Pantheon Report

Generated at 2018-02-20 05:01:58 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

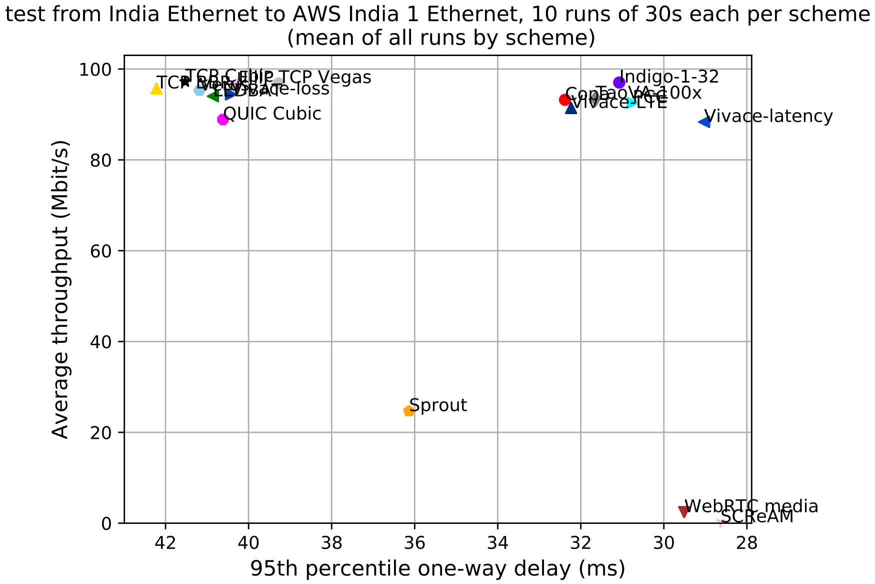
Each test lasted for 30 seconds running 1 flow.

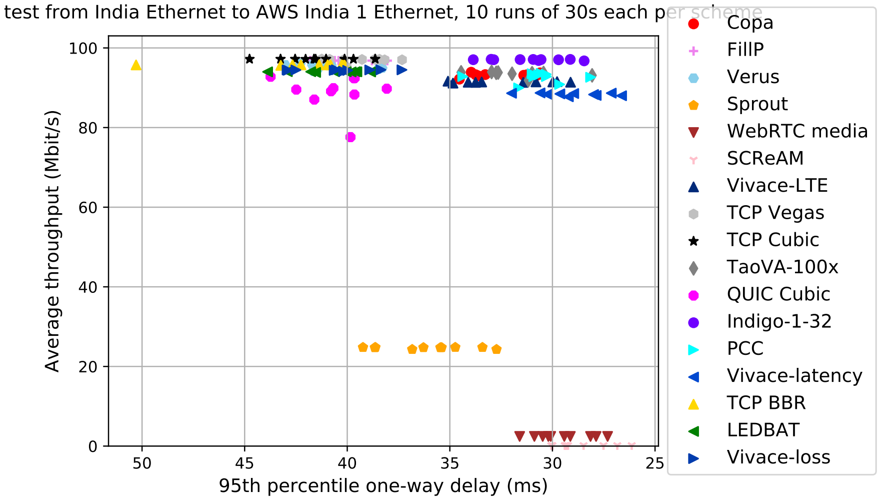
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

NTP offsets were measured against `nets.org.sg` 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
```

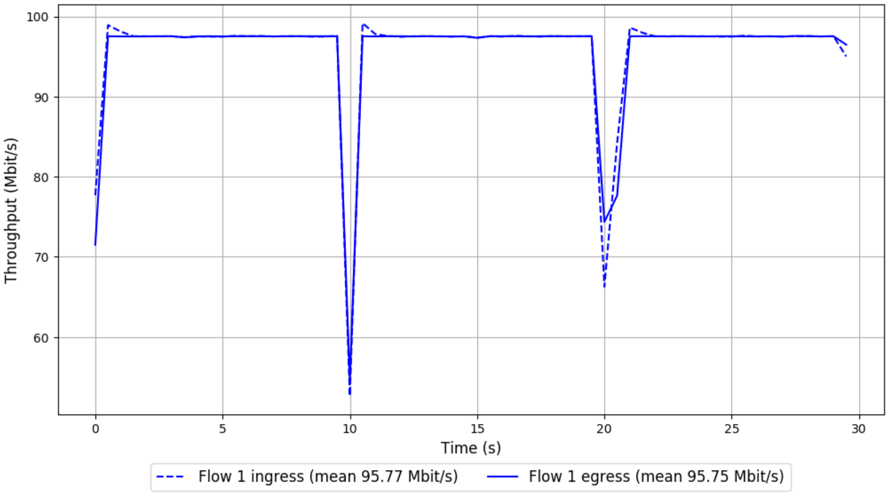

test from India Ethernet to AWS India 1 Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)
Average throughput (Mbit/s)
95th percentile one-way delay (ms)
100
80
60
40
20
0
42
40
38
36
34
32
30
28
TCP BBR
TCP Cubic
FillP
TCP Vegas
Verus
Vivace-loss
LEDBAT
QUIC Cubic
Indigo-1-32
Copa
TaoVA-100x
Vivace-LTE
PCC
Vivace-latency
Sprout
WebRTC media
SCReAM

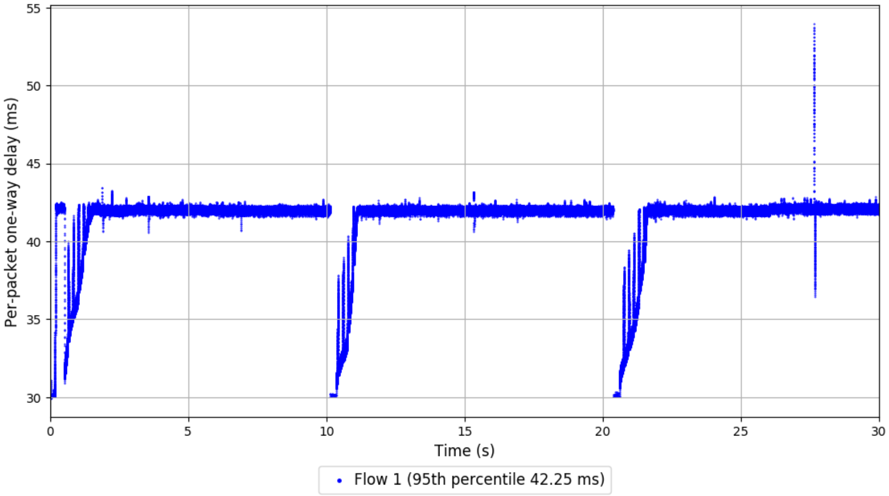

test from India Ethernet to AWS India 1 Ethernet, 10 runs of 30s each per scheme
Average throughput (Mbit/s)
95th percentile one-way delay (ms)
100
80
60
40
20
0
50
45
40
35
30
25
Copa
FillP
Verus
Sprout
WebRTC media
SCReAM
Vivace-LTE
TCP Vegas
TCP Cubic
TaoVA-100x
QUIC Cubic
Indigo-1-32
PCC
Vivace-latency
TCP BBR
LEDBAT
Vivace-loss

scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	95.73	42.22	0.12
TCP Cubic	10	97.20	41.52	0.12
LEDBAT	10	94.00	40.86	0.12
PCC	10	92.56	30.75	0.08
QUIC Cubic	10	88.88	40.62	0.10
SCReAM	10	0.22	28.64	0.05
WebRTC media	10	2.42	29.51	0.09
Sprout	10	24.68	36.14	0.06
TaoVA-100x	10	93.48	31.64	0.08
TCP Vegas	10	96.91	39.28	0.08
Verus	10	95.29	41.18	0.12
Copa	10	93.22	32.38	0.08
FillP	10	96.81	40.25	0.10
Indigo-1-32	10	97.03	31.07	0.08
Vivace-latency	10	88.34	29.03	0.08
Vivace-loss	10	94.42	40.42	0.12
Vivace-LTE	10	91.42	32.23	0.08

```
Run 1: Statistics of TCP BBR

Start at: 2018-02-19 21:24:07
End at: 2018-02-19 21:24:37
Local clock offset: -4.363 ms
Remote clock offset: -20.925 ms

# Below is generated by plot.py at 2018-02-20 04:34:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 42.254 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 42.254 ms
Loss rate: 0.12%
```

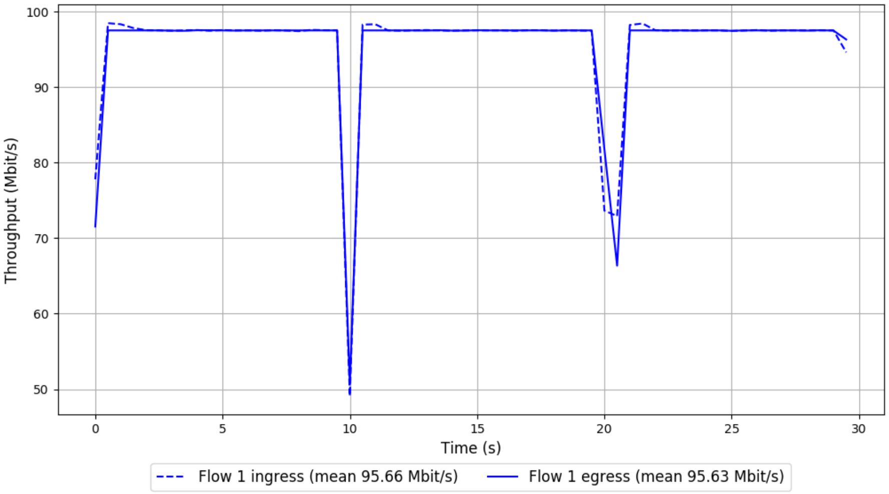
Run 1: Report of TCP BBR — Data Link

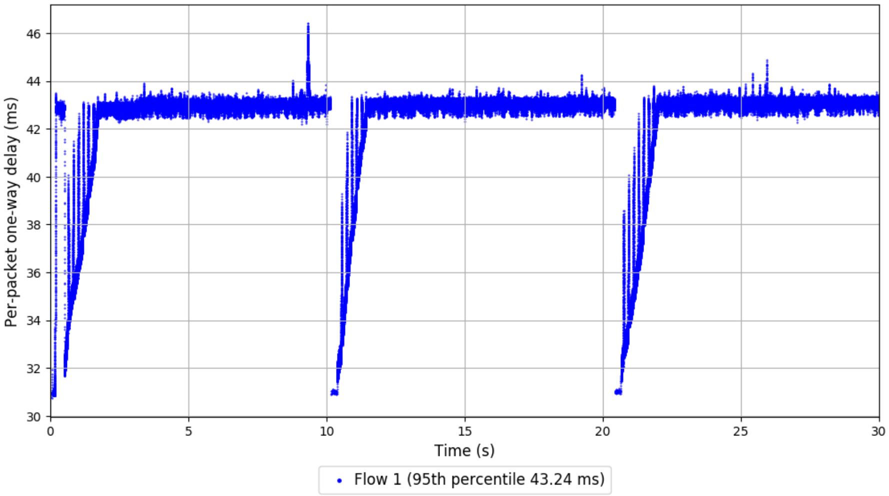




```
Run 2: Statistics of TCP BBR

Start at: 2018-02-19 21:45:50
End at: 2018-02-19 21:46:20
Local clock offset: -5.85 ms
Remote clock offset: -22.104 ms

# Below is generated by plot.py at 2018-02-20 04:34:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.63 Mbit/s
95th percentile per-packet one-way delay: 43.240 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.63 Mbit/s
95th percentile per-packet one-way delay: 43.240 ms
Loss rate: 0.12%
```

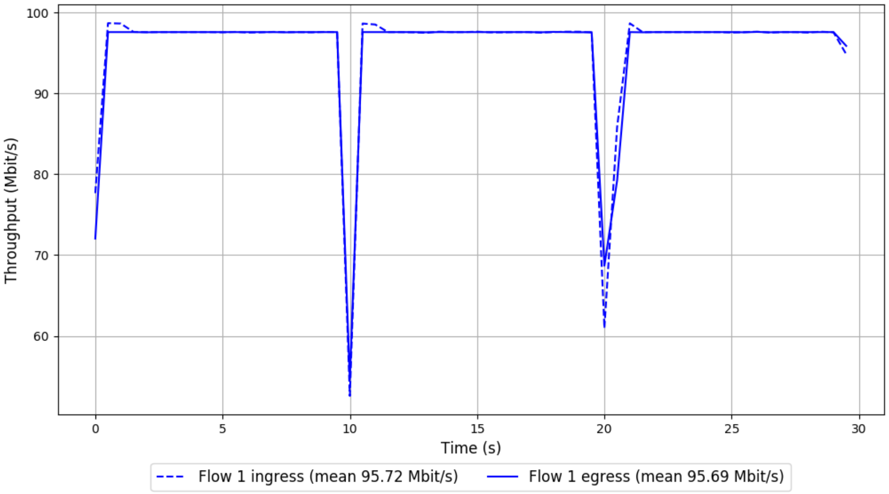
Run 2: Report of TCP BBR — Data Link

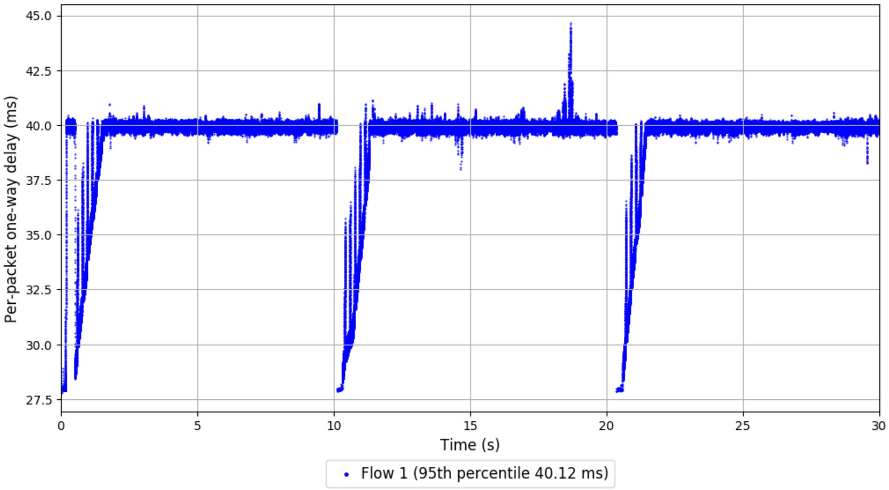




```
Run 3: Statistics of TCP BBR

Start at: 2018-02-19 22:07:20
End at: 2018-02-19 22:07:50
Local clock offset: -1.041 ms
Remote clock offset: -18.488 ms

# Below is generated by plot.py at 2018-02-20 04:34:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.69 Mbit/s
95th percentile per-packet one-way delay: 40.124 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.69 Mbit/s
95th percentile per-packet one-way delay: 40.124 ms
Loss rate: 0.12%
```

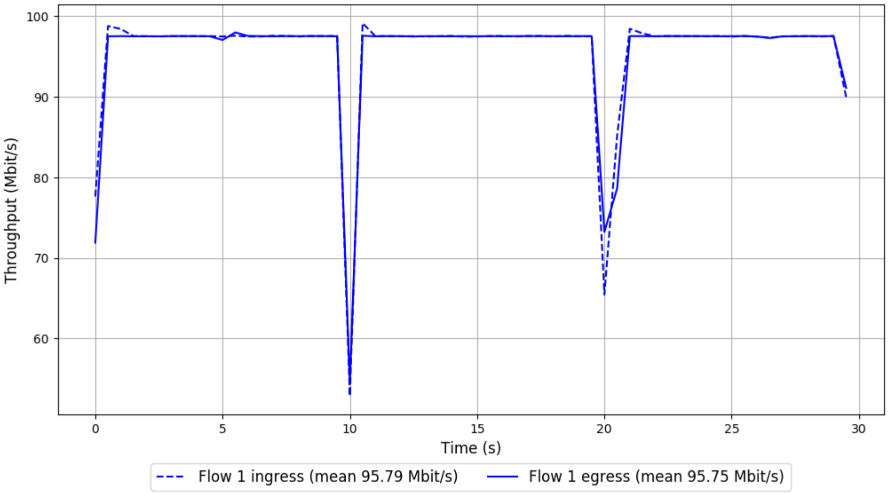
Run 3: Report of TCP BBR — Data Link

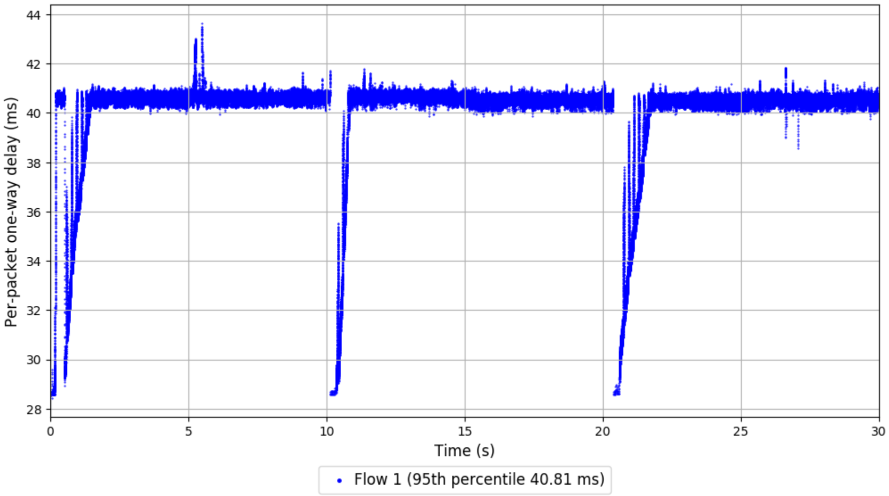




```
Run 4: Statistics of TCP BBR

Start at: 2018-02-19 22:28:55
End at: 2018-02-19 22:29:25
Local clock offset: 1.694 ms
Remote clock offset: -18.665 ms

# Below is generated by plot.py at 2018-02-20 04:34:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 40.812 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 40.812 ms
Loss rate: 0.12%
```

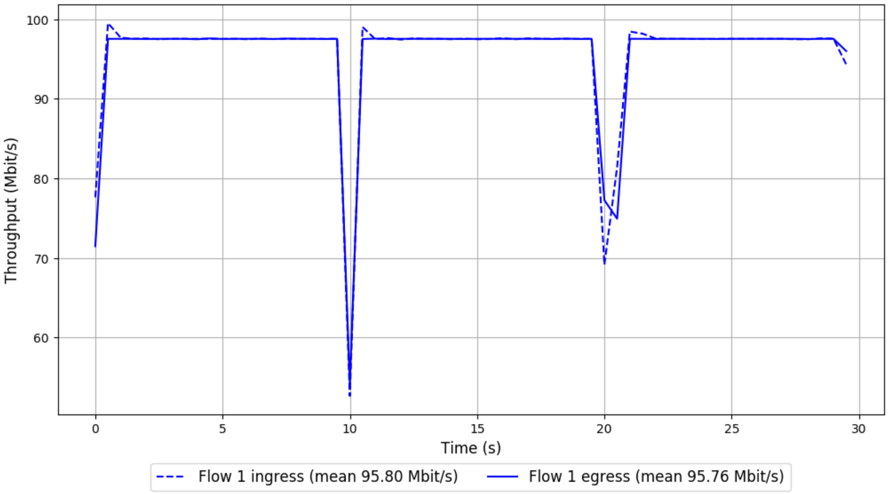
Run 4: Report of TCP BBR — Data Link

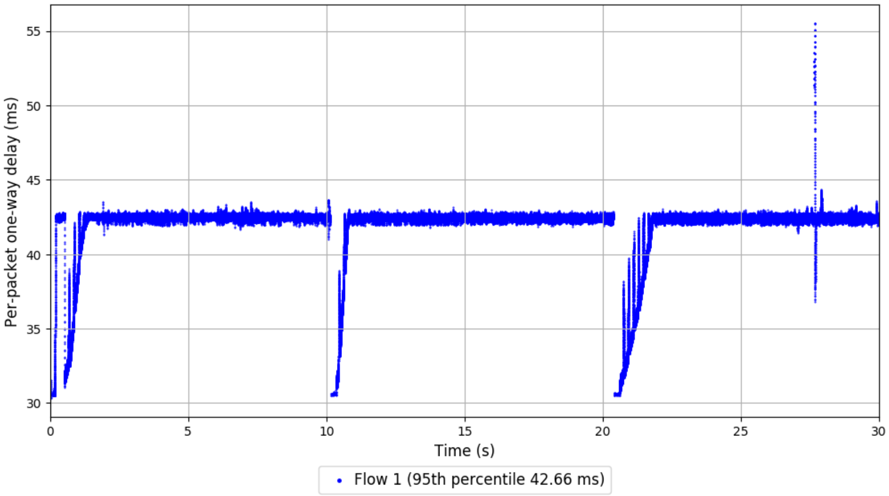




```
Run 5: Statistics of TCP BBR

Start at: 2018-02-19 22:50:49
End at: 2018-02-19 22:51:19
Local clock offset: -0.208 ms
Remote clock offset: -22.719 ms

# Below is generated by plot.py at 2018-02-20 04:34:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.76 Mbit/s
95th percentile per-packet one-way delay: 42.665 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 95.76 Mbit/s
95th percentile per-packet one-way delay: 42.665 ms
Loss rate: 0.11%
```

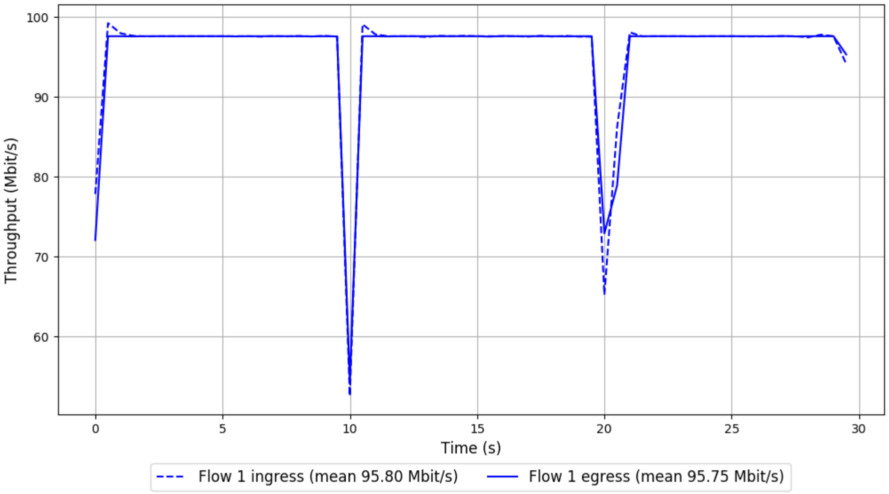
Run 5: Report of TCP BBR — Data Link

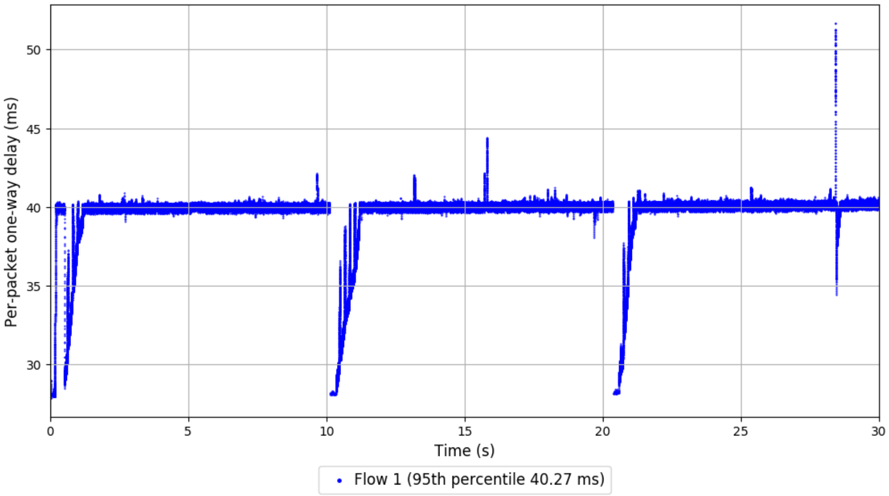




```
Run 6: Statistics of TCP BBR

Start at: 2018-02-19 23:12:18
End at: 2018-02-19 23:12:48
Local clock offset: -9.903 ms
Remote clock offset: -20.2 ms

# Below is generated by plot.py at 2018-02-20 04:34:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 40.273 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 40.273 ms
Loss rate: 0.12%
```

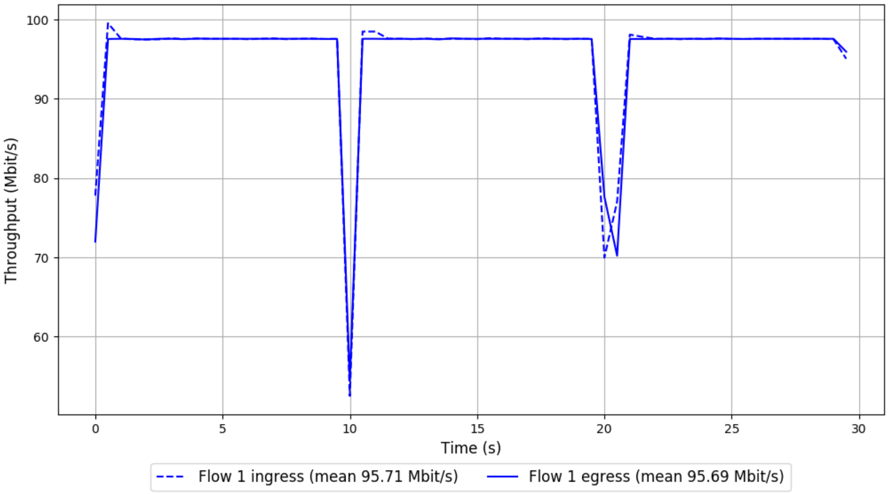
Run 6: Report of TCP BBR — Data Link

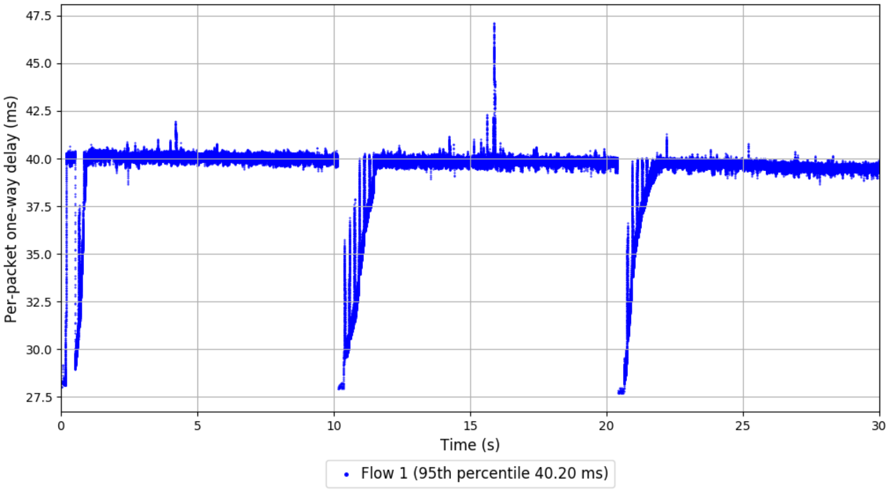




```
Run 7: Statistics of TCP BBR

Start at: 2018-02-19 23:33:52
End at: 2018-02-19 23:34:22
Local clock offset: -14.695 ms
Remote clock offset: -17.101 ms

# Below is generated by plot.py at 2018-02-20 04:34:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.69 Mbit/s
95th percentile per-packet one-way delay: 40.202 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.69 Mbit/s
95th percentile per-packet one-way delay: 40.202 ms
Loss rate: 0.12%
```

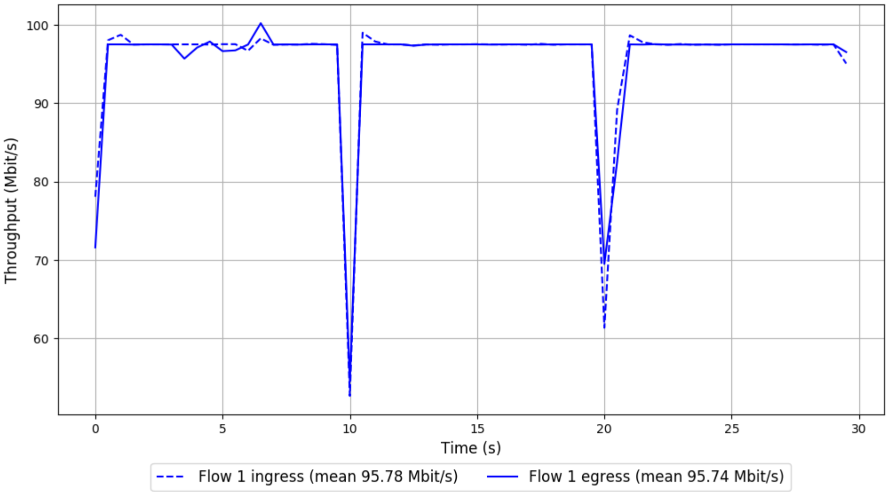
Run 7: Report of TCP BBR — Data Link

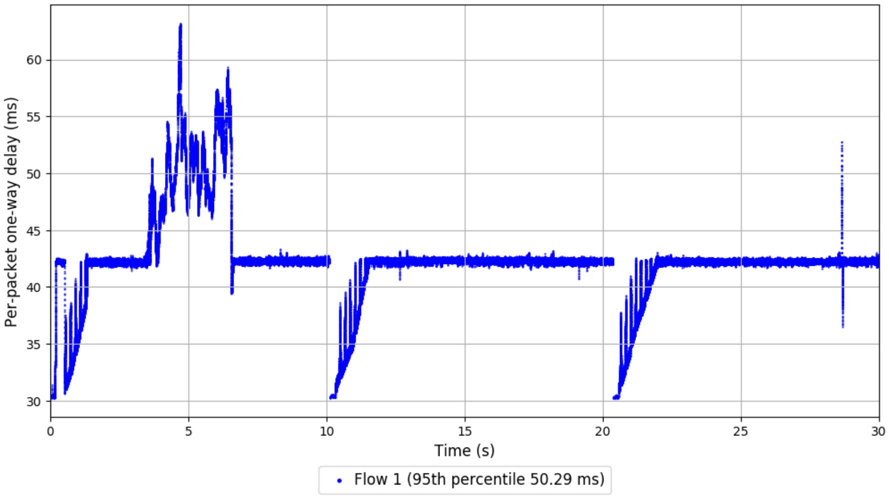




```
Run 8: Statistics of TCP BBR

Start at: 2018-02-19 23:55:15
End at: 2018-02-19 23:55:45
Local clock offset: 4.886 ms
Remote clock offset: -11.263 ms

# Below is generated by plot.py at 2018-02-20 04:34:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.74 Mbit/s
95th percentile per-packet one-way delay: 50.291 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 95.74 Mbit/s
95th percentile per-packet one-way delay: 50.291 ms
Loss rate: 0.13%
```

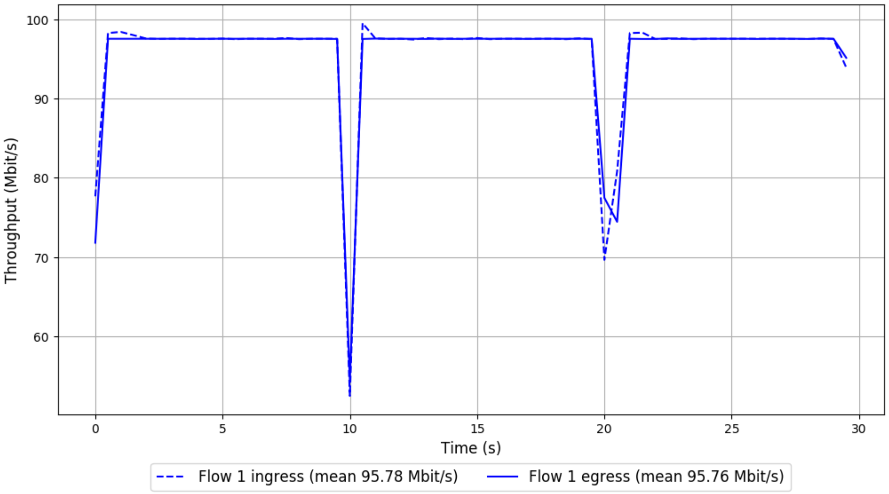
Run 8: Report of TCP BBR — Data Link

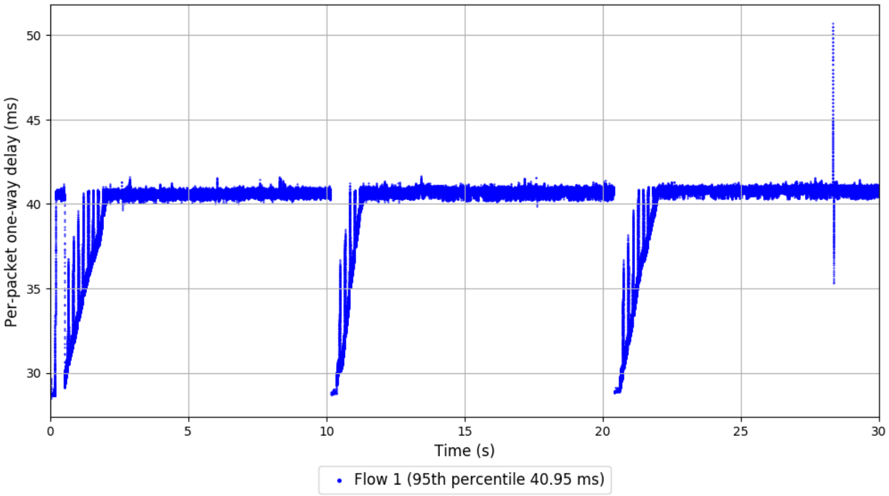




```
Run 9: Statistics of TCP BBR

Start at: 2018-02-20 00:16:45
End at: 2018-02-20 00:17:15
Local clock offset: -0.635 ms
Remote clock offset: -7.604 ms

# Below is generated by plot.py at 2018-02-20 04:36:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.76 Mbit/s
95th percentile per-packet one-way delay: 40.951 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.76 Mbit/s
95th percentile per-packet one-way delay: 40.951 ms
Loss rate: 0.12%
```

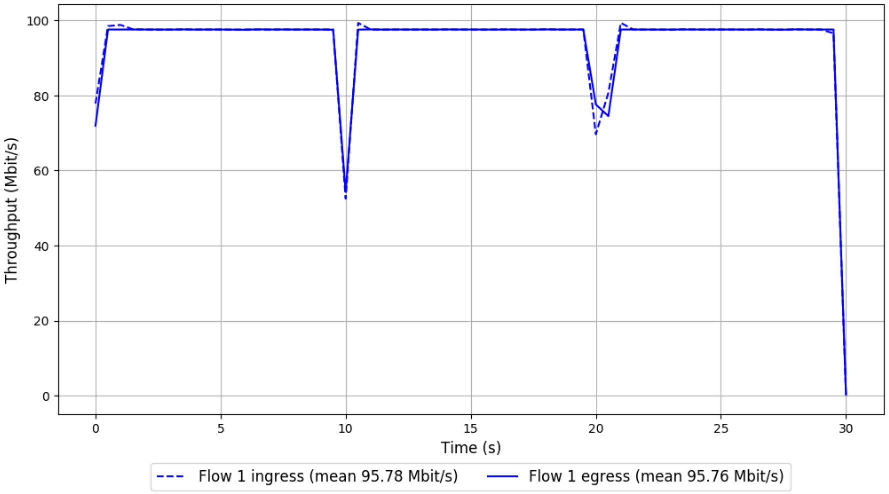
Run 9: Report of TCP BBR — Data Link

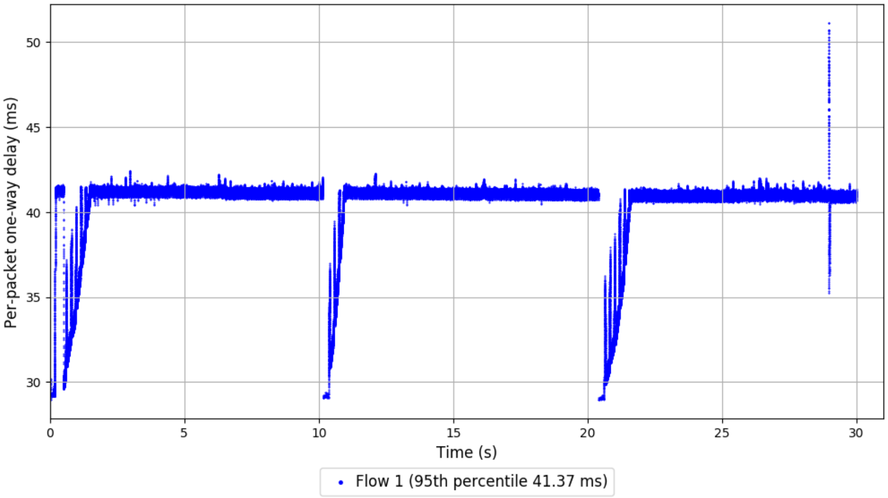




```
Run 10: Statistics of TCP BBR

Start at: 2018-02-20 00:38:31
End at: 2018-02-20 00:39:01
Local clock offset: -3.702 ms
Remote clock offset: -10.942 ms

# Below is generated by plot.py at 2018-02-20 04:36:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.76 Mbit/s
95th percentile per-packet one-way delay: 41.371 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.76 Mbit/s
95th percentile per-packet one-way delay: 41.371 ms
Loss rate: 0.12%
```

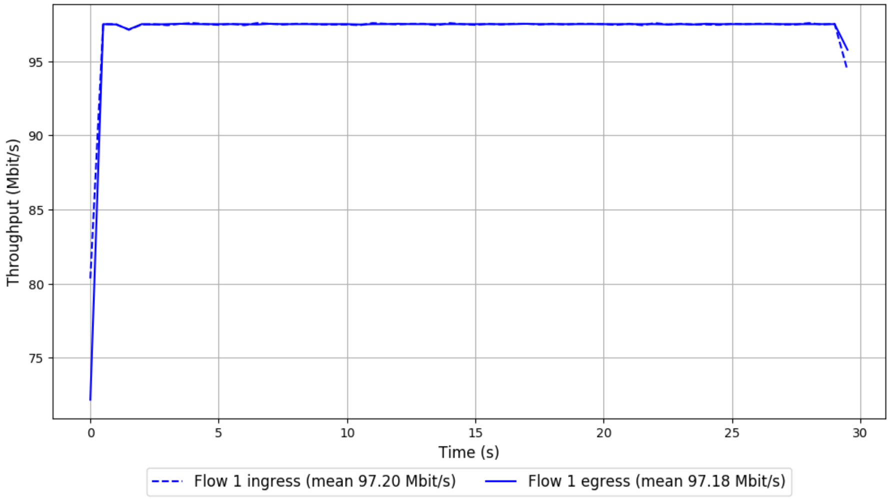
Run 10: Report of TCP BBR — Data Link

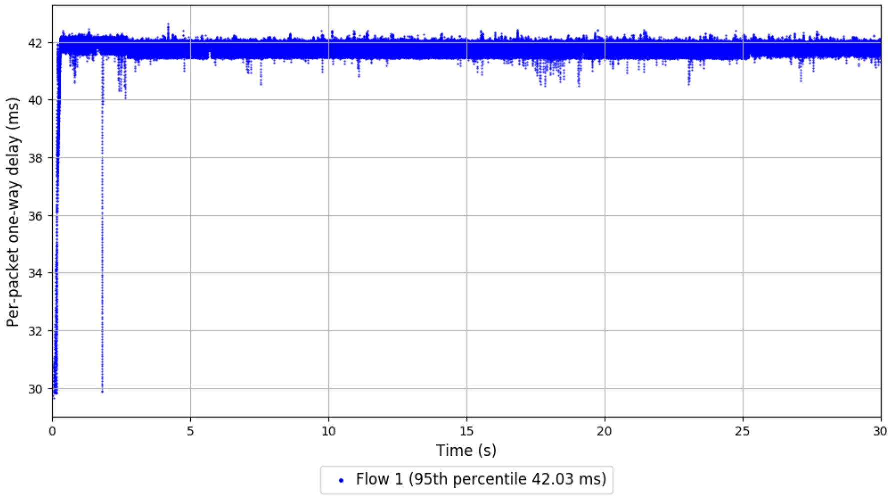




```
Run 1: Statistics of TCP Cubic

Start at: 2018-02-19 21:15:42
End at: 2018-02-19 21:16:12
Local clock offset: -5.186 ms
Remote clock offset: -21.209 ms

# Below is generated by plot.py at 2018-02-20 04:36:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.18 Mbit/s
95th percentile per-packet one-way delay: 42.029 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 97.18 Mbit/s
95th percentile per-packet one-way delay: 42.029 ms
Loss rate: 0.12%
```

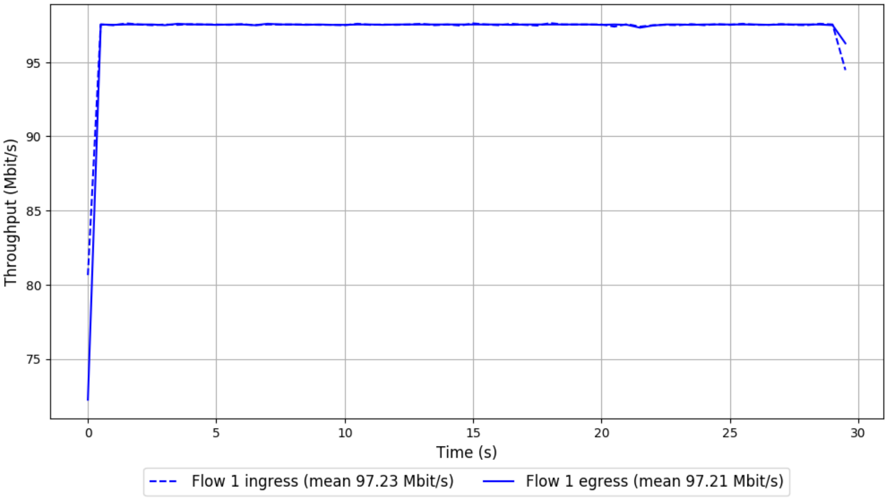
Run 1: Report of TCP Cubic — Data Link

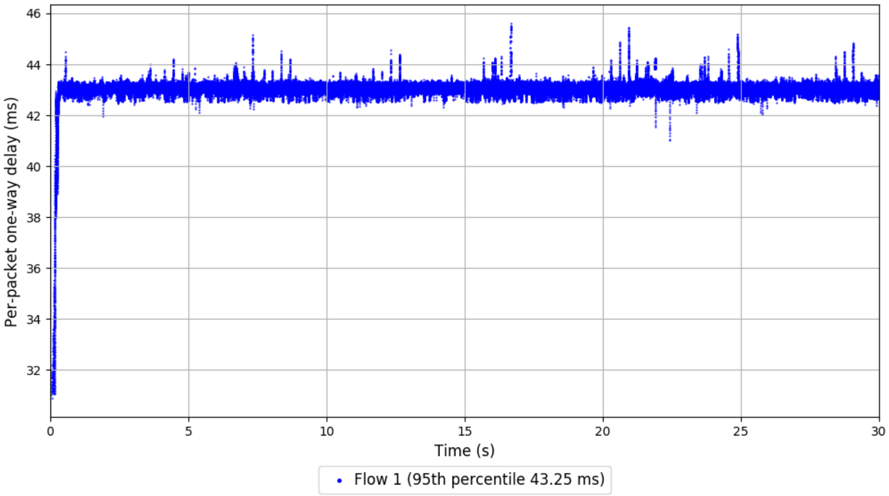




```
Run 2: Statistics of TCP Cubic

Start at: 2018-02-19 21:37:12
End at: 2018-02-19 21:37:42
Local clock offset: -4.387 ms
Remote clock offset: -21.924 ms

# Below is generated by plot.py at 2018-02-20 04:36:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.21 Mbit/s
95th percentile per-packet one-way delay: 43.250 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 97.21 Mbit/s
95th percentile per-packet one-way delay: 43.250 ms
Loss rate: 0.11%
```

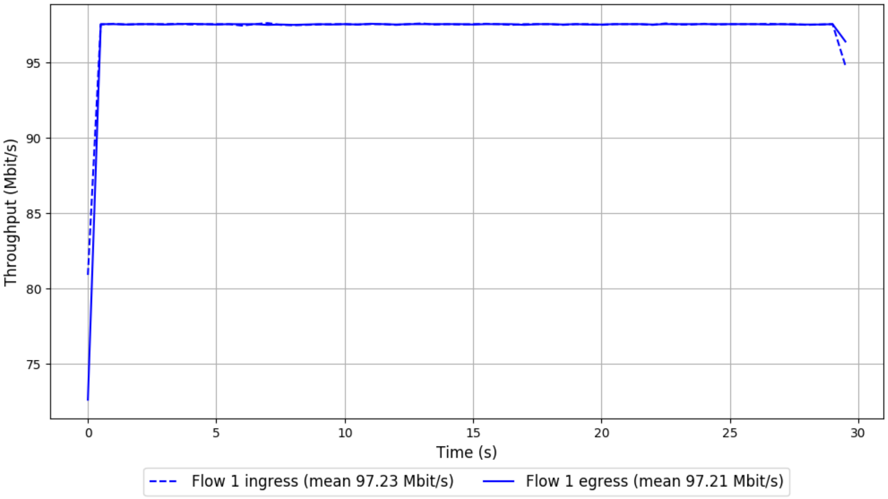
Run 2: Report of TCP Cubic — Data Link

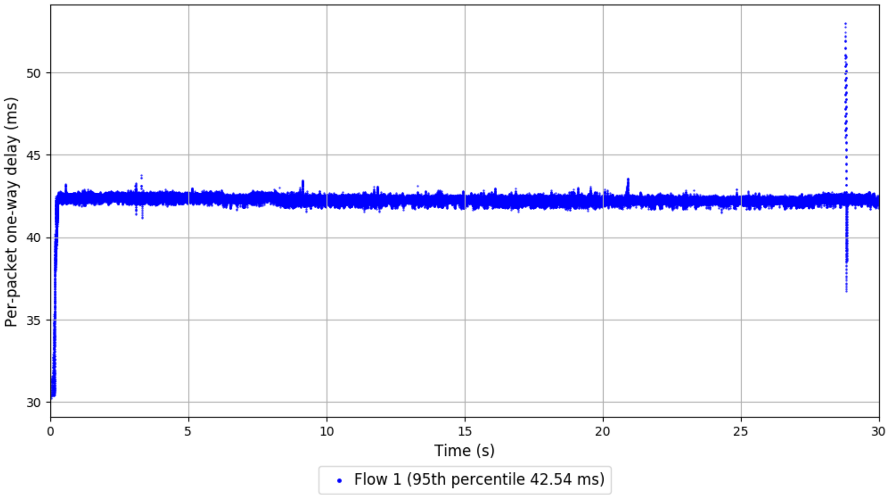




```
Run 3: Statistics of TCP Cubic

Start at: 2018-02-19 21:59:01
End at: 2018-02-19 21:59:31
Local clock offset: 0.31 ms
Remote clock offset: -18.173 ms

# Below is generated by plot.py at 2018-02-20 04:36:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.21 Mbit/s
95th percentile per-packet one-way delay: 42.540 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 97.21 Mbit/s
95th percentile per-packet one-way delay: 42.540 ms
Loss rate: 0.11%
```

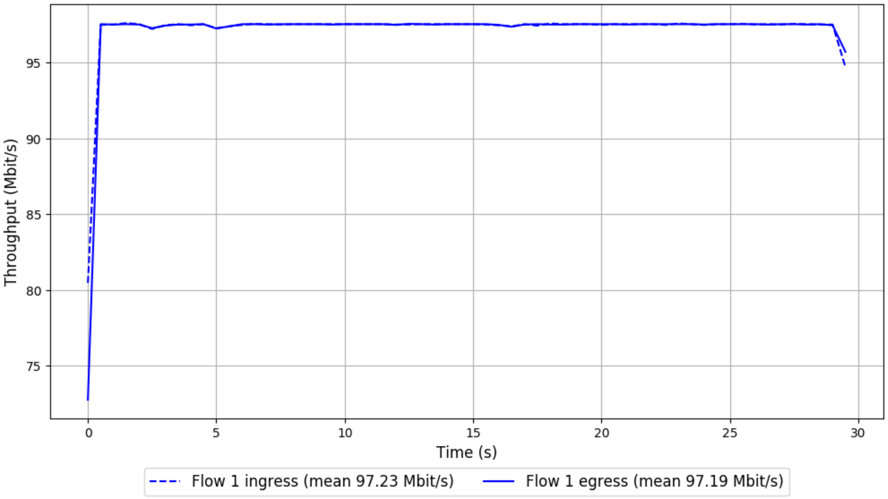
Run 3: Report of TCP Cubic — Data Link

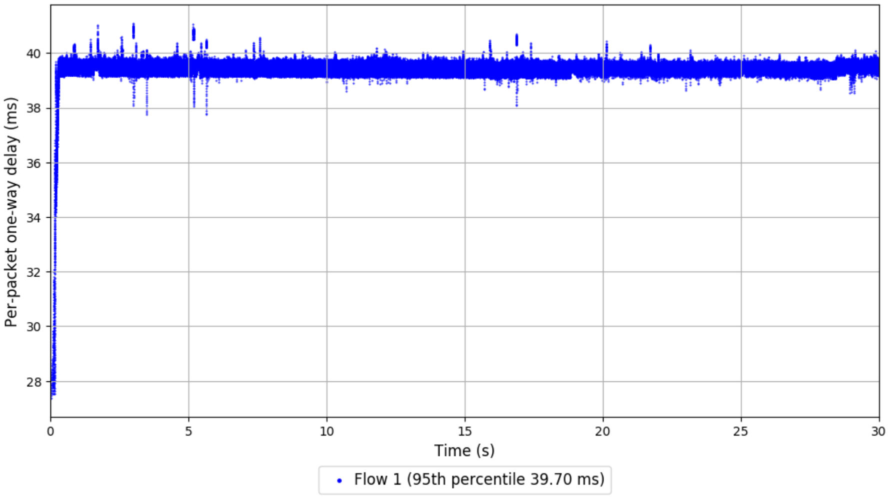




```
Run 4: Statistics of TCP Cubic

Start at: 2018-02-19 22:20:30
End at: 2018-02-19 22:21:00
Local clock offset: 0.03 ms
Remote clock offset: -18.853 ms

# Below is generated by plot.py at 2018-02-20 04:36:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.19 Mbit/s
95th percentile per-packet one-way delay: 39.698 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 97.19 Mbit/s
95th percentile per-packet one-way delay: 39.698 ms
Loss rate: 0.12%
```

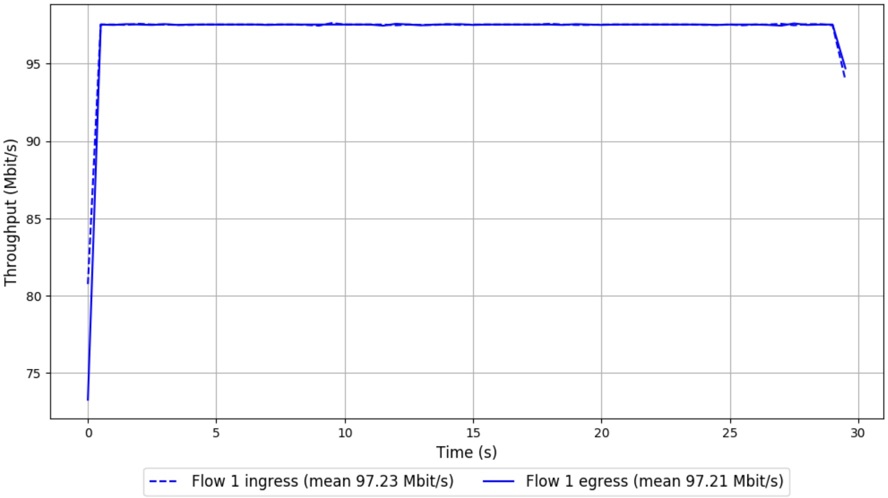
Run 4: Report of TCP Cubic — Data Link

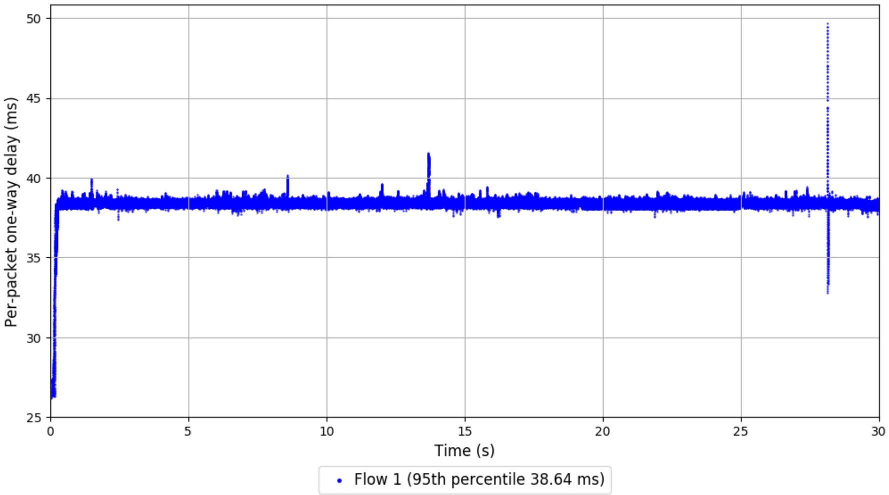




```
Run 5: Statistics of TCP Cubic

Start at: 2018-02-19 22:42:16
End at: 2018-02-19 22:42:46
Local clock offset: -1.307 ms
Remote clock offset: -19.334 ms

# Below is generated by plot.py at 2018-02-20 04:36:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.21 Mbit/s
95th percentile per-packet one-way delay: 38.638 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 97.21 Mbit/s
95th percentile per-packet one-way delay: 38.638 ms
Loss rate: 0.12%
```

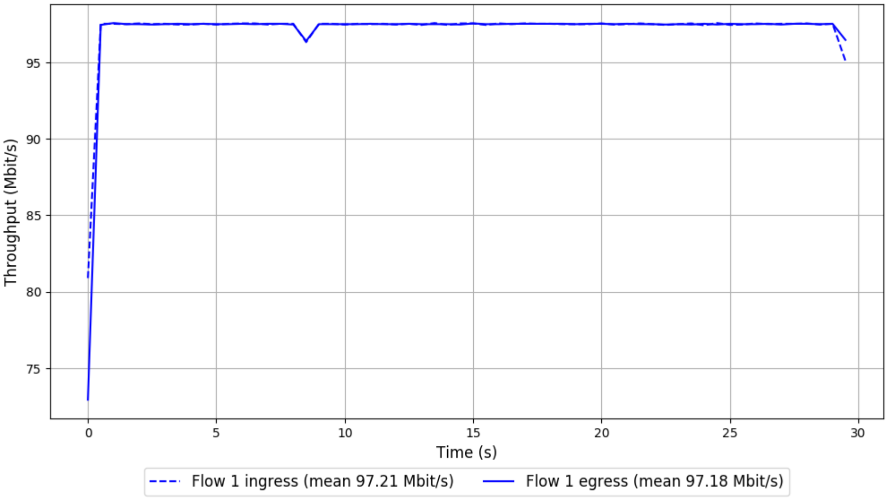
Run 5: Report of TCP Cubic — Data Link

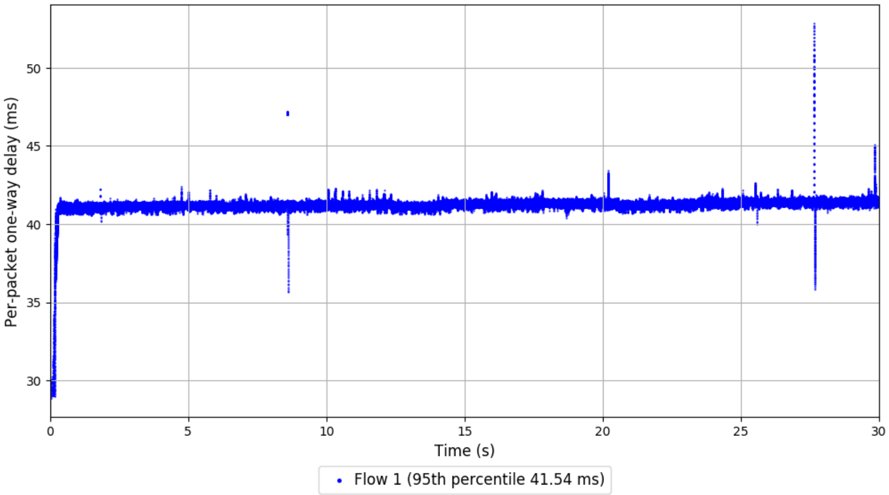




```
Run 6: Statistics of TCP Cubic

Start at: 2018-02-19 23:04:02
End at: 2018-02-19 23:04:32
Local clock offset: -5.283 ms
Remote clock offset: -21.062 ms

# Below is generated by plot.py at 2018-02-20 04:36:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.18 Mbit/s
95th percentile per-packet one-way delay: 41.539 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 97.18 Mbit/s
95th percentile per-packet one-way delay: 41.539 ms
Loss rate: 0.12%
```

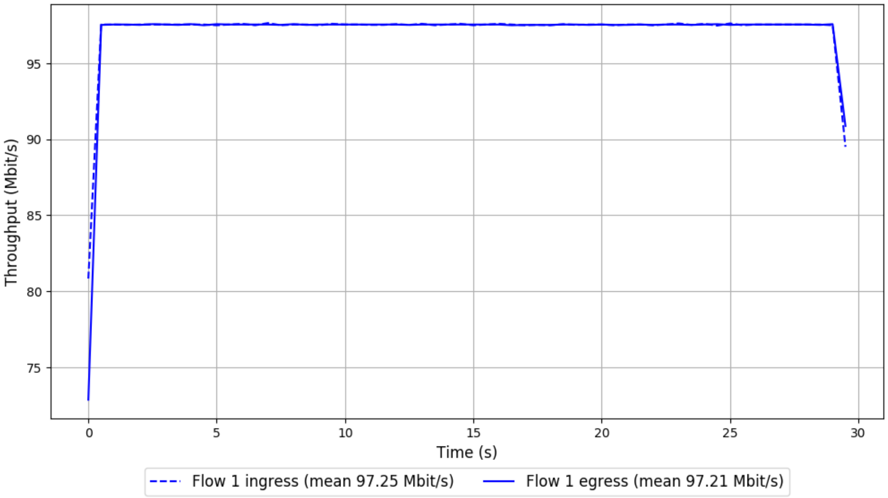
Run 6: Report of TCP Cubic — Data Link

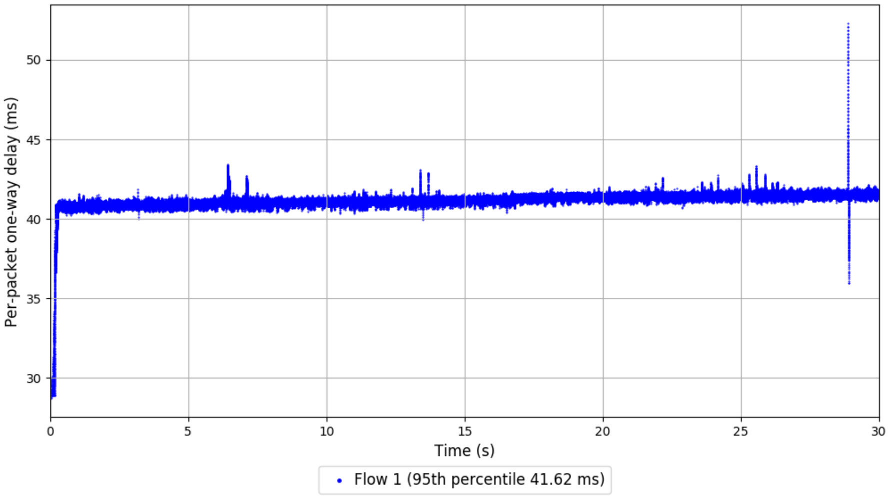




```
Run 7: Statistics of TCP Cubic

Start at: 2018-02-19 23:25:22
End at: 2018-02-19 23:25:52
Local clock offset: -13.123 ms
Remote clock offset: -20.992 ms

# Below is generated by plot.py at 2018-02-20 04:37:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.21 Mbit/s
95th percentile per-packet one-way delay: 41.622 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 97.21 Mbit/s
95th percentile per-packet one-way delay: 41.622 ms
Loss rate: 0.11%
```

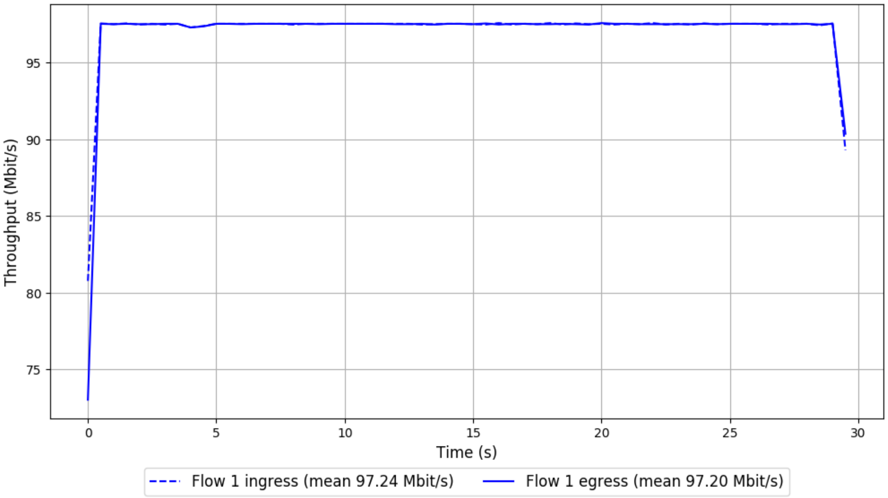
Run 7: Report of TCP Cubic — Data Link

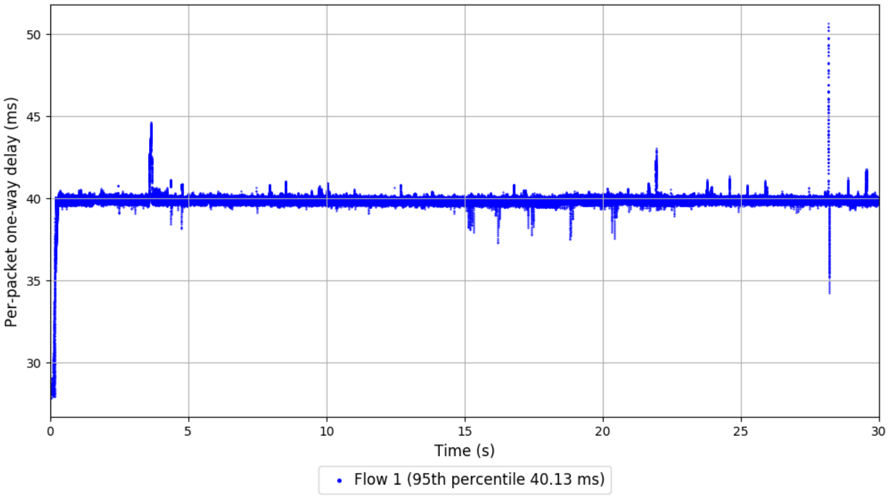




```
Run 8: Statistics of TCP Cubic

Start at: 2018-02-19 23:46:58
End at: 2018-02-19 23:47:28
Local clock offset: -1.188 ms
Remote clock offset: -12.767 ms

# Below is generated by plot.py at 2018-02-20 04:37:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.20 Mbit/s
95th percentile per-packet one-way delay: 40.129 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 97.20 Mbit/s
95th percentile per-packet one-way delay: 40.129 ms
Loss rate: 0.12%
```

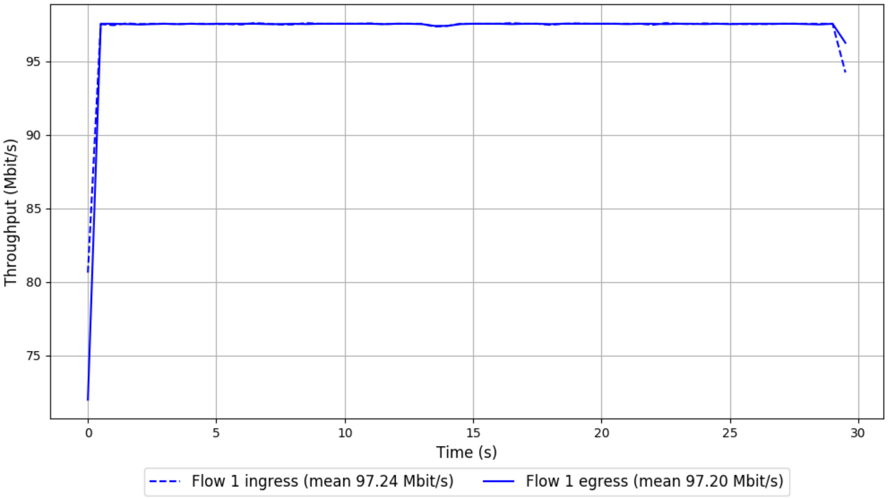
Run 8: Report of TCP Cubic — Data Link

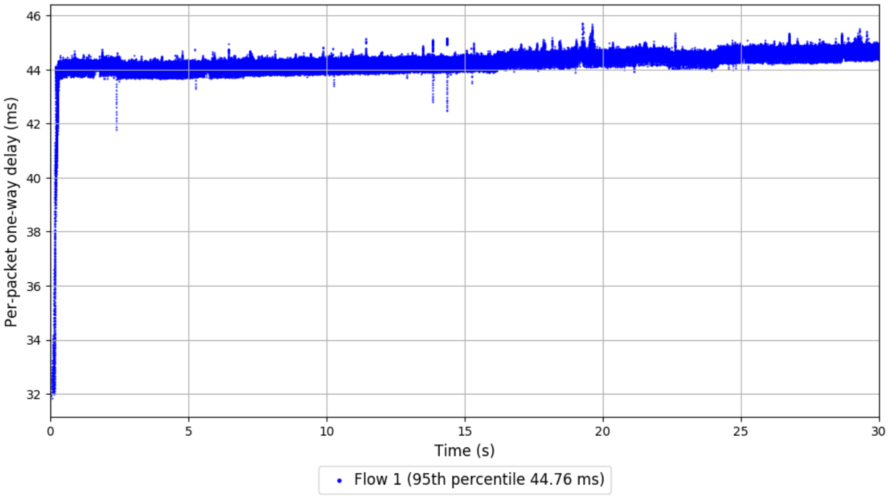




```
Run 9: Statistics of TCP Cubic

Start at: 2018-02-20 00:08:16
End at: 2018-02-20 00:08:46
Local clock offset: 8.207 ms
Remote clock offset: -9.125 ms

# Below is generated by plot.py at 2018-02-20 04:37:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.20 Mbit/s
95th percentile per-packet one-way delay: 44.762 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 97.20 Mbit/s
95th percentile per-packet one-way delay: 44.762 ms
Loss rate: 0.12%
```

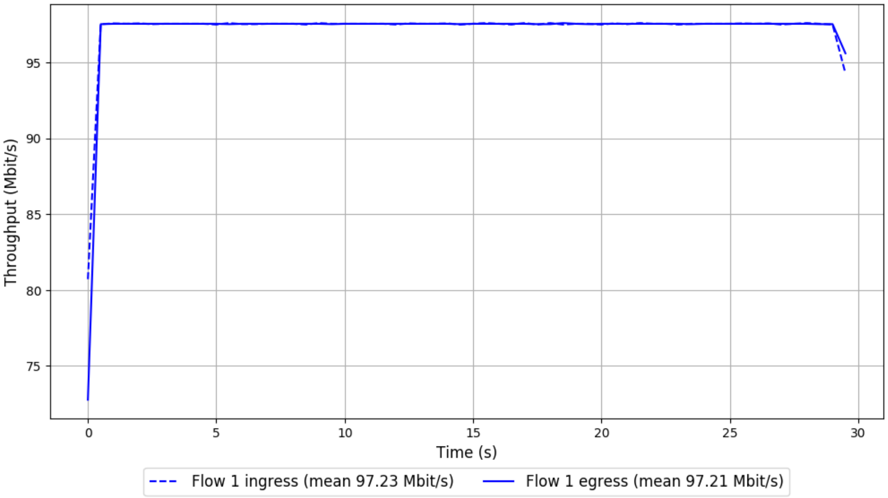
Run 9: Report of TCP Cubic — Data Link

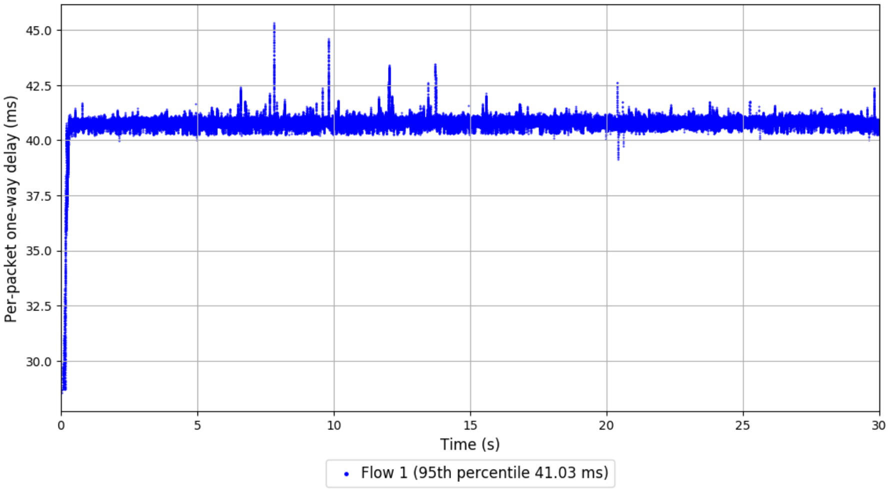




```
Run 10: Statistics of TCP Cubic

Start at: 2018-02-20 00:30:03
End at: 2018-02-20 00:30:33
Local clock offset: -2.432 ms
Remote clock offset: -5.585 ms

# Below is generated by plot.py at 2018-02-20 04:37:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.21 Mbit/s
95th percentile per-packet one-way delay: 41.032 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 97.21 Mbit/s
95th percentile per-packet one-way delay: 41.032 ms
Loss rate: 0.11%
```

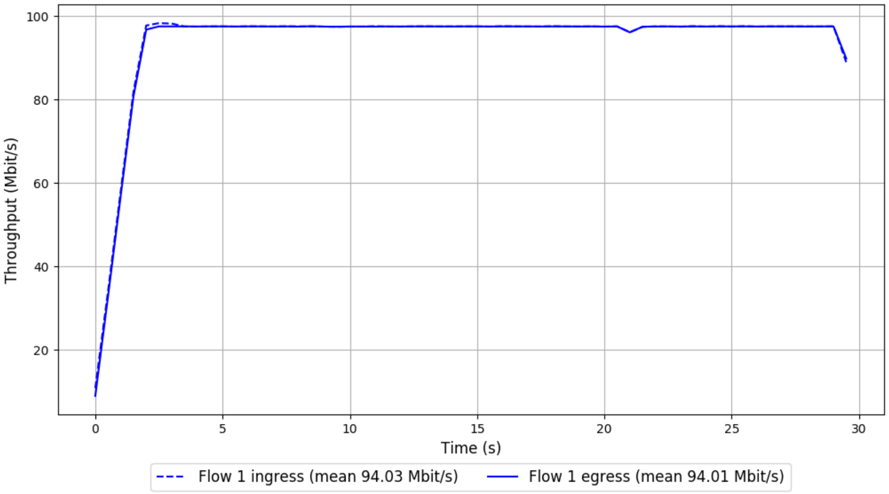
Run 10: Report of TCP Cubic — Data Link

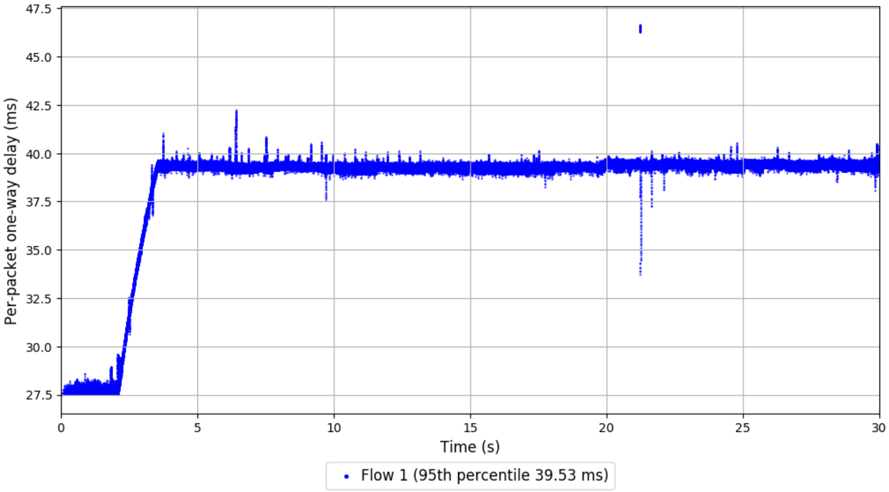




```
Run 1: Statistics of LEDBAT

Start at: 2018-02-19 21:28:41
End at: 2018-02-19 21:29:11
Local clock offset: -5.875 ms
Remote clock offset: -19.943 ms

# Below is generated by plot.py at 2018-02-20 04:37:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.01 Mbit/s
95th percentile per-packet one-way delay: 39.531 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 94.01 Mbit/s
95th percentile per-packet one-way delay: 39.531 ms
Loss rate: 0.12%
```

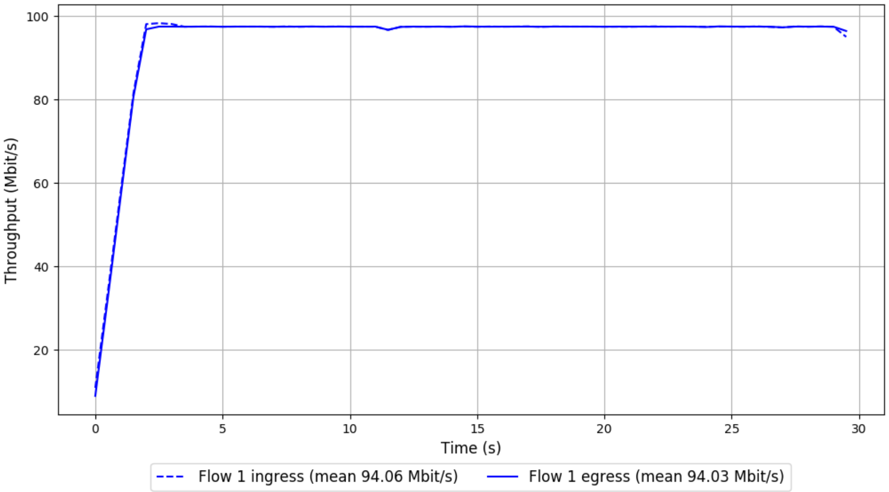
Run 1: Report of LEDBAT — Data Link

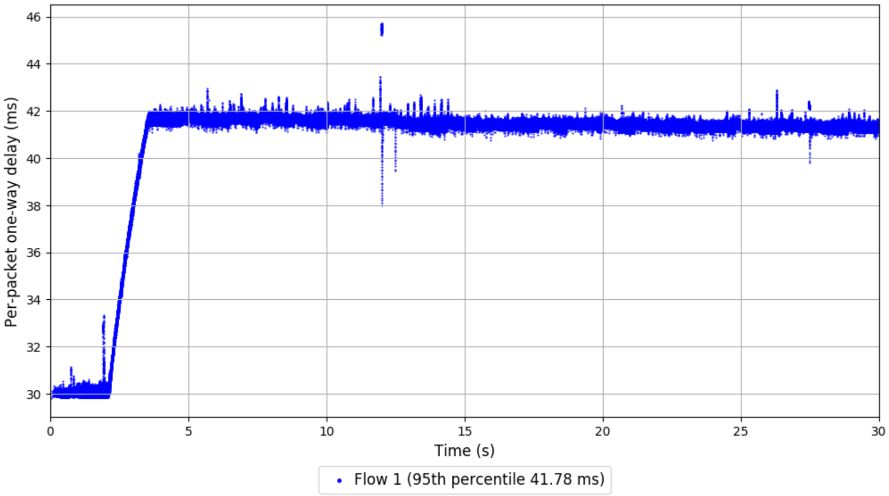




```
Run 2: Statistics of LEDBAT

Start at: 2018-02-19 21:50:26
End at: 2018-02-19 21:50:56
Local clock offset: -6.513 ms
Remote clock offset: -21.149 ms

# Below is generated by plot.py at 2018-02-20 04:37:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.03 Mbit/s
95th percentile per-packet one-way delay: 41.781 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 94.03 Mbit/s
95th percentile per-packet one-way delay: 41.781 ms
Loss rate: 0.12%
```

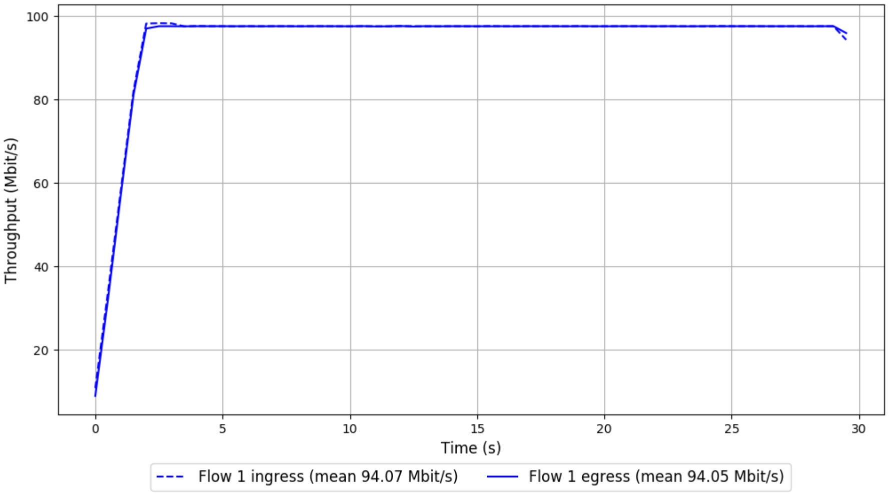
Run 2: Report of LEDBAT — Data Link

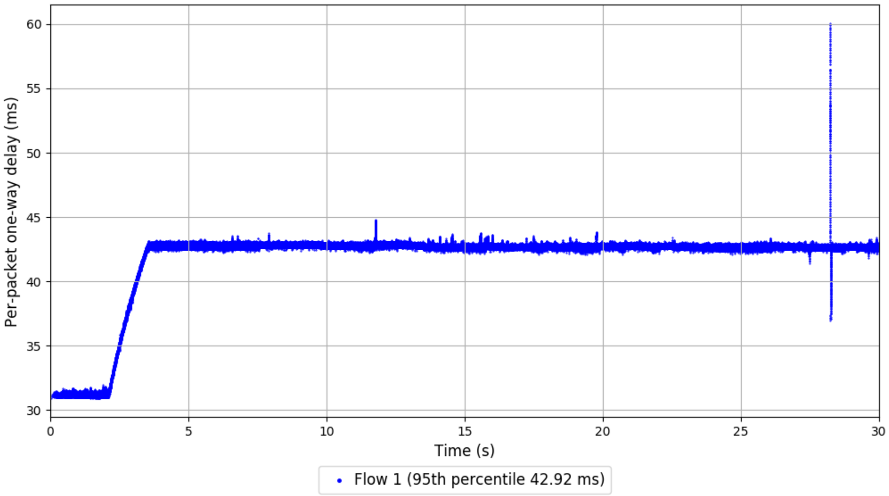




```
Run 3: Statistics of LEDBAT

Start at: 2018-02-19 22:11:55
End at: 2018-02-19 22:12:25
Local clock offset: 1.603 ms
Remote clock offset: -19.338 ms

# Below is generated by plot.py at 2018-02-20 04:37:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.05 Mbit/s
95th percentile per-packet one-way delay: 42.919 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 94.05 Mbit/s
95th percentile per-packet one-way delay: 42.919 ms
Loss rate: 0.12%
```

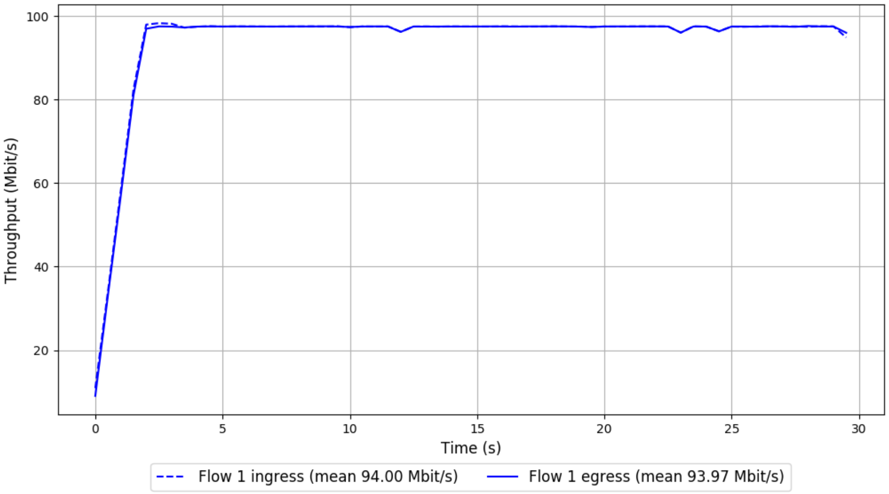
Run 3: Report of LEDBAT — Data Link

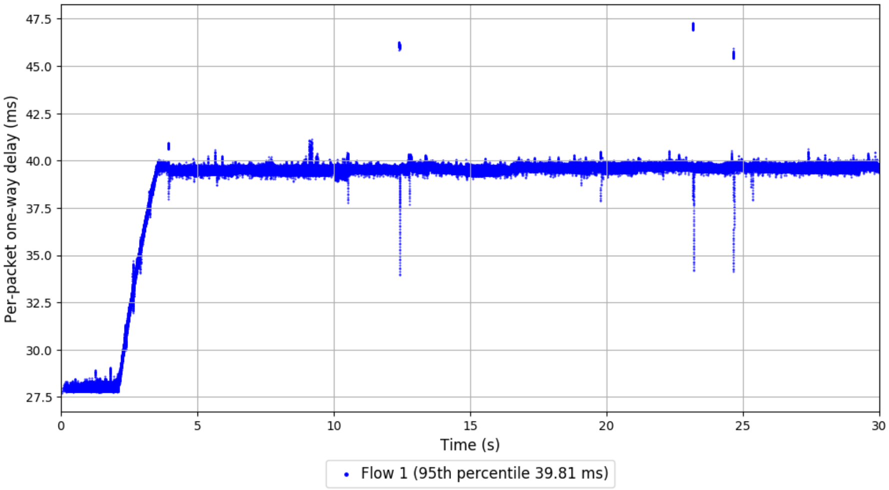




```
Run 4: Statistics of LEDBAT

Start at: 2018-02-19 22:33:32
End at: 2018-02-19 22:34:02
Local clock offset: 1.146 ms
Remote clock offset: -18.308 ms

# Below is generated by plot.py at 2018-02-20 04:37:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.97 Mbit/s
95th percentile per-packet one-way delay: 39.808 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 93.97 Mbit/s
95th percentile per-packet one-way delay: 39.808 ms
Loss rate: 0.12%
```

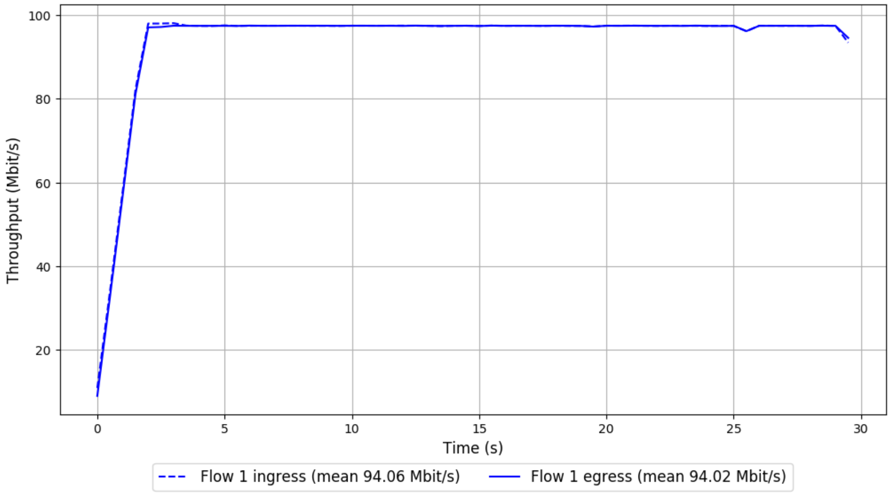
Run 4: Report of LEDBAT — Data Link

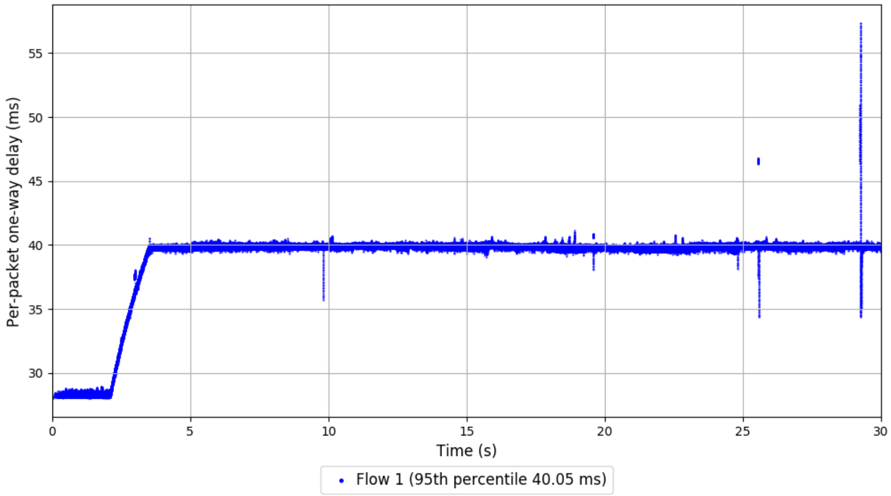




```
Run 5: Statistics of LEDBAT

Start at: 2018-02-19 22:55:29
End at: 2018-02-19 22:55:59
Local clock offset: -1.051 ms
Remote clock offset: -21.611 ms

# Below is generated by plot.py at 2018-02-20 04:38:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.02 Mbit/s
95th percentile per-packet one-way delay: 40.046 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 94.02 Mbit/s
95th percentile per-packet one-way delay: 40.046 ms
Loss rate: 0.12%
```

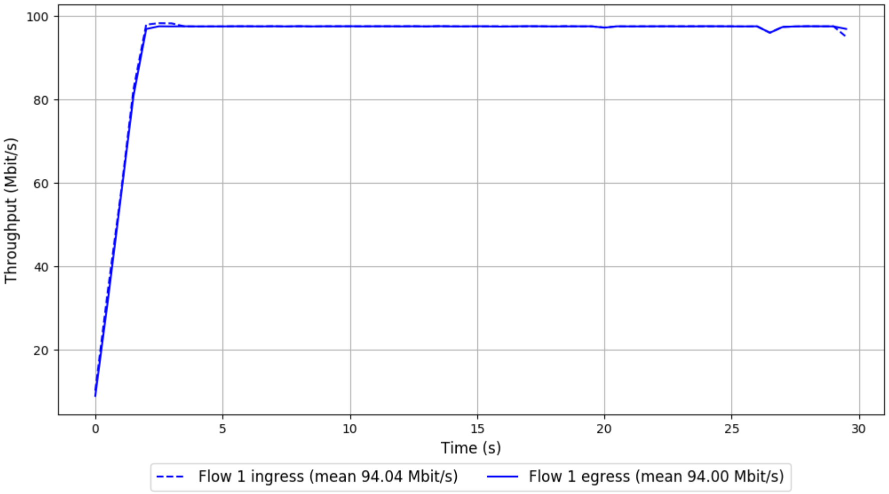
Run 5: Report of LEDBAT — Data Link

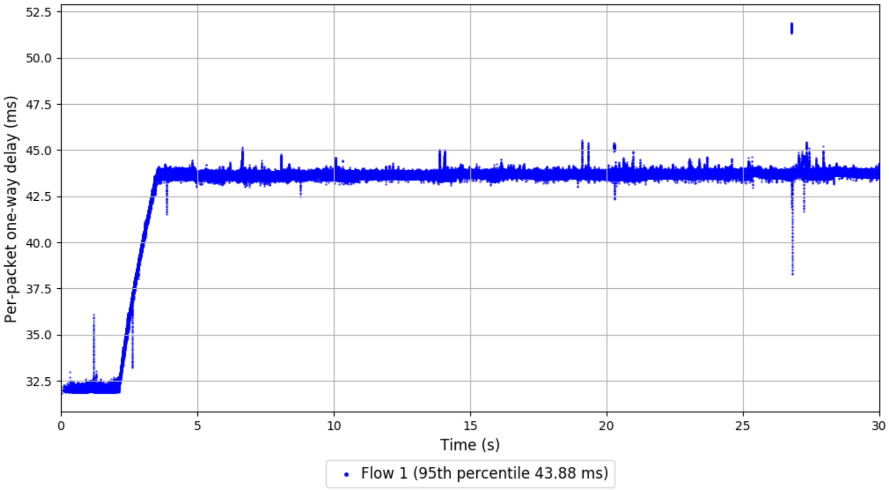




```
Run 6: Statistics of LEDBAT

Start at: 2018-02-19 23:16:52
End at: 2018-02-19 23:17:22
Local clock offset: -9.457 ms
Remote clock offset: -22.267 ms

# Below is generated by plot.py at 2018-02-20 04:38:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.00 Mbit/s
95th percentile per-packet one-way delay: 43.881 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 94.00 Mbit/s
95th percentile per-packet one-way delay: 43.881 ms
Loss rate: 0.12%
```

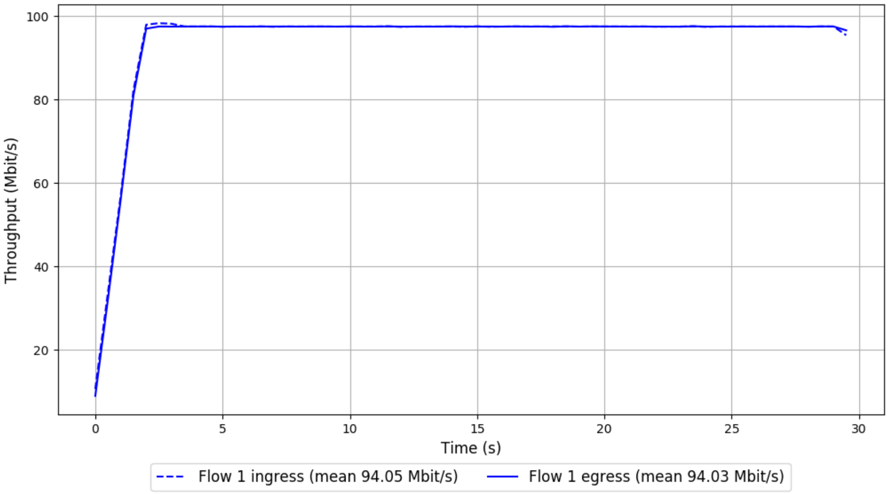
Run 6: Report of LEDBAT — Data Link

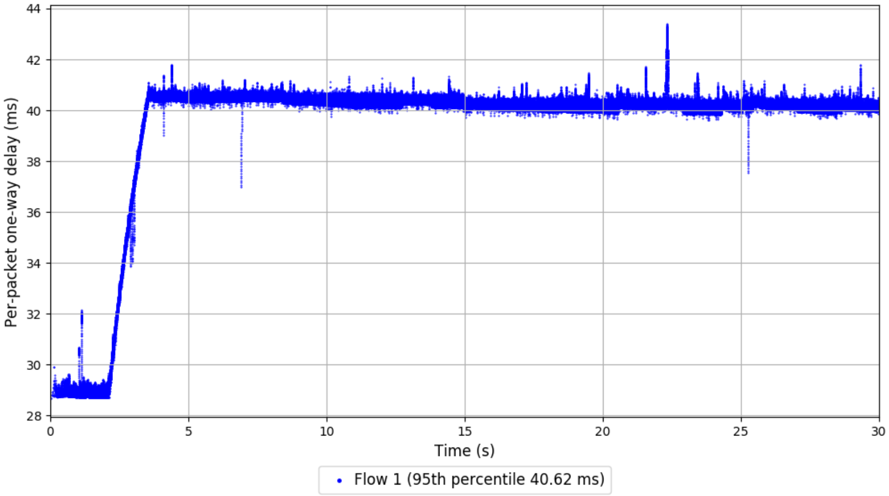




```
Run 7: Statistics of LEDBAT

Start at: 2018-02-19 23:38:28
End at: 2018-02-19 23:38:58
Local clock offset: -6.198 ms
Remote clock offset: -13.953 ms

# Below is generated by plot.py at 2018-02-20 04:38:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.03 Mbit/s
95th percentile per-packet one-way delay: 40.616 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 94.03 Mbit/s
95th percentile per-packet one-way delay: 40.616 ms
Loss rate: 0.12%
```

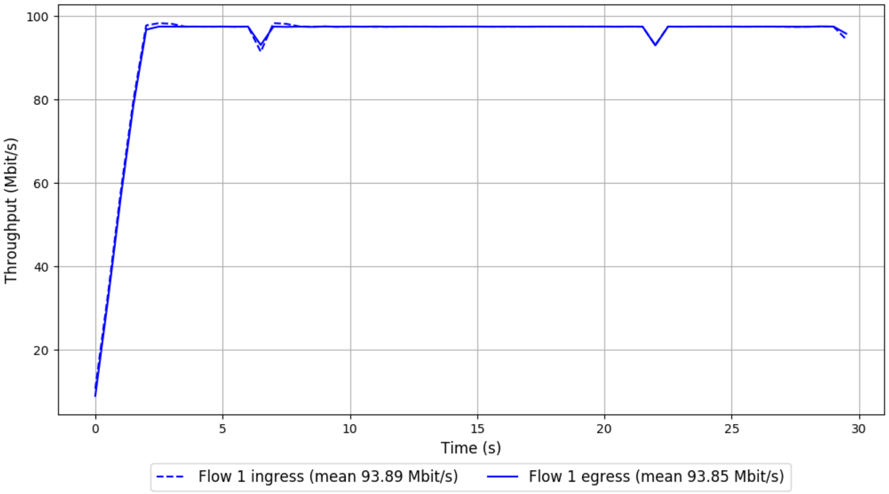
Run 7: Report of LEDBAT — Data Link

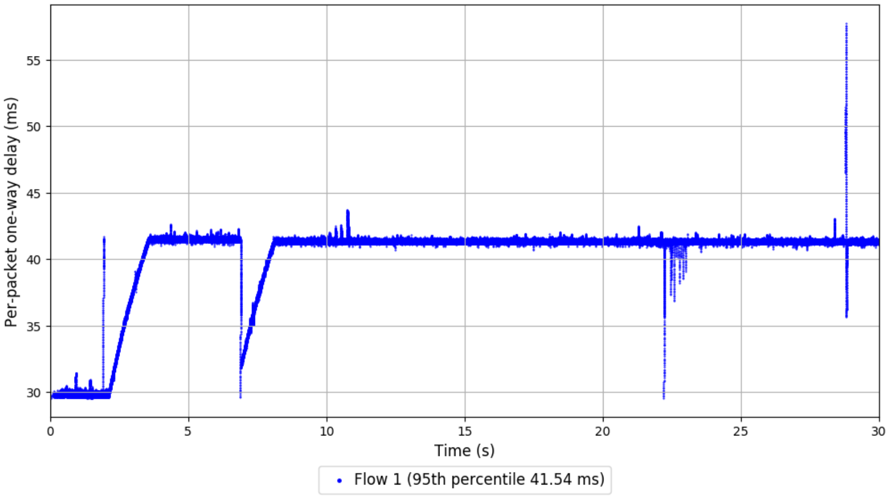




```
Run 8: Statistics of LEDBAT

Start at: 2018-02-19 23:59:46
End at: 2018-02-20 00:00:16
Local clock offset: 7.487 ms
Remote clock offset: -8.763 ms

# Below is generated by plot.py at 2018-02-20 04:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.85 Mbit/s
95th percentile per-packet one-way delay: 41.540 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 93.85 Mbit/s
95th percentile per-packet one-way delay: 41.540 ms
Loss rate: 0.12%
```

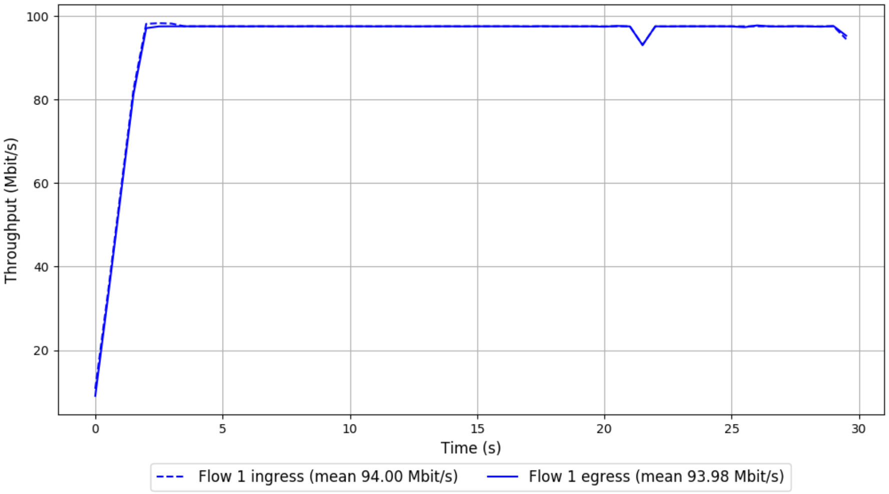
Run 8: Report of LEDBAT — Data Link

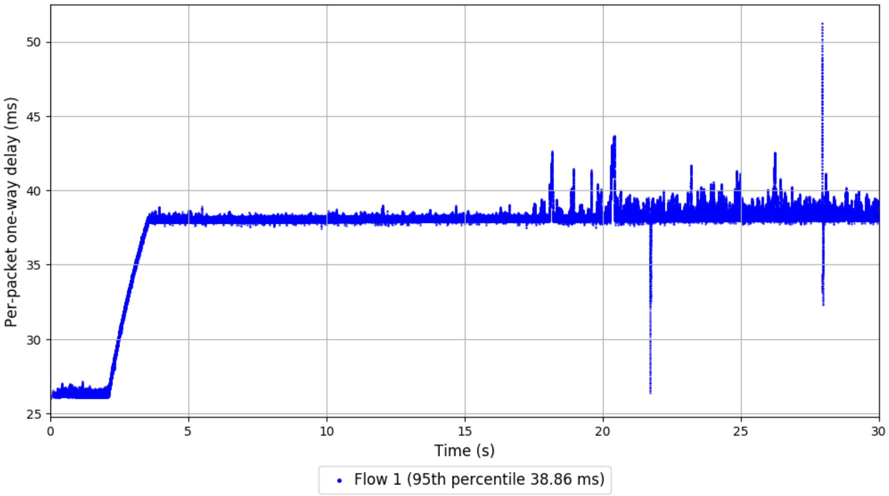




```
Run 9: Statistics of LEDBAT

Start at: 2018-02-20 00:21:22
End at: 2018-02-20 00:21:52
Local clock offset: -3.89 ms
Remote clock offset: -6.471 ms

# Below is generated by plot.py at 2018-02-20 04:38:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.98 Mbit/s
95th percentile per-packet one-way delay: 38.858 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 93.98 Mbit/s
95th percentile per-packet one-way delay: 38.858 ms
Loss rate: 0.12%
```

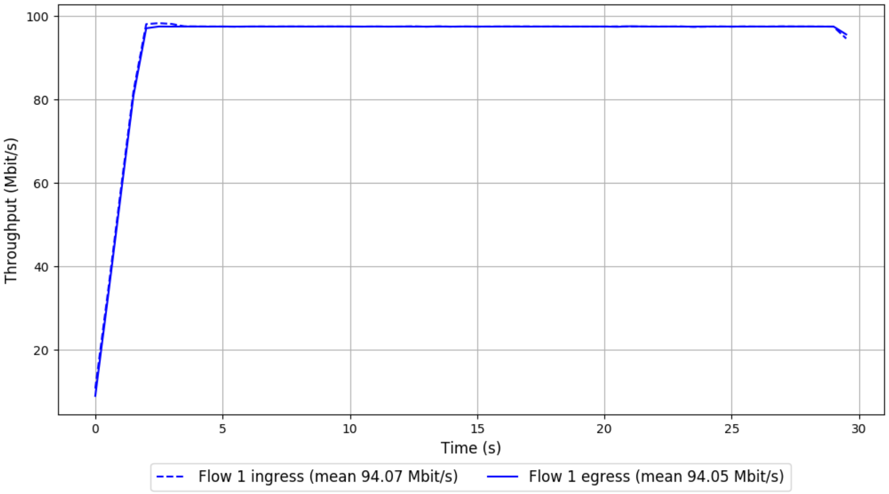
Run 9: Report of LEDBAT — Data Link

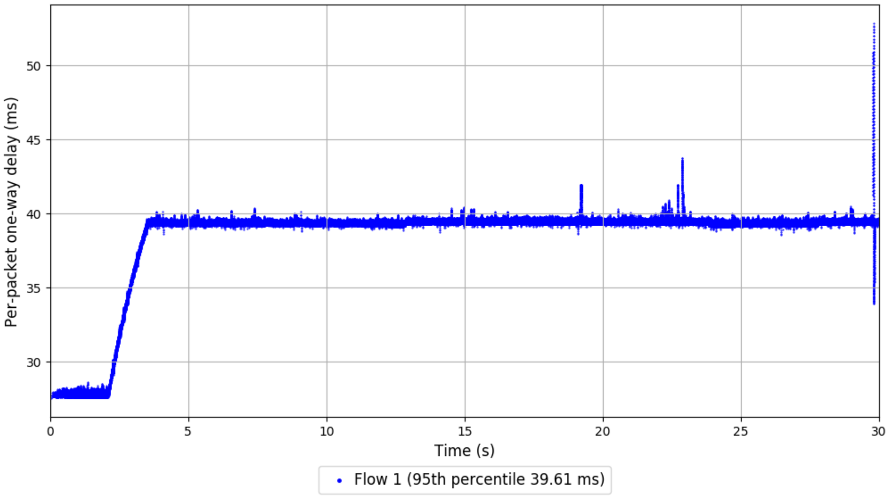




```
Run 10: Statistics of LEDBAT

Start at: 2018-02-20 00:43:13
End at: 2018-02-20 00:43:43
Local clock offset: -4.766 ms
Remote clock offset: -11.976 ms

# Below is generated by plot.py at 2018-02-20 04:38:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.05 Mbit/s
95th percentile per-packet one-way delay: 39.606 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 94.05 Mbit/s
95th percentile per-packet one-way delay: 39.606 ms
Loss rate: 0.12%
```

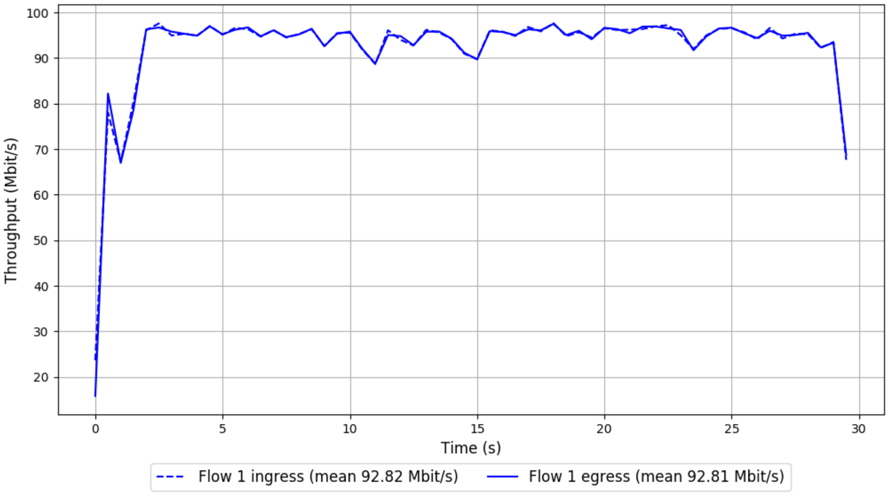
Run 10: Report of LEDBAT — Data Link

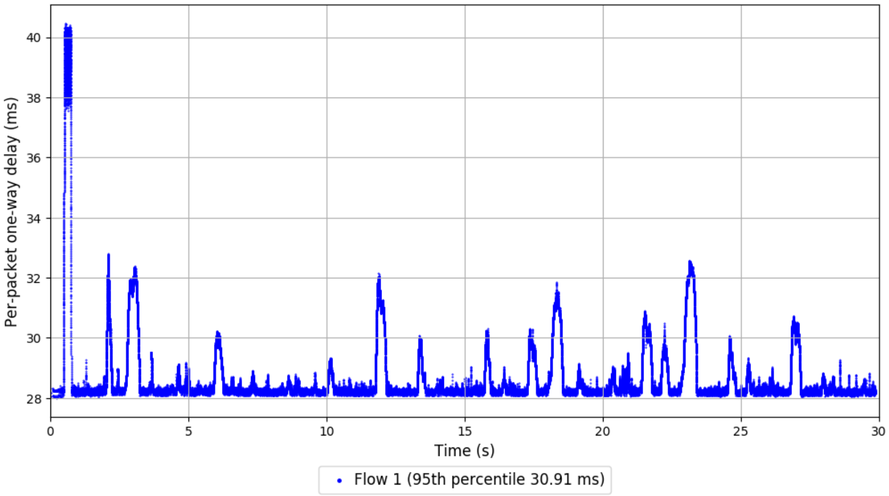




```
Run 1: Statistics of PCC

Start at: 2018-02-19 21:19:22
End at: 2018-02-19 21:19:52
Local clock offset: -5.502 ms
Remote clock offset: -20.091 ms

# Below is generated by plot.py at 2018-02-20 04:38:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.81 Mbit/s
95th percentile per-packet one-way delay: 30.909 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 92.81 Mbit/s
95th percentile per-packet one-way delay: 30.909 ms
Loss rate: 0.08%
```

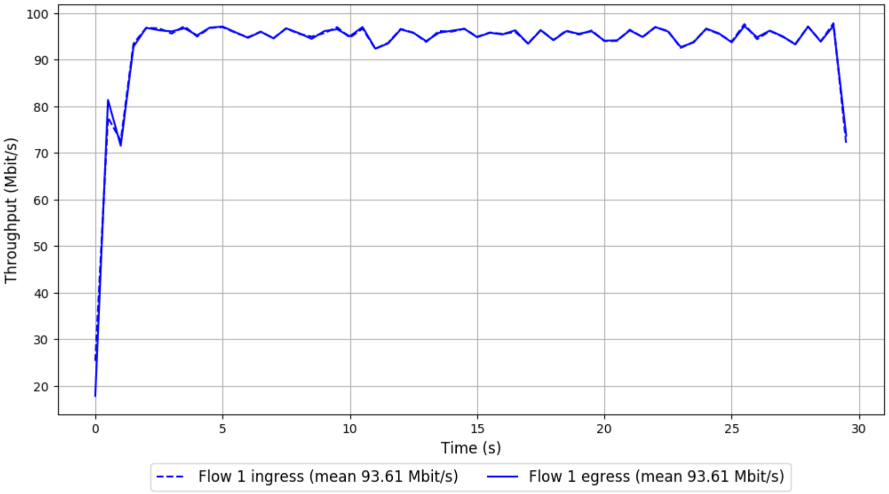
Run 1: Report of PCC — Data Link

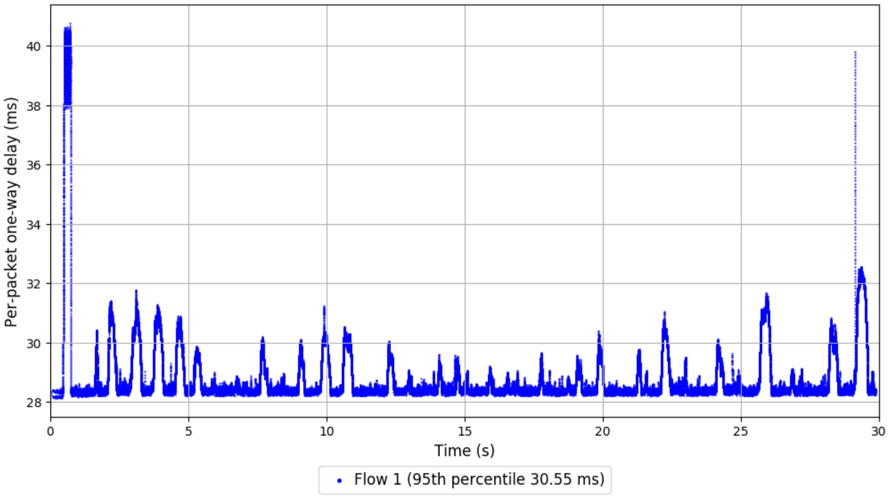




```
Run 2: Statistics of PCC

Start at: 2018-02-19 21:40:54
End at: 2018-02-19 21:41:24
Local clock offset: -5.893 ms
Remote clock offset: -20.641 ms

# Below is generated by plot.py at 2018-02-20 04:39:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.61 Mbit/s
95th percentile per-packet one-way delay: 30.549 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 93.61 Mbit/s
95th percentile per-packet one-way delay: 30.549 ms
Loss rate: 0.07%
```

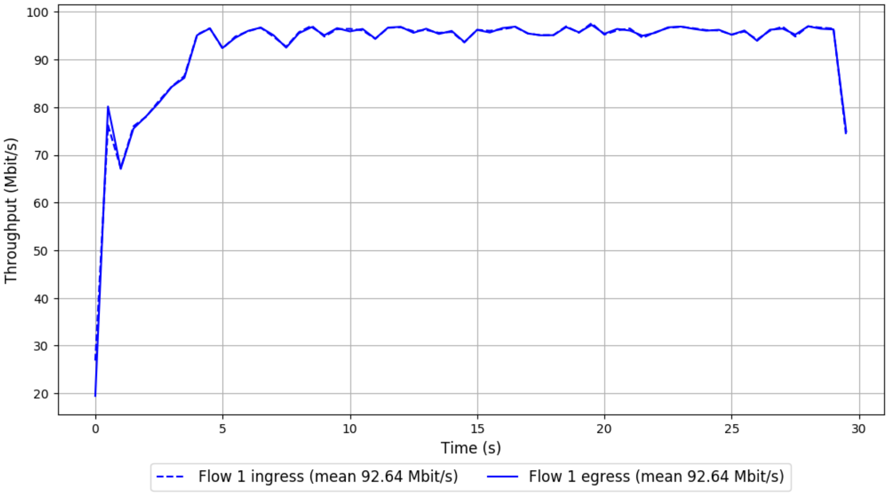
Run 2: Report of PCC — Data Link

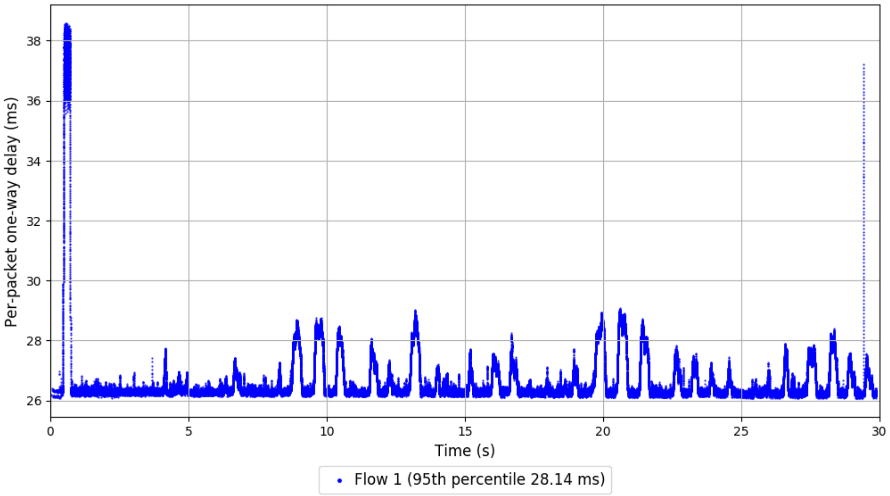




```
Run 3: Statistics of PCC

Start at: 2018-02-19 22:02:40
End at: 2018-02-19 22:03:10
Local clock offset: -3.275 ms
Remote clock offset: -18.477 ms

# Below is generated by plot.py at 2018-02-20 04:40:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.64 Mbit/s
95th percentile per-packet one-way delay: 28.140 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 92.64 Mbit/s
95th percentile per-packet one-way delay: 28.140 ms
Loss rate: 0.08%
```

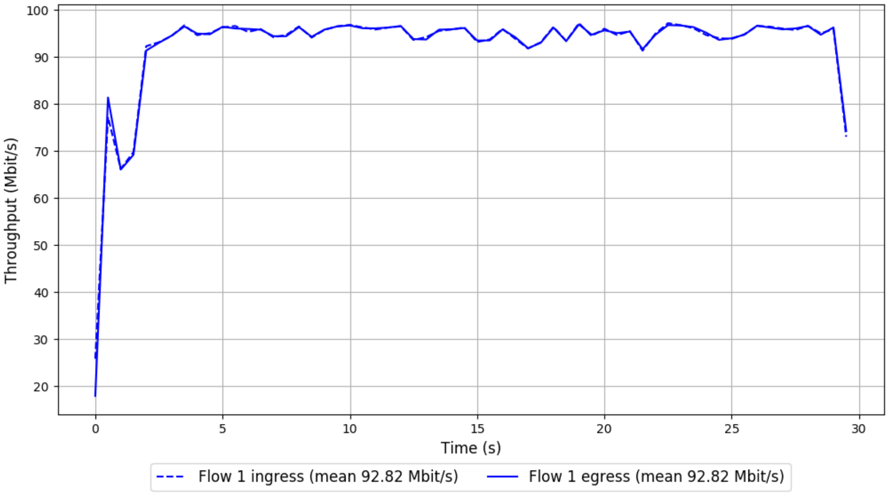
Run 3: Report of PCC — Data Link

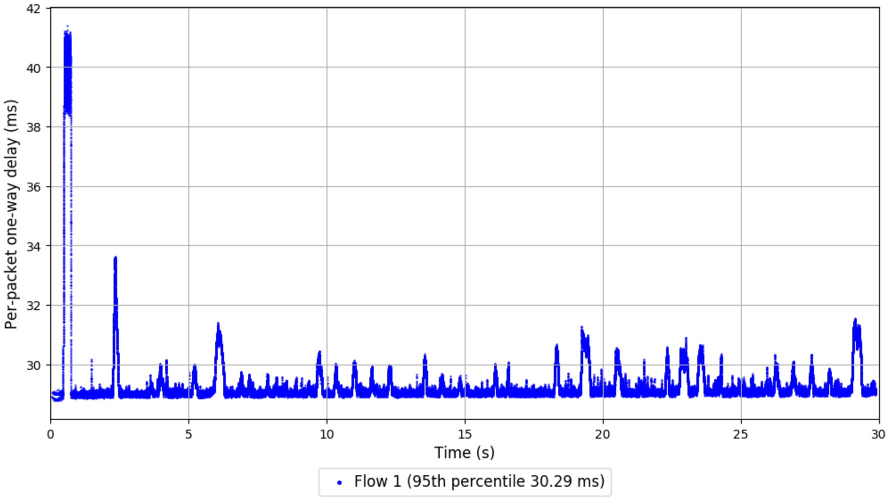




```
Run 4: Statistics of PCC

Start at: 2018-02-19 22:24:10
End at: 2018-02-19 22:24:40
Local clock offset: 2.361 ms
Remote clock offset: -18.764 ms

# Below is generated by plot.py at 2018-02-20 04:40:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.82 Mbit/s
95th percentile per-packet one-way delay: 30.294 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 92.82 Mbit/s
95th percentile per-packet one-way delay: 30.294 ms
Loss rate: 0.08%
```

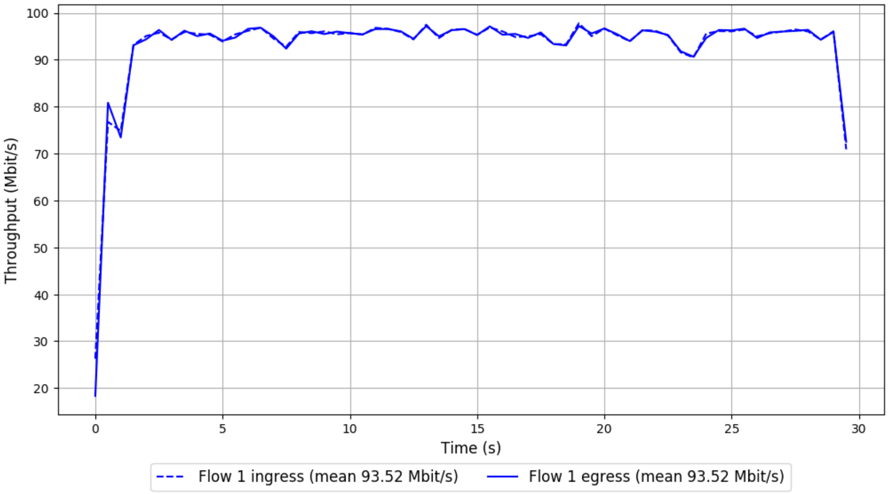
Run 4: Report of PCC — Data Link

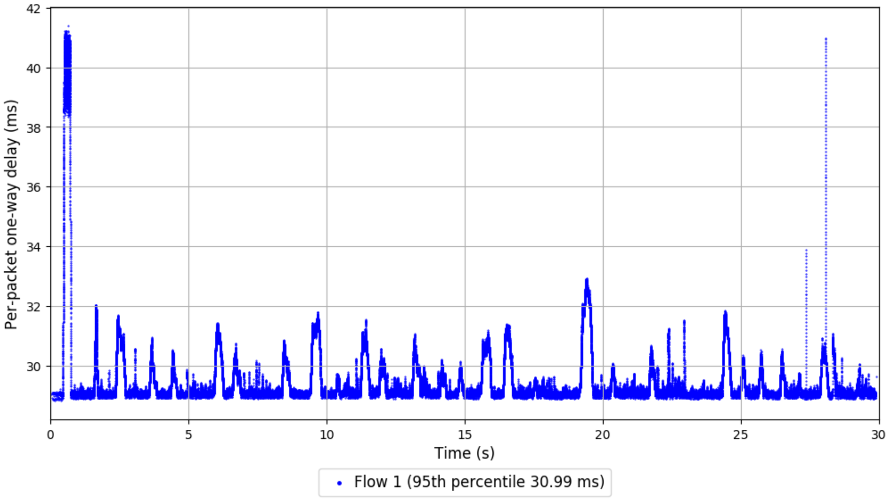




```
Run 5: Statistics of PCC

Start at: 2018-02-19 22:46:01
End at: 2018-02-19 22:46:32
Local clock offset: -1.293 ms
Remote clock offset: -22.172 ms

# Below is generated by plot.py at 2018-02-20 04:40:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.52 Mbit/s
95th percentile per-packet one-way delay: 30.989 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 93.52 Mbit/s
95th percentile per-packet one-way delay: 30.989 ms
Loss rate: 0.07%
```

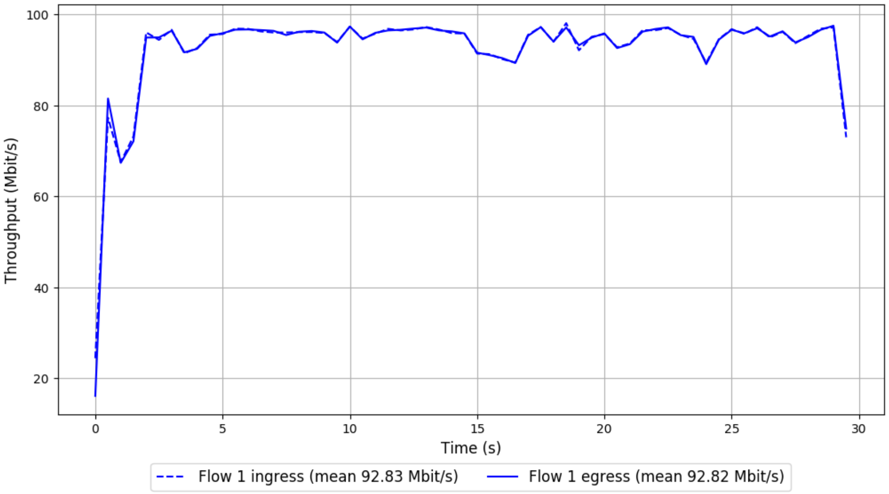
Run 5: Report of PCC — Data Link

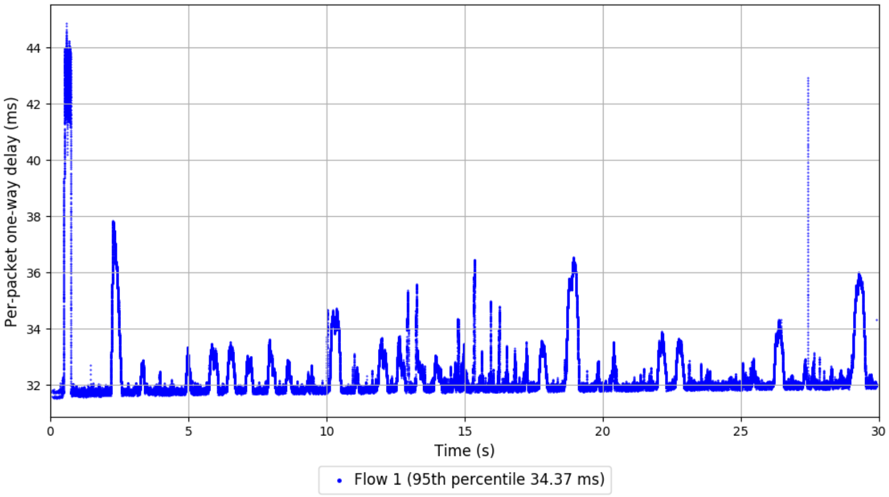




```
Run 6: Statistics of PCC

Start at: 2018-02-19 23:07:38
End at: 2018-02-19 23:08:08
Local clock offset: -7.225 ms
Remote clock offset: -23.377 ms

# Below is generated by plot.py at 2018-02-20 04:40:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.82 Mbit/s
95th percentile per-packet one-way delay: 34.371 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 92.82 Mbit/s
95th percentile per-packet one-way delay: 34.371 ms
Loss rate: 0.07%
```

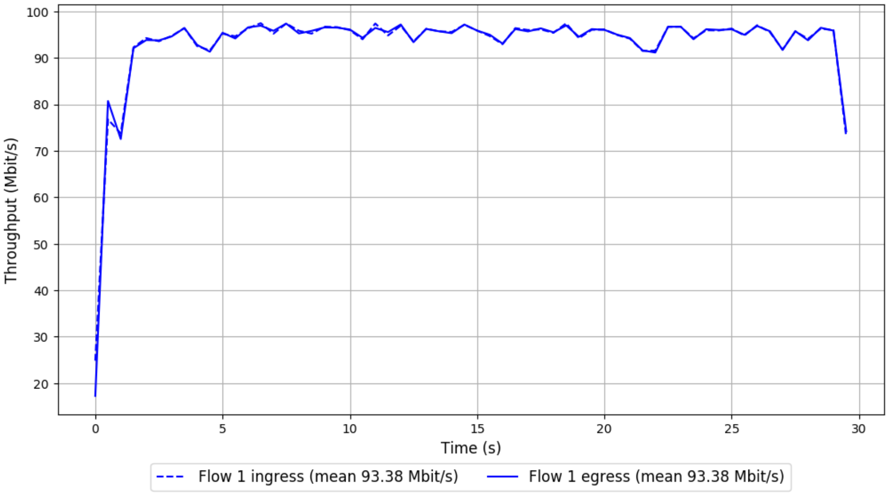
Run 6: Report of PCC — Data Link

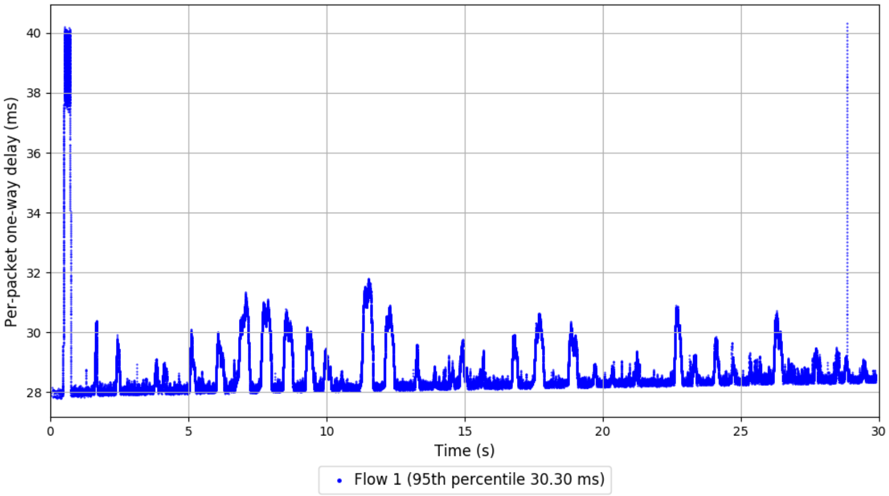




```
Run 7: Statistics of PCC

Start at: 2018-02-19 23:29:02
End at: 2018-02-19 23:29:32
Local clock offset: -13.566 ms
Remote clock offset: -16.54 ms

# Below is generated by plot.py at 2018-02-20 04:40:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.38 Mbit/s
95th percentile per-packet one-way delay: 30.305 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 93.38 Mbit/s
95th percentile per-packet one-way delay: 30.305 ms
Loss rate: 0.08%
```

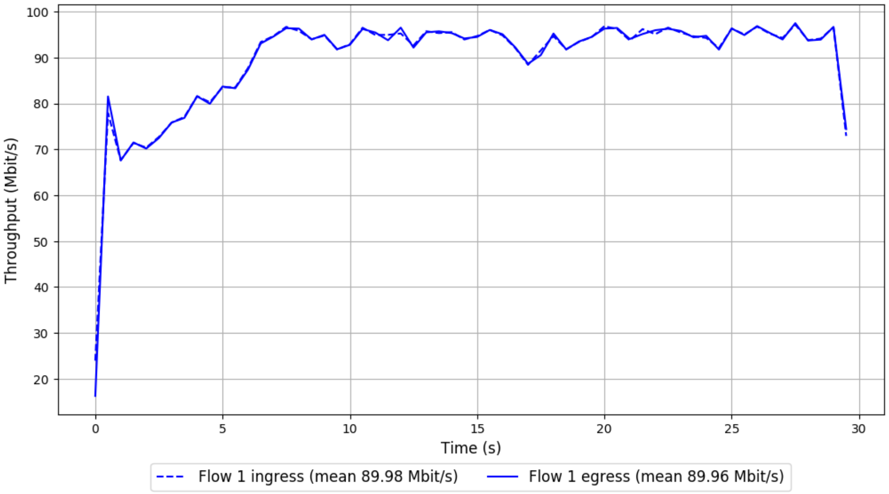
Run 7: Report of PCC — Data Link

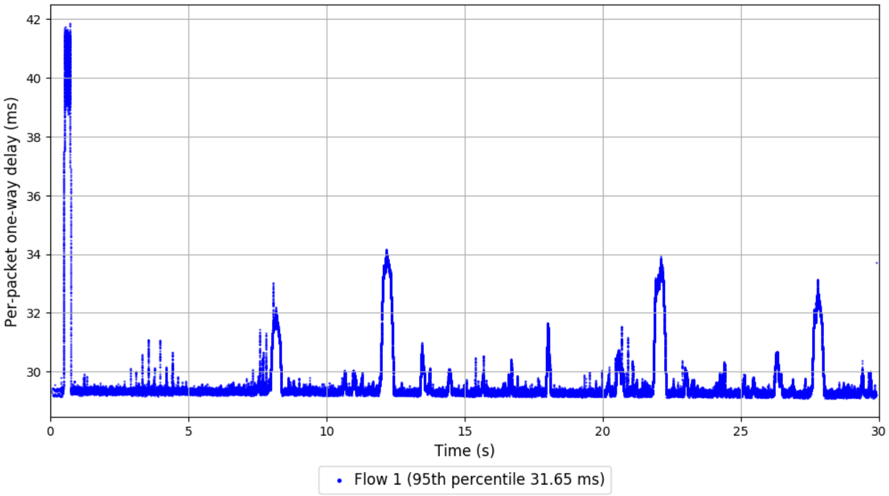




```
Run 8: Statistics of PCC

Start at: 2018-02-19 23:50:36
End at: 2018-02-19 23:51:06
Local clock offset: 3.924 ms
Remote clock offset: -10.248 ms

# Below is generated by plot.py at 2018-02-20 04:40:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.96 Mbit/s
95th percentile per-packet one-way delay: 31.649 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 89.96 Mbit/s
95th percentile per-packet one-way delay: 31.649 ms
Loss rate: 0.08%
```

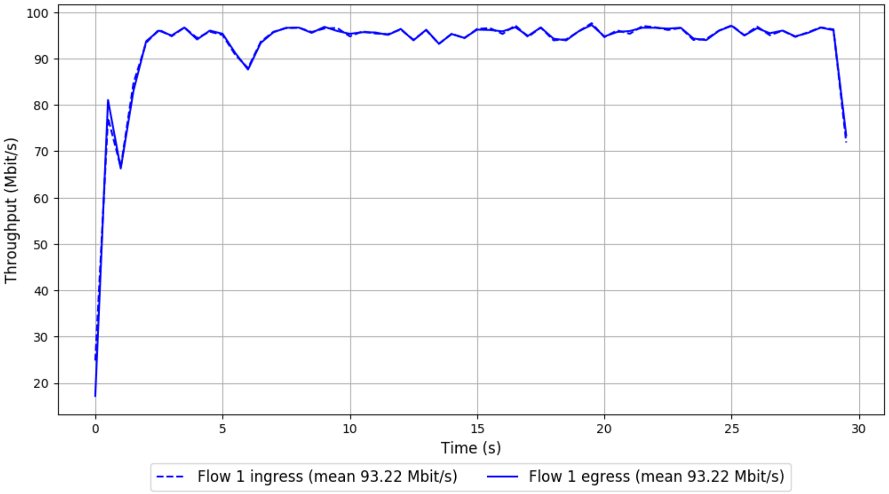
Run 8: Report of PCC — Data Link

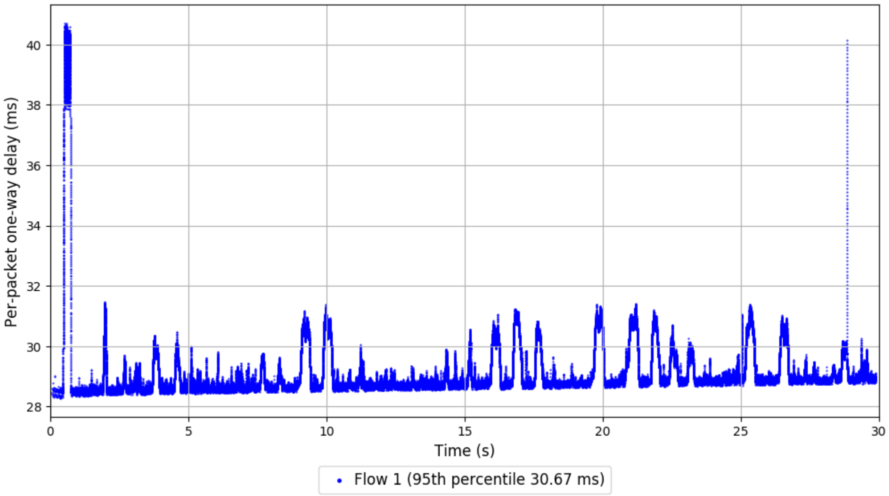




```
Run 9: Statistics of PCC

Start at: 2018-02-20 00:11:58
End at: 2018-02-20 00:12:28
Local clock offset: 0.76 ms
Remote clock offset: -9.239 ms

# Below is generated by plot.py at 2018-02-20 04:40:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.22 Mbit/s
95th percentile per-packet one-way delay: 30.673 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 93.22 Mbit/s
95th percentile per-packet one-way delay: 30.673 ms
Loss rate: 0.08%
```

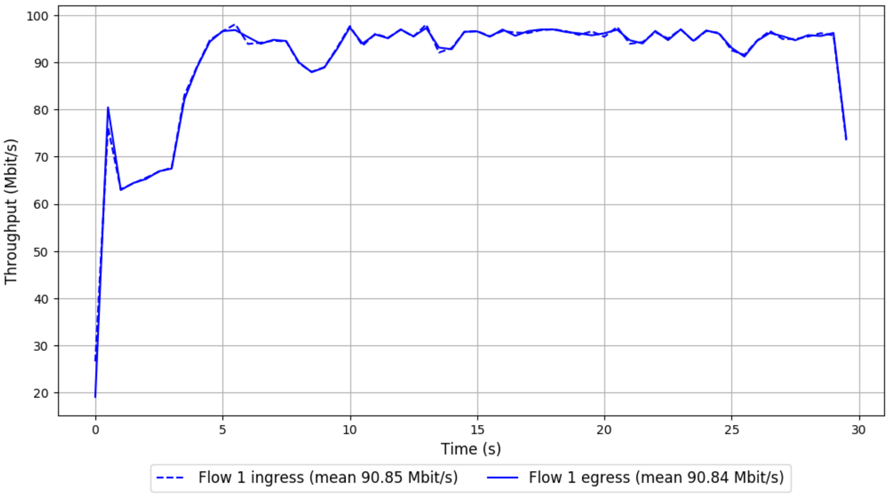
Run 9: Report of PCC — Data Link

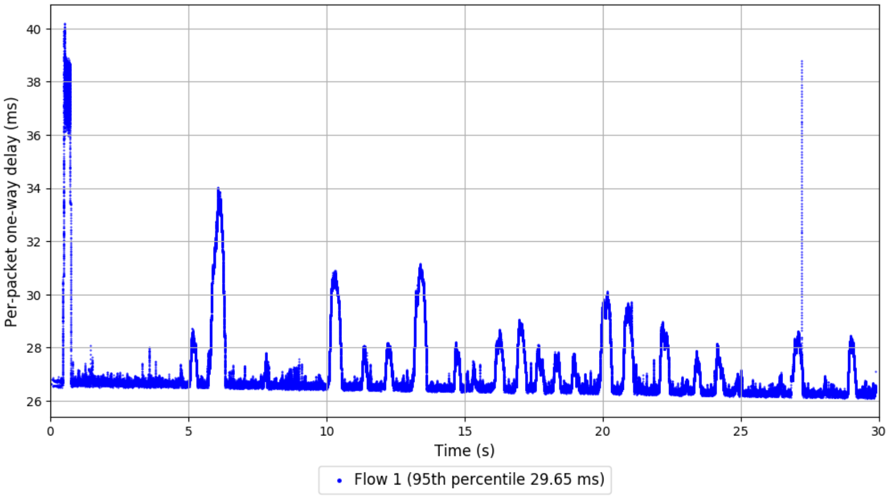




```
Run 10: Statistics of PCC

Start at: 2018-02-20 00:33:46
End at: 2018-02-20 00:34:16
Local clock offset: -4.706 ms
Remote clock offset: -5.722 ms

# Below is generated by plot.py at 2018-02-20 04:40:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.84 Mbit/s
95th percentile per-packet one-way delay: 29.651 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 90.84 Mbit/s
95th percentile per-packet one-way delay: 29.651 ms
Loss rate: 0.08%
```

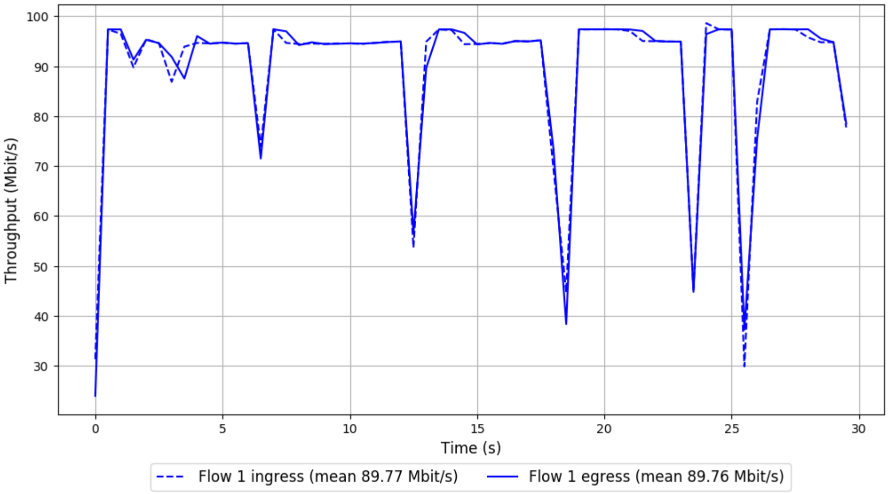
Run 10: Report of PCC — Data Link

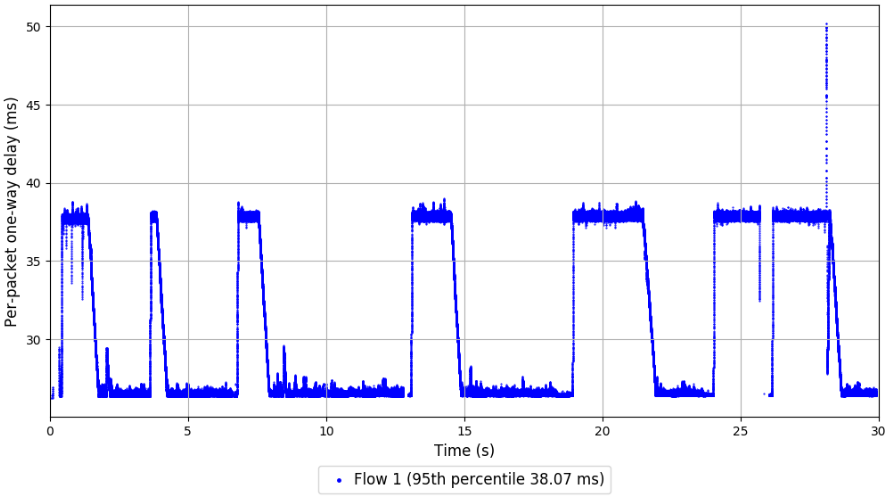




```
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-19 21:08:14
End at: 2018-02-19 21:08:44
Local clock offset: -5.664 ms
Remote clock offset: -18.471 ms

# Below is generated by plot.py at 2018-02-20 04:41:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.76 Mbit/s
95th percentile per-packet one-way delay: 38.073 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 89.76 Mbit/s
95th percentile per-packet one-way delay: 38.073 ms
Loss rate: 0.08%
```

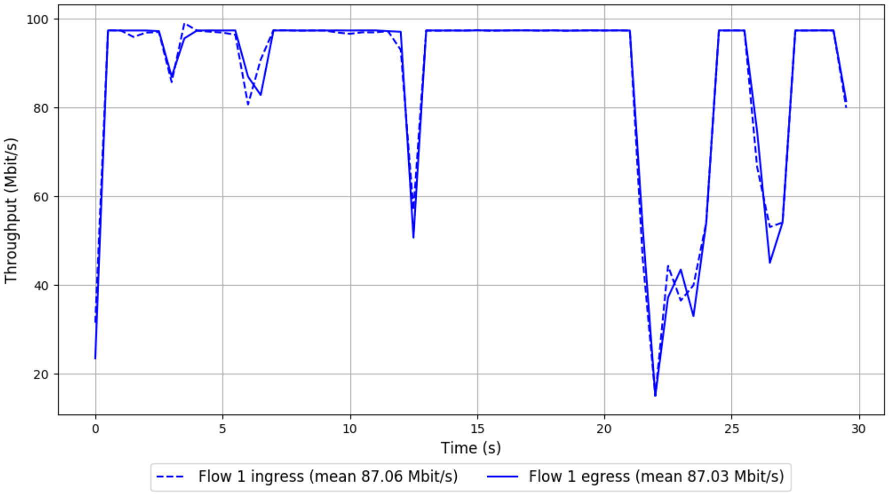
Run 1: Report of QUIC Cubic — Data Link

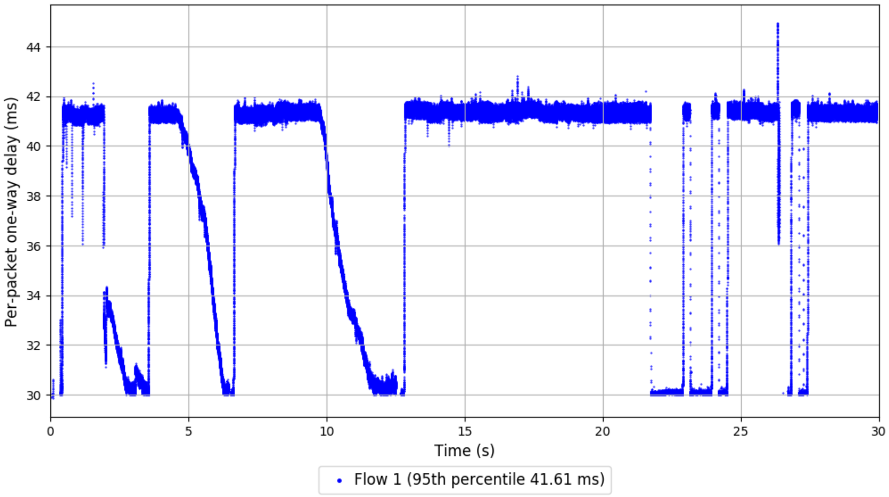




```
Run 2: Statistics of QUIC Cubic

Start at: 2018-02-19 21:29:56
End at: 2018-02-19 21:30:26
Local clock offset: -4.441 ms
Remote clock offset: -20.986 ms

# Below is generated by plot.py at 2018-02-20 04:41:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.03 Mbit/s
95th percentile per-packet one-way delay: 41.606 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 87.03 Mbit/s
95th percentile per-packet one-way delay: 41.606 ms
Loss rate: 0.13%
```

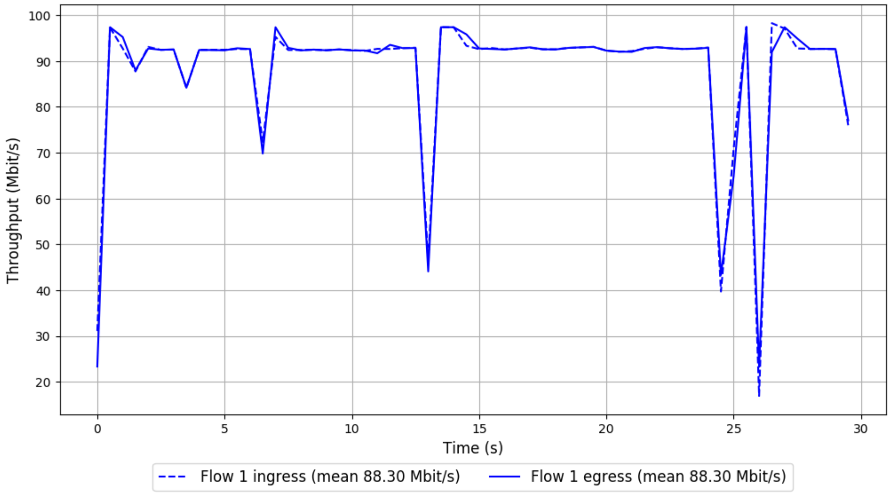
Run 2: Report of QUIC Cubic — Data Link

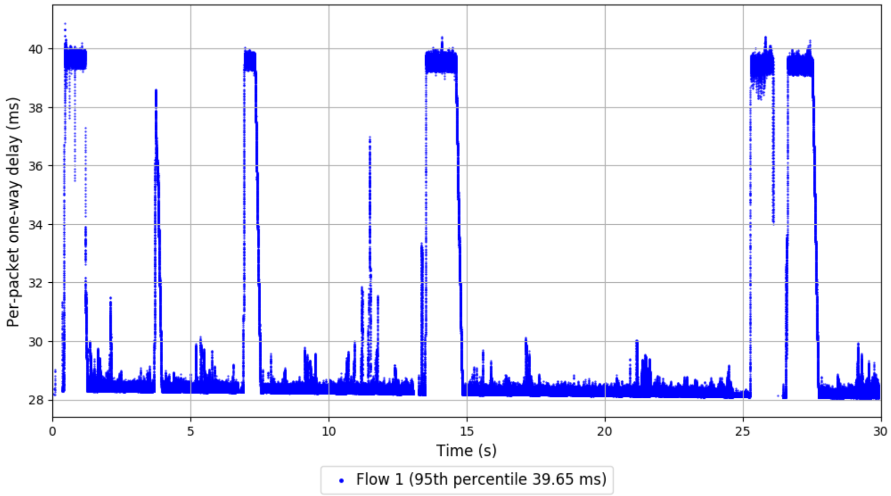




```
Run 3: Statistics of QUIC Cubic

Start at: 2018-02-19 21:51:43
End at: 2018-02-19 21:52:13
Local clock offset: -7.389 ms
Remote clock offset: -21.202 ms

# Below is generated by plot.py at 2018-02-20 04:41:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.30 Mbit/s
95th percentile per-packet one-way delay: 39.651 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 88.30 Mbit/s
95th percentile per-packet one-way delay: 39.651 ms
Loss rate: 0.08%
```

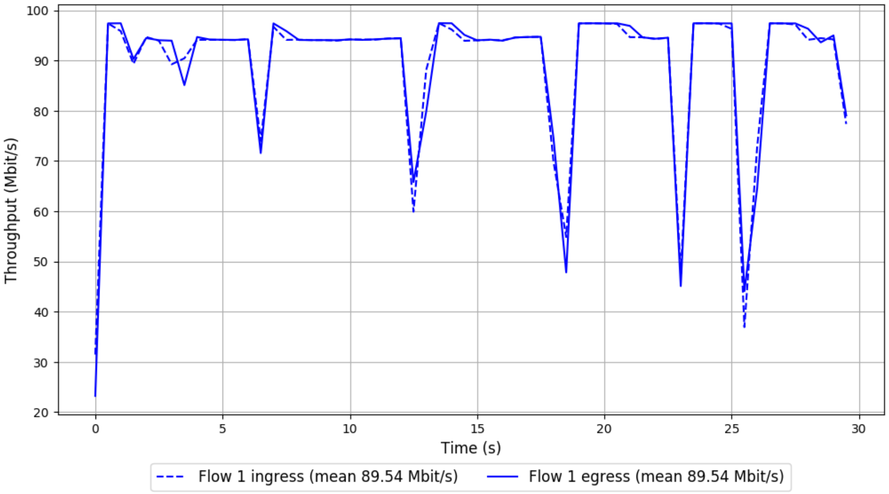
Run 3: Report of QUIC Cubic — Data Link

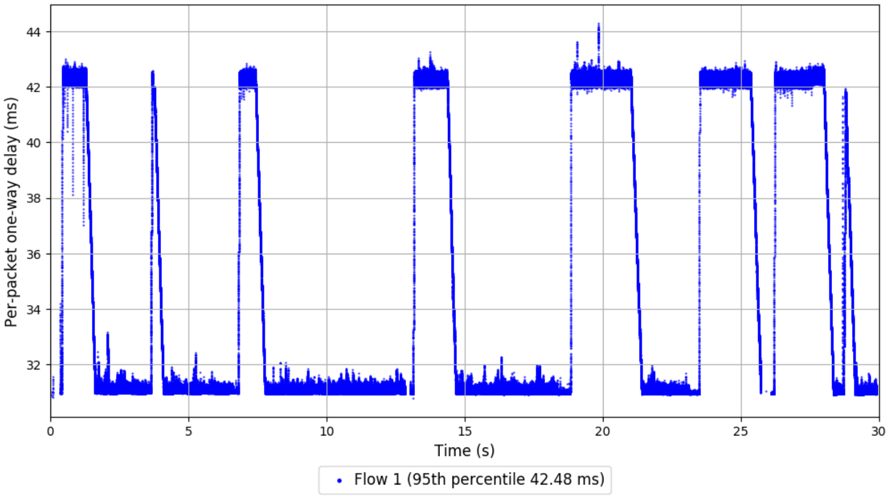




```
Run 4: Statistics of QUIC Cubic

Start at: 2018-02-19 22:13:11
End at: 2018-02-19 22:13:42
Local clock offset: 2.418 ms
Remote clock offset: -18.656 ms

# Below is generated by plot.py at 2018-02-20 04:41:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.54 Mbit/s
95th percentile per-packet one-way delay: 42.484 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 89.54 Mbit/s
95th percentile per-packet one-way delay: 42.484 ms
Loss rate: 0.08%
```

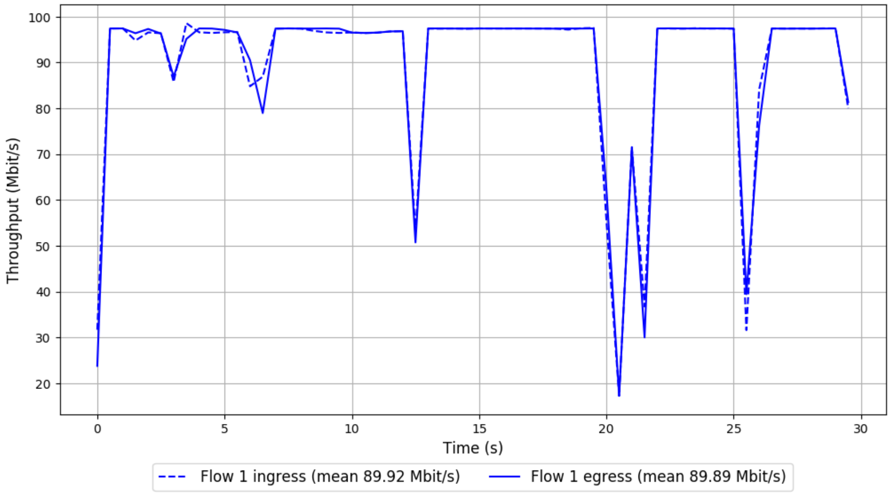
Run 4: Report of QUIC Cubic — Data Link

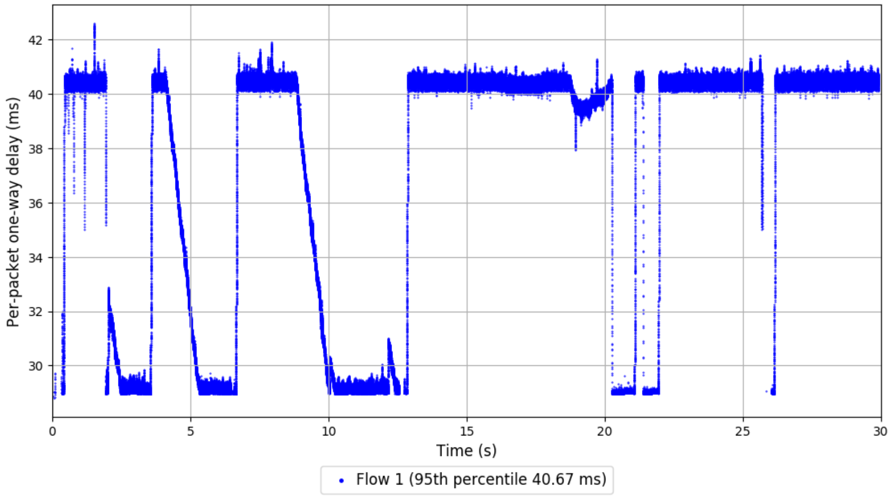




```
Run 5: Statistics of QUIC Cubic

Start at: 2018-02-19 22:34:47
End at: 2018-02-19 22:35:17
Local clock offset: 1.827 ms
Remote clock offset: -18.796 ms

# Below is generated by plot.py at 2018-02-20 04:41:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.89 Mbit/s
95th percentile per-packet one-way delay: 40.674 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 89.89 Mbit/s
95th percentile per-packet one-way delay: 40.674 ms
Loss rate: 0.12%
```

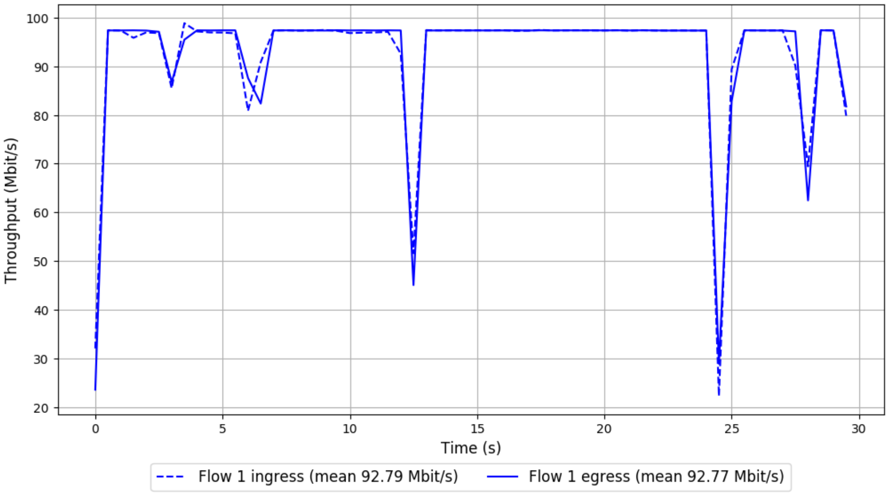
Run 5: Report of QUIC Cubic — Data Link

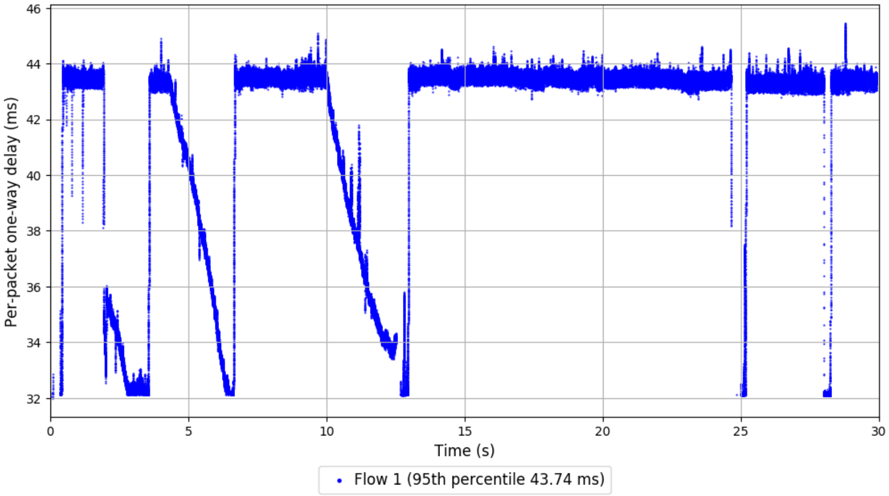




```
Run 6: Statistics of QUIC Cubic

Start at: 2018-02-19 22:56:44
End at: 2018-02-19 22:57:14
Local clock offset: 2.008 ms
Remote clock offset: -22.749 ms

# Below is generated by plot.py at 2018-02-20 04:41:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.77 Mbit/s
95th percentile per-packet one-way delay: 43.737 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 92.77 Mbit/s
95th percentile per-packet one-way delay: 43.737 ms
Loss rate: 0.12%
```

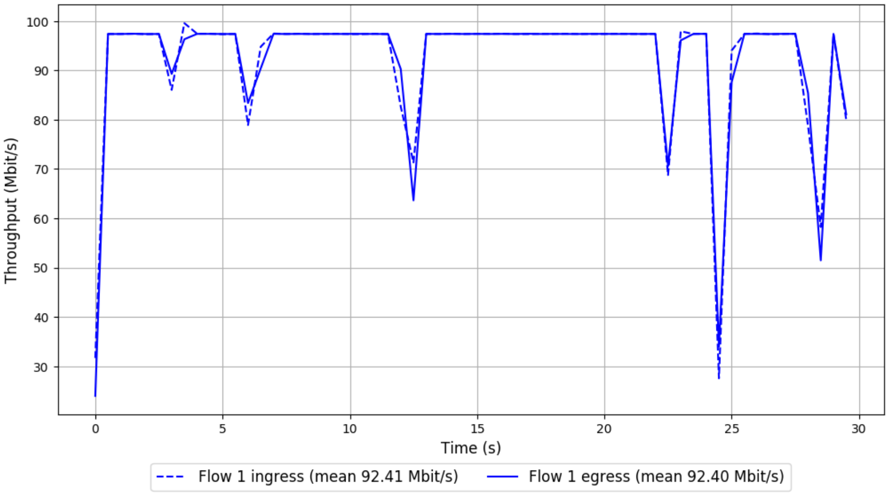
Run 6: Report of QUIC Cubic — Data Link

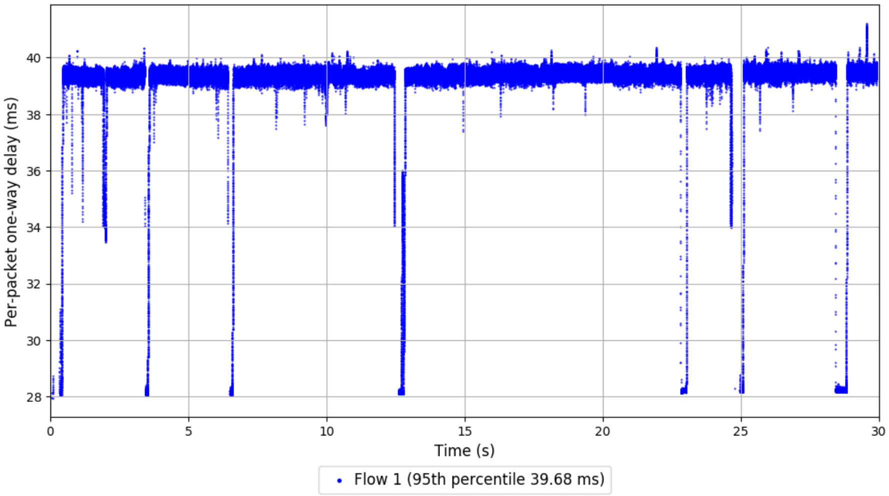




```
Run 7: Statistics of QUIC Cubic

Start at: 2018-02-19 23:18:08
End at: 2018-02-19 23:18:38
Local clock offset: -11.65 ms
Remote clock offset: -20.352 ms

# Below is generated by plot.py at 2018-02-20 04:41:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.40 Mbit/s
95th percentile per-packet one-way delay: 39.679 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 92.40 Mbit/s
95th percentile per-packet one-way delay: 39.679 ms
Loss rate: 0.12%
```

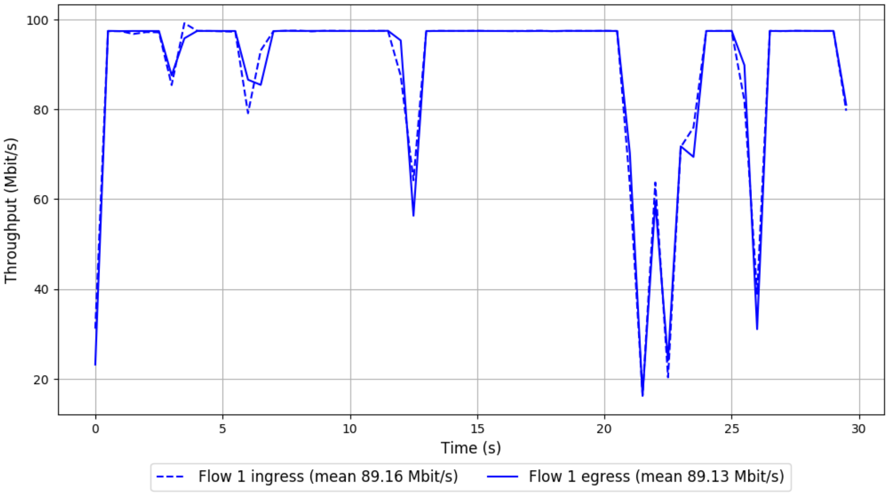
Run 7: Report of QUIC Cubic — Data Link

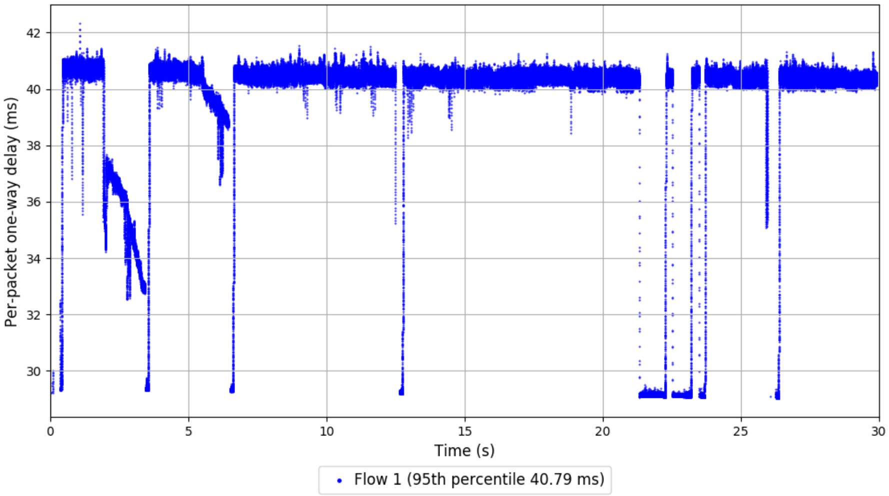




```
Run 8: Statistics of QUIC Cubic

Start at: 2018-02-19 23:39:44
End at: 2018-02-19 23:40:14
Local clock offset: -3.276 ms
Remote clock offset: -12.571 ms

# Below is generated by plot.py at 2018-02-20 04:41:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.13 Mbit/s
95th percentile per-packet one-way delay: 40.789 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 89.13 Mbit/s
95th percentile per-packet one-way delay: 40.789 ms
Loss rate: 0.12%
```

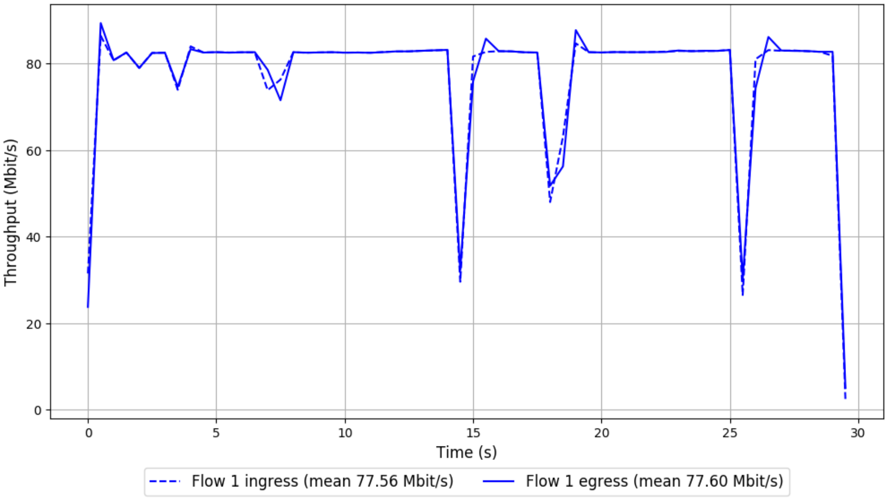
Run 8: Report of QUIC Cubic — Data Link

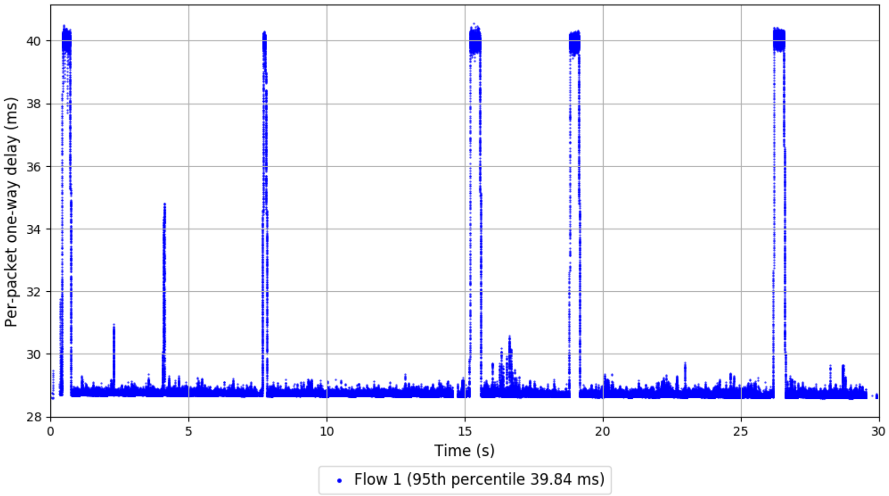




```
Run 9: Statistics of QUIC Cubic

Start at: 2018-02-20 00:01:00
End at: 2018-02-20 00:01:30
Local clock offset: 0.733 ms
Remote clock offset: -14.838 ms

# Below is generated by plot.py at 2018-02-20 04:43:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.60 Mbit/s
95th percentile per-packet one-way delay: 39.842 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 77.60 Mbit/s
95th percentile per-packet one-way delay: 39.842 ms
Loss rate: 0.02%
```

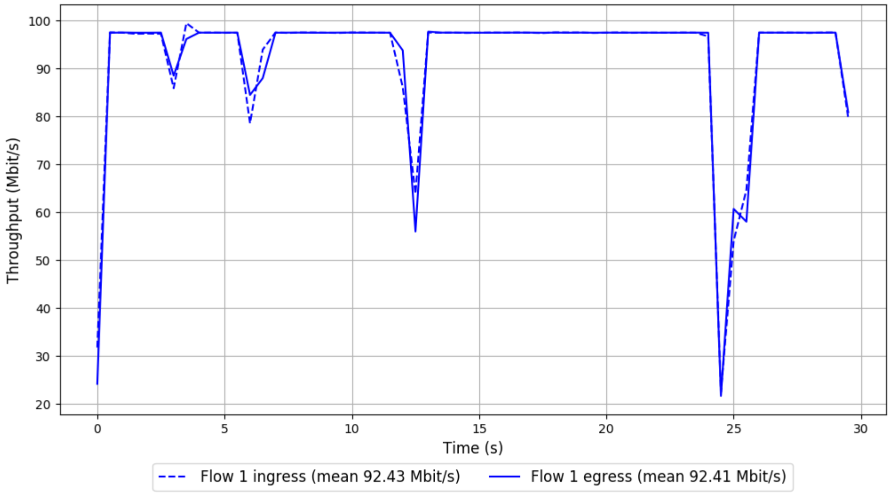
Run 9: Report of QUIC Cubic — Data Link

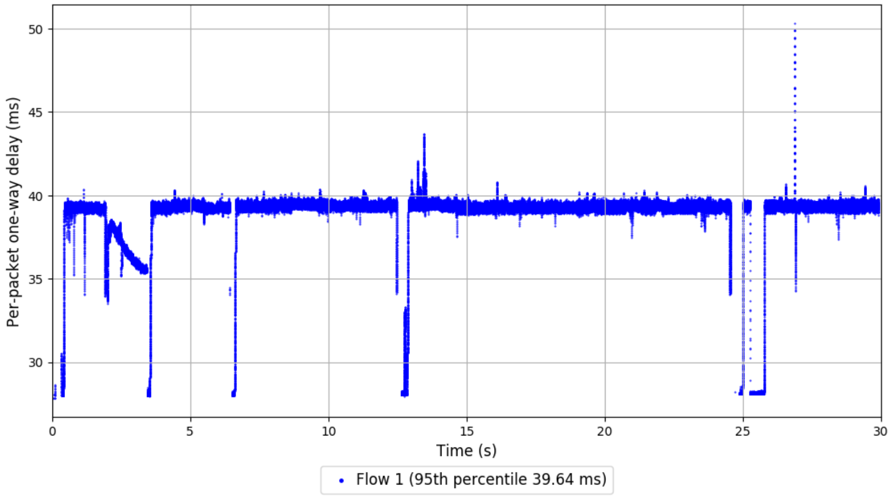




```
Run 10: Statistics of QUIC Cubic

Start at: 2018-02-20 00:22:40
End at: 2018-02-20 00:23:10
Local clock offset: -1.647 ms
Remote clock offset: -5.743 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.41 Mbit/s
95th percentile per-packet one-way delay: 39.638 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 92.41 Mbit/s
95th percentile per-packet one-way delay: 39.638 ms
Loss rate: 0.12%
```

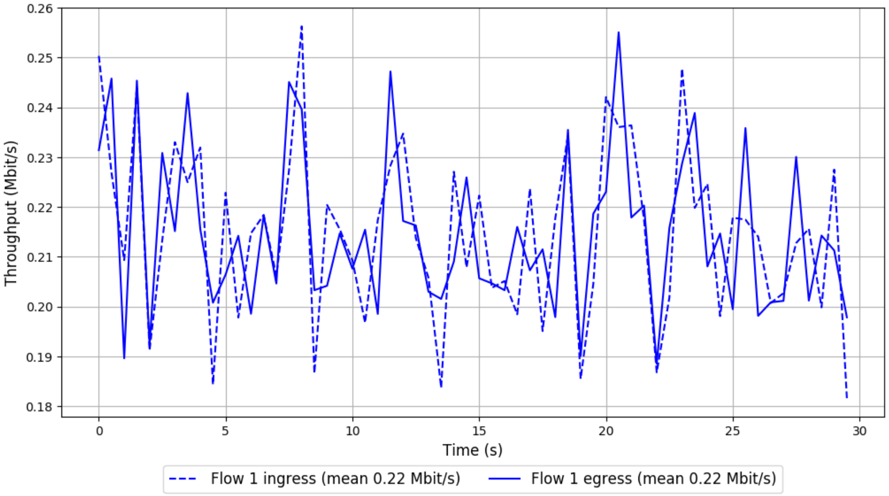
Run 10: Report of QUIC Cubic — Data Link

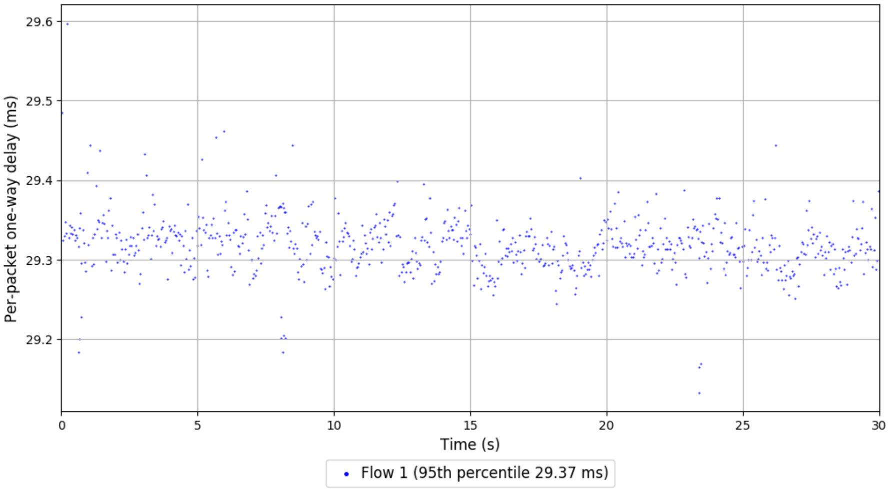




```
Run 1: Statistics of SCReAM

Start at: 2018-02-19 21:25:19
End at: 2018-02-19 21:25:49
Local clock offset: -5.032 ms
Remote clock offset: -20.862 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 29.371 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 29.371 ms
Loss rate: 0.00%
```

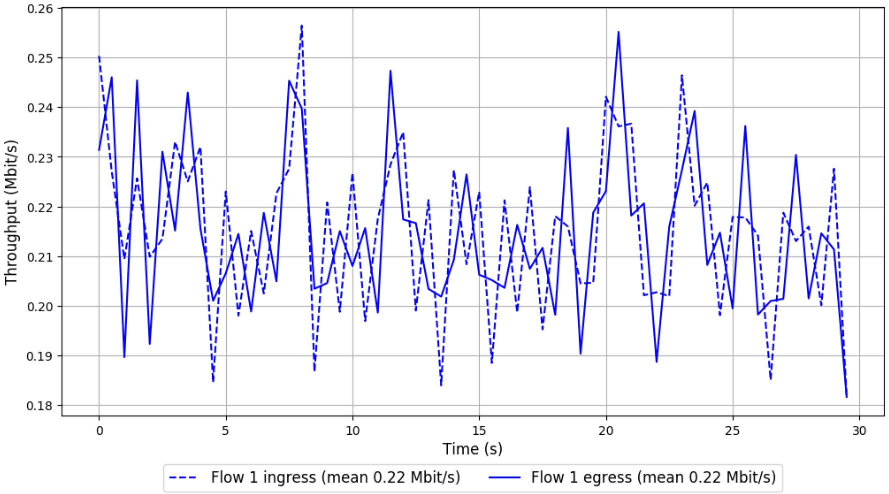
Run 1: Report of SCReAM — Data Link

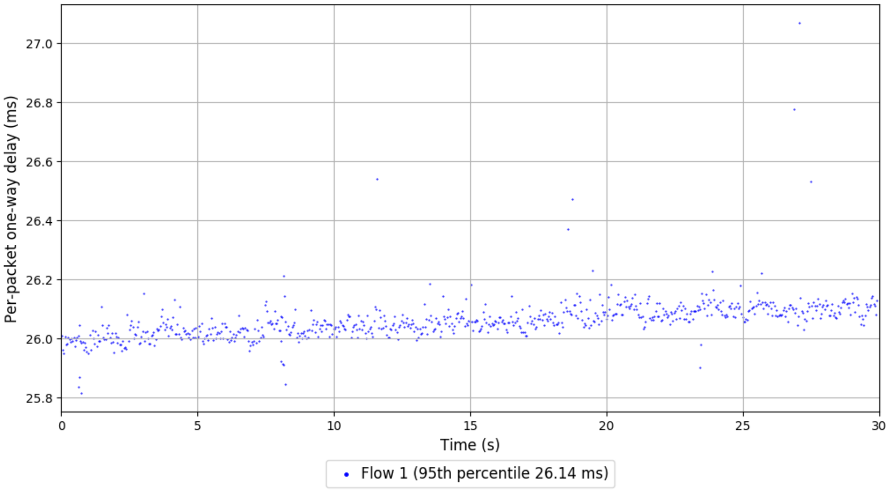




```
Run 2: Statistics of SCReAM

Start at: 2018-02-19 21:47:00
End at: 2018-02-19 21:47:30
Local clock offset: -7.58 ms
Remote clock offset: -18.658 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 26.136 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 26.136 ms
Loss rate: 0.13%
```

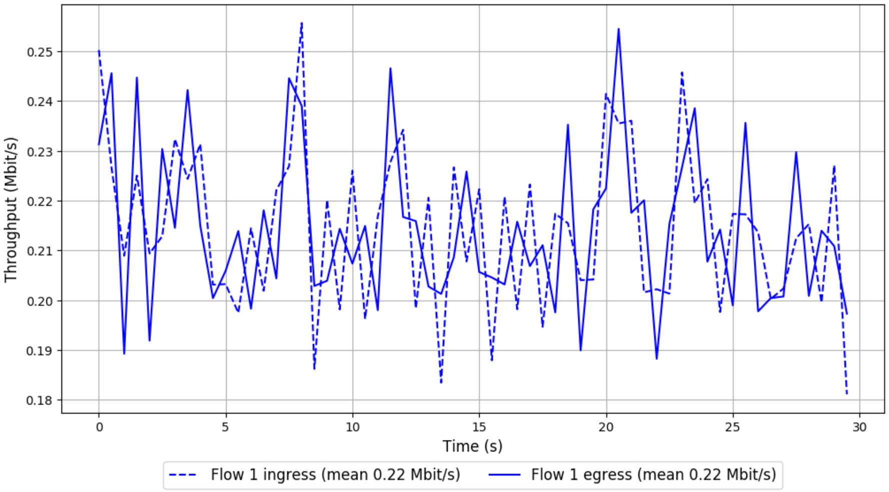
Run 2: Report of SCReAM — Data Link

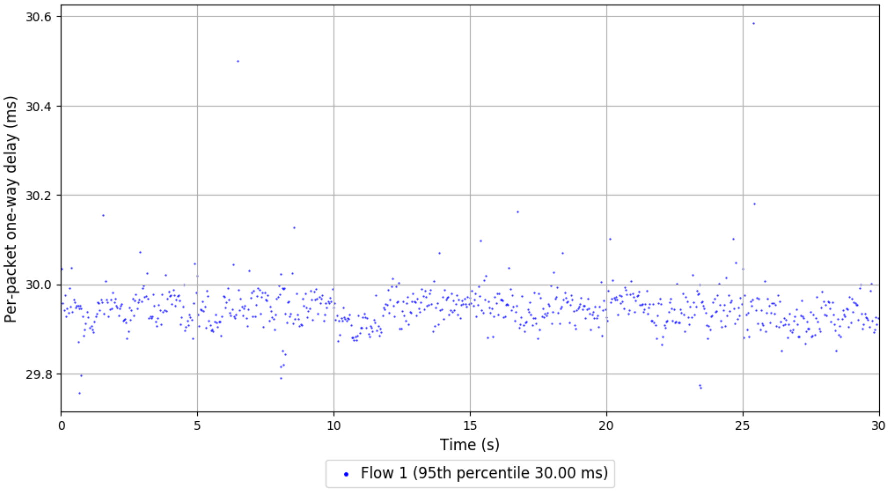




```
Run 3: Statistics of SCReAM

Start at: 2018-02-19 22:08:31
End at: 2018-02-19 22:09:01
Local clock offset: 1.324 ms
Remote clock offset: -18.271 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.001 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.001 ms
Loss rate: 0.00%
```

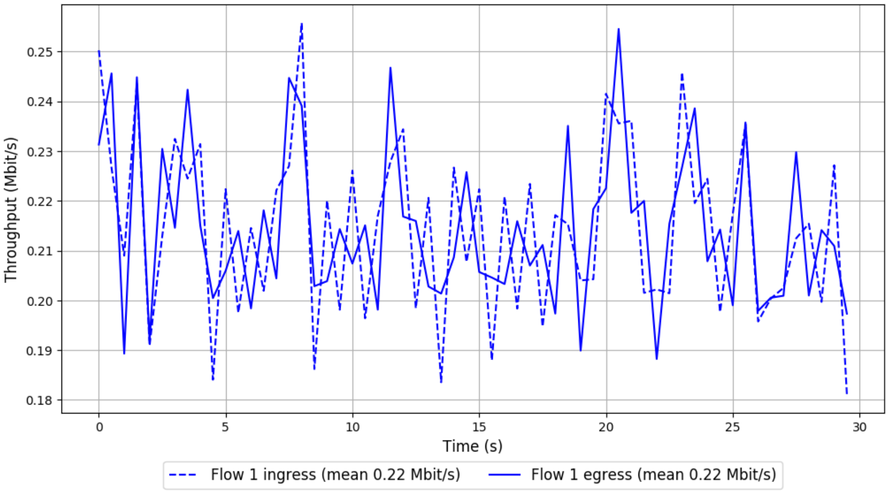
Run 3: Report of SCReAM — Data Link

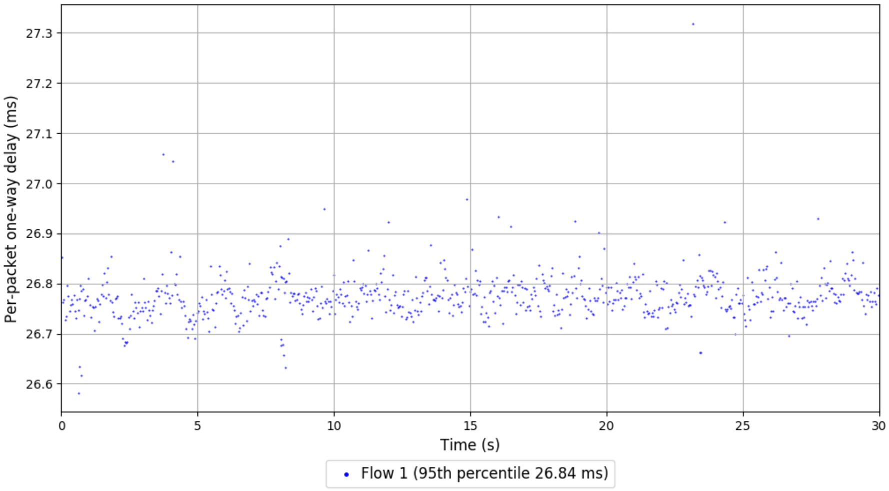




```
Run 4: Statistics of SCReAM

Start at: 2018-02-19 22:30:07
End at: 2018-02-19 22:30:37
Local clock offset: -0.625 ms
Remote clock offset: -19.12 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 26.839 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 26.839 ms
Loss rate: 0.00%
```

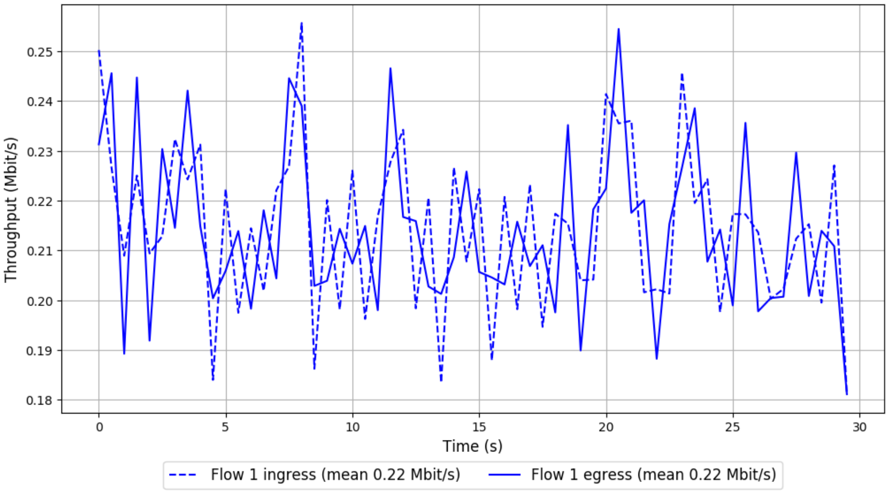
Run 4: Report of SCReAM — Data Link

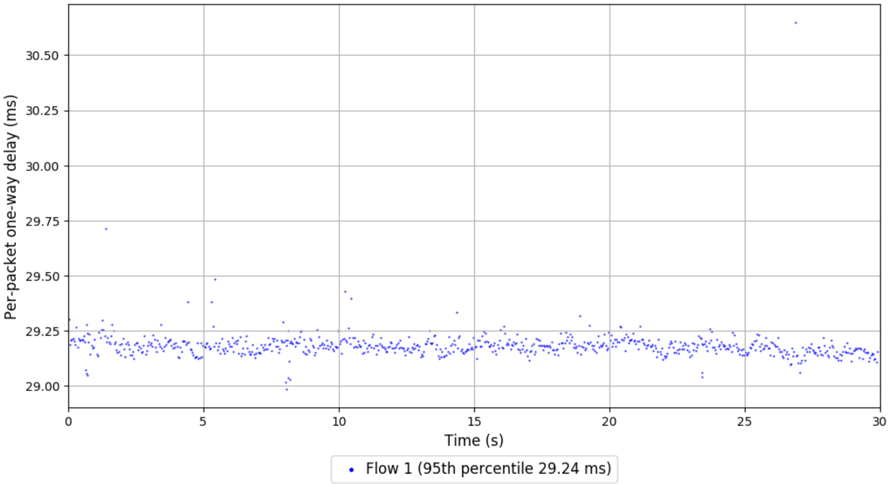




```
Run 5: Statistics of SCReAM

Start at: 2018-02-19 22:52:04
End at: 2018-02-19 22:52:34
Local clock offset: 0.877 ms
Remote clock offset: -20.438 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 29.242 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 29.242 ms
Loss rate: 0.13%
```

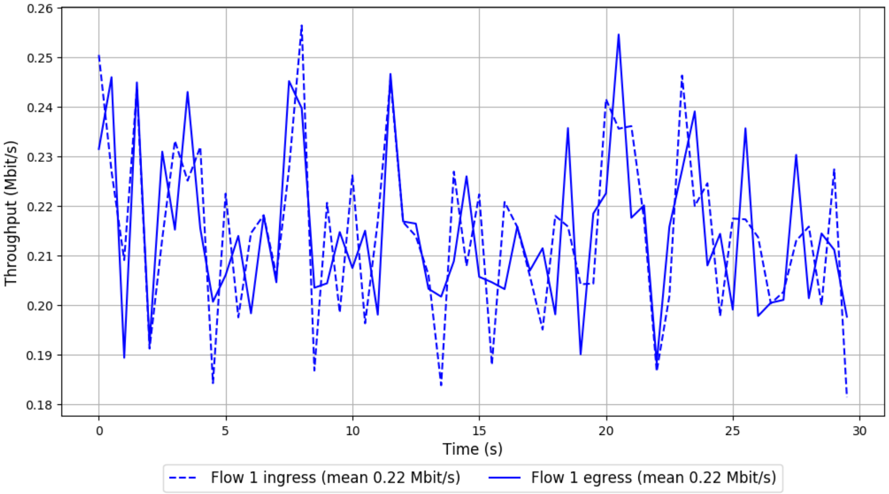
Run 5: Report of SCReAM — Data Link

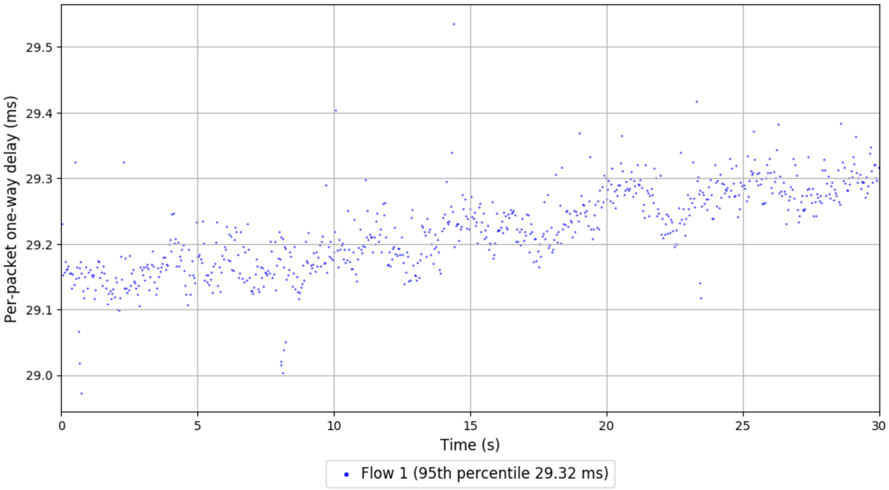




```
Run 6: Statistics of SCReAM

Start at: 2018-02-19 23:13:29
End at: 2018-02-19 23:13:59
Local clock offset: -9.852 ms
Remote clock offset: -20.853 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 29.317 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 29.317 ms
Loss rate: 0.00%
```

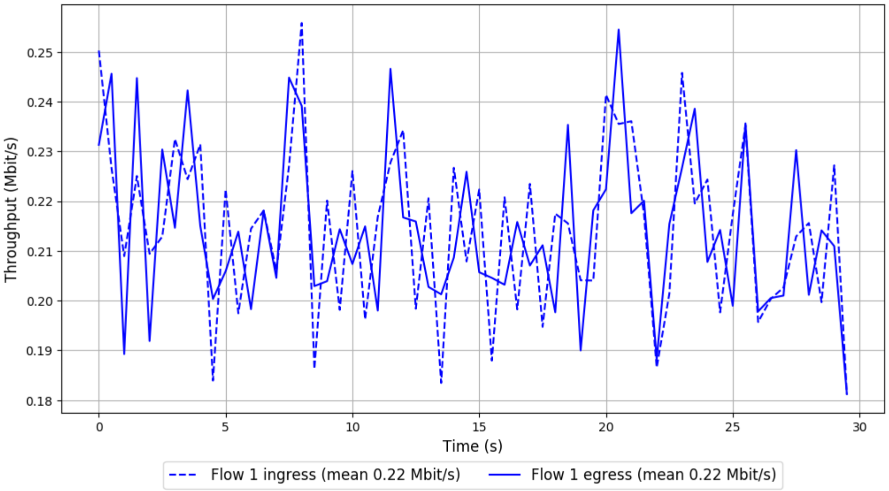
Run 6: Report of SCReAM — Data Link

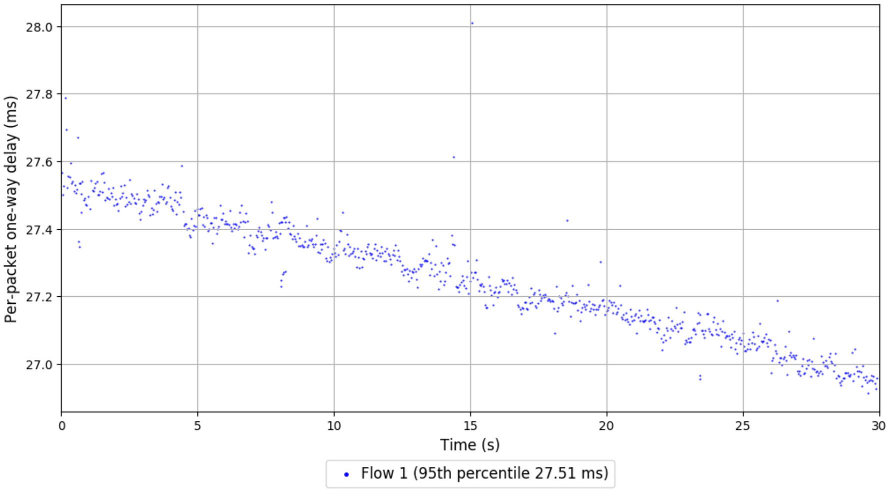




```
Run 7: Statistics of SCReAM

Start at: 2018-02-19 23:35:04
End at: 2018-02-19 23:35:34
Local clock offset: -10.382 ms
Remote clock offset: -13.643 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 27.512 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 27.512 ms
Loss rate: 0.13%
```

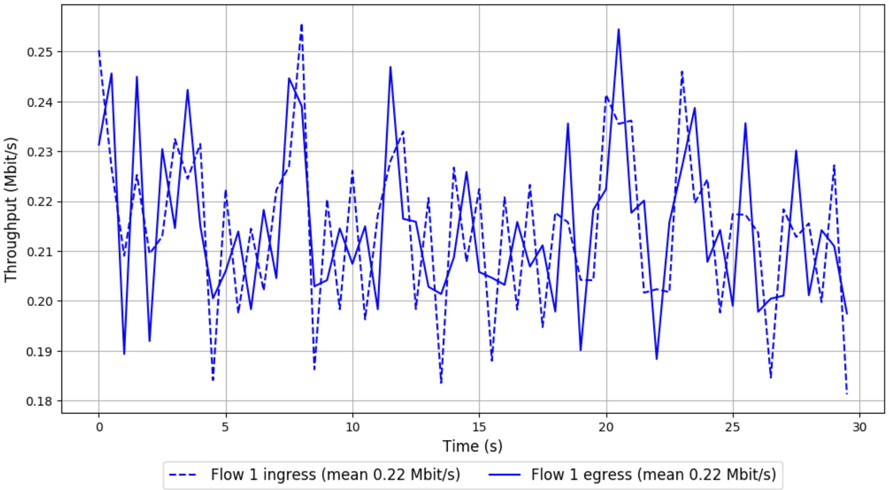
Run 7: Report of SCReAM — Data Link

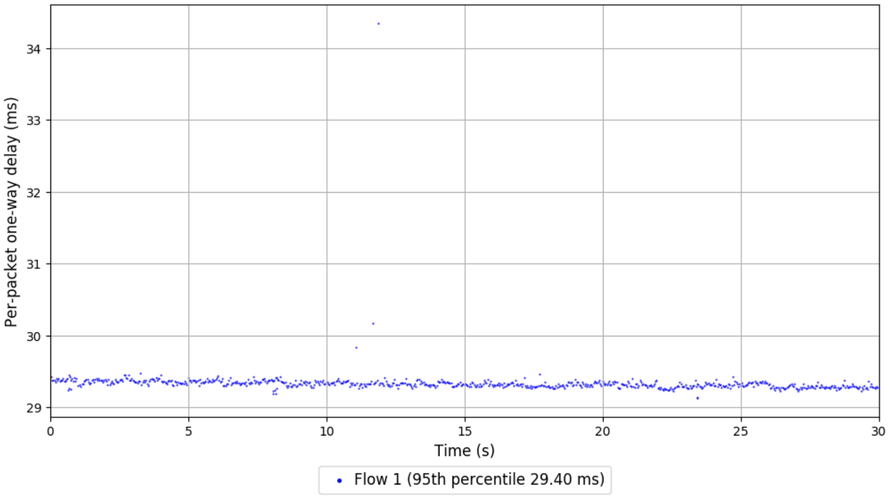




```
Run 8: Statistics of SCReAM

Start at: 2018-02-19 23:56:25
End at: 2018-02-19 23:56:55
Local clock offset: 5.836 ms
Remote clock offset: -9.621 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 29.399 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 29.399 ms
Loss rate: 0.00%
```

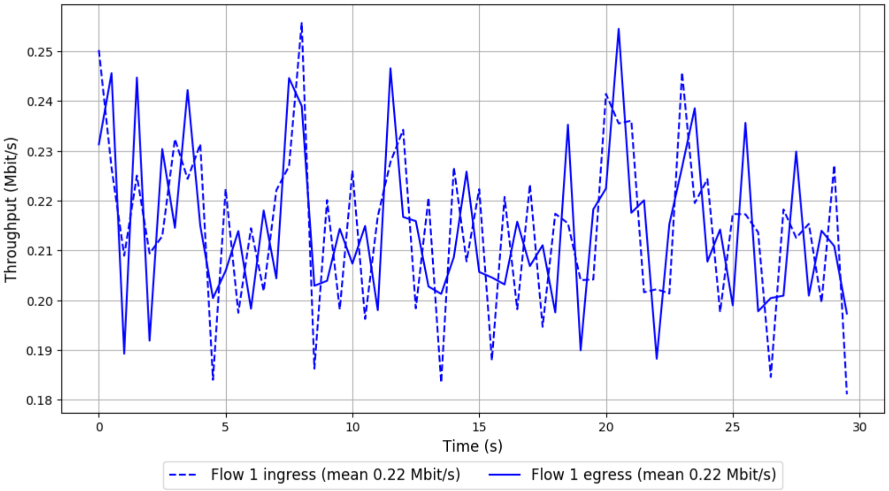
Run 8: Report of SCReAM — Data Link

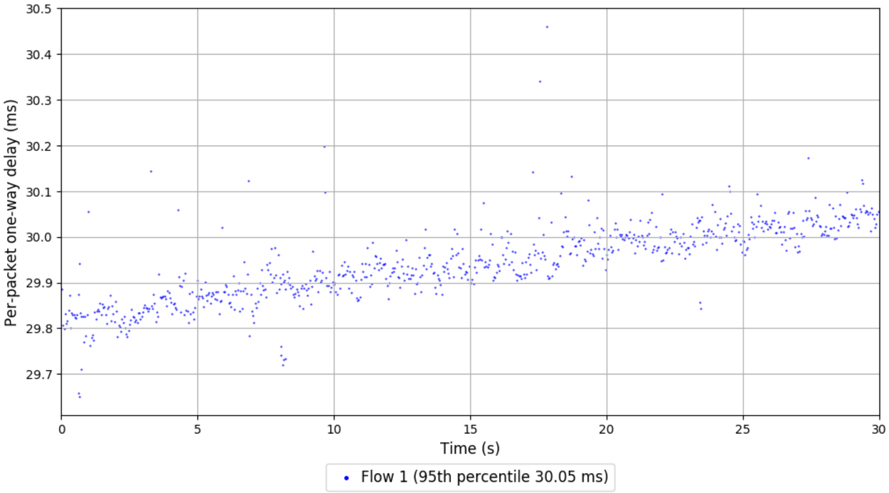




```
Run 9: Statistics of SCReAM

Start at: 2018-02-20 00:17:57
End at: 2018-02-20 00:18:27
Local clock offset: -1.906 ms
Remote clock offset: -9.469 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.055 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.055 ms
Loss rate: 0.00%
```

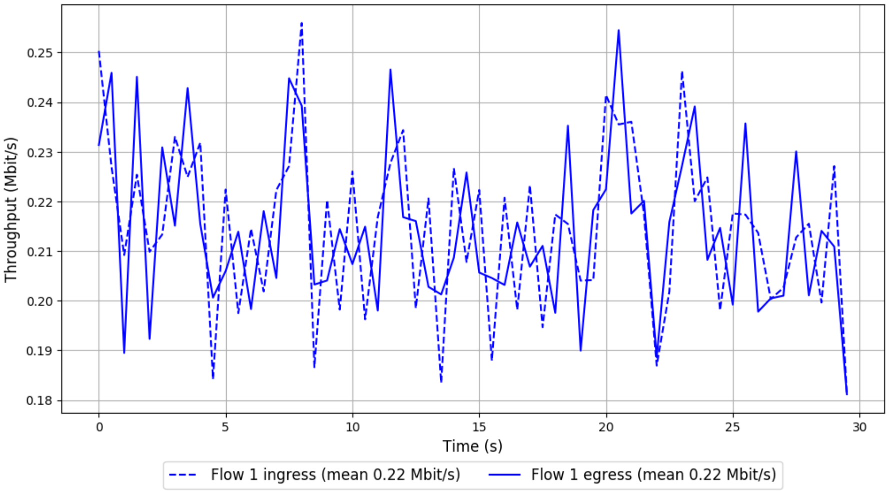
Run 9: Report of SCReAM — Data Link

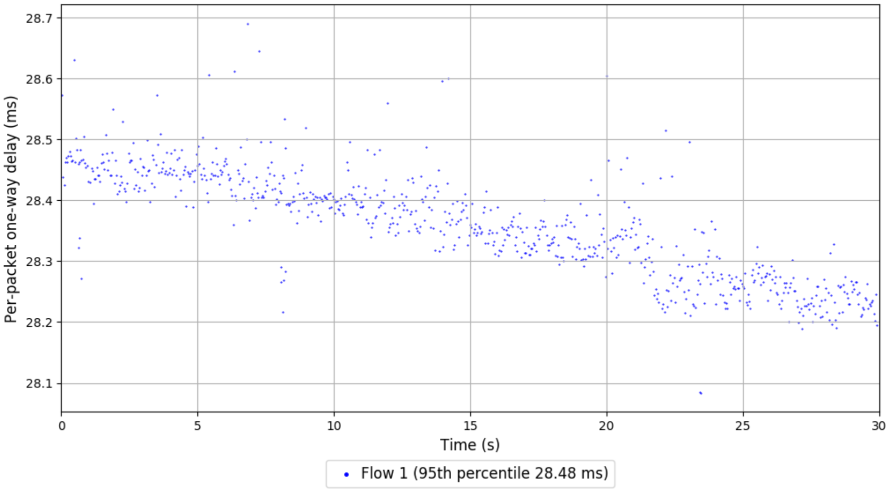




```
Run 10: Statistics of SCReAM

Start at: 2018-02-20 00:39:45
End at: 2018-02-20 00:40:15
Local clock offset: -3.573 ms
Remote clock offset: -10.808 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 28.482 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 28.482 ms
Loss rate: 0.13%
```

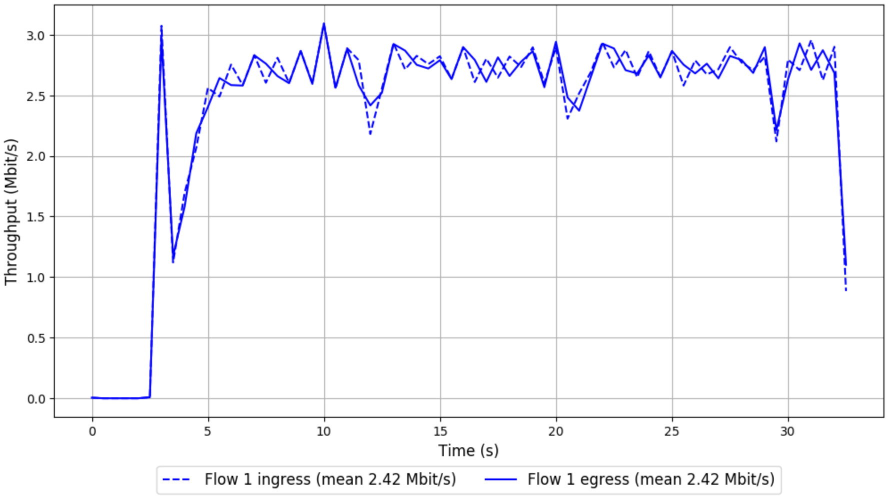
Run 10: Report of SCReAM — Data Link

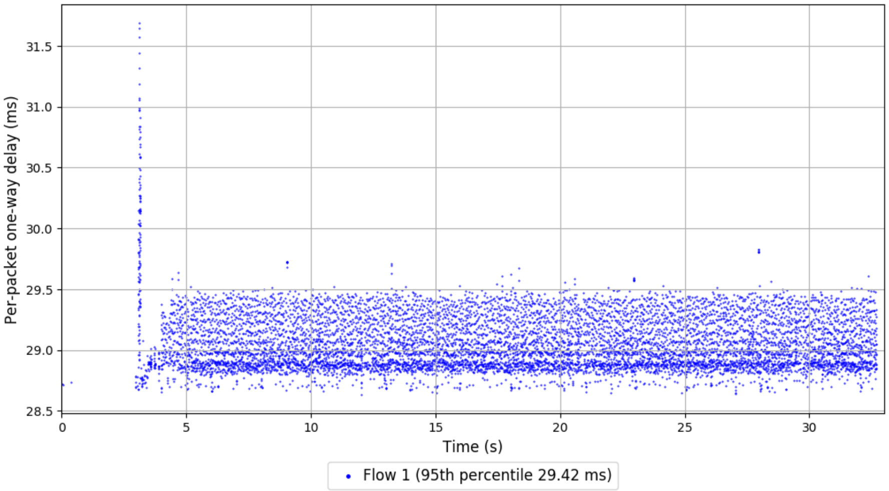




```
Run 1: Statistics of WebRTC media

Start at: 2018-02-19 21:26:23
End at: 2018-02-19 21:26:54
Local clock offset: -5.078 ms
Remote clock offset: -20.463 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 29.422 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 29.422 ms
Loss rate: 0.00%
```

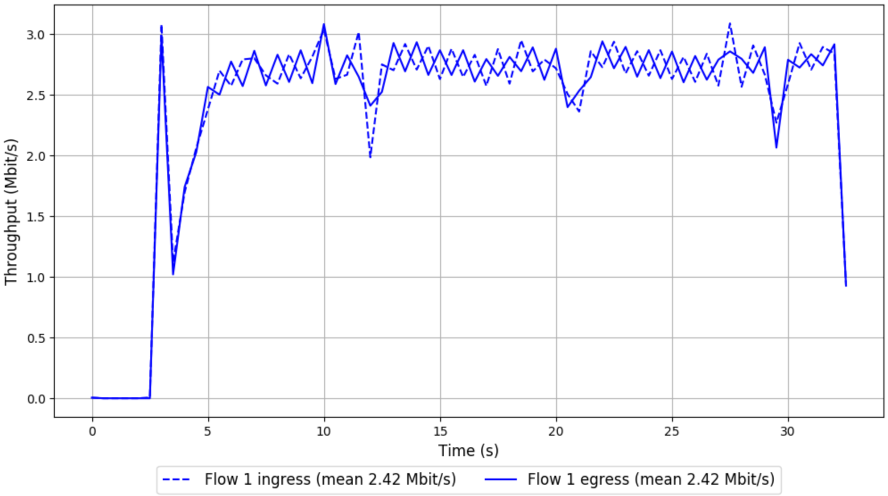
Run 1: Report of WebRTC media — Data Link

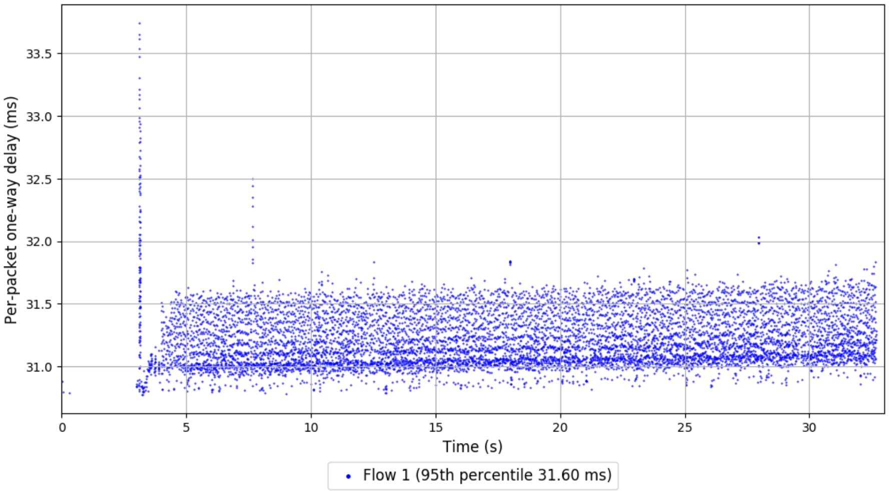




```
Run 2: Statistics of WebRTC media

Start at: 2018-02-19 21:48:05
End at: 2018-02-19 21:48:35
Local clock offset: -4.223 ms
Remote clock offset: -20.05 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 31.597 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 31.597 ms
Loss rate: 0.10%
```

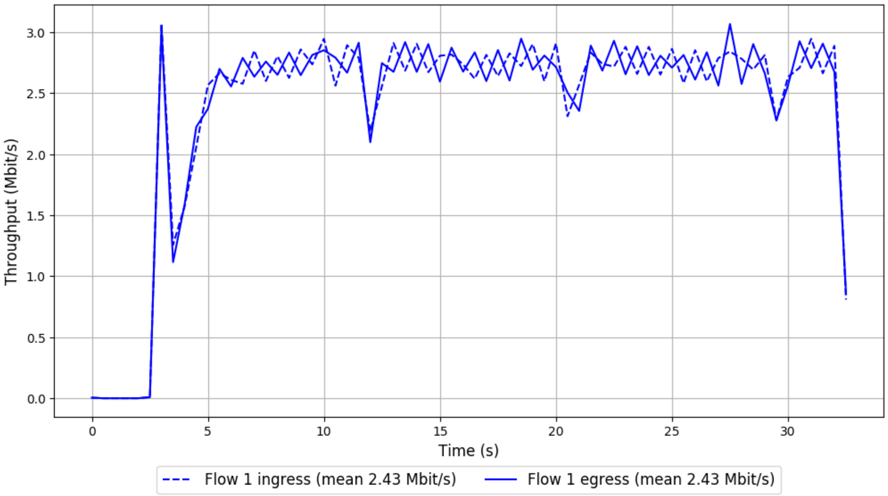
Run 2: Report of WebRTC media — Data Link

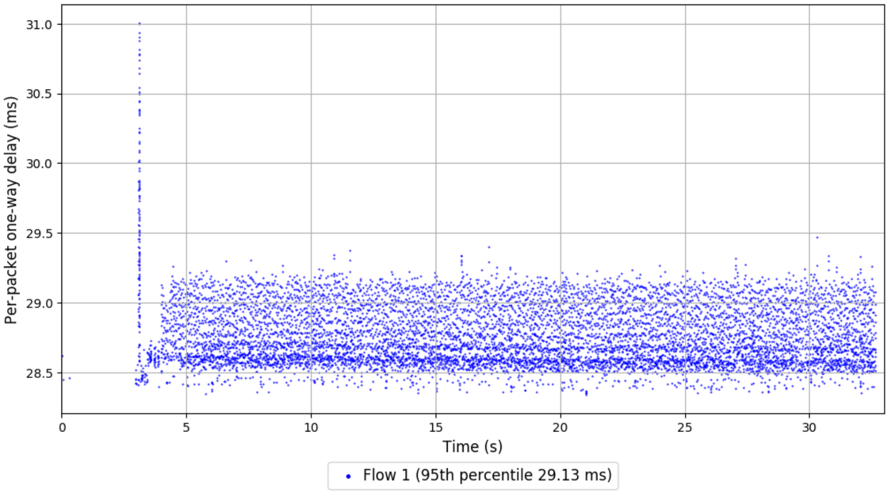




```
Run 3: Statistics of WebRTC media

Start at: 2018-02-19 22:09:36
End at: 2018-02-19 22:10:06
Local clock offset: -1.255 ms
Remote clock offset: -19.6 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 29.128 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 29.128 ms
Loss rate: 0.10%
```

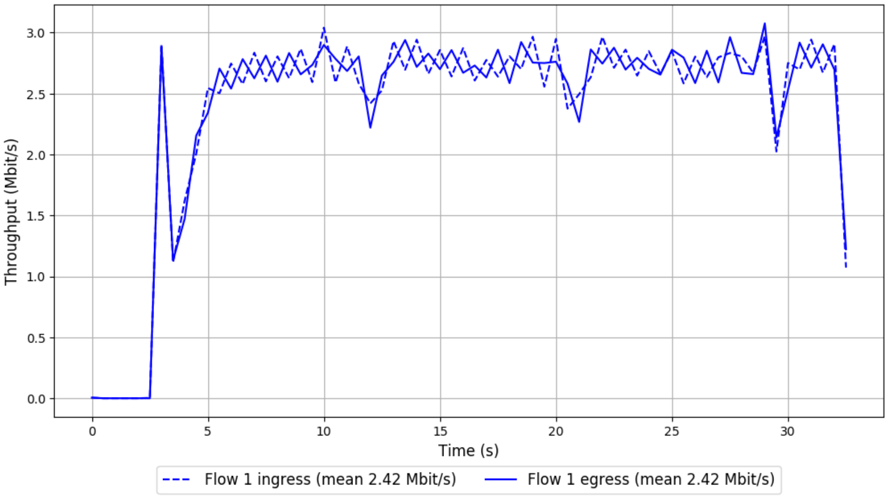
Run 3: Report of WebRTC media — Data Link

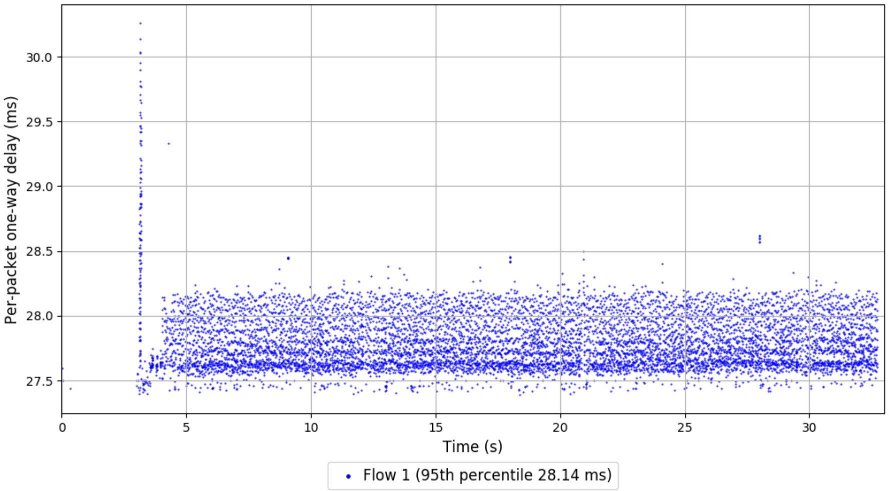




```
Run 4: Statistics of WebRTC media

Start at: 2018-02-19 22:31:12
End at: 2018-02-19 22:31:42
Local clock offset: -0.32 ms
Remote clock offset: -19.624 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 28.144 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 28.144 ms
Loss rate: 0.04%
```

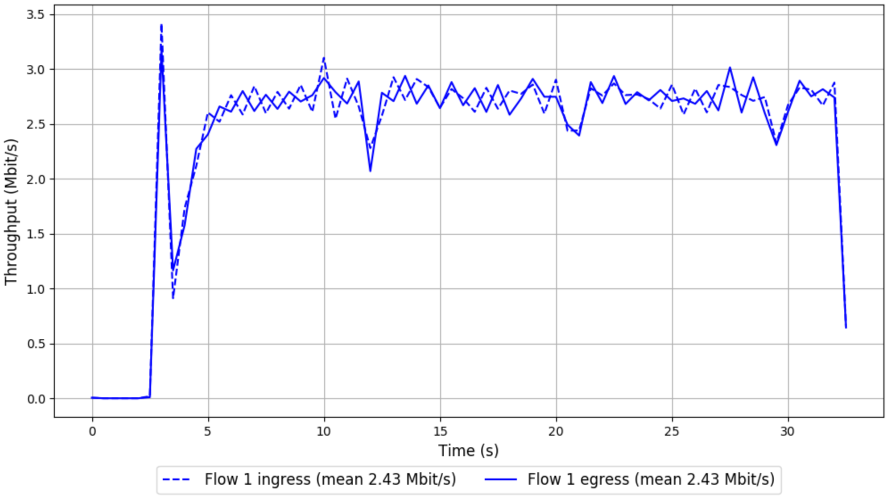
Run 4: Report of WebRTC media — Data Link

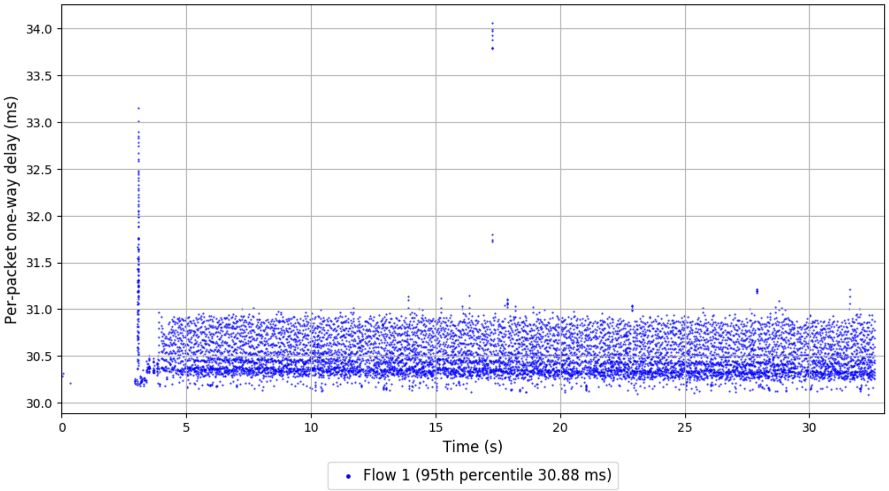




```
Run 5: Statistics of WebRTC media

Start at: 2018-02-19 22:53:09
End at: 2018-02-19 22:53:39
Local clock offset: 1.361 ms
Remote clock offset: -21.232 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 30.880 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 30.880 ms
Loss rate: 0.14%
```

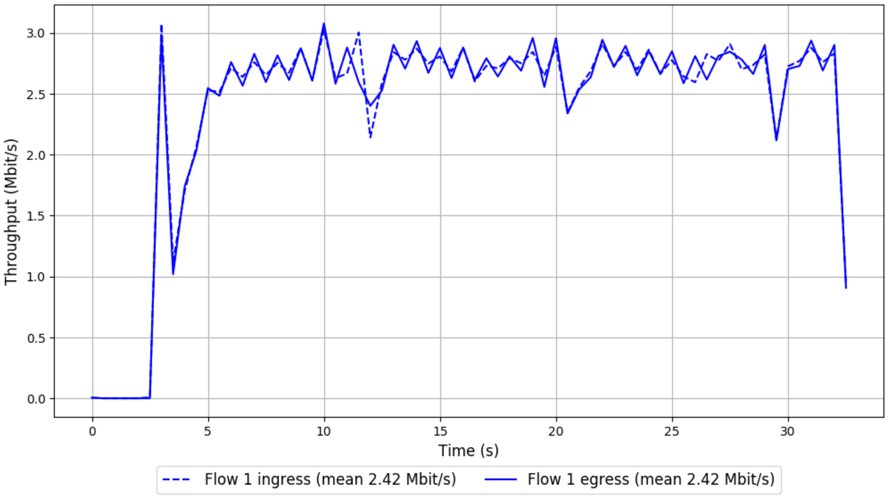
Run 5: Report of WebRTC media — Data Link

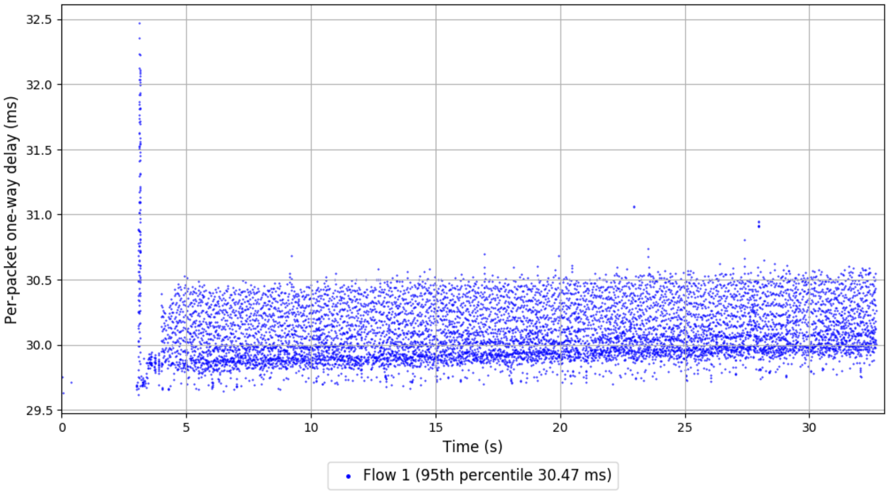




```
Run 6: Statistics of WebRTC media

Start at: 2018-02-19 23:14:34
End at: 2018-02-19 23:15:04
Local clock offset: -9.372 ms
Remote clock offset: -20.733 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 30.474 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 30.474 ms
Loss rate: 0.11%
```

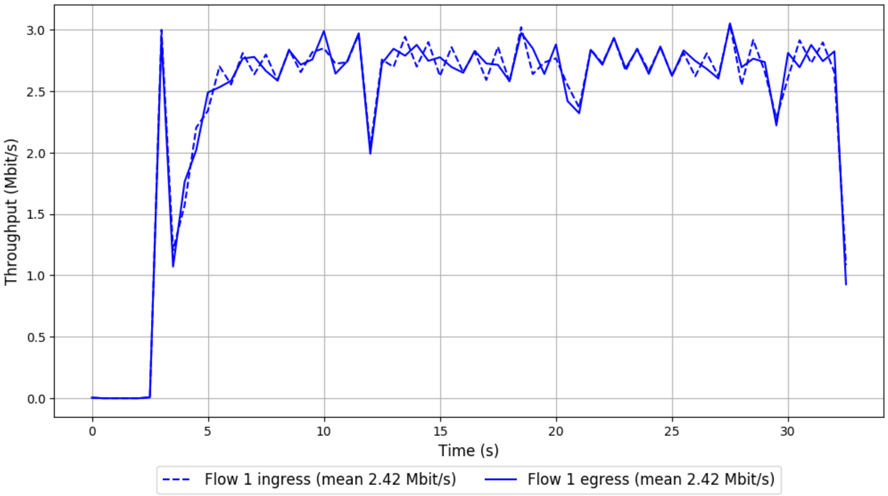
Run 6: Report of WebRTC media — Data Link

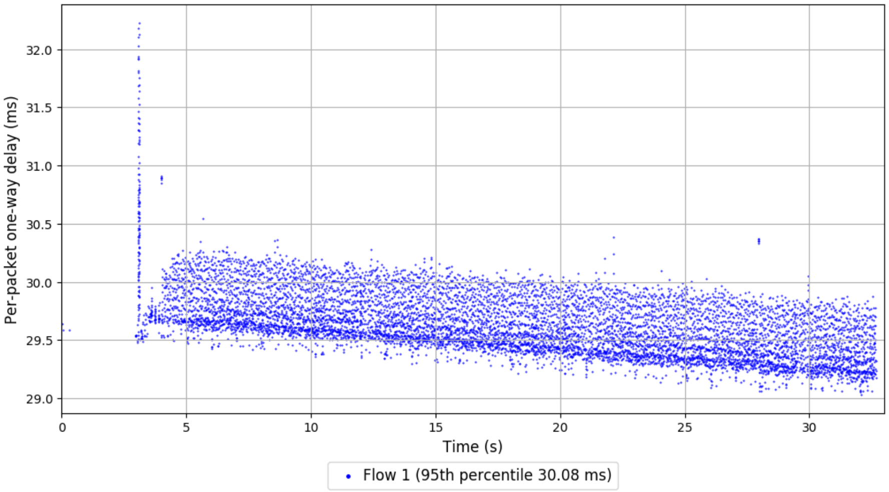




```
Run 7: Statistics of WebRTC media

Start at: 2018-02-19 23:36:09
End at: 2018-02-19 23:36:39
Local clock offset: -8.616 ms
Remote clock offset: -15.217 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 30.084 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 30.084 ms
Loss rate: 0.14%
```

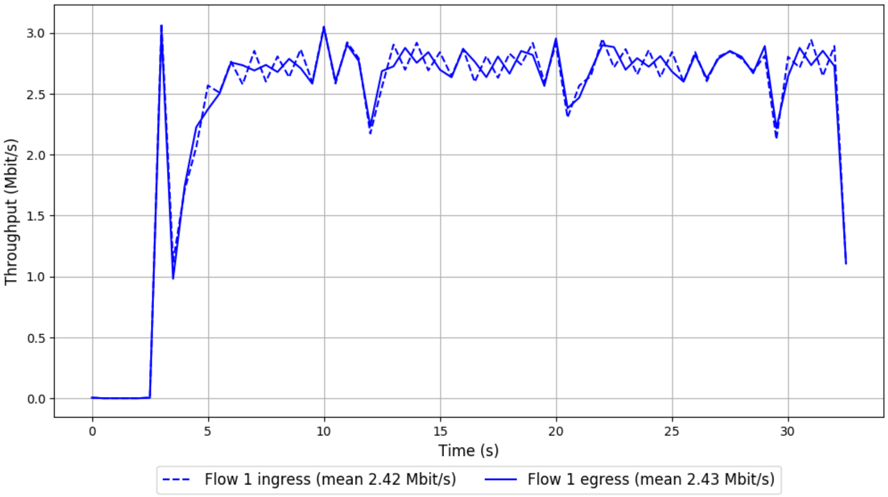
Run 7: Report of WebRTC media — Data Link

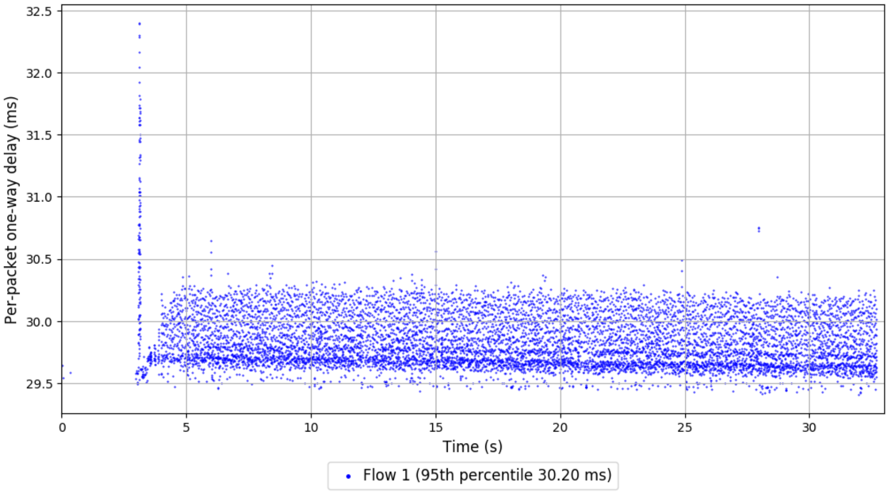




```
Run 8: Statistics of WebRTC media

Start at: 2018-02-19 23:57:29
End at: 2018-02-19 23:57:59
Local clock offset: 6.043 ms
Remote clock offset: -9.925 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 30.199 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 30.199 ms
Loss rate: 0.13%
```

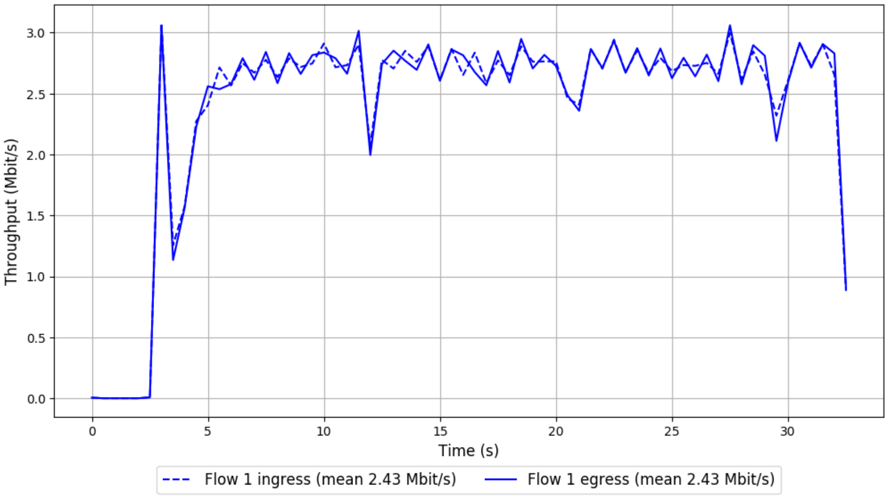
Run 8: Report of WebRTC media — Data Link

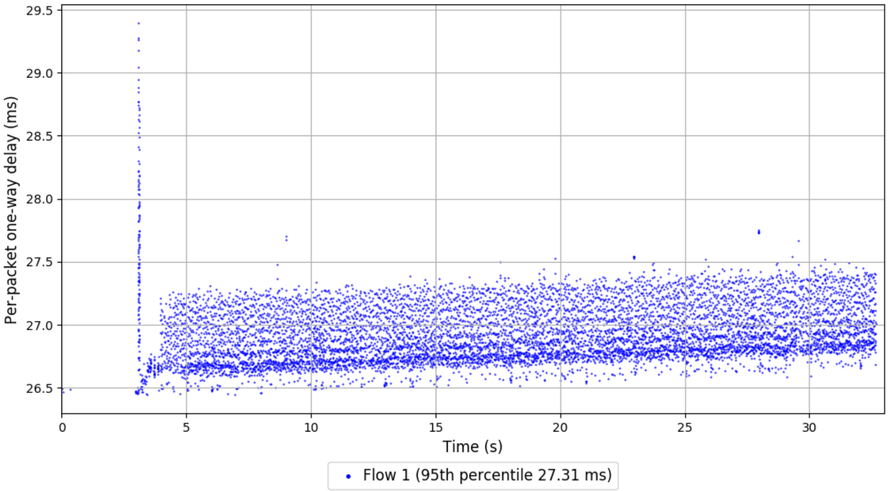




```
Run 9: Statistics of WebRTC media

Start at: 2018-02-20 00:19:02
End at: 2018-02-20 00:19:32
Local clock offset: -3.34 ms
Remote clock offset: -7.27 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 27.311 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 27.311 ms
Loss rate: 0.02%
```

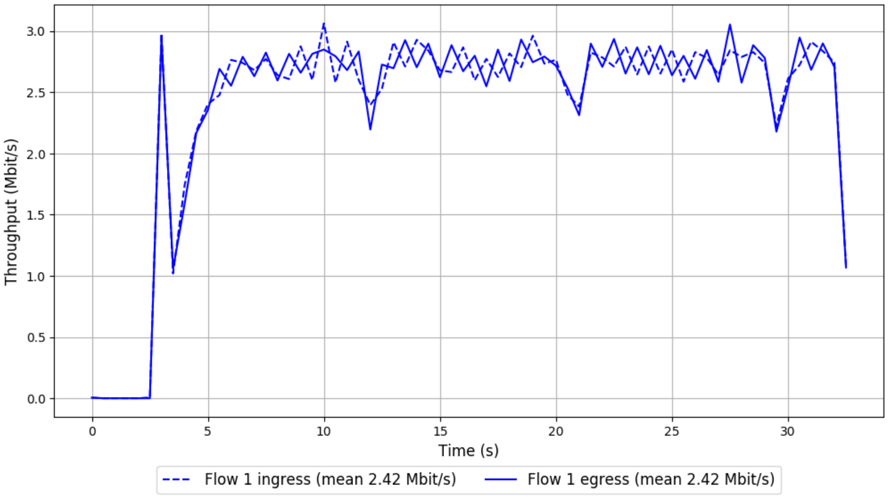
Run 9: Report of WebRTC media — Data Link

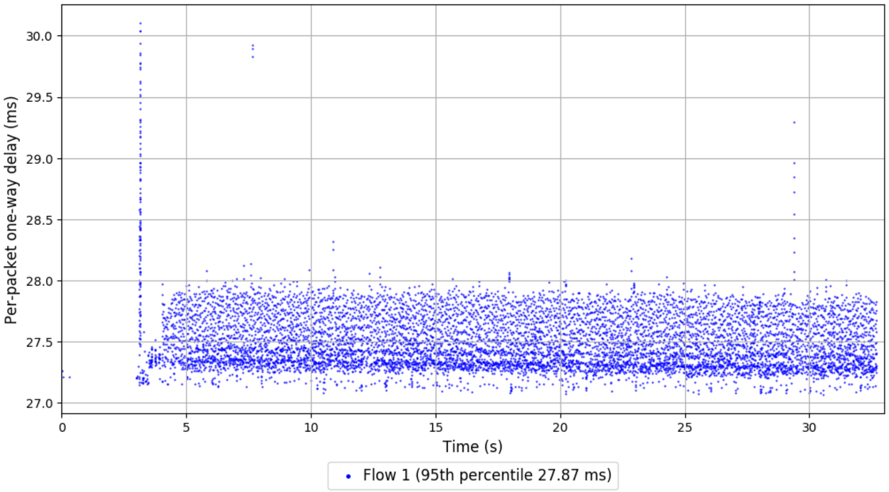




```
Run 10: Statistics of WebRTC media

Start at: 2018-02-20 00:40:50
End at: 2018-02-20 00:41:20
Local clock offset: -4.743 ms
Remote clock offset: -11.351 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 27.873 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 27.873 ms
Loss rate: 0.14%
```

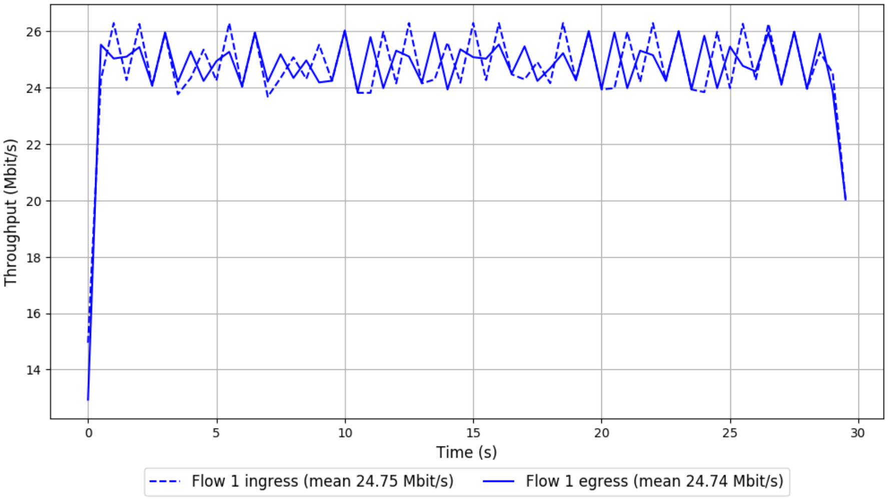
Run 10: Report of WebRTC media — Data Link

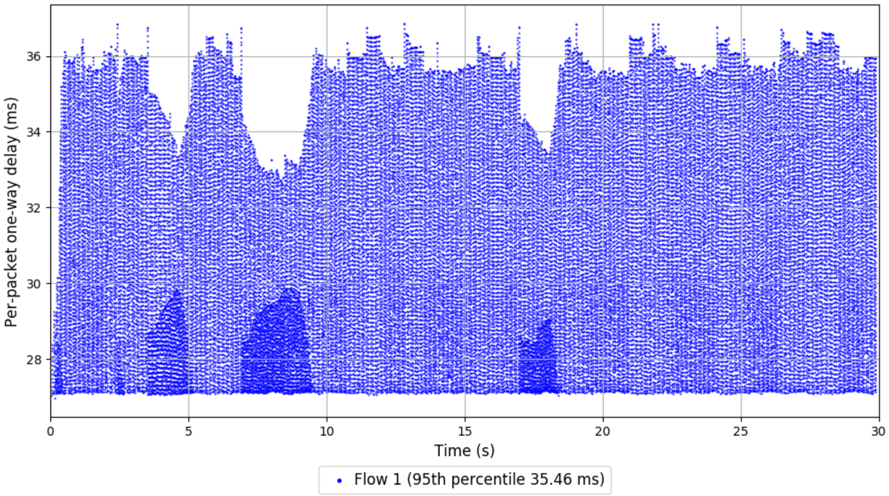




```
Run 1: Statistics of Sprout

Start at: 2018-02-19 21:09:26
End at: 2018-02-19 21:09:56
Local clock offset: -7.849 ms
Remote clock offset: -21.261 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.74 Mbit/s
95th percentile per-packet one-way delay: 35.459 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 24.74 Mbit/s
95th percentile per-packet one-way delay: 35.459 ms
Loss rate: 0.14%
```

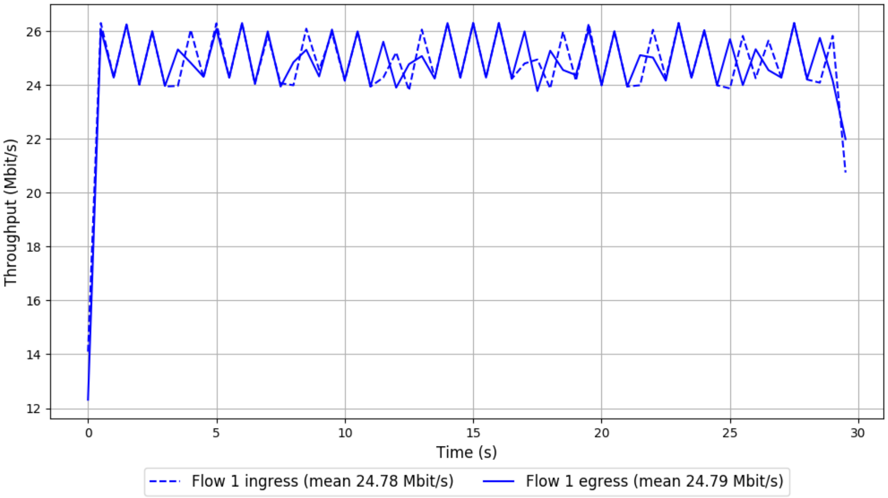
Run 1: Report of Sprout — Data Link

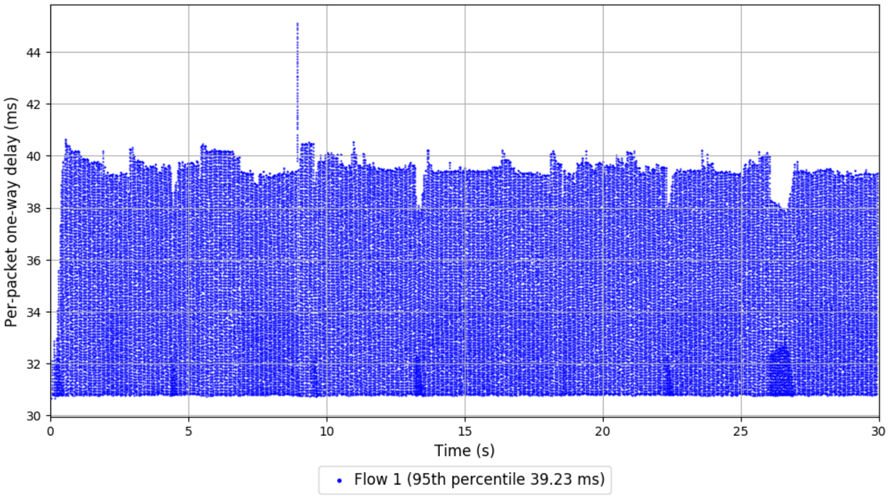




```
Run 2: Statistics of Sprout

Start at: 2018-02-19 21:31:08
End at: 2018-02-19 21:31:38
Local clock offset: -4.254 ms
Remote clock offset: -21.478 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.79 Mbit/s
95th percentile per-packet one-way delay: 39.233 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 24.79 Mbit/s
95th percentile per-packet one-way delay: 39.233 ms
Loss rate: 0.05%
```

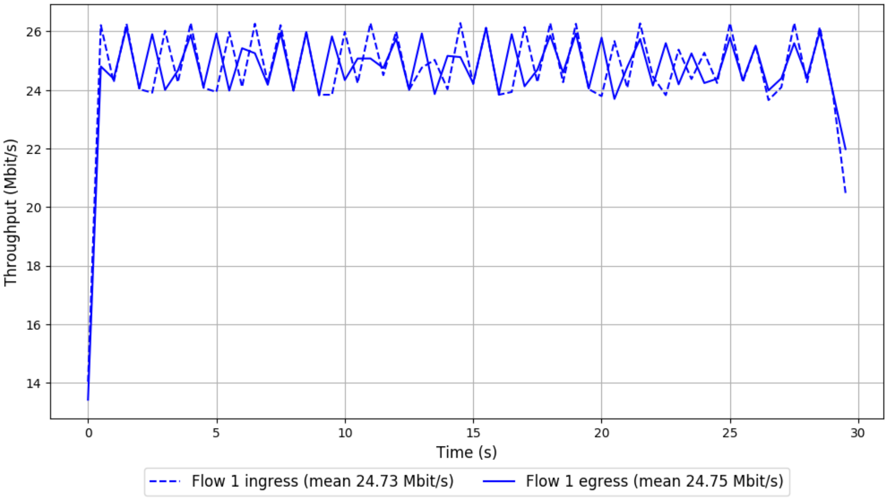
Run 2: Report of Sprout — Data Link

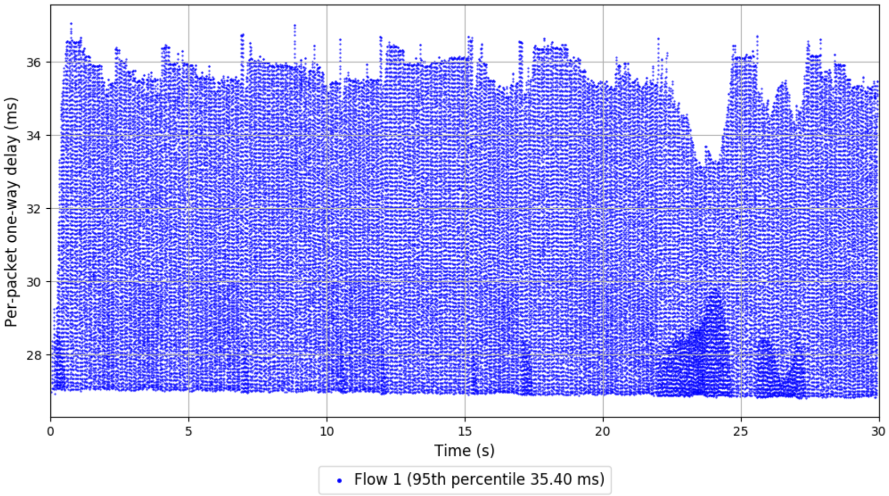




```
Run 3: Statistics of Sprout

Start at: 2018-02-19 21:52:56
End at: 2018-02-19 21:53:26
Local clock offset: -4.003 ms
Remote clock offset: -17.122 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.75 Mbit/s
95th percentile per-packet one-way delay: 35.401 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 24.75 Mbit/s
95th percentile per-packet one-way delay: 35.401 ms
Loss rate: 0.03%
```

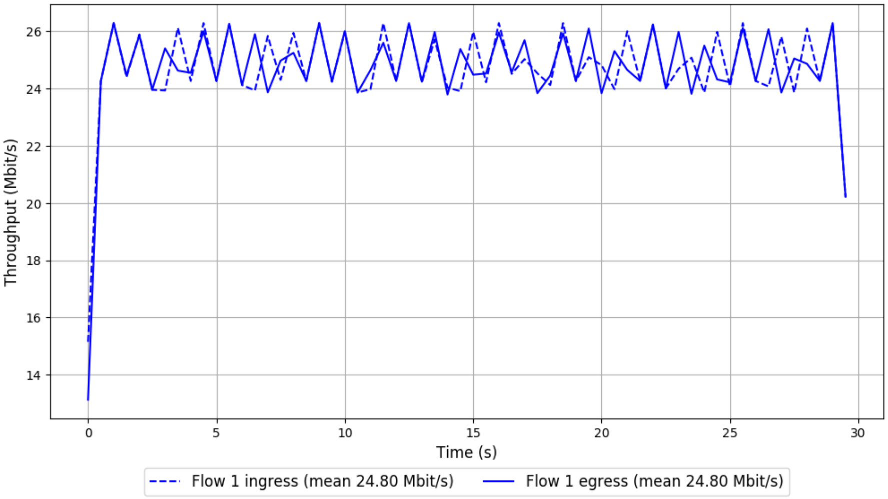
Run 3: Report of Sprout — Data Link

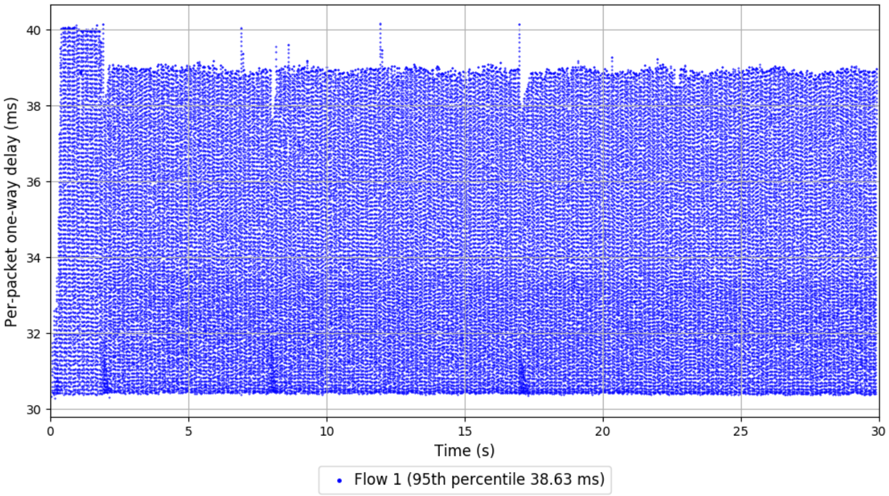




```
Run 4: Statistics of Sprout

Start at: 2018-02-19 22:14:25
End at: 2018-02-19 22:14:55
Local clock offset: 1.612 ms
Remote clock offset: -18.936 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.80 Mbit/s
95th percentile per-packet one-way delay: 38.628 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 24.80 Mbit/s
95th percentile per-packet one-way delay: 38.628 ms
Loss rate: 0.14%
```

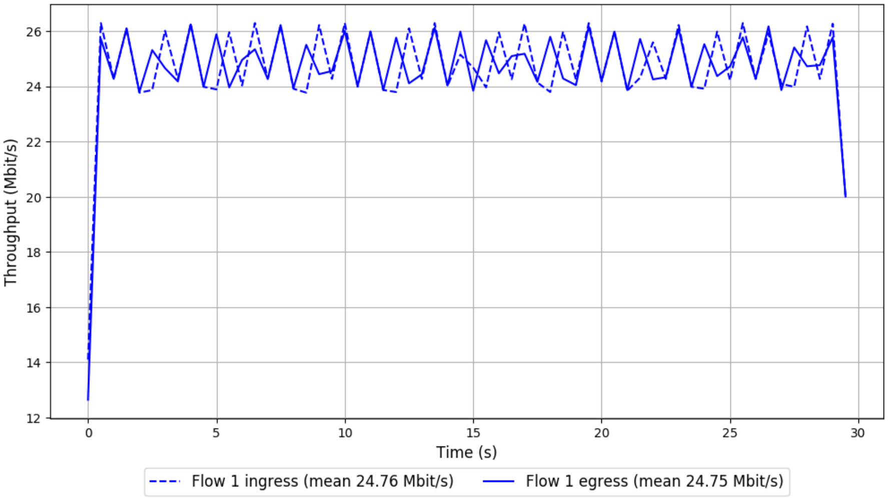
Run 4: Report of Sprout — Data Link

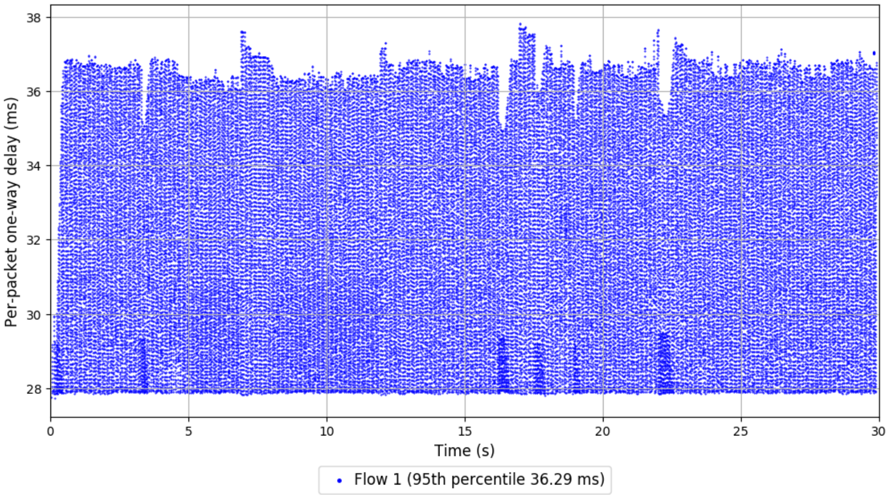




```
Run 5: Statistics of Sprout

Start at: 2018-02-19 22:36:01
End at: 2018-02-19 22:36:31
Local clock offset: -0.221 ms
Remote clock offset: -19.684 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.75 Mbit/s
95th percentile per-packet one-way delay: 36.286 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 24.75 Mbit/s
95th percentile per-packet one-way delay: 36.286 ms
Loss rate: 0.13%
```

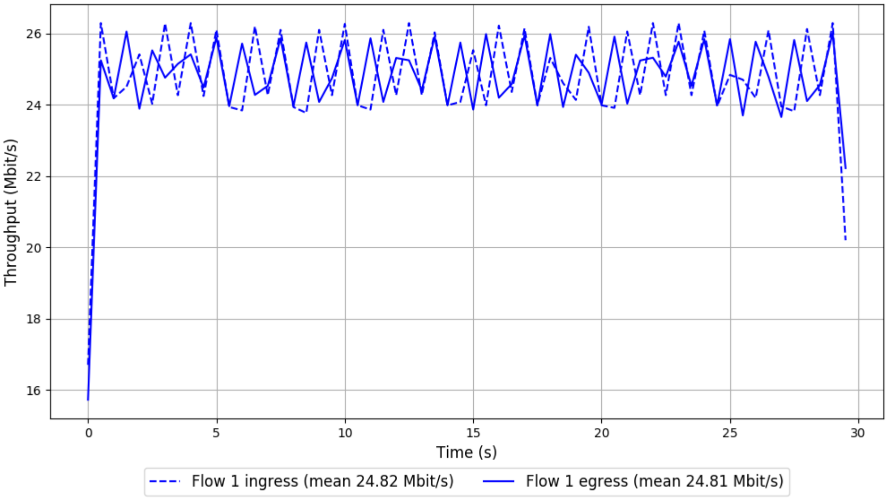
Run 5: Report of Sprout — Data Link

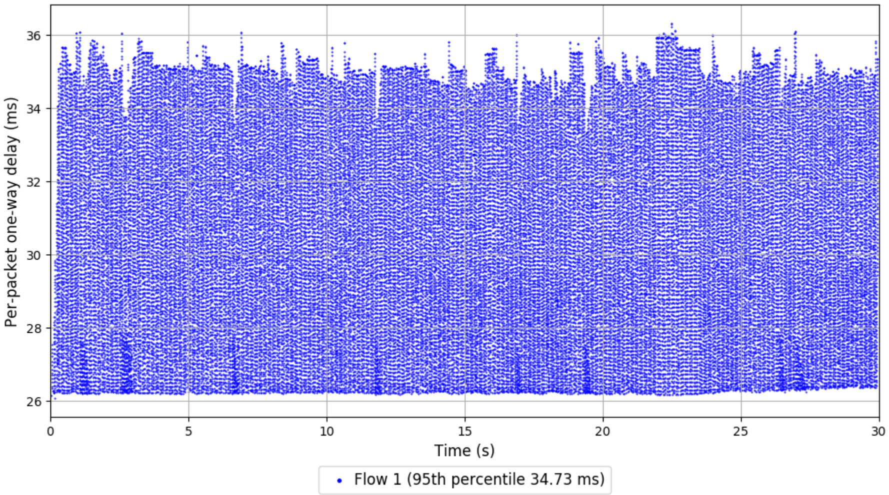




```
Run 6: Statistics of Sprout

Start at: 2018-02-19 22:57:55
End at: 2018-02-19 22:58:25
Local clock offset: -1.504 ms
Remote clock offset: -20.414 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.81 Mbit/s
95th percentile per-packet one-way delay: 34.735 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.81 Mbit/s
95th percentile per-packet one-way delay: 34.735 ms
Loss rate: 0.00%
```

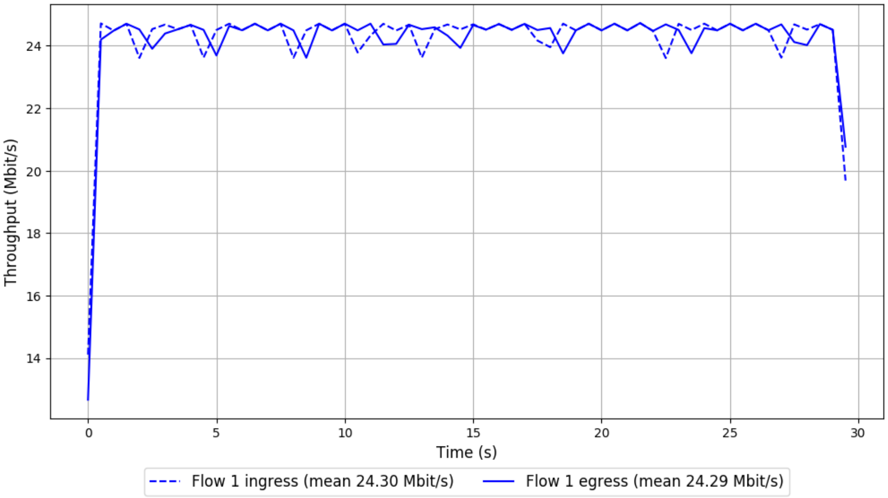
Run 6: Report of Sprout — Data Link

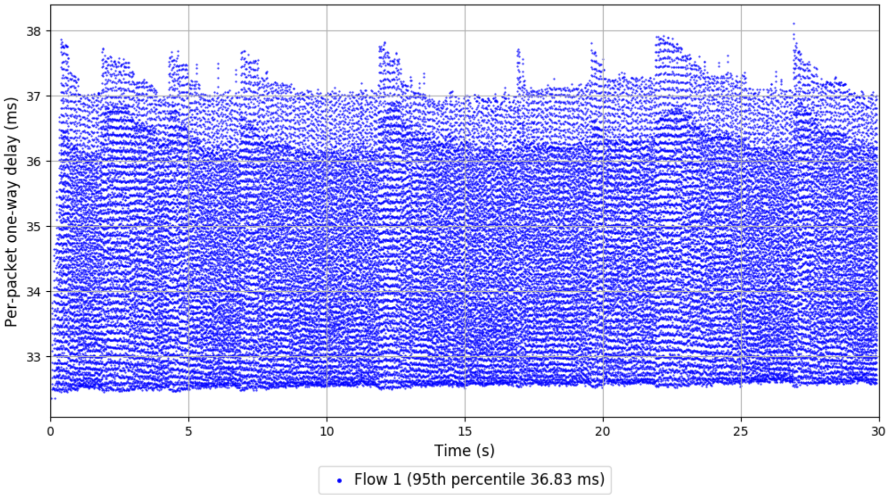




```
Run 7: Statistics of Sprout

Start at: 2018-02-19 23:19:19
End at: 2018-02-19 23:19:49
Local clock offset: -10.564 ms
Remote clock offset: -23.362 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.29 Mbit/s
95th percentile per-packet one-way delay: 36.834 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 24.29 Mbit/s
95th percentile per-packet one-way delay: 36.834 ms
Loss rate: 0.06%
```

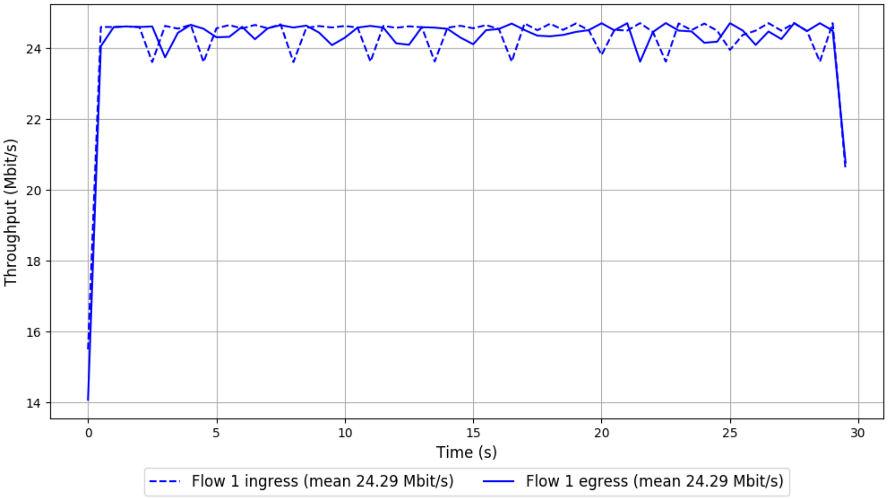
Run 7: Report of Sprout — Data Link

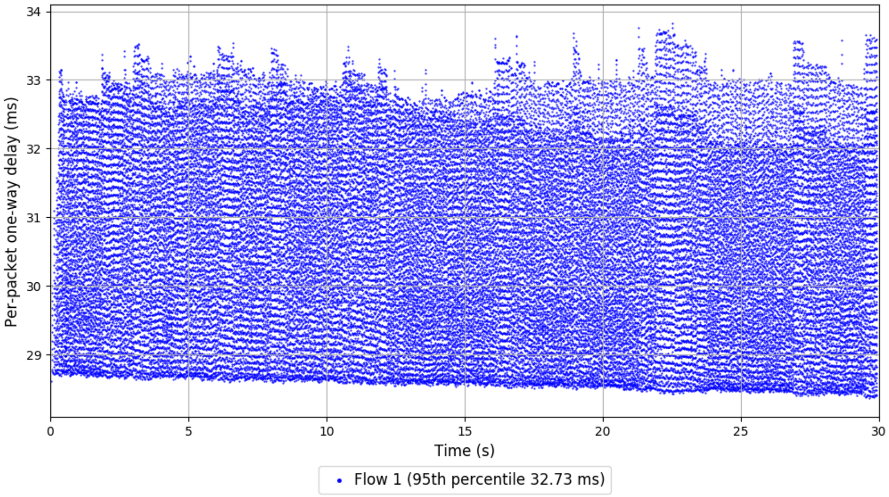




```
Run 8: Statistics of Sprout

Start at: 2018-02-19 23:40:57
End at: 2018-02-19 23:41:27
Local clock offset: -3.204 ms
Remote clock offset: -12.614 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.29 Mbit/s
95th percentile per-packet one-way delay: 32.725 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 24.29 Mbit/s
95th percentile per-packet one-way delay: 32.725 ms
Loss rate: 0.06%
```

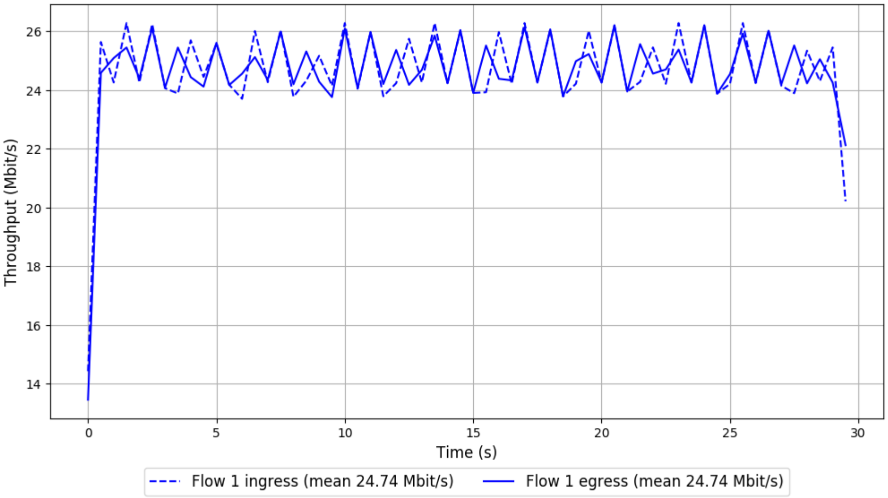
Run 8: Report of Sprout — Data Link

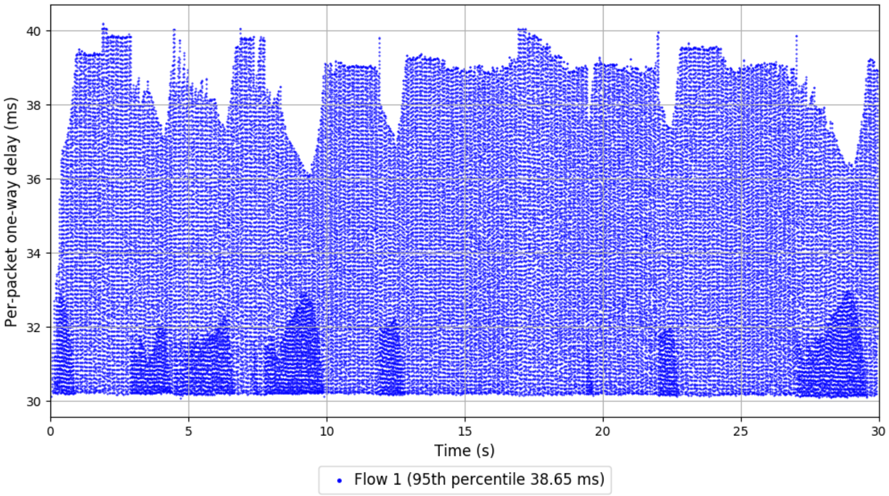




```
Run 9: Statistics of Sprout

Start at: 2018-02-20 00:02:10
End at: 2018-02-20 00:02:40
Local clock offset: 7.761 ms
Remote clock offset: -9.465 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.74 Mbit/s
95th percentile per-packet one-way delay: 38.654 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.74 Mbit/s
95th percentile per-packet one-way delay: 38.654 ms
Loss rate: 0.00%
```

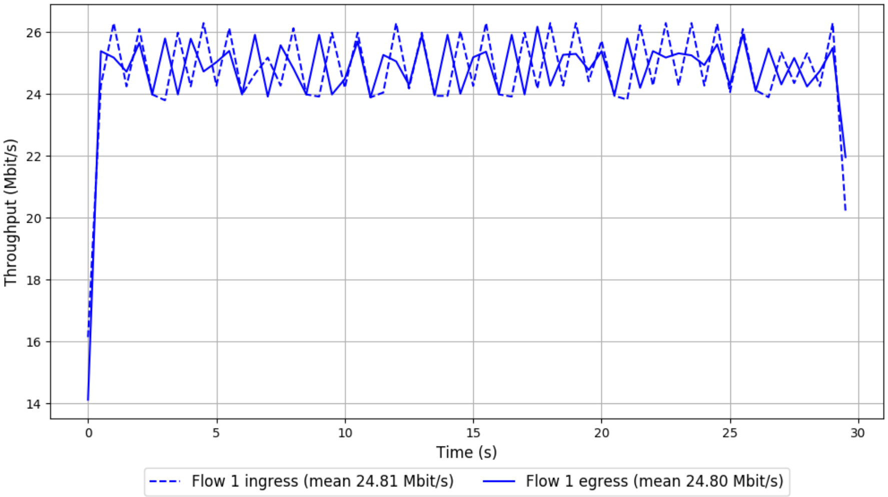
Run 9: Report of Sprout — Data Link

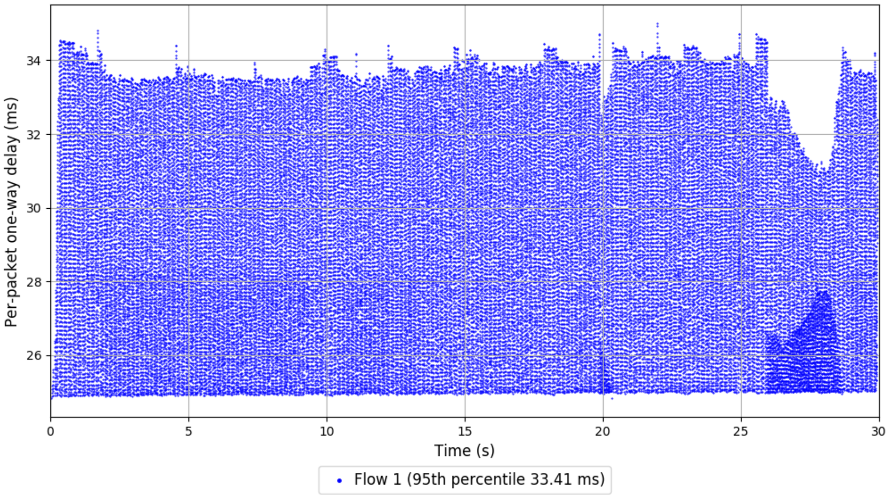




```
Run 10: Statistics of Sprout

Start at: 2018-02-20 00:23:52
End at: 2018-02-20 00:24:22
Local clock offset: -4.772 ms
Remote clock offset: -5.385 ms

# Below is generated by plot.py at 2018-02-20 04:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.80 Mbit/s
95th percentile per-packet one-way delay: 33.411 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 24.80 Mbit/s
95th percentile per-packet one-way delay: 33.411 ms
Loss rate: 0.02%
```

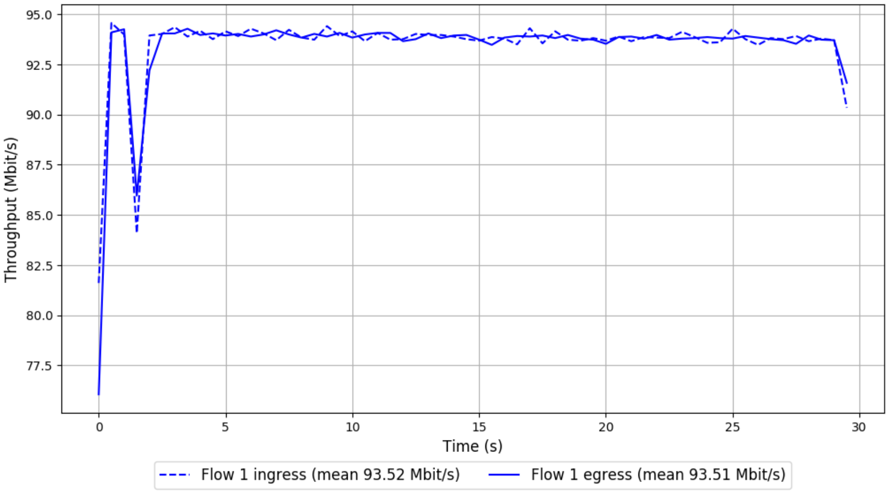
Run 10: Report of Sprout — Data Link

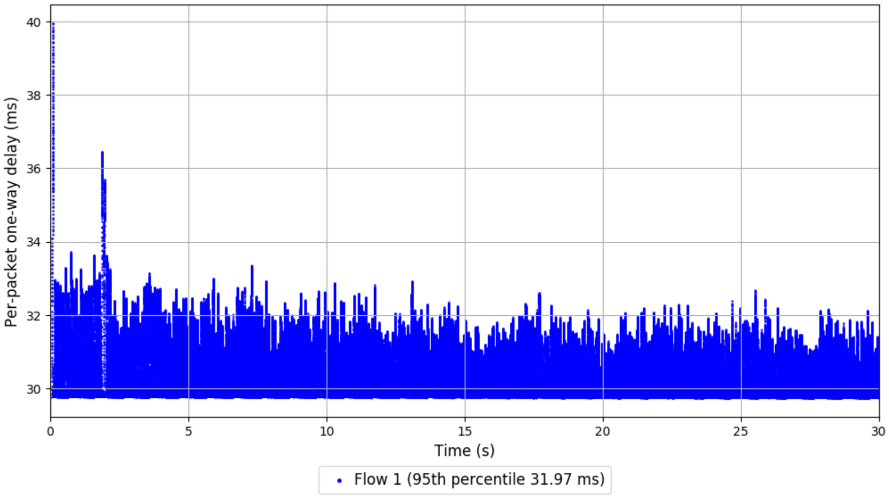




```
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-19 21:16:53
End at: 2018-02-19 21:17:23
Local clock offset: -5.269 ms
Remote clock offset: -21.333 ms

# Below is generated by plot.py at 2018-02-20 04:45:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.51 Mbit/s
95th percentile per-packet one-way delay: 31.967 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 93.51 Mbit/s
95th percentile per-packet one-way delay: 31.967 ms
Loss rate: 0.08%
```

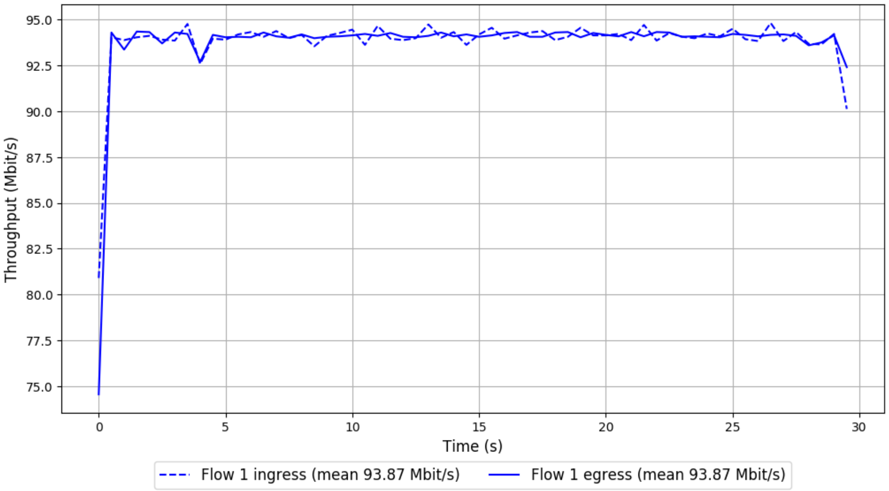
Run 1: Report of TaoVA-100x — Data Link

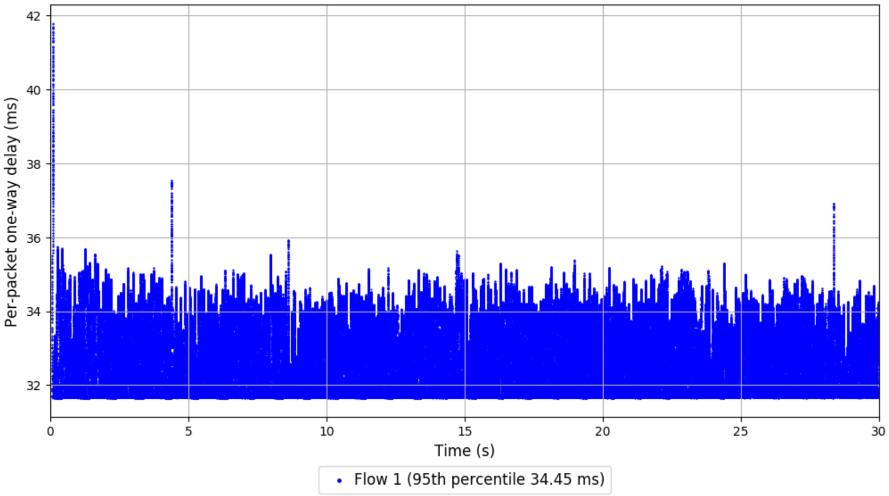




```
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-19 21:38:25
End at: 2018-02-19 21:38:55
Local clock offset: -3.532 ms
Remote clock offset: -21.662 ms

# Below is generated by plot.py at 2018-02-20 04:45:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.87 Mbit/s
95th percentile per-packet one-way delay: 34.451 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 93.87 Mbit/s
95th percentile per-packet one-way delay: 34.451 ms
Loss rate: 0.07%
```

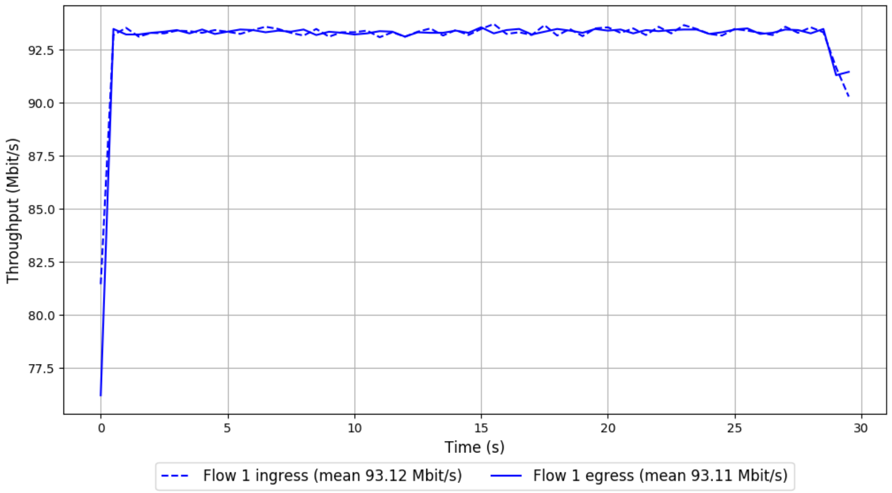
Run 2: Report of TaoVA-100x — Data Link

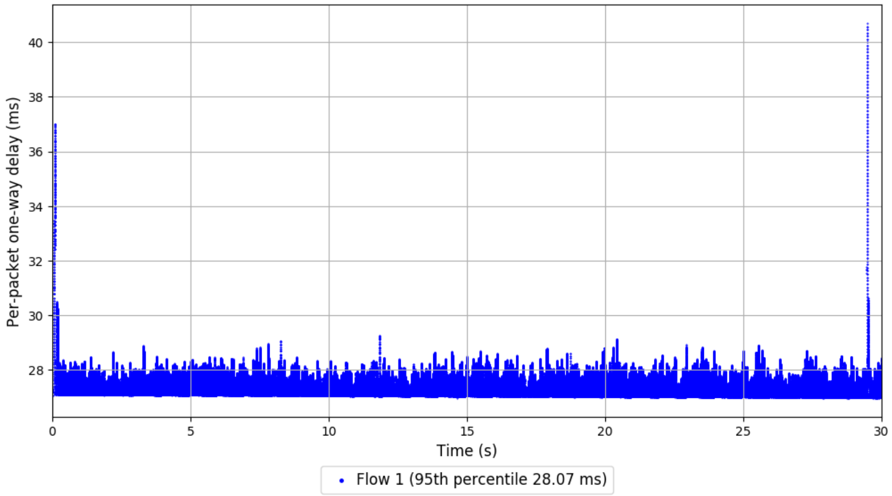




```
Run 3: Statistics of TaoVA-100x

Start at: 2018-02-19 22:00:12
End at: 2018-02-19 22:00:42
Local clock offset: -3.632 ms
Remote clock offset: -19.166 ms

# Below is generated by plot.py at 2018-02-20 04:45:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.11 Mbit/s
95th percentile per-packet one-way delay: 28.066 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 93.11 Mbit/s
95th percentile per-packet one-way delay: 28.066 ms
Loss rate: 0.08%
```

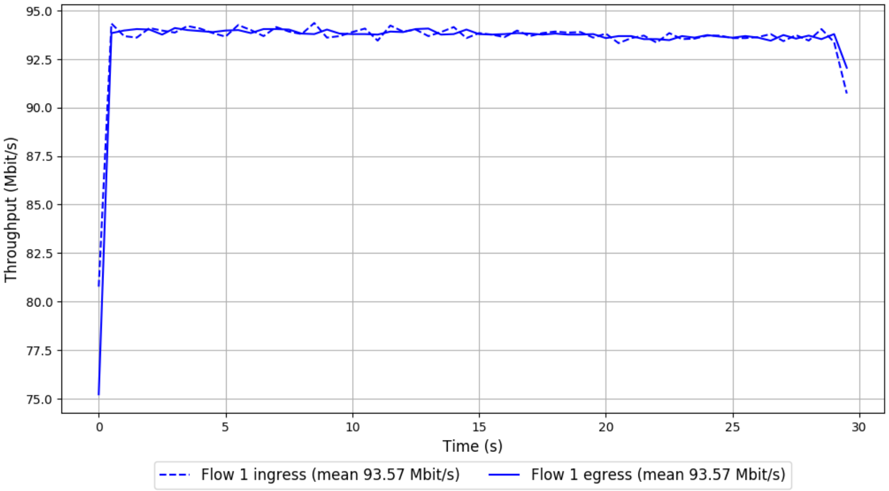
Run 3: Report of TaoVA-100x — Data Link

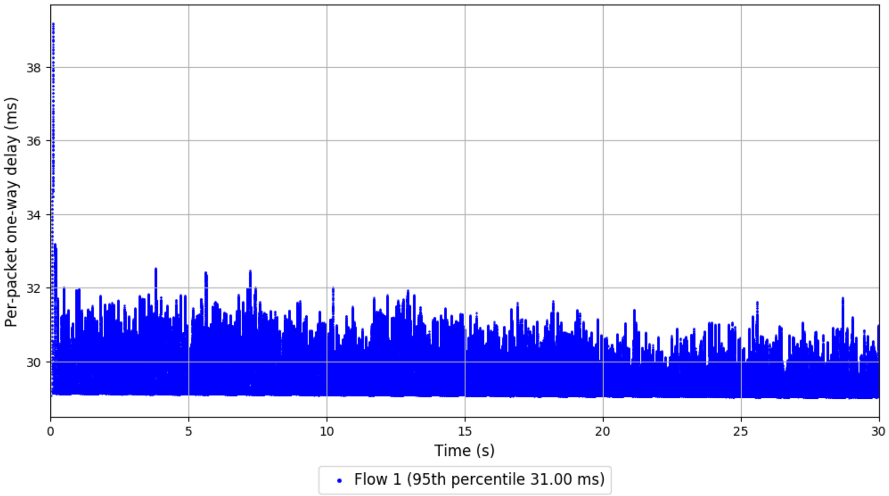




```
Run 4: Statistics of TaoVA-100x

Start at: 2018-02-19 22:21:42
End at: 2018-02-19 22:22:12
Local clock offset: 2.349 ms
Remote clock offset: -18.421 ms

# Below is generated by plot.py at 2018-02-20 04:45:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.57 Mbit/s
95th percentile per-packet one-way delay: 31.004 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 93.57 Mbit/s
95th percentile per-packet one-way delay: 31.004 ms
Loss rate: 0.07%
```

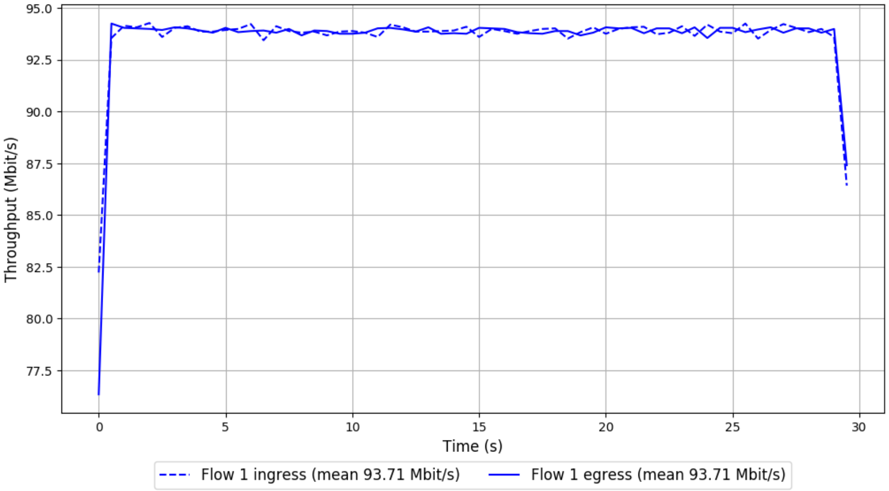
Run 4: Report of TaoVA-100x — Data Link

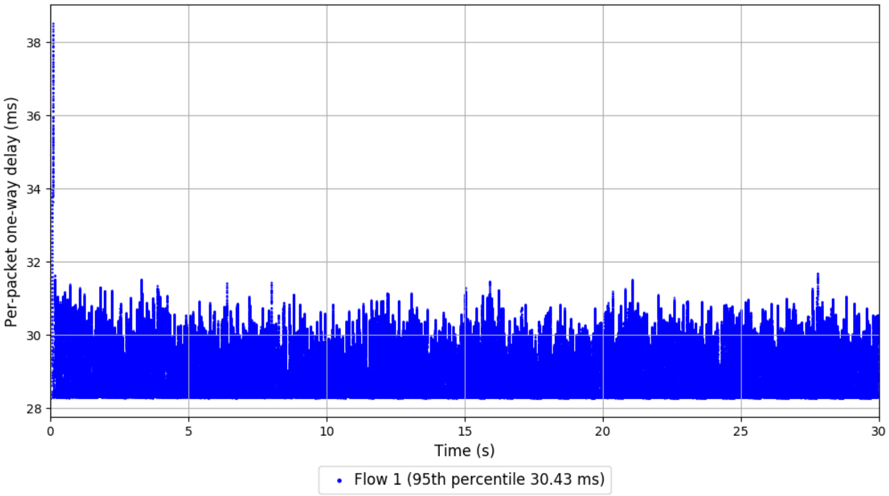




```
Run 5: Statistics of TaoVA-100x

Start at: 2018-02-19 22:43:30
End at: 2018-02-19 22:44:00
Local clock offset: 0.693 ms
Remote clock offset: -19.391 ms

# Below is generated by plot.py at 2018-02-20 04:45:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.71 Mbit/s
95th percentile per-packet one-way delay: 30.433 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 93.71 Mbit/s
95th percentile per-packet one-way delay: 30.433 ms
Loss rate: 0.08%
```

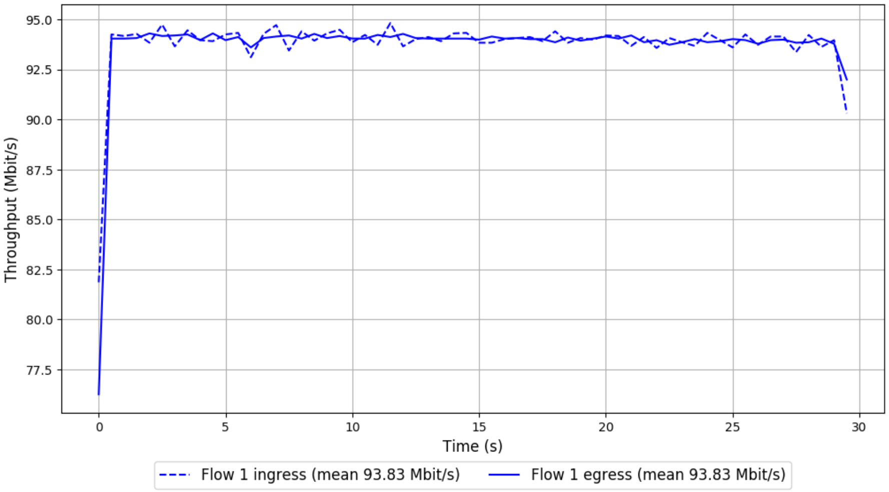
Run 5: Report of TaoVA-100x — Data Link

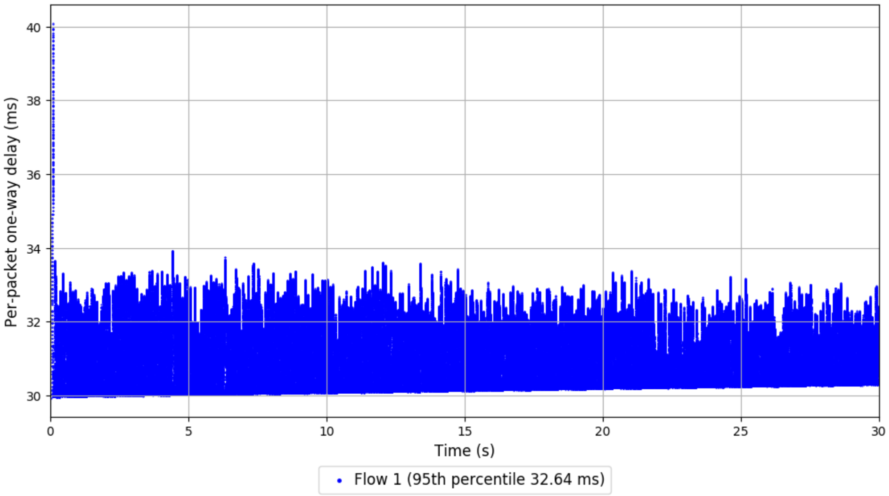




```
Run 6: Statistics of TaoVA-100x

Start at: 2018-02-19 23:05:15
End at: 2018-02-19 23:05:45
Local clock offset: -4.648 ms
Remote clock offset: -20.532 ms

# Below is generated by plot.py at 2018-02-20 04:45:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.83 Mbit/s
95th percentile per-packet one-way delay: 32.644 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 93.83 Mbit/s
95th percentile per-packet one-way delay: 32.644 ms
Loss rate: 0.07%
```

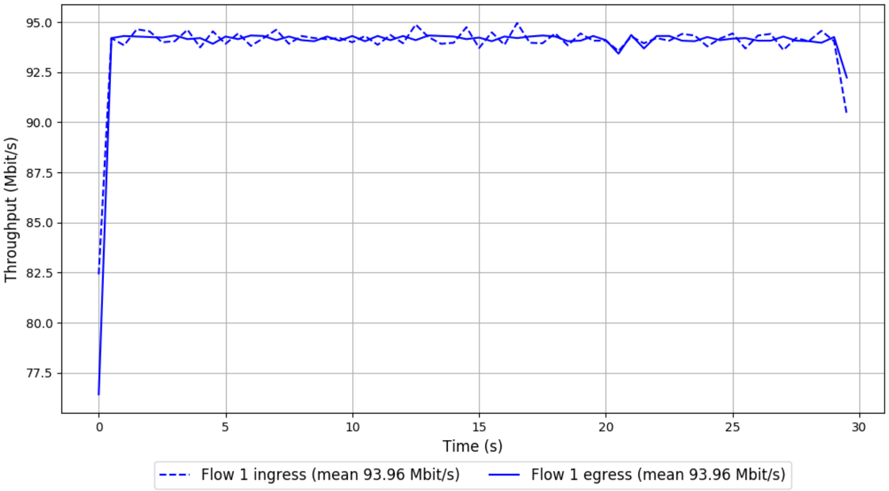
Run 6: Report of TaoVA-100x — Data Link

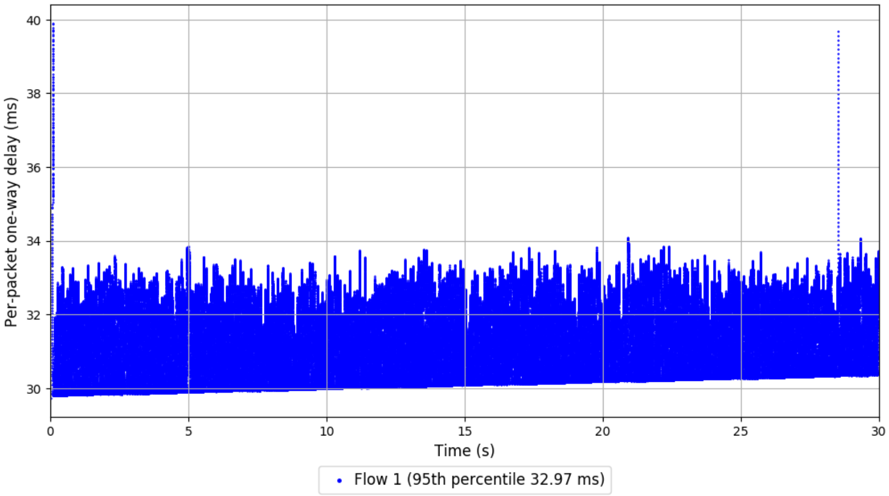




```
Run 7: Statistics of TaoVA-100x

Start at: 2018-02-19 23:26:34
End at: 2018-02-19 23:27:04
Local clock offset: -12.761 ms
Remote clock offset: -20.099 ms

# Below is generated by plot.py at 2018-02-20 04:45:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.96 Mbit/s
95th percentile per-packet one-way delay: 32.965 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 93.96 Mbit/s
95th percentile per-packet one-way delay: 32.965 ms
Loss rate: 0.08%
```

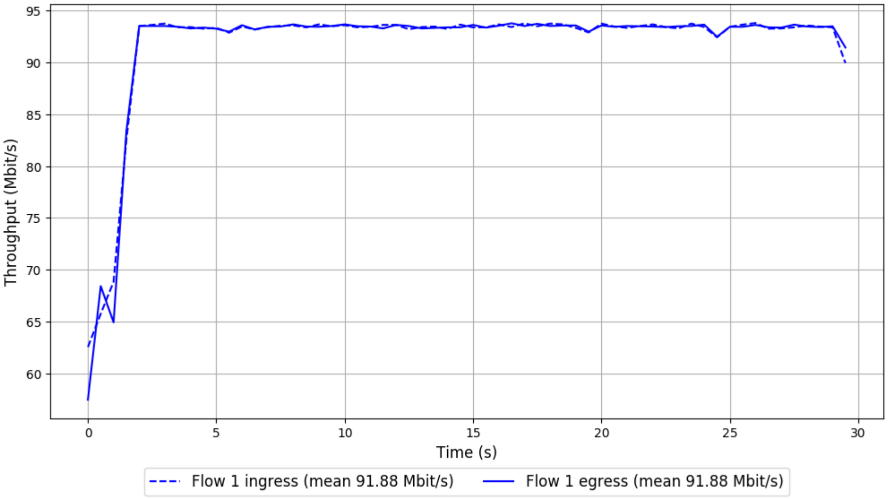
Run 7: Report of TaoVA-100x — Data Link

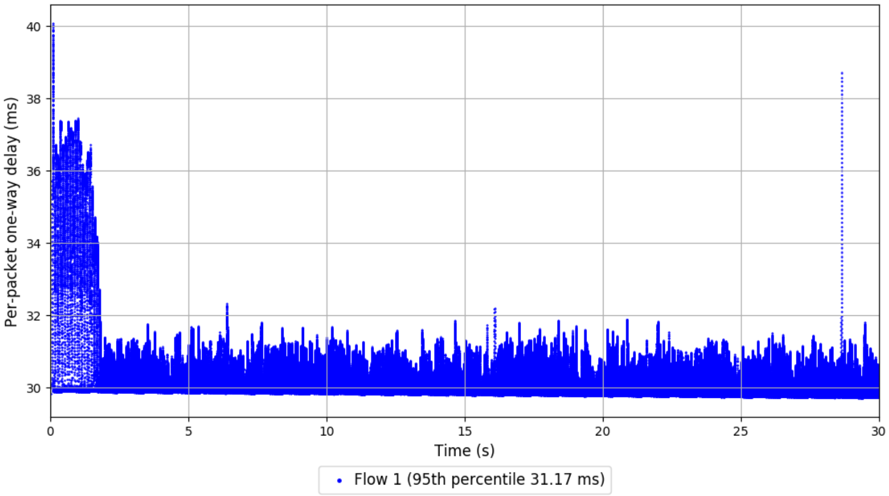




```
Run 8: Statistics of TaoVA-100x

Start at: 2018-02-19 23:48:09
End at: 2018-02-19 23:48:39
Local clock offset: 2.547 ms
Remote clock offset: -11.417 ms

# Below is generated by plot.py at 2018-02-20 04:45:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.88 Mbit/s
95th percentile per-packet one-way delay: 31.173 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 91.88 Mbit/s
95th percentile per-packet one-way delay: 31.173 ms
Loss rate: 0.07%
```

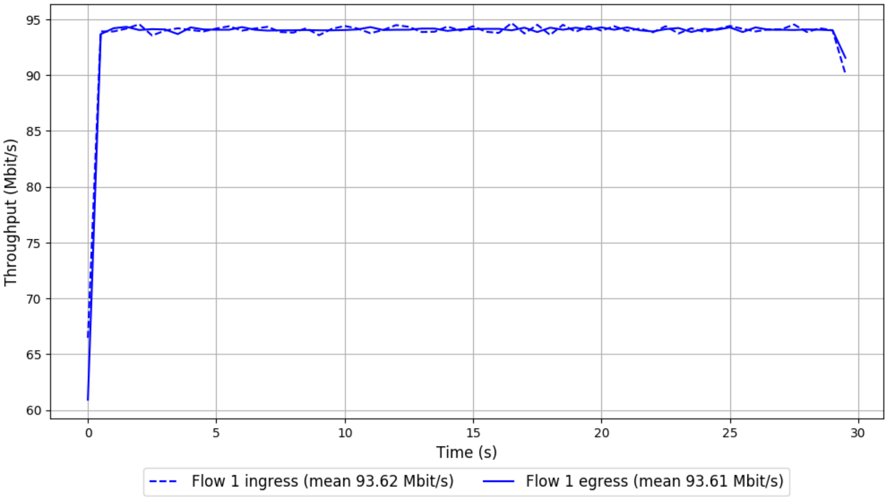
Run 8: Report of TaoVA-100x — Data Link

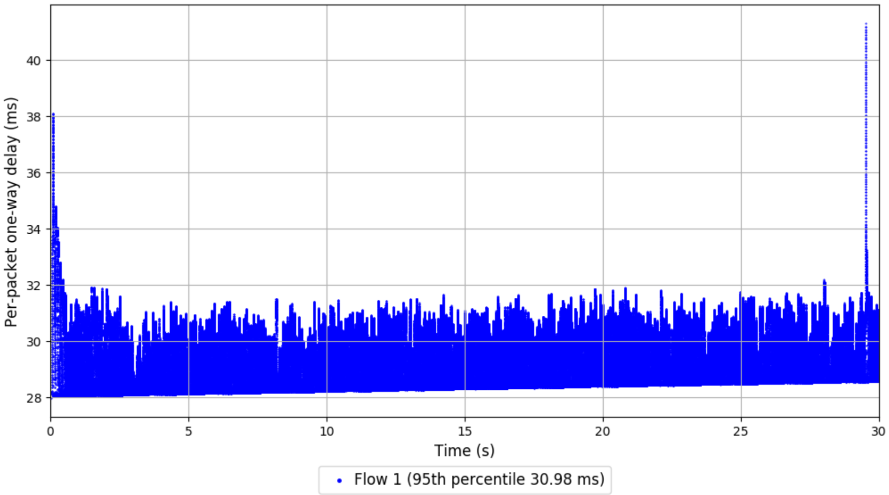




```
Run 9: Statistics of TaoVA-100x

Start at: 2018-02-20 00:09:29
End at: 2018-02-20 00:09:59
Local clock offset: 3.979 ms
Remote clock offset: -8.0 ms

# Below is generated by plot.py at 2018-02-20 04:47:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.61 Mbit/s
95th percentile per-packet one-way delay: 30.984 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 93.61 Mbit/s
95th percentile per-packet one-way delay: 30.984 ms
Loss rate: 0.08%
```

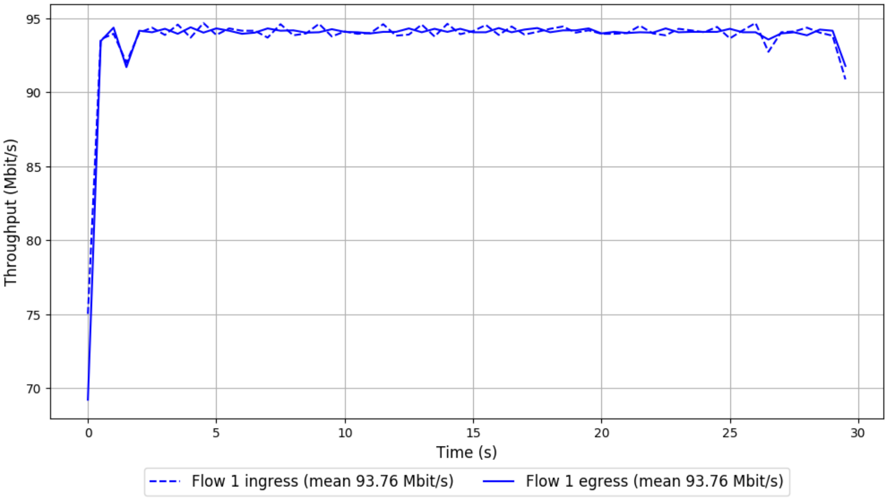
Run 9: Report of TaoVA-100x — Data Link

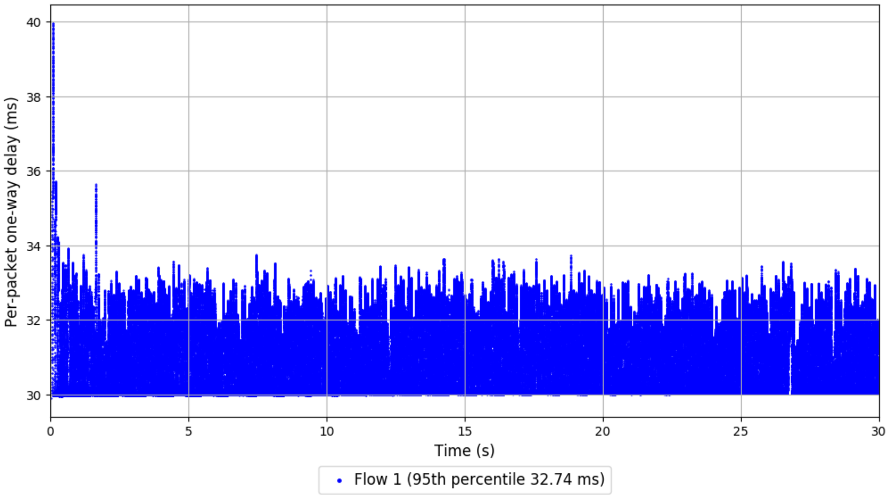




```
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-20 00:31:15
End at: 2018-02-20 00:31:45
Local clock offset: -2.677 ms
Remote clock offset: -6.957 ms

# Below is generated by plot.py at 2018-02-20 04:47:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.76 Mbit/s
95th percentile per-packet one-way delay: 32.740 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 93.76 Mbit/s
95th percentile per-packet one-way delay: 32.740 ms
Loss rate: 0.08%
```

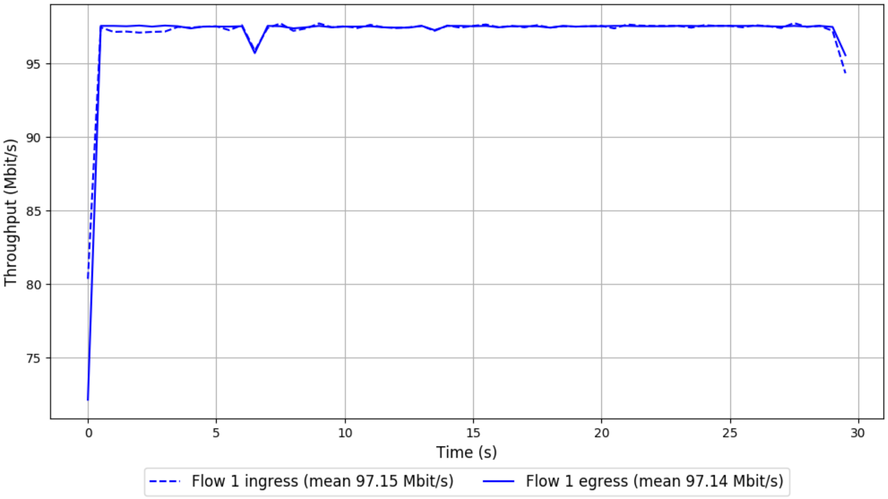
Run 10: Report of TaoVA-100x — Data Link

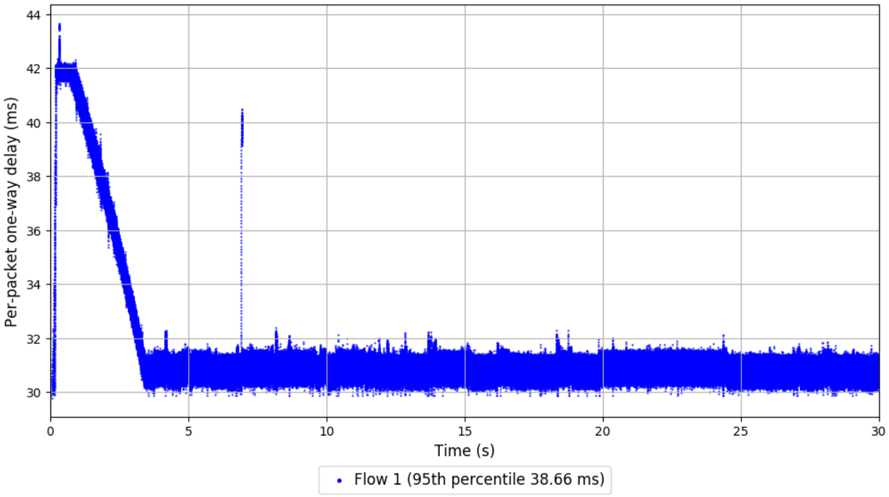




```
Run 1: Statistics of TCP Vegas

Start at: 2018-02-19 21:18:11
End at: 2018-02-19 21:18:41
Local clock offset: -4.657 ms
Remote clock offset: -20.875 ms

# Below is generated by plot.py at 2018-02-20 04:47:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.14 Mbit/s
95th percentile per-packet one-way delay: 38.655 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 97.14 Mbit/s
95th percentile per-packet one-way delay: 38.655 ms
Loss rate: 0.08%
```

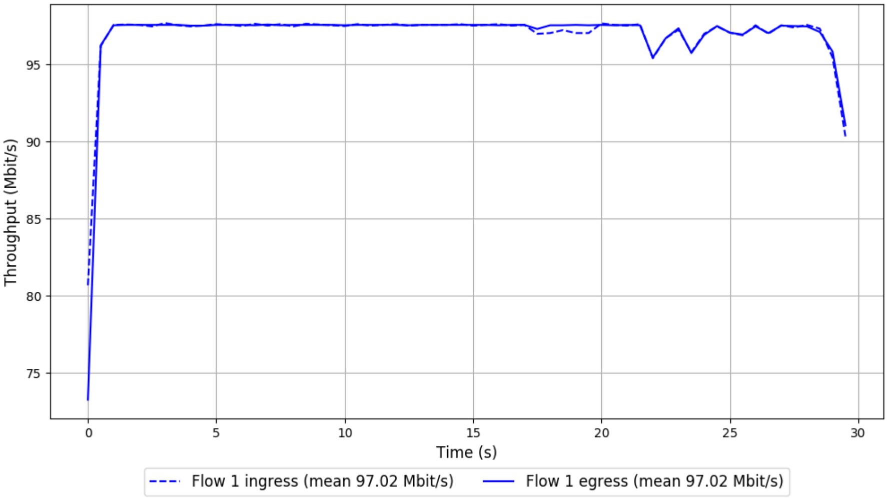
Run 1: Report of TCP Vegas — Data Link

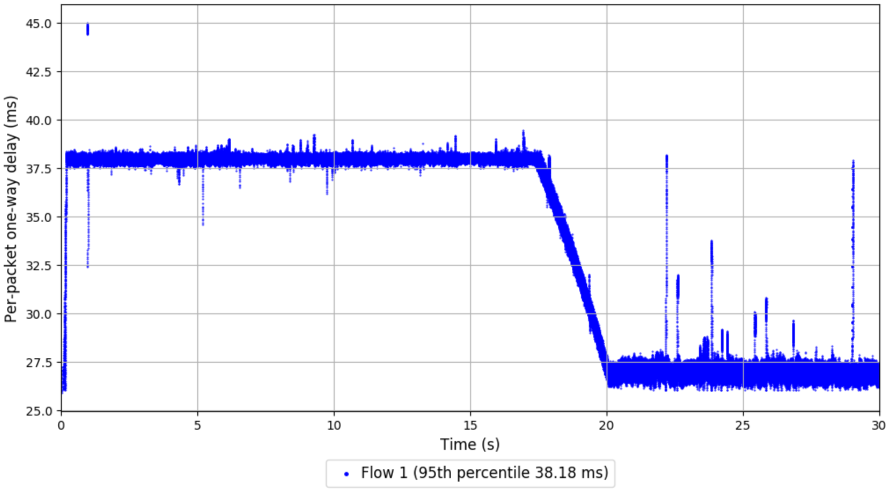




```
Run 2: Statistics of TCP Vegas

Start at: 2018-02-19 21:39:43
End at: 2018-02-19 21:40:13
Local clock offset: -7.118 ms
Remote clock offset: -19.602 ms

# Below is generated by plot.py at 2018-02-20 04:47:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.02 Mbit/s
95th percentile per-packet one-way delay: 38.178 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 97.02 Mbit/s
95th percentile per-packet one-way delay: 38.178 ms
Loss rate: 0.08%
```

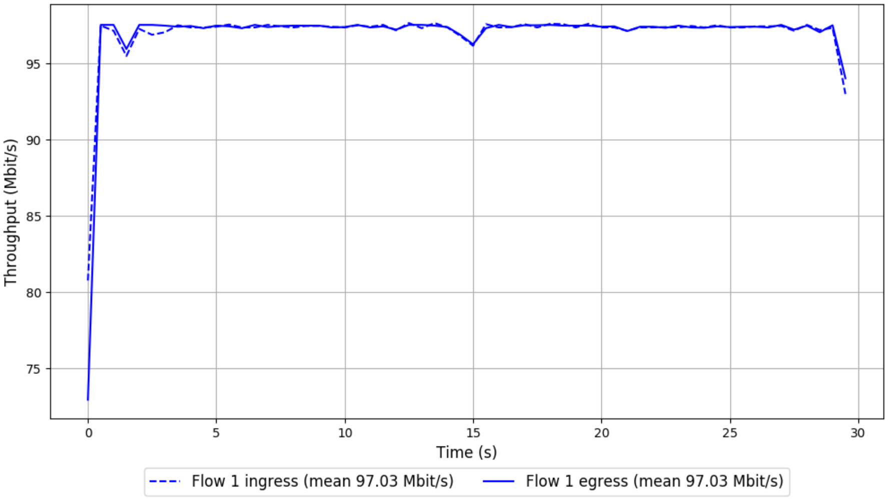
Run 2: Report of TCP Vegas — Data Link

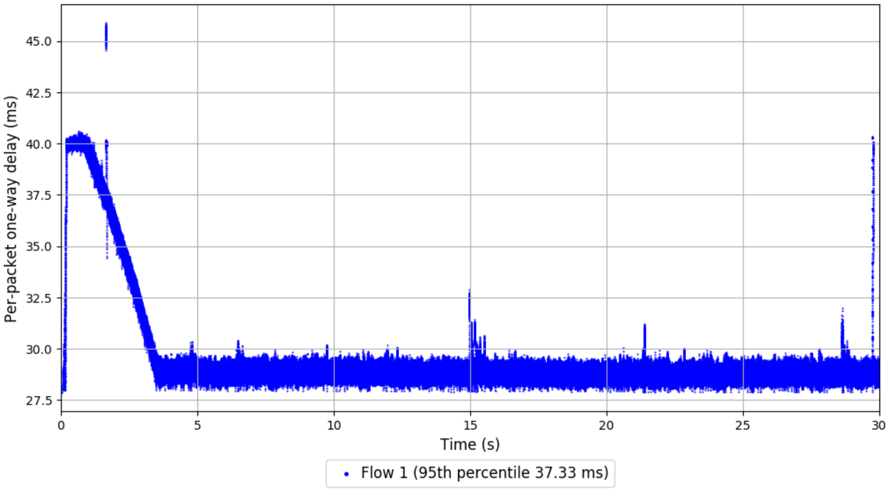




```
Run 3: Statistics of TCP Vegas

Start at: 2018-02-19 22:01:29
End at: 2018-02-19 22:01:59
Local clock offset: -0.702 ms
Remote clock offset: -17.364 ms

# Below is generated by plot.py at 2018-02-20 04:47:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.03 Mbit/s
95th percentile per-packet one-way delay: 37.328 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 97.03 Mbit/s
95th percentile per-packet one-way delay: 37.328 ms
Loss rate: 0.08%
```

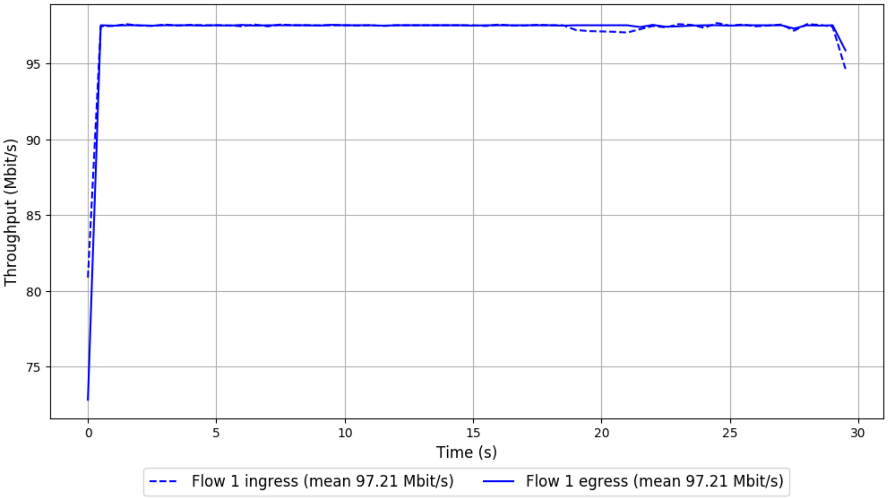
Run 3: Report of TCP Vegas — Data Link

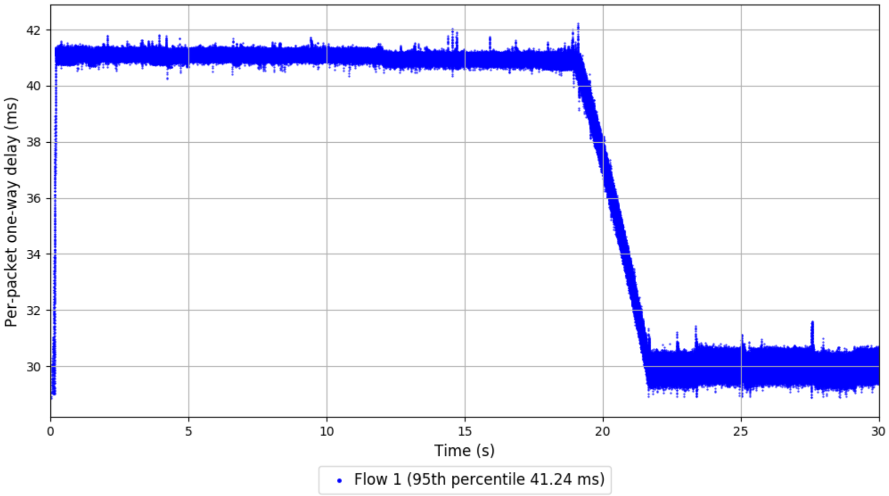




```
Run 4: Statistics of TCP Vegas

Start at: 2018-02-19 22:22:59
End at: 2018-02-19 22:23:29
Local clock offset: 0.085 ms
Remote clock offset: -20.806 ms

# Below is generated by plot.py at 2018-02-20 04:47:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.21 Mbit/s
95th percentile per-packet one-way delay: 41.244 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 97.21 Mbit/s
95th percentile per-packet one-way delay: 41.244 ms
Loss rate: 0.08%
```

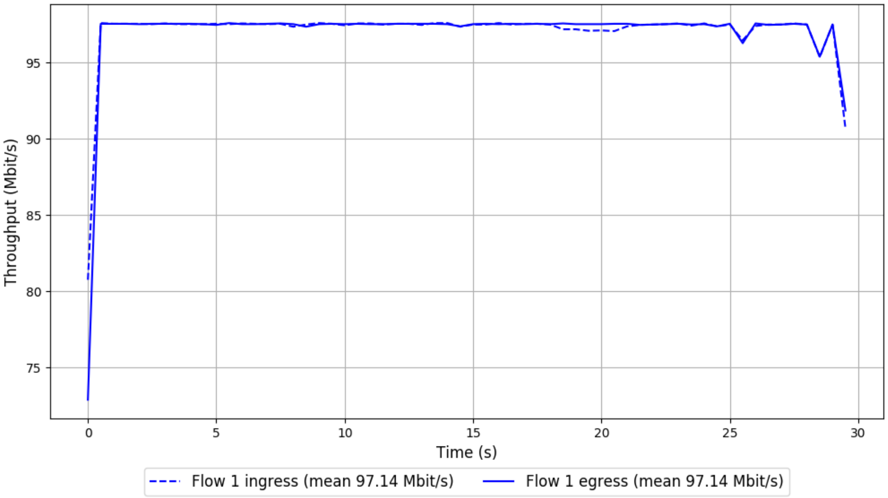
Run 4: Report of TCP Vegas — Data Link

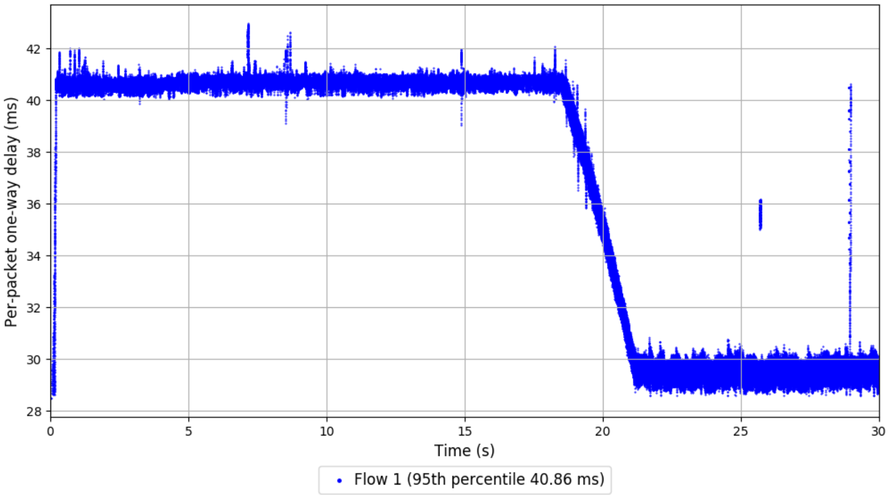




```
Run 5: Statistics of TCP Vegas

Start at: 2018-02-19 22:44:49
End at: 2018-02-19 22:45:19
Local clock offset: 0.491 ms
Remote clock offset: -19.924 ms

# Below is generated by plot.py at 2018-02-20 04:47:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.14 Mbit/s
95th percentile per-packet one-way delay: 40.858 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 97.14 Mbit/s
95th percentile per-packet one-way delay: 40.858 ms
Loss rate: 0.08%
```

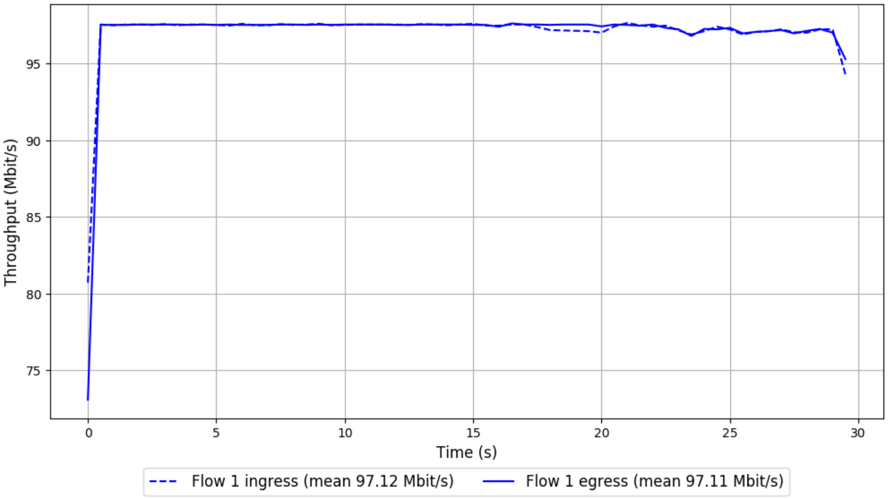
Run 5: Report of TCP Vegas — Data Link

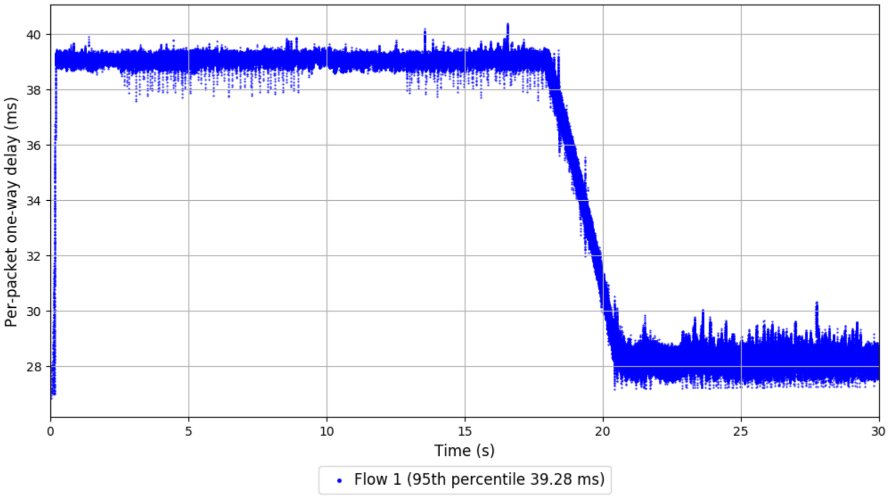




```
Run 6: Statistics of TCP Vegas

Start at: 2018-02-19 23:06:28
End at: 2018-02-19 23:06:58
Local clock offset: -8.639 ms
Remote clock offset: -20.734 ms

# Below is generated by plot.py at 2018-02-20 04:47:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.11 Mbit/s
95th percentile per-packet one-way delay: 39.280 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 97.11 Mbit/s
95th percentile per-packet one-way delay: 39.280 ms
Loss rate: 0.08%
```

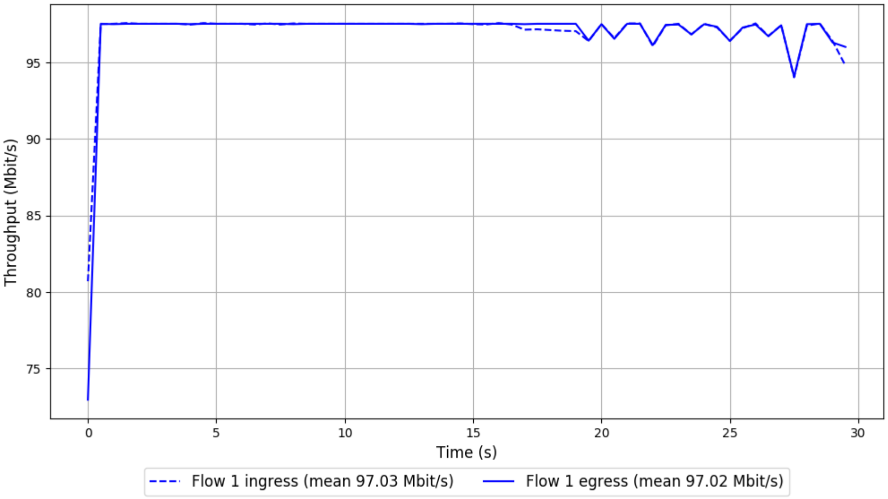
Run 6: Report of TCP Vegas — Data Link

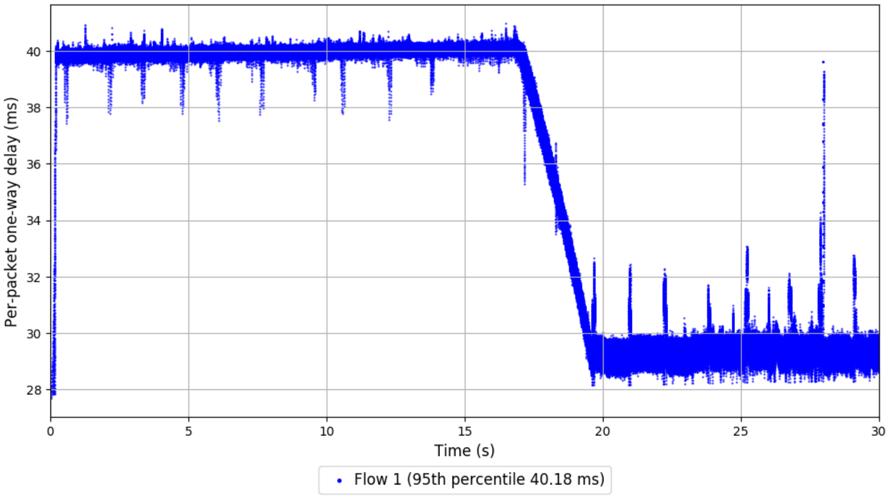




```
Run 7: Statistics of TCP Vegas

Start at: 2018-02-19 23:27:51
End at: 2018-02-19 23:28:21
Local clock offset: -15.169 ms
Remote clock offset: -19.12 ms

# Below is generated by plot.py at 2018-02-20 04:48:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.02 Mbit/s
95th percentile per-packet one-way delay: 40.179 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 97.02 Mbit/s
95th percentile per-packet one-way delay: 40.179 ms
Loss rate: 0.08%
```

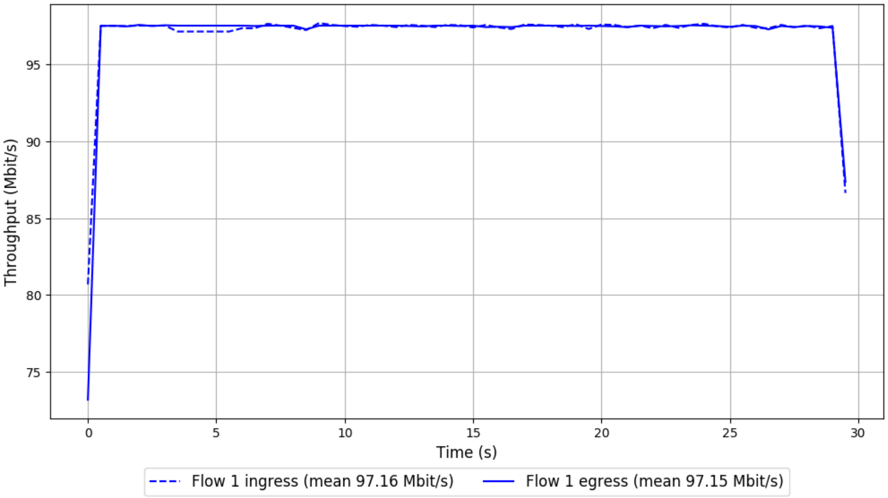
Run 7: Report of TCP Vegas — Data Link

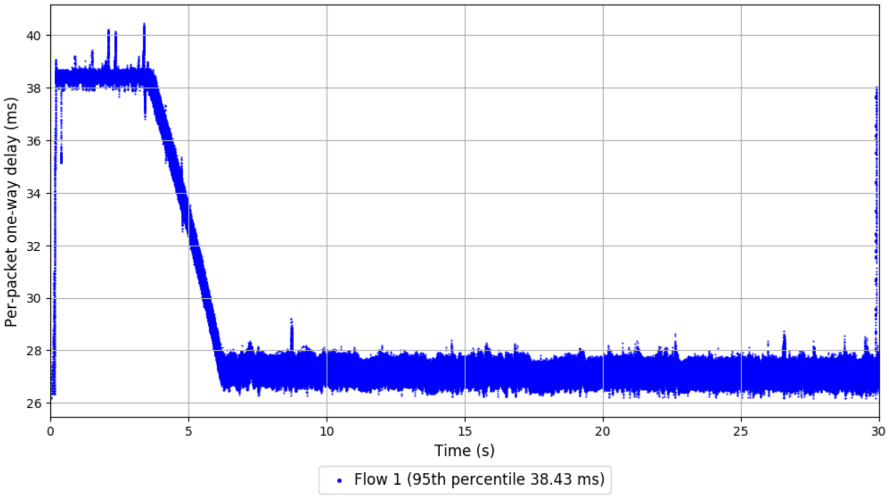




```
Run 8: Statistics of TCP Vegas

Start at: 2018-02-19 23:49:24
End at: 2018-02-19 23:49:54
Local clock offset: 0.909 ms
Remote clock offset: -9.887 ms

# Below is generated by plot.py at 2018-02-20 04:48:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.15 Mbit/s
95th percentile per-packet one-way delay: 38.427 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 97.15 Mbit/s
95th percentile per-packet one-way delay: 38.427 ms
Loss rate: 0.08%
```

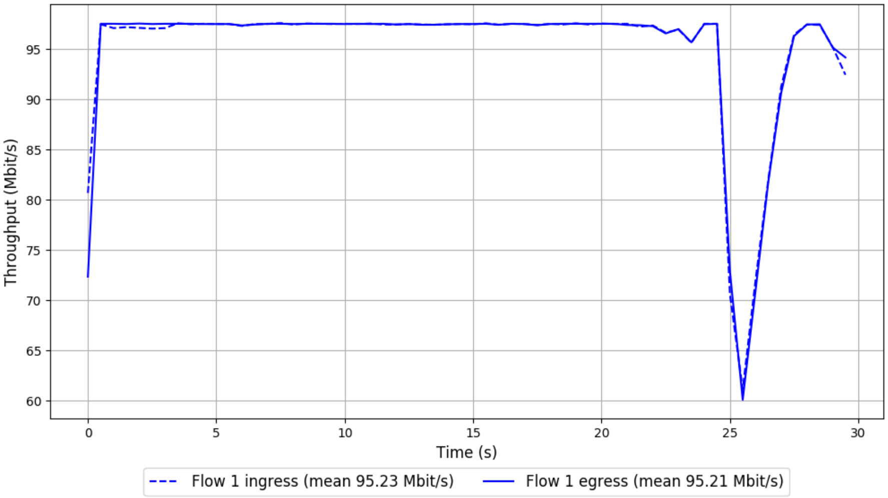
Run 8: Report of TCP Vegas — Data Link

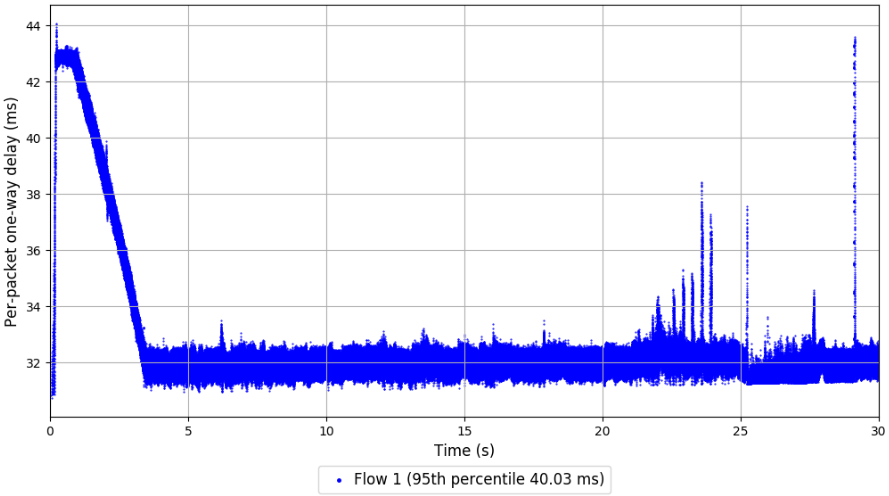




```
Run 9: Statistics of TCP Vegas

Start at: 2018-02-20 00:10:46
End at: 2018-02-20 00:11:16
Local clock offset: 4.221 ms
Remote clock offset: -9.241 ms

# Below is generated by plot.py at 2018-02-20 04:48:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.21 Mbit/s
95th percentile per-packet one-way delay: 40.027 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 95.21 Mbit/s
95th percentile per-packet one-way delay: 40.027 ms
Loss rate: 0.09%
```

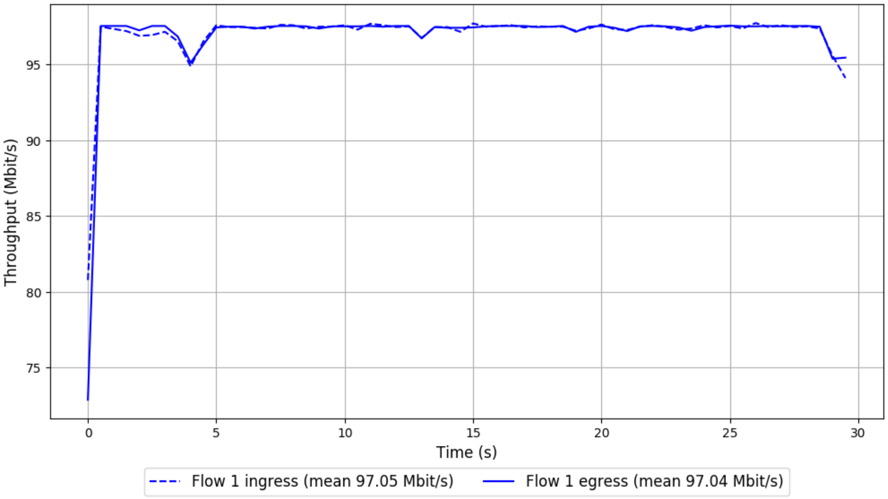
Run 9: Report of TCP Vegas — Data Link

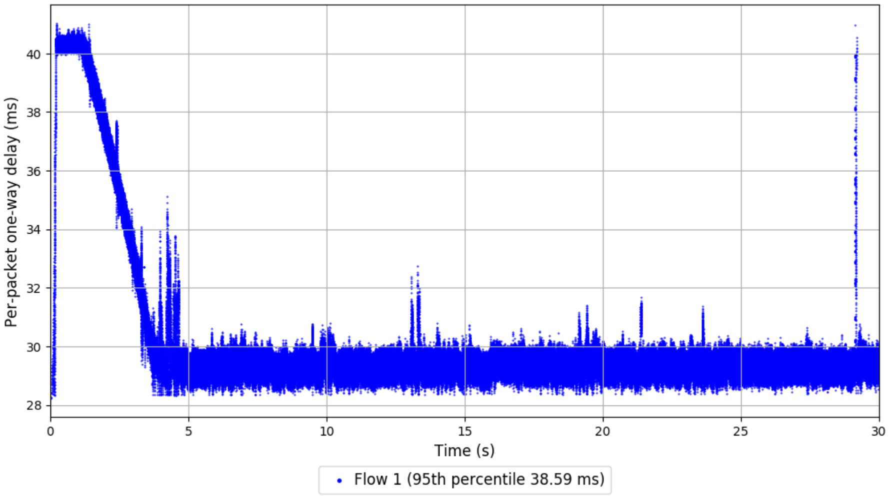




```
Run 10: Statistics of TCP Vegas

Start at: 2018-02-20 00:32:33
End at: 2018-02-20 00:33:03
Local clock offset: -3.571 ms
Remote clock offset: -6.038 ms

# Below is generated by plot.py at 2018-02-20 04:48:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.04 Mbit/s
95th percentile per-packet one-way delay: 38.593 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 97.04 Mbit/s
95th percentile per-packet one-way delay: 38.593 ms
Loss rate: 0.08%
```

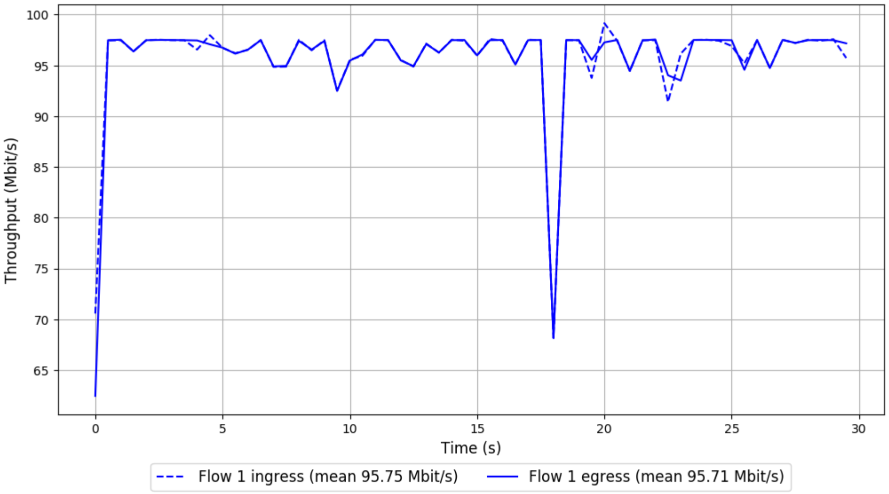
Run 10: Report of TCP Vegas — Data Link

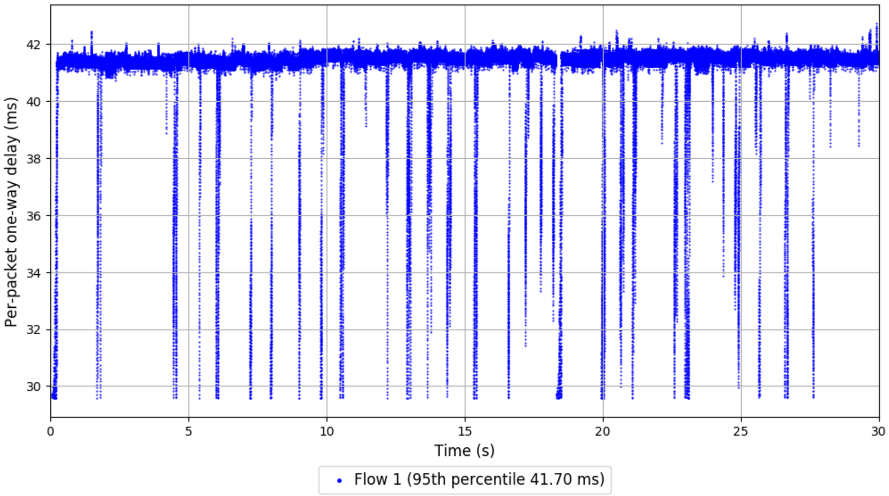




```
Run 1: Statistics of Verus

Start at: 2018-02-19 21:13:12
End at: 2018-02-19 21:13:42
Local clock offset: -5.127 ms
Remote clock offset: -21.003 ms

# Below is generated by plot.py at 2018-02-20 04:48:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.71 Mbit/s
95th percentile per-packet one-way delay: 41.702 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.71 Mbit/s
95th percentile per-packet one-way delay: 41.702 ms
Loss rate: 0.12%
```

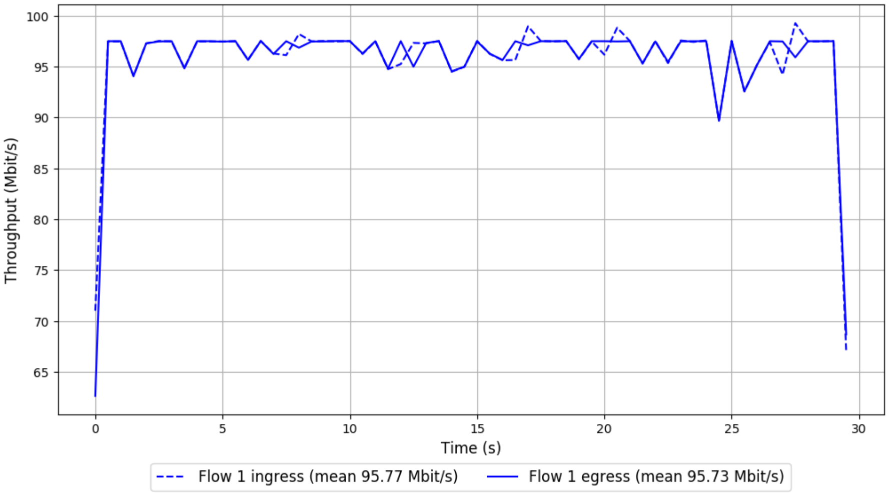
Run 1: Report of Verus — Data Link

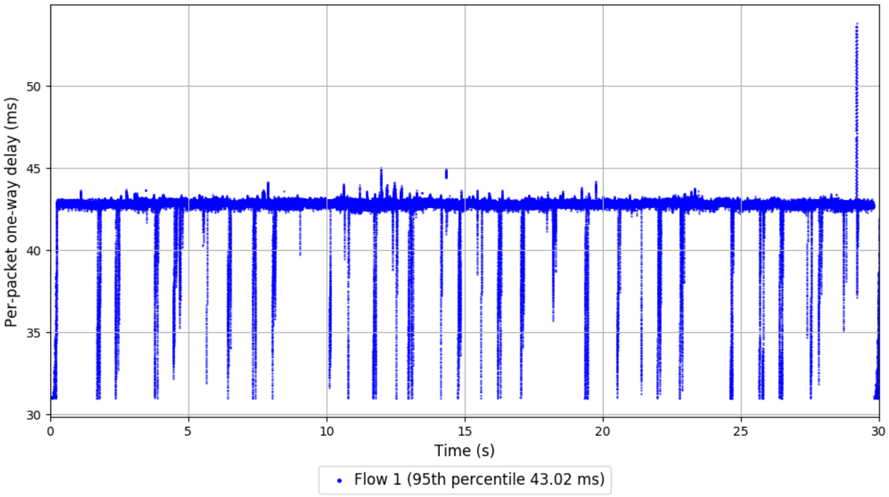




```
Run 2: Statistics of Verus

Start at: 2018-02-19 21:34:46
End at: 2018-02-19 21:35:16
Local clock offset: -4.639 ms
Remote clock offset: -22.122 ms

# Below is generated by plot.py at 2018-02-20 04:48:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.73 Mbit/s
95th percentile per-packet one-way delay: 43.025 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.73 Mbit/s
95th percentile per-packet one-way delay: 43.025 ms
Loss rate: 0.12%
```

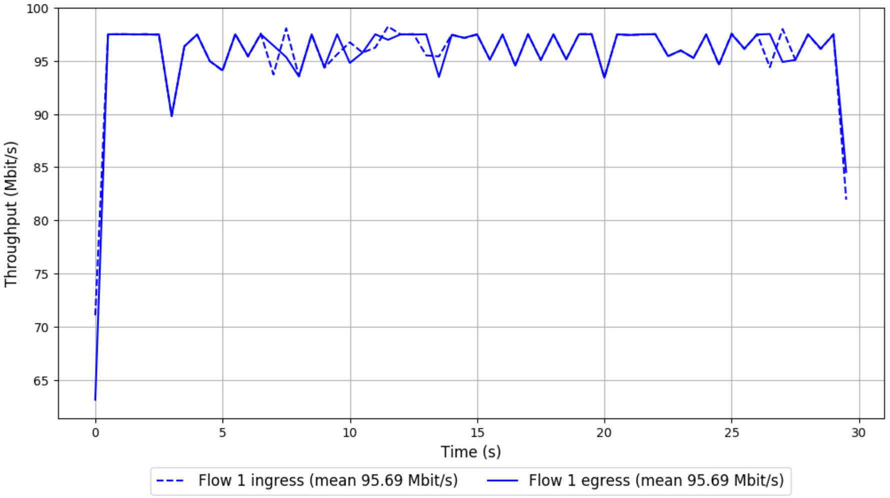
Run 2: Report of Verus — Data Link

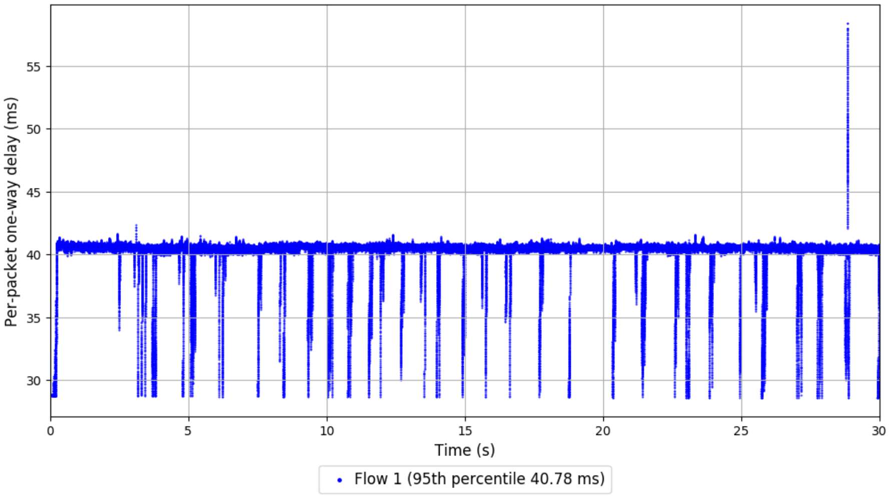




```
Run 3: Statistics of Verus

Start at: 2018-02-19 21:56:33
End at: 2018-02-19 21:57:03
Local clock offset: -2.06 ms
Remote clock offset: -18.242 ms

# Below is generated by plot.py at 2018-02-20 04:49:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.69 Mbit/s
95th percentile per-packet one-way delay: 40.780 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 95.69 Mbit/s
95th percentile per-packet one-way delay: 40.780 ms
Loss rate: 0.09%
```

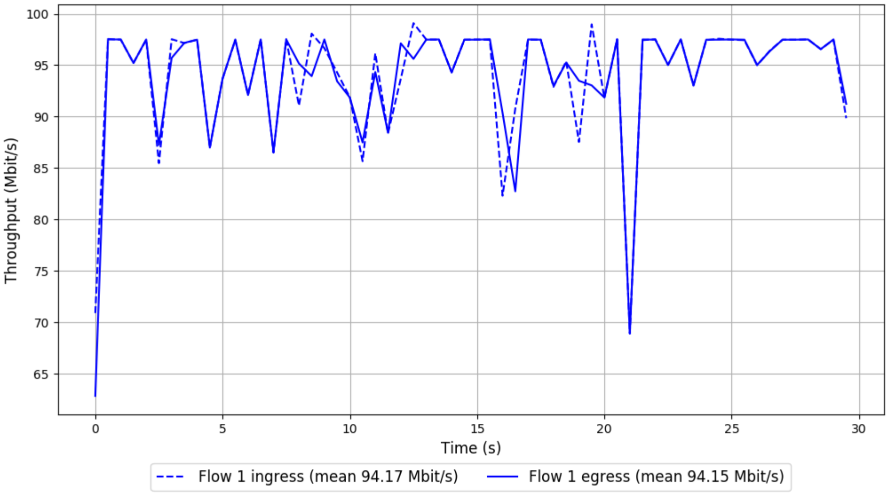
Run 3: Report of Verus — Data Link

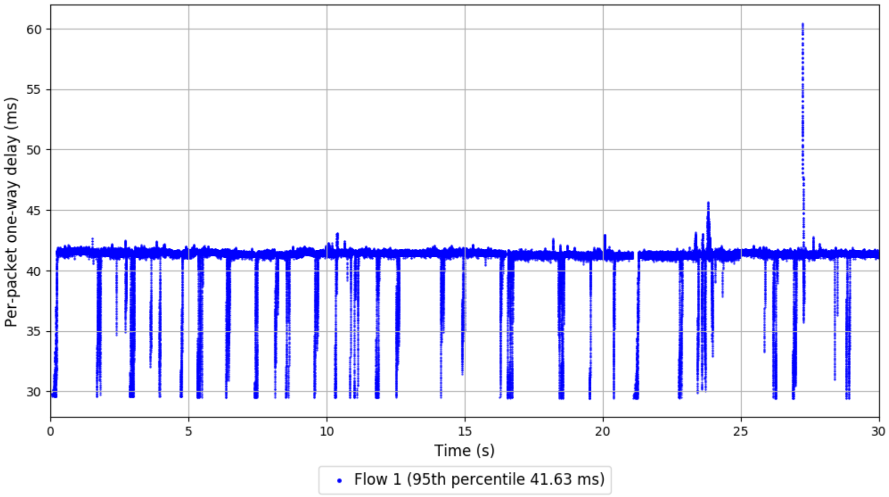




```
Run 4: Statistics of Verus

Start at: 2018-02-19 22:18:05
End at: 2018-02-19 22:18:35
Local clock offset: 2.656 ms
Remote clock offset: -17.606 ms

# Below is generated by plot.py at 2018-02-20 04:49:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.15 Mbit/s
95th percentile per-packet one-way delay: 41.635 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 94.15 Mbit/s
95th percentile per-packet one-way delay: 41.635 ms
Loss rate: 0.12%
```

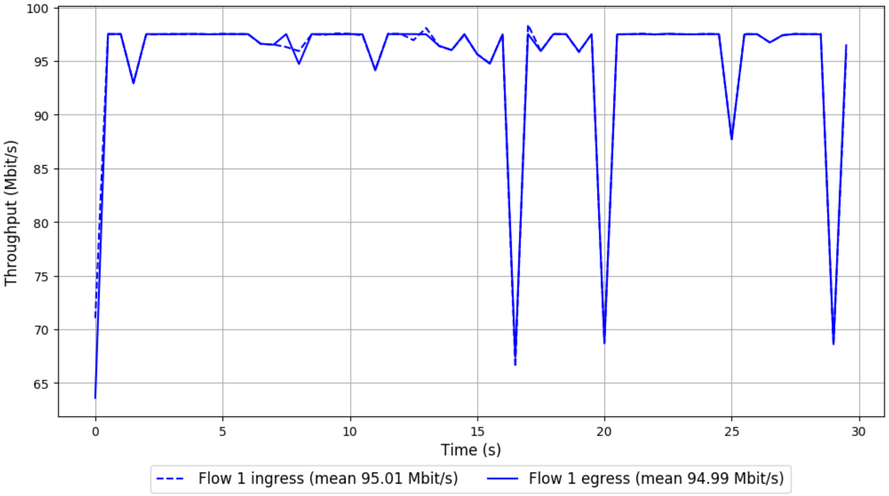
Run 4: Report of Verus — Data Link

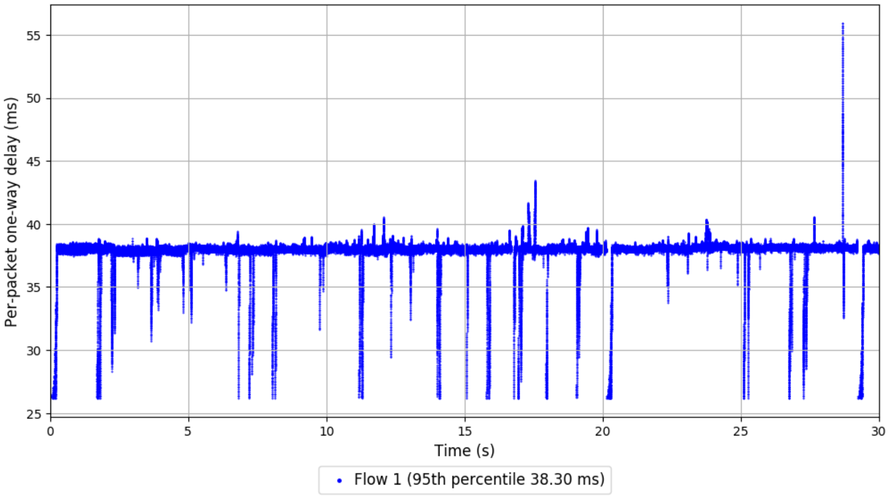




```
Run 5: Statistics of Verus

Start at: 2018-02-19 22:39:42
End at: 2018-02-19 22:40:12
Local clock offset: -1.5 ms
Remote clock offset: -19.393 ms

# Below is generated by plot.py at 2018-02-20 04:49:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.99 Mbit/s
95th percentile per-packet one-way delay: 38.302 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 94.99 Mbit/s
95th percentile per-packet one-way delay: 38.302 ms
Loss rate: 0.12%
```

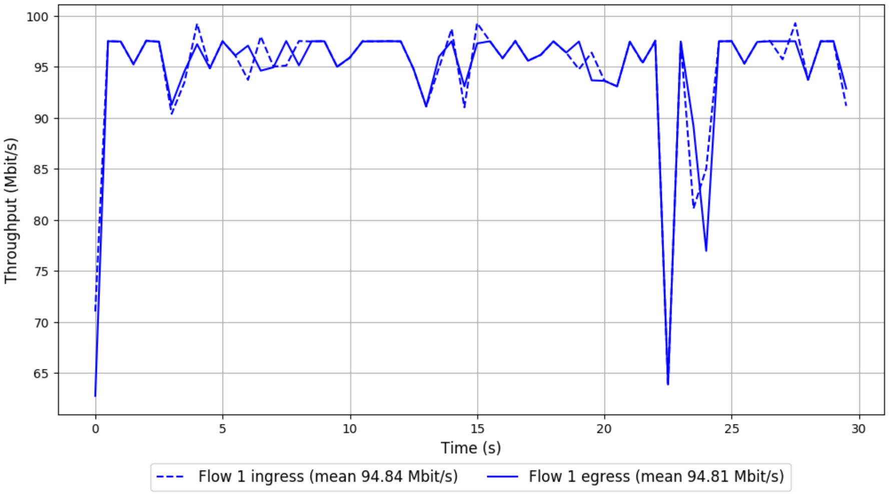
Run 5: Report of Verus — Data Link

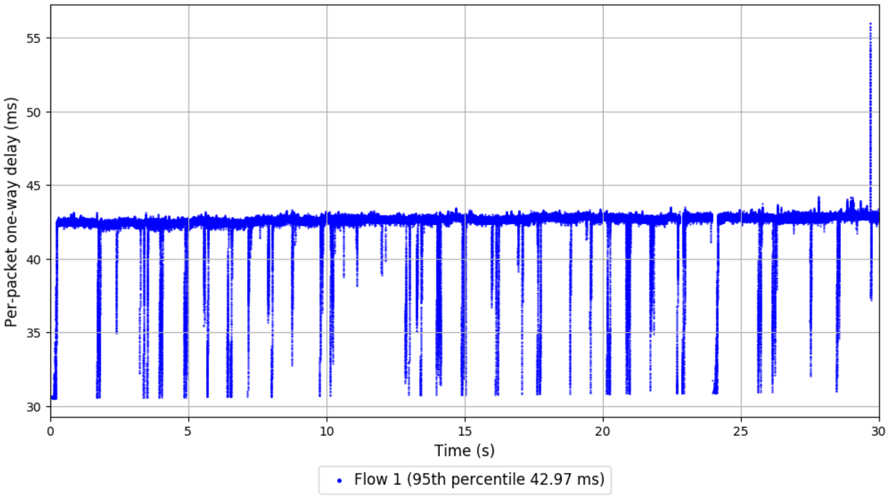




```
Run 6: Statistics of Verus

Start at: 2018-02-19 23:01:32
End at: 2018-02-19 23:02:02
Local clock offset: -1.658 ms
Remote clock offset: -21.174 ms

# Below is generated by plot.py at 2018-02-20 04:49:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.81 Mbit/s
95th percentile per-packet one-way delay: 42.970 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 94.81 Mbit/s
95th percentile per-packet one-way delay: 42.970 ms
Loss rate: 0.12%
```

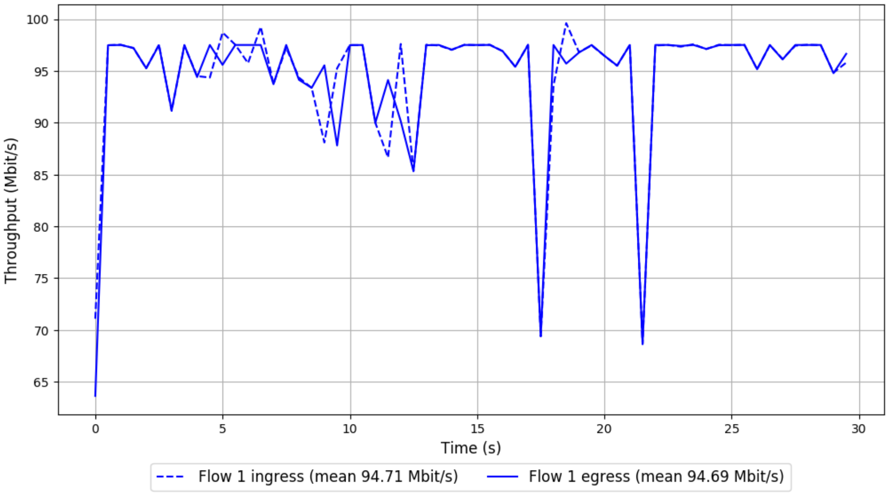
Run 6: Report of Verus — Data Link

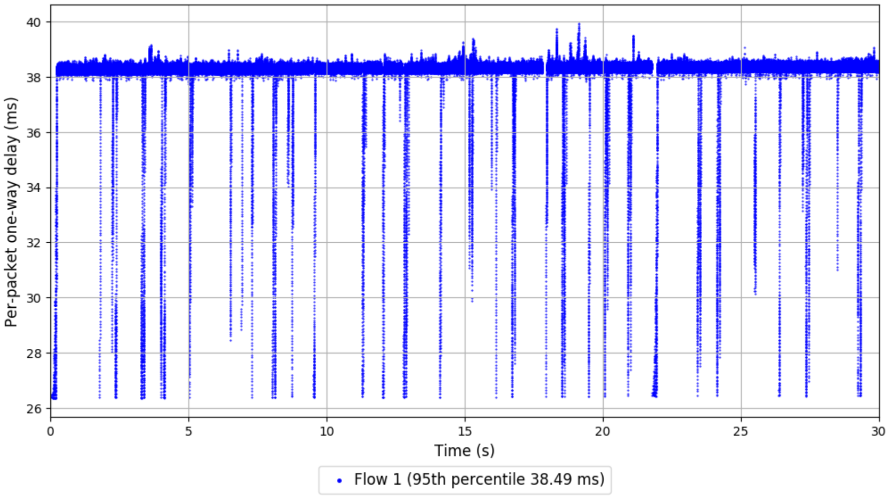




```
Run 7: Statistics of Verus

Start at: 2018-02-19 23:22:56
End at: 2018-02-19 23:23:26
Local clock offset: -15.22 ms
Remote clock offset: -21.223 ms

# Below is generated by plot.py at 2018-02-20 04:49:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.69 Mbit/s
95th percentile per-packet one-way delay: 38.491 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 94.69 Mbit/s
95th percentile per-packet one-way delay: 38.491 ms
Loss rate: 0.12%
```

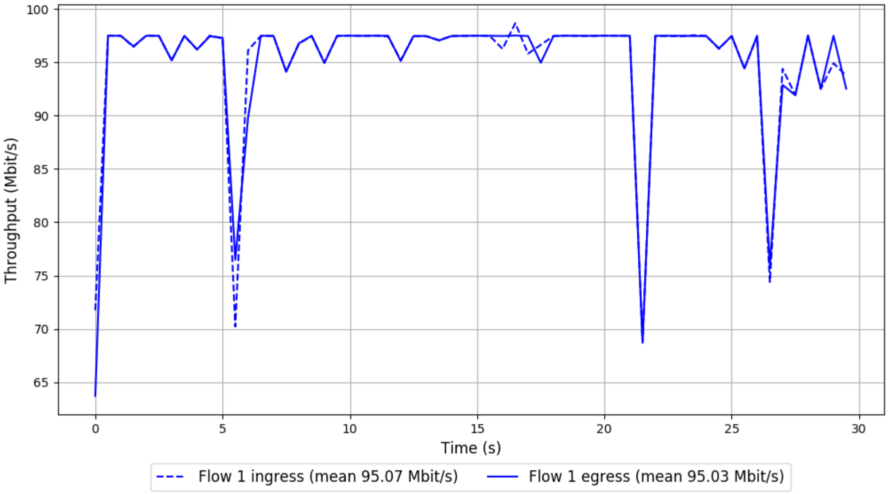
Run 7: Report of Verus — Data Link

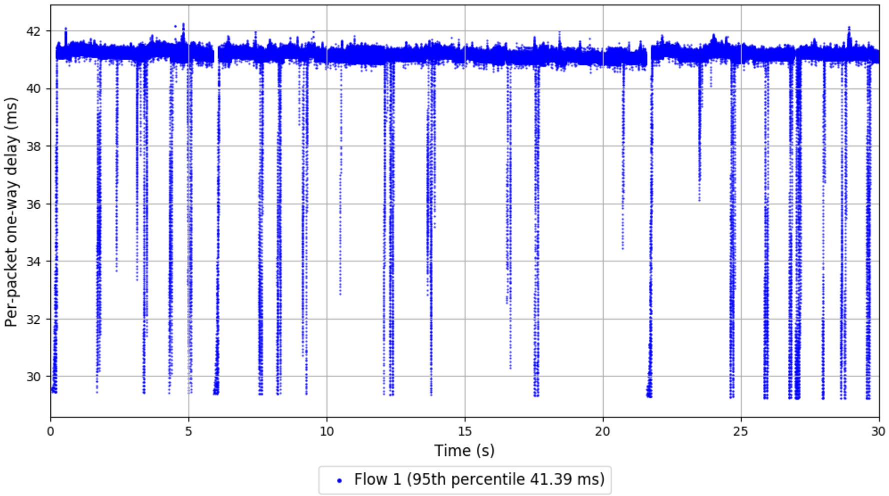




```
Run 8: Statistics of Verus

Start at: 2018-02-19 23:44:32
End at: 2018-02-19 23:45:02
Local clock offset: -0.429 ms
Remote clock offset: -12.525 ms

# Below is generated by plot.py at 2018-02-20 04:49:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.03 Mbit/s
95th percentile per-packet one-way delay: 41.391 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.03 Mbit/s
95th percentile per-packet one-way delay: 41.391 ms
Loss rate: 0.12%
```

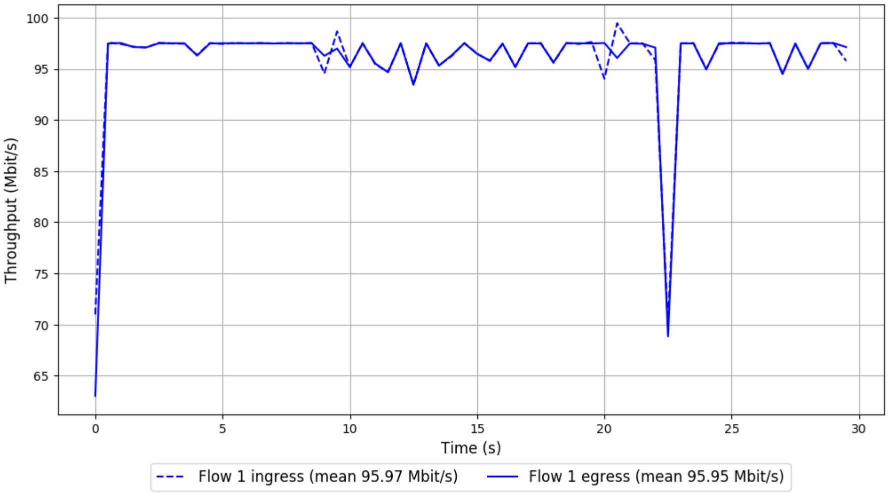
Run 8: Report of Verus — Data Link

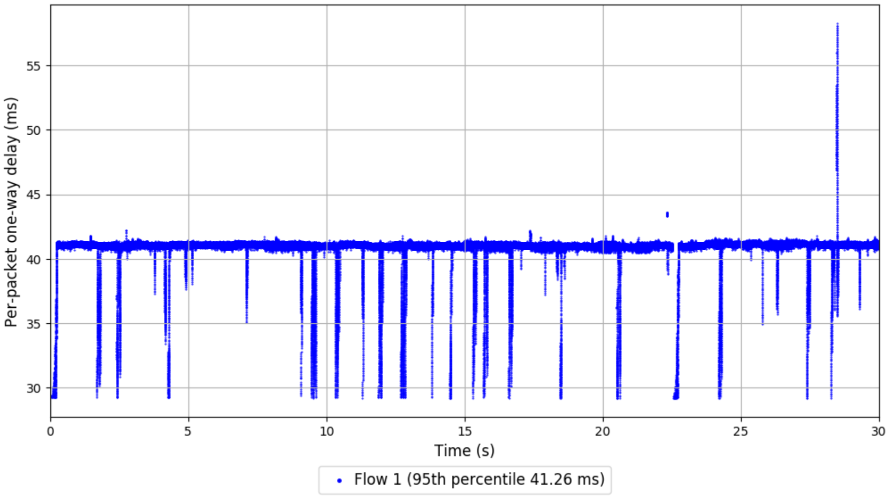




```
Run 9: Statistics of Verus

Start at: 2018-02-20 00:05:50
End at: 2018-02-20 00:06:20
Local clock offset: 8.676 ms
Remote clock offset: -8.151 ms

# Below is generated by plot.py at 2018-02-20 04:49:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.95 Mbit/s
95th percentile per-packet one-way delay: 41.257 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 95.95 Mbit/s
95th percentile per-packet one-way delay: 41.257 ms
Loss rate: 0.12%
```

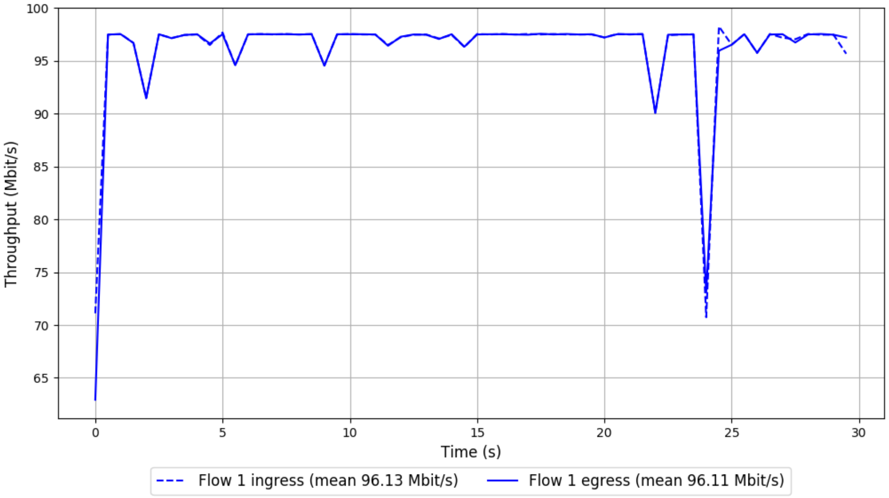
Run 9: Report of Verus — Data Link

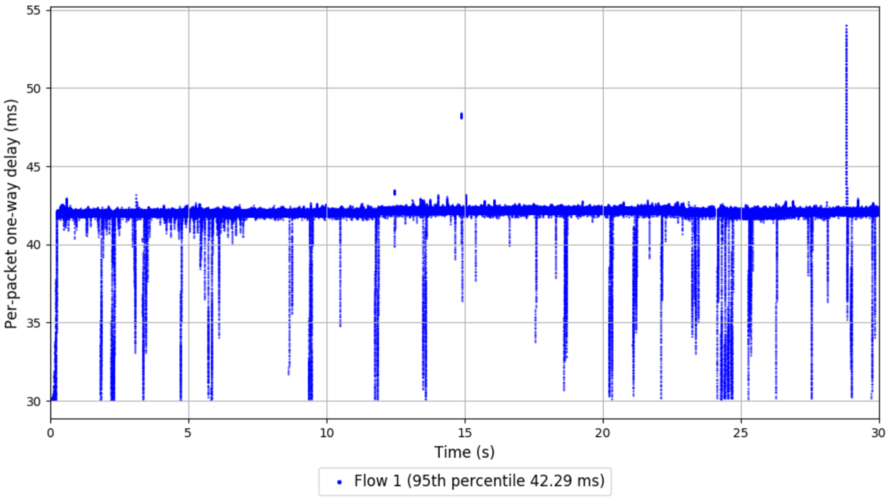




```
Run 10: Statistics of Verus

Start at: 2018-02-20 00:27:31
End at: 2018-02-20 00:28:01
Local clock offset: -2.479 ms
Remote clock offset: -7.461 ms

# Below is generated by plot.py at 2018-02-20 04:50:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.11 Mbit/s
95th percentile per-packet one-way delay: 42.290 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 96.11 Mbit/s
95th percentile per-packet one-way delay: 42.290 ms
Loss rate: 0.12%
```

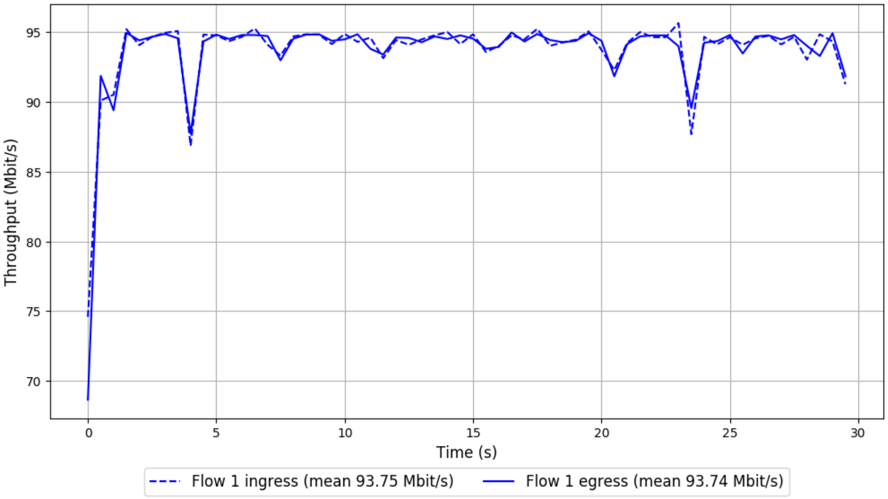
Run 10: Report of Verus — Data Link

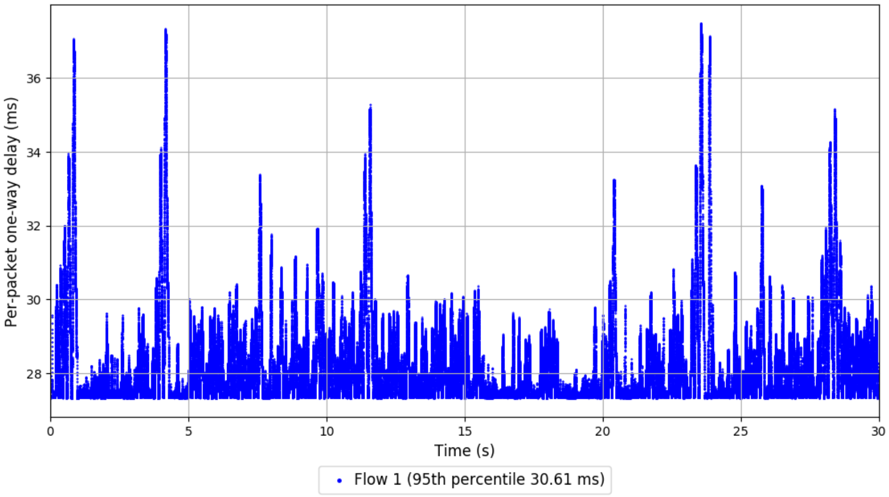




```
Run 1: Statistics of Copa

Start at: 2018-02-19 21:11:47
End at: 2018-02-19 21:12:17
Local clock offset: -5.429 ms
Remote clock offset: -19.094 ms

# Below is generated by plot.py at 2018-02-20 04:51:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.74 Mbit/s
95th percentile per-packet one-way delay: 30.605 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 93.74 Mbit/s
95th percentile per-packet one-way delay: 30.605 ms
Loss rate: 0.08%
```

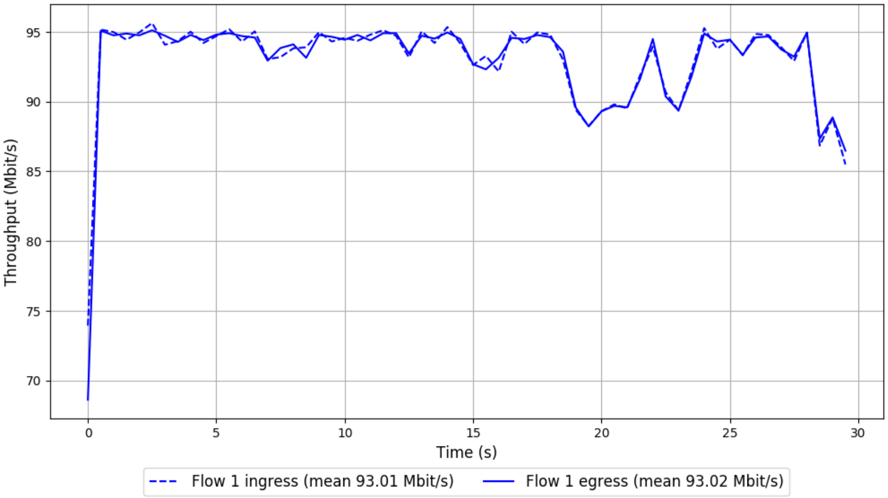
Run 1: Report of Copa — Data Link

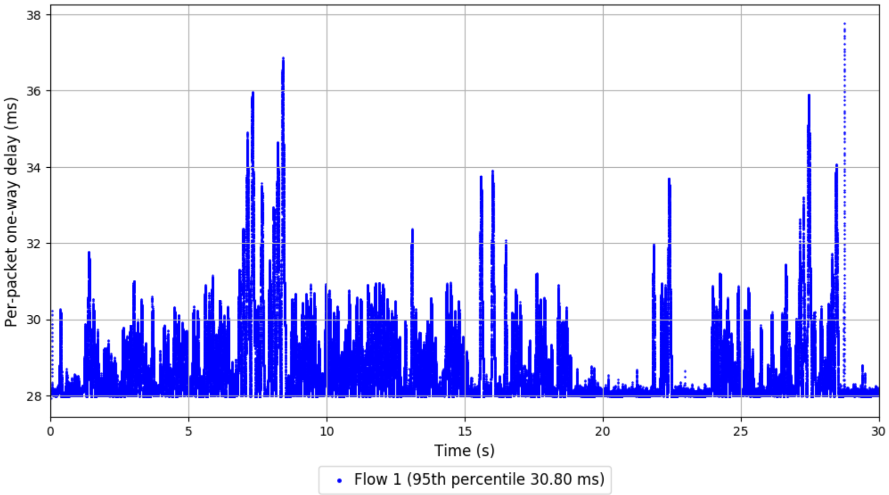




```
Run 2: Statistics of Copa

Start at: 2018-02-19 21:33:29
End at: 2018-02-19 21:33:59
Local clock offset: -5.913 ms
Remote clock offset: -20.398 ms

# Below is generated by plot.py at 2018-02-20 04:51:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.02 Mbit/s
95th percentile per-packet one-way delay: 30.802 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 93.02 Mbit/s
95th percentile per-packet one-way delay: 30.802 ms
Loss rate: 0.07%
```

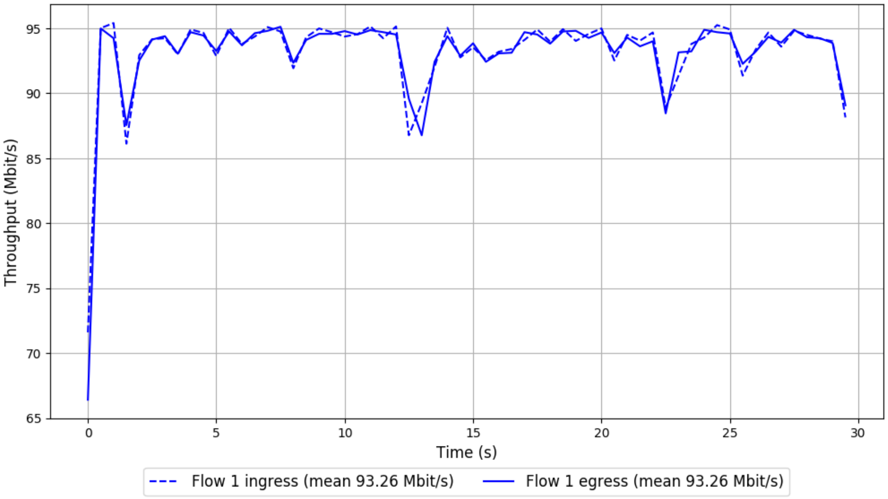
Run 2: Report of Copa — Data Link

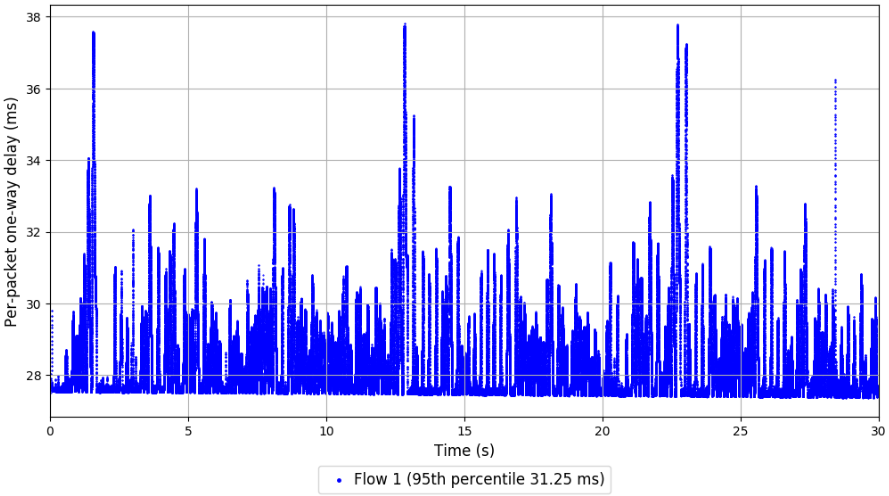




```
Run 3: Statistics of Copa

Start at: 2018-02-19 21:55:16
End at: 2018-02-19 21:55:46
Local clock offset: -4.94 ms
Remote clock offset: -19.526 ms

# Below is generated by plot.py at 2018-02-20 04:52:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.26 Mbit/s
95th percentile per-packet one-way delay: 31.247 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 93.26 Mbit/s
95th percentile per-packet one-way delay: 31.247 ms
Loss rate: 0.08%
```

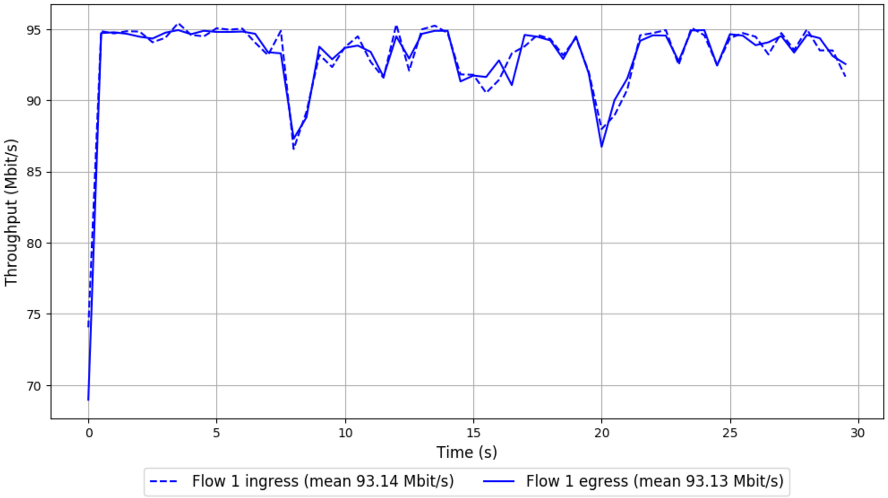
Run 3: Report of Copa — Data Link

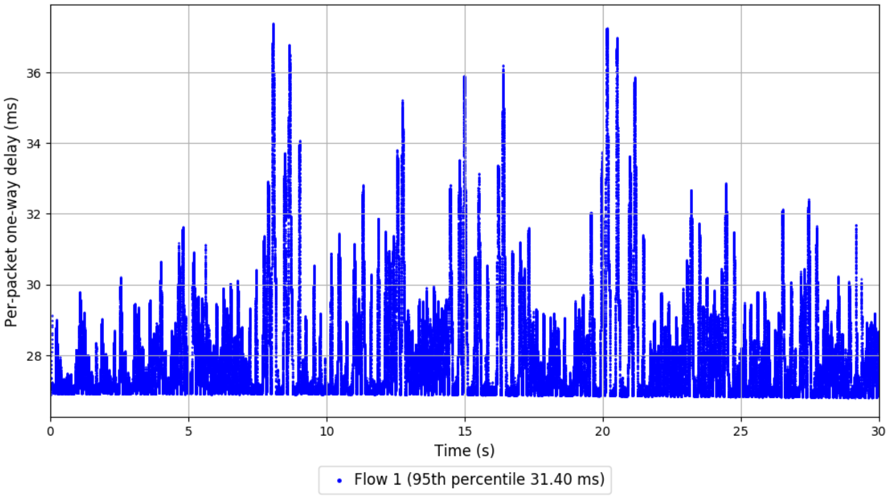




```
Run 4: Statistics of Copa

Start at: 2018-02-19 22:16:45
End at: 2018-02-19 22:17:15
Local clock offset: 0.439 ms
Remote clock offset: -16.811 ms

# Below is generated by plot.py at 2018-02-20 04:52:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.13 Mbit/s
95th percentile per-packet one-way delay: 31.399 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 93.13 Mbit/s
95th percentile per-packet one-way delay: 31.399 ms
Loss rate: 0.08%
```

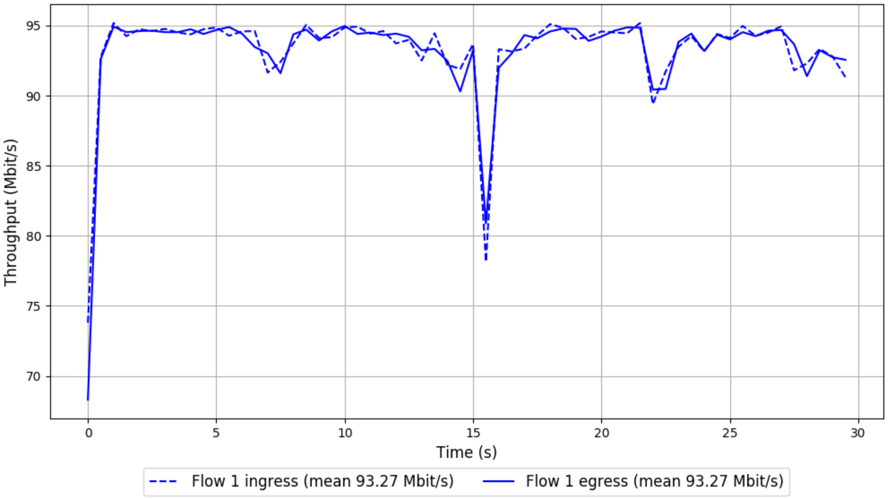
Run 4: Report of Copa — Data Link

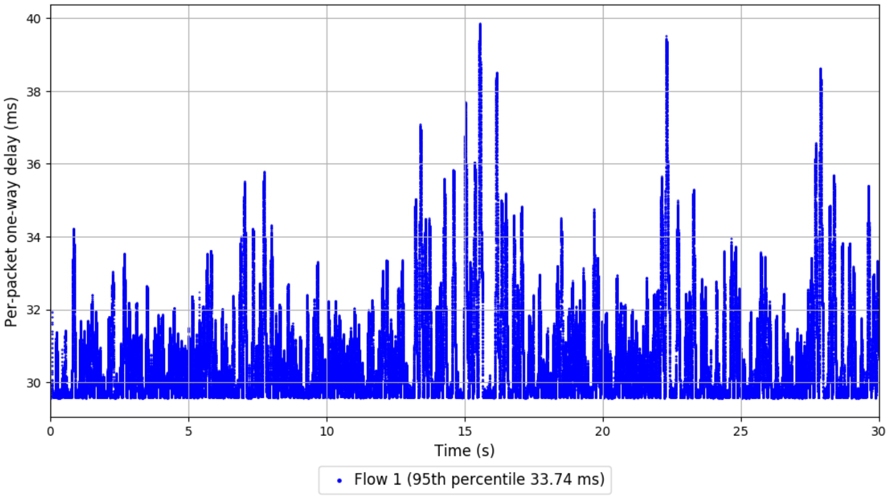




```
Run 5: Statistics of Copa

Start at: 2018-02-19 22:38:23
End at: 2018-02-19 22:38:53
Local clock offset: 0.258 ms
Remote clock offset: -21.01 ms

# Below is generated by plot.py at 2018-02-20 04:52:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.27 Mbit/s
95th percentile per-packet one-way delay: 33.741 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 93.27 Mbit/s
95th percentile per-packet one-way delay: 33.741 ms
Loss rate: 0.07%
```

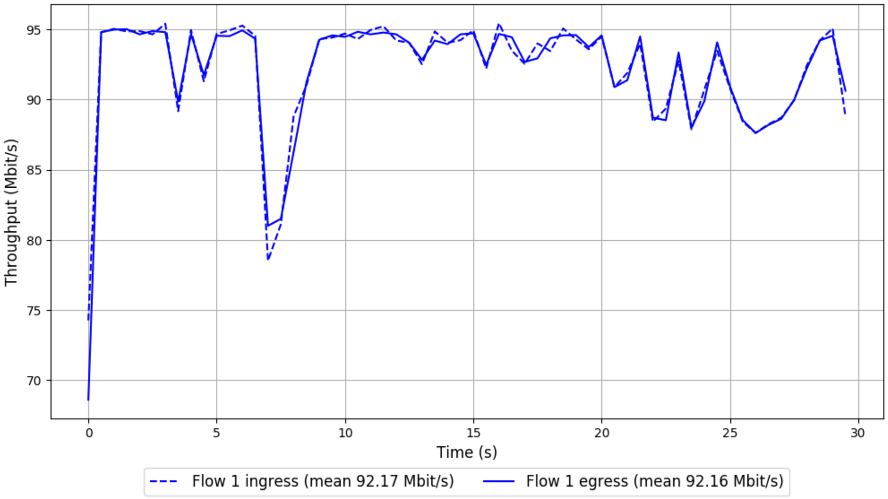
Run 5: Report of Copa — Data Link

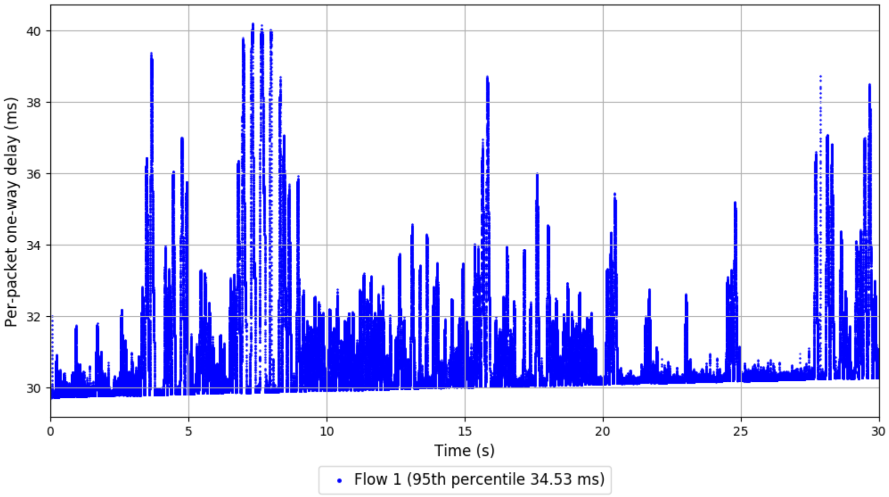




```
Run 6: Statistics of Copa

Start at: 2018-02-19 23:00:17
End at: 2018-02-19 23:00:47
Local clock offset: -0.29 ms
Remote clock offset: -20.309 ms

# Below is generated by plot.py at 2018-02-20 04:52:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.16 Mbit/s
95th percentile per-packet one-way delay: 34.535 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 92.16 Mbit/s
95th percentile per-packet one-way delay: 34.535 ms
Loss rate: 0.08%
```

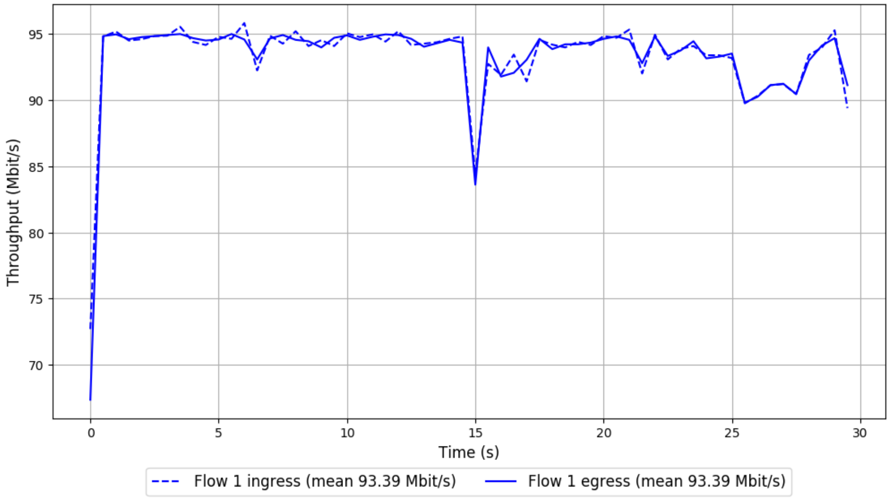
Run 6: Report of Copa — Data Link

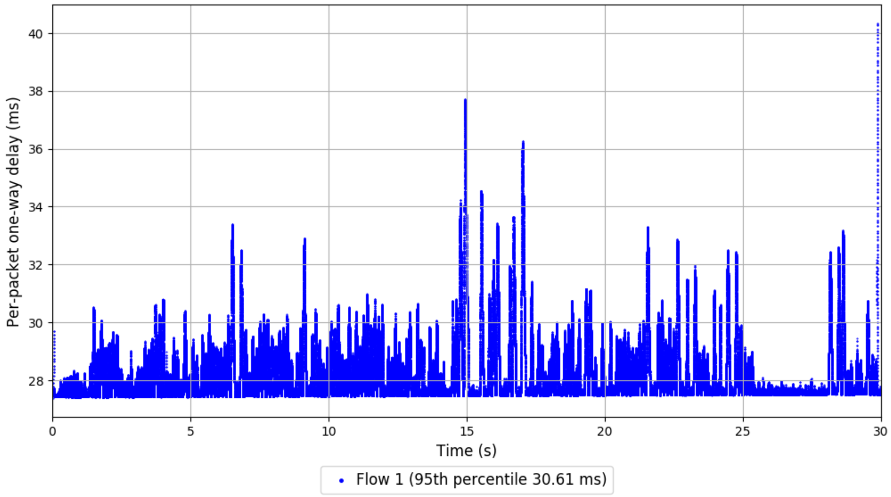




```
Run 7: Statistics of Copa

Start at: 2018-02-19 23:21:40
End at: 2018-02-19 23:22:10
Local clock offset: -13.706 ms
Remote clock offset: -21.019 ms

# Below is generated by plot.py at 2018-02-20 04:52:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.39 Mbit/s
95th percentile per-packet one-way delay: 30.609 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 93.39 Mbit/s
95th percentile per-packet one-way delay: 30.609 ms
Loss rate: 0.07%
```

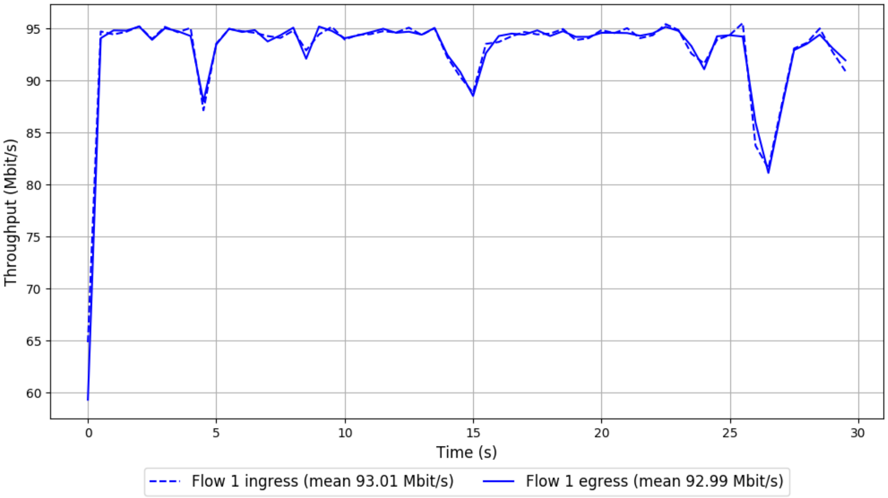
Run 7: Report of Copa — Data Link

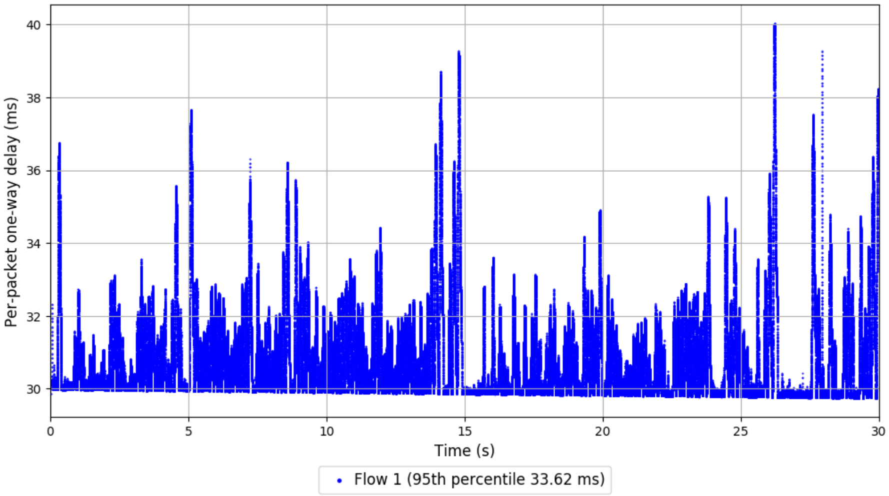




```
Run 8: Statistics of Copa

Start at: 2018-02-19 23:43:18
End at: 2018-02-19 23:43:48
Local clock offset: -1.219 ms
Remote clock offset: -13.255 ms

# Below is generated by plot.py at 2018-02-20 04:52:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.99 Mbit/s
95th percentile per-packet one-way delay: 33.619 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 92.99 Mbit/s
95th percentile per-packet one-way delay: 33.619 ms
Loss rate: 0.09%
```

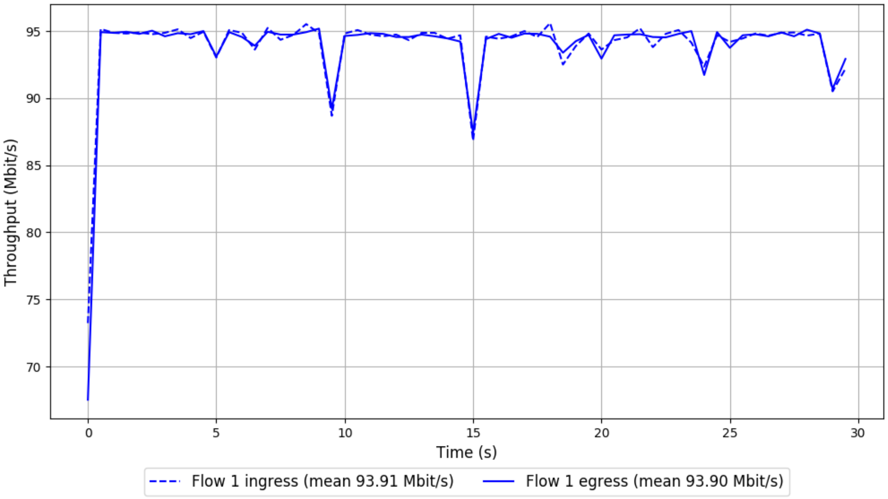
Run 8: Report of Copa — Data Link

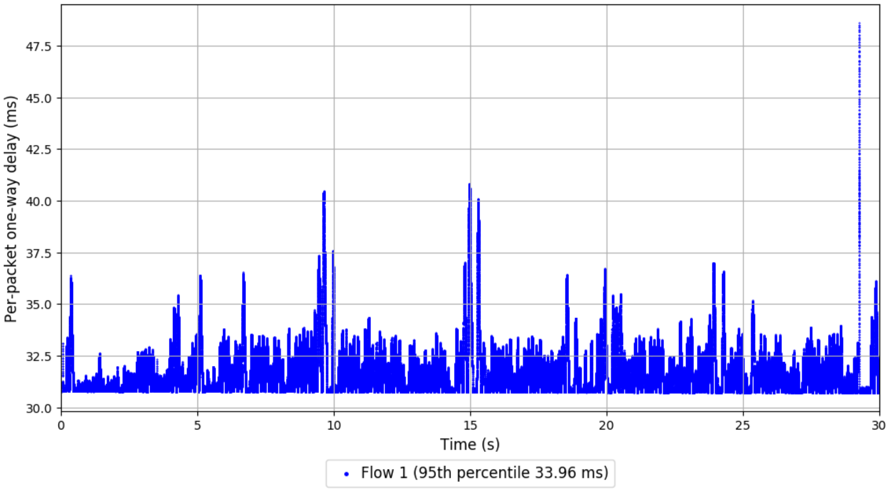




```
Run 9: Statistics of Copa

Start at: 2018-02-20 00:04:32
End at: 2018-02-20 00:05:02
Local clock offset: 8.754 ms
Remote clock offset: -9.452 ms

# Below is generated by plot.py at 2018-02-20 04:54:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.90 Mbit/s
95th percentile per-packet one-way delay: 33.961 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 93.90 Mbit/s
95th percentile per-packet one-way delay: 33.961 ms
Loss rate: 0.09%
```

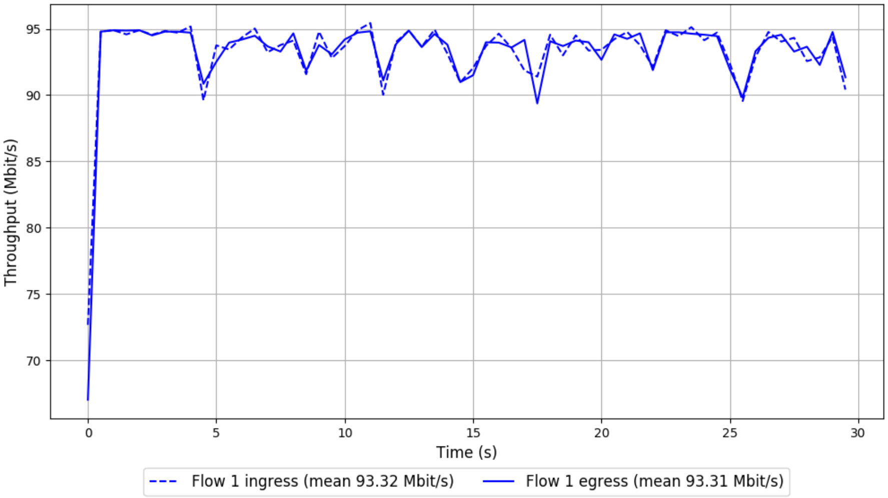
Run 9: Report of Copa — Data Link

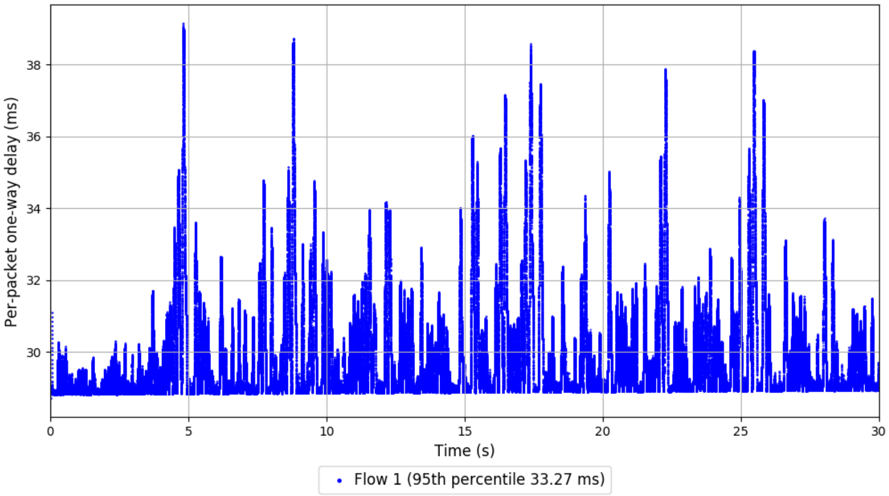




```
Run 10: Statistics of Copa

Start at: 2018-02-20 00:26:13
End at: 2018-02-20 00:26:43
Local clock offset: -2.732 ms
Remote clock offset: -6.77 ms

# Below is generated by plot.py at 2018-02-20 04:54:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.31 Mbit/s
95th percentile per-packet one-way delay: 33.274 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 93.31 Mbit/s
95th percentile per-packet one-way delay: 33.274 ms
Loss rate: 0.08%
```

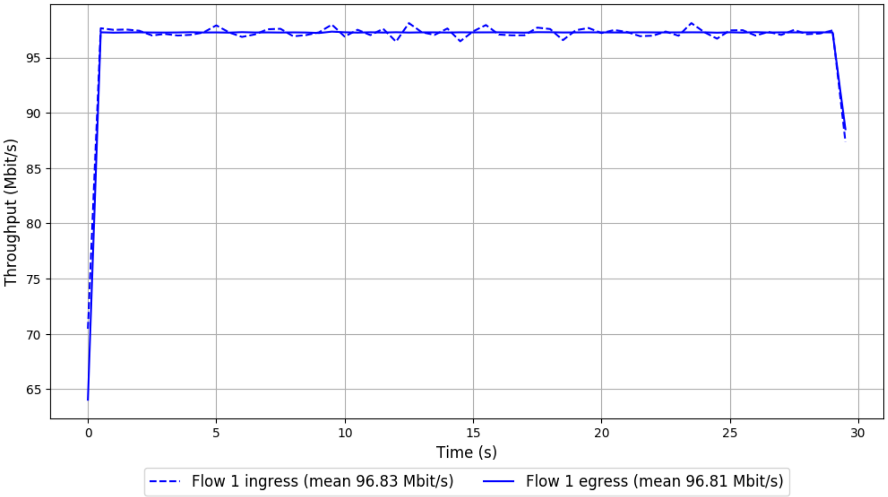
Run 10: Report of Copa — Data Link

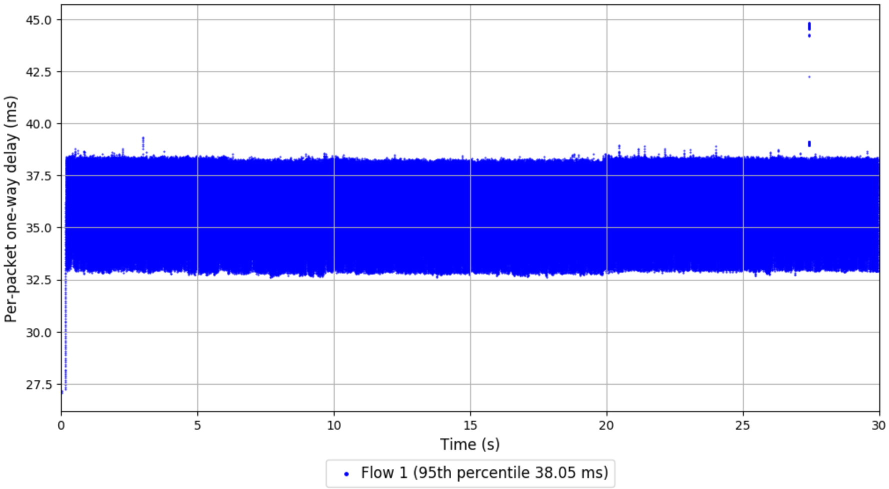




```
Run 1: Statistics of FillP

Start at: 2018-02-19 21:20:32
End at: 2018-02-19 21:21:02
Local clock offset: -7.42 ms
Remote clock offset: -21.025 ms

# Below is generated by plot.py at 2018-02-20 04:54:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.81 Mbit/s
95th percentile per-packet one-way delay: 38.048 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 96.81 Mbit/s
95th percentile per-packet one-way delay: 38.048 ms
Loss rate: 0.10%
```

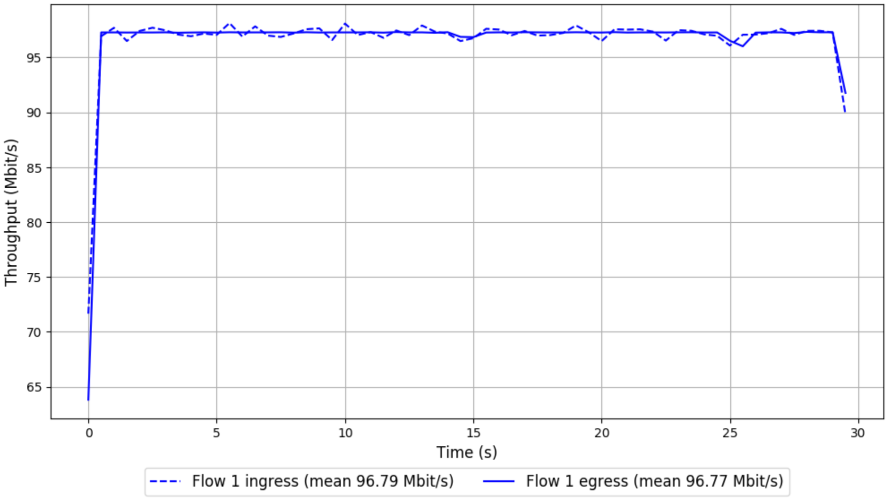
Run 1: Report of FillP — Data Link

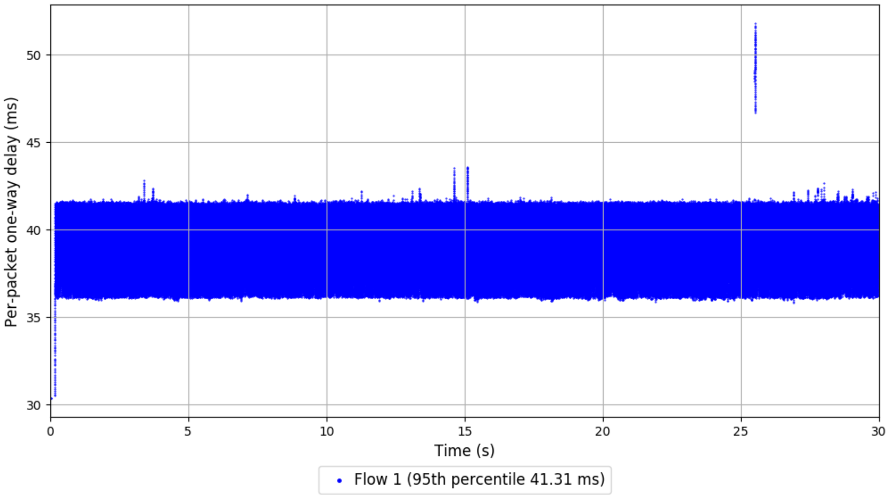




```
Run 2: Statistics of FillP

Start at: 2018-02-19 21:42:05
End at: 2018-02-19 21:42:35
Local clock offset: -4.634 ms
Remote clock offset: -21.502 ms

# Below is generated by plot.py at 2018-02-20 04:54:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.77 Mbit/s
95th percentile per-packet one-way delay: 41.307 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 96.77 Mbit/s
95th percentile per-packet one-way delay: 41.307 ms
Loss rate: 0.10%
```

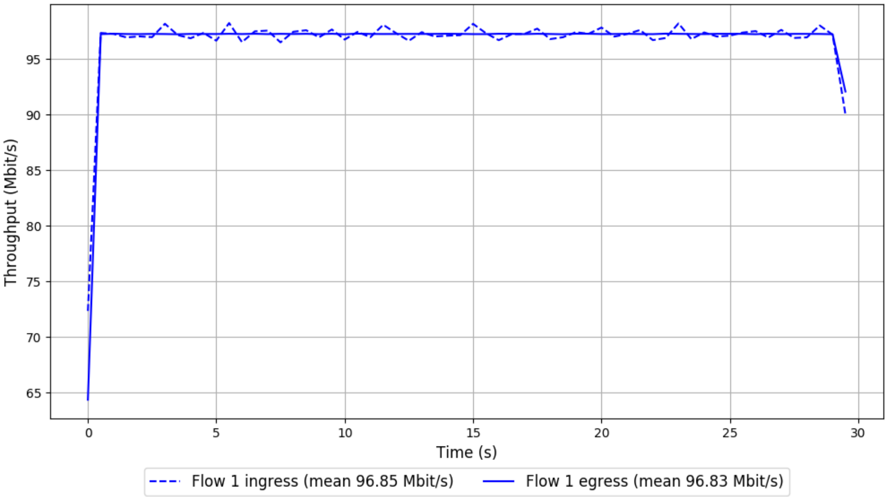
Run 2: Report of FillP — Data Link

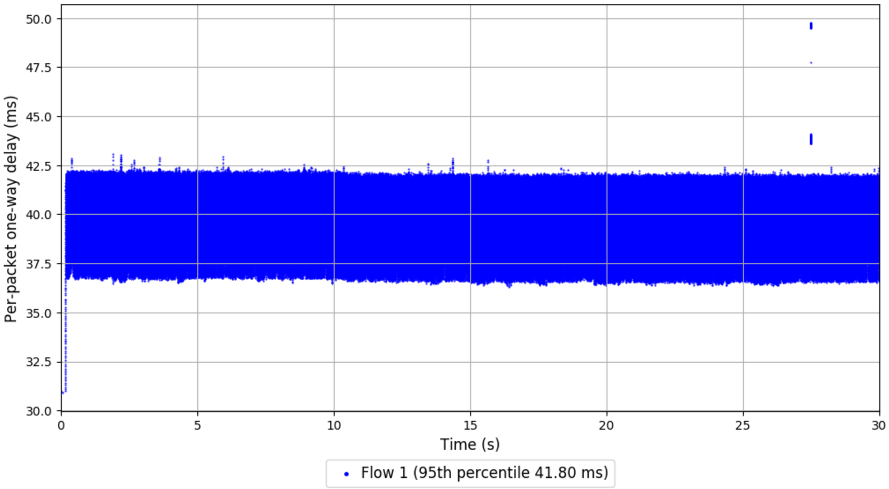




```
Run 3: Statistics of FillP

Start at: 2018-02-19 22:03:50
End at: 2018-02-19 22:04:20
Local clock offset: 1.785 ms
Remote clock offset: -18.318 ms

# Below is generated by plot.py at 2018-02-20 04:54:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.83 Mbit/s
95th percentile per-packet one-way delay: 41.802 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 96.83 Mbit/s
95th percentile per-packet one-way delay: 41.802 ms
Loss rate: 0.10%
```

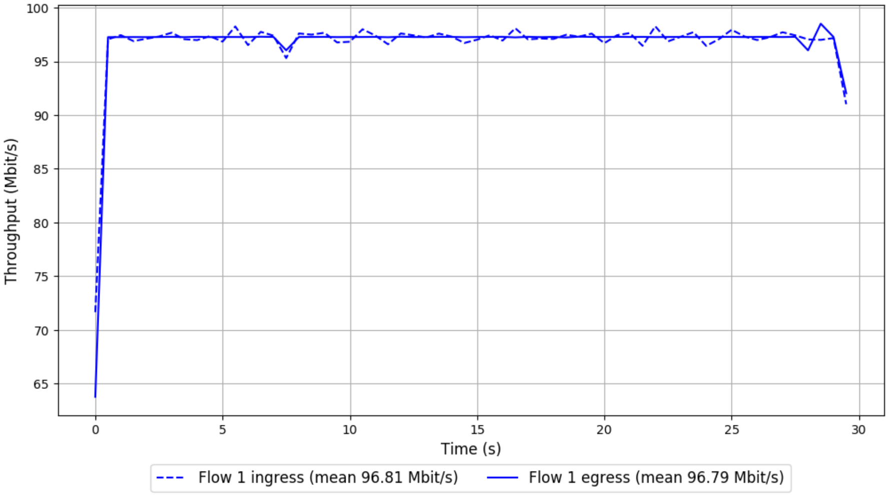
Run 3: Report of FillP — Data Link

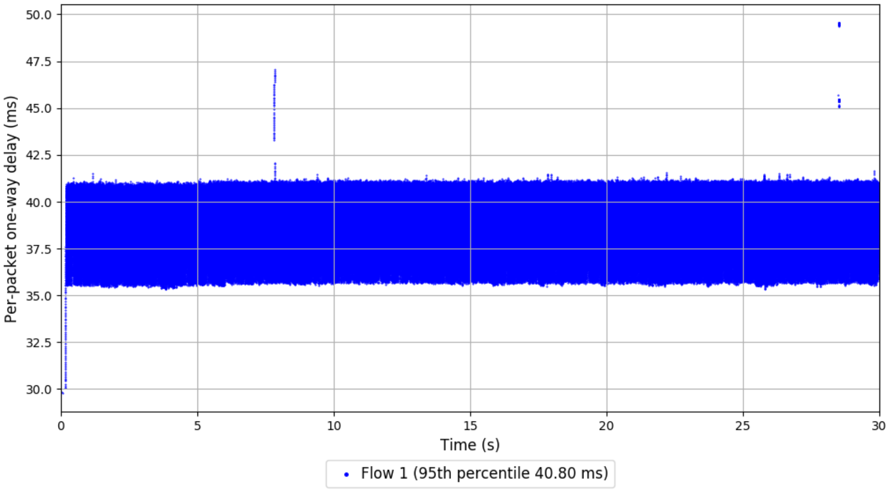




```
Run 4: Statistics of FillP

Start at: 2018-02-19 22:25:19
End at: 2018-02-19 22:25:49
Local clock offset: 1.936 ms
Remote clock offset: -19.97 ms

# Below is generated by plot.py at 2018-02-20 04:54:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.79 Mbit/s
95th percentile per-packet one-way delay: 40.801 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 96.79 Mbit/s
95th percentile per-packet one-way delay: 40.801 ms
Loss rate: 0.11%
```

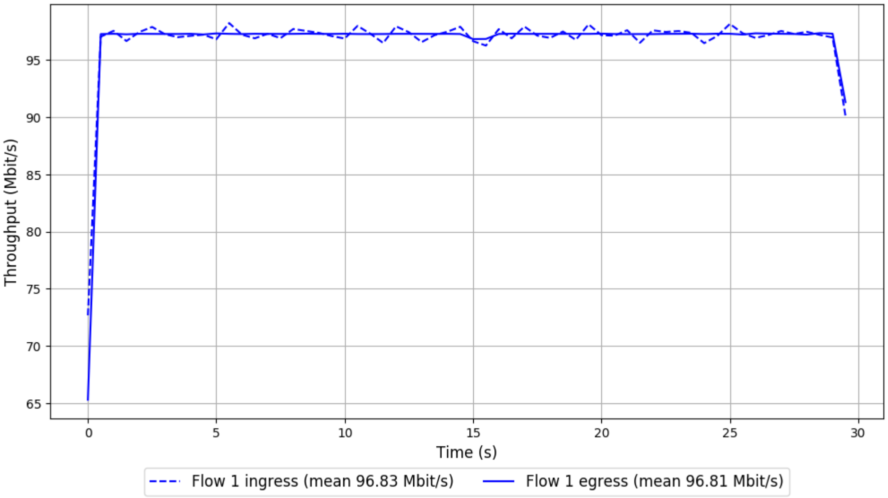
Run 4: Report of FillP — Data Link

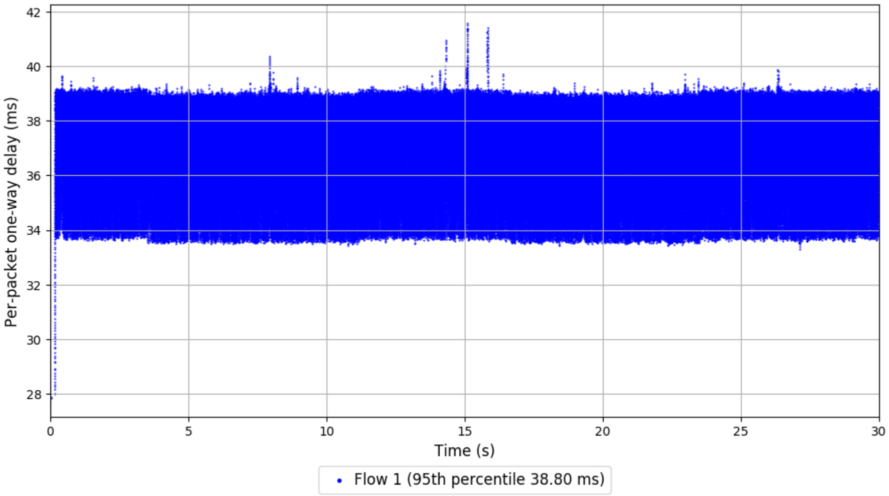




```
Run 5: Statistics of FillP

Start at: 2018-02-19 22:47:11
End at: 2018-02-19 22:47:41
Local clock offset: -0.848 ms
Remote clock offset: -20.656 ms

# Below is generated by plot.py at 2018-02-20 04:54:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.81 Mbit/s
95th percentile per-packet one-way delay: 38.796 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 96.81 Mbit/s
95th percentile per-packet one-way delay: 38.796 ms
Loss rate: 0.10%
```

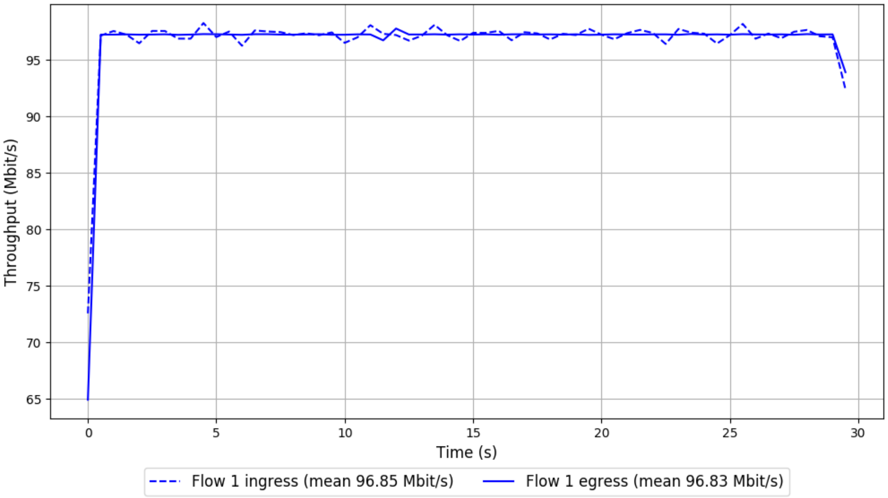
Run 5: Report of FillP — Data Link

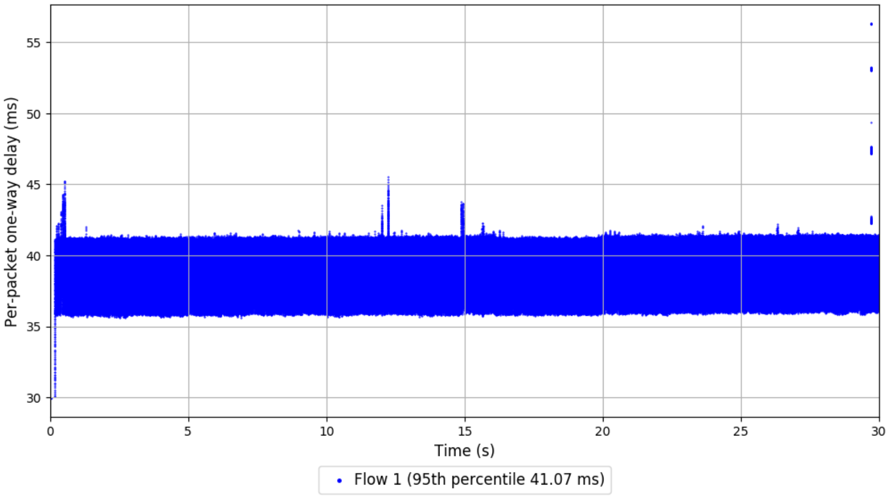




```
Run 6: Statistics of FillP

Start at: 2018-02-19 23:08:47
End at: 2018-02-19 23:09:17
Local clock offset: -8.701 ms
Remote clock offset: -22.565 ms

# Below is generated by plot.py at 2018-02-20 04:54:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.83 Mbit/s
95th percentile per-packet one-way delay: 41.071 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 96.83 Mbit/s
95th percentile per-packet one-way delay: 41.071 ms
Loss rate: 0.10%
```

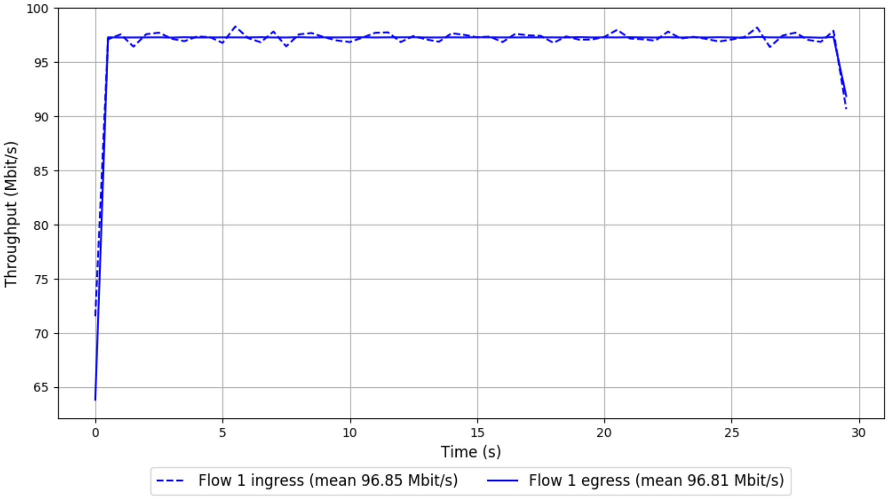
Run 6: Report of FillP — Data Link

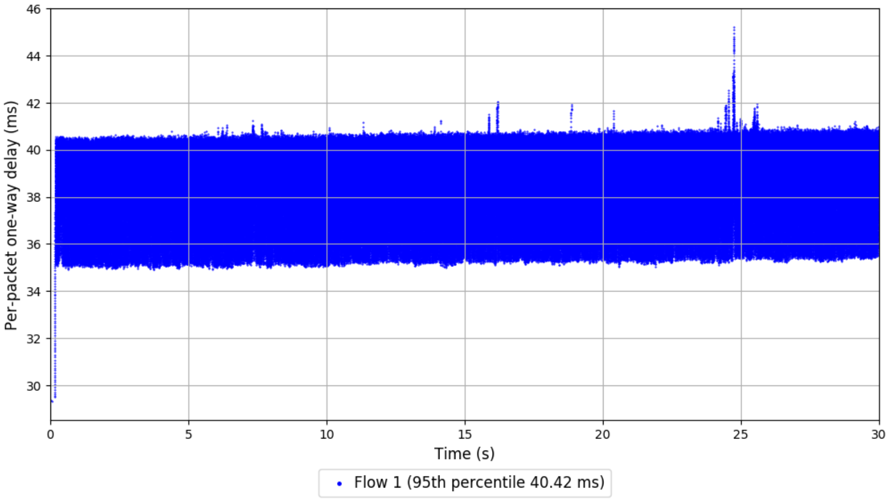




```
Run 7: Statistics of FillP

Start at: 2018-02-19 23:30:11
End at: 2018-02-19 23:30:41
Local clock offset: -14.089 ms
Remote clock offset: -17.467 ms

# Below is generated by plot.py at 2018-02-20 04:55:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.81 Mbit/s
95th percentile per-packet one-way delay: 40.424 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 96.81 Mbit/s
95th percentile per-packet one-way delay: 40.424 ms
Loss rate: 0.11%
```

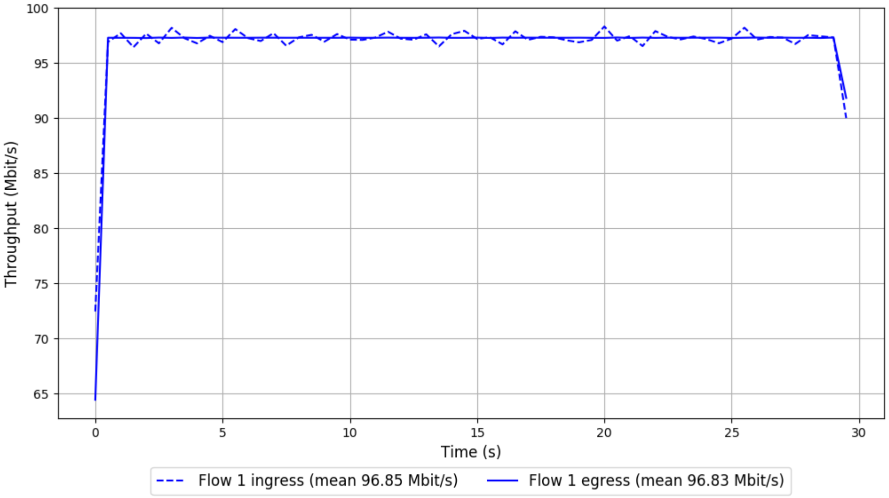
Run 7: Report of FillP — Data Link

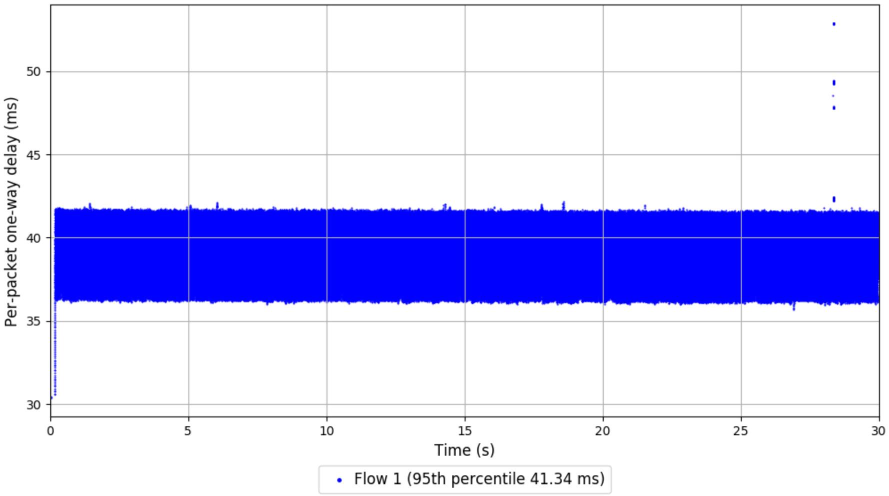




```
Run 8: Statistics of FillP

Start at: 2018-02-19 23:51:44
End at: 2018-02-19 23:52:14
Local clock offset: 3.897 ms
Remote clock offset: -11.71 ms

# Below is generated by plot.py at 2018-02-20 04:55:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.83 Mbit/s
95th percentile per-packet one-way delay: 41.345 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 96.83 Mbit/s
95th percentile per-packet one-way delay: 41.345 ms
Loss rate: 0.10%
```

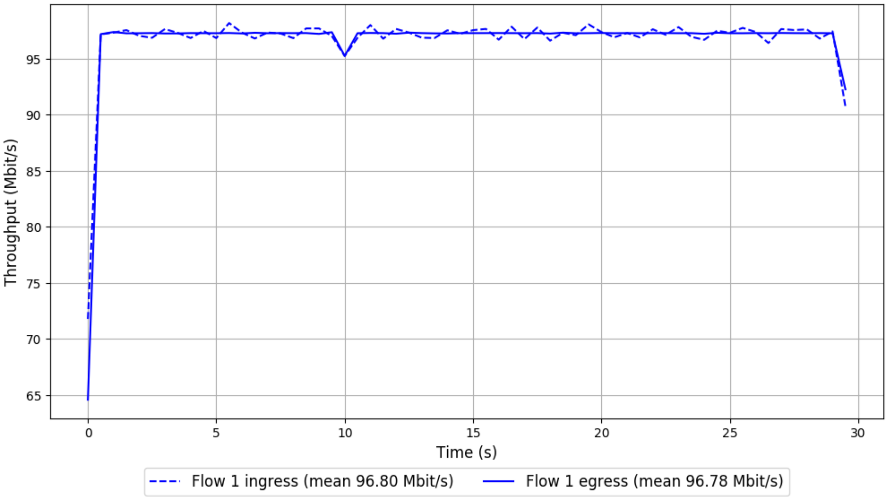
Run 8: Report of FillP — Data Link

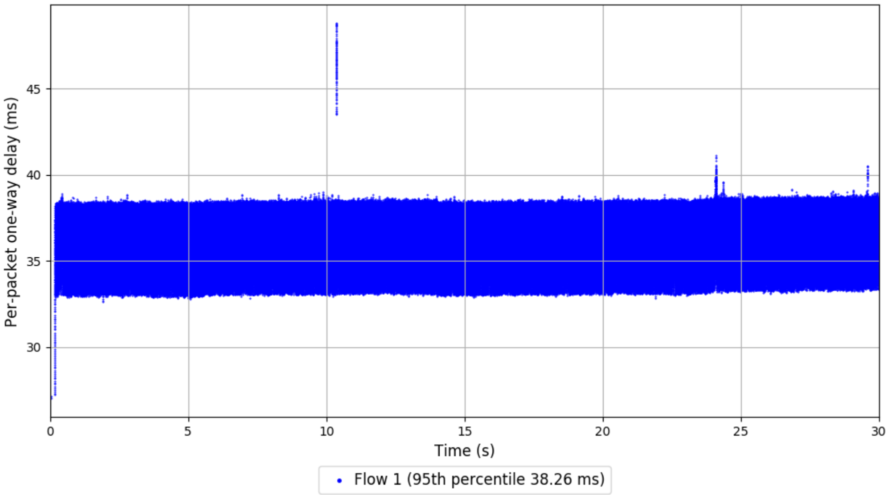




```
Run 9: Statistics of FillP

Start at: 2018-02-20 00:13:13
End at: 2018-02-20 00:13:43
Local clock offset: 0.153 ms
Remote clock offset: -7.561 ms

# Below is generated by plot.py at 2018-02-20 04:55:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.78 Mbit/s
95th percentile per-packet one-way delay: 38.257 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 96.78 Mbit/s
95th percentile per-packet one-way delay: 38.257 ms
Loss rate: 0.10%
```

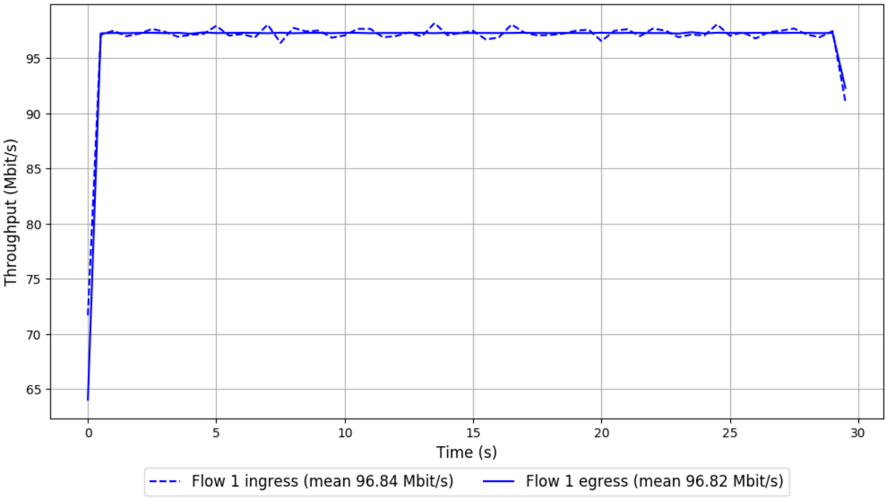
Run 9: Report of FillP — Data Link

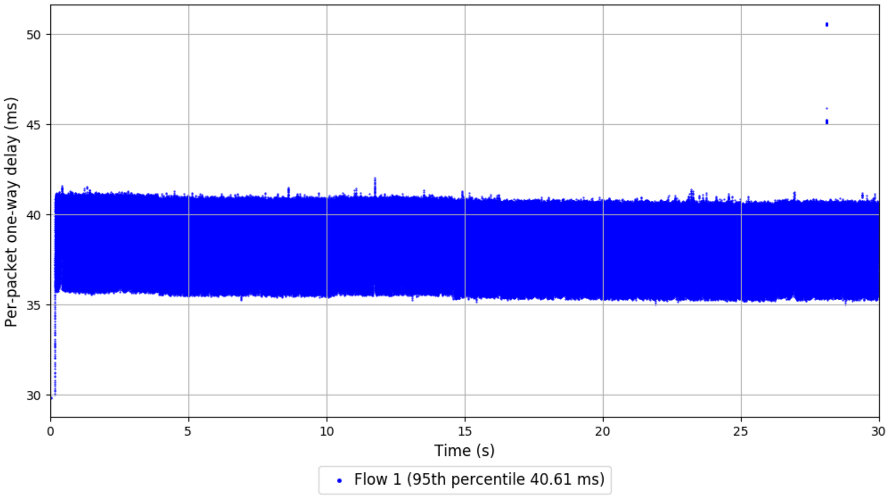




```
Run 10: Statistics of FillP

Start at: 2018-02-20 00:34:57
End at: 2018-02-20 00:35:27
Local clock offset: -1.64 ms
Remote clock offset: -7.038 ms

# Below is generated by plot.py at 2018-02-20 04:55:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.82 Mbit/s
95th percentile per-packet one-way delay: 40.609 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 96.82 Mbit/s
95th percentile per-packet one-way delay: 40.609 ms
Loss rate: 0.11%
```

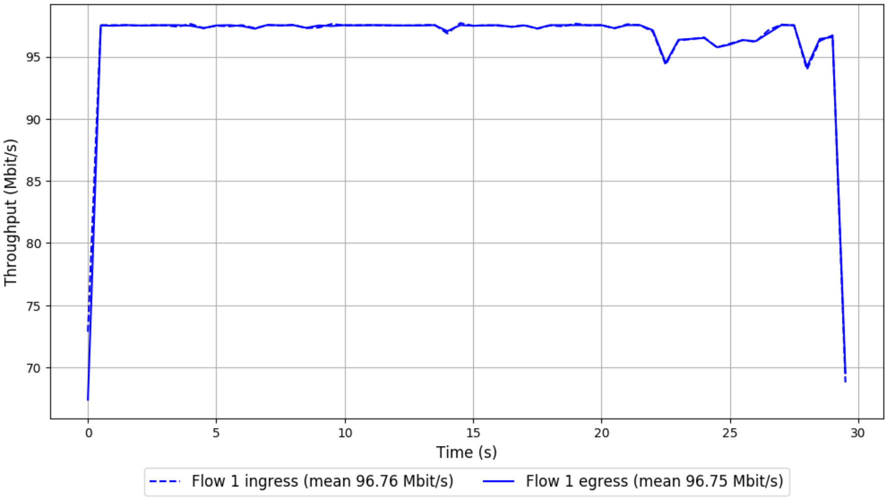
Run 10: Report of FillP — Data Link

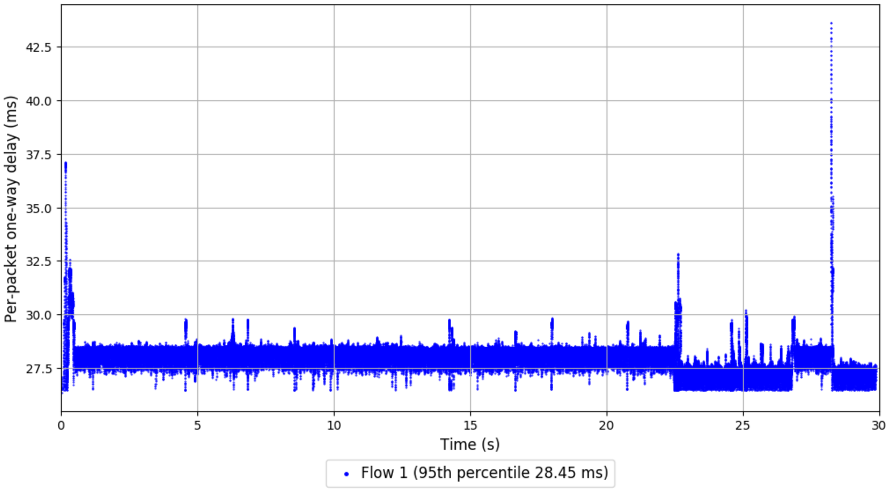




```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-19 21:10:32
End at: 2018-02-19 21:11:02
Local clock offset: -7.522 ms
Remote clock offset: -20.34 ms

# Below is generated by plot.py at 2018-02-20 04:55:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.75 Mbit/s
95th percentile per-packet one-way delay: 28.455 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 96.75 Mbit/s
95th percentile per-packet one-way delay: 28.455 ms
Loss rate: 0.08%
```

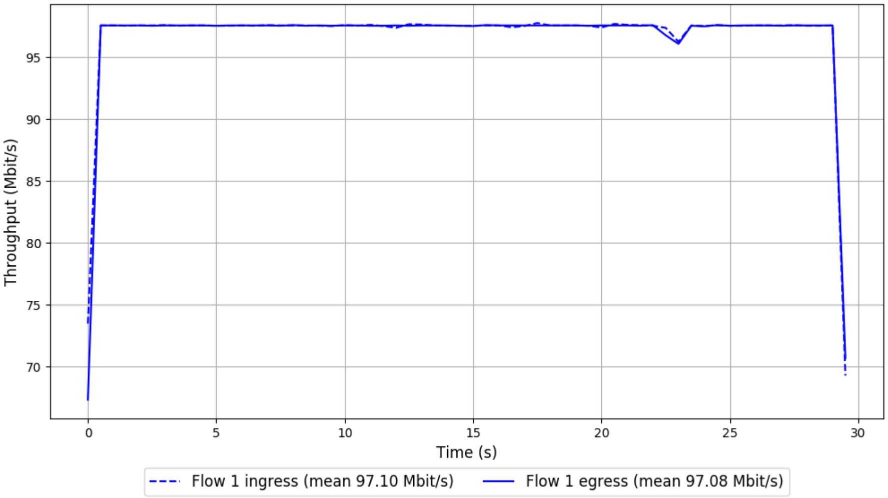
Run 1: Report of Indigo-1-32 — Data Link

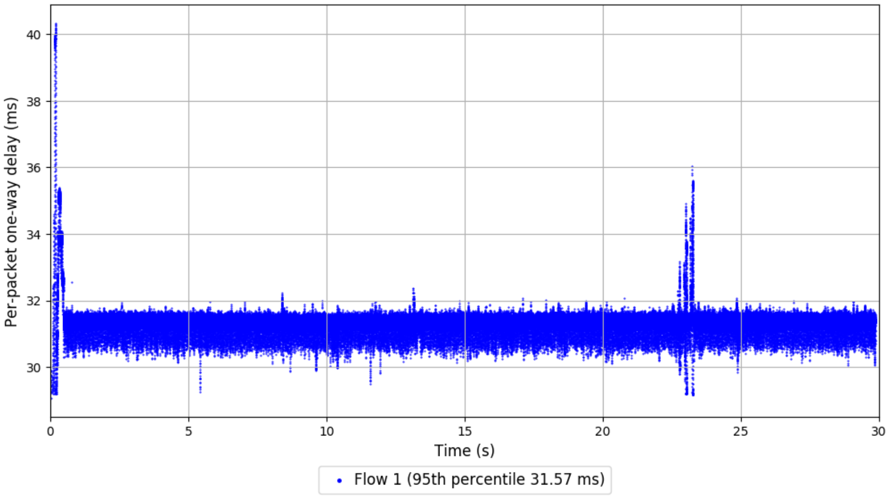




```
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-19 21:32:14
End at: 2018-02-19 21:32:45
Local clock offset: -11.145 ms
Remote clock offset: -26.833 ms

# Below is generated by plot.py at 2018-02-20 04:55:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.08 Mbit/s
95th percentile per-packet one-way delay: 31.575 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 97.08 Mbit/s
95th percentile per-packet one-way delay: 31.575 ms
Loss rate: 0.09%
```

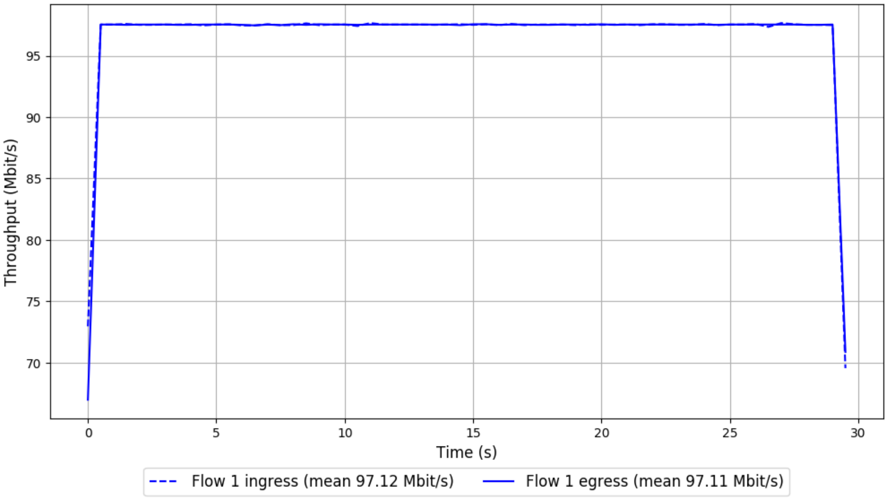
Run 2: Report of Indigo-1-32 — Data Link

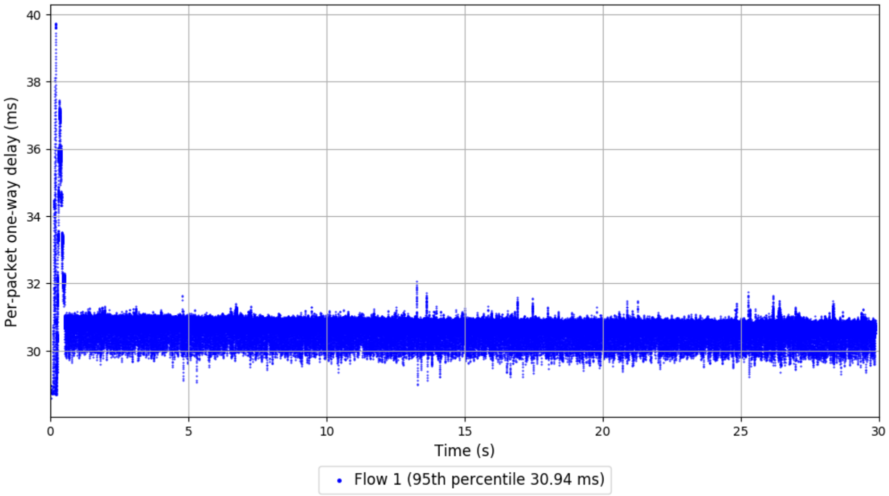




```
Run 3: Statistics of Indigo-1-32

Start at: 2018-02-19 21:54:02
End at: 2018-02-19 21:54:32
Local clock offset: -3.84 ms
Remote clock offset: -19.093 ms

# Below is generated by plot.py at 2018-02-20 04:55:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.11 Mbit/s
95th percentile per-packet one-way delay: 30.939 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 97.11 Mbit/s
95th percentile per-packet one-way delay: 30.939 ms
Loss rate: 0.08%
```

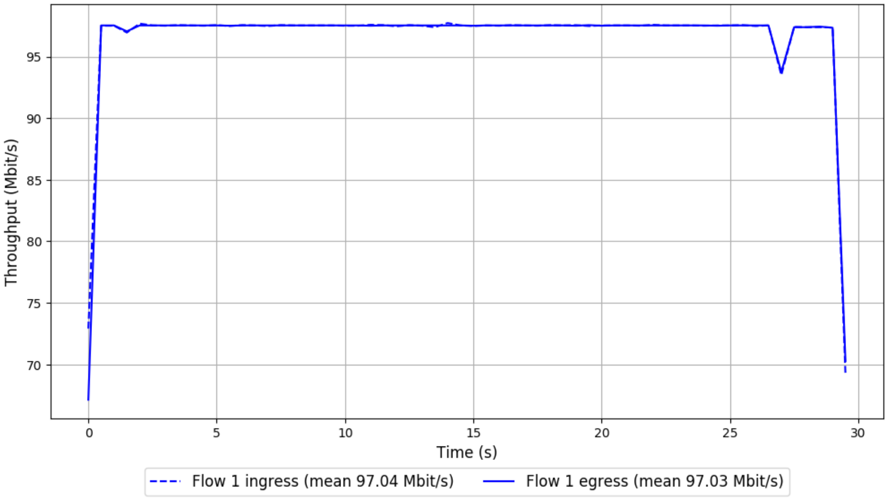
Run 3: Report of Indigo-1-32 — Data Link

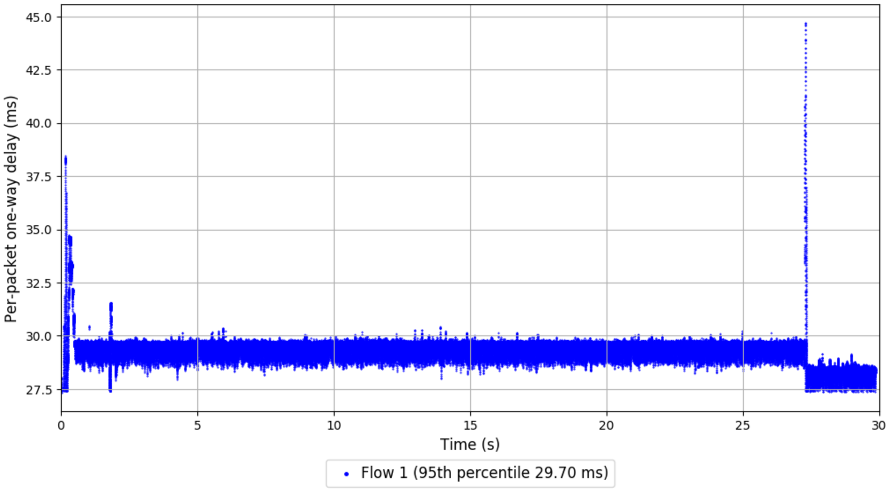




```
Run 4: Statistics of Indigo-1-32

Start at: 2018-02-19 22:15:32
End at: 2018-02-19 22:16:02
Local clock offset: 0.197 ms
Remote clock offset: -17.466 ms

# Below is generated by plot.py at 2018-02-20 04:55:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.03 Mbit/s
95th percentile per-packet one-way delay: 29.702 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 97.03 Mbit/s
95th percentile per-packet one-way delay: 29.702 ms
Loss rate: 0.08%
```

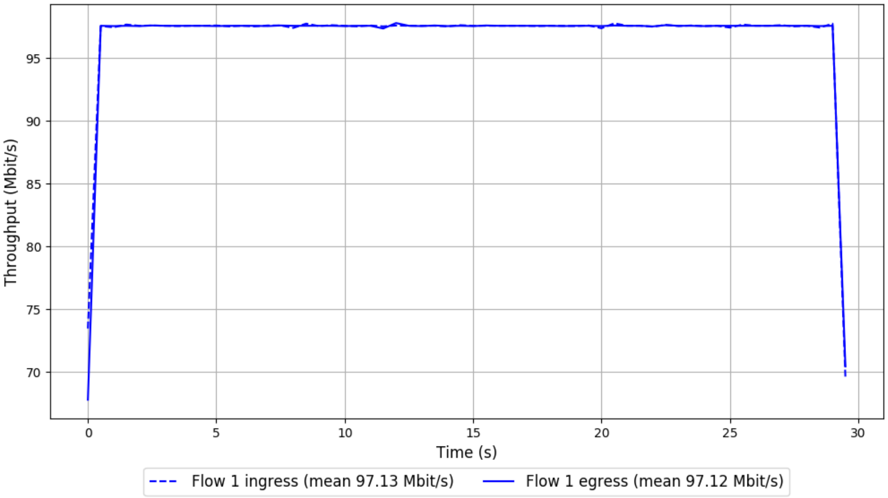
Run 4: Report of Indigo-1-32 — Data Link

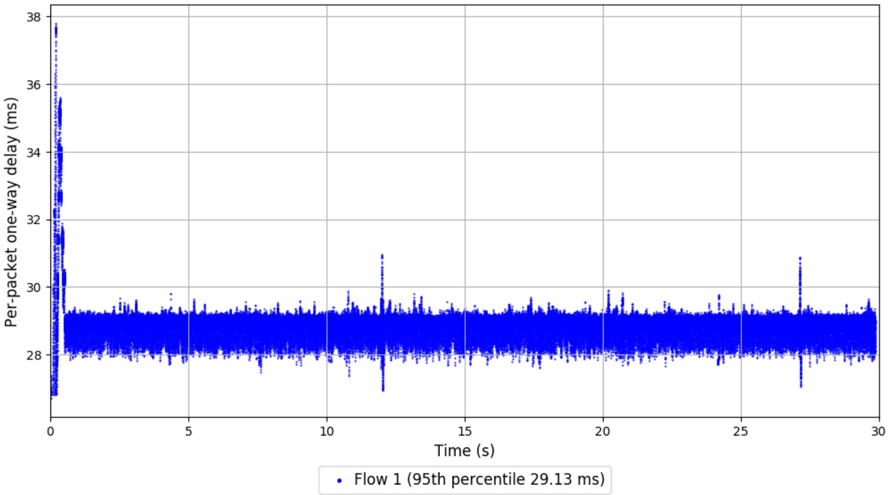




```
Run 5: Statistics of Indigo-1-32

Start at: 2018-02-19 22:37:07
End at: 2018-02-19 22:37:37
Local clock offset: -1.368 ms
Remote clock offset: -19.816 ms

# Below is generated by plot.py at 2018-02-20 04:56:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.12 Mbit/s
95th percentile per-packet one-way delay: 29.132 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 97.12 Mbit/s
95th percentile per-packet one-way delay: 29.132 ms
Loss rate: 0.08%
```

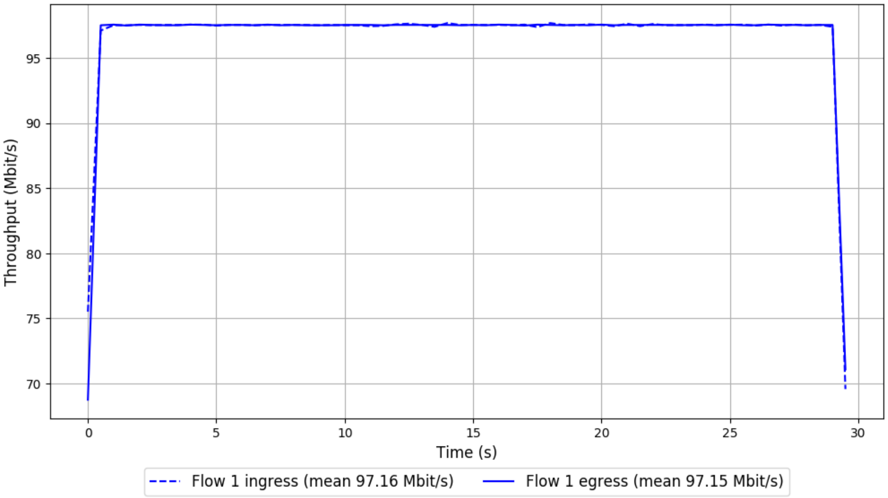
Run 5: Report of Indigo-1-32 — Data Link

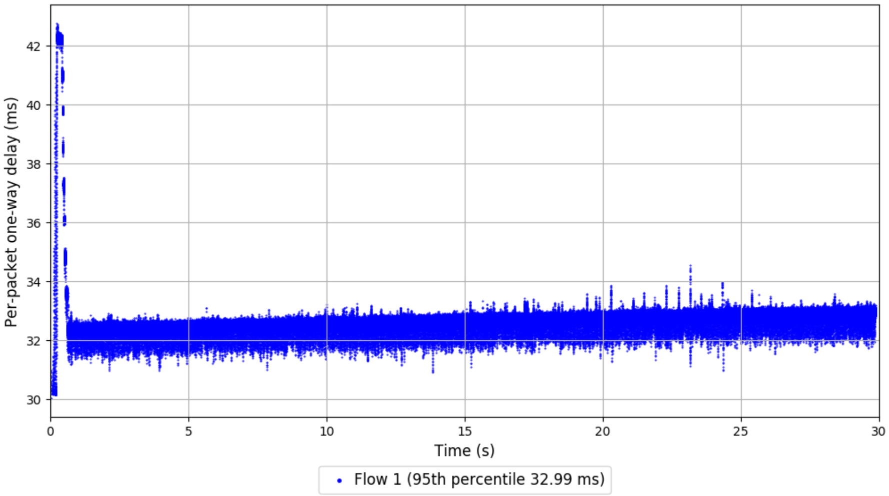




```
Run 6: Statistics of Indigo-1-32

Start at: 2018-02-19 22:59:01
End at: 2018-02-19 22:59:31
Local clock offset: 1.607 ms
Remote clock offset: -20.316 ms

# Below is generated by plot.py at 2018-02-20 04:56:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.15 Mbit/s
95th percentile per-packet one-way delay: 32.987 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 97.15 Mbit/s
95th percentile per-packet one-way delay: 32.987 ms
Loss rate: 0.08%
```

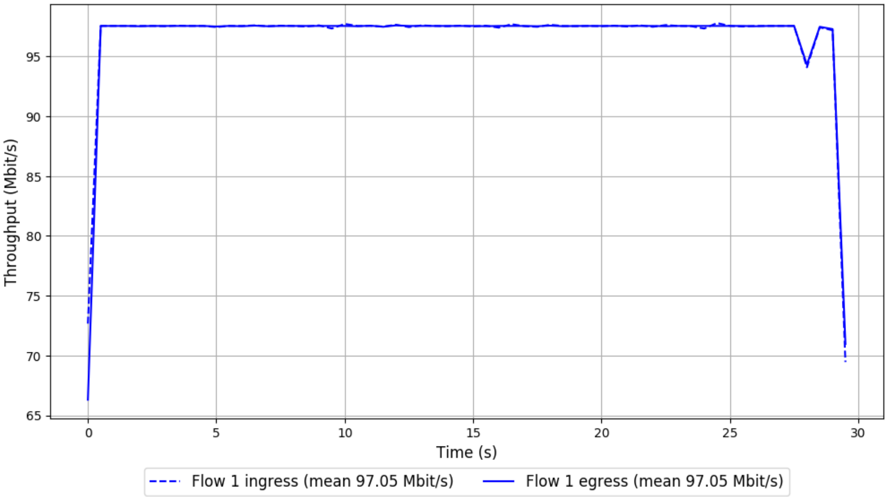
Run 6: Report of Indigo-1-32 — Data Link

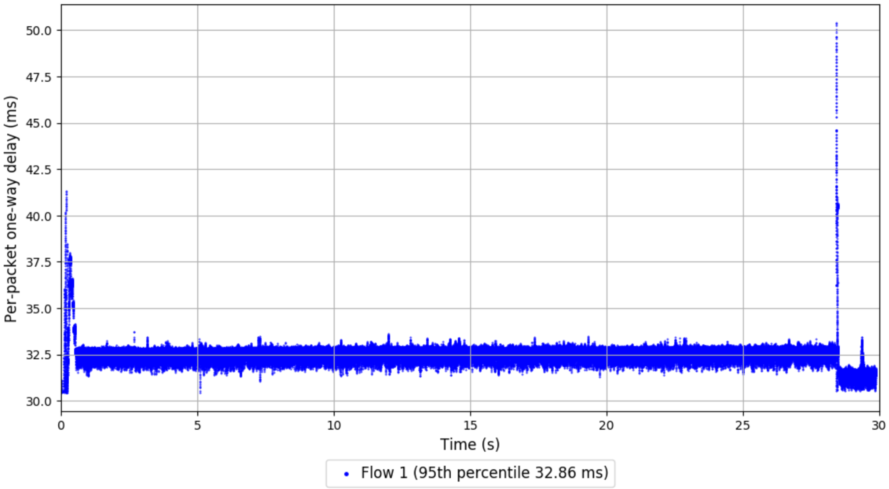




```
Run 7: Statistics of Indigo-1-32

Start at: 2018-02-19 23:20:25
End at: 2018-02-19 23:20:55
Local clock offset: -10.241 ms
Remote clock offset: -20.806 ms

# Below is generated by plot.py at 2018-02-20 04:56:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.05 Mbit/s
95th percentile per-packet one-way delay: 32.862 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 97.05 Mbit/s
95th percentile per-packet one-way delay: 32.862 ms
Loss rate: 0.08%
```

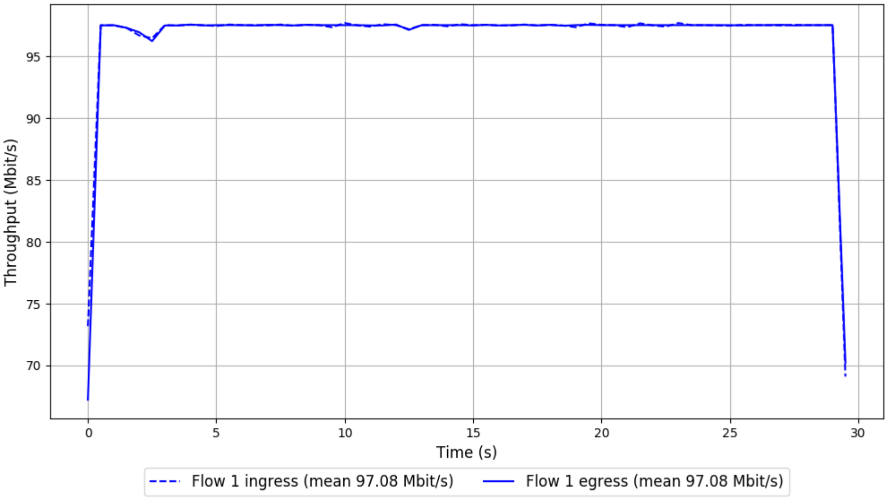
Run 7: Report of Indigo-1-32 — Data Link

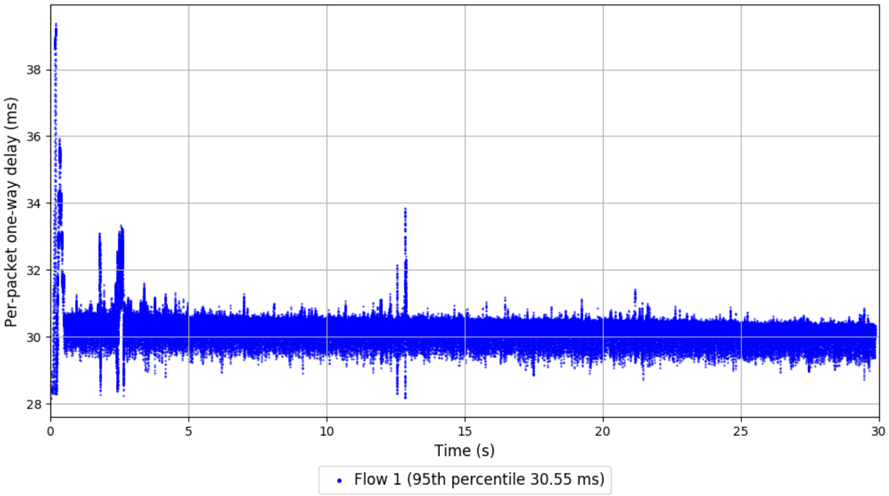




```
Run 8: Statistics of Indigo-1-32

Start at: 2018-02-19 23:42:03
End at: 2018-02-19 23:42:33
Local clock offset: -2.107 ms
Remote clock offset: -11.778 ms

# Below is generated by plot.py at 2018-02-20 04:57:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.08 Mbit/s
95th percentile per-packet one-way delay: 30.555 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 97.08 Mbit/s
95th percentile per-packet one-way delay: 30.555 ms
Loss rate: 0.08%
```

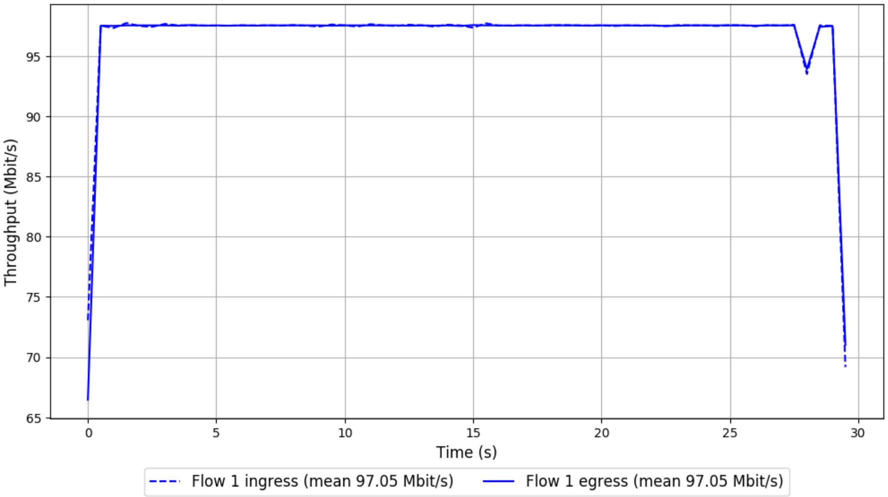
Run 8: Report of Indigo-1-32 — Data Link

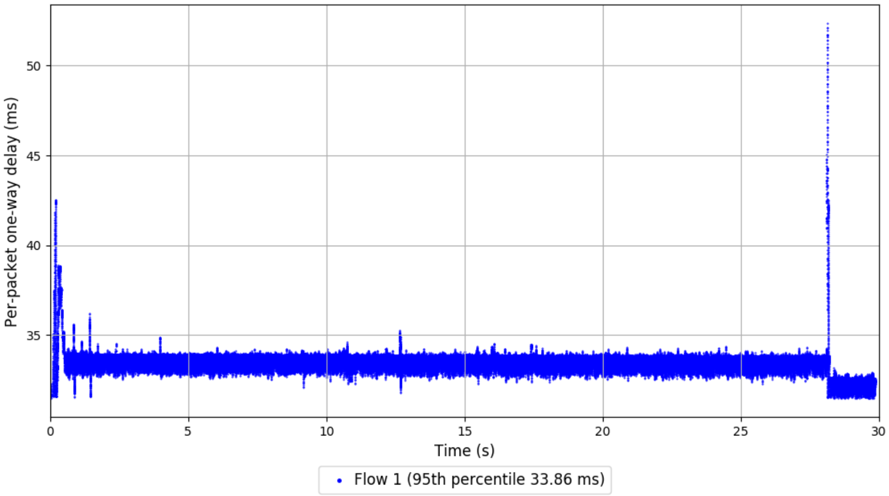




```
Run 9: Statistics of Indigo-1-32

Start at: 2018-02-20 00:03:16
End at: 2018-02-20 00:03:46
Local clock offset: 9.093 ms
Remote clock offset: -9.683 ms

# Below is generated by plot.py at 2018-02-20 04:57:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.05 Mbit/s
95th percentile per-packet one-way delay: 33.858 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 97.05 Mbit/s
95th percentile per-packet one-way delay: 33.858 ms
Loss rate: 0.08%
```

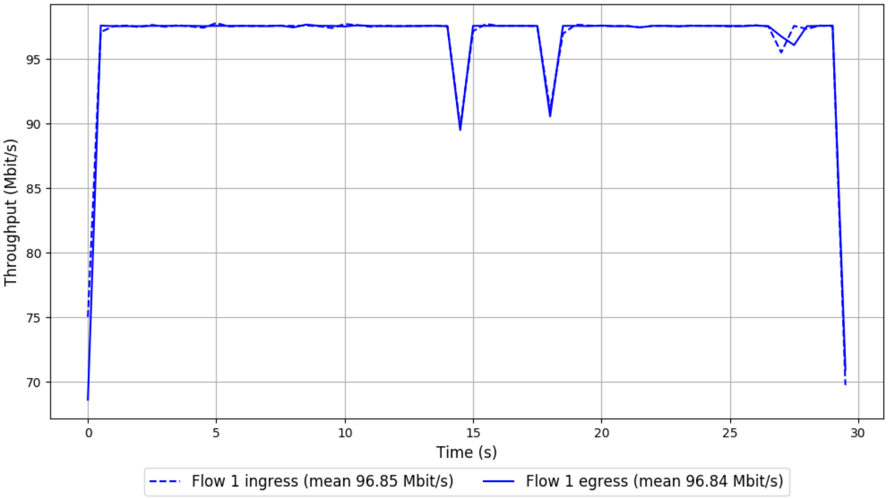
Run 9: Report of Indigo-1-32 — Data Link

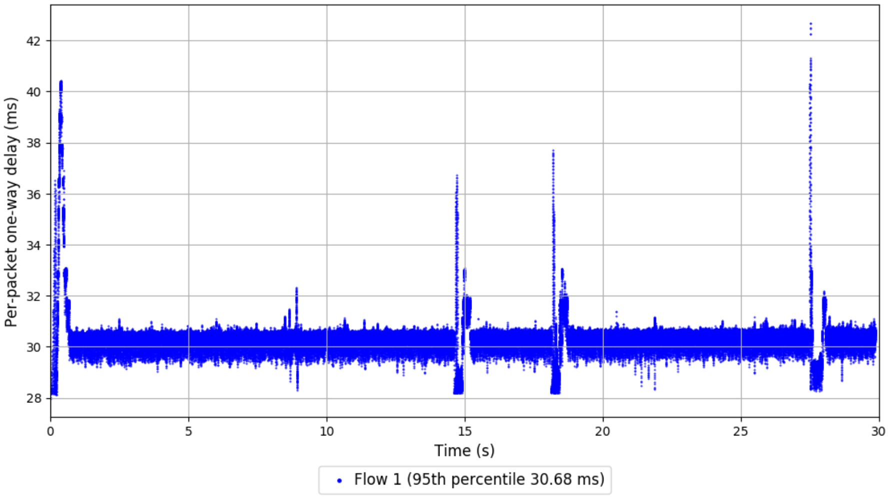




```
Run 10: Statistics of Indigo-1-32

Start at: 2018-02-20 00:24:59
End at: 2018-02-20 00:25:29
Local clock offset: -3.499 ms
Remote clock offset: -7.128 ms

# Below is generated by plot.py at 2018-02-20 04:57:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.84 Mbit/s
95th percentile per-packet one-way delay: 30.676 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 96.84 Mbit/s
95th percentile per-packet one-way delay: 30.676 ms
Loss rate: 0.08%
```

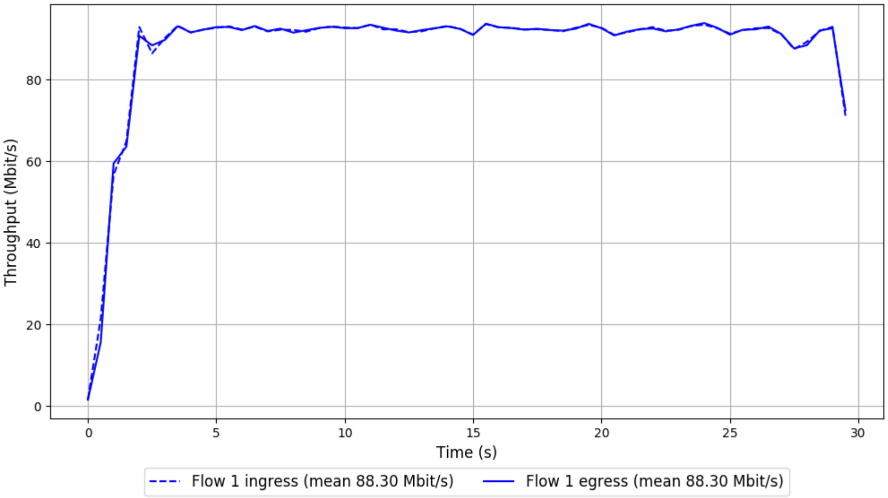
Run 10: Report of Indigo-1-32 — Data Link

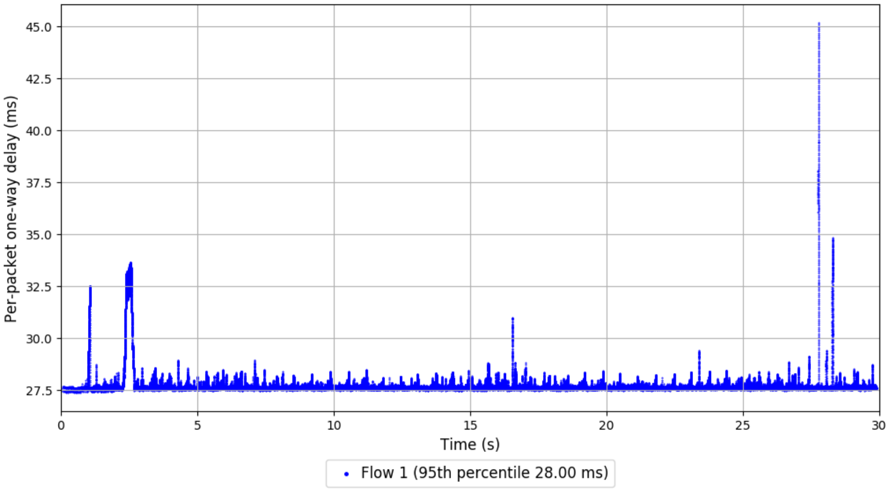




```
Run 1: Statistics of Vivace-latency

Start at: 2018-02-19 21:14:28
End at: 2018-02-19 21:14:58
Local clock offset: -6.297 ms
Remote clock offset: -20.129 ms

# Below is generated by plot.py at 2018-02-20 04:57:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.30 Mbit/s
95th percentile per-packet one-way delay: 27.997 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 88.30 Mbit/s
95th percentile per-packet one-way delay: 27.997 ms
Loss rate: 0.08%
```

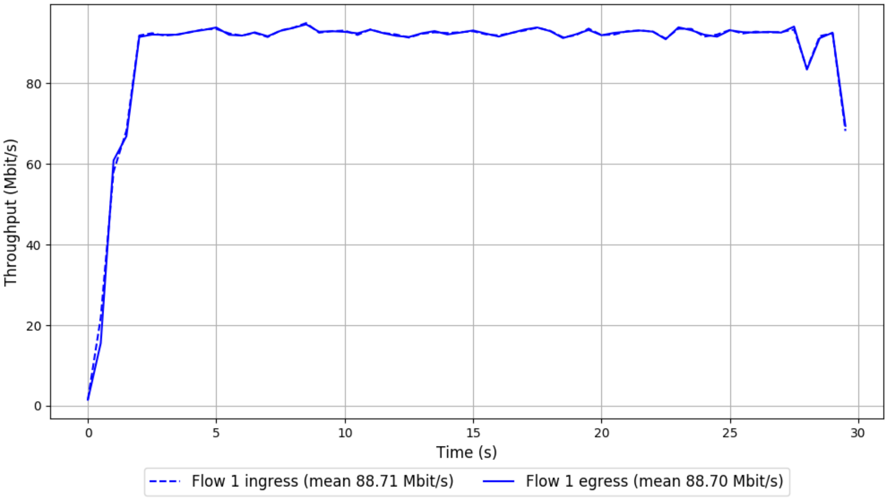
Run 1: Report of Vivace-latency — Data Link

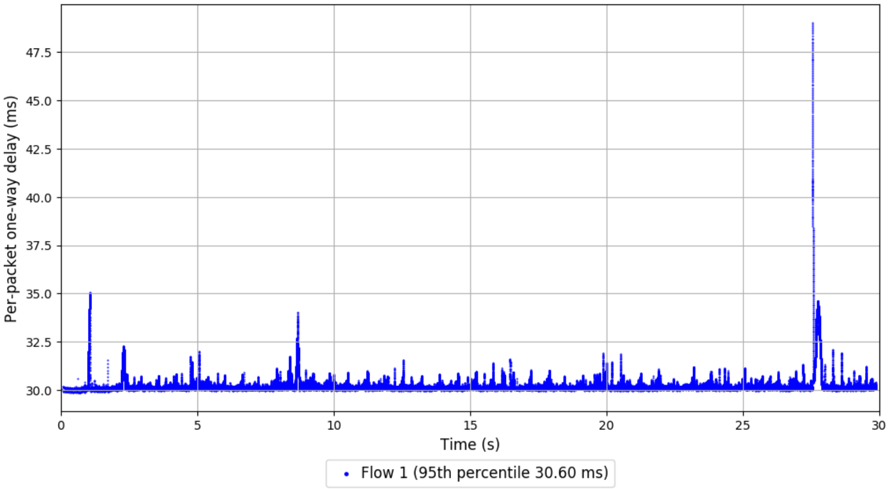




```
Run 2: Statistics of Vivace-latency

Start at: 2018-02-19 21:35:59
End at: 2018-02-19 21:36:29
Local clock offset: -4.686 ms
Remote clock offset: -21.251 ms

# Below is generated by plot.py at 2018-02-20 04:57:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.70 Mbit/s
95th percentile per-packet one-way delay: 30.604 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 88.70 Mbit/s
95th percentile per-packet one-way delay: 30.604 ms
Loss rate: 0.08%
```

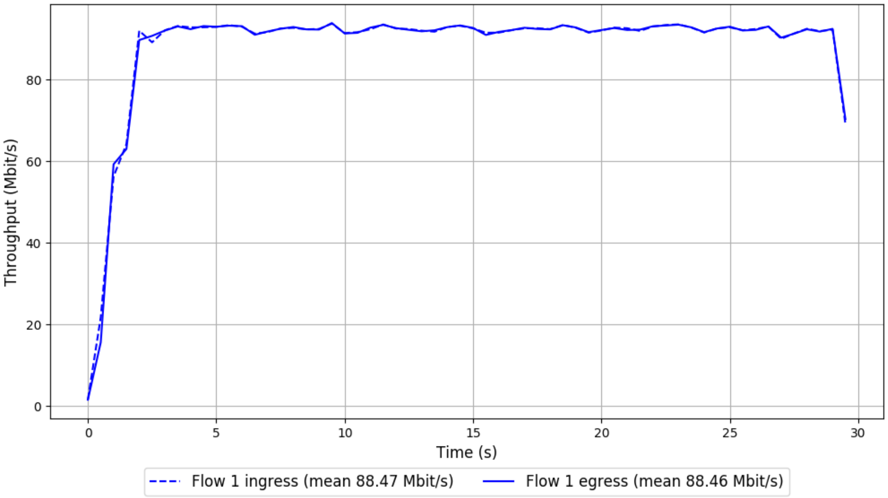
Run 2: Report of Vivace-latency — Data Link

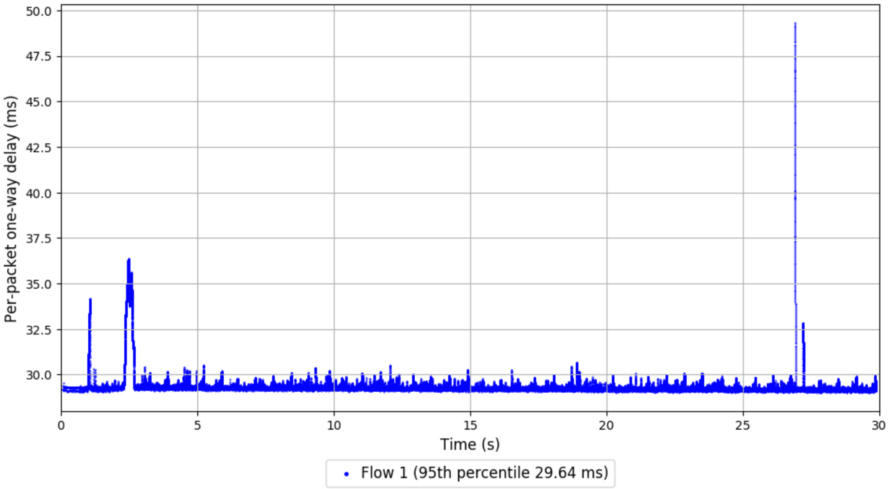




```
Run 3: Statistics of Vivace-latency

Start at: 2018-02-19 21:57:46
End at: 2018-02-19 21:58:16
Local clock offset: -0.217 ms
Remote clock offset: -17.278 ms

# Below is generated by plot.py at 2018-02-20 04:58:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.46 Mbit/s
95th percentile per-packet one-way delay: 29.639 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 88.46 Mbit/s
95th percentile per-packet one-way delay: 29.639 ms
Loss rate: 0.08%
```

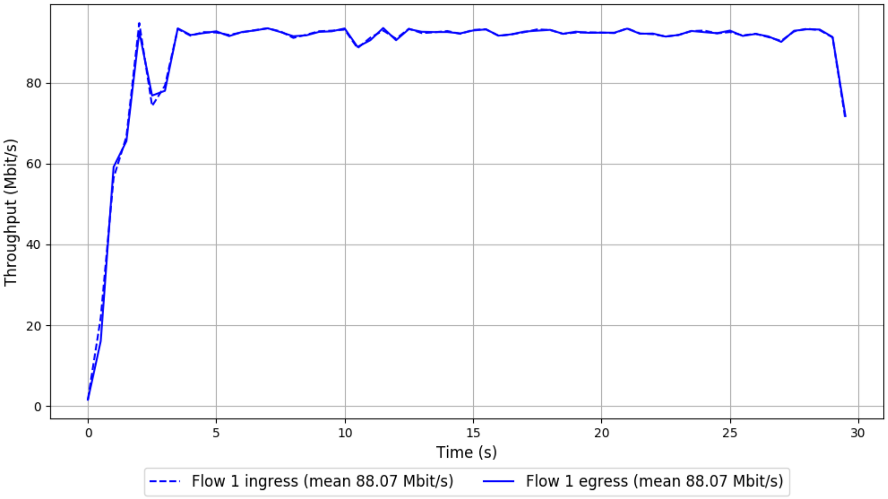
Run 3: Report of Vivace-latency — Data Link

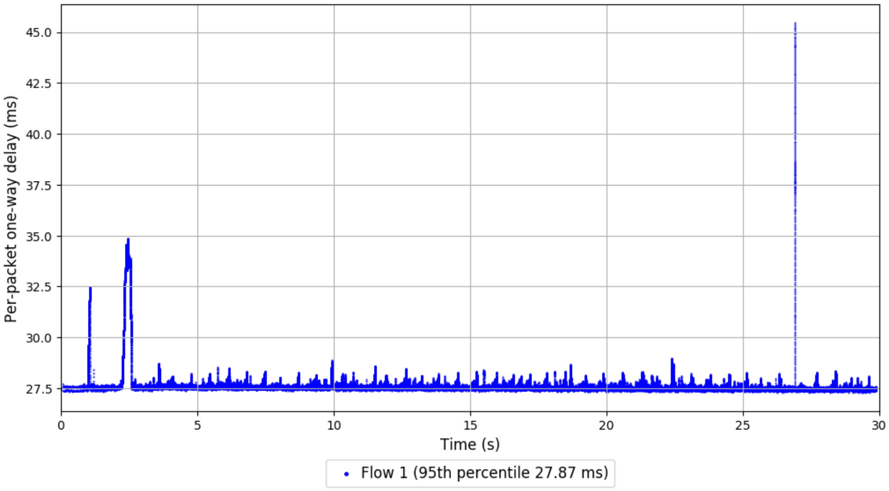




```
Run 4: Statistics of Vivace-latency

Start at: 2018-02-19 22:19:17
End at: 2018-02-19 22:19:47
Local clock offset: 1.454 ms
Remote clock offset: -17.138 ms

# Below is generated by plot.py at 2018-02-20 04:58:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.07 Mbit/s
95th percentile per-packet one-way delay: 27.868 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 88.07 Mbit/s
95th percentile per-packet one-way delay: 27.868 ms
Loss rate: 0.08%
```

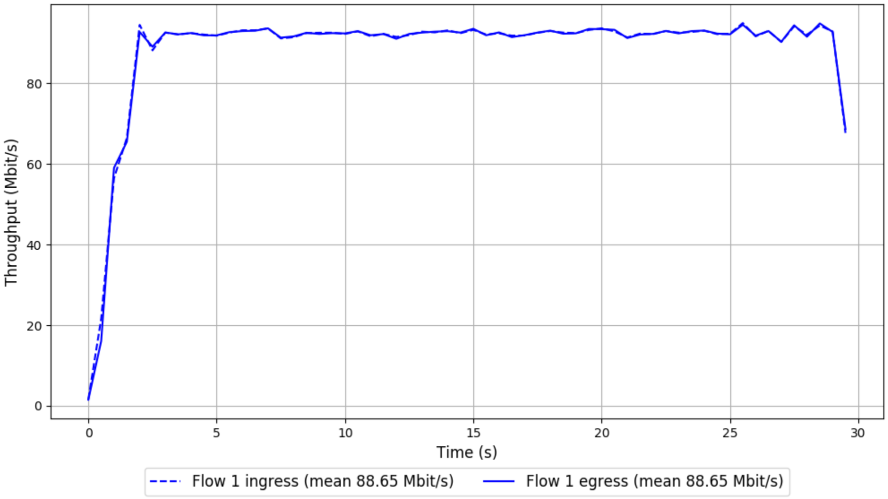
Run 4: Report of Vivace-latency — Data Link

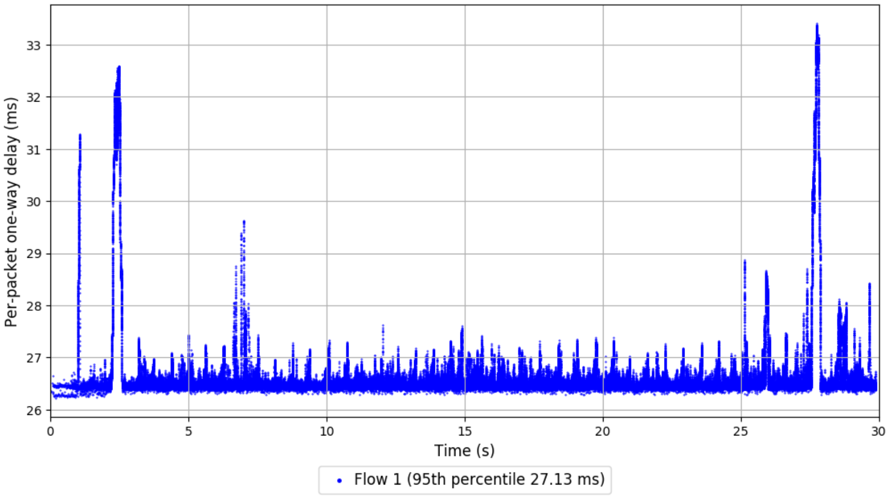




```
Run 5: Statistics of Vivace-latency

Start at: 2018-02-19 22:41:02
End at: 2018-02-19 22:41:32
Local clock offset: -0.252 ms
Remote clock offset: -18.404 ms

# Below is generated by plot.py at 2018-02-20 04:58:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.65 Mbit/s
95th percentile per-packet one-way delay: 27.133 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 88.65 Mbit/s
95th percentile per-packet one-way delay: 27.133 ms
Loss rate: 0.07%
```

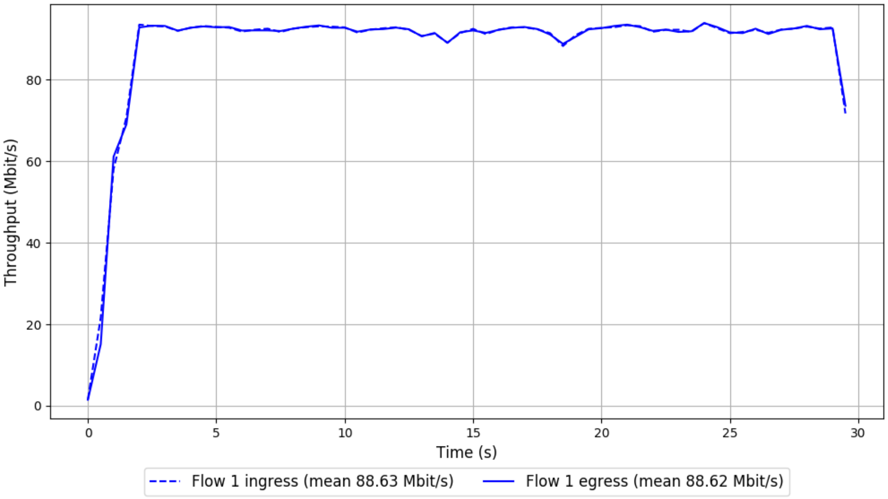
Run 5: Report of Vivace-latency — Data Link

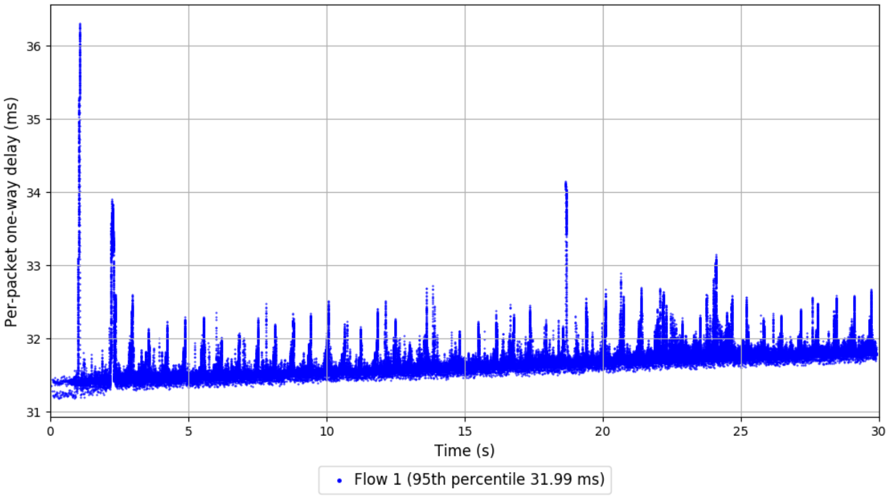




```
Run 6: Statistics of Vivace-latency

Start at: 2018-02-19 23:02:47
End at: 2018-02-19 23:03:17
Local clock offset: -3.164 ms
Remote clock offset: -22.354 ms

# Below is generated by plot.py at 2018-02-20 04:58:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.62 Mbit/s
95th percentile per-packet one-way delay: 31.994 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 88.62 Mbit/s
95th percentile per-packet one-way delay: 31.994 ms
Loss rate: 0.08%
```

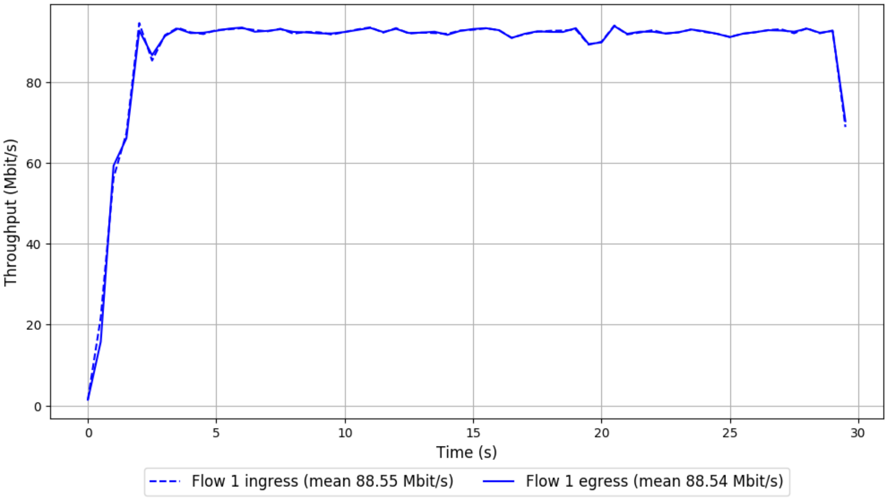
Run 6: Report of Vivace-latency — Data Link

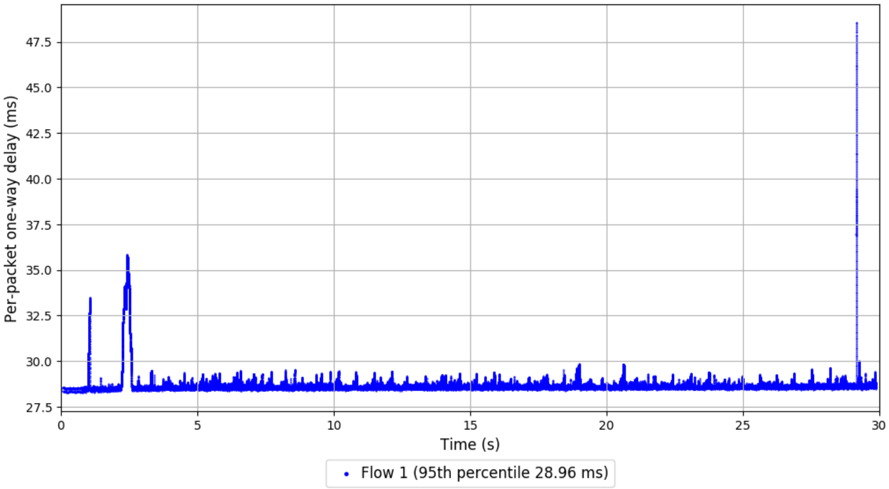




```
Run 7: Statistics of Vivace-latency

Start at: 2018-02-19 23:24:10
End at: 2018-02-19 23:24:40
Local clock offset: -13.695 ms
Remote clock offset: -21.578 ms

# Below is generated by plot.py at 2018-02-20 04:58:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.54 Mbit/s
95th percentile per-packet one-way delay: 28.963 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 88.54 Mbit/s
95th percentile per-packet one-way delay: 28.963 ms
Loss rate: 0.08%
```

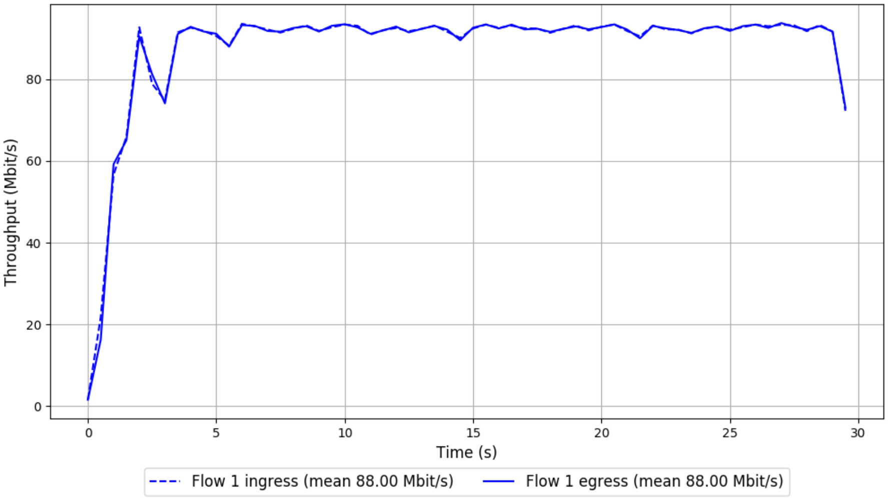
Run 7: Report of Vivace-latency — Data Link

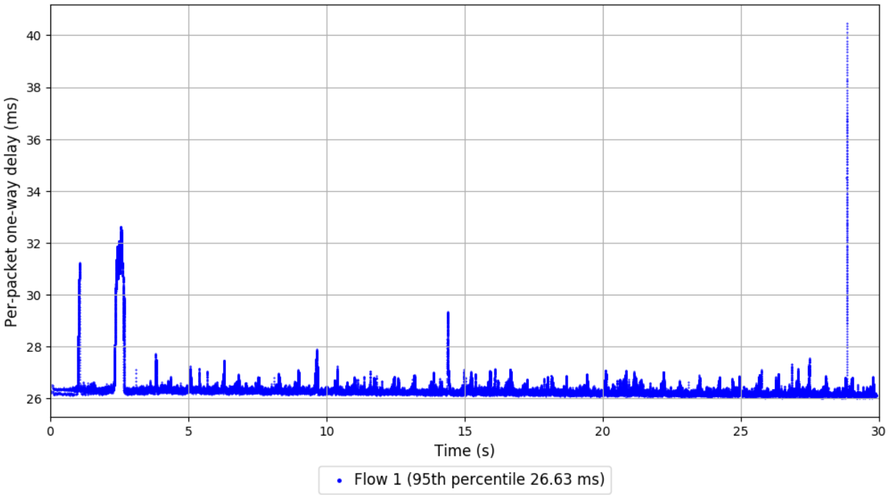




```
Run 8: Statistics of Vivace-latency

Start at: 2018-02-19 23:45:45
End at: 2018-02-19 23:46:15
Local clock offset: -0.274 ms
Remote clock offset: -9.768 ms

# Below is generated by plot.py at 2018-02-20 04:58:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.00 Mbit/s
95th percentile per-packet one-way delay: 26.631 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 88.00 Mbit/s
95th percentile per-packet one-way delay: 26.631 ms
Loss rate: 0.08%
```

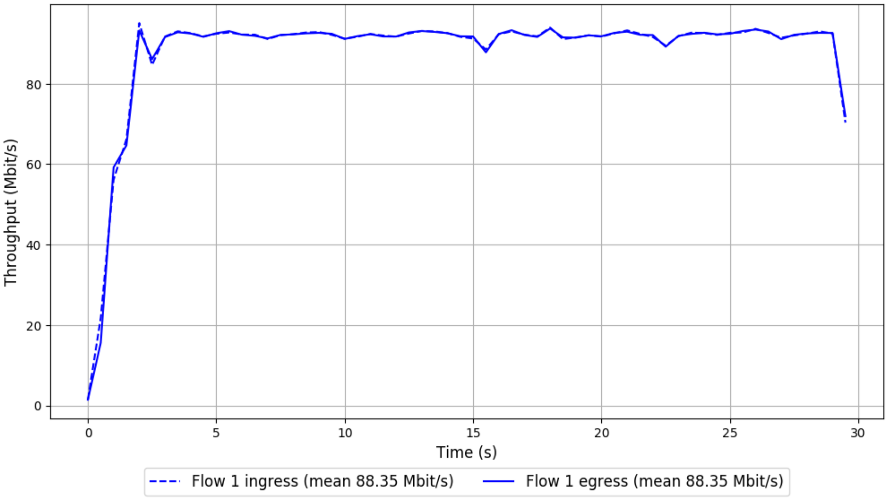
Run 8: Report of Vivace-latency — Data Link

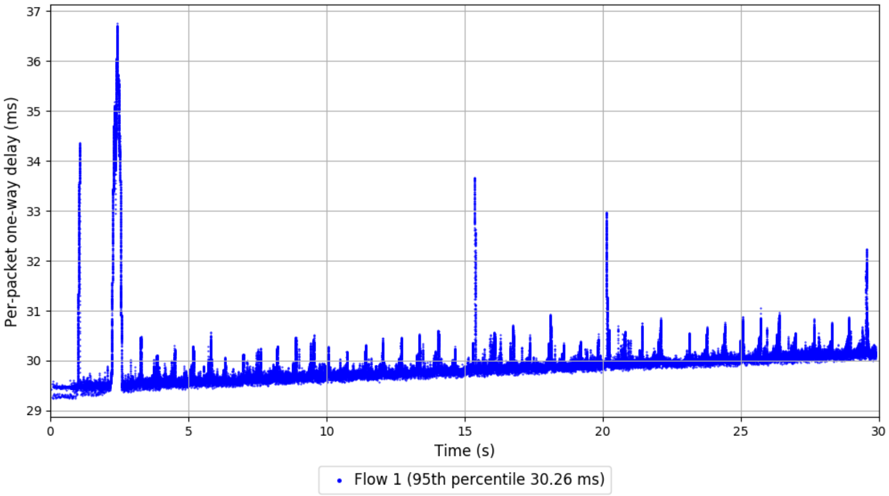




```
Run 9: Statistics of Vivace-latency

Start at: 2018-02-20 00:07:03
End at: 2018-02-20 00:07:33
Local clock offset: 8.436 ms
Remote clock offset: -7.979 ms

# Below is generated by plot.py at 2018-02-20 04:58:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.35 Mbit/s
95th percentile per-packet one-way delay: 30.256 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 88.35 Mbit/s
95th percentile per-packet one-way delay: 30.256 ms
Loss rate: 0.08%
```

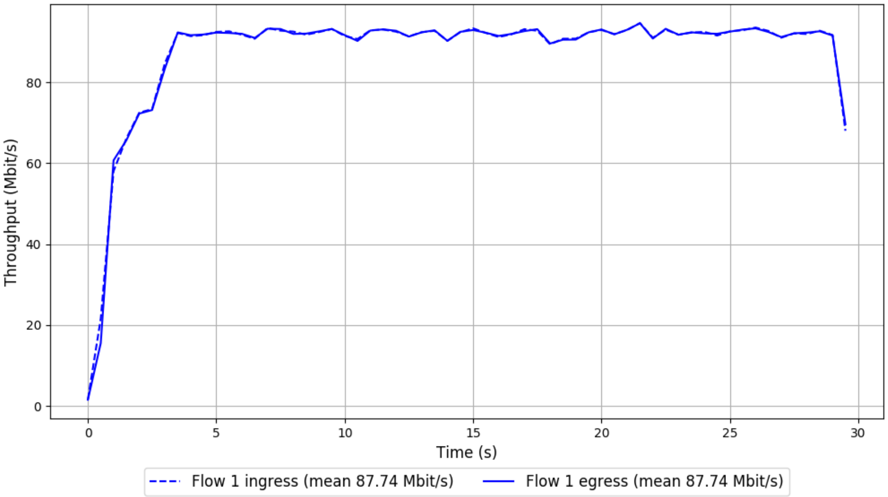
Run 9: Report of Vivace-latency — Data Link

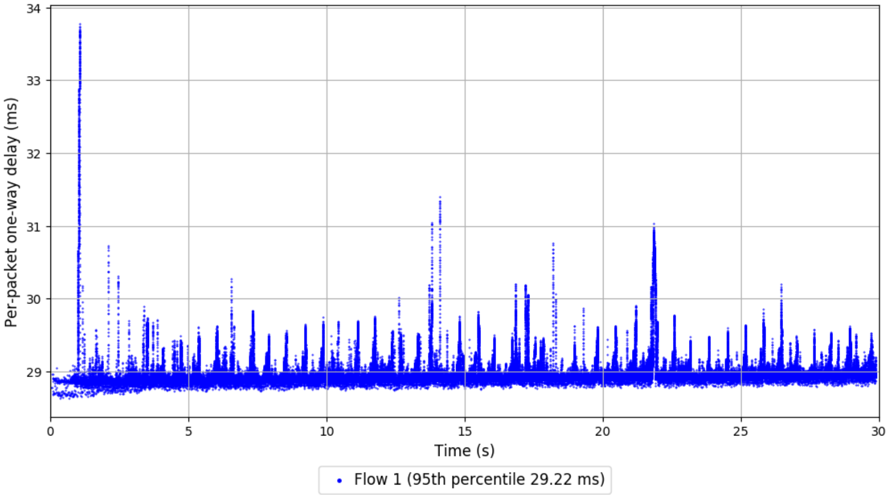




```
Run 10: Statistics of Vivace-latency

Start at: 2018-02-20 00:28:46
End at: 2018-02-20 00:29:16
Local clock offset: -2.311 ms
Remote clock offset: -5.843 ms

# Below is generated by plot.py at 2018-02-20 04:58:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.74 Mbit/s
95th percentile per-packet one-way delay: 29.224 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 87.74 Mbit/s
95th percentile per-packet one-way delay: 29.224 ms
Loss rate: 0.07%
```

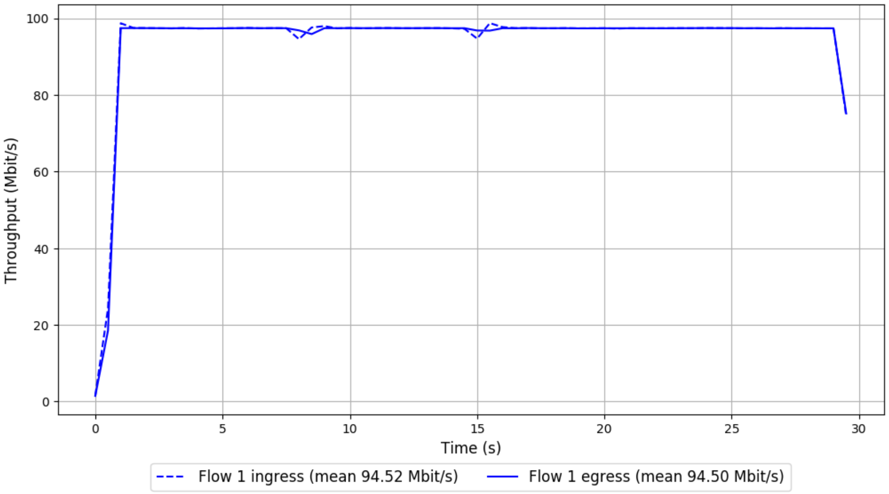
Run 10: Report of Vivace-latency — Data Link

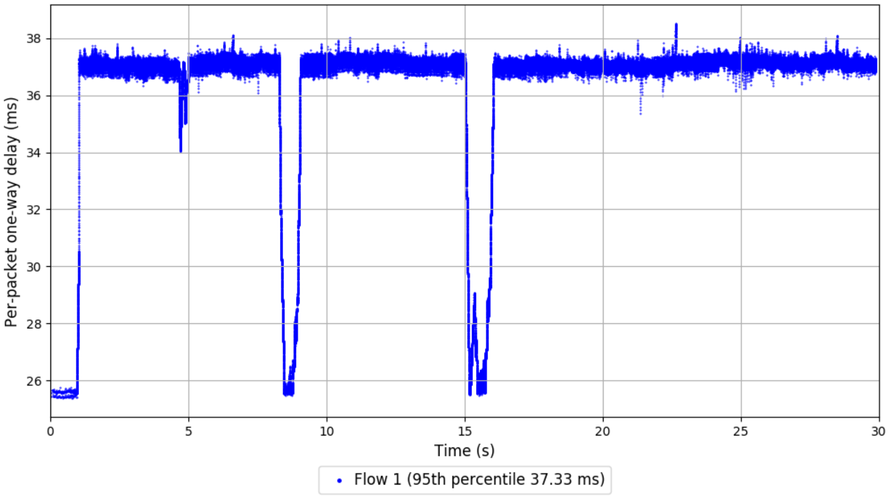




```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-19 21:27:28
End at: 2018-02-19 21:27:58
Local clock offset: -7.599 ms
Remote clock offset: -19.735 ms

# Below is generated by plot.py at 2018-02-20 04:59:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.50 Mbit/s
95th percentile per-packet one-way delay: 37.333 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 94.50 Mbit/s
95th percentile per-packet one-way delay: 37.333 ms
Loss rate: 0.12%
```

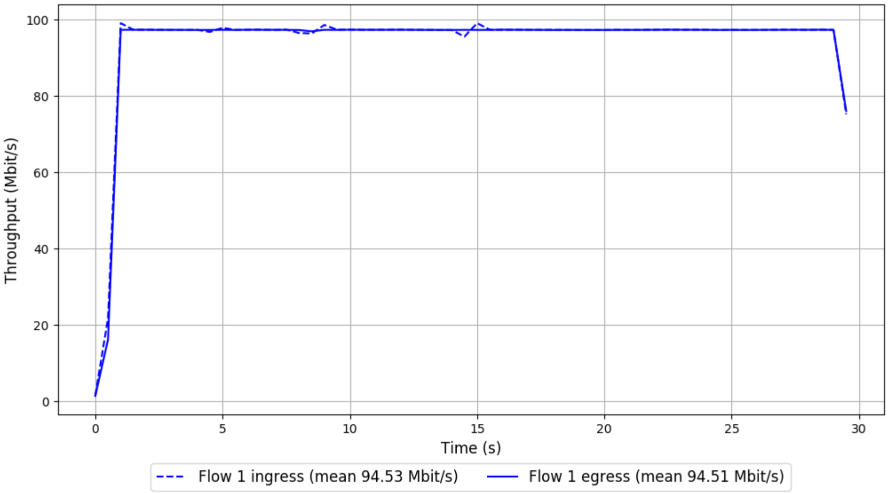
Run 1: Report of Vivace-loss — Data Link

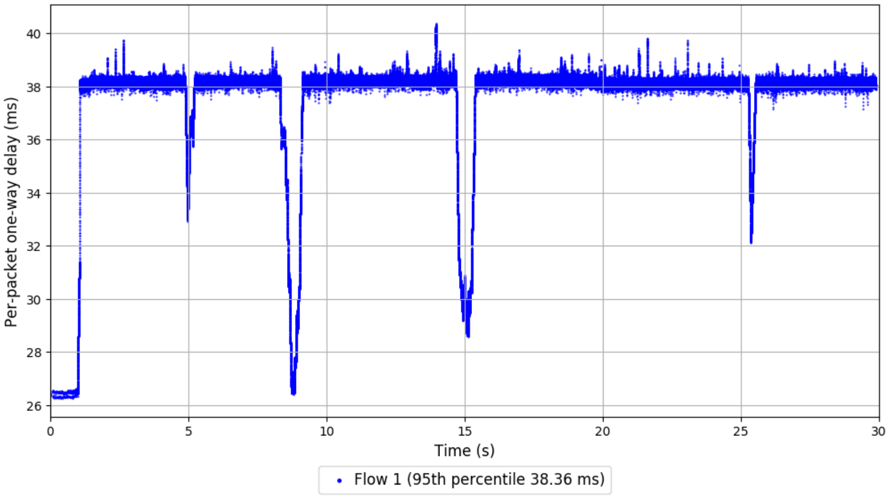




```
Run 2: Statistics of Vivace-loss

Start at: 2018-02-19 21:49:10
End at: 2018-02-19 21:49:40
Local clock offset: -7.333 ms
Remote clock offset: -18.46 ms

# Below is generated by plot.py at 2018-02-20 04:59:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.51 Mbit/s
95th percentile per-packet one-way delay: 38.356 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 94.51 Mbit/s
95th percentile per-packet one-way delay: 38.356 ms
Loss rate: 0.12%
```

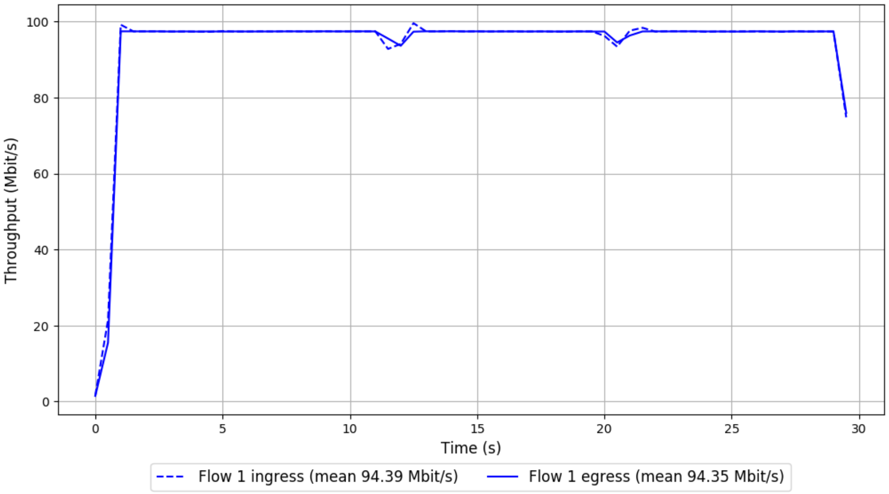
Run 2: Report of Vivace-loss — Data Link

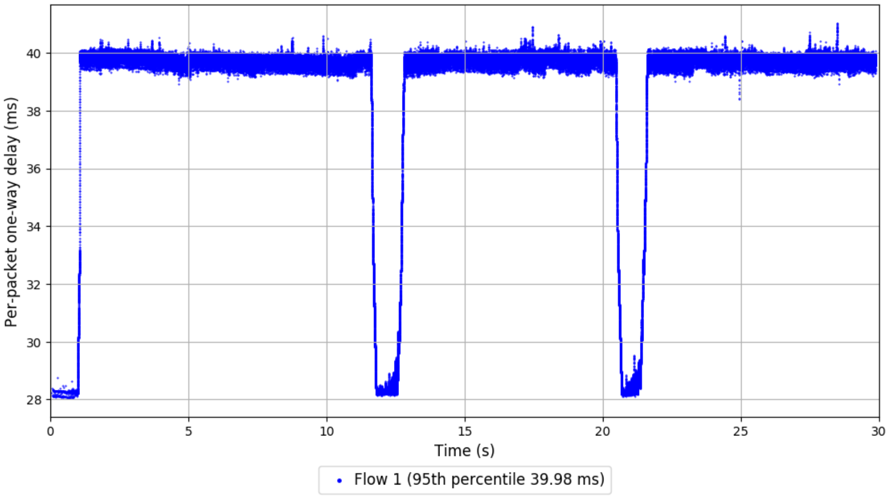




```
Run 3: Statistics of Vivace-loss

Start at: 2018-02-19 22:10:41
End at: 2018-02-19 22:11:11
Local clock offset: 0.391 ms
Remote clock offset: -17.736 ms

# Below is generated by plot.py at 2018-02-20 04:59:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.35 Mbit/s
95th percentile per-packet one-way delay: 39.978 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 94.35 Mbit/s
95th percentile per-packet one-way delay: 39.978 ms
Loss rate: 0.12%
```

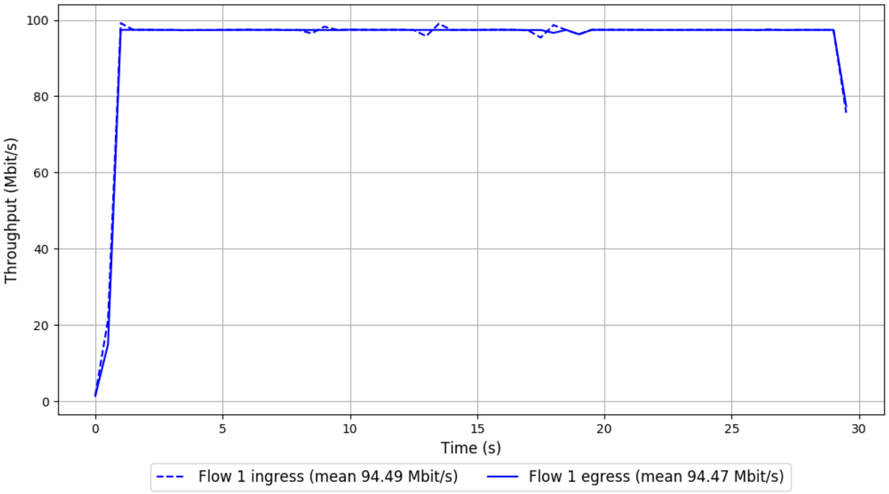
Run 3: Report of Vivace-loss — Data Link

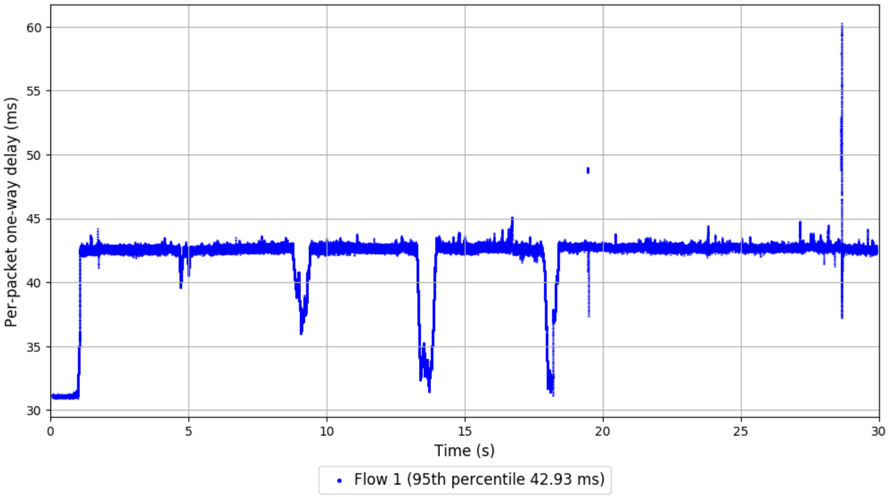




```
Run 4: Statistics of Vivace-loss

Start at: 2018-02-19 22:32:17
End at: 2018-02-19 22:32:47
Local clock offset: 1.881 ms
Remote clock offset: -20.943 ms

# Below is generated by plot.py at 2018-02-20 04:59:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.47 Mbit/s
95th percentile per-packet one-way delay: 42.931 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 94.47 Mbit/s
95th percentile per-packet one-way delay: 42.931 ms
Loss rate: 0.12%
```

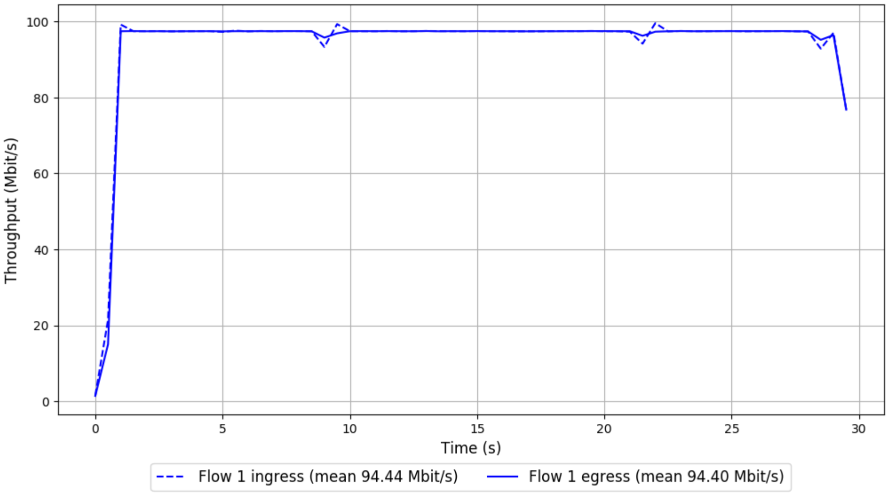
Run 4: Report of Vivace-loss — Data Link

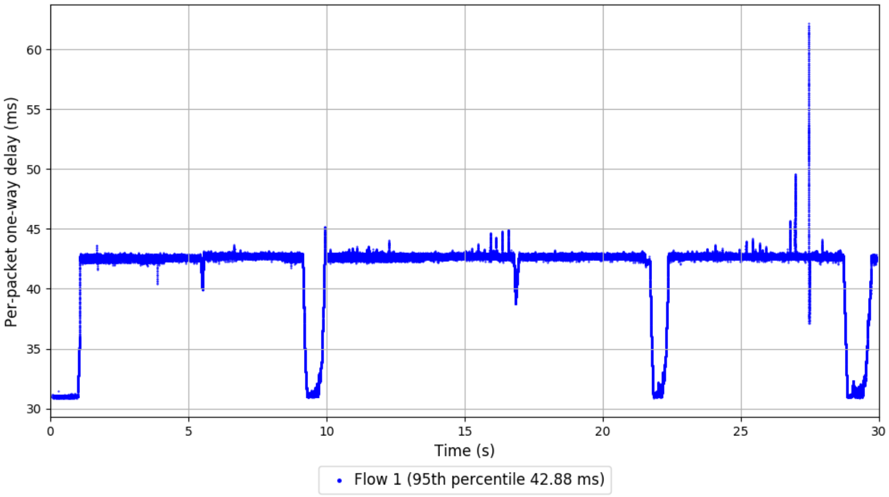




```
Run 5: Statistics of Vivace-loss

Start at: 2018-02-19 22:54:14
End at: 2018-02-19 22:54:44
Local clock offset: 1.617 ms
Remote clock offset: -21.82 ms

# Below is generated by plot.py at 2018-02-20 04:59:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.40 Mbit/s
95th percentile per-packet one-way delay: 42.879 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 94.40 Mbit/s
95th percentile per-packet one-way delay: 42.879 ms
Loss rate: 0.12%
```

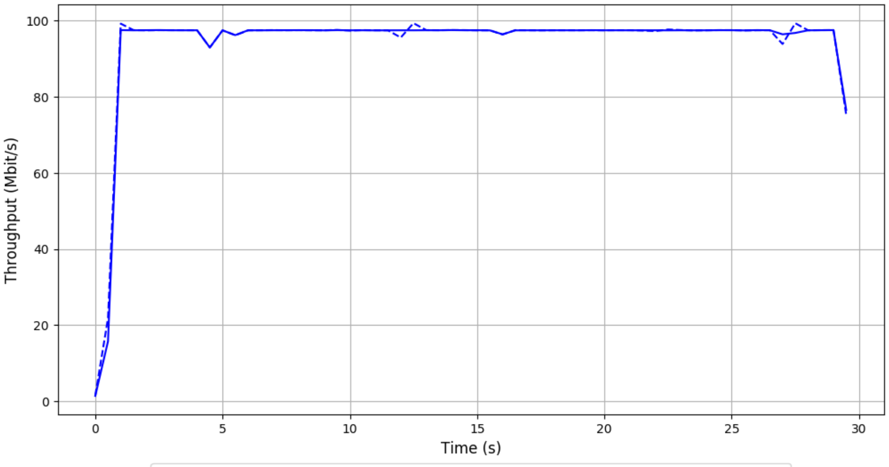
Run 5: Report of Vivace-loss — Data Link



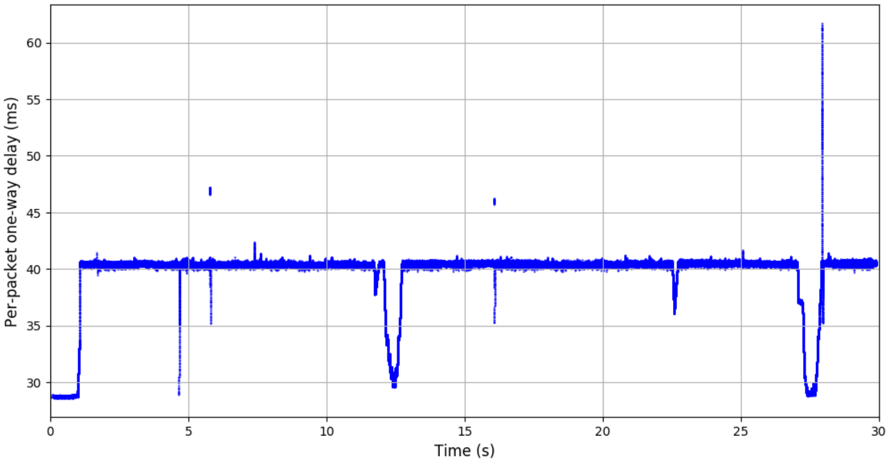


```
Run 6: Statistics of Vivace-loss

Start at: 2018-02-19 23:15:39
End at: 2018-02-19 23:16:09
Local clock offset: -10.689 ms
Remote clock offset: -20.715 ms

# Below is generated by plot.py at 2018-02-20 04:59:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.37 Mbit/s
95th percentile per-packet one-way delay: 40.637 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 94.37 Mbit/s
95th percentile per-packet one-way delay: 40.637 ms
Loss rate: 0.12%
```

Run 6: Report of Vivace-loss — Data Link



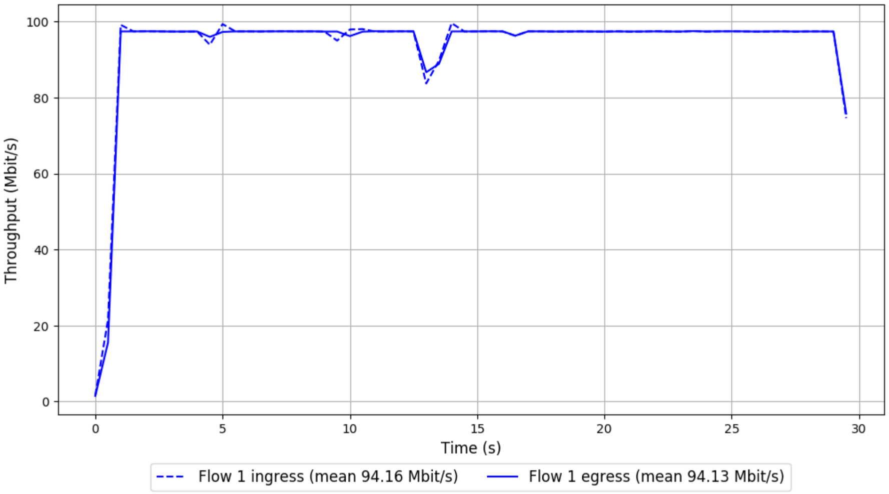
Flow 1 ingress (mean 94.41 Mbit/s) Flow 1 egress (mean 94.37 Mbit/s)

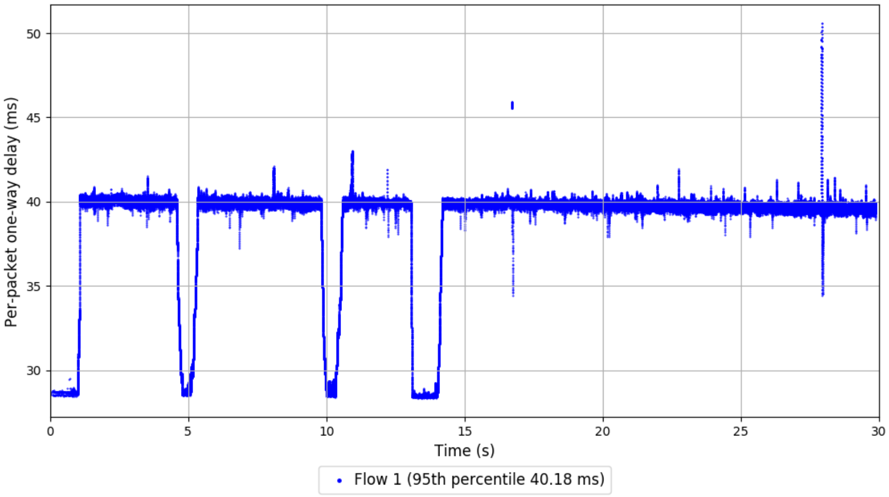


Flow 1 (95th percentile 40.64 ms)

```
Run 7: Statistics of Vivace-loss

Start at: 2018-02-19 23:37:14
End at: 2018-02-19 23:37:44
Local clock offset: -8.726 ms
Remote clock offset: -15.359 ms

# Below is generated by plot.py at 2018-02-20 04:59:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.13 Mbit/s
95th percentile per-packet one-way delay: 40.177 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 94.13 Mbit/s
95th percentile per-packet one-way delay: 40.177 ms
Loss rate: 0.12%
```

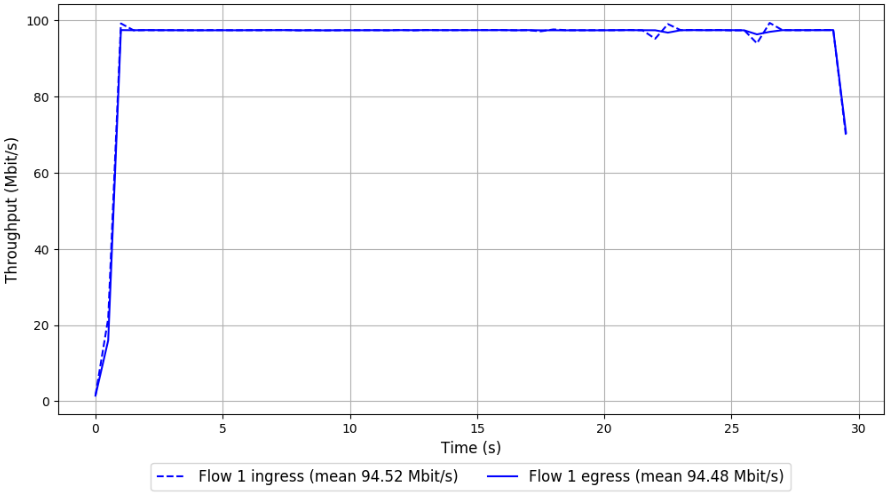
Run 7: Report of Vivace-loss — Data Link

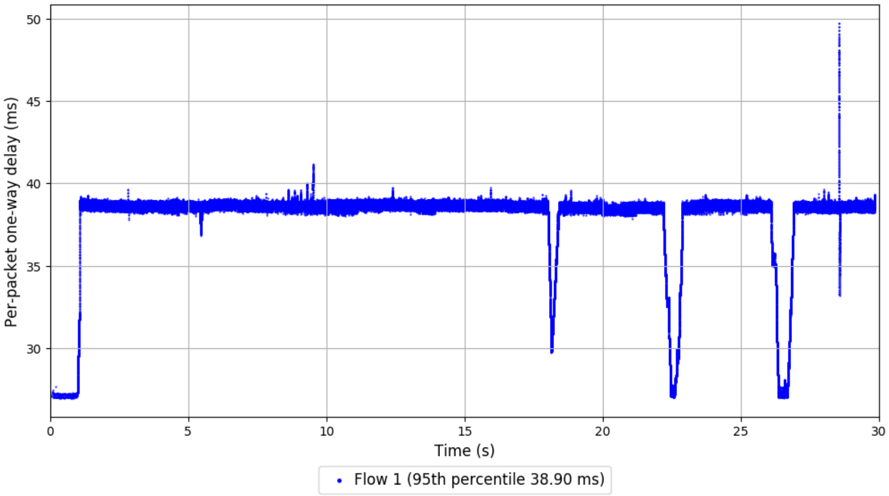




```
Run 8: Statistics of Vivace-loss

Start at: 2018-02-19 23:58:34
End at: 2018-02-19 23:59:04
Local clock offset: 4.358 ms
Remote clock offset: -9.289 ms

# Below is generated by plot.py at 2018-02-20 04:59:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.48 Mbit/s
95th percentile per-packet one-way delay: 38.903 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 94.48 Mbit/s
95th percentile per-packet one-way delay: 38.903 ms
Loss rate: 0.12%
```

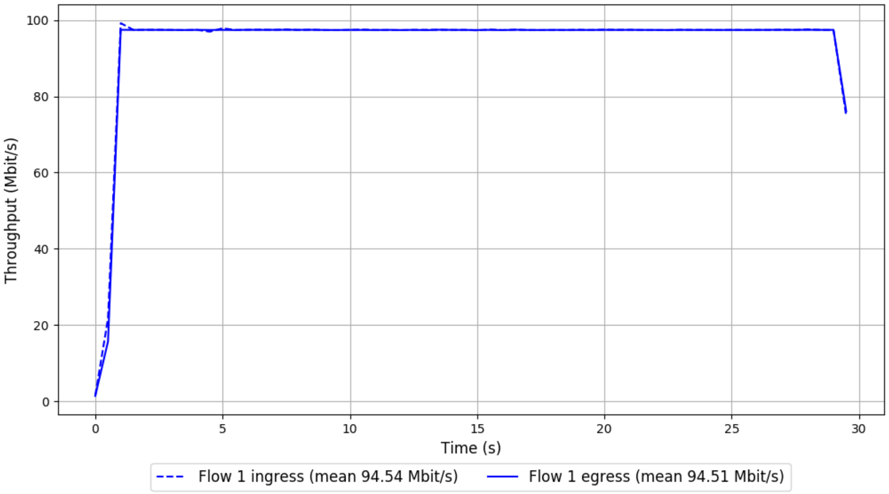
Run 8: Report of Vivace-loss — Data Link

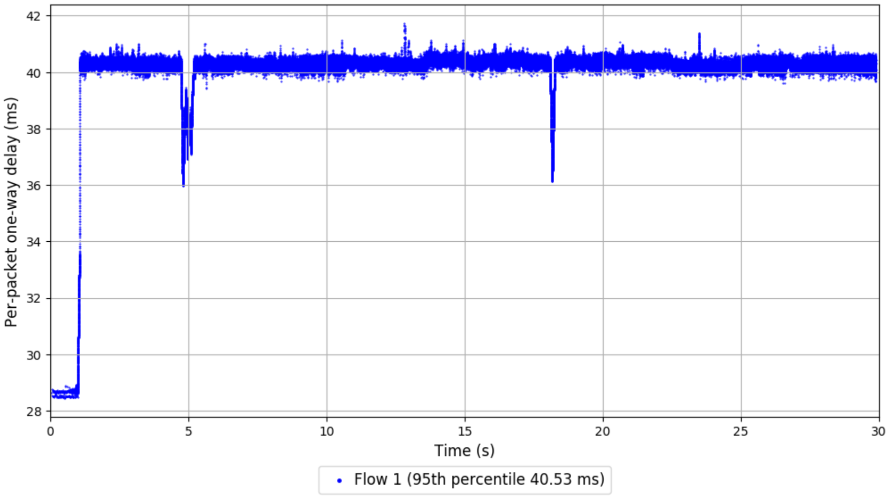




```
Run 9: Statistics of Vivace-loss

Start at: 2018-02-20 00:20:07
End at: 2018-02-20 00:20:37
Local clock offset: -2.589 ms
Remote clock offset: -8.164 ms

# Below is generated by plot.py at 2018-02-20 05:01:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.51 Mbit/s
95th percentile per-packet one-way delay: 40.527 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 94.51 Mbit/s
95th percentile per-packet one-way delay: 40.527 ms
Loss rate: 0.12%
```

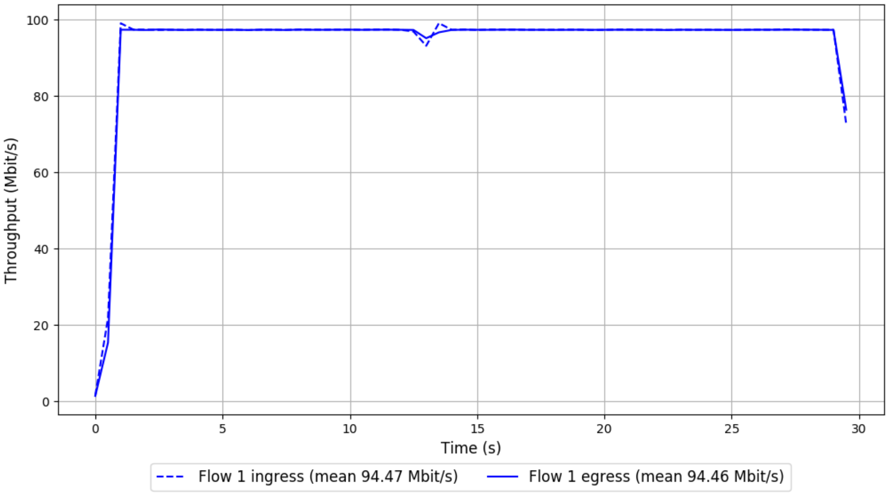
Run 9: Report of Vivace-loss — Data Link

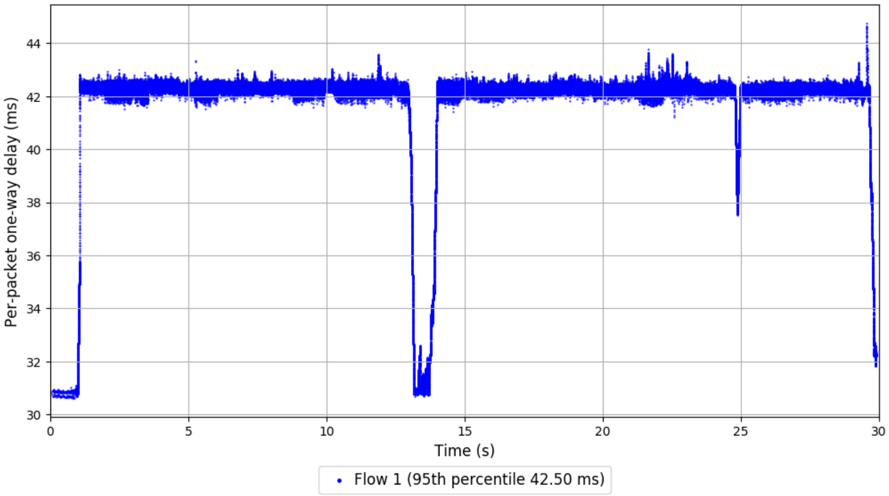




```
Run 10: Statistics of Vivace-loss

Start at: 2018-02-20 00:41:54
End at: 2018-02-20 00:42:25
Local clock offset: -2.369 ms
Remote clock offset: -12.656 ms

# Below is generated by plot.py at 2018-02-20 05:01:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.46 Mbit/s
95th percentile per-packet one-way delay: 42.501 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 94.46 Mbit/s
95th percentile per-packet one-way delay: 42.501 ms
Loss rate: 0.08%
```

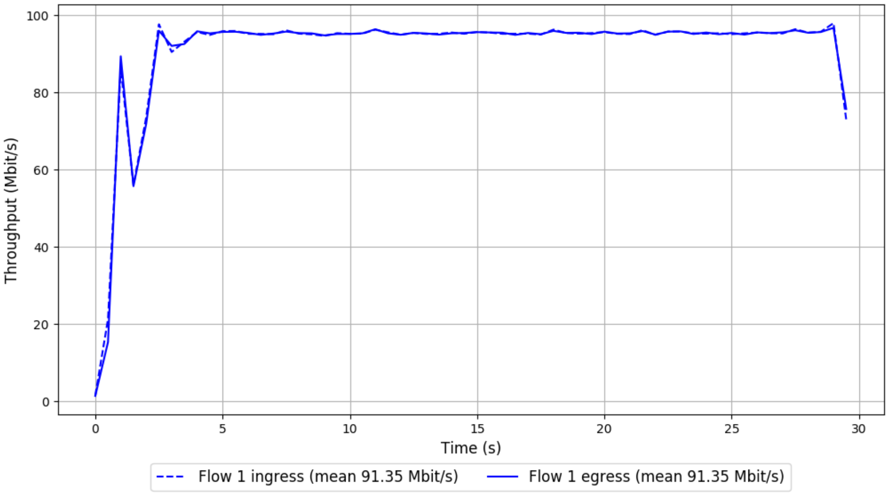
Run 10: Report of Vivace-loss — Data Link

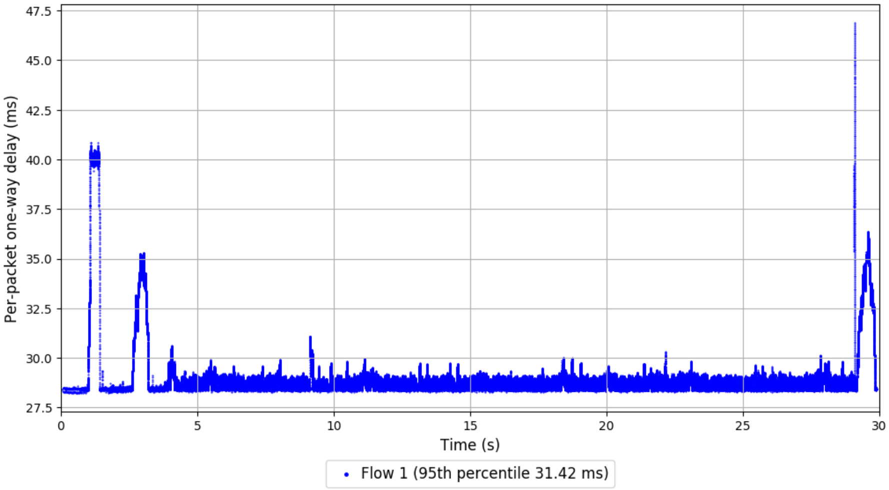




```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-19 21:21:42
End at: 2018-02-19 21:22:12
Local clock offset: -5.311 ms
Remote clock offset: -20.193 ms

# Below is generated by plot.py at 2018-02-20 05:01:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.35 Mbit/s
95th percentile per-packet one-way delay: 31.422 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 91.35 Mbit/s
95th percentile per-packet one-way delay: 31.422 ms
Loss rate: 0.08%
```

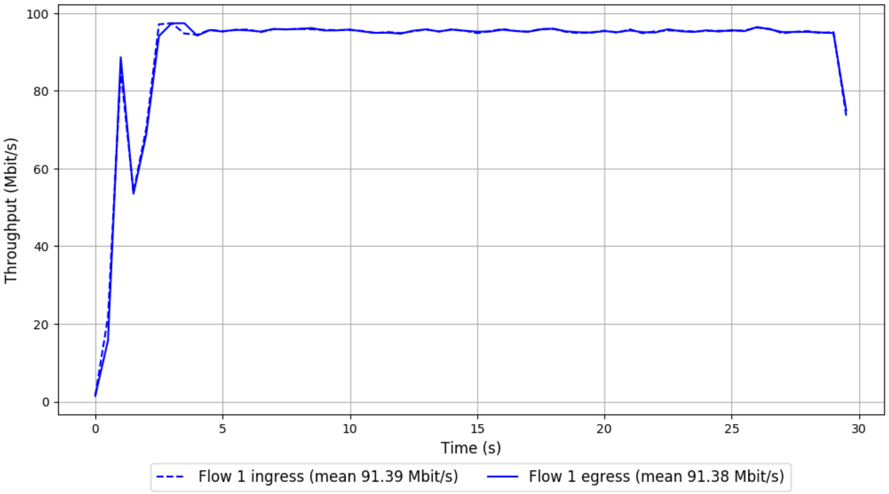
Run 1: Report of Vivace-LTE — Data Link

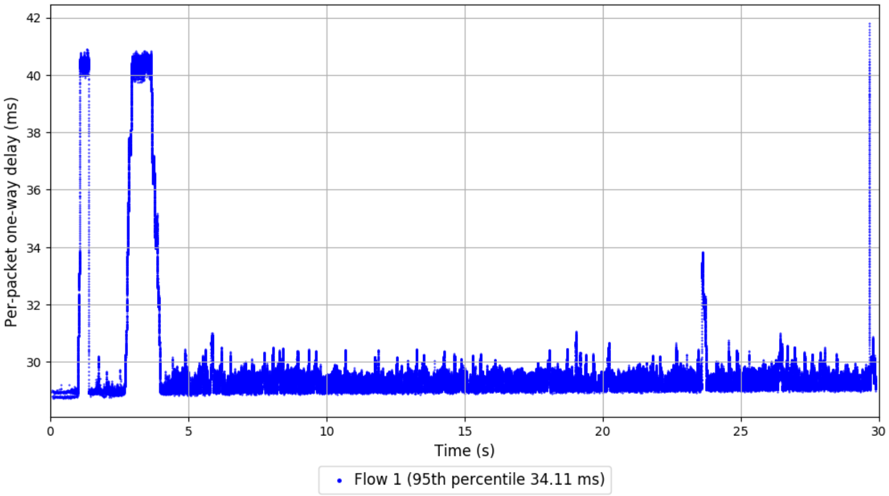




```
Run 2: Statistics of Vivace-LTE

Start at: 2018-02-19 21:43:17
End at: 2018-02-19 21:43:47
Local clock offset: -5.927 ms
Remote clock offset: -21.034 ms

# Below is generated by plot.py at 2018-02-20 05:01:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.38 Mbit/s
95th percentile per-packet one-way delay: 34.106 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 91.38 Mbit/s
95th percentile per-packet one-way delay: 34.106 ms
Loss rate: 0.08%
```

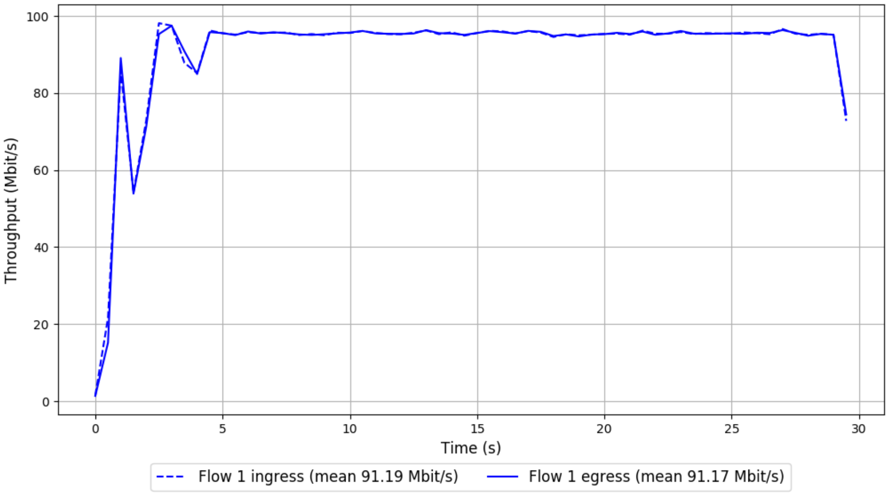
Run 2: Report of Vivace-LTE — Data Link

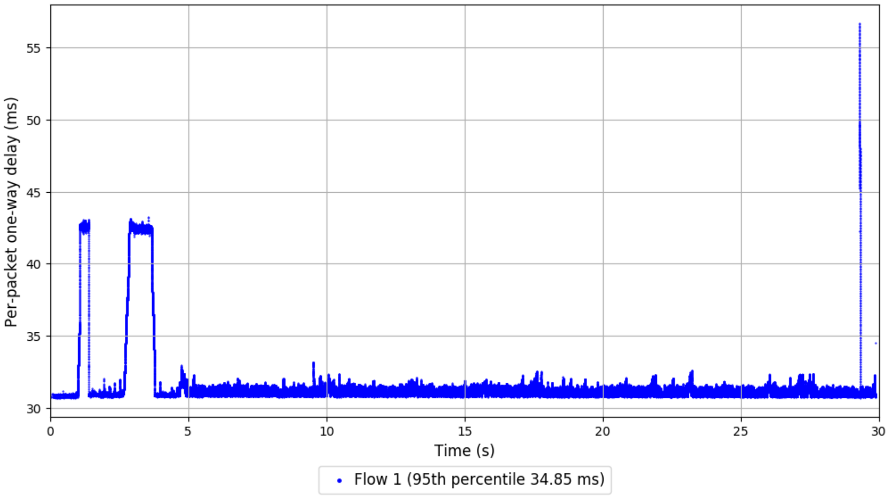




```
Run 3: Statistics of Vivace-LTE

Start at: 2018-02-19 22:04:59
End at: 2018-02-19 22:05:29
Local clock offset: 0.635 ms
Remote clock offset: -19.526 ms

# Below is generated by plot.py at 2018-02-20 05:01:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.17 Mbit/s
95th percentile per-packet one-way delay: 34.847 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 91.17 Mbit/s
95th percentile per-packet one-way delay: 34.847 ms
Loss rate: 0.08%
```

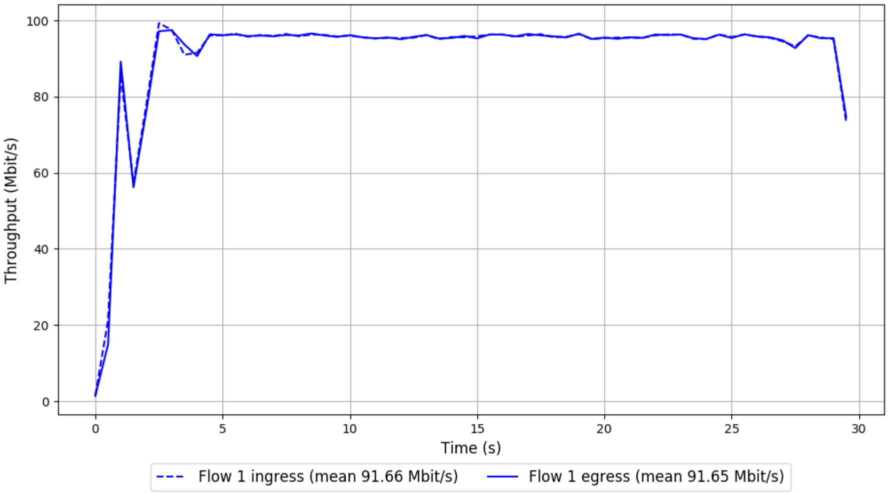
Run 3: Report of Vivace-LTE — Data Link

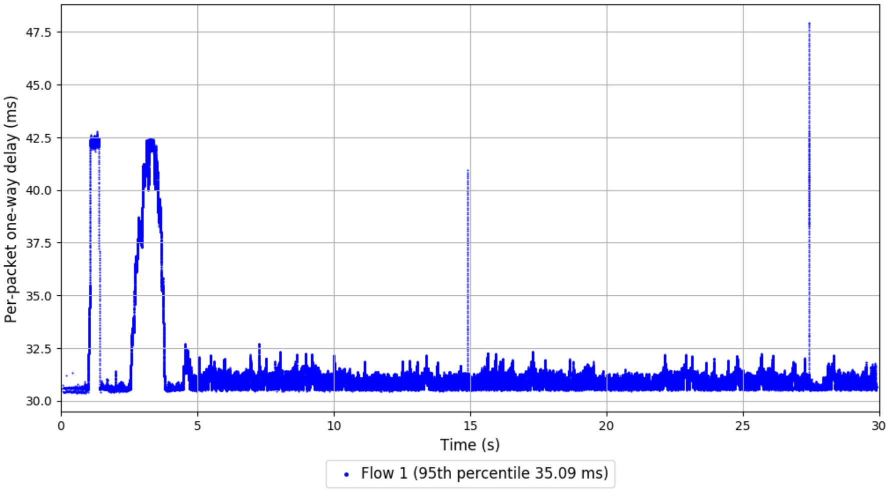




```
Run 4: Statistics of Vivace-LTE

Start at: 2018-02-19 22:26:35
End at: 2018-02-19 22:27:05
Local clock offset: 2.064 ms
Remote clock offset: -20.438 ms

# Below is generated by plot.py at 2018-02-20 05:01:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.65 Mbit/s
95th percentile per-packet one-way delay: 35.090 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 91.65 Mbit/s
95th percentile per-packet one-way delay: 35.090 ms
Loss rate: 0.08%
```

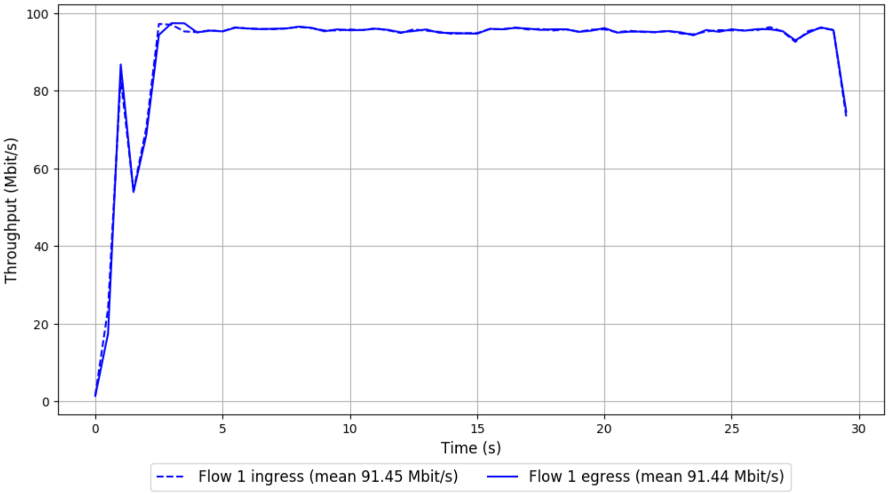
Run 4: Report of Vivace-LTE — Data Link

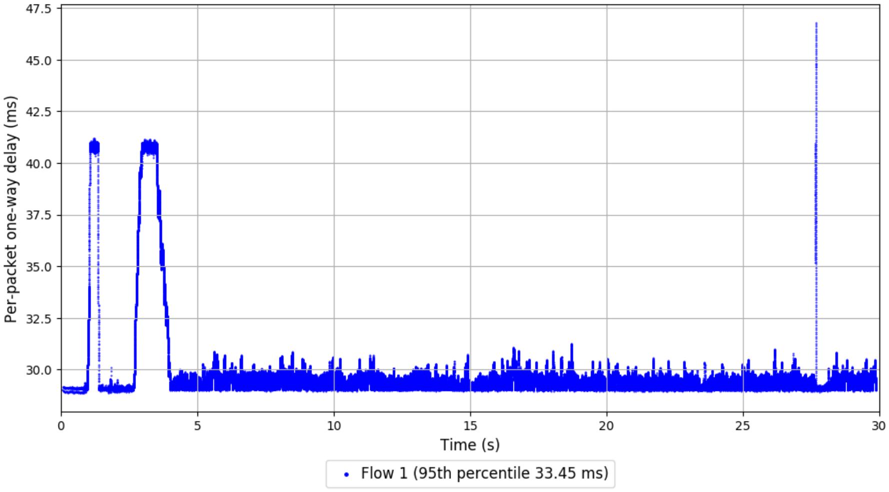




```
Run 5: Statistics of Vivace-LTE

Start at: 2018-02-19 22:48:20
End at: 2018-02-19 22:48:50
Local clock offset: 2.352 ms
Remote clock offset: -18.655 ms

# Below is generated by plot.py at 2018-02-20 05:01:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.44 Mbit/s
95th percentile per-packet one-way delay: 33.447 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 91.44 Mbit/s
95th percentile per-packet one-way delay: 33.447 ms
Loss rate: 0.08%
```

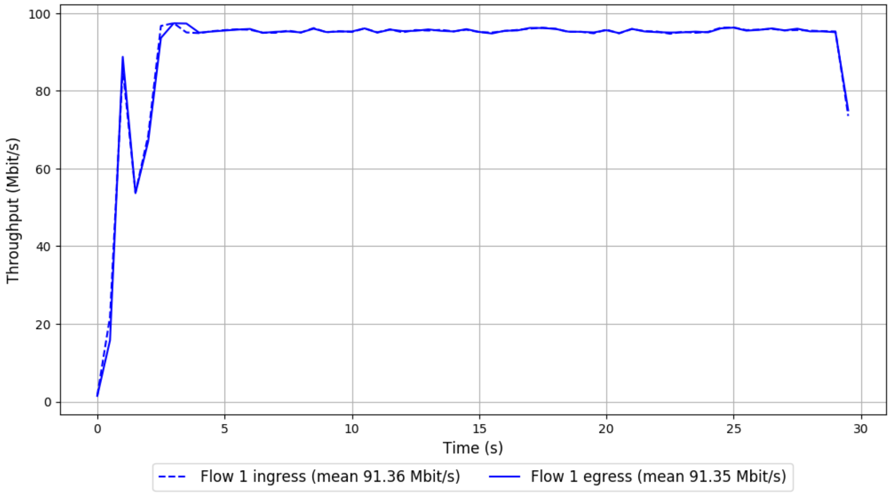
Run 5: Report of Vivace-LTE — Data Link

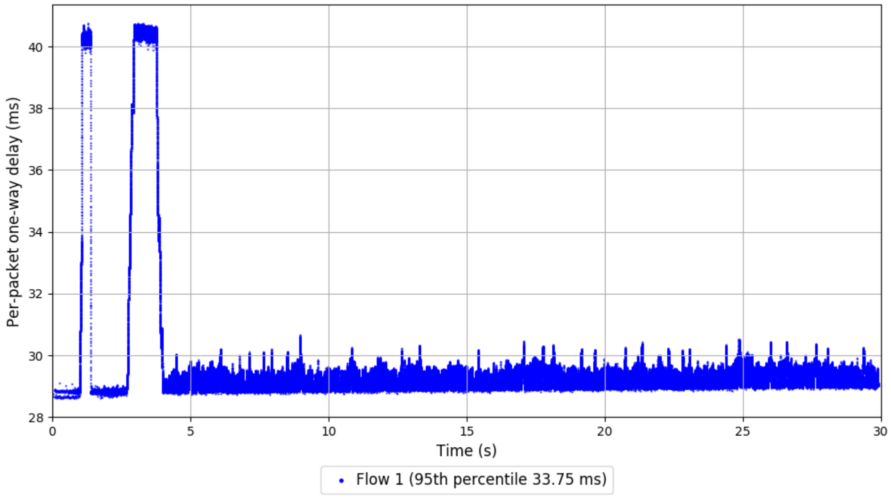




```
Run 6: Statistics of Vivace-LTE

Start at: 2018-02-19 23:09:57
End at: 2018-02-19 23:10:27
Local clock offset: -8.981 ms
Remote clock offset: -21.057 ms

# Below is generated by plot.py at 2018-02-20 05:01:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.35 Mbit/s
95th percentile per-packet one-way delay: 33.746 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 91.35 Mbit/s
95th percentile per-packet one-way delay: 33.746 ms
Loss rate: 0.08%
```

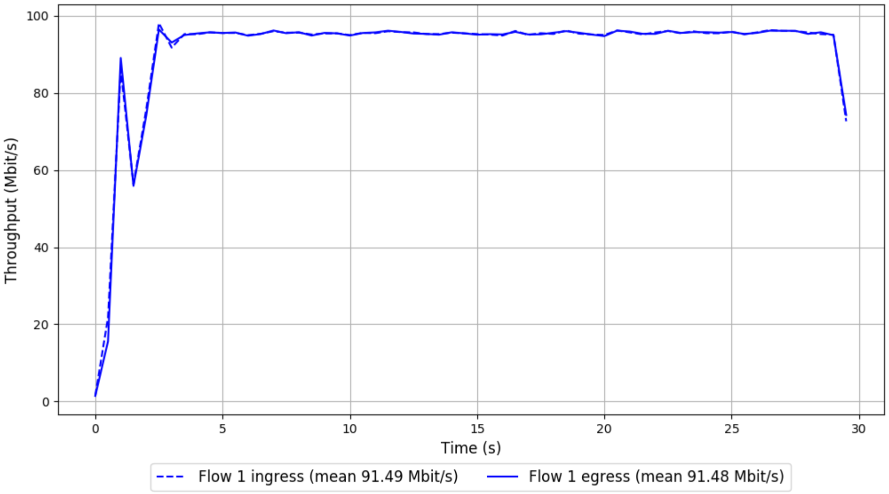
Run 6: Report of Vivace-LTE — Data Link

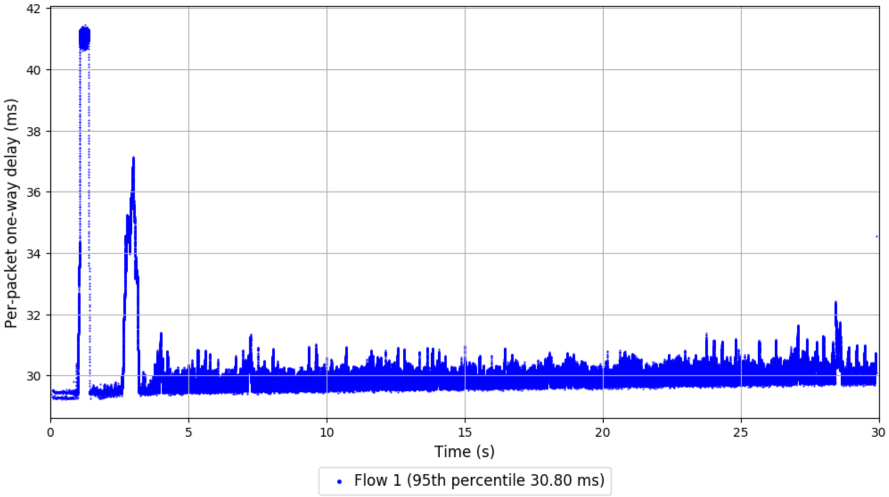




```
Run 7: Statistics of Vivace-LTE

Start at: 2018-02-19 23:31:23
End at: 2018-02-19 23:31:53
Local clock offset: -15.13 ms
Remote clock offset: -17.593 ms

# Below is generated by plot.py at 2018-02-20 05:01:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.48 Mbit/s
95th percentile per-packet one-way delay: 30.804 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 91.48 Mbit/s
95th percentile per-packet one-way delay: 30.804 ms
Loss rate: 0.08%
```

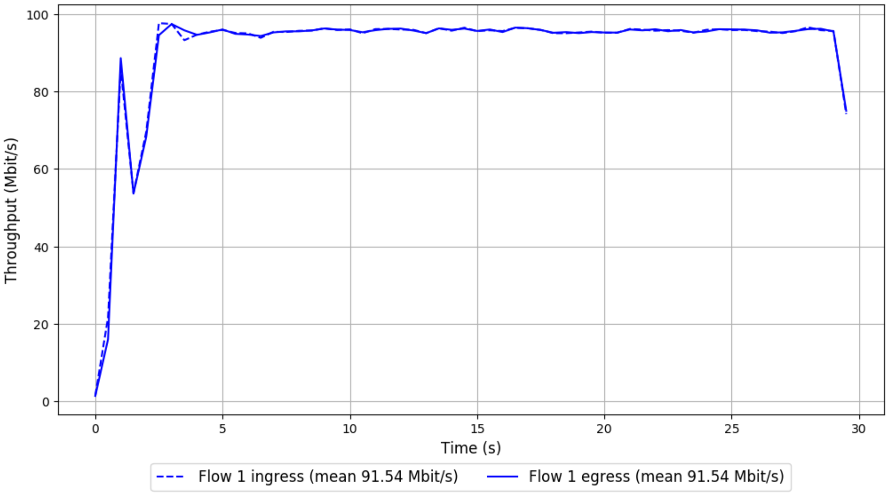
Run 7: Report of Vivace-LTE — Data Link

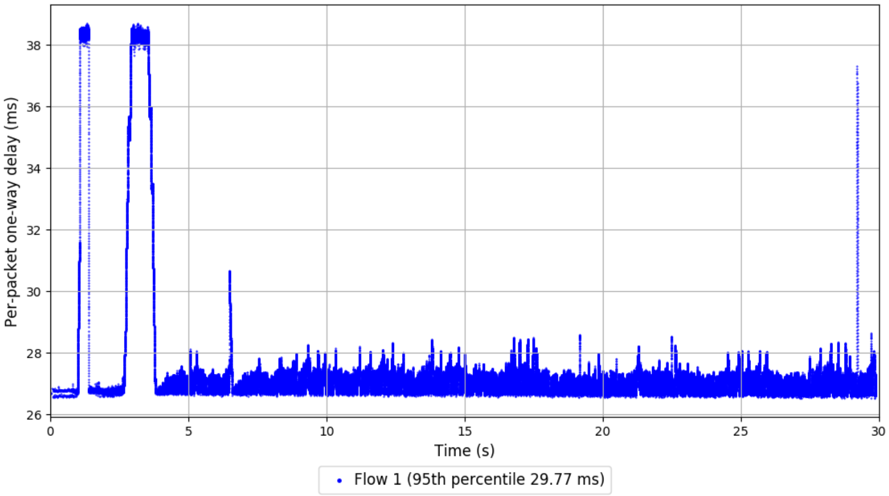




```
Run 8: Statistics of Vivace-LTE

Start at: 2018-02-19 23:52:55
End at: 2018-02-19 23:53:25
Local clock offset: 1.413 ms
Remote clock offset: -10.744 ms

# Below is generated by plot.py at 2018-02-20 05:01:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.54 Mbit/s
95th percentile per-packet one-way delay: 29.774 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 91.54 Mbit/s
95th percentile per-packet one-way delay: 29.774 ms
Loss rate: 0.08%
```

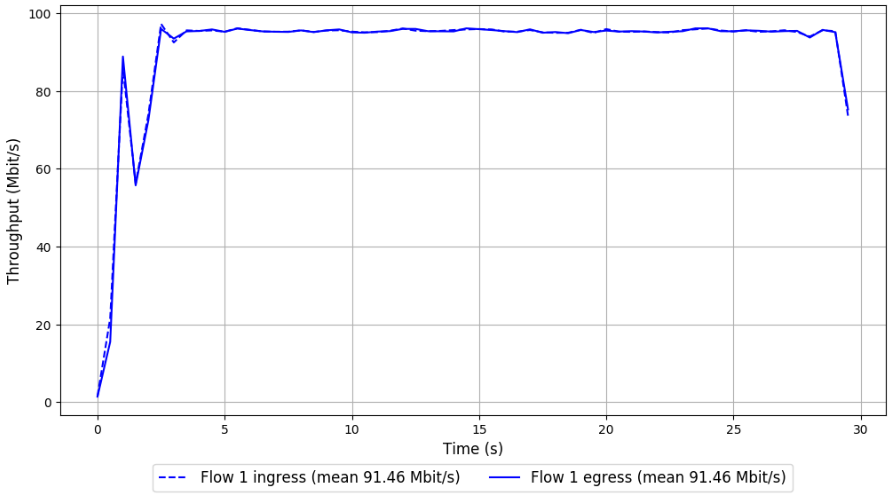
Run 8: Report of Vivace-LTE — Data Link

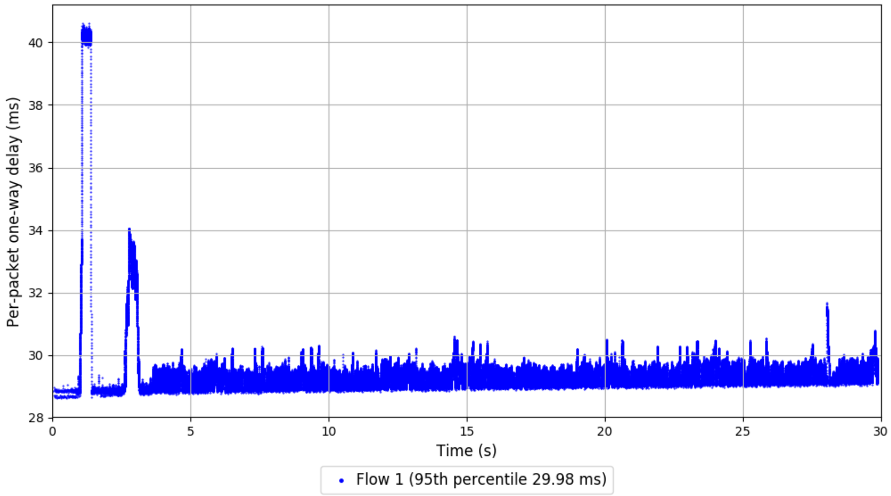




```
Run 9: Statistics of Vivace-LTE

Start at: 2018-02-20 00:14:24
End at: 2018-02-20 00:14:54
Local clock offset: 0.637 ms
Remote clock offset: -7.882 ms

# Below is generated by plot.py at 2018-02-20 05:01:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.46 Mbit/s
95th percentile per-packet one-way delay: 29.983 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 91.46 Mbit/s
95th percentile per-packet one-way delay: 29.983 ms
Loss rate: 0.08%
```

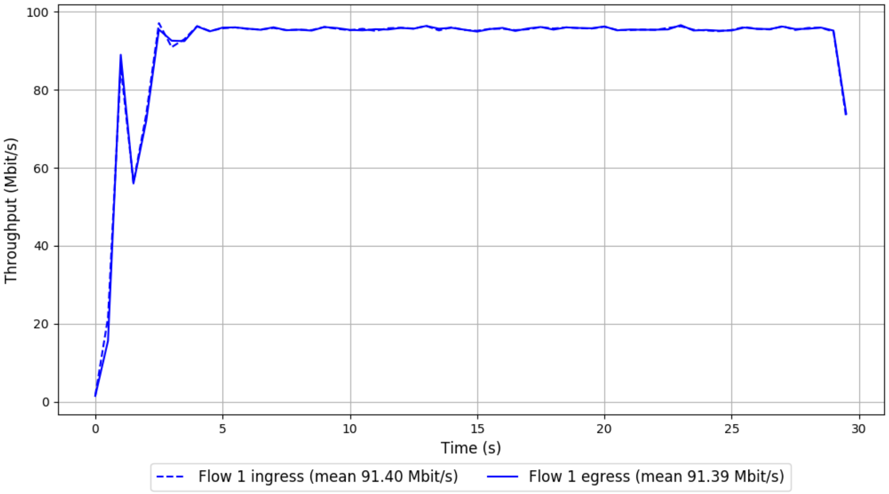
Run 9: Report of Vivace-LTE — Data Link

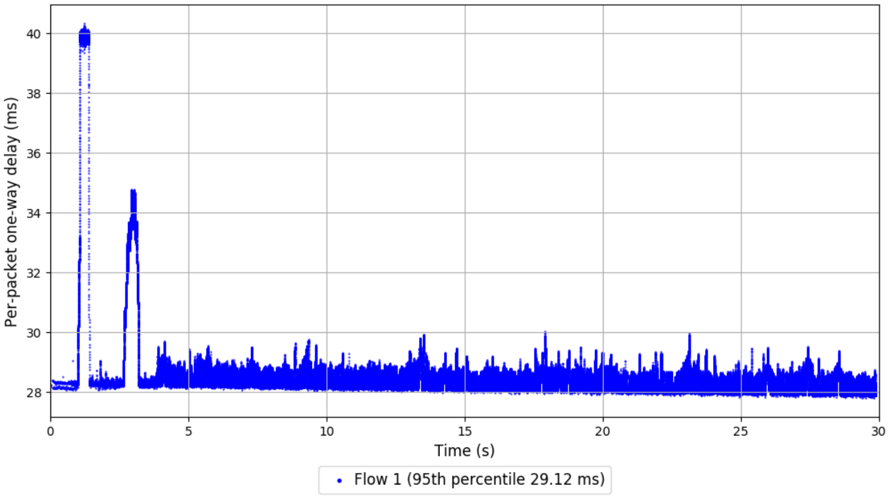




```
Run 10: Statistics of Vivace-LTE

Start at: 2018-02-20 00:36:10
End at: 2018-02-20 00:36:40
Local clock offset: -3.775 ms
Remote clock offset: -8.519 ms

# Below is generated by plot.py at 2018-02-20 05:01:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.39 Mbit/s
95th percentile per-packet one-way delay: 29.116 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 91.39 Mbit/s
95th percentile per-packet one-way delay: 29.116 ms
Loss rate: 0.08%
```

Run 10: Report of Vivace-LTE — Data Link


Throughput (Mbit/s)
100
80
60
40
20
0
0
5
10
15
20
25
30
Time (s)
Flow 1 ingress (mean 91.40 Mbit/s)
Flow 1 egress (mean 91.39 Mbit/s)


Per-packet one-way delay (ms)
40
38
36
34
32
30
28
0
5
10
15
20
25
30
Time (s)
Flow 1 (95th percentile 29.12 ms)