Pantheon Report

Generated at 2018-06-02 04:15:06 (UTC).

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

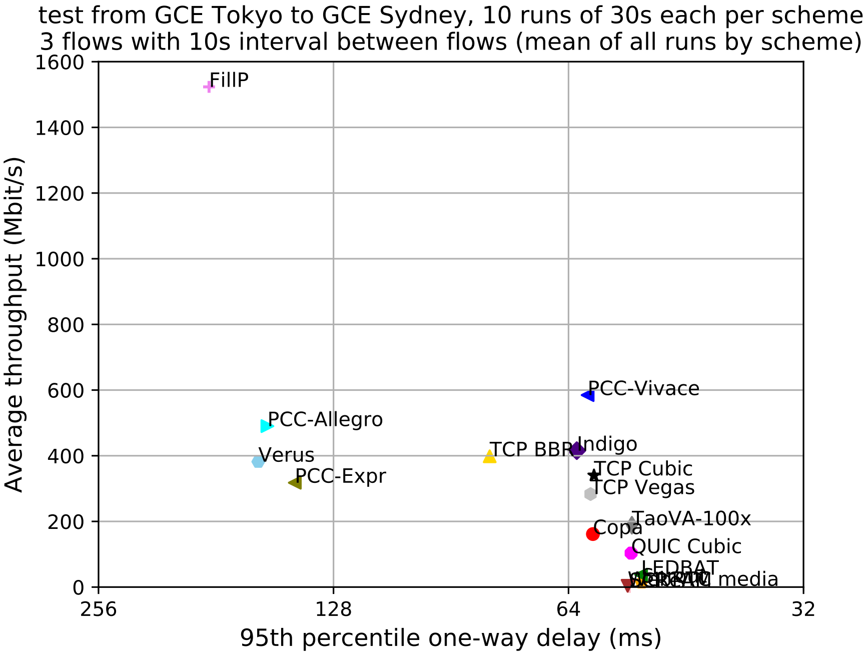
Repeated the test of 16 congestion control schemes 10 times.

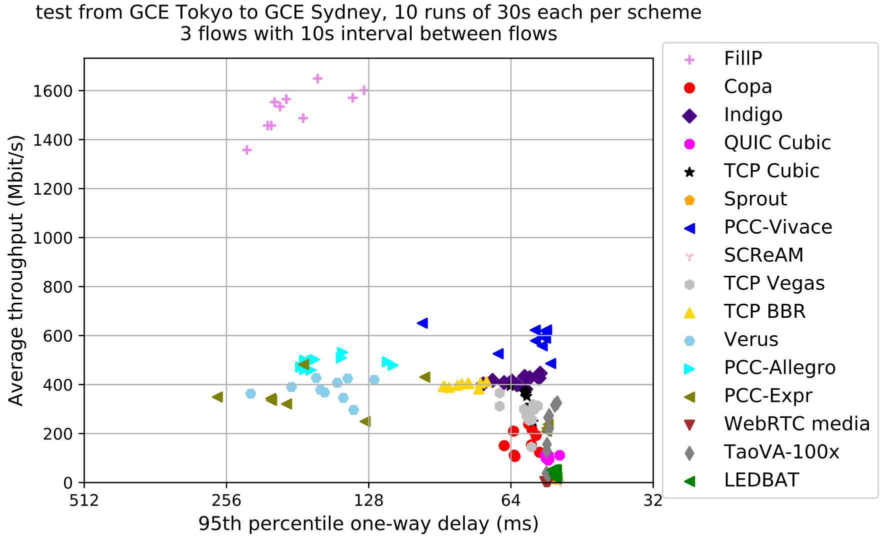
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

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

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

```
Git summary:
branch: master @ 227fdf9a3757f17b88537cceed5743a33037a3d2
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
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/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
 M src/ScreamClient
 M src/ScreamServer
third_party/sprout @ c838669682f0c19f6baf92afc9a596a406d48c1f
 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 @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

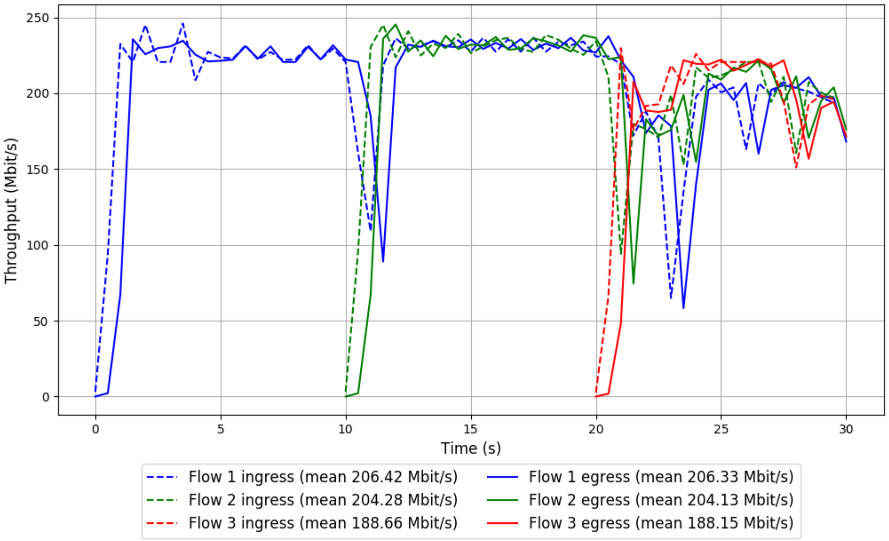

test from GCE Tokyo to GCE Sydney, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)
Average throughput (Mbit/s)
95th percentile one-way delay (ms)
0
200
400
600
800
1000
1200
1400
1600
256
128
64
32
FillP
PCC-Allegro
Verus
PCC-Expr
TCP BBR
Indigo
PCC-Vivace
TCP Cubic
TCP Vegas
TaoVA-100x
Copa
QUIC Cubic
LEDBAT
WebRTC media

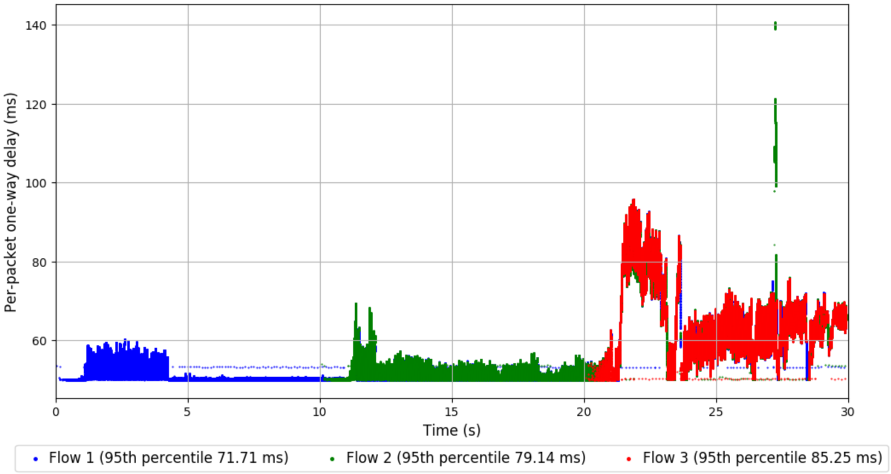

test from GCE Tokyo to GCE Sydney, 10 runs of 30s each per scheme
3 flows with 10s interval between flows
Average throughput (Mbit/s)
95th percentile one-way delay (ms)
0
200
400
600
800
1000
1200
1400
1600
512
256
128
64
32
FillP
Copa
Indigo
QUIC Cubic
TCP Cubic
Sprout
PCC-Vivace
SCReAM
TCP Vegas
TCP BBR
Verus
PCC-Allegro
PCC-Expr
WebRTC media
TaoVA-100x
LEDBAT

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	207.24	198.09	180.39	78.04	81.07	83.39	0.40	0.60	1.33
Copa	10	80.94	89.82	74.61	58.25	57.36	62.91	0.64	0.52	1.06
TCP Cubic	10	195.27	180.73	75.08	59.30	58.71	57.15	0.30	0.52	2.51
FillP	10	800.68	763.47	655.42	176.85	179.74	164.74	2.90	3.62	4.52
Indigo	10	226.40	210.83	149.99	61.18	62.64	64.25	0.33	0.52	1.24
LEDBAT	10	23.21	17.20	9.68	51.59	51.79	51.62	0.60	0.88	1.85
PCC-Allegro	10	460.44	30.37	29.56	155.46	155.84	146.31	1.26	1.69	1.85
PCC-Expr	10	174.73	170.76	90.71	109.92	122.26	86.52	1.78	3.87	3.15
QUIC Cubic	10	64.98	45.47	24.48	52.47	52.20	51.93	0.47	1.02	2.71
SCReAM	10	0.22	0.21	0.22	52.07	52.02	52.36	0.33	0.62	1.09
Sprout	10	7.05	6.78	6.57	51.75	52.69	51.87	0.38	0.52	1.22
TaoVA-100x	10	60.29	126.80	136.69	53.12	52.64	52.69	0.30	0.36	0.87
TCP Vegas	10	172.84	119.94	93.52	59.30	58.07	58.76	0.24	0.48	1.24
Verus	10	252.92	145.08	99.73	162.32	145.60	164.79	1.19	1.21	3.72
PCC-Vivace	10	337.70	315.30	115.29	58.29	66.41	53.36	0.34	0.55	1.59
WebRTC media	10	1.99	1.32	0.56	52.73	52.99	52.55	0.49	0.59	1.59

```
Run 1: Statistics of TCP BBR

Start at: 2018-06-01 22:16:59
End at: 2018-06-01 22:17:29
Local clock offset: 0.476 ms
Remote clock offset: -0.074 ms

# Below is generated by plot.py at 2018-06-02 02:12:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 404.06 Mbit/s
95th percentile per-packet one-way delay: 79.033 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 206.33 Mbit/s
95th percentile per-packet one-way delay: 71.707 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 204.13 Mbit/s
95th percentile per-packet one-way delay: 79.135 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 188.15 Mbit/s
95th percentile per-packet one-way delay: 85.246 ms
Loss rate: 1.31%
```

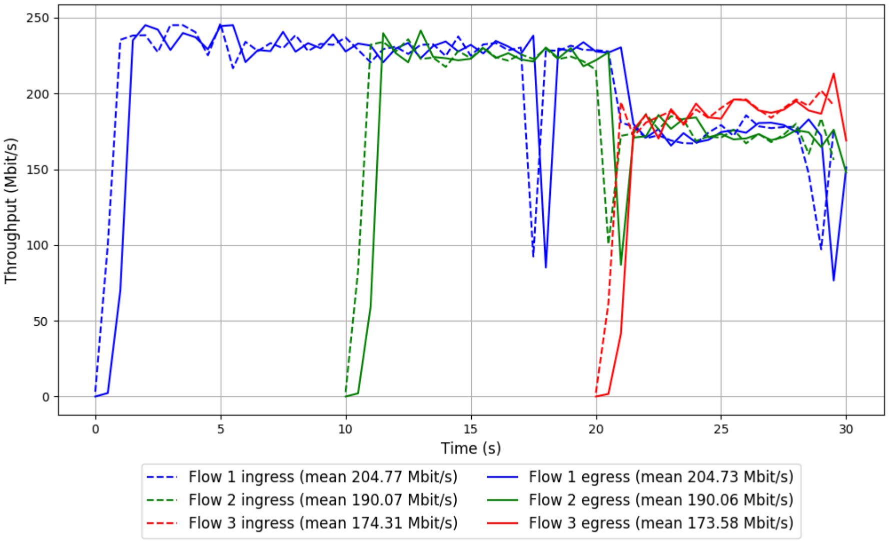
Run 1: Report of TCP BBR — Data Link

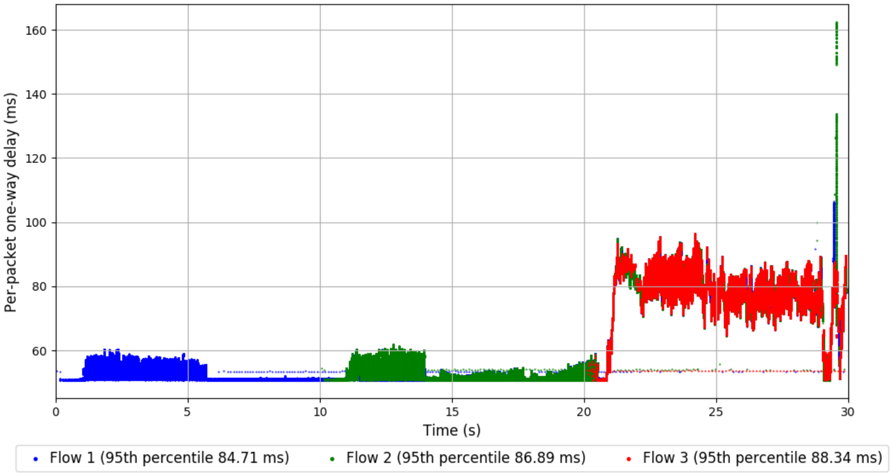




```
Run 2: Statistics of TCP BBR

Start at: 2018-06-01 22:40:09
End at: 2018-06-01 22:40:40
Local clock offset: 0.632 ms
Remote clock offset: -0.158 ms

# Below is generated by plot.py at 2018-06-02 02:12:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 388.26 Mbit/s
95th percentile per-packet one-way delay: 86.583 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 204.73 Mbit/s
95th percentile per-packet one-way delay: 84.707 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 190.06 Mbit/s
95th percentile per-packet one-way delay: 86.885 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 173.58 Mbit/s
95th percentile per-packet one-way delay: 88.344 ms
Loss rate: 1.41%
```

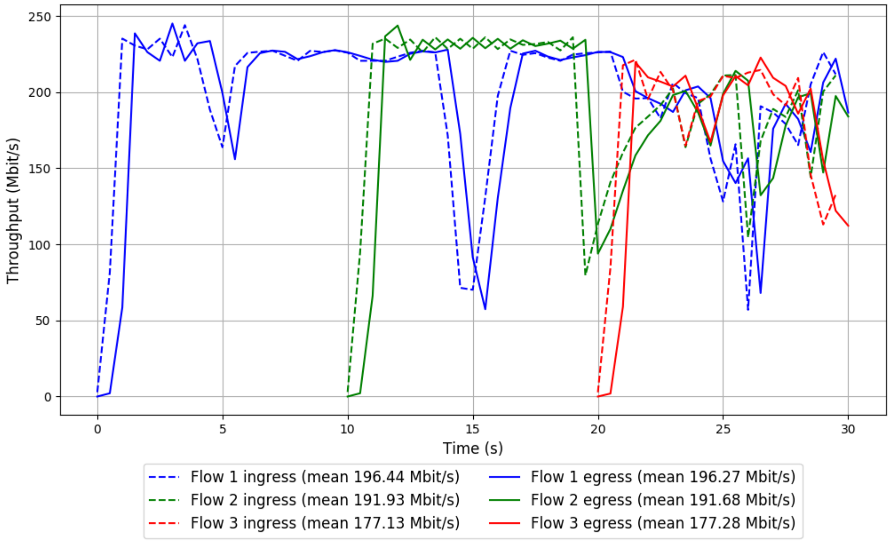
Run 2: Report of TCP BBR — Data Link

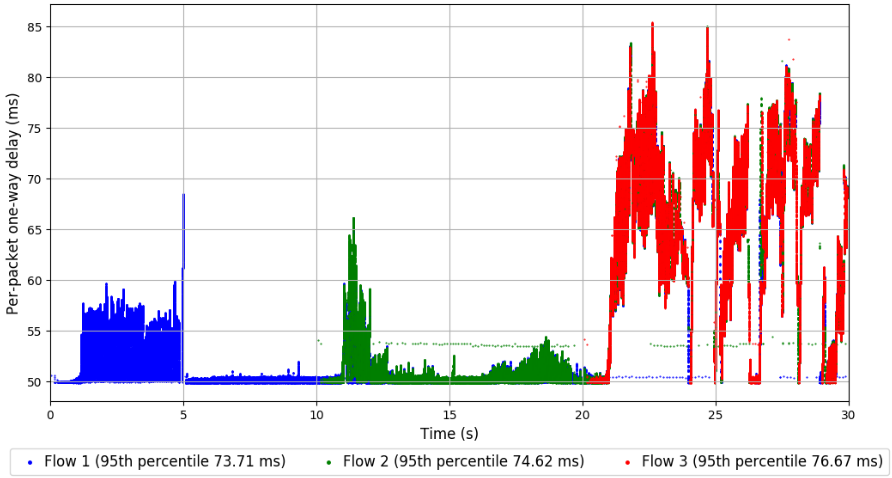




```
Run 3: Statistics of TCP BBR

Start at: 2018-06-01 23:03:12
End at: 2018-06-01 23:03:42
Local clock offset: 0.788 ms
Remote clock offset: 0.221 ms

# Below is generated by plot.py at 2018-06-02 02:12:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 382.20 Mbit/s
95th percentile per-packet one-way delay: 74.841 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 196.27 Mbit/s
95th percentile per-packet one-way delay: 73.706 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 191.68 Mbit/s
95th percentile per-packet one-way delay: 74.616 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 177.28 Mbit/s
95th percentile per-packet one-way delay: 76.675 ms
Loss rate: 1.01%
```

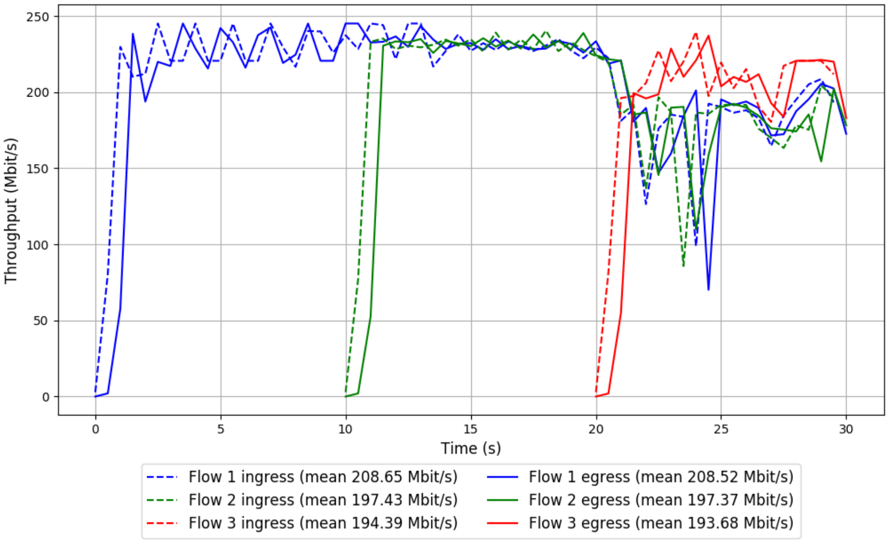
Run 3: Report of TCP BBR — Data Link

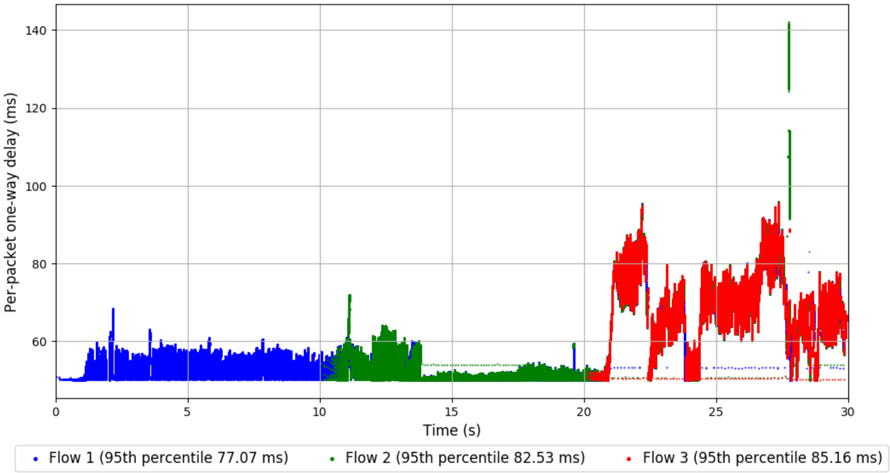




```
Run 4: Statistics of TCP BBR

Start at: 2018-06-01 23:26:20
End at: 2018-06-01 23:26:50
Local clock offset: 0.331 ms
Remote clock offset: -0.259 ms

# Below is generated by plot.py at 2018-06-02 02:12:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 403.59 Mbit/s
95th percentile per-packet one-way delay: 81.356 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 208.52 Mbit/s
95th percentile per-packet one-way delay: 77.066 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 197.37 Mbit/s
95th percentile per-packet one-way delay: 82.528 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 193.68 Mbit/s
95th percentile per-packet one-way delay: 85.164 ms
Loss rate: 1.38%
```

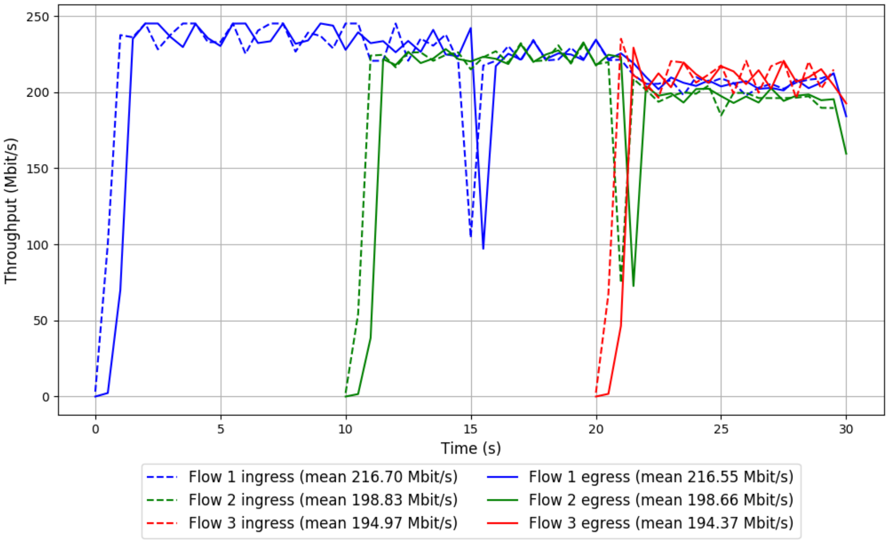
Run 4: Report of TCP BBR — Data Link

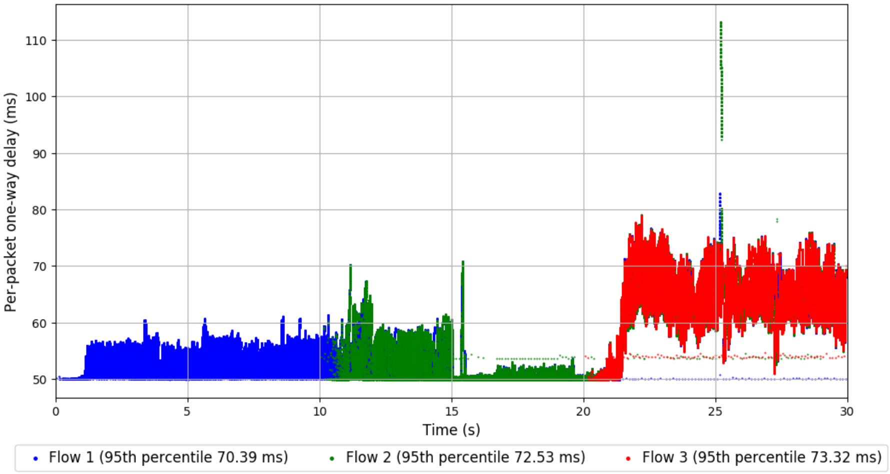




```
Run 5: Statistics of TCP BBR

Start at: 2018-06-01 23:49:08
End at: 2018-06-01 23:49:38
Local clock offset: -0.034 ms
Remote clock offset: -0.161 ms

# Below is generated by plot.py at 2018-06-02 02:12:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 412.75 Mbit/s
95th percentile per-packet one-way delay: 72.068 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 216.55 Mbit/s
95th percentile per-packet one-way delay: 70.389 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 198.66 Mbit/s
95th percentile per-packet one-way delay: 72.534 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 194.37 Mbit/s
95th percentile per-packet one-way delay: 73.322 ms
Loss rate: 1.28%
```

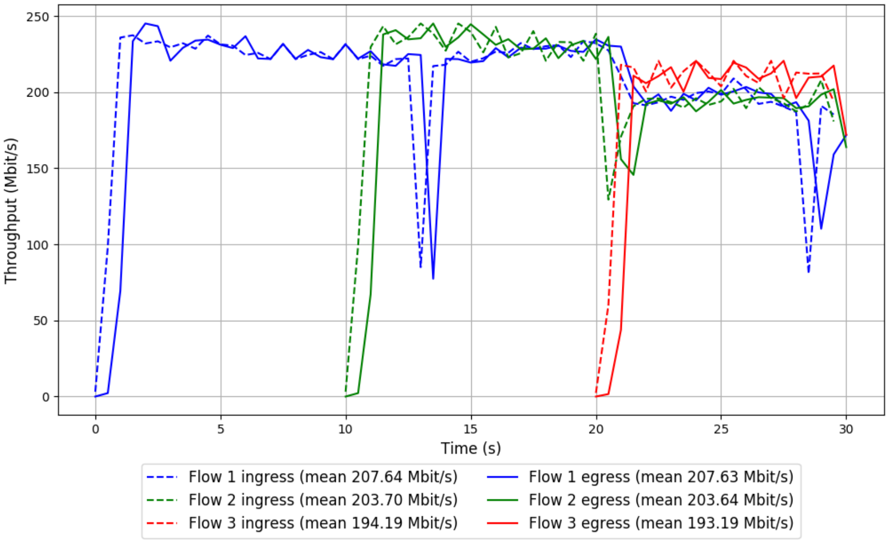
Run 5: Report of TCP BBR — Data Link

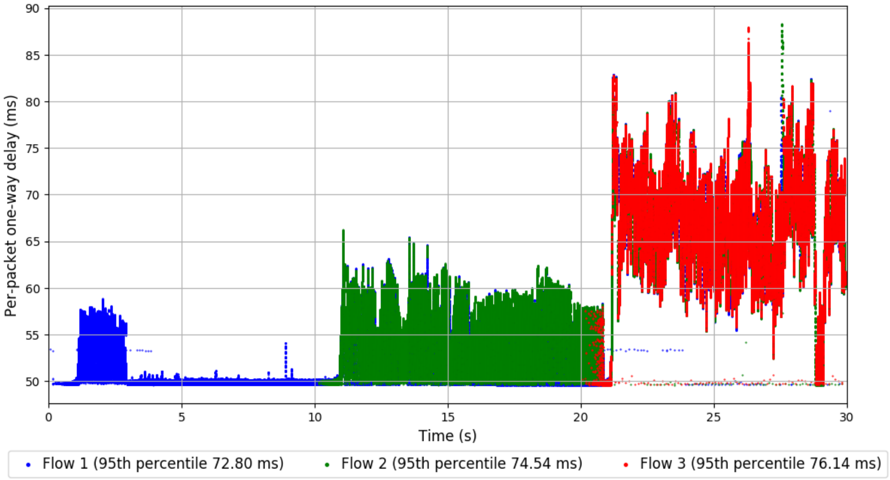




```
Run 6: Statistics of TCP BBR

Start at: 2018-06-02 00:12:04
End at: 2018-06-02 00:12:34
Local clock offset: -0.264 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2018-06-02 02:12:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 406.84 Mbit/s
95th percentile per-packet one-way delay: 74.275 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 207.63 Mbit/s
95th percentile per-packet one-way delay: 72.801 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 203.64 Mbit/s
95th percentile per-packet one-way delay: 74.538 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 193.19 Mbit/s
95th percentile per-packet one-way delay: 76.135 ms
Loss rate: 1.20%
```

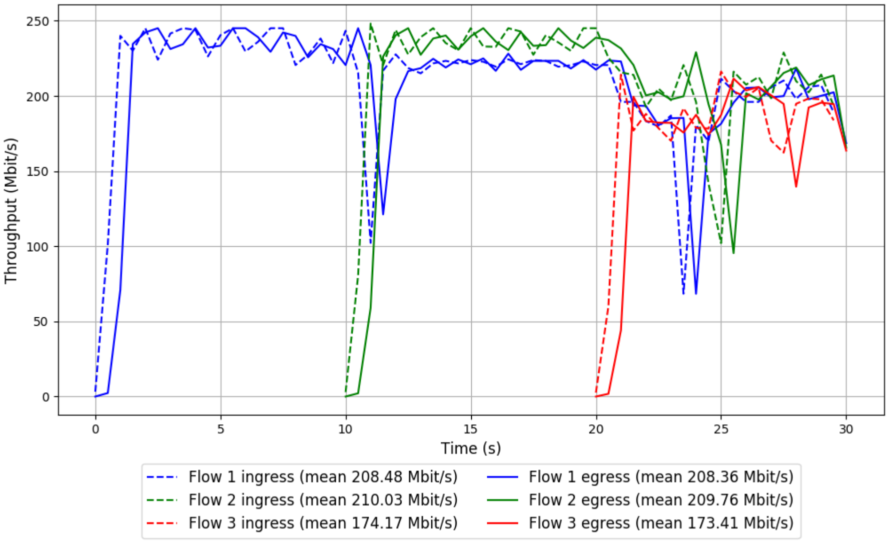
Run 6: Report of TCP BBR — Data Link

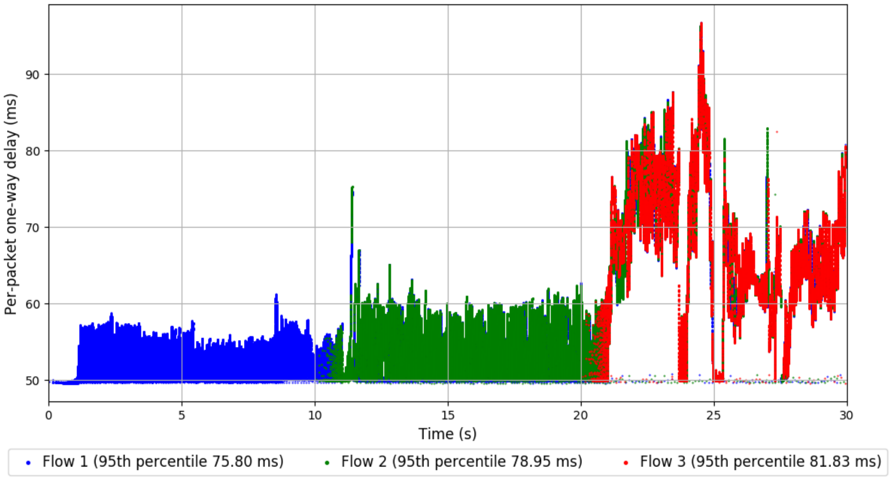




```
Run 7: Statistics of TCP BBR

Start at: 2018-06-02 00:35:22
End at: 2018-06-02 00:35:52
Local clock offset: 0.029 ms
Remote clock offset: 0.226 ms

# Below is generated by plot.py at 2018-06-02 02:12:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 405.08 Mbit/s
95th percentile per-packet one-way delay: 78.625 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 208.36 Mbit/s
95th percentile per-packet one-way delay: 75.804 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 209.76 Mbit/s
95th percentile per-packet one-way delay: 78.955 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 173.41 Mbit/s
95th percentile per-packet one-way delay: 81.825 ms
Loss rate: 1.48%
```

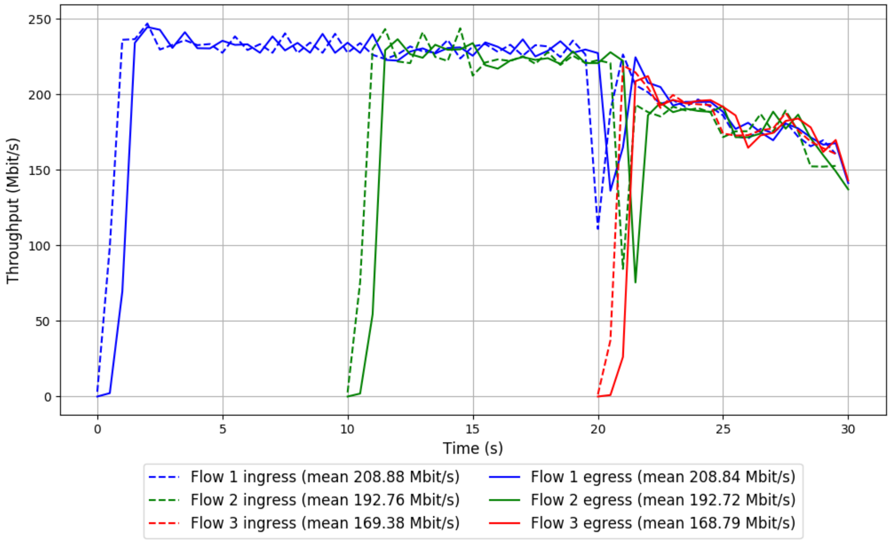
Run 7: Report of TCP BBR — Data Link

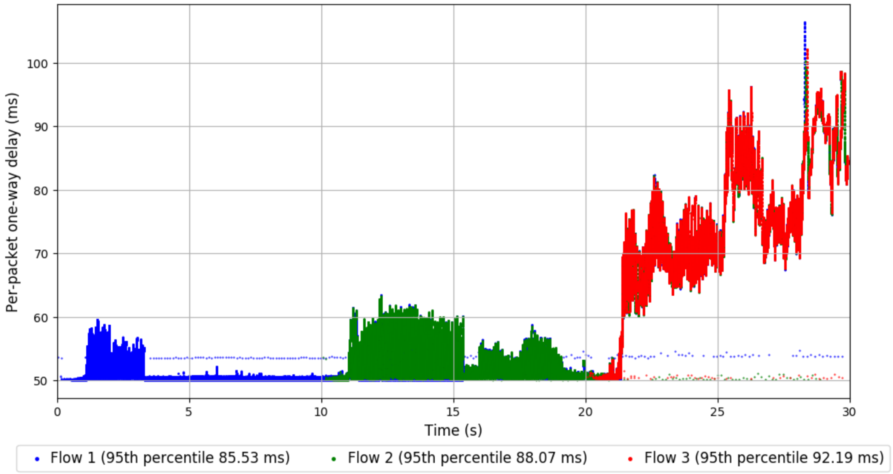




```
Run 8: Statistics of TCP BBR

Start at: 2018-06-02 00:58:06
End at: 2018-06-02 00:58:36
Local clock offset: 0.033 ms
Remote clock offset: -0.15 ms

# Below is generated by plot.py at 2018-06-02 02:12:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 392.69 Mbit/s
95th percentile per-packet one-way delay: 88.525 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 208.84 Mbit/s
95th percentile per-packet one-way delay: 85.534 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 192.72 Mbit/s
95th percentile per-packet one-way delay: 88.072 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 168.79 Mbit/s
95th percentile per-packet one-way delay: 92.186 ms
Loss rate: 1.38%
```

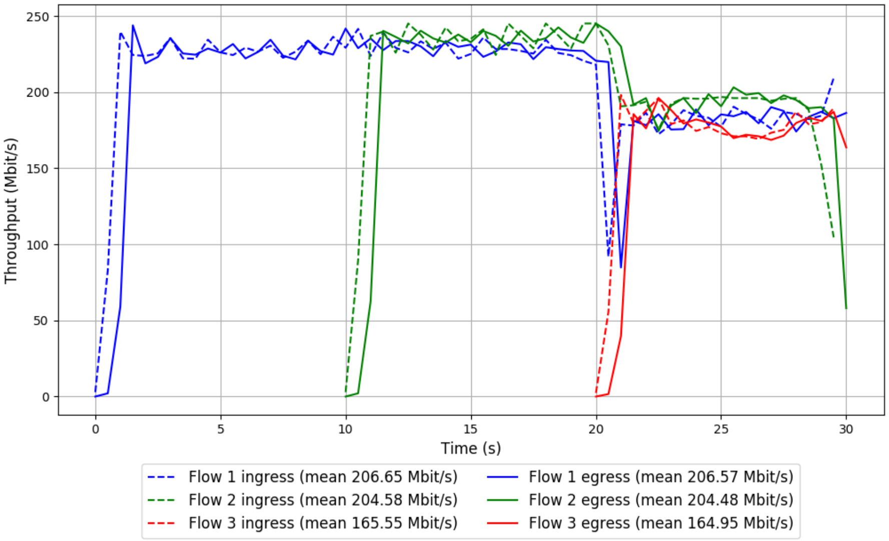
Run 8: Report of TCP BBR — Data Link

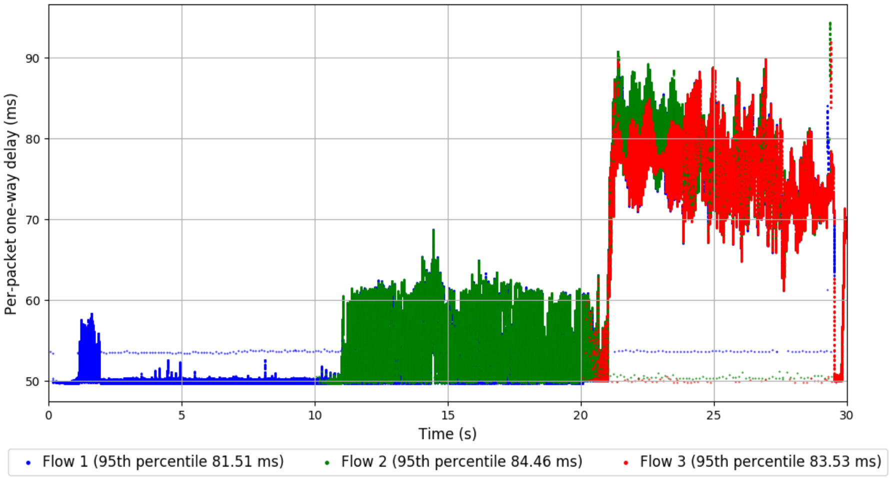




```
Run 9: Statistics of TCP BBR

Start at: 2018-06-02 01:20:51
End at: 2018-06-02 01:21:21
Local clock offset: 0.123 ms
Remote clock offset: 0.104 ms

# Below is generated by plot.py at 2018-06-02 02:18:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 396.99 Mbit/s
95th percentile per-packet one-way delay: 83.182 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 206.57 Mbit/s
95th percentile per-packet one-way delay: 81.513 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 204.48 Mbit/s
95th percentile per-packet one-way delay: 84.462 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 164.95 Mbit/s
95th percentile per-packet one-way delay: 83.527 ms
Loss rate: 1.41%
```

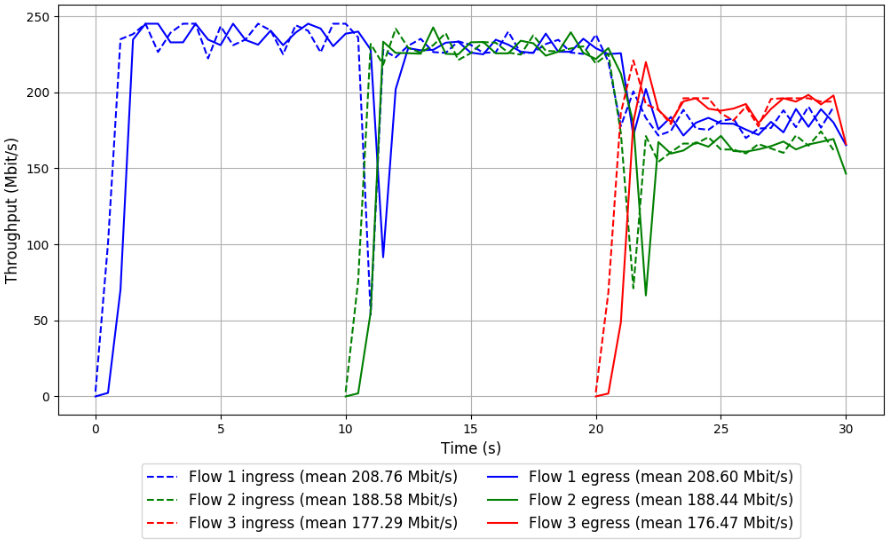
Run 9: Report of TCP BBR — Data Link

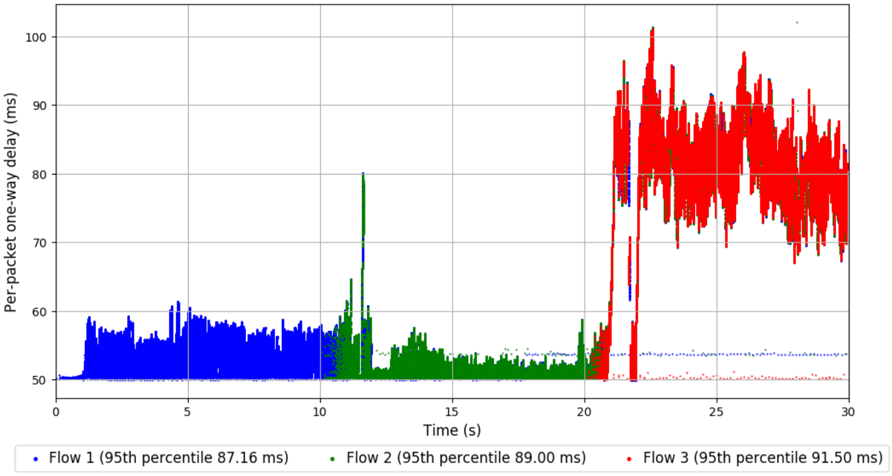




```
Run 10: Statistics of TCP BBR

Start at: 2018-06-02 01:44:10
End at: 2018-06-02 01:44:40
Local clock offset: 0.192 ms
Remote clock offset: 0.016 ms

# Below is generated by plot.py at 2018-06-02 02:18:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 392.13 Mbit/s
95th percentile per-packet one-way delay: 89.016 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 208.60 Mbit/s
95th percentile per-packet one-way delay: 87.163 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 188.44 Mbit/s
95th percentile per-packet one-way delay: 89.005 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 176.47 Mbit/s
95th percentile per-packet one-way delay: 91.503 ms
Loss rate: 1.49%
```

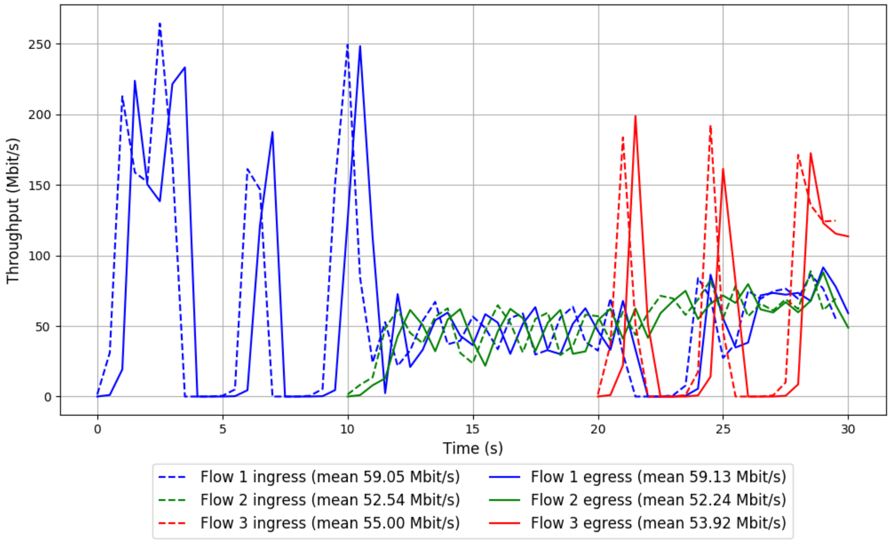
Run 10: Report of TCP BBR — Data Link

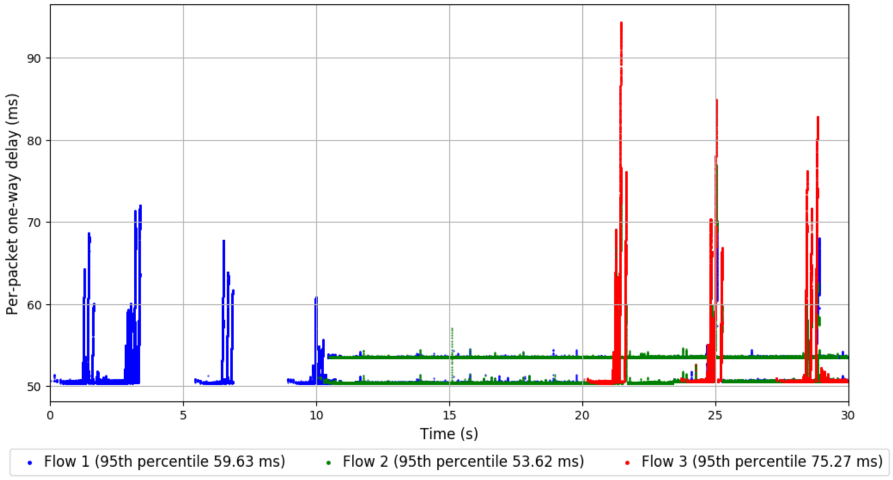




```
Run 1: Statistics of Copa

Start at: 2018-06-01 22:05:07
End at: 2018-06-01 22:05:37
Local clock offset: 0.57 ms
Remote clock offset: -0.408 ms

# Below is generated by plot.py at 2018-06-02 02:18:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 111.66 Mbit/s
95th percentile per-packet one-way delay: 63.001 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 59.13 Mbit/s
95th percentile per-packet one-way delay: 59.631 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 52.24 Mbit/s
95th percentile per-packet one-way delay: 53.618 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 53.92 Mbit/s
95th percentile per-packet one-way delay: 75.272 ms
Loss rate: 3.00%
```

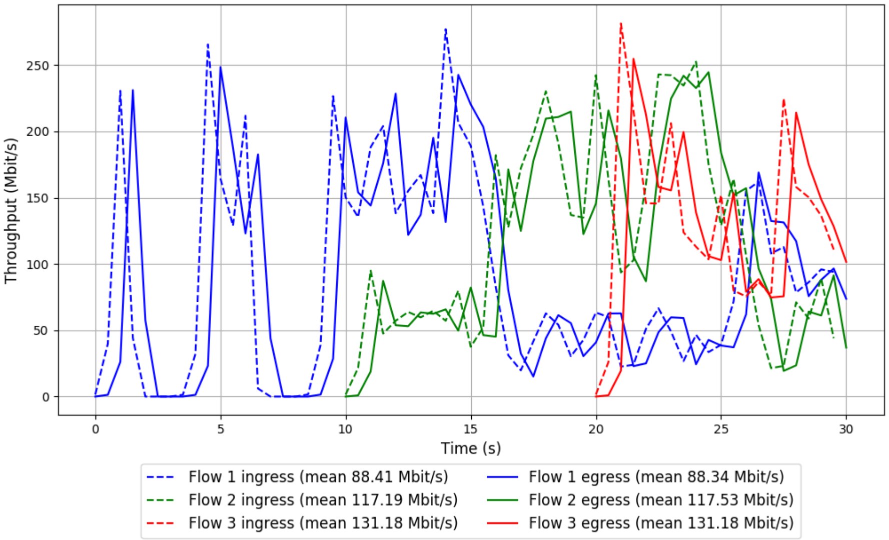
Run 1: Report of Copa — Data Link

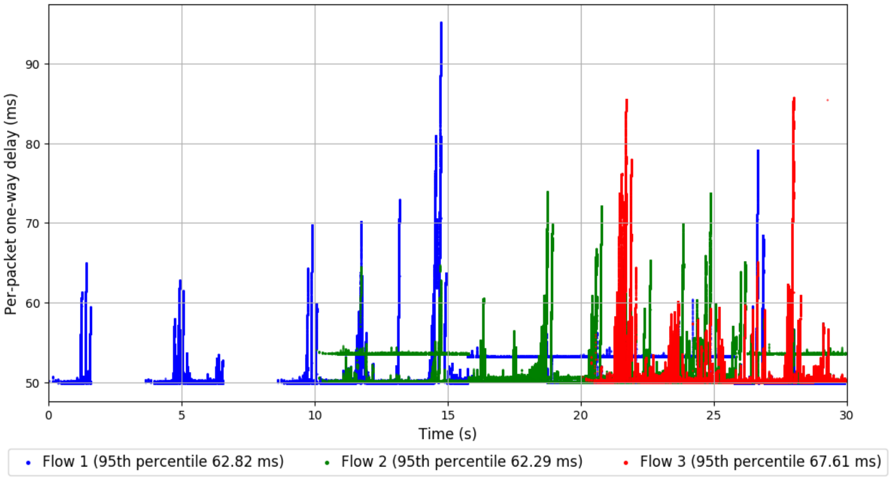




```
Run 2: Statistics of Copa

Start at: 2018-06-01 22:28:22
End at: 2018-06-01 22:28:52
Local clock offset: 0.49 ms
Remote clock offset: -0.024 ms

# Below is generated by plot.py at 2018-06-02 02:18:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 209.72 Mbit/s
95th percentile per-packet one-way delay: 63.197 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 88.34 Mbit/s
95th percentile per-packet one-way delay: 62.816 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 117.53 Mbit/s
95th percentile per-packet one-way delay: 62.291 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 131.18 Mbit/s
95th percentile per-packet one-way delay: 67.613 ms
Loss rate: 0.96%
```

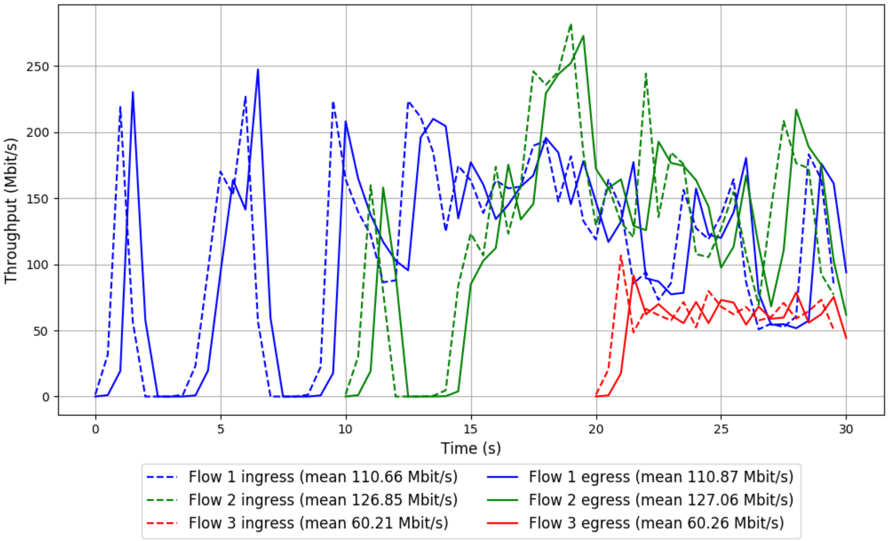
Run 2: Report of Copa — Data Link

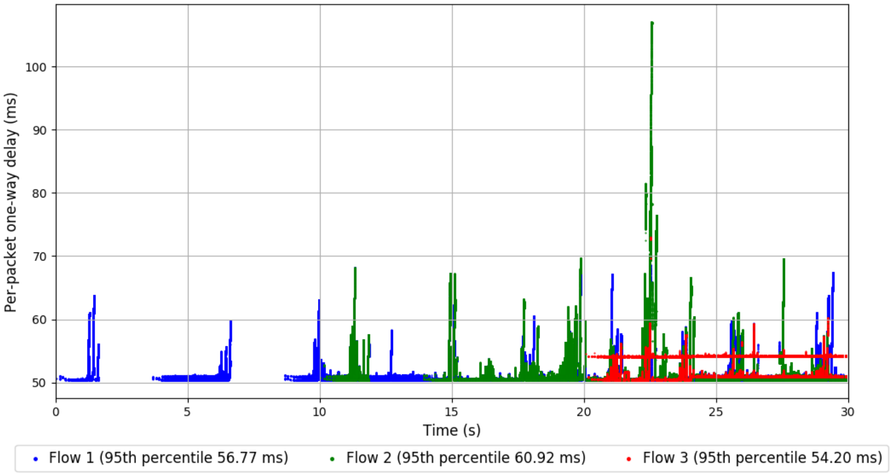




```
Run 3: Statistics of Copa

Start at: 2018-06-01 22:51:17
End at: 2018-06-01 22:51:47
Local clock offset: 0.743 ms
Remote clock offset: -0.318 ms

# Below is generated by plot.py at 2018-06-02 02:18:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 215.19 Mbit/s
95th percentile per-packet one-way delay: 57.742 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 110.87 Mbit/s
95th percentile per-packet one-way delay: 56.768 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 127.06 Mbit/s
95th percentile per-packet one-way delay: 60.920 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 60.26 Mbit/s
95th percentile per-packet one-way delay: 54.195 ms
Loss rate: 1.00%
```

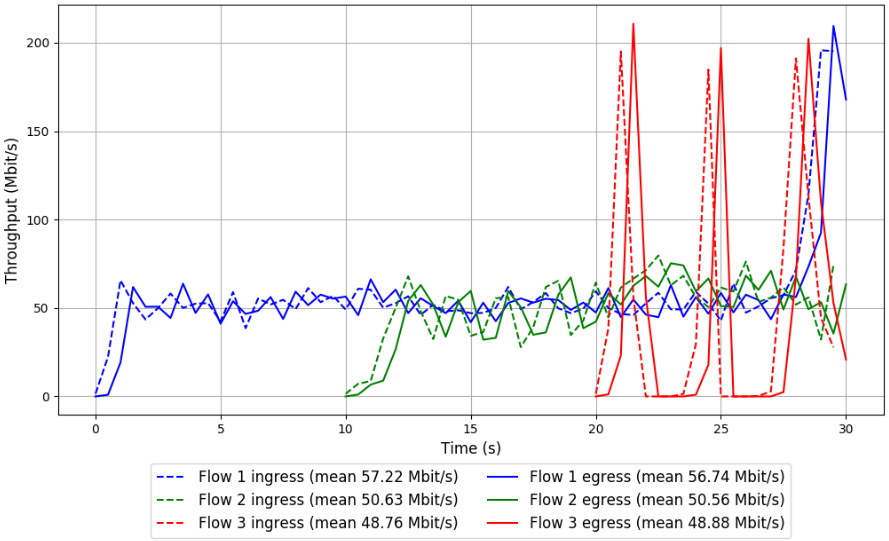
Run 3: Report of Copa — Data Link

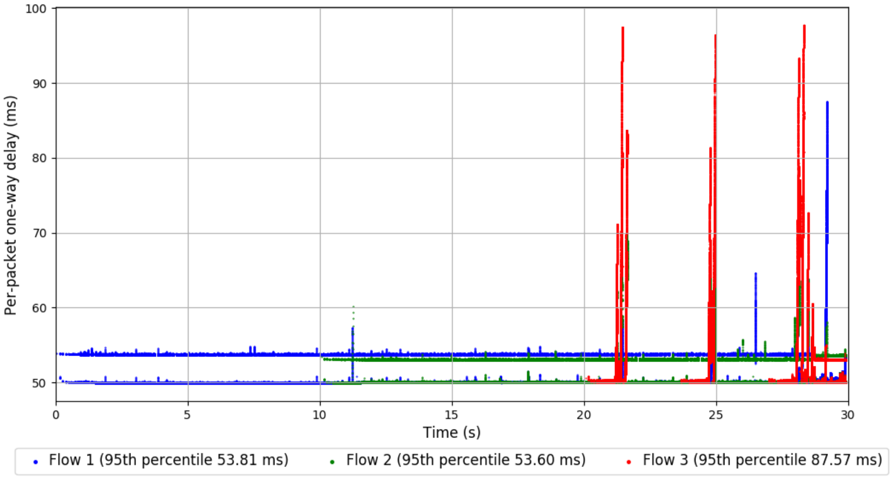




```
Run 4: Statistics of Copa

Start at: 2018-06-01 23:14:29
End at: 2018-06-01 23:14:59
Local clock offset: 0.523 ms
Remote clock offset: -0.142 ms

# Below is generated by plot.py at 2018-06-02 02:18:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 106.43 Mbit/s
95th percentile per-packet one-way delay: 62.778 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 56.74 Mbit/s
95th percentile per-packet one-way delay: 53.812 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 50.56 Mbit/s
95th percentile per-packet one-way delay: 53.596 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 48.88 Mbit/s
95th percentile per-packet one-way delay: 87.572 ms
Loss rate: 0.79%
```

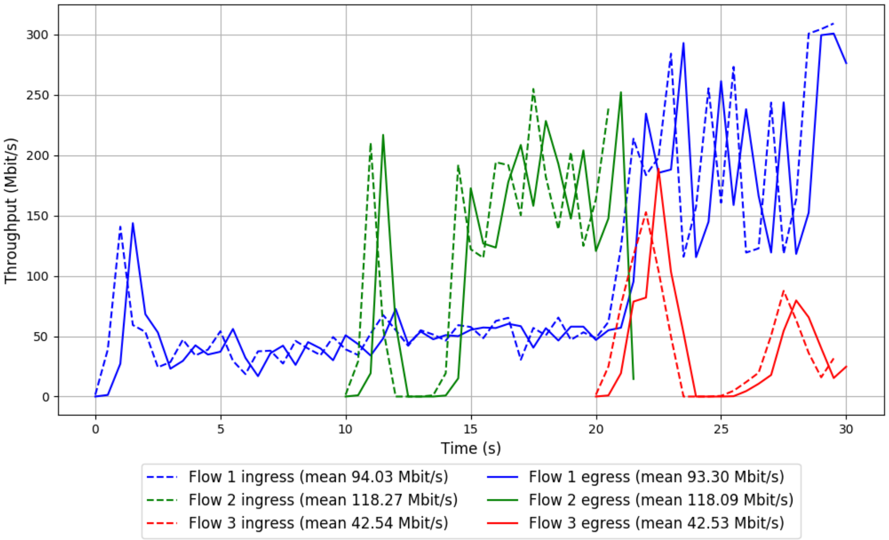
Run 4: Report of Copa — Data Link

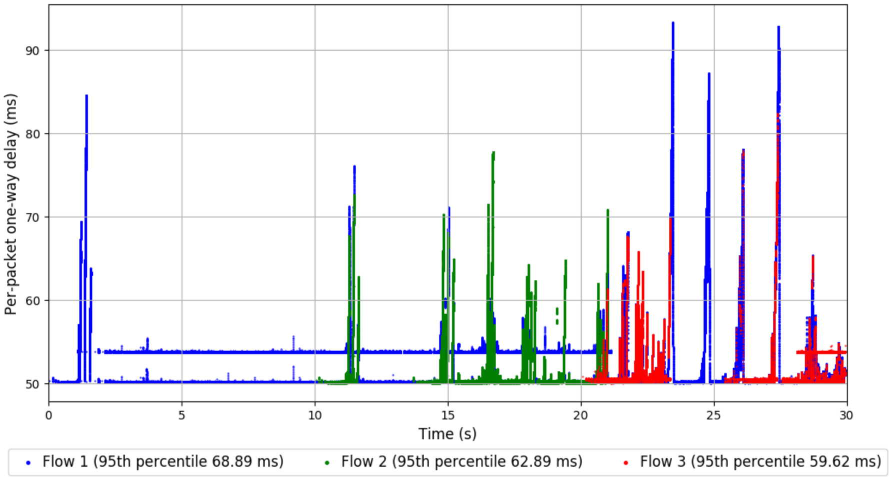




```
Run 5: Statistics of Copa

Start at: 2018-06-01 23:37:20
End at: 2018-06-01 23:37:50
Local clock offset: 0.26 ms
Remote clock offset: -0.195 ms

# Below is generated by plot.py at 2018-06-02 02:18:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 150.64 Mbit/s
95th percentile per-packet one-way delay: 66.146 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 93.30 Mbit/s
95th percentile per-packet one-way delay: 68.892 ms
Loss rate: 1.10%
-- Flow 2:
Average throughput: 118.09 Mbit/s
95th percentile per-packet one-way delay: 62.893 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 42.53 Mbit/s
95th percentile per-packet one-way delay: 59.622 ms
Loss rate: 1.06%
```

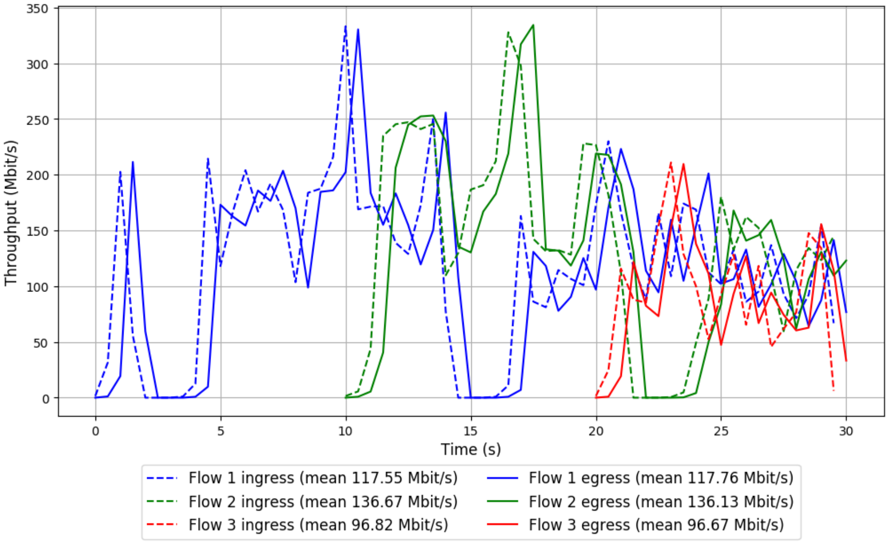
Run 5: Report of Copa — Data Link

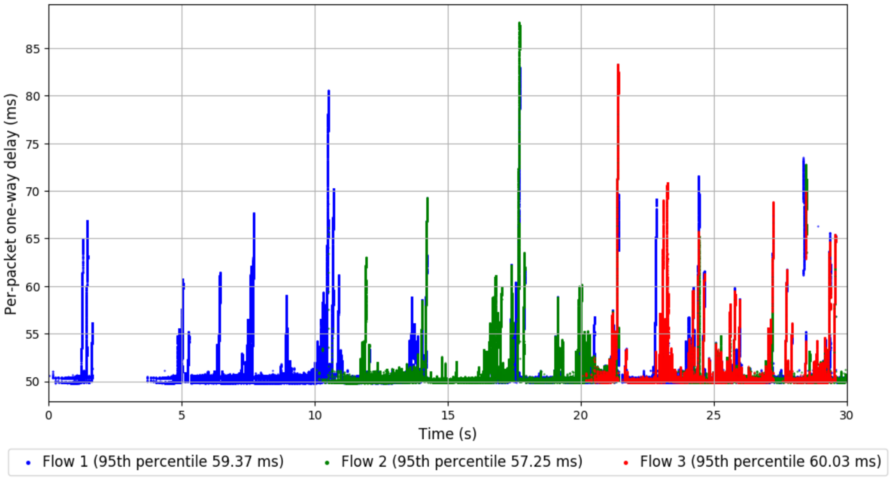




```
Run 6: Statistics of Copa

Start at: 2018-06-02 00:00:08
End at: 2018-06-02 00:00:38
Local clock offset: -0.061 ms
Remote clock offset: -0.107 ms

# Below is generated by plot.py at 2018-06-02 02:19:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 238.81 Mbit/s
95th percentile per-packet one-way delay: 58.723 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 117.76 Mbit/s
95th percentile per-packet one-way delay: 59.365 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 136.13 Mbit/s
95th percentile per-packet one-way delay: 57.254 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 96.67 Mbit/s
95th percentile per-packet one-way delay: 60.028 ms
Loss rate: 0.00%
```

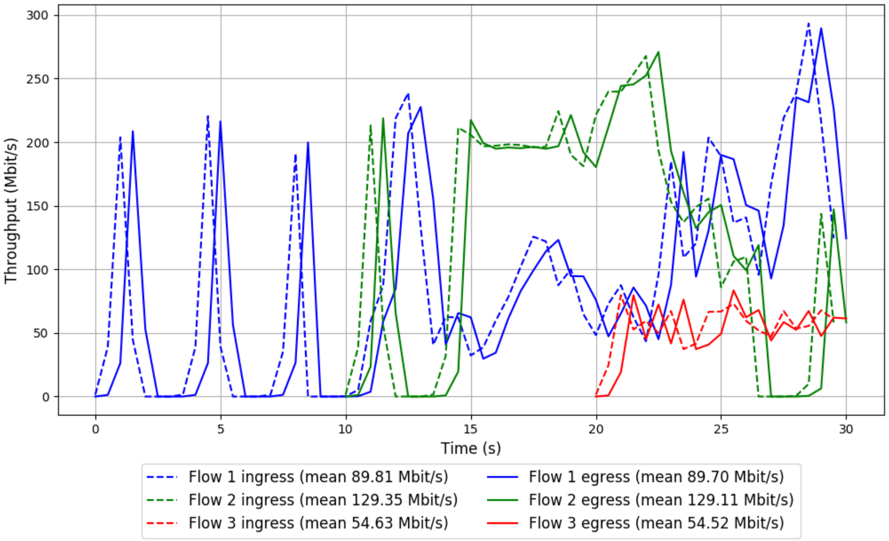
Run 6: Report of Copa — Data Link

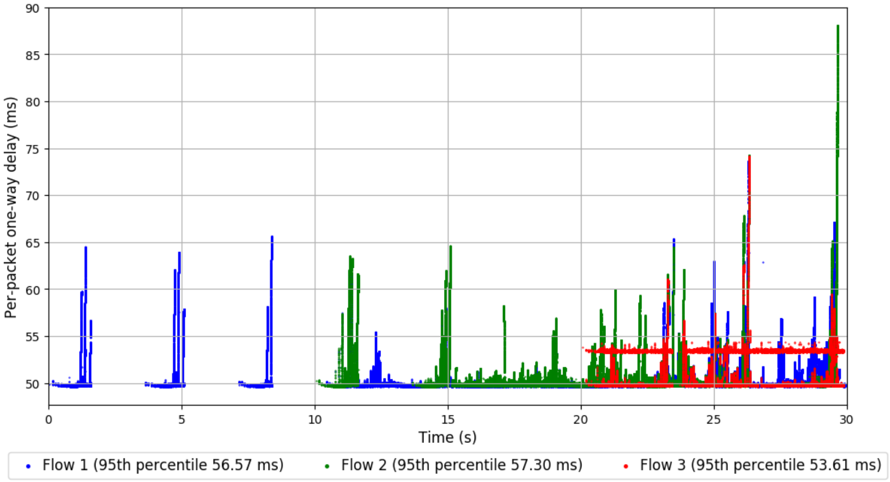




```
Run 7: Statistics of Copa

Start at: 2018-06-02 00:23:18
End at: 2018-06-02 00:23:48
Local clock offset: -0.138 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2018-06-02 02:21:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 192.30 Mbit/s
95th percentile per-packet one-way delay: 56.636 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 89.70 Mbit/s
95th percentile per-packet one-way delay: 56.572 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 129.11 Mbit/s
95th percentile per-packet one-way delay: 57.300 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 54.52 Mbit/s
95th percentile per-packet one-way delay: 53.606 ms
Loss rate: 1.28%
```

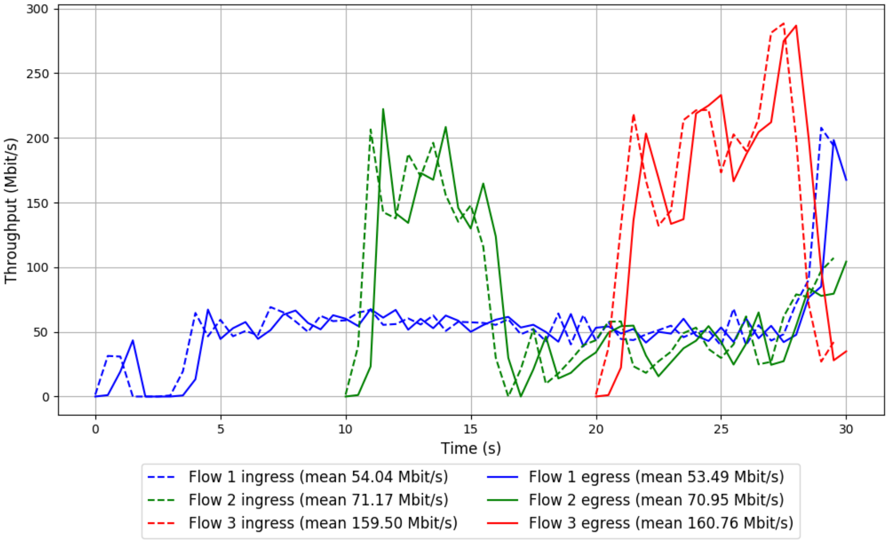
Run 7: Report of Copa — Data Link

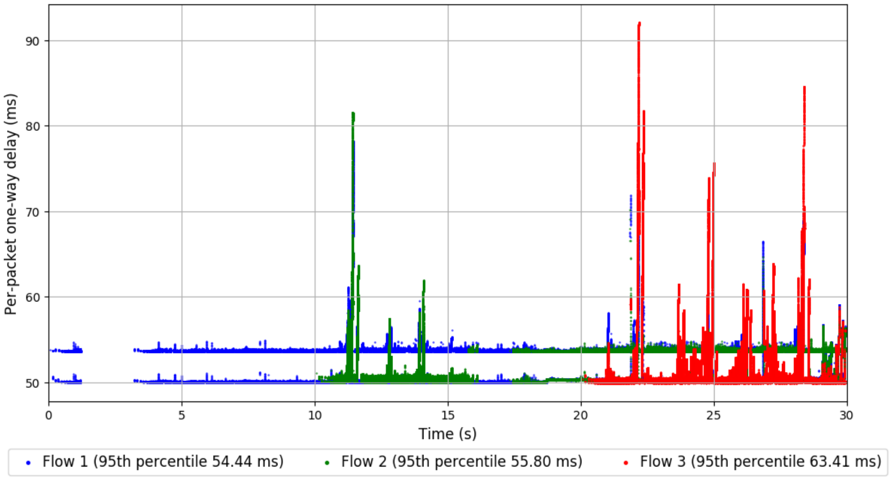




```
Run 8: Statistics of Copa

Start at: 2018-06-02 00:46:22
End at: 2018-06-02 00:46:52
Local clock offset: 0.017 ms
Remote clock offset: -0.128 ms

# Below is generated by plot.py at 2018-06-02 02:21:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 153.75 Mbit/s
95th percentile per-packet one-way delay: 57.925 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 53.49 Mbit/s
95th percentile per-packet one-way delay: 54.437 ms
Loss rate: 1.36%
-- Flow 2:
Average throughput: 70.95 Mbit/s
95th percentile per-packet one-way delay: 55.795 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 160.76 Mbit/s
95th percentile per-packet one-way delay: 63.414 ms
Loss rate: 0.26%
```

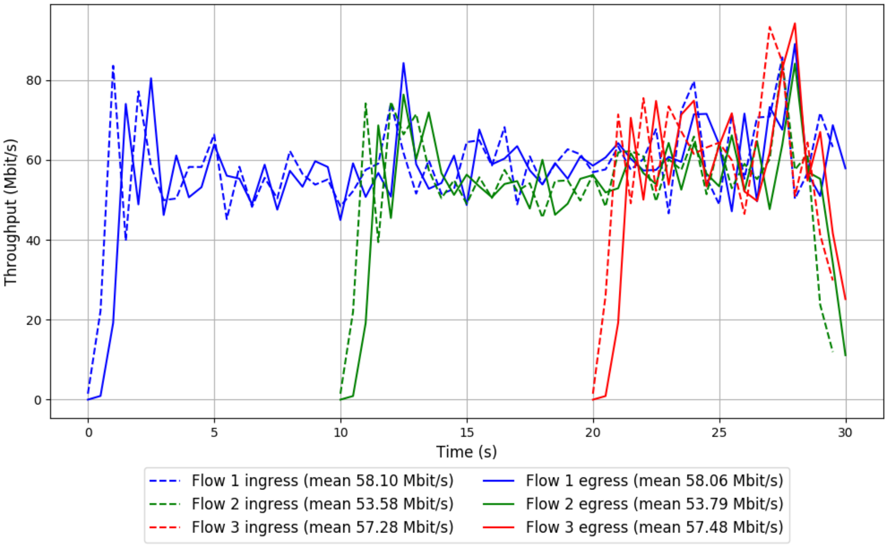
Run 8: Report of Copa — Data Link

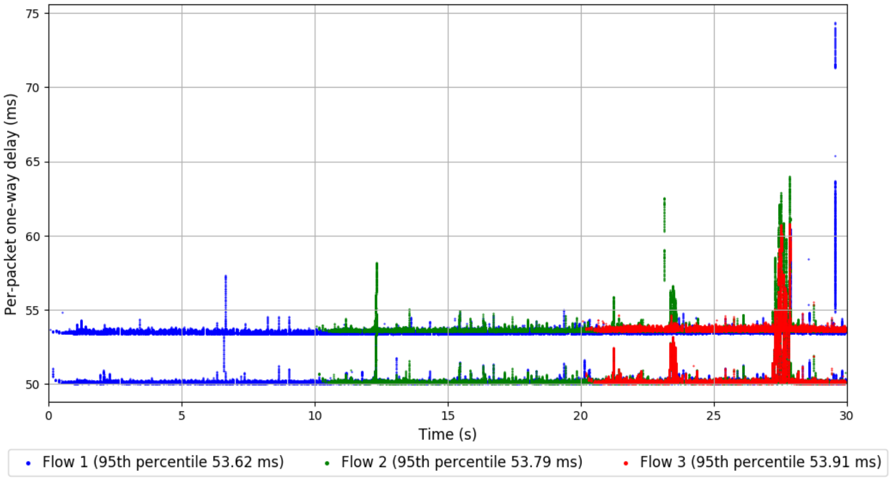




```
Run 9: Statistics of Copa

Start at: 2018-06-02 01:09:11
End at: 2018-06-02 01:09:41
Local clock offset: 0.039 ms
Remote clock offset: 0.089 ms

# Below is generated by plot.py at 2018-06-02 02:21:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 112.78 Mbit/s
95th percentile per-packet one-way delay: 53.745 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 58.06 Mbit/s
95th percentile per-packet one-way delay: 53.621 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 53.79 Mbit/s
95th percentile per-packet one-way delay: 53.787 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 57.48 Mbit/s
95th percentile per-packet one-way delay: 53.905 ms
Loss rate: 0.74%
```

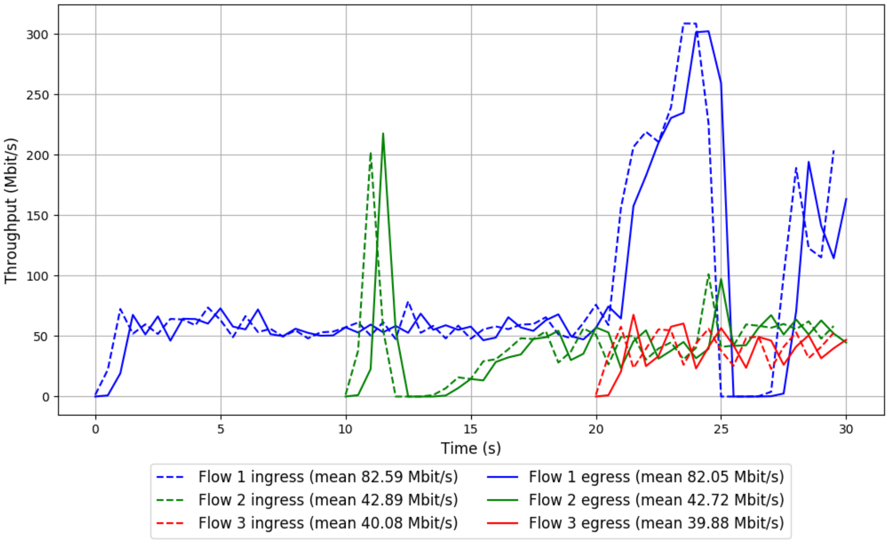
Run 9: Report of Copa — Data Link

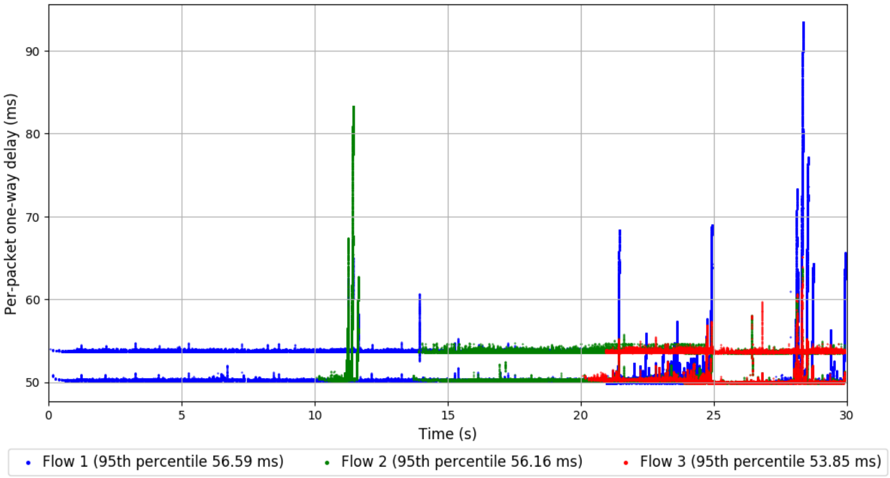




```
Run 10: Statistics of Copa

Start at: 2018-06-02 01:32:07
End at: 2018-06-02 01:32:37
Local clock offset: 0.263 ms
Remote clock offset: 0.06 ms

# Below is generated by plot.py at 2018-06-02 02:21:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 123.59 Mbit/s
95th percentile per-packet one-way delay: 55.685 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 82.05 Mbit/s
95th percentile per-packet one-way delay: 56.585 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 42.72 Mbit/s
95th percentile per-packet one-way delay: 56.155 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 39.88 Mbit/s
95th percentile per-packet one-way delay: 53.851 ms
Loss rate: 1.51%
```

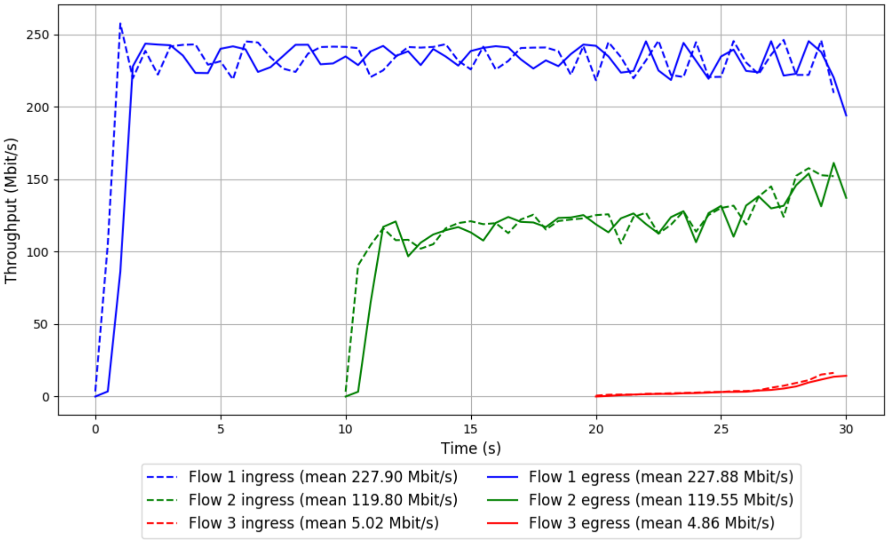
Run 10: Report of Copa — Data Link

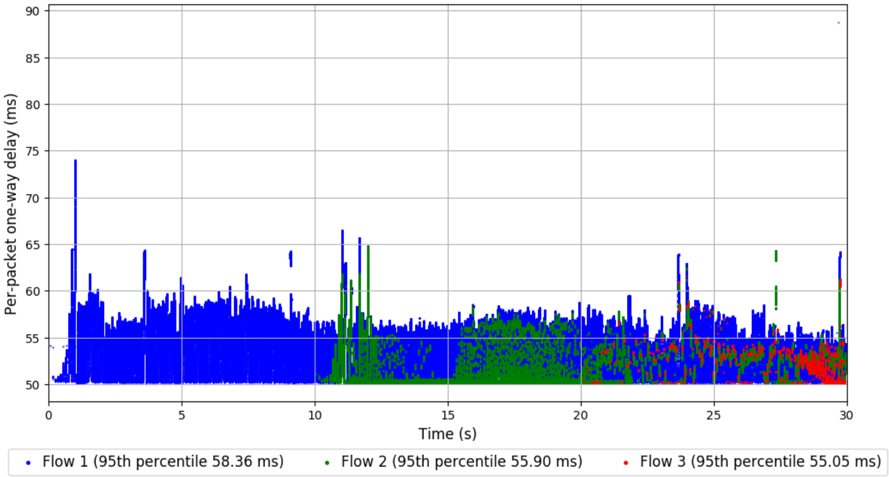




```
Run 1: Statistics of TCP Cubic

Start at: 2018-06-01 22:11:40
End at: 2018-06-01 22:12:10
Local clock offset: 0.485 ms
Remote clock offset: -0.28 ms

# Below is generated by plot.py at 2018-06-02 02:23:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 309.00 Mbit/s
95th percentile per-packet one-way delay: 58.130 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 227.88 Mbit/s
95th percentile per-packet one-way delay: 58.358 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 119.55 Mbit/s
95th percentile per-packet one-way delay: 55.901 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 4.86 Mbit/s
95th percentile per-packet one-way delay: 55.045 ms
Loss rate: 4.21%
```

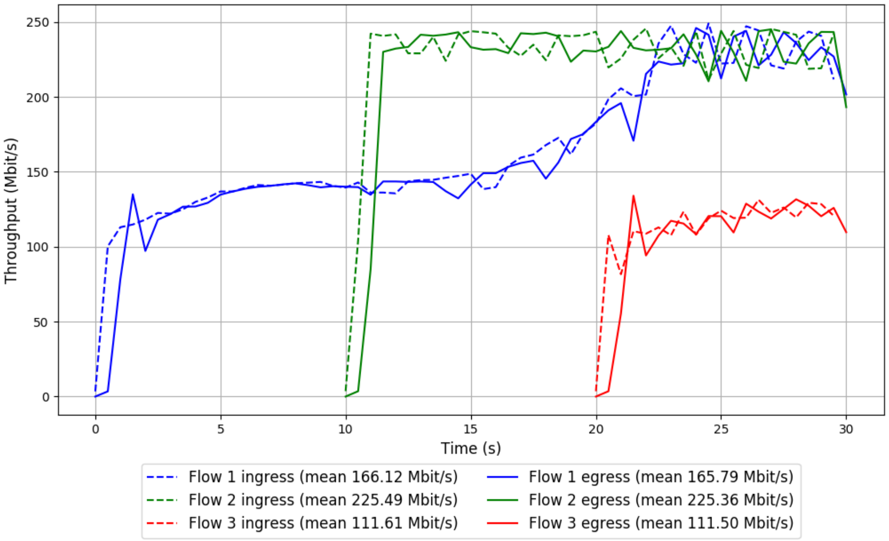
Run 1: Report of TCP Cubic — Data Link

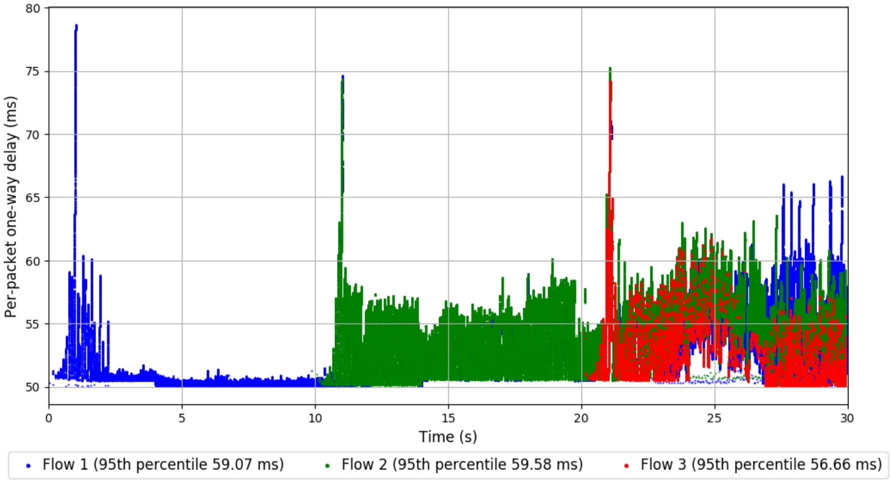




```
Run 2: Statistics of TCP Cubic

Start at: 2018-06-01 22:34:47
End at: 2018-06-01 22:35:17
Local clock offset: 0.797 ms
Remote clock offset: 0.178 ms

# Below is generated by plot.py at 2018-06-02 02:23:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 352.26 Mbit/s
95th percentile per-packet one-way delay: 59.225 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 165.79 Mbit/s
95th percentile per-packet one-way delay: 59.070 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 225.36 Mbit/s
95th percentile per-packet one-way delay: 59.575 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 111.50 Mbit/s
95th percentile per-packet one-way delay: 56.655 ms
Loss rate: 1.19%
```

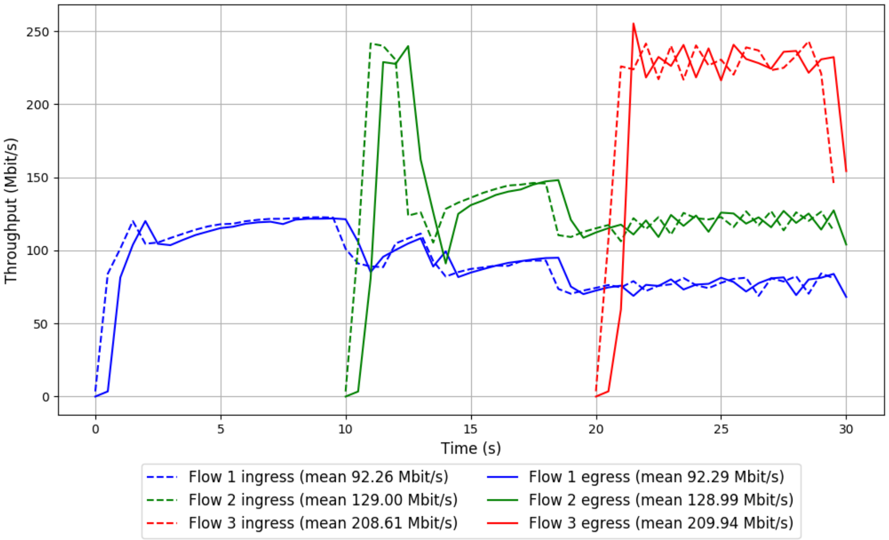
Run 2: Report of TCP Cubic — Data Link

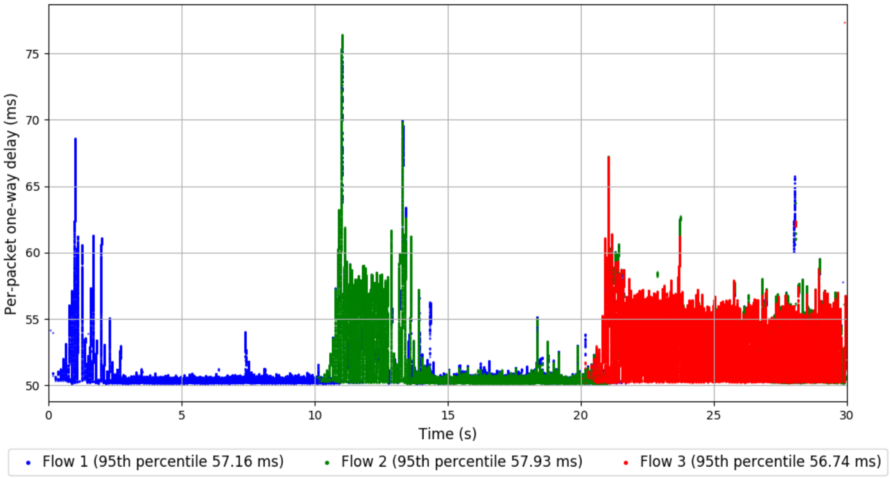




```
Run 3: Statistics of TCP Cubic

Start at: 2018-06-01 22:57:57
End at: 2018-06-01 22:58:27
Local clock offset: 0.831 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2018-06-02 02:23:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 247.34 Mbit/s
95th percentile per-packet one-way delay: 57.425 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 92.29 Mbit/s
95th percentile per-packet one-way delay: 57.158 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 128.99 Mbit/s
95th percentile per-packet one-way delay: 57.931 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 209.94 Mbit/s
95th percentile per-packet one-way delay: 56.738 ms
Loss rate: 0.39%
```

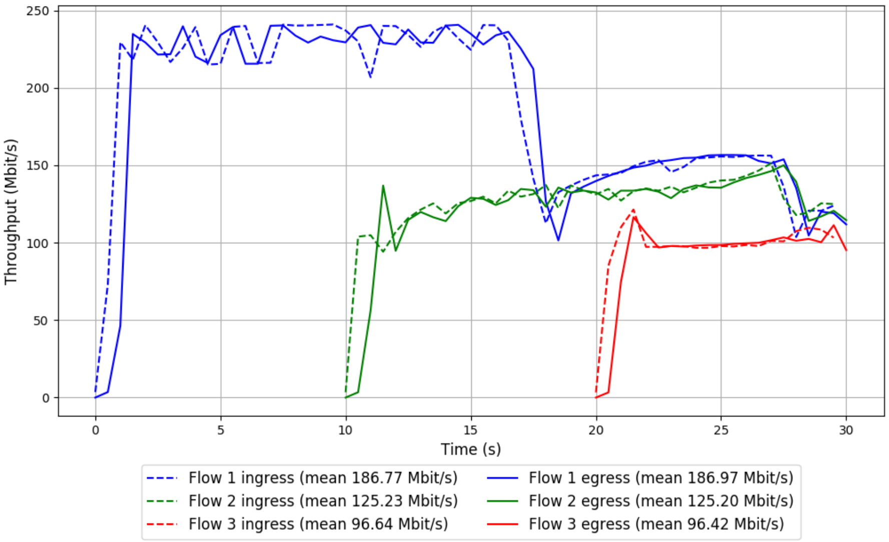
Run 3: Report of TCP Cubic — Data Link

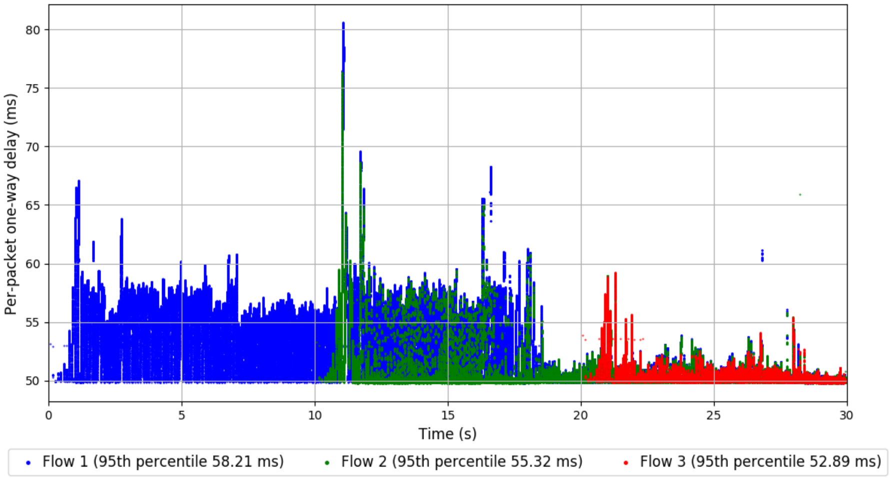




```
Run 4: Statistics of TCP Cubic

Start at: 2018-06-01 23:21:03
End at: 2018-06-01 23:21:33
Local clock offset: 0.556 ms
Remote clock offset: 0.008 ms

# Below is generated by plot.py at 2018-06-02 02:24:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 302.00 Mbit/s
95th percentile per-packet one-way delay: 57.742 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 186.97 Mbit/s
95th percentile per-packet one-way delay: 58.213 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 125.20 Mbit/s
95th percentile per-packet one-way delay: 55.321 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 96.42 Mbit/s
95th percentile per-packet one-way delay: 52.888 ms
Loss rate: 1.23%
```

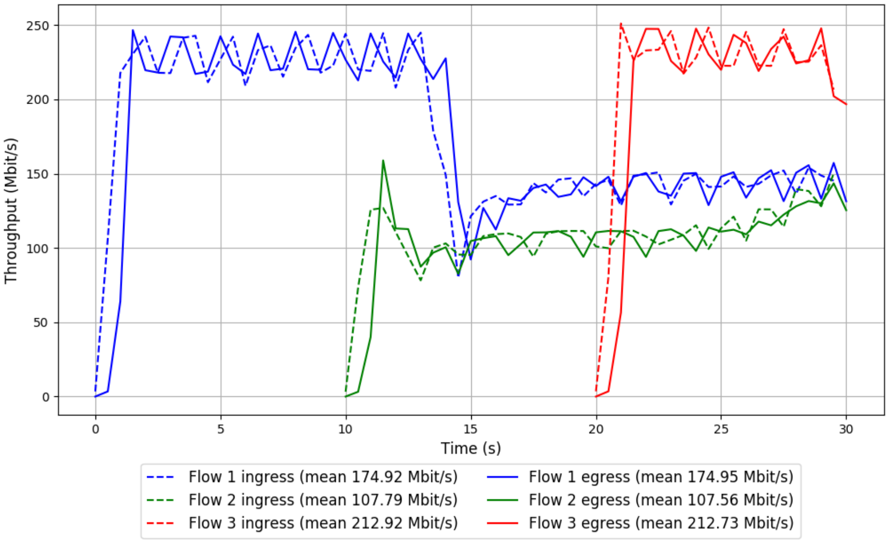
Run 4: Report of TCP Cubic — Data Link

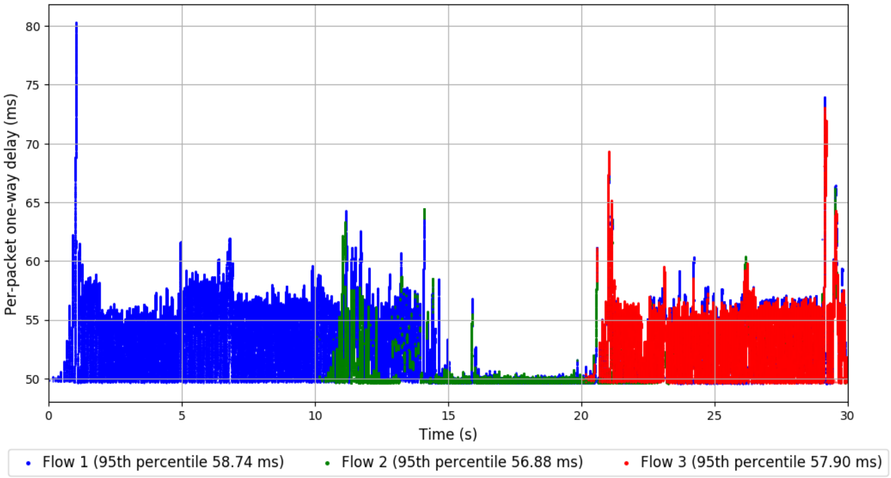




```
Run 5: Statistics of TCP Cubic

Start at: 2018-06-01 23:43:48
End at: 2018-06-01 23:44:18
Local clock offset: -0.006 ms
Remote clock offset: 0.143 ms

# Below is generated by plot.py at 2018-06-02 02:25:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 316.56 Mbit/s
95th percentile per-packet one-way delay: 58.249 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 174.95 Mbit/s
95th percentile per-packet one-way delay: 58.743 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 107.56 Mbit/s
95th percentile per-packet one-way delay: 56.880 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 212.73 Mbit/s
95th percentile per-packet one-way delay: 57.899 ms
Loss rate: 1.14%
```

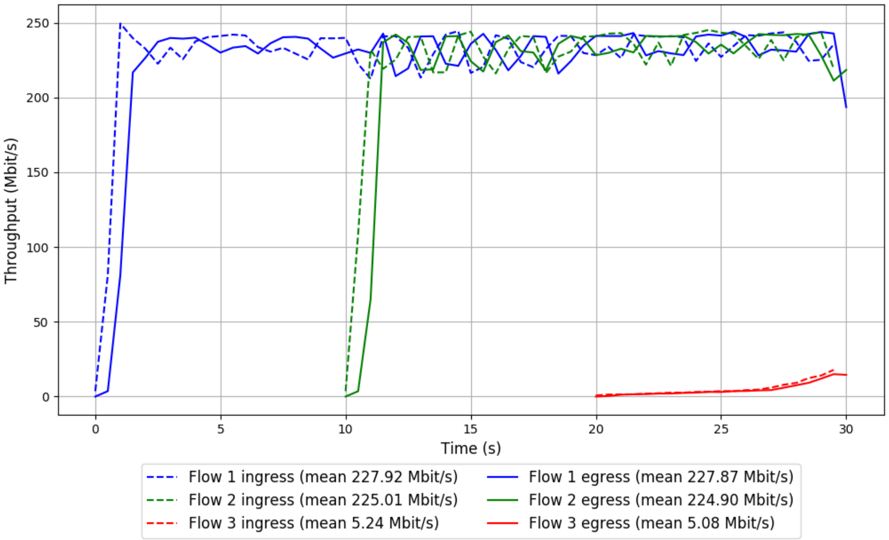
Run 5: Report of TCP Cubic — Data Link

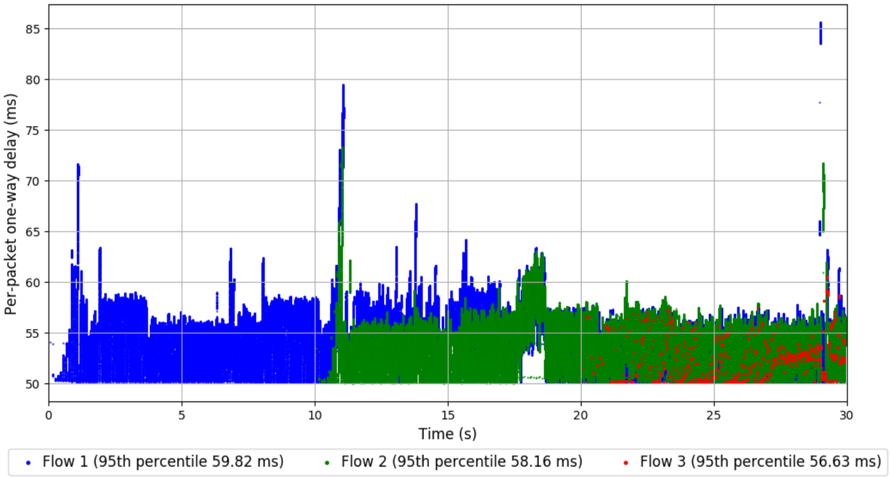




```
Run 6: Statistics of TCP Cubic

Start at: 2018-06-02 00:06:43
End at: 2018-06-02 00:07:13
Local clock offset: 0.129 ms
Remote clock offset: -0.114 ms

# Below is generated by plot.py at 2018-06-02 02:26:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 378.87 Mbit/s
95th percentile per-packet one-way delay: 59.479 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 227.87 Mbit/s
95th percentile per-packet one-way delay: 59.823 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 224.90 Mbit/s
95th percentile per-packet one-way delay: 58.155 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 5.08 Mbit/s
95th percentile per-packet one-way delay: 56.629 ms
Loss rate: 3.99%
```

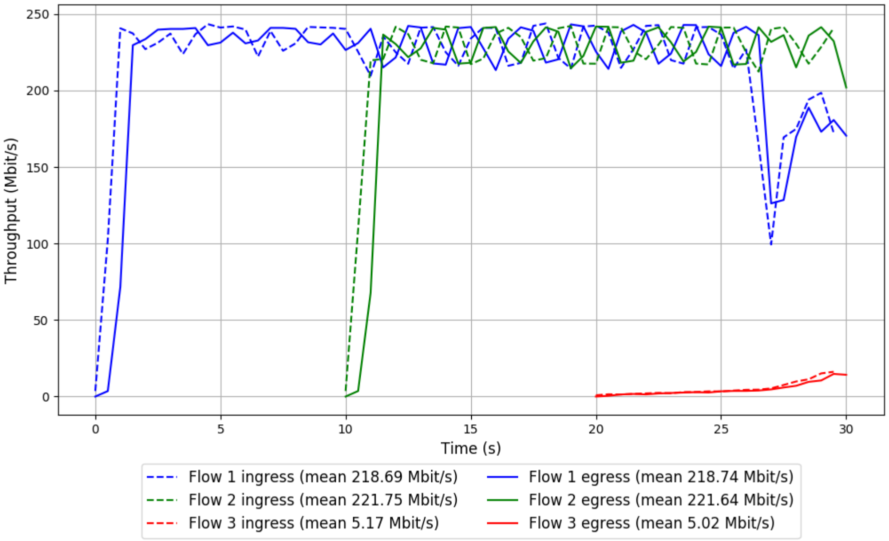
Run 6: Report of TCP Cubic — Data Link

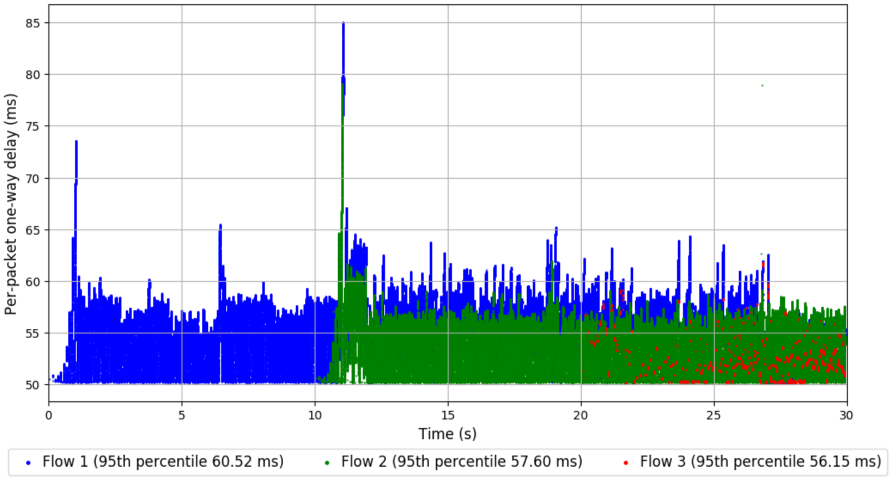




```
Run 7: Statistics of TCP Cubic

Start at: 2018-06-02 00:29:59
End at: 2018-06-02 00:30:29
Local clock offset: 0.084 ms
Remote clock offset: -0.263 ms

# Below is generated by plot.py at 2018-06-02 02:27:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 367.75 Mbit/s
95th percentile per-packet one-way delay: 59.708 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 218.74 Mbit/s
95th percentile per-packet one-way delay: 60.523 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 221.64 Mbit/s
95th percentile per-packet one-way delay: 57.600 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 5.02 Mbit/s
95th percentile per-packet one-way delay: 56.148 ms
Loss rate: 3.97%
```

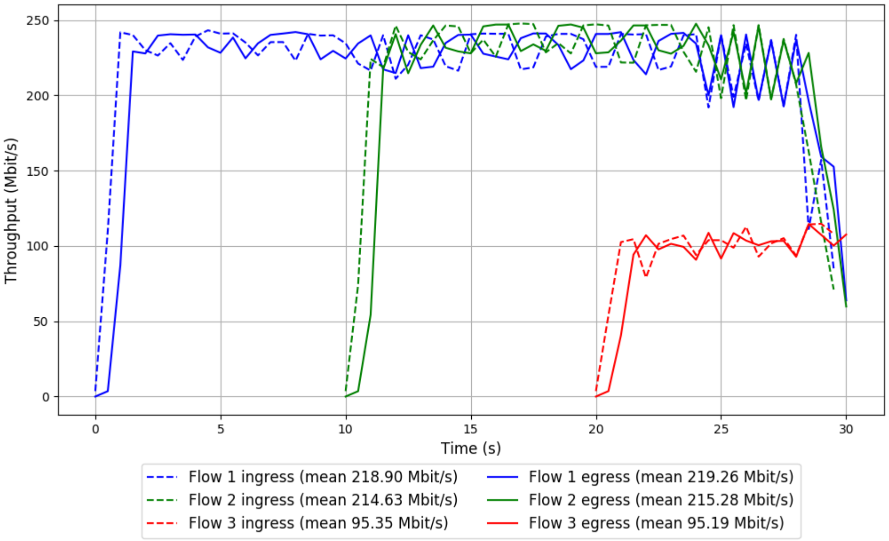
Run 7: Report of TCP Cubic — Data Link

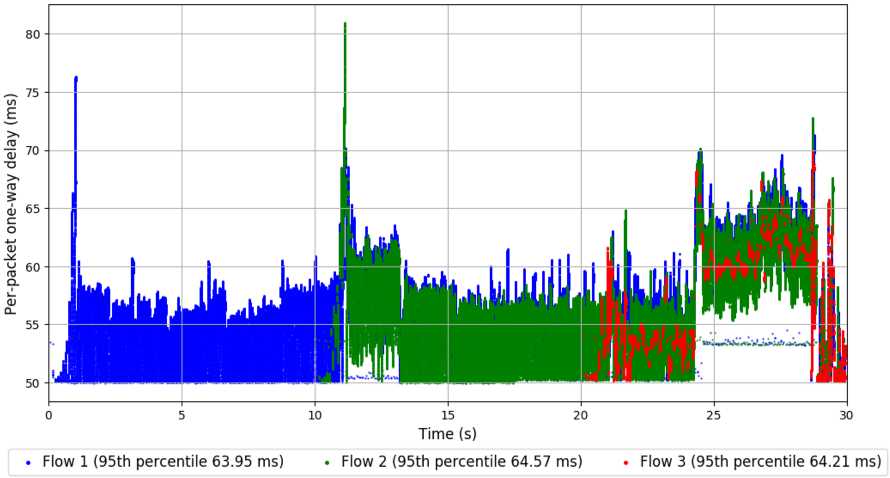




```
Run 8: Statistics of TCP Cubic

Start at: 2018-06-02 00:52:43
End at: 2018-06-02 00:53:13
Local clock offset: 0.071 ms
Remote clock offset: 0.058 ms

# Below is generated by plot.py at 2018-06-02 02:28:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 393.65 Mbit/s
95th percentile per-packet one-way delay: 64.241 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 219.26 Mbit/s
95th percentile per-packet one-way delay: 63.945 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 215.28 Mbit/s
95th percentile per-packet one-way delay: 64.566 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 95.19 Mbit/s
95th percentile per-packet one-way delay: 64.211 ms
Loss rate: 1.21%
```

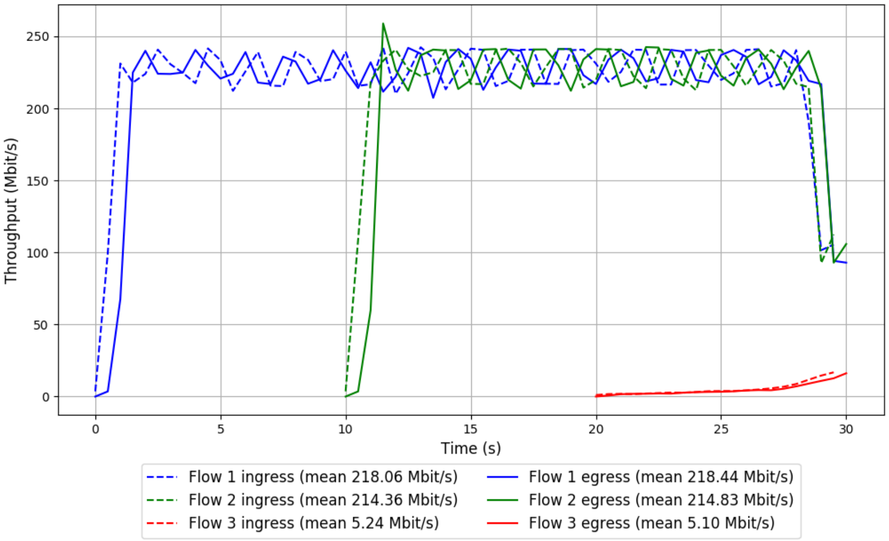
Run 8: Report of TCP Cubic — Data Link

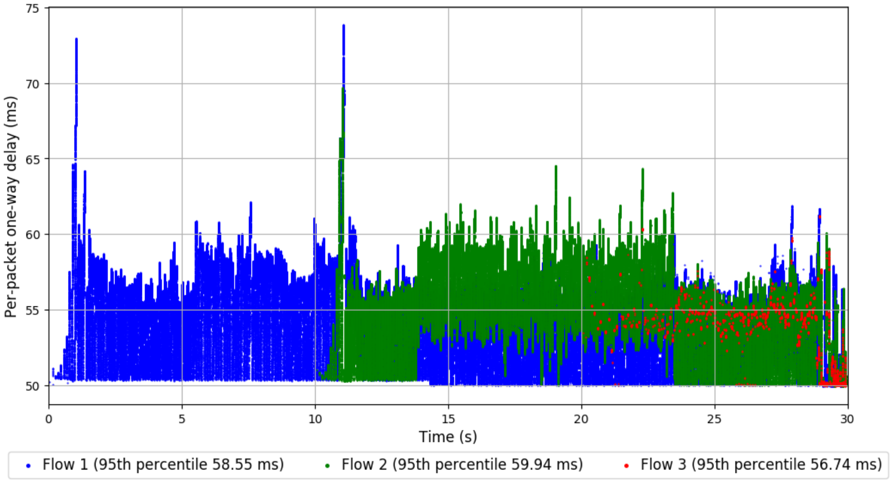




```
Run 9: Statistics of TCP Cubic

Start at: 2018-06-02 01:15:37
End at: 2018-06-02 01:16:07
Local clock offset: 0.327 ms
Remote clock offset: 0.095 ms

# Below is generated by plot.py at 2018-06-02 02:28:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 362.66 Mbit/s
95th percentile per-packet one-way delay: 59.399 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 218.44 Mbit/s
95th percentile per-packet one-way delay: 58.546 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 214.83 Mbit/s
95th percentile per-packet one-way delay: 59.935 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 5.10 Mbit/s
95th percentile per-packet one-way delay: 56.739 ms
Loss rate: 3.70%
```

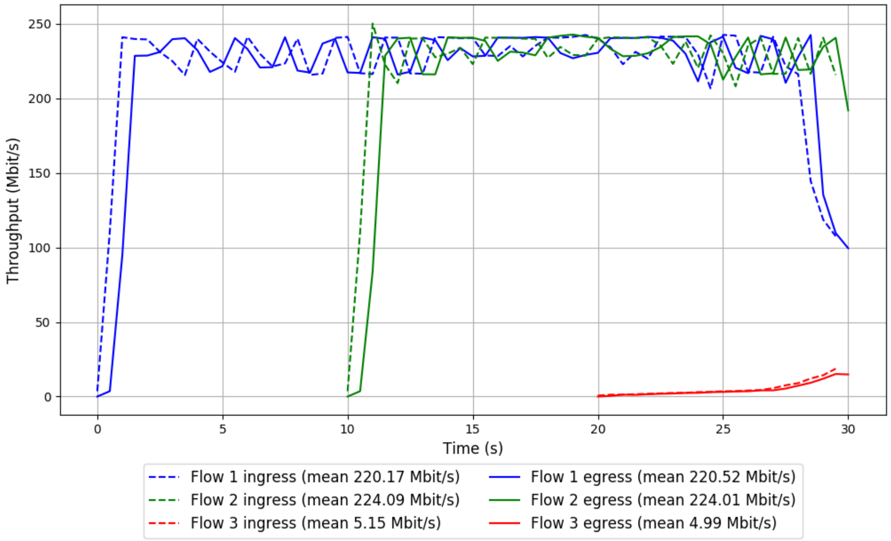
Run 9: Report of TCP Cubic — Data Link

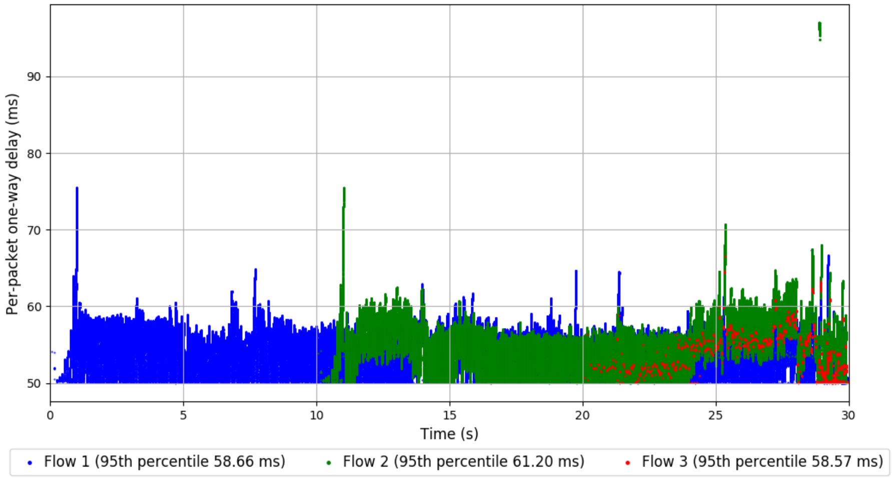




```
Run 10: Statistics of TCP Cubic

Start at: 2018-06-02 01:38:47
End at: 2018-06-02 01:39:17
Local clock offset: 0.36 ms
Remote clock offset: 0.061 ms

# Below is generated by plot.py at 2018-06-02 02:29:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 370.90 Mbit/s
95th percentile per-packet one-way delay: 60.096 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 220.52 Mbit/s
95th percentile per-packet one-way delay: 58.663 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 224.01 Mbit/s
95th percentile per-packet one-way delay: 61.202 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 4.99 Mbit/s
95th percentile per-packet one-way delay: 58.567 ms
Loss rate: 4.12%
```

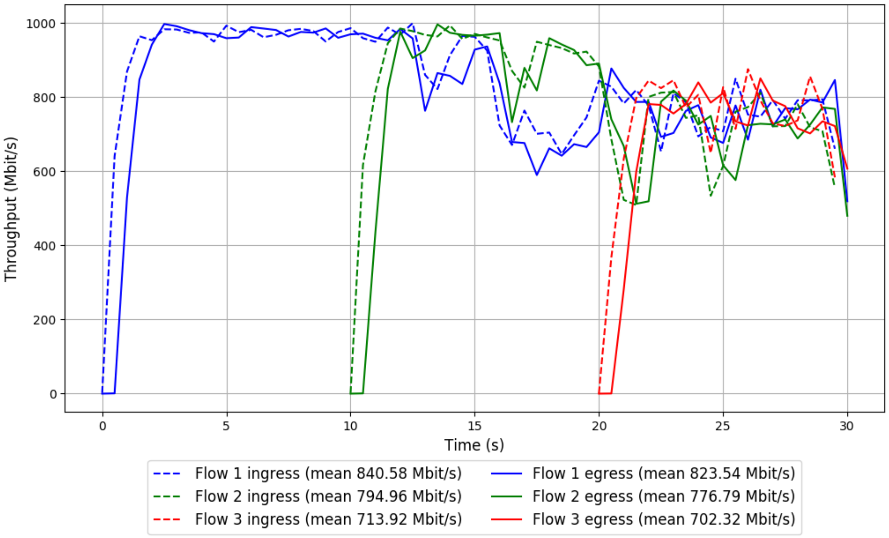
Run 10: Report of TCP Cubic — Data Link

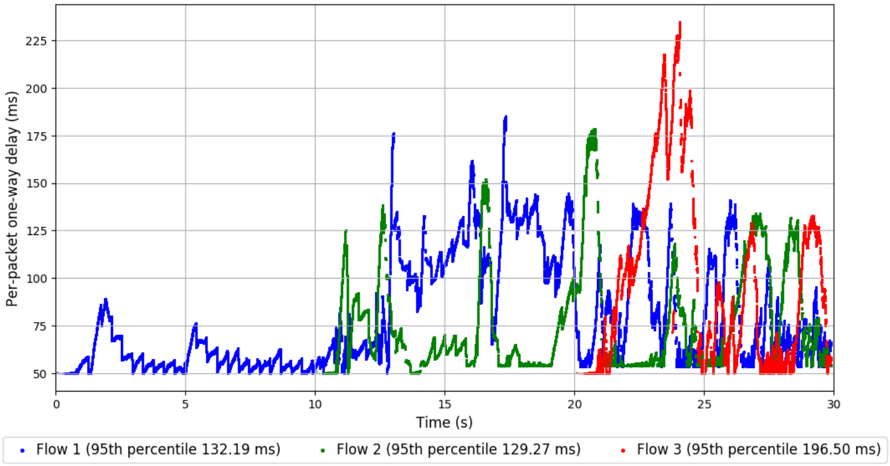




```
Run 1: Statistics of FillP

Start at: 2018-06-01 21:59:54
End at: 2018-06-01 22:00:24
Local clock offset: 0.597 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2018-06-02 02:55:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1570.46 Mbit/s
95th percentile per-packet one-way delay: 138.389 ms
Loss rate: 2.55%
-- Flow 1:
Average throughput: 823.54 Mbit/s
95th percentile per-packet one-way delay: 132.191 ms
Loss rate: 2.37%
-- Flow 2:
Average throughput: 776.79 Mbit/s
95th percentile per-packet one-way delay: 129.273 ms
Loss rate: 2.80%
-- Flow 3:
Average throughput: 702.32 Mbit/s
95th percentile per-packet one-way delay: 196.500 ms
Loss rate: 2.66%
```

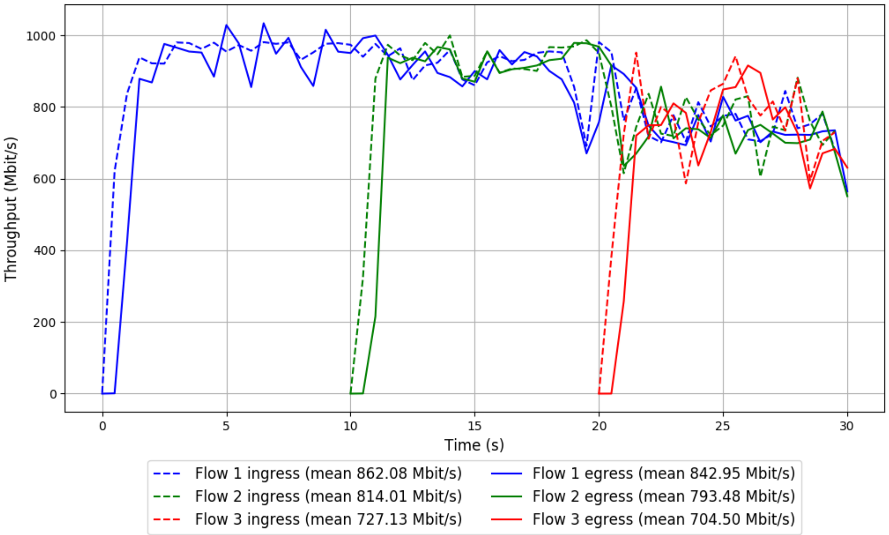
Run 1: Report of FillP — Data Link

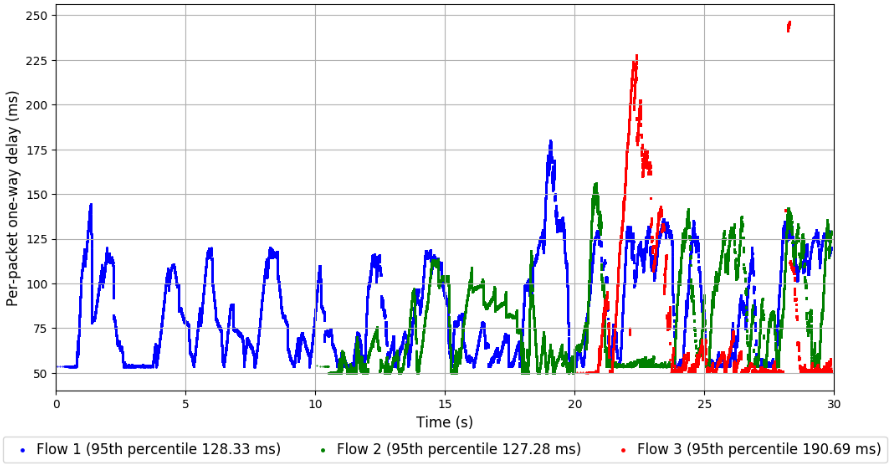




```
Run 2: Statistics of FillP

Start at: 2018-06-01 22:23:07
End at: 2018-06-01 22:23:37
Local clock offset: 0.315 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2018-06-02 02:56:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1601.34 Mbit/s
95th percentile per-packet one-way delay: 130.937 ms
Loss rate: 2.97%
-- Flow 1:
Average throughput: 842.95 Mbit/s
95th percentile per-packet one-way delay: 128.331 ms
Loss rate: 2.58%
-- Flow 2:
Average throughput: 793.48 Mbit/s
95th percentile per-packet one-way delay: 127.281 ms
Loss rate: 3.06%
-- Flow 3:
Average throughput: 704.50 Mbit/s
95th percentile per-packet one-way delay: 190.693 ms
Loss rate: 4.15%
```

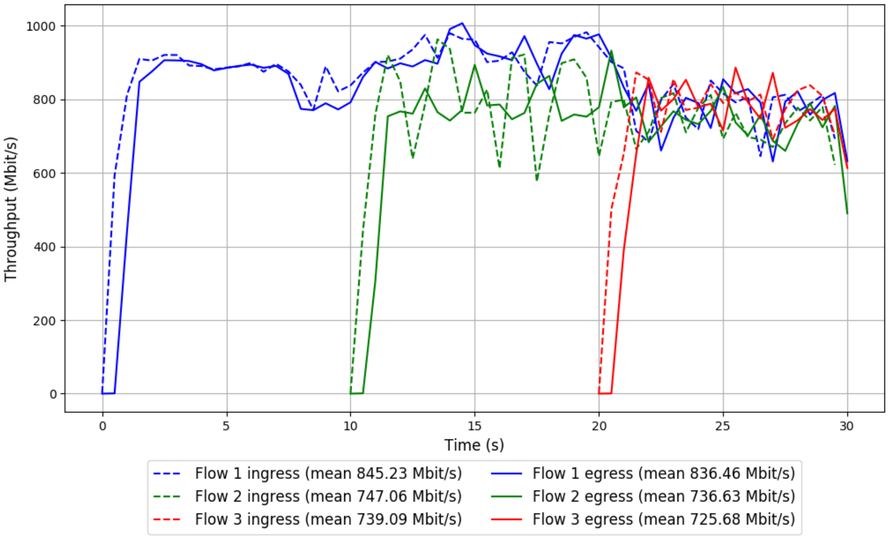
Run 2: Report of FillP — Data Link

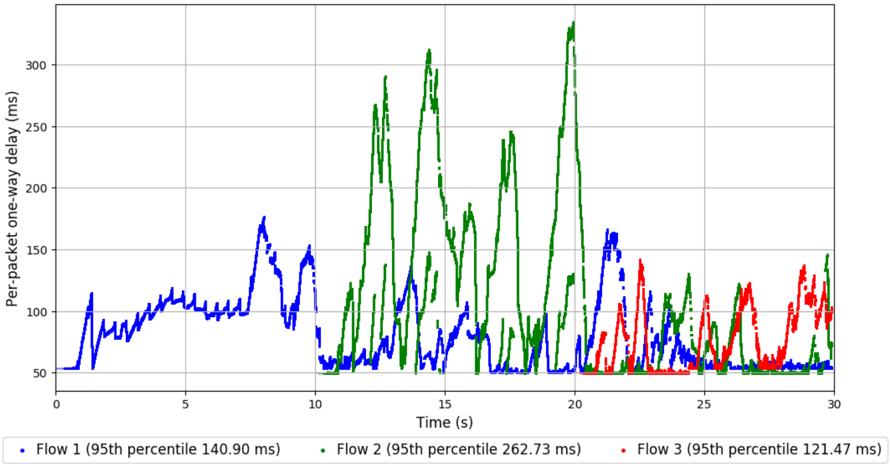




```
Run 3: Statistics of FillP

Start at: 2018-06-01 22:46:06
End at: 2018-06-01 22:46:36
Local clock offset: 0.595 ms
Remote clock offset: 0.187 ms

# Below is generated by plot.py at 2018-06-02 02:56:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1565.04 Mbit/s
95th percentile per-packet one-way delay: 191.255 ms
Loss rate: 1.75%
-- Flow 1:
Average throughput: 836.46 Mbit/s
95th percentile per-packet one-way delay: 140.899 ms
Loss rate: 1.36%
-- Flow 2:
Average throughput: 736.63 Mbit/s
95th percentile per-packet one-way delay: 262.728 ms
Loss rate: 1.88%
-- Flow 3:
Average throughput: 725.68 Mbit/s
95th percentile per-packet one-way delay: 121.466 ms
Loss rate: 2.84%
```

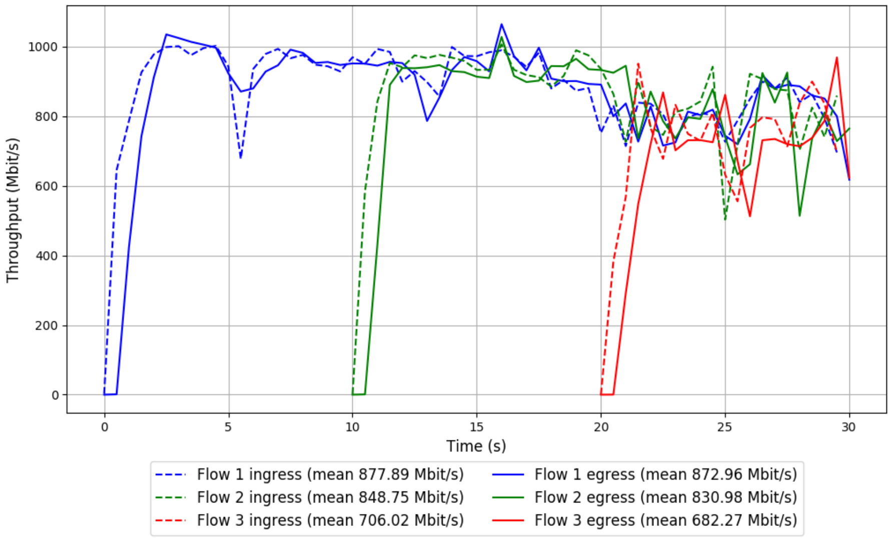
Run 3: Report of FillP — Data Link

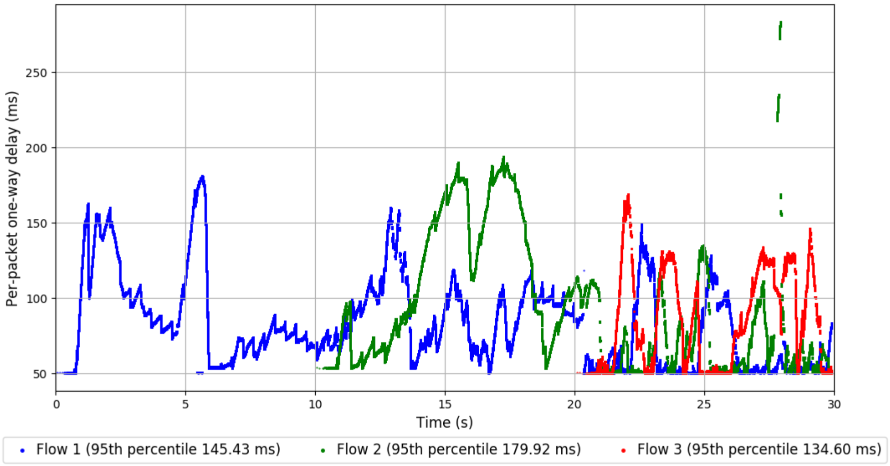




```
Run 4: Statistics of FillP

Start at: 2018-06-01 23:09:15
End at: 2018-06-01 23:09:45
Local clock offset: 0.619 ms
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2018-06-02 02:59:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1649.19 Mbit/s
95th percentile per-packet one-way delay: 164.210 ms
Loss rate: 1.97%
-- Flow 1:
Average throughput: 872.96 Mbit/s
95th percentile per-packet one-way delay: 145.433 ms
Loss rate: 0.91%
-- Flow 2:
Average throughput: 830.98 Mbit/s
95th percentile per-packet one-way delay: 179.916 ms
Loss rate: 2.62%
-- Flow 3:
Average throughput: 682.27 Mbit/s
95th percentile per-packet one-way delay: 134.598 ms
Loss rate: 4.38%
```

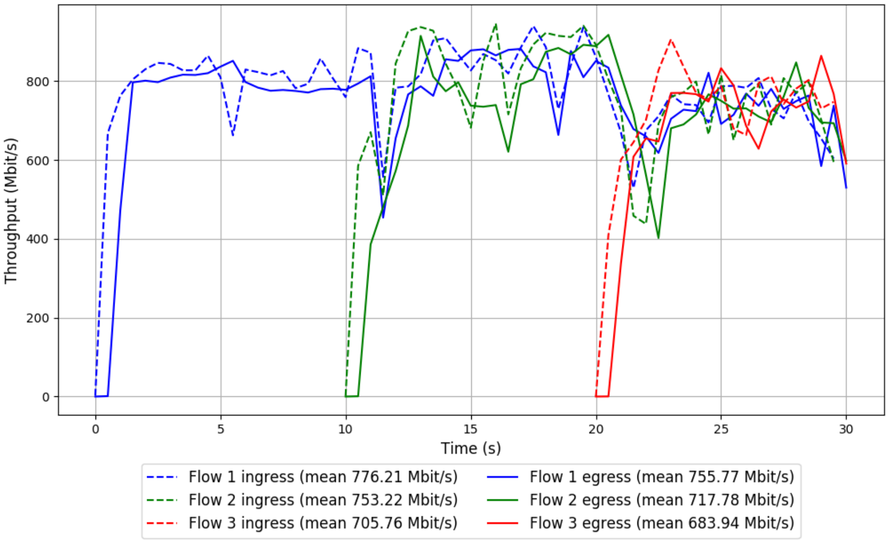
Run 4: Report of FillP — Data Link

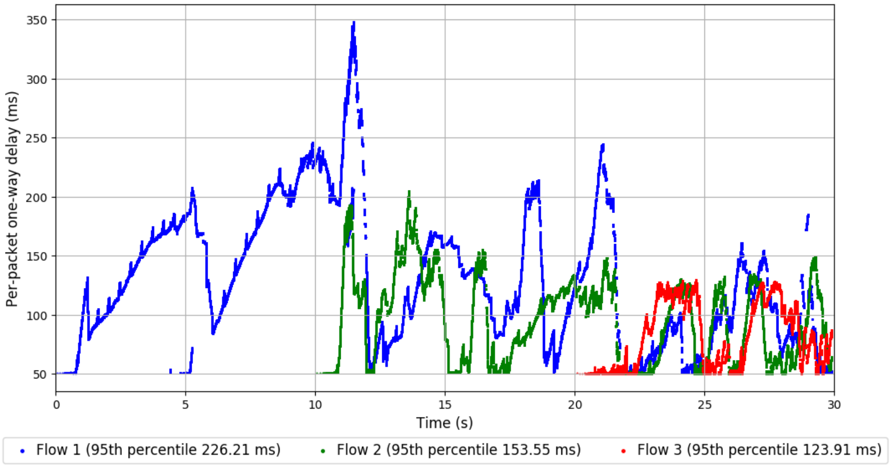




```
Run 5: Statistics of FillP

Start at: 2018-06-01 23:32:11
End at: 2018-06-01 23:32:41
Local clock offset: 0.231 ms
Remote clock offset: -0.18 ms

# Below is generated by plot.py at 2018-06-02 02:59:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1457.54 Mbit/s
95th percentile per-packet one-way delay: 205.898 ms
Loss rate: 3.88%
-- Flow 1:
Average throughput: 755.77 Mbit/s
95th percentile per-packet one-way delay: 226.210 ms
Loss rate: 2.97%
-- Flow 2:
Average throughput: 717.78 Mbit/s
95th percentile per-packet one-way delay: 153.547 ms
Loss rate: 5.20%
-- Flow 3:
Average throughput: 683.94 Mbit/s
95th percentile per-packet one-way delay: 123.910 ms
Loss rate: 4.11%
```

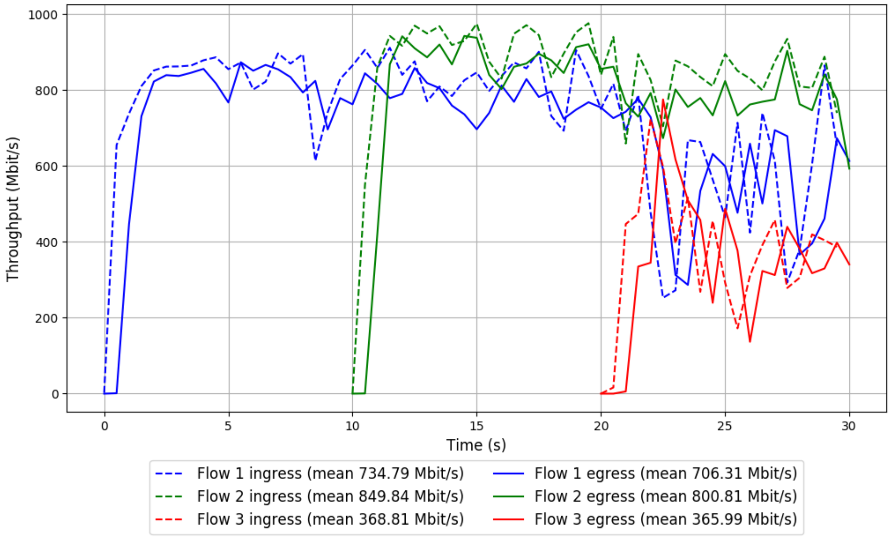
Run 5: Report of FillP — Data Link

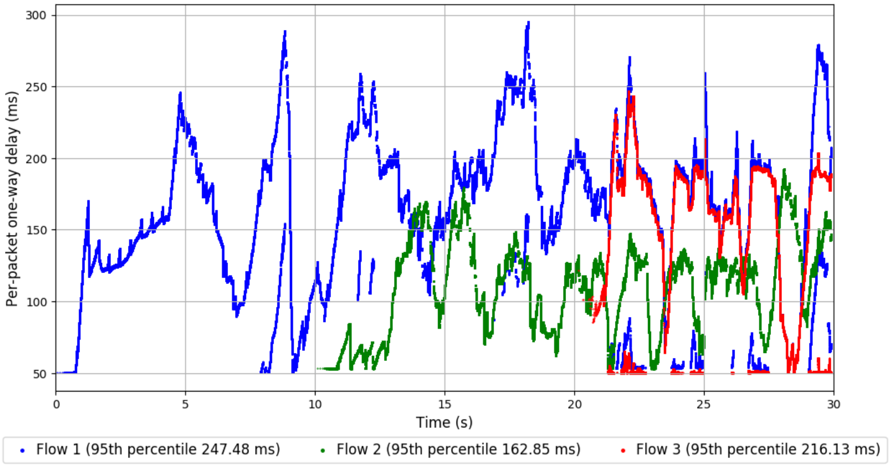




```
Run 6: Statistics of FillP

Start at: 2018-06-01 23:55:04
End at: 2018-06-01 23:55:34
Local clock offset: -0.093 ms
Remote clock offset: -0.154 ms

# Below is generated by plot.py at 2018-06-02 02:59:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1357.61 Mbit/s
95th percentile per-packet one-way delay: 231.679 ms
Loss rate: 4.89%
-- Flow 1:
Average throughput: 706.31 Mbit/s
95th percentile per-packet one-way delay: 247.477 ms
Loss rate: 4.21%
-- Flow 2:
Average throughput: 800.81 Mbit/s
95th percentile per-packet one-way delay: 162.850 ms
Loss rate: 6.28%
-- Flow 3:
Average throughput: 365.99 Mbit/s
95th percentile per-packet one-way delay: 216.134 ms
Loss rate: 2.53%
```

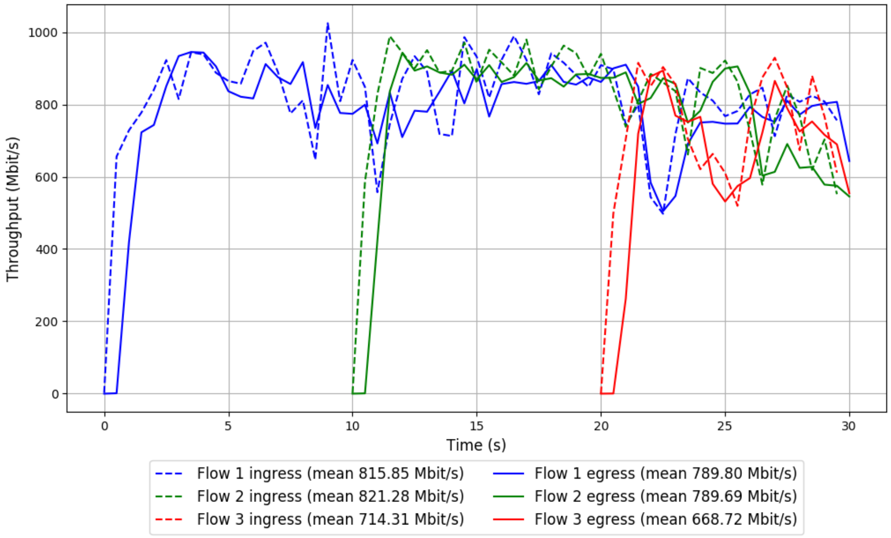
Run 6: Report of FillP — Data Link

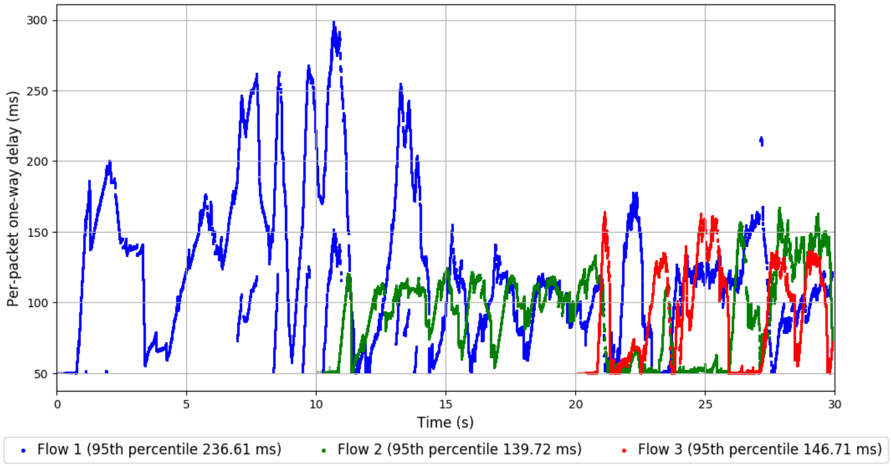




```
Run 7: Statistics of FillP

Start at: 2018-06-02 00:18:08
End at: 2018-06-02 00:18:38
Local clock offset: -0.009 ms
Remote clock offset: -0.26 ms

# Below is generated by plot.py at 2018-06-02 02:59:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1534.72 Mbit/s
95th percentile per-packet one-way delay: 197.171 ms
Loss rate: 4.38%
-- Flow 1:
Average throughput: 789.80 Mbit/s
95th percentile per-packet one-way delay: 236.606 ms
Loss rate: 3.53%
-- Flow 2:
Average throughput: 789.69 Mbit/s
95th percentile per-packet one-way delay: 139.719 ms
Loss rate: 4.36%
-- Flow 3:
Average throughput: 668.72 Mbit/s
95th percentile per-packet one-way delay: 146.708 ms
Loss rate: 7.37%
```

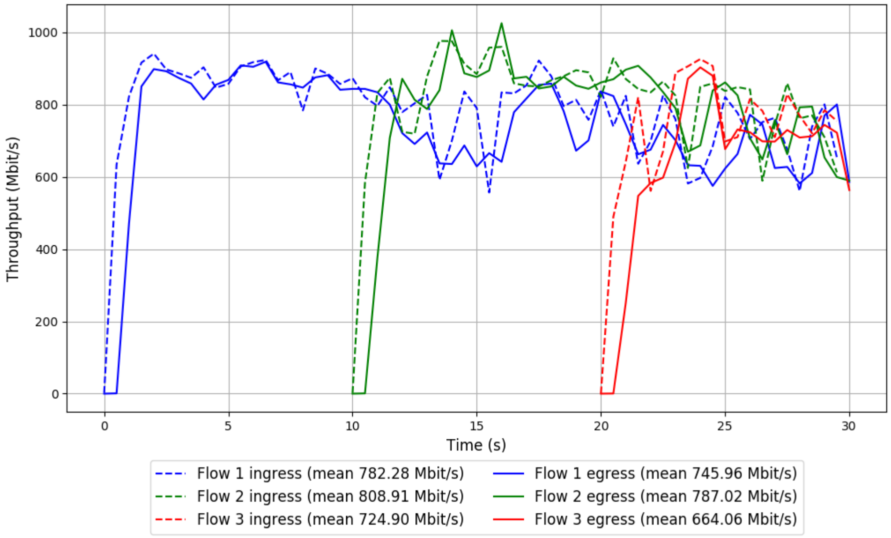
Run 7: Report of FillP — Data Link

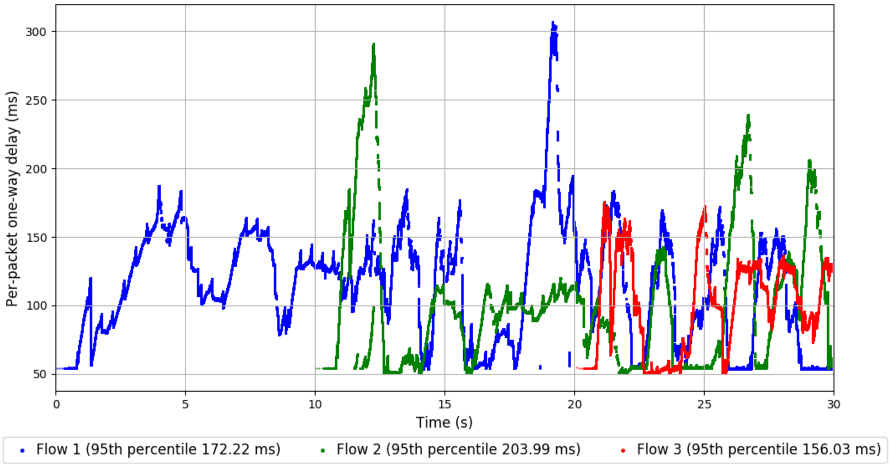




```
Run 8: Statistics of FillP

Start at: 2018-06-02 00:41:16
End at: 2018-06-02 00:41:46
Local clock offset: 0.139 ms
Remote clock offset: -0.161 ms

# Below is generated by plot.py at 2018-06-02 02:59:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1487.54 Mbit/s
95th percentile per-packet one-way delay: 176.170 ms
Loss rate: 5.05%
-- Flow 1:
Average throughput: 745.96 Mbit/s
95th percentile per-packet one-way delay: 172.218 ms
Loss rate: 4.98%
-- Flow 2:
Average throughput: 787.02 Mbit/s
95th percentile per-packet one-way delay: 203.991 ms
Loss rate: 3.22%
-- Flow 3:
Average throughput: 664.06 Mbit/s
95th percentile per-packet one-way delay: 156.033 ms
Loss rate: 9.37%
```

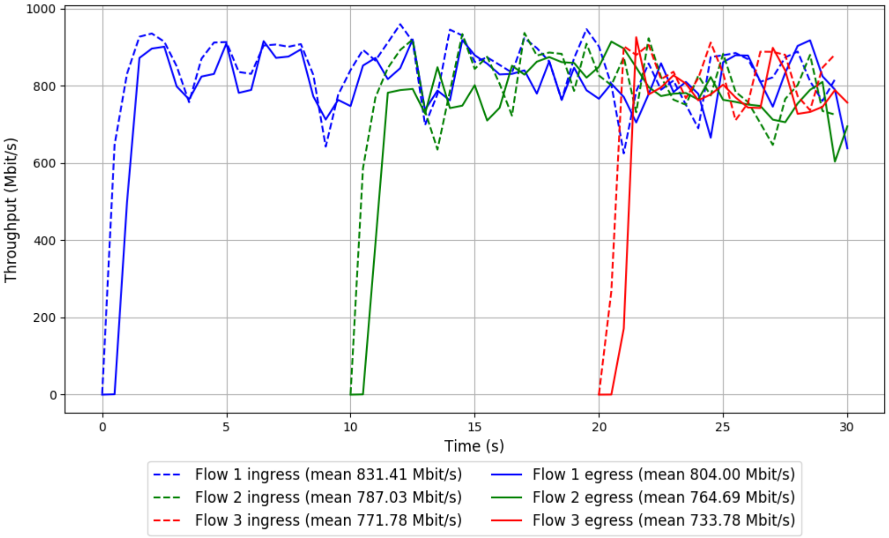
Run 8: Report of FillP — Data Link

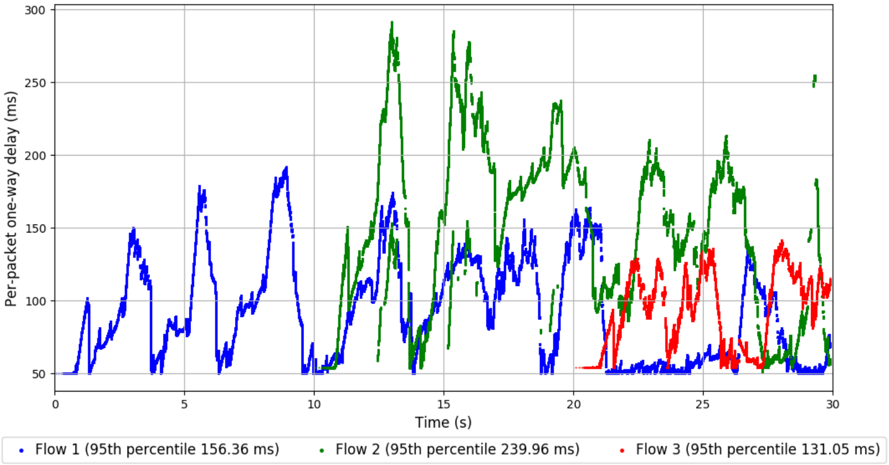




```
Run 9: Statistics of FillP

Start at: 2018-06-02 01:04:04
End at: 2018-06-02 01:04:34
Local clock offset: 0.081 ms
Remote clock offset: -0.145 ms

# Below is generated by plot.py at 2018-06-02 03:27:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1553.08 Mbit/s
95th percentile per-packet one-way delay: 202.586 ms
Loss rate: 3.92%
-- Flow 1:
Average throughput: 804.00 Mbit/s
95th percentile per-packet one-way delay: 156.358 ms
Loss rate: 3.64%
-- Flow 2:
Average throughput: 764.69 Mbit/s
95th percentile per-packet one-way delay: 239.963 ms
Loss rate: 3.37%
-- Flow 3:
Average throughput: 733.78 Mbit/s
95th percentile per-packet one-way delay: 131.054 ms
Loss rate: 5.97%
```

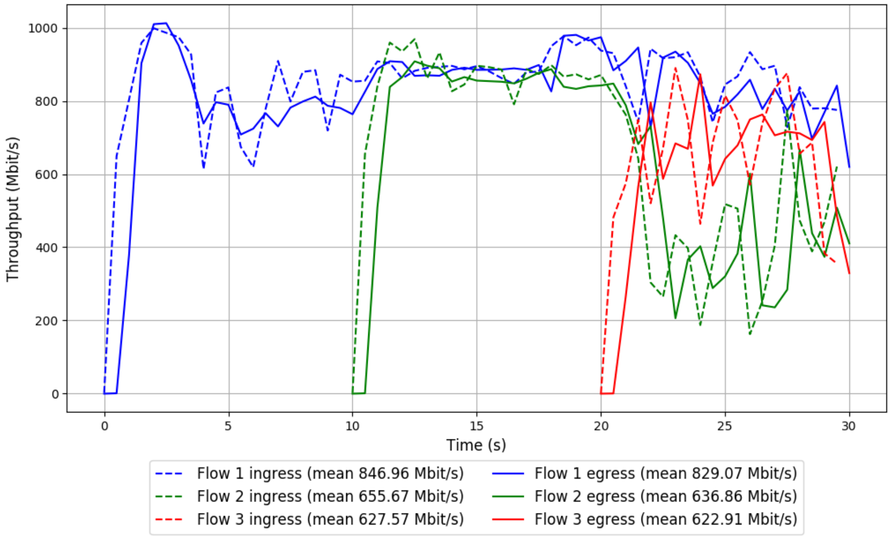
Run 9: Report of FillP — Data Link

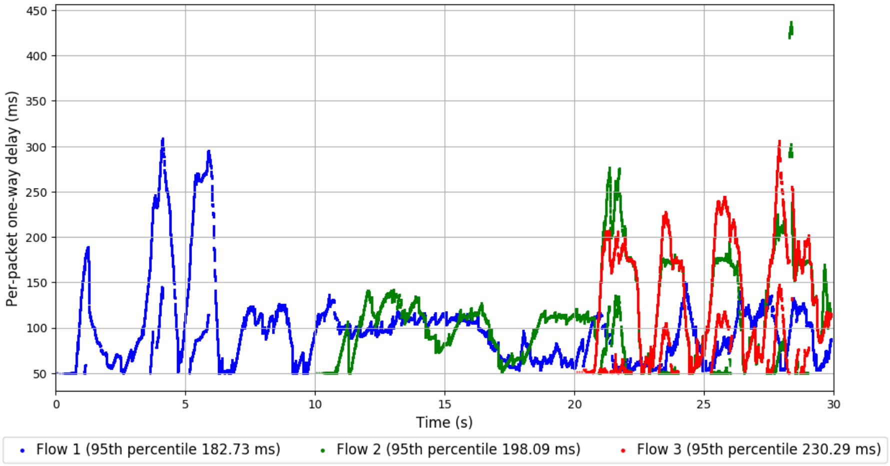




```
Run 10: Statistics of FillP

Start at: 2018-06-02 01:27:01
End at: 2018-06-02 01:27:31
Local clock offset: 0.349 ms
Remote clock offset: 0.334 ms

# Below is generated by plot.py at 2018-06-02 03:27:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1457.22 Mbit/s
95th percentile per-packet one-way delay: 209.482 ms
Loss rate: 2.63%
-- Flow 1:
Average throughput: 829.07 Mbit/s
95th percentile per-packet one-way delay: 182.729 ms
Loss rate: 2.45%
-- Flow 2:
Average throughput: 636.86 Mbit/s
95th percentile per-packet one-way delay: 198.092 ms
Loss rate: 3.38%
-- Flow 3:
Average throughput: 622.91 Mbit/s
95th percentile per-packet one-way delay: 230.286 ms
Loss rate: 1.78%
```

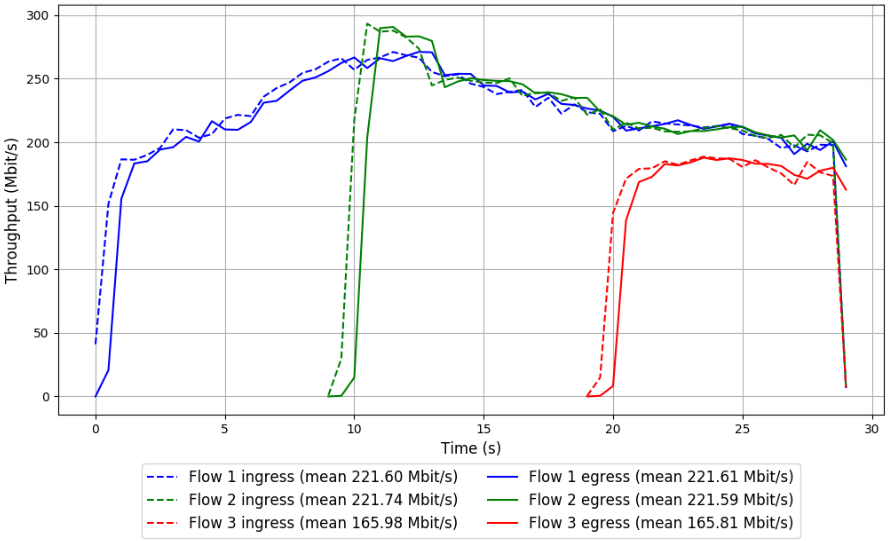
Run 10: Report of FillP — Data Link

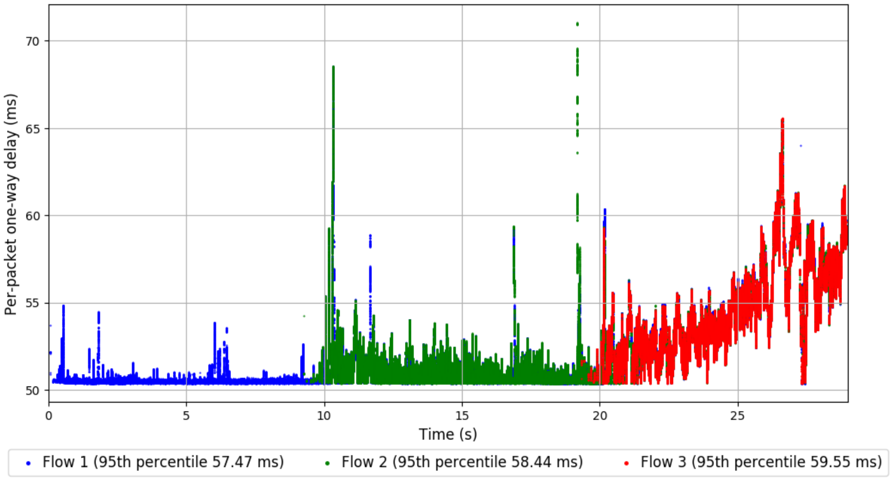




```
Run 1: Statistics of Indigo

Start at: 2018-06-01 22:03:32
End at: 2018-06-01 22:04:02
Local clock offset: 0.626 ms
Remote clock offset: -0.152 ms

# Below is generated by plot.py at 2018-06-02 03:27:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 427.86 Mbit/s
95th percentile per-packet one-way delay: 58.418 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 221.61 Mbit/s
95th percentile per-packet one-way delay: 57.468 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 221.59 Mbit/s
95th percentile per-packet one-way delay: 58.444 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 165.81 Mbit/s
95th percentile per-packet one-way delay: 59.551 ms
Loss rate: 1.16%
```

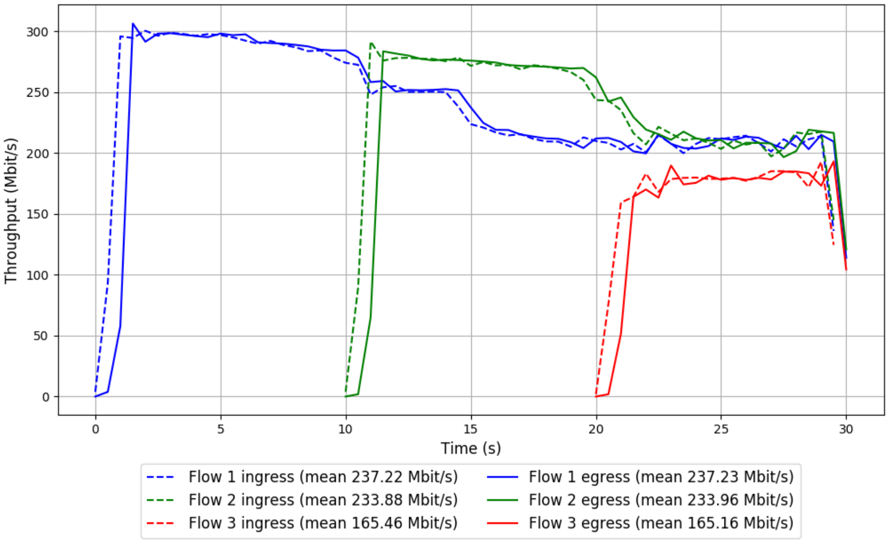
Run 1: Report of Indigo — Data Link

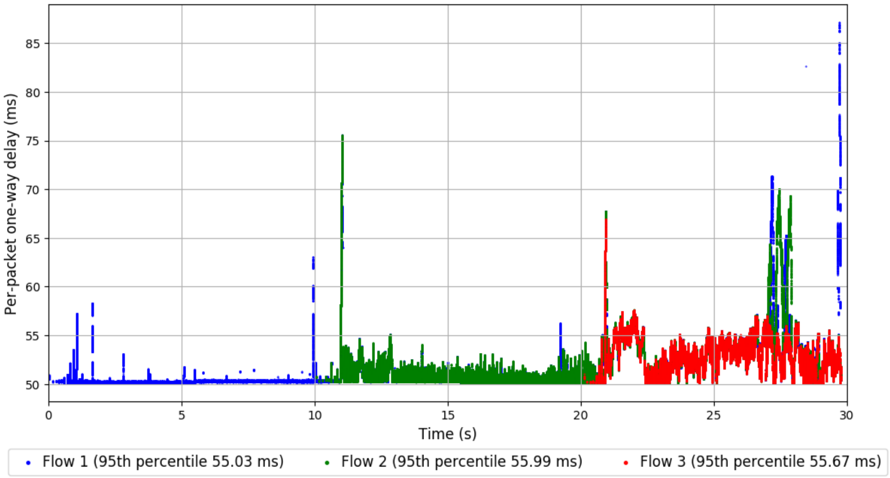




```
Run 2: Statistics of Indigo

Start at: 2018-06-01 22:26:45
End at: 2018-06-01 22:27:15
Local clock offset: 0.614 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2018-06-02 03:27:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 446.00 Mbit/s
95th percentile per-packet one-way delay: 55.495 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 237.23 Mbit/s
95th percentile per-packet one-way delay: 55.031 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 233.96 Mbit/s
95th percentile per-packet one-way delay: 55.990 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 165.16 Mbit/s
95th percentile per-packet one-way delay: 55.666 ms
Loss rate: 1.24%
```

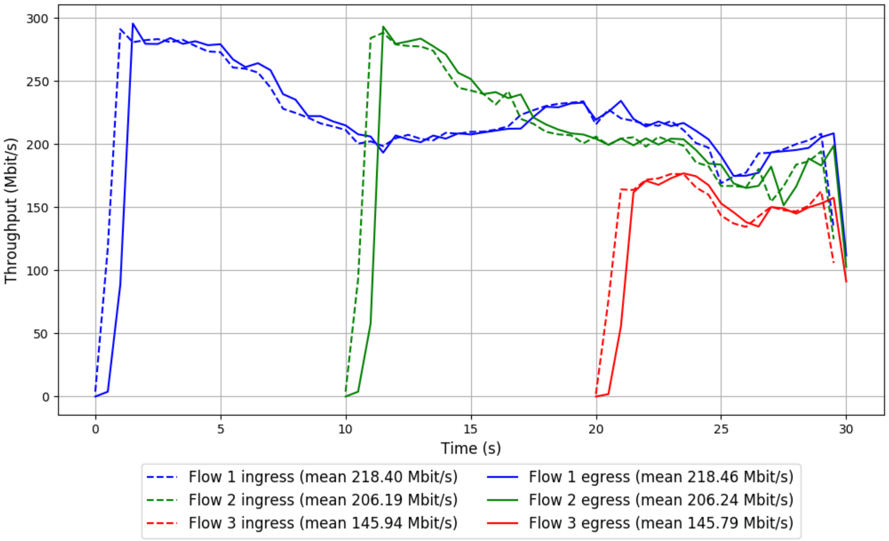
Run 2: Report of Indigo — Data Link

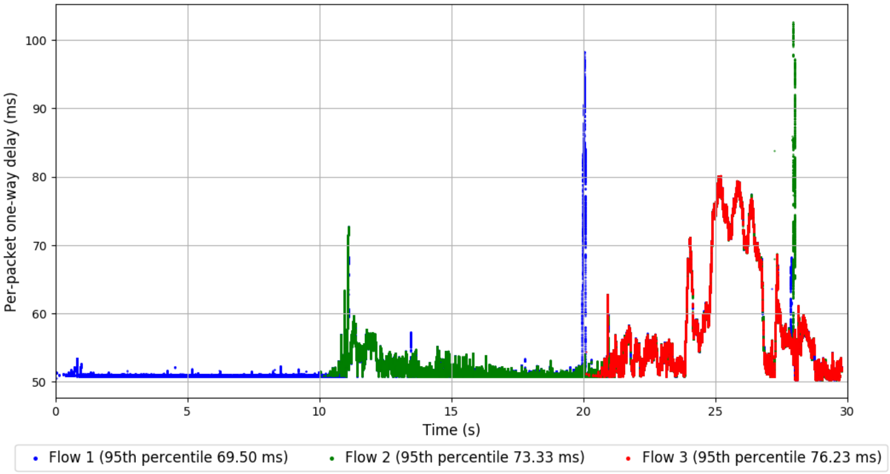




```
Run 3: Statistics of Indigo

Start at: 2018-06-01 22:49:43
End at: 2018-06-01 22:50:13
Local clock offset: 0.685 ms
Remote clock offset: -0.291 ms

# Below is generated by plot.py at 2018-06-02 03:27:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 402.65 Mbit/s
95th percentile per-packet one-way delay: 73.282 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 218.46 Mbit/s
95th percentile per-packet one-way delay: 69.501 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 206.24 Mbit/s
95th percentile per-packet one-way delay: 73.333 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 145.79 Mbit/s
95th percentile per-packet one-way delay: 76.227 ms
Loss rate: 1.18%
```

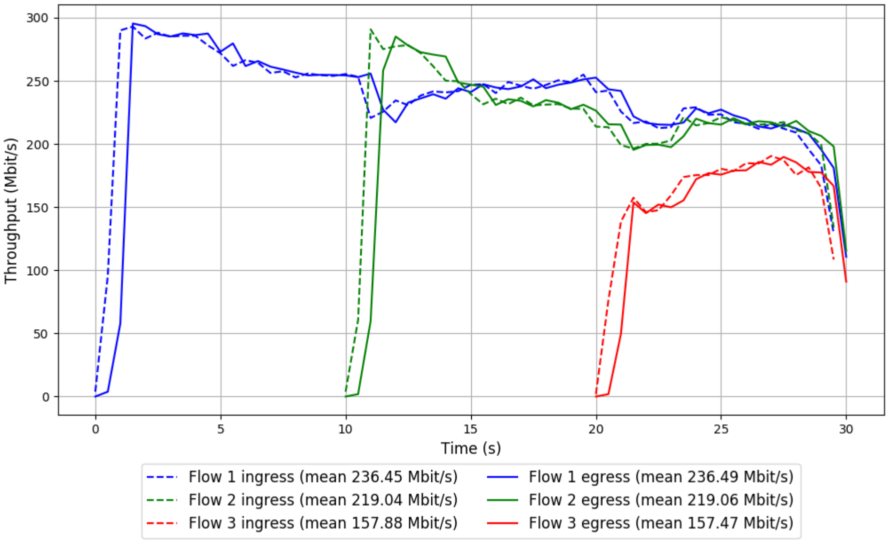
Run 3: Report of Indigo — Data Link

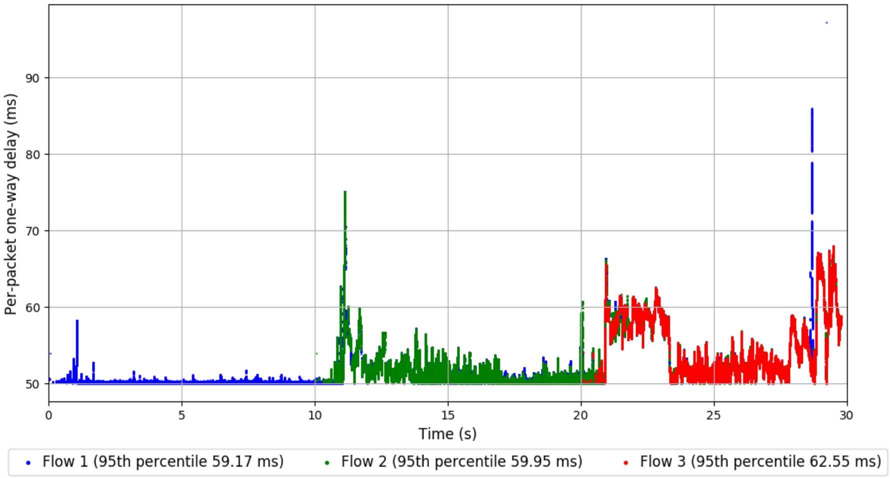




```
Run 4: Statistics of Indigo

Start at: 2018-06-01 23:12:54
End at: 2018-06-01 23:13:24
Local clock offset: 0.668 ms
Remote clock offset: -0.146 ms

# Below is generated by plot.py at 2018-06-02 03:27:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 432.98 Mbit/s
95th percentile per-packet one-way delay: 59.856 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 236.49 Mbit/s
95th percentile per-packet one-way delay: 59.173 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 219.06 Mbit/s
95th percentile per-packet one-way delay: 59.945 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 157.47 Mbit/s
95th percentile per-packet one-way delay: 62.552 ms
Loss rate: 1.30%
```

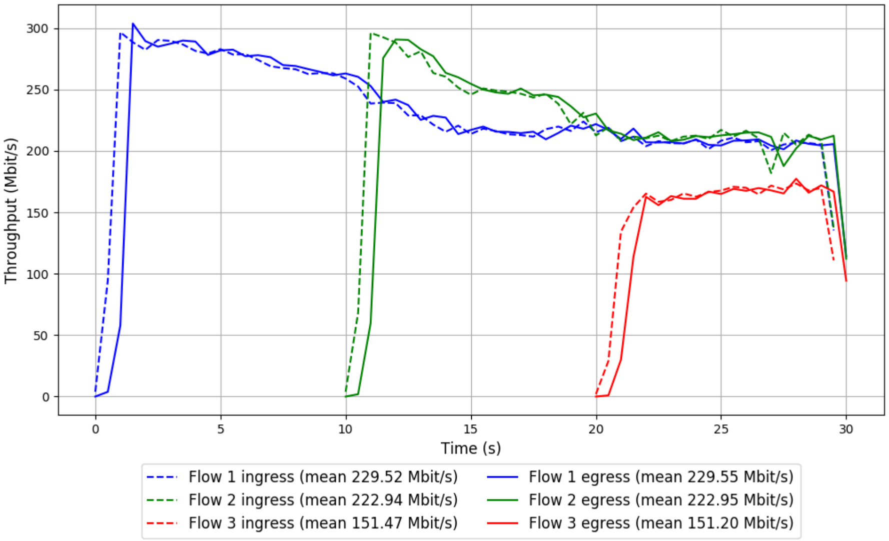
Run 4: Report of Indigo — Data Link

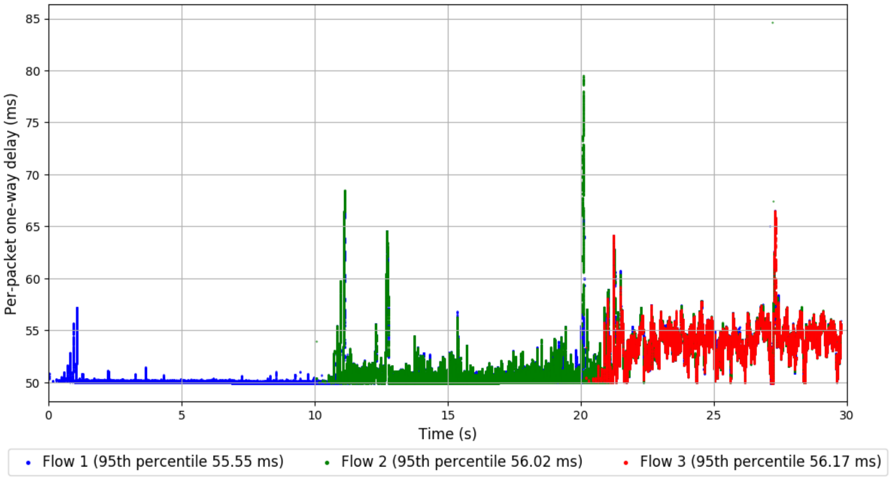




```
Run 5: Statistics of Indigo

Start at: 2018-06-01 23:35:44
End at: 2018-06-01 23:36:14
Local clock offset: 0.302 ms
Remote clock offset: 0.021 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 426.16 Mbit/s
95th percentile per-packet one-way delay: 55.838 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 229.55 Mbit/s
95th percentile per-packet one-way delay: 55.546 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 222.95 Mbit/s
95th percentile per-packet one-way delay: 56.021 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 151.20 Mbit/s
95th percentile per-packet one-way delay: 56.175 ms
Loss rate: 1.26%
```

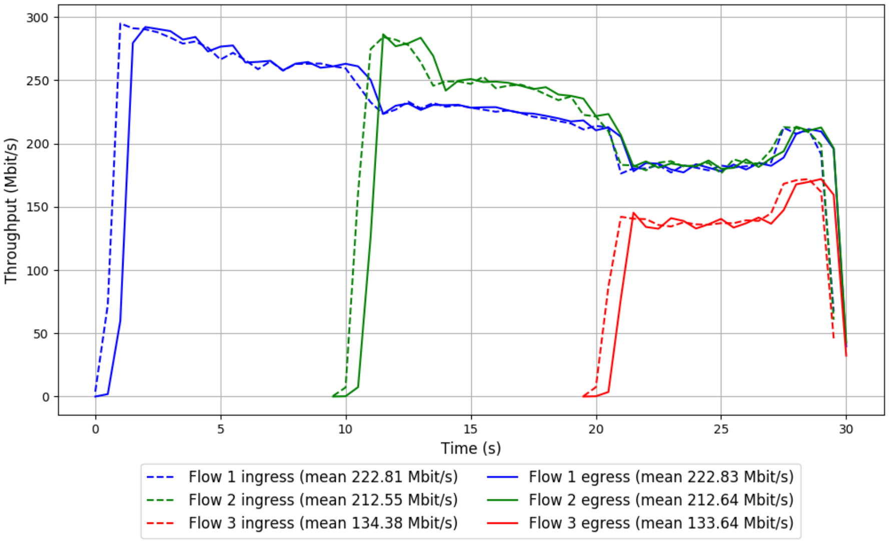
Run 5: Report of Indigo — Data Link

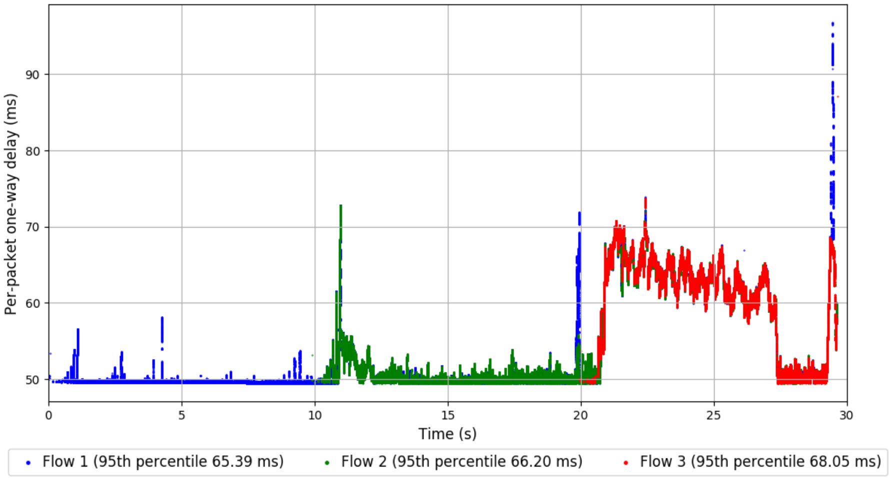




```
Run 6: Statistics of Indigo

Start at: 2018-06-01 23:58:33
End at: 2018-06-01 23:59:03
Local clock offset: -0.286 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 407.99 Mbit/s
95th percentile per-packet one-way delay: 66.179 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 222.83 Mbit/s
95th percentile per-packet one-way delay: 65.395 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 212.64 Mbit/s
95th percentile per-packet one-way delay: 66.196 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 133.64 Mbit/s
95th percentile per-packet one-way delay: 68.046 ms
Loss rate: 1.27%
```

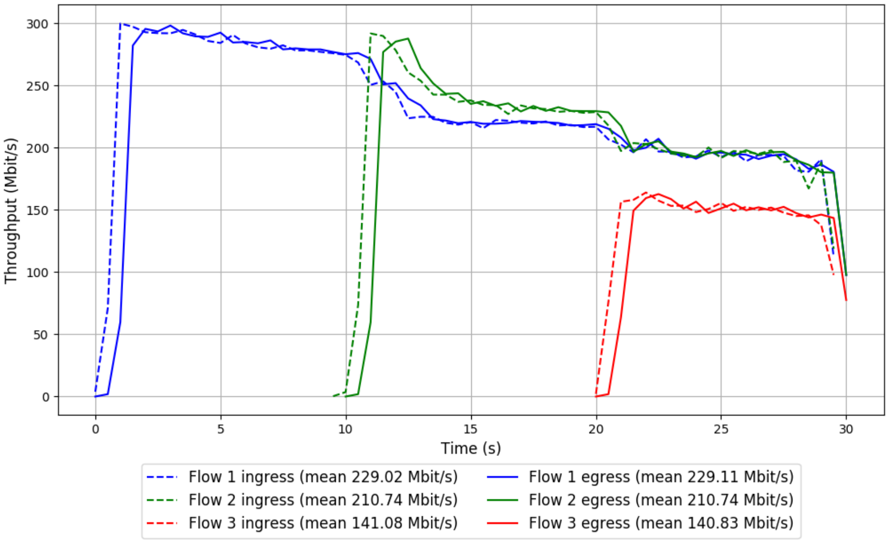
Run 6: Report of Indigo — Data Link

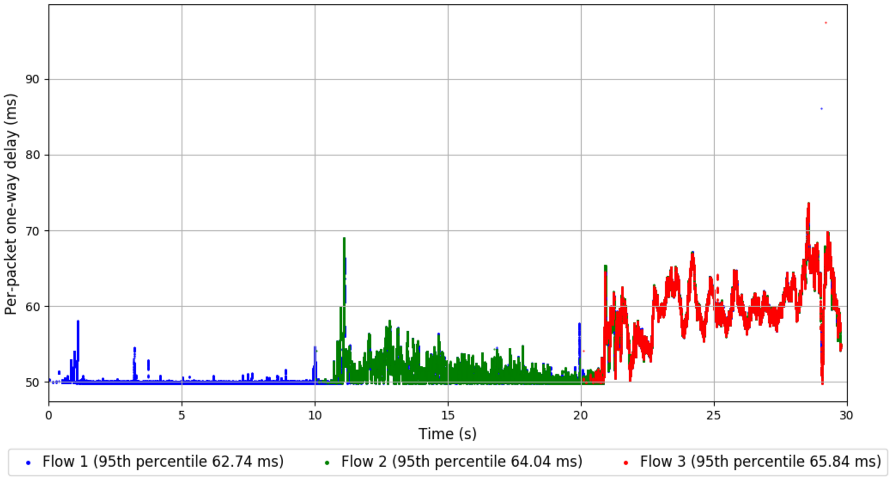




```
Run 7: Statistics of Indigo

Start at: 2018-06-02 00:21:43
End at: 2018-06-02 00:22:13
Local clock offset: -0.119 ms
Remote clock offset: -0.136 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 414.70 Mbit/s
95th percentile per-packet one-way delay: 63.754 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 229.11 Mbit/s
95th percentile per-packet one-way delay: 62.737 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 210.74 Mbit/s
95th percentile per-packet one-way delay: 64.037 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 140.83 Mbit/s
95th percentile per-packet one-way delay: 65.841 ms
Loss rate: 1.21%
```

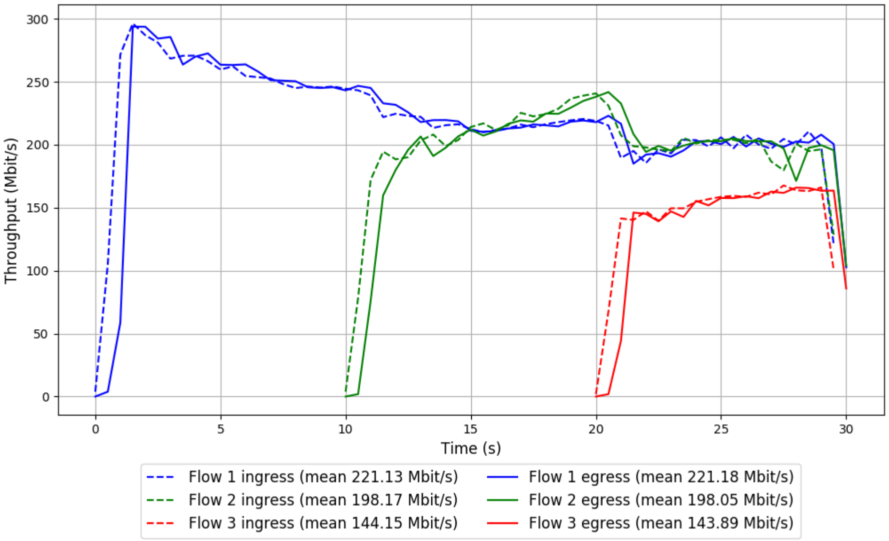
Run 7: Report of Indigo — Data Link

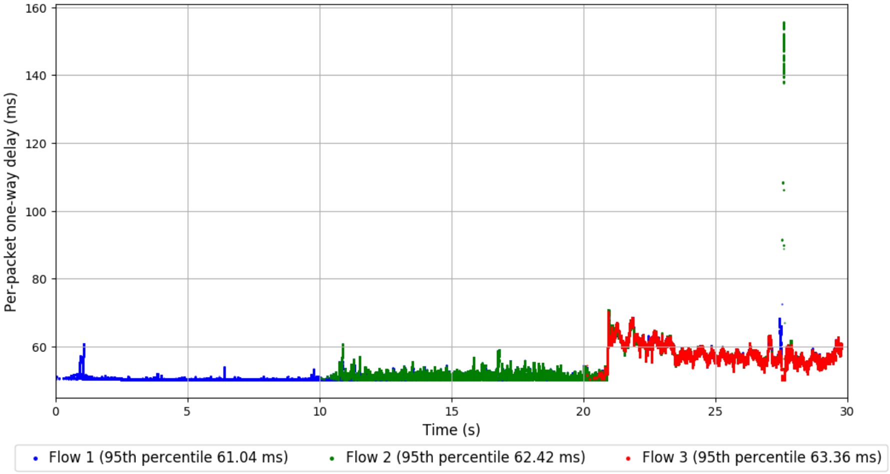




```
Run 8: Statistics of Indigo

Start at: 2018-06-02 00:44:48
End at: 2018-06-02 00:45:18
Local clock offset: 0.418 ms
Remote clock offset: 0.016 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 399.14 Mbit/s
95th percentile per-packet one-way delay: 62.145 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 221.18 Mbit/s
95th percentile per-packet one-way delay: 61.043 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 198.05 Mbit/s
95th percentile per-packet one-way delay: 62.425 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 143.89 Mbit/s
95th percentile per-packet one-way delay: 63.360 ms
Loss rate: 1.23%
```

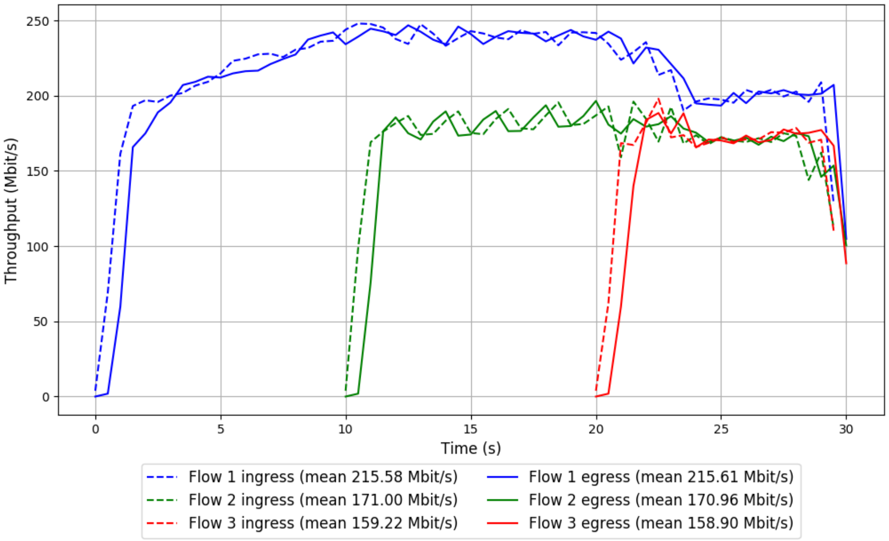
Run 8: Report of Indigo — Data Link

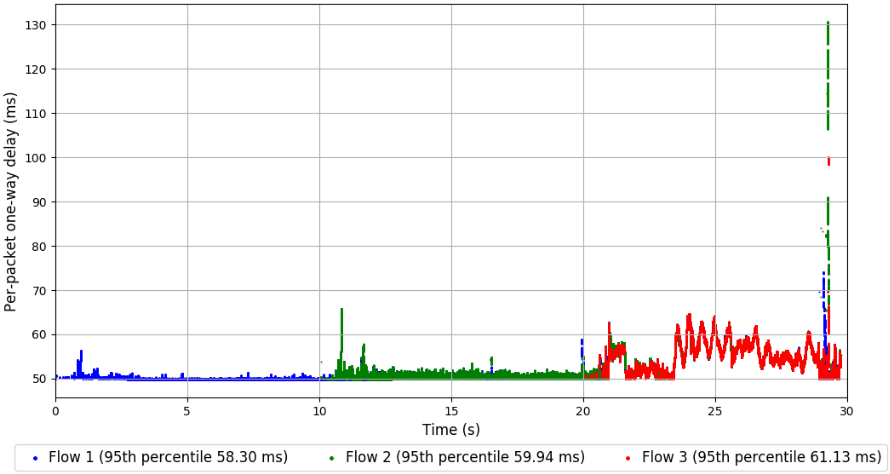




```
Run 9: Statistics of Indigo

Start at: 2018-06-02 01:07:38
End at: 2018-06-02 01:08:08
Local clock offset: -0.002 ms
Remote clock offset: 0.124 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 380.89 Mbit/s
95th percentile per-packet one-way delay: 59.578 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 215.61 Mbit/s
95th percentile per-packet one-way delay: 58.303 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 170.96 Mbit/s
95th percentile per-packet one-way delay: 59.940 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 158.90 Mbit/s
95th percentile per-packet one-way delay: 61.133 ms
Loss rate: 1.27%
```

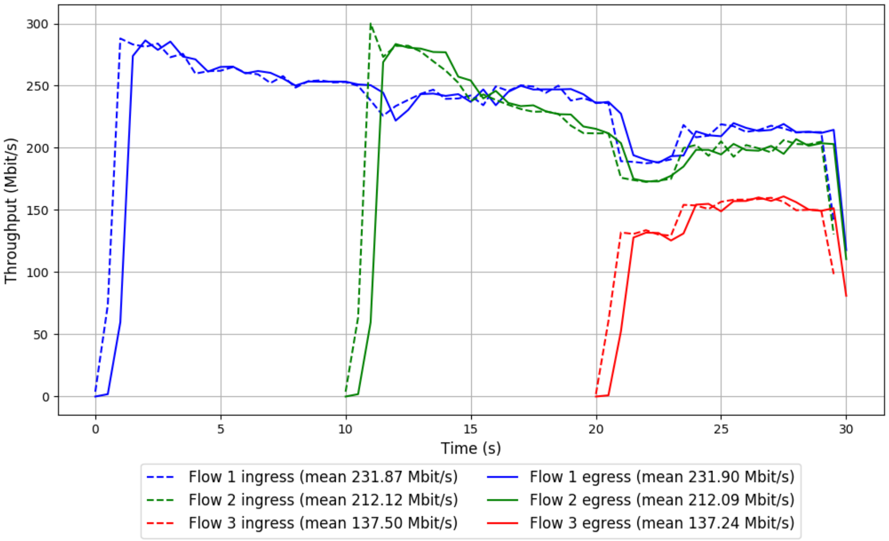
Run 9: Report of Indigo — Data Link

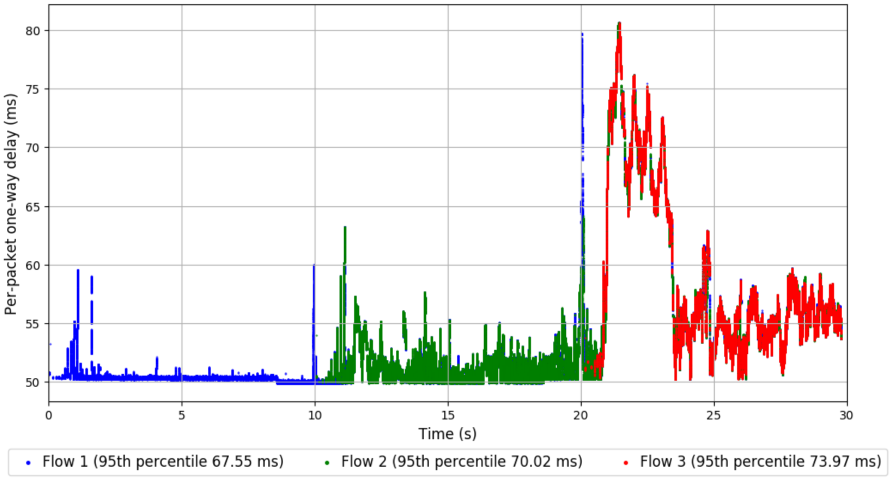




```
Run 10: Statistics of Indigo

Start at: 2018-06-02 01:30:32
End at: 2018-06-02 01:31:02
Local clock offset: 0.127 ms
Remote clock offset: -0.091 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 416.92 Mbit/s
95th percentile per-packet one-way delay: 70.023 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 231.90 Mbit/s
95th percentile per-packet one-way delay: 67.554 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 212.09 Mbit/s
95th percentile per-packet one-way delay: 70.023 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 137.24 Mbit/s
95th percentile per-packet one-way delay: 73.975 ms
Loss rate: 1.25%
```

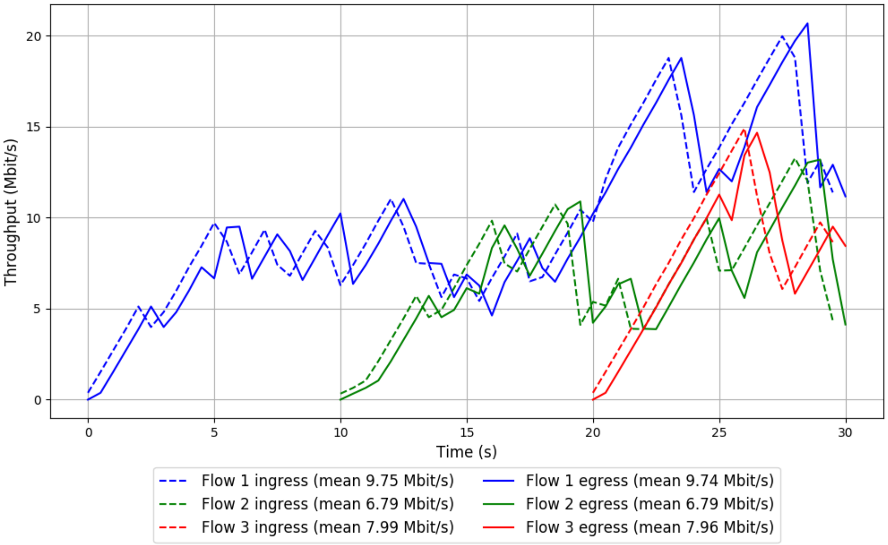
Run 10: Report of Indigo — Data Link

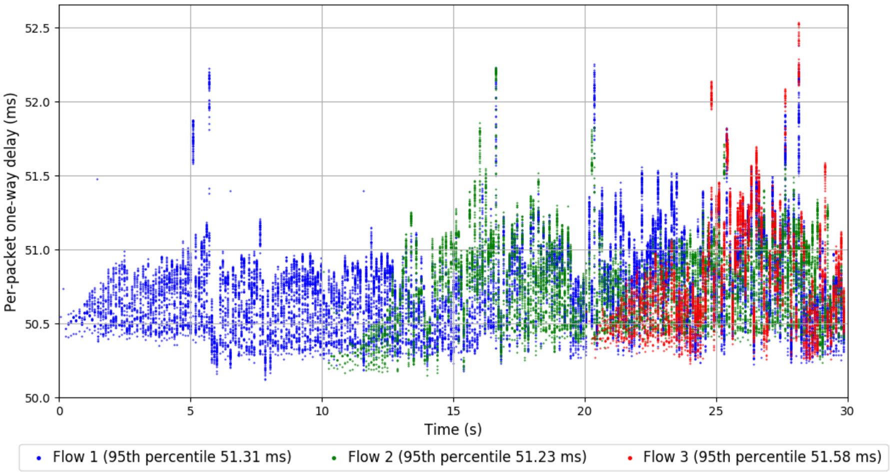




```
Run 1: Statistics of LEDBAT

Start at: 2018-06-01 22:13:05
End at: 2018-06-01 22:13:35
Local clock offset: 0.407 ms
Remote clock offset: -0.275 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.86 Mbit/s
95th percentile per-packet one-way delay: 51.339 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 9.74 Mbit/s
95th percentile per-packet one-way delay: 51.309 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 6.79 Mbit/s
95th percentile per-packet one-way delay: 51.230 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 7.96 Mbit/s
95th percentile per-packet one-way delay: 51.578 ms
Loss rate: 1.43%
```

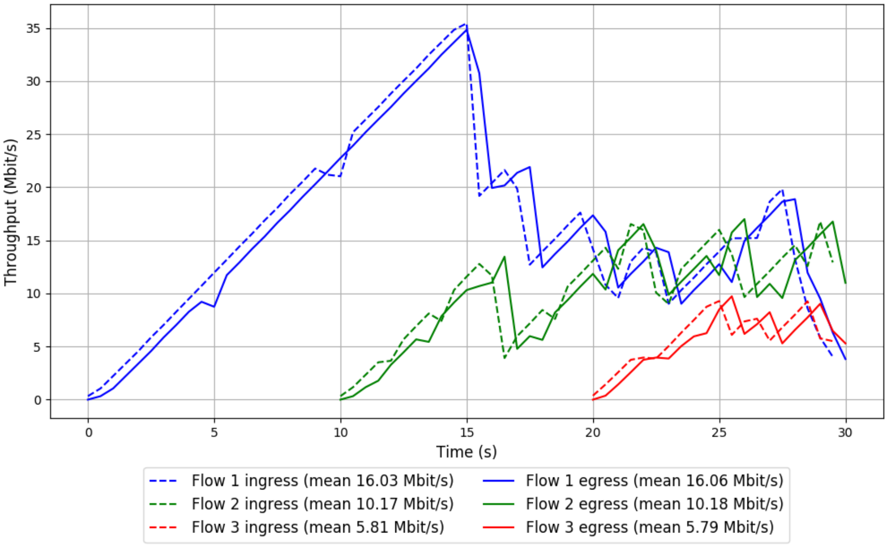
Run 1: Report of LEDBAT — Data Link

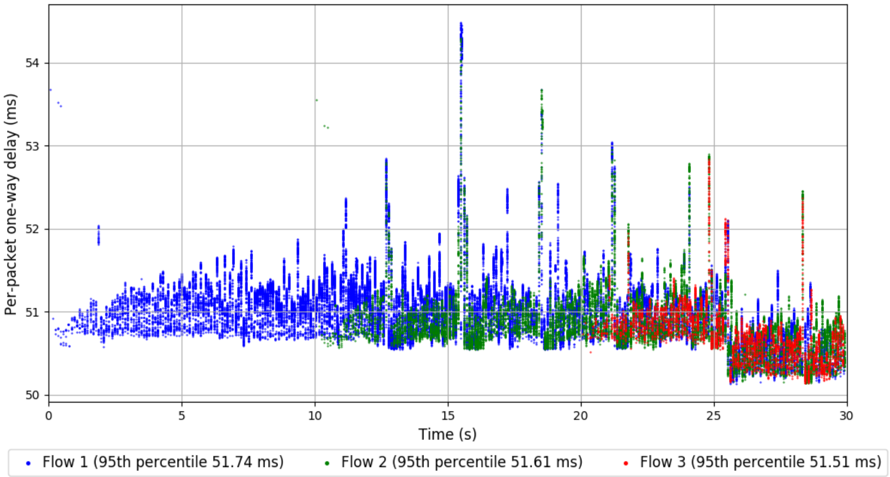




```
Run 2: Statistics of LEDBAT

Start at: 2018-06-01 22:36:15
End at: 2018-06-01 22:36:45
Local clock offset: 0.687 ms
Remote clock offset: -0.004 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 24.71 Mbit/s
95th percentile per-packet one-way delay: 51.713 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 16.06 Mbit/s
95th percentile per-packet one-way delay: 51.741 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 10.18 Mbit/s
95th percentile per-packet one-way delay: 51.613 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 5.79 Mbit/s
95th percentile per-packet one-way delay: 51.507 ms
Loss rate: 1.27%
```

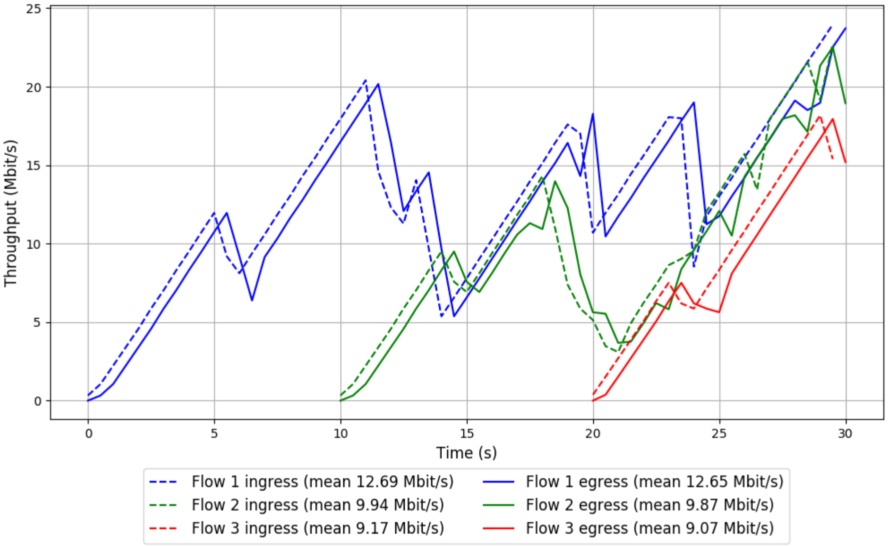
Run 2: Report of LEDBAT — Data Link

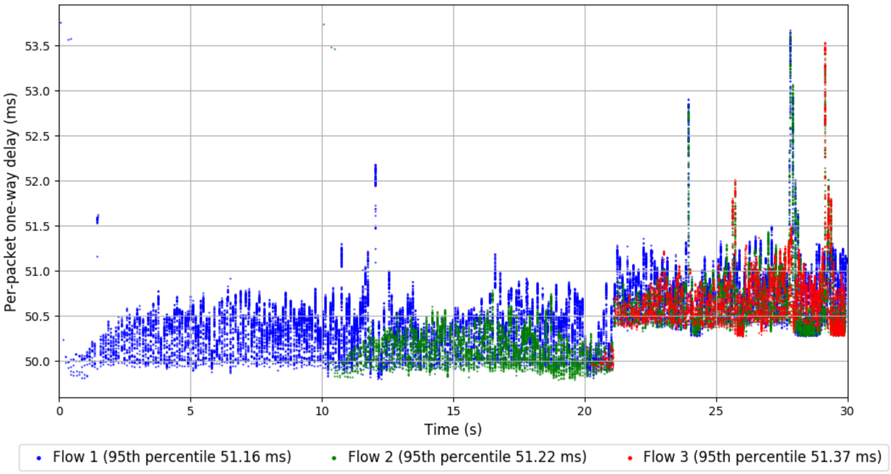




```
Run 3: Statistics of LEDBAT

Start at: 2018-06-01 22:59:20
End at: 2018-06-01 22:59:50
Local clock offset: 0.54 ms
Remote clock offset: 0.037 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 22.16 Mbit/s
95th percentile per-packet one-way delay: 51.191 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 12.65 Mbit/s
95th percentile per-packet one-way delay: 51.158 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 9.87 Mbit/s
95th percentile per-packet one-way delay: 51.218 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 9.07 Mbit/s
95th percentile per-packet one-way delay: 51.366 ms
Loss rate: 2.16%
```

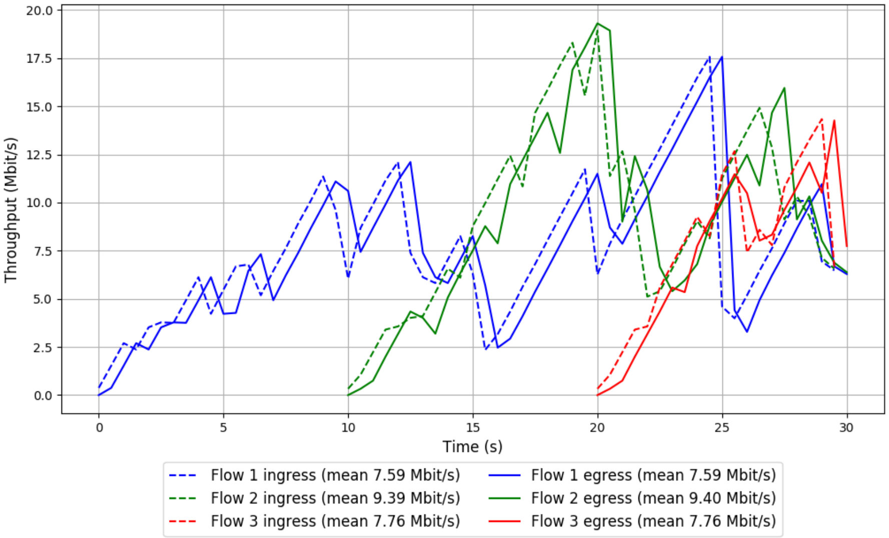
Run 3: Report of LEDBAT — Data Link

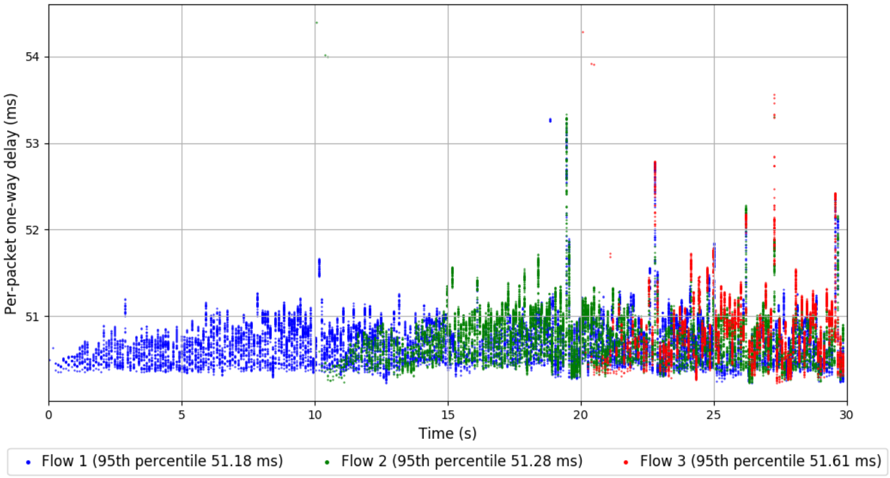




```
Run 4: Statistics of LEDBAT

Start at: 2018-06-01 23:22:28
End at: 2018-06-01 23:22:58
Local clock offset: 0.619 ms
Remote clock offset: -0.355 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.37 Mbit/s
95th percentile per-packet one-way delay: 51.304 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 7.59 Mbit/s
95th percentile per-packet one-way delay: 51.176 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 9.40 Mbit/s
95th percentile per-packet one-way delay: 51.284 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 7.76 Mbit/s
95th percentile per-packet one-way delay: 51.610 ms
Loss rate: 1.13%
```

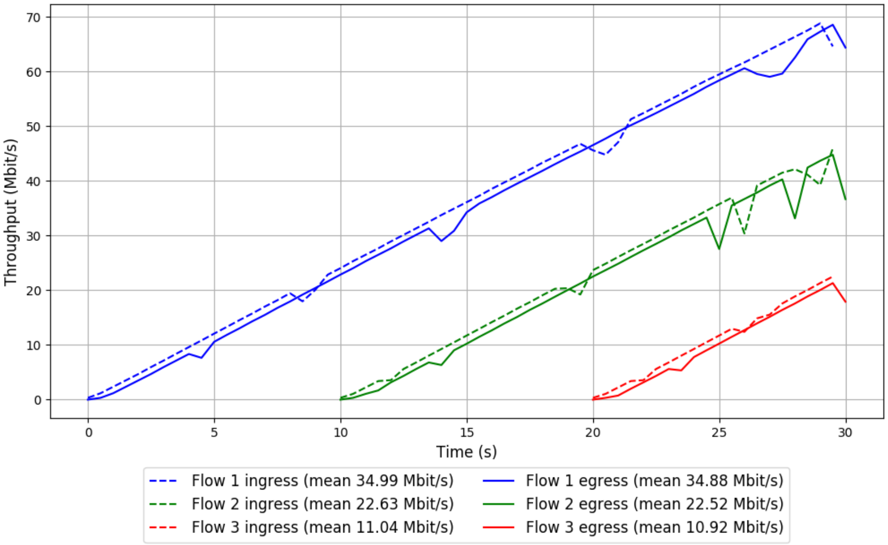
Run 4: Report of LEDBAT — Data Link

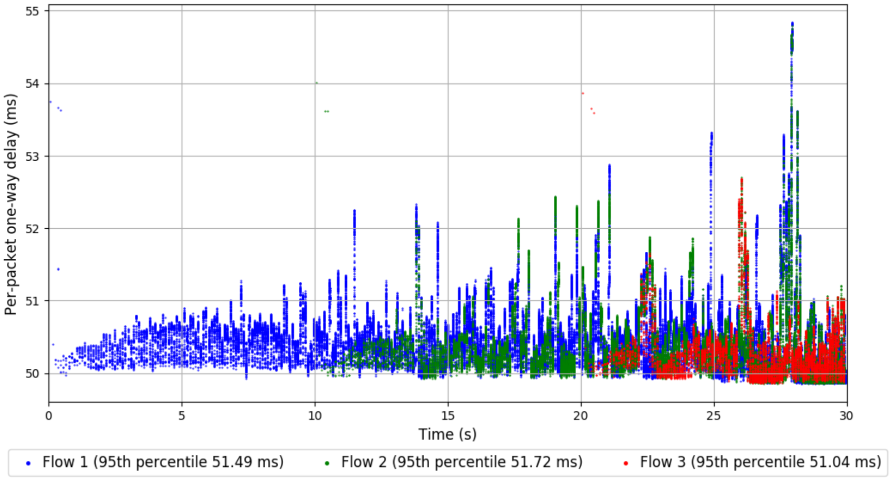




```
Run 5: Statistics of LEDBAT

Start at: 2018-06-01 23:45:16
End at: 2018-06-01 23:45:46
Local clock offset: -0.0 ms
Remote clock offset: -0.138 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 53.40 Mbit/s
95th percentile per-packet one-way delay: 51.577 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 34.88 Mbit/s
95th percentile per-packet one-way delay: 51.494 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 22.52 Mbit/s
95th percentile per-packet one-way delay: 51.715 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 10.92 Mbit/s
95th percentile per-packet one-way delay: 51.041 ms
Loss rate: 2.10%
```

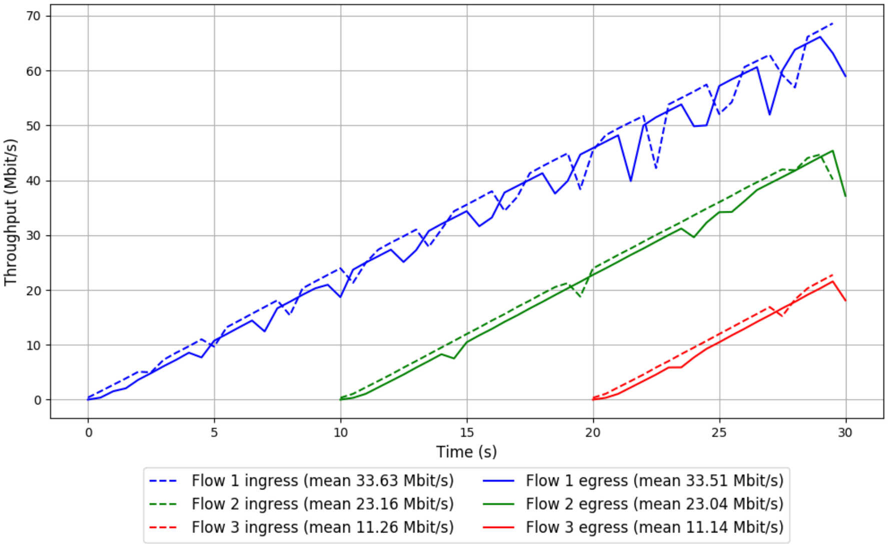
Run 5: Report of LEDBAT — Data Link

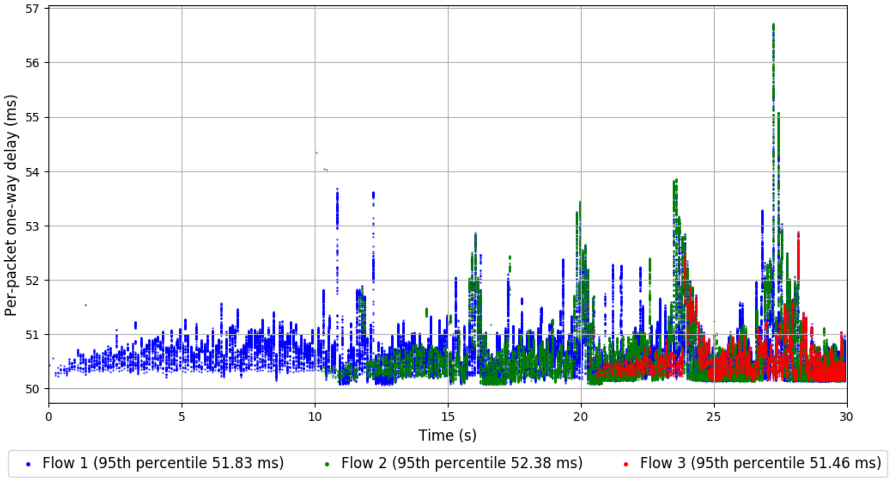




```
Run 6: Statistics of LEDBAT

Start at: 2018-06-02 00:08:10
End at: 2018-06-02 00:08:40
Local clock offset: 0.313 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.44 Mbit/s
95th percentile per-packet one-way delay: 51.988 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 33.51 Mbit/s
95th percentile per-packet one-way delay: 51.827 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 23.04 Mbit/s
95th percentile per-packet one-way delay: 52.385 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 11.14 Mbit/s
95th percentile per-packet one-way delay: 51.464 ms
Loss rate: 2.08%
```

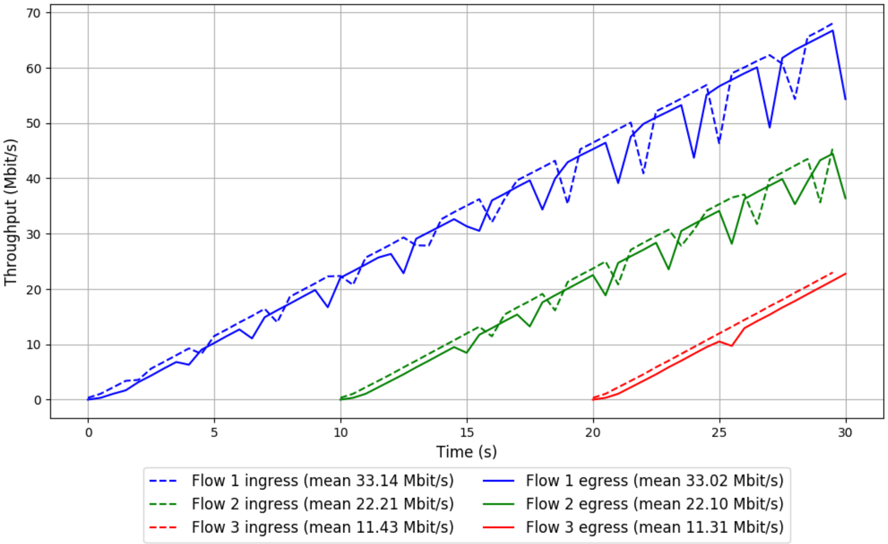
Run 6: Report of LEDBAT — Data Link

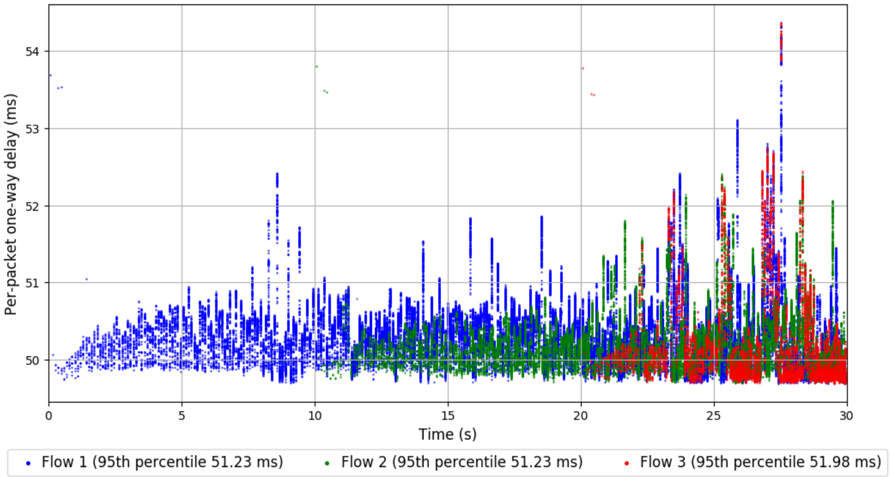




```
Run 7: Statistics of LEDBAT

Start at: 2018-06-02 00:31:25
End at: 2018-06-02 00:31:55
Local clock offset: -0.05 ms
Remote clock offset: 0.024 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 51.39 Mbit/s
95th percentile per-packet one-way delay: 51.274 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 33.02 Mbit/s
95th percentile per-packet one-way delay: 51.227 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 22.10 Mbit/s
95th percentile per-packet one-way delay: 51.233 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 11.31 Mbit/s
95th percentile per-packet one-way delay: 51.980 ms
Loss rate: 2.06%
```

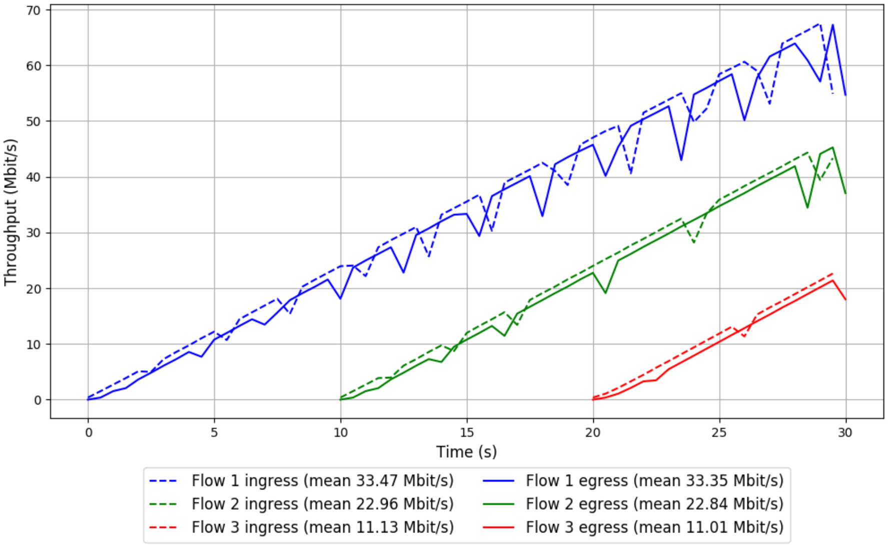
Run 7: Report of LEDBAT — Data Link

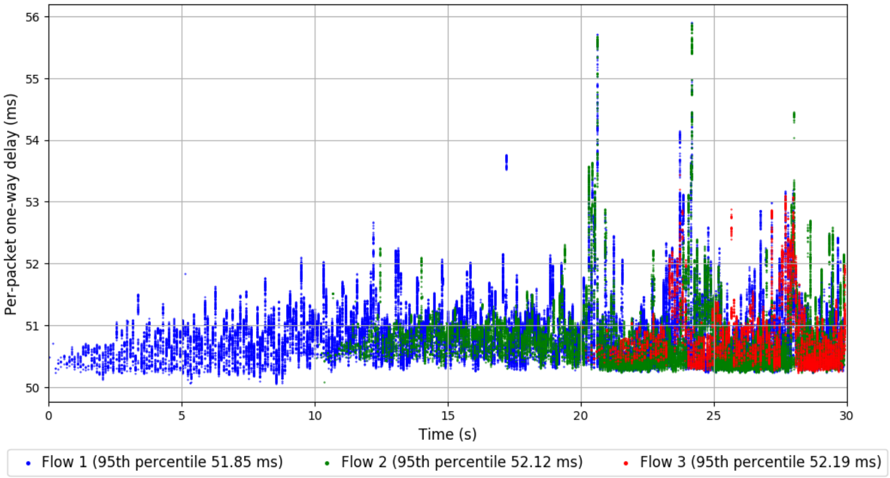




```
Run 8: Statistics of LEDBAT

Start at: 2018-06-02 00:54:12
End at: 2018-06-02 00:54:42
Local clock offset: 0.068 ms
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.09 Mbit/s
95th percentile per-packet one-way delay: 51.934 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 33.35 Mbit/s
95th percentile per-packet one-way delay: 51.851 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 22.84 Mbit/s
95th percentile per-packet one-way delay: 52.116 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 11.01 Mbit/s
95th percentile per-packet one-way delay: 52.186 ms
Loss rate: 2.09%
```

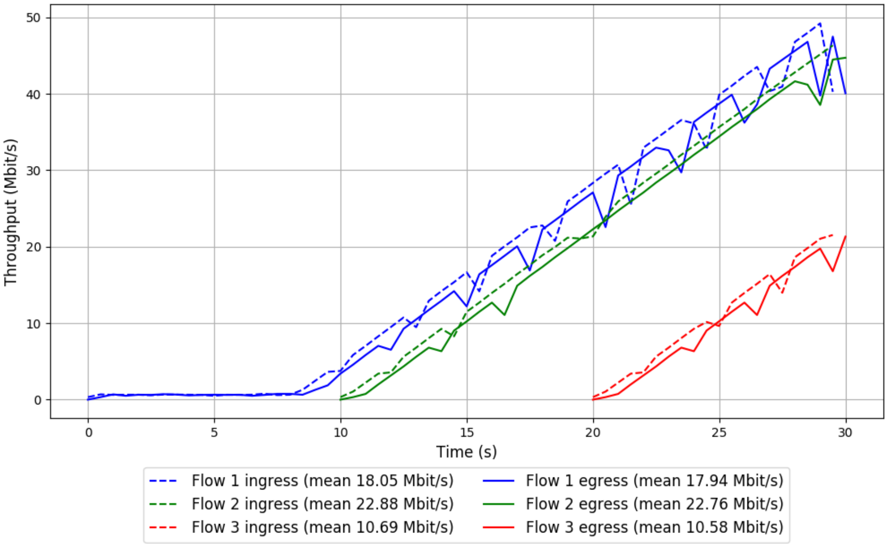
Run 8: Report of LEDBAT — Data Link

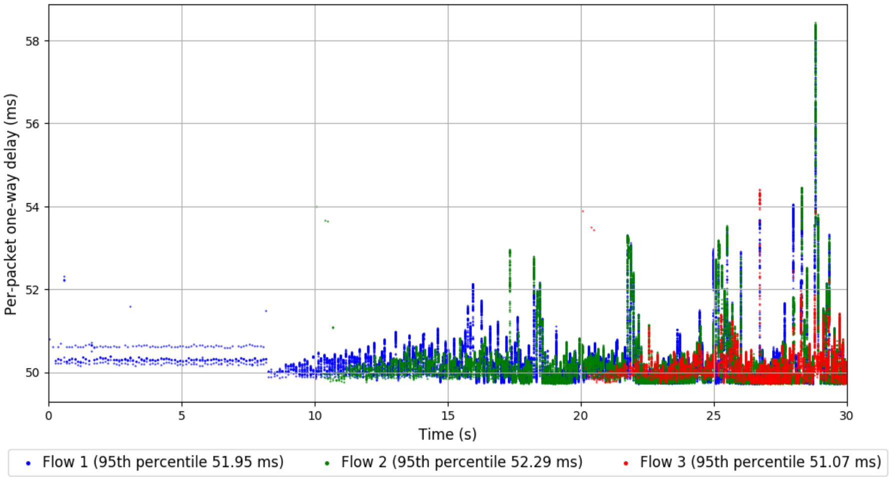




```
Run 9: Statistics of LEDBAT

Start at: 2018-06-02 01:17:03
End at: 2018-06-02 01:17:33
Local clock offset: 0.368 ms
Remote clock offset: 0.343 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.51 Mbit/s
95th percentile per-packet one-way delay: 52.005 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 17.94 Mbit/s
95th percentile per-packet one-way delay: 51.946 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 22.76 Mbit/s
95th percentile per-packet one-way delay: 52.290 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 10.58 Mbit/s
95th percentile per-packet one-way delay: 51.071 ms
Loss rate: 2.12%
```

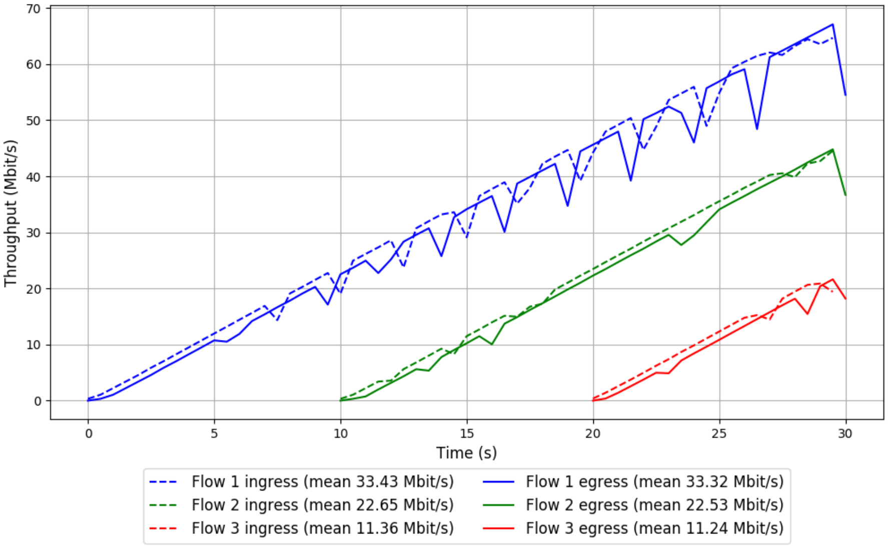
Run 9: Report of LEDBAT — Data Link

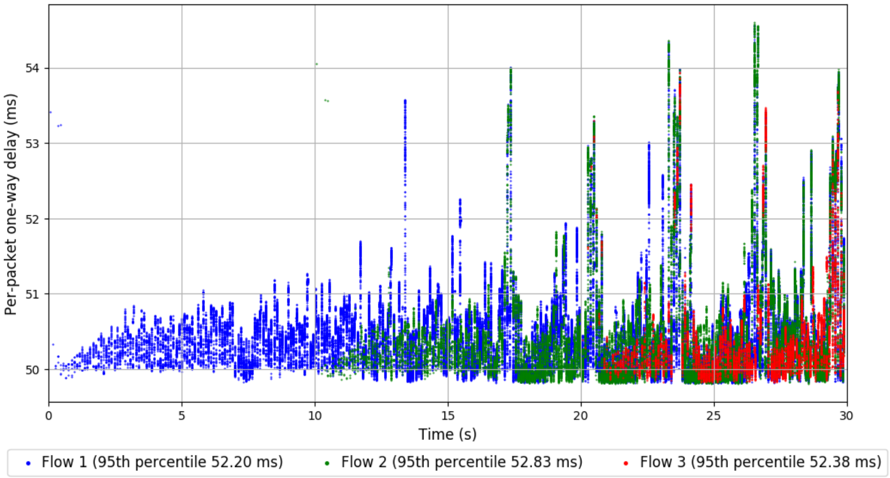




```
Run 10: Statistics of LEDBAT

Start at: 2018-06-02 01:40:13
End at: 2018-06-02 01:40:43
Local clock offset: 0.221 ms
Remote clock offset: 0.088 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 51.99 Mbit/s
95th percentile per-packet one-way delay: 52.432 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 33.32 Mbit/s
95th percentile per-packet one-way delay: 52.200 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 22.53 Mbit/s
95th percentile per-packet one-way delay: 52.829 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 11.24 Mbit/s
95th percentile per-packet one-way delay: 52.379 ms
Loss rate: 2.07%
```

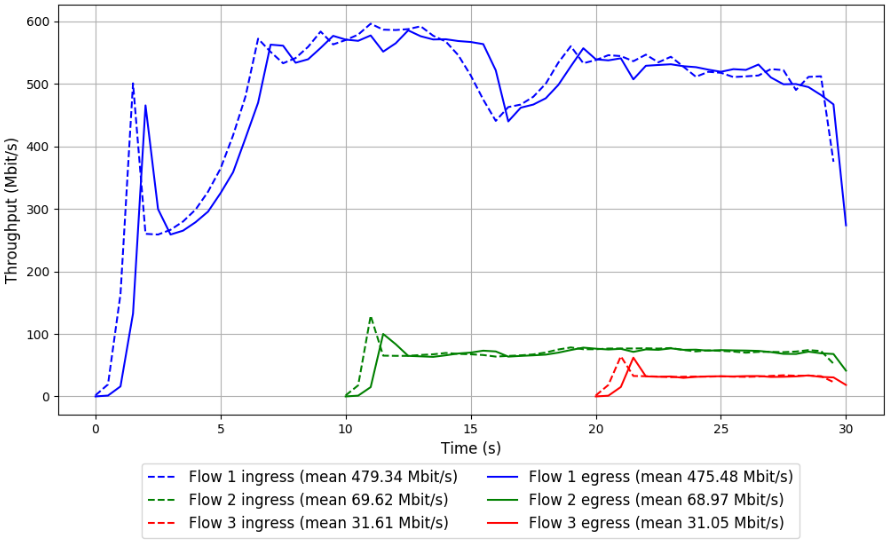
Run 10: Report of LEDBAT — Data Link

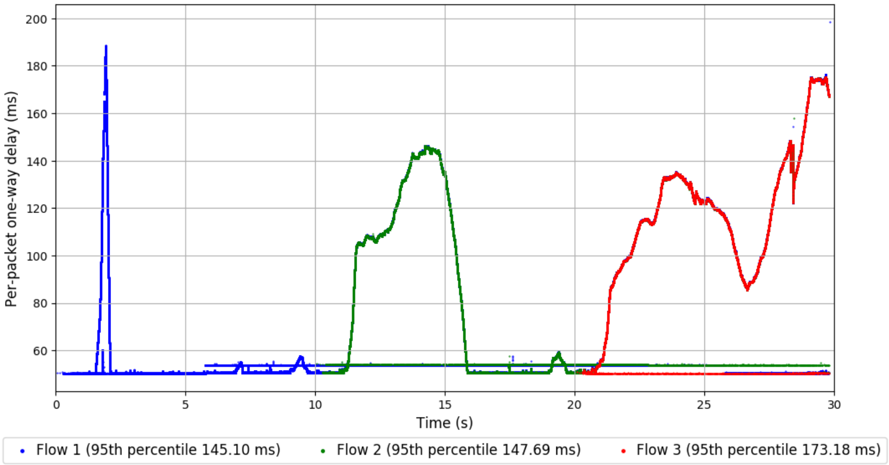




```
Run 1: Statistics of PCC-Allegro

Start at: 2018-06-01 22:02:05
End at: 2018-06-01 22:02:35
Local clock offset: 0.622 ms
Remote clock offset: -0.24 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 531.38 Mbit/s
95th percentile per-packet one-way delay: 145.356 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 475.48 Mbit/s
95th percentile per-packet one-way delay: 145.097 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 68.97 Mbit/s
95th percentile per-packet one-way delay: 147.693 ms
Loss rate: 1.47%
-- Flow 3:
Average throughput: 31.05 Mbit/s
95th percentile per-packet one-way delay: 173.181 ms
Loss rate: 2.80%
```

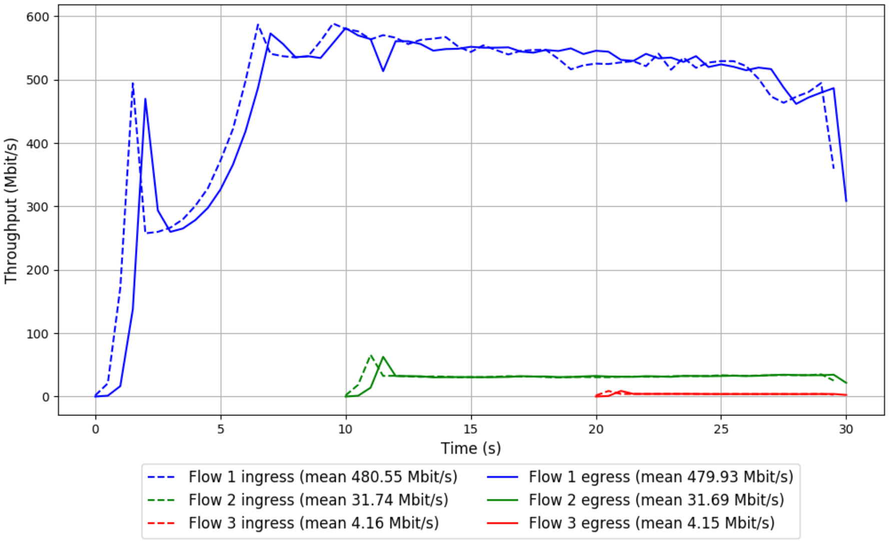
Run 1: Report of PCC-Allegro — Data Link

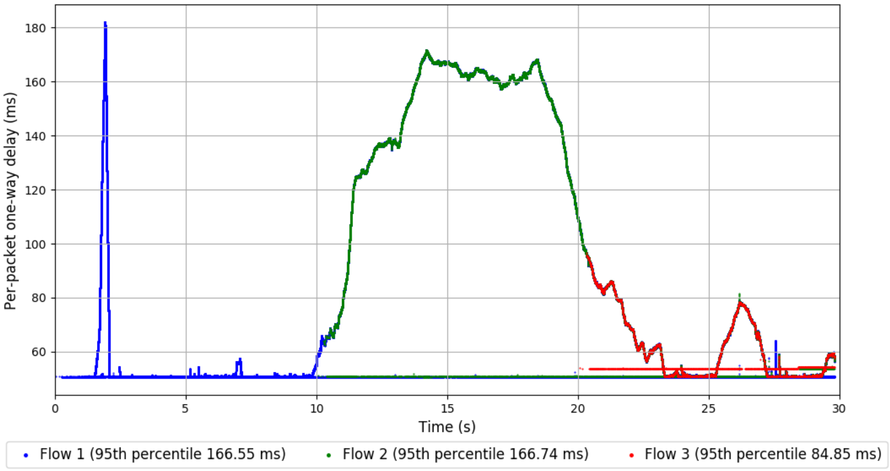




```
Run 2: Statistics of PCC-Allegro

Start at: 2018-06-01 22:25:19
End at: 2018-06-01 22:25:49
Local clock offset: 0.782 ms
Remote clock offset: -0.244 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 502.30 Mbit/s
95th percentile per-packet one-way delay: 166.562 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 479.93 Mbit/s
95th percentile per-packet one-way delay: 166.552 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 31.69 Mbit/s
95th percentile per-packet one-way delay: 166.742 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 4.15 Mbit/s
95th percentile per-packet one-way delay: 84.852 ms
Loss rate: 1.13%
```

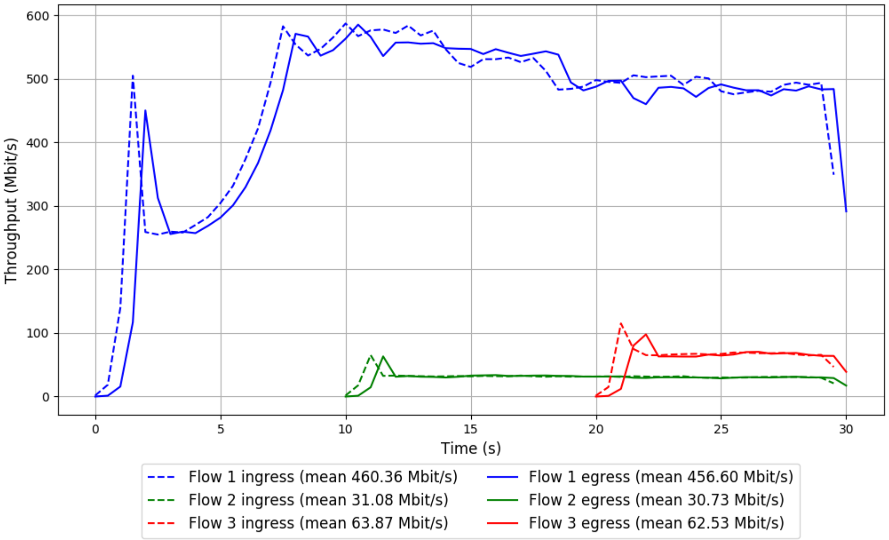
Run 2: Report of PCC-Allegro — Data Link

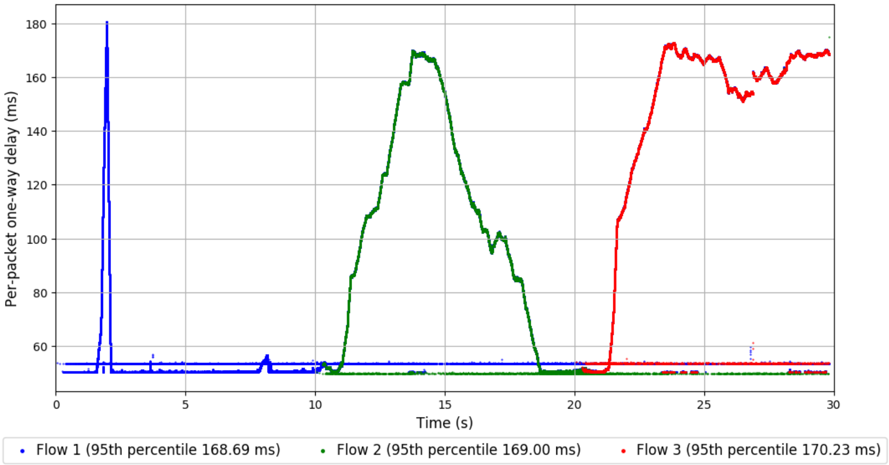




```
Run 3: Statistics of PCC-Allegro

Start at: 2018-06-01 22:48:17
End at: 2018-06-01 22:48:47
Local clock offset: 0.599 ms
Remote clock offset: 0.107 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 497.34 Mbit/s
95th percentile per-packet one-way delay: 168.766 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 456.60 Mbit/s
95th percentile per-packet one-way delay: 168.689 ms
Loss rate: 1.17%
-- Flow 2:
Average throughput: 30.73 Mbit/s
95th percentile per-packet one-way delay: 168.997 ms
Loss rate: 1.62%
-- Flow 3:
Average throughput: 62.53 Mbit/s
95th percentile per-packet one-way delay: 170.231 ms
Loss rate: 3.16%
```

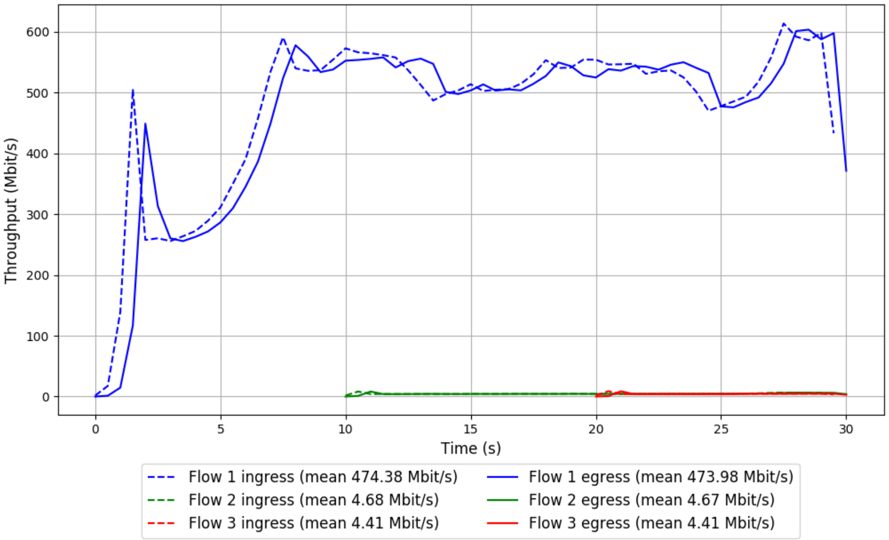
Run 3: Report of PCC-Allegro — Data Link

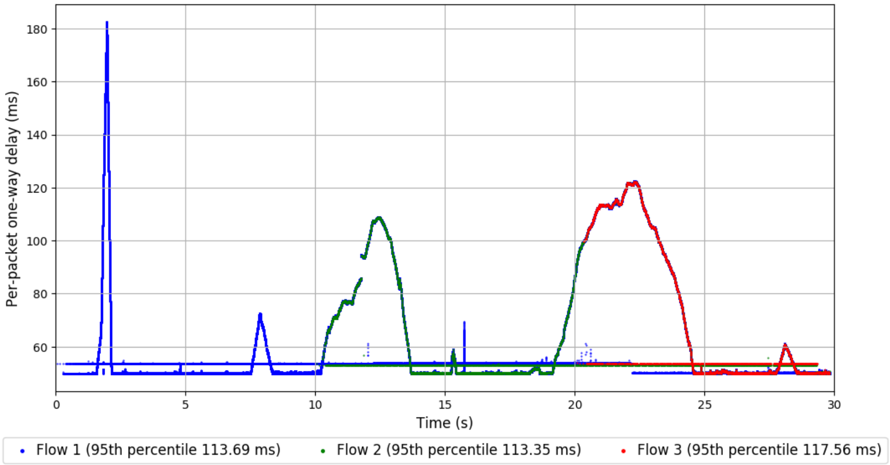




```
Run 4: Statistics of PCC-Allegro

Start at: 2018-06-01 23:11:29
End at: 2018-06-01 23:11:59
Local clock offset: 0.631 ms
Remote clock offset: 0.069 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 478.49 Mbit/s
95th percentile per-packet one-way delay: 113.688 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 473.98 Mbit/s
95th percentile per-packet one-way delay: 113.685 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 4.67 Mbit/s
95th percentile per-packet one-way delay: 113.348 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 4.41 Mbit/s
95th percentile per-packet one-way delay: 117.557 ms
Loss rate: 1.10%
```

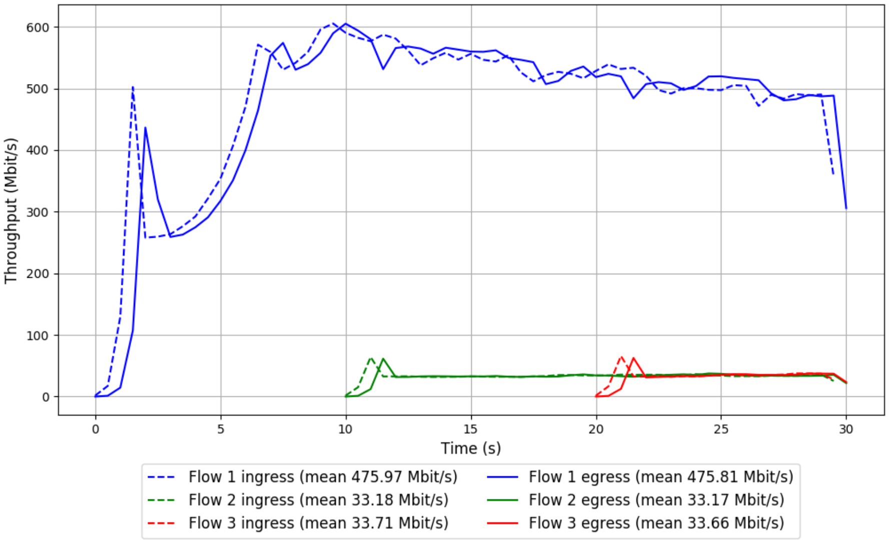
Run 4: Report of PCC-Allegro — Data Link

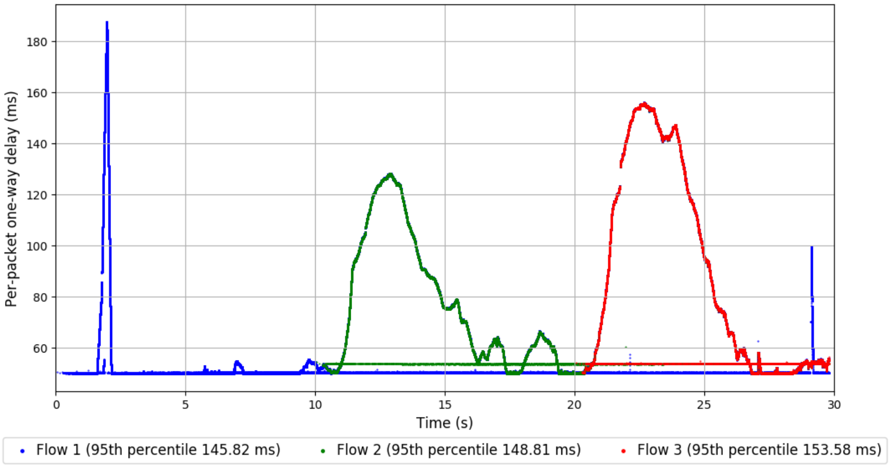




```
Run 5: Statistics of PCC-Allegro

Start at: 2018-06-01 23:34:17
End at: 2018-06-01 23:34:47
Local clock offset: 0.087 ms
Remote clock offset: -0.226 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 508.82 Mbit/s
95th percentile per-packet one-way delay: 146.281 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 475.81 Mbit/s
95th percentile per-packet one-way delay: 145.824 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 33.17 Mbit/s
95th percentile per-packet one-way delay: 148.813 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 33.66 Mbit/s
95th percentile per-packet one-way delay: 153.578 ms
Loss rate: 1.23%
```

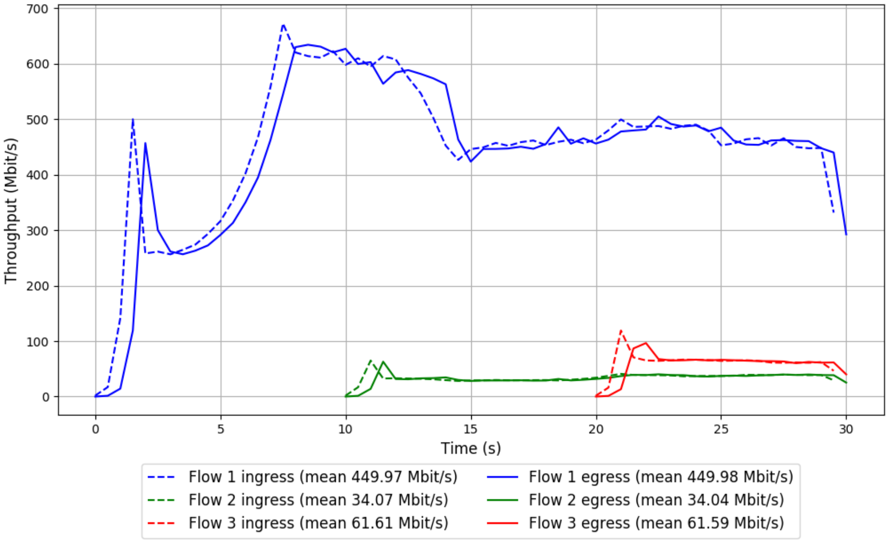
Run 5: Report of PCC-Allegro — Data Link

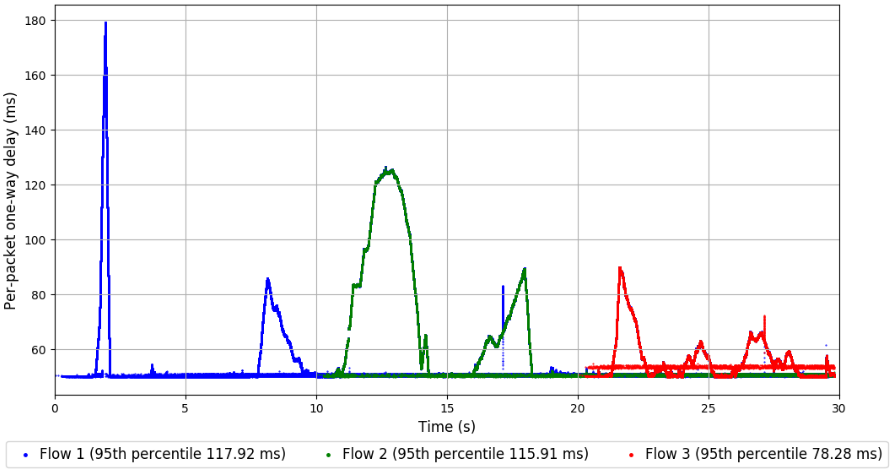




```
Run 6: Statistics of PCC-Allegro

Start at: 2018-06-01 23:57:08
End at: 2018-06-01 23:57:38
Local clock offset: -0.087 ms
Remote clock offset: -0.183 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 492.71 Mbit/s
95th percentile per-packet one-way delay: 116.935 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 449.98 Mbit/s
95th percentile per-packet one-way delay: 117.922 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 34.04 Mbit/s
95th percentile per-packet one-way delay: 115.914 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 61.59 Mbit/s
95th percentile per-packet one-way delay: 78.285 ms
Loss rate: 1.09%
```

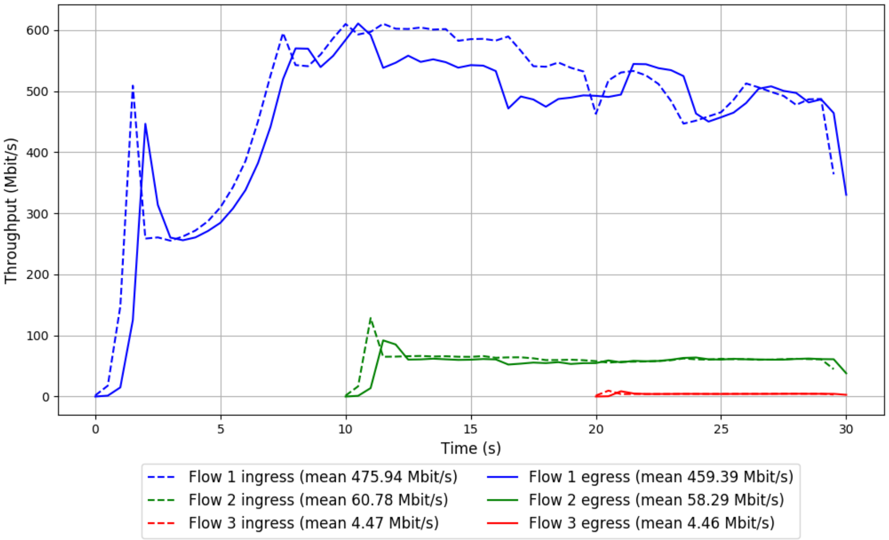
Run 6: Report of PCC-Allegro — Data Link

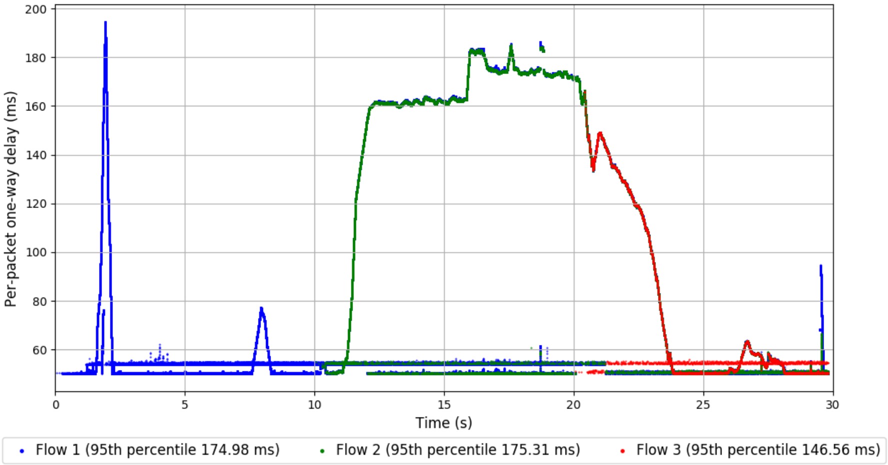




```
Run 7: Statistics of PCC-Allegro

Start at: 2018-06-02 00:20:17
End at: 2018-06-02 00:20:47
Local clock offset: 0.073 ms
Remote clock offset: -0.133 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 499.50 Mbit/s
95th percentile per-packet one-way delay: 174.996 ms
Loss rate: 3.87%
-- Flow 1:
Average throughput: 459.39 Mbit/s
95th percentile per-packet one-way delay: 174.977 ms
Loss rate: 3.81%
-- Flow 2:
Average throughput: 58.29 Mbit/s
95th percentile per-packet one-way delay: 175.310 ms
Loss rate: 4.62%
-- Flow 3:
Average throughput: 4.46 Mbit/s
95th percentile per-packet one-way delay: 146.561 ms
Loss rate: 1.04%
```

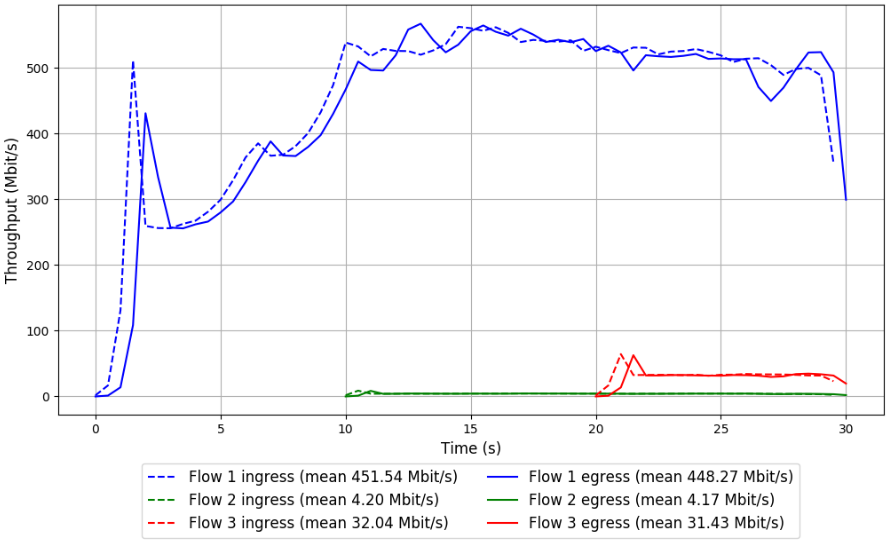
Run 7: Report of PCC-Allegro — Data Link

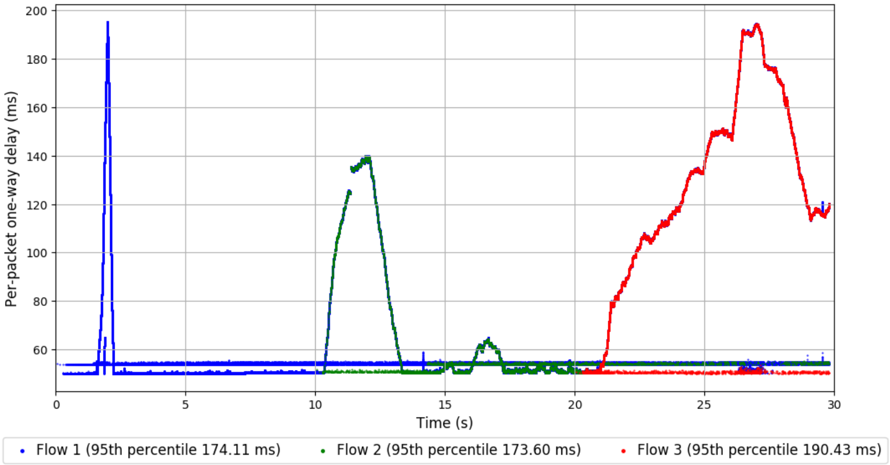




```
Run 8: Statistics of PCC-Allegro

Start at: 2018-06-02 00:43:24
End at: 2018-06-02 00:43:54
Local clock offset: 0.302 ms
Remote clock offset: 0.1 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 461.32 Mbit/s
95th percentile per-packet one-way delay: 174.974 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 448.27 Mbit/s
95th percentile per-packet one-way delay: 174.110 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 4.17 Mbit/s
95th percentile per-packet one-way delay: 173.603 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 31.43 Mbit/s
95th percentile per-packet one-way delay: 190.433 ms
Loss rate: 2.96%
```

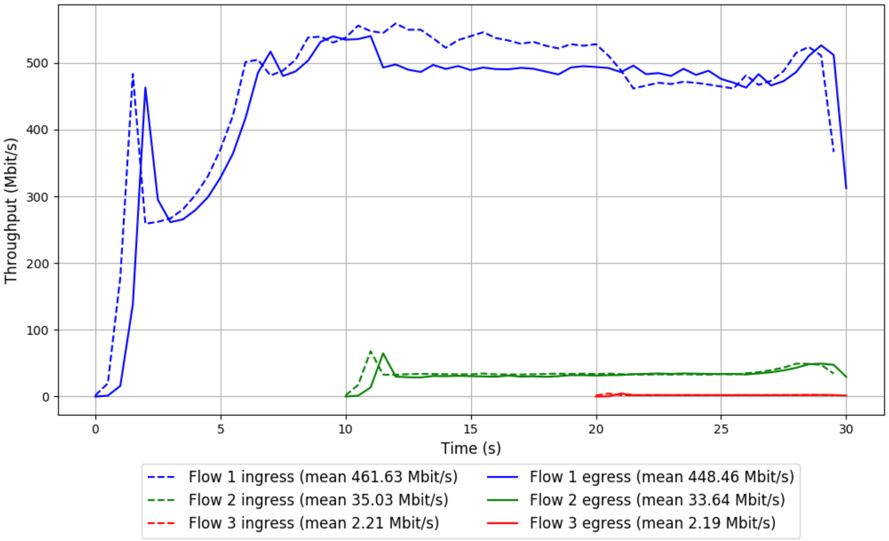
Run 8: Report of PCC-Allegro — Data Link

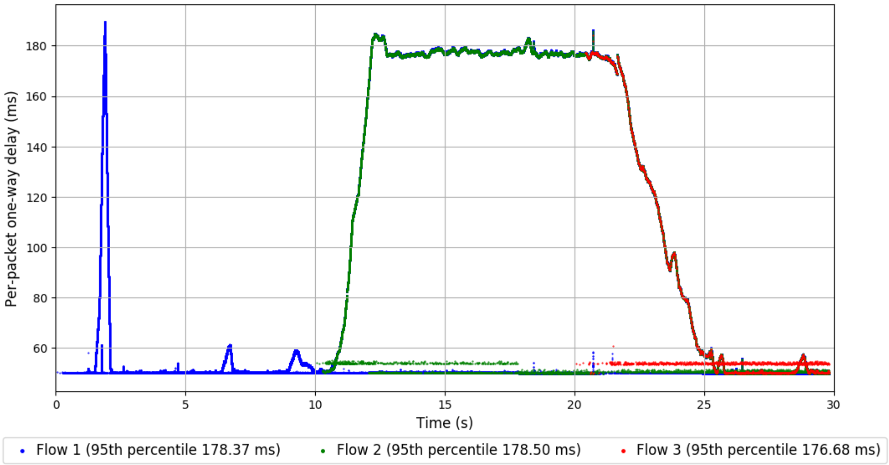




```
Run 9: Statistics of PCC-Allegro

Start at: 2018-06-02 01:06:13
End at: 2018-06-02 01:06:43
Local clock offset: 0.076 ms
Remote clock offset: 0.111 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 471.48 Mbit/s
95th percentile per-packet one-way delay: 178.371 ms
Loss rate: 3.26%
-- Flow 1:
Average throughput: 448.46 Mbit/s
95th percentile per-packet one-way delay: 178.367 ms
Loss rate: 3.20%
-- Flow 2:
Average throughput: 33.64 Mbit/s
95th percentile per-packet one-way delay: 178.497 ms
Loss rate: 4.48%
-- Flow 3:
Average throughput: 2.19 Mbit/s
95th percentile per-packet one-way delay: 176.680 ms
Loss rate: 2.29%
```

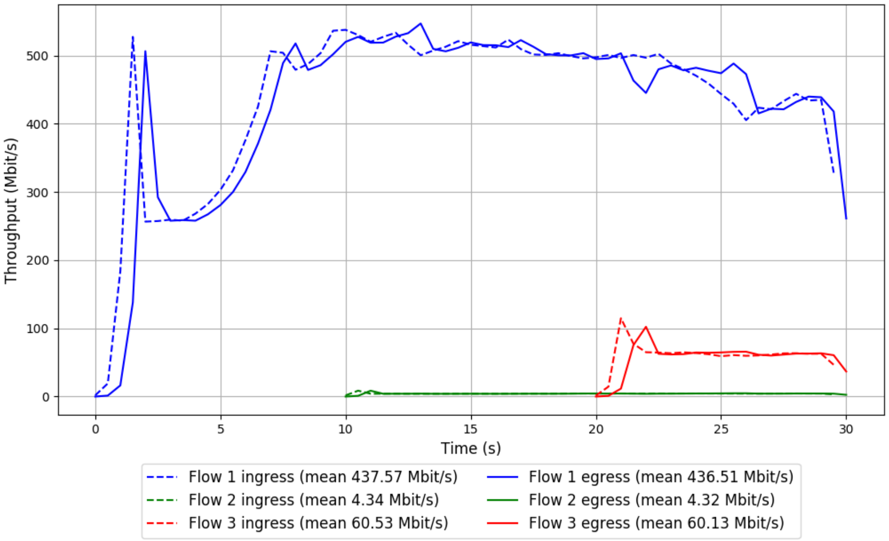
Run 9: Report of PCC-Allegro — Data Link

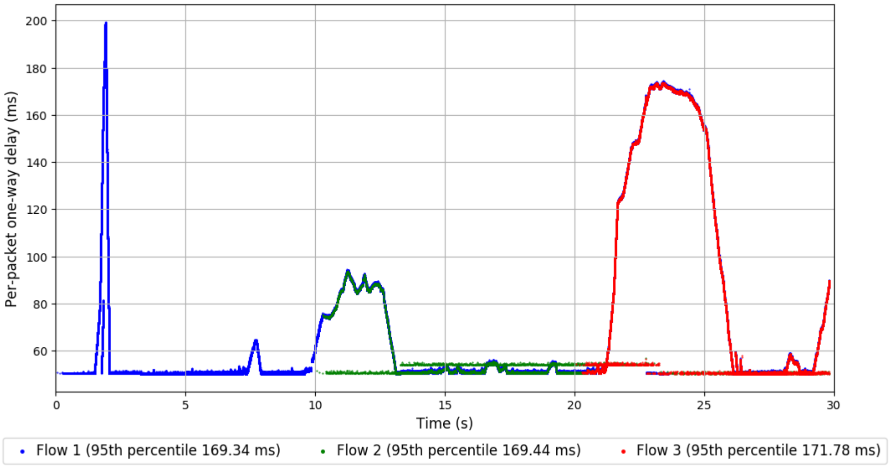




```
Run 10: Statistics of PCC-Allegro

Start at: 2018-06-02 01:29:08
End at: 2018-06-02 01:29:38
Local clock offset: 0.545 ms
Remote clock offset: 0.026 ms

# Below is generated by plot.py at 2018-06-02 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 459.05 Mbit/s
95th percentile per-packet one-way delay: 169.613 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 436.51 Mbit/s
95th percentile per-packet one-way delay: 169.338 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 169.442 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 60.13 Mbit/s
95th percentile per-packet one-way delay: 171.779 ms
Loss rate: 1.75%
```

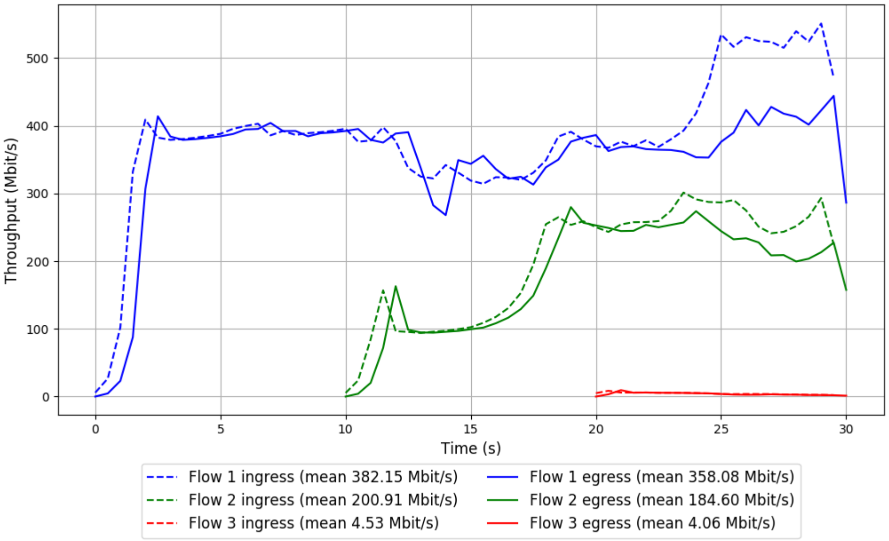
Run 10: Report of PCC-Allegro — Data Link

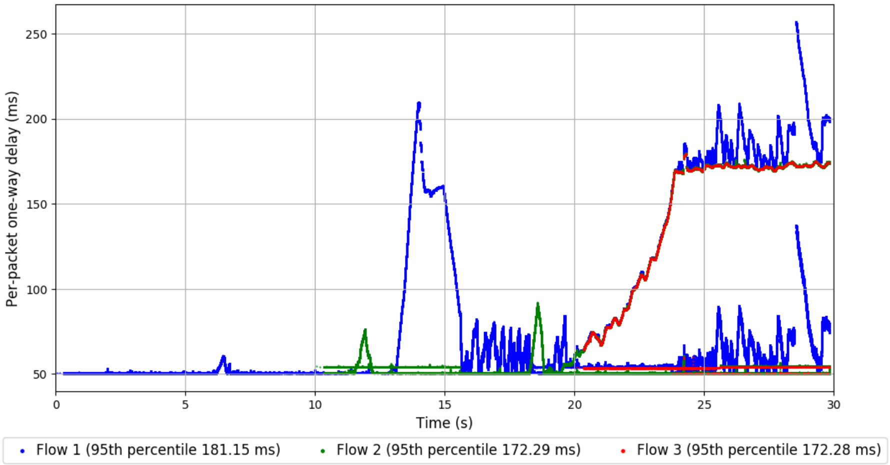




```
Run 1: Statistics of PCC-Expr

Start at: 2018-06-01 22:21:22
End at: 2018-06-01 22:21:52
Local clock offset: 0.563 ms
Remote clock offset: -0.217 ms

# Below is generated by plot.py at 2018-06-02 03:34:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 481.92 Mbit/s
95th percentile per-packet one-way delay: 175.848 ms
Loss rate: 7.16%
-- Flow 1:
Average throughput: 358.08 Mbit/s
95th percentile per-packet one-way delay: 181.146 ms
Loss rate: 6.63%
-- Flow 2:
Average throughput: 184.60 Mbit/s
95th percentile per-packet one-way delay: 172.288 ms
Loss rate: 8.62%
-- Flow 3:
Average throughput: 4.06 Mbit/s
95th percentile per-packet one-way delay: 172.276 ms
Loss rate: 11.51%
```

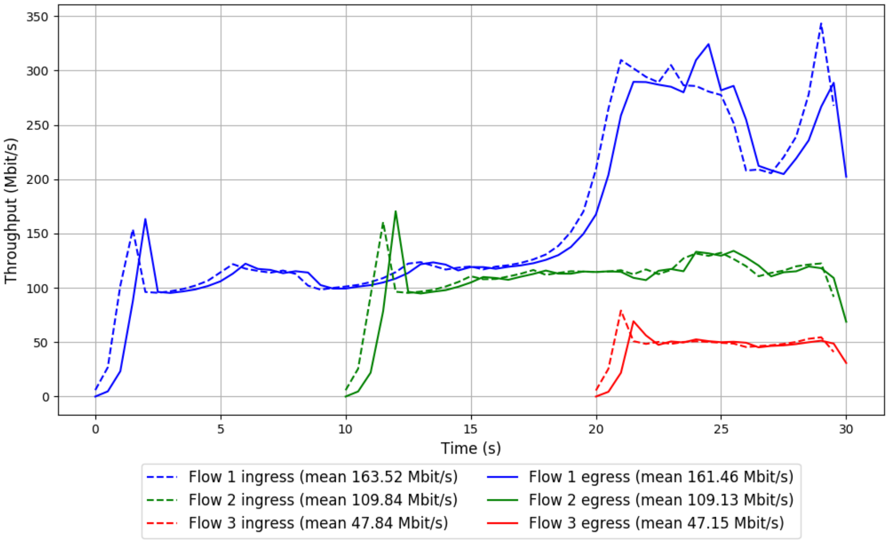
Run 1: Report of PCC-Expr — Data Link

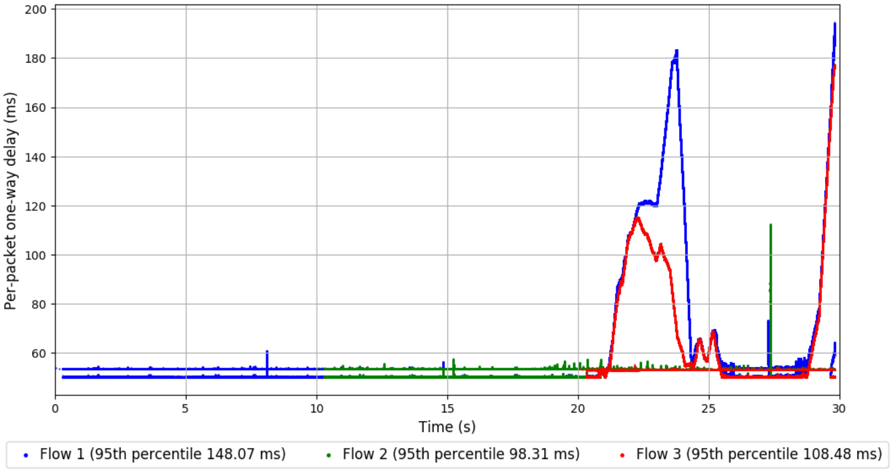




```
Run 2: Statistics of PCC-Expr

Start at: 2018-06-01 22:44:36
End at: 2018-06-01 22:45:06
Local clock offset: 0.181 ms
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2018-06-02 03:34:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 249.32 Mbit/s
95th percentile per-packet one-way delay: 130.303 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 161.46 Mbit/s
95th percentile per-packet one-way delay: 148.071 ms
Loss rate: 1.61%
-- Flow 2:
Average throughput: 109.13 Mbit/s
95th percentile per-packet one-way delay: 98.305 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 47.15 Mbit/s
95th percentile per-packet one-way delay: 108.477 ms
Loss rate: 2.43%
```

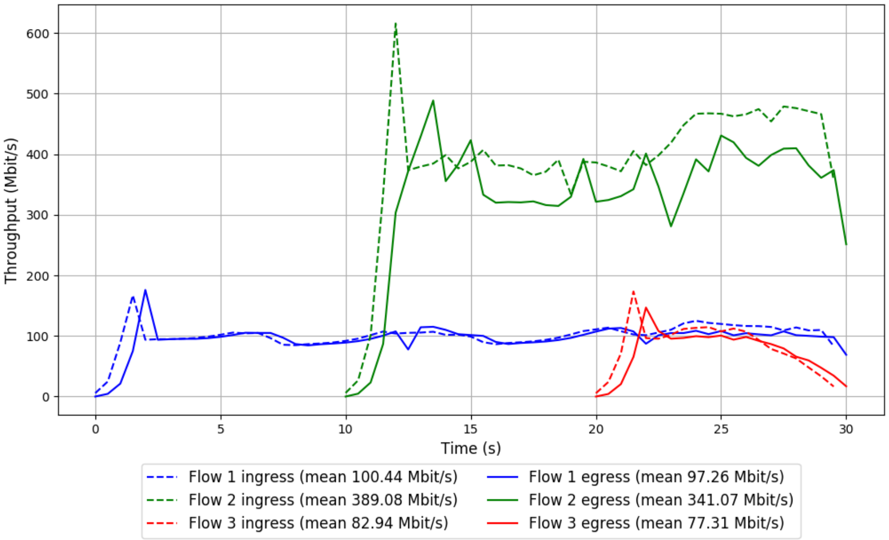
Run 2: Report of PCC-Expr — Data Link

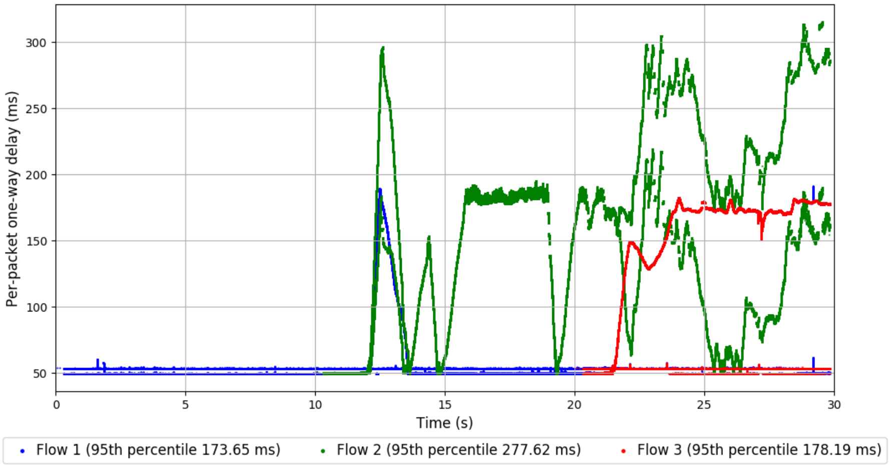




```
Run 3: Statistics of PCC-Expr

Start at: 2018-06-01 23:07:39
End at: 2018-06-01 23:08:09
Local clock offset: 0.47 ms
Remote clock offset: 0.027 ms

# Below is generated by plot.py at 2018-06-02 03:36:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 349.15 Mbit/s
95th percentile per-packet one-way delay: 267.675 ms
Loss rate: 10.04%
-- Flow 1:
Average throughput: 97.26 Mbit/s
95th percentile per-packet one-way delay: 173.653 ms
Loss rate: 3.51%
-- Flow 2:
Average throughput: 341.07 Mbit/s
95th percentile per-packet one-way delay: 277.619 ms
Loss rate: 12.80%
-- Flow 3:
Average throughput: 77.31 Mbit/s
95th percentile per-packet one-way delay: 178.194 ms
Loss rate: 7.80%
```

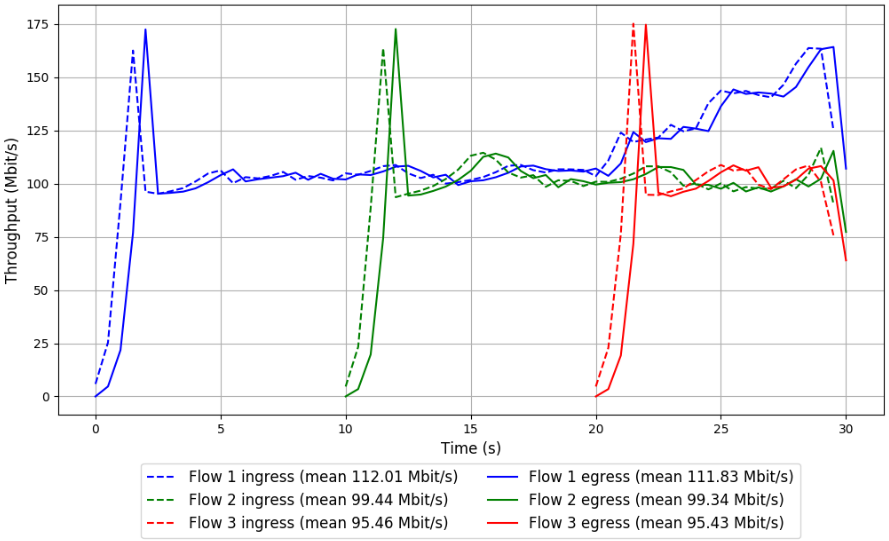
Run 3: Report of PCC-Expr — Data Link

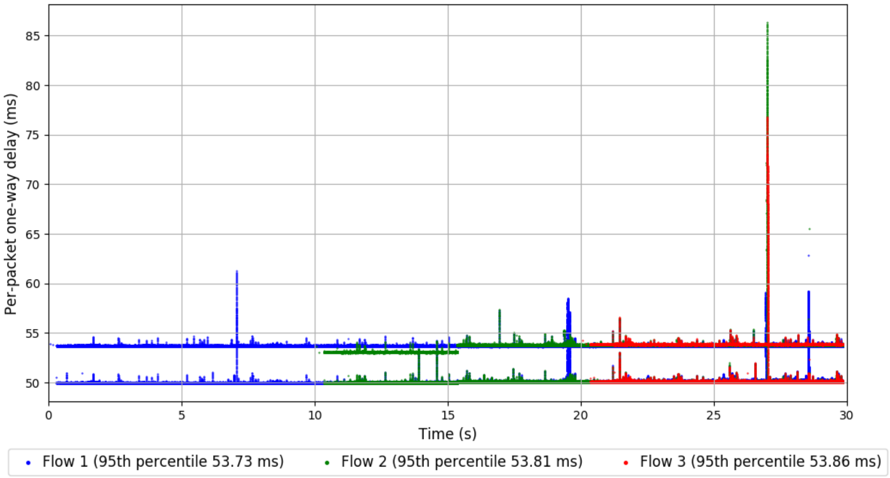




```
Run 4: Statistics of PCC-Expr

Start at: 2018-06-01 23:30:45
End at: 2018-06-01 23:31:15
Local clock offset: 0.34 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2018-06-02 03:36:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 209.04 Mbit/s
95th percentile per-packet one-way delay: 53.819 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 111.83 Mbit/s
95th percentile per-packet one-way delay: 53.733 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 99.34 Mbit/s
95th percentile per-packet one-way delay: 53.807 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 95.43 Mbit/s
95th percentile per-packet one-way delay: 53.861 ms
Loss rate: 1.14%
```

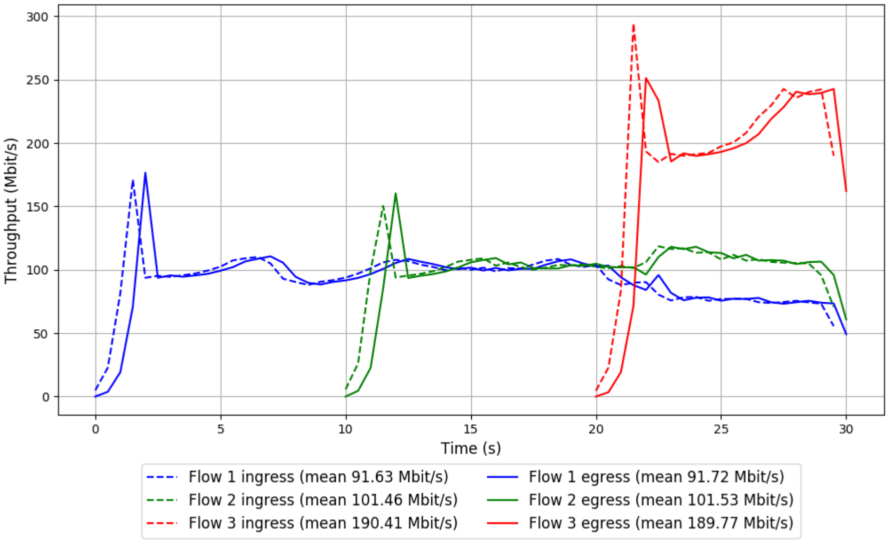
Run 4: Report of PCC-Expr — Data Link

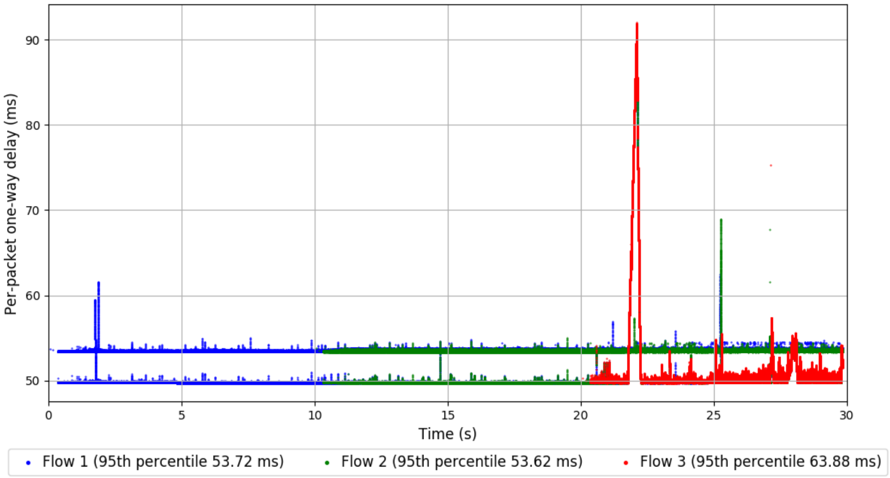




```
Run 5: Statistics of PCC-Expr

Start at: 2018-06-01 23:53:36
End at: 2018-06-01 23:54:06
Local clock offset: -0.15 ms
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2018-06-02 03:36:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 221.30 Mbit/s
95th percentile per-packet one-way delay: 53.727 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 91.72 Mbit/s
95th percentile per-packet one-way delay: 53.715 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 101.53 Mbit/s
95th percentile per-packet one-way delay: 53.617 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 189.77 Mbit/s
95th percentile per-packet one-way delay: 63.885 ms
Loss rate: 1.39%
```

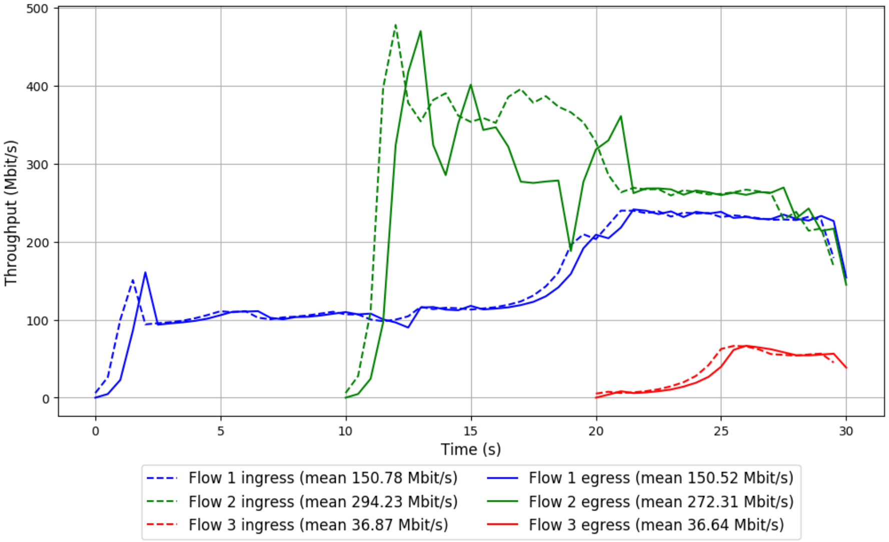
Run 5: Report of PCC-Expr — Data Link

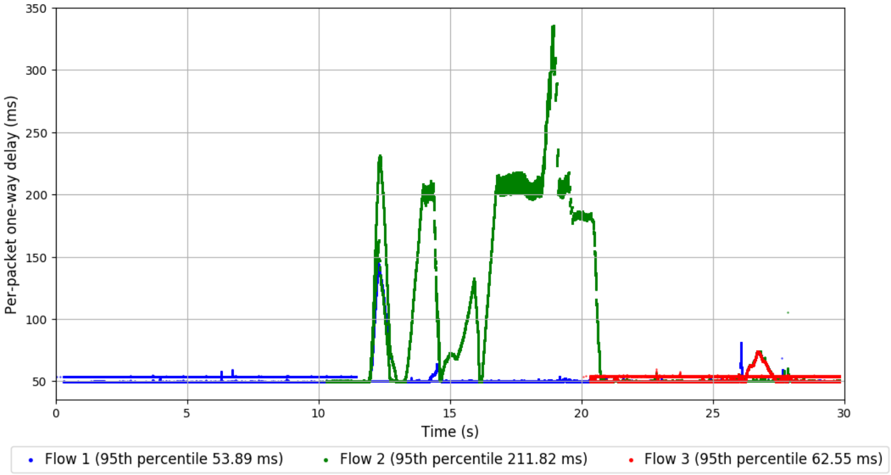




```
Run 6: Statistics of PCC-Expr

Start at: 2018-06-02 00:16:29
End at: 2018-06-02 00:16:59
Local clock offset: 0.03 ms
Remote clock offset: 0.101 ms

# Below is generated by plot.py at 2018-06-02 03:36:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 343.34 Mbit/s
95th percentile per-packet one-way delay: 206.301 ms
Loss rate: 4.61%
-- Flow 1:
Average throughput: 150.52 Mbit/s
95th percentile per-packet one-way delay: 53.889 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 272.31 Mbit/s
95th percentile per-packet one-way delay: 211.821 ms
Loss rate: 7.93%
-- Flow 3:
Average throughput: 36.64 Mbit/s
95th percentile per-packet one-way delay: 62.555 ms
Loss rate: 1.69%
```

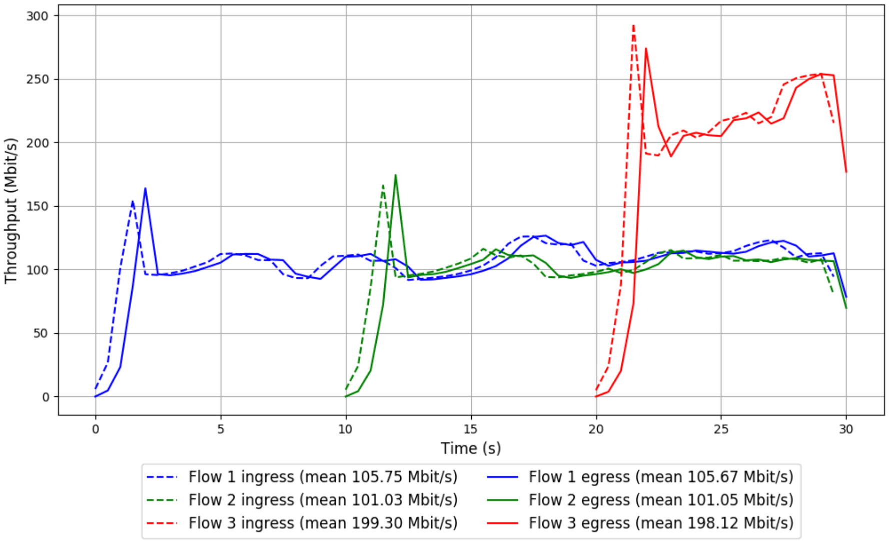
Run 6: Report of PCC-Expr — Data Link

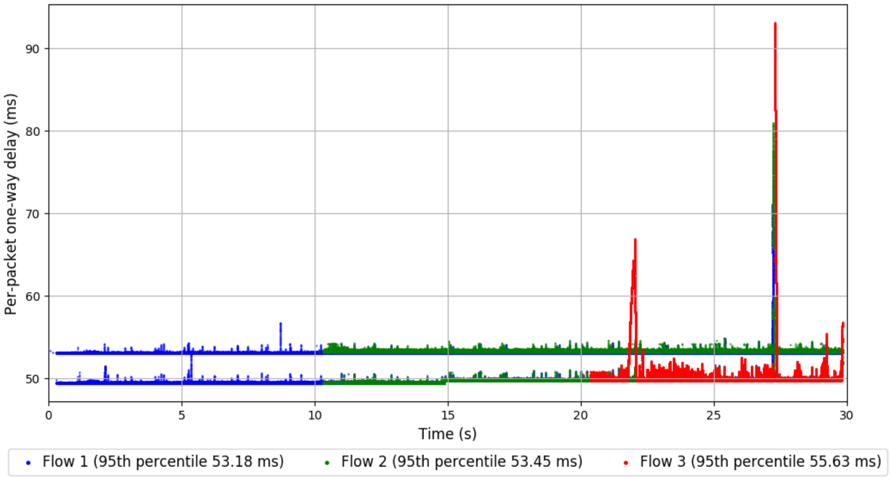




```
Run 7: Statistics of PCC-Expr

Start at: 2018-06-02 00:39:46
End at: 2018-06-02 00:40:16
Local clock offset: -0.173 ms
Remote clock offset: 0.192 ms

# Below is generated by plot.py at 2018-06-02 03:36:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 237.61 Mbit/s
95th percentile per-packet one-way delay: 53.407 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 105.67 Mbit/s
95th percentile per-packet one-way delay: 53.181 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 101.05 Mbit/s
95th percentile per-packet one-way delay: 53.451 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 198.12 Mbit/s
95th percentile per-packet one-way delay: 55.628 ms
Loss rate: 1.65%
```

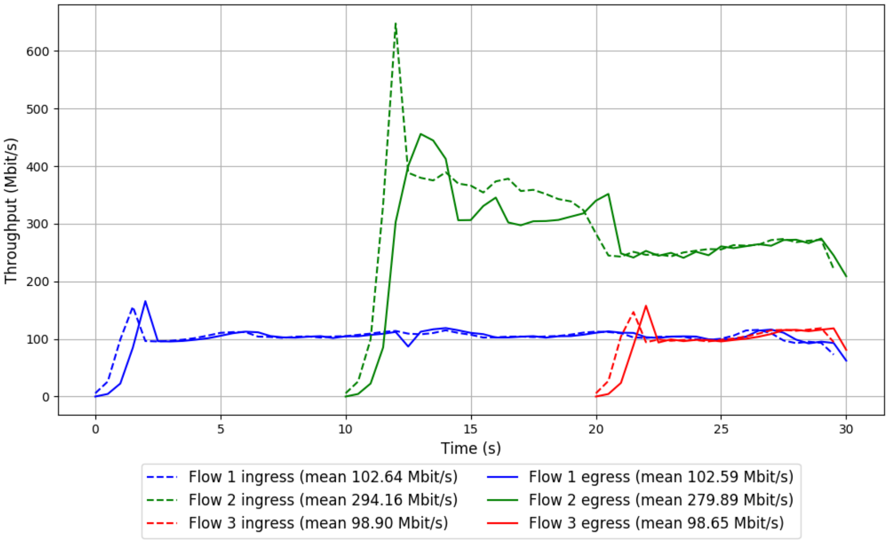
Run 7: Report of PCC-Expr — Data Link

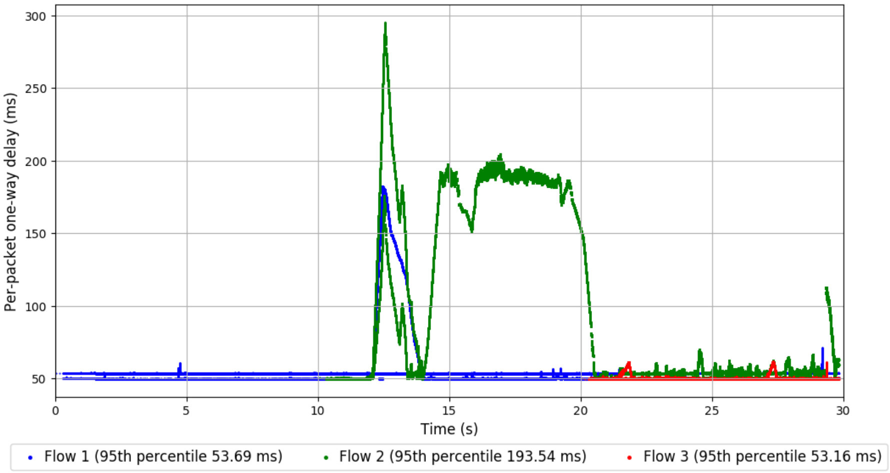




```
Run 8: Statistics of PCC-Expr

Start at: 2018-06-02 01:02:29
End at: 2018-06-02 01:02:59
Local clock offset: -0.123 ms
Remote clock offset: 0.062 ms

# Below is generated by plot.py at 2018-06-02 03:37:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 320.78 Mbit/s
95th percentile per-packet one-way delay: 191.004 ms
Loss rate: 3.42%
-- Flow 1:
Average throughput: 102.59 Mbit/s
95th percentile per-packet one-way delay: 53.685 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 279.89 Mbit/s
95th percentile per-packet one-way delay: 193.537 ms
Loss rate: 5.35%
-- Flow 3:
Average throughput: 98.65 Mbit/s
95th percentile per-packet one-way delay: 53.156 ms
Loss rate: 1.31%
```

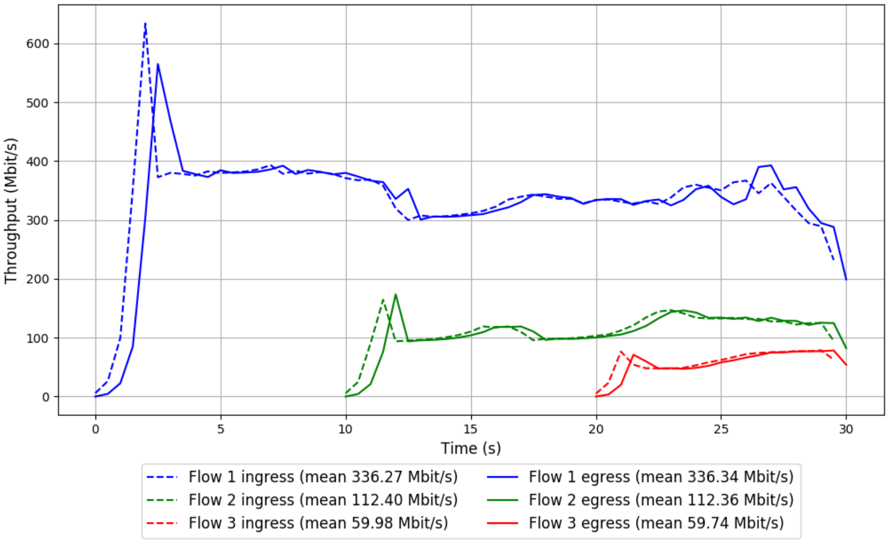
Run 8: Report of PCC-Expr — Data Link

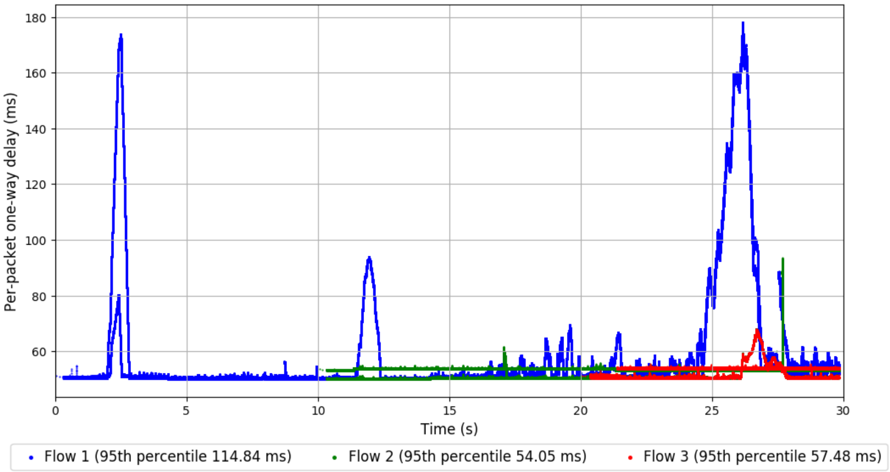




```
Run 9: Statistics of PCC-Expr

Start at: 2018-06-02 01:25:17
End at: 2018-06-02 01:25:47
Local clock offset: 0.26 ms
Remote clock offset: -0.125 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 430.48 Mbit/s
95th percentile per-packet one-way delay: 97.408 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 336.34 Mbit/s
95th percentile per-packet one-way delay: 114.836 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 112.36 Mbit/s
95th percentile per-packet one-way delay: 54.052 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 59.74 Mbit/s
95th percentile per-packet one-way delay: 57.481 ms
Loss rate: 1.44%
```

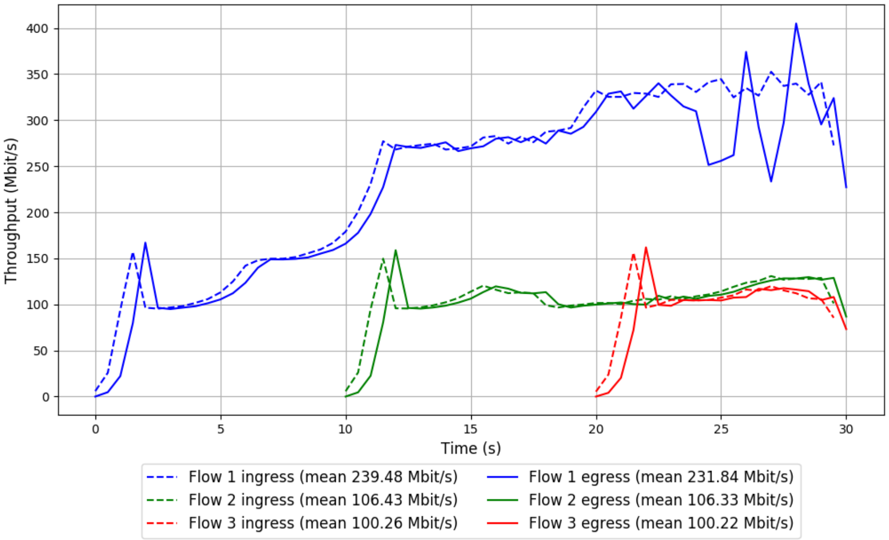
Run 9: Report of PCC-Expr — Data Link

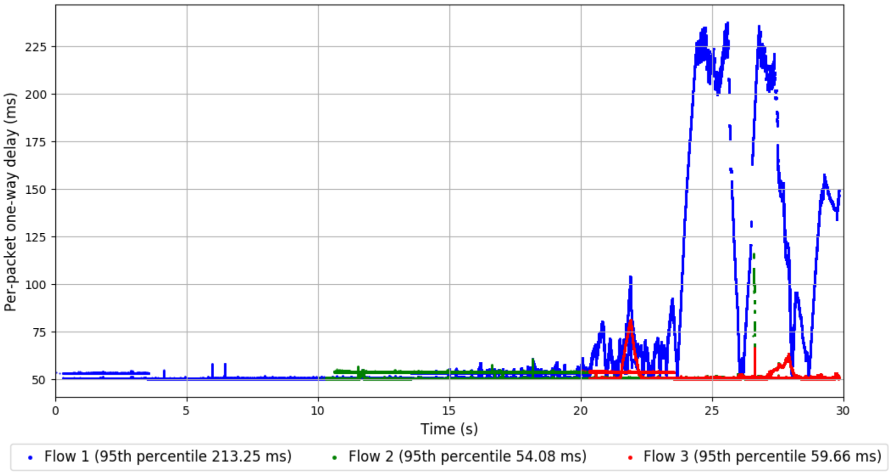




```
Run 10: Statistics of PCC-Expr

Start at: 2018-06-02 01:48:27
End at: 2018-06-02 01:48:57
Local clock offset: 0.142 ms
Remote clock offset: -0.195 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 335.29 Mbit/s
95th percentile per-packet one-way delay: 205.440 ms
Loss rate: 2.71%
-- Flow 1:
Average throughput: 231.84 Mbit/s
95th percentile per-packet one-way delay: 213.245 ms
Loss rate: 3.54%
-- Flow 2:
Average throughput: 106.33 Mbit/s
95th percentile per-packet one-way delay: 54.077 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 100.22 Mbit/s
95th percentile per-packet one-way delay: 59.659 ms
Loss rate: 1.14%
```

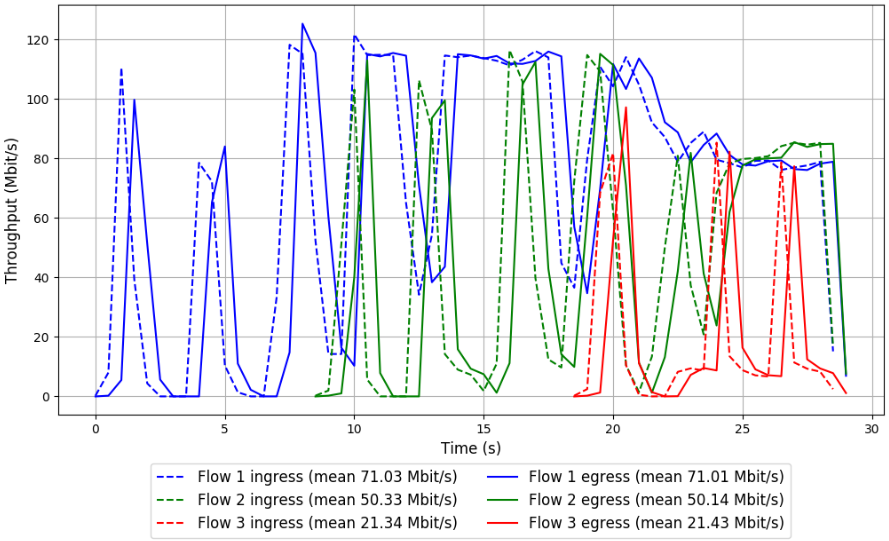
Run 10: Report of PCC-Expr — Data Link

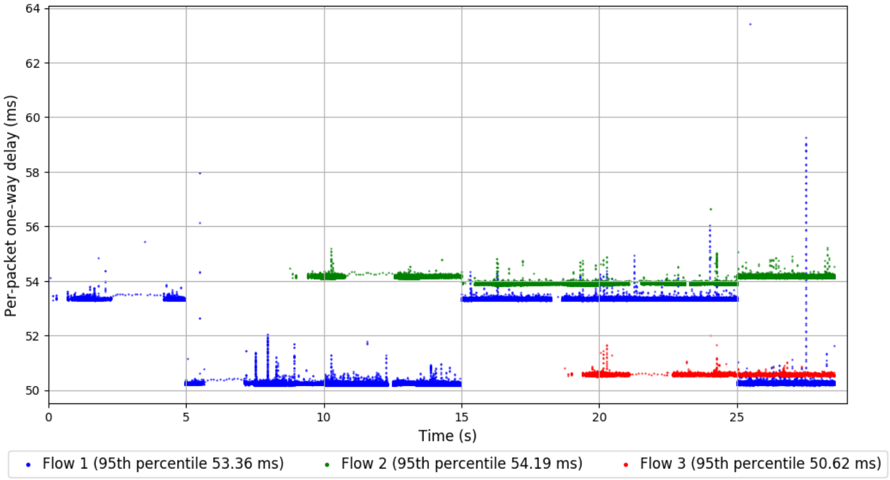




```
Run 1: Statistics of QUIC Cubic

Start at: 2018-06-01 22:07:42
End at: 2018-06-01 22:08:12
Local clock offset: 0.56 ms
Remote clock offset: -0.261 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 113.19 Mbit/s
95th percentile per-packet one-way delay: 54.162 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 71.01 Mbit/s
95th percentile per-packet one-way delay: 53.362 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 50.14 Mbit/s
95th percentile per-packet one-way delay: 54.193 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 21.43 Mbit/s
95th percentile per-packet one-way delay: 50.620 ms
Loss rate: 0.62%
```

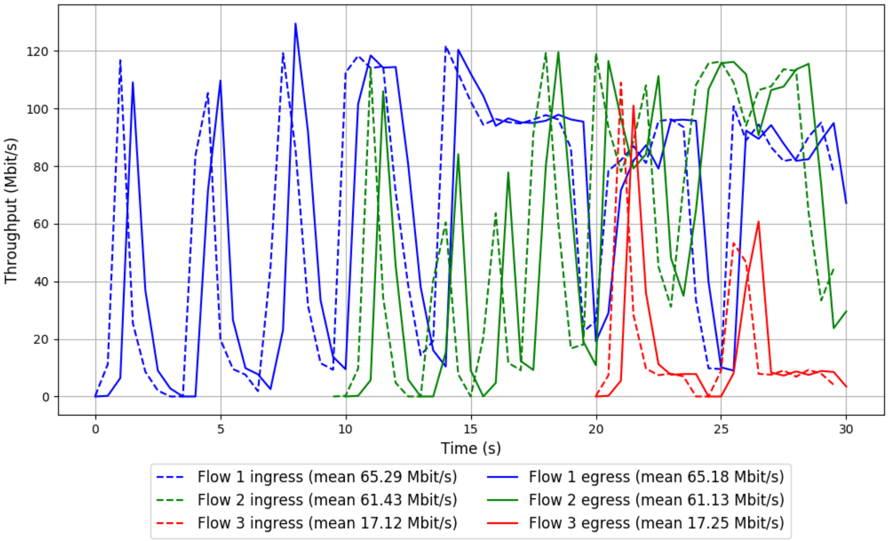
Run 1: Report of QUIC Cubic — Data Link

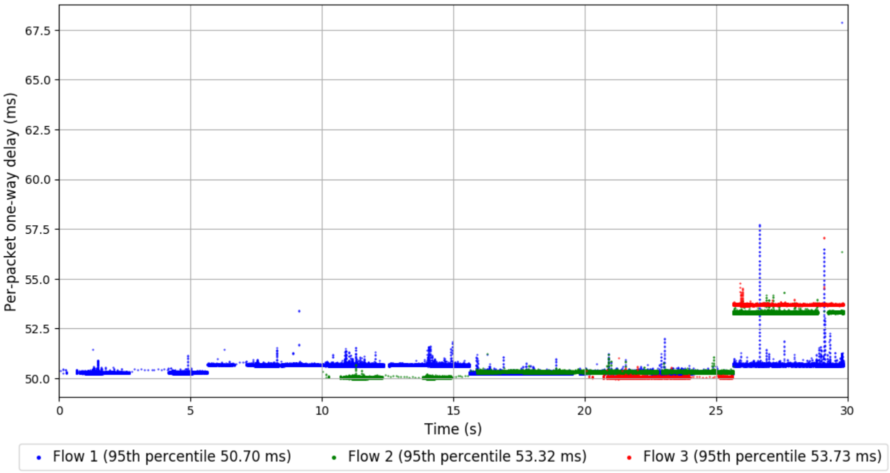




```
Run 2: Statistics of QUIC Cubic

Start at: 2018-06-01 22:31:12
End at: 2018-06-01 22:31:42
Local clock offset: 0.77 ms
Remote clock offset: 0.164 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 111.47 Mbit/s
95th percentile per-packet one-way delay: 53.316 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 65.18 Mbit/s
95th percentile per-packet one-way delay: 50.697 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 61.13 Mbit/s
95th percentile per-packet one-way delay: 53.324 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 17.25 Mbit/s
95th percentile per-packet one-way delay: 53.725 ms
Loss rate: 0.32%
```

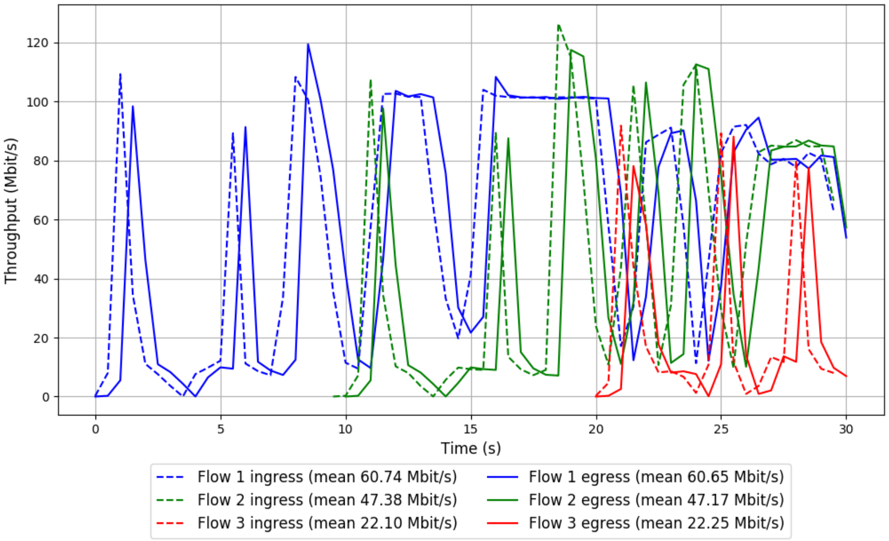
Run 2: Report of QUIC Cubic — Data Link

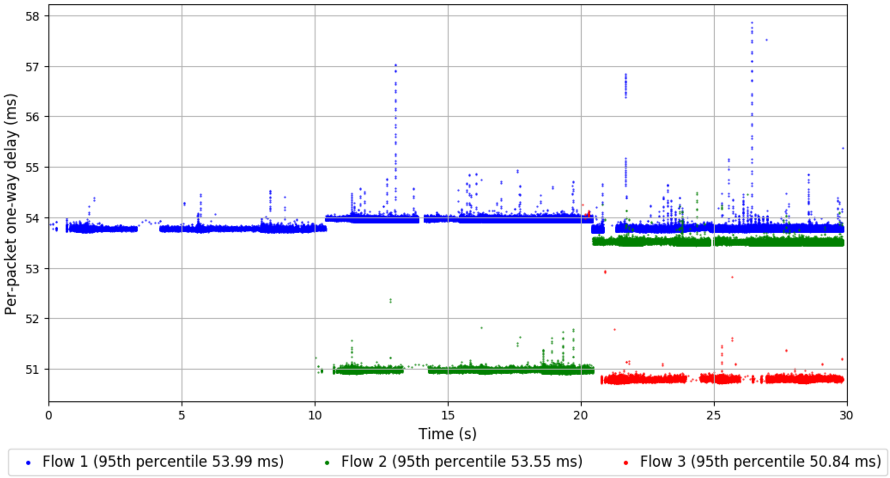




```
Run 3: Statistics of QUIC Cubic

Start at: 2018-06-01 22:54:07
End at: 2018-06-01 22:54:37
Local clock offset: 0.786 ms
Remote clock offset: -0.013 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.31 Mbit/s
95th percentile per-packet one-way delay: 53.978 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 60.65 Mbit/s
95th percentile per-packet one-way delay: 53.988 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 47.17 Mbit/s
95th percentile per-packet one-way delay: 53.546 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 22.25 Mbit/s
95th percentile per-packet one-way delay: 50.844 ms
Loss rate: 0.44%
```

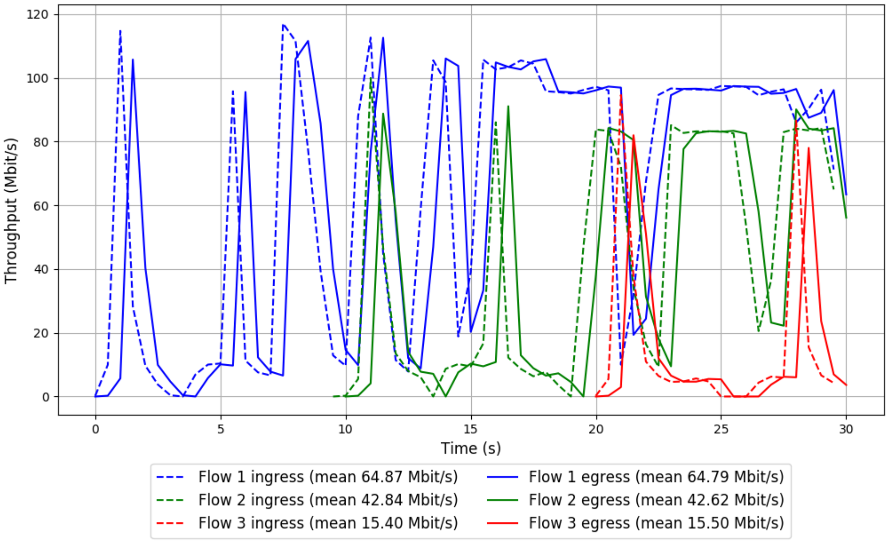
Run 3: Report of QUIC Cubic — Data Link

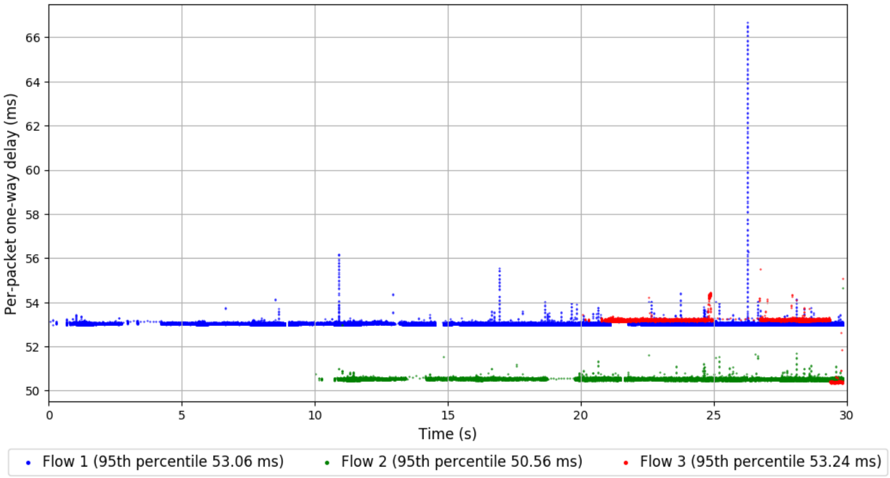




```
Run 4: Statistics of QUIC Cubic

Start at: 2018-06-01 23:17:09
End at: 2018-06-01 23:17:39
Local clock offset: 0.745 ms
Remote clock offset: 0.138 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 98.20 Mbit/s
95th percentile per-packet one-way delay: 53.145 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 64.79 Mbit/s
95th percentile per-packet one-way delay: 53.062 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 42.62 Mbit/s
95th percentile per-packet one-way delay: 50.561 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 15.50 Mbit/s
95th percentile per-packet one-way delay: 53.244 ms
Loss rate: 0.39%
```

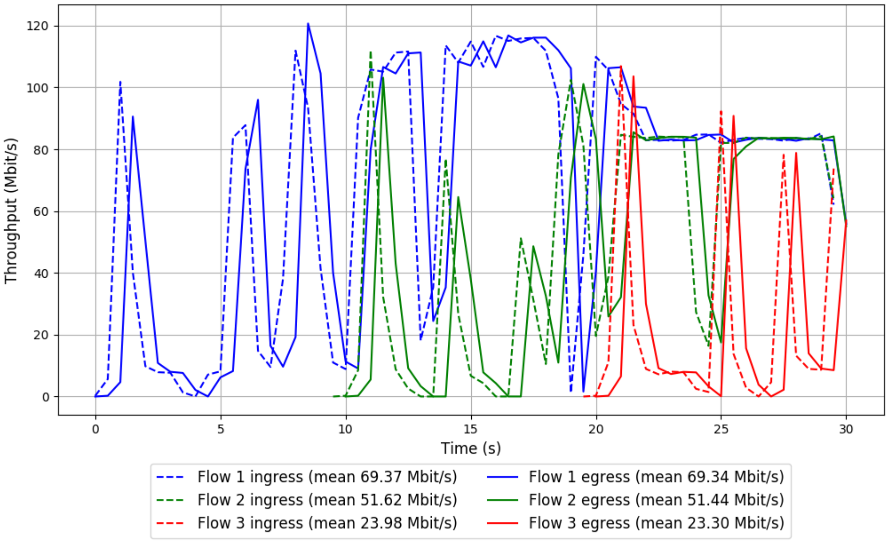
Run 4: Report of QUIC Cubic — Data Link

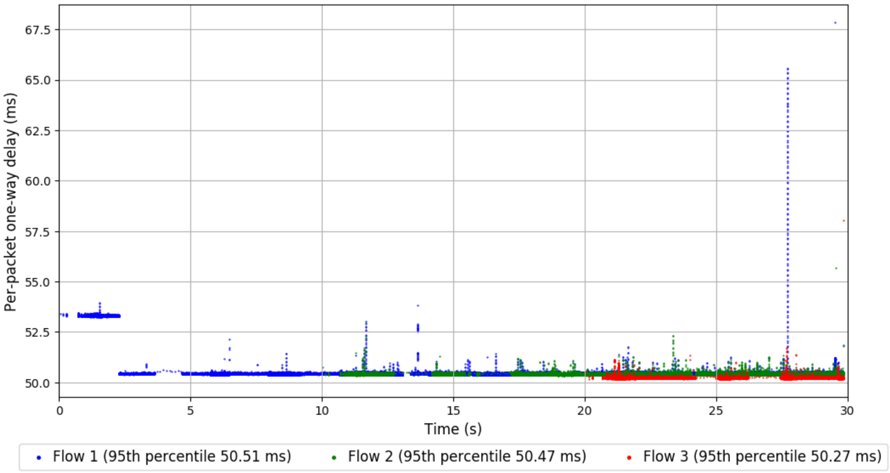




```
Run 5: Statistics of QUIC Cubic

Start at: 2018-06-01 23:40:06
End at: 2018-06-01 23:40:36
Local clock offset: 0.215 ms
Remote clock offset: -0.268 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 111.17 Mbit/s
95th percentile per-packet one-way delay: 50.490 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 69.34 Mbit/s
95th percentile per-packet one-way delay: 50.511 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 51.44 Mbit/s
95th percentile per-packet one-way delay: 50.467 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 23.30 Mbit/s
95th percentile per-packet one-way delay: 50.275 ms
Loss rate: 3.78%
```

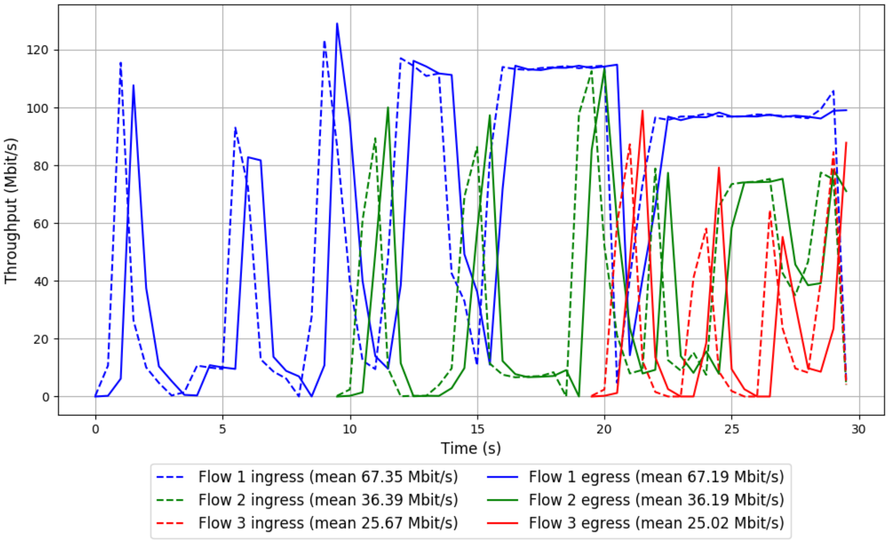
Run 5: Report of QUIC Cubic — Data Link

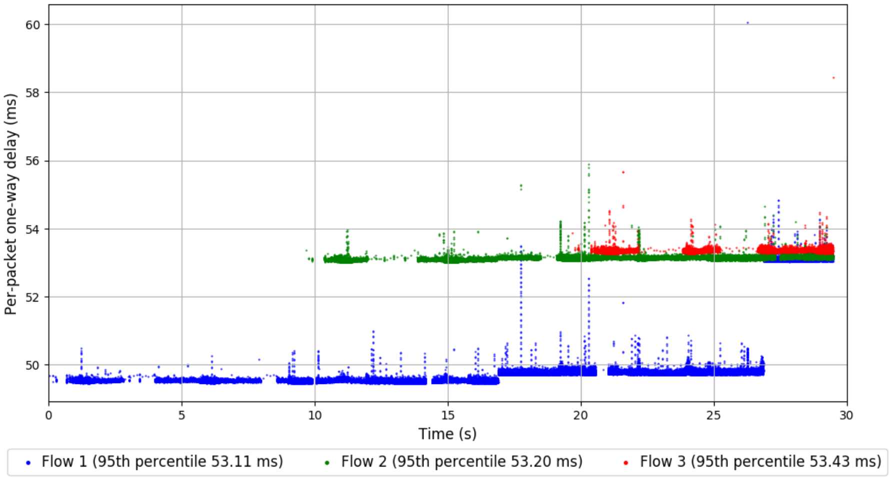




```
Run 6: Statistics of QUIC Cubic

Start at: 2018-06-02 00:03:01
End at: 2018-06-02 00:03:31
Local clock offset: -0.096 ms
Remote clock offset: 0.246 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.85 Mbit/s
95th percentile per-packet one-way delay: 53.330 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 67.19 Mbit/s
95th percentile per-packet one-way delay: 53.106 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 36.19 Mbit/s
95th percentile per-packet one-way delay: 53.204 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 25.02 Mbit/s
95th percentile per-packet one-way delay: 53.430 ms
Loss rate: 3.54%
```

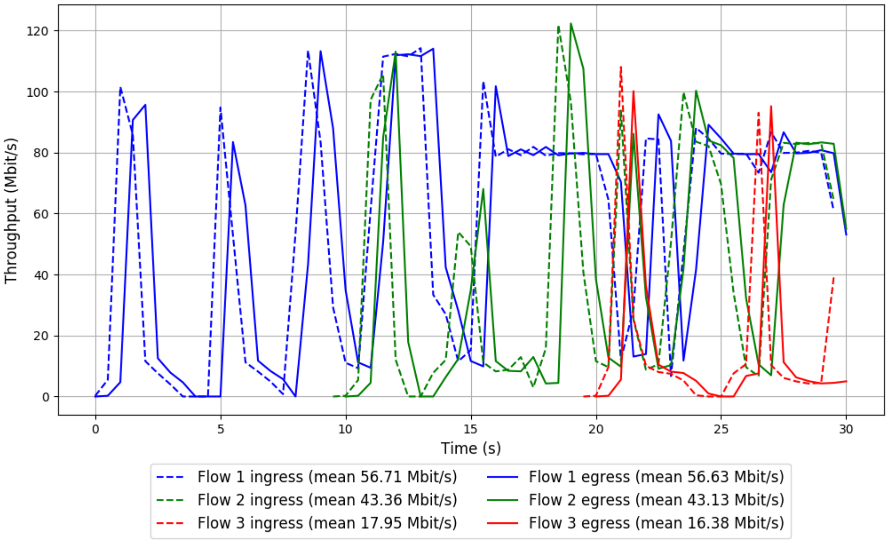
Run 6: Report of QUIC Cubic — Data Link

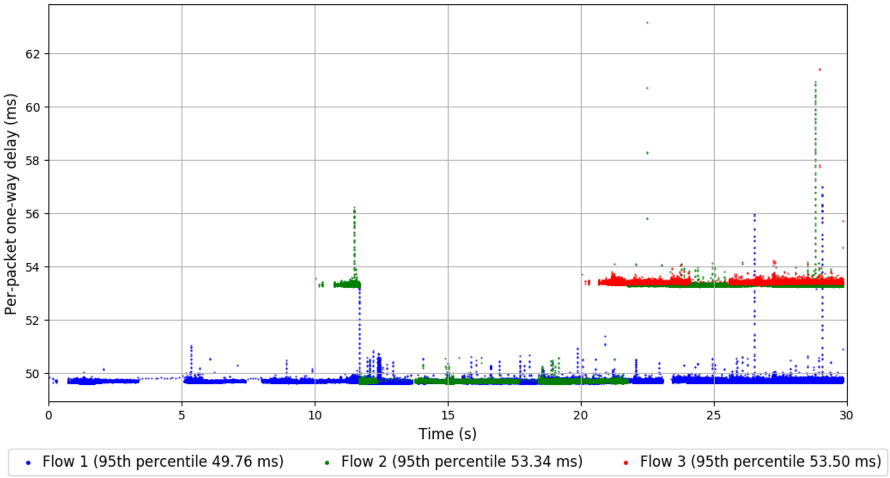




```
Run 7: Statistics of QUIC Cubic

Start at: 2018-06-02 00:26:06
End at: 2018-06-02 00:26:36
Local clock offset: -0.022 ms
Remote clock offset: 0.117 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.68 Mbit/s
95th percentile per-packet one-way delay: 53.367 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 56.63 Mbit/s
95th percentile per-packet one-way delay: 49.758 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 43.13 Mbit/s
95th percentile per-packet one-way delay: 53.343 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 16.38 Mbit/s
95th percentile per-packet one-way delay: 53.499 ms
Loss rate: 9.74%
```

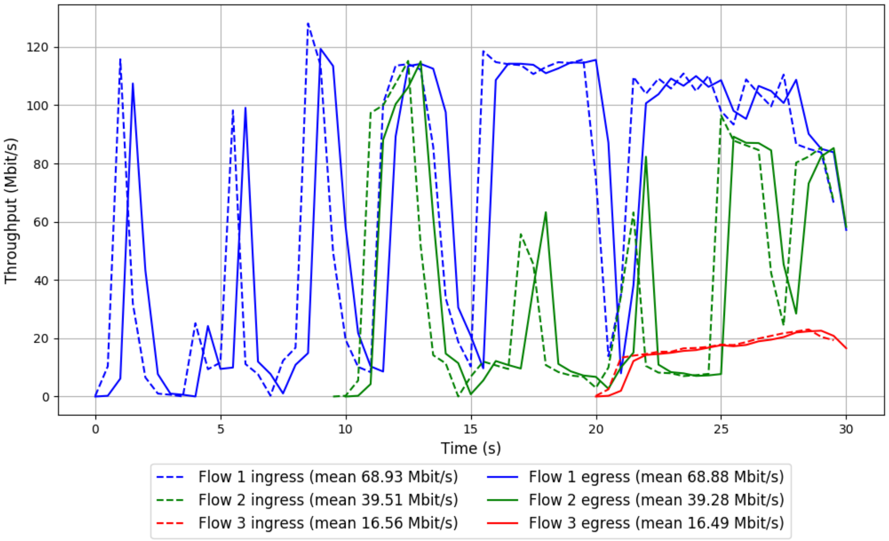
Run 7: Report of QUIC Cubic — Data Link

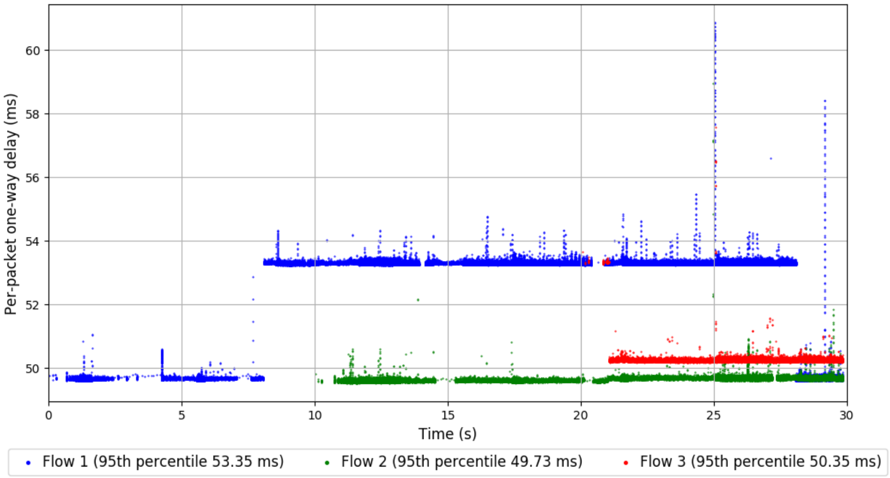




```
Run 8: Statistics of QUIC Cubic

Start at: 2018-06-02 00:49:10
End at: 2018-06-02 00:49:40
Local clock offset: 0.057 ms
Remote clock offset: 0.308 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.40 Mbit/s
95th percentile per-packet one-way delay: 53.343 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 68.88 Mbit/s
95th percentile per-packet one-way delay: 53.355 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 39.28 Mbit/s
95th percentile per-packet one-way delay: 49.733 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 16.49 Mbit/s
95th percentile per-packet one-way delay: 50.349 ms
Loss rate: 1.51%
```

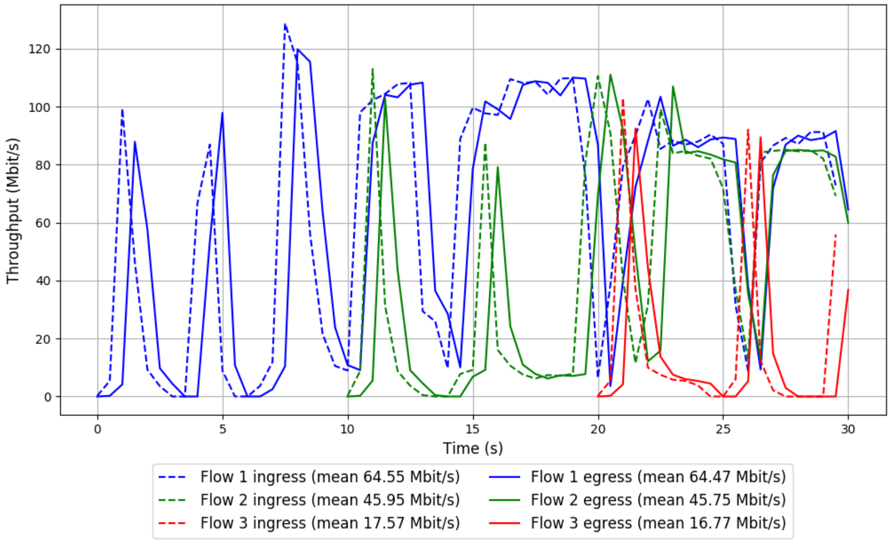
Run 8: Report of QUIC Cubic — Data Link

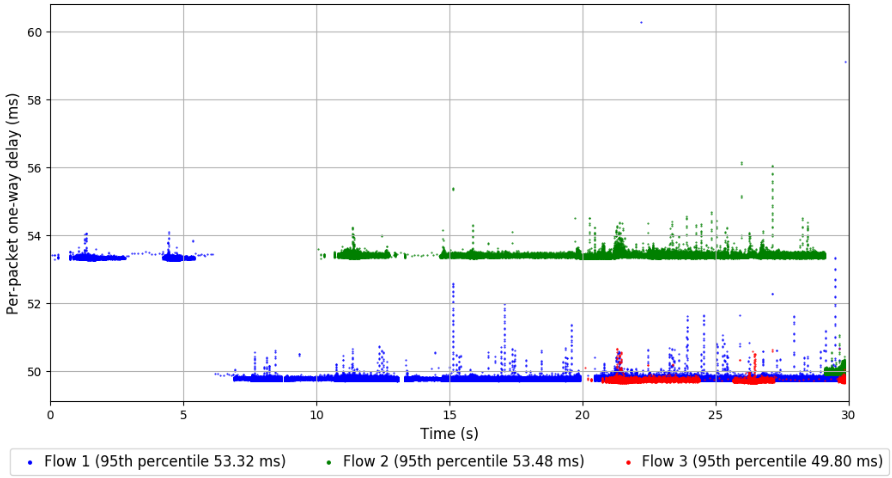




```
Run 9: Statistics of QUIC Cubic

Start at: 2018-06-02 01:11:52
End at: 2018-06-02 01:12:22
Local clock offset: 0.018 ms
Remote clock offset: 0.087 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.34 Mbit/s
95th percentile per-packet one-way delay: 53.435 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 64.47 Mbit/s
95th percentile per-packet one-way delay: 53.317 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 45.75 Mbit/s
95th percentile per-packet one-way delay: 53.479 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 16.77 Mbit/s
95th percentile per-packet one-way delay: 49.805 ms
Loss rate: 5.52%
```

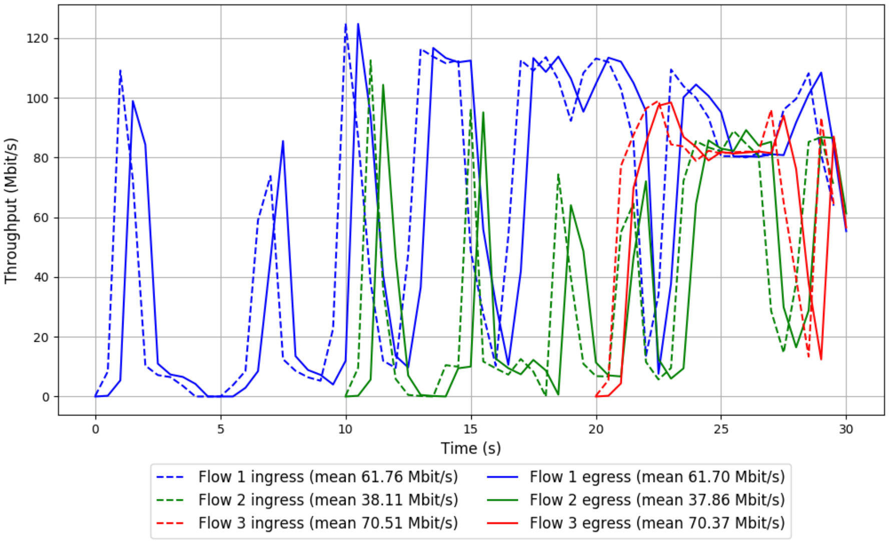
Run 9: Report of QUIC Cubic — Data Link

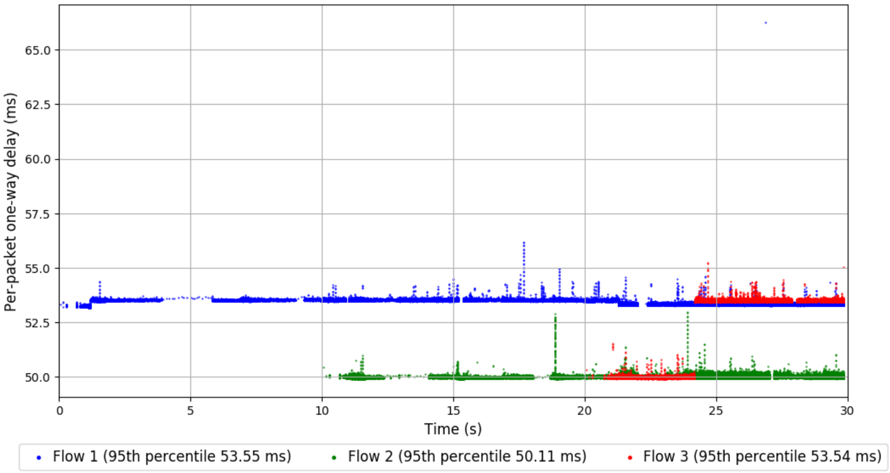




```
Run 10: Statistics of QUIC Cubic

Start at: 2018-06-02 01:34:47
End at: 2018-06-02 01:35:17
Local clock offset: 0.545 ms
Remote clock offset: 0.299 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 109.95 Mbit/s
95th percentile per-packet one-way delay: 53.539 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 61.70 Mbit/s
95th percentile per-packet one-way delay: 53.547 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 37.86 Mbit/s
95th percentile per-packet one-way delay: 50.112 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 70.37 Mbit/s
95th percentile per-packet one-way delay: 53.542 ms
Loss rate: 1.19%
```

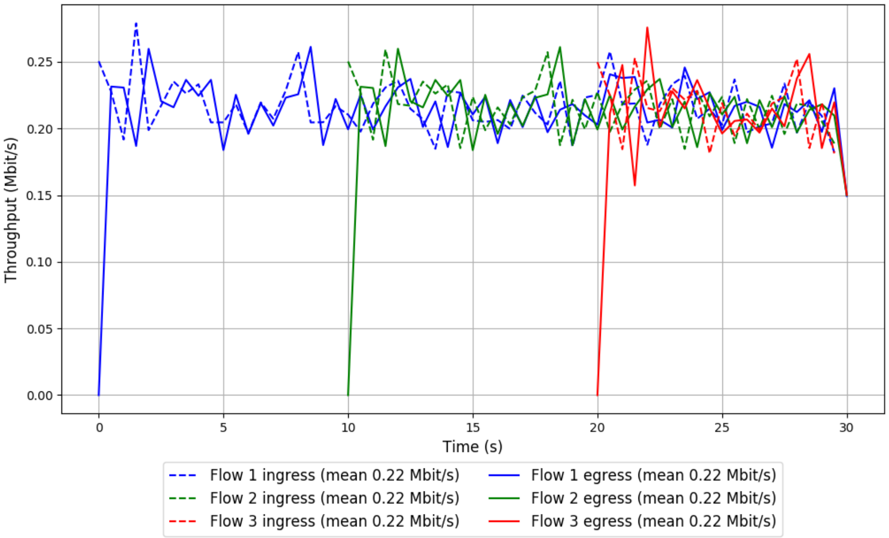
Run 10: Report of QUIC Cubic — Data Link

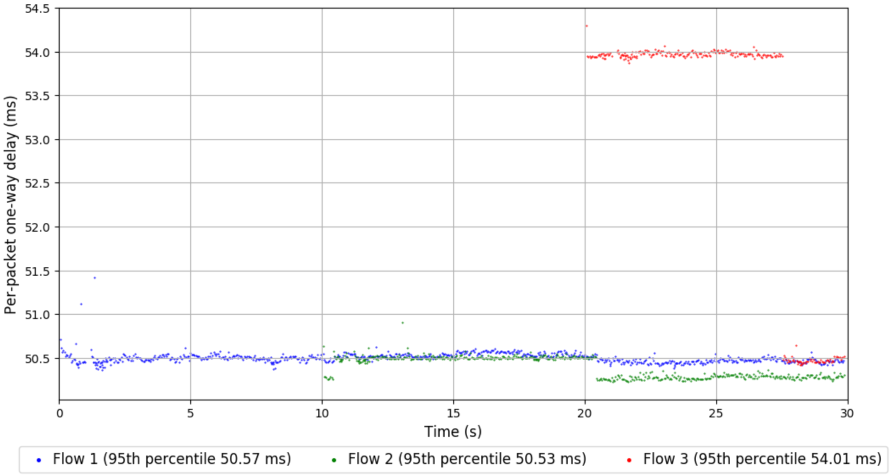




```
Run 1: Statistics of SCReAM

Start at: 2018-06-01 22:18:30
End at: 2018-06-01 22:19:00
Local clock offset: 0.706 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.974 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.573 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.528 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 54.012 ms
Loss rate: 1.10%
```

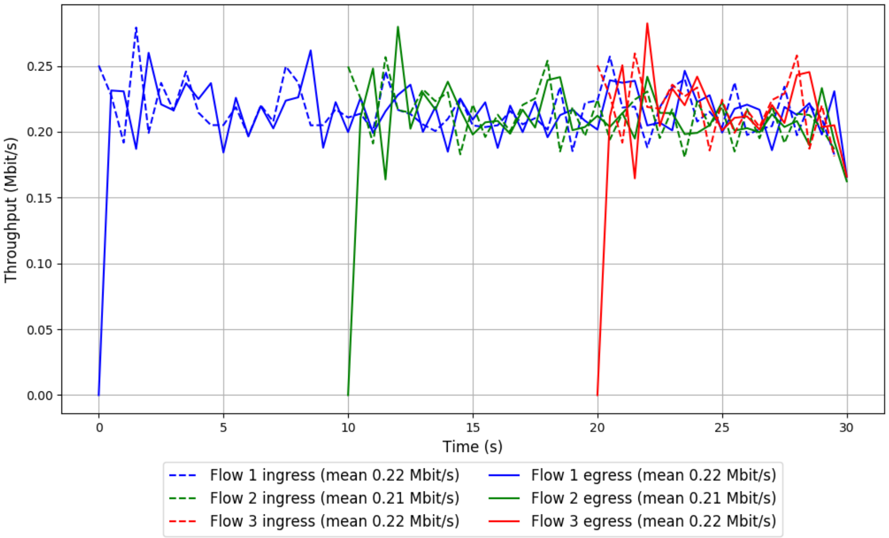
Run 1: Report of SCReAM — Data Link

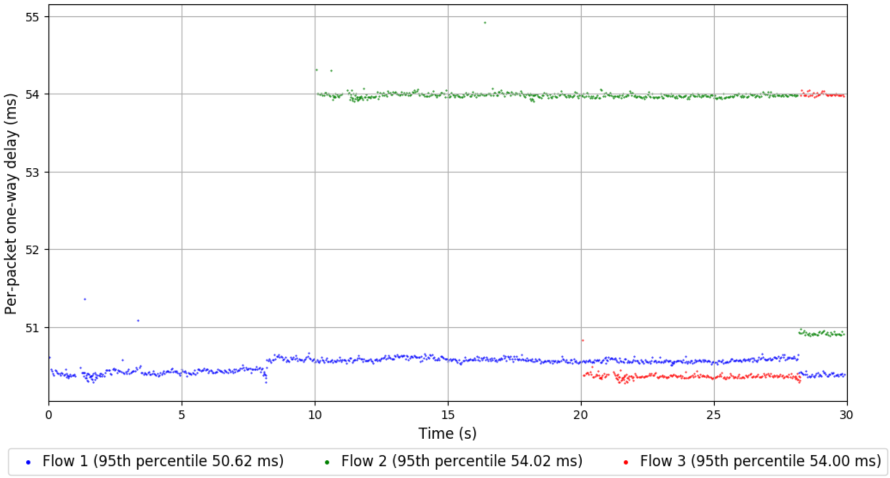




```
Run 2: Statistics of SCReAM

Start at: 2018-06-01 22:41:40
End at: 2018-06-01 22:42:10
Local clock offset: 0.704 ms
Remote clock offset: -0.165 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 54.007 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.623 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.025 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.997 ms
Loss rate: 1.08%
```

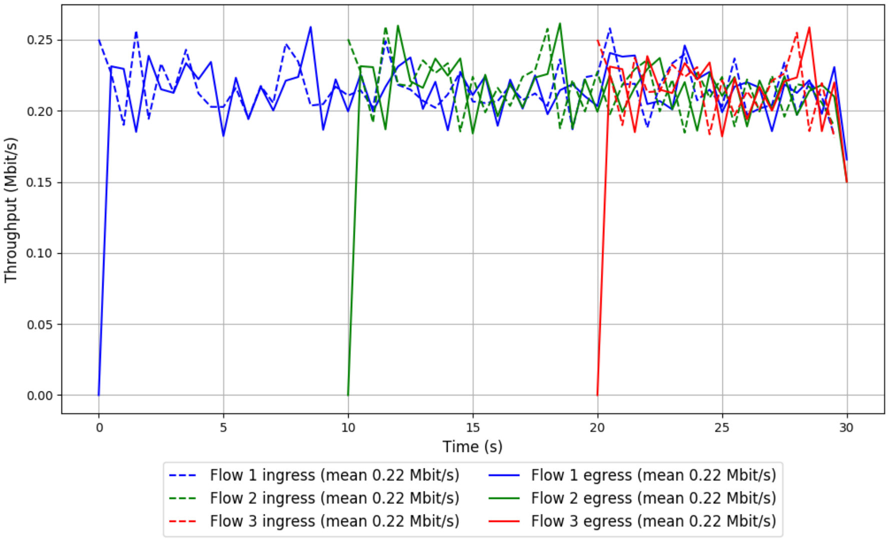
Run 2: Report of SCReAM — Data Link

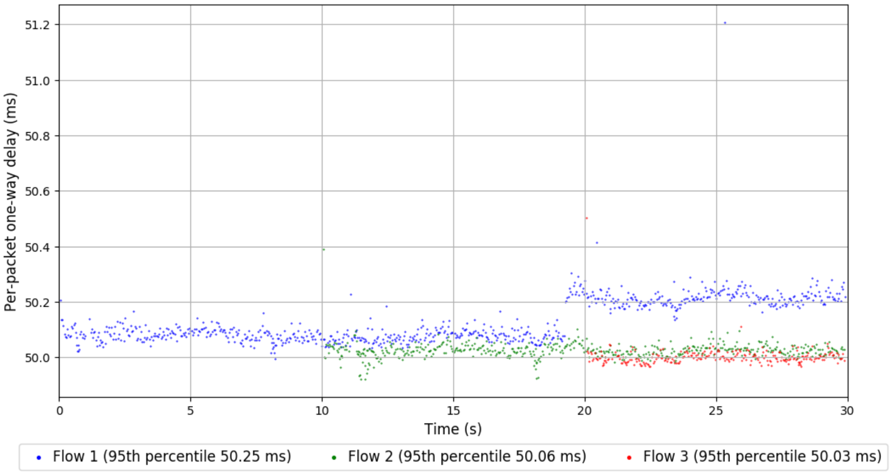




```
Run 3: Statistics of SCReAM

Start at: 2018-06-01 23:04:42
End at: 2018-06-01 23:05:12
Local clock offset: 0.612 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.230 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.246 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.060 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.034 ms
Loss rate: 1.09%
```

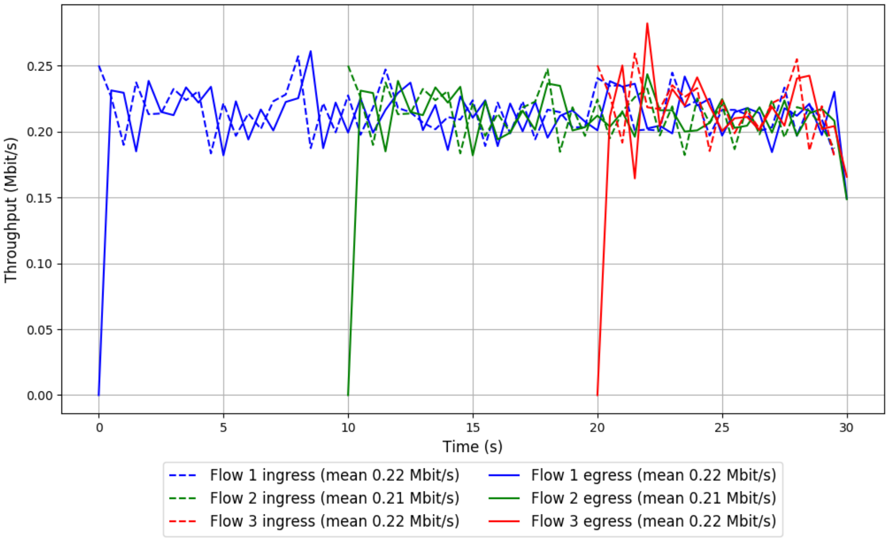
Run 3: Report of SCReAM — Data Link

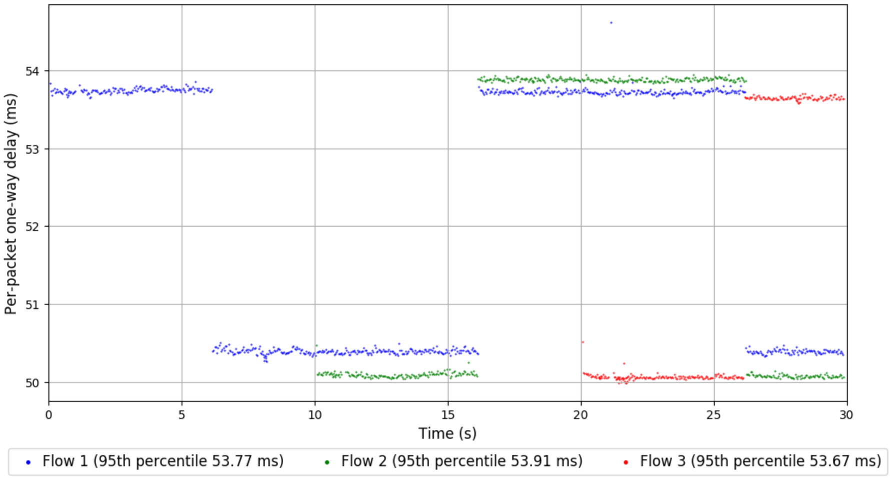




```
Run 4: Statistics of SCReAM

Start at: 2018-06-01 23:27:52
End at: 2018-06-01 23:28:22
Local clock offset: 0.341 ms
Remote clock offset: -0.101 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.893 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.773 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.909 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.666 ms
Loss rate: 1.08%
```

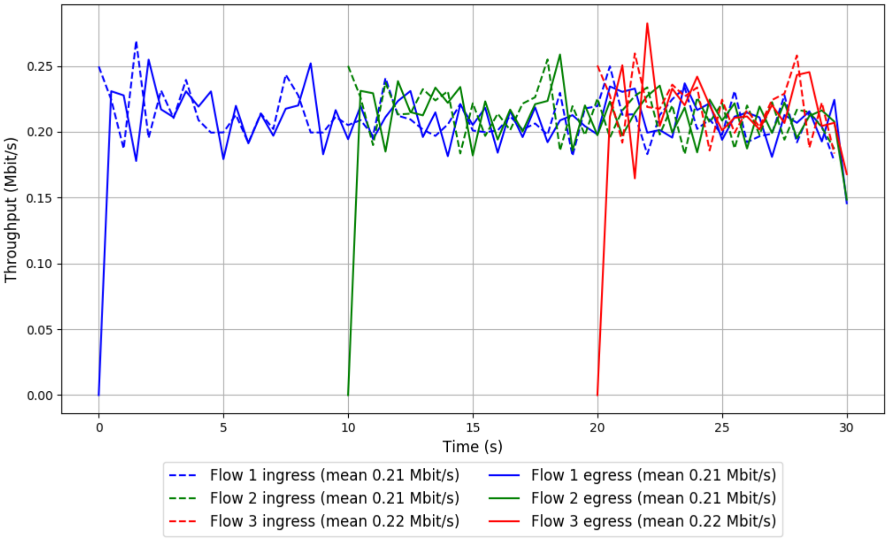
Run 4: Report of SCReAM — Data Link

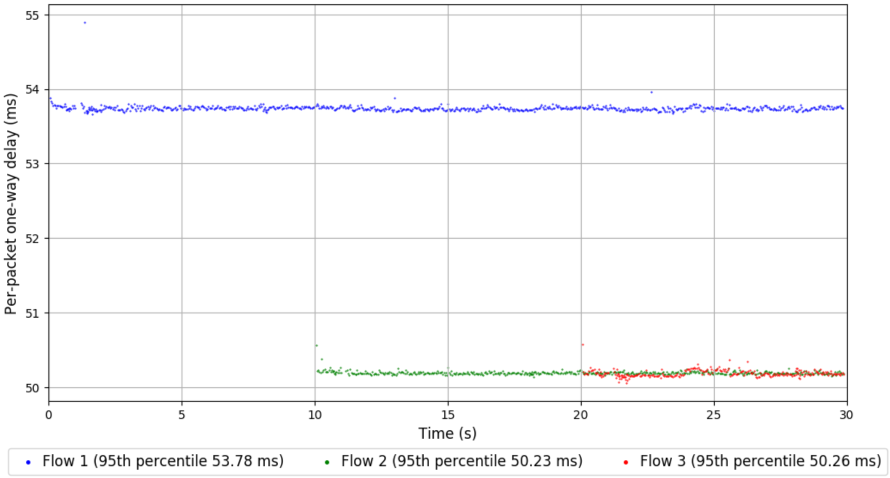




```
Run 5: Statistics of SCReAM

Start at: 2018-06-01 23:50:37
End at: 2018-06-01 23:51:07
Local clock offset: 0.009 ms
Remote clock offset: -0.036 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.772 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.782 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.228 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.256 ms
Loss rate: 1.09%
```

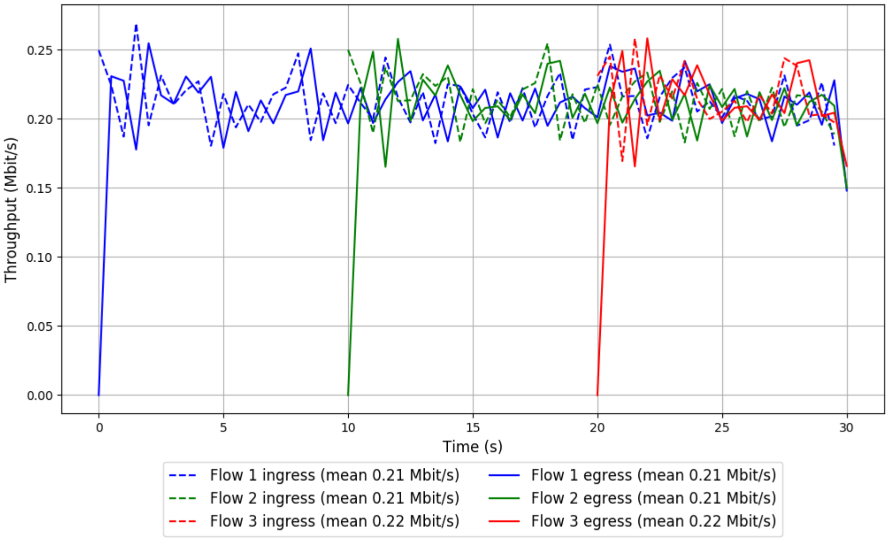
Run 5: Report of SCReAM — Data Link

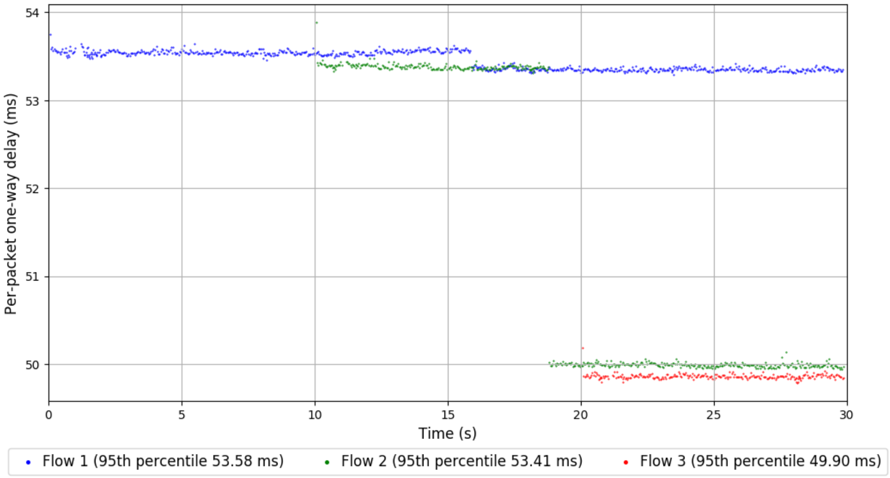




```
Run 6: Statistics of SCReAM

Start at: 2018-06-02 00:13:32
End at: 2018-06-02 00:14:02
Local clock offset: -0.053 ms
Remote clock offset: 0.118 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.573 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.583 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.413 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.904 ms
Loss rate: 1.09%
```

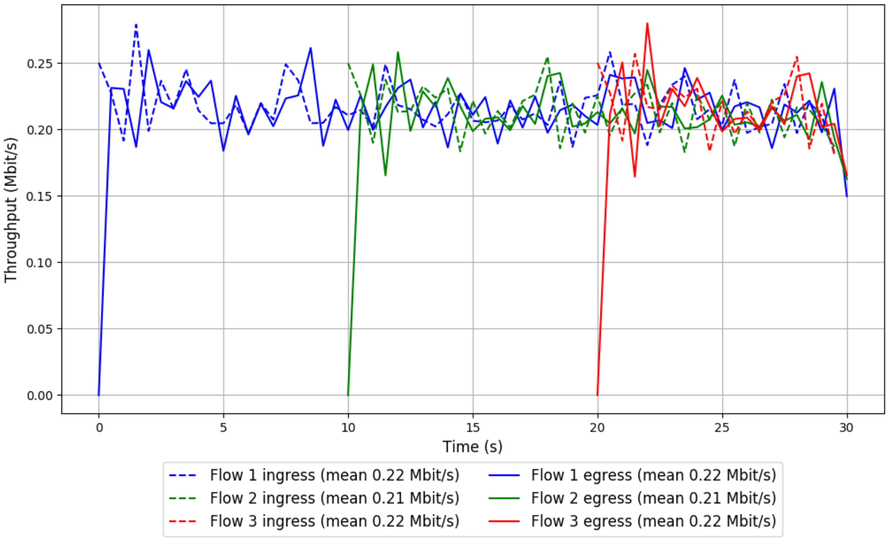
Run 6: Report of SCReAM — Data Link

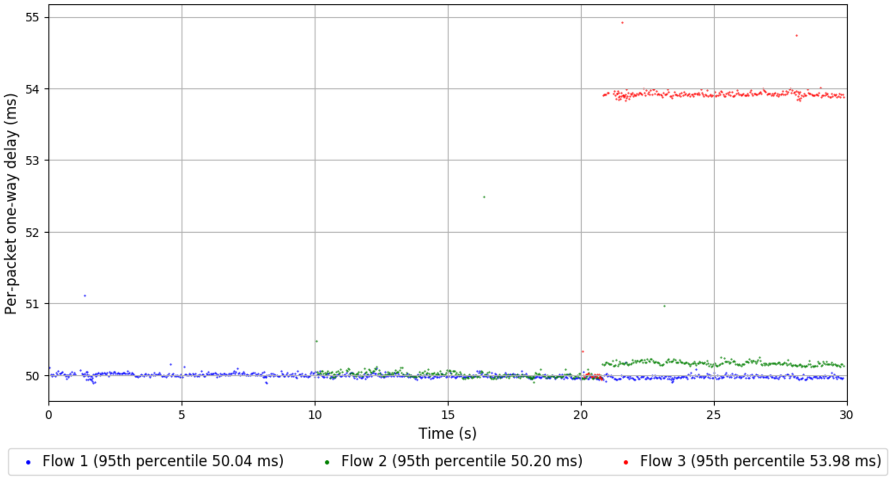




```
Run 7: Statistics of SCReAM

Start at: 2018-06-02 00:36:50
End at: 2018-06-02 00:37:20
Local clock offset: 0.041 ms
Remote clock offset: -0.053 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.929 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.038 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.204 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.980 ms
Loss rate: 1.08%
```

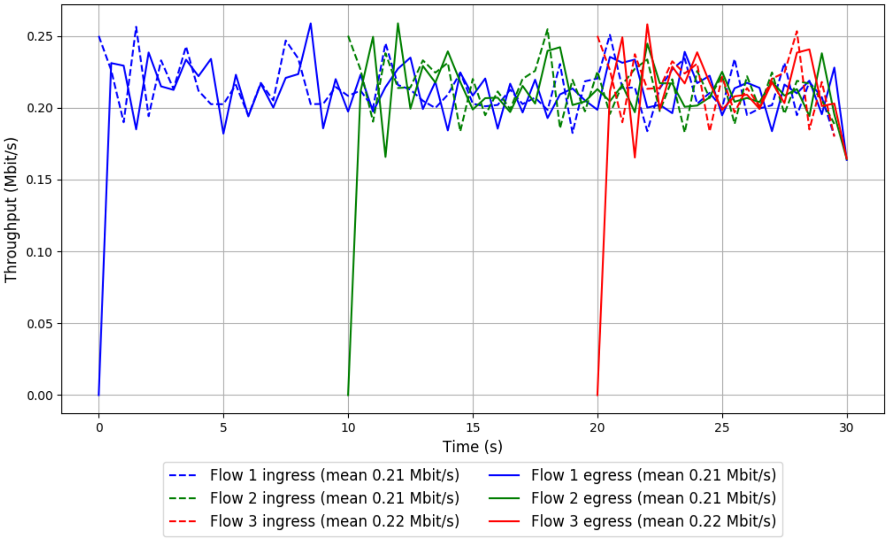
Run 7: Report of SCReAM — Data Link

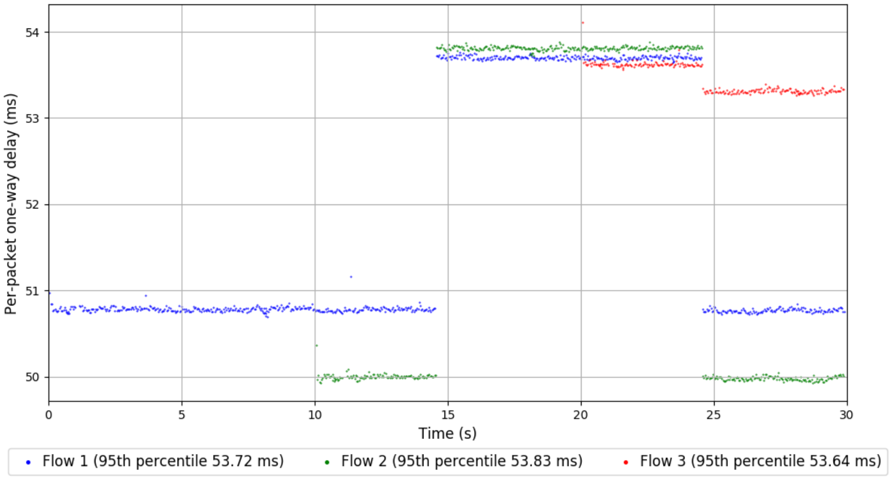




```
Run 8: Statistics of SCReAM

Start at: 2018-06-02 00:59:33
End at: 2018-06-02 01:00:03
Local clock offset: -0.1 ms
Remote clock offset: -0.131 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.818 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.720 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.832 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.637 ms
Loss rate: 1.09%
```

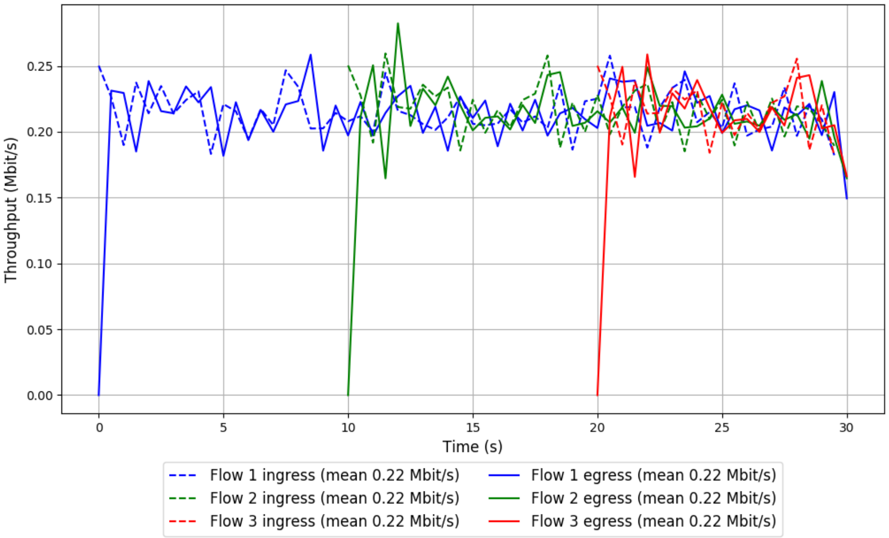
Run 8: Report of SCReAM — Data Link

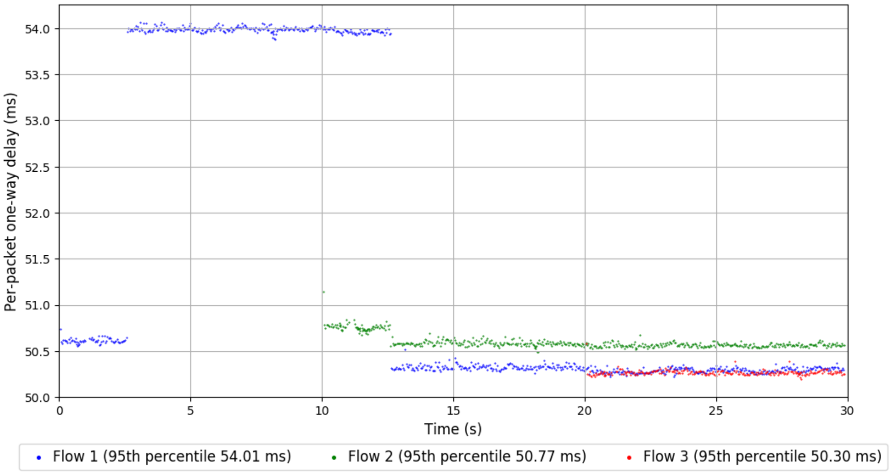




```
Run 9: Statistics of SCReAM

Start at: 2018-06-02 01:22:18
End at: 2018-06-02 01:22:48
Local clock offset: 0.389 ms
Remote clock offset: -0.082 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.996 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 54.009 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.768 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.305 ms
Loss rate: 1.09%
```

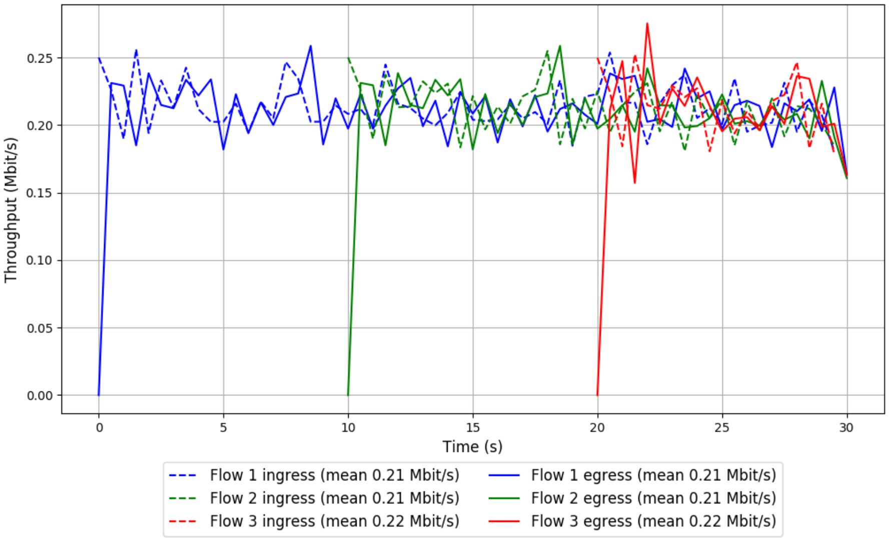
Run 9: Report of SCReAM — Data Link

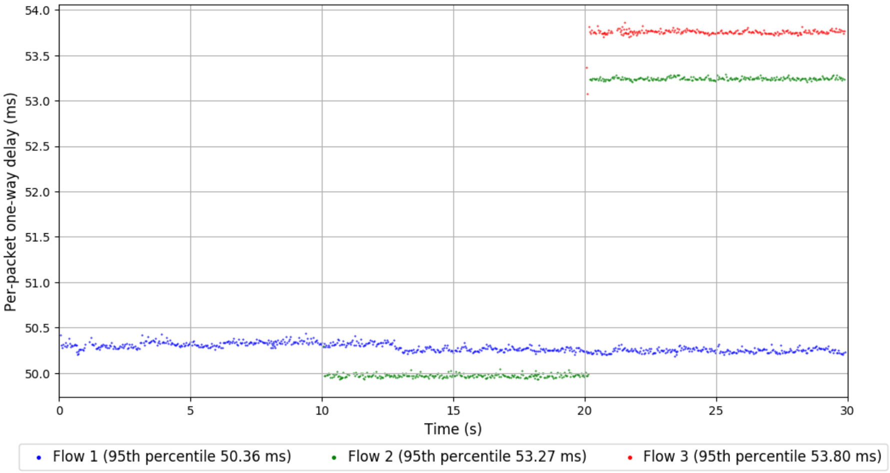




```
Run 10: Statistics of SCReAM

Start at: 2018-06-02 01:45:38
End at: 2018-06-02 01:46:08
Local clock offset: -0.072 ms
Remote clock offset: -0.171 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.767 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.356 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.266 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.796 ms
Loss rate: 1.08%
```

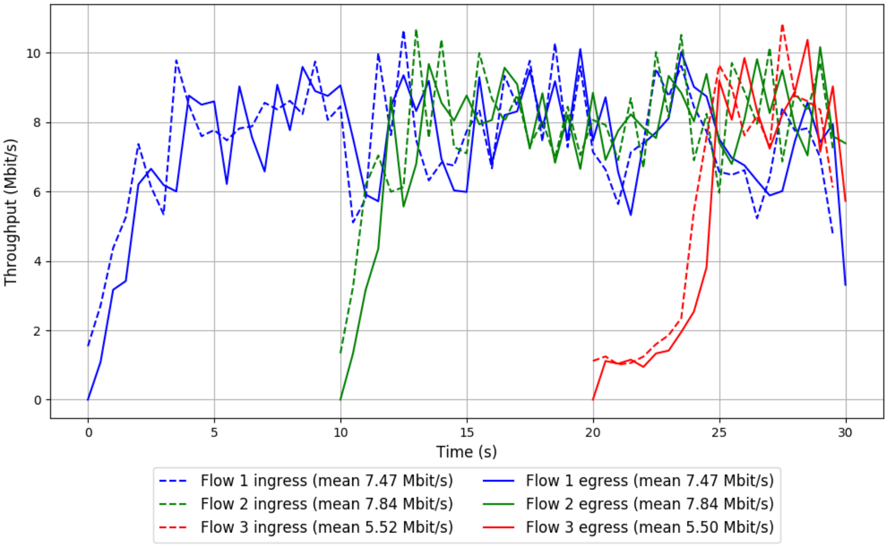
Run 10: Report of SCReAM — Data Link

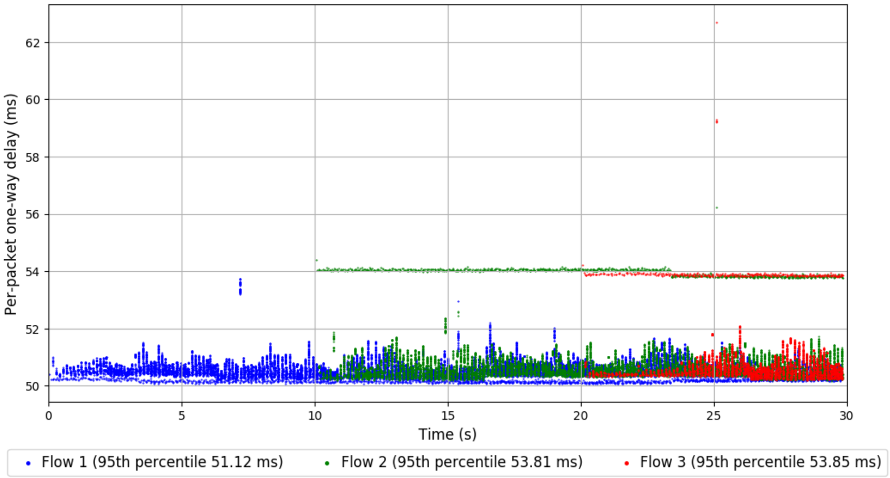




```
Run 1: Statistics of Sprout

Start at: 2018-06-01 22:14:14
End at: 2018-06-01 22:14:44
Local clock offset: 0.448 ms
Remote clock offset: -0.28 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.47 Mbit/s
95th percentile per-packet one-way delay: 51.431 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 7.47 Mbit/s
95th percentile per-packet one-way delay: 51.118 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 7.84 Mbit/s
95th percentile per-packet one-way delay: 53.813 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 5.50 Mbit/s
95th percentile per-packet one-way delay: 53.846 ms
Loss rate: 1.40%
```

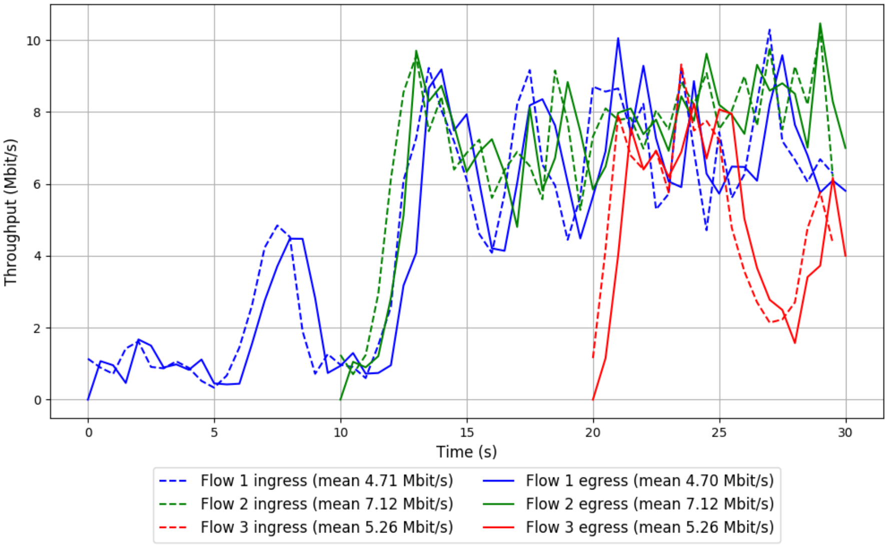
Run 1: Report of Sprout — Data Link

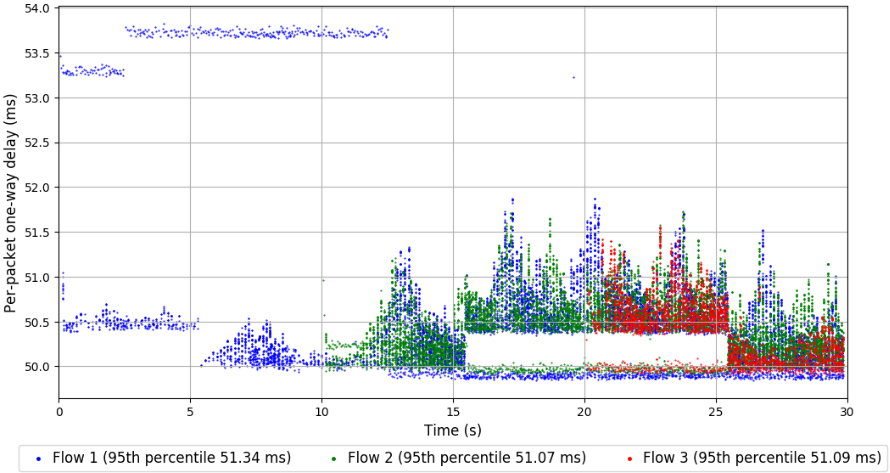




```
Run 2: Statistics of Sprout

Start at: 2018-06-01 22:37:25
End at: 2018-06-01 22:37:55
Local clock offset: 0.487 ms
Remote clock offset: 0.014 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.15 Mbit/s
95th percentile per-packet one-way delay: 51.156 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 4.70 Mbit/s
95th percentile per-packet one-way delay: 51.335 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 7.12 Mbit/s
95th percentile per-packet one-way delay: 51.067 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 5.26 Mbit/s
95th percentile per-packet one-way delay: 51.095 ms
Loss rate: 0.96%
```

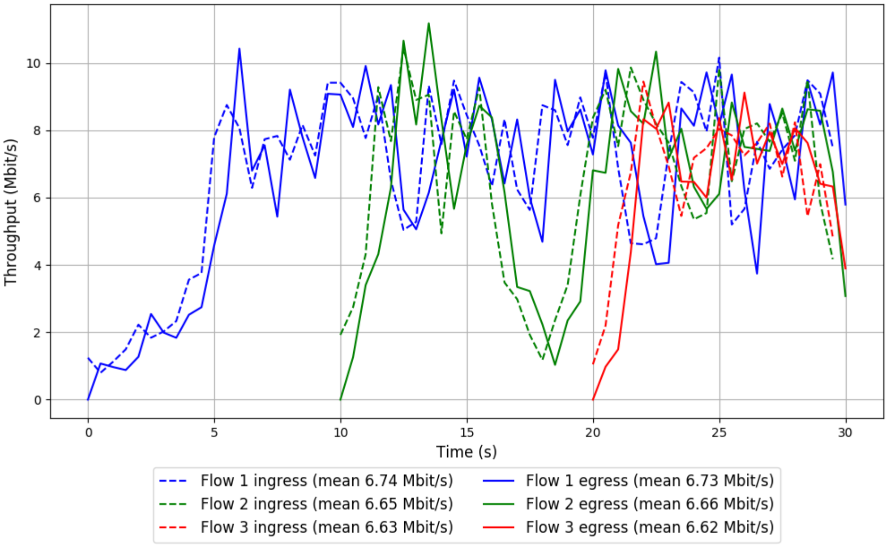
Run 2: Report of Sprout — Data Link

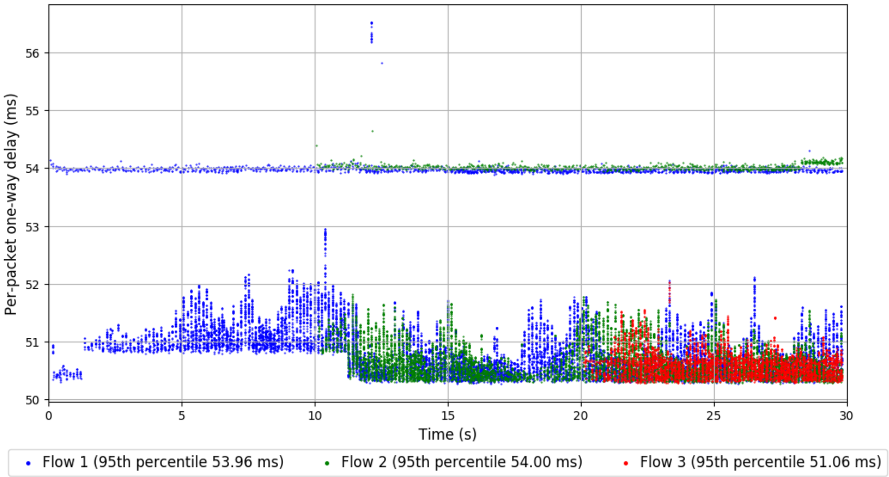




```
Run 3: Statistics of Sprout

Start at: 2018-06-01 23:00:30
End at: 2018-06-01 23:01:00
Local clock offset: 0.613 ms
Remote clock offset: -0.348 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.32 Mbit/s
95th percentile per-packet one-way delay: 53.959 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 6.73 Mbit/s
95th percentile per-packet one-way delay: 53.959 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 6.66 Mbit/s
95th percentile per-packet one-way delay: 54.000 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 6.62 Mbit/s
95th percentile per-packet one-way delay: 51.065 ms
Loss rate: 1.22%
```

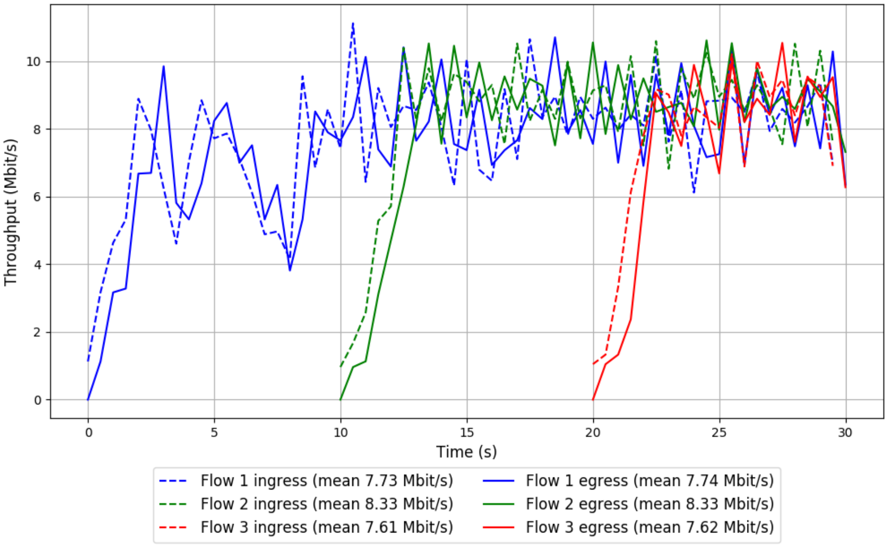
Run 3: Report of Sprout — Data Link

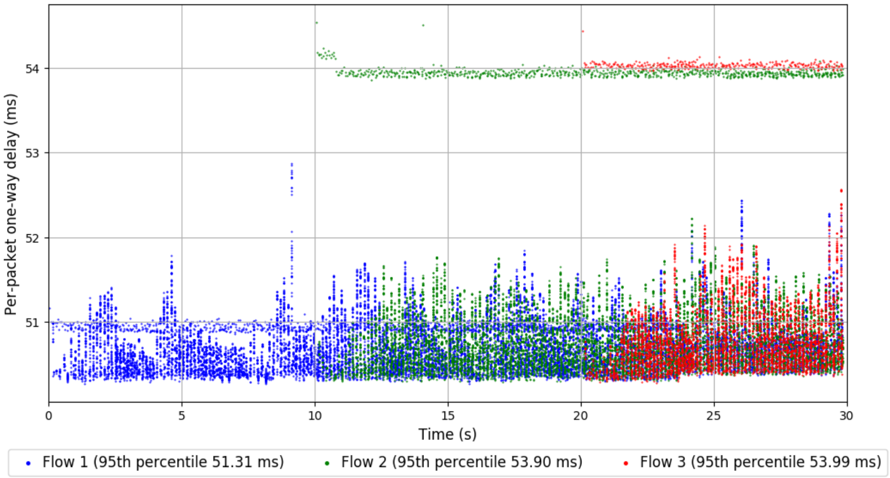




```
Run 4: Statistics of Sprout

Start at: 2018-06-01 23:23:37
End at: 2018-06-01 23:24:07
Local clock offset: 0.736 ms
Remote clock offset: -0.214 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.76 Mbit/s
95th percentile per-packet one-way delay: 51.547 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 7.74 Mbit/s
95th percentile per-packet one-way delay: 51.308 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 8.33 Mbit/s
95th percentile per-packet one-way delay: 53.898 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 7.62 Mbit/s
95th percentile per-packet one-way delay: 53.986 ms
Loss rate: 1.08%
```

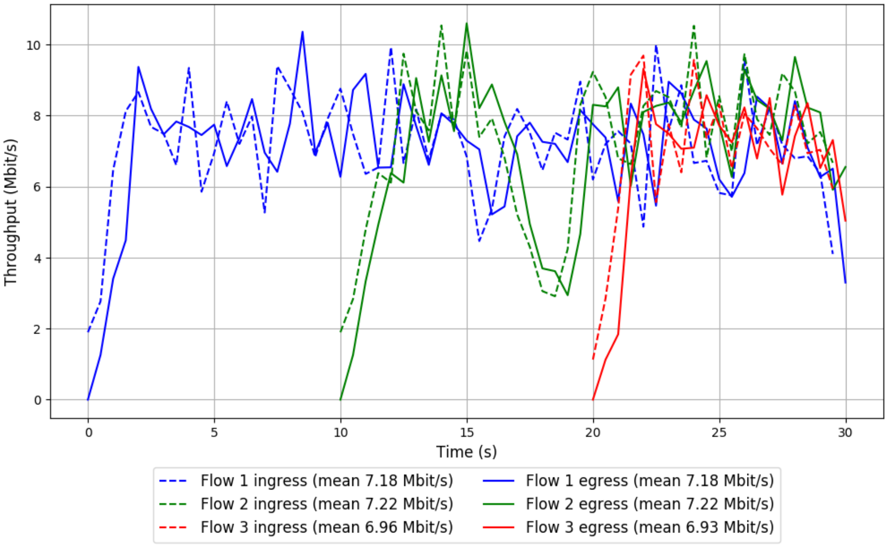
Run 4: Report of Sprout — Data Link

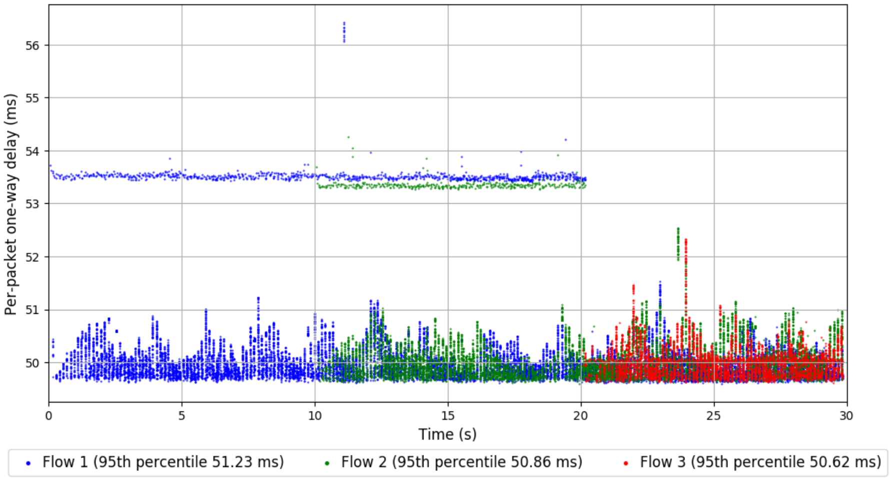




```
Run 5: Statistics of Sprout

Start at: 2018-06-01 23:46:28
End at: 2018-06-01 23:46:58
Local clock offset: -0.122 ms
Remote clock offset: 0.032 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.25 Mbit/s
95th percentile per-packet one-way delay: 50.865 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 7.18 Mbit/s
95th percentile per-packet one-way delay: 51.225 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 7.22 Mbit/s
95th percentile per-packet one-way delay: 50.864 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 6.93 Mbit/s
95th percentile per-packet one-way delay: 50.619 ms
Loss rate: 1.37%
```

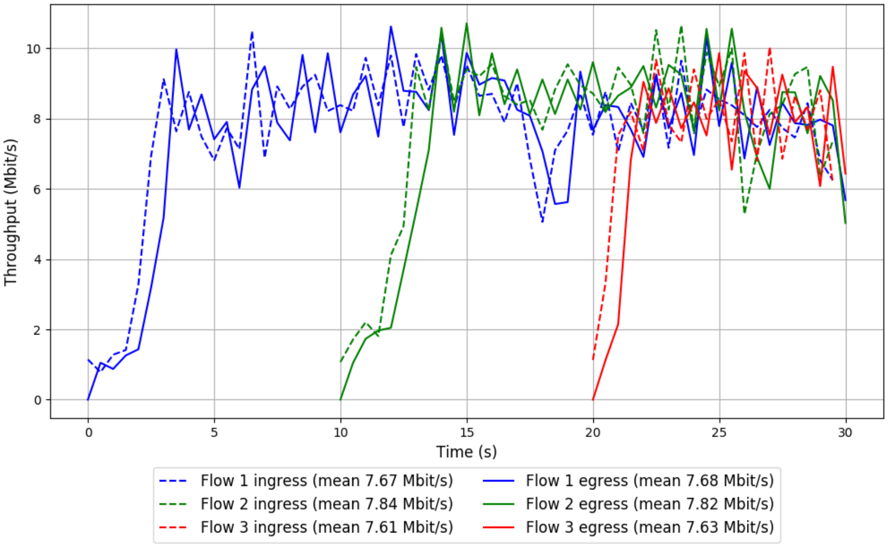
Run 5: Report of Sprout — Data Link

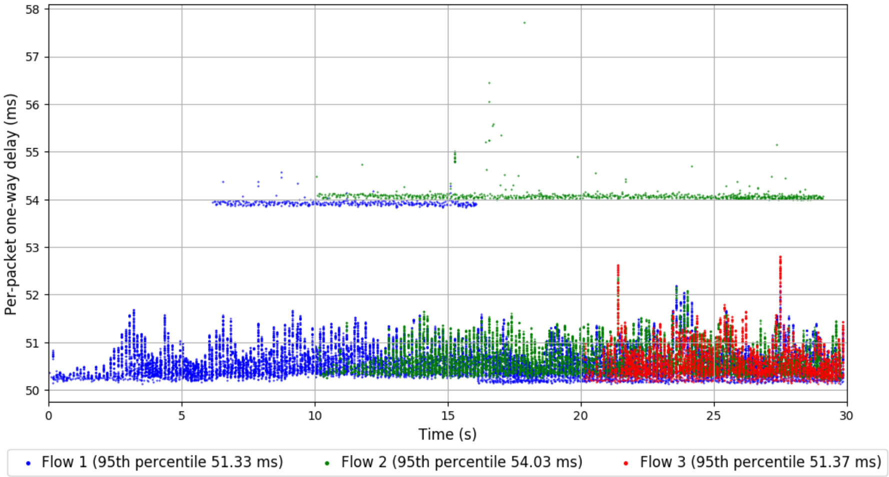




```
Run 6: Statistics of Sprout

Start at: 2018-06-02 00:09:22
End at: 2018-06-02 00:09:52
Local clock offset: 0.289 ms
Remote clock offset: -0.099 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.36 Mbit/s
95th percentile per-packet one-way delay: 51.460 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 7.68 Mbit/s
95th percentile per-packet one-way delay: 51.334 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 7.82 Mbit/s
95th percentile per-packet one-way delay: 54.030 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 7.63 Mbit/s
95th percentile per-packet one-way delay: 51.365 ms
Loss rate: 0.66%
```

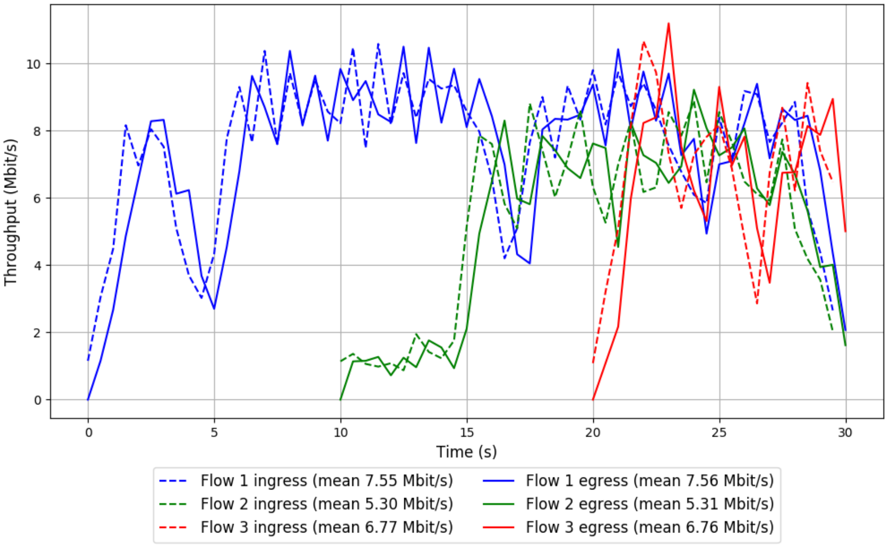
Run 6: Report of Sprout — Data Link

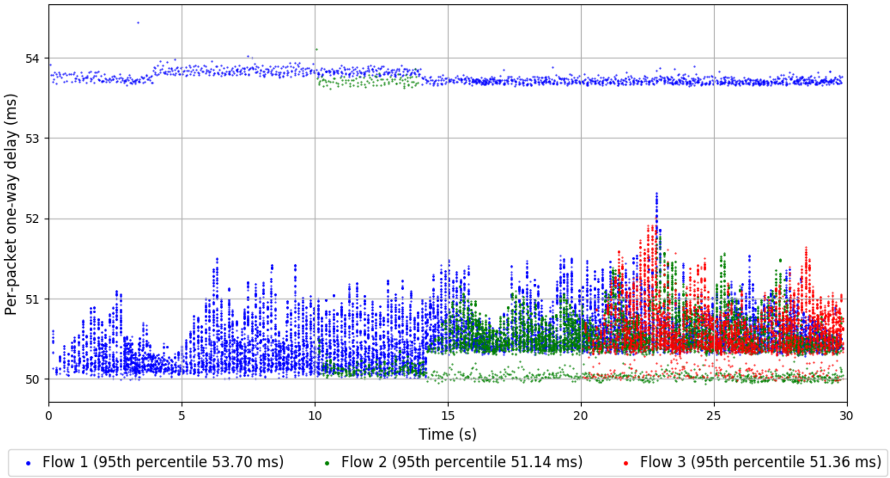




```
Run 7: Statistics of Sprout

Start at: 2018-06-02 00:32:37
End at: 2018-06-02 00:33:07
Local clock offset: 0.152 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.30 Mbit/s
95th percentile per-packet one-way delay: 51.561 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 7.56 Mbit/s
95th percentile per-packet one-way delay: 53.699 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 5.31 Mbit/s
95th percentile per-packet one-way delay: 51.141 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 6.76 Mbit/s
95th percentile per-packet one-way delay: 51.359 ms
Loss rate: 1.09%
```

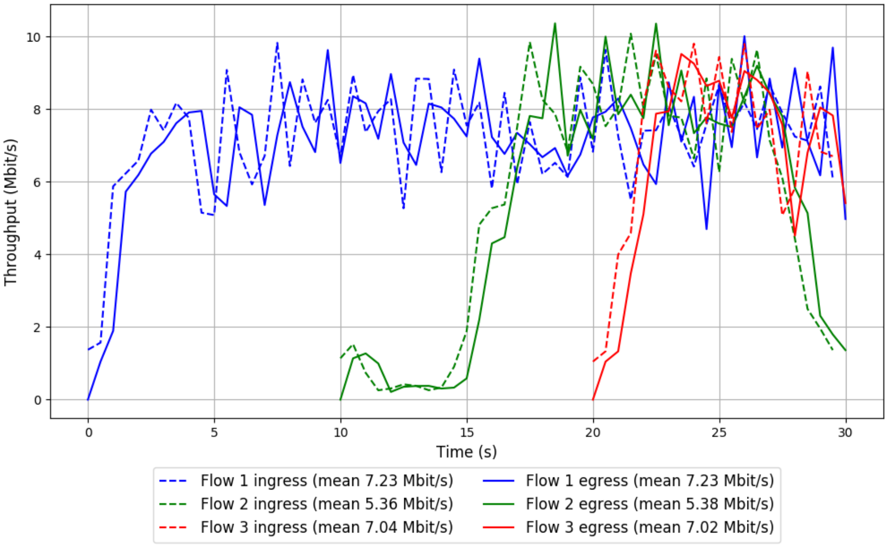
Run 7: Report of Sprout — Data Link

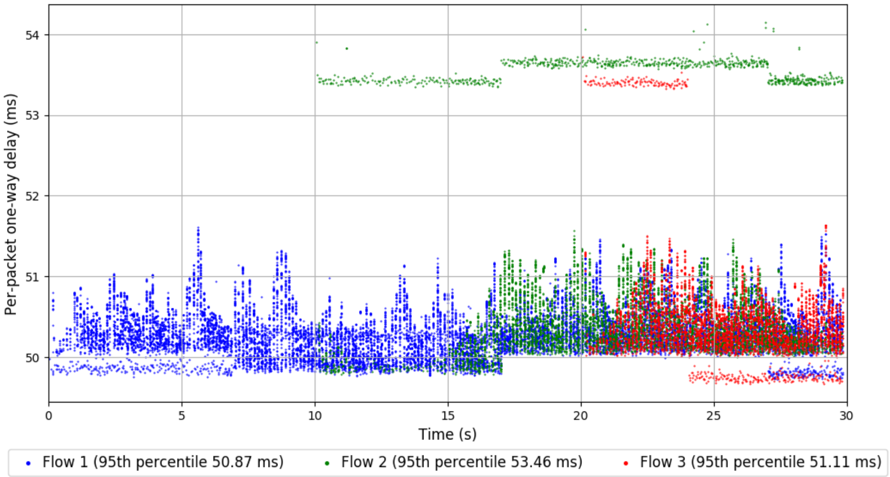




```
Run 8: Statistics of Sprout

Start at: 2018-06-02 00:55:24
End at: 2018-06-02 00:55:54
Local clock offset: -0.06 ms
Remote clock offset: 0.095 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.10 Mbit/s
95th percentile per-packet one-way delay: 51.111 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 7.23 Mbit/s
95th percentile per-packet one-way delay: 50.870 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 5.38 Mbit/s
95th percentile per-packet one-way delay: 53.460 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 7.02 Mbit/s
95th percentile per-packet one-way delay: 51.111 ms
Loss rate: 0.93%
```

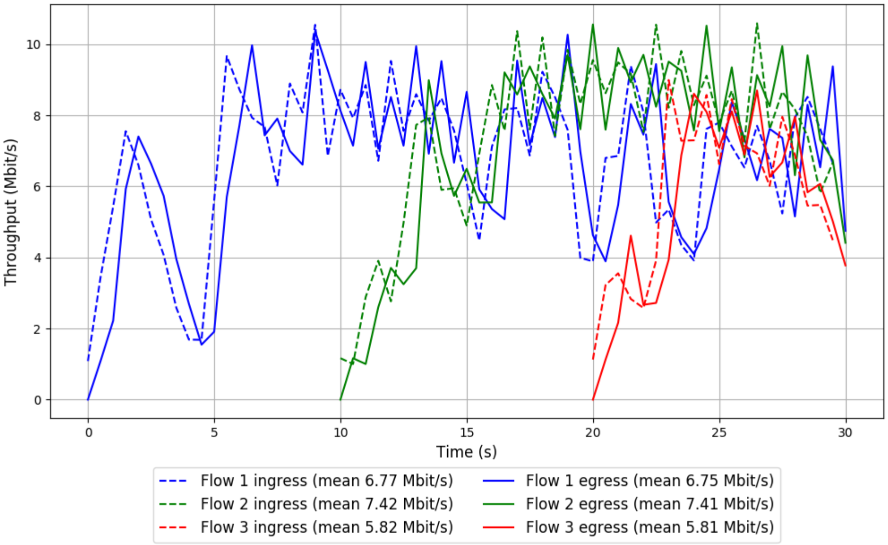
Run 8: Report of Sprout — Data Link

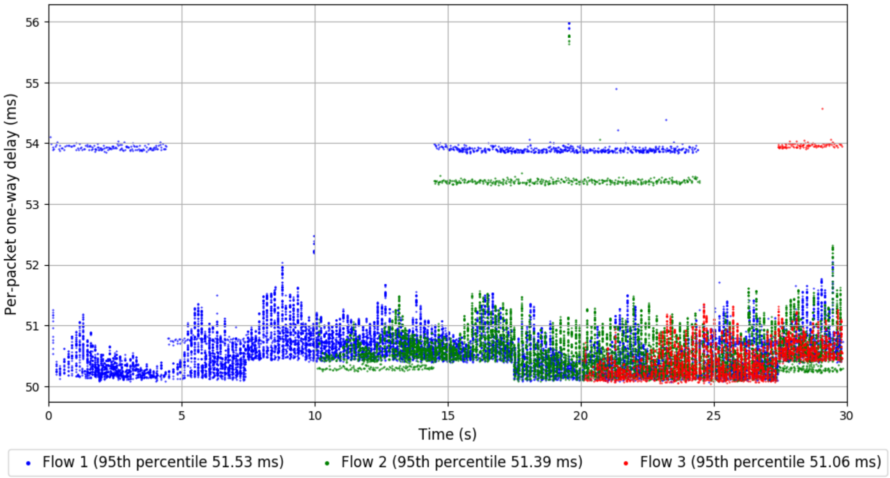




```
Run 9: Statistics of Sprout

Start at: 2018-06-02 01:18:13
End at: 2018-06-02 01:18:44
Local clock offset: 0.493 ms
Remote clock offset: 0.16 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.57 Mbit/s
95th percentile per-packet one-way delay: 51.428 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 6.75 Mbit/s
95th percentile per-packet one-way delay: 51.534 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 7.41 Mbit/s
95th percentile per-packet one-way delay: 51.391 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 5.81 Mbit/s
95th percentile per-packet one-way delay: 51.062 ms
Loss rate: 1.40%
```

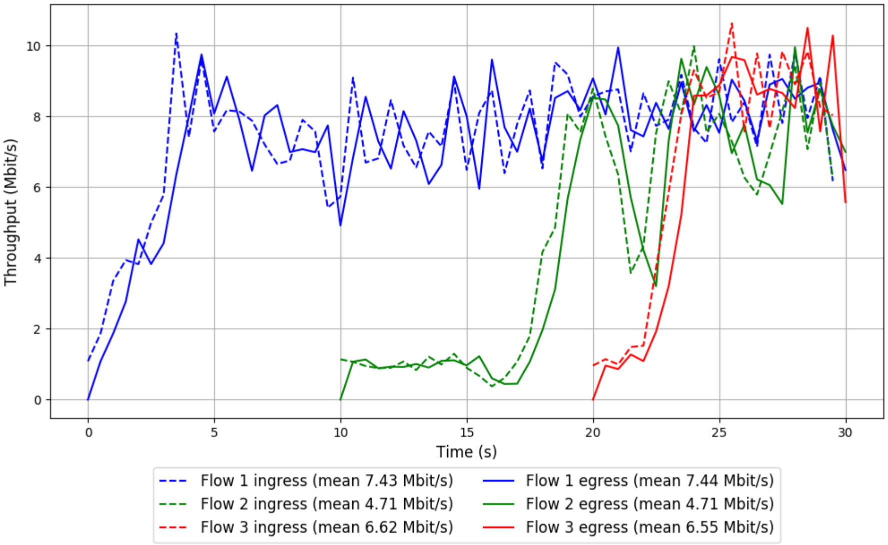
Run 9: Report of Sprout — Data Link

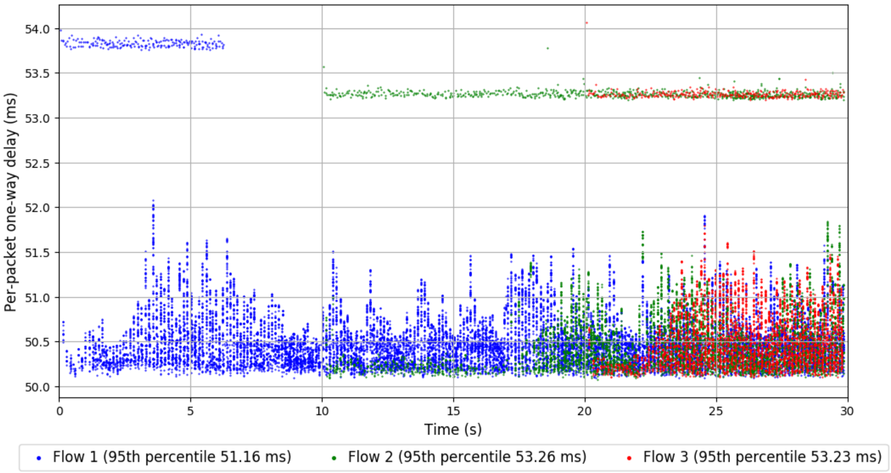




```
Run 10: Statistics of Sprout

Start at: 2018-06-02 01:41:25
End at: 2018-06-02 01:41:55
Local clock offset: 0.21 ms
Remote clock offset: -0.154 ms

# Below is generated by plot.py at 2018-06-02 03:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.71 Mbit/s
95th percentile per-packet one-way delay: 51.394 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 7.44 Mbit/s
95th percentile per-packet one-way delay: 51.159 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 4.71 Mbit/s
95th percentile per-packet one-way delay: 53.256 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 6.55 Mbit/s
95th percentile per-packet one-way delay: 53.235 ms
Loss rate: 2.06%
```

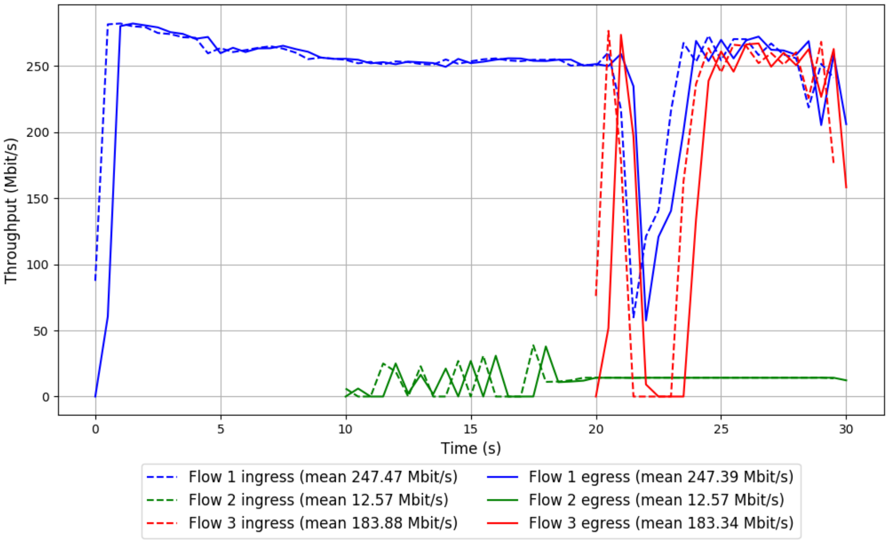
Run 10: Report of Sprout — Data Link

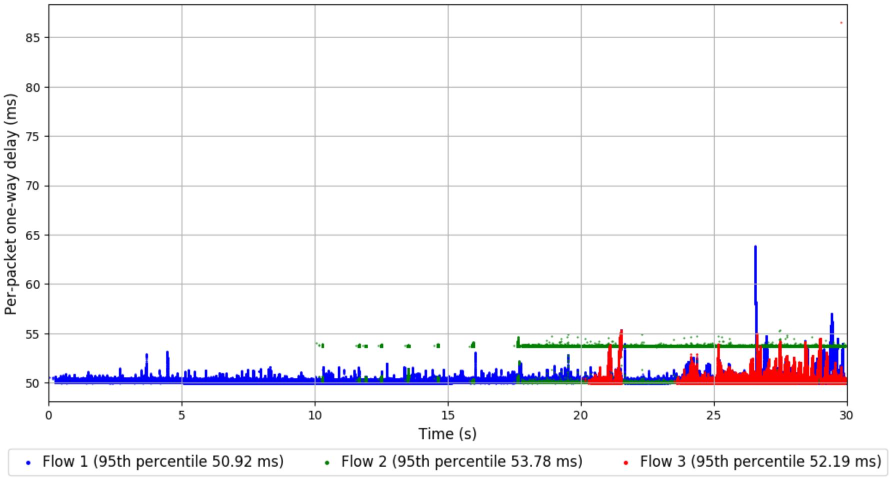




```
Run 1: Statistics of TaoVA-100x

Start at: 2018-06-01 22:08:56
End at: 2018-06-01 22:09:26
Local clock offset: 0.414 ms
Remote clock offset: -0.193 ms

# Below is generated by plot.py at 2018-06-02 03:48:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 316.23 Mbit/s
95th percentile per-packet one-way delay: 51.663 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 247.39 Mbit/s
95th percentile per-packet one-way delay: 50.922 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 12.57 Mbit/s
95th percentile per-packet one-way delay: 53.781 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 183.34 Mbit/s
95th percentile per-packet one-way delay: 52.186 ms
Loss rate: 1.34%
```

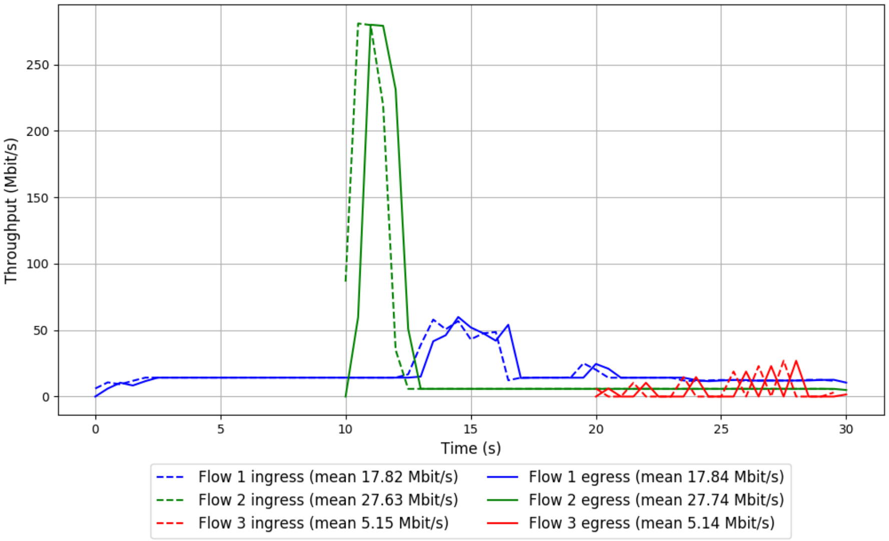
Run 1: Report of TaoVA-100x — Data Link

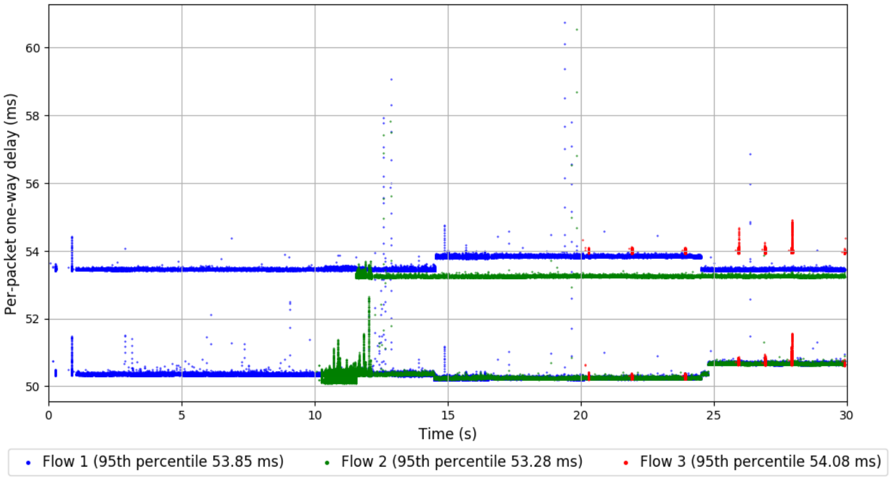




```
Run 2: Statistics of TaoVA-100x

Start at: 2018-06-01 22:32:26
End at: 2018-06-01 22:32:56
Local clock offset: 0.727 ms
Remote clock offset: -0.015 ms

# Below is generated by plot.py at 2018-06-02 03:48:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.99 Mbit/s
95th percentile per-packet one-way delay: 53.843 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 17.84 Mbit/s
95th percentile per-packet one-way delay: 53.847 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 27.74 Mbit/s
95th percentile per-packet one-way delay: 53.282 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 5.14 Mbit/s
95th percentile per-packet one-way delay: 54.080 ms
Loss rate: 1.40%
```

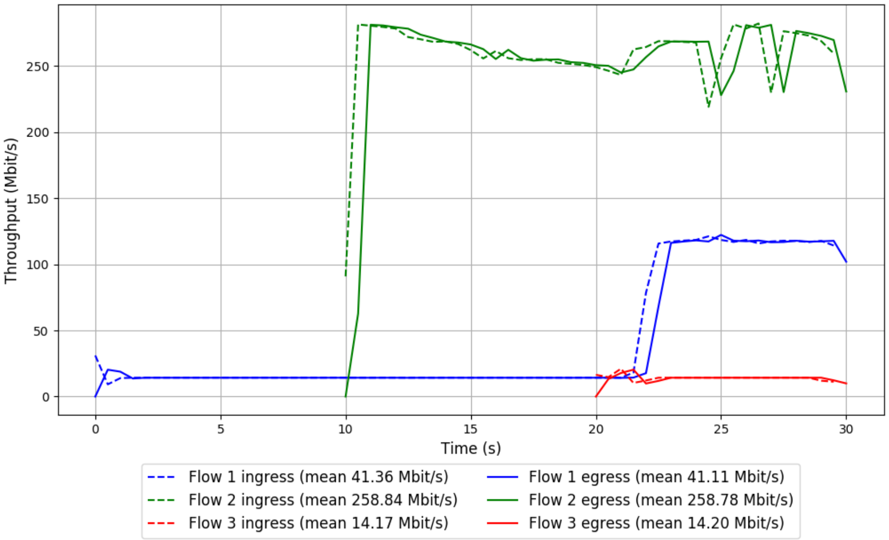
Run 2: Report of TaoVA-100x — Data Link

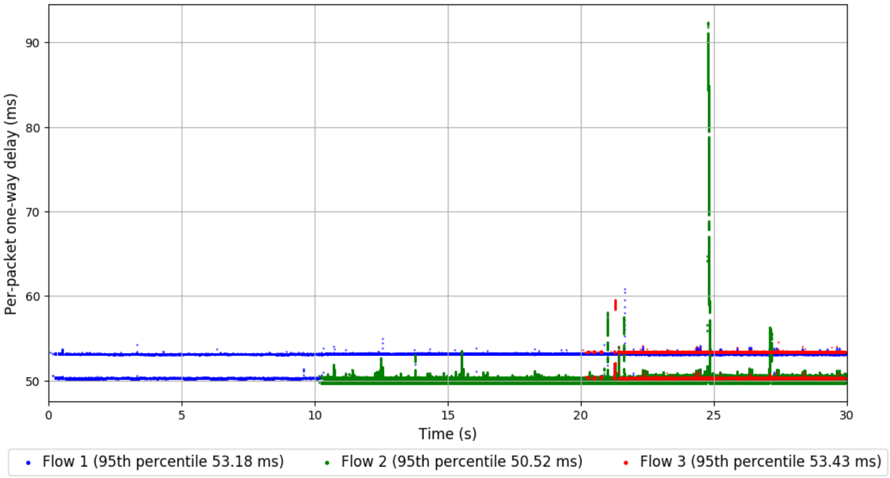




```
Run 3: Statistics of TaoVA-100x

Start at: 2018-06-01 22:55:21
End at: 2018-06-01 22:55:51
Local clock offset: 0.51 ms
Remote clock offset: 0.099 ms

# Below is generated by plot.py at 2018-06-02 03:48:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 217.93 Mbit/s
95th percentile per-packet one-way delay: 53.151 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 41.11 Mbit/s
95th percentile per-packet one-way delay: 53.181 ms
Loss rate: 0.97%
-- Flow 2:
Average throughput: 258.78 Mbit/s
95th percentile per-packet one-way delay: 50.519 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 14.20 Mbit/s
95th percentile per-packet one-way delay: 53.431 ms
Loss rate: 0.85%
```

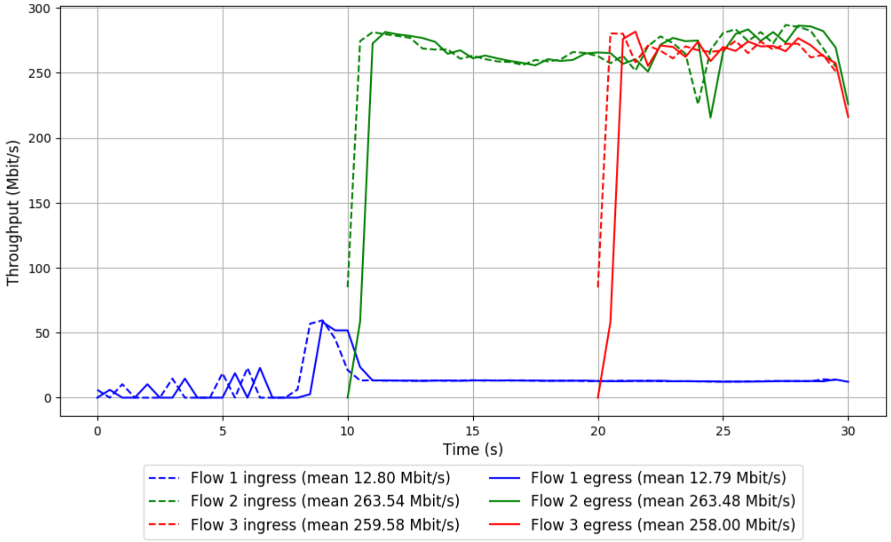
Run 3: Report of TaoVA-100x — Data Link

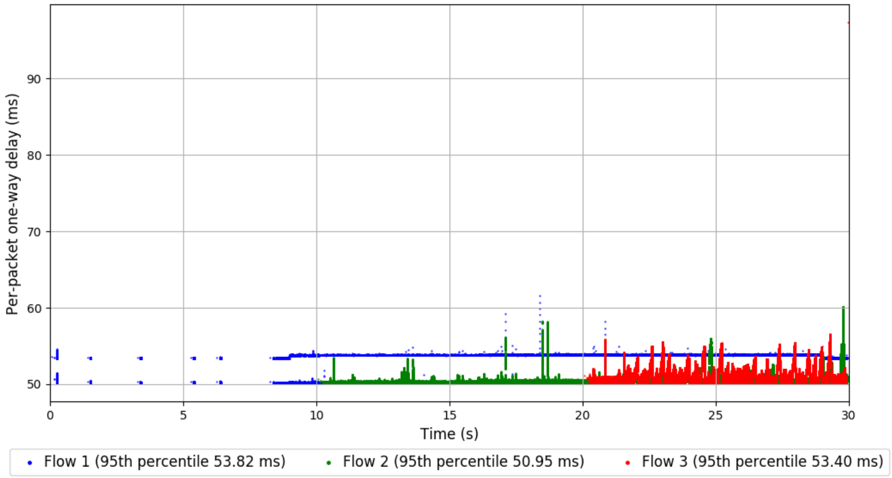




```
Run 4: Statistics of TaoVA-100x

Start at: 2018-06-01 23:18:22
End at: 2018-06-01 23:18:52
Local clock offset: 0.638 ms
Remote clock offset: -0.208 ms

# Below is generated by plot.py at 2018-06-02 03:48:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 273.21 Mbit/s
95th percentile per-packet one-way delay: 53.121 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 12.79 Mbit/s
95th percentile per-packet one-way delay: 53.823 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 263.48 Mbit/s
95th percentile per-packet one-way delay: 50.952 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 258.00 Mbit/s
95th percentile per-packet one-way delay: 53.399 ms
Loss rate: 1.28%
```

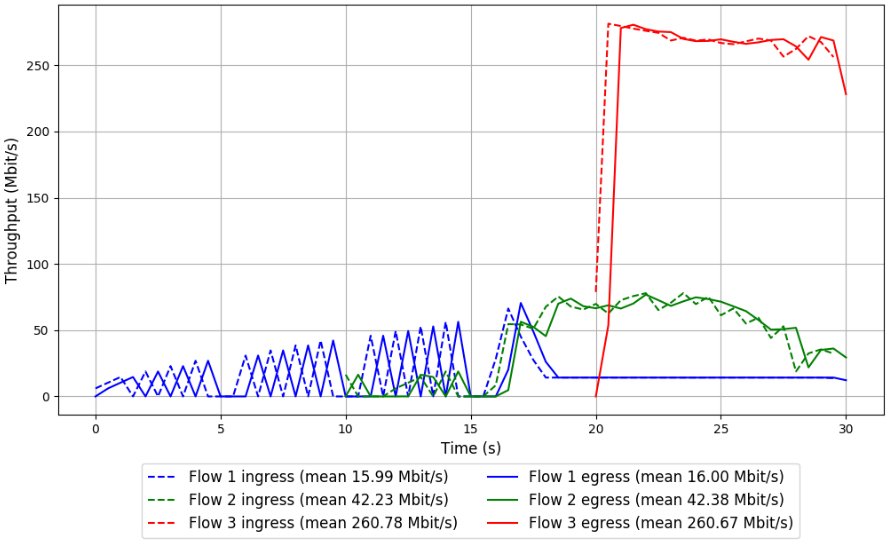
Run 4: Report of TaoVA-100x — Data Link

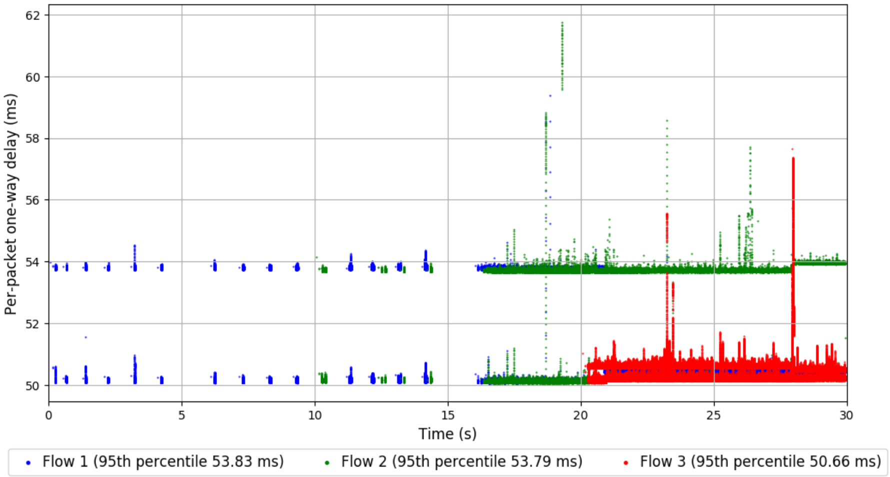




```
Run 5: Statistics of TaoVA-100x

Start at: 2018-06-01 23:41:20
End at: 2018-06-01 23:41:50
Local clock offset: 0.115 ms
Remote clock offset: -0.253 ms

# Below is generated by plot.py at 2018-06-02 03:48:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 130.24 Mbit/s
95th percentile per-packet one-way delay: 53.768 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 16.00 Mbit/s
95th percentile per-packet one-way delay: 53.825 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 42.38 Mbit/s
95th percentile per-packet one-way delay: 53.792 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 260.67 Mbit/s
95th percentile per-packet one-way delay: 50.661 ms
Loss rate: 1.09%
```

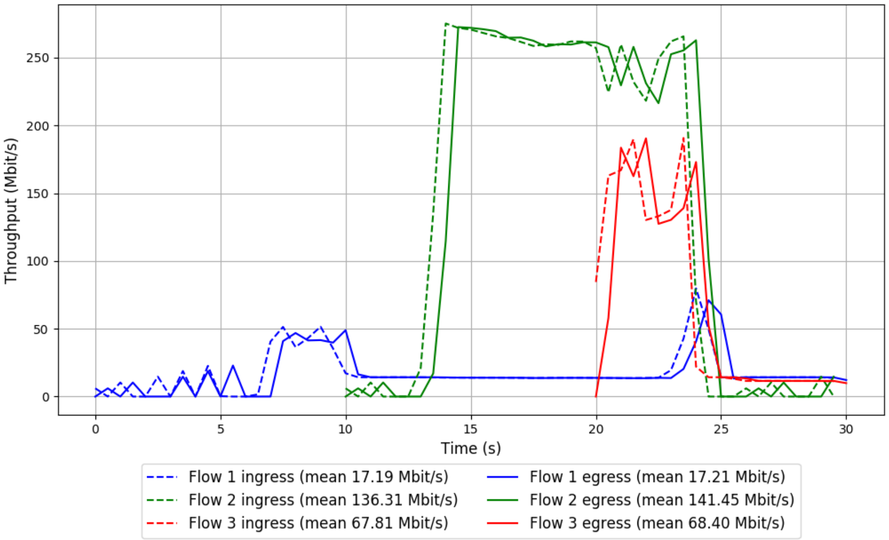
Run 5: Report of TaoVA-100x — Data Link

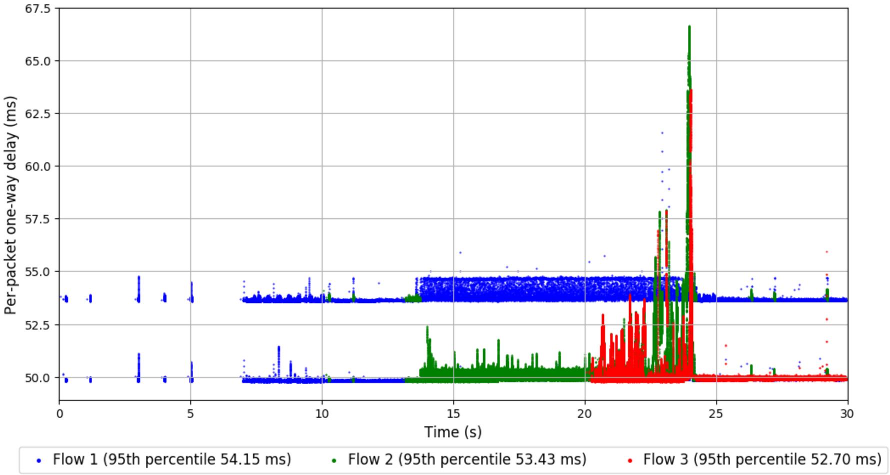




```
Run 6: Statistics of TaoVA-100x

Start at: 2018-06-02 00:04:14
End at: 2018-06-02 00:04:44
Local clock offset: 0.088 ms
Remote clock offset: 0.072 ms

# Below is generated by plot.py at 2018-06-02 03:48:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 130.53 Mbit/s
95th percentile per-packet one-way delay: 53.752 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 17.21 Mbit/s
95th percentile per-packet one-way delay: 54.149 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 141.45 Mbit/s
95th percentile per-packet one-way delay: 53.430 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 68.40 Mbit/s
95th percentile per-packet one-way delay: 52.695 ms
Loss rate: 0.18%
```

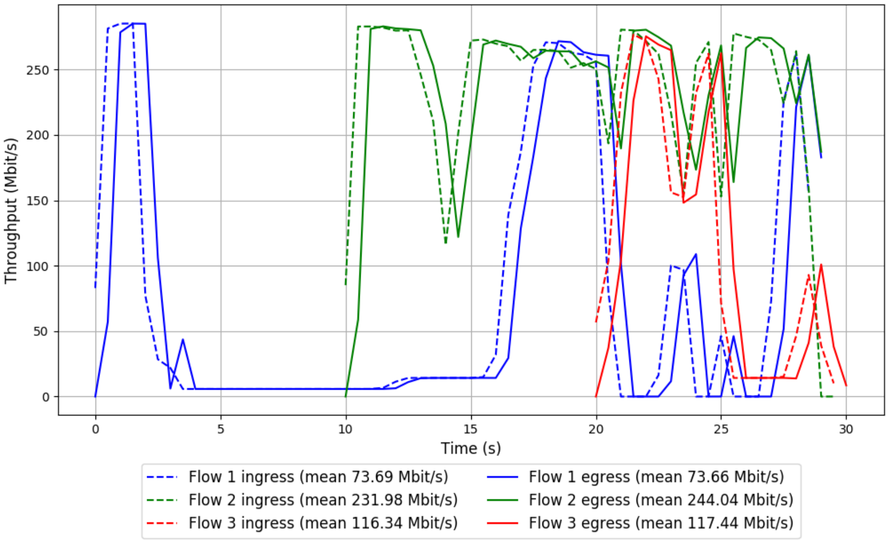
Run 6: Report of TaoVA-100x — Data Link

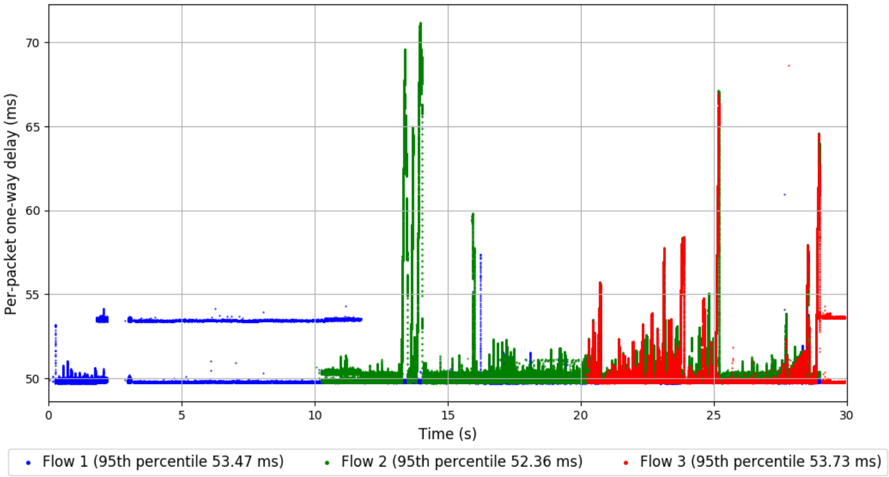




```
Run 7: Statistics of TaoVA-100x

Start at: 2018-06-02 00:27:19
End at: 2018-06-02 00:27:49
Local clock offset: -0.173 ms
Remote clock offset: -0.145 ms

# Below is generated by plot.py at 2018-06-02 03:48:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 264.63 Mbit/s
95th percentile per-packet one-way delay: 53.428 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 73.66 Mbit/s
95th percentile per-packet one-way delay: 53.467 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 244.04 Mbit/s
95th percentile per-packet one-way delay: 52.356 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 117.44 Mbit/s
95th percentile per-packet one-way delay: 53.728 ms
Loss rate: 0.10%
```

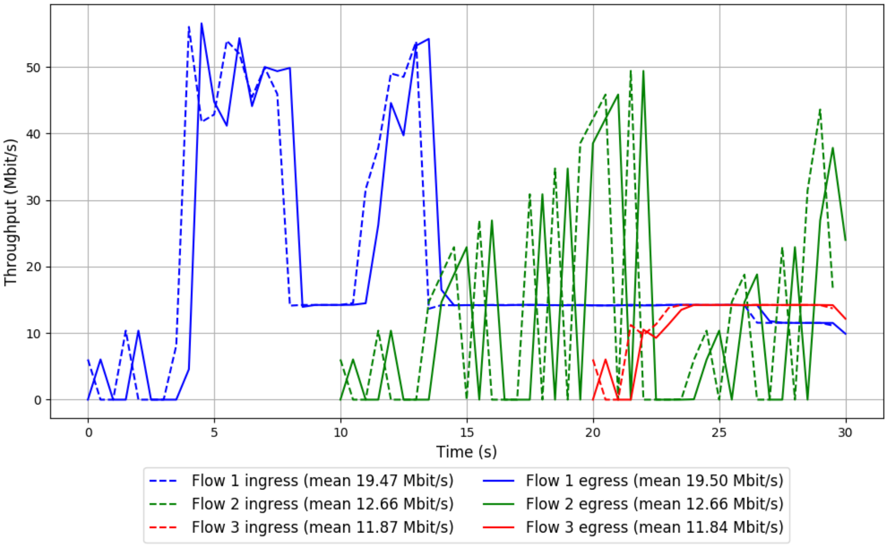
Run 7: Report of TaoVA-100x — Data Link

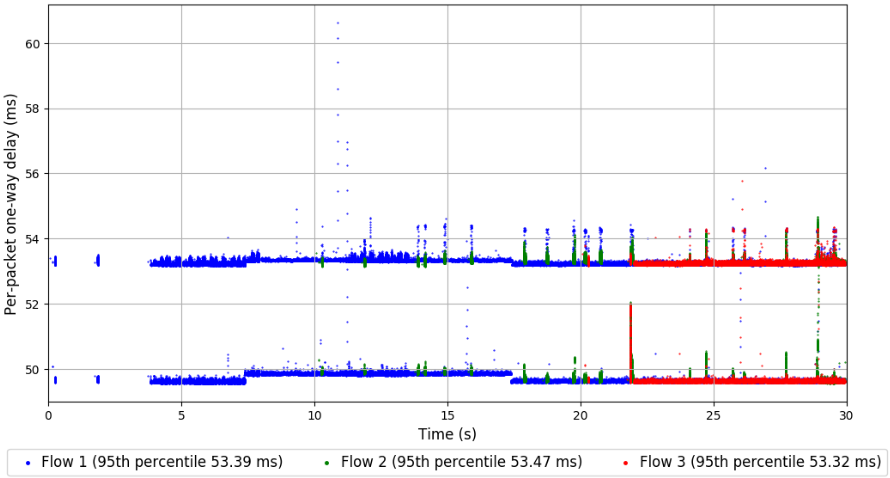




```
Run 8: Statistics of TaoVA-100x

Start at: 2018-06-02 00:50:24
End at: 2018-06-02 00:50:54
Local clock offset: 0.181 ms
Remote clock offset: 0.491 ms

# Below is generated by plot.py at 2018-06-02 03:48:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.83 Mbit/s
95th percentile per-packet one-way delay: 53.422 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 19.50 Mbit/s
95th percentile per-packet one-way delay: 53.387 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 12.66 Mbit/s
95th percentile per-packet one-way delay: 53.470 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 11.84 Mbit/s
95th percentile per-packet one-way delay: 53.320 ms
Loss rate: 1.25%
```

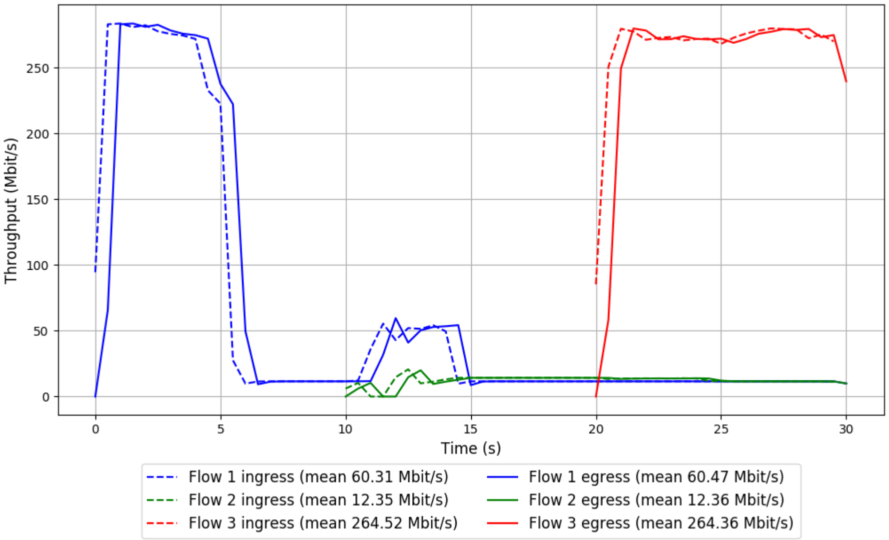
Run 8: Report of TaoVA-100x — Data Link

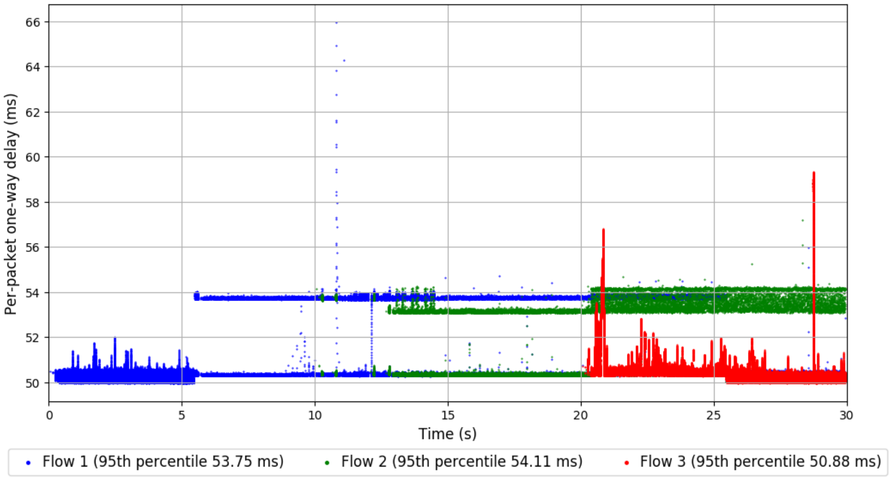




```
Run 9: Statistics of TaoVA-100x

Start at: 2018-06-02 01:13:05
End at: 2018-06-02 01:13:35
Local clock offset: 0.344 ms
Remote clock offset: 0.103 ms

# Below is generated by plot.py at 2018-06-02 03:48:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 155.95 Mbit/s
95th percentile per-packet one-way delay: 53.686 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 60.47 Mbit/s
95th percentile per-packet one-way delay: 53.751 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 12.36 Mbit/s
95th percentile per-packet one-way delay: 54.106 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 264.36 Mbit/s
95th percentile per-packet one-way delay: 50.878 ms
Loss rate: 1.11%
```

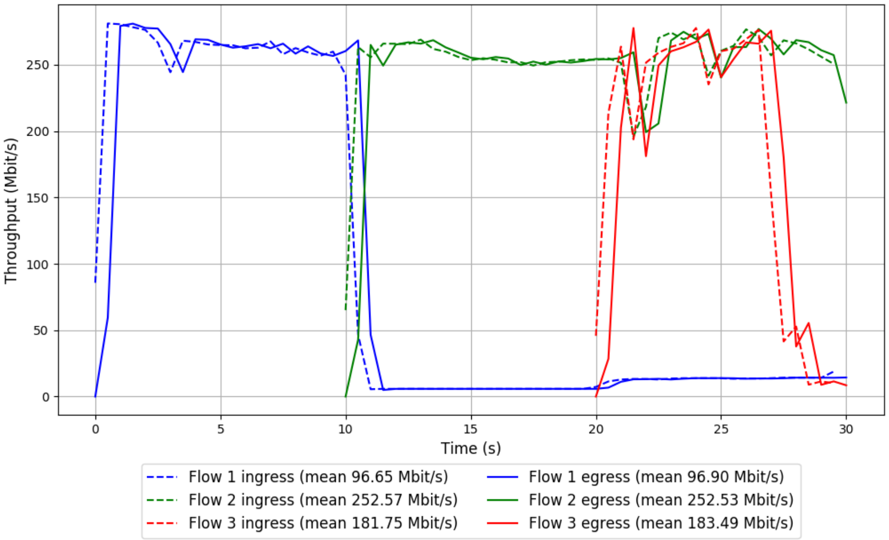
Run 9: Report of TaoVA-100x — Data Link

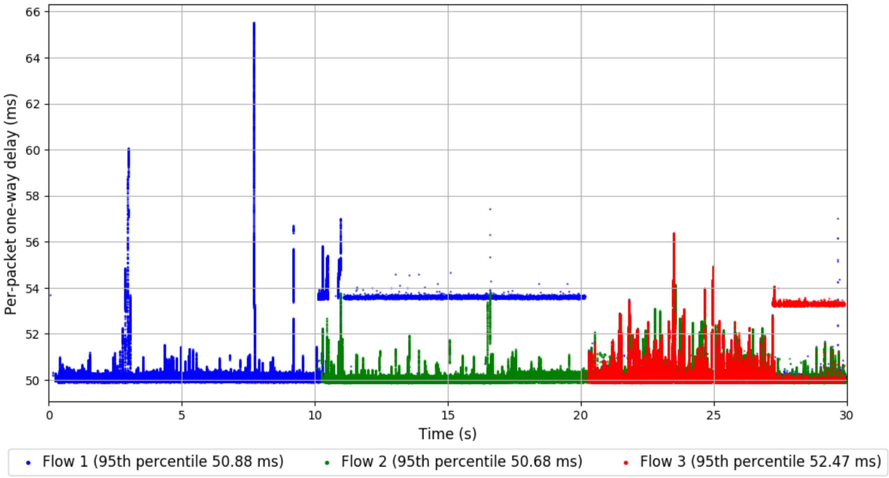




```
Run 10: Statistics of TaoVA-100x

Start at: 2018-06-02 01:36:01
End at: 2018-06-02 01:36:31
Local clock offset: 0.371 ms
Remote clock offset: 0.161 ms

# Below is generated by plot.py at 2018-06-02 03:54:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 325.31 Mbit/s
95th percentile per-packet one-way delay: 51.065 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 96.90 Mbit/s
95th percentile per-packet one-way delay: 50.883 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 252.53 Mbit/s
95th percentile per-packet one-way delay: 50.680 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 183.49 Mbit/s
95th percentile per-packet one-way delay: 52.473 ms
Loss rate: 0.08%
```

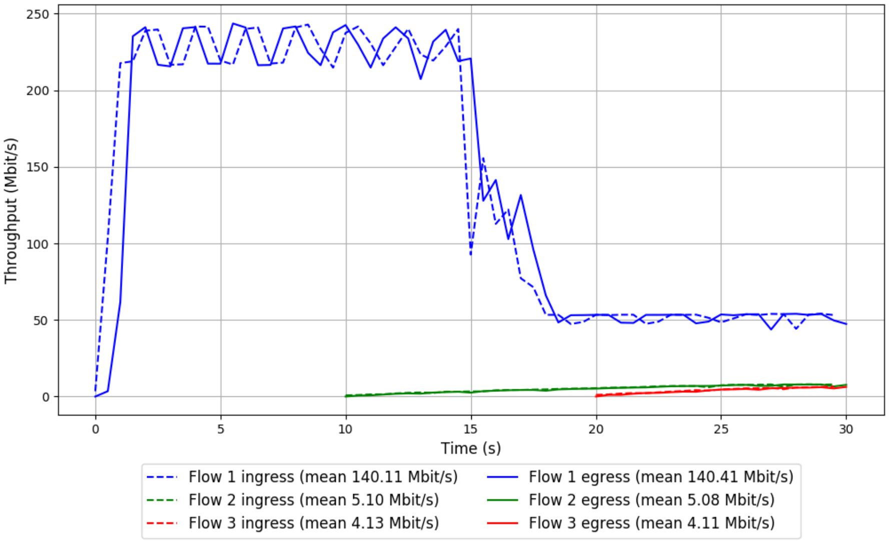
Run 10: Report of TaoVA-100x — Data Link

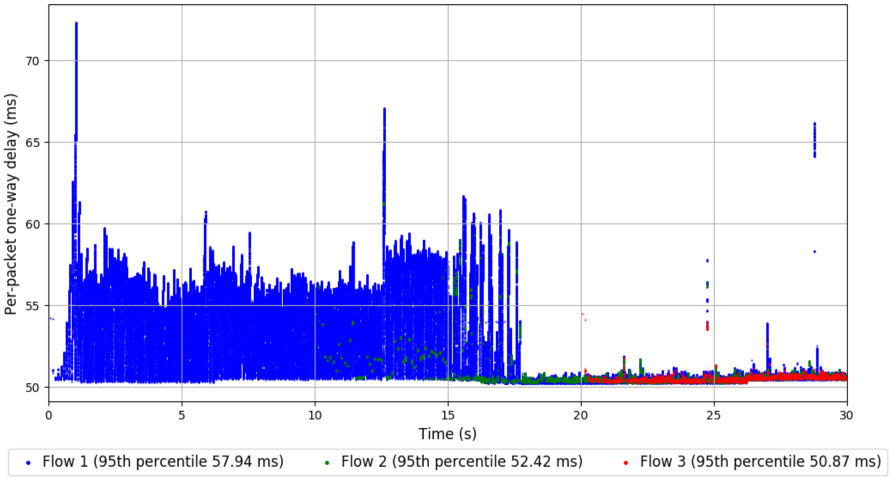




```
Run 1: Statistics of TCP Vegas

Start at: 2018-06-01 22:06:25
End at: 2018-06-01 22:06:55
Local clock offset: 0.56 ms
Remote clock offset: -0.28 ms

# Below is generated by plot.py at 2018-06-02 03:54:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 145.09 Mbit/s
95th percentile per-packet one-way delay: 57.911 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 140.41 Mbit/s
95th percentile per-packet one-way delay: 57.935 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 5.08 Mbit/s
95th percentile per-packet one-way delay: 52.425 ms
Loss rate: 0.86%
-- Flow 3:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 50.871 ms
Loss rate: 1.60%
```

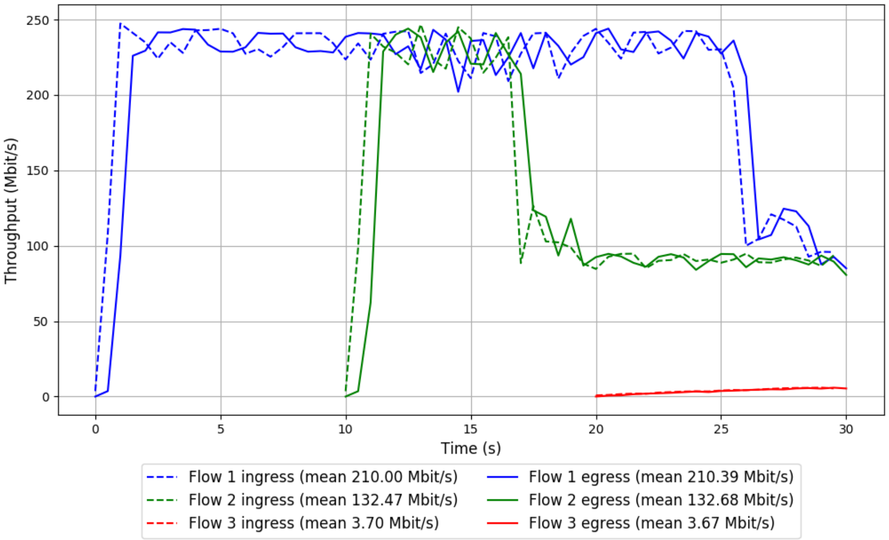
Run 1: Report of TCP Vegas — Data Link

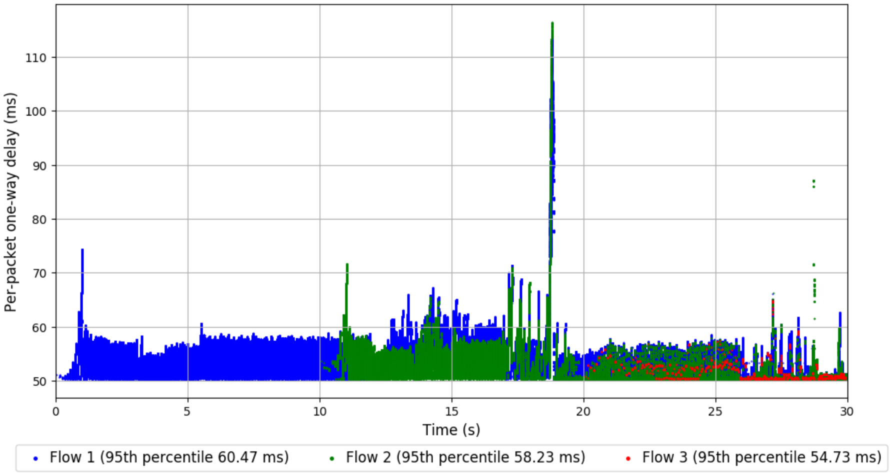




```
Run 2: Statistics of TCP Vegas

Start at: 2018-06-01 22:29:48
End at: 2018-06-01 22:30:18
Local clock offset: 0.722 ms
Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2018-06-02 03:54:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 299.81 Mbit/s
95th percentile per-packet one-way delay: 60.069 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 210.39 Mbit/s
95th percentile per-packet one-way delay: 60.467 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 132.68 Mbit/s
95th percentile per-packet one-way delay: 58.225 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 3.67 Mbit/s
95th percentile per-packet one-way delay: 54.734 ms
Loss rate: 1.86%
```

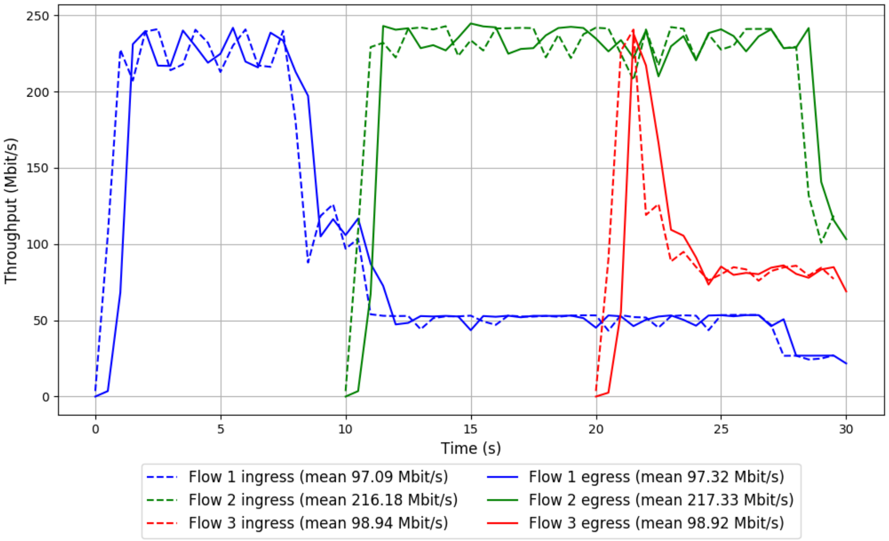
Run 2: Report of TCP Vegas — Data Link

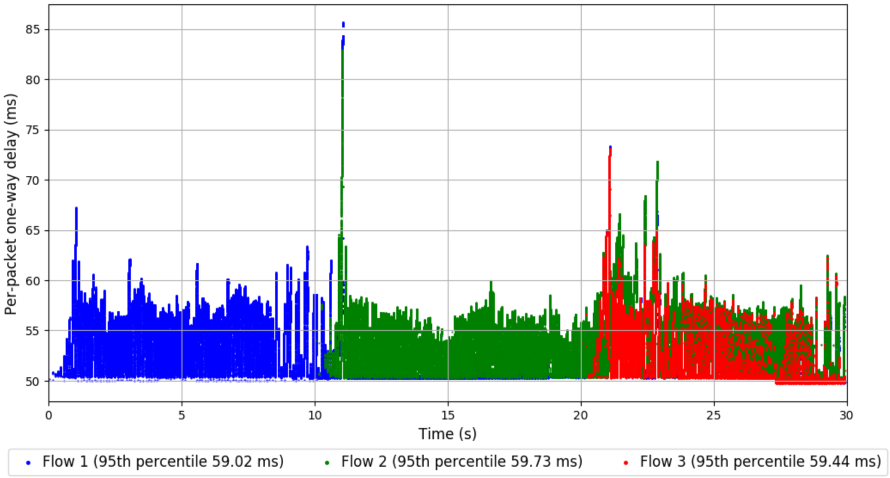




```
Run 3: Statistics of TCP Vegas

Start at: 2018-06-01 22:52:44
End at: 2018-06-01 22:53:14
Local clock offset: 0.449 ms
Remote clock offset: -0.006 ms

# Below is generated by plot.py at 2018-06-02 03:54:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 274.14 Mbit/s
95th percentile per-packet one-way delay: 59.354 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 97.32 Mbit/s
95th percentile per-packet one-way delay: 59.023 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 217.33 Mbit/s
95th percentile per-packet one-way delay: 59.731 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 98.92 Mbit/s
95th percentile per-packet one-way delay: 59.435 ms
Loss rate: 0.90%
```

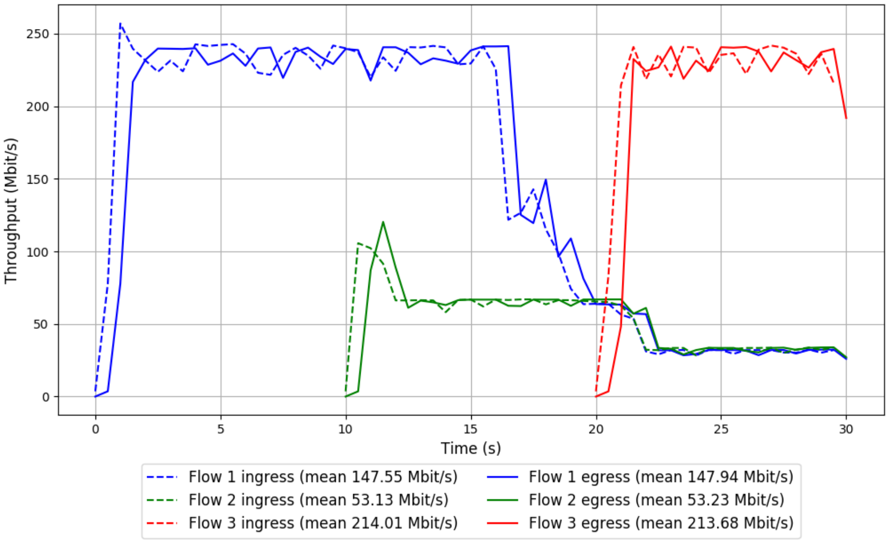
Run 3: Report of TCP Vegas — Data Link

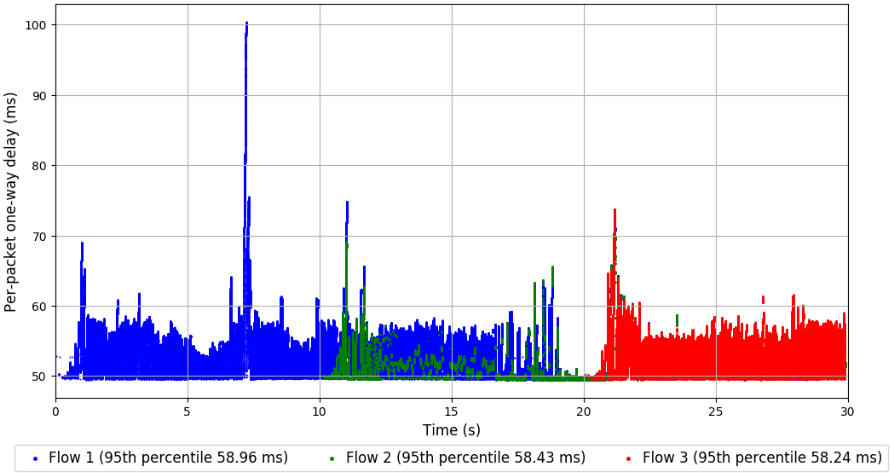




```
Run 4: Statistics of TCP Vegas

Start at: 2018-06-01 23:15:46
End at: 2018-06-01 23:16:16
Local clock offset: 0.21 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2018-06-02 03:54:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 253.64 Mbit/s
95th percentile per-packet one-way delay: 58.579 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 147.94 Mbit/s
95th percentile per-packet one-way delay: 58.960 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 53.23 Mbit/s
95th percentile per-packet one-way delay: 58.433 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 213.68 Mbit/s
95th percentile per-packet one-way delay: 58.241 ms
Loss rate: 1.13%
```

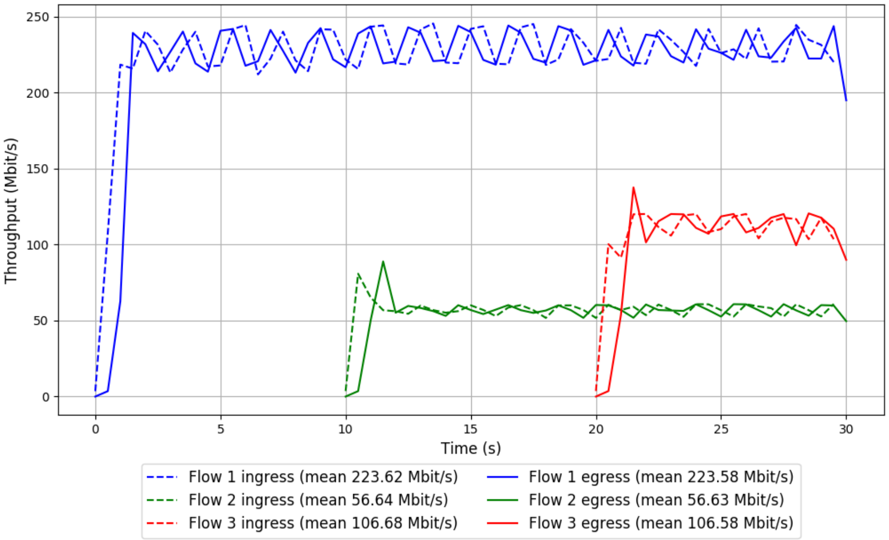
Run 4: Report of TCP Vegas — Data Link

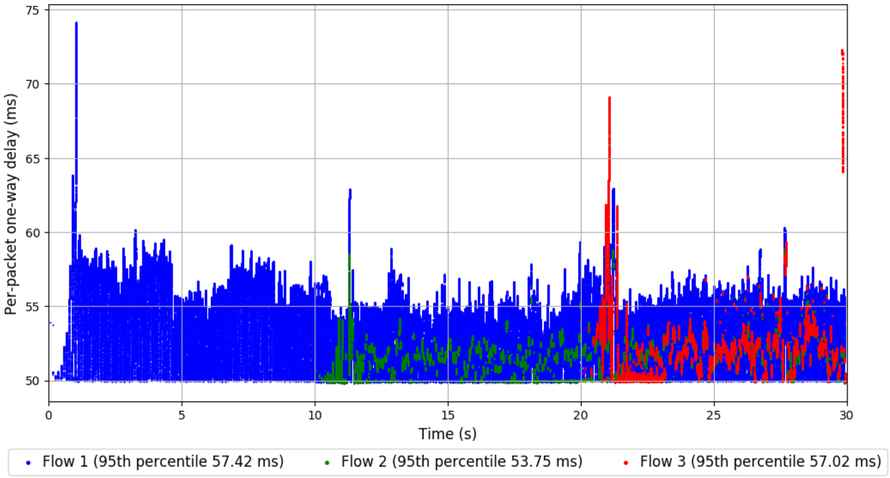




```
Run 5: Statistics of TCP Vegas

Start at: 2018-06-01 23:38:41
End at: 2018-06-01 23:39:11
Local clock offset: 0.179 ms
Remote clock offset: 0.032 ms

# Below is generated by plot.py at 2018-06-02 03:54:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 296.25 Mbit/s
95th percentile per-packet one-way delay: 57.295 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 223.58 Mbit/s
95th percentile per-packet one-way delay: 57.416 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 56.63 Mbit/s
95th percentile per-packet one-way delay: 53.749 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 106.58 Mbit/s
95th percentile per-packet one-way delay: 57.023 ms
Loss rate: 1.13%
```

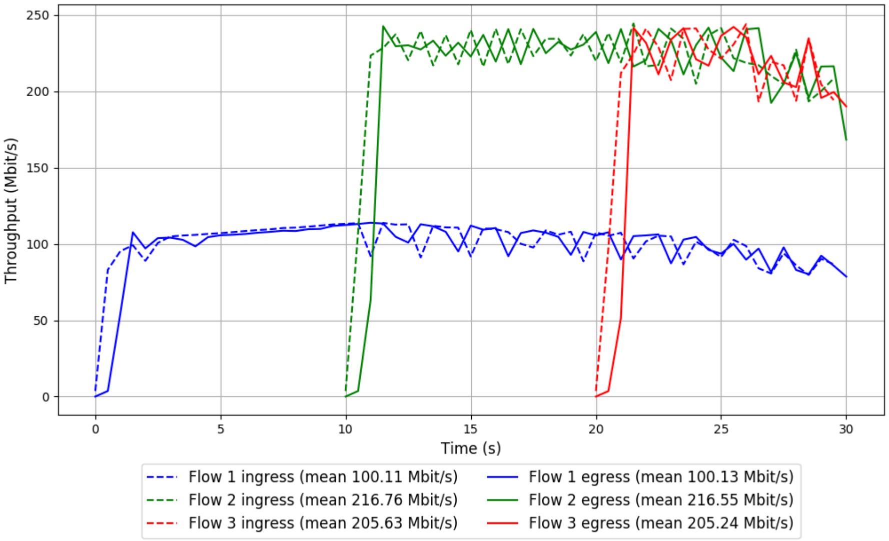
Run 5: Report of TCP Vegas — Data Link

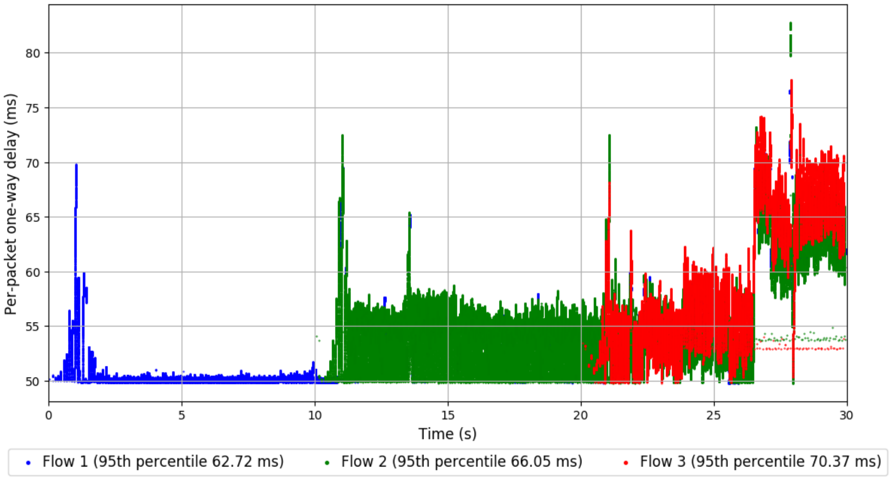




```
Run 6: Statistics of TCP Vegas

Start at: 2018-06-02 00:01:36
End at: 2018-06-02 00:02:06
Local clock offset: 0.121 ms
Remote clock offset: 0.112 ms

# Below is generated by plot.py at 2018-06-02 03:54:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 311.50 Mbit/s
95th percentile per-packet one-way delay: 67.630 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 100.13 Mbit/s
95th percentile per-packet one-way delay: 62.716 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 216.55 Mbit/s
95th percentile per-packet one-way delay: 66.050 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 205.24 Mbit/s
95th percentile per-packet one-way delay: 70.374 ms
Loss rate: 1.18%
```

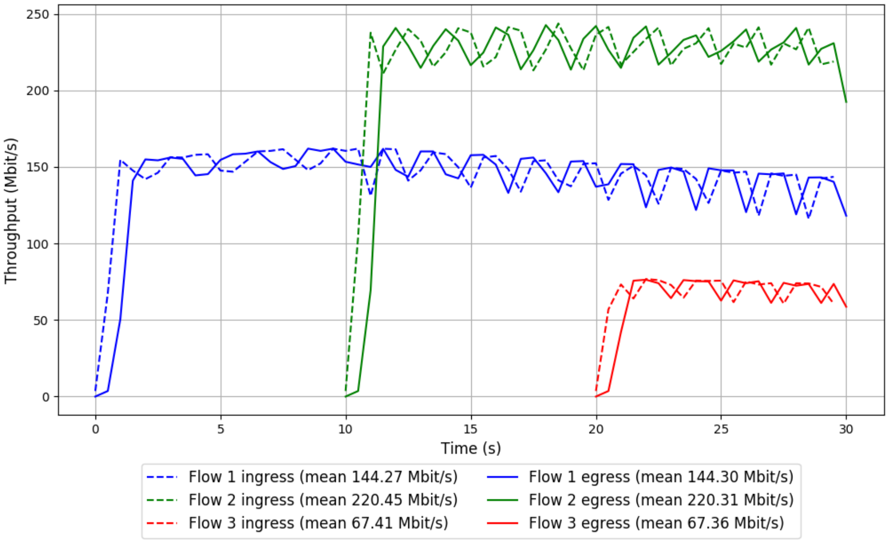
Run 6: Report of TCP Vegas — Data Link

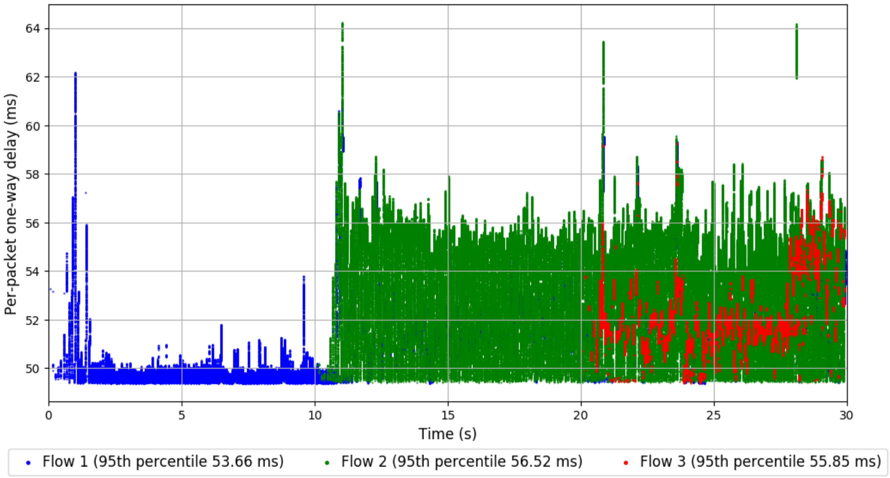




```
Run 7: Statistics of TCP Vegas

Start at: 2018-06-02 00:24:42
End at: 2018-06-02 00:25:12
Local clock offset: -0.289 ms
Remote clock offset: 0.089 ms

# Below is generated by plot.py at 2018-06-02 03:54:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 312.78 Mbit/s
95th percentile per-packet one-way delay: 56.130 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 144.30 Mbit/s
95th percentile per-packet one-way delay: 53.665 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 220.31 Mbit/s
95th percentile per-packet one-way delay: 56.519 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 67.36 Mbit/s
95th percentile per-packet one-way delay: 55.855 ms
Loss rate: 1.09%
```

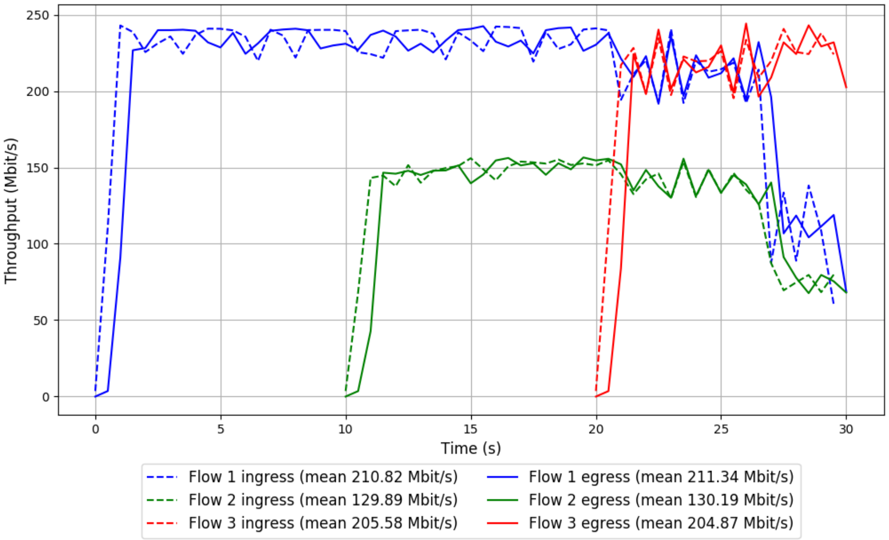
Run 7: Report of TCP Vegas — Data Link

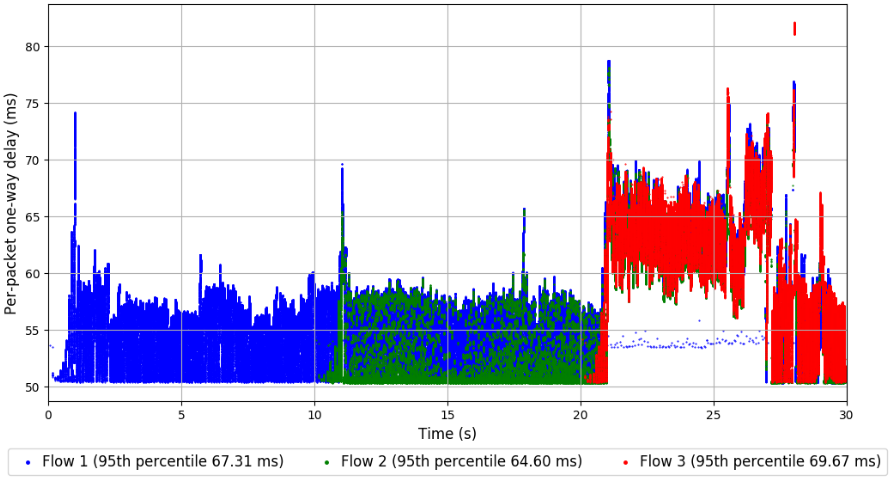




```
Run 8: Statistics of TCP Vegas

Start at: 2018-06-02 00:47:43
End at: 2018-06-02 00:48:13
Local clock offset: 0.058 ms
Remote clock offset: -0.163 ms

# Below is generated by plot.py at 2018-06-02 03:55:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 365.38 Mbit/s
95th percentile per-packet one-way delay: 67.591 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 211.34 Mbit/s
95th percentile per-packet one-way delay: 67.309 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 130.19 Mbit/s
95th percentile per-packet one-way delay: 64.596 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 204.87 Mbit/s
95th percentile per-packet one-way delay: 69.674 ms
Loss rate: 1.13%
```

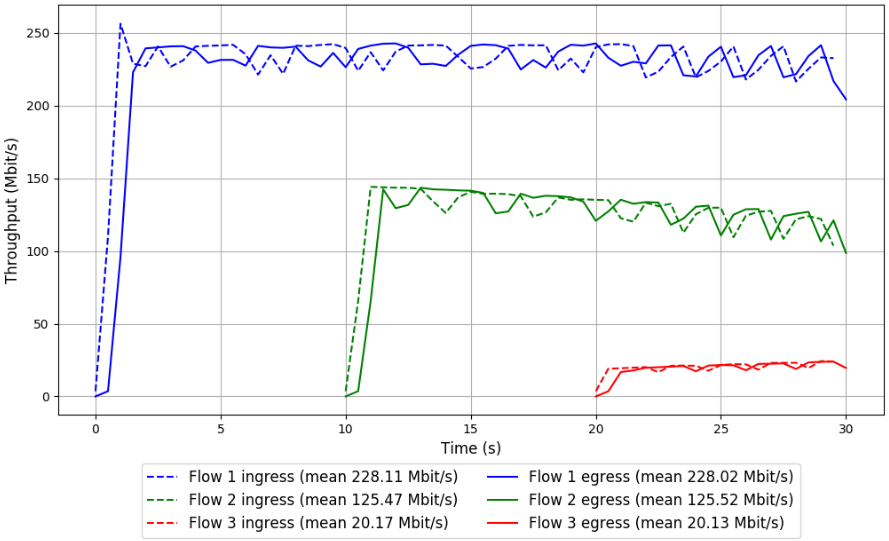
Run 8: Report of TCP Vegas — Data Link

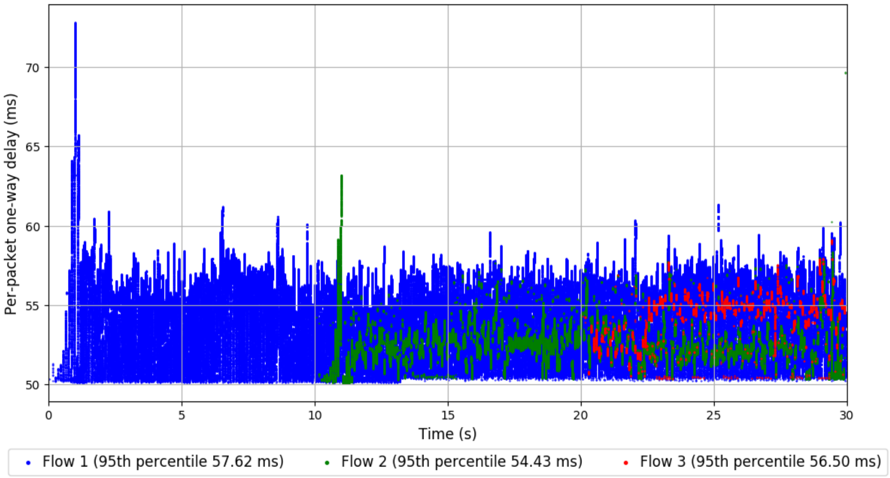




```
Run 9: Statistics of TCP Vegas

Start at: 2018-06-02 01:10:28
End at: 2018-06-02 01:10:58
Local clock offset: 0.177 ms
Remote clock offset: -0.093 ms

# Below is generated by plot.py at 2018-06-02 03:55:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 318.11 Mbit/s
95th percentile per-packet one-way delay: 57.397 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 228.02 Mbit/s
95th percentile per-packet one-way delay: 57.616 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 125.52 Mbit/s
95th percentile per-packet one-way delay: 54.428 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 20.13 Mbit/s
95th percentile per-packet one-way delay: 56.496 ms
Loss rate: 1.23%
```

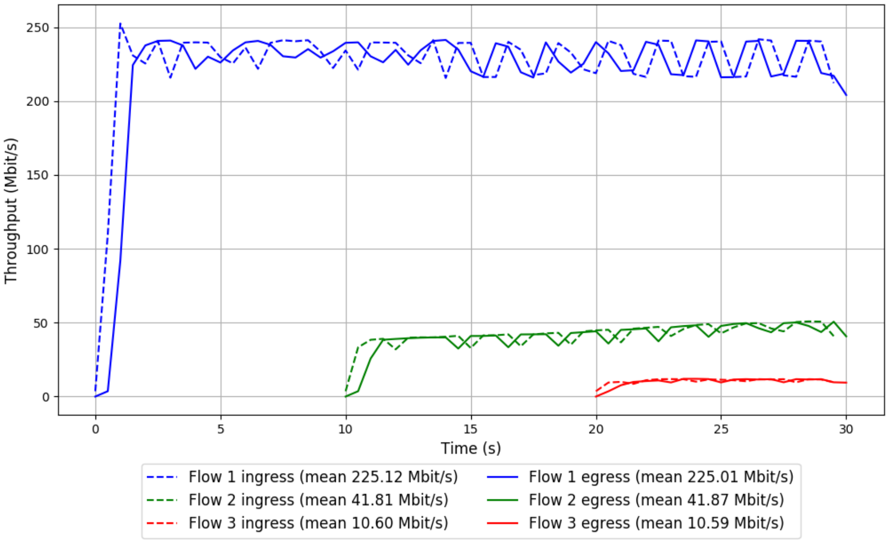
Run 9: Report of TCP Vegas — Data Link

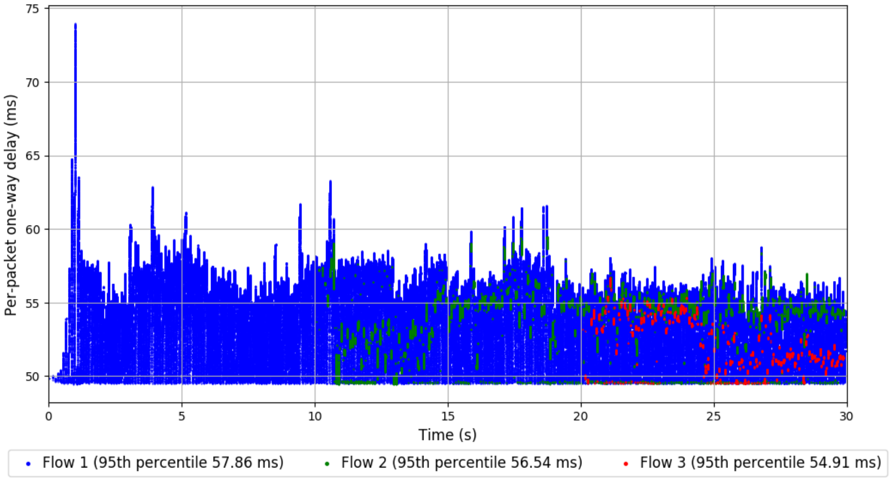




```
Run 10: Statistics of TCP Vegas

Start at: 2018-06-02 01:33:26
End at: 2018-06-02 01:33:56
Local clock offset: 0.096 ms
Remote clock offset: 0.323 ms

# Below is generated by plot.py at 2018-06-02 03:55:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 256.23 Mbit/s
95th percentile per-packet one-way delay: 57.776 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 225.01 Mbit/s
95th percentile per-packet one-way delay: 57.859 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 41.87 Mbit/s
95th percentile per-packet one-way delay: 56.538 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 10.59 Mbit/s
95th percentile per-packet one-way delay: 54.910 ms
Loss rate: 1.12%
```

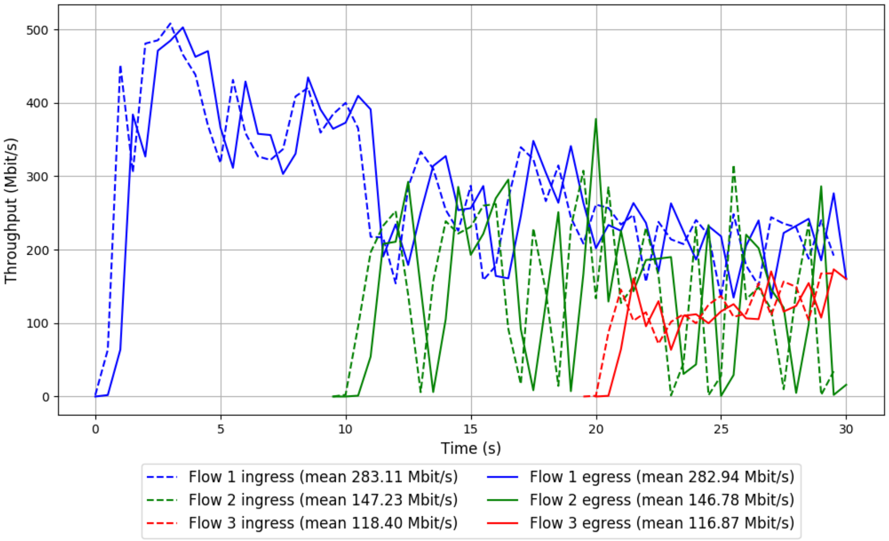
Run 10: Report of TCP Vegas — Data Link

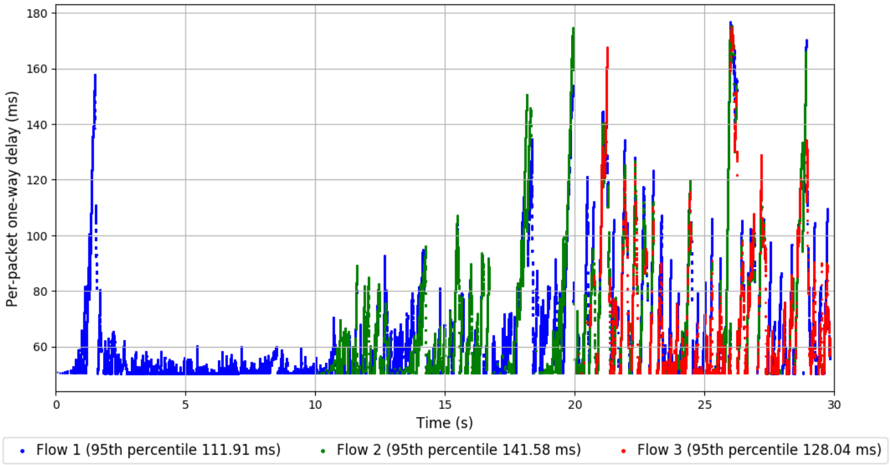




```
Run 1: Statistics of Verus

Start at: 2018-06-01 22:15:24
End at: 2018-06-01 22:15:54
Local clock offset: 0.409 ms
Remote clock offset: -0.439 ms

# Below is generated by plot.py at 2018-06-02 03:58:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 419.13 Mbit/s
95th percentile per-packet one-way delay: 124.591 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 282.94 Mbit/s
95th percentile per-packet one-way delay: 111.905 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 146.78 Mbit/s
95th percentile per-packet one-way delay: 141.577 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 116.87 Mbit/s
95th percentile per-packet one-way delay: 128.038 ms
Loss rate: 1.51%
```

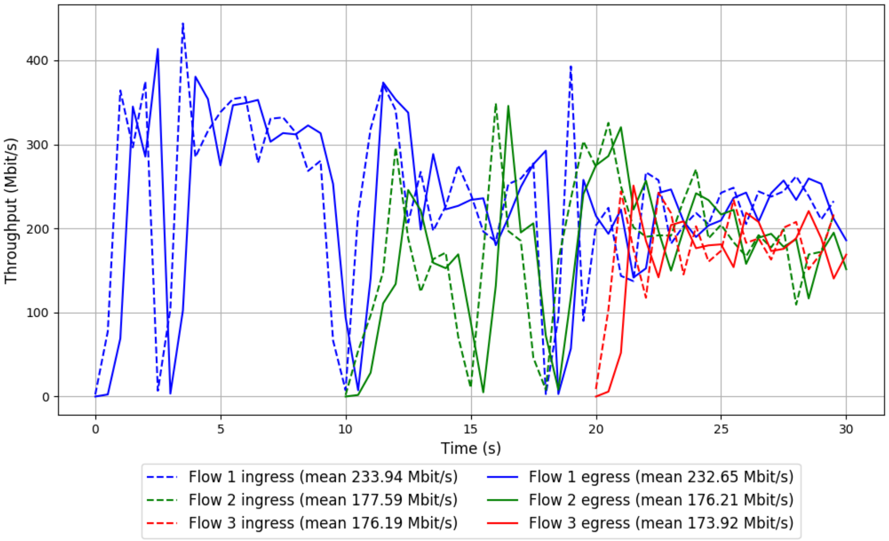
Run 1: Report of Verus — Data Link

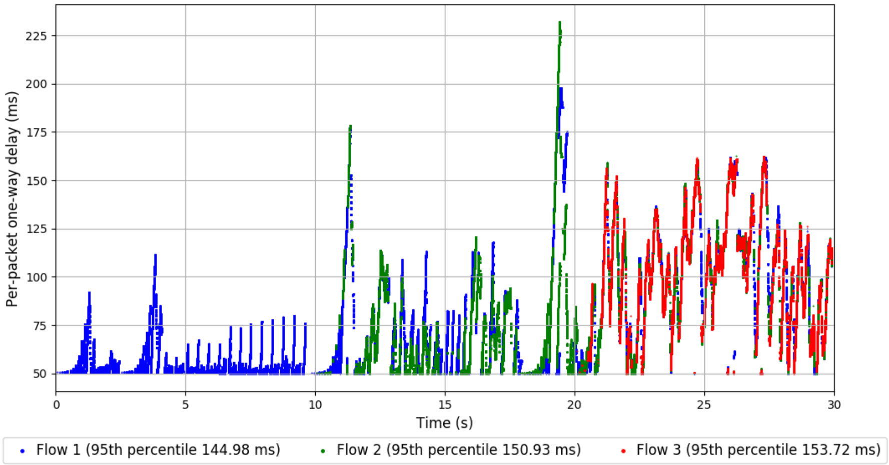




```
Run 2: Statistics of Verus

Start at: 2018-06-01 22:38:35
End at: 2018-06-01 22:39:05
Local clock offset: 0.601 ms
Remote clock offset: 0.191 ms

# Below is generated by plot.py at 2018-06-02 03:59:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 407.06 Mbit/s
95th percentile per-packet one-way delay: 149.168 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 232.65 Mbit/s
95th percentile per-packet one-way delay: 144.979 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 176.21 Mbit/s
95th percentile per-packet one-way delay: 150.934 ms
Loss rate: 1.30%
-- Flow 3:
Average throughput: 173.92 Mbit/s
95th percentile per-packet one-way delay: 153.716 ms
Loss rate: 2.43%
```

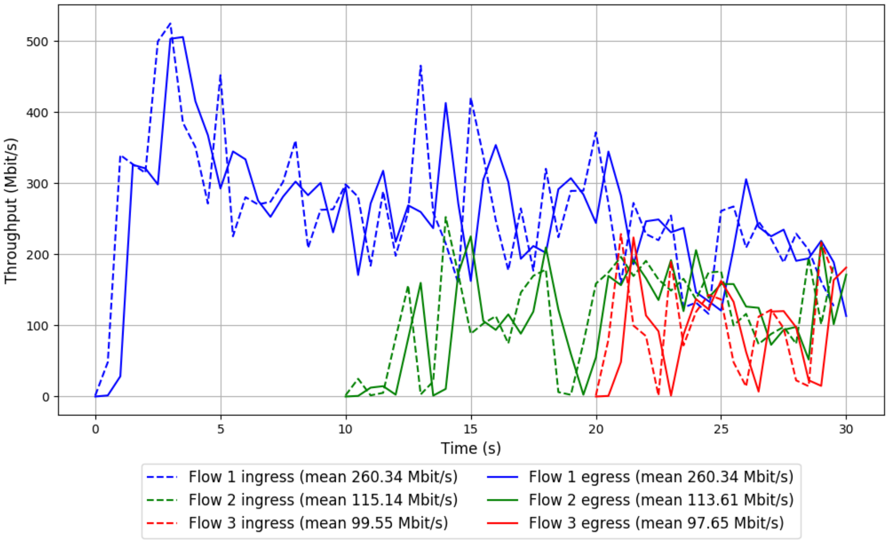
Run 2: Report of Verus — Data Link

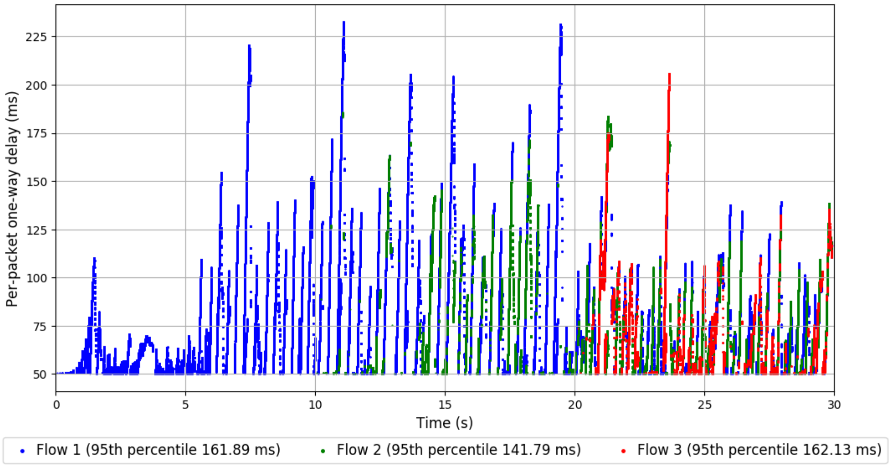




```
Run 3: Statistics of Verus

Start at: 2018-06-01 23:01:39
End at: 2018-06-01 23:02:09
Local clock offset: 0.795 ms
Remote clock offset: 0.272 ms

# Below is generated by plot.py at 2018-06-02 03:59:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 367.91 Mbit/s
95th percentile per-packet one-way delay: 158.679 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 260.34 Mbit/s
95th percentile per-packet one-way delay: 161.891 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 113.61 Mbit/s
95th percentile per-packet one-way delay: 141.789 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 97.65 Mbit/s
95th percentile per-packet one-way delay: 162.133 ms
Loss rate: 3.12%
```

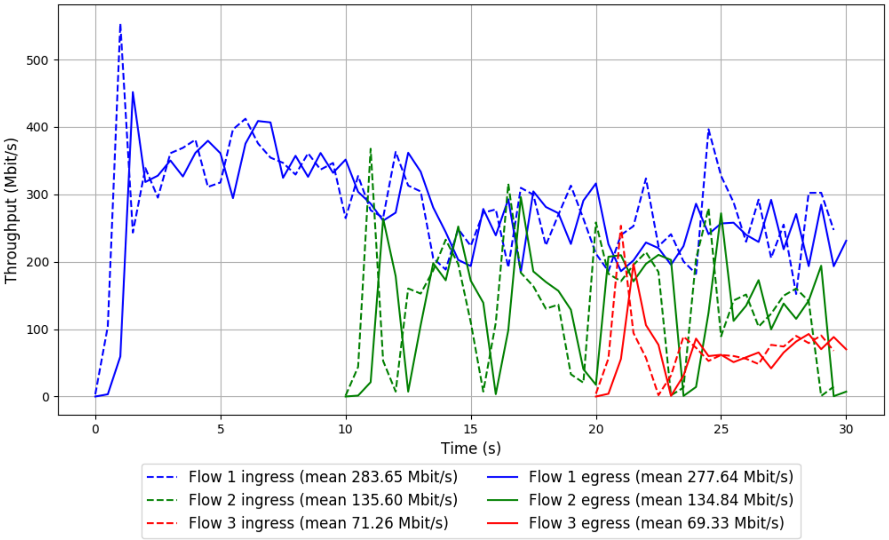
Run 3: Report of Verus — Data Link

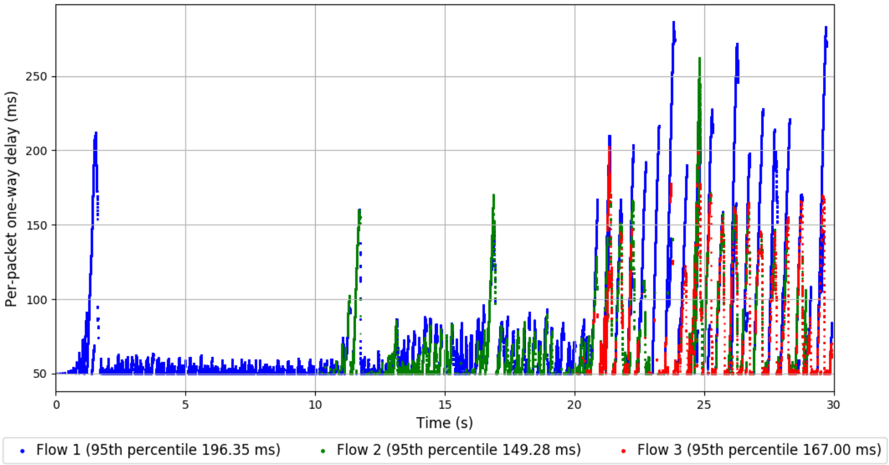




```
Run 4: Statistics of Verus

Start at: 2018-06-01 23:24:46
End at: 2018-06-01 23:25:16
Local clock offset: 0.385 ms
Remote clock offset: -0.024 ms

# Below is generated by plot.py at 2018-06-02 04:00:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 389.82 Mbit/s
95th percentile per-packet one-way delay: 186.473 ms
Loss rate: 2.23%
-- Flow 1:
Average throughput: 277.64 Mbit/s
95th percentile per-packet one-way delay: 196.354 ms
Loss rate: 2.46%
-- Flow 2:
Average throughput: 134.84 Mbit/s
95th percentile per-packet one-way delay: 149.281 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 69.33 Mbit/s
95th percentile per-packet one-way delay: 167.002 ms
Loss rate: 3.81%
```

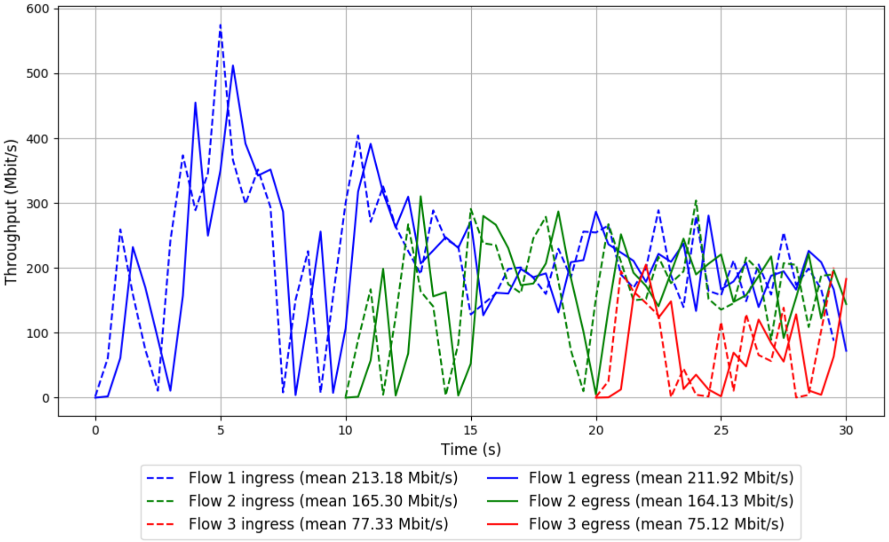
Run 4: Report of Verus — Data Link

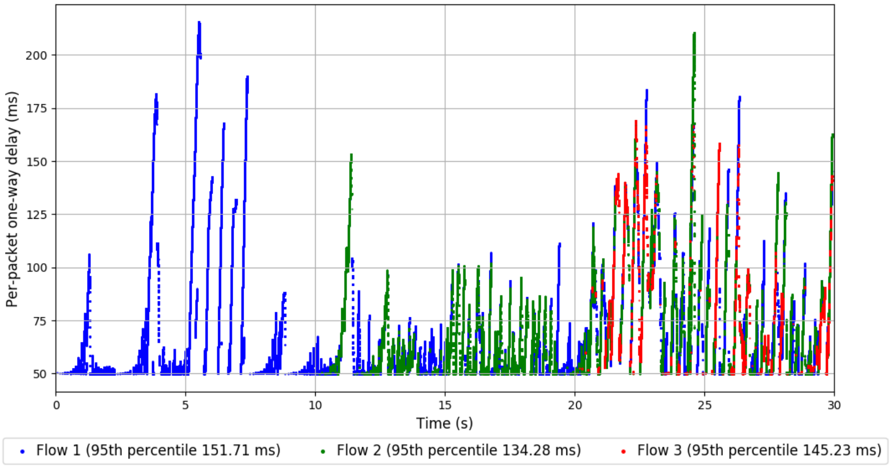




```
Run 5: Statistics of Verus

Start at: 2018-06-01 23:47:37
End at: 2018-06-01 23:48:07
Local clock offset: 0.088 ms
Remote clock offset: 0.114 ms

# Below is generated by plot.py at 2018-06-02 04:00:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 345.76 Mbit/s
95th percentile per-packet one-way delay: 144.877 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 211.92 Mbit/s
95th percentile per-packet one-way delay: 151.707 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 164.13 Mbit/s
95th percentile per-packet one-way delay: 134.285 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 75.12 Mbit/s
95th percentile per-packet one-way delay: 145.231 ms
Loss rate: 3.79%
```

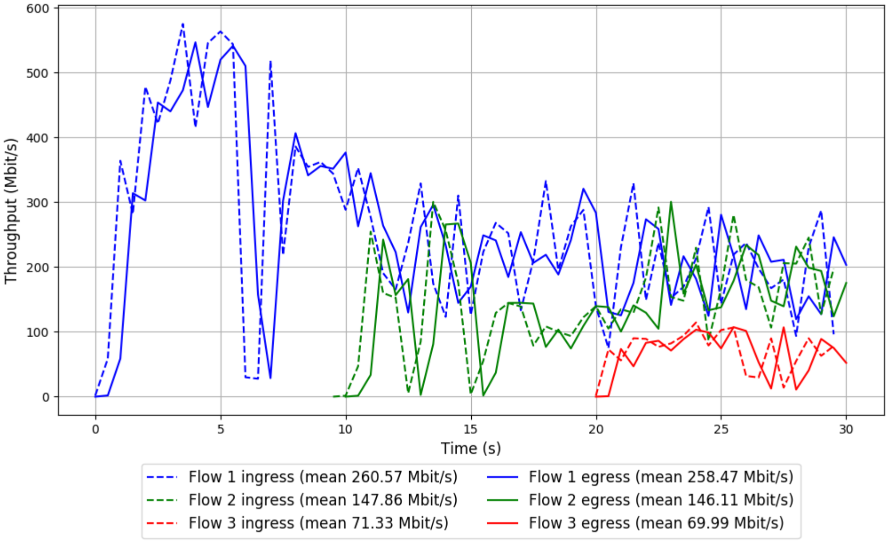
Run 5: Report of Verus — Data Link

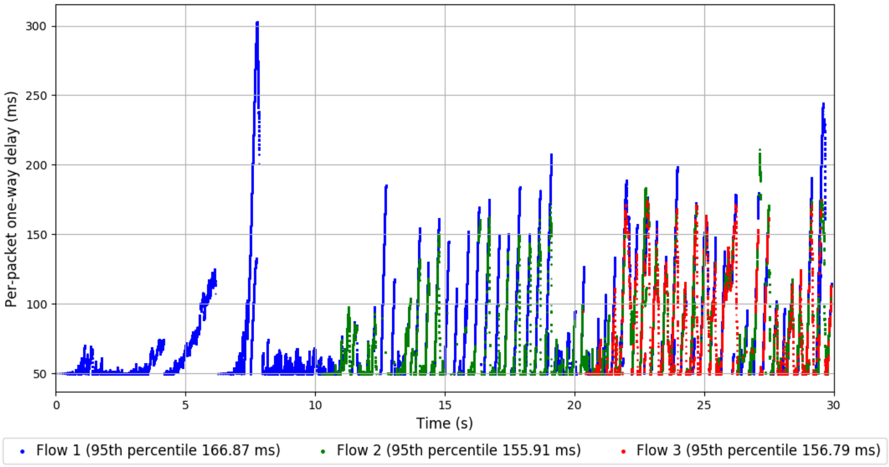




```
Run 6: Statistics of Verus

Start at: 2018-06-02 00:10:31
End at: 2018-06-02 00:11:01
Local clock offset: -0.1 ms
Remote clock offset: -0.024 ms

# Below is generated by plot.py at 2018-06-02 04:01:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 378.77 Mbit/s
95th percentile per-packet one-way delay: 161.825 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 258.47 Mbit/s
95th percentile per-packet one-way delay: 166.870 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 146.11 Mbit/s
95th percentile per-packet one-way delay: 155.912 ms
Loss rate: 1.63%
-- Flow 3:
Average throughput: 69.99 Mbit/s
95th percentile per-packet one-way delay: 156.787 ms
Loss rate: 2.89%
```

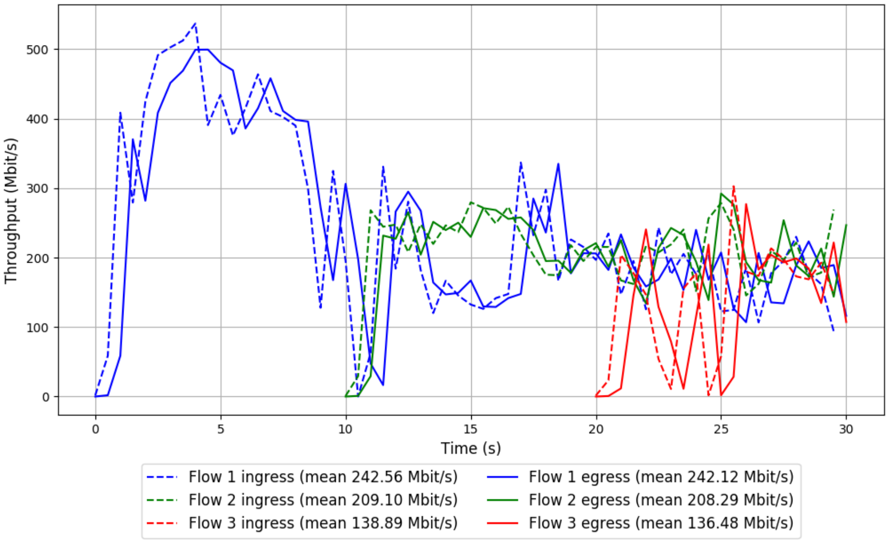
Run 6: Report of Verus — Data Link

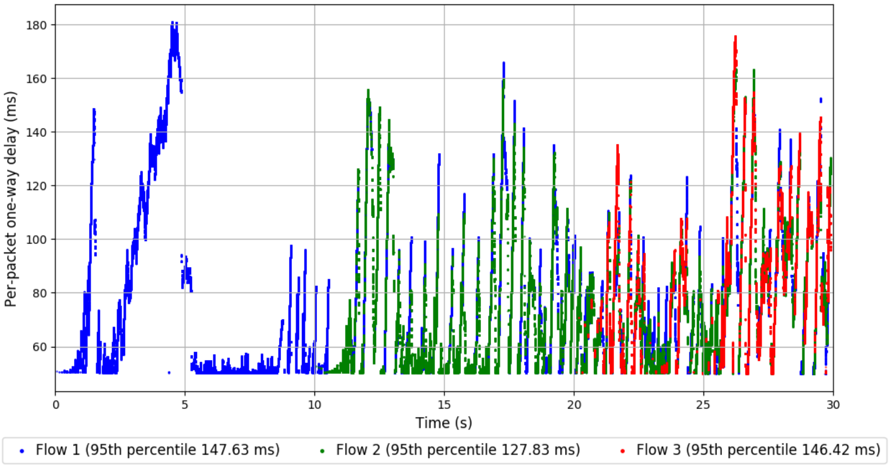




```
Run 7: Statistics of Verus

Start at: 2018-06-02 00:33:46
End at: 2018-06-02 00:34:16
Local clock offset: 0.082 ms
Remote clock offset: -0.062 ms

# Below is generated by plot.py at 2018-06-02 04:02:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 424.85 Mbit/s
95th percentile per-packet one-way delay: 141.798 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 242.12 Mbit/s
95th percentile per-packet one-way delay: 147.634 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 208.29 Mbit/s
95th percentile per-packet one-way delay: 127.825 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 136.48 Mbit/s
95th percentile per-packet one-way delay: 146.416 ms
Loss rate: 2.73%
```

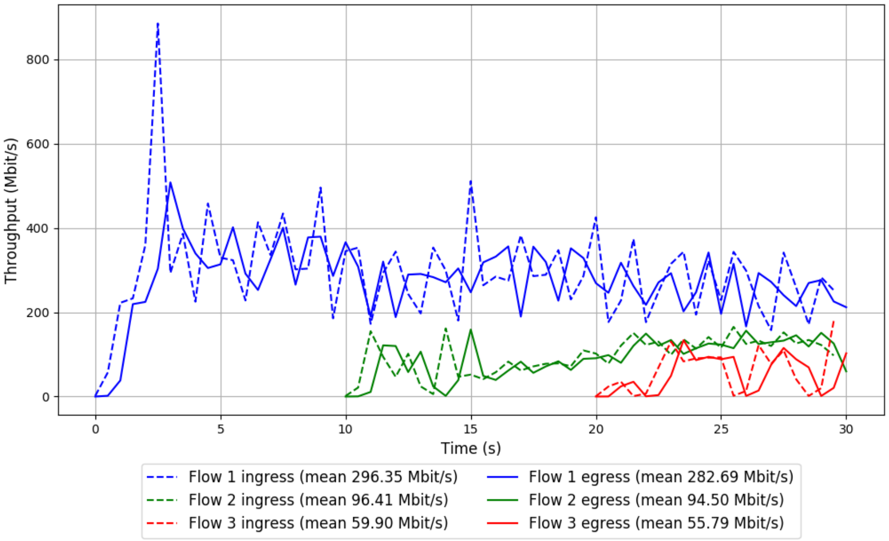
Run 7: Report of Verus — Data Link

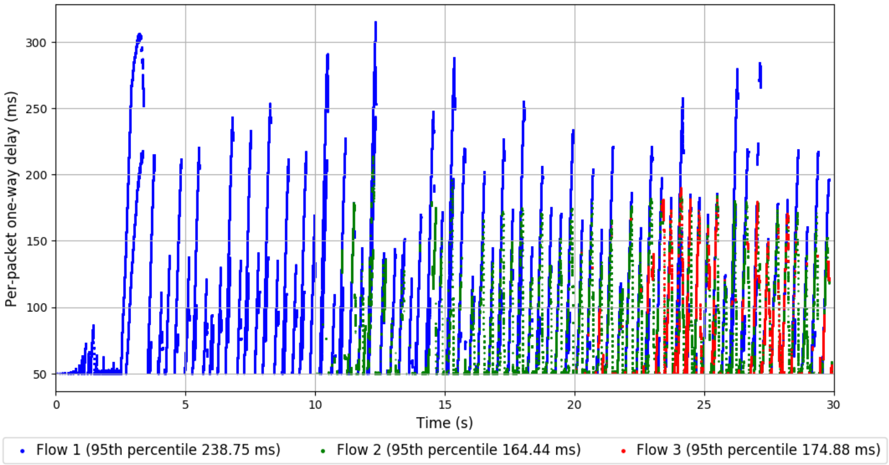




```
Run 8: Statistics of Verus

Start at: 2018-06-02 00:56:33
End at: 2018-06-02 00:57:03
Local clock offset: 0.109 ms
Remote clock offset: 0.056 ms

# Below is generated by plot.py at 2018-06-02 04:02:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 362.76 Mbit/s
95th percentile per-packet one-way delay: 227.514 ms
Loss rate: 4.98%
-- Flow 1:
Average throughput: 282.69 Mbit/s
95th percentile per-packet one-way delay: 238.749 ms
Loss rate: 5.33%
-- Flow 2:
Average throughput: 94.50 Mbit/s
95th percentile per-packet one-way delay: 164.436 ms
Loss rate: 2.50%
-- Flow 3:
Average throughput: 55.79 Mbit/s
95th percentile per-packet one-way delay: 174.877 ms
Loss rate: 7.86%
```

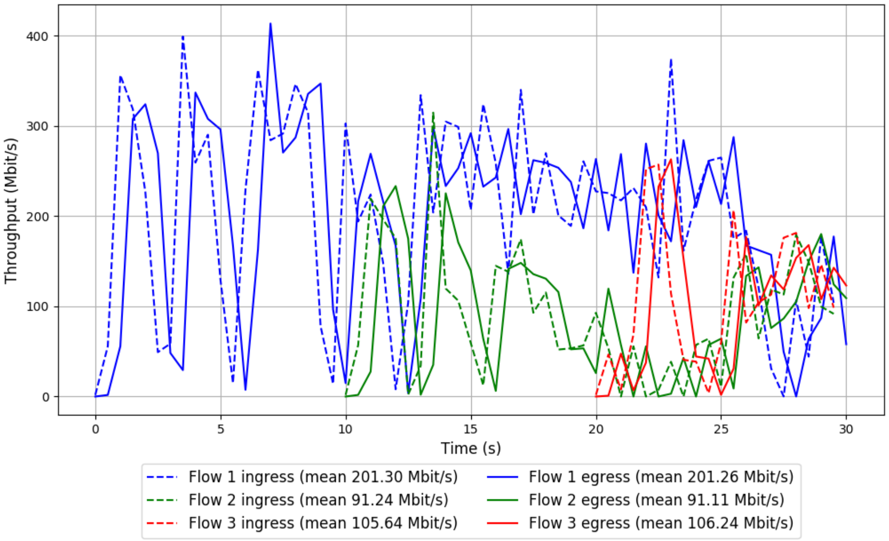
Run 8: Report of Verus — Data Link

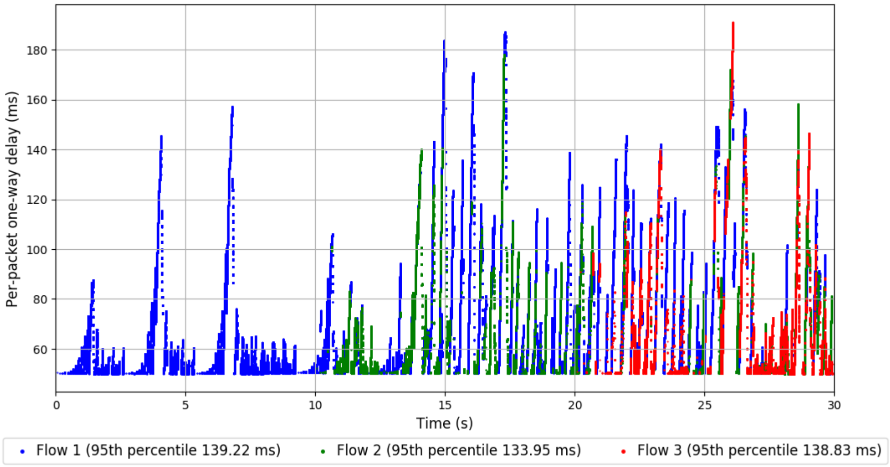




```
Run 9: Statistics of Verus

Start at: 2018-06-02 01:19:23
End at: 2018-06-02 01:19:53
Local clock offset: 0.392 ms
Remote clock offset: 0.119 ms

# Below is generated by plot.py at 2018-06-02 04:03:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 296.45 Mbit/s
95th percentile per-packet one-way delay: 137.766 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 201.26 Mbit/s
95th percentile per-packet one-way delay: 139.224 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 91.11 Mbit/s
95th percentile per-packet one-way delay: 133.954 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 106.24 Mbit/s
95th percentile per-packet one-way delay: 138.826 ms
Loss rate: 0.50%
```

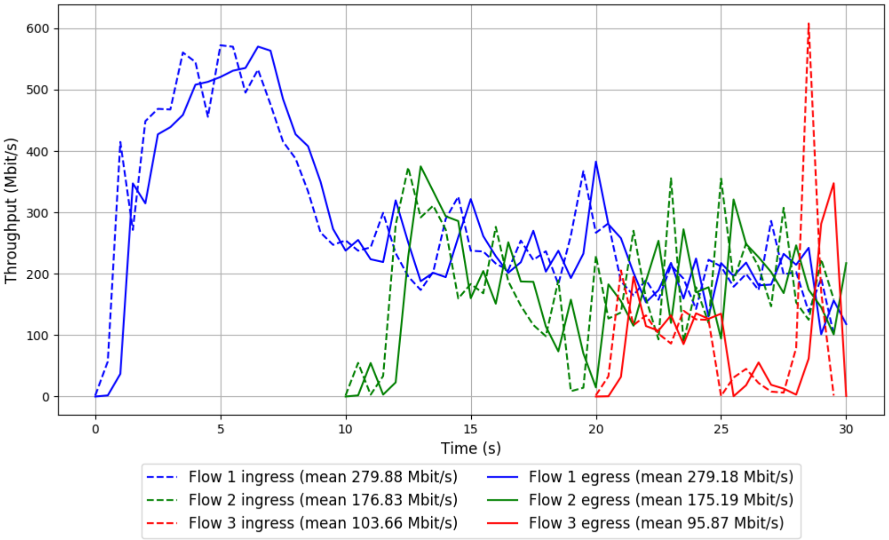
Run 9: Report of Verus — Data Link

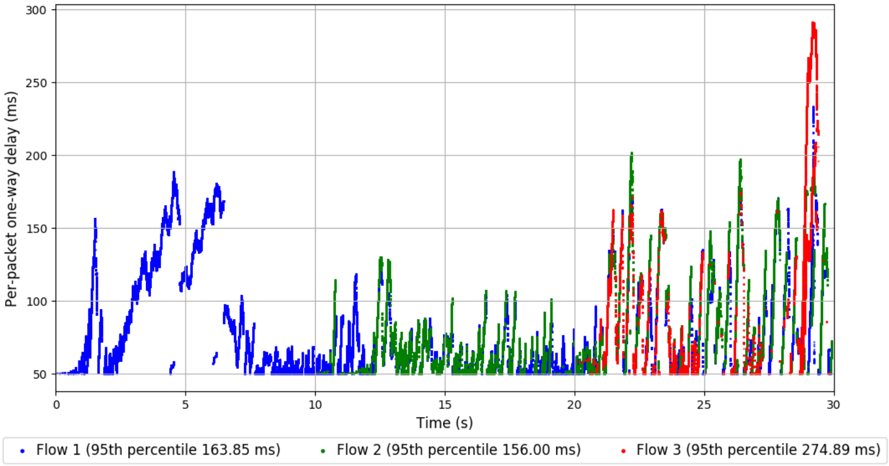




```
Run 10: Statistics of Verus

Start at: 2018-06-02 01:42:34
End at: 2018-06-02 01:43:04
Local clock offset: 0.258 ms
Remote clock offset: -0.353 ms

# Below is generated by plot.py at 2018-06-02 04:06:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 426.87 Mbit/s
95th percentile per-packet one-way delay: 165.314 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 279.18 Mbit/s
95th percentile per-packet one-way delay: 163.847 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 175.19 Mbit/s
95th percentile per-packet one-way delay: 156.005 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 95.87 Mbit/s
95th percentile per-packet one-way delay: 274.890 ms
Loss rate: 8.57%
```

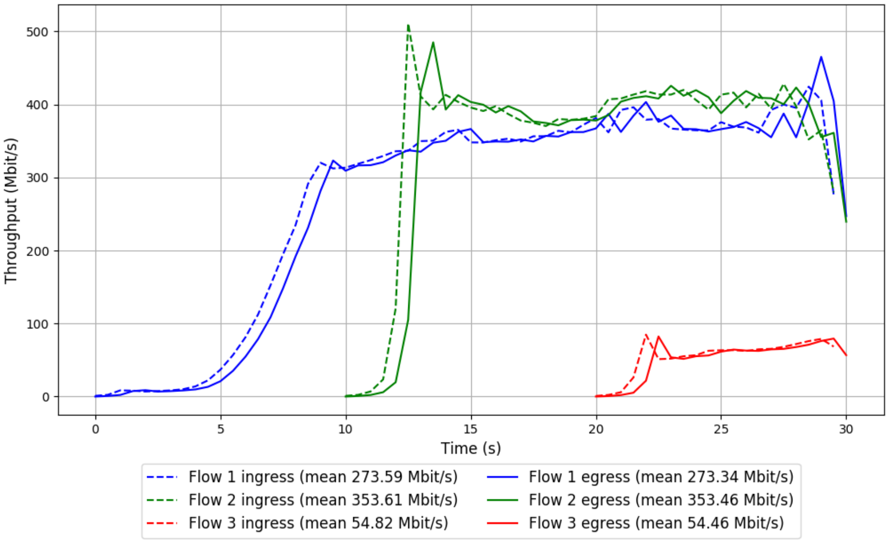
Run 10: Report of Verus — Data Link

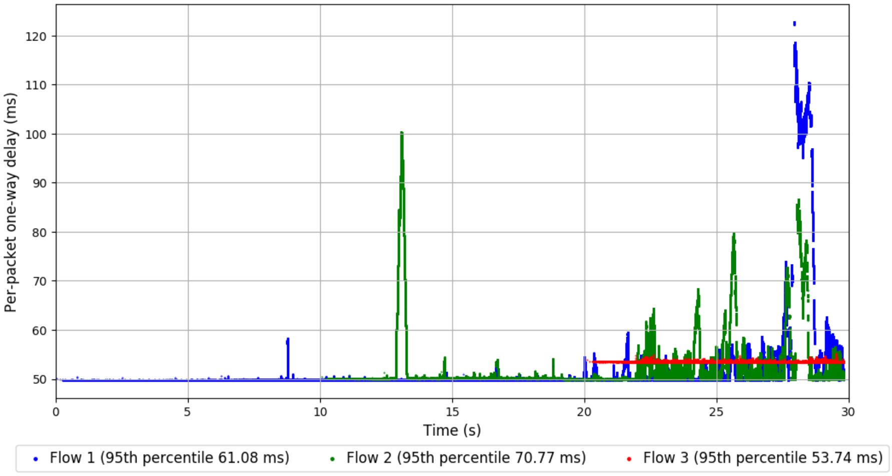




```
Run 1: Statistics of PCC-Vivace

Start at: 2018-06-01 22:19:39
End at: 2018-06-01 22:20:09
Local clock offset: 0.231 ms
Remote clock offset: -0.156 ms

# Below is generated by plot.py at 2018-06-02 04:08:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 525.78 Mbit/s
95th percentile per-packet one-way delay: 68.146 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 273.34 Mbit/s
95th percentile per-packet one-way delay: 61.083 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 353.46 Mbit/s
95th percentile per-packet one-way delay: 70.770 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 54.46 Mbit/s
95th percentile per-packet one-way delay: 53.745 ms
Loss rate: 1.79%
```

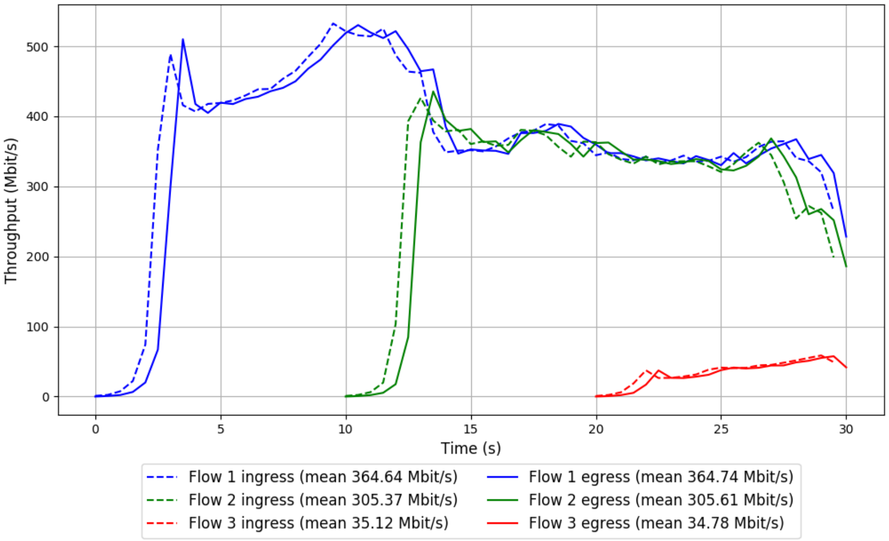
Run 1: Report of PCC-Vivace — Data Link

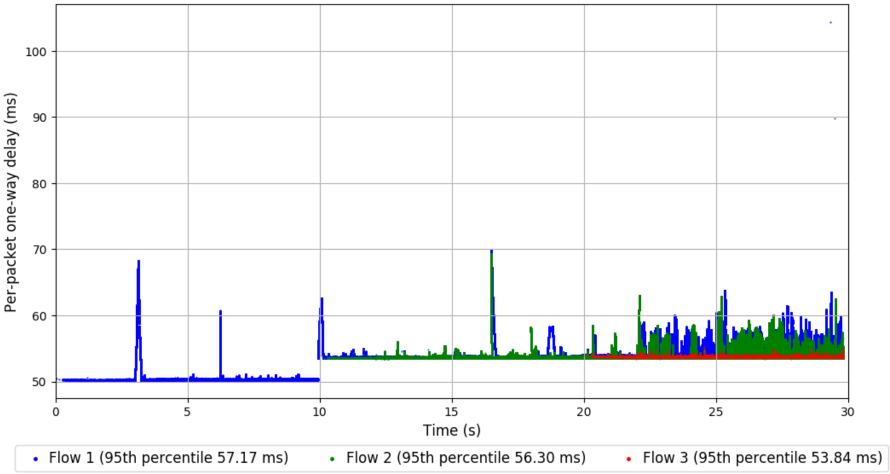




```
Run 2: Statistics of PCC-Vivace

Start at: 2018-06-01 22:42:48
End at: 2018-06-01 22:43:18
Local clock offset: 0.511 ms
Remote clock offset: 0.022 ms

# Below is generated by plot.py at 2018-06-02 04:10:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 578.89 Mbit/s
95th percentile per-packet one-way delay: 56.796 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 364.74 Mbit/s
95th percentile per-packet one-way delay: 57.168 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 305.61 Mbit/s
95th percentile per-packet one-way delay: 56.301 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 34.78 Mbit/s
95th percentile per-packet one-way delay: 53.837 ms
Loss rate: 2.04%
```

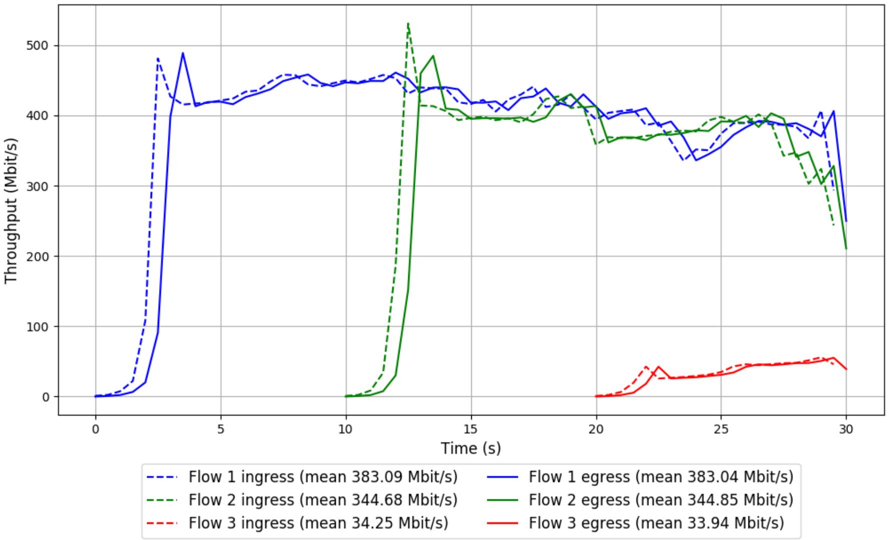
Run 2: Report of PCC-Vivace — Data Link

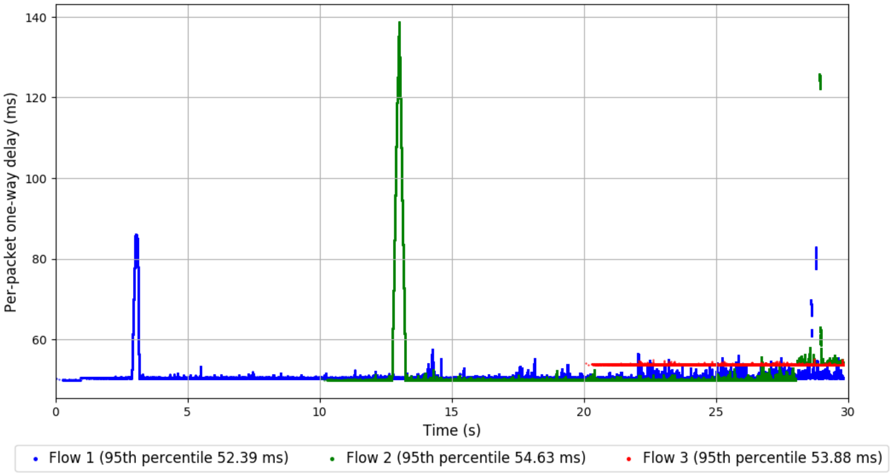




```
Run 3: Statistics of PCC-Vivace

Start at: 2018-06-01 23:05:50
End at: 2018-06-01 23:06:20
Local clock offset: 0.498 ms
Remote clock offset: -0.134 ms

# Below is generated by plot.py at 2018-06-02 04:11:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 623.04 Mbit/s
95th percentile per-packet one-way delay: 53.801 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 383.04 Mbit/s
95th percentile per-packet one-way delay: 52.392 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 344.85 Mbit/s
95th percentile per-packet one-way delay: 54.626 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 33.94 Mbit/s
95th percentile per-packet one-way delay: 53.880 ms
Loss rate: 2.00%
```

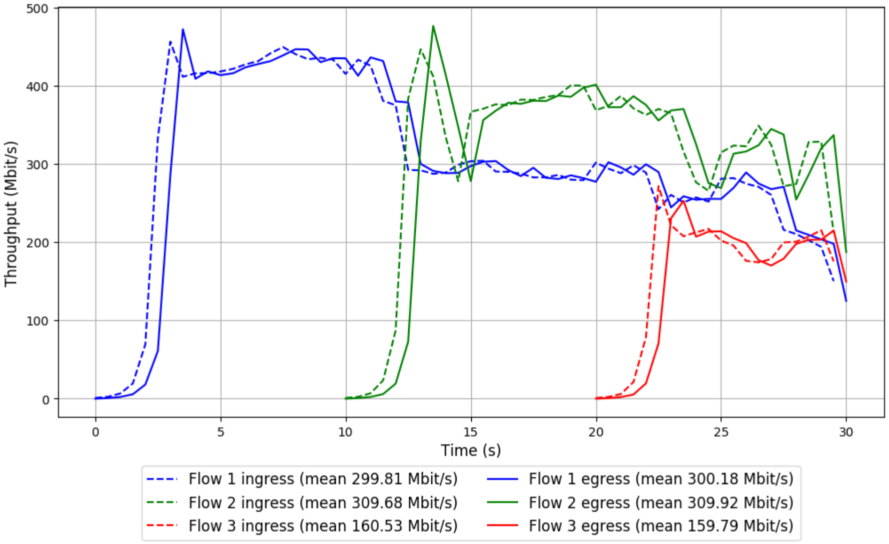
Run 3: Report of PCC-Vivace — Data Link

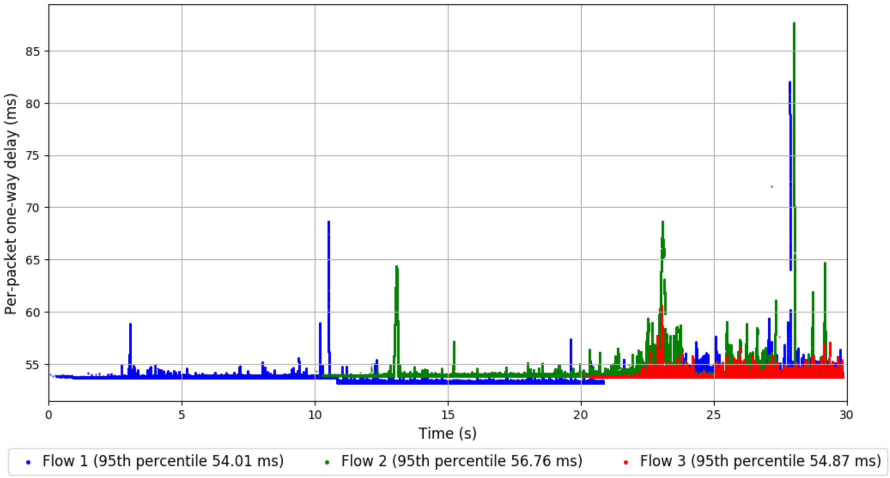




```
Run 4: Statistics of PCC-Vivace

Start at: 2018-06-01 23:29:00
End at: 2018-06-01 23:29:30
Local clock offset: 0.324 ms
Remote clock offset: -0.22 ms

# Below is generated by plot.py at 2018-06-02 04:11:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 558.23 Mbit/s
95th percentile per-packet one-way delay: 54.968 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 300.18 Mbit/s
95th percentile per-packet one-way delay: 54.008 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 309.92 Mbit/s
95th percentile per-packet one-way delay: 56.764 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 159.79 Mbit/s
95th percentile per-packet one-way delay: 54.866 ms
Loss rate: 1.57%
```

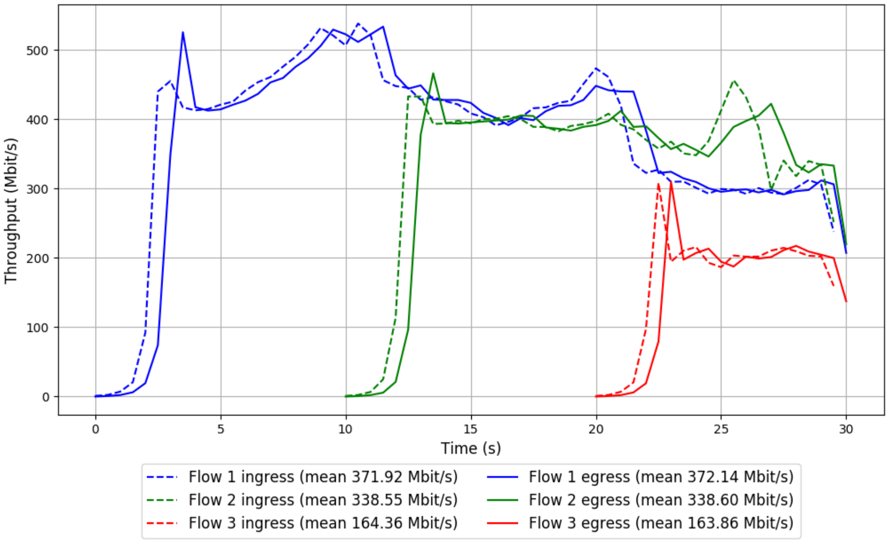
Run 4: Report of PCC-Vivace — Data Link

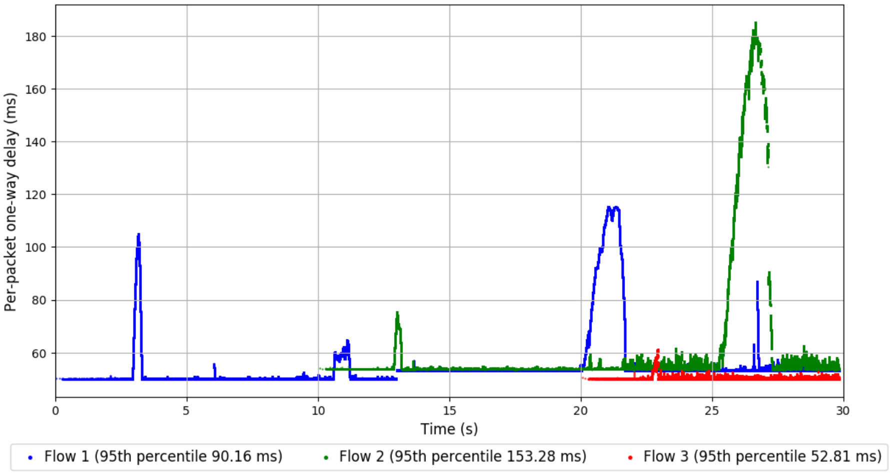




```
Run 5: Statistics of PCC-Vivace

Start at: 2018-06-01 23:51:45
End at: 2018-06-01 23:52:15
Local clock offset: 0.051 ms
Remote clock offset: -0.129 ms

# Below is generated by plot.py at 2018-06-02 04:12:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 650.51 Mbit/s
95th percentile per-packet one-way delay: 98.592 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 372.14 Mbit/s
95th percentile per-packet one-way delay: 90.155 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 338.60 Mbit/s
95th percentile per-packet one-way delay: 153.281 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 163.86 Mbit/s
95th percentile per-packet one-way delay: 52.810 ms
Loss rate: 1.35%
```

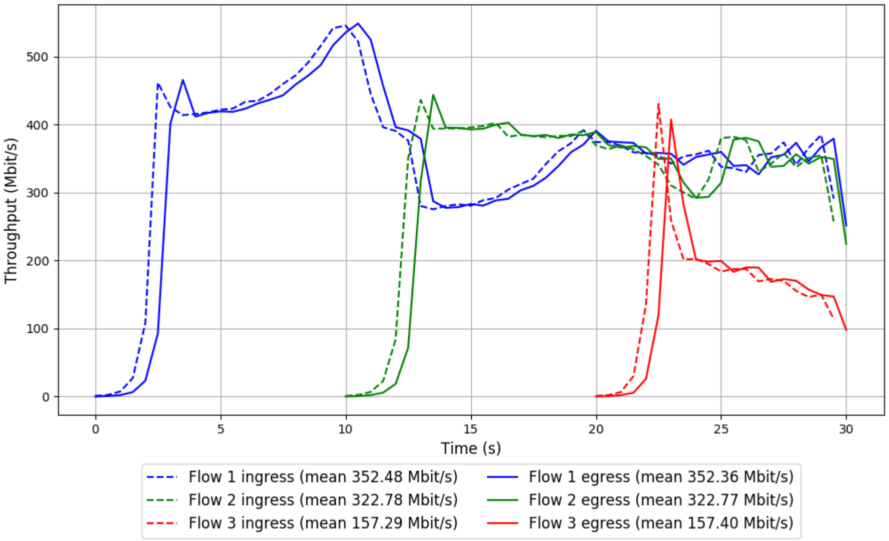
Run 5: Report of PCC-Vivace — Data Link

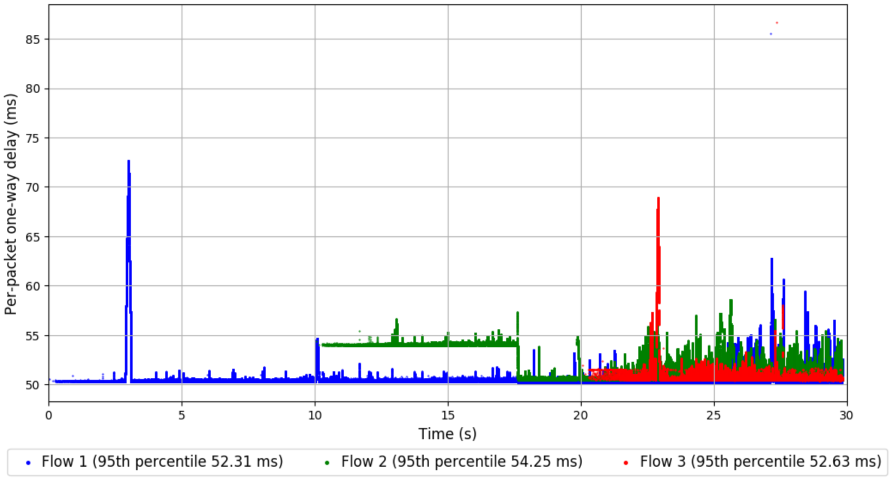




```
Run 6: Statistics of PCC-Vivace

Start at: 2018-06-02 00:14:40
End at: 2018-06-02 00:15:10
Local clock offset: 0.254 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2018-06-02 04:12:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 618.13 Mbit/s
95th percentile per-packet one-way delay: 54.053 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 352.36 Mbit/s
95th percentile per-packet one-way delay: 52.306 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 322.77 Mbit/s
95th percentile per-packet one-way delay: 54.250 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 157.40 Mbit/s
95th percentile per-packet one-way delay: 52.635 ms
Loss rate: 1.01%
```

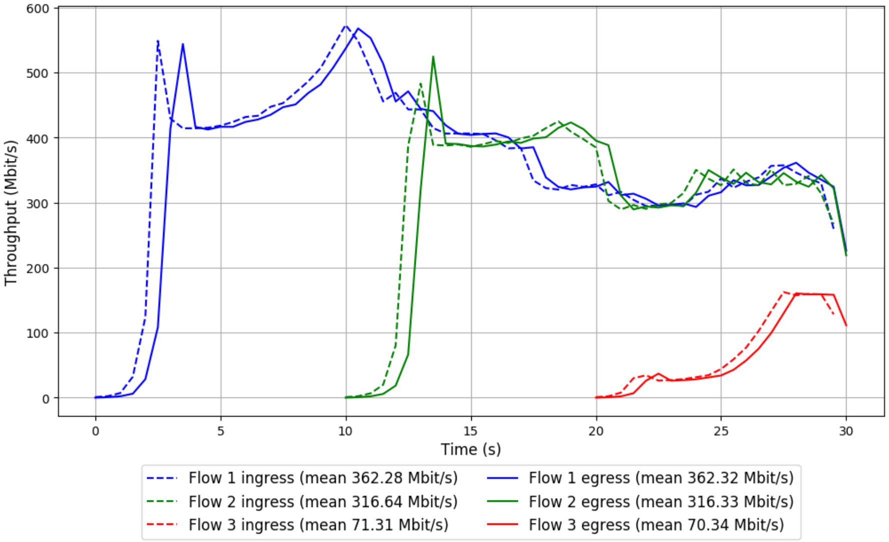
Run 6: Report of PCC-Vivace — Data Link

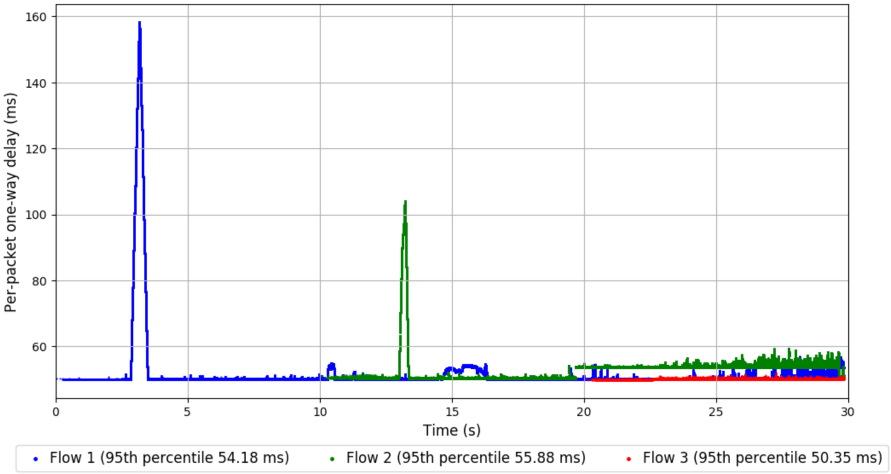




```
Run 7: Statistics of PCC-Vivace

Start at: 2018-06-02 00:37:58
End at: 2018-06-02 00:38:28
Local clock offset: 0.096 ms
Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2018-06-02 04:13:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 595.25 Mbit/s
95th percentile per-packet one-way delay: 54.930 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 362.32 Mbit/s
95th percentile per-packet one-way delay: 54.181 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 316.33 Mbit/s
95th percentile per-packet one-way delay: 55.876 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 70.34 Mbit/s
95th percentile per-packet one-way delay: 50.351 ms
Loss rate: 2.39%
```

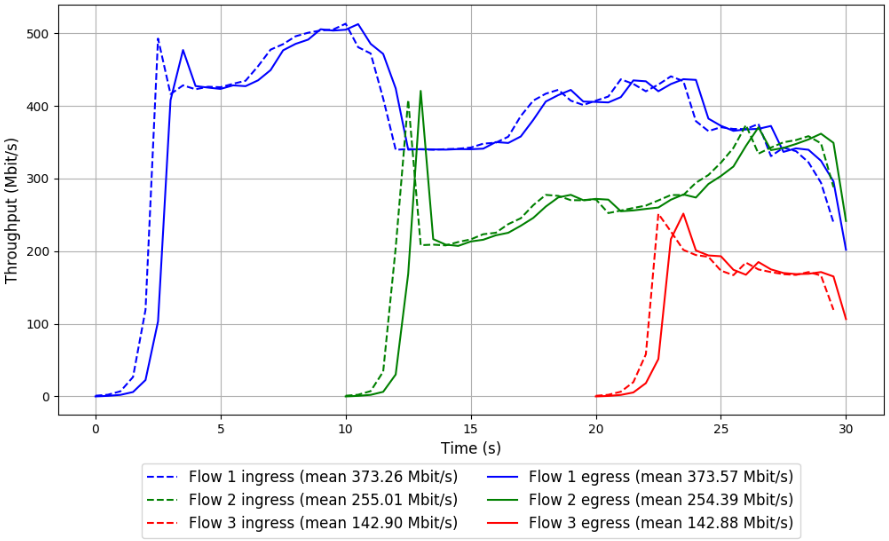
Run 7: Report of PCC-Vivace — Data Link

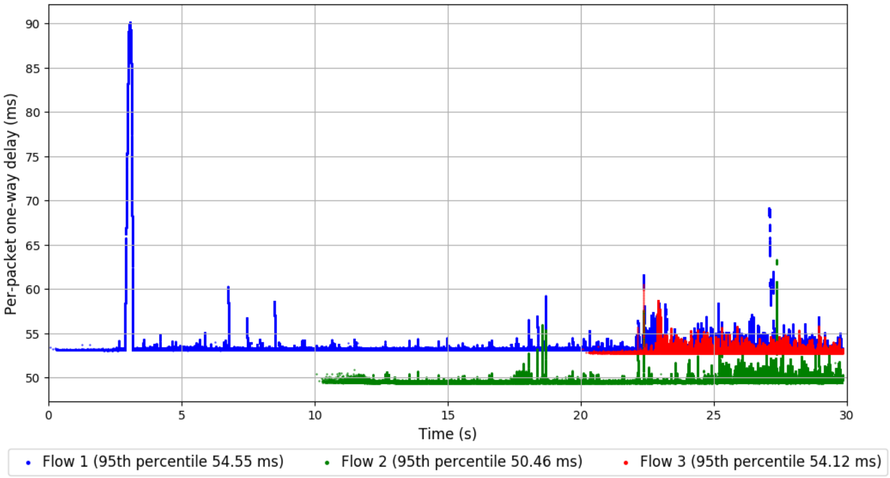




```
Run 8: Statistics of PCC-Vivace

Start at: 2018-06-02 01:00:42
End at: 2018-06-02 01:01:12
Local clock offset: -0.014 ms
Remote clock offset: 0.424 ms

# Below is generated by plot.py at 2018-06-02 04:14:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 589.26 Mbit/s
95th percentile per-packet one-way delay: 54.078 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 373.57 Mbit/s
95th percentile per-packet one-way delay: 54.554 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 254.39 Mbit/s
95th percentile per-packet one-way delay: 50.461 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 142.88 Mbit/s
95th percentile per-packet one-way delay: 54.122 ms
Loss rate: 1.10%
```

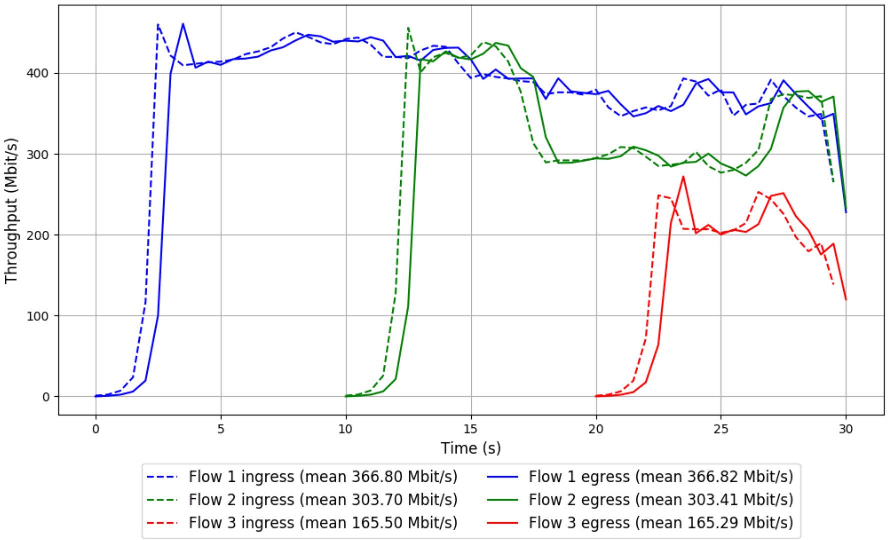
Run 8: Report of PCC-Vivace — Data Link

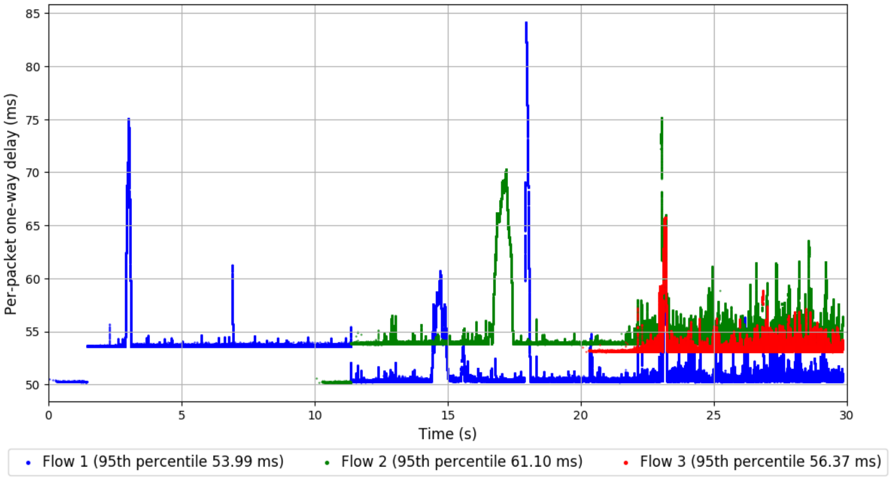




```
Run 9: Statistics of PCC-Vivace

Start at: 2018-06-02 01:23:27
End at: 2018-06-02 01:23:57
Local clock offset: 0.346 ms
Remote clock offset: 0.115 ms

# Below is generated by plot.py at 2018-06-02 04:15:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 622.31 Mbit/s
95th percentile per-packet one-way delay: 56.868 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 366.82 Mbit/s
95th percentile per-packet one-way delay: 53.989 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 303.41 Mbit/s
95th percentile per-packet one-way delay: 61.101 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 165.29 Mbit/s
95th percentile per-packet one-way delay: 56.373 ms
Loss rate: 1.21%
```

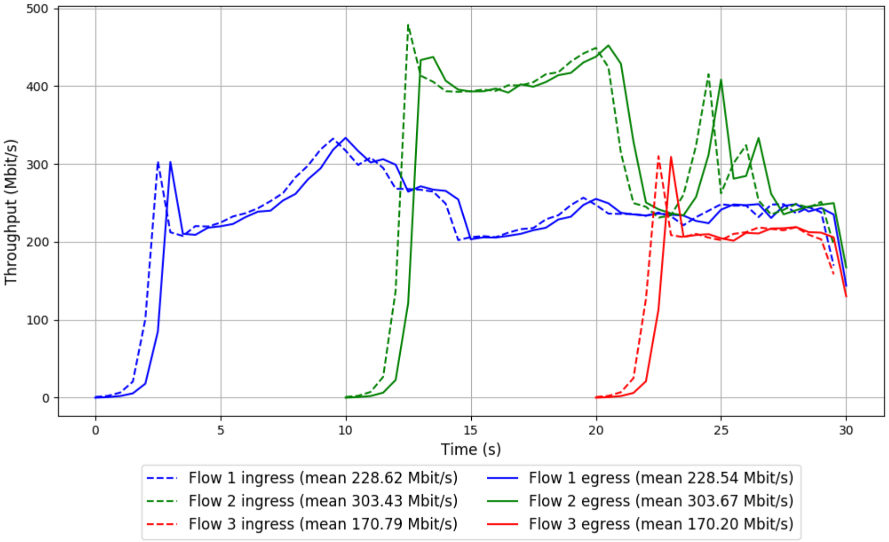
Run 9: Report of PCC-Vivace — Data Link

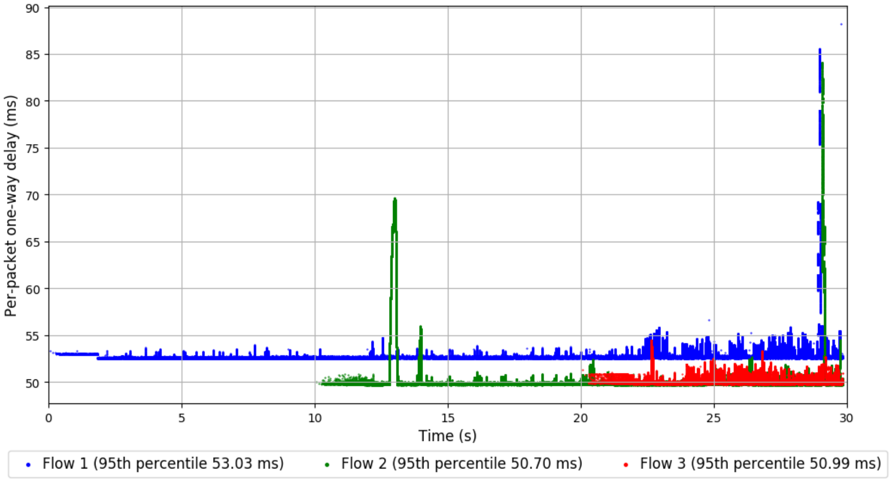




```
Run 10: Statistics of PCC-Vivace

Start at: 2018-06-02 01:46:46
End at: 2018-06-02 01:47:16
Local clock offset: -0.083 ms
Remote clock offset: 0.204 ms

# Below is generated by plot.py at 2018-06-02 04:15:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 485.93 Mbit/s
95th percentile per-packet one-way delay: 52.749 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 228.54 Mbit/s
95th percentile per-packet one-way delay: 53.034 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 303.67 Mbit/s
95th percentile per-packet one-way delay: 50.701 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 170.20 Mbit/s
95th percentile per-packet one-way delay: 50.994 ms
Loss rate: 1.40%
```

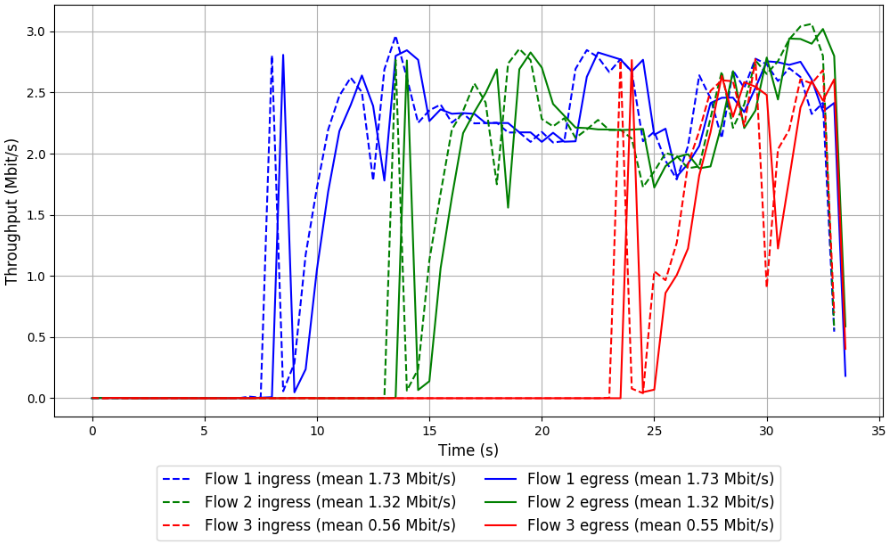
Run 10: Report of PCC-Vivace — Data Link

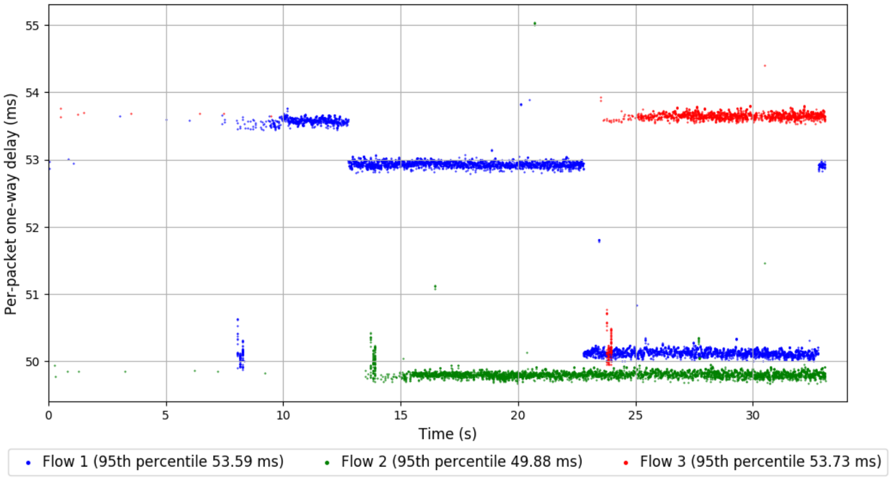




```
Run 1: Statistics of WebRTC media

Start at: 2018-06-01 22:10:31
End at: 2018-06-01 22:11:01
Local clock offset: 0.411 ms
Remote clock offset: 0.106 ms

# Below is generated by plot.py at 2018-06-02 04:15:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.58 Mbit/s
95th percentile per-packet one-way delay: 53.669 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 1.73 Mbit/s
95th percentile per-packet one-way delay: 53.587 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 49.885 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 53.732 ms
Loss rate: 1.90%
```

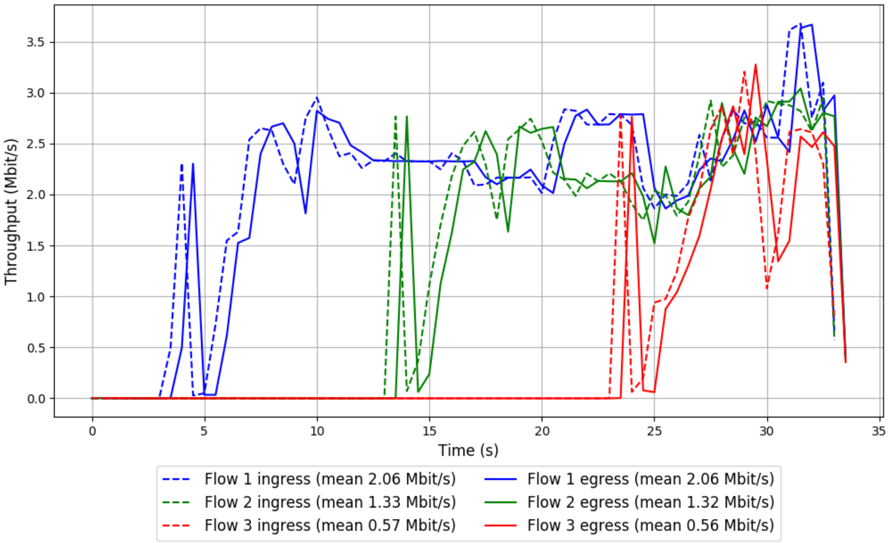
Run 1: Report of WebRTC media — Data Link

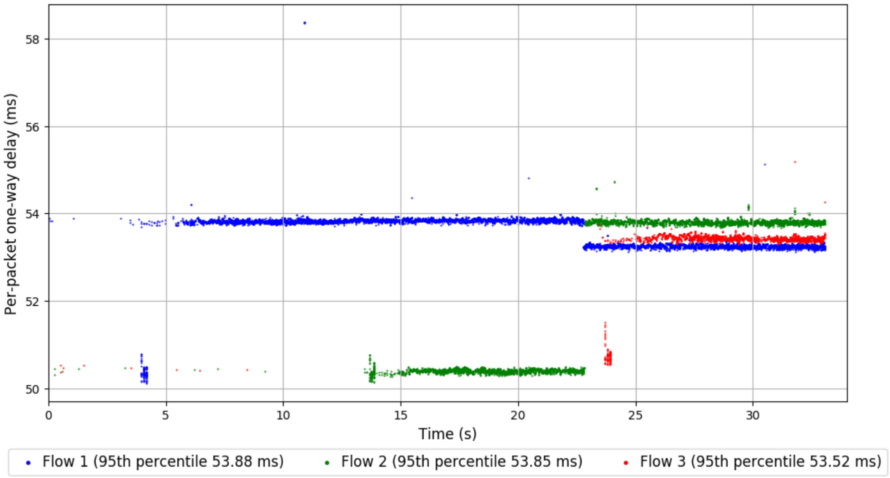




```
Run 2: Statistics of WebRTC media

Start at: 2018-06-01 22:33:38
End at: 2018-06-01 22:34:08
Local clock offset: 0.624 ms
Remote clock offset: -0.019 ms

# Below is generated by plot.py at 2018-06-02 04:15:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.92 Mbit/s
95th percentile per-packet one-way delay: 53.873 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 53.883 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 53.851 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 53.518 ms
Loss rate: 1.60%
```

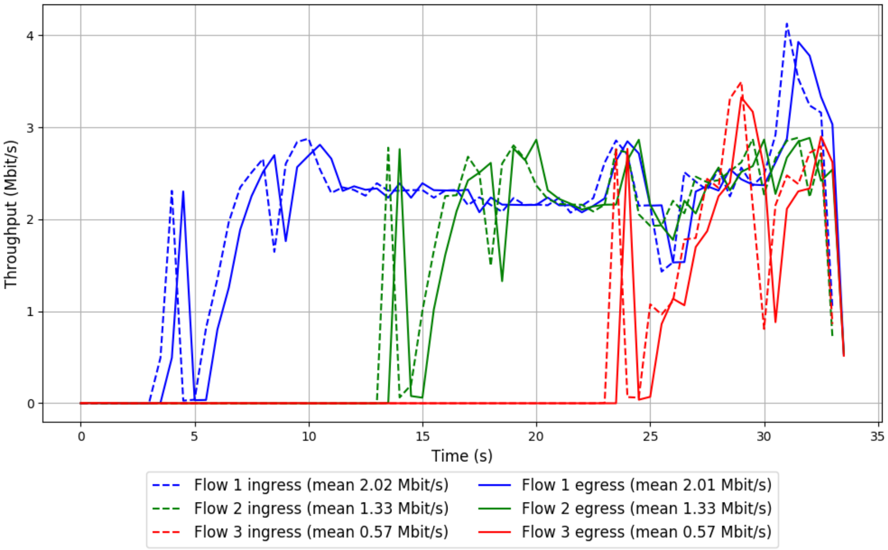
Run 2: Report of WebRTC media — Data Link

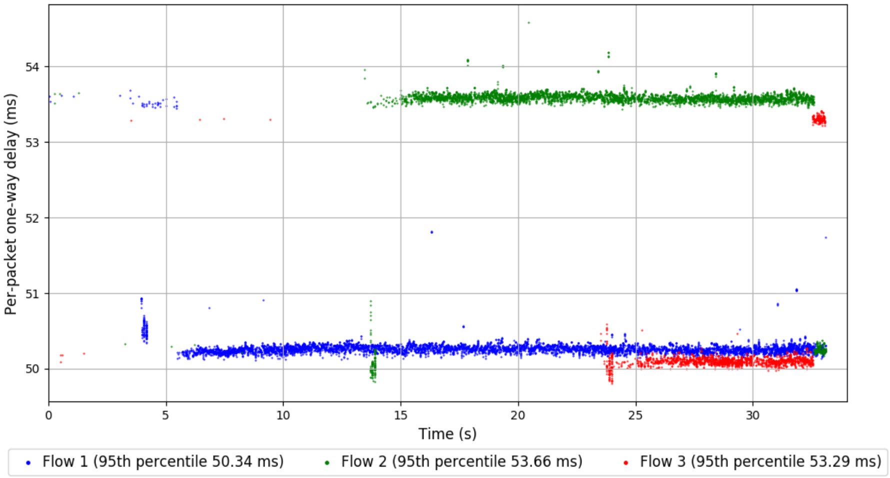




```
Run 3: Statistics of WebRTC media

Start at: 2018-06-01 22:56:49
End at: 2018-06-01 22:57:19
Local clock offset: 0.585 ms
Remote clock offset: 0.095 ms

# Below is generated by plot.py at 2018-06-02 04:15:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.89 Mbit/s
95th percentile per-packet one-way delay: 53.627 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 50.338 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 53.657 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 53.288 ms
Loss rate: 1.84%
```

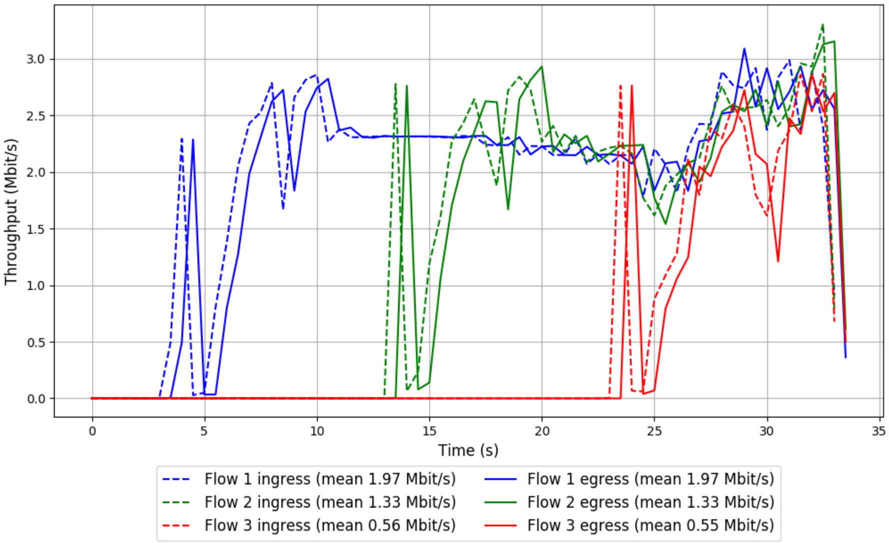
Run 3: Report of WebRTC media — Data Link

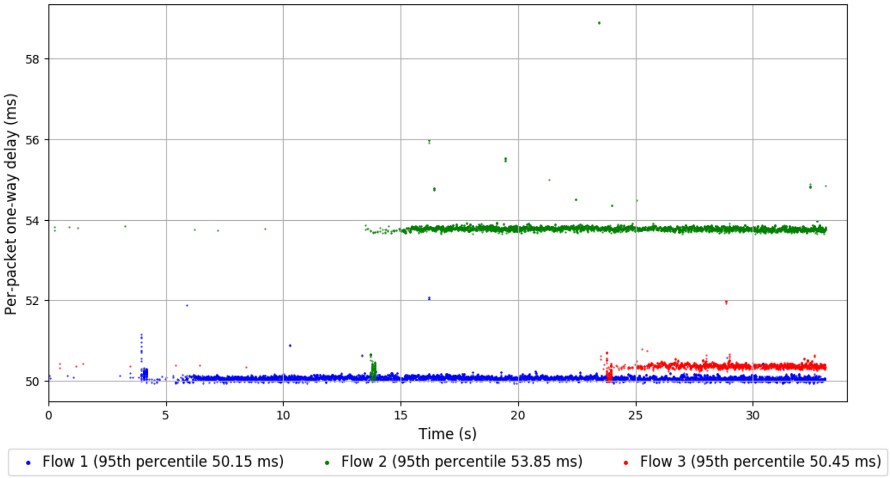




```
Run 4: Statistics of WebRTC media

Start at: 2018-06-01 23:19:54
End at: 2018-06-01 23:20:24
Local clock offset: 0.685 ms
Remote clock offset: -0.028 ms

# Below is generated by plot.py at 2018-06-02 04:15:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.83 Mbit/s
95th percentile per-packet one-way delay: 53.825 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 50.148 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 53.850 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 50.453 ms
Loss rate: 1.39%
```

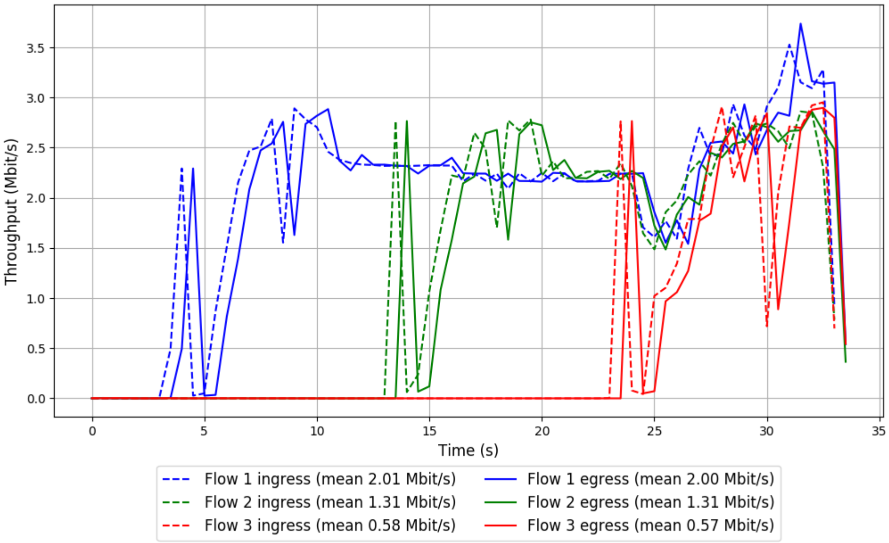
Run 4: Report of WebRTC media — Data Link

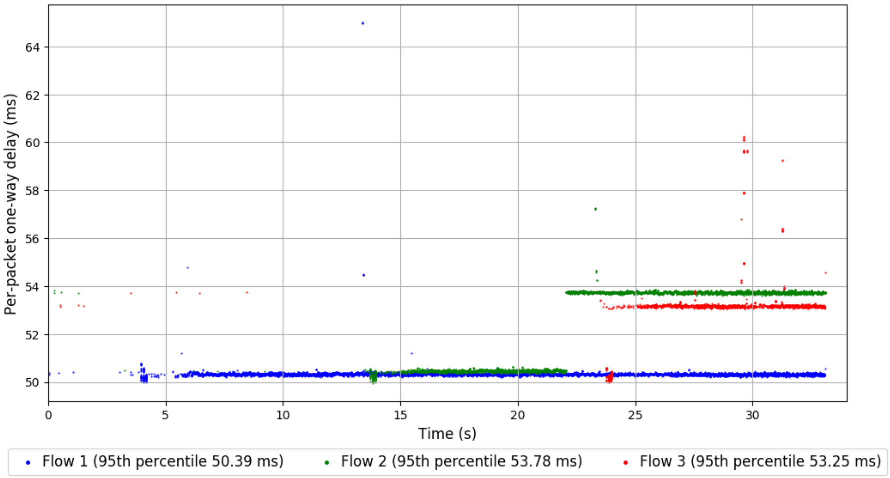




```
Run 5: Statistics of WebRTC media

Start at: 2018-06-01 23:42:39
End at: 2018-06-01 23:43:09
Local clock offset: 0.26 ms
Remote clock offset: 0.023 ms

# Below is generated by plot.py at 2018-06-02 04:15:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.86 Mbit/s
95th percentile per-packet one-way delay: 53.758 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 50.394 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 53.782 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 53.254 ms
Loss rate: 1.34%
```

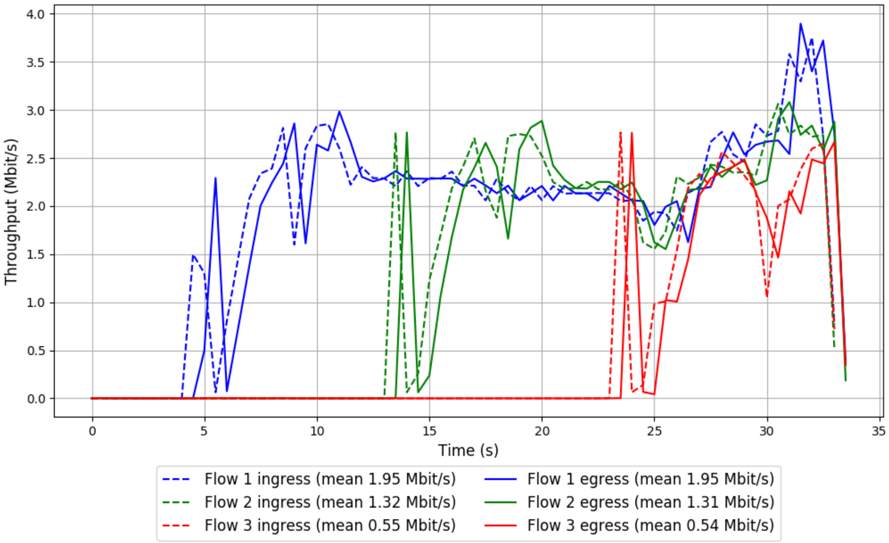
Run 5: Report of WebRTC media — Data Link

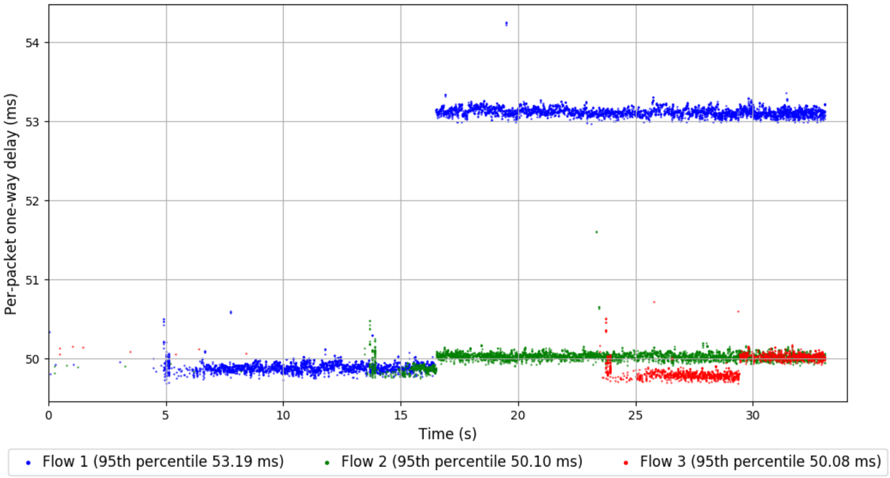




```
Run 6: Statistics of WebRTC media

Start at: 2018-06-02 00:05:35
End at: 2018-06-02 00:06:05
Local clock offset: -0.062 ms
Remote clock offset: 0.024 ms

# Below is generated by plot.py at 2018-06-02 04:15:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.79 Mbit/s
95th percentile per-packet one-way delay: 53.169 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 53.193 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 50.096 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 50.076 ms
Loss rate: 1.93%
```

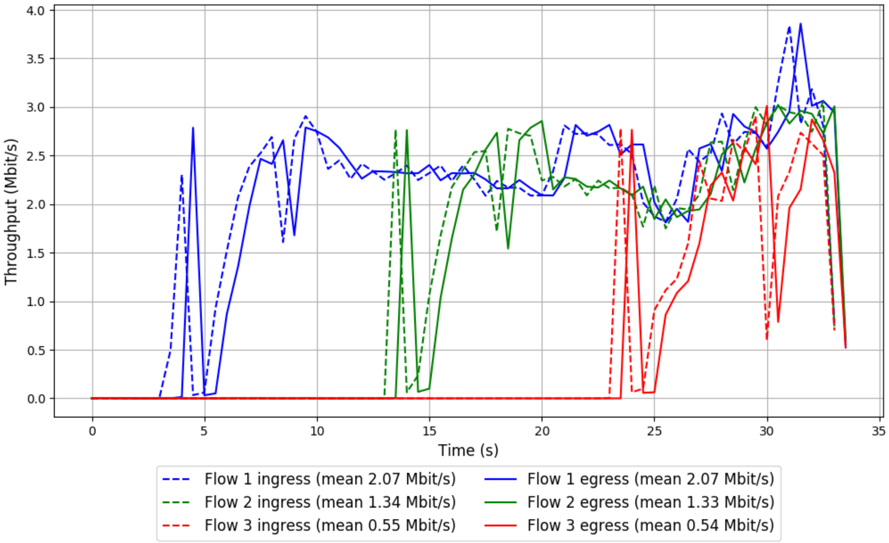
Run 6: Report of WebRTC media — Data Link

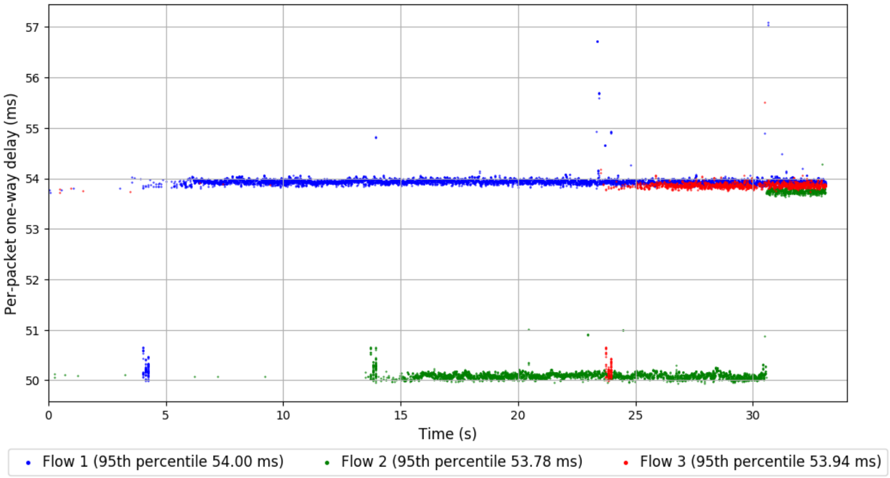




```
Run 7: Statistics of WebRTC media

Start at: 2018-06-02 00:28:51
End at: 2018-06-02 00:29:21
Local clock offset: 0.082 ms
Remote clock offset: -0.071 ms

# Below is generated by plot.py at 2018-06-02 04:15:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.93 Mbit/s
95th percentile per-packet one-way delay: 53.989 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 2.07 Mbit/s
95th percentile per-packet one-way delay: 54.004 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 53.778 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 53.937 ms
Loss rate: 1.46%
```

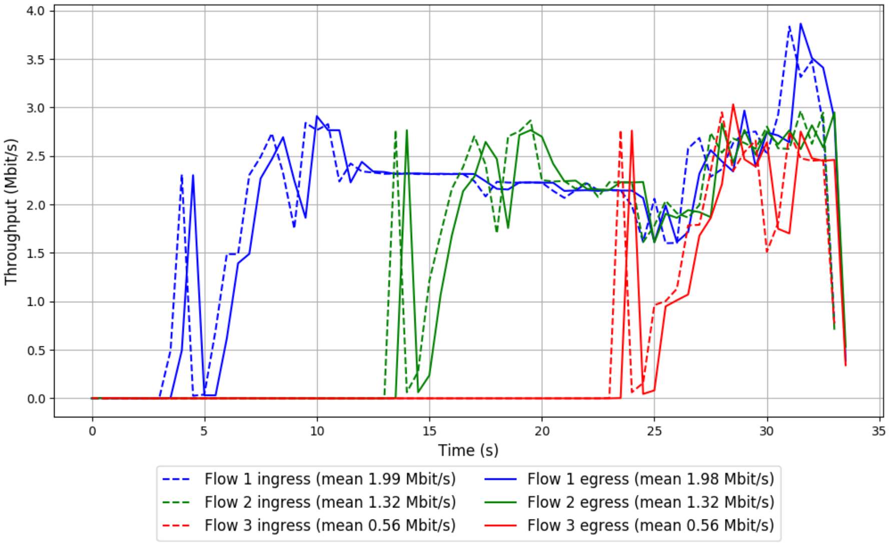
Run 7: Report of WebRTC media — Data Link

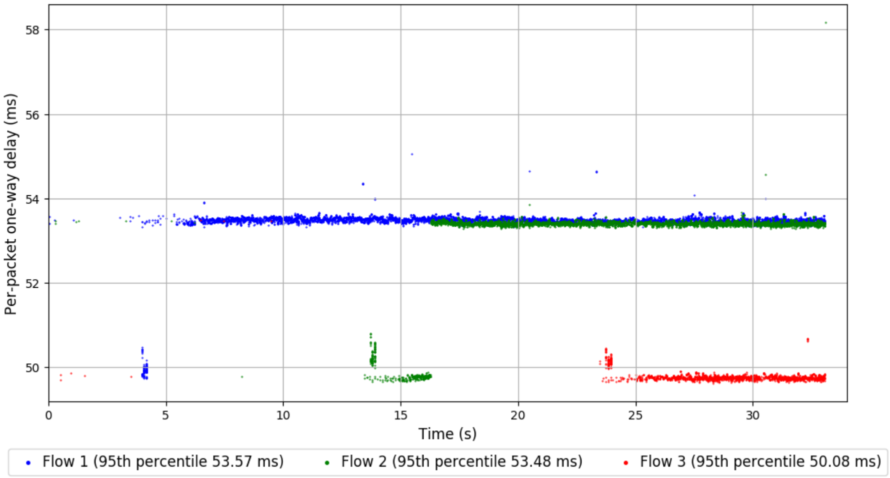




```
Run 8: Statistics of WebRTC media

Start at: 2018-06-02 00:51:35
End at: 2018-06-02 00:52:05
Local clock offset: 0.038 ms
Remote clock offset: 0.23 ms

# Below is generated by plot.py at 2018-06-02 04:15:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.84 Mbit/s
95th percentile per-packet one-way delay: 53.553 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 53.571 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 53.478 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 50.082 ms
Loss rate: 1.55%
```

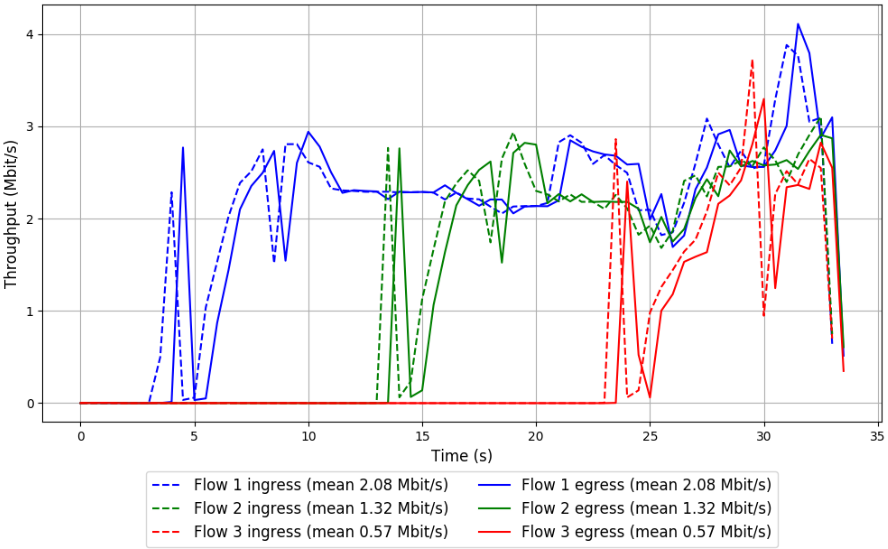
Run 8: Report of WebRTC media — Data Link

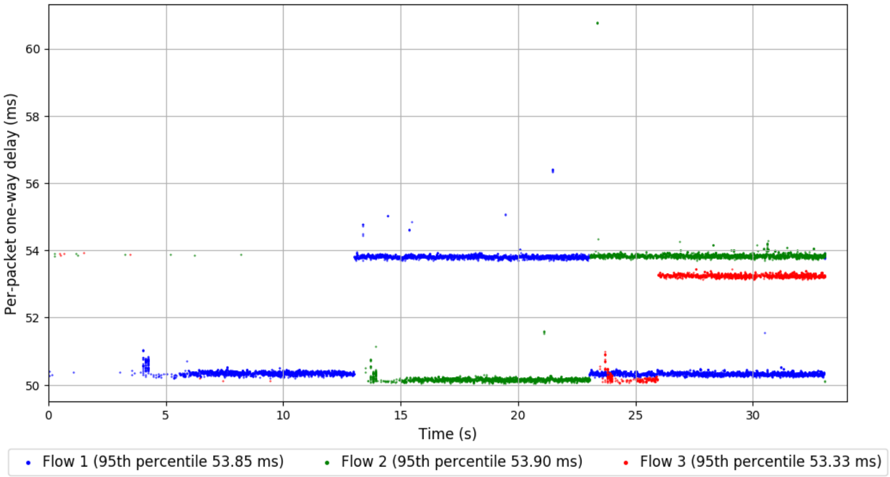




```
Run 9: Statistics of WebRTC media

Start at: 2018-06-02 01:14:28
End at: 2018-06-02 01:14:58
Local clock offset: 0.183 ms
Remote clock offset: -0.118 ms

# Below is generated by plot.py at 2018-06-02 04:15:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.95 Mbit/s
95th percentile per-packet one-way delay: 53.873 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 53.852 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 53.900 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 53.325 ms
Loss rate: 1.41%
```

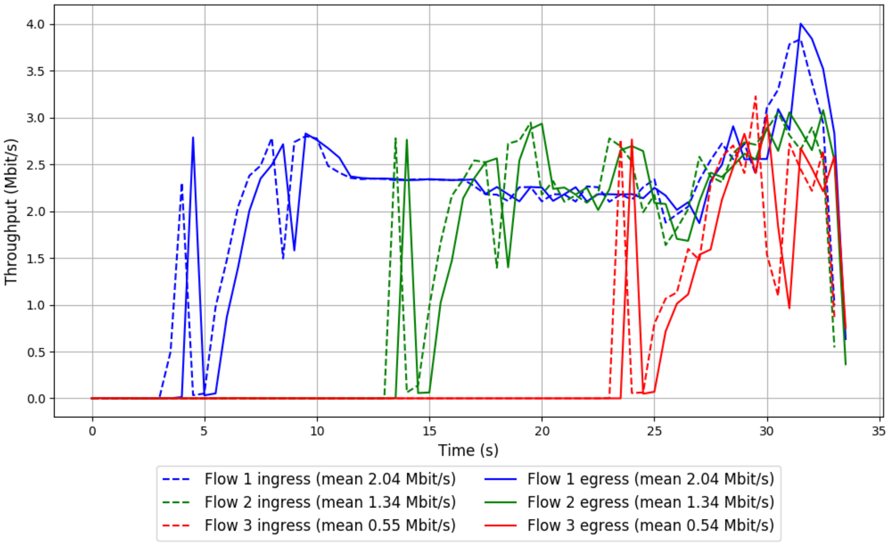
Run 9: Report of WebRTC media — Data Link



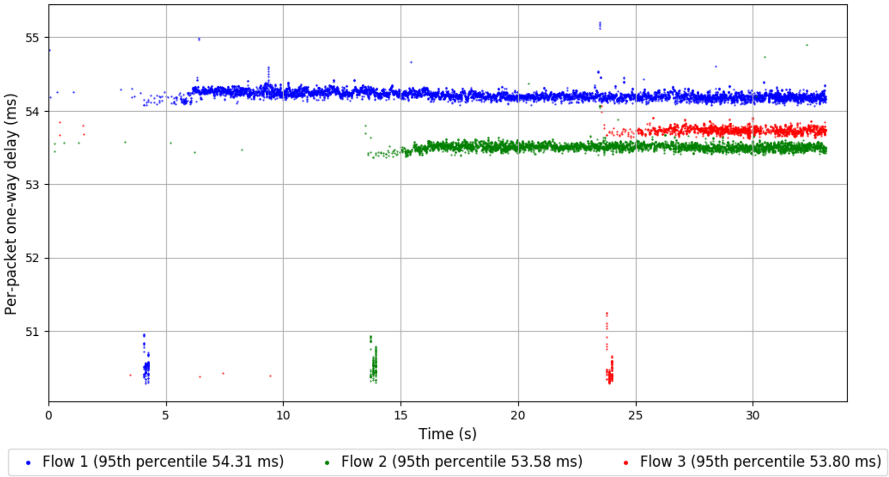


```
Run 10: Statistics of WebRTC media

Start at: 2018-06-02 01:37:38
End at: 2018-06-02 01:38:08
Local clock offset: 0.492 ms
Remote clock offset: -0.066 ms

# Below is generated by plot.py at 2018-06-02 04:15:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.90 Mbit/s
95th percentile per-packet one-way delay: 54.288 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 54.308 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 53.575 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 53.804 ms
Loss rate: 1.45%
```

Run 10: Report of WebRTC media — Data Link



Throughput (Mbit/s)
Time (s)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
5
10
15
20
25
30
35
Flow 1 ingress (mean 2.04 Mbit/s)
Flow 2 ingress (mean 1.34 Mbit/s)
Flow 3 ingress (mean 0.55 Mbit/s)
Flow 1 egress (mean 2.04 Mbit/s)
Flow 2 egress (mean 1.34 Mbit/s)
Flow 3 egress (mean 0.54 Mbit/s)



Per-packet one-way delay (ms)
Time (s)
55
54
53
52
51
0
5
10
15
20
25
30
Flow 1 (95th percentile 54.31 ms)
Flow 2 (95th percentile 53.58 ms)
Flow 3 (95th percentile 53.80 ms)