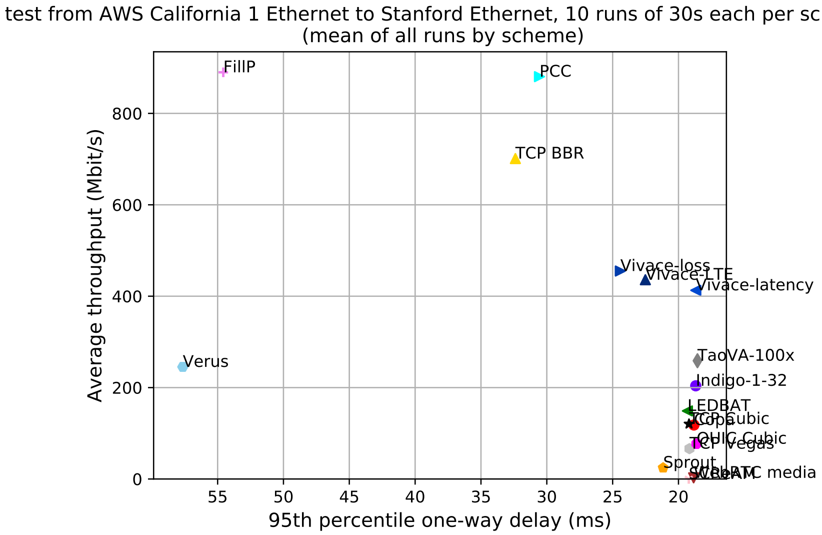
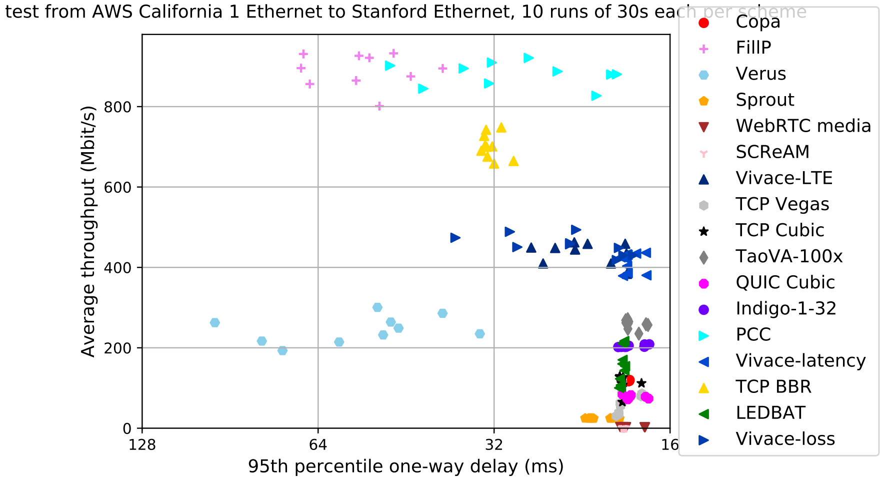
Pantheon Report

Generated at 2018-02-27 23:57:03 (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 1 flow.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
Tested BBR with qdisc of Fair Queuing (`fq`), and other schemes with the default Linux qdisc (`pfifo_fast`).
NTP offsets were measured against `time.stanford.edu` and have been applied to correct the timestamps in logs.

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

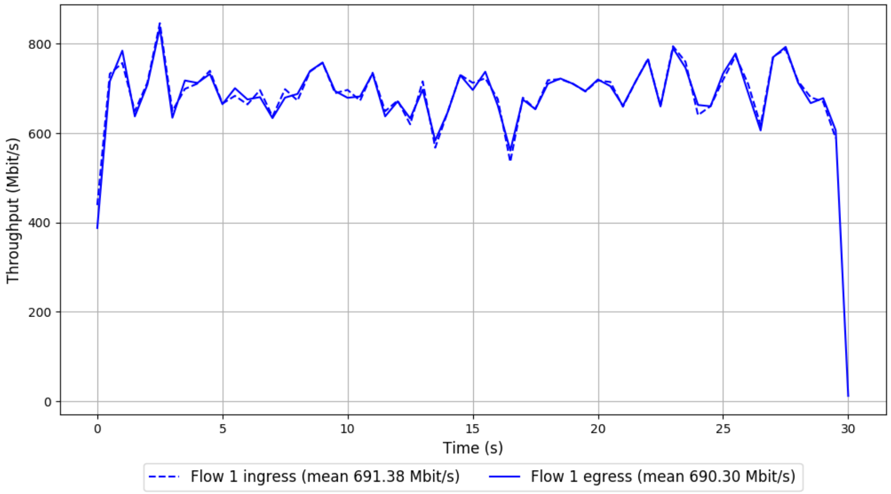

test from AWS California 1 Ethernet to Stanford Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)
Average throughput (Mbit/s)
0
200
400
600
800
95th percentile one-way delay (ms)
55
50
45
40
35
30
25
20
FillP
PCC
TCP BBR
Vivace-loss
Vivace-LTE
Vivace-latency
Verus
TaoVA-100x
Indigo-1-32
LEDBAT
TCP Cubic
Copa
QUIC Cubic
TCP Vegas
Sprout
SCReAM
WebRTC media

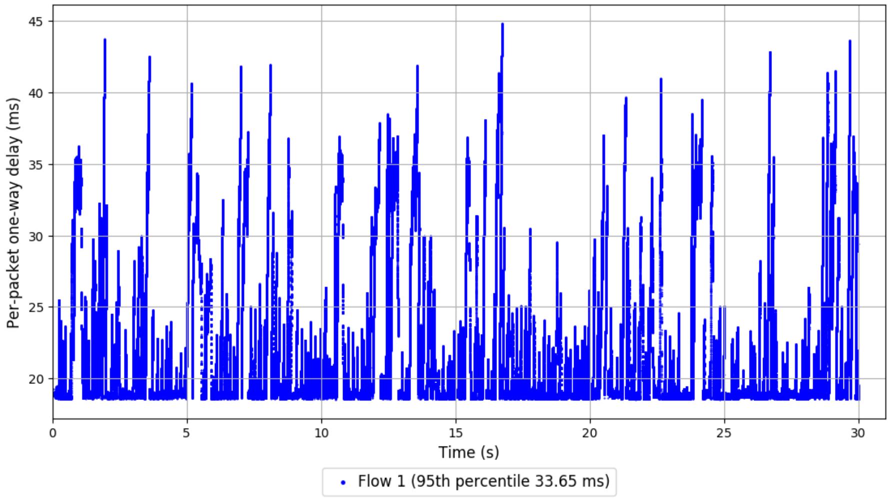

test from AWS California 1 Ethernet to Stanford Ethernet, 10 runs of 30s each per scheme
Average throughput (Mbit/s)
0
200
400
600
800
95th percentile one-way delay (ms)
128
64
32
16
Copa
FillP
Verus
Sprout
WebRTC media
SCReAM
Vivace-LTE
TCP Vegas
TCP Cubic
TaoVA-100x
QUIC Cubic
Indigo-1-32
PCC
Vivace-latency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

		mean avg tput (Mbit/s)	mean 95th-%ile delay (ms)	mean loss rate (%)
scheme	# runs	flow 1	flow 1	flow 1
TCP BBR	10	701.17	32.39	0.25
TCP Cubic	10	120.47	19.20	0.02
LEDBAT	10	148.95	19.32	0.02
PCC	10	880.40	30.56	0.30
QUIC Cubic	10	77.23	18.62	0.01
SCReAM	10	0.22	19.22	0.00
WebRTC media	10	2.54	18.85	0.01
Sprout	10	24.55	21.16	0.11
TaoVA-100x	10	258.80	18.56	0.01
TCP Vegas	10	66.40	19.17	0.04
Verus	10	245.32	57.65	10.02
Copa	10	118.16	18.83	0.01
FillP	10	889.94	54.57	6.79
Indigo-1-32	10	203.95	18.69	0.01
Vivace-latency	10	412.87	18.69	0.02
Vivace-loss	10	455.11	24.42	0.01
Vivace-LTE	10	436.05	22.52	0.01

```
Run 1: Statistics of TCP BBR

Start at: 2018-02-27 15:51:07
End at: 2018-02-27 15:51:37
Local clock offset: 0.775 ms
Remote clock offset: -4.566 ms

# Below is generated by plot.py at 2018-02-27 22:28:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 690.30 Mbit/s
95th percentile per-packet one-way delay: 33.645 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 690.30 Mbit/s
95th percentile per-packet one-way delay: 33.645 ms
Loss rate: 0.16%
```

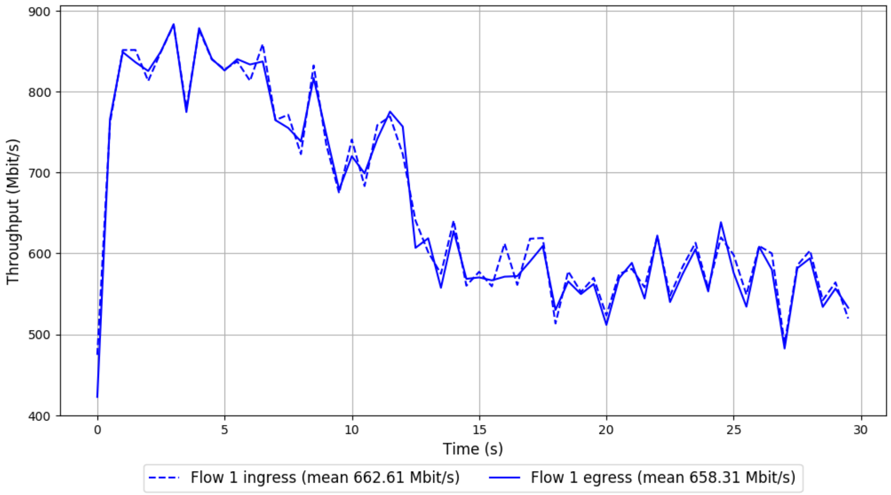
Run 1: Report of TCP BBR — Data Link

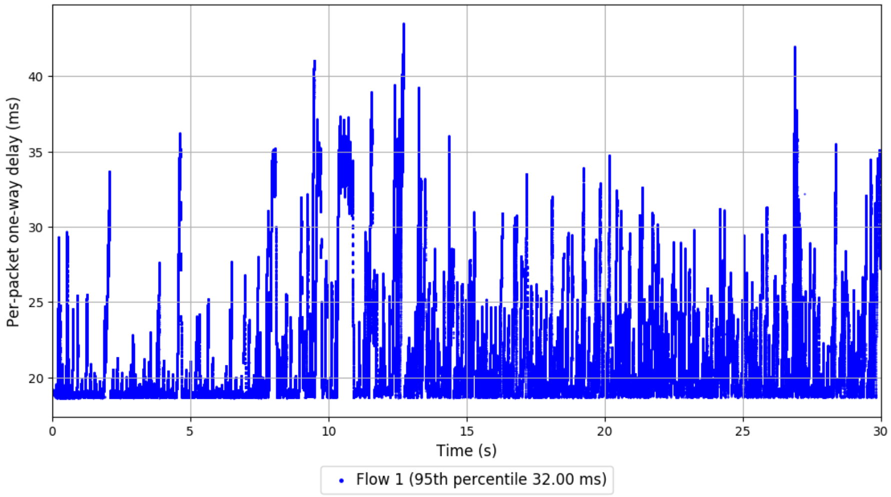




```
Run 2: Statistics of TCP BBR

Start at: 2018-02-27 16:18:16
End at: 2018-02-27 16:18:46
Local clock offset: 0.786 ms
Remote clock offset: -5.476 ms

# Below is generated by plot.py at 2018-02-27 22:28:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 658.31 Mbit/s
95th percentile per-packet one-way delay: 31.998 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 658.31 Mbit/s
95th percentile per-packet one-way delay: 31.998 ms
Loss rate: 0.65%
```

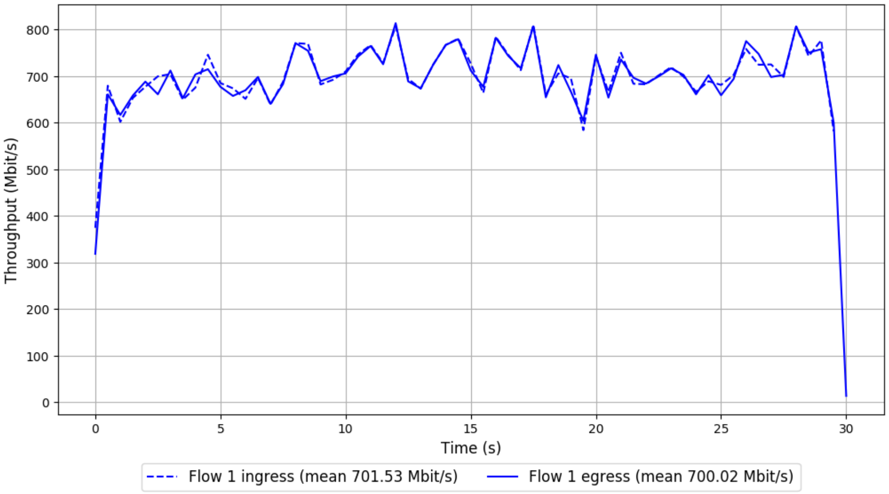
Run 2: Report of TCP BBR — Data Link

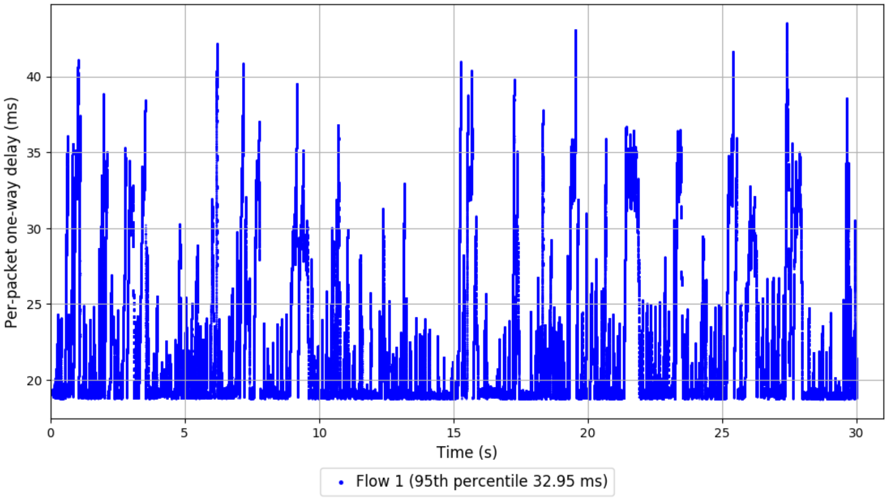




```
Run 3: Statistics of TCP BBR

Start at: 2018-02-27 16:45:24
End at: 2018-02-27 16:45:54
Local clock offset: 0.631 ms
Remote clock offset: -6.126 ms

# Below is generated by plot.py at 2018-02-27 22:28:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 700.02 Mbit/s
95th percentile per-packet one-way delay: 32.955 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 700.02 Mbit/s
95th percentile per-packet one-way delay: 32.955 ms
Loss rate: 0.22%
```

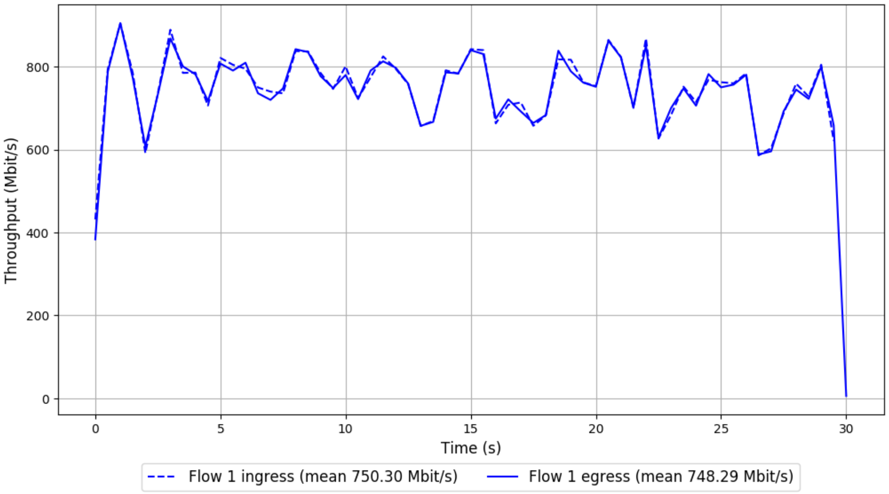
Run 3: Report of TCP BBR — Data Link

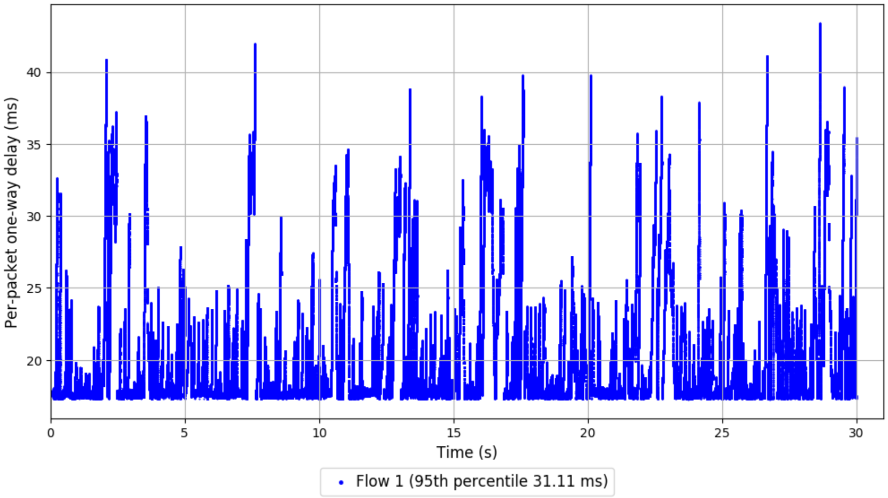




```
Run 4: Statistics of TCP BBR

Start at: 2018-02-27 17:12:41
End at: 2018-02-27 17:13:11
Local clock offset: 0.549 ms
Remote clock offset: -4.659 ms

# Below is generated by plot.py at 2018-02-27 22:29:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 748.29 Mbit/s
95th percentile per-packet one-way delay: 31.106 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 748.29 Mbit/s
95th percentile per-packet one-way delay: 31.106 ms
Loss rate: 0.27%
```

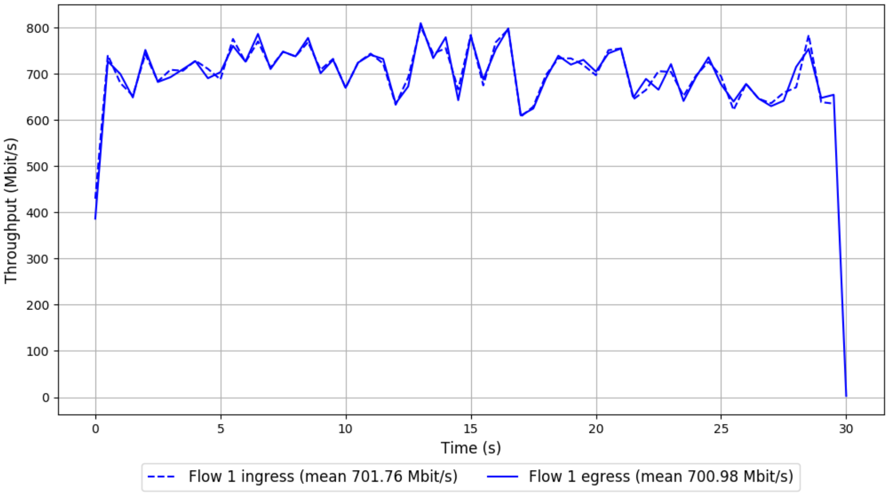
Run 4: Report of TCP BBR — Data Link

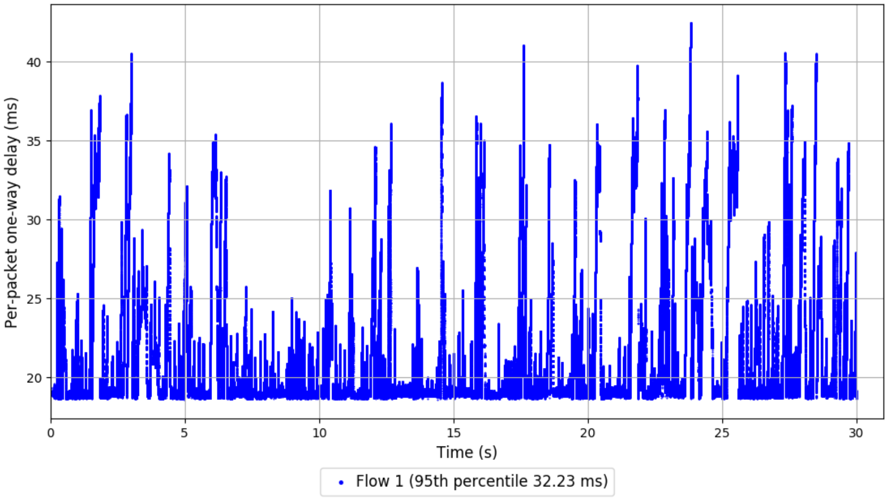




```
Run 5: Statistics of TCP BBR

Start at: 2018-02-27 17:39:51
End at: 2018-02-27 17:40:21
Local clock offset: 0.495 ms
Remote clock offset: -6.252 ms

# Below is generated by plot.py at 2018-02-27 22:29:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 700.98 Mbit/s
95th percentile per-packet one-way delay: 32.234 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 700.98 Mbit/s
95th percentile per-packet one-way delay: 32.234 ms
Loss rate: 0.11%
```

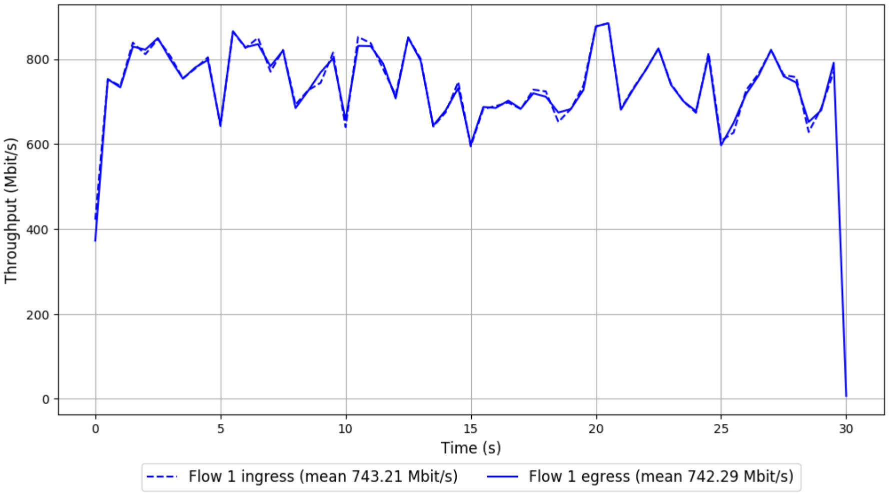
Run 5: Report of TCP BBR — Data Link

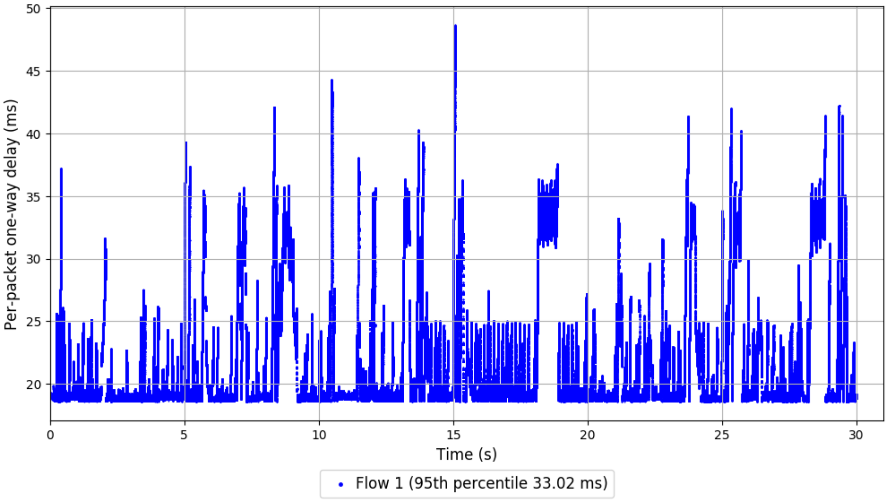




```
Run 6: Statistics of TCP BBR

Start at: 2018-02-27 18:06:59
End at: 2018-02-27 18:07:29
Local clock offset: -0.557 ms
Remote clock offset: -6.399 ms

# Below is generated by plot.py at 2018-02-27 22:29:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 742.29 Mbit/s
95th percentile per-packet one-way delay: 33.024 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 742.29 Mbit/s
95th percentile per-packet one-way delay: 33.024 ms
Loss rate: 0.13%
```

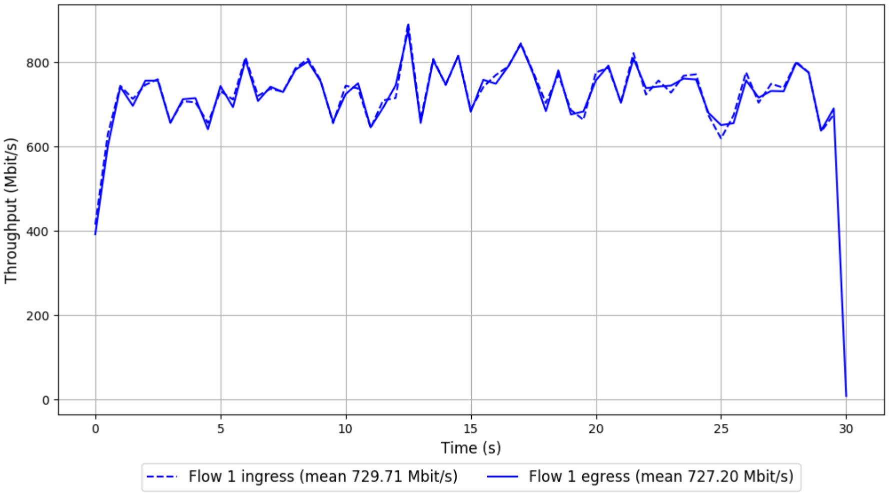
Run 6: Report of TCP BBR — Data Link

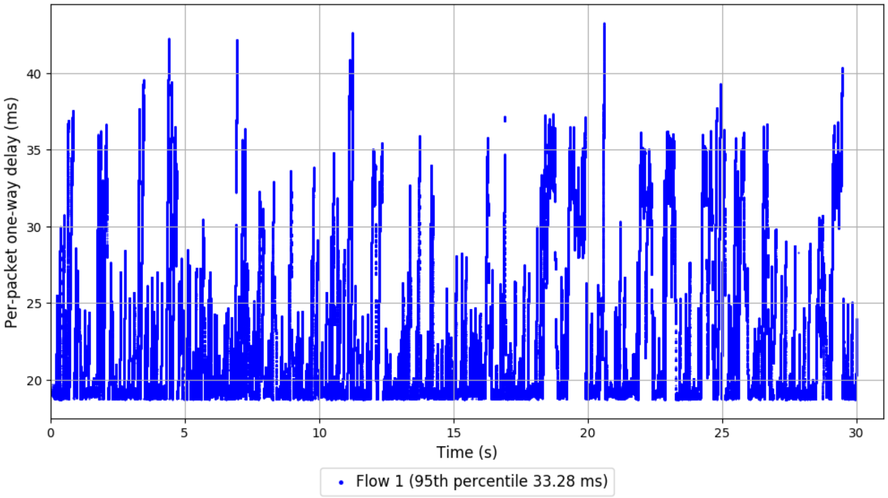




```
Run 7: Statistics of TCP BBR

Start at: 2018-02-27 18:34:03
End at: 2018-02-27 18:34:33
Local clock offset: -0.867 ms
Remote clock offset: -5.836 ms

# Below is generated by plot.py at 2018-02-27 22:29:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 727.20 Mbit/s
95th percentile per-packet one-way delay: 33.278 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 727.20 Mbit/s
95th percentile per-packet one-way delay: 33.278 ms
Loss rate: 0.34%
```

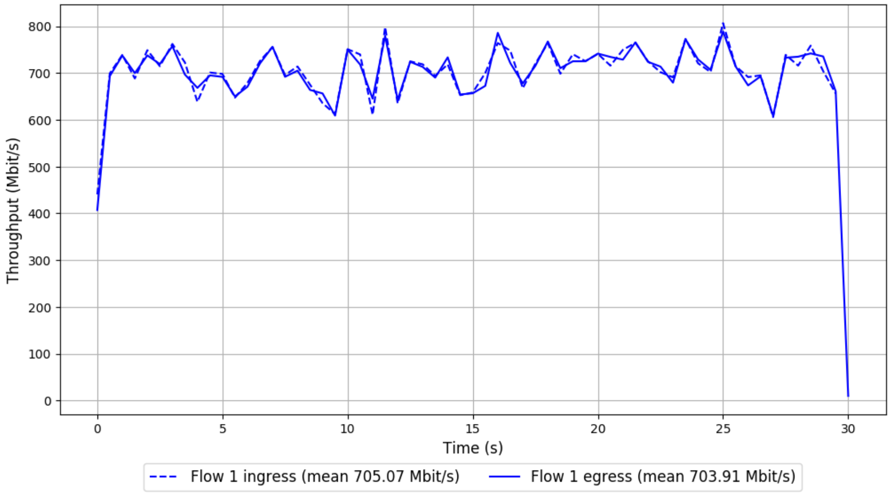
Run 7: Report of TCP BBR — Data Link

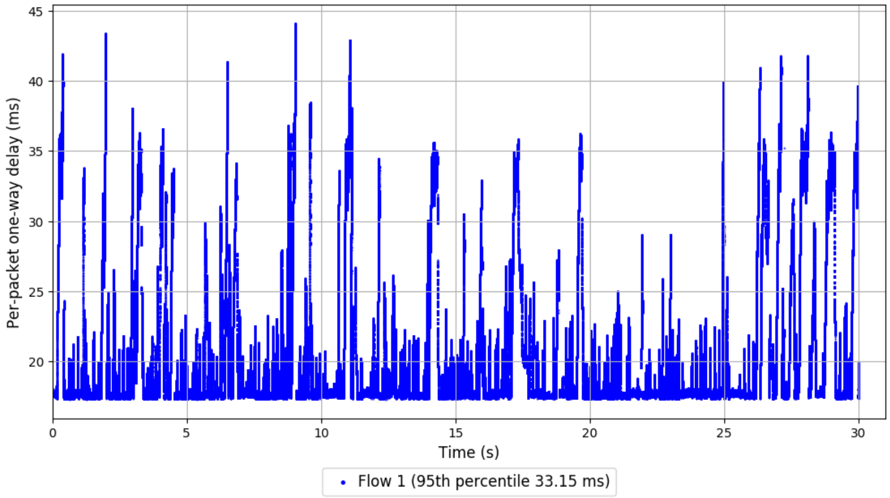




```
Run 8: Statistics of TCP BBR

Start at: 2018-02-27 19:01:08
End at: 2018-02-27 19:01:38
Local clock offset: -0.93 ms
Remote clock offset: -5.231 ms

# Below is generated by plot.py at 2018-02-27 22:29:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 703.91 Mbit/s
95th percentile per-packet one-way delay: 33.149 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 703.91 Mbit/s
95th percentile per-packet one-way delay: 33.149 ms
Loss rate: 0.16%
```

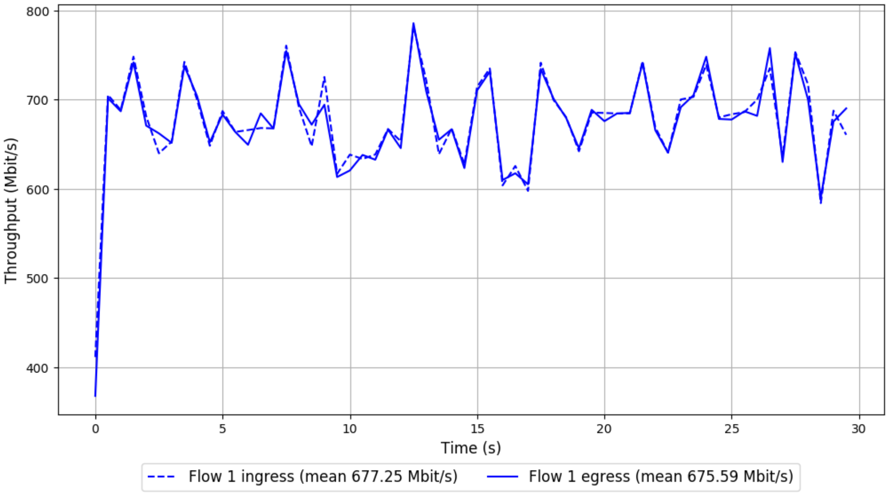
Run 8: Report of TCP BBR — Data Link

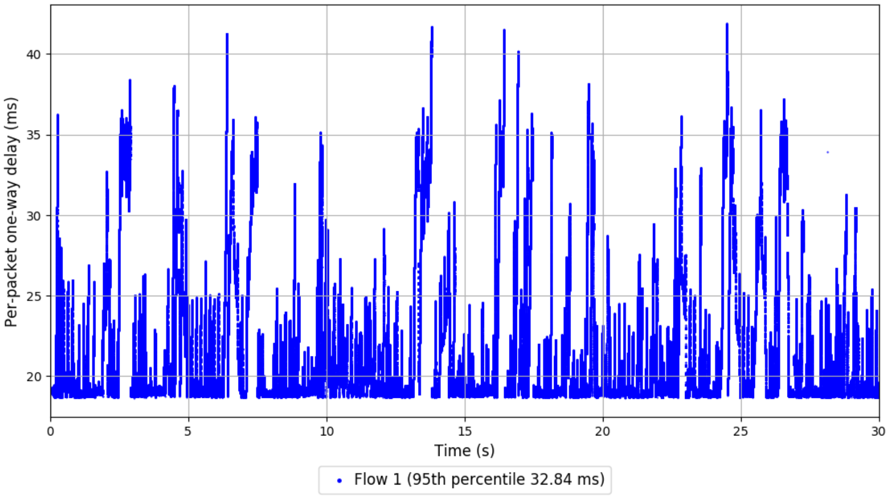




```
Run 9: Statistics of TCP BBR

Start at: 2018-02-27 19:28:10
End at: 2018-02-27 19:28:40
Local clock offset: -0.423 ms
Remote clock offset: -5.119 ms

# Below is generated by plot.py at 2018-02-27 22:37:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 675.59 Mbit/s
95th percentile per-packet one-way delay: 32.837 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 675.59 Mbit/s
95th percentile per-packet one-way delay: 32.837 ms
Loss rate: 0.25%
```

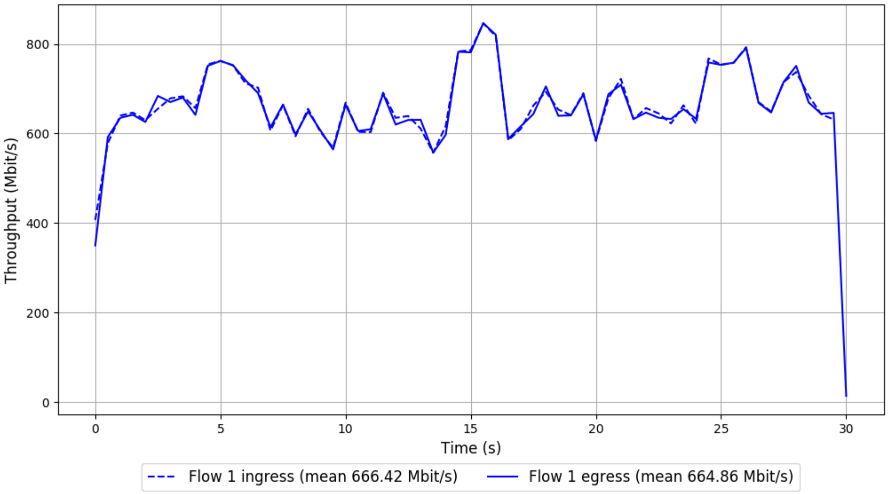
Run 9: Report of TCP BBR — Data Link

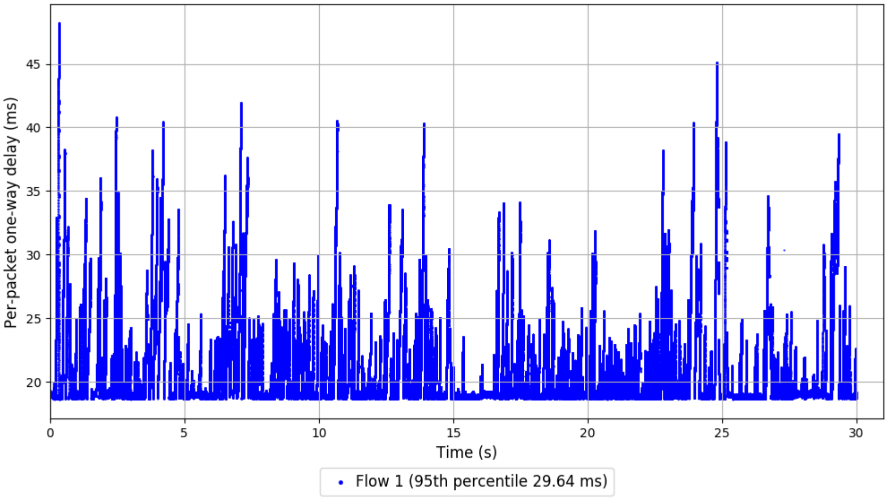




```
Run 10: Statistics of TCP BBR

Start at: 2018-02-27 19:55:07
End at: 2018-02-27 19:55:37
Local clock offset: 0.919 ms
Remote clock offset: -6.925 ms

# Below is generated by plot.py at 2018-02-27 22:37:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 664.86 Mbit/s
95th percentile per-packet one-way delay: 29.640 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 664.86 Mbit/s
95th percentile per-packet one-way delay: 29.640 ms
Loss rate: 0.23%
```

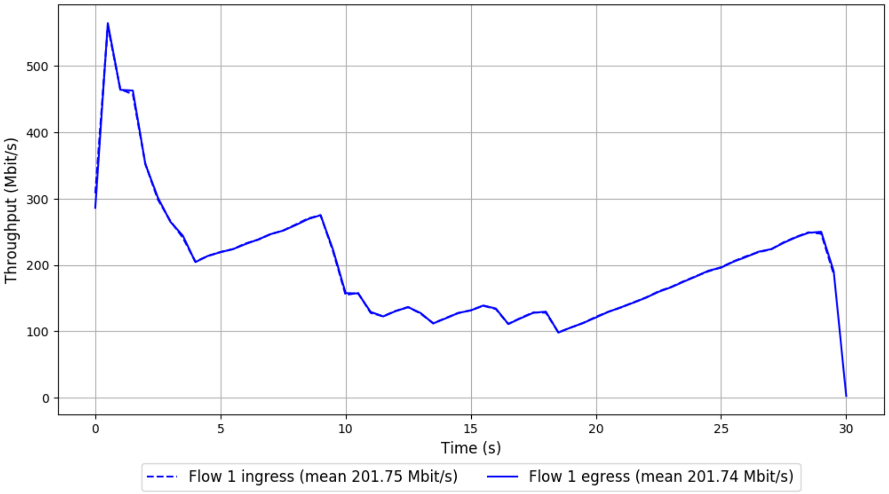
Run 10: Report of TCP BBR — Data Link

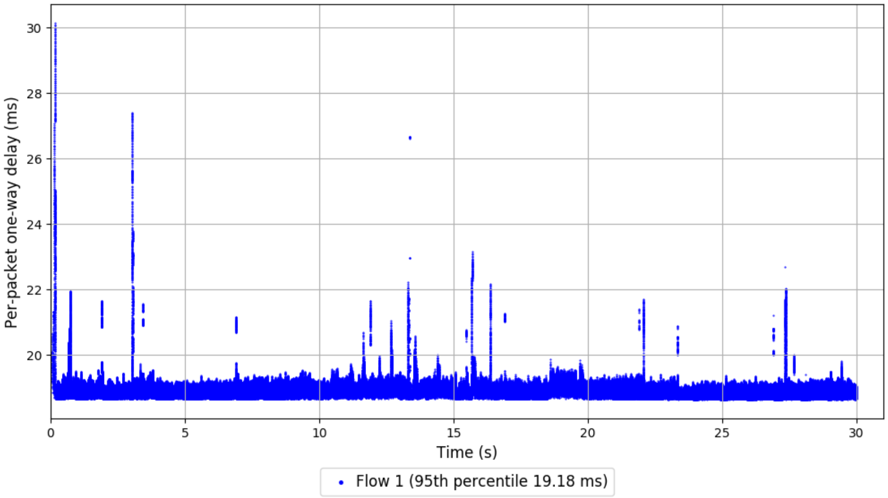




```
Run 1: Statistics of TCP Cubic

Start at: 2018-02-27 15:46:42
End at: 2018-02-27 15:47:12
Local clock offset: 0.693 ms
Remote clock offset: -4.789 ms

# Below is generated by plot.py at 2018-02-27 22:37:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 201.74 Mbit/s
95th percentile per-packet one-way delay: 19.177 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 201.74 Mbit/s
95th percentile per-packet one-way delay: 19.177 ms
Loss rate: 0.01%
```

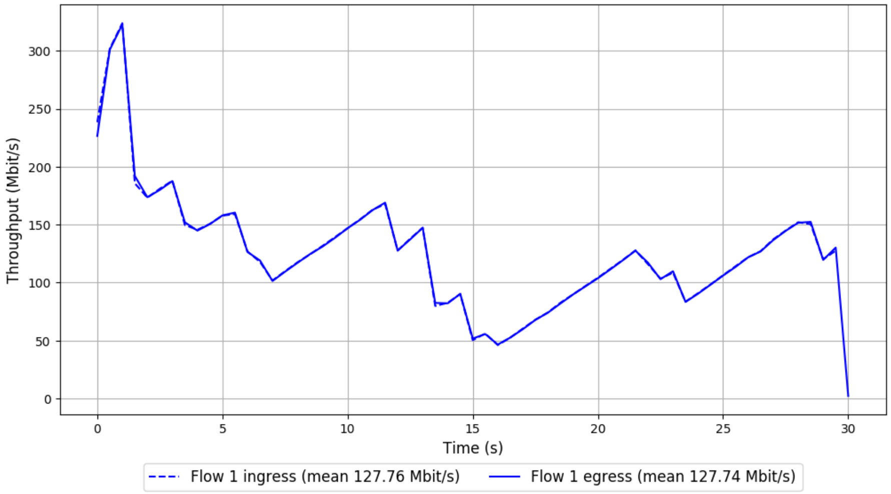
Run 1: Report of TCP Cubic — Data Link

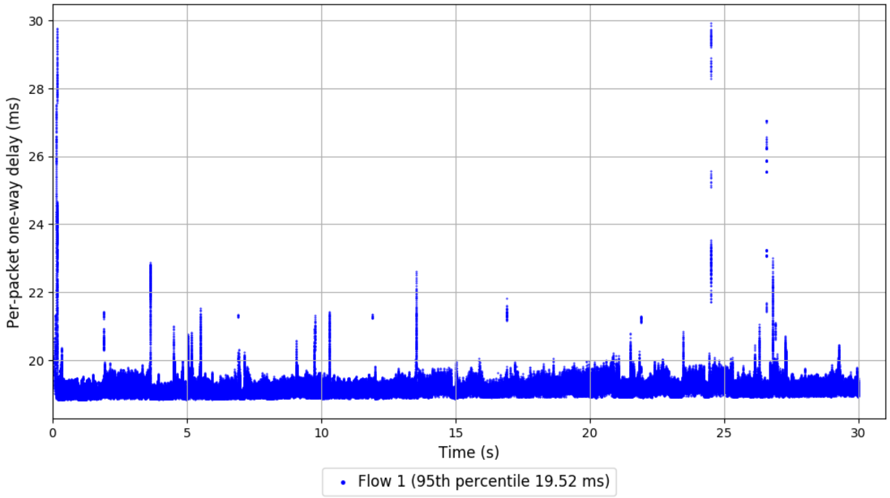




```
Run 2: Statistics of TCP Cubic

Start at: 2018-02-27 16:13:51
End at: 2018-02-27 16:14:21
Local clock offset: 0.632 ms
Remote clock offset: -4.785 ms

# Below is generated by plot.py at 2018-02-27 22:37:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 127.74 Mbit/s
95th percentile per-packet one-way delay: 19.520 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 127.74 Mbit/s
95th percentile per-packet one-way delay: 19.520 ms
Loss rate: 0.02%
```

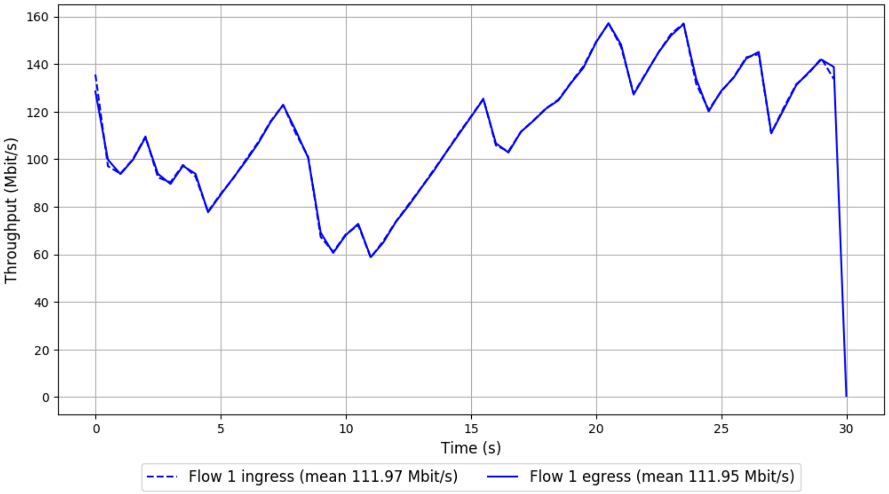
Run 2: Report of TCP Cubic — Data Link

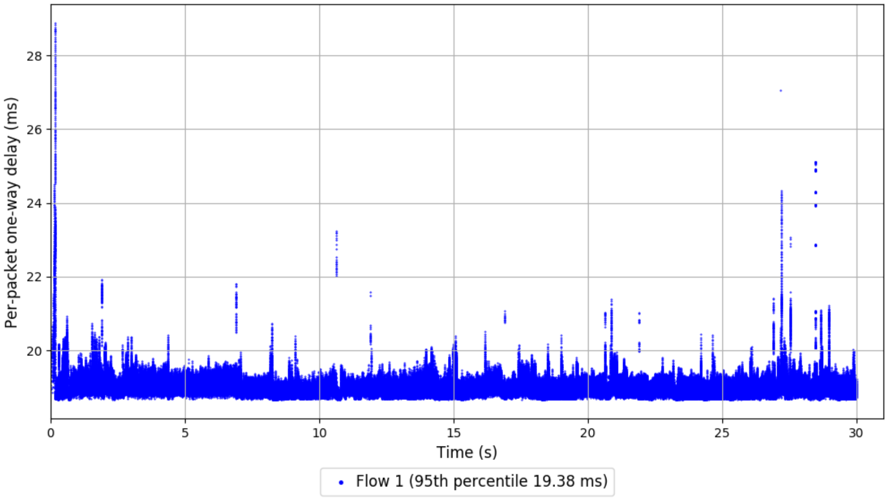




```
Run 3: Statistics of TCP Cubic

Start at: 2018-02-27 16:41:04
End at: 2018-02-27 16:41:34
Local clock offset: 0.71 ms
Remote clock offset: -6.312 ms

# Below is generated by plot.py at 2018-02-27 22:37:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 111.95 Mbit/s
95th percentile per-packet one-way delay: 19.377 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 111.95 Mbit/s
95th percentile per-packet one-way delay: 19.377 ms
Loss rate: 0.02%
```

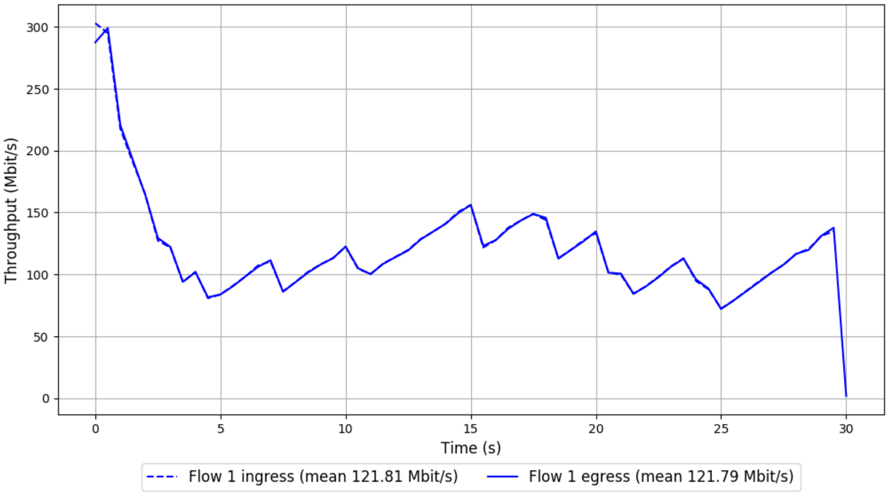
Run 3: Report of TCP Cubic — Data Link

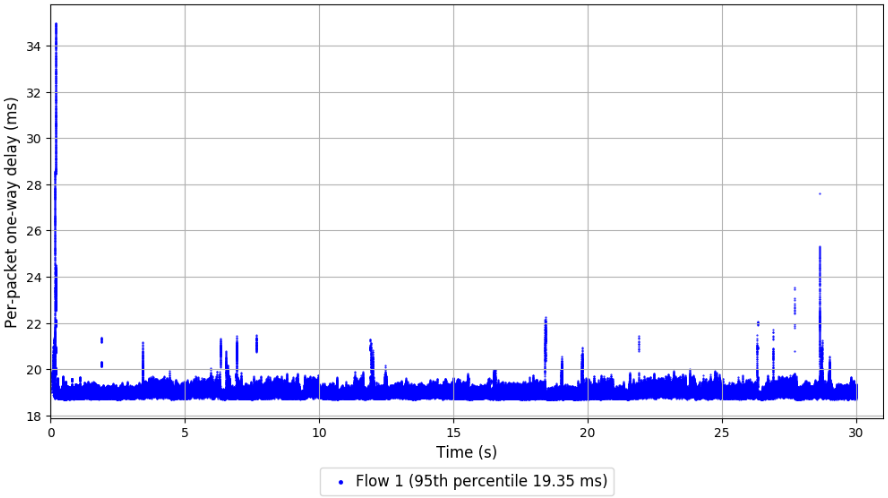




```
Run 4: Statistics of TCP Cubic

Start at: 2018-02-27 17:08:18
End at: 2018-02-27 17:08:48
Local clock offset: 0.636 ms
Remote clock offset: -4.734 ms

# Below is generated by plot.py at 2018-02-27 22:37:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 121.79 Mbit/s
95th percentile per-packet one-way delay: 19.348 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 121.79 Mbit/s
95th percentile per-packet one-way delay: 19.348 ms
Loss rate: 0.02%
```

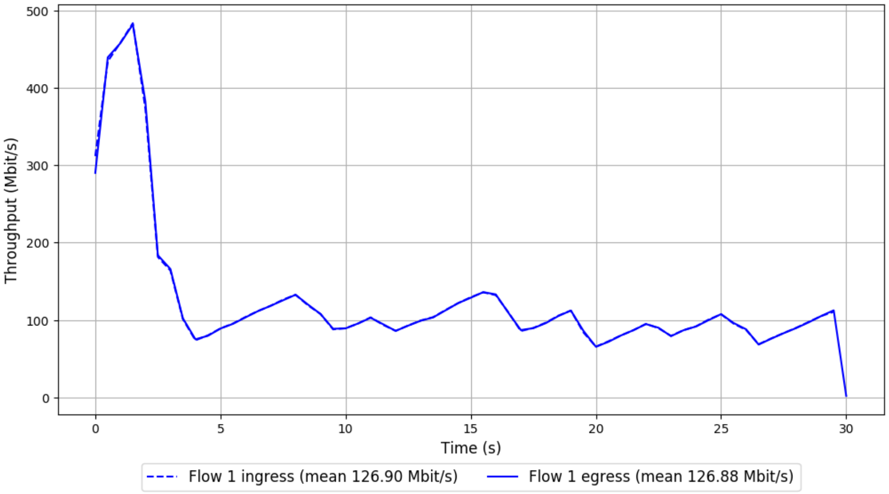
Run 4: Report of TCP Cubic — Data Link

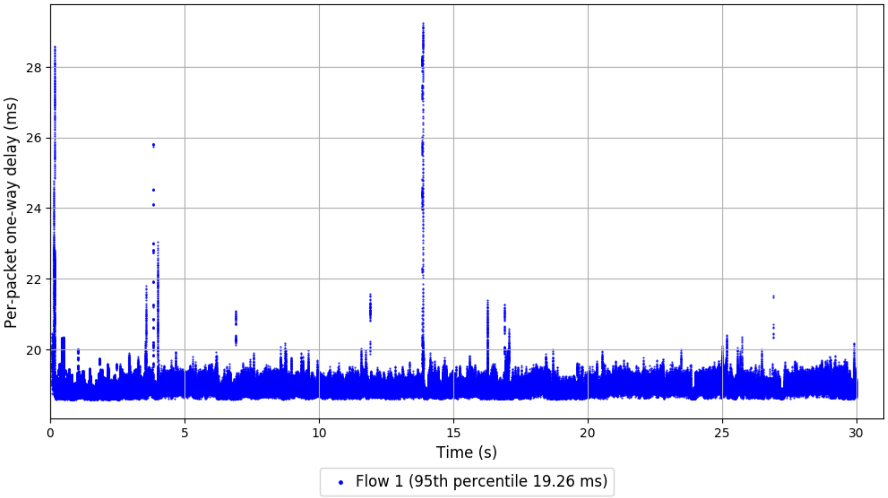




```
Run 5: Statistics of TCP Cubic

Start at: 2018-02-27 17:35:30
End at: 2018-02-27 17:36:00
Local clock offset: 0.515 ms
Remote clock offset: -6.178 ms

# Below is generated by plot.py at 2018-02-27 22:37:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 126.88 Mbit/s
95th percentile per-packet one-way delay: 19.258 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 126.88 Mbit/s
95th percentile per-packet one-way delay: 19.258 ms
Loss rate: 0.01%
```

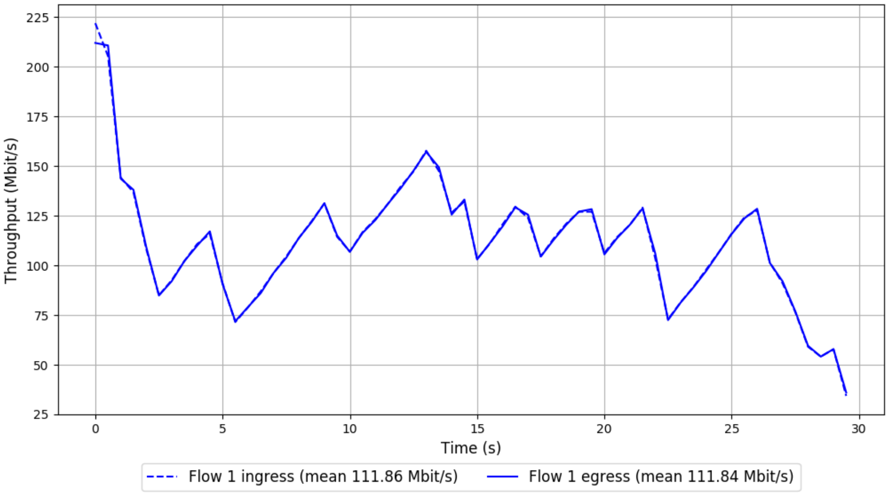
Run 5: Report of TCP Cubic — Data Link

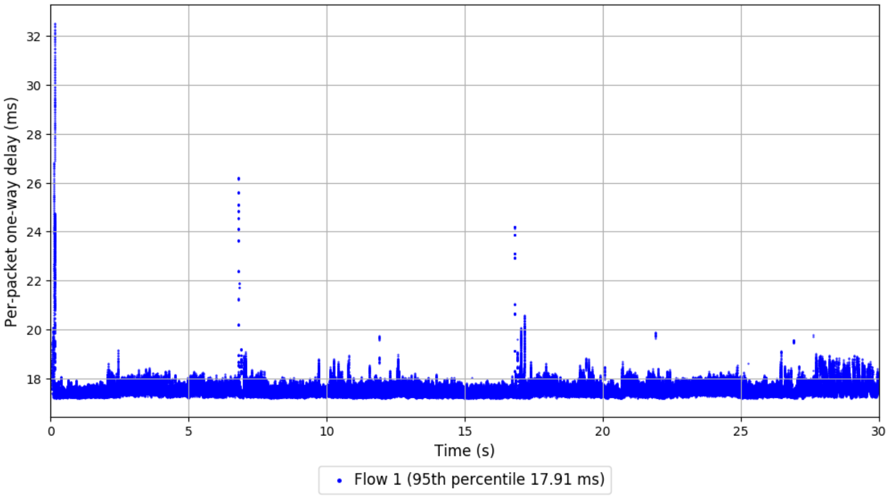




```
Run 6: Statistics of TCP Cubic

Start at: 2018-02-27 18:02:37
End at: 2018-02-27 18:03:07
Local clock offset: -0.371 ms
Remote clock offset: -6.347 ms

# Below is generated by plot.py at 2018-02-27 22:37:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 111.84 Mbit/s
95th percentile per-packet one-way delay: 17.906 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 111.84 Mbit/s
95th percentile per-packet one-way delay: 17.906 ms
Loss rate: 0.02%
```

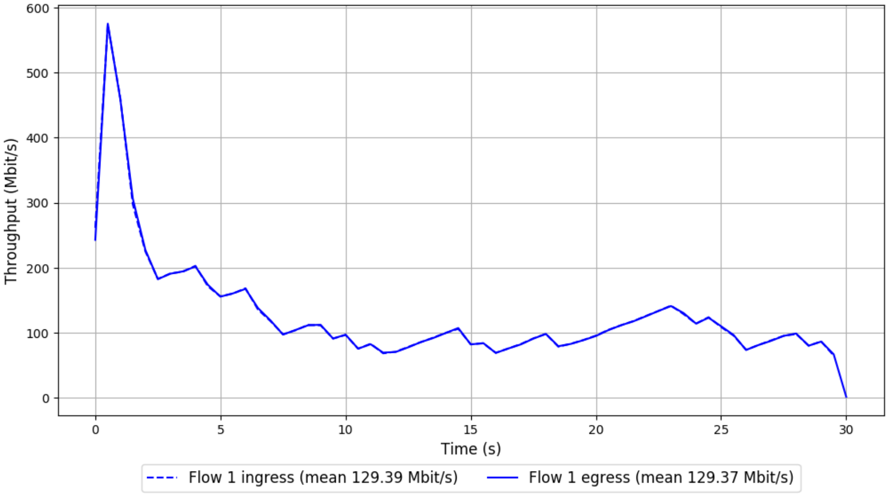
Run 6: Report of TCP Cubic — Data Link

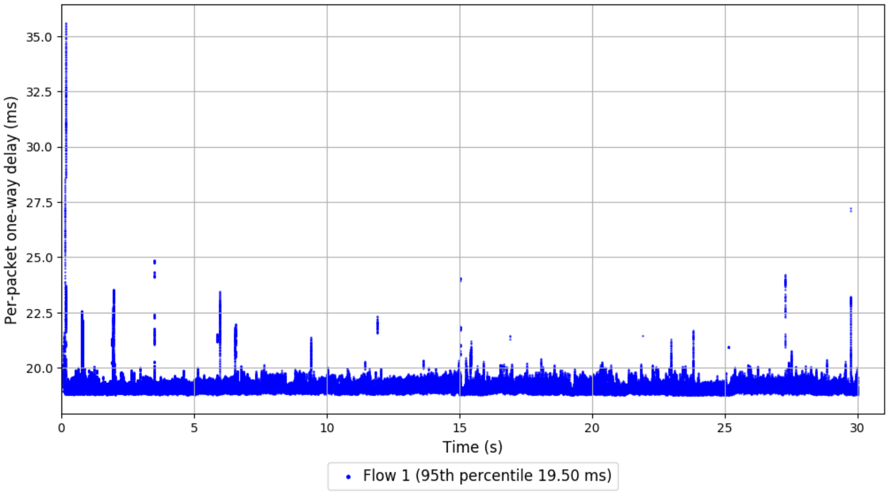




```
Run 7: Statistics of TCP Cubic

Start at: 2018-02-27 18:29:38
End at: 2018-02-27 18:30:08
Local clock offset: -0.983 ms
Remote clock offset: -6.085 ms

# Below is generated by plot.py at 2018-02-27 22:37:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 129.37 Mbit/s
95th percentile per-packet one-way delay: 19.499 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 129.37 Mbit/s
95th percentile per-packet one-way delay: 19.499 ms
Loss rate: 0.02%
```

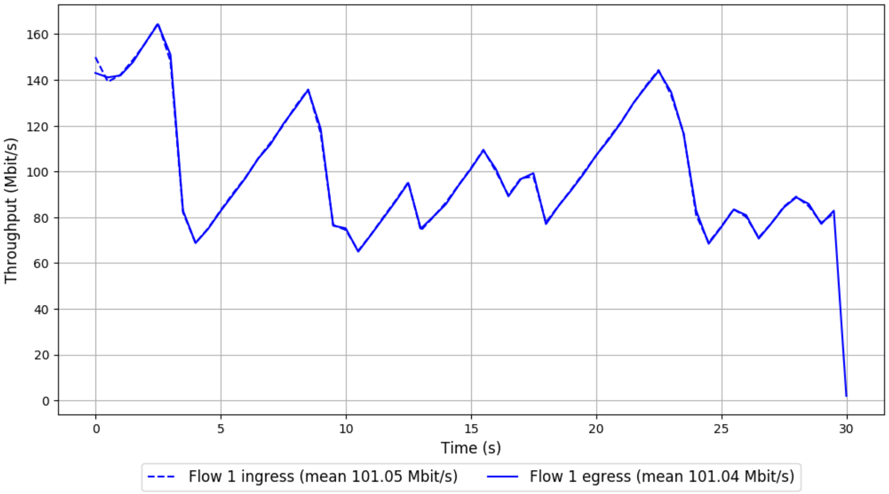
Run 7: Report of TCP Cubic — Data Link

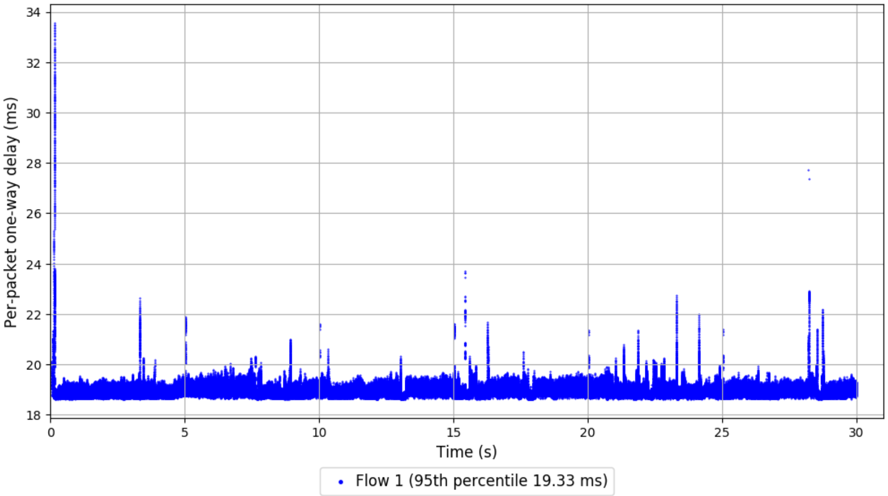




```
Run 8: Statistics of TCP Cubic

Start at: 2018-02-27 18:56:44
End at: 2018-02-27 18:57:14
Local clock offset: -0.873 ms
Remote clock offset: -5.228 ms

# Below is generated by plot.py at 2018-02-27 22:37:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 101.04 Mbit/s
95th percentile per-packet one-way delay: 19.333 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 101.04 Mbit/s
95th percentile per-packet one-way delay: 19.333 ms
Loss rate: 0.02%
```

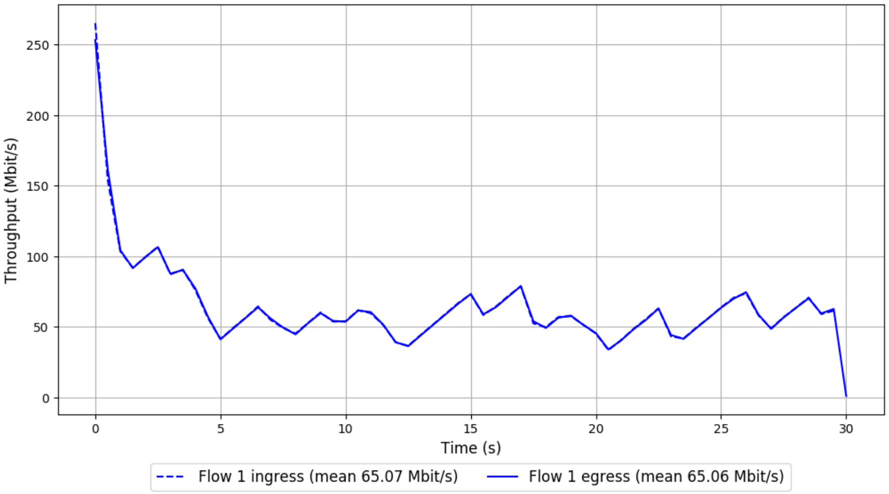
Run 8: Report of TCP Cubic — Data Link

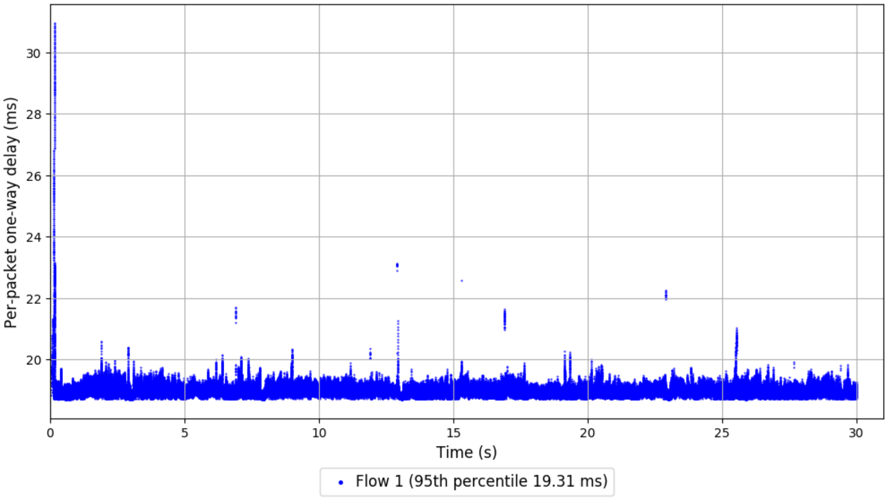




```
Run 9: Statistics of TCP Cubic

Start at: 2018-02-27 19:23:50
End at: 2018-02-27 19:24:20
Local clock offset: -0.437 ms
Remote clock offset: -5.138 ms

# Below is generated by plot.py at 2018-02-27 22:37:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.06 Mbit/s
95th percentile per-packet one-way delay: 19.307 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 65.06 Mbit/s
95th percentile per-packet one-way delay: 19.307 ms
Loss rate: 0.03%
```

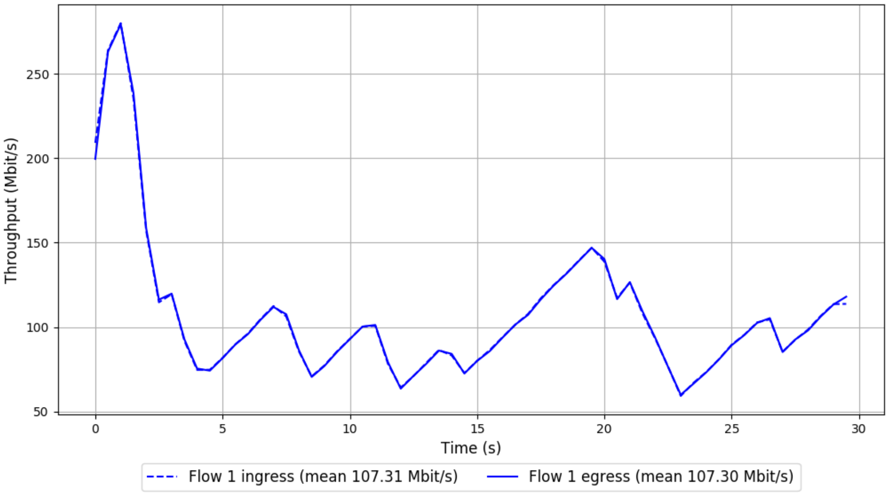
Run 9: Report of TCP Cubic — Data Link

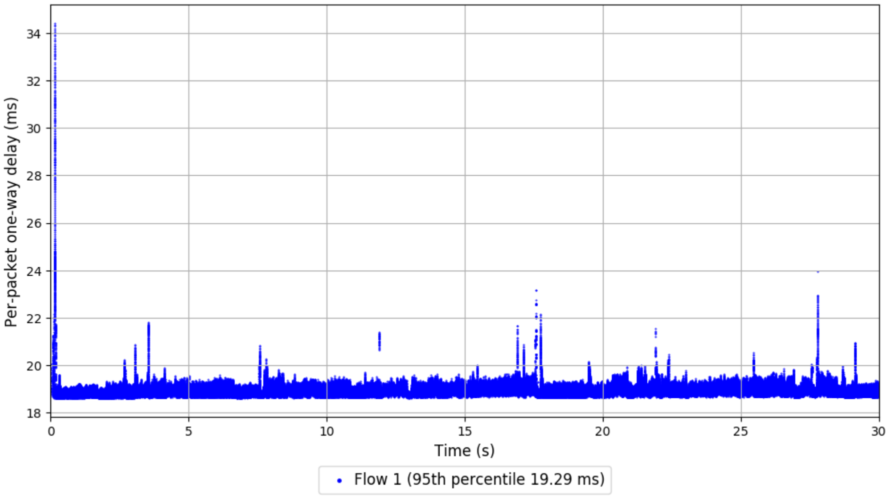




```
Run 10: Statistics of TCP Cubic

Start at: 2018-02-27 19:50:44
End at: 2018-02-27 19:51:14
Local clock offset: 0.776 ms
Remote clock offset: -6.747 ms

# Below is generated by plot.py at 2018-02-27 22:37:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 107.30 Mbit/s
95th percentile per-packet one-way delay: 19.286 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 107.30 Mbit/s
95th percentile per-packet one-way delay: 19.286 ms
Loss rate: 0.01%
```

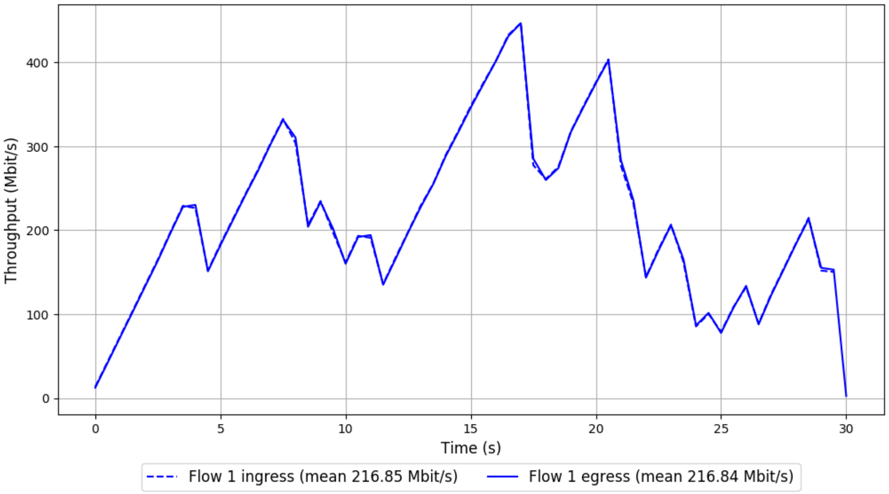
Run 10: Report of TCP Cubic — Data Link

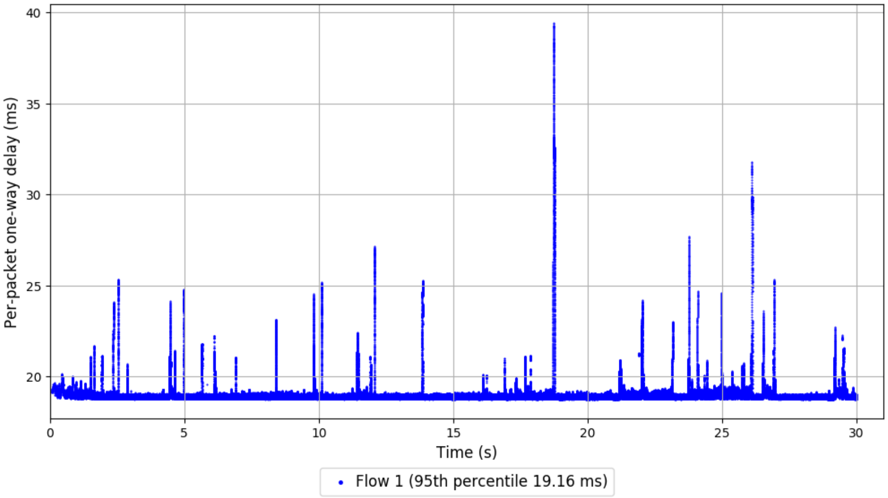




```
Run 1: Statistics of LEDBAT

Start at: 2018-02-27 15:58:59
End at: 2018-02-27 15:59:30
Local clock offset: 0.64 ms
Remote clock offset: -4.26 ms

# Below is generated by plot.py at 2018-02-27 22:37:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.84 Mbit/s
95th percentile per-packet one-way delay: 19.165 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 216.84 Mbit/s
95th percentile per-packet one-way delay: 19.165 ms
Loss rate: 0.00%
```

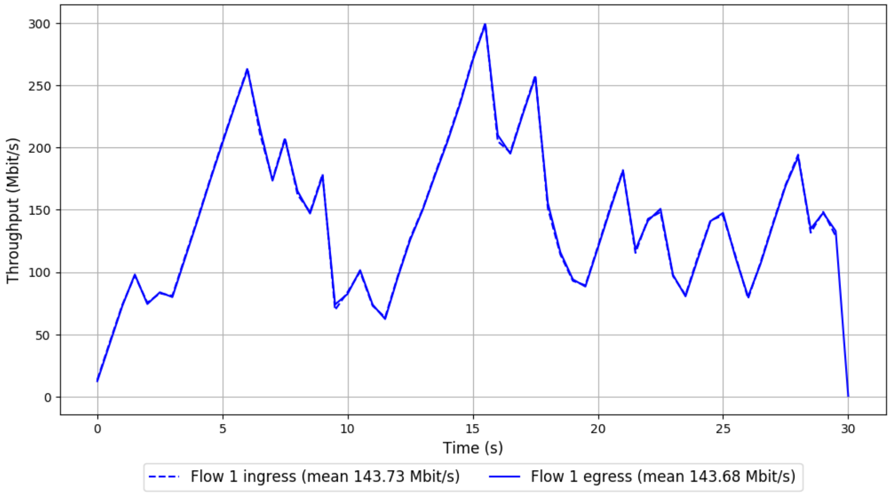
Run 1: Report of LEDBAT — Data Link

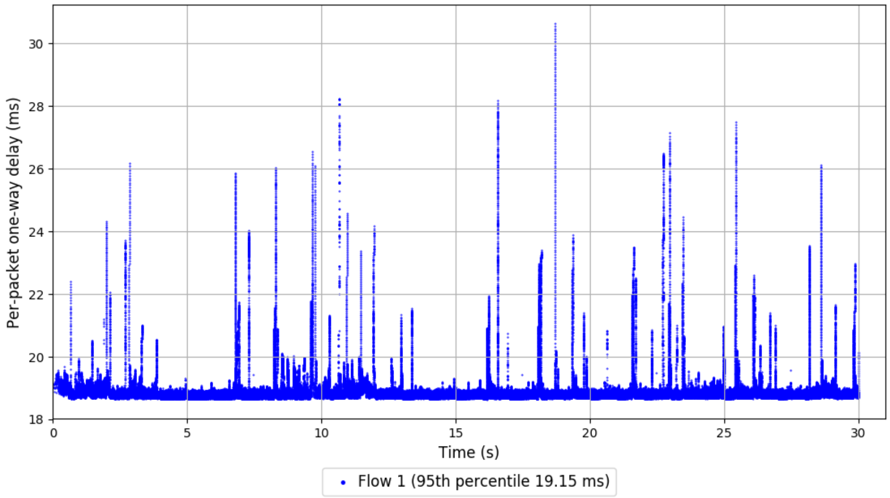




```
Run 2: Statistics of LEDBAT

Start at: 2018-02-27 16:26:14
End at: 2018-02-27 16:26:45
Local clock offset: 0.764 ms
Remote clock offset: -5.99 ms

# Below is generated by plot.py at 2018-02-27 22:37:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 143.68 Mbit/s
95th percentile per-packet one-way delay: 19.152 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 143.68 Mbit/s
95th percentile per-packet one-way delay: 19.152 ms
Loss rate: 0.04%
```

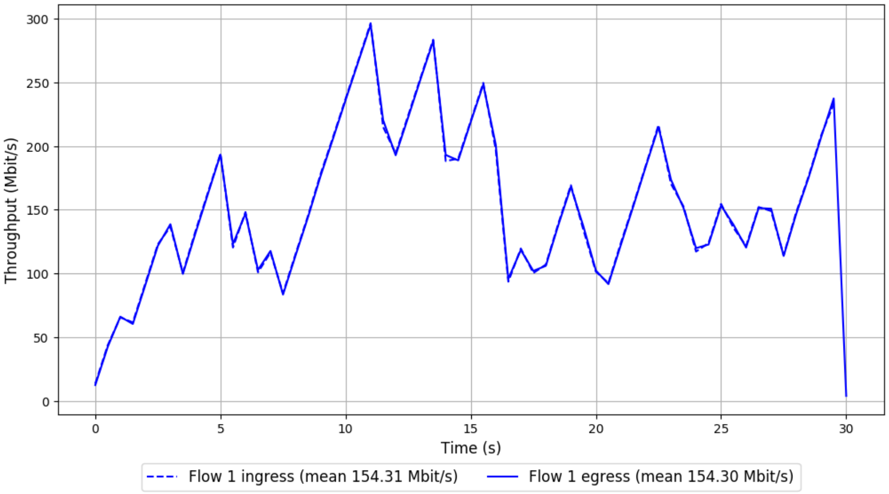
Run 2: Report of LEDBAT — Data Link

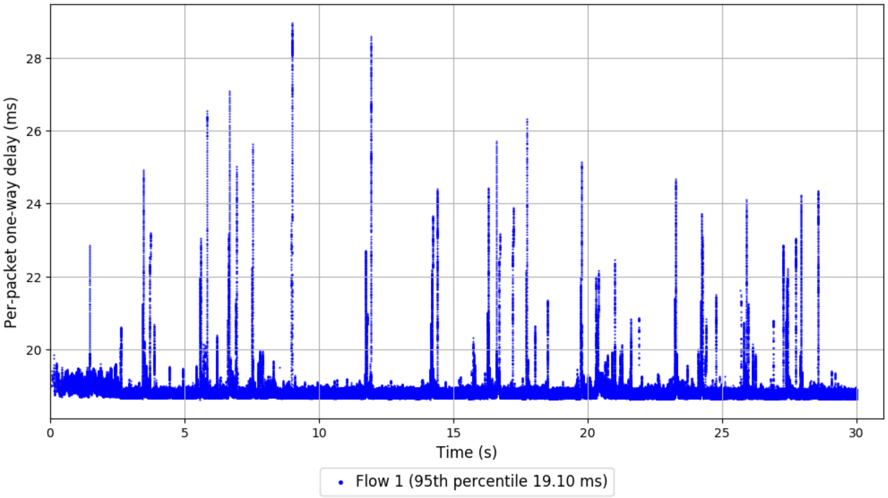




```
Run 3: Statistics of LEDBAT

Start at: 2018-02-27 16:53:19
End at: 2018-02-27 16:53:49
Local clock offset: 0.613 ms
Remote clock offset: -5.461 ms

# Below is generated by plot.py at 2018-02-27 22:37:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 154.30 Mbit/s
95th percentile per-packet one-way delay: 19.103 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 154.30 Mbit/s
95th percentile per-packet one-way delay: 19.103 ms
Loss rate: 0.01%
```

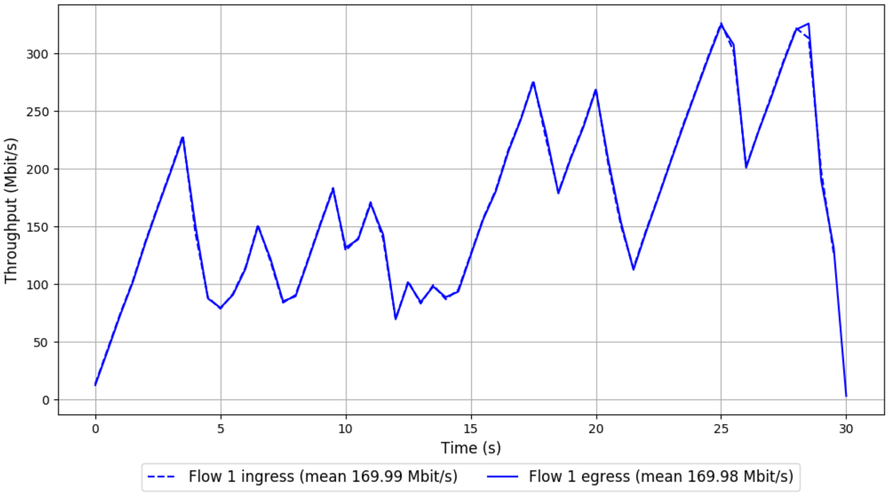
Run 3: Report of LEDBAT — Data Link

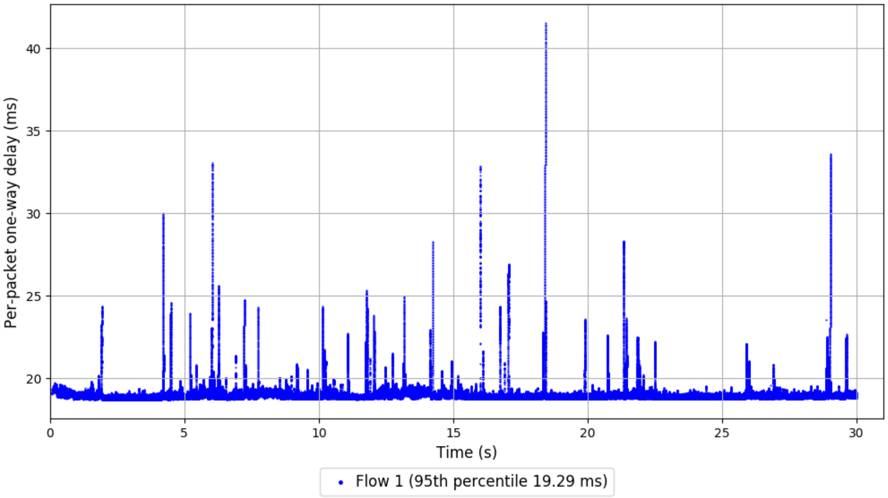




```
Run 4: Statistics of LEDBAT

Start at: 2018-02-27 17:20:38
End at: 2018-02-27 17:21:08
Local clock offset: 0.583 ms
Remote clock offset: -4.91 ms

# Below is generated by plot.py at 2018-02-27 22:37:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 169.98 Mbit/s
95th percentile per-packet one-way delay: 19.291 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 169.98 Mbit/s
95th percentile per-packet one-way delay: 19.291 ms
Loss rate: 0.01%
```

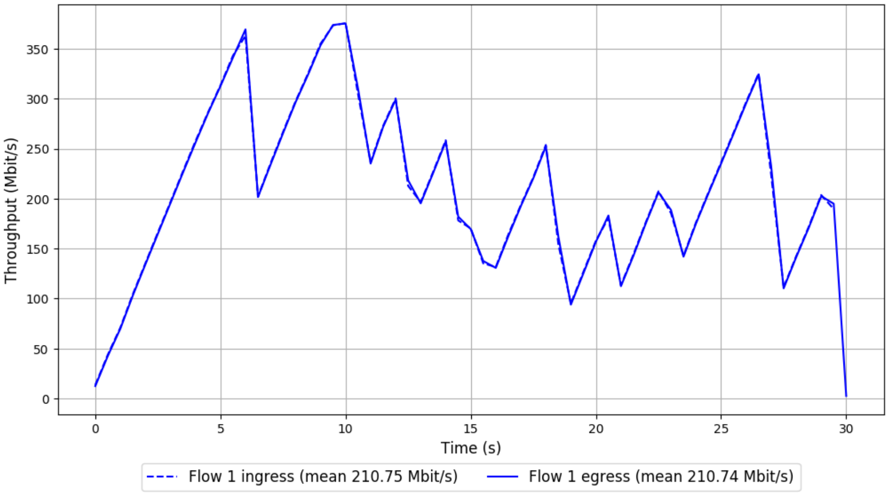
Run 4: Report of LEDBAT — Data Link

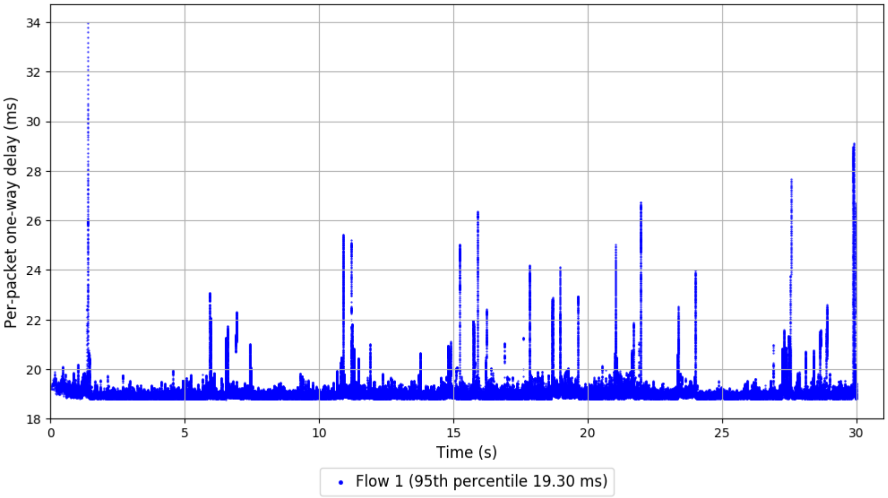




```
Run 5: Statistics of LEDBAT

Start at: 2018-02-27 17:47:43
End at: 2018-02-27 17:48:13
Local clock offset: 0.36 ms
Remote clock offset: -6.304 ms

# Below is generated by plot.py at 2018-02-27 22:37:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 210.74 Mbit/s
95th percentile per-packet one-way delay: 19.295 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 210.74 Mbit/s
95th percentile per-packet one-way delay: 19.295 ms
Loss rate: 0.01%
```

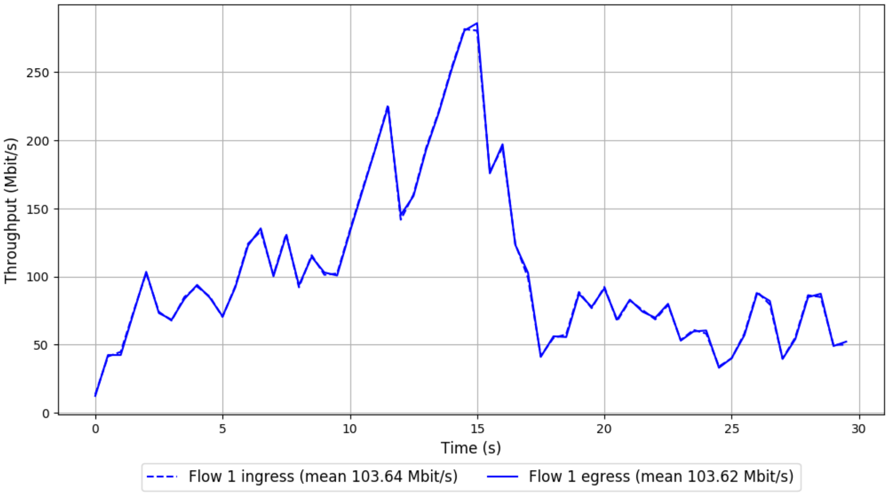
Run 5: Report of LEDBAT — Data Link

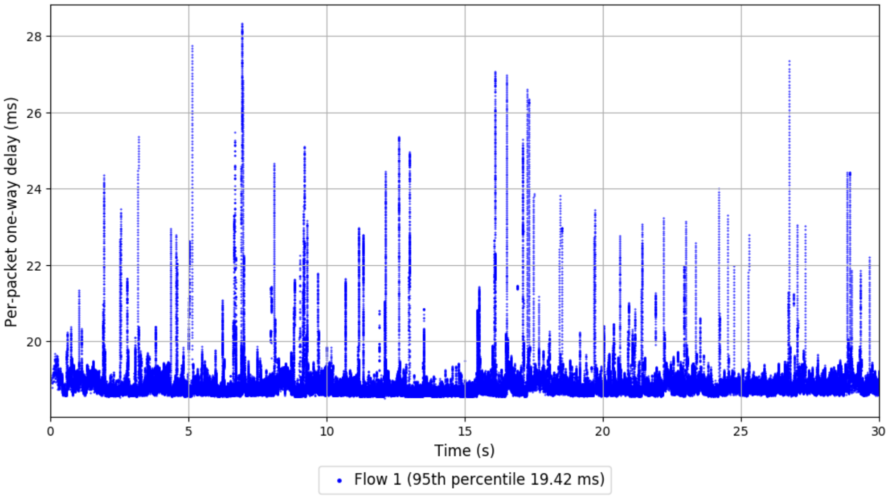




```
Run 6: Statistics of LEDBAT

Start at: 2018-02-27 18:14:53
End at: 2018-02-27 18:15:23
Local clock offset: -0.812 ms
Remote clock offset: -6.424 ms

# Below is generated by plot.py at 2018-02-27 22:37:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 103.62 Mbit/s
95th percentile per-packet one-way delay: 19.424 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 103.62 Mbit/s
95th percentile per-packet one-way delay: 19.424 ms
Loss rate: 0.02%
```

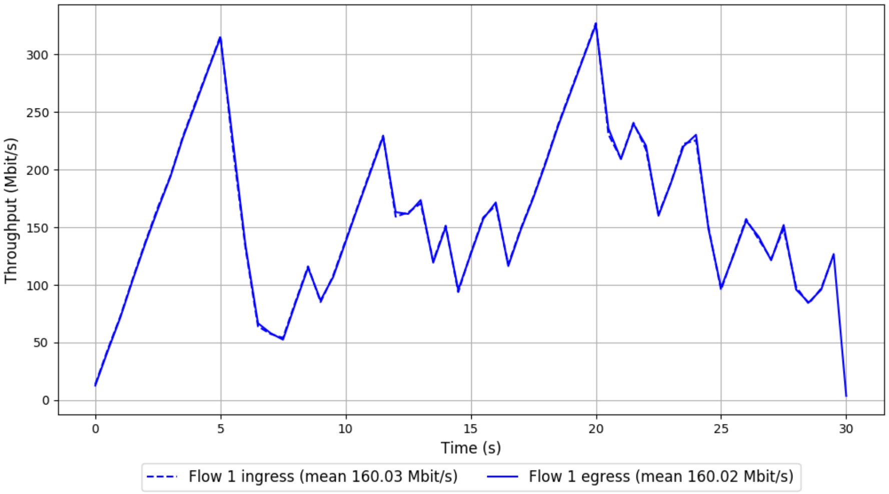
Run 6: Report of LEDBAT — Data Link

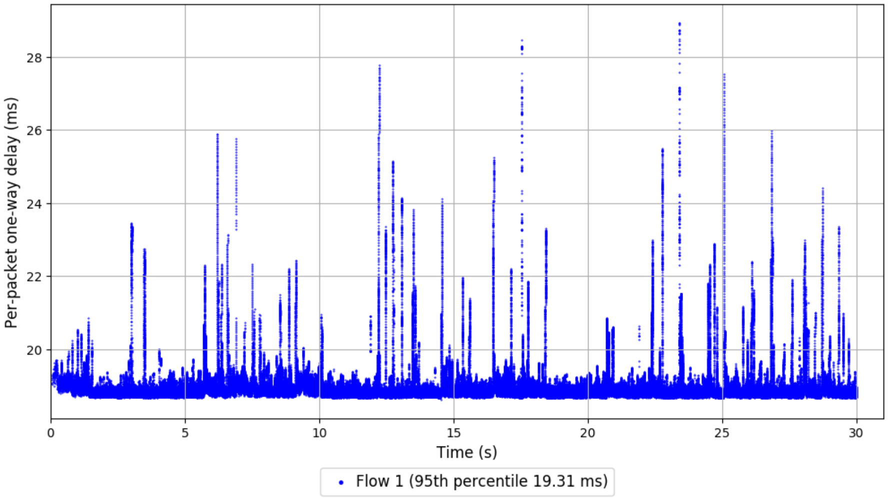




```
Run 7: Statistics of LEDBAT

Start at: 2018-02-27 18:41:56
End at: 2018-02-27 18:42:26
Local clock offset: -0.824 ms
Remote clock offset: -5.533 ms

# Below is generated by plot.py at 2018-02-27 22:37:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 160.02 Mbit/s
95th percentile per-packet one-way delay: 19.313 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 160.02 Mbit/s
95th percentile per-packet one-way delay: 19.313 ms
Loss rate: 0.01%
```

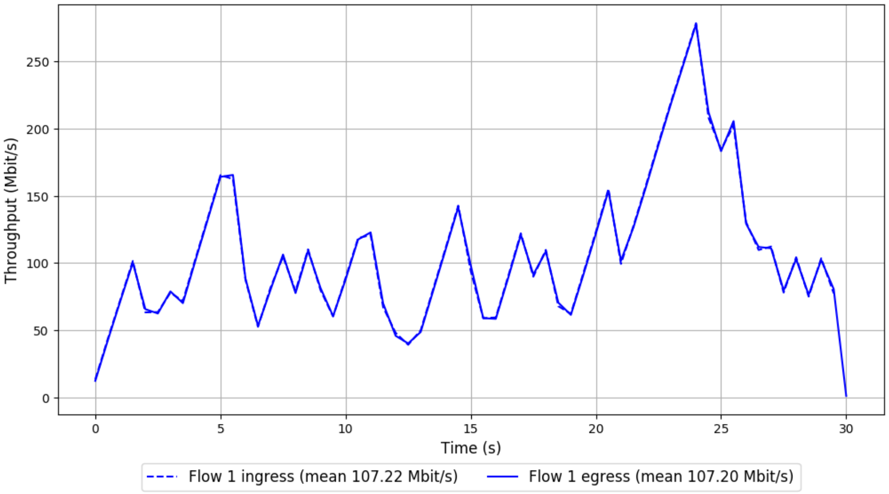
Run 7: Report of LEDBAT — Data Link

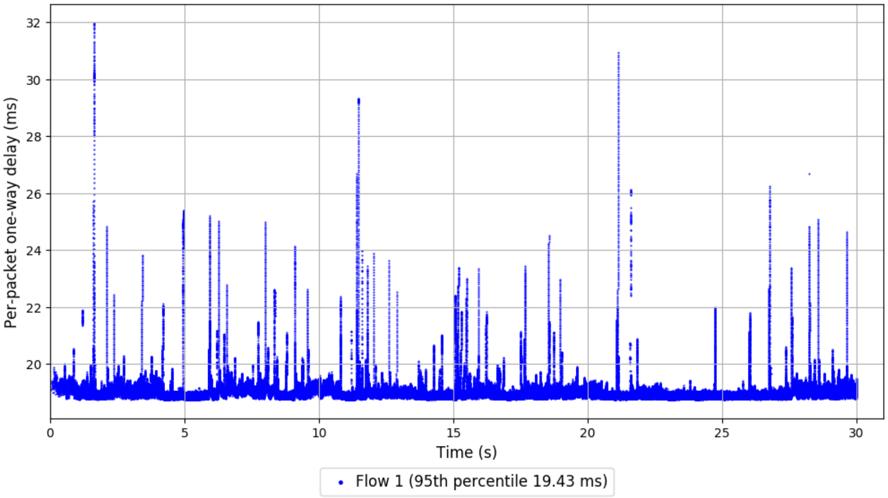




```
Run 8: Statistics of LEDBAT

Start at: 2018-02-27 19:09:01
End at: 2018-02-27 19:09:31
Local clock offset: -0.602 ms
Remote clock offset: -5.123 ms

# Below is generated by plot.py at 2018-02-27 22:37:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 107.20 Mbit/s
95th percentile per-packet one-way delay: 19.430 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 107.20 Mbit/s
95th percentile per-packet one-way delay: 19.430 ms
Loss rate: 0.02%
```

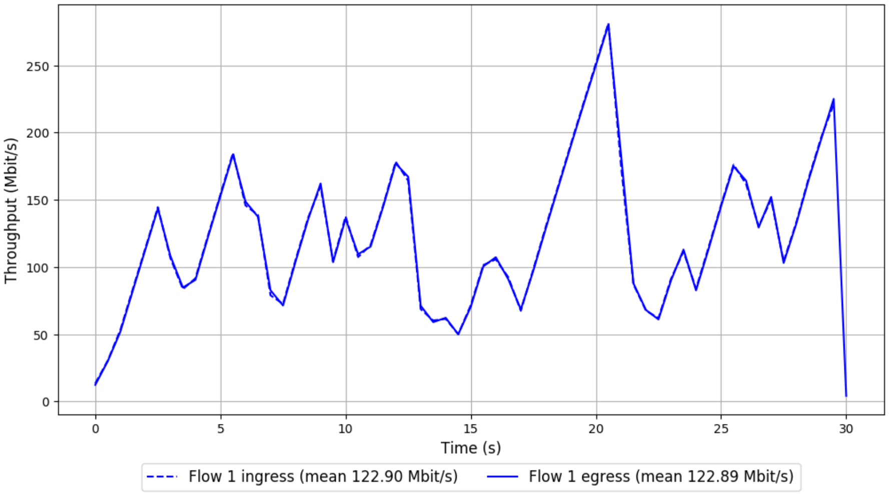
Run 8: Report of LEDBAT — Data Link

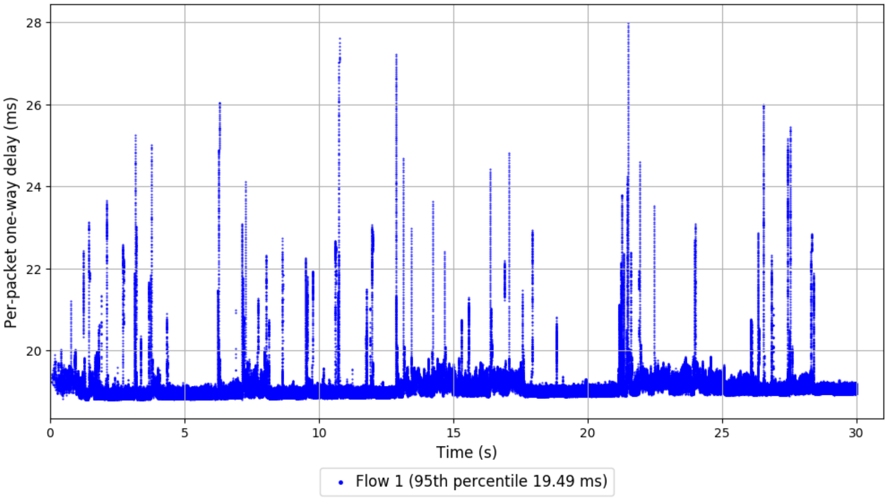




```
Run 9: Statistics of LEDBAT

Start at: 2018-02-27 19:36:01
End at: 2018-02-27 19:36:31
Local clock offset: -0.098 ms
Remote clock offset: -5.214 ms

# Below is generated by plot.py at 2018-02-27 22:37:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 122.89 Mbit/s
95th percentile per-packet one-way delay: 19.493 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 122.89 Mbit/s
95th percentile per-packet one-way delay: 19.493 ms
Loss rate: 0.01%
```

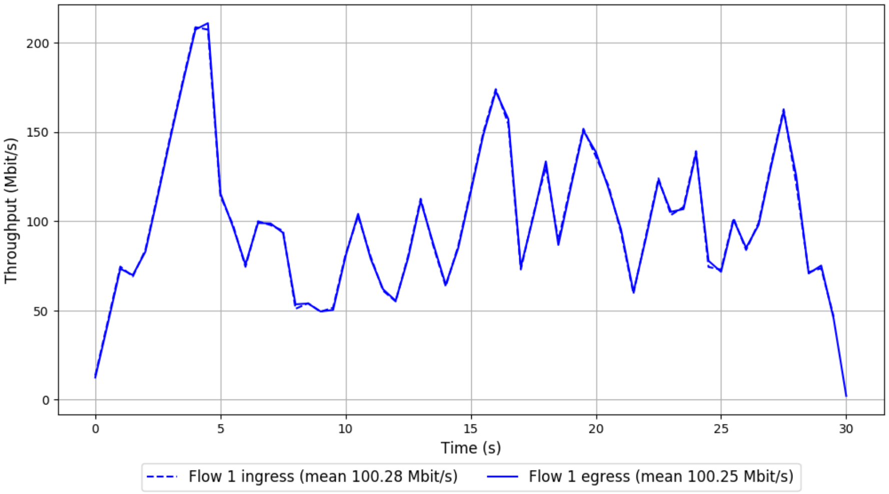
Run 9: Report of LEDBAT — Data Link

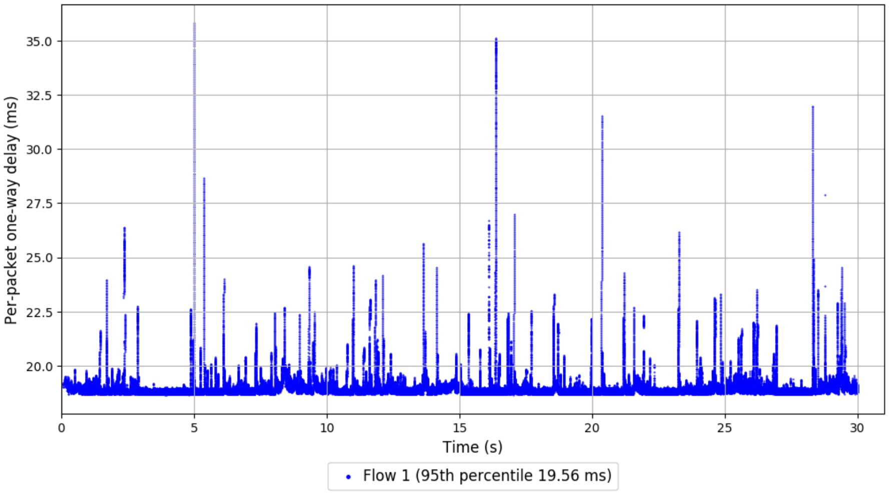




```
Run 10: Statistics of LEDBAT

Start at: 2018-02-27 20:02:59
End at: 2018-02-27 20:03:29
Local clock offset: 1.014 ms
Remote clock offset: -7.181 ms

# Below is generated by plot.py at 2018-02-27 22:37:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 100.25 Mbit/s
95th percentile per-packet one-way delay: 19.558 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 100.25 Mbit/s
95th percentile per-packet one-way delay: 19.558 ms
Loss rate: 0.03%
```

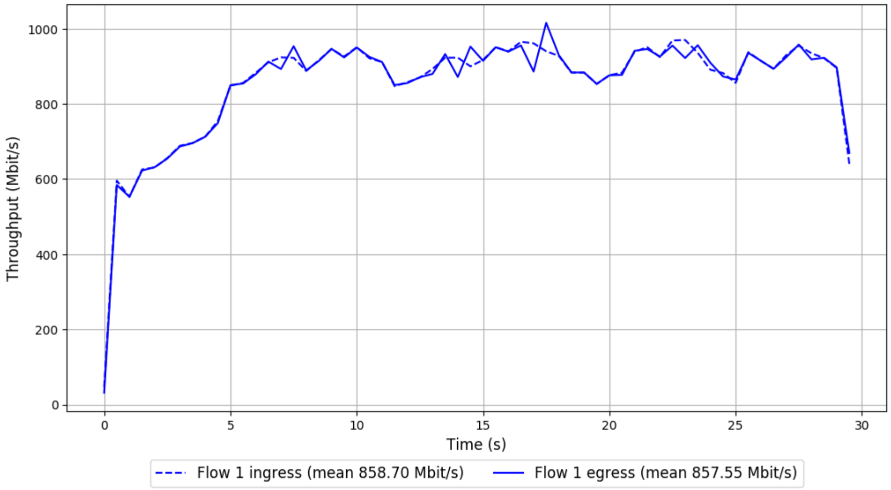
Run 10: Report of LEDBAT — Data Link

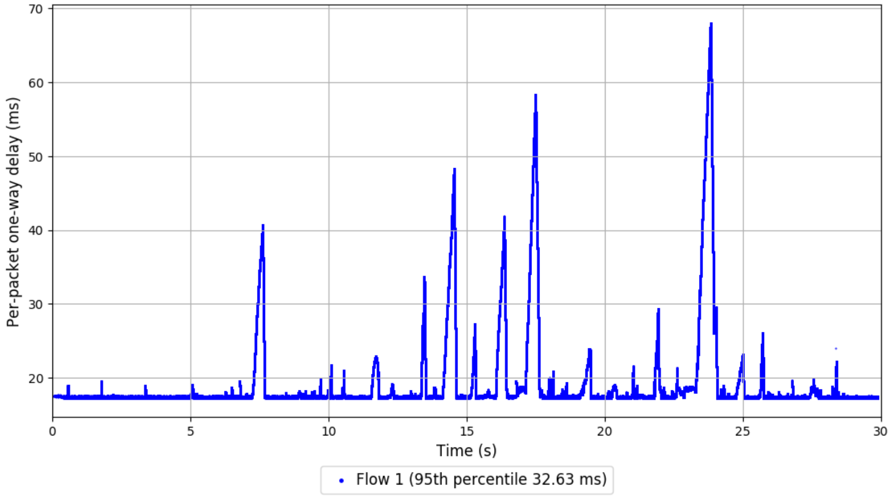




```
Run 1: Statistics of PCC

Start at: 2018-02-27 15:41:52
End at: 2018-02-27 15:42:22
Local clock offset: 0.835 ms
Remote clock offset: -4.985 ms

# Below is generated by plot.py at 2018-02-27 22:45:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 857.55 Mbit/s
95th percentile per-packet one-way delay: 32.629 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 857.55 Mbit/s
95th percentile per-packet one-way delay: 32.629 ms
Loss rate: 0.13%
```

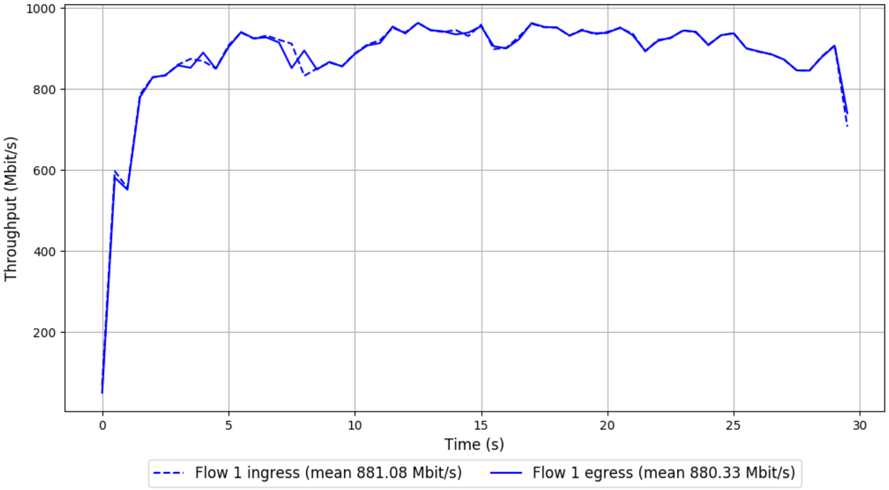
Run 1: Report of PCC — Data Link

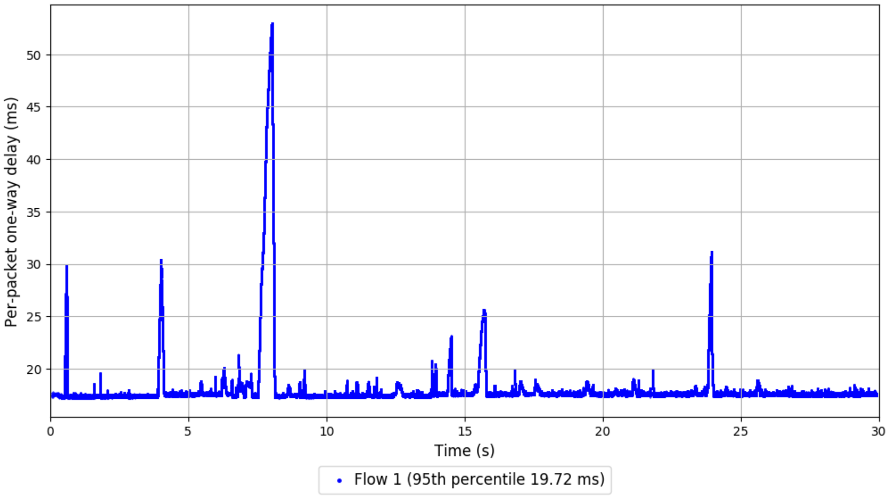




```
Run 2: Statistics of PCC

Start at: 2018-02-27 16:09:02
End at: 2018-02-27 16:09:32
Local clock offset: 0.678 ms
Remote clock offset: -4.085 ms

# Below is generated by plot.py at 2018-02-27 22:47:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 880.33 Mbit/s
95th percentile per-packet one-way delay: 19.724 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 880.33 Mbit/s
95th percentile per-packet one-way delay: 19.724 ms
Loss rate: 0.09%
```

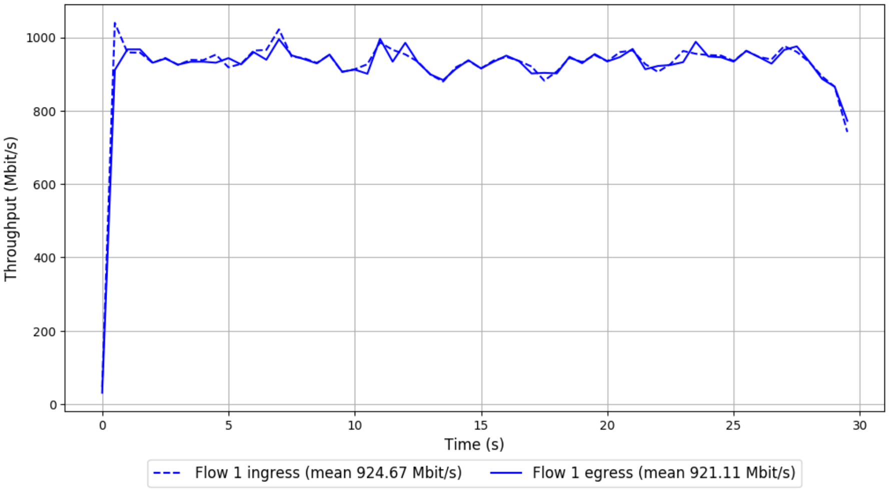
Run 2: Report of PCC — Data Link

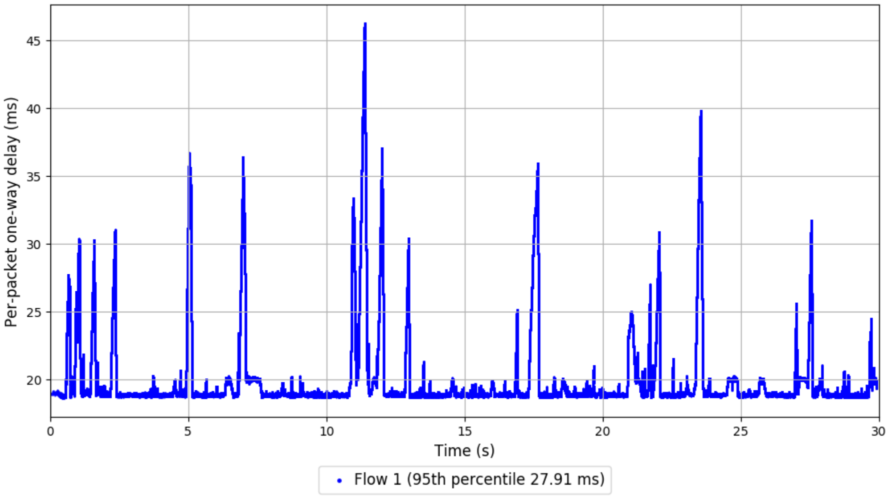




```
Run 3: Statistics of PCC

Start at: 2018-02-27 16:36:14
End at: 2018-02-27 16:36:44
Local clock offset: 0.645 ms
Remote clock offset: -6.331 ms

# Below is generated by plot.py at 2018-02-27 22:48:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 921.11 Mbit/s
95th percentile per-packet one-way delay: 27.914 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 921.11 Mbit/s
95th percentile per-packet one-way delay: 27.914 ms
Loss rate: 0.38%
```

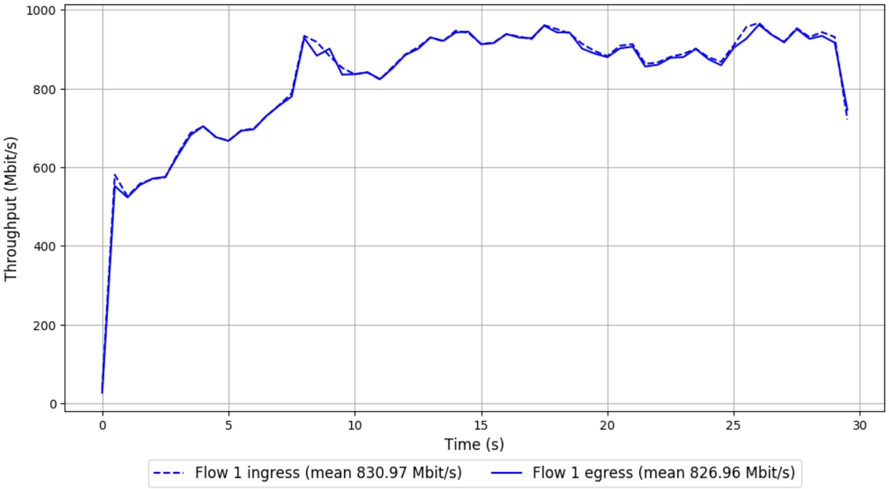
Run 3: Report of PCC — Data Link

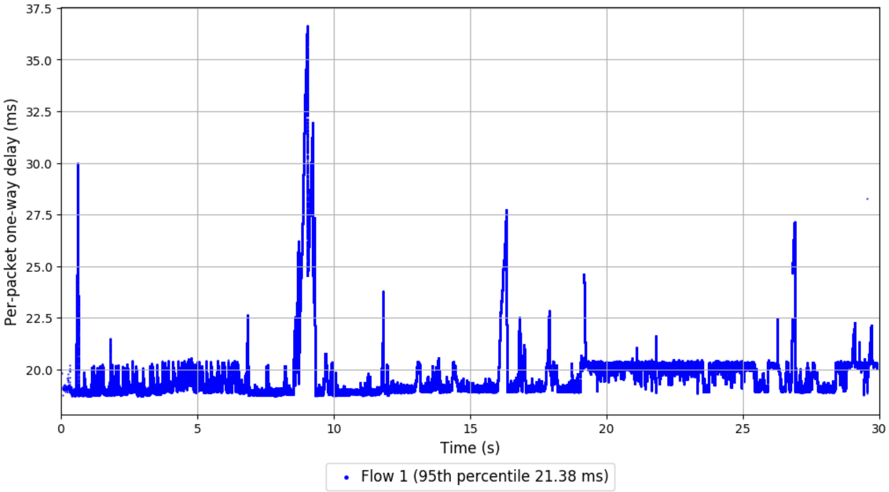




```
Run 4: Statistics of PCC

Start at: 2018-02-27 17:03:18
End at: 2018-02-27 17:03:48
Local clock offset: 0.547 ms
Remote clock offset: -5.005 ms

# Below is generated by plot.py at 2018-02-27 22:48:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 826.96 Mbit/s
95th percentile per-packet one-way delay: 21.382 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 826.96 Mbit/s
95th percentile per-packet one-way delay: 21.382 ms
Loss rate: 0.48%
```

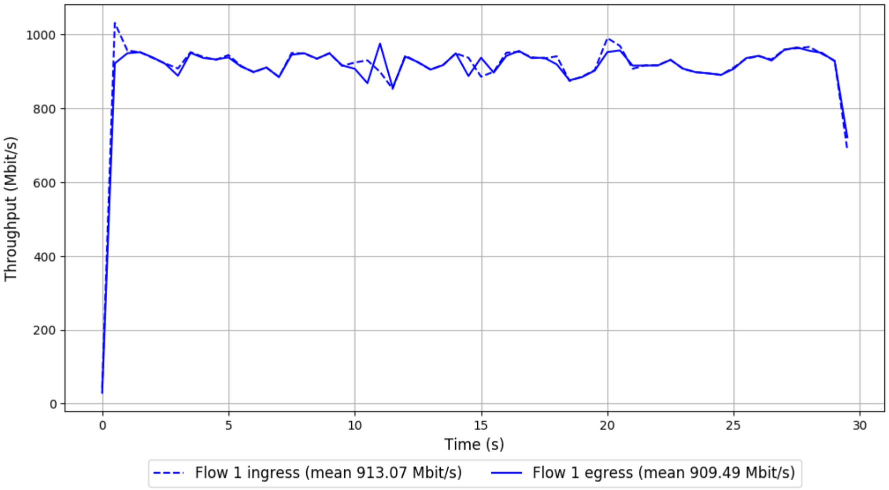
Run 4: Report of PCC — Data Link

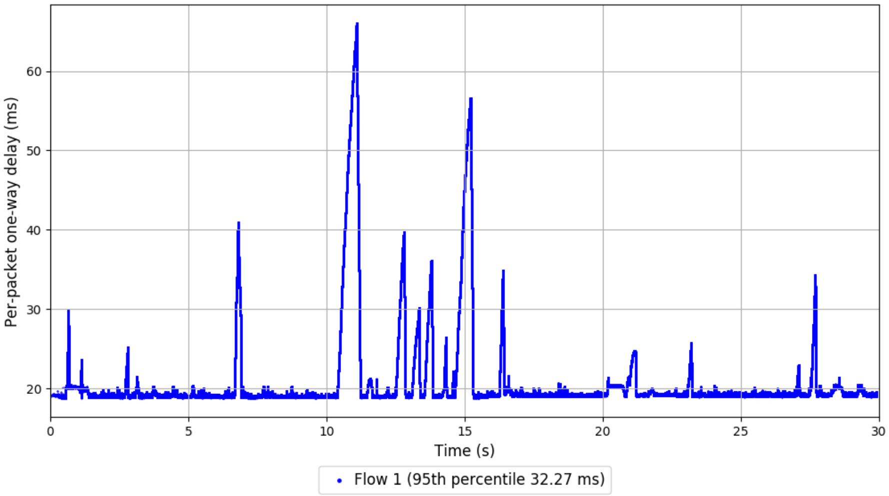




```
Run 5: Statistics of PCC

Start at: 2018-02-27 17:30:37
End at: 2018-02-27 17:31:07
Local clock offset: 0.536 ms
Remote clock offset: -5.861 ms

# Below is generated by plot.py at 2018-02-27 22:48:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 909.49 Mbit/s
95th percentile per-packet one-way delay: 32.275 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 909.49 Mbit/s
95th percentile per-packet one-way delay: 32.275 ms
Loss rate: 0.39%
```

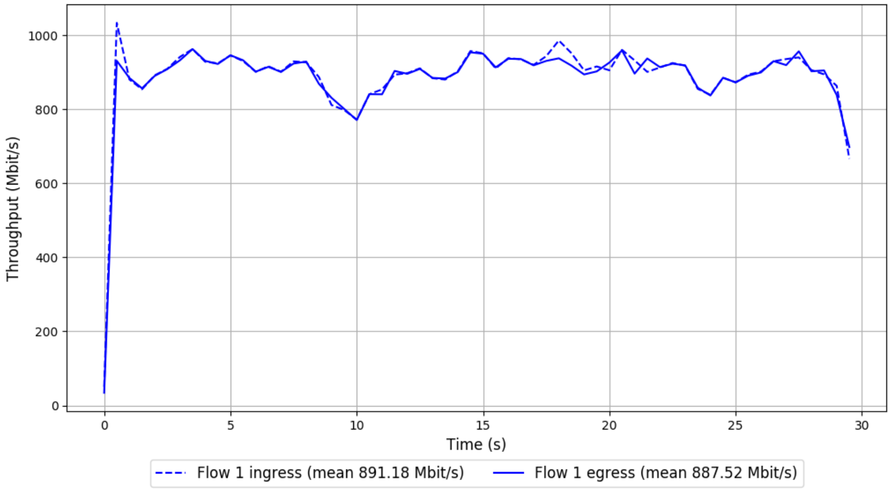
Run 5: Report of PCC — Data Link

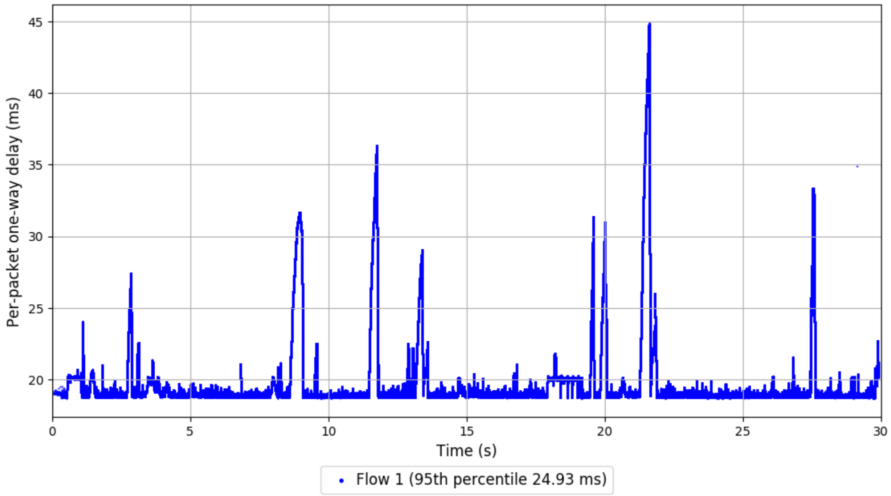




```
Run 6: Statistics of PCC

Start at: 2018-02-27 17:57:44
End at: 2018-02-27 17:58:14
Local clock offset: -0.181 ms
Remote clock offset: -6.375 ms

# Below is generated by plot.py at 2018-02-27 22:48:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 887.52 Mbit/s
95th percentile per-packet one-way delay: 24.925 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 887.52 Mbit/s
95th percentile per-packet one-way delay: 24.925 ms
Loss rate: 0.41%
```

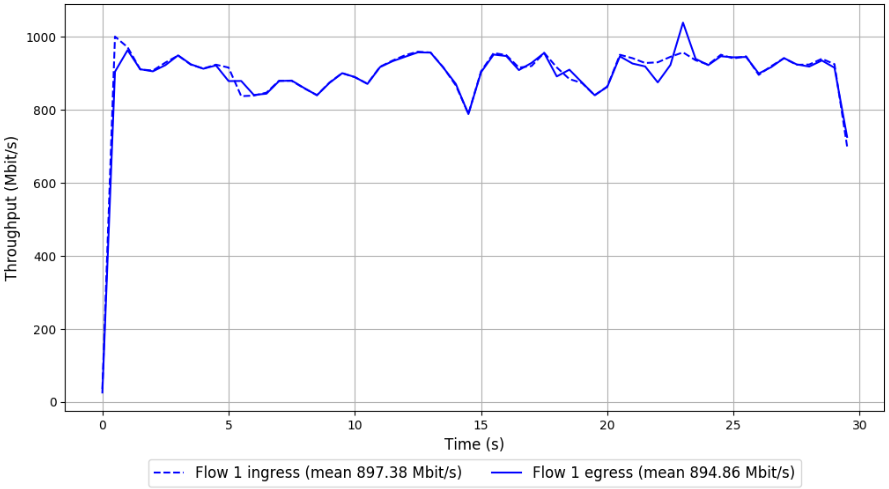
Run 6: Report of PCC — Data Link

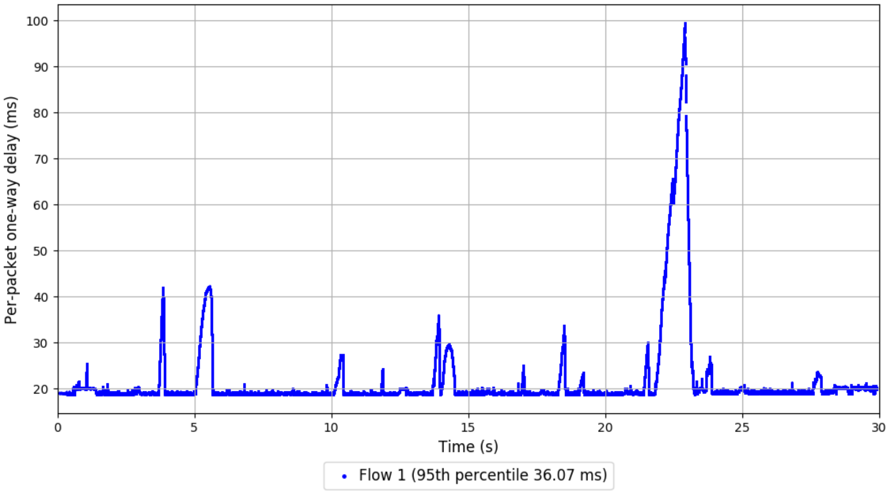




```
Run 7: Statistics of PCC

Start at: 2018-02-27 18:24:50
End at: 2018-02-27 18:25:20
Local clock offset: -1.077 ms
Remote clock offset: -6.377 ms

# Below is generated by plot.py at 2018-02-27 22:49:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 894.86 Mbit/s
95th percentile per-packet one-way delay: 36.070 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 894.86 Mbit/s
95th percentile per-packet one-way delay: 36.070 ms
Loss rate: 0.28%
```

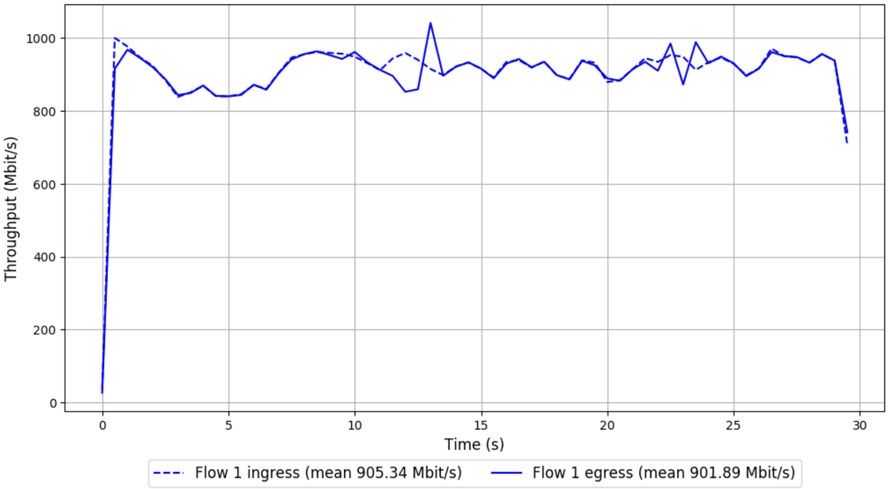
Run 7: Report of PCC — Data Link

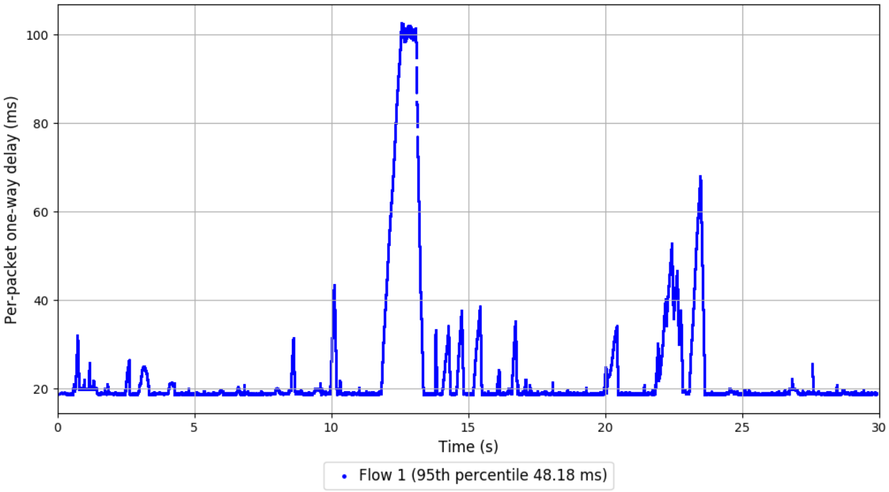




```
Run 8: Statistics of PCC

Start at: 2018-02-27 18:51:53
End at: 2018-02-27 18:52:23
Local clock offset: -0.899 ms
Remote clock offset: -5.373 ms

# Below is generated by plot.py at 2018-02-27 22:50:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 901.89 Mbit/s
95th percentile per-packet one-way delay: 48.180 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 901.89 Mbit/s
95th percentile per-packet one-way delay: 48.180 ms
Loss rate: 0.38%
```

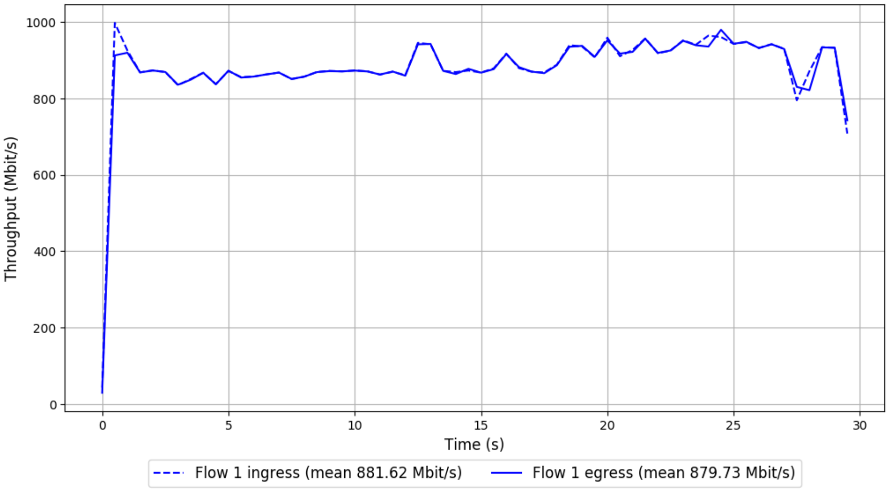
Run 8: Report of PCC — Data Link

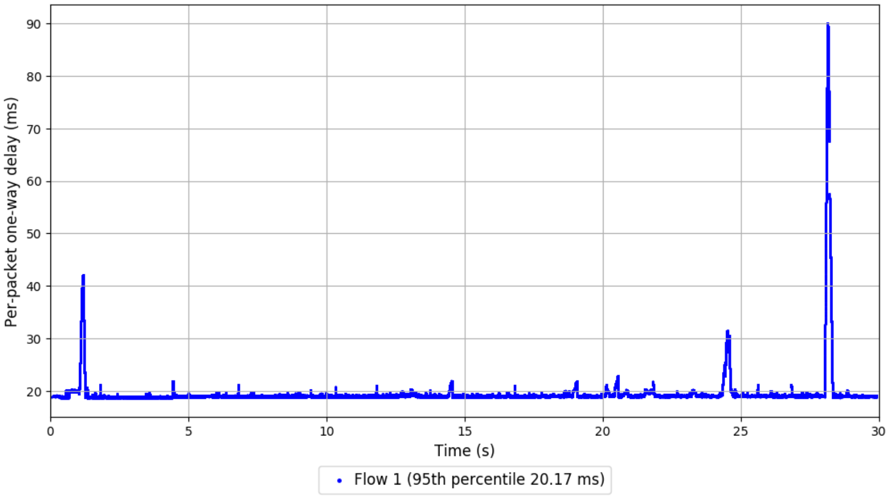




```
Run 9: Statistics of PCC

Start at: 2018-02-27 19:18:58
End at: 2018-02-27 19:19:28
Local clock offset: -0.363 ms
Remote clock offset: -5.122 ms

# Below is generated by plot.py at 2018-02-27 22:59:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 879.73 Mbit/s
95th percentile per-packet one-way delay: 20.173 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 879.73 Mbit/s
95th percentile per-packet one-way delay: 20.173 ms
Loss rate: 0.21%
```

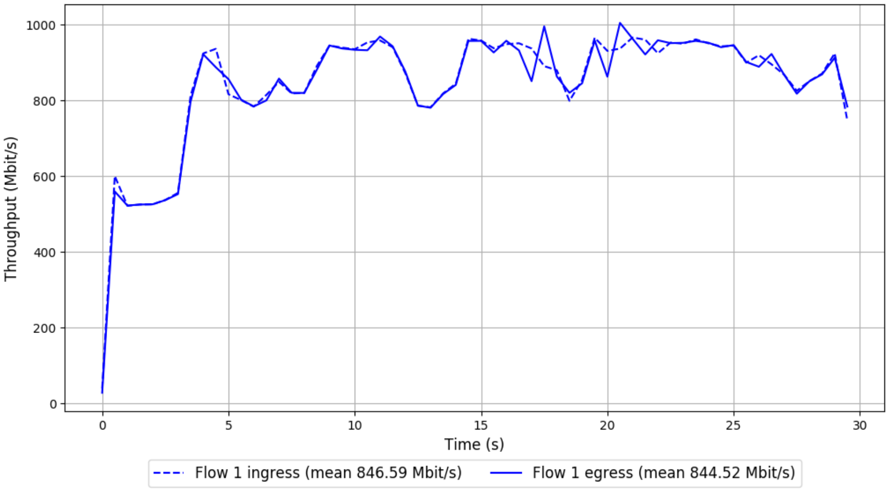
Run 9: Report of PCC — Data Link

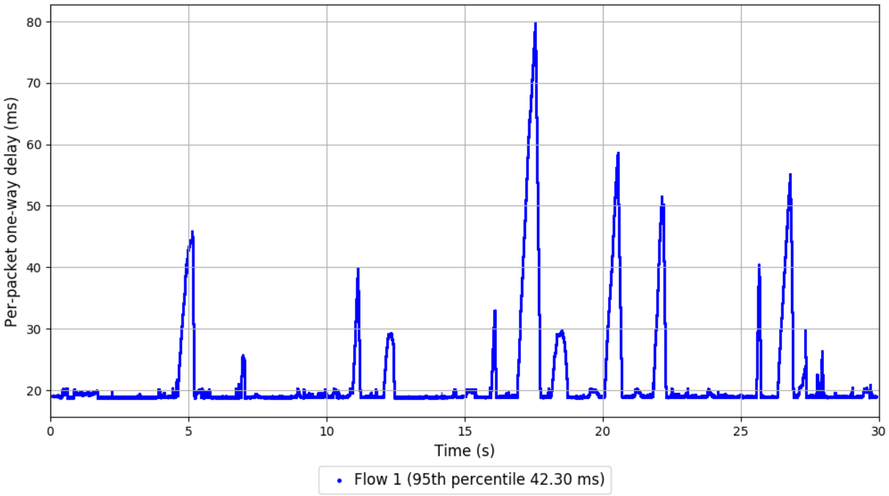




```
Run 10: Statistics of PCC

Start at: 2018-02-27 19:45:55
End at: 2018-02-27 19:46:25
Local clock offset: 0.598 ms
Remote clock offset: -6.361 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 844.52 Mbit/s
95th percentile per-packet one-way delay: 42.295 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 844.52 Mbit/s
95th percentile per-packet one-way delay: 42.295 ms
Loss rate: 0.24%
```

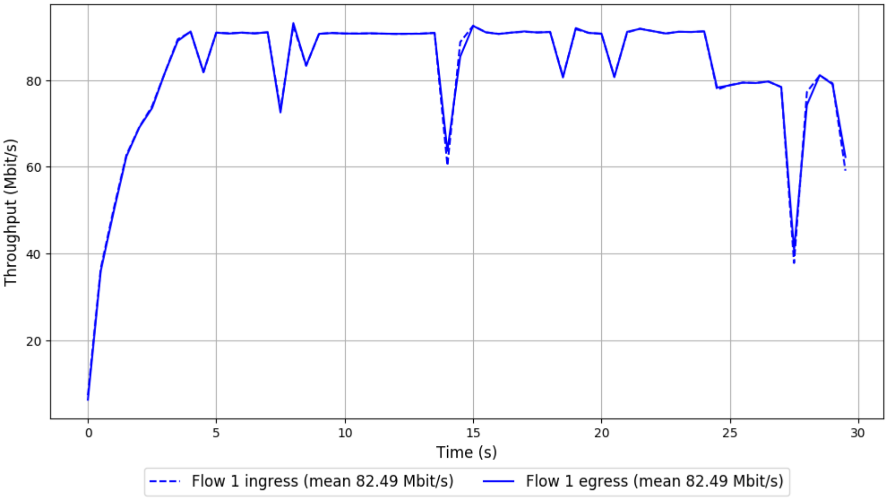
Run 10: Report of PCC — Data Link

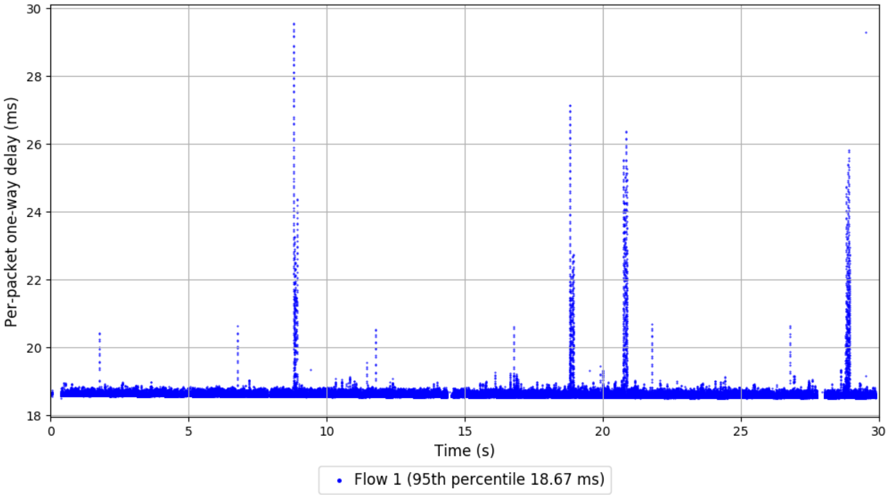




```
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-27 15:36:07
End at: 2018-02-27 15:36:37
Local clock offset: 0.84 ms
Remote clock offset: -5.719 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.49 Mbit/s
95th percentile per-packet one-way delay: 18.673 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 82.49 Mbit/s
95th percentile per-packet one-way delay: 18.673 ms
Loss rate: 0.00%
```

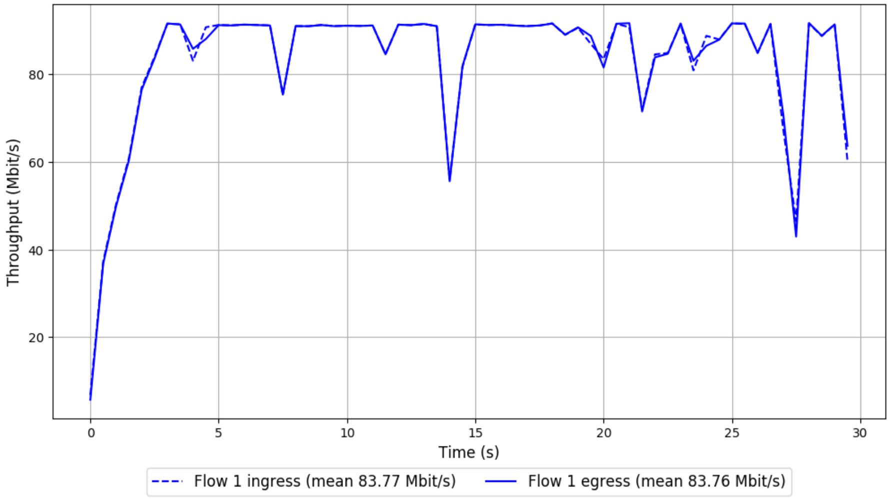
Run 1: Report of QUIC Cubic — Data Link

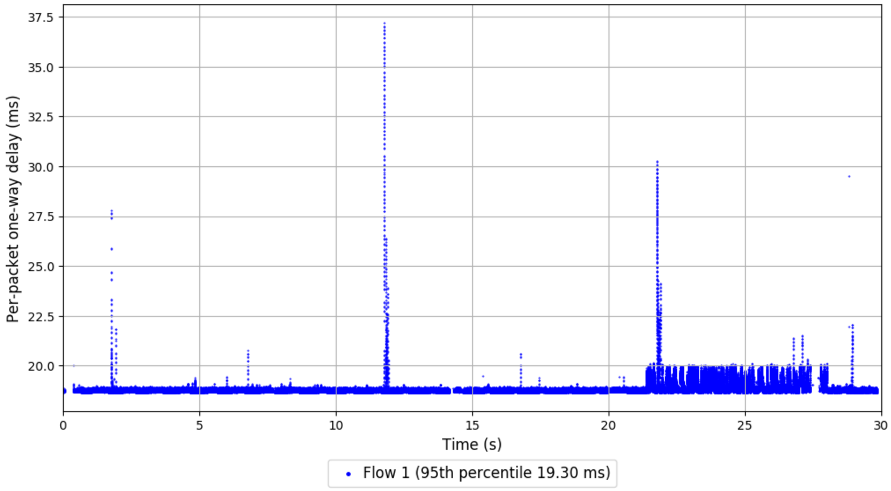




```
Run 2: Statistics of QUIC Cubic

Start at: 2018-02-27 16:03:14
End at: 2018-02-27 16:03:44
Local clock offset: 0.711 ms
Remote clock offset: -4.188 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.76 Mbit/s
95th percentile per-packet one-way delay: 19.303 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 83.76 Mbit/s
95th percentile per-packet one-way delay: 19.303 ms
Loss rate: 0.01%
```

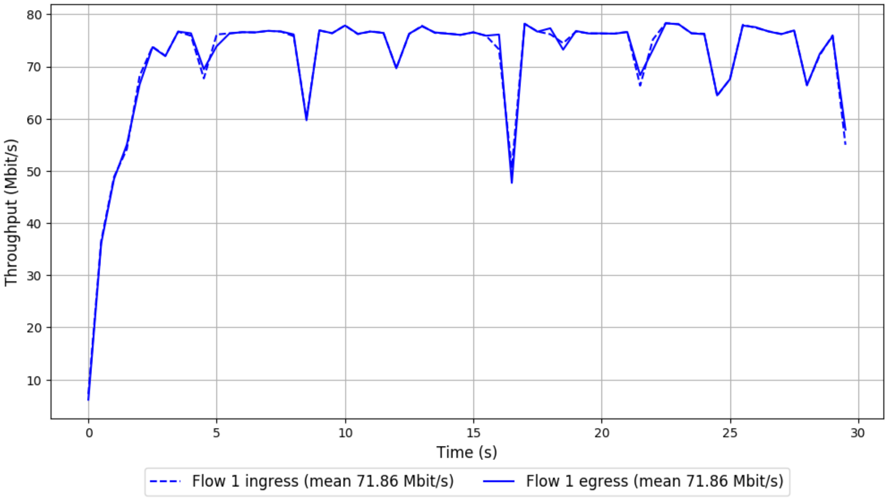
Run 2: Report of QUIC Cubic — Data Link

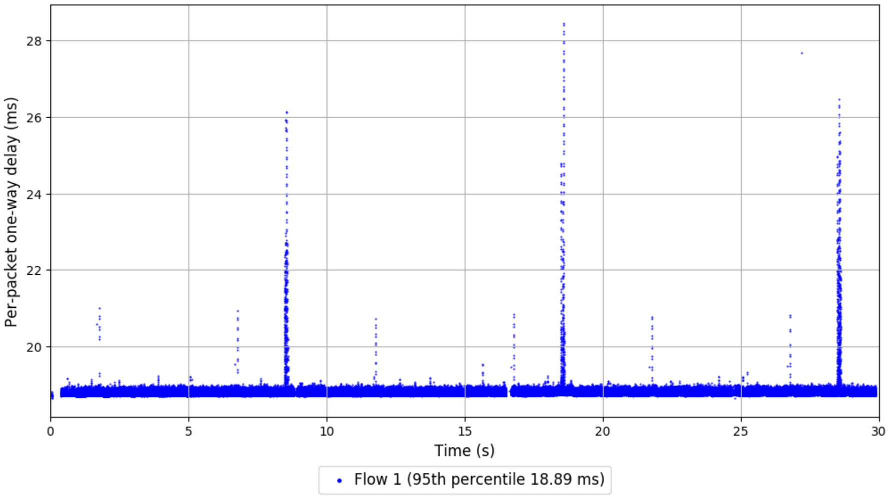




```
Run 3: Statistics of QUIC Cubic

Start at: 2018-02-27 16:30:26
End at: 2018-02-27 16:30:56
Local clock offset: 0.67 ms
Remote clock offset: -6.197 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.86 Mbit/s
95th percentile per-packet one-way delay: 18.893 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 71.86 Mbit/s
95th percentile per-packet one-way delay: 18.893 ms
Loss rate: 0.00%
```

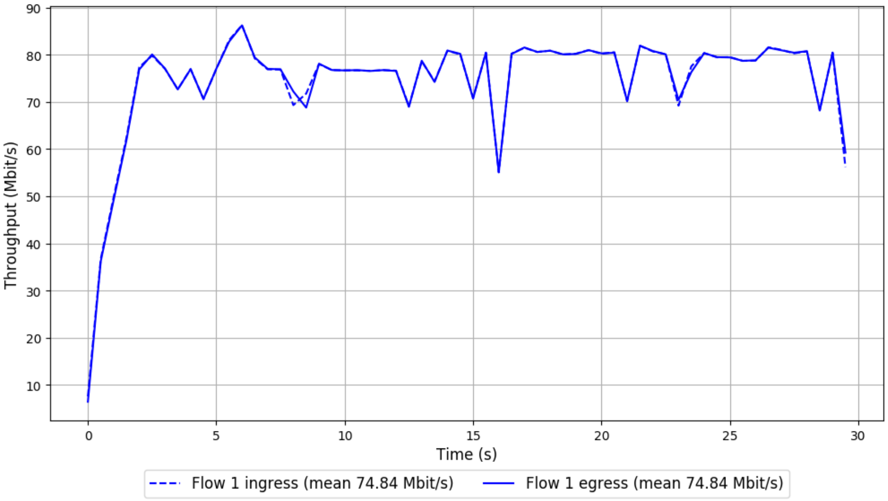
Run 3: Report of QUIC Cubic — Data Link

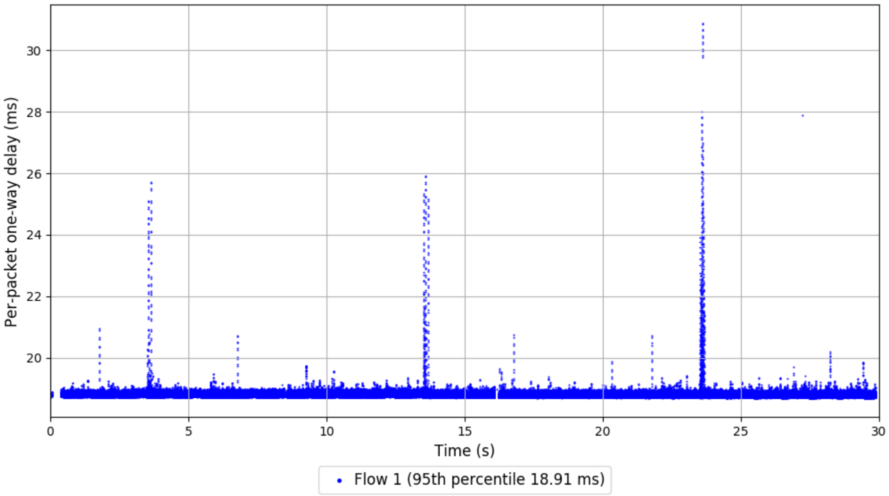




```
Run 4: Statistics of QUIC Cubic

Start at: 2018-02-27 16:57:31
End at: 2018-02-27 16:58:01
Local clock offset: 0.595 ms
Remote clock offset: -5.183 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.84 Mbit/s
95th percentile per-packet one-way delay: 18.906 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 74.84 Mbit/s
95th percentile per-packet one-way delay: 18.906 ms
Loss rate: 0.00%
```

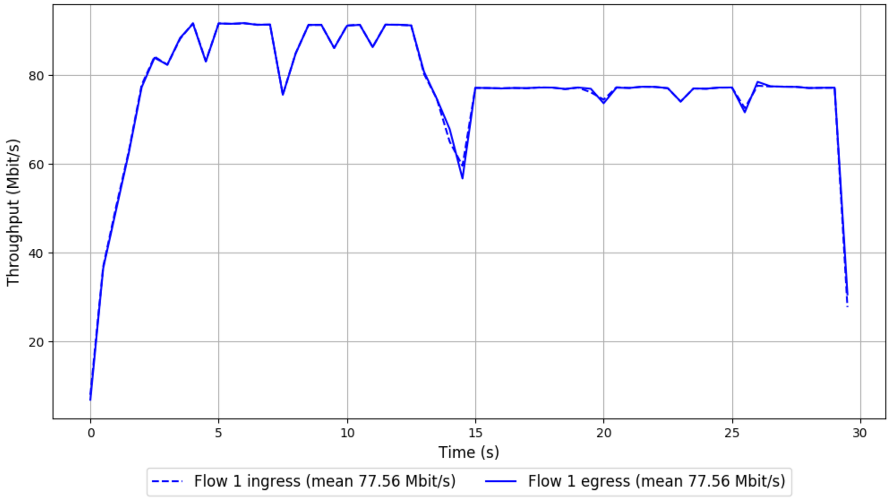
Run 4: Report of QUIC Cubic — Data Link

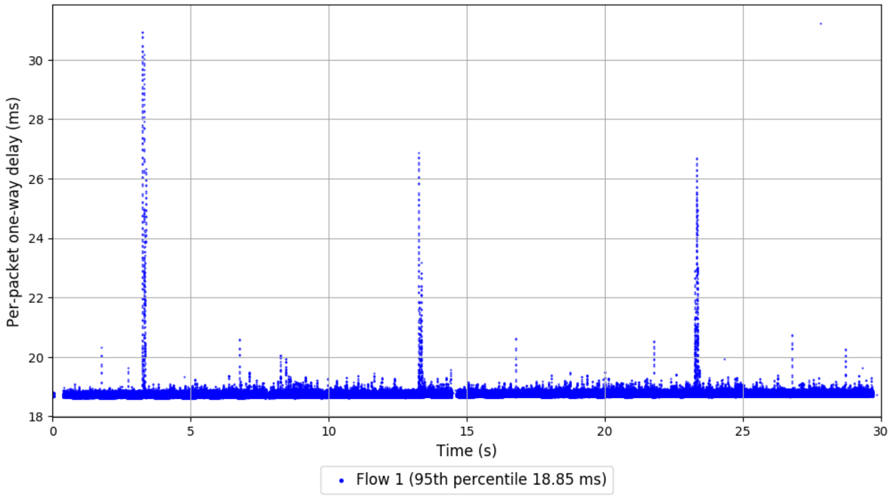




```
Run 5: Statistics of QUIC Cubic

Start at: 2018-02-27 17:24:51
End at: 2018-02-27 17:25:21
Local clock offset: 0.566 ms
Remote clock offset: -5.53 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.56 Mbit/s
95th percentile per-packet one-way delay: 18.854 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 77.56 Mbit/s
95th percentile per-packet one-way delay: 18.854 ms
Loss rate: 0.00%
```

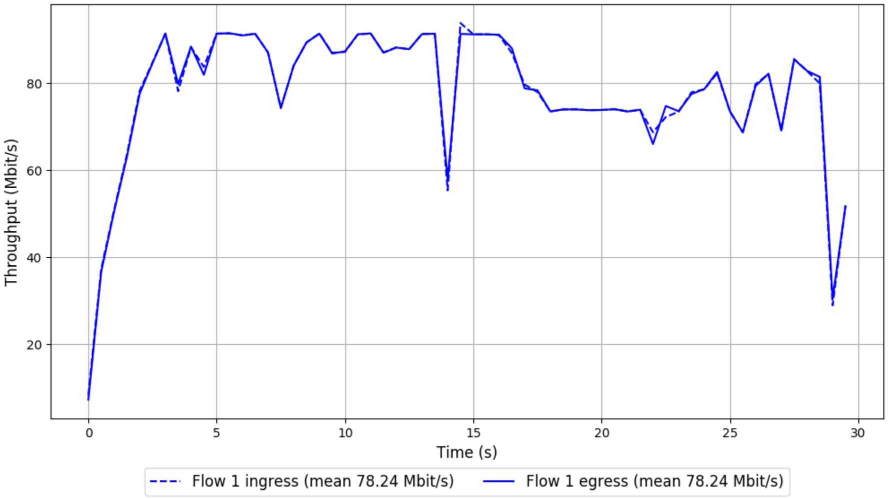
Run 5: Report of QUIC Cubic — Data Link

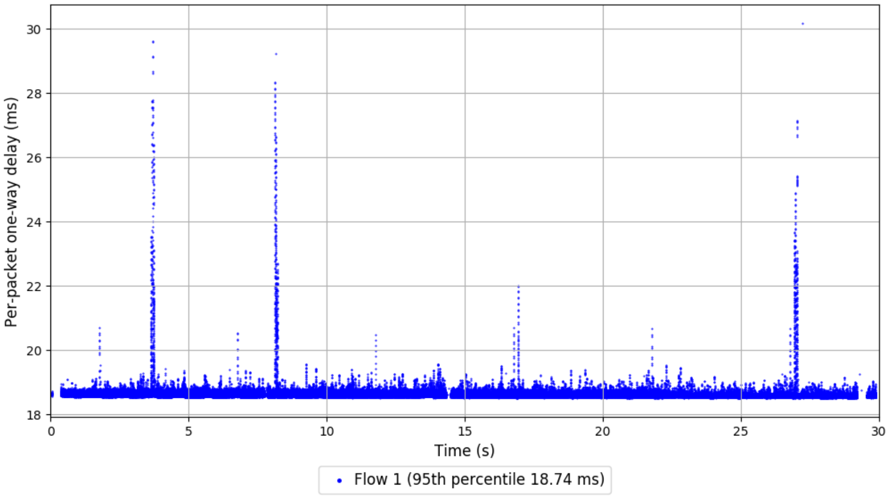




```
Run 6: Statistics of QUIC Cubic

Start at: 2018-02-27 17:51:57
End at: 2018-02-27 17:52:27
Local clock offset: 0.359 ms
Remote clock offset: -6.483 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.24 Mbit/s
95th percentile per-packet one-way delay: 18.740 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 78.24 Mbit/s
95th percentile per-packet one-way delay: 18.740 ms
Loss rate: 0.01%
```

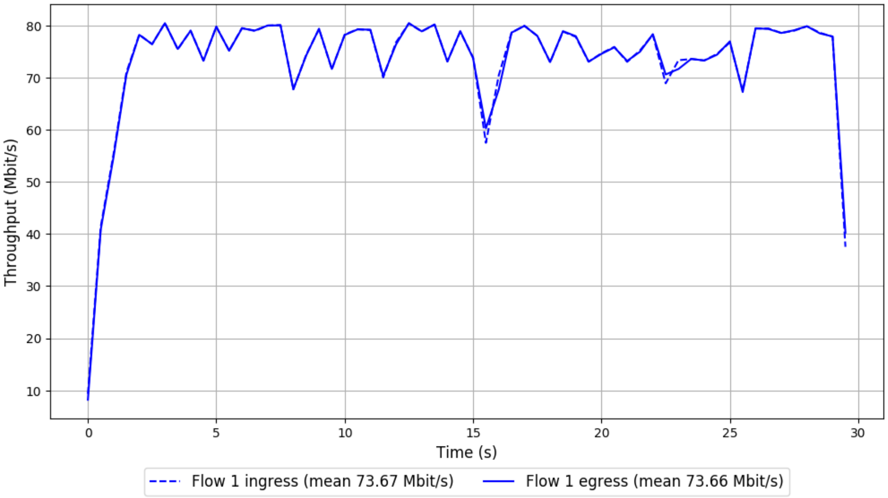
Run 6: Report of QUIC Cubic — Data Link

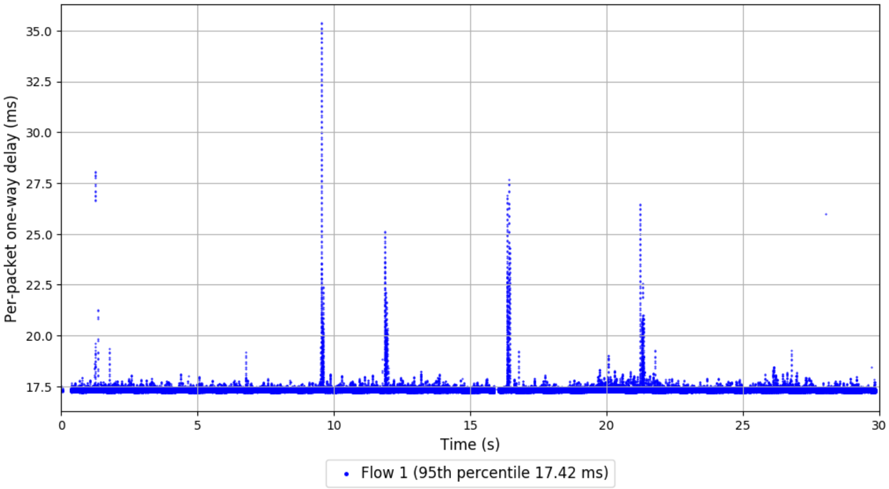




```
Run 7: Statistics of QUIC Cubic

Start at: 2018-02-27 18:19:02
End at: 2018-02-27 18:19:32
Local clock offset: -0.928 ms
Remote clock offset: -6.367 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.66 Mbit/s
95th percentile per-packet one-way delay: 17.418 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 73.66 Mbit/s
95th percentile per-packet one-way delay: 17.418 ms
Loss rate: 0.01%
```

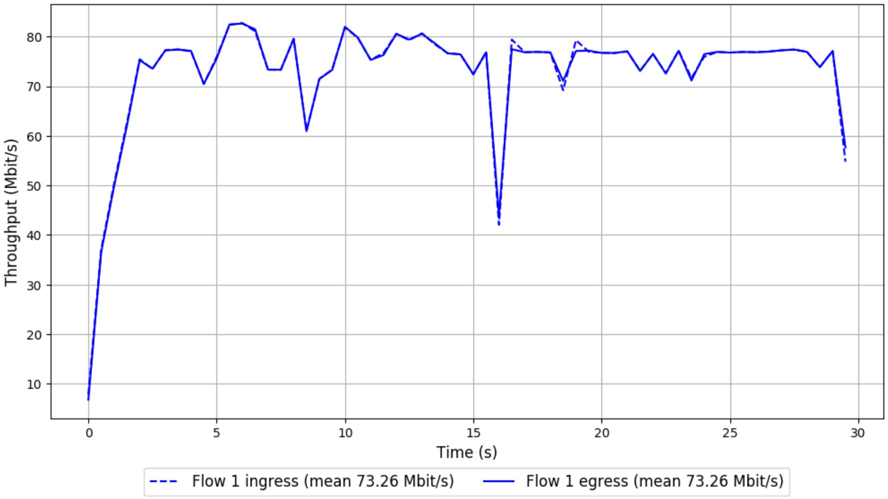
Run 7: Report of QUIC Cubic — Data Link

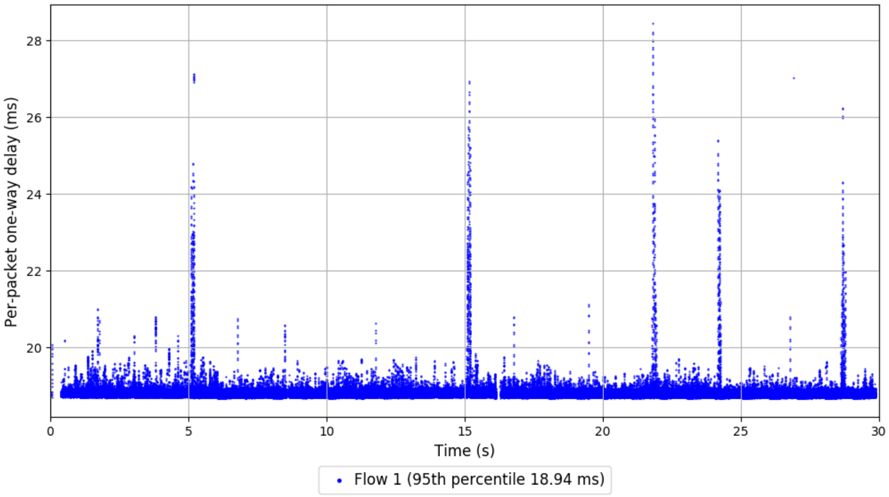




```
Run 8: Statistics of QUIC Cubic

Start at: 2018-02-27 18:46:08
End at: 2018-02-27 18:46:38
Local clock offset: -0.755 ms
Remote clock offset: -5.356 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.26 Mbit/s
95th percentile per-packet one-way delay: 18.941 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 73.26 Mbit/s
95th percentile per-packet one-way delay: 18.941 ms
Loss rate: 0.00%
```

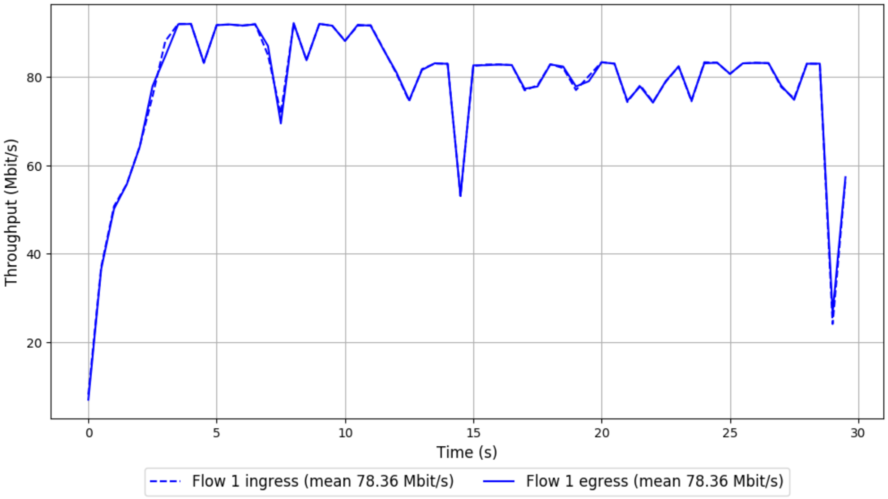
Run 8: Report of QUIC Cubic — Data Link

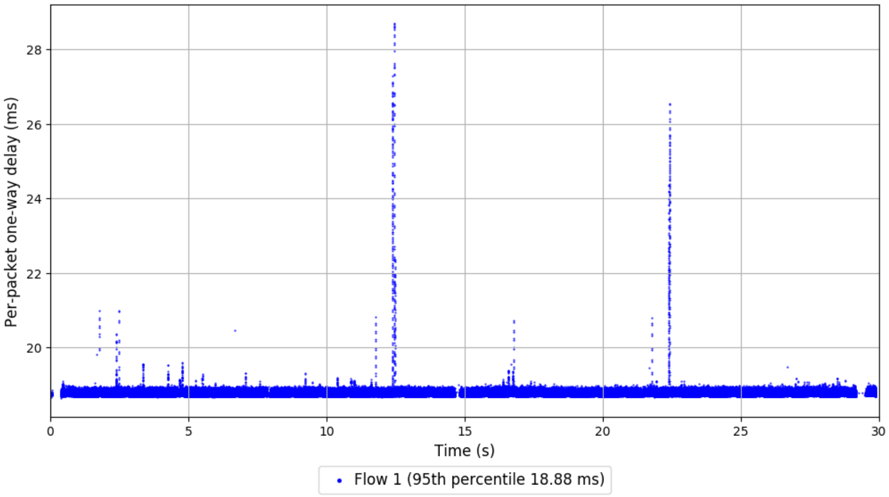




```
Run 9: Statistics of QUIC Cubic

Start at: 2018-02-27 19:13:10
End at: 2018-02-27 19:13:40
Local clock offset: -0.518 ms
Remote clock offset: -5.203 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.36 Mbit/s
95th percentile per-packet one-way delay: 18.875 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 78.36 Mbit/s
95th percentile per-packet one-way delay: 18.875 ms
Loss rate: 0.01%
```

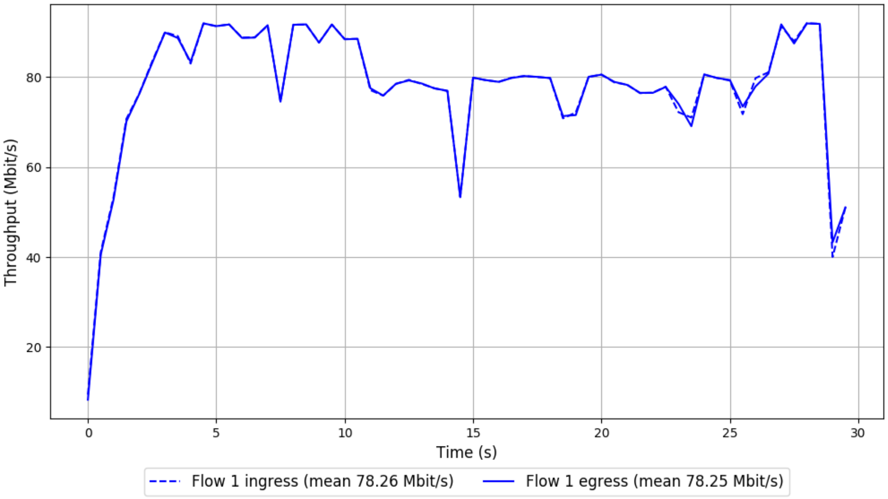
Run 9: Report of QUIC Cubic — Data Link

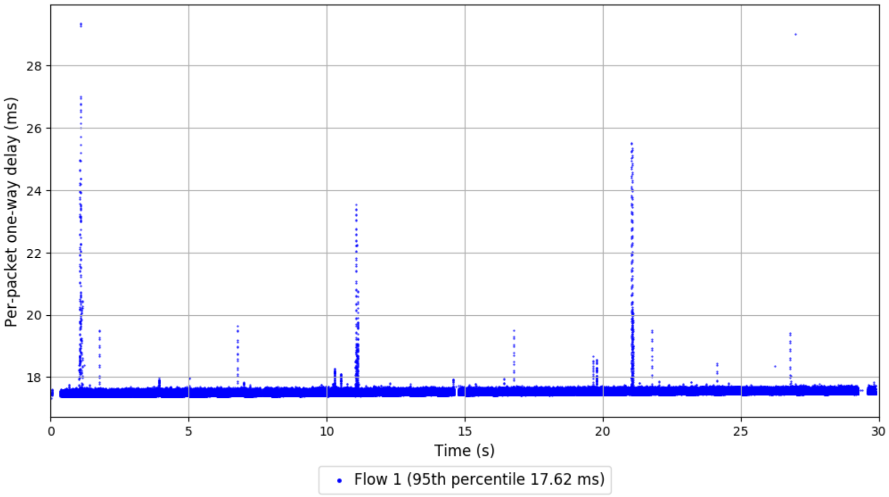




```
Run 10: Statistics of QUIC Cubic

Start at: 2018-02-27 19:40:11
End at: 2018-02-27 19:40:41
Local clock offset: 0.252 ms
Remote clock offset: -5.811 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.25 Mbit/s
95th percentile per-packet one-way delay: 17.616 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 78.25 Mbit/s
95th percentile per-packet one-way delay: 17.616 ms
Loss rate: 0.01%
```

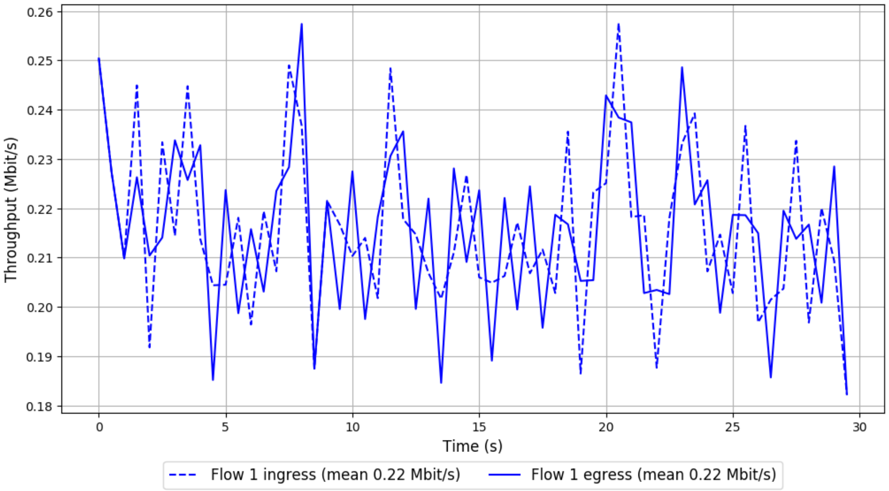
Run 10: Report of QUIC Cubic — Data Link

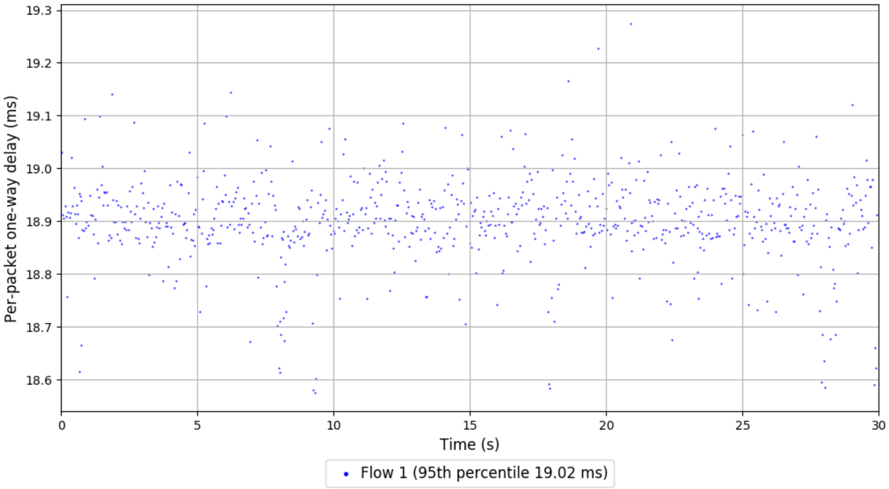




```
Run 1: Statistics of SCReAM

Start at: 2018-02-27 16:00:28
End at: 2018-02-27 16:00:58
Local clock offset: 0.728 ms
Remote clock offset: -4.311 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.021 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.021 ms
Loss rate: 0.00%
```

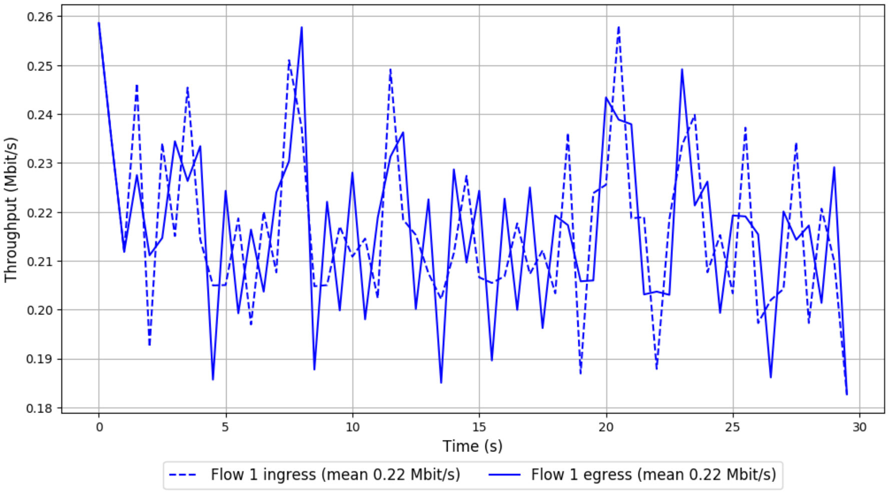
Run 1: Report of SCReAM — Data Link

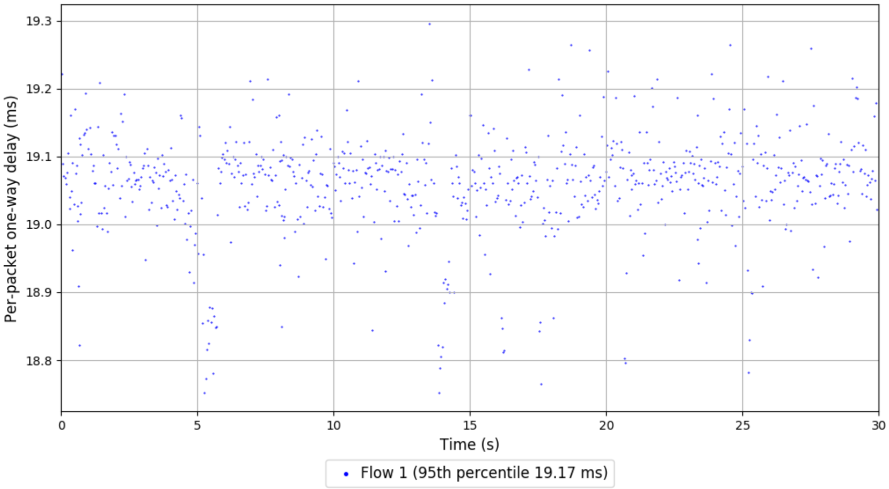




```
Run 2: Statistics of SCReAM

Start at: 2018-02-27 16:27:40
End at: 2018-02-27 16:28:10
Local clock offset: 0.665 ms
Remote clock offset: -6.114 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.169 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.169 ms
Loss rate: 0.00%
```

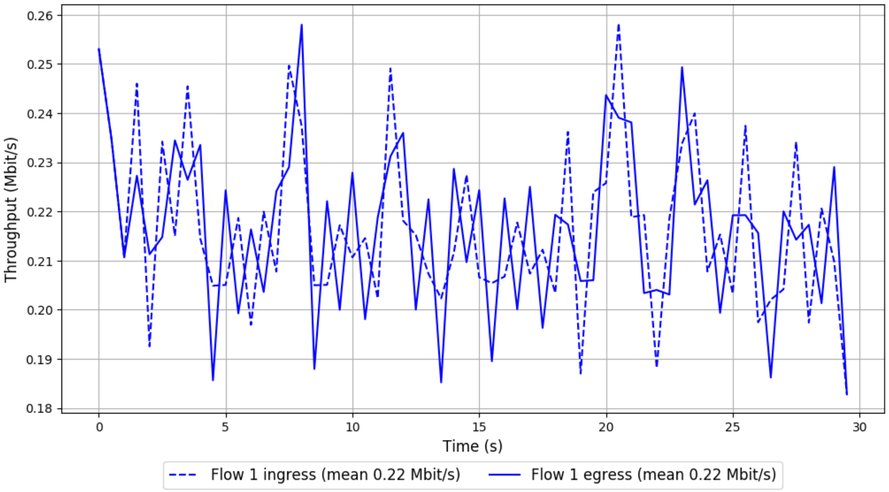
Run 2: Report of SCReAM — Data Link

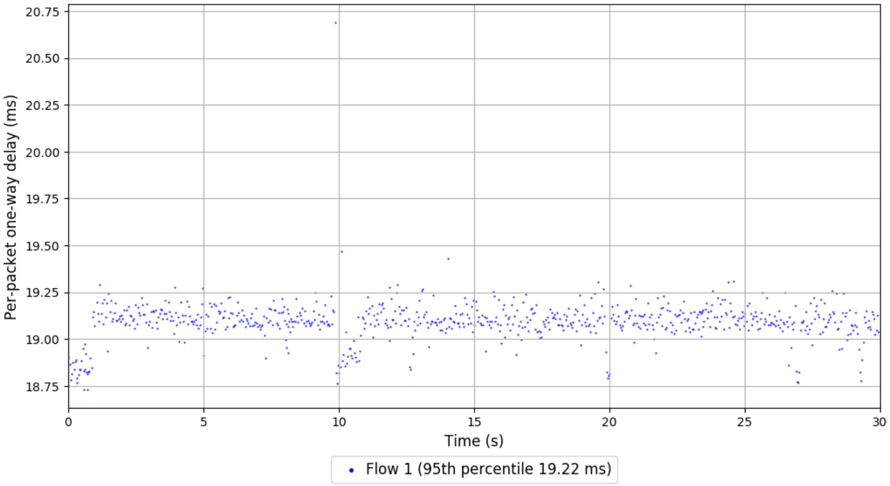




```
Run 3: Statistics of SCReAM

Start at: 2018-02-27 16:54:45
End at: 2018-02-27 16:55:15
Local clock offset: 0.601 ms
Remote clock offset: -5.318 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.220 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.220 ms
Loss rate: 0.00%
```

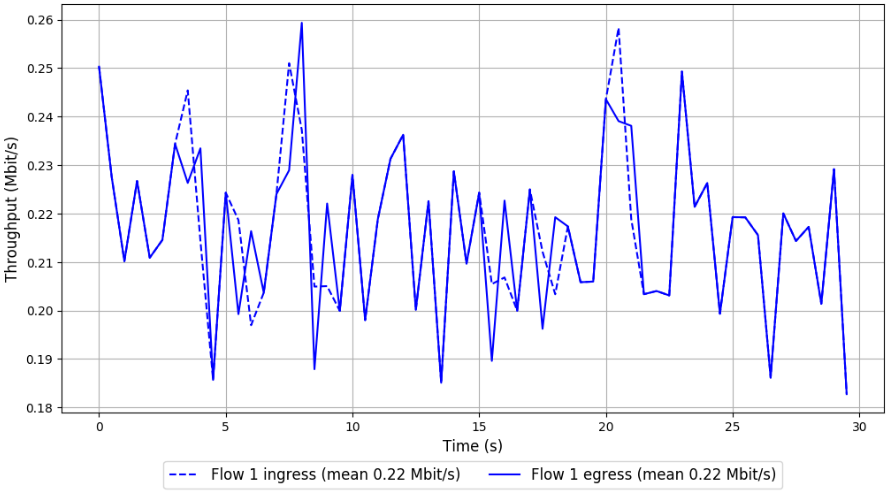
Run 3: Report of SCReAM — Data Link

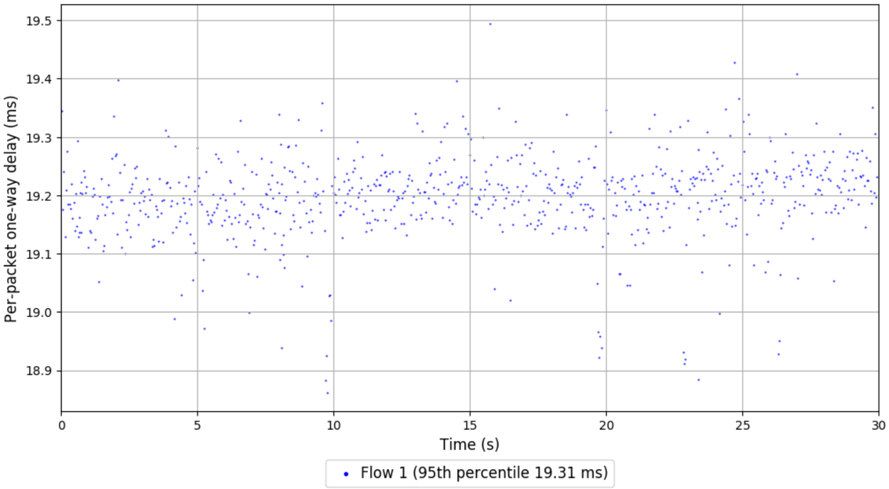




```
Run 4: Statistics of SCReAM

Start at: 2018-02-27 17:22:05
End at: 2018-02-27 17:22:35
Local clock offset: 0.479 ms
Remote clock offset: -5.129 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.306 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.306 ms
Loss rate: 0.00%
```

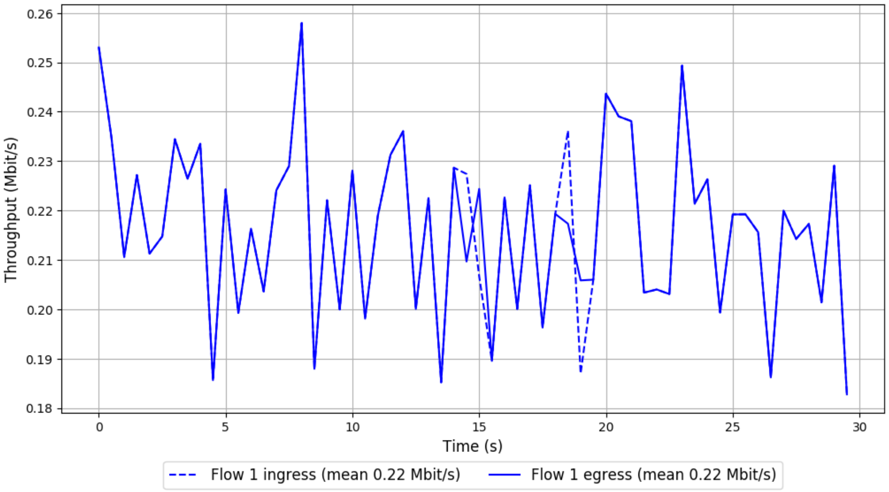
Run 4: Report of SCReAM — Data Link

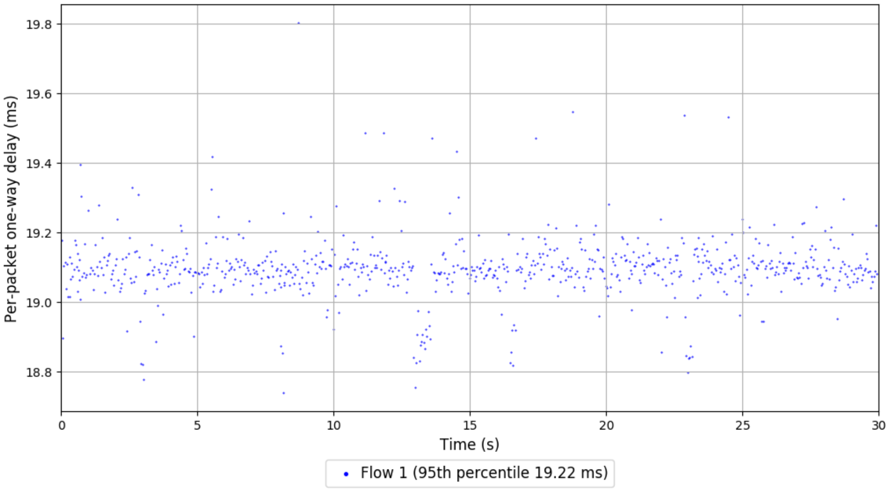




```
Run 5: Statistics of SCReAM

Start at: 2018-02-27 17:49:11
End at: 2018-02-27 17:49:41
Local clock offset: 0.34 ms
Remote clock offset: -6.437 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.220 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.220 ms
Loss rate: 0.00%
```

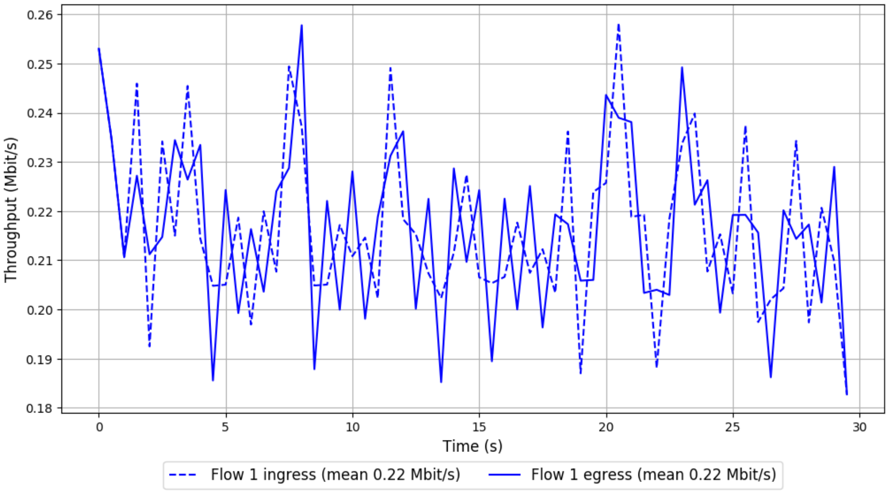
Run 5: Report of SCReAM — Data Link

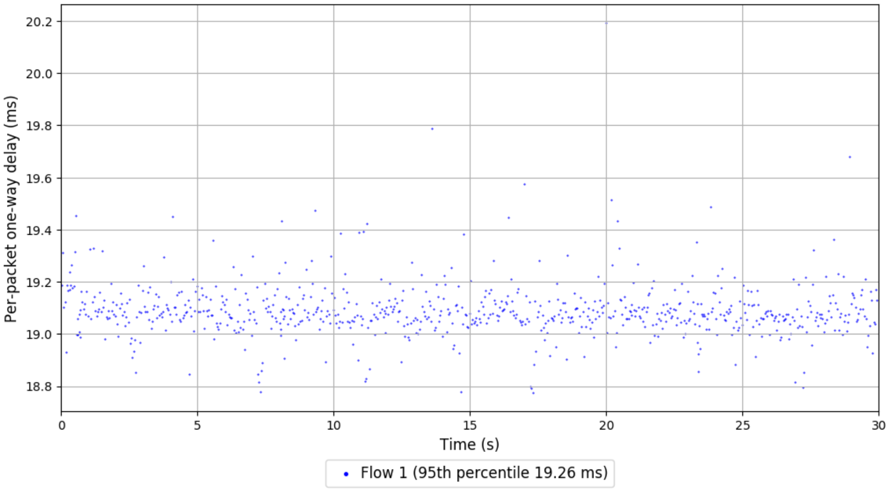




```
Run 6: Statistics of SCReAM

Start at: 2018-02-27 18:16:16
End at: 2018-02-27 18:16:46
Local clock offset: -0.856 ms
Remote clock offset: -6.306 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.264 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.264 ms
Loss rate: 0.00%
```

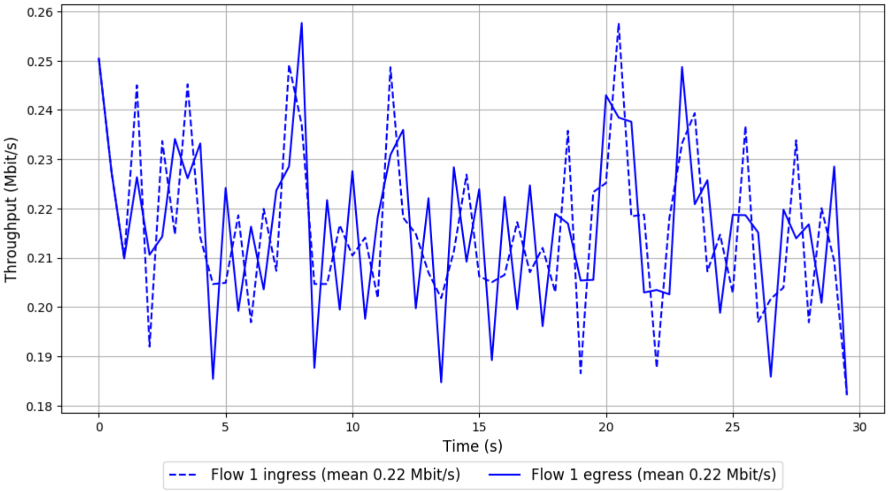
Run 6: Report of SCReAM — Data Link

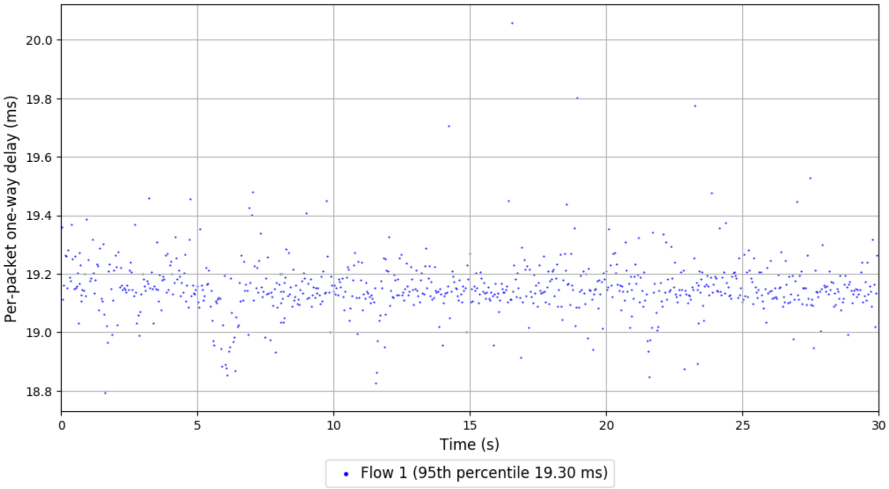




```
Run 7: Statistics of SCReAM

Start at: 2018-02-27 18:43:22
End at: 2018-02-27 18:43:52
Local clock offset: -0.834 ms
Remote clock offset: -5.425 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.299 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.299 ms
Loss rate: 0.00%
```

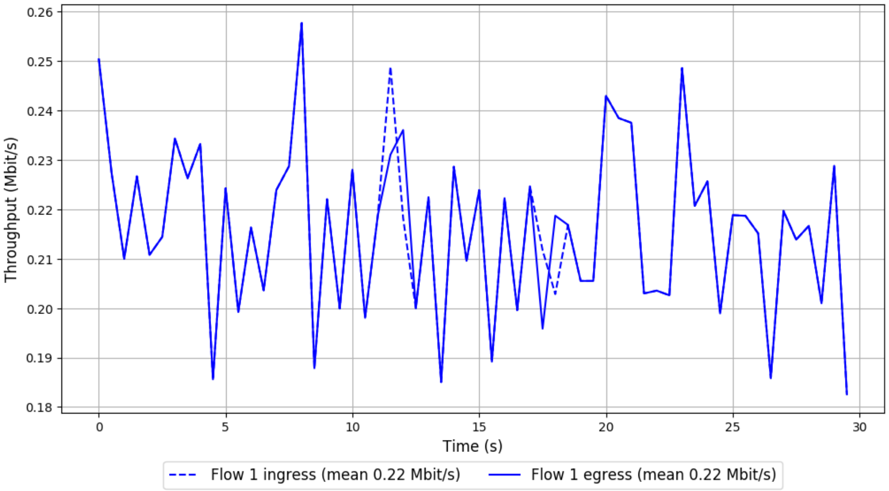
Run 7: Report of SCReAM — Data Link

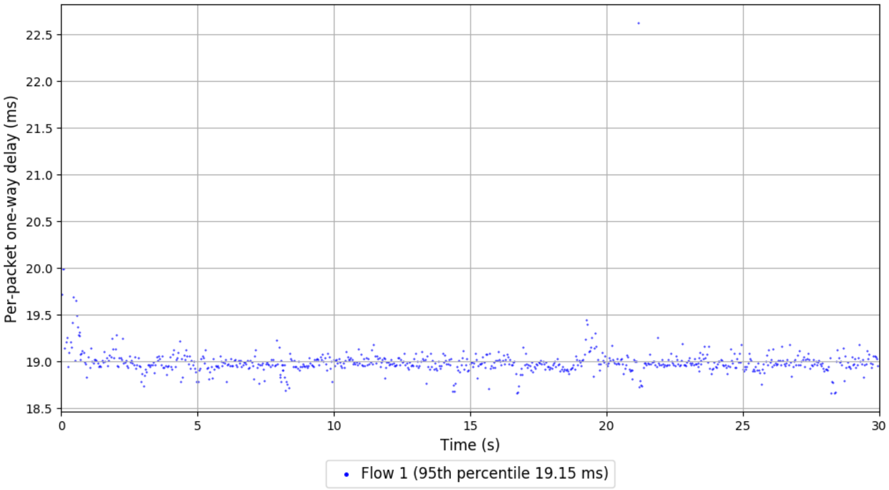




```
Run 8: Statistics of SCReAM

Start at: 2018-02-27 19:10:24
End at: 2018-02-27 19:10:54
Local clock offset: -0.51 ms
Remote clock offset: -5.213 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.148 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.148 ms
Loss rate: 0.00%
```

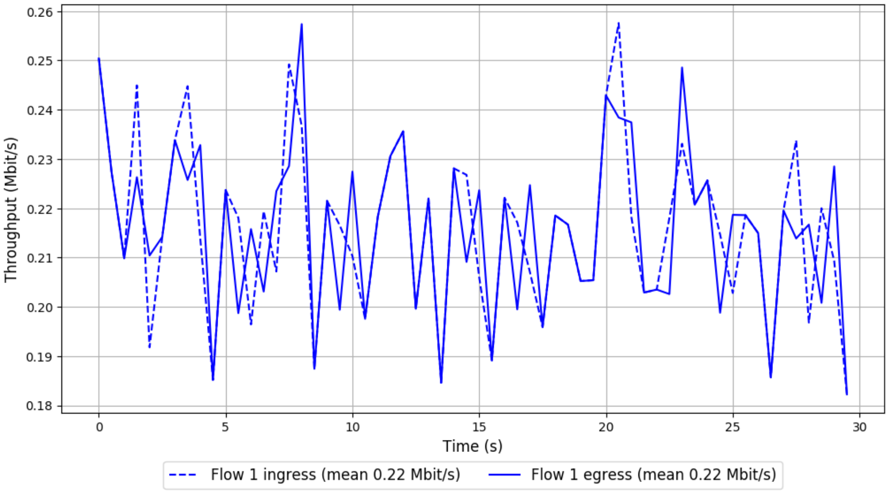
Run 8: Report of SCReAM — Data Link

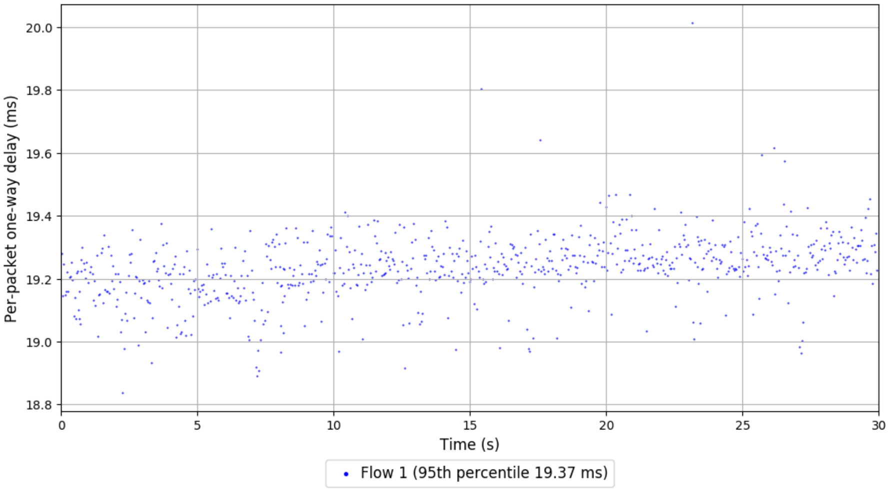




```
Run 9: Statistics of SCReAM

Start at: 2018-02-27 19:37:25
End at: 2018-02-27 19:37:55
Local clock offset: -0.02 ms
Remote clock offset: -5.484 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.373 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.373 ms
Loss rate: 0.00%
```

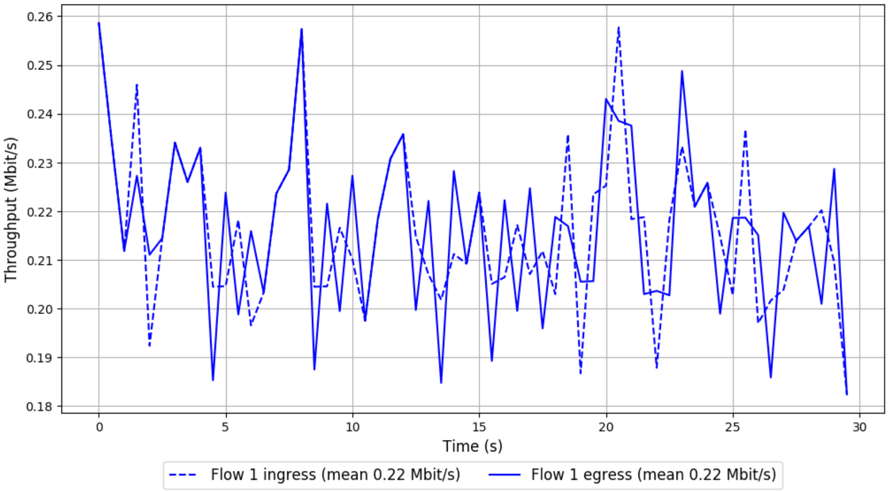
Run 9: Report of SCReAM — Data Link

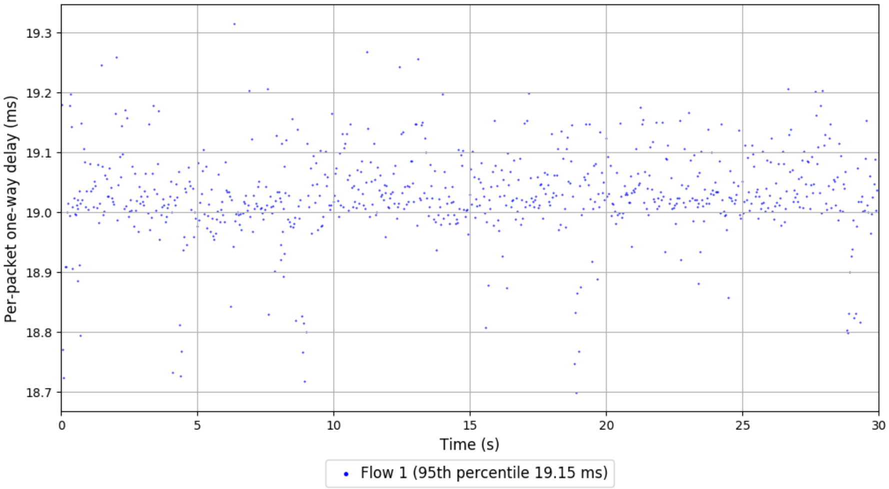




```
Run 10: Statistics of SCReAM

Start at: 2018-02-27 20:04:23
End at: 2018-02-27 20:04:53
Local clock offset: 1.112 ms
Remote clock offset: -7.161 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.147 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.147 ms
Loss rate: 0.00%
```

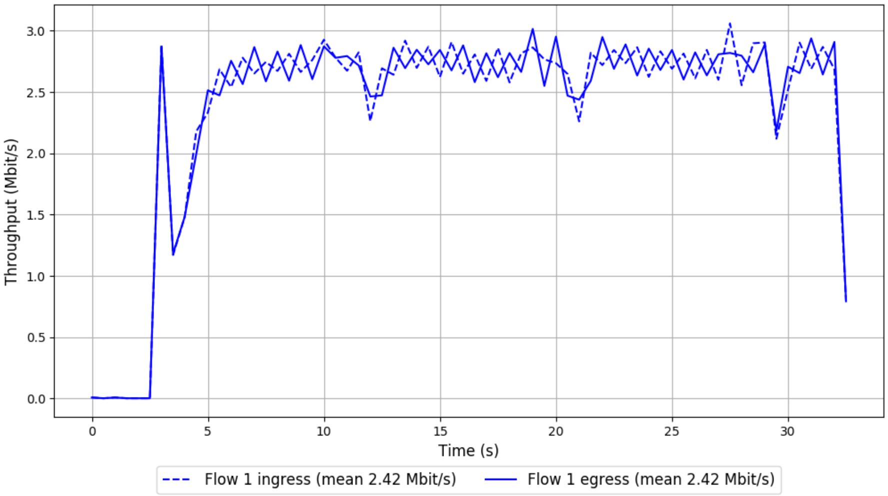
Run 10: Report of SCReAM — Data Link

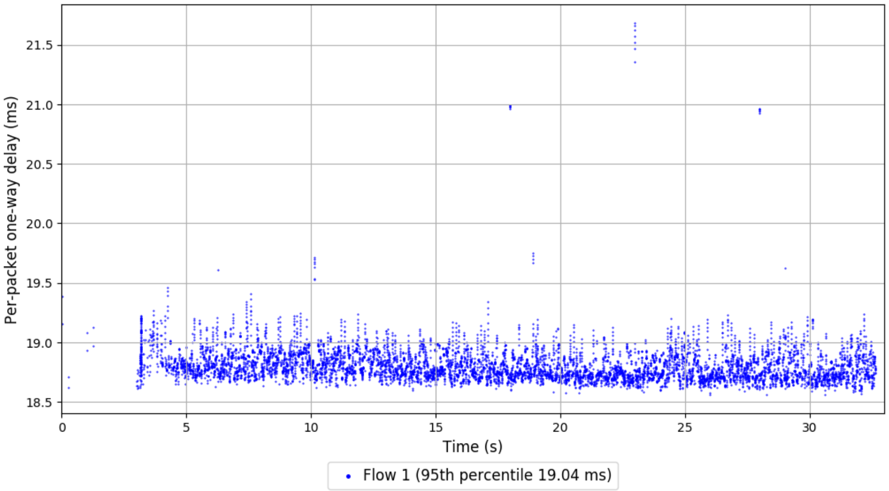




```
Run 1: Statistics of WebRTC media

Start at: 2018-02-27 15:37:28
End at: 2018-02-27 15:37:59
Local clock offset: 0.752 ms
Remote clock offset: -5.55 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 19.044 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 19.044 ms
Loss rate: 0.00%
```

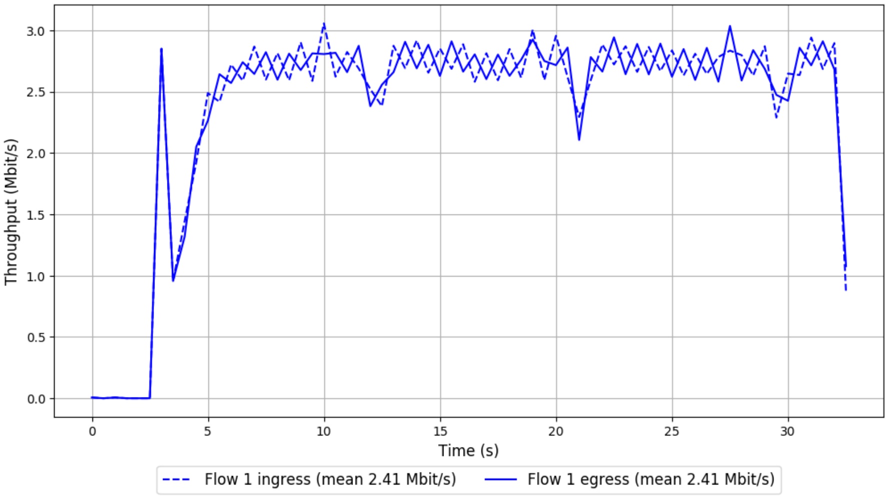
Run 1: Report of WebRTC media — Data Link

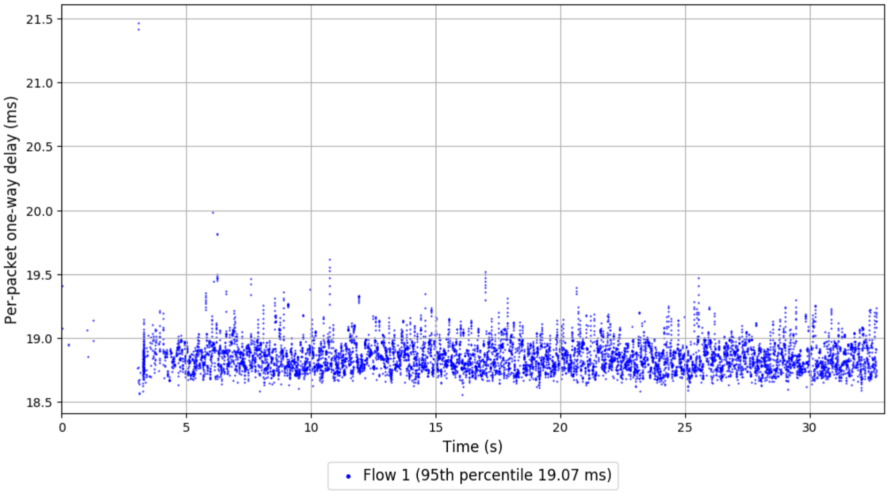




```
Run 2: Statistics of WebRTC media

Start at: 2018-02-27 16:04:35
End at: 2018-02-27 16:05:05
Local clock offset: 0.709 ms
Remote clock offset: -4.153 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 19.075 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 19.075 ms
Loss rate: 0.00%
```

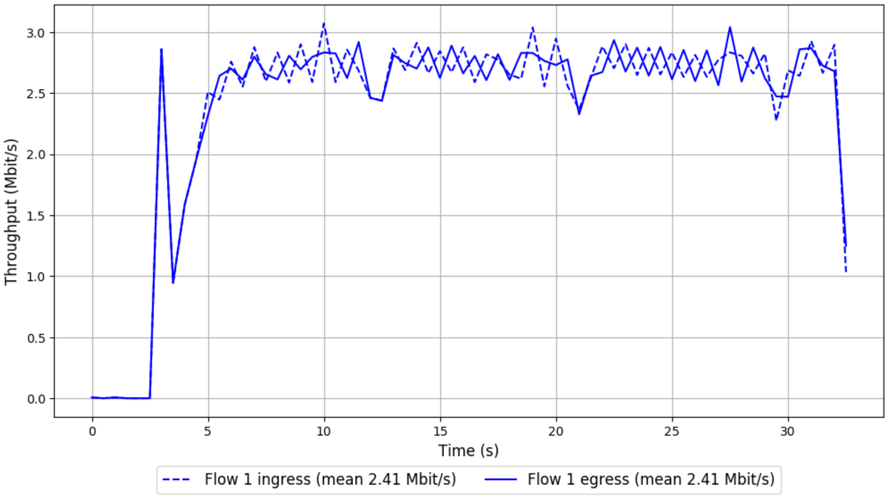
Run 2: Report of WebRTC media — Data Link

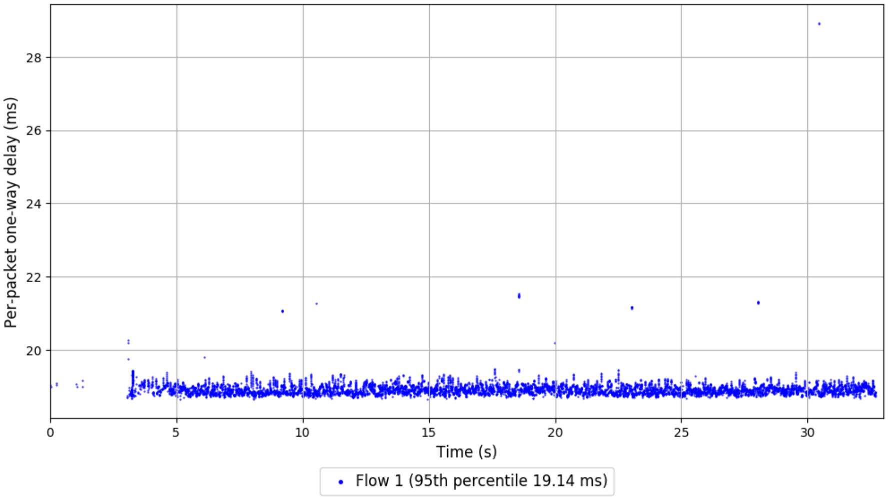




```
Run 3: Statistics of WebRTC media

Start at: 2018-02-27 16:31:47
End at: 2018-02-27 16:32:17
Local clock offset: 0.656 ms
Remote clock offset: -6.247 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 19.142 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 19.142 ms
Loss rate: 0.01%
```

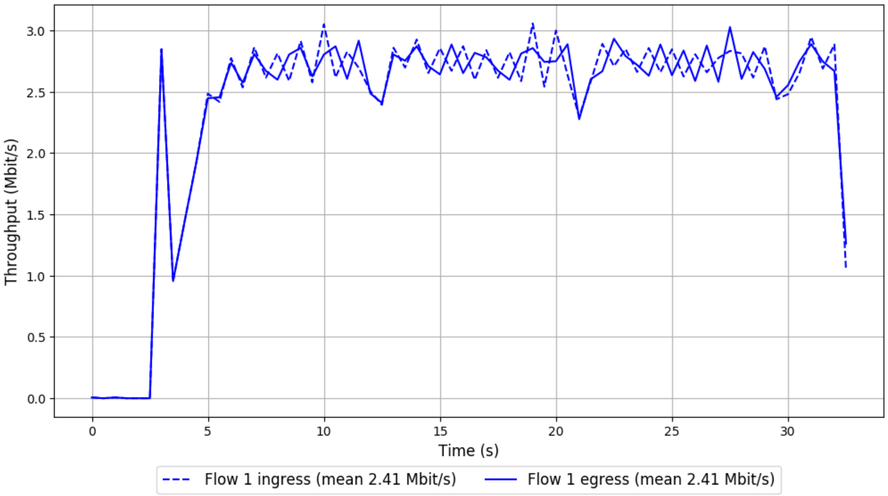
Run 3: Report of WebRTC media — Data Link

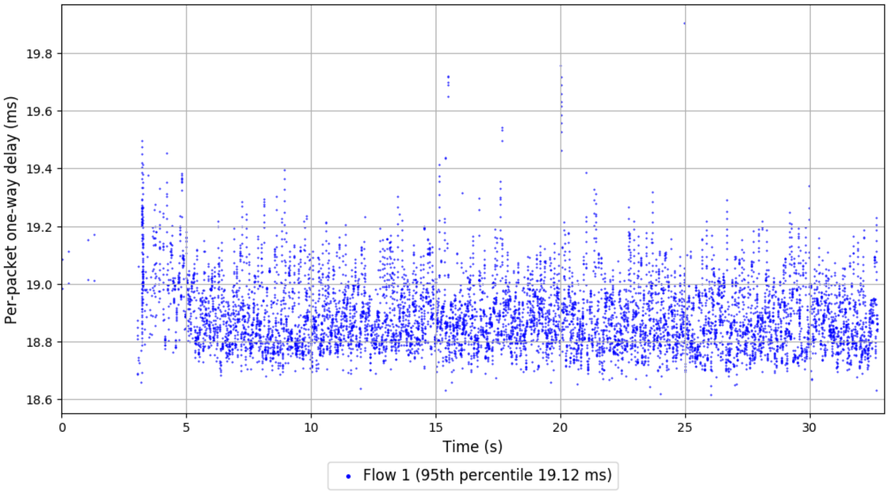




```
Run 4: Statistics of WebRTC media

Start at: 2018-02-27 16:58:52
End at: 2018-02-27 16:59:22
Local clock offset: 0.561 ms
Remote clock offset: -5.175 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 19.118 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 19.118 ms
Loss rate: 0.00%
```

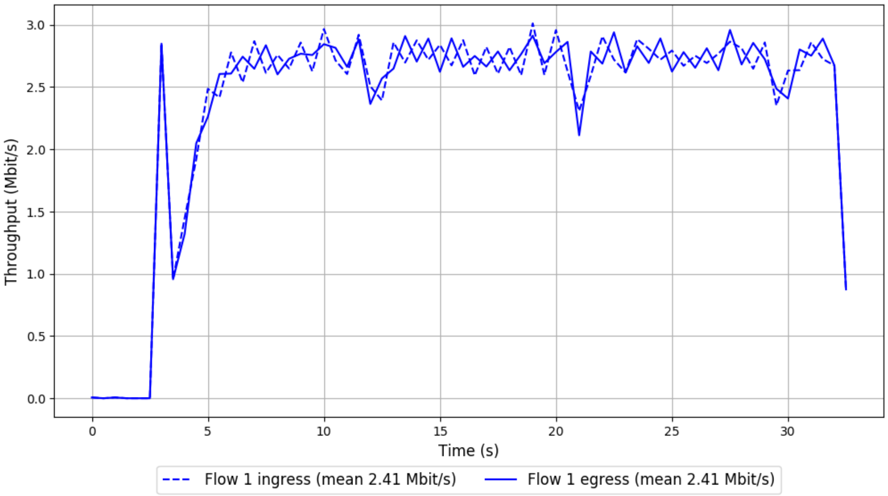
Run 4: Report of WebRTC media — Data Link

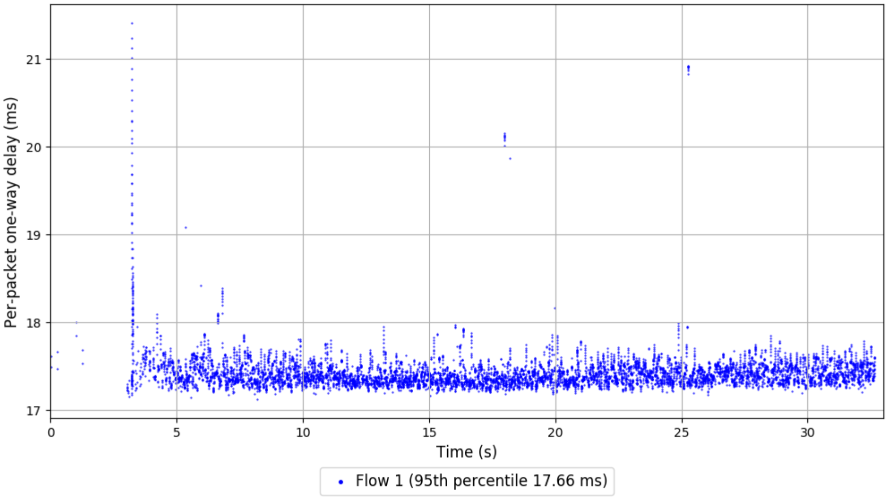




```
Run 5: Statistics of WebRTC media

Start at: 2018-02-27 17:26:12
End at: 2018-02-27 17:26:42
Local clock offset: 0.543 ms
Remote clock offset: -5.676 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 17.659 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 17.659 ms
Loss rate: 0.00%
```

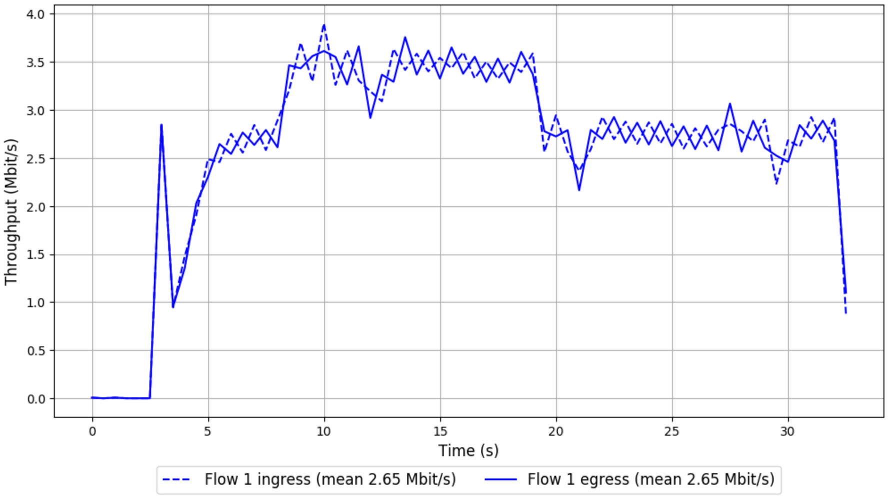
Run 5: Report of WebRTC media — Data Link

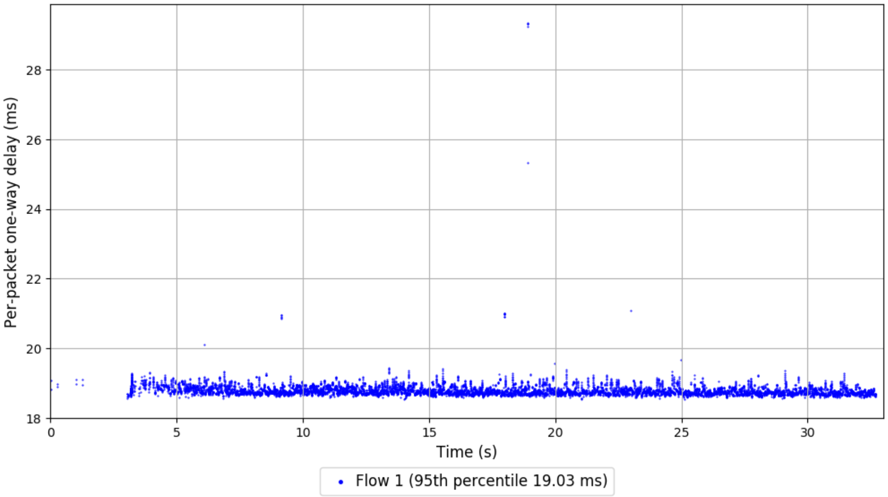




```
Run 6: Statistics of WebRTC media

Start at: 2018-02-27 17:53:18
End at: 2018-02-27 17:53:48
Local clock offset: 0.244 ms
Remote clock offset: -6.396 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.65 Mbit/s
95th percentile per-packet one-way delay: 19.033 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.65 Mbit/s
95th percentile per-packet one-way delay: 19.033 ms
Loss rate: 0.01%
```

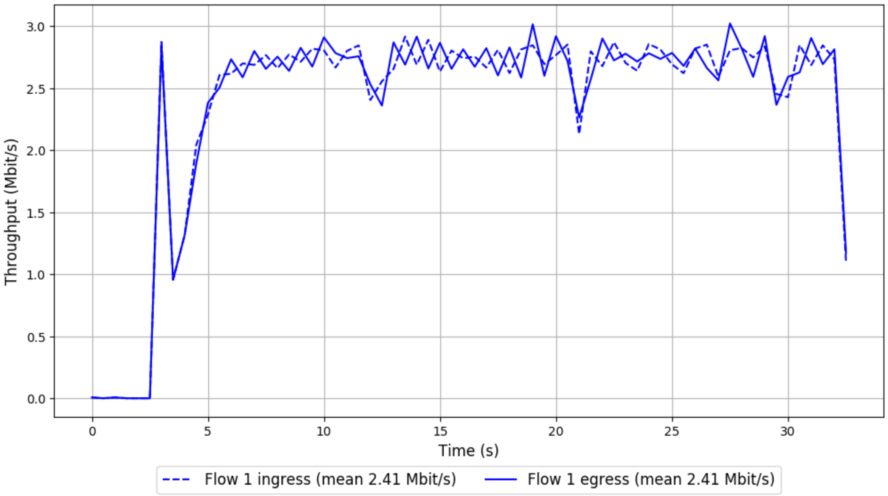
Run 6: Report of WebRTC media — Data Link

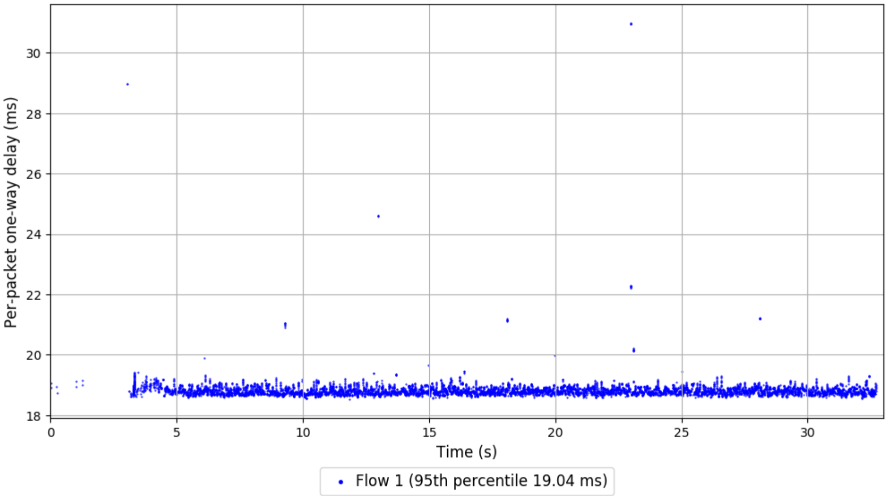




```
Run 7: Statistics of WebRTC media

Start at: 2018-02-27 18:20:23
End at: 2018-02-27 18:20:53
Local clock offset: -0.975 ms
Remote clock offset: -6.451 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 19.036 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 19.036 ms
Loss rate: 0.02%
```

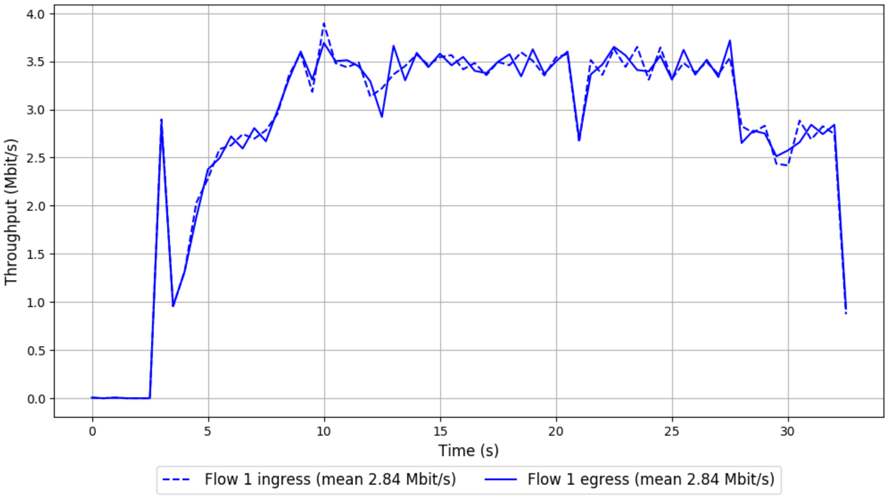
Run 7: Report of WebRTC media — Data Link

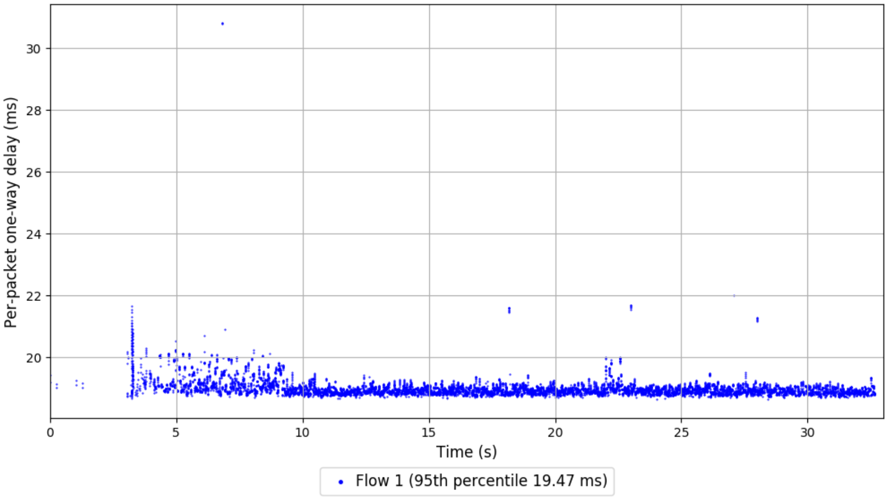




```
Run 8: Statistics of WebRTC media

Start at: 2018-02-27 18:47:29
End at: 2018-02-27 18:47:59
Local clock offset: -0.853 ms
Remote clock offset: -5.378 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.84 Mbit/s
95th percentile per-packet one-way delay: 19.470 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 2.84 Mbit/s
95th percentile per-packet one-way delay: 19.470 ms
Loss rate: 0.06%
```

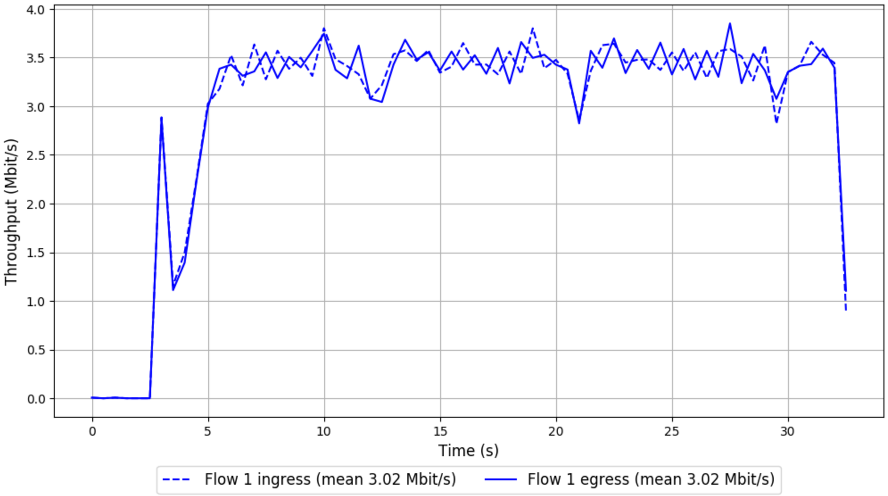
Run 8: Report of WebRTC media — Data Link

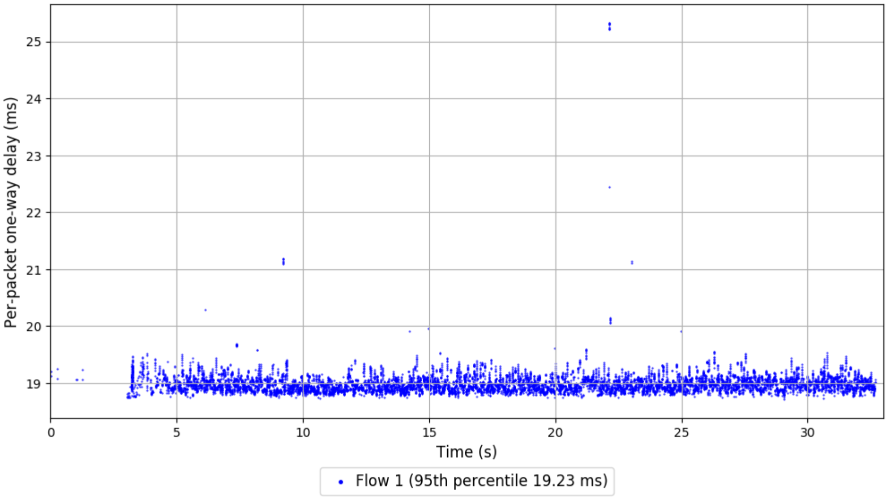




```
Run 9: Statistics of WebRTC media

Start at: 2018-02-27 19:14:31
End at: 2018-02-27 19:15:01
Local clock offset: -0.523 ms
Remote clock offset: -5.113 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.02 Mbit/s
95th percentile per-packet one-way delay: 19.234 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 3.02 Mbit/s
95th percentile per-packet one-way delay: 19.234 ms
Loss rate: 0.01%
```

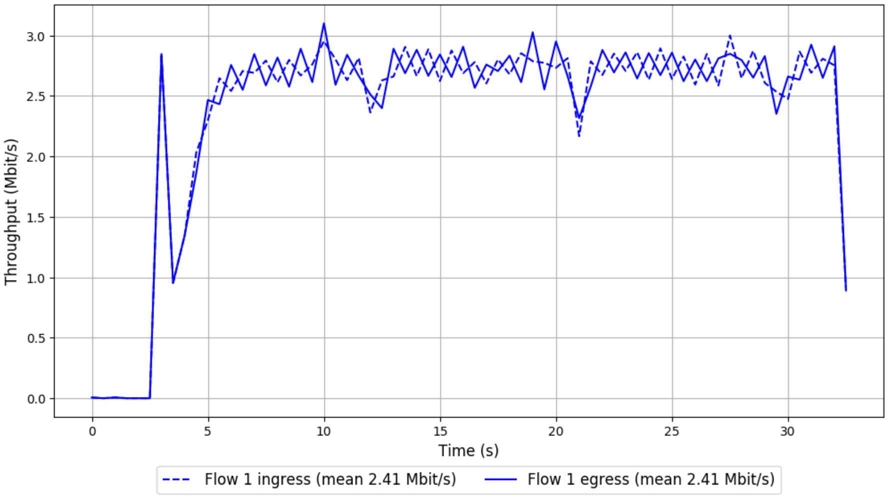
Run 9: Report of WebRTC media — Data Link

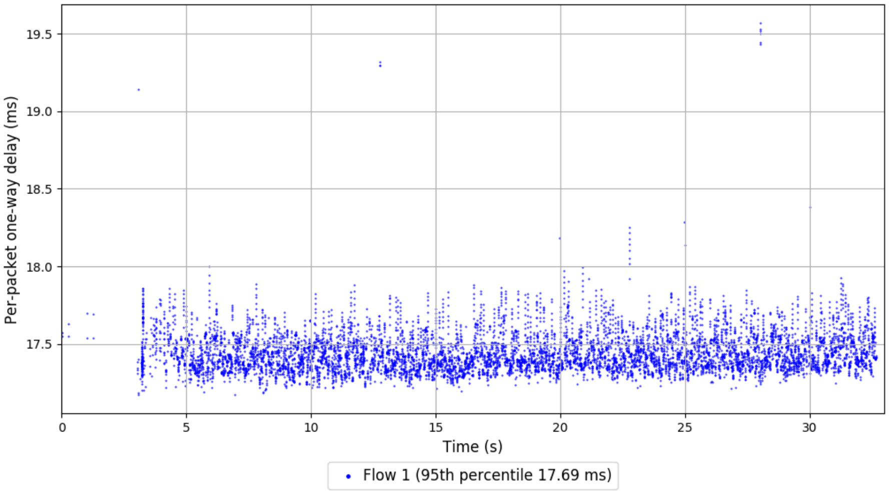




```
Run 10: Statistics of WebRTC media

Start at: 2018-02-27 19:41:32
End at: 2018-02-27 19:42:02
Local clock offset: 0.372 ms
Remote clock offset: -6.107 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 17.692 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 17.692 ms
Loss rate: 0.00%
```

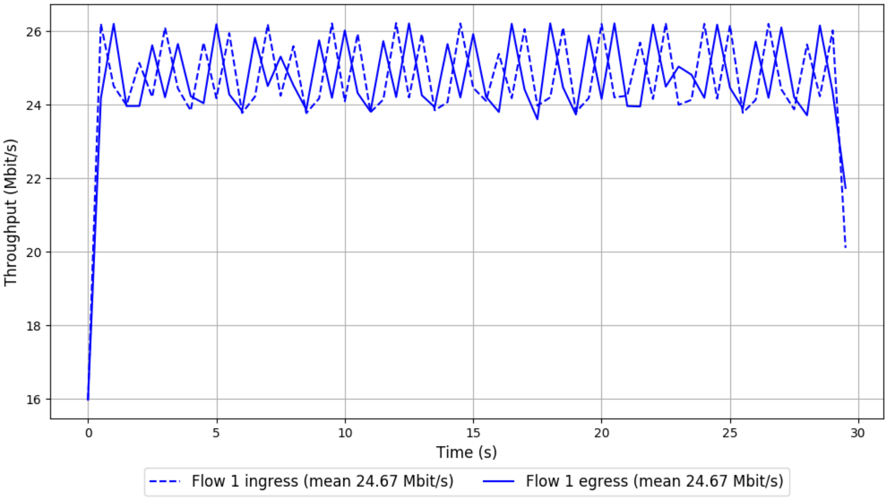
Run 10: Report of WebRTC media — Data Link

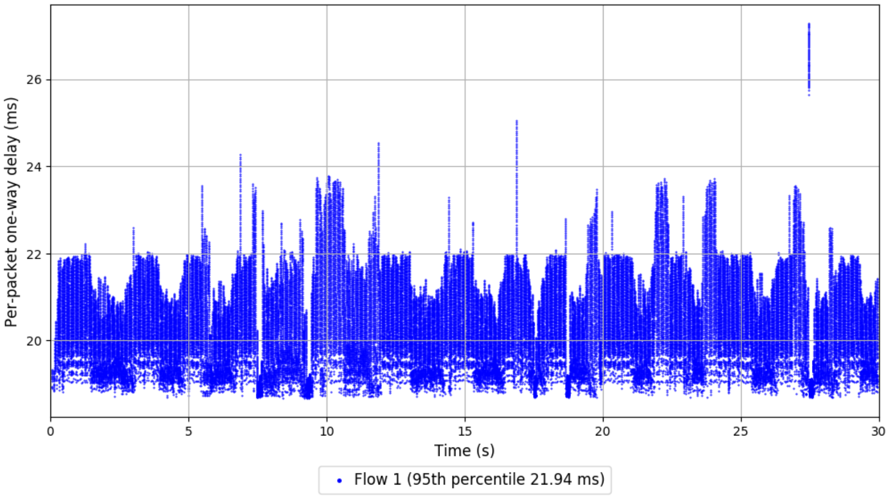




```
Run 1: Statistics of Sprout

Start at: 2018-02-27 15:49:48
End at: 2018-02-27 15:50:18
Local clock offset: 0.71 ms
Remote clock offset: -4.623 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.67 Mbit/s
95th percentile per-packet one-way delay: 21.943 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 24.67 Mbit/s
95th percentile per-packet one-way delay: 21.943 ms
Loss rate: 0.01%
```

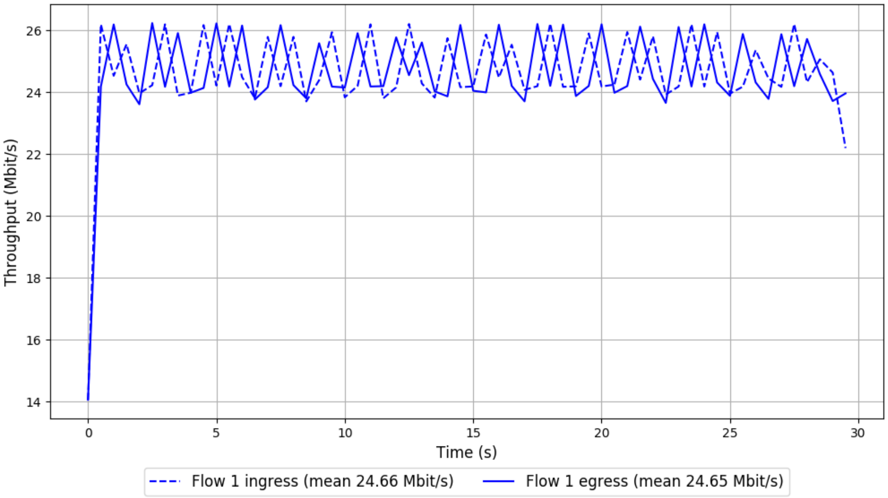
Run 1: Report of Sprout — Data Link

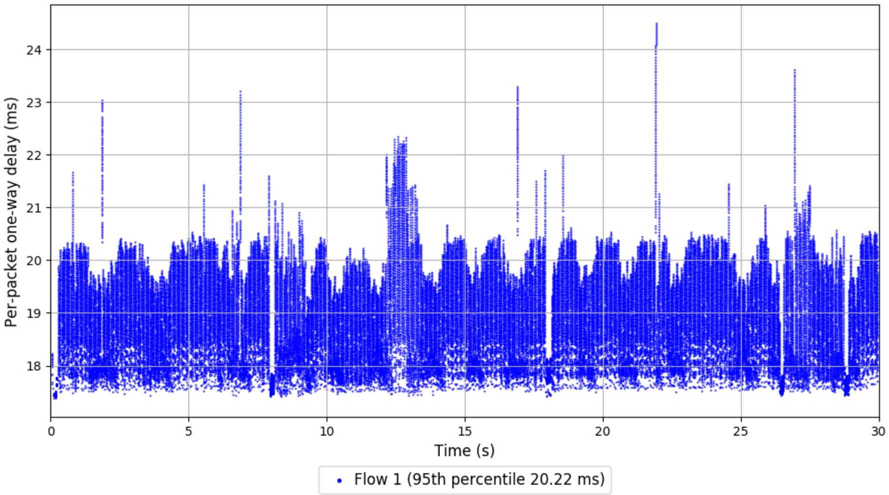




```
Run 2: Statistics of Sprout

Start at: 2018-02-27 16:16:57
End at: 2018-02-27 16:17:27
Local clock offset: 0.69 ms
Remote clock offset: -5.266 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.65 Mbit/s
95th percentile per-packet one-way delay: 20.217 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 24.65 Mbit/s
95th percentile per-packet one-way delay: 20.217 ms
Loss rate: 0.02%
```

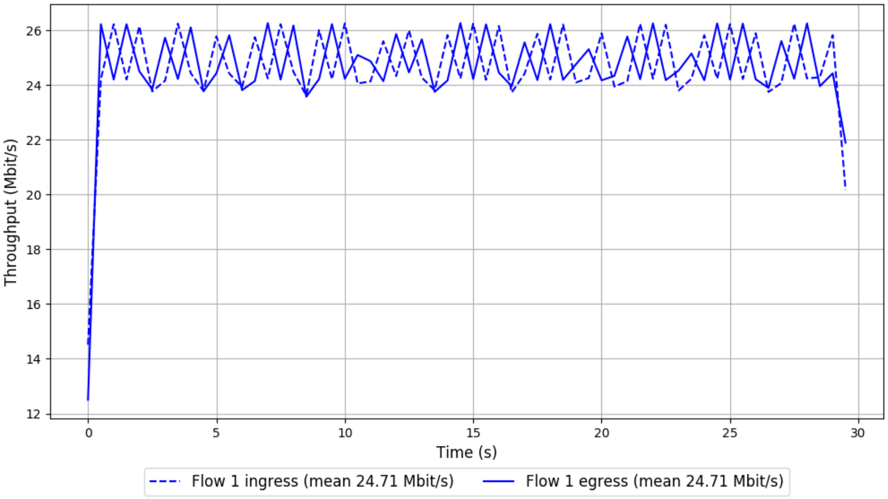
Run 2: Report of Sprout — Data Link

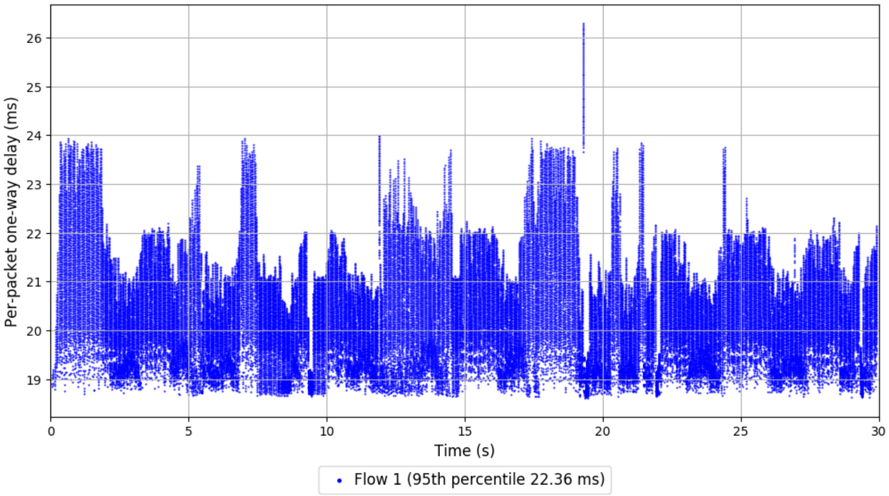




```
Run 3: Statistics of Sprout

Start at: 2018-02-27 16:44:06
End at: 2018-02-27 16:44:36
Local clock offset: 0.702 ms
Remote clock offset: -6.376 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.71 Mbit/s
95th percentile per-packet one-way delay: 22.355 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 24.71 Mbit/s
95th percentile per-packet one-way delay: 22.355 ms
Loss rate: 0.01%
```

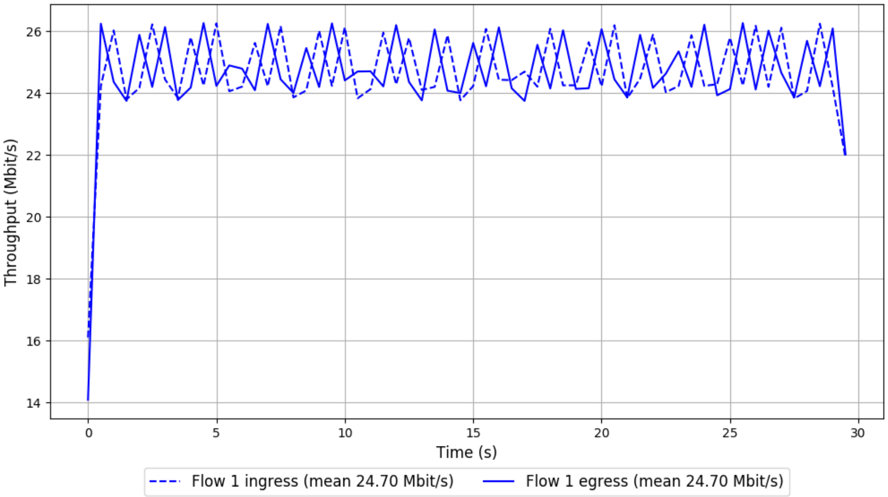
Run 3: Report of Sprout — Data Link

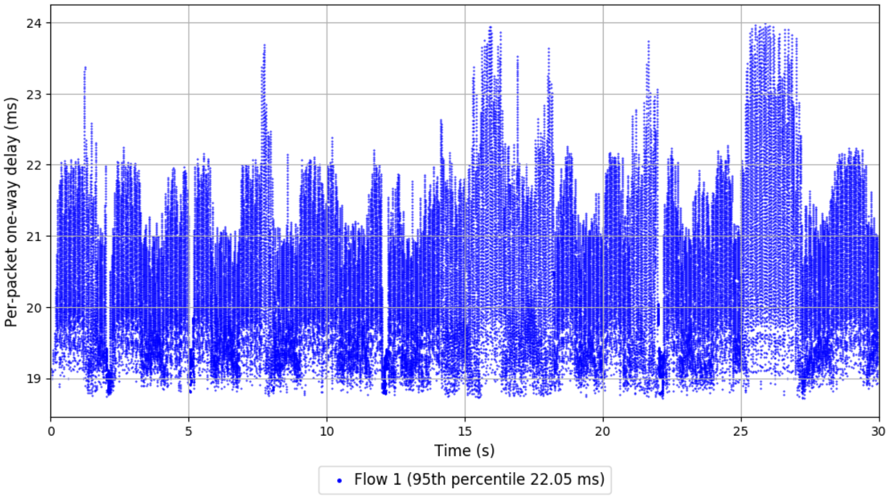




```
Run 4: Statistics of Sprout

Start at: 2018-02-27 17:11:22
End at: 2018-02-27 17:11:52
Local clock offset: 0.553 ms
Remote clock offset: -4.716 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.70 Mbit/s
95th percentile per-packet one-way delay: 22.052 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 24.70 Mbit/s
95th percentile per-packet one-way delay: 22.052 ms
Loss rate: 0.02%
```

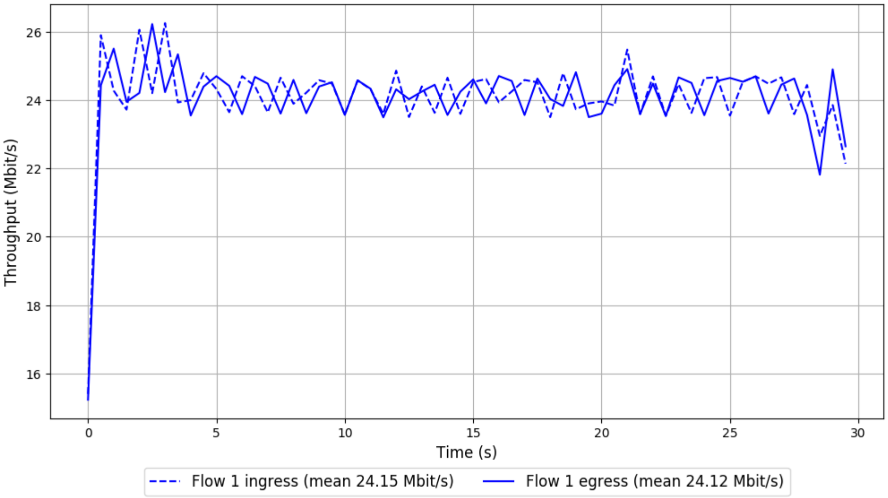
Run 4: Report of Sprout — Data Link

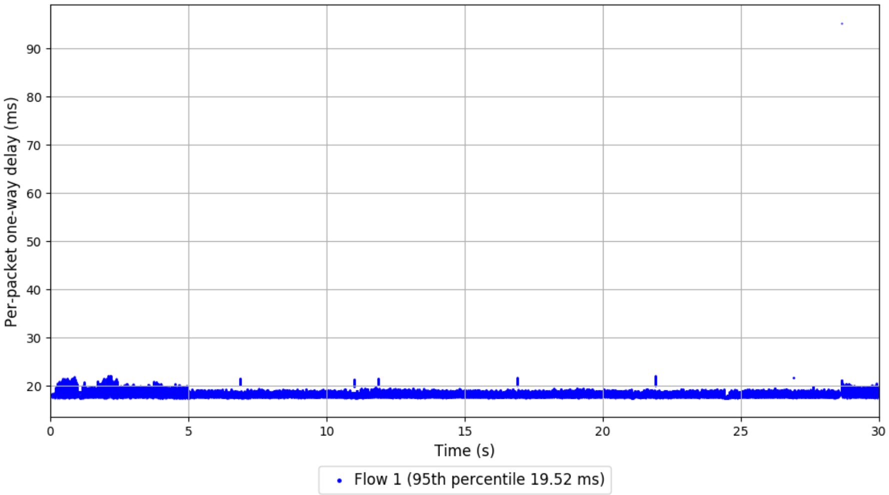




```
Run 5: Statistics of Sprout

Start at: 2018-02-27 17:38:33
End at: 2018-02-27 17:39:03
Local clock offset: 0.395 ms
Remote clock offset: -6.191 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.12 Mbit/s
95th percentile per-packet one-way delay: 19.520 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 24.12 Mbit/s
95th percentile per-packet one-way delay: 19.520 ms
Loss rate: 0.11%
```

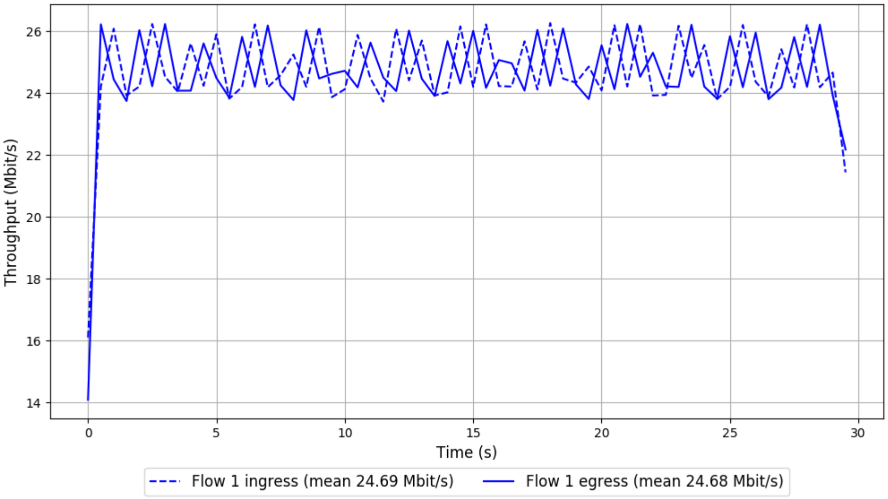
Run 5: Report of Sprout — Data Link

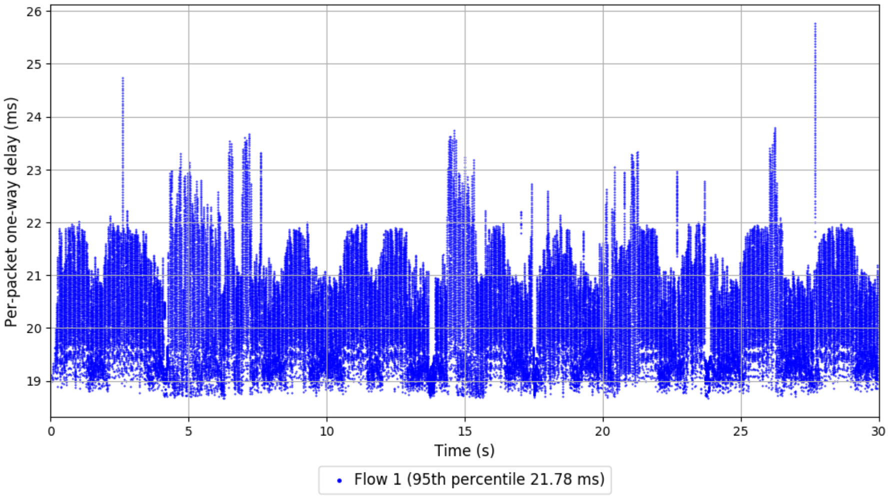




```
Run 6: Statistics of Sprout

Start at: 2018-02-27 18:05:40
End at: 2018-02-27 18:06:10
Local clock offset: -0.52 ms
Remote clock offset: -6.336 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.68 Mbit/s
95th percentile per-packet one-way delay: 21.776 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 24.68 Mbit/s
95th percentile per-packet one-way delay: 21.776 ms
Loss rate: 0.04%
```

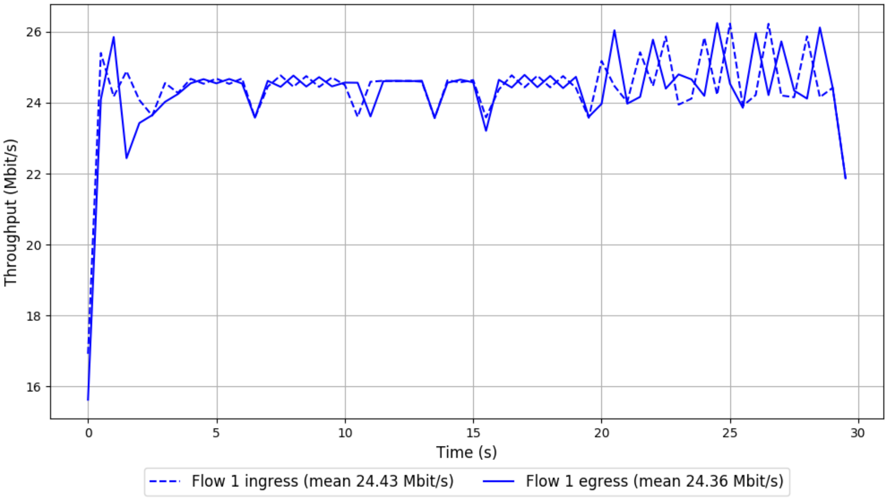
Run 6: Report of Sprout — Data Link

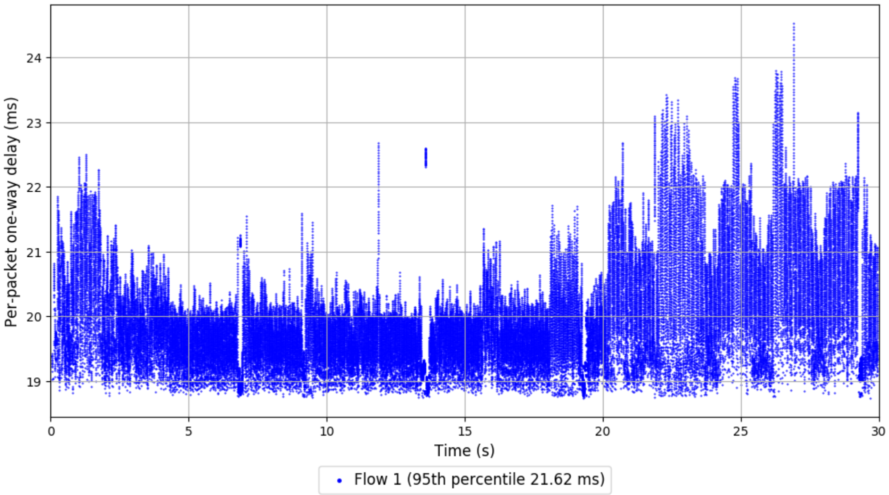




```
Run 7: Statistics of Sprout

Start at: 2018-02-27 18:32:44
End at: 2018-02-27 18:33:14
Local clock offset: -0.901 ms
Remote clock offset: -5.919 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.36 Mbit/s
95th percentile per-packet one-way delay: 21.621 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 24.36 Mbit/s
95th percentile per-packet one-way delay: 21.621 ms
Loss rate: 0.30%
```

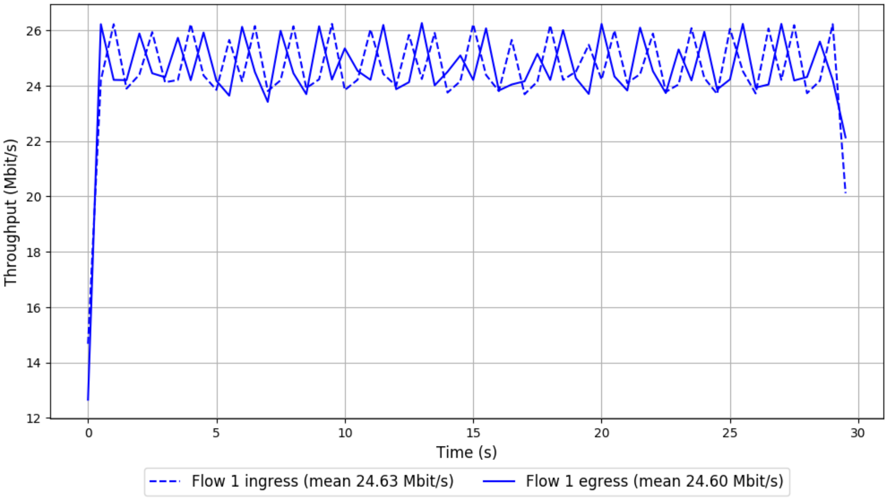
Run 7: Report of Sprout — Data Link

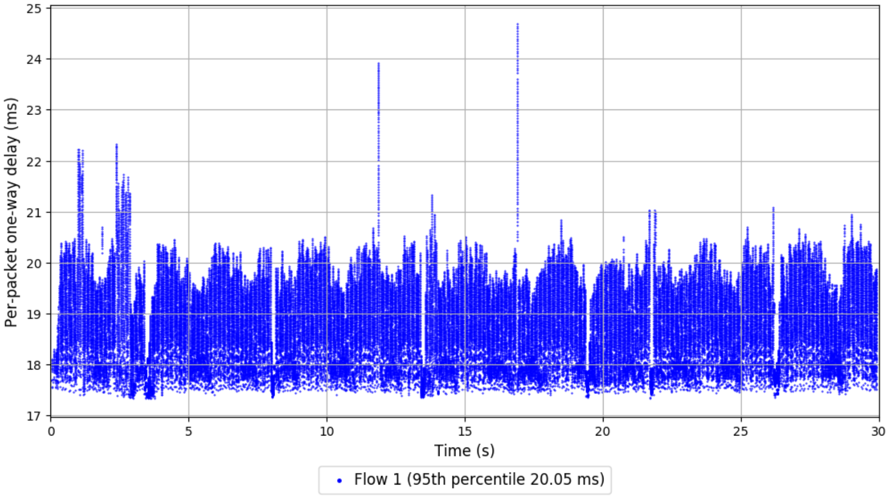




```
Run 8: Statistics of Sprout

Start at: 2018-02-27 18:59:49
End at: 2018-02-27 19:00:19
Local clock offset: -0.989 ms
Remote clock offset: -5.247 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.60 Mbit/s
95th percentile per-packet one-way delay: 20.054 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 24.60 Mbit/s
95th percentile per-packet one-way delay: 20.054 ms
Loss rate: 0.11%
```

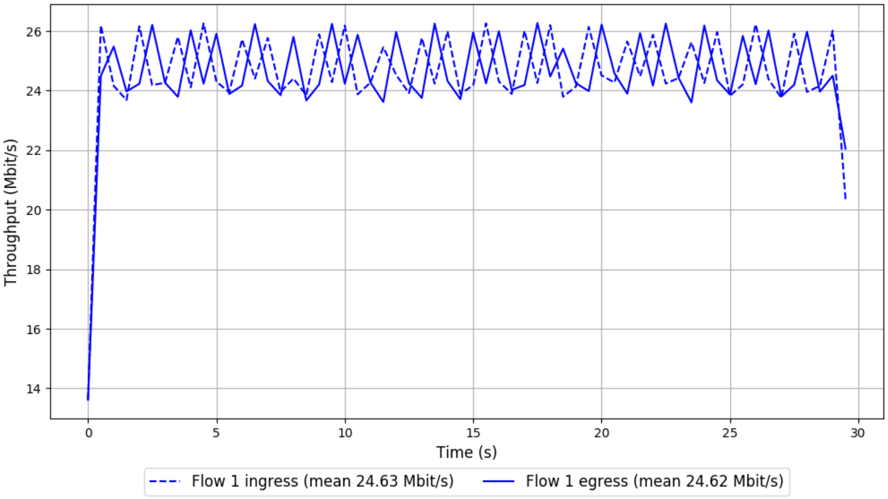
Run 8: Report of Sprout — Data Link

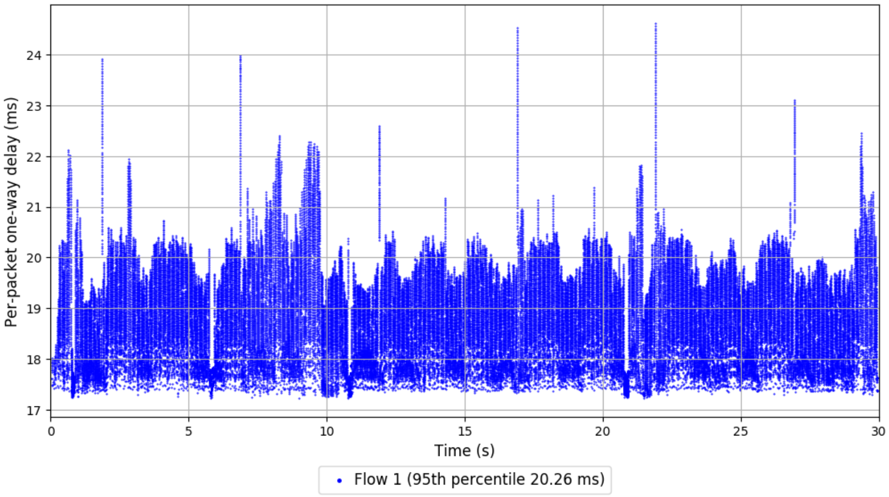




```
Run 9: Statistics of Sprout

Start at: 2018-02-27 19:26:52
End at: 2018-02-27 19:27:22
Local clock offset: -0.364 ms
Remote clock offset: -5.109 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.62 Mbit/s
95th percentile per-packet one-way delay: 20.258 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 24.62 Mbit/s
95th percentile per-packet one-way delay: 20.258 ms
Loss rate: 0.05%
```

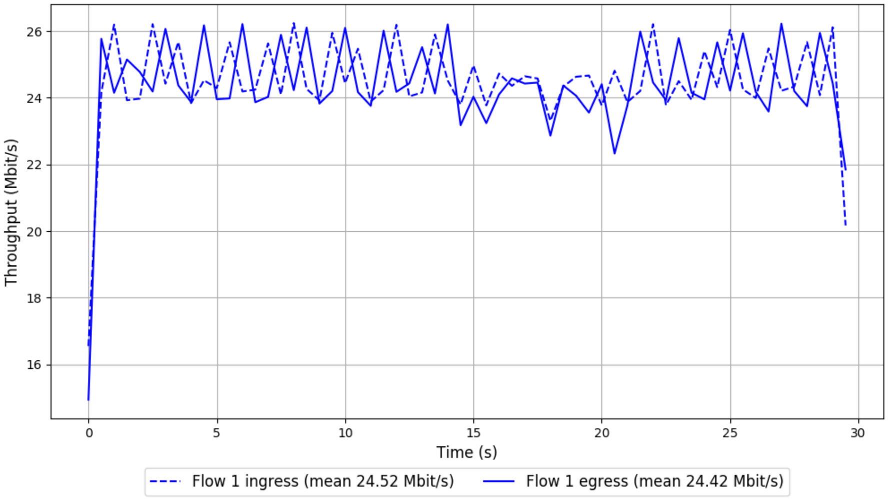
Run 9: Report of Sprout — Data Link

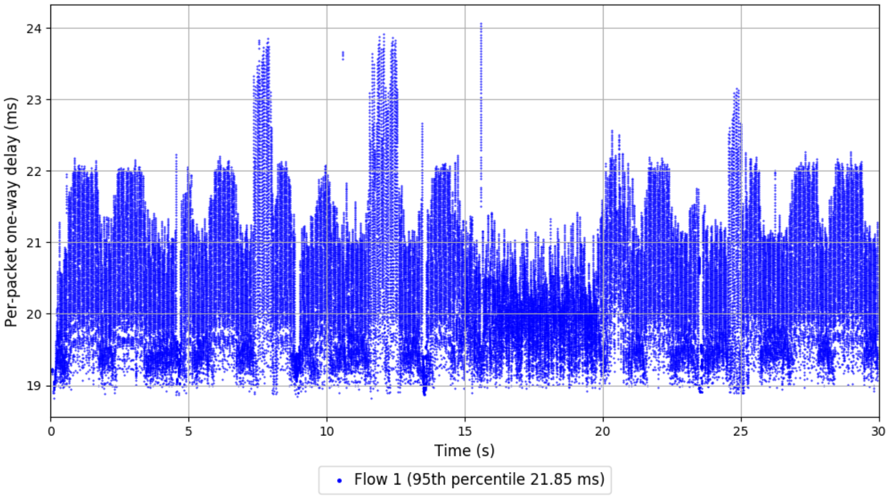




```
Run 10: Statistics of Sprout

Start at: 2018-02-27 19:53:48
End at: 2018-02-27 19:54:18
Local clock offset: 0.786 ms
Remote clock offset: -6.791 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.42 Mbit/s
95th percentile per-packet one-way delay: 21.849 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 24.42 Mbit/s
95th percentile per-packet one-way delay: 21.849 ms
Loss rate: 0.40%
```

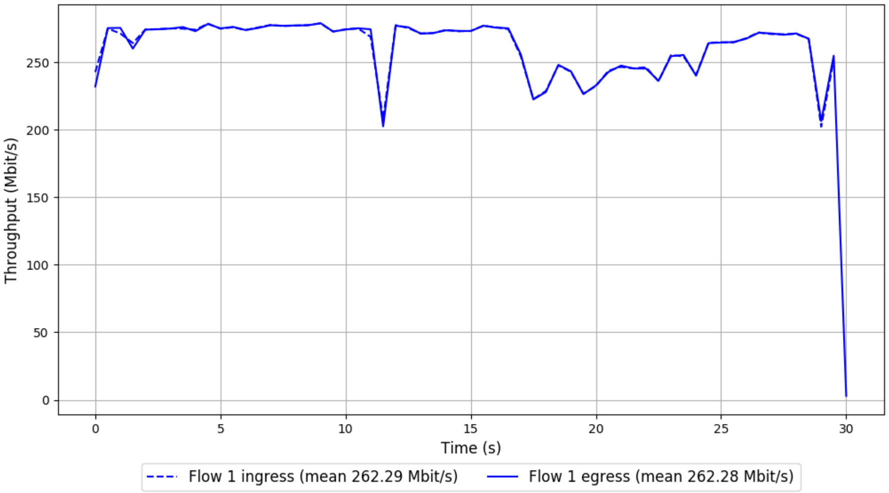
Run 10: Report of Sprout — Data Link

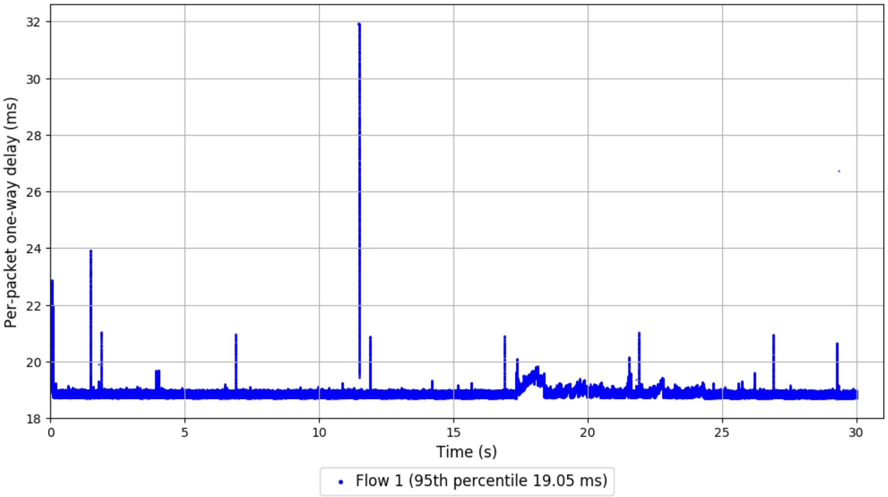




```
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-27 15:57:24
End at: 2018-02-27 15:57:54
Local clock offset: 0.667 ms
Remote clock offset: -4.304 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 262.28 Mbit/s
95th percentile per-packet one-way delay: 19.047 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 262.28 Mbit/s
95th percentile per-packet one-way delay: 19.047 ms
Loss rate: 0.00%
```

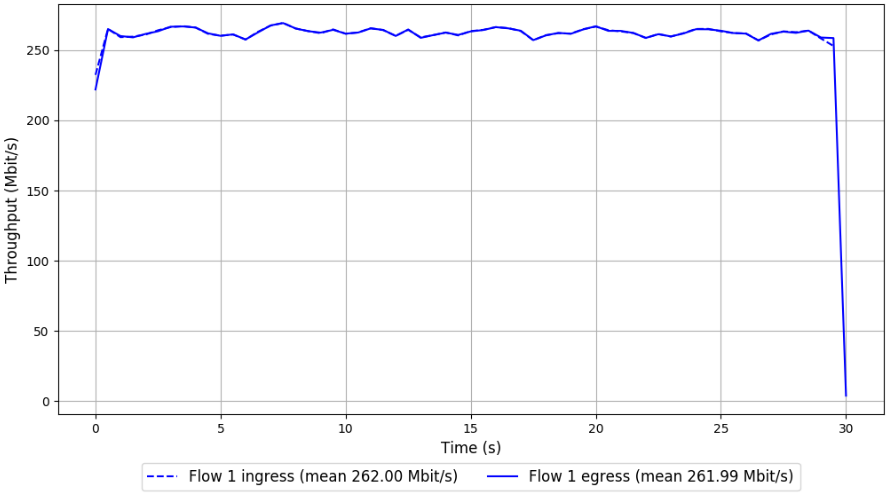
Run 1: Report of TaoVA-100x — Data Link

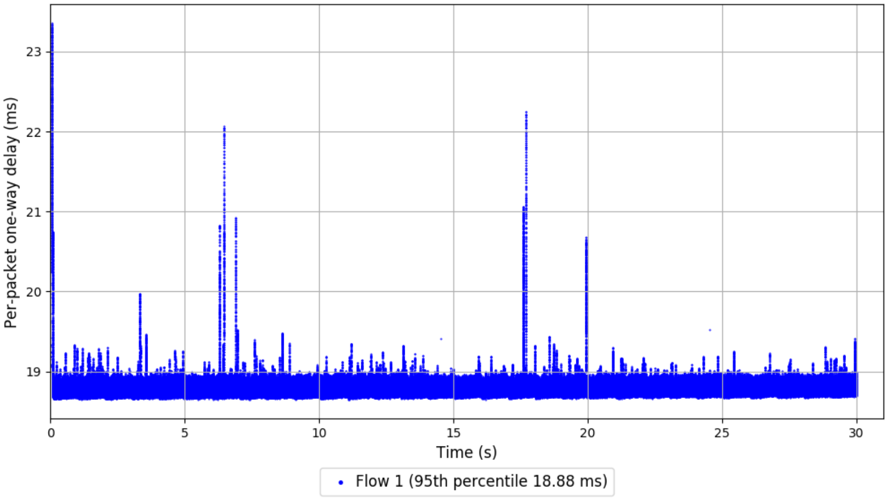




```
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-27 16:24:38
End at: 2018-02-27 16:25:08
Local clock offset: 0.771 ms
Remote clock offset: -5.928 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 261.99 Mbit/s
95th percentile per-packet one-way delay: 18.881 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 261.99 Mbit/s
95th percentile per-packet one-way delay: 18.881 ms
Loss rate: 0.01%
```

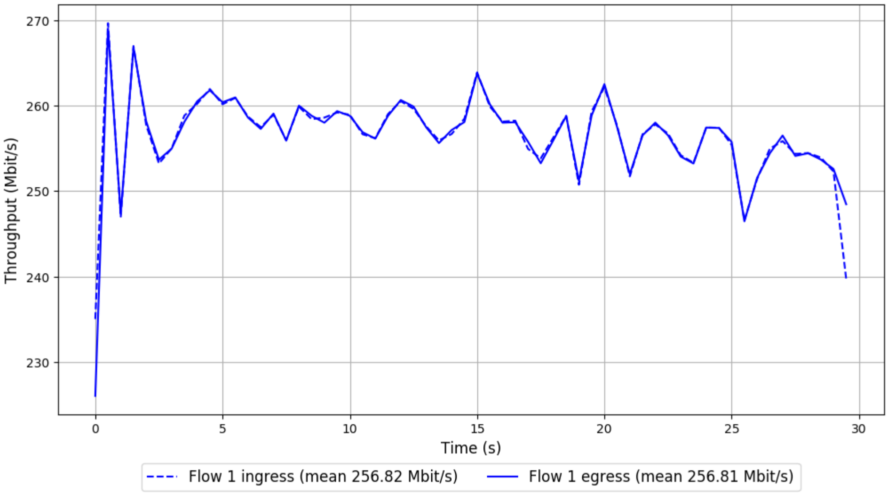
Run 2: Report of TaoVA-100x — Data Link

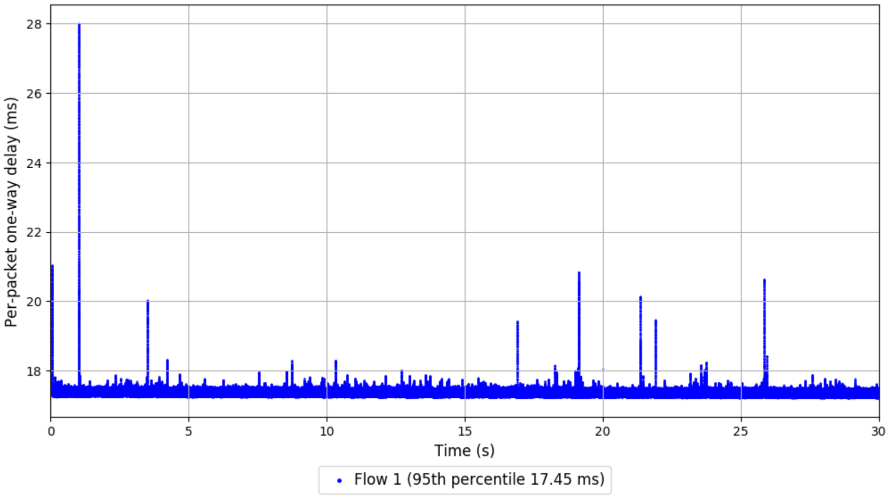




```
Run 3: Statistics of TaoVA-100x

Start at: 2018-02-27 16:51:44
End at: 2018-02-27 16:52:14
Local clock offset: 0.69 ms
Remote clock offset: -5.485 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 256.81 Mbit/s
95th percentile per-packet one-way delay: 17.451 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 256.81 Mbit/s
95th percentile per-packet one-way delay: 17.451 ms
Loss rate: 0.00%
```

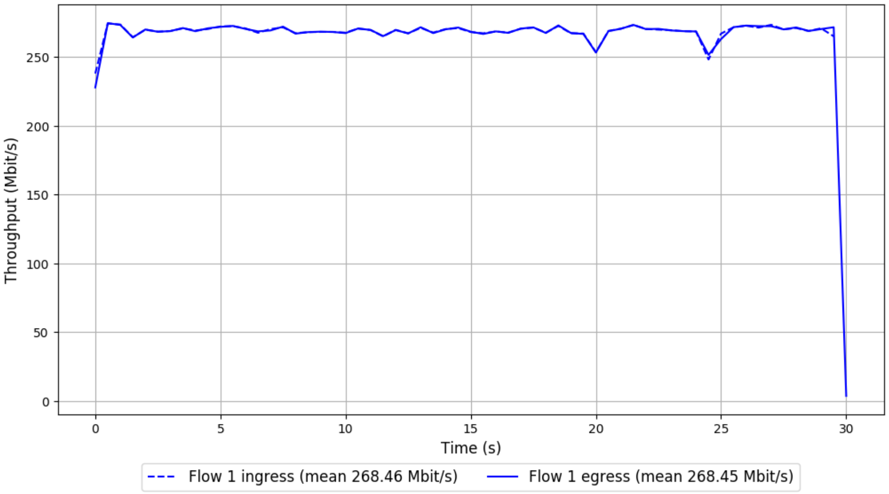
Run 3: Report of TaoVA-100x — Data Link

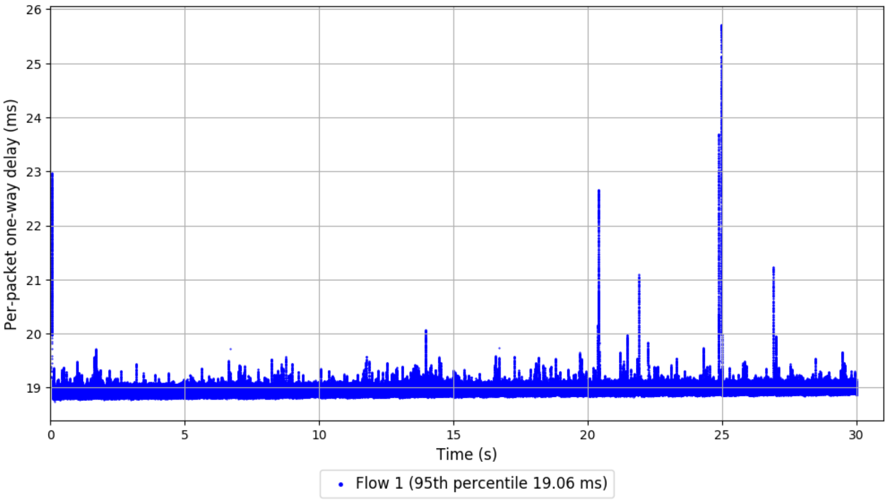




```
Run 4: Statistics of TaoVA-100x

Start at: 2018-02-27 17:19:03
End at: 2018-02-27 17:19:33
Local clock offset: 0.567 ms
Remote clock offset: -4.564 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 268.45 Mbit/s
95th percentile per-packet one-way delay: 19.056 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 268.45 Mbit/s
95th percentile per-packet one-way delay: 19.056 ms
Loss rate: 0.00%
```

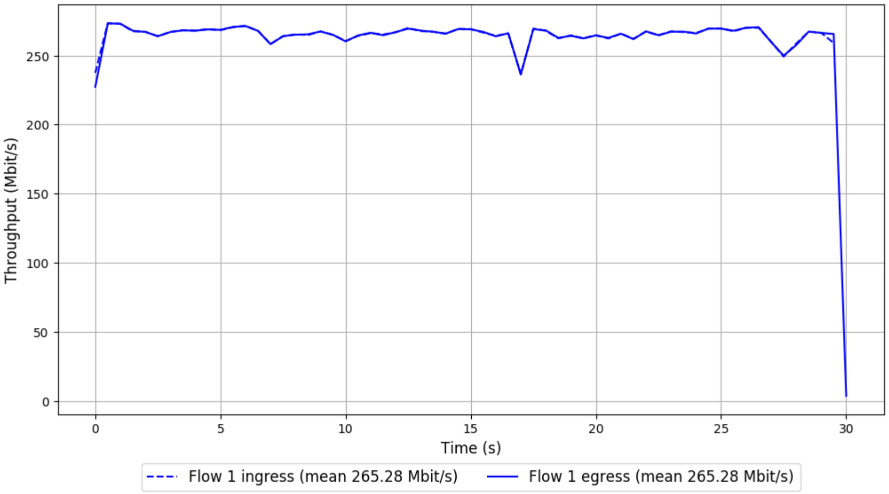
Run 4: Report of TaoVA-100x — Data Link

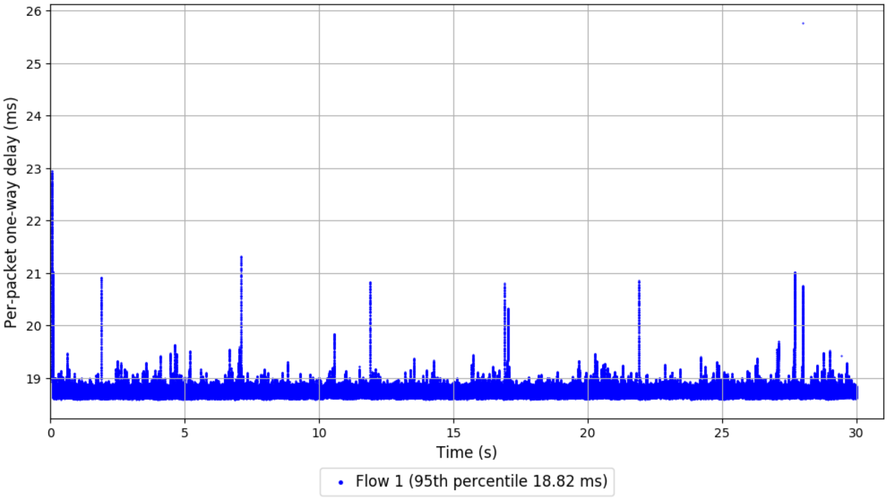




```
Run 5: Statistics of TaoVA-100x

Start at: 2018-02-27 17:46:07
End at: 2018-02-27 17:46:37
Local clock offset: 0.447 ms
Remote clock offset: -6.401 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 265.28 Mbit/s
95th percentile per-packet one-way delay: 18.823 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 265.28 Mbit/s
95th percentile per-packet one-way delay: 18.823 ms
Loss rate: 0.00%
```

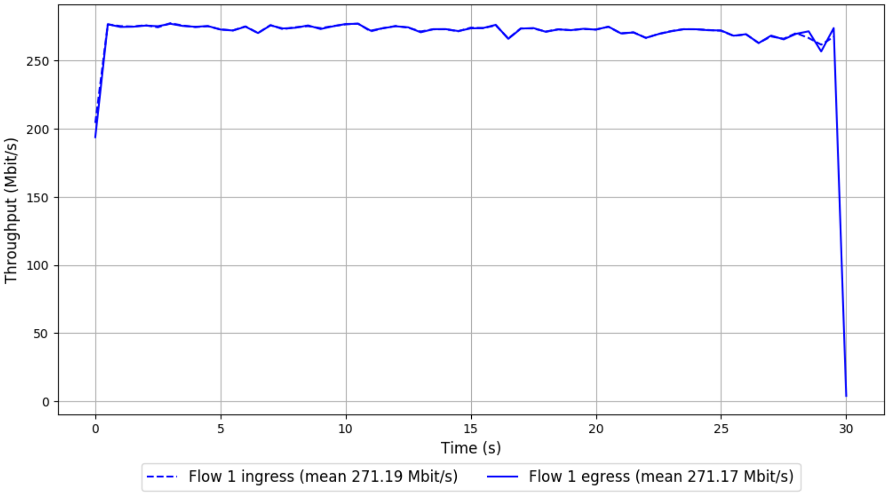
Run 5: Report of TaoVA-100x — Data Link

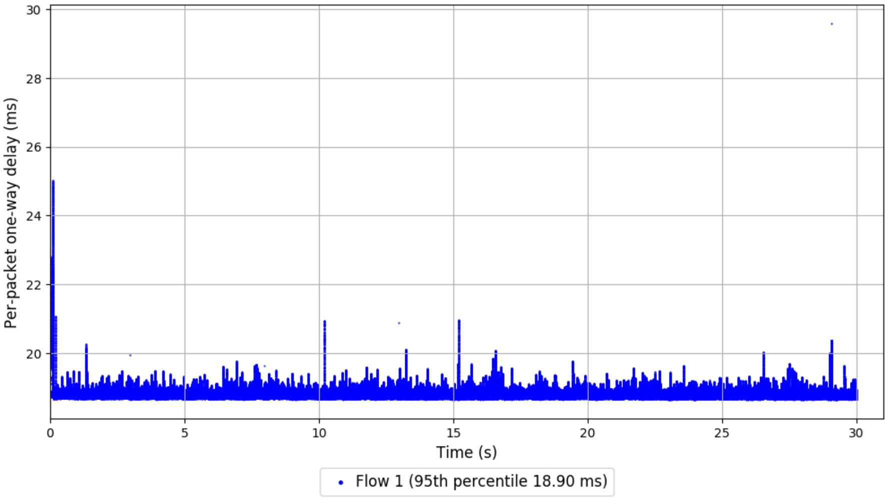




```
Run 6: Statistics of TaoVA-100x

Start at: 2018-02-27 18:13:17
End at: 2018-02-27 18:13:47
Local clock offset: -0.766 ms
Remote clock offset: -6.301 ms

# Below is generated by plot.py at 2018-02-27 22:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 271.17 Mbit/s
95th percentile per-packet one-way delay: 18.900 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 271.17 Mbit/s
95th percentile per-packet one-way delay: 18.900 ms
Loss rate: 0.01%
```

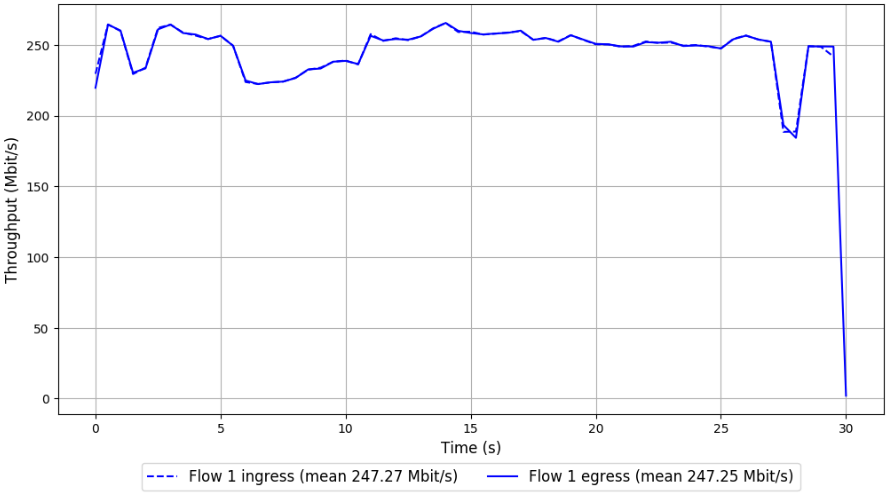
Run 6: Report of TaoVA-100x — Data Link

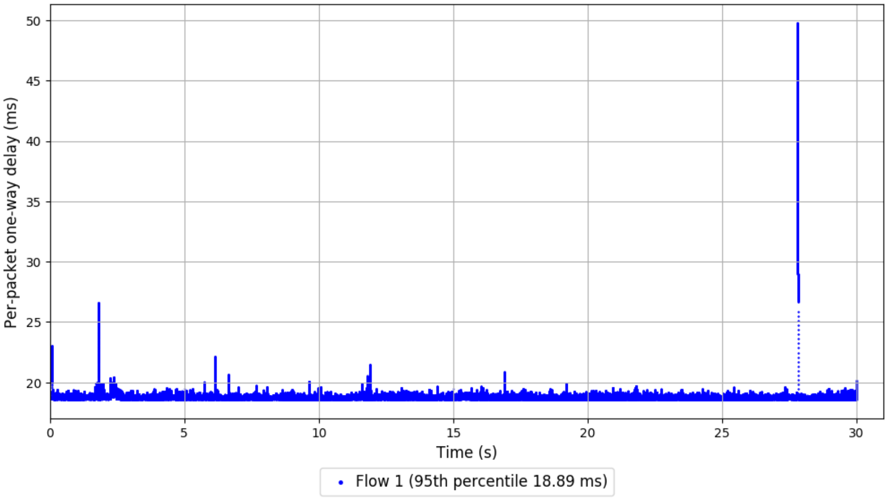




```
Run 7: Statistics of TaoVA-100x

Start at: 2018-02-27 18:40:21
End at: 2018-02-27 18:40:51
Local clock offset: -0.721 ms
Remote clock offset: -5.588 ms

# Below is generated by plot.py at 2018-02-27 23:05:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 247.25 Mbit/s
95th percentile per-packet one-way delay: 18.891 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 247.25 Mbit/s
95th percentile per-packet one-way delay: 18.891 ms
Loss rate: 0.01%
```

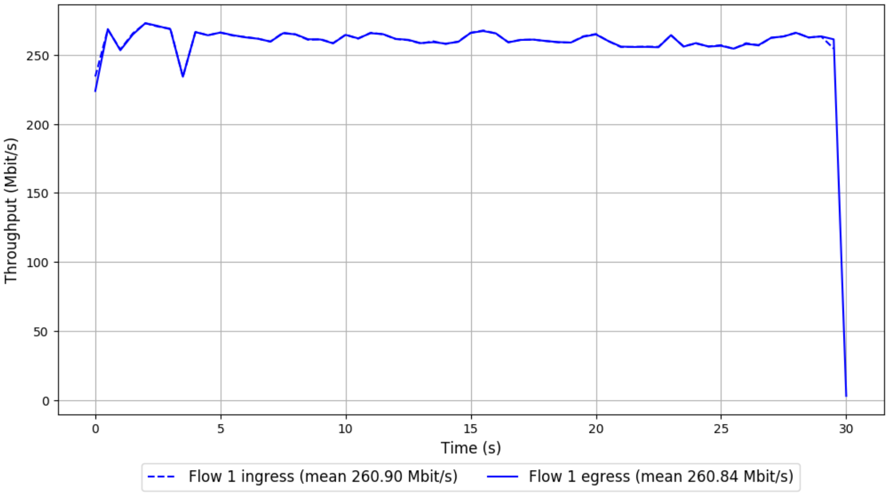
Run 7: Report of TaoVA-100x — Data Link

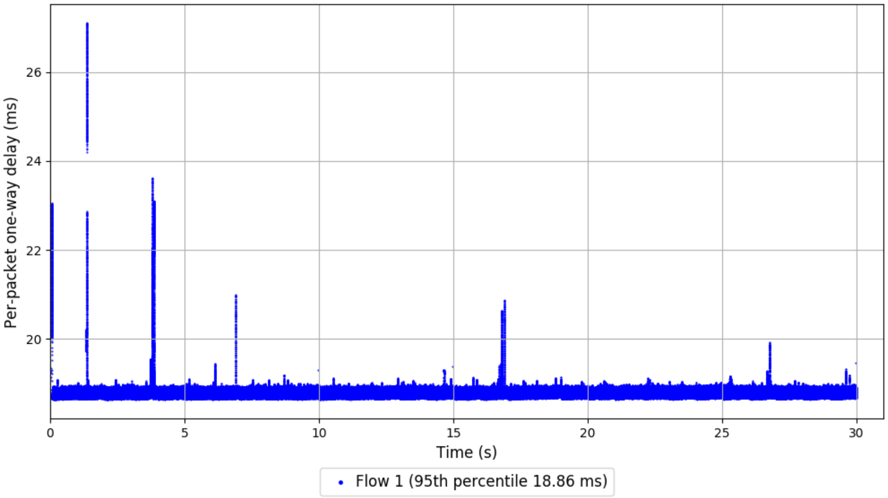




```
Run 8: Statistics of TaoVA-100x

Start at: 2018-02-27 19:07:26
End at: 2018-02-27 19:07:56
Local clock offset: -0.56 ms
Remote clock offset: -5.173 ms

# Below is generated by plot.py at 2018-02-27 23:05:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 260.84 Mbit/s
95th percentile per-packet one-way delay: 18.859 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 260.84 Mbit/s
95th percentile per-packet one-way delay: 18.859 ms
Loss rate: 0.02%
```

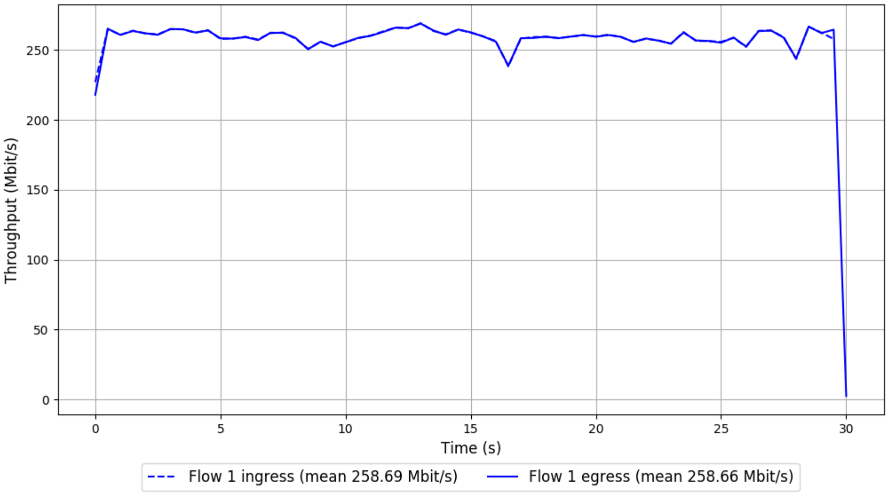
Run 8: Report of TaoVA-100x — Data Link

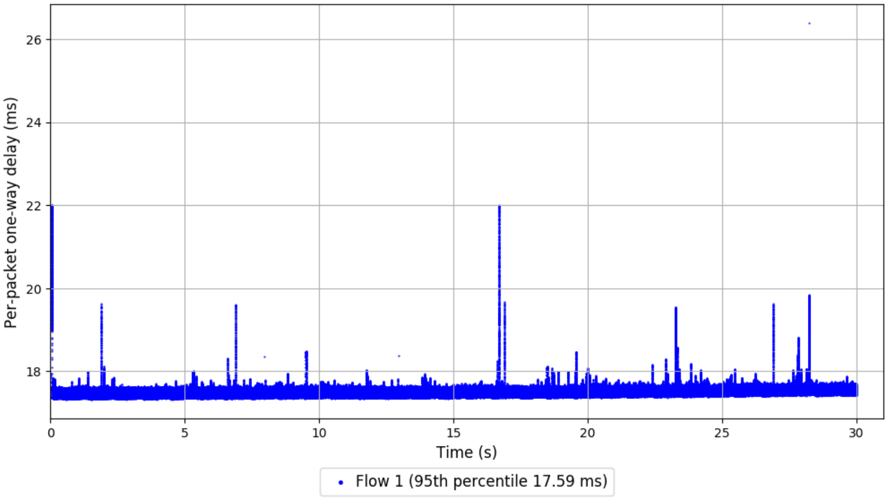




```
Run 9: Statistics of TaoVA-100x

Start at: 2018-02-27 19:34:26
End at: 2018-02-27 19:34:56
Local clock offset: -0.373 ms
Remote clock offset: -5.062 ms

# Below is generated by plot.py at 2018-02-27 23:05:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 258.66 Mbit/s
95th percentile per-packet one-way delay: 17.591 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 258.66 Mbit/s
95th percentile per-packet one-way delay: 17.591 ms
Loss rate: 0.01%
```

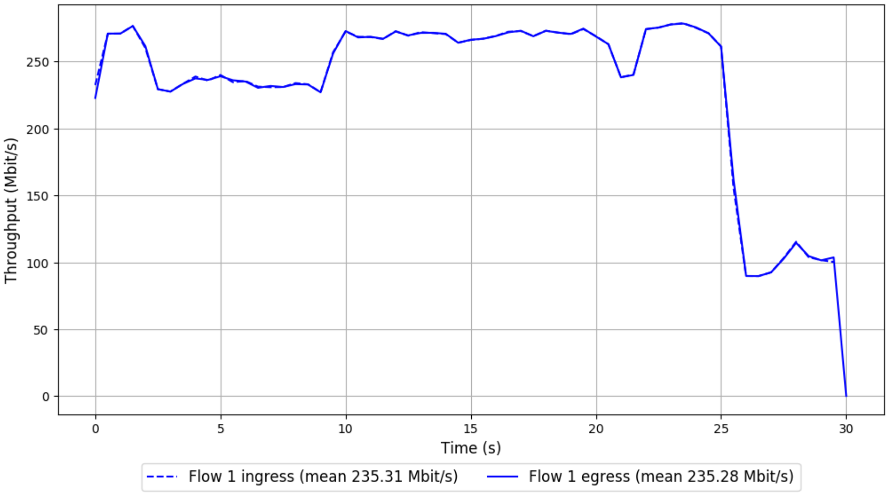
Run 9: Report of TaoVA-100x — Data Link

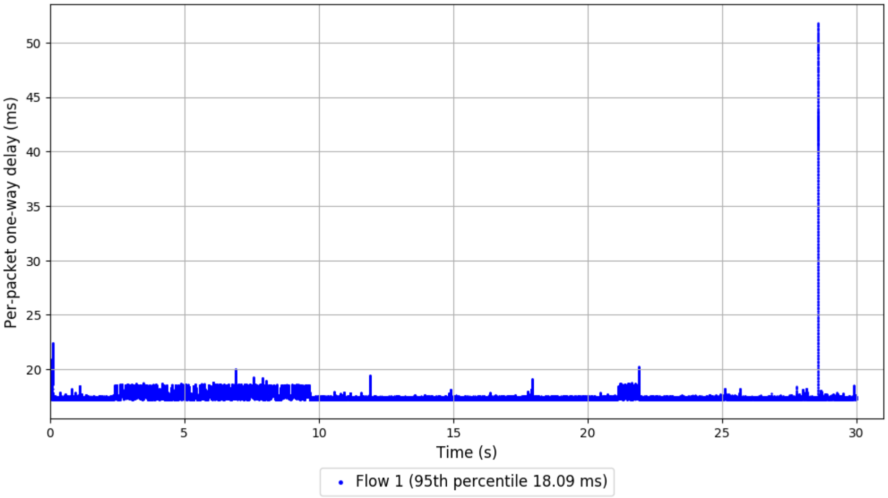




```
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-27 20:01:24
End at: 2018-02-27 20:01:54
Local clock offset: 1.08 ms
Remote clock offset: -7.067 ms

# Below is generated by plot.py at 2018-02-27 23:05:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 235.28 Mbit/s
95th percentile per-packet one-way delay: 18.093 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 235.28 Mbit/s
95th percentile per-packet one-way delay: 18.093 ms
Loss rate: 0.01%
```

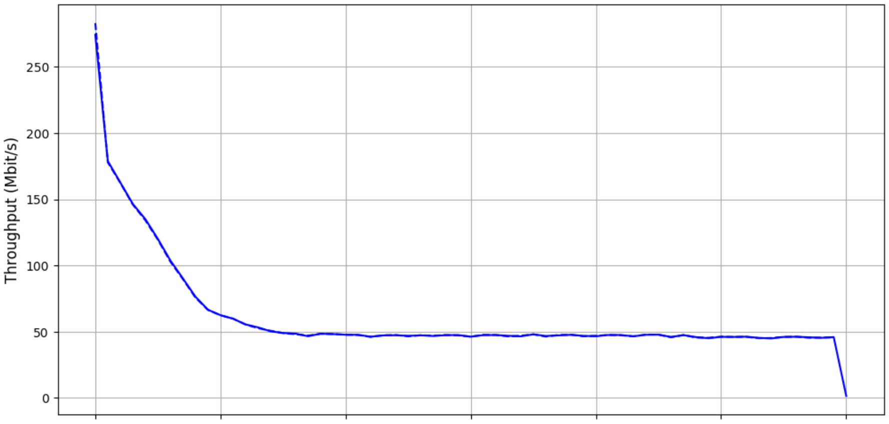
Run 10: Report of TaoVA-100x — Data Link



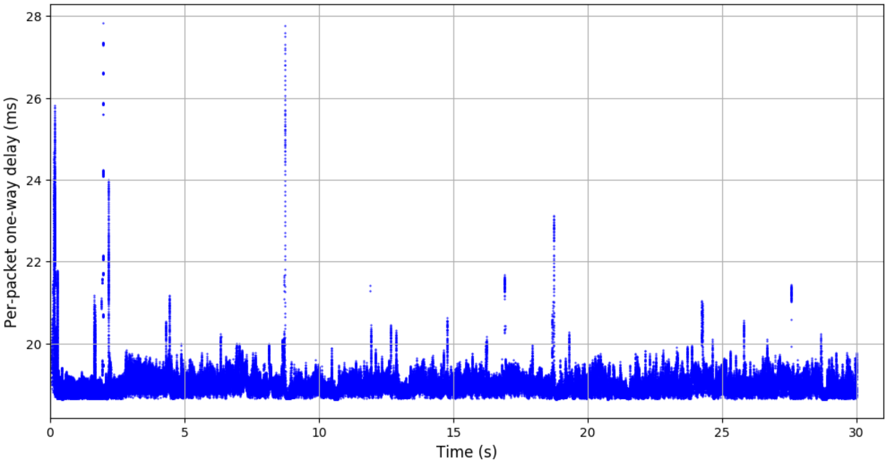


```
Run 1: Statistics of TCP Vegas

Start at: 2018-02-27 15:54:17
End at: 2018-02-27 15:54:47
Local clock offset: 0.766 ms
Remote clock offset: -4.405 ms

# Below is generated by plot.py at 2018-02-27 23:05:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.46 Mbit/s
95th percentile per-packet one-way delay: 19.477 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 62.46 Mbit/s
95th percentile per-packet one-way delay: 19.477 ms
Loss rate: 0.03%
```

Run 1: Report of TCP Vegas — Data Link



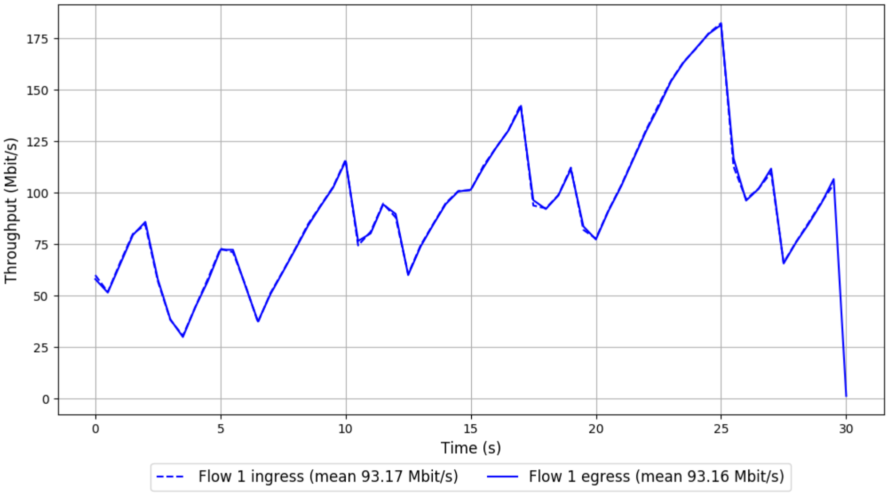
Flow 1 ingress (mean 62.49 Mbit/s) Flow 1 egress (mean 62.46 Mbit/s)

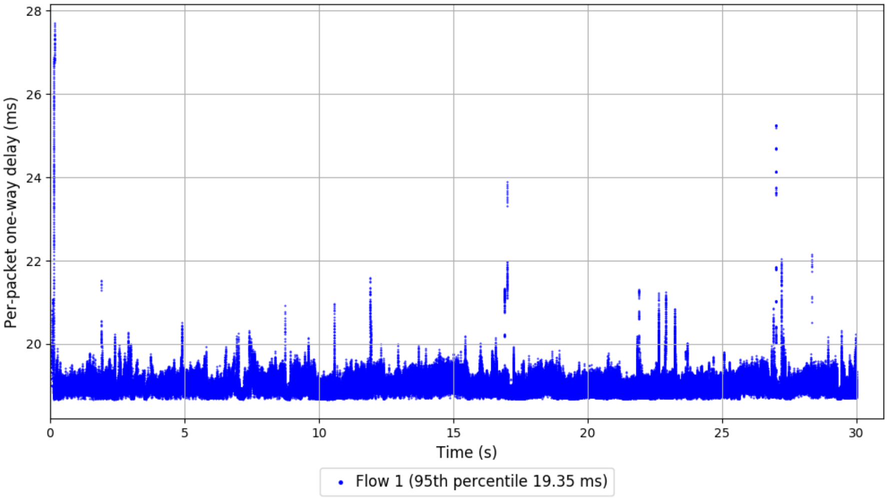


• Flow 1 (95th percentile 19.48 ms)

```
Run 2: Statistics of TCP Vegas

Start at: 2018-02-27 16:21:28
End at: 2018-02-27 16:21:58
Local clock offset: 0.778 ms
Remote clock offset: -5.746 ms

# Below is generated by plot.py at 2018-02-27 23:05:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.16 Mbit/s
95th percentile per-packet one-way delay: 19.349 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 93.16 Mbit/s
95th percentile per-packet one-way delay: 19.349 ms
Loss rate: 0.01%
```

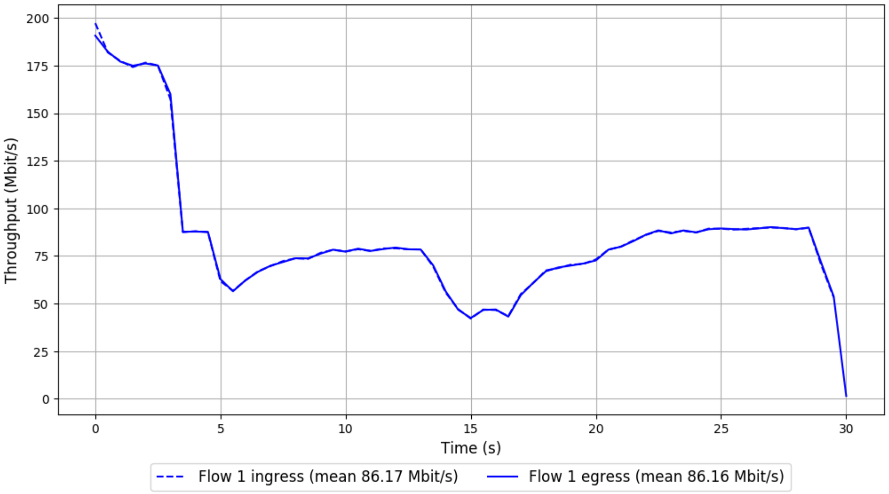
Run 2: Report of TCP Vegas — Data Link

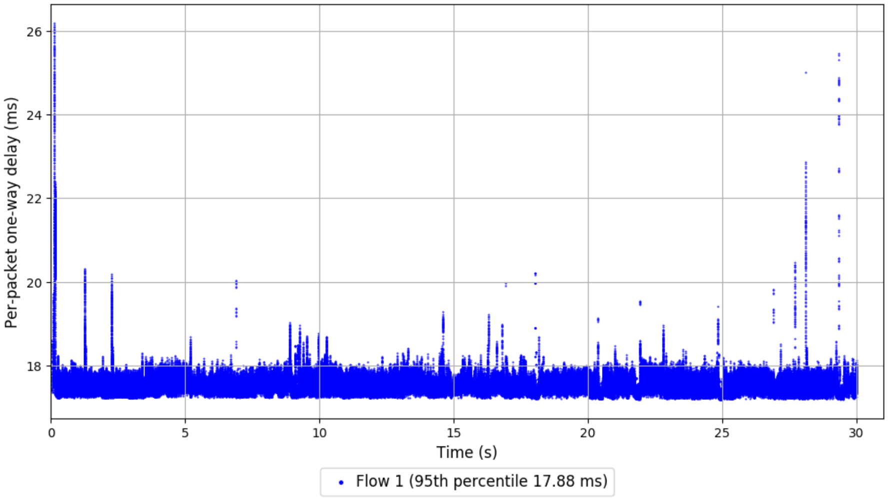




```
Run 3: Statistics of TCP Vegas

Start at: 2018-02-27 16:48:36
End at: 2018-02-27 16:49:06
Local clock offset: 0.704 ms
Remote clock offset: -5.793 ms

# Below is generated by plot.py at 2018-02-27 23:05:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.16 Mbit/s
95th percentile per-packet one-way delay: 17.875 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 86.16 Mbit/s
95th percentile per-packet one-way delay: 17.875 ms
Loss rate: 0.01%
```

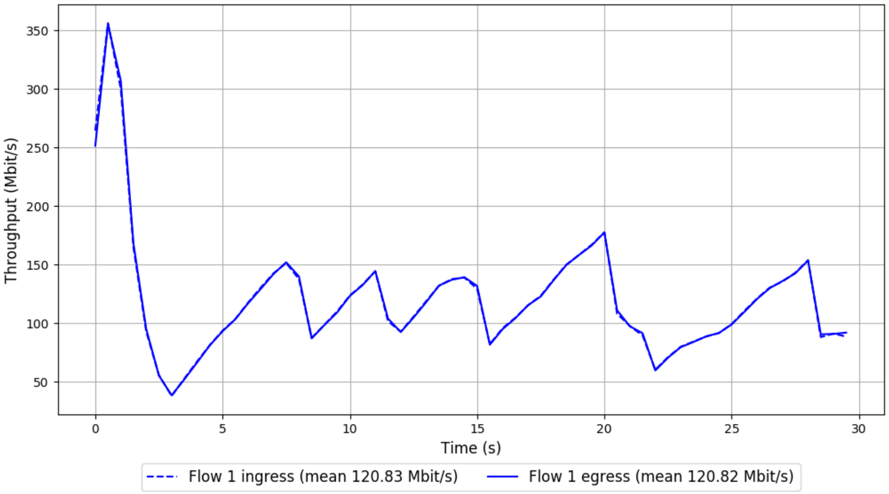
Run 3: Report of TCP Vegas — Data Link

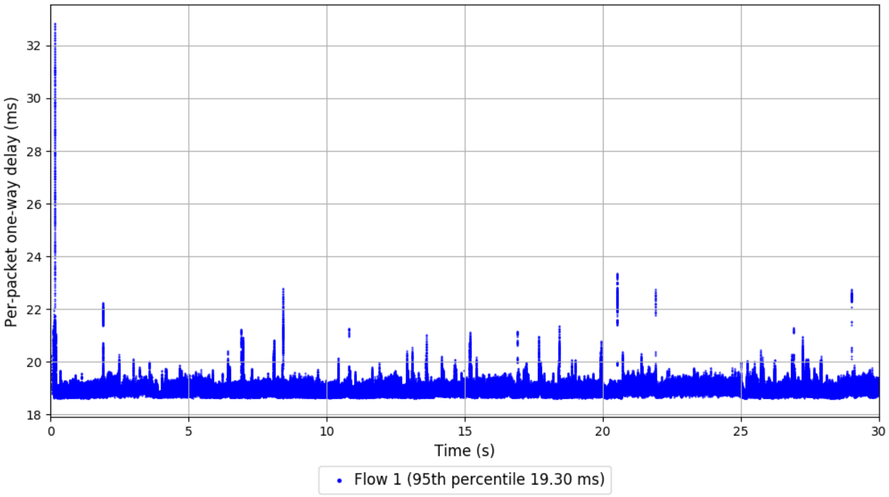




```
Run 4: Statistics of TCP Vegas

Start at: 2018-02-27 17:15:54
End at: 2018-02-27 17:16:24
Local clock offset: 0.627 ms
Remote clock offset: -4.566 ms

# Below is generated by plot.py at 2018-02-27 23:05:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 120.82 Mbit/s
95th percentile per-packet one-way delay: 19.303 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 120.82 Mbit/s
95th percentile per-packet one-way delay: 19.303 ms
Loss rate: 0.01%
```

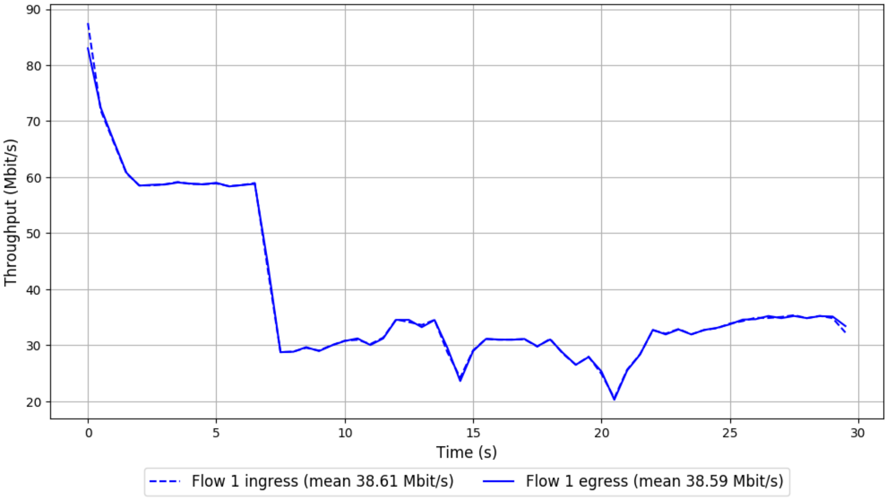
Run 4: Report of TCP Vegas — Data Link

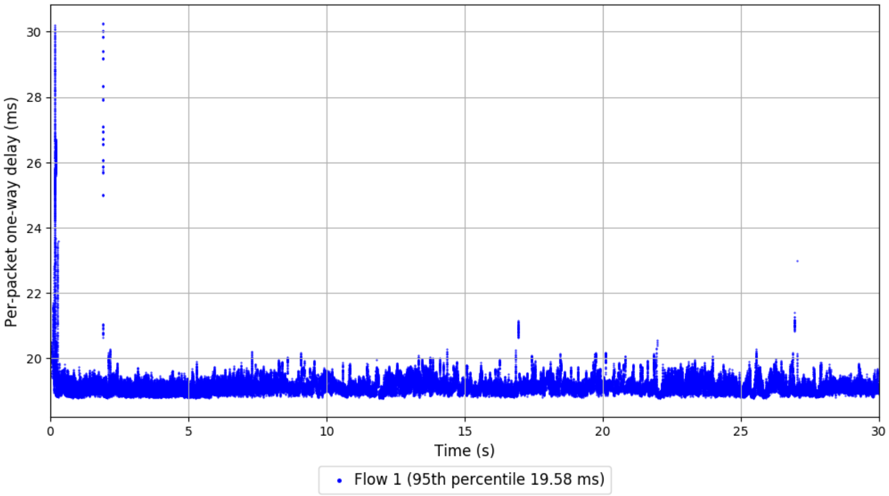




```
Run 5: Statistics of TCP Vegas

Start at: 2018-02-27 17:43:02
End at: 2018-02-27 17:43:32
Local clock offset: 0.363 ms
Remote clock offset: -6.257 ms

# Below is generated by plot.py at 2018-02-27 23:05:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 38.59 Mbit/s
95th percentile per-packet one-way delay: 19.582 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 38.59 Mbit/s
95th percentile per-packet one-way delay: 19.582 ms
Loss rate: 0.07%
```

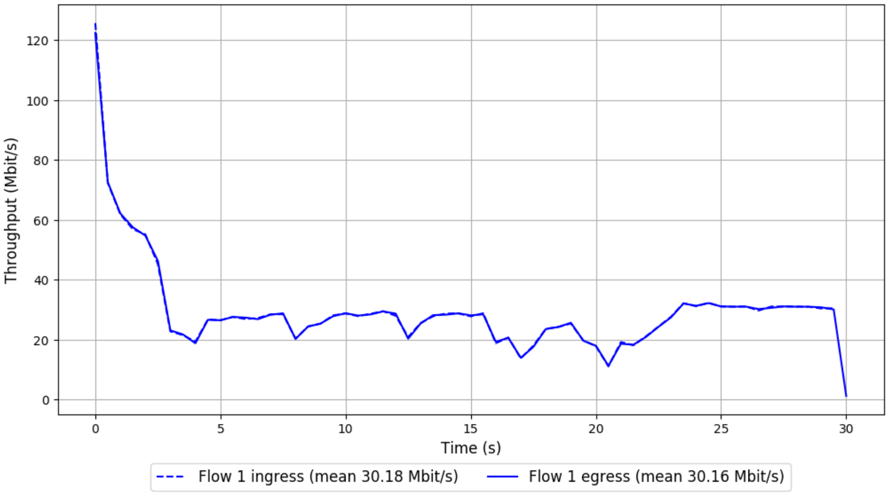
Run 5: Report of TCP Vegas — Data Link

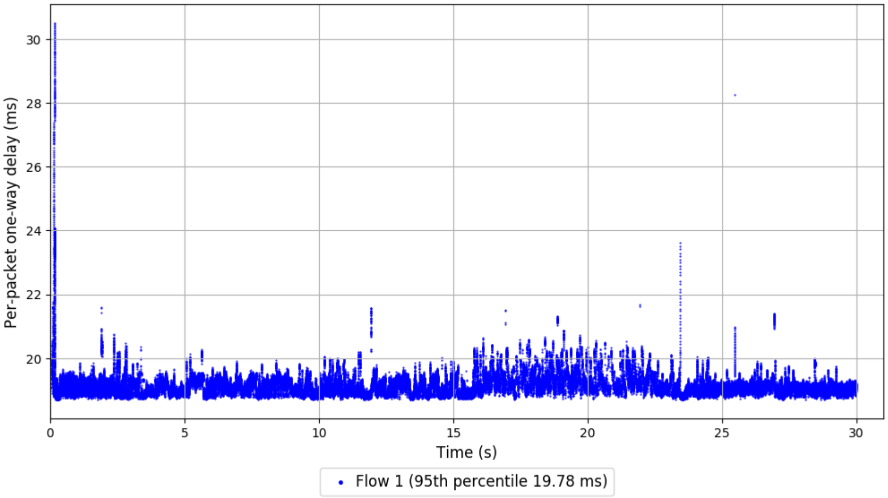




```
Run 6: Statistics of TCP Vegas

Start at: 2018-02-27 18:10:10
End at: 2018-02-27 18:10:40
Local clock offset: -0.755 ms
Remote clock offset: -6.4 ms

# Below is generated by plot.py at 2018-02-27 23:05:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.16 Mbit/s
95th percentile per-packet one-way delay: 19.783 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 30.16 Mbit/s
95th percentile per-packet one-way delay: 19.783 ms
Loss rate: 0.04%
```

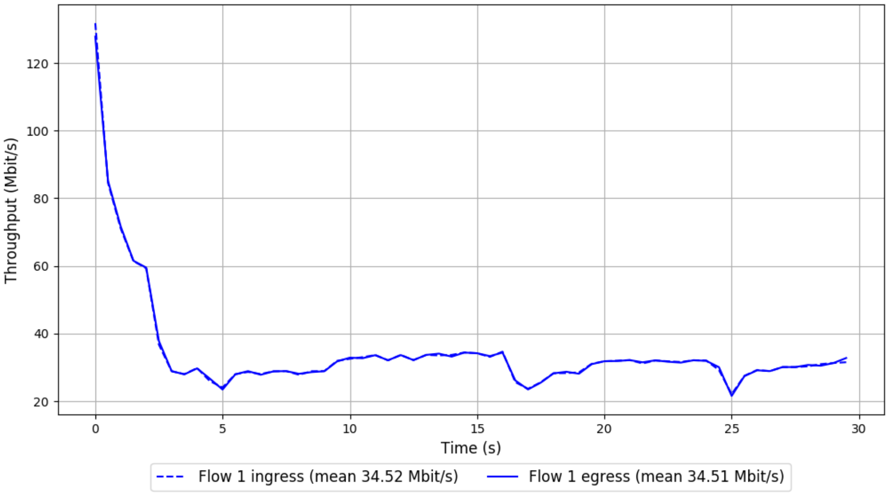
Run 6: Report of TCP Vegas — Data Link

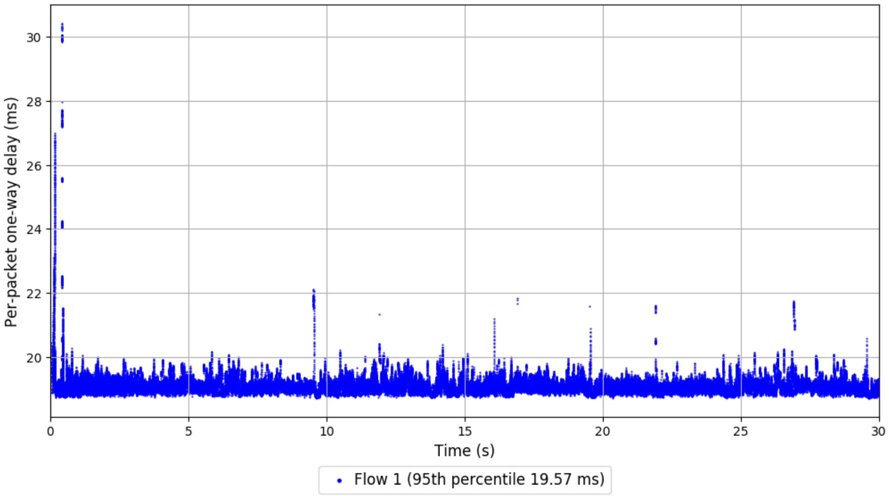




```
Run 7: Statistics of TCP Vegas

Start at: 2018-02-27 18:37:14
End at: 2018-02-27 18:37:44
Local clock offset: -0.821 ms
Remote clock offset: -5.658 ms

# Below is generated by plot.py at 2018-02-27 23:05:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 34.51 Mbit/s
95th percentile per-packet one-way delay: 19.571 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 34.51 Mbit/s
95th percentile per-packet one-way delay: 19.571 ms
Loss rate: 0.02%
```

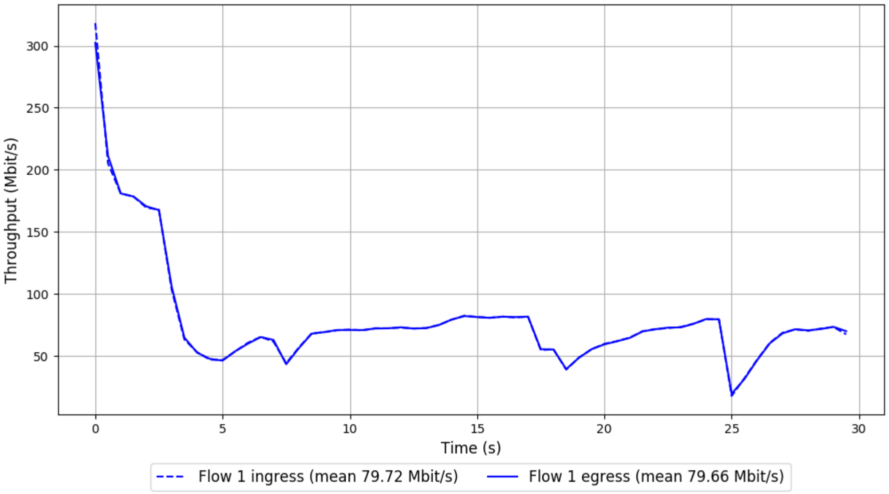
Run 7: Report of TCP Vegas — Data Link

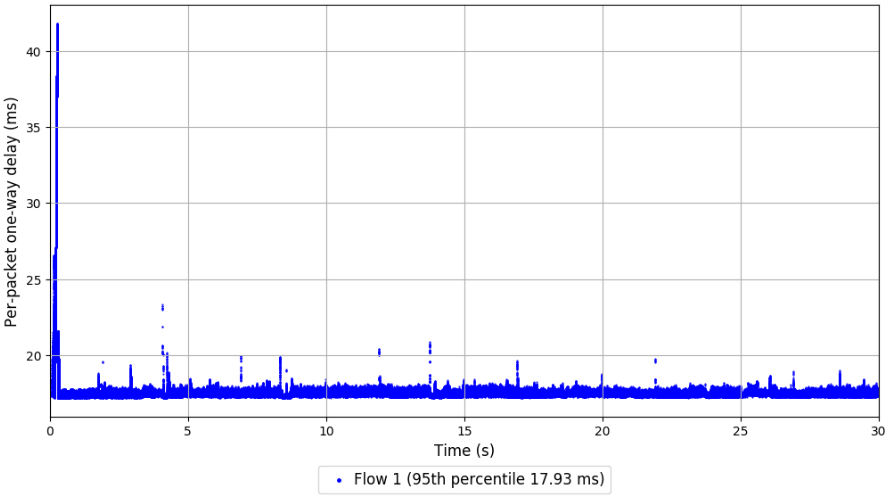




```
Run 8: Statistics of TCP Vegas

Start at: 2018-02-27 19:04:19
End at: 2018-02-27 19:04:49
Local clock offset: -0.676 ms
Remote clock offset: -5.24 ms

# Below is generated by plot.py at 2018-02-27 23:05:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.66 Mbit/s
95th percentile per-packet one-way delay: 17.934 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 79.66 Mbit/s
95th percentile per-packet one-way delay: 17.934 ms
Loss rate: 0.08%
```

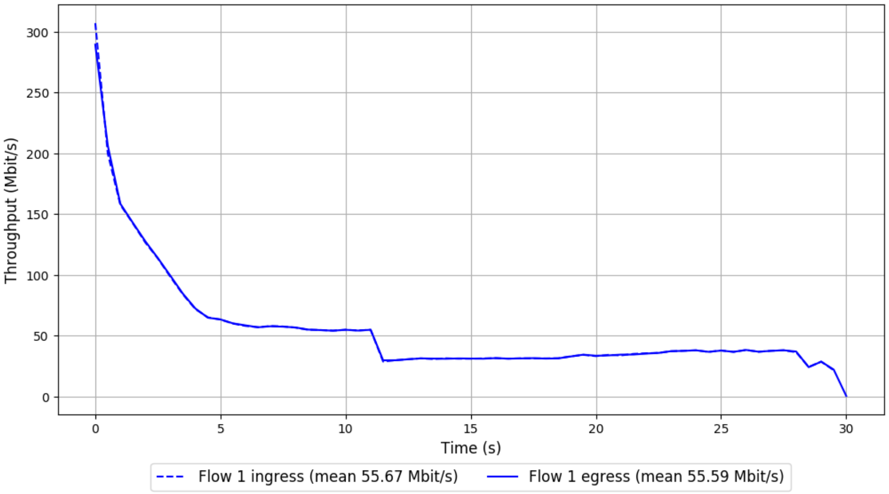
Run 8: Report of TCP Vegas — Data Link

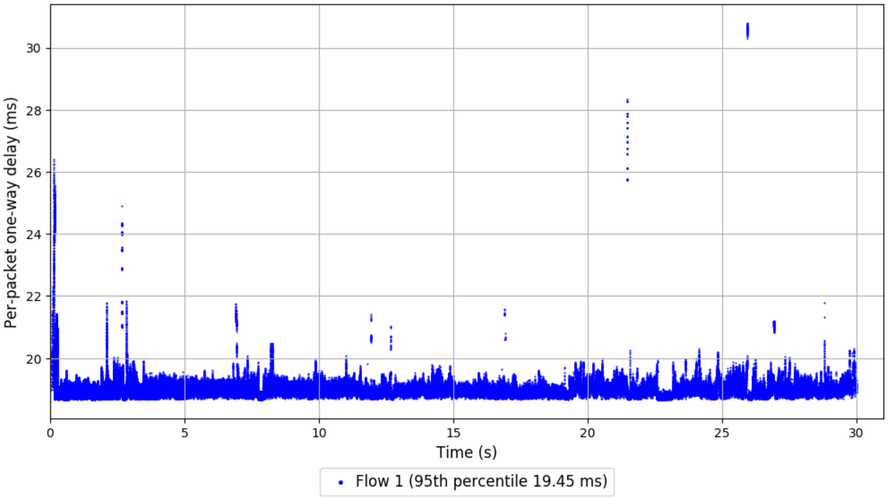




```
Run 9: Statistics of TCP Vegas

Start at: 2018-02-27 19:31:20
End at: 2018-02-27 19:31:50
Local clock offset: -0.414 ms
Remote clock offset: -5.11 ms

# Below is generated by plot.py at 2018-02-27 23:05:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 55.59 Mbit/s
95th percentile per-packet one-way delay: 19.447 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 55.59 Mbit/s
95th percentile per-packet one-way delay: 19.447 ms
Loss rate: 0.14%
```

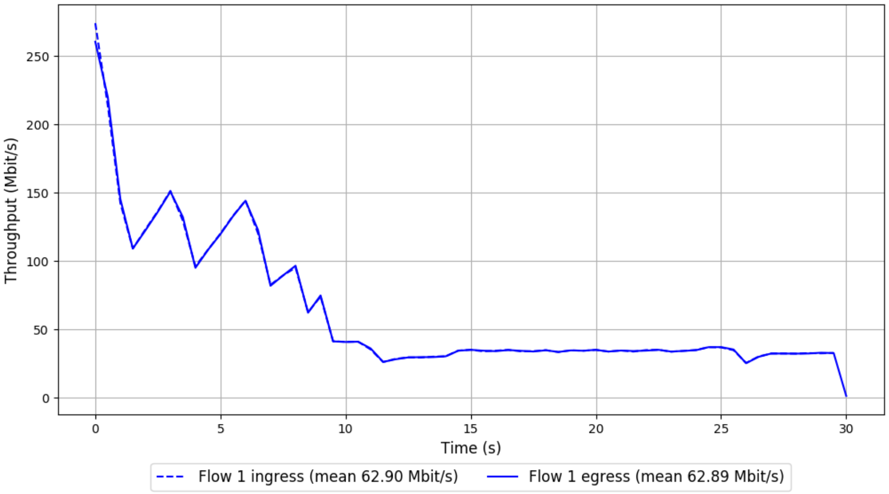
Run 9: Report of TCP Vegas — Data Link

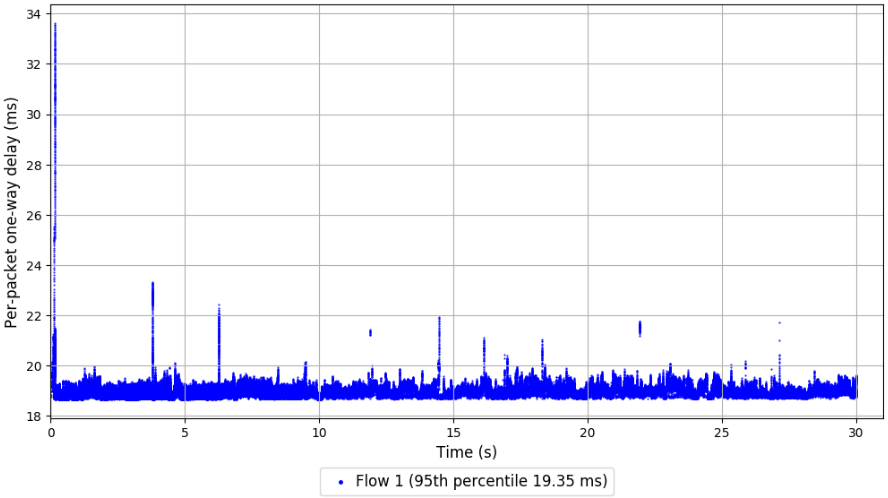




```
Run 10: Statistics of TCP Vegas

Start at: 2018-02-27 19:58:17
End at: 2018-02-27 19:58:47
Local clock offset: 0.997 ms
Remote clock offset: -7.003 ms

# Below is generated by plot.py at 2018-02-27 23:05:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.89 Mbit/s
95th percentile per-packet one-way delay: 19.346 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 62.89 Mbit/s
95th percentile per-packet one-way delay: 19.346 ms
Loss rate: 0.01%
```

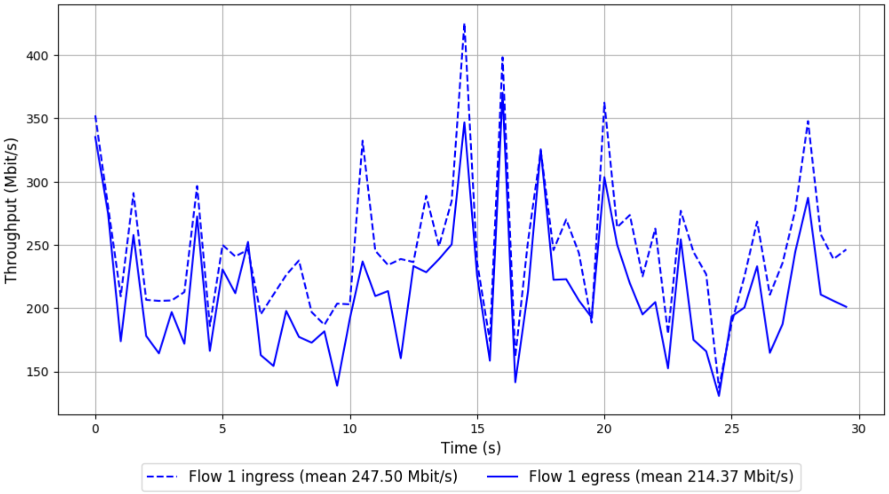
Run 10: Report of TCP Vegas — Data Link

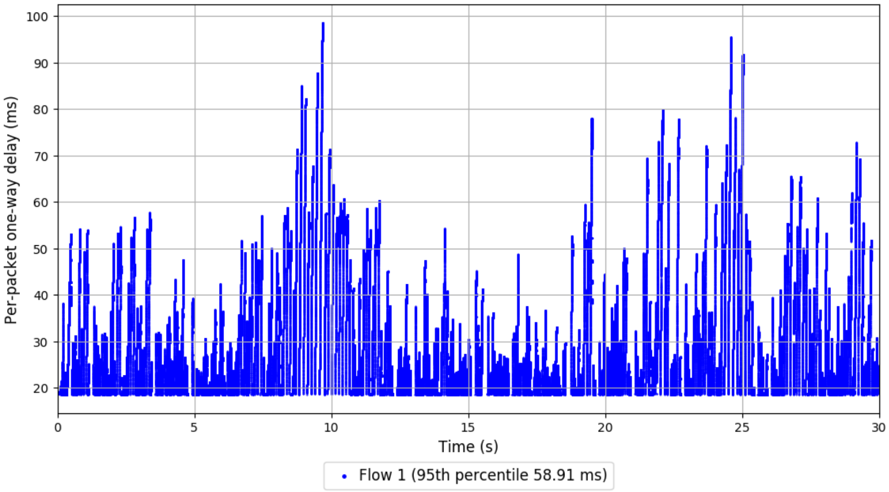




```
Run 1: Statistics of Verus

Start at: 2018-02-27 15:43:33
End at: 2018-02-27 15:44:04
Local clock offset: 0.812 ms
Remote clock offset: -4.984 ms

# Below is generated by plot.py at 2018-02-27 23:05:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 214.37 Mbit/s
95th percentile per-packet one-way delay: 58.915 ms
Loss rate: 13.38%
-- Flow 1:
Average throughput: 214.37 Mbit/s
95th percentile per-packet one-way delay: 58.915 ms
Loss rate: 13.38%
```

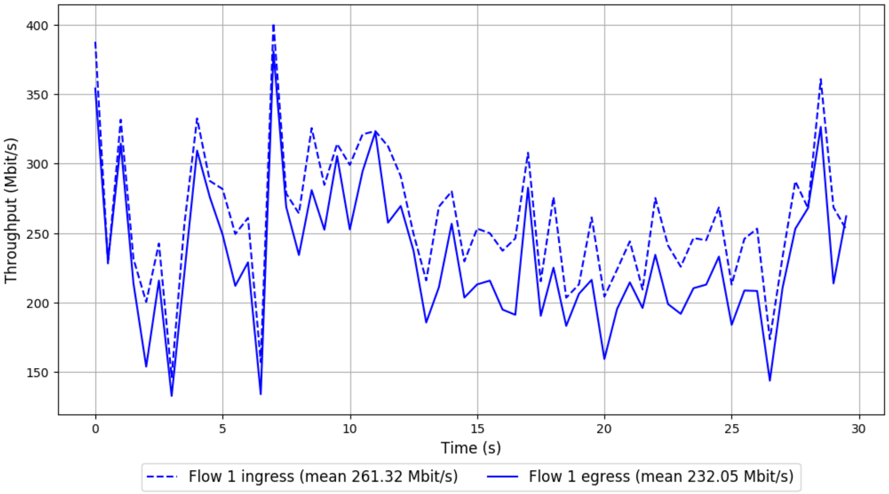
Run 1: Report of Verus — Data Link

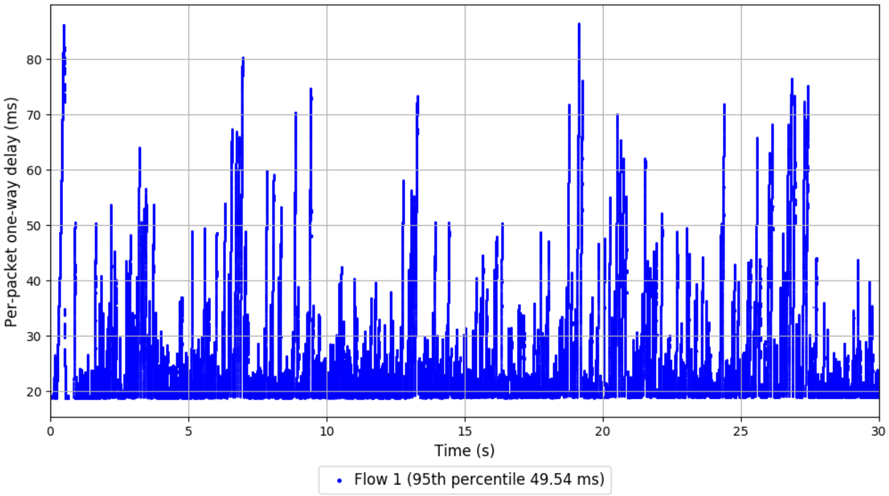




```
Run 2: Statistics of Verus

Start at: 2018-02-27 16:10:43
End at: 2018-02-27 16:11:13
Local clock offset: 0.608 ms
Remote clock offset: -4.262 ms

# Below is generated by plot.py at 2018-02-27 23:05:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 232.05 Mbit/s
95th percentile per-packet one-way delay: 49.540 ms
Loss rate: 11.20%
-- Flow 1:
Average throughput: 232.05 Mbit/s
95th percentile per-packet one-way delay: 49.540 ms
Loss rate: 11.20%
```

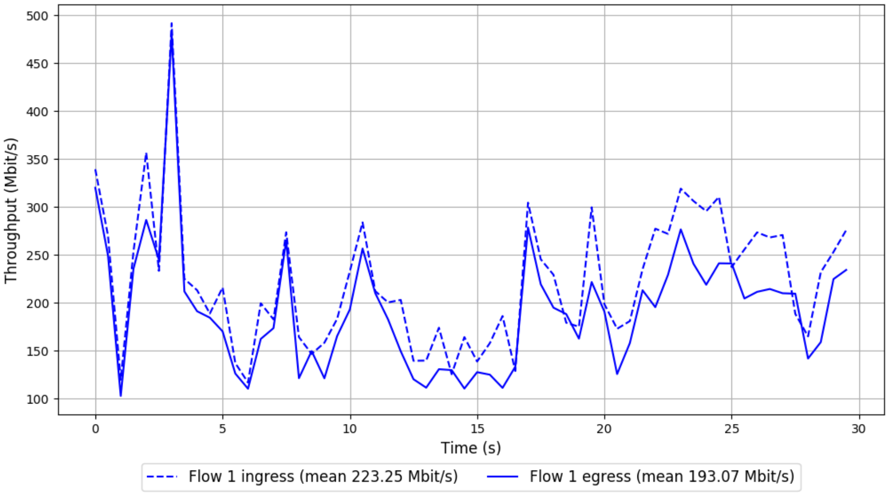
Run 2: Report of Verus — Data Link

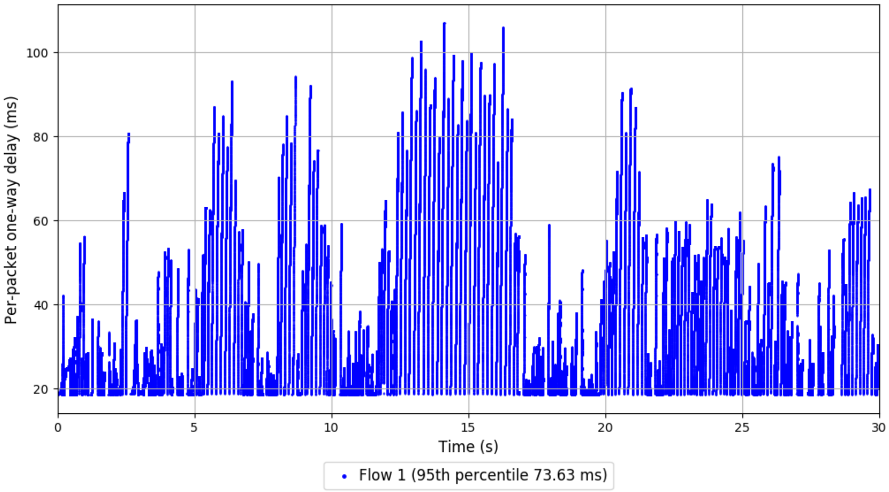




```
Run 3: Statistics of Verus

Start at: 2018-02-27 16:37:56
End at: 2018-02-27 16:38:26
Local clock offset: 0.732 ms
Remote clock offset: -6.352 ms

# Below is generated by plot.py at 2018-02-27 23:05:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 193.07 Mbit/s
95th percentile per-packet one-way delay: 73.631 ms
Loss rate: 13.52%
-- Flow 1:
Average throughput: 193.07 Mbit/s
95th percentile per-packet one-way delay: 73.631 ms
Loss rate: 13.52%
```

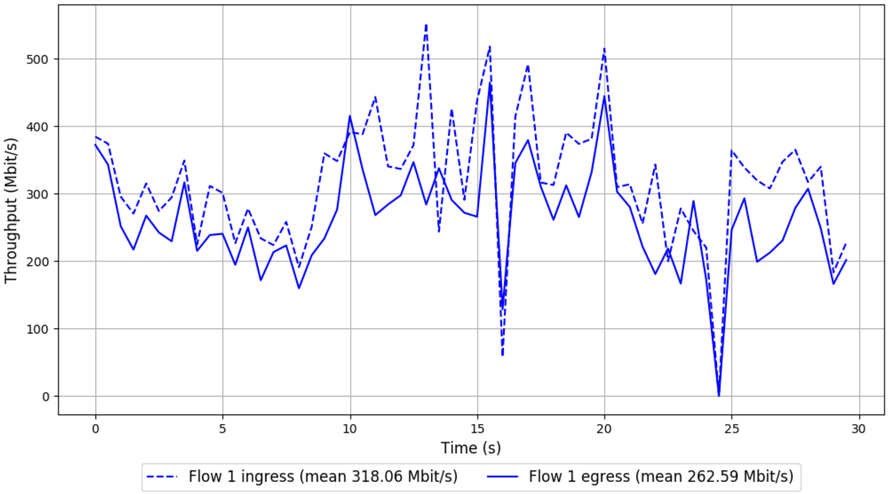
Run 3: Report of Verus — Data Link

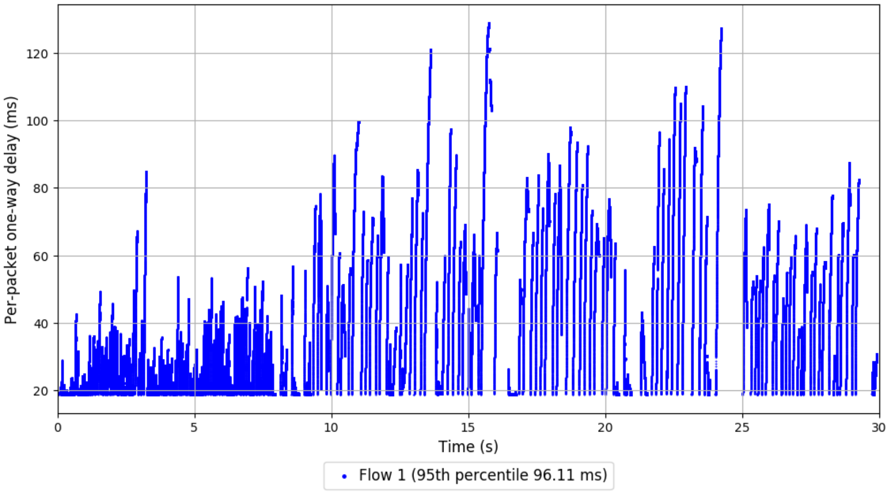




```
Run 4: Statistics of Verus

Start at: 2018-02-27 17:05:00
End at: 2018-02-27 17:05:30
Local clock offset: 0.637 ms
Remote clock offset: -4.869 ms

# Below is generated by plot.py at 2018-02-27 23:05:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 262.59 Mbit/s
95th percentile per-packet one-way delay: 96.111 ms
Loss rate: 17.41%
-- Flow 1:
Average throughput: 262.59 Mbit/s
95th percentile per-packet one-way delay: 96.111 ms
Loss rate: 17.41%
```

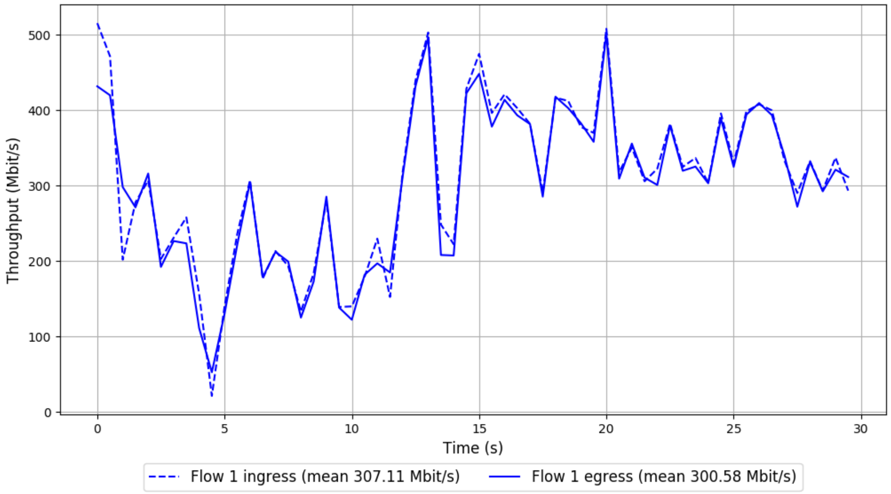
Run 4: Report of Verus — Data Link

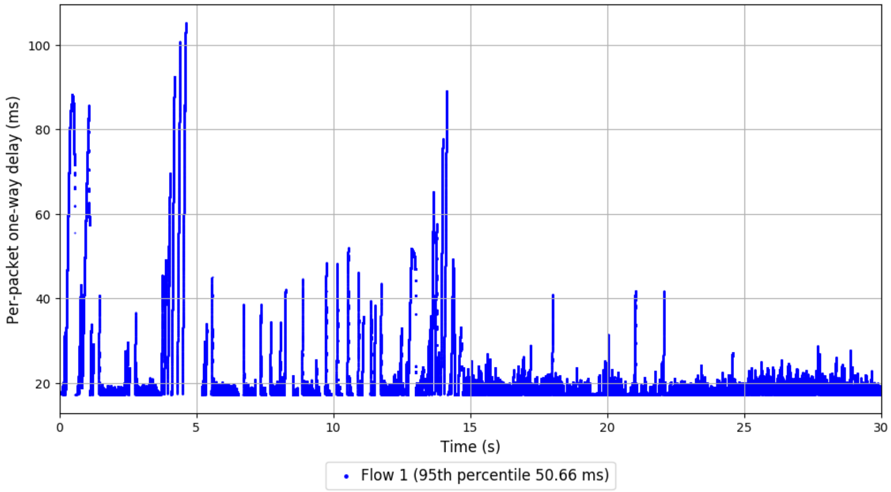




```
Run 5: Statistics of Verus

Start at: 2018-02-27 17:32:19
End at: 2018-02-27 17:32:49
Local clock offset: 0.511 ms
Remote clock offset: -6.052 ms

# Below is generated by plot.py at 2018-02-27 23:08:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 300.58 Mbit/s
95th percentile per-packet one-way delay: 50.660 ms
Loss rate: 2.13%
-- Flow 1:
Average throughput: 300.58 Mbit/s
95th percentile per-packet one-way delay: 50.660 ms
Loss rate: 2.13%
```

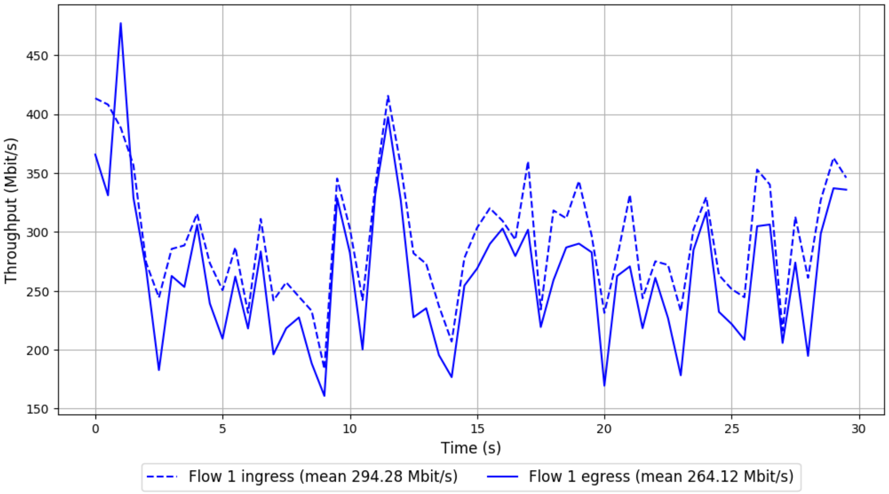
Run 5: Report of Verus — Data Link

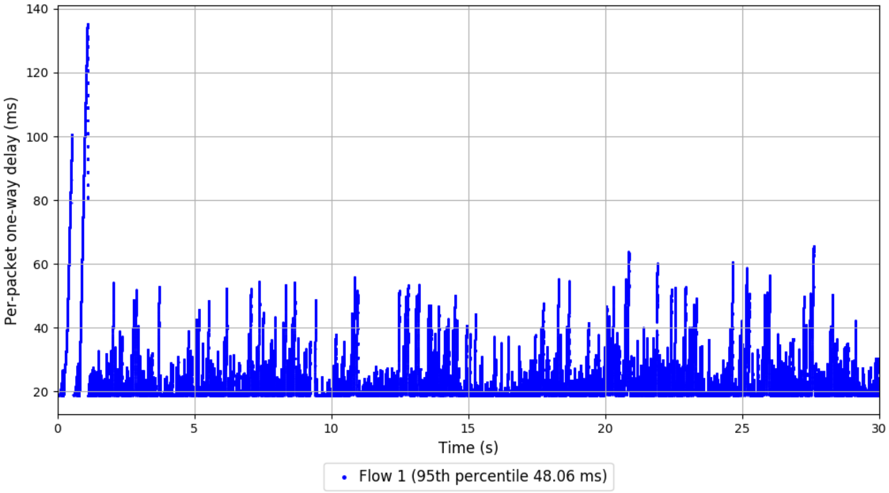




```
Run 6: Statistics of Verus

Start at: 2018-02-27 17:59:26
End at: 2018-02-27 17:59:56
Local clock offset: -0.202 ms
Remote clock offset: -6.404 ms

# Below is generated by plot.py at 2018-02-27 23:08:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 264.12 Mbit/s
95th percentile per-packet one-way delay: 48.065 ms
Loss rate: 10.25%
-- Flow 1:
Average throughput: 264.12 Mbit/s
95th percentile per-packet one-way delay: 48.065 ms
Loss rate: 10.25%
```

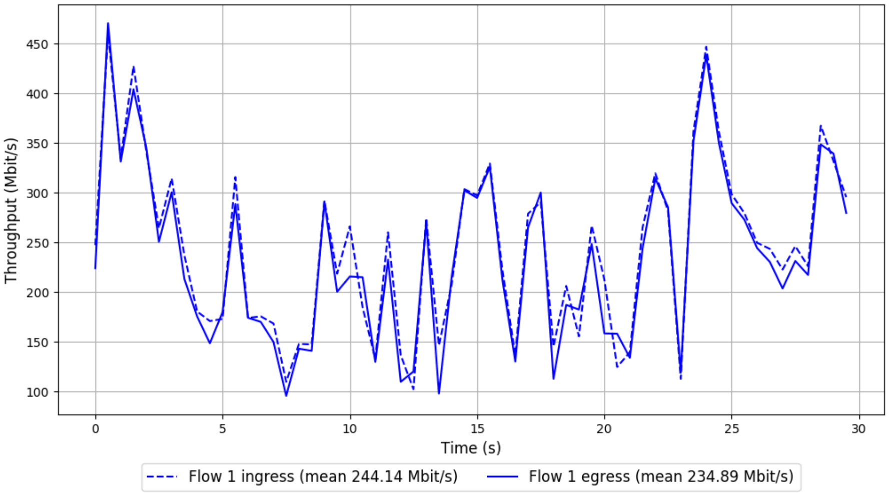
Run 6: Report of Verus — Data Link

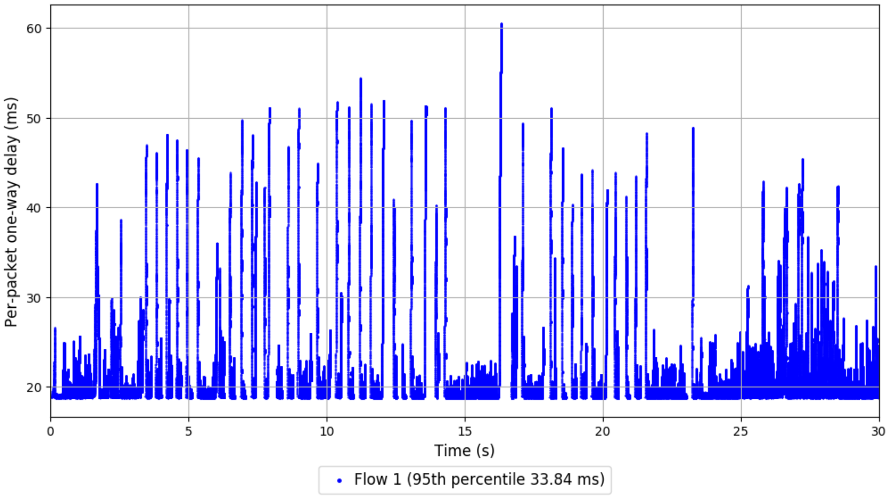




```
Run 7: Statistics of Verus

Start at: 2018-02-27 18:26:31
End at: 2018-02-27 18:27:01
Local clock offset: -1.122 ms
Remote clock offset: -6.391 ms

# Below is generated by plot.py at 2018-02-27 23:08:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 234.89 Mbit/s
95th percentile per-packet one-way delay: 33.845 ms
Loss rate: 3.78%
-- Flow 1:
Average throughput: 234.89 Mbit/s
95th percentile per-packet one-way delay: 33.845 ms
Loss rate: 3.78%
```

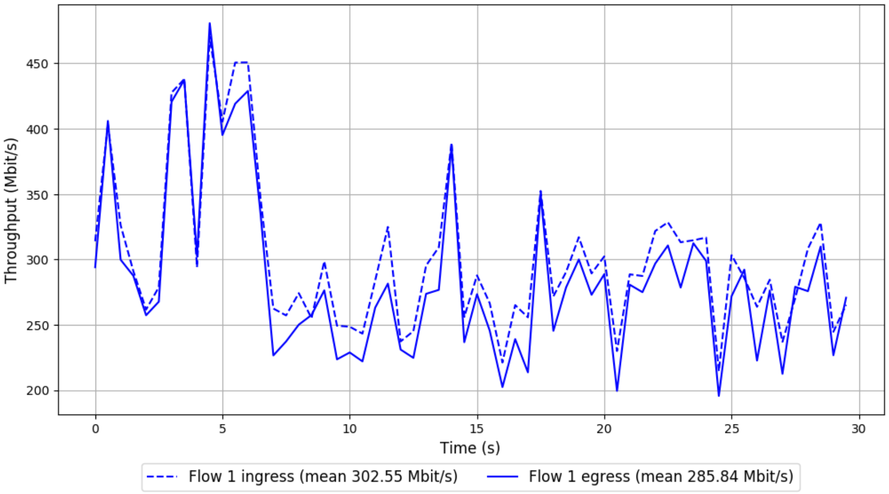
Run 7: Report of Verus — Data Link

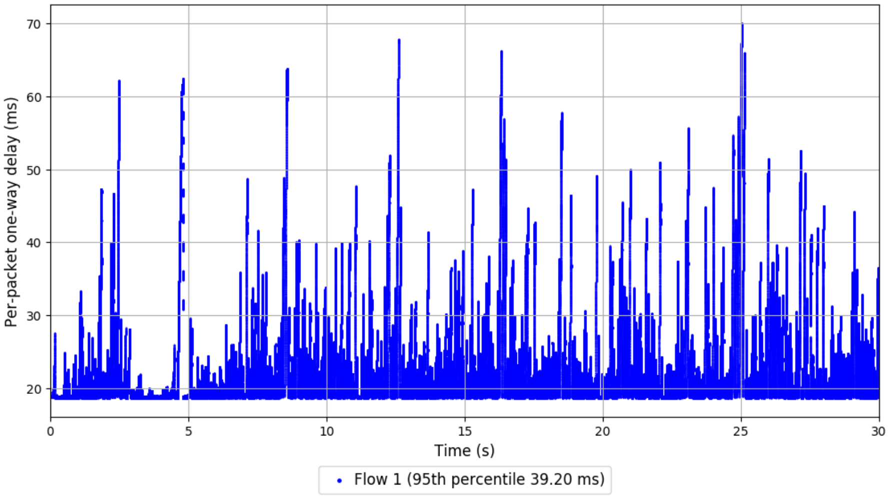




```
Run 8: Statistics of Verus

Start at: 2018-02-27 18:53:35
End at: 2018-02-27 18:54:05
Local clock offset: -0.822 ms
Remote clock offset: -5.238 ms

# Below is generated by plot.py at 2018-02-27 23:09:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 285.84 Mbit/s
95th percentile per-packet one-way delay: 39.198 ms
Loss rate: 5.47%
-- Flow 1:
Average throughput: 285.84 Mbit/s
95th percentile per-packet one-way delay: 39.198 ms
Loss rate: 5.47%
```

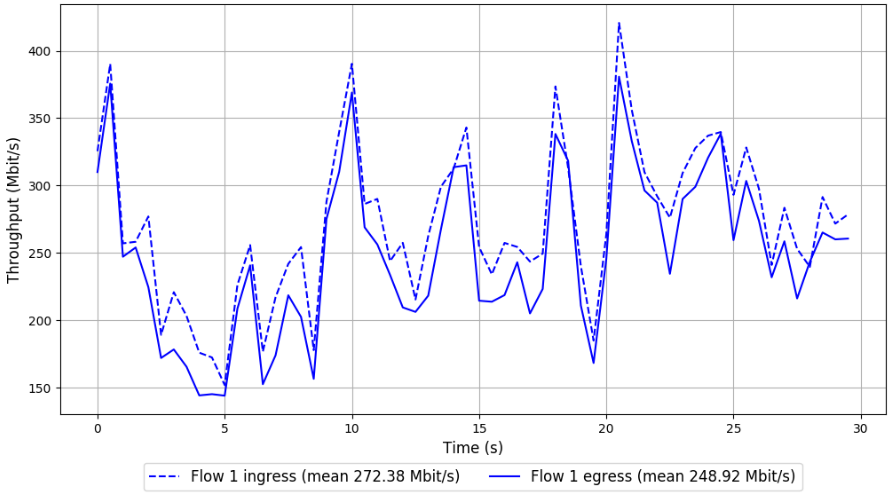
Run 8: Report of Verus — Data Link

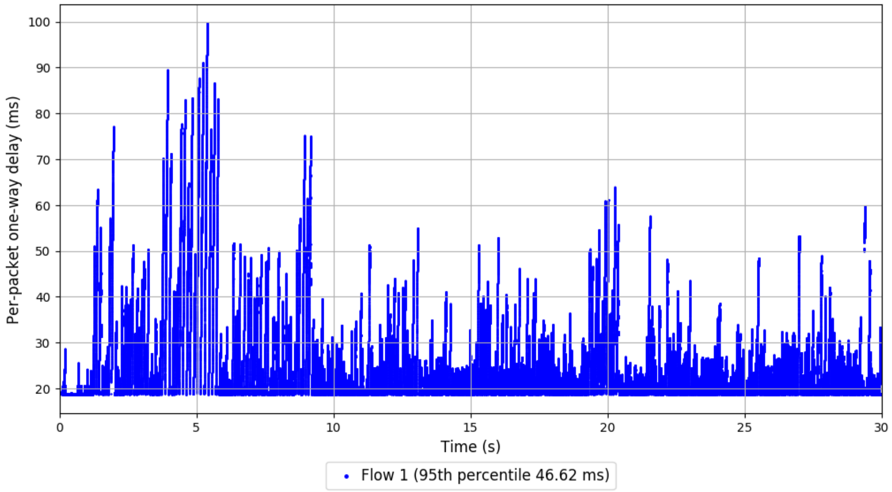




```
Run 9: Statistics of Verus

Start at: 2018-02-27 19:20:39
End at: 2018-02-27 19:21:09
Local clock offset: -0.389 ms
Remote clock offset: -5.162 ms

# Below is generated by plot.py at 2018-02-27 23:09:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 248.92 Mbit/s
95th percentile per-packet one-way delay: 46.618 ms
Loss rate: 8.61%
-- Flow 1:
Average throughput: 248.92 Mbit/s
95th percentile per-packet one-way delay: 46.618 ms
Loss rate: 8.61%
```

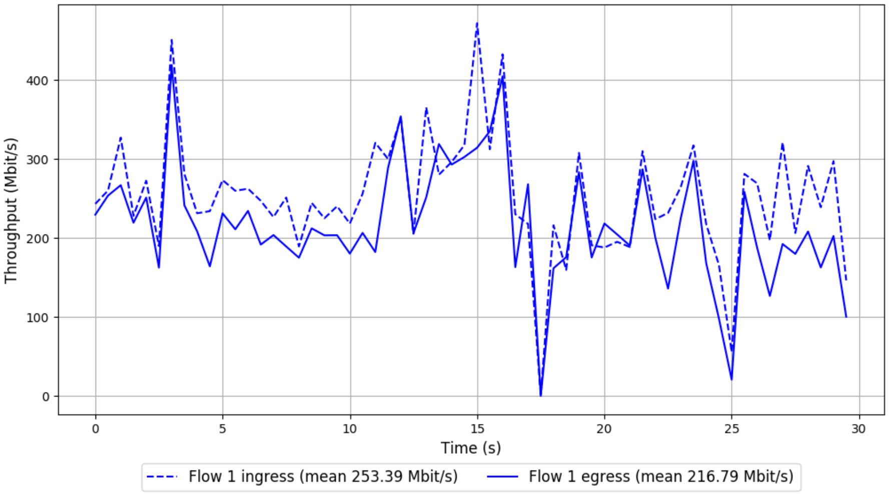
Run 9: Report of Verus — Data Link

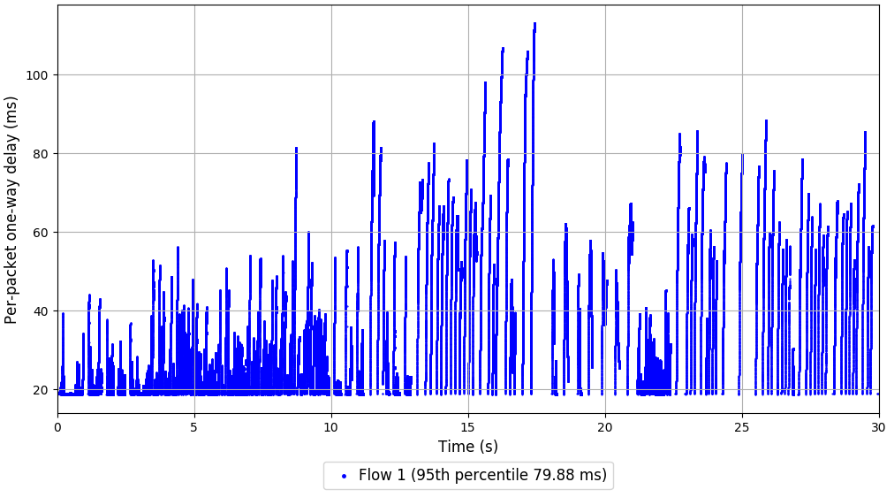




```
Run 10: Statistics of Verus

Start at: 2018-02-27 19:47:35
End at: 2018-02-27 19:48:05
Local clock offset: 0.655 ms
Remote clock offset: -6.563 ms

# Below is generated by plot.py at 2018-02-27 23:09:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.79 Mbit/s
95th percentile per-packet one-way delay: 79.877 ms
Loss rate: 14.44%
-- Flow 1:
Average throughput: 216.79 Mbit/s
95th percentile per-packet one-way delay: 79.877 ms
Loss rate: 14.44%
```

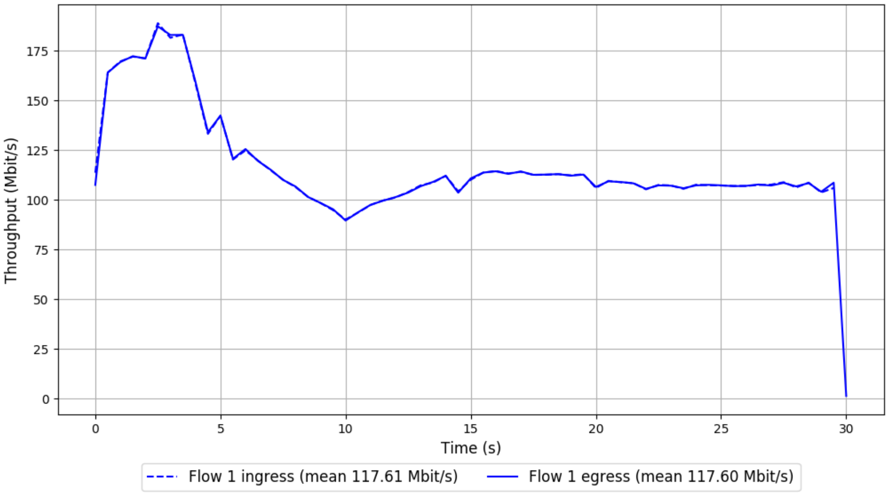
Run 10: Report of Verus — Data Link

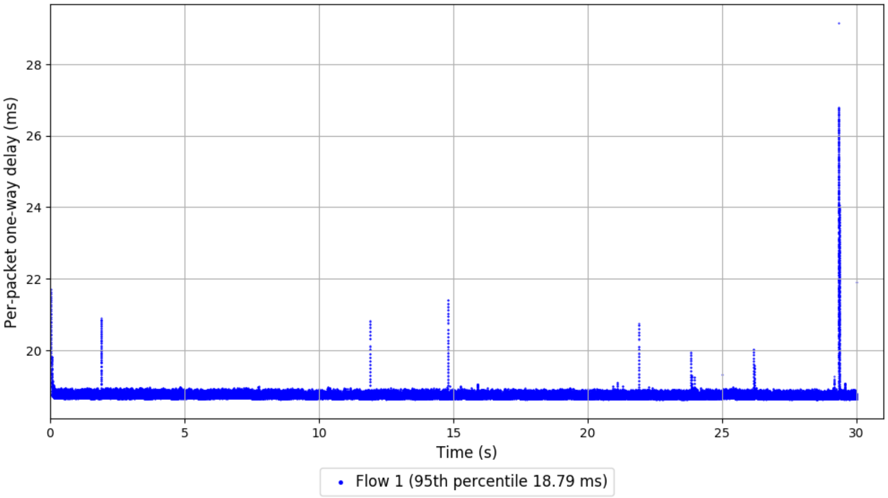




```
Run 1: Statistics of Copa

Start at: 2018-02-27 15:52:51
End at: 2018-02-27 15:53:21
Local clock offset: 0.677 ms
Remote clock offset: -4.522 ms

# Below is generated by plot.py at 2018-02-27 23:09:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 117.60 Mbit/s
95th percentile per-packet one-way delay: 18.789 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 117.60 Mbit/s
95th percentile per-packet one-way delay: 18.789 ms
Loss rate: 0.00%
```

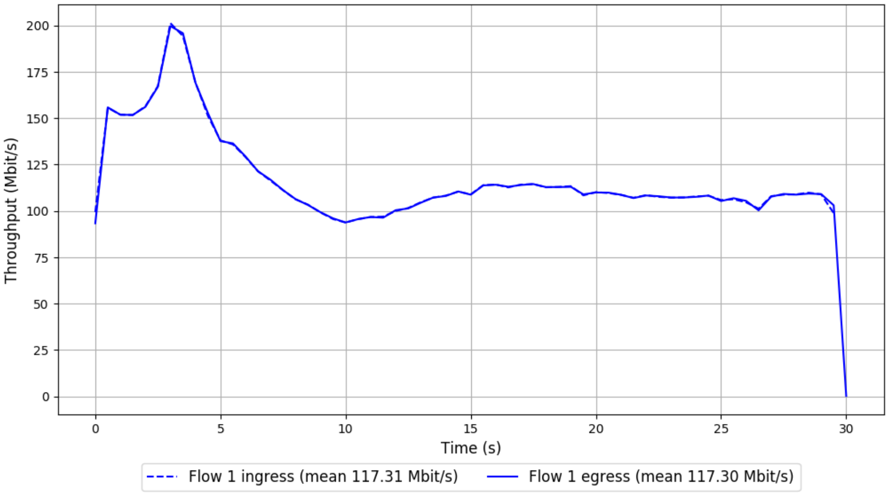
Run 1: Report of Copa — Data Link

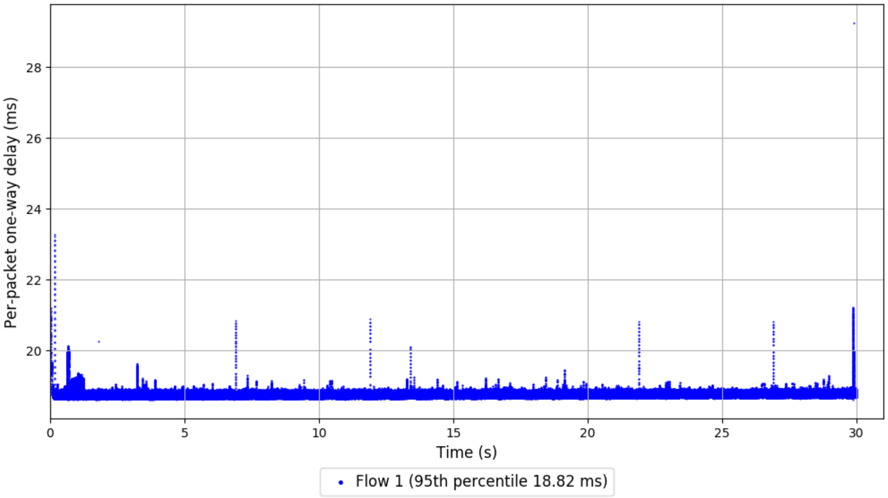




```
Run 2: Statistics of Copa

Start at: 2018-02-27 16:20:02
End at: 2018-02-27 16:20:32
Local clock offset: 0.788 ms
Remote clock offset: -5.662 ms

# Below is generated by plot.py at 2018-02-27 23:09:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 117.30 Mbit/s
95th percentile per-packet one-way delay: 18.818 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 117.30 Mbit/s
95th percentile per-packet one-way delay: 18.818 ms
Loss rate: 0.01%
```

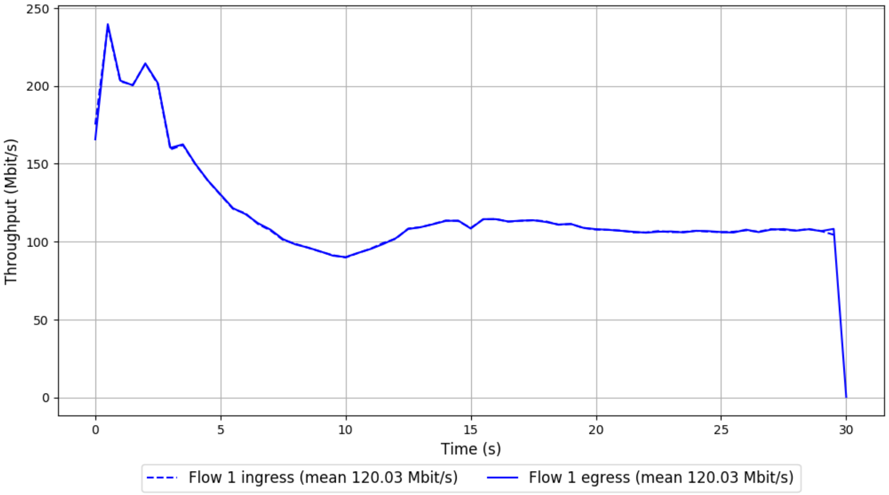
Run 2: Report of Copa — Data Link

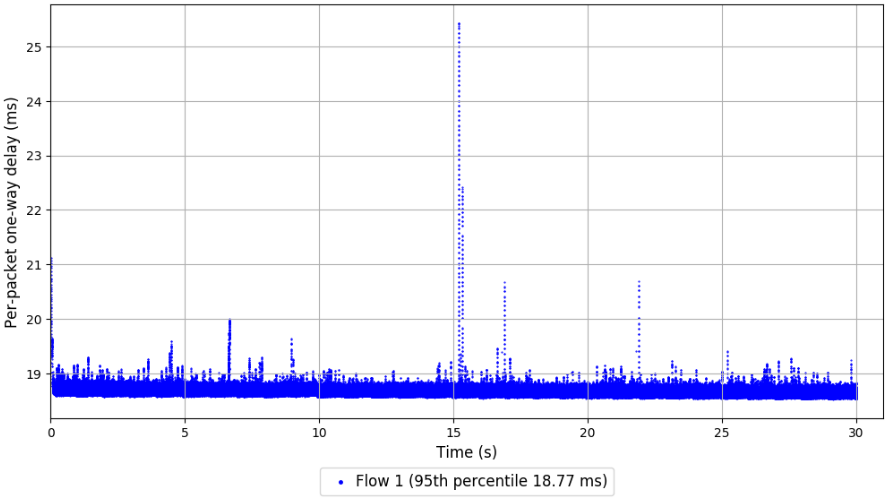




```
Run 3: Statistics of Copa

Start at: 2018-02-27 16:47:10
End at: 2018-02-27 16:47:40
Local clock offset: 0.702 ms
Remote clock offset: -6.027 ms

# Below is generated by plot.py at 2018-02-27 23:11:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 120.03 Mbit/s
95th percentile per-packet one-way delay: 18.766 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 120.03 Mbit/s
95th percentile per-packet one-way delay: 18.766 ms
Loss rate: 0.01%
```

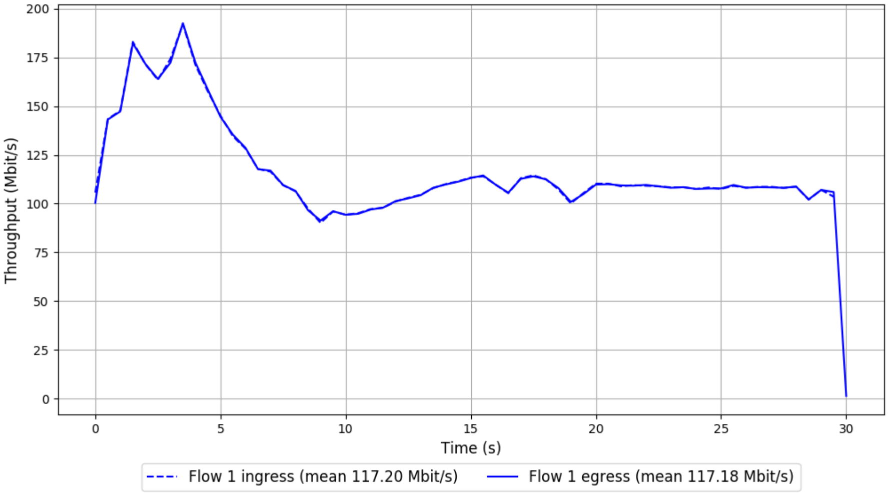
Run 3: Report of Copa — Data Link

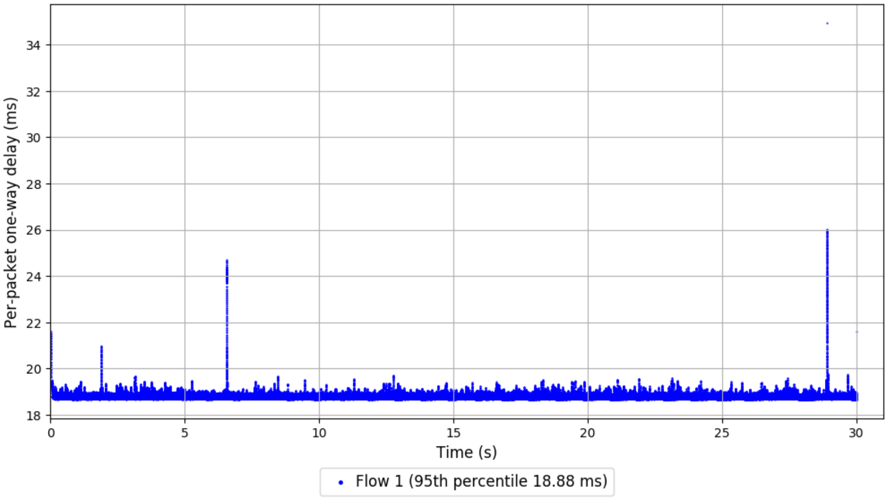




```
Run 4: Statistics of Copa

Start at: 2018-02-27 17:14:28
End at: 2018-02-27 17:14:58
Local clock offset: 0.605 ms
Remote clock offset: -4.589 ms

# Below is generated by plot.py at 2018-02-27 23:11:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 117.18 Mbit/s
95th percentile per-packet one-way delay: 18.883 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 117.18 Mbit/s
95th percentile per-packet one-way delay: 18.883 ms
Loss rate: 0.01%
```

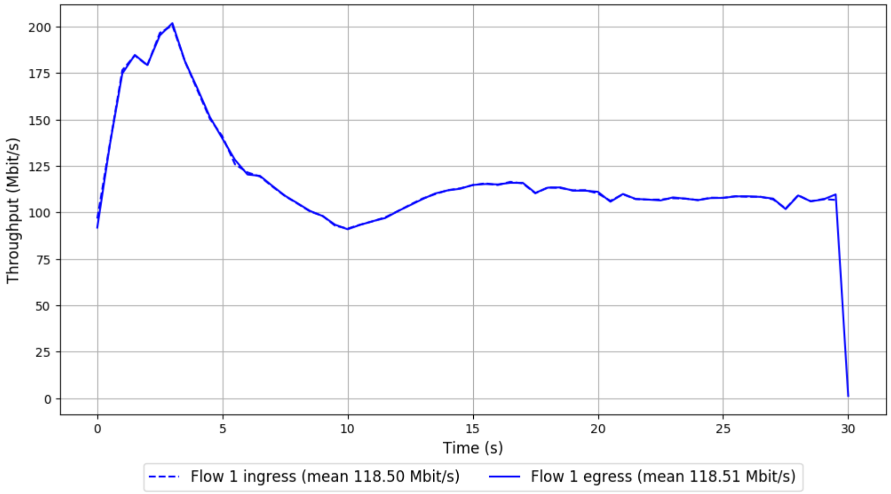
Run 4: Report of Copa — Data Link

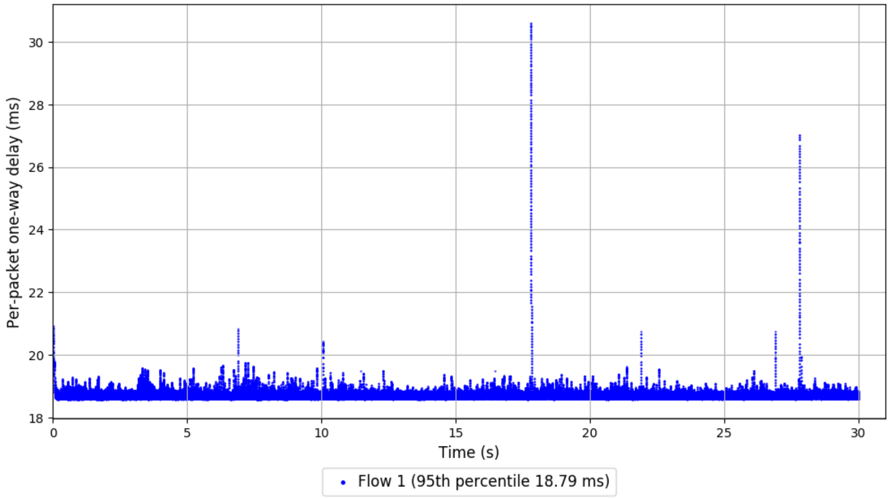




```
Run 5: Statistics of Copa

Start at: 2018-02-27 17:41:36
End at: 2018-02-27 17:42:06
Local clock offset: 0.475 ms
Remote clock offset: -6.328 ms

# Below is generated by plot.py at 2018-02-27 23:11:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 118.51 Mbit/s
95th percentile per-packet one-way delay: 18.793 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 118.51 Mbit/s
95th percentile per-packet one-way delay: 18.793 ms
Loss rate: 0.00%
```

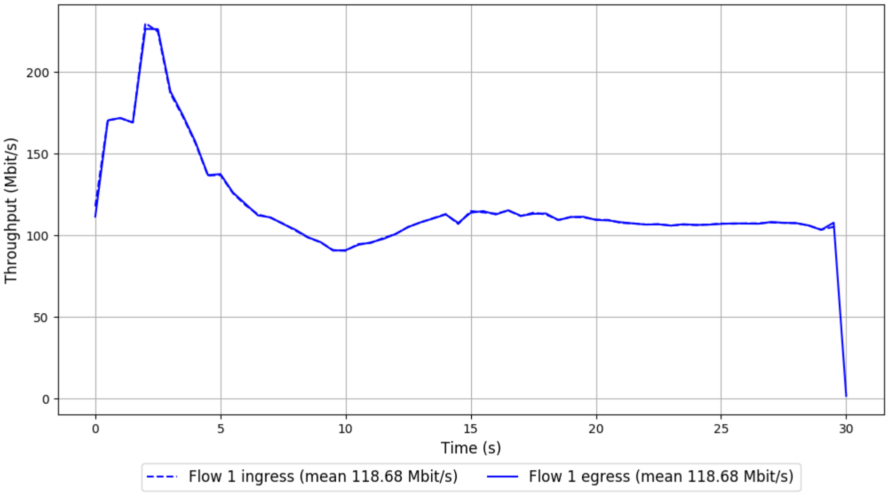
Run 5: Report of Copa — Data Link

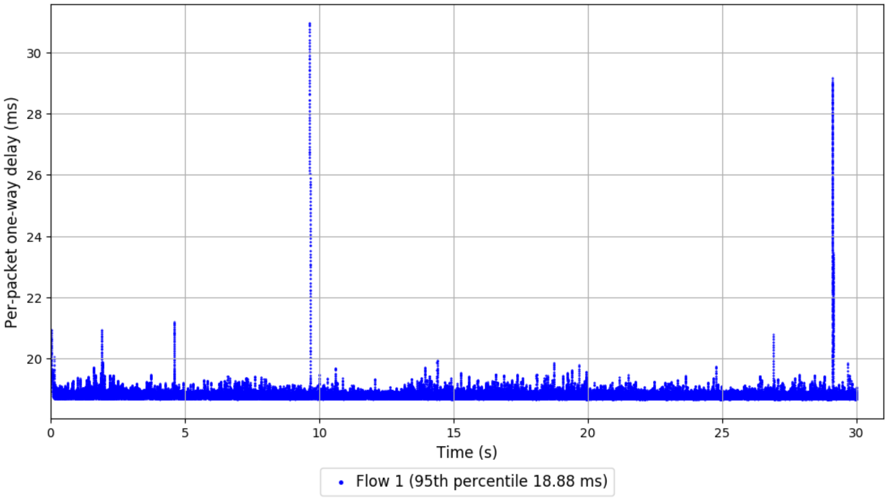




```
Run 6: Statistics of Copa

Start at: 2018-02-27 18:08:44
End at: 2018-02-27 18:09:14
Local clock offset: -0.717 ms
Remote clock offset: -6.403 ms

# Below is generated by plot.py at 2018-02-27 23:11:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 118.68 Mbit/s
95th percentile per-packet one-way delay: 18.882 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 118.68 Mbit/s
95th percentile per-packet one-way delay: 18.882 ms
Loss rate: 0.00%
```

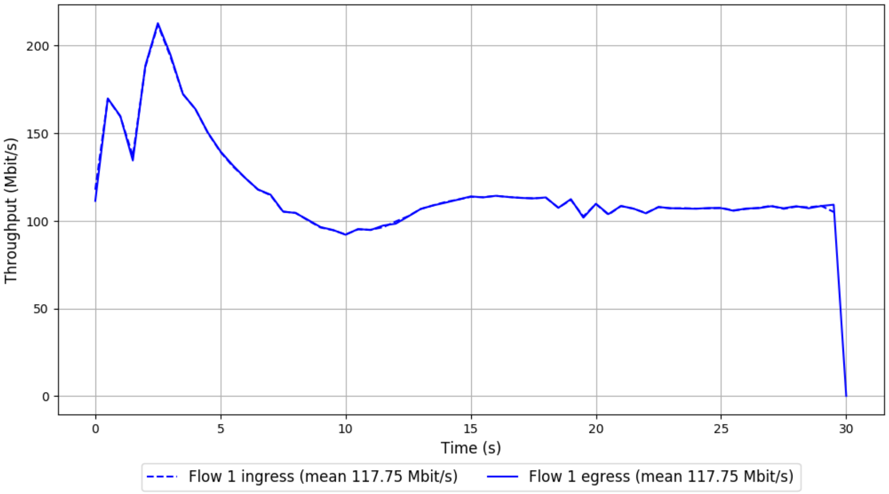
Run 6: Report of Copa — Data Link

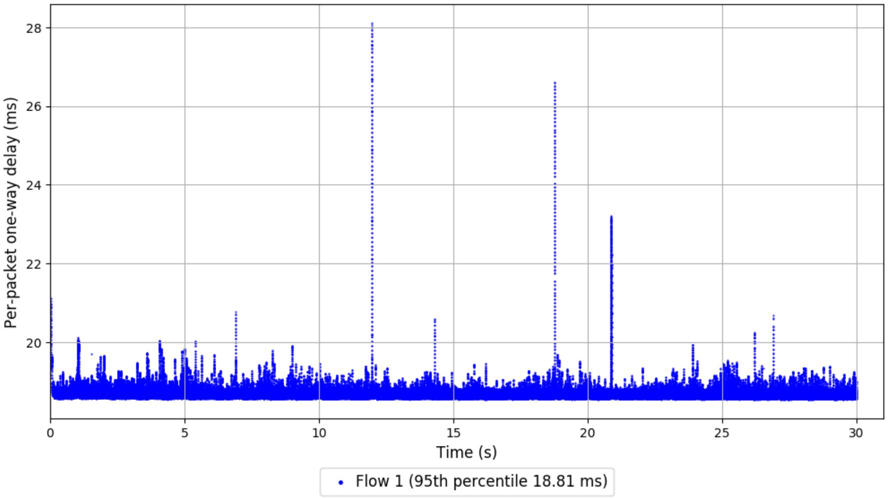




```
Run 7: Statistics of Copa

Start at: 2018-02-27 18:35:48
End at: 2018-02-27 18:36:18
Local clock offset: -0.74 ms
Remote clock offset: -5.774 ms

# Below is generated by plot.py at 2018-02-27 23:11:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 117.75 Mbit/s
95th percentile per-packet one-way delay: 18.806 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 117.75 Mbit/s
95th percentile per-packet one-way delay: 18.806 ms
Loss rate: 0.01%
```

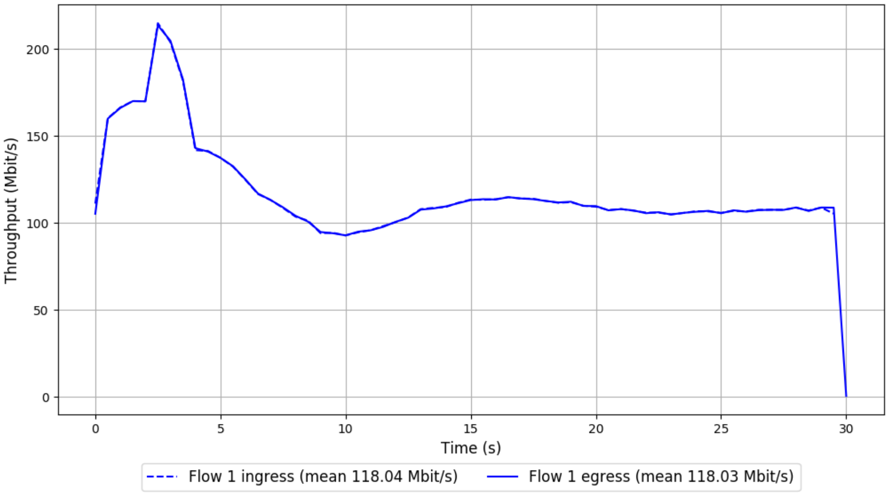
Run 7: Report of Copa — Data Link

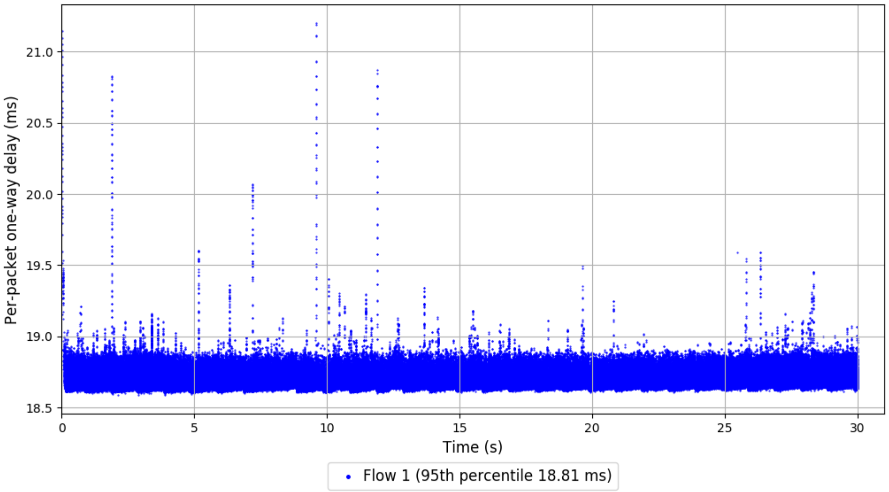




```
Run 8: Statistics of Copa

Start at: 2018-02-27 19:02:53
End at: 2018-02-27 19:03:23
Local clock offset: -0.725 ms
Remote clock offset: -5.241 ms

# Below is generated by plot.py at 2018-02-27 23:12:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 118.03 Mbit/s
95th percentile per-packet one-way delay: 18.806 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 118.03 Mbit/s
95th percentile per-packet one-way delay: 18.806 ms
Loss rate: 0.01%
```

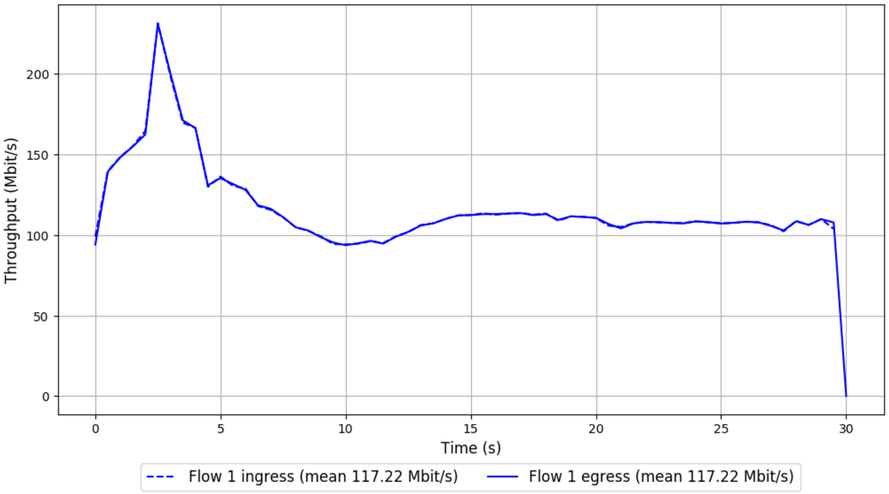
Run 8: Report of Copa — Data Link

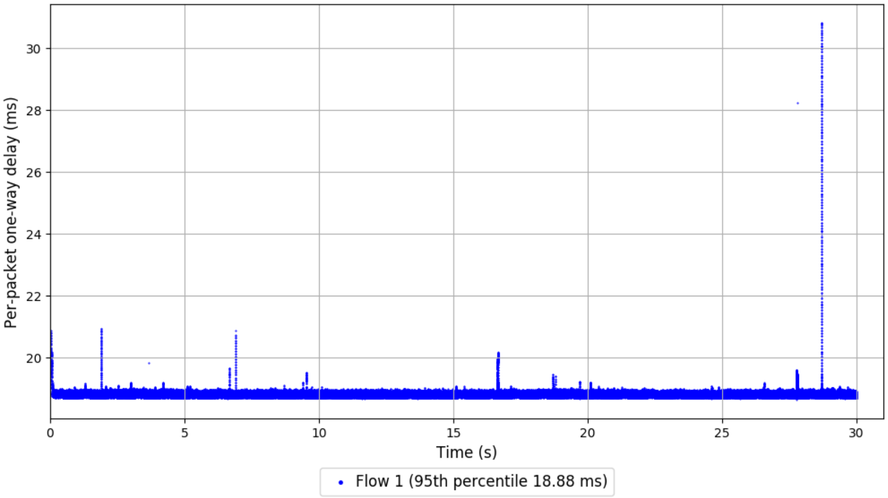




```
Run 9: Statistics of Copa

Start at: 2018-02-27 19:29:54
End at: 2018-02-27 19:30:24
Local clock offset: -0.423 ms
Remote clock offset: -5.089 ms

# Below is generated by plot.py at 2018-02-27 23:12:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 117.22 Mbit/s
95th percentile per-packet one-way delay: 18.876 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 117.22 Mbit/s
95th percentile per-packet one-way delay: 18.876 ms
Loss rate: 0.01%
```

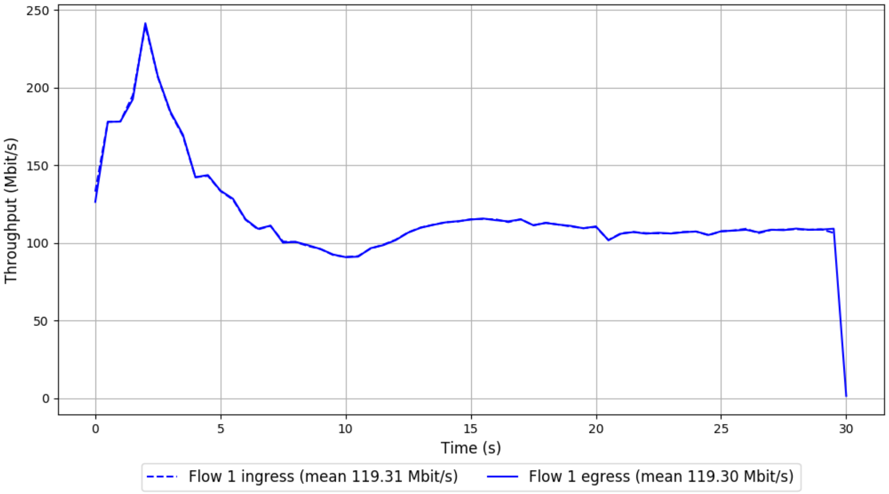
Run 9: Report of Copa — Data Link

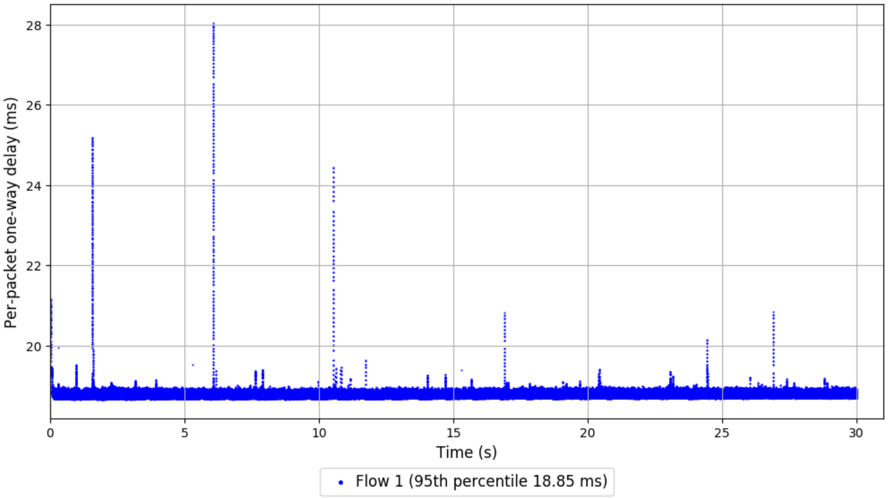




```
Run 10: Statistics of Copa

Start at: 2018-02-27 19:56:51
End at: 2018-02-27 19:57:22
Local clock offset: 0.878 ms
Remote clock offset: -6.998 ms

# Below is generated by plot.py at 2018-02-27 23:12:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 119.30 Mbit/s
95th percentile per-packet one-way delay: 18.853 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 119.30 Mbit/s
95th percentile per-packet one-way delay: 18.853 ms
Loss rate: 0.01%
```

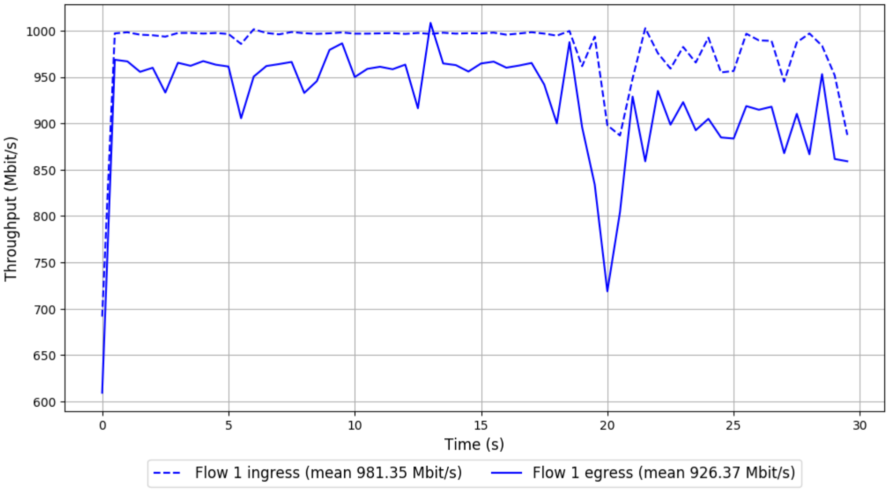
Run 10: Report of Copa — Data Link

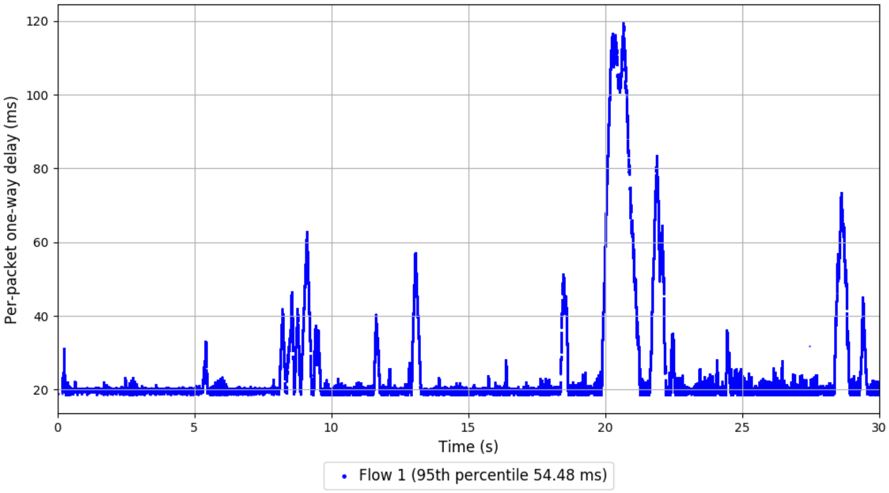




```
Run 1: Statistics of FillP

Start at: 2018-02-27 15:55:37
End at: 2018-02-27 15:56:07
Local clock offset: 0.744 ms
Remote clock offset: -4.446 ms

# Below is generated by plot.py at 2018-02-27 23:25:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 926.37 Mbit/s
95th percentile per-packet one-way delay: 54.483 ms
Loss rate: 5.60%
-- Flow 1:
Average throughput: 926.37 Mbit/s
95th percentile per-packet one-way delay: 54.483 ms
Loss rate: 5.60%
```

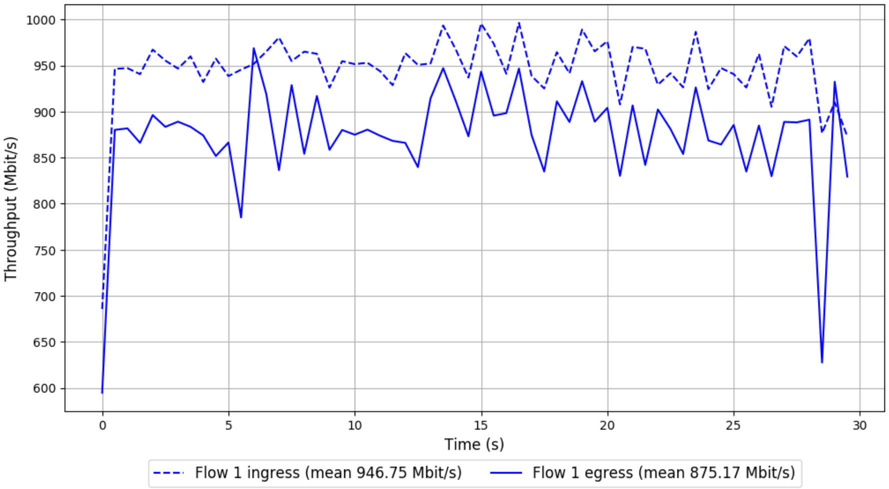
Run 1: Report of FillP — Data Link

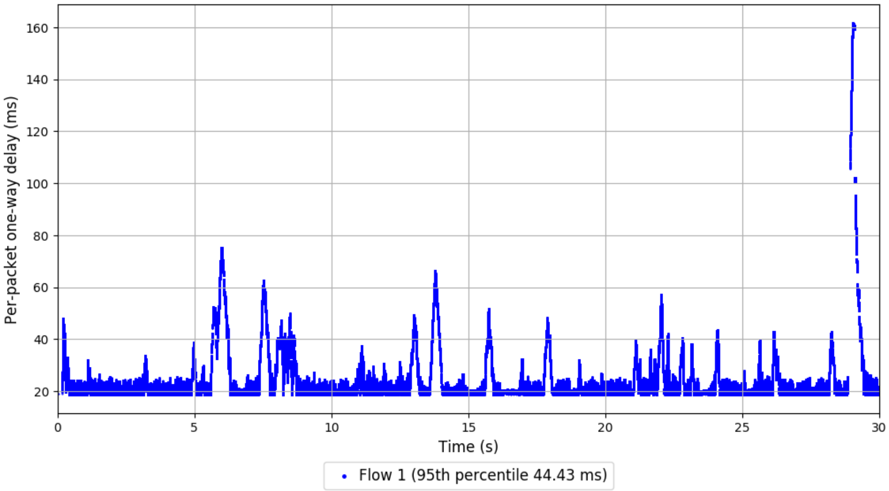




```
Run 2: Statistics of FillP

Start at: 2018-02-27 16:22:50
End at: 2018-02-27 16:23:20
Local clock offset: 0.794 ms
Remote clock offset: -5.848 ms

# Below is generated by plot.py at 2018-02-27 23:25:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 875.17 Mbit/s
95th percentile per-packet one-way delay: 44.433 ms
Loss rate: 7.56%
-- Flow 1:
Average throughput: 875.17 Mbit/s
95th percentile per-packet one-way delay: 44.433 ms
Loss rate: 7.56%
```

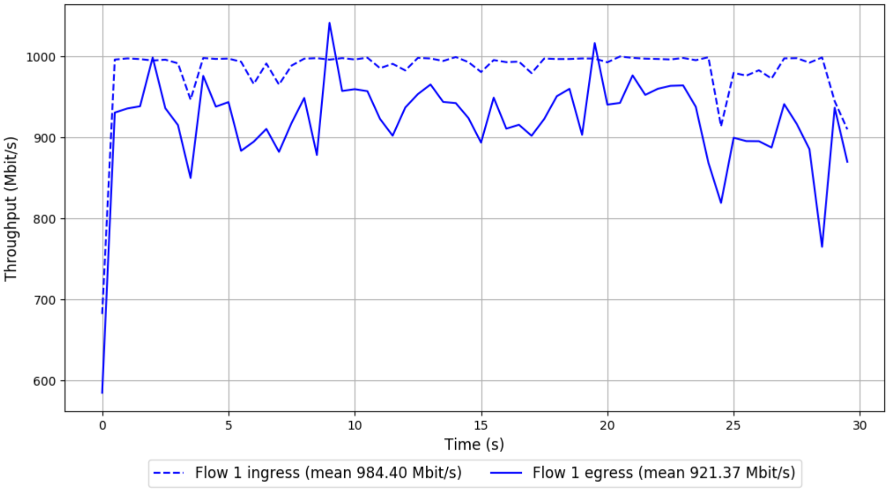
Run 2: Report of FillP — Data Link

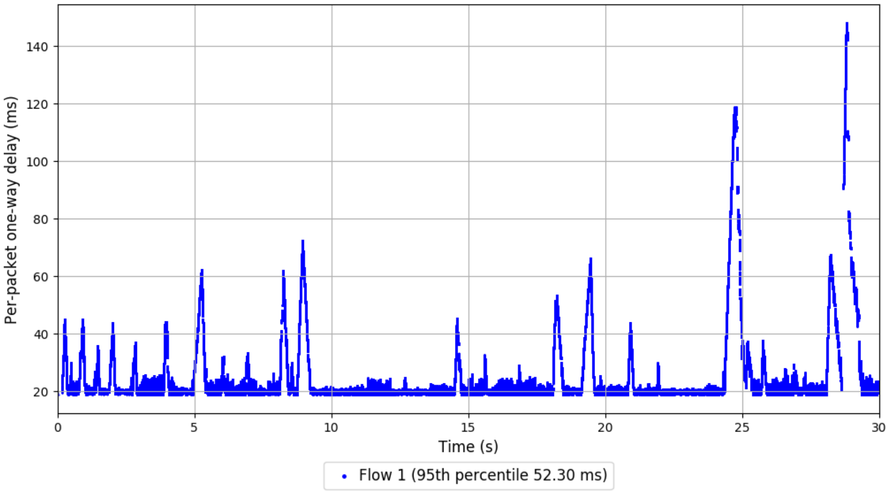




```
Run 3: Statistics of FillP

Start at: 2018-02-27 16:49:57
End at: 2018-02-27 16:50:27
Local clock offset: 0.626 ms
Remote clock offset: -5.727 ms

# Below is generated by plot.py at 2018-02-27 23:26:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 921.37 Mbit/s
95th percentile per-packet one-way delay: 52.301 ms
Loss rate: 6.40%
-- Flow 1:
Average throughput: 921.37 Mbit/s
95th percentile per-packet one-way delay: 52.301 ms
Loss rate: 6.40%
```

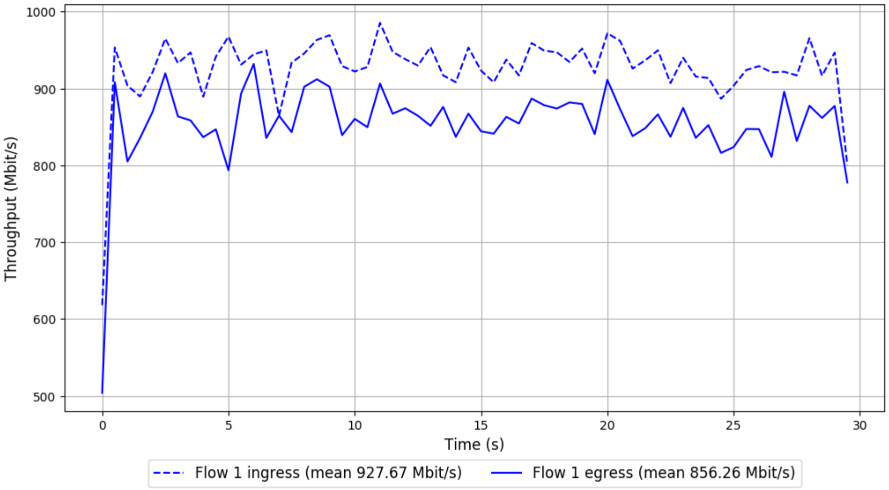
Run 3: Report of FillP — Data Link

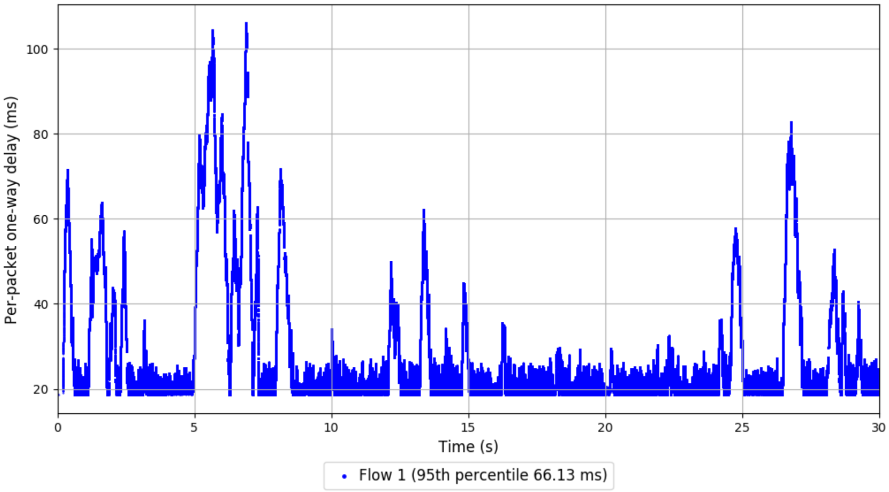




```
Run 4: Statistics of FillP

Start at: 2018-02-27 17:17:16
End at: 2018-02-27 17:17:46
Local clock offset: 0.502 ms
Remote clock offset: -4.603 ms

# Below is generated by plot.py at 2018-02-27 23:26:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 856.26 Mbit/s
95th percentile per-packet one-way delay: 66.132 ms
Loss rate: 7.70%
-- Flow 1:
Average throughput: 856.26 Mbit/s
95th percentile per-packet one-way delay: 66.132 ms
Loss rate: 7.70%
```

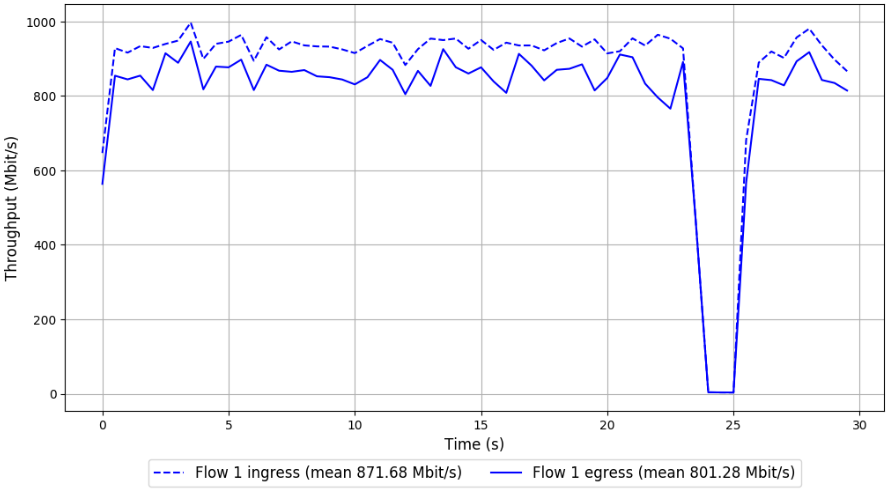
Run 4: Report of FillP — Data Link

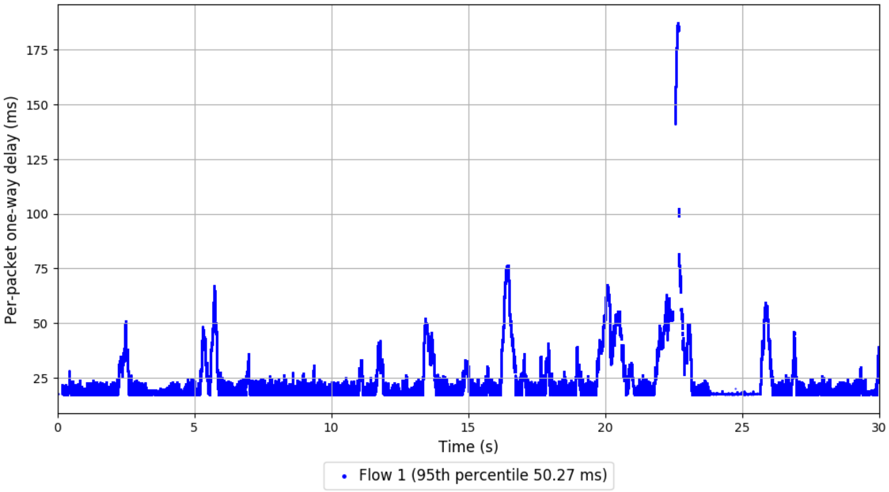




```
Run 5: Statistics of FillP

Start at: 2018-02-27 17:44:22
End at: 2018-02-27 17:44:52
Local clock offset: 0.46 ms
Remote clock offset: -6.344 ms

# Below is generated by plot.py at 2018-02-27 23:26:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 801.28 Mbit/s
95th percentile per-packet one-way delay: 50.272 ms
Loss rate: 8.07%
-- Flow 1:
Average throughput: 801.28 Mbit/s
95th percentile per-packet one-way delay: 50.272 ms
Loss rate: 8.07%
```

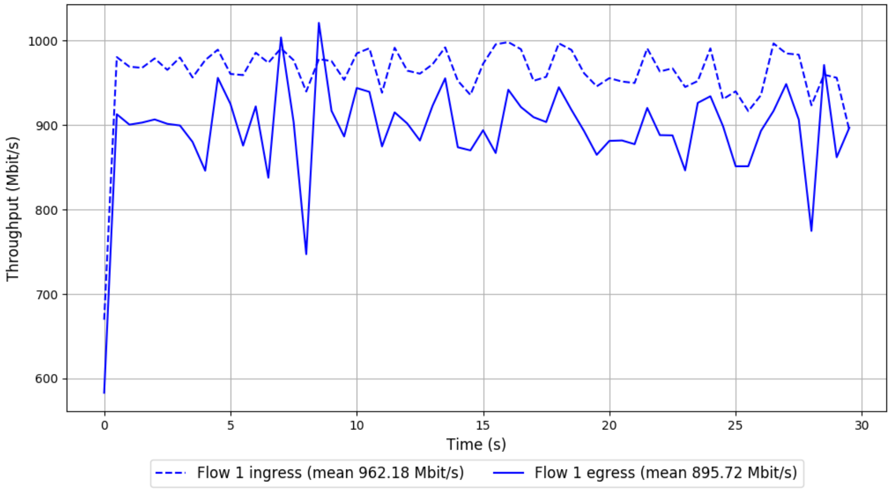
Run 5: Report of FillP — Data Link

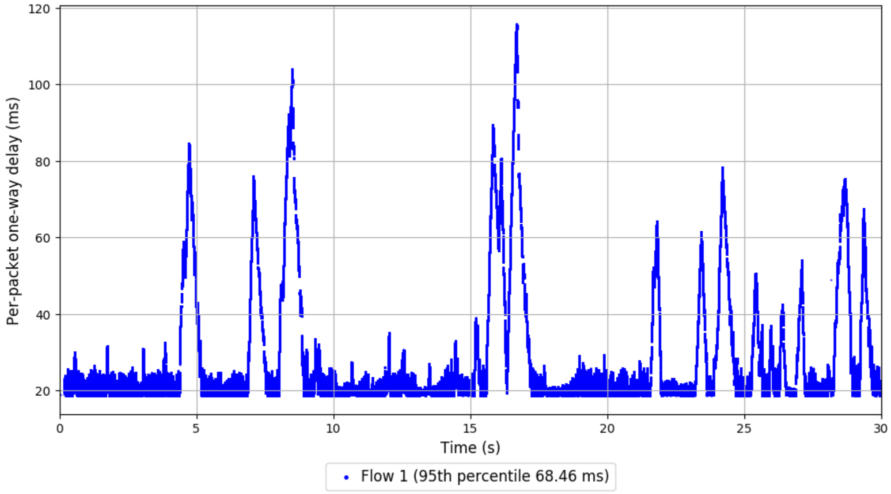




```
Run 6: Statistics of FillP

Start at: 2018-02-27 18:11:29
End at: 2018-02-27 18:11:59
Local clock offset: -0.702 ms
Remote clock offset: -6.345 ms

# Below is generated by plot.py at 2018-02-27 23:26:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 895.72 Mbit/s
95th percentile per-packet one-way delay: 68.458 ms
Loss rate: 6.91%
-- Flow 1:
Average throughput: 895.72 Mbit/s
95th percentile per-packet one-way delay: 68.458 ms
Loss rate: 6.91%
```

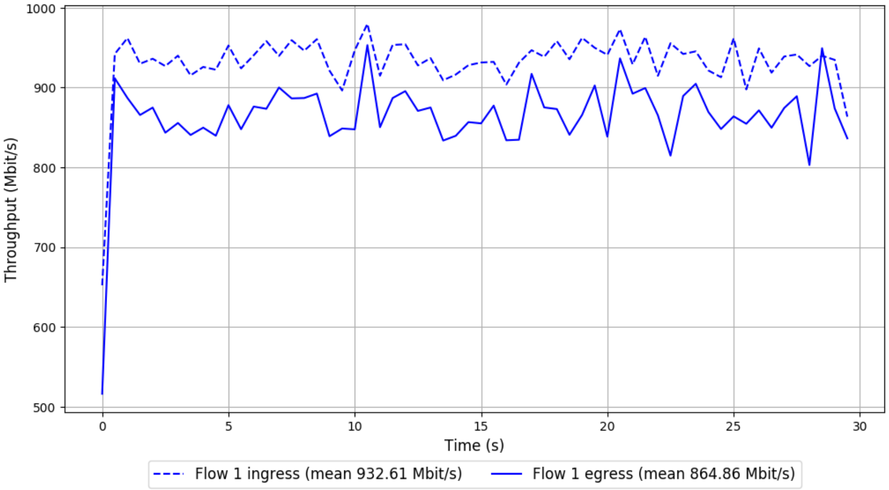
Run 6: Report of FillP — Data Link

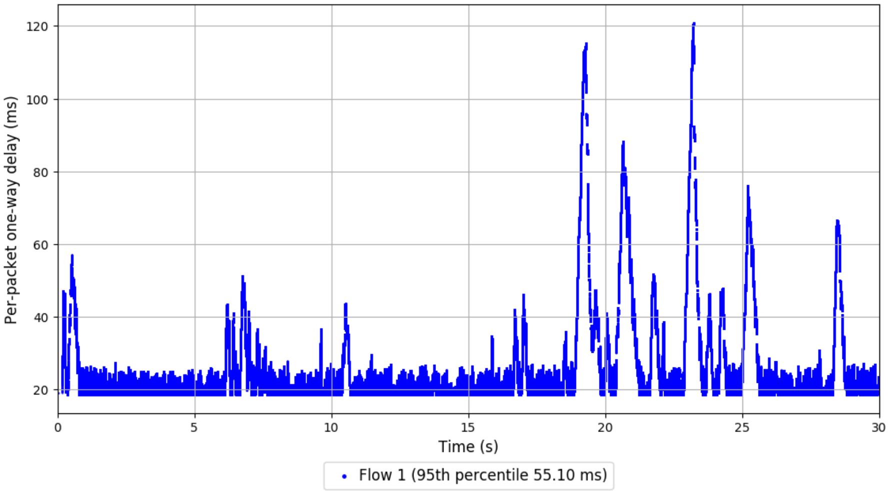




```
Run 7: Statistics of FillP

Start at: 2018-02-27 18:38:33
End at: 2018-02-27 18:39:03
Local clock offset: -0.746 ms
Remote clock offset: -5.665 ms

# Below is generated by plot.py at 2018-02-27 23:26:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 864.86 Mbit/s
95th percentile per-packet one-way delay: 55.101 ms
Loss rate: 7.26%
-- Flow 1:
Average throughput: 864.86 Mbit/s
95th percentile per-packet one-way delay: 55.101 ms
Loss rate: 7.26%
```

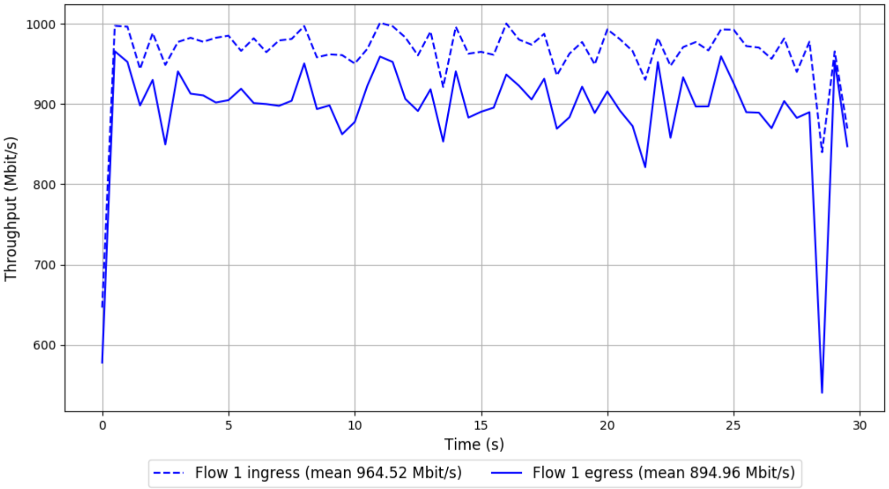
Run 7: Report of FillP — Data Link

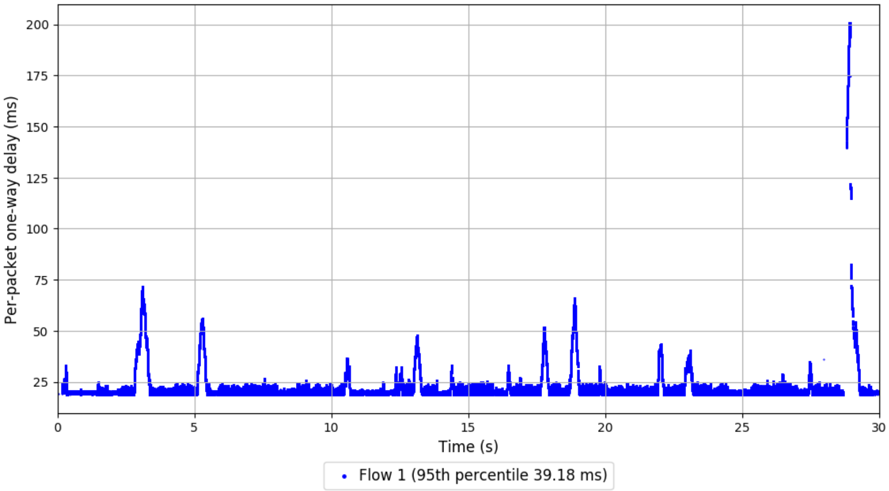




```
Run 8: Statistics of FillP

Start at: 2018-02-27 19:05:40
End at: 2018-02-27 19:06:10
Local clock offset: -0.622 ms
Remote clock offset: -5.145 ms

# Below is generated by plot.py at 2018-02-27 23:26:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 894.96 Mbit/s
95th percentile per-packet one-way delay: 39.177 ms
Loss rate: 7.21%
-- Flow 1:
Average throughput: 894.96 Mbit/s
95th percentile per-packet one-way delay: 39.177 ms
Loss rate: 7.21%
```

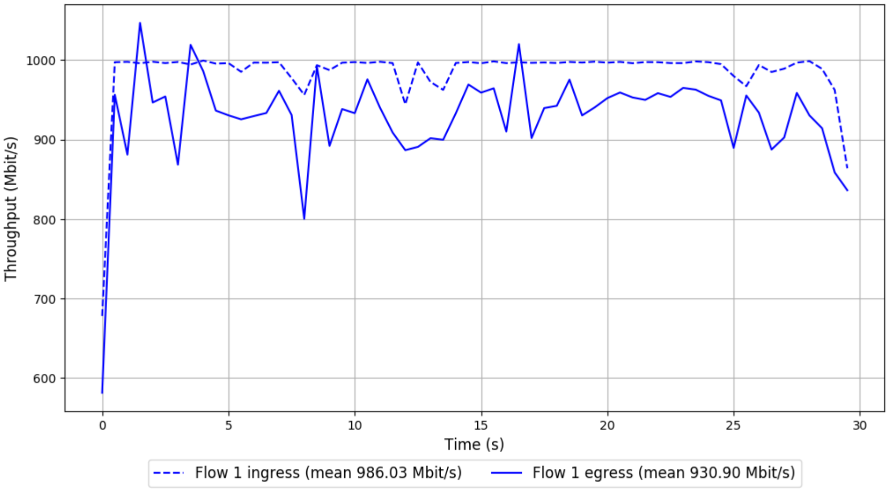
Run 8: Report of FillP — Data Link

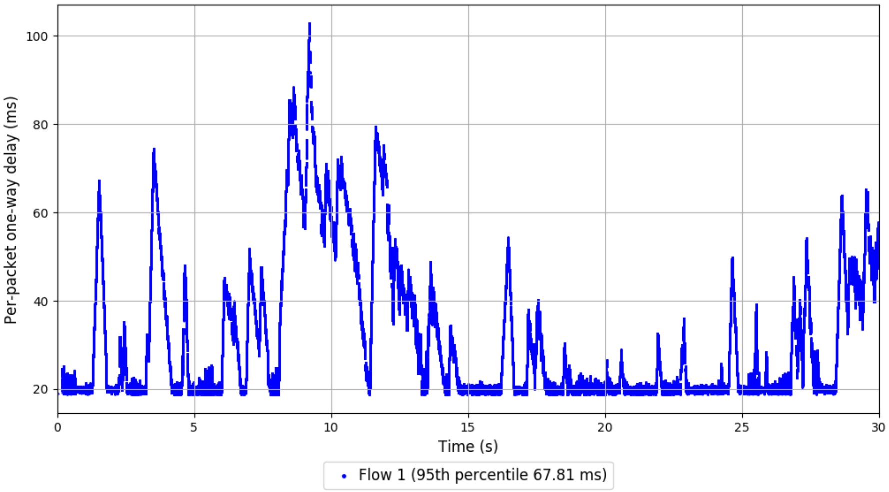




```
Run 9: Statistics of FillP

Start at: 2018-02-27 19:32:39
End at: 2018-02-27 19:33:10
Local clock offset: -0.345 ms
Remote clock offset: -4.994 ms

# Below is generated by plot.py at 2018-02-27 23:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 930.90 Mbit/s
95th percentile per-packet one-way delay: 67.812 ms
Loss rate: 5.59%
-- Flow 1:
Average throughput: 930.90 Mbit/s
95th percentile per-packet one-way delay: 67.812 ms
Loss rate: 5.59%
```

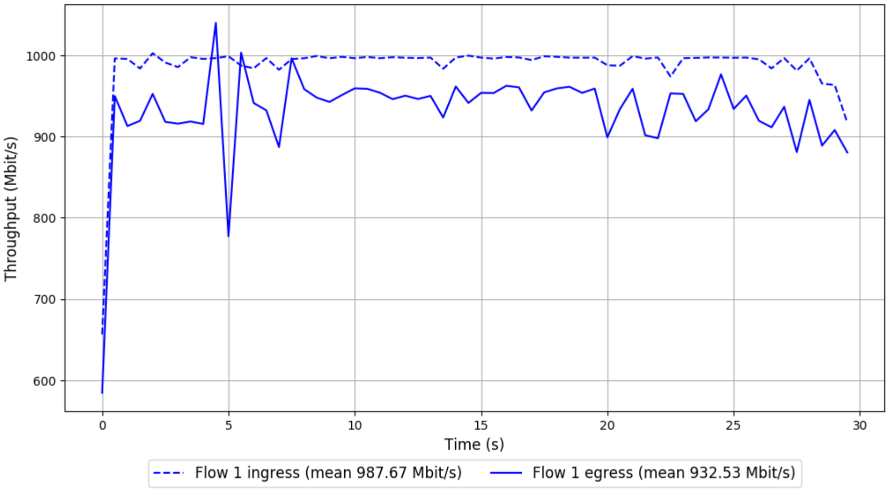
Run 9: Report of FillP — Data Link

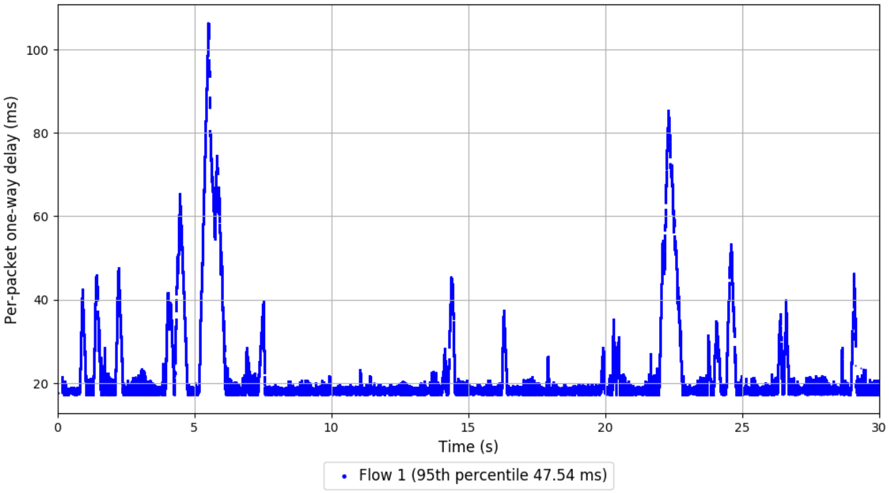




```
Run 10: Statistics of FillP

Start at: 2018-02-27 19:59:38
End at: 2018-02-27 20:00:08
Local clock offset: 1.027 ms
Remote clock offset: -7.068 ms

# Below is generated by plot.py at 2018-02-27 23:39:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 932.53 Mbit/s
95th percentile per-packet one-way delay: 47.541 ms
Loss rate: 5.58%
-- Flow 1:
Average throughput: 932.53 Mbit/s
95th percentile per-packet one-way delay: 47.541 ms
Loss rate: 5.58%
```

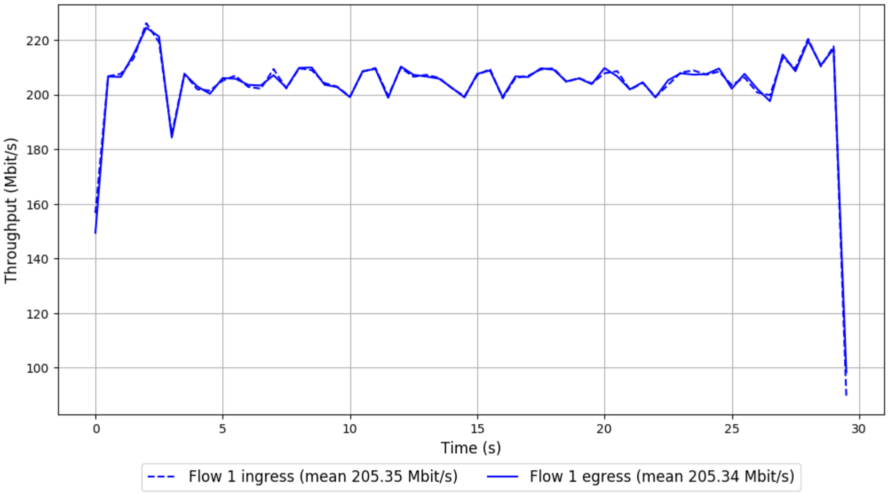
Run 10: Report of FillP — Data Link

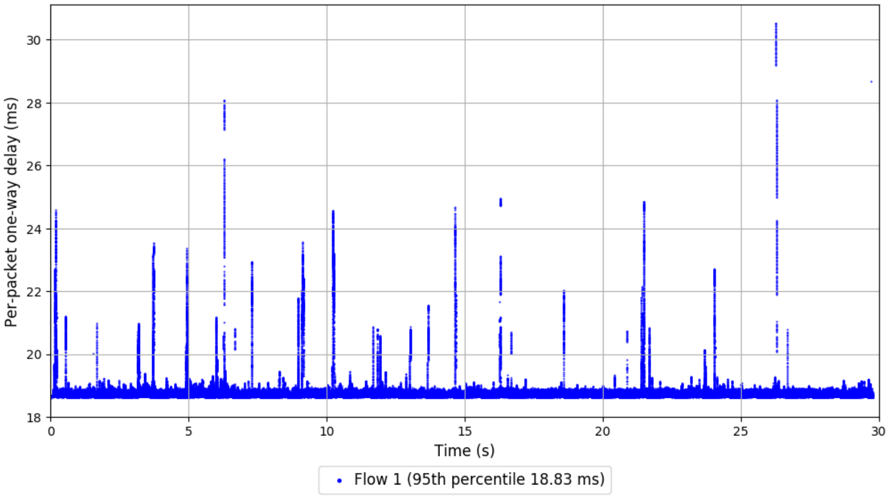




```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-27 15:34:39
End at: 2018-02-27 15:35:10
Local clock offset: 0.83 ms
Remote clock offset: -5.703 ms

# Below is generated by plot.py at 2018-02-27 23:39:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 205.34 Mbit/s
95th percentile per-packet one-way delay: 18.833 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 205.34 Mbit/s
95th percentile per-packet one-way delay: 18.833 ms
Loss rate: 0.00%
```

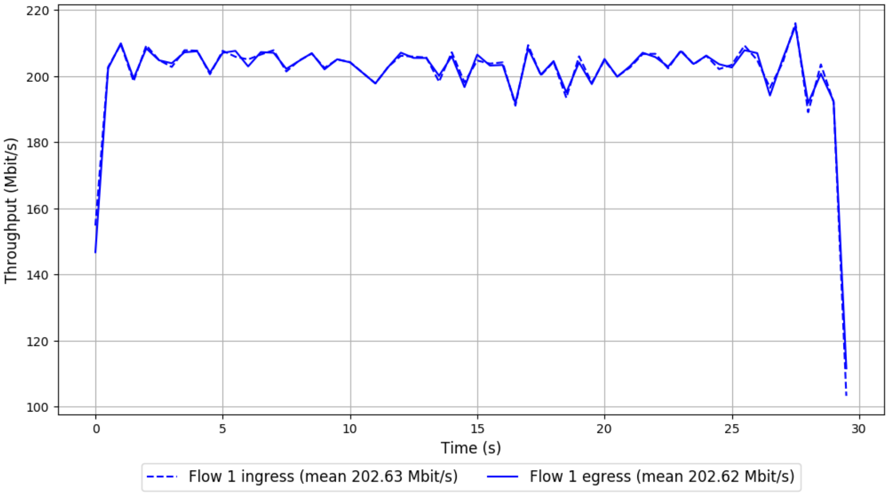
Run 1: Report of Indigo-1-32 — Data Link

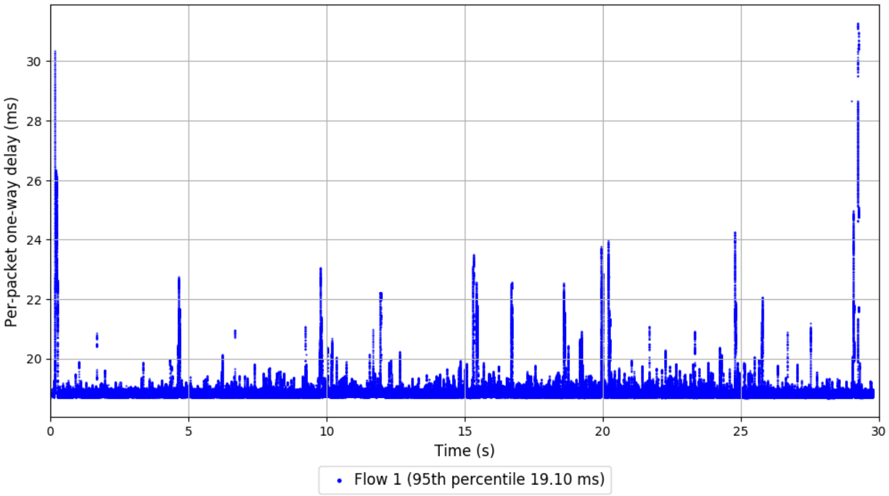




```
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-27 16:01:46
End at: 2018-02-27 16:02:16
Local clock offset: 0.646 ms
Remote clock offset: -4.257 ms

# Below is generated by plot.py at 2018-02-27 23:39:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 202.62 Mbit/s
95th percentile per-packet one-way delay: 19.099 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 202.62 Mbit/s
95th percentile per-packet one-way delay: 19.099 ms
Loss rate: 0.00%
```

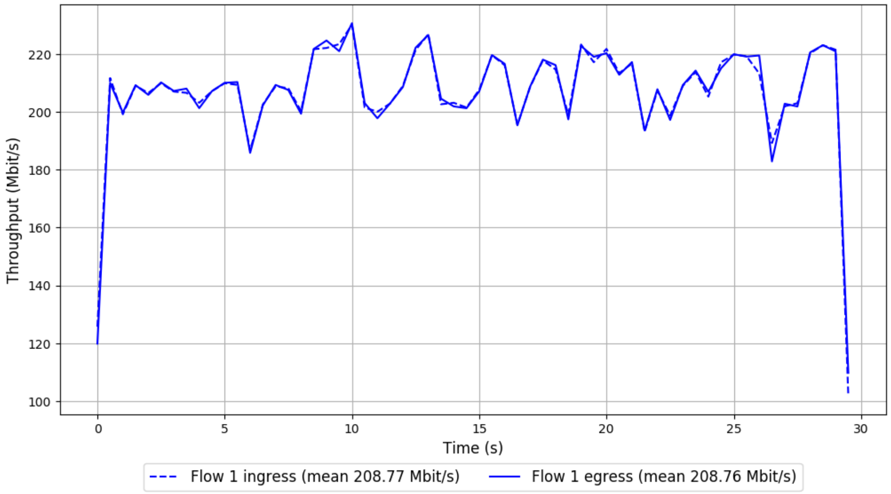
Run 2: Report of Indigo-1-32 — Data Link

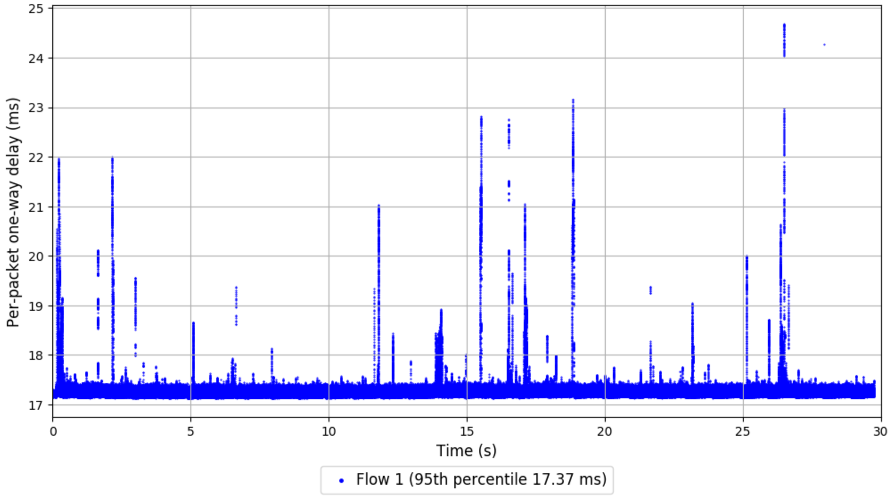




```
Run 3: Statistics of Indigo-1-32

Start at: 2018-02-27 16:28:58
End at: 2018-02-27 16:29:28
Local clock offset: 0.75 ms
Remote clock offset: -6.184 ms

# Below is generated by plot.py at 2018-02-27 23:39:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 208.76 Mbit/s
95th percentile per-packet one-way delay: 17.367 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 208.76 Mbit/s
95th percentile per-packet one-way delay: 17.367 ms
Loss rate: 0.01%
```

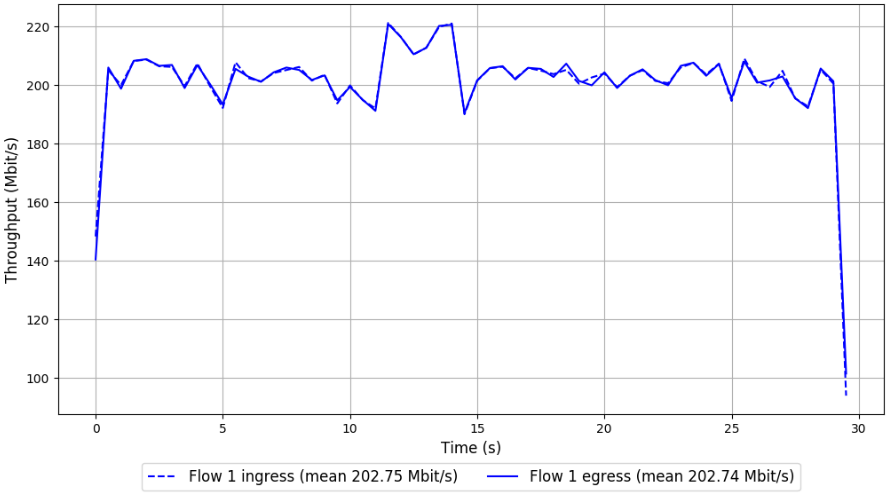
Run 3: Report of Indigo-1-32 — Data Link

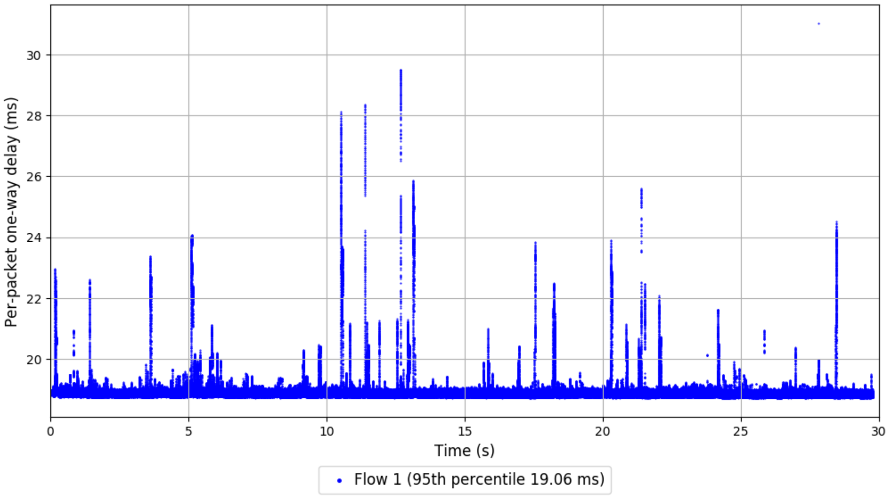




```
Run 4: Statistics of Indigo-1-32

Start at: 2018-02-27 16:56:03
End at: 2018-02-27 16:56:33
Local clock offset: 0.592 ms
Remote clock offset: -5.233 ms

# Below is generated by plot.py at 2018-02-27 23:39:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 202.74 Mbit/s
95th percentile per-packet one-way delay: 19.061 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 202.74 Mbit/s
95th percentile per-packet one-way delay: 19.061 ms
Loss rate: 0.00%
```

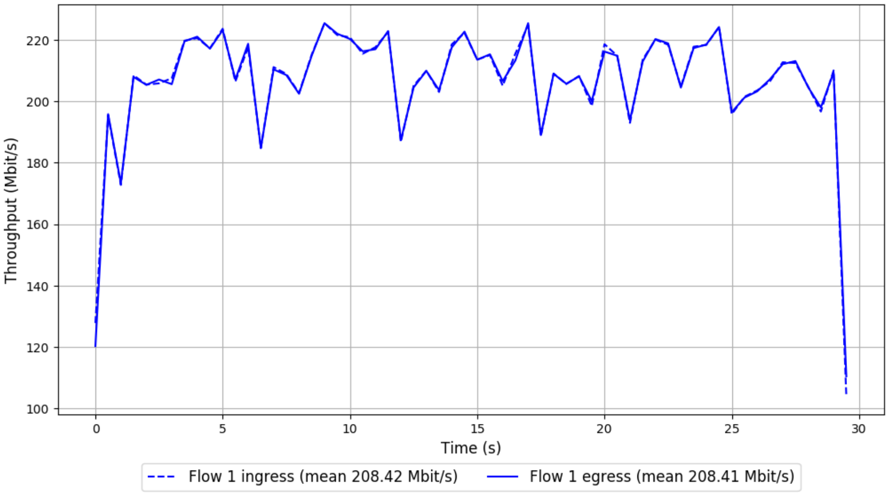
Run 4: Report of Indigo-1-32 — Data Link

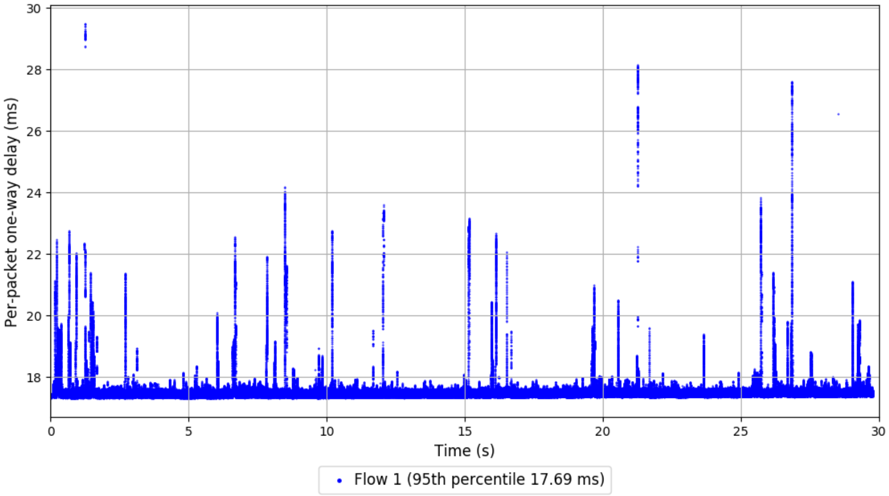




```
Run 5: Statistics of Indigo-1-32

Start at: 2018-02-27 17:23:23
End at: 2018-02-27 17:23:53
Local clock offset: 0.561 ms
Remote clock offset: -5.275 ms

# Below is generated by plot.py at 2018-02-27 23:39:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 208.41 Mbit/s
95th percentile per-packet one-way delay: 17.687 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 208.41 Mbit/s
95th percentile per-packet one-way delay: 17.687 ms
Loss rate: 0.00%
```

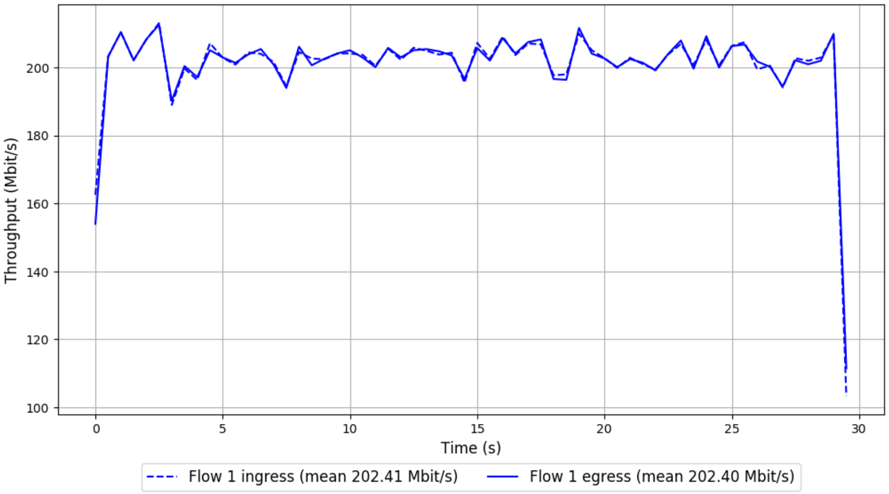
Run 5: Report of Indigo-1-32 — Data Link

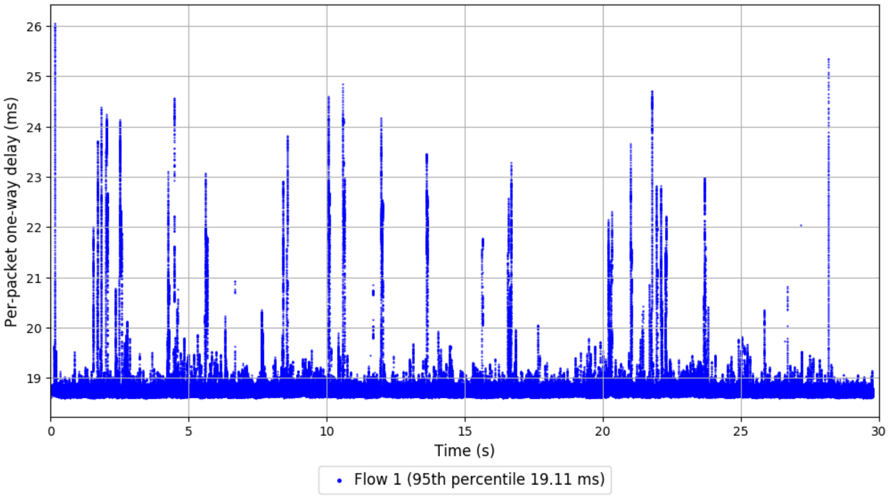




```
Run 6: Statistics of Indigo-1-32

Start at: 2018-02-27 17:50:29
End at: 2018-02-27 17:50:59
Local clock offset: 0.424 ms
Remote clock offset: -6.448 ms

# Below is generated by plot.py at 2018-02-27 23:39:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 202.40 Mbit/s
95th percentile per-packet one-way delay: 19.115 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 202.40 Mbit/s
95th percentile per-packet one-way delay: 19.115 ms
Loss rate: 0.00%
```

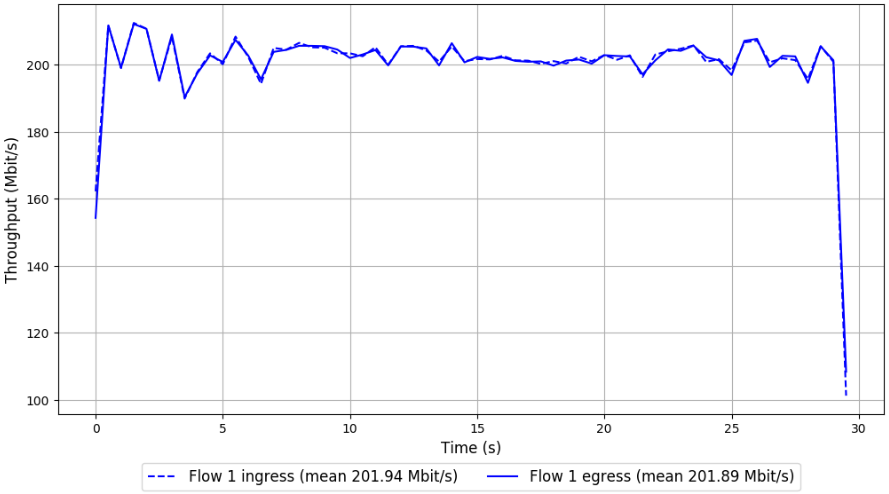
Run 6: Report of Indigo-1-32 — Data Link

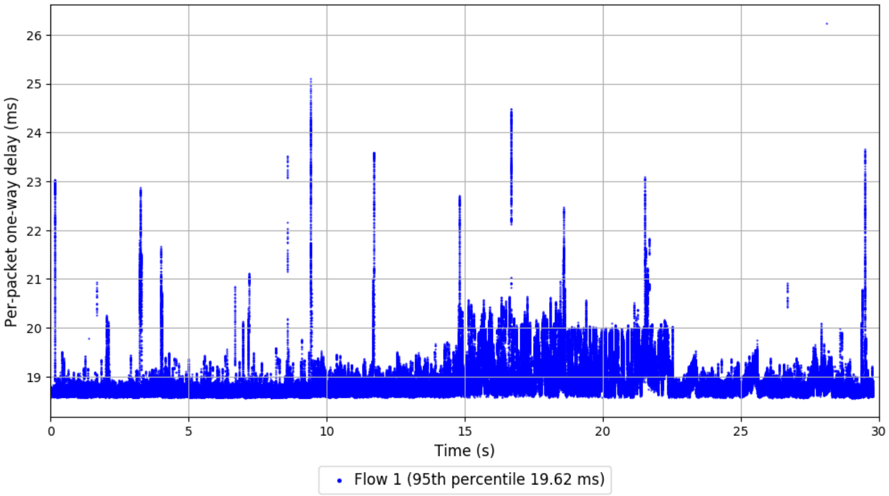




```
Run 7: Statistics of Indigo-1-32

Start at: 2018-02-27 18:17:35
End at: 2018-02-27 18:18:05
Local clock offset: -0.88 ms
Remote clock offset: -6.432 ms

# Below is generated by plot.py at 2018-02-27 23:39:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 201.89 Mbit/s
95th percentile per-packet one-way delay: 19.622 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 201.89 Mbit/s
95th percentile per-packet one-way delay: 19.622 ms
Loss rate: 0.03%
```

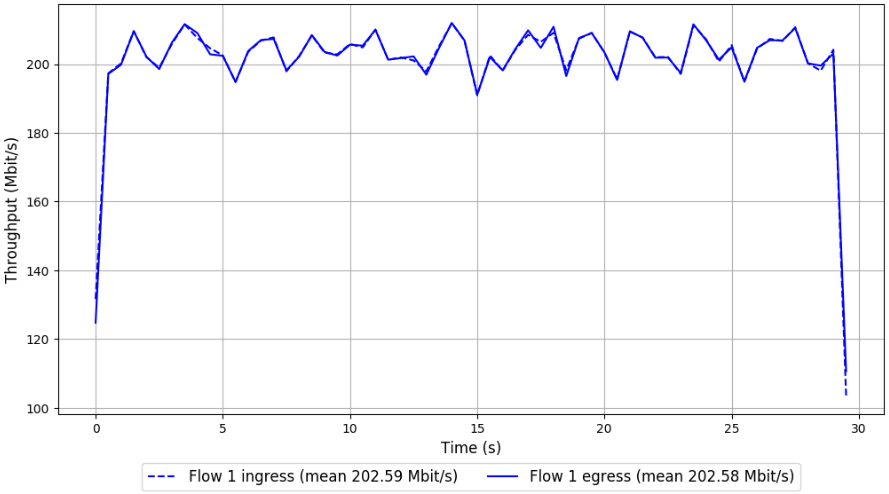
Run 7: Report of Indigo-1-32 — Data Link

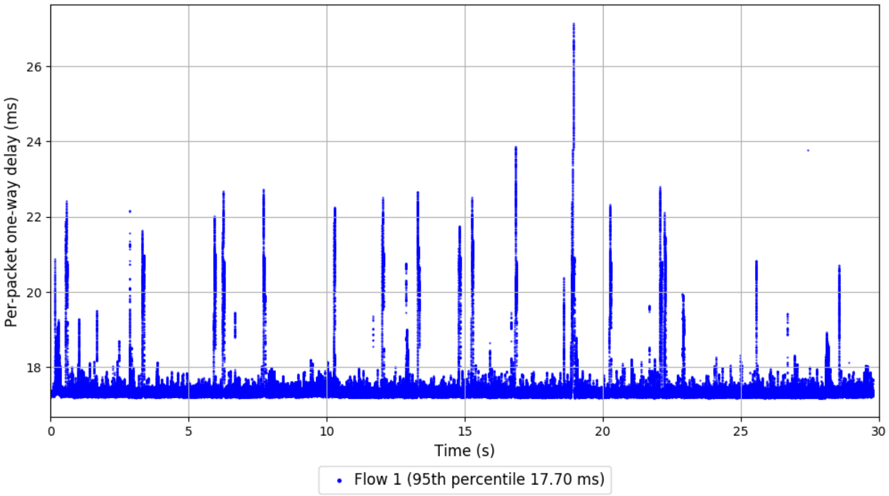




```
Run 8: Statistics of Indigo-1-32

Start at: 2018-02-27 18:44:40
End at: 2018-02-27 18:45:10
Local clock offset: -0.769 ms
Remote clock offset: -5.47 ms

# Below is generated by plot.py at 2018-02-27 23:39:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 202.58 Mbit/s
95th percentile per-packet one-way delay: 17.704 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 202.58 Mbit/s
95th percentile per-packet one-way delay: 17.704 ms
Loss rate: 0.01%
```

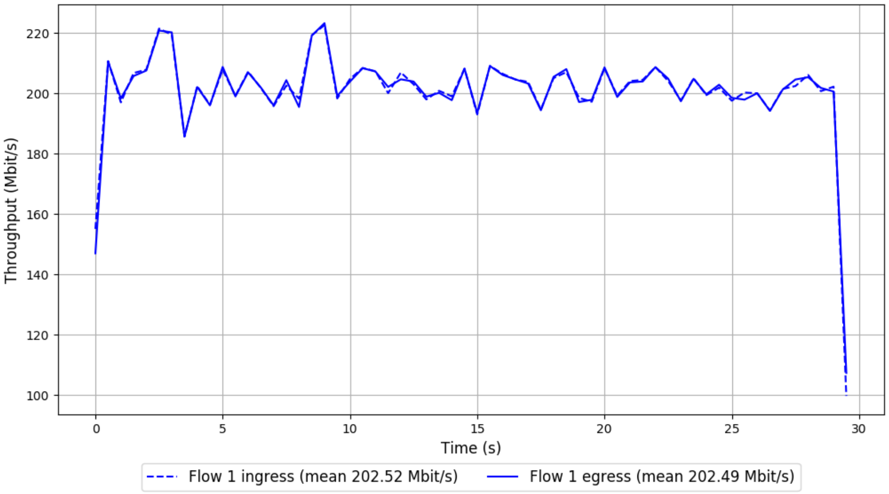
Run 8: Report of Indigo-1-32 — Data Link

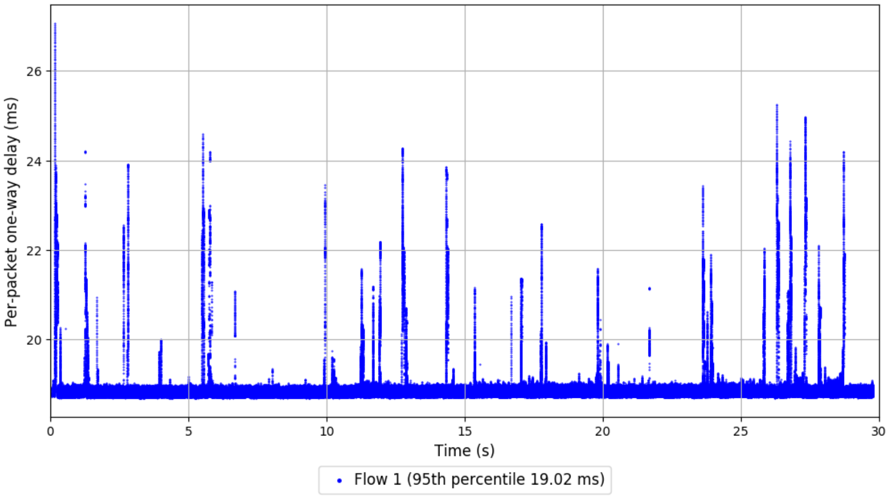




```
Run 9: Statistics of Indigo-1-32

Start at: 2018-02-27 19:11:43
End at: 2018-02-27 19:12:13
Local clock offset: -0.572 ms
Remote clock offset: -5.211 ms

# Below is generated by plot.py at 2018-02-27 23:39:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 202.49 Mbit/s
95th percentile per-packet one-way delay: 19.016 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 202.49 Mbit/s
95th percentile per-packet one-way delay: 19.016 ms
Loss rate: 0.01%
```

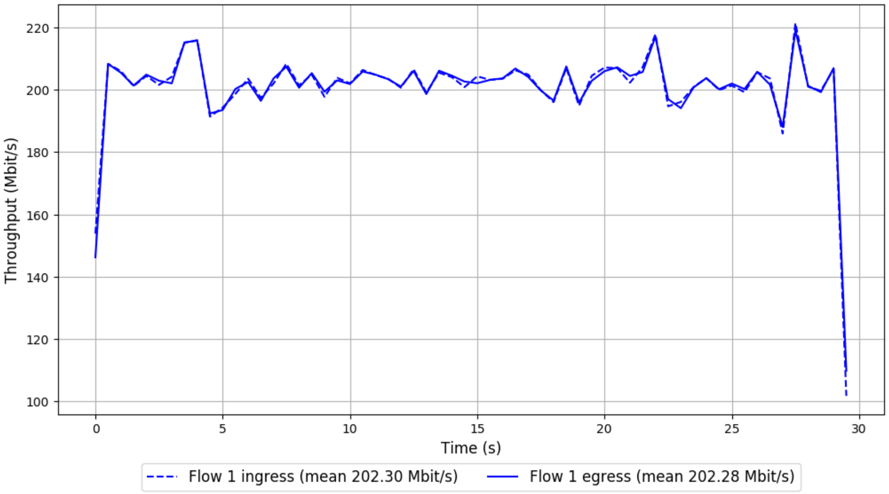
Run 9: Report of Indigo-1-32 — Data Link

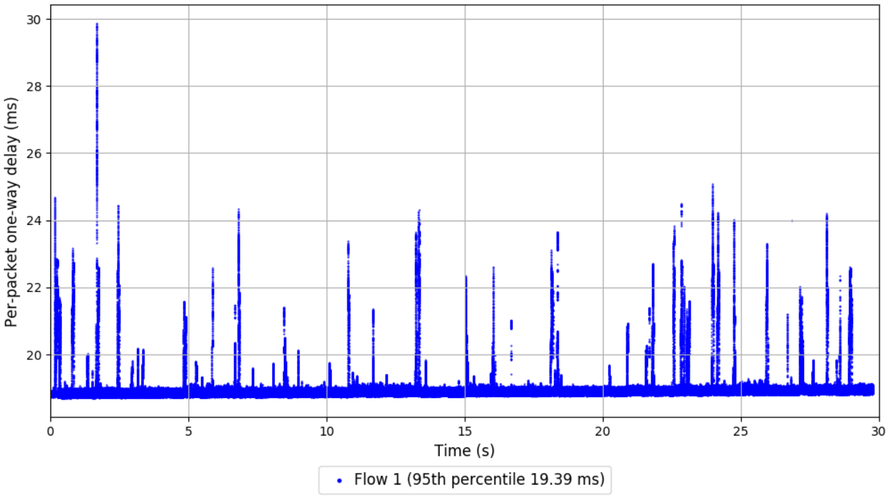




```
Run 10: Statistics of Indigo-1-32

Start at: 2018-02-27 19:38:43
End at: 2018-02-27 19:39:14
Local clock offset: 0.155 ms
Remote clock offset: -5.738 ms

# Below is generated by plot.py at 2018-02-27 23:39:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 202.28 Mbit/s
95th percentile per-packet one-way delay: 19.387 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 202.28 Mbit/s
95th percentile per-packet one-way delay: 19.387 ms
Loss rate: 0.01%
```

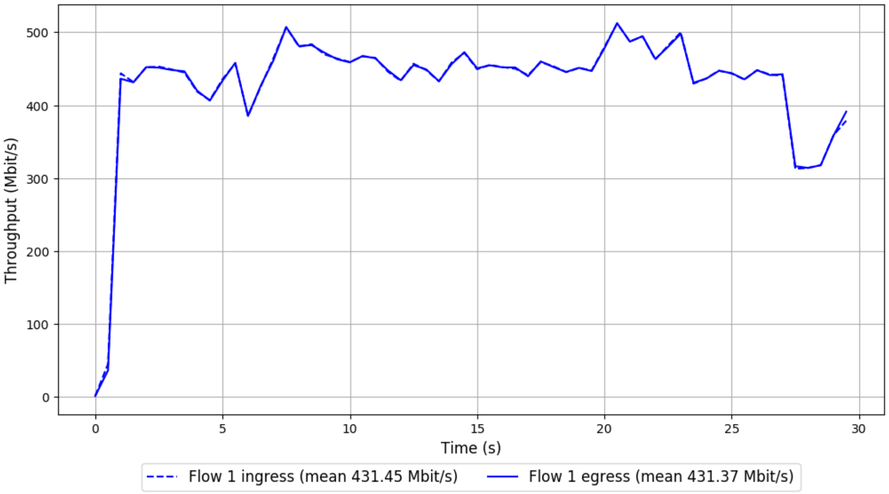
Run 10: Report of Indigo-1-32 — Data Link

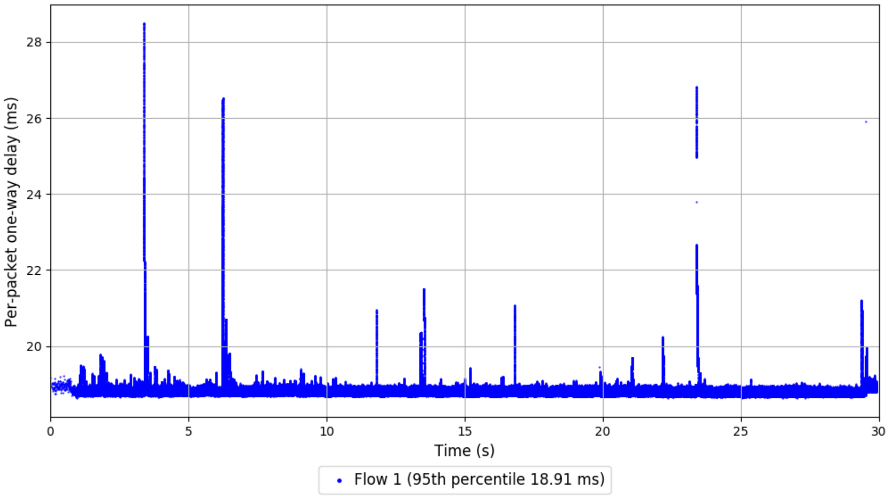




```
Run 1: Statistics of Vivace-latency

Start at: 2018-02-27 15:45:02
End at: 2018-02-27 15:45:32
Local clock offset: 0.72 ms
Remote clock offset: -4.847 ms

# Below is generated by plot.py at 2018-02-27 23:39:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 431.37 Mbit/s
95th percentile per-packet one-way delay: 18.912 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 431.37 Mbit/s
95th percentile per-packet one-way delay: 18.912 ms
Loss rate: 0.02%
```

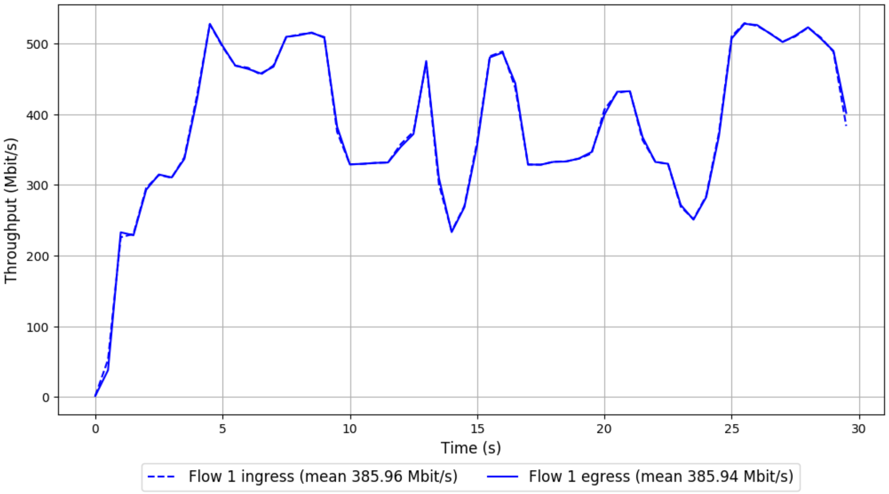
Run 1: Report of Vivace-latency — Data Link

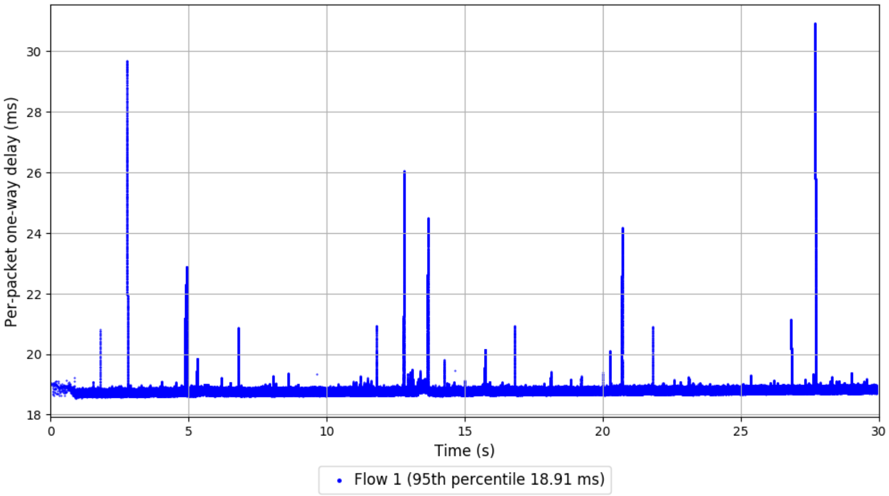




```
Run 2: Statistics of Vivace-latency

Start at: 2018-02-27 16:12:12
End at: 2018-02-27 16:12:43
Local clock offset: 0.737 ms
Remote clock offset: -4.624 ms

# Below is generated by plot.py at 2018-02-27 23:39:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 385.94 Mbit/s
95th percentile per-packet one-way delay: 18.906 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 385.94 Mbit/s
95th percentile per-packet one-way delay: 18.906 ms
Loss rate: 0.01%
```

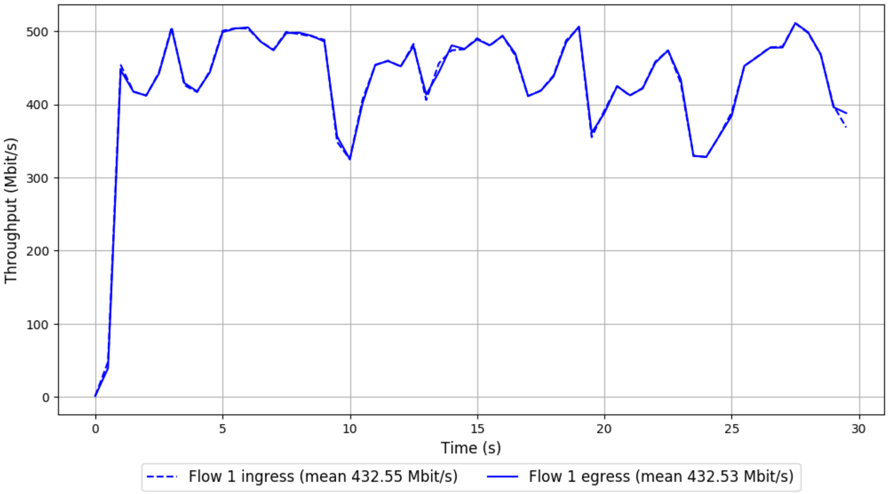
Run 2: Report of Vivace-latency — Data Link

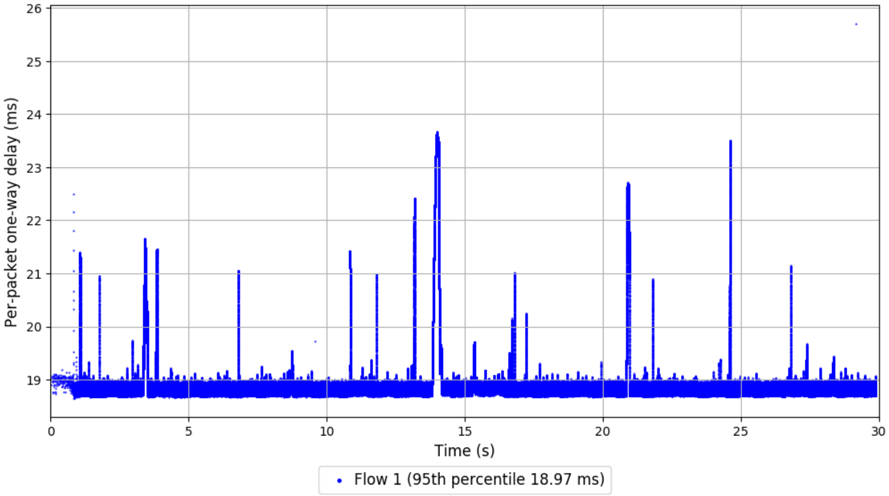




```
Run 3: Statistics of Vivace-latency

Start at: 2018-02-27 16:39:24
End at: 2018-02-27 16:39:54
Local clock offset: 0.709 ms
Remote clock offset: -6.278 ms

# Below is generated by plot.py at 2018-02-27 23:39:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 432.53 Mbit/s
95th percentile per-packet one-way delay: 18.972 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 432.53 Mbit/s
95th percentile per-packet one-way delay: 18.972 ms
Loss rate: 0.01%
```

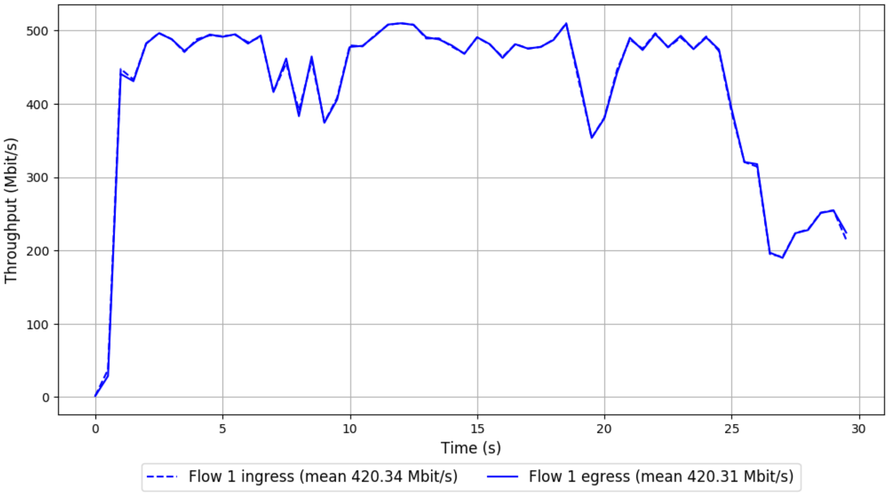
Run 3: Report of Vivace-latency — Data Link

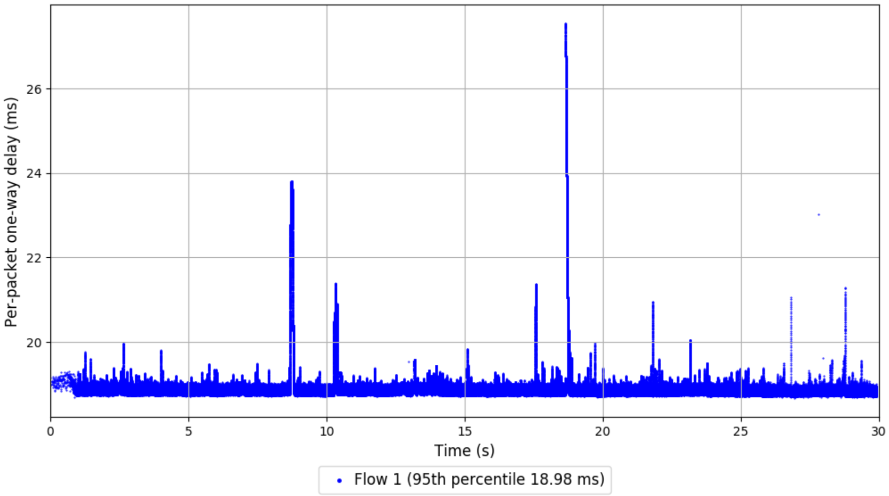




```
Run 4: Statistics of Vivace-latency

Start at: 2018-02-27 17:06:36
End at: 2018-02-27 17:07:06
Local clock offset: 0.561 ms
Remote clock offset: -4.831 ms

# Below is generated by plot.py at 2018-02-27 23:39:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 420.31 Mbit/s
95th percentile per-packet one-way delay: 18.983 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 420.31 Mbit/s
95th percentile per-packet one-way delay: 18.983 ms
Loss rate: 0.01%
```

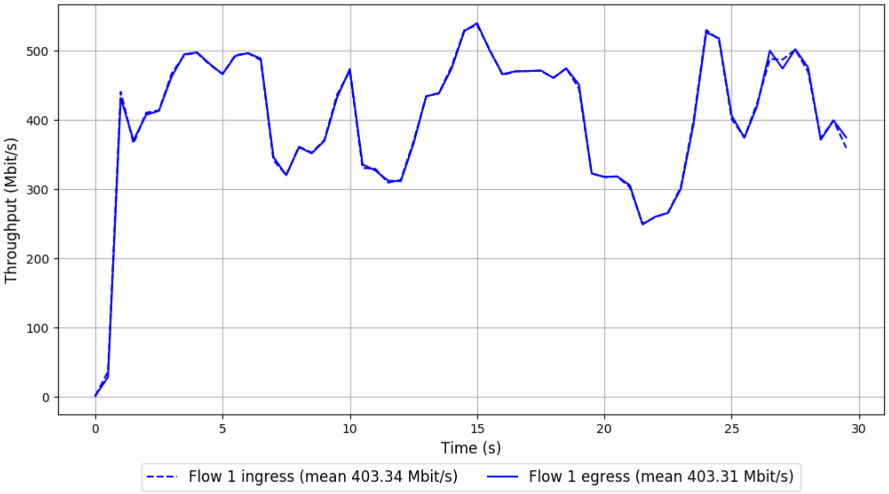
Run 4: Report of Vivace-latency — Data Link

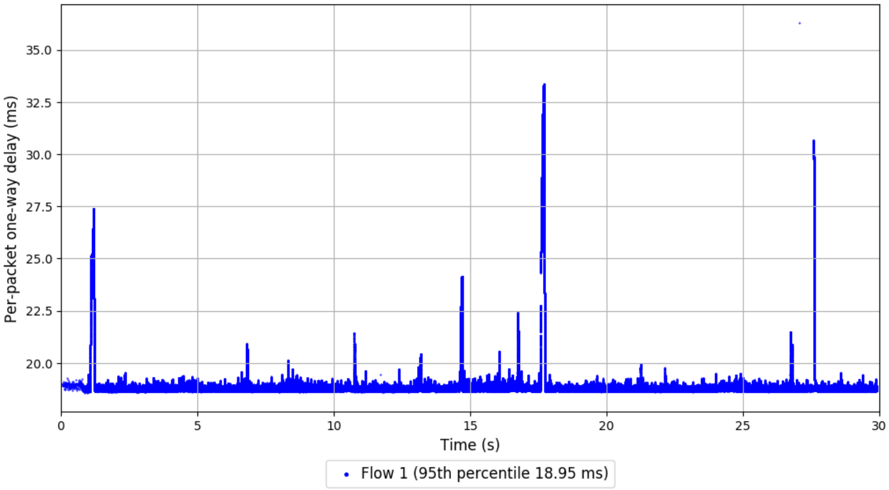




```
Run 5: Statistics of Vivace-latency

Start at: 2018-02-27 17:33:52
End at: 2018-02-27 17:34:22
Local clock offset: 0.506 ms
Remote clock offset: -6.103 ms

# Below is generated by plot.py at 2018-02-27 23:39:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 403.31 Mbit/s
95th percentile per-packet one-way delay: 18.948 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 403.31 Mbit/s
95th percentile per-packet one-way delay: 18.948 ms
Loss rate: 0.01%
```

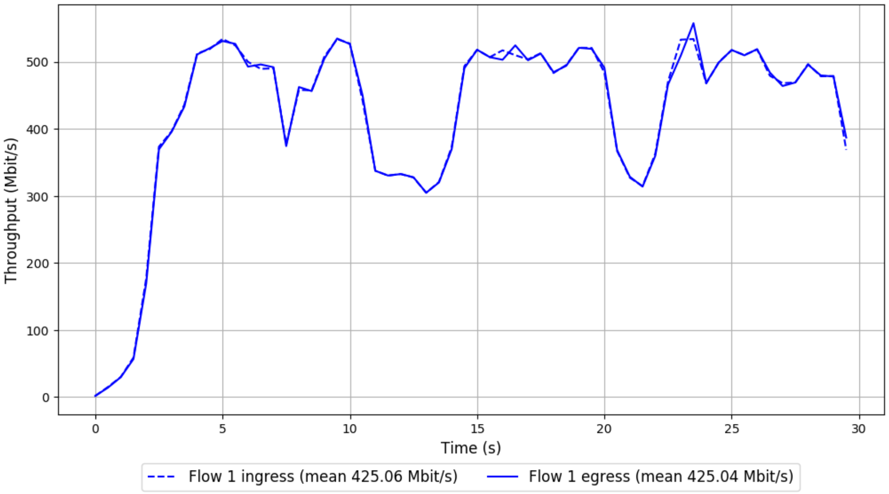
Run 5: Report of Vivace-latency — Data Link

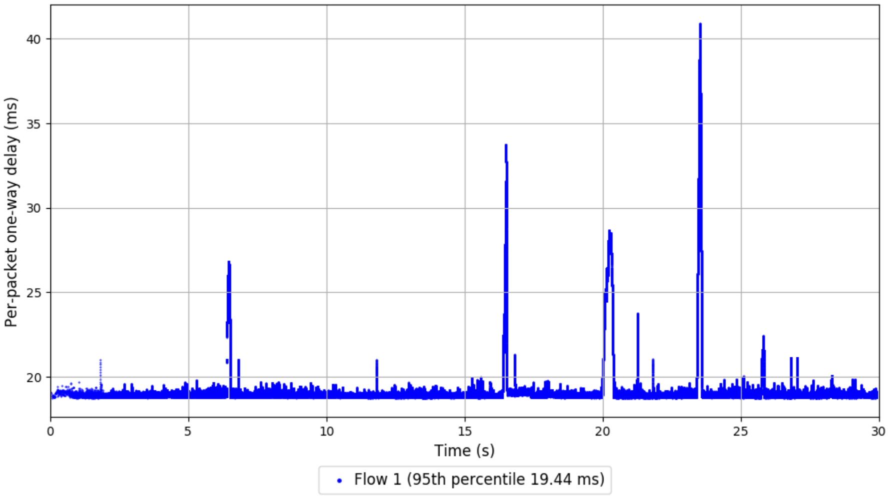




```
Run 6: Statistics of Vivace-latency

Start at: 2018-02-27 18:00:57
End at: 2018-02-27 18:01:27
Local clock offset: -0.381 ms
Remote clock offset: -6.283 ms

# Below is generated by plot.py at 2018-02-27 23:39:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 425.04 Mbit/s
95th percentile per-packet one-way delay: 19.438 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 425.04 Mbit/s
95th percentile per-packet one-way delay: 19.438 ms
Loss rate: 0.01%
```

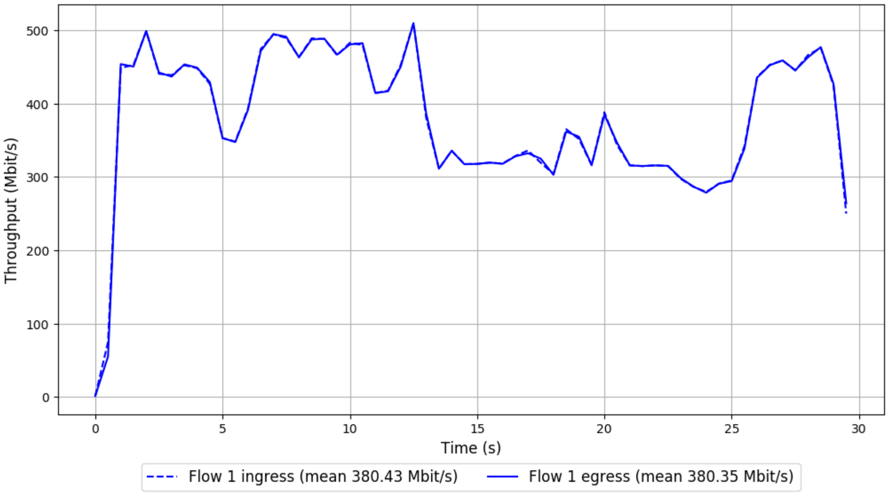
Run 6: Report of Vivace-latency — Data Link

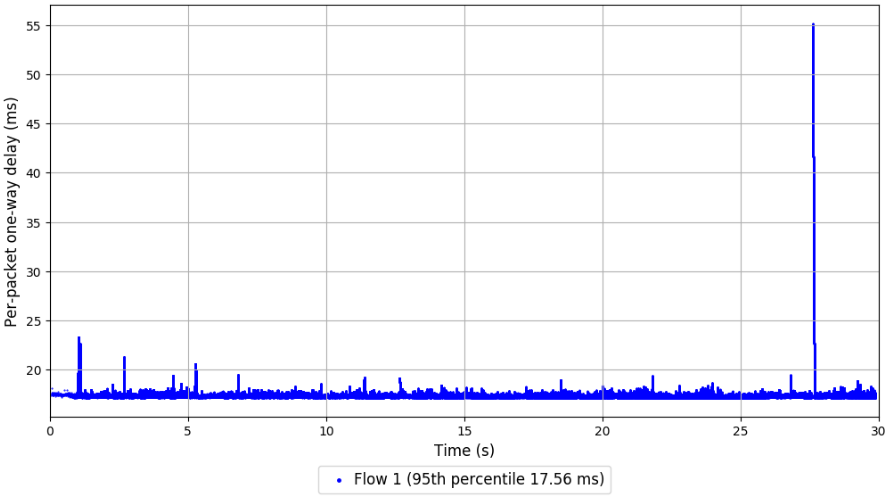




```
Run 7: Statistics of Vivace-latency

Start at: 2018-02-27 18:28:01
End at: 2018-02-27 18:28:31
Local clock offset: -0.952 ms
Remote clock offset: -6.311 ms

# Below is generated by plot.py at 2018-02-27 23:40:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 380.35 Mbit/s
95th percentile per-packet one-way delay: 17.561 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 380.35 Mbit/s
95th percentile per-packet one-way delay: 17.561 ms
Loss rate: 0.02%
```

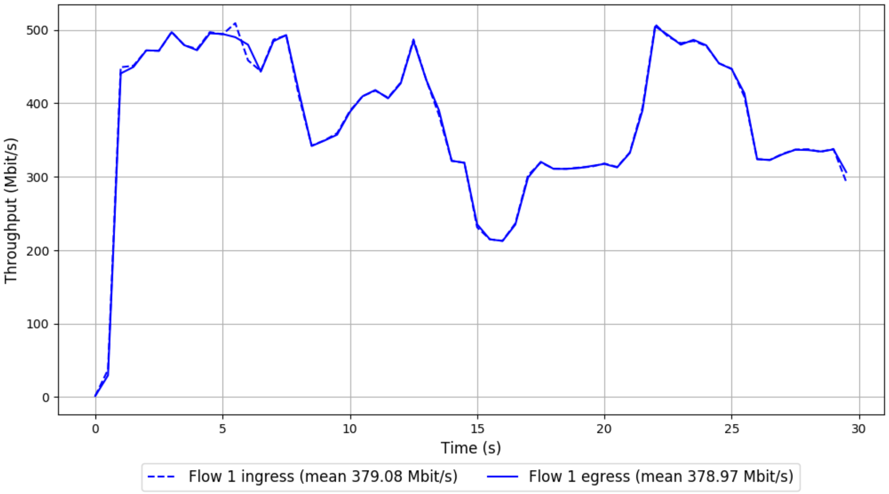
Run 7: Report of Vivace-latency — Data Link

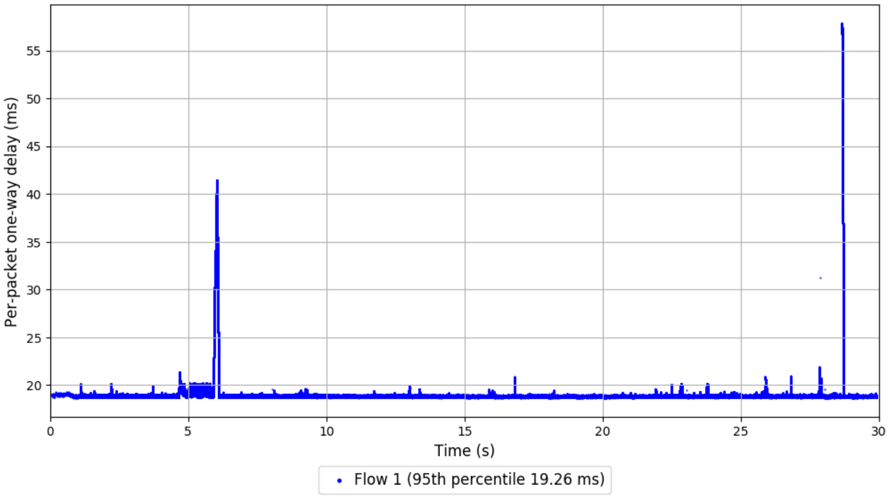




```
Run 8: Statistics of Vivace-latency

Start at: 2018-02-27 18:55:07
End at: 2018-02-27 18:55:37
Local clock offset: -0.867 ms
Remote clock offset: -5.22 ms

# Below is generated by plot.py at 2018-02-27 23:40:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 378.97 Mbit/s
95th percentile per-packet one-way delay: 19.258 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 378.97 Mbit/s
95th percentile per-packet one-way delay: 19.258 ms
Loss rate: 0.03%
```

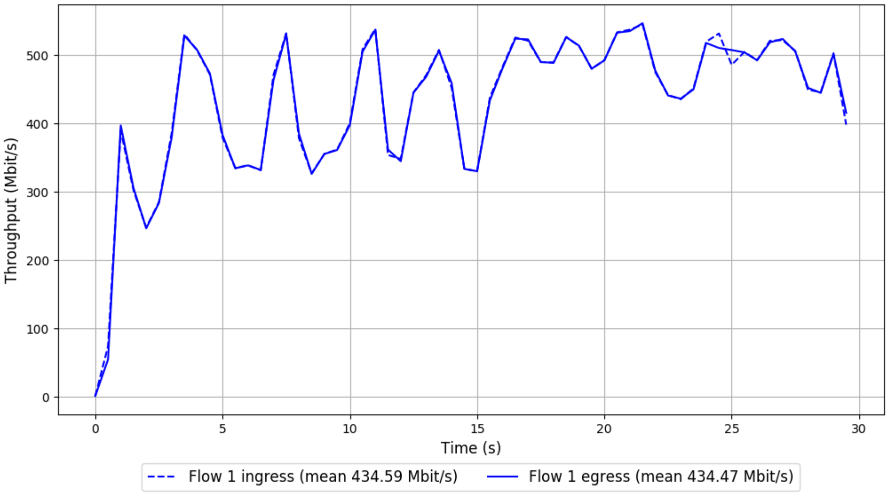
Run 8: Report of Vivace-latency — Data Link

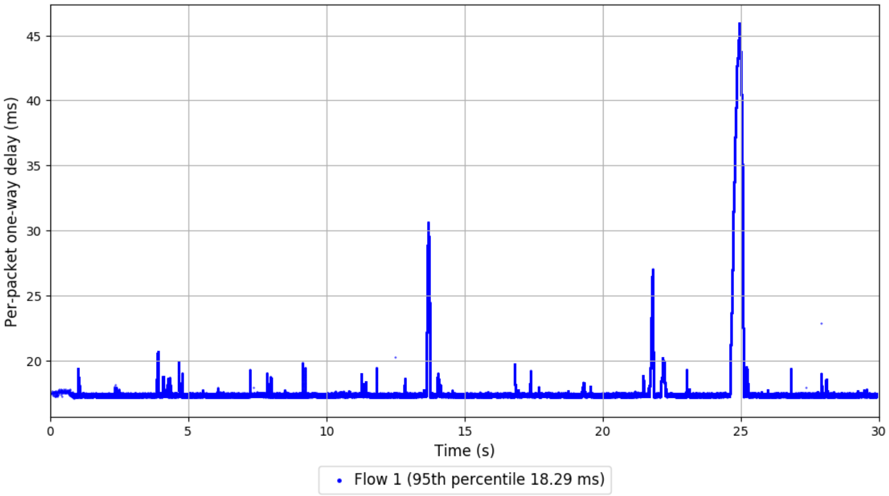




```
Run 9: Statistics of Vivace-latency

Start at: 2018-02-27 19:22:09
End at: 2018-02-27 19:22:39
Local clock offset: -0.365 ms
Remote clock offset: -5.135 ms

# Below is generated by plot.py at 2018-02-27 23:43:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 434.47 Mbit/s
95th percentile per-packet one-way delay: 18.287 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 434.47 Mbit/s
95th percentile per-packet one-way delay: 18.287 ms
Loss rate: 0.03%
```

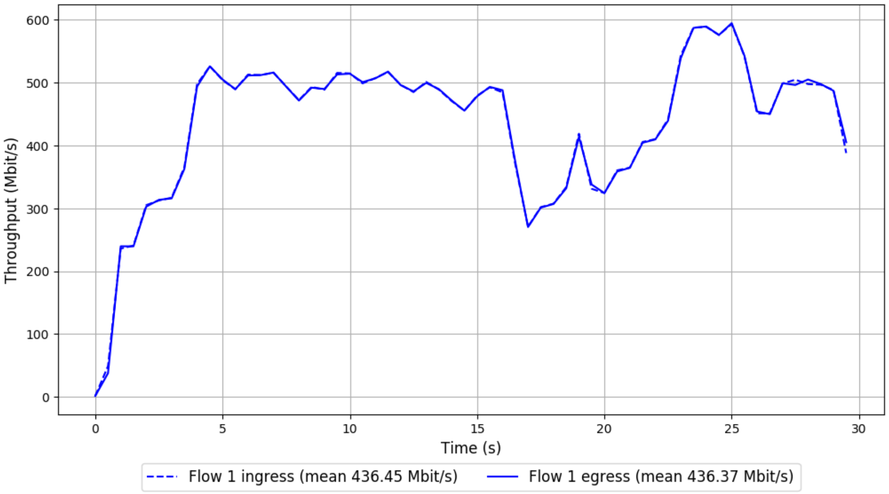
Run 9: Report of Vivace-latency — Data Link

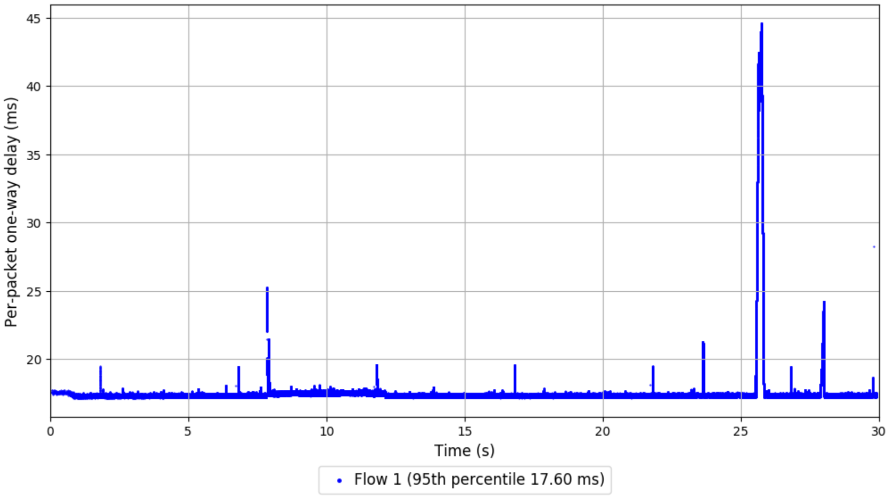




```
Run 10: Statistics of Vivace-latency

Start at: 2018-02-27 19:49:04
End at: 2018-02-27 19:49:34
Local clock offset: 0.714 ms
Remote clock offset: -6.678 ms

# Below is generated by plot.py at 2018-02-27 23:43:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 436.37 Mbit/s
95th percentile per-packet one-way delay: 17.597 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 436.37 Mbit/s
95th percentile per-packet one-way delay: 17.597 ms
Loss rate: 0.02%
```

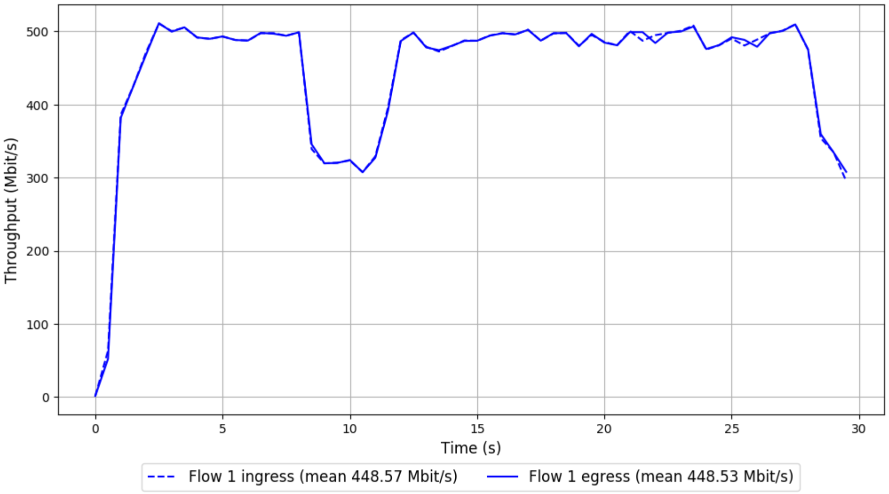
Run 10: Report of Vivace-latency — Data Link

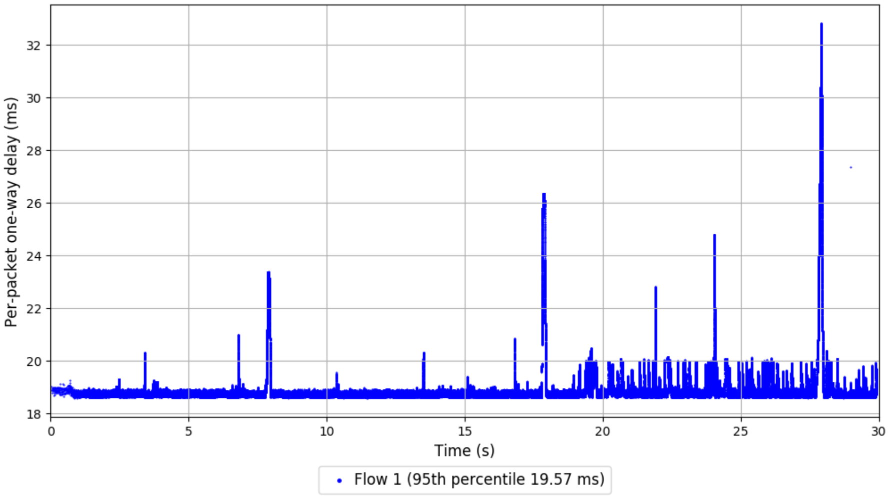




```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-27 15:48:08
End at: 2018-02-27 15:48:38
Local clock offset: 0.806 ms
Remote clock offset: -4.66 ms

# Below is generated by plot.py at 2018-02-27 23:44:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 448.53 Mbit/s
95th percentile per-packet one-way delay: 19.570 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 448.53 Mbit/s
95th percentile per-packet one-way delay: 19.570 ms
Loss rate: 0.01%
```

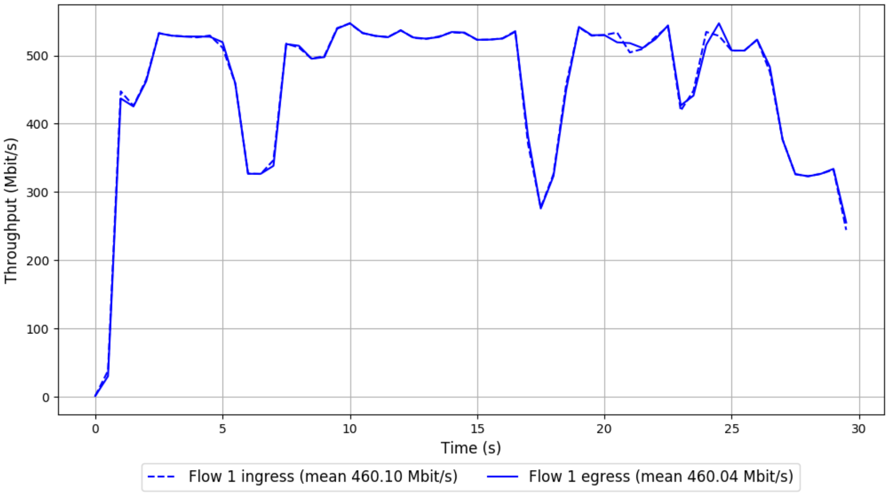
Run 1: Report of Vivace-loss — Data Link

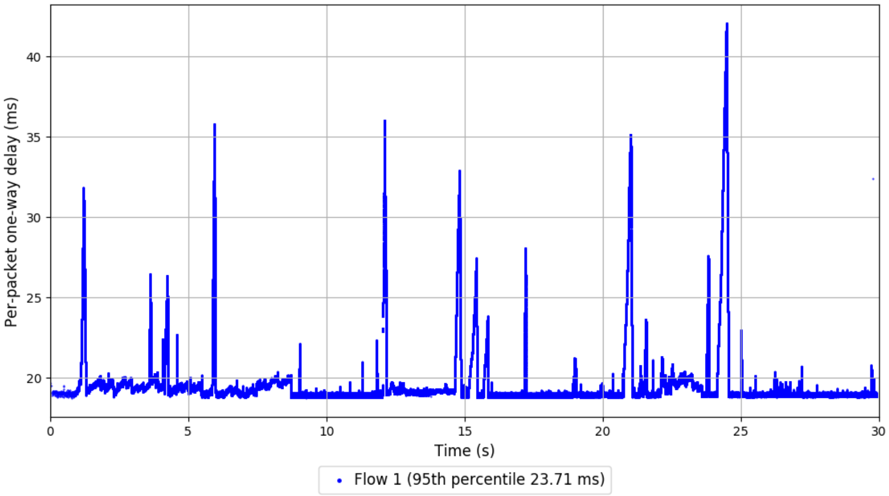




```
Run 2: Statistics of Vivace-loss

Start at: 2018-02-27 16:15:13
End at: 2018-02-27 16:15:43
Local clock offset: 0.648 ms
Remote clock offset: -5.109 ms

# Below is generated by plot.py at 2018-02-27 23:44:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 460.04 Mbit/s
95th percentile per-packet one-way delay: 23.713 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 460.04 Mbit/s
95th percentile per-packet one-way delay: 23.713 ms
Loss rate: 0.02%
```

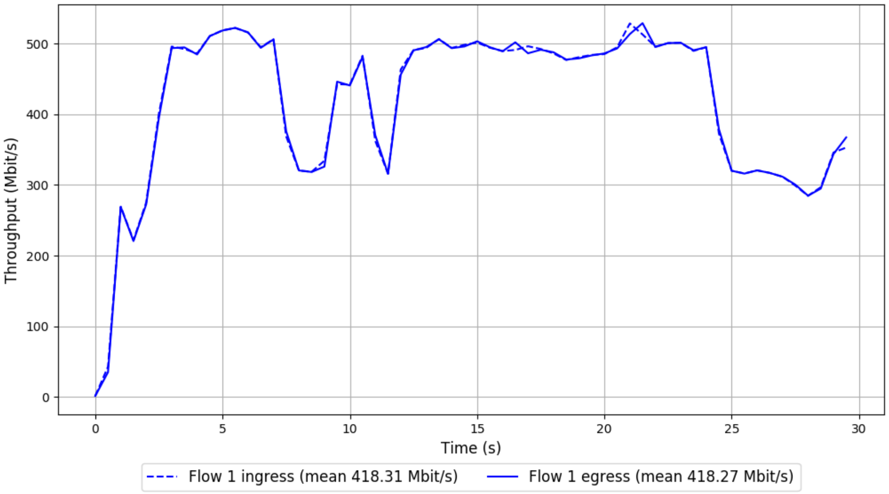
Run 2: Report of Vivace-loss — Data Link

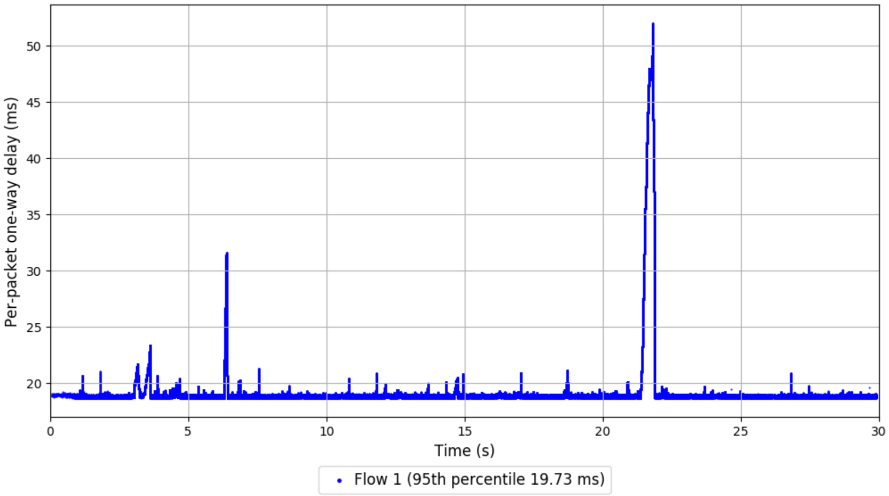




```
Run 3: Statistics of Vivace-loss

Start at: 2018-02-27 16:42:26
End at: 2018-02-27 16:42:56
Local clock offset: 0.716 ms
Remote clock offset: -6.329 ms

# Below is generated by plot.py at 2018-02-27 23:45:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 418.27 Mbit/s
95th percentile per-packet one-way delay: 19.731 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 418.27 Mbit/s
95th percentile per-packet one-way delay: 19.731 ms
Loss rate: 0.01%
```

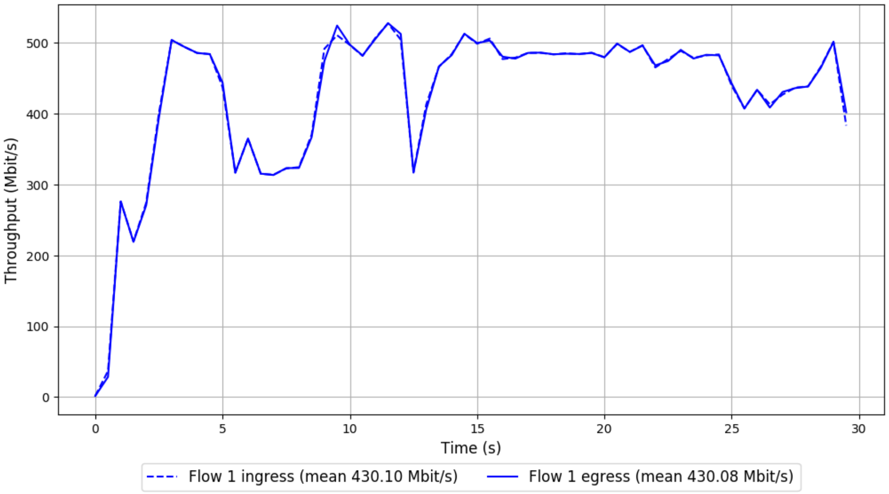
Run 3: Report of Vivace-loss — Data Link

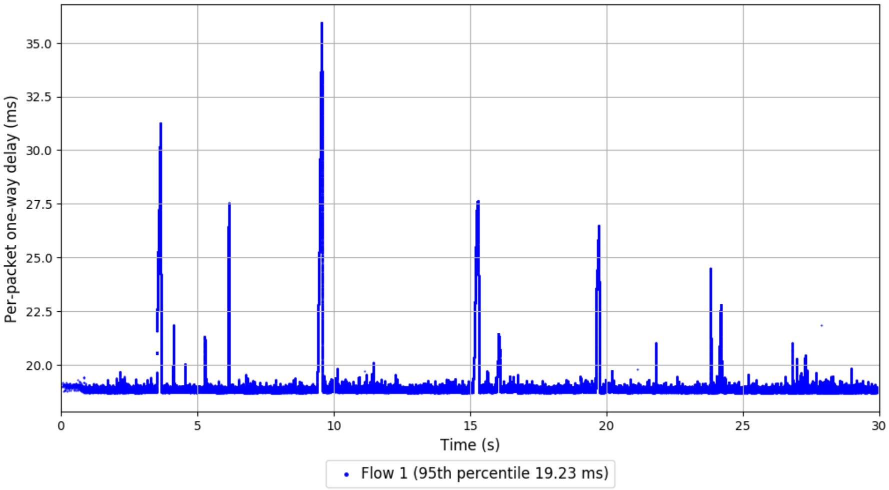




```
Run 4: Statistics of Vivace-loss

Start at: 2018-02-27 17:09:41
End at: 2018-02-27 17:10:11
Local clock offset: 0.619 ms
Remote clock offset: -4.692 ms

# Below is generated by plot.py at 2018-02-27 23:46:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 430.08 Mbit/s
95th percentile per-packet one-way delay: 19.227 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 430.08 Mbit/s
95th percentile per-packet one-way delay: 19.227 ms
Loss rate: 0.01%
```

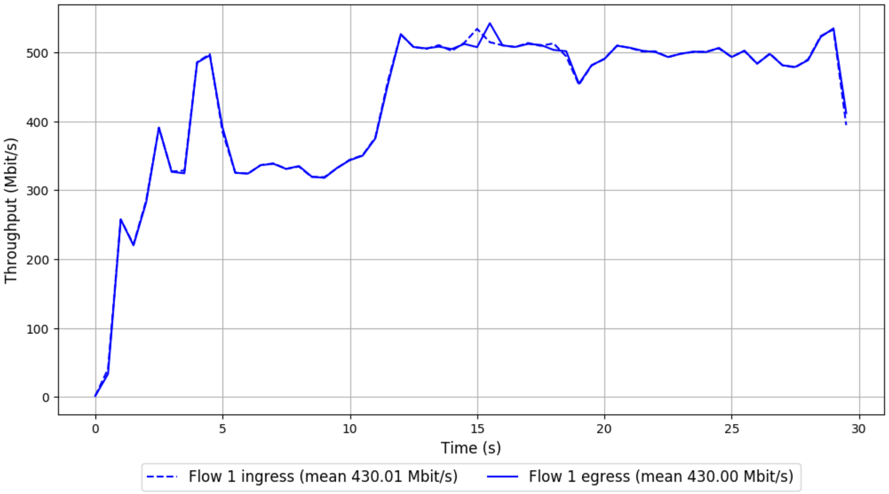
Run 4: Report of Vivace-loss — Data Link

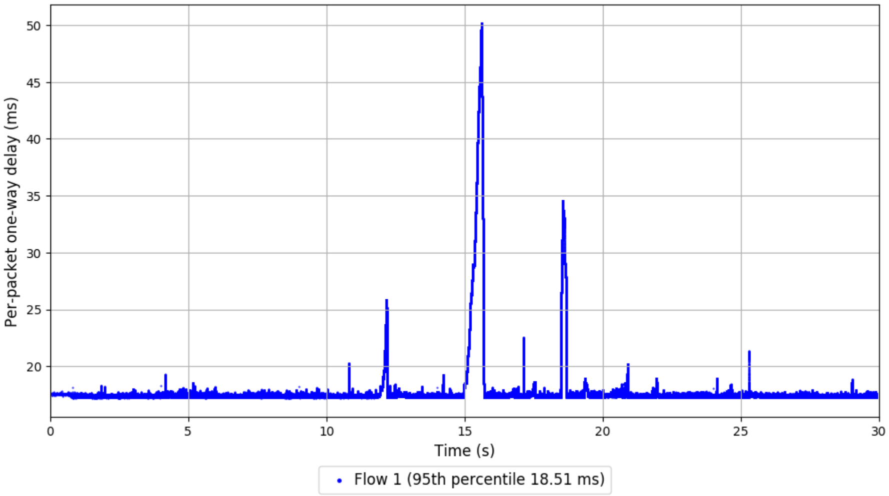




```
Run 5: Statistics of Vivace-loss

Start at: 2018-02-27 17:36:53
End at: 2018-02-27 17:37:23
Local clock offset: 0.415 ms
Remote clock offset: -6.219 ms

# Below is generated by plot.py at 2018-02-27 23:46:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 430.00 Mbit/s
95th percentile per-packet one-way delay: 18.509 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 430.00 Mbit/s
95th percentile per-packet one-way delay: 18.509 ms
Loss rate: 0.00%
```

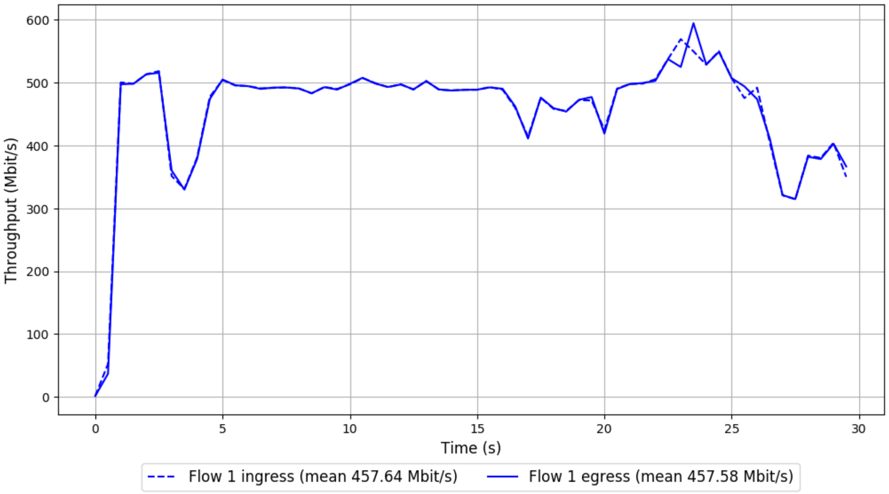
Run 5: Report of Vivace-loss — Data Link

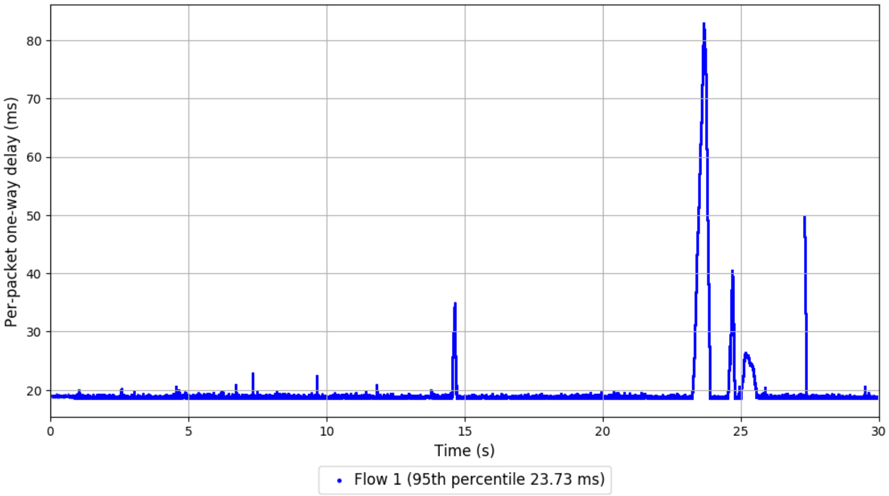




```
Run 6: Statistics of Vivace-loss

Start at: 2018-02-27 18:03:59
End at: 2018-02-27 18:04:29
Local clock offset: -0.452 ms
Remote clock offset: -6.383 ms

# Below is generated by plot.py at 2018-02-27 23:47:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 457.58 Mbit/s
95th percentile per-packet one-way delay: 23.727 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 457.58 Mbit/s
95th percentile per-packet one-way delay: 23.727 ms
Loss rate: 0.02%
```

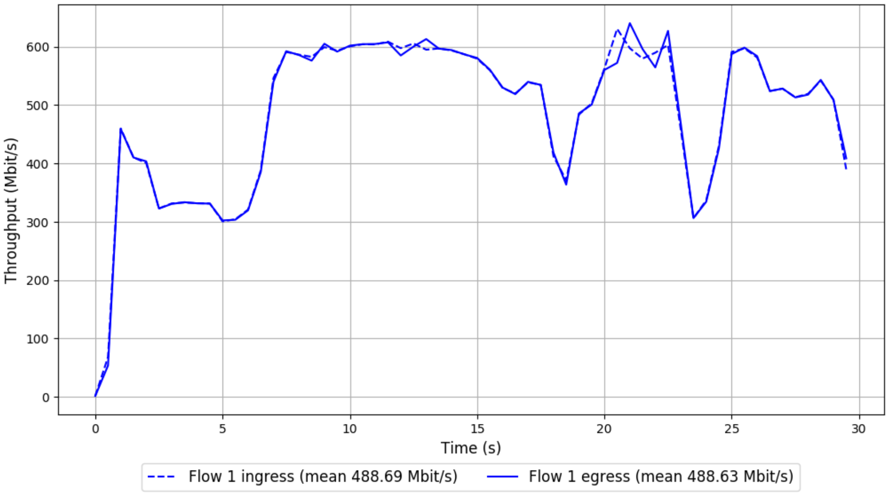
Run 6: Report of Vivace-loss — Data Link

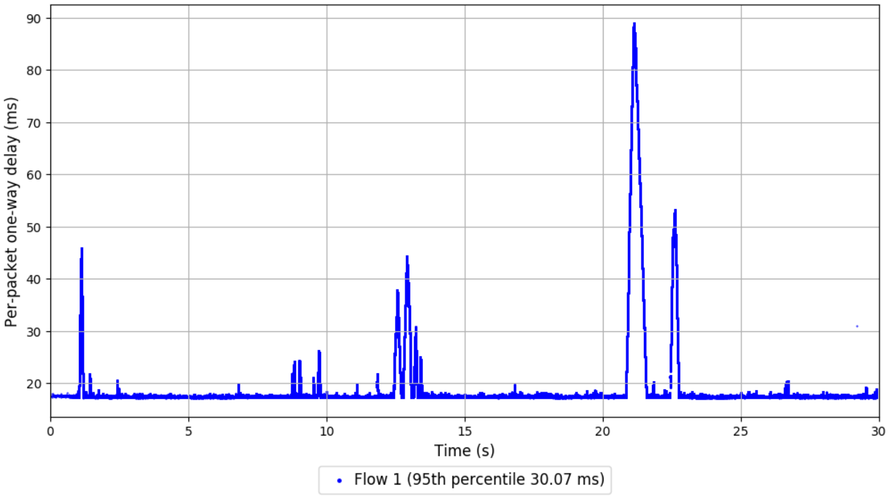




```
Run 7: Statistics of Vivace-loss

Start at: 2018-02-27 18:31:01
End at: 2018-02-27 18:31:31
Local clock offset: -0.847 ms
Remote clock offset: -5.965 ms

# Below is generated by plot.py at 2018-02-27 23:50:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 488.63 Mbit/s
95th percentile per-packet one-way delay: 30.067 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 488.63 Mbit/s
95th percentile per-packet one-way delay: 30.067 ms
Loss rate: 0.01%
```

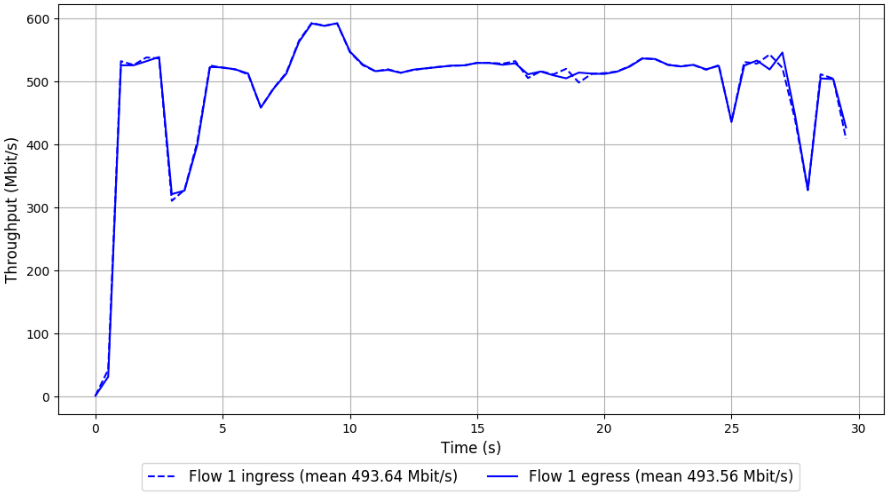
Run 7: Report of Vivace-loss — Data Link

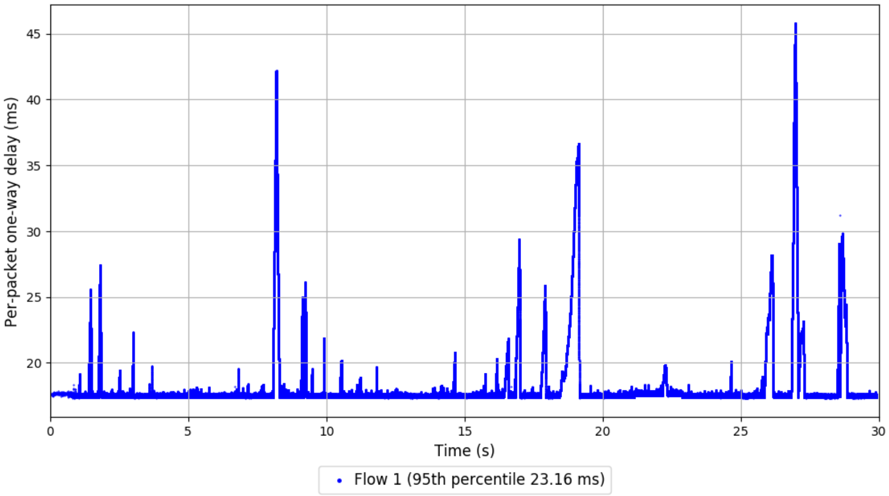




```
Run 8: Statistics of Vivace-loss

Start at: 2018-02-27 18:58:06
End at: 2018-02-27 18:58:36
Local clock offset: -0.985 ms
Remote clock offset: -5.157 ms

# Below is generated by plot.py at 2018-02-27 23:51:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 493.56 Mbit/s
95th percentile per-packet one-way delay: 23.158 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 493.56 Mbit/s
95th percentile per-packet one-way delay: 23.158 ms
Loss rate: 0.02%
```

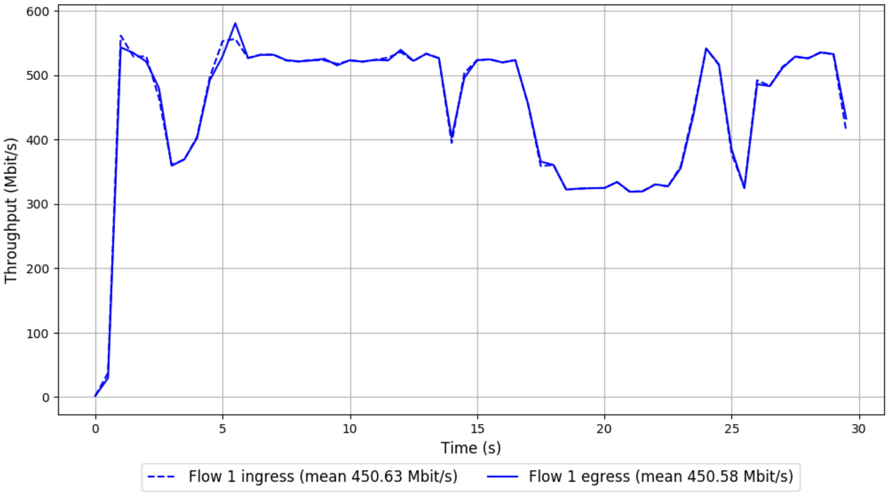
Run 8: Report of Vivace-loss — Data Link

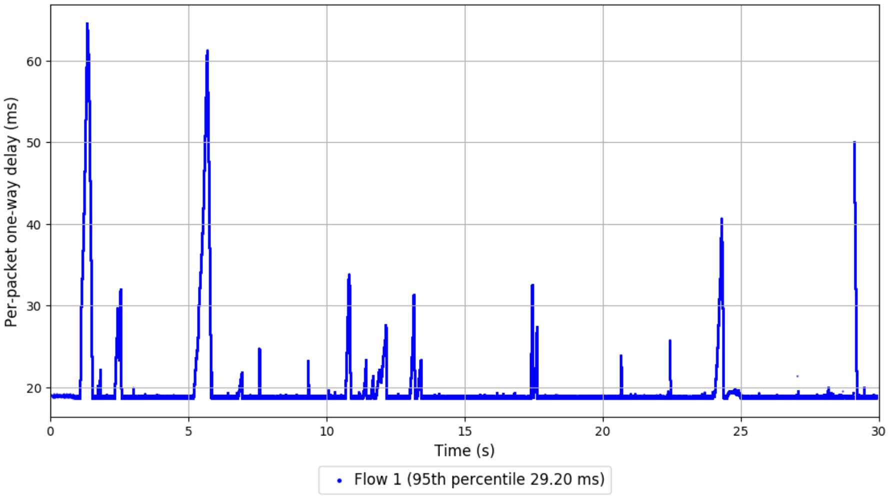




```
Run 9: Statistics of Vivace-loss

Start at: 2018-02-27 19:25:10
End at: 2018-02-27 19:25:40
Local clock offset: -0.357 ms
Remote clock offset: -5.045 ms

# Below is generated by plot.py at 2018-02-27 23:51:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 450.58 Mbit/s
95th percentile per-packet one-way delay: 29.197 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 450.58 Mbit/s
95th percentile per-packet one-way delay: 29.197 ms
Loss rate: 0.01%
```

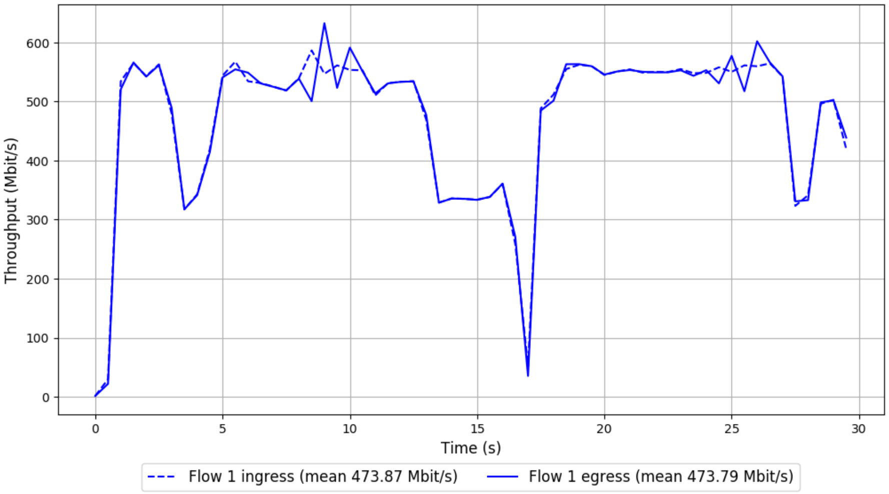
Run 9: Report of Vivace-loss — Data Link

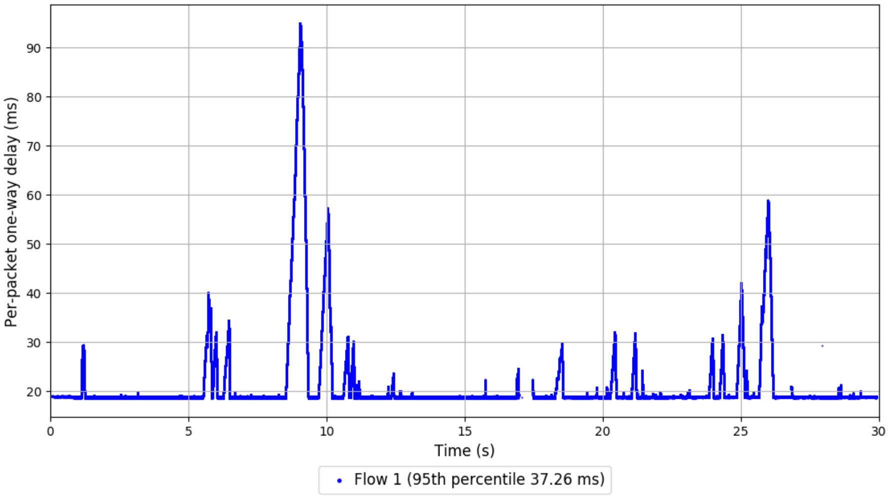




```
Run 10: Statistics of Vivace-loss

Start at: 2018-02-27 19:52:06
End at: 2018-02-27 19:52:36
Local clock offset: 0.838 ms
Remote clock offset: -6.728 ms

# Below is generated by plot.py at 2018-02-27 23:51:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 473.79 Mbit/s
95th percentile per-packet one-way delay: 37.255 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 473.79 Mbit/s
95th percentile per-packet one-way delay: 37.255 ms
Loss rate: 0.02%
```

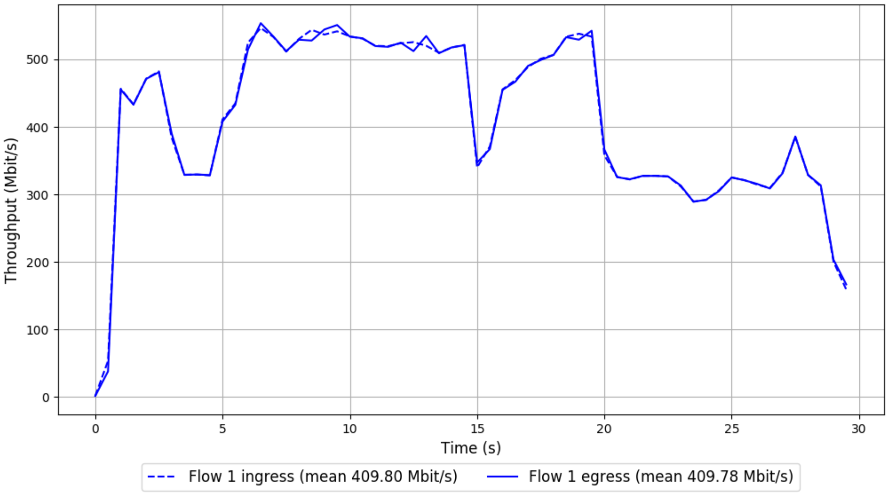
Run 10: Report of Vivace-loss — Data Link

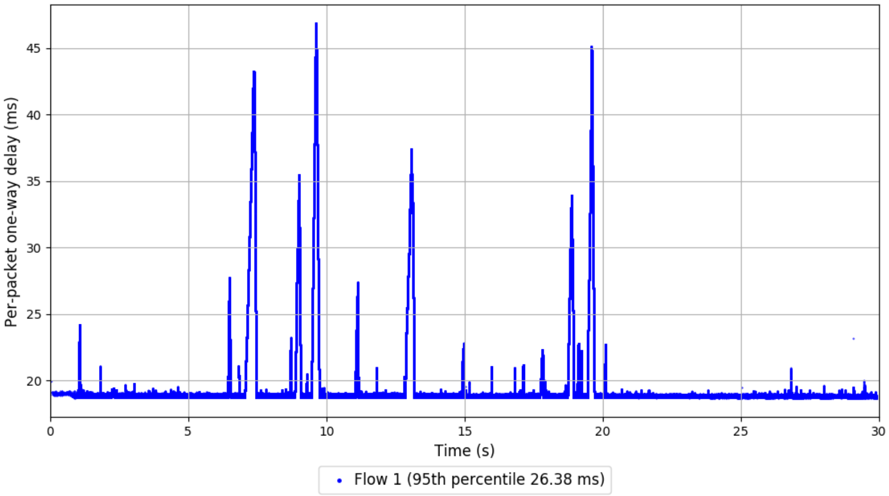




```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-27 15:38:46
End at: 2018-02-27 15:39:16
Local clock offset: 0.751 ms
Remote clock offset: -5.295 ms

# Below is generated by plot.py at 2018-02-27 23:51:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 409.78 Mbit/s
95th percentile per-packet one-way delay: 26.380 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 409.78 Mbit/s
95th percentile per-packet one-way delay: 26.380 ms
Loss rate: 0.00%
```

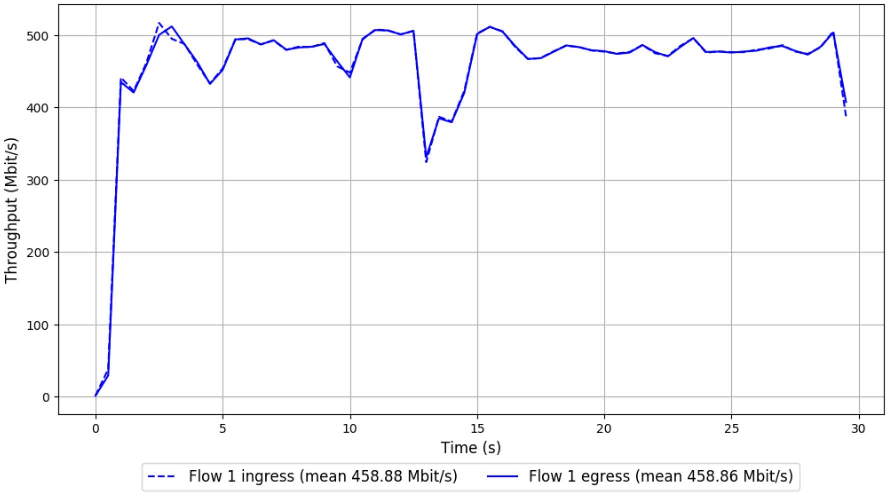
Run 1: Report of Vivace-LTE — Data Link

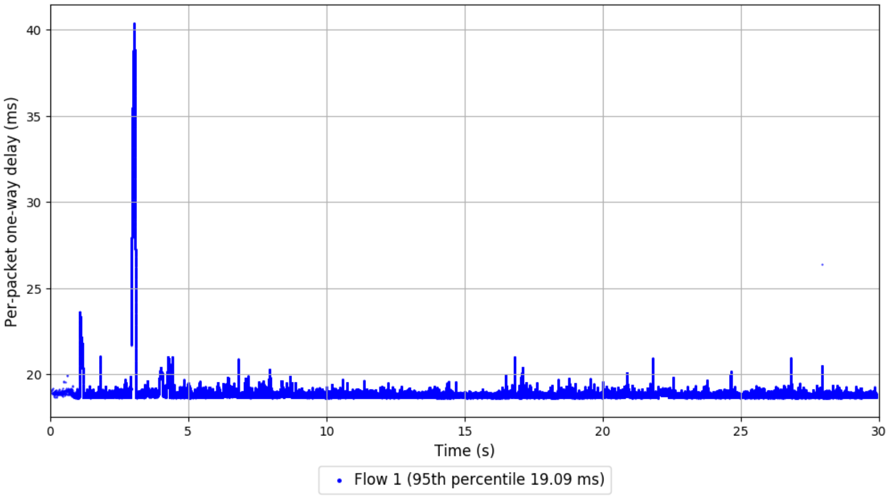




```
Run 2: Statistics of Vivace-LTE

Start at: 2018-02-27 16:05:53
End at: 2018-02-27 16:06:23
Local clock offset: 0.704 ms
Remote clock offset: -4.141 ms

# Below is generated by plot.py at 2018-02-27 23:53:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 458.86 Mbit/s
95th percentile per-packet one-way delay: 19.093 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 458.86 Mbit/s
95th percentile per-packet one-way delay: 19.093 ms
Loss rate: 0.00%
```

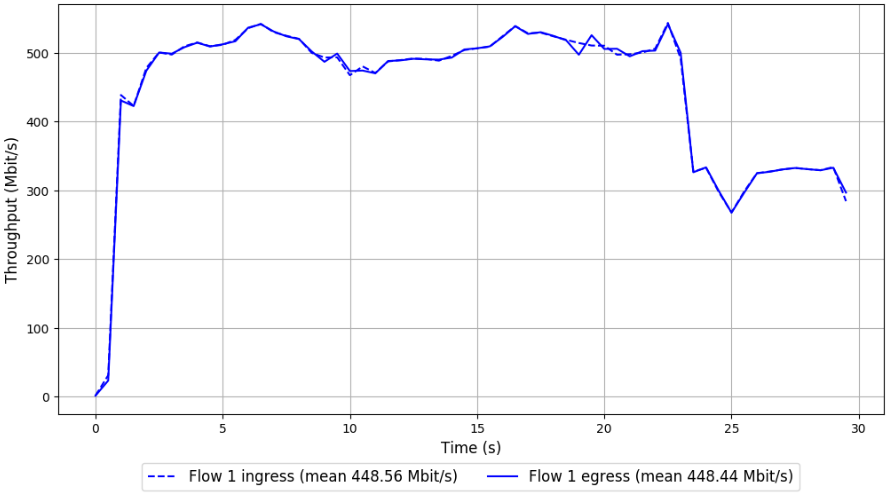
Run 2: Report of Vivace-LTE — Data Link

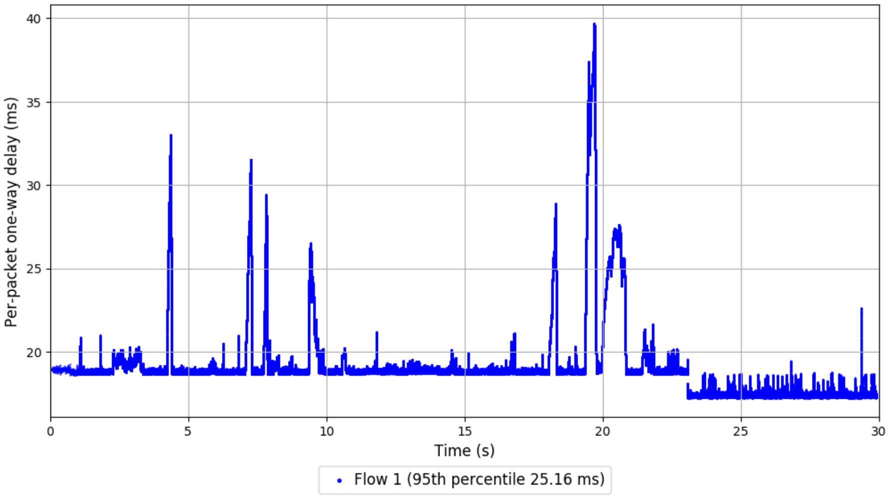




```
Run 3: Statistics of Vivace-LTE

Start at: 2018-02-27 16:33:06
End at: 2018-02-27 16:33:36
Local clock offset: 0.659 ms
Remote clock offset: -6.273 ms

# Below is generated by plot.py at 2018-02-27 23:53:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 448.44 Mbit/s
95th percentile per-packet one-way delay: 25.160 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 448.44 Mbit/s
95th percentile per-packet one-way delay: 25.160 ms
Loss rate: 0.03%
```

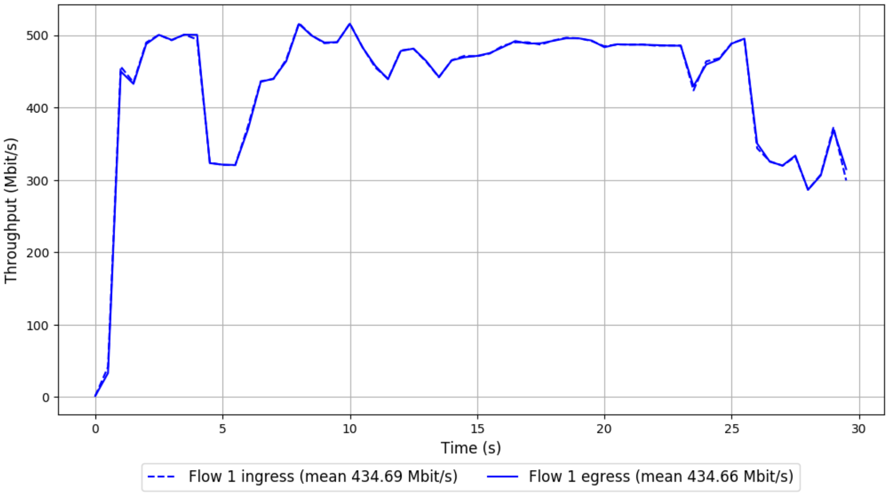
Run 3: Report of Vivace-LTE — Data Link

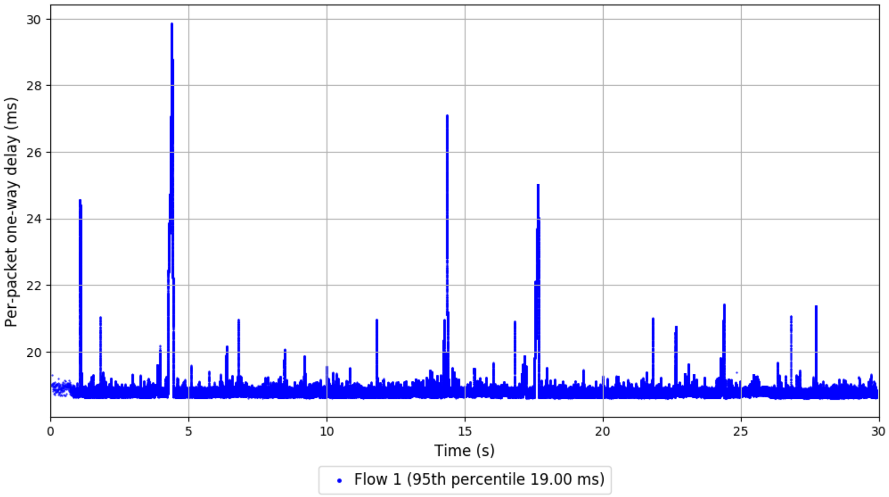




```
Run 4: Statistics of Vivace-LTE

Start at: 2018-02-27 17:00:10
End at: 2018-02-27 17:00:40
Local clock offset: 0.679 ms
Remote clock offset: -5.055 ms

# Below is generated by plot.py at 2018-02-27 23:53:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 434.66 Mbit/s
95th percentile per-packet one-way delay: 18.996 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 434.66 Mbit/s
95th percentile per-packet one-way delay: 18.996 ms
Loss rate: 0.01%
```

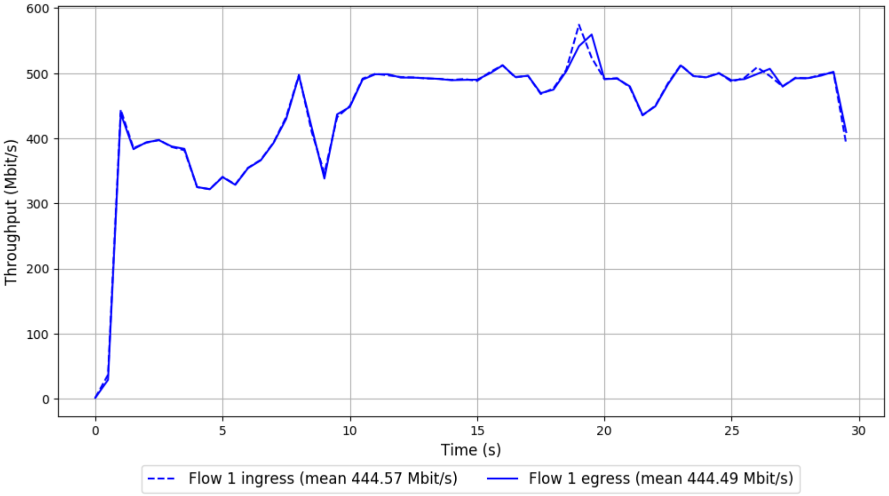
Run 4: Report of Vivace-LTE — Data Link

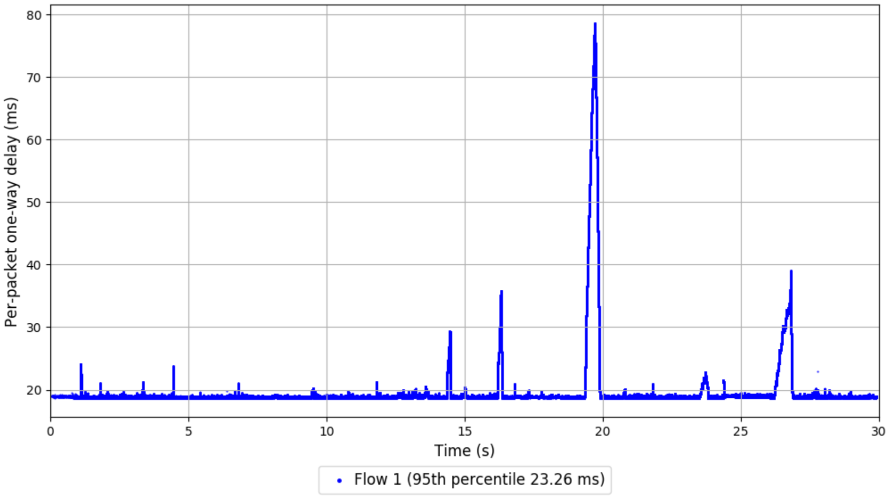




```
Run 5: Statistics of Vivace-LTE

Start at: 2018-02-27 17:27:30
End at: 2018-02-27 17:28:00
Local clock offset: 0.546 ms
Remote clock offset: -5.725 ms

# Below is generated by plot.py at 2018-02-27 23:56:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 444.49 Mbit/s
95th percentile per-packet one-way delay: 23.260 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 444.49 Mbit/s
95th percentile per-packet one-way delay: 23.260 ms
Loss rate: 0.02%
```

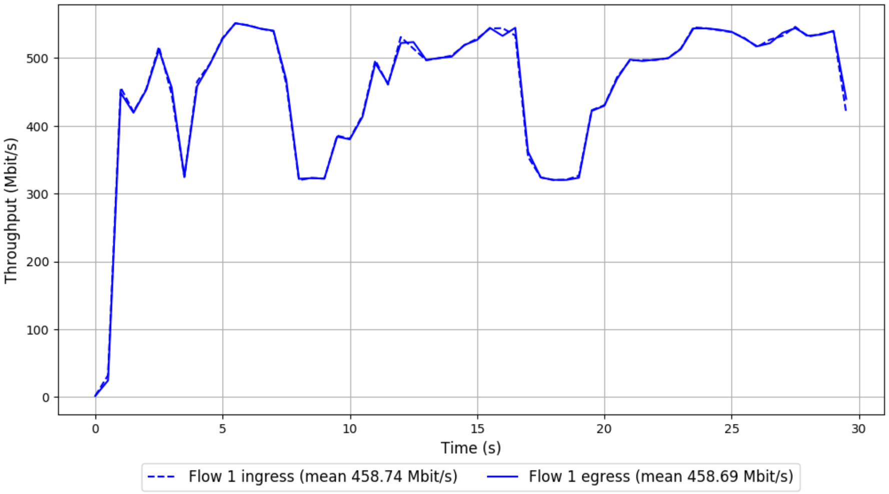
Run 5: Report of Vivace-LTE — Data Link

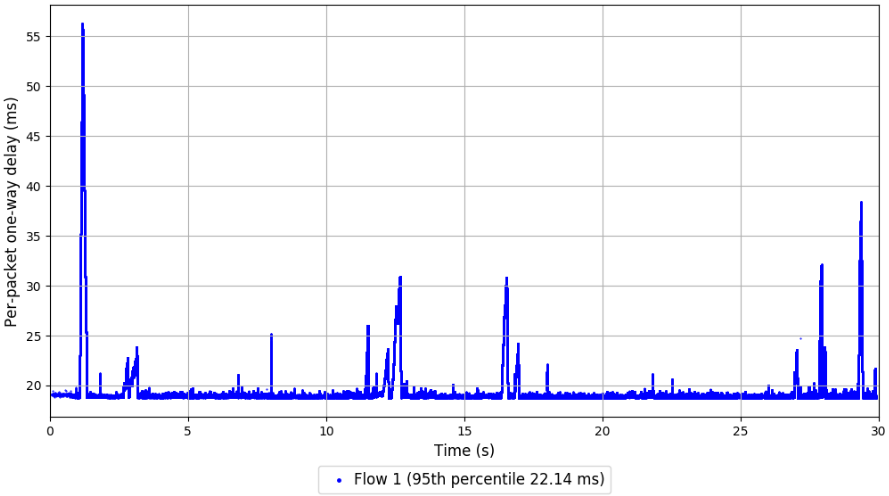




```
Run 6: Statistics of Vivace-LTE

Start at: 2018-02-27 17:54:36
End at: 2018-02-27 17:55:06
Local clock offset: 0.04 ms
Remote clock offset: -6.363 ms

# Below is generated by plot.py at 2018-02-27 23:56:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 458.69 Mbit/s
95th percentile per-packet one-way delay: 22.140 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 458.69 Mbit/s
95th percentile per-packet one-way delay: 22.140 ms
Loss rate: 0.01%
```

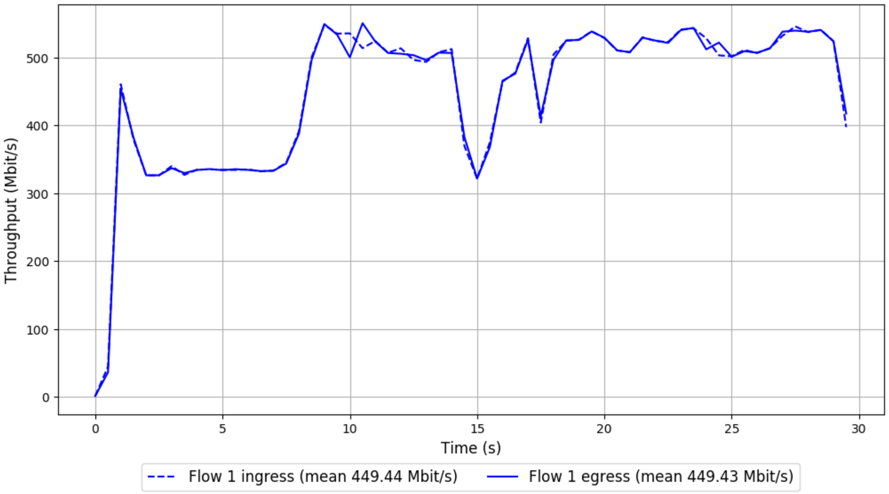
Run 6: Report of Vivace-LTE — Data Link

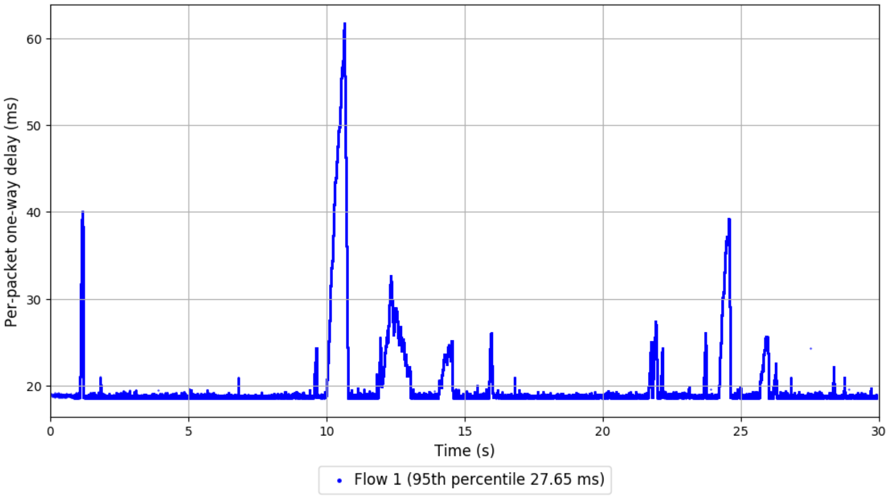




```
Run 7: Statistics of Vivace-LTE

Start at: 2018-02-27 18:21:41
End at: 2018-02-27 18:22:12
Local clock offset: -0.99 ms
Remote clock offset: -6.444 ms

# Below is generated by plot.py at 2018-02-27 23:56:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 449.43 Mbit/s
95th percentile per-packet one-way delay: 27.646 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 449.43 Mbit/s
95th percentile per-packet one-way delay: 27.646 ms
Loss rate: 0.00%
```

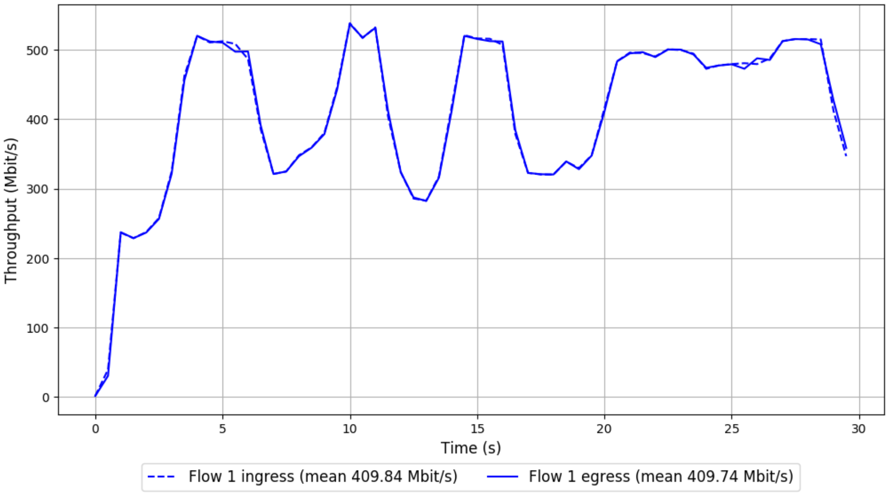
Run 7: Report of Vivace-LTE — Data Link

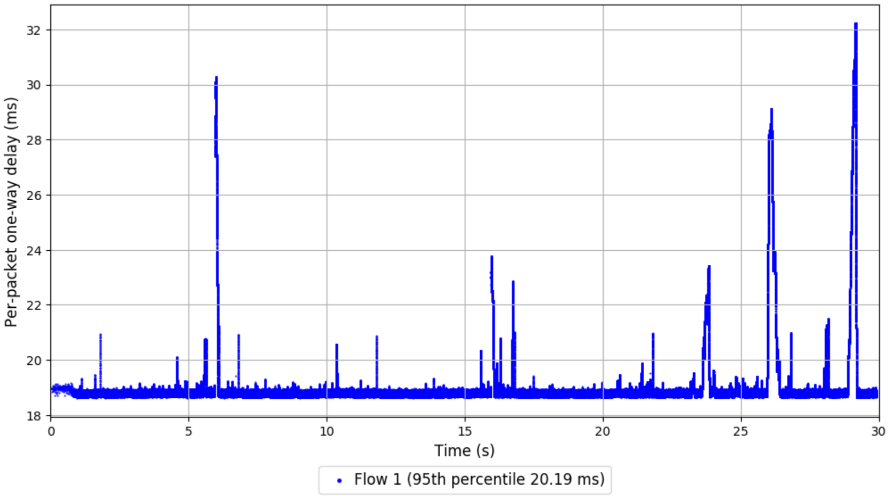




```
Run 8: Statistics of Vivace-LTE

Start at: 2018-02-27 18:48:47
End at: 2018-02-27 18:49:17
Local clock offset: -0.776 ms
Remote clock offset: -5.319 ms

# Below is generated by plot.py at 2018-02-27 23:56:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 409.74 Mbit/s
95th percentile per-packet one-way delay: 20.193 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 409.74 Mbit/s
95th percentile per-packet one-way delay: 20.193 ms
Loss rate: 0.02%
```

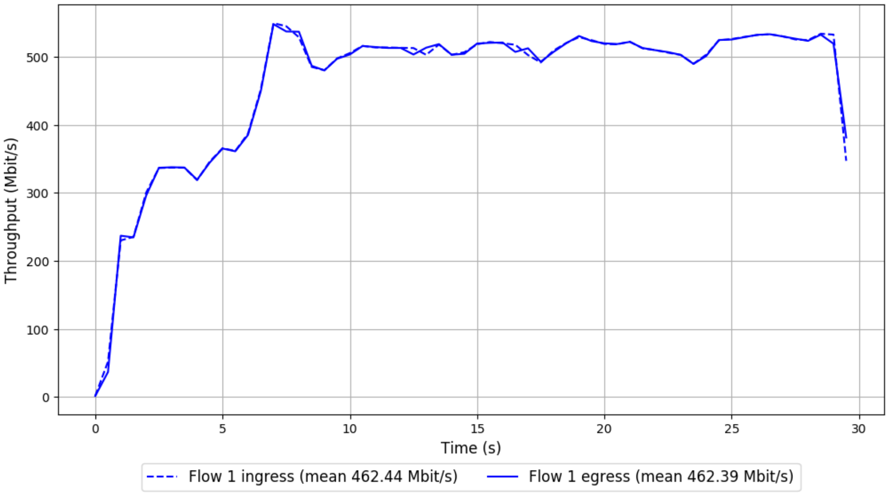
Run 8: Report of Vivace-LTE — Data Link

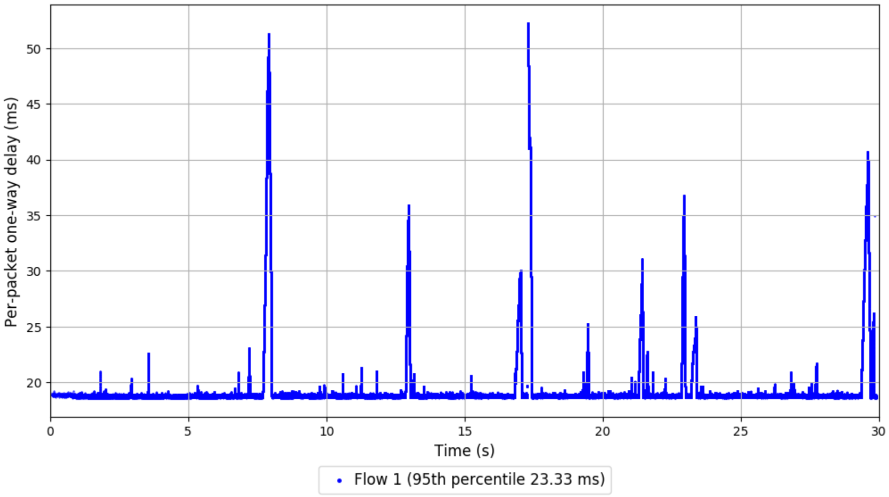




```
Run 9: Statistics of Vivace-LTE

Start at: 2018-02-27 19:15:50
End at: 2018-02-27 19:16:20
Local clock offset: -0.407 ms
Remote clock offset: -5.193 ms

# Below is generated by plot.py at 2018-02-27 23:57:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 462.39 Mbit/s
95th percentile per-packet one-way delay: 23.329 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 462.39 Mbit/s
95th percentile per-packet one-way delay: 23.329 ms
Loss rate: 0.01%
```

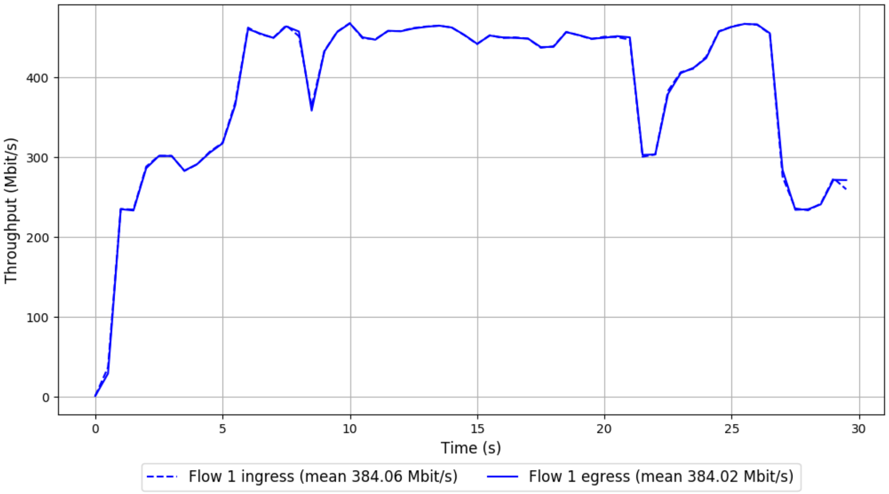
Run 9: Report of Vivace-LTE — Data Link

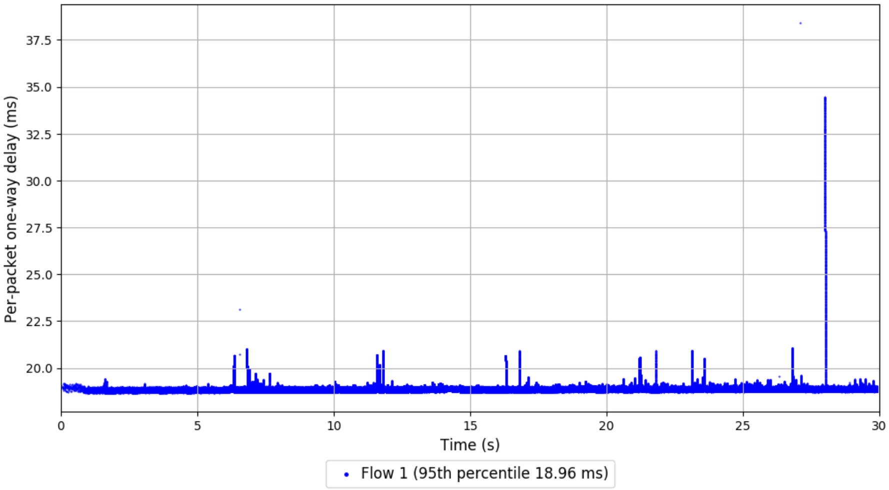




```
Run 10: Statistics of Vivace-LTE

Start at: 2018-02-27 19:42:50
End at: 2018-02-27 19:43:20
Local clock offset: 0.449 ms
Remote clock offset: -6.164 ms

# Below is generated by plot.py at 2018-02-27 23:57:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 384.02 Mbit/s
95th percentile per-packet one-way delay: 18.959 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 384.02 Mbit/s
95th percentile per-packet one-way delay: 18.959 ms
Loss rate: 0.01%
```

Run 10: Report of Vivace-LTE — Data Link


Throughput (Mbit/s)
0
100
200
300
400
0
5
10
15
20
25
30
Time (s)
Flow 1 ingress (mean 384.06 Mbit/s)
Flow 1 egress (mean 384.02 Mbit/s)


Per-packet one-way delay (ms)
20.0
22.5
25.0
27.5
30.0
32.5
35.0
37.5
0
5
10
15
20
25
30
Time (s)
Flow 1 (95th percentile 18.96 ms)