Pantheon Report

Generated at 2018-01-17 13:24:50 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

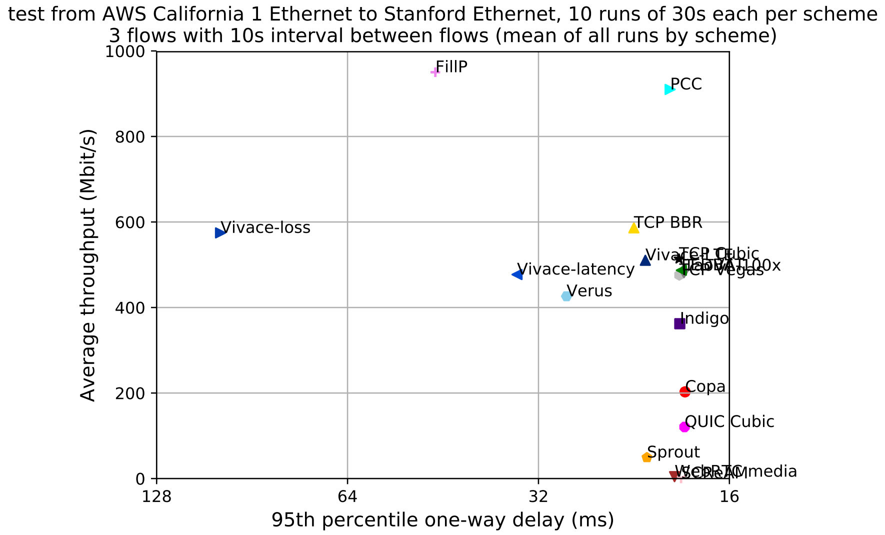
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

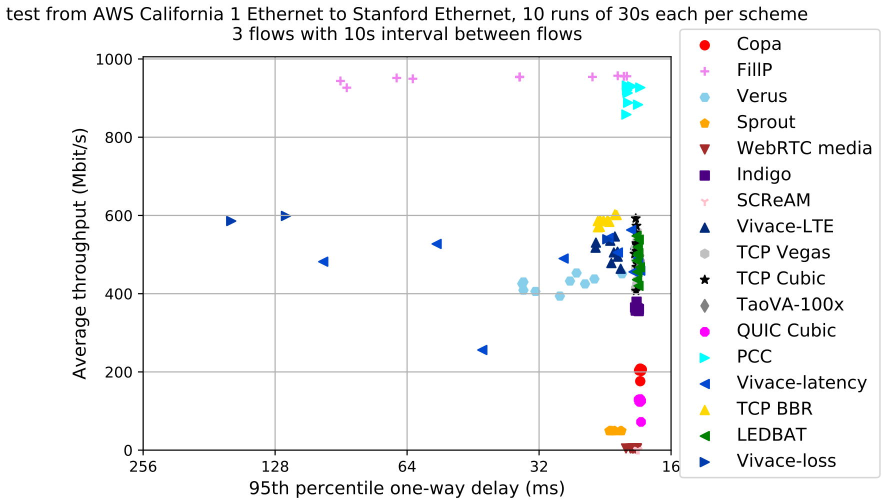
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

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

```
Git summary:
branch: master @ 386976fcf771de1359acd909bfbb98a156d79009
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
 M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/vivace @ 423cbca3e8ea1d599e7b5cf725835e8a2b6bfac6
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```


test from AWS California 1 Ethernet to Stanford Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)
Average throughput (Mbit/s)
95th percentile one-way delay (ms)
1000
800
600
400
200
0
128
64
32
16
FillP
PCC
Vivace-loss
TCP BBR
Vivace-latency
Vivace-LTE
TCP Cubic
TaoVA-100x
LEDBAT
TCP Vegas
Verus
Indigo
Copa
QUIC Cubic
Sprout
WebRTC media
SCReAM


test from AWS California 1 Ethernet to Stanford Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows
Average throughput (Mbit/s)
95th percentile one-way delay (ms)
1000
800
600
400
200
0
256
128
64
32
16
Copa
FillP
Verus
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WebRTC media
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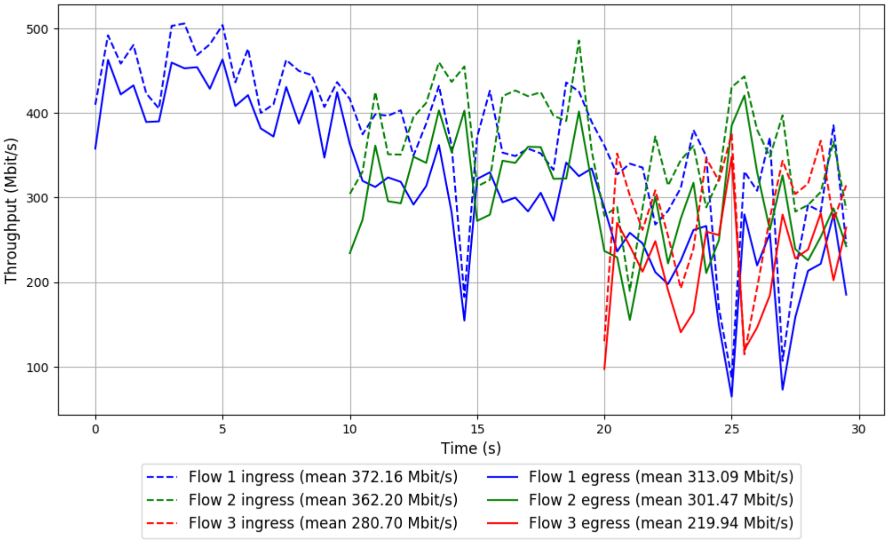
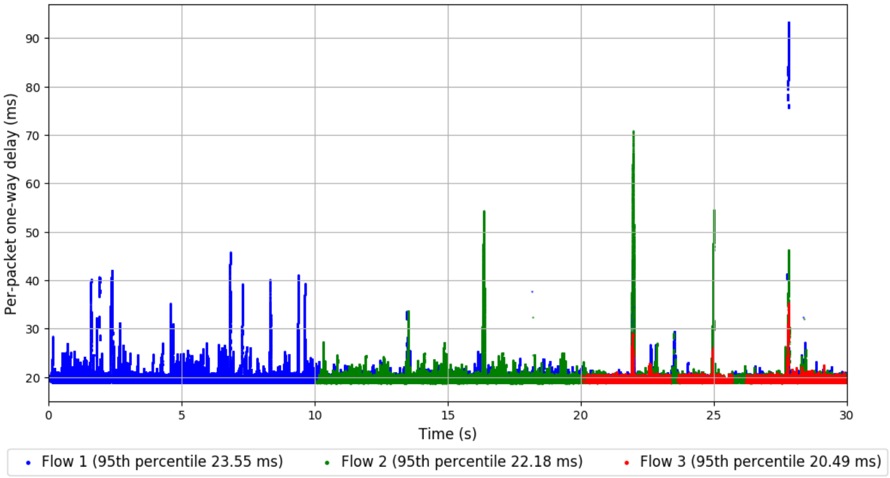
SCReAM
Vivace-LTE
TCP Vegas
TCP Cubic
TaoVA-100x
QUIC Cubic
PCC
Vivace-latency
TCP BBR
LEDBAT
Vivace-loss

scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	321.63	279.75	241.50	23.44	21.24	20.18	15.57	19.66	22.56
TCP Cubic	10	321.22	188.53	201.56	19.08	18.80	19.25	0.10	0.11	0.20
LEDBAT	10	276.27	230.76	172.70	18.65	18.86	18.70	0.02	0.02	0.02
PCC	10	790.18	146.95	67.22	19.73	19.92	19.90	0.46	0.31	0.34
QUIC Cubic	10	60.32	63.52	55.35	18.54	18.30	18.80	0.00	0.01	0.00
SCReAM	10	0.22	0.22	0.22	18.79	18.51	18.82	0.00	0.00	0.00
WebRTC media	10	2.35	1.49	0.56	19.27	19.62	19.85	0.00	0.01	0.00
Sprout	8	24.77	24.70	24.38	21.50	21.37	21.16	0.00	0.02	0.01
TaoVA-100x	10	253.88	252.89	246.76	18.31	18.75	18.50	0.00	0.01	0.01
TCP Vegas	10	283.40	195.65	186.93	19.20	18.94	18.33	0.05	0.06	0.06
Verus	10	216.18	228.43	176.06	34.45	23.98	21.87	14.73	16.44	14.27
Copa	9	102.72	106.86	111.13	18.64	18.64	18.81	0.00	0.00	0.00
FillP	10	588.61	407.29	273.02	50.65	20.06	25.08	9.61	15.51	16.25
Indigo	10	187.42	179.00	164.46	18.85	18.98	19.22	0.01	0.01	0.01
Vivace-latency	10	292.82	210.38	135.09	41.05	30.43	24.32	1.90	6.78	0.11
Vivace-loss	3	326.15	267.94	213.46	102.53	67.25	28.42	2.11	0.98	0.56
Vivace-LTE	10	297.84	244.41	152.83	21.62	22.70	19.93	0.14	0.28	0.23

```
Run 1: Statistics of TCP BBR

Start at: 2018-01-17 03:53:22
End at: 2018-01-17 03:53:52
Local clock offset: -1.383 ms
Remote clock offset: -2.502 ms

# Below is generated by plot.py at 2018-01-17 10:59:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 586.75 Mbit/s
95th percentile per-packet one-way delay: 22.841 ms
Loss rate: 16.94%
-- Flow 1:
Average throughput: 313.09 Mbit/s
95th percentile per-packet one-way delay: 23.553 ms
Loss rate: 15.87%
-- Flow 2:
Average throughput: 301.47 Mbit/s
95th percentile per-packet one-way delay: 22.184 ms
Loss rate: 16.76%
-- Flow 3:
Average throughput: 219.94 Mbit/s
95th percentile per-packet one-way delay: 20.492 ms
Loss rate: 21.64%
```

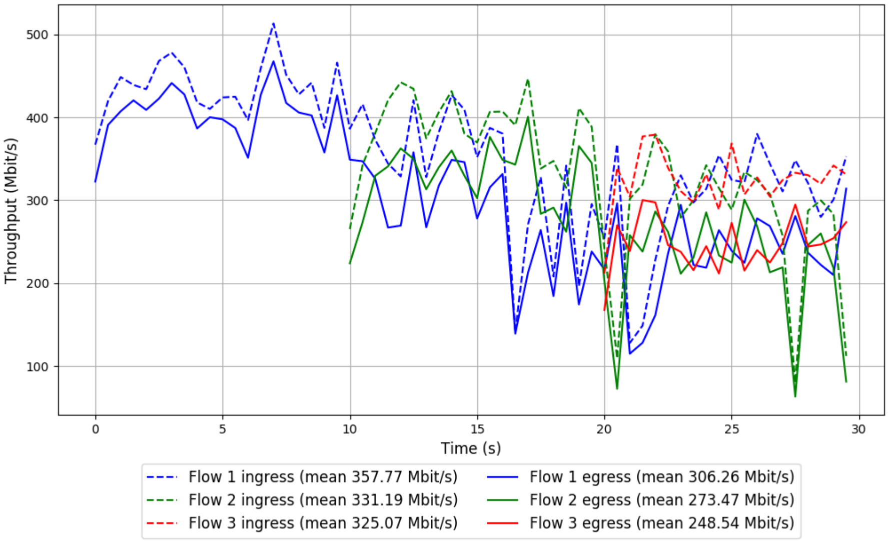
Run 1: Report of TCP BBR — Data Link

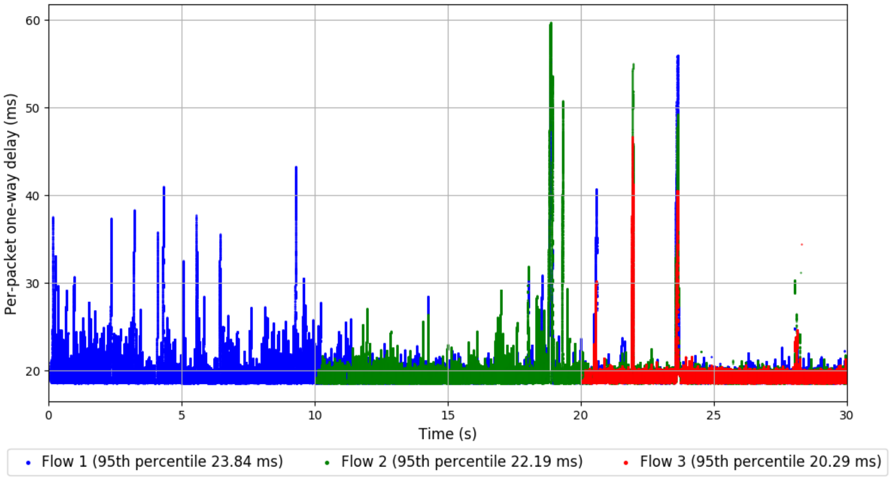




```
Run 2: Statistics of TCP BBR

Start at: 2018-01-17 04:20:53
End at: 2018-01-17 04:21:23
Local clock offset: -1.752 ms
Remote clock offset: -2.876 ms

# Below is generated by plot.py at 2018-01-17 10:59:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 570.83 Mbit/s
95th percentile per-packet one-way delay: 23.254 ms
Loss rate: 16.81%
-- Flow 1:
Average throughput: 306.26 Mbit/s
95th percentile per-packet one-way delay: 23.844 ms
Loss rate: 14.40%
-- Flow 2:
Average throughput: 273.47 Mbit/s
95th percentile per-packet one-way delay: 22.187 ms
Loss rate: 17.42%
-- Flow 3:
Average throughput: 248.54 Mbit/s
95th percentile per-packet one-way delay: 20.289 ms
Loss rate: 23.55%
```

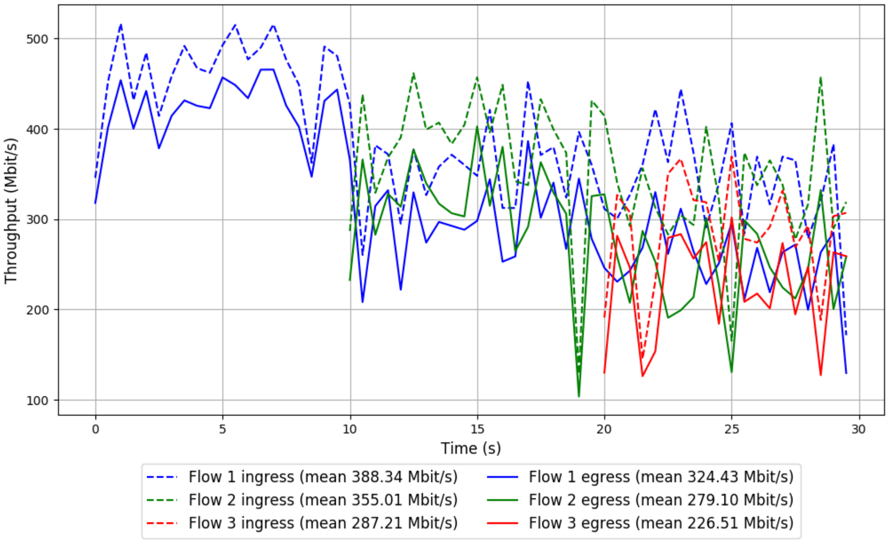
Run 2: Report of TCP BBR — Data Link

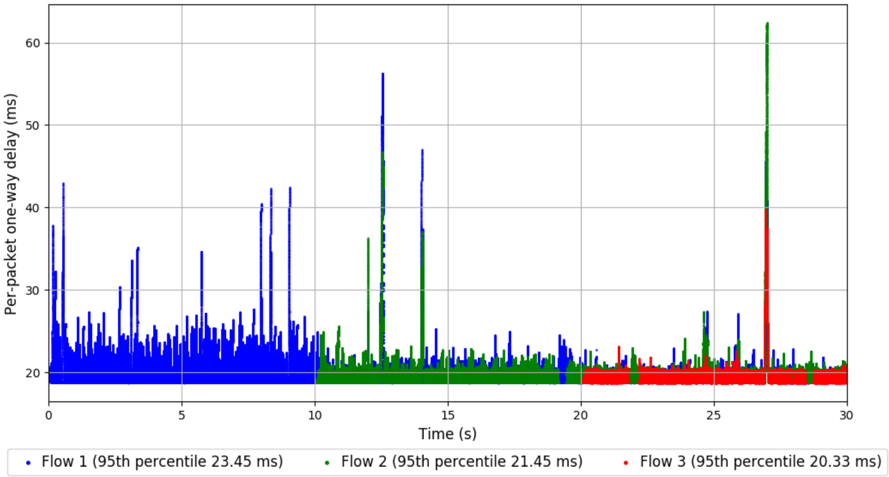




```
Run 3: Statistics of TCP BBR

Start at: 2018-01-17 04:48:30
End at: 2018-01-17 04:49:00
Local clock offset: -2.283 ms
Remote clock offset: -2.314 ms

# Below is generated by plot.py at 2018-01-17 10:59:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 585.48 Mbit/s
95th percentile per-packet one-way delay: 22.765 ms
Loss rate: 18.69%
-- Flow 1:
Average throughput: 324.43 Mbit/s
95th percentile per-packet one-way delay: 23.449 ms
Loss rate: 16.46%
-- Flow 2:
Average throughput: 279.10 Mbit/s
95th percentile per-packet one-way delay: 21.453 ms
Loss rate: 21.38%
-- Flow 3:
Average throughput: 226.51 Mbit/s
95th percentile per-packet one-way delay: 20.332 ms
Loss rate: 21.13%
```

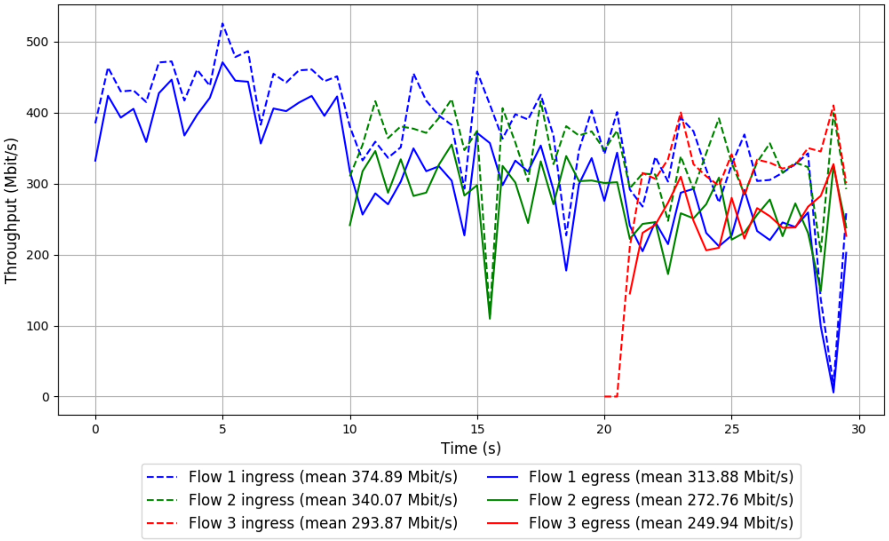
Run 3: Report of TCP BBR — Data Link

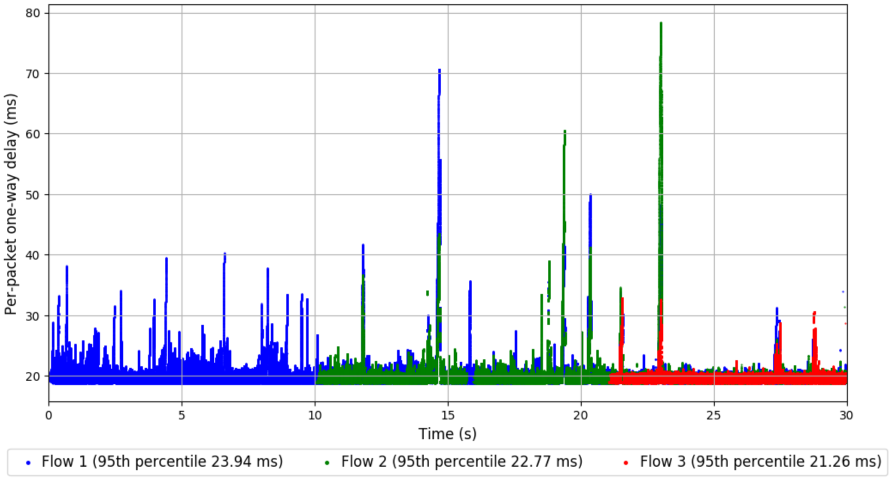




```
Run 4: Statistics of TCP BBR

Start at: 2018-01-17 05:16:07
End at: 2018-01-17 05:16:37
Local clock offset: -2.549 ms
Remote clock offset: -1.897 ms

# Below is generated by plot.py at 2018-01-17 10:59:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 569.90 Mbit/s
95th percentile per-packet one-way delay: 23.491 ms
Loss rate: 18.43%
-- Flow 1:
Average throughput: 313.88 Mbit/s
95th percentile per-packet one-way delay: 23.939 ms
Loss rate: 16.27%
-- Flow 2:
Average throughput: 272.76 Mbit/s
95th percentile per-packet one-way delay: 22.769 ms
Loss rate: 19.79%
-- Flow 3:
Average throughput: 249.94 Mbit/s
95th percentile per-packet one-way delay: 21.260 ms
Loss rate: 23.57%
```

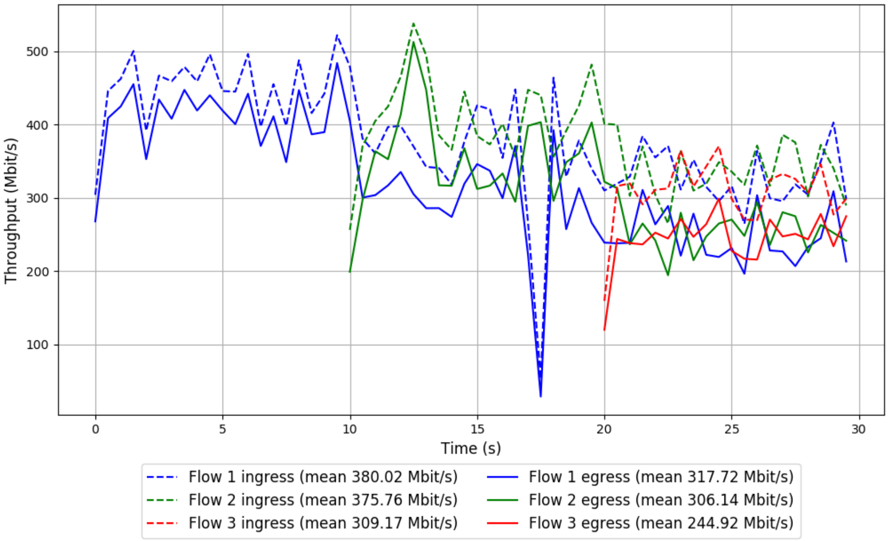
Run 4: Report of TCP BBR — Data Link

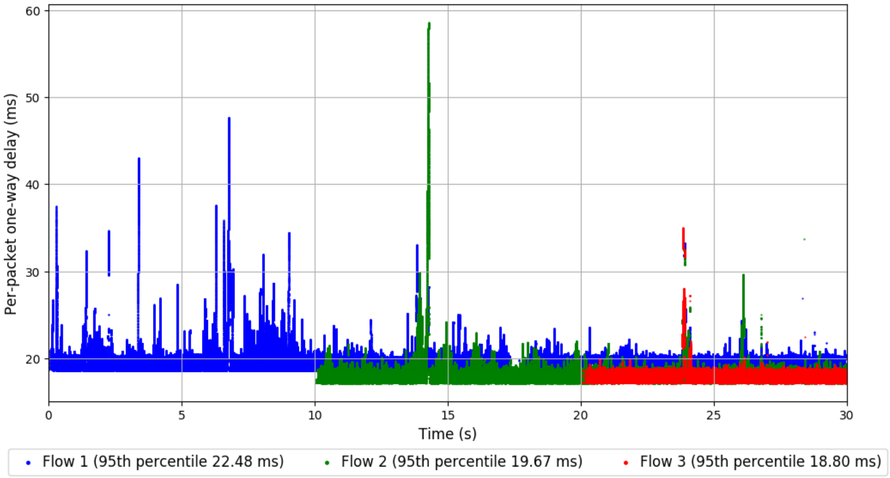




```
Run 5: Statistics of TCP BBR

Start at: 2018-01-17 05:43:37
End at: 2018-01-17 05:44:07
Local clock offset: -3.041 ms
Remote clock offset: -2.196 ms

# Below is generated by plot.py at 2018-01-17 10:59:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 602.86 Mbit/s
95th percentile per-packet one-way delay: 21.486 ms
Loss rate: 17.74%
-- Flow 1:
Average throughput: 317.72 Mbit/s
95th percentile per-packet one-way delay: 22.479 ms
Loss rate: 16.39%
-- Flow 2:
Average throughput: 306.14 Mbit/s
95th percentile per-packet one-way delay: 19.666 ms
Loss rate: 18.53%
-- Flow 3:
Average throughput: 244.92 Mbit/s
95th percentile per-packet one-way delay: 18.796 ms
Loss rate: 20.78%
```

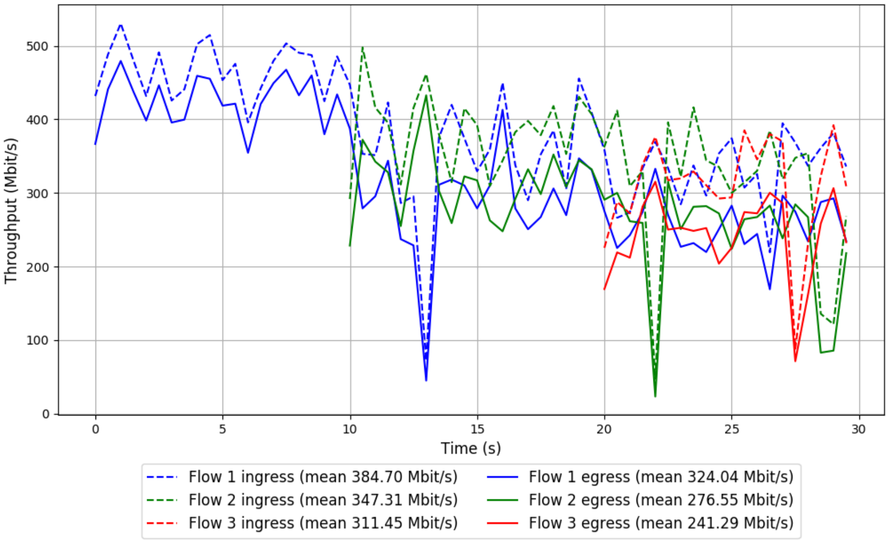
Run 5: Report of TCP BBR — Data Link

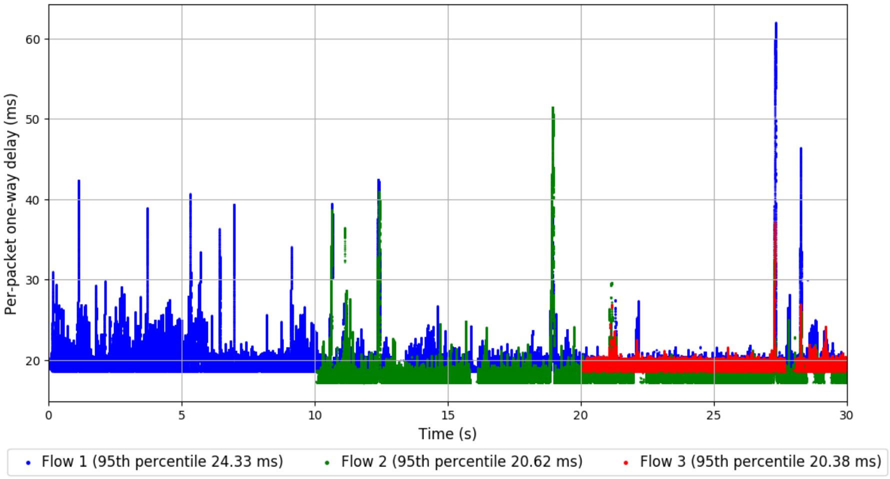




```
Run 6: Statistics of TCP BBR

Start at: 2018-01-17 06:11:18
End at: 2018-01-17 06:11:48
Local clock offset: -2.726 ms
Remote clock offset: -1.916 ms

# Below is generated by plot.py at 2018-01-17 10:59:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 588.19 Mbit/s
95th percentile per-packet one-way delay: 23.221 ms
Loss rate: 18.22%
-- Flow 1:
Average throughput: 324.04 Mbit/s
95th percentile per-packet one-way delay: 24.333 ms
Loss rate: 15.77%
-- Flow 2:
Average throughput: 276.55 Mbit/s
95th percentile per-packet one-way delay: 20.623 ms
Loss rate: 20.37%
-- Flow 3:
Average throughput: 241.29 Mbit/s
95th percentile per-packet one-way delay: 20.375 ms
Loss rate: 22.52%
```

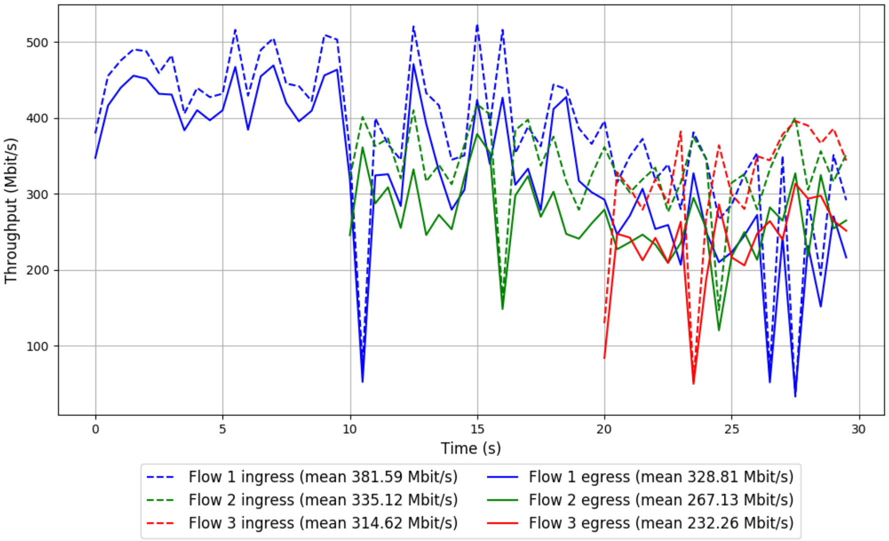
Run 6: Report of TCP BBR — Data Link

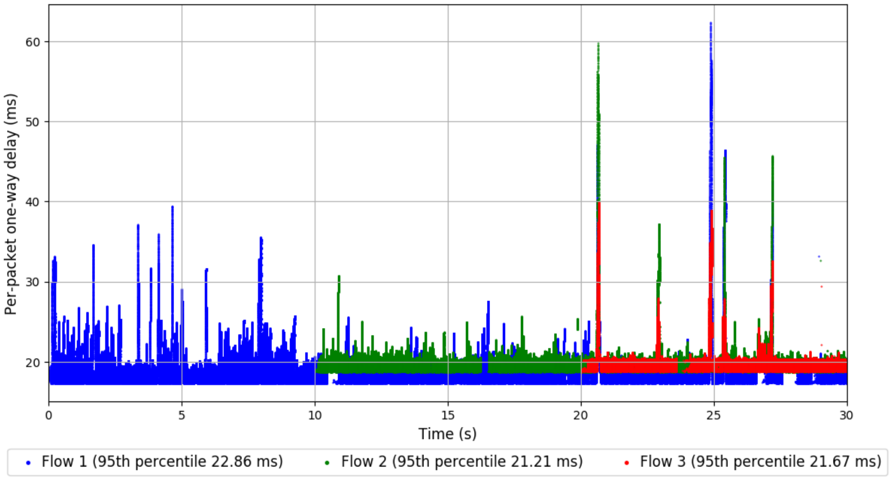




```
Run 7: Statistics of TCP BBR

Start at: 2018-01-17 06:39:16
End at: 2018-01-17 06:39:46
Local clock offset: -2.845 ms
Remote clock offset: -1.833 ms

# Below is generated by plot.py at 2018-01-17 10:59:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 583.63 Mbit/s
95th percentile per-packet one-way delay: 22.126 ms
Loss rate: 17.68%
-- Flow 1:
Average throughput: 328.81 Mbit/s
95th percentile per-packet one-way delay: 22.864 ms
Loss rate: 13.83%
-- Flow 2:
Average throughput: 267.13 Mbit/s
95th percentile per-packet one-way delay: 21.208 ms
Loss rate: 20.28%
-- Flow 3:
Average throughput: 232.26 Mbit/s
95th percentile per-packet one-way delay: 21.666 ms
Loss rate: 26.17%
```

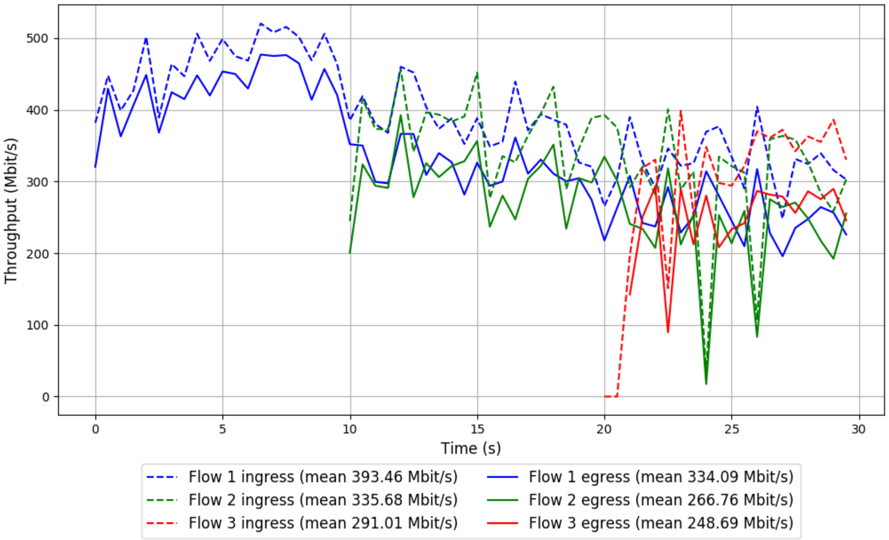
Run 7: Report of TCP BBR — Data Link

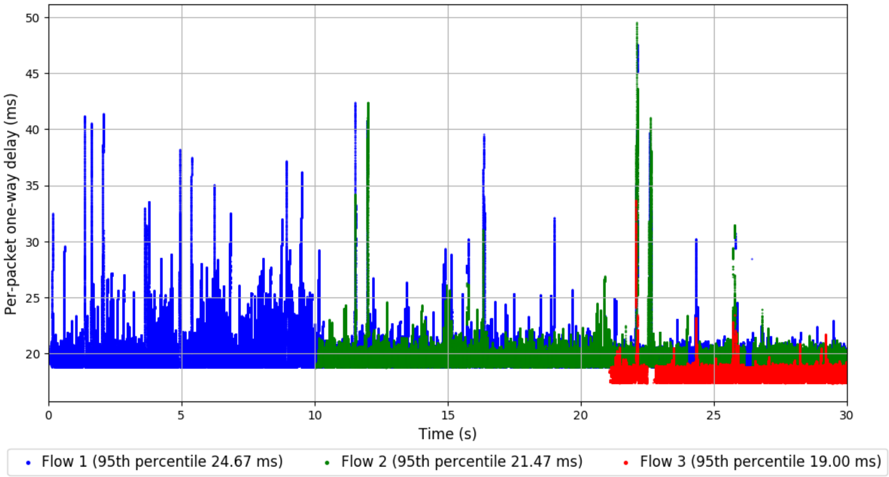




```
Run 8: Statistics of TCP BBR

Start at: 2018-01-17 07:06:58
End at: 2018-01-17 07:07:28
Local clock offset: -3.601 ms
Remote clock offset: -1.83 ms

# Below is generated by plot.py at 2018-01-17 10:59:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 585.80 Mbit/s
95th percentile per-packet one-way delay: 23.508 ms
Loss rate: 17.90%
-- Flow 1:
Average throughput: 334.09 Mbit/s
95th percentile per-packet one-way delay: 24.669 ms
Loss rate: 15.09%
-- Flow 2:
Average throughput: 266.76 Mbit/s
95th percentile per-packet one-way delay: 21.470 ms
Loss rate: 20.53%
-- Flow 3:
Average throughput: 248.69 Mbit/s
95th percentile per-packet one-way delay: 19.001 ms
Loss rate: 23.31%
```

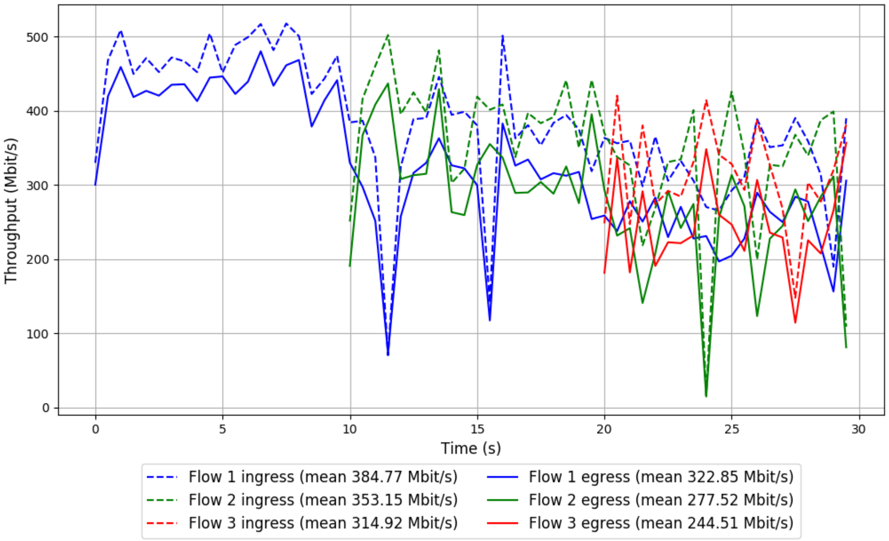
Run 8: Report of TCP BBR — Data Link

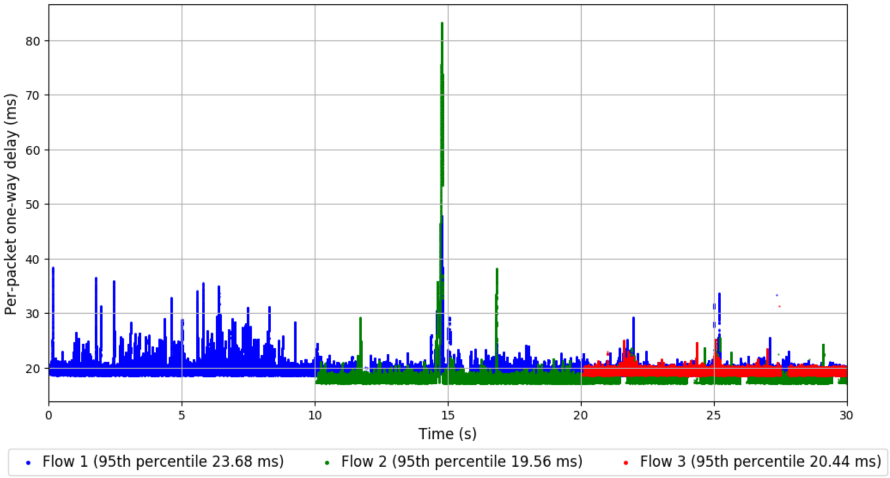




```
Run 9: Statistics of TCP BBR

Start at: 2018-01-17 07:34:27
End at: 2018-01-17 07:34:57
Local clock offset: -4.433 ms
Remote clock offset: -1.729 ms

# Below is generated by plot.py at 2018-01-17 11:07:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 588.71 Mbit/s
95th percentile per-packet one-way delay: 22.331 ms
Loss rate: 18.72%
-- Flow 1:
Average throughput: 322.85 Mbit/s
95th percentile per-packet one-way delay: 23.678 ms
Loss rate: 16.09%
-- Flow 2:
Average throughput: 277.52 Mbit/s
95th percentile per-packet one-way delay: 19.557 ms
Loss rate: 21.41%
-- Flow 3:
Average throughput: 244.51 Mbit/s
95th percentile per-packet one-way delay: 20.437 ms
Loss rate: 22.36%
```

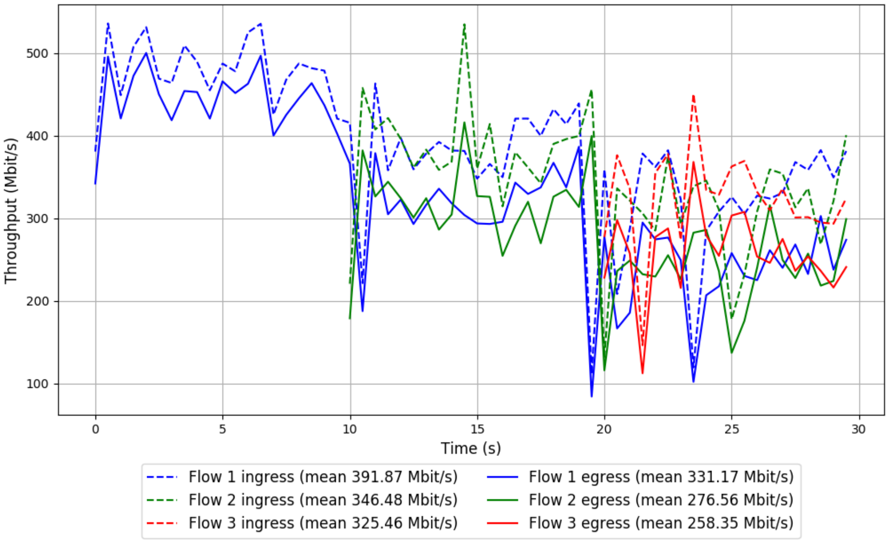
Run 9: Report of TCP BBR — Data Link

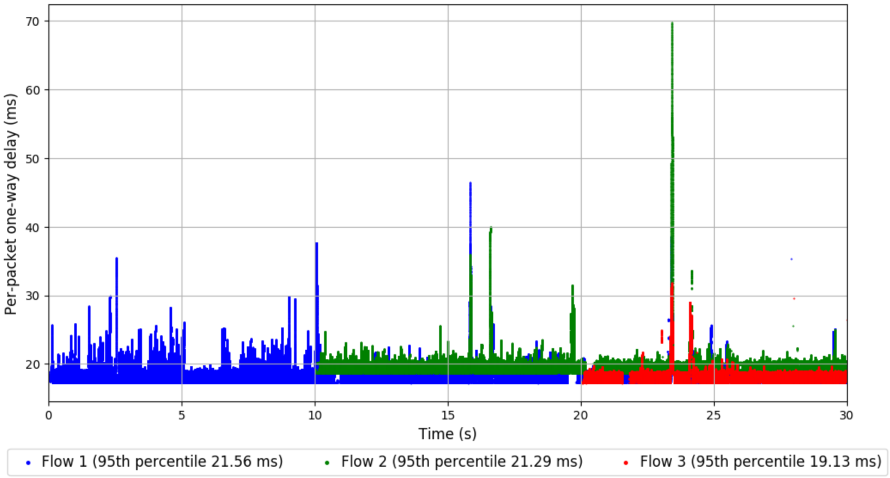




```
Run 10: Statistics of TCP BBR

Start at: 2018-01-17 08:01:57
End at: 2018-01-17 08:02:27
Local clock offset: -5.145 ms
Remote clock offset: -2.168 ms

# Below is generated by plot.py at 2018-01-17 11:07:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 601.03 Mbit/s
95th percentile per-packet one-way delay: 21.291 ms
Loss rate: 17.72%
-- Flow 1:
Average throughput: 331.17 Mbit/s
95th percentile per-packet one-way delay: 21.564 ms
Loss rate: 15.49%
-- Flow 2:
Average throughput: 276.56 Mbit/s
95th percentile per-packet one-way delay: 21.292 ms
Loss rate: 20.18%
-- Flow 3:
Average throughput: 258.35 Mbit/s
95th percentile per-packet one-way delay: 19.126 ms
Loss rate: 20.55%
```

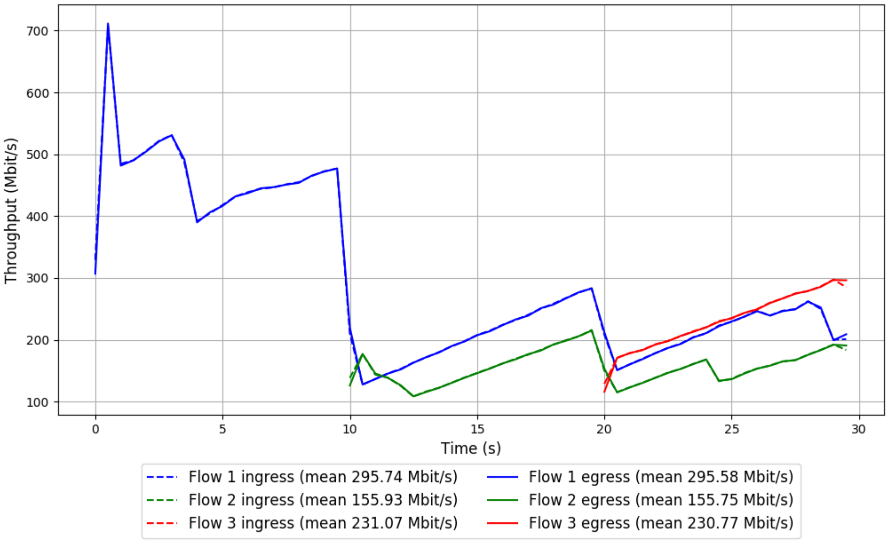
Run 10: Report of TCP BBR — Data Link

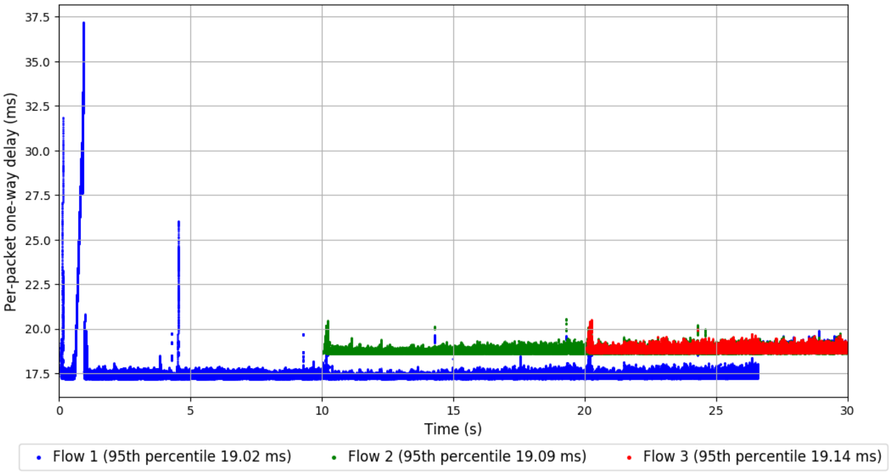




```
Run 1: Statistics of TCP Cubic

Start at: 2018-01-17 03:46:13
End at: 2018-01-17 03:46:43
Local clock offset: -1.272 ms
Remote clock offset: -2.41 ms

# Below is generated by plot.py at 2018-01-17 11:07:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 475.90 Mbit/s
95th percentile per-packet one-way delay: 19.089 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 295.58 Mbit/s
95th percentile per-packet one-way delay: 19.020 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 155.75 Mbit/s
95th percentile per-packet one-way delay: 19.094 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 230.77 Mbit/s
95th percentile per-packet one-way delay: 19.139 ms
Loss rate: 0.13%
```

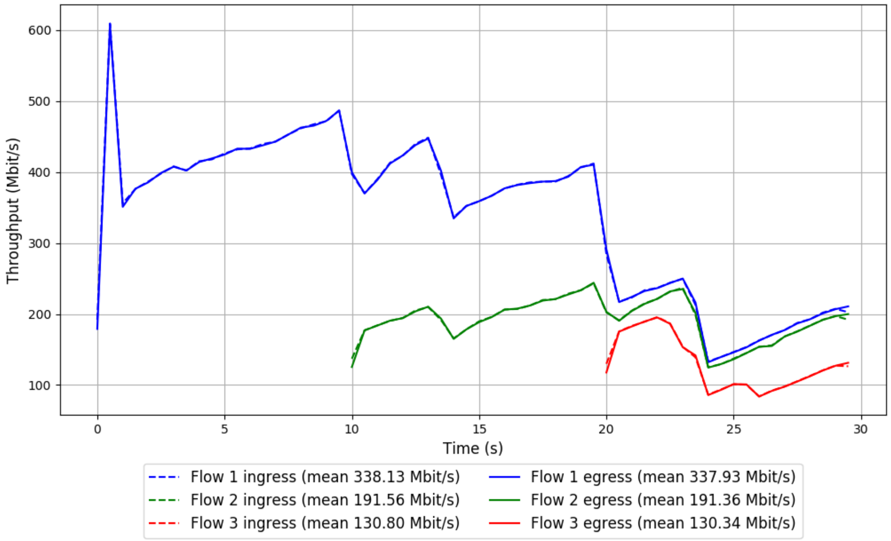
Run 1: Report of TCP Cubic — Data Link

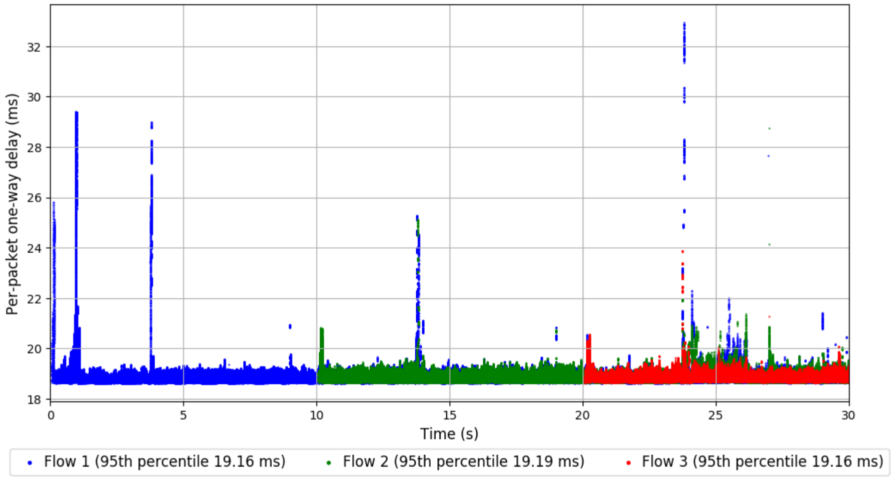




```
Run 2: Statistics of TCP Cubic

Start at: 2018-01-17 04:13:42
End at: 2018-01-17 04:14:12
Local clock offset: -1.715 ms
Remote clock offset: -3.028 ms

# Below is generated by plot.py at 2018-01-17 11:07:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 508.60 Mbit/s
95th percentile per-packet one-way delay: 19.169 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 337.93 Mbit/s
95th percentile per-packet one-way delay: 19.157 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 191.36 Mbit/s
95th percentile per-packet one-way delay: 19.193 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 130.34 Mbit/s
95th percentile per-packet one-way delay: 19.155 ms
Loss rate: 0.36%
```

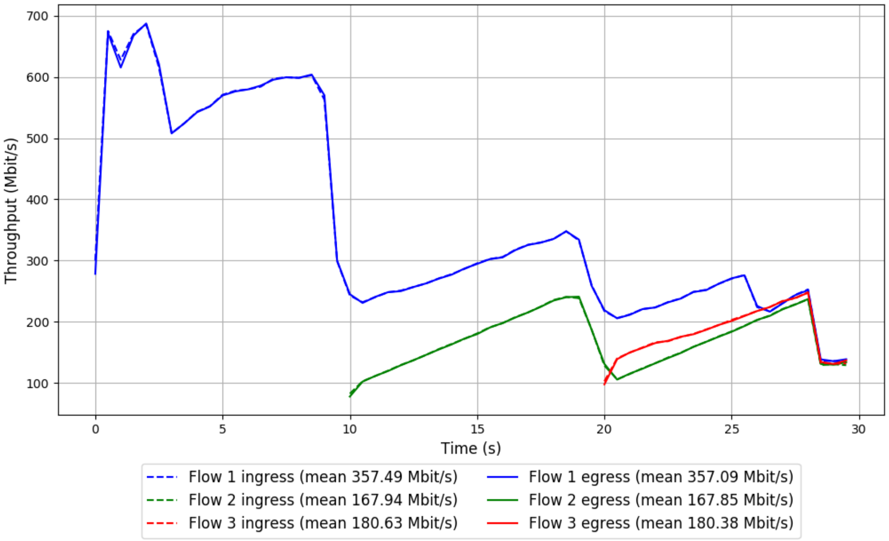
Run 2: Report of TCP Cubic — Data Link

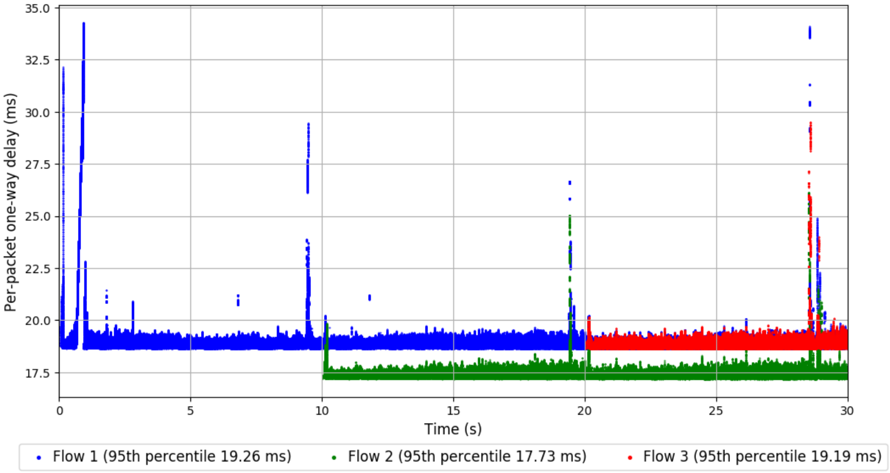




```
Run 3: Statistics of TCP Cubic

Start at: 2018-01-17 04:41:11
End at: 2018-01-17 04:41:41
Local clock offset: -2.009 ms
Remote clock offset: -2.373 ms

# Below is generated by plot.py at 2018-01-17 11:07:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 528.77 Mbit/s
95th percentile per-packet one-way delay: 19.200 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 357.09 Mbit/s
95th percentile per-packet one-way delay: 19.257 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 167.85 Mbit/s
95th percentile per-packet one-way delay: 17.732 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 180.38 Mbit/s
95th percentile per-packet one-way delay: 19.187 ms
Loss rate: 0.14%
```

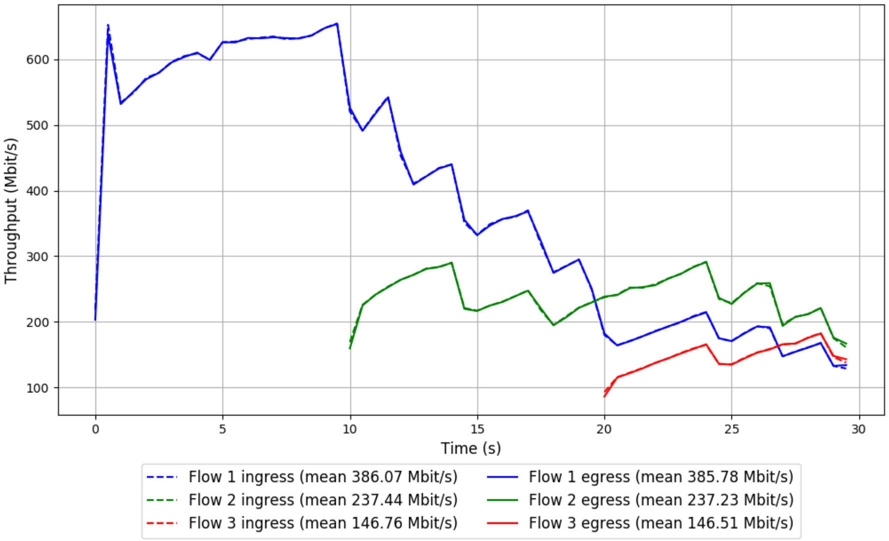
Run 3: Report of TCP Cubic — Data Link

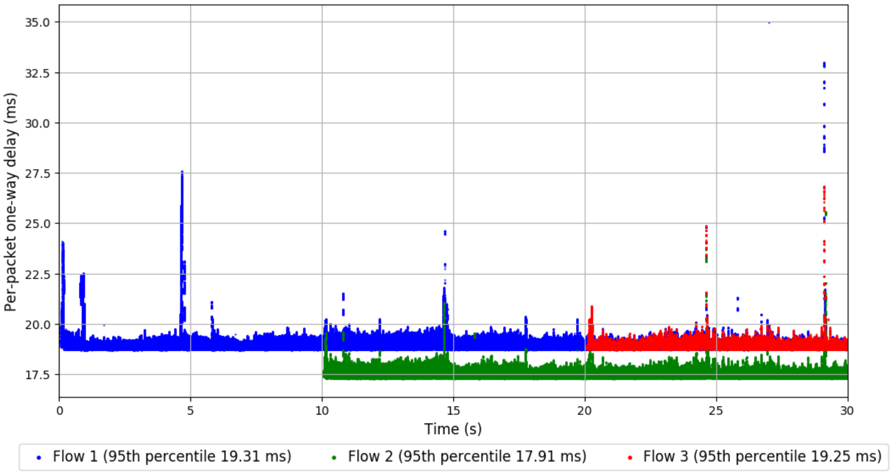




```
Run 4: Statistics of TCP Cubic

Start at: 2018-01-17 05:08:31
End at: 2018-01-17 05:09:01
Local clock offset: -2.369 ms
Remote clock offset: -2.082 ms

# Below is generated by plot.py at 2018-01-17 11:07:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 592.40 Mbit/s
95th percentile per-packet one-way delay: 19.260 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 385.78 Mbit/s
95th percentile per-packet one-way delay: 19.313 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 237.23 Mbit/s
95th percentile per-packet one-way delay: 17.908 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 146.51 Mbit/s
95th percentile per-packet one-way delay: 19.254 ms
Loss rate: 0.17%
```

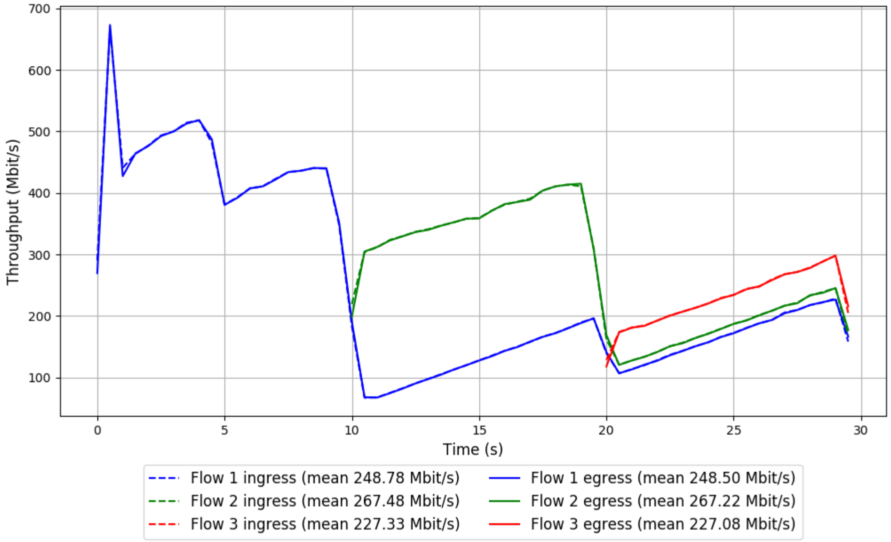
Run 4: Report of TCP Cubic — Data Link

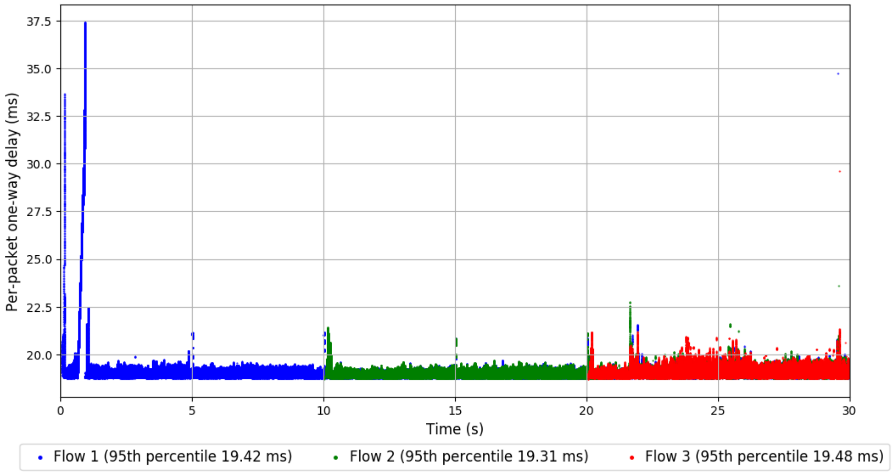




```
Run 5: Statistics of TCP Cubic

Start at: 2018-01-17 05:36:24
End at: 2018-01-17 05:36:54
Local clock offset: -2.958 ms
Remote clock offset: -2.155 ms

# Below is generated by plot.py at 2018-01-17 11:07:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 501.84 Mbit/s
95th percentile per-packet one-way delay: 19.387 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 248.50 Mbit/s
95th percentile per-packet one-way delay: 19.418 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 267.22 Mbit/s
95th percentile per-packet one-way delay: 19.306 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 227.08 Mbit/s
95th percentile per-packet one-way delay: 19.475 ms
Loss rate: 0.11%
```

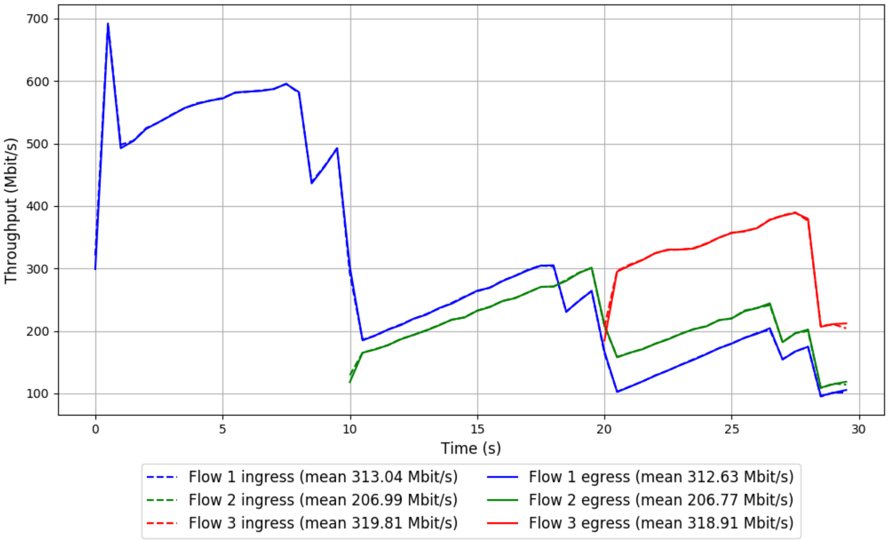
Run 5: Report of TCP Cubic — Data Link

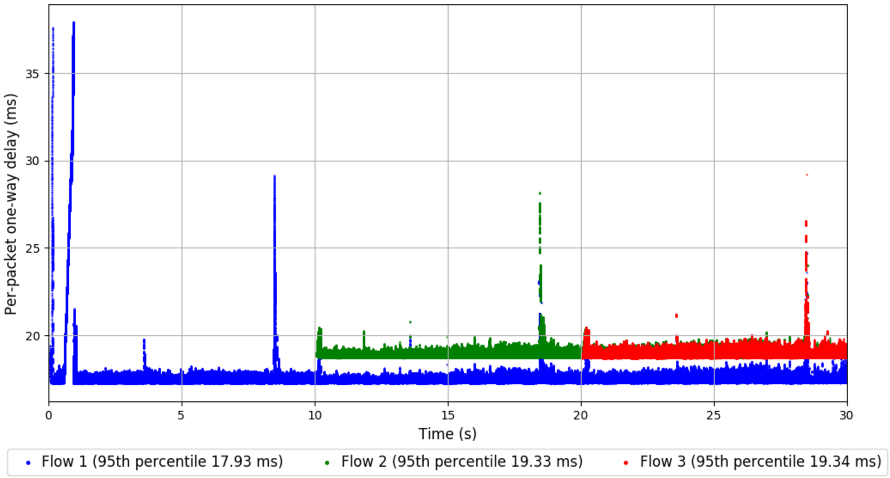




```
Run 6: Statistics of TCP Cubic

Start at: 2018-01-17 06:04:05
End at: 2018-01-17 06:04:35
Local clock offset: -3.014 ms
Remote clock offset: -2.0 ms

# Below is generated by plot.py at 2018-01-17 11:07:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 556.15 Mbit/s
95th percentile per-packet one-way delay: 19.263 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 312.63 Mbit/s
95th percentile per-packet one-way delay: 17.925 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 206.77 Mbit/s
95th percentile per-packet one-way delay: 19.326 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 318.91 Mbit/s
95th percentile per-packet one-way delay: 19.341 ms
Loss rate: 0.28%
```

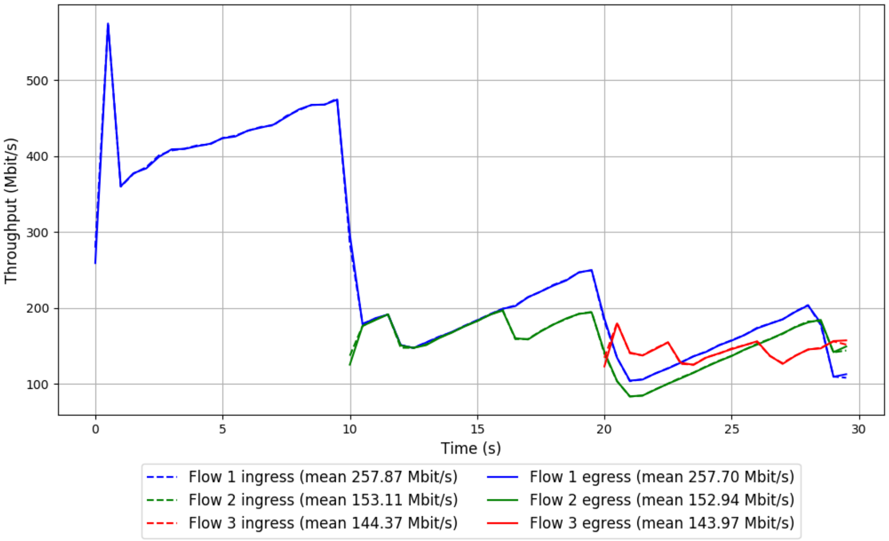
Run 6: Report of TCP Cubic — Data Link

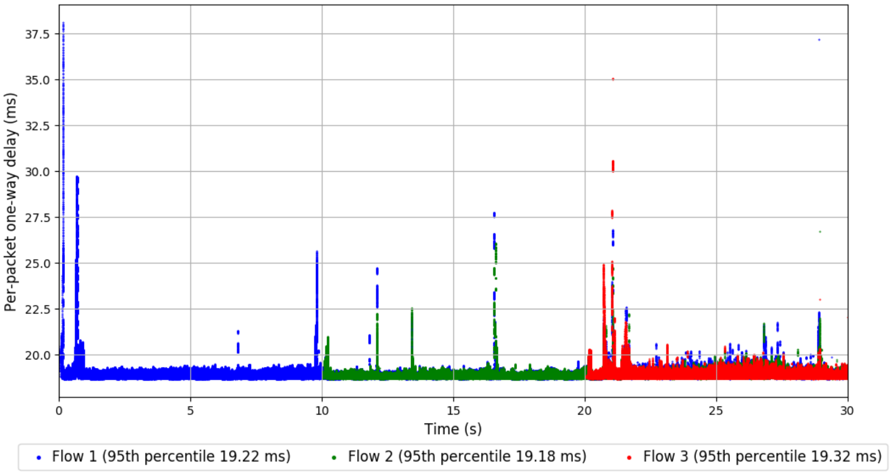




```
Run 7: Statistics of TCP Cubic

Start at: 2018-01-17 06:31:48
End at: 2018-01-17 06:32:18
Local clock offset: -2.682 ms
Remote clock offset: -1.734 ms

# Below is generated by plot.py at 2018-01-17 11:10:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 407.30 Mbit/s
95th percentile per-packet one-way delay: 19.223 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 257.70 Mbit/s
95th percentile per-packet one-way delay: 19.220 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 152.94 Mbit/s
95th percentile per-packet one-way delay: 19.184 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 143.97 Mbit/s
95th percentile per-packet one-way delay: 19.323 ms
Loss rate: 0.24%
```

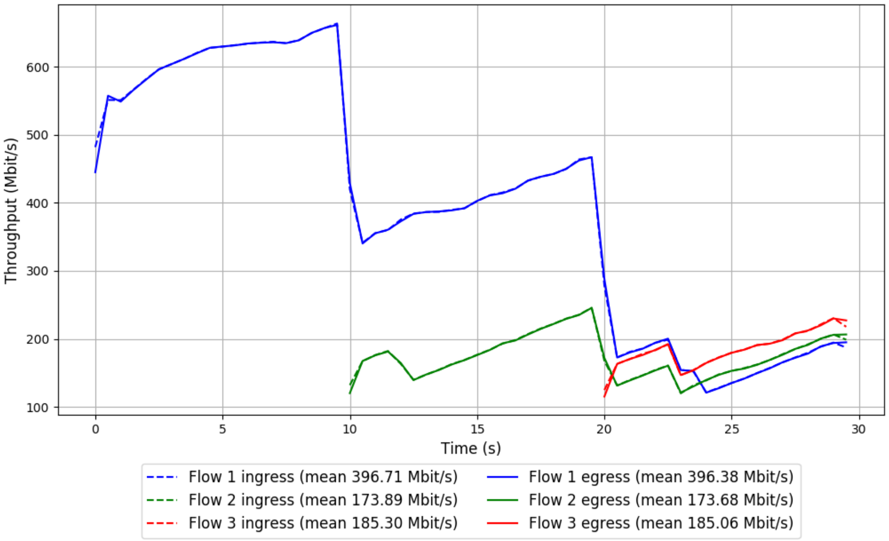
Run 7: Report of TCP Cubic — Data Link

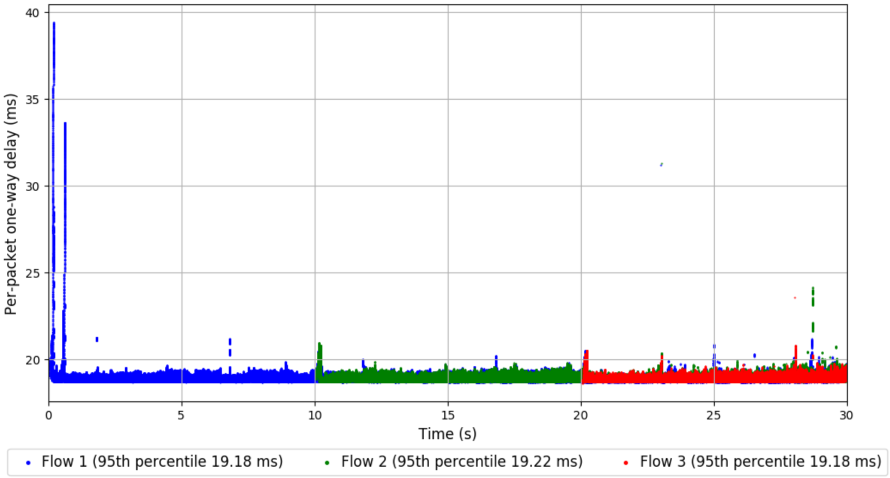




```
Run 8: Statistics of TCP Cubic

Start at: 2018-01-17 06:59:43
End at: 2018-01-17 07:00:13
Local clock offset: -3.299 ms
Remote clock offset: -1.894 ms

# Below is generated by plot.py at 2018-01-17 11:14:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 573.48 Mbit/s
95th percentile per-packet one-way delay: 19.190 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 396.38 Mbit/s
95th percentile per-packet one-way delay: 19.180 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 173.68 Mbit/s
95th percentile per-packet one-way delay: 19.224 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 185.06 Mbit/s
95th percentile per-packet one-way delay: 19.180 ms
Loss rate: 0.12%
```

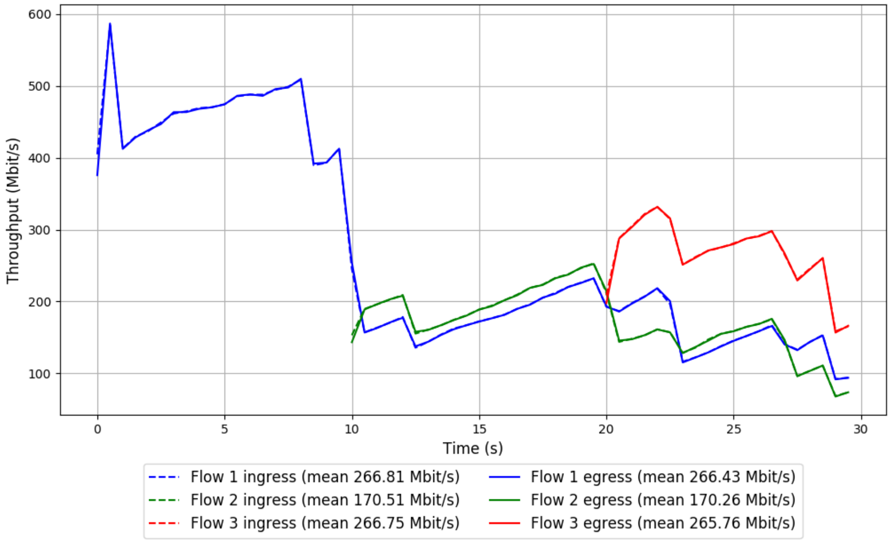
Run 8: Report of TCP Cubic — Data Link

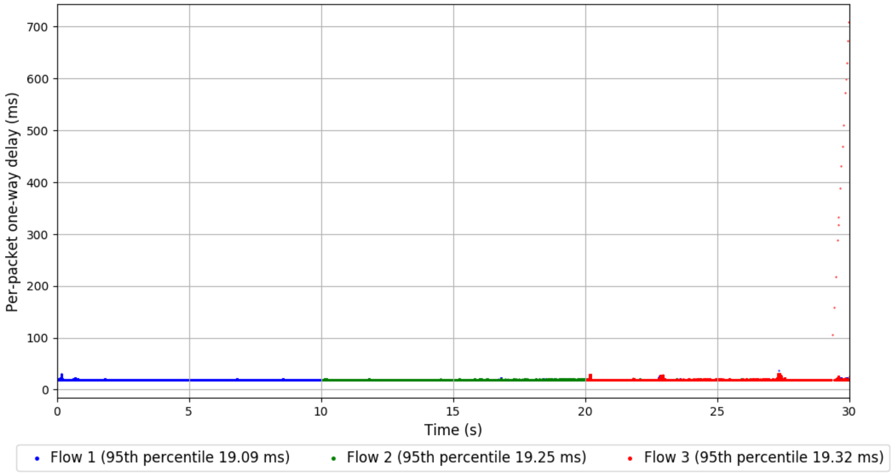




```
Run 9: Statistics of TCP Cubic

Start at: 2018-01-17 07:27:20
End at: 2018-01-17 07:27:50
Local clock offset: -4.203 ms
Remote clock offset: -1.856 ms

# Below is generated by plot.py at 2018-01-17 11:14:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 468.05 Mbit/s
95th percentile per-packet one-way delay: 19.183 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 266.43 Mbit/s
95th percentile per-packet one-way delay: 19.092 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 170.26 Mbit/s
95th percentile per-packet one-way delay: 19.246 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 265.76 Mbit/s
95th percentile per-packet one-way delay: 19.324 ms
Loss rate: 0.31%
```

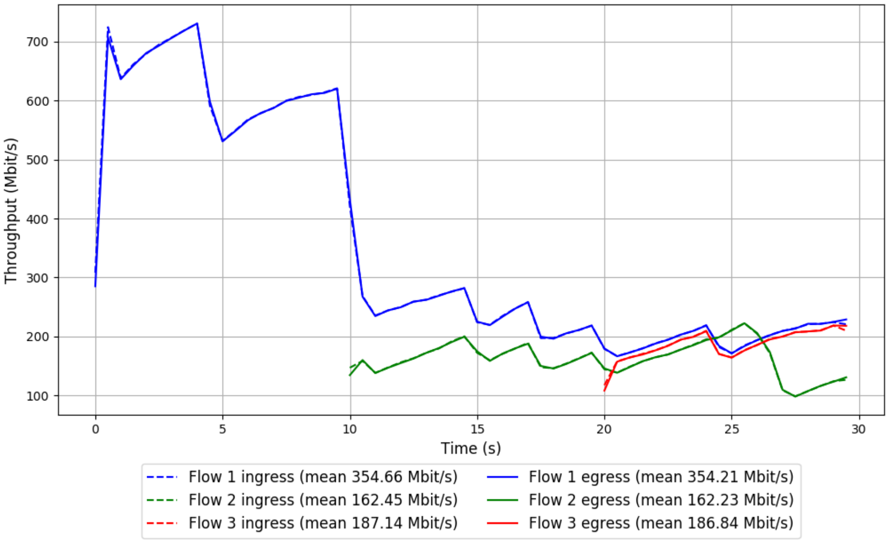
Run 9: Report of TCP Cubic — Data Link

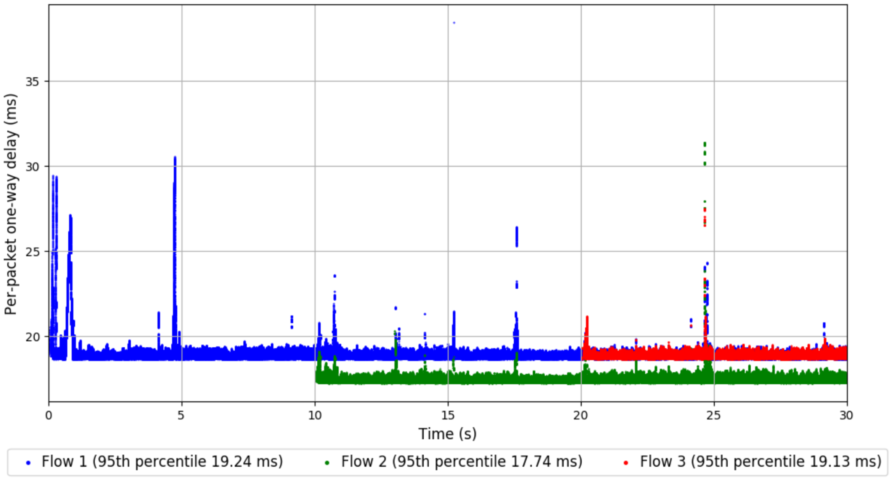




```
Run 10: Statistics of TCP Cubic

Start at: 2018-01-17 07:54:47
End at: 2018-01-17 07:55:17
Local clock offset: -5.015 ms
Remote clock offset: -2.05 ms

# Below is generated by plot.py at 2018-01-17 11:14:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 524.28 Mbit/s
95th percentile per-packet one-way delay: 19.163 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 354.21 Mbit/s
95th percentile per-packet one-way delay: 19.236 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 162.23 Mbit/s
95th percentile per-packet one-way delay: 17.739 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 186.84 Mbit/s
95th percentile per-packet one-way delay: 19.126 ms
Loss rate: 0.16%
```

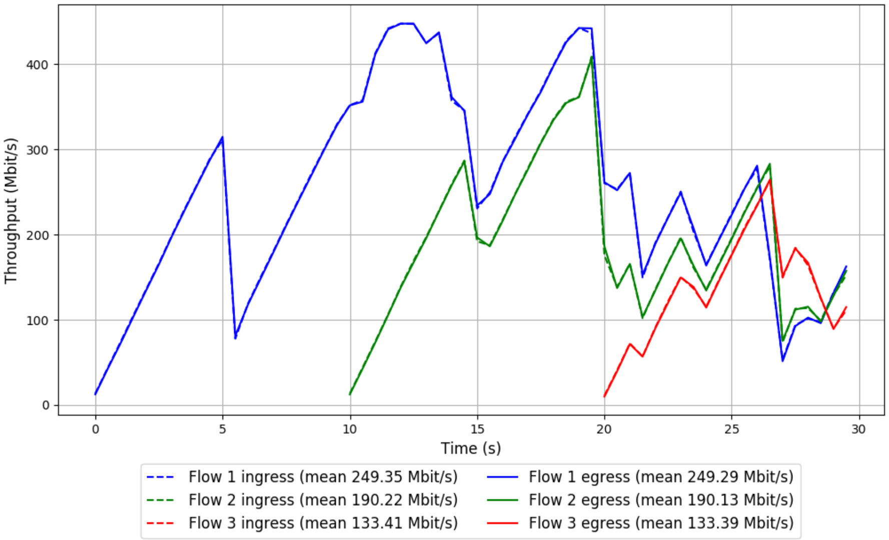
Run 10: Report of TCP Cubic — Data Link

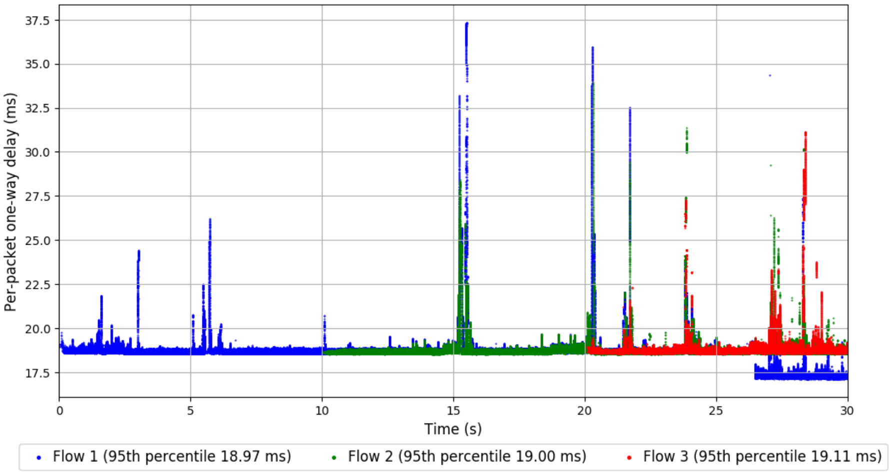




```
Run 1: Statistics of LEDBAT

Start at: 2018-01-17 03:32:00
End at: 2018-01-17 03:32:30
Local clock offset: -1.148 ms
Remote clock offset: -2.355 ms

# Below is generated by plot.py at 2018-01-17 11:14:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 420.00 Mbit/s
95th percentile per-packet one-way delay: 18.988 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 249.29 Mbit/s
95th percentile per-packet one-way delay: 18.966 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 190.13 Mbit/s
95th percentile per-packet one-way delay: 19.002 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 133.39 Mbit/s
95th percentile per-packet one-way delay: 19.114 ms
Loss rate: 0.02%
```

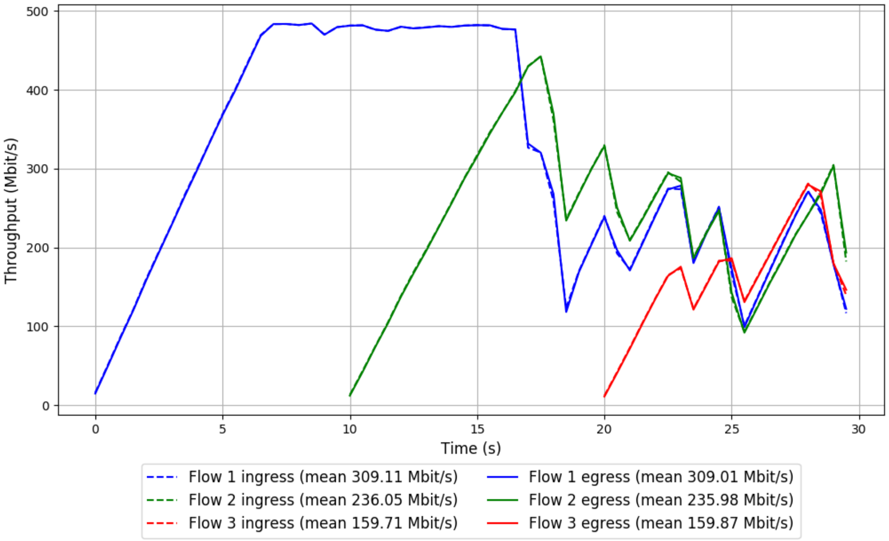
Run 1: Report of LEDBAT — Data Link

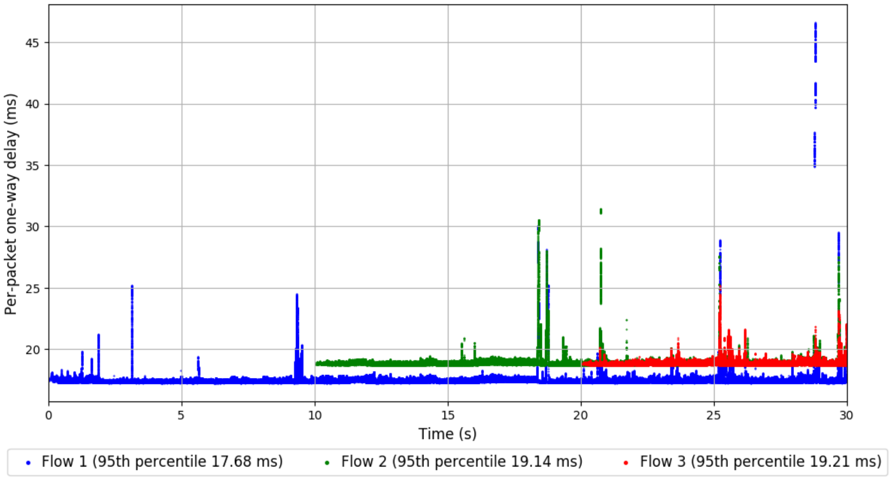




```
Run 2: Statistics of LEDBAT

Start at: 2018-01-17 03:59:22
End at: 2018-01-17 03:59:52
Local clock offset: -1.38 ms
Remote clock offset: -2.715 ms

# Below is generated by plot.py at 2018-01-17 11:14:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 519.06 Mbit/s
95th percentile per-packet one-way delay: 19.058 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 309.01 Mbit/s
95th percentile per-packet one-way delay: 17.679 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 235.98 Mbit/s
95th percentile per-packet one-way delay: 19.141 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 159.87 Mbit/s
95th percentile per-packet one-way delay: 19.211 ms
Loss rate: 0.02%
```

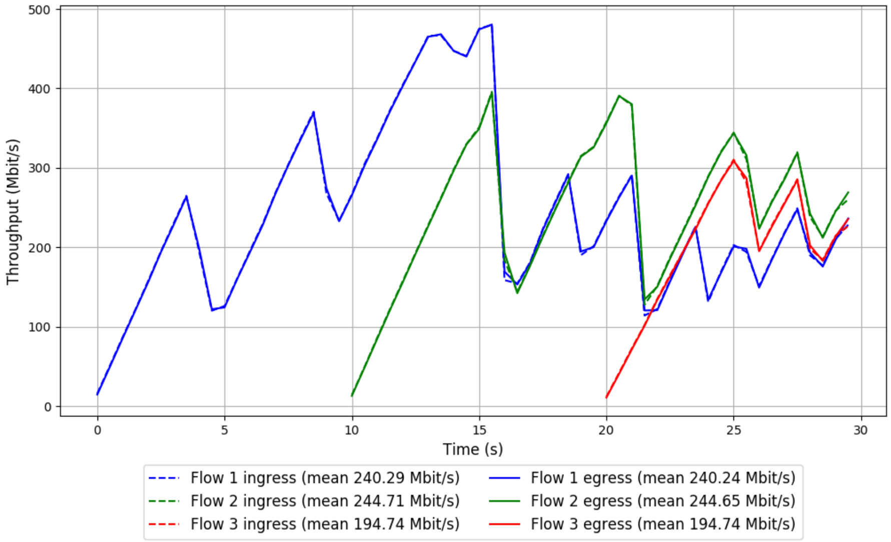
Run 2: Report of LEDBAT — Data Link

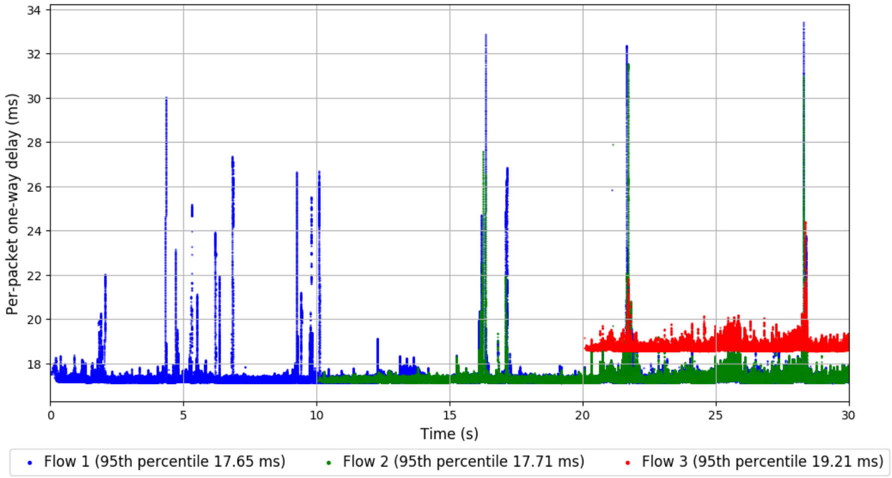




```
Run 3: Statistics of LEDBAT

Start at: 2018-01-17 04:26:51
End at: 2018-01-17 04:27:21
Local clock offset: -1.963 ms
Remote clock offset: -2.739 ms

# Below is generated by plot.py at 2018-01-17 11:14:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 467.60 Mbit/s
95th percentile per-packet one-way delay: 18.852 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 240.24 Mbit/s
95th percentile per-packet one-way delay: 17.649 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 244.65 Mbit/s
95th percentile per-packet one-way delay: 17.711 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 194.74 Mbit/s
95th percentile per-packet one-way delay: 19.210 ms
Loss rate: 0.01%
```

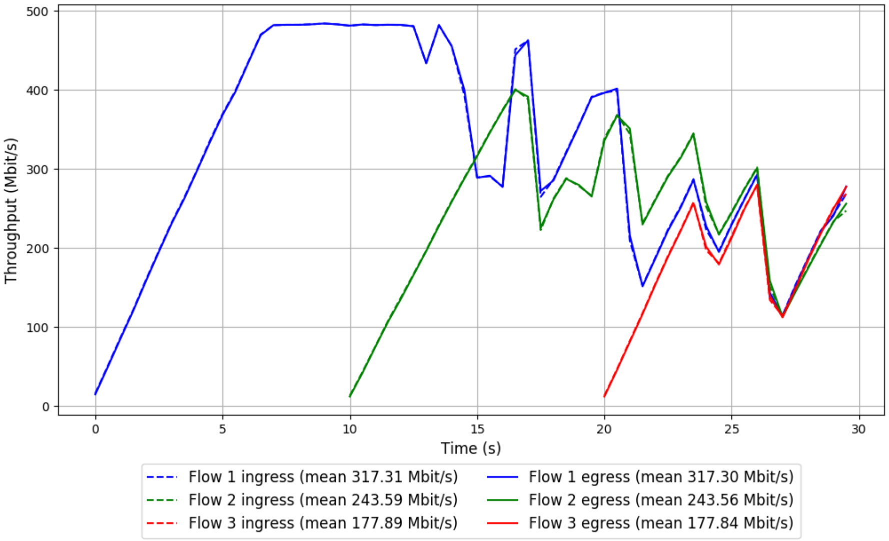
Run 3: Report of LEDBAT — Data Link

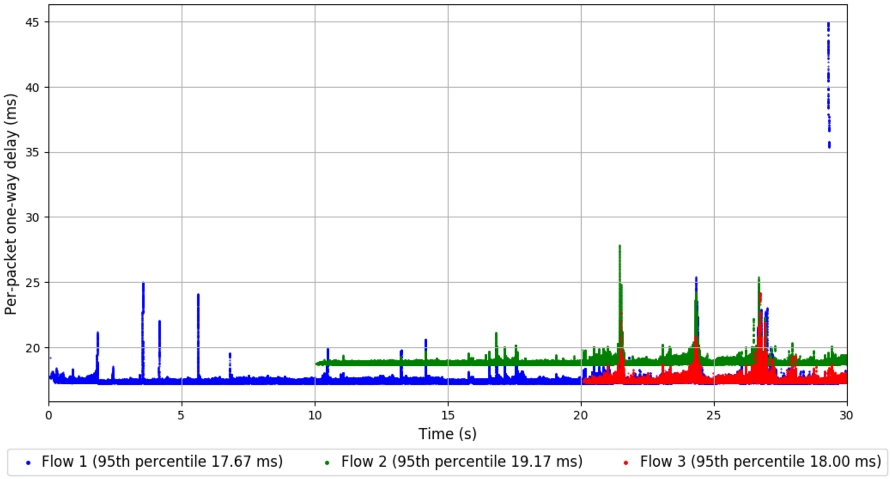




```
Run 4: Statistics of LEDBAT

Start at: 2018-01-17 04:54:30
End at: 2018-01-17 04:55:00
Local clock offset: -2.313 ms
Remote clock offset: -2.171 ms

# Below is generated by plot.py at 2018-01-17 11:15:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 538.29 Mbit/s
95th percentile per-packet one-way delay: 18.962 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 317.30 Mbit/s
95th percentile per-packet one-way delay: 17.671 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 243.56 Mbit/s
95th percentile per-packet one-way delay: 19.167 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 177.84 Mbit/s
95th percentile per-packet one-way delay: 18.002 ms
Loss rate: 0.02%
```

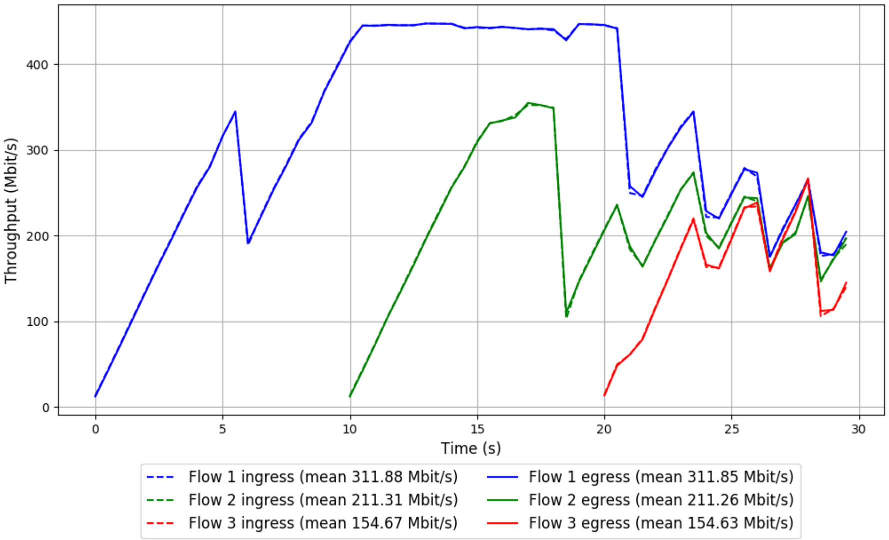
Run 4: Report of LEDBAT — Data Link

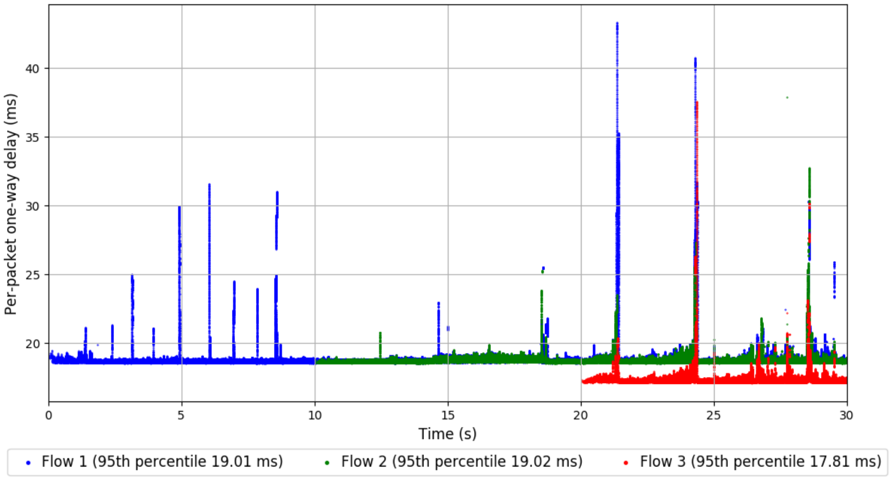




```
Run 5: Statistics of LEDBAT

Start at: 2018-01-17 05:22:02
End at: 2018-01-17 05:22:32
Local clock offset: -2.539 ms
Remote clock offset: -1.973 ms

# Below is generated by plot.py at 2018-01-17 11:17:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 503.87 Mbit/s
95th percentile per-packet one-way delay: 19.003 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 311.85 Mbit/s
95th percentile per-packet one-way delay: 19.011 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 211.26 Mbit/s
95th percentile per-packet one-way delay: 19.022 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 154.63 Mbit/s
95th percentile per-packet one-way delay: 17.809 ms
Loss rate: 0.03%
```

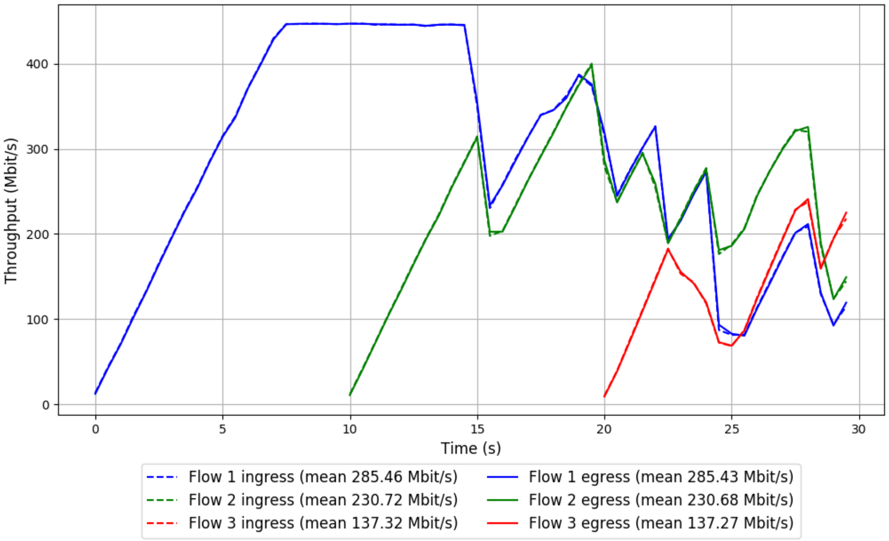
Run 5: Report of LEDBAT — Data Link

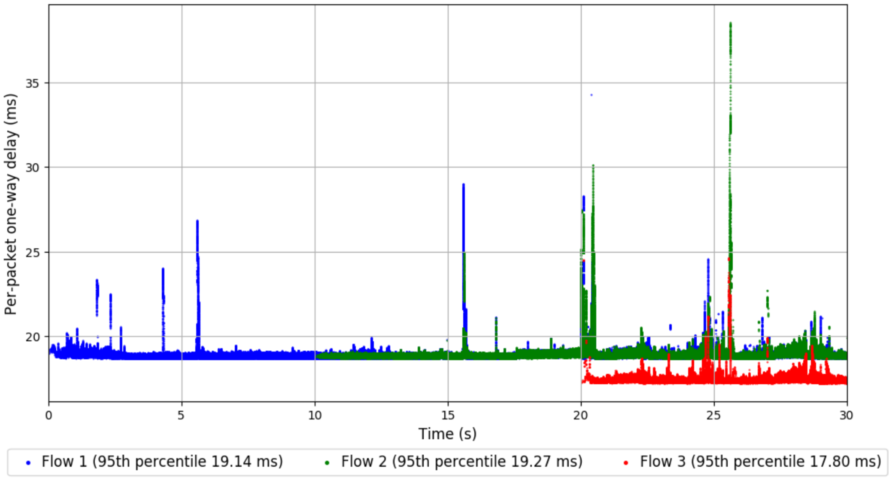




```
Run 6: Statistics of LEDBAT

Start at: 2018-01-17 05:49:40
End at: 2018-01-17 05:50:10
Local clock offset: -3.249 ms
Remote clock offset: -2.188 ms

# Below is generated by plot.py at 2018-01-17 11:19:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 484.45 Mbit/s
95th percentile per-packet one-way delay: 19.157 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 285.43 Mbit/s
95th percentile per-packet one-way delay: 19.135 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 230.68 Mbit/s
95th percentile per-packet one-way delay: 19.267 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 137.27 Mbit/s
95th percentile per-packet one-way delay: 17.804 ms
Loss rate: 0.04%
```

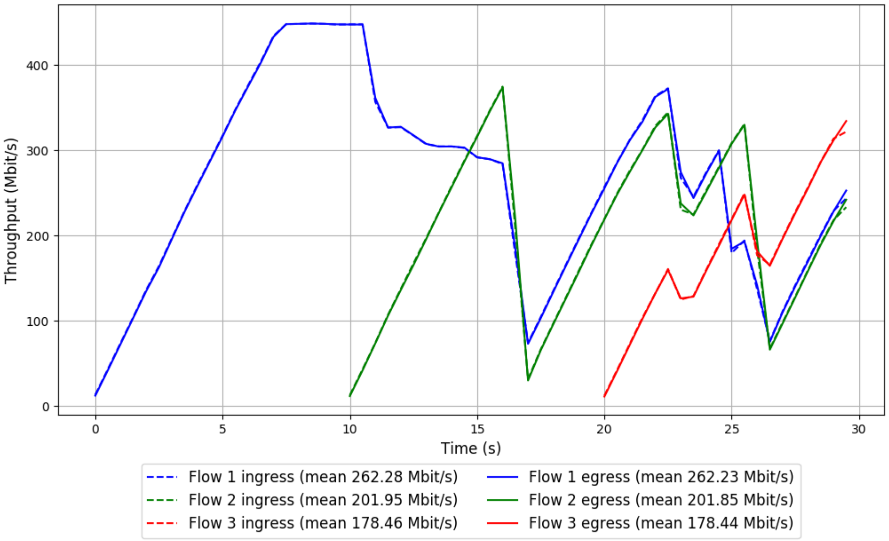
Run 6: Report of LEDBAT — Data Link

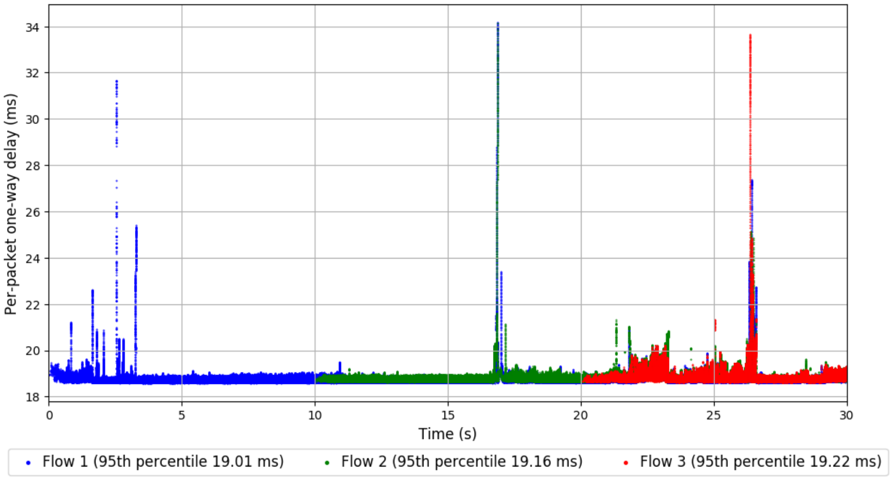




```
Run 7: Statistics of LEDBAT

Start at: 2018-01-17 06:17:16
End at: 2018-01-17 06:17:46
Local clock offset: -2.527 ms
Remote clock offset: -1.917 ms

# Below is generated by plot.py at 2018-01-17 11:19:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 455.80 Mbit/s
95th percentile per-packet one-way delay: 19.096 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 262.23 Mbit/s
95th percentile per-packet one-way delay: 19.014 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 201.85 Mbit/s
95th percentile per-packet one-way delay: 19.158 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 178.44 Mbit/s
95th percentile per-packet one-way delay: 19.221 ms
Loss rate: 0.01%
```

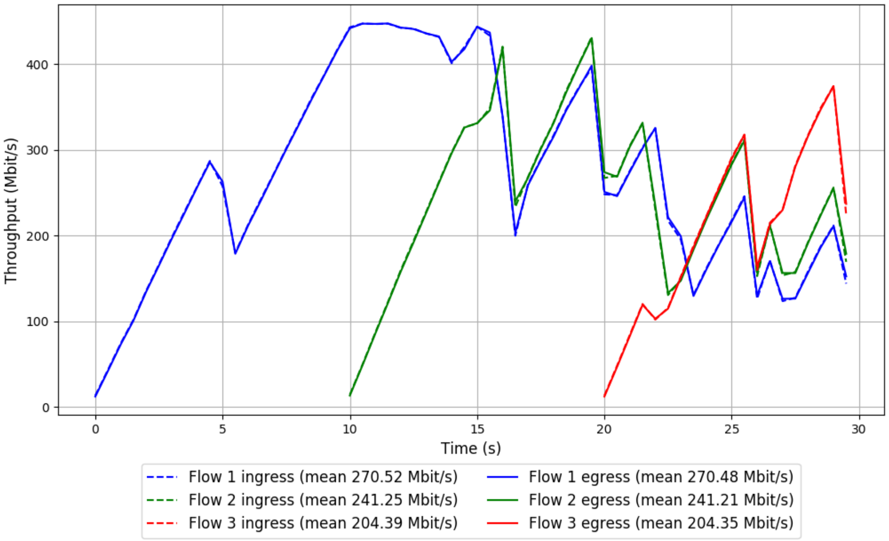
Run 7: Report of LEDBAT — Data Link

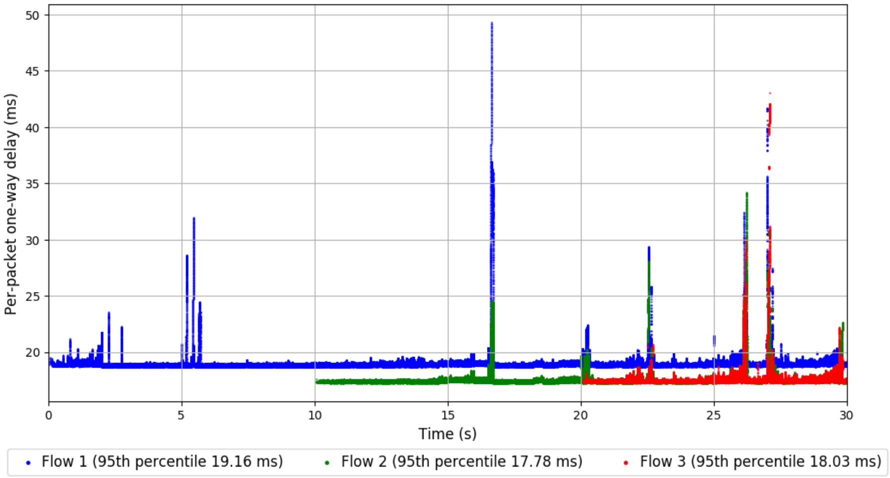




```
Run 8: Statistics of LEDBAT

Start at: 2018-01-17 06:45:17
End at: 2018-01-17 06:45:47
Local clock offset: -3.0 ms
Remote clock offset: -2.053 ms

# Below is generated by plot.py at 2018-01-17 11:20:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 498.70 Mbit/s
95th percentile per-packet one-way delay: 19.089 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 270.48 Mbit/s
95th percentile per-packet one-way delay: 19.160 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 241.21 Mbit/s
95th percentile per-packet one-way delay: 17.783 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 204.35 Mbit/s
95th percentile per-packet one-way delay: 18.033 ms
Loss rate: 0.02%
```

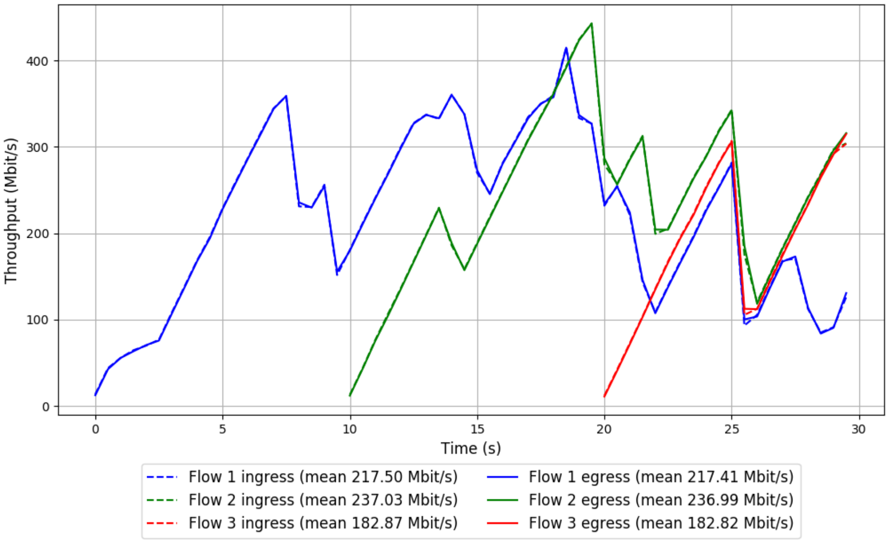
Run 8: Report of LEDBAT — Data Link

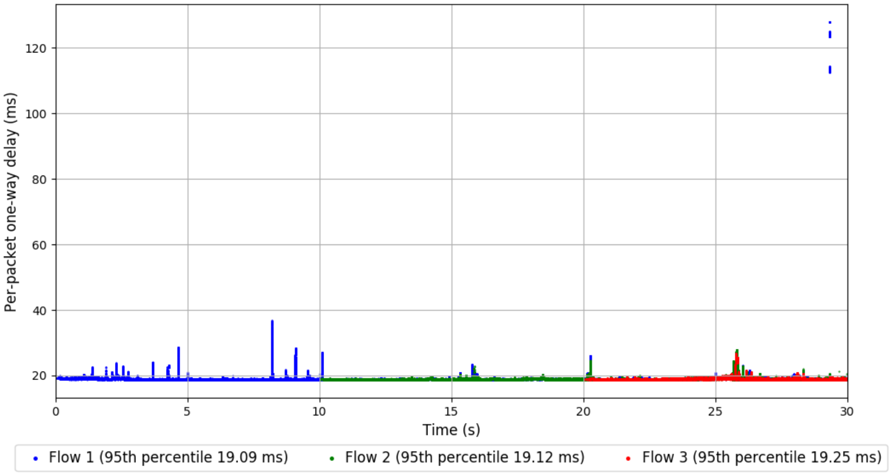




```
Run 9: Statistics of LEDBAT

Start at: 2018-01-17 07:12:53
End at: 2018-01-17 07:13:23
Local clock offset: -3.742 ms
Remote clock offset: -1.953 ms

# Below is generated by plot.py at 2018-01-17 11:20:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 435.79 Mbit/s
95th percentile per-packet one-way delay: 19.132 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 217.41 Mbit/s
95th percentile per-packet one-way delay: 19.092 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 236.99 Mbit/s
95th percentile per-packet one-way delay: 19.124 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 182.82 Mbit/s
95th percentile per-packet one-way delay: 19.249 ms
Loss rate: 0.03%
```

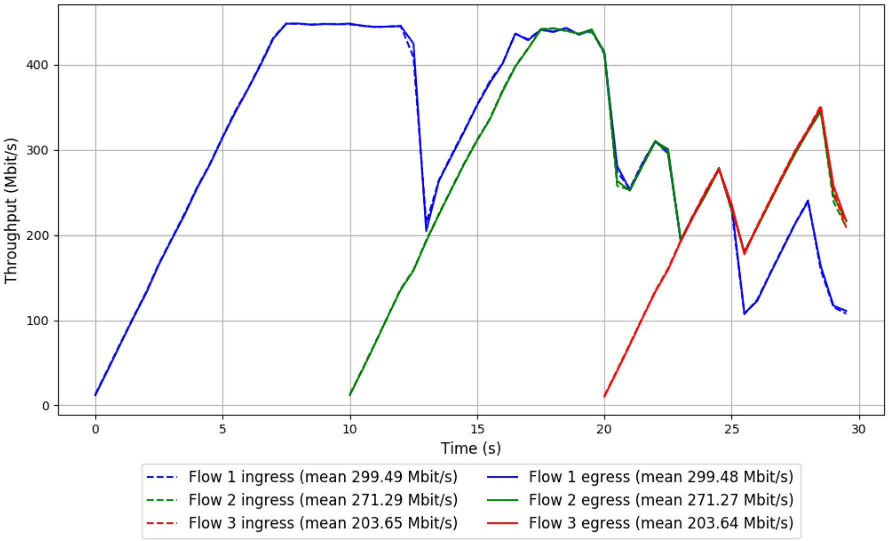
Run 9: Report of LEDBAT — Data Link

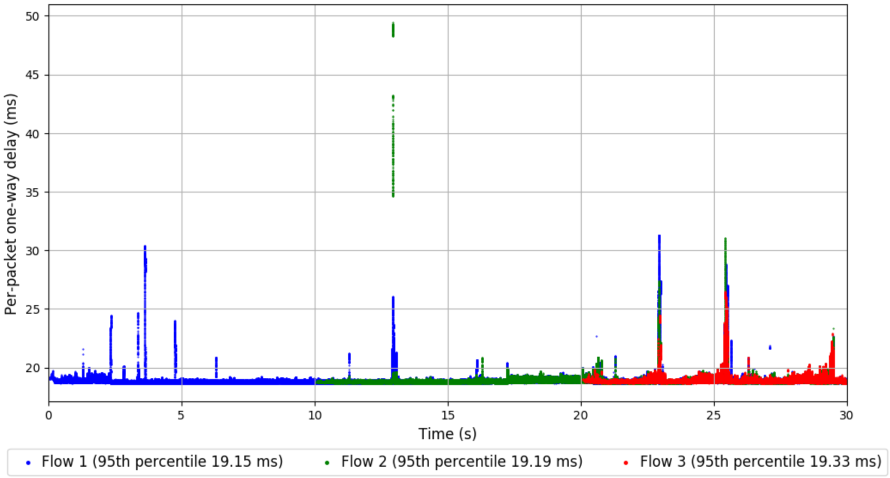




```
Run 10: Statistics of LEDBAT

Start at: 2018-01-17 07:40:24
End at: 2018-01-17 07:40:54
Local clock offset: -4.624 ms
Remote clock offset: -1.7 ms

# Below is generated by plot.py at 2018-01-17 11:21:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 547.57 Mbit/s
95th percentile per-packet one-way delay: 19.183 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 299.48 Mbit/s
95th percentile per-packet one-way delay: 19.151 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 271.27 Mbit/s
95th percentile per-packet one-way delay: 19.187 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 203.64 Mbit/s
95th percentile per-packet one-way delay: 19.328 ms
Loss rate: 0.02%
```

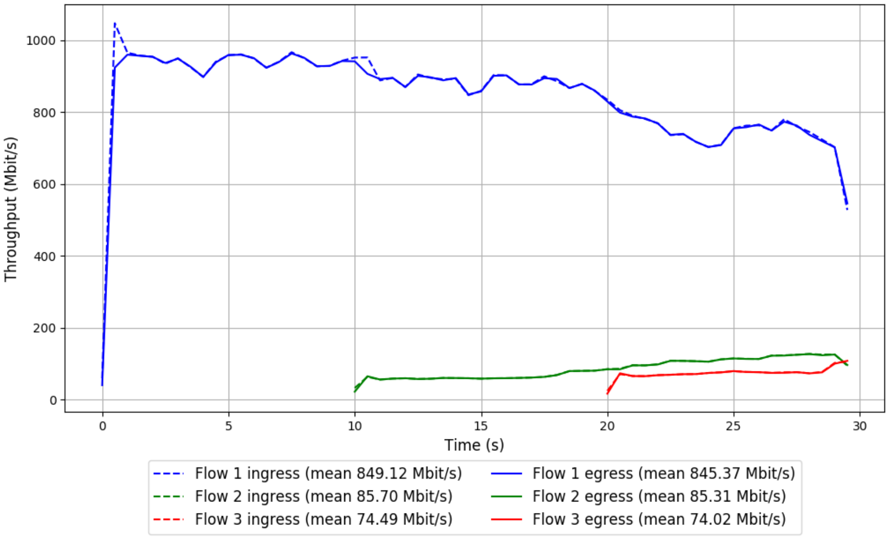
Run 10: Report of LEDBAT — Data Link

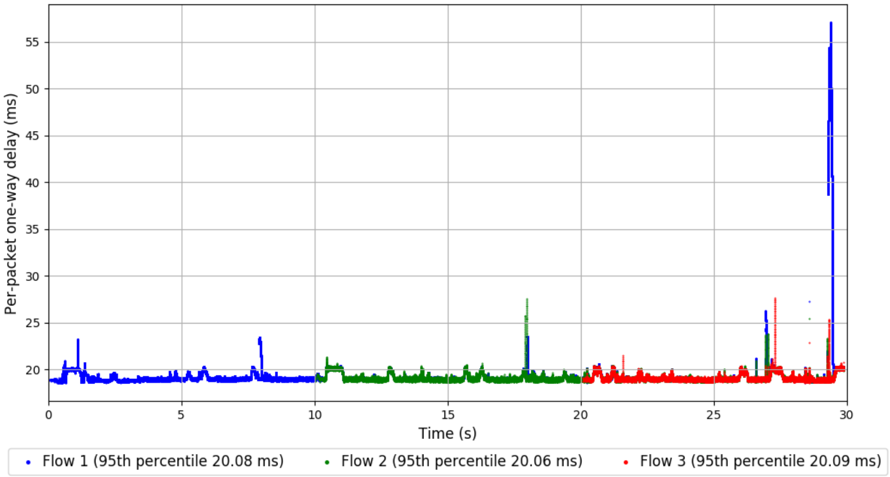




```
Run 1: Statistics of PCC

Start at: 2018-01-17 03:27:43
End at: 2018-01-17 03:28:13
Local clock offset: -1.091 ms
Remote clock offset: -2.415 ms

# Below is generated by plot.py at 2018-01-17 11:26:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 926.45 Mbit/s
95th percentile per-packet one-way delay: 20.083 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 845.37 Mbit/s
95th percentile per-packet one-way delay: 20.084 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 85.31 Mbit/s
95th percentile per-packet one-way delay: 20.057 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 74.02 Mbit/s
95th percentile per-packet one-way delay: 20.094 ms
Loss rate: 0.62%
```

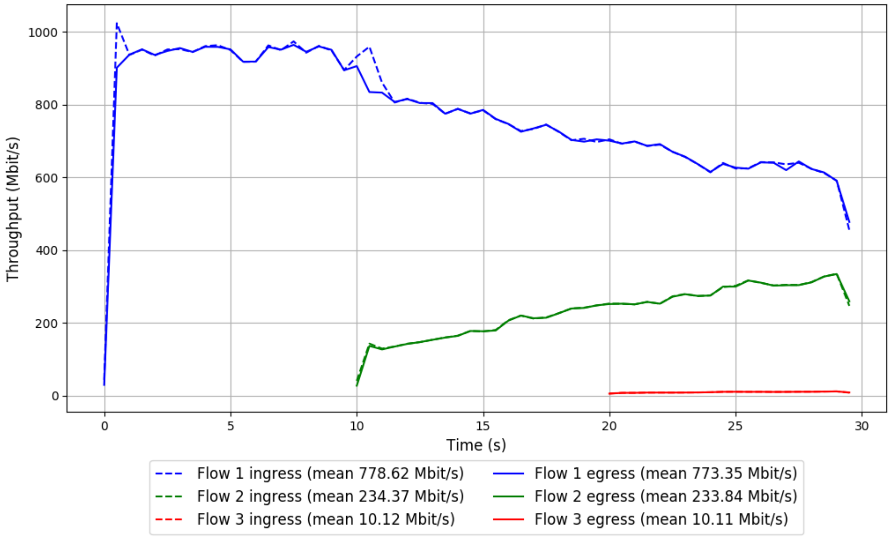
Run 1: Report of PCC — Data Link

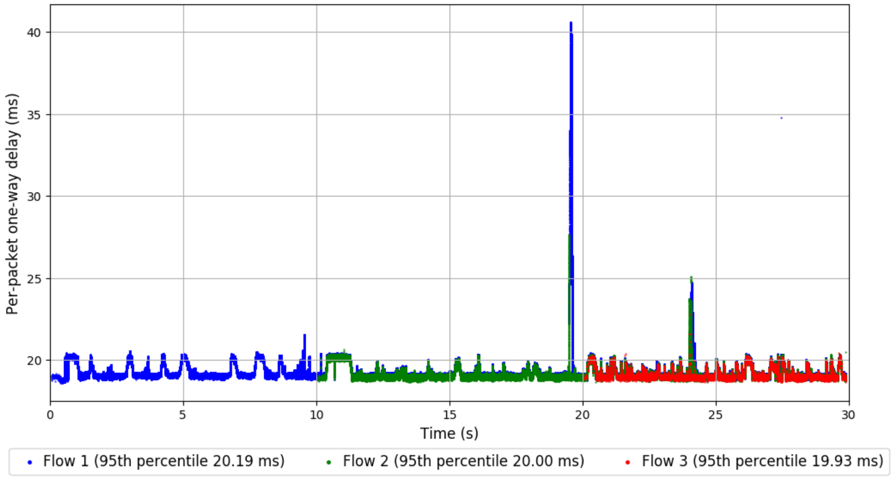




```
Run 2: Statistics of PCC

Start at: 2018-01-17 03:55:06
End at: 2018-01-17 03:55:36
Local clock offset: -1.274 ms
Remote clock offset: -2.6 ms

# Below is generated by plot.py at 2018-01-17 11:27:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 932.08 Mbit/s
95th percentile per-packet one-way delay: 20.180 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 773.35 Mbit/s
95th percentile per-packet one-way delay: 20.193 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 233.84 Mbit/s
95th percentile per-packet one-way delay: 19.998 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 10.11 Mbit/s
95th percentile per-packet one-way delay: 19.931 ms
Loss rate: 0.08%
```

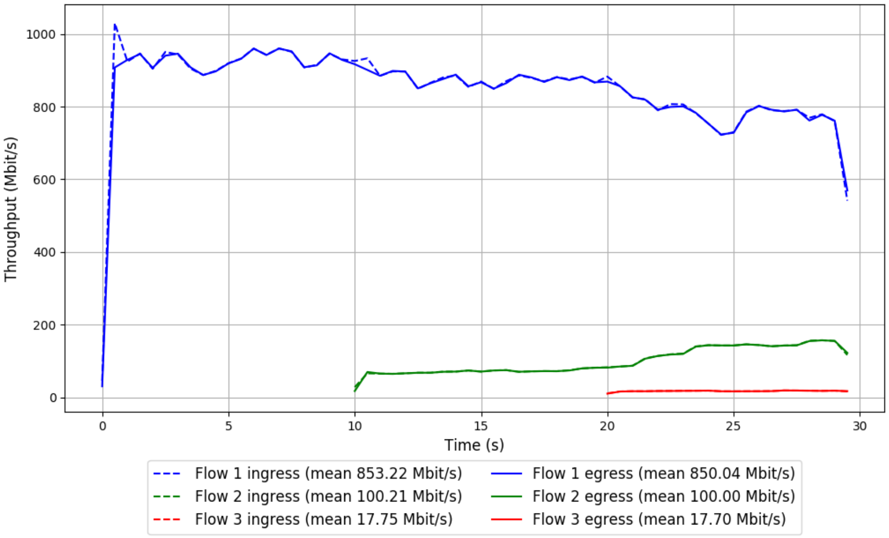
Run 2: Report of PCC — Data Link

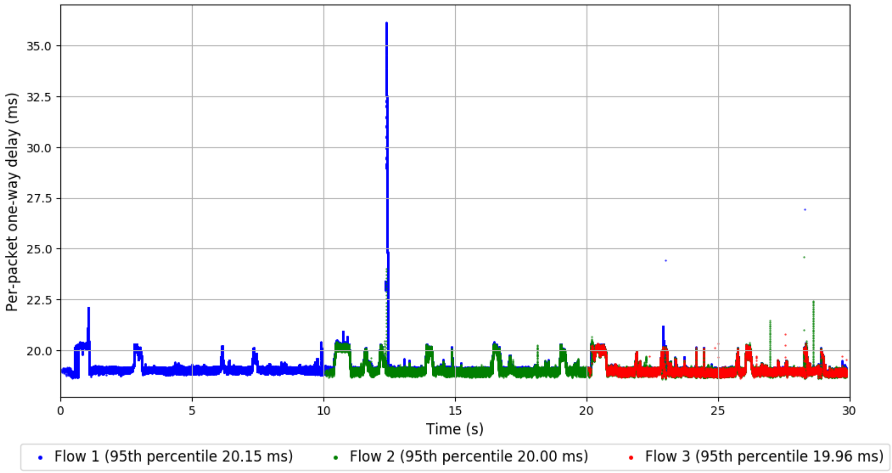




```
Run 3: Statistics of PCC

Start at: 2018-01-17 04:22:36
End at: 2018-01-17 04:23:06
Local clock offset: -1.82 ms
Remote clock offset: -2.751 ms

# Below is generated by plot.py at 2018-01-17 11:31:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 922.33 Mbit/s
95th percentile per-packet one-way delay: 20.140 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 850.04 Mbit/s
95th percentile per-packet one-way delay: 20.150 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 100.00 Mbit/s
95th percentile per-packet one-way delay: 19.999 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 17.70 Mbit/s
95th percentile per-packet one-way delay: 19.962 ms
Loss rate: 0.32%
```

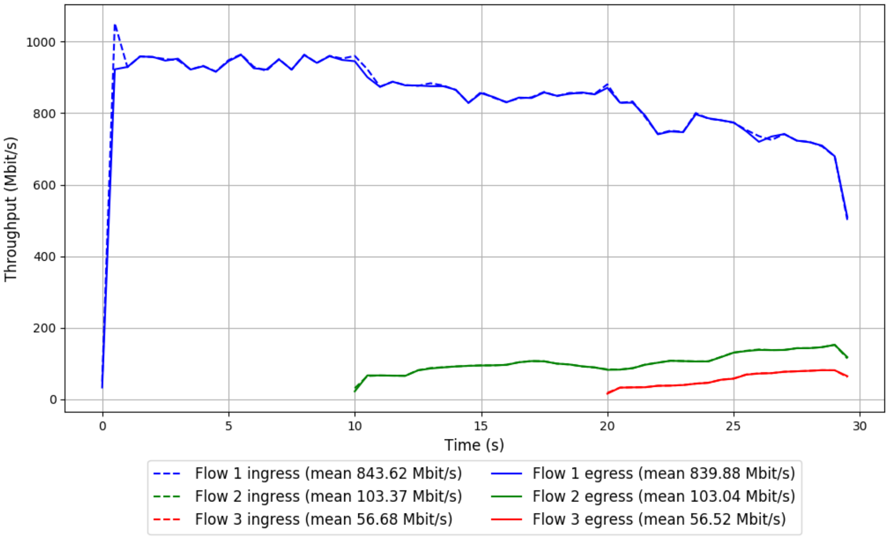
Run 3: Report of PCC — Data Link

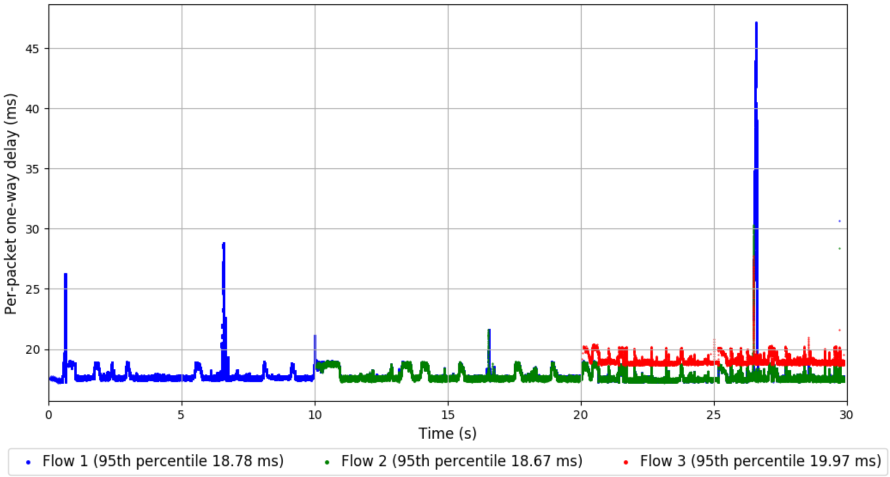




```
Run 4: Statistics of PCC

Start at: 2018-01-17 04:50:14
End at: 2018-01-17 04:50:44
Local clock offset: -2.211 ms
Remote clock offset: -2.19 ms

# Below is generated by plot.py at 2018-01-17 11:32:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 926.96 Mbit/s
95th percentile per-packet one-way delay: 18.811 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 839.88 Mbit/s
95th percentile per-packet one-way delay: 18.783 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 103.04 Mbit/s
95th percentile per-packet one-way delay: 18.667 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 56.52 Mbit/s
95th percentile per-packet one-way delay: 19.973 ms
Loss rate: 0.28%
```

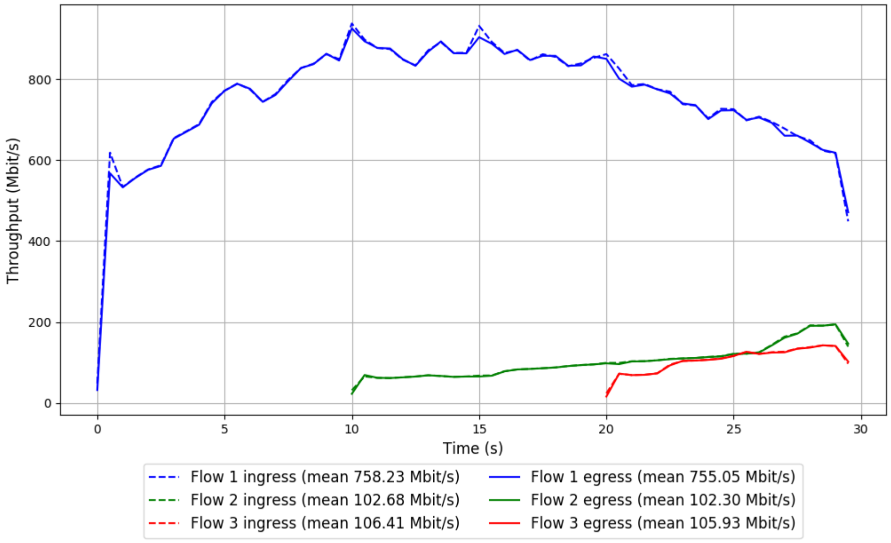
Run 4: Report of PCC — Data Link

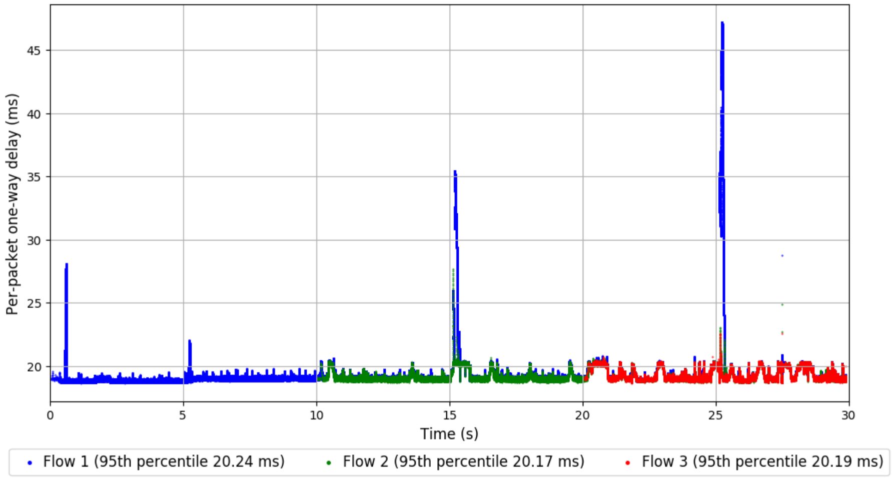




```
Run 5: Statistics of PCC

Start at: 2018-01-17 05:17:51
End at: 2018-01-17 05:18:21
Local clock offset: -2.581 ms
Remote clock offset: -1.967 ms

# Below is generated by plot.py at 2018-01-17 11:32:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 857.97 Mbit/s
95th percentile per-packet one-way delay: 20.230 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 755.05 Mbit/s
95th percentile per-packet one-way delay: 20.237 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 102.30 Mbit/s
95th percentile per-packet one-way delay: 20.174 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 105.93 Mbit/s
95th percentile per-packet one-way delay: 20.187 ms
Loss rate: 0.46%
```

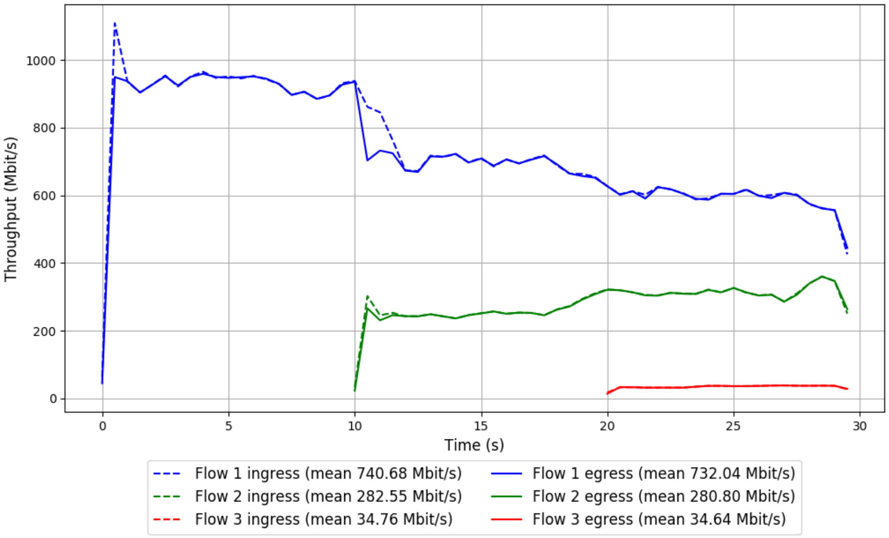
Run 5: Report of PCC — Data Link

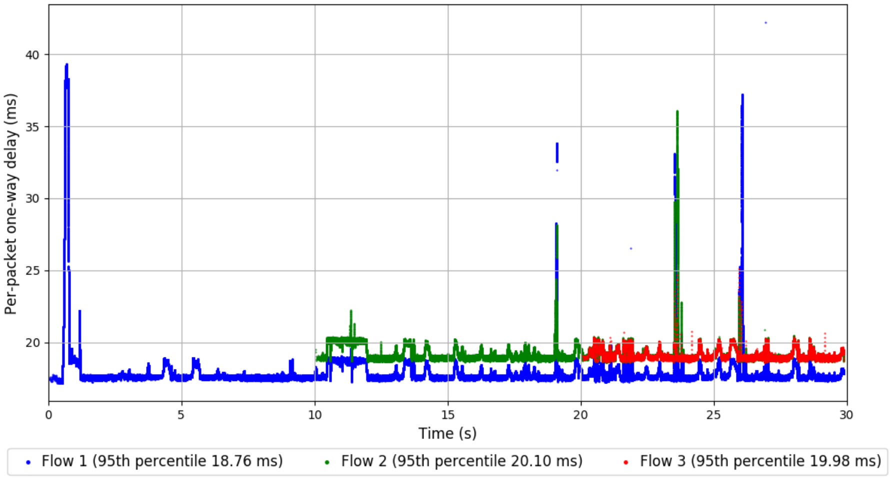




```
Run 6: Statistics of PCC

Start at: 2018-01-17 05:45:22
End at: 2018-01-17 05:45:52
Local clock offset: -3.096 ms
Remote clock offset: -2.195 ms

# Below is generated by plot.py at 2018-01-17 11:33:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 930.09 Mbit/s
95th percentile per-packet one-way delay: 19.629 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 732.04 Mbit/s
95th percentile per-packet one-way delay: 18.762 ms
Loss rate: 1.16%
-- Flow 2:
Average throughput: 280.80 Mbit/s
95th percentile per-packet one-way delay: 20.104 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 34.64 Mbit/s
95th percentile per-packet one-way delay: 19.980 ms
Loss rate: 0.35%
```

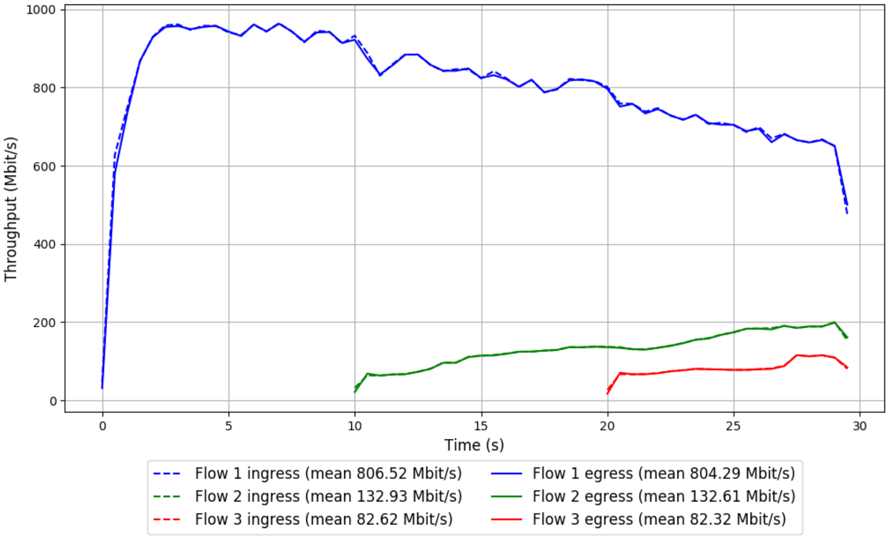
Run 6: Report of PCC — Data Link

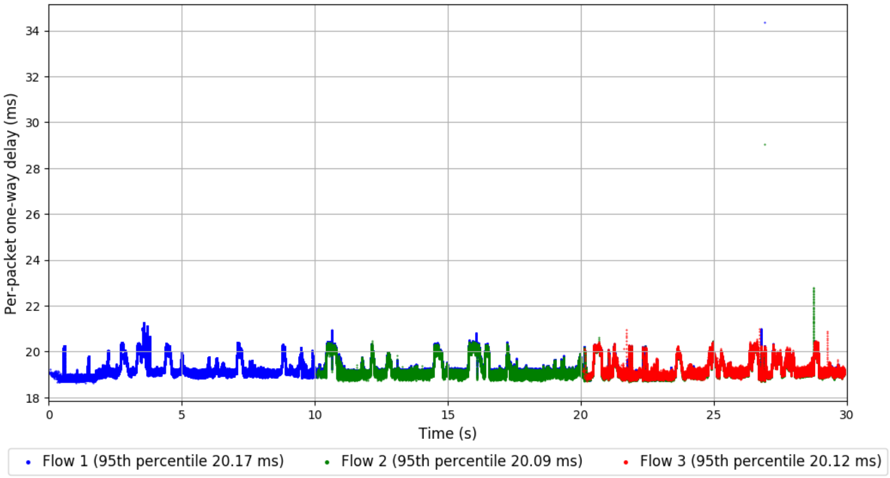




```
Run 7: Statistics of PCC

Start at: 2018-01-17 06:13:03
End at: 2018-01-17 06:13:33
Local clock offset: -2.674 ms
Remote clock offset: -1.807 ms

# Below is generated by plot.py at 2018-01-17 11:33:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 919.50 Mbit/s
95th percentile per-packet one-way delay: 20.158 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 804.29 Mbit/s
95th percentile per-packet one-way delay: 20.167 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 132.61 Mbit/s
95th percentile per-packet one-way delay: 20.092 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 82.32 Mbit/s
95th percentile per-packet one-way delay: 20.117 ms
Loss rate: 0.37%
```

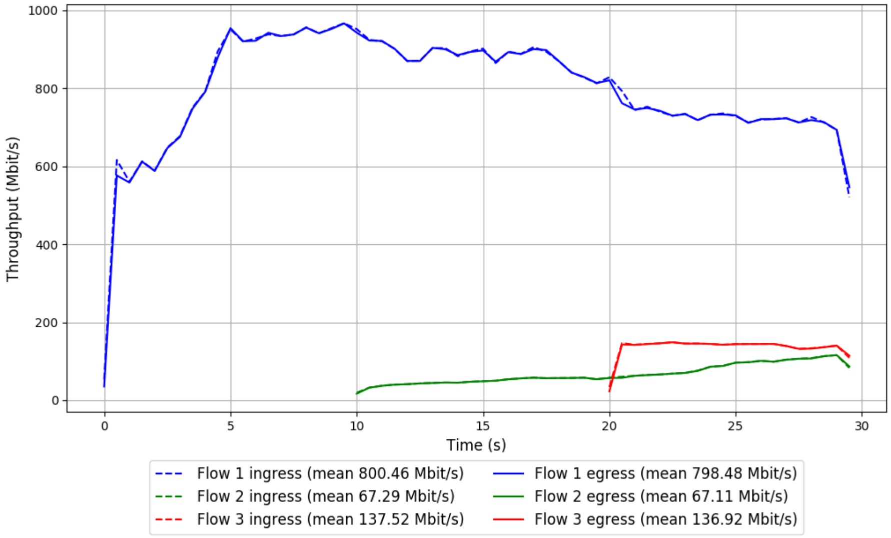
Run 7: Report of PCC — Data Link

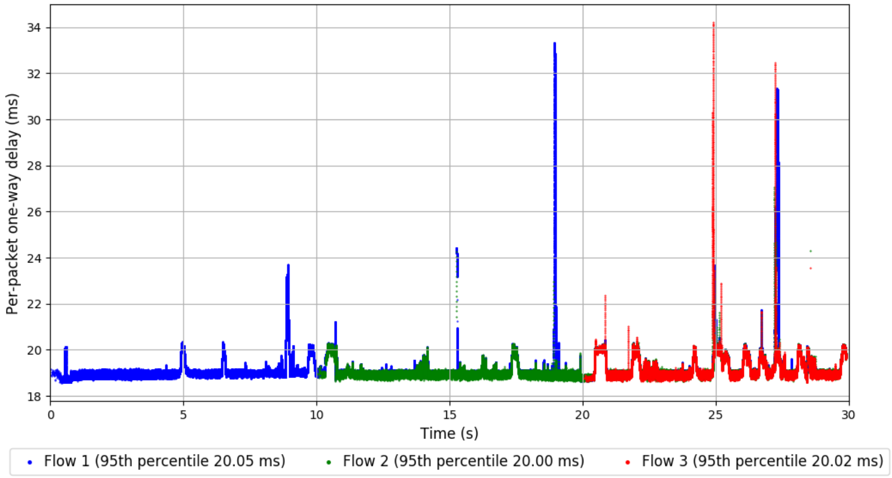




```
Run 8: Statistics of PCC

Start at: 2018-01-17 06:41:00
End at: 2018-01-17 06:41:30
Local clock offset: -2.855 ms
Remote clock offset: -1.975 ms

# Below is generated by plot.py at 2018-01-17 11:34:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 888.21 Mbit/s
95th percentile per-packet one-way delay: 20.042 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 798.48 Mbit/s
95th percentile per-packet one-way delay: 20.048 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 67.11 Mbit/s
95th percentile per-packet one-way delay: 20.003 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 136.92 Mbit/s
95th percentile per-packet one-way delay: 20.021 ms
Loss rate: 0.43%
```

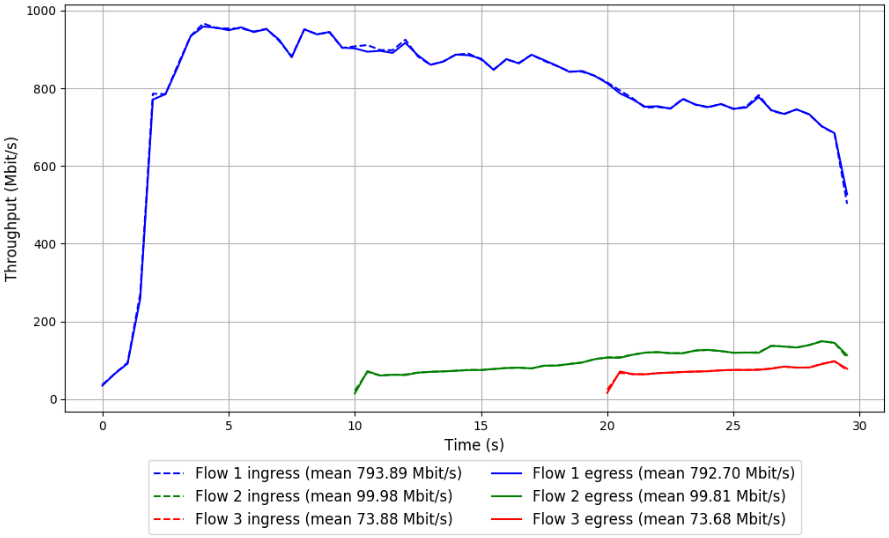
Run 8: Report of PCC — Data Link

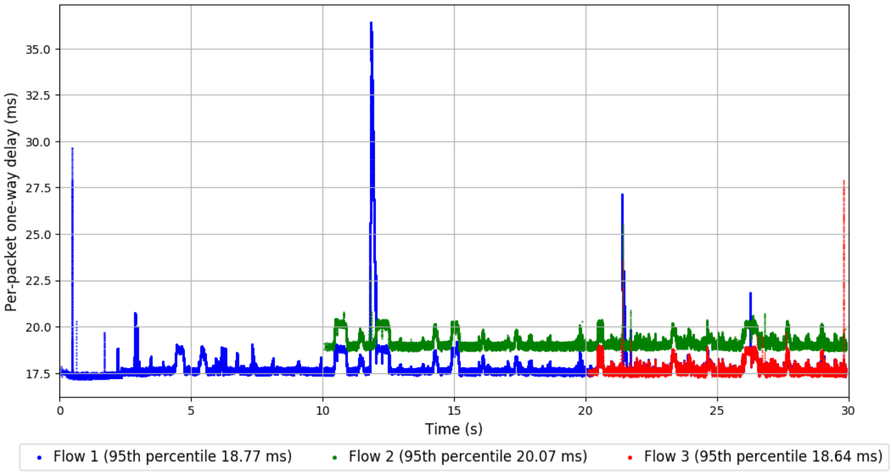




```
Run 9: Statistics of PCC

Start at: 2018-01-17 07:08:42
End at: 2018-01-17 07:09:12
Local clock offset: -3.575 ms
Remote clock offset: -1.869 ms

# Below is generated by plot.py at 2018-01-17 11:40:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 883.18 Mbit/s
95th percentile per-packet one-way delay: 19.033 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 792.70 Mbit/s
95th percentile per-packet one-way delay: 18.772 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 99.81 Mbit/s
95th percentile per-packet one-way delay: 20.074 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 73.68 Mbit/s
95th percentile per-packet one-way delay: 18.641 ms
Loss rate: 0.27%
```

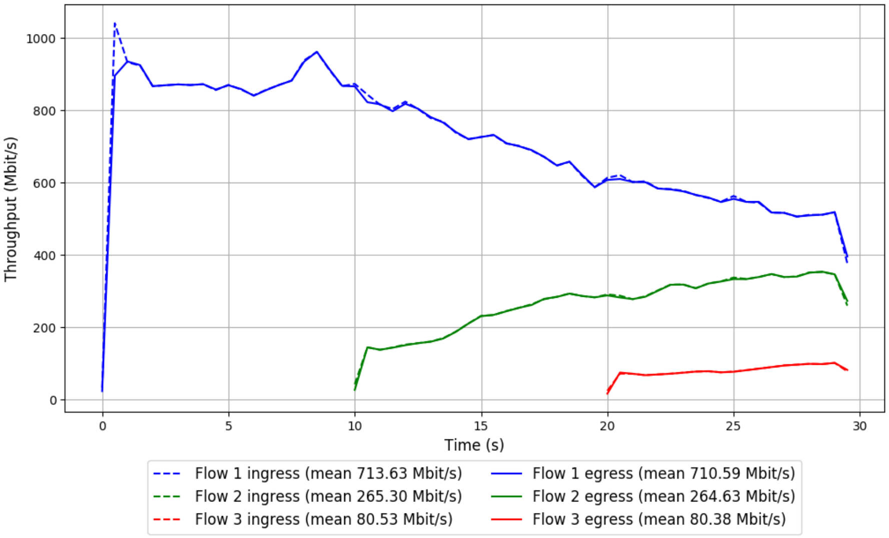
Run 9: Report of PCC — Data Link

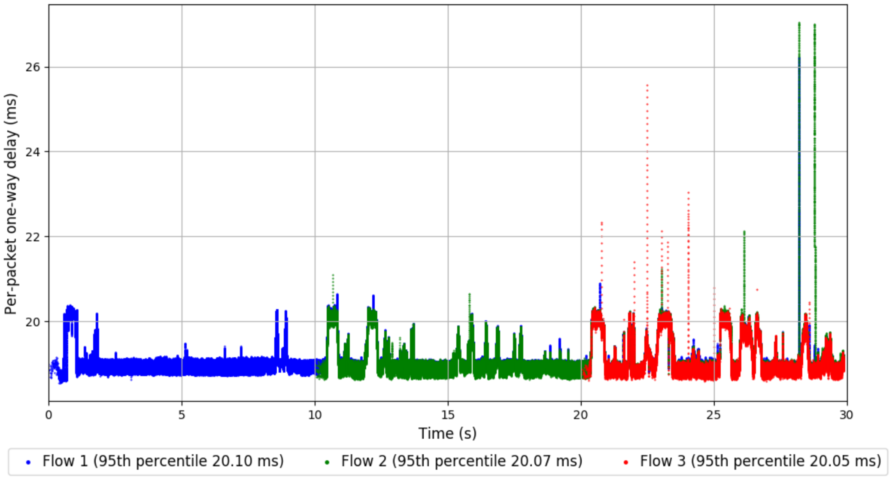




```
Run 10: Statistics of PCC

Start at: 2018-01-17 07:36:11
End at: 2018-01-17 07:36:41
Local clock offset: -4.49 ms
Remote clock offset: -1.761 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 913.01 Mbit/s
95th percentile per-packet one-way delay: 20.094 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 710.59 Mbit/s
95th percentile per-packet one-way delay: 20.101 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 264.63 Mbit/s
95th percentile per-packet one-way delay: 20.071 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 80.38 Mbit/s
95th percentile per-packet one-way delay: 20.050 ms
Loss rate: 0.18%
```

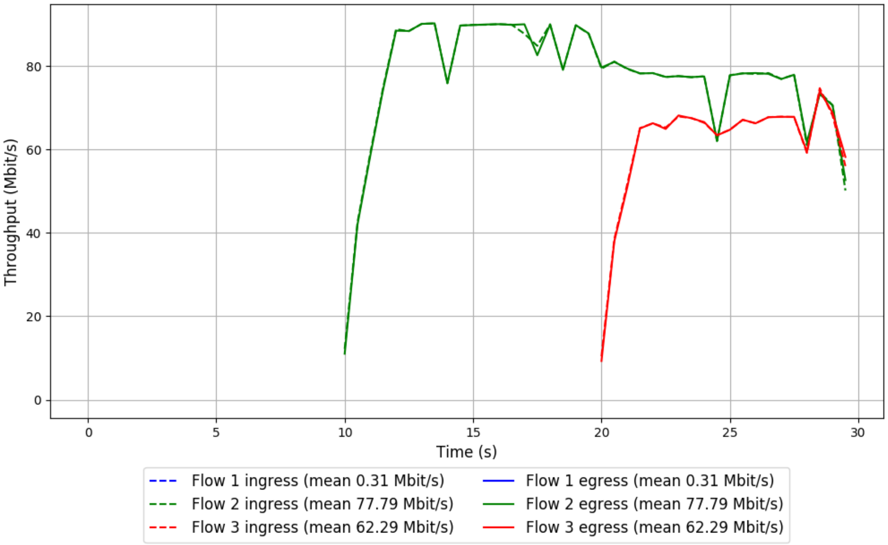
Run 10: Report of PCC — Data Link

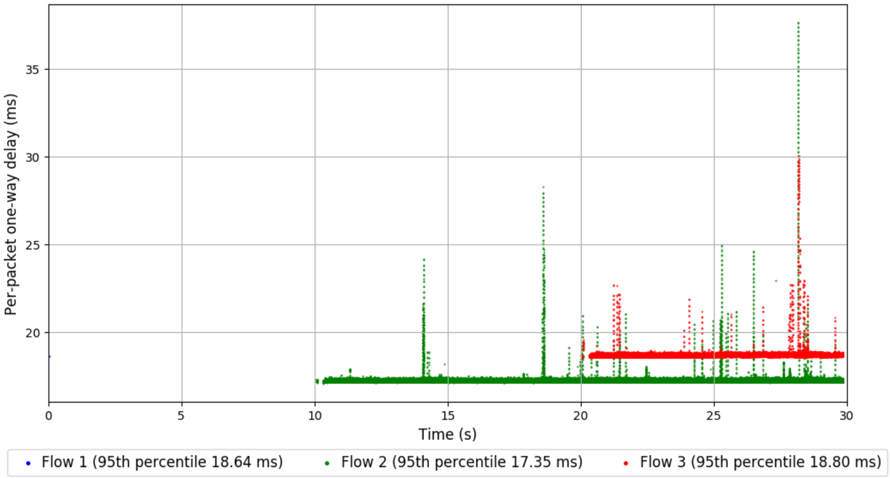




```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-17 03:43:48
End at: 2018-01-17 03:44:18
Local clock offset: -1.256 ms
Remote clock offset: -2.338 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.15 Mbit/s
95th percentile per-packet one-way delay: 18.734 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 18.640 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 77.79 Mbit/s
95th percentile per-packet one-way delay: 17.347 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 62.29 Mbit/s
95th percentile per-packet one-way delay: 18.801 ms
Loss rate: 0.00%
```

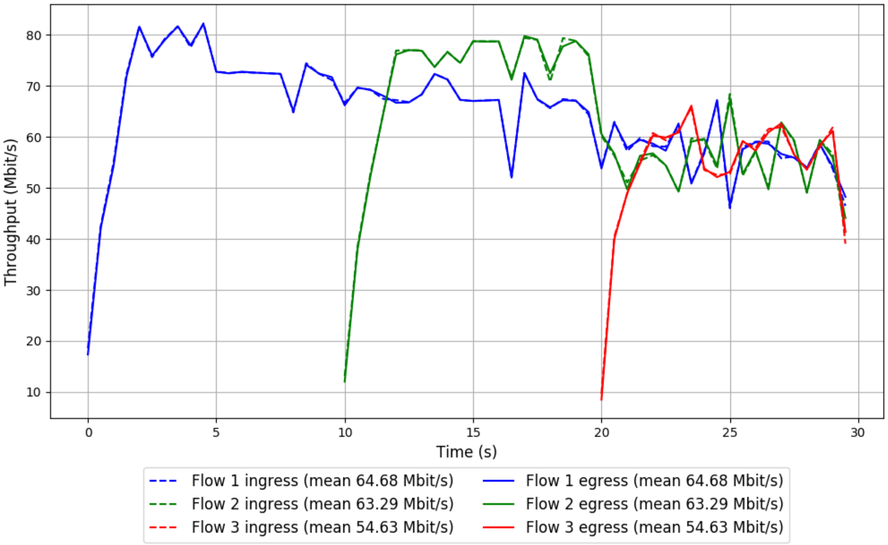
Run 1: Report of QUIC Cubic — Data Link

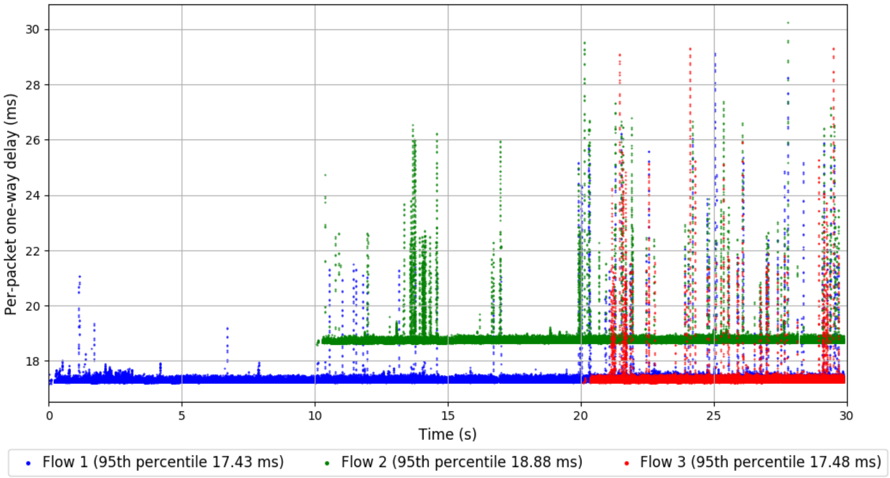




```
Run 2: Statistics of QUIC Cubic

Start at: 2018-01-17 04:11:14
End at: 2018-01-17 04:11:44
Local clock offset: -1.764 ms
Remote clock offset: -2.955 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 124.57 Mbit/s
95th percentile per-packet one-way delay: 18.804 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.68 Mbit/s
95th percentile per-packet one-way delay: 17.431 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 63.29 Mbit/s
95th percentile per-packet one-way delay: 18.883 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 54.63 Mbit/s
95th percentile per-packet one-way delay: 17.479 ms
Loss rate: 0.00%
```

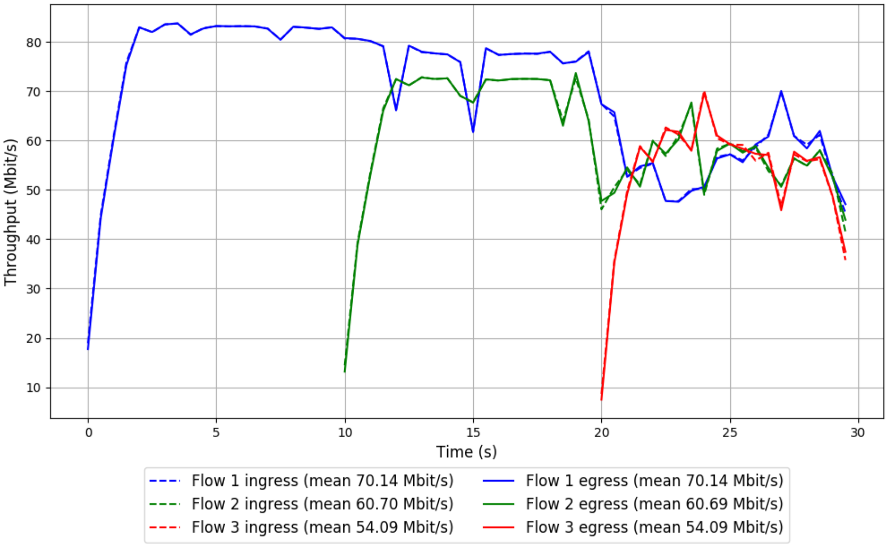
Run 2: Report of QUIC Cubic — Data Link

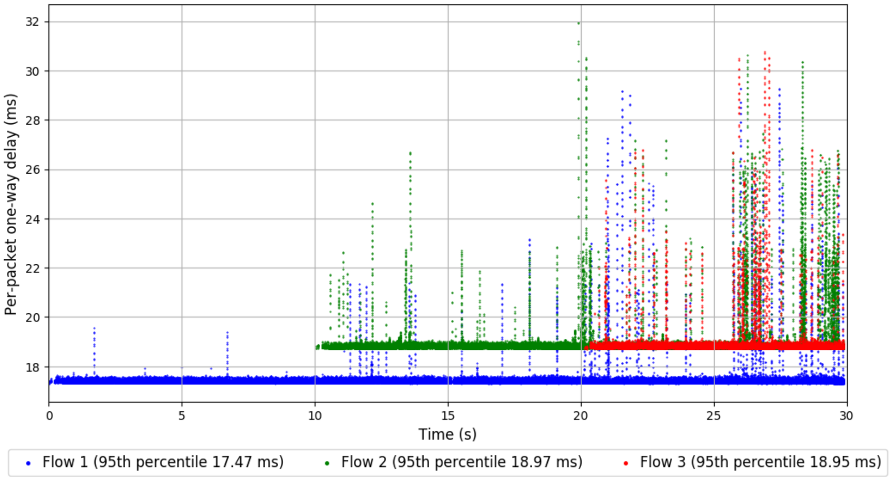




```
Run 3: Statistics of QUIC Cubic

Start at: 2018-01-17 04:38:43
End at: 2018-01-17 04:39:13
Local clock offset: -2.031 ms
Remote clock offset: -2.395 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.07 Mbit/s
95th percentile per-packet one-way delay: 18.868 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 70.14 Mbit/s
95th percentile per-packet one-way delay: 17.471 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 60.69 Mbit/s
95th percentile per-packet one-way delay: 18.974 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 54.09 Mbit/s
95th percentile per-packet one-way delay: 18.948 ms
Loss rate: 0.00%
```

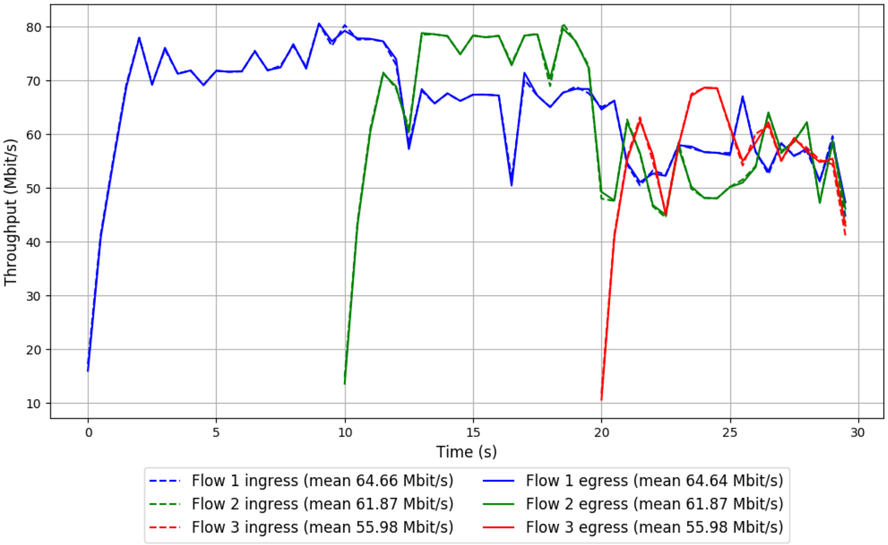
Run 3: Report of QUIC Cubic — Data Link

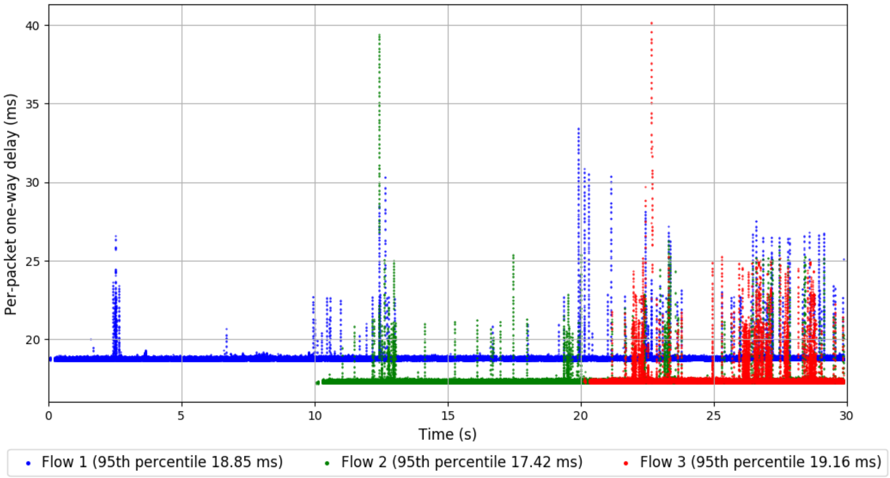




```
Run 4: Statistics of QUIC Cubic

Start at: 2018-01-17 05:06:03
End at: 2018-01-17 05:06:33
Local clock offset: -2.453 ms
Remote clock offset: -2.196 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 124.00 Mbit/s
95th percentile per-packet one-way delay: 18.828 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.64 Mbit/s
95th percentile per-packet one-way delay: 18.850 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.87 Mbit/s
95th percentile per-packet one-way delay: 17.423 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 55.98 Mbit/s
95th percentile per-packet one-way delay: 19.157 ms
Loss rate: 0.00%
```

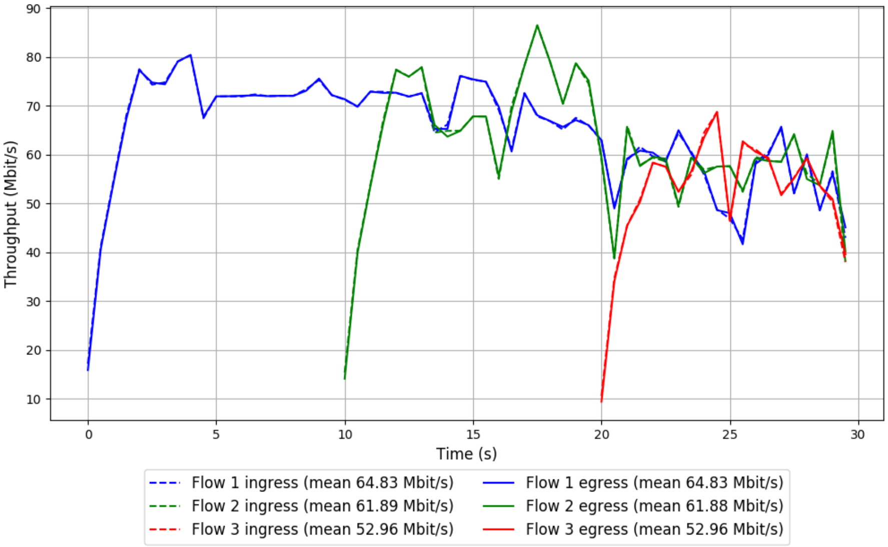
Run 4: Report of QUIC Cubic — Data Link

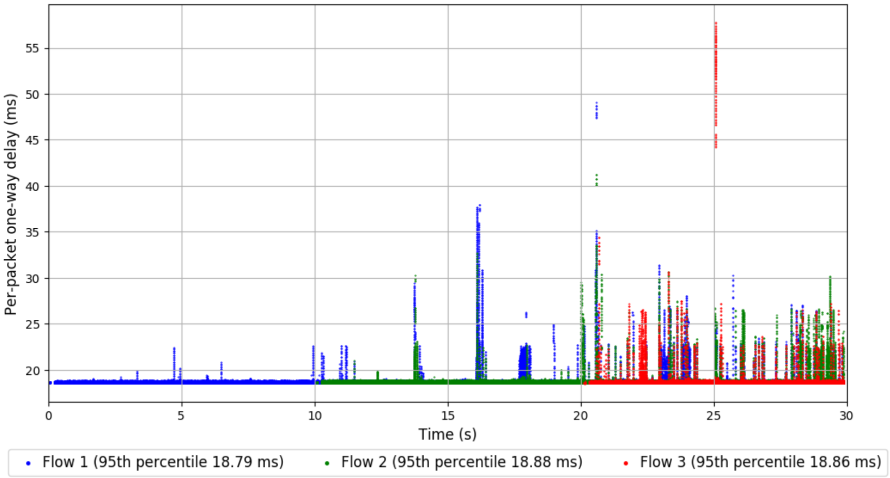




```
Run 5: Statistics of QUIC Cubic

Start at: 2018-01-17 05:33:56
End at: 2018-01-17 05:34:26
Local clock offset: -2.791 ms
Remote clock offset: -2.191 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 123.29 Mbit/s
95th percentile per-packet one-way delay: 18.816 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 64.83 Mbit/s
95th percentile per-packet one-way delay: 18.785 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.88 Mbit/s
95th percentile per-packet one-way delay: 18.877 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 52.96 Mbit/s
95th percentile per-packet one-way delay: 18.857 ms
Loss rate: 0.00%
```

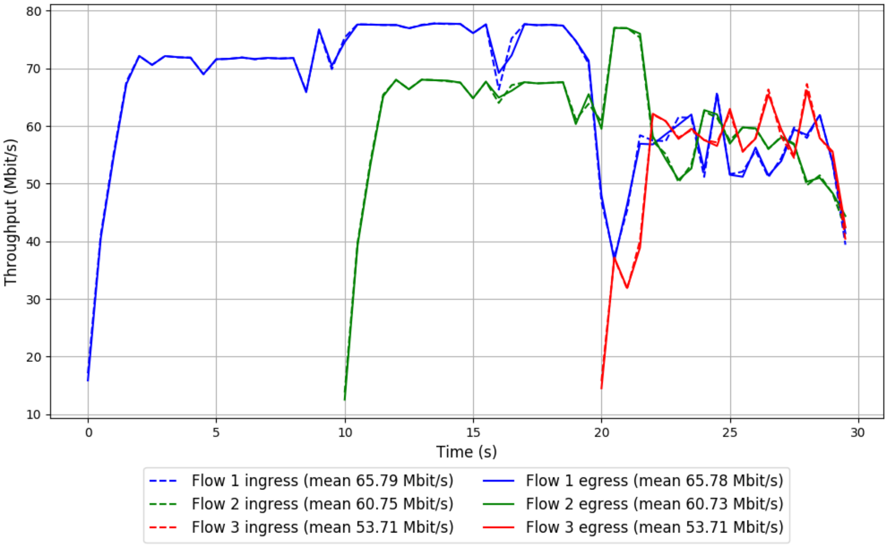
Run 5: Report of QUIC Cubic — Data Link

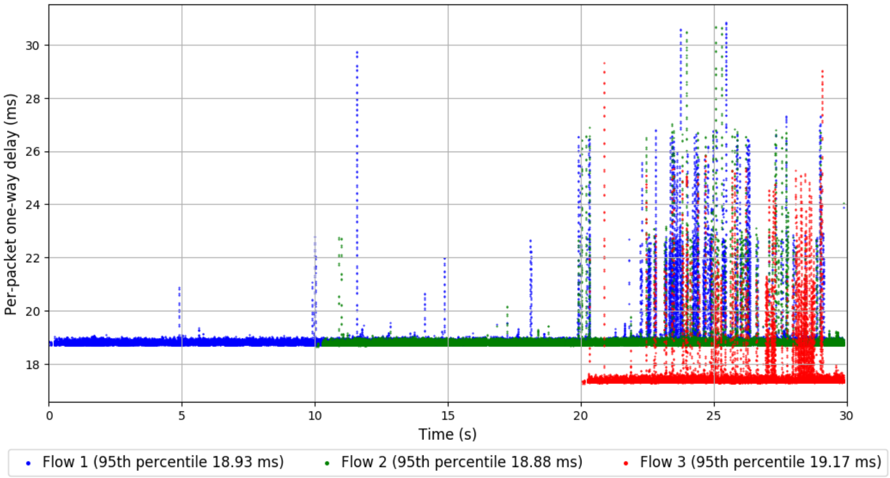




```
Run 6: Statistics of QUIC Cubic

Start at: 2018-01-17 06:01:37
End at: 2018-01-17 06:02:07
Local clock offset: -3.097 ms
Remote clock offset: -2.02 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 123.76 Mbit/s
95th percentile per-packet one-way delay: 18.909 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 65.78 Mbit/s
95th percentile per-packet one-way delay: 18.926 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 60.73 Mbit/s
95th percentile per-packet one-way delay: 18.878 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 53.71 Mbit/s
95th percentile per-packet one-way delay: 19.174 ms
Loss rate: 0.00%
```

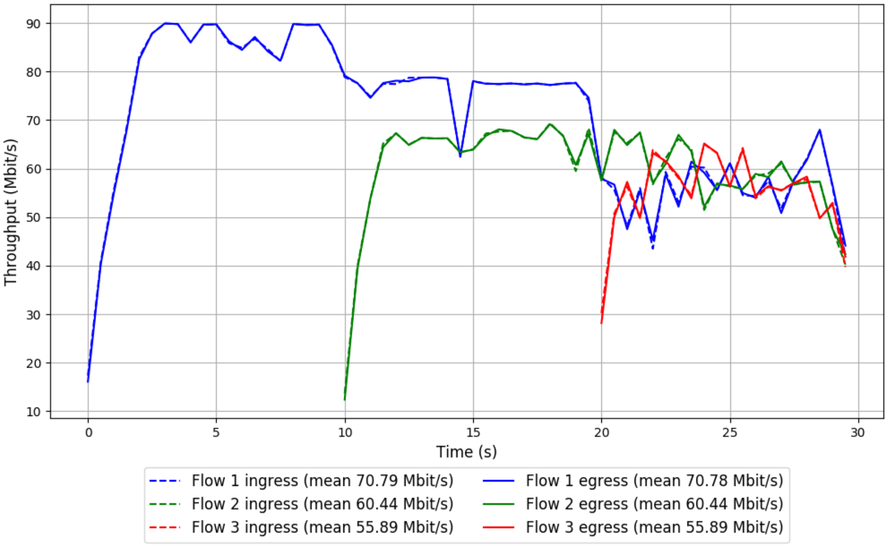
Run 6: Report of QUIC Cubic — Data Link

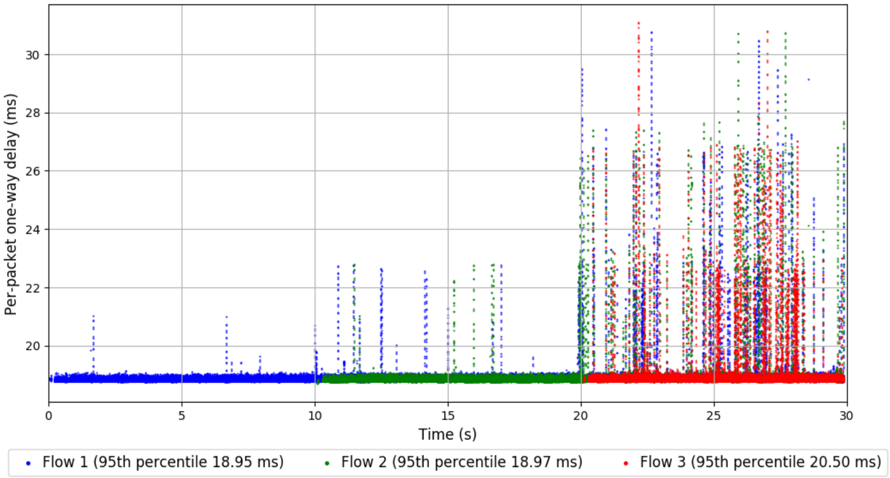




```
Run 7: Statistics of QUIC Cubic

Start at: 2018-01-17 06:29:20
End at: 2018-01-17 06:29:50
Local clock offset: -2.731 ms
Remote clock offset: -1.646 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 129.26 Mbit/s
95th percentile per-packet one-way delay: 18.975 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 70.78 Mbit/s
95th percentile per-packet one-way delay: 18.946 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 60.44 Mbit/s
95th percentile per-packet one-way delay: 18.974 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 55.89 Mbit/s
95th percentile per-packet one-way delay: 20.504 ms
Loss rate: 0.00%
```

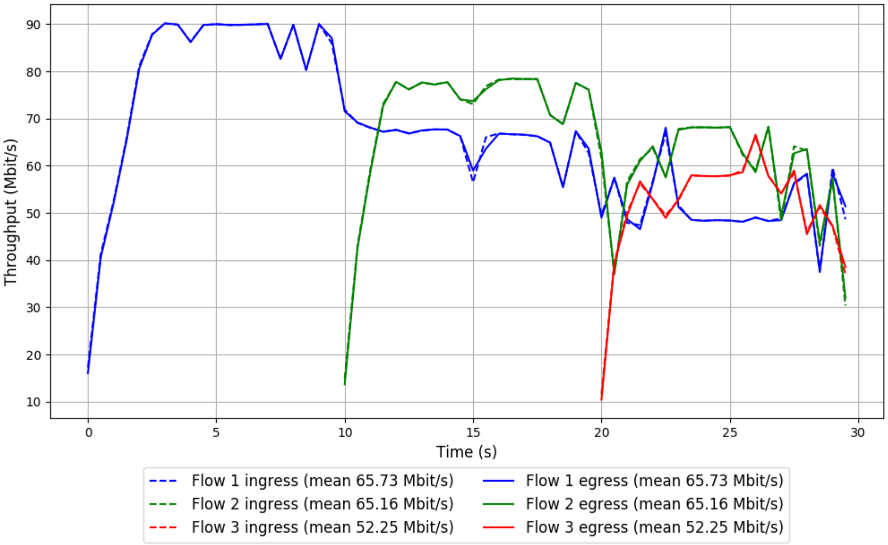
Run 7: Report of QUIC Cubic — Data Link

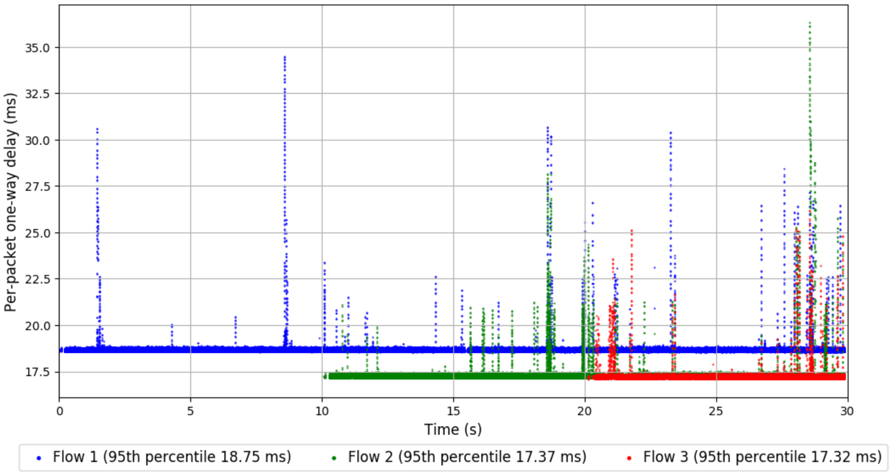




```
Run 8: Statistics of QUIC Cubic

Start at: 2018-01-17 06:57:15
End at: 2018-01-17 06:57:45
Local clock offset: -3.132 ms
Remote clock offset: -1.974 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 126.06 Mbit/s
95th percentile per-packet one-way delay: 18.719 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 65.73 Mbit/s
95th percentile per-packet one-way delay: 18.747 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 65.16 Mbit/s
95th percentile per-packet one-way delay: 17.367 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 52.25 Mbit/s
95th percentile per-packet one-way delay: 17.322 ms
Loss rate: 0.00%
```

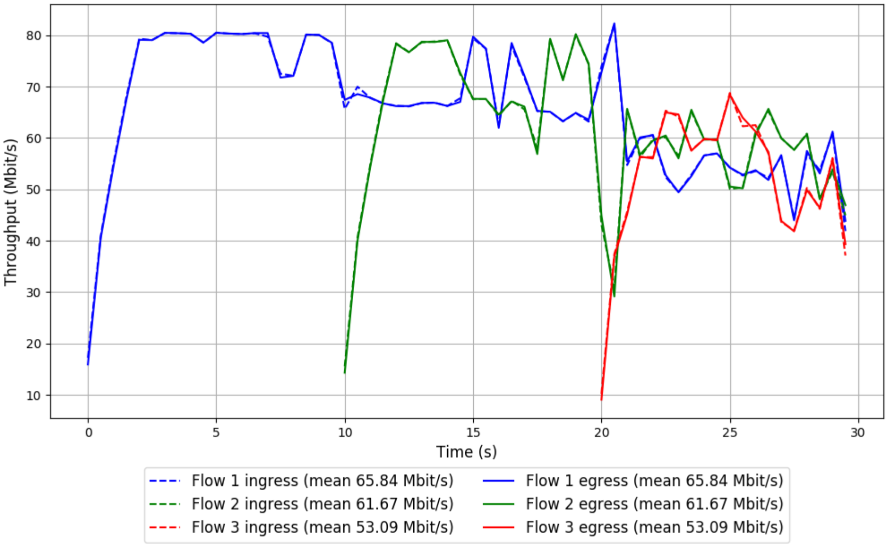
Run 8: Report of QUIC Cubic — Data Link

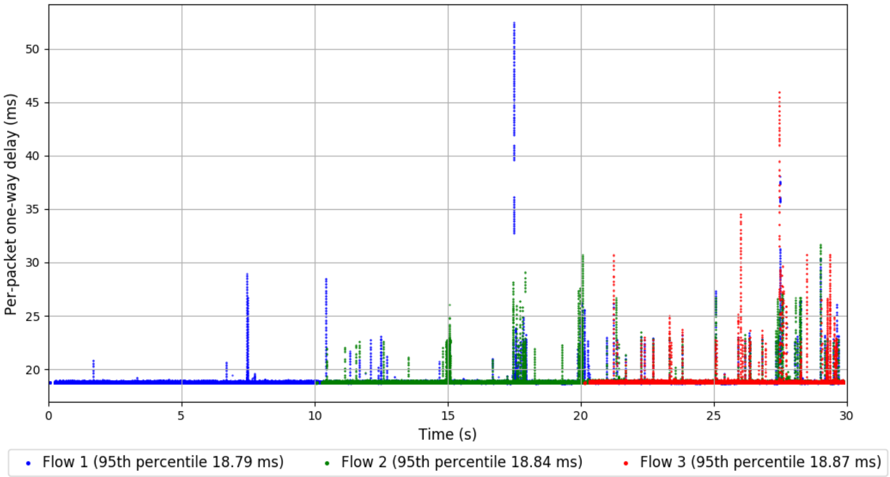




```
Run 9: Statistics of QUIC Cubic

Start at: 2018-01-17 07:24:51
End at: 2018-01-17 07:25:21
Local clock offset: -4.209 ms
Remote clock offset: -1.874 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 124.20 Mbit/s
95th percentile per-packet one-way delay: 18.821 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 65.84 Mbit/s
95th percentile per-packet one-way delay: 18.794 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.67 Mbit/s
95th percentile per-packet one-way delay: 18.844 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 53.09 Mbit/s
95th percentile per-packet one-way delay: 18.870 ms
Loss rate: 0.00%
```

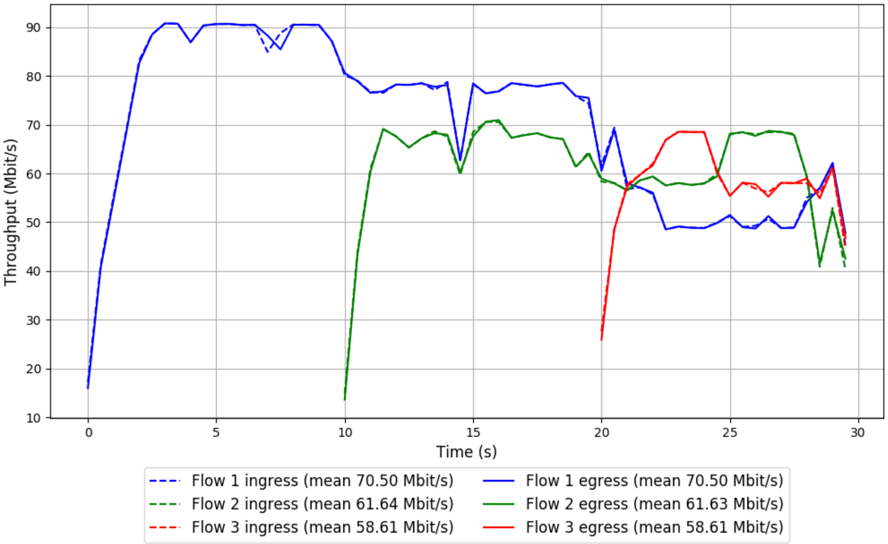
Run 9: Report of QUIC Cubic — Data Link

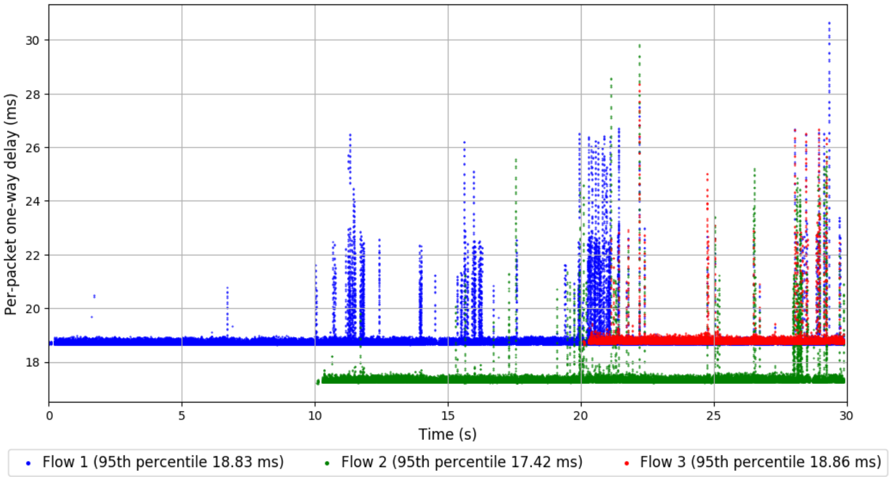




```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-17 07:52:19
End at: 2018-01-17 07:52:49
Local clock offset: -4.961 ms
Remote clock offset: -1.986 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 130.67 Mbit/s
95th percentile per-packet one-way delay: 18.812 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 70.50 Mbit/s
95th percentile per-packet one-way delay: 18.832 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.63 Mbit/s
95th percentile per-packet one-way delay: 17.418 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 58.61 Mbit/s
95th percentile per-packet one-way delay: 18.865 ms
Loss rate: 0.00%
```

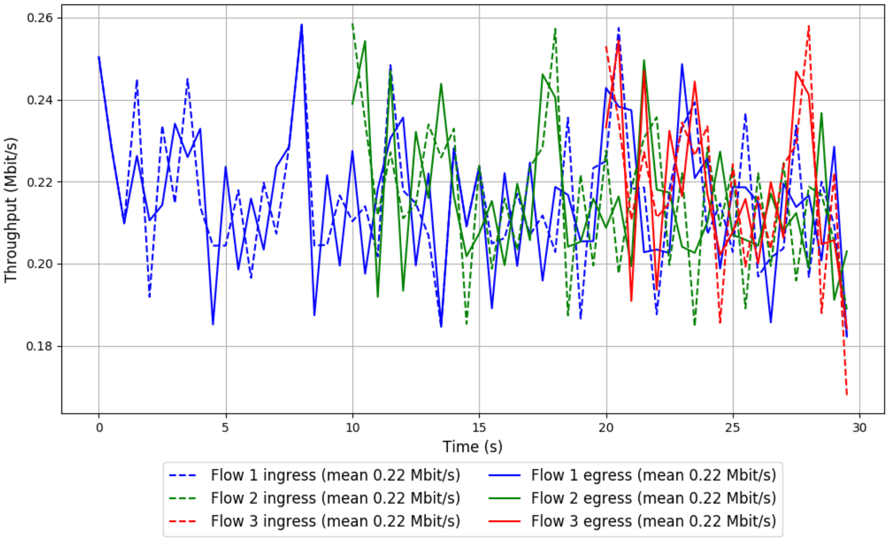
Run 10: Report of QUIC Cubic — Data Link

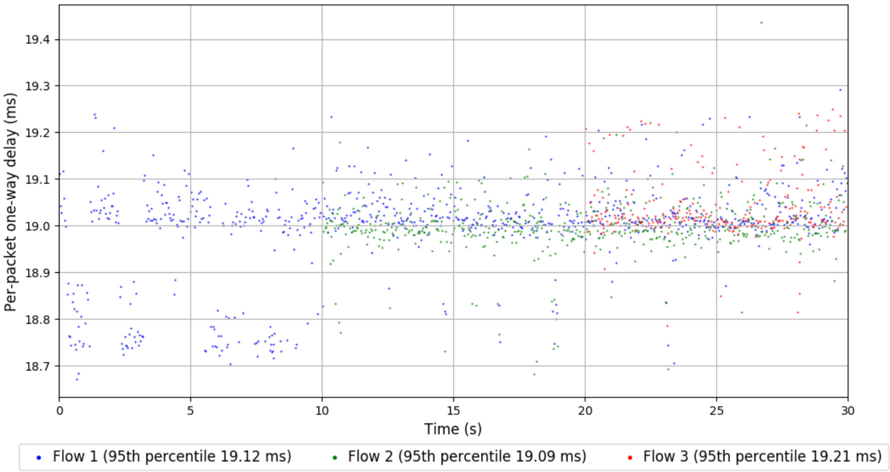




```
Run 1: Statistics of SCReAM

Start at: 2018-01-17 03:29:21
End at: 2018-01-17 03:29:51
Local clock offset: -1.223 ms
Remote clock offset: -2.389 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.126 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.118 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.092 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.206 ms
Loss rate: 0.00%
```

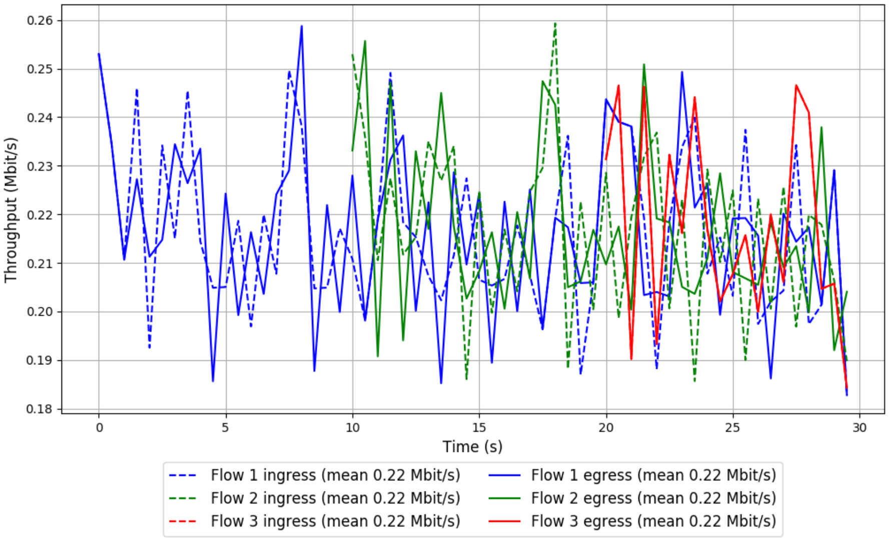
Run 1: Report of SCReAM — Data Link

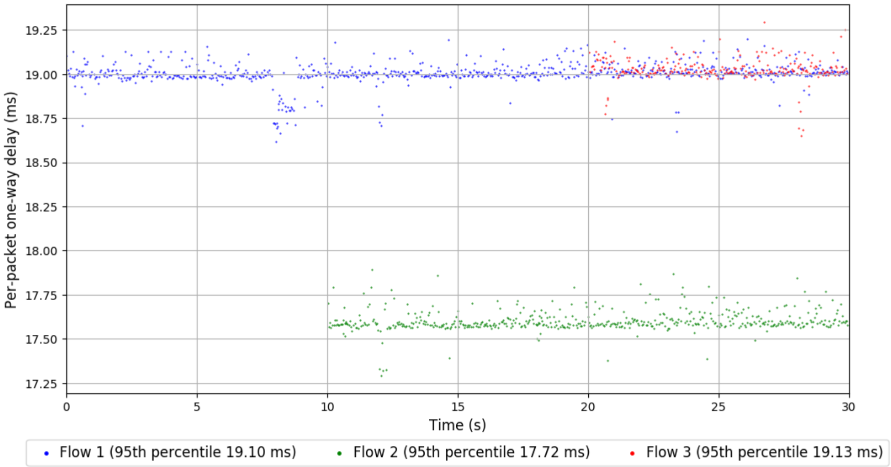




```
Run 2: Statistics of SCReAM

Start at: 2018-01-17 03:56:45
End at: 2018-01-17 03:57:15
Local clock offset: -1.262 ms
Remote clock offset: -2.588 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.094 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.104 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.716 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.126 ms
Loss rate: 0.00%
```

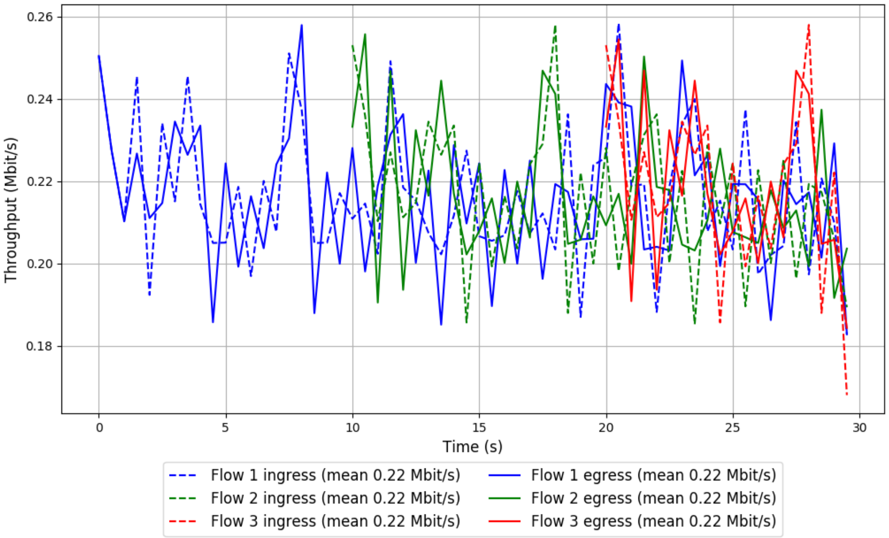
Run 2: Report of SCReAM — Data Link

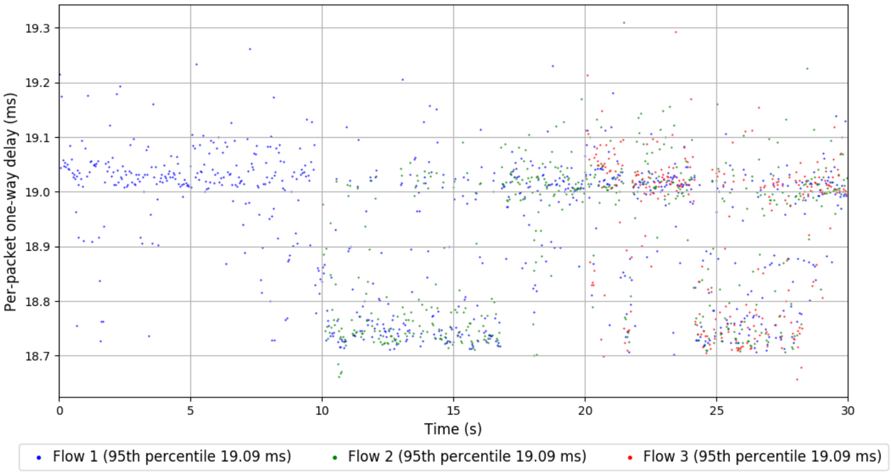




```
Run 3: Statistics of SCReAM

Start at: 2018-01-17 04:24:14
End at: 2018-01-17 04:24:44
Local clock offset: -1.891 ms
Remote clock offset: -2.67 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.093 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.093 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.092 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.095 ms
Loss rate: 0.00%
```

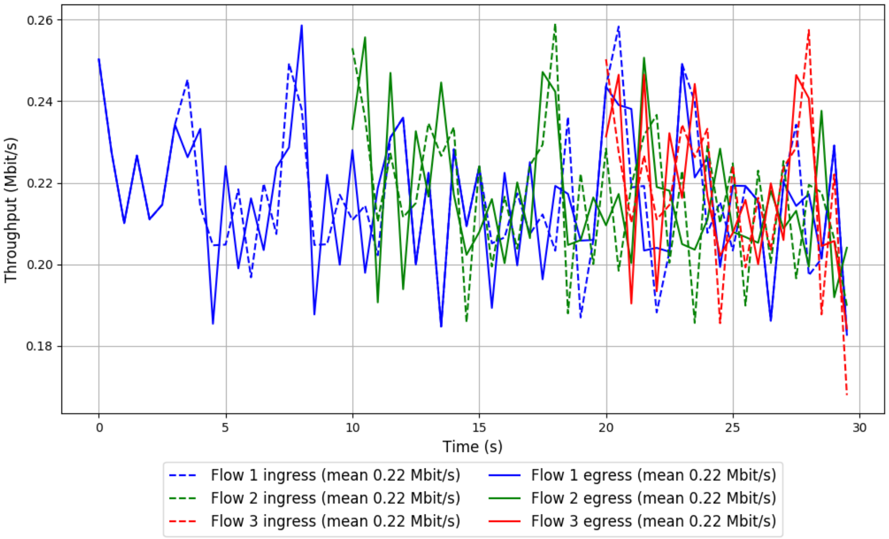
Run 3: Report of SCReAM — Data Link

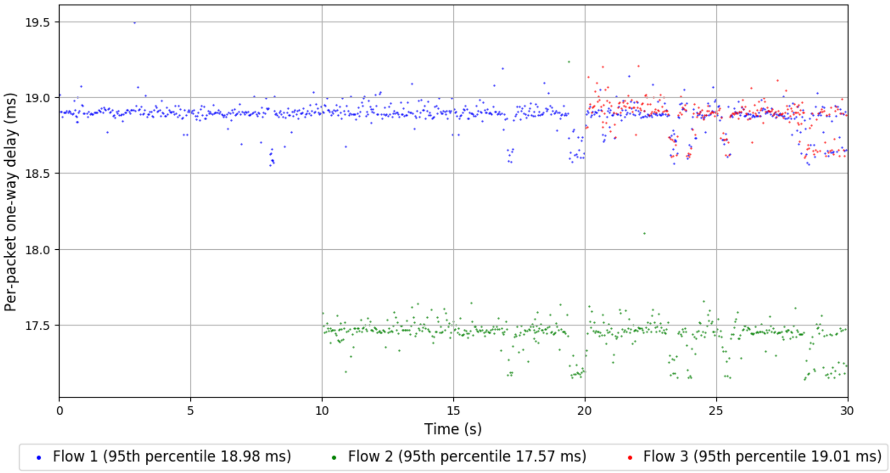




```
Run 4: Statistics of SCReAM

Start at: 2018-01-17 04:51:53
End at: 2018-01-17 04:52:23
Local clock offset: -2.26 ms
Remote clock offset: -2.288 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 18.971 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 18.980 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.567 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.014 ms
Loss rate: 0.00%
```

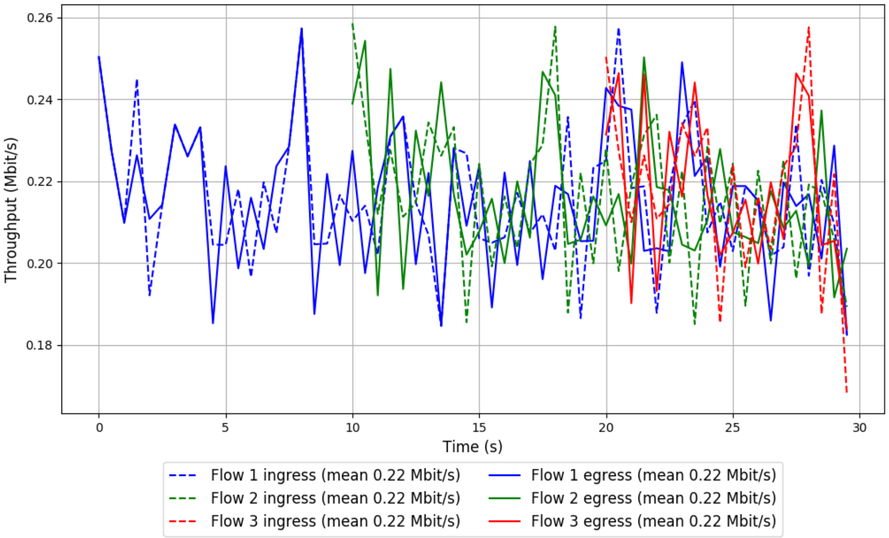
Run 4: Report of SCReAM — Data Link

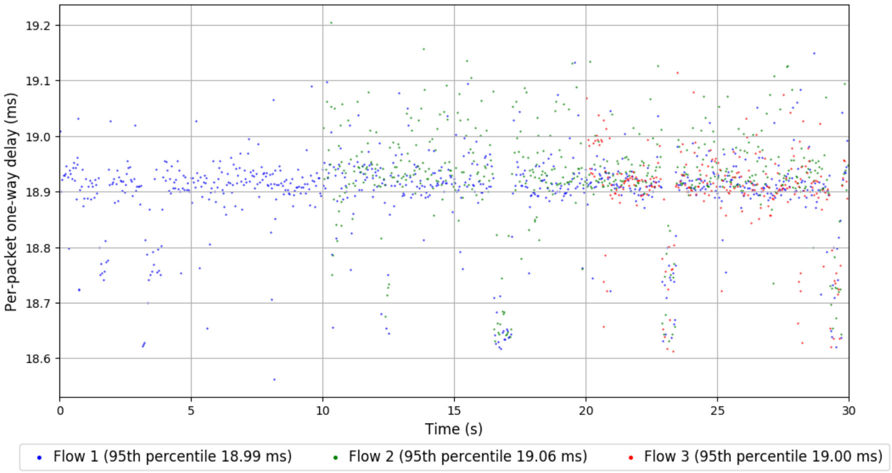




```
Run 5: Statistics of SCReAM

Start at: 2018-01-17 05:19:27
End at: 2018-01-17 05:19:57
Local clock offset: -2.521 ms
Remote clock offset: -1.933 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.032 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 18.991 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.064 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 18.999 ms
Loss rate: 0.00%
```

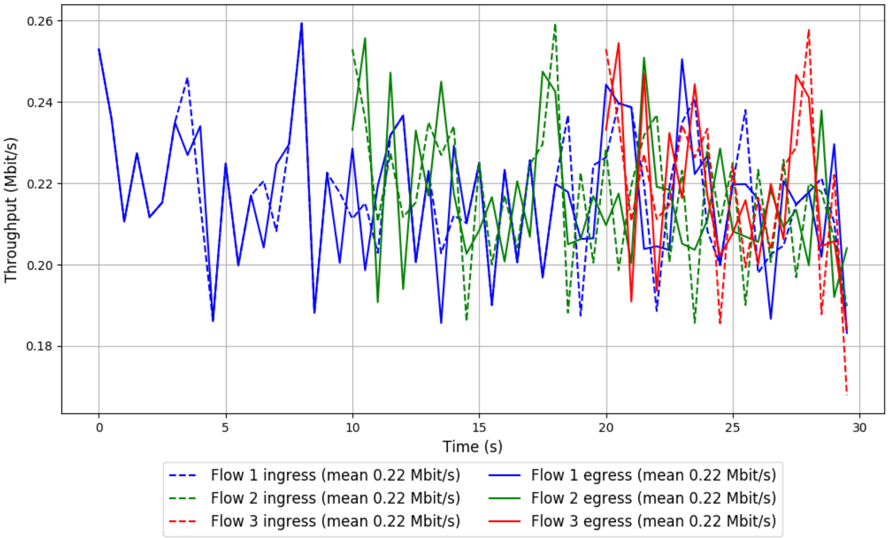
Run 5: Report of SCReAM — Data Link

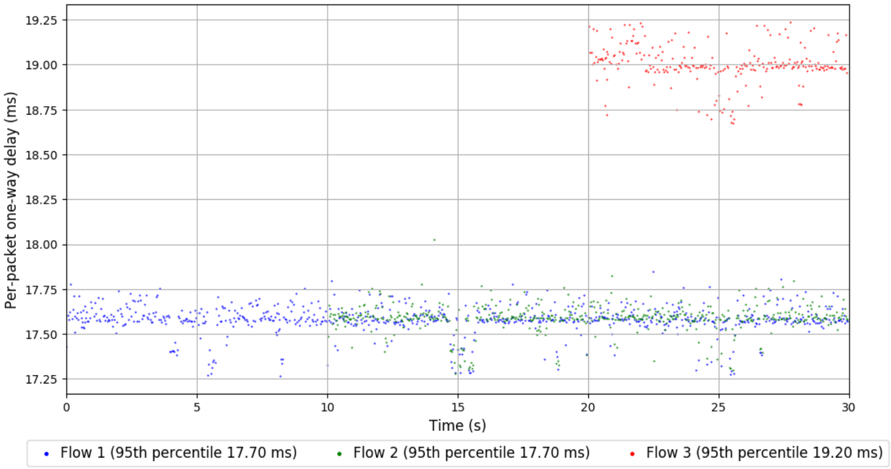




```
Run 6: Statistics of SCReAM

Start at: 2018-01-17 05:47:00
End at: 2018-01-17 05:47:30
Local clock offset: -3.099 ms
Remote clock offset: -2.088 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 19.033 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.702 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.696 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.196 ms
Loss rate: 0.00%
```

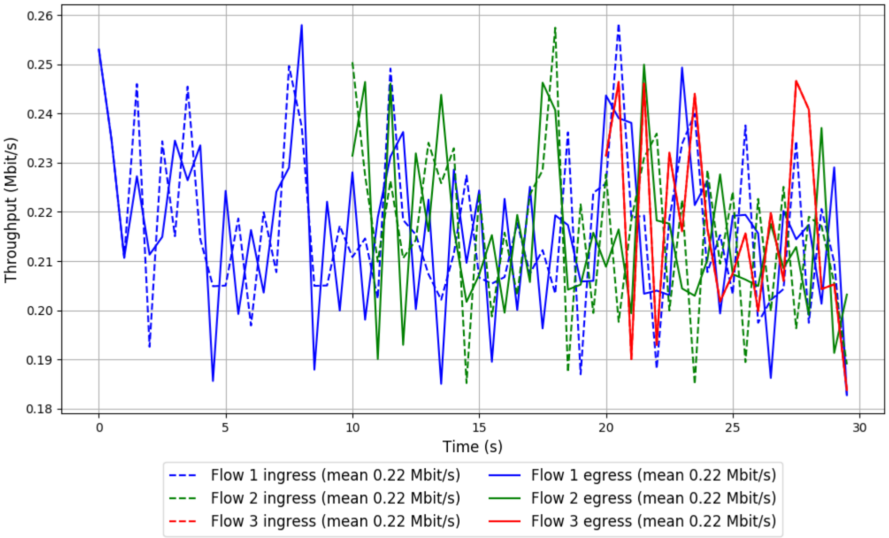
Run 6: Report of SCReAM — Data Link

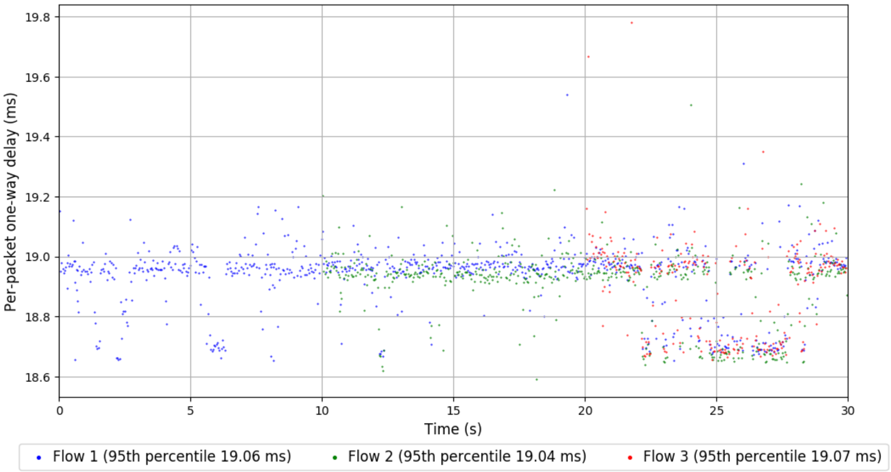




```
Run 7: Statistics of SCReAM

Start at: 2018-01-17 06:14:42
End at: 2018-01-17 06:15:12
Local clock offset: -2.615 ms
Remote clock offset: -1.903 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.054 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.057 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.038 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.075 ms
Loss rate: 0.00%
```

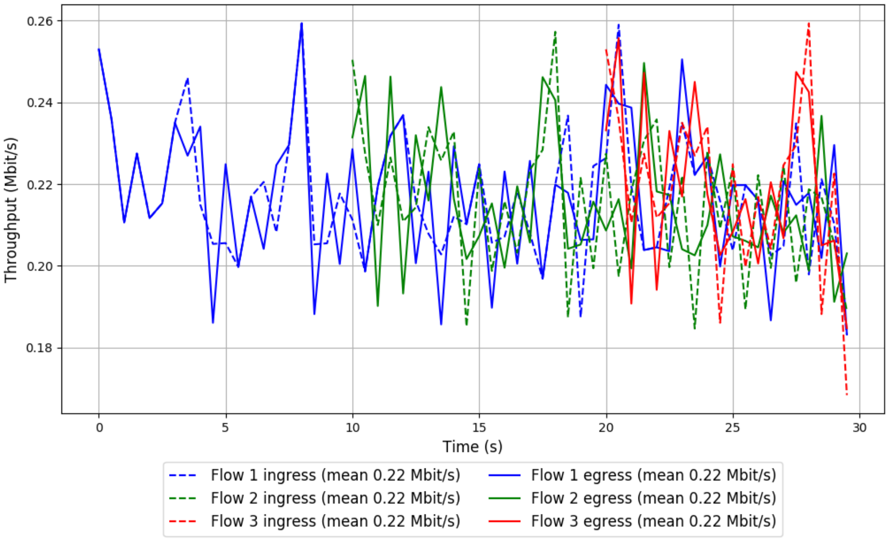
Run 7: Report of SCReAM — Data Link

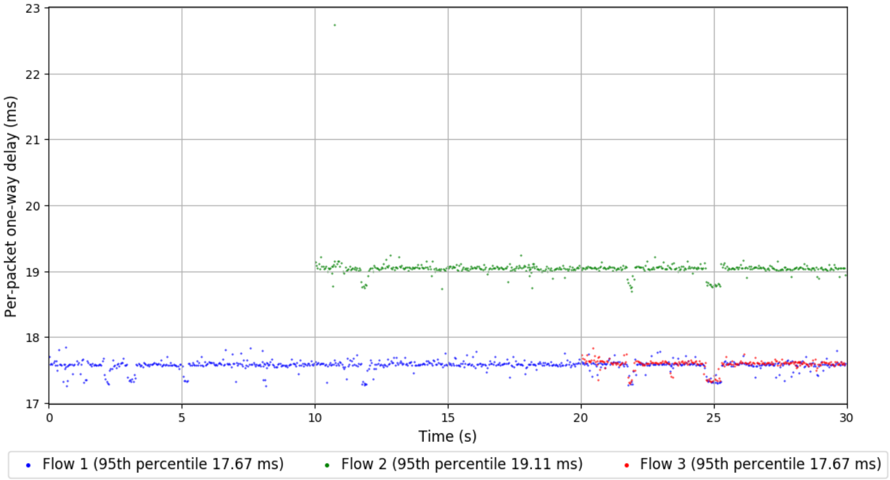




```
Run 8: Statistics of SCReAM

Start at: 2018-01-17 06:42:37
End at: 2018-01-17 06:43:07
Local clock offset: -2.887 ms
Remote clock offset: -1.899 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.073 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.672 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.114 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.670 ms
Loss rate: 0.00%
```

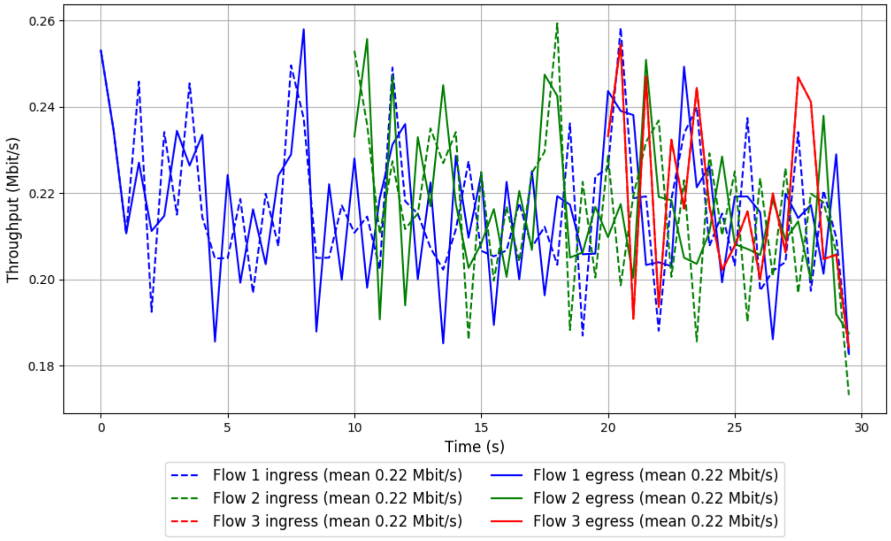
Run 8: Report of SCReAM — Data Link

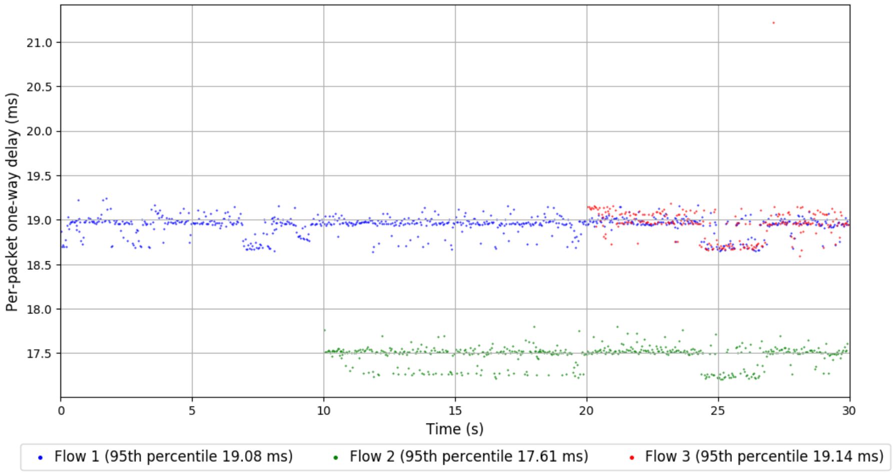




```
Run 9: Statistics of SCReAM

Start at: 2018-01-17 07:10:20
End at: 2018-01-17 07:10:50
Local clock offset: -3.651 ms
Remote clock offset: -1.984 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.088 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.076 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.612 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.135 ms
Loss rate: 0.00%
```

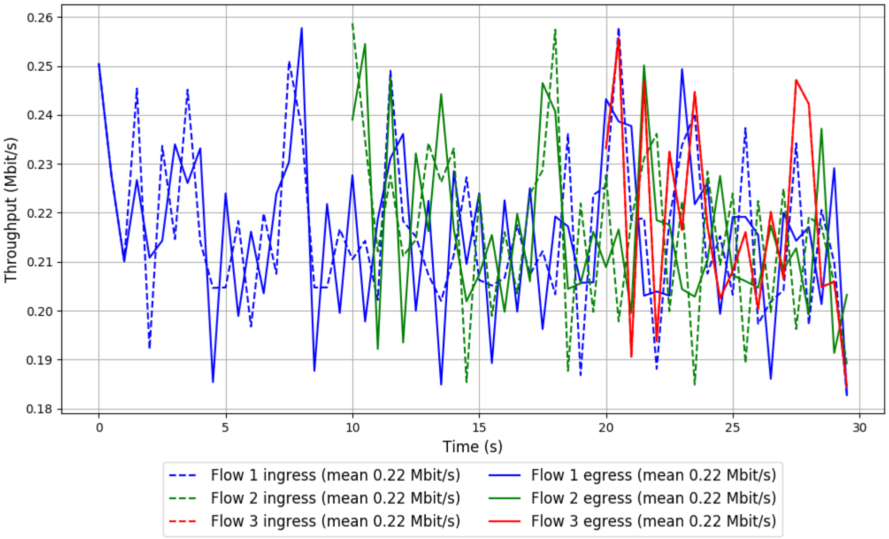
Run 9: Report of SCReAM — Data Link

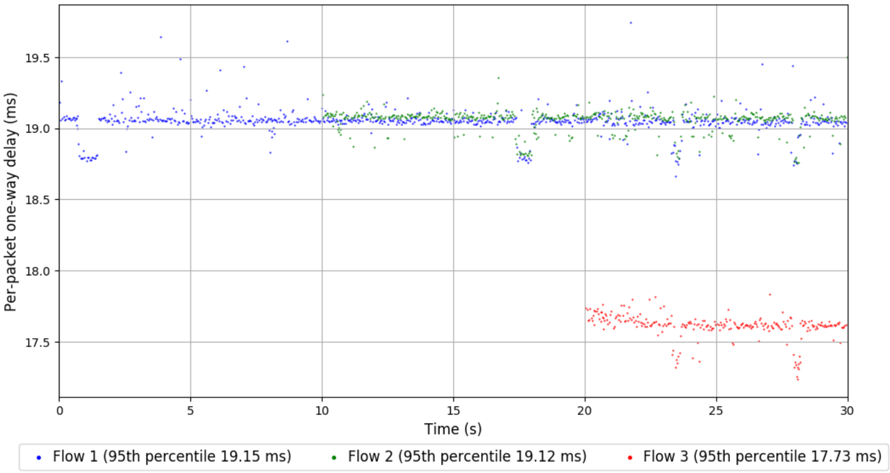




```
Run 10: Statistics of SCReAM

Start at: 2018-01-17 07:37:49
End at: 2018-01-17 07:38:19
Local clock offset: -4.628 ms
Remote clock offset: -1.663 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.126 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.152 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.123 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.727 ms
Loss rate: 0.00%
```

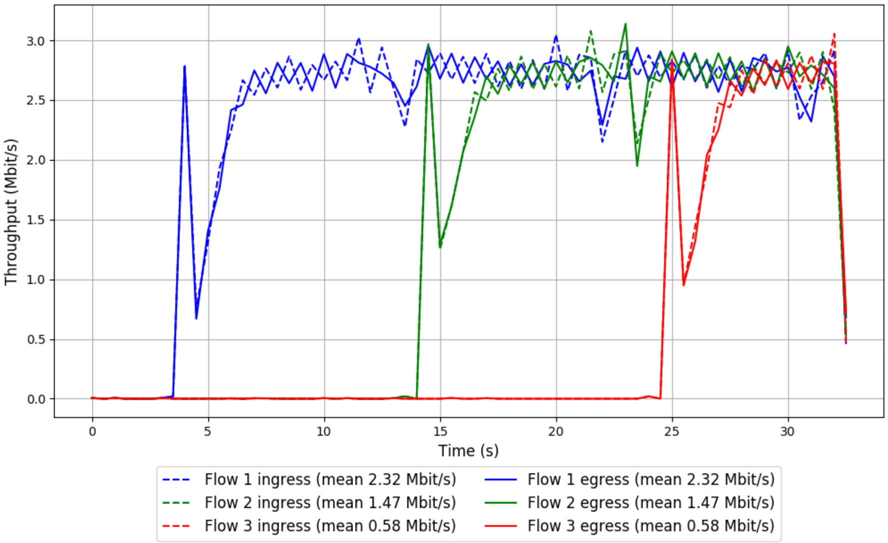
Run 10: Report of SCReAM — Data Link

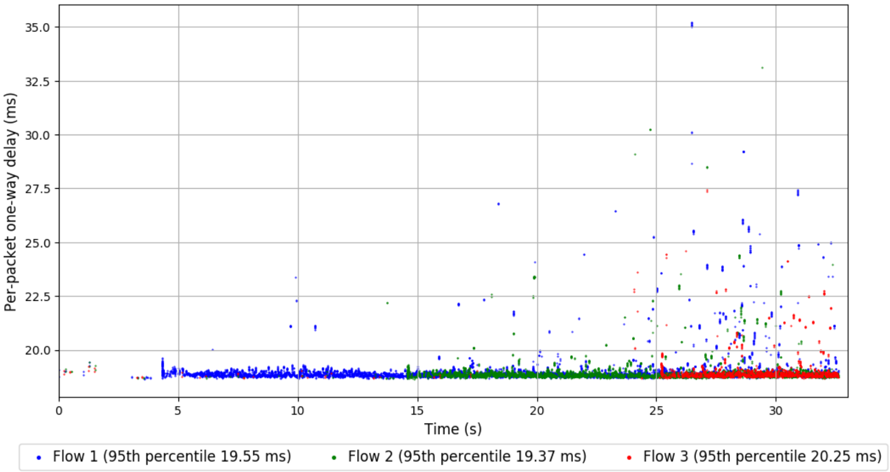




```
Run 1: Statistics of WebRTC media

Start at: 2018-01-17 03:47:44
End at: 2018-01-17 03:48:14
Local clock offset: -1.387 ms
Remote clock offset: -2.446 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.35 Mbit/s
95th percentile per-packet one-way delay: 19.595 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 19.547 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 19.374 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 20.254 ms
Loss rate: 0.00%
```

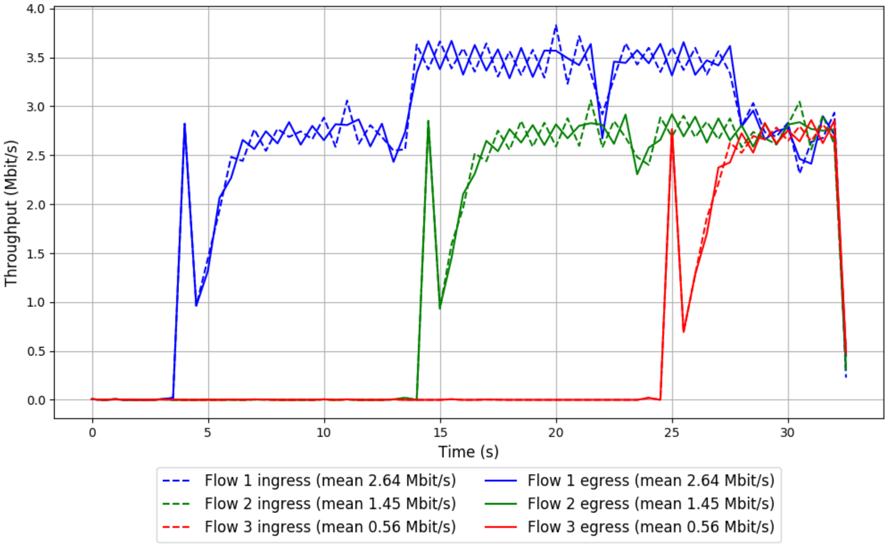
Run 1: Report of WebRTC media — Data Link

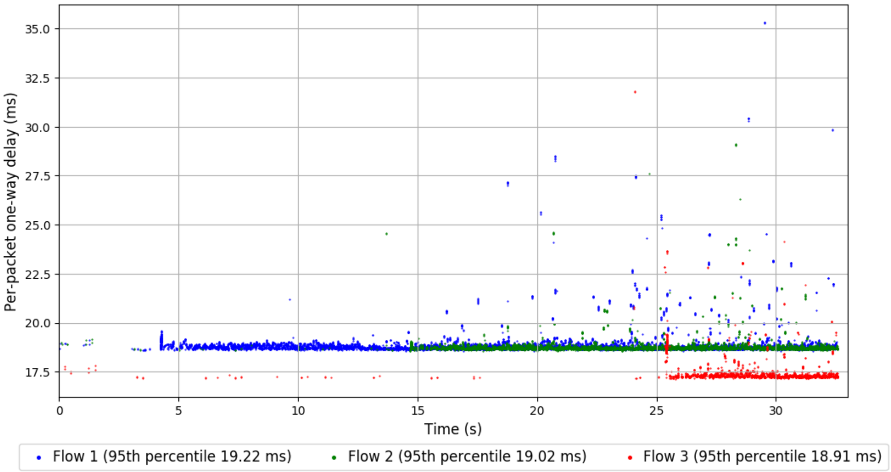




```
Run 2: Statistics of WebRTC media

Start at: 2018-01-17 04:15:14
End at: 2018-01-17 04:15:44
Local clock offset: -1.667 ms
Remote clock offset: -3.005 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.64 Mbit/s
95th percentile per-packet one-way delay: 19.136 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.64 Mbit/s
95th percentile per-packet one-way delay: 19.222 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 19.017 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 18.912 ms
Loss rate: 0.00%
```

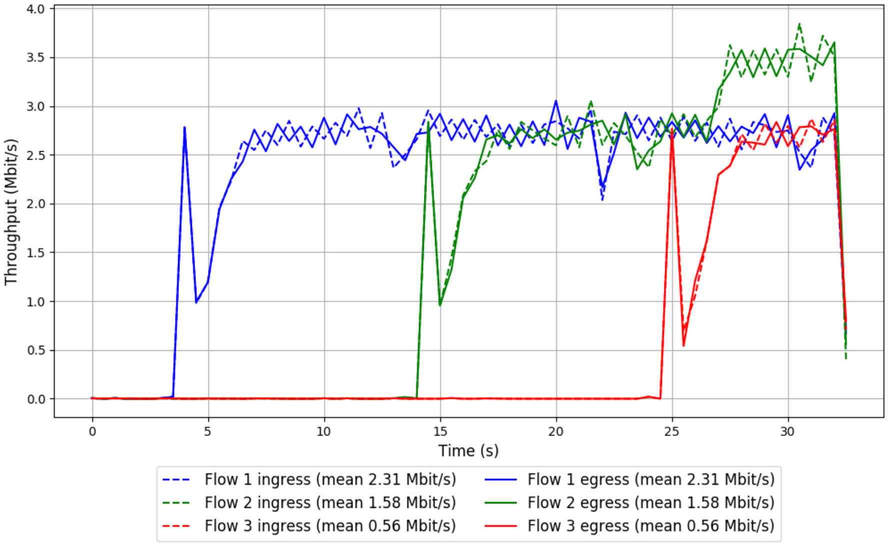
Run 2: Report of WebRTC media — Data Link

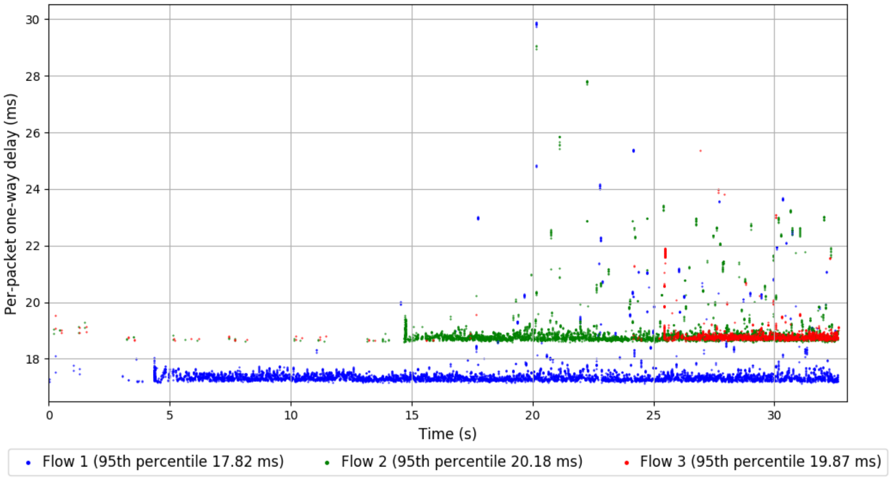




```
Run 3: Statistics of WebRTC media

Start at: 2018-01-17 04:42:44
End at: 2018-01-17 04:43:14
Local clock offset: -2.049 ms
Remote clock offset: -2.32 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.43 Mbit/s
95th percentile per-packet one-way delay: 19.266 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 17.819 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 20.181 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 19.872 ms
Loss rate: 0.00%
```

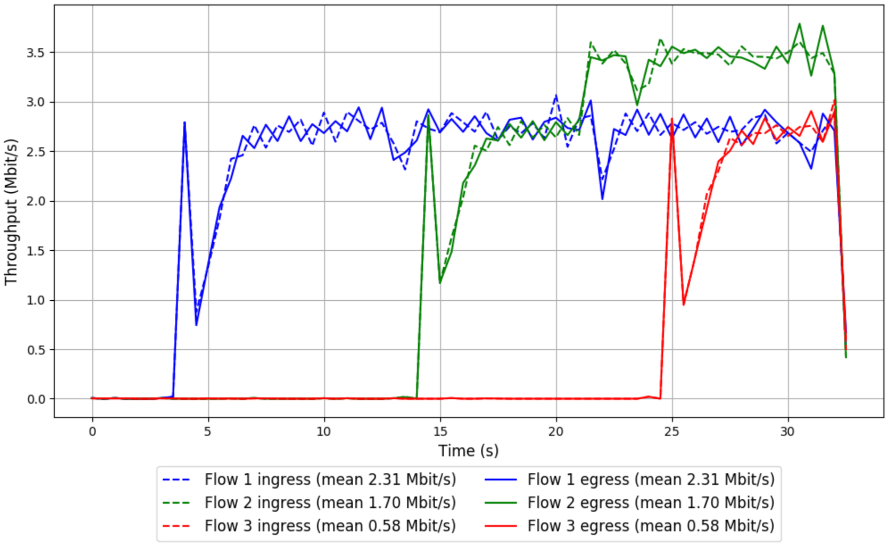
Run 3: Report of WebRTC media — Data Link

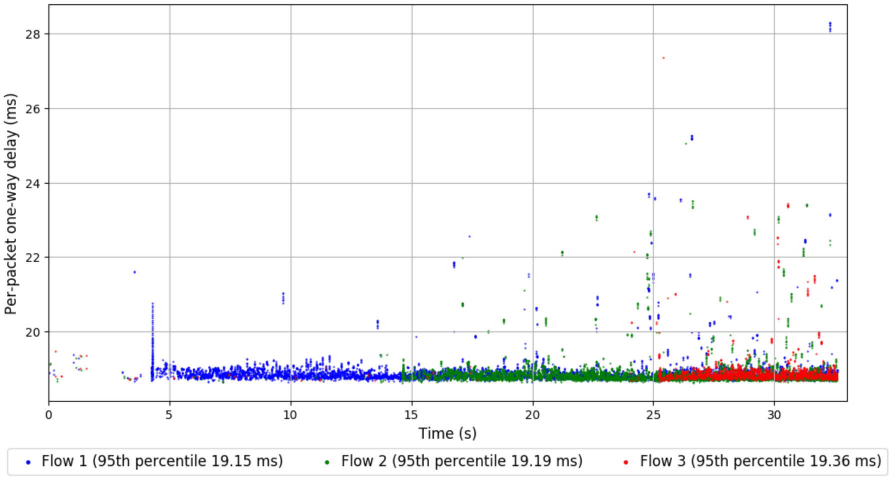




```
Run 4: Statistics of WebRTC media

Start at: 2018-01-17 05:10:06
End at: 2018-01-17 05:10:36
Local clock offset: -2.45 ms
Remote clock offset: -2.127 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.58 Mbit/s
95th percentile per-packet one-way delay: 19.184 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 19.154 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.70 Mbit/s
95th percentile per-packet one-way delay: 19.191 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 19.357 ms
Loss rate: 0.00%
```

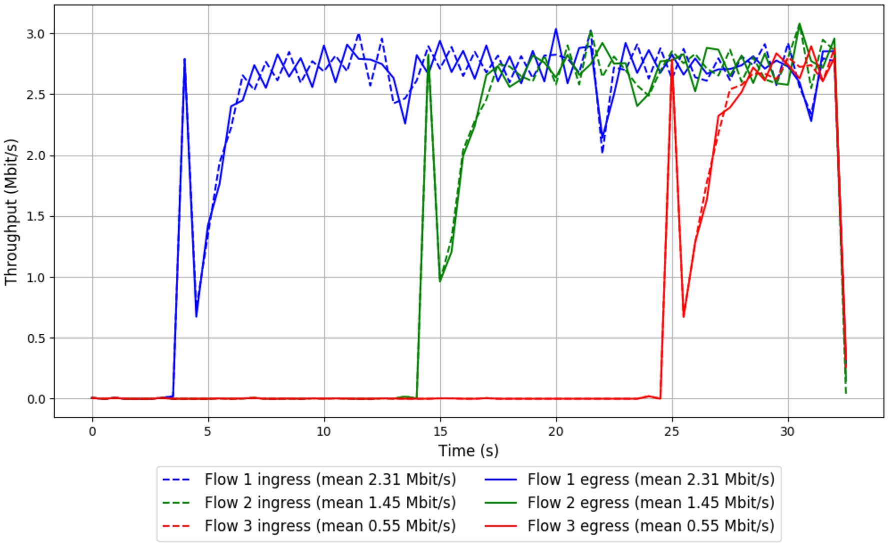
Run 4: Report of WebRTC media — Data Link

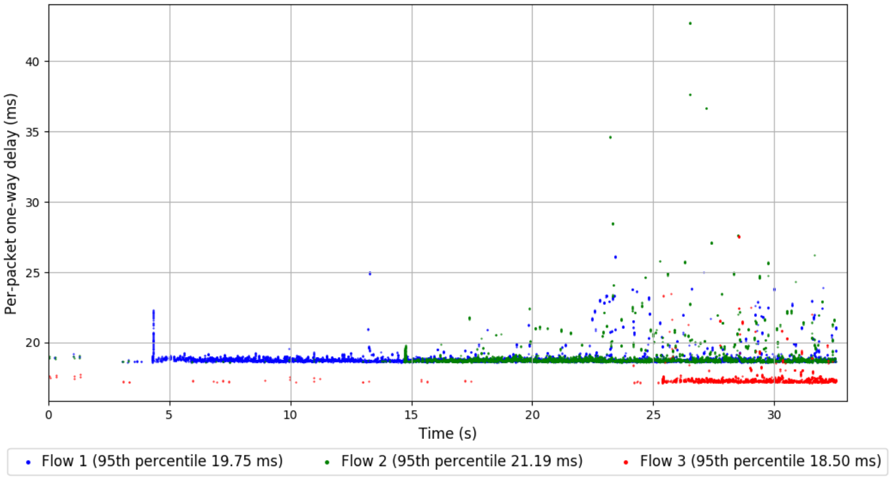




```
Run 5: Statistics of WebRTC media

Start at: 2018-01-17 05:37:55
End at: 2018-01-17 05:38:25
Local clock offset: -2.892 ms
Remote clock offset: -2.193 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.31 Mbit/s
95th percentile per-packet one-way delay: 20.270 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 19.751 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 21.192 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 18.503 ms
Loss rate: 0.00%
```

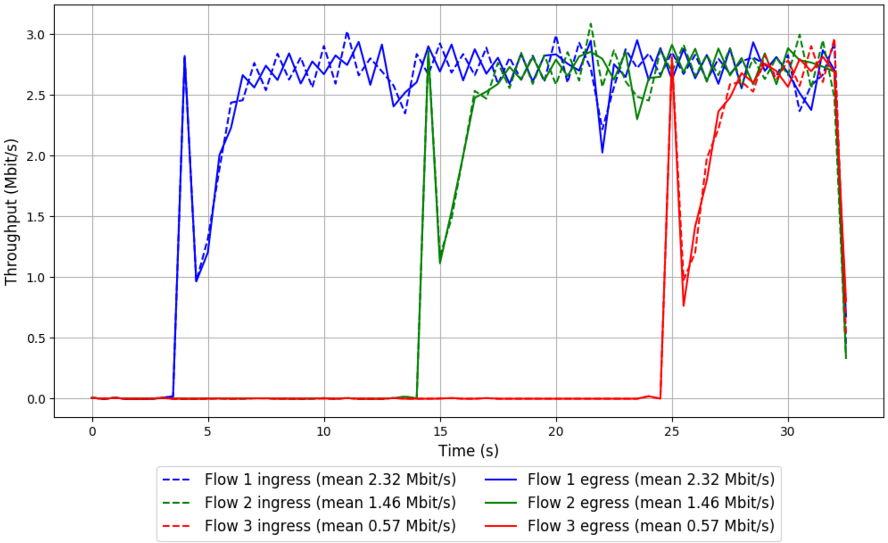
Run 5: Report of WebRTC media — Data Link

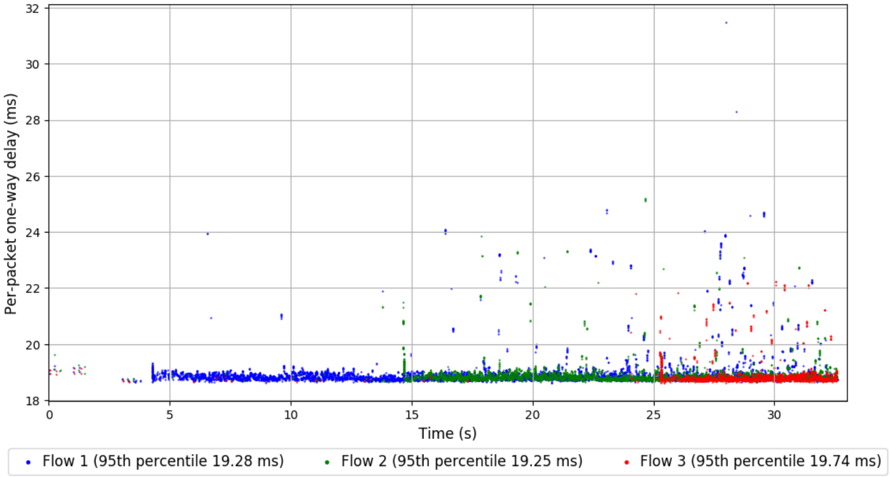




```
Run 6: Statistics of WebRTC media

Start at: 2018-01-17 06:05:39
End at: 2018-01-17 06:06:09
Local clock offset: -2.934 ms
Remote clock offset: -1.968 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.34 Mbit/s
95th percentile per-packet one-way delay: 19.327 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 19.276 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 19.245 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 19.742 ms
Loss rate: 0.00%
```

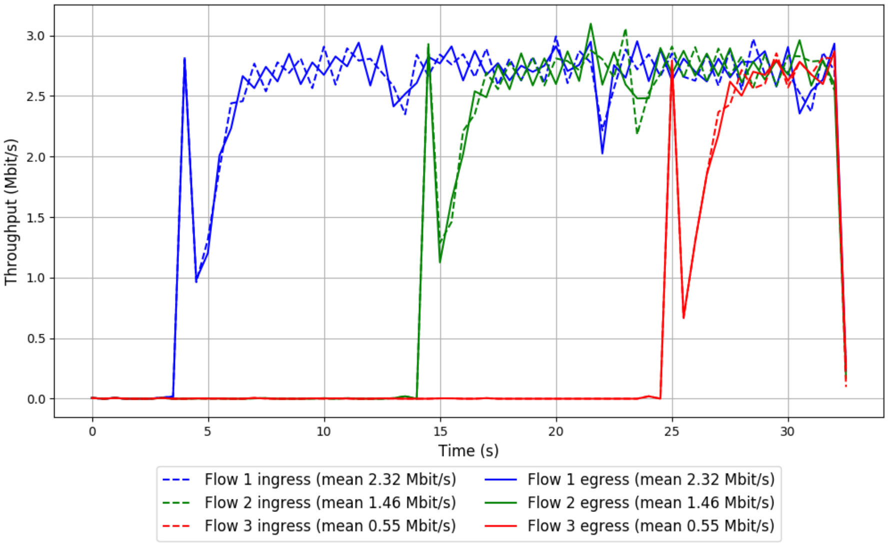
Run 6: Report of WebRTC media — Data Link

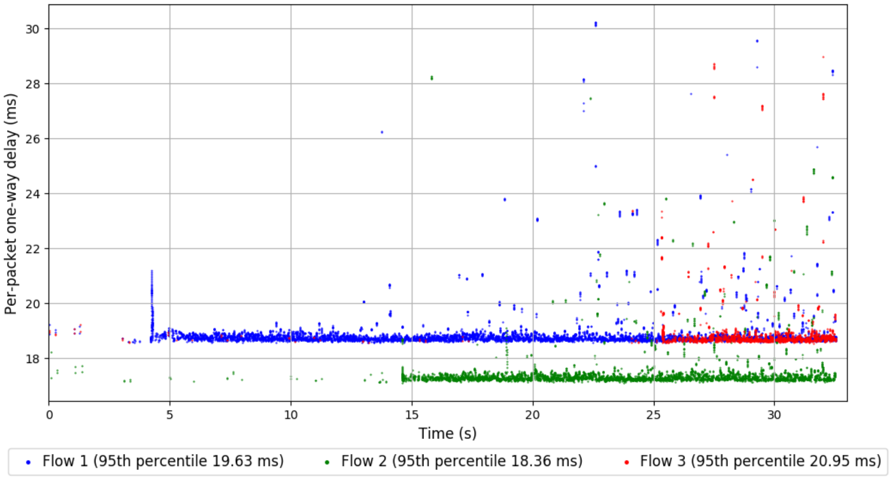




```
Run 7: Statistics of WebRTC media

Start at: 2018-01-17 06:33:15
End at: 2018-01-17 06:33:45
Local clock offset: -2.724 ms
Remote clock offset: -1.83 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.33 Mbit/s
95th percentile per-packet one-way delay: 19.505 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 19.633 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 18.361 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 20.955 ms
Loss rate: 0.00%
```

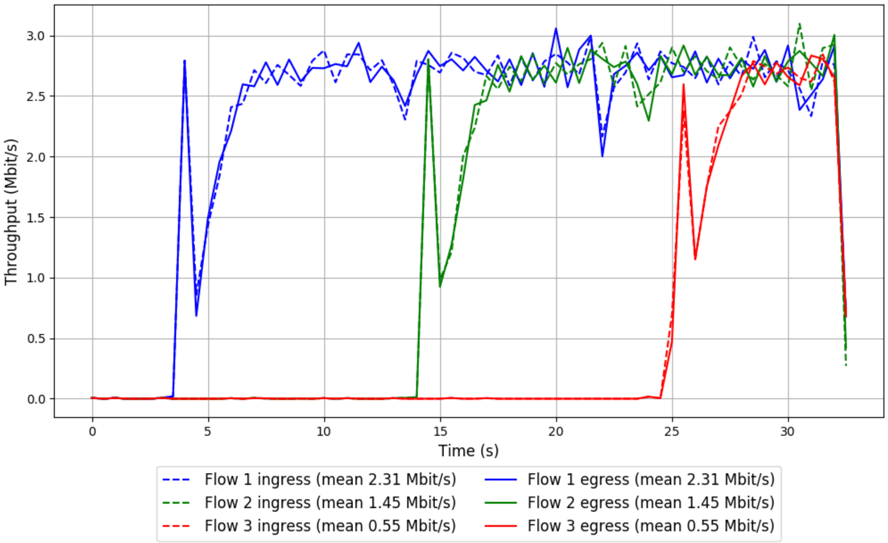
Run 7: Report of WebRTC media — Data Link

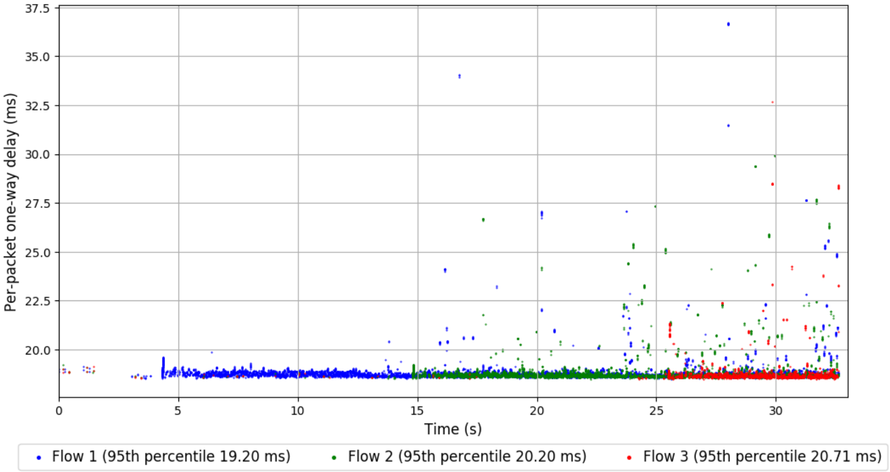




```
Run 8: Statistics of WebRTC media

Start at: 2018-01-17 07:01:18
End at: 2018-01-17 07:01:48
Local clock offset: -3.28 ms
Remote clock offset: -1.927 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.30 Mbit/s
95th percentile per-packet one-way delay: 19.550 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 19.198 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 20.202 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 20.710 ms
Loss rate: 0.00%
```

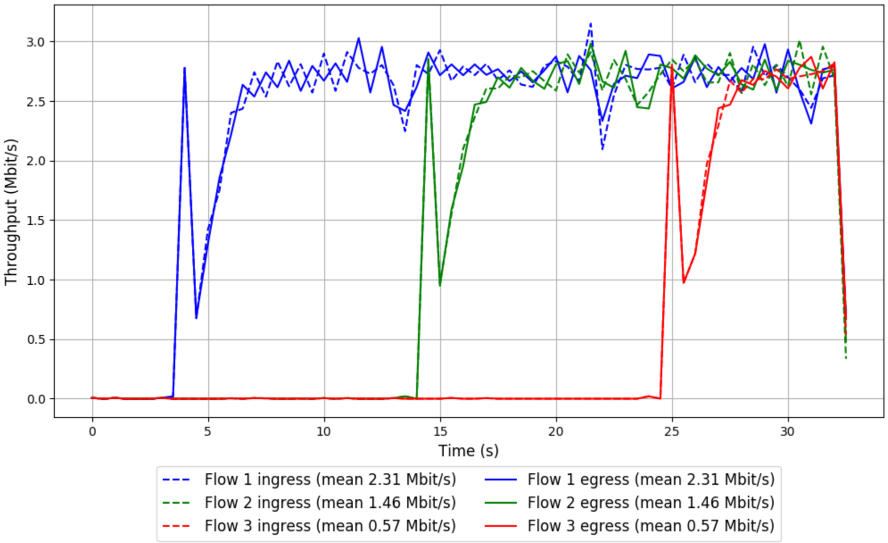
Run 8: Report of WebRTC media — Data Link

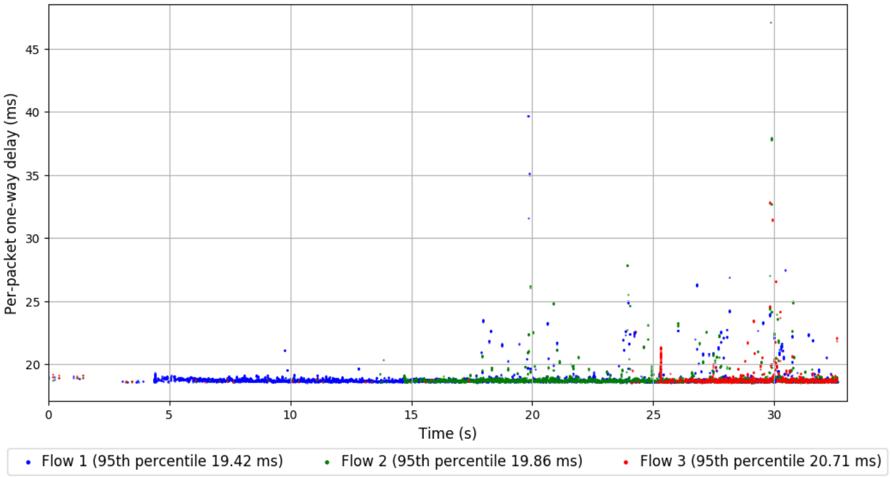




```
Run 9: Statistics of WebRTC media

Start at: 2018-01-17 07:28:50
End at: 2018-01-17 07:29:20
Local clock offset: -4.235 ms
Remote clock offset: -1.808 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.33 Mbit/s
95th percentile per-packet one-way delay: 19.807 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 19.416 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 19.857 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 20.707 ms
Loss rate: 0.00%
```

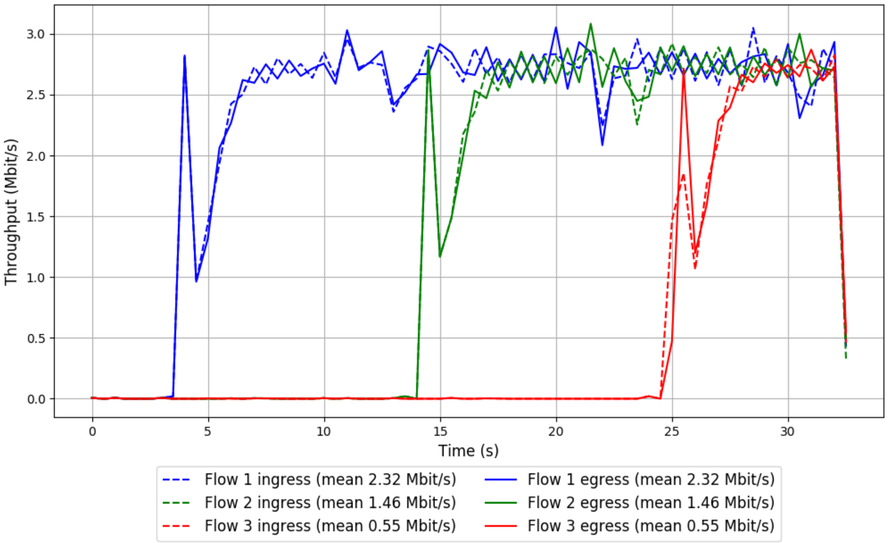
Run 9: Report of WebRTC media — Data Link

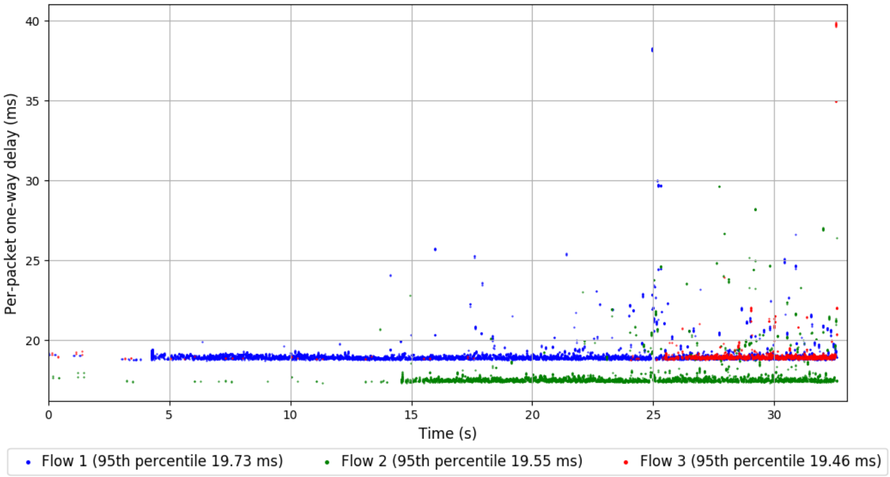




```
Run 10: Statistics of WebRTC media

Start at: 2018-01-17 07:56:20
End at: 2018-01-17 07:56:50
Local clock offset: -5.138 ms
Remote clock offset: -2.059 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 19.619 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 19.725 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 19.554 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 19.456 ms
Loss rate: 0.00%
```

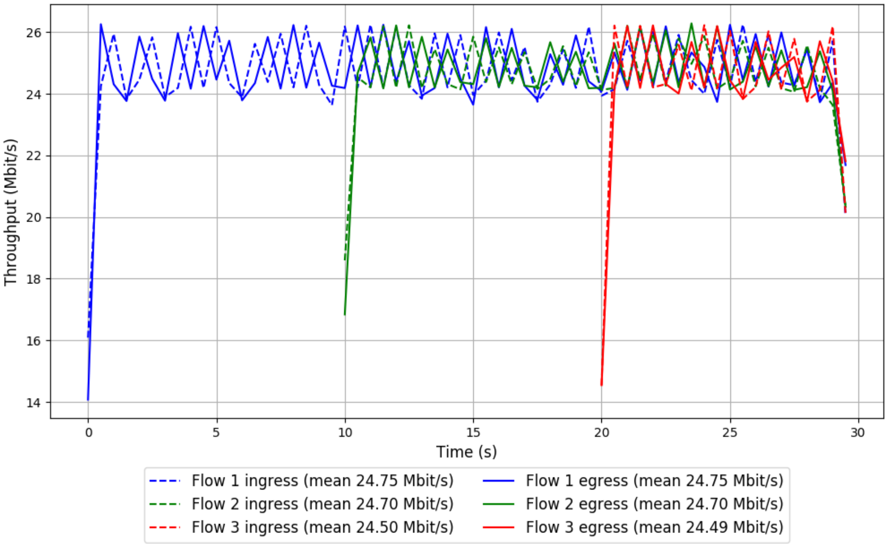
Run 10: Report of WebRTC media — Data Link

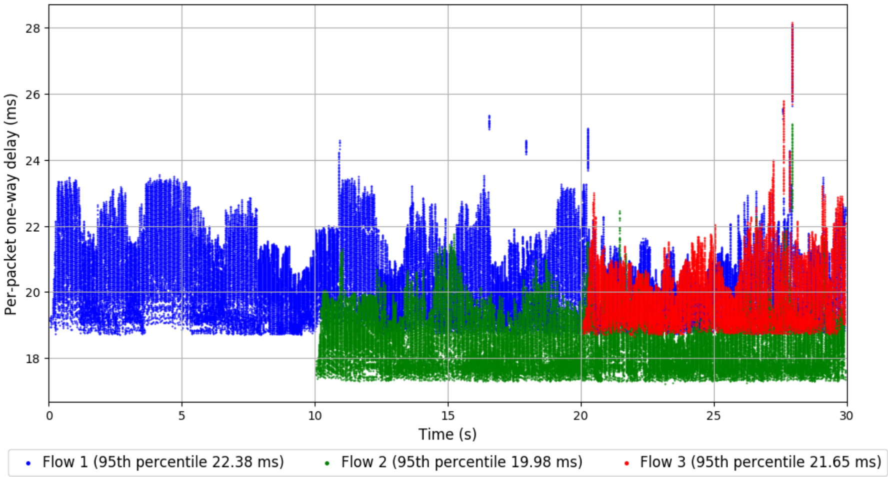




```
Run 1: Statistics of Sprout

Start at: 2018-01-17 03:45:01
End at: 2018-01-17 03:45:31
Local clock offset: -1.27 ms
Remote clock offset: -2.285 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.27 Mbit/s
95th percentile per-packet one-way delay: 21.966 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 24.75 Mbit/s
95th percentile per-packet one-way delay: 22.382 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 24.70 Mbit/s
95th percentile per-packet one-way delay: 19.980 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.49 Mbit/s
95th percentile per-packet one-way delay: 21.646 ms
Loss rate: 0.01%
```

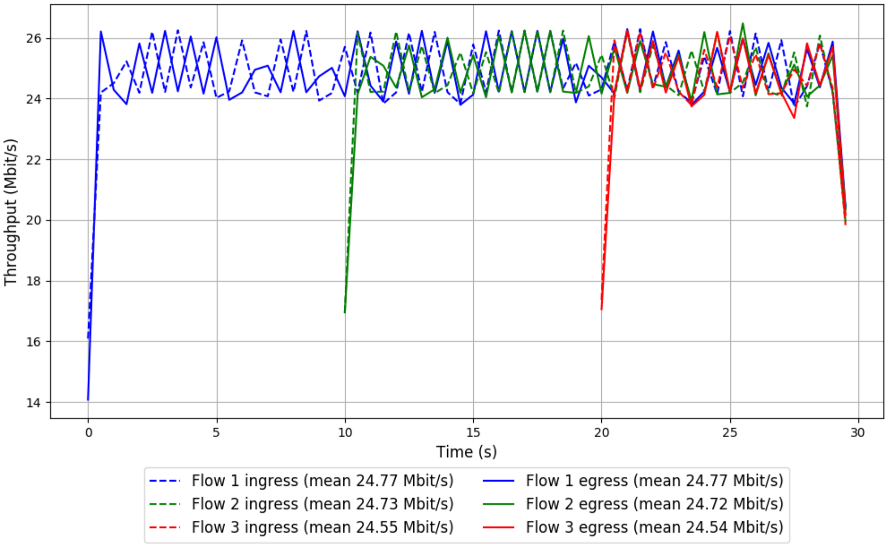
Run 1: Report of Sprout — Data Link

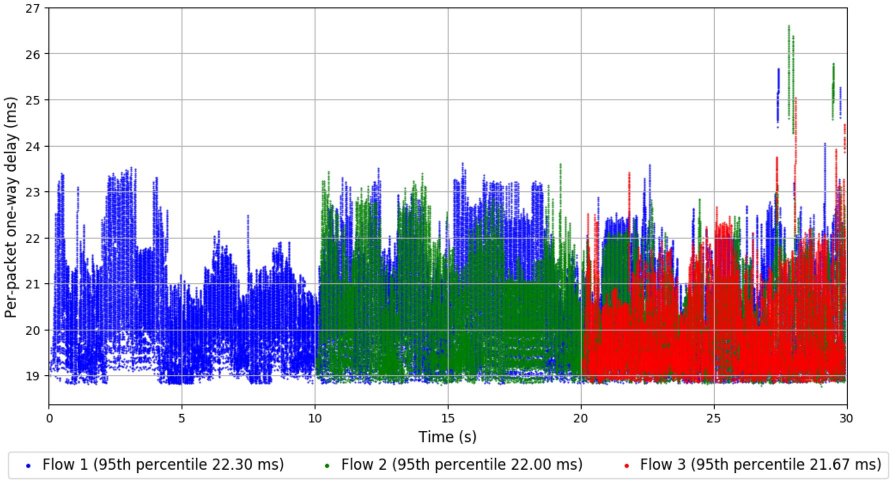




```
Run 2: Statistics of Sprout

Start at: 2018-01-17 04:12:30
End at: 2018-01-17 04:13:00
Local clock offset: -1.829 ms
Remote clock offset: -2.93 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.32 Mbit/s
95th percentile per-packet one-way delay: 22.137 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 24.77 Mbit/s
95th percentile per-packet one-way delay: 22.296 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 24.72 Mbit/s
95th percentile per-packet one-way delay: 21.995 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 24.54 Mbit/s
95th percentile per-packet one-way delay: 21.673 ms
Loss rate: 0.05%
```

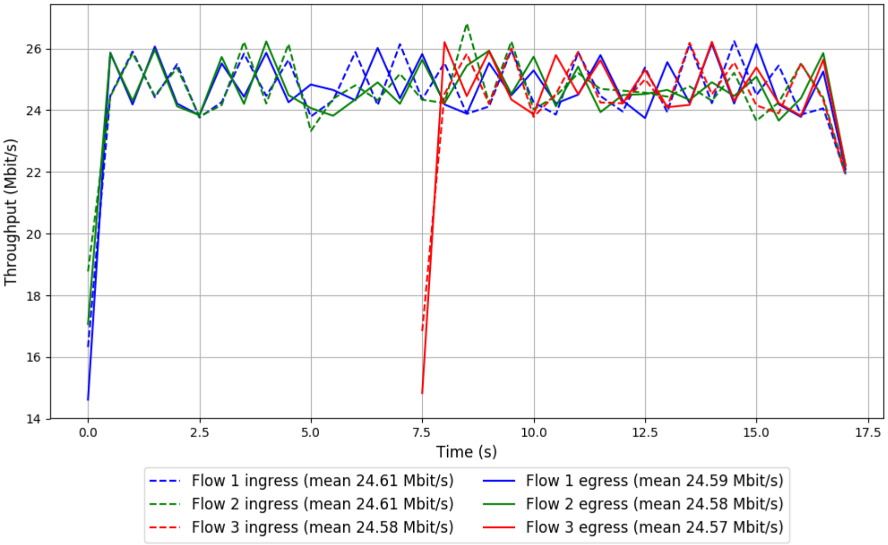
Run 2: Report of Sprout — Data Link

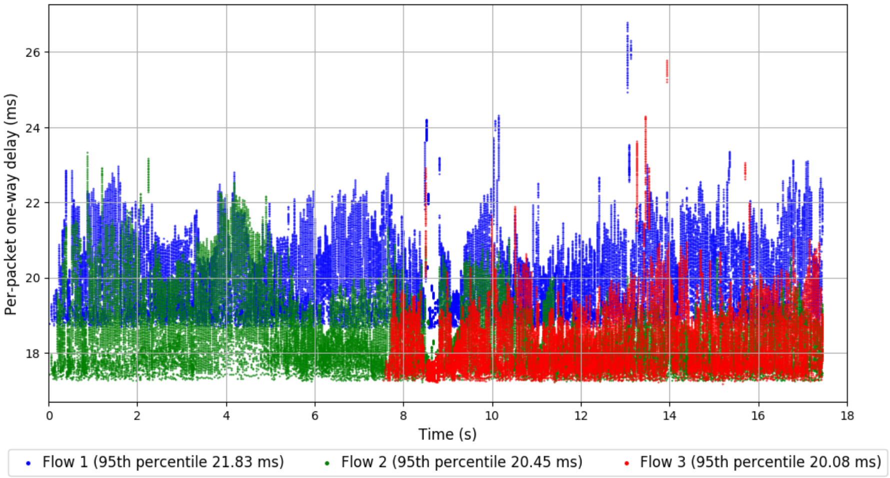




```
Run 3: Statistics of Sprout

Start at: 2018-01-17 04:40:00
End at: 2018-01-17 04:40:30
Local clock offset: -1.978 ms
Remote clock offset: -2.39 ms
```

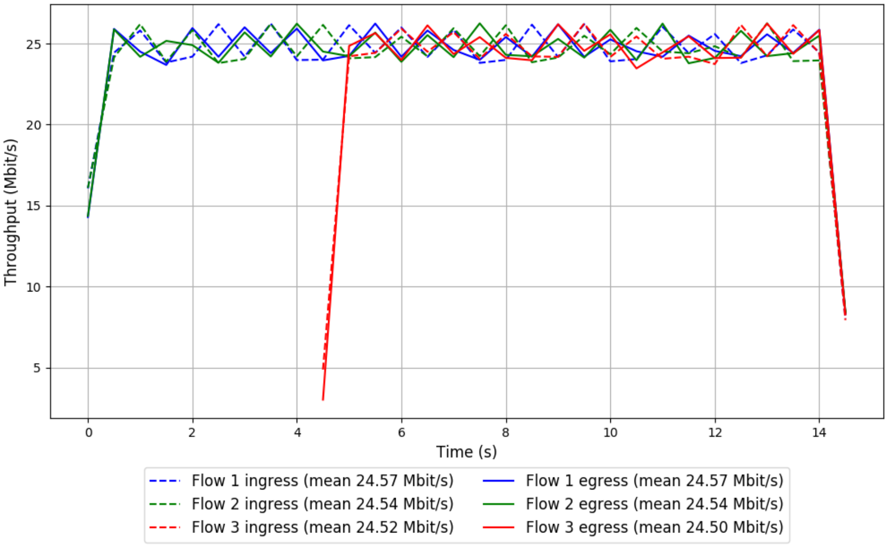
Run 3: Report of Sprout — Data Link

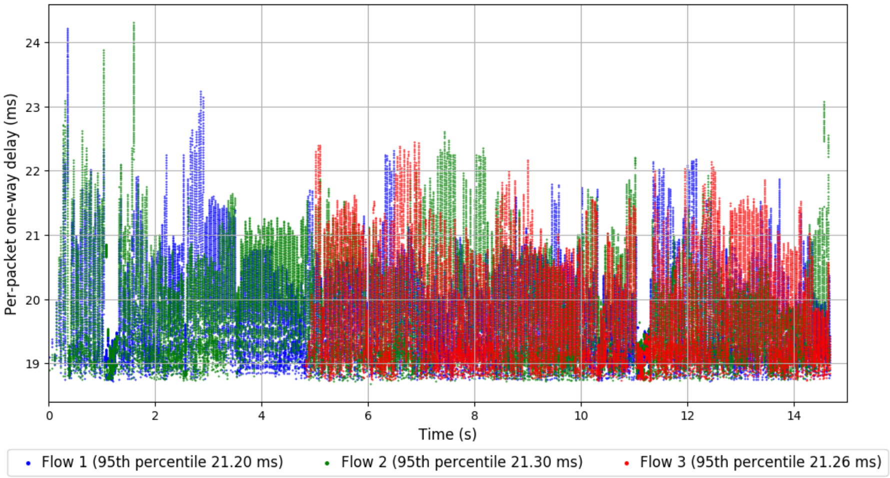




```
Run 4: Statistics of Sprout

Start at: 2018-01-17 05:07:19
End at: 2018-01-17 05:07:49
Local clock offset: -2.395 ms
Remote clock offset: -2.089 ms
```

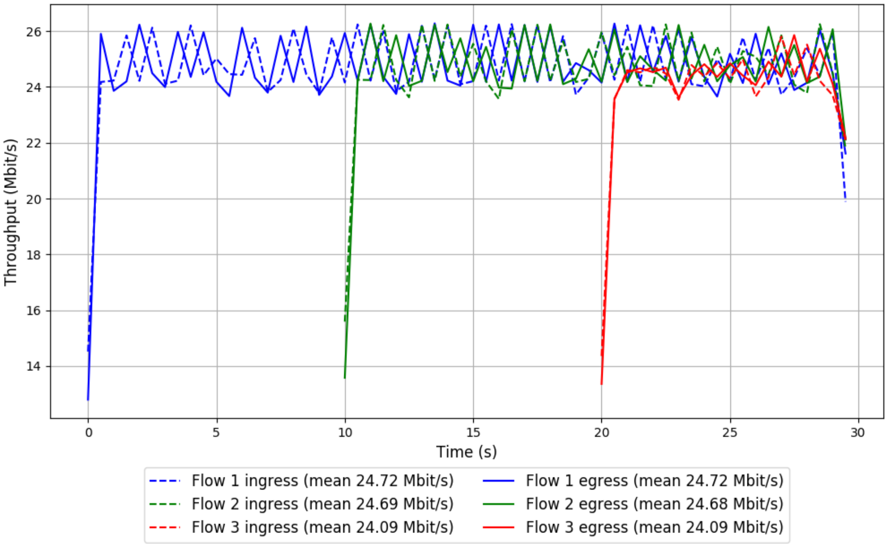
Run 4: Report of Sprout — Data Link

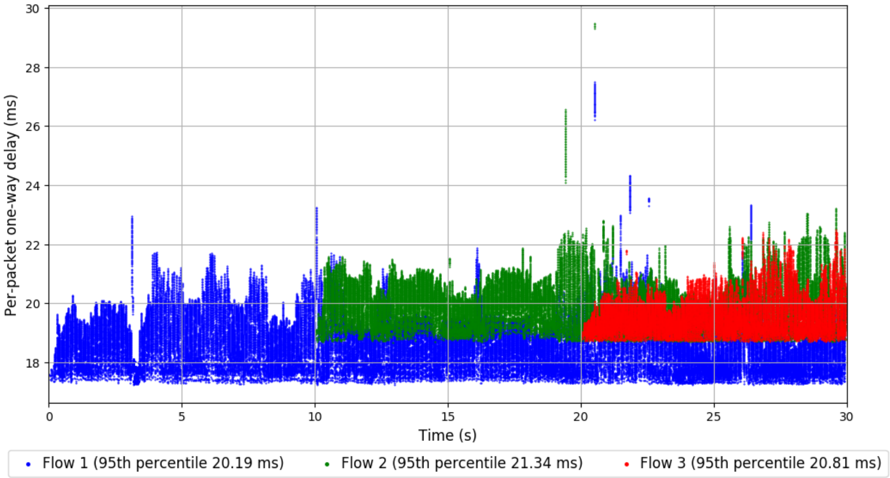




```
Run 5: Statistics of Sprout

Start at: 2018-01-17 05:35:12
End at: 2018-01-17 05:35:42
Local clock offset: -2.828 ms
Remote clock offset: -2.129 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.10 Mbit/s
95th percentile per-packet one-way delay: 20.889 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 24.72 Mbit/s
95th percentile per-packet one-way delay: 20.192 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.68 Mbit/s
95th percentile per-packet one-way delay: 21.335 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 24.09 Mbit/s
95th percentile per-packet one-way delay: 20.810 ms
Loss rate: 0.00%
```

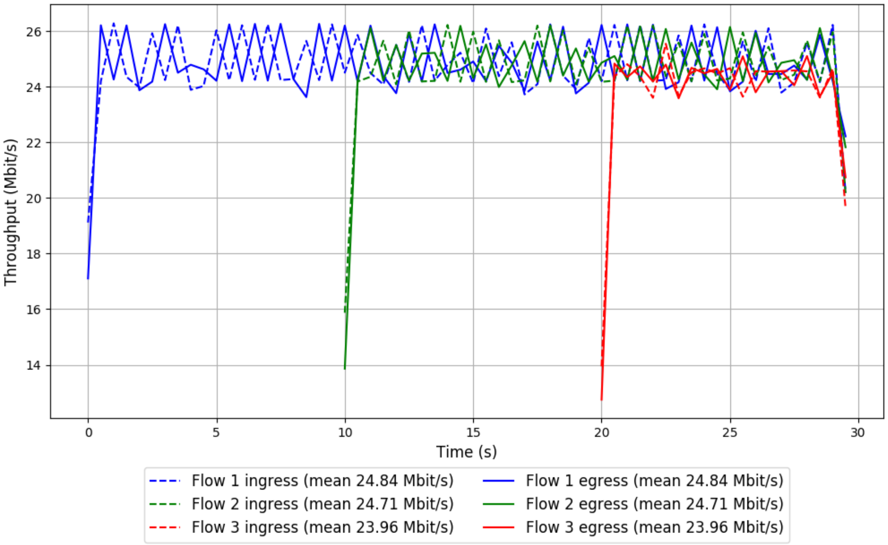
Run 5: Report of Sprout — Data Link

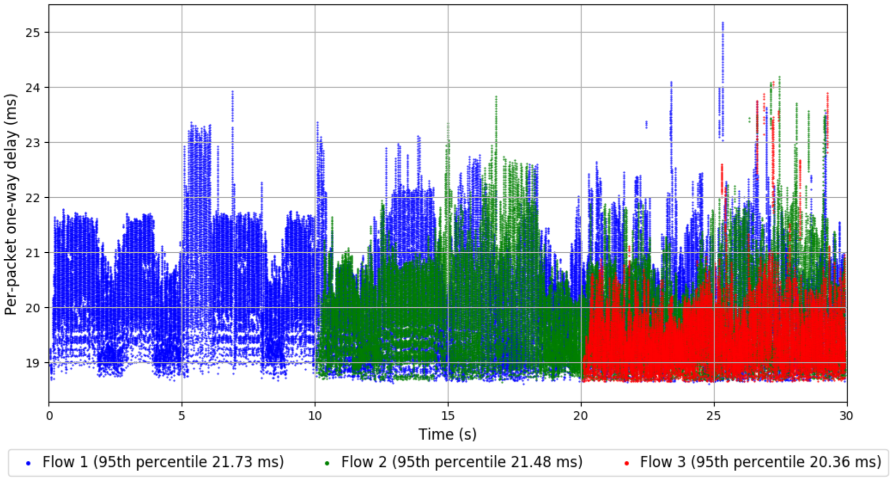




```
Run 6: Statistics of Sprout

Start at: 2018-01-17 06:02:53
End at: 2018-01-17 06:03:23
Local clock offset: -3.041 ms
Remote clock offset: -2.073 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.18 Mbit/s
95th percentile per-packet one-way delay: 21.582 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.84 Mbit/s
95th percentile per-packet one-way delay: 21.733 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.71 Mbit/s
95th percentile per-packet one-way delay: 21.478 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.96 Mbit/s
95th percentile per-packet one-way delay: 20.359 ms
Loss rate: 0.01%
```

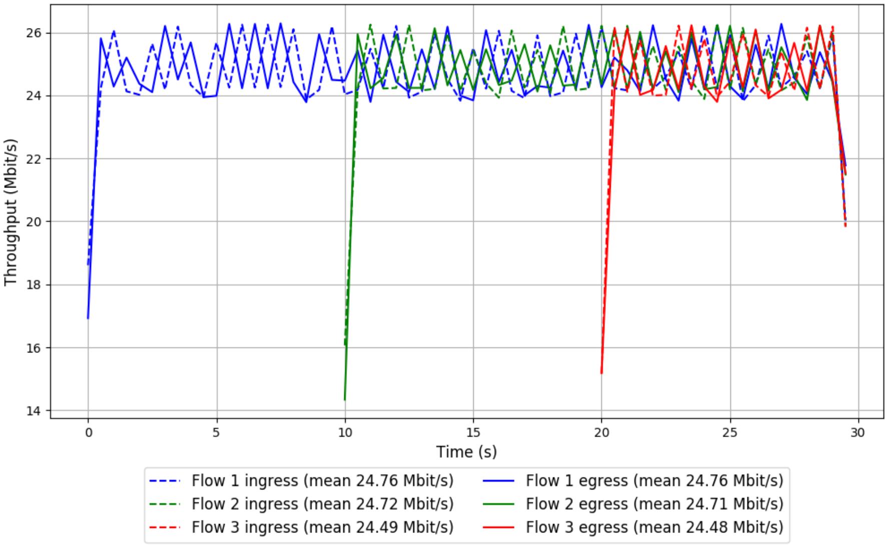
Run 6: Report of Sprout — Data Link

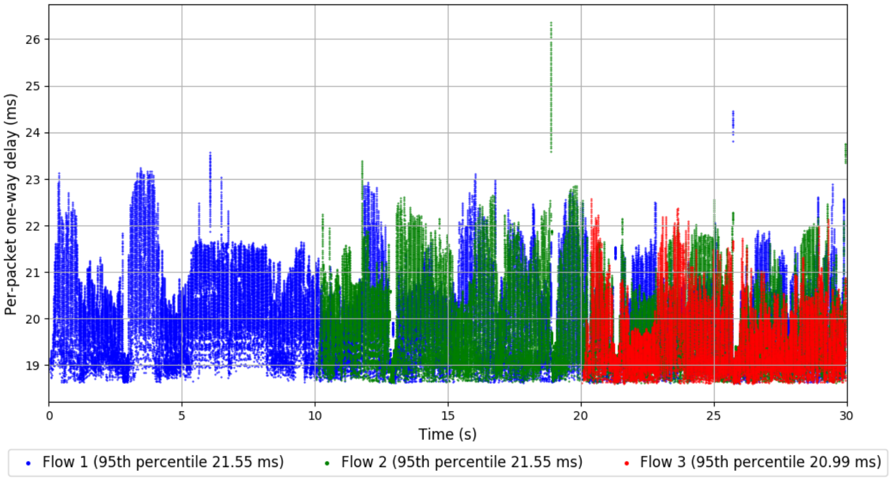




```
Run 7: Statistics of Sprout

Start at: 2018-01-17 06:30:36
End at: 2018-01-17 06:31:06
Local clock offset: -2.676 ms
Remote clock offset: -1.786 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.29 Mbit/s
95th percentile per-packet one-way delay: 21.489 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.76 Mbit/s
95th percentile per-packet one-way delay: 21.546 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.71 Mbit/s
95th percentile per-packet one-way delay: 21.548 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.48 Mbit/s
95th percentile per-packet one-way delay: 20.986 ms
Loss rate: 0.00%
```

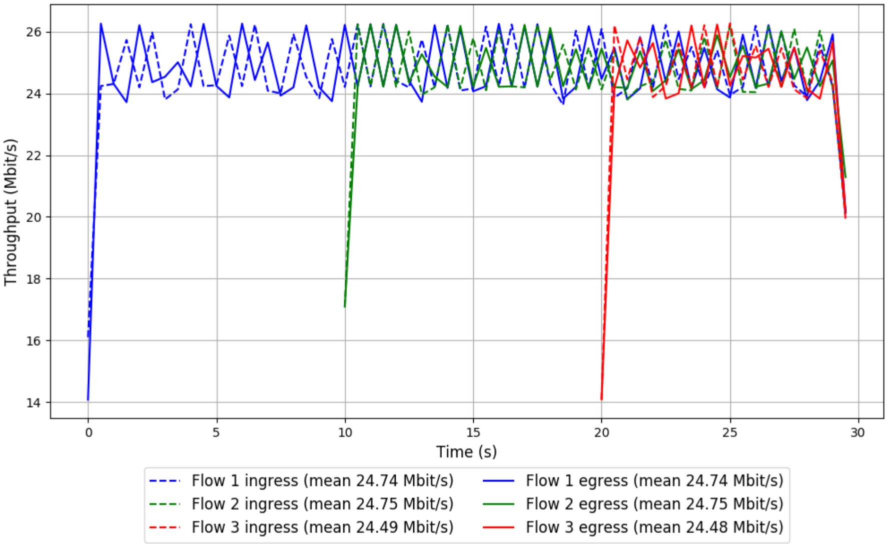
Run 7: Report of Sprout — Data Link

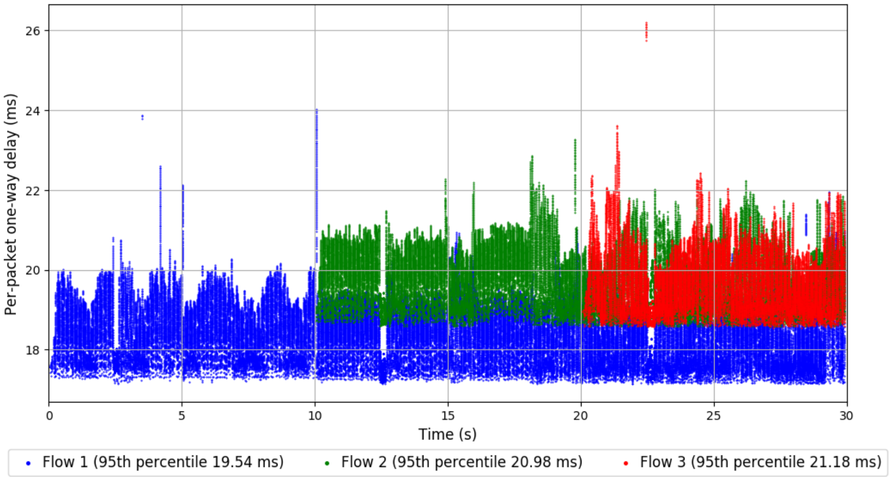




```
Run 8: Statistics of Sprout

Start at: 2018-01-17 06:58:31
End at: 2018-01-17 06:59:01
Local clock offset: -3.183 ms
Remote clock offset: -1.971 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.27 Mbit/s
95th percentile per-packet one-way delay: 20.746 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.74 Mbit/s
95th percentile per-packet one-way delay: 19.537 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.75 Mbit/s
95th percentile per-packet one-way delay: 20.982 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.48 Mbit/s
95th percentile per-packet one-way delay: 21.185 ms
Loss rate: 0.00%
```

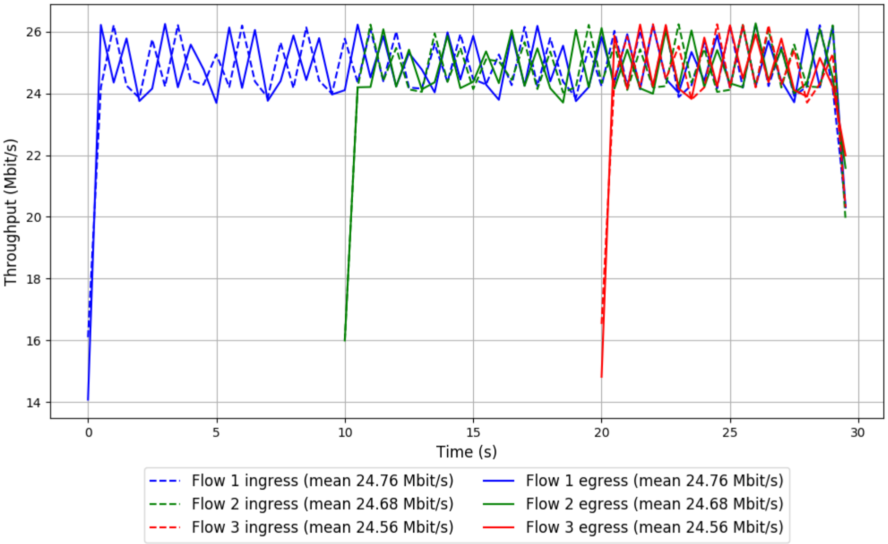
Run 8: Report of Sprout — Data Link

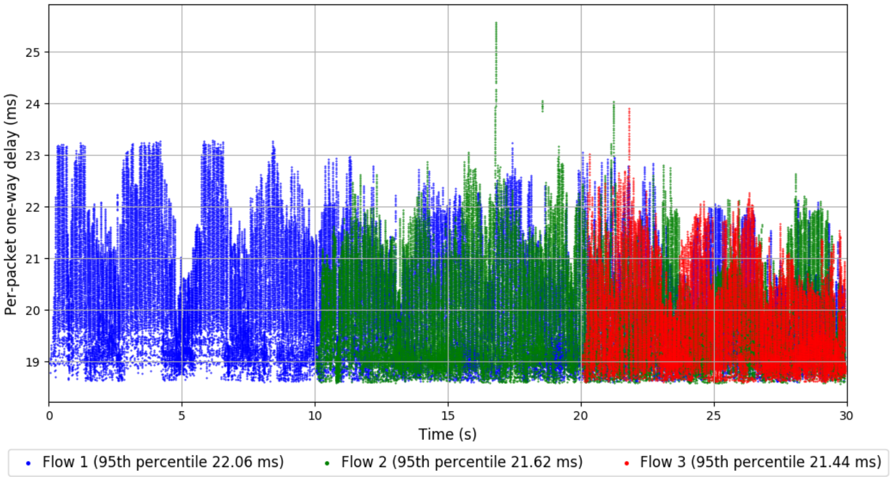




```
Run 9: Statistics of Sprout

Start at: 2018-01-17 07:26:08
End at: 2018-01-17 07:26:38
Local clock offset: -4.148 ms
Remote clock offset: -1.86 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.28 Mbit/s
95th percentile per-packet one-way delay: 21.830 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.76 Mbit/s
95th percentile per-packet one-way delay: 22.064 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.68 Mbit/s
95th percentile per-packet one-way delay: 21.625 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.56 Mbit/s
95th percentile per-packet one-way delay: 21.442 ms
Loss rate: 0.00%
```

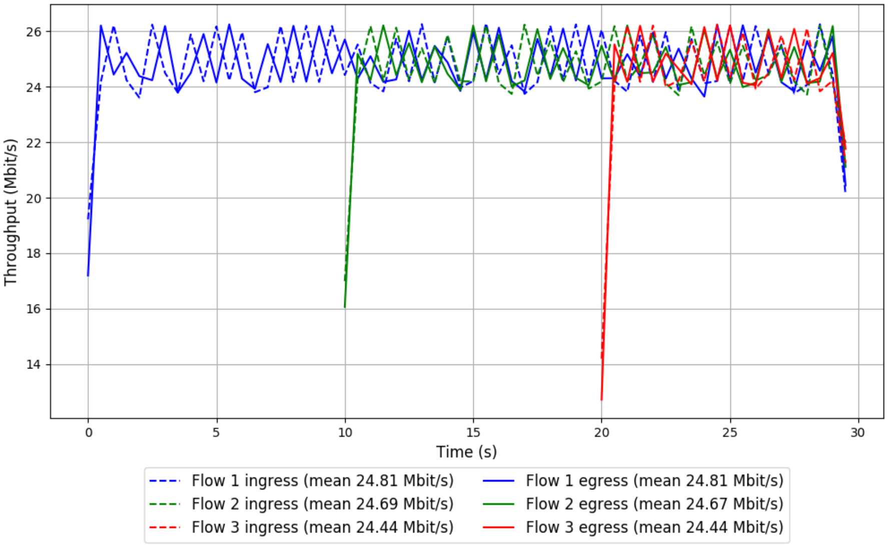
Run 9: Report of Sprout — Data Link

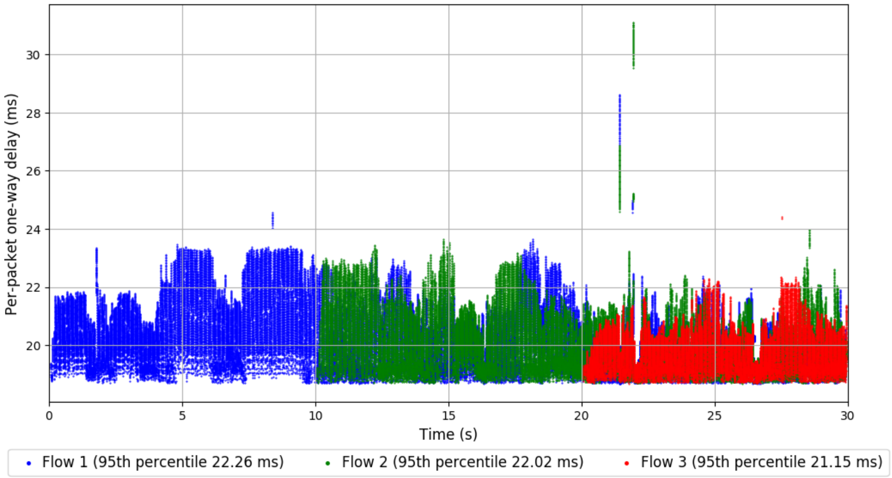




```
Run 10: Statistics of Sprout

Start at: 2018-01-17 07:53:35
End at: 2018-01-17 07:54:05
Local clock offset: -5.067 ms
Remote clock offset: -2.093 ms

# Below is generated by plot.py at 2018-01-17 11:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.29 Mbit/s
95th percentile per-packet one-way delay: 22.039 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 24.81 Mbit/s
95th percentile per-packet one-way delay: 22.256 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.67 Mbit/s
95th percentile per-packet one-way delay: 22.019 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 24.44 Mbit/s
95th percentile per-packet one-way delay: 21.149 ms
Loss rate: 0.00%
```

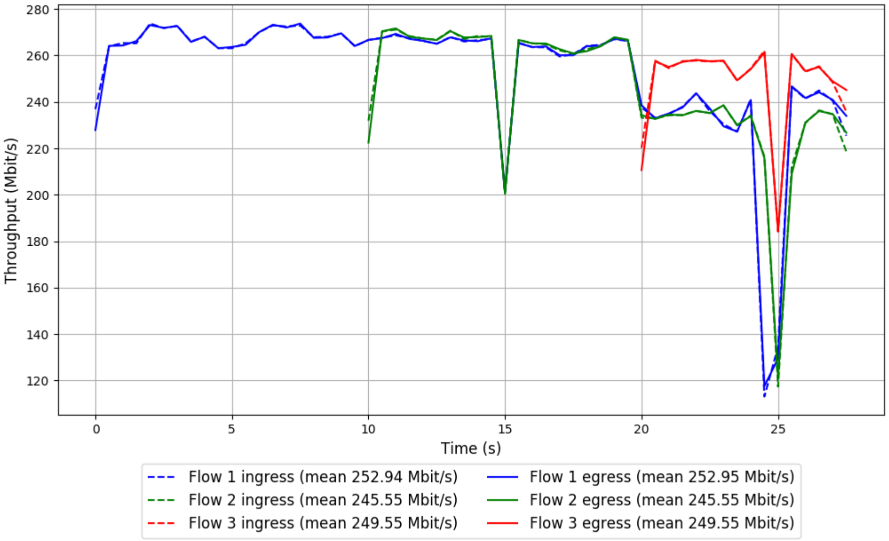
Run 10: Report of Sprout — Data Link

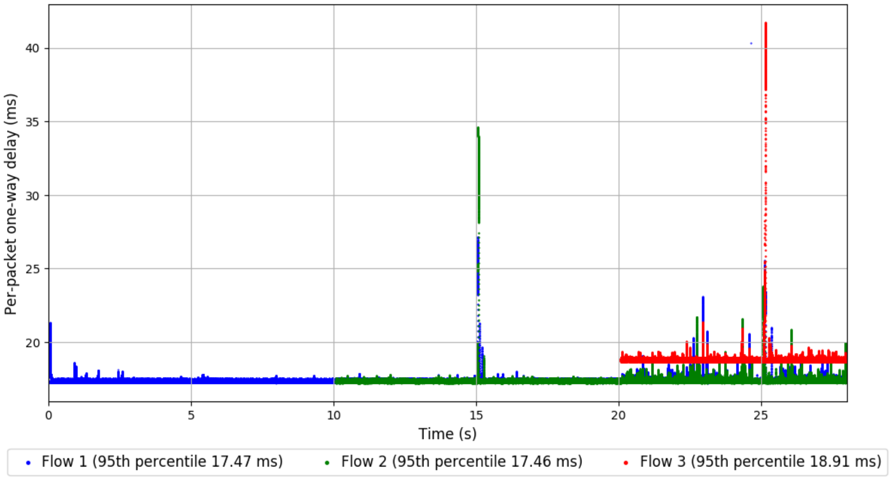




```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-17 03:38:44
End at: 2018-01-17 03:39:14
Local clock offset: -1.302 ms
Remote clock offset: -2.268 ms

# Below is generated by plot.py at 2018-01-17 11:48:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 481.32 Mbit/s
95th percentile per-packet one-way delay: 18.800 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 252.95 Mbit/s
95th percentile per-packet one-way delay: 17.466 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 245.55 Mbit/s
95th percentile per-packet one-way delay: 17.461 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 249.55 Mbit/s
95th percentile per-packet one-way delay: 18.908 ms
Loss rate: 0.00%
```

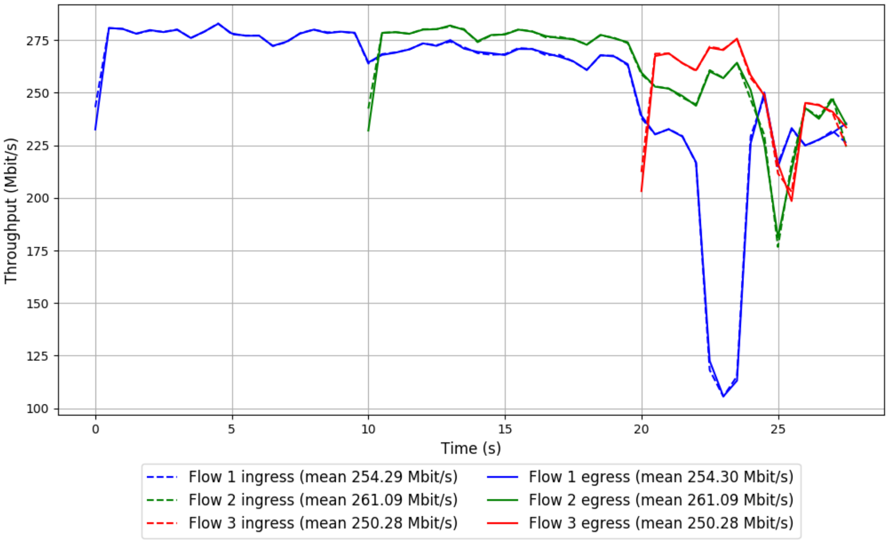
Run 1: Report of TaoVA-100x — Data Link

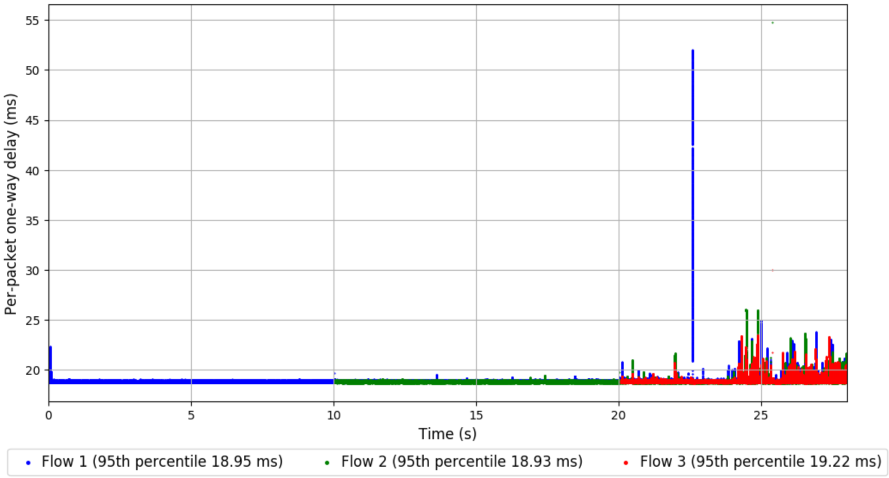




```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-17 04:06:13
End at: 2018-01-17 04:06:43
Local clock offset: -1.682 ms
Remote clock offset: -2.862 ms

# Below is generated by plot.py at 2018-01-17 11:49:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 492.86 Mbit/s
95th percentile per-packet one-way delay: 18.960 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 254.30 Mbit/s
95th percentile per-packet one-way delay: 18.954 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 261.09 Mbit/s
95th percentile per-packet one-way delay: 18.933 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 250.28 Mbit/s
95th percentile per-packet one-way delay: 19.217 ms
Loss rate: 0.00%
```

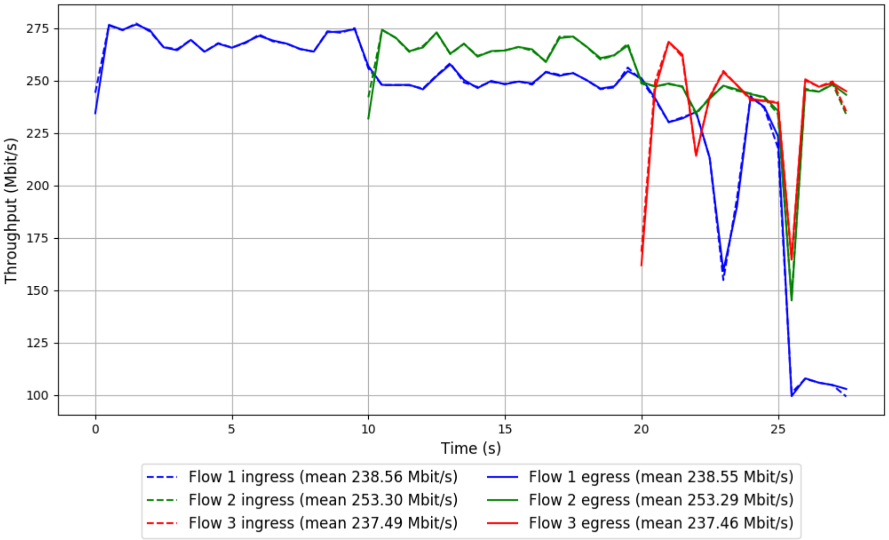
Run 2: Report of TaoVA-100x — Data Link

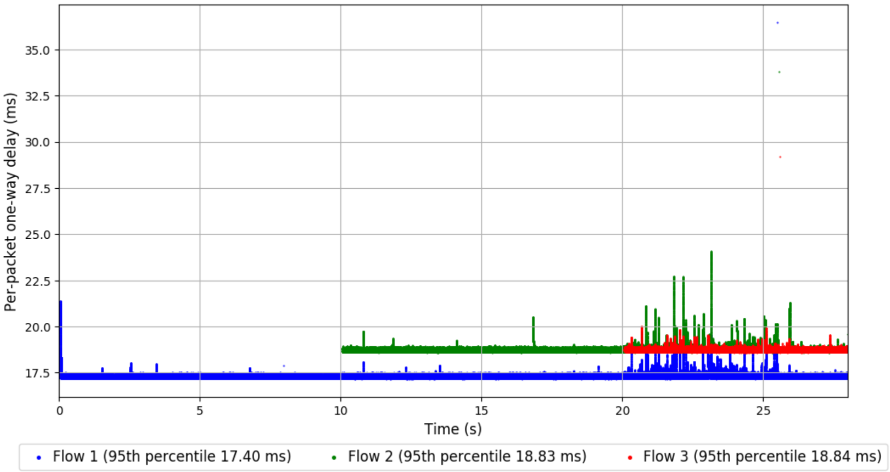




```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-17 04:33:36
End at: 2018-01-17 04:34:06
Local clock offset: -1.868 ms
Remote clock offset: -2.583 ms

# Below is generated by plot.py at 2018-01-17 11:49:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 468.61 Mbit/s
95th percentile per-packet one-way delay: 18.787 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 238.55 Mbit/s
95th percentile per-packet one-way delay: 17.397 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 253.29 Mbit/s
95th percentile per-packet one-way delay: 18.830 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 237.46 Mbit/s
95th percentile per-packet one-way delay: 18.841 ms
Loss rate: 0.01%
```

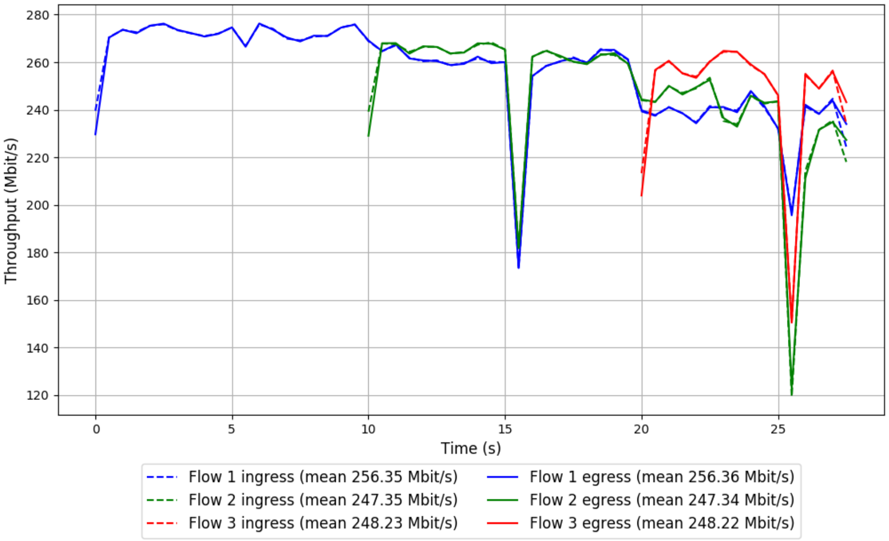
Run 3: Report of TaoVA-100x — Data Link

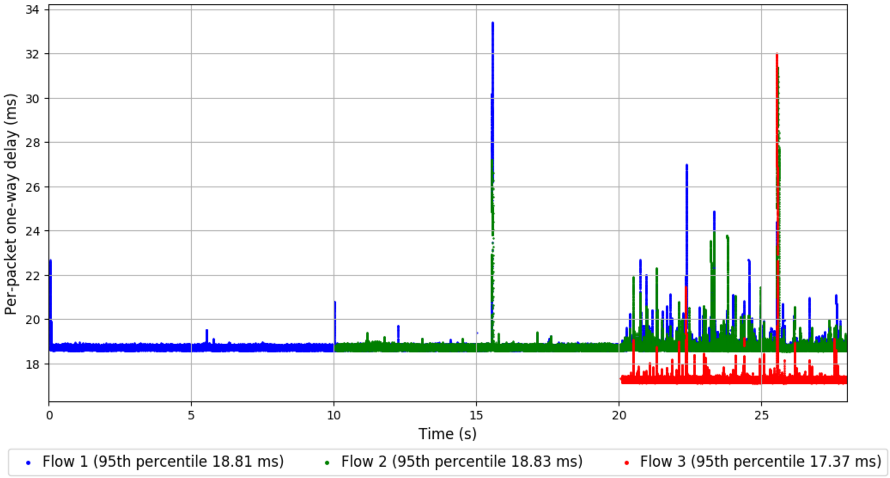




```
Run 4: Statistics of TaoVA-100x

Start at: 2018-01-17 05:01:03
End at: 2018-01-17 05:01:33
Local clock offset: -2.421 ms
Remote clock offset: -2.212 ms

# Below is generated by plot.py at 2018-01-17 11:49:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 485.48 Mbit/s
95th percentile per-packet one-way delay: 18.809 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 256.36 Mbit/s
95th percentile per-packet one-way delay: 18.811 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 247.34 Mbit/s
95th percentile per-packet one-way delay: 18.829 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 248.22 Mbit/s
95th percentile per-packet one-way delay: 17.366 ms
Loss rate: 0.00%
```

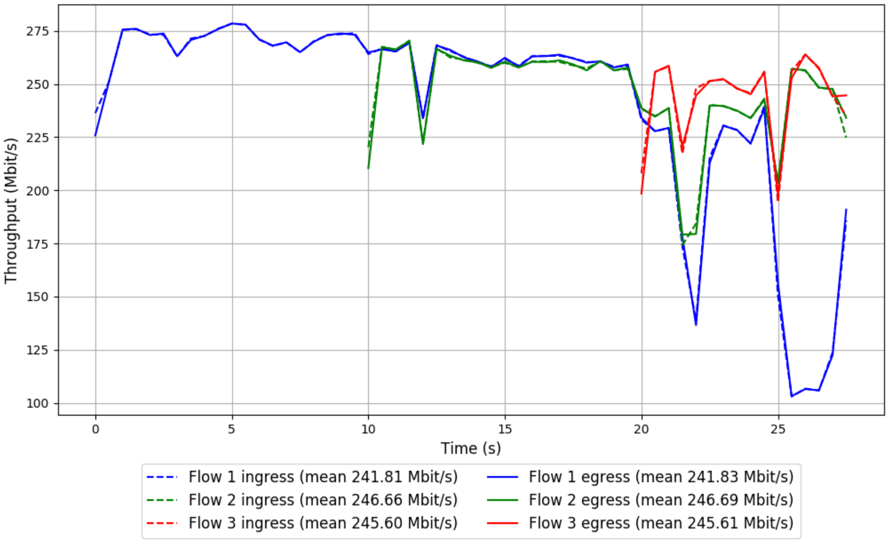
Run 4: Report of TaoVA-100x — Data Link

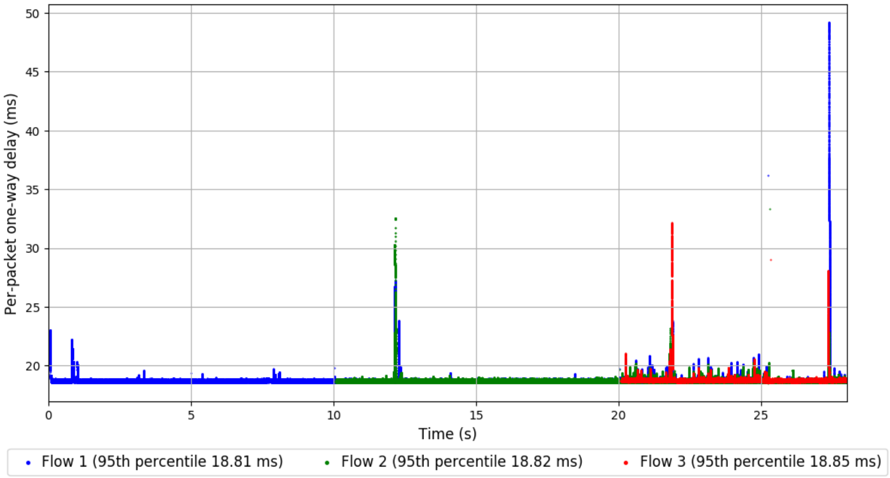




```
Run 5: Statistics of TaoVA-100x

Start at: 2018-01-17 05:28:52
End at: 2018-01-17 05:29:22
Local clock offset: -2.683 ms
Remote clock offset: -2.07 ms

# Below is generated by plot.py at 2018-01-17 11:49:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 469.56 Mbit/s
95th percentile per-packet one-way delay: 18.822 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 241.83 Mbit/s
95th percentile per-packet one-way delay: 18.810 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 246.69 Mbit/s
95th percentile per-packet one-way delay: 18.819 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 245.61 Mbit/s
95th percentile per-packet one-way delay: 18.853 ms
Loss rate: 0.00%
```

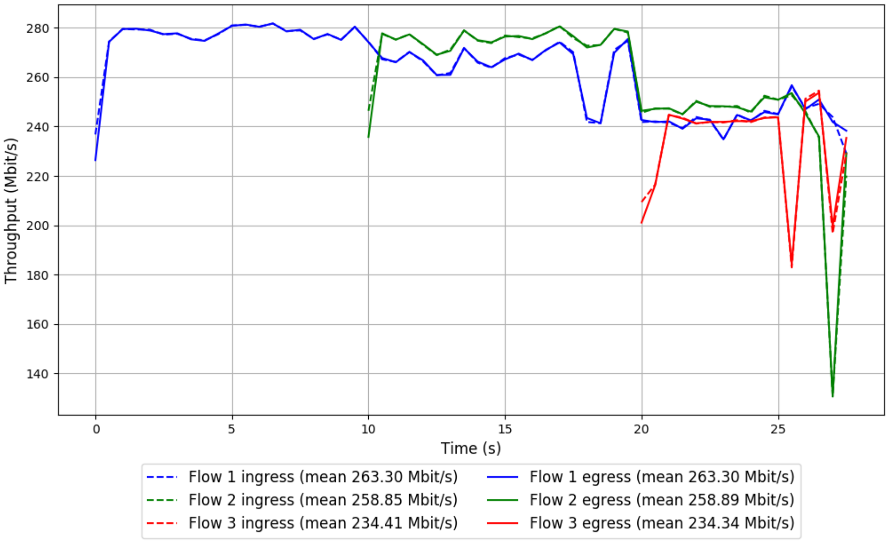
Run 5: Report of TaoVA-100x — Data Link

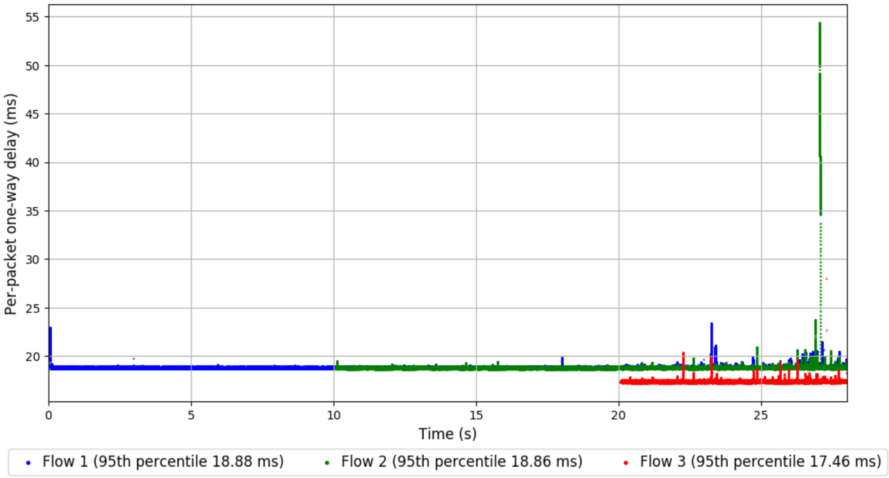




```
Run 6: Statistics of TaoVA-100x

Start at: 2018-01-17 05:56:31
End at: 2018-01-17 05:57:01
Local clock offset: -3.352 ms
Remote clock offset: -2.18 ms

# Below is generated by plot.py at 2018-01-17 11:49:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 496.08 Mbit/s
95th percentile per-packet one-way delay: 18.867 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 263.30 Mbit/s
95th percentile per-packet one-way delay: 18.882 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 258.89 Mbit/s
95th percentile per-packet one-way delay: 18.862 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 234.34 Mbit/s
95th percentile per-packet one-way delay: 17.457 ms
Loss rate: 0.00%
```

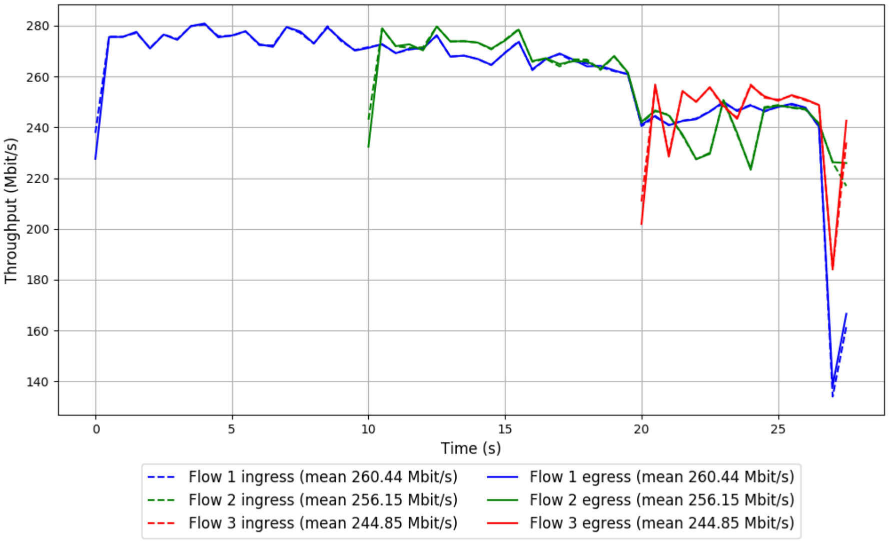
Run 6: Report of TaoVA-100x — Data Link

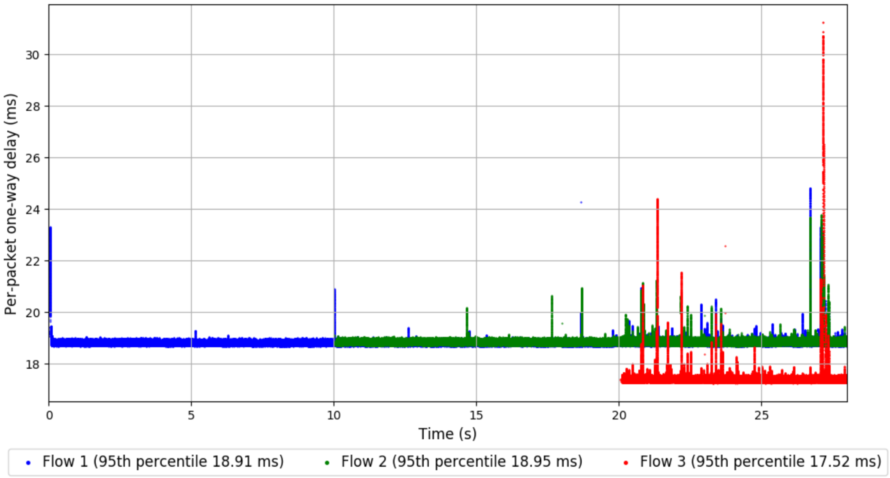




```
Run 7: Statistics of TaoVA-100x

Start at: 2018-01-17 06:24:10
End at: 2018-01-17 06:24:40
Local clock offset: -2.615 ms
Remote clock offset: -1.74 ms

# Below is generated by plot.py at 2018-01-17 11:52:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 494.24 Mbit/s
95th percentile per-packet one-way delay: 18.923 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 260.44 Mbit/s
95th percentile per-packet one-way delay: 18.914 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 256.15 Mbit/s
95th percentile per-packet one-way delay: 18.950 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 244.85 Mbit/s
95th percentile per-packet one-way delay: 17.523 ms
Loss rate: 0.00%
```

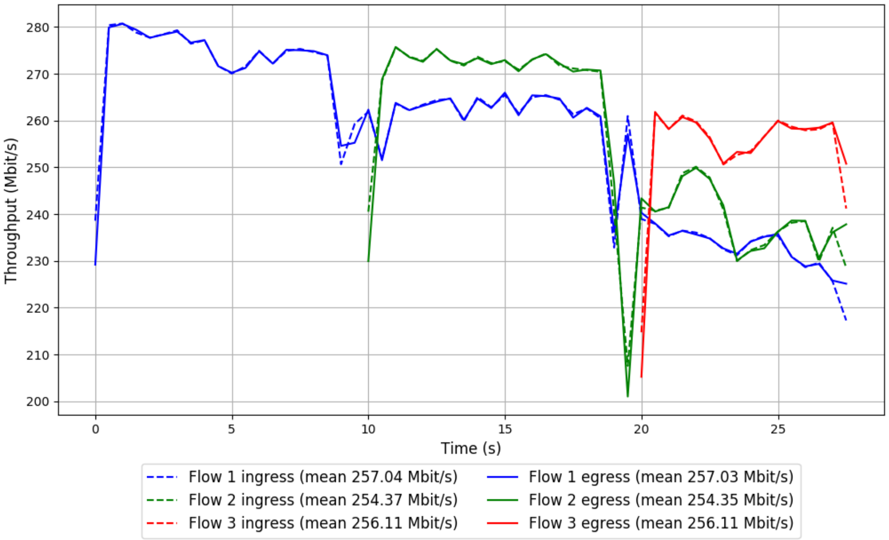
Run 7: Report of TaoVA-100x — Data Link

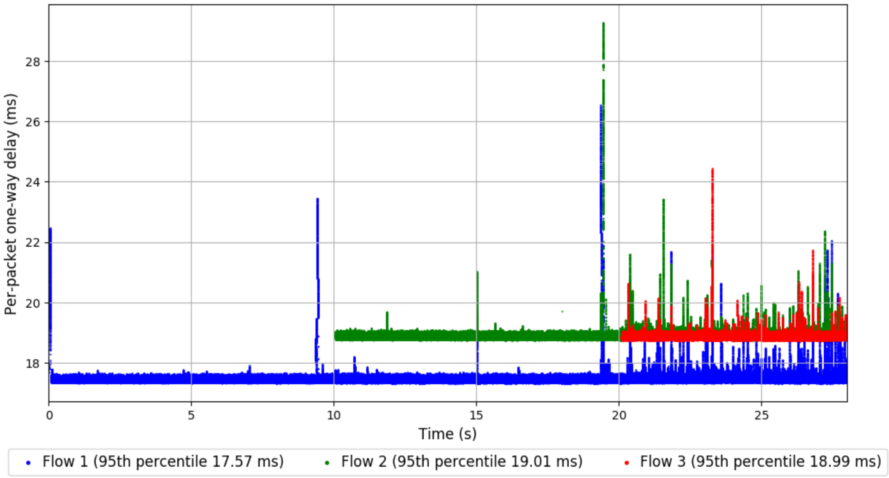




```
Run 8: Statistics of TaoVA-100x

Start at: 2018-01-17 06:52:07
End at: 2018-01-17 06:52:37
Local clock offset: -3.1 ms
Remote clock offset: -1.957 ms

# Below is generated by plot.py at 2018-01-17 11:53:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 492.91 Mbit/s
95th percentile per-packet one-way delay: 18.967 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 257.03 Mbit/s
95th percentile per-packet one-way delay: 17.569 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 254.35 Mbit/s
95th percentile per-packet one-way delay: 19.011 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 256.11 Mbit/s
95th percentile per-packet one-way delay: 18.986 ms
Loss rate: 0.00%
```

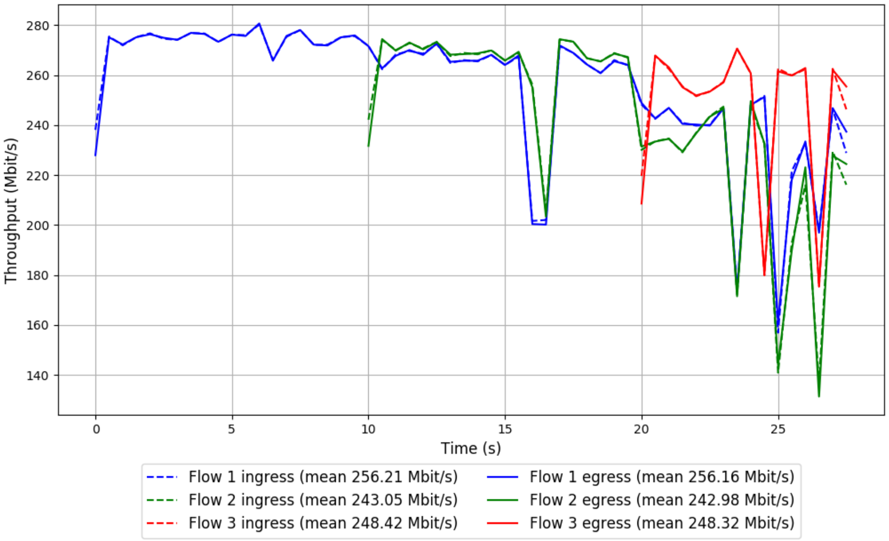
Run 8: Report of TaoVA-100x — Data Link

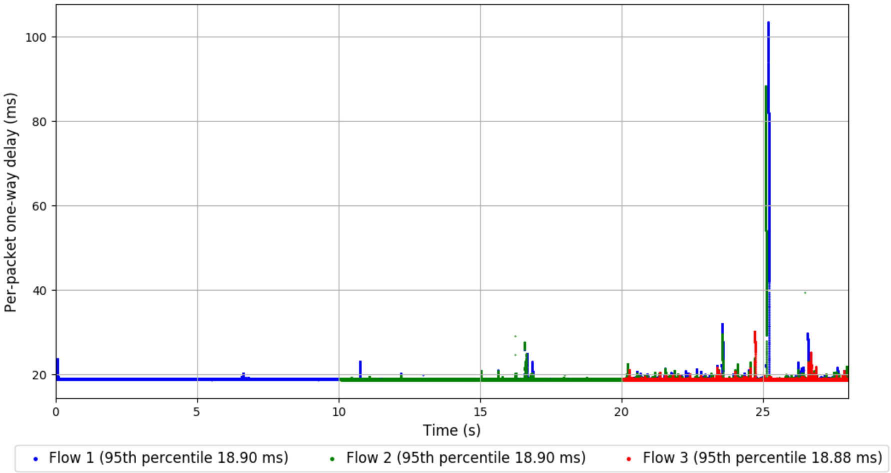




```
Run 9: Statistics of TaoVA-100x

Start at: 2018-01-17 07:19:45
End at: 2018-01-17 07:20:15
Local clock offset: -4.054 ms
Remote clock offset: -1.938 ms

# Below is generated by plot.py at 2018-01-17 12:00:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 482.70 Mbit/s
95th percentile per-packet one-way delay: 18.898 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 256.16 Mbit/s
95th percentile per-packet one-way delay: 18.903 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 242.98 Mbit/s
95th percentile per-packet one-way delay: 18.897 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 248.32 Mbit/s
95th percentile per-packet one-way delay: 18.878 ms
Loss rate: 0.04%
```

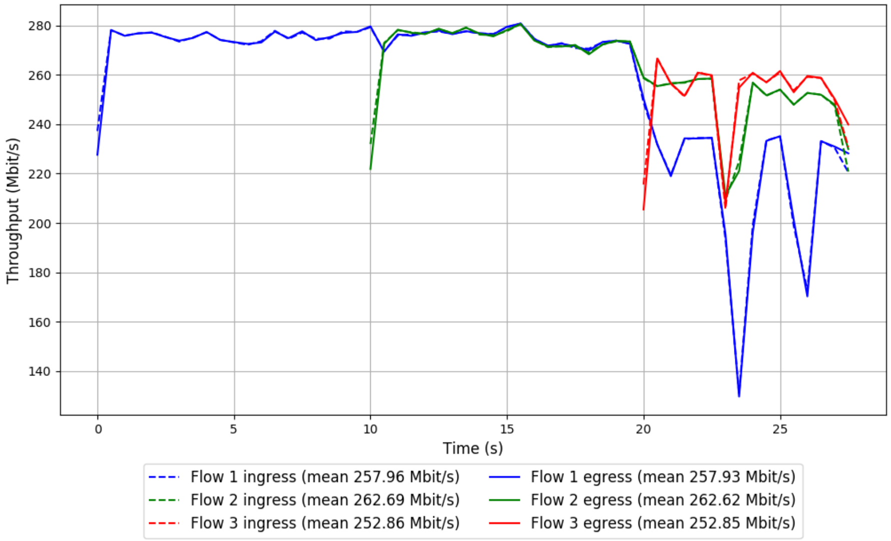
Run 9: Report of TaoVA-100x — Data Link

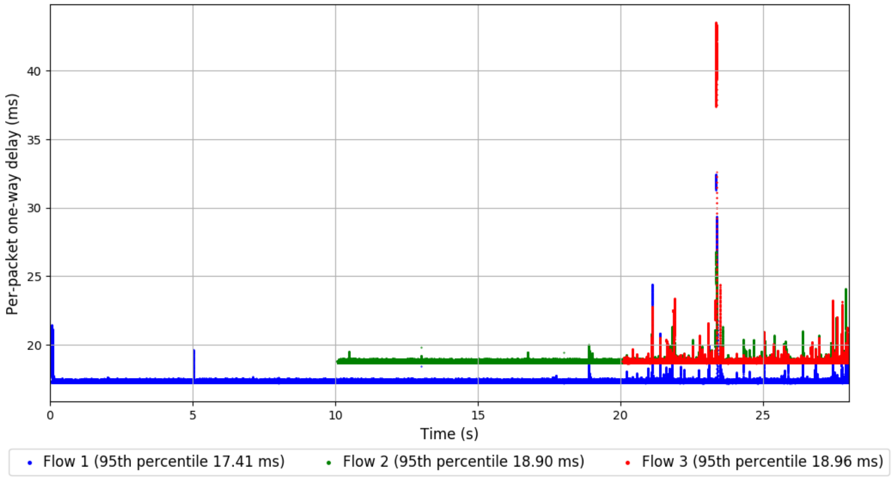




```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-17 07:47:14
End at: 2018-01-17 07:47:44
Local clock offset: -4.935 ms
Remote clock offset: -1.953 ms

# Below is generated by plot.py at 2018-01-17 12:00:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 497.88 Mbit/s
95th percentile per-packet one-way delay: 18.853 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 257.93 Mbit/s
95th percentile per-packet one-way delay: 17.412 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 262.62 Mbit/s
95th percentile per-packet one-way delay: 18.897 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 252.85 Mbit/s
95th percentile per-packet one-way delay: 18.961 ms
Loss rate: 0.01%
```

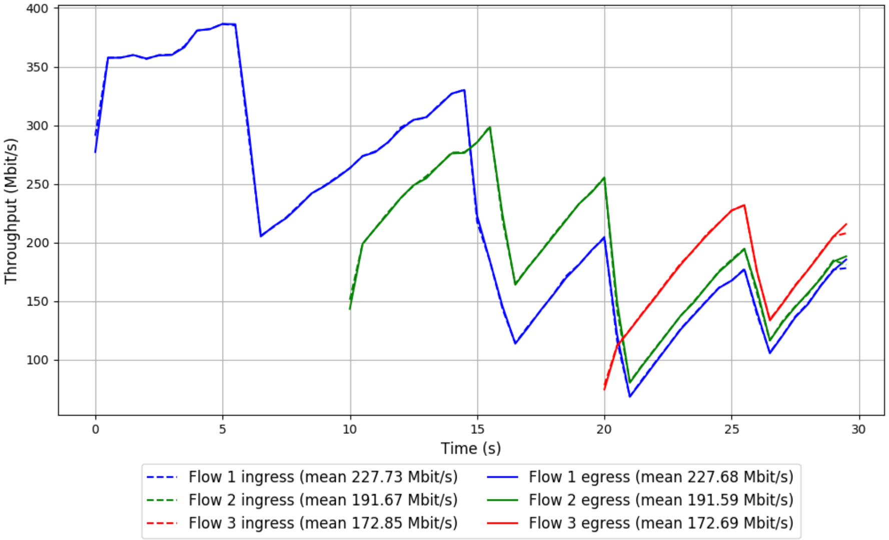
Run 10: Report of TaoVA-100x — Data Link

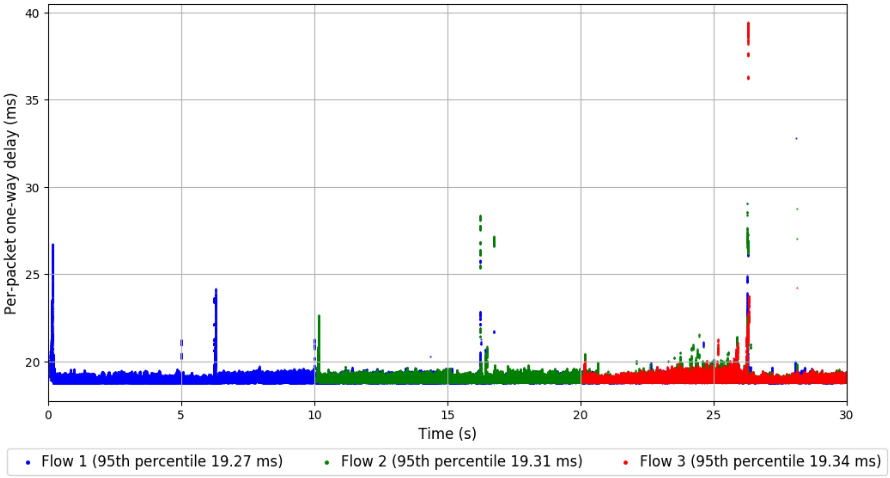




```
Run 1: Statistics of TCP Vegas

Start at: 2018-01-17 03:42:20
End at: 2018-01-17 03:42:50
Local clock offset: -1.348 ms
Remote clock offset: -2.204 ms

# Below is generated by plot.py at 2018-01-17 12:00:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 412.60 Mbit/s
95th percentile per-packet one-way delay: 19.288 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 227.68 Mbit/s
95th percentile per-packet one-way delay: 19.265 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 191.59 Mbit/s
95th percentile per-packet one-way delay: 19.307 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 172.69 Mbit/s
95th percentile per-packet one-way delay: 19.335 ms
Loss rate: 0.09%
```

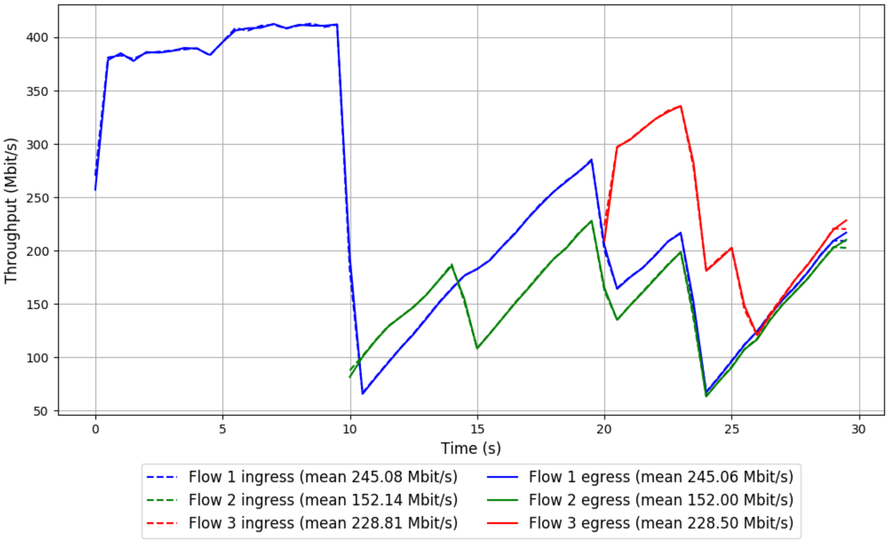
Run 1: Report of TCP Vegas — Data Link

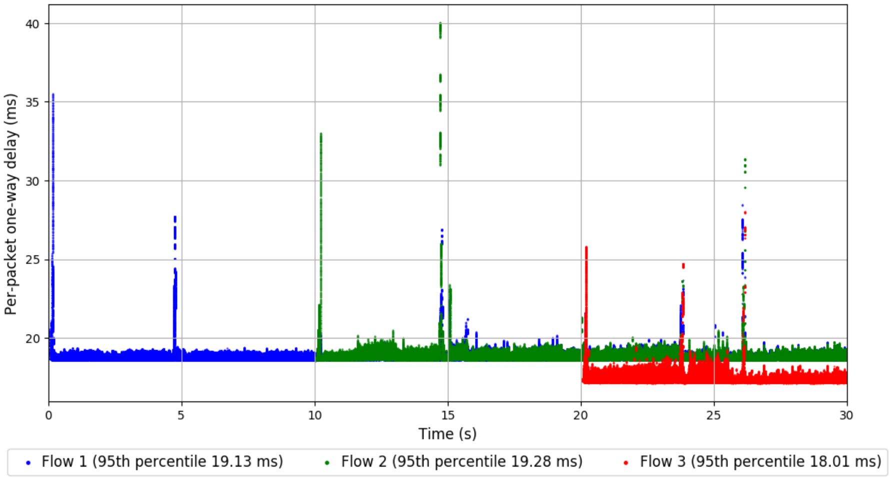




```
Run 2: Statistics of TCP Vegas

Start at: 2018-01-17 04:09:46
End at: 2018-01-17 04:10:16
Local clock offset: -1.702 ms
Remote clock offset: -2.97 ms

# Below is generated by plot.py at 2018-01-17 12:00:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 422.13 Mbit/s
95th percentile per-packet one-way delay: 19.161 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 245.06 Mbit/s
95th percentile per-packet one-way delay: 19.132 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 152.00 Mbit/s
95th percentile per-packet one-way delay: 19.283 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 228.50 Mbit/s
95th percentile per-packet one-way delay: 18.009 ms
Loss rate: 0.13%
```

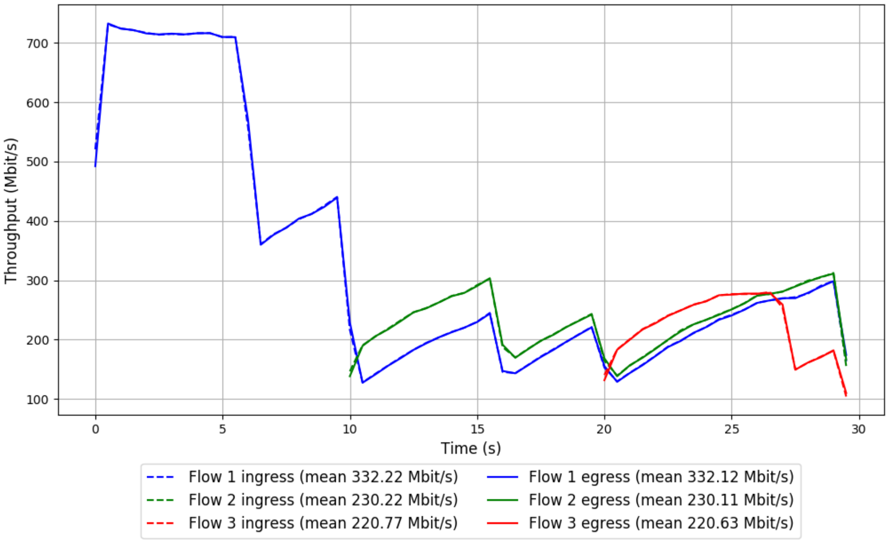
Run 2: Report of TCP Vegas — Data Link

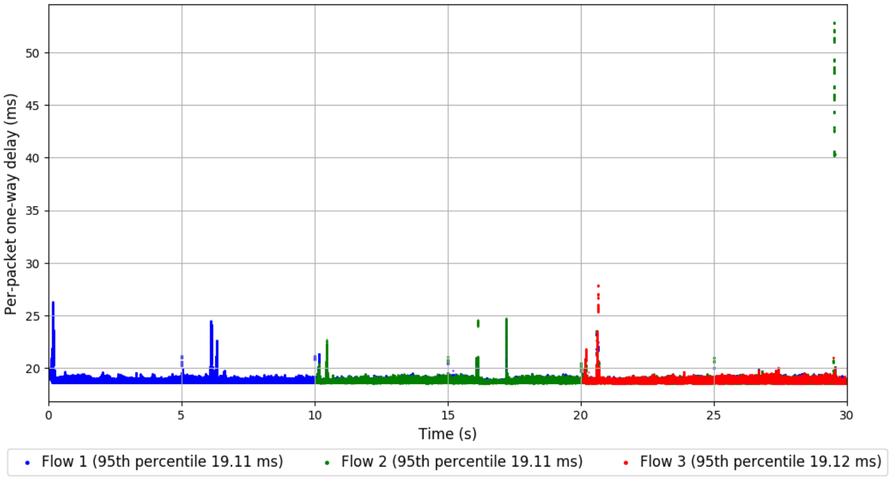




```
Run 3: Statistics of TCP Vegas

Start at: 2018-01-17 04:37:10
End at: 2018-01-17 04:37:40
Local clock offset: -1.896 ms
Remote clock offset: -2.469 ms

# Below is generated by plot.py at 2018-01-17 12:00:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 558.59 Mbit/s
95th percentile per-packet one-way delay: 19.113 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 332.12 Mbit/s
95th percentile per-packet one-way delay: 19.113 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 230.11 Mbit/s
95th percentile per-packet one-way delay: 19.107 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 220.63 Mbit/s
95th percentile per-packet one-way delay: 19.124 ms
Loss rate: 0.06%
```

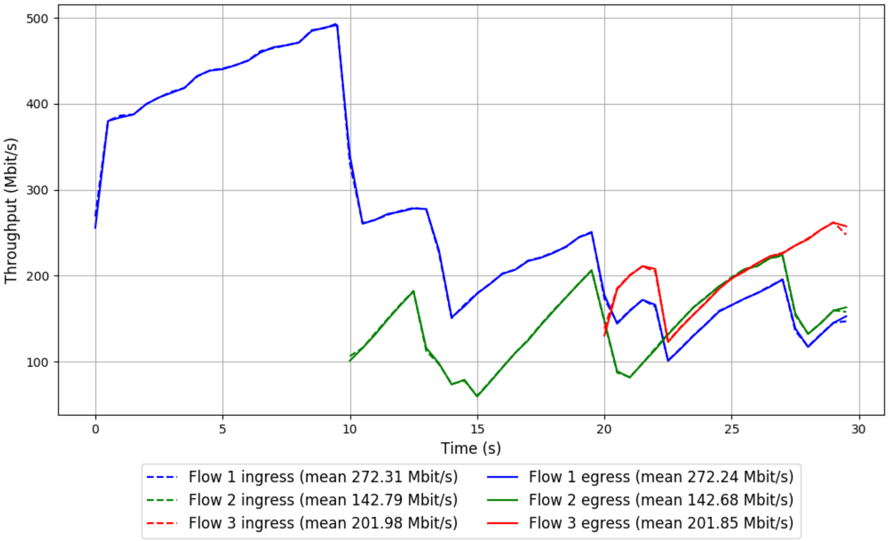
Run 3: Report of TCP Vegas — Data Link

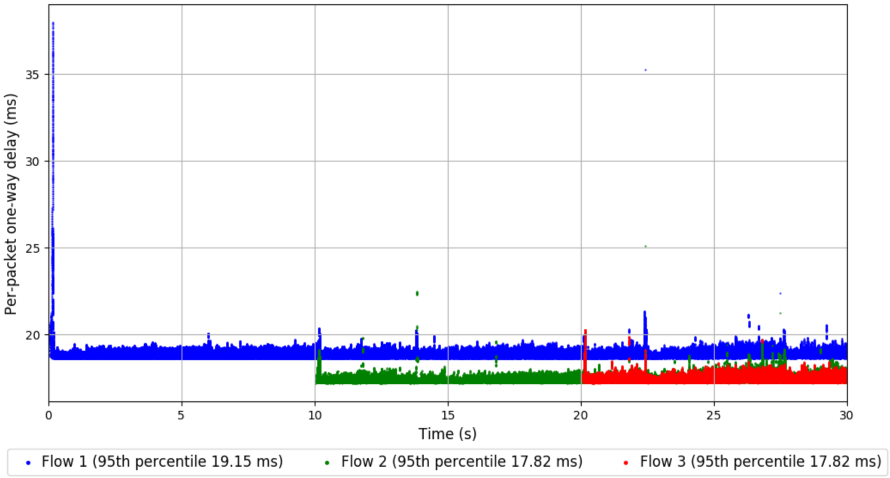




```
Run 4: Statistics of TCP Vegas

Start at: 2018-01-17 05:04:35
End at: 2018-01-17 05:05:05
Local clock offset: -2.501 ms
Remote clock offset: -2.197 ms

# Below is generated by plot.py at 2018-01-17 12:00:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 434.29 Mbit/s
95th percentile per-packet one-way delay: 19.107 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 272.24 Mbit/s
95th percentile per-packet one-way delay: 19.154 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 142.68 Mbit/s
95th percentile per-packet one-way delay: 17.825 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 201.85 Mbit/s
95th percentile per-packet one-way delay: 17.815 ms
Loss rate: 0.07%
```

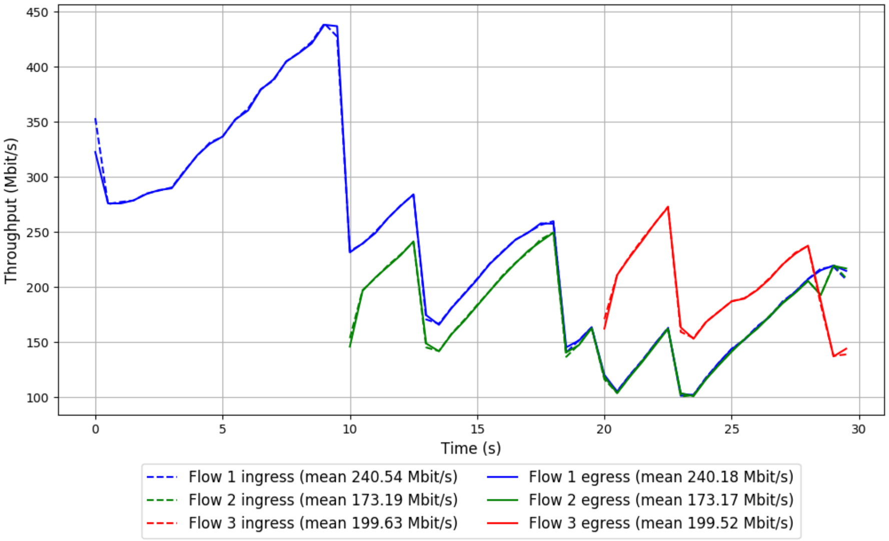
Run 4: Report of TCP Vegas — Data Link

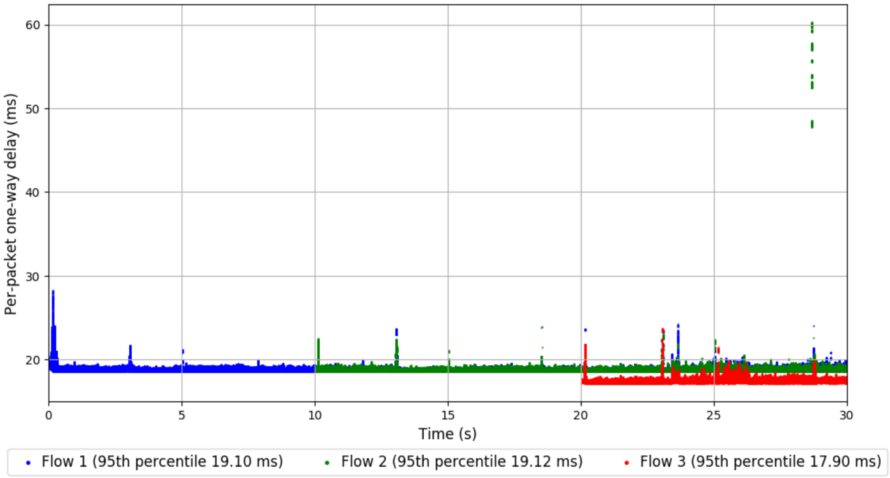




```
Run 5: Statistics of TCP Vegas

Start at: 2018-01-17 05:32:28
End at: 2018-01-17 05:32:58
Local clock offset: -2.781 ms
Remote clock offset: -2.166 ms

# Below is generated by plot.py at 2018-01-17 12:00:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 421.85 Mbit/s
95th percentile per-packet one-way delay: 19.087 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 240.18 Mbit/s
95th percentile per-packet one-way delay: 19.098 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 173.17 Mbit/s
95th percentile per-packet one-way delay: 19.121 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 199.52 Mbit/s
95th percentile per-packet one-way delay: 17.897 ms
Loss rate: 0.05%
```

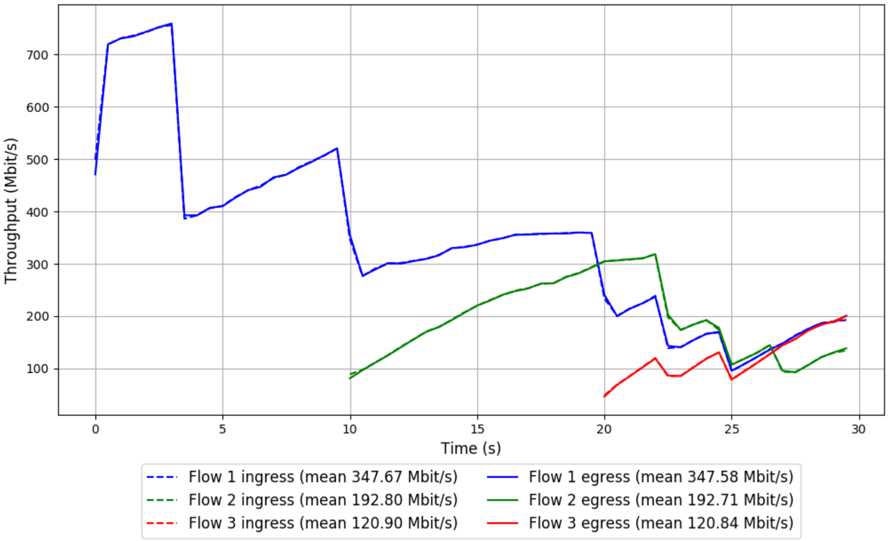
Run 5: Report of TCP Vegas — Data Link

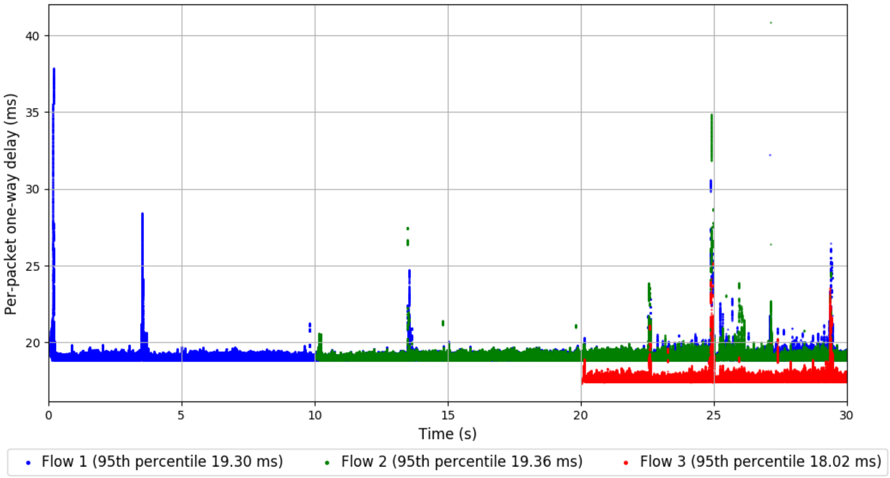




```
Run 6: Statistics of TCP Vegas

Start at: 2018-01-17 06:00:05
End at: 2018-01-17 06:00:35
Local clock offset: -3.284 ms
Remote clock offset: -2.076 ms

# Below is generated by plot.py at 2018-01-17 12:00:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 515.97 Mbit/s
95th percentile per-packet one-way delay: 19.309 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 347.58 Mbit/s
95th percentile per-packet one-way delay: 19.296 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 192.71 Mbit/s
95th percentile per-packet one-way delay: 19.364 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 120.84 Mbit/s
95th percentile per-packet one-way delay: 18.019 ms
Loss rate: 0.05%
```

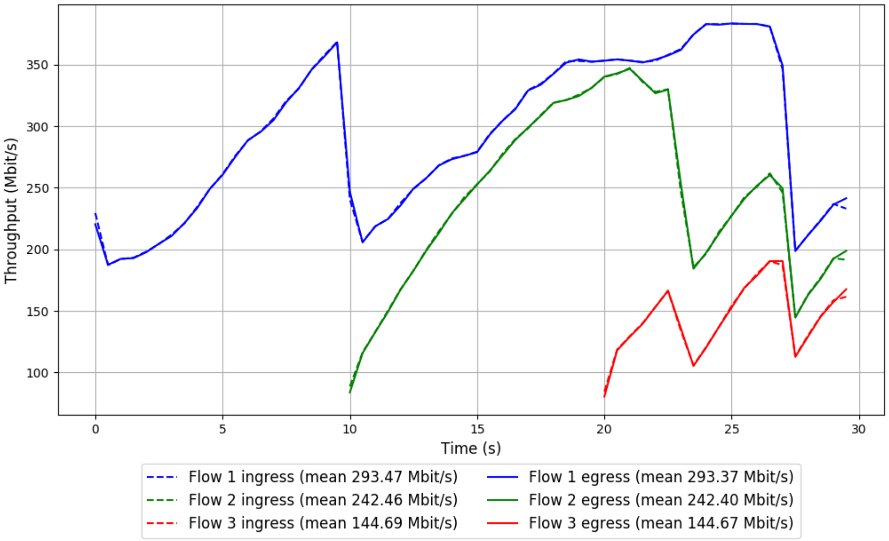
Run 6: Report of TCP Vegas — Data Link

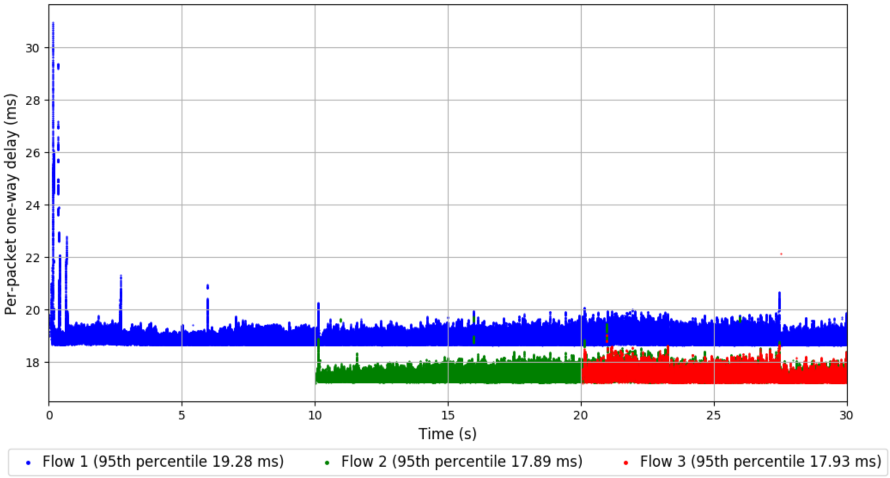




```
Run 7: Statistics of TCP Vegas

Start at: 2018-01-17 06:27:48
End at: 2018-01-17 06:28:18
Local clock offset: -2.612 ms
Remote clock offset: -1.688 ms

# Below is generated by plot.py at 2018-01-17 12:01:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 502.81 Mbit/s
95th percentile per-packet one-way delay: 19.206 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 293.37 Mbit/s
95th percentile per-packet one-way delay: 19.280 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 242.40 Mbit/s
95th percentile per-packet one-way delay: 17.885 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 144.67 Mbit/s
95th percentile per-packet one-way delay: 17.933 ms
Loss rate: 0.02%
```

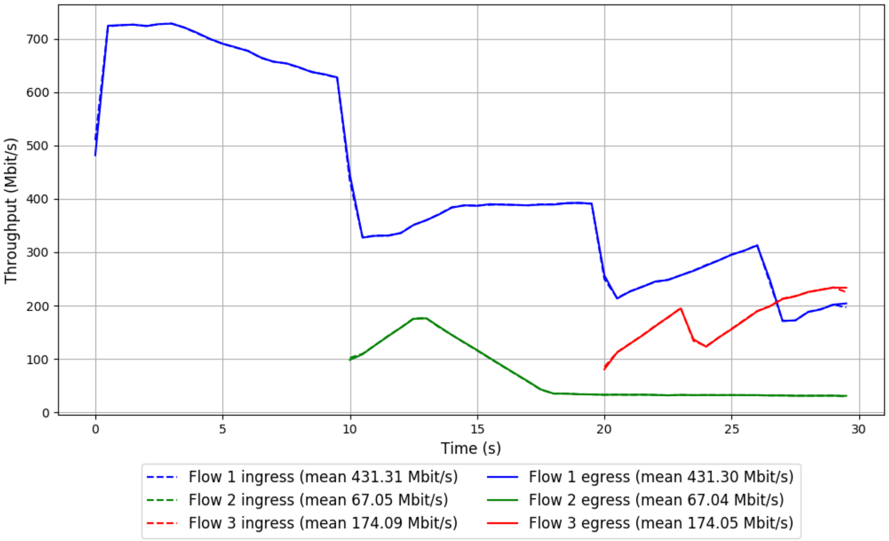
Run 7: Report of TCP Vegas — Data Link

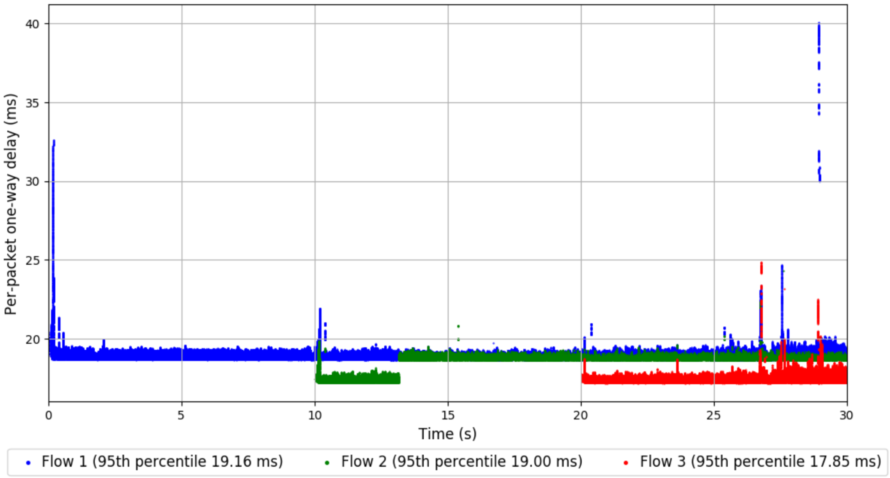




```
Run 8: Statistics of TCP Vegas

Start at: 2018-01-17 06:55:43
End at: 2018-01-17 06:56:13
Local clock offset: -3.067 ms
Remote clock offset: -1.936 ms

# Below is generated by plot.py at 2018-01-17 12:02:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 533.79 Mbit/s
95th percentile per-packet one-way delay: 19.142 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 431.30 Mbit/s
95th percentile per-packet one-way delay: 19.161 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 67.04 Mbit/s
95th percentile per-packet one-way delay: 18.996 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 174.05 Mbit/s
95th percentile per-packet one-way delay: 17.848 ms
Loss rate: 0.01%
```

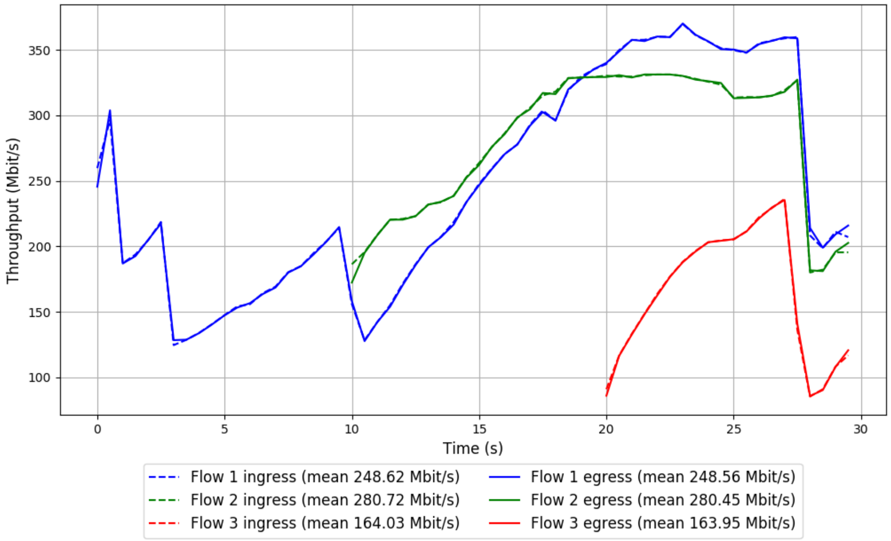
Run 8: Report of TCP Vegas — Data Link

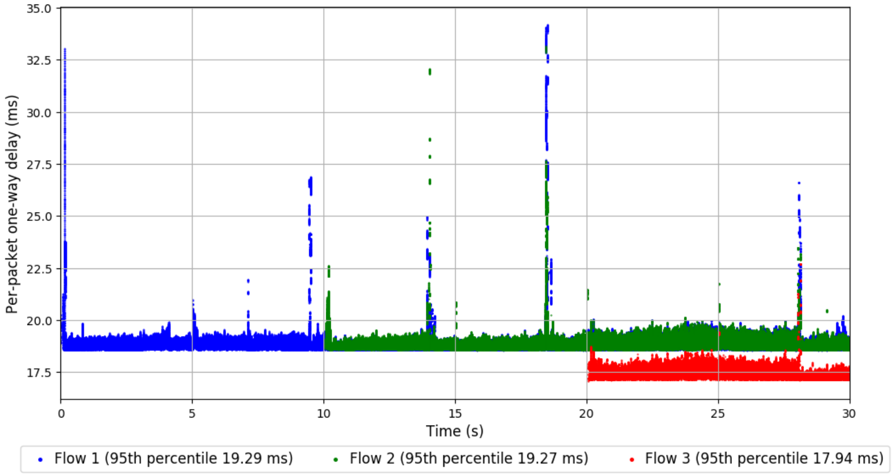




```
Run 9: Statistics of TCP Vegas

Start at: 2018-01-17 07:23:21
End at: 2018-01-17 07:23:51
Local clock offset: -4.056 ms
Remote clock offset: -1.881 ms

# Below is generated by plot.py at 2018-01-17 12:02:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 489.76 Mbit/s
95th percentile per-packet one-way delay: 19.263 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 248.56 Mbit/s
95th percentile per-packet one-way delay: 19.293 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 280.45 Mbit/s
95th percentile per-packet one-way delay: 19.273 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 163.95 Mbit/s
95th percentile per-packet one-way delay: 17.942 ms
Loss rate: 0.04%
```

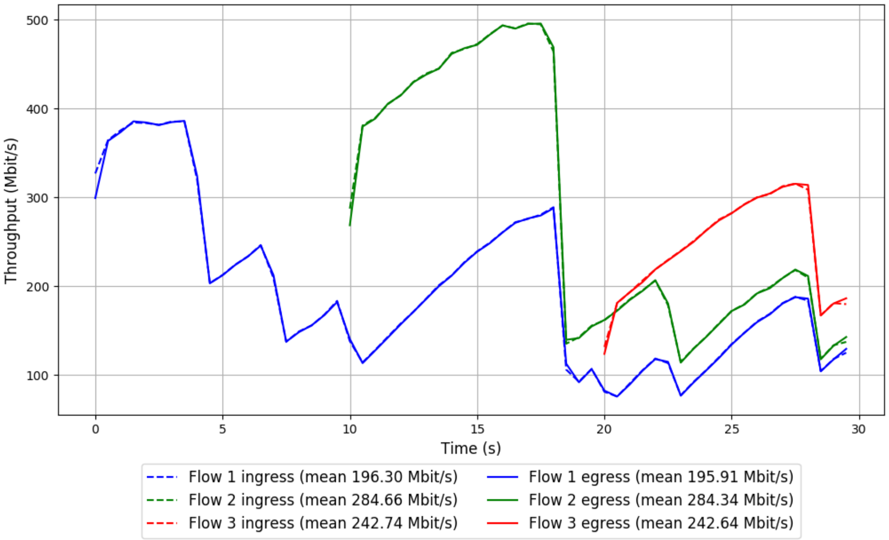
Run 9: Report of TCP Vegas — Data Link

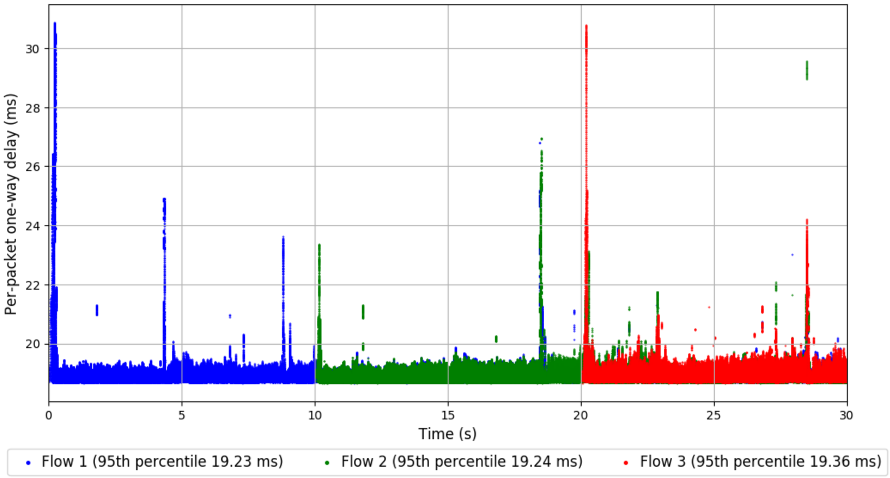




```
Run 10: Statistics of TCP Vegas

Start at: 2018-01-17 07:50:48
End at: 2018-01-17 07:51:18
Local clock offset: -4.941 ms
Remote clock offset: -1.965 ms

# Below is generated by plot.py at 2018-01-17 12:03:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 465.79 Mbit/s
95th percentile per-packet one-way delay: 19.265 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 195.91 Mbit/s
95th percentile per-packet one-way delay: 19.233 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 284.34 Mbit/s
95th percentile per-packet one-way delay: 19.242 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 242.64 Mbit/s
95th percentile per-packet one-way delay: 19.355 ms
Loss rate: 0.03%
```

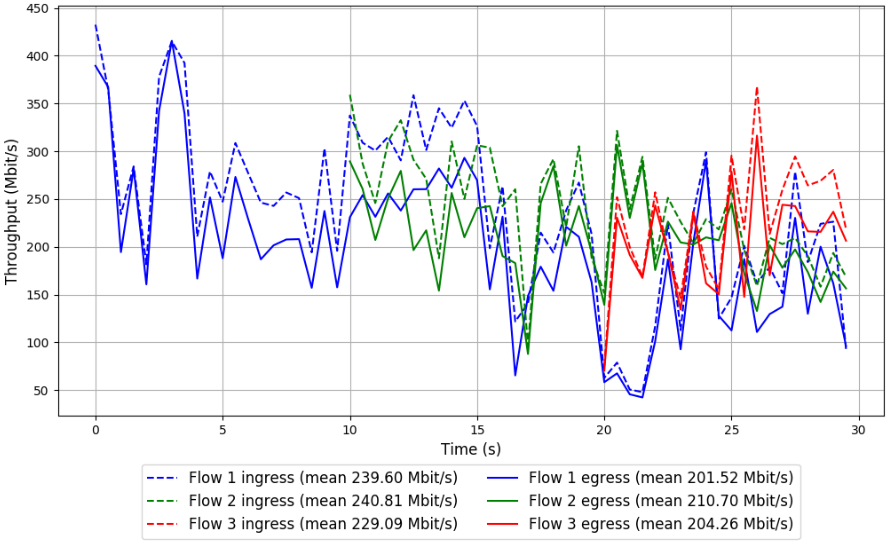
Run 10: Report of TCP Vegas — Data Link

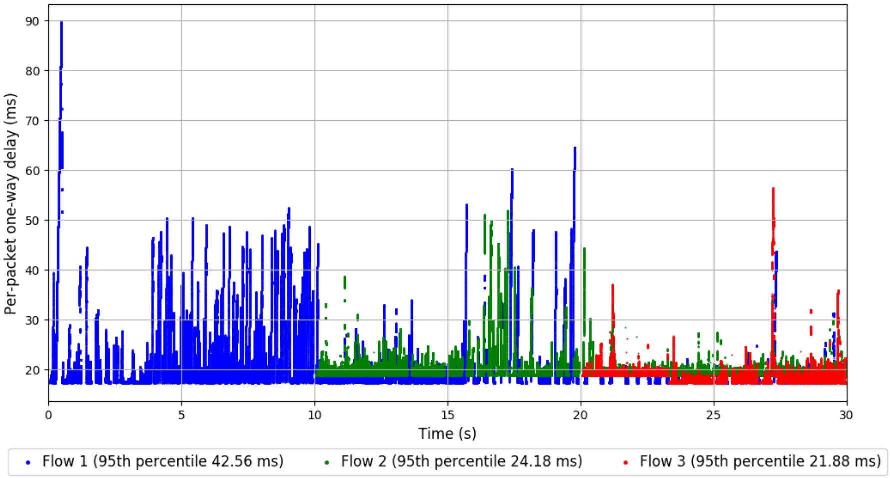




```
Run 1: Statistics of Verus

Start at: 2018-01-17 03:37:10
End at: 2018-01-17 03:37:40
Local clock offset: -1.306 ms
Remote clock offset: -2.23 ms

# Below is generated by plot.py at 2018-01-17 12:04:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 408.96 Mbit/s
95th percentile per-packet one-way delay: 34.739 ms
Loss rate: 13.94%
-- Flow 1:
Average throughput: 201.52 Mbit/s
95th percentile per-packet one-way delay: 42.557 ms
Loss rate: 15.89%
-- Flow 2:
Average throughput: 210.70 Mbit/s
95th percentile per-packet one-way delay: 24.181 ms
Loss rate: 12.50%
-- Flow 3:
Average throughput: 204.26 Mbit/s
95th percentile per-packet one-way delay: 21.877 ms
Loss rate: 10.85%
```

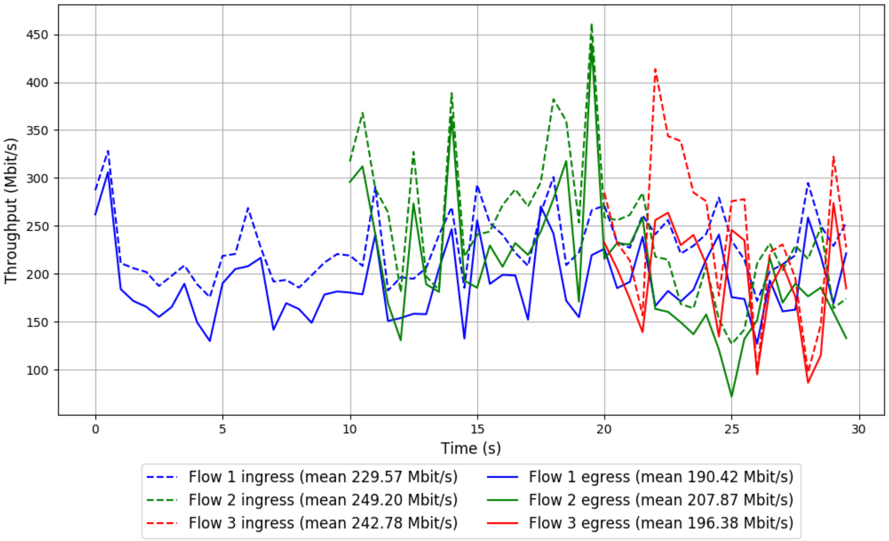
Run 1: Report of Verus — Data Link

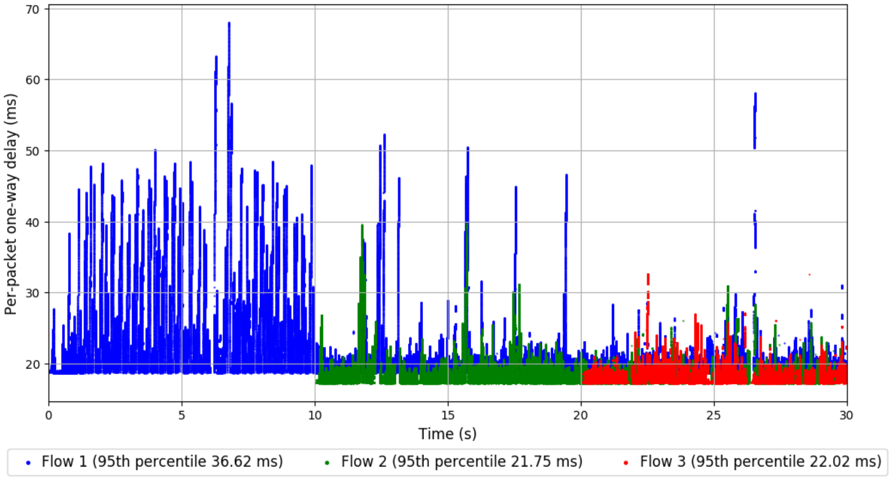




```
Run 2: Statistics of Verus

Start at: 2018-01-17 04:04:40
End at: 2018-01-17 04:05:10
Local clock offset: -1.517 ms
Remote clock offset: -2.766 ms

# Below is generated by plot.py at 2018-01-17 12:06:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 393.83 Mbit/s
95th percentile per-packet one-way delay: 28.694 ms
Loss rate: 17.23%
-- Flow 1:
Average throughput: 190.42 Mbit/s
95th percentile per-packet one-way delay: 36.618 ms
Loss rate: 17.05%
-- Flow 2:
Average throughput: 207.87 Mbit/s
95th percentile per-packet one-way delay: 21.749 ms
Loss rate: 16.58%
-- Flow 3:
Average throughput: 196.38 Mbit/s
95th percentile per-packet one-way delay: 22.021 ms
Loss rate: 19.11%
```

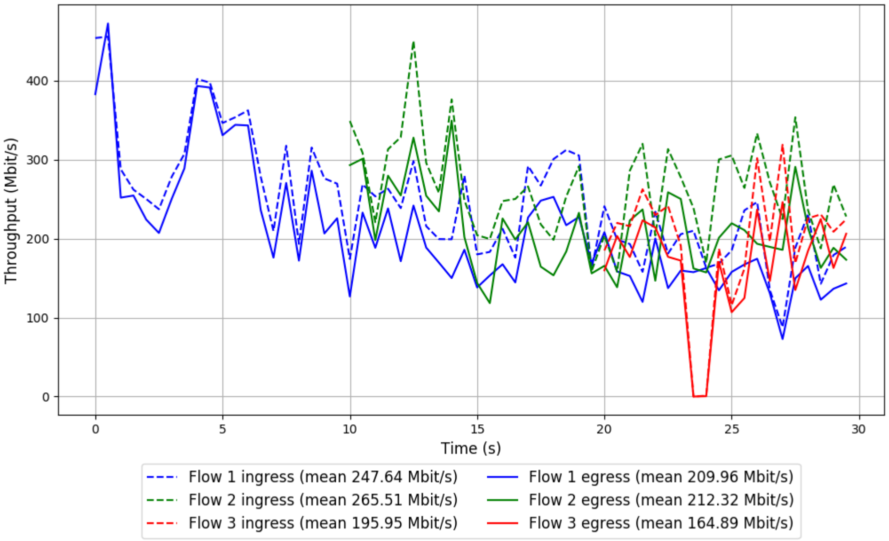
Run 2: Report of Verus — Data Link

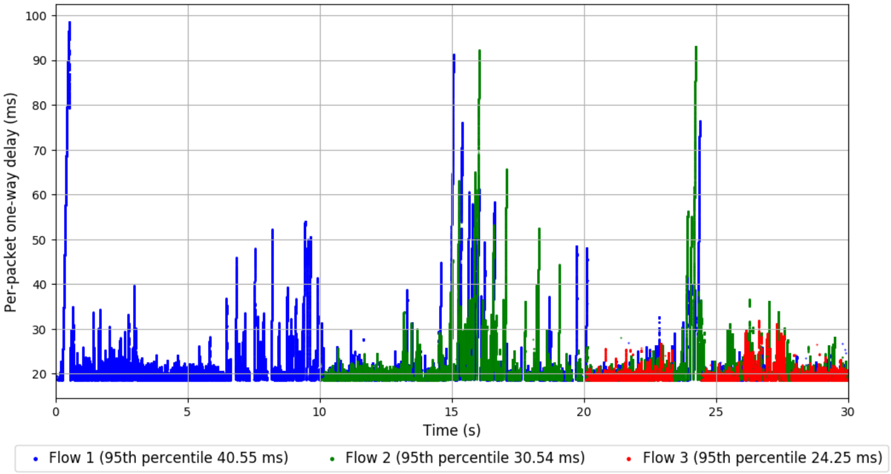




```
Run 3: Statistics of Verus

Start at: 2018-01-17 04:32:01
End at: 2018-01-17 04:32:31
Local clock offset: -1.887 ms
Remote clock offset: -2.617 ms

# Below is generated by plot.py at 2018-01-17 12:07:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 405.73 Mbit/s
95th percentile per-packet one-way delay: 32.621 ms
Loss rate: 17.04%
-- Flow 1:
Average throughput: 209.96 Mbit/s
95th percentile per-packet one-way delay: 40.555 ms
Loss rate: 15.21%
-- Flow 2:
Average throughput: 212.32 Mbit/s
95th percentile per-packet one-way delay: 30.539 ms
Loss rate: 20.05%
-- Flow 3:
Average throughput: 164.89 Mbit/s
95th percentile per-packet one-way delay: 24.248 ms
Loss rate: 15.85%
```

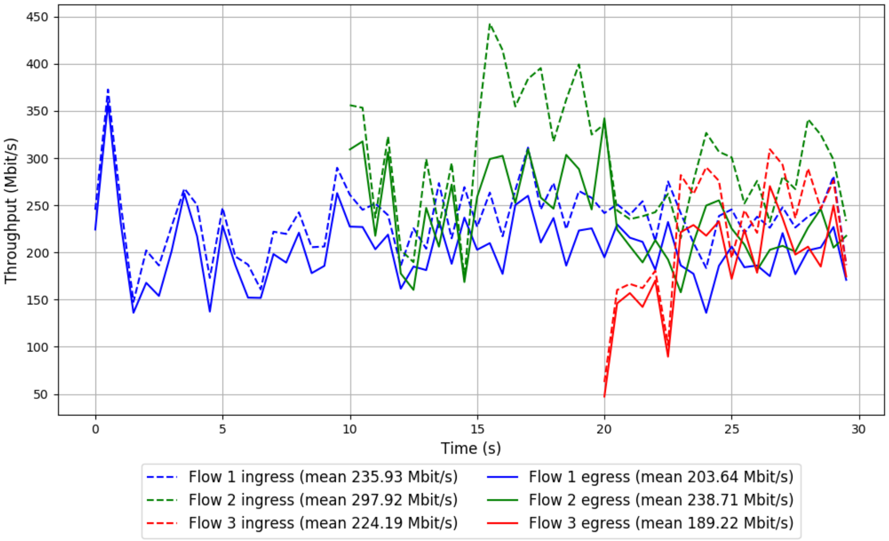
Run 3: Report of Verus — Data Link

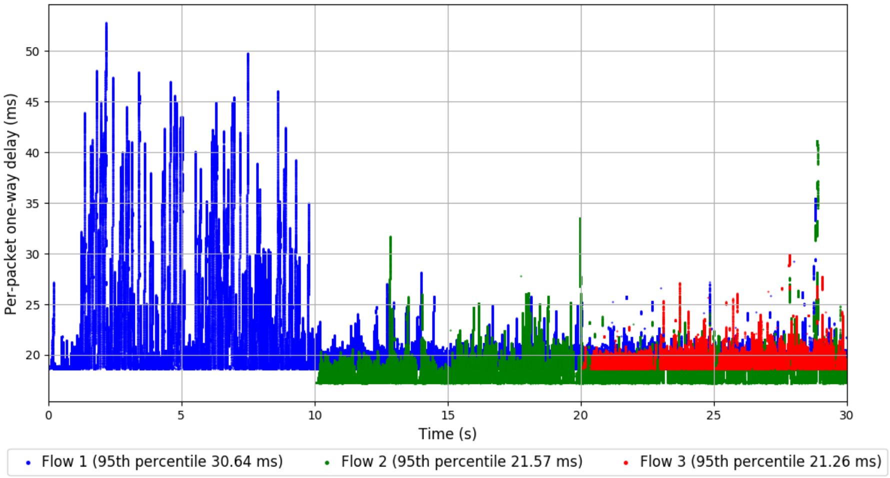




```
Run 4: Statistics of Verus

Start at: 2018-01-17 04:59:28
End at: 2018-01-17 04:59:58
Local clock offset: -2.437 ms
Remote clock offset: -2.232 ms

# Below is generated by plot.py at 2018-01-17 12:07:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 425.01 Mbit/s
95th percentile per-packet one-way delay: 25.139 ms
Loss rate: 16.37%
-- Flow 1:
Average throughput: 203.64 Mbit/s
95th percentile per-packet one-way delay: 30.637 ms
Loss rate: 13.68%
-- Flow 2:
Average throughput: 238.71 Mbit/s
95th percentile per-packet one-way delay: 21.575 ms
Loss rate: 19.87%
-- Flow 3:
Average throughput: 189.22 Mbit/s
95th percentile per-packet one-way delay: 21.264 ms
Loss rate: 15.59%
```

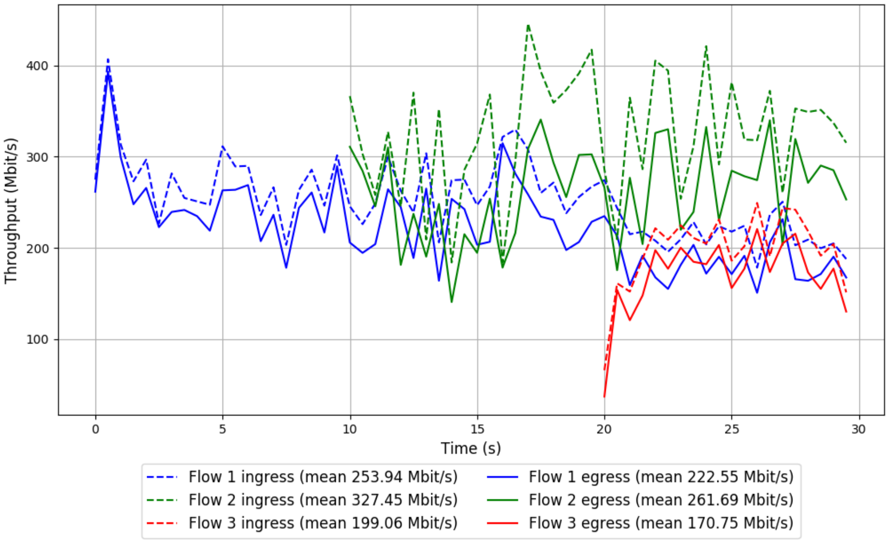
Run 4: Report of Verus — Data Link

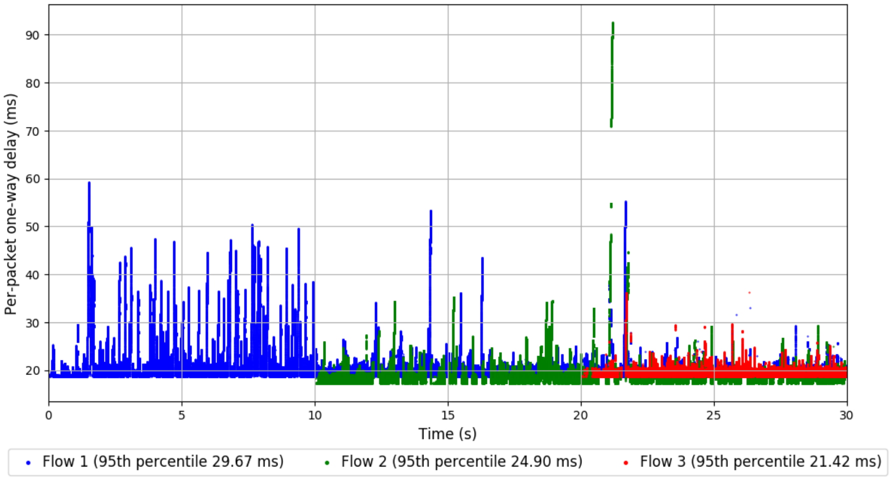




```
Run 5: Statistics of Verus

Start at: 2018-01-17 05:27:15
End at: 2018-01-17 05:27:45
Local clock offset: -2.608 ms
Remote clock offset: -1.926 ms

# Below is generated by plot.py at 2018-01-17 12:08:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 452.89 Mbit/s
95th percentile per-packet one-way delay: 26.282 ms
Loss rate: 15.71%
-- Flow 1:
Average throughput: 222.55 Mbit/s
95th percentile per-packet one-way delay: 29.671 ms
Loss rate: 12.36%
-- Flow 2:
Average throughput: 261.69 Mbit/s
95th percentile per-packet one-way delay: 24.896 ms
Loss rate: 20.08%
-- Flow 3:
Average throughput: 170.75 Mbit/s
95th percentile per-packet one-way delay: 21.422 ms
Loss rate: 14.22%
```

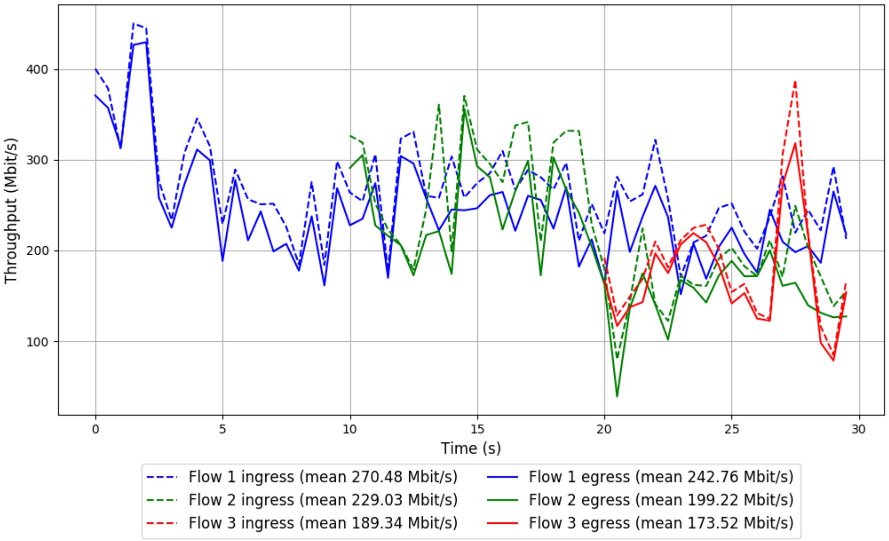
Run 5: Report of Verus — Data Link

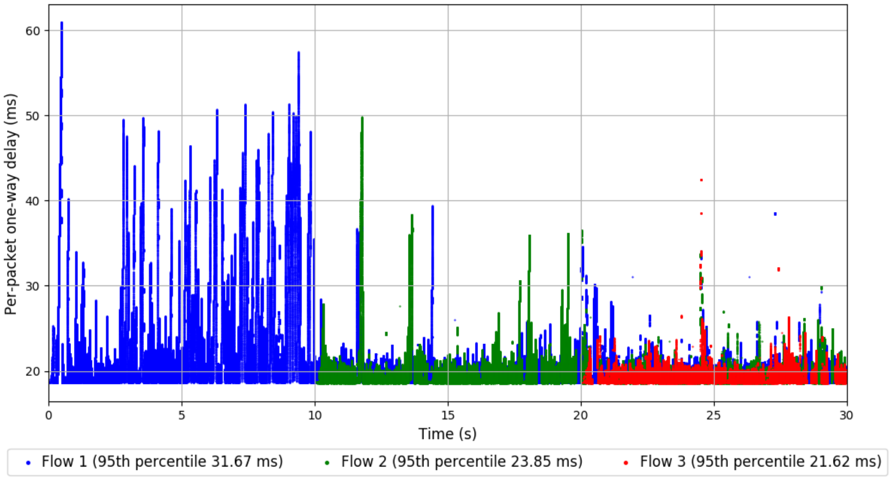




```
Run 6: Statistics of Verus

Start at: 2018-01-17 05:54:55
End at: 2018-01-17 05:55:25
Local clock offset: -3.257 ms
Remote clock offset: -2.178 ms

# Below is generated by plot.py at 2018-01-17 12:09:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 432.25 Mbit/s
95th percentile per-packet one-way delay: 27.204 ms
Loss rate: 10.87%
-- Flow 1:
Average throughput: 242.76 Mbit/s
95th percentile per-packet one-way delay: 31.672 ms
Loss rate: 10.25%
-- Flow 2:
Average throughput: 199.22 Mbit/s
95th percentile per-packet one-way delay: 23.848 ms
Loss rate: 13.02%
-- Flow 3:
Average throughput: 173.52 Mbit/s
95th percentile per-packet one-way delay: 21.622 ms
Loss rate: 8.34%
```

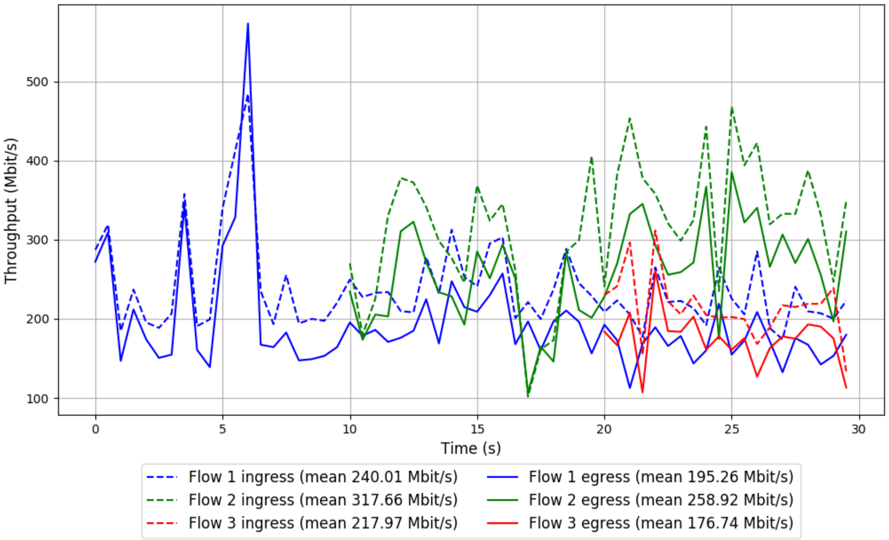
Run 6: Report of Verus — Data Link

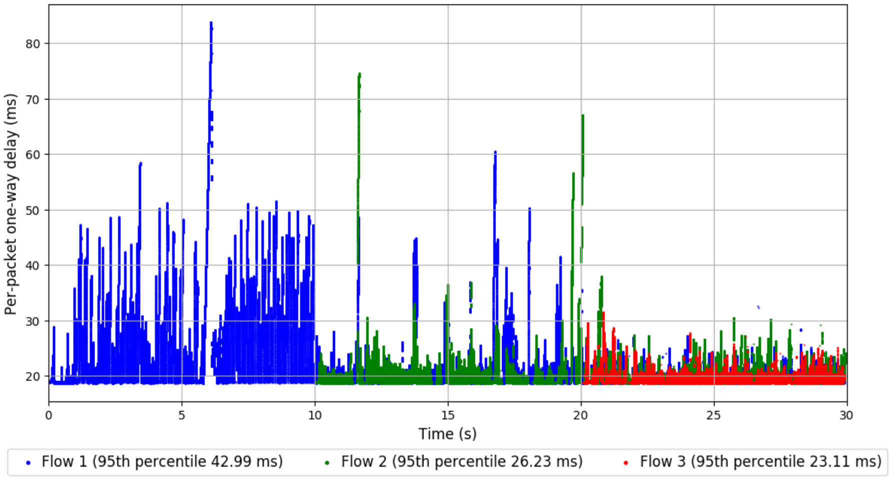




```
Run 7: Statistics of Verus

Start at: 2018-01-17 06:22:34
End at: 2018-01-17 06:23:04
Local clock offset: -2.584 ms
Remote clock offset: -1.811 ms

# Below is generated by plot.py at 2018-01-17 12:09:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 425.54 Mbit/s
95th percentile per-packet one-way delay: 34.958 ms
Loss rate: 18.62%
-- Flow 1:
Average throughput: 195.26 Mbit/s
95th percentile per-packet one-way delay: 42.988 ms
Loss rate: 18.64%
-- Flow 2:
Average throughput: 258.92 Mbit/s
95th percentile per-packet one-way delay: 26.229 ms
Loss rate: 18.49%
-- Flow 3:
Average throughput: 176.74 Mbit/s
95th percentile per-packet one-way delay: 23.106 ms
Loss rate: 18.91%
```

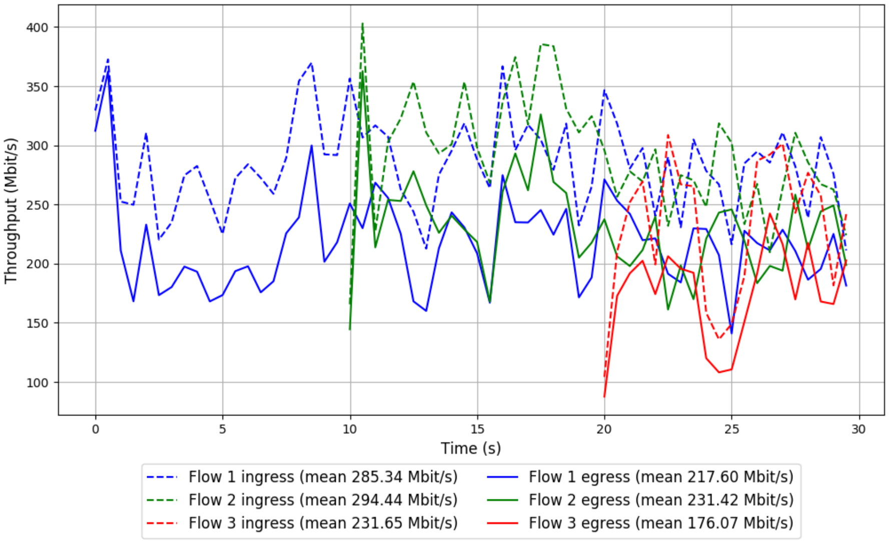
Run 7: Report of Verus — Data Link

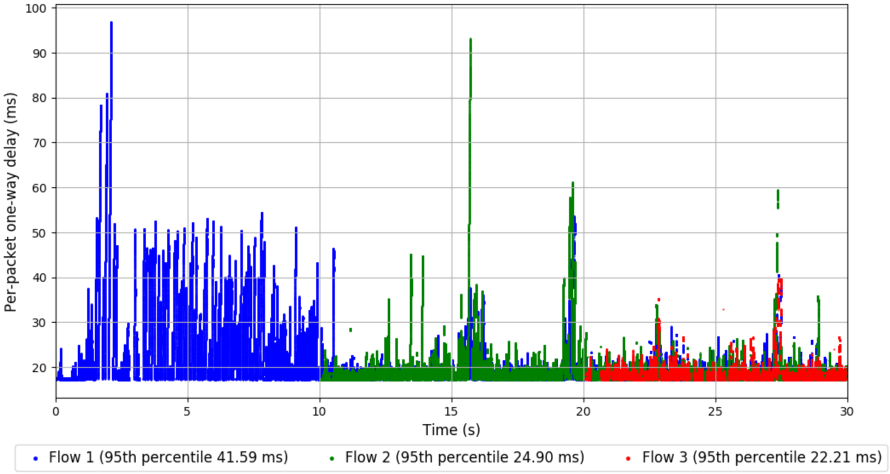




```
Run 8: Statistics of Verus

Start at: 2018-01-17 06:50:32
End at: 2018-01-17 06:51:02
Local clock offset: -2.989 ms
Remote clock offset: -2.02 ms

# Below is generated by plot.py at 2018-01-17 12:10:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 429.91 Mbit/s
95th percentile per-packet one-way delay: 34.738 ms
Loss rate: 22.95%
-- Flow 1:
Average throughput: 217.60 Mbit/s
95th percentile per-packet one-way delay: 41.593 ms
Loss rate: 23.74%
-- Flow 2:
Average throughput: 231.42 Mbit/s
95th percentile per-packet one-way delay: 24.902 ms
Loss rate: 21.39%
-- Flow 3:
Average throughput: 176.07 Mbit/s
95th percentile per-packet one-way delay: 22.208 ms
Loss rate: 24.01%
```

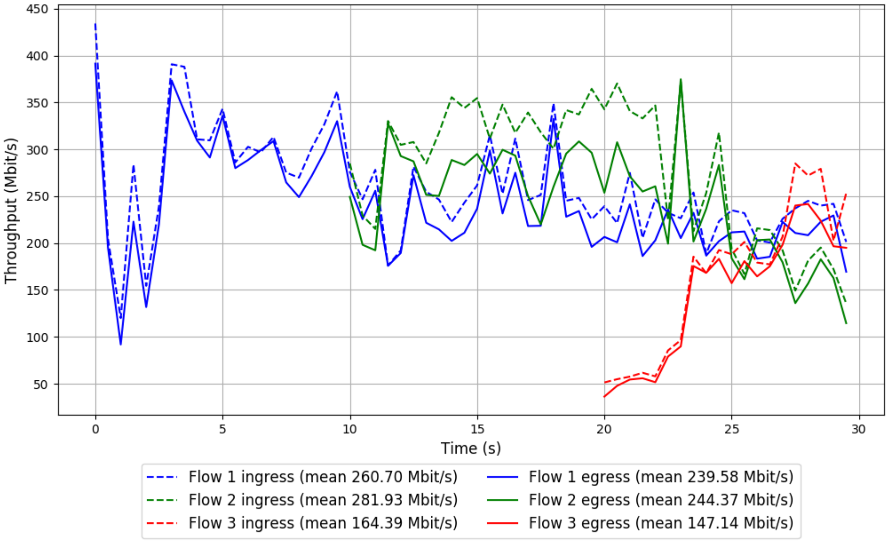
Run 8: Report of Verus — Data Link

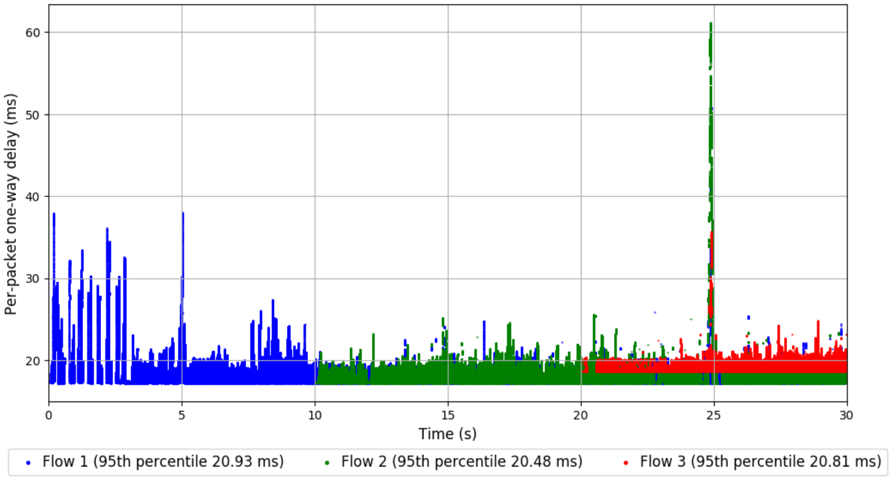




```
Run 9: Statistics of Verus

Start at: 2018-01-17 07:18:09
End at: 2018-01-17 07:18:39
Local clock offset: -3.897 ms
Remote clock offset: -1.921 ms

# Below is generated by plot.py at 2018-01-17 12:11:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 450.93 Mbit/s
95th percentile per-packet one-way delay: 20.700 ms
Loss rate: 10.30%
-- Flow 1:
Average throughput: 239.58 Mbit/s
95th percentile per-packet one-way delay: 20.935 ms
Loss rate: 8.09%
-- Flow 2:
Average throughput: 244.37 Mbit/s
95th percentile per-packet one-way delay: 20.476 ms
Loss rate: 13.31%
-- Flow 3:
Average throughput: 147.14 Mbit/s
95th percentile per-packet one-way delay: 20.808 ms
Loss rate: 10.47%
```

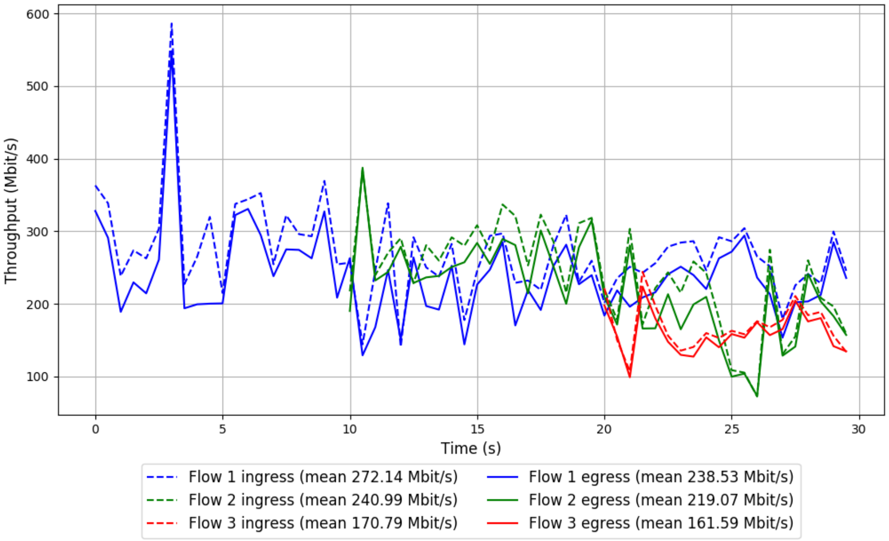
Run 9: Report of Verus — Data Link

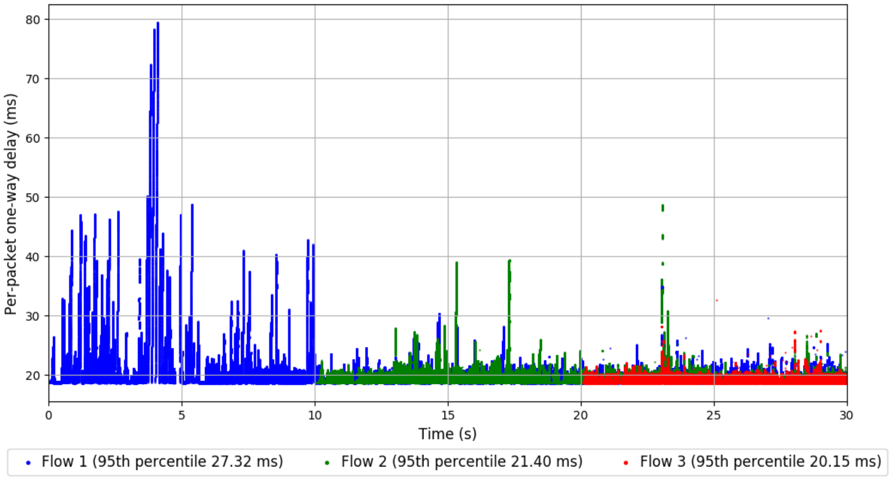




```
Run 10: Statistics of Verus

Start at: 2018-01-17 07:45:39
End at: 2018-01-17 07:46:09
Local clock offset: -4.799 ms
Remote clock offset: -1.91 ms

# Below is generated by plot.py at 2018-01-17 12:13:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 437.62 Mbit/s
95th percentile per-packet one-way delay: 23.930 ms
Loss rate: 10.48%
-- Flow 1:
Average throughput: 238.53 Mbit/s
95th percentile per-packet one-way delay: 27.323 ms
Loss rate: 12.35%
-- Flow 2:
Average throughput: 219.07 Mbit/s
95th percentile per-packet one-way delay: 21.396 ms
Loss rate: 9.09%
-- Flow 3:
Average throughput: 161.59 Mbit/s
95th percentile per-packet one-way delay: 20.152 ms
Loss rate: 5.39%
```

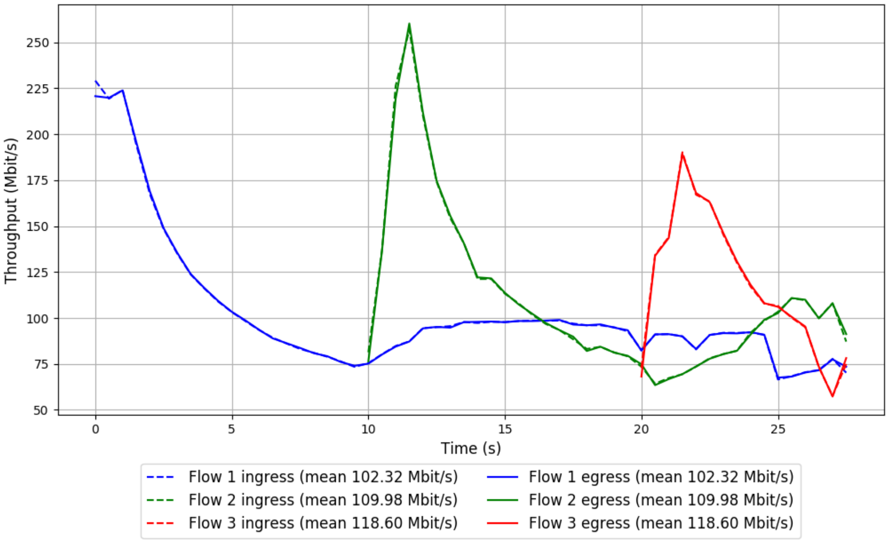
Run 10: Report of Verus — Data Link

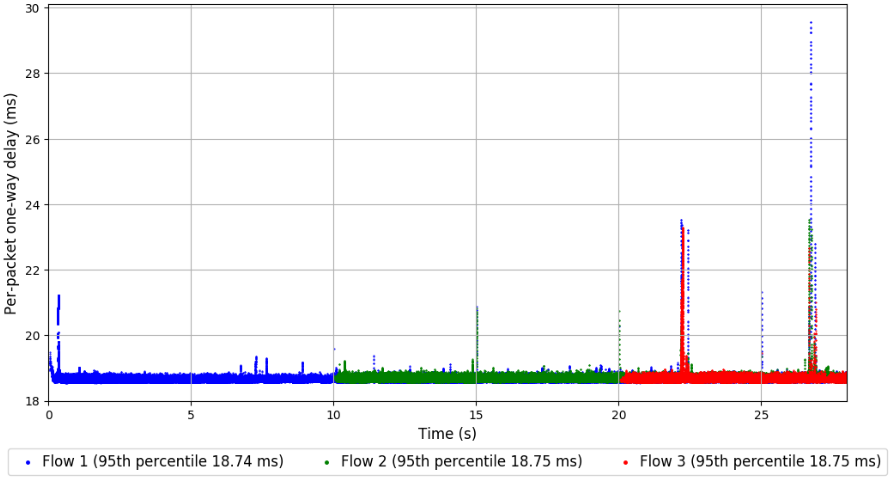




```
Run 1: Statistics of Copa

Start at: 2018-01-17 03:51:57
End at: 2018-01-17 03:52:27
Local clock offset: -1.276 ms
Remote clock offset: -2.566 ms

# Below is generated by plot.py at 2018-01-17 12:13:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 206.53 Mbit/s
95th percentile per-packet one-way delay: 18.748 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 102.32 Mbit/s
95th percentile per-packet one-way delay: 18.741 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 109.98 Mbit/s
95th percentile per-packet one-way delay: 18.754 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 118.60 Mbit/s
95th percentile per-packet one-way delay: 18.755 ms
Loss rate: 0.00%
```

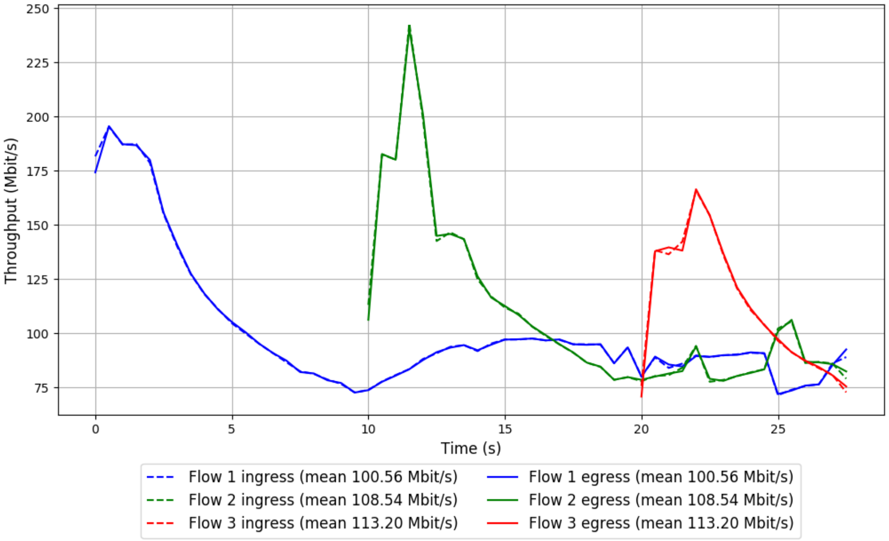
Run 1: Report of Copa — Data Link

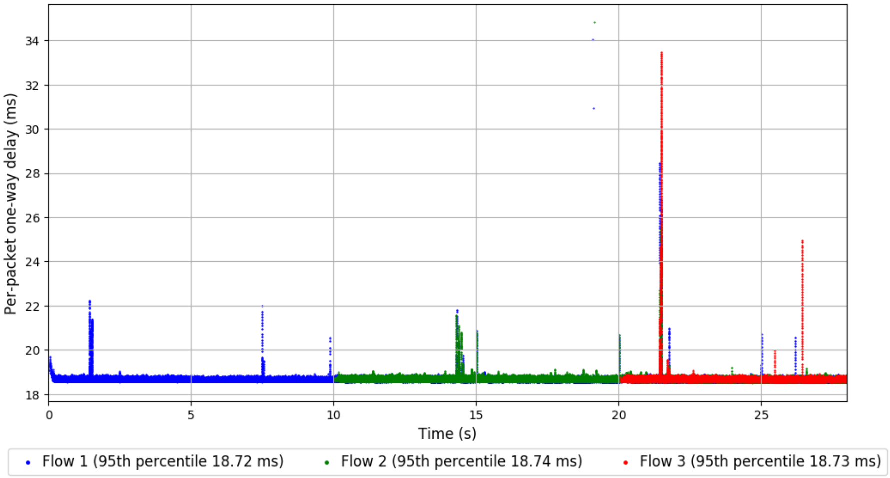




```
Run 2: Statistics of Copa

Start at: 2018-01-17 04:19:27
End at: 2018-01-17 04:19:57
Local clock offset: -1.73 ms
Remote clock offset: -2.9 ms

# Below is generated by plot.py at 2018-01-17 12:13:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 202.33 Mbit/s
95th percentile per-packet one-way delay: 18.730 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 100.56 Mbit/s
95th percentile per-packet one-way delay: 18.722 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 108.54 Mbit/s
95th percentile per-packet one-way delay: 18.740 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 113.20 Mbit/s
95th percentile per-packet one-way delay: 18.733 ms
Loss rate: 0.01%
```

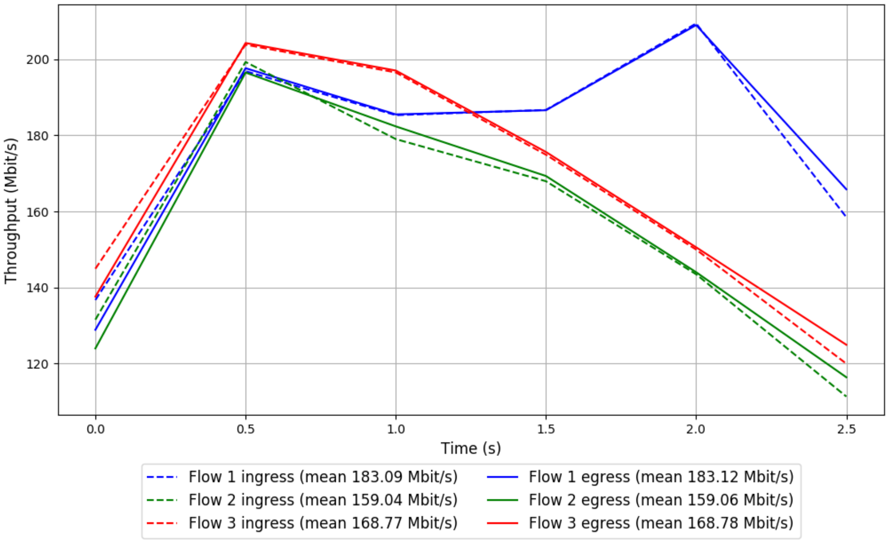
Run 2: Report of Copa — Data Link

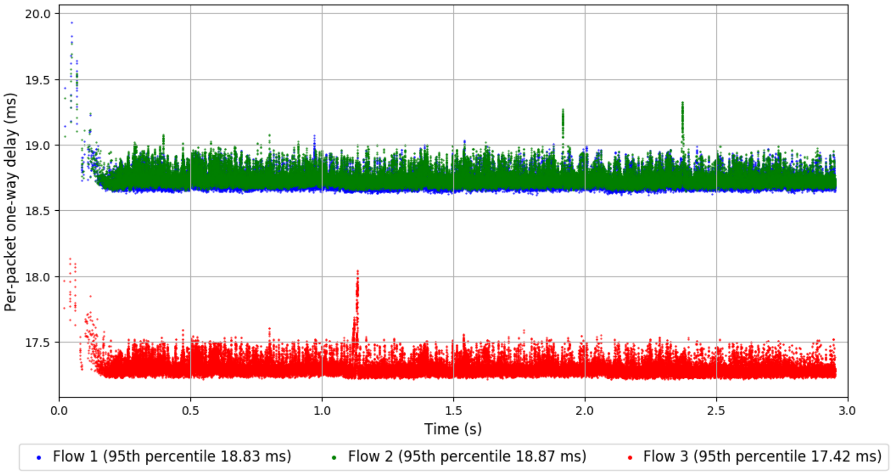




```
Run 3: Statistics of Copa

Start at: 2018-01-17 04:47:16
End at: 2018-01-17 04:47:46
Local clock offset: -2.229 ms
Remote clock offset: -2.318 ms
```

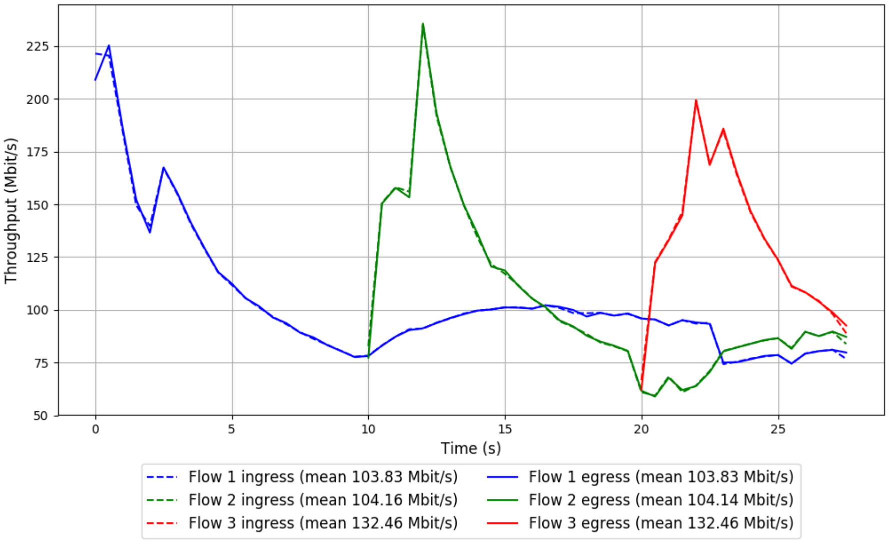
Run 3: Report of Copa — Data Link

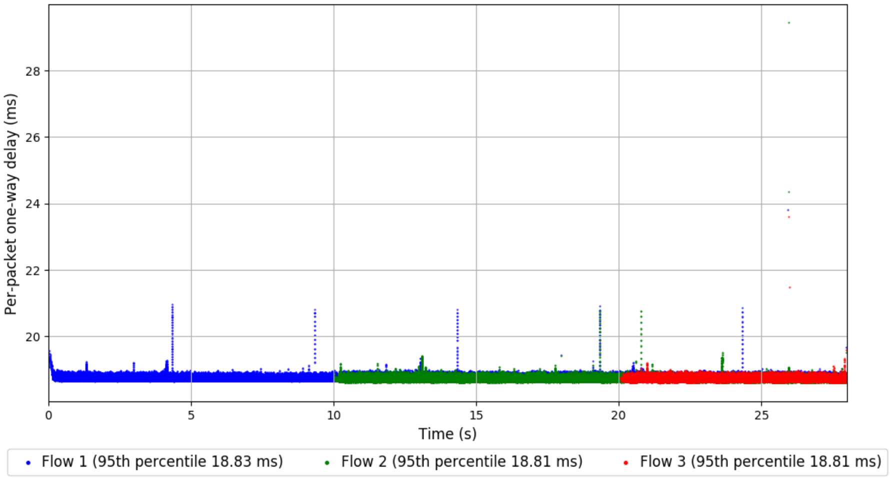




```
Run 4: Statistics of Copa

Start at: 2018-01-17 05:14:42
End at: 2018-01-17 05:15:12
Local clock offset: -2.45 ms
Remote clock offset: -1.987 ms

# Below is generated by plot.py at 2018-01-17 12:14:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 208.24 Mbit/s
95th percentile per-packet one-way delay: 18.819 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 103.83 Mbit/s
95th percentile per-packet one-way delay: 18.830 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 104.14 Mbit/s
95th percentile per-packet one-way delay: 18.806 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 132.46 Mbit/s
95th percentile per-packet one-way delay: 18.807 ms
Loss rate: 0.00%
```

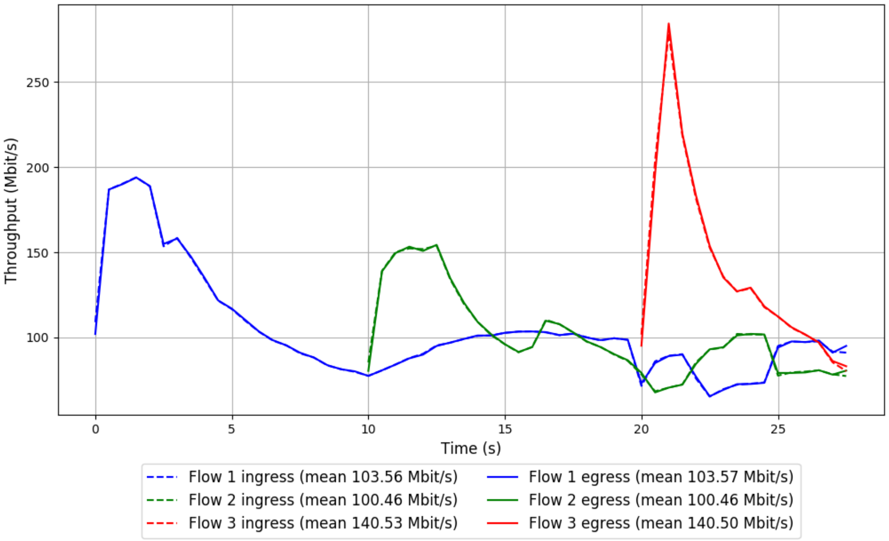
Run 4: Report of Copa — Data Link

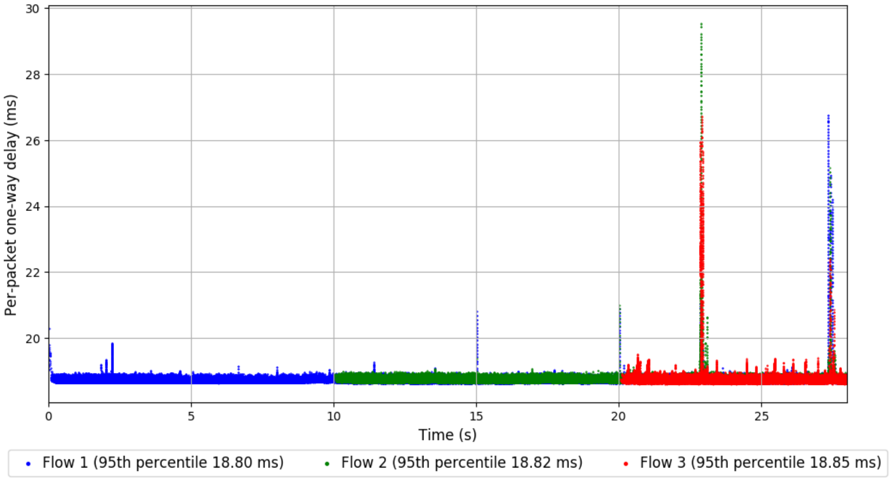




```
Run 5: Statistics of Copa

Start at: 2018-01-17 05:42:11
End at: 2018-01-17 05:42:41
Local clock offset: -3.027 ms
Remote clock offset: -2.144 ms

# Below is generated by plot.py at 2018-01-17 12:14:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 207.90 Mbit/s
95th percentile per-packet one-way delay: 18.819 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 103.57 Mbit/s
95th percentile per-packet one-way delay: 18.805 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 100.46 Mbit/s
95th percentile per-packet one-way delay: 18.823 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 140.50 Mbit/s
95th percentile per-packet one-way delay: 18.853 ms
Loss rate: 0.02%
```

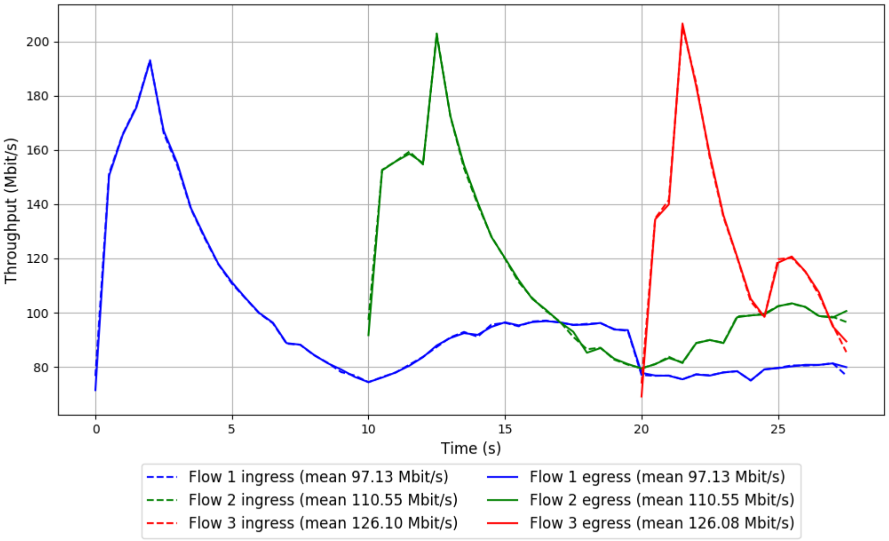
Run 5: Report of Copa — Data Link

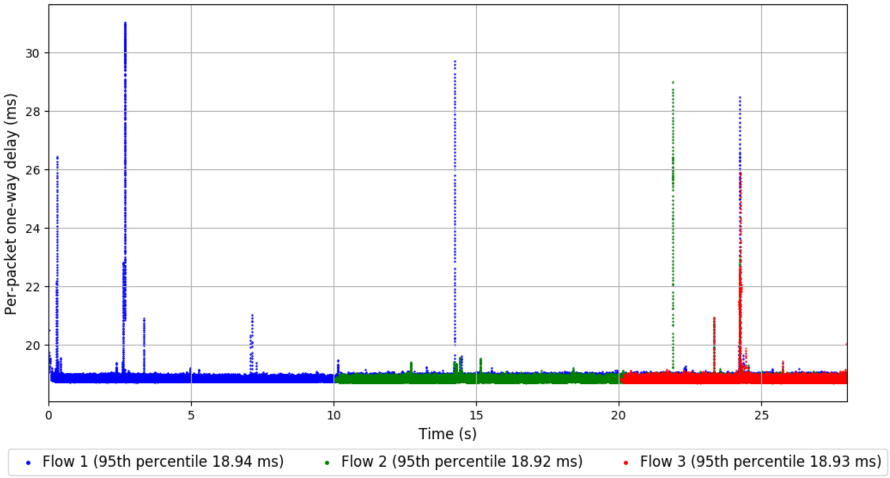




```
Run 6: Statistics of Copa

Start at: 2018-01-17 06:09:53
End at: 2018-01-17 06:10:23
Local clock offset: -2.778 ms
Remote clock offset: -1.841 ms

# Below is generated by plot.py at 2018-01-17 12:15:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 203.83 Mbit/s
95th percentile per-packet one-way delay: 18.929 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 97.13 Mbit/s
95th percentile per-packet one-way delay: 18.939 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 110.55 Mbit/s
95th percentile per-packet one-way delay: 18.916 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 126.08 Mbit/s
95th percentile per-packet one-way delay: 18.927 ms
Loss rate: 0.00%
```

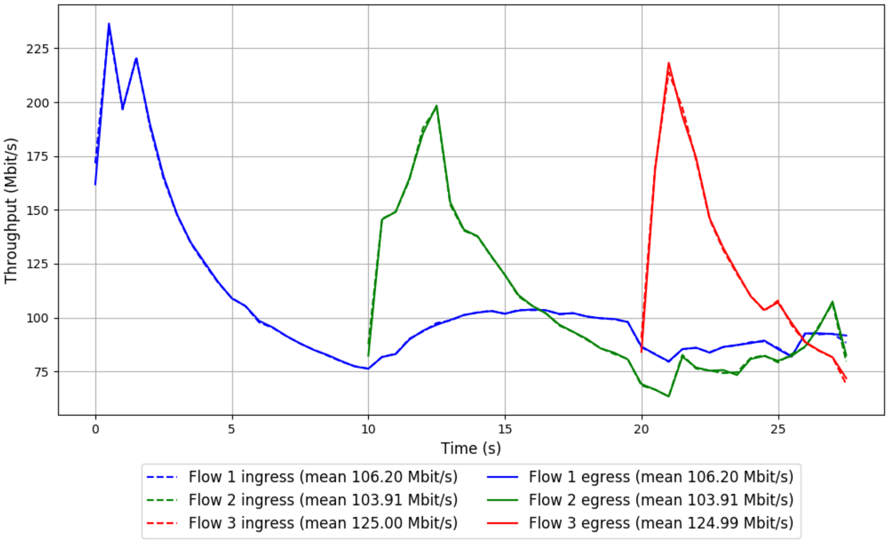
Run 6: Report of Copa — Data Link

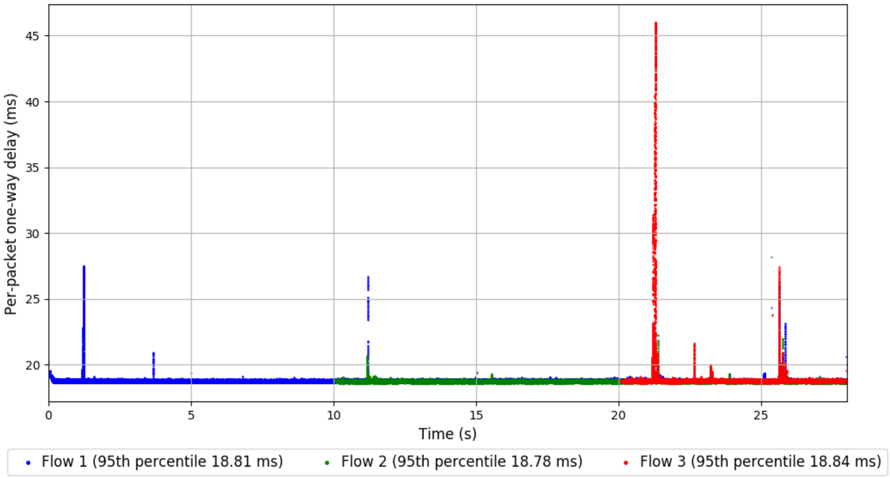




```
Run 7: Statistics of Copa

Start at: 2018-01-17 06:37:51
End at: 2018-01-17 06:38:21
Local clock offset: -2.81 ms
Remote clock offset: -1.898 ms

# Below is generated by plot.py at 2018-01-17 12:15:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 208.38 Mbit/s
95th percentile per-packet one-way delay: 18.807 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 106.20 Mbit/s
95th percentile per-packet one-way delay: 18.812 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 103.91 Mbit/s
95th percentile per-packet one-way delay: 18.782 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 124.99 Mbit/s
95th percentile per-packet one-way delay: 18.838 ms
Loss rate: 0.01%
```

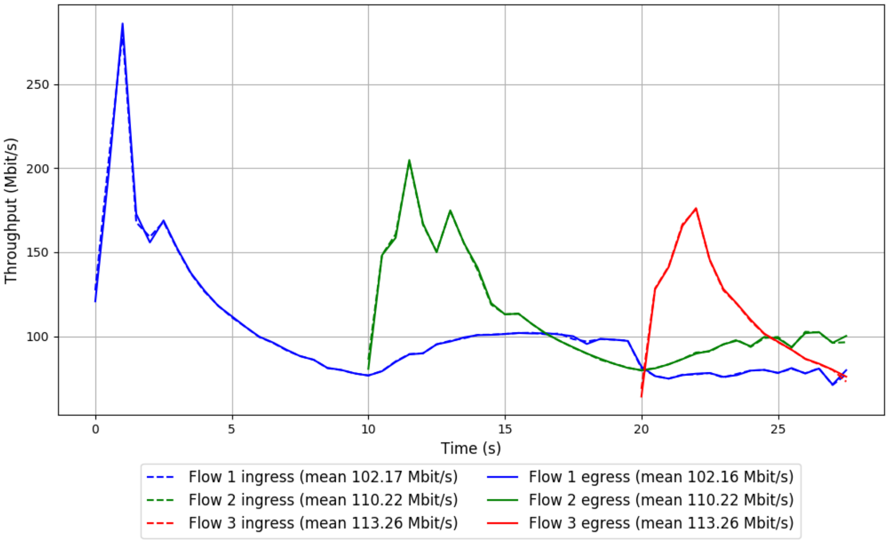
Run 7: Report of Copa — Data Link

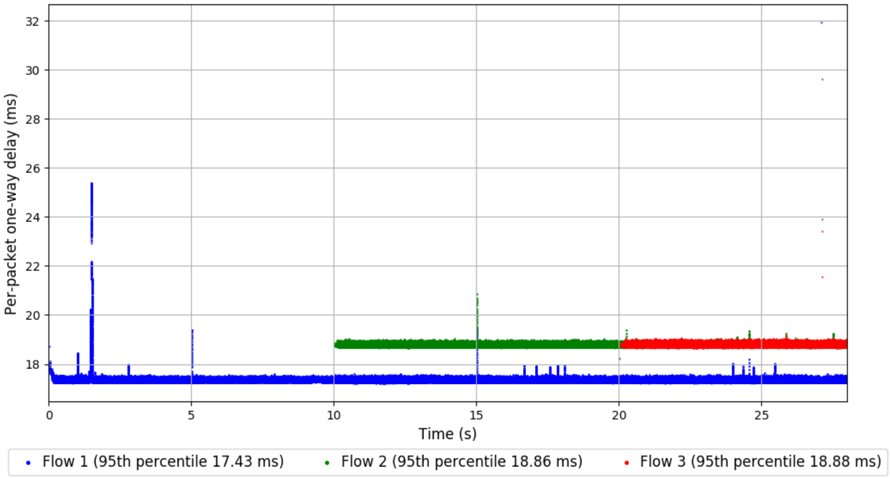




```
Run 8: Statistics of Copa

Start at: 2018-01-17 07:05:33
End at: 2018-01-17 07:06:03
Local clock offset: -3.542 ms
Remote clock offset: -1.871 ms

# Below is generated by plot.py at 2018-01-17 12:16:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 205.02 Mbit/s
95th percentile per-packet one-way delay: 18.832 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 102.16 Mbit/s
95th percentile per-packet one-way delay: 17.431 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 110.22 Mbit/s
95th percentile per-packet one-way delay: 18.861 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 113.26 Mbit/s
95th percentile per-packet one-way delay: 18.880 ms
Loss rate: 0.00%
```

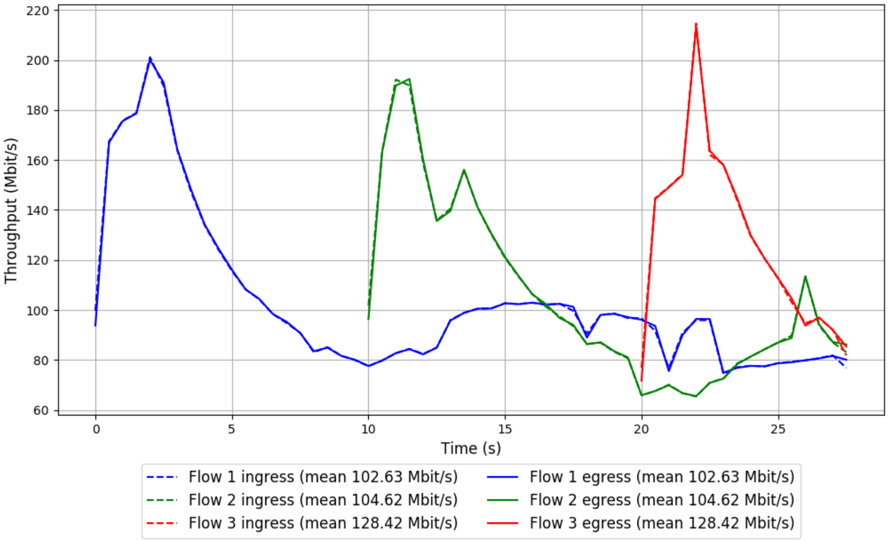
Run 8: Report of Copa — Data Link

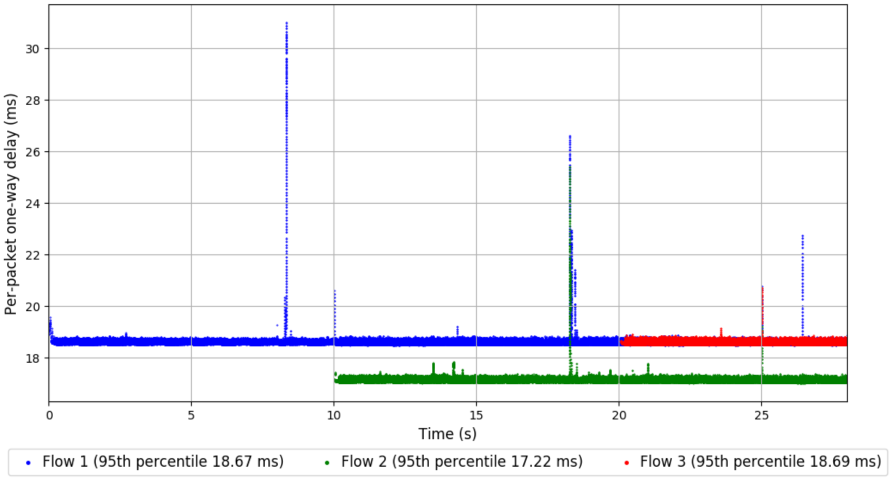




```
Run 9: Statistics of Copa

Start at: 2018-01-17 07:33:02
End at: 2018-01-17 07:33:32
Local clock offset: -4.349 ms
Remote clock offset: -1.81 ms

# Below is generated by plot.py at 2018-01-17 12:17:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 206.20 Mbit/s
95th percentile per-packet one-way delay: 18.654 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 102.63 Mbit/s
95th percentile per-packet one-way delay: 18.672 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 104.62 Mbit/s
95th percentile per-packet one-way delay: 17.216 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 128.42 Mbit/s
95th percentile per-packet one-way delay: 18.688 ms
Loss rate: 0.00%
```

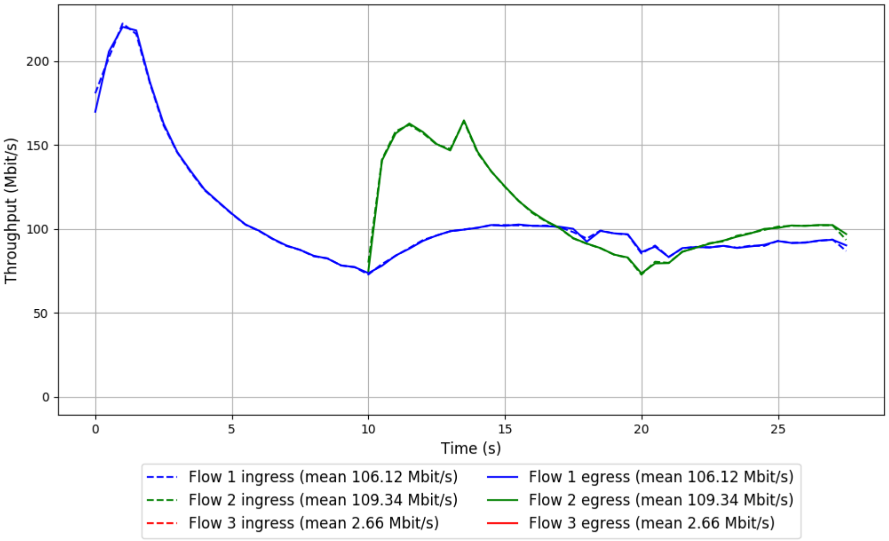
Run 9: Report of Copa — Data Link

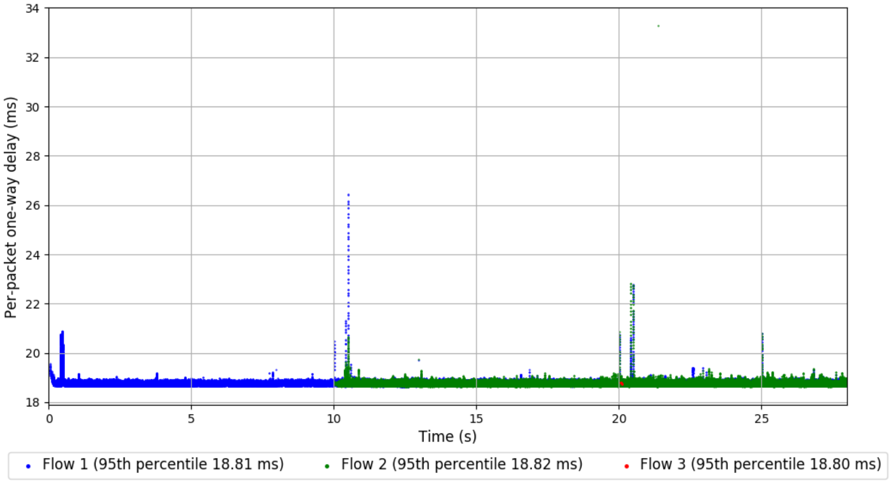




```
Run 10: Statistics of Copa

Start at: 2018-01-17 08:00:34
End at: 2018-01-17 08:01:04
Local clock offset: -5.117 ms
Remote clock offset: -2.152 ms

# Below is generated by plot.py at 2018-01-17 12:17:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 176.31 Mbit/s
95th percentile per-packet one-way delay: 18.812 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 106.12 Mbit/s
95th percentile per-packet one-way delay: 18.808 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 109.34 Mbit/s
95th percentile per-packet one-way delay: 18.817 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 2.66 Mbit/s
95th percentile per-packet one-way delay: 18.799 ms
Loss rate: 0.00%
```

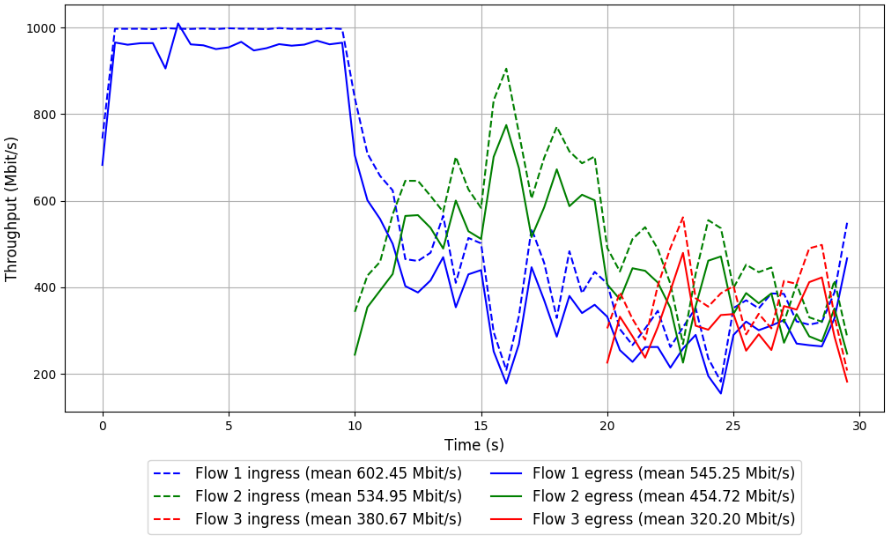
Run 10: Report of Copa — Data Link

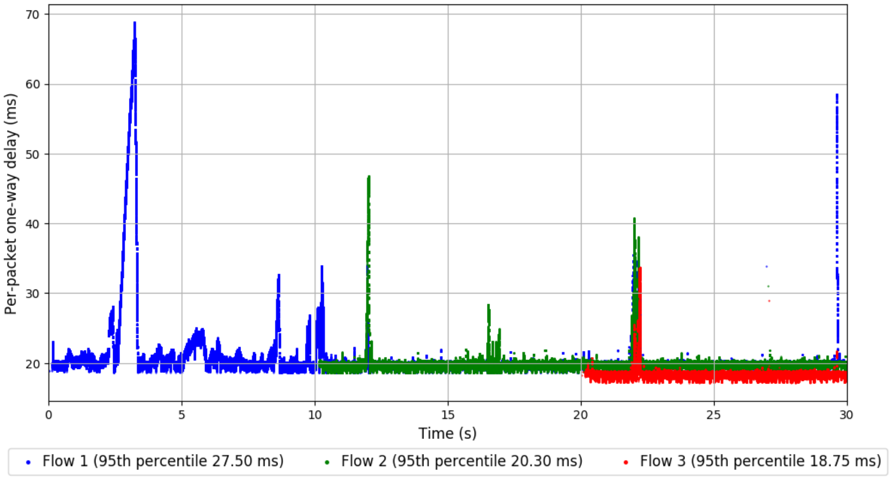




```
Run 1: Statistics of FillP

Start at: 2018-01-17 03:33:34
End at: 2018-01-17 03:34:04
Local clock offset: -1.189 ms
Remote clock offset: -2.338 ms

# Below is generated by plot.py at 2018-01-17 12:28:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 954.18 Mbit/s
95th percentile per-packet one-way delay: 24.180 ms
Loss rate: 12.05%
-- Flow 1:
Average throughput: 545.25 Mbit/s
95th percentile per-packet one-way delay: 27.499 ms
Loss rate: 9.49%
-- Flow 2:
Average throughput: 454.72 Mbit/s
95th percentile per-packet one-way delay: 20.300 ms
Loss rate: 15.00%
-- Flow 3:
Average throughput: 320.20 Mbit/s
95th percentile per-packet one-way delay: 18.749 ms
Loss rate: 15.89%
```

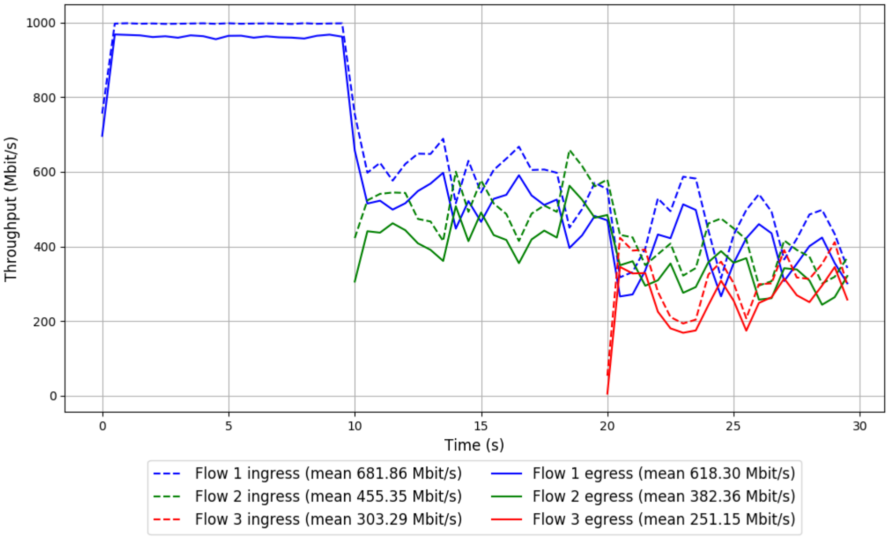
Run 1: Report of FillP — Data Link

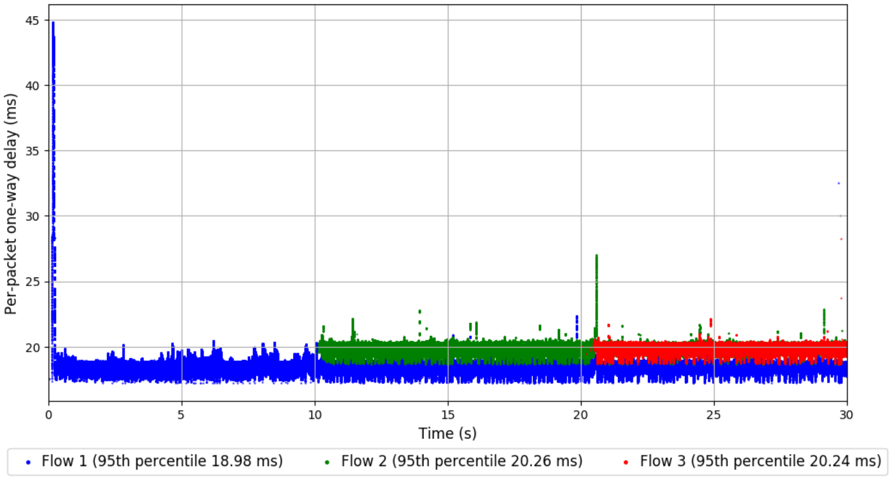




```
Run 2: Statistics of FillP

Start at: 2018-01-17 04:01:00
End at: 2018-01-17 04:01:30
Local clock offset: -1.363 ms
Remote clock offset: -2.699 ms

# Below is generated by plot.py at 2018-01-17 12:29:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 955.94 Mbit/s
95th percentile per-packet one-way delay: 20.185 ms
Loss rate: 11.92%
-- Flow 1:
Average throughput: 618.30 Mbit/s
95th percentile per-packet one-way delay: 18.981 ms
Loss rate: 9.32%
-- Flow 2:
Average throughput: 382.36 Mbit/s
95th percentile per-packet one-way delay: 20.256 ms
Loss rate: 16.03%
-- Flow 3:
Average throughput: 251.15 Mbit/s
95th percentile per-packet one-way delay: 20.236 ms
Loss rate: 17.19%
```

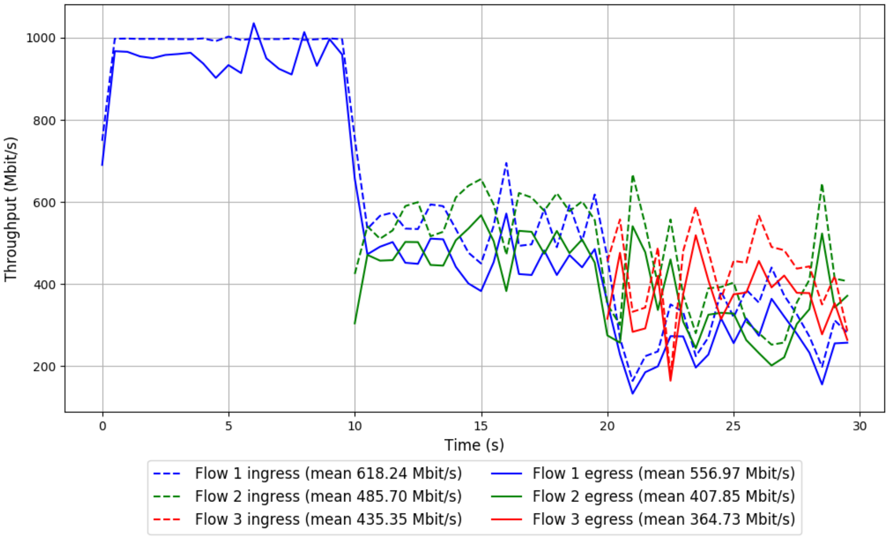
Run 2: Report of FillP — Data Link

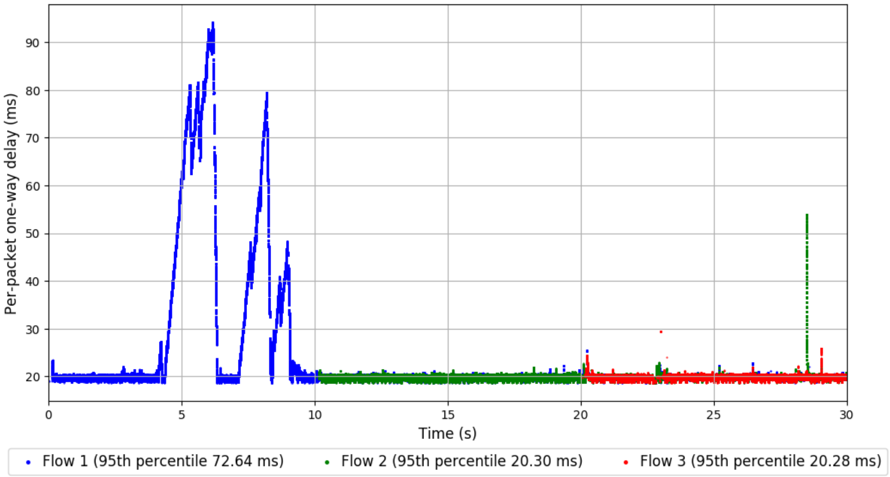




```
Run 3: Statistics of FillP

Start at: 2018-01-17 04:28:26
End at: 2018-01-17 04:28:56
Local clock offset: -2.086 ms
Remote clock offset: -2.703 ms

# Below is generated by plot.py at 2018-01-17 12:29:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 949.44 Mbit/s
95th percentile per-packet one-way delay: 62.106 ms
Loss rate: 12.57%
-- Flow 1:
Average throughput: 556.97 Mbit/s
95th percentile per-packet one-way delay: 72.640 ms
Loss rate: 9.91%
-- Flow 2:
Average throughput: 407.85 Mbit/s
95th percentile per-packet one-way delay: 20.297 ms
Loss rate: 16.03%
-- Flow 3:
Average throughput: 364.73 Mbit/s
95th percentile per-packet one-way delay: 20.283 ms
Loss rate: 16.22%
```

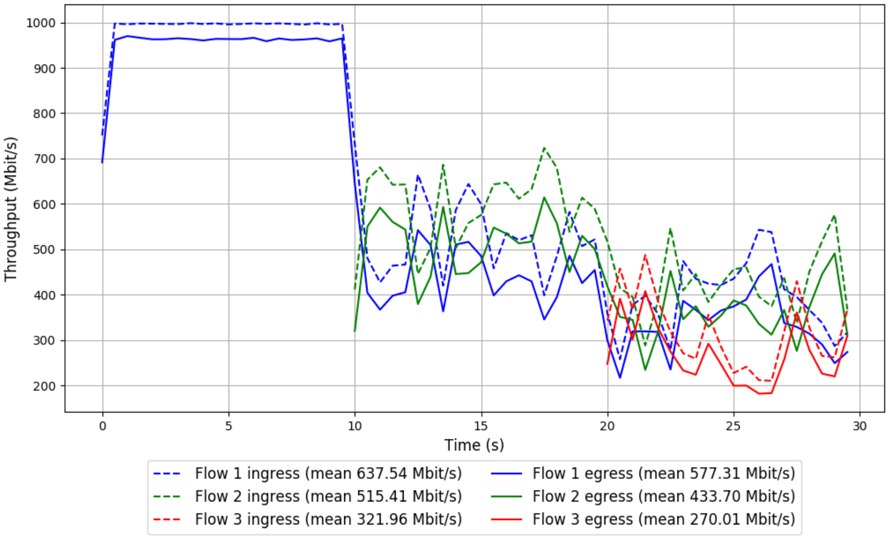
Run 3: Report of FillP — Data Link

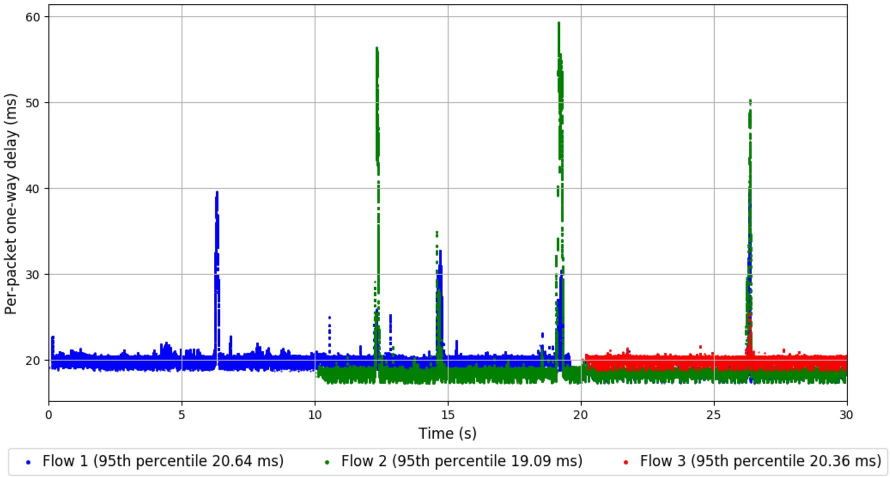




```
Run 4: Statistics of FillP

Start at: 2018-01-17 04:56:10
End at: 2018-01-17 04:56:40
Local clock offset: -2.447 ms
Remote clock offset: -2.148 ms

# Below is generated by plot.py at 2018-01-17 12:30:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 955.59 Mbit/s
95th percentile per-packet one-way delay: 20.504 ms
Loss rate: 12.13%
-- Flow 1:
Average throughput: 577.31 Mbit/s
95th percentile per-packet one-way delay: 20.635 ms
Loss rate: 9.45%
-- Flow 2:
Average throughput: 433.70 Mbit/s
95th percentile per-packet one-way delay: 19.093 ms
Loss rate: 15.85%
-- Flow 3:
Average throughput: 270.01 Mbit/s
95th percentile per-packet one-way delay: 20.363 ms
Loss rate: 16.14%
```

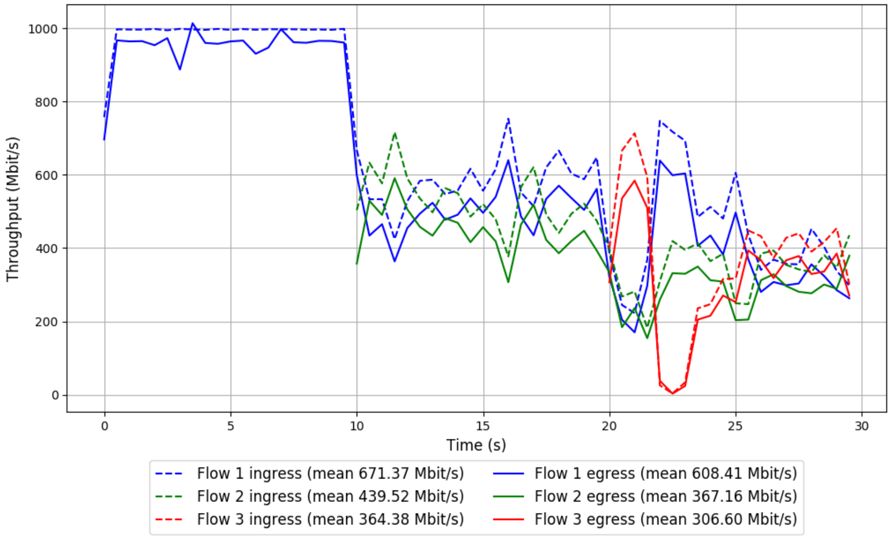
Run 4: Report of FillP — Data Link

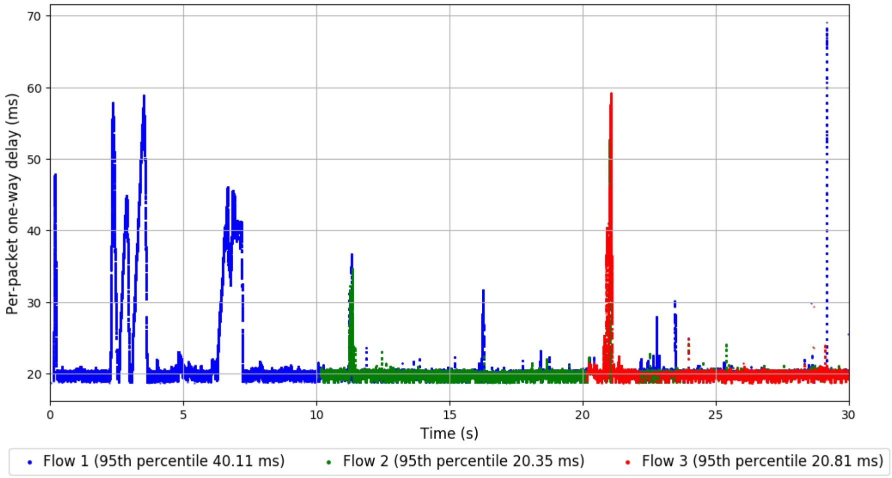




```
Run 5: Statistics of FillP

Start at: 2018-01-17 05:23:40
End at: 2018-01-17 05:24:10
Local clock offset: -2.676 ms
Remote clock offset: -1.941 ms

# Below is generated by plot.py at 2018-01-17 12:30:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 954.45 Mbit/s
95th percentile per-packet one-way delay: 35.409 ms
Loss rate: 12.00%
-- Flow 1:
Average throughput: 608.41 Mbit/s
95th percentile per-packet one-way delay: 40.108 ms
Loss rate: 9.36%
-- Flow 2:
Average throughput: 367.16 Mbit/s
95th percentile per-packet one-way delay: 20.354 ms
Loss rate: 16.46%
-- Flow 3:
Average throughput: 306.60 Mbit/s
95th percentile per-packet one-way delay: 20.811 ms
Loss rate: 15.86%
```

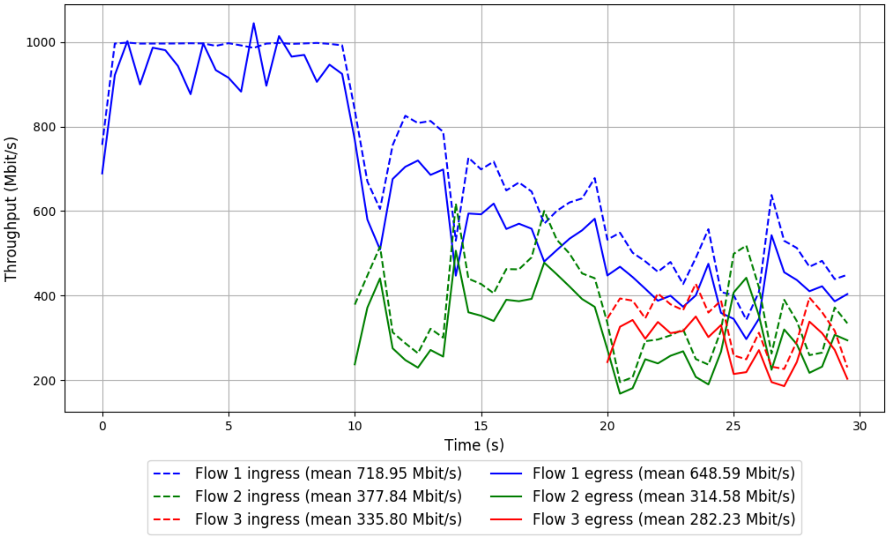
Run 5: Report of FillP — Data Link

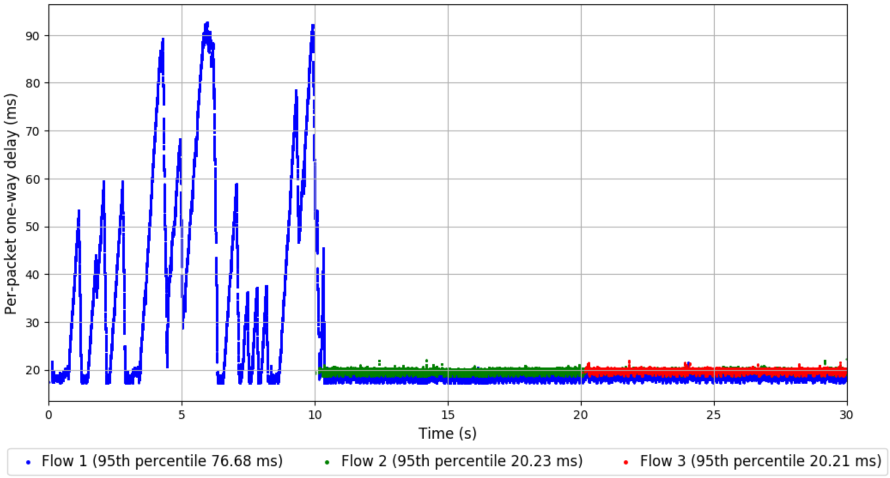




```
Run 6: Statistics of FillP

Start at: 2018-01-17 05:51:17
End at: 2018-01-17 05:51:47
Local clock offset: -3.187 ms
Remote clock offset: -2.104 ms

# Below is generated by plot.py at 2018-01-17 12:31:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 951.51 Mbit/s
95th percentile per-packet one-way delay: 67.602 ms
Loss rate: 12.03%
-- Flow 1:
Average throughput: 648.59 Mbit/s
95th percentile per-packet one-way delay: 76.676 ms
Loss rate: 9.78%
-- Flow 2:
Average throughput: 314.58 Mbit/s
95th percentile per-packet one-way delay: 20.225 ms
Loss rate: 16.73%
-- Flow 3:
Average throughput: 282.23 Mbit/s
95th percentile per-packet one-way delay: 20.214 ms
Loss rate: 15.95%
```

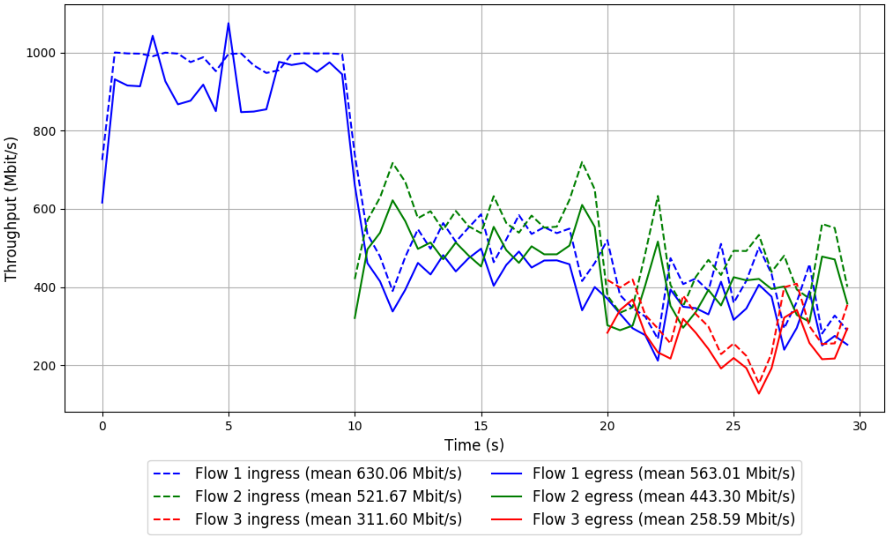
Run 6: Report of FillP — Data Link

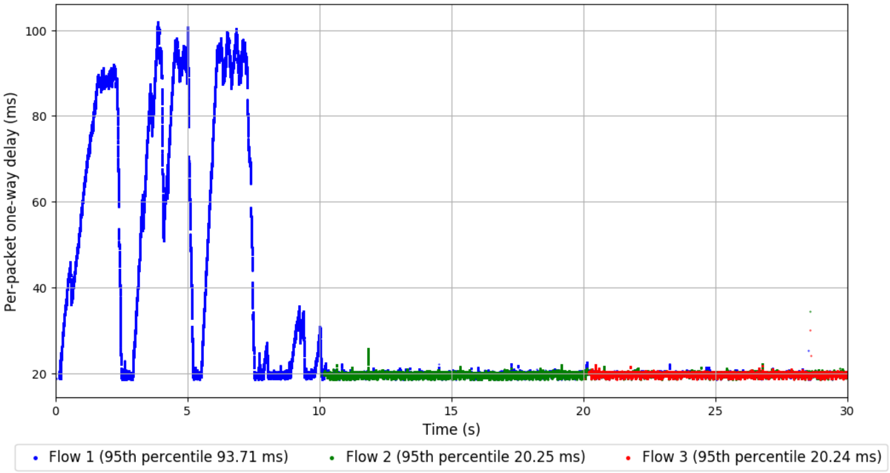




```
Run 7: Statistics of FillP

Start at: 2018-01-17 06:18:52
End at: 2018-01-17 06:19:22
Local clock offset: -2.456 ms
Remote clock offset: -1.833 ms

# Below is generated by plot.py at 2018-01-17 12:32:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 943.87 Mbit/s
95th percentile per-packet one-way delay: 90.825 ms
Loss rate: 12.66%
-- Flow 1:
Average throughput: 563.01 Mbit/s
95th percentile per-packet one-way delay: 93.713 ms
Loss rate: 10.64%
-- Flow 2:
Average throughput: 443.30 Mbit/s
95th percentile per-packet one-way delay: 20.254 ms
Loss rate: 15.03%
-- Flow 3:
Average throughput: 258.59 Mbit/s
95th percentile per-packet one-way delay: 20.240 ms
Loss rate: 17.01%
```

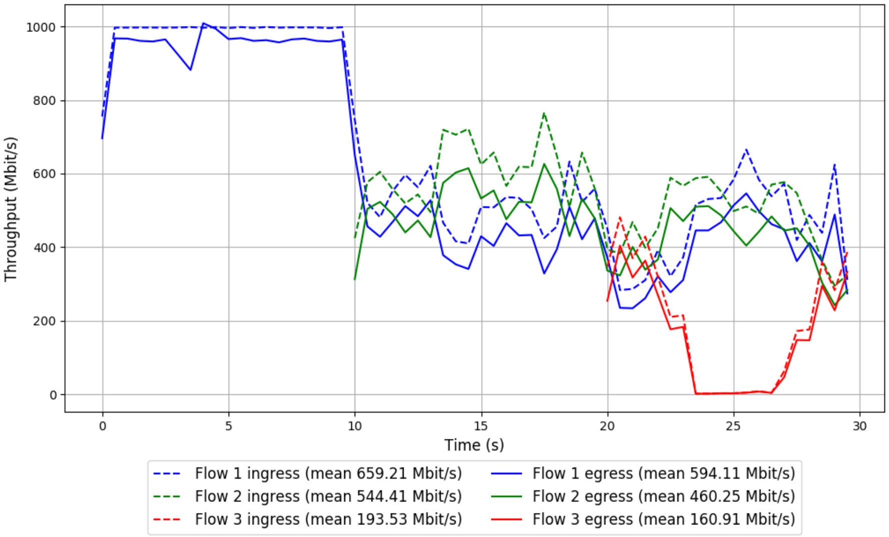
Run 7: Report of FillP — Data Link

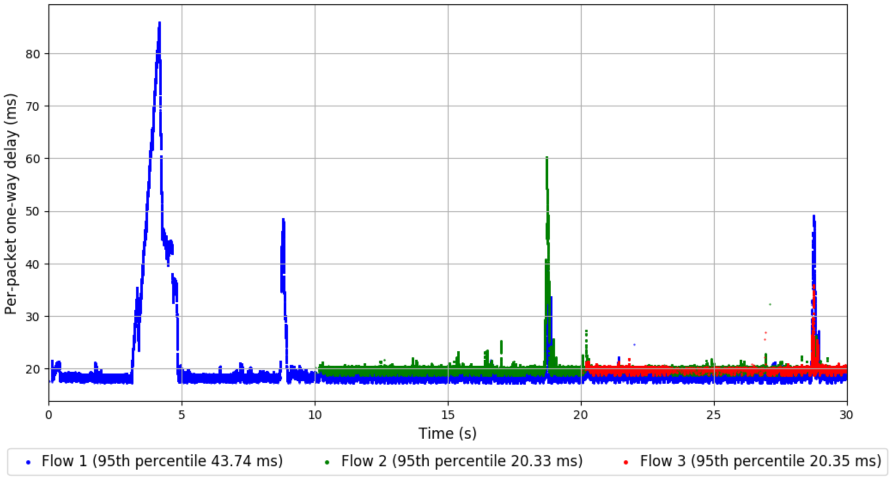




```
Run 8: Statistics of FillP

Start at: 2018-01-17 06:46:55
End at: 2018-01-17 06:47:25
Local clock offset: -3.03 ms
Remote clock offset: -2.088 ms

# Below is generated by plot.py at 2018-01-17 12:32:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 953.72 Mbit/s
95th percentile per-packet one-way delay: 35.475 ms
Loss rate: 12.15%
-- Flow 1:
Average throughput: 594.11 Mbit/s
95th percentile per-packet one-way delay: 43.744 ms
Loss rate: 9.87%
-- Flow 2:
Average throughput: 460.25 Mbit/s
95th percentile per-packet one-way delay: 20.330 ms
Loss rate: 15.46%
-- Flow 3:
Average throughput: 160.91 Mbit/s
95th percentile per-packet one-way delay: 20.349 ms
Loss rate: 16.86%
```

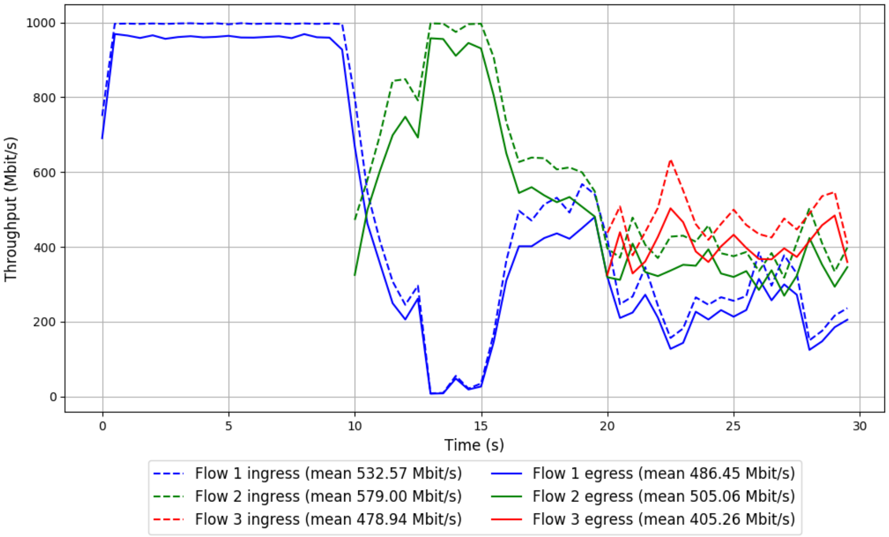
Run 8: Report of FillP — Data Link

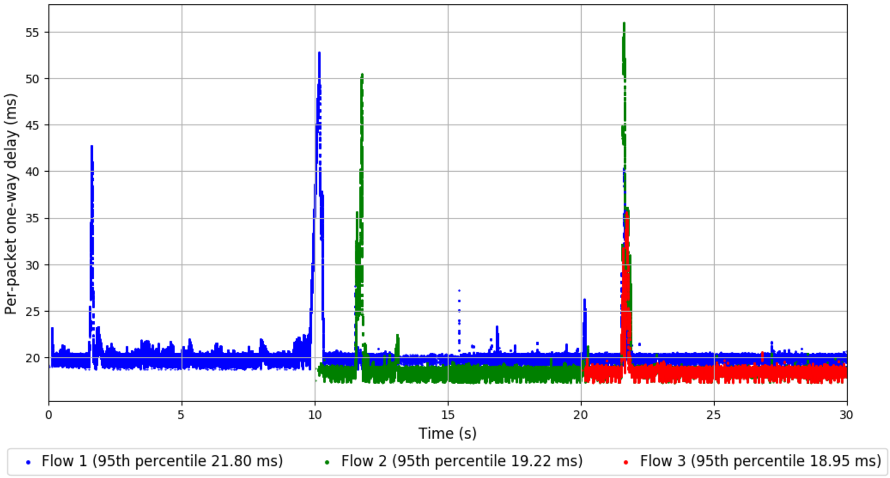




```
Run 9: Statistics of FillP

Start at: 2018-01-17 07:14:27
End at: 2018-01-17 07:14:57
Local clock offset: -3.876 ms
Remote clock offset: -1.928 ms

# Below is generated by plot.py at 2018-01-17 12:43:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 957.13 Mbit/s
95th percentile per-packet one-way delay: 21.168 ms
Loss rate: 11.12%
-- Flow 1:
Average throughput: 486.45 Mbit/s
95th percentile per-packet one-way delay: 21.803 ms
Loss rate: 8.66%
-- Flow 2:
Average throughput: 505.06 Mbit/s
95th percentile per-packet one-way delay: 19.216 ms
Loss rate: 12.77%
-- Flow 3:
Average throughput: 405.26 Mbit/s
95th percentile per-packet one-way delay: 18.946 ms
Loss rate: 15.39%
```

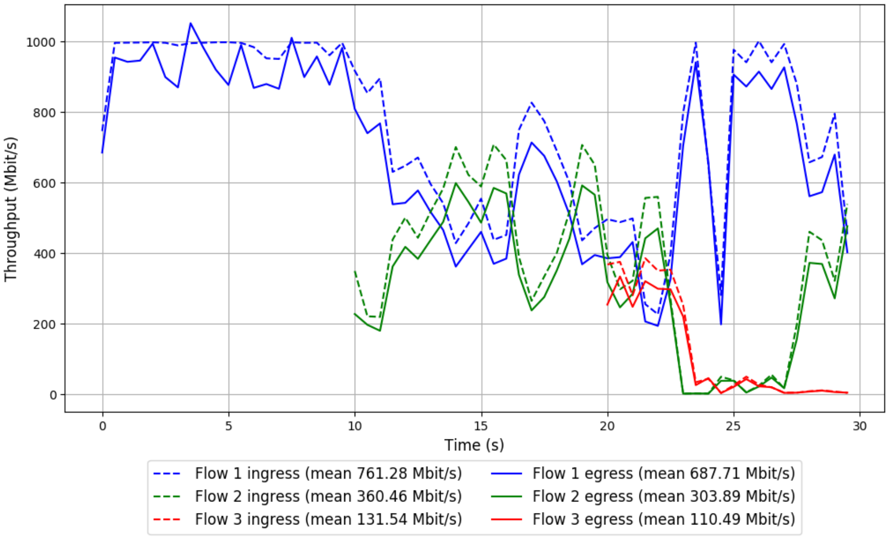
Run 9: Report of FillP — Data Link

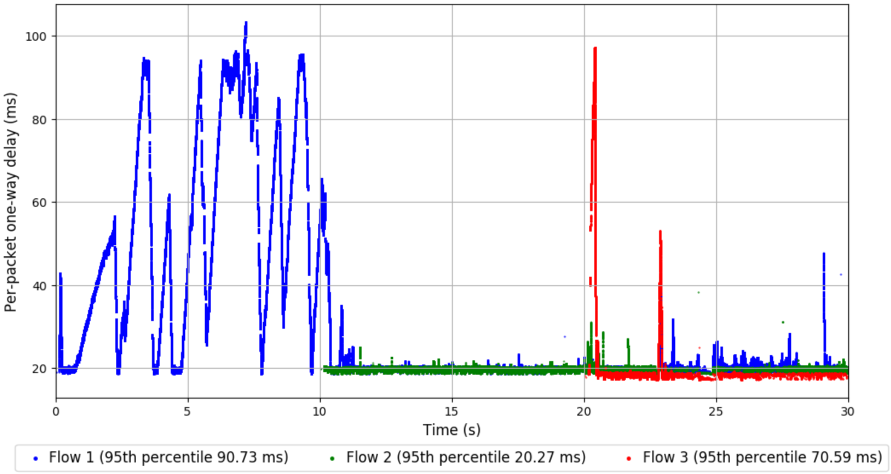




```
Run 10: Statistics of FillP

Start at: 2018-01-17 07:42:04
End at: 2018-01-17 07:42:34
Local clock offset: -4.776 ms
Remote clock offset: -1.843 ms

# Below is generated by plot.py at 2018-01-17 12:43:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 926.56 Mbit/s
95th percentile per-packet one-way delay: 87.854 ms
Loss rate: 11.31%
-- Flow 1:
Average throughput: 687.71 Mbit/s
95th percentile per-packet one-way delay: 90.726 ms
Loss rate: 9.66%
-- Flow 2:
Average throughput: 303.89 Mbit/s
95th percentile per-packet one-way delay: 20.270 ms
Loss rate: 15.70%
-- Flow 3:
Average throughput: 110.49 Mbit/s
95th percentile per-packet one-way delay: 70.589 ms
Loss rate: 16.00%
```

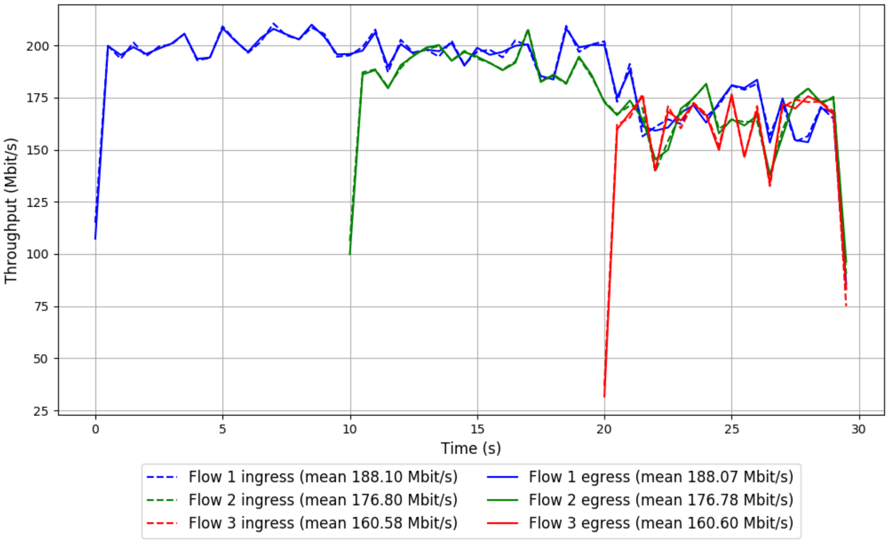
Run 10: Report of FillP — Data Link

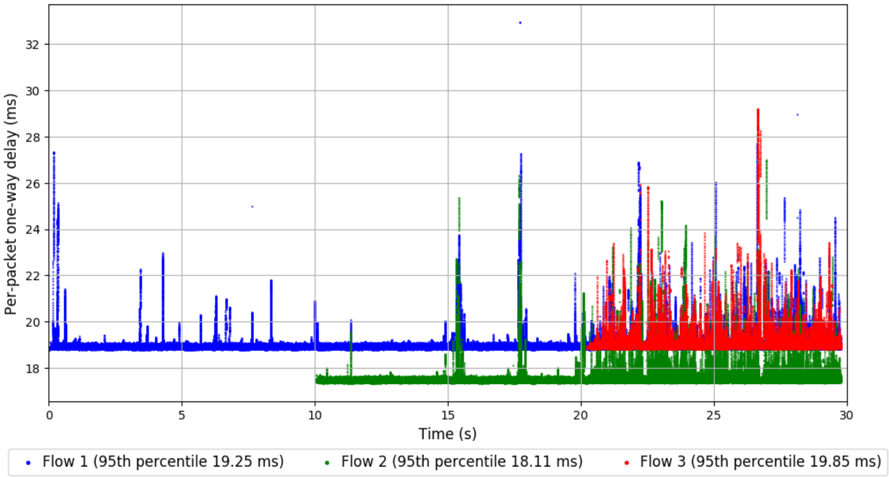




```
Run 1: Statistics of Indigo

Start at: 2018-01-17 03:48:54
End at: 2018-01-17 03:49:24
Local clock offset: -1.359 ms
Remote clock offset: -2.362 ms

# Below is generated by plot.py at 2018-01-17 12:43:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 356.71 Mbit/s
95th percentile per-packet one-way delay: 19.250 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 188.07 Mbit/s
95th percentile per-packet one-way delay: 19.253 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 176.78 Mbit/s
95th percentile per-packet one-way delay: 18.115 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 160.60 Mbit/s
95th percentile per-packet one-way delay: 19.852 ms
Loss rate: 0.01%
```

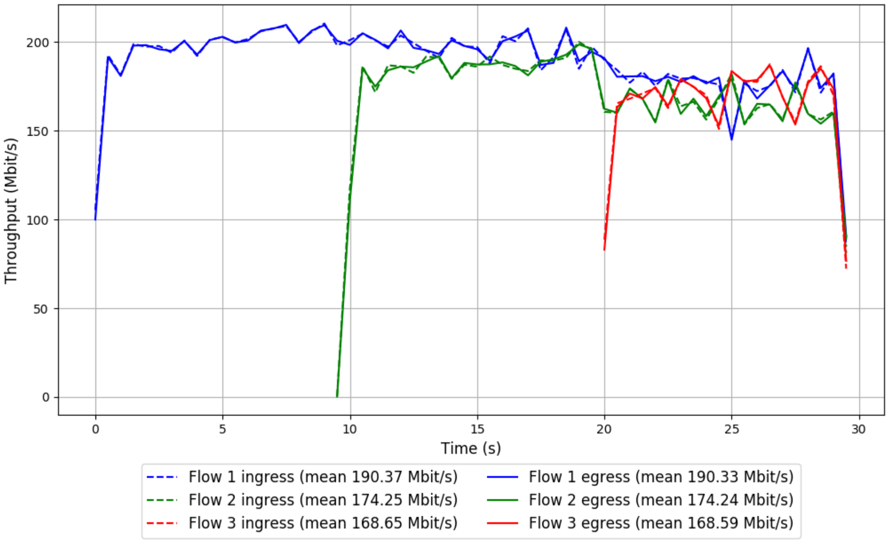
Run 1: Report of Indigo — Data Link

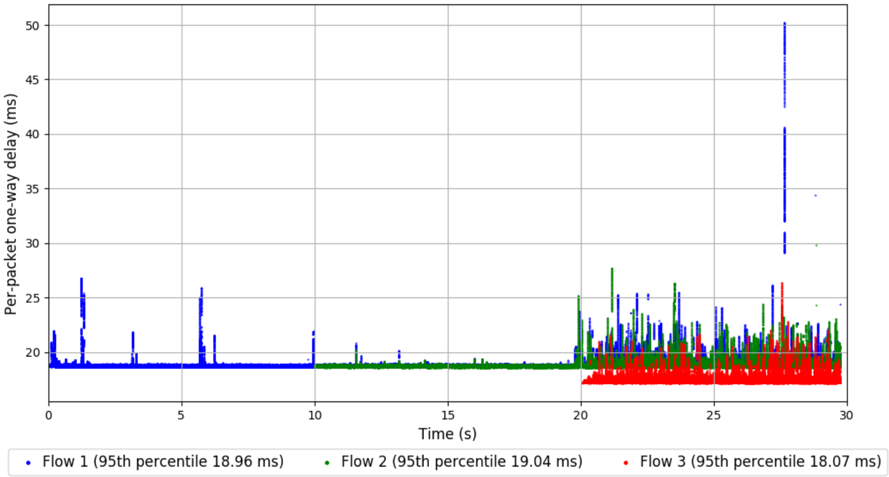




```
Run 2: Statistics of Indigo

Start at: 2018-01-17 04:16:24
End at: 2018-01-17 04:16:54
Local clock offset: -1.635 ms
Remote clock offset: -2.965 ms

# Below is generated by plot.py at 2018-01-17 12:43:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 360.86 Mbit/s
95th percentile per-packet one-way delay: 18.945 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 190.33 Mbit/s
95th percentile per-packet one-way delay: 18.961 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 174.24 Mbit/s
95th percentile per-packet one-way delay: 19.043 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 168.59 Mbit/s
95th percentile per-packet one-way delay: 18.073 ms
Loss rate: 0.03%
```

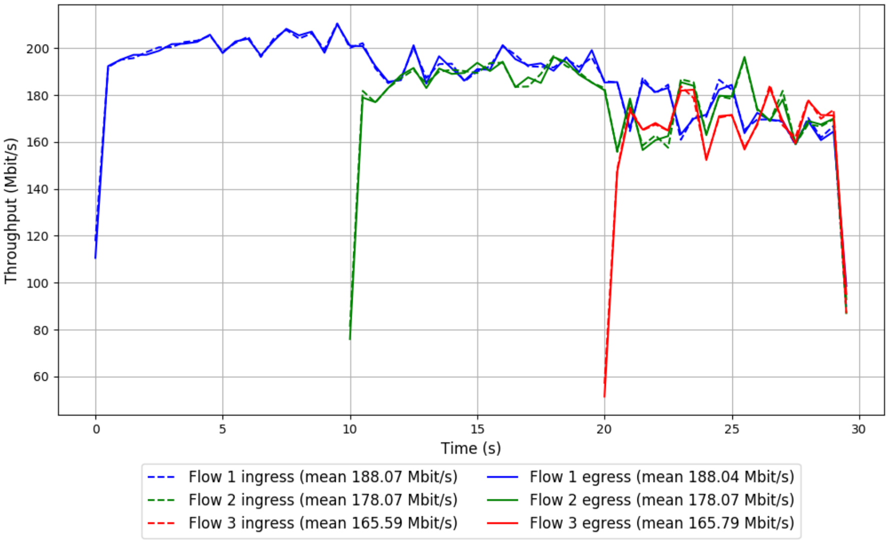
Run 2: Report of Indigo — Data Link

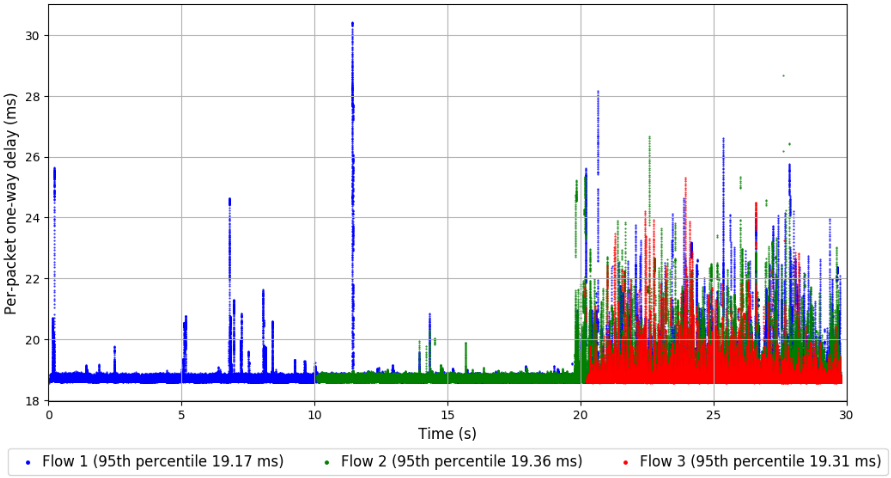




```
Run 3: Statistics of Indigo

Start at: 2018-01-17 04:43:54
End at: 2018-01-17 04:44:24
Local clock offset: -2.096 ms
Remote clock offset: -2.383 ms

# Below is generated by plot.py at 2018-01-17 12:43:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 359.32 Mbit/s
95th percentile per-packet one-way delay: 19.261 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 188.04 Mbit/s
95th percentile per-packet one-way delay: 19.166 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 178.07 Mbit/s
95th percentile per-packet one-way delay: 19.361 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 165.79 Mbit/s
95th percentile per-packet one-way delay: 19.309 ms
Loss rate: 0.00%
```

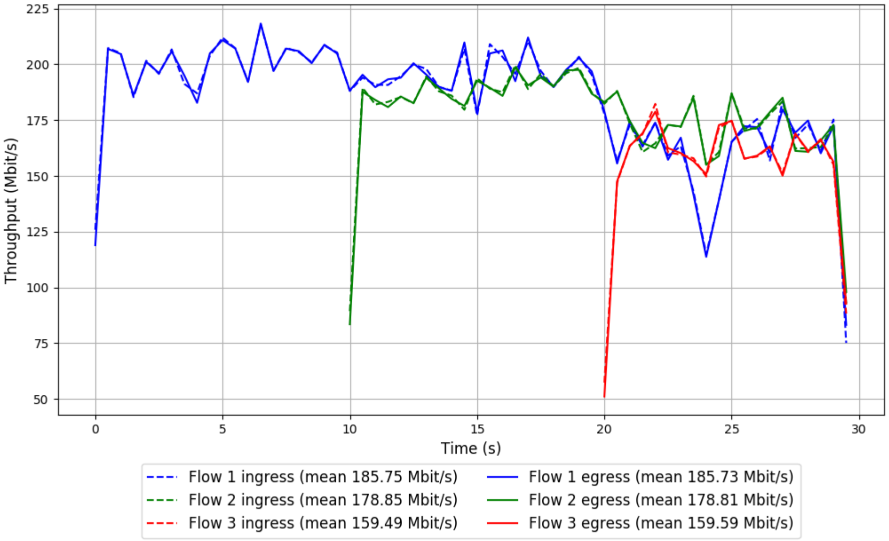
Run 3: Report of Indigo — Data Link

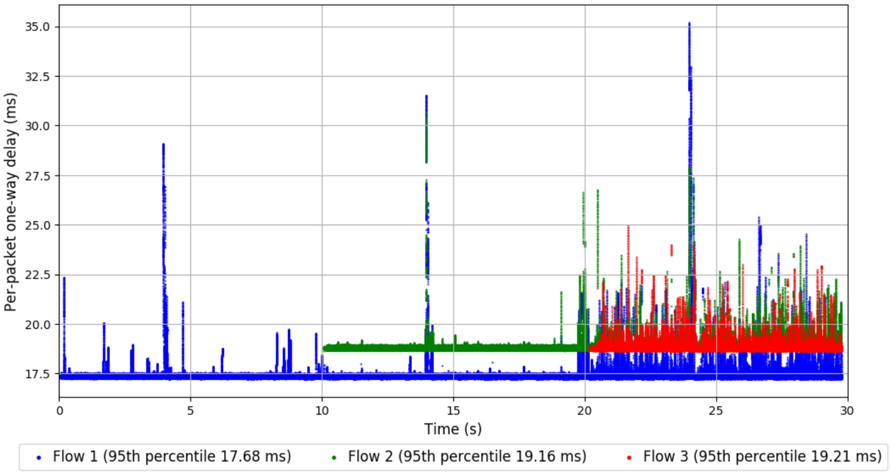




```
Run 4: Statistics of Indigo

Start at: 2018-01-17 05:11:17
End at: 2018-01-17 05:11:47
Local clock offset: -2.455 ms
Remote clock offset: -2.114 ms

# Below is generated by plot.py at 2018-01-17 12:43:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.59 Mbit/s
95th percentile per-packet one-way delay: 18.964 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 185.73 Mbit/s
95th percentile per-packet one-way delay: 17.679 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 178.81 Mbit/s
95th percentile per-packet one-way delay: 19.163 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 159.59 Mbit/s
95th percentile per-packet one-way delay: 19.210 ms
Loss rate: 0.00%
```

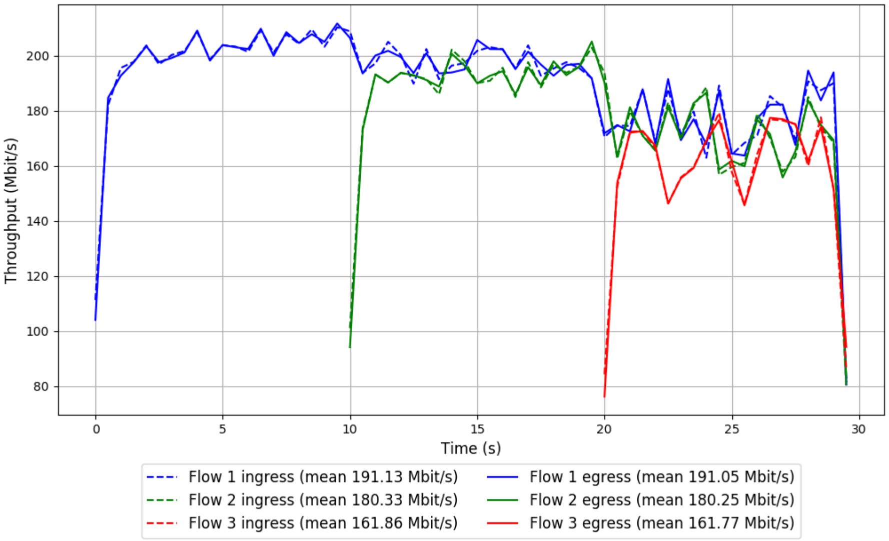
Run 4: Report of Indigo — Data Link

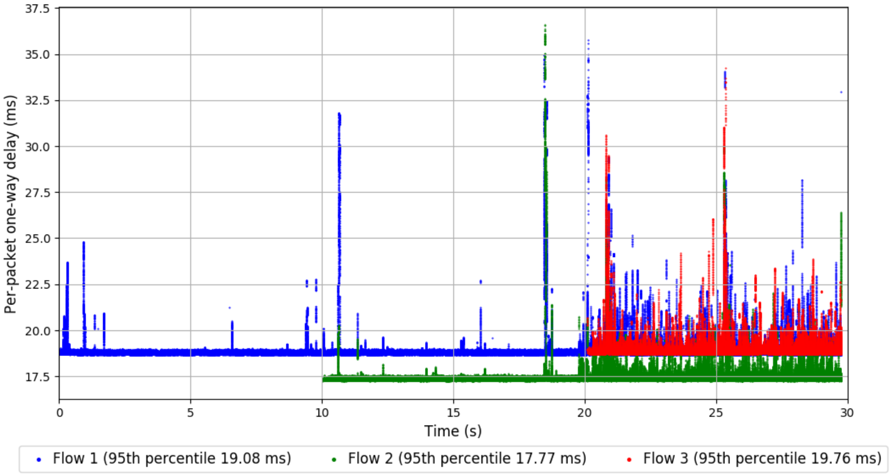




```
Run 5: Statistics of Indigo

Start at: 2018-01-17 05:39:06
End at: 2018-01-17 05:39:36
Local clock offset: -2.954 ms
Remote clock offset: -2.113 ms

# Below is generated by plot.py at 2018-01-17 12:43:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 363.14 Mbit/s
95th percentile per-packet one-way delay: 19.087 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 191.05 Mbit/s
95th percentile per-packet one-way delay: 19.077 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 180.25 Mbit/s
95th percentile per-packet one-way delay: 17.766 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 161.77 Mbit/s
95th percentile per-packet one-way delay: 19.756 ms
Loss rate: 0.03%
```

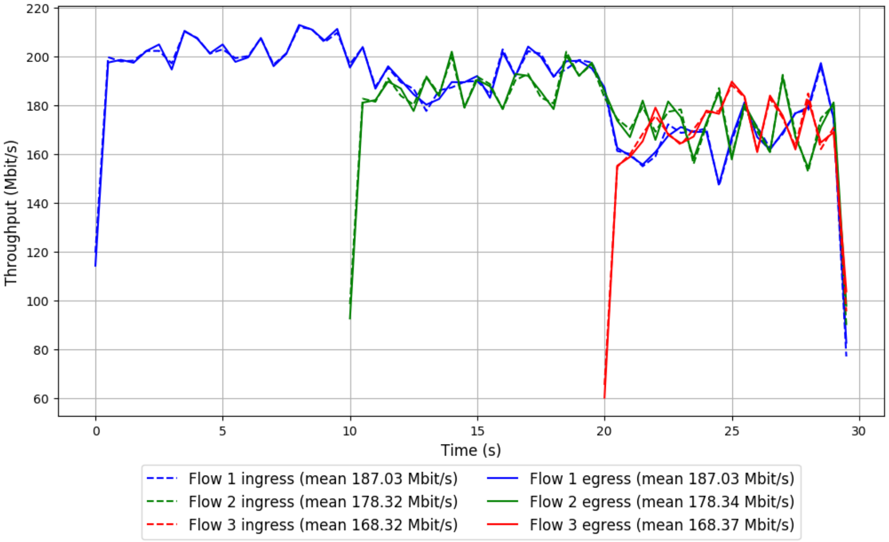
Run 5: Report of Indigo — Data Link

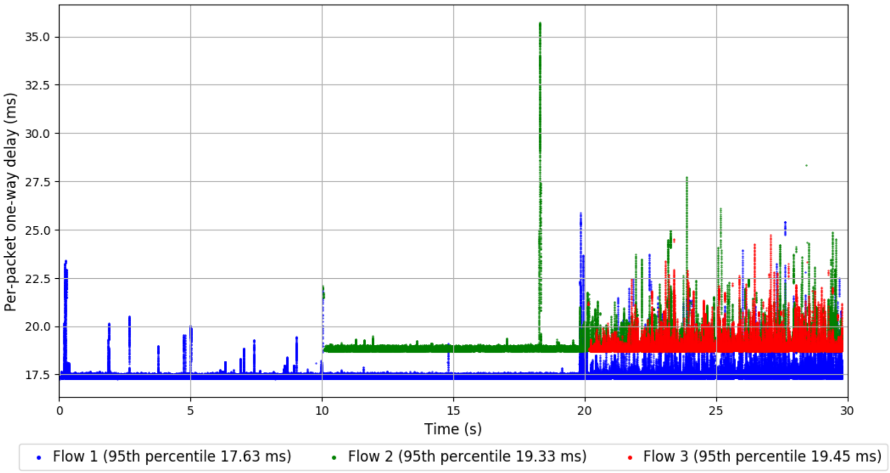




```
Run 6: Statistics of Indigo

Start at: 2018-01-17 06:06:50
End at: 2018-01-17 06:07:20
Local clock offset: -2.908 ms
Remote clock offset: -1.933 ms

# Below is generated by plot.py at 2018-01-17 12:43:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 359.79 Mbit/s
95th percentile per-packet one-way delay: 19.074 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 187.03 Mbit/s
95th percentile per-packet one-way delay: 17.630 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 178.34 Mbit/s
95th percentile per-packet one-way delay: 19.331 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 168.37 Mbit/s
95th percentile per-packet one-way delay: 19.449 ms
Loss rate: 0.00%
```

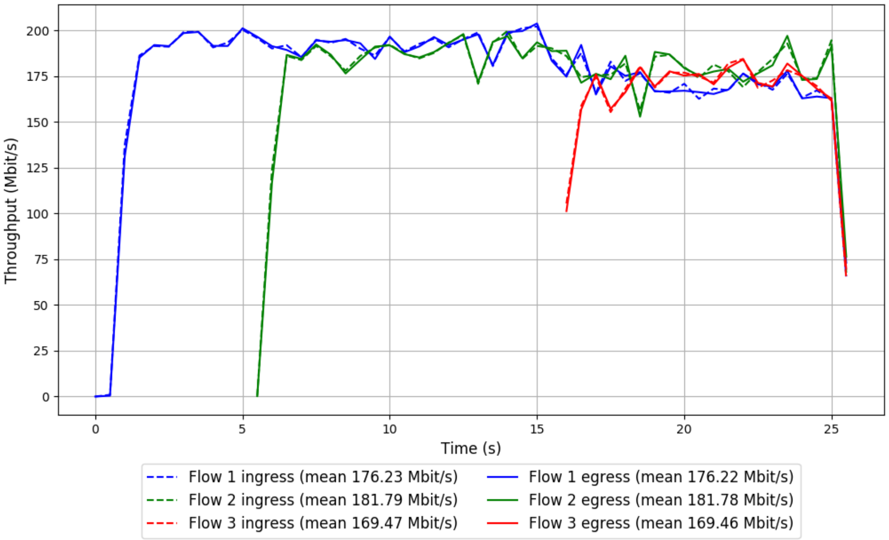
Run 6: Report of Indigo — Data Link

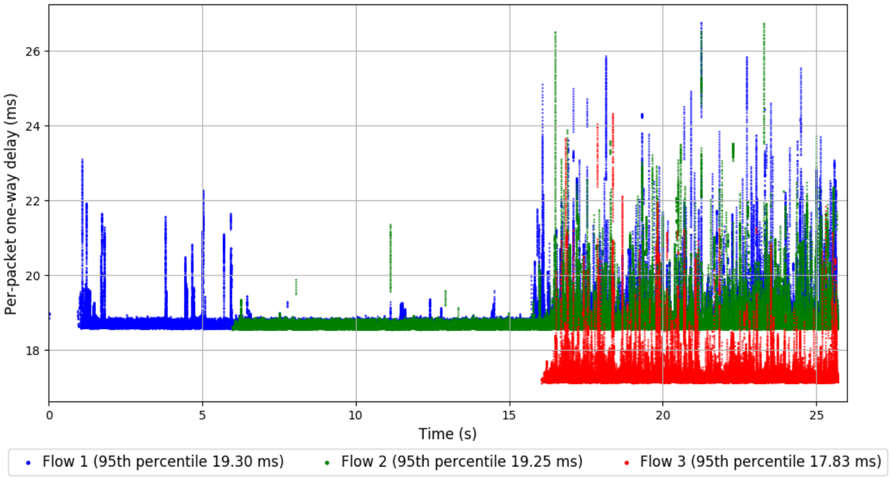




```
Run 7: Statistics of Indigo

Start at: 2018-01-17 06:34:26
End at: 2018-01-17 06:34:56
Local clock offset: -2.717 ms
Remote clock offset: -1.842 ms

# Below is generated by plot.py at 2018-01-17 12:43:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 379.40 Mbit/s
95th percentile per-packet one-way delay: 19.177 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 176.22 Mbit/s
95th percentile per-packet one-way delay: 19.296 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 181.78 Mbit/s
95th percentile per-packet one-way delay: 19.251 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 169.46 Mbit/s
95th percentile per-packet one-way delay: 17.834 ms
Loss rate: 0.00%
```

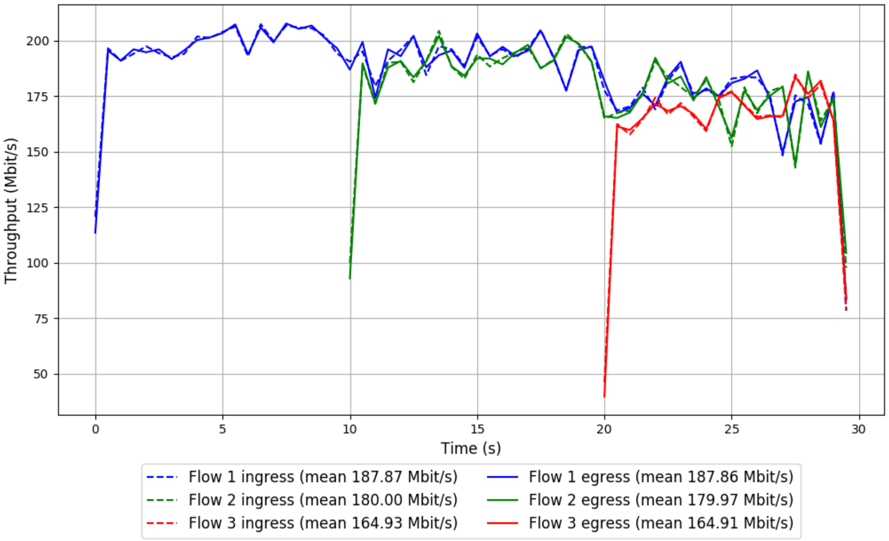
Run 7: Report of Indigo — Data Link

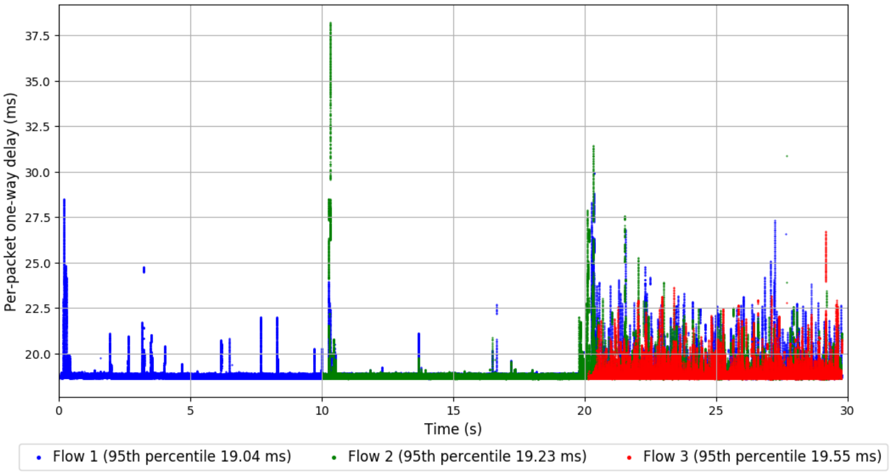




```
Run 8: Statistics of Indigo

Start at: 2018-01-17 07:02:28
End at: 2018-01-17 07:02:58
Local clock offset: -3.334 ms
Remote clock offset: -1.841 ms

# Below is generated by plot.py at 2018-01-17 12:43:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 360.60 Mbit/s
95th percentile per-packet one-way delay: 19.213 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 187.86 Mbit/s
95th percentile per-packet one-way delay: 19.041 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 179.97 Mbit/s
95th percentile per-packet one-way delay: 19.227 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 164.91 Mbit/s
95th percentile per-packet one-way delay: 19.547 ms
Loss rate: 0.00%
```

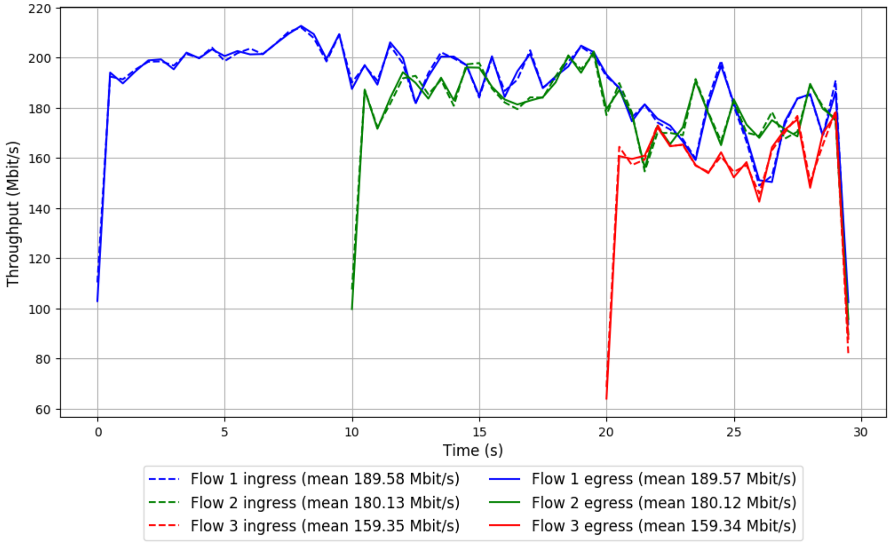
Run 8: Report of Indigo — Data Link

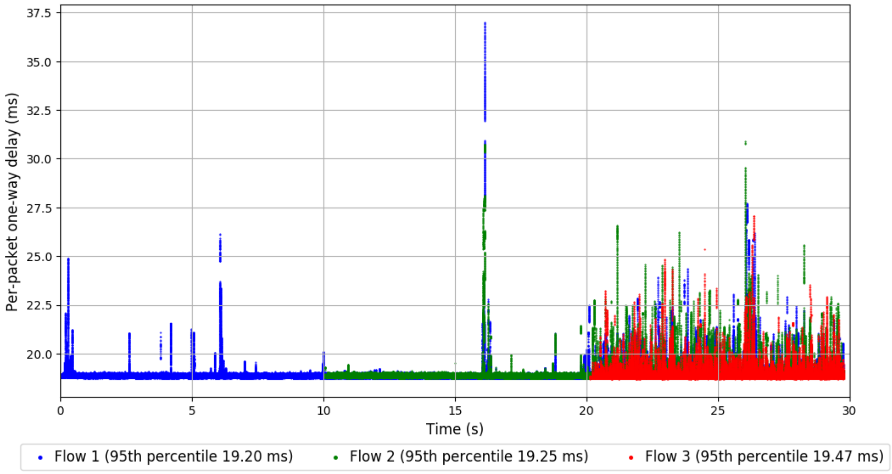




```
Run 9: Statistics of Indigo

Start at: 2018-01-17 07:30:01
End at: 2018-01-17 07:30:31
Local clock offset: -4.355 ms
Remote clock offset: -1.74 ms

# Below is generated by plot.py at 2018-01-17 12:43:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 360.65 Mbit/s
95th percentile per-packet one-way delay: 19.269 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 189.57 Mbit/s
95th percentile per-packet one-way delay: 19.201 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 180.12 Mbit/s
95th percentile per-packet one-way delay: 19.247 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 159.34 Mbit/s
95th percentile per-packet one-way delay: 19.473 ms
Loss rate: 0.01%
```

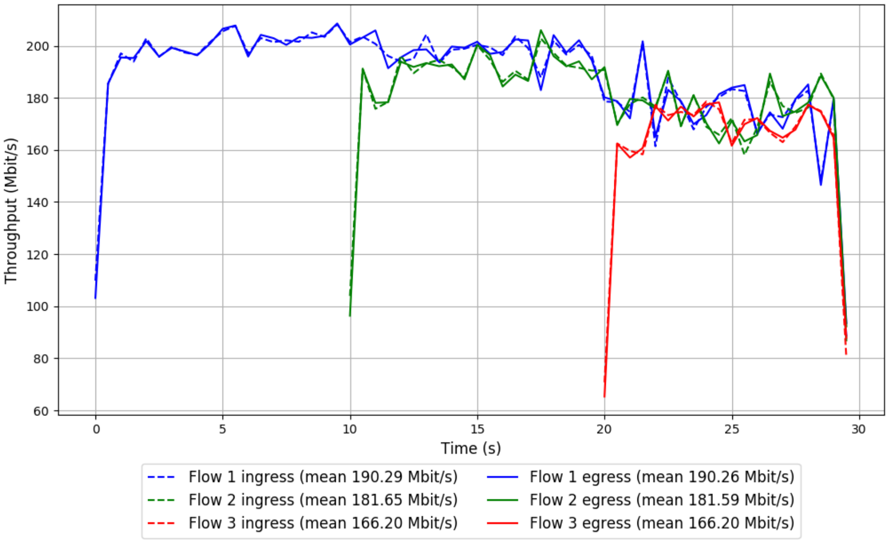
Run 9: Report of Indigo — Data Link

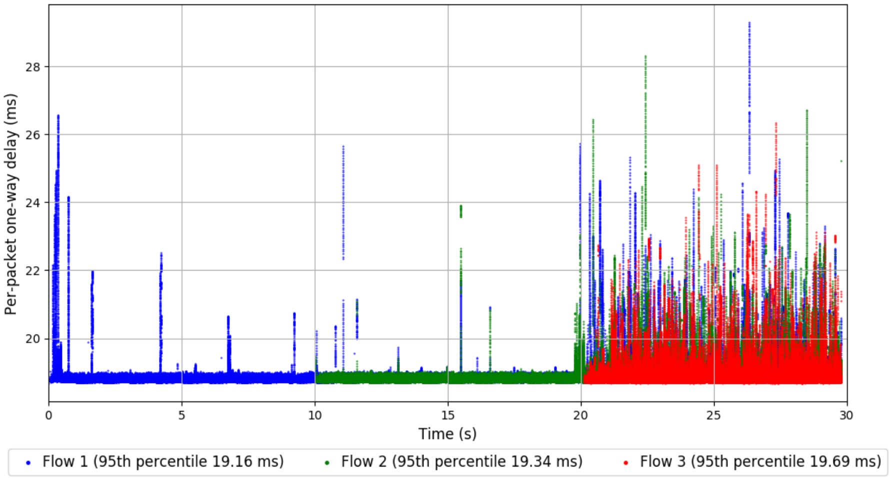




```
Run 10: Statistics of Indigo

Start at: 2018-01-17 07:57:30
End at: 2018-01-17 07:58:00
Local clock offset: -5.055 ms
Remote clock offset: -2.06 ms

# Below is generated by plot.py at 2018-01-17 12:43:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 364.63 Mbit/s
95th percentile per-packet one-way delay: 19.328 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 190.26 Mbit/s
95th percentile per-packet one-way delay: 19.163 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 181.59 Mbit/s
95th percentile per-packet one-way delay: 19.339 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 166.20 Mbit/s
95th percentile per-packet one-way delay: 19.687 ms
Loss rate: 0.01%
```

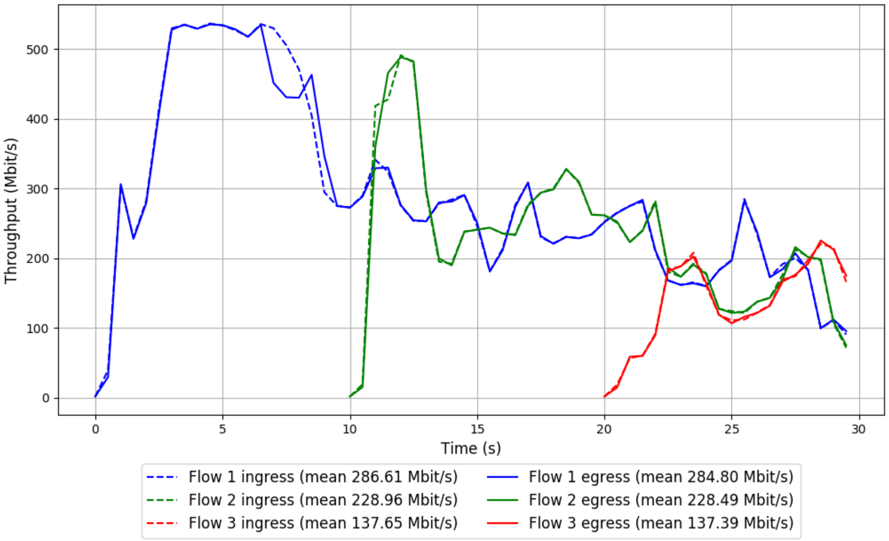
Run 10: Report of Indigo — Data Link

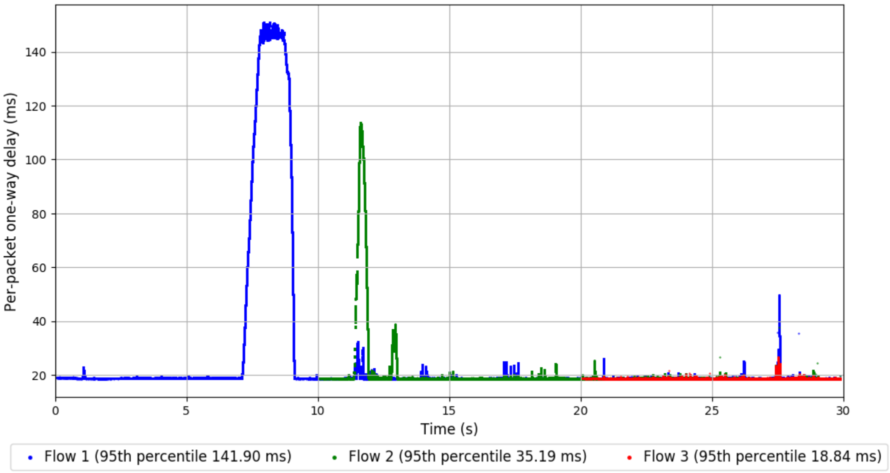




```
Run 1: Statistics of Vivace-latency

Start at: 2018-01-17 03:35:22
End at: 2018-01-17 03:35:52
Local clock offset: -1.203 ms
Remote clock offset: -2.321 ms

# Below is generated by plot.py at 2018-01-17 12:48:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 481.80 Mbit/s
95th percentile per-packet one-way delay: 99.432 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 284.80 Mbit/s
95th percentile per-packet one-way delay: 141.899 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 228.49 Mbit/s
95th percentile per-packet one-way delay: 35.185 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 137.39 Mbit/s
95th percentile per-packet one-way delay: 18.838 ms
Loss rate: 0.20%
```

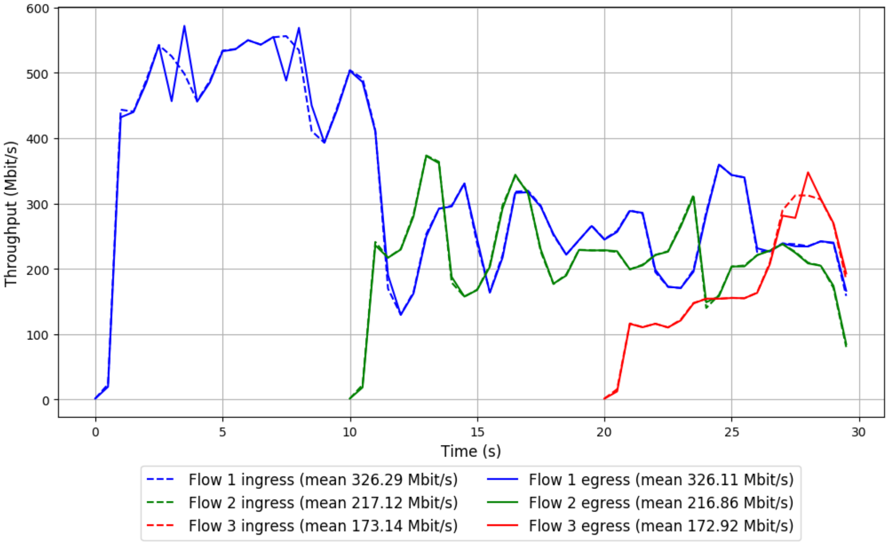
Run 1: Report of Vivace-latency — Data Link

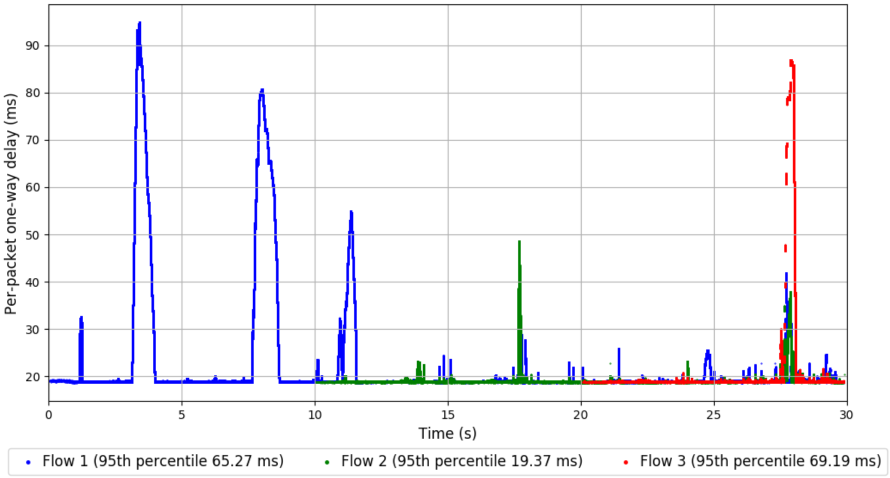




```
Run 2: Statistics of Vivace-latency

Start at: 2018-01-17 04:02:48
End at: 2018-01-17 04:03:18
Local clock offset: -1.435 ms
Remote clock offset: -2.783 ms

# Below is generated by plot.py at 2018-01-17 12:50:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 527.19 Mbit/s
95th percentile per-packet one-way delay: 54.816 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 326.11 Mbit/s
95th percentile per-packet one-way delay: 65.271 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 216.86 Mbit/s
95th percentile per-packet one-way delay: 19.367 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 172.92 Mbit/s
95th percentile per-packet one-way delay: 69.188 ms
Loss rate: 0.12%
```

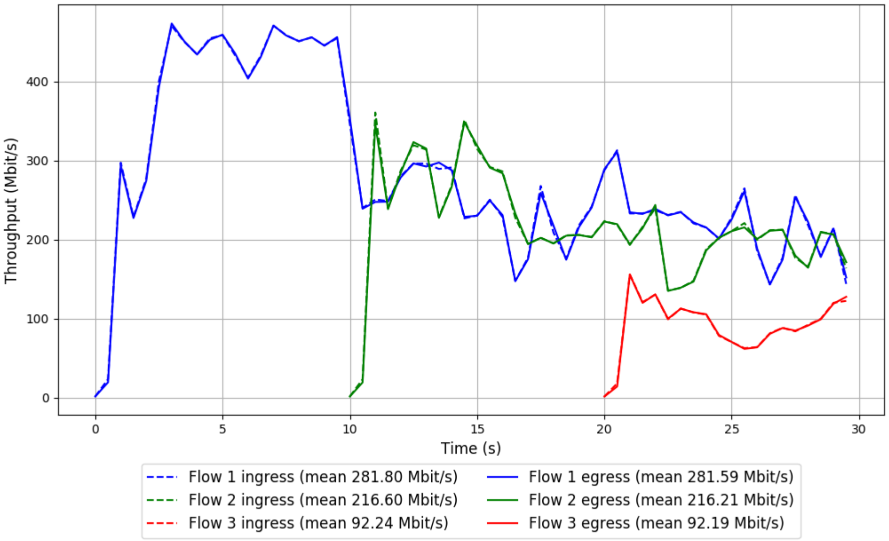
Run 2: Report of Vivace-latency — Data Link

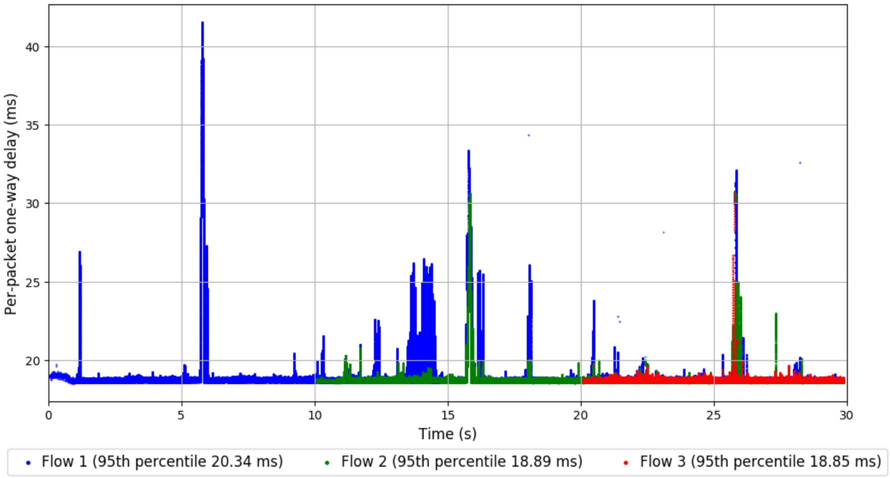




```
Run 3: Statistics of Vivace-latency

Start at: 2018-01-17 04:30:15
End at: 2018-01-17 04:30:45
Local clock offset: -1.972 ms
Remote clock offset: -2.678 ms

# Below is generated by plot.py at 2018-01-17 12:50:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 455.74 Mbit/s
95th percentile per-packet one-way delay: 19.492 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 281.59 Mbit/s
95th percentile per-packet one-way delay: 20.344 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 216.21 Mbit/s
95th percentile per-packet one-way delay: 18.885 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 92.19 Mbit/s
95th percentile per-packet one-way delay: 18.854 ms
Loss rate: 0.06%
```

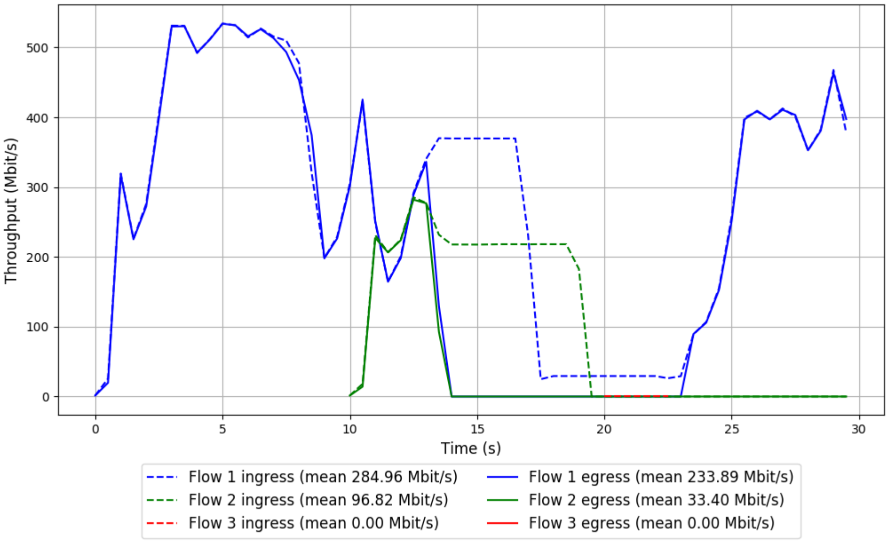
Run 3: Report of Vivace-latency — Data Link

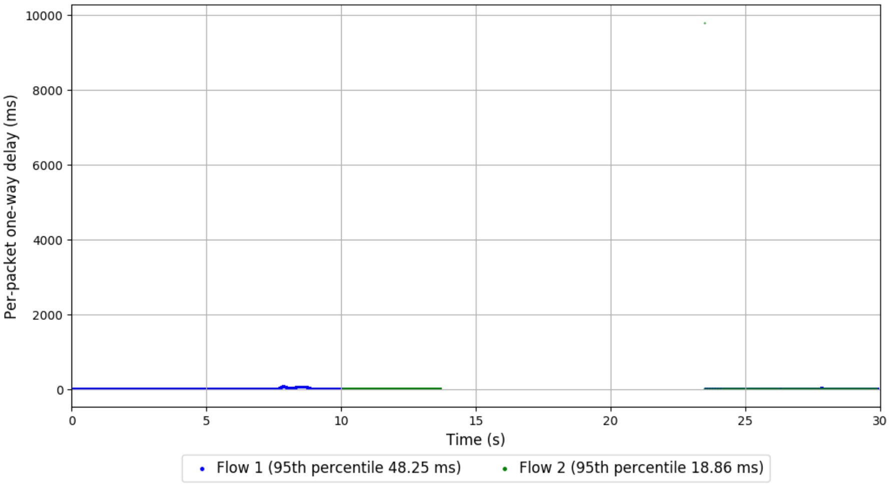




```
Run 4: Statistics of Vivace-latency

Start at: 2018-01-17 04:57:58
End at: 2018-01-17 04:58:28
Local clock offset: -2.384 ms
Remote clock offset: -2.236 ms

# Below is generated by plot.py at 2018-01-17 12:50:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 256.07 Mbit/s
95th percentile per-packet one-way delay: 43.125 ms
Loss rate: 26.68%
-- Flow 1:
Average throughput: 233.89 Mbit/s
95th percentile per-packet one-way delay: 48.249 ms
Loss rate: 17.92%
-- Flow 2:
Average throughput: 33.40 Mbit/s
95th percentile per-packet one-way delay: 18.862 ms
Loss rate: 65.50%
-- Flow 3:
Average throughput: 0.00 Mbit/s
```

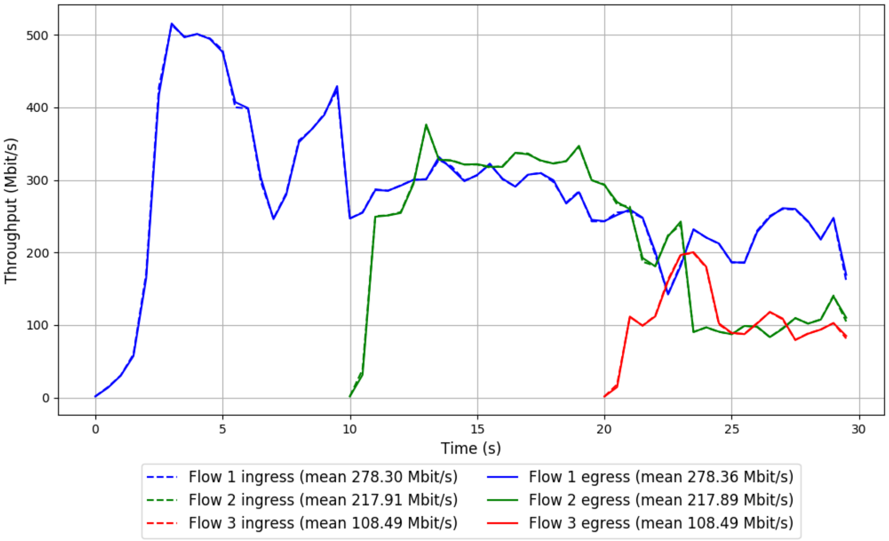
Run 4: Report of Vivace-latency — Data Link

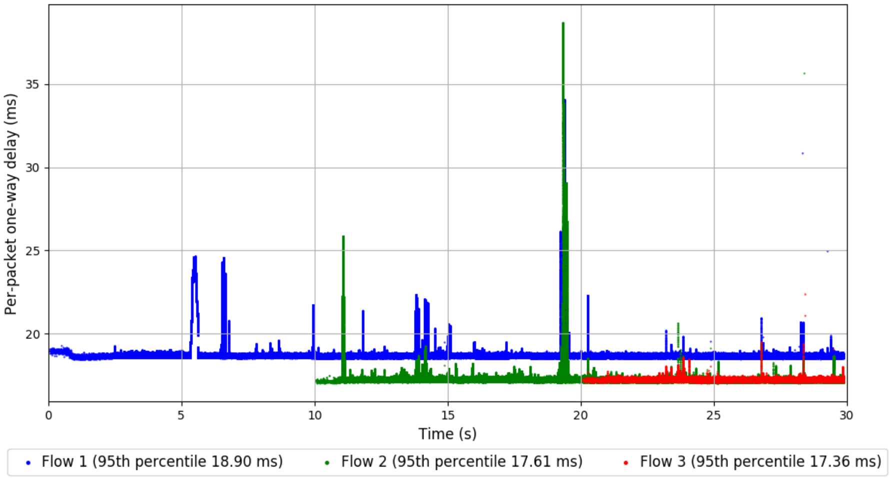




```
Run 5: Statistics of Vivace-latency

Start at: 2018-01-17 05:25:29
End at: 2018-01-17 05:25:59
Local clock offset: -2.593 ms
Remote clock offset: -2.014 ms

# Below is generated by plot.py at 2018-01-17 12:52:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 458.93 Mbit/s
95th percentile per-packet one-way delay: 18.815 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 278.36 Mbit/s
95th percentile per-packet one-way delay: 18.897 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 217.89 Mbit/s
95th percentile per-packet one-way delay: 17.613 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 108.49 Mbit/s
95th percentile per-packet one-way delay: 17.356 ms
Loss rate: 0.00%
```

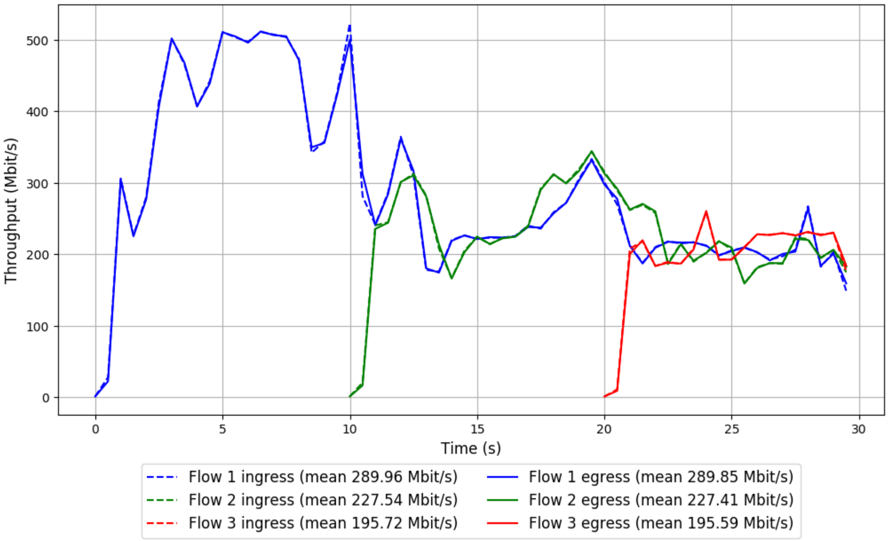
Run 5: Report of Vivace-latency — Data Link

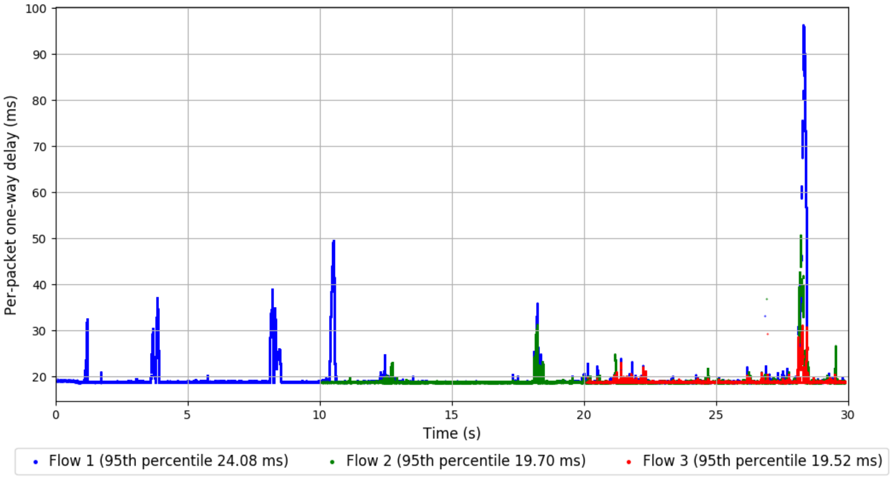




```
Run 6: Statistics of Vivace-latency

Start at: 2018-01-17 05:53:06
End at: 2018-01-17 05:53:36
Local clock offset: -3.227 ms
Remote clock offset: -2.089 ms

# Below is generated by plot.py at 2018-01-17 12:54:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 505.23 Mbit/s
95th percentile per-packet one-way delay: 21.157 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 289.85 Mbit/s
95th percentile per-packet one-way delay: 24.082 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 227.41 Mbit/s
95th percentile per-packet one-way delay: 19.702 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 195.59 Mbit/s
95th percentile per-packet one-way delay: 19.516 ms
Loss rate: 0.08%
```

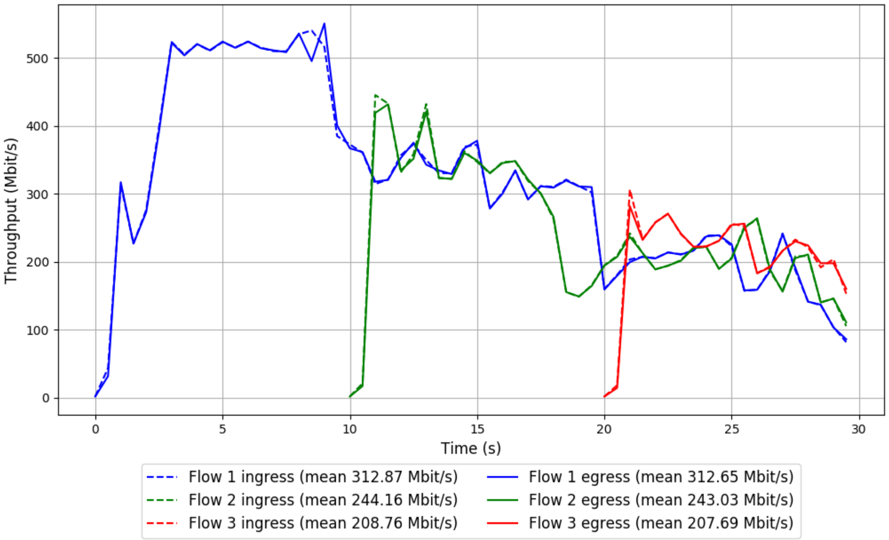
Run 6: Report of Vivace-latency — Data Link

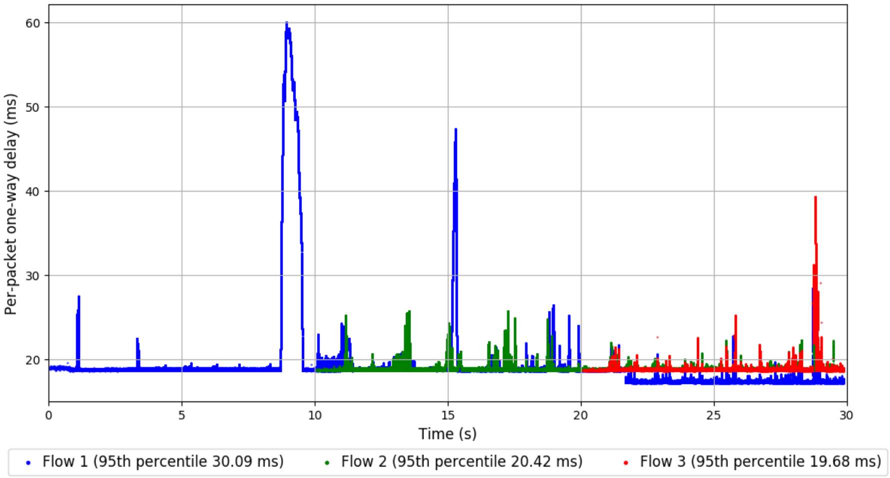




```
Run 7: Statistics of Vivace-latency

Start at: 2018-01-17 06:20:40
End at: 2018-01-17 06:21:10
Local clock offset: -2.443 ms
Remote clock offset: -1.766 ms

# Below is generated by plot.py at 2018-01-17 12:57:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 542.49 Mbit/s
95th percentile per-packet one-way delay: 22.233 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 312.65 Mbit/s
95th percentile per-packet one-way delay: 30.095 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 243.03 Mbit/s
95th percentile per-packet one-way delay: 20.424 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 207.69 Mbit/s
95th percentile per-packet one-way delay: 19.675 ms
Loss rate: 0.51%
```

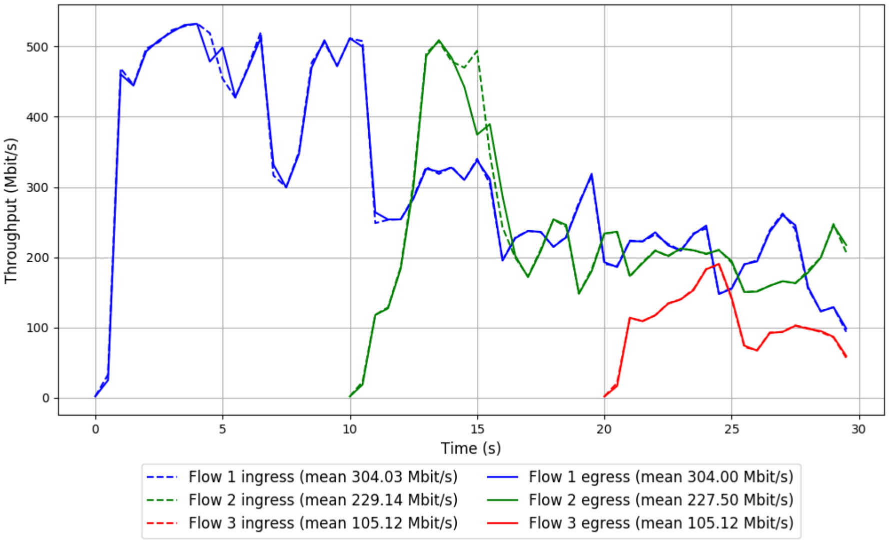
Run 7: Report of Vivace-latency — Data Link

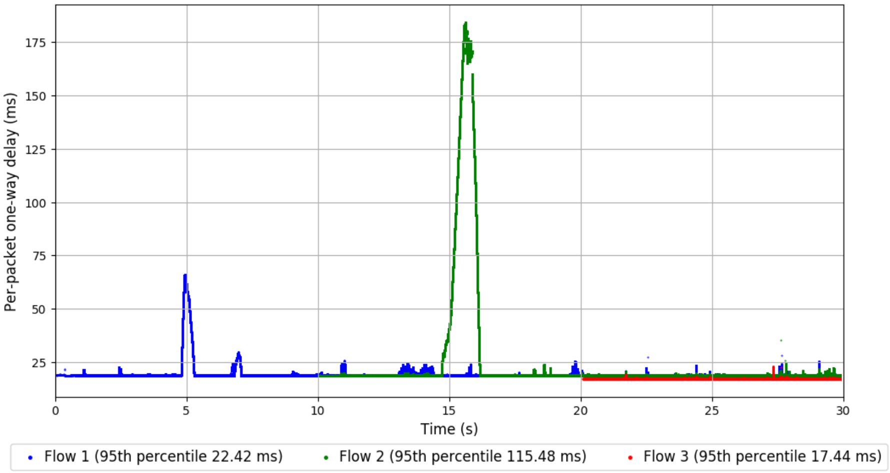




```
Run 8: Statistics of Vivace-latency

Start at: 2018-01-17 06:48:43
End at: 2018-01-17 06:49:13
Local clock offset: -2.987 ms
Remote clock offset: -2.041 ms

# Below is generated by plot.py at 2018-01-17 12:57:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 489.83 Mbit/s
95th percentile per-packet one-way delay: 28.133 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 304.00 Mbit/s
95th percentile per-packet one-way delay: 22.419 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 227.50 Mbit/s
95th percentile per-packet one-way delay: 115.482 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 105.12 Mbit/s
95th percentile per-packet one-way delay: 17.443 ms
Loss rate: 0.00%
```

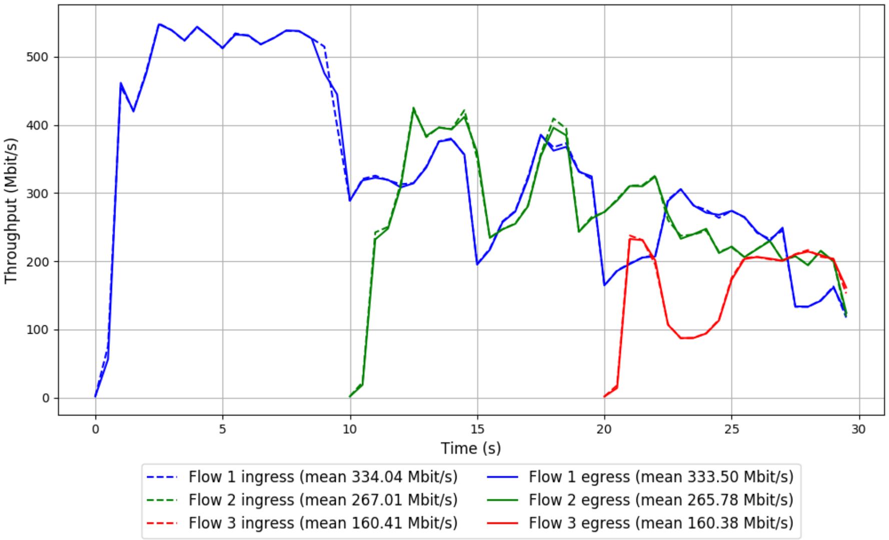
Run 8: Report of Vivace-latency — Data Link

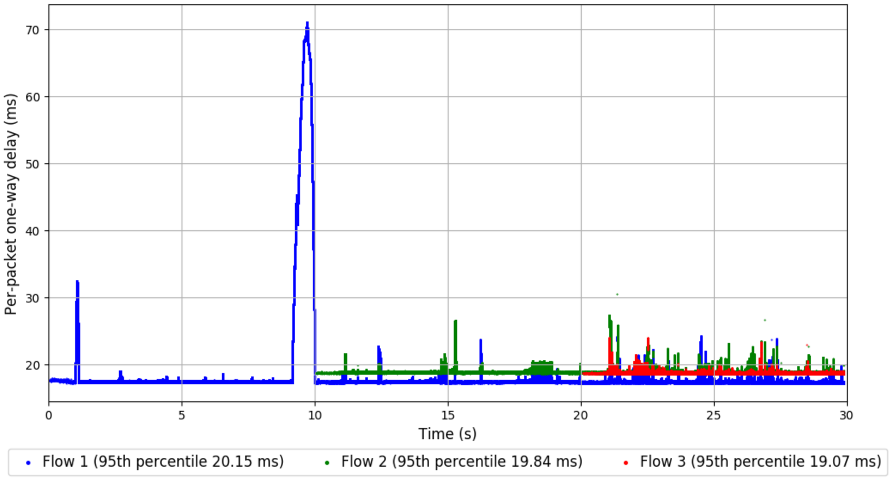




```
Run 9: Statistics of Vivace-latency

Start at: 2018-01-17 07:16:15
End at: 2018-01-17 07:16:45
Local clock offset: -3.83 ms
Remote clock offset: -1.893 ms

# Below is generated by plot.py at 2018-01-17 13:02:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 562.91 Mbit/s
95th percentile per-packet one-way delay: 19.730 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 333.50 Mbit/s
95th percentile per-packet one-way delay: 20.148 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 265.78 Mbit/s
95th percentile per-packet one-way delay: 19.842 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 160.38 Mbit/s
95th percentile per-packet one-way delay: 19.067 ms
Loss rate: 0.04%
```

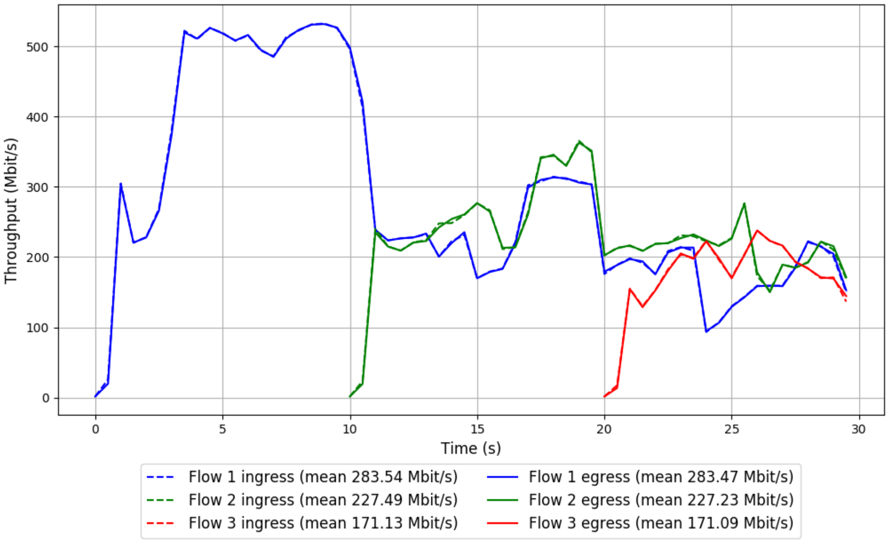
Run 9: Report of Vivace-latency — Data Link

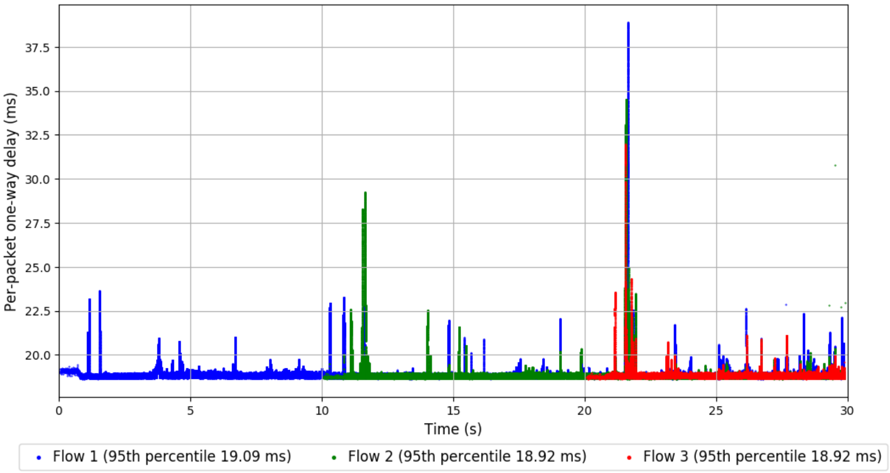




```
Run 10: Statistics of Vivace-latency

Start at: 2018-01-17 07:43:50
End at: 2018-01-17 07:44:20
Local clock offset: -4.735 ms
Remote clock offset: -1.769 ms

# Below is generated by plot.py at 2018-01-17 13:02:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 490.76 Mbit/s
95th percentile per-packet one-way delay: 19.024 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 283.47 Mbit/s
95th percentile per-packet one-way delay: 19.094 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 227.23 Mbit/s
95th percentile per-packet one-way delay: 18.922 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 171.09 Mbit/s
95th percentile per-packet one-way delay: 18.924 ms
Loss rate: 0.02%
```

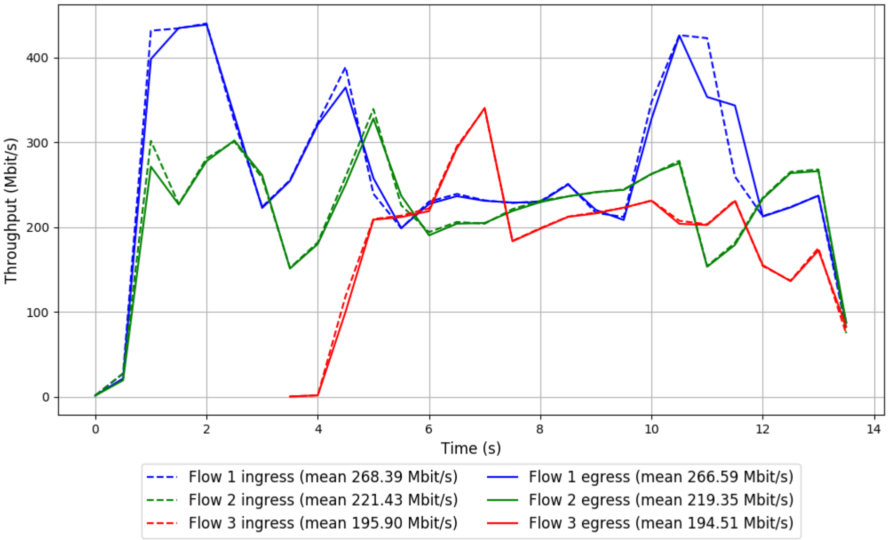
Run 10: Report of Vivace-latency — Data Link

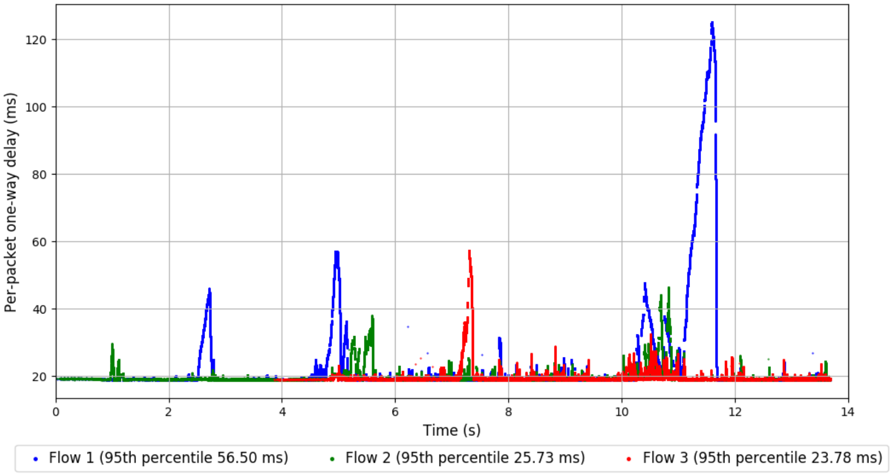




```
Run 1: Statistics of Vivace-loss

Start at: 2018-01-17 03:50:25
End at: 2018-01-17 03:50:55
Local clock offset: -1.378 ms
Remote clock offset: -2.447 ms
```

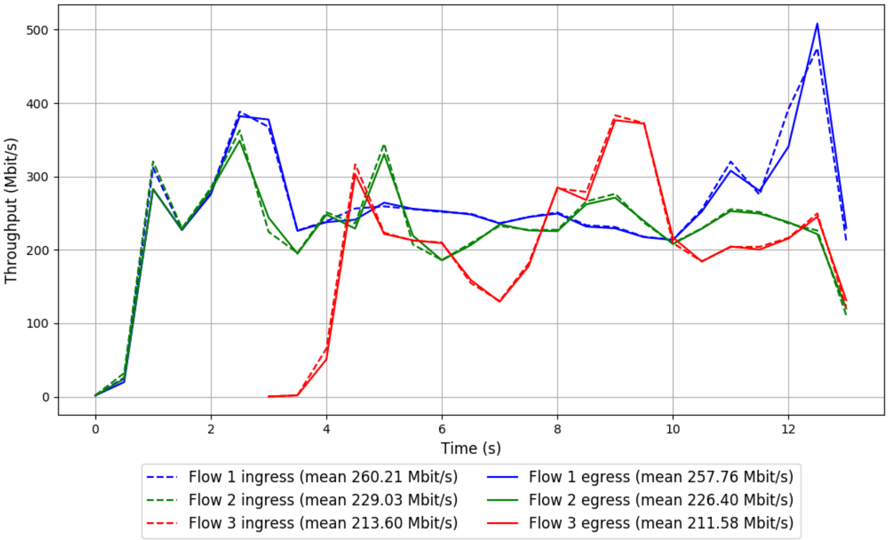
Run 1: Report of Vivace-loss — Data Link

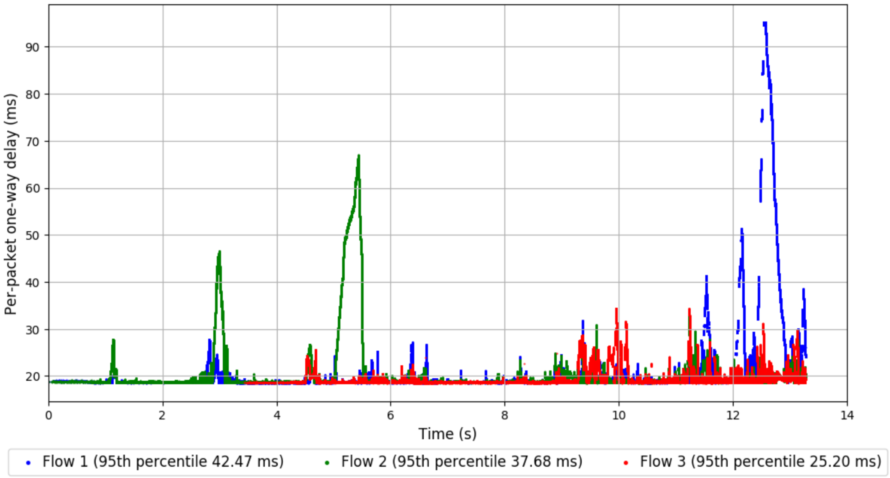




```
Run 2: Statistics of Vivace-loss

Start at: 2018-01-17 04:17:55
End at: 2018-01-17 04:18:25
Local clock offset: -1.656 ms
Remote clock offset: -2.935 ms
```

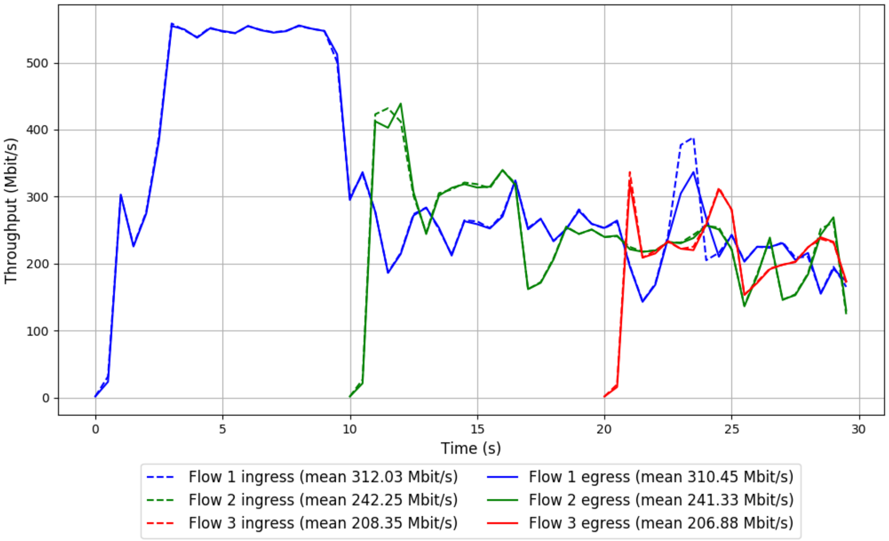
Run 2: Report of Vivace-loss — Data Link

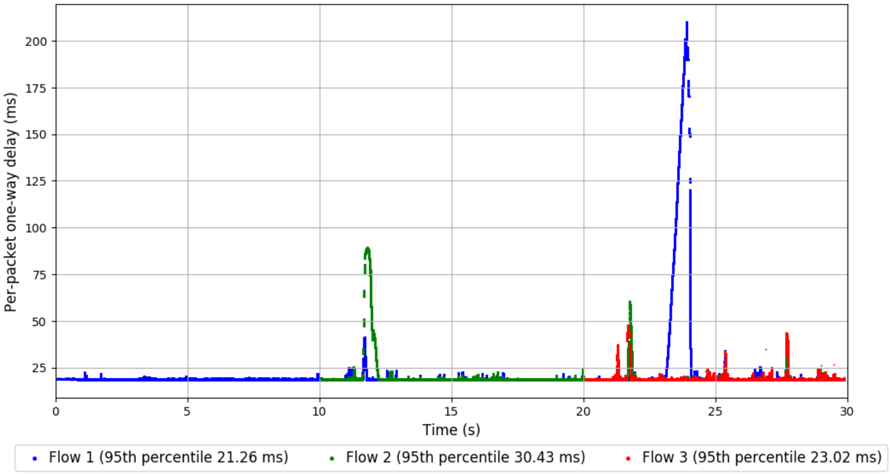




```
Run 3: Statistics of Vivace-loss

Start at: 2018-01-17 04:45:24
End at: 2018-01-17 04:45:54
Local clock offset: -2.116 ms
Remote clock offset: -2.338 ms

# Below is generated by plot.py at 2018-01-17 13:06:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 539.09 Mbit/s
95th percentile per-packet one-way delay: 22.363 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 310.45 Mbit/s
95th percentile per-packet one-way delay: 21.261 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 241.33 Mbit/s
95th percentile per-packet one-way delay: 30.433 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 206.88 Mbit/s
95th percentile per-packet one-way delay: 23.024 ms
Loss rate: 0.71%
```

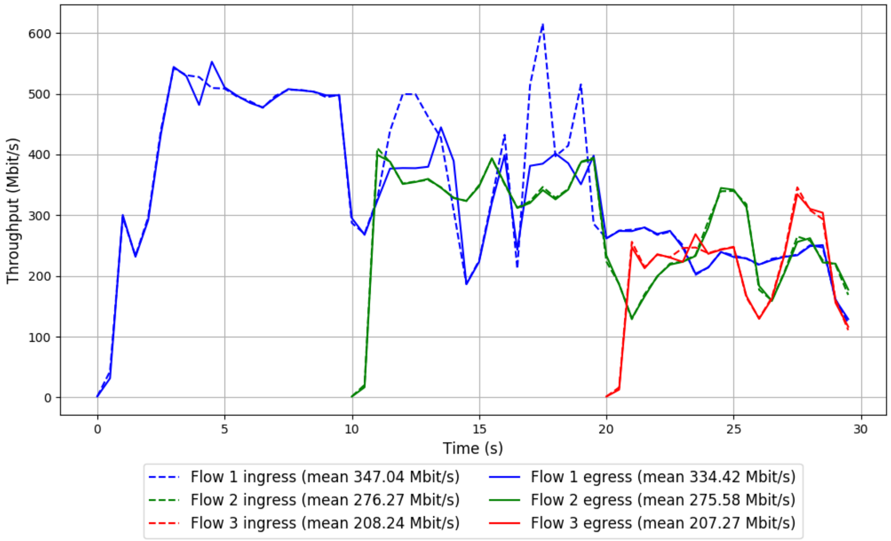
Run 3: Report of Vivace-loss — Data Link

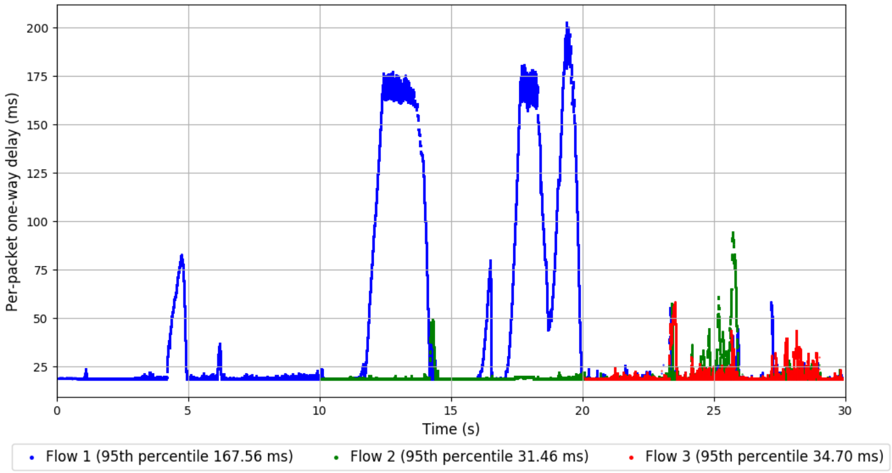




```
Run 4: Statistics of Vivace-loss

Start at: 2018-01-17 05:12:46
End at: 2018-01-17 05:13:17
Local clock offset: -2.393 ms
Remote clock offset: -2.076 ms

# Below is generated by plot.py at 2018-01-17 13:09:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 585.72 Mbit/s
95th percentile per-packet one-way delay: 161.182 ms
Loss rate: 2.24%
-- Flow 1:
Average throughput: 334.42 Mbit/s
95th percentile per-packet one-way delay: 167.557 ms
Loss rate: 3.65%
-- Flow 2:
Average throughput: 275.58 Mbit/s
95th percentile per-packet one-way delay: 31.462 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 207.27 Mbit/s
95th percentile per-packet one-way delay: 34.698 ms
Loss rate: 0.47%
```

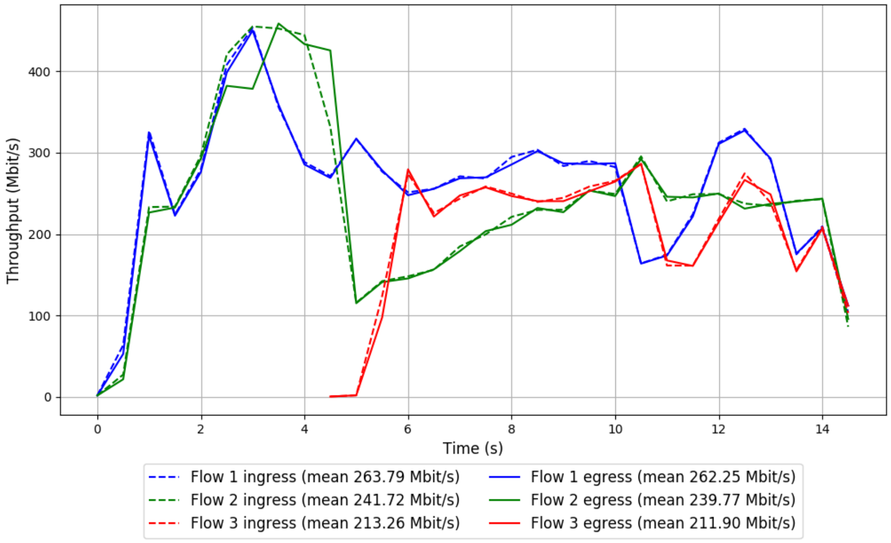
Run 4: Report of Vivace-loss — Data Link

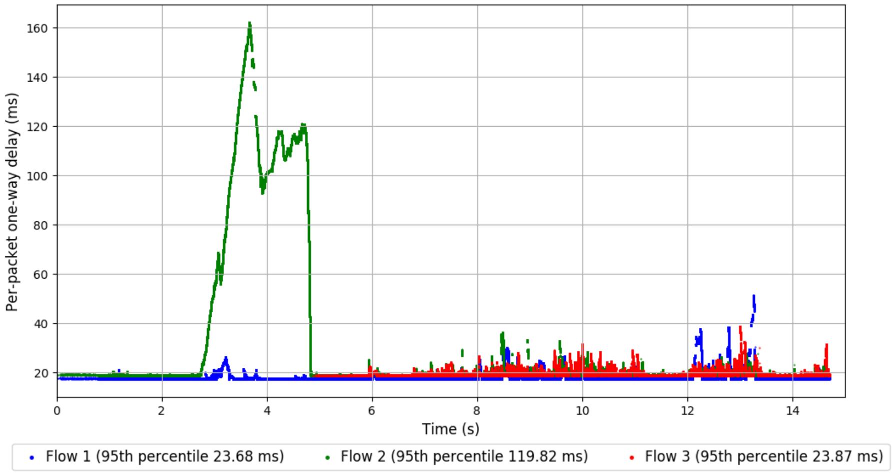




```
Run 5: Statistics of Vivace-loss

Start at: 2018-01-17 05:40:36
End at: 2018-01-17 05:41:06
Local clock offset: -2.976 ms
Remote clock offset: -2.133 ms
```

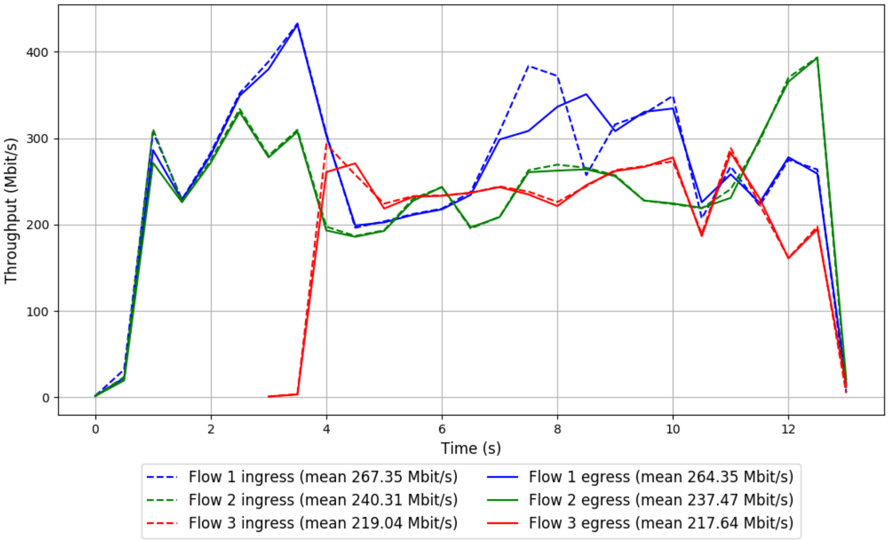
Run 5: Report of Vivace-loss — Data Link

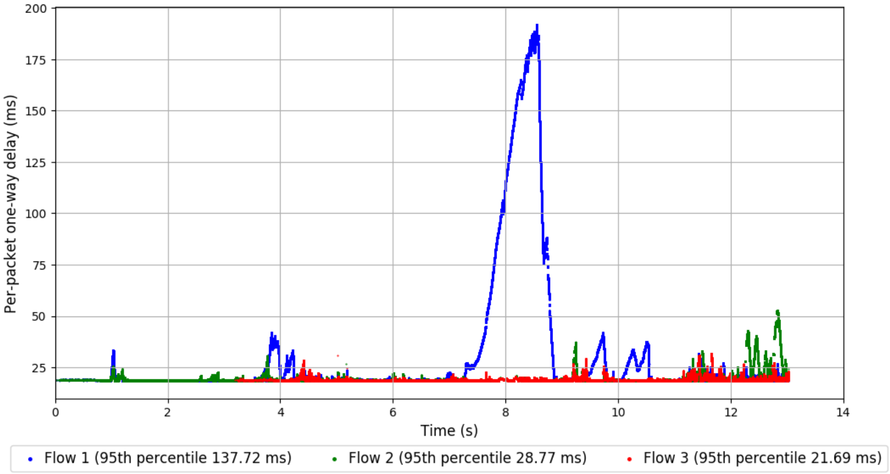




```
Run 6: Statistics of Vivace-loss

Start at: 2018-01-17 06:08:20
End at: 2018-01-17 06:08:50
Local clock offset: -2.841 ms
Remote clock offset: -1.986 ms
```

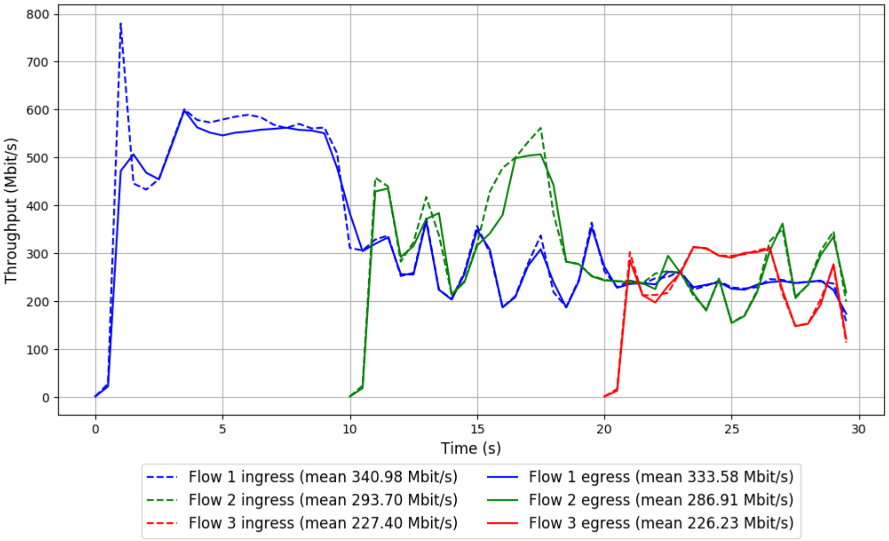
Run 6: Report of Vivace-loss — Data Link

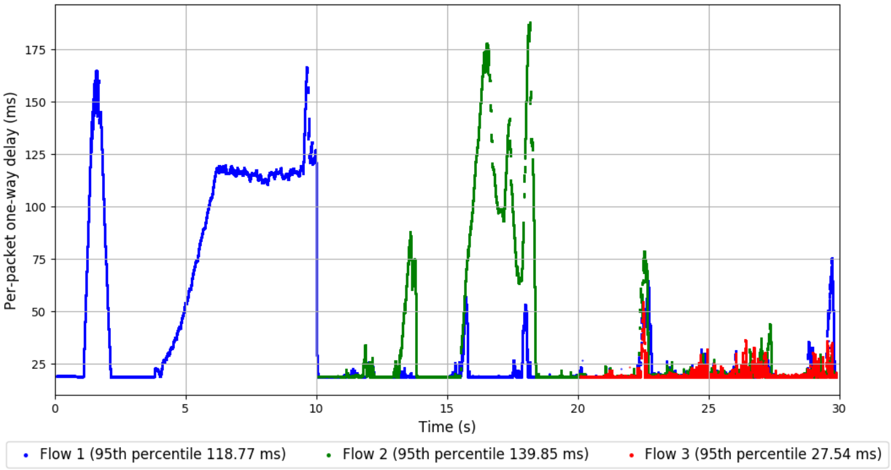




```
Run 7: Statistics of Vivace-loss

Start at: 2018-01-17 06:35:54
End at: 2018-01-17 06:36:24
Local clock offset: -2.761 ms
Remote clock offset: -1.868 ms

# Below is generated by plot.py at 2018-01-17 13:13:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 598.75 Mbit/s
95th percentile per-packet one-way delay: 120.918 ms
Loss rate: 2.01%
-- Flow 1:
Average throughput: 333.58 Mbit/s
95th percentile per-packet one-way delay: 118.769 ms
Loss rate: 2.17%
-- Flow 2:
Average throughput: 286.91 Mbit/s
95th percentile per-packet one-way delay: 139.846 ms
Loss rate: 2.31%
-- Flow 3:
Average throughput: 226.23 Mbit/s
95th percentile per-packet one-way delay: 27.543 ms
Loss rate: 0.51%
```

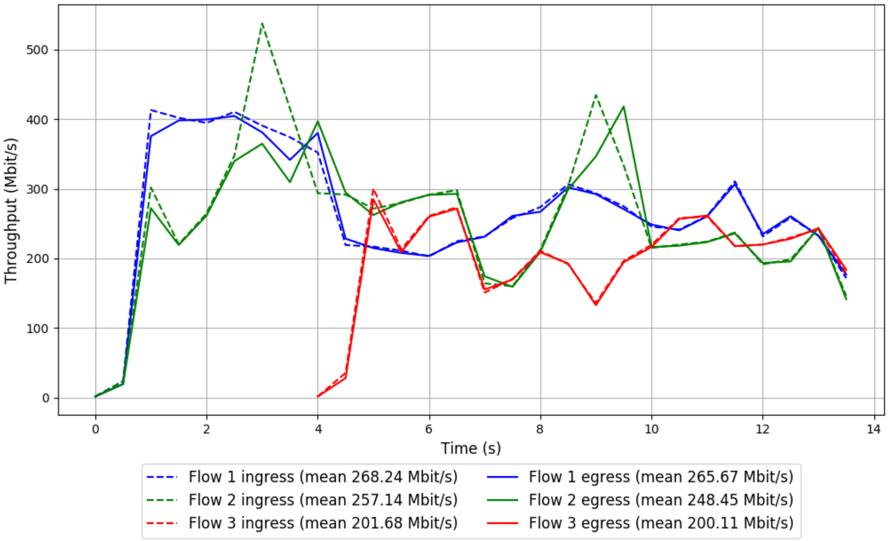
Run 7: Report of Vivace-loss — Data Link

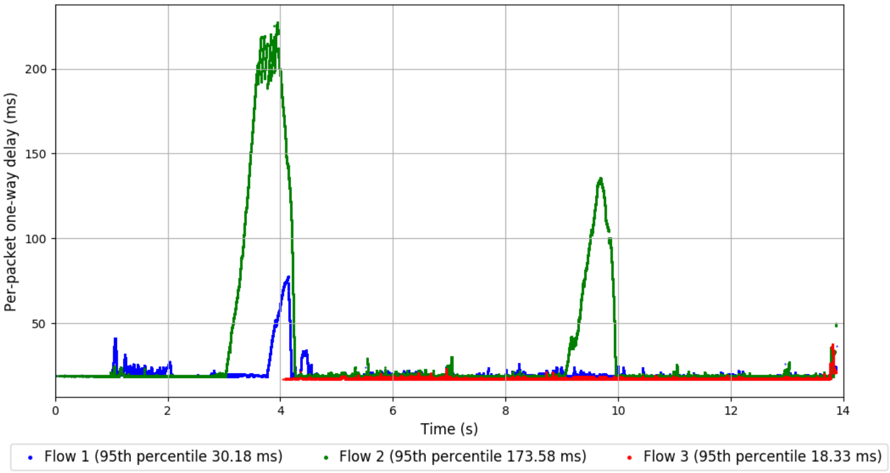




```
Run 8: Statistics of Vivace-loss

Start at: 2018-01-17 07:03:59
End at: 2018-01-17 07:04:29
Local clock offset: -3.404 ms
Remote clock offset: -1.843 ms
```

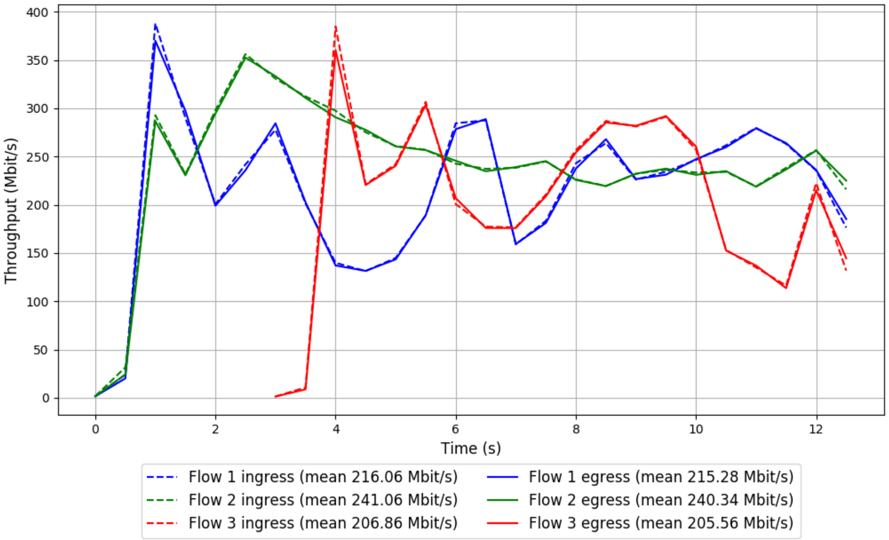
Run 8: Report of Vivace-loss — Data Link

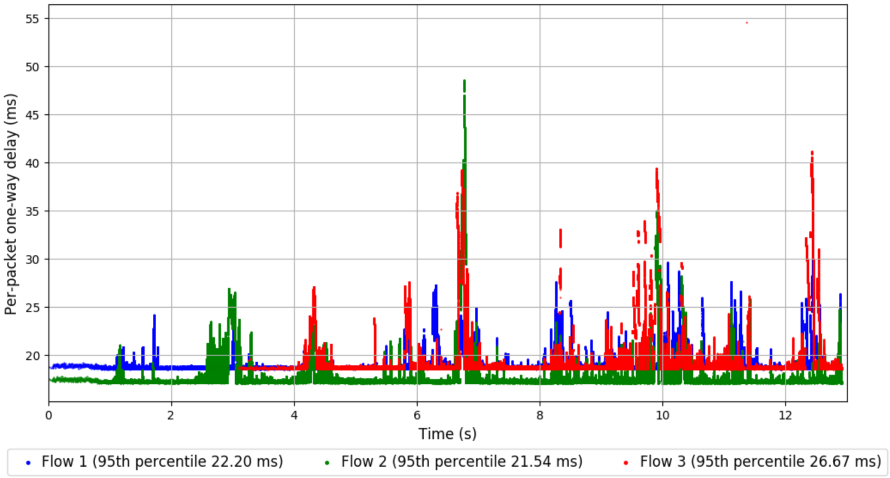




```
Run 9: Statistics of Vivace-loss

Start at: 2018-01-17 07:31:31
End at: 2018-01-17 07:32:01
Local clock offset: -4.329 ms
Remote clock offset: -1.788 ms
```

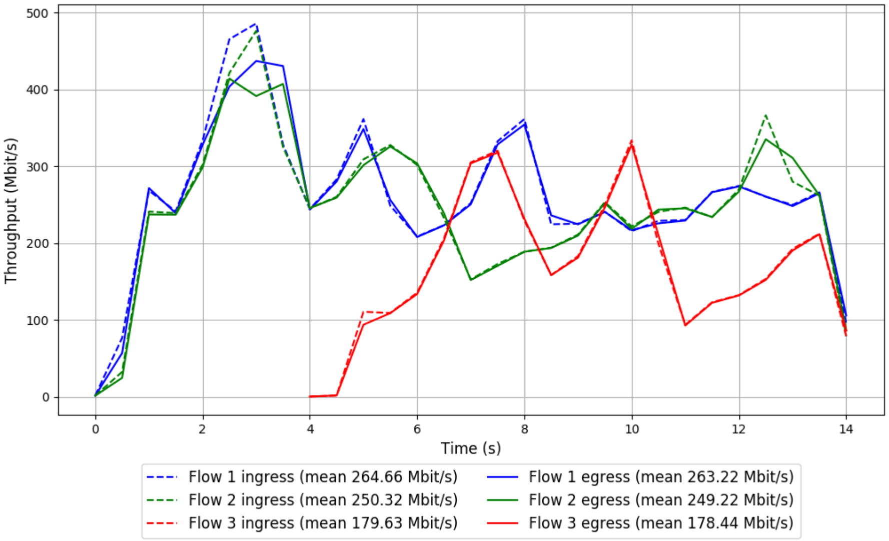
Run 9: Report of Vivace-loss — Data Link

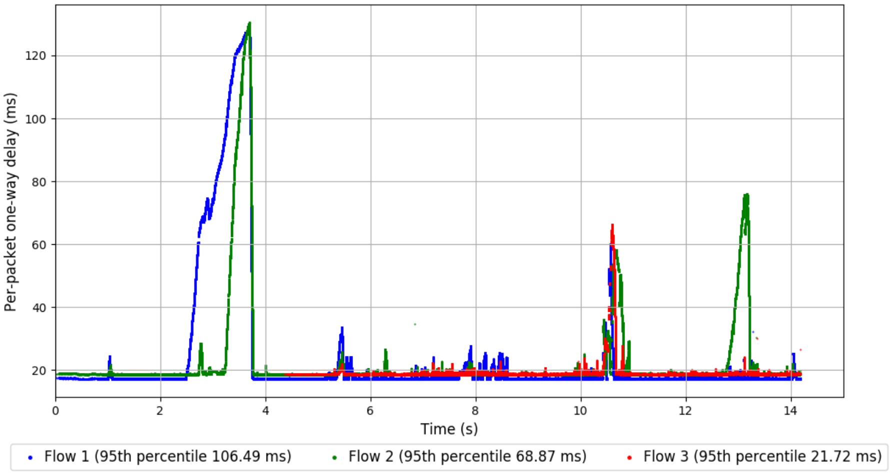




```
Run 10: Statistics of Vivace-loss

Start at: 2018-01-17 07:59:01
End at: 2018-01-17 07:59:31
Local clock offset: -5.07 ms
Remote clock offset: -2.187 ms
```

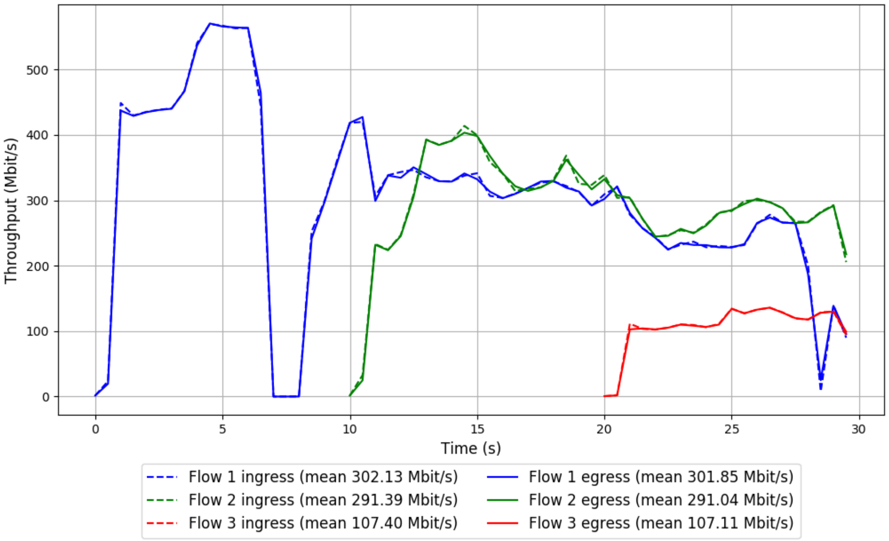
Run 10: Report of Vivace-loss — Data Link

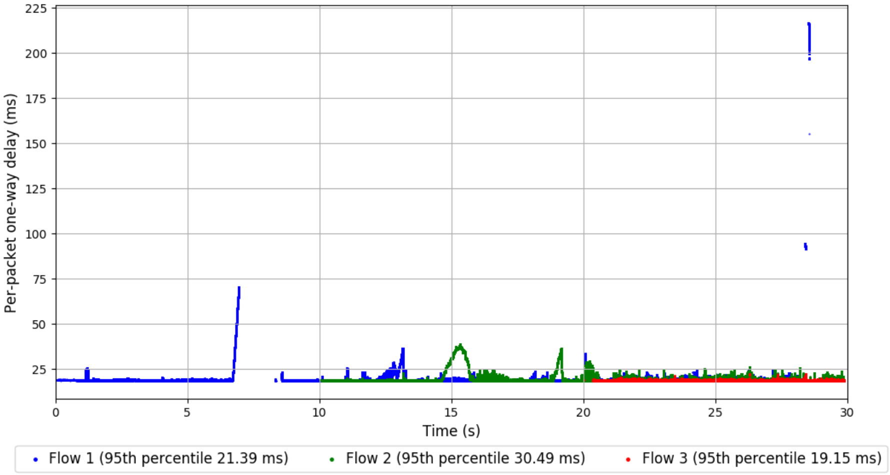




```
Run 1: Statistics of Vivace-LTE

Start at: 2018-01-17 03:40:28
End at: 2018-01-17 03:40:58
Local clock offset: -1.24 ms
Remote clock offset: -2.264 ms

# Below is generated by plot.py at 2018-01-17 13:18:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 530.60 Mbit/s
95th percentile per-packet one-way delay: 23.743 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 301.85 Mbit/s
95th percentile per-packet one-way delay: 21.389 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 291.04 Mbit/s
95th percentile per-packet one-way delay: 30.494 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 107.11 Mbit/s
95th percentile per-packet one-way delay: 19.147 ms
Loss rate: 0.27%
```

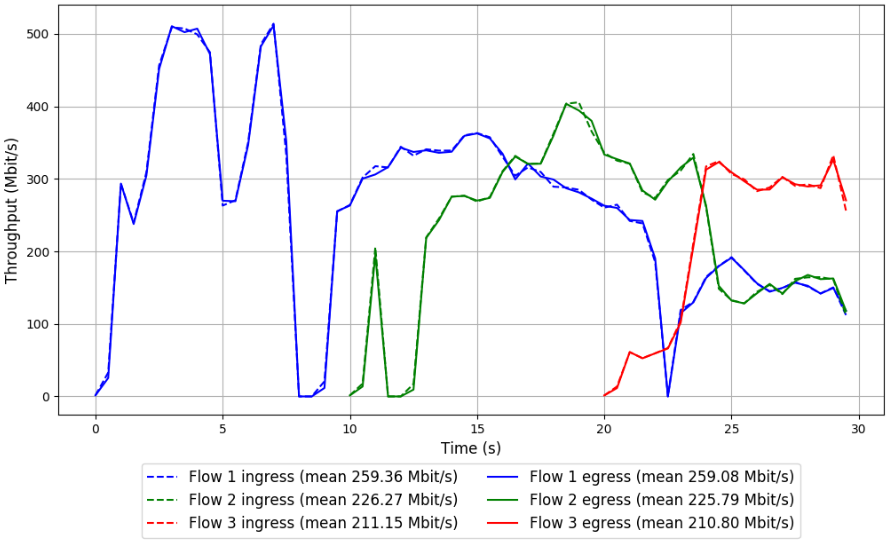
Run 1: Report of Vivace-LTE — Data Link

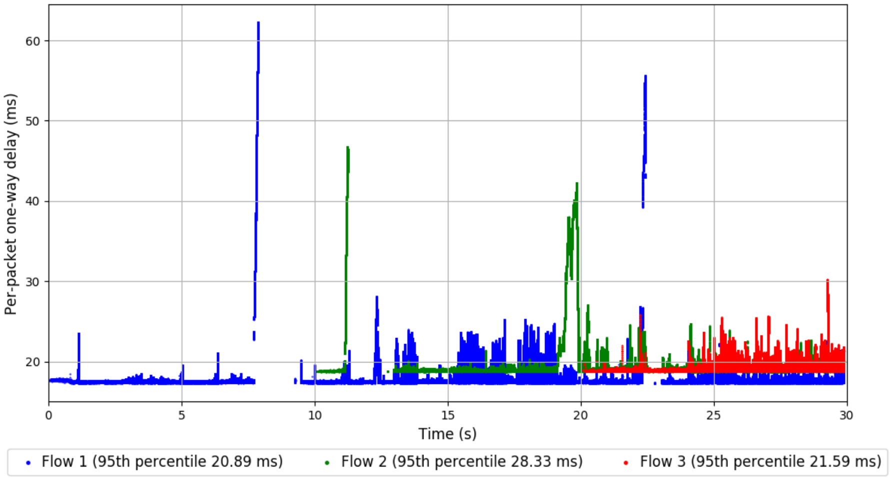




```
Run 2: Statistics of Vivace-LTE

Start at: 2018-01-17 04:07:59
End at: 2018-01-17 04:08:29
Local clock offset: -1.726 ms
Remote clock offset: -2.833 ms

# Below is generated by plot.py at 2018-01-17 13:18:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 478.35 Mbit/s
95th percentile per-packet one-way delay: 21.890 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 259.08 Mbit/s
95th percentile per-packet one-way delay: 20.895 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 225.79 Mbit/s
95th percentile per-packet one-way delay: 28.331 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 210.80 Mbit/s
95th percentile per-packet one-way delay: 21.593 ms
Loss rate: 0.15%
```

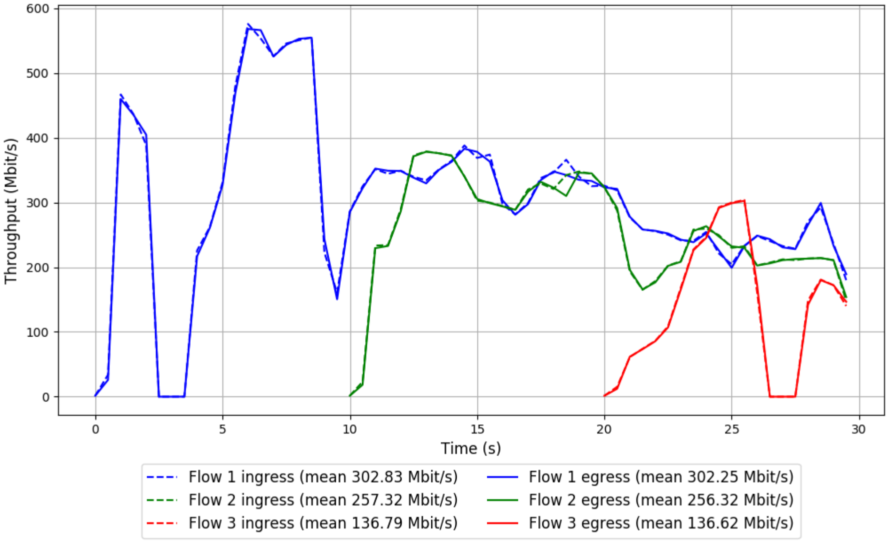
Run 2: Report of Vivace-LTE — Data Link

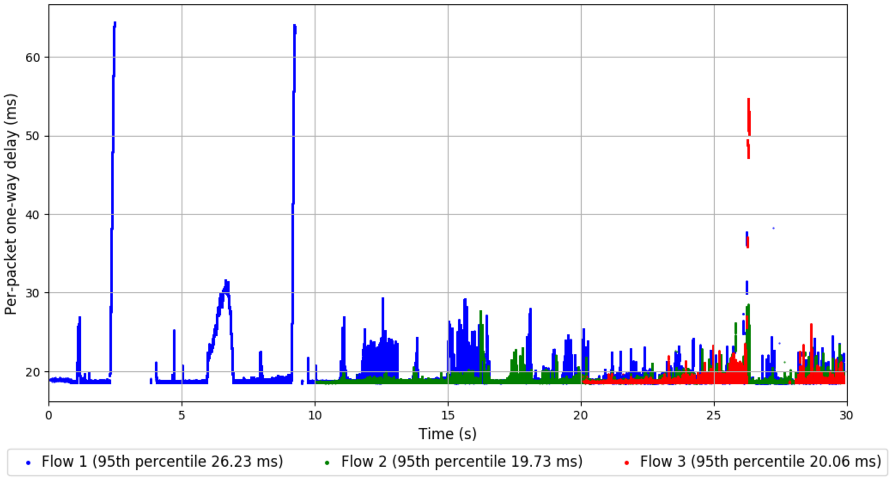




```
Run 3: Statistics of Vivace-LTE

Start at: 2018-01-17 04:35:19
End at: 2018-01-17 04:35:49
Local clock offset: -1.836 ms
Remote clock offset: -2.561 ms

# Below is generated by plot.py at 2018-01-17 13:19:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 517.59 Mbit/s
95th percentile per-packet one-way delay: 23.785 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 302.25 Mbit/s
95th percentile per-packet one-way delay: 26.225 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 256.32 Mbit/s
95th percentile per-packet one-way delay: 19.733 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 136.62 Mbit/s
95th percentile per-packet one-way delay: 20.058 ms
Loss rate: 0.12%
```

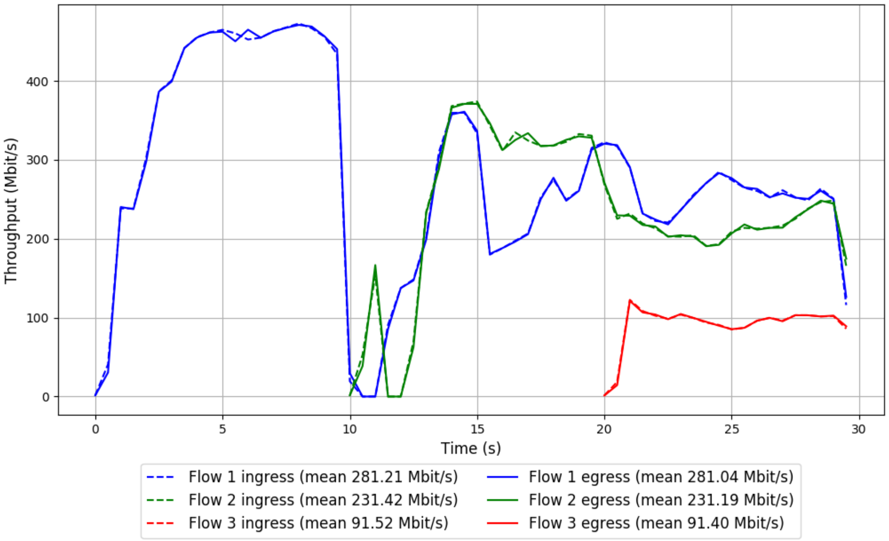
Run 3: Report of Vivace-LTE — Data Link

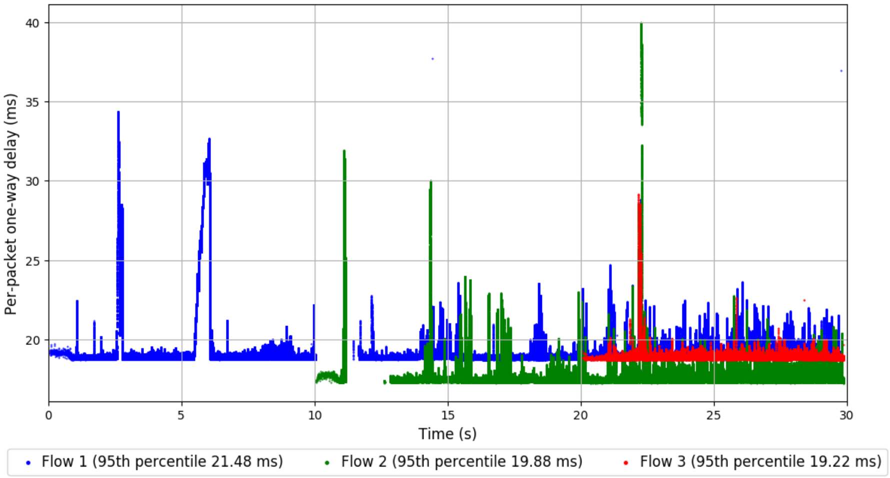




```
Run 4: Statistics of Vivace-LTE

Start at: 2018-01-17 05:02:49
End at: 2018-01-17 05:03:19
Local clock offset: -2.55 ms
Remote clock offset: -2.124 ms

# Below is generated by plot.py at 2018-01-17 13:19:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 463.77 Mbit/s
95th percentile per-packet one-way delay: 20.846 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 281.04 Mbit/s
95th percentile per-packet one-way delay: 21.484 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 231.19 Mbit/s
95th percentile per-packet one-way delay: 19.881 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 91.40 Mbit/s
95th percentile per-packet one-way delay: 19.221 ms
Loss rate: 0.13%
```

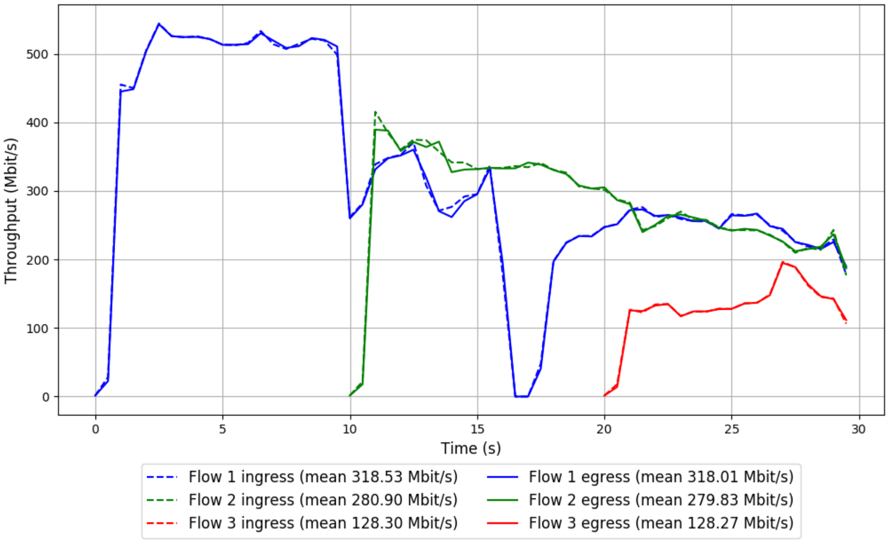
Run 4: Report of Vivace-LTE — Data Link

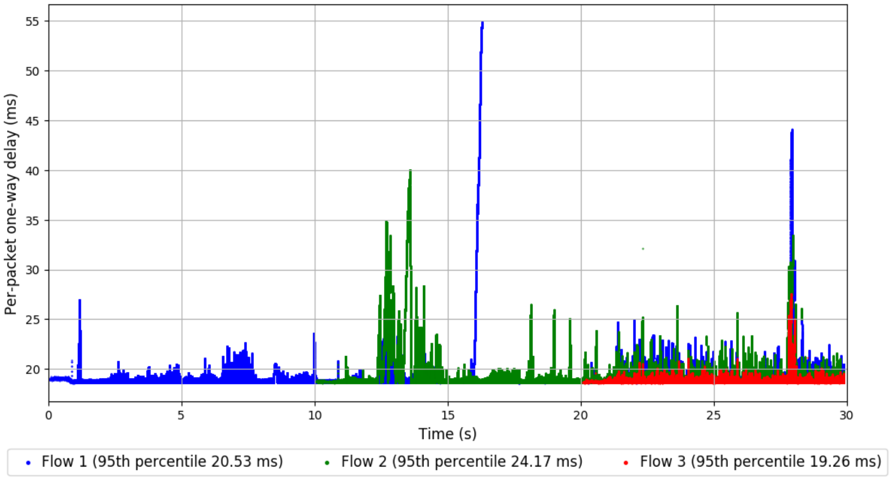




```
Run 5: Statistics of Vivace-LTE

Start at: 2018-01-17 05:30:35
End at: 2018-01-17 05:31:05
Local clock offset: -2.744 ms
Remote clock offset: -2.063 ms

# Below is generated by plot.py at 2018-01-17 13:22:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 546.25 Mbit/s
95th percentile per-packet one-way delay: 21.494 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 318.01 Mbit/s
95th percentile per-packet one-way delay: 20.532 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 279.83 Mbit/s
95th percentile per-packet one-way delay: 24.167 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 128.27 Mbit/s
95th percentile per-packet one-way delay: 19.263 ms
Loss rate: 0.02%
```

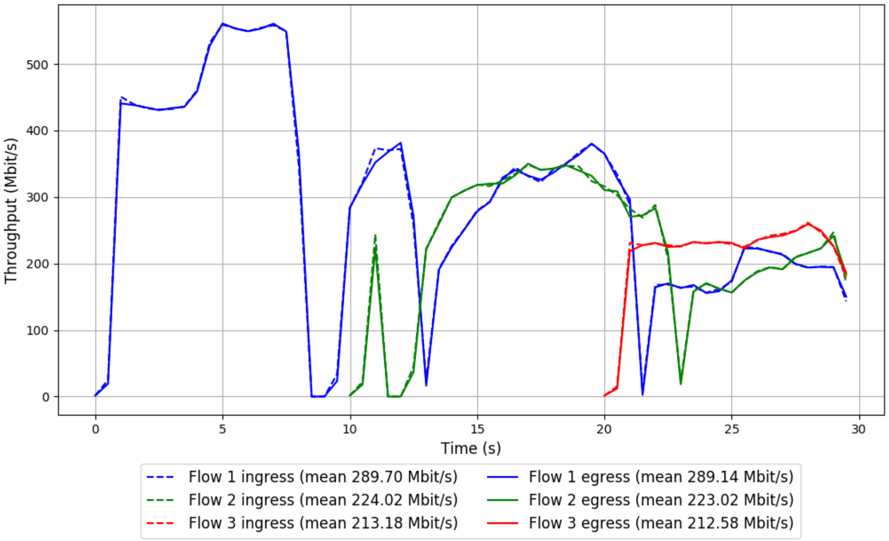
Run 5: Report of Vivace-LTE — Data Link

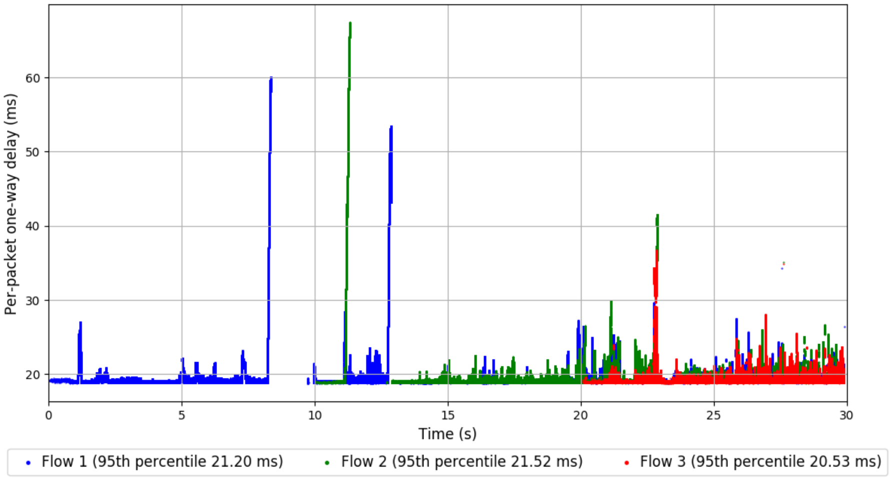




```
Run 6: Statistics of Vivace-LTE

Start at: 2018-01-17 05:58:16
End at: 2018-01-17 05:58:46
Local clock offset: -3.343 ms
Remote clock offset: -2.088 ms

# Below is generated by plot.py at 2018-01-17 13:22:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 507.29 Mbit/s
95th percentile per-packet one-way delay: 21.197 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 289.14 Mbit/s
95th percentile per-packet one-way delay: 21.203 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 223.02 Mbit/s
95th percentile per-packet one-way delay: 21.525 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 212.58 Mbit/s
95th percentile per-packet one-way delay: 20.526 ms
Loss rate: 0.30%
```

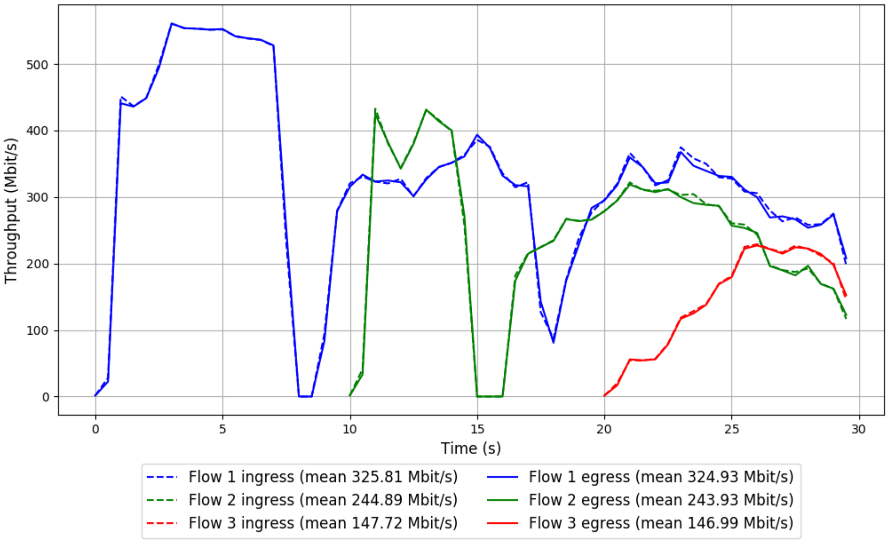
Run 6: Report of Vivace-LTE — Data Link

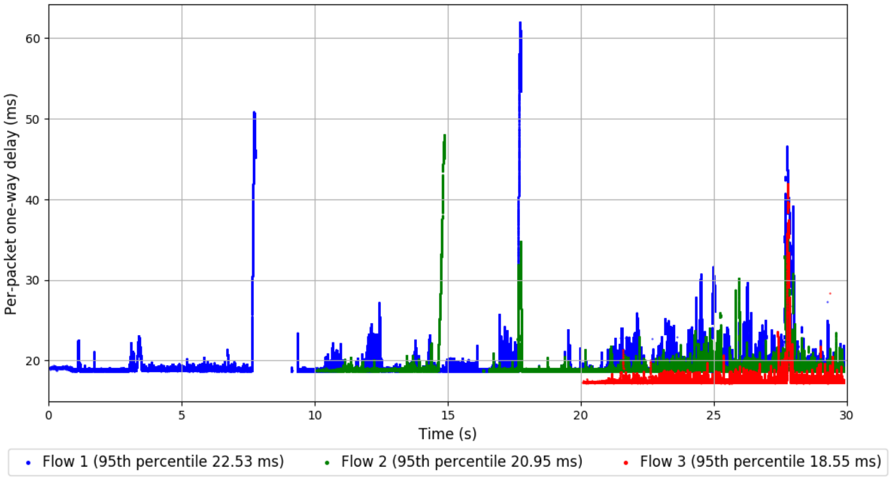




```
Run 7: Statistics of Vivace-LTE

Start at: 2018-01-17 06:25:56
End at: 2018-01-17 06:26:26
Local clock offset: -2.568 ms
Remote clock offset: -1.665 ms

# Below is generated by plot.py at 2018-01-17 13:23:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 535.47 Mbit/s
95th percentile per-packet one-way delay: 22.020 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 324.93 Mbit/s
95th percentile per-packet one-way delay: 22.534 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 243.93 Mbit/s
95th percentile per-packet one-way delay: 20.955 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 146.99 Mbit/s
95th percentile per-packet one-way delay: 18.553 ms
Loss rate: 0.49%
```

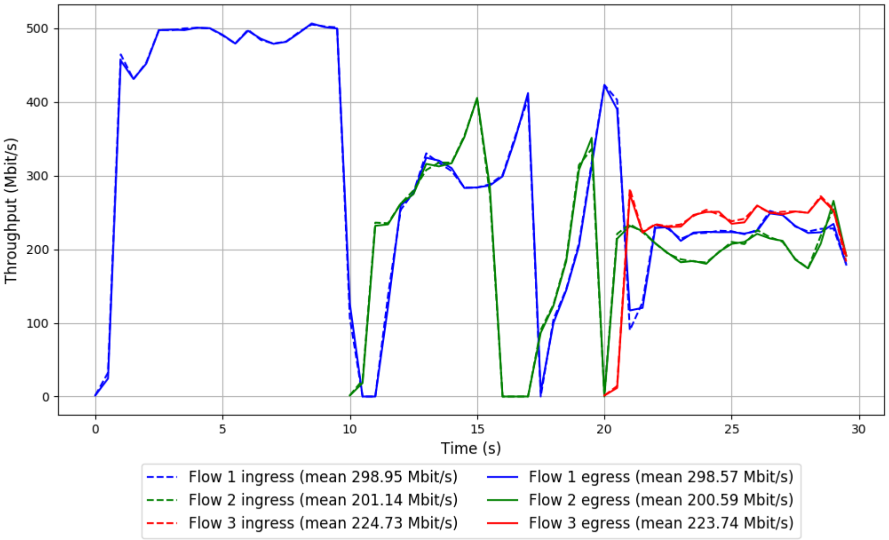
Run 7: Report of Vivace-LTE — Data Link

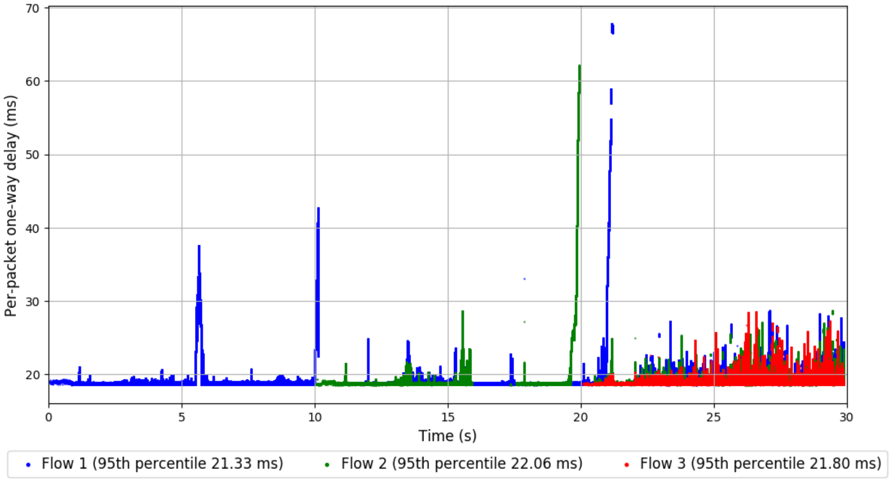




```
Run 8: Statistics of Vivace-LTE

Start at: 2018-01-17 06:53:53
End at: 2018-01-17 06:54:23
Local clock offset: -3.024 ms
Remote clock offset: -2.027 ms

# Below is generated by plot.py at 2018-01-17 13:23:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 505.48 Mbit/s
95th percentile per-packet one-way delay: 21.607 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 298.57 Mbit/s
95th percentile per-packet one-way delay: 21.331 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 200.59 Mbit/s
95th percentile per-packet one-way delay: 22.060 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 223.74 Mbit/s
95th percentile per-packet one-way delay: 21.796 ms
Loss rate: 0.44%
```

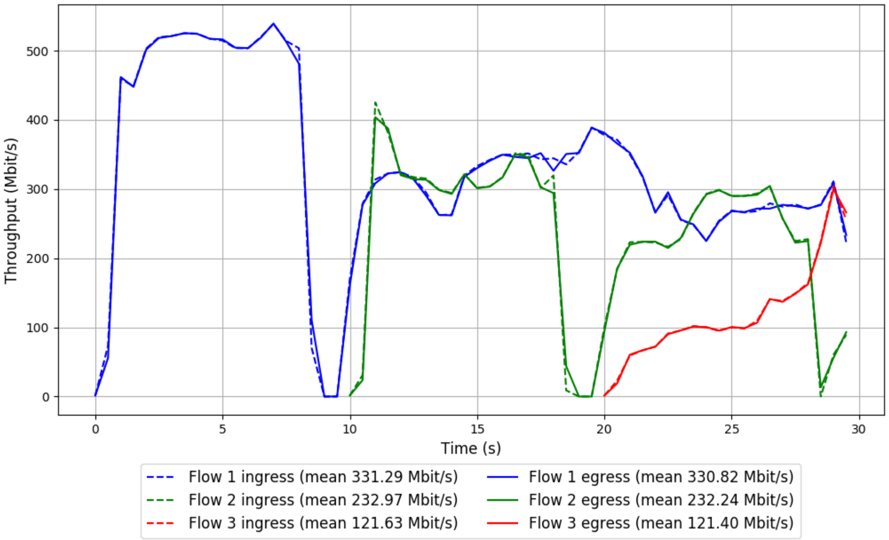
Run 8: Report of Vivace-LTE — Data Link

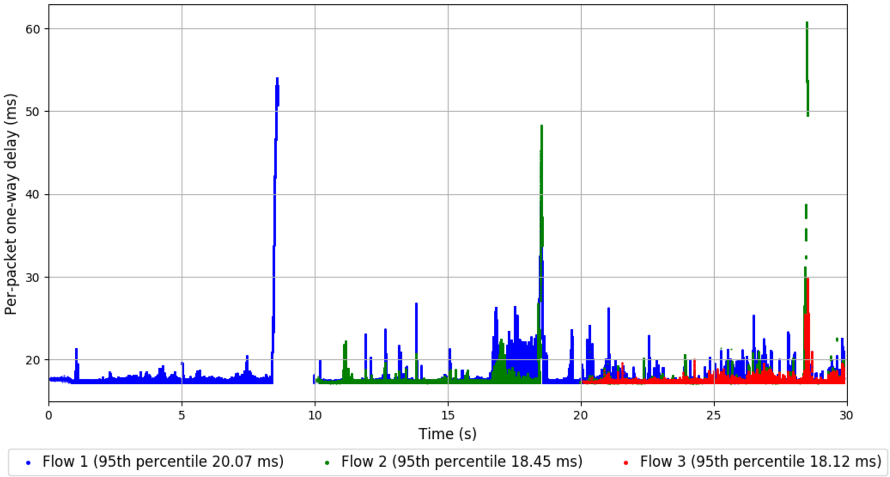




```
Run 9: Statistics of Vivace-LTE

Start at: 2018-01-17 07:21:30
End at: 2018-01-17 07:22:00
Local clock offset: -4.005 ms
Remote clock offset: -1.835 ms

# Below is generated by plot.py at 2018-01-17 13:24:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 525.11 Mbit/s
95th percentile per-packet one-way delay: 19.332 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 330.82 Mbit/s
95th percentile per-packet one-way delay: 20.069 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 232.24 Mbit/s
95th percentile per-packet one-way delay: 18.445 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 121.40 Mbit/s
95th percentile per-packet one-way delay: 18.121 ms
Loss rate: 0.19%
```

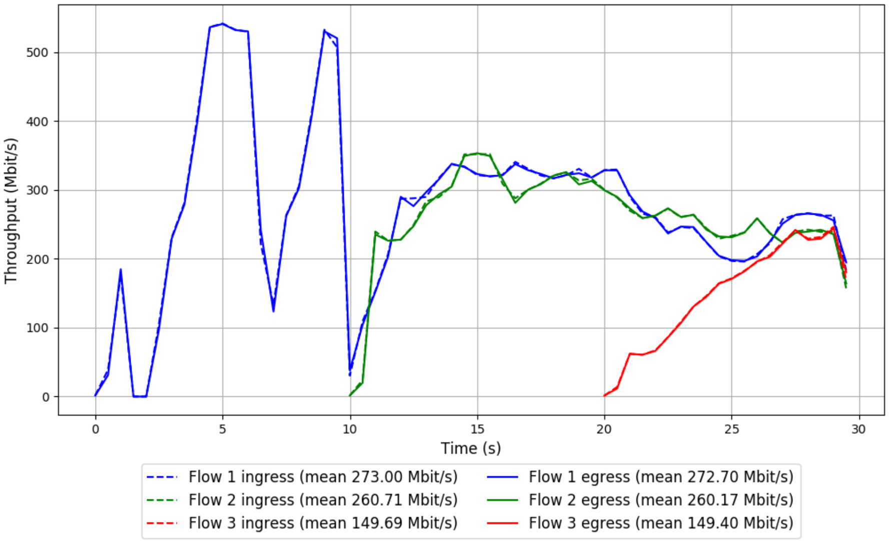
Run 9: Report of Vivace-LTE — Data Link



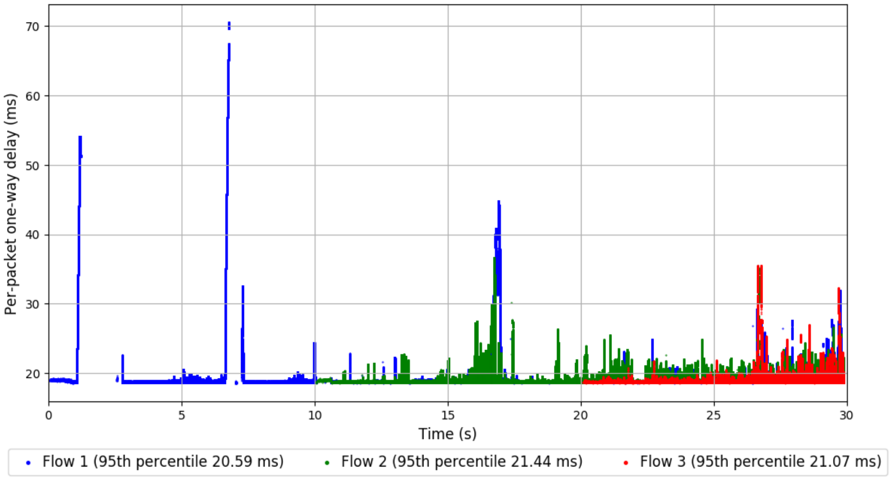


```
Run 10: Statistics of Vivace-LTE

Start at: 2018-01-17 07:49:00
End at: 2018-01-17 07:49:30
Local clock offset: -4.884 ms
Remote clock offset: -1.918 ms

# Below is generated by plot.py at 2018-01-17 13:24:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 494.71 Mbit/s
95th percentile per-packet one-way delay: 21.173 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 272.70 Mbit/s
95th percentile per-packet one-way delay: 20.588 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 260.17 Mbit/s
95th percentile per-packet one-way delay: 21.442 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 149.40 Mbit/s
95th percentile per-packet one-way delay: 21.071 ms
Loss rate: 0.20%
```

Run 10: Report of Vivace-LTE — Data Link



Throughput (Mbit/s)
0
100
200
300
400
500
Time (s)
0
5
10
15
20
25
30
Flow 1 ingress (mean 273.00 Mbit/s)
Flow 2 ingress (mean 260.71 Mbit/s)
Flow 3 ingress (mean 149.69 Mbit/s)
Flow 1 egress (mean 272.70 Mbit/s)
Flow 2 egress (mean 260.17 Mbit/s)
Flow 3 egress (mean 149.40 Mbit/s)



Per-packet one-way delay (ms)
20
30
40
50
60
70
Time (s)
0
5
10
15
20
25
30
Flow 1 (95th percentile 20.59 ms)
Flow 2 (95th percentile 21.44 ms)
Flow 3 (95th percentile 21.07 ms)