Pantheon Report

Generated at 2018-03-21 14:32:04 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

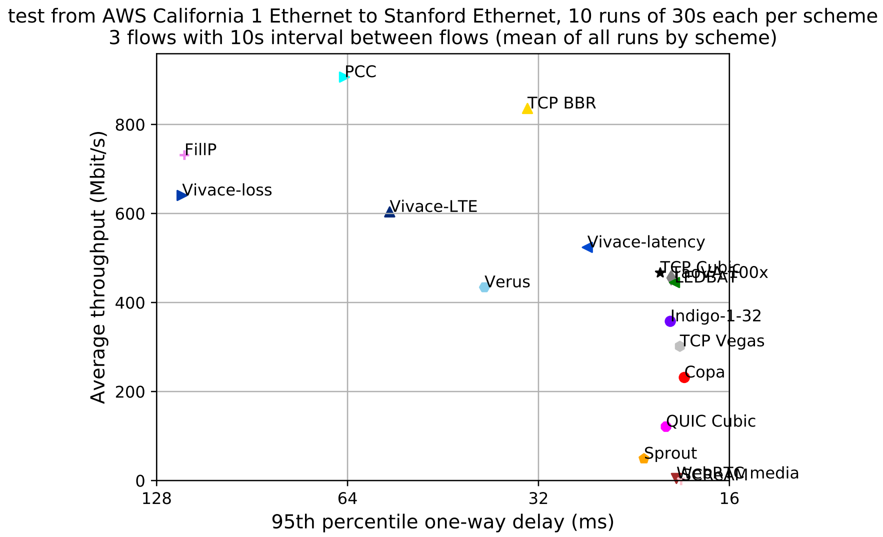
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

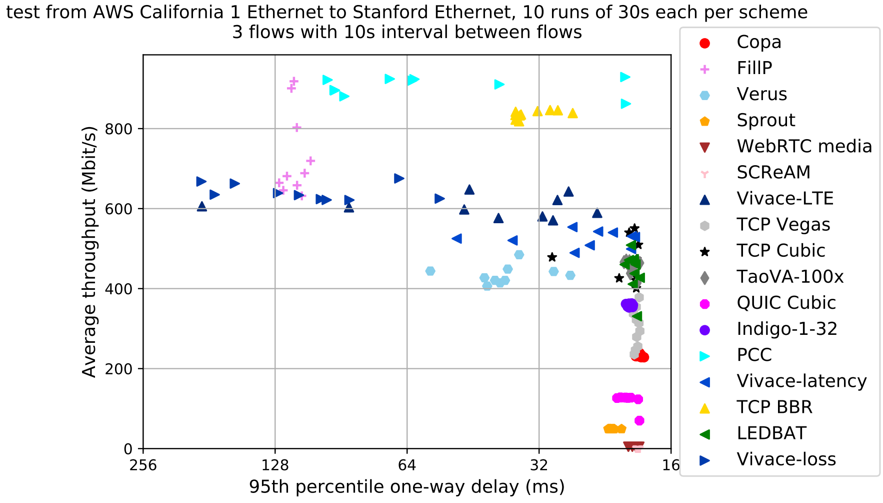
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

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

```
Git summary:
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
 M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```


test from AWS California 1 Ethernet to Stanford Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)
Average throughput (Mbit/s)
0
200
400
600
800
95th percentile one-way delay (ms)
128
64
32
16
PCC
TCP BBR
FillP
Vivace-loss
Vivace-LTE
Vivace-latency
TCP Cubic
TaoVA-100x
LEDBAT
Verus
Indigo-1-32
TCP Vegas
Copa
QUIC Cubic
Sprout
WebRTC media
SCReAM


test from AWS California 1 Ethernet to Stanford Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows
Average throughput (Mbit/s)
0
200
400
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95th percentile one-way delay (ms)
256
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Copa
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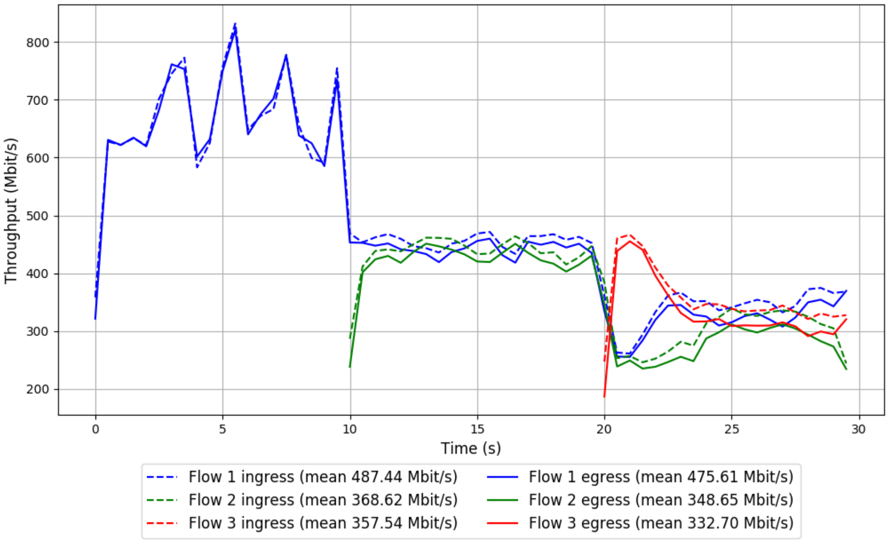
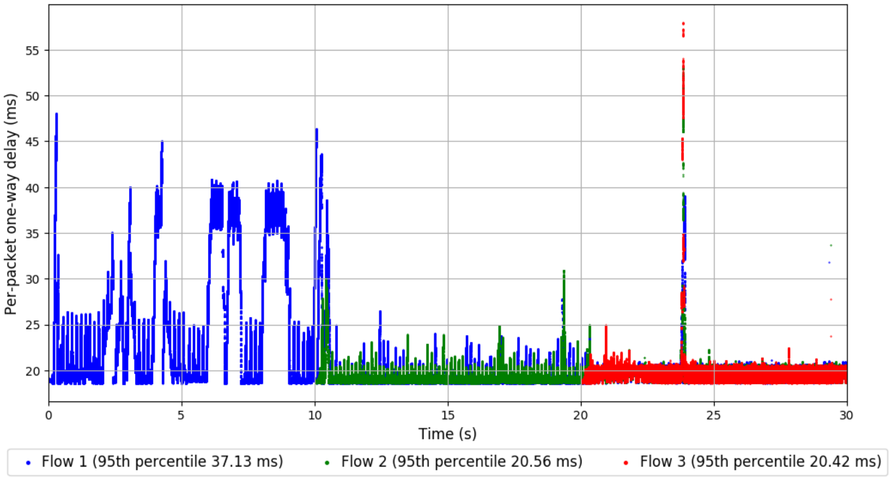
Sprout
WebRTC media
SCReAM
Vivace-LTE
TCP Vegas
TCP Cubic
TaoVA-100x
QUIC Cubic
Indigo-1-32
PCC
Vivace-latency
TCP BBR
LEDBAT
Vivace-loss

scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	481.67	383.56	297.82	36.02	22.62	20.32	2.72	4.91	6.39
TCP Cubic	10	261.34	193.03	231.22	24.90	19.01	19.00	0.05	0.07	0.10
LEDBAT	10	244.06	221.55	160.71	19.58	19.36	19.10	0.01	0.02	0.02
PCC	10	707.99	257.00	83.68	68.07	19.88	20.00	1.37	1.10	0.48
QUIC Cubic	10	61.54	62.13	56.18	19.61	19.40	21.00	0.00	0.01	0.02
SCReAM	10	0.22	0.22	0.22	18.65	18.92	18.67	0.00	0.00	0.00
WebRTC media	10	2.44	1.59	0.69	19.44	18.97	19.59	0.00	0.02	0.00
Sprout	10	24.73	24.62	24.34	21.78	21.55	21.67	0.01	0.01	0.04
TaoVA-100x	10	241.60	216.89	209.04	18.85	19.80	20.85	0.00	0.01	0.03
TCP Vegas	10	154.31	109.88	223.05	18.91	18.96	19.12	0.01	0.09	0.04
Verus	10	225.13	216.98	198.24	41.77	32.18	47.06	11.97	13.66	14.30
Copa	10	113.44	114.01	127.30	18.57	18.57	18.52	0.00	0.00	0.01
FillP	10	402.19	269.56	451.69	113.31	81.75	98.16	10.73	15.88	14.83
Indigo-1-32	10	187.06	178.21	164.36	19.02	19.76	20.88	0.01	0.01	0.01
Vivace-latency	10	306.91	273.92	105.75	36.92	24.49	19.08	0.02	0.07	0.06
Vivace-loss	10	348.85	328.06	223.53	132.12	81.59	22.20	1.37	0.93	1.54
Vivace-LTE	10	348.86	317.90	131.88	64.42	46.32	19.31	0.21	0.15	0.25

```
Run 1: Statistics of TCP BBR

Start at: 2018-03-21 04:36:24
End at: 2018-03-21 04:36:54
Local clock offset: 0.865 ms
Remote clock offset: -5.625 ms

# Below is generated by plot.py at 2018-03-21 12:18:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 818.34 Mbit/s
95th percentile per-packet one-way delay: 35.548 ms
Loss rate: 3.91%
-- Flow 1:
Average throughput: 475.61 Mbit/s
95th percentile per-packet one-way delay: 37.132 ms
Loss rate: 2.42%
-- Flow 2:
Average throughput: 348.65 Mbit/s
95th percentile per-packet one-way delay: 20.561 ms
Loss rate: 5.41%
-- Flow 3:
Average throughput: 332.70 Mbit/s
95th percentile per-packet one-way delay: 20.421 ms
Loss rate: 6.94%
```

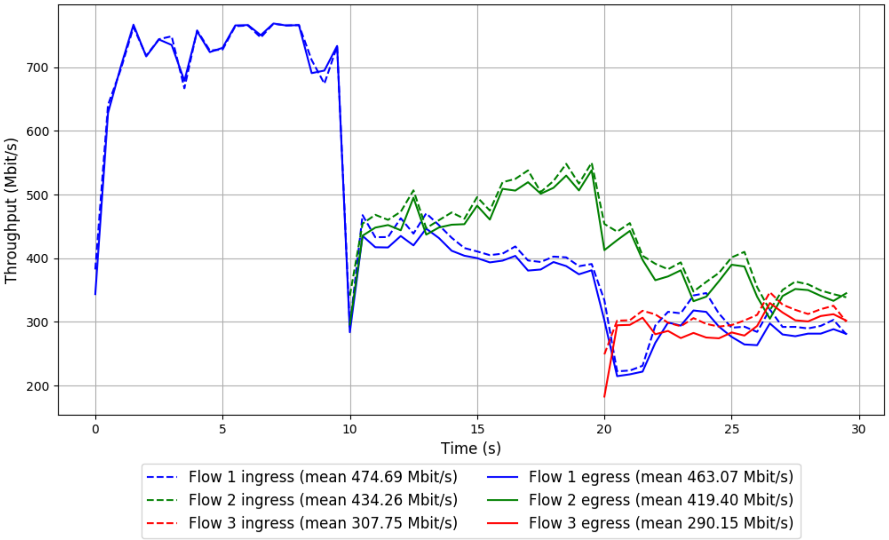
Run 1: Report of TCP BBR — Data Link

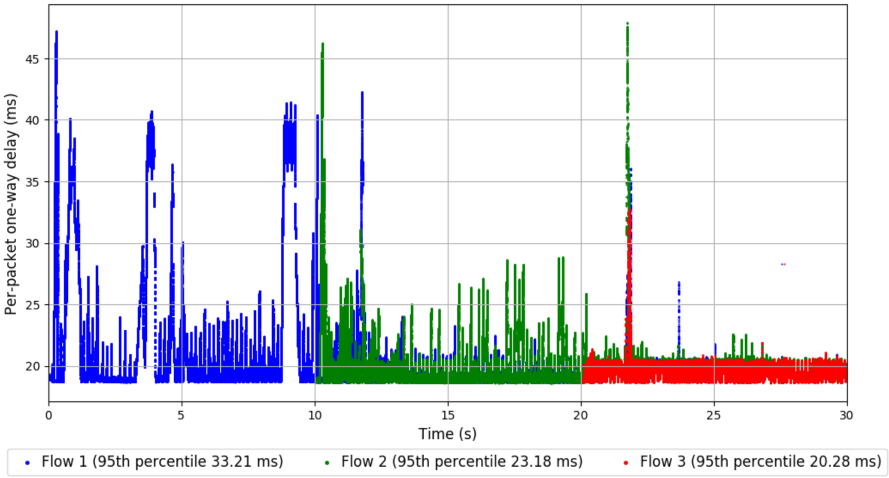




```
Run 2: Statistics of TCP BBR

Start at: 2018-03-21 05:05:32
End at: 2018-03-21 05:06:02
Local clock offset: -0.109 ms
Remote clock offset: -5.9 ms

# Below is generated by plot.py at 2018-03-21 12:19:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 838.77 Mbit/s
95th percentile per-packet one-way delay: 26.815 ms
Loss rate: 3.16%
-- Flow 1:
Average throughput: 463.07 Mbit/s
95th percentile per-packet one-way delay: 33.209 ms
Loss rate: 2.45%
-- Flow 2:
Average throughput: 419.40 Mbit/s
95th percentile per-packet one-way delay: 23.178 ms
Loss rate: 3.42%
-- Flow 3:
Average throughput: 290.15 Mbit/s
95th percentile per-packet one-way delay: 20.283 ms
Loss rate: 5.71%
```

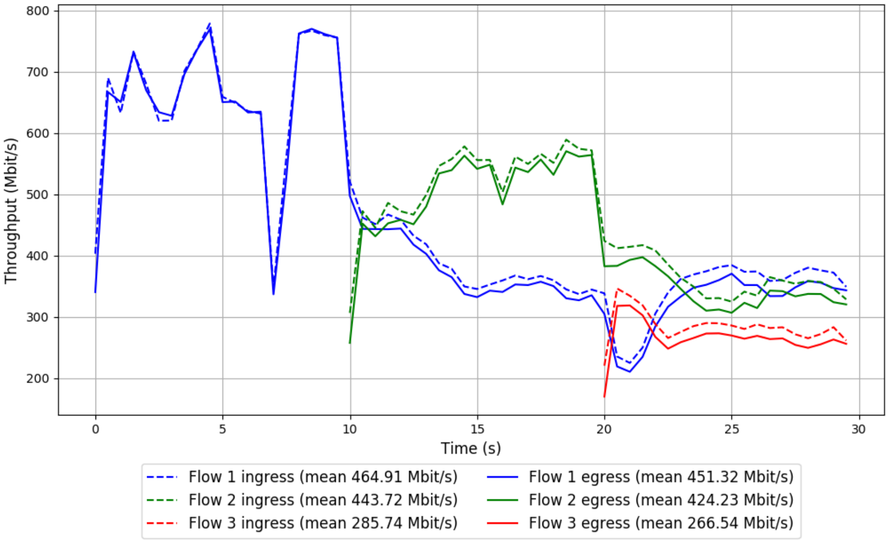
Run 2: Report of TCP BBR — Data Link

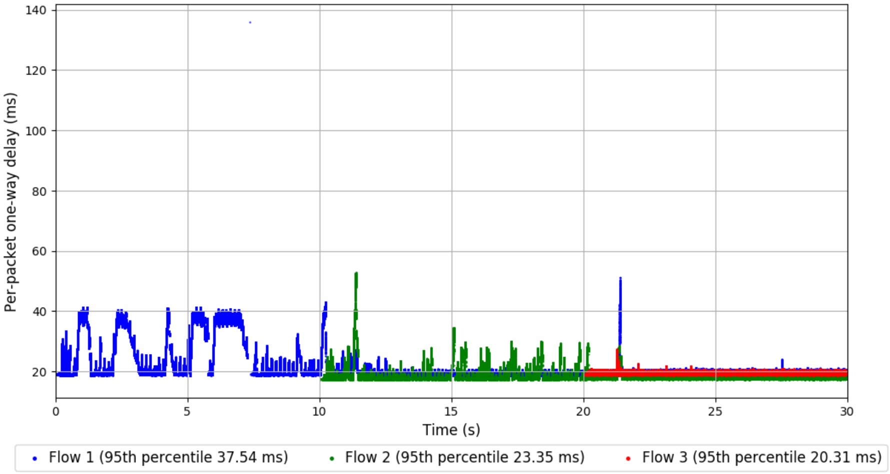




```
Run 3: Statistics of TCP BBR

Start at: 2018-03-21 05:34:52
End at: 2018-03-21 05:35:22
Local clock offset: -0.709 ms
Remote clock offset: -4.991 ms

# Below is generated by plot.py at 2018-03-21 12:19:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 822.28 Mbit/s
95th percentile per-packet one-way delay: 36.197 ms
Loss rate: 3.85%
-- Flow 1:
Average throughput: 451.32 Mbit/s
95th percentile per-packet one-way delay: 37.541 ms
Loss rate: 2.92%
-- Flow 2:
Average throughput: 424.23 Mbit/s
95th percentile per-packet one-way delay: 23.346 ms
Loss rate: 4.39%
-- Flow 3:
Average throughput: 266.54 Mbit/s
95th percentile per-packet one-way delay: 20.310 ms
Loss rate: 6.71%
```

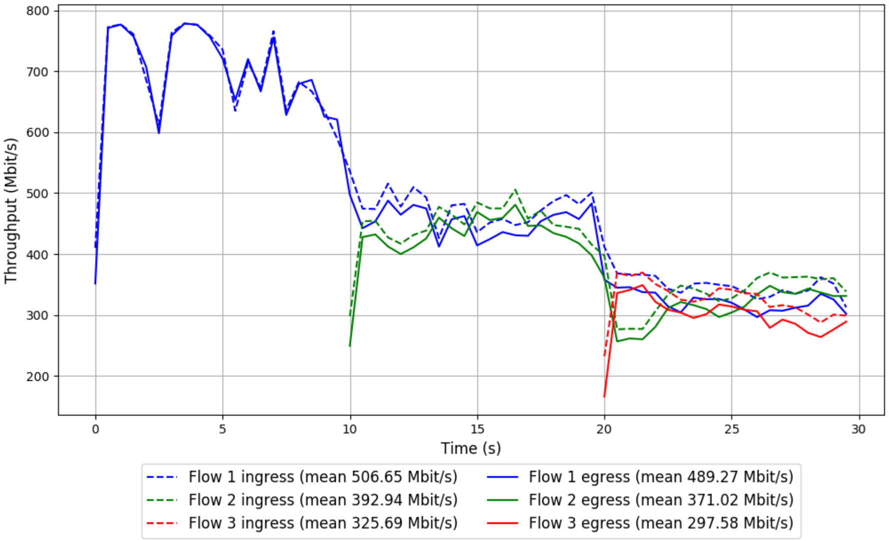
Run 3: Report of TCP BBR — Data Link

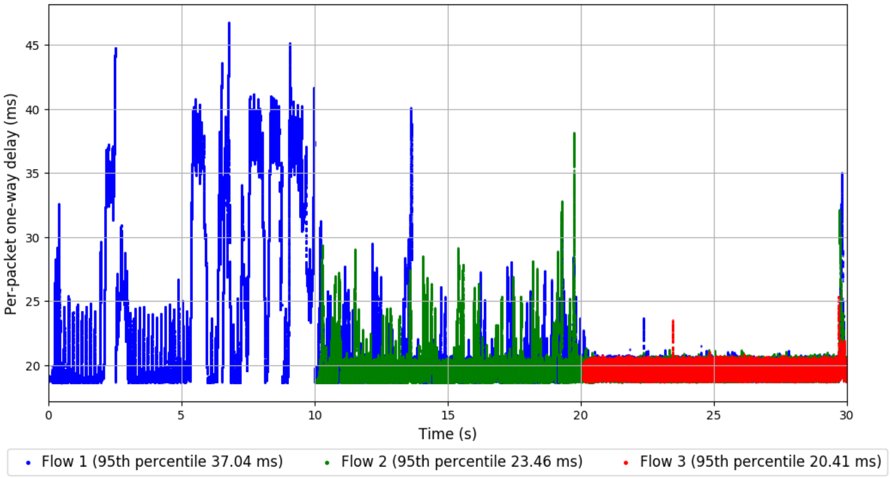




```
Run 4: Statistics of TCP BBR

Start at: 2018-03-21 06:03:43
End at: 2018-03-21 06:04:13
Local clock offset: 7.739 ms
Remote clock offset: -5.263 ms

# Below is generated by plot.py at 2018-03-21 12:19:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 835.21 Mbit/s
95th percentile per-packet one-way delay: 35.190 ms
Loss rate: 4.71%
-- Flow 1:
Average throughput: 489.27 Mbit/s
95th percentile per-packet one-way delay: 37.036 ms
Loss rate: 3.43%
-- Flow 2:
Average throughput: 371.02 Mbit/s
95th percentile per-packet one-way delay: 23.462 ms
Loss rate: 5.57%
-- Flow 3:
Average throughput: 297.58 Mbit/s
95th percentile per-packet one-way delay: 20.414 ms
Loss rate: 8.63%
```

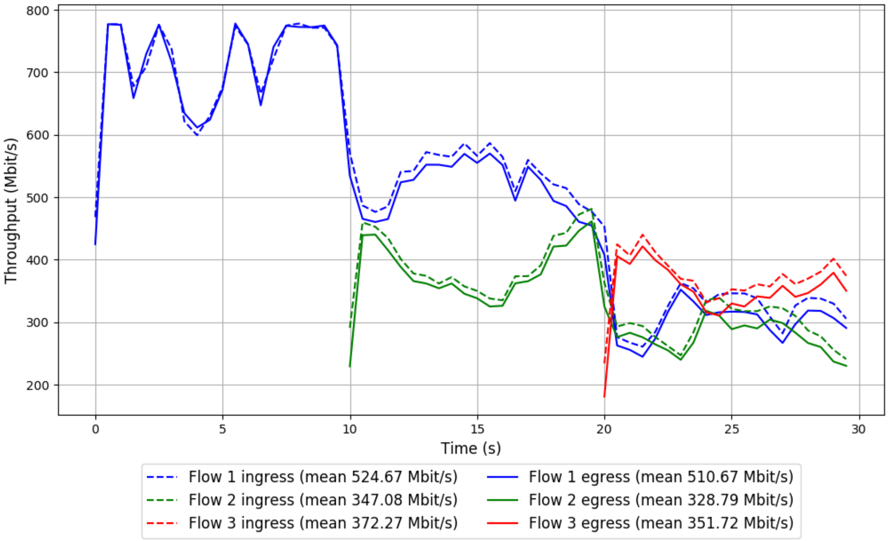
Run 4: Report of TCP BBR — Data Link

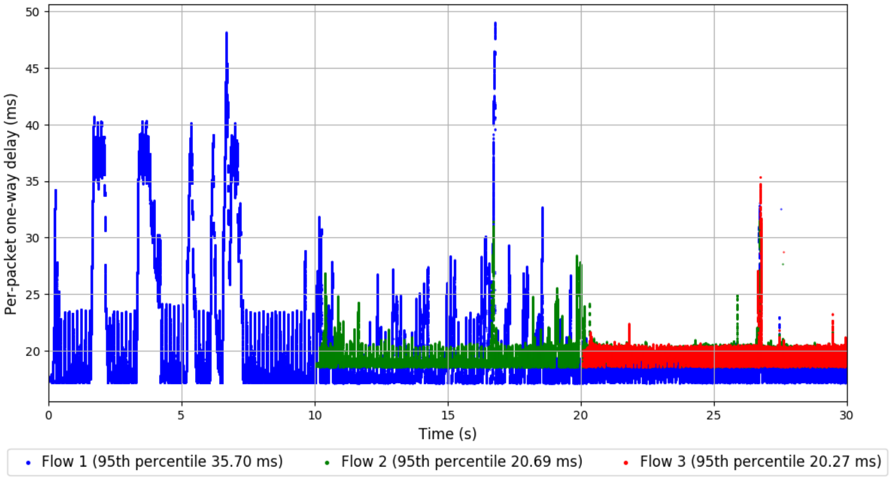




```
Run 5: Statistics of TCP BBR

Start at: 2018-03-21 06:33:16
End at: 2018-03-21 06:33:46
Local clock offset: 0.667 ms
Remote clock offset: -6.003 ms

# Below is generated by plot.py at 2018-03-21 12:19:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 846.30 Mbit/s
95th percentile per-packet one-way delay: 30.200 ms
Loss rate: 3.75%
-- Flow 1:
Average throughput: 510.67 Mbit/s
95th percentile per-packet one-way delay: 35.701 ms
Loss rate: 2.66%
-- Flow 2:
Average throughput: 328.79 Mbit/s
95th percentile per-packet one-way delay: 20.690 ms
Loss rate: 5.27%
-- Flow 3:
Average throughput: 351.72 Mbit/s
95th percentile per-packet one-way delay: 20.272 ms
Loss rate: 5.53%
```

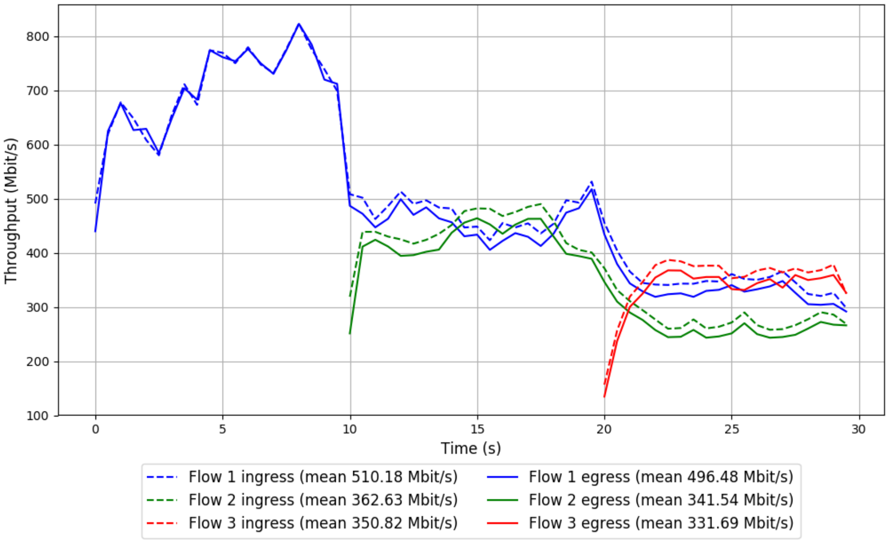
Run 5: Report of TCP BBR — Data Link

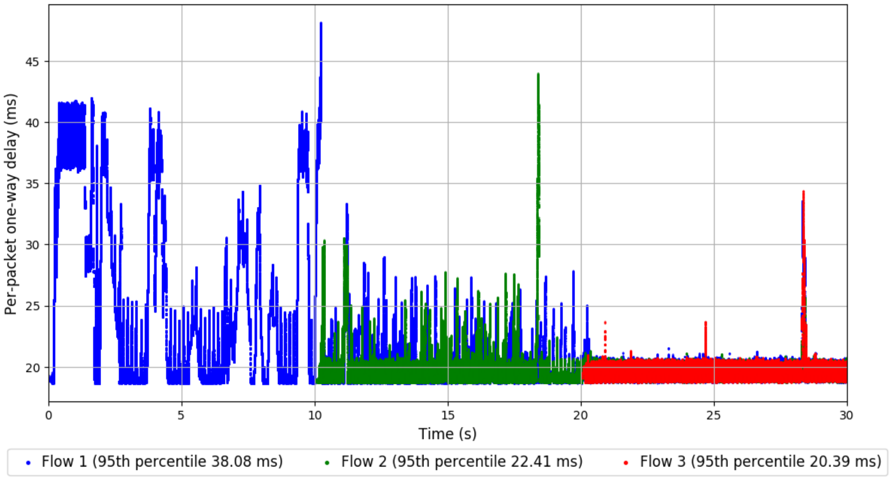




```
Run 6: Statistics of TCP BBR

Start at: 2018-03-21 07:02:33
End at: 2018-03-21 07:03:03
Local clock offset: 3.962 ms
Remote clock offset: -6.194 ms

# Below is generated by plot.py at 2018-03-21 12:19:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 833.91 Mbit/s
95th percentile per-packet one-way delay: 36.229 ms
Loss rate: 3.93%
-- Flow 1:
Average throughput: 496.48 Mbit/s
95th percentile per-packet one-way delay: 38.075 ms
Loss rate: 2.68%
-- Flow 2:
Average throughput: 341.54 Mbit/s
95th percentile per-packet one-way delay: 22.411 ms
Loss rate: 5.81%
-- Flow 3:
Average throughput: 331.69 Mbit/s
95th percentile per-packet one-way delay: 20.387 ms
Loss rate: 5.45%
```

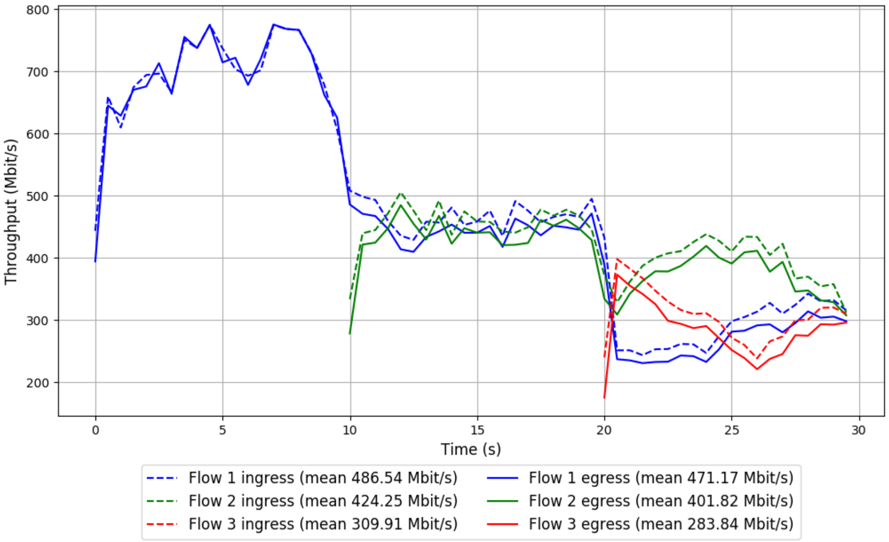
Run 6: Report of TCP BBR — Data Link

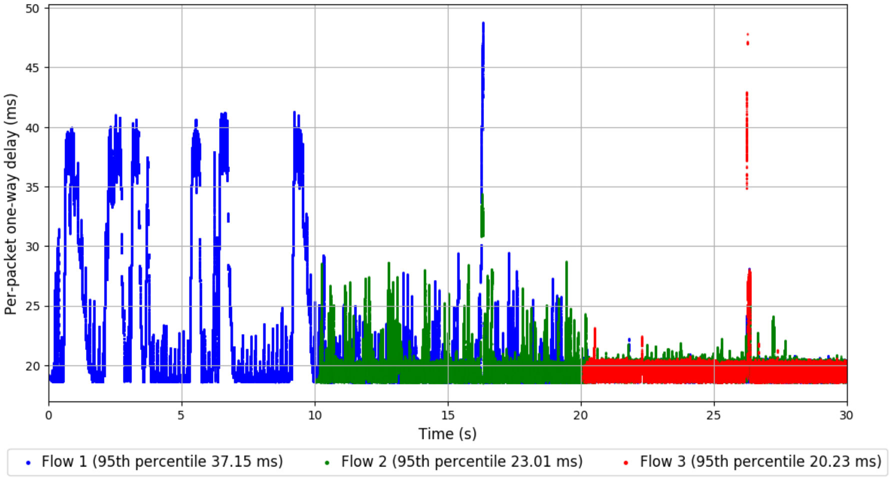




```
Run 7: Statistics of TCP BBR

Start at: 2018-03-21 07:32:05
End at: 2018-03-21 07:32:35
Local clock offset: 1.112 ms
Remote clock offset: -5.78 ms

# Below is generated by plot.py at 2018-03-21 12:19:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 832.97 Mbit/s
95th percentile per-packet one-way delay: 35.410 ms
Loss rate: 4.47%
-- Flow 1:
Average throughput: 471.17 Mbit/s
95th percentile per-packet one-way delay: 37.149 ms
Loss rate: 3.16%
-- Flow 2:
Average throughput: 401.82 Mbit/s
95th percentile per-packet one-way delay: 23.006 ms
Loss rate: 5.29%
-- Flow 3:
Average throughput: 283.84 Mbit/s
95th percentile per-packet one-way delay: 20.228 ms
Loss rate: 8.41%
```

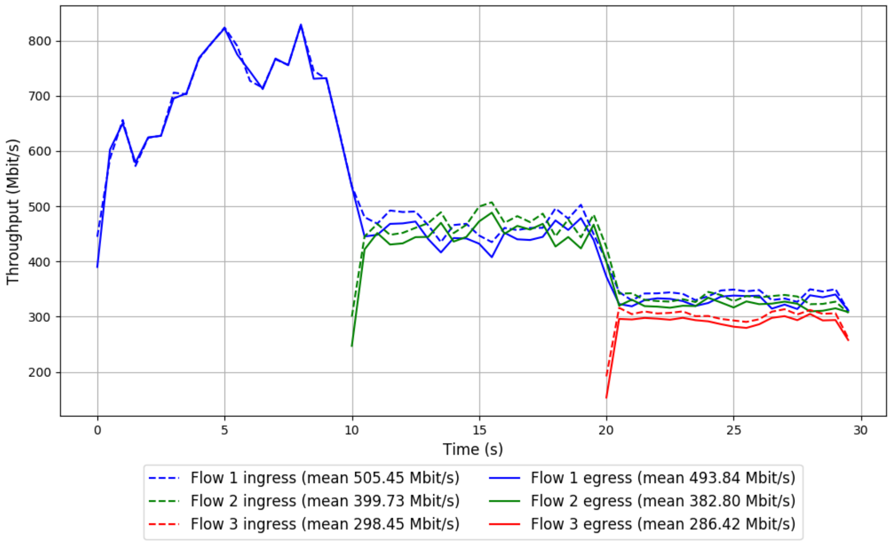
Run 7: Report of TCP BBR — Data Link

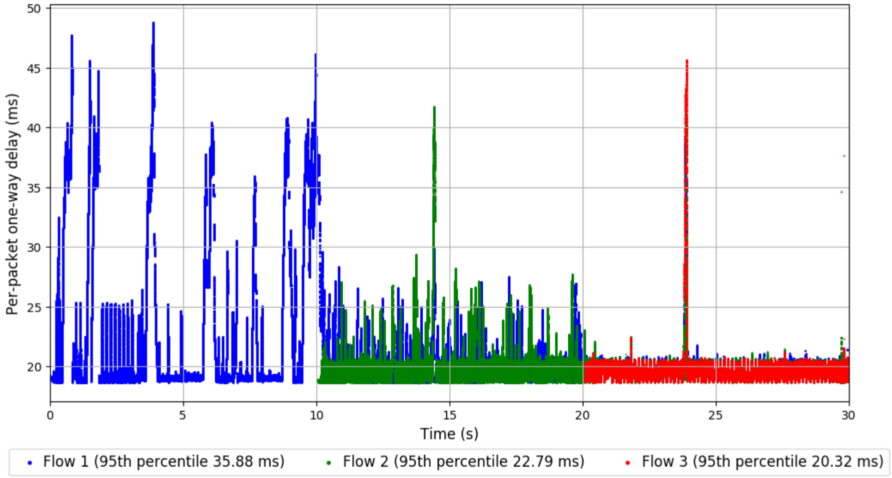




```
Run 8: Statistics of TCP BBR

Start at: 2018-03-21 08:01:17
End at: 2018-03-21 08:01:47
Local clock offset: -0.505 ms
Remote clock offset: -6.076 ms

# Below is generated by plot.py at 2018-03-21 12:19:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 843.77 Mbit/s
95th percentile per-packet one-way delay: 32.254 ms
Loss rate: 3.09%
-- Flow 1:
Average throughput: 493.84 Mbit/s
95th percentile per-packet one-way delay: 35.876 ms
Loss rate: 2.30%
-- Flow 2:
Average throughput: 382.80 Mbit/s
95th percentile per-packet one-way delay: 22.789 ms
Loss rate: 4.24%
-- Flow 3:
Average throughput: 286.42 Mbit/s
95th percentile per-packet one-way delay: 20.318 ms
Loss rate: 4.04%
```

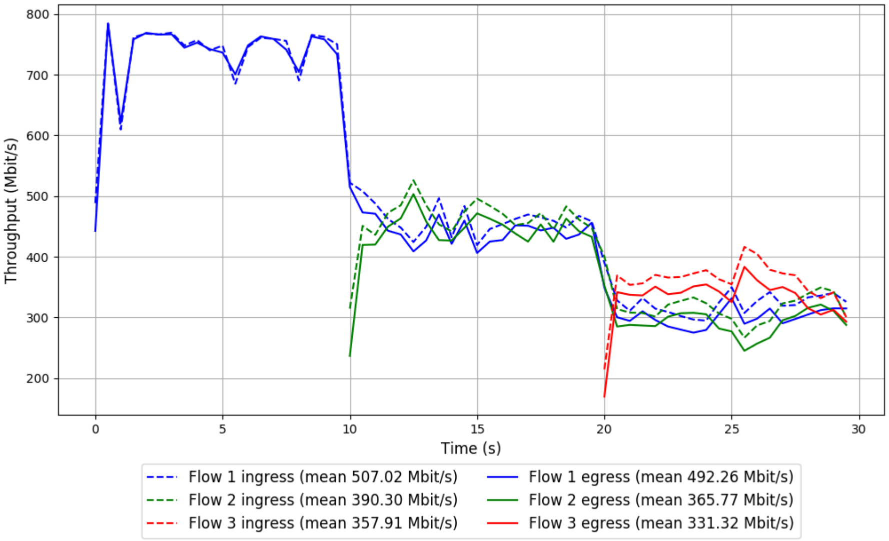
Run 8: Report of TCP BBR — Data Link

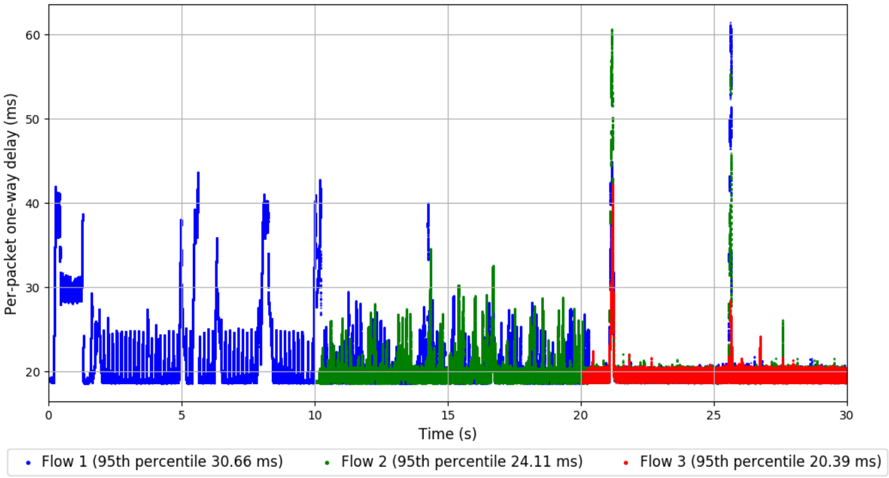




```
Run 9: Statistics of TCP BBR

Start at: 2018-03-21 08:30:35
End at: 2018-03-21 08:31:05
Local clock offset: -0.68 ms
Remote clock offset: -6.025 ms

# Below is generated by plot.py at 2018-03-21 12:30:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 845.85 Mbit/s
95th percentile per-packet one-way delay: 28.997 ms
Loss rate: 4.51%
-- Flow 1:
Average throughput: 492.26 Mbit/s
95th percentile per-packet one-way delay: 30.663 ms
Loss rate: 2.91%
-- Flow 2:
Average throughput: 365.77 Mbit/s
95th percentile per-packet one-way delay: 24.110 ms
Loss rate: 6.29%
-- Flow 3:
Average throughput: 331.32 Mbit/s
95th percentile per-packet one-way delay: 20.393 ms
Loss rate: 7.44%
```

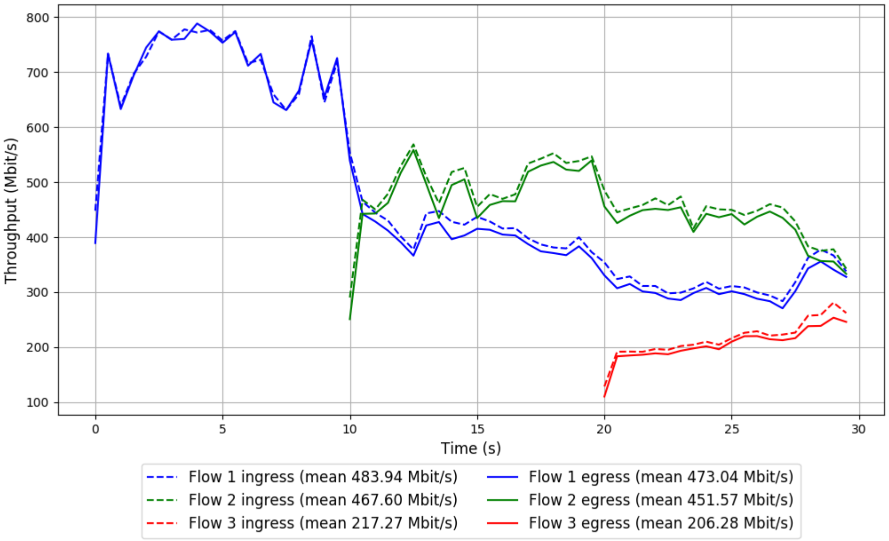
Run 9: Report of TCP BBR — Data Link

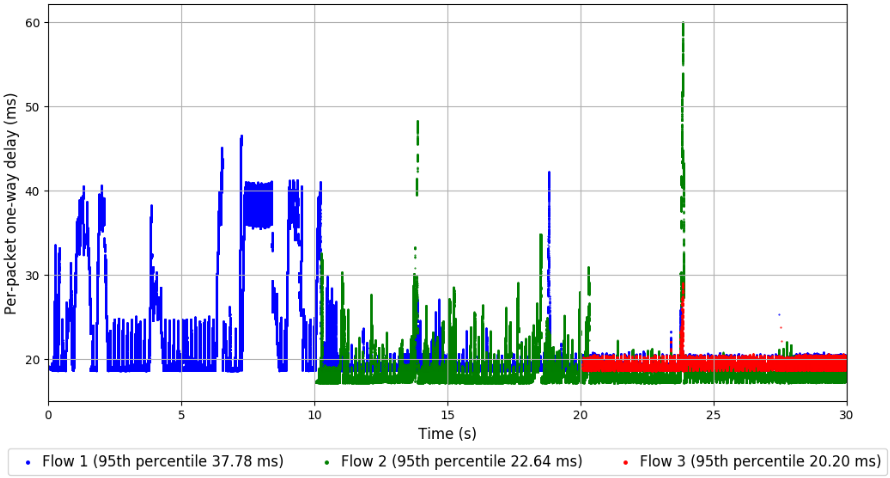




```
Run 10: Statistics of TCP BBR

Start at: 2018-03-21 08:59:56
End at: 2018-03-21 09:00:26
Local clock offset: -0.499 ms
Remote clock offset: -4.851 ms

# Below is generated by plot.py at 2018-03-21 12:30:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 842.09 Mbit/s
95th percentile per-packet one-way delay: 36.189 ms
Loss rate: 2.90%
-- Flow 1:
Average throughput: 473.04 Mbit/s
95th percentile per-packet one-way delay: 37.785 ms
Loss rate: 2.25%
-- Flow 2:
Average throughput: 451.57 Mbit/s
95th percentile per-packet one-way delay: 22.644 ms
Loss rate: 3.42%
-- Flow 3:
Average throughput: 206.28 Mbit/s
95th percentile per-packet one-way delay: 20.203 ms
Loss rate: 5.05%
```

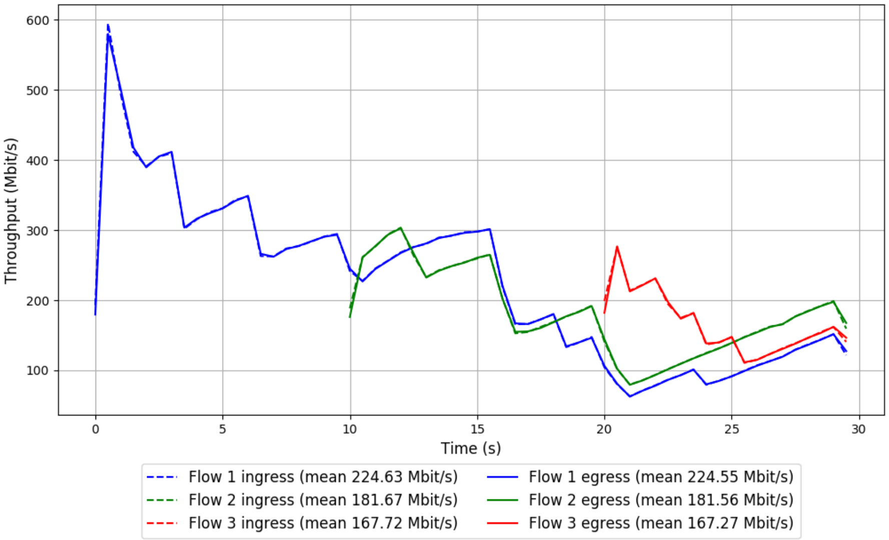
Run 10: Report of TCP BBR — Data Link

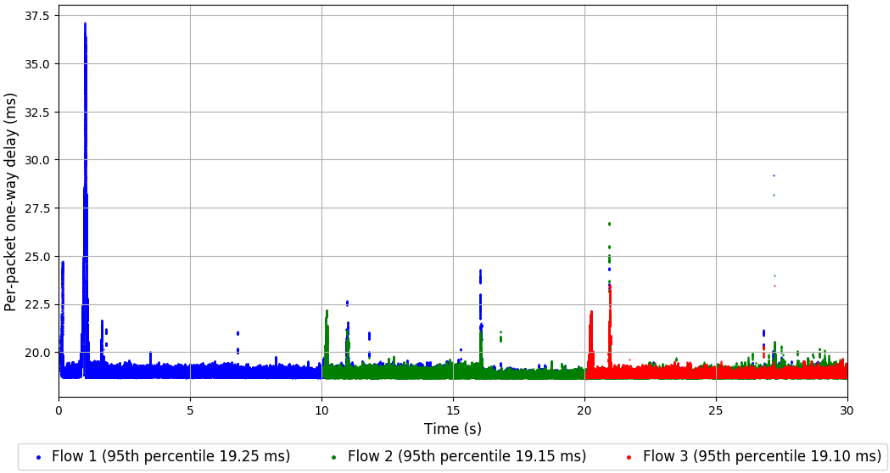




```
Run 1: Statistics of TCP Cubic

Start at: 2018-03-21 04:56:23
End at: 2018-03-21 04:56:53
Local clock offset: 0.019 ms
Remote clock offset: -6.205 ms

# Below is generated by plot.py at 2018-03-21 12:30:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 401.00 Mbit/s
95th percentile per-packet one-way delay: 19.207 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 224.55 Mbit/s
95th percentile per-packet one-way delay: 19.250 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 181.56 Mbit/s
95th percentile per-packet one-way delay: 19.150 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 167.27 Mbit/s
95th percentile per-packet one-way delay: 19.104 ms
Loss rate: 0.26%
```

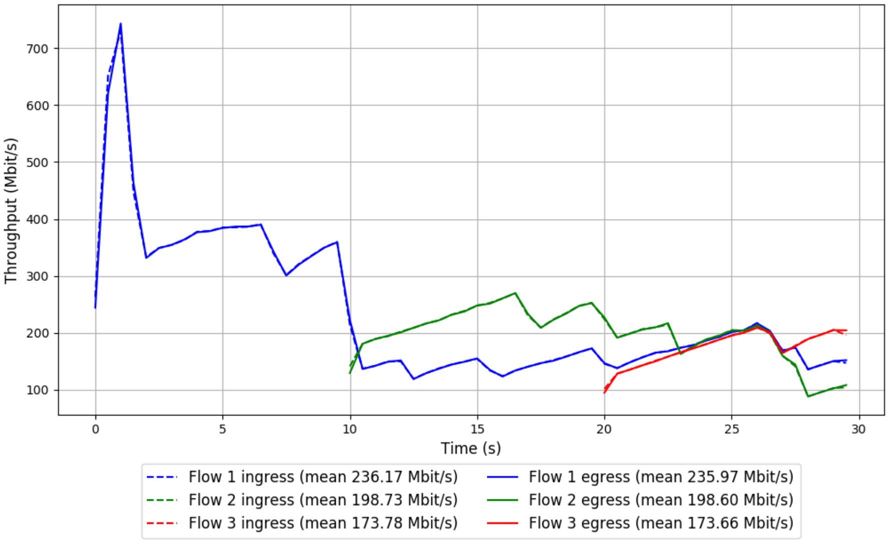
Run 1: Report of TCP Cubic — Data Link

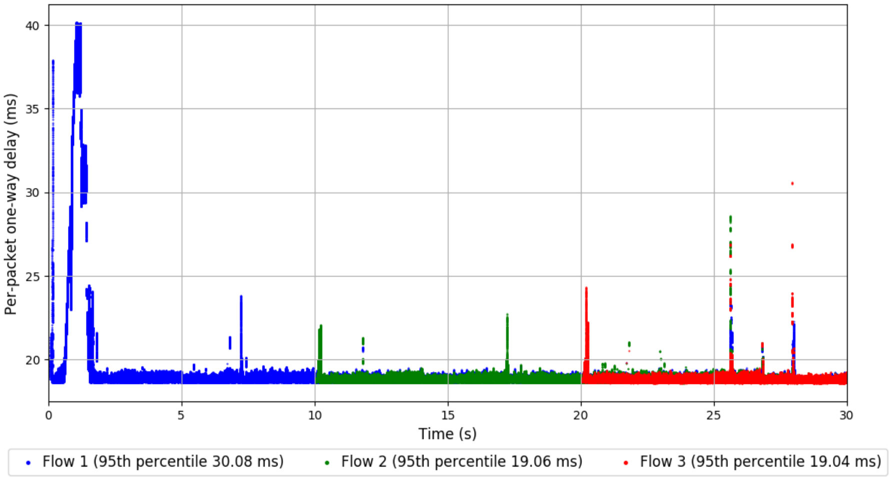




```
Run 2: Statistics of TCP Cubic

Start at: 2018-03-21 05:25:36
End at: 2018-03-21 05:26:06
Local clock offset: -0.443 ms
Remote clock offset: -5.146 ms

# Below is generated by plot.py at 2018-03-21 12:30:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 425.91 Mbit/s
95th percentile per-packet one-way delay: 21.011 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 235.97 Mbit/s
95th percentile per-packet one-way delay: 30.076 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 198.60 Mbit/s
95th percentile per-packet one-way delay: 19.062 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 173.66 Mbit/s
95th percentile per-packet one-way delay: 19.040 ms
Loss rate: 0.06%
```

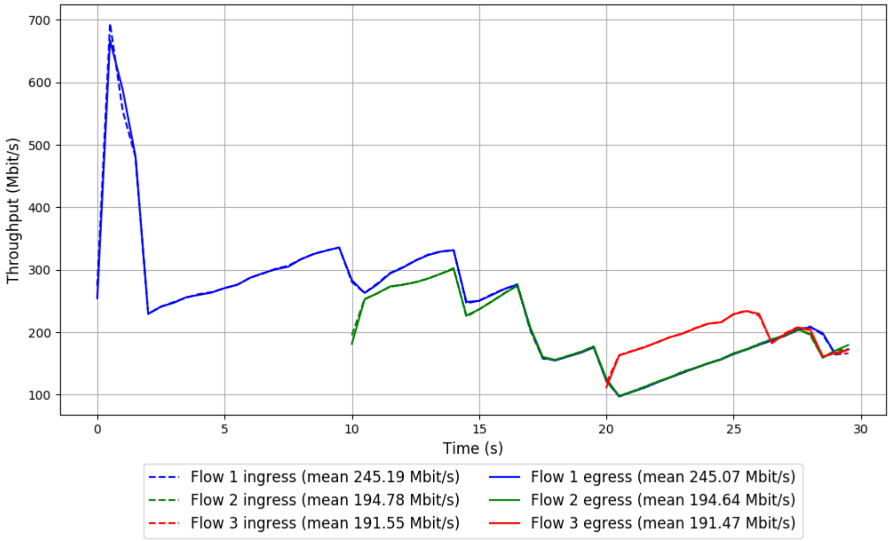
Run 2: Report of TCP Cubic — Data Link

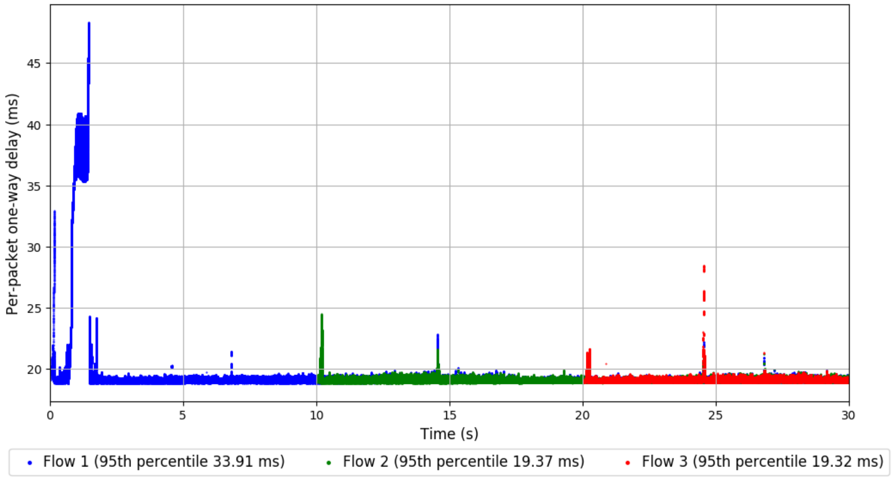




```
Run 3: Statistics of TCP Cubic

Start at: 2018-03-21 05:54:38
End at: 2018-03-21 05:55:08
Local clock offset: 6.419 ms
Remote clock offset: -5.189 ms

# Below is generated by plot.py at 2018-03-21 12:30:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 438.35 Mbit/s
95th percentile per-packet one-way delay: 19.665 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 245.07 Mbit/s
95th percentile per-packet one-way delay: 33.913 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 194.64 Mbit/s
95th percentile per-packet one-way delay: 19.368 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 191.47 Mbit/s
95th percentile per-packet one-way delay: 19.323 ms
Loss rate: 0.04%
```

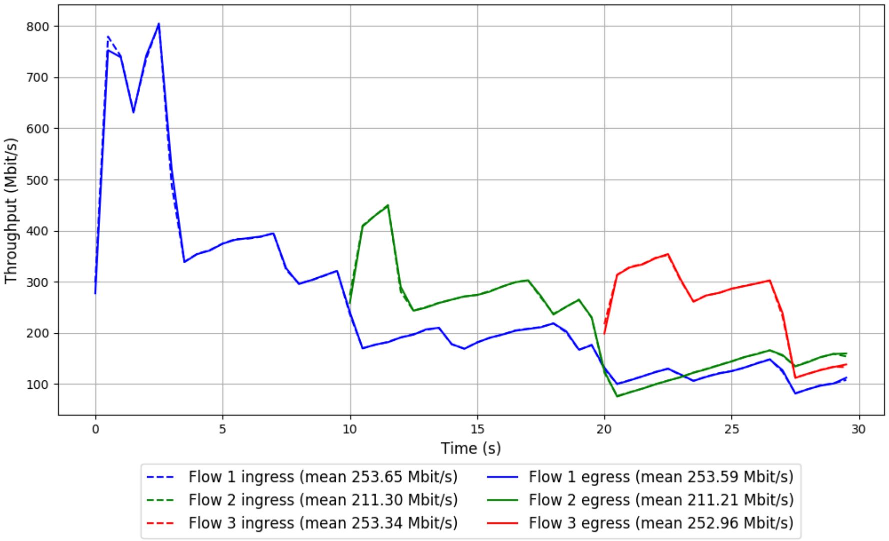
Run 3: Report of TCP Cubic — Data Link

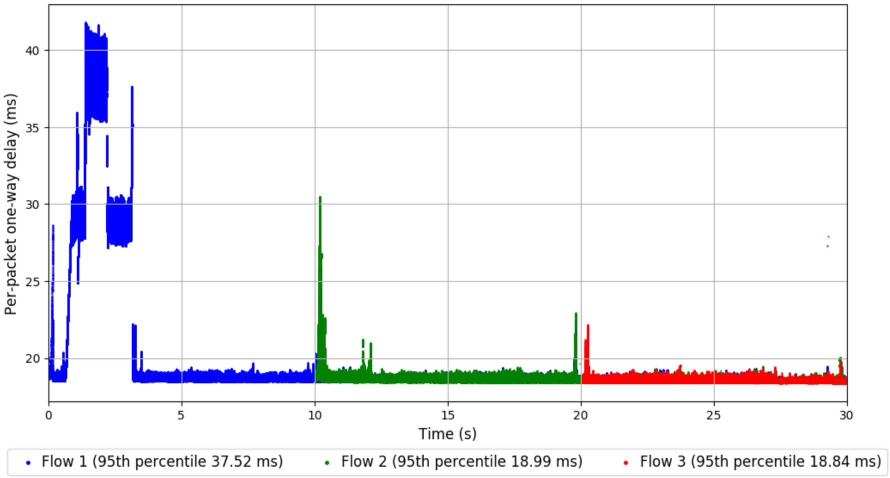




```
Run 4: Statistics of TCP Cubic

Start at: 2018-03-21 06:23:53
End at: 2018-03-21 06:24:23
Local clock offset: 2.184 ms
Remote clock offset: -5.868 ms

# Below is generated by plot.py at 2018-03-21 12:30:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 478.25 Mbit/s
95th percentile per-packet one-way delay: 29.879 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 253.59 Mbit/s
95th percentile per-packet one-way delay: 37.515 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 211.21 Mbit/s
95th percentile per-packet one-way delay: 18.987 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 252.96 Mbit/s
95th percentile per-packet one-way delay: 18.836 ms
Loss rate: 0.15%
```

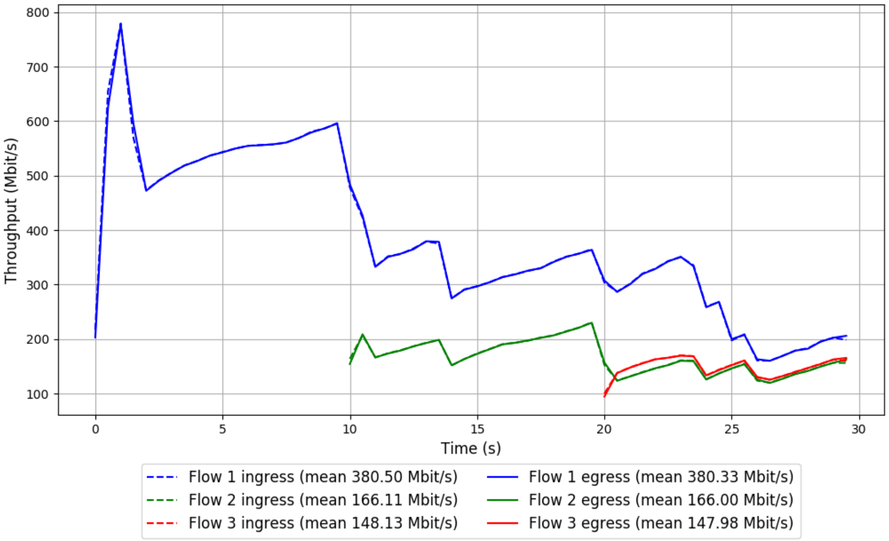
Run 4: Report of TCP Cubic — Data Link

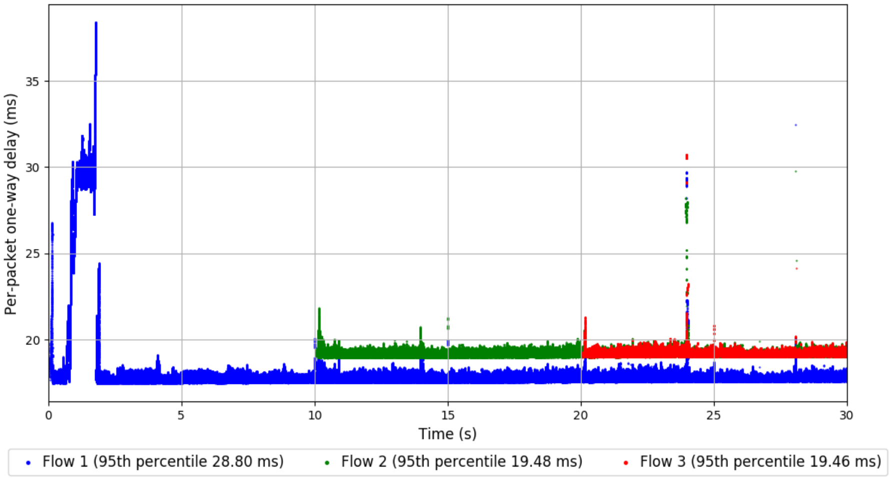




```
Run 5: Statistics of TCP Cubic

Start at: 2018-03-21 06:53:18
End at: 2018-03-21 06:53:48
Local clock offset: 2.449 ms
Remote clock offset: -6.08 ms

# Below is generated by plot.py at 2018-03-21 12:30:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 539.97 Mbit/s
95th percentile per-packet one-way delay: 19.942 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 380.33 Mbit/s
95th percentile per-packet one-way delay: 28.799 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 166.00 Mbit/s
95th percentile per-packet one-way delay: 19.478 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 147.98 Mbit/s
95th percentile per-packet one-way delay: 19.465 ms
Loss rate: 0.10%
```

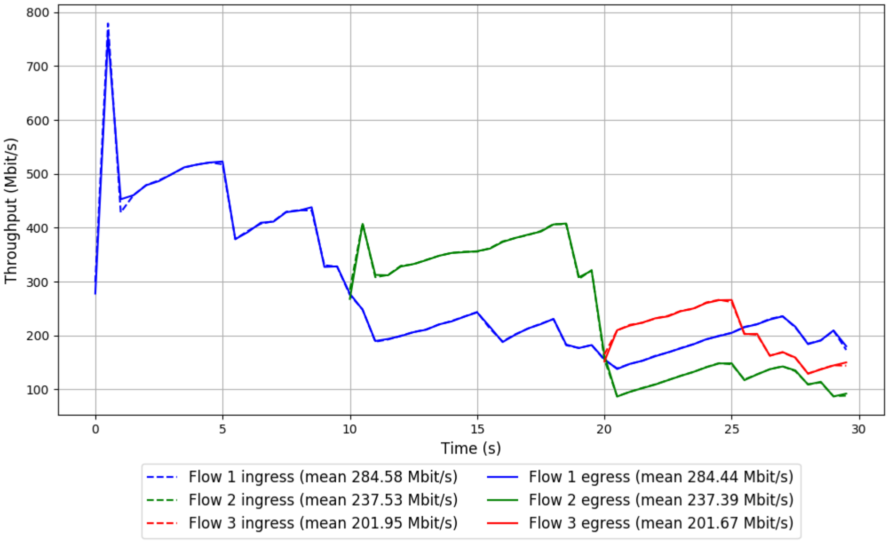
Run 5: Report of TCP Cubic — Data Link

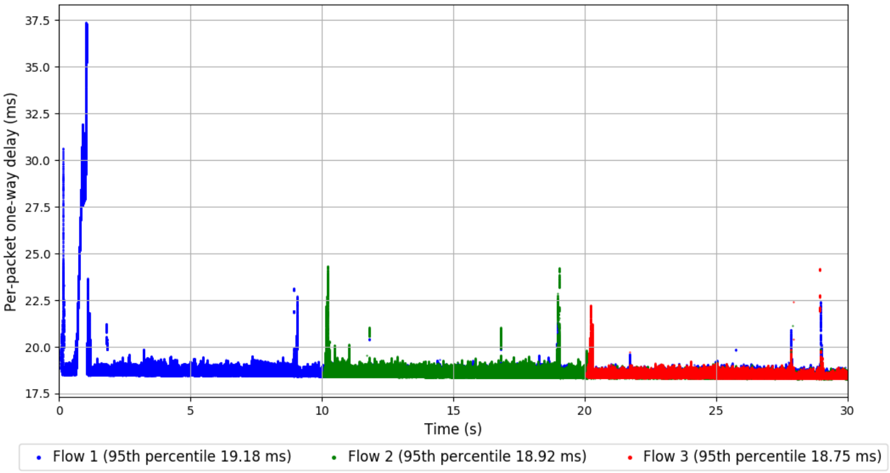




```
Run 6: Statistics of TCP Cubic

Start at: 2018-03-21 07:22:42
End at: 2018-03-21 07:23:12
Local clock offset: 3.524 ms
Remote clock offset: -6.057 ms

# Below is generated by plot.py at 2018-03-21 12:30:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 509.50 Mbit/s
95th percentile per-packet one-way delay: 19.000 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 284.44 Mbit/s
95th percentile per-packet one-way delay: 19.176 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 237.39 Mbit/s
95th percentile per-packet one-way delay: 18.916 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 201.67 Mbit/s
95th percentile per-packet one-way delay: 18.749 ms
Loss rate: 0.14%
```

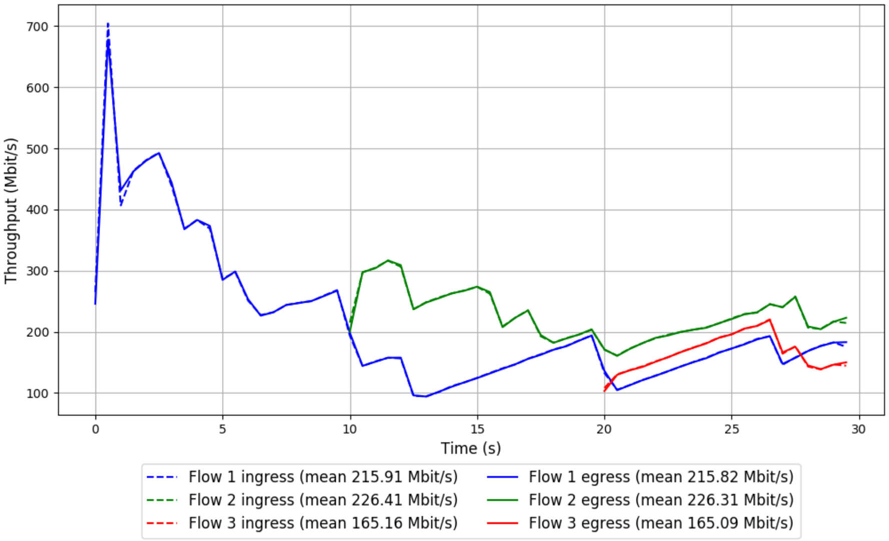
Run 6: Report of TCP Cubic — Data Link

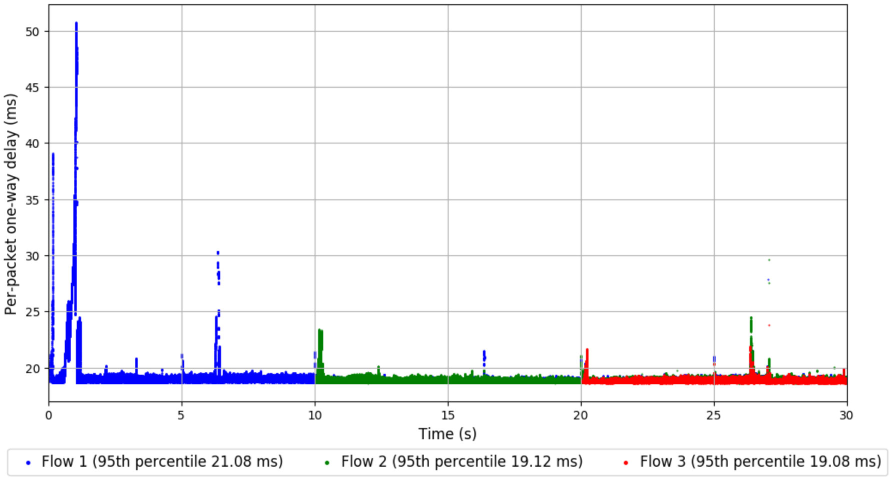




```
Run 7: Statistics of TCP Cubic

Start at: 2018-03-21 07:52:05
End at: 2018-03-21 07:52:35
Local clock offset: -1.065 ms
Remote clock offset: -5.676 ms

# Below is generated by plot.py at 2018-03-21 12:30:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 421.34 Mbit/s
95th percentile per-packet one-way delay: 19.292 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 215.82 Mbit/s
95th percentile per-packet one-way delay: 21.084 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 226.31 Mbit/s
95th percentile per-packet one-way delay: 19.122 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 165.09 Mbit/s
95th percentile per-packet one-way delay: 19.079 ms
Loss rate: 0.05%
```

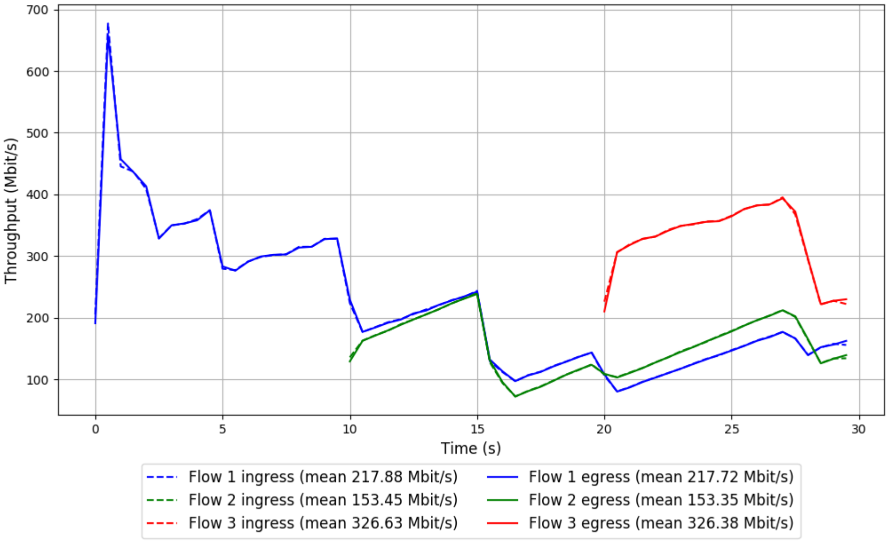
Run 7: Report of TCP Cubic — Data Link

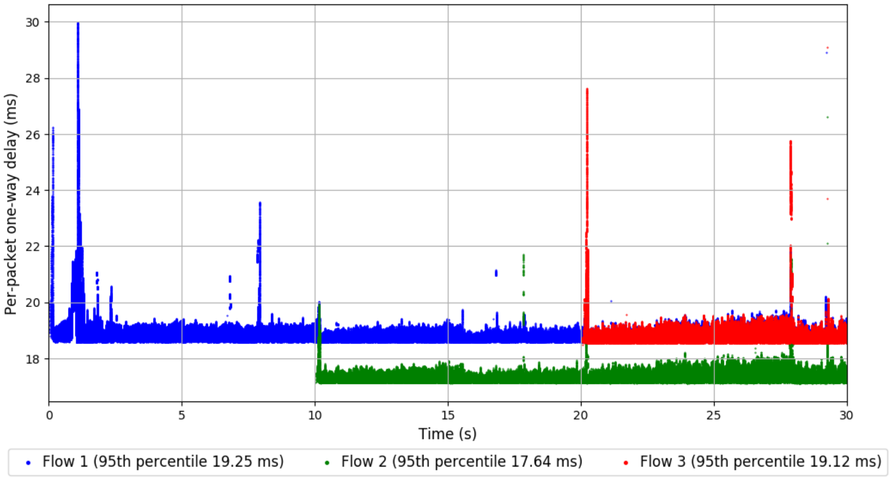




```
Run 8: Statistics of TCP Cubic

Start at: 2018-03-21 08:21:23
End at: 2018-03-21 08:21:53
Local clock offset: -0.69 ms
Remote clock offset: -6.402 ms

# Below is generated by plot.py at 2018-03-21 12:31:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 428.18 Mbit/s
95th percentile per-packet one-way delay: 19.135 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 217.72 Mbit/s
95th percentile per-packet one-way delay: 19.245 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 153.35 Mbit/s
95th percentile per-packet one-way delay: 17.644 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 326.38 Mbit/s
95th percentile per-packet one-way delay: 19.121 ms
Loss rate: 0.08%
```

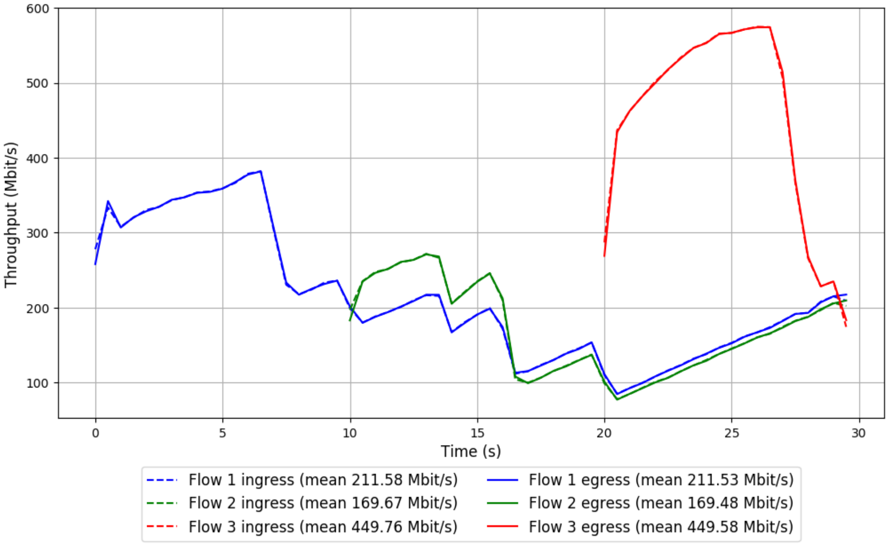
Run 8: Report of TCP Cubic — Data Link

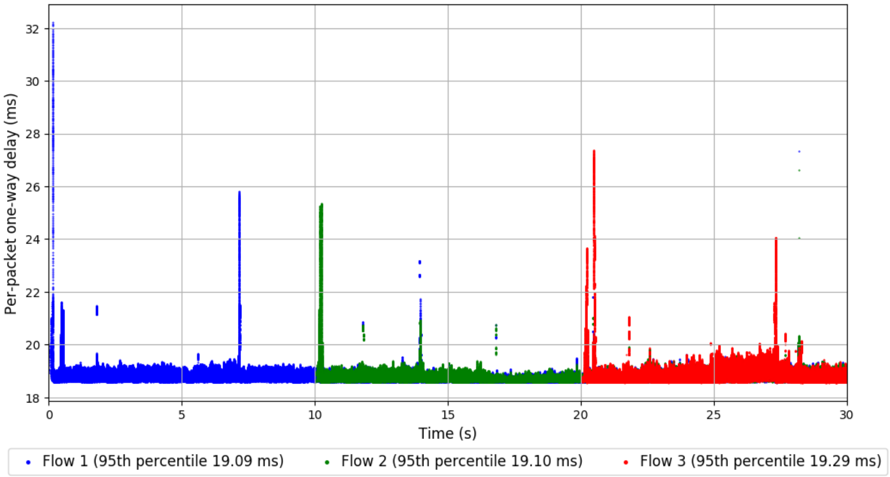




```
Run 9: Statistics of TCP Cubic

Start at: 2018-03-21 08:50:40
End at: 2018-03-21 08:51:10
Local clock offset: -0.355 ms
Remote clock offset: -4.994 ms

# Below is generated by plot.py at 2018-03-21 12:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 473.69 Mbit/s
95th percentile per-packet one-way delay: 19.160 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 211.53 Mbit/s
95th percentile per-packet one-way delay: 19.085 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 169.48 Mbit/s
95th percentile per-packet one-way delay: 19.098 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 449.58 Mbit/s
95th percentile per-packet one-way delay: 19.289 ms
Loss rate: 0.03%
```

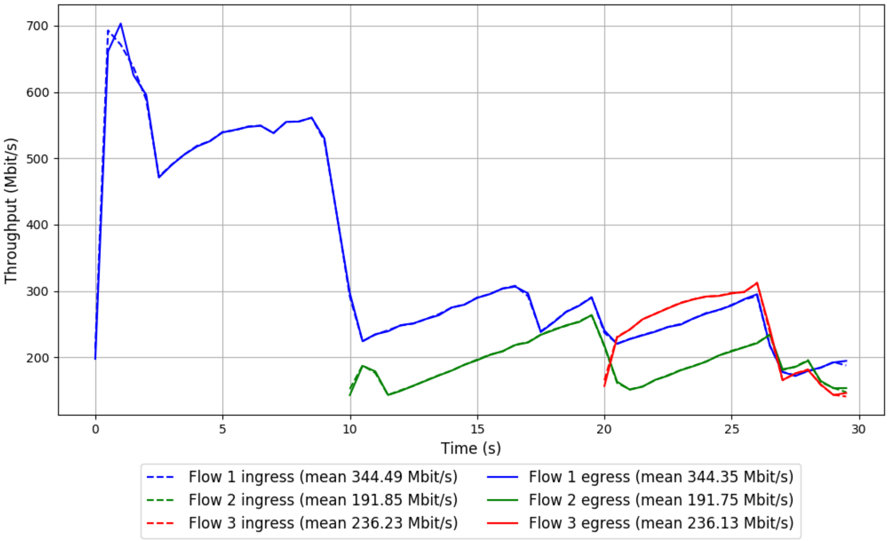
Run 9: Report of TCP Cubic — Data Link

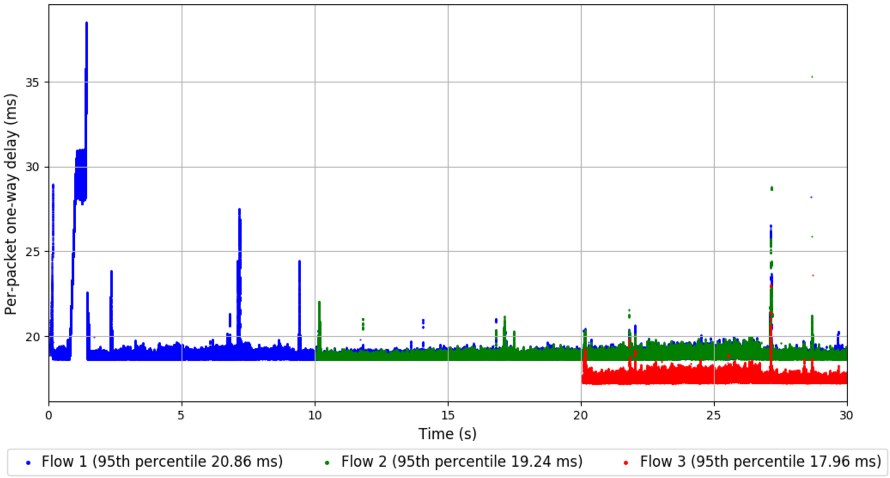




```
Run 10: Statistics of TCP Cubic

Start at: 2018-03-21 09:20:02
End at: 2018-03-21 09:20:32
Local clock offset: 0.613 ms
Remote clock offset: -5.91 ms

# Below is generated by plot.py at 2018-03-21 12:33:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 550.43 Mbit/s
95th percentile per-packet one-way delay: 19.378 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 344.35 Mbit/s
95th percentile per-packet one-way delay: 20.858 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 191.75 Mbit/s
95th percentile per-packet one-way delay: 19.242 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 236.13 Mbit/s
95th percentile per-packet one-way delay: 17.961 ms
Loss rate: 0.04%
```

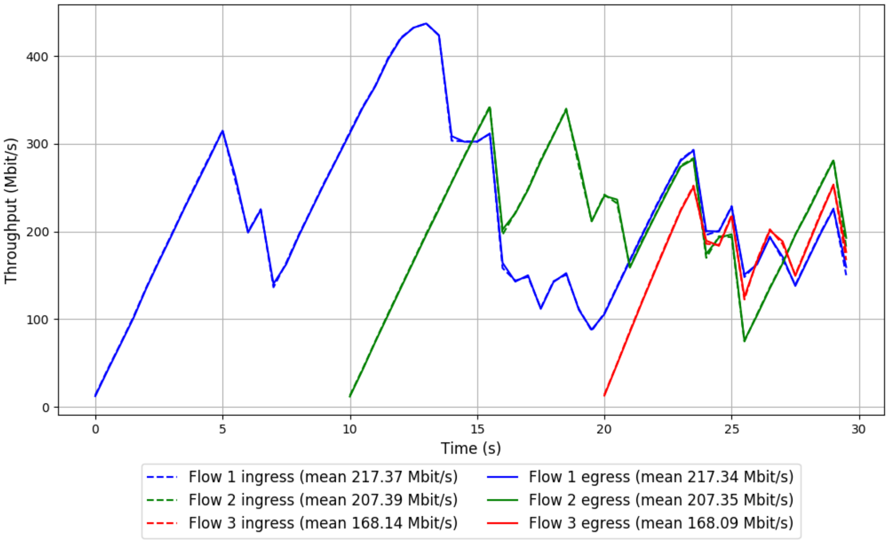
Run 10: Report of TCP Cubic — Data Link

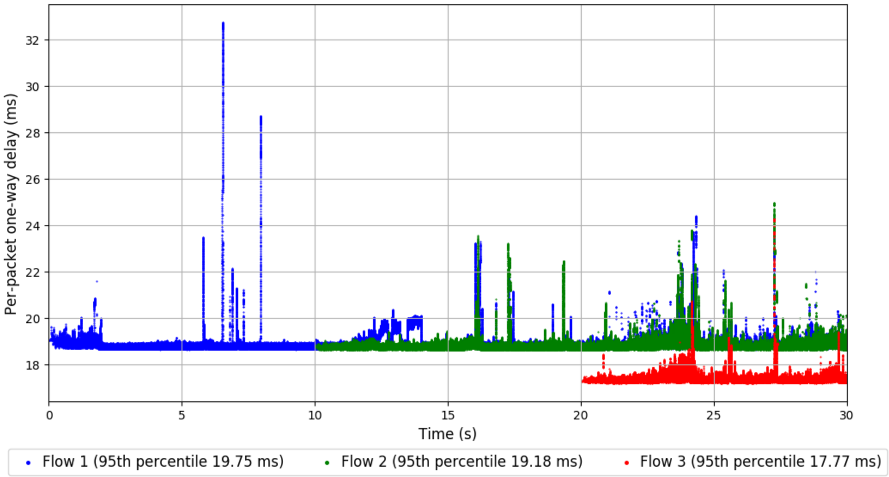




```
Run 1: Statistics of LEDBAT

Start at: 2018-03-21 04:57:57
End at: 2018-03-21 04:58:27
Local clock offset: 0.06 ms
Remote clock offset: -6.16 ms

# Below is generated by plot.py at 2018-03-21 12:33:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 411.24 Mbit/s
95th percentile per-packet one-way delay: 19.573 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 217.34 Mbit/s
95th percentile per-packet one-way delay: 19.753 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 207.35 Mbit/s
95th percentile per-packet one-way delay: 19.177 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 168.09 Mbit/s
95th percentile per-packet one-way delay: 17.771 ms
Loss rate: 0.03%
```

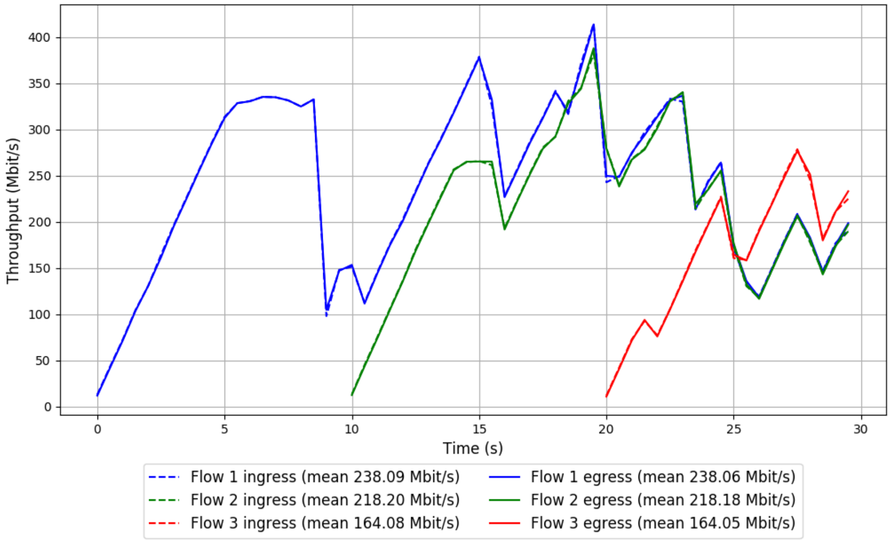
Run 1: Report of LEDBAT — Data Link

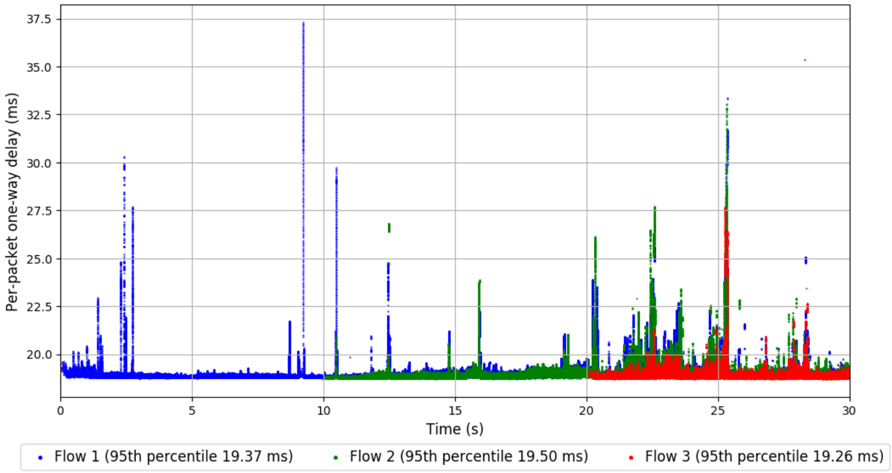




```
Run 2: Statistics of LEDBAT

Start at: 2018-03-21 05:27:11
End at: 2018-03-21 05:27:41
Local clock offset: -0.551 ms
Remote clock offset: -5.062 ms

# Below is generated by plot.py at 2018-03-21 12:33:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 437.76 Mbit/s
95th percentile per-packet one-way delay: 19.390 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 238.06 Mbit/s
95th percentile per-packet one-way delay: 19.367 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 218.18 Mbit/s
95th percentile per-packet one-way delay: 19.498 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 164.05 Mbit/s
95th percentile per-packet one-way delay: 19.258 ms
Loss rate: 0.01%
```

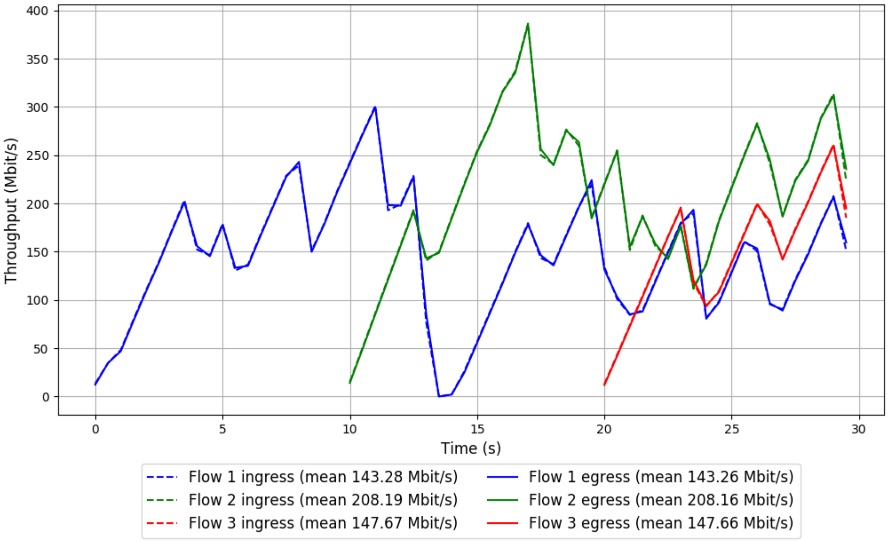
Run 2: Report of LEDBAT — Data Link

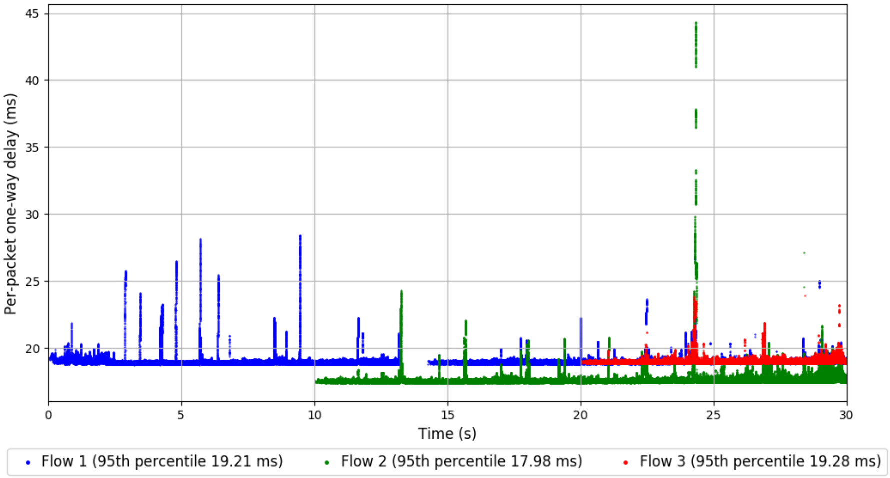




```
Run 3: Statistics of LEDBAT

Start at: 2018-03-21 05:56:13
End at: 2018-03-21 05:56:43
Local clock offset: 6.677 ms
Remote clock offset: -5.249 ms

# Below is generated by plot.py at 2018-03-21 12:35:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 330.92 Mbit/s
95th percentile per-packet one-way delay: 19.142 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 143.26 Mbit/s
95th percentile per-packet one-way delay: 19.207 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 208.16 Mbit/s
95th percentile per-packet one-way delay: 17.981 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 147.66 Mbit/s
95th percentile per-packet one-way delay: 19.280 ms
Loss rate: 0.01%
```

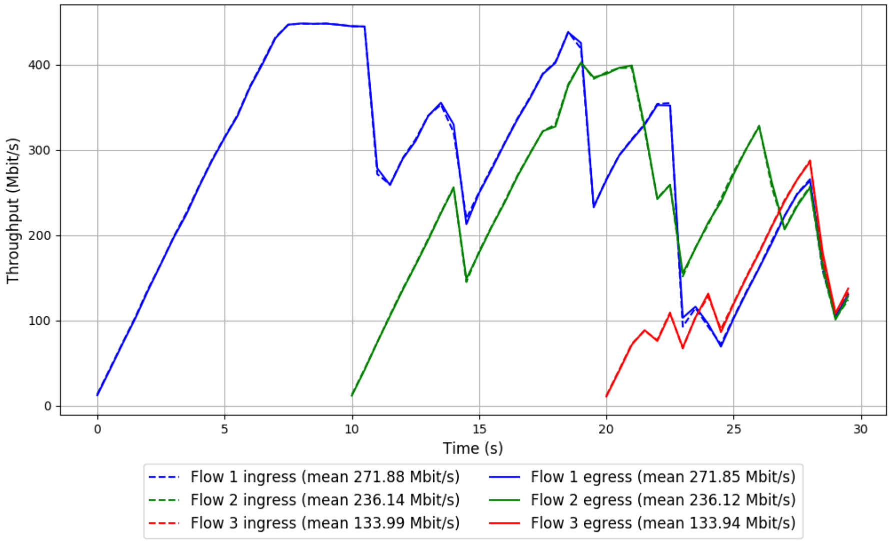
Run 3: Report of LEDBAT — Data Link

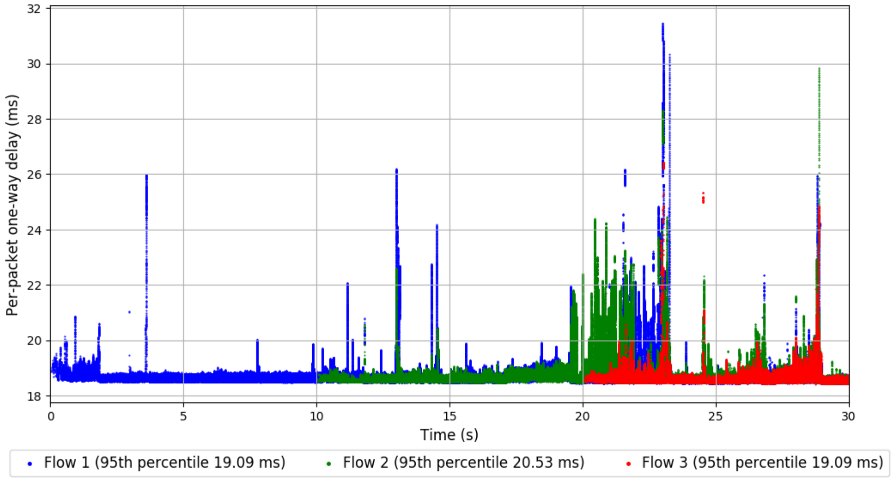




```
Run 4: Statistics of LEDBAT

Start at: 2018-03-21 06:25:29
End at: 2018-03-21 06:25:59
Local clock offset: 1.815 ms
Remote clock offset: -5.906 ms

# Below is generated by plot.py at 2018-03-21 12:37:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 473.55 Mbit/s
95th percentile per-packet one-way delay: 19.462 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 271.85 Mbit/s
95th percentile per-packet one-way delay: 19.092 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 236.12 Mbit/s
95th percentile per-packet one-way delay: 20.532 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 133.94 Mbit/s
95th percentile per-packet one-way delay: 19.085 ms
Loss rate: 0.04%
```

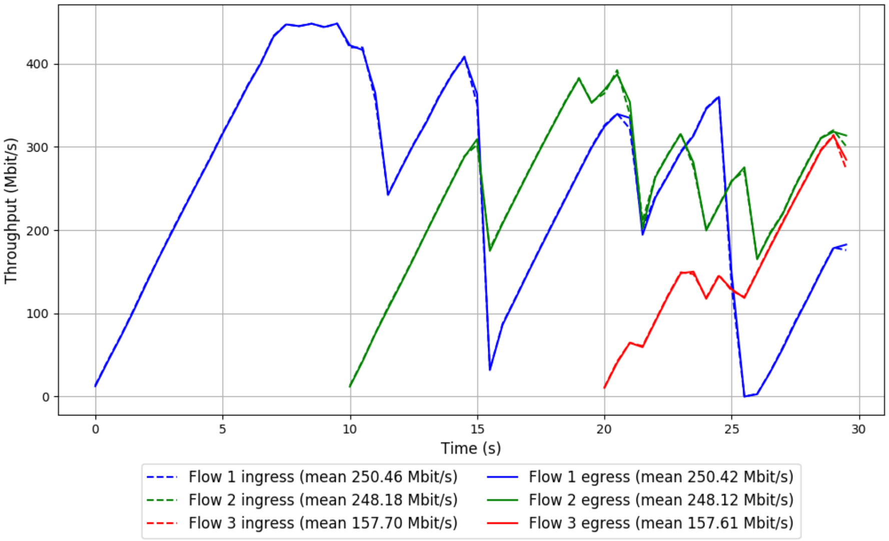
Run 4: Report of LEDBAT — Data Link

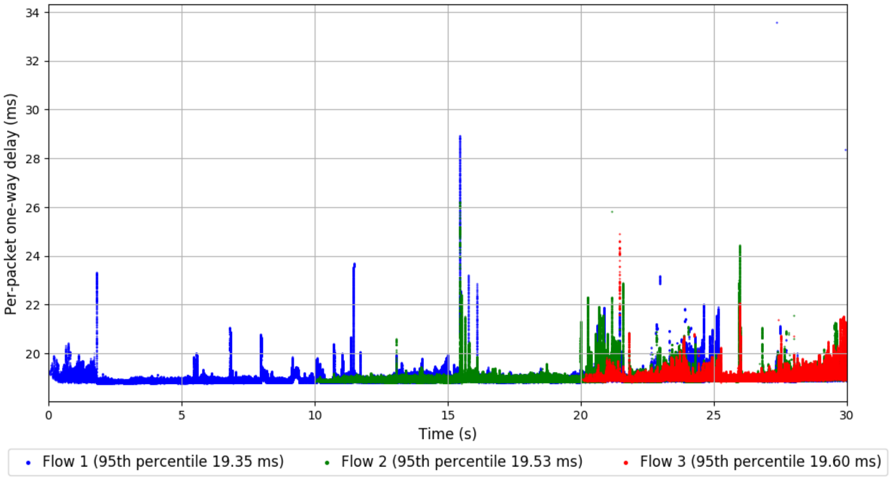




```
Run 5: Statistics of LEDBAT

Start at: 2018-03-21 06:54:56
End at: 2018-03-21 06:55:26
Local clock offset: 2.899 ms
Remote clock offset: -6.089 ms

# Below is generated by plot.py at 2018-03-21 12:37:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 467.85 Mbit/s
95th percentile per-packet one-way delay: 19.446 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 250.42 Mbit/s
95th percentile per-packet one-way delay: 19.353 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 248.12 Mbit/s
95th percentile per-packet one-way delay: 19.532 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 157.61 Mbit/s
95th percentile per-packet one-way delay: 19.601 ms
Loss rate: 0.06%
```

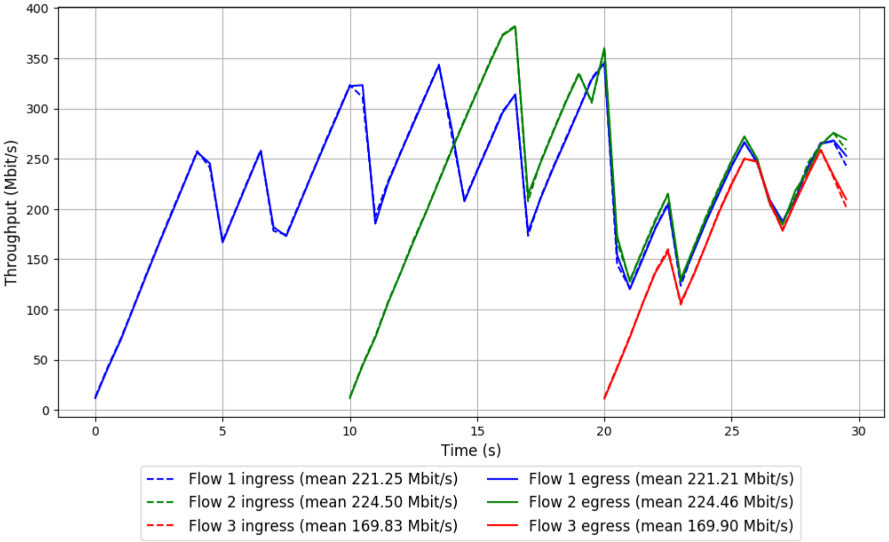
Run 5: Report of LEDBAT — Data Link

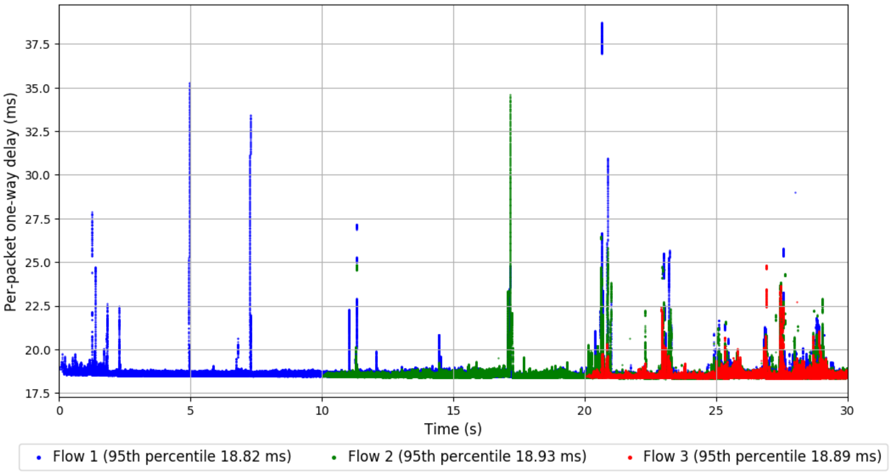




```
Run 6: Statistics of LEDBAT

Start at: 2018-03-21 07:24:20
End at: 2018-03-21 07:24:50
Local clock offset: 2.935 ms
Remote clock offset: -5.995 ms

# Below is generated by plot.py at 2018-03-21 12:37:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 427.07 Mbit/s
95th percentile per-packet one-way delay: 18.857 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 221.21 Mbit/s
95th percentile per-packet one-way delay: 18.821 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 224.46 Mbit/s
95th percentile per-packet one-way delay: 18.933 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 169.90 Mbit/s
95th percentile per-packet one-way delay: 18.886 ms
Loss rate: 0.01%
```

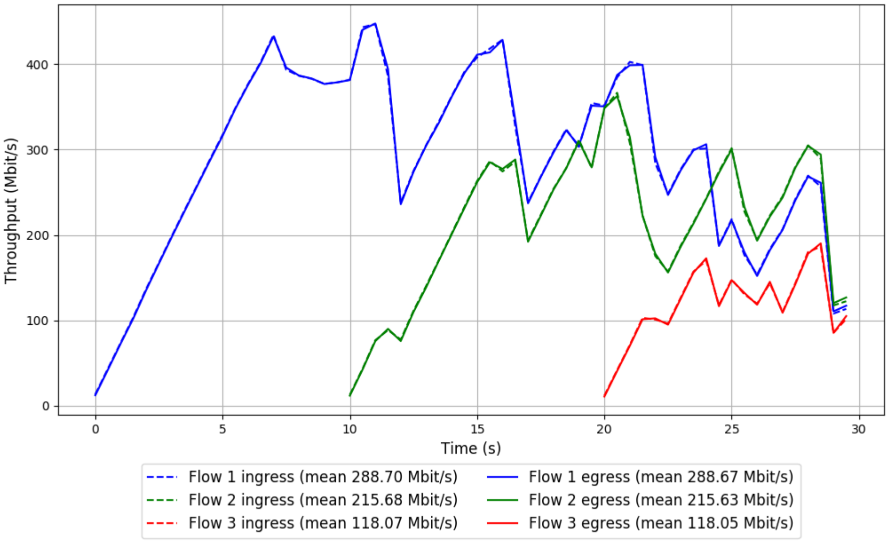
Run 6: Report of LEDBAT — Data Link

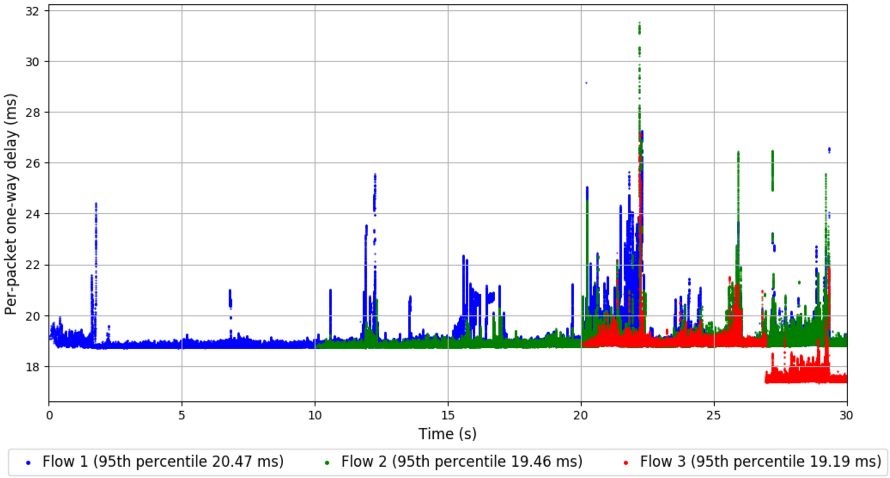




```
Run 7: Statistics of LEDBAT

Start at: 2018-03-21 07:53:39
End at: 2018-03-21 07:54:09
Local clock offset: -1.153 ms
Remote clock offset: -5.731 ms

# Below is generated by plot.py at 2018-03-21 12:38:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 471.41 Mbit/s
95th percentile per-packet one-way delay: 19.963 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 288.67 Mbit/s
95th percentile per-packet one-way delay: 20.470 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 215.63 Mbit/s
95th percentile per-packet one-way delay: 19.462 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 118.05 Mbit/s
95th percentile per-packet one-way delay: 19.194 ms
Loss rate: 0.03%
```

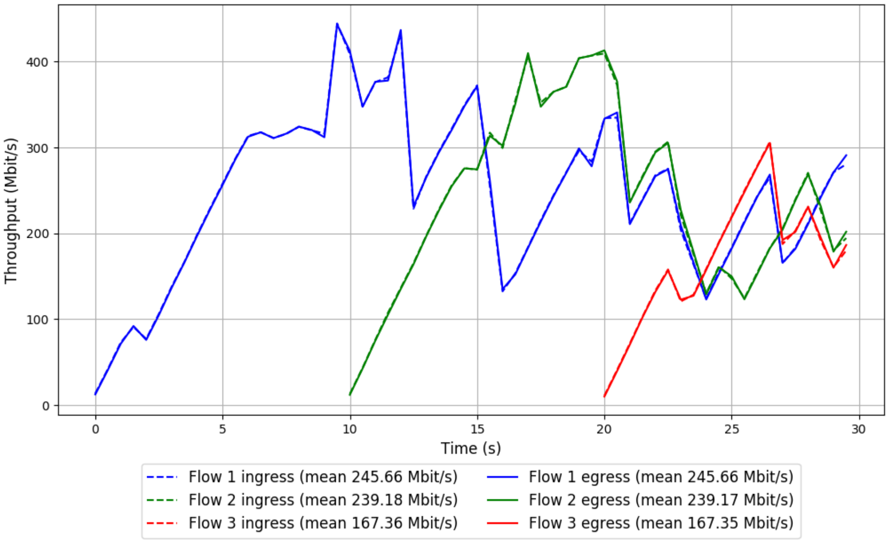
Run 7: Report of LEDBAT — Data Link

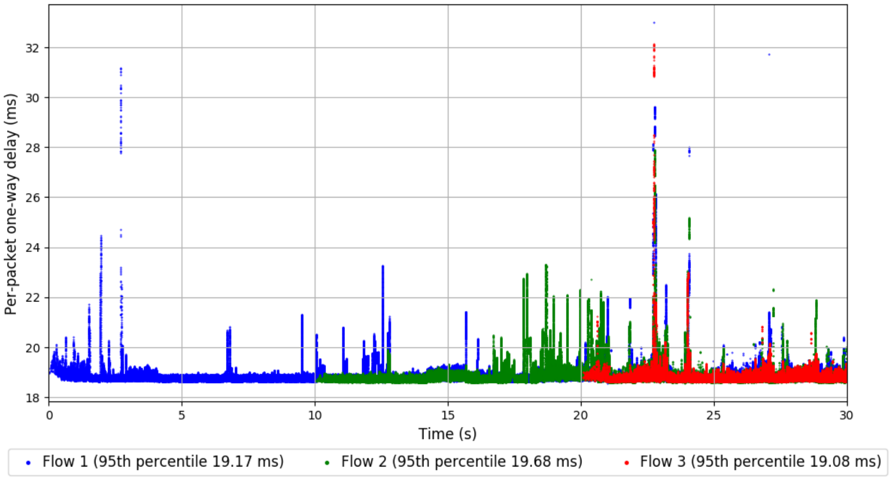




```
Run 8: Statistics of LEDBAT

Start at: 2018-03-21 08:22:58
End at: 2018-03-21 08:23:28
Local clock offset: -0.78 ms
Remote clock offset: -6.409 ms

# Below is generated by plot.py at 2018-03-21 12:39:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 460.38 Mbit/s
95th percentile per-packet one-way delay: 19.280 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 245.66 Mbit/s
95th percentile per-packet one-way delay: 19.174 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 239.17 Mbit/s
95th percentile per-packet one-way delay: 19.681 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 167.35 Mbit/s
95th percentile per-packet one-way delay: 19.077 ms
Loss rate: 0.01%
```

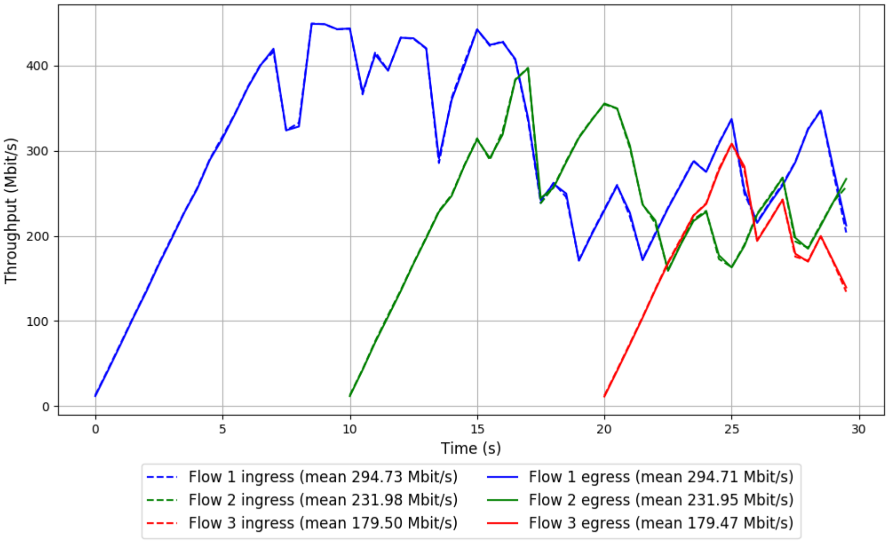
Run 8: Report of LEDBAT — Data Link

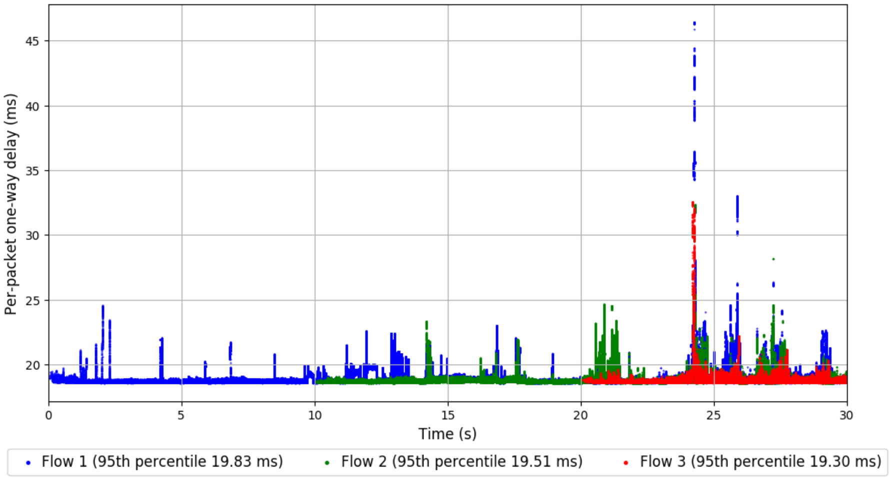




```
Run 9: Statistics of LEDBAT

Start at: 2018-03-21 08:52:16
End at: 2018-03-21 08:52:46
Local clock offset: -0.392 ms
Remote clock offset: -4.973 ms

# Below is generated by plot.py at 2018-03-21 12:40:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 508.69 Mbit/s
95th percentile per-packet one-way delay: 19.752 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 294.71 Mbit/s
95th percentile per-packet one-way delay: 19.831 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 231.95 Mbit/s
95th percentile per-packet one-way delay: 19.514 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 179.47 Mbit/s
95th percentile per-packet one-way delay: 19.304 ms
Loss rate: 0.02%
```

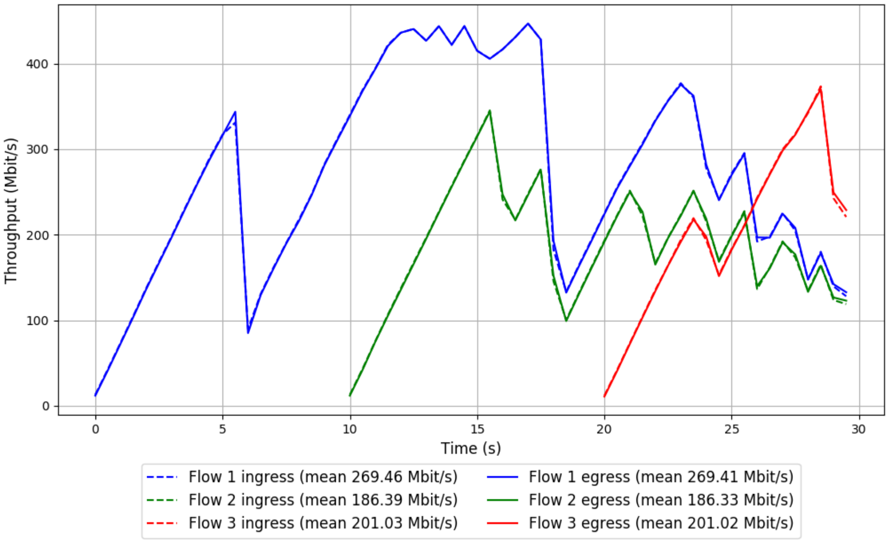
Run 9: Report of LEDBAT — Data Link

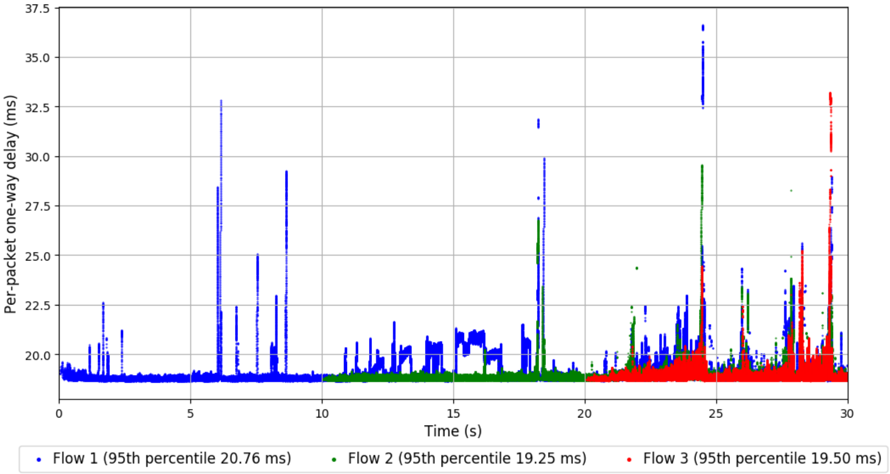




```
Run 10: Statistics of LEDBAT

Start at: 2018-03-21 09:21:41
End at: 2018-03-21 09:22:11
Local clock offset: 0.648 ms
Remote clock offset: -5.901 ms

# Below is generated by plot.py at 2018-03-21 12:40:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 460.17 Mbit/s
95th percentile per-packet one-way delay: 20.418 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 269.41 Mbit/s
95th percentile per-packet one-way delay: 20.759 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 186.33 Mbit/s
95th percentile per-packet one-way delay: 19.245 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 201.02 Mbit/s
95th percentile per-packet one-way delay: 19.499 ms
Loss rate: 0.00%
```

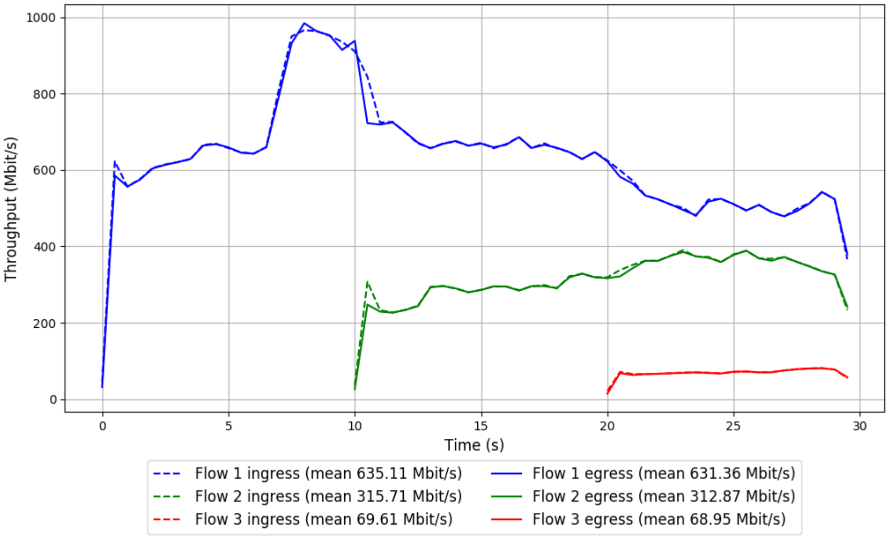
Run 10: Report of LEDBAT — Data Link

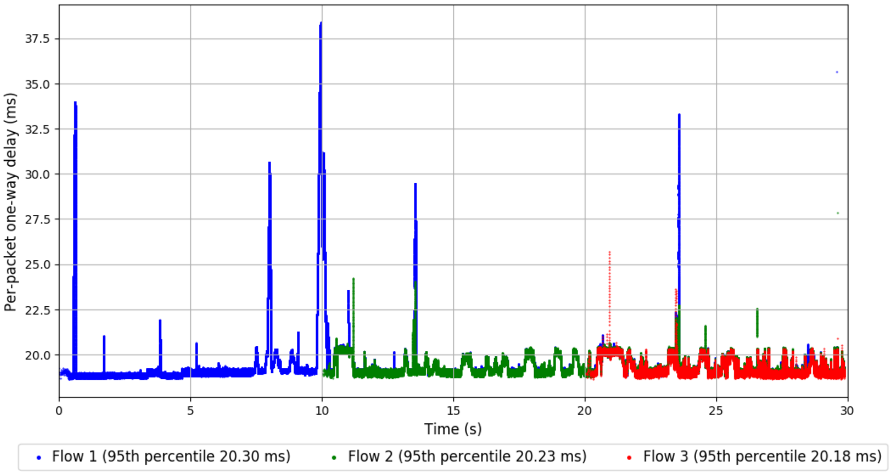




```
Run 1: Statistics of PCC

Start at: 2018-03-21 04:43:00
End at: 2018-03-21 04:43:30
Local clock offset: 0.569 ms
Remote clock offset: -5.908 ms

# Below is generated by plot.py at 2018-03-21 12:47:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 862.11 Mbit/s
95th percentile per-packet one-way delay: 20.273 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 631.36 Mbit/s
95th percentile per-packet one-way delay: 20.301 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 312.87 Mbit/s
95th percentile per-packet one-way delay: 20.225 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 68.95 Mbit/s
95th percentile per-packet one-way delay: 20.176 ms
Loss rate: 0.95%
```

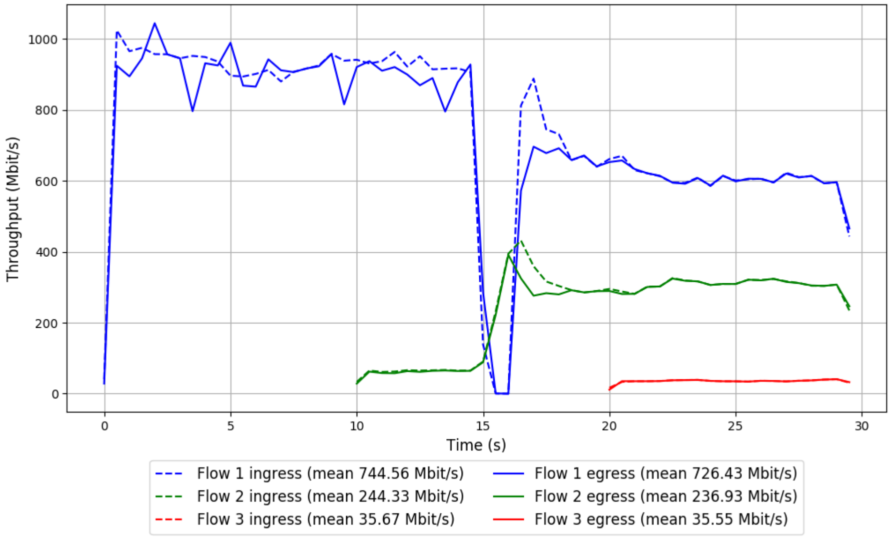
Run 1: Report of PCC — Data Link

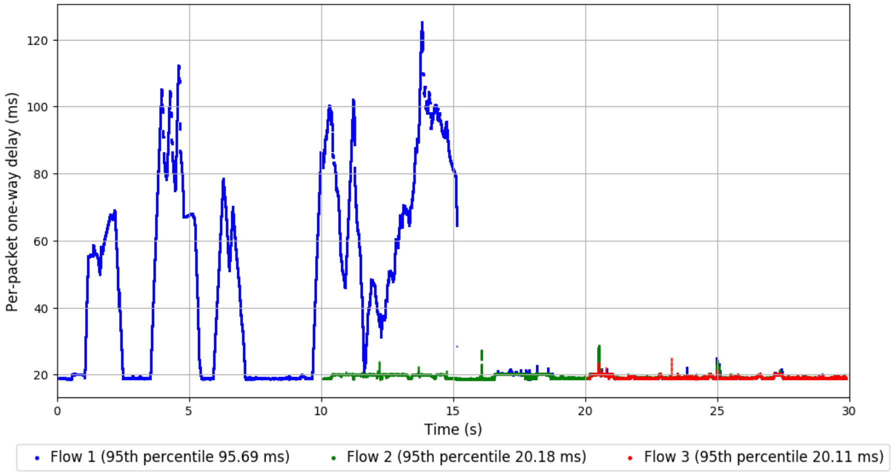




```
Run 2: Statistics of PCC

Start at: 2018-03-21 05:12:09
End at: 2018-03-21 05:12:39
Local clock offset: -0.207 ms
Remote clock offset: -5.511 ms

# Below is generated by plot.py at 2018-03-21 12:50:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 895.66 Mbit/s
95th percentile per-packet one-way delay: 93.430 ms
Loss rate: 2.51%
-- Flow 1:
Average throughput: 726.43 Mbit/s
95th percentile per-packet one-way delay: 95.691 ms
Loss rate: 2.43%
-- Flow 2:
Average throughput: 236.93 Mbit/s
95th percentile per-packet one-way delay: 20.176 ms
Loss rate: 3.03%
-- Flow 3:
Average throughput: 35.55 Mbit/s
95th percentile per-packet one-way delay: 20.113 ms
Loss rate: 0.32%
```

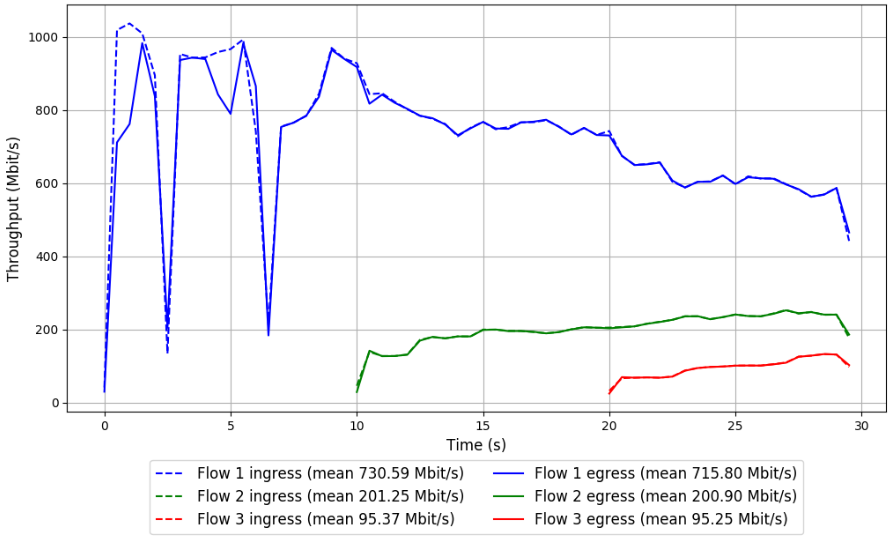
Run 2: Report of PCC — Data Link

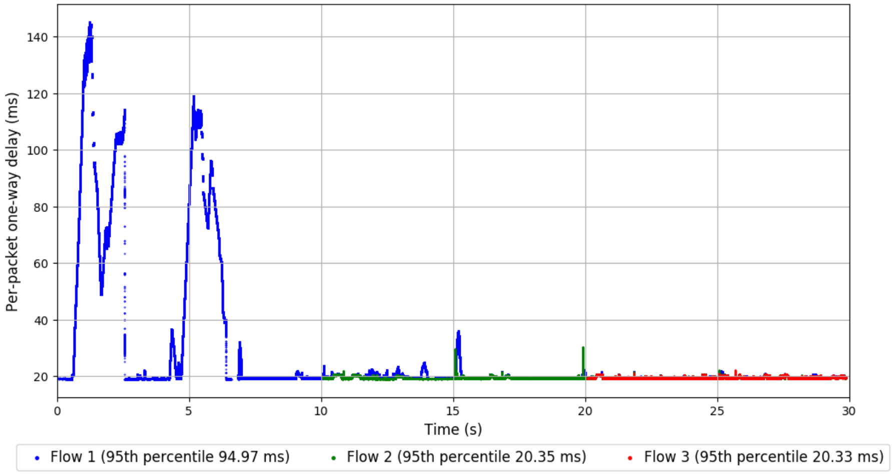




```
Run 3: Statistics of PCC

Start at: 2018-03-21 05:41:28
End at: 2018-03-21 05:41:58
Local clock offset: 2.185 ms
Remote clock offset: -5.162 ms

# Below is generated by plot.py at 2018-03-21 12:50:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 880.77 Mbit/s
95th percentile per-packet one-way delay: 88.972 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 715.80 Mbit/s
95th percentile per-packet one-way delay: 94.975 ms
Loss rate: 2.02%
-- Flow 2:
Average throughput: 200.90 Mbit/s
95th percentile per-packet one-way delay: 20.347 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 95.25 Mbit/s
95th percentile per-packet one-way delay: 20.330 ms
Loss rate: 0.12%
```

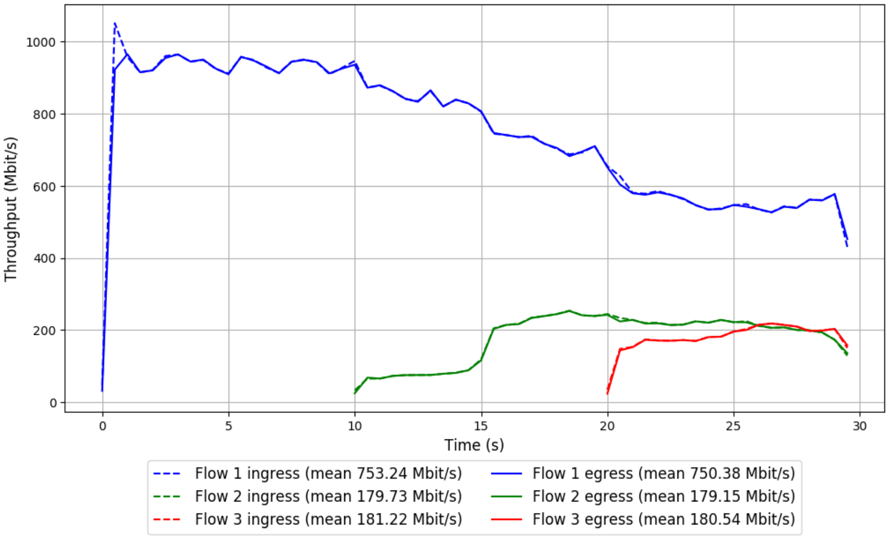
Run 3: Report of PCC — Data Link

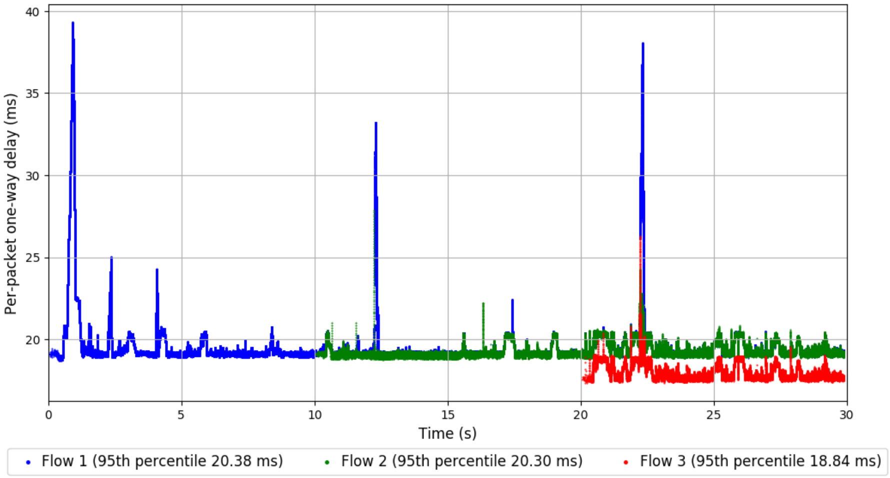




```
Run 4: Statistics of PCC

Start at: 2018-03-21 06:10:20
End at: 2018-03-21 06:10:50
Local clock offset: 8.269 ms
Remote clock offset: -5.263 ms

# Below is generated by plot.py at 2018-03-21 12:51:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 928.95 Mbit/s
95th percentile per-packet one-way delay: 20.345 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 750.38 Mbit/s
95th percentile per-packet one-way delay: 20.380 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 179.15 Mbit/s
95th percentile per-packet one-way delay: 20.297 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 180.54 Mbit/s
95th percentile per-packet one-way delay: 18.841 ms
Loss rate: 0.37%
```

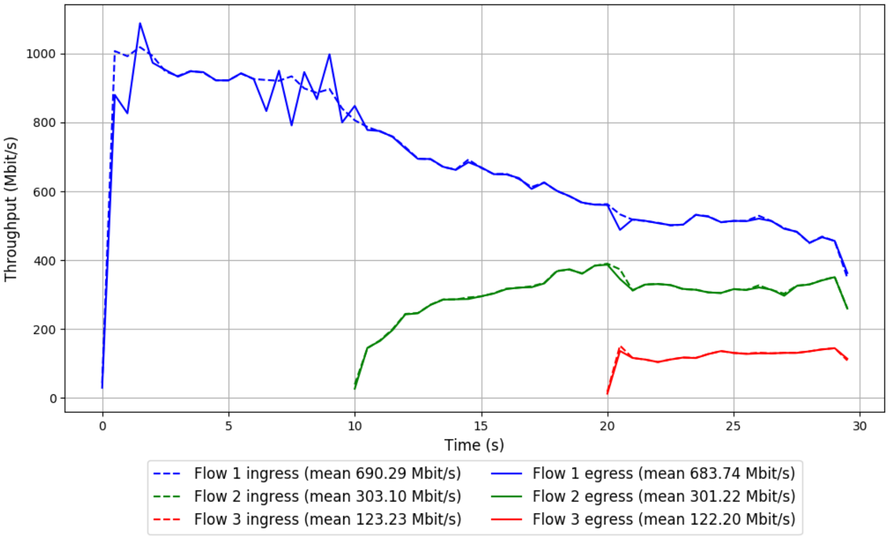
Run 4: Report of PCC — Data Link

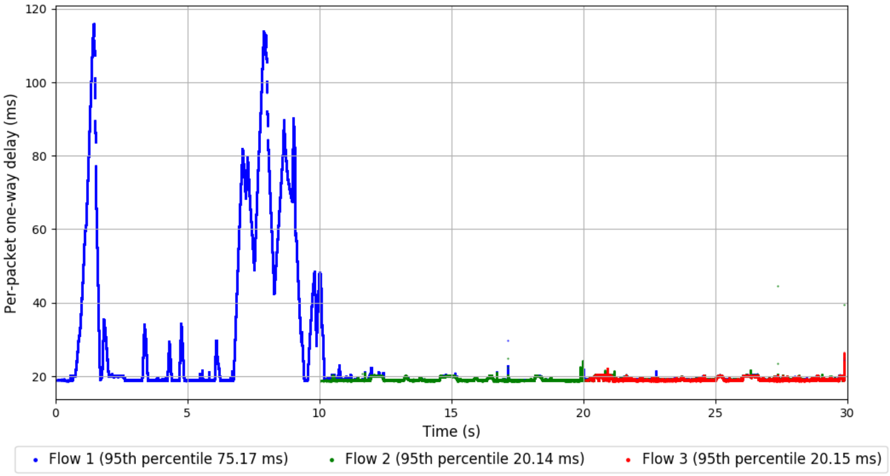




```
Run 5: Statistics of PCC

Start at: 2018-03-21 06:39:52
End at: 2018-03-21 06:40:22
Local clock offset: 0.039 ms
Remote clock offset: -6.066 ms

# Below is generated by plot.py at 2018-03-21 12:52:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 924.19 Mbit/s
95th percentile per-packet one-way delay: 70.069 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 683.74 Mbit/s
95th percentile per-packet one-way delay: 75.171 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 301.22 Mbit/s
95th percentile per-packet one-way delay: 20.136 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 122.20 Mbit/s
95th percentile per-packet one-way delay: 20.150 ms
Loss rate: 0.84%
```

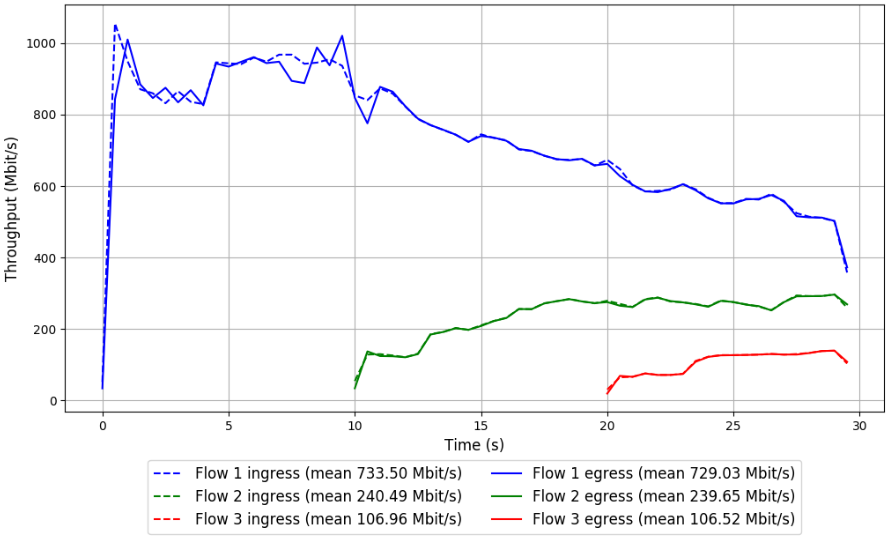
Run 5: Report of PCC — Data Link

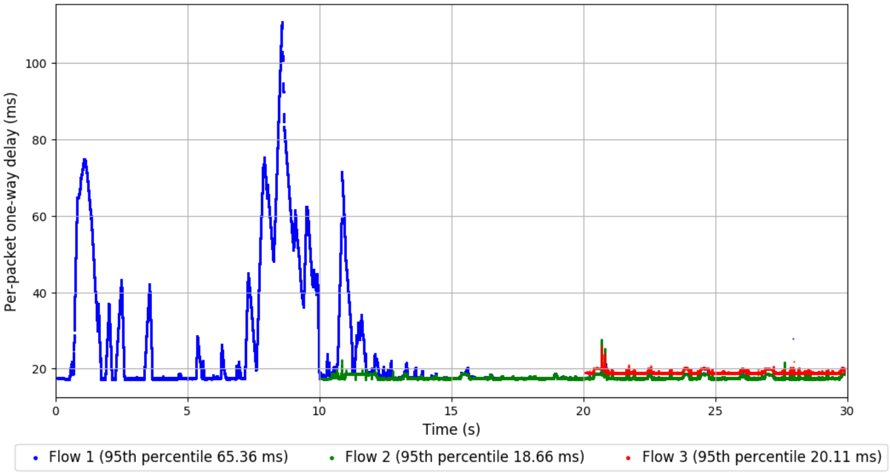




```
Run 6: Statistics of PCC

Start at: 2018-03-21 07:09:11
End at: 2018-03-21 07:09:41
Local clock offset: 4.405 ms
Remote clock offset: -6.21 ms

# Below is generated by plot.py at 2018-03-21 12:52:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 923.47 Mbit/s
95th percentile per-packet one-way delay: 61.560 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 729.03 Mbit/s
95th percentile per-packet one-way delay: 65.355 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 239.65 Mbit/s
95th percentile per-packet one-way delay: 18.657 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 106.52 Mbit/s
95th percentile per-packet one-way delay: 20.107 ms
Loss rate: 0.41%
```

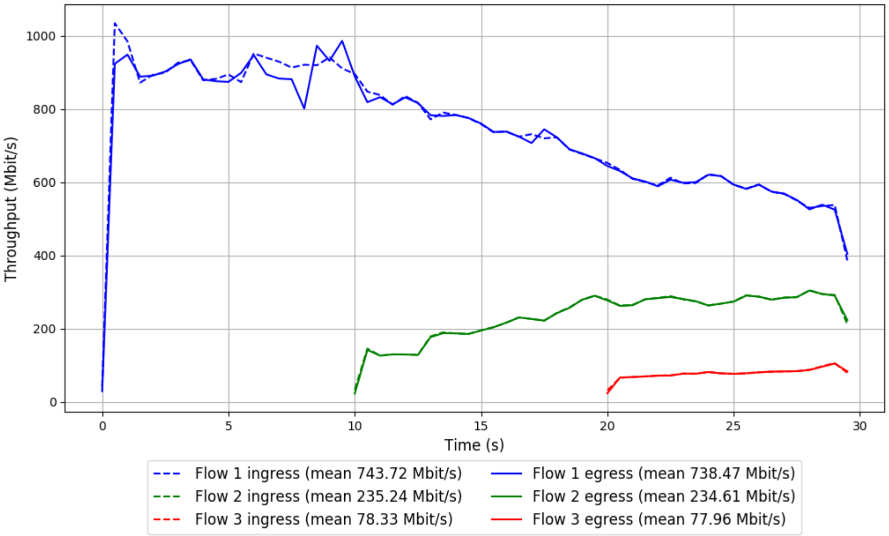
Run 6: Report of PCC — Data Link

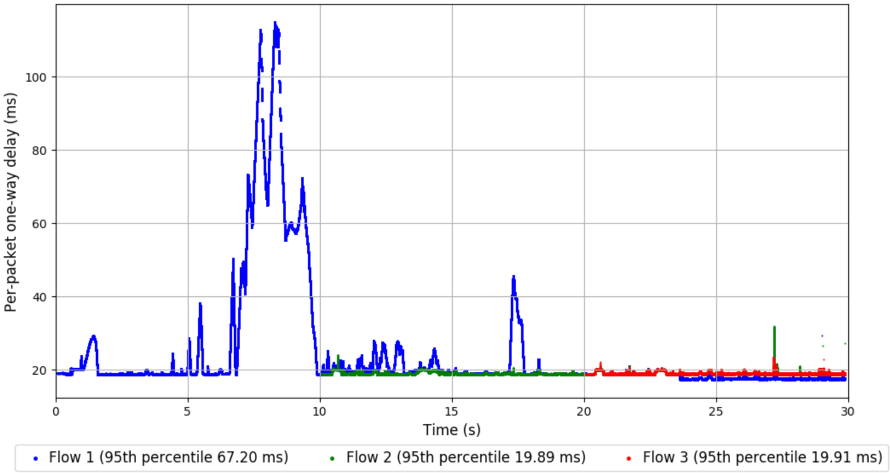




```
Run 7: Statistics of PCC

Start at: 2018-03-21 07:38:44
End at: 2018-03-21 07:39:14
Local clock offset: 0.084 ms
Remote clock offset: -5.834 ms

# Below is generated by plot.py at 2018-03-21 12:54:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 919.90 Mbit/s
95th percentile per-packet one-way delay: 62.252 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 738.47 Mbit/s
95th percentile per-packet one-way delay: 67.197 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 234.61 Mbit/s
95th percentile per-packet one-way delay: 19.893 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 77.96 Mbit/s
95th percentile per-packet one-way delay: 19.908 ms
Loss rate: 0.48%
```

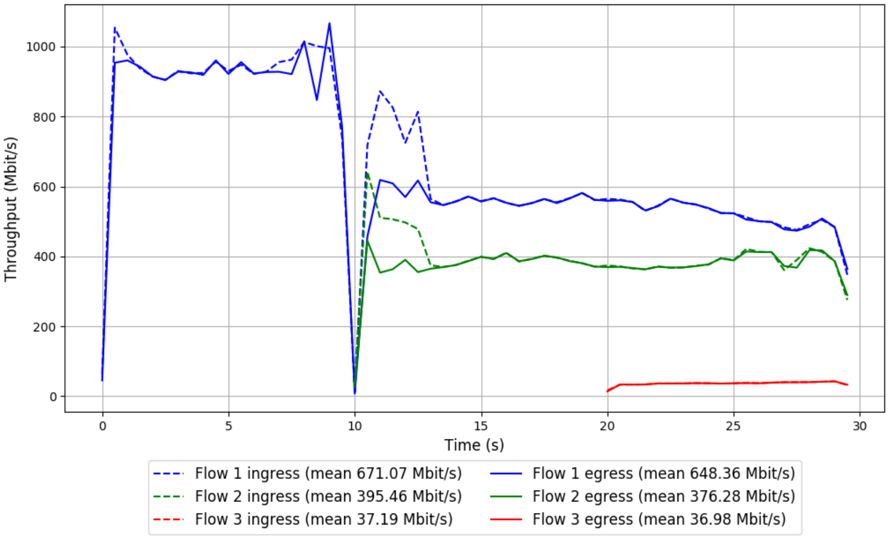
Run 7: Report of PCC — Data Link

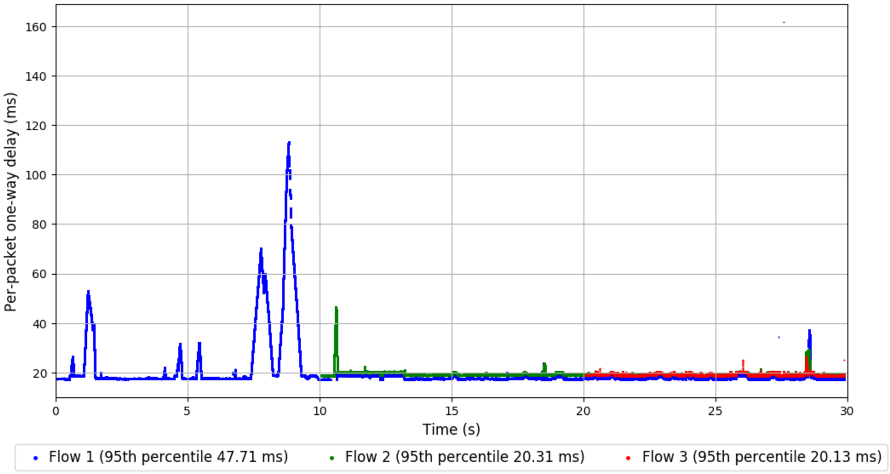




```
Run 8: Statistics of PCC

Start at: 2018-03-21 08:07:52
End at: 2018-03-21 08:08:22
Local clock offset: -0.477 ms
Remote clock offset: -6.246 ms

# Below is generated by plot.py at 2018-03-21 12:54:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 910.49 Mbit/s
95th percentile per-packet one-way delay: 39.395 ms
Loss rate: 3.75%
-- Flow 1:
Average throughput: 648.36 Mbit/s
95th percentile per-packet one-way delay: 47.713 ms
Loss rate: 3.38%
-- Flow 2:
Average throughput: 376.28 Mbit/s
95th percentile per-packet one-way delay: 20.311 ms
Loss rate: 4.85%
-- Flow 3:
Average throughput: 36.98 Mbit/s
95th percentile per-packet one-way delay: 20.129 ms
Loss rate: 0.50%
```

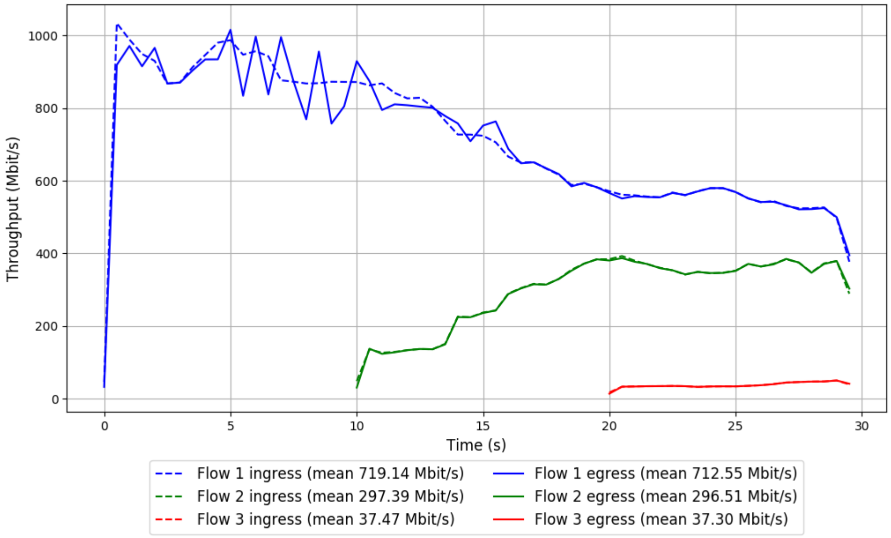
Run 8: Report of PCC — Data Link

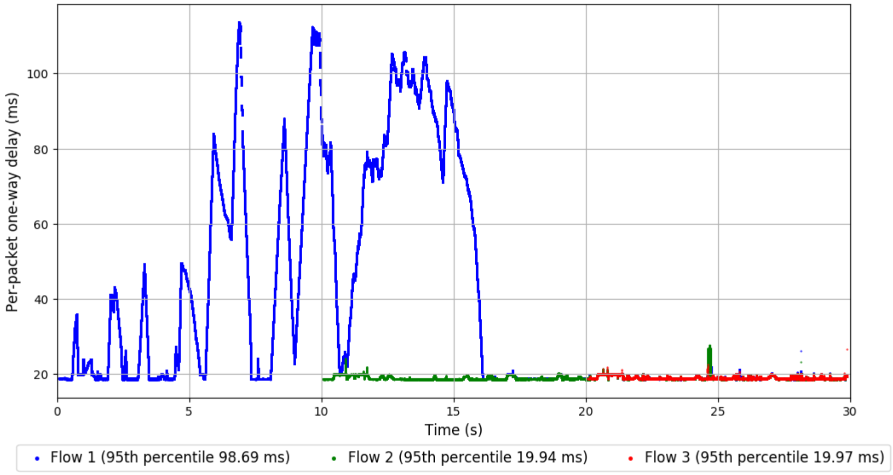




```
Run 9: Statistics of PCC

Start at: 2018-03-21 08:37:16
End at: 2018-03-21 08:37:46
Local clock offset: -0.361 ms
Remote clock offset: -5.463 ms

# Below is generated by plot.py at 2018-03-21 13:01:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 921.76 Mbit/s
95th percentile per-packet one-way delay: 97.128 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 712.55 Mbit/s
95th percentile per-packet one-way delay: 98.690 ms
Loss rate: 0.91%
-- Flow 2:
Average throughput: 296.51 Mbit/s
95th percentile per-packet one-way delay: 19.940 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 37.30 Mbit/s
95th percentile per-packet one-way delay: 19.966 ms
Loss rate: 0.38%
```

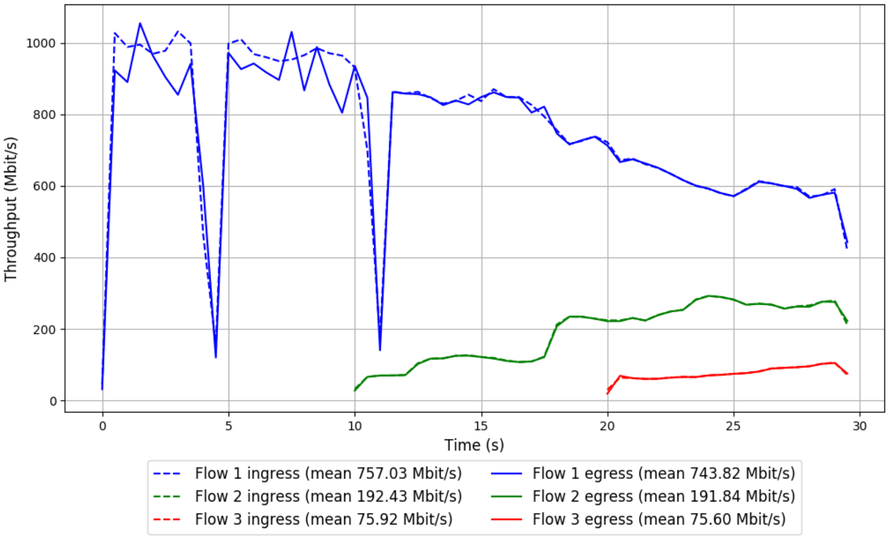
Run 9: Report of PCC — Data Link

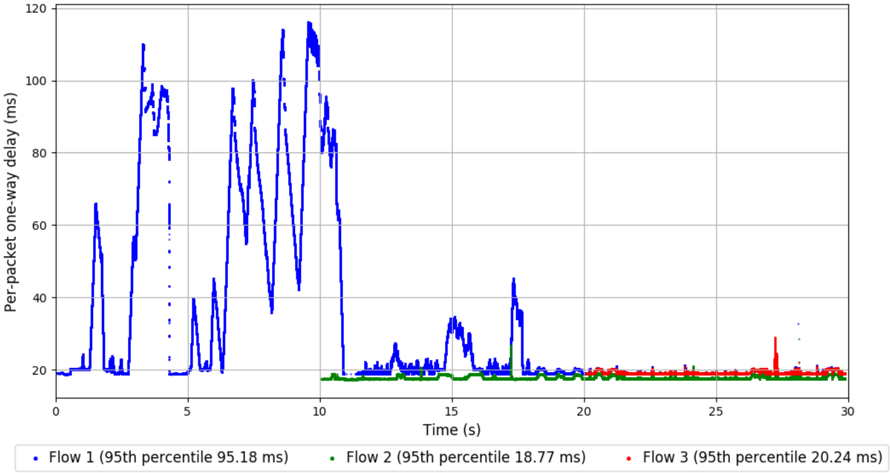




```
Run 10: Statistics of PCC

Start at: 2018-03-21 09:06:32
End at: 2018-03-21 09:07:02
Local clock offset: -0.063 ms
Remote clock offset: -5.323 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 896.21 Mbit/s
95th percentile per-packet one-way delay: 93.683 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 743.82 Mbit/s
95th percentile per-packet one-way delay: 95.183 ms
Loss rate: 1.75%
-- Flow 2:
Average throughput: 191.84 Mbit/s
95th percentile per-packet one-way delay: 18.771 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 75.60 Mbit/s
95th percentile per-packet one-way delay: 20.240 ms
Loss rate: 0.42%
```

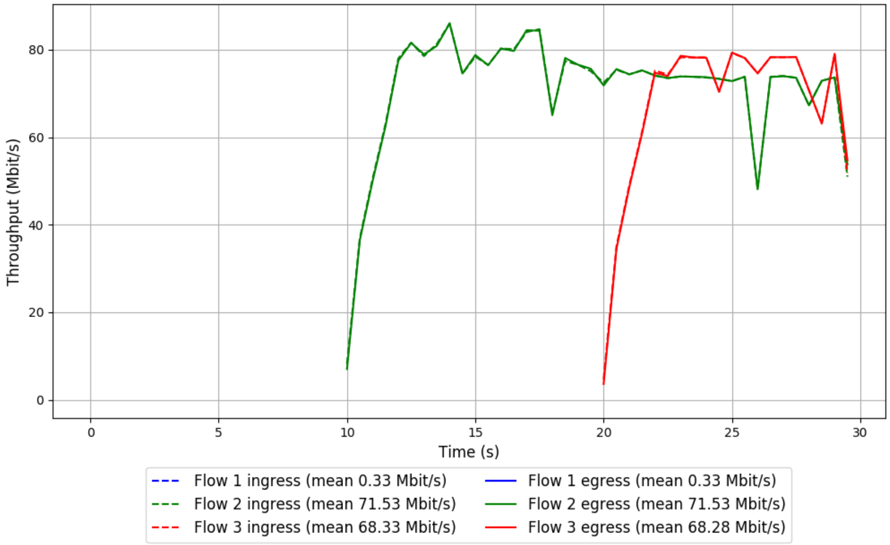
Run 10: Report of PCC — Data Link

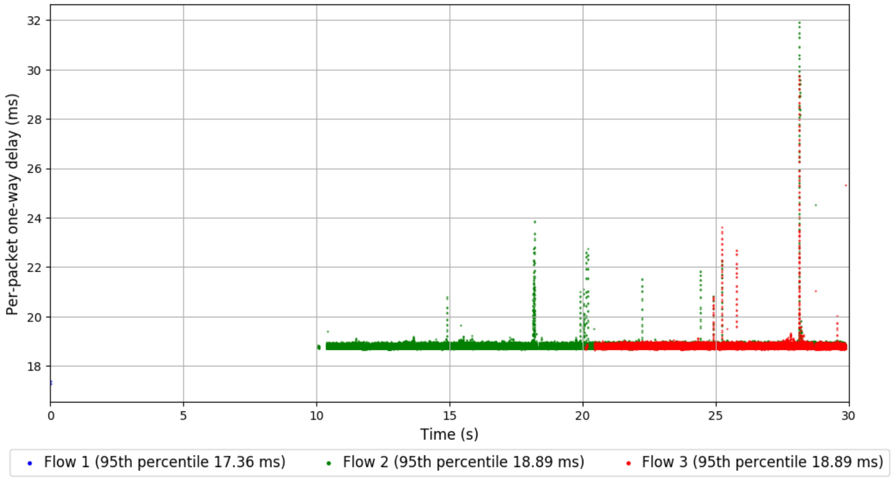




```
Run 1: Statistics of QUIC Cubic

Start at: 2018-03-21 04:39:56
End at: 2018-03-21 04:40:26
Local clock offset: 0.773 ms
Remote clock offset: -5.705 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.92 Mbit/s
95th percentile per-packet one-way delay: 18.891 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 17.360 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 71.53 Mbit/s
95th percentile per-packet one-way delay: 18.891 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 68.28 Mbit/s
95th percentile per-packet one-way delay: 18.890 ms
Loss rate: 0.00%
```

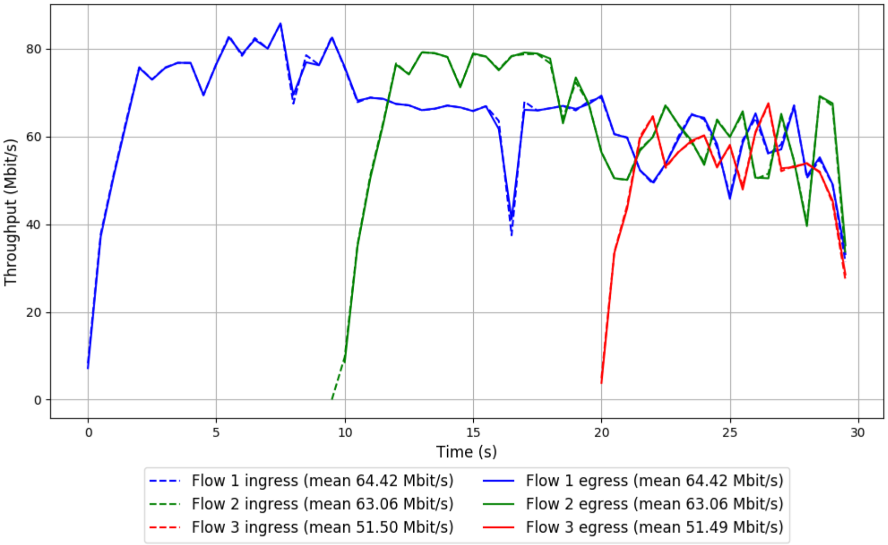
Run 1: Report of QUIC Cubic — Data Link

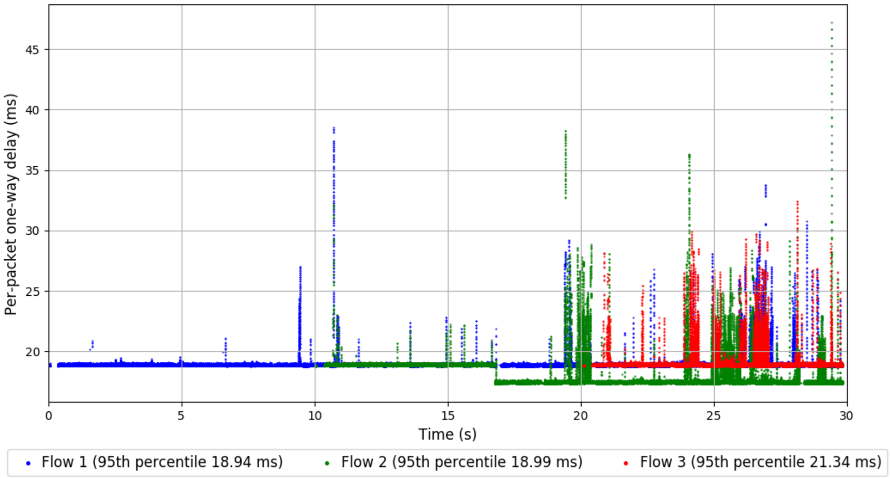




```
Run 2: Statistics of QUIC Cubic

Start at: 2018-03-21 05:09:04
End at: 2018-03-21 05:09:34
Local clock offset: -0.155 ms
Remote clock offset: -5.609 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 123.23 Mbit/s
95th percentile per-packet one-way delay: 19.017 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 64.42 Mbit/s
95th percentile per-packet one-way delay: 18.941 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 63.06 Mbit/s
95th percentile per-packet one-way delay: 18.991 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 51.49 Mbit/s
95th percentile per-packet one-way delay: 21.341 ms
Loss rate: 0.01%
```

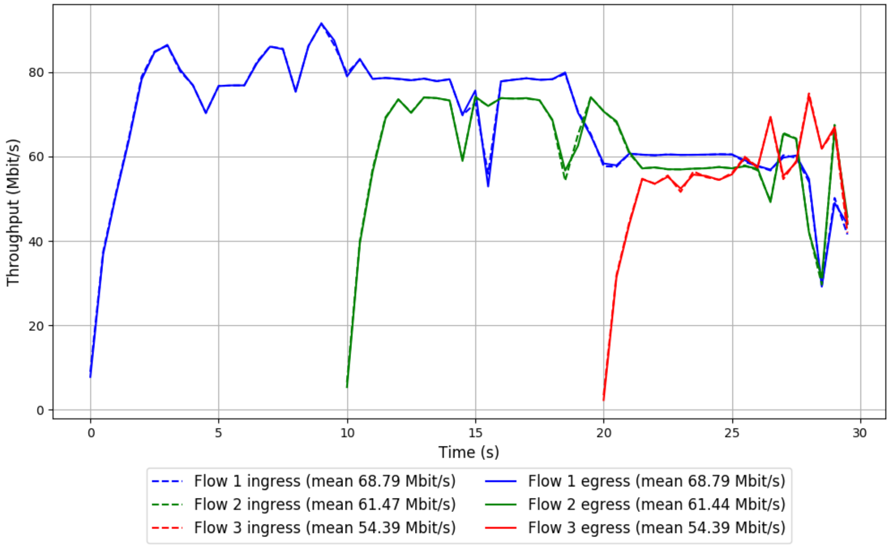
Run 2: Report of QUIC Cubic — Data Link

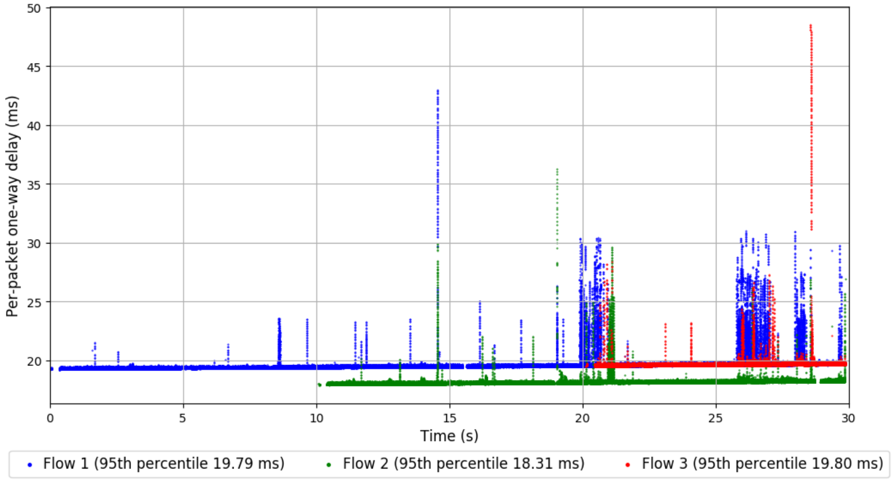




```
Run 3: Statistics of QUIC Cubic

Start at: 2018-03-21 05:38:24
End at: 2018-03-21 05:38:54
Local clock offset: -0.063 ms
Remote clock offset: -5.124 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 127.34 Mbit/s
95th percentile per-packet one-way delay: 19.750 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 68.79 Mbit/s
95th percentile per-packet one-way delay: 19.792 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.44 Mbit/s
95th percentile per-packet one-way delay: 18.313 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 54.39 Mbit/s
95th percentile per-packet one-way delay: 19.804 ms
Loss rate: 0.00%
```

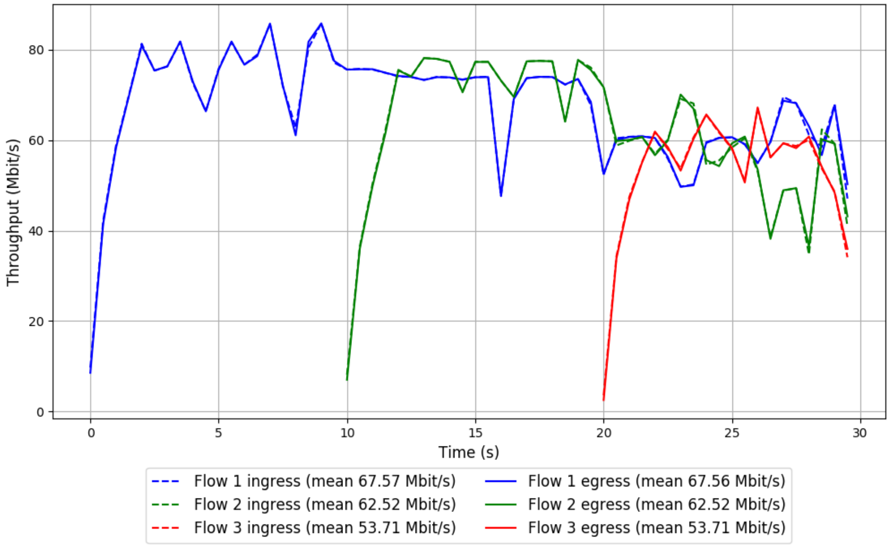
Run 3: Report of QUIC Cubic — Data Link

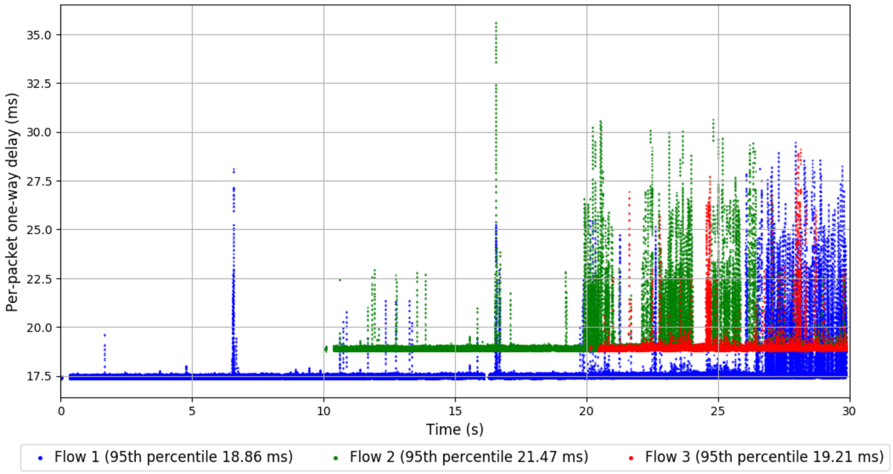




```
Run 4: Statistics of QUIC Cubic

Start at: 2018-03-21 06:07:16
End at: 2018-03-21 06:07:46
Local clock offset: 8.09 ms
Remote clock offset: -5.161 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 126.68 Mbit/s
95th percentile per-packet one-way delay: 20.068 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.56 Mbit/s
95th percentile per-packet one-way delay: 18.864 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 62.52 Mbit/s
95th percentile per-packet one-way delay: 21.474 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 53.71 Mbit/s
95th percentile per-packet one-way delay: 19.209 ms
Loss rate: 0.00%
```

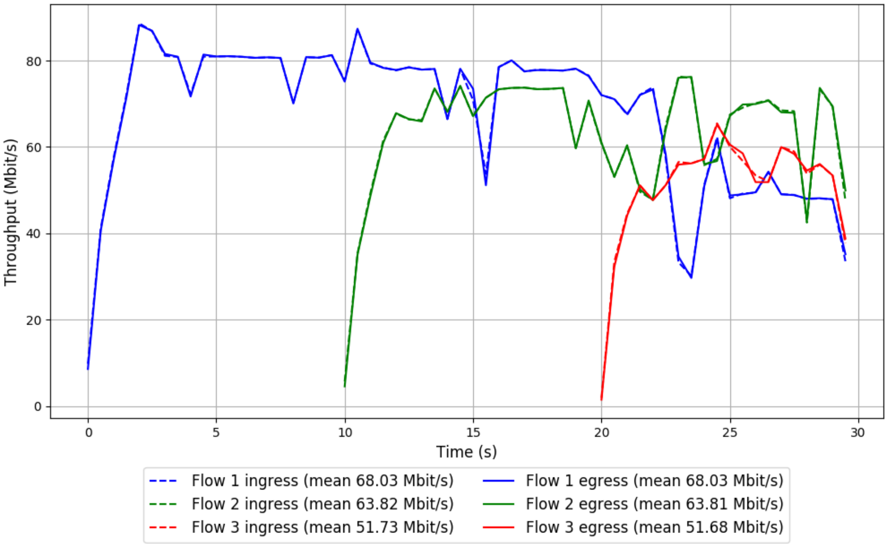
Run 4: Report of QUIC Cubic — Data Link

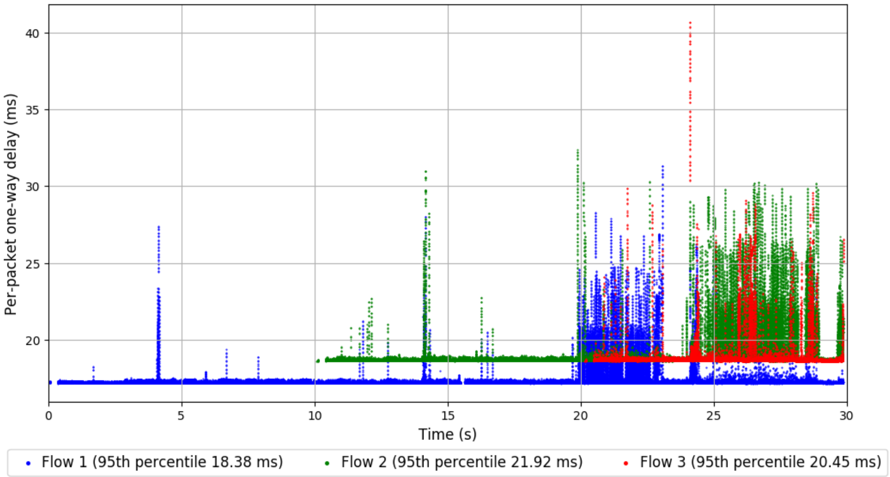




```
Run 5: Statistics of QUIC Cubic

Start at: 2018-03-21 06:36:48
End at: 2018-03-21 06:37:18
Local clock offset: 0.25 ms
Remote clock offset: -6.088 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 127.20 Mbit/s
95th percentile per-packet one-way delay: 20.319 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 68.03 Mbit/s
95th percentile per-packet one-way delay: 18.377 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 63.81 Mbit/s
95th percentile per-packet one-way delay: 21.916 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 51.68 Mbit/s
95th percentile per-packet one-way delay: 20.453 ms
Loss rate: 0.09%
```

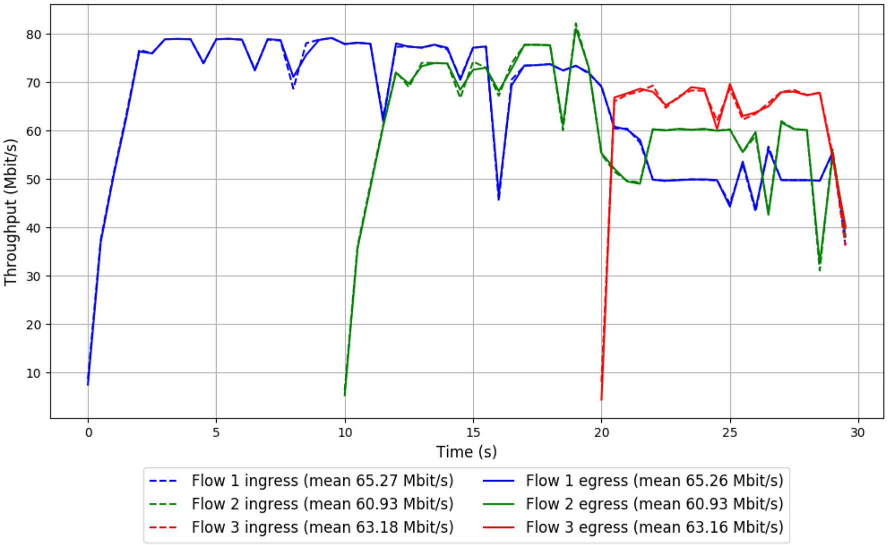
Run 5: Report of QUIC Cubic — Data Link

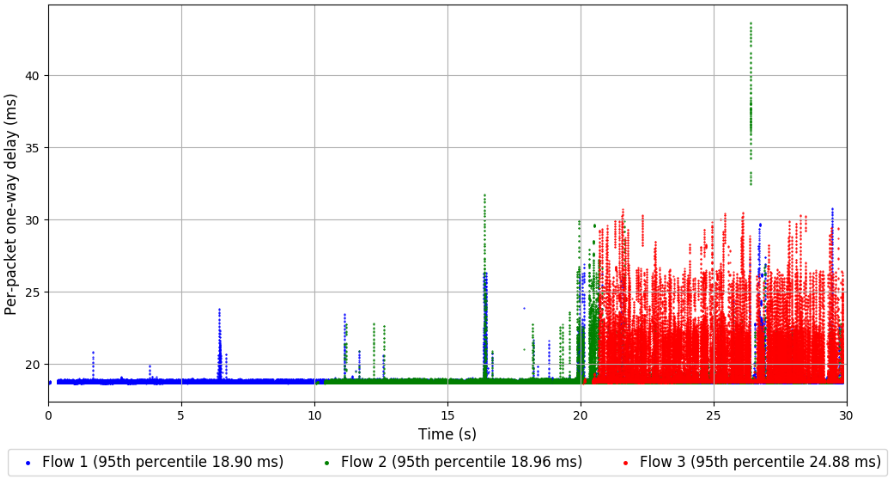




```
Run 6: Statistics of QUIC Cubic

Start at: 2018-03-21 07:06:05
End at: 2018-03-21 07:06:35
Local clock offset: 4.289 ms
Remote clock offset: -6.143 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 126.35 Mbit/s
95th percentile per-packet one-way delay: 21.252 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 65.26 Mbit/s
95th percentile per-packet one-way delay: 18.901 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 60.93 Mbit/s
95th percentile per-packet one-way delay: 18.965 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 63.16 Mbit/s
95th percentile per-packet one-way delay: 24.882 ms
Loss rate: 0.03%
```

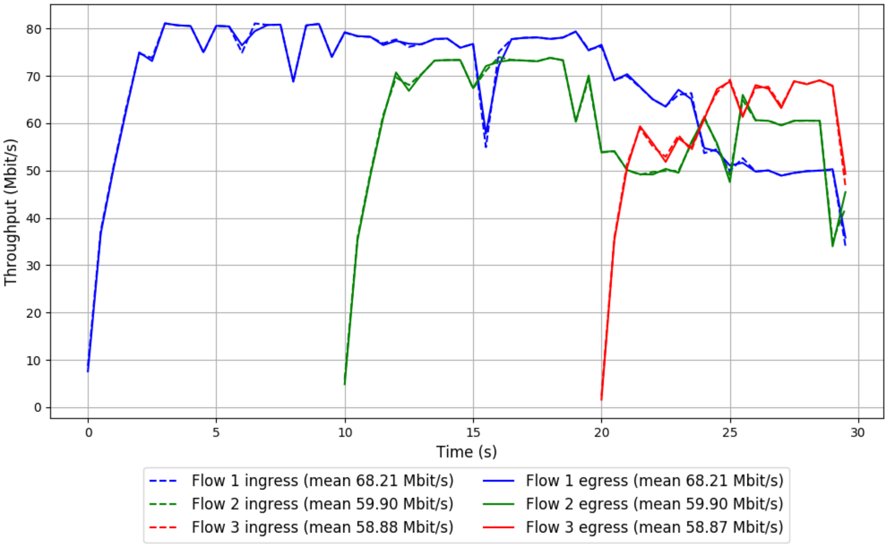
Run 6: Report of QUIC Cubic — Data Link

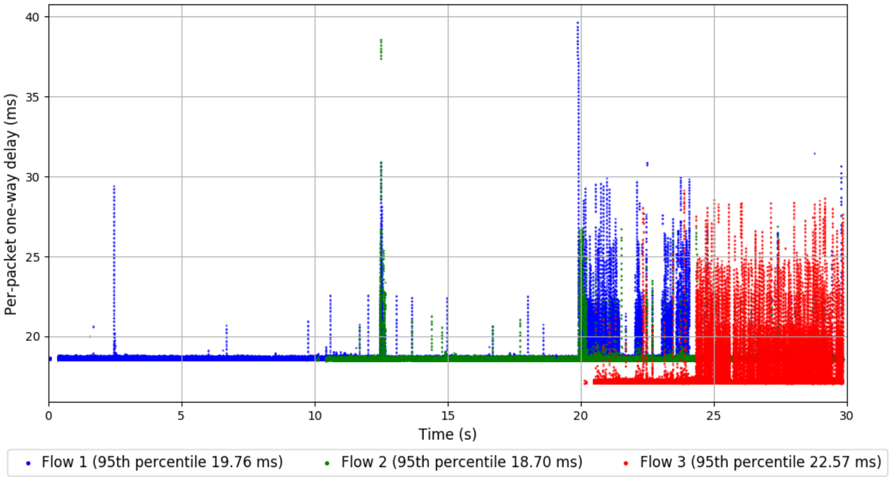




```
Run 7: Statistics of QUIC Cubic

Start at: 2018-03-21 07:35:39
End at: 2018-03-21 07:36:09
Local clock offset: 0.567 ms
Remote clock offset: -5.846 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 127.15 Mbit/s
95th percentile per-packet one-way delay: 20.081 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 68.21 Mbit/s
95th percentile per-packet one-way delay: 19.764 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.90 Mbit/s
95th percentile per-packet one-way delay: 18.701 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 58.87 Mbit/s
95th percentile per-packet one-way delay: 22.572 ms
Loss rate: 0.01%
```

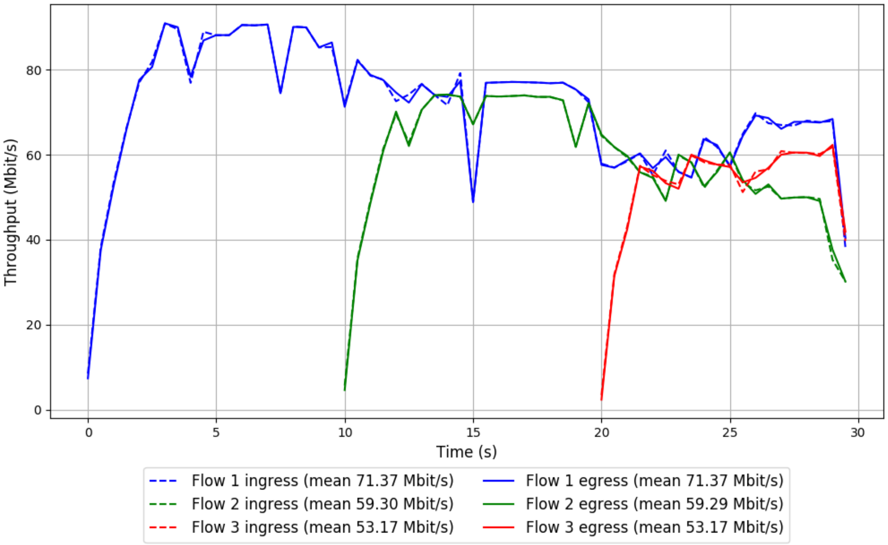
Run 7: Report of QUIC Cubic — Data Link

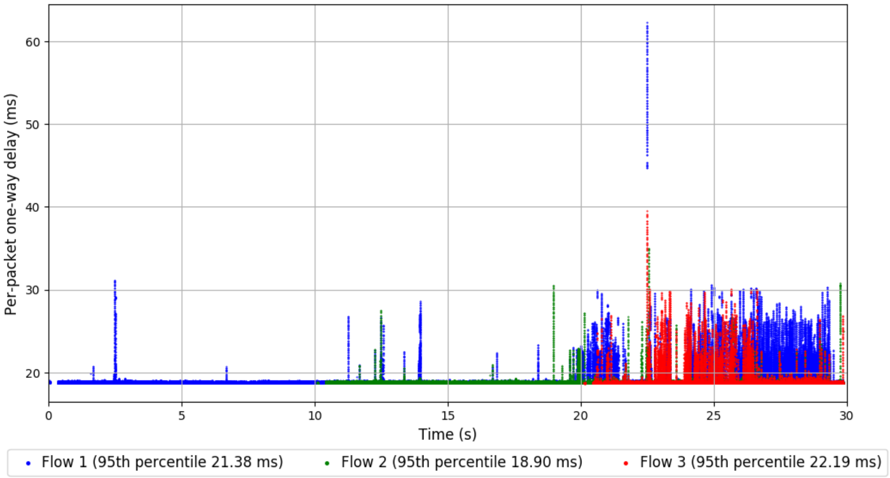




```
Run 8: Statistics of QUIC Cubic

Start at: 2018-03-21 08:04:48
End at: 2018-03-21 08:05:18
Local clock offset: -0.493 ms
Remote clock offset: -6.178 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.07 Mbit/s
95th percentile per-packet one-way delay: 20.882 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 71.37 Mbit/s
95th percentile per-packet one-way delay: 21.384 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.29 Mbit/s
95th percentile per-packet one-way delay: 18.901 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 53.17 Mbit/s
95th percentile per-packet one-way delay: 22.193 ms
Loss rate: 0.00%
```

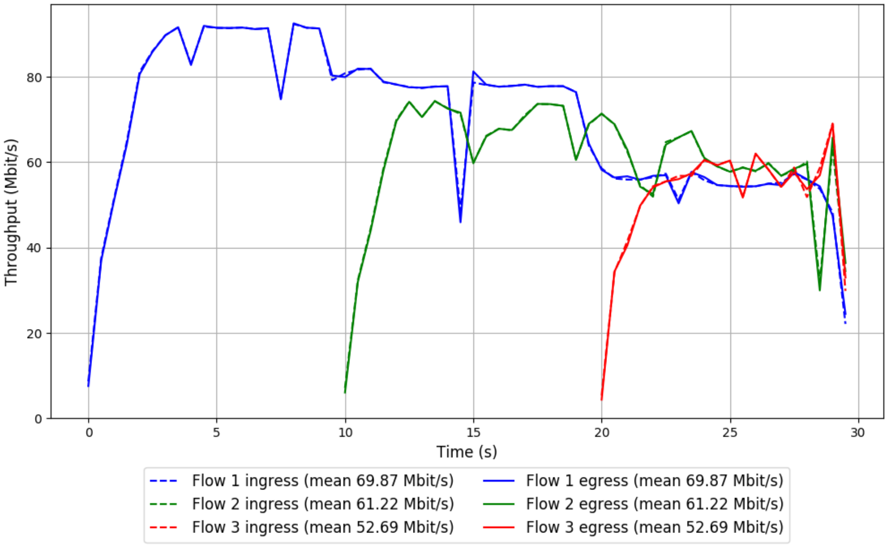
Run 8: Report of QUIC Cubic — Data Link

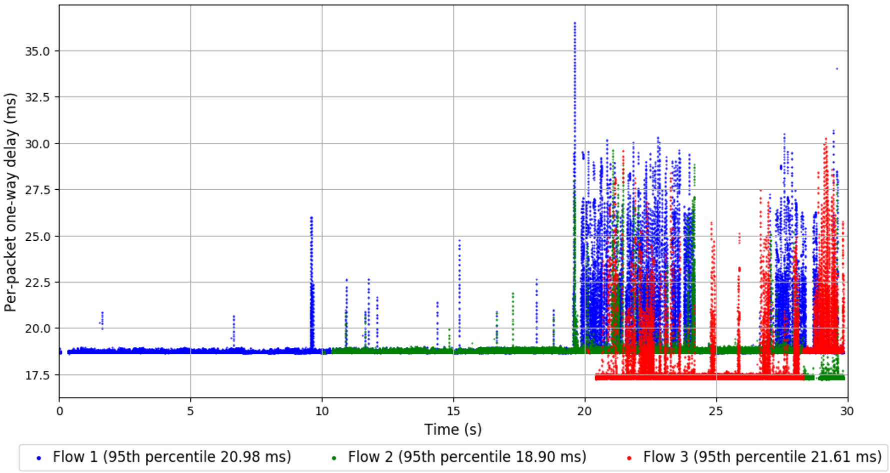




```
Run 9: Statistics of QUIC Cubic

Start at: 2018-03-21 08:34:11
End at: 2018-03-21 08:34:41
Local clock offset: -0.475 ms
Remote clock offset: -5.603 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 127.76 Mbit/s
95th percentile per-packet one-way delay: 20.326 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 69.87 Mbit/s
95th percentile per-packet one-way delay: 20.981 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.22 Mbit/s
95th percentile per-packet one-way delay: 18.896 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 52.69 Mbit/s
95th percentile per-packet one-way delay: 21.609 ms
Loss rate: 0.01%
```

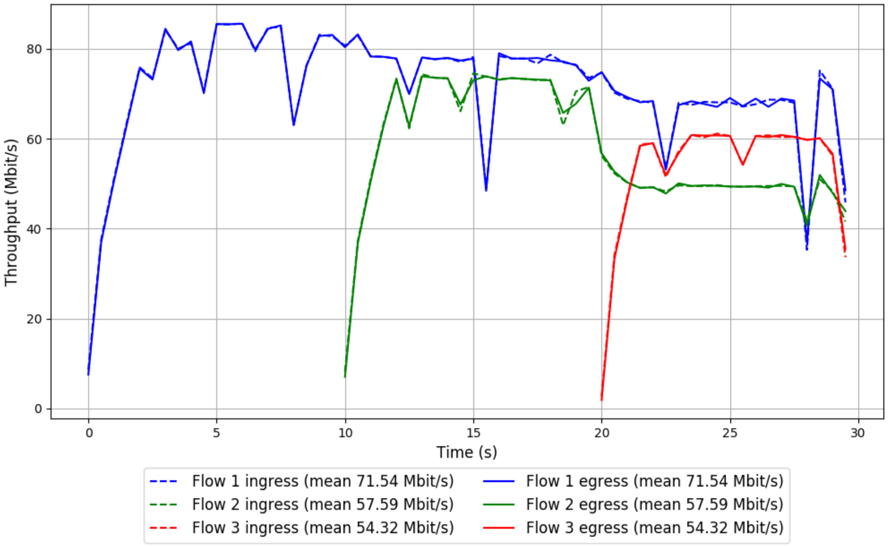
Run 9: Report of QUIC Cubic — Data Link

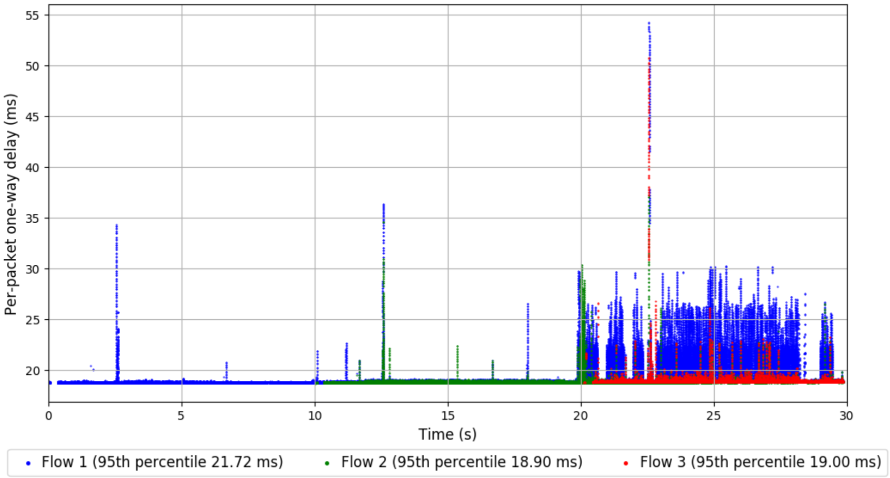




```
Run 10: Statistics of QUIC Cubic

Start at: 2018-03-21 09:03:27
End at: 2018-03-21 09:03:57
Local clock offset: -0.342 ms
Remote clock offset: -5.096 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 127.56 Mbit/s
95th percentile per-packet one-way delay: 20.831 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 71.54 Mbit/s
95th percentile per-packet one-way delay: 21.716 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 57.59 Mbit/s
95th percentile per-packet one-way delay: 18.904 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 54.32 Mbit/s
95th percentile per-packet one-way delay: 19.005 ms
Loss rate: 0.00%
```

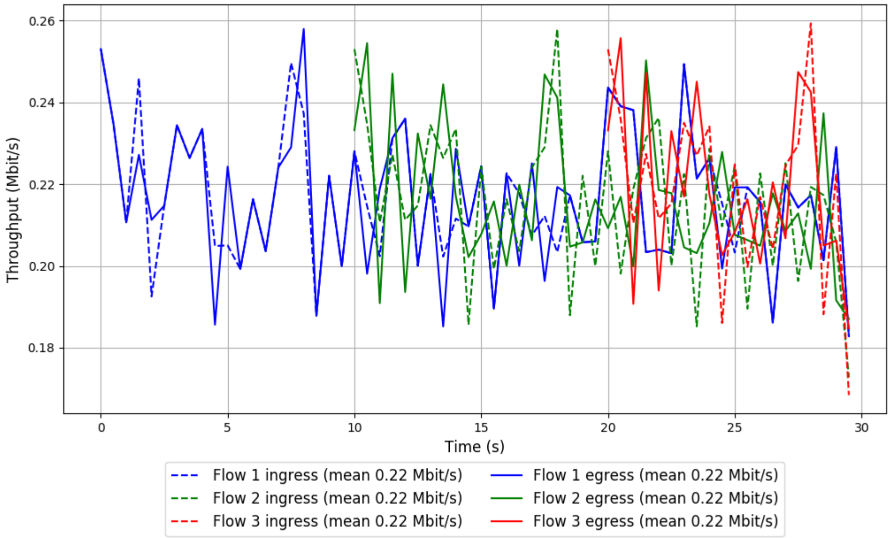
Run 10: Report of QUIC Cubic — Data Link

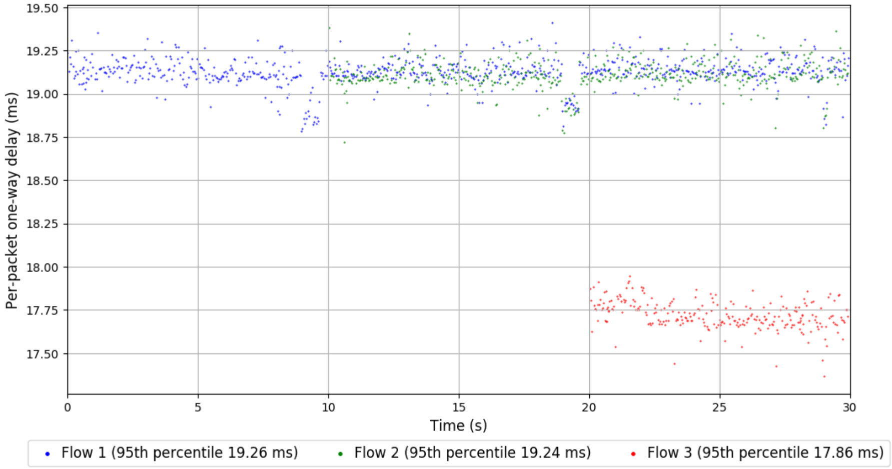




```
Run 1: Statistics of SCReAM

Start at: 2018-03-21 04:35:05
End at: 2018-03-21 04:35:35
Local clock offset: 0.773 ms
Remote clock offset: -5.495 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.243 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.259 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.239 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.859 ms
Loss rate: 0.00%
```

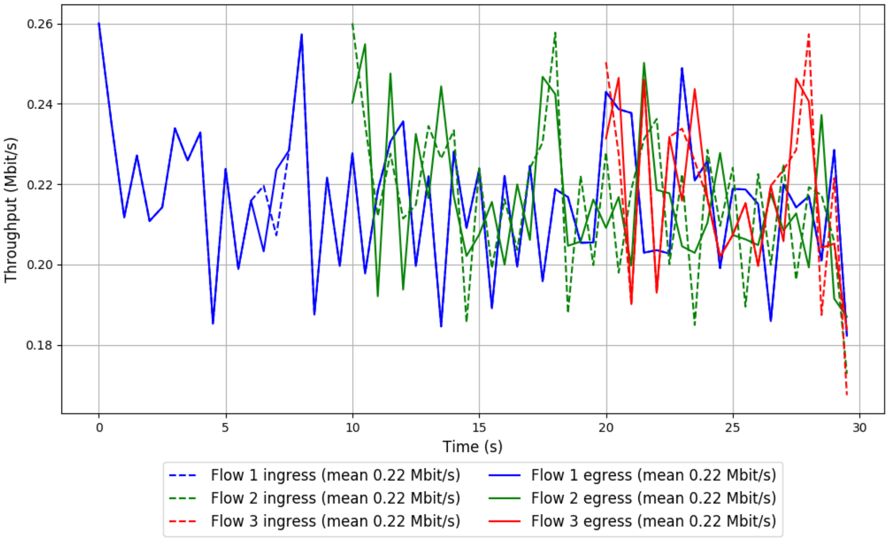
Run 1: Report of SCReAM — Data Link

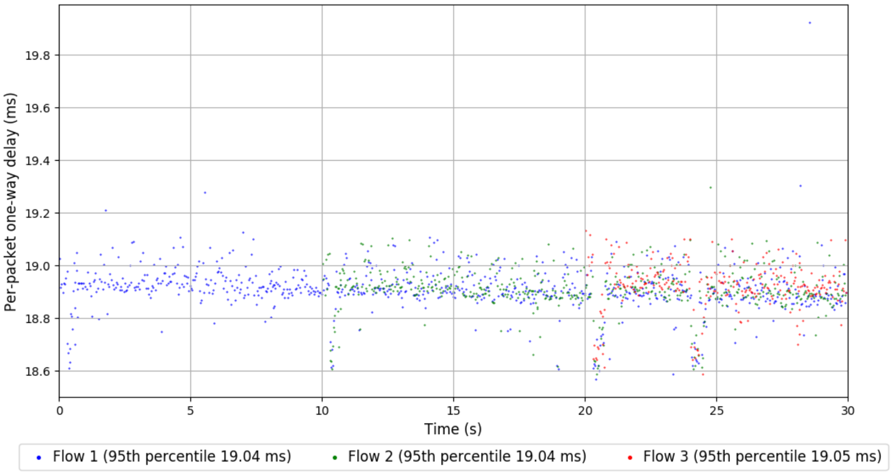




```
Run 2: Statistics of SCReAM

Start at: 2018-03-21 05:04:13
End at: 2018-03-21 05:04:43
Local clock offset: -0.127 ms
Remote clock offset: -6.082 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.043 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.037 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.037 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.055 ms
Loss rate: 0.00%
```

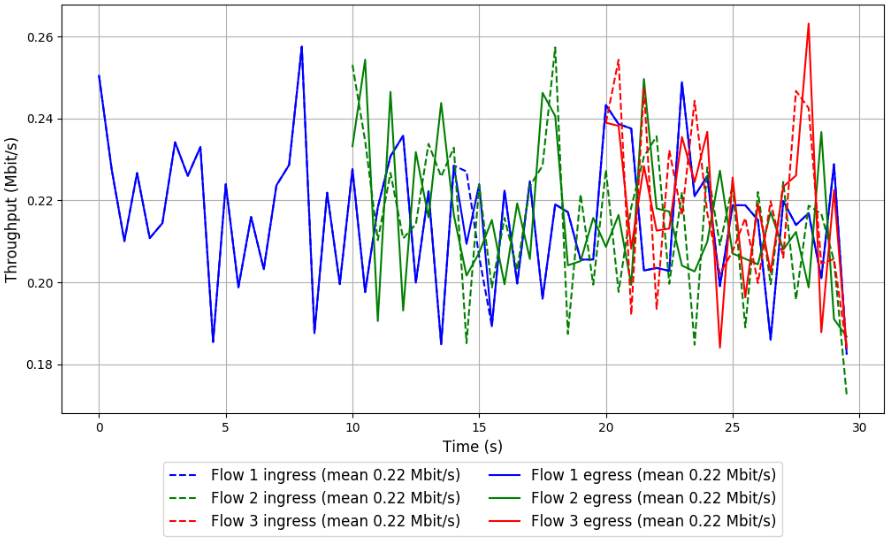
Run 2: Report of SCReAM — Data Link

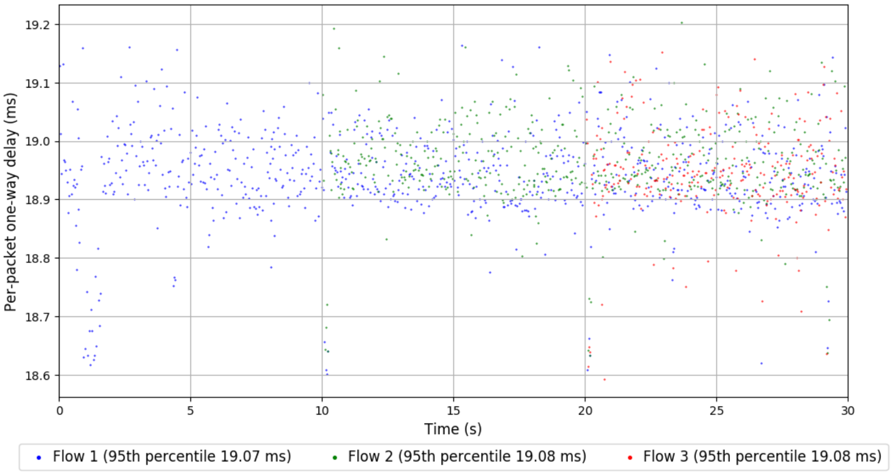




```
Run 3: Statistics of SCReAM

Start at: 2018-03-21 05:33:33
End at: 2018-03-21 05:34:03
Local clock offset: -0.656 ms
Remote clock offset: -5.067 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.073 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.066 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.079 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.082 ms
Loss rate: 0.00%
```

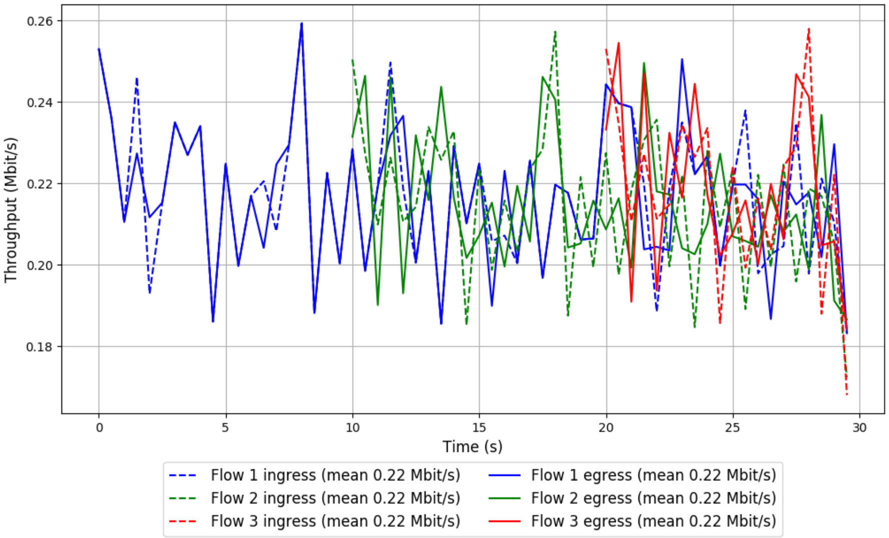
Run 3: Report of SCReAM — Data Link

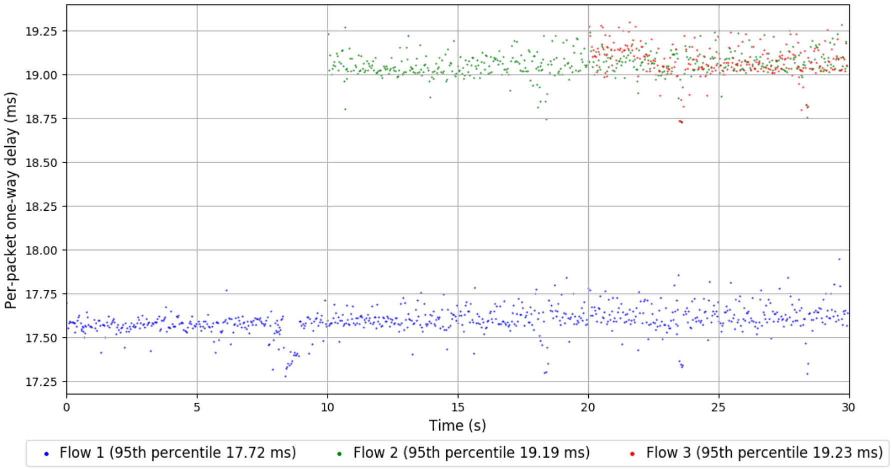




```
Run 4: Statistics of SCReAM

Start at: 2018-03-21 06:02:24
End at: 2018-03-21 06:02:54
Local clock offset: 7.589 ms
Remote clock offset: -5.25 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.162 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.717 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.188 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.228 ms
Loss rate: 0.00%
```

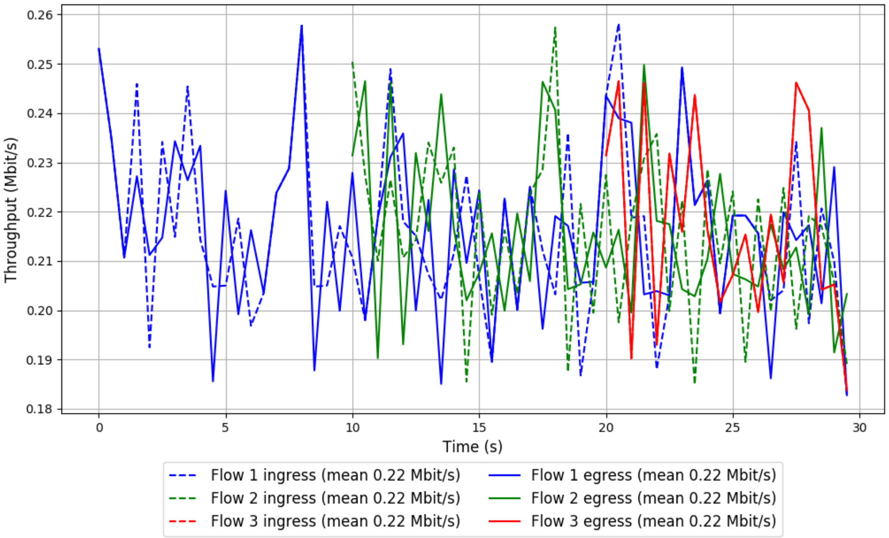
Run 4: Report of SCReAM — Data Link

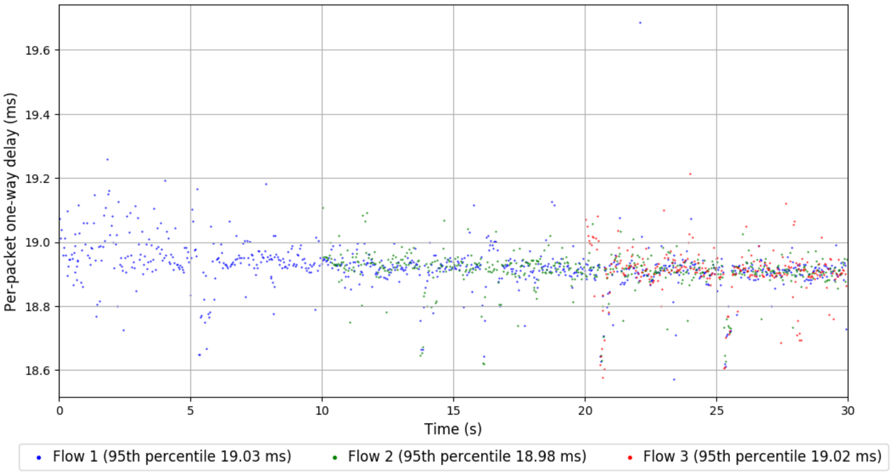




```
Run 5: Statistics of SCReAM

Start at: 2018-03-21 06:31:57
End at: 2018-03-21 06:32:27
Local clock offset: 0.817 ms
Remote clock offset: -5.963 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.014 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.033 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 18.976 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.015 ms
Loss rate: 0.00%
```

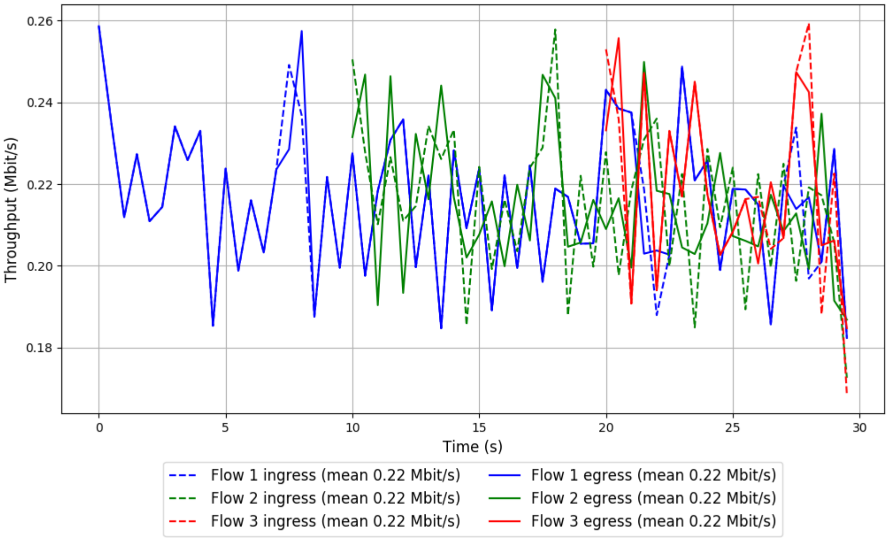
Run 5: Report of SCReAM — Data Link

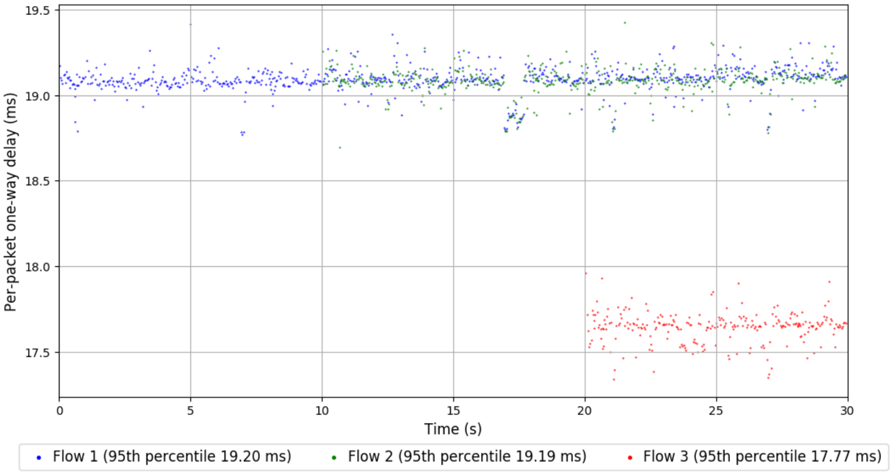




```
Run 6: Statistics of SCReAM

Start at: 2018-03-21 07:01:15
End at: 2018-03-21 07:01:45
Local clock offset: 3.822 ms
Remote clock offset: -6.108 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.186 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.200 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.188 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.765 ms
Loss rate: 0.00%
```

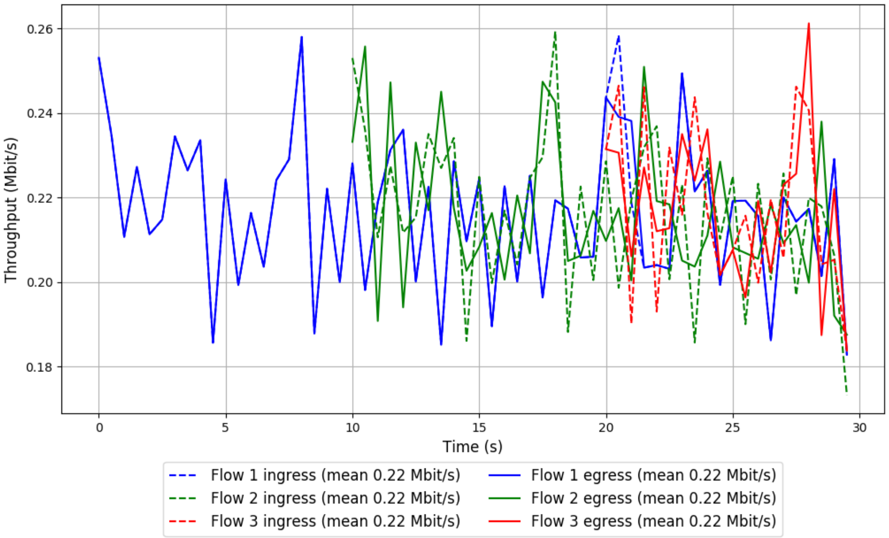
Run 6: Report of SCReAM — Data Link

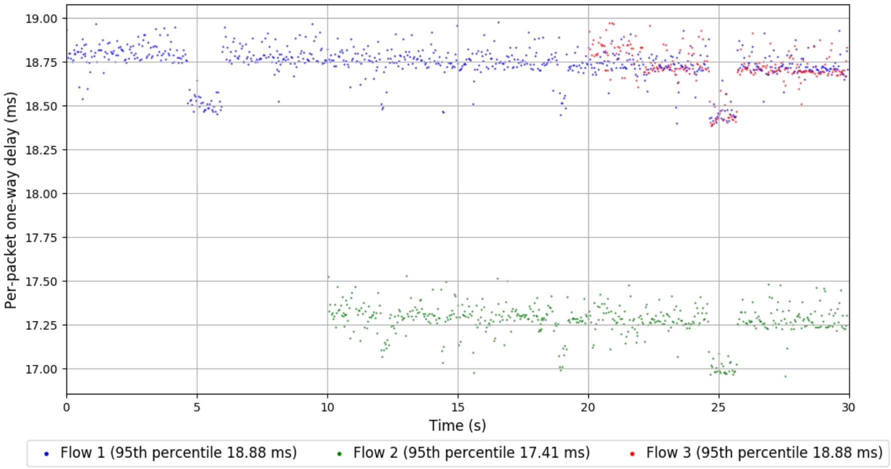




```
Run 7: Statistics of SCReAM

Start at: 2018-03-21 07:30:47
End at: 2018-03-21 07:31:17
Local clock offset: 1.348 ms
Remote clock offset: -5.914 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 18.854 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 18.879 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.410 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 18.880 ms
Loss rate: 0.00%
```

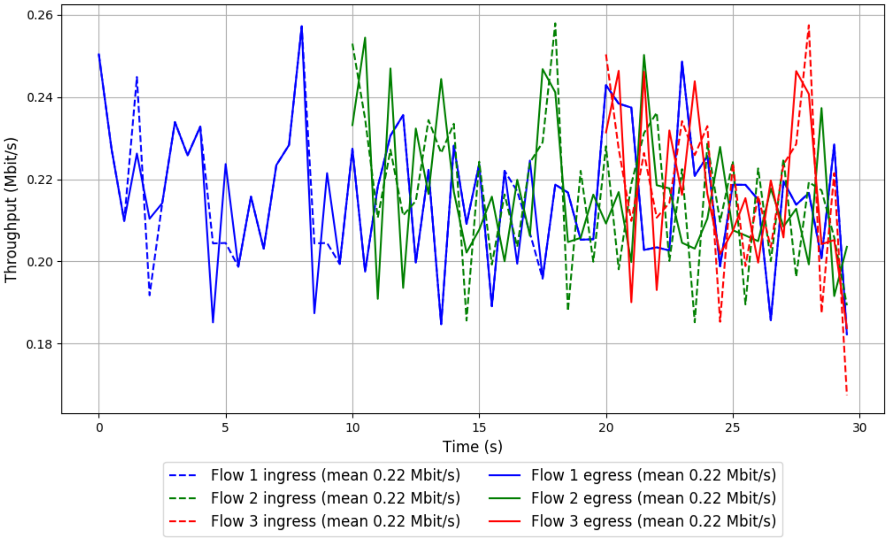
Run 7: Report of SCReAM — Data Link

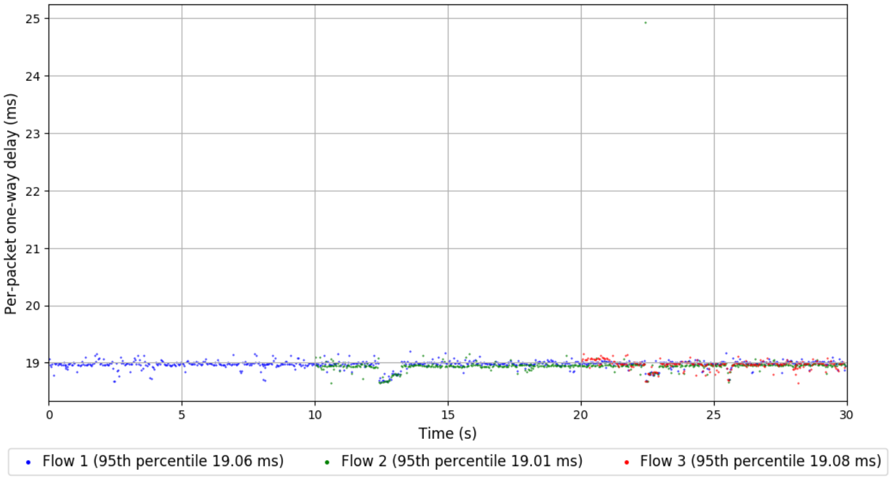




```
Run 8: Statistics of SCReAM

Start at: 2018-03-21 07:59:58
End at: 2018-03-21 08:00:28
Local clock offset: -0.559 ms
Remote clock offset: -6.045 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.062 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.063 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.014 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.077 ms
Loss rate: 0.00%
```

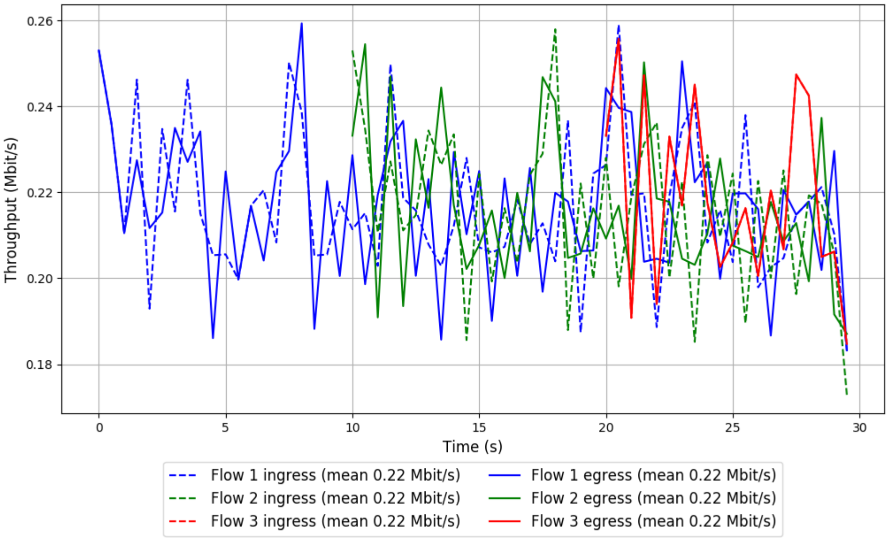
Run 8: Report of SCReAM — Data Link

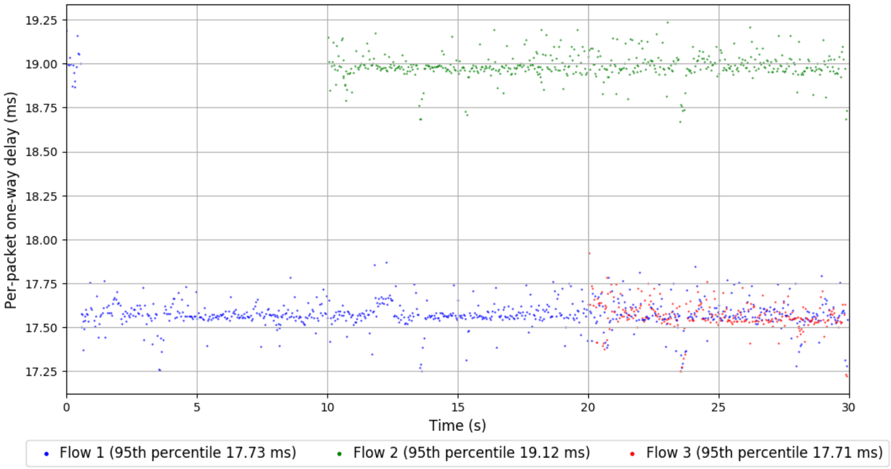




```
Run 9: Statistics of SCReAM

Start at: 2018-03-21 08:29:17
End at: 2018-03-21 08:29:47
Local clock offset: -0.823 ms
Remote clock offset: -6.17 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 19.047 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.735 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.121 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.706 ms
Loss rate: 0.00%
```

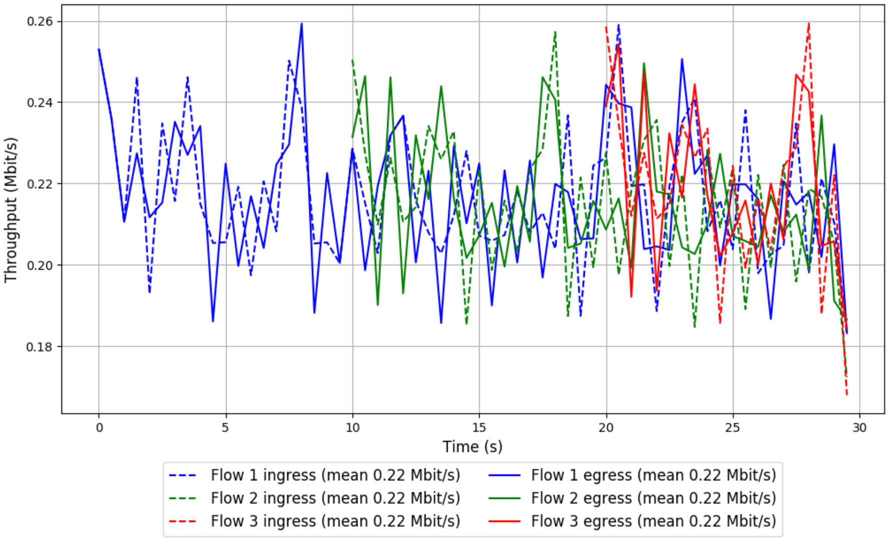
Run 9: Report of SCReAM — Data Link

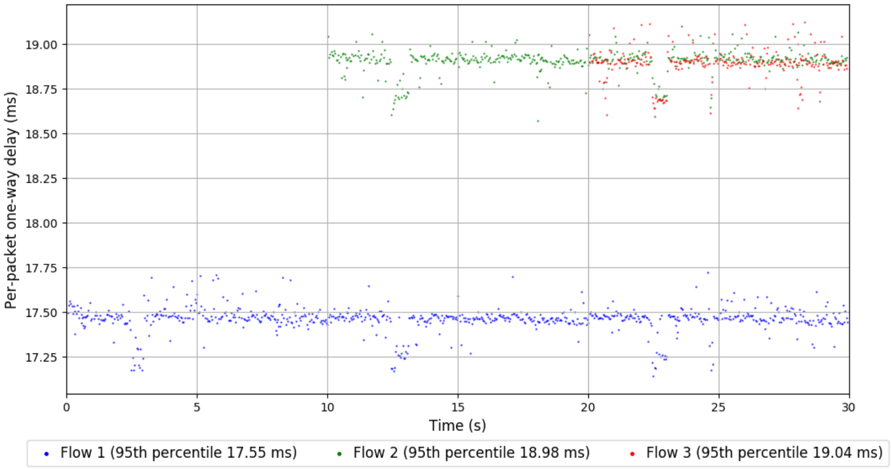




```
Run 10: Statistics of SCReAM

Start at: 2018-03-21 08:58:37
End at: 2018-03-21 08:59:07
Local clock offset: -0.48 ms
Remote clock offset: -4.88 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 18.954 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.555 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 18.985 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.041 ms
Loss rate: 0.00%
```

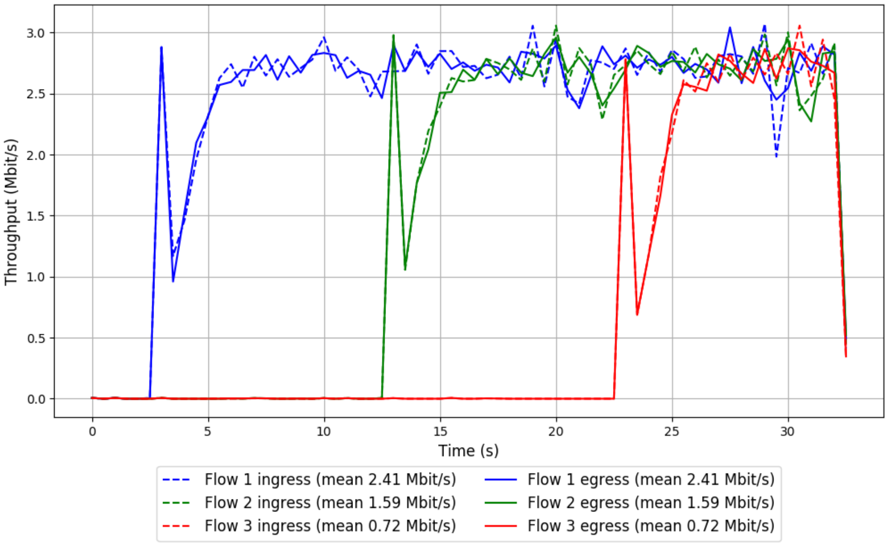
Run 10: Report of SCReAM — Data Link

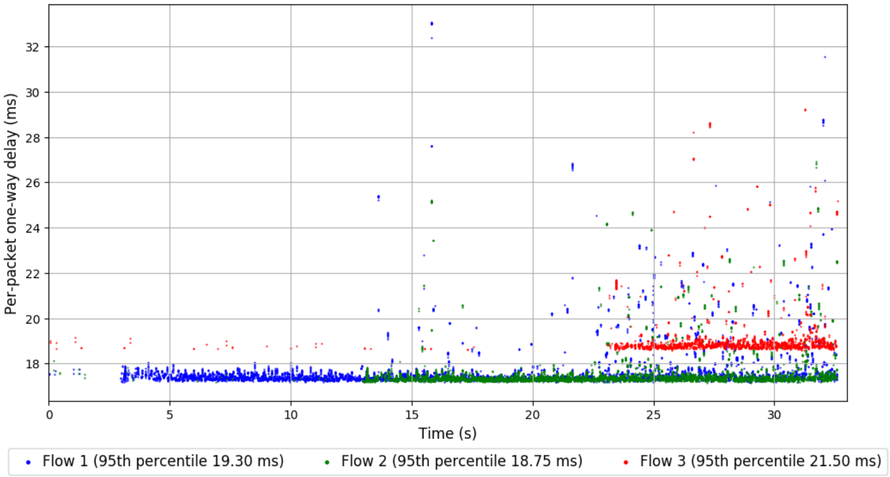




```
Run 1: Statistics of WebRTC media

Start at: 2018-03-21 04:59:35
End at: 2018-03-21 05:00:05
Local clock offset: -0.073 ms
Remote clock offset: -6.247 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.71 Mbit/s
95th percentile per-packet one-way delay: 19.616 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 19.304 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 18.745 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.72 Mbit/s
95th percentile per-packet one-way delay: 21.500 ms
Loss rate: 0.00%
```

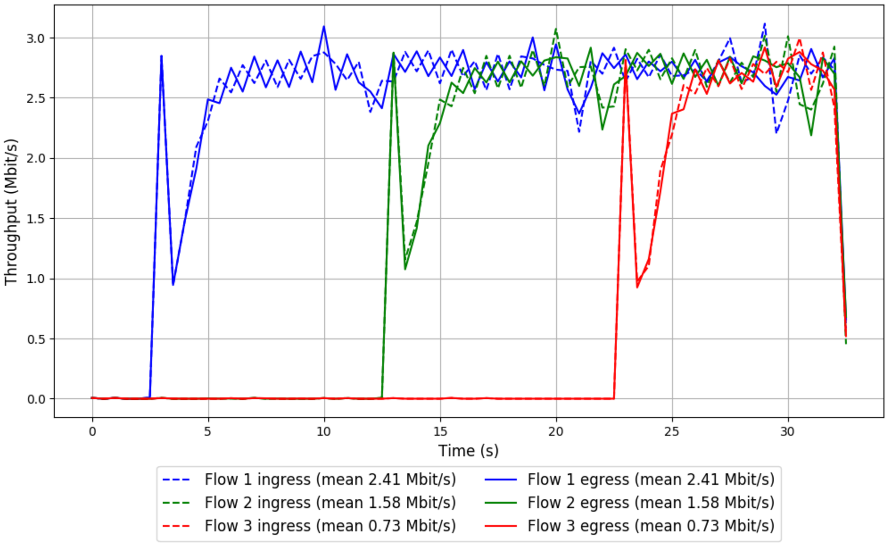
Run 1: Report of WebRTC media — Data Link

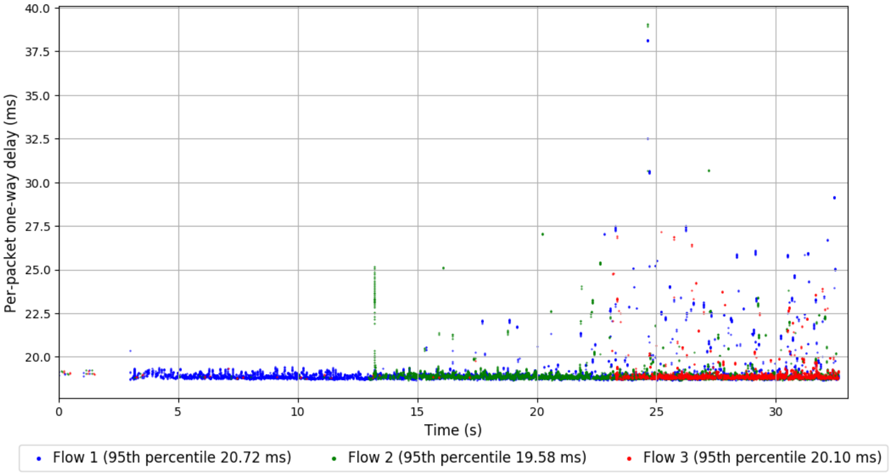




```
Run 2: Statistics of WebRTC media

Start at: 2018-03-21 05:28:51
End at: 2018-03-21 05:29:21
Local clock offset: -0.613 ms
Remote clock offset: -5.066 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.71 Mbit/s
95th percentile per-packet one-way delay: 20.037 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 20.719 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 19.579 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 20.099 ms
Loss rate: 0.00%
```

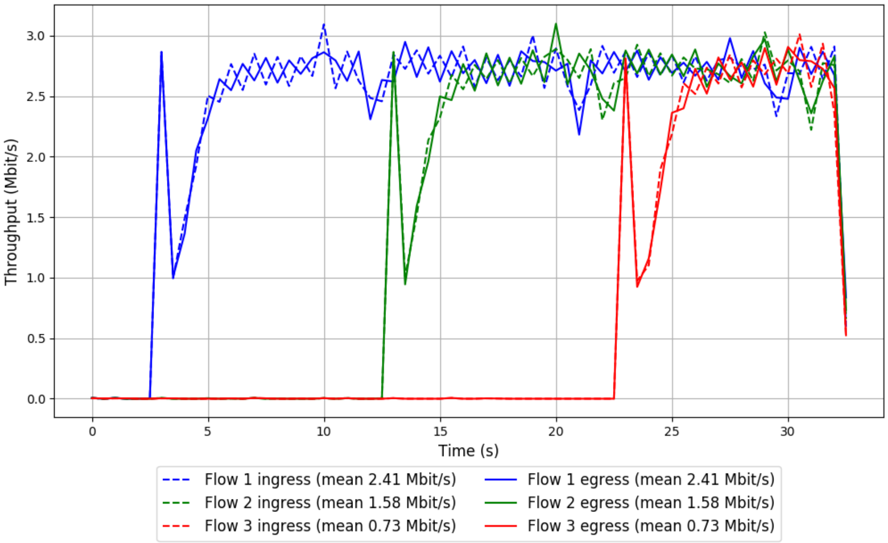
Run 2: Report of WebRTC media — Data Link

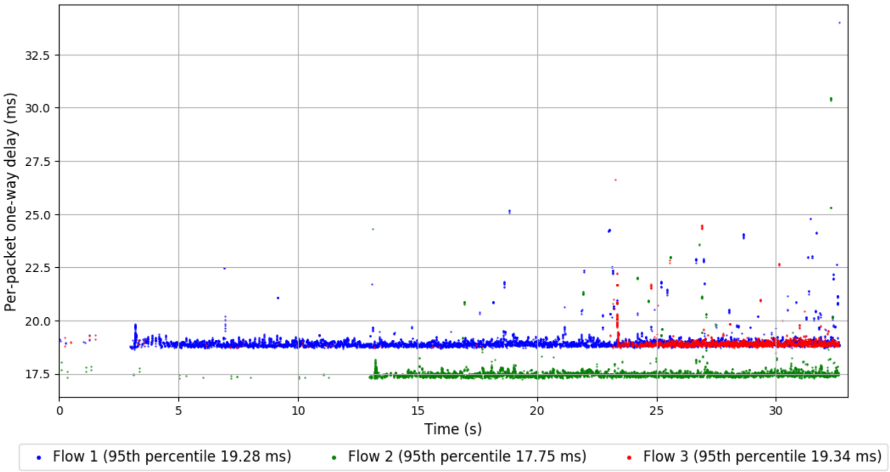




```
Run 3: Statistics of WebRTC media

Start at: 2018-03-21 05:57:49
End at: 2018-03-21 05:58:19
Local clock offset: 6.959 ms
Remote clock offset: -5.263 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.71 Mbit/s
95th percentile per-packet one-way delay: 19.198 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 19.279 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 17.755 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 19.336 ms
Loss rate: 0.00%
```

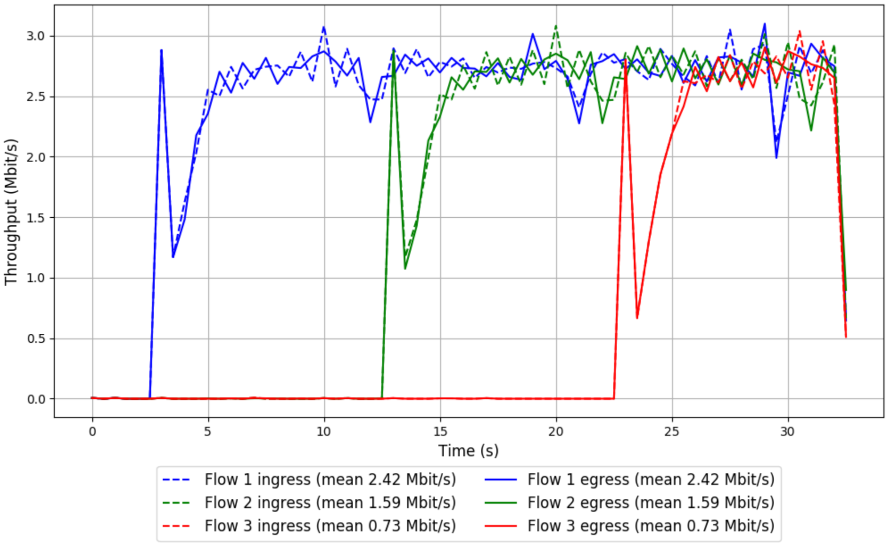
Run 3: Report of WebRTC media — Data Link

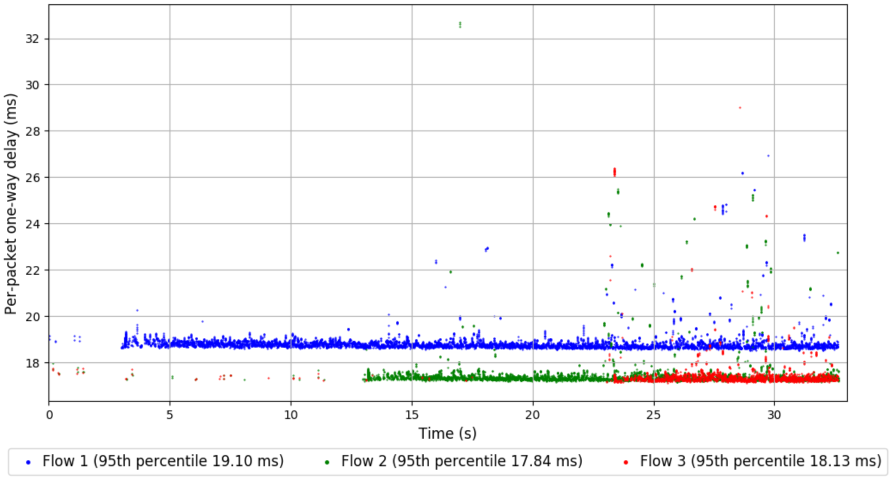




```
Run 4: Statistics of WebRTC media

Start at: 2018-03-21 06:27:11
End at: 2018-03-21 06:27:41
Local clock offset: 1.433 ms
Remote clock offset: -5.868 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.72 Mbit/s
95th percentile per-packet one-way delay: 19.030 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 19.097 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 17.835 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 18.130 ms
Loss rate: 0.00%
```

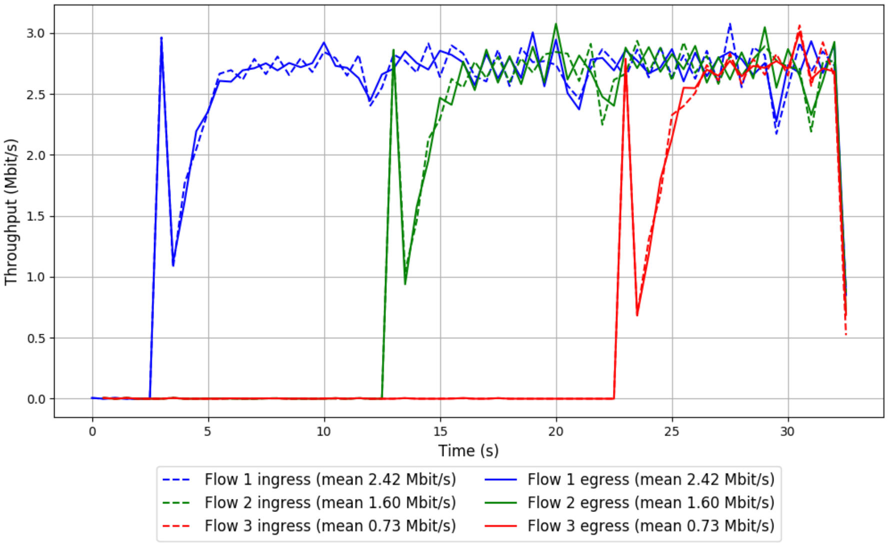
Run 4: Report of WebRTC media — Data Link

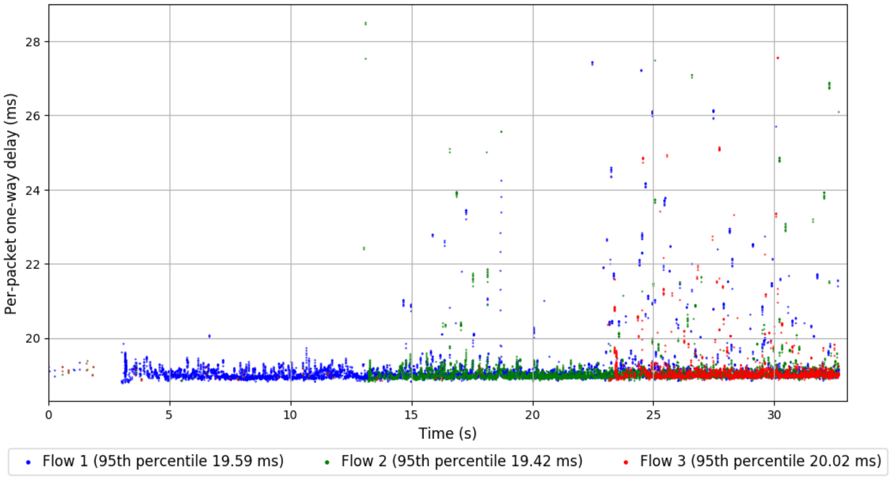




```
Run 5: Statistics of WebRTC media

Start at: 2018-03-21 06:56:38
End at: 2018-03-21 06:57:08
Local clock offset: 3.11 ms
Remote clock offset: -6.107 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.71 Mbit/s
95th percentile per-packet one-way delay: 19.604 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 19.589 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.60 Mbit/s
95th percentile per-packet one-way delay: 19.423 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 20.022 ms
Loss rate: 0.00%
```

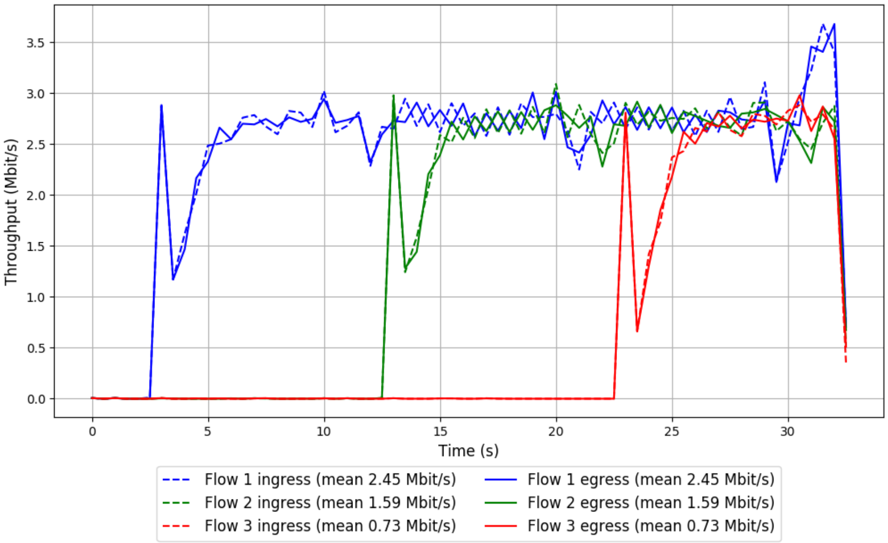
Run 5: Report of WebRTC media — Data Link

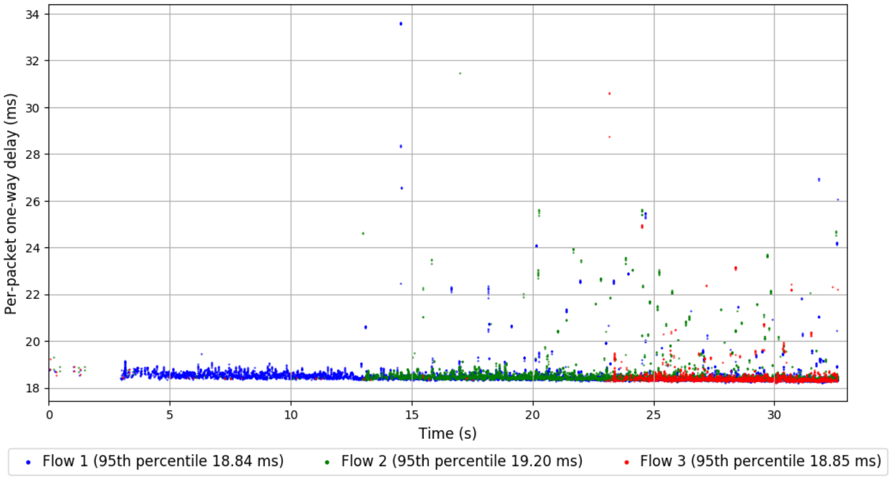




```
Run 6: Statistics of WebRTC media

Start at: 2018-03-21 07:25:59
End at: 2018-03-21 07:26:29
Local clock offset: 2.497 ms
Remote clock offset: -5.985 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.75 Mbit/s
95th percentile per-packet one-way delay: 18.895 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.45 Mbit/s
95th percentile per-packet one-way delay: 18.838 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 19.203 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 18.848 ms
Loss rate: 0.00%
```

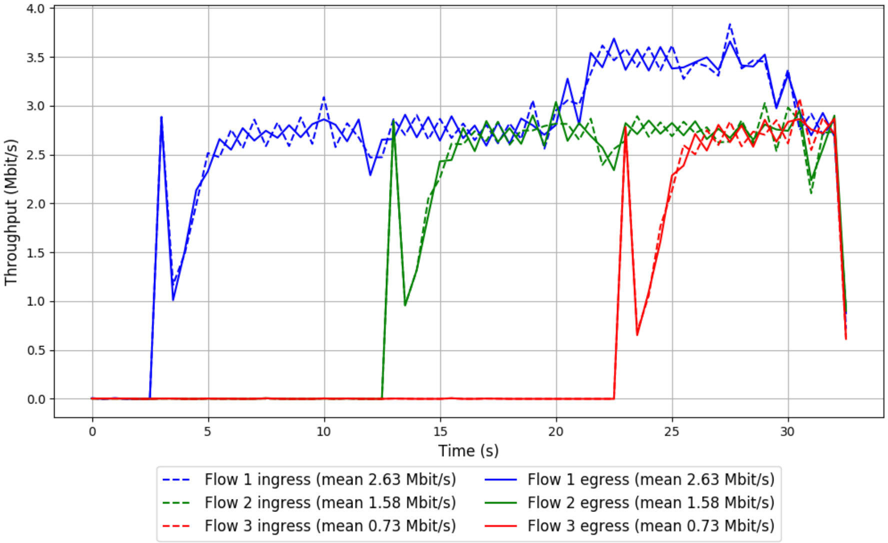
Run 6: Report of WebRTC media — Data Link

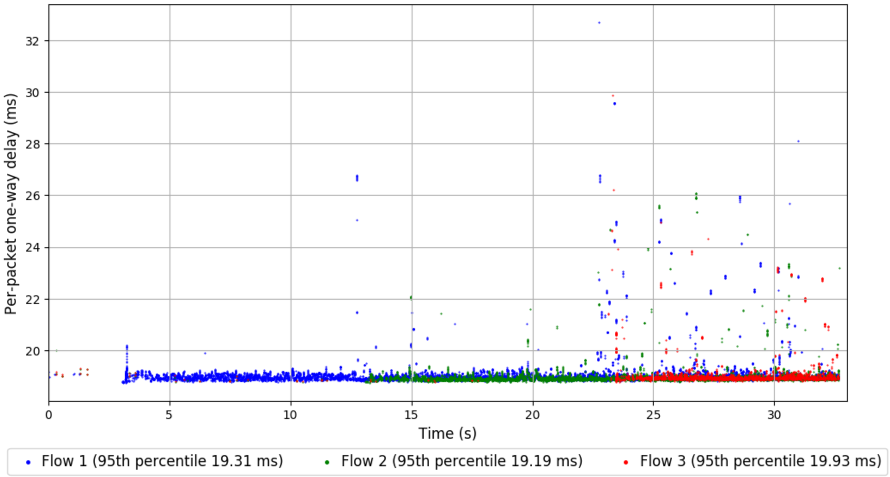




```
Run 7: Statistics of WebRTC media

Start at: 2018-03-21 07:55:21
End at: 2018-03-21 07:55:51
Local clock offset: -1.069 ms
Remote clock offset: -5.881 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.92 Mbit/s
95th percentile per-packet one-way delay: 19.288 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.63 Mbit/s
95th percentile per-packet one-way delay: 19.309 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 19.191 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 19.933 ms
Loss rate: 0.00%
```

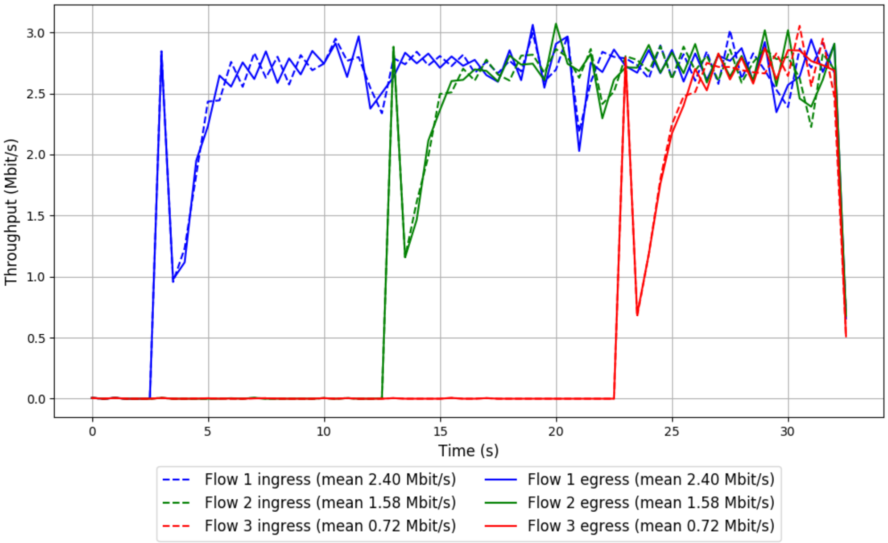
Run 7: Report of WebRTC media — Data Link

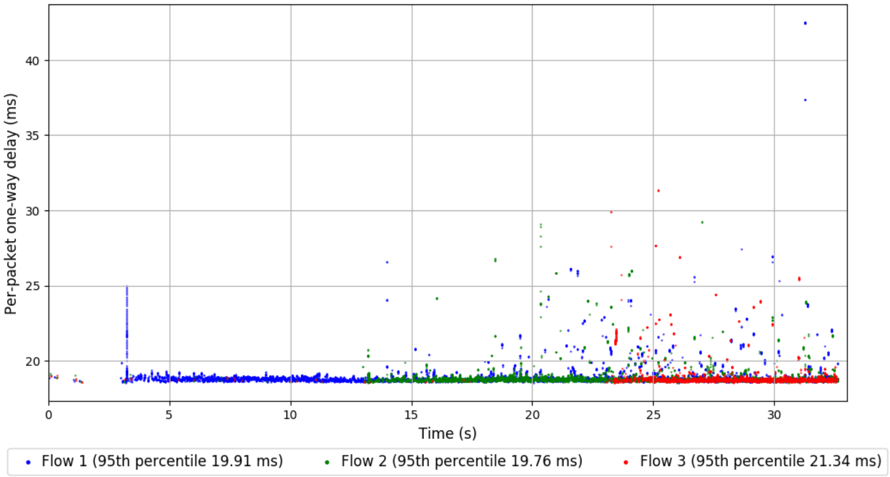




```
Run 8: Statistics of WebRTC media

Start at: 2018-03-21 08:24:39
End at: 2018-03-21 08:25:09
Local clock offset: -0.785 ms
Remote clock offset: -6.394 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.70 Mbit/s
95th percentile per-packet one-way delay: 20.006 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 19.909 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 19.761 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.72 Mbit/s
95th percentile per-packet one-way delay: 21.336 ms
Loss rate: 0.00%
```

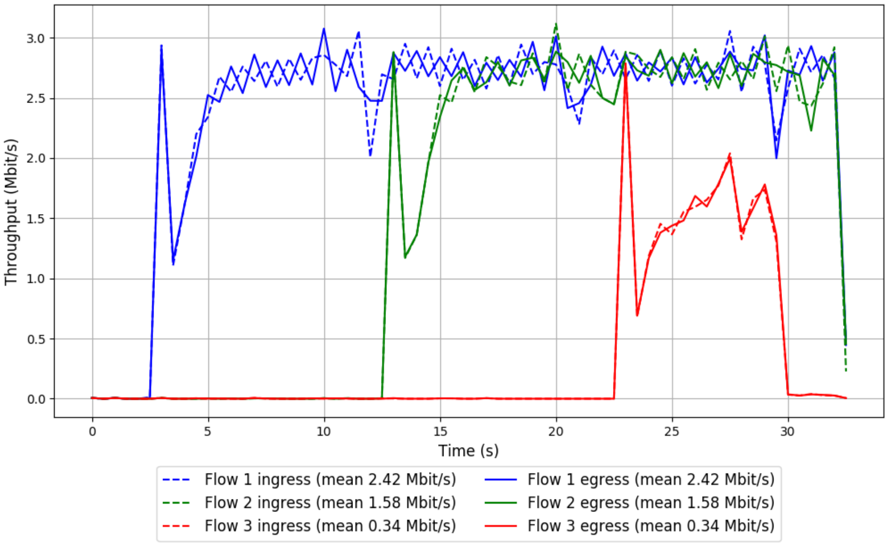
Run 8: Report of WebRTC media — Data Link

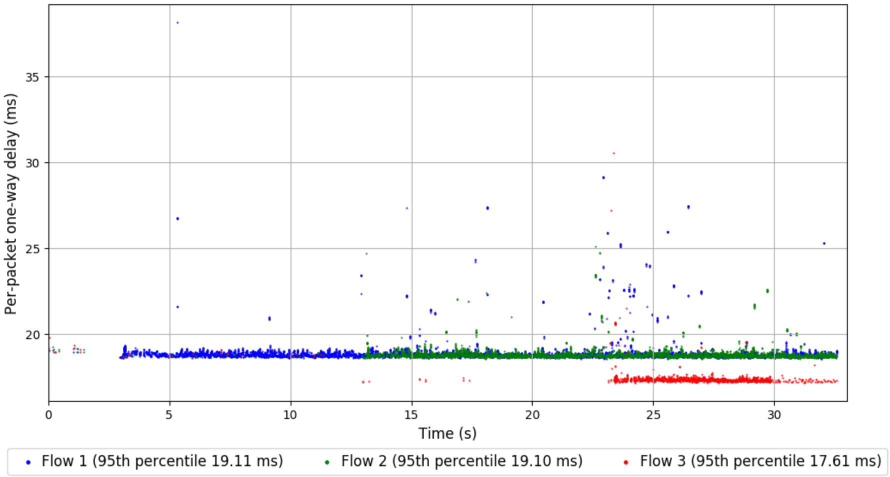




```
Run 9: Statistics of WebRTC media

Start at: 2018-03-21 08:54:00
End at: 2018-03-21 08:54:30
Local clock offset: -0.397 ms
Remote clock offset: -4.867 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.33 Mbit/s
95th percentile per-packet one-way delay: 19.097 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 19.113 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 19.099 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 17.609 ms
Loss rate: 0.00%
```

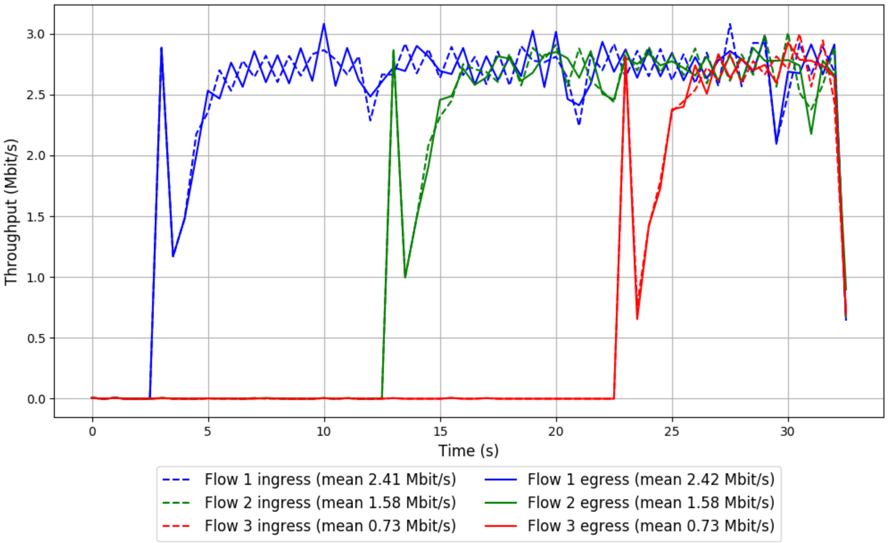
Run 9: Report of WebRTC media — Data Link

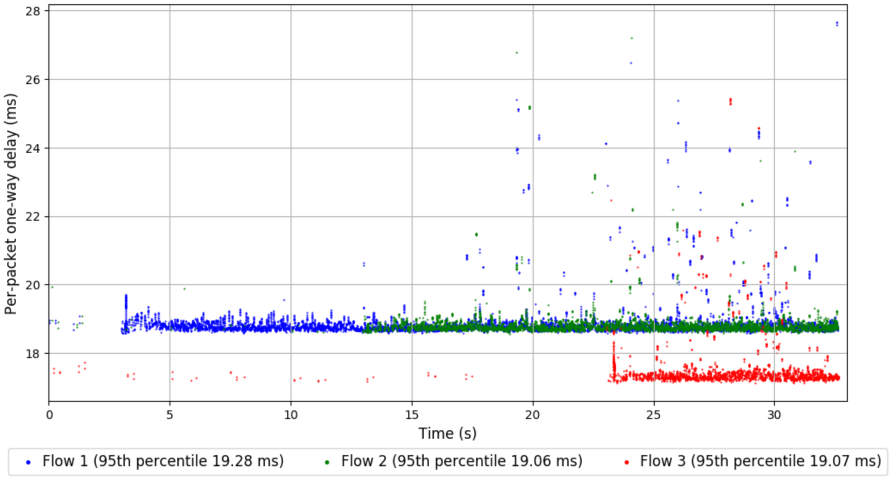




```
Run 10: Statistics of WebRTC media

Start at: 2018-03-21 09:23:23
End at: 2018-03-21 09:23:53
Local clock offset: 0.691 ms
Remote clock offset: -5.989 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.72 Mbit/s
95th percentile per-packet one-way delay: 19.157 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 19.284 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 19.063 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 19.069 ms
Loss rate: 0.00%
```

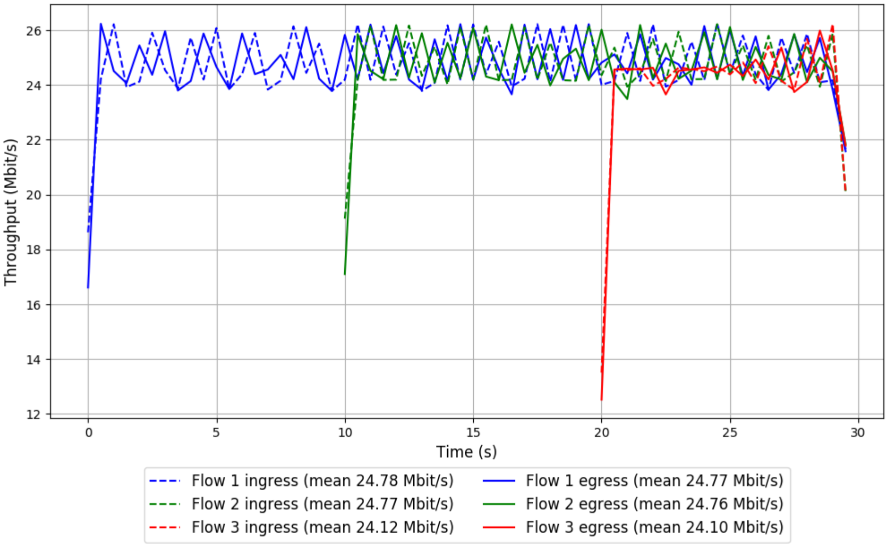
Run 10: Report of WebRTC media — Data Link

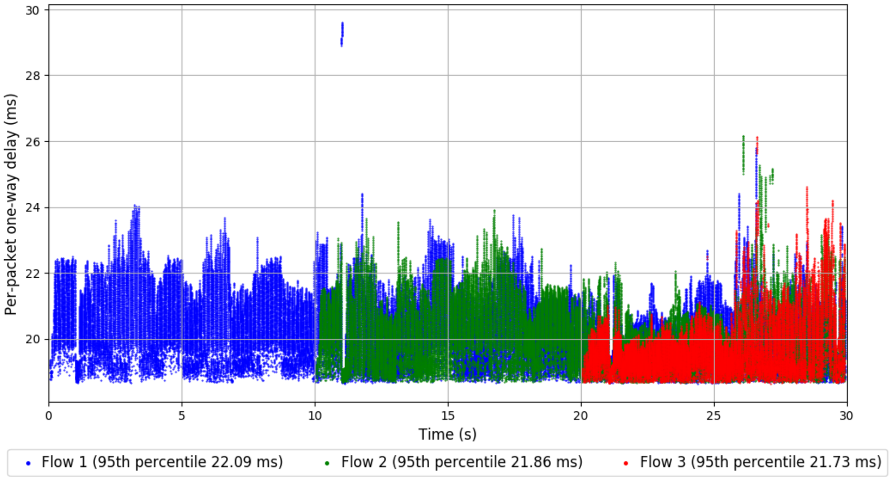




```
Run 1: Statistics of Sprout

Start at: 2018-03-21 04:55:03
End at: 2018-03-21 04:55:33
Local clock offset: 0.162 ms
Remote clock offset: -6.128 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.19 Mbit/s
95th percentile per-packet one-way delay: 21.987 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 24.77 Mbit/s
95th percentile per-packet one-way delay: 22.091 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 24.76 Mbit/s
95th percentile per-packet one-way delay: 21.855 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 24.10 Mbit/s
95th percentile per-packet one-way delay: 21.731 ms
Loss rate: 0.03%
```

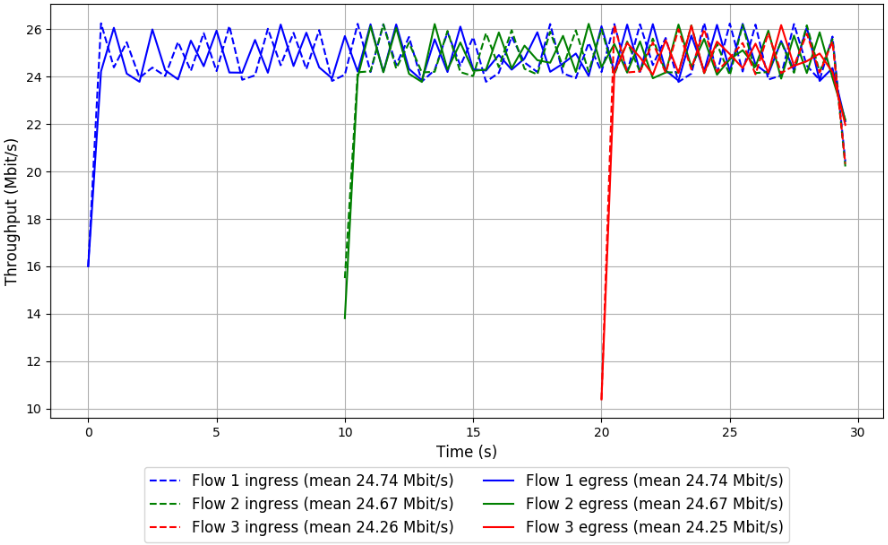
Run 1: Report of Sprout — Data Link

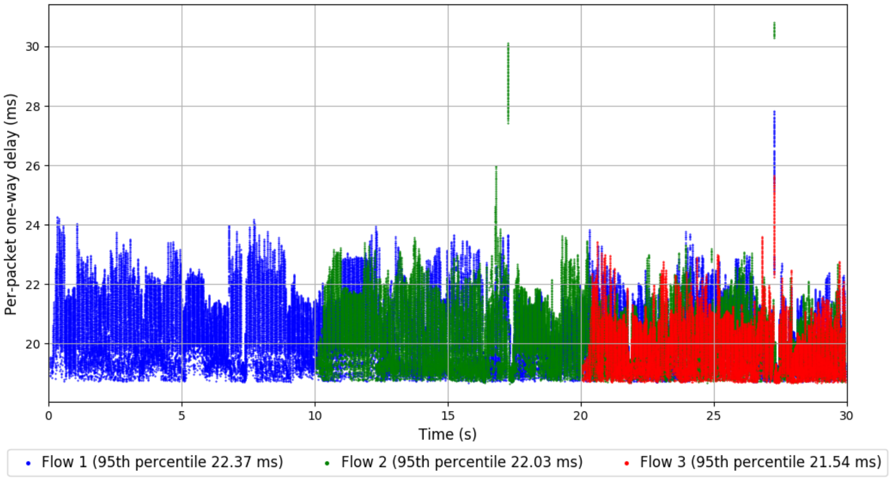




```
Run 2: Statistics of Sprout

Start at: 2018-03-21 05:24:16
End at: 2018-03-21 05:24:46
Local clock offset: -0.424 ms
Remote clock offset: -5.096 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.16 Mbit/s
95th percentile per-packet one-way delay: 22.184 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.74 Mbit/s
95th percentile per-packet one-way delay: 22.368 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.67 Mbit/s
95th percentile per-packet one-way delay: 22.026 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.25 Mbit/s
95th percentile per-packet one-way delay: 21.539 ms
Loss rate: 0.00%
```

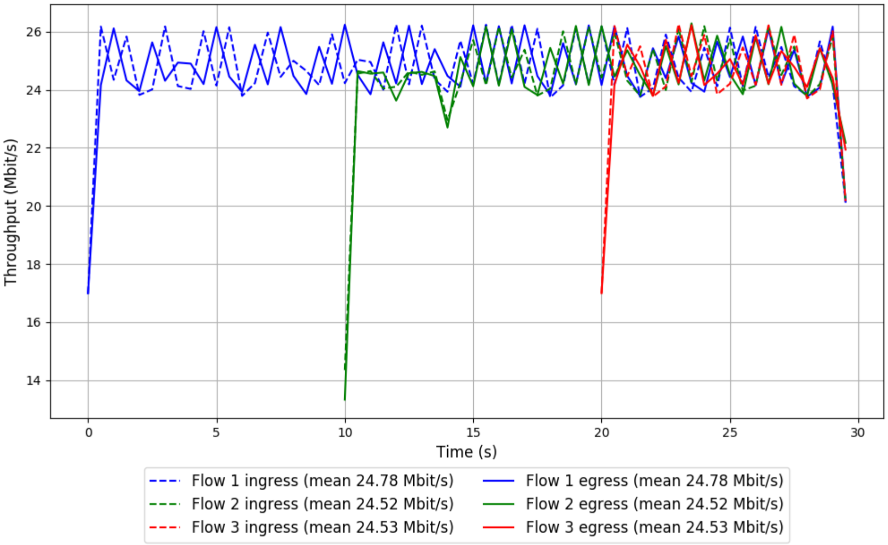
Run 2: Report of Sprout — Data Link

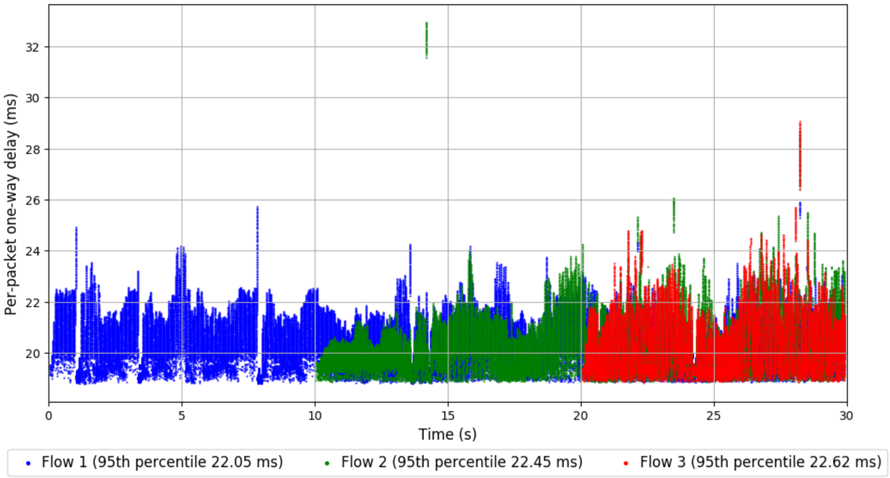




```
Run 3: Statistics of Sprout

Start at: 2018-03-21 05:53:19
End at: 2018-03-21 05:53:49
Local clock offset: 6.192 ms
Remote clock offset: -5.224 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.19 Mbit/s
95th percentile per-packet one-way delay: 22.259 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.78 Mbit/s
95th percentile per-packet one-way delay: 22.052 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.52 Mbit/s
95th percentile per-packet one-way delay: 22.450 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.53 Mbit/s
95th percentile per-packet one-way delay: 22.624 ms
Loss rate: 0.00%
```

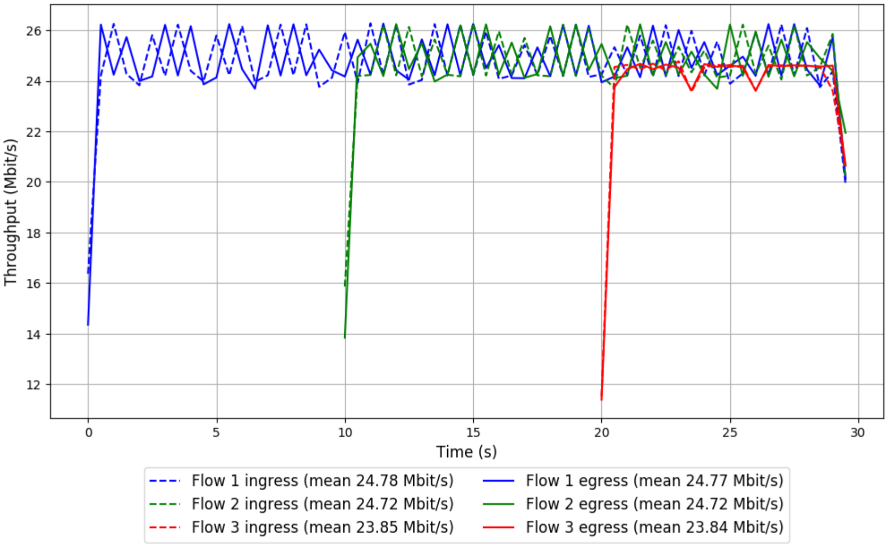
Run 3: Report of Sprout — Data Link

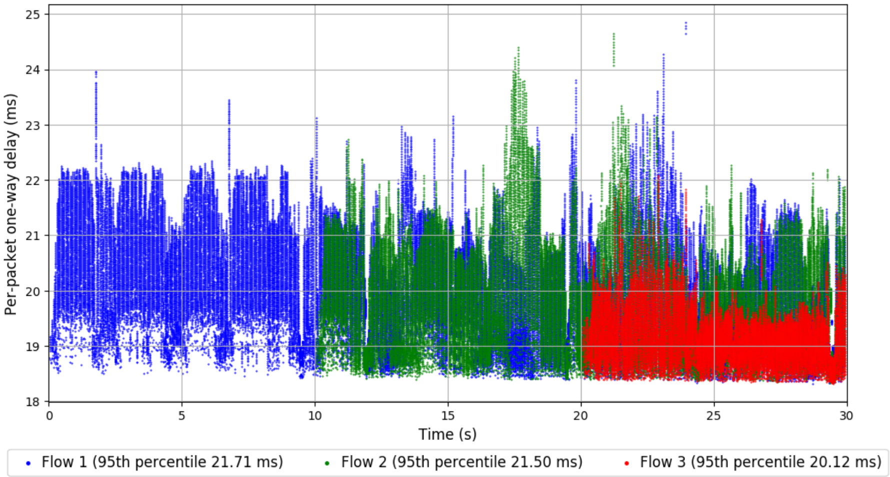




```
Run 4: Statistics of Sprout

Start at: 2018-03-21 06:22:33
End at: 2018-03-21 06:23:03
Local clock offset: 2.581 ms
Remote clock offset: -5.825 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.06 Mbit/s
95th percentile per-packet one-way delay: 21.554 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 24.77 Mbit/s
95th percentile per-packet one-way delay: 21.711 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 24.72 Mbit/s
95th percentile per-packet one-way delay: 21.497 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.84 Mbit/s
95th percentile per-packet one-way delay: 20.122 ms
Loss rate: 0.00%
```

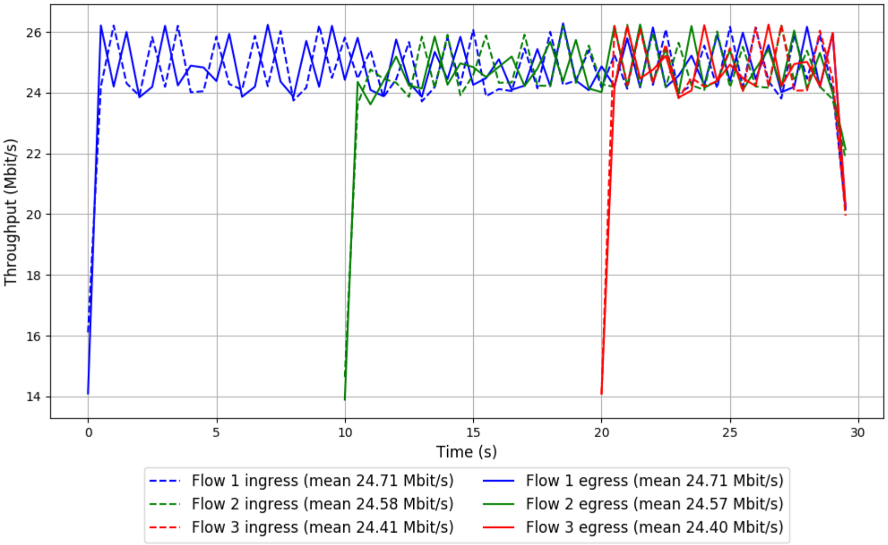
Run 4: Report of Sprout — Data Link

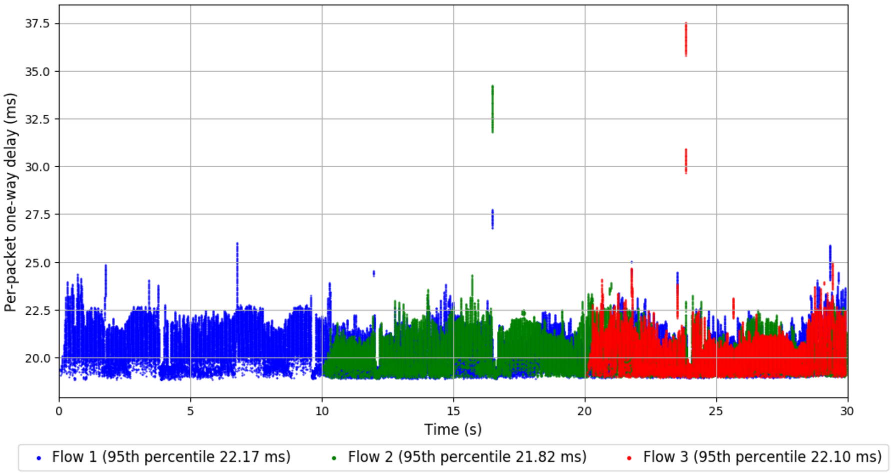




```
Run 5: Statistics of Sprout

Start at: 2018-03-21 06:51:58
End at: 2018-03-21 06:52:28
Local clock offset: 2.16 ms
Remote clock offset: -6.136 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.09 Mbit/s
95th percentile per-packet one-way delay: 22.059 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 24.71 Mbit/s
95th percentile per-packet one-way delay: 22.174 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 24.57 Mbit/s
95th percentile per-packet one-way delay: 21.824 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 24.40 Mbit/s
95th percentile per-packet one-way delay: 22.101 ms
Loss rate: 0.04%
```

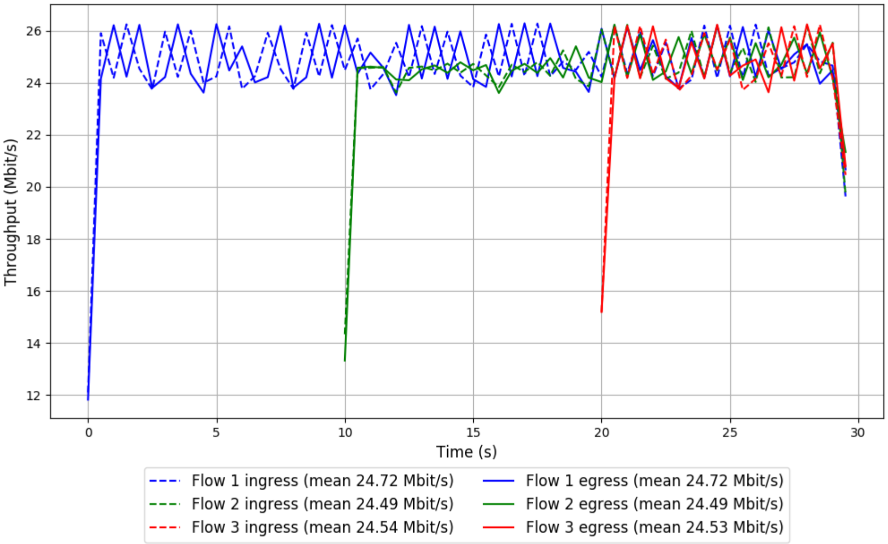
Run 5: Report of Sprout — Data Link

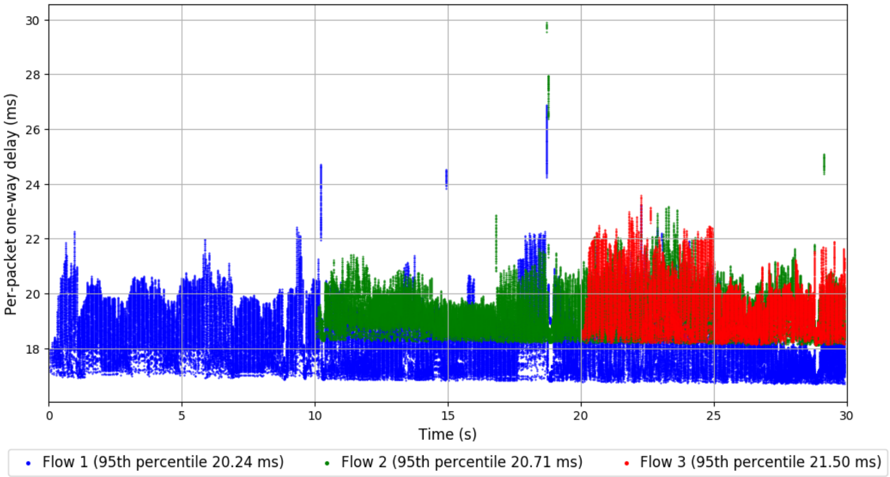




```
Run 6: Statistics of Sprout

Start at: 2018-03-21 07:21:23
End at: 2018-03-21 07:21:53
Local clock offset: 4.172 ms
Remote clock offset: -6.132 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.11 Mbit/s
95th percentile per-packet one-way delay: 20.751 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.72 Mbit/s
95th percentile per-packet one-way delay: 20.239 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.49 Mbit/s
95th percentile per-packet one-way delay: 20.708 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.53 Mbit/s
95th percentile per-packet one-way delay: 21.497 ms
Loss rate: 0.01%
```

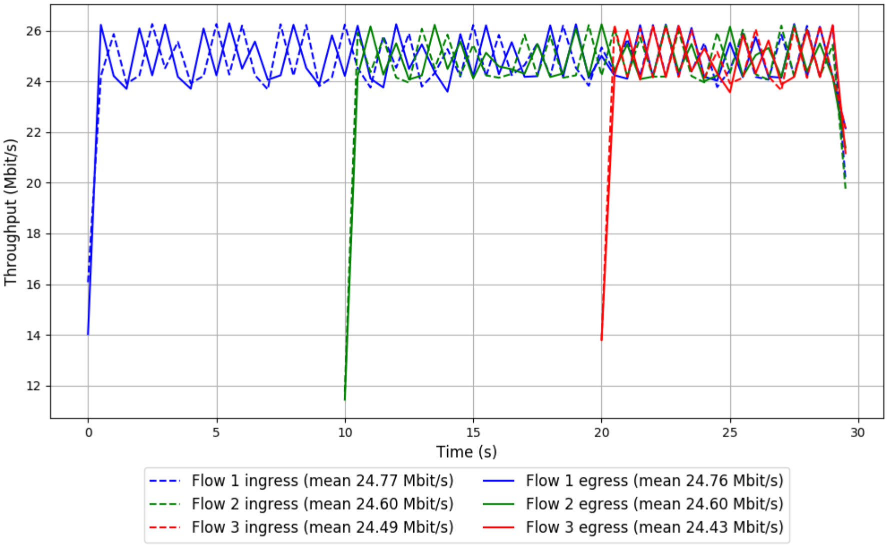
Run 6: Report of Sprout — Data Link

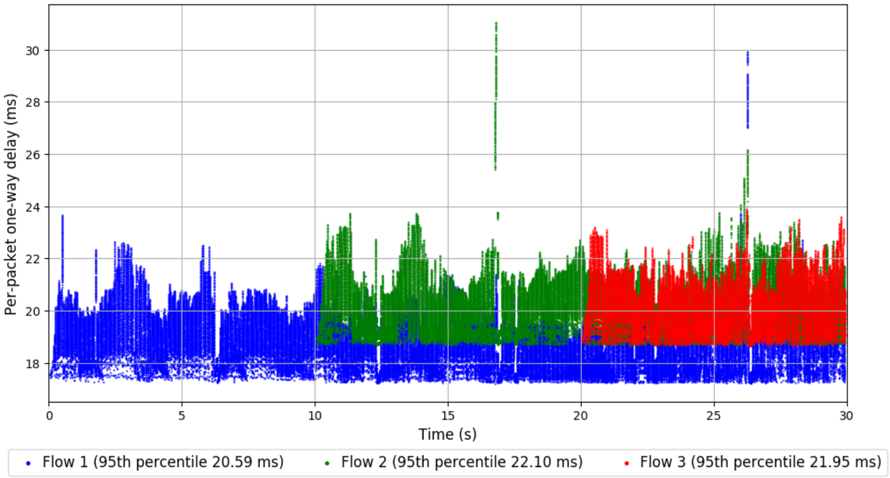




```
Run 7: Statistics of Sprout

Start at: 2018-03-21 07:50:45
End at: 2018-03-21 07:51:15
Local clock offset: -0.951 ms
Remote clock offset: -5.667 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.18 Mbit/s
95th percentile per-packet one-way delay: 21.630 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 24.76 Mbit/s
95th percentile per-packet one-way delay: 20.593 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.60 Mbit/s
95th percentile per-packet one-way delay: 22.099 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.43 Mbit/s
95th percentile per-packet one-way delay: 21.952 ms
Loss rate: 0.26%
```

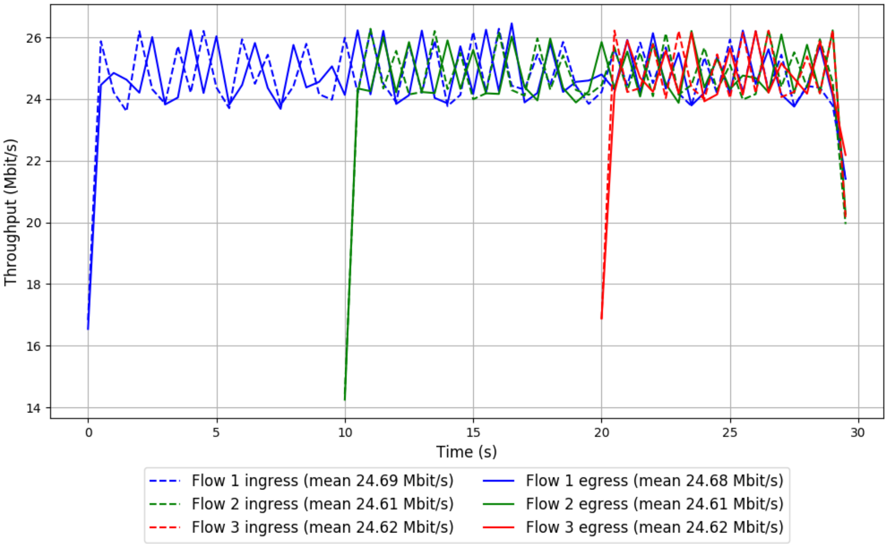
Run 7: Report of Sprout — Data Link

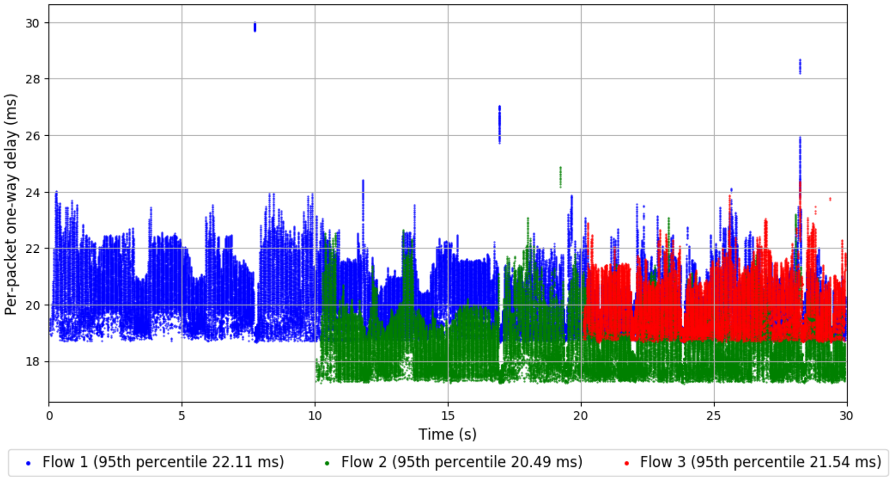




```
Run 8: Statistics of Sprout

Start at: 2018-03-21 08:20:03
End at: 2018-03-21 08:20:33
Local clock offset: -0.749 ms
Remote clock offset: -6.378 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.18 Mbit/s
95th percentile per-packet one-way delay: 21.786 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 24.68 Mbit/s
95th percentile per-packet one-way delay: 22.109 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 24.61 Mbit/s
95th percentile per-packet one-way delay: 20.494 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.62 Mbit/s
95th percentile per-packet one-way delay: 21.537 ms
Loss rate: 0.00%
```

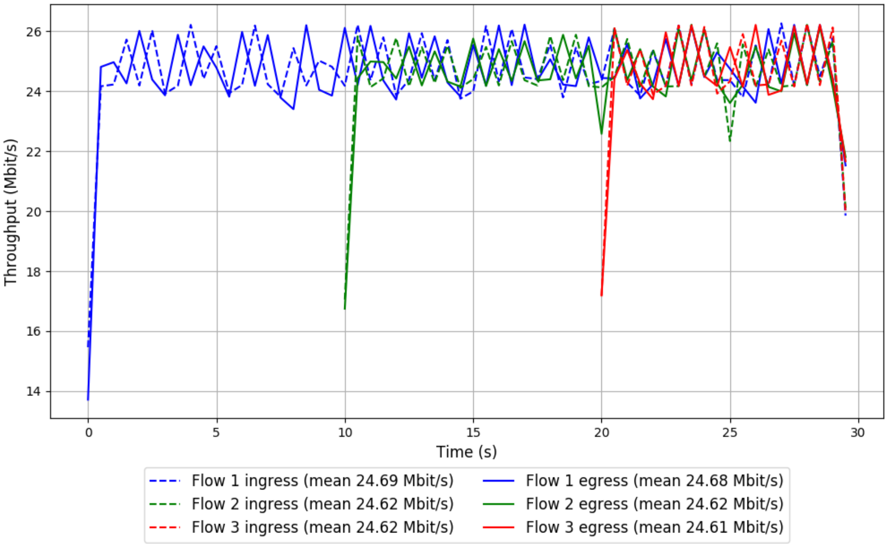
Run 8: Report of Sprout — Data Link

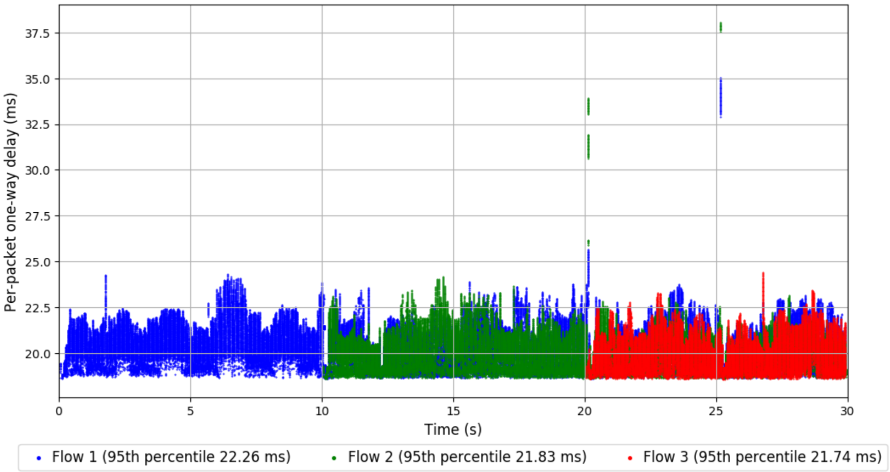




```
Run 9: Statistics of Sprout

Start at: 2018-03-21 08:49:20
End at: 2018-03-21 08:49:50
Local clock offset: -0.355 ms
Remote clock offset: -5.02 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.19 Mbit/s
95th percentile per-packet one-way delay: 22.075 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 24.68 Mbit/s
95th percentile per-packet one-way delay: 22.260 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 24.62 Mbit/s
95th percentile per-packet one-way delay: 21.827 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.61 Mbit/s
95th percentile per-packet one-way delay: 21.737 ms
Loss rate: 0.00%
```

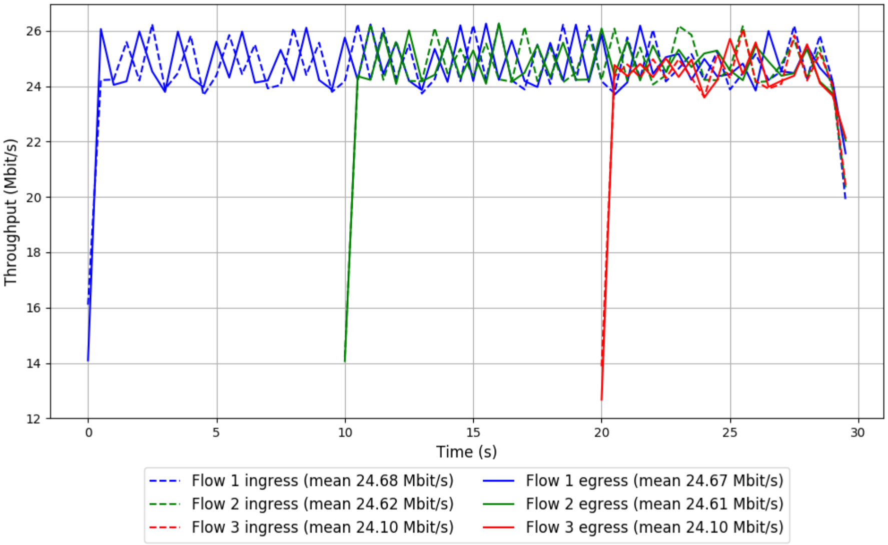
Run 9: Report of Sprout — Data Link

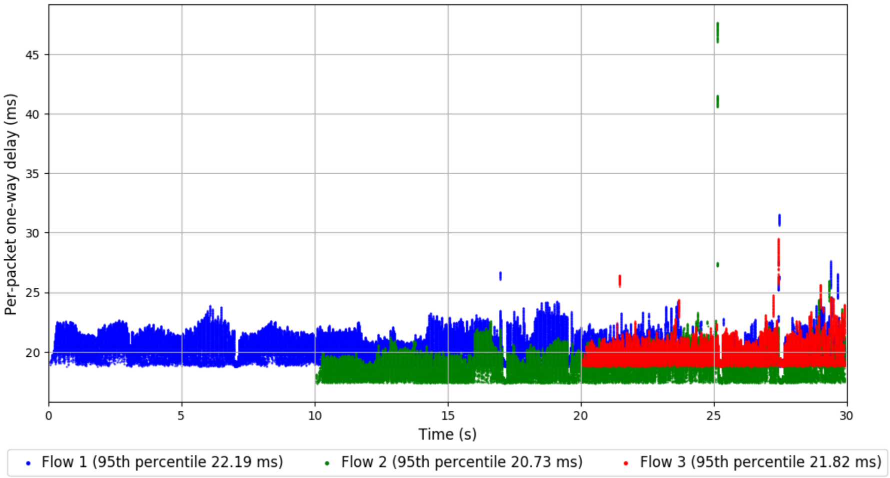




```
Run 10: Statistics of Sprout

Start at: 2018-03-21 09:18:43
End at: 2018-03-21 09:19:13
Local clock offset: 0.512 ms
Remote clock offset: -5.881 ms

# Below is generated by plot.py at 2018-03-21 13:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.01 Mbit/s
95th percentile per-packet one-way delay: 21.915 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 24.67 Mbit/s
95th percentile per-packet one-way delay: 22.187 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 24.61 Mbit/s
95th percentile per-packet one-way delay: 20.727 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 24.10 Mbit/s
95th percentile per-packet one-way delay: 21.822 ms
Loss rate: 0.02%
```

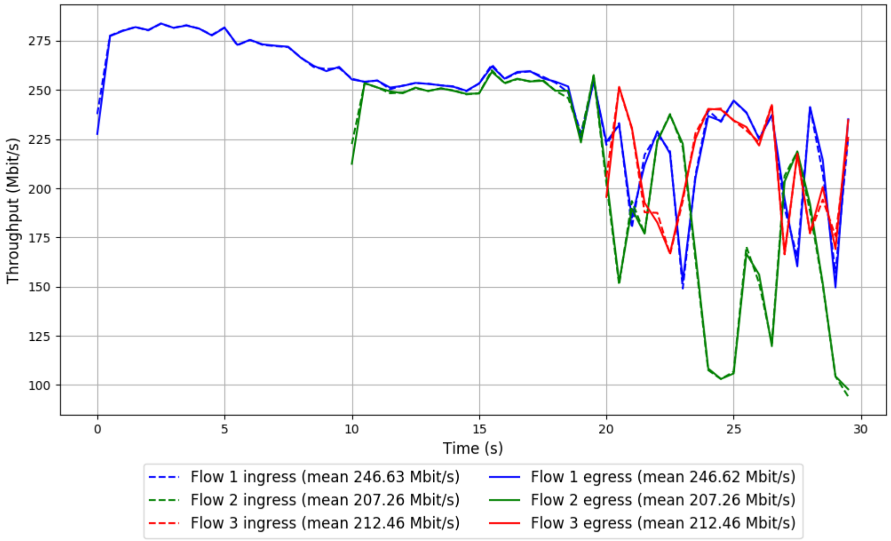
Run 10: Report of Sprout — Data Link

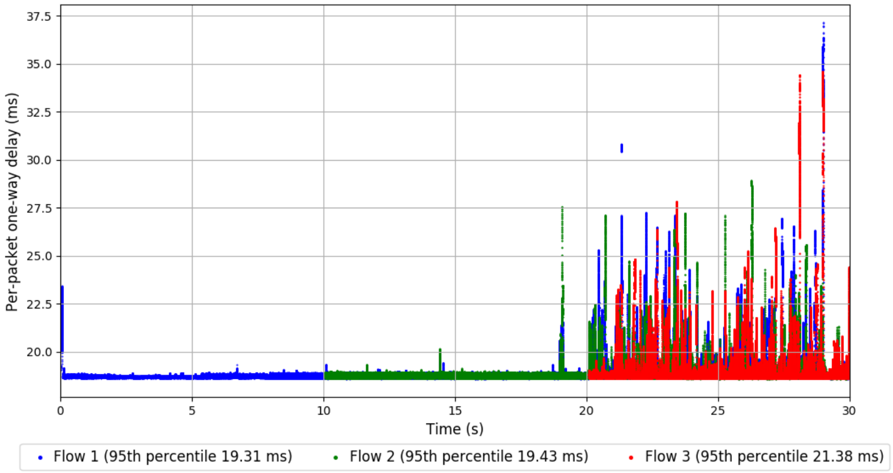




```
Run 1: Statistics of TaoVA-100x

Start at: 2018-03-21 04:51:45
End at: 2018-03-21 04:52:15
Local clock offset: 0.338 ms
Remote clock offset: -6.044 ms

# Below is generated by plot.py at 2018-03-21 13:09:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 455.02 Mbit/s
95th percentile per-packet one-way delay: 19.721 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 246.62 Mbit/s
95th percentile per-packet one-way delay: 19.312 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 207.26 Mbit/s
95th percentile per-packet one-way delay: 19.429 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 212.46 Mbit/s
95th percentile per-packet one-way delay: 21.377 ms
Loss rate: 0.00%
```

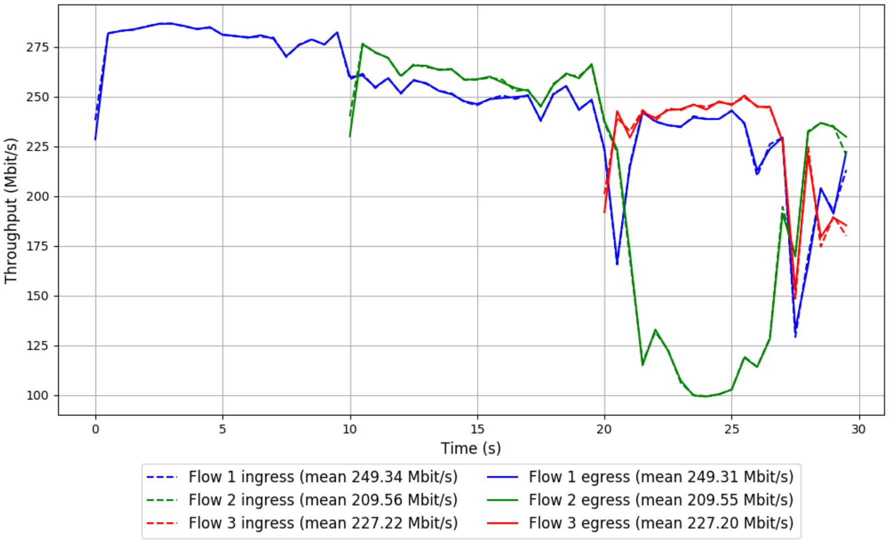
Run 1: Report of TaoVA-100x — Data Link

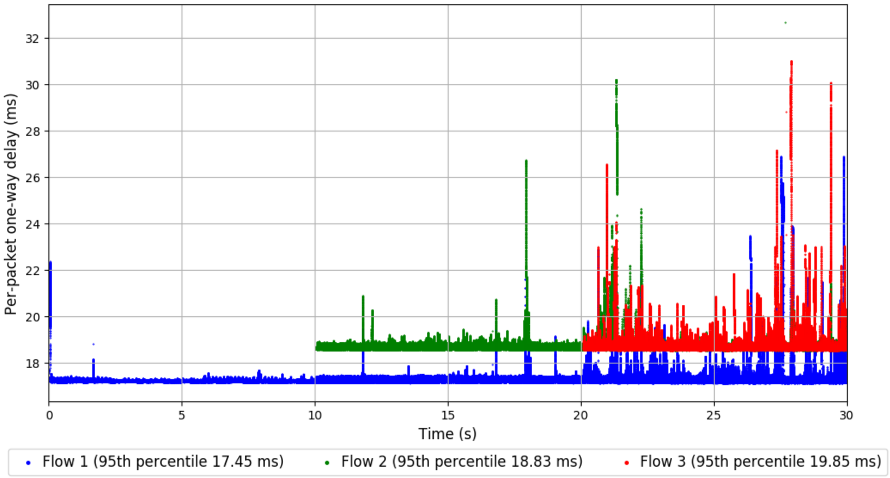




```
Run 2: Statistics of TaoVA-100x

Start at: 2018-03-21 05:20:55
End at: 2018-03-21 05:21:25
Local clock offset: -0.299 ms
Remote clock offset: -5.239 ms

# Below is generated by plot.py at 2018-03-21 13:10:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 464.11 Mbit/s
95th percentile per-packet one-way delay: 18.858 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 249.31 Mbit/s
95th percentile per-packet one-way delay: 17.454 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 209.55 Mbit/s
95th percentile per-packet one-way delay: 18.828 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 227.20 Mbit/s
95th percentile per-packet one-way delay: 19.852 ms
Loss rate: 0.00%
```

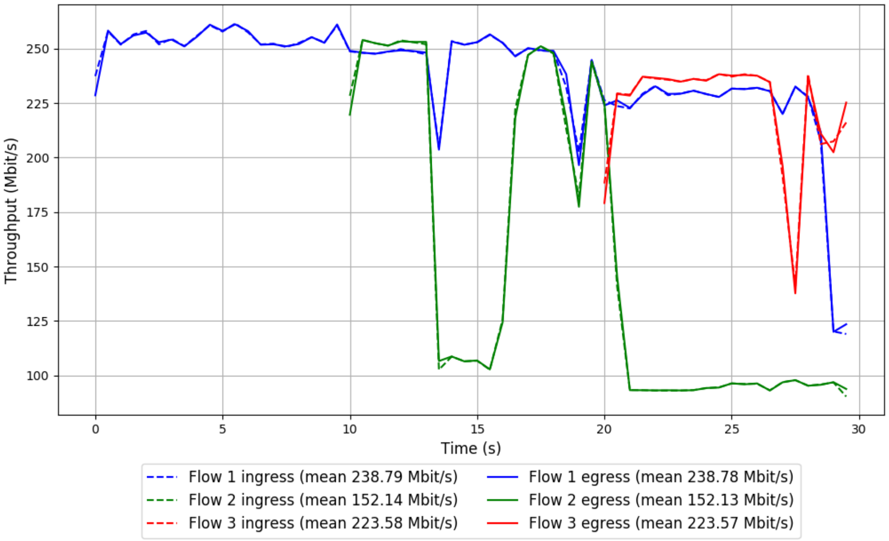
Run 2: Report of TaoVA-100x — Data Link

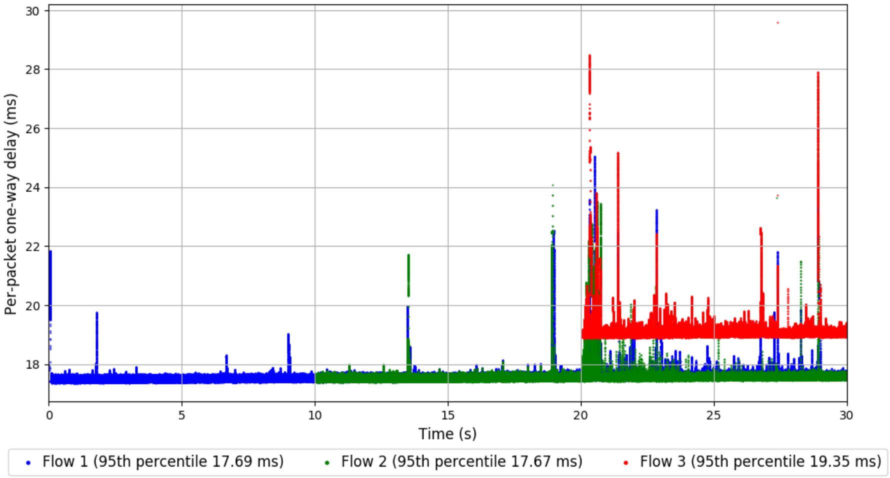




```
Run 3: Statistics of TaoVA-100x

Start at: 2018-03-21 05:50:04
End at: 2018-03-21 05:50:34
Local clock offset: 5.461 ms
Remote clock offset: -5.207 ms

# Below is generated by plot.py at 2018-03-21 13:10:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 414.32 Mbit/s
95th percentile per-packet one-way delay: 19.115 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 238.78 Mbit/s
95th percentile per-packet one-way delay: 17.694 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 152.13 Mbit/s
95th percentile per-packet one-way delay: 17.670 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 223.57 Mbit/s
95th percentile per-packet one-way delay: 19.354 ms
Loss rate: 0.00%
```

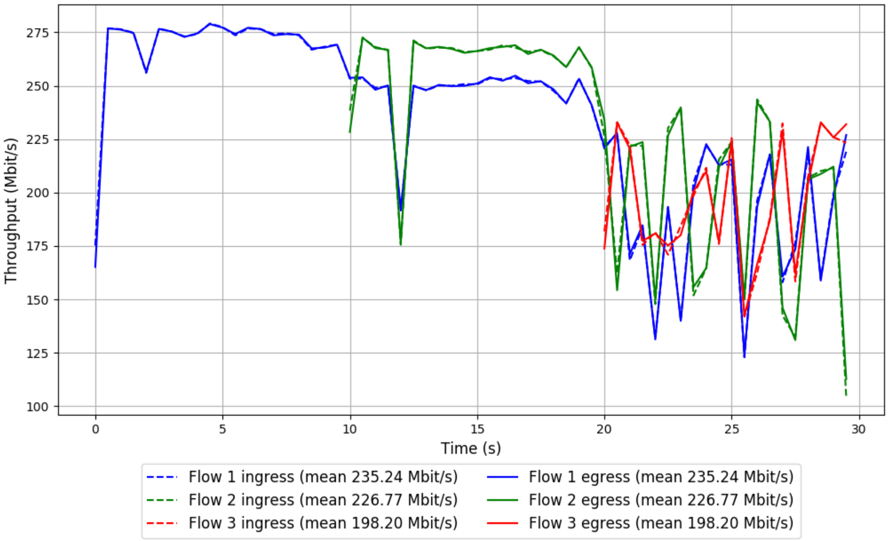
Run 3: Report of TaoVA-100x — Data Link

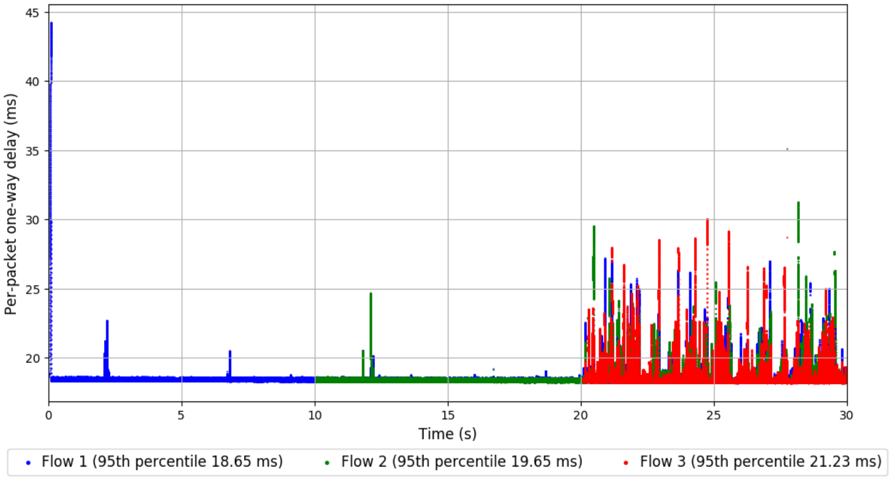




```
Run 4: Statistics of TaoVA-100x

Start at: 2018-03-21 06:19:10
End at: 2018-03-21 06:19:40
Local clock offset: 3.74 ms
Remote clock offset: -5.71 ms

# Below is generated by plot.py at 2018-03-21 13:10:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 451.89 Mbit/s
95th percentile per-packet one-way delay: 19.543 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 235.24 Mbit/s
95th percentile per-packet one-way delay: 18.652 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 226.77 Mbit/s
95th percentile per-packet one-way delay: 19.647 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 198.20 Mbit/s
95th percentile per-packet one-way delay: 21.226 ms
Loss rate: 0.00%
```

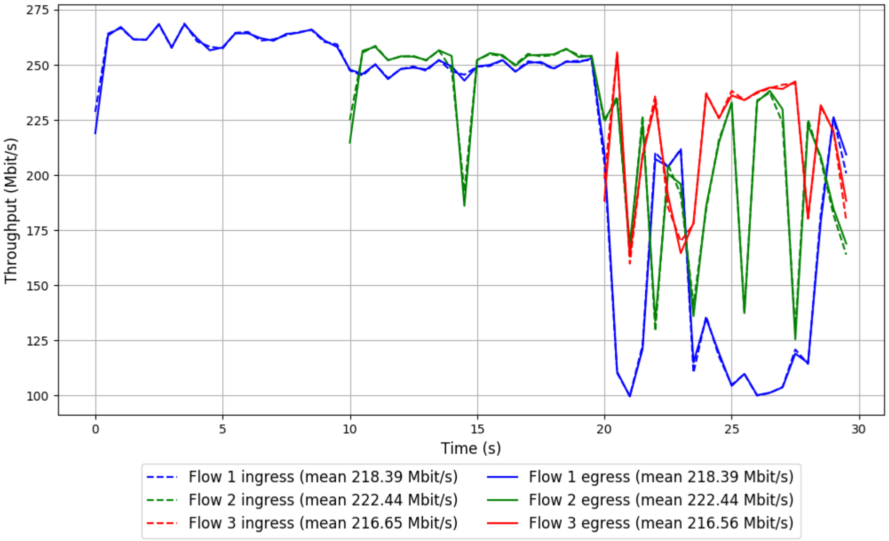
Run 4: Report of TaoVA-100x — Data Link

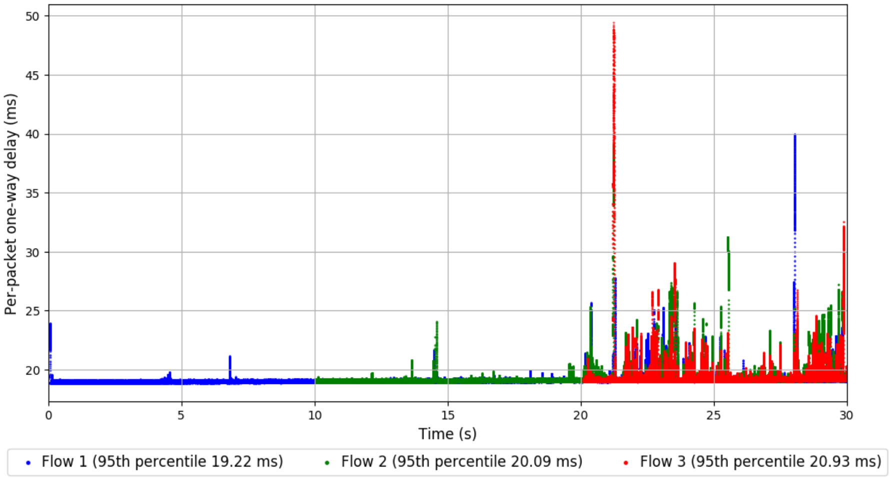




```
Run 5: Statistics of TaoVA-100x

Start at: 2018-03-21 06:48:38
End at: 2018-03-21 06:49:08
Local clock offset: 1.066 ms
Remote clock offset: -6.146 ms

# Below is generated by plot.py at 2018-03-21 13:10:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 438.15 Mbit/s
95th percentile per-packet one-way delay: 19.810 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 218.39 Mbit/s
95th percentile per-packet one-way delay: 19.223 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 222.44 Mbit/s
95th percentile per-packet one-way delay: 20.088 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 216.56 Mbit/s
95th percentile per-packet one-way delay: 20.926 ms
Loss rate: 0.04%
```

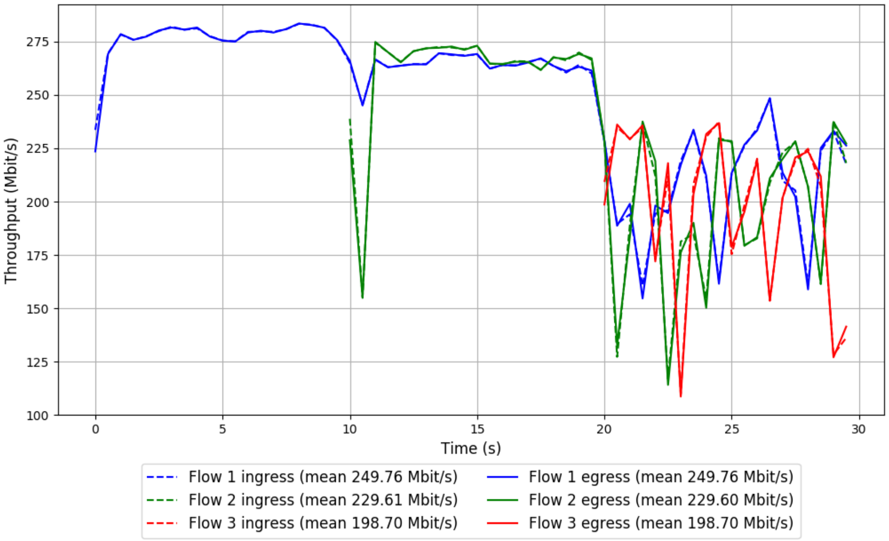
Run 5: Report of TaoVA-100x — Data Link

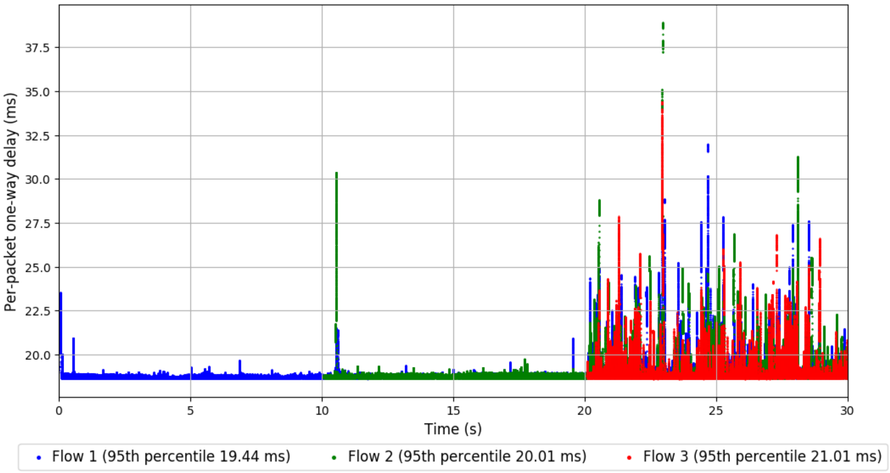




```
Run 6: Statistics of TaoVA-100x

Start at: 2018-03-21 07:18:01
End at: 2018-03-21 07:18:31
Local clock offset: 4.853 ms
Remote clock offset: -6.25 ms

# Below is generated by plot.py at 2018-03-21 13:10:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 468.43 Mbit/s
95th percentile per-packet one-way delay: 19.910 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 249.76 Mbit/s
95th percentile per-packet one-way delay: 19.440 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 229.60 Mbit/s
95th percentile per-packet one-way delay: 20.014 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 198.70 Mbit/s
95th percentile per-packet one-way delay: 21.008 ms
Loss rate: 0.00%
```

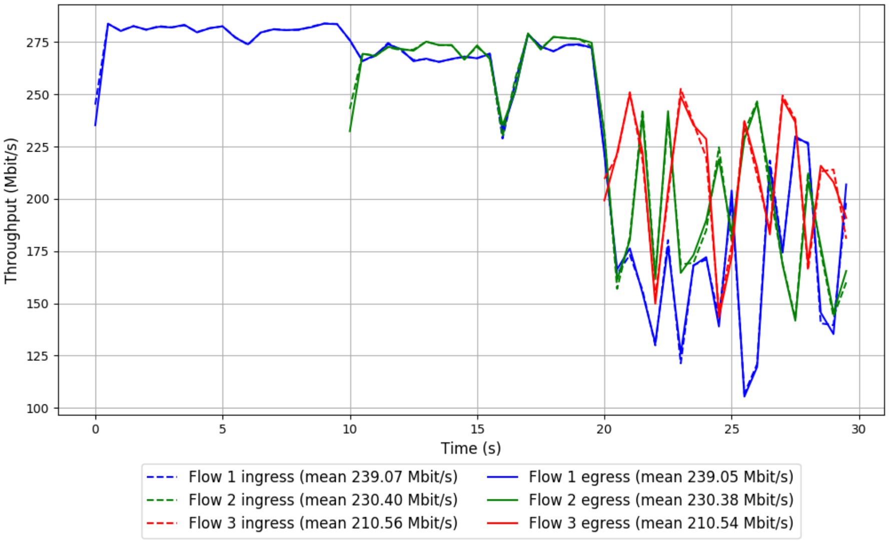
Run 6: Report of TaoVA-100x — Data Link

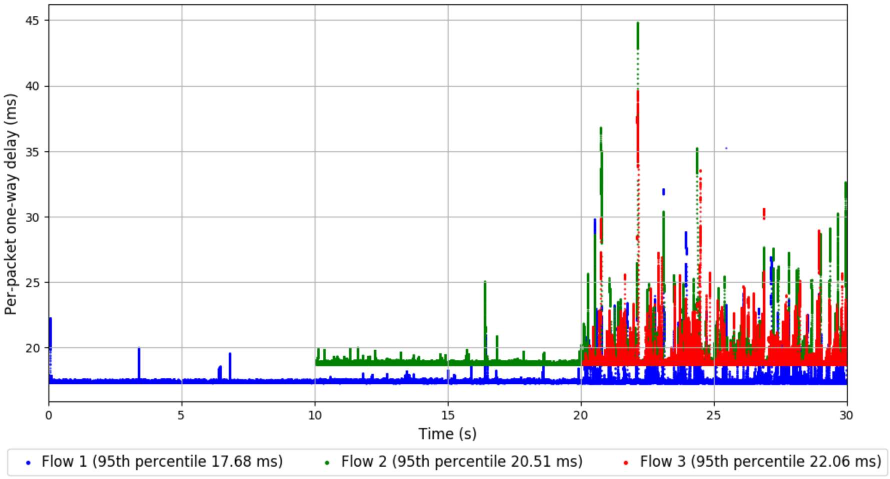




```
Run 7: Statistics of TaoVA-100x

Start at: 2018-03-21 07:47:25
End at: 2018-03-21 07:47:55
Local clock offset: -0.763 ms
Remote clock offset: -5.671 ms

# Below is generated by plot.py at 2018-03-21 13:14:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 462.20 Mbit/s
95th percentile per-packet one-way delay: 20.091 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 239.05 Mbit/s
95th percentile per-packet one-way delay: 17.678 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 230.38 Mbit/s
95th percentile per-packet one-way delay: 20.510 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 210.54 Mbit/s
95th percentile per-packet one-way delay: 22.056 ms
Loss rate: 0.01%
```

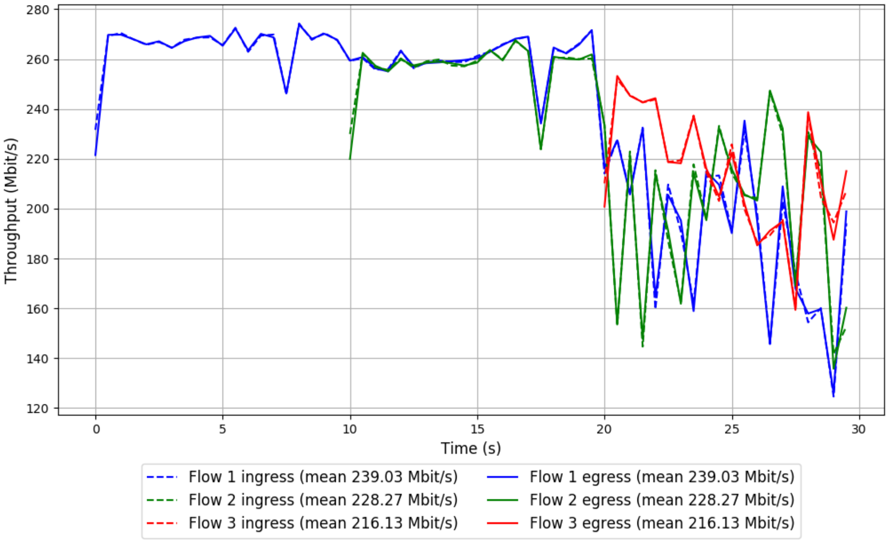
Run 7: Report of TaoVA-100x — Data Link

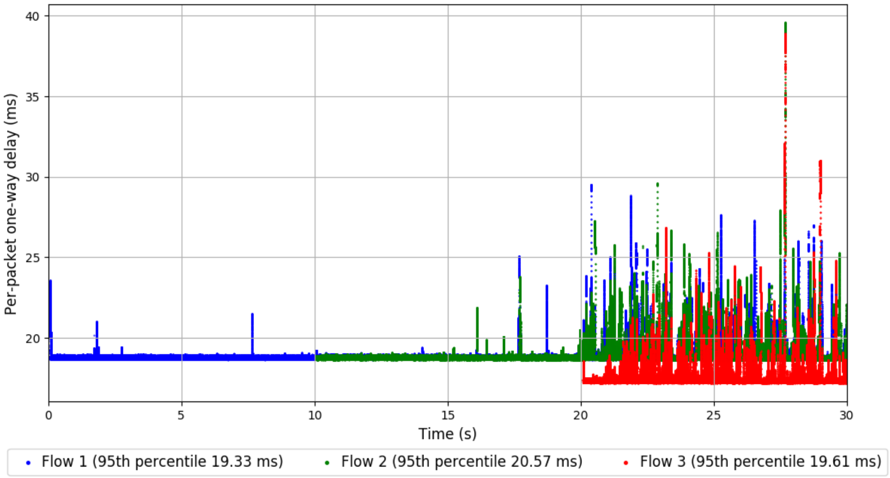




```
Run 8: Statistics of TaoVA-100x

Start at: 2018-03-21 08:16:43
End at: 2018-03-21 08:17:13
Local clock offset: -0.641 ms
Remote clock offset: -6.337 ms

# Below is generated by plot.py at 2018-03-21 13:16:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 462.59 Mbit/s
95th percentile per-packet one-way delay: 19.874 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 239.03 Mbit/s
95th percentile per-packet one-way delay: 19.330 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 228.27 Mbit/s
95th percentile per-packet one-way delay: 20.575 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 216.13 Mbit/s
95th percentile per-packet one-way delay: 19.615 ms
Loss rate: 0.00%
```

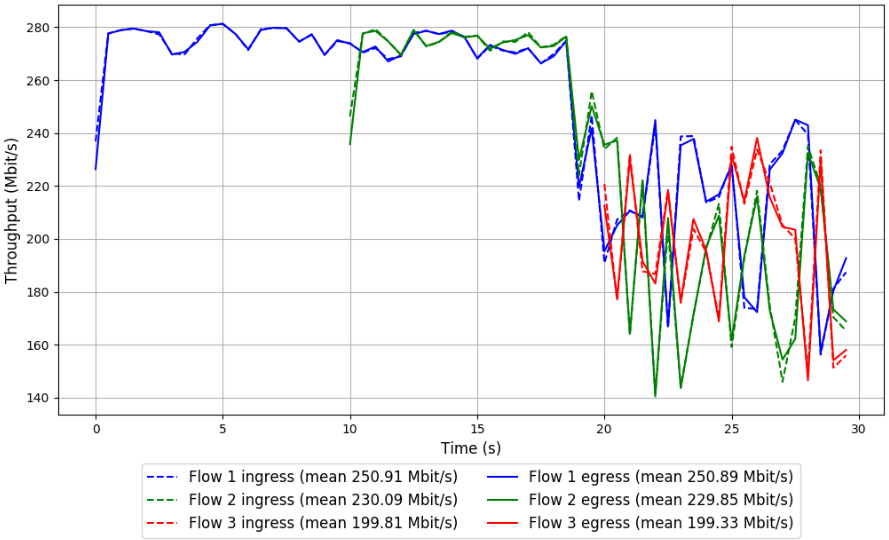
Run 8: Report of TaoVA-100x — Data Link

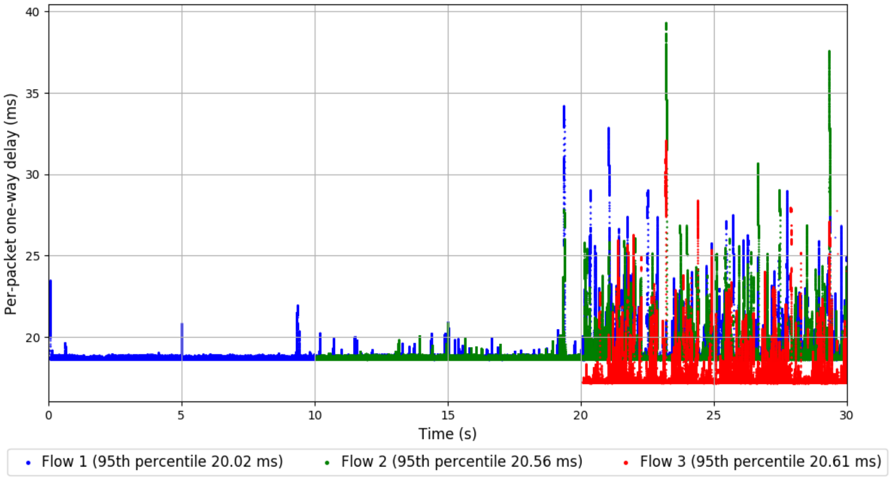




```
Run 9: Statistics of TaoVA-100x

Start at: 2018-03-21 08:46:01
End at: 2018-03-21 08:46:31
Local clock offset: -0.321 ms
Remote clock offset: -5.038 ms

# Below is generated by plot.py at 2018-03-21 13:21:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 469.99 Mbit/s
95th percentile per-packet one-way delay: 20.245 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 250.89 Mbit/s
95th percentile per-packet one-way delay: 20.015 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 229.85 Mbit/s
95th percentile per-packet one-way delay: 20.559 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 199.33 Mbit/s
95th percentile per-packet one-way delay: 20.615 ms
Loss rate: 0.22%
```

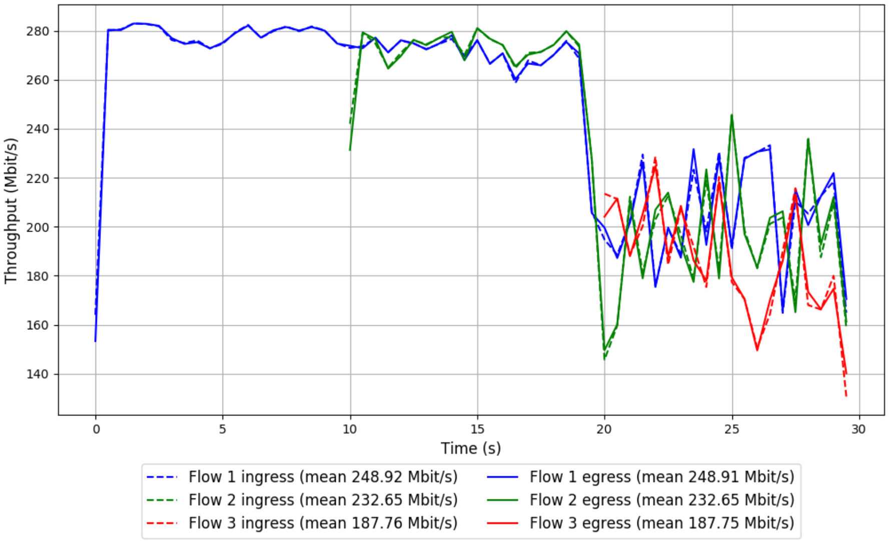
Run 9: Report of TaoVA-100x — Data Link

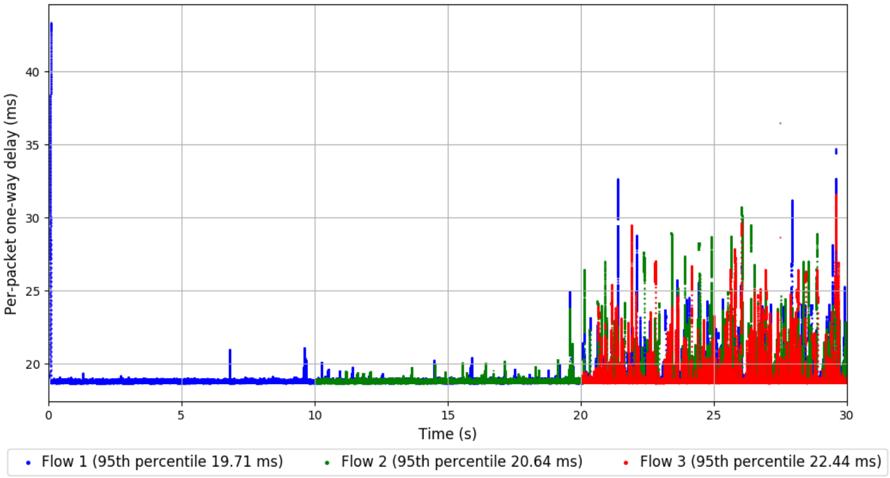




```
Run 10: Statistics of TaoVA-100x

Start at: 2018-03-21 09:15:20
End at: 2018-03-21 09:15:50
Local clock offset: 0.443 ms
Remote clock offset: -5.791 ms

# Below is generated by plot.py at 2018-03-21 13:22:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 466.18 Mbit/s
95th percentile per-packet one-way delay: 20.481 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 248.91 Mbit/s
95th percentile per-packet one-way delay: 19.714 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 232.65 Mbit/s
95th percentile per-packet one-way delay: 20.638 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 187.75 Mbit/s
95th percentile per-packet one-way delay: 22.440 ms
Loss rate: 0.00%
```

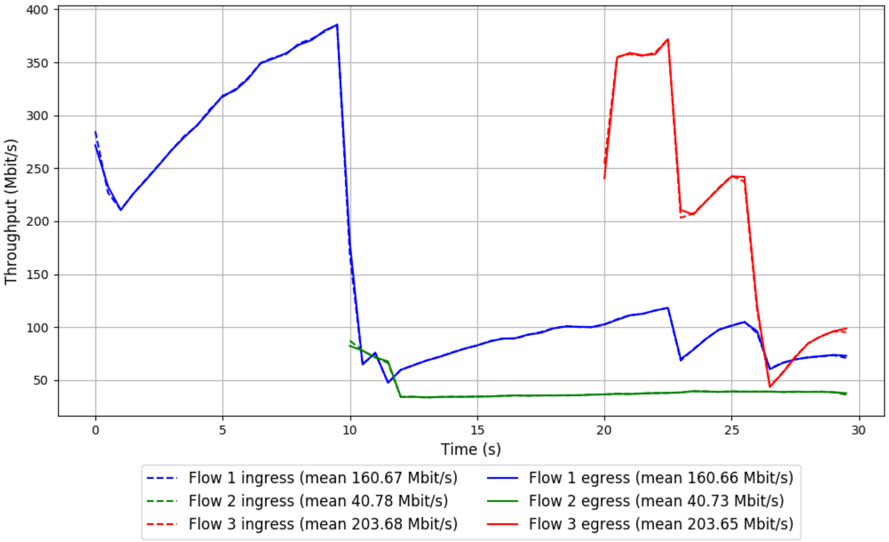
Run 10: Report of TaoVA-100x — Data Link

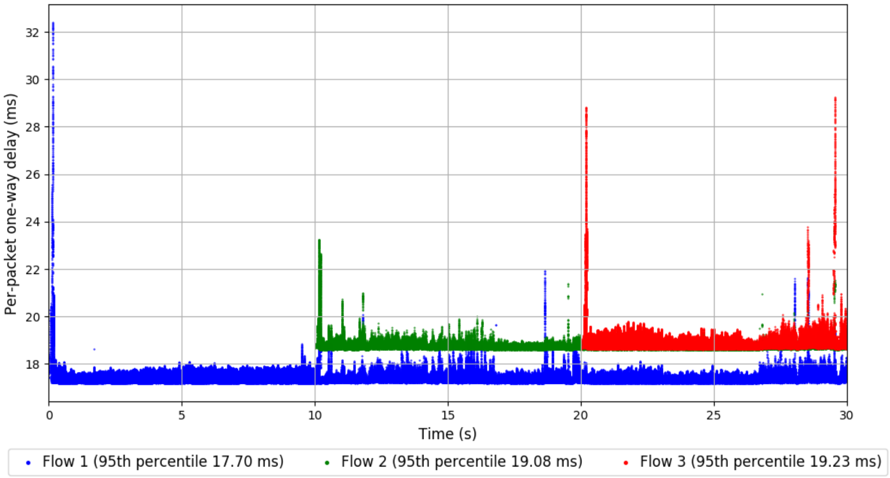




```
Run 1: Statistics of TCP Vegas

Start at: 2018-03-21 04:53:34
End at: 2018-03-21 04:54:04
Local clock offset: 0.233 ms
Remote clock offset: -6.146 ms

# Below is generated by plot.py at 2018-03-21 13:22:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 255.40 Mbit/s
95th percentile per-packet one-way delay: 19.051 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 160.66 Mbit/s
95th percentile per-packet one-way delay: 17.696 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 40.73 Mbit/s
95th percentile per-packet one-way delay: 19.082 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 203.65 Mbit/s
95th percentile per-packet one-way delay: 19.226 ms
Loss rate: 0.01%
```

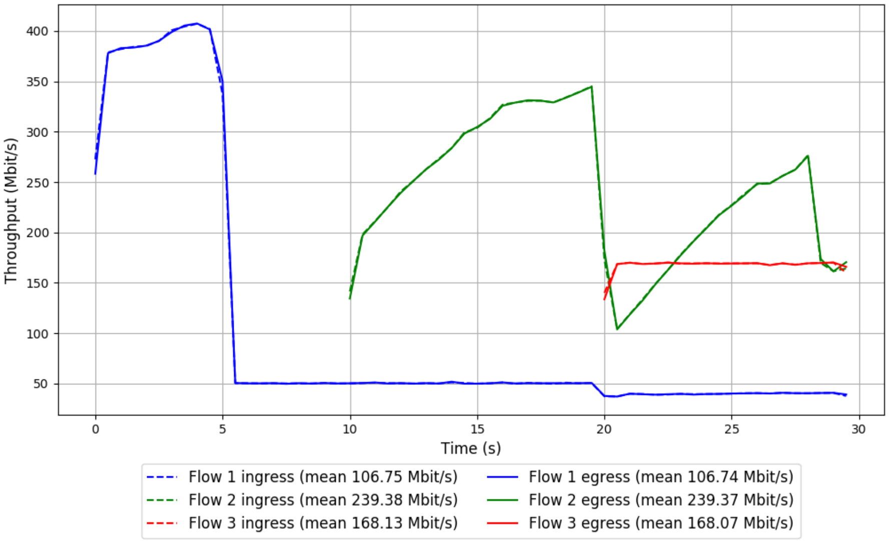
Run 1: Report of TCP Vegas — Data Link

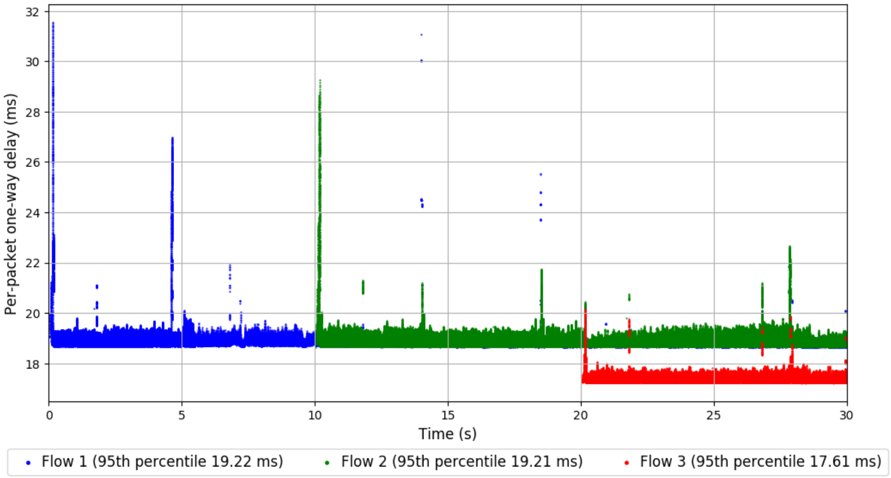




```
Run 2: Statistics of TCP Vegas

Start at: 2018-03-21 05:22:46
End at: 2018-03-21 05:23:16
Local clock offset: -0.468 ms
Remote clock offset: -5.211 ms

# Below is generated by plot.py at 2018-03-21 13:22:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 321.97 Mbit/s
95th percentile per-packet one-way delay: 19.197 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 106.74 Mbit/s
95th percentile per-packet one-way delay: 19.218 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 239.37 Mbit/s
95th percentile per-packet one-way delay: 19.214 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 168.07 Mbit/s
95th percentile per-packet one-way delay: 17.613 ms
Loss rate: 0.03%
```

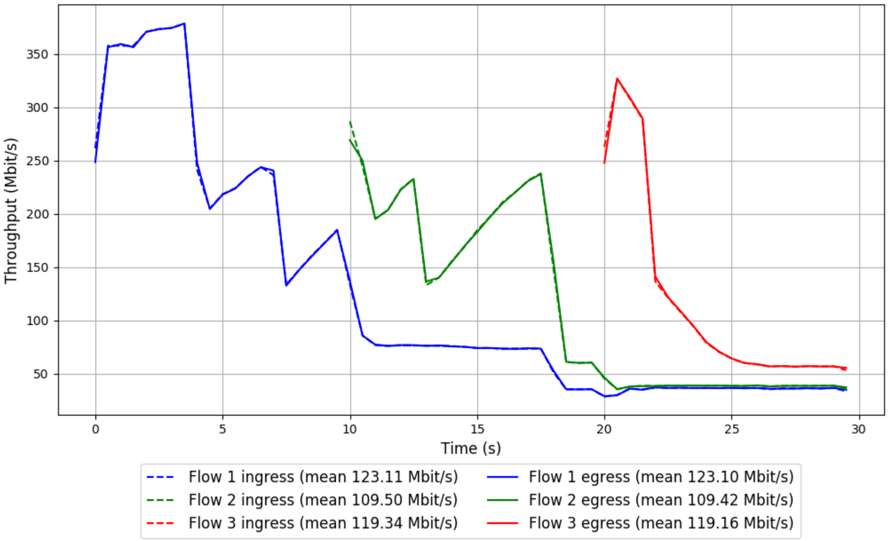
Run 2: Report of TCP Vegas — Data Link

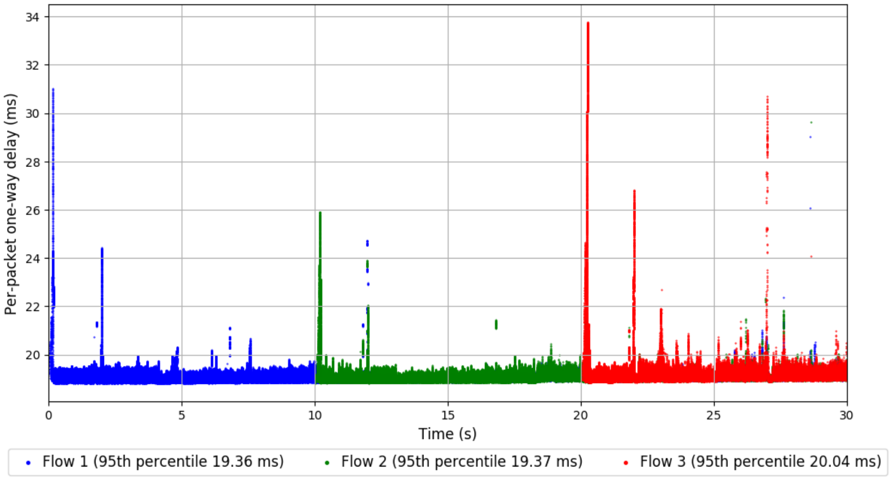




```
Run 3: Statistics of TCP Vegas

Start at: 2018-03-21 05:51:51
End at: 2018-03-21 05:52:21
Local clock offset: 5.918 ms
Remote clock offset: -5.165 ms

# Below is generated by plot.py at 2018-03-21 13:22:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 235.49 Mbit/s
95th percentile per-packet one-way delay: 19.415 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 123.10 Mbit/s
95th percentile per-packet one-way delay: 19.355 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 109.42 Mbit/s
95th percentile per-packet one-way delay: 19.373 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 119.16 Mbit/s
95th percentile per-packet one-way delay: 20.037 ms
Loss rate: 0.15%
```

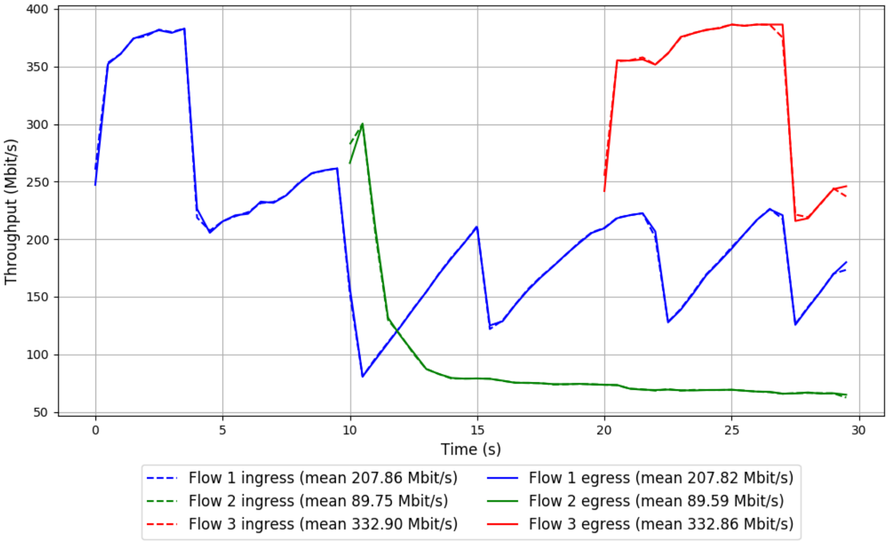
Run 3: Report of TCP Vegas — Data Link

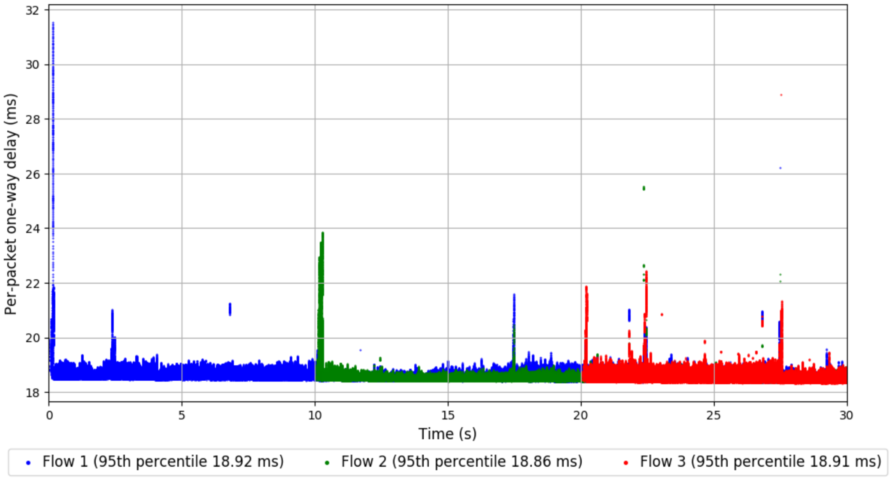




```
Run 4: Statistics of TCP Vegas

Start at: 2018-03-21 06:21:00
End at: 2018-03-21 06:21:30
Local clock offset: 2.959 ms
Remote clock offset: -5.79 ms

# Below is generated by plot.py at 2018-03-21 13:22:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 378.02 Mbit/s
95th percentile per-packet one-way delay: 18.914 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 207.82 Mbit/s
95th percentile per-packet one-way delay: 18.918 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 89.59 Mbit/s
95th percentile per-packet one-way delay: 18.862 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 332.86 Mbit/s
95th percentile per-packet one-way delay: 18.915 ms
Loss rate: 0.01%
```

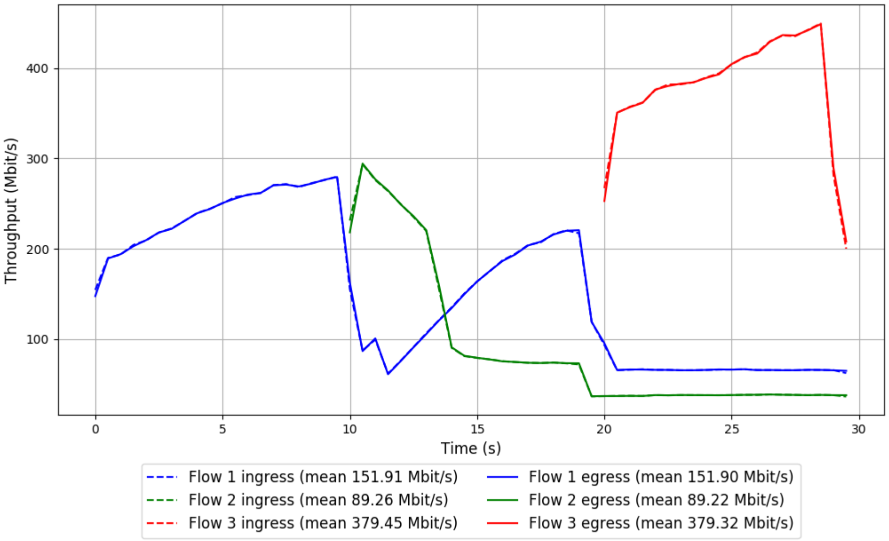
Run 4: Report of TCP Vegas — Data Link

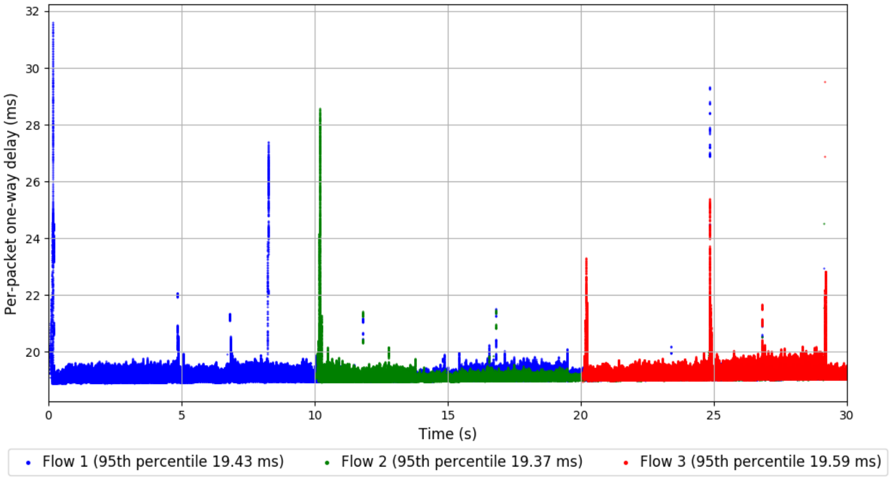




```
Run 5: Statistics of TCP Vegas

Start at: 2018-03-21 06:50:27
End at: 2018-03-21 06:50:57
Local clock offset: 1.771 ms
Remote clock offset: -6.032 ms

# Below is generated by plot.py at 2018-03-21 13:22:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 337.24 Mbit/s
95th percentile per-packet one-way delay: 19.502 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 151.90 Mbit/s
95th percentile per-packet one-way delay: 19.433 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 89.22 Mbit/s
95th percentile per-packet one-way delay: 19.374 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 379.32 Mbit/s
95th percentile per-packet one-way delay: 19.588 ms
Loss rate: 0.03%
```

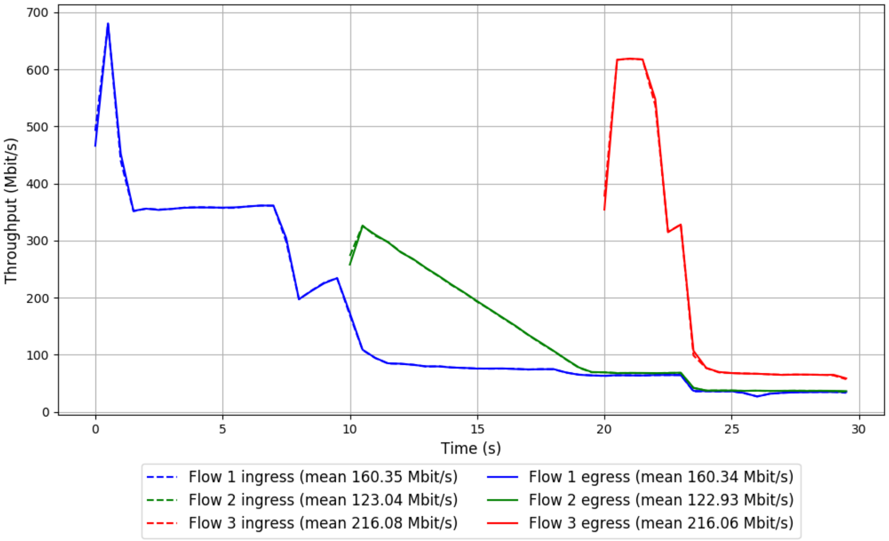
Run 5: Report of TCP Vegas — Data Link

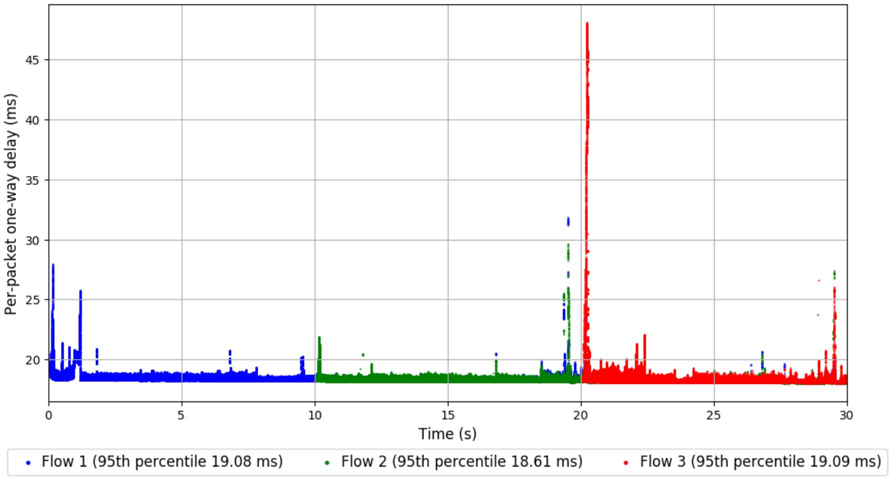




```
Run 6: Statistics of TCP Vegas

Start at: 2018-03-21 07:19:52
End at: 2018-03-21 07:20:22
Local clock offset: 4.936 ms
Remote clock offset: -6.156 ms

# Below is generated by plot.py at 2018-03-21 13:22:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 313.95 Mbit/s
95th percentile per-packet one-way delay: 18.938 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 160.34 Mbit/s
95th percentile per-packet one-way delay: 19.084 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 122.93 Mbit/s
95th percentile per-packet one-way delay: 18.607 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 216.06 Mbit/s
95th percentile per-packet one-way delay: 19.092 ms
Loss rate: 0.01%
```

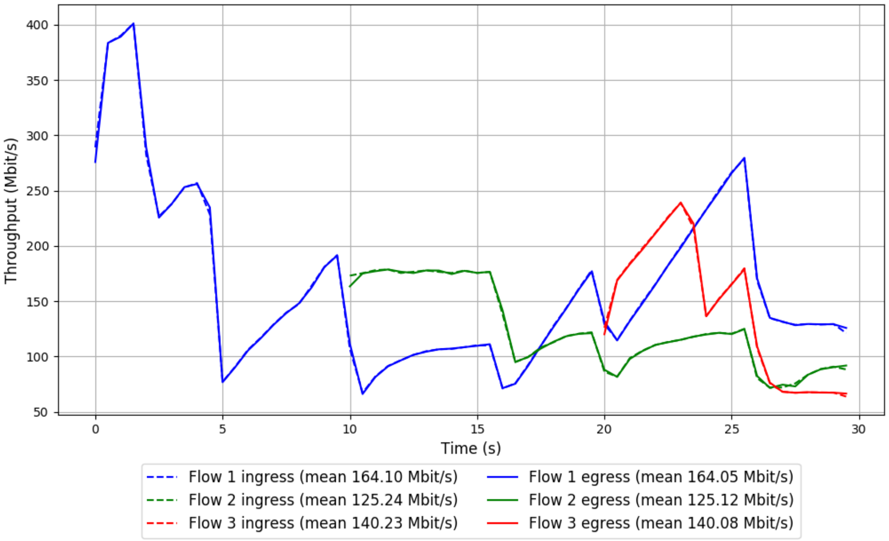
Run 6: Report of TCP Vegas — Data Link

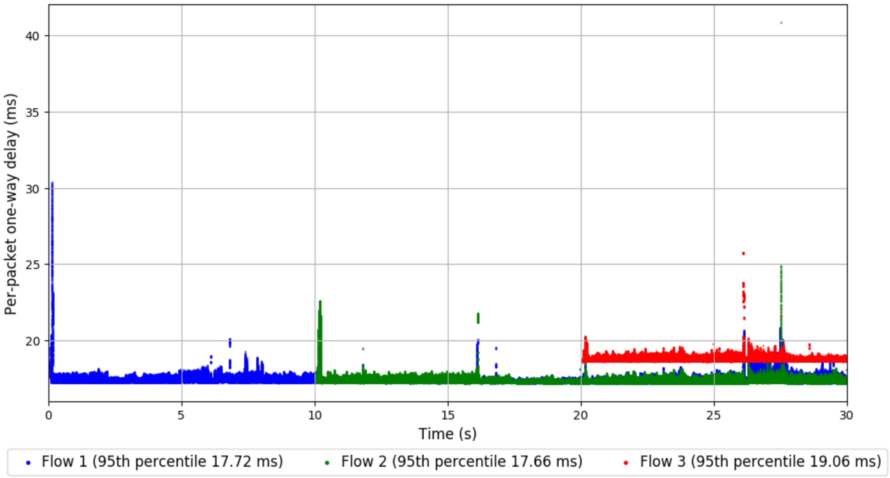




```
Run 7: Statistics of TCP Vegas

Start at: 2018-03-21 07:49:15
End at: 2018-03-21 07:49:45
Local clock offset: -0.898 ms
Remote clock offset: -5.747 ms

# Below is generated by plot.py at 2018-03-21 13:22:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 293.88 Mbit/s
95th percentile per-packet one-way delay: 18.848 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 164.05 Mbit/s
95th percentile per-packet one-way delay: 17.724 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 125.12 Mbit/s
95th percentile per-packet one-way delay: 17.658 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 140.08 Mbit/s
95th percentile per-packet one-way delay: 19.060 ms
Loss rate: 0.11%
```

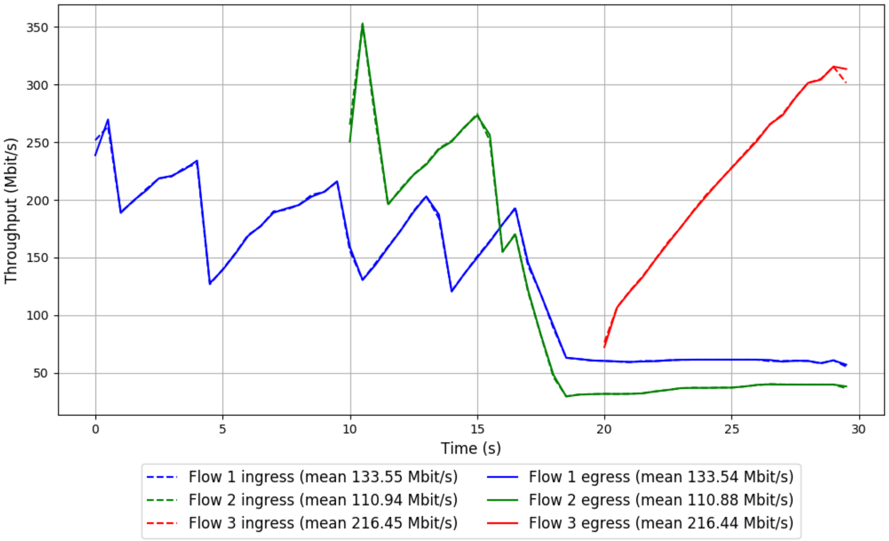
Run 7: Report of TCP Vegas — Data Link

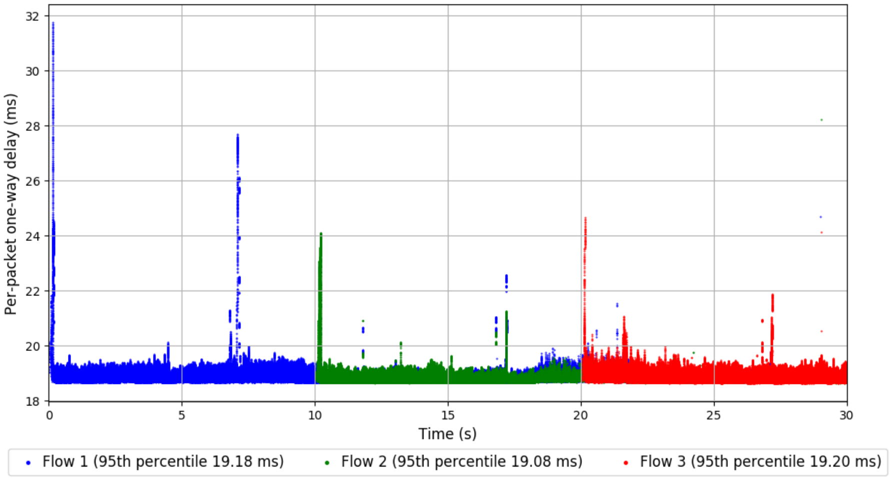




```
Run 8: Statistics of TCP Vegas

Start at: 2018-03-21 08:18:33
End at: 2018-03-21 08:19:03
Local clock offset: -0.613 ms
Remote clock offset: -6.285 ms

# Below is generated by plot.py at 2018-03-21 13:22:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 279.19 Mbit/s
95th percentile per-packet one-way delay: 19.166 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 133.54 Mbit/s
95th percentile per-packet one-way delay: 19.180 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 110.88 Mbit/s
95th percentile per-packet one-way delay: 19.083 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 216.44 Mbit/s
95th percentile per-packet one-way delay: 19.195 ms
Loss rate: 0.00%
```

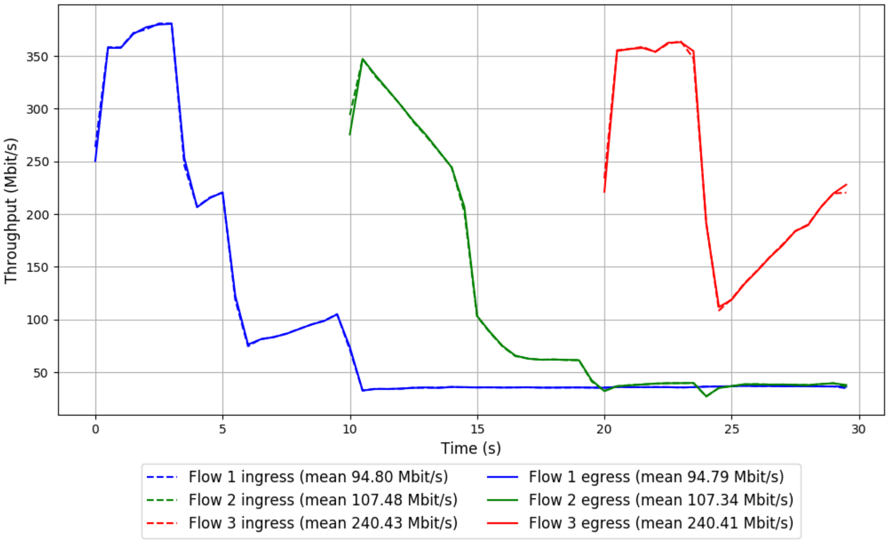
Run 8: Report of TCP Vegas — Data Link

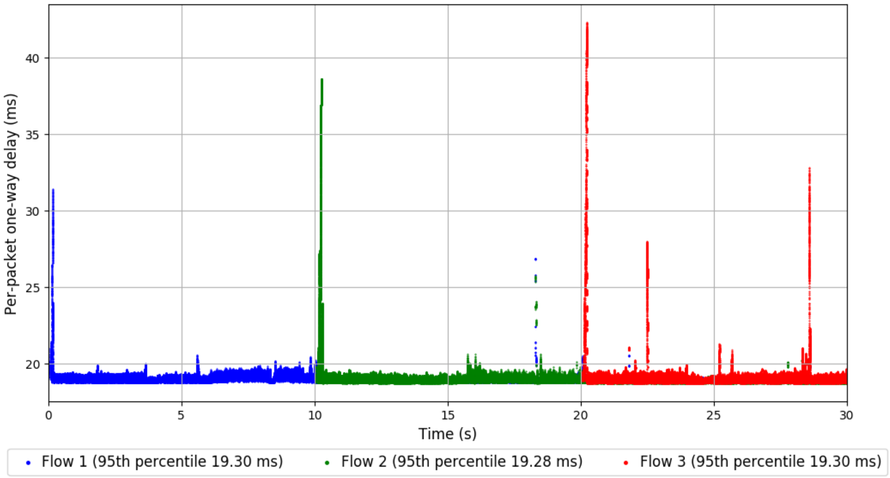




```
Run 9: Statistics of TCP Vegas

Start at: 2018-03-21 08:47:52
End at: 2018-03-21 08:48:22
Local clock offset: -0.421 ms
Remote clock offset: -4.983 ms

# Below is generated by plot.py at 2018-03-21 13:22:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 246.09 Mbit/s
95th percentile per-packet one-way delay: 19.298 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 94.79 Mbit/s
95th percentile per-packet one-way delay: 19.301 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 107.34 Mbit/s
95th percentile per-packet one-way delay: 19.284 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 240.41 Mbit/s
95th percentile per-packet one-way delay: 19.302 ms
Loss rate: 0.01%
```

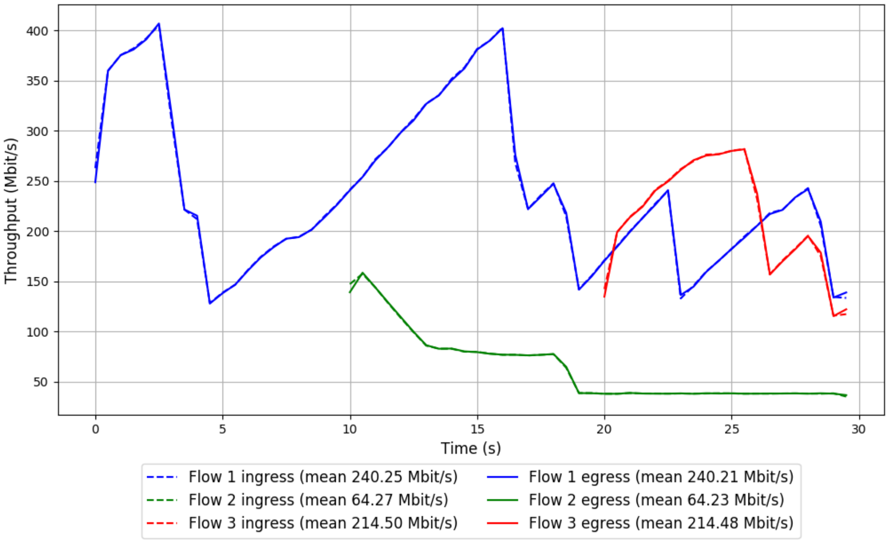
Run 9: Report of TCP Vegas — Data Link

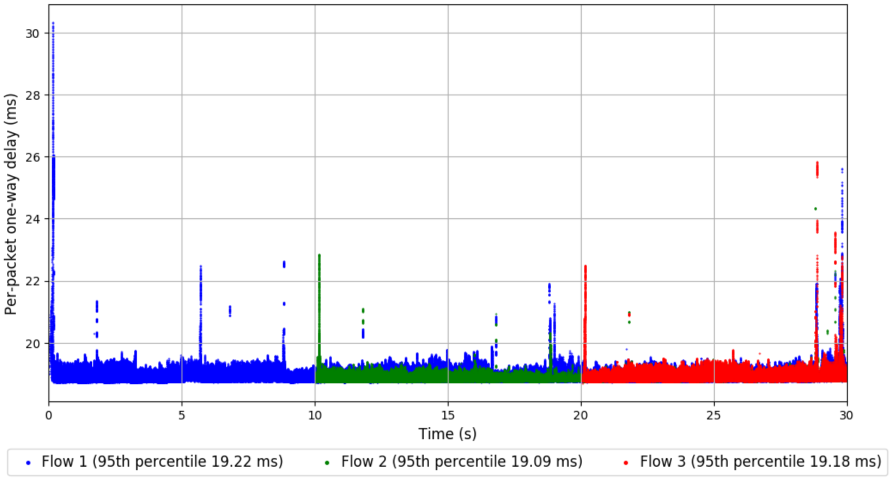




```
Run 10: Statistics of TCP Vegas

Start at: 2018-03-21 09:17:11
End at: 2018-03-21 09:17:41
Local clock offset: 0.487 ms
Remote clock offset: -5.823 ms

# Below is generated by plot.py at 2018-03-21 13:22:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 354.14 Mbit/s
95th percentile per-packet one-way delay: 19.207 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 240.21 Mbit/s
95th percentile per-packet one-way delay: 19.224 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 64.23 Mbit/s
95th percentile per-packet one-way delay: 19.086 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 214.48 Mbit/s
95th percentile per-packet one-way delay: 19.180 ms
Loss rate: 0.01%
```

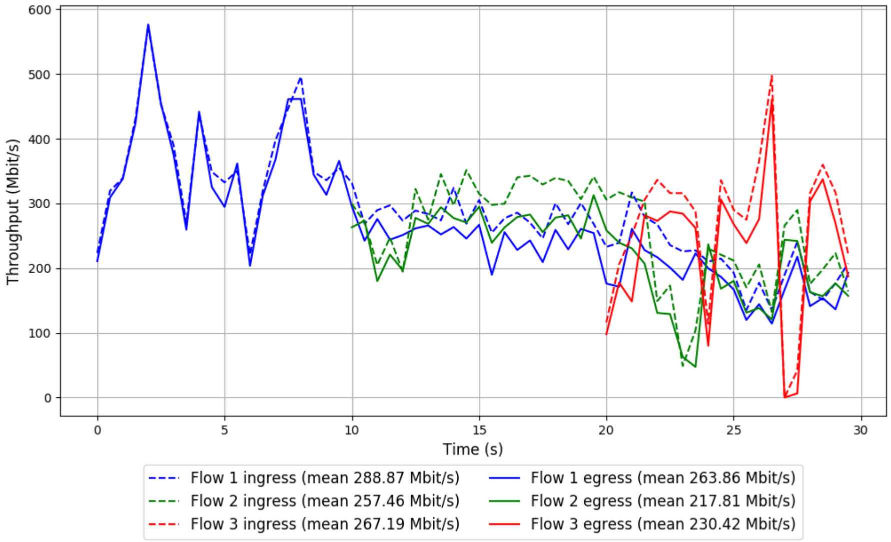
Run 10: Report of TCP Vegas — Data Link

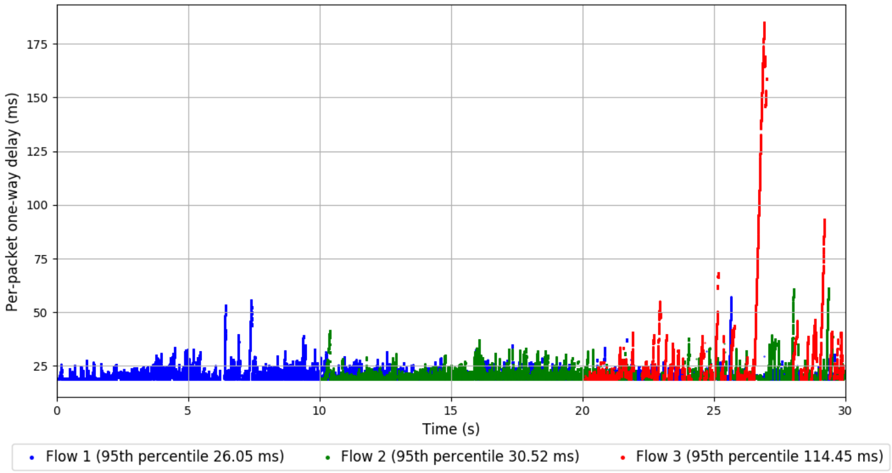




```
Run 1: Statistics of Verus

Start at: 2018-03-21 04:41:17
End at: 2018-03-21 04:41:47
Local clock offset: 0.755 ms
Remote clock offset: -5.858 ms

# Below is generated by plot.py at 2018-03-21 13:25:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 484.72 Mbit/s
95th percentile per-packet one-way delay: 35.536 ms
Loss rate: 11.57%
-- Flow 1:
Average throughput: 263.86 Mbit/s
95th percentile per-packet one-way delay: 26.047 ms
Loss rate: 8.65%
-- Flow 2:
Average throughput: 217.81 Mbit/s
95th percentile per-packet one-way delay: 30.523 ms
Loss rate: 15.39%
-- Flow 3:
Average throughput: 230.42 Mbit/s
95th percentile per-packet one-way delay: 114.446 ms
Loss rate: 13.71%
```

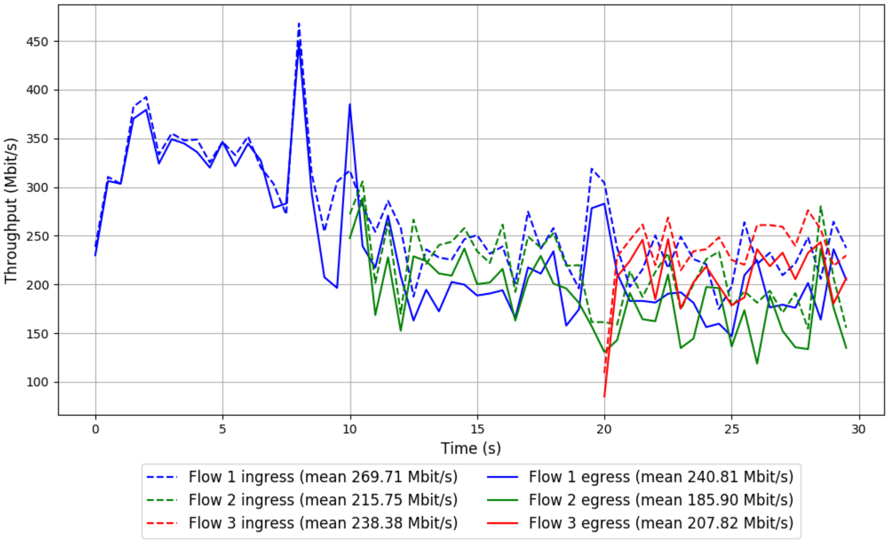
Run 1: Report of Verus — Data Link

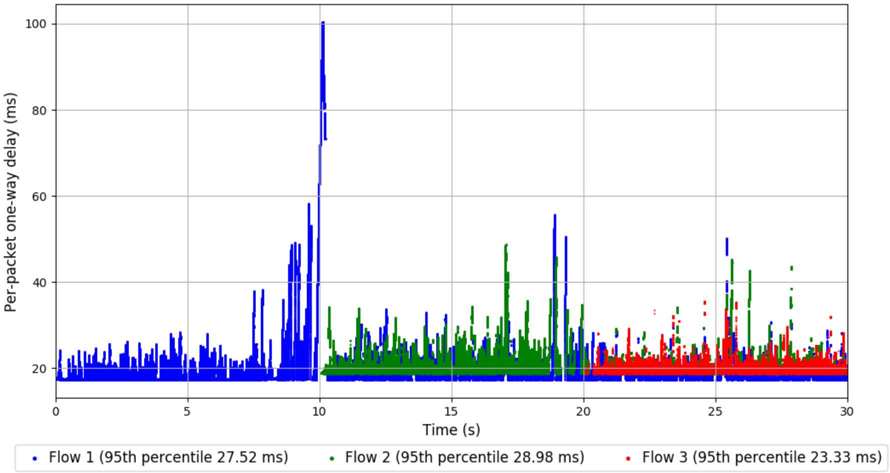




```
Run 2: Statistics of Verus

Start at: 2018-03-21 05:10:28
End at: 2018-03-21 05:10:58
Local clock offset: -0.171 ms
Remote clock offset: -5.547 ms

# Below is generated by plot.py at 2018-03-21 13:25:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 433.13 Mbit/s
95th percentile per-packet one-way delay: 27.156 ms
Loss rate: 11.96%
-- Flow 1:
Average throughput: 240.81 Mbit/s
95th percentile per-packet one-way delay: 27.516 ms
Loss rate: 10.72%
-- Flow 2:
Average throughput: 185.90 Mbit/s
95th percentile per-packet one-way delay: 28.975 ms
Loss rate: 13.83%
-- Flow 3:
Average throughput: 207.82 Mbit/s
95th percentile per-packet one-way delay: 23.330 ms
Loss rate: 12.82%
```

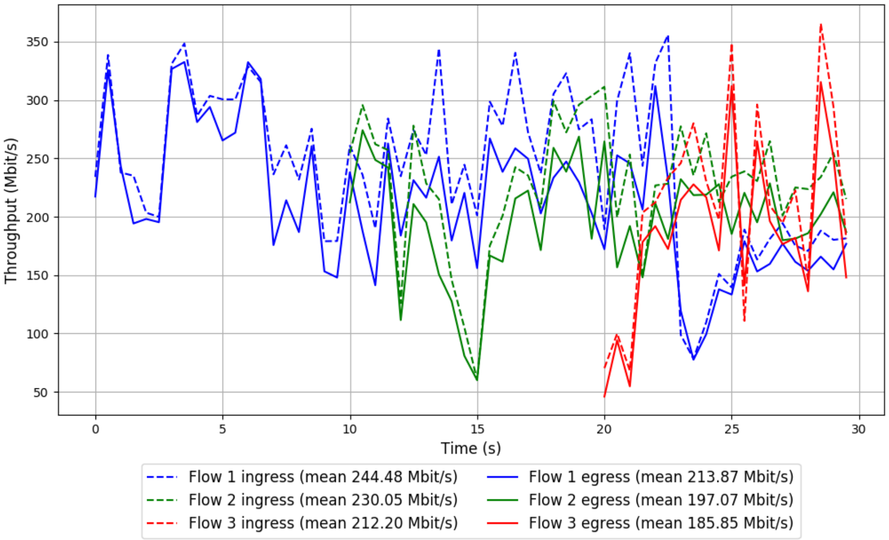
Run 2: Report of Verus — Data Link

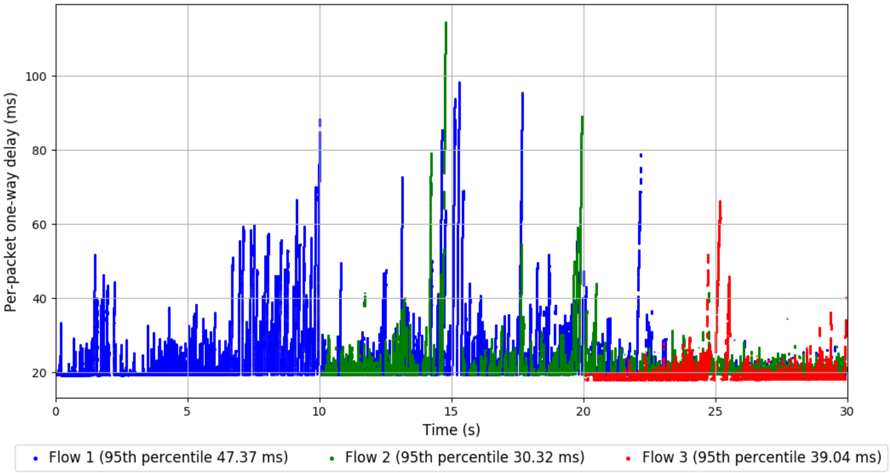




```
Run 3: Statistics of Verus

Start at: 2018-03-21 05:39:48
End at: 2018-03-21 05:40:18
Local clock offset: 0.977 ms
Remote clock offset: -5.134 ms

# Below is generated by plot.py at 2018-03-21 13:25:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 406.36 Mbit/s
95th percentile per-packet one-way delay: 42.028 ms
Loss rate: 13.08%
-- Flow 1:
Average throughput: 213.87 Mbit/s
95th percentile per-packet one-way delay: 47.371 ms
Loss rate: 12.51%
-- Flow 2:
Average throughput: 197.07 Mbit/s
95th percentile per-packet one-way delay: 30.316 ms
Loss rate: 14.33%
-- Flow 3:
Average throughput: 185.85 Mbit/s
95th percentile per-packet one-way delay: 39.042 ms
Loss rate: 12.34%
```

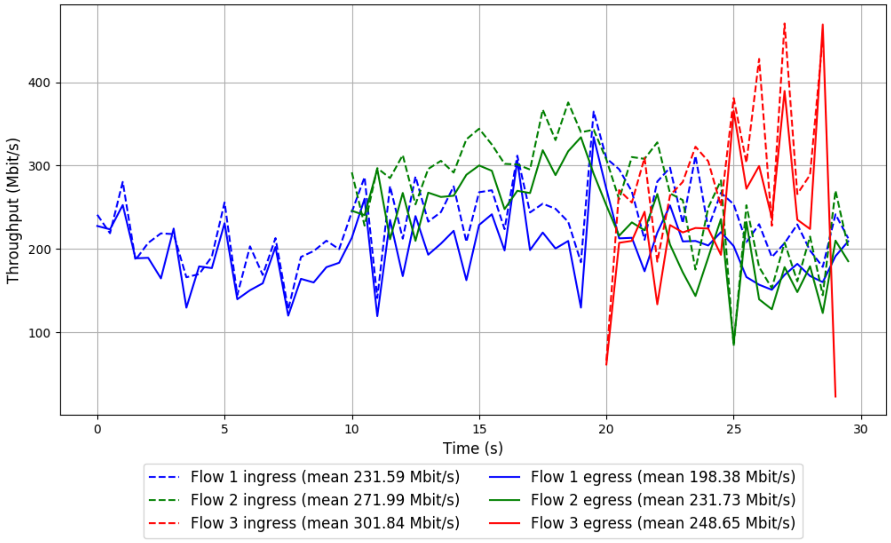
Run 3: Report of Verus — Data Link

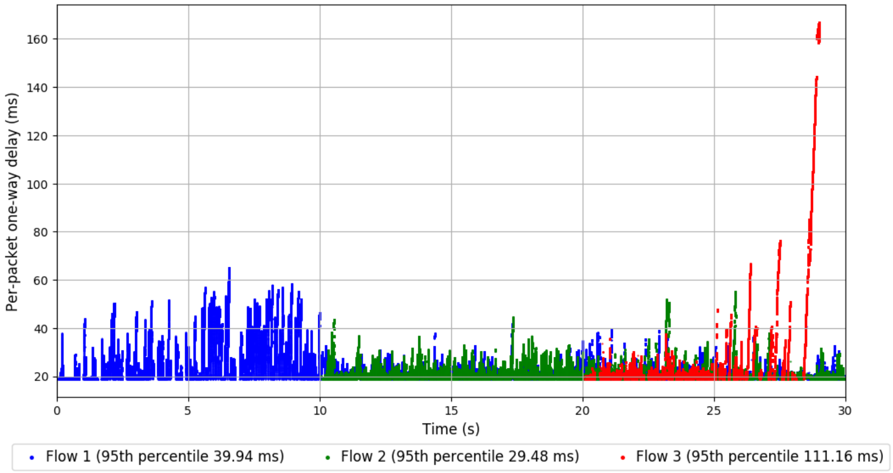




```
Run 4: Statistics of Verus

Start at: 2018-03-21 06:08:39
End at: 2018-03-21 06:09:09
Local clock offset: 8.122 ms
Remote clock offset: -5.281 ms

# Below is generated by plot.py at 2018-03-21 13:25:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 427.04 Mbit/s
95th percentile per-packet one-way delay: 42.634 ms
Loss rate: 14.85%
-- Flow 1:
Average throughput: 198.38 Mbit/s
95th percentile per-packet one-way delay: 39.939 ms
Loss rate: 14.34%
-- Flow 2:
Average throughput: 231.73 Mbit/s
95th percentile per-packet one-way delay: 29.484 ms
Loss rate: 14.80%
-- Flow 3:
Average throughput: 248.65 Mbit/s
95th percentile per-packet one-way delay: 111.162 ms
Loss rate: 16.25%
```

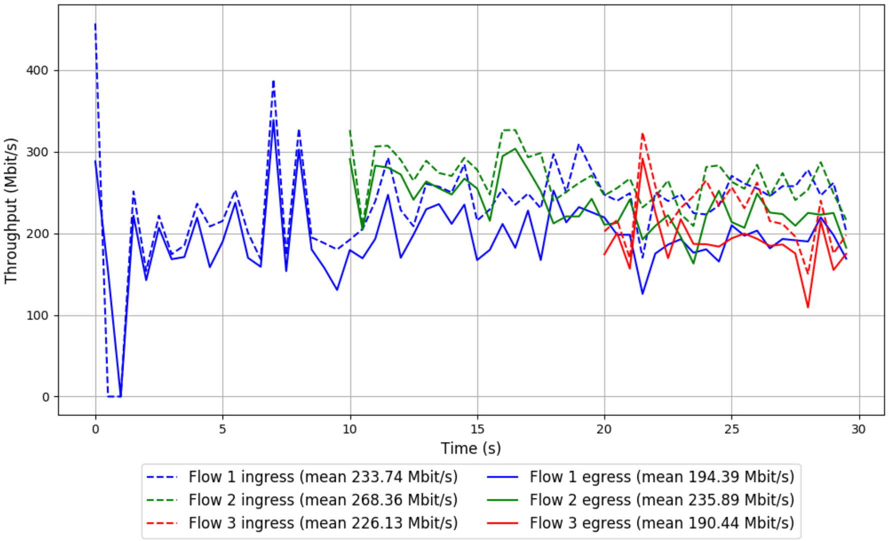
Run 4: Report of Verus — Data Link

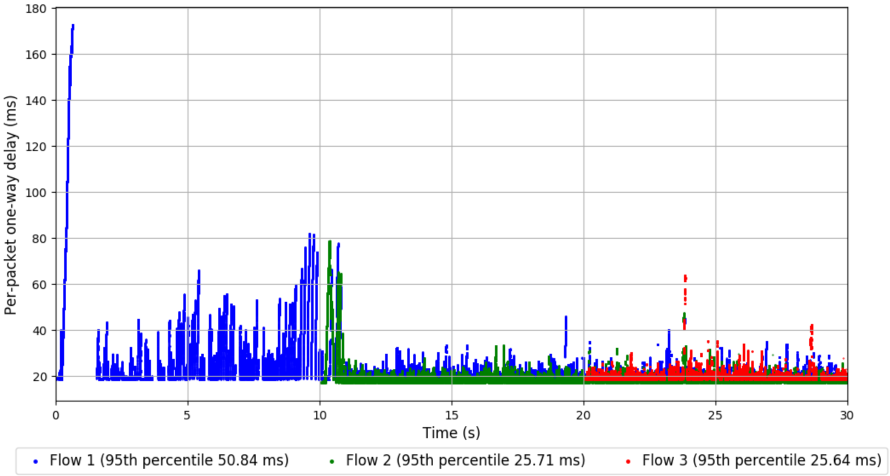




```
Run 5: Statistics of Verus

Start at: 2018-03-21 06:38:12
End at: 2018-03-21 06:38:42
Local clock offset: 0.22 ms
Remote clock offset: -6.109 ms

# Below is generated by plot.py at 2018-03-21 13:26:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 414.38 Mbit/s
95th percentile per-packet one-way delay: 39.275 ms
Loss rate: 14.94%
-- Flow 1:
Average throughput: 194.39 Mbit/s
95th percentile per-packet one-way delay: 50.844 ms
Loss rate: 16.83%
-- Flow 2:
Average throughput: 235.89 Mbit/s
95th percentile per-packet one-way delay: 25.712 ms
Loss rate: 12.10%
-- Flow 3:
Average throughput: 190.44 Mbit/s
95th percentile per-packet one-way delay: 25.636 ms
Loss rate: 15.79%
```

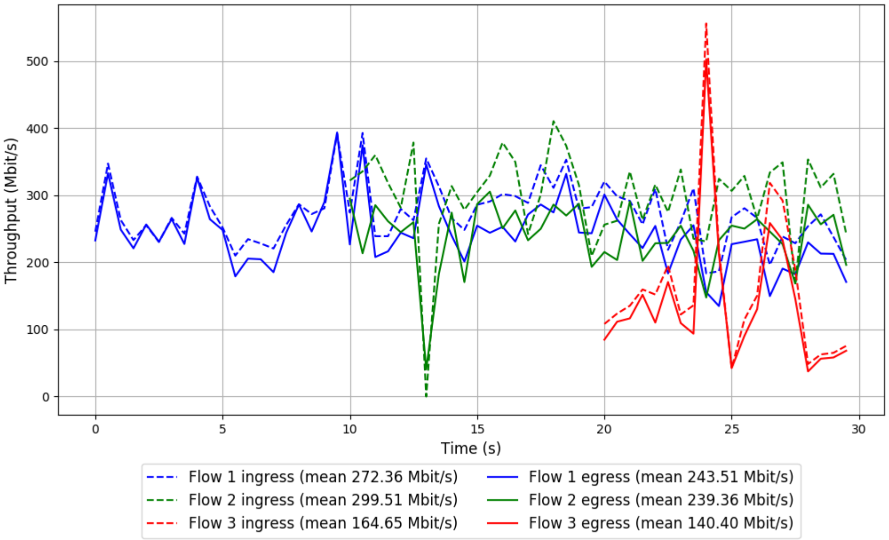
Run 5: Report of Verus — Data Link

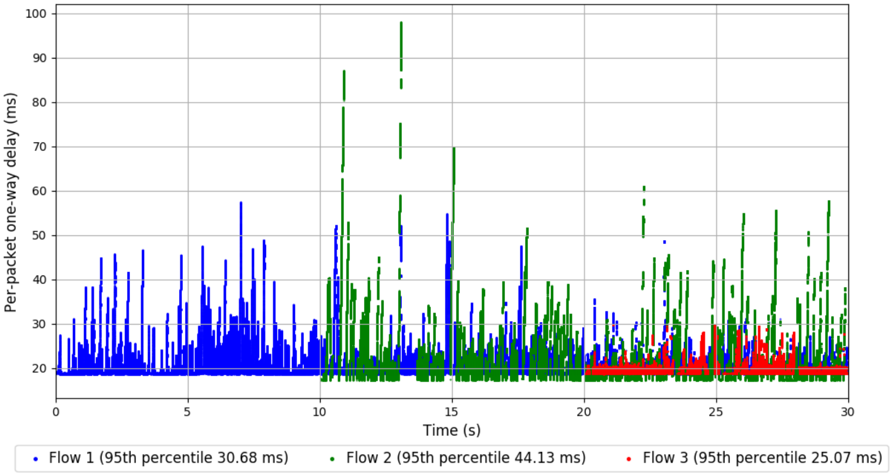




```
Run 6: Statistics of Verus

Start at: 2018-03-21 07:07:29
End at: 2018-03-21 07:07:59
Local clock offset: 4.391 ms
Remote clock offset: -6.199 ms

# Below is generated by plot.py at 2018-03-21 13:28:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 448.77 Mbit/s
95th percentile per-packet one-way delay: 37.719 ms
Loss rate: 14.58%
-- Flow 1:
Average throughput: 243.51 Mbit/s
95th percentile per-packet one-way delay: 30.680 ms
Loss rate: 10.59%
-- Flow 2:
Average throughput: 239.36 Mbit/s
95th percentile per-packet one-way delay: 44.127 ms
Loss rate: 20.00%
-- Flow 3:
Average throughput: 140.40 Mbit/s
95th percentile per-packet one-way delay: 25.073 ms
Loss rate: 14.74%
```

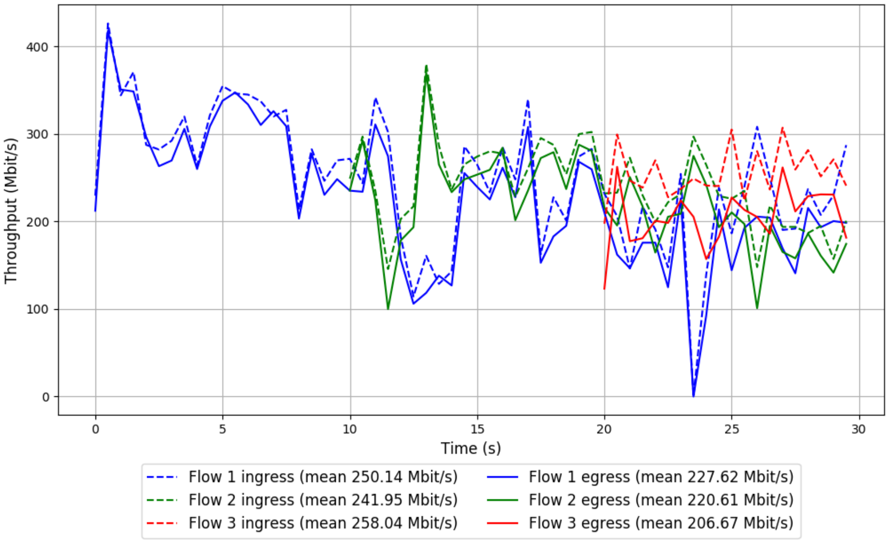
Run 6: Report of Verus — Data Link

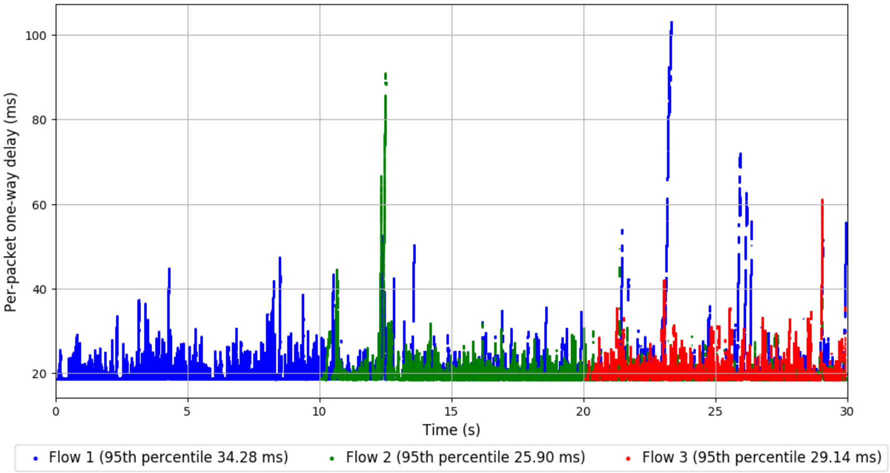




```
Run 7: Statistics of Verus

Start at: 2018-03-21 07:37:02
End at: 2018-03-21 07:37:32
Local clock offset: 0.4 ms
Remote clock offset: -5.751 ms

# Below is generated by plot.py at 2018-03-21 13:28:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 442.77 Mbit/s
95th percentile per-packet one-way delay: 29.635 ms
Loss rate: 10.81%
-- Flow 1:
Average throughput: 227.62 Mbit/s
95th percentile per-packet one-way delay: 34.277 ms
Loss rate: 9.00%
-- Flow 2:
Average throughput: 220.61 Mbit/s
95th percentile per-packet one-way delay: 25.899 ms
Loss rate: 8.82%
-- Flow 3:
Average throughput: 206.67 Mbit/s
95th percentile per-packet one-way delay: 29.145 ms
Loss rate: 19.90%
```

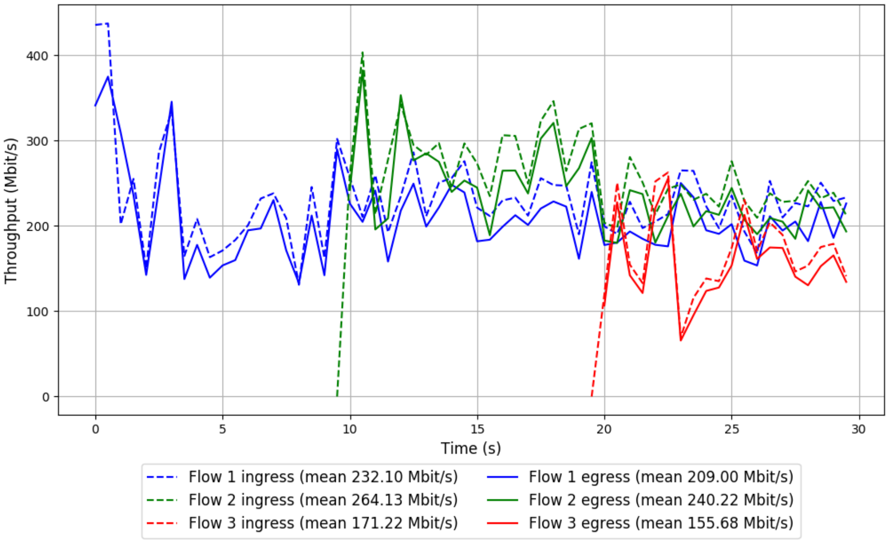
Run 7: Report of Verus — Data Link

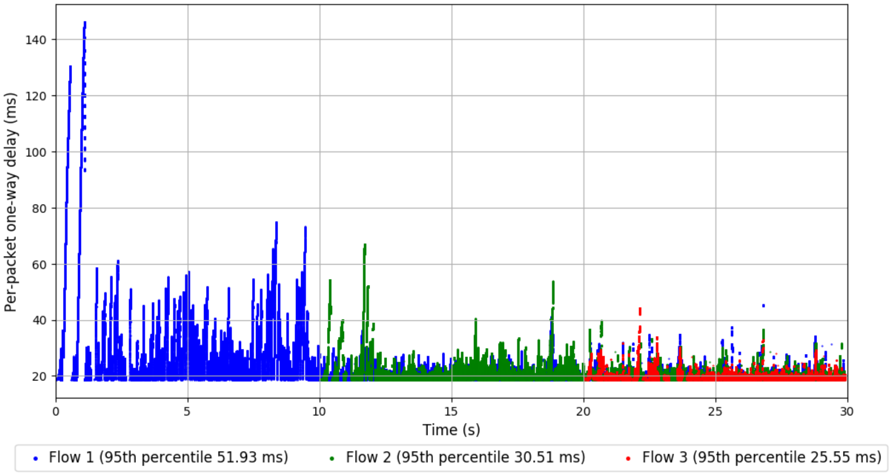




```
Run 8: Statistics of Verus

Start at: 2018-03-21 08:06:12
End at: 2018-03-21 08:06:42
Local clock offset: -0.488 ms
Remote clock offset: -6.214 ms

# Below is generated by plot.py at 2018-03-21 13:28:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 420.50 Mbit/s
95th percentile per-packet one-way delay: 38.272 ms
Loss rate: 9.50%
-- Flow 1:
Average throughput: 209.00 Mbit/s
95th percentile per-packet one-way delay: 51.932 ms
Loss rate: 9.95%
-- Flow 2:
Average throughput: 240.22 Mbit/s
95th percentile per-packet one-way delay: 30.511 ms
Loss rate: 9.05%
-- Flow 3:
Average throughput: 155.68 Mbit/s
95th percentile per-packet one-way delay: 25.555 ms
Loss rate: 9.08%
```

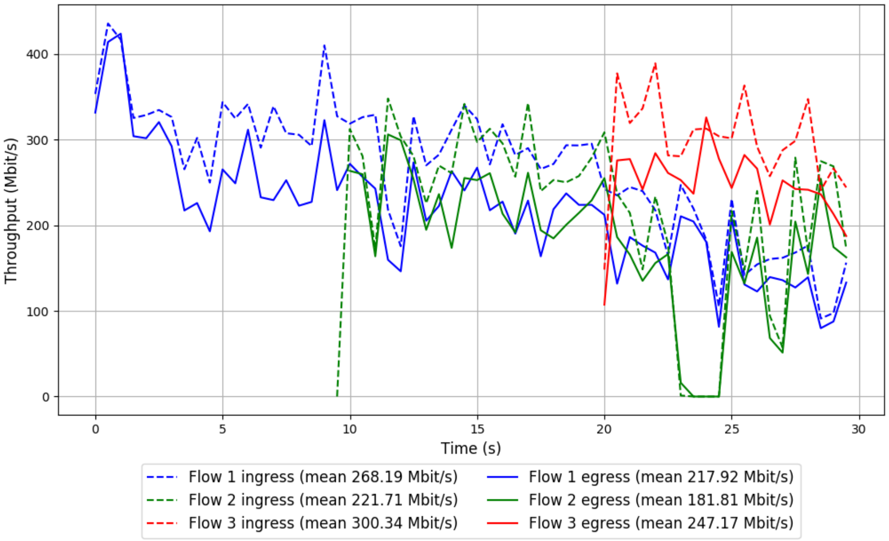
Run 8: Report of Verus — Data Link

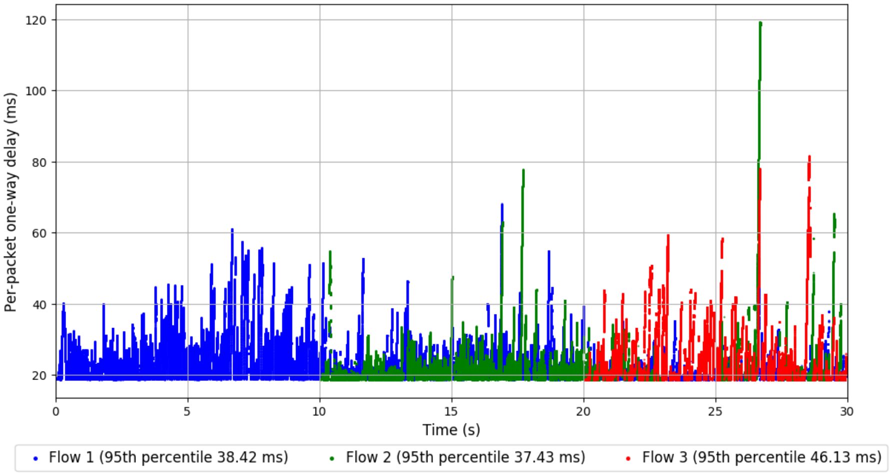




```
Run 9: Statistics of Verus

Start at: 2018-03-21 08:35:35
End at: 2018-03-21 08:36:05
Local clock offset: -0.407 ms
Remote clock offset: -5.504 ms

# Below is generated by plot.py at 2018-03-21 13:31:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 420.61 Mbit/s
95th percentile per-packet one-way delay: 40.339 ms
Loss rate: 18.32%
-- Flow 1:
Average throughput: 217.92 Mbit/s
95th percentile per-packet one-way delay: 38.418 ms
Loss rate: 18.74%
-- Flow 2:
Average throughput: 181.81 Mbit/s
95th percentile per-packet one-way delay: 37.427 ms
Loss rate: 17.99%
-- Flow 3:
Average throughput: 247.17 Mbit/s
95th percentile per-packet one-way delay: 46.127 ms
Loss rate: 17.68%
```

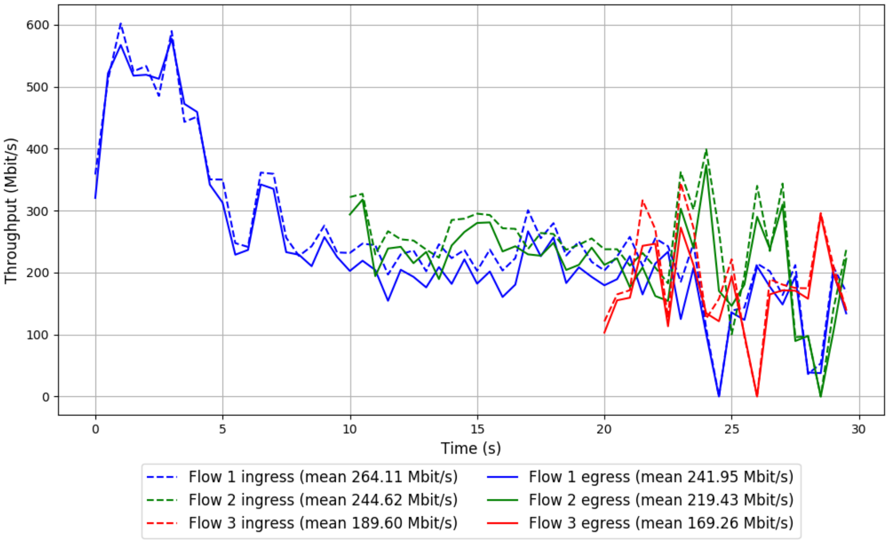
Run 9: Report of Verus — Data Link

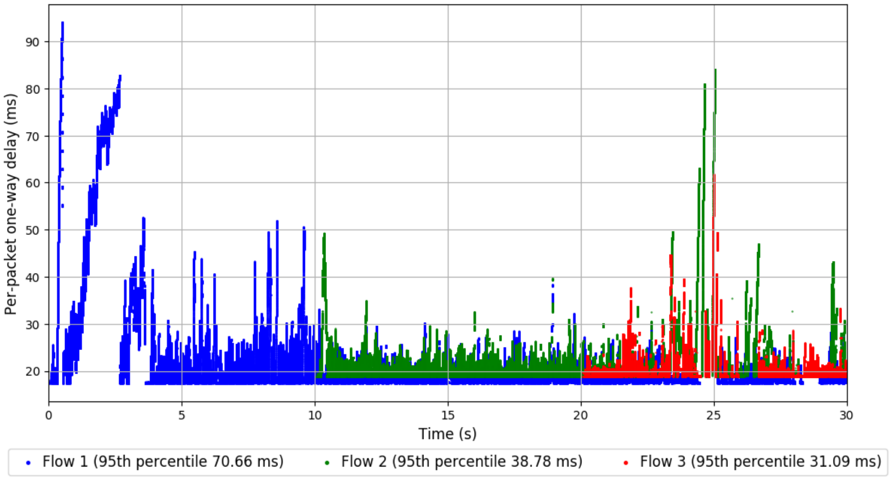




```
Run 10: Statistics of Verus

Start at: 2018-03-21 09:04:51
End at: 2018-03-21 09:05:21
Local clock offset: -0.175 ms
Remote clock offset: -5.147 ms

# Below is generated by plot.py at 2018-03-21 13:32:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 443.87 Mbit/s
95th percentile per-packet one-way delay: 56.649 ms
Loss rate: 9.32%
-- Flow 1:
Average throughput: 241.95 Mbit/s
95th percentile per-packet one-way delay: 70.659 ms
Loss rate: 8.39%
-- Flow 2:
Average throughput: 219.43 Mbit/s
95th percentile per-packet one-way delay: 38.780 ms
Loss rate: 10.29%
-- Flow 3:
Average throughput: 169.26 Mbit/s
95th percentile per-packet one-way delay: 31.092 ms
Loss rate: 10.72%
```

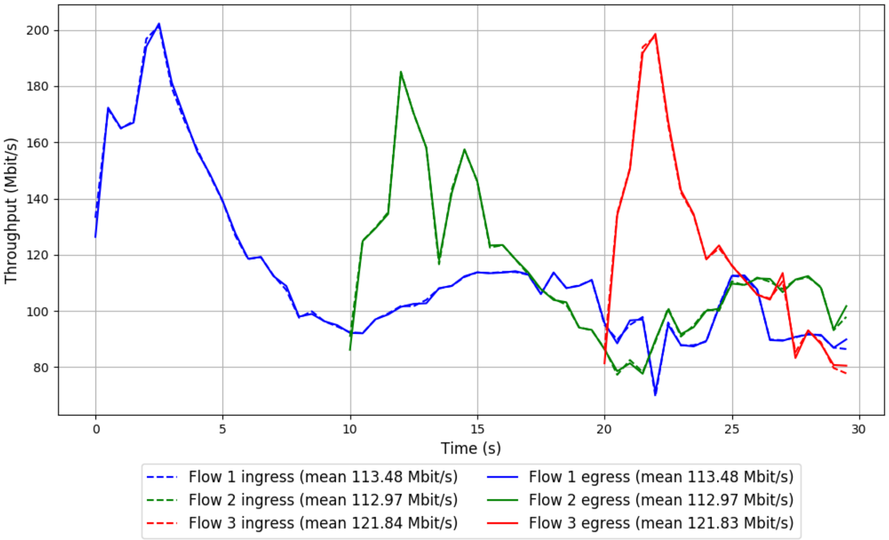
Run 10: Report of Verus — Data Link

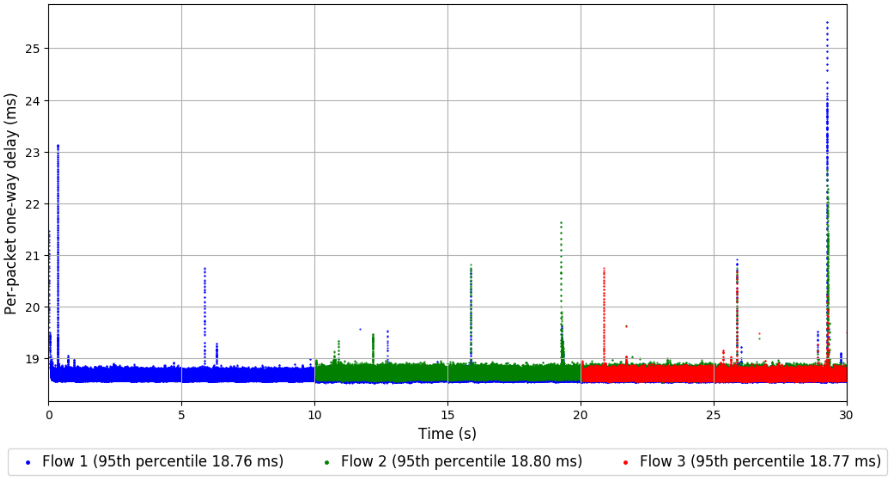




```
Run 1: Statistics of Copa

Start at: 2018-03-21 04:48:25
End at: 2018-03-21 04:48:55
Local clock offset: 0.482 ms
Remote clock offset: -6.025 ms

# Below is generated by plot.py at 2018-03-21 13:32:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 229.09 Mbit/s
95th percentile per-packet one-way delay: 18.776 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 113.48 Mbit/s
95th percentile per-packet one-way delay: 18.756 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 112.97 Mbit/s
95th percentile per-packet one-way delay: 18.800 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 121.83 Mbit/s
95th percentile per-packet one-way delay: 18.774 ms
Loss rate: 0.00%
```

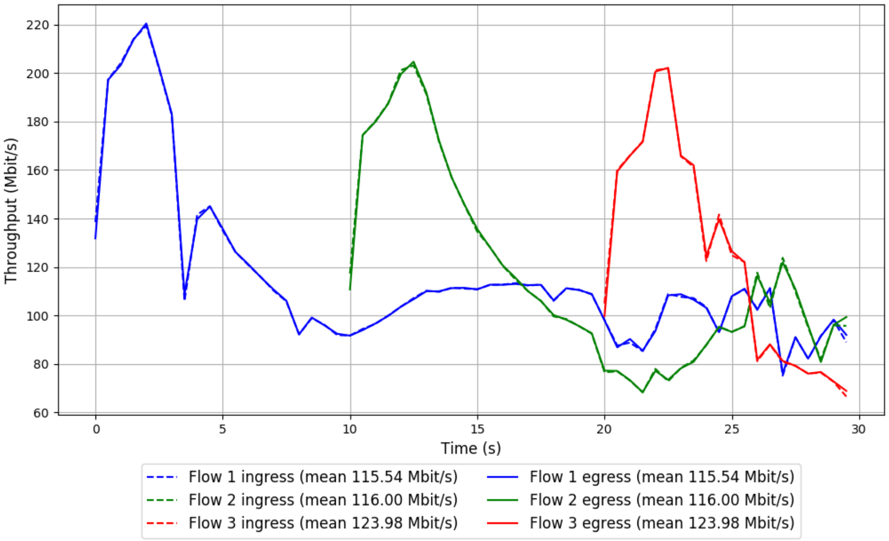
Run 1: Report of Copa — Data Link

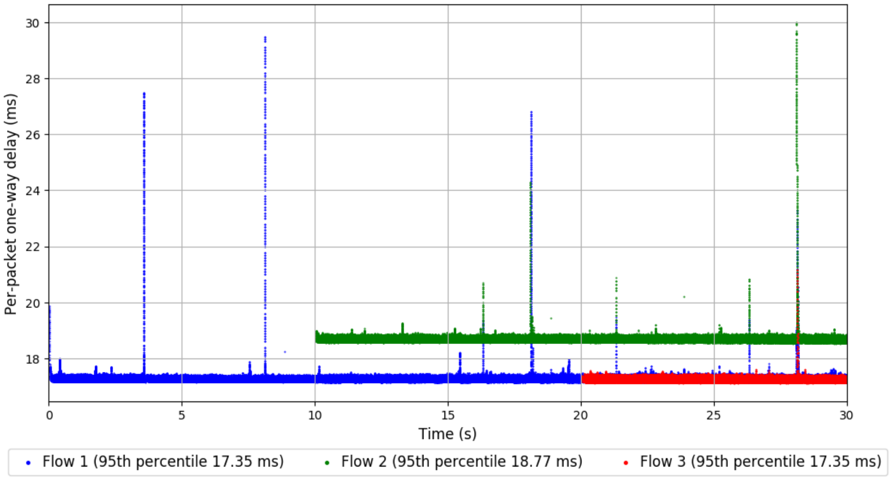




```
Run 2: Statistics of Copa

Start at: 2018-03-21 05:17:35
End at: 2018-03-21 05:18:05
Local clock offset: -0.221 ms
Remote clock offset: -5.306 ms

# Below is generated by plot.py at 2018-03-21 13:32:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 233.90 Mbit/s
95th percentile per-packet one-way delay: 18.716 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 115.54 Mbit/s
95th percentile per-packet one-way delay: 17.349 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 116.00 Mbit/s
95th percentile per-packet one-way delay: 18.772 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 123.98 Mbit/s
95th percentile per-packet one-way delay: 17.348 ms
Loss rate: 0.00%
```

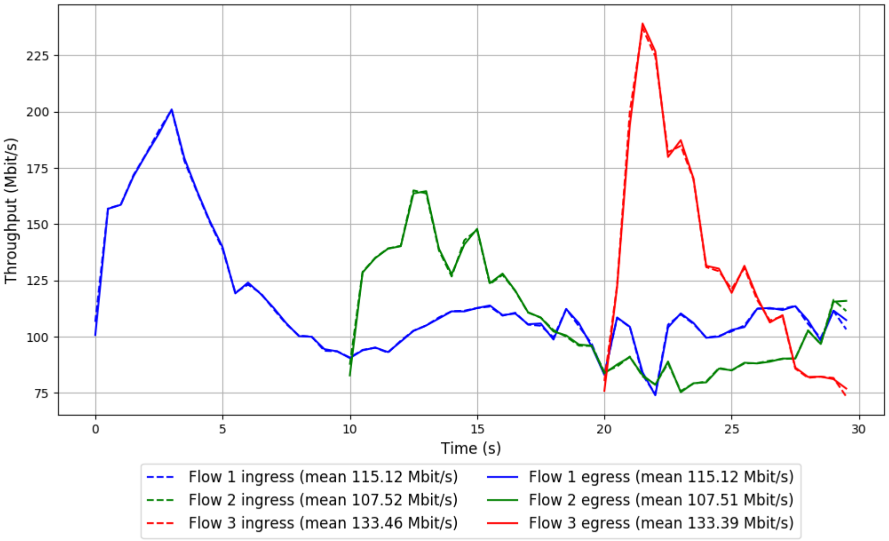
Run 2: Report of Copa — Data Link

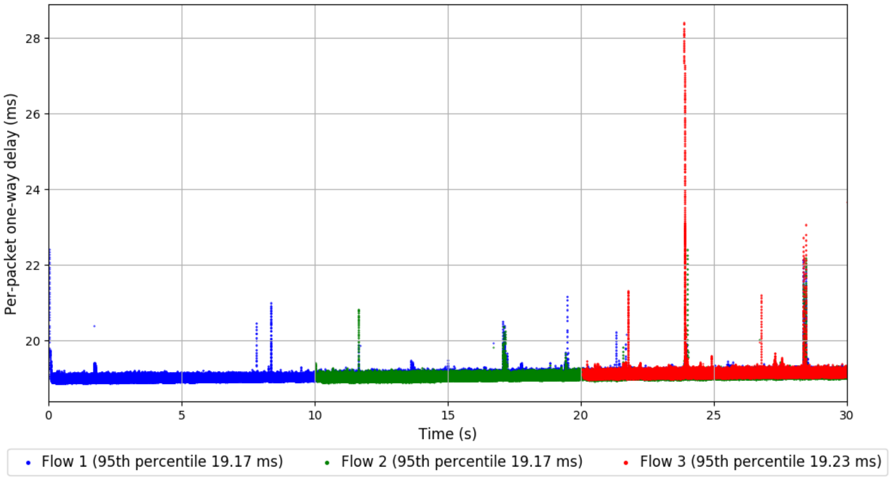




```
Run 3: Statistics of Copa

Start at: 2018-03-21 05:46:45
End at: 2018-03-21 05:47:15
Local clock offset: 4.473 ms
Remote clock offset: -5.189 ms

# Below is generated by plot.py at 2018-03-21 13:32:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 230.90 Mbit/s
95th percentile per-packet one-way delay: 19.189 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 115.12 Mbit/s
95th percentile per-packet one-way delay: 19.173 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 107.51 Mbit/s
95th percentile per-packet one-way delay: 19.167 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 133.39 Mbit/s
95th percentile per-packet one-way delay: 19.230 ms
Loss rate: 0.01%
```

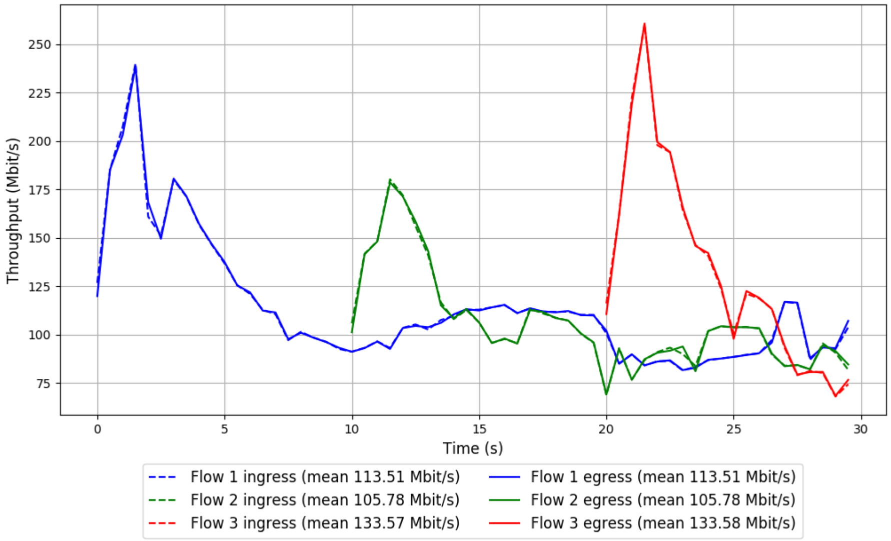
Run 3: Report of Copa — Data Link

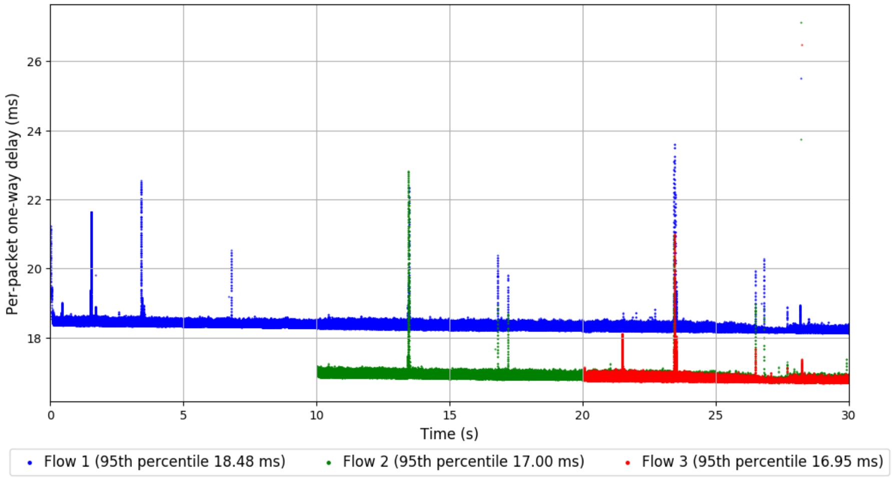




```
Run 4: Statistics of Copa

Start at: 2018-03-21 06:15:49
End at: 2018-03-21 06:16:19
Local clock offset: 5.194 ms
Remote clock offset: -5.59 ms

# Below is generated by plot.py at 2018-03-21 13:35:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 228.29 Mbit/s
95th percentile per-packet one-way delay: 18.445 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 113.51 Mbit/s
95th percentile per-packet one-way delay: 18.483 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 105.78 Mbit/s
95th percentile per-packet one-way delay: 17.004 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 133.58 Mbit/s
95th percentile per-packet one-way delay: 16.949 ms
Loss rate: 0.00%
```

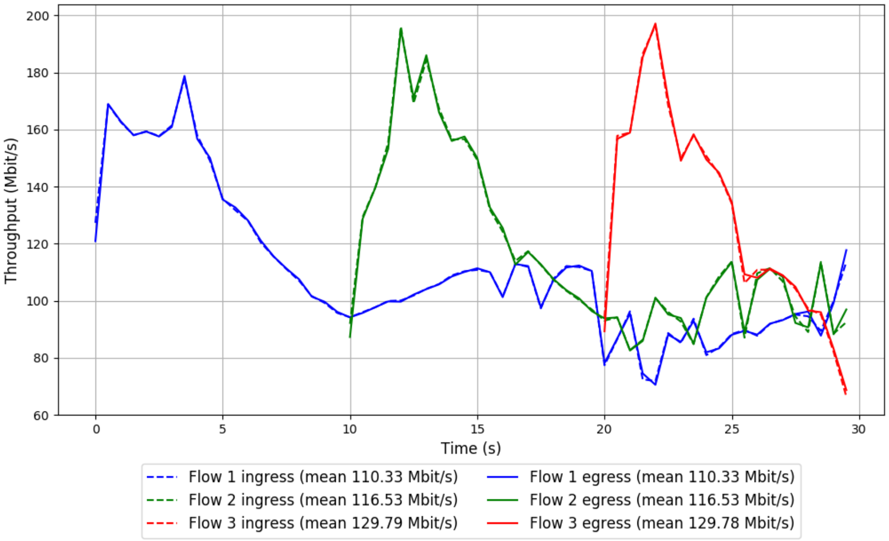
Run 4: Report of Copa — Data Link

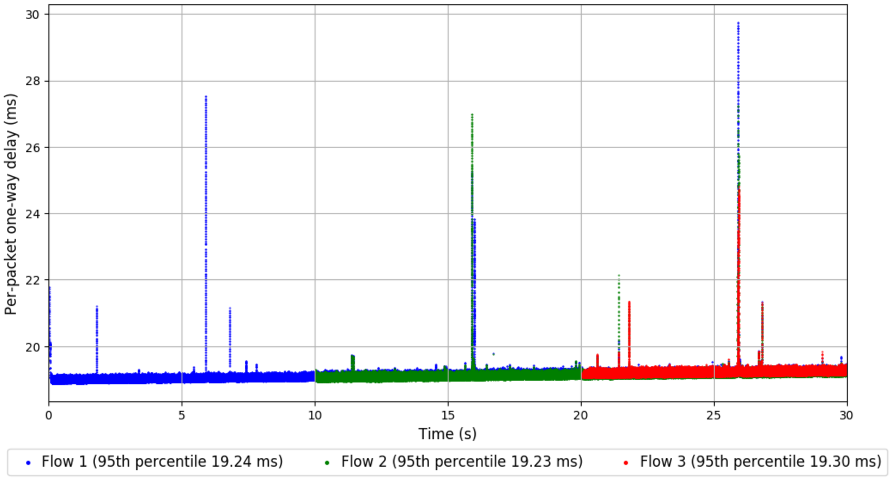




```
Run 5: Statistics of Copa

Start at: 2018-03-21 06:45:16
End at: 2018-03-21 06:45:46
Local clock offset: -0.352 ms
Remote clock offset: -6.096 ms

# Below is generated by plot.py at 2018-03-21 13:35:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 231.00 Mbit/s
95th percentile per-packet one-way delay: 19.255 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 110.33 Mbit/s
95th percentile per-packet one-way delay: 19.240 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 116.53 Mbit/s
95th percentile per-packet one-way delay: 19.232 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 129.78 Mbit/s
95th percentile per-packet one-way delay: 19.298 ms
Loss rate: 0.00%
```

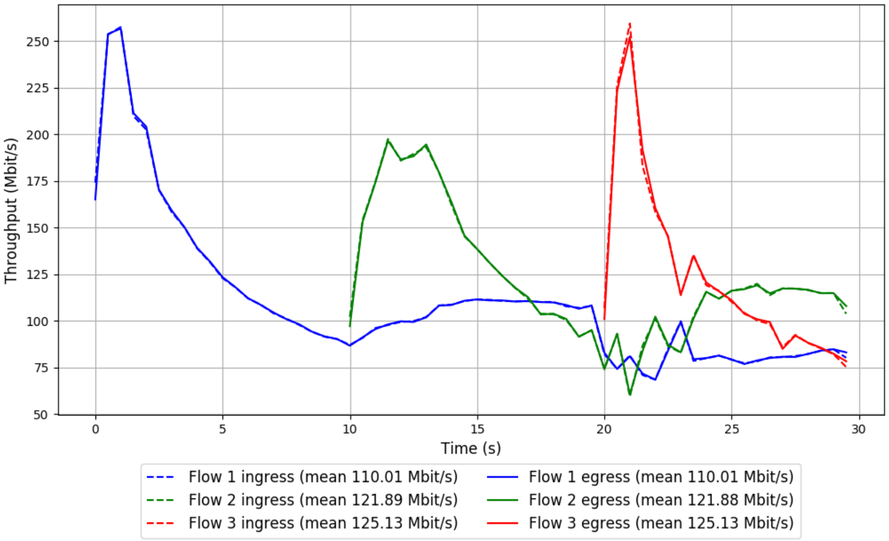
Run 5: Report of Copa — Data Link

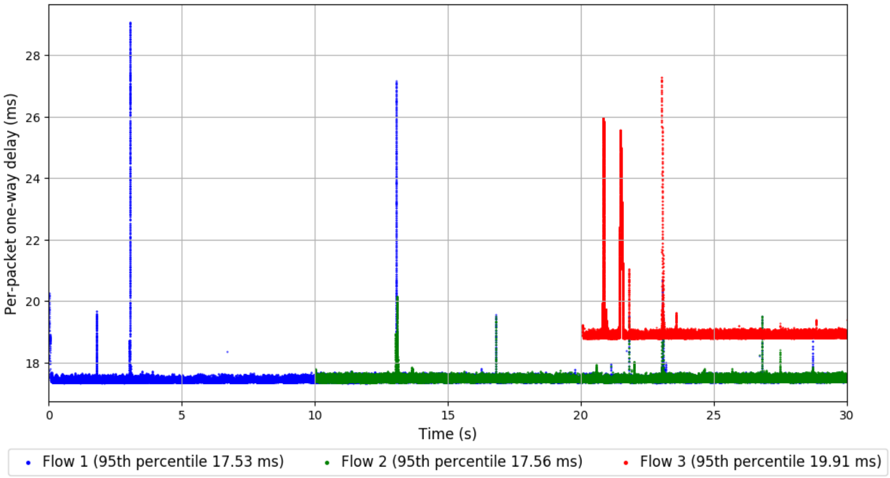




```
Run 6: Statistics of Copa

Start at: 2018-03-21 07:14:38
End at: 2018-03-21 07:15:08
Local clock offset: 4.657 ms
Remote clock offset: -6.162 ms

# Below is generated by plot.py at 2018-03-21 13:35:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 232.65 Mbit/s
95th percentile per-packet one-way delay: 18.895 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 110.01 Mbit/s
95th percentile per-packet one-way delay: 17.528 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 121.88 Mbit/s
95th percentile per-packet one-way delay: 17.556 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 125.13 Mbit/s
95th percentile per-packet one-way delay: 19.905 ms
Loss rate: 0.00%
```

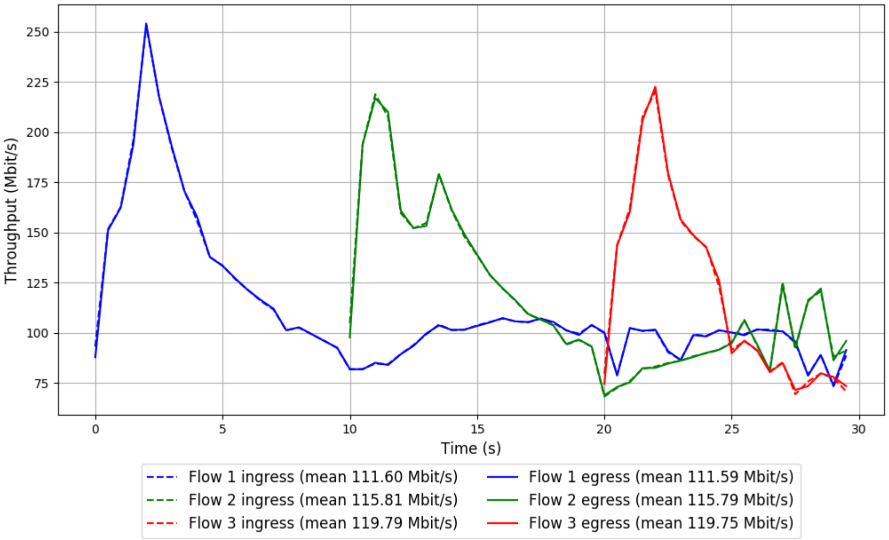
Run 6: Report of Copa — Data Link

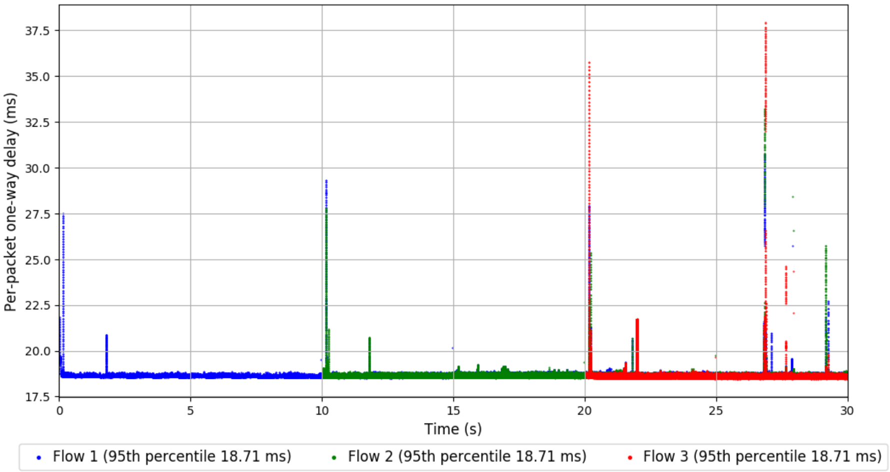




```
Run 7: Statistics of Copa

Start at: 2018-03-21 07:44:11
End at: 2018-03-21 07:44:41
Local clock offset: -0.39 ms
Remote clock offset: -5.782 ms

# Below is generated by plot.py at 2018-03-21 13:37:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 228.42 Mbit/s
95th percentile per-packet one-way delay: 18.707 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 111.59 Mbit/s
95th percentile per-packet one-way delay: 18.706 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 115.79 Mbit/s
95th percentile per-packet one-way delay: 18.710 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 119.75 Mbit/s
95th percentile per-packet one-way delay: 18.706 ms
Loss rate: 0.04%
```

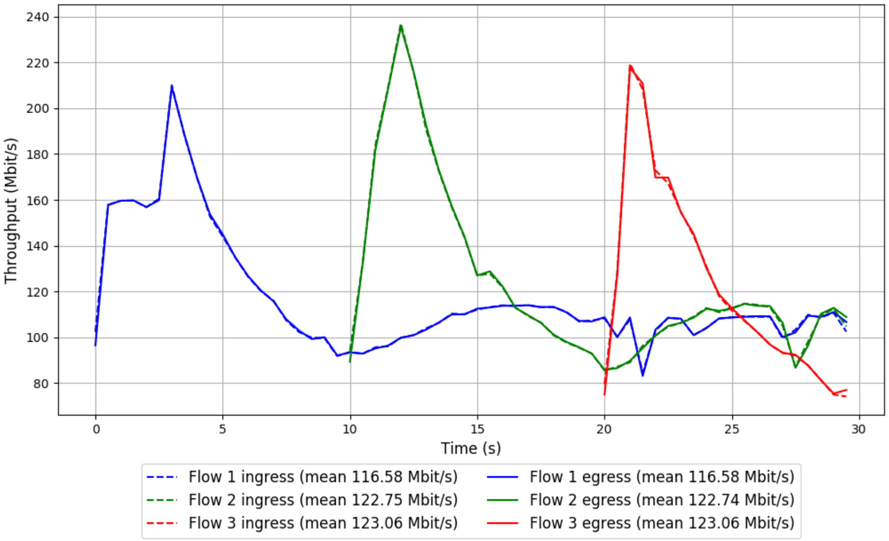
Run 7: Report of Copa — Data Link

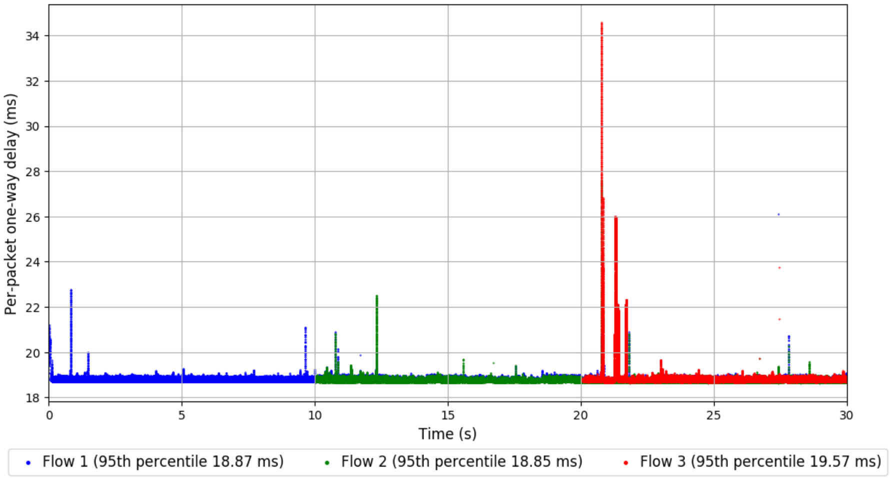




```
Run 8: Statistics of Copa

Start at: 2018-03-21 08:13:20
End at: 2018-03-21 08:13:50
Local clock offset: -0.463 ms
Remote clock offset: -6.192 ms

# Below is generated by plot.py at 2018-03-21 13:38:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 239.10 Mbit/s
95th percentile per-packet one-way delay: 18.874 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 116.58 Mbit/s
95th percentile per-packet one-way delay: 18.872 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 122.74 Mbit/s
95th percentile per-packet one-way delay: 18.850 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 123.06 Mbit/s
95th percentile per-packet one-way delay: 19.571 ms
Loss rate: 0.00%
```

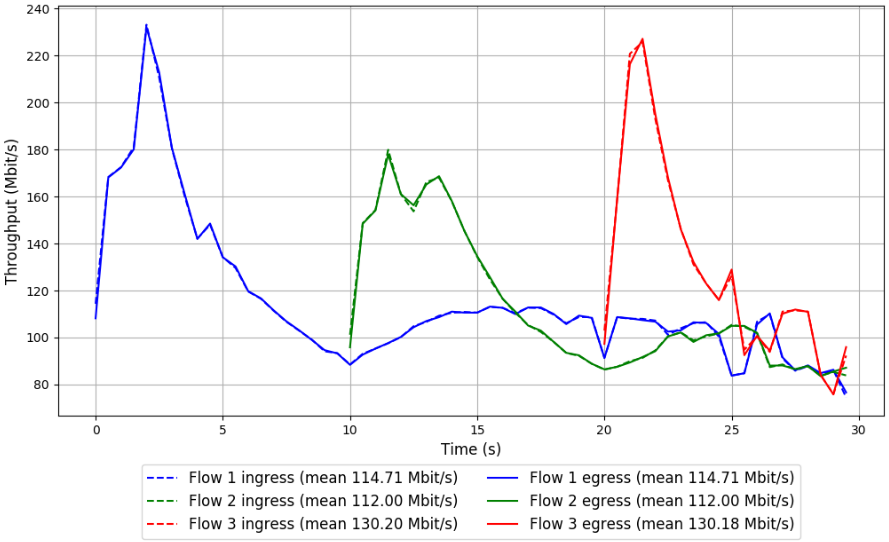
Run 8: Report of Copa — Data Link

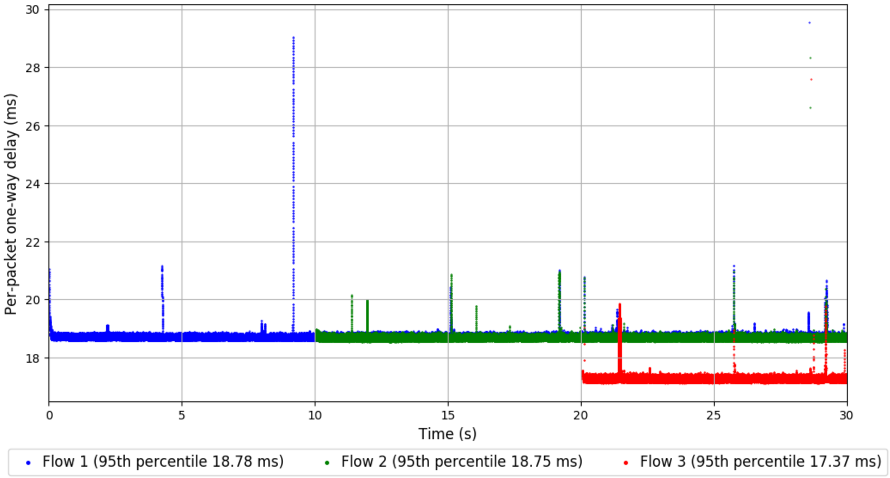




```
Run 9: Statistics of Copa

Start at: 2018-03-21 08:42:41
End at: 2018-03-21 08:43:11
Local clock offset: -0.305 ms
Remote clock offset: -5.192 ms

# Below is generated by plot.py at 2018-03-21 13:38:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 232.43 Mbit/s
95th percentile per-packet one-way delay: 18.760 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 114.71 Mbit/s
95th percentile per-packet one-way delay: 18.778 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 112.00 Mbit/s
95th percentile per-packet one-way delay: 18.749 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 130.18 Mbit/s
95th percentile per-packet one-way delay: 17.367 ms
Loss rate: 0.02%
```

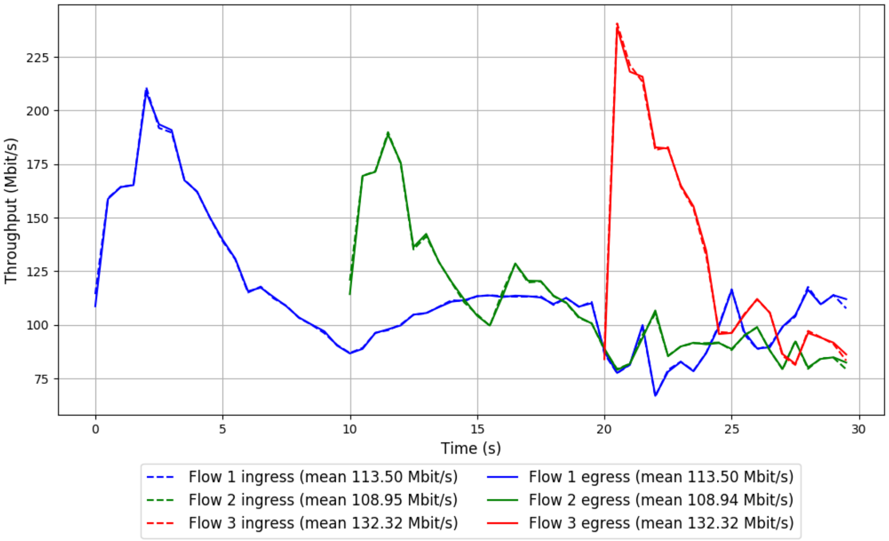
Run 9: Report of Copa — Data Link

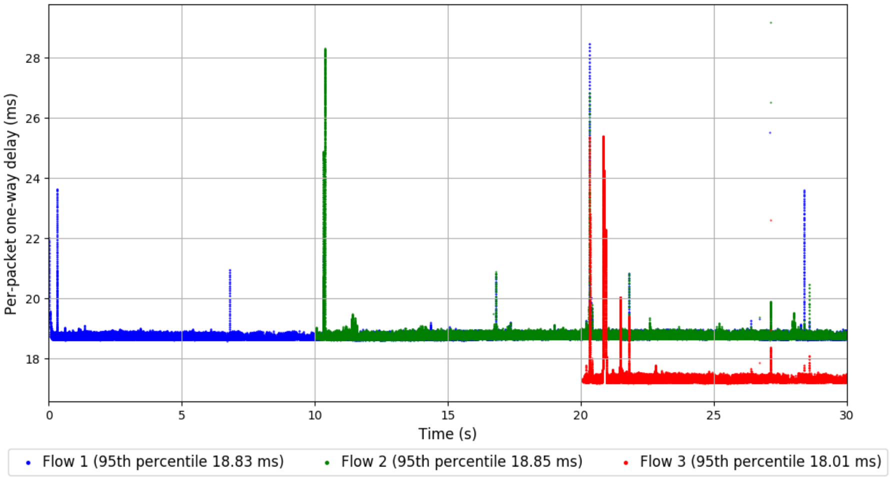




```
Run 10: Statistics of Copa

Start at: 2018-03-21 09:11:59
End at: 2018-03-21 09:12:29
Local clock offset: 0.375 ms
Remote clock offset: -5.673 ms

# Below is generated by plot.py at 2018-03-21 13:38:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 229.88 Mbit/s
95th percentile per-packet one-way delay: 18.837 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 113.50 Mbit/s
95th percentile per-packet one-way delay: 18.828 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 108.94 Mbit/s
95th percentile per-packet one-way delay: 18.853 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 132.32 Mbit/s
95th percentile per-packet one-way delay: 18.011 ms
Loss rate: 0.02%
```

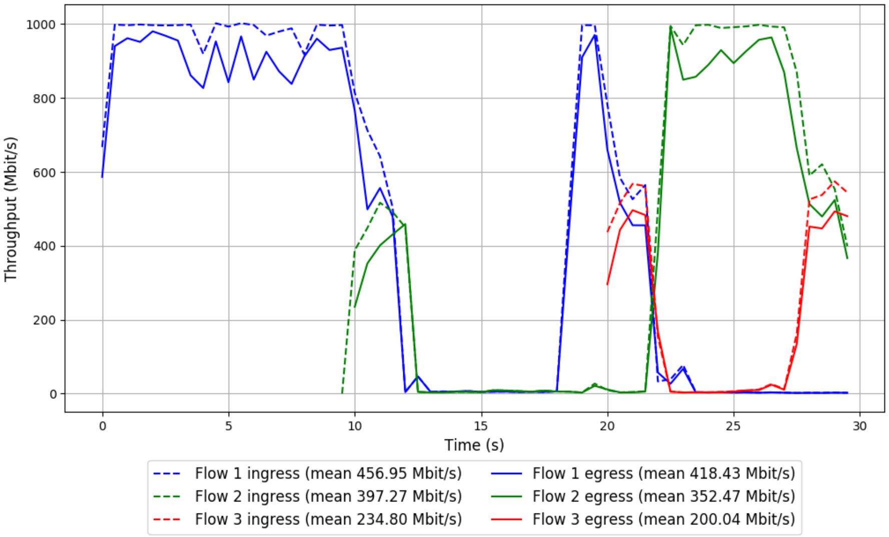
Run 10: Report of Copa — Data Link

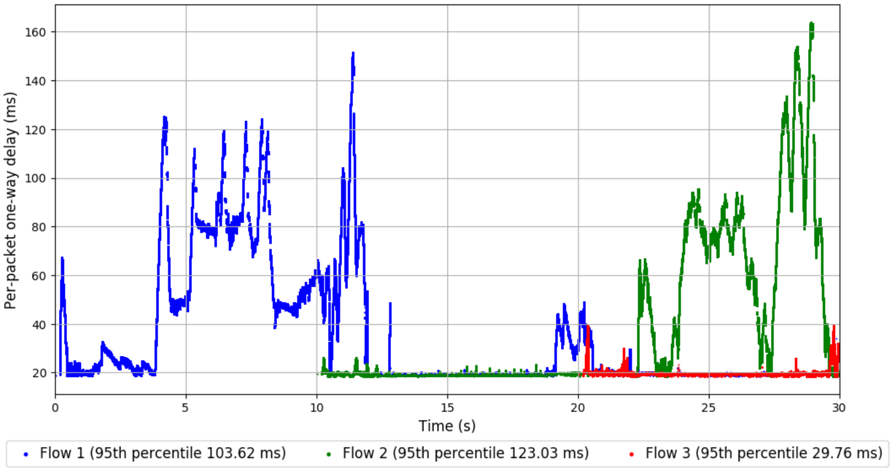




```
Run 1: Statistics of FillP

Start at: 2018-03-21 05:02:30
End at: 2018-03-21 05:03:00
Local clock offset: -0.118 ms
Remote clock offset: -6.277 ms

# Below is generated by plot.py at 2018-03-21 13:43:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 719.35 Mbit/s
95th percentile per-packet one-way delay: 106.235 ms
Loss rate: 10.00%
-- Flow 1:
Average throughput: 418.43 Mbit/s
95th percentile per-packet one-way delay: 103.623 ms
Loss rate: 8.43%
-- Flow 2:
Average throughput: 352.47 Mbit/s
95th percentile per-packet one-way delay: 123.031 ms
Loss rate: 11.28%
-- Flow 3:
Average throughput: 200.04 Mbit/s
95th percentile per-packet one-way delay: 29.758 ms
Loss rate: 14.87%
```

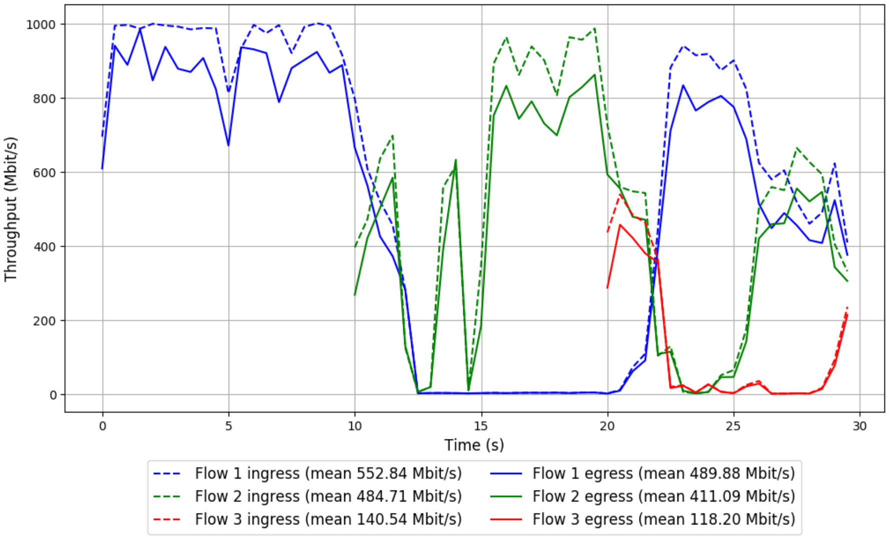
Run 1: Report of FillP — Data Link

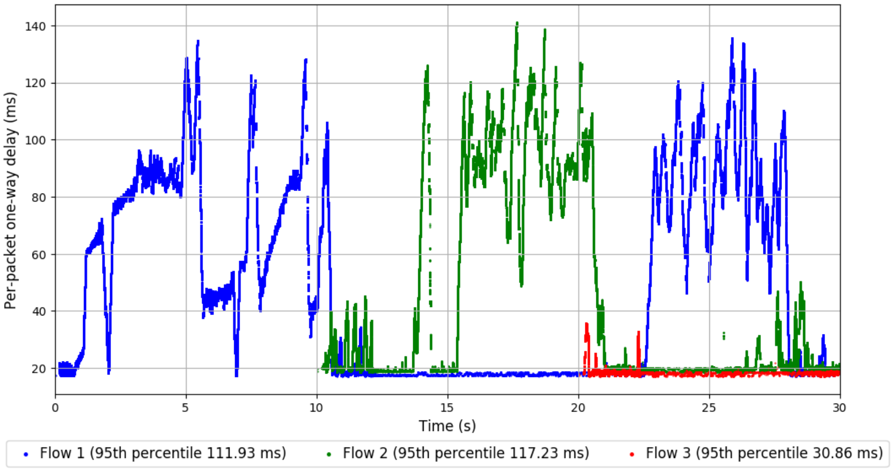




```
Run 2: Statistics of FillP

Start at: 2018-03-21 05:31:46
End at: 2018-03-21 05:32:16
Local clock offset: -0.703 ms
Remote clock offset: -5.124 ms

# Below is generated by plot.py at 2018-03-21 13:48:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 802.72 Mbit/s
95th percentile per-packet one-way delay: 114.199 ms
Loss rate: 12.94%
-- Flow 1:
Average throughput: 489.88 Mbit/s
95th percentile per-packet one-way delay: 111.931 ms
Loss rate: 11.39%
-- Flow 2:
Average throughput: 411.09 Mbit/s
95th percentile per-packet one-way delay: 117.234 ms
Loss rate: 15.18%
-- Flow 3:
Average throughput: 118.20 Mbit/s
95th percentile per-packet one-way delay: 30.865 ms
Loss rate: 15.89%
```

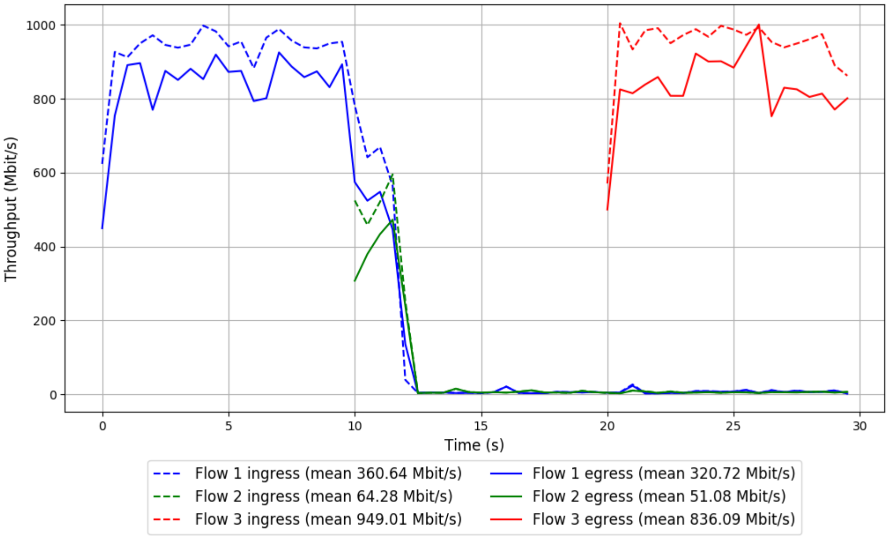
Run 2: Report of FillP — Data Link

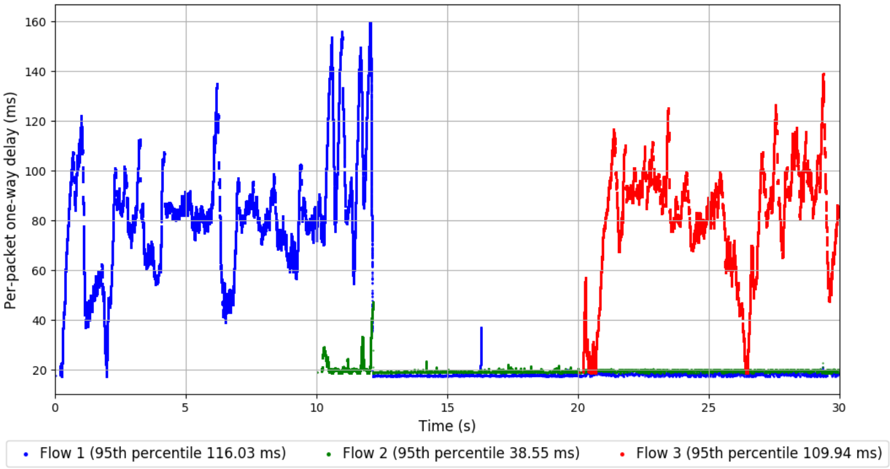




```
Run 3: Statistics of FillP

Start at: 2018-03-21 06:00:43
End at: 2018-03-21 06:01:13
Local clock offset: 7.351 ms
Remote clock offset: -5.192 ms

# Below is generated by plot.py at 2018-03-21 13:48:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 631.89 Mbit/s
95th percentile per-packet one-way delay: 111.260 ms
Loss rate: 11.99%
-- Flow 1:
Average throughput: 320.72 Mbit/s
95th percentile per-packet one-way delay: 116.035 ms
Loss rate: 11.07%
-- Flow 2:
Average throughput: 51.08 Mbit/s
95th percentile per-packet one-way delay: 38.550 ms
Loss rate: 20.54%
-- Flow 3:
Average throughput: 836.09 Mbit/s
95th percentile per-packet one-way delay: 109.935 ms
Loss rate: 11.89%
```

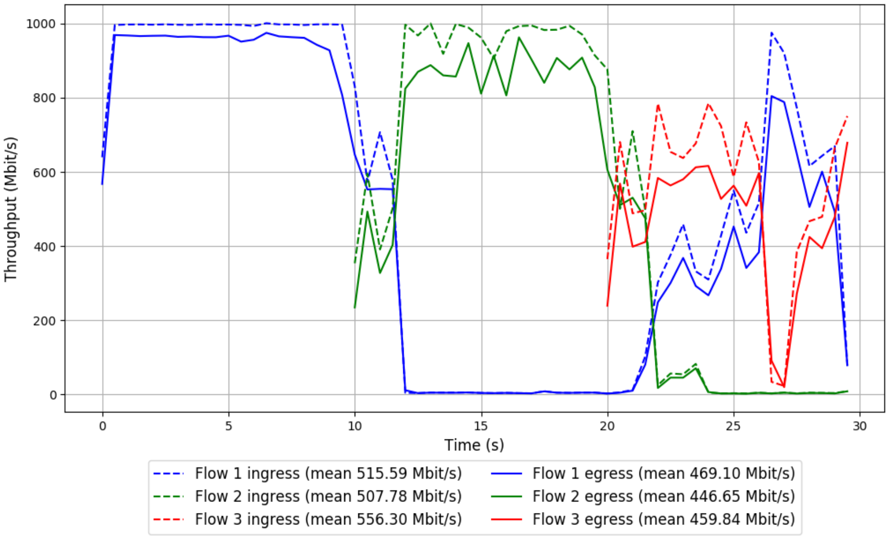
Run 3: Report of FillP — Data Link

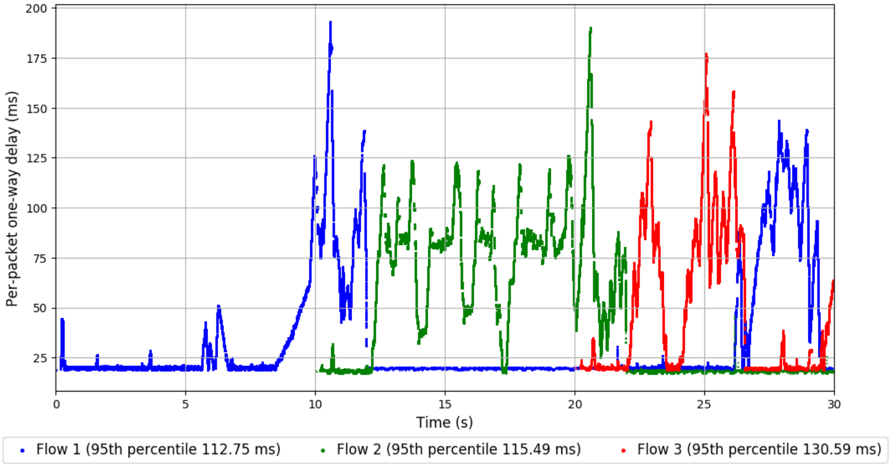




```
Run 4: Statistics of FillP

Start at: 2018-03-21 06:30:06
End at: 2018-03-21 06:30:36
Local clock offset: 0.994 ms
Remote clock offset: -5.899 ms

# Below is generated by plot.py at 2018-03-21 13:50:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 918.33 Mbit/s
95th percentile per-packet one-way delay: 115.948 ms
Loss rate: 11.48%
-- Flow 1:
Average throughput: 469.10 Mbit/s
95th percentile per-packet one-way delay: 112.750 ms
Loss rate: 9.01%
-- Flow 2:
Average throughput: 446.65 Mbit/s
95th percentile per-packet one-way delay: 115.490 ms
Loss rate: 12.04%
-- Flow 3:
Average throughput: 459.84 Mbit/s
95th percentile per-packet one-way delay: 130.585 ms
Loss rate: 17.34%
```

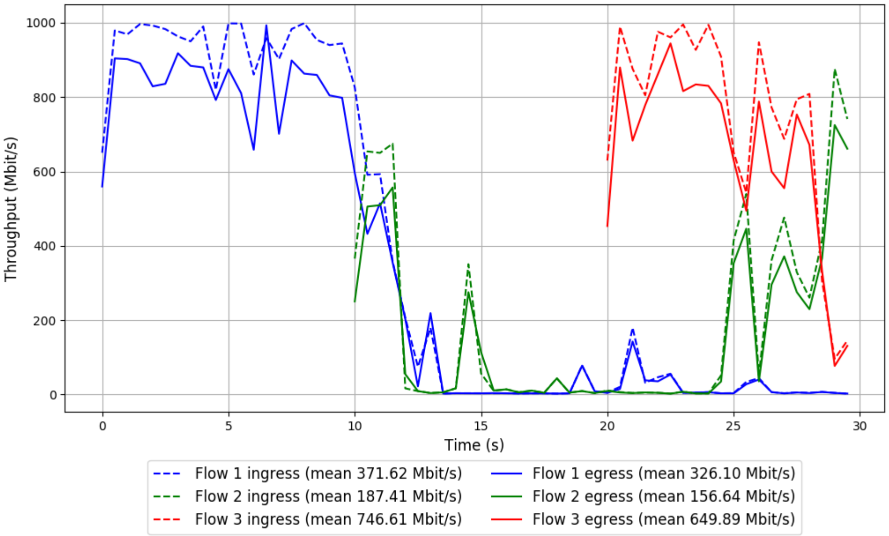
Run 4: Report of FillP — Data Link

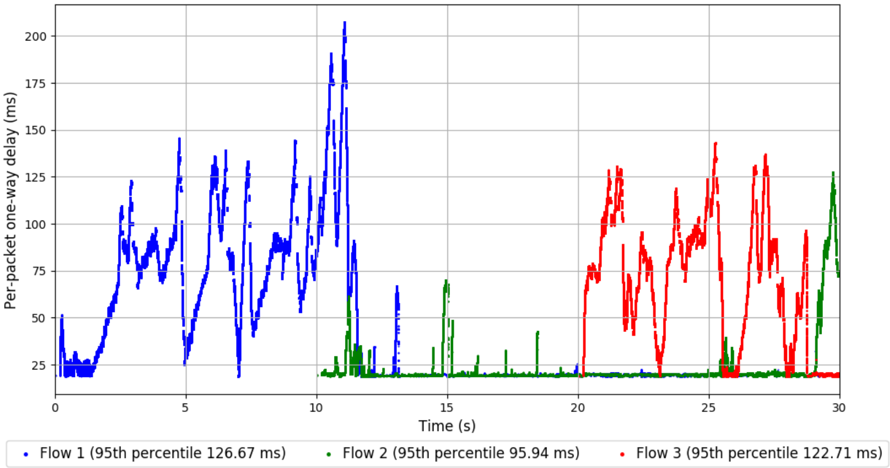




```
Run 5: Statistics of FillP

Start at: 2018-03-21 06:59:33
End at: 2018-03-21 07:00:03
Local clock offset: 3.642 ms
Remote clock offset: -6.128 ms

# Below is generated by plot.py at 2018-03-21 13:50:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 645.70 Mbit/s
95th percentile per-packet one-way delay: 122.623 ms
Loss rate: 13.18%
-- Flow 1:
Average throughput: 326.10 Mbit/s
95th percentile per-packet one-way delay: 126.666 ms
Loss rate: 12.25%
-- Flow 2:
Average throughput: 156.64 Mbit/s
95th percentile per-packet one-way delay: 95.941 ms
Loss rate: 16.41%
-- Flow 3:
Average throughput: 649.89 Mbit/s
95th percentile per-packet one-way delay: 122.714 ms
Loss rate: 12.94%
```

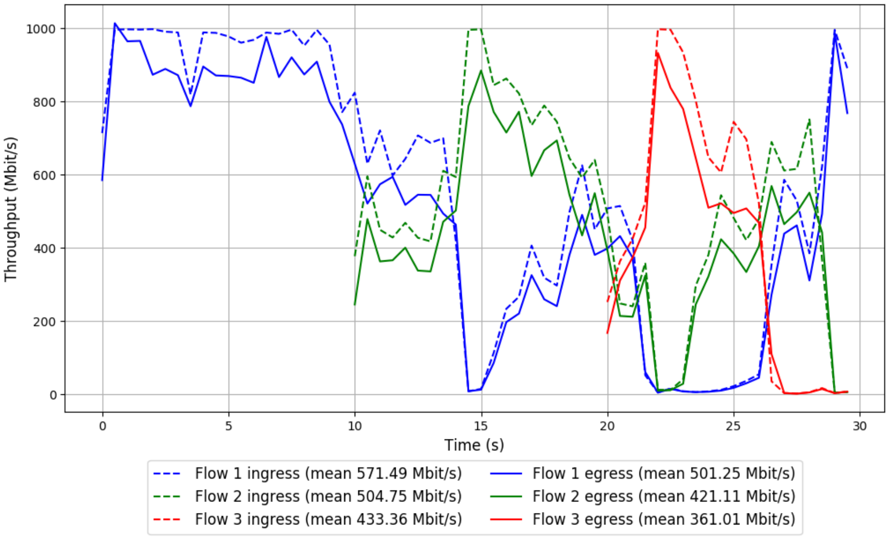
Run 5: Report of FillP — Data Link

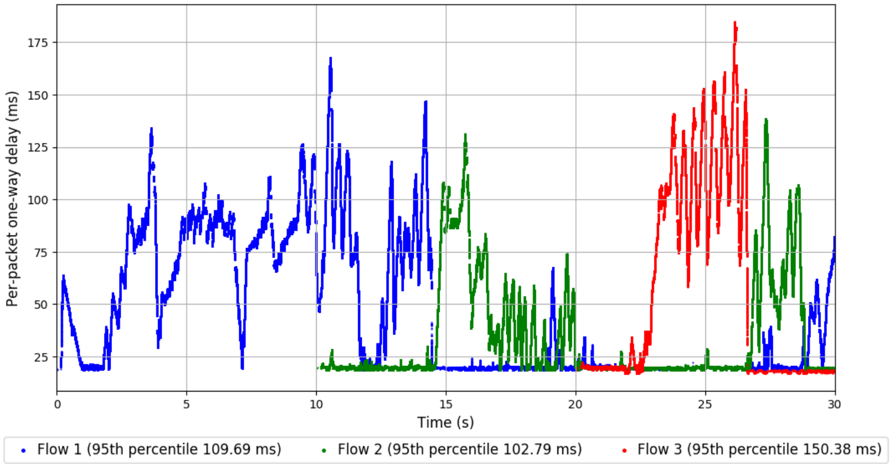




```
Run 6: Statistics of FillP

Start at: 2018-03-21 07:28:54
End at: 2018-03-21 07:29:24
Local clock offset: 1.644 ms
Remote clock offset: -5.945 ms

# Below is generated by plot.py at 2018-03-21 13:52:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 900.68 Mbit/s
95th percentile per-packet one-way delay: 117.496 ms
Loss rate: 14.26%
-- Flow 1:
Average throughput: 501.25 Mbit/s
95th percentile per-packet one-way delay: 109.689 ms
Loss rate: 12.29%
-- Flow 2:
Average throughput: 421.11 Mbit/s
95th percentile per-packet one-way delay: 102.789 ms
Loss rate: 16.57%
-- Flow 3:
Average throughput: 361.01 Mbit/s
95th percentile per-packet one-way delay: 150.375 ms
Loss rate: 16.71%
```

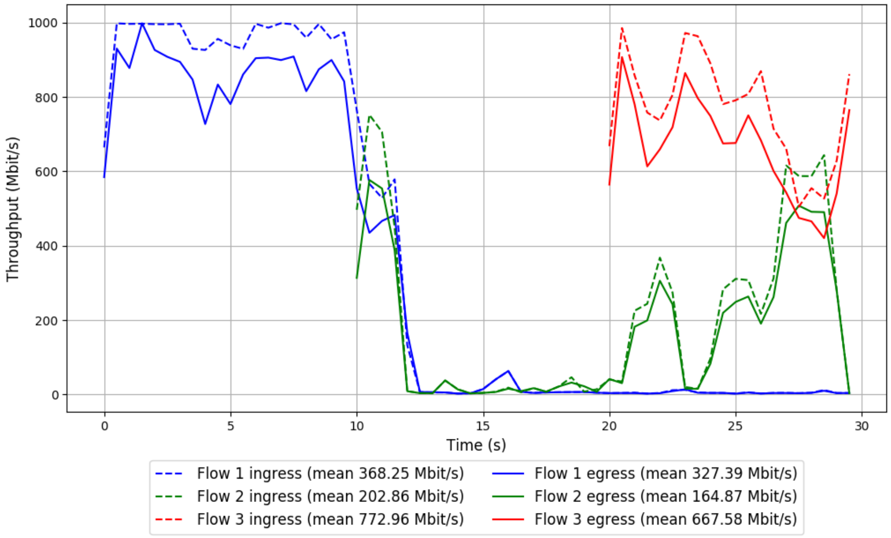
Run 6: Report of FillP — Data Link

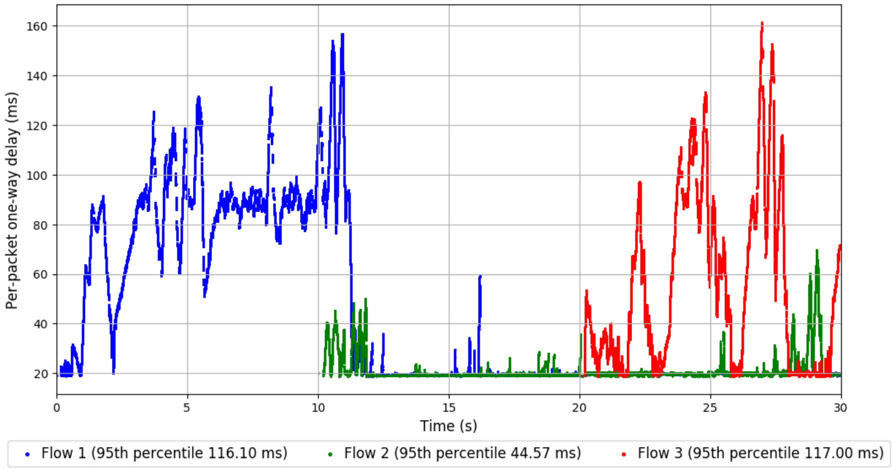




```
Run 7: Statistics of FillP

Start at: 2018-03-21 07:58:15
End at: 2018-03-21 07:58:45
Local clock offset: -0.771 ms
Remote clock offset: -5.898 ms

# Below is generated by plot.py at 2018-03-21 13:52:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 658.35 Mbit/s
95th percentile per-packet one-way delay: 114.057 ms
Loss rate: 13.31%
-- Flow 1:
Average throughput: 327.39 Mbit/s
95th percentile per-packet one-way delay: 116.102 ms
Loss rate: 11.09%
-- Flow 2:
Average throughput: 164.87 Mbit/s
95th percentile per-packet one-way delay: 44.571 ms
Loss rate: 18.73%
-- Flow 3:
Average throughput: 667.58 Mbit/s
95th percentile per-packet one-way delay: 116.995 ms
Loss rate: 13.63%
```

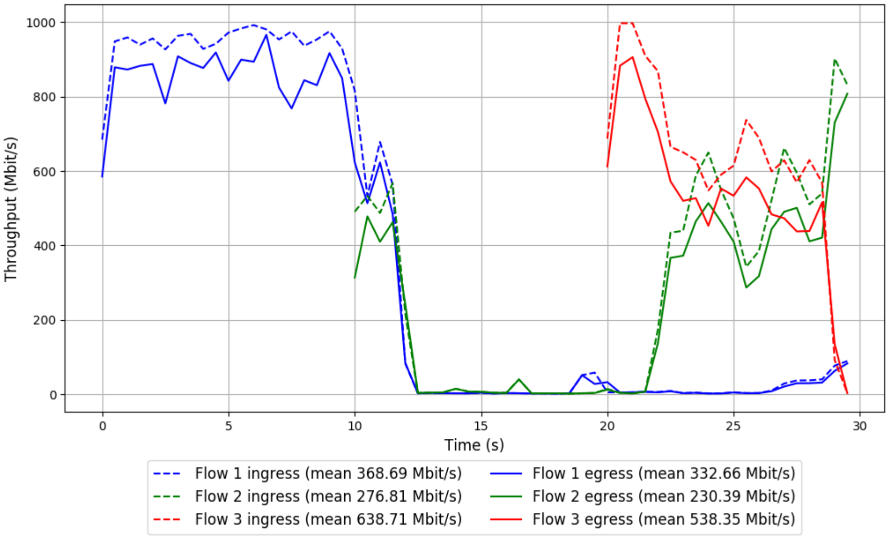
Run 7: Report of FillP — Data Link

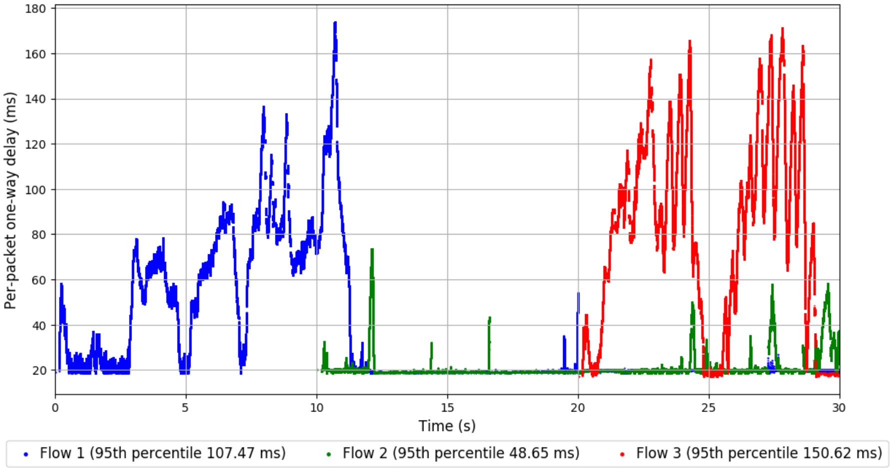




```
Run 8: Statistics of FillP

Start at: 2018-03-21 08:27:33
End at: 2018-03-21 08:28:03
Local clock offset: -0.981 ms
Remote clock offset: -6.369 ms

# Below is generated by plot.py at 2018-03-21 13:52:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 664.42 Mbit/s
95th percentile per-packet one-way delay: 125.334 ms
Loss rate: 13.10%
-- Flow 1:
Average throughput: 332.66 Mbit/s
95th percentile per-packet one-way delay: 107.466 ms
Loss rate: 9.77%
-- Flow 2:
Average throughput: 230.39 Mbit/s
95th percentile per-packet one-way delay: 48.651 ms
Loss rate: 16.77%
-- Flow 3:
Average throughput: 538.35 Mbit/s
95th percentile per-packet one-way delay: 150.622 ms
Loss rate: 15.71%
```

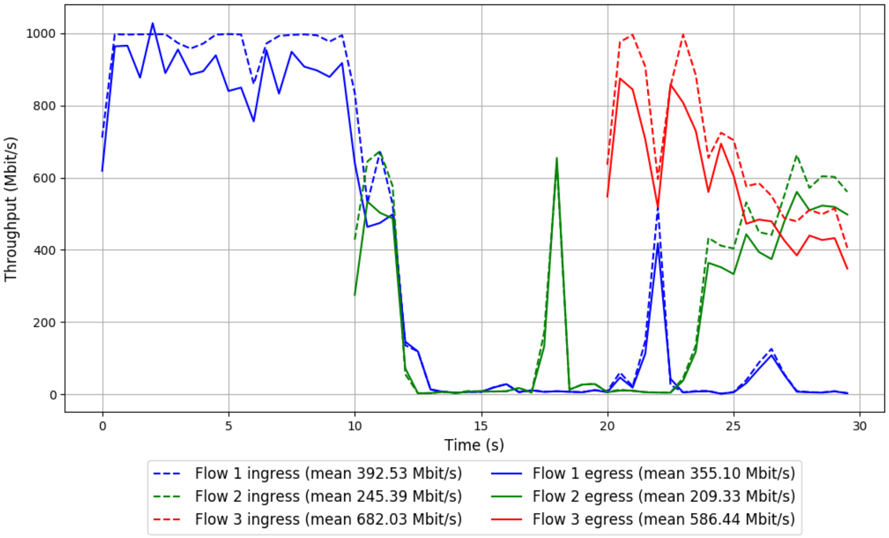
Run 8: Report of FillP — Data Link

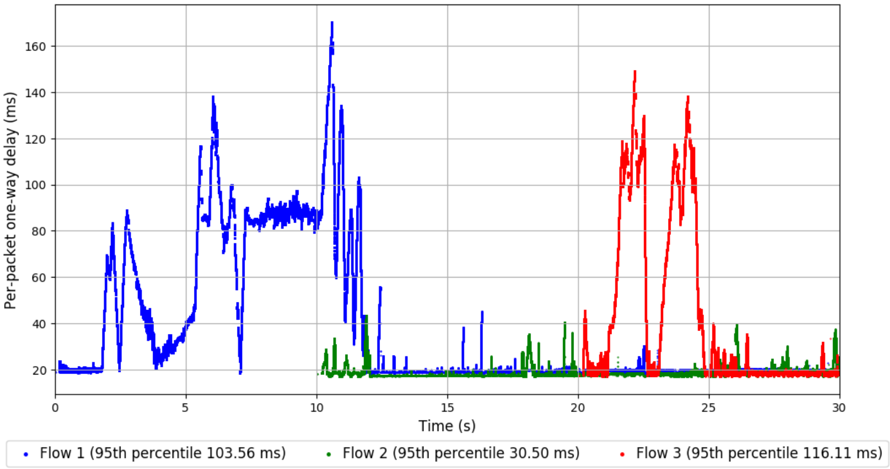




```
Run 9: Statistics of FillP

Start at: 2018-03-21 08:56:54
End at: 2018-03-21 08:57:24
Local clock offset: -0.539 ms
Remote clock offset: -4.874 ms

# Below is generated by plot.py at 2018-03-21 13:56:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 688.57 Mbit/s
95th percentile per-packet one-way delay: 109.600 ms
Loss rate: 11.90%
-- Flow 1:
Average throughput: 355.10 Mbit/s
95th percentile per-packet one-way delay: 103.560 ms
Loss rate: 9.53%
-- Flow 2:
Average throughput: 209.33 Mbit/s
95th percentile per-packet one-way delay: 30.498 ms
Loss rate: 14.69%
-- Flow 3:
Average throughput: 586.44 Mbit/s
95th percentile per-packet one-way delay: 116.107 ms
Loss rate: 14.00%
```

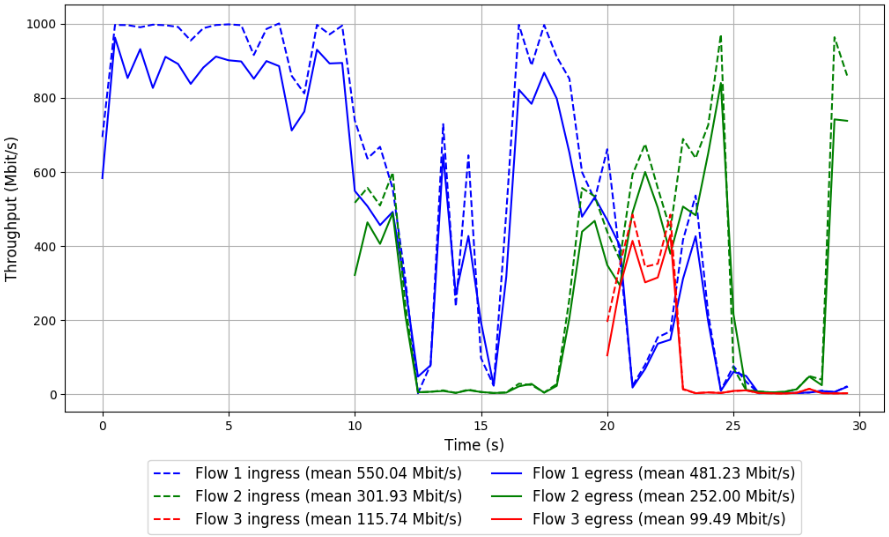
Run 9: Report of FillP — Data Link

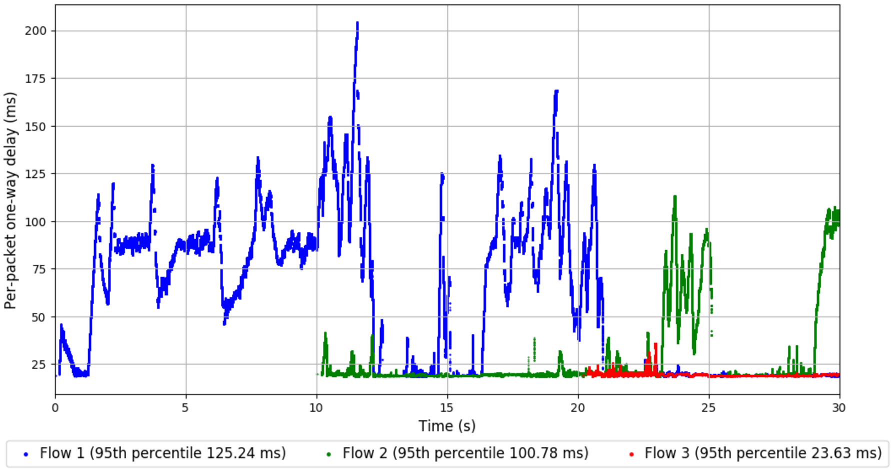




```
Run 10: Statistics of FillP

Start at: 2018-03-21 09:26:17
End at: 2018-03-21 09:26:47
Local clock offset: 0.741 ms
Remote clock offset: -6.016 ms

# Below is generated by plot.py at 2018-03-21 13:56:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 681.18 Mbit/s
95th percentile per-packet one-way delay: 120.276 ms
Loss rate: 13.68%
-- Flow 1:
Average throughput: 481.23 Mbit/s
95th percentile per-packet one-way delay: 125.237 ms
Loss rate: 12.51%
-- Flow 2:
Average throughput: 252.00 Mbit/s
95th percentile per-packet one-way delay: 100.775 ms
Loss rate: 16.54%
-- Flow 3:
Average throughput: 99.49 Mbit/s
95th percentile per-packet one-way delay: 23.630 ms
Loss rate: 15.36%
```

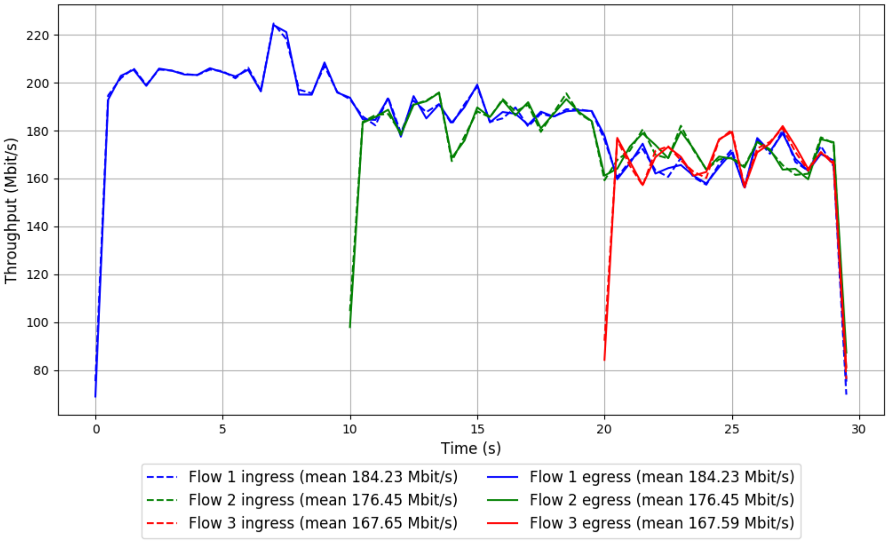
Run 10: Report of FillP — Data Link

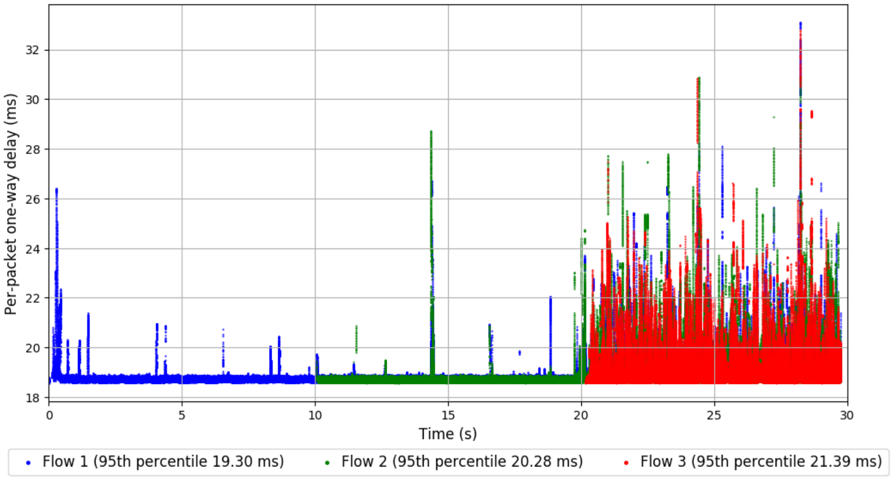




```
Run 1: Statistics of Indigo-1-32

Start at: 2018-03-21 04:38:19
End at: 2018-03-21 04:38:49
Local clock offset: 0.821 ms
Remote clock offset: -5.729 ms

# Below is generated by plot.py at 2018-03-21 13:56:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.20 Mbit/s
95th percentile per-packet one-way delay: 20.104 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 184.23 Mbit/s
95th percentile per-packet one-way delay: 19.301 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 176.45 Mbit/s
95th percentile per-packet one-way delay: 20.276 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 167.59 Mbit/s
95th percentile per-packet one-way delay: 21.385 ms
Loss rate: 0.04%
```

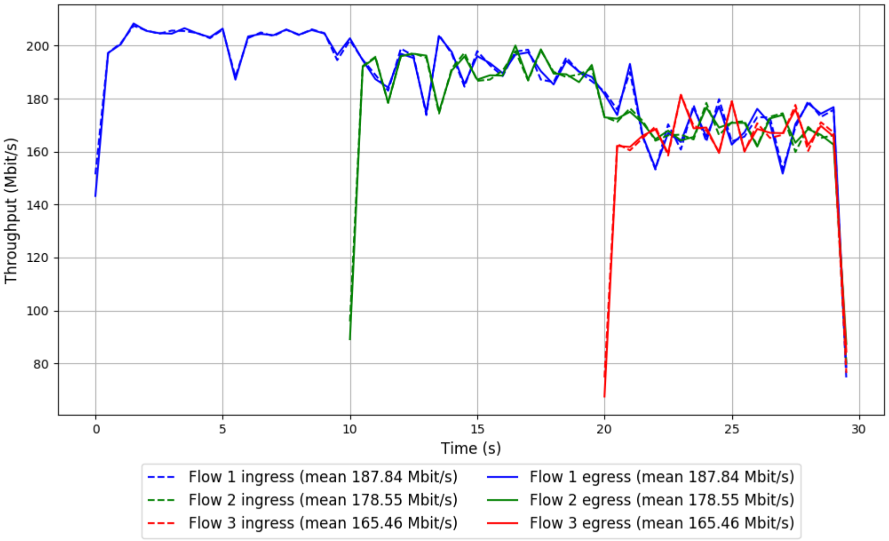
Run 1: Report of Indigo-1-32 — Data Link

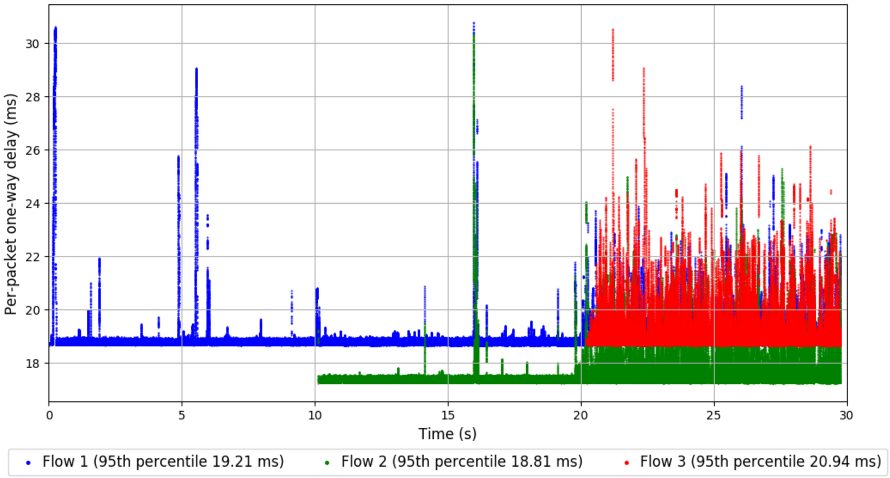




```
Run 2: Statistics of Indigo-1-32

Start at: 2018-03-21 05:07:27
End at: 2018-03-21 05:07:57
Local clock offset: -0.083 ms
Remote clock offset: -5.709 ms

# Below is generated by plot.py at 2018-03-21 13:56:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 358.94 Mbit/s
95th percentile per-packet one-way delay: 19.547 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 187.84 Mbit/s
95th percentile per-packet one-way delay: 19.207 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 178.55 Mbit/s
95th percentile per-packet one-way delay: 18.809 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 165.46 Mbit/s
95th percentile per-packet one-way delay: 20.944 ms
Loss rate: 0.00%
```

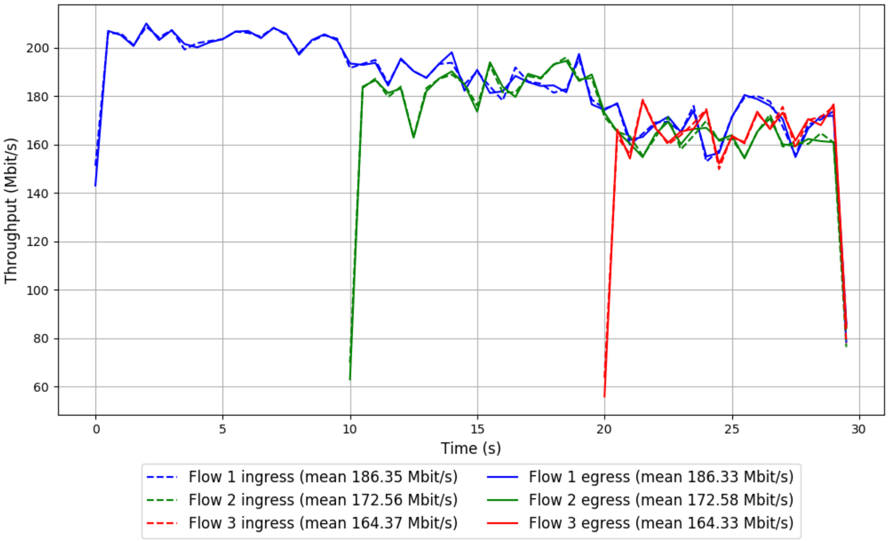
Run 2: Report of Indigo-1-32 — Data Link

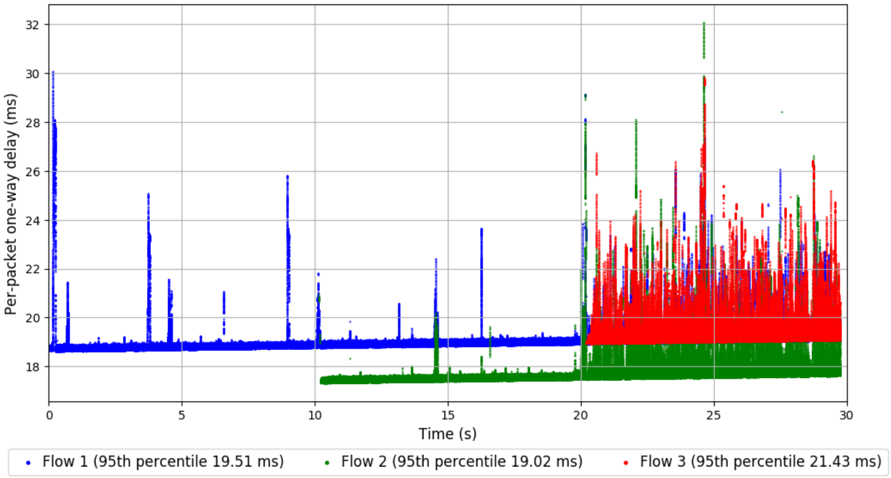




```
Run 3: Statistics of Indigo-1-32

Start at: 2018-03-21 05:36:48
End at: 2018-03-21 05:37:18
Local clock offset: -0.754 ms
Remote clock offset: -5.094 ms

# Below is generated by plot.py at 2018-03-21 13:56:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 352.77 Mbit/s
95th percentile per-packet one-way delay: 19.954 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 186.33 Mbit/s
95th percentile per-packet one-way delay: 19.512 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 172.58 Mbit/s
95th percentile per-packet one-way delay: 19.022 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 164.33 Mbit/s
95th percentile per-packet one-way delay: 21.435 ms
Loss rate: 0.02%
```

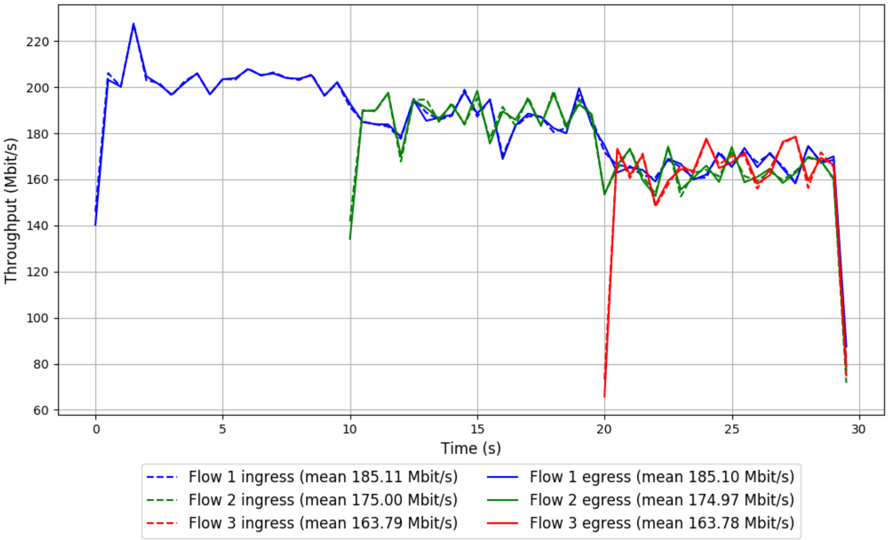
Run 3: Report of Indigo-1-32 — Data Link

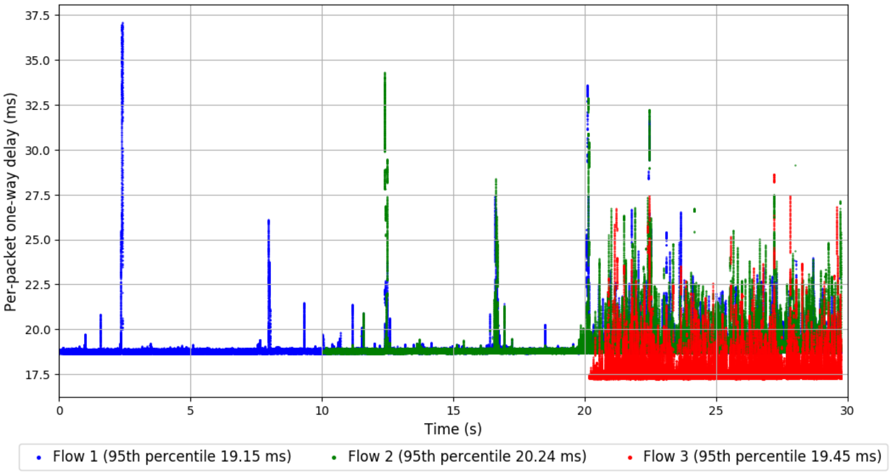




```
Run 4: Statistics of Indigo-1-32

Start at: 2018-03-21 06:05:40
End at: 2018-03-21 06:06:10
Local clock offset: 7.938 ms
Remote clock offset: -5.285 ms

# Below is generated by plot.py at 2018-03-21 13:56:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 353.88 Mbit/s
95th percentile per-packet one-way delay: 19.581 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 185.10 Mbit/s
95th percentile per-packet one-way delay: 19.147 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 174.97 Mbit/s
95th percentile per-packet one-way delay: 20.244 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 163.78 Mbit/s
95th percentile per-packet one-way delay: 19.446 ms
Loss rate: 0.01%
```

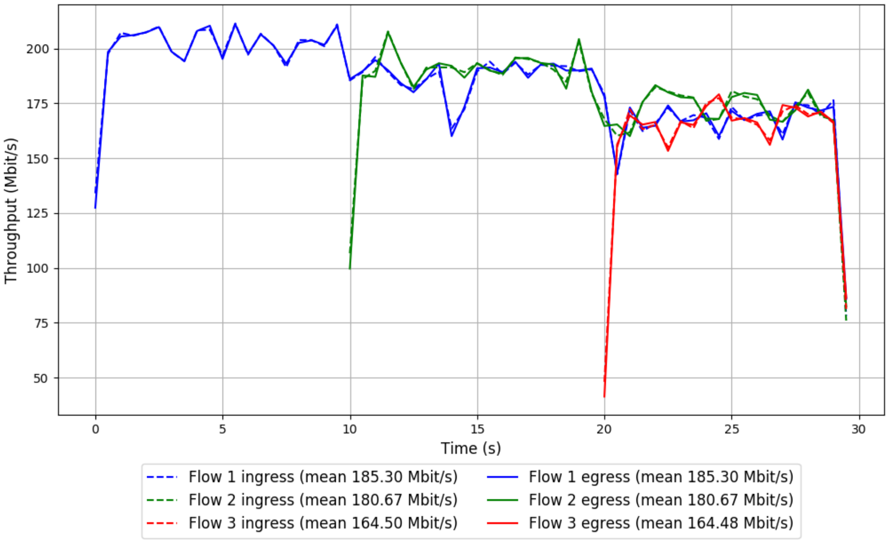
Run 4: Report of Indigo-1-32 — Data Link

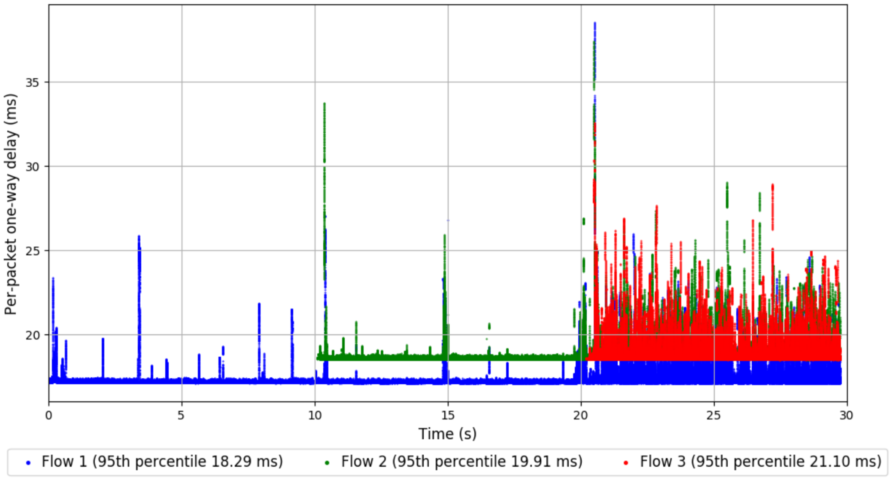




```
Run 5: Statistics of Indigo-1-32

Start at: 2018-03-21 06:35:11
End at: 2018-03-21 06:35:41
Local clock offset: 0.503 ms
Remote clock offset: -6.055 ms

# Below is generated by plot.py at 2018-03-21 13:56:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 357.43 Mbit/s
95th percentile per-packet one-way delay: 19.701 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 185.30 Mbit/s
95th percentile per-packet one-way delay: 18.288 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 180.67 Mbit/s
95th percentile per-packet one-way delay: 19.910 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 164.48 Mbit/s
95th percentile per-packet one-way delay: 21.101 ms
Loss rate: 0.01%
```

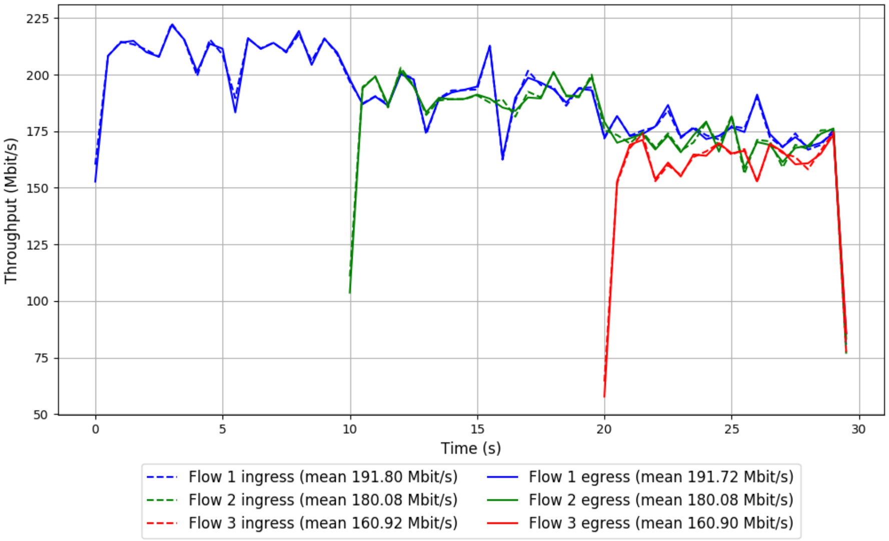
Run 5: Report of Indigo-1-32 — Data Link

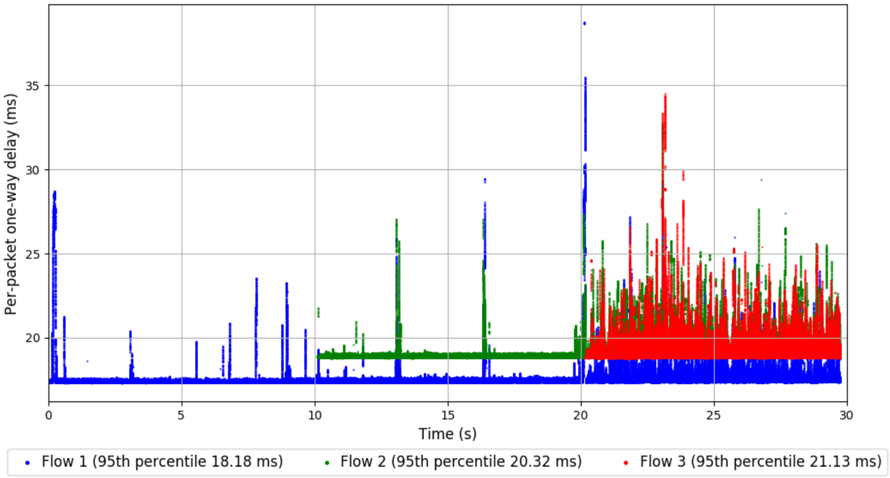




```
Run 6: Statistics of Indigo-1-32

Start at: 2018-03-21 07:04:28
End at: 2018-03-21 07:04:58
Local clock offset: 4.124 ms
Remote clock offset: -6.127 ms

# Below is generated by plot.py at 2018-03-21 13:58:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 362.51 Mbit/s
95th percentile per-packet one-way delay: 19.956 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 191.72 Mbit/s
95th percentile per-packet one-way delay: 18.181 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 180.08 Mbit/s
95th percentile per-packet one-way delay: 20.320 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 160.90 Mbit/s
95th percentile per-packet one-way delay: 21.129 ms
Loss rate: 0.01%
```

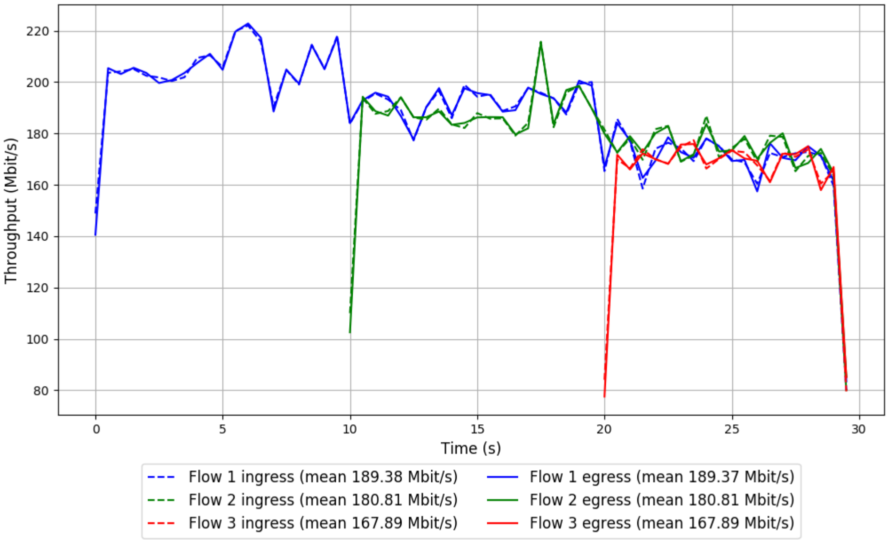
Run 6: Report of Indigo-1-32 — Data Link

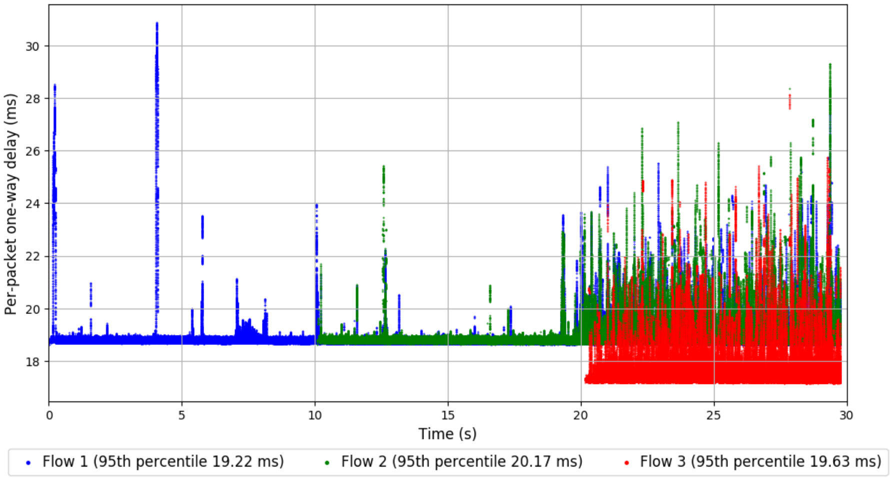




```
Run 7: Statistics of Indigo-1-32

Start at: 2018-03-21 07:34:02
End at: 2018-03-21 07:34:32
Local clock offset: 0.686 ms
Remote clock offset: -5.797 ms

# Below is generated by plot.py at 2018-03-21 13:59:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 362.93 Mbit/s
95th percentile per-packet one-way delay: 19.674 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 189.37 Mbit/s
95th percentile per-packet one-way delay: 19.217 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 180.81 Mbit/s
95th percentile per-packet one-way delay: 20.171 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 167.89 Mbit/s
95th percentile per-packet one-way delay: 19.630 ms
Loss rate: 0.00%
```

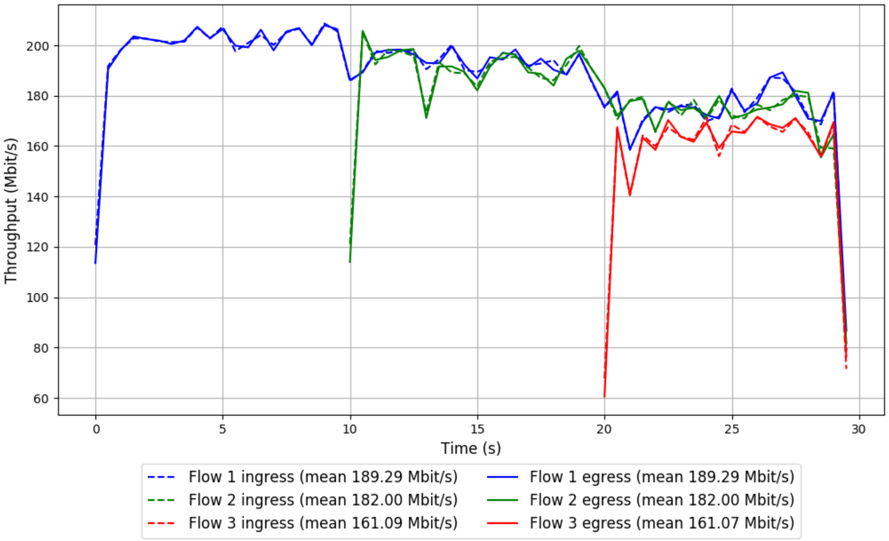
Run 7: Report of Indigo-1-32 — Data Link

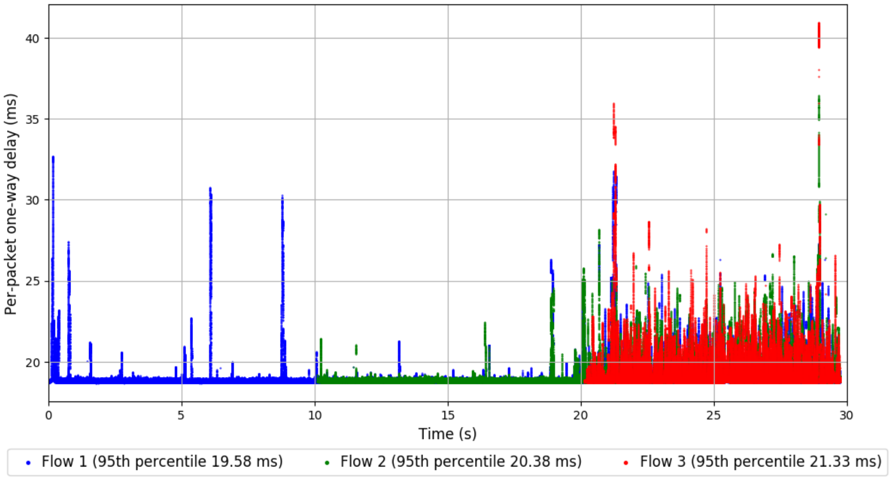




```
Run 8: Statistics of Indigo-1-32

Start at: 2018-03-21 08:03:12
End at: 2018-03-21 08:03:42
Local clock offset: -0.513 ms
Remote clock offset: -6.131 ms

# Below is generated by plot.py at 2018-03-21 13:59:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 361.59 Mbit/s
95th percentile per-packet one-way delay: 20.278 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 189.29 Mbit/s
95th percentile per-packet one-way delay: 19.584 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 182.00 Mbit/s
95th percentile per-packet one-way delay: 20.377 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 161.07 Mbit/s
95th percentile per-packet one-way delay: 21.329 ms
Loss rate: 0.01%
```

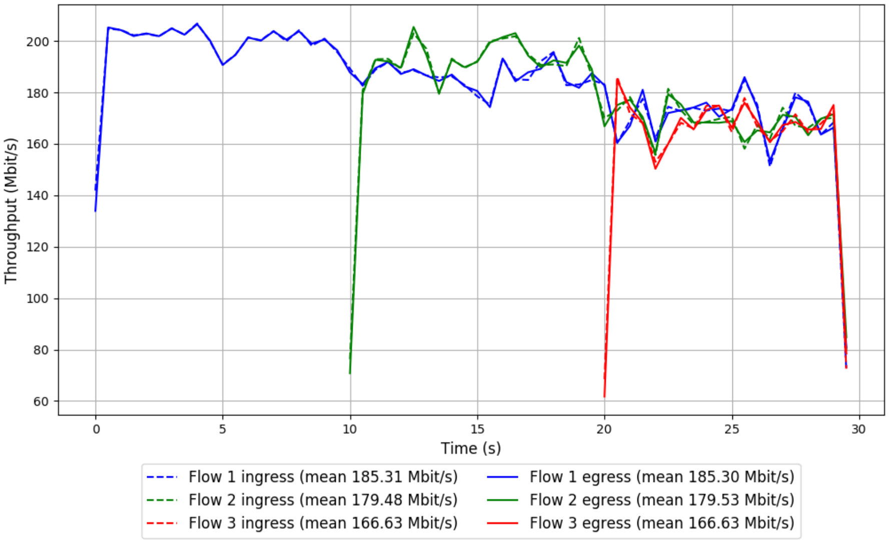
Run 8: Report of Indigo-1-32 — Data Link

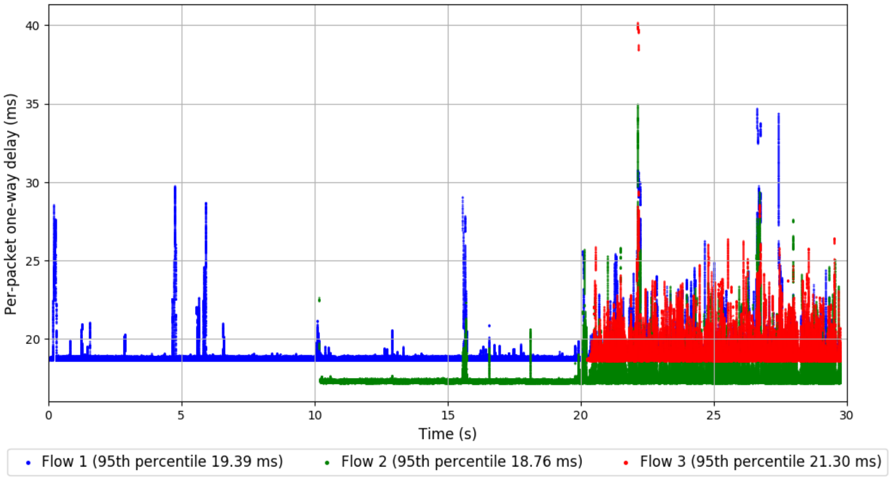




```
Run 9: Statistics of Indigo-1-32

Start at: 2018-03-21 08:32:35
End at: 2018-03-21 08:33:05
Local clock offset: -0.549 ms
Remote clock offset: -5.808 ms

# Below is generated by plot.py at 2018-03-21 13:59:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 357.00 Mbit/s
95th percentile per-packet one-way delay: 19.764 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 185.30 Mbit/s
95th percentile per-packet one-way delay: 19.391 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 179.53 Mbit/s
95th percentile per-packet one-way delay: 18.762 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 166.63 Mbit/s
95th percentile per-packet one-way delay: 21.303 ms
Loss rate: 0.00%
```

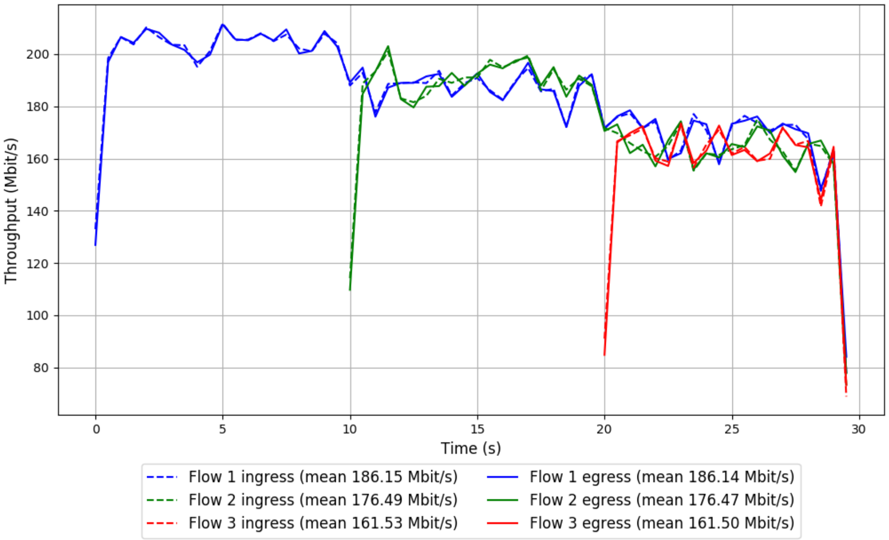
Run 9: Report of Indigo-1-32 — Data Link

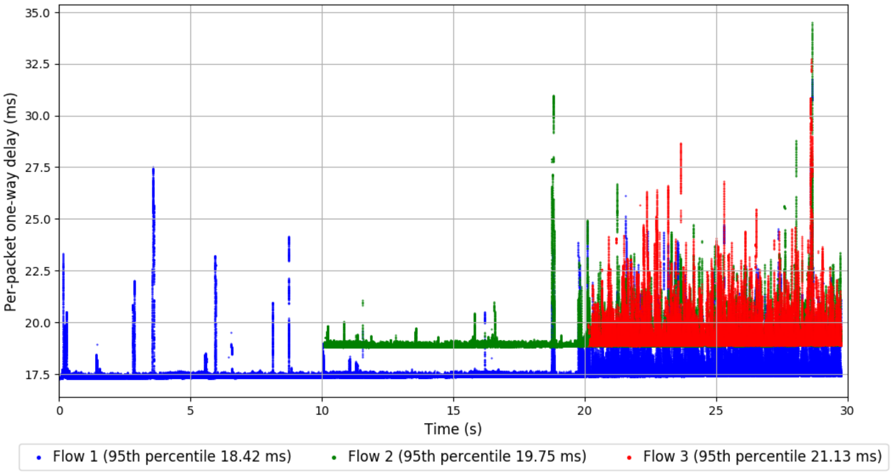




```
Run 10: Statistics of Indigo-1-32

Start at: 2018-03-21 09:01:51
End at: 2018-03-21 09:02:21
Local clock offset: -0.59 ms
Remote clock offset: -4.86 ms

# Below is generated by plot.py at 2018-03-21 13:59:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.09 Mbit/s
95th percentile per-packet one-way delay: 19.726 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 186.14 Mbit/s
95th percentile per-packet one-way delay: 18.419 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 176.47 Mbit/s
95th percentile per-packet one-way delay: 19.746 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 161.50 Mbit/s
95th percentile per-packet one-way delay: 21.130 ms
Loss rate: 0.01%
```

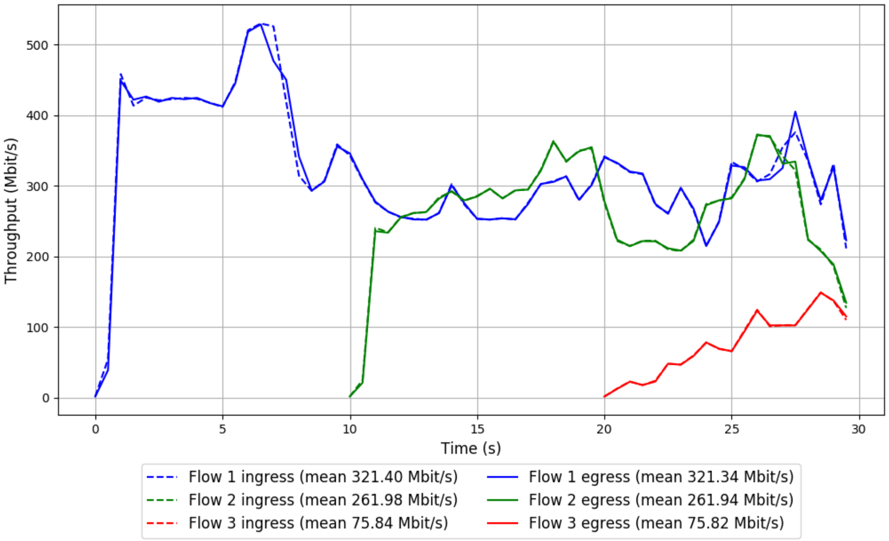
Run 10: Report of Indigo-1-32 — Data Link

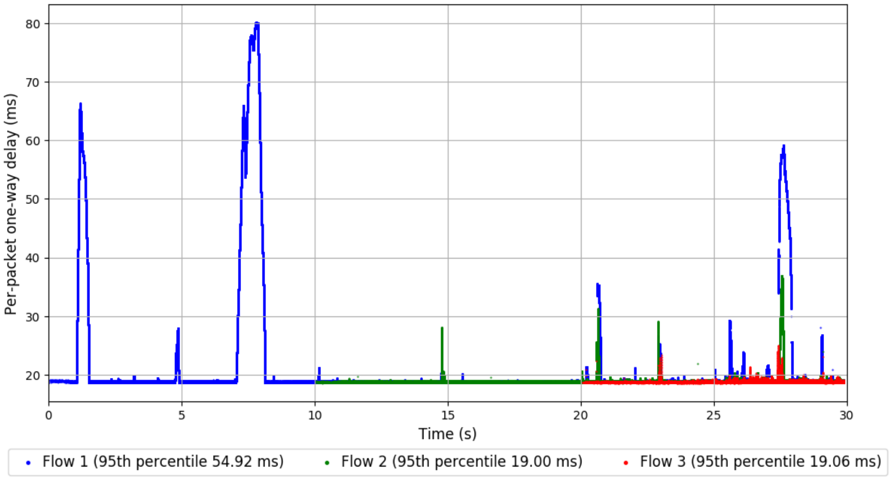




```
Run 1: Statistics of Vivace-latency

Start at: 2018-03-21 04:49:59
End at: 2018-03-21 04:50:29
Local clock offset: 0.407 ms
Remote clock offset: -6.027 ms

# Below is generated by plot.py at 2018-03-21 14:03:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 520.44 Mbit/s
95th percentile per-packet one-way delay: 36.786 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 321.34 Mbit/s
95th percentile per-packet one-way delay: 54.920 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 261.94 Mbit/s
95th percentile per-packet one-way delay: 19.004 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 75.82 Mbit/s
95th percentile per-packet one-way delay: 19.057 ms
Loss rate: 0.02%
```

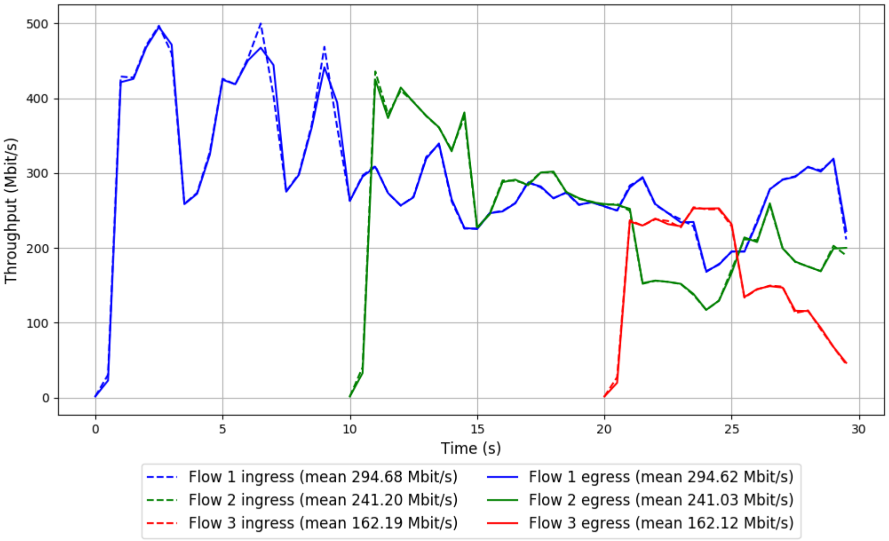
Run 1: Report of Vivace-latency — Data Link

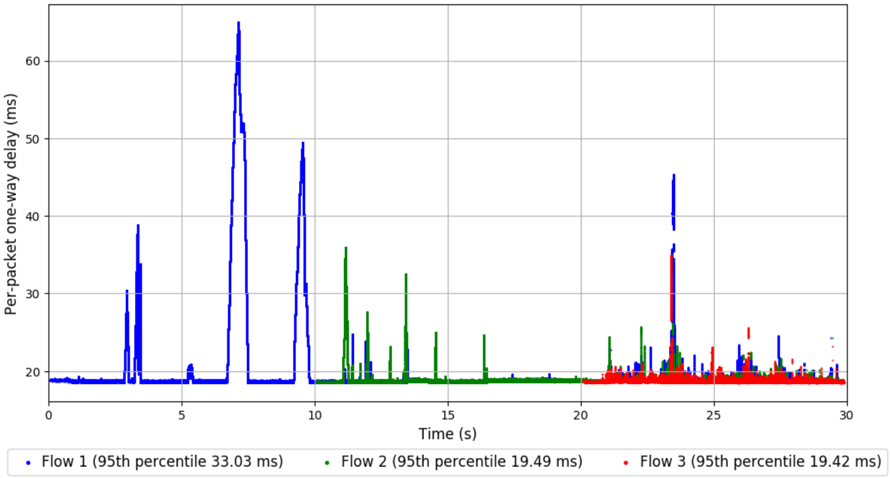




```
Run 2: Statistics of Vivace-latency

Start at: 2018-03-21 05:19:10
End at: 2018-03-21 05:19:40
Local clock offset: -0.238 ms
Remote clock offset: -5.289 ms

# Below is generated by plot.py at 2018-03-21 14:03:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 508.23 Mbit/s
95th percentile per-packet one-way delay: 24.526 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 294.62 Mbit/s
95th percentile per-packet one-way delay: 33.029 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 241.03 Mbit/s
95th percentile per-packet one-way delay: 19.494 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 162.12 Mbit/s
95th percentile per-packet one-way delay: 19.418 ms
Loss rate: 0.04%
```

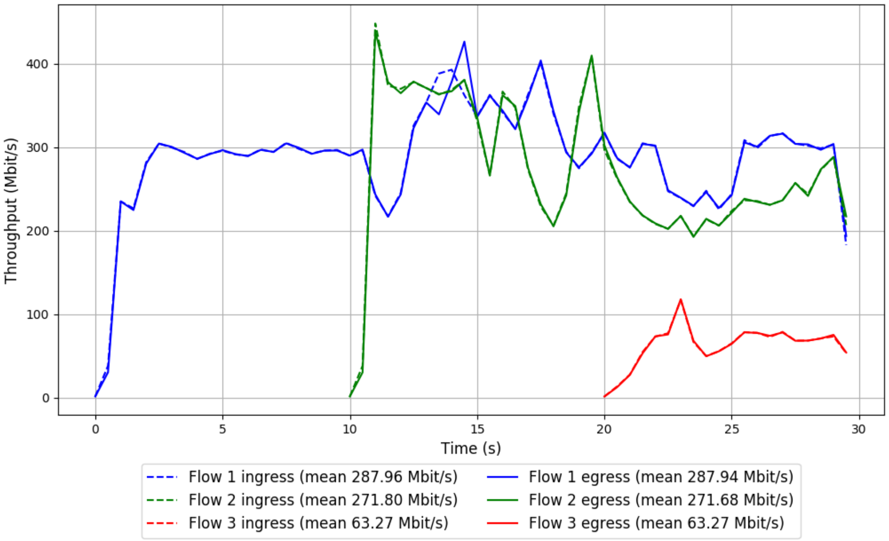
Run 2: Report of Vivace-latency — Data Link

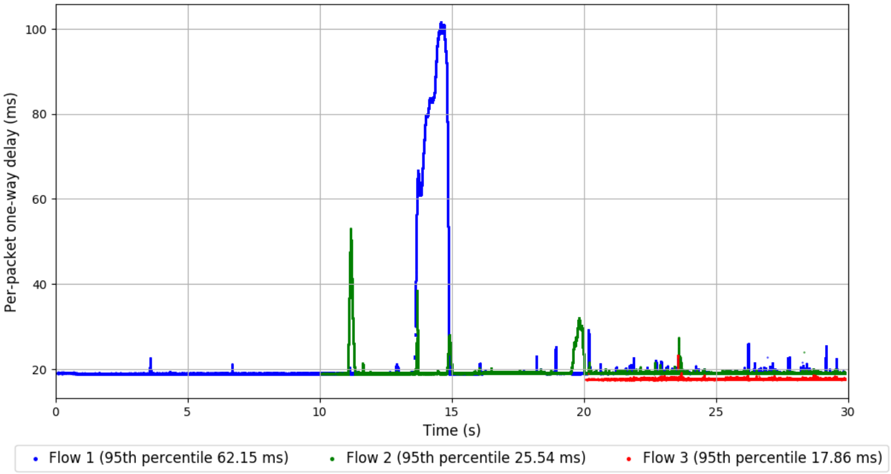




```
Run 3: Statistics of Vivace-latency

Start at: 2018-03-21 05:48:19
End at: 2018-03-21 05:48:49
Local clock offset: 5.006 ms
Remote clock offset: -5.209 ms

# Below is generated by plot.py at 2018-03-21 14:04:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 489.42 Mbit/s
95th percentile per-packet one-way delay: 26.559 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 287.94 Mbit/s
95th percentile per-packet one-way delay: 62.152 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 271.68 Mbit/s
95th percentile per-packet one-way delay: 25.543 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 63.27 Mbit/s
95th percentile per-packet one-way delay: 17.855 ms
Loss rate: 0.00%
```

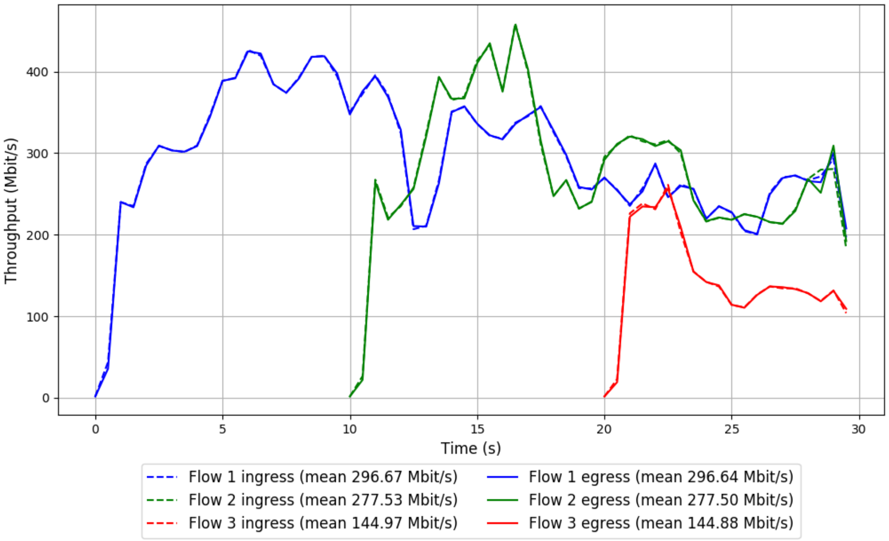
Run 3: Report of Vivace-latency — Data Link

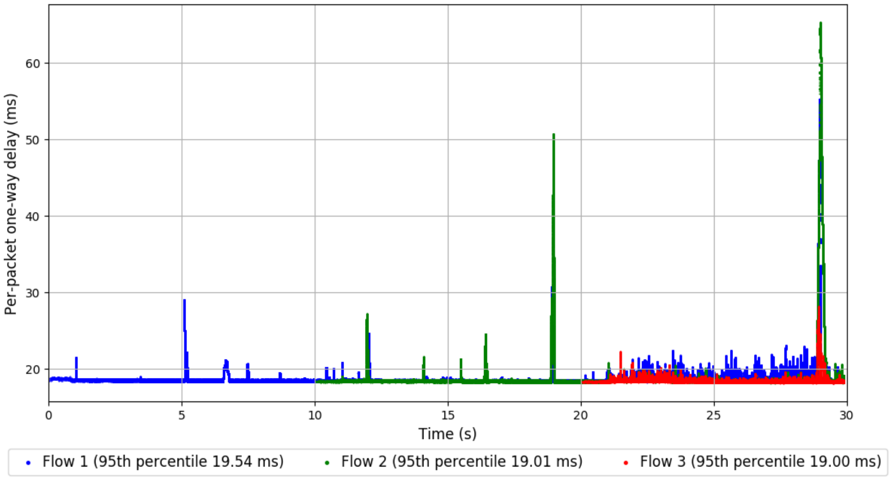




```
Run 4: Statistics of Vivace-latency

Start at: 2018-03-21 06:17:24
End at: 2018-03-21 06:17:54
Local clock offset: 4.501 ms
Remote clock offset: -5.582 ms

# Below is generated by plot.py at 2018-03-21 14:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 528.93 Mbit/s
95th percentile per-packet one-way delay: 19.339 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 296.64 Mbit/s
95th percentile per-packet one-way delay: 19.538 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 277.50 Mbit/s
95th percentile per-packet one-way delay: 19.013 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 144.88 Mbit/s
95th percentile per-packet one-way delay: 19.000 ms
Loss rate: 0.06%
```

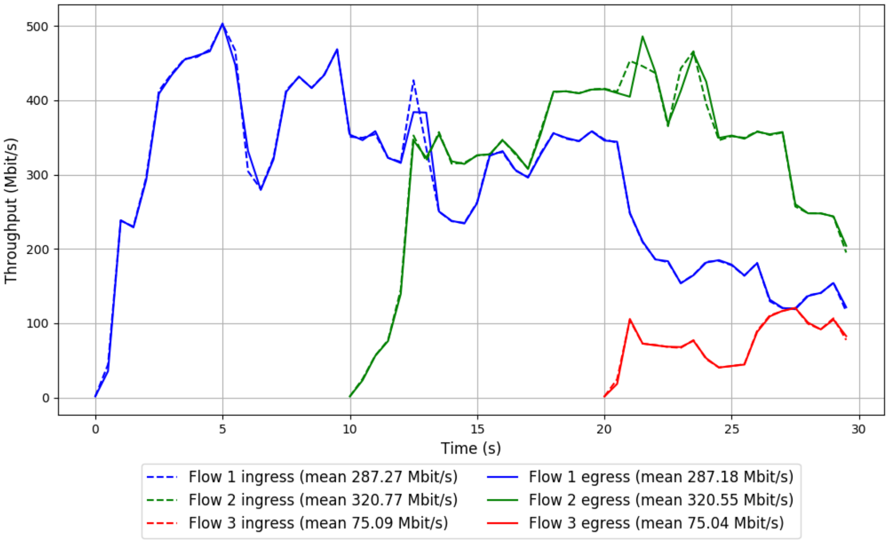
Run 4: Report of Vivace-latency — Data Link

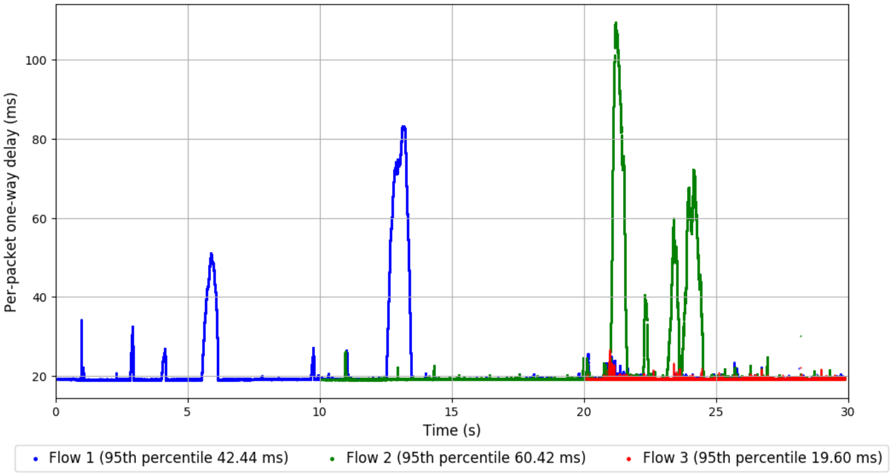




```
Run 5: Statistics of Vivace-latency

Start at: 2018-03-21 06:46:51
End at: 2018-03-21 06:47:21
Local clock offset: 0.335 ms
Remote clock offset: -6.066 ms

# Below is generated by plot.py at 2018-03-21 14:07:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 525.01 Mbit/s
95th percentile per-packet one-way delay: 49.335 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 287.18 Mbit/s
95th percentile per-packet one-way delay: 42.442 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 320.55 Mbit/s
95th percentile per-packet one-way delay: 60.425 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 75.04 Mbit/s
95th percentile per-packet one-way delay: 19.603 ms
Loss rate: 0.13%
```

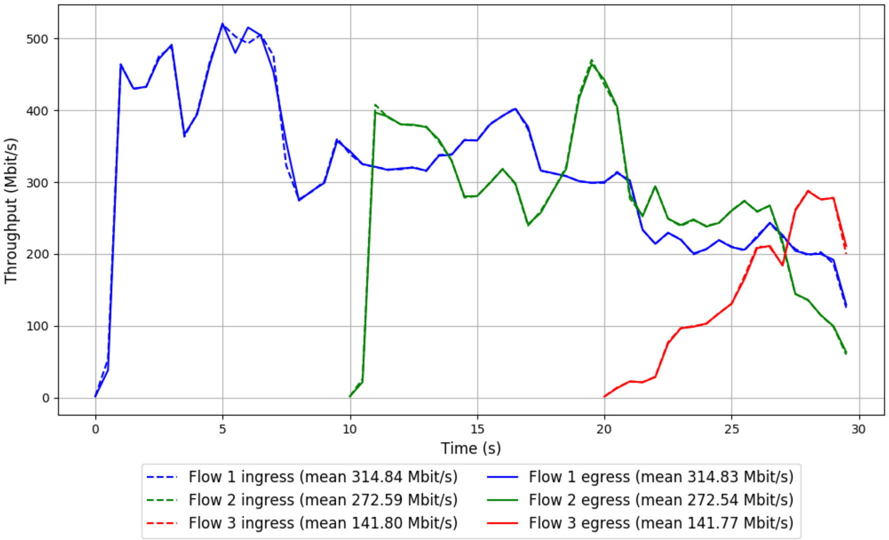
Run 5: Report of Vivace-latency — Data Link

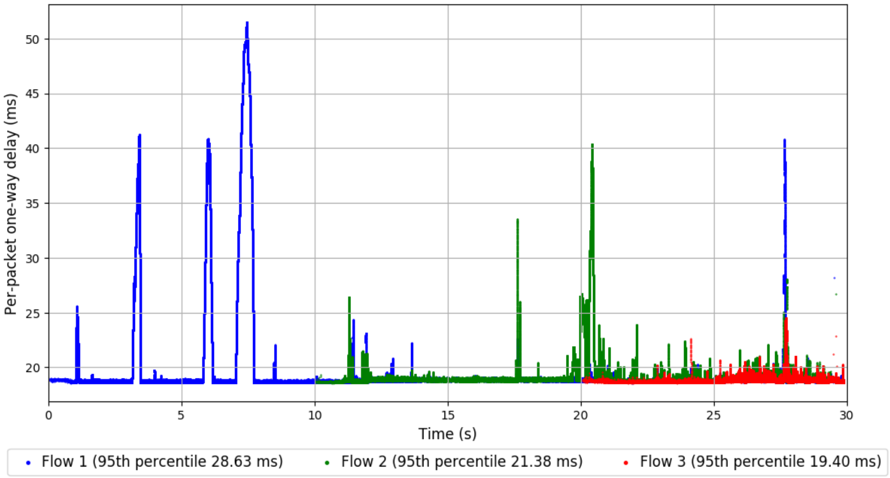




```
Run 6: Statistics of Vivace-latency

Start at: 2018-03-21 07:16:14
End at: 2018-03-21 07:16:44
Local clock offset: 4.806 ms
Remote clock offset: -6.24 ms

# Below is generated by plot.py at 2018-03-21 14:07:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 542.69 Mbit/s
95th percentile per-packet one-way delay: 23.472 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 314.83 Mbit/s
95th percentile per-packet one-way delay: 28.631 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 272.54 Mbit/s
95th percentile per-packet one-way delay: 21.380 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 141.77 Mbit/s
95th percentile per-packet one-way delay: 19.396 ms
Loss rate: 0.02%
```

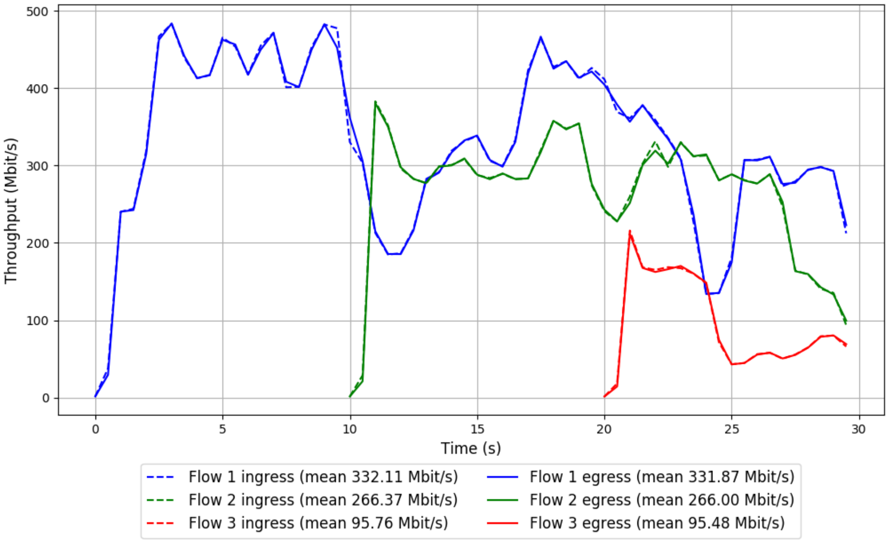
Run 6: Report of Vivace-latency — Data Link

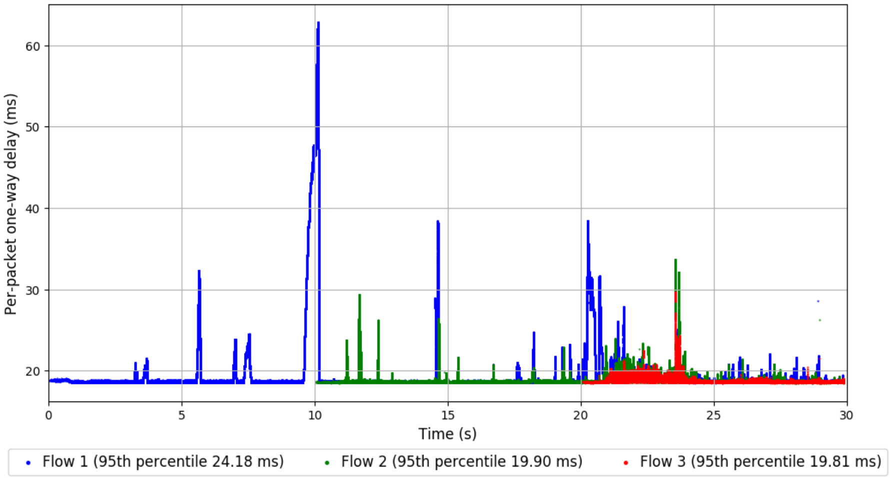




```
Run 7: Statistics of Vivace-latency

Start at: 2018-03-21 07:45:37
End at: 2018-03-21 07:46:07
Local clock offset: -0.504 ms
Remote clock offset: -5.739 ms

# Below is generated by plot.py at 2018-03-21 14:08:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 540.11 Mbit/s
95th percentile per-packet one-way delay: 21.717 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 331.87 Mbit/s
95th percentile per-packet one-way delay: 24.176 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 266.00 Mbit/s
95th percentile per-packet one-way delay: 19.903 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 95.48 Mbit/s
95th percentile per-packet one-way delay: 19.811 ms
Loss rate: 0.29%
```

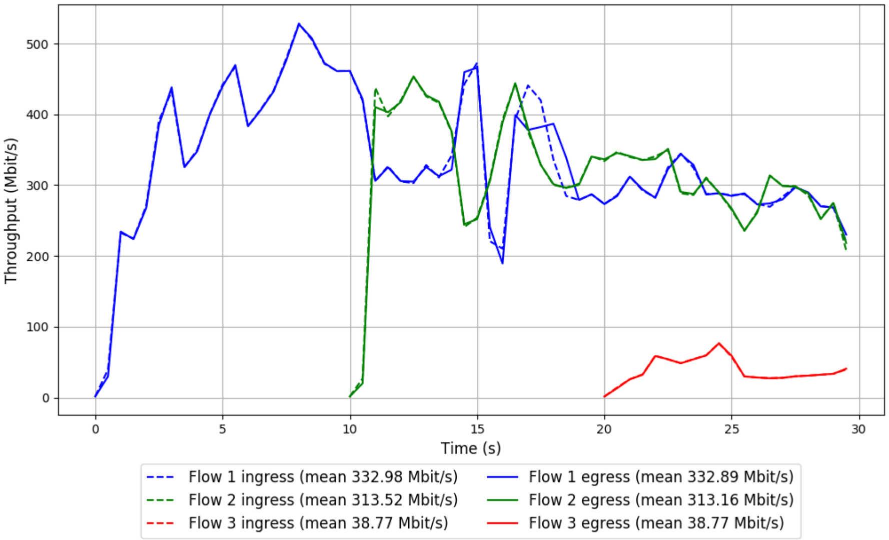
Run 7: Report of Vivace-latency — Data Link

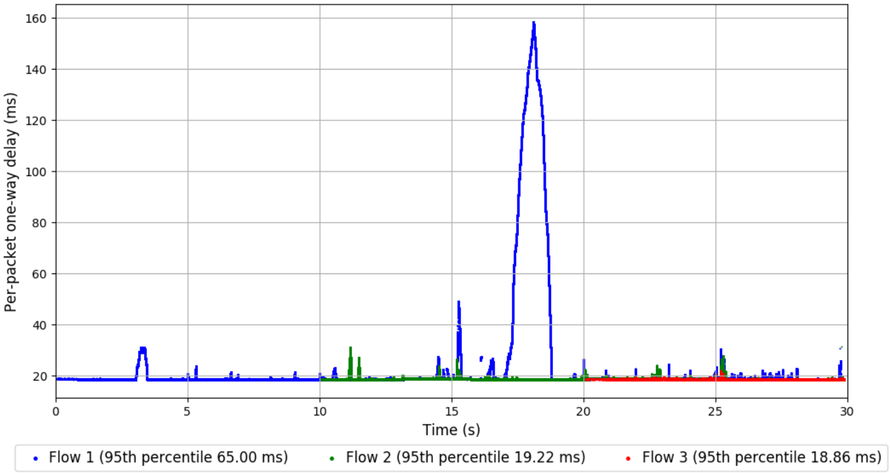




```
Run 8: Statistics of Vivace-latency

Start at: 2018-03-21 08:14:55
End at: 2018-03-21 08:15:25
Local clock offset: -0.492 ms
Remote clock offset: -6.33 ms

# Below is generated by plot.py at 2018-03-21 14:08:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 553.80 Mbit/s
95th percentile per-packet one-way delay: 26.863 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 332.89 Mbit/s
95th percentile per-packet one-way delay: 65.003 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 313.16 Mbit/s
95th percentile per-packet one-way delay: 19.221 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 38.77 Mbit/s
95th percentile per-packet one-way delay: 18.855 ms
Loss rate: 0.00%
```

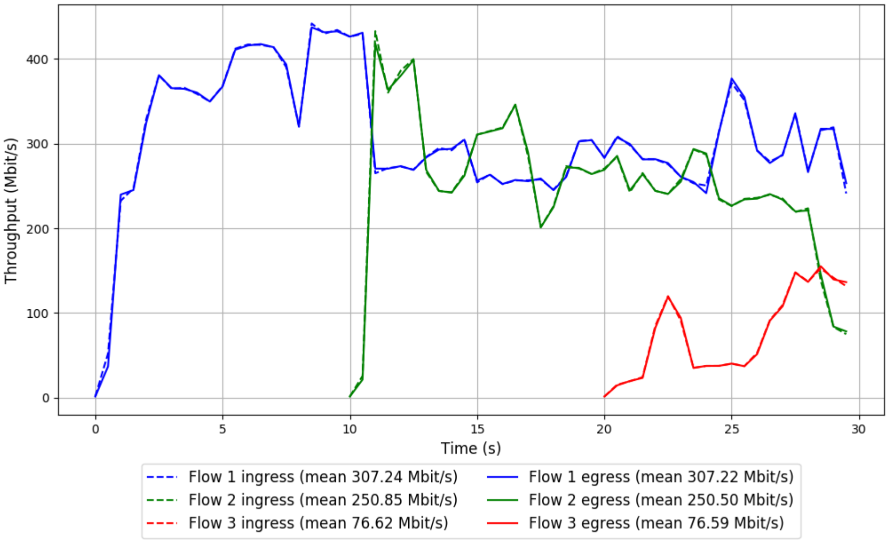
Run 8: Report of Vivace-latency — Data Link

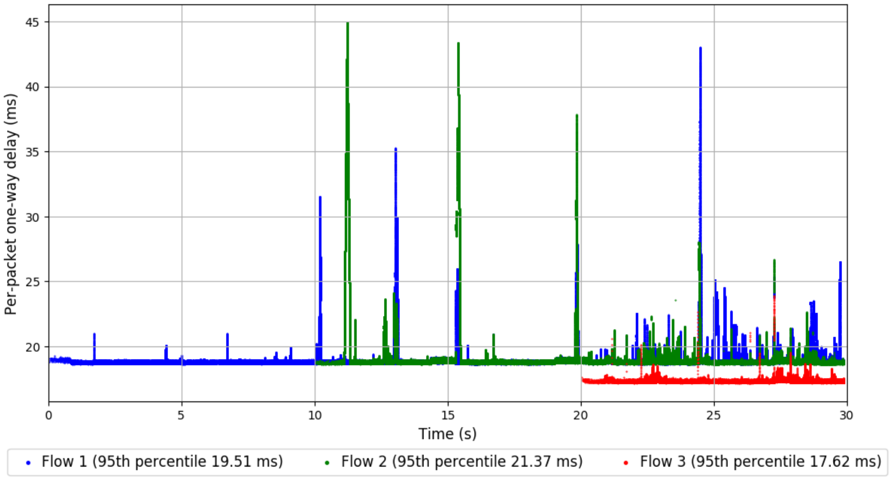




```
Run 9: Statistics of Vivace-latency

Start at: 2018-03-21 08:44:16
End at: 2018-03-21 08:44:46
Local clock offset: -0.342 ms
Remote clock offset: -5.087 ms

# Below is generated by plot.py at 2018-03-21 14:11:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 499.04 Mbit/s
95th percentile per-packet one-way delay: 19.740 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 307.22 Mbit/s
95th percentile per-packet one-way delay: 19.509 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 250.50 Mbit/s
95th percentile per-packet one-way delay: 21.371 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 76.59 Mbit/s
95th percentile per-packet one-way delay: 17.622 ms
Loss rate: 0.04%
```

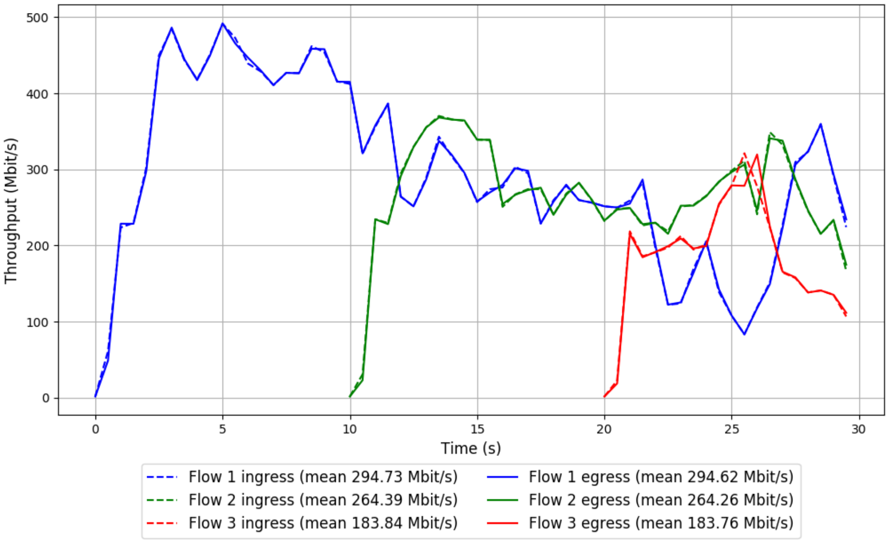
Run 9: Report of Vivace-latency — Data Link

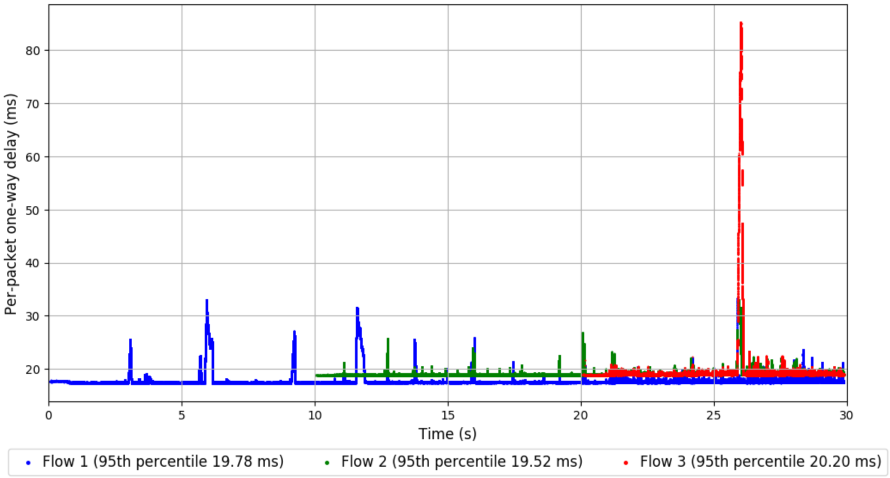




```
Run 10: Statistics of Vivace-latency

Start at: 2018-03-21 09:13:34
End at: 2018-03-21 09:14:04
Local clock offset: 0.374 ms
Remote clock offset: -5.669 ms

# Below is generated by plot.py at 2018-03-21 14:11:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 530.88 Mbit/s
95th percentile per-packet one-way delay: 19.665 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 294.62 Mbit/s
95th percentile per-packet one-way delay: 19.780 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 264.26 Mbit/s
95th percentile per-packet one-way delay: 19.515 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 183.76 Mbit/s
95th percentile per-packet one-way delay: 20.205 ms
Loss rate: 0.04%
```

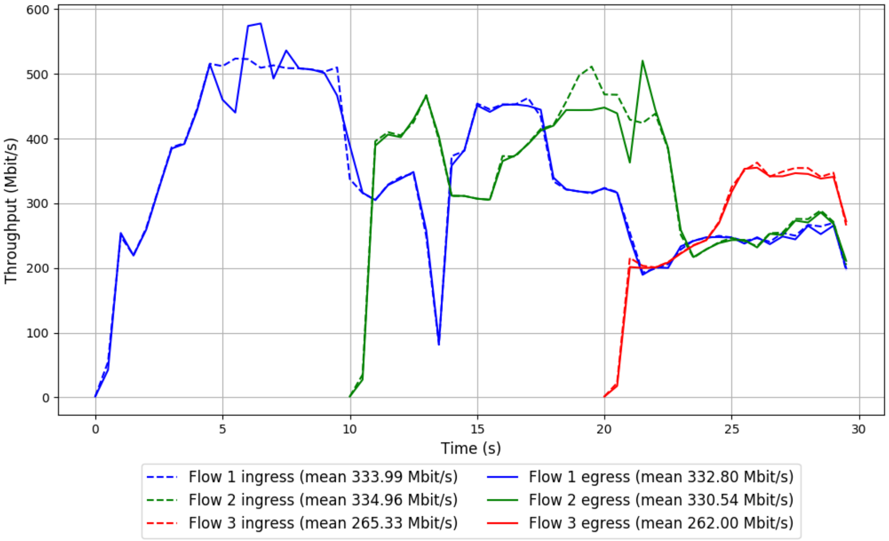
Run 10: Report of Vivace-latency — Data Link

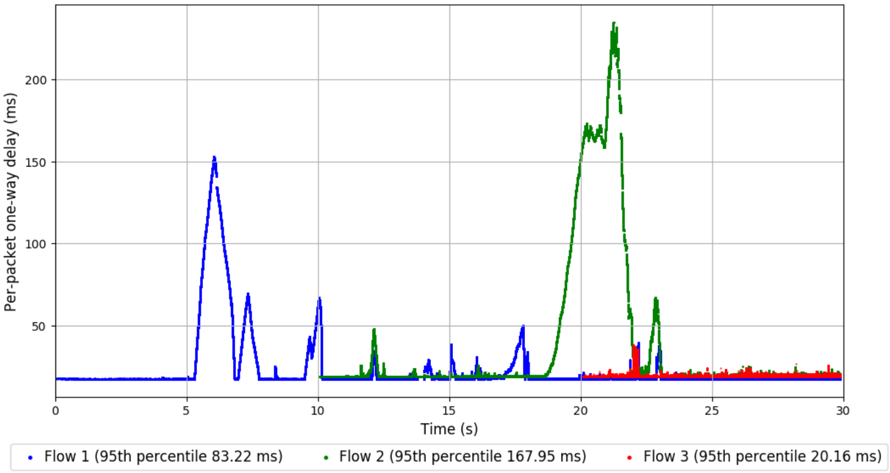




```
Run 1: Statistics of Vivace-loss

Start at: 2018-03-21 04:46:32
End at: 2018-03-21 04:47:02
Local clock offset: 0.526 ms
Remote clock offset: -6.023 ms

# Below is generated by plot.py at 2018-03-21 14:13:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 638.73 Mbit/s
95th percentile per-packet one-way delay: 126.051 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 332.80 Mbit/s
95th percentile per-packet one-way delay: 83.220 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 330.54 Mbit/s
95th percentile per-packet one-way delay: 167.948 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 262.00 Mbit/s
95th percentile per-packet one-way delay: 20.165 ms
Loss rate: 1.27%
```

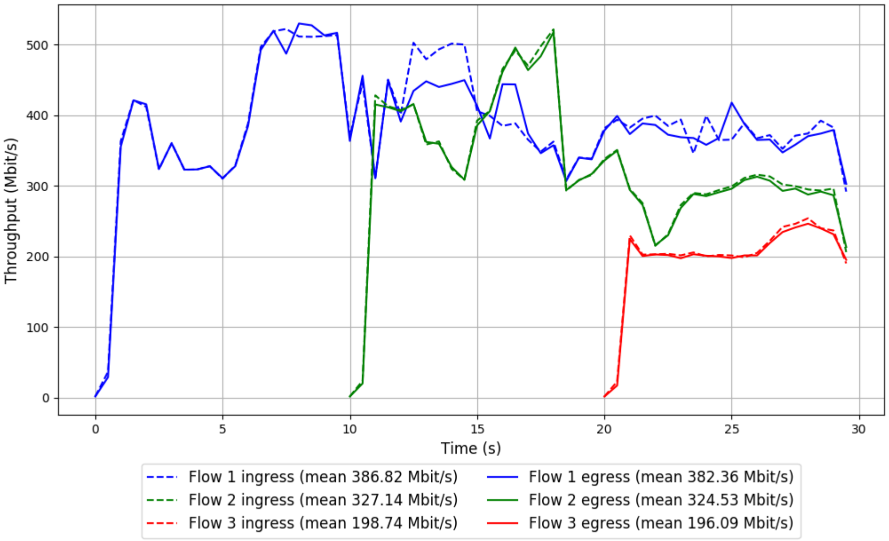
Run 1: Report of Vivace-loss — Data Link

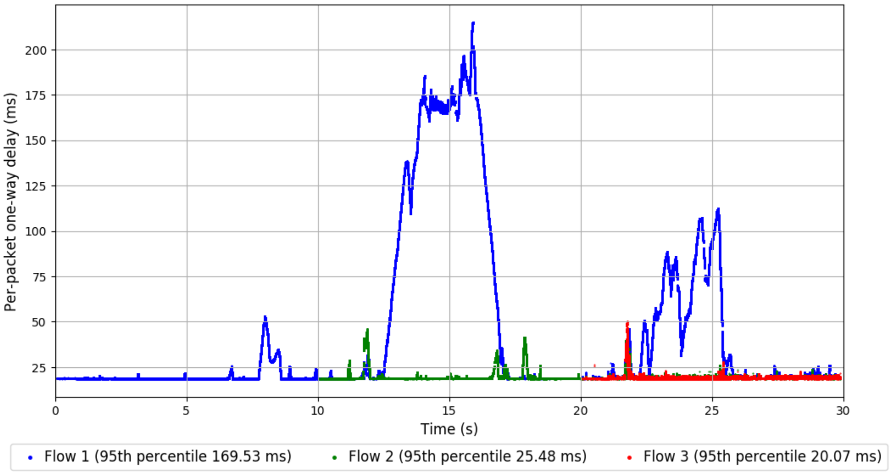




```
Run 2: Statistics of Vivace-loss

Start at: 2018-03-21 05:15:42
End at: 2018-03-21 05:16:12
Local clock offset: -0.152 ms
Remote clock offset: -5.384 ms

# Below is generated by plot.py at 2018-03-21 14:16:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 662.57 Mbit/s
95th percentile per-packet one-way delay: 158.143 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 382.36 Mbit/s
95th percentile per-packet one-way delay: 169.531 ms
Loss rate: 1.16%
-- Flow 2:
Average throughput: 324.53 Mbit/s
95th percentile per-packet one-way delay: 25.480 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 196.09 Mbit/s
95th percentile per-packet one-way delay: 20.075 ms
Loss rate: 1.31%
```

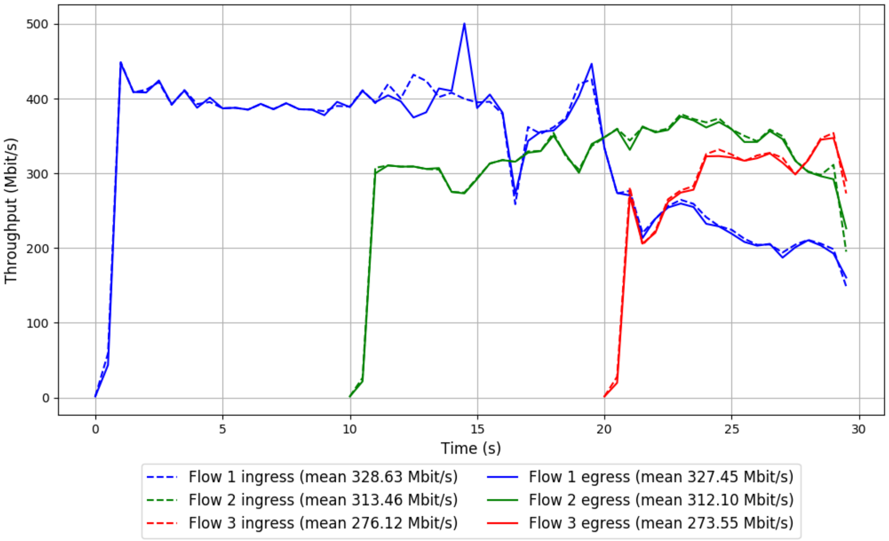
Run 2: Report of Vivace-loss — Data Link

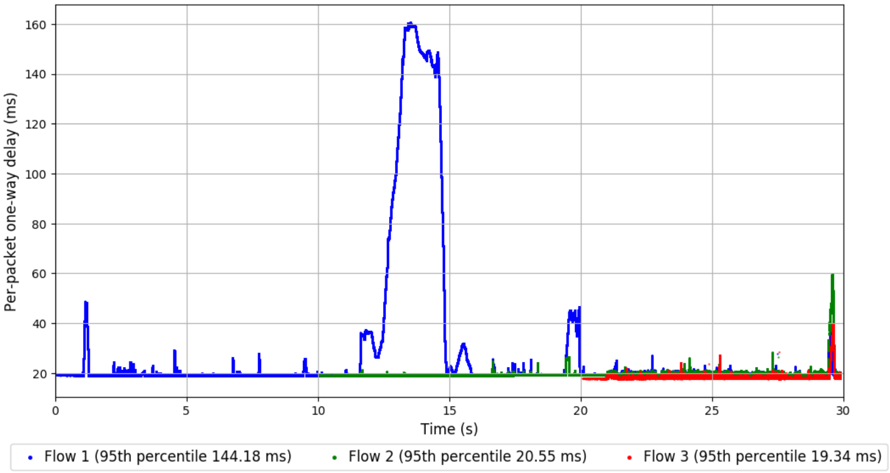




```
Run 3: Statistics of Vivace-loss

Start at: 2018-03-21 05:44:53
End at: 2018-03-21 05:45:24
Local clock offset: 3.798 ms
Remote clock offset: -5.184 ms

# Below is generated by plot.py at 2018-03-21 14:16:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 624.98 Mbit/s
95th percentile per-packet one-way delay: 53.909 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 327.45 Mbit/s
95th percentile per-packet one-way delay: 144.183 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 312.10 Mbit/s
95th percentile per-packet one-way delay: 20.549 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 273.55 Mbit/s
95th percentile per-packet one-way delay: 19.338 ms
Loss rate: 0.93%
```

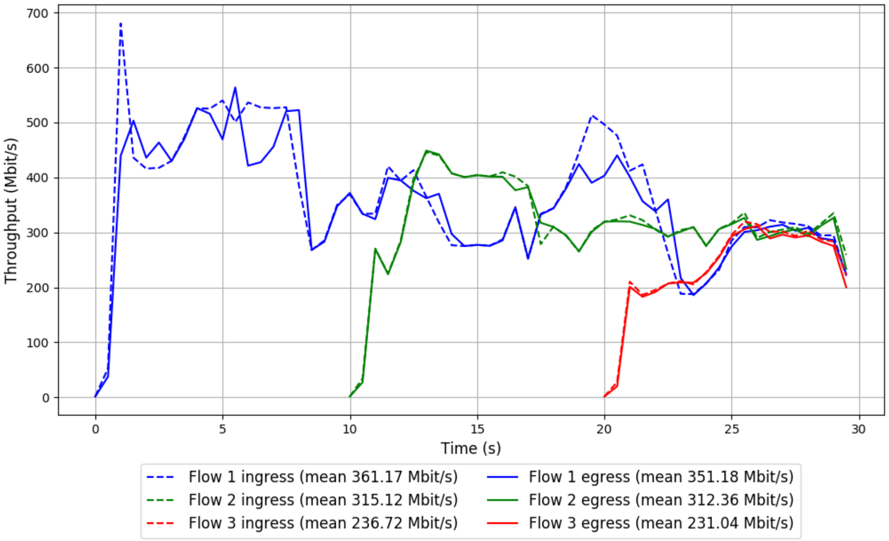
Run 3: Report of Vivace-loss — Data Link

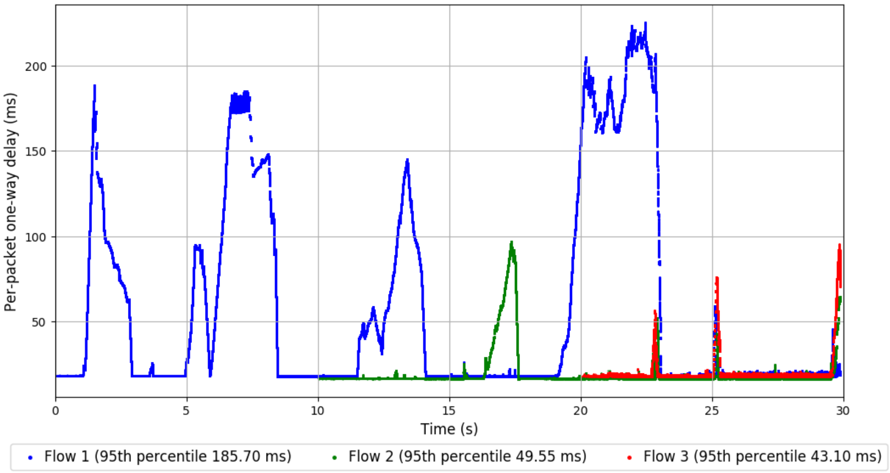




```
Run 4: Statistics of Vivace-loss

Start at: 2018-03-21 06:13:57
End at: 2018-03-21 06:14:27
Local clock offset: 6.55 ms
Remote clock offset: -5.426 ms

# Below is generated by plot.py at 2018-03-21 14:17:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 634.90 Mbit/s
95th percentile per-packet one-way delay: 175.756 ms
Loss rate: 2.11%
-- Flow 1:
Average throughput: 351.18 Mbit/s
95th percentile per-packet one-way delay: 185.699 ms
Loss rate: 2.77%
-- Flow 2:
Average throughput: 312.36 Mbit/s
95th percentile per-packet one-way delay: 49.550 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 231.04 Mbit/s
95th percentile per-packet one-way delay: 43.103 ms
Loss rate: 2.39%
```

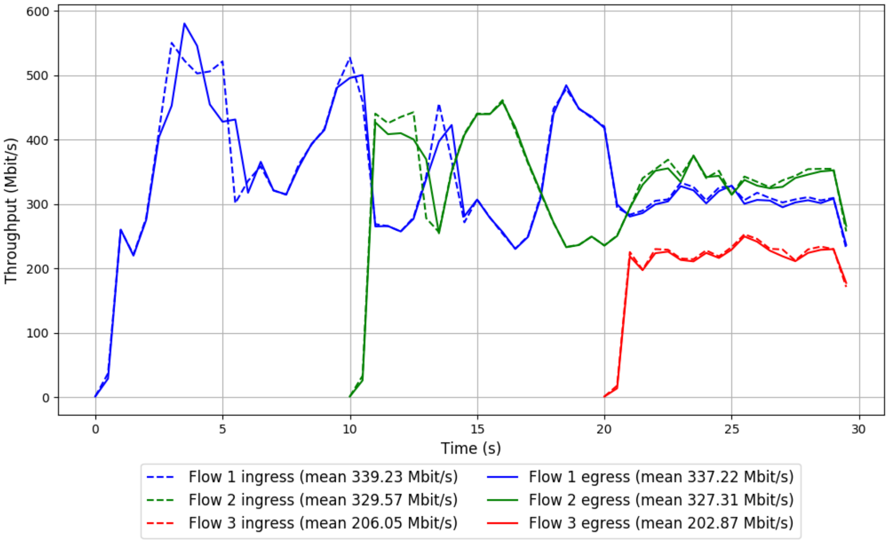
Run 4: Report of Vivace-loss — Data Link

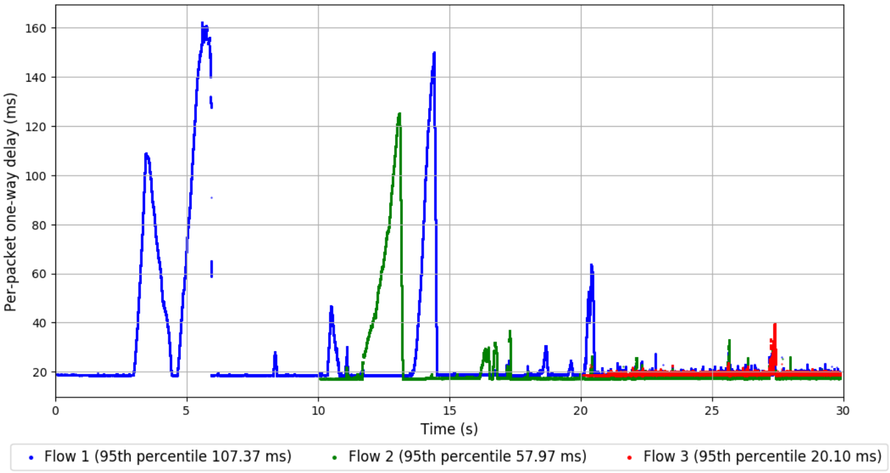




```
Run 5: Statistics of Vivace-loss

Start at: 2018-03-21 06:43:25
End at: 2018-03-21 06:43:55
Local clock offset: -0.139 ms
Remote clock offset: -6.162 ms

# Below is generated by plot.py at 2018-03-21 14:17:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 621.43 Mbit/s
95th percentile per-packet one-way delay: 86.630 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 337.22 Mbit/s
95th percentile per-packet one-way delay: 107.374 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 327.31 Mbit/s
95th percentile per-packet one-way delay: 57.974 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 202.87 Mbit/s
95th percentile per-packet one-way delay: 20.097 ms
Loss rate: 1.54%
```

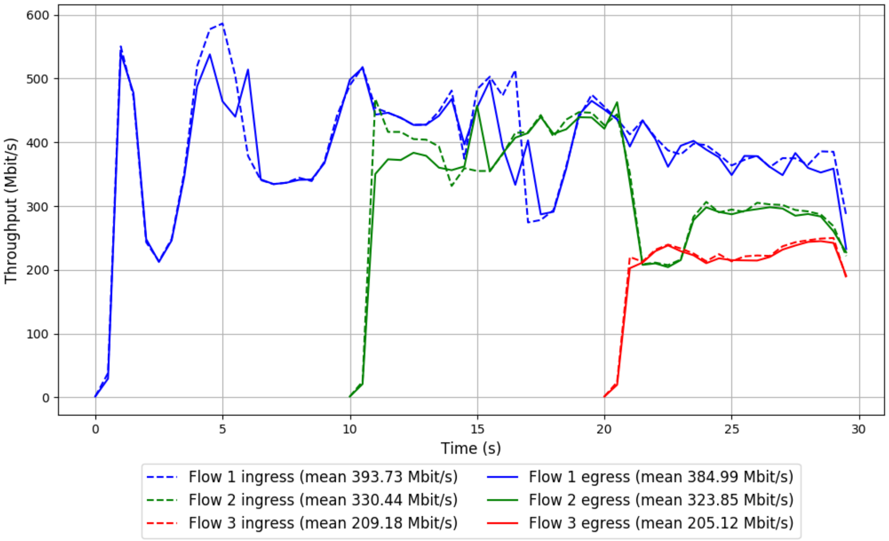
Run 5: Report of Vivace-loss — Data Link

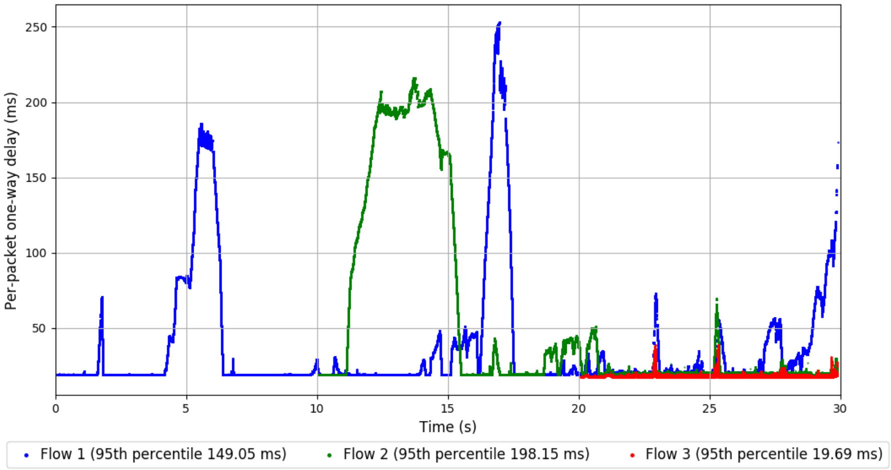




```
Run 6: Statistics of Vivace-loss

Start at: 2018-03-21 07:12:45
End at: 2018-03-21 07:13:15
Local clock offset: 4.556 ms
Remote clock offset: -6.232 ms

# Below is generated by plot.py at 2018-03-21 14:18:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 667.78 Mbit/s
95th percentile per-packet one-way delay: 188.460 ms
Loss rate: 2.09%
-- Flow 1:
Average throughput: 384.99 Mbit/s
95th percentile per-packet one-way delay: 149.047 ms
Loss rate: 2.18%
-- Flow 2:
Average throughput: 323.85 Mbit/s
95th percentile per-packet one-way delay: 198.152 ms
Loss rate: 1.99%
-- Flow 3:
Average throughput: 205.12 Mbit/s
95th percentile per-packet one-way delay: 19.694 ms
Loss rate: 1.91%
```

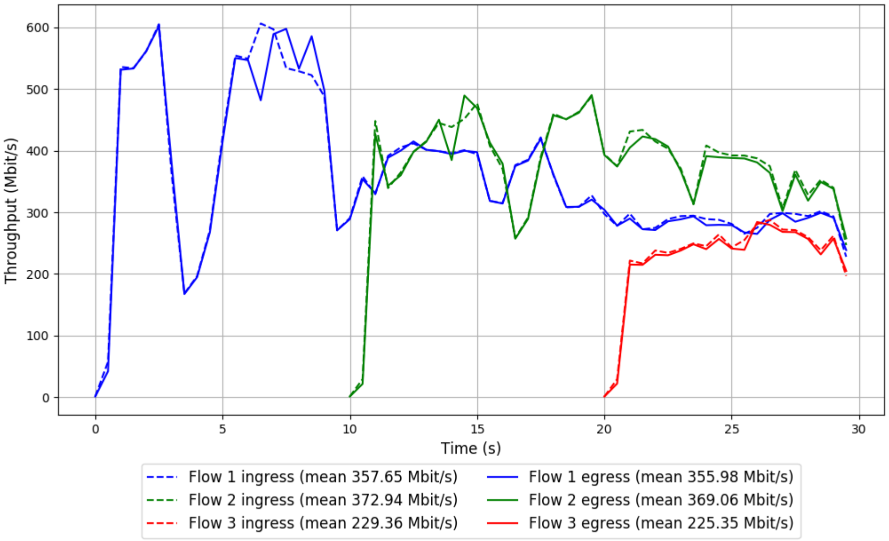
Run 6: Report of Vivace-loss — Data Link

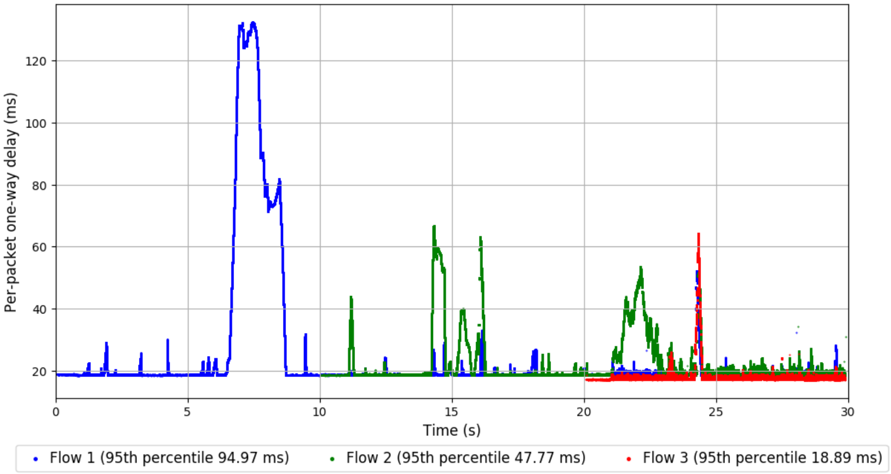




```
Run 7: Statistics of Vivace-loss

Start at: 2018-03-21 07:42:17
End at: 2018-03-21 07:42:47
Local clock offset: -0.209 ms
Remote clock offset: -5.801 ms

# Below is generated by plot.py at 2018-03-21 14:21:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 675.40 Mbit/s
95th percentile per-packet one-way delay: 66.681 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 355.98 Mbit/s
95th percentile per-packet one-way delay: 94.966 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 369.06 Mbit/s
95th percentile per-packet one-way delay: 47.765 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 225.35 Mbit/s
95th percentile per-packet one-way delay: 18.893 ms
Loss rate: 1.75%
```

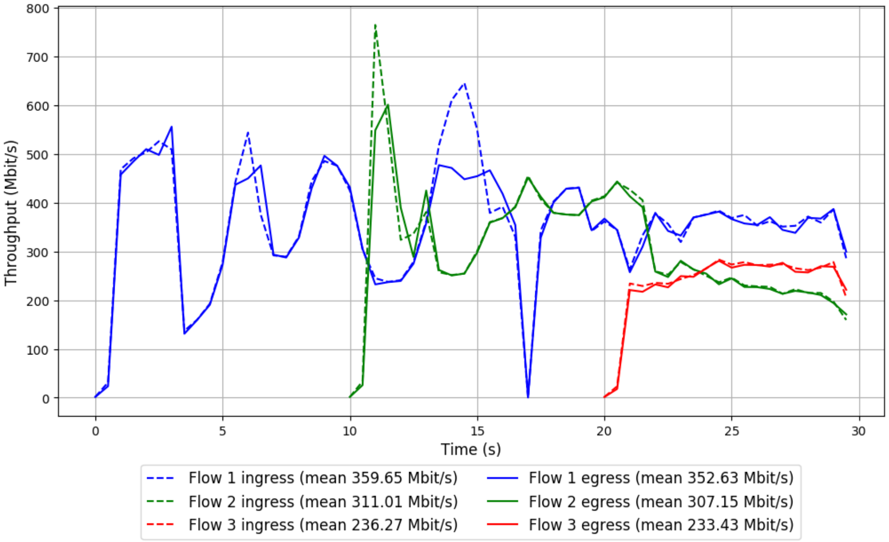
Run 7: Report of Vivace-loss — Data Link

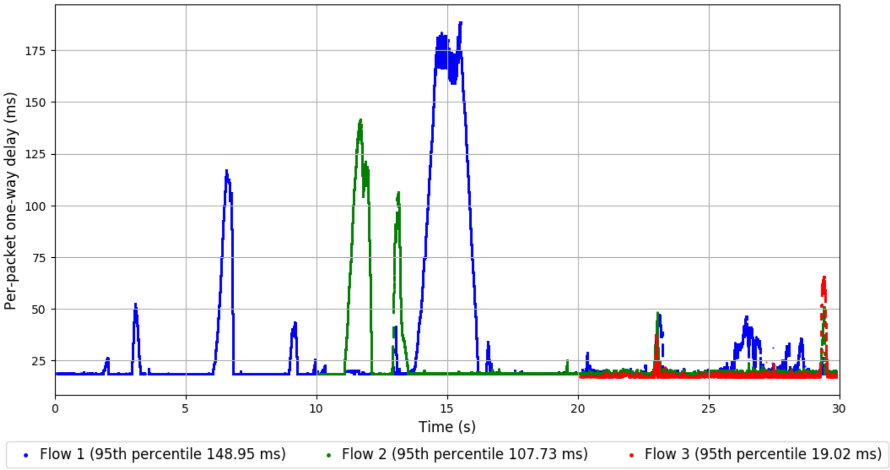




```
Run 8: Statistics of Vivace-loss

Start at: 2018-03-21 08:11:28
End at: 2018-03-21 08:11:58
Local clock offset: -0.436 ms
Remote clock offset: -6.278 ms

# Below is generated by plot.py at 2018-03-21 14:21:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 633.64 Mbit/s
95th percentile per-packet one-way delay: 112.932 ms
Loss rate: 1.64%
-- Flow 1:
Average throughput: 352.63 Mbit/s
95th percentile per-packet one-way delay: 148.954 ms
Loss rate: 1.96%
-- Flow 2:
Average throughput: 307.15 Mbit/s
95th percentile per-packet one-way delay: 107.730 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 233.43 Mbit/s
95th percentile per-packet one-way delay: 19.024 ms
Loss rate: 1.20%
```

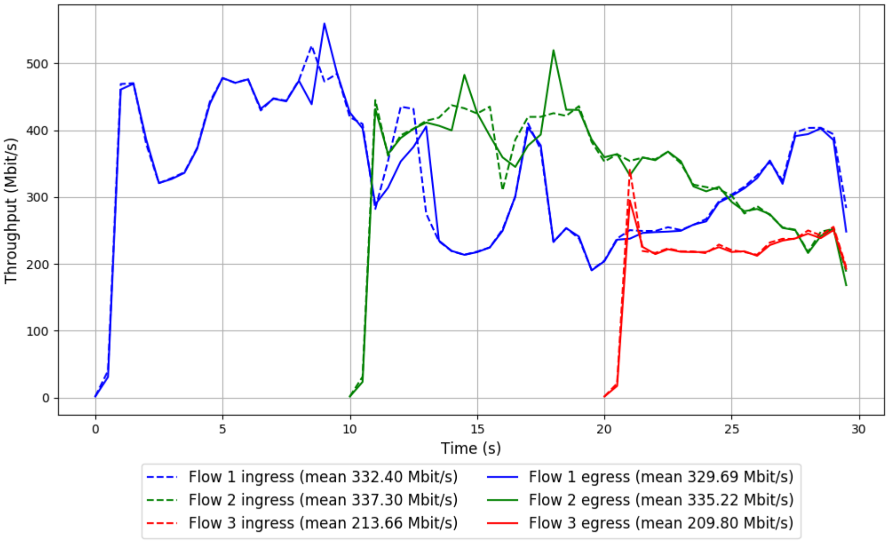
Run 8: Report of Vivace-loss — Data Link

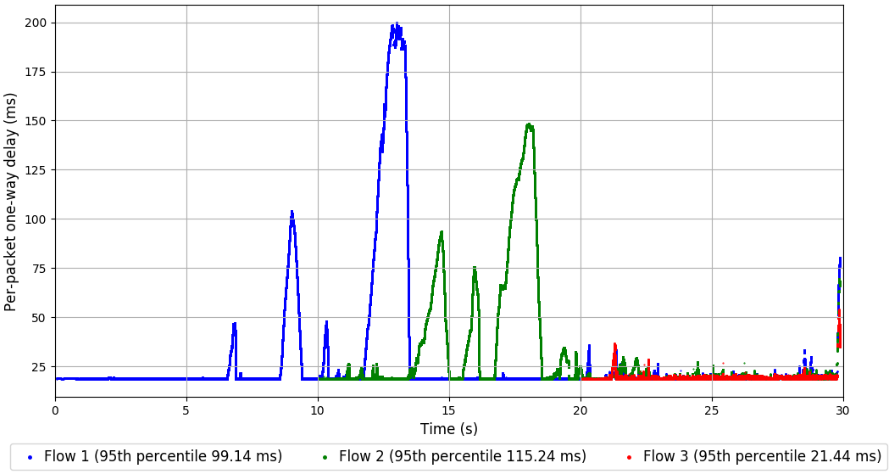




```
Run 9: Statistics of Vivace-loss

Start at: 2018-03-21 08:40:50
End at: 2018-03-21 08:41:20
Local clock offset: -0.31 ms
Remote clock offset: -5.169 ms

# Below is generated by plot.py at 2018-03-21 14:23:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 621.69 Mbit/s
95th percentile per-packet one-way delay: 97.614 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 329.69 Mbit/s
95th percentile per-packet one-way delay: 99.145 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 335.22 Mbit/s
95th percentile per-packet one-way delay: 115.240 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 209.80 Mbit/s
95th percentile per-packet one-way delay: 21.443 ms
Loss rate: 1.80%
```

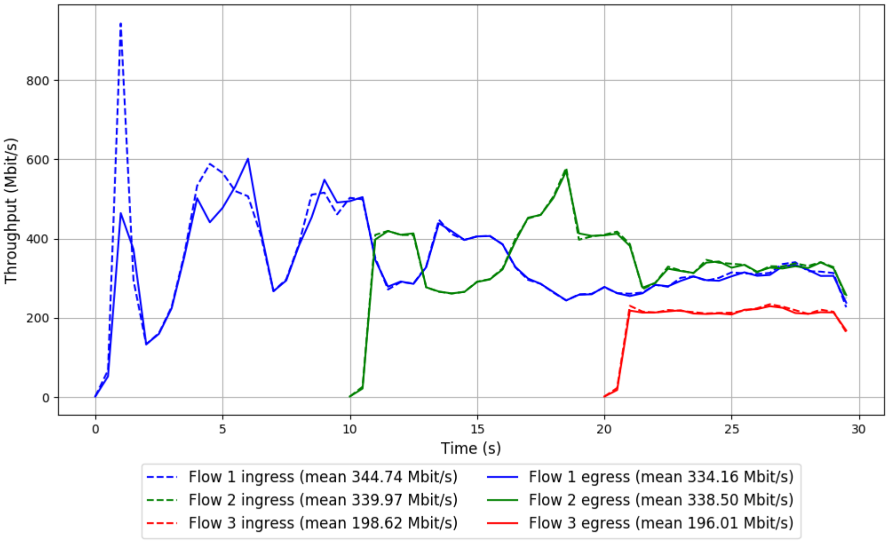
Run 9: Report of Vivace-loss — Data Link

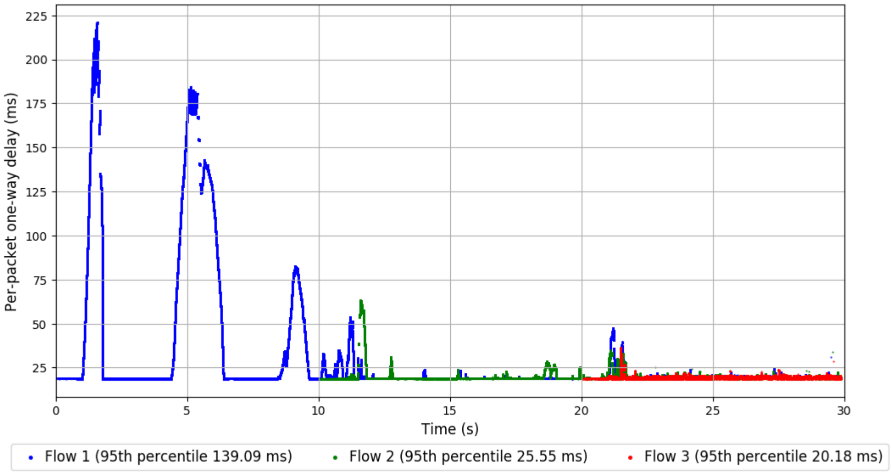




```
Run 10: Statistics of Vivace-loss

Start at: 2018-03-21 09:10:08
End at: 2018-03-21 09:10:38
Local clock offset: 0.284 ms
Remote clock offset: -5.592 ms

# Below is generated by plot.py at 2018-03-21 14:26:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 623.72 Mbit/s
95th percentile per-packet one-way delay: 100.667 ms
Loss rate: 1.95%
-- Flow 1:
Average throughput: 334.16 Mbit/s
95th percentile per-packet one-way delay: 139.089 ms
Loss rate: 3.07%
-- Flow 2:
Average throughput: 338.50 Mbit/s
95th percentile per-packet one-way delay: 25.545 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 196.01 Mbit/s
95th percentile per-packet one-way delay: 20.176 ms
Loss rate: 1.31%
```

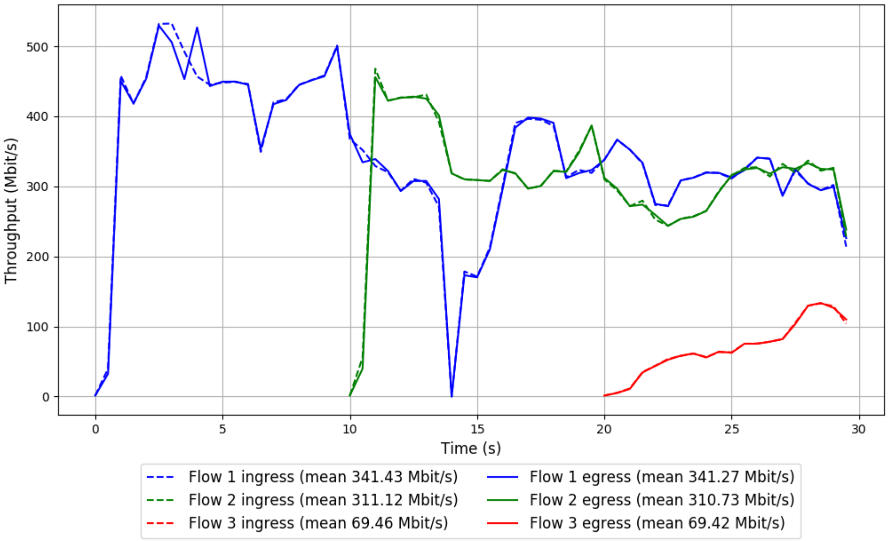
Run 10: Report of Vivace-loss — Data Link

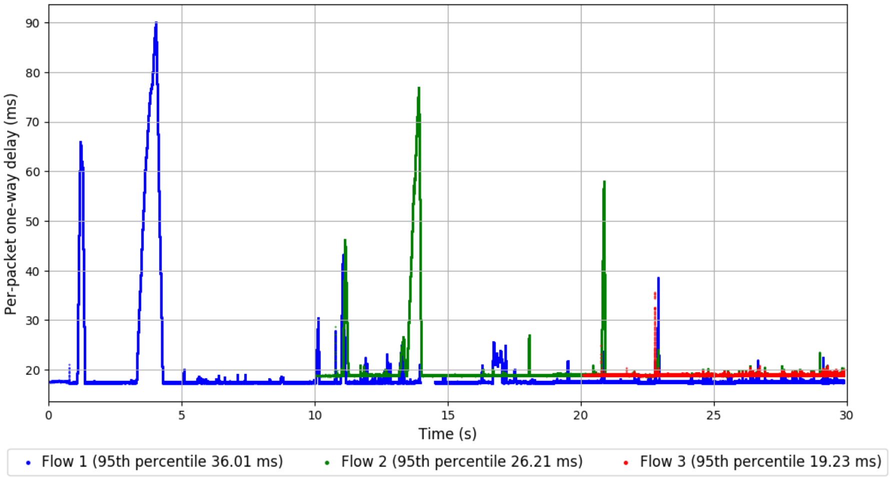




```
Run 1: Statistics of Vivace-LTE

Start at: 2018-03-21 04:44:43
End at: 2018-03-21 04:45:13
Local clock offset: 0.534 ms
Remote clock offset: -5.9 ms

# Below is generated by plot.py at 2018-03-21 14:26:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 570.72 Mbit/s
95th percentile per-packet one-way delay: 29.740 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 341.27 Mbit/s
95th percentile per-packet one-way delay: 36.008 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 310.73 Mbit/s
95th percentile per-packet one-way delay: 26.213 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 69.42 Mbit/s
95th percentile per-packet one-way delay: 19.230 ms
Loss rate: 0.06%
```

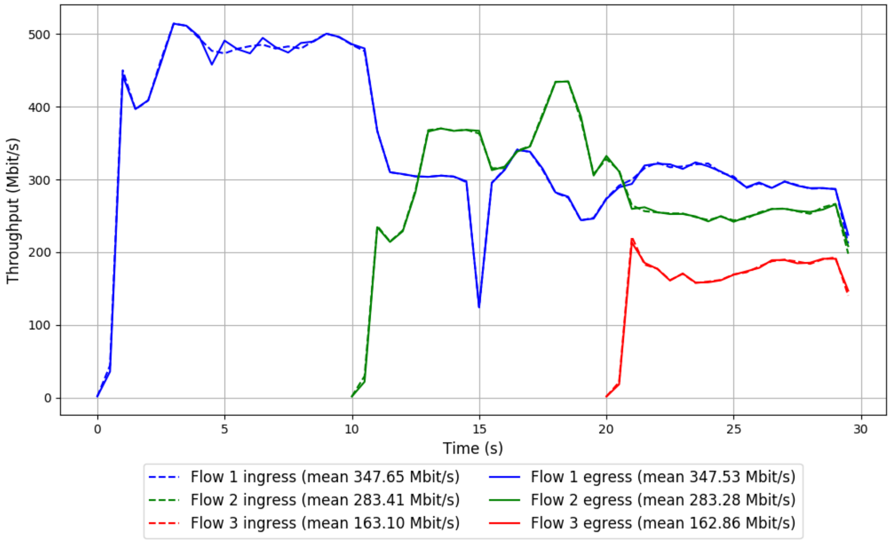
Run 1: Report of Vivace-LTE — Data Link

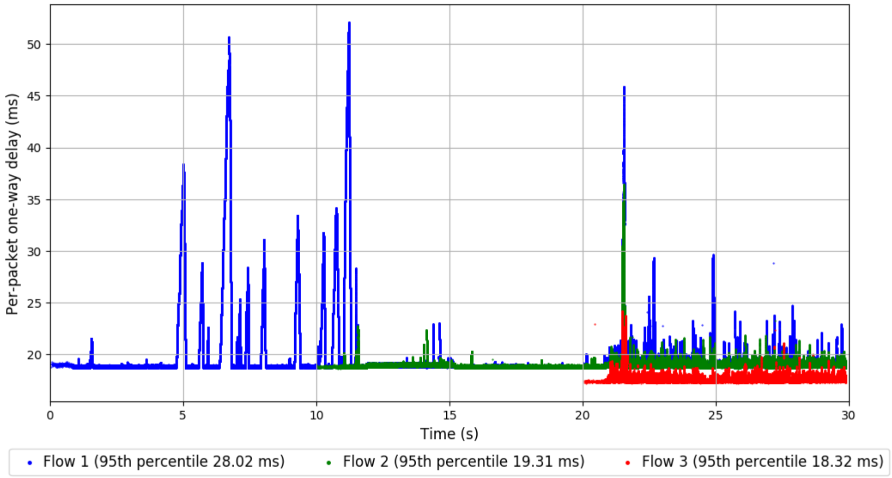




```
Run 2: Statistics of Vivace-LTE

Start at: 2018-03-21 05:13:52
End at: 2018-03-21 05:14:22
Local clock offset: -0.15 ms
Remote clock offset: -5.334 ms

# Below is generated by plot.py at 2018-03-21 14:26:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 589.47 Mbit/s
95th percentile per-packet one-way delay: 23.580 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 347.53 Mbit/s
95th percentile per-packet one-way delay: 28.015 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 283.28 Mbit/s
95th percentile per-packet one-way delay: 19.314 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 162.86 Mbit/s
95th percentile per-packet one-way delay: 18.315 ms
Loss rate: 0.15%
```

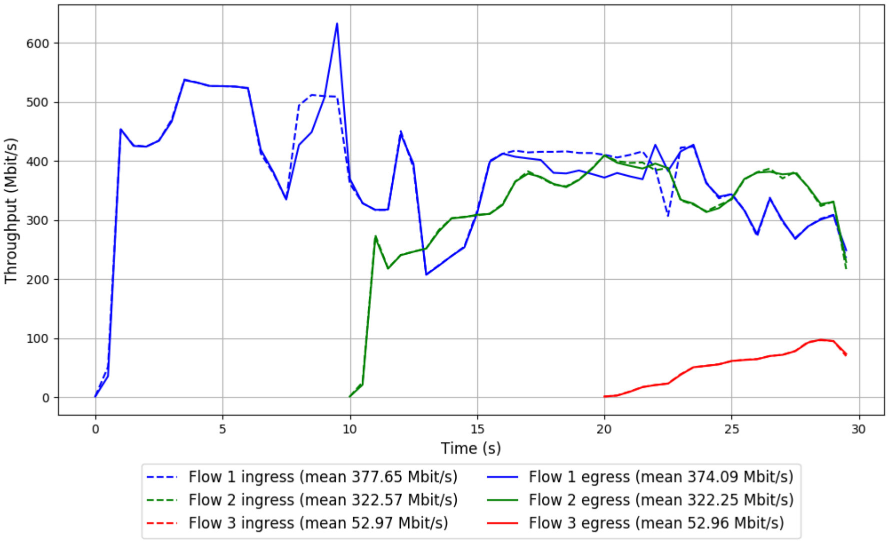
Run 2: Report of Vivace-LTE — Data Link

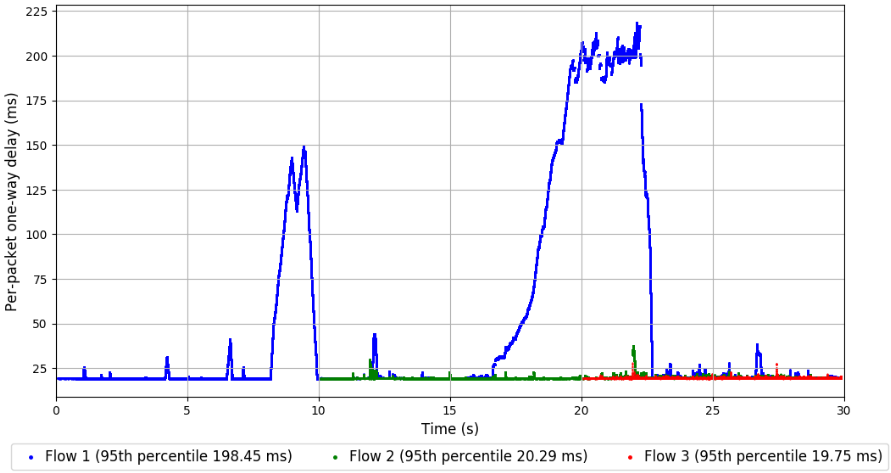




```
Run 3: Statistics of Vivace-LTE

Start at: 2018-03-21 05:43:11
End at: 2018-03-21 05:43:41
Local clock offset: 3.112 ms
Remote clock offset: -5.089 ms

# Below is generated by plot.py at 2018-03-21 14:26:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 605.78 Mbit/s
95th percentile per-packet one-way delay: 187.995 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 374.09 Mbit/s
95th percentile per-packet one-way delay: 198.454 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 322.25 Mbit/s
95th percentile per-packet one-way delay: 20.288 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 52.96 Mbit/s
95th percentile per-packet one-way delay: 19.751 ms
Loss rate: 0.03%
```

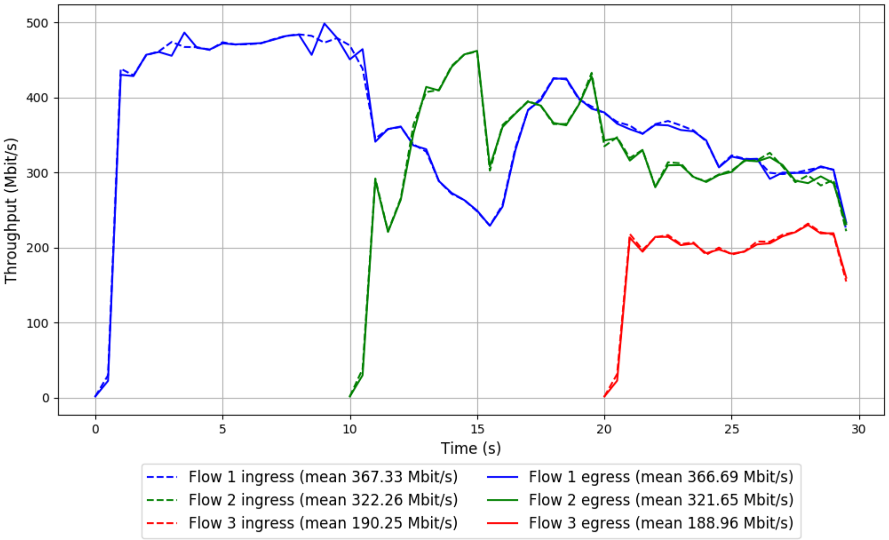
Run 3: Report of Vivace-LTE — Data Link

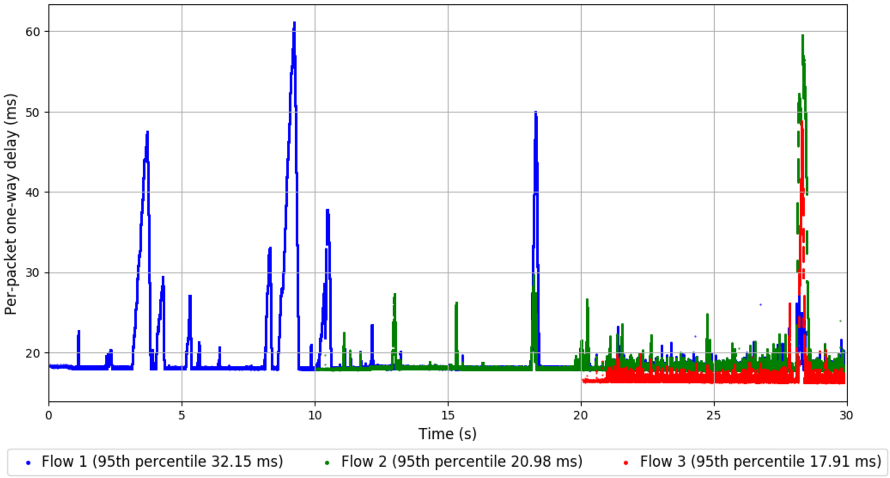




```
Run 4: Statistics of Vivace-LTE

Start at: 2018-03-21 06:12:04
End at: 2018-03-21 06:12:34
Local clock offset: 8.048 ms
Remote clock offset: -5.363 ms

# Below is generated by plot.py at 2018-03-21 14:28:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 642.77 Mbit/s
95th percentile per-packet one-way delay: 27.404 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 366.69 Mbit/s
95th percentile per-packet one-way delay: 32.150 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 321.65 Mbit/s
95th percentile per-packet one-way delay: 20.976 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 188.96 Mbit/s
95th percentile per-packet one-way delay: 17.909 ms
Loss rate: 0.68%
```

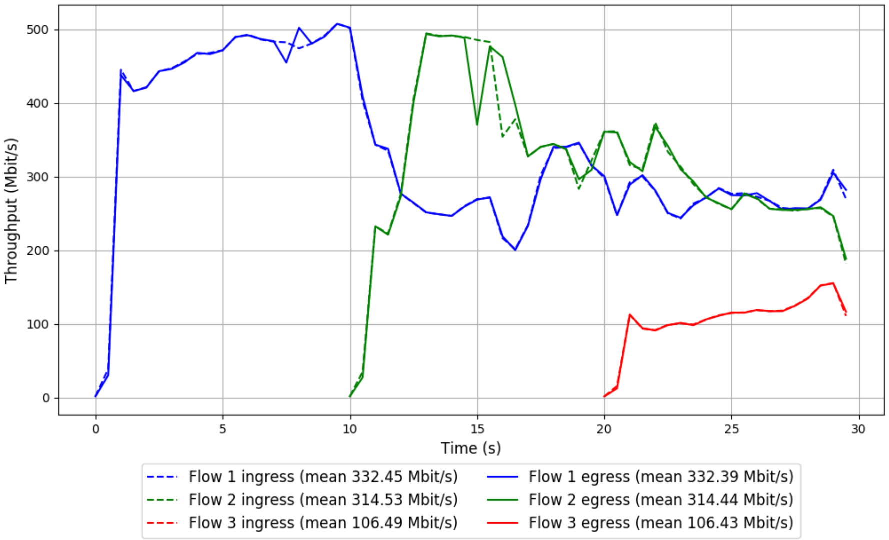
Run 4: Report of Vivace-LTE — Data Link

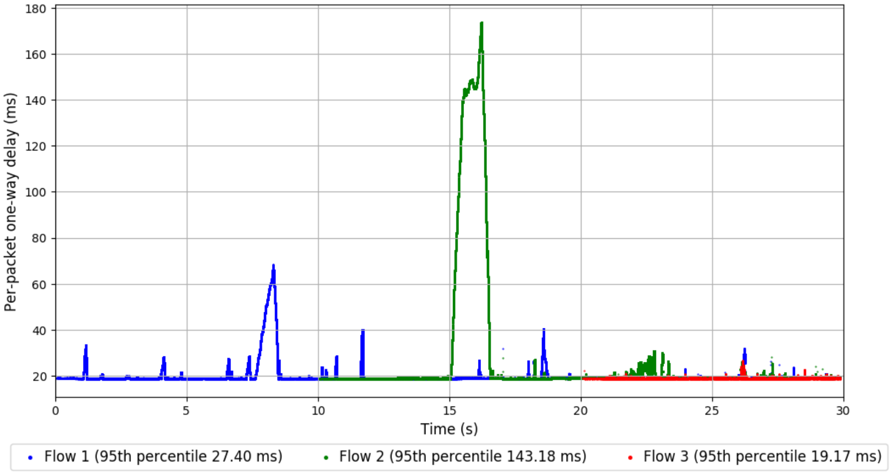




```
Run 5: Statistics of Vivace-LTE

Start at: 2018-03-21 06:41:36
End at: 2018-03-21 06:42:06
Local clock offset: 0.001 ms
Remote clock offset: -6.032 ms

# Below is generated by plot.py at 2018-03-21 14:29:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 576.41 Mbit/s
95th percentile per-packet one-way delay: 39.597 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 332.39 Mbit/s
95th percentile per-packet one-way delay: 27.399 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 314.44 Mbit/s
95th percentile per-packet one-way delay: 143.177 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 106.43 Mbit/s
95th percentile per-packet one-way delay: 19.168 ms
Loss rate: 0.06%
```

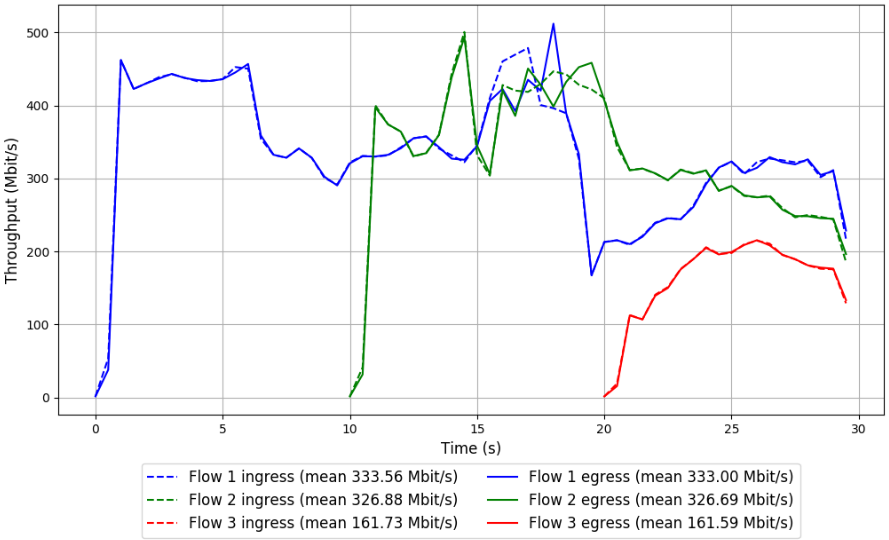
Run 5: Report of Vivace-LTE — Data Link

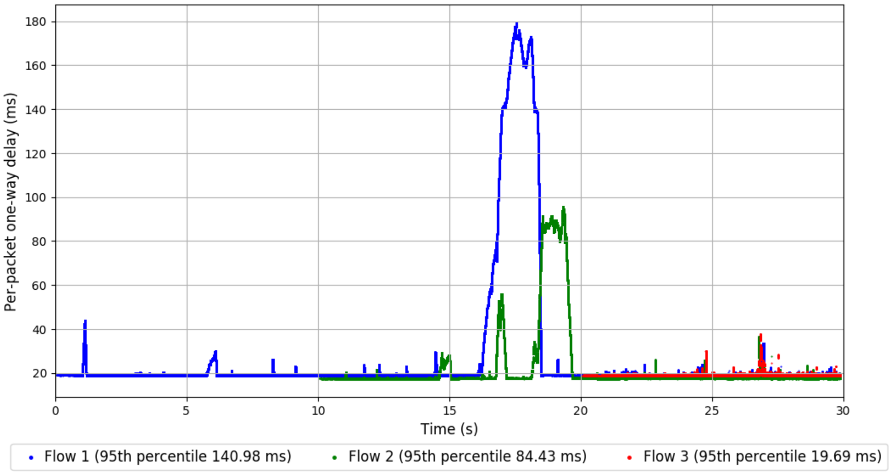




```
Run 6: Statistics of Vivace-LTE

Start at: 2018-03-21 07:10:55
End at: 2018-03-21 07:11:25
Local clock offset: 4.489 ms
Remote clock offset: -6.219 ms

# Below is generated by plot.py at 2018-03-21 14:30:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 603.17 Mbit/s
95th percentile per-packet one-way delay: 86.848 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 333.00 Mbit/s
95th percentile per-packet one-way delay: 140.977 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 326.69 Mbit/s
95th percentile per-packet one-way delay: 84.428 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 161.59 Mbit/s
95th percentile per-packet one-way delay: 19.690 ms
Loss rate: 0.09%
```

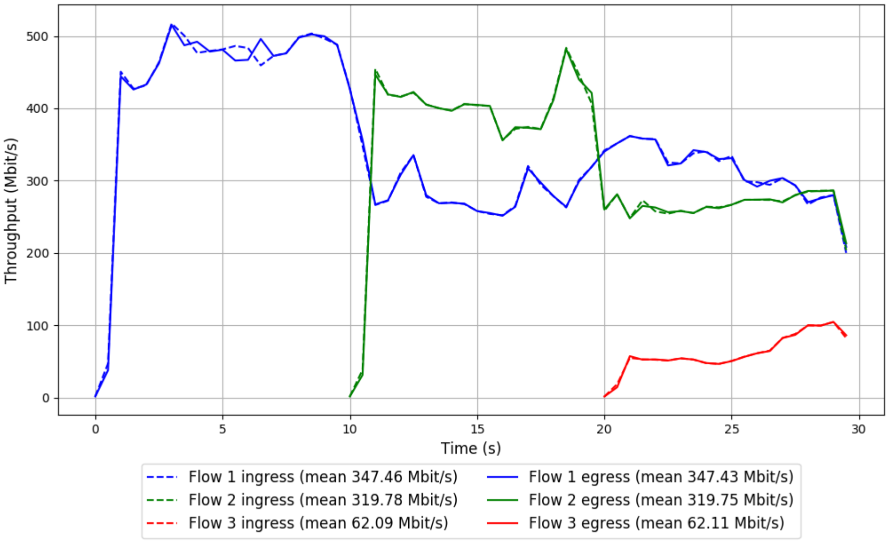
Run 6: Report of Vivace-LTE — Data Link

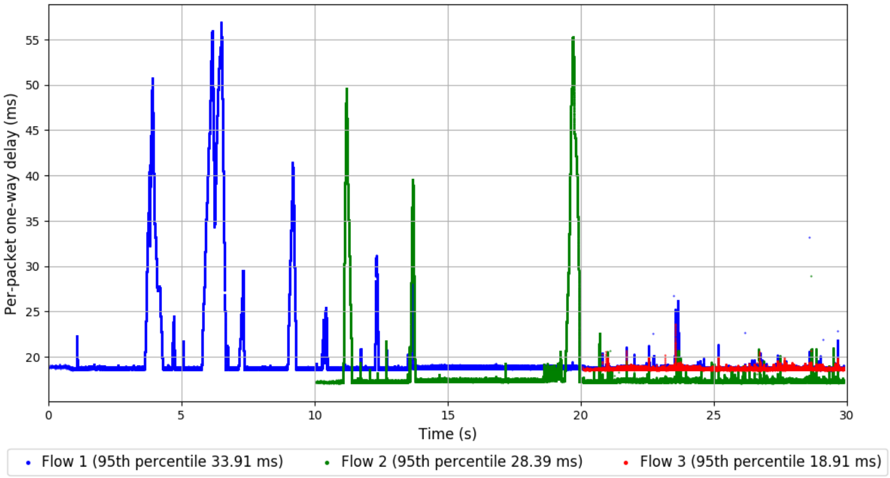




```
Run 7: Statistics of Vivace-LTE

Start at: 2018-03-21 07:40:27
End at: 2018-03-21 07:40:57
Local clock offset: -0.101 ms
Remote clock offset: -5.818 ms

# Below is generated by plot.py at 2018-03-21 14:30:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 580.46 Mbit/s
95th percentile per-packet one-way delay: 31.438 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 347.43 Mbit/s
95th percentile per-packet one-way delay: 33.908 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 319.75 Mbit/s
95th percentile per-packet one-way delay: 28.394 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 62.11 Mbit/s
95th percentile per-packet one-way delay: 18.906 ms
Loss rate: 0.01%
```

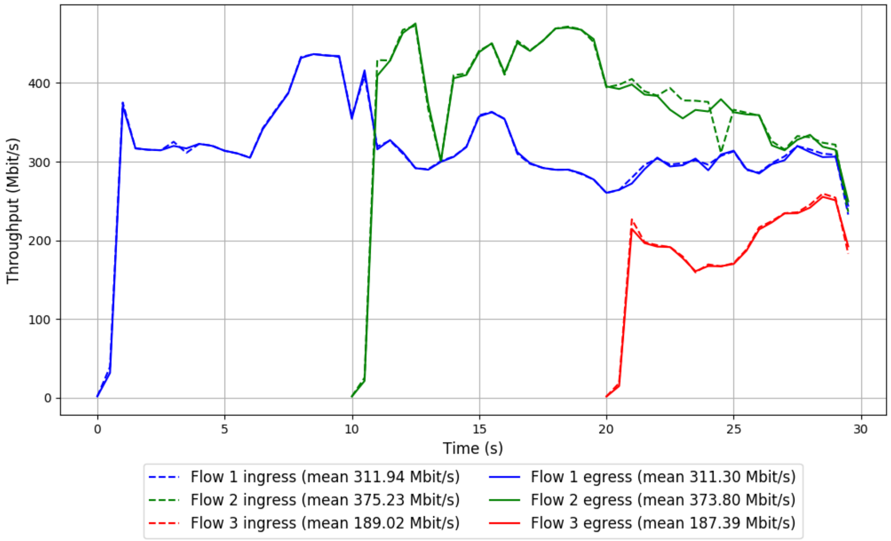
Run 7: Report of Vivace-LTE — Data Link

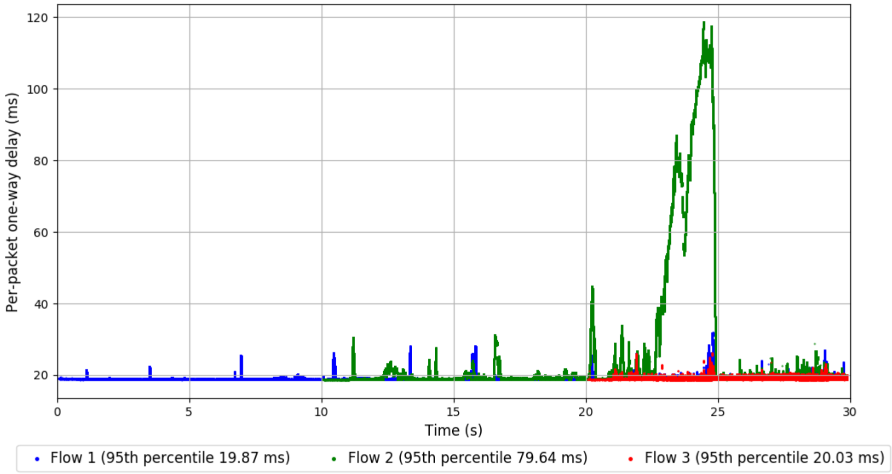




```
Run 8: Statistics of Vivace-LTE

Start at: 2018-03-21 08:09:36
End at: 2018-03-21 08:10:06
Local clock offset: -0.387 ms
Remote clock offset: -6.243 ms

# Below is generated by plot.py at 2018-03-21 14:31:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 621.50 Mbit/s
95th percentile per-packet one-way delay: 29.054 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 311.30 Mbit/s
95th percentile per-packet one-way delay: 19.874 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 373.80 Mbit/s
95th percentile per-packet one-way delay: 79.637 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 187.39 Mbit/s
95th percentile per-packet one-way delay: 20.028 ms
Loss rate: 0.86%
```

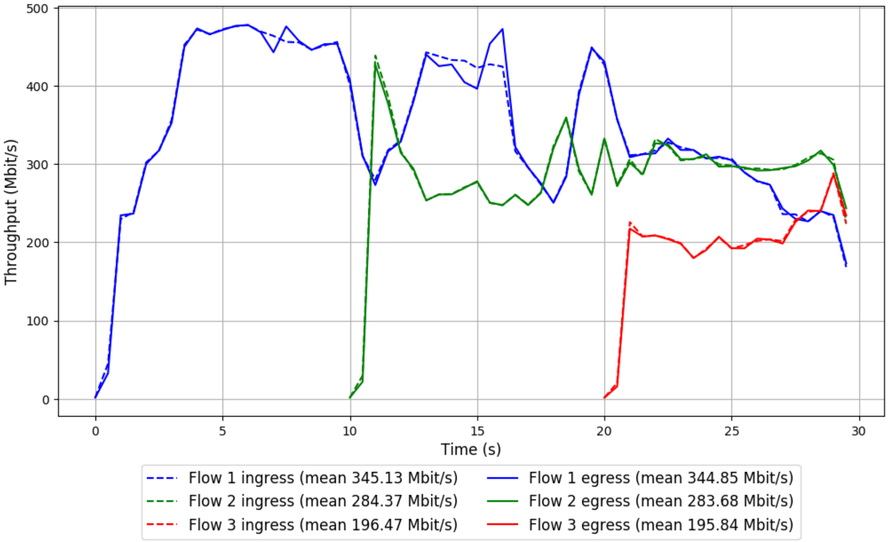
Run 8: Report of Vivace-LTE — Data Link

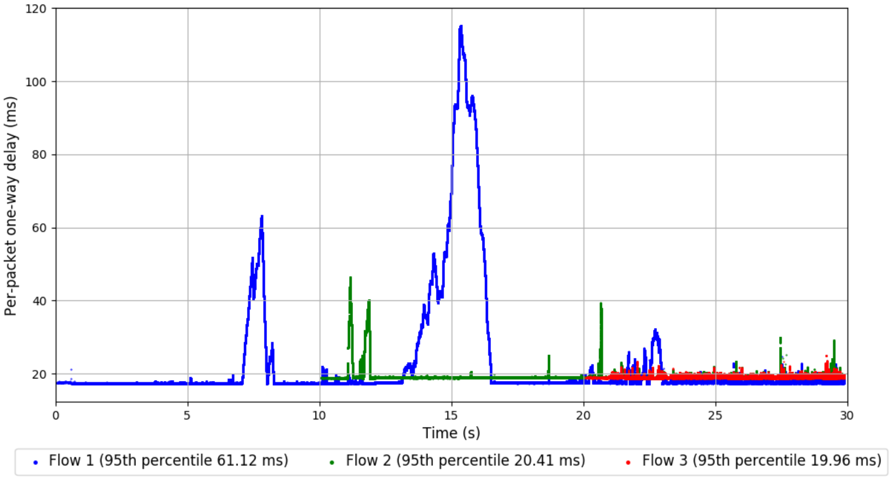




```
Run 9: Statistics of Vivace-LTE

Start at: 2018-03-21 08:39:00
End at: 2018-03-21 08:39:30
Local clock offset: -0.42 ms
Remote clock offset: -5.312 ms

# Below is generated by plot.py at 2018-03-21 14:31:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 597.89 Mbit/s
95th percentile per-packet one-way delay: 47.410 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 344.85 Mbit/s
95th percentile per-packet one-way delay: 61.116 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 283.68 Mbit/s
95th percentile per-packet one-way delay: 20.408 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 195.84 Mbit/s
95th percentile per-packet one-way delay: 19.962 ms
Loss rate: 0.32%
```

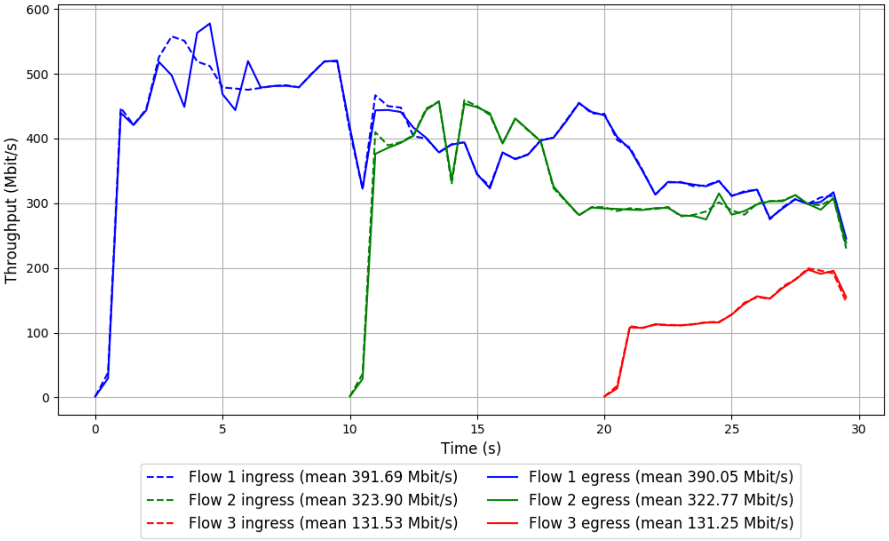
Run 9: Report of Vivace-LTE — Data Link



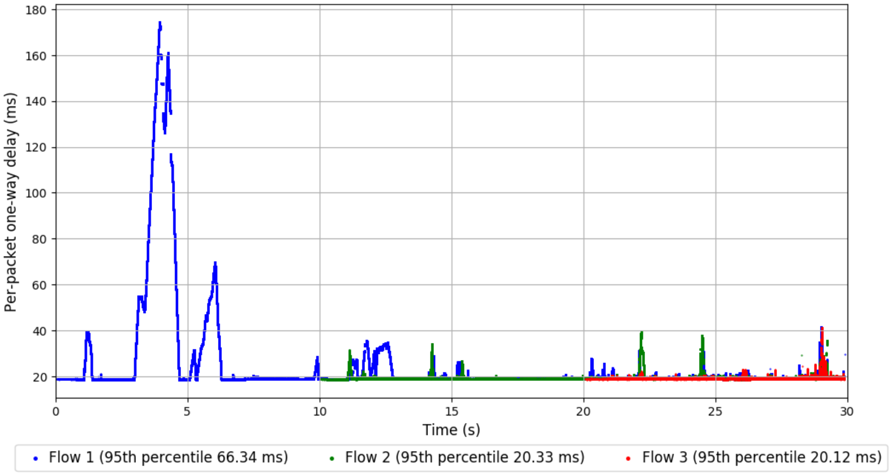


```
Run 10: Statistics of Vivace-LTE

Start at: 2018-03-21 09:08:16
End at: 2018-03-21 09:08:46
Local clock offset: 0.147 ms
Remote clock offset: -5.476 ms

# Below is generated by plot.py at 2018-03-21 14:32:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 647.79 Mbit/s
95th percentile per-packet one-way delay: 46.130 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 390.05 Mbit/s
95th percentile per-packet one-way delay: 66.339 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 322.77 Mbit/s
95th percentile per-packet one-way delay: 20.331 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 131.25 Mbit/s
95th percentile per-packet one-way delay: 20.116 ms
Loss rate: 0.23%
```

Run 10: Report of Vivace-LTE — Data Link



Throughput (Mbit/s)
600
500
400
300
200
100
0
0
5
10
15
20
25
30
Time (s)
Flow 1 ingress (mean 391.69 Mbit/s)
Flow 2 ingress (mean 323.90 Mbit/s)
Flow 3 ingress (mean 131.53 Mbit/s)
Flow 1 egress (mean 390.05 Mbit/s)
Flow 2 egress (mean 322.77 Mbit/s)
Flow 3 egress (mean 131.25 Mbit/s)



Per-packet one-way delay (ms)
180
160
140
120
100
80
60
40
20
0
5
10
15
20
25
30
Time (s)
Flow 1 (95th percentile 66.34 ms)
Flow 2 (95th percentile 20.33 ms)
Flow 3 (95th percentile 20.12 ms)