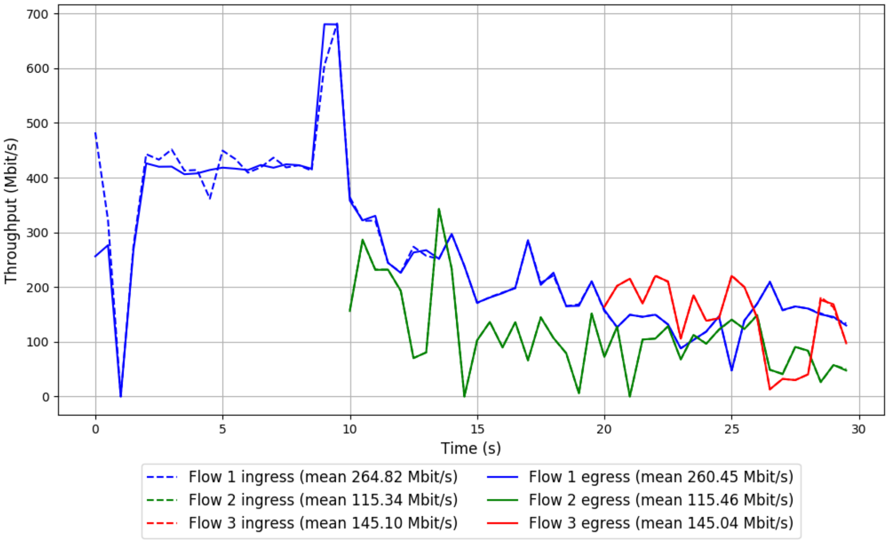
Run 6: Report of Verus — Data Link

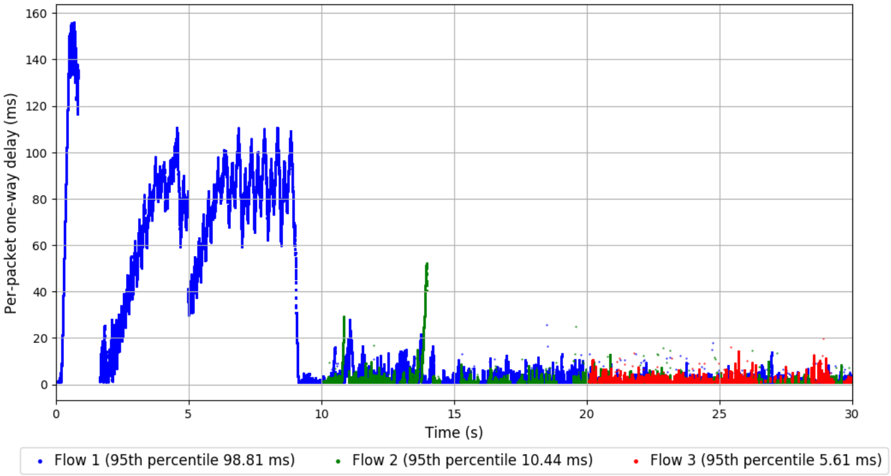




```
Run 7: Statistics of Verus

Start at: 2017-12-11 22:11:34
End at: 2017-12-11 22:12:04
Local clock offset: -0.697 ms
Remote clock offset: -0.153 ms

# Below is generated by plot.py at 2017-12-12 04:24:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 385.11 Mbit/s
95th percentile per-packet one-way delay: 94.263 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 260.45 Mbit/s
95th percentile per-packet one-way delay: 98.809 ms
Loss rate: 1.74%
-- Flow 2:
Average throughput: 115.46 Mbit/s
95th percentile per-packet one-way delay: 10.437 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 145.04 Mbit/s
95th percentile per-packet one-way delay: 5.609 ms
Loss rate: 0.05%
```

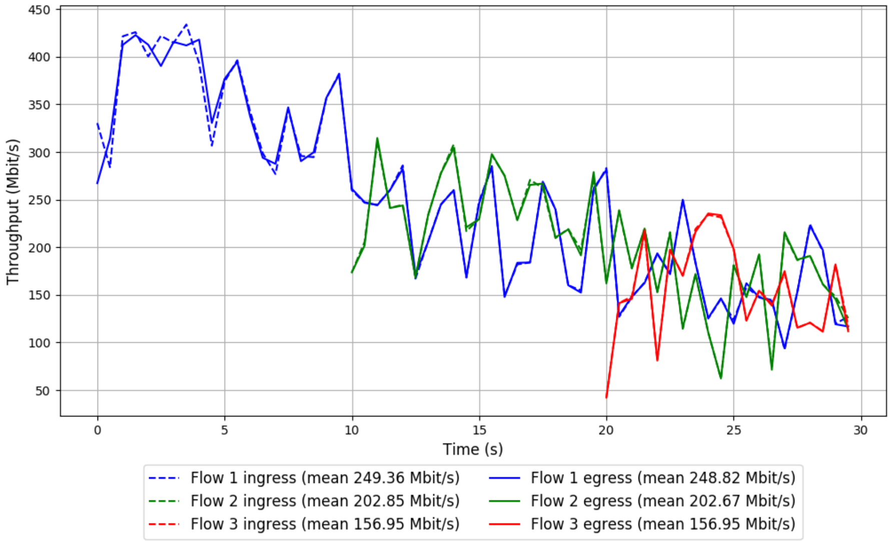
Run 7: Report of Verus — Data Link

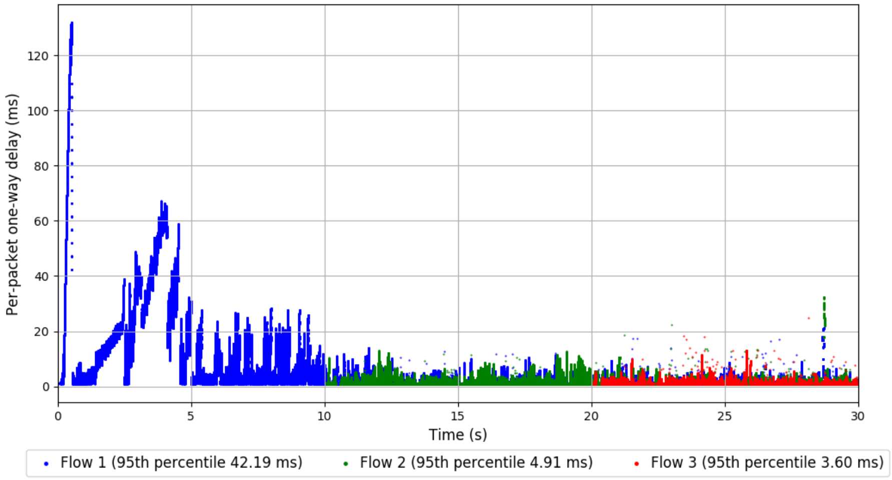




```
Run 8: Statistics of Verus

Start at: 2017-12-11 22:32:15
End at: 2017-12-11 22:32:45
Local clock offset: -0.449 ms
Remote clock offset: -0.092 ms

# Below is generated by plot.py at 2017-12-12 04:26:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 435.58 Mbit/s
95th percentile per-packet one-way delay: 30.474 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 248.82 Mbit/s
95th percentile per-packet one-way delay: 42.193 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 202.67 Mbit/s
95th percentile per-packet one-way delay: 4.914 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 156.95 Mbit/s
95th percentile per-packet one-way delay: 3.598 ms
Loss rate: 0.19%
```

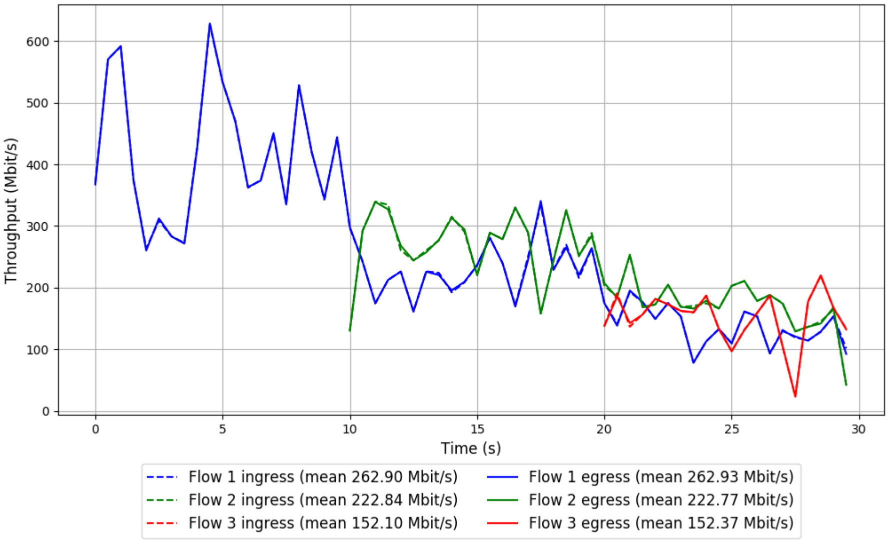
Run 8: Report of Verus — Data Link

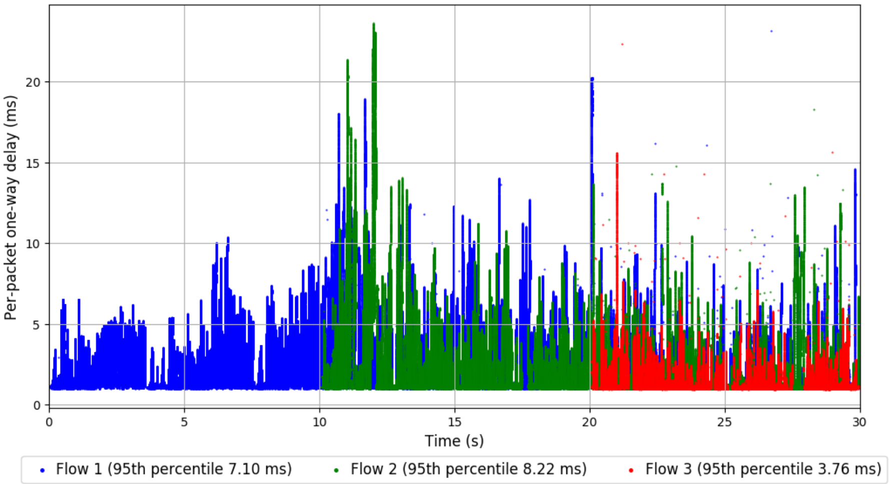




```
Run 9: Statistics of Verus

Start at: 2017-12-11 22:52:56
End at: 2017-12-11 22:53:26
Local clock offset: -0.048 ms
Remote clock offset: -0.302 ms

# Below is generated by plot.py at 2017-12-12 04:28:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 461.30 Mbit/s
95th percentile per-packet one-way delay: 7.161 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 262.93 Mbit/s
95th percentile per-packet one-way delay: 7.097 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 222.77 Mbit/s
95th percentile per-packet one-way delay: 8.216 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 152.37 Mbit/s
95th percentile per-packet one-way delay: 3.763 ms
Loss rate: 0.03%
```

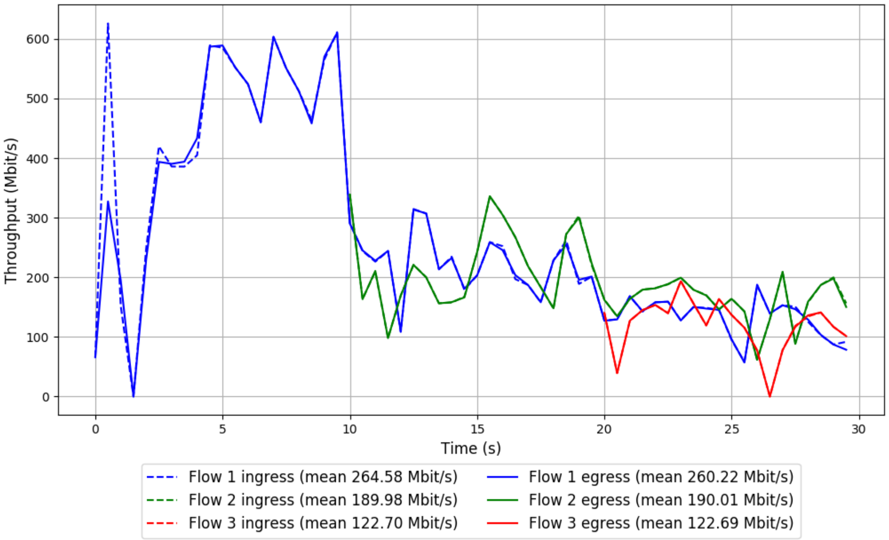
Run 9: Report of Verus — Data Link

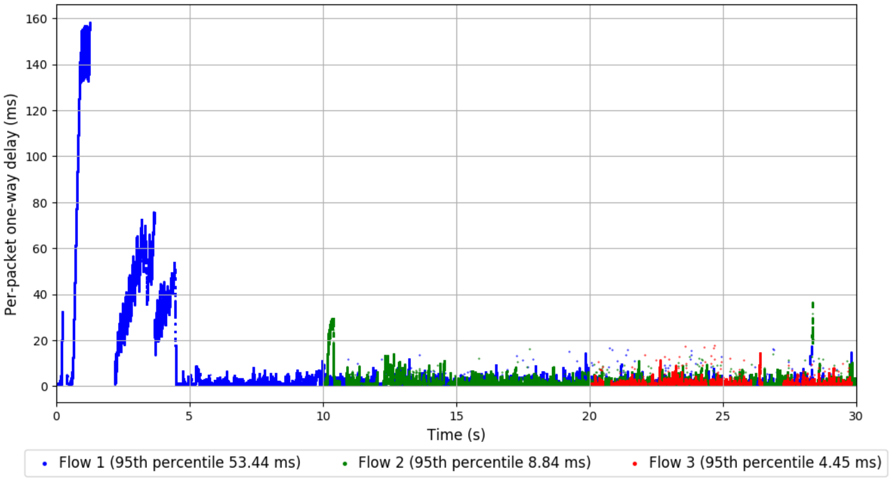




```
Run 10: Statistics of Verus

Start at: 2017-12-11 23:13:37
End at: 2017-12-11 23:14:07
Local clock offset: 0.161 ms
Remote clock offset: -0.148 ms

# Below is generated by plot.py at 2017-12-12 04:28:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 426.74 Mbit/s
95th percentile per-packet one-way delay: 40.821 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 260.22 Mbit/s
95th percentile per-packet one-way delay: 53.440 ms
Loss rate: 1.70%
-- Flow 2:
Average throughput: 190.01 Mbit/s
95th percentile per-packet one-way delay: 8.840 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 122.69 Mbit/s
95th percentile per-packet one-way delay: 4.446 ms
Loss rate: 0.00%
```

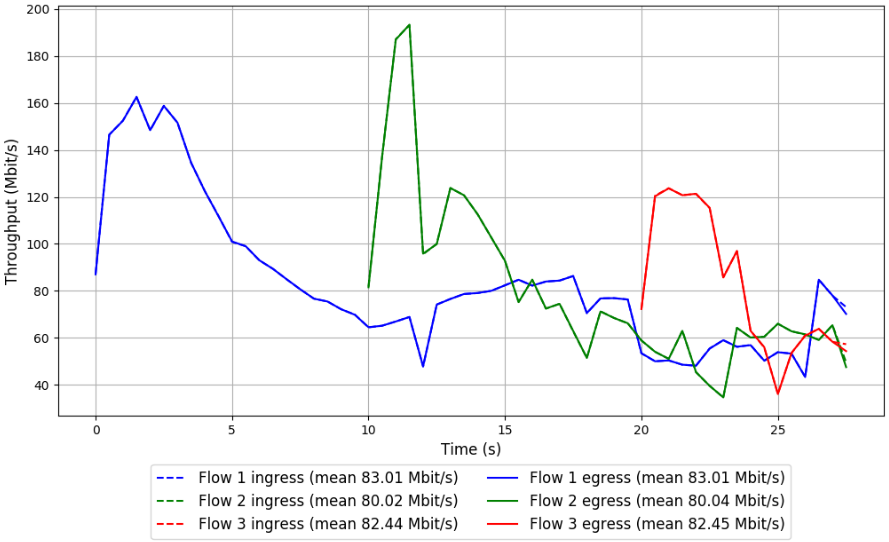
Run 10: Report of Verus — Data Link

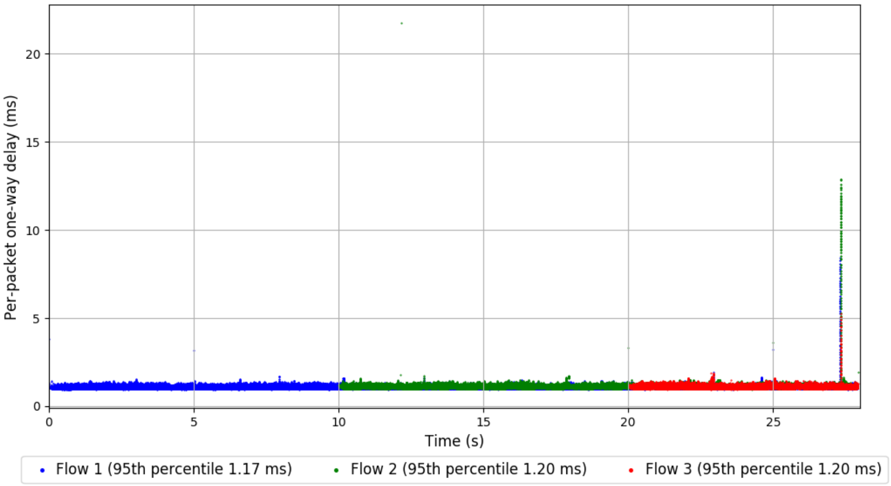




```
Run 1: Statistics of Copa

Start at: 2017-12-11 20:04:35
End at: 2017-12-11 20:05:05
Local clock offset: -1.7 ms
Remote clock offset: -2.389 ms

# Below is generated by plot.py at 2017-12-12 04:28:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 157.67 Mbit/s
95th percentile per-packet one-way delay: 1.184 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 83.01 Mbit/s
95th percentile per-packet one-way delay: 1.167 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 80.04 Mbit/s
95th percentile per-packet one-way delay: 1.199 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 82.45 Mbit/s
95th percentile per-packet one-way delay: 1.198 ms
Loss rate: 0.23%
```

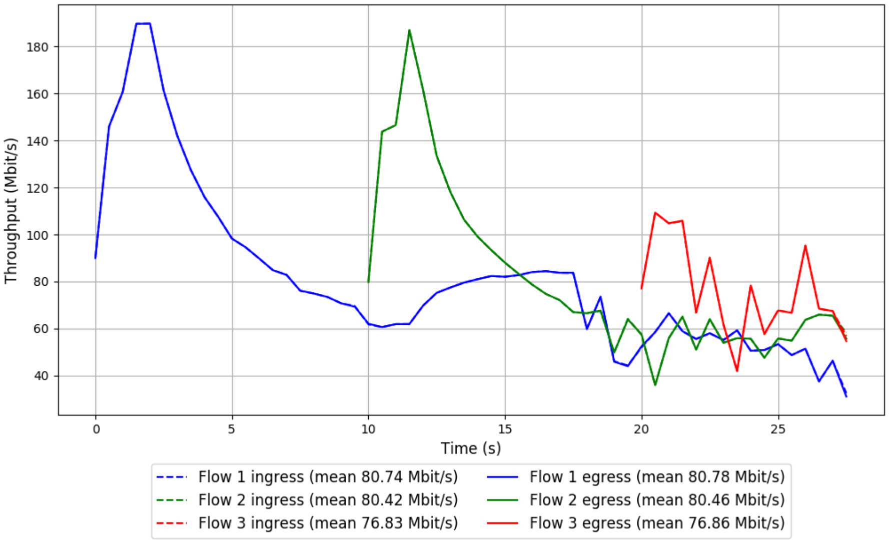
Run 1: Report of Copa — Data Link

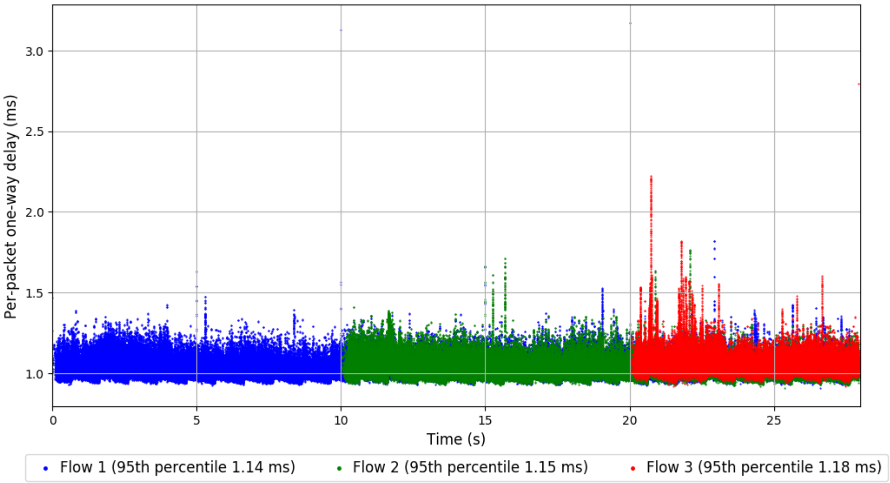




```
Run 2: Statistics of Copa

Start at: 2017-12-11 20:25:28
End at: 2017-12-11 20:25:58
Local clock offset: -1.809 ms
Remote clock offset: -1.905 ms

# Below is generated by plot.py at 2017-12-12 04:28:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 154.09 Mbit/s
95th percentile per-packet one-way delay: 1.147 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 80.78 Mbit/s
95th percentile per-packet one-way delay: 1.139 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 80.46 Mbit/s
95th percentile per-packet one-way delay: 1.145 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 76.86 Mbit/s
95th percentile per-packet one-way delay: 1.177 ms
Loss rate: 0.19%
```

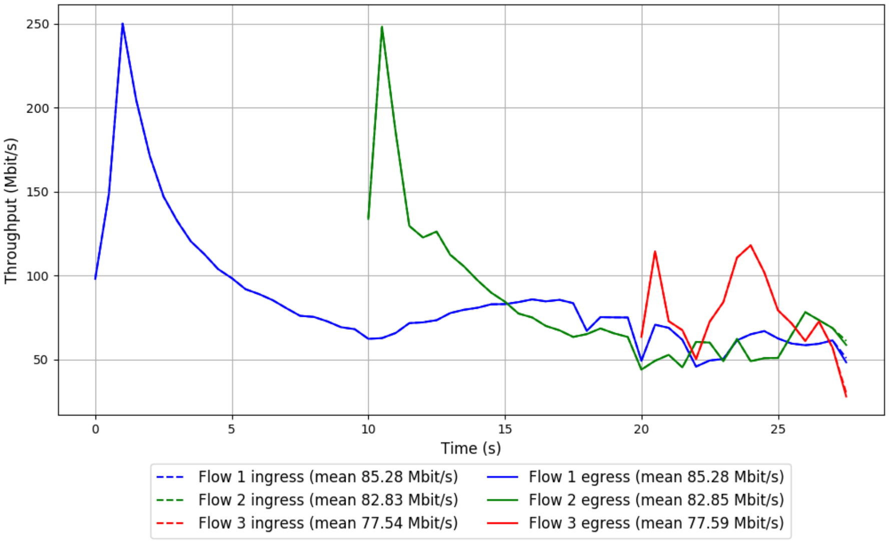
Run 2: Report of Copa — Data Link

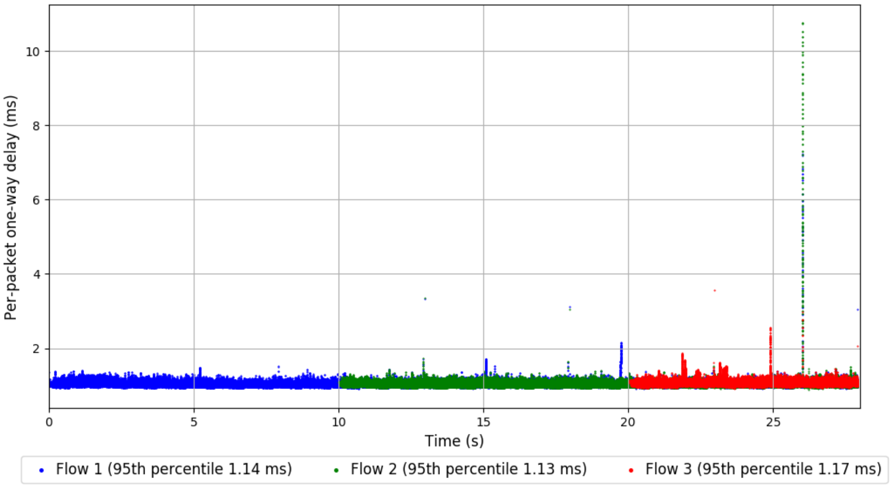




```
Run 3: Statistics of Copa

Start at: 2017-12-11 20:45:57
End at: 2017-12-11 20:46:27
Local clock offset: -1.676 ms
Remote clock offset: -1.701 ms

# Below is generated by plot.py at 2017-12-12 04:28:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 160.38 Mbit/s
95th percentile per-packet one-way delay: 1.138 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 85.28 Mbit/s
95th percentile per-packet one-way delay: 1.136 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 82.85 Mbit/s
95th percentile per-packet one-way delay: 1.128 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 77.59 Mbit/s
95th percentile per-packet one-way delay: 1.165 ms
Loss rate: 0.18%
```

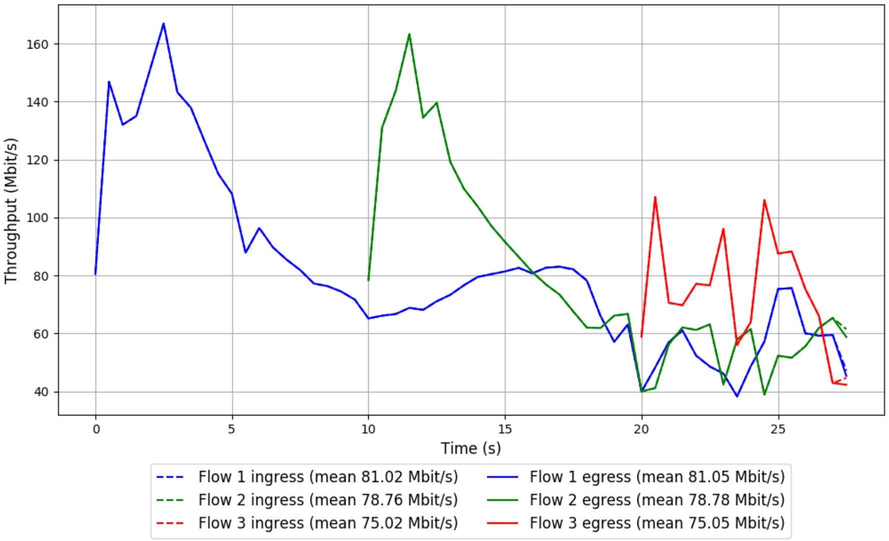
Run 3: Report of Copa — Data Link

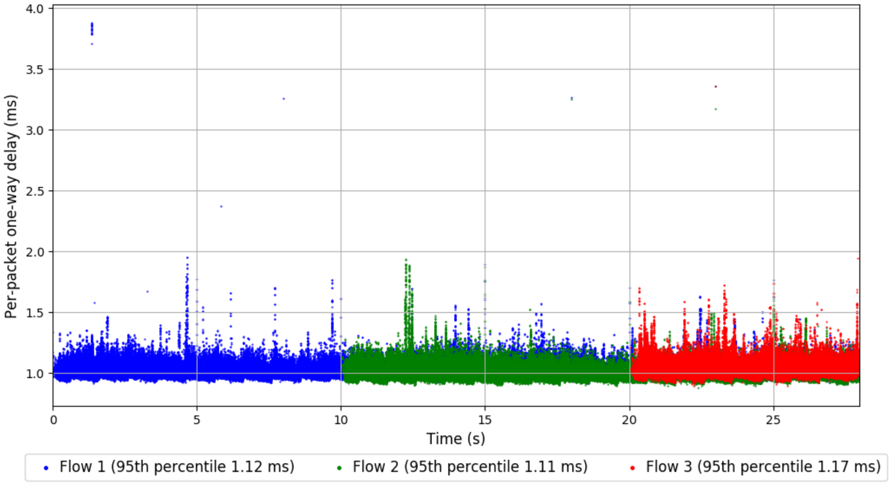




```
Run 4: Statistics of Copa

Start at: 2017-12-11 21:06:39
End at: 2017-12-11 21:07:09
Local clock offset: -1.563 ms
Remote clock offset: -1.439 ms

# Below is generated by plot.py at 2017-12-12 04:28:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 152.78 Mbit/s
95th percentile per-packet one-way delay: 1.122 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 81.05 Mbit/s
95th percentile per-packet one-way delay: 1.116 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 78.78 Mbit/s
95th percentile per-packet one-way delay: 1.107 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 75.05 Mbit/s
95th percentile per-packet one-way delay: 1.168 ms
Loss rate: 0.21%
```

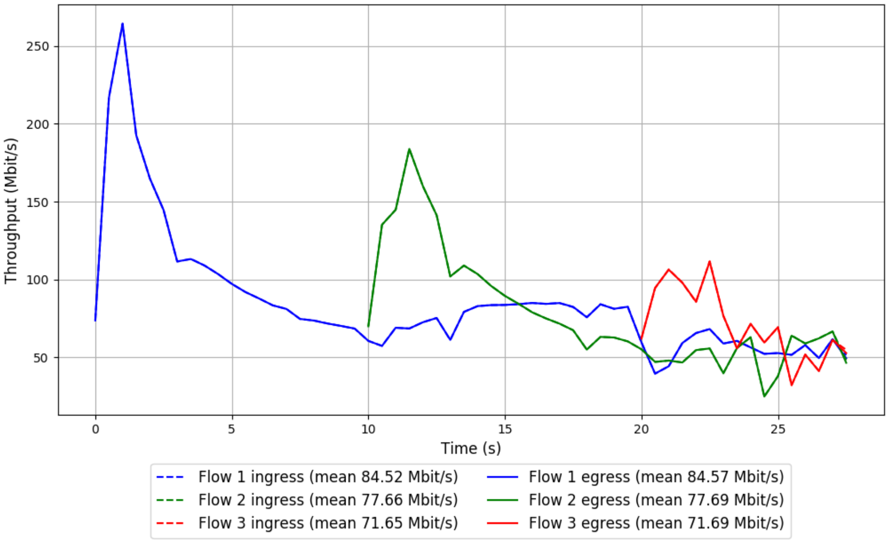
Run 4: Report of Copa — Data Link

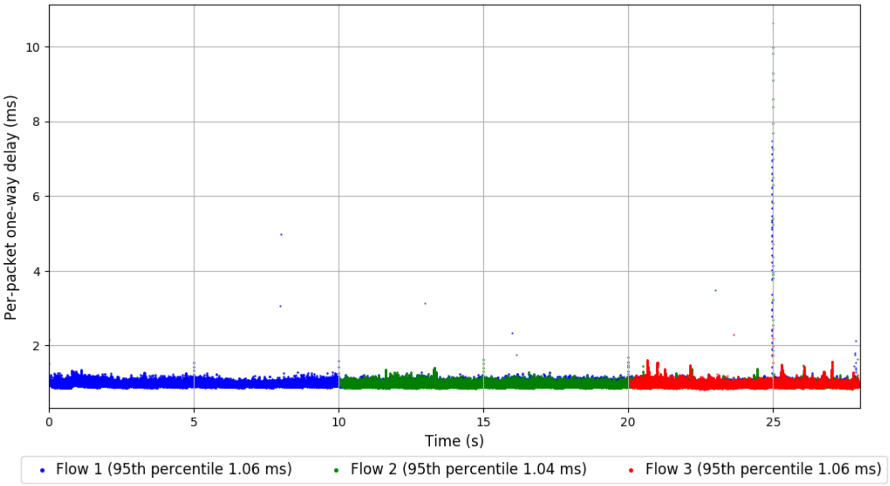




```
Run 5: Statistics of Copa

Start at: 2017-12-11 21:27:16
End at: 2017-12-11 21:27:46
Local clock offset: -1.448 ms
Remote clock offset: -1.135 ms

# Below is generated by plot.py at 2017-12-12 04:28:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 154.61 Mbit/s
95th percentile per-packet one-way delay: 1.052 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 84.57 Mbit/s
95th percentile per-packet one-way delay: 1.057 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 77.69 Mbit/s
95th percentile per-packet one-way delay: 1.040 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 71.69 Mbit/s
95th percentile per-packet one-way delay: 1.058 ms
Loss rate: 0.19%
```

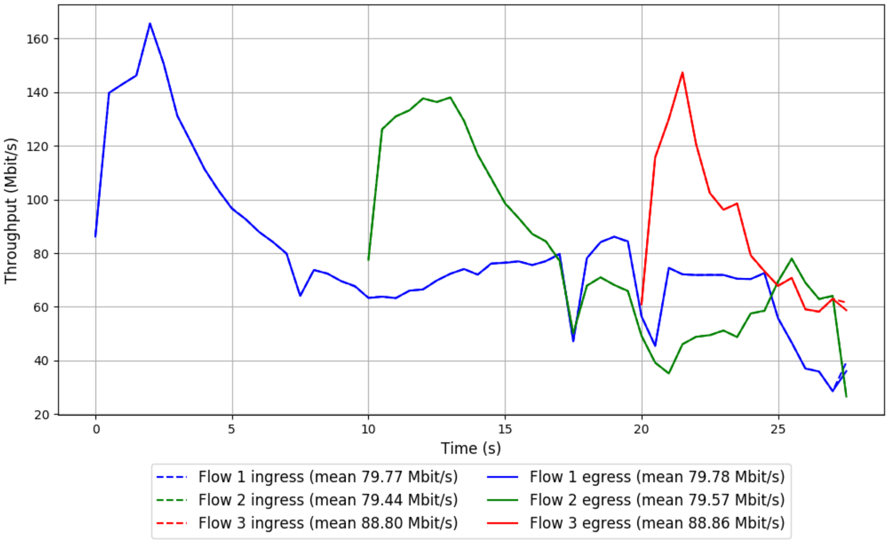
Run 5: Report of Copa — Data Link

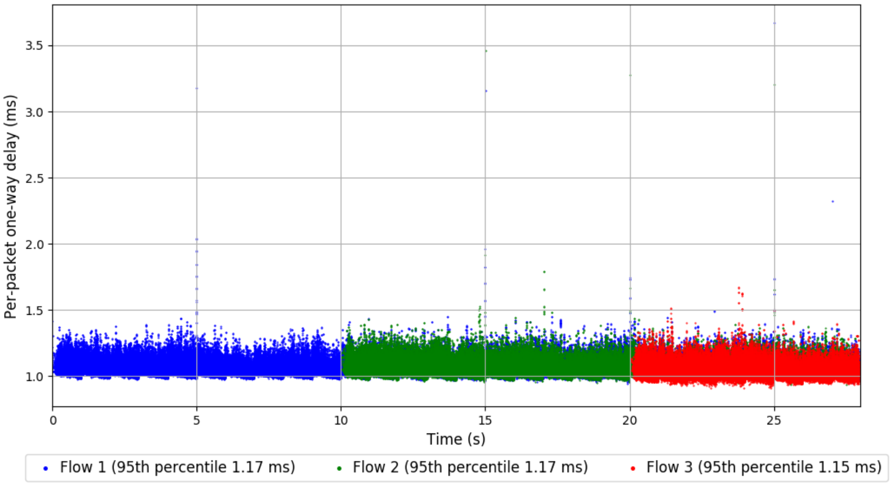




```
Run 6: Statistics of Copa

Start at: 2017-12-11 21:47:52
End at: 2017-12-11 21:48:22
Local clock offset: -0.949 ms
Remote clock offset: -0.472 ms

# Below is generated by plot.py at 2017-12-12 04:29:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 155.89 Mbit/s
95th percentile per-packet one-way delay: 1.164 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 79.78 Mbit/s
95th percentile per-packet one-way delay: 1.166 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 79.57 Mbit/s
95th percentile per-packet one-way delay: 1.165 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 88.86 Mbit/s
95th percentile per-packet one-way delay: 1.147 ms
Loss rate: 0.20%
```

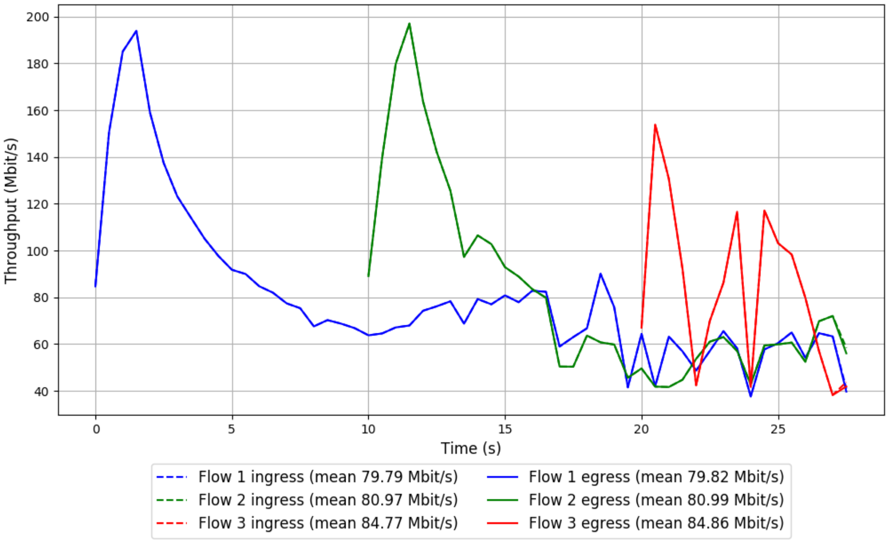
Run 6: Report of Copa — Data Link

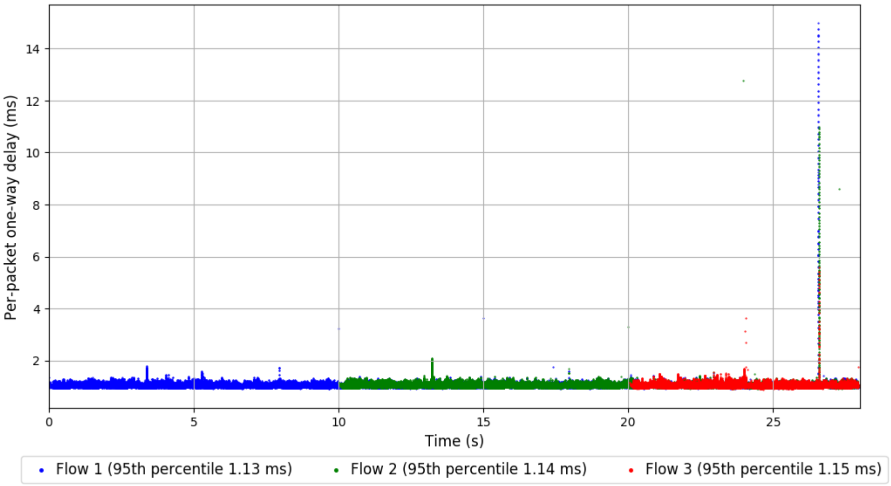




```
Run 7: Statistics of Copa

Start at: 2017-12-11 22:08:22
End at: 2017-12-11 22:08:52
Local clock offset: -0.829 ms
Remote clock offset: -0.232 ms

# Below is generated by plot.py at 2017-12-12 04:29:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 155.71 Mbit/s
95th percentile per-packet one-way delay: 1.135 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 79.82 Mbit/s
95th percentile per-packet one-way delay: 1.130 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 80.99 Mbit/s
95th percentile per-packet one-way delay: 1.139 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 84.86 Mbit/s
95th percentile per-packet one-way delay: 1.145 ms
Loss rate: 0.15%
```

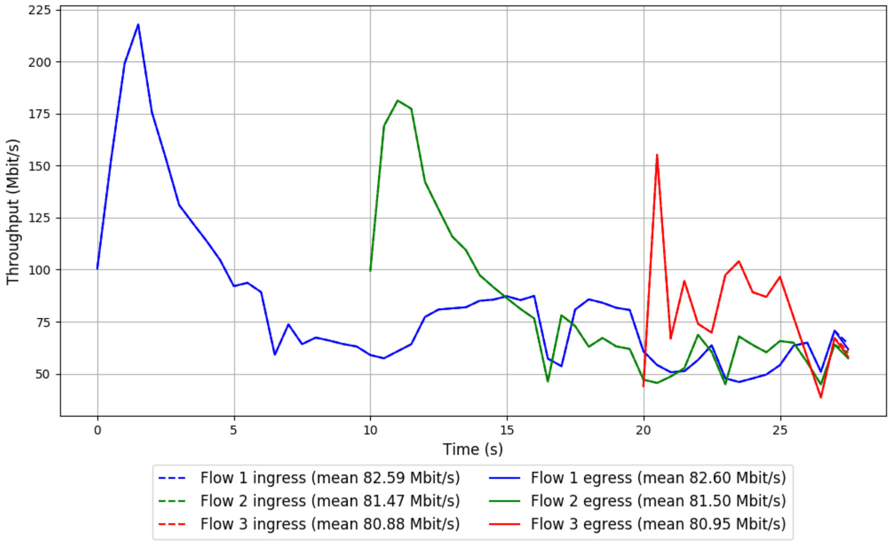
Run 7: Report of Copa — Data Link

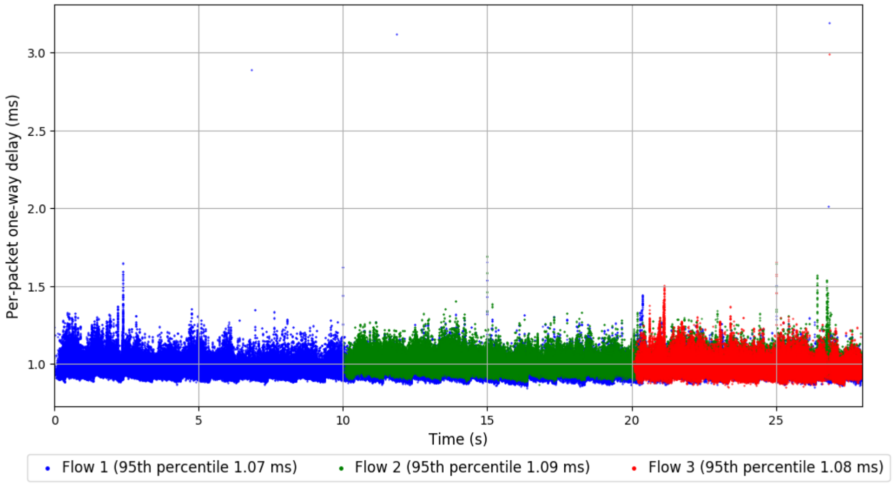




```
Run 8: Statistics of Copa

Start at: 2017-12-11 22:29:03
End at: 2017-12-11 22:29:33
Local clock offset: -0.406 ms
Remote clock offset: 0.045 ms

# Below is generated by plot.py at 2017-12-12 04:30:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 157.74 Mbit/s
95th percentile per-packet one-way delay: 1.084 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 82.60 Mbit/s
95th percentile per-packet one-way delay: 1.073 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 81.50 Mbit/s
95th percentile per-packet one-way delay: 1.095 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 80.95 Mbit/s
95th percentile per-packet one-way delay: 1.085 ms
Loss rate: 0.22%
```

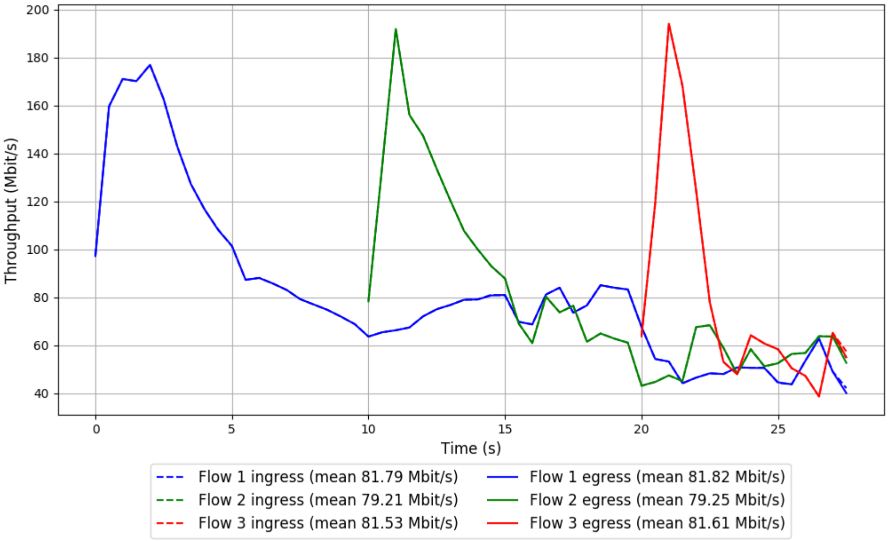
Run 8: Report of Copa — Data Link

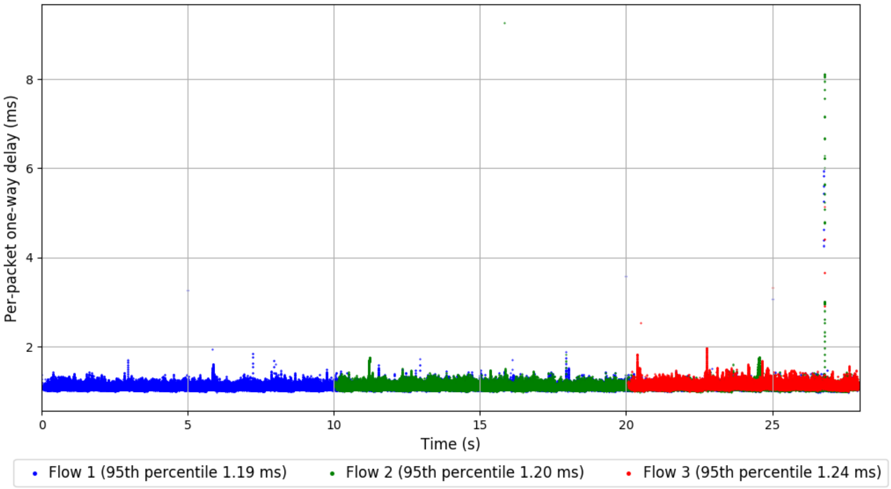




```
Run 9: Statistics of Copa

Start at: 2017-12-11 22:49:44
End at: 2017-12-11 22:50:14
Local clock offset: -0.117 ms
Remote clock offset: -0.416 ms

# Below is generated by plot.py at 2017-12-12 04:30:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 155.70 Mbit/s
95th percentile per-packet one-way delay: 1.200 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 81.82 Mbit/s
95th percentile per-packet one-way delay: 1.186 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 79.25 Mbit/s
95th percentile per-packet one-way delay: 1.196 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 81.61 Mbit/s
95th percentile per-packet one-way delay: 1.237 ms
Loss rate: 0.20%
```

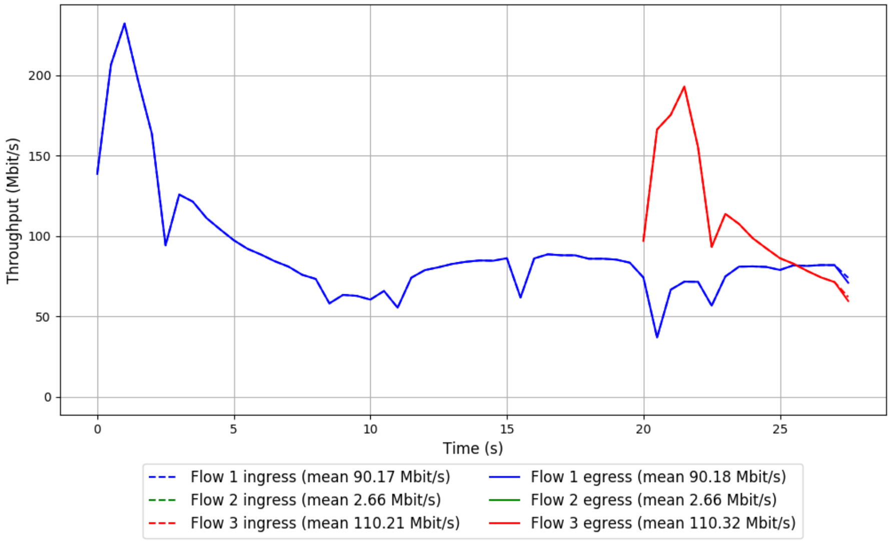
Run 9: Report of Copa — Data Link

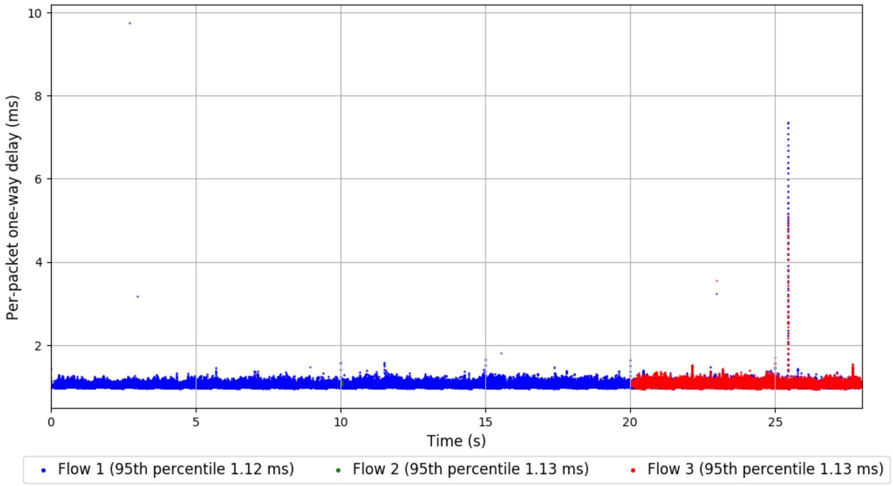




```
Run 10: Statistics of Copa

Start at: 2017-12-11 23:10:27
End at: 2017-12-11 23:10:57
Local clock offset: 0.142 ms
Remote clock offset: -0.205 ms

# Below is generated by plot.py at 2017-12-12 04:30:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 121.44 Mbit/s
95th percentile per-packet one-way delay: 1.120 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 90.18 Mbit/s
95th percentile per-packet one-way delay: 1.116 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 2.66 Mbit/s
95th percentile per-packet one-way delay: 1.126 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 110.32 Mbit/s
95th percentile per-packet one-way delay: 1.132 ms
Loss rate: 0.15%
```

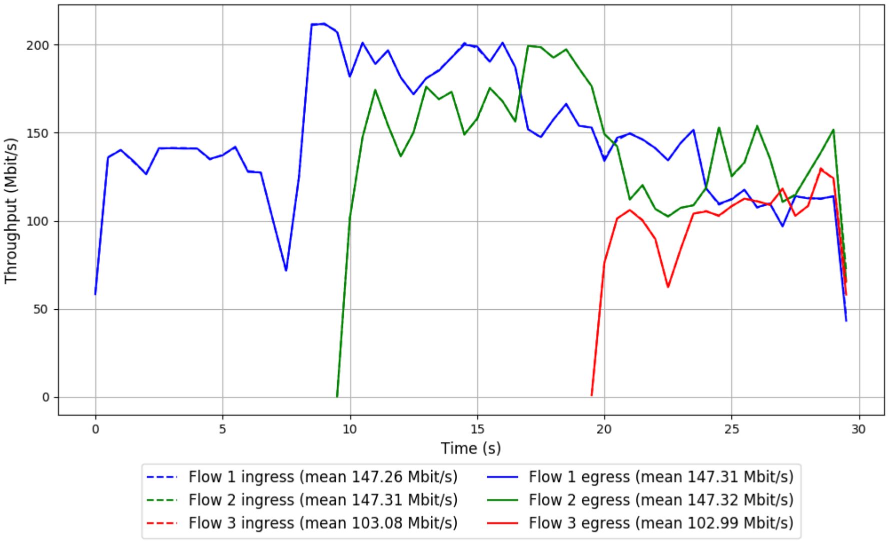
Run 10: Report of Copa — Data Link

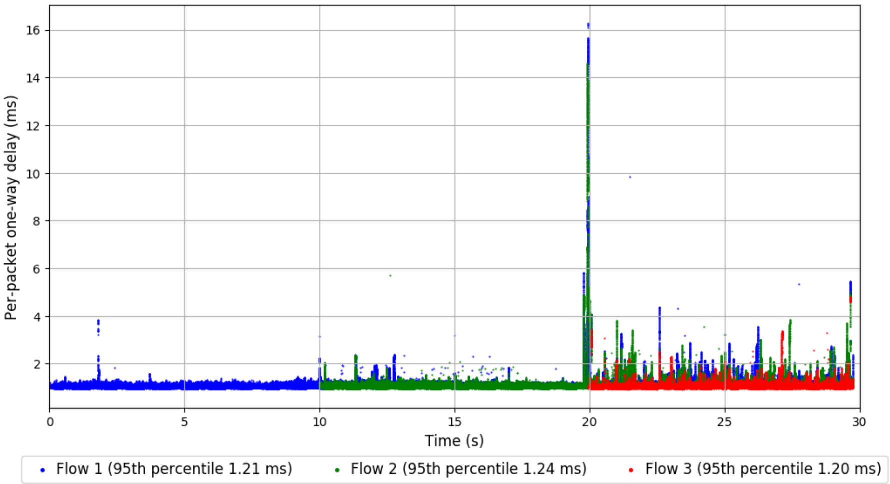




```
Run 1: Statistics of Indigo

Start at: 2017-12-11 20:01:59
End at: 2017-12-11 20:02:29
Local clock offset: -1.642 ms
Remote clock offset: -2.41 ms

# Below is generated by plot.py at 2017-12-12 04:32:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 279.02 Mbit/s
95th percentile per-packet one-way delay: 1.215 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 147.31 Mbit/s
95th percentile per-packet one-way delay: 1.206 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 147.32 Mbit/s
95th percentile per-packet one-way delay: 1.239 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 102.99 Mbit/s
95th percentile per-packet one-way delay: 1.199 ms
Loss rate: 0.31%
```

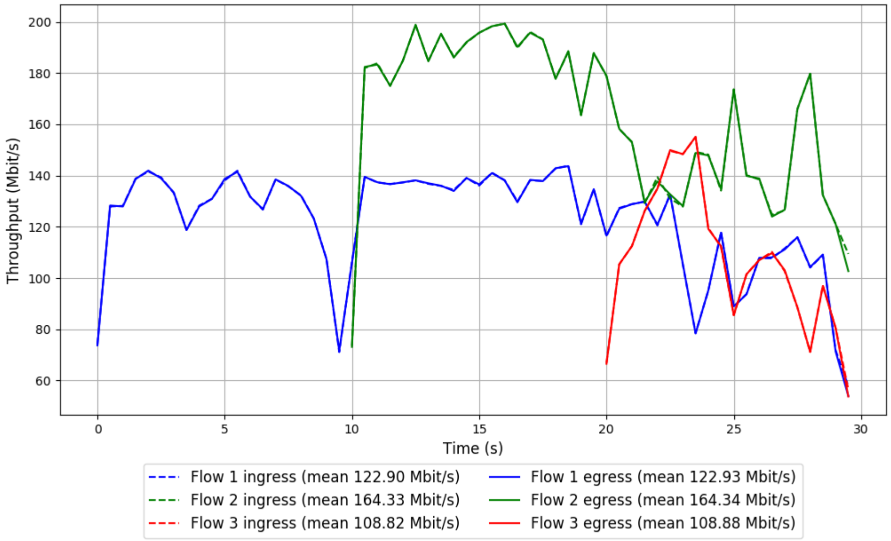
Run 1: Report of Indigo — Data Link

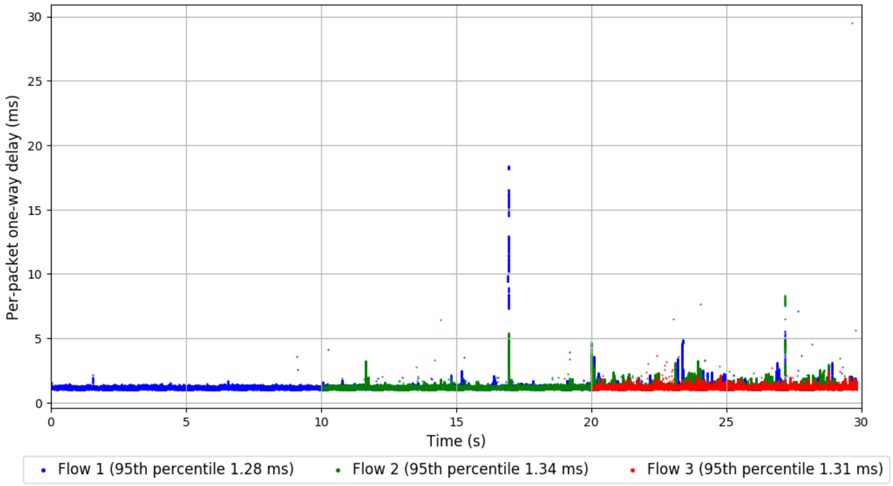




```
Run 2: Statistics of Indigo

Start at: 2017-12-11 20:22:53
End at: 2017-12-11 20:23:23
Local clock offset: -1.739 ms
Remote clock offset: -1.922 ms

# Below is generated by plot.py at 2017-12-12 04:32:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 267.55 Mbit/s
95th percentile per-packet one-way delay: 1.305 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 122.93 Mbit/s
95th percentile per-packet one-way delay: 1.277 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 164.34 Mbit/s
95th percentile per-packet one-way delay: 1.345 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 108.88 Mbit/s
95th percentile per-packet one-way delay: 1.311 ms
Loss rate: 0.14%
```

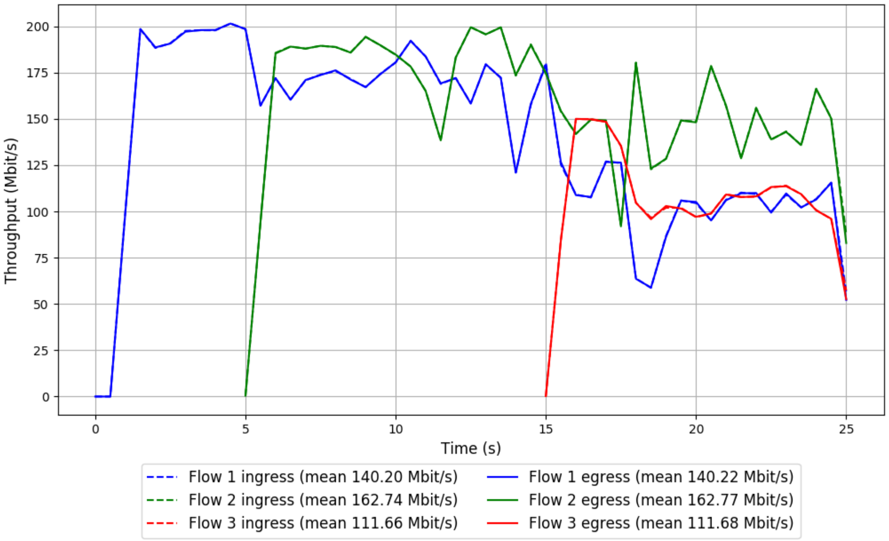
Run 2: Report of Indigo — Data Link

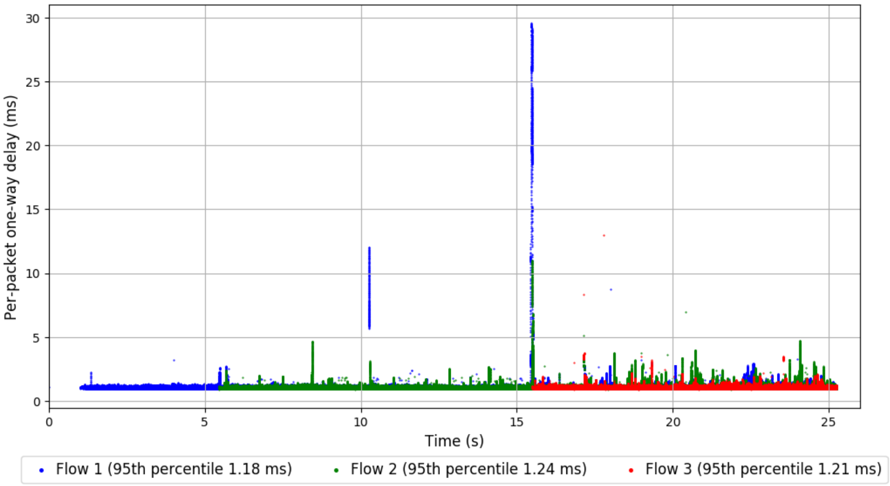




```
Run 3: Statistics of Indigo

Start at: 2017-12-11 20:43:21
End at: 2017-12-11 20:43:51
Local clock offset: -1.75 ms
Remote clock offset: -1.762 ms

# Below is generated by plot.py at 2017-12-12 04:32:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 310.92 Mbit/s
95th percentile per-packet one-way delay: 1.200 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 140.22 Mbit/s
95th percentile per-packet one-way delay: 1.178 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 162.77 Mbit/s
95th percentile per-packet one-way delay: 1.242 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 111.68 Mbit/s
95th percentile per-packet one-way delay: 1.207 ms
Loss rate: 0.23%
```

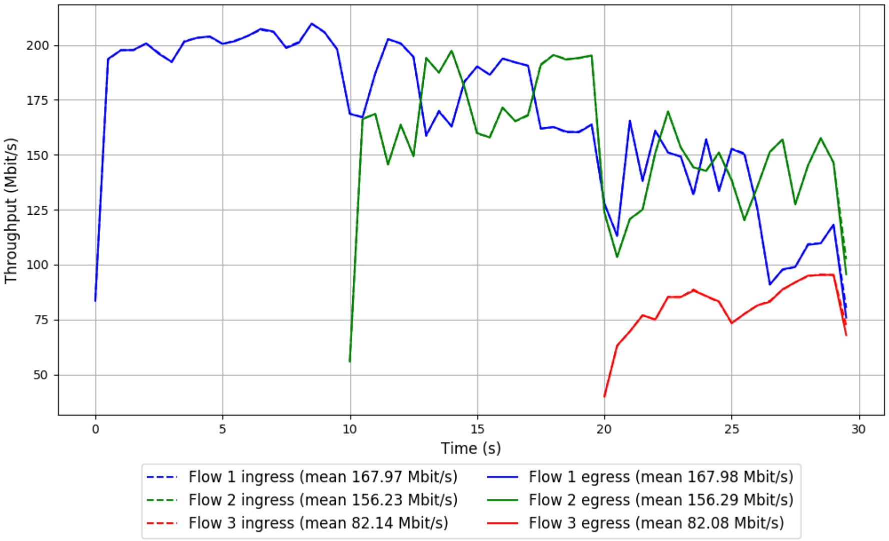
Run 3: Report of Indigo — Data Link

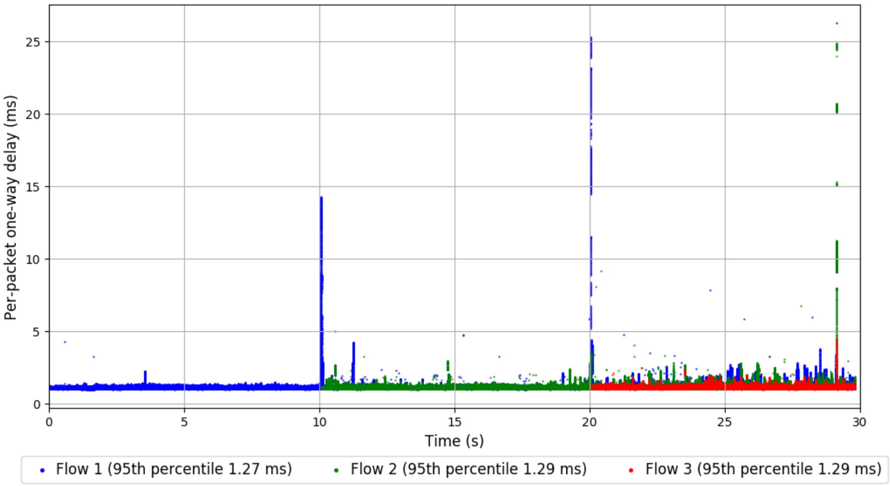




```
Run 4: Statistics of Indigo

Start at: 2017-12-11 21:04:01
End at: 2017-12-11 21:04:31
Local clock offset: -1.557 ms
Remote clock offset: -1.533 ms

# Below is generated by plot.py at 2017-12-12 04:33:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 298.12 Mbit/s
95th percentile per-packet one-way delay: 1.279 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 167.98 Mbit/s
95th percentile per-packet one-way delay: 1.269 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 156.29 Mbit/s
95th percentile per-packet one-way delay: 1.291 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 82.08 Mbit/s
95th percentile per-packet one-way delay: 1.294 ms
Loss rate: 0.28%
```

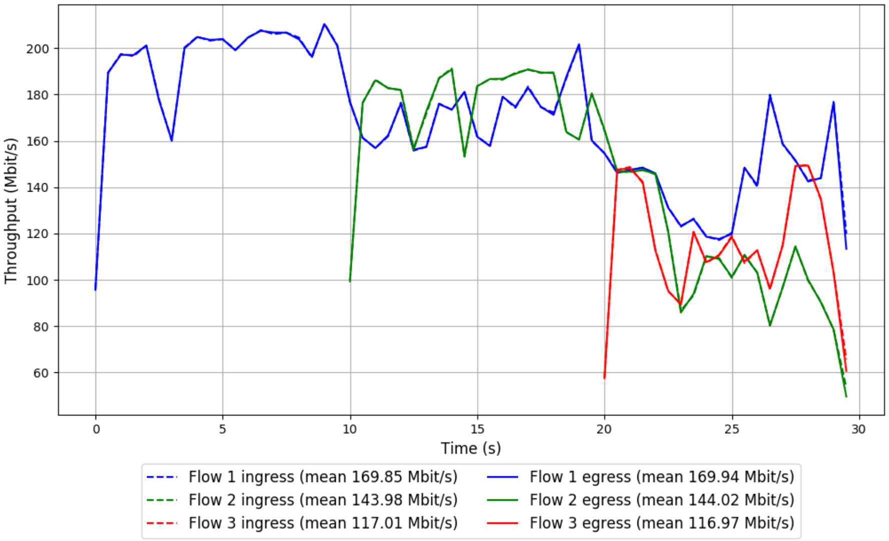
Run 4: Report of Indigo — Data Link

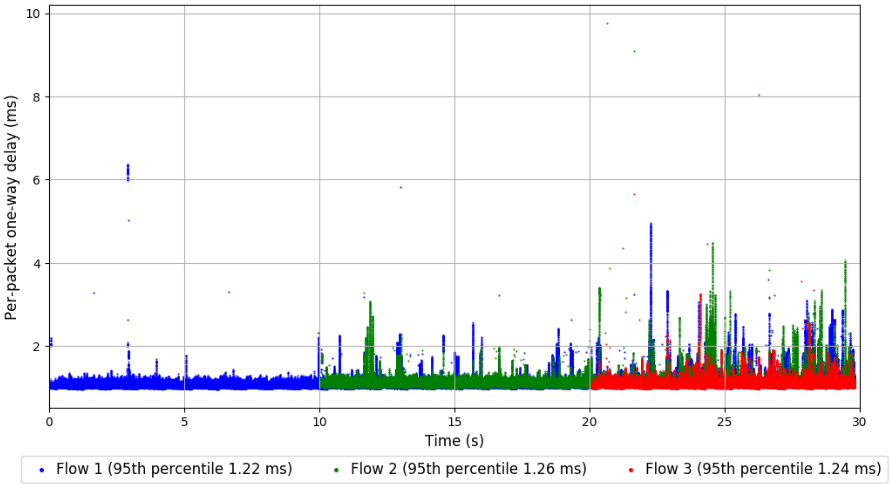




```
Run 5: Statistics of Indigo

Start at: 2017-12-11 21:24:39
End at: 2017-12-11 21:25:09
Local clock offset: -1.405 ms
Remote clock offset: -1.249 ms

# Below is generated by plot.py at 2017-12-12 04:34:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 303.79 Mbit/s
95th percentile per-packet one-way delay: 1.234 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 169.94 Mbit/s
95th percentile per-packet one-way delay: 1.215 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 144.02 Mbit/s
95th percentile per-packet one-way delay: 1.259 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 116.97 Mbit/s
95th percentile per-packet one-way delay: 1.241 ms
Loss rate: 0.22%
```

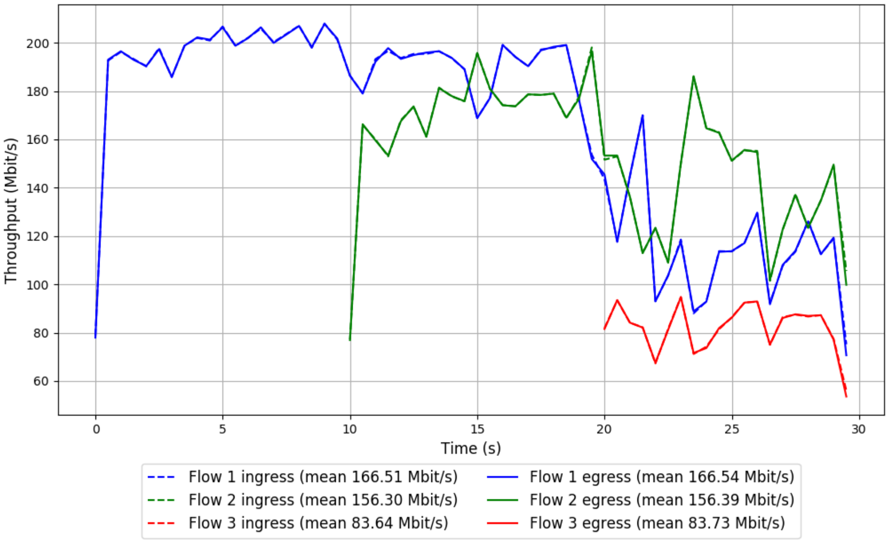
Run 5: Report of Indigo — Data Link

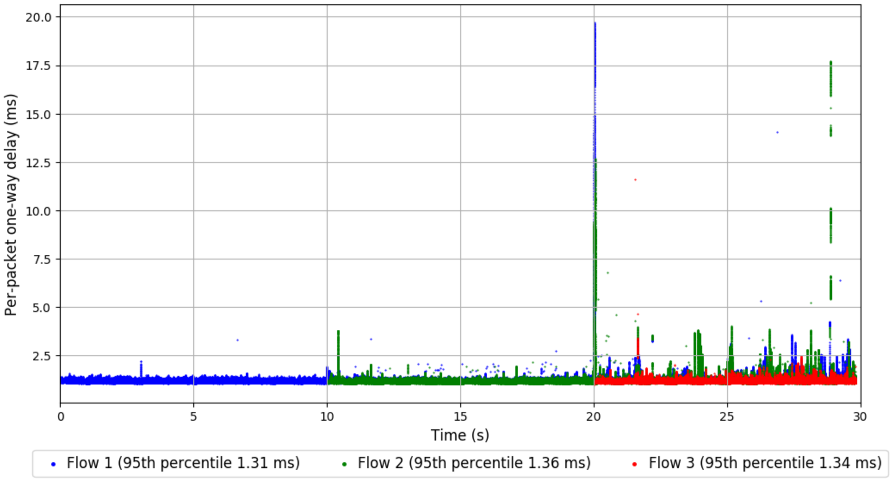




```
Run 6: Statistics of Indigo

Start at: 2017-12-11 21:45:15
End at: 2017-12-11 21:45:45
Local clock offset: -0.983 ms
Remote clock offset: -0.56 ms

# Below is generated by plot.py at 2017-12-12 04:34:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 297.60 Mbit/s
95th percentile per-packet one-way delay: 1.327 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 166.54 Mbit/s
95th percentile per-packet one-way delay: 1.313 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 156.39 Mbit/s
95th percentile per-packet one-way delay: 1.358 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 83.73 Mbit/s
95th percentile per-packet one-way delay: 1.338 ms
Loss rate: 0.17%
```

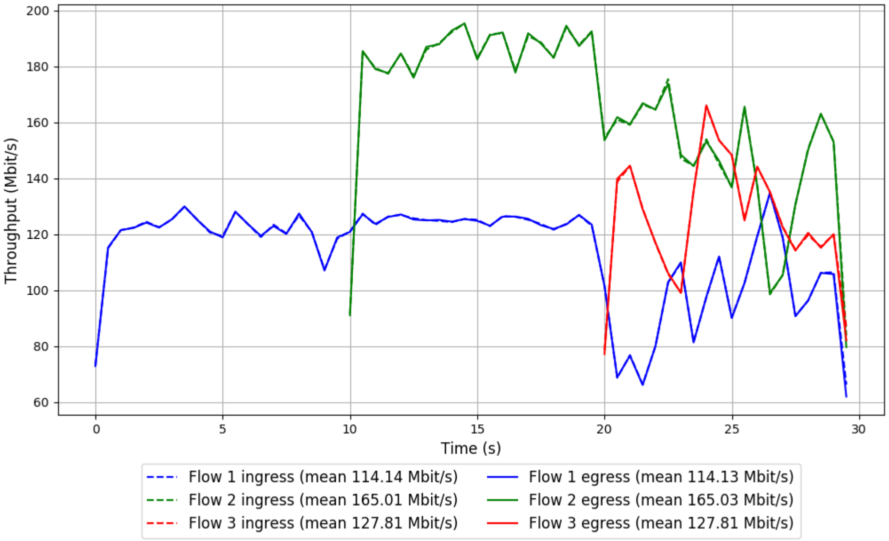
Run 6: Report of Indigo — Data Link

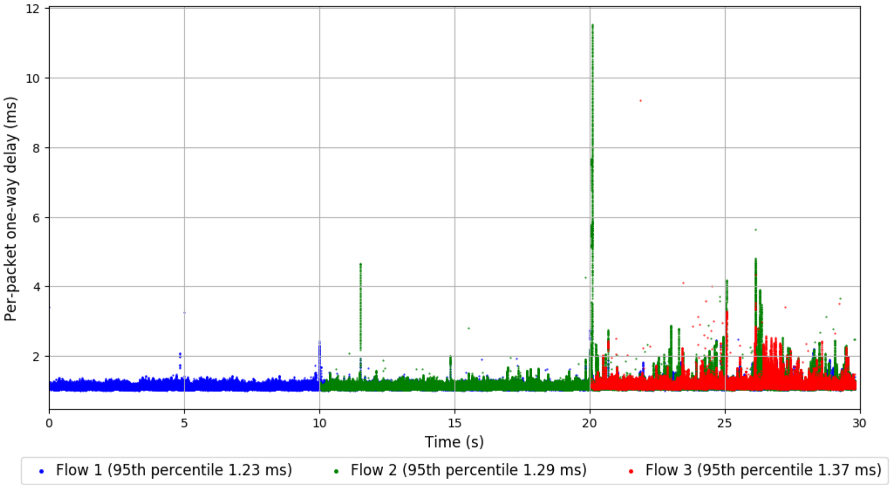




```
Run 7: Statistics of Indigo

Start at: 2017-12-11 22:05:46
End at: 2017-12-11 22:06:16
Local clock offset: -0.74 ms
Remote clock offset: -0.277 ms

# Below is generated by plot.py at 2017-12-12 04:34:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 265.45 Mbit/s
95th percentile per-packet one-way delay: 1.277 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 114.13 Mbit/s
95th percentile per-packet one-way delay: 1.232 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 165.03 Mbit/s
95th percentile per-packet one-way delay: 1.294 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 127.81 Mbit/s
95th percentile per-packet one-way delay: 1.374 ms
Loss rate: 0.21%
```

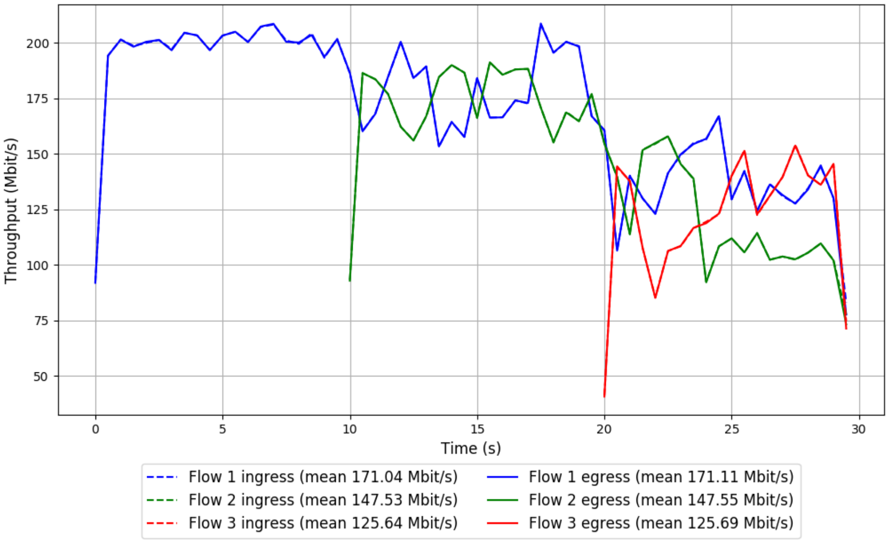
Run 7: Report of Indigo — Data Link

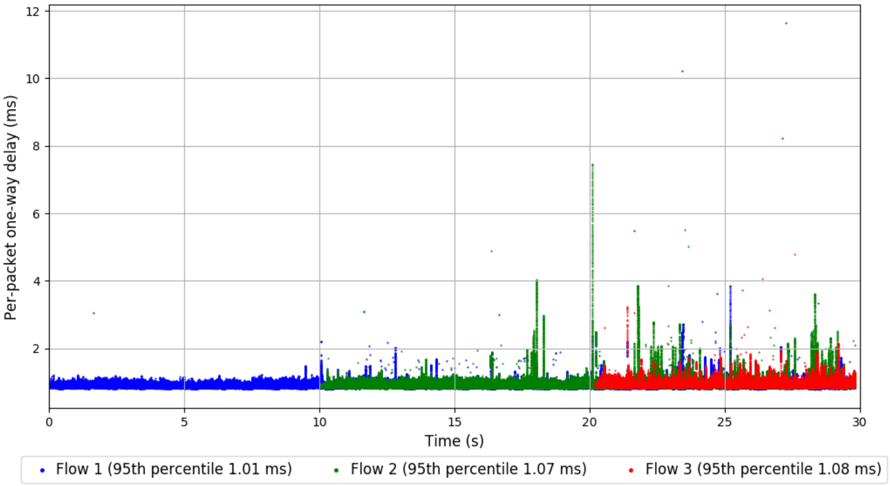




```
Run 8: Statistics of Indigo

Start at: 2017-12-11 22:26:25
End at: 2017-12-11 22:26:55
Local clock offset: -0.534 ms
Remote clock offset: 0.105 ms

# Below is generated by plot.py at 2017-12-12 04:35:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 309.46 Mbit/s
95th percentile per-packet one-way delay: 1.038 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 171.11 Mbit/s
95th percentile per-packet one-way delay: 1.010 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 147.55 Mbit/s
95th percentile per-packet one-way delay: 1.070 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 125.69 Mbit/s
95th percentile per-packet one-way delay: 1.084 ms
Loss rate: 0.14%
```

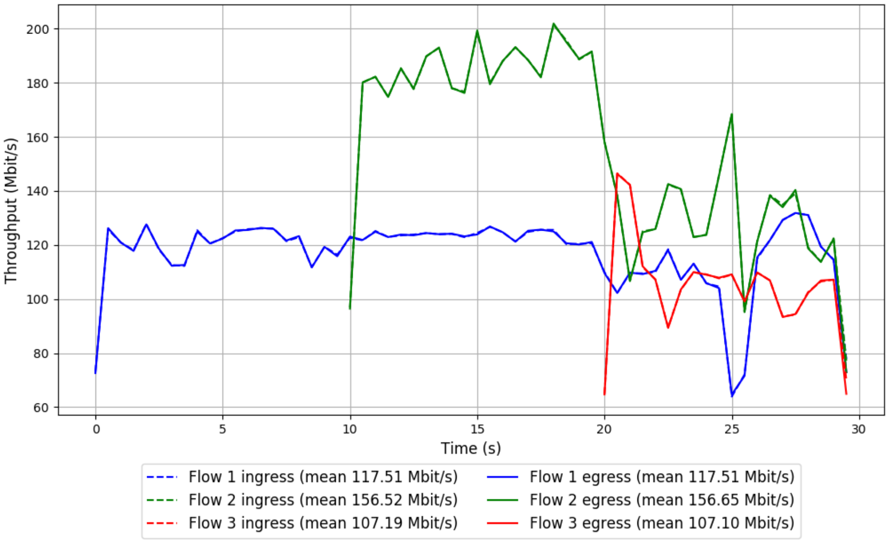
Run 8: Report of Indigo — Data Link

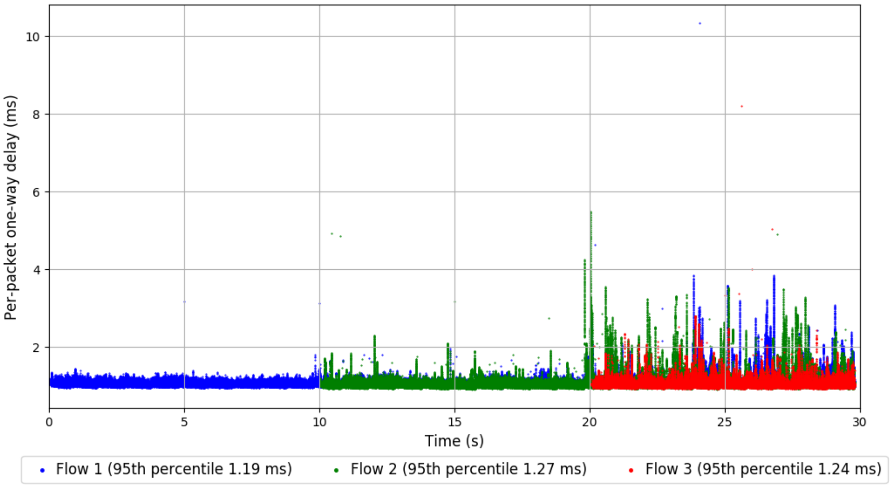




```
Run 9: Statistics of Indigo

Start at: 2017-12-11 22:47:09
End at: 2017-12-11 22:47:39
Local clock offset: -0.218 ms
Remote clock offset: -0.424 ms

# Below is generated by plot.py at 2017-12-12 04:35:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 256.47 Mbit/s
95th percentile per-packet one-way delay: 1.220 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 117.51 Mbit/s
95th percentile per-packet one-way delay: 1.187 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 156.65 Mbit/s
95th percentile per-packet one-way delay: 1.269 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 107.10 Mbit/s
95th percentile per-packet one-way delay: 1.240 ms
Loss rate: 0.25%
```

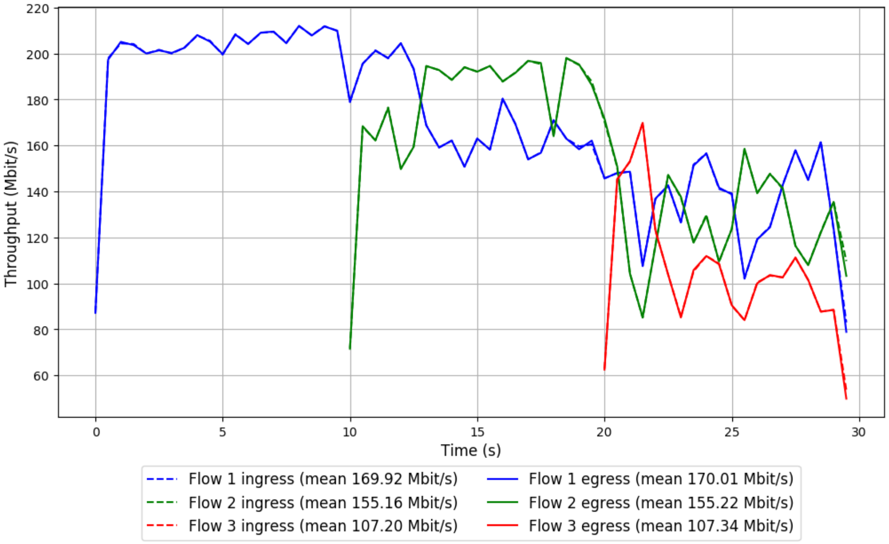
Run 9: Report of Indigo — Data Link

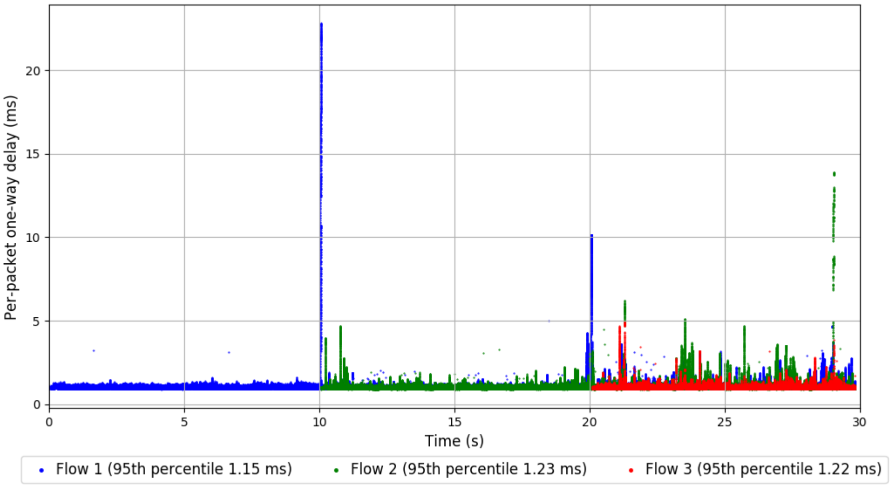




```
Run 10: Statistics of Indigo

Start at: 2017-12-11 23:07:49
End at: 2017-12-11 23:08:19
Local clock offset: 0.078 ms
Remote clock offset: -0.193 ms

# Below is generated by plot.py at 2017-12-12 04:36:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 307.76 Mbit/s
95th percentile per-packet one-way delay: 1.176 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 170.01 Mbit/s
95th percentile per-packet one-way delay: 1.149 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 155.22 Mbit/s
95th percentile per-packet one-way delay: 1.228 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 107.34 Mbit/s
95th percentile per-packet one-way delay: 1.220 ms
Loss rate: 0.18%
```

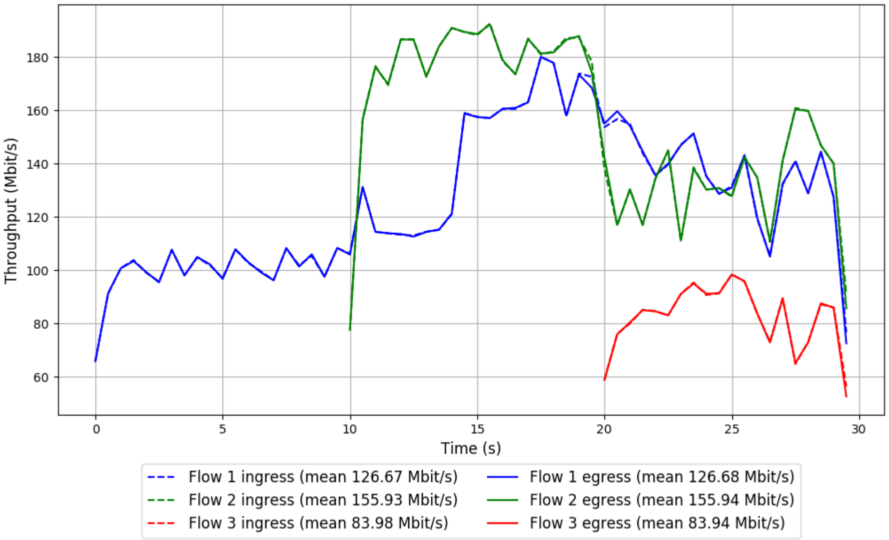
Run 10: Report of Indigo — Data Link

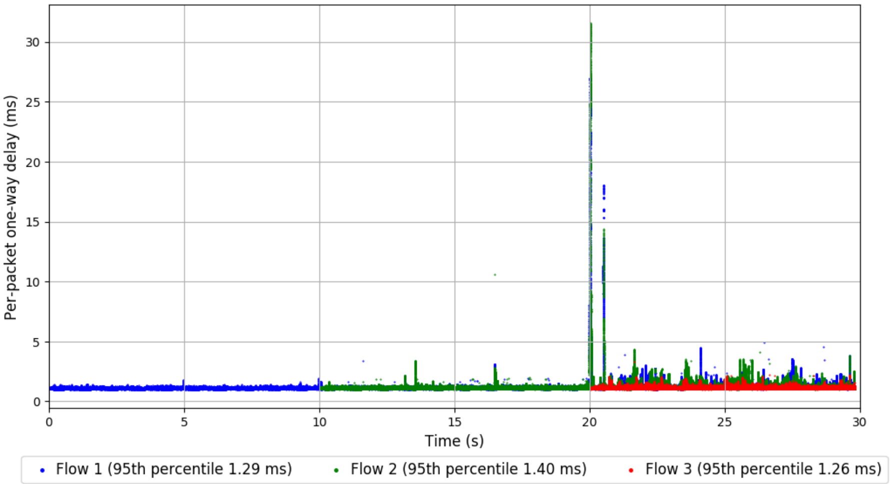




```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-11 20:11:05
End at: 2017-12-11 20:11:35
Local clock offset: -1.825 ms
Remote clock offset: -2.222 ms

# Below is generated by plot.py at 2017-12-12 04:36:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 257.72 Mbit/s
95th percentile per-packet one-way delay: 1.322 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 126.68 Mbit/s
95th percentile per-packet one-way delay: 1.289 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 155.94 Mbit/s
95th percentile per-packet one-way delay: 1.400 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 83.94 Mbit/s
95th percentile per-packet one-way delay: 1.265 ms
Loss rate: 0.24%
```

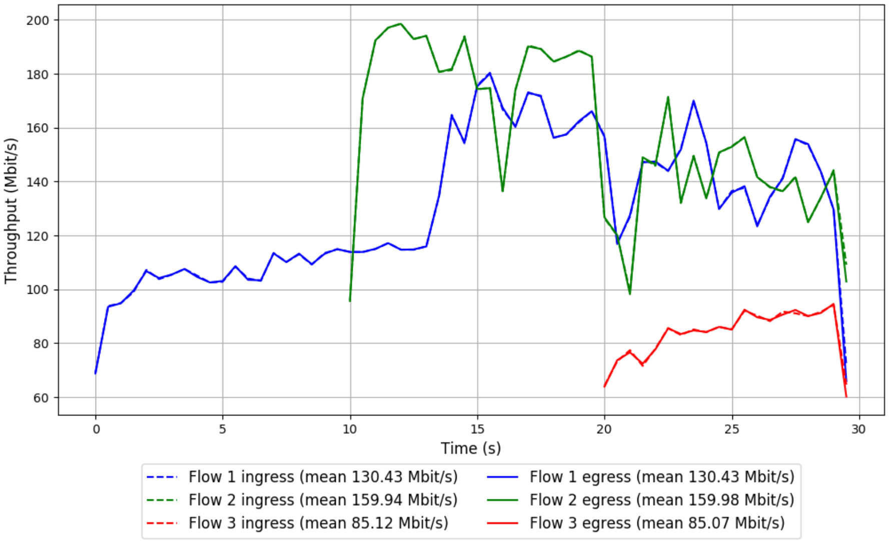
Run 1: Report of Indigo-calib — Data Link

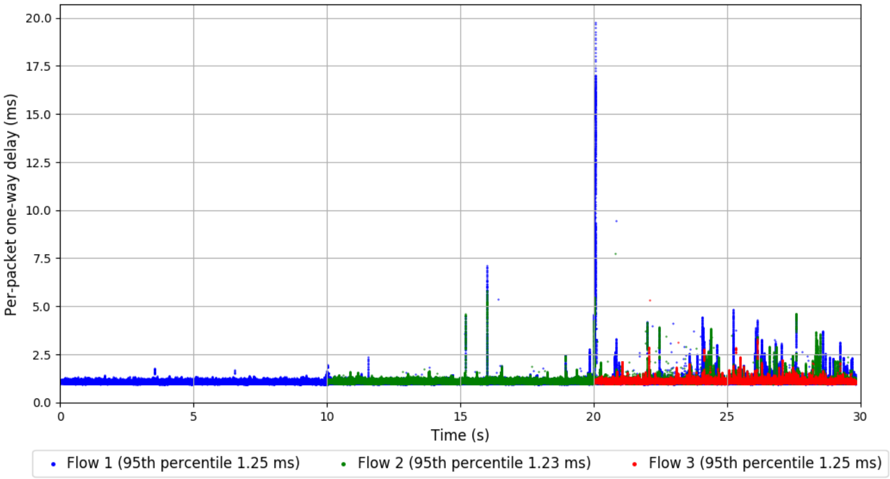




```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-11 20:31:51
End at: 2017-12-11 20:32:21
Local clock offset: -1.701 ms
Remote clock offset: -1.772 ms

# Below is generated by plot.py at 2017-12-12 04:37:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 264.54 Mbit/s
95th percentile per-packet one-way delay: 1.235 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 130.43 Mbit/s
95th percentile per-packet one-way delay: 1.245 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 159.98 Mbit/s
95th percentile per-packet one-way delay: 1.225 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 85.07 Mbit/s
95th percentile per-packet one-way delay: 1.245 ms
Loss rate: 0.27%
```

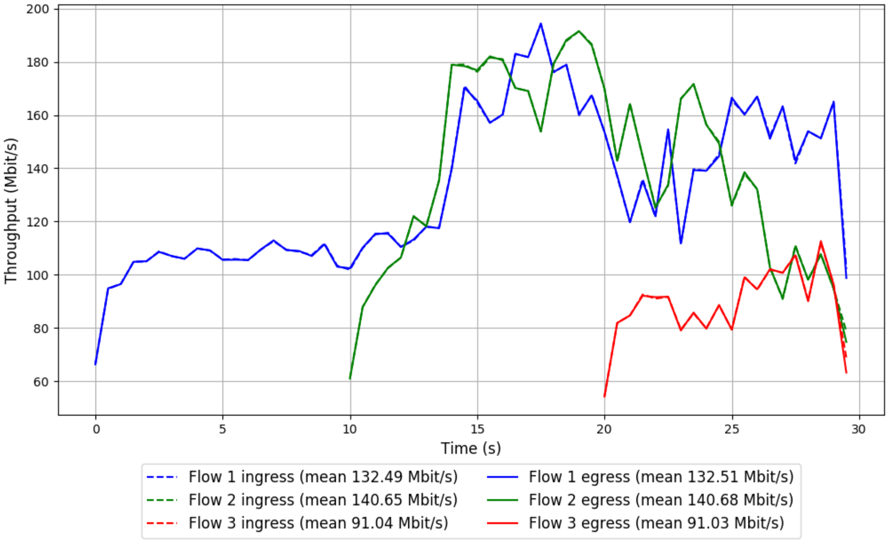
Run 2: Report of Indigo-calib — Data Link

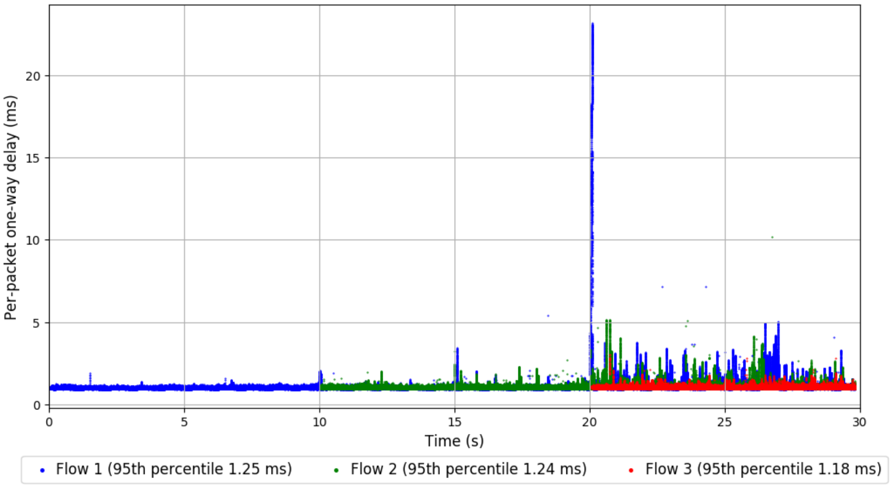




```
Run 3: Statistics of Indigo-calib

Start at: 2017-12-11 20:52:23
End at: 2017-12-11 20:52:53
Local clock offset: -1.632 ms
Remote clock offset: -1.439 ms

# Below is generated by plot.py at 2017-12-12 04:37:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 255.60 Mbit/s
95th percentile per-packet one-way delay: 1.232 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 132.51 Mbit/s
95th percentile per-packet one-way delay: 1.247 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 140.68 Mbit/s
95th percentile per-packet one-way delay: 1.239 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 91.03 Mbit/s
95th percentile per-packet one-way delay: 1.183 ms
Loss rate: 0.31%
```

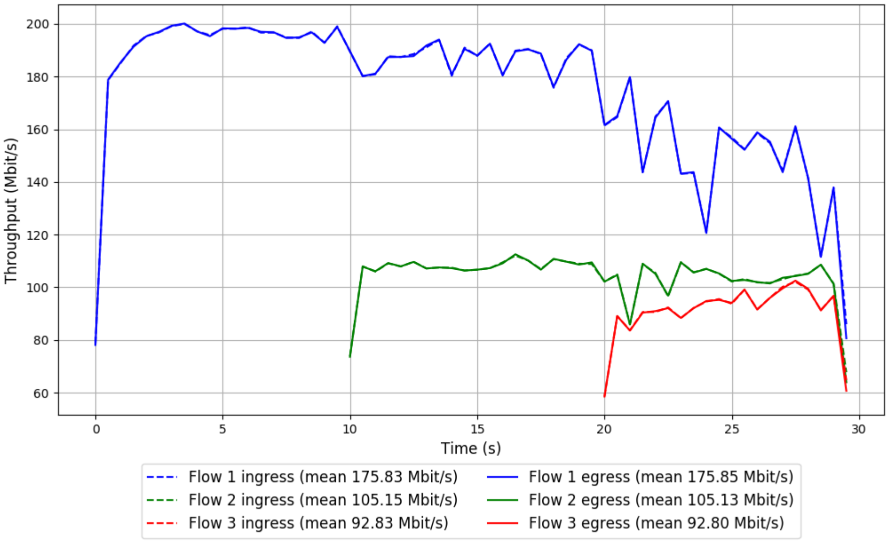
Run 3: Report of Indigo-calib — Data Link

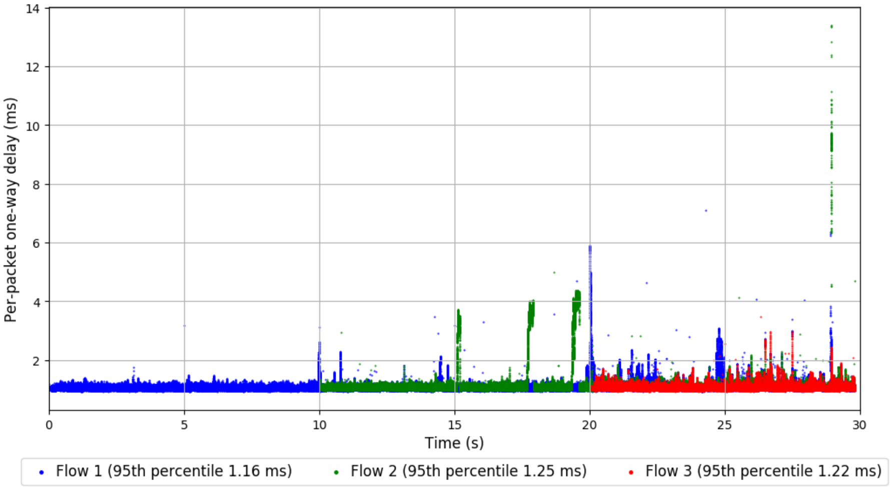




```
Run 4: Statistics of Indigo-calib

Start at: 2017-12-11 21:13:07
End at: 2017-12-11 21:13:37
Local clock offset: -1.584 ms
Remote clock offset: -1.478 ms

# Below is generated by plot.py at 2017-12-12 04:38:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 275.90 Mbit/s
95th percentile per-packet one-way delay: 1.185 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 175.85 Mbit/s
95th percentile per-packet one-way delay: 1.160 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 105.13 Mbit/s
95th percentile per-packet one-way delay: 1.255 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 92.80 Mbit/s
95th percentile per-packet one-way delay: 1.221 ms
Loss rate: 0.23%
```

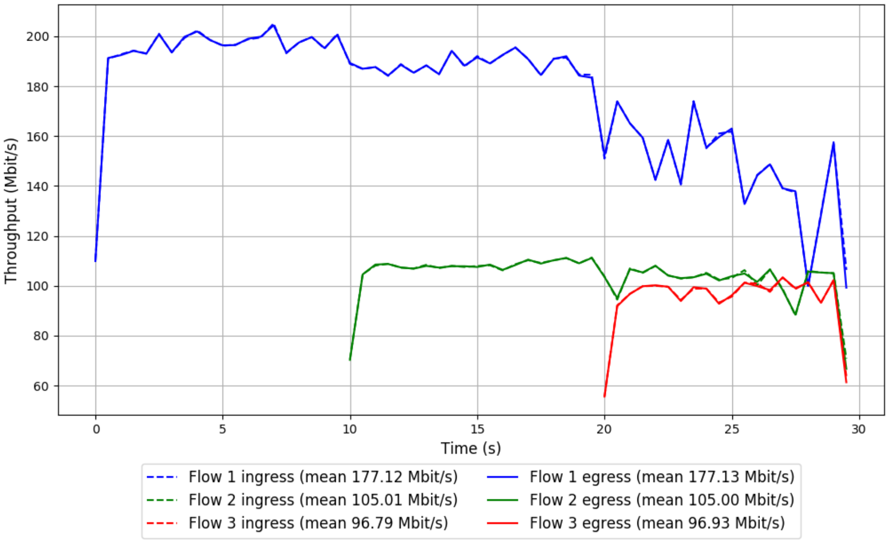
Run 4: Report of Indigo-calib — Data Link

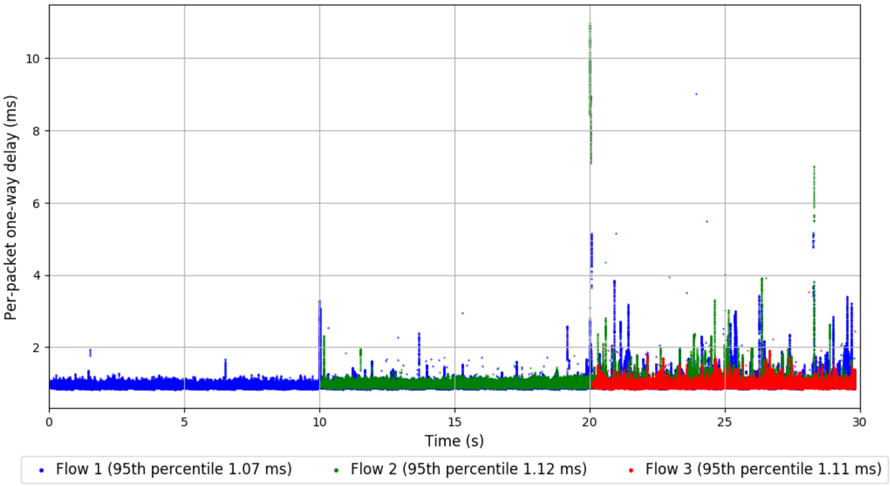




```
Run 5: Statistics of Indigo-calib

Start at: 2017-12-11 21:33:36
End at: 2017-12-11 21:34:06
Local clock offset: -1.322 ms
Remote clock offset: -0.882 ms

# Below is generated by plot.py at 2017-12-12 04:38:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 278.33 Mbit/s
95th percentile per-packet one-way delay: 1.089 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 177.13 Mbit/s
95th percentile per-packet one-way delay: 1.068 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 105.00 Mbit/s
95th percentile per-packet one-way delay: 1.116 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 96.93 Mbit/s
95th percentile per-packet one-way delay: 1.113 ms
Loss rate: 0.14%
```

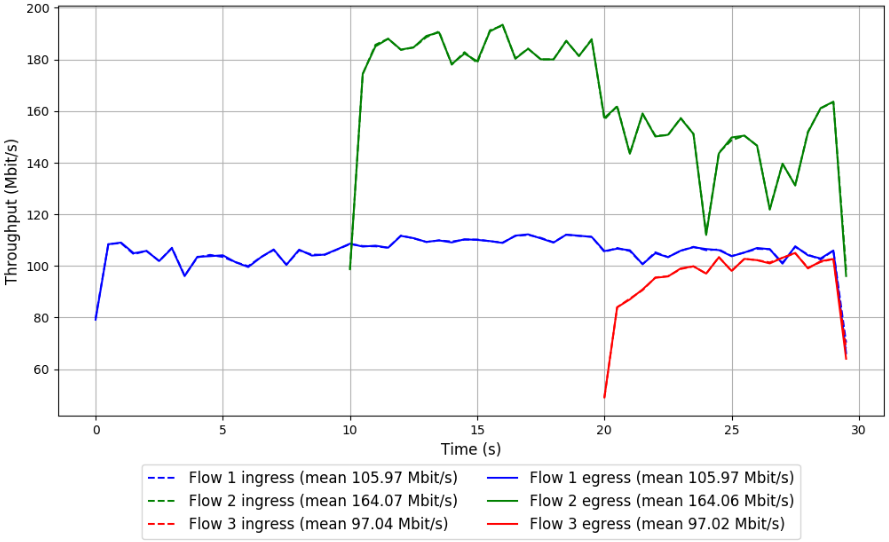
Run 5: Report of Indigo-calib — Data Link

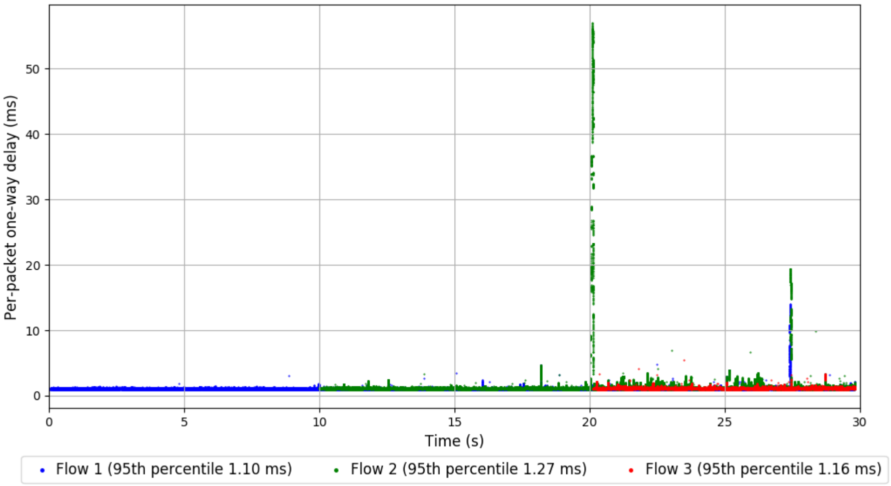




```
Run 6: Statistics of Indigo-calib

Start at: 2017-12-11 21:54:16
End at: 2017-12-11 21:54:46
Local clock offset: -0.873 ms
Remote clock offset: -0.412 ms

# Below is generated by plot.py at 2017-12-12 04:38:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 246.48 Mbit/s
95th percentile per-packet one-way delay: 1.169 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 105.97 Mbit/s
95th percentile per-packet one-way delay: 1.103 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 164.06 Mbit/s
95th percentile per-packet one-way delay: 1.266 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 97.02 Mbit/s
95th percentile per-packet one-way delay: 1.159 ms
Loss rate: 0.23%
```

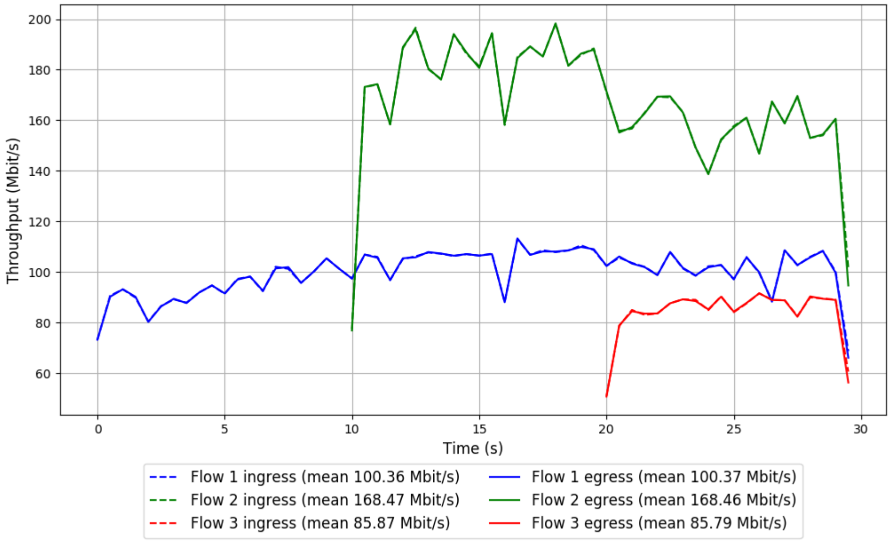
Run 6: Report of Indigo-calib — Data Link

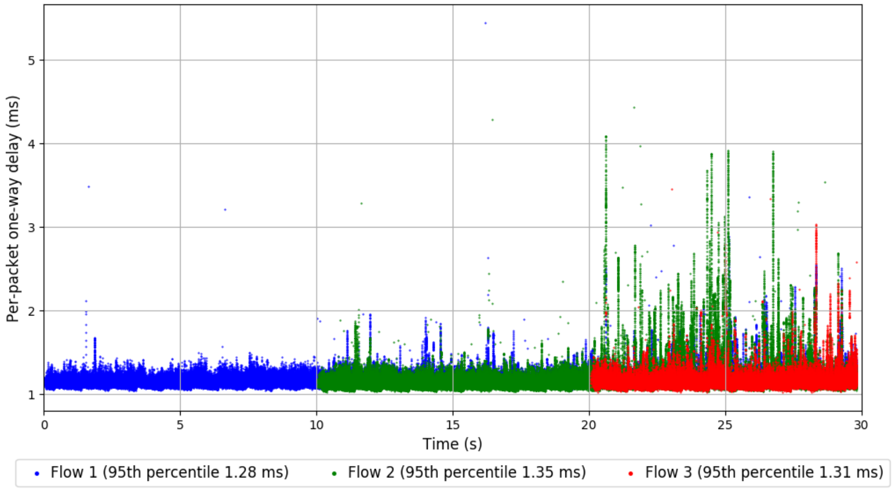




```
Run 7: Statistics of Indigo-calib

Start at: 2017-12-11 22:14:45
End at: 2017-12-11 22:15:15
Local clock offset: -0.63 ms
Remote clock offset: -0.06 ms

# Below is generated by plot.py at 2017-12-12 04:38:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 240.16 Mbit/s
95th percentile per-packet one-way delay: 1.305 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 100.37 Mbit/s
95th percentile per-packet one-way delay: 1.276 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 168.46 Mbit/s
95th percentile per-packet one-way delay: 1.351 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 85.79 Mbit/s
95th percentile per-packet one-way delay: 1.311 ms
Loss rate: 0.27%
```

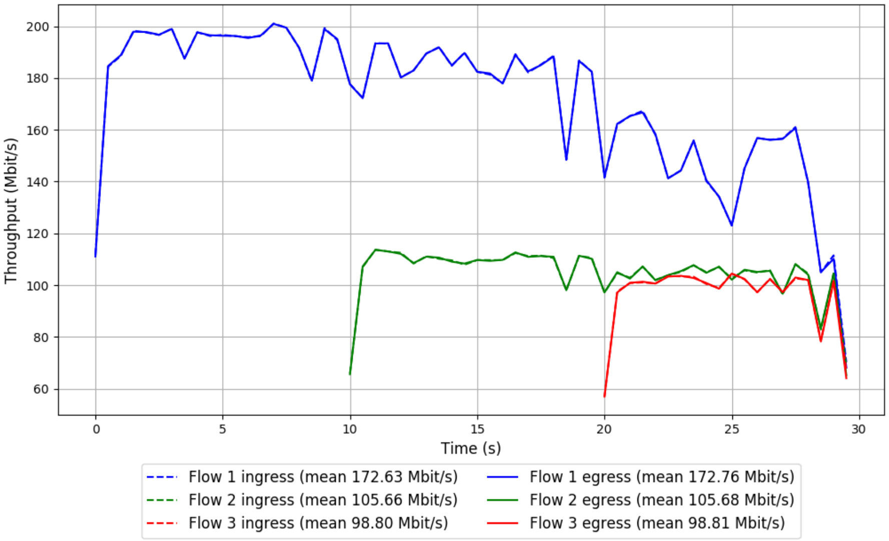
Run 7: Report of Indigo-calib — Data Link

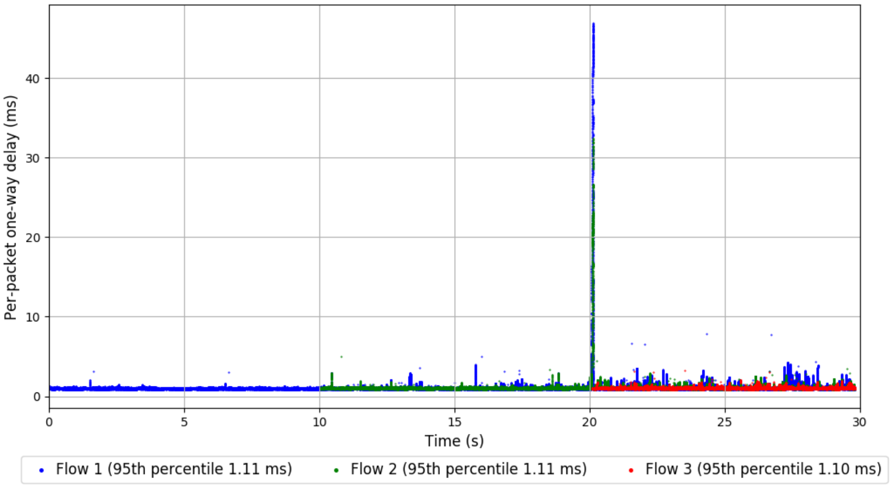




```
Run 8: Statistics of Indigo-calib

Start at: 2017-12-11 22:35:28
End at: 2017-12-11 22:35:58
Local clock offset: -0.421 ms
Remote clock offset: -0.163 ms

# Below is generated by plot.py at 2017-12-12 04:39:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 274.96 Mbit/s
95th percentile per-packet one-way delay: 1.110 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 172.76 Mbit/s
95th percentile per-packet one-way delay: 1.112 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 105.68 Mbit/s
95th percentile per-packet one-way delay: 1.113 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 98.81 Mbit/s
95th percentile per-packet one-way delay: 1.097 ms
Loss rate: 0.18%
```

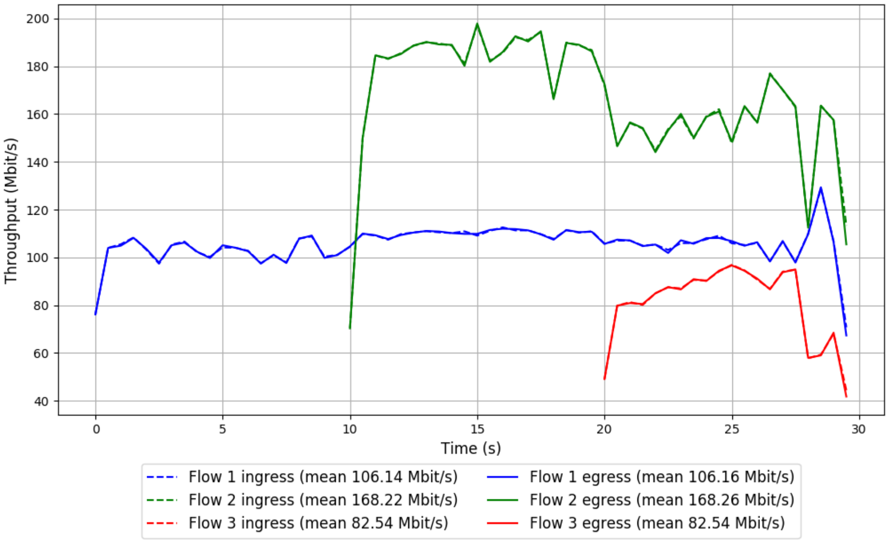
Run 8: Report of Indigo-calib — Data Link

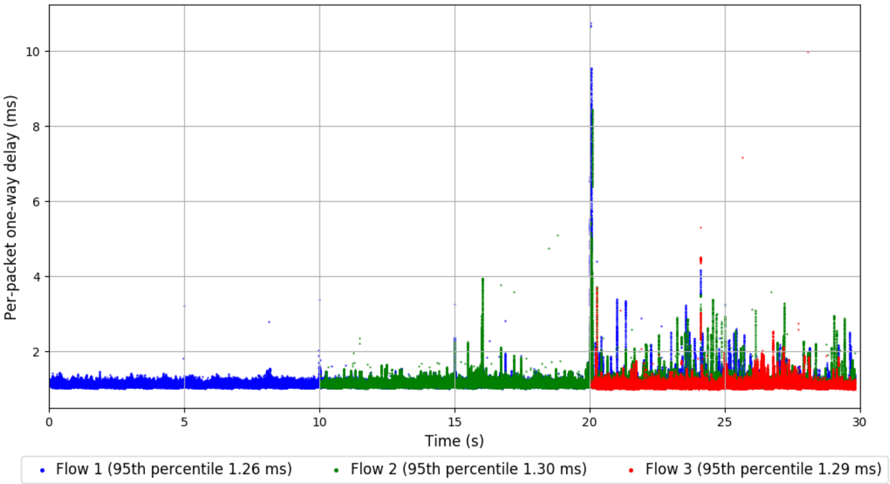




```
Run 9: Statistics of Indigo-calib

Start at: 2017-12-11 22:56:09
End at: 2017-12-11 22:56:39
Local clock offset: 0.003 ms
Remote clock offset: -0.296 ms

# Below is generated by plot.py at 2017-12-12 04:39:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 244.86 Mbit/s
95th percentile per-packet one-way delay: 1.281 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 106.16 Mbit/s
95th percentile per-packet one-way delay: 1.260 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 168.26 Mbit/s
95th percentile per-packet one-way delay: 1.300 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 82.54 Mbit/s
95th percentile per-packet one-way delay: 1.290 ms
Loss rate: 0.16%
```

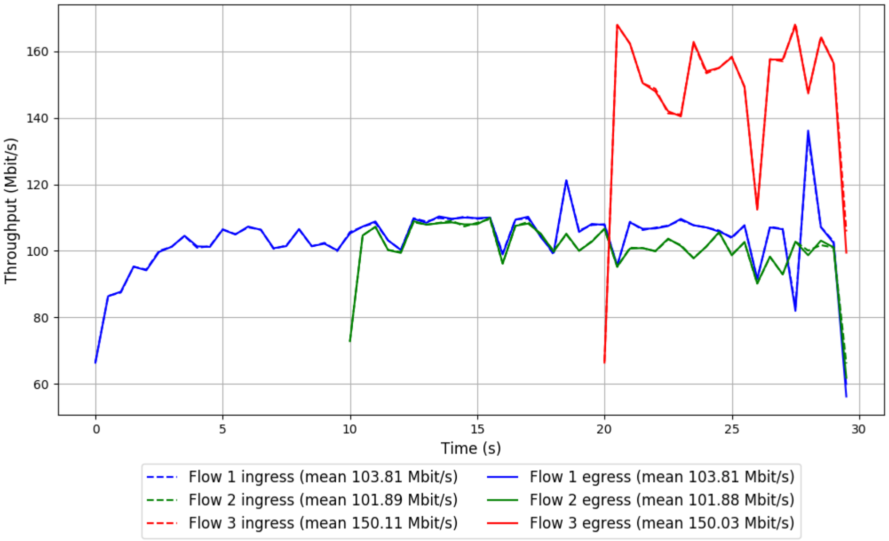
Run 9: Report of Indigo-calib — Data Link



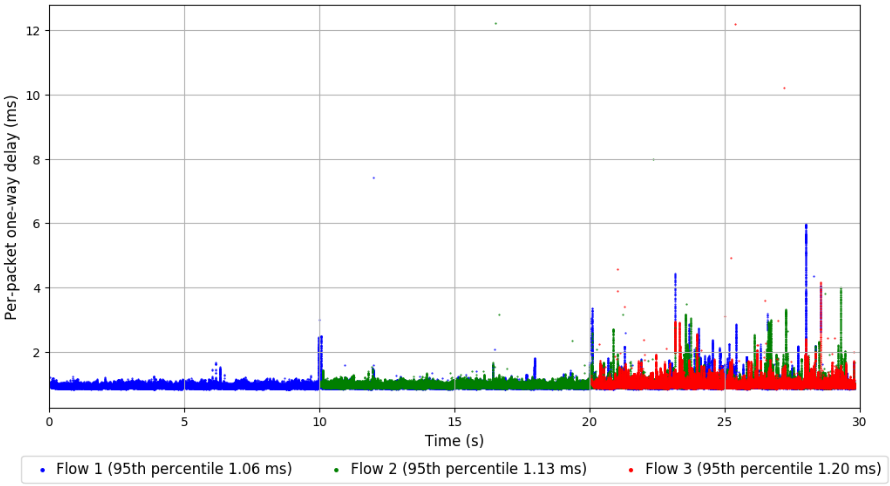


```
Run 10: Statistics of Indigo-calib

Start at: 2017-12-11 23:16:51
End at: 2017-12-11 23:17:21
Local clock offset: 0.097 ms
Remote clock offset: -0.129 ms

# Below is generated by plot.py at 2017-12-12 04:39:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 220.39 Mbit/s
95th percentile per-packet one-way delay: 1.116 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 103.81 Mbit/s
95th percentile per-packet one-way delay: 1.065 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 101.88 Mbit/s
95th percentile per-packet one-way delay: 1.127 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 150.03 Mbit/s
95th percentile per-packet one-way delay: 1.203 ms
Loss rate: 0.25%
```

Run 10: Report of Indigo-calib — Data Link



Throughput (Mbit/s)
60
80
100
120
140
160
0
5
10
15
20
25
30
Time (s)
Flow 1 ingress (mean 103.81 Mbit/s)
Flow 2 ingress (mean 101.89 Mbit/s)
Flow 3 ingress (mean 150.11 Mbit/s)
Flow 1 egress (mean 103.81 Mbit/s)
Flow 2 egress (mean 101.88 Mbit/s)
Flow 3 egress (mean 150.03 Mbit/s)



Per-packet one-way delay (ms)
2
4
6
8
10
12
0
5
10
15
20
25
30
Time (s)
Flow 1 (95th percentile 1.06 ms)
Flow 2 (95th percentile 1.13 ms)
Flow 3 (95th percentile 1.20 ms)