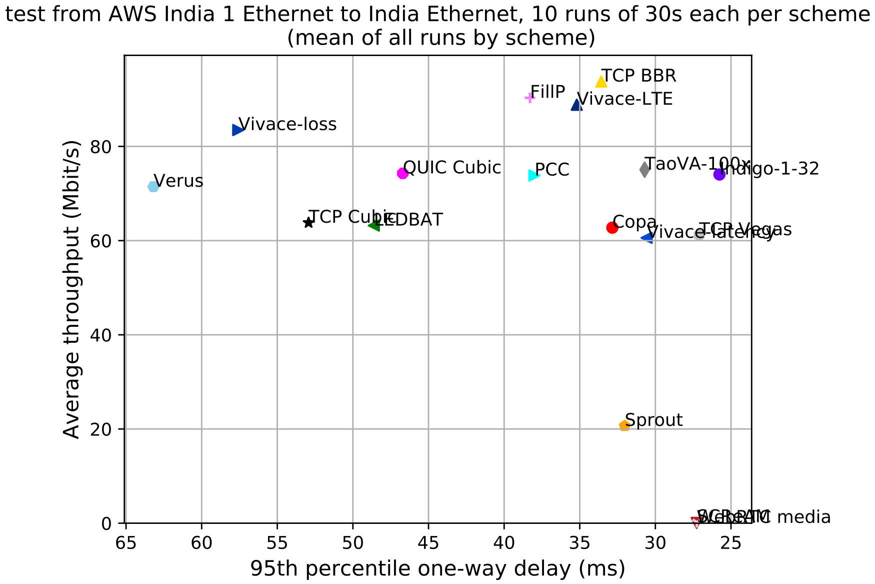
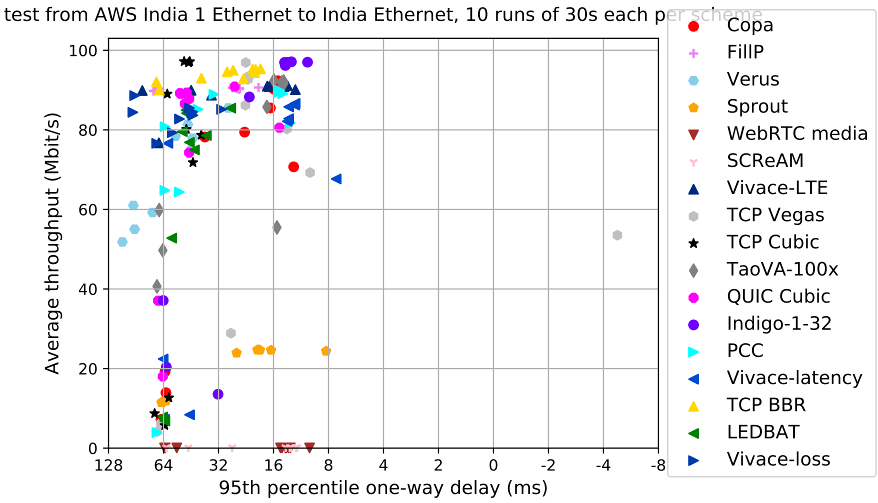
Pantheon Report

Generated at 2018-04-10 17:03:57 (UTC).
Data path: AWS India 1 Ethernet (*local*) →India Ethernet (*remote*).
Repeated the test of 17 congestion control schemes 10 times.
Each test lasted for 30 seconds running 1 flow.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
Tested BBR with qdisc of Fair Queuing (`fq`), and other schemes with the default Linux qdisc (`pfifo_fast`).
NTP offsets were measured against `nets.org.sg` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: master @ eb420b5be9bafccd22cf68b99ff5a2000462fc59
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/fillp @ 11f8c46a2bf1dc797253db7e8ca04076272b2a44
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 @ f271183af822eee5d0031620f4bebf38aedc5581
```

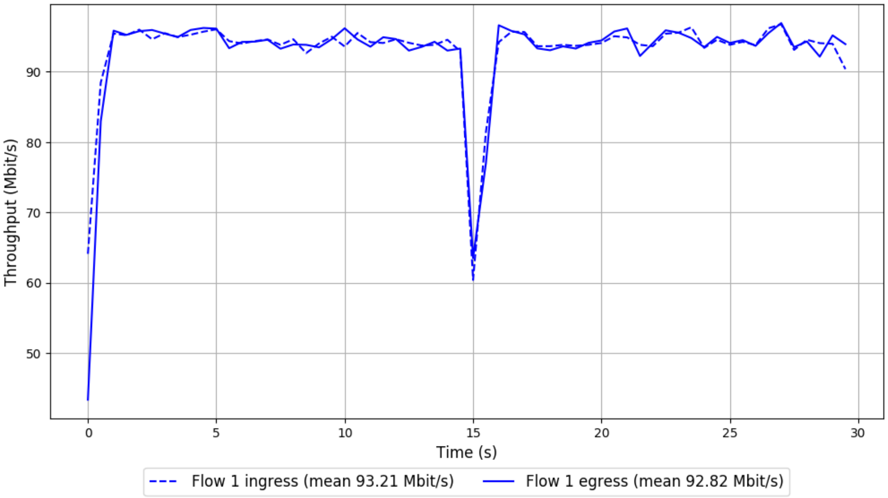

test from AWS India 1 Ethernet to India Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)
Average throughput (Mbit/s)
95th percentile one-way delay (ms)
0
20
40
60
80
65
60
55
50
45
40
35
30
25
TCP BBR
FillP
Vivace-LTE
Vivace-loss
QUIC Cubic
PCC
TaoVA-100x
Indigo-1-32
Verus
TCP Cubic
LEDBAT
Copa
Vivace-latency
TCP Vegas
Sprout
SCReAM
WebRTC media

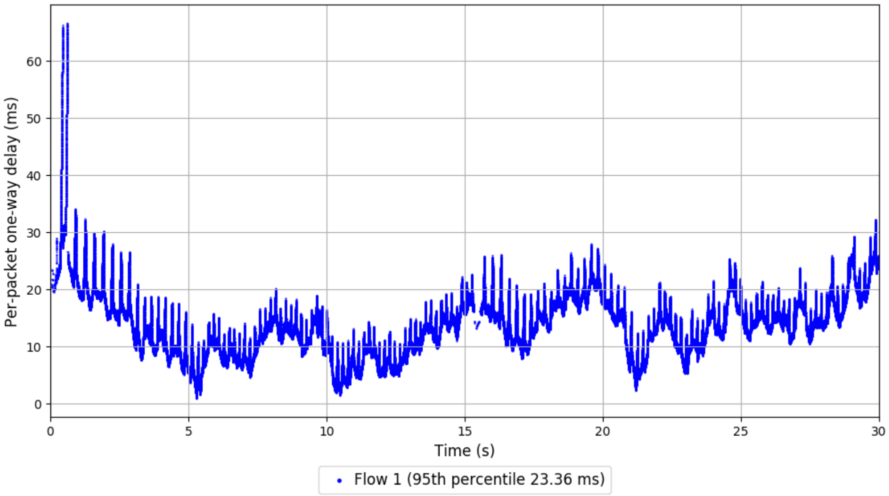

test from AWS India 1 Ethernet to India Ethernet, 10 runs of 30s each per scheme
Average throughput (Mbit/s)
95th percentile one-way delay (ms)
0
20
40
60
80
100
128
64
32
16
8
4
2
0
-2
-4
-8
Copa
FillP
Verus
Sprout
WebRTC media
SCReAM
Vivace-LTE
TCP Vegas
TCP Cubic
TaoVA-100x
QUIC Cubic
Indigo-1-32
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	93.77	33.57	0.33
TCP Cubic	10	63.80	52.93	0.32
LEDBAT	10	63.20	48.62	0.14
PCC	10	73.82	37.99	0.58
QUIC Cubic	10	74.28	46.70	0.25
SCReAM	10	0.20	27.25	0.04
WebRTC media	10	0.06	27.27	0.04
Sprout	10	20.65	32.03	0.09
TaoVA-100x	10	75.06	30.71	0.21
TCP Vegas	10	61.16	27.10	0.11
Verus	10	71.44	63.19	22.01
Copa	10	62.75	32.84	0.22
FillP	10	90.32	38.29	1.49
Indigo-1-32	10	74.04	25.76	0.05
Vivace-latency	10	60.59	30.58	0.13
Vivace-loss	10	83.48	57.58	8.16
Vivace-LTE	10	88.86	35.20	0.56

```
Run 1: Statistics of TCP BBR

Start at: 2018-04-10 12:46:38
End at: 2018-04-10 12:47:08
Local clock offset: 0.516 ms
Remote clock offset: -11.033 ms

# Below is generated by plot.py at 2018-04-10 16:41:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.82 Mbit/s
95th percentile per-packet one-way delay: 23.358 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 92.82 Mbit/s
95th percentile per-packet one-way delay: 23.358 ms
Loss rate: 0.40%
```

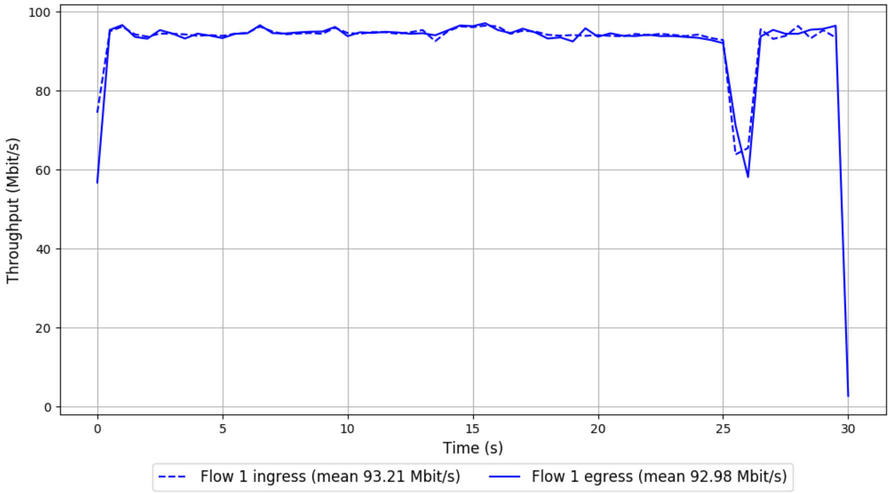
Run 1: Report of TCP BBR — Data Link

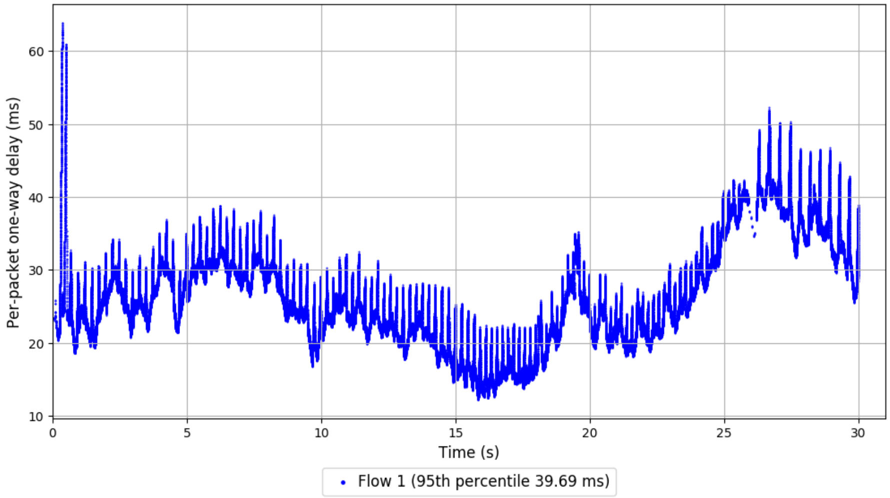




```
Run 2: Statistics of TCP BBR

Start at: 2018-04-10 13:07:58
End at: 2018-04-10 13:08:28
Local clock offset: -0.218 ms
Remote clock offset: -7.273 ms

# Below is generated by plot.py at 2018-04-10 16:41:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.98 Mbit/s
95th percentile per-packet one-way delay: 39.691 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 92.98 Mbit/s
95th percentile per-packet one-way delay: 39.691 ms
Loss rate: 0.23%
```

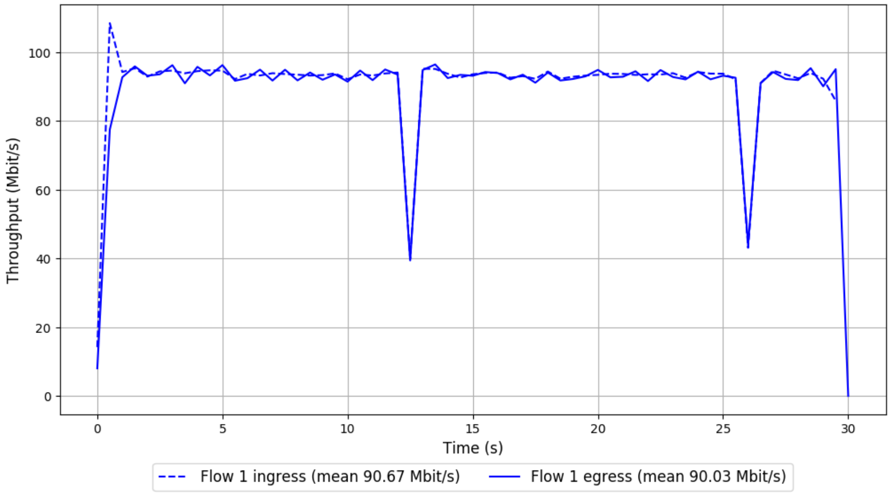
Run 2: Report of TCP BBR — Data Link

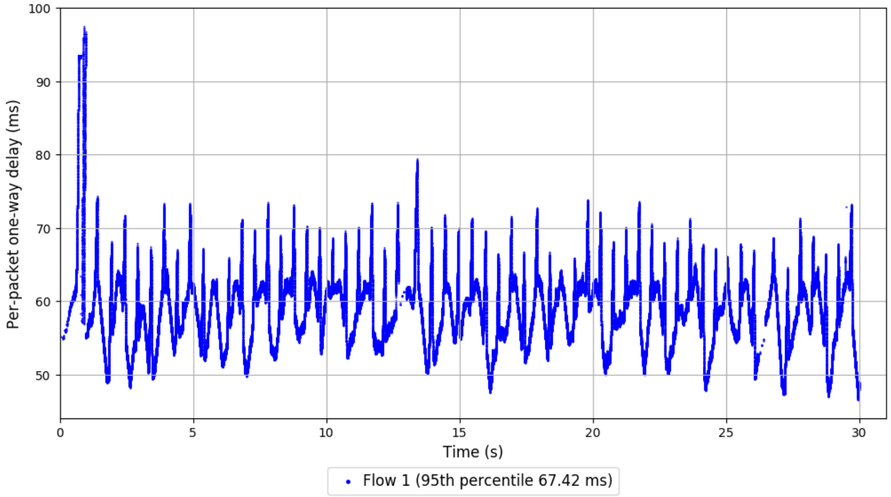




```
Run 3: Statistics of TCP BBR

Start at: 2018-04-10 13:30:15
End at: 2018-04-10 13:30:45
Local clock offset: 0.426 ms
Remote clock offset: -2.802 ms

# Below is generated by plot.py at 2018-04-10 16:41:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.03 Mbit/s
95th percentile per-packet one-way delay: 67.416 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 90.03 Mbit/s
95th percentile per-packet one-way delay: 67.416 ms
Loss rate: 0.77%
```

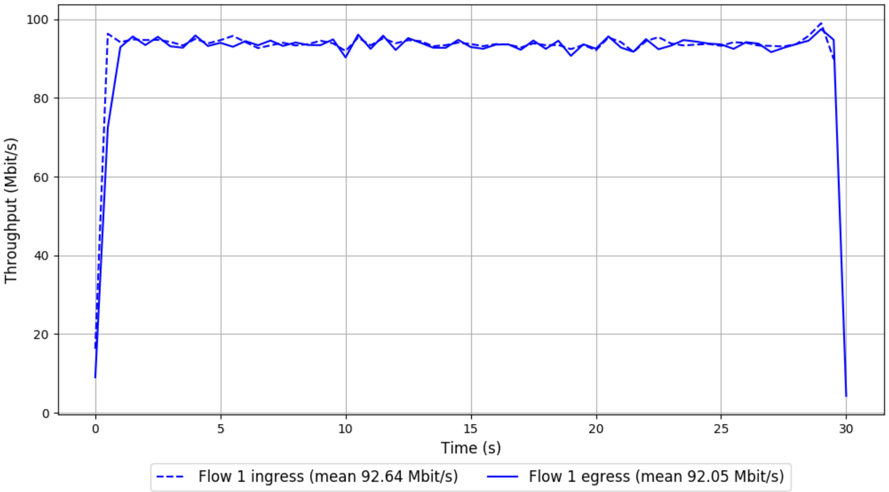
Run 3: Report of TCP BBR — Data Link

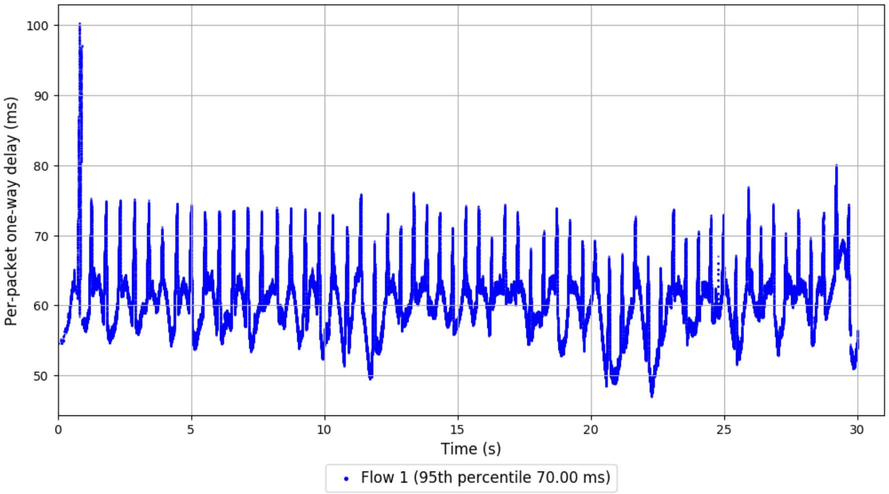




```
Run 4: Statistics of TCP BBR

Start at: 2018-04-10 13:51:36
End at: 2018-04-10 13:52:06
Local clock offset: 1.237 ms
Remote clock offset: 15.613 ms

# Below is generated by plot.py at 2018-04-10 16:41:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.05 Mbit/s
95th percentile per-packet one-way delay: 69.999 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 92.05 Mbit/s
95th percentile per-packet one-way delay: 69.999 ms
Loss rate: 0.70%
```

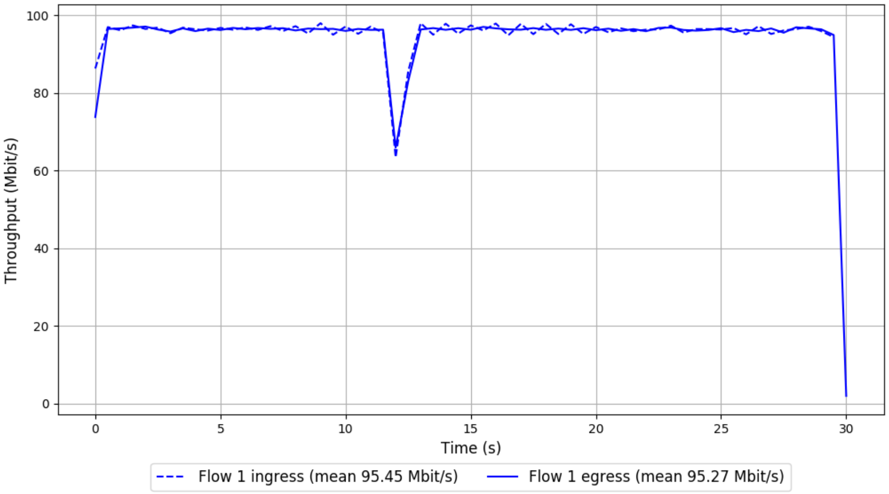
Run 4: Report of TCP BBR — Data Link

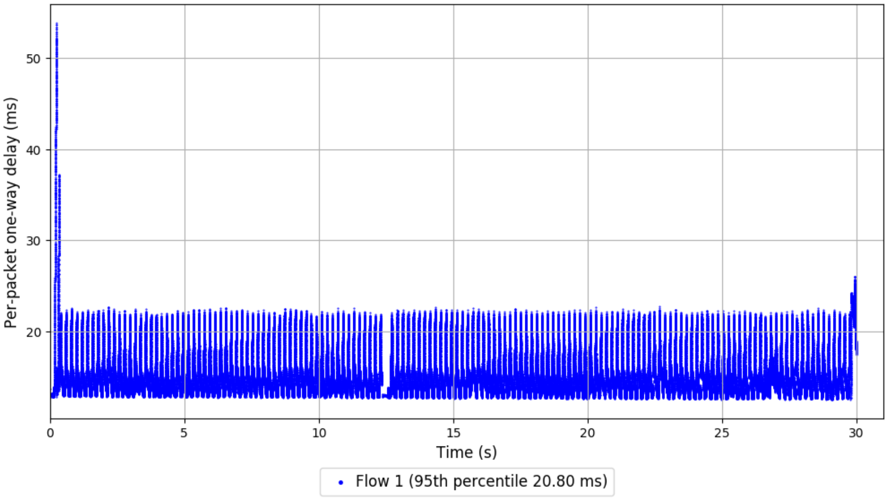




```
Run 5: Statistics of TCP BBR

Start at: 2018-04-10 14:13:00
End at: 2018-04-10 14:13:30
Local clock offset: 0.207 ms
Remote clock offset: 28.326 ms

# Below is generated by plot.py at 2018-04-10 16:41:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.27 Mbit/s
95th percentile per-packet one-way delay: 20.799 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 95.27 Mbit/s
95th percentile per-packet one-way delay: 20.799 ms
Loss rate: 0.17%
```

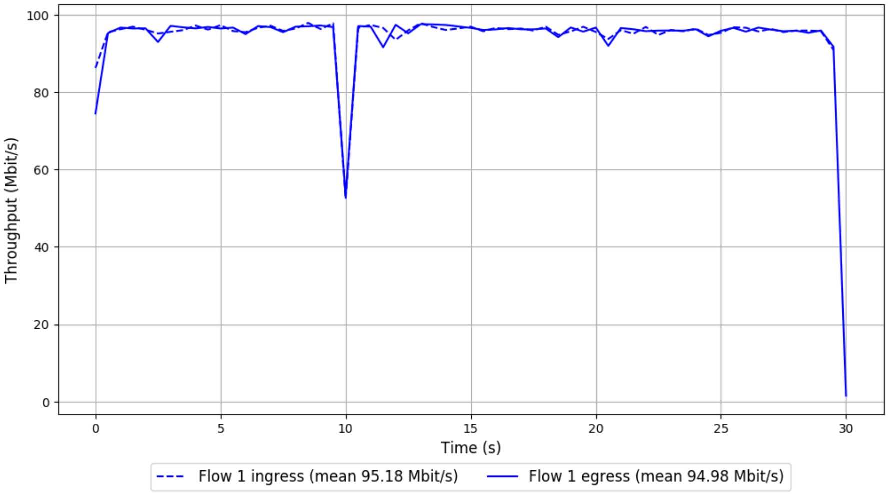
Run 5: Report of TCP BBR — Data Link

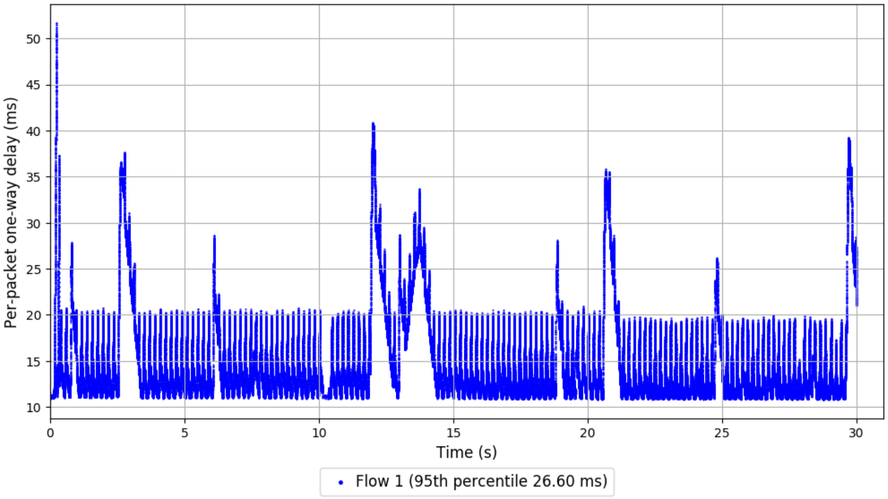




```
Run 6: Statistics of TCP BBR

Start at: 2018-04-10 14:33:58
End at: 2018-04-10 14:34:28
Local clock offset: -1.258 ms
Remote clock offset: 31.308 ms

# Below is generated by plot.py at 2018-04-10 16:41:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.98 Mbit/s
95th percentile per-packet one-way delay: 26.602 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 94.98 Mbit/s
95th percentile per-packet one-way delay: 26.602 ms
Loss rate: 0.18%
```

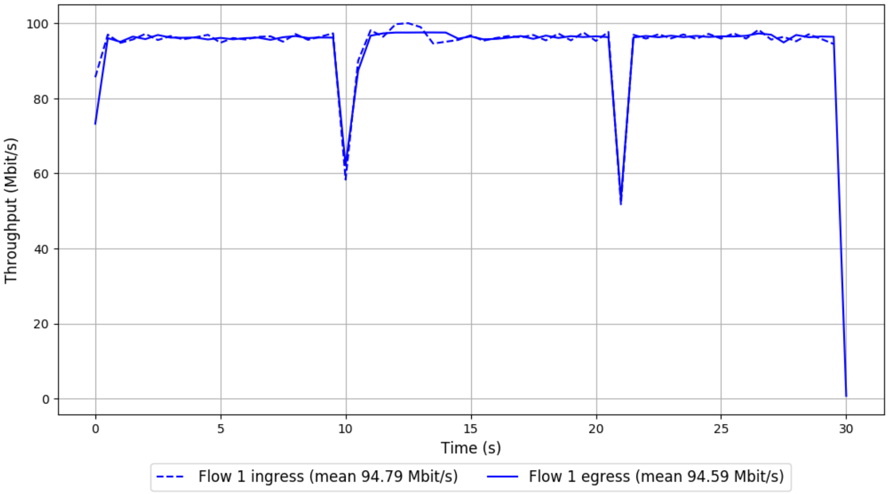
Run 6: Report of TCP BBR — Data Link

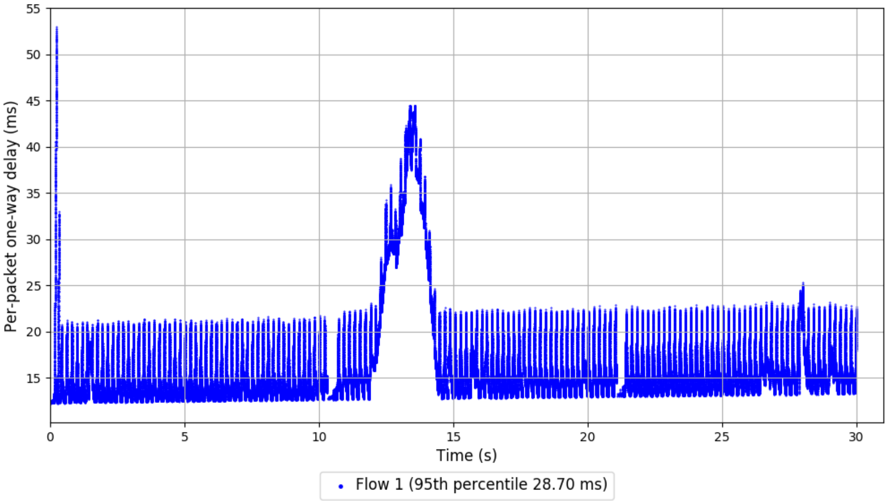




```
Run 7: Statistics of TCP BBR

Start at: 2018-04-10 14:55:58
End at: 2018-04-10 14:56:28
Local clock offset: -0.282 ms
Remote clock offset: 13.728 ms

# Below is generated by plot.py at 2018-04-10 16:41:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.59 Mbit/s
95th percentile per-packet one-way delay: 28.703 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 94.59 Mbit/s
95th percentile per-packet one-way delay: 28.703 ms
Loss rate: 0.19%
```

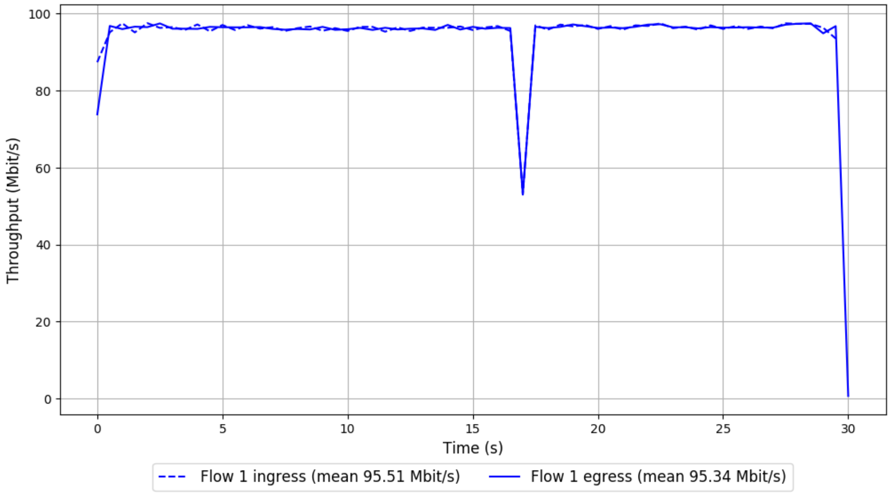
Run 7: Report of TCP BBR — Data Link

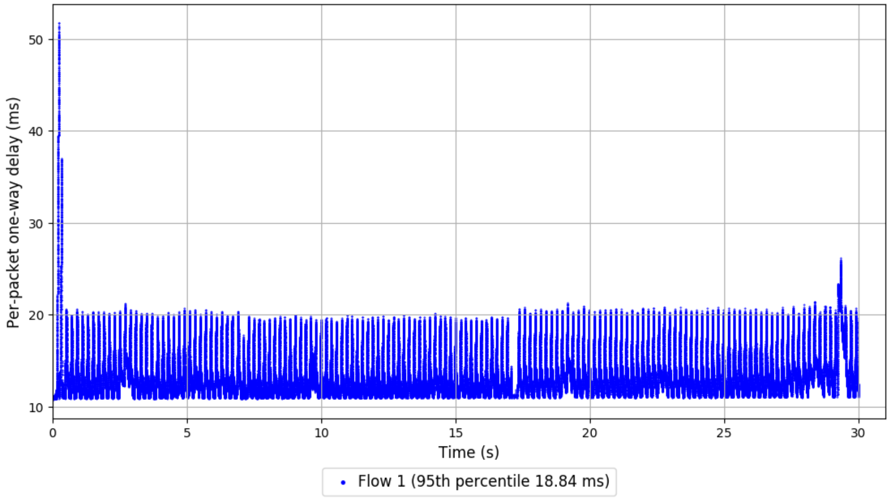




```
Run 8: Statistics of TCP BBR

Start at: 2018-04-10 15:17:59
End at: 2018-04-10 15:18:29
Local clock offset: 0.087 ms
Remote clock offset: -6.444 ms

# Below is generated by plot.py at 2018-04-10 16:41:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.34 Mbit/s
95th percentile per-packet one-way delay: 18.842 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 95.34 Mbit/s
95th percentile per-packet one-way delay: 18.842 ms
Loss rate: 0.17%
```

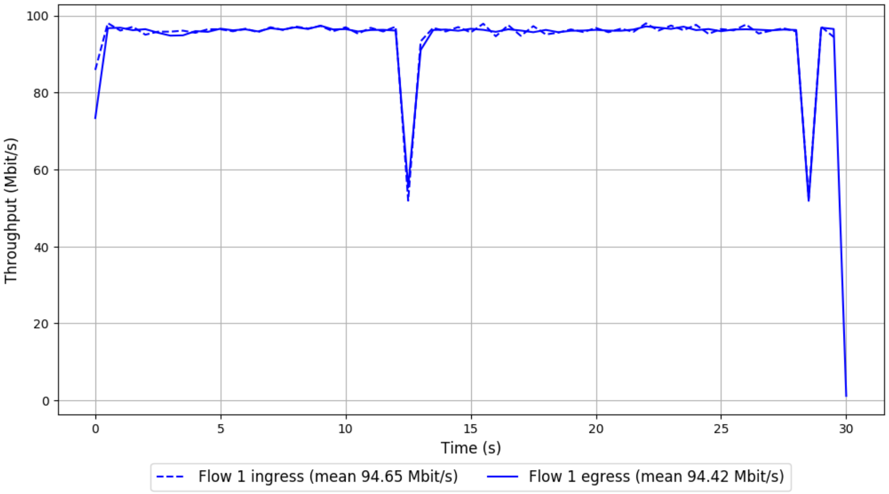
Run 8: Report of TCP BBR — Data Link

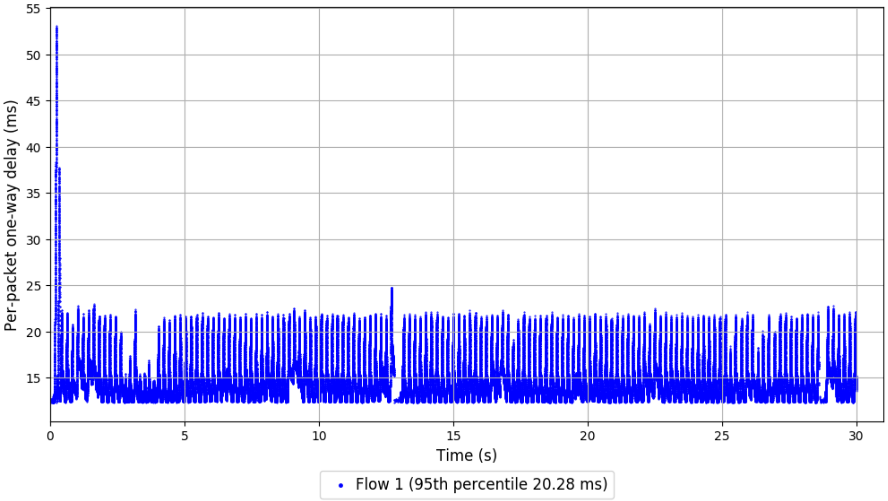




```
Run 9: Statistics of TCP BBR

Start at: 2018-04-10 15:39:37
End at: 2018-04-10 15:40:07
Local clock offset: 0.528 ms
Remote clock offset: -2.467 ms

# Below is generated by plot.py at 2018-04-10 16:43:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.42 Mbit/s
95th percentile per-packet one-way delay: 20.283 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 94.42 Mbit/s
95th percentile per-packet one-way delay: 20.283 ms
Loss rate: 0.23%
```

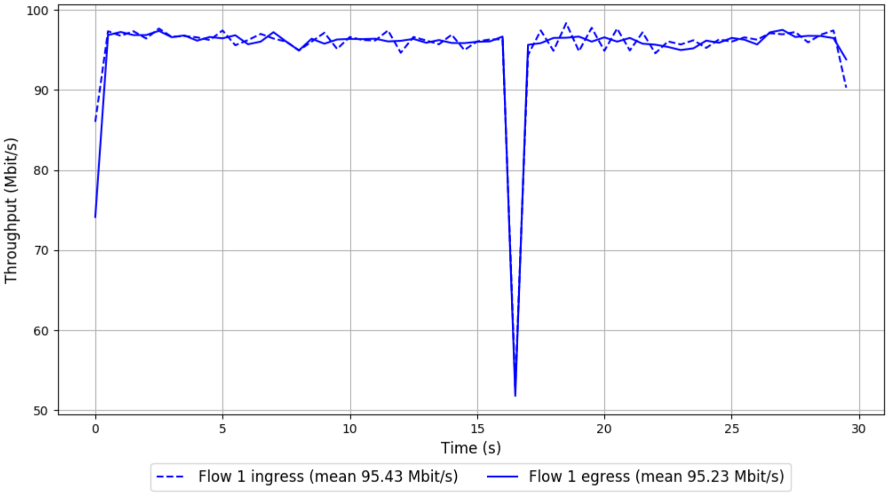
Run 9: Report of TCP BBR — Data Link

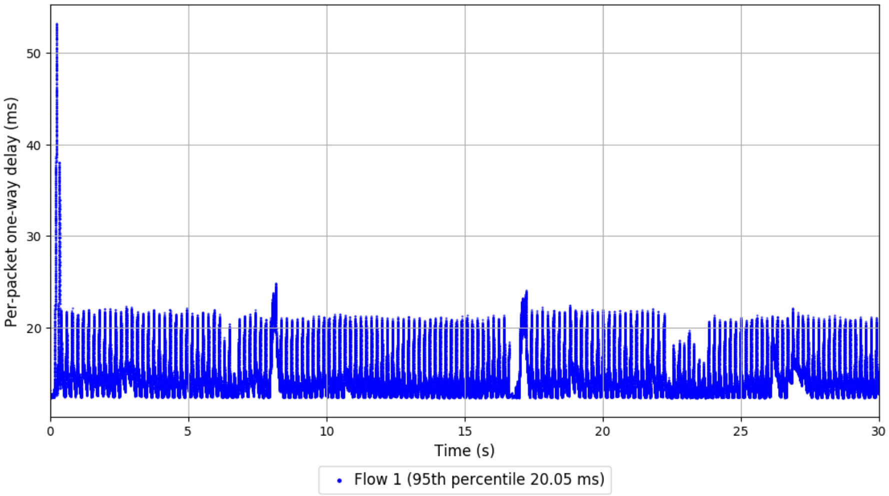




```
Run 10: Statistics of TCP BBR

Start at: 2018-04-10 16:02:12
End at: 2018-04-10 16:02:42
Local clock offset: 0.581 ms
Remote clock offset: -1.693 ms

# Below is generated by plot.py at 2018-04-10 16:43:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.23 Mbit/s
95th percentile per-packet one-way delay: 20.050 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 95.23 Mbit/s
95th percentile per-packet one-way delay: 20.050 ms
Loss rate: 0.21%
```

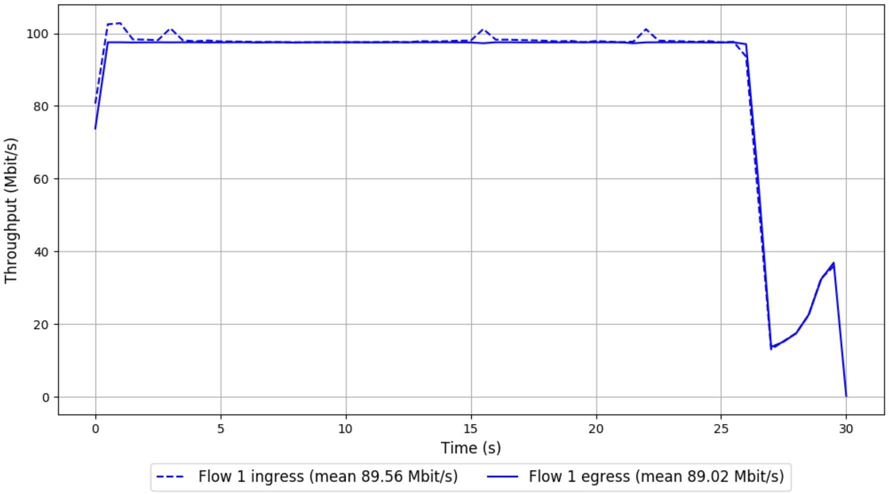
Run 10: Report of TCP BBR — Data Link

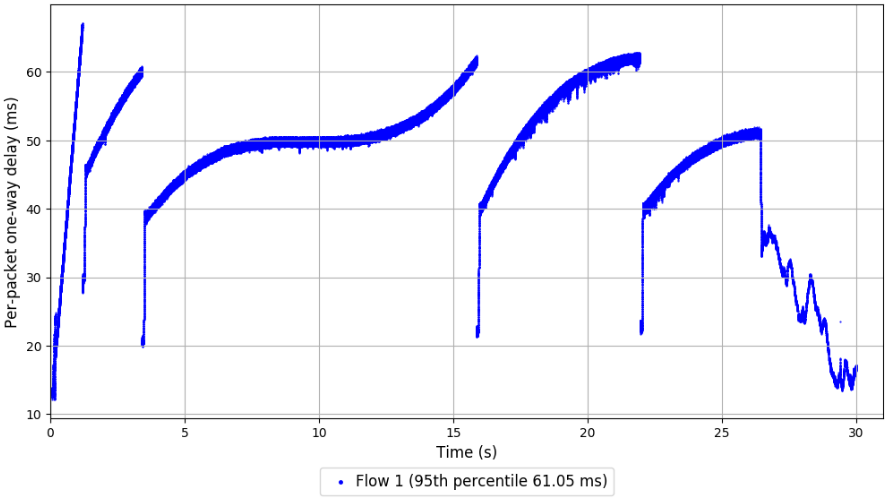




```
Run 1: Statistics of TCP Cubic

Start at: 2018-04-10 12:38:09
End at: 2018-04-10 12:38:39
Local clock offset: 0.553 ms
Remote clock offset: 9.272 ms

# Below is generated by plot.py at 2018-04-10 16:43:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.02 Mbit/s
95th percentile per-packet one-way delay: 61.054 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 89.02 Mbit/s
95th percentile per-packet one-way delay: 61.054 ms
Loss rate: 0.59%
```

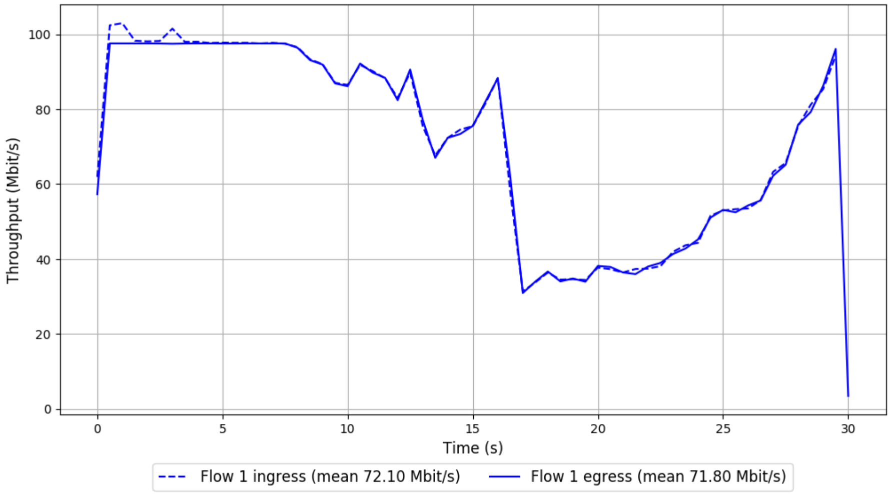
Run 1: Report of TCP Cubic — Data Link

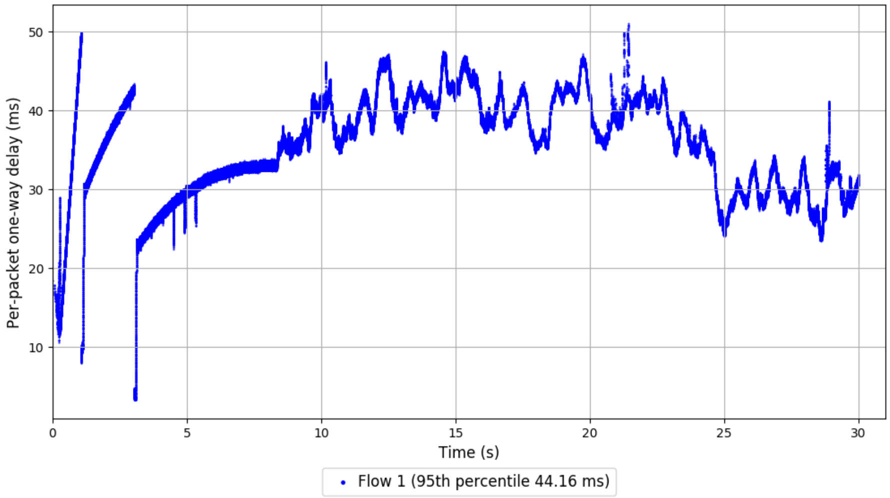




```
Run 2: Statistics of TCP Cubic

Start at: 2018-04-10 12:59:46
End at: 2018-04-10 13:00:16
Local clock offset: 1.382 ms
Remote clock offset: -17.556 ms

# Below is generated by plot.py at 2018-04-10 16:43:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.80 Mbit/s
95th percentile per-packet one-way delay: 44.159 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 71.80 Mbit/s
95th percentile per-packet one-way delay: 44.159 ms
Loss rate: 0.38%
```

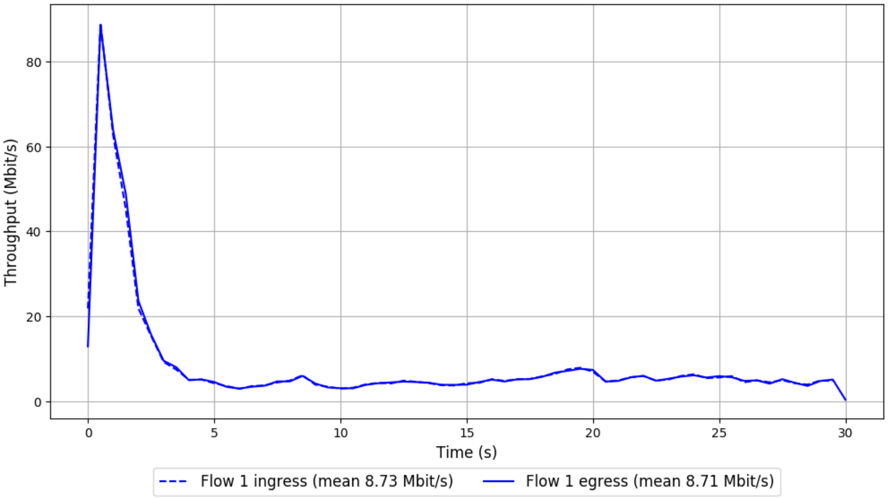
Run 2: Report of TCP Cubic — Data Link

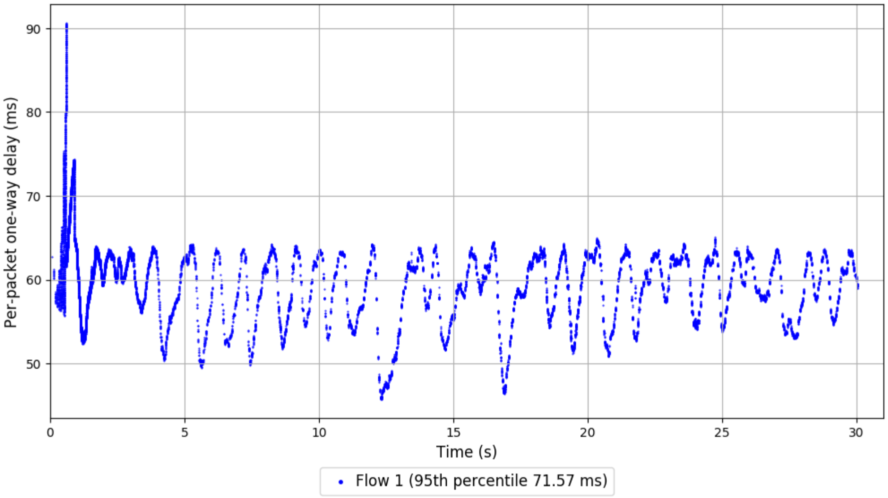




```
Run 3: Statistics of TCP Cubic

Start at: 2018-04-10 13:21:30
End at: 2018-04-10 13:22:00
Local clock offset: -0.104 ms
Remote clock offset: -2.007 ms

# Below is generated by plot.py at 2018-04-10 16:43:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.71 Mbit/s
95th percentile per-packet one-way delay: 71.573 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 8.71 Mbit/s
95th percentile per-packet one-way delay: 71.573 ms
Loss rate: 0.30%
```

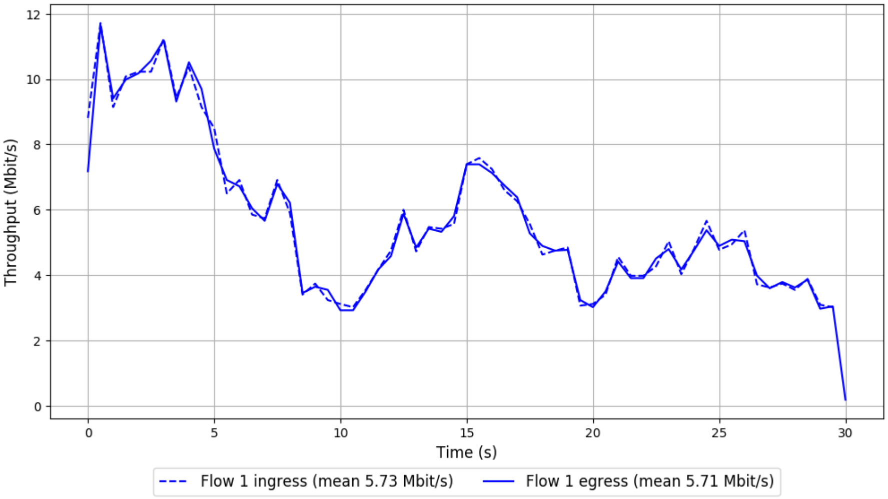
Run 3: Report of TCP Cubic — Data Link

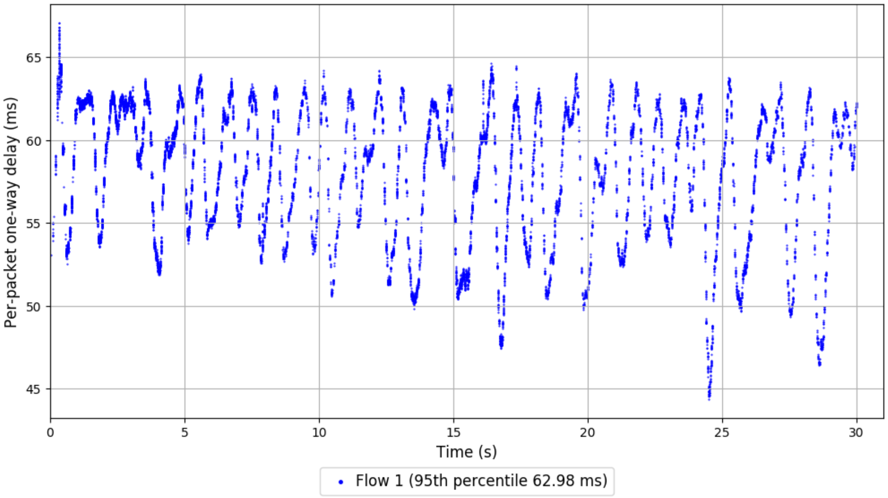




```
Run 4: Statistics of TCP Cubic

Start at: 2018-04-10 13:43:14
End at: 2018-04-10 13:43:44
Local clock offset: 0.226 ms
Remote clock offset: 4.414 ms

# Below is generated by plot.py at 2018-04-10 16:43:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.71 Mbit/s
95th percentile per-packet one-way delay: 62.975 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 5.71 Mbit/s
95th percentile per-packet one-way delay: 62.975 ms
Loss rate: 0.31%
```

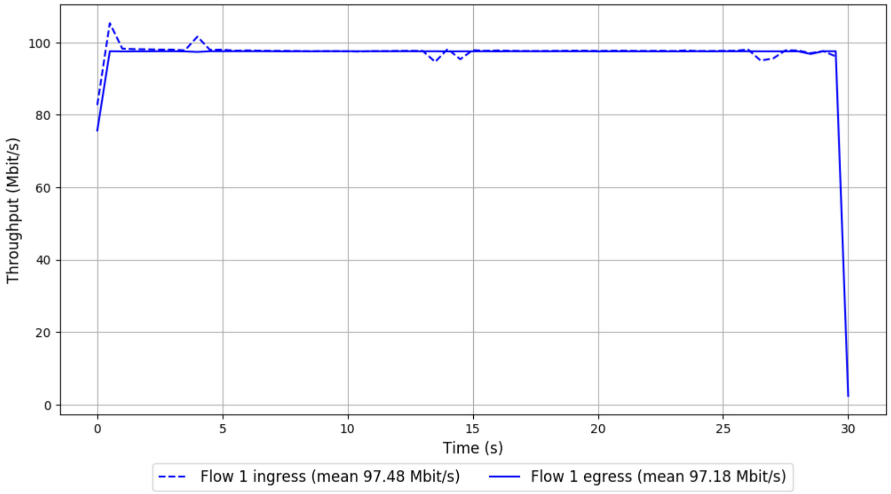
Run 4: Report of TCP Cubic — Data Link

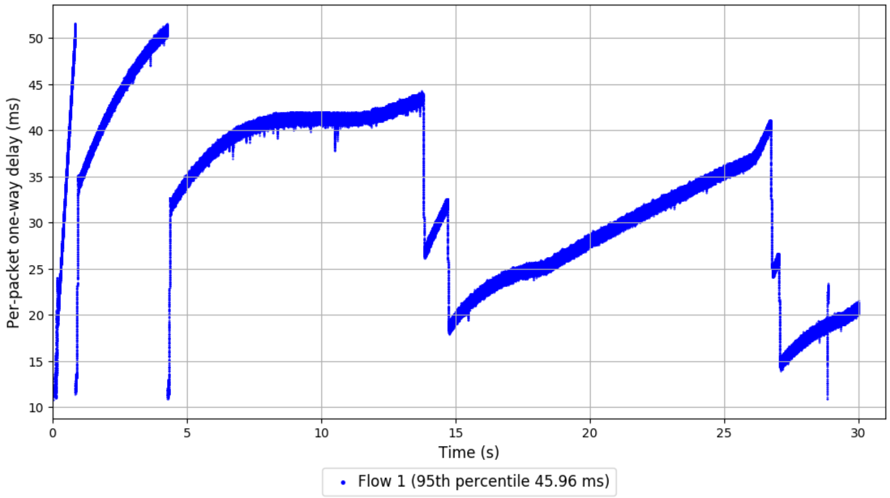




```
Run 5: Statistics of TCP Cubic

Start at: 2018-04-10 14:04:49
End at: 2018-04-10 14:05:19
Local clock offset: 1.685 ms
Remote clock offset: 23.723 ms

# Below is generated by plot.py at 2018-04-10 16:43:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.18 Mbit/s
95th percentile per-packet one-way delay: 45.958 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 97.18 Mbit/s
95th percentile per-packet one-way delay: 45.958 ms
Loss rate: 0.27%
```

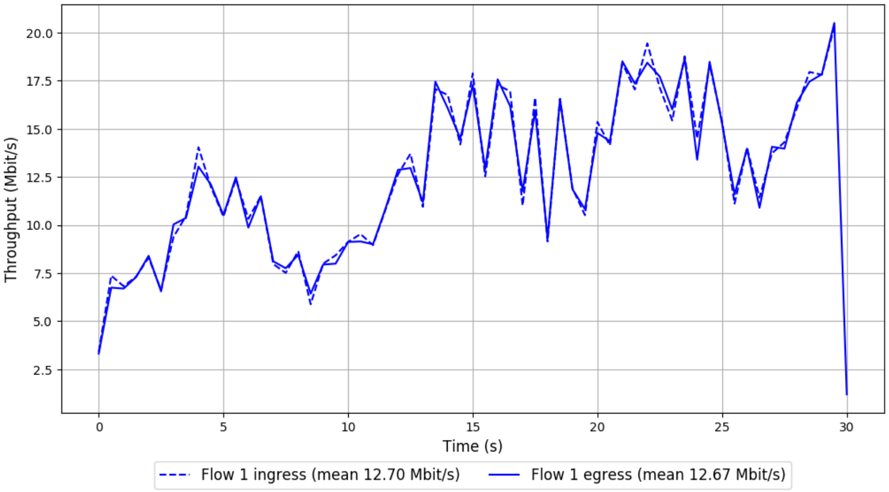
Run 5: Report of TCP Cubic — Data Link

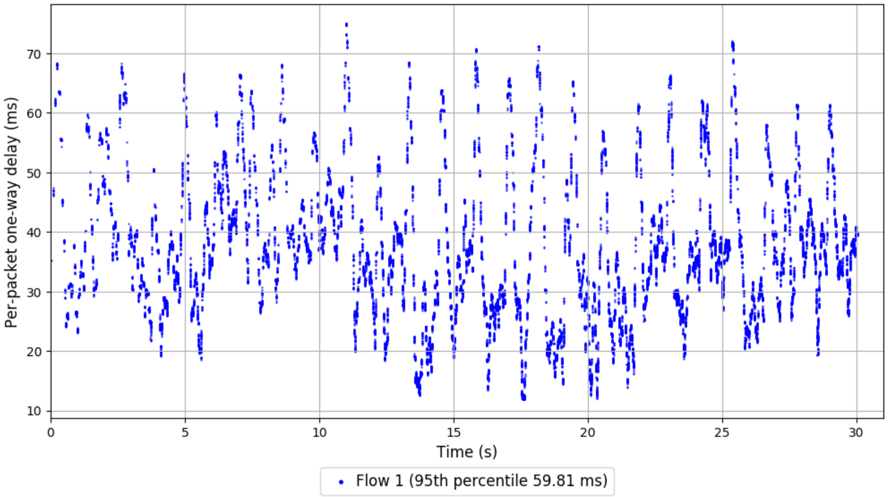




```
Run 6: Statistics of TCP Cubic

Start at: 2018-04-10 14:25:39
End at: 2018-04-10 14:26:09
Local clock offset: -0.666 ms
Remote clock offset: 29.64 ms

# Below is generated by plot.py at 2018-04-10 16:43:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.67 Mbit/s
95th percentile per-packet one-way delay: 59.810 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 12.67 Mbit/s
95th percentile per-packet one-way delay: 59.810 ms
Loss rate: 0.24%
```

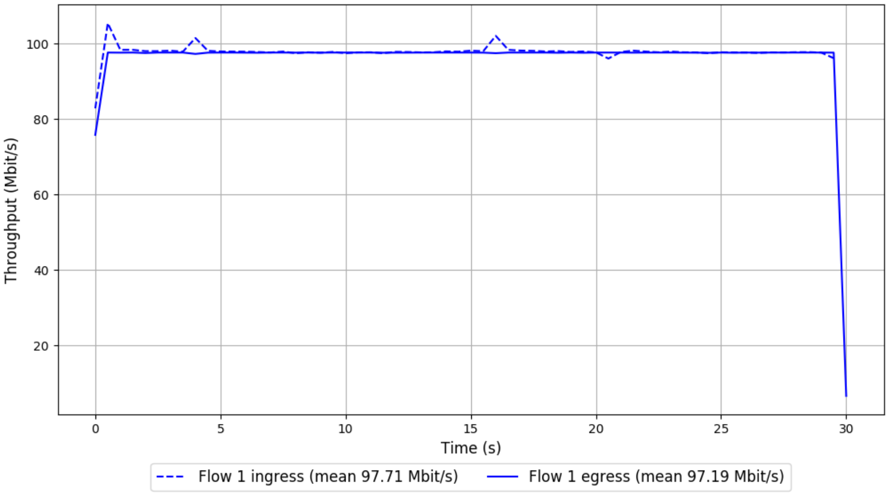
Run 6: Report of TCP Cubic — Data Link

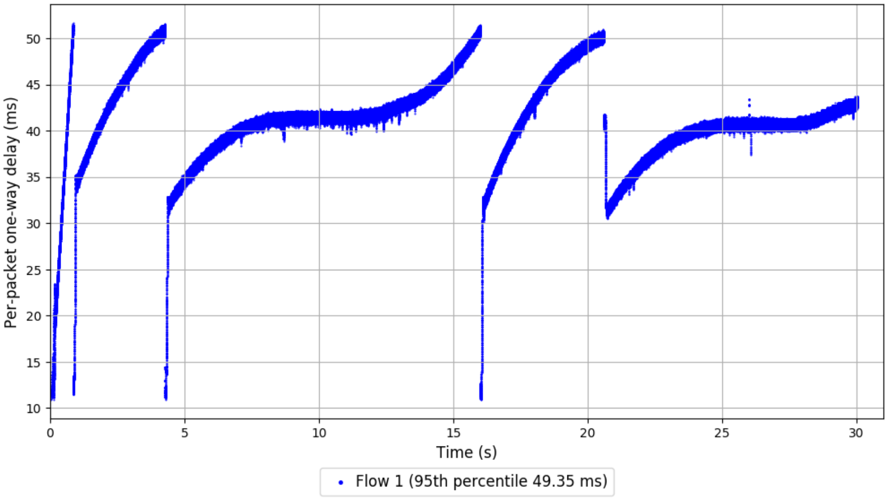




```
Run 7: Statistics of TCP Cubic

Start at: 2018-04-10 14:47:28
End at: 2018-04-10 14:47:58
Local clock offset: -1.387 ms
Remote clock offset: 35.595 ms

# Below is generated by plot.py at 2018-04-10 16:43:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.19 Mbit/s
95th percentile per-packet one-way delay: 49.350 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 97.19 Mbit/s
95th percentile per-packet one-way delay: 49.350 ms
Loss rate: 0.43%
```

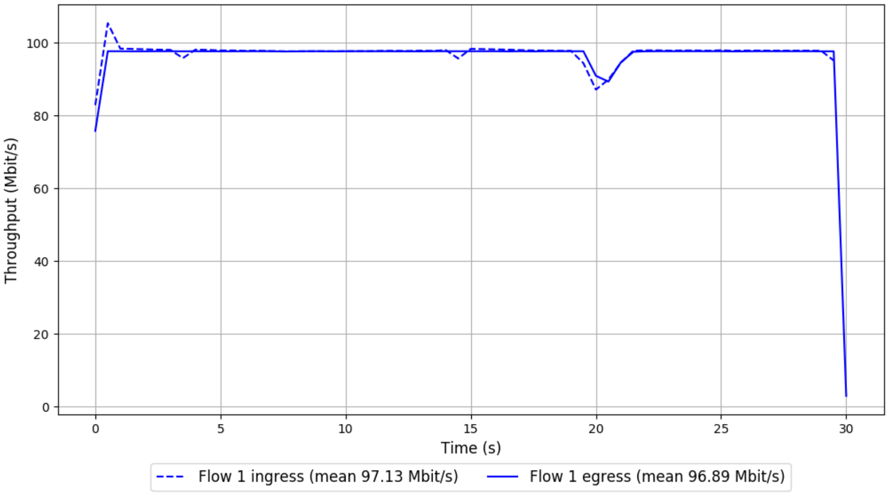
Run 7: Report of TCP Cubic — Data Link

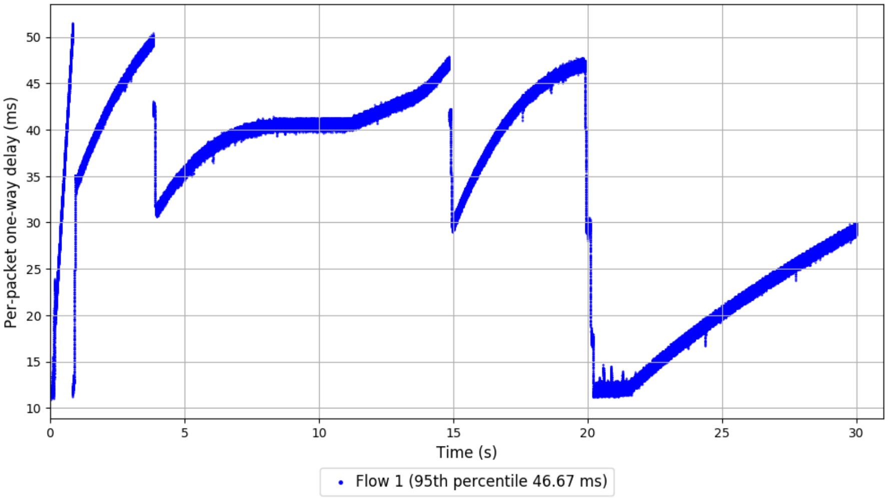




```
Run 8: Statistics of TCP Cubic

Start at: 2018-04-10 15:09:25
End at: 2018-04-10 15:09:55
Local clock offset: 0.391 ms
Remote clock offset: -2.161 ms

# Below is generated by plot.py at 2018-04-10 16:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.89 Mbit/s
95th percentile per-packet one-way delay: 46.672 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 96.89 Mbit/s
95th percentile per-packet one-way delay: 46.672 ms
Loss rate: 0.19%
```

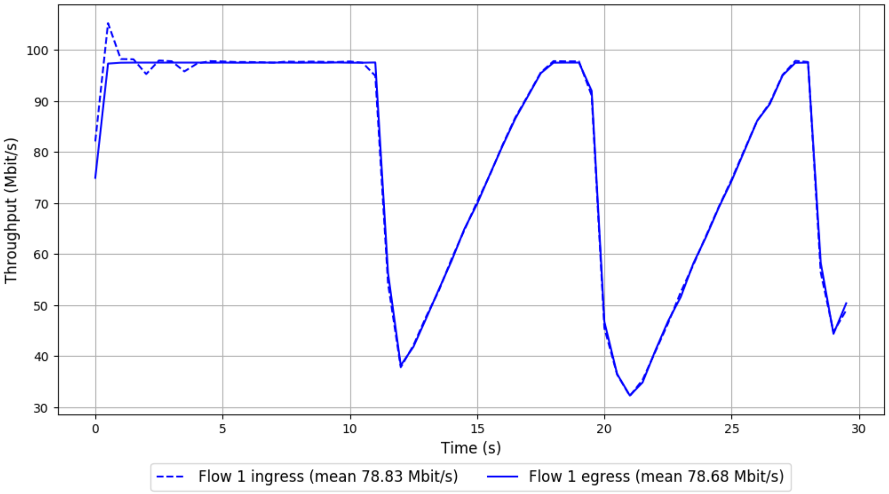
Run 8: Report of TCP Cubic — Data Link

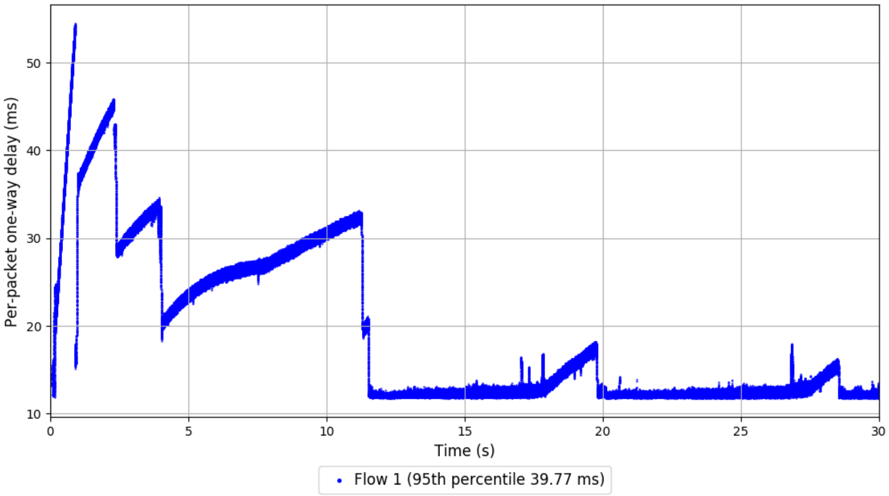




```
Run 9: Statistics of TCP Cubic

Start at: 2018-04-10 15:31:06
End at: 2018-04-10 15:31:36
Local clock offset: 0.645 ms
Remote clock offset: -3.17 ms

# Below is generated by plot.py at 2018-04-10 16:43:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.68 Mbit/s
95th percentile per-packet one-way delay: 39.775 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 78.68 Mbit/s
95th percentile per-packet one-way delay: 39.775 ms
Loss rate: 0.19%
```

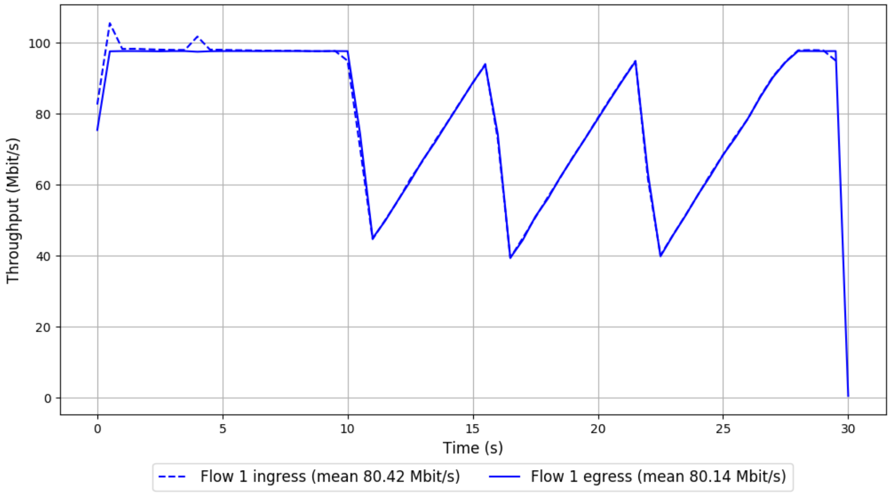
Run 9: Report of TCP Cubic — Data Link

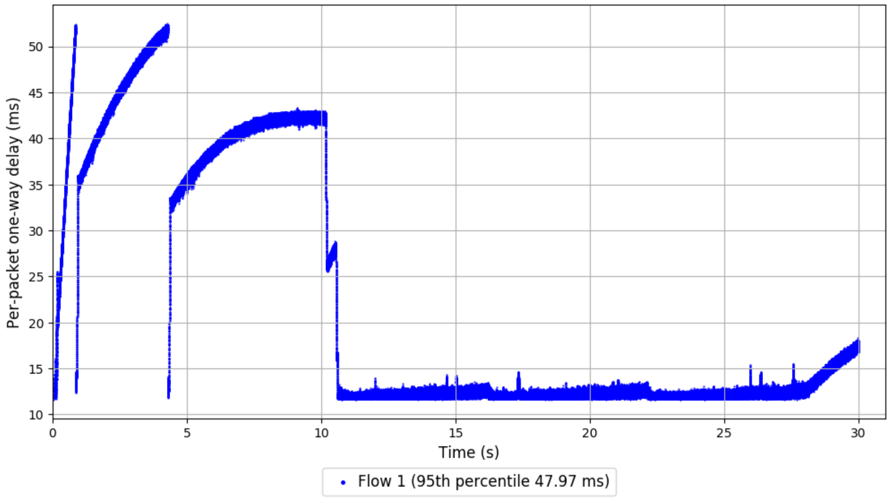




```
Run 10: Statistics of TCP Cubic

Start at: 2018-04-10 15:53:29
End at: 2018-04-10 15:53:59
Local clock offset: 1.354 ms
Remote clock offset: -2.413 ms

# Below is generated by plot.py at 2018-04-10 16:43:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.14 Mbit/s
95th percentile per-packet one-way delay: 47.968 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 80.14 Mbit/s
95th percentile per-packet one-way delay: 47.968 ms
Loss rate: 0.33%
```

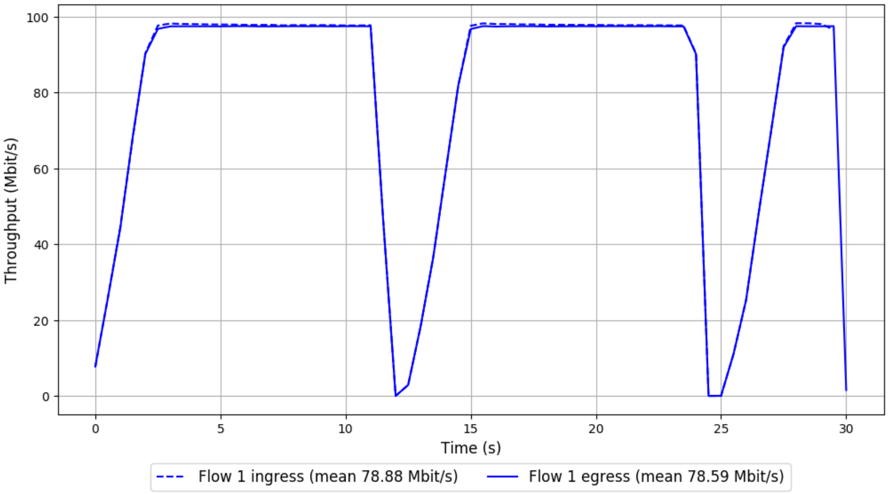
Run 10: Report of TCP Cubic — Data Link

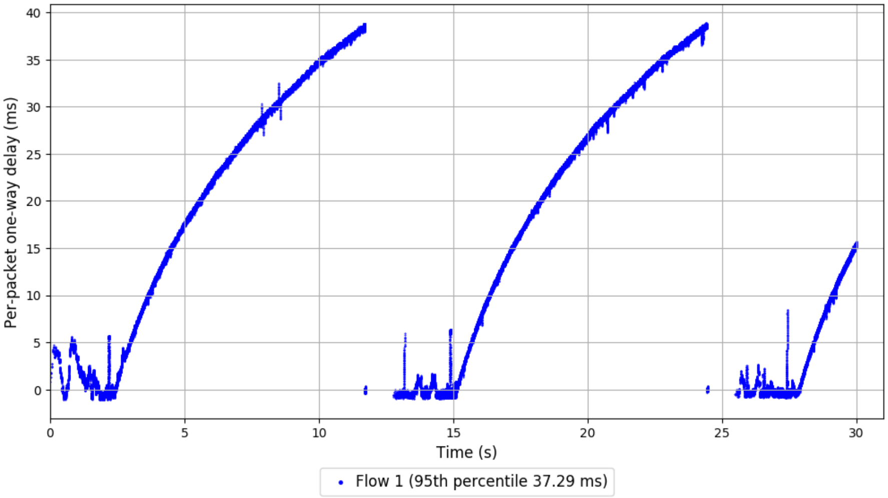




```
Run 1: Statistics of LEDBAT

Start at: 2018-04-10 12:47:54
End at: 2018-04-10 12:48:24
Local clock offset: 0.651 ms
Remote clock offset: -13.235 ms

# Below is generated by plot.py at 2018-04-10 16:44:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.59 Mbit/s
95th percentile per-packet one-way delay: 37.291 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 78.59 Mbit/s
95th percentile per-packet one-way delay: 37.291 ms
Loss rate: 0.32%
```

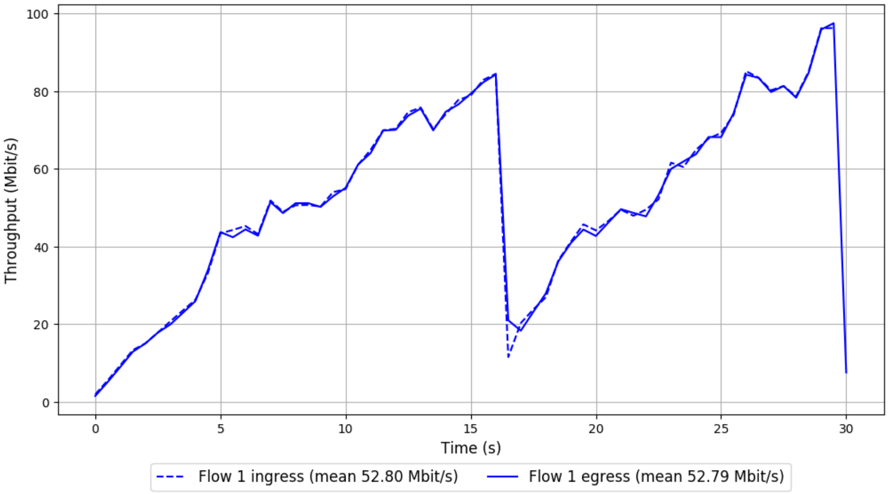
Run 1: Report of LEDBAT — Data Link

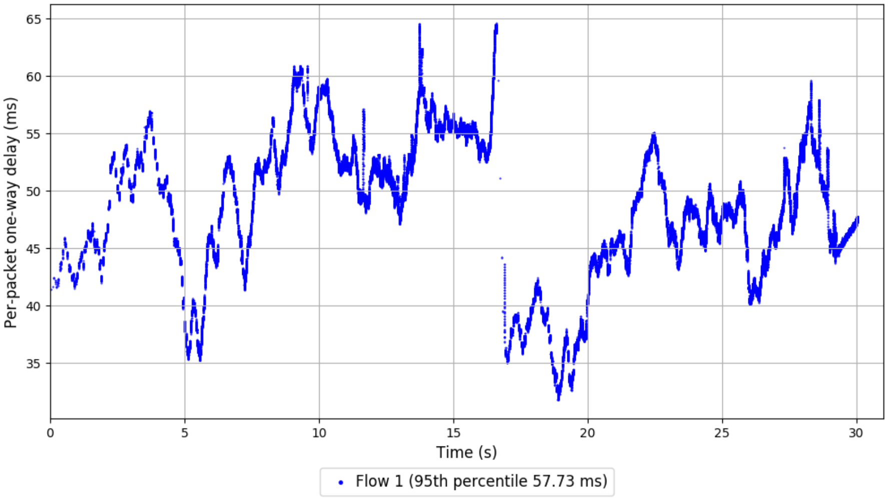




```
Run 2: Statistics of LEDBAT

Start at: 2018-04-10 13:09:11
End at: 2018-04-10 13:09:41
Local clock offset: -4.267 ms
Remote clock offset: -9.312 ms

# Below is generated by plot.py at 2018-04-10 16:44:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.79 Mbit/s
95th percentile per-packet one-way delay: 57.735 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 52.79 Mbit/s
95th percentile per-packet one-way delay: 57.735 ms
Loss rate: 0.01%
```

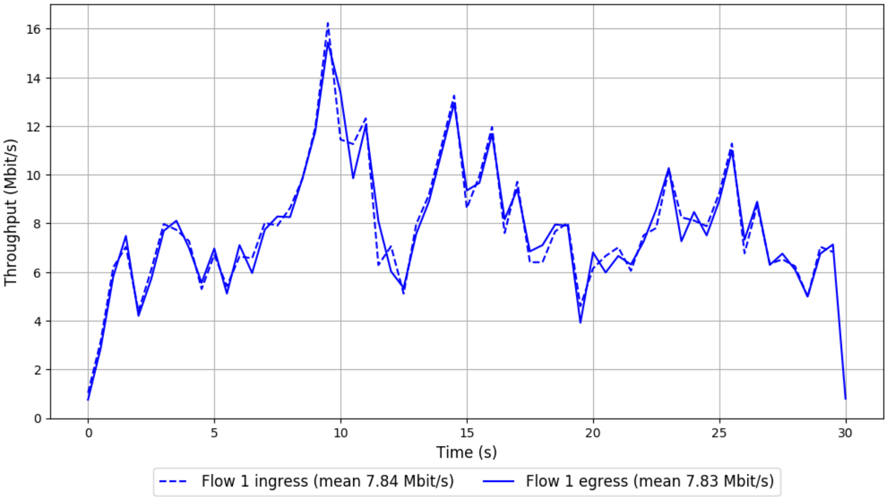
Run 2: Report of LEDBAT — Data Link

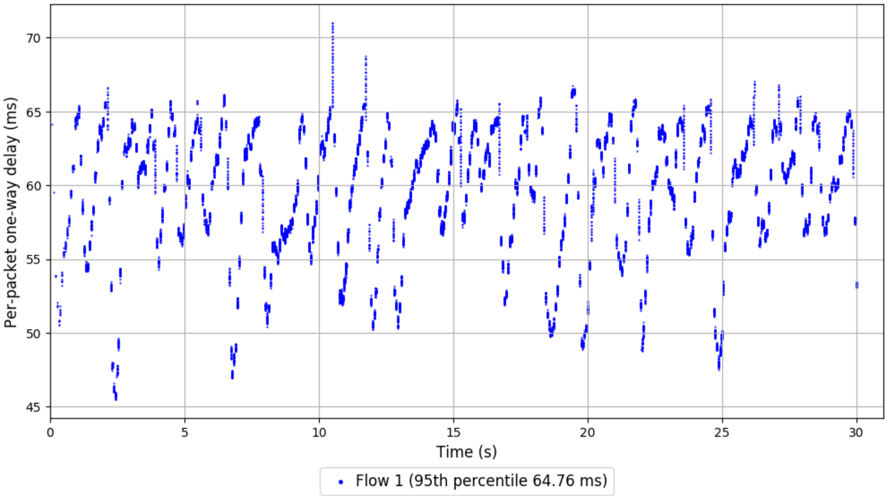




```
Run 3: Statistics of LEDBAT

Start at: 2018-04-10 13:31:30
End at: 2018-04-10 13:32:00
Local clock offset: -0.166 ms
Remote clock offset: -0.957 ms

# Below is generated by plot.py at 2018-04-10 16:44:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.83 Mbit/s
95th percentile per-packet one-way delay: 64.759 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 7.83 Mbit/s
95th percentile per-packet one-way delay: 64.759 ms
Loss rate: 0.20%
```

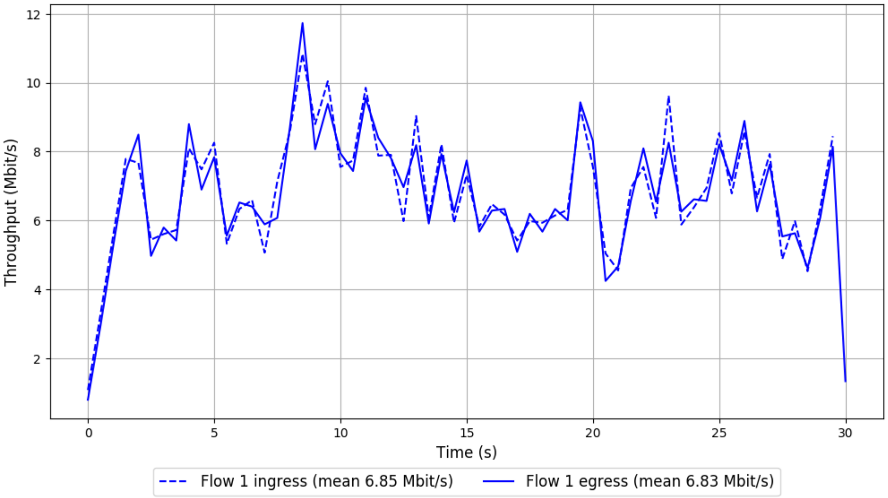
Run 3: Report of LEDBAT — Data Link

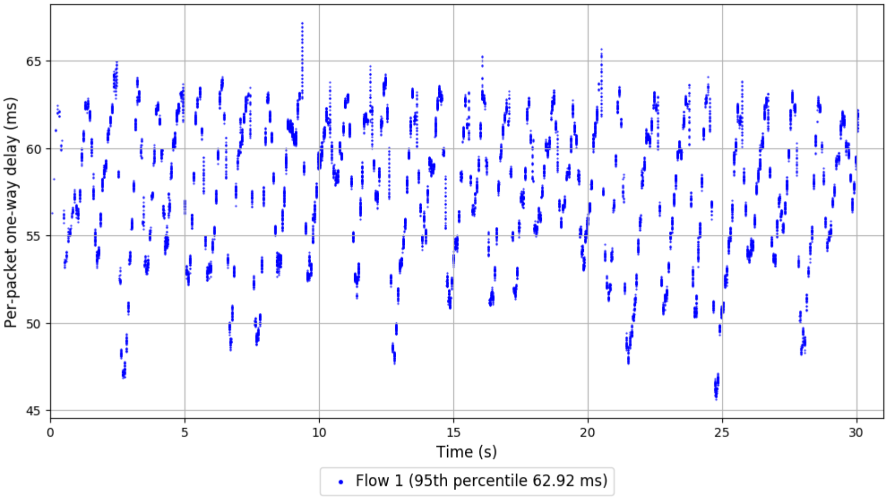




```
Run 4: Statistics of LEDBAT

Start at: 2018-04-10 13:52:51
End at: 2018-04-10 13:53:21
Local clock offset: 0.989 ms
Remote clock offset: 15.981 ms

# Below is generated by plot.py at 2018-04-10 16:44:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.83 Mbit/s
95th percentile per-packet one-way delay: 62.921 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 6.83 Mbit/s
95th percentile per-packet one-way delay: 62.921 ms
Loss rate: 0.29%
```

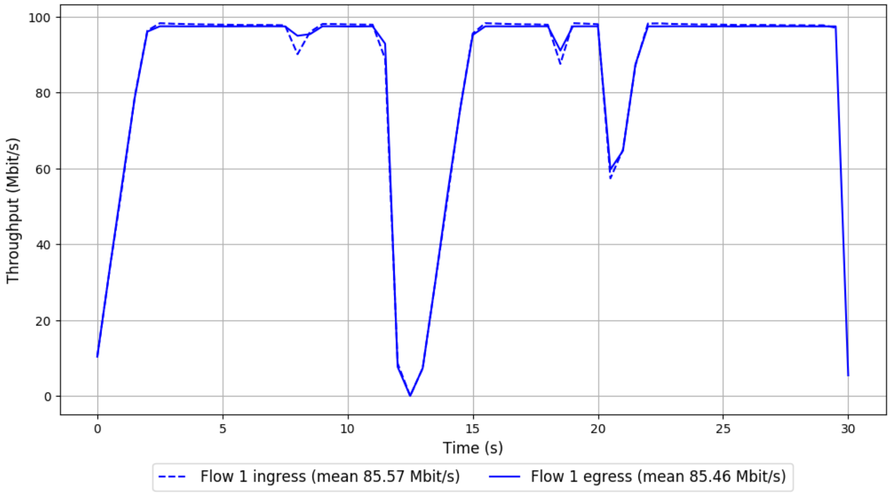
Run 4: Report of LEDBAT — Data Link

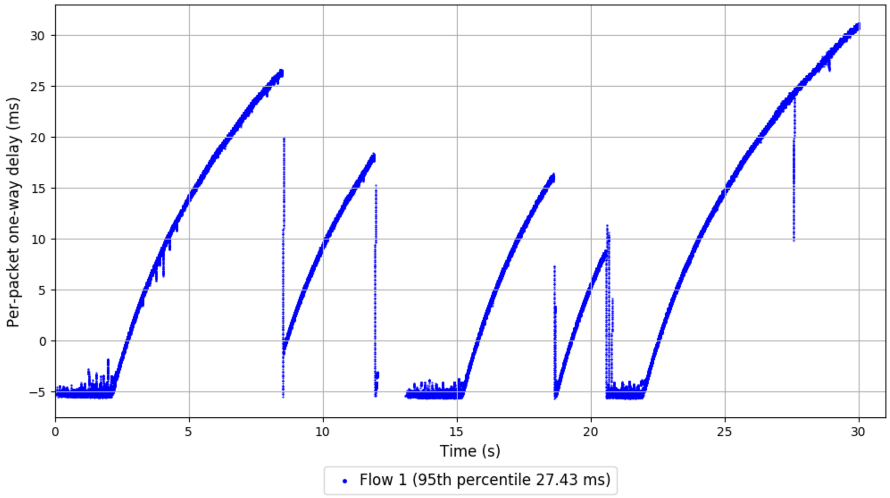




```
Run 5: Statistics of LEDBAT

Start at: 2018-04-10 14:14:09
End at: 2018-04-10 14:14:39
Local clock offset: 1.195 ms
Remote clock offset: 11.689 ms

# Below is generated by plot.py at 2018-04-10 16:44:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.46 Mbit/s
95th percentile per-packet one-way delay: 27.425 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 85.46 Mbit/s
95th percentile per-packet one-way delay: 27.425 ms
Loss rate: 0.01%
```

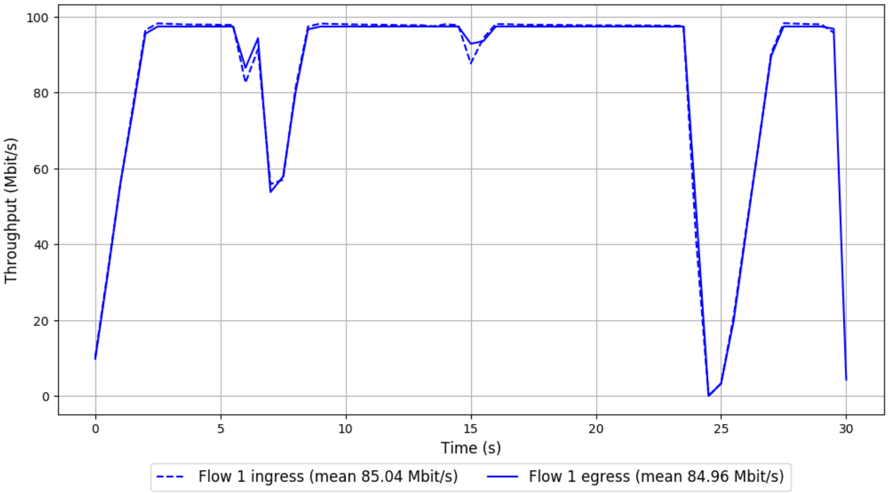
Run 5: Report of LEDBAT — Data Link

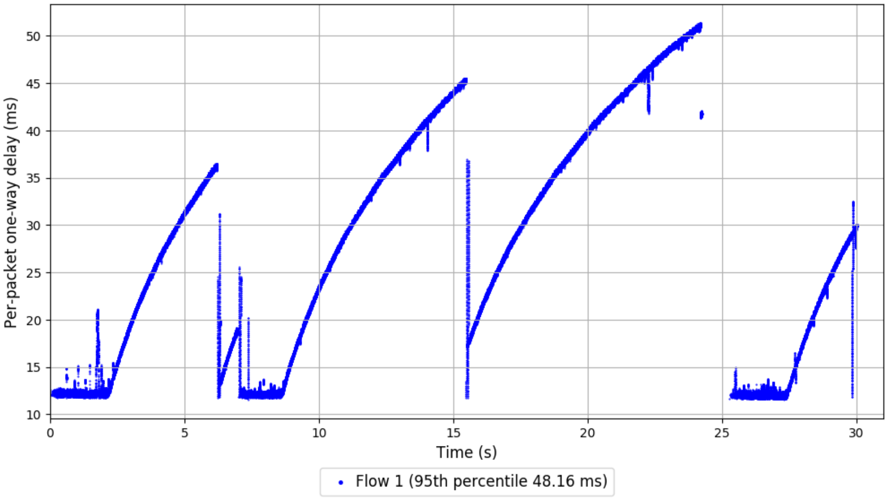




```
Run 6: Statistics of LEDBAT

Start at: 2018-04-10 14:35:11
End at: 2018-04-10 14:35:41
Local clock offset: -1.371 ms
Remote clock offset: 32.453 ms

# Below is generated by plot.py at 2018-04-10 16:44:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.96 Mbit/s
95th percentile per-packet one-way delay: 48.165 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 84.96 Mbit/s
95th percentile per-packet one-way delay: 48.165 ms
Loss rate: 0.04%
```

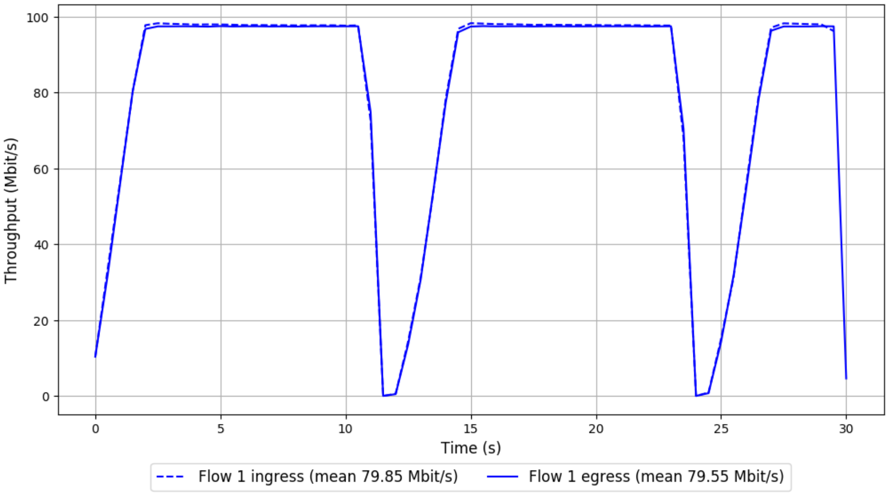
Run 6: Report of LEDBAT — Data Link

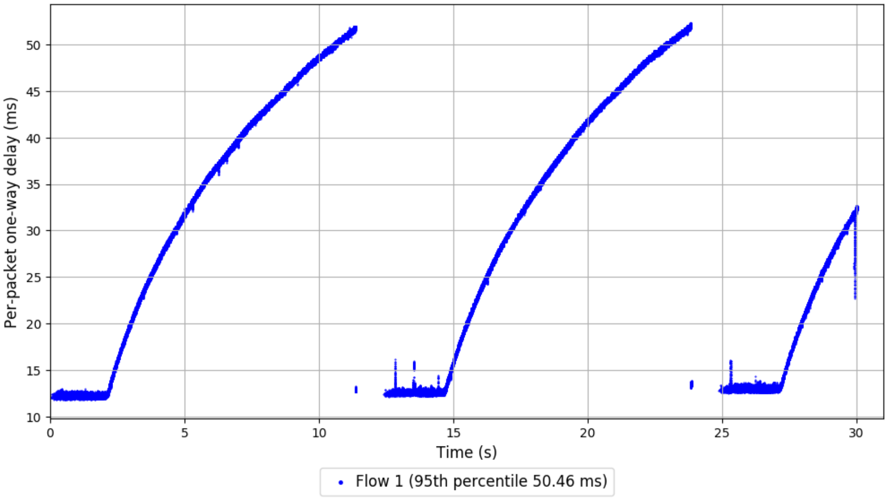




```
Run 7: Statistics of LEDBAT

Start at: 2018-04-10 14:57:13
End at: 2018-04-10 14:57:43
Local clock offset: -0.579 ms
Remote clock offset: 10.681 ms

# Below is generated by plot.py at 2018-04-10 16:44:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.55 Mbit/s
95th percentile per-packet one-way delay: 50.464 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 79.55 Mbit/s
95th percentile per-packet one-way delay: 50.464 ms
Loss rate: 0.32%
```

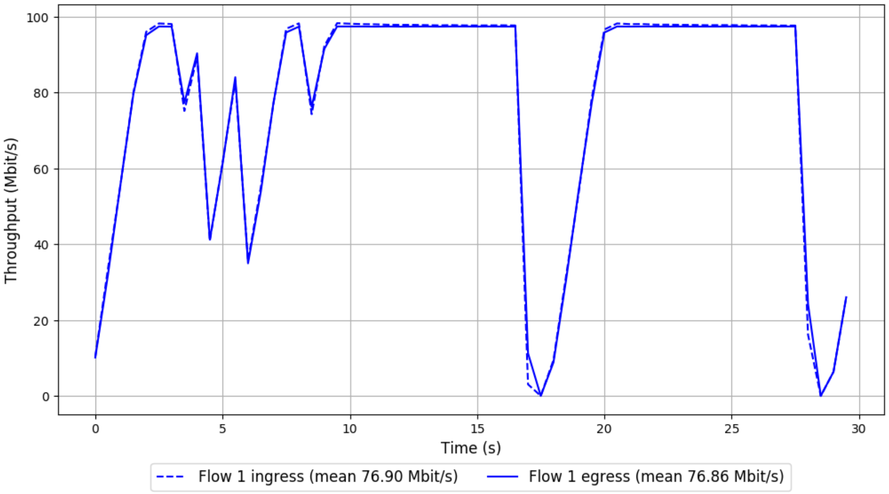
Run 7: Report of LEDBAT — Data Link

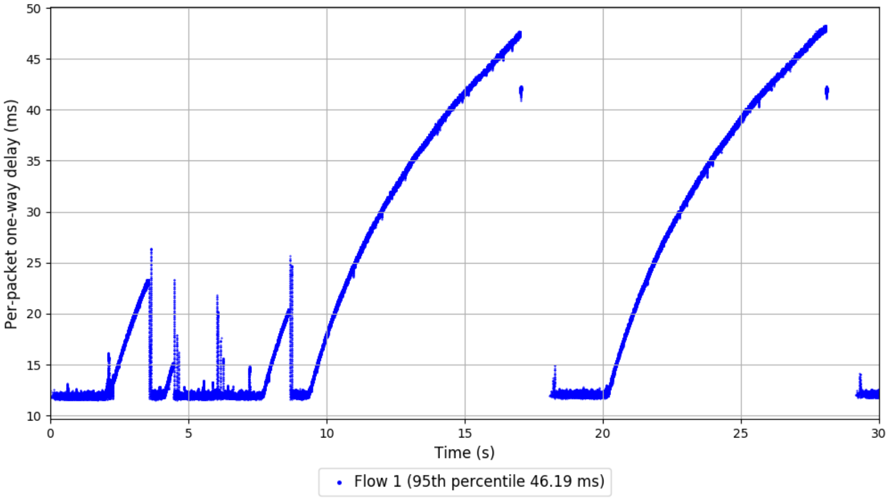




```
Run 8: Statistics of LEDBAT

Start at: 2018-04-10 15:19:15
End at: 2018-04-10 15:19:45
Local clock offset: 0.473 ms
Remote clock offset: -5.936 ms

# Below is generated by plot.py at 2018-04-10 16:44:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.86 Mbit/s
95th percentile per-packet one-way delay: 46.185 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 76.86 Mbit/s
95th percentile per-packet one-way delay: 46.185 ms
Loss rate: 0.06%
```

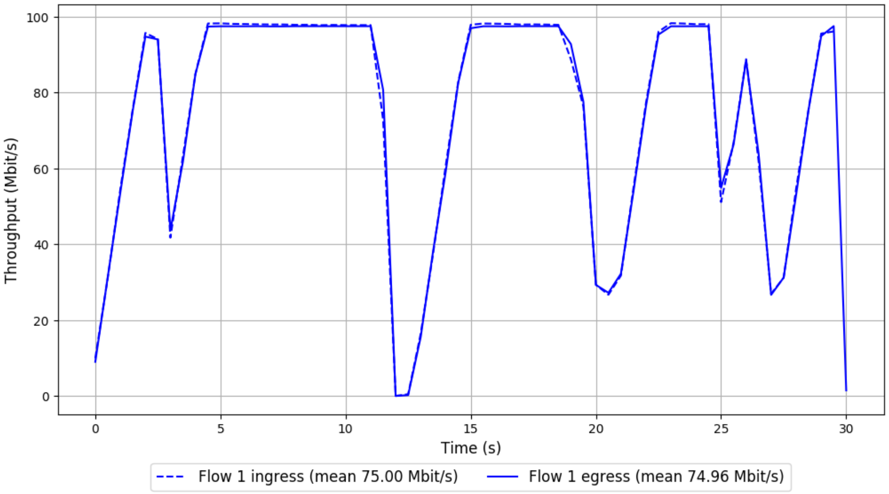
Run 8: Report of LEDBAT — Data Link

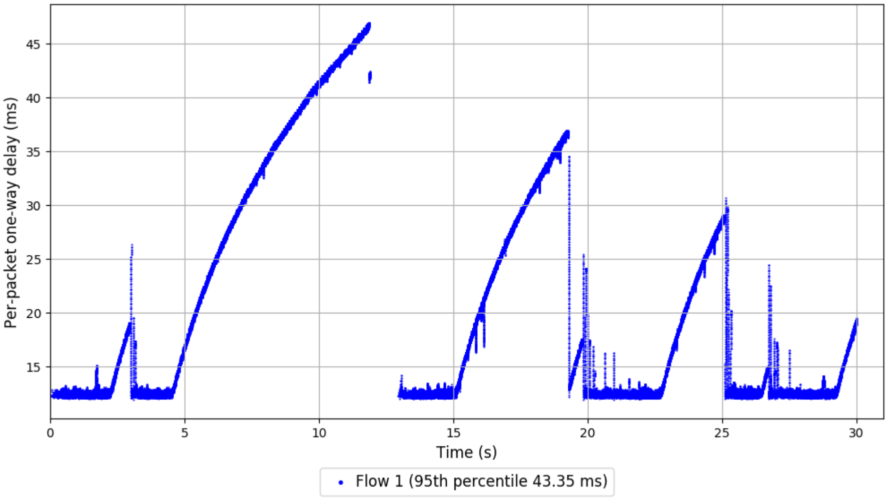




```
Run 9: Statistics of LEDBAT

Start at: 2018-04-10 15:40:49
End at: 2018-04-10 15:41:19
Local clock offset: 1.037 ms
Remote clock offset: -2.245 ms

# Below is generated by plot.py at 2018-04-10 16:44:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.96 Mbit/s
95th percentile per-packet one-way delay: 43.353 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 74.96 Mbit/s
95th percentile per-packet one-way delay: 43.353 ms
Loss rate: 0.04%
```

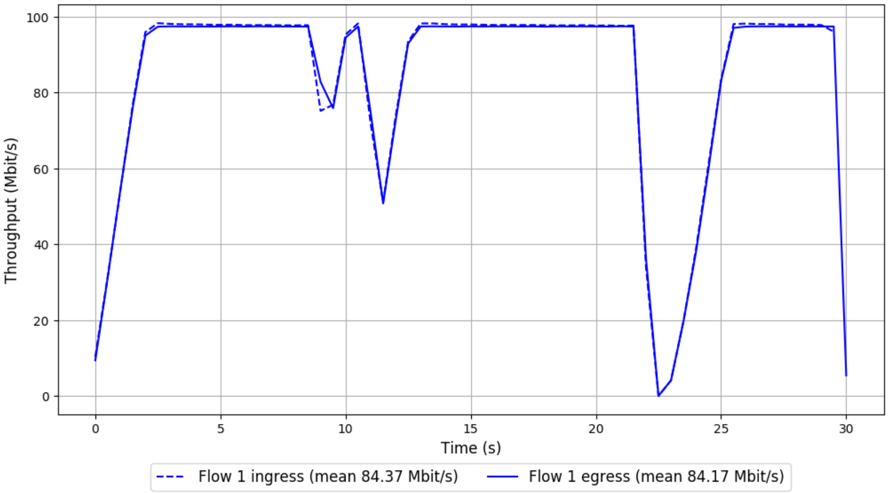
Run 9: Report of LEDBAT — Data Link

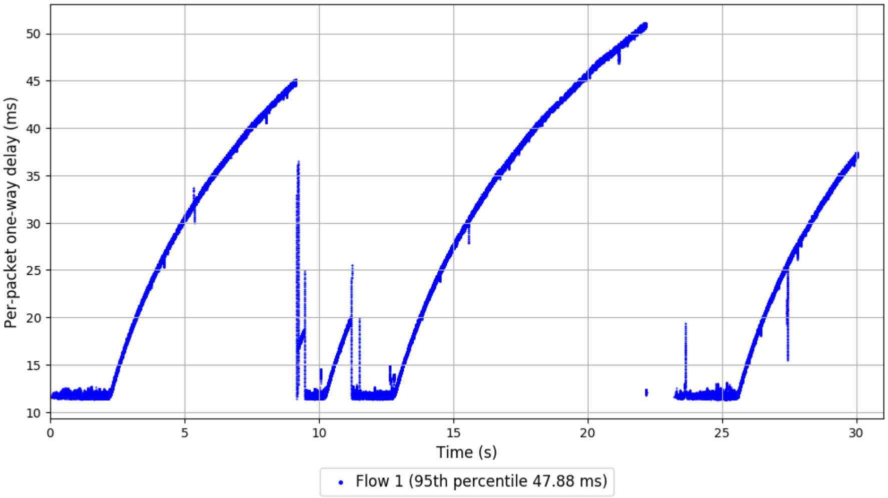




```
Run 10: Statistics of LEDBAT

Start at: 2018-04-10 16:03:26
End at: 2018-04-10 16:03:56
Local clock offset: 1.624 ms
Remote clock offset: -1.93 ms

# Below is generated by plot.py at 2018-04-10 16:45:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.17 Mbit/s
95th percentile per-packet one-way delay: 47.882 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 84.17 Mbit/s
95th percentile per-packet one-way delay: 47.882 ms
Loss rate: 0.15%
```

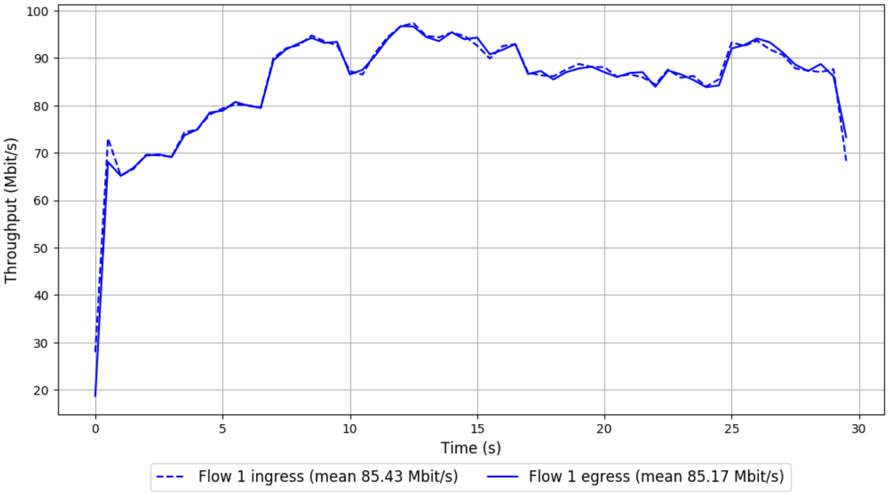
Run 10: Report of LEDBAT — Data Link

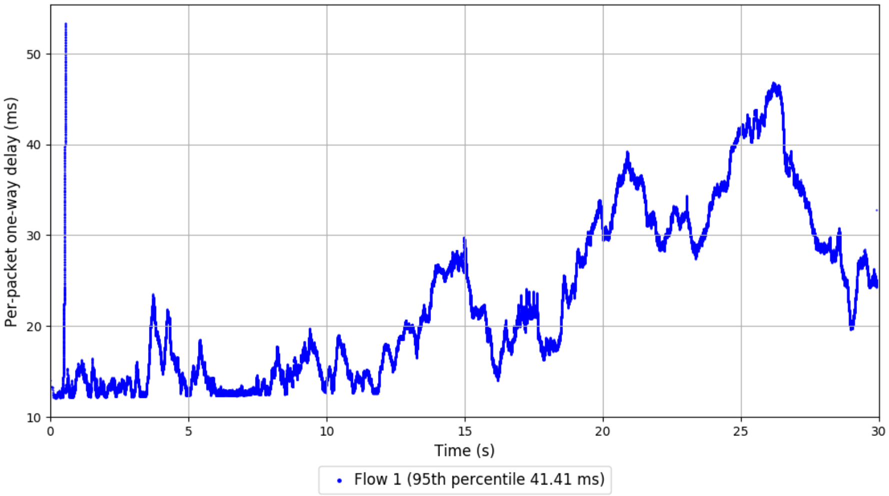




```
Run 1: Statistics of PCC

Start at: 2018-04-10 12:35:49
End at: 2018-04-10 12:36:19
Local clock offset: 0.046 ms
Remote clock offset: 14.291 ms

# Below is generated by plot.py at 2018-04-10 16:45:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.17 Mbit/s
95th percentile per-packet one-way delay: 41.413 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 85.17 Mbit/s
95th percentile per-packet one-way delay: 41.413 ms
Loss rate: 0.24%
```

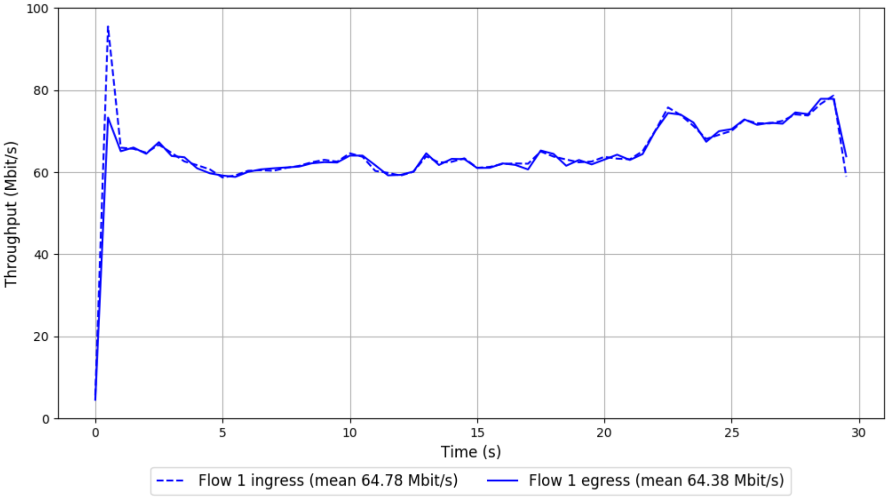
Run 1: Report of PCC — Data Link

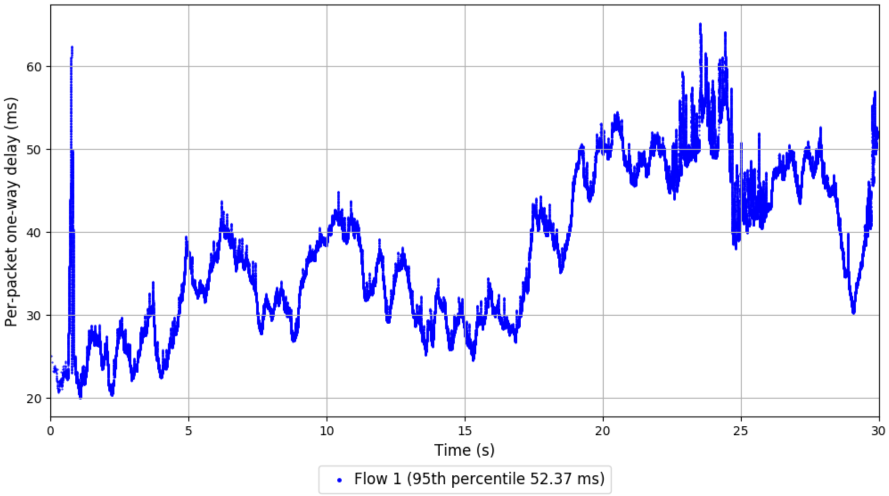




```
Run 2: Statistics of PCC

Start at: 2018-04-10 12:57:26
End at: 2018-04-10 12:57:56
Local clock offset: 0.856 ms
Remote clock offset: -11.552 ms

# Below is generated by plot.py at 2018-04-10 16:45:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.38 Mbit/s
95th percentile per-packet one-way delay: 52.370 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 64.38 Mbit/s
95th percentile per-packet one-way delay: 52.370 ms
Loss rate: 0.56%
```

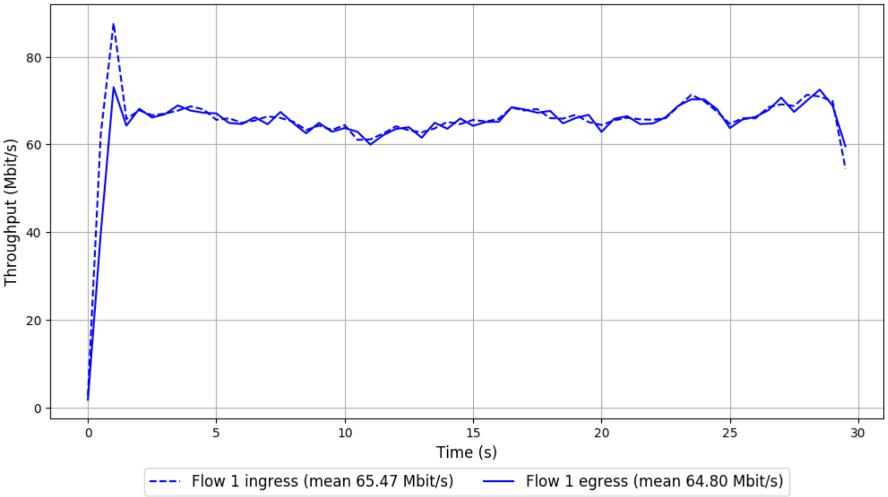
Run 2: Report of PCC — Data Link

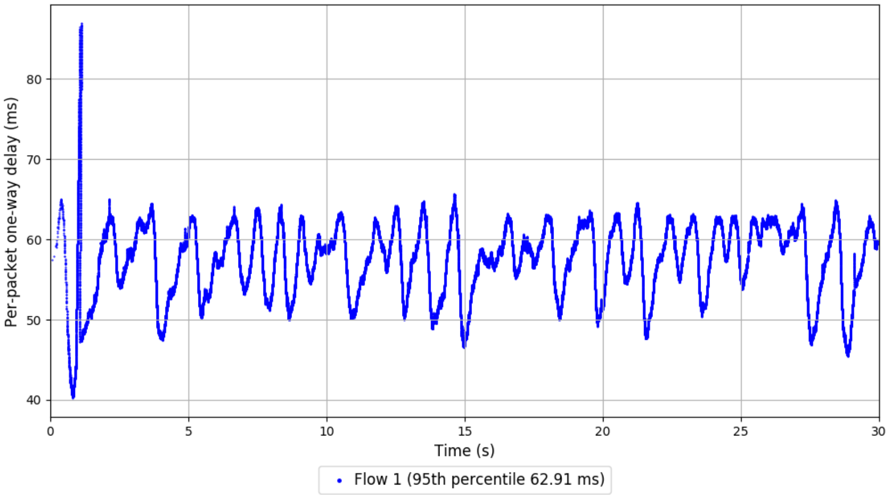




```
Run 3: Statistics of PCC

Start at: 2018-04-10 13:18:53
End at: 2018-04-10 13:19:23
Local clock offset: 0.325 ms
Remote clock offset: -2.423 ms

# Below is generated by plot.py at 2018-04-10 16:45:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.80 Mbit/s
95th percentile per-packet one-way delay: 62.914 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 64.80 Mbit/s
95th percentile per-packet one-way delay: 62.914 ms
Loss rate: 1.08%
```

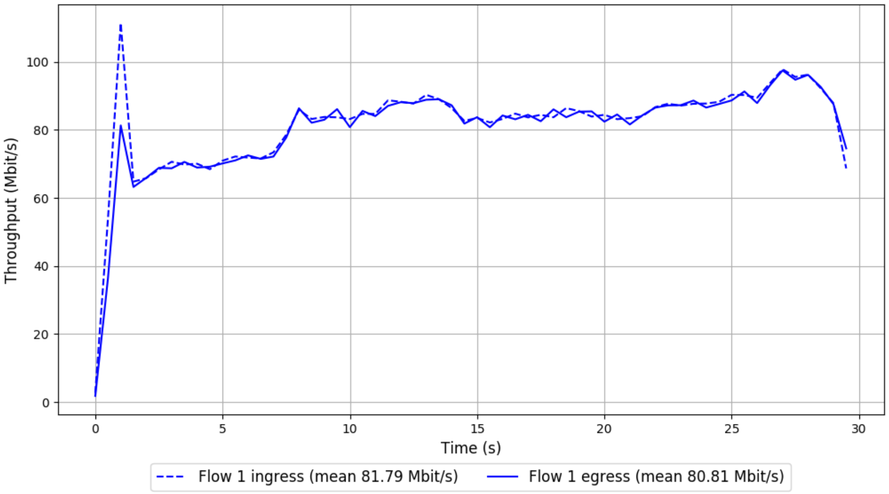
Run 3: Report of PCC — Data Link

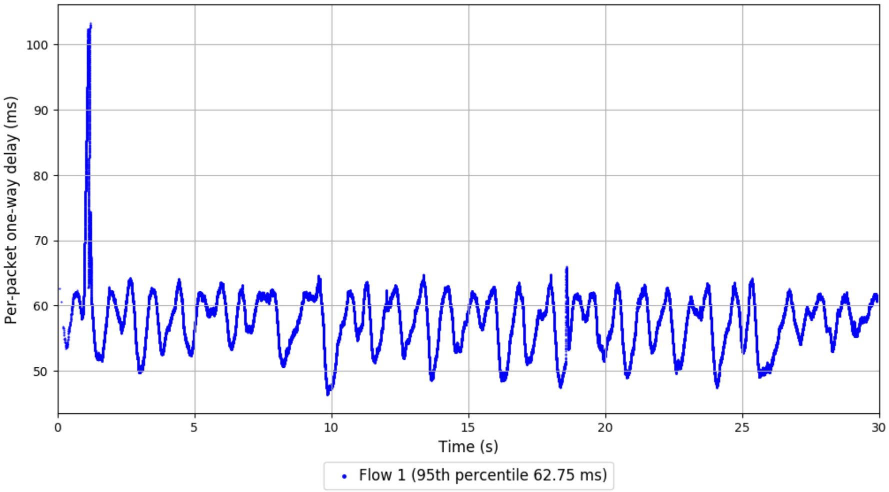




```
Run 4: Statistics of PCC

Start at: 2018-04-10 13:40:52
End at: 2018-04-10 13:41:23
Local clock offset: 0.13 ms
Remote clock offset: -0.926 ms

# Below is generated by plot.py at 2018-04-10 16:45:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.81 Mbit/s
95th percentile per-packet one-way delay: 62.748 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 80.81 Mbit/s
95th percentile per-packet one-way delay: 62.748 ms
Loss rate: 1.28%
```

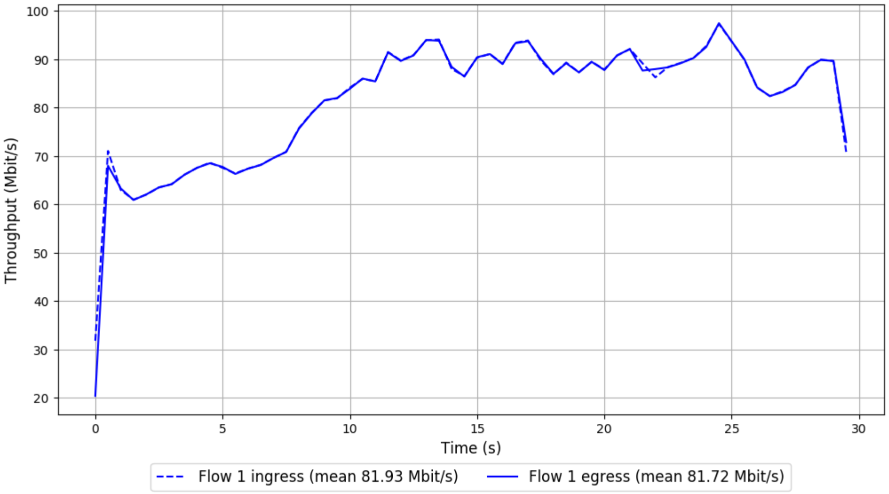
Run 4: Report of PCC — Data Link

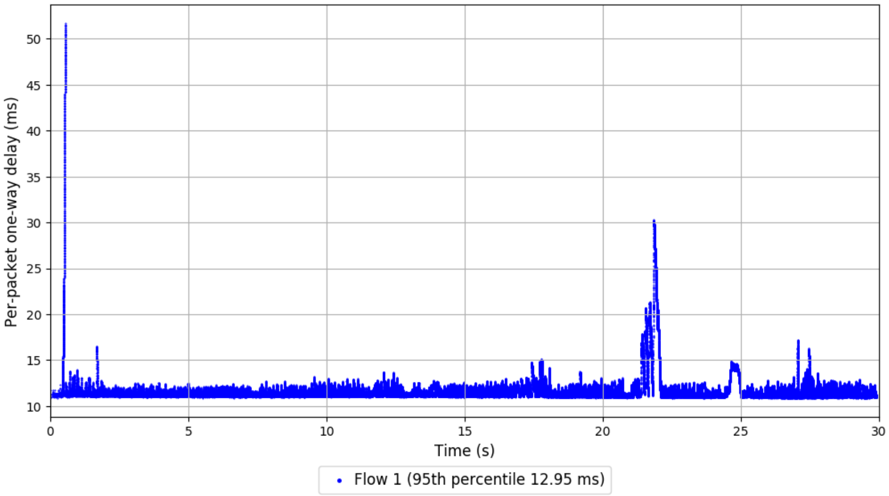




```
Run 5: Statistics of PCC

Start at: 2018-04-10 14:02:29
End at: 2018-04-10 14:02:59
Local clock offset: 1.144 ms
Remote clock offset: 22.381 ms

# Below is generated by plot.py at 2018-04-10 16:45:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.72 Mbit/s
95th percentile per-packet one-way delay: 12.945 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 81.72 Mbit/s
95th percentile per-packet one-way delay: 12.945 ms
Loss rate: 0.26%
```

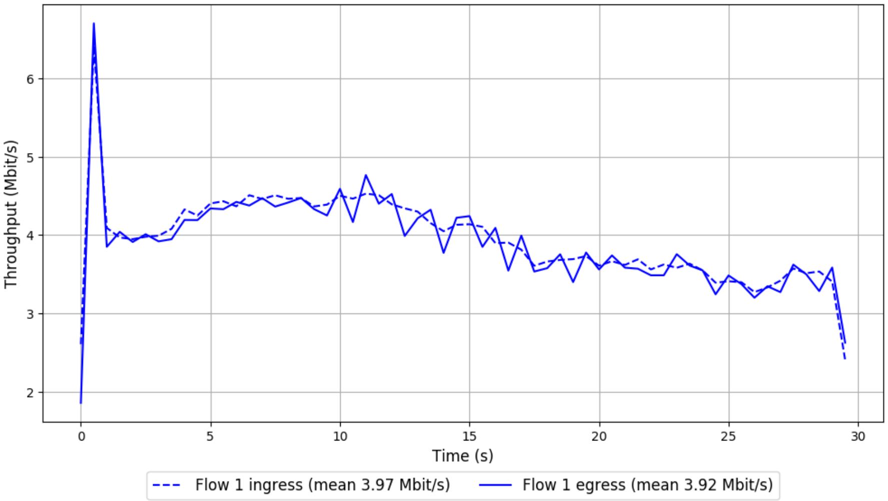
Run 5: Report of PCC — Data Link

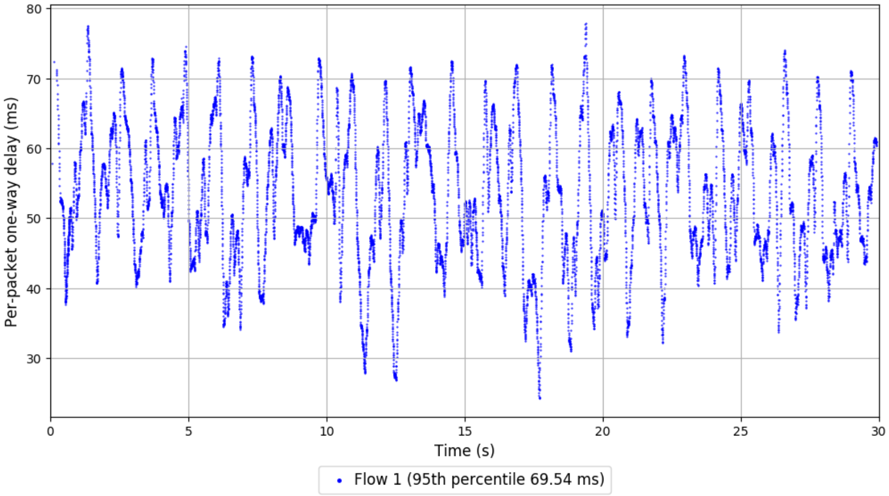




```
Run 6: Statistics of PCC

Start at: 2018-04-10 14:23:20
End at: 2018-04-10 14:23:50
Local clock offset: -8.046 ms
Remote clock offset: 23.936 ms

# Below is generated by plot.py at 2018-04-10 16:45:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.92 Mbit/s
95th percentile per-packet one-way delay: 69.536 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 3.92 Mbit/s
95th percentile per-packet one-way delay: 69.536 ms
Loss rate: 1.19%
```

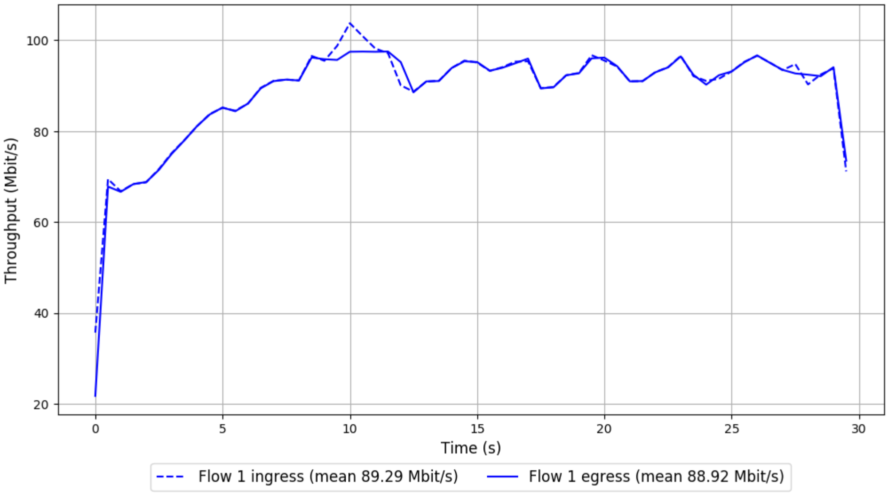
Run 6: Report of PCC — Data Link

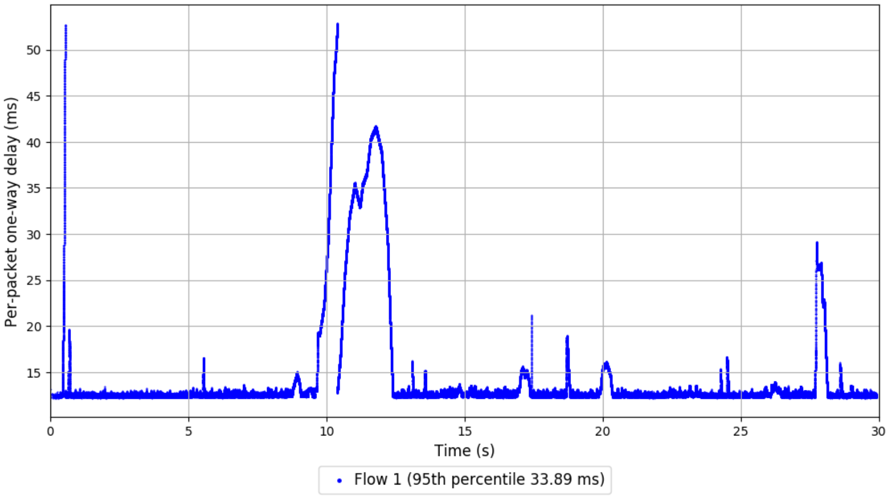




```
Run 7: Statistics of PCC

Start at: 2018-04-10 14:44:58
End at: 2018-04-10 14:45:28
Local clock offset: -2.173 ms
Remote clock offset: 35.687 ms

# Below is generated by plot.py at 2018-04-10 16:45:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.92 Mbit/s
95th percentile per-packet one-way delay: 33.890 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 88.92 Mbit/s
95th percentile per-packet one-way delay: 33.890 ms
Loss rate: 0.42%
```

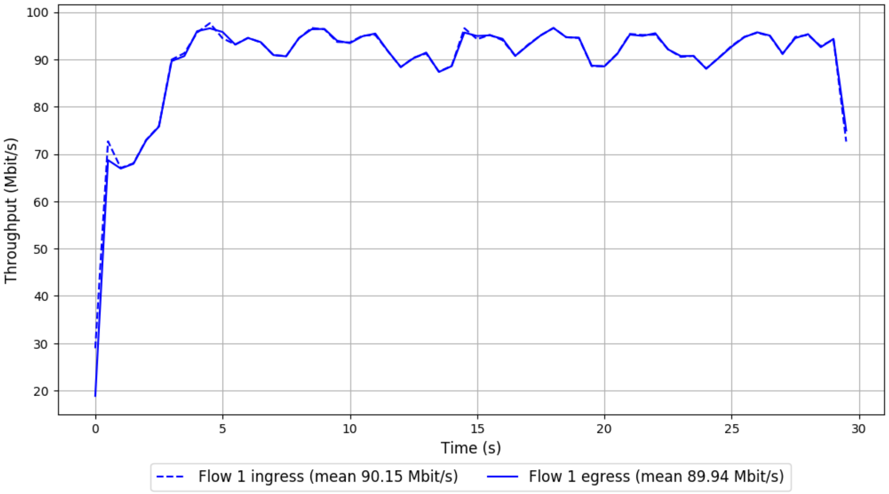
Run 7: Report of PCC — Data Link

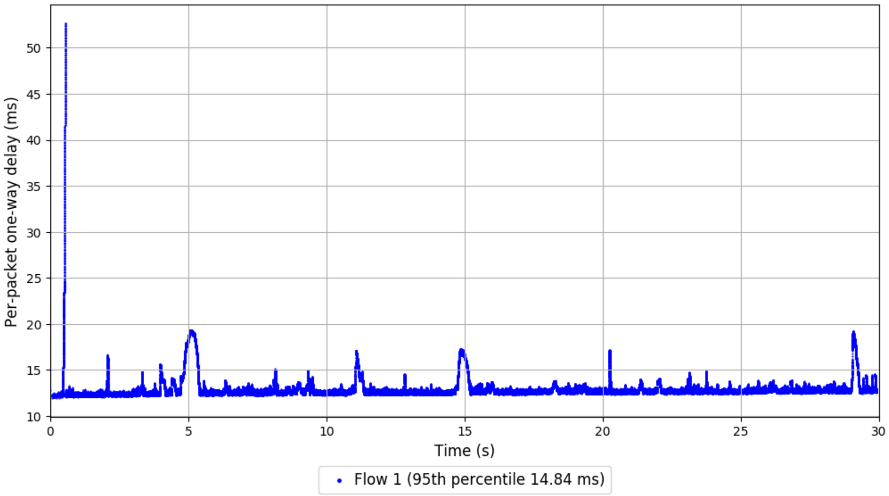




```
Run 8: Statistics of PCC

Start at: 2018-04-10 15:07:01
End at: 2018-04-10 15:07:31
Local clock offset: 0.187 ms
Remote clock offset: -0.185 ms

# Below is generated by plot.py at 2018-04-10 16:46:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.94 Mbit/s
95th percentile per-packet one-way delay: 14.836 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 89.94 Mbit/s
95th percentile per-packet one-way delay: 14.836 ms
Loss rate: 0.23%
```

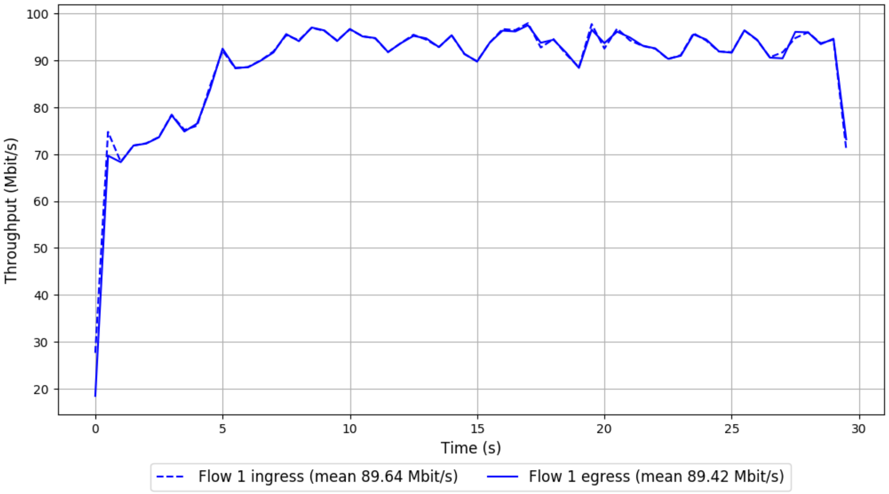
Run 8: Report of PCC — Data Link

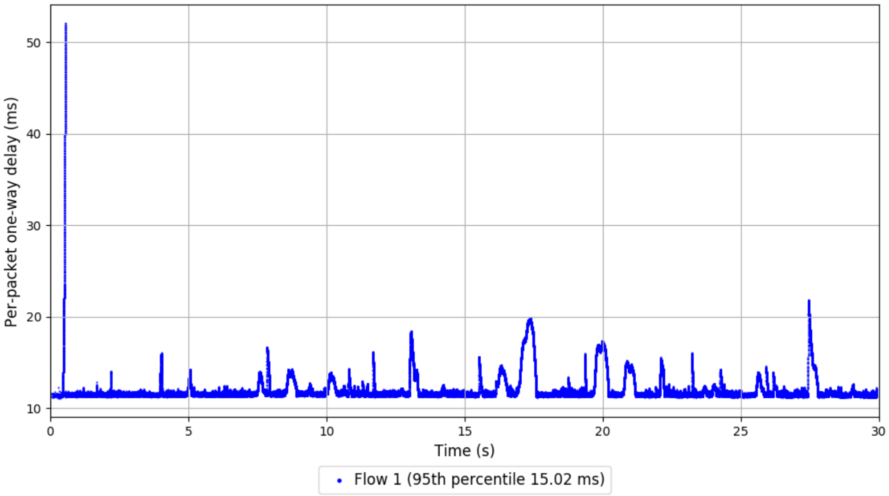




```
Run 9: Statistics of PCC

Start at: 2018-04-10 15:28:46
End at: 2018-04-10 15:29:16
Local clock offset: 0.689 ms
Remote clock offset: -4.608 ms

# Below is generated by plot.py at 2018-04-10 16:46:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.42 Mbit/s
95th percentile per-packet one-way delay: 15.018 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 89.42 Mbit/s
95th percentile per-packet one-way delay: 15.018 ms
Loss rate: 0.24%
```

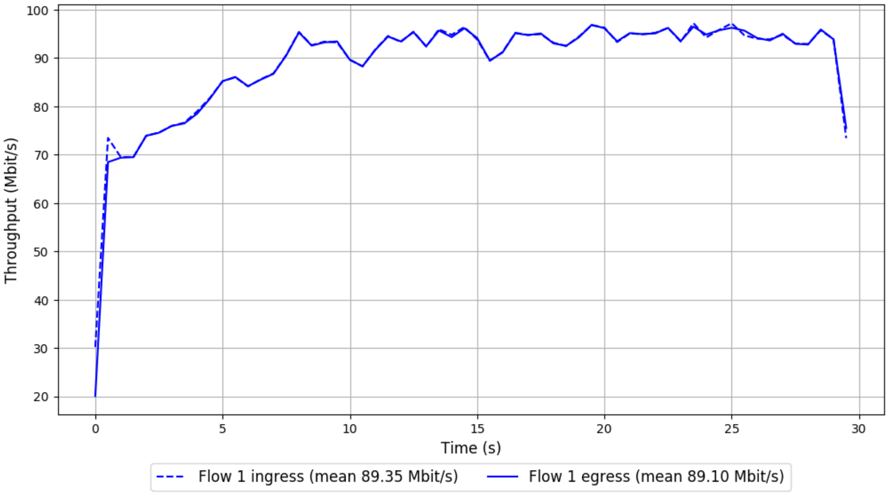
Run 9: Report of PCC — Data Link

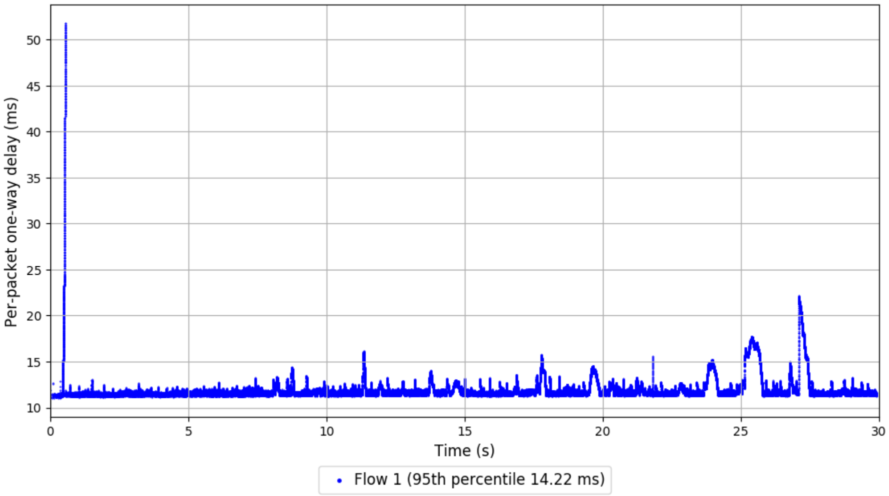




```
Run 10: Statistics of PCC

Start at: 2018-04-10 15:51:04
End at: 2018-04-10 15:51:34
Local clock offset: 1.49 ms
Remote clock offset: -3.084 ms

# Below is generated by plot.py at 2018-04-10 16:46:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.10 Mbit/s
95th percentile per-packet one-way delay: 14.221 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 89.10 Mbit/s
95th percentile per-packet one-way delay: 14.221 ms
Loss rate: 0.29%
```

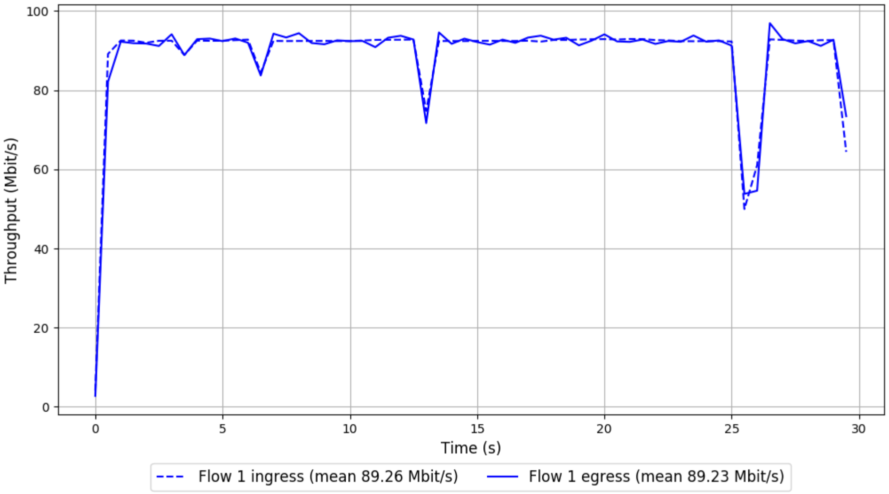
Run 10: Report of PCC — Data Link

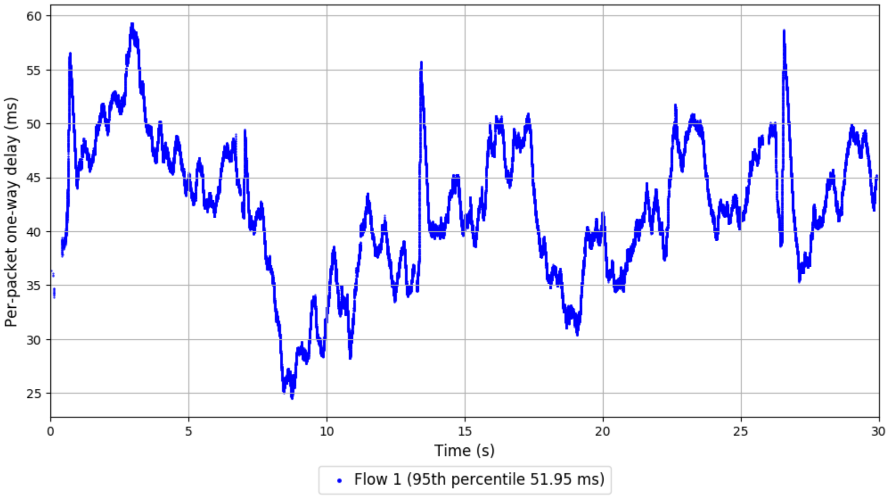




```
Run 1: Statistics of QUIC Cubic

Start at: 2018-04-10 12:42:43
End at: 2018-04-10 12:43:13
Local clock offset: 0.835 ms
Remote clock offset: 4.686 ms

# Below is generated by plot.py at 2018-04-10 16:46:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.23 Mbit/s
95th percentile per-packet one-way delay: 51.954 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 89.23 Mbit/s
95th percentile per-packet one-way delay: 51.954 ms
Loss rate: 0.00%
```

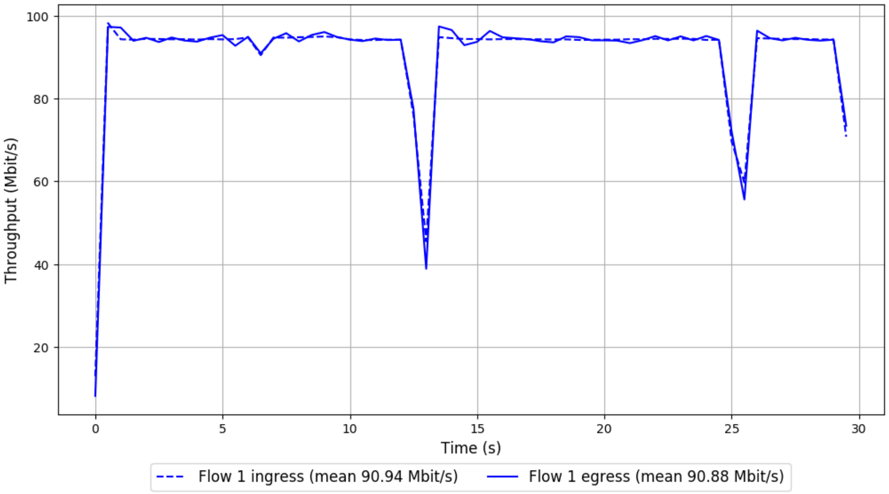
Run 1: Report of QUIC Cubic — Data Link

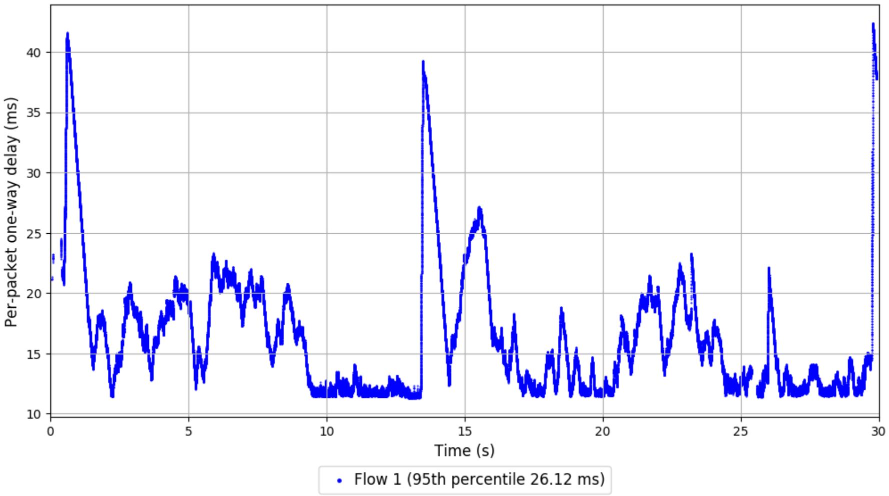




```
Run 2: Statistics of QUIC Cubic

Start at: 2018-04-10 13:04:21
End at: 2018-04-10 13:04:51
Local clock offset: 1.0 ms
Remote clock offset: -6.132 ms

# Below is generated by plot.py at 2018-04-10 16:47:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.88 Mbit/s
95th percentile per-packet one-way delay: 26.122 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 90.88 Mbit/s
95th percentile per-packet one-way delay: 26.122 ms
Loss rate: 0.00%
```

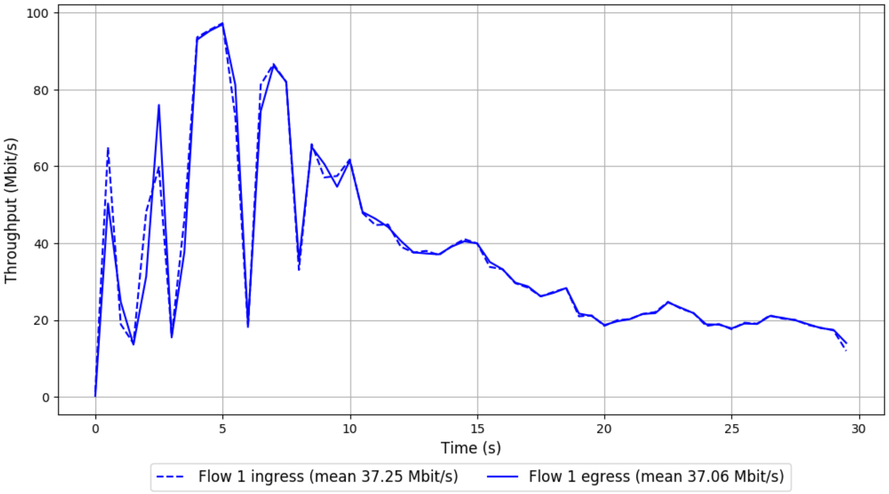
Run 2: Report of QUIC Cubic — Data Link

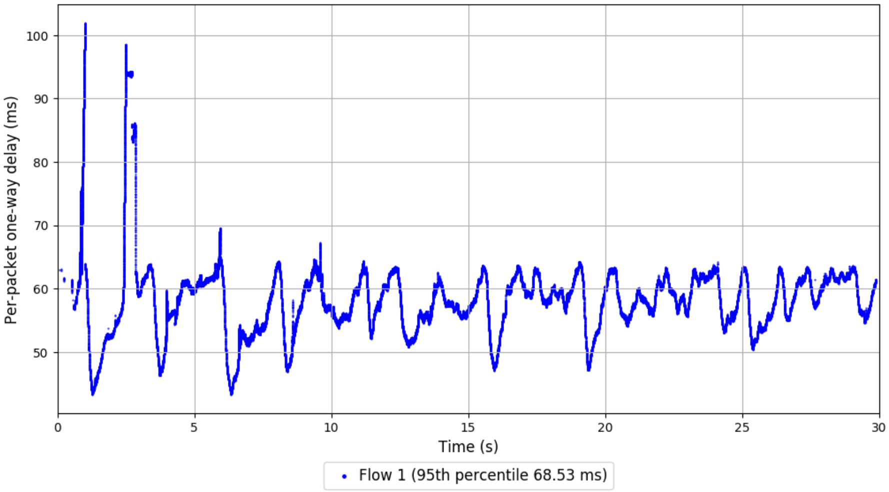




```
Run 3: Statistics of QUIC Cubic

Start at: 2018-04-10 13:26:11
End at: 2018-04-10 13:26:41
Local clock offset: 0.329 ms
Remote clock offset: -0.992 ms

# Below is generated by plot.py at 2018-04-10 16:47:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.06 Mbit/s
95th percentile per-packet one-way delay: 68.528 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 37.06 Mbit/s
95th percentile per-packet one-way delay: 68.528 ms
Loss rate: 0.50%
```

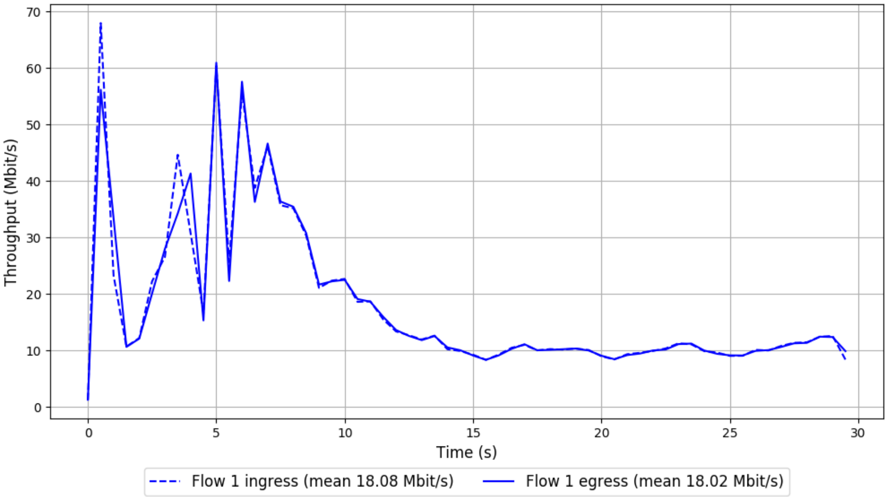
Run 3: Report of QUIC Cubic — Data Link

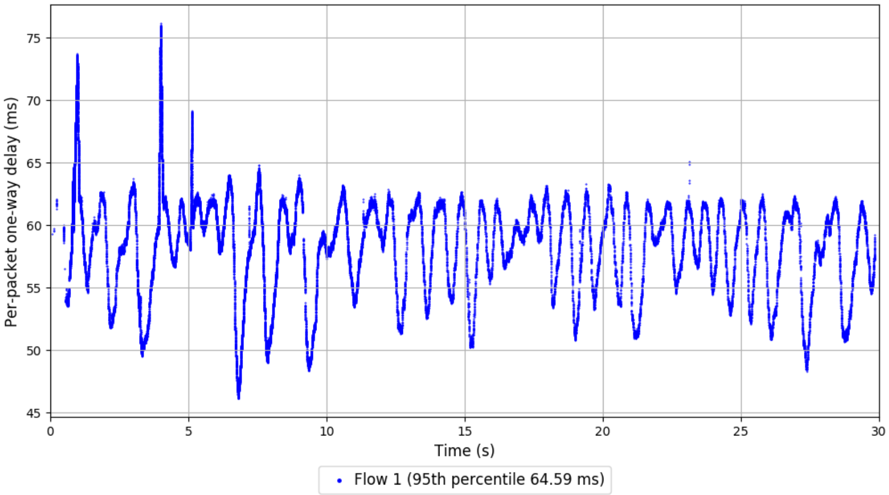




```
Run 4: Statistics of QUIC Cubic

Start at: 2018-04-10 13:47:53
End at: 2018-04-10 13:48:23
Local clock offset: 0.904 ms
Remote clock offset: 11.021 ms

# Below is generated by plot.py at 2018-04-10 16:47:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 18.02 Mbit/s
95th percentile per-packet one-way delay: 64.589 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 18.02 Mbit/s
95th percentile per-packet one-way delay: 64.589 ms
Loss rate: 0.32%
```

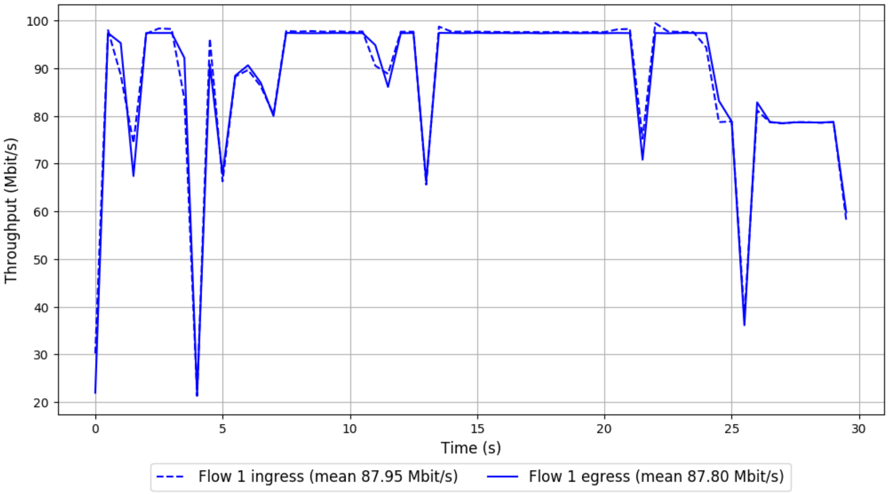
Run 4: Report of QUIC Cubic — Data Link

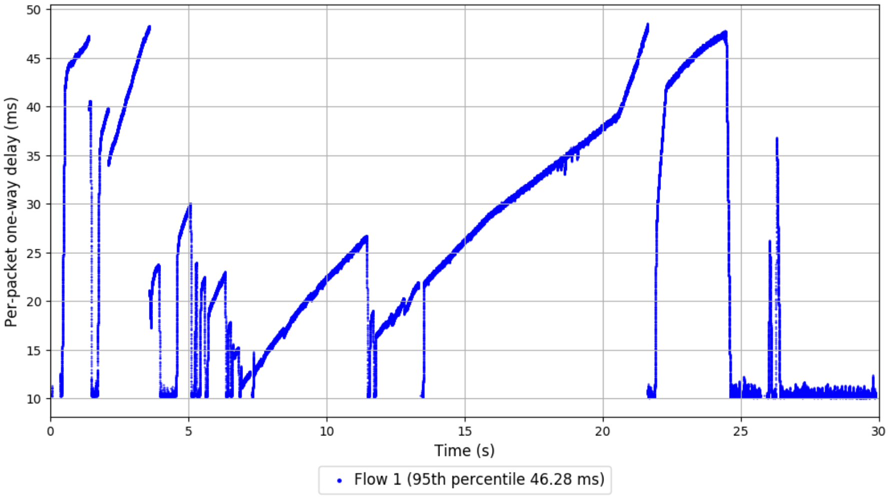




```
Run 5: Statistics of QUIC Cubic

Start at: 2018-04-10 14:09:24
End at: 2018-04-10 14:09:54
Local clock offset: 1.81 ms
Remote clock offset: 25.152 ms

# Below is generated by plot.py at 2018-04-10 16:47:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.80 Mbit/s
95th percentile per-packet one-way delay: 46.277 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 87.80 Mbit/s
95th percentile per-packet one-way delay: 46.277 ms
Loss rate: 0.18%
```

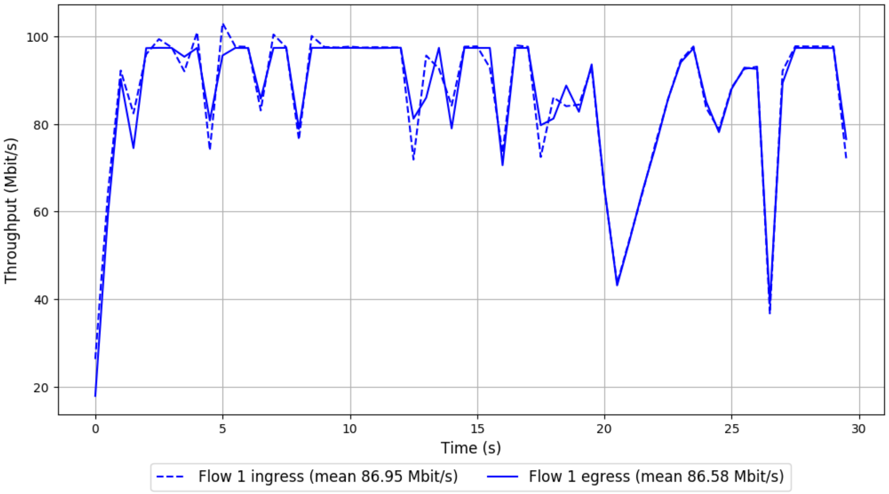
Run 5: Report of QUIC Cubic — Data Link

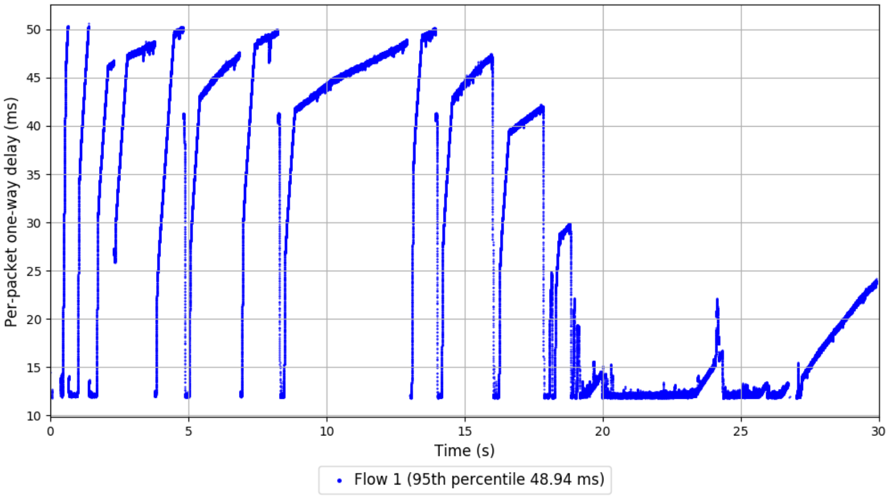




```
Run 6: Statistics of QUIC Cubic

Start at: 2018-04-10 14:30:18
End at: 2018-04-10 14:30:48
Local clock offset: -0.839 ms
Remote clock offset: 31.57 ms

# Below is generated by plot.py at 2018-04-10 16:47:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.58 Mbit/s
95th percentile per-packet one-way delay: 48.939 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 86.58 Mbit/s
95th percentile per-packet one-way delay: 48.939 ms
Loss rate: 0.39%
```

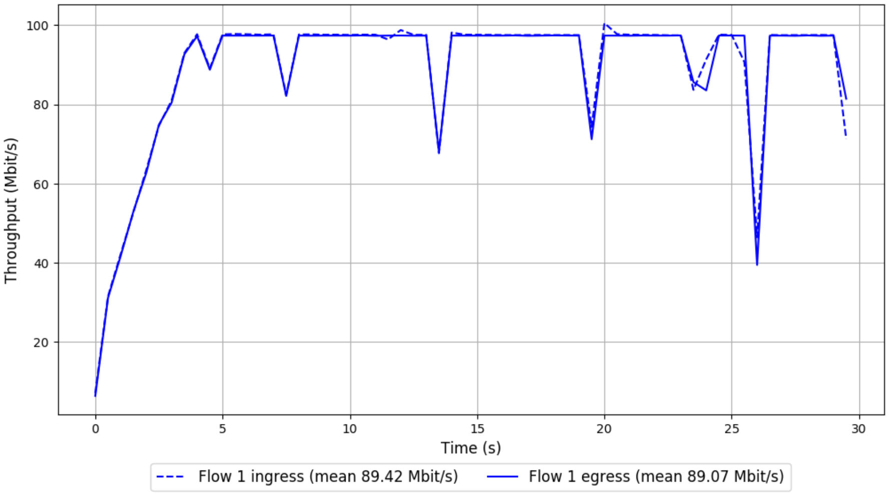
Run 6: Report of QUIC Cubic — Data Link

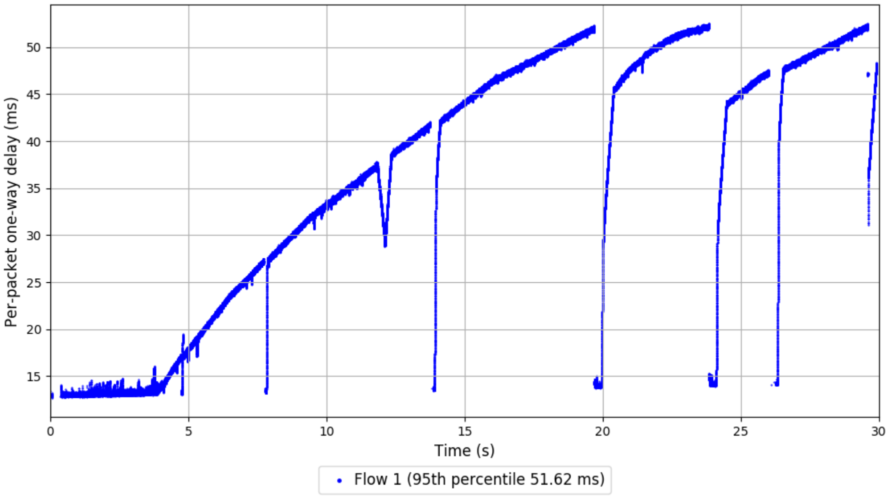




```
Run 7: Statistics of QUIC Cubic

Start at: 2018-04-10 14:52:16
End at: 2018-04-10 14:52:46
Local clock offset: -1.096 ms
Remote clock offset: 22.929 ms

# Below is generated by plot.py at 2018-04-10 16:47:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.07 Mbit/s
95th percentile per-packet one-way delay: 51.620 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 89.07 Mbit/s
95th percentile per-packet one-way delay: 51.620 ms
Loss rate: 0.28%
```

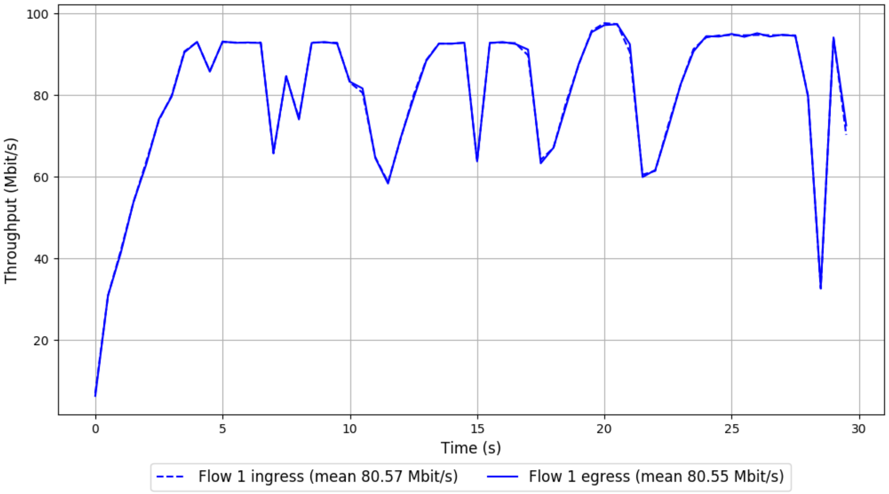
Run 7: Report of QUIC Cubic — Data Link

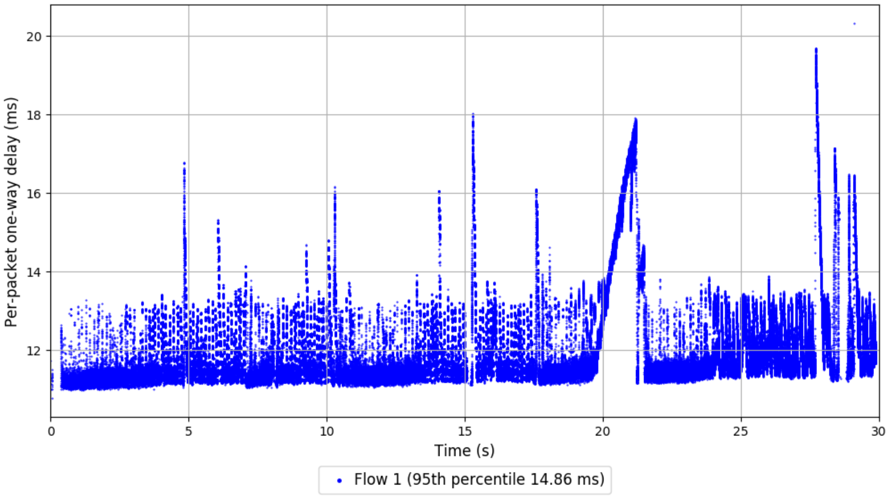




```
Run 8: Statistics of QUIC Cubic

Start at: 2018-04-10 15:14:09
End at: 2018-04-10 15:14:39
Local clock offset: -0.022 ms
Remote clock offset: -4.865 ms

# Below is generated by plot.py at 2018-04-10 16:47:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.55 Mbit/s
95th percentile per-packet one-way delay: 14.864 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 80.55 Mbit/s
95th percentile per-packet one-way delay: 14.864 ms
Loss rate: 0.02%
```

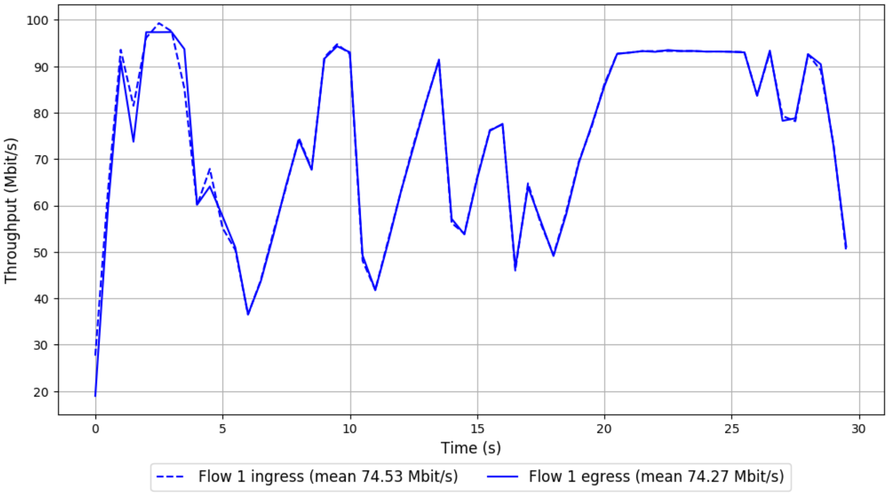
Run 8: Report of QUIC Cubic — Data Link

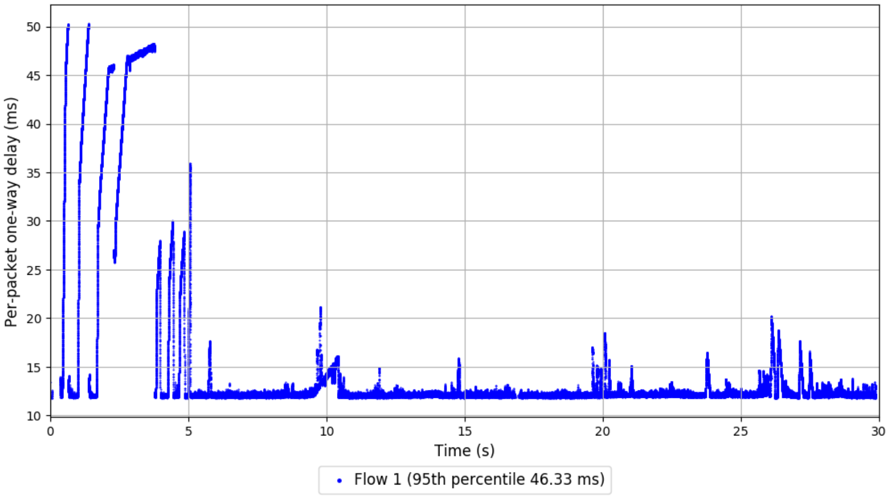




```
Run 9: Statistics of QUIC Cubic

Start at: 2018-04-10 15:35:48
End at: 2018-04-10 15:36:18
Local clock offset: 1.127 ms
Remote clock offset: -2.491 ms

# Below is generated by plot.py at 2018-04-10 16:48:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.27 Mbit/s
95th percentile per-packet one-way delay: 46.328 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 74.27 Mbit/s
95th percentile per-packet one-way delay: 46.328 ms
Loss rate: 0.35%
```

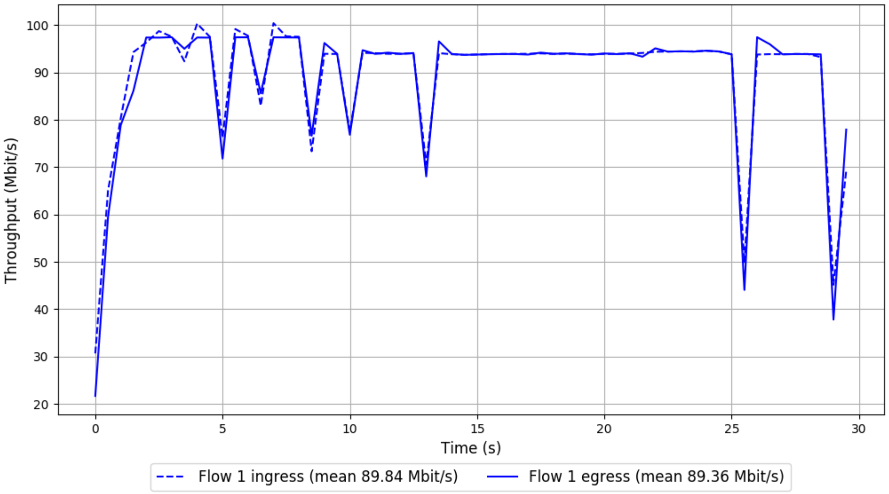
Run 9: Report of QUIC Cubic — Data Link

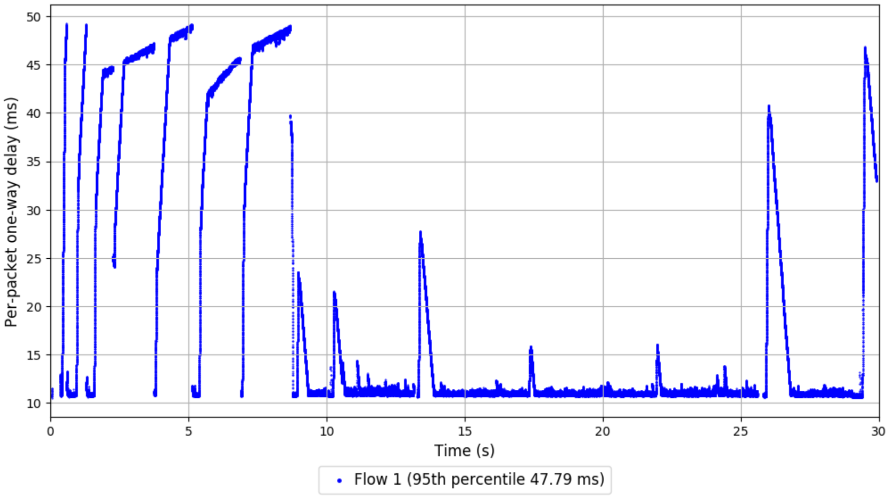




```
Run 10: Statistics of QUIC Cubic

Start at: 2018-04-10 15:58:17
End at: 2018-04-10 15:58:47
Local clock offset: 0.94 ms
Remote clock offset: -4.031 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.36 Mbit/s
95th percentile per-packet one-way delay: 47.786 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 89.36 Mbit/s
95th percentile per-packet one-way delay: 47.786 ms
Loss rate: 0.46%
```

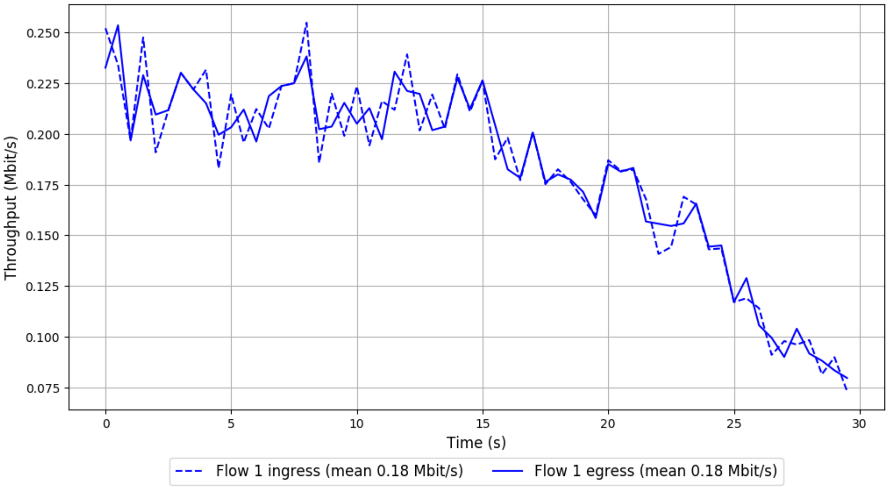
Run 10: Report of QUIC Cubic — Data Link

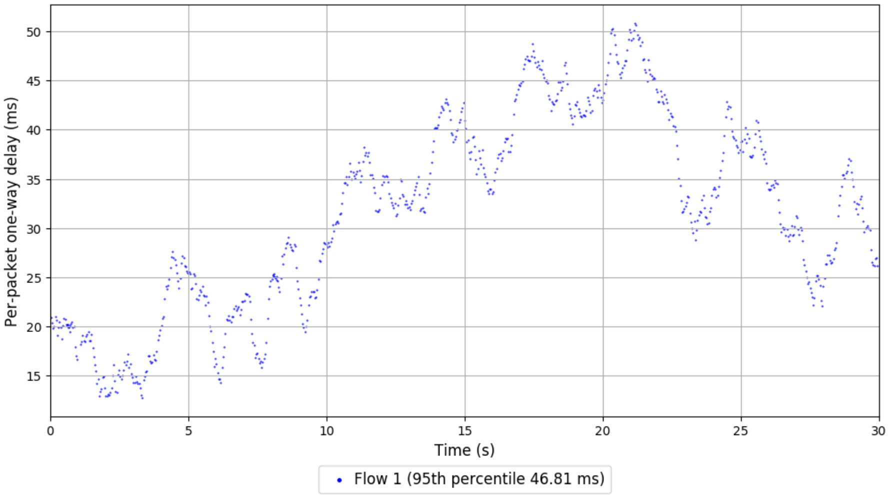




```
Run 1: Statistics of SCReAM

Start at: 2018-04-10 12:41:38
End at: 2018-04-10 12:42:08
Local clock offset: 0.872 ms
Remote clock offset: 5.245 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 46.811 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 46.811 ms
Loss rate: 0.00%
```

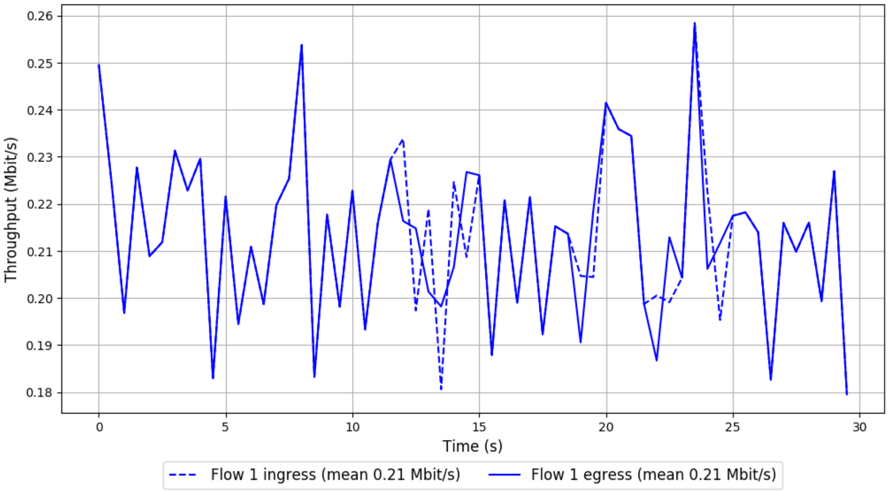
Run 1: Report of SCReAM — Data Link

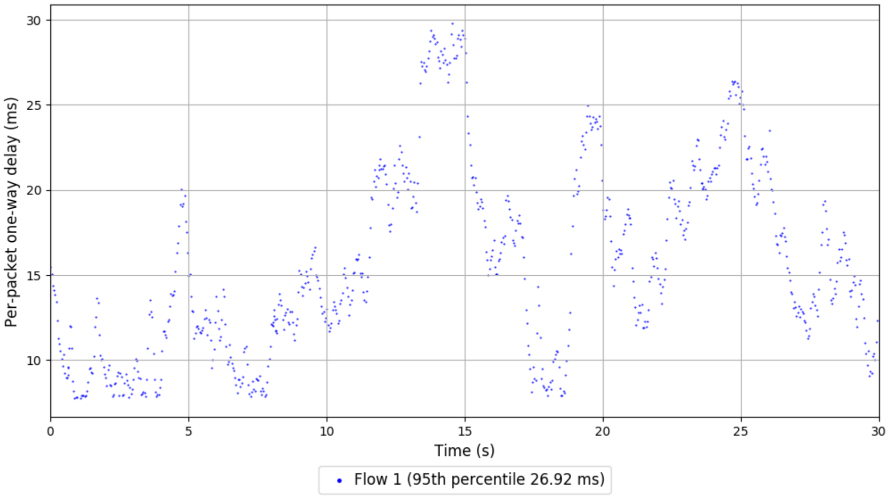




```
Run 2: Statistics of SCReAM

Start at: 2018-04-10 13:03:16
End at: 2018-04-10 13:03:46
Local clock offset: 0.379 ms
Remote clock offset: -10.723 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 26.922 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 26.922 ms
Loss rate: 0.00%
```

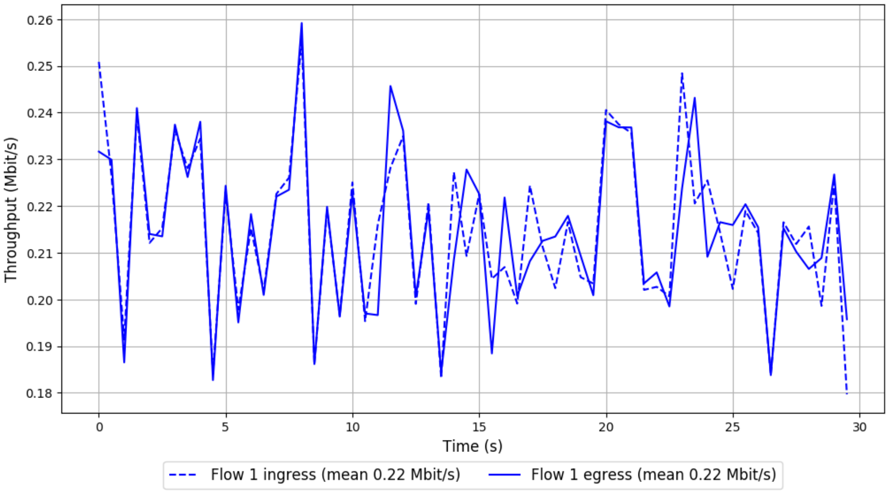
Run 2: Report of SCReAM — Data Link

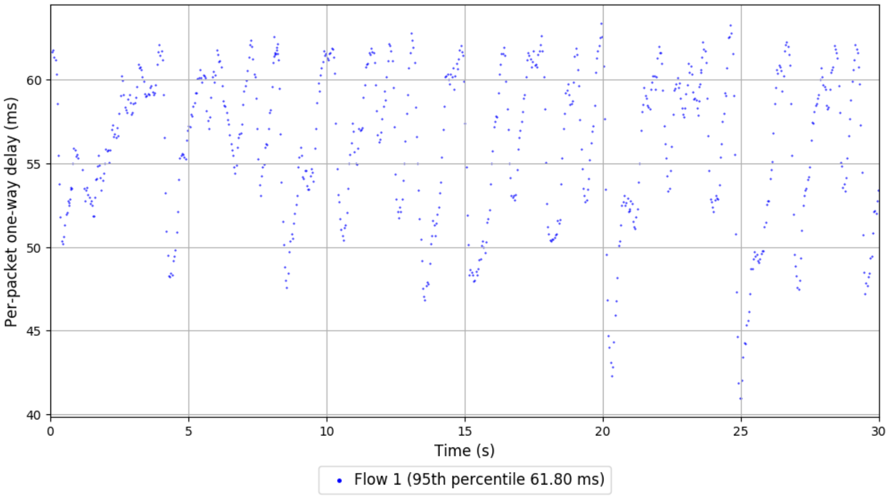




```
Run 3: Statistics of SCReAM

Start at: 2018-04-10 13:25:05
End at: 2018-04-10 13:25:35
Local clock offset: -0.139 ms
Remote clock offset: -3.185 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.805 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.805 ms
Loss rate: 0.00%
```

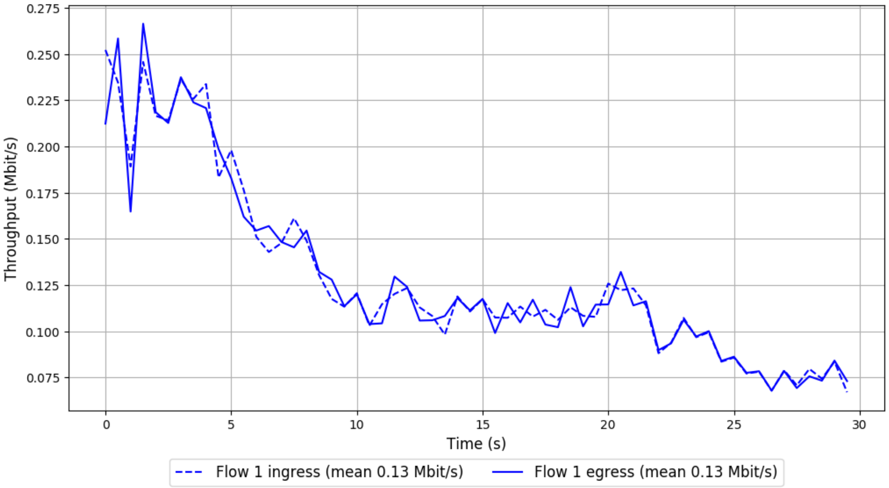
Run 3: Report of SCReAM — Data Link

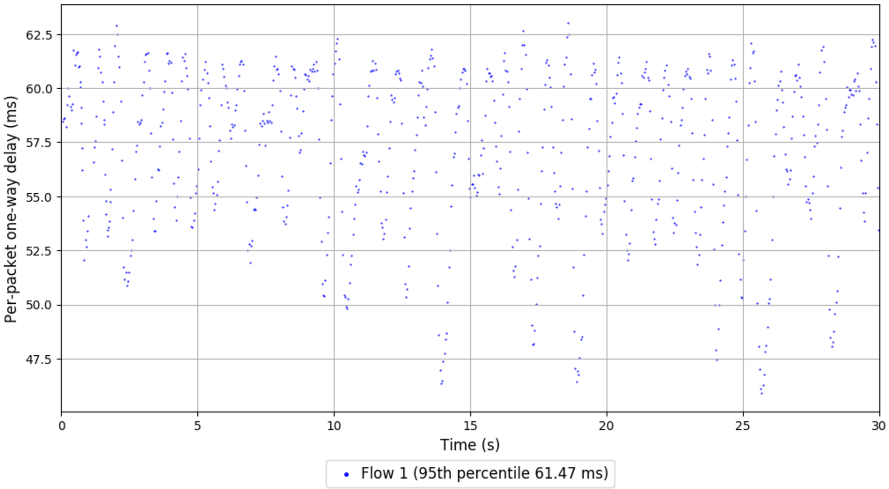




```
Run 4: Statistics of SCReAM

Start at: 2018-04-10 13:46:47
End at: 2018-04-10 13:47:17
Local clock offset: 0.908 ms
Remote clock offset: 9.242 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 61.472 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 61.472 ms
Loss rate: 0.42%
```

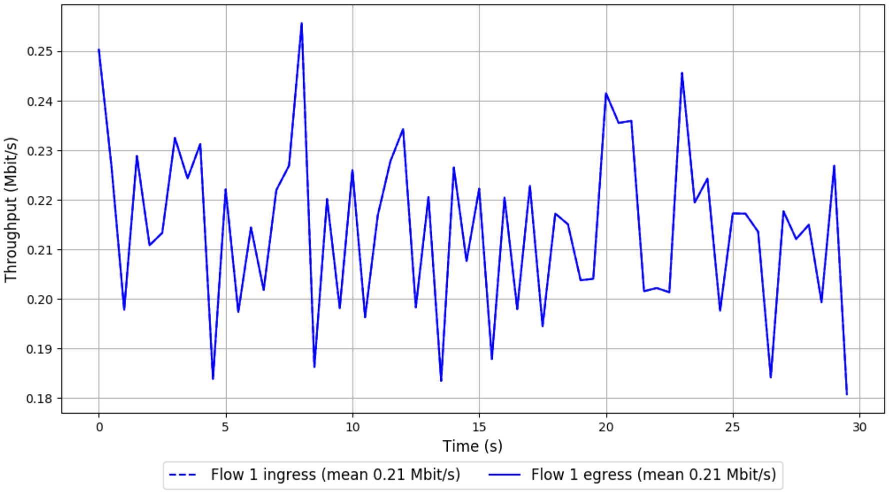
Run 4: Report of SCReAM — Data Link

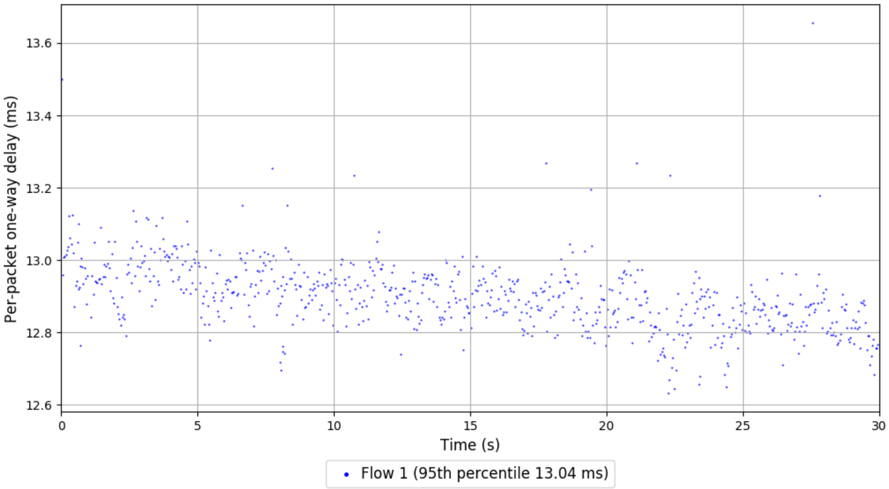




```
Run 5: Statistics of SCReAM

Start at: 2018-04-10 14:08:19
End at: 2018-04-10 14:08:49
Local clock offset: 1.662 ms
Remote clock offset: 26.687 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 13.038 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 13.038 ms
Loss rate: 0.00%
```

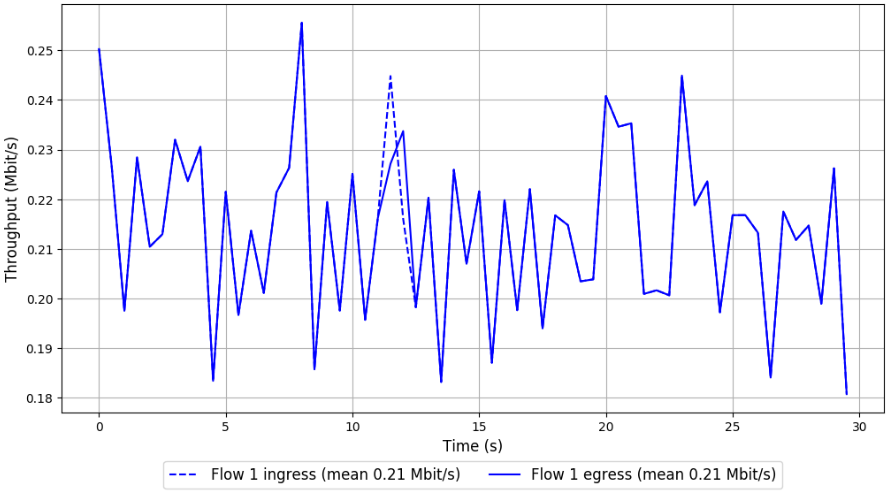
Run 5: Report of SCReAM — Data Link

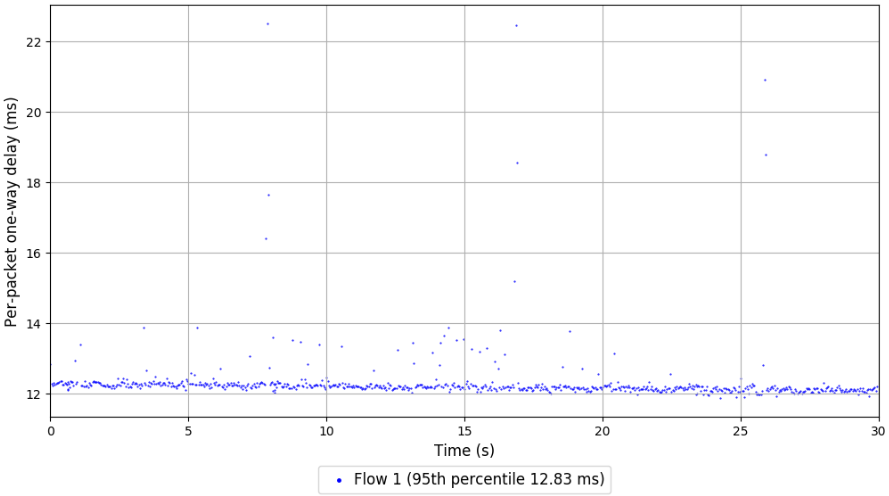




```
Run 6: Statistics of SCReAM

Start at: 2018-04-10 14:29:14
End at: 2018-04-10 14:29:44
Local clock offset: -1.242 ms
Remote clock offset: 30.477 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 12.829 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 12.829 ms
Loss rate: 0.00%
```

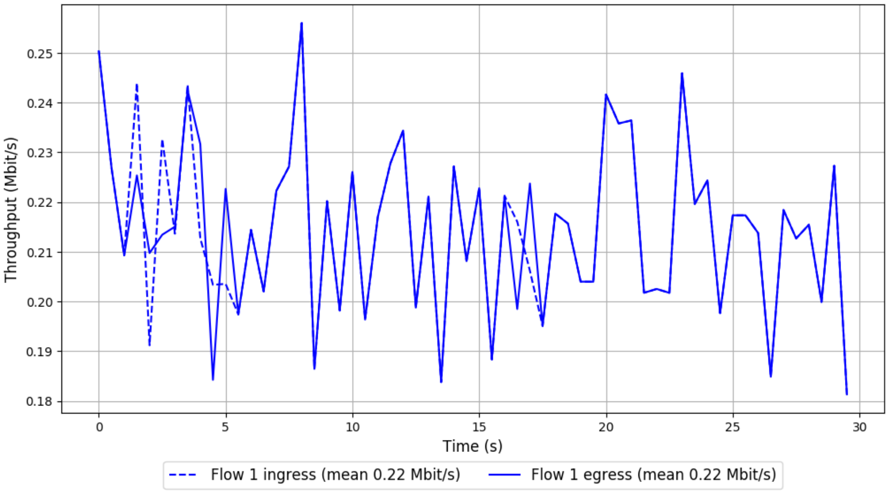
Run 6: Report of SCReAM — Data Link

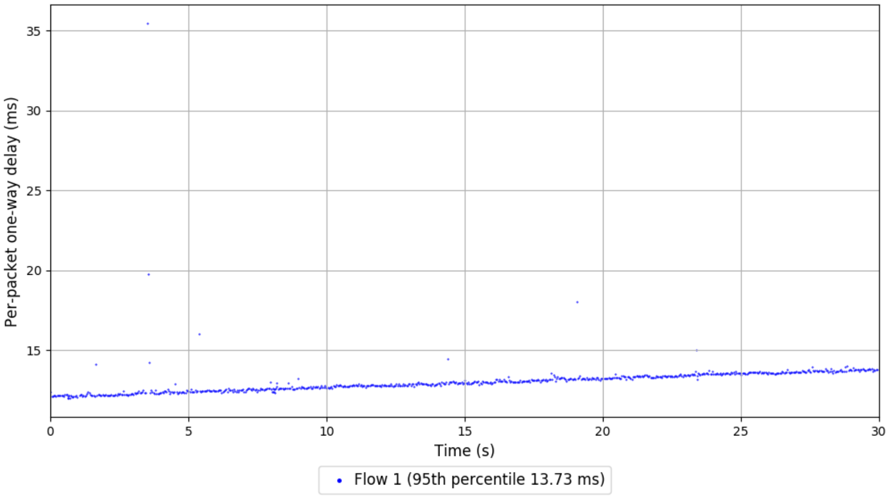




```
Run 7: Statistics of SCReAM

Start at: 2018-04-10 14:51:12
End at: 2018-04-10 14:51:42
Local clock offset: -0.296 ms
Remote clock offset: 26.403 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 13.729 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 13.729 ms
Loss rate: 0.00%
```

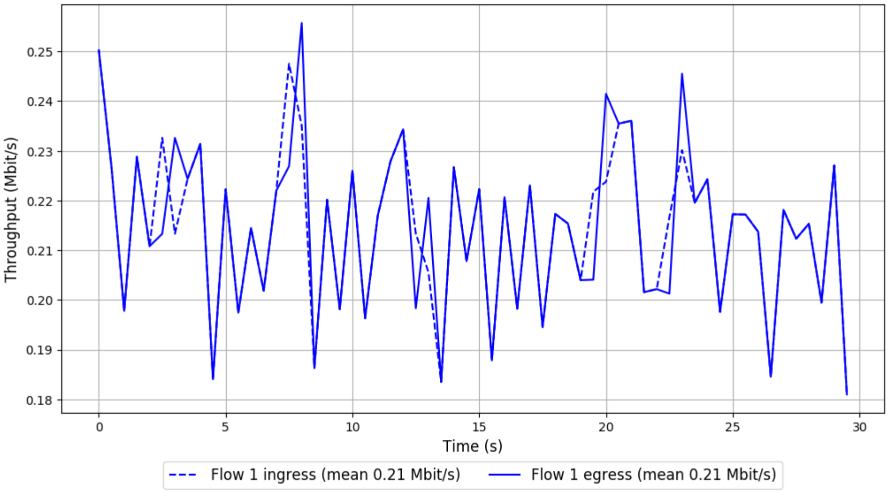
Run 7: Report of SCReAM — Data Link

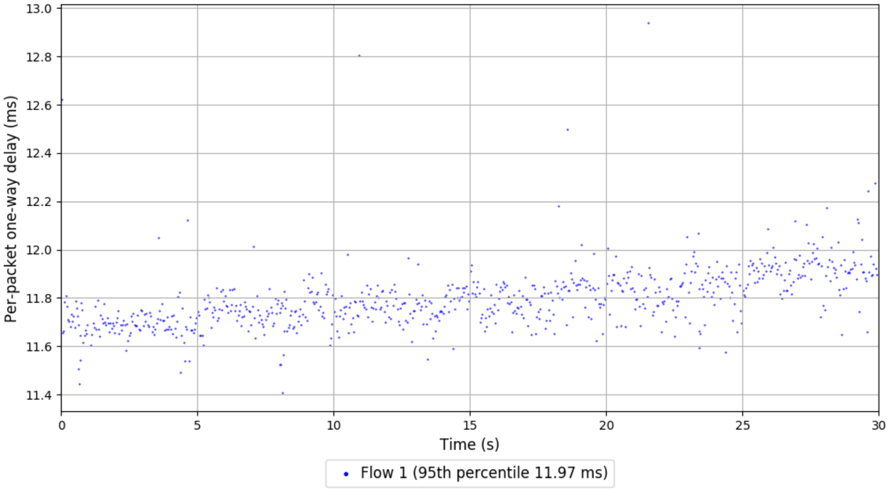




```
Run 8: Statistics of SCReAM

Start at: 2018-04-10 15:13:04
End at: 2018-04-10 15:13:34
Local clock offset: -0.342 ms
Remote clock offset: -4.601 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 11.968 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 11.968 ms
Loss rate: 0.00%
```

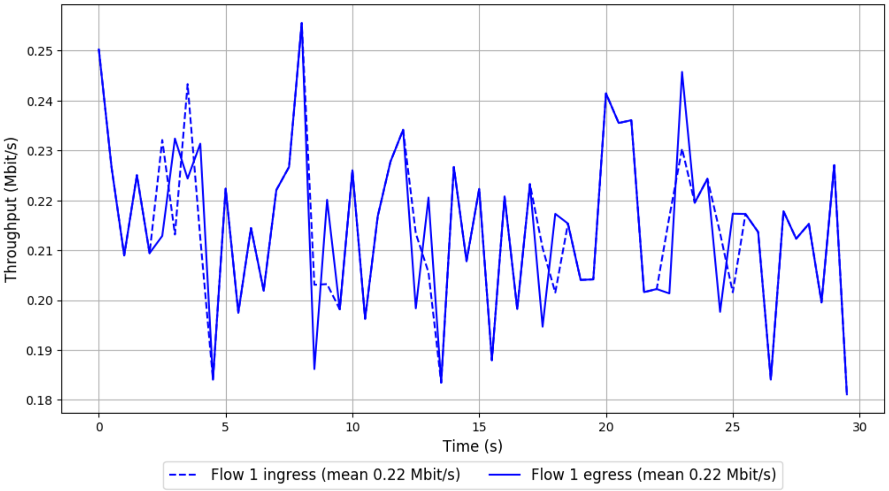
Run 8: Report of SCReAM — Data Link

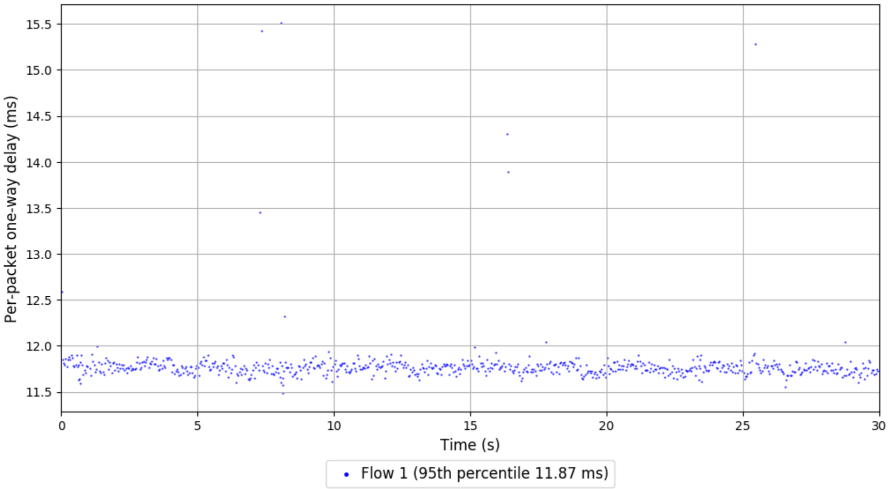




```
Run 9: Statistics of SCReAM

Start at: 2018-04-10 15:34:43
End at: 2018-04-10 15:35:13
Local clock offset: 1.022 ms
Remote clock offset: -2.536 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 11.874 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 11.874 ms
Loss rate: 0.00%
```

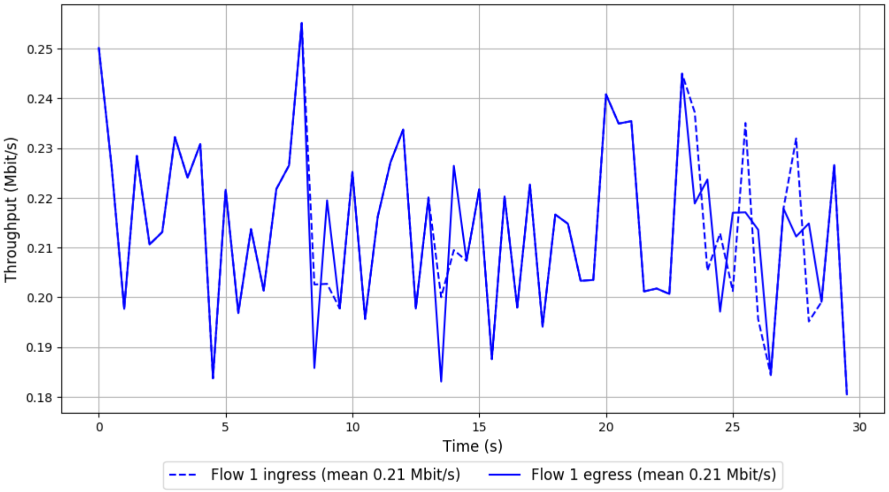
Run 9: Report of SCReAM — Data Link

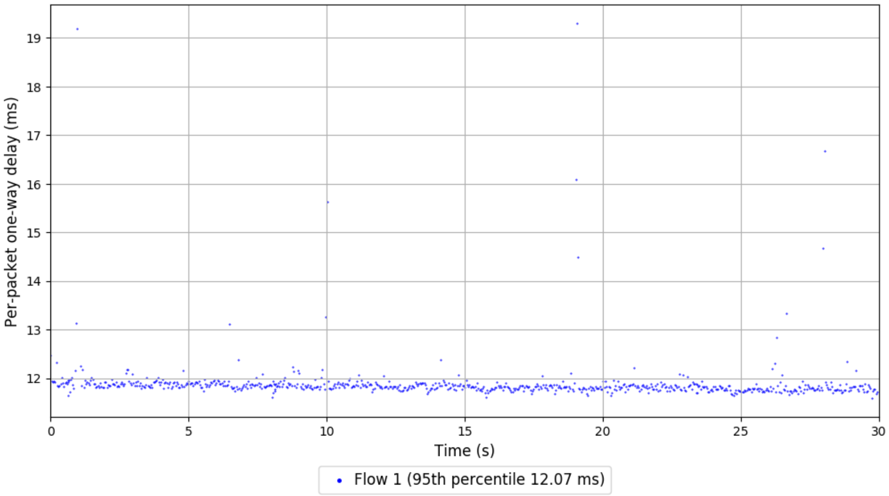




```
Run 10: Statistics of SCReAM

Start at: 2018-04-10 15:57:12
End at: 2018-04-10 15:57:42
Local clock offset: 1.078 ms
Remote clock offset: -3.109 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 12.068 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 12.068 ms
Loss rate: 0.00%
```

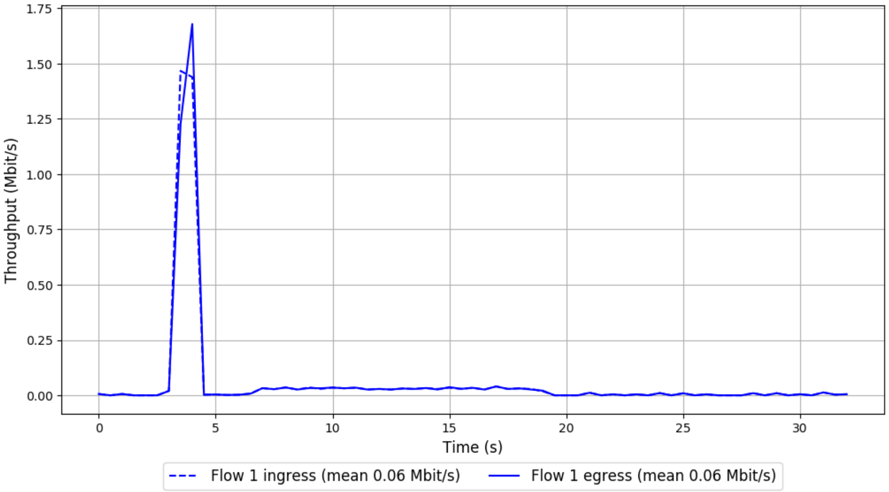
Run 10: Report of SCReAM — Data Link

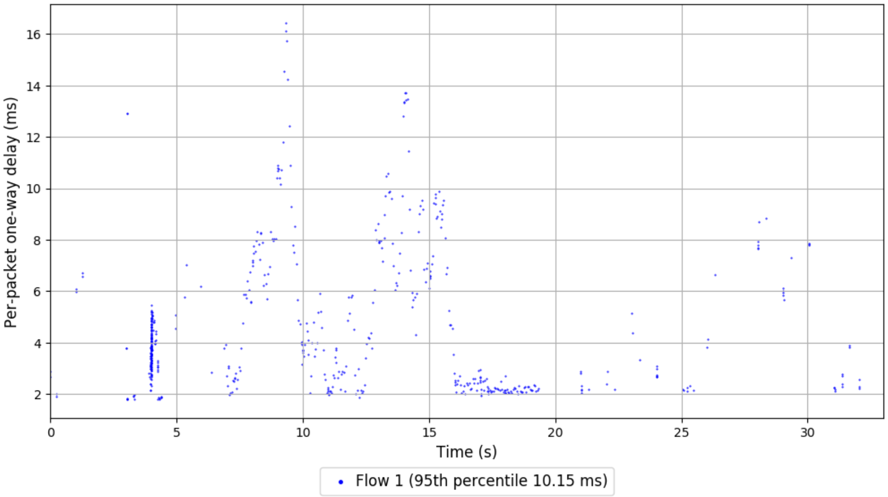




```
Run 1: Statistics of WebRTC media

Start at: 2018-04-10 12:49:09
End at: 2018-04-10 12:49:39
Local clock offset: -0.013 ms
Remote clock offset: -12.087 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 10.152 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 10.152 ms
Loss rate: 0.00%
```

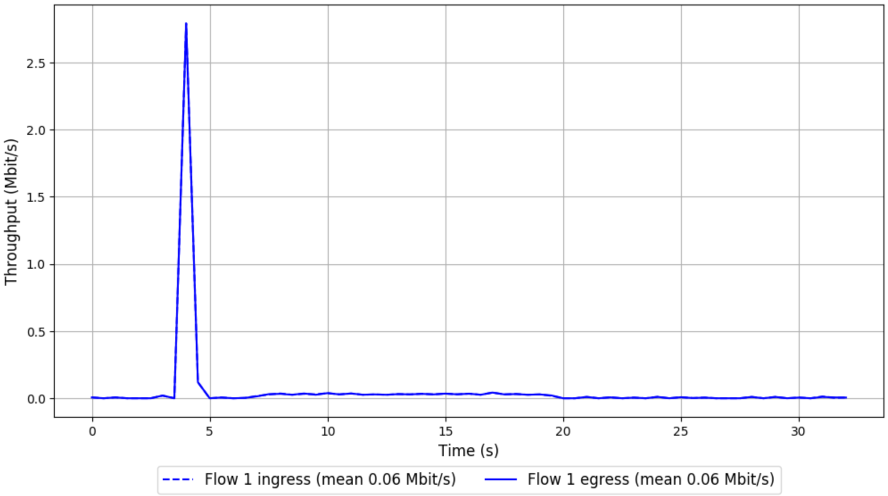
Run 1: Report of WebRTC media — Data Link

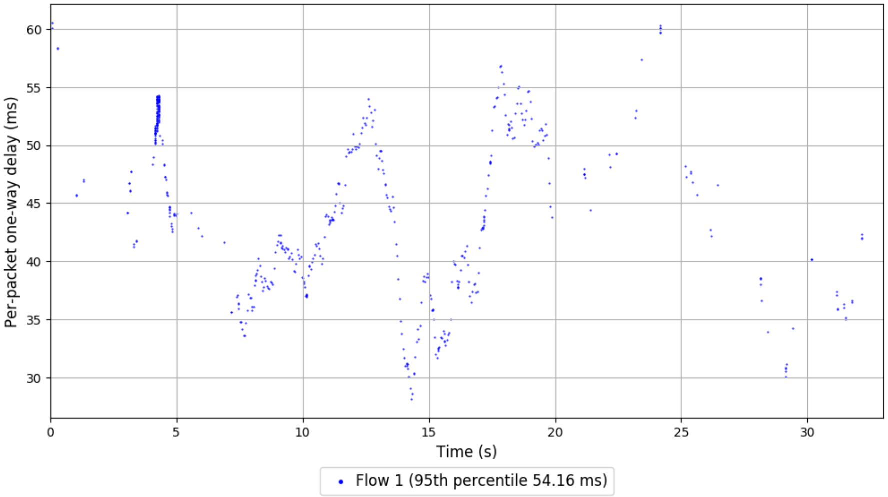




```
Run 2: Statistics of WebRTC media

Start at: 2018-04-10 13:10:21
End at: 2018-04-10 13:10:51
Local clock offset: 0.859 ms
Remote clock offset: -4.949 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 54.160 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 54.160 ms
Loss rate: 0.00%
```

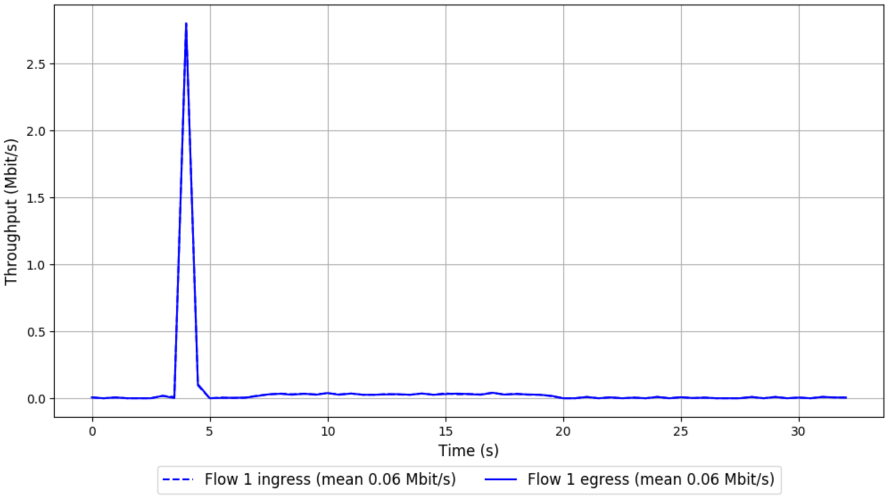
Run 2: Report of WebRTC media — Data Link

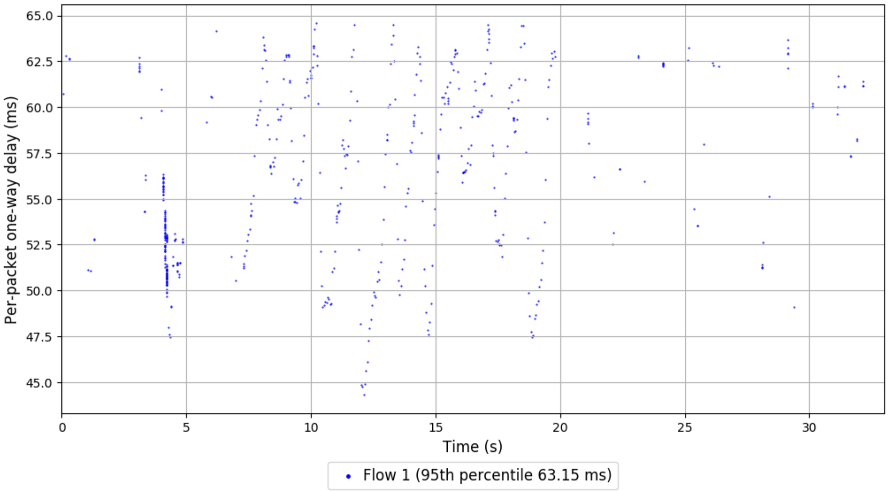




```
Run 3: Statistics of WebRTC media

Start at: 2018-04-10 13:32:37
End at: 2018-04-10 13:33:07
Local clock offset: -0.306 ms
Remote clock offset: -1.561 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 63.147 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 63.147 ms
Loss rate: 0.27%
```

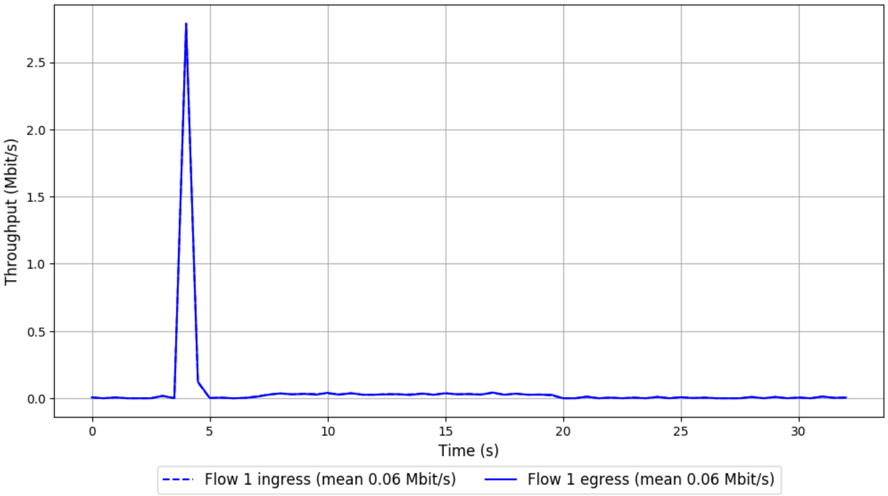
Run 3: Report of WebRTC media — Data Link

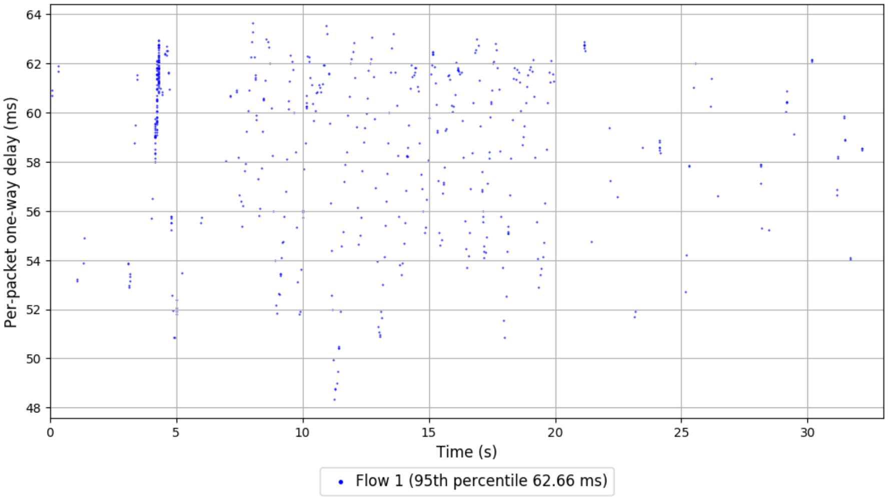




```
Run 4: Statistics of WebRTC media

Start at: 2018-04-10 13:53:58
End at: 2018-04-10 13:54:28
Local clock offset: 0.976 ms
Remote clock offset: 16.755 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 62.656 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 62.656 ms
Loss rate: 0.14%
```

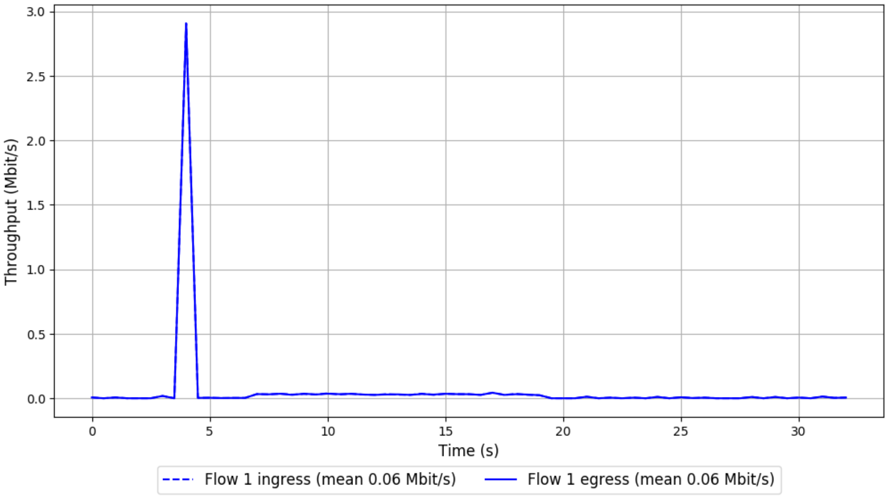
Run 4: Report of WebRTC media — Data Link

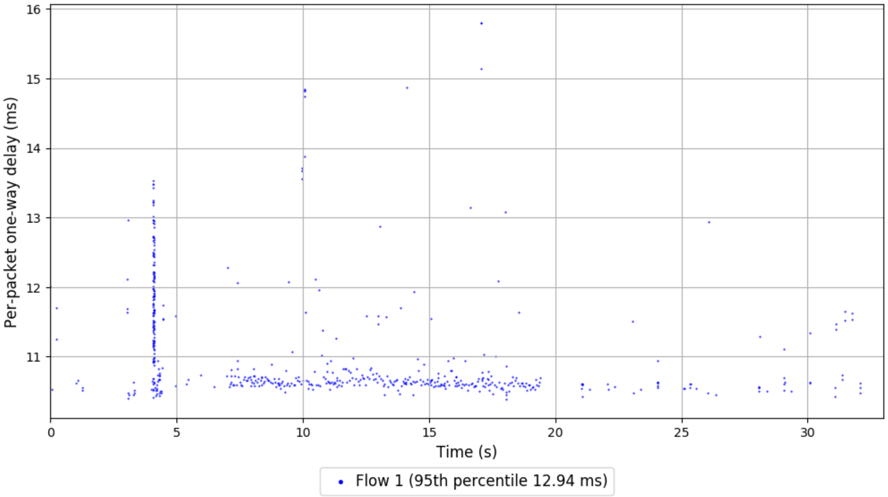




```
Run 5: Statistics of WebRTC media

Start at: 2018-04-10 14:15:19
End at: 2018-04-10 14:15:49
Local clock offset: 0.527 ms
Remote clock offset: 27.423 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 12.941 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 12.941 ms
Loss rate: 0.00%
```

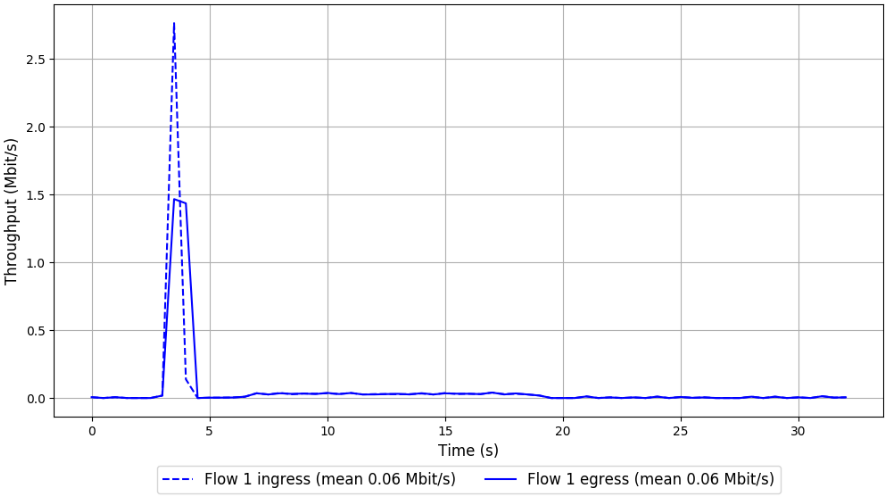
Run 5: Report of WebRTC media — Data Link

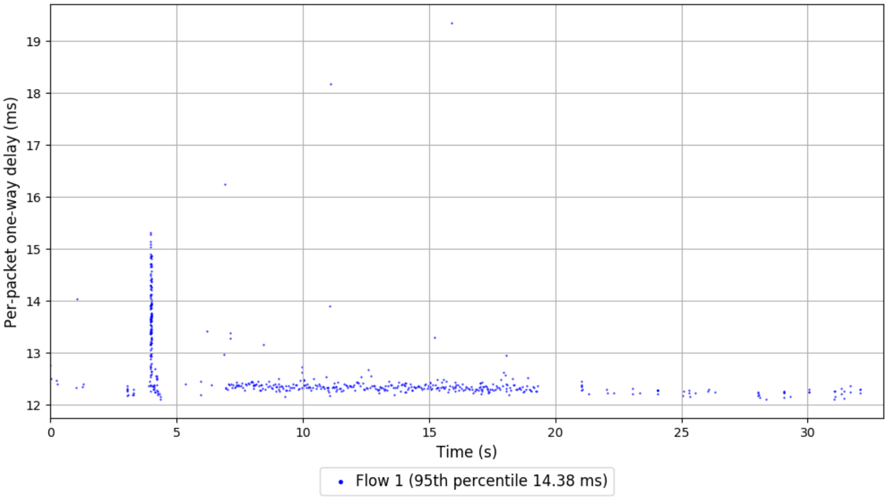




```
Run 6: Statistics of WebRTC media

Start at: 2018-04-10 14:36:30
End at: 2018-04-10 14:37:00
Local clock offset: -1.621 ms
Remote clock offset: 33.294 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 14.379 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 14.379 ms
Loss rate: 0.00%
```

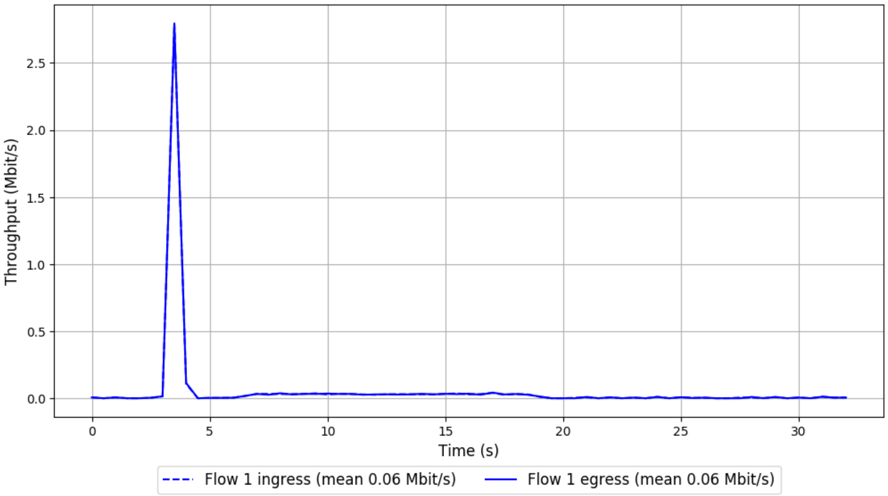
Run 6: Report of WebRTC media — Data Link

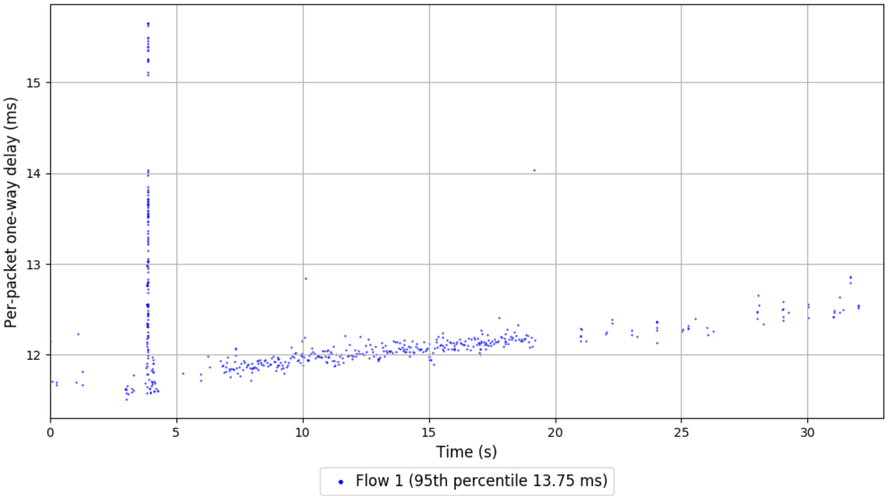




```
Run 7: Statistics of WebRTC media

Start at: 2018-04-10 14:58:31
End at: 2018-04-10 14:59:01
Local clock offset: -0.843 ms
Remote clock offset: 8.092 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 13.754 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 13.754 ms
Loss rate: 0.00%
```

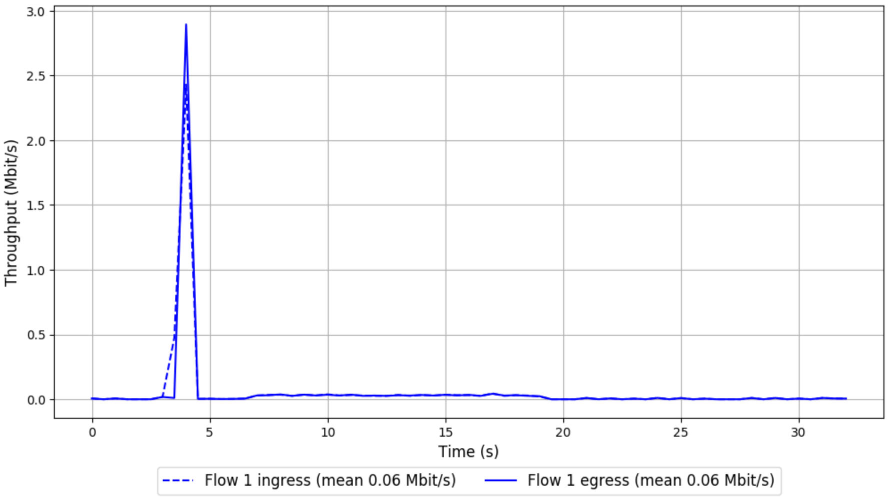
Run 7: Report of WebRTC media — Data Link

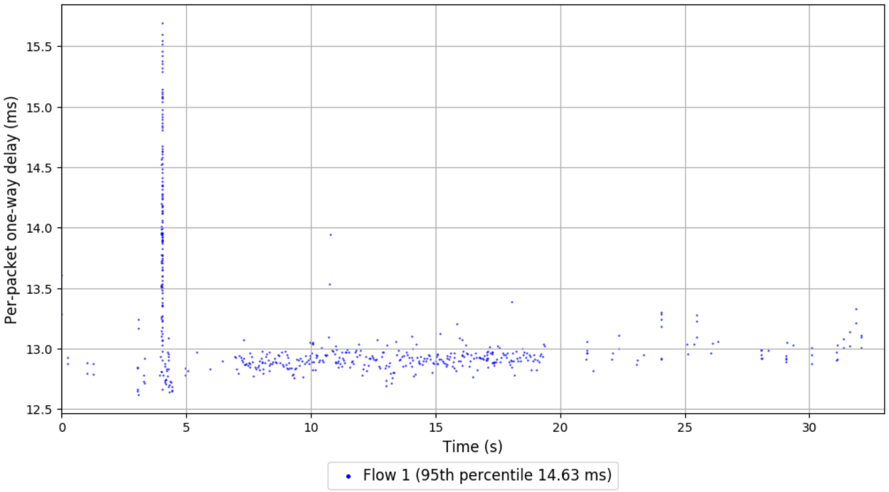




```
Run 8: Statistics of WebRTC media

Start at: 2018-04-10 15:20:26
End at: 2018-04-10 15:20:57
Local clock offset: 0.321 ms
Remote clock offset: -5.591 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 14.632 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 14.632 ms
Loss rate: 0.00%
```

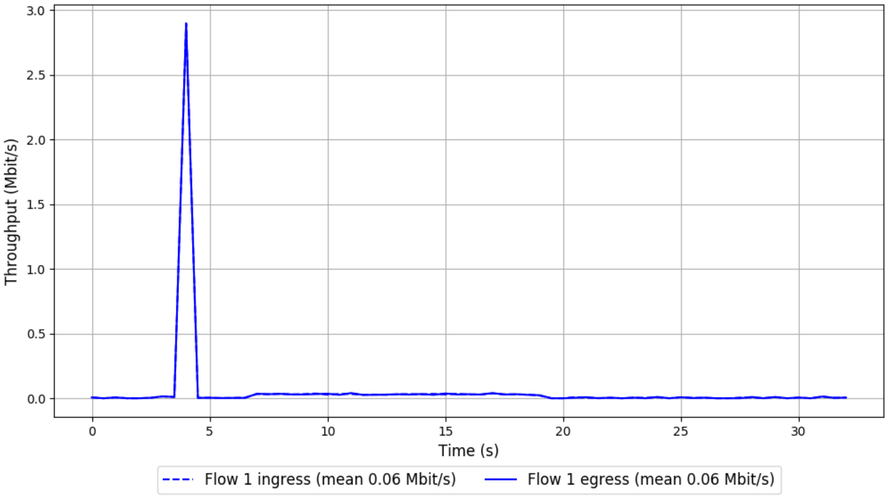
Run 8: Report of WebRTC media — Data Link

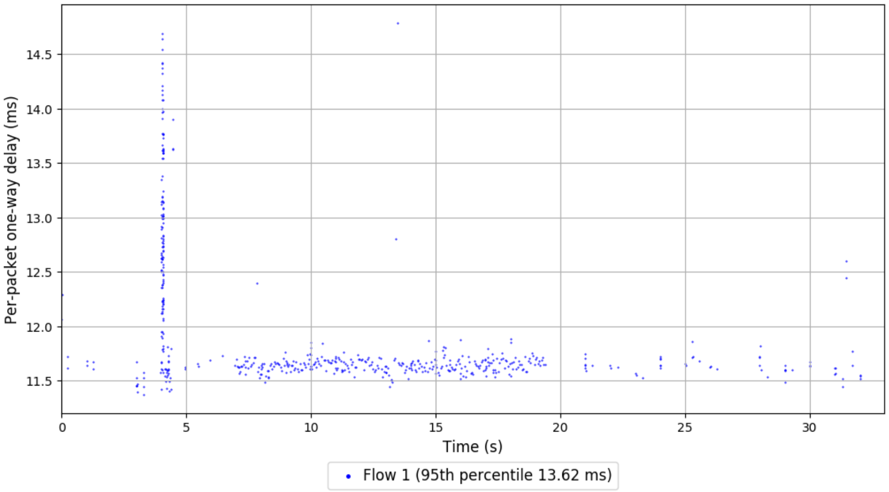




```
Run 9: Statistics of WebRTC media

Start at: 2018-04-10 15:42:01
End at: 2018-04-10 15:42:32
Local clock offset: 1.229 ms
Remote clock offset: -2.077 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 13.622 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 13.622 ms
Loss rate: 0.00%
```

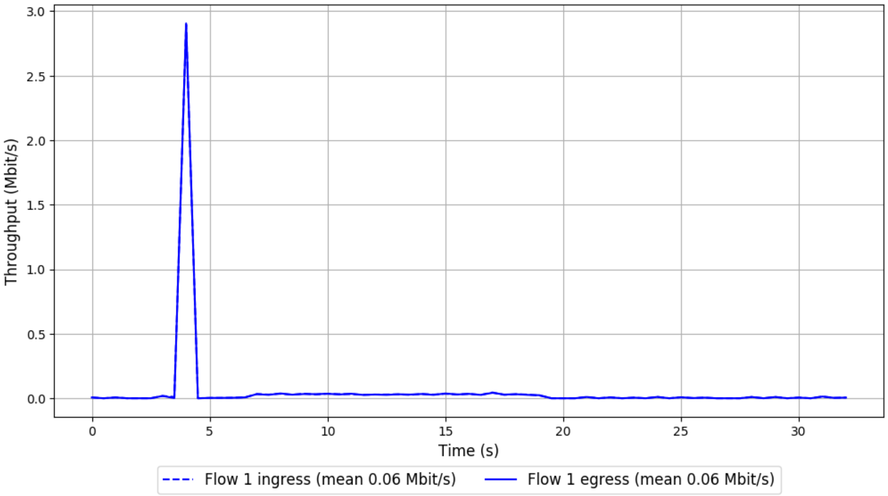
Run 9: Report of WebRTC media — Data Link

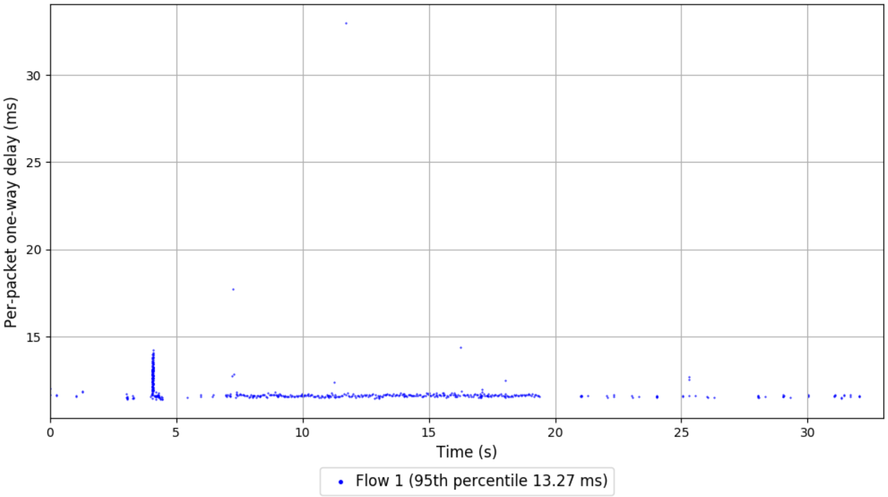




```
Run 10: Statistics of WebRTC media

Start at: 2018-04-10 16:04:39
End at: 2018-04-10 16:05:09
Local clock offset: 0.829 ms
Remote clock offset: -1.918 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 13.266 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 13.266 ms
Loss rate: 0.00%
```

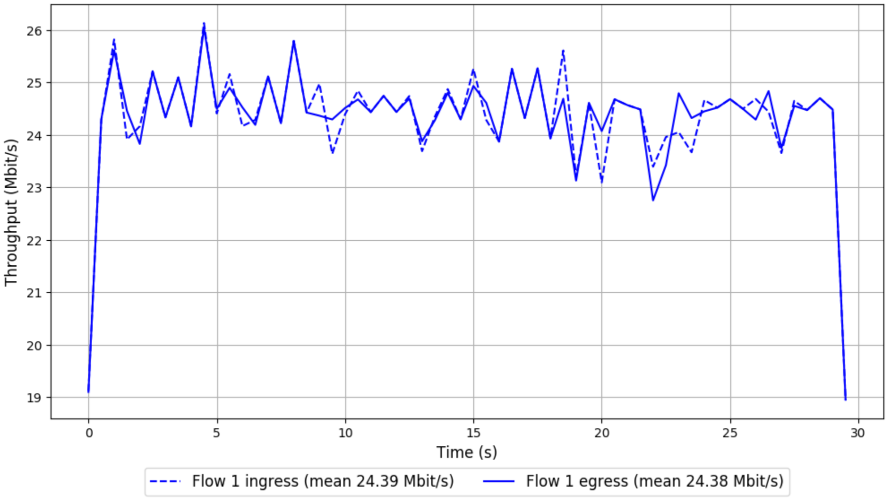
Run 10: Report of WebRTC media — Data Link

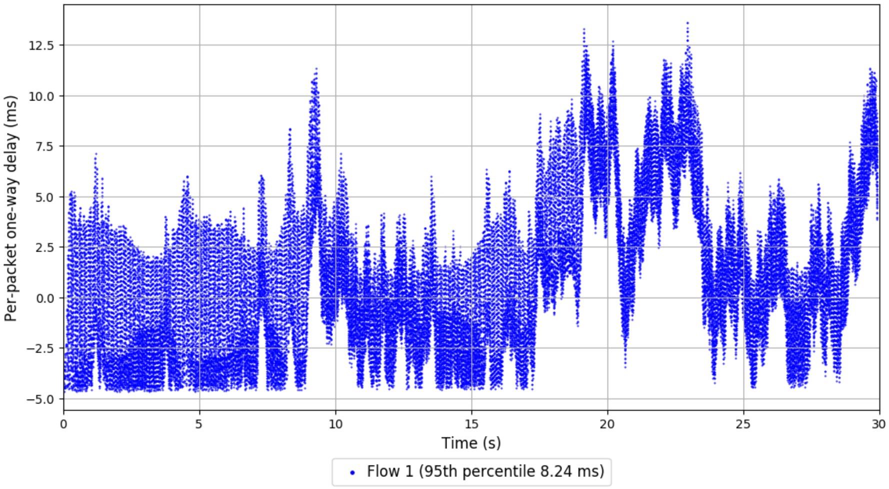




```
Run 1: Statistics of Sprout

Start at: 2018-04-10 12:51:25
End at: 2018-04-10 12:51:56
Local clock offset: 0.859 ms
Remote clock offset: -18.53 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.38 Mbit/s
95th percentile per-packet one-way delay: 8.242 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.38 Mbit/s
95th percentile per-packet one-way delay: 8.242 ms
Loss rate: 0.00%
```

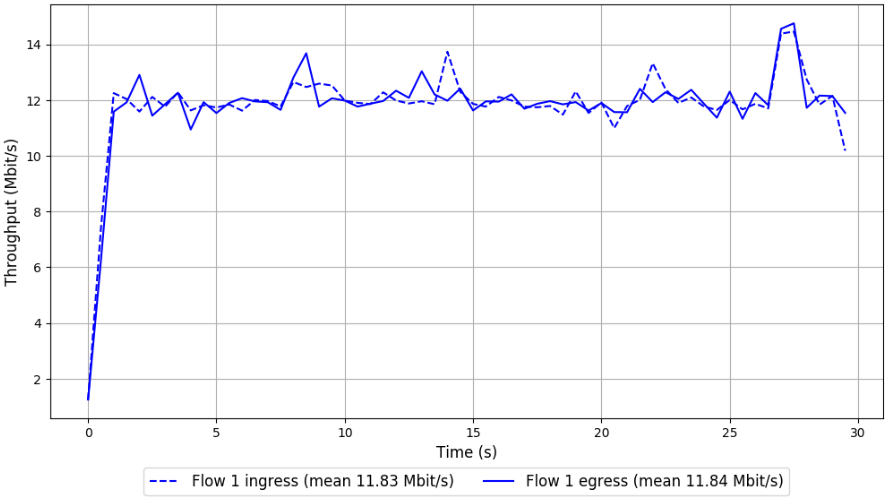
Run 1: Report of Sprout — Data Link

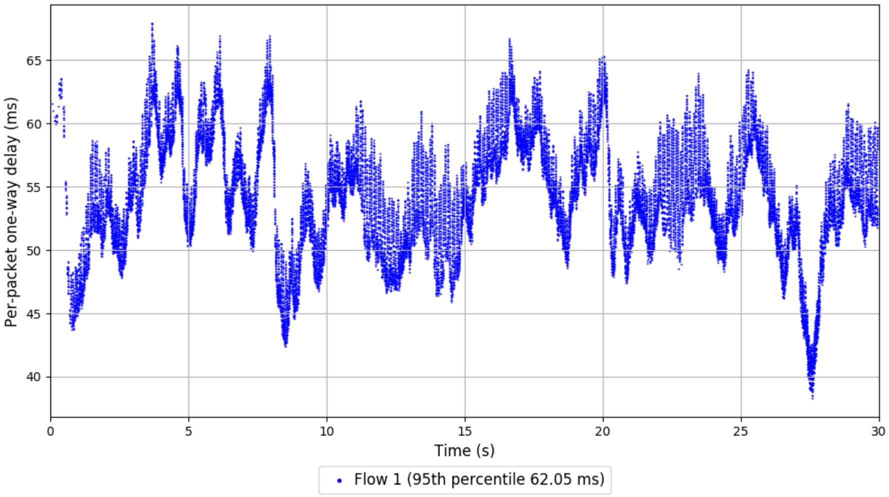




```
Run 2: Statistics of Sprout

Start at: 2018-04-10 13:12:38
End at: 2018-04-10 13:13:08
Local clock offset: 0.663 ms
Remote clock offset: -3.781 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.84 Mbit/s
95th percentile per-packet one-way delay: 62.047 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 11.84 Mbit/s
95th percentile per-packet one-way delay: 62.047 ms
Loss rate: 0.05%
```

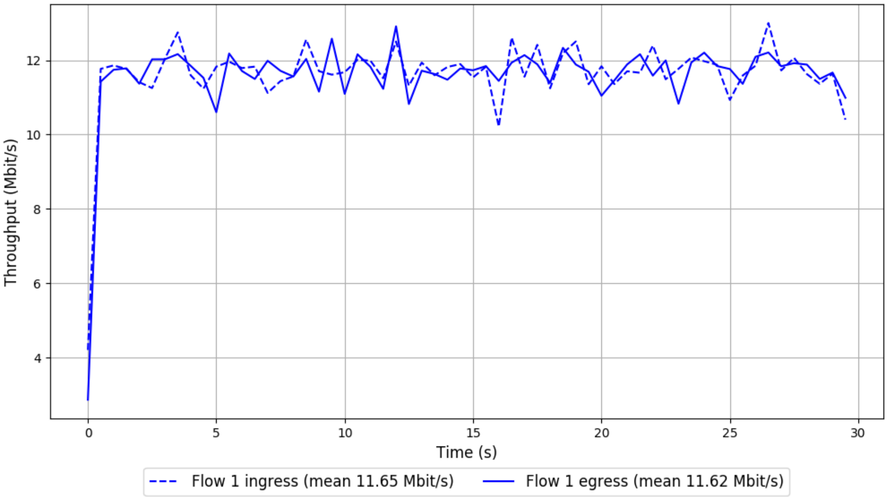
Run 2: Report of Sprout — Data Link

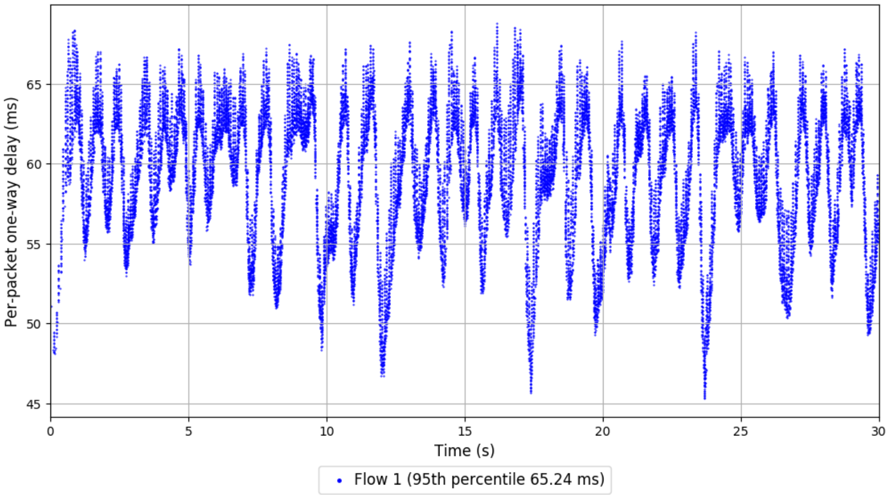




```
Run 3: Statistics of Sprout

Start at: 2018-04-10 13:34:57
End at: 2018-04-10 13:35:27
Local clock offset: -0.561 ms
Remote clock offset: -2.766 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.62 Mbit/s
95th percentile per-packet one-way delay: 65.241 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 11.62 Mbit/s
95th percentile per-packet one-way delay: 65.241 ms
Loss rate: 0.35%
```

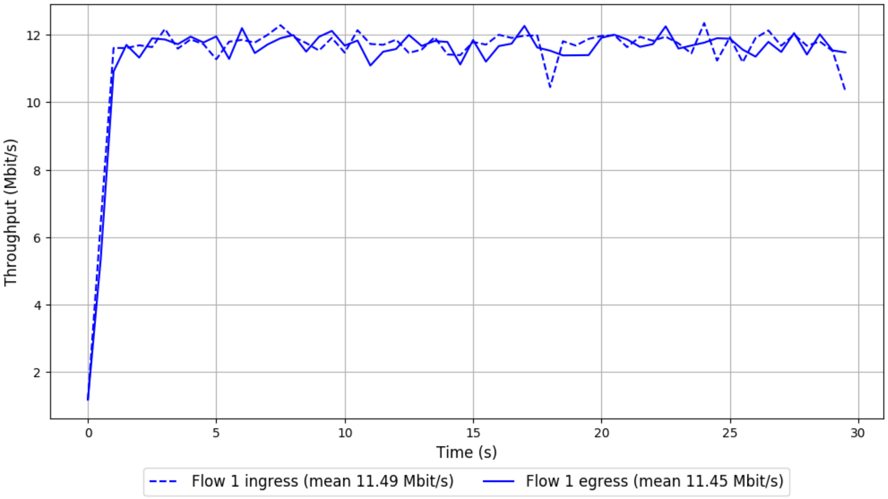
Run 3: Report of Sprout — Data Link

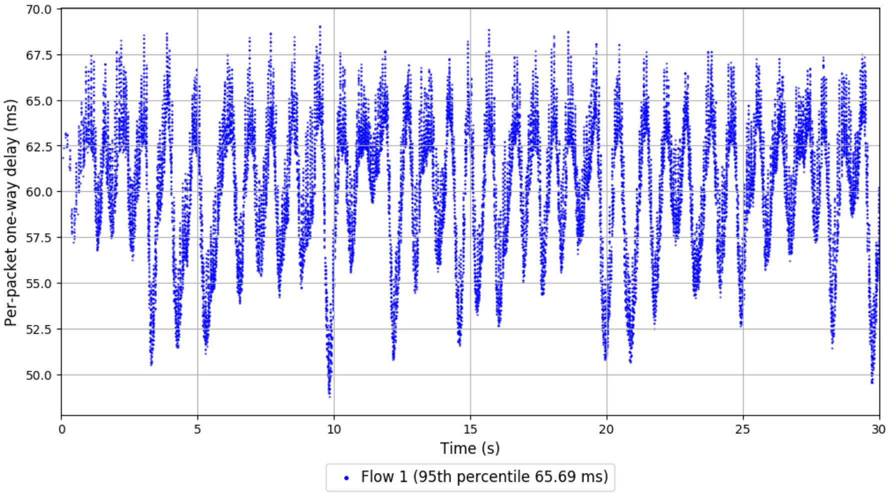




```
Run 4: Statistics of Sprout

Start at: 2018-04-10 13:56:35
End at: 2018-04-10 13:57:05
Local clock offset: 1.544 ms
Remote clock offset: 19.815 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.45 Mbit/s
95th percentile per-packet one-way delay: 65.685 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 11.45 Mbit/s
95th percentile per-packet one-way delay: 65.685 ms
Loss rate: 0.43%
```

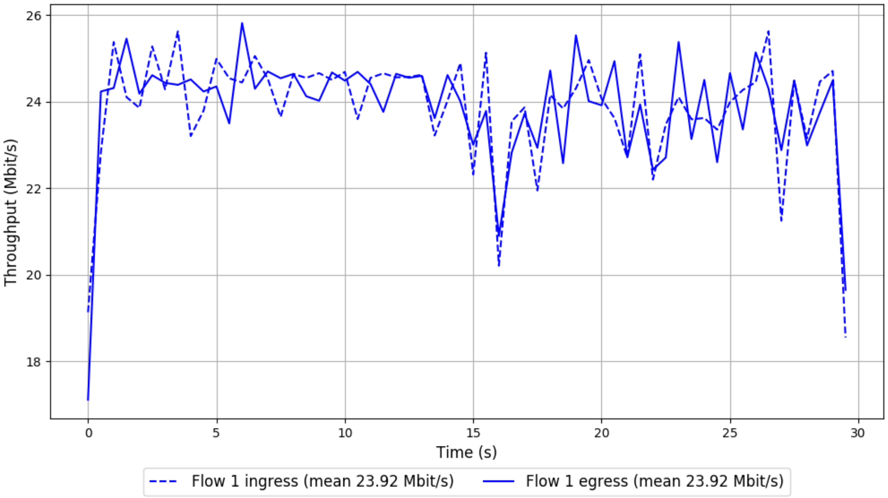
Run 4: Report of Sprout — Data Link

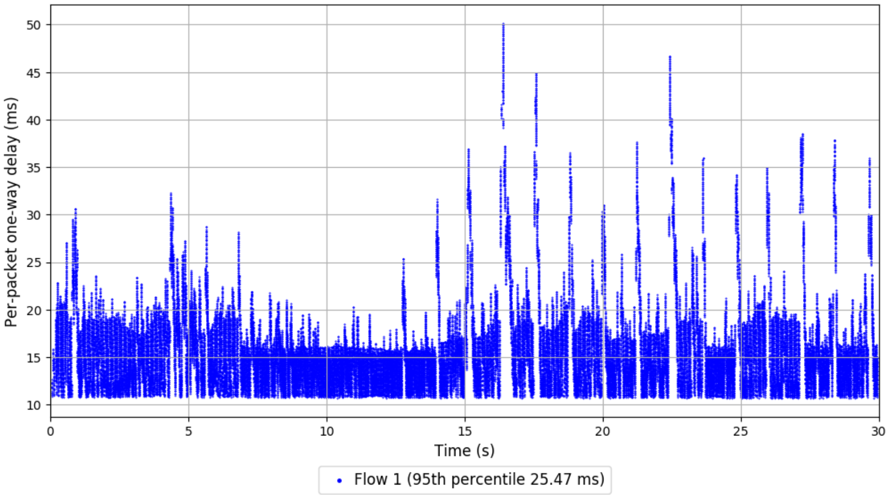




```
Run 5: Statistics of Sprout

Start at: 2018-04-10 14:17:33
End at: 2018-04-10 14:18:03
Local clock offset: 0.443 ms
Remote clock offset: 27.964 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 23.92 Mbit/s
95th percentile per-packet one-way delay: 25.473 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 23.92 Mbit/s
95th percentile per-packet one-way delay: 25.473 ms
Loss rate: 0.00%
```

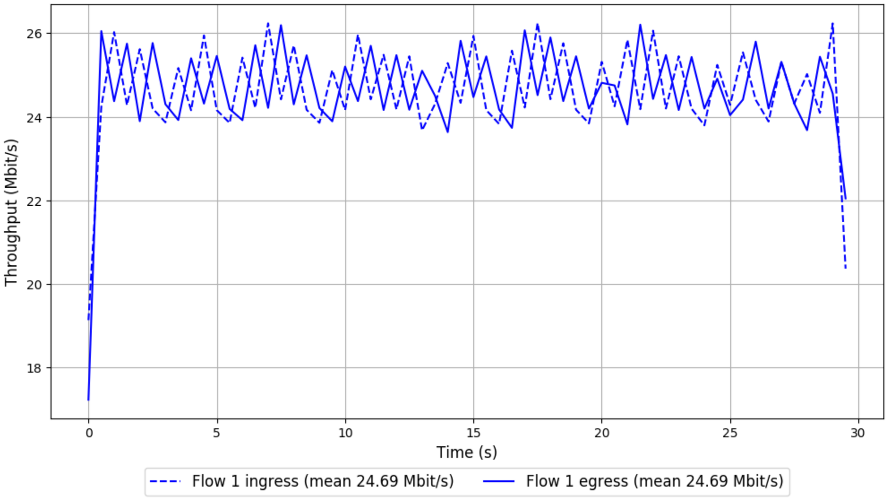
Run 5: Report of Sprout — Data Link

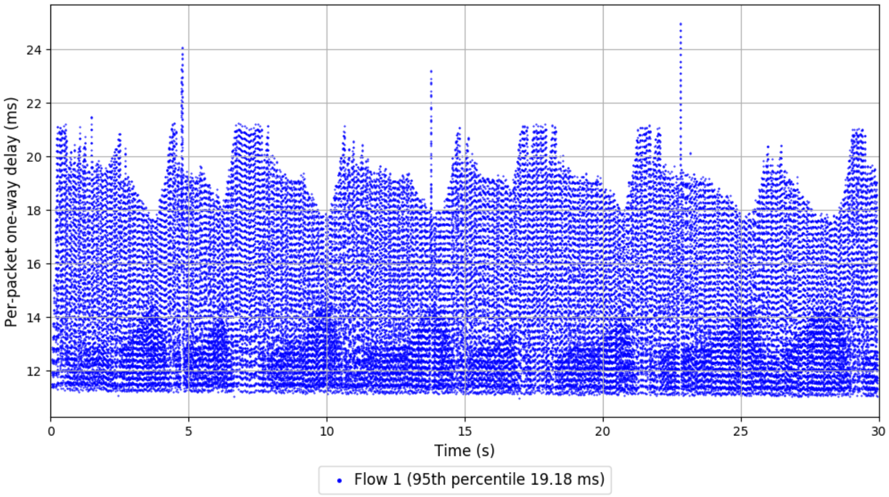




```
Run 6: Statistics of Sprout

Start at: 2018-04-10 14:38:44
End at: 2018-04-10 14:39:14
Local clock offset: -1.216 ms
Remote clock offset: 33.339 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.69 Mbit/s
95th percentile per-packet one-way delay: 19.182 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 24.69 Mbit/s
95th percentile per-packet one-way delay: 19.182 ms
Loss rate: 0.01%
```

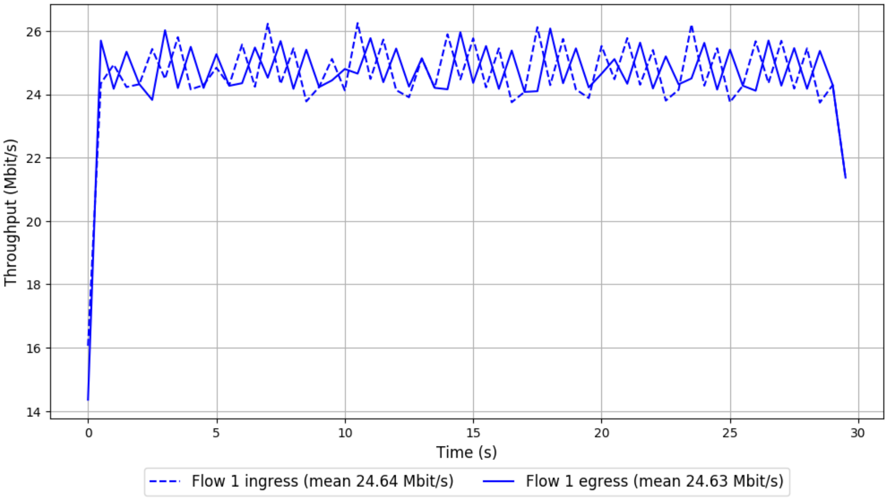
Run 6: Report of Sprout — Data Link

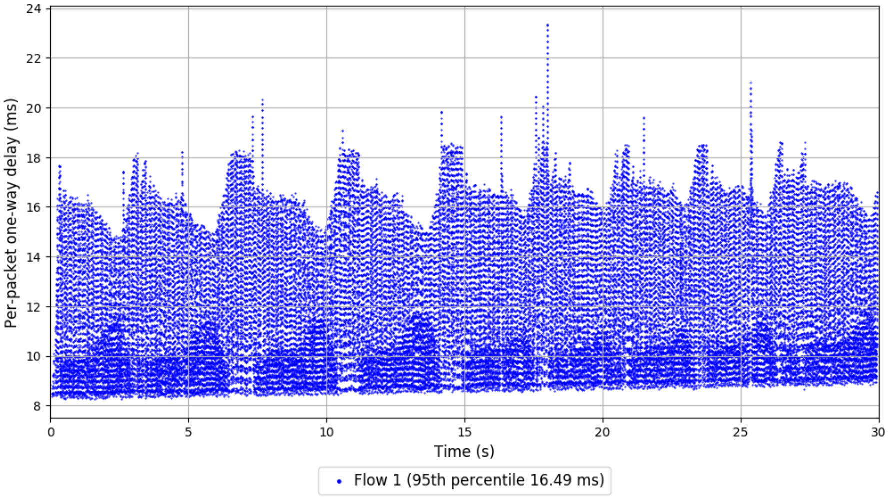




```
Run 7: Statistics of Sprout

Start at: 2018-04-10 15:00:47
End at: 2018-04-10 15:01:17
Local clock offset: -0.401 ms
Remote clock offset: 1.816 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.63 Mbit/s
95th percentile per-packet one-way delay: 16.494 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.63 Mbit/s
95th percentile per-packet one-way delay: 16.494 ms
Loss rate: 0.00%
```

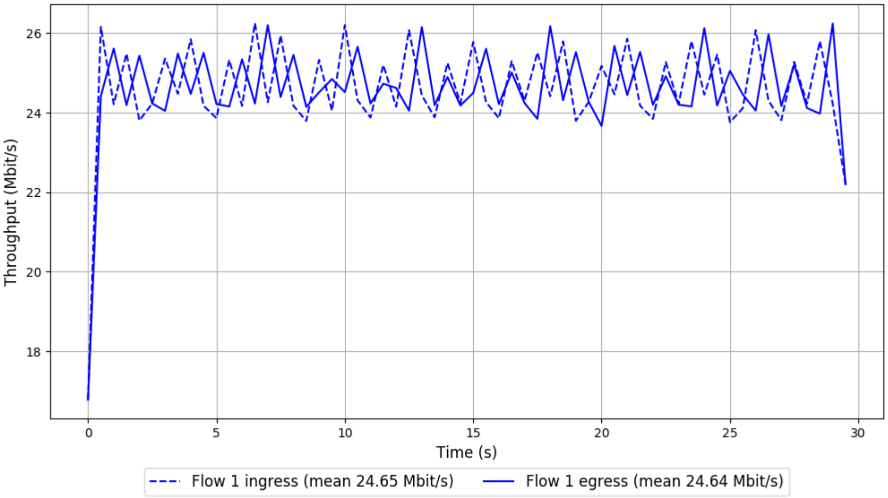
Run 7: Report of Sprout — Data Link

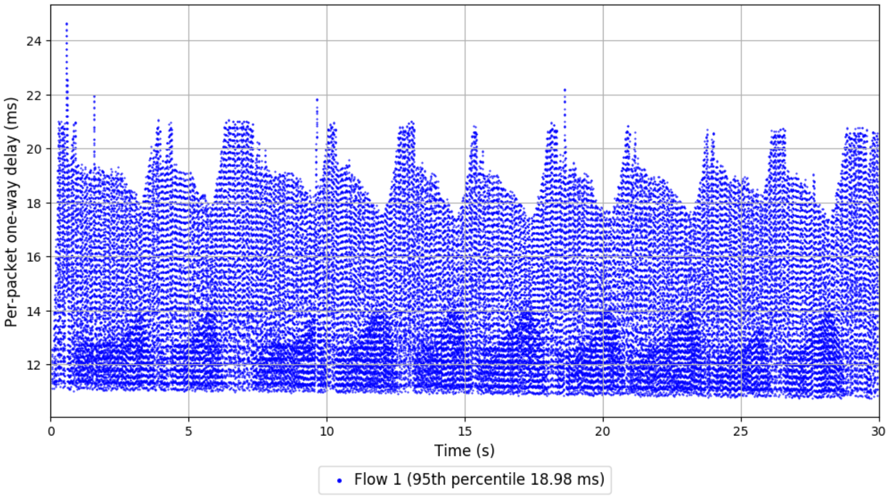




```
Run 8: Statistics of Sprout

Start at: 2018-04-10 15:22:40
End at: 2018-04-10 15:23:10
Local clock offset: 0.436 ms
Remote clock offset: -7.485 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.64 Mbit/s
95th percentile per-packet one-way delay: 18.983 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.64 Mbit/s
95th percentile per-packet one-way delay: 18.983 ms
Loss rate: 0.00%
```

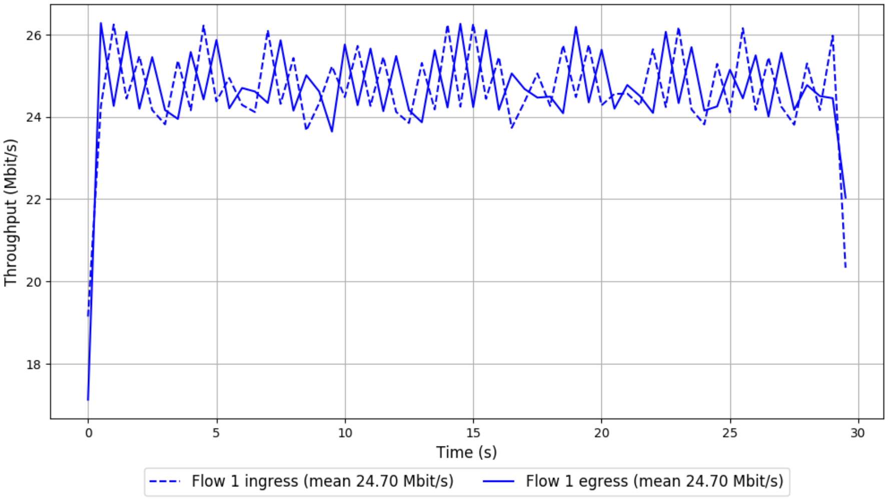
Run 8: Report of Sprout — Data Link

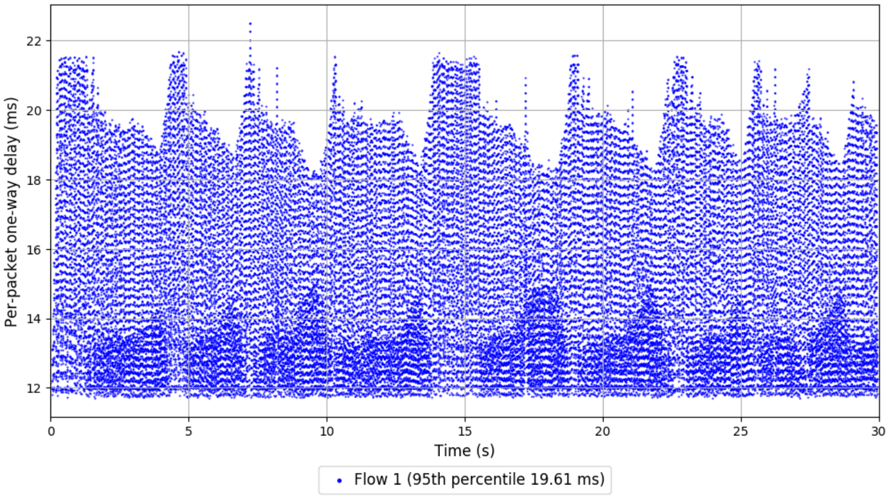




```
Run 9: Statistics of Sprout

Start at: 2018-04-10 15:44:19
End at: 2018-04-10 15:44:49
Local clock offset: 0.426 ms
Remote clock offset: -2.793 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.70 Mbit/s
95th percentile per-packet one-way delay: 19.612 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 24.70 Mbit/s
95th percentile per-packet one-way delay: 19.612 ms
Loss rate: 0.01%
```

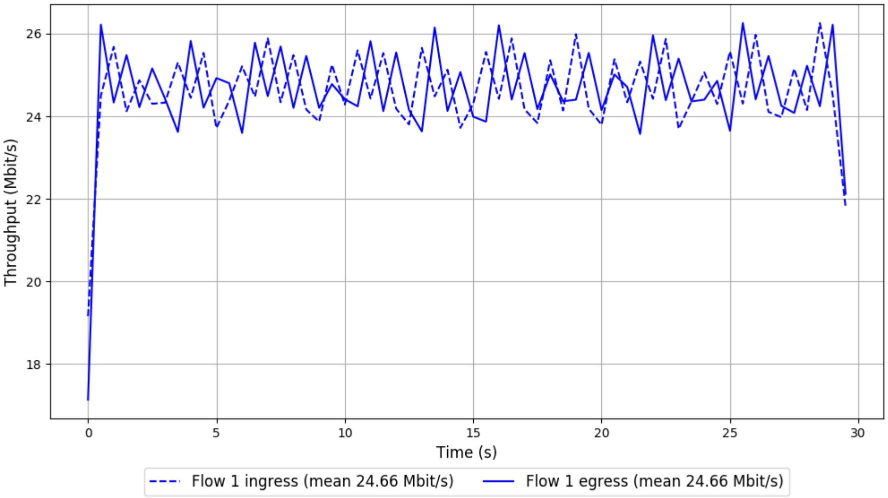
Run 9: Report of Sprout — Data Link

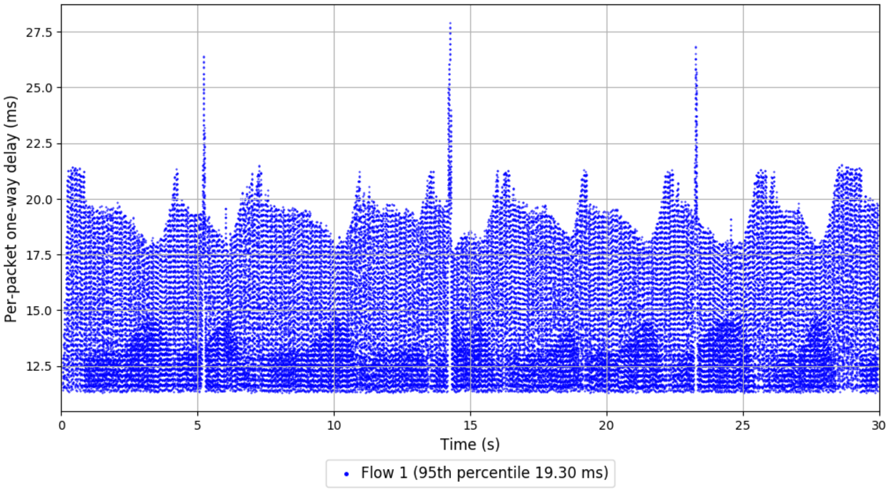




```
Run 10: Statistics of Sprout

Start at: 2018-04-10 16:06:54
End at: 2018-04-10 16:07:24
Local clock offset: 0.625 ms
Remote clock offset: -2.208 ms

# Below is generated by plot.py at 2018-04-10 16:48:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.66 Mbit/s
95th percentile per-packet one-way delay: 19.304 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.66 Mbit/s
95th percentile per-packet one-way delay: 19.304 ms
Loss rate: 0.00%
```

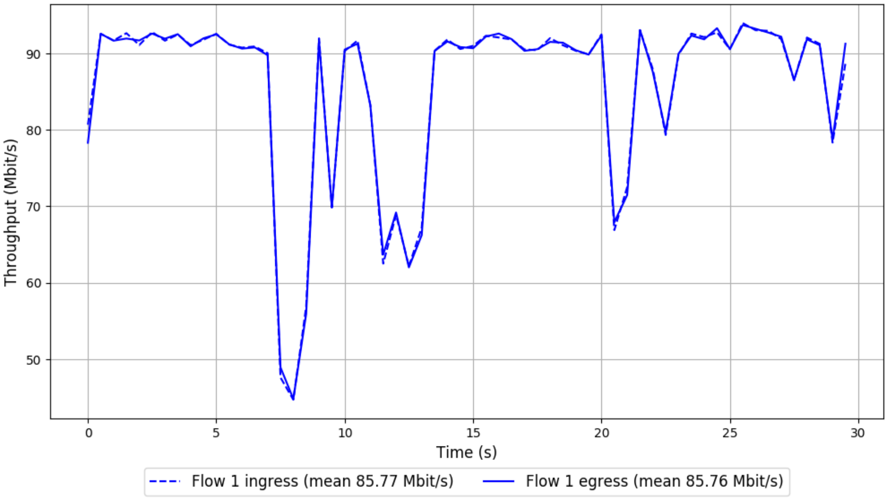
Run 10: Report of Sprout — Data Link

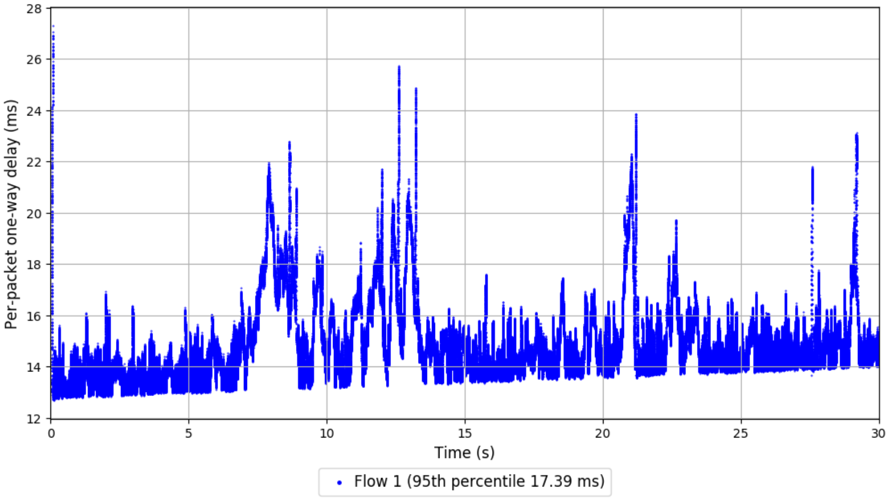




```
Run 1: Statistics of TaoVA-100x

Start at: 2018-04-10 12:34:36
End at: 2018-04-10 12:35:06
Local clock offset: -0.348 ms
Remote clock offset: 17.321 ms

# Below is generated by plot.py at 2018-04-10 16:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.76 Mbit/s
95th percentile per-packet one-way delay: 17.388 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 85.76 Mbit/s
95th percentile per-packet one-way delay: 17.388 ms
Loss rate: 0.00%
```

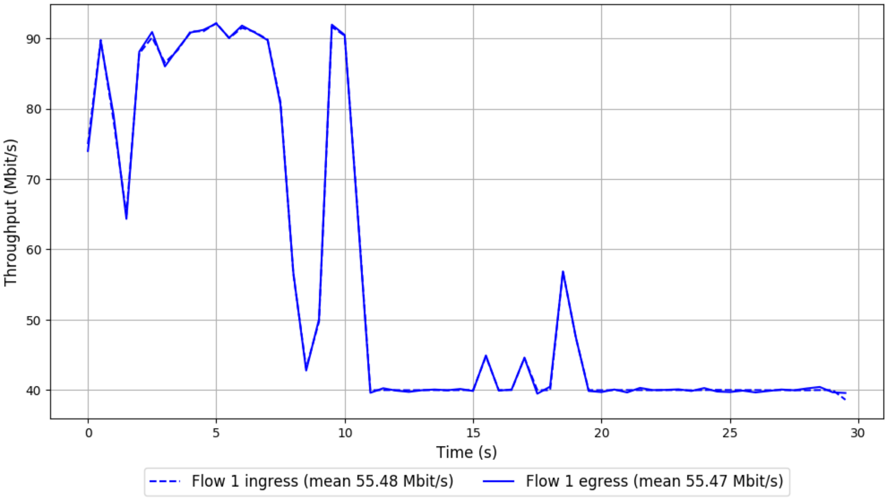
Run 1: Report of TaoVA-100x — Data Link

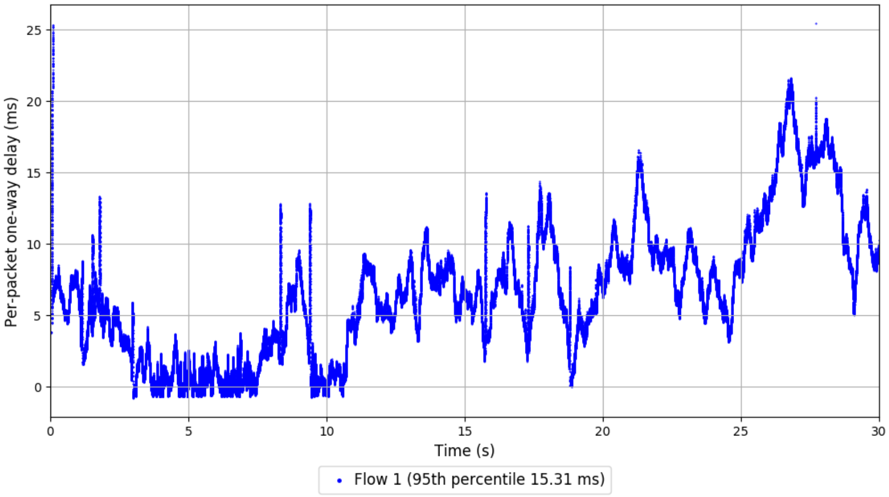




```
Run 2: Statistics of TaoVA-100x

Start at: 2018-04-10 12:56:16
End at: 2018-04-10 12:56:46
Local clock offset: 0.725 ms
Remote clock offset: -16.694 ms

# Below is generated by plot.py at 2018-04-10 16:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 55.47 Mbit/s
95th percentile per-packet one-way delay: 15.311 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.47 Mbit/s
95th percentile per-packet one-way delay: 15.311 ms
Loss rate: 0.00%
```

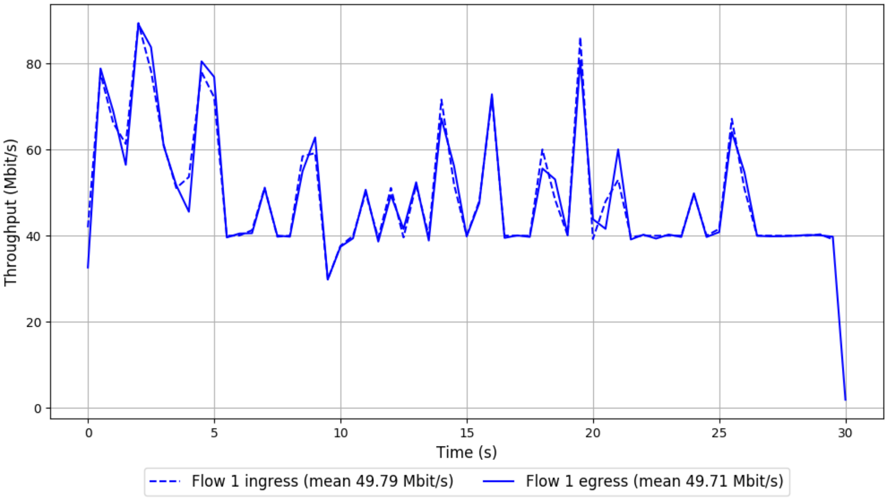
Run 2: Report of TaoVA-100x — Data Link

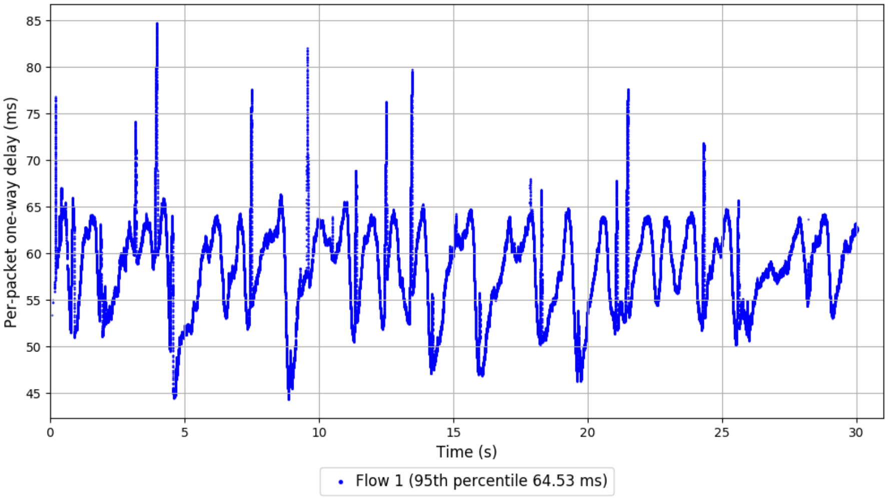




```
Run 3: Statistics of TaoVA-100x

Start at: 2018-04-10 13:17:32
End at: 2018-04-10 13:18:02
Local clock offset: -0.381 ms
Remote clock offset: -2.259 ms

# Below is generated by plot.py at 2018-04-10 16:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 49.71 Mbit/s
95th percentile per-packet one-way delay: 64.529 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 49.71 Mbit/s
95th percentile per-packet one-way delay: 64.529 ms
Loss rate: 0.22%
```

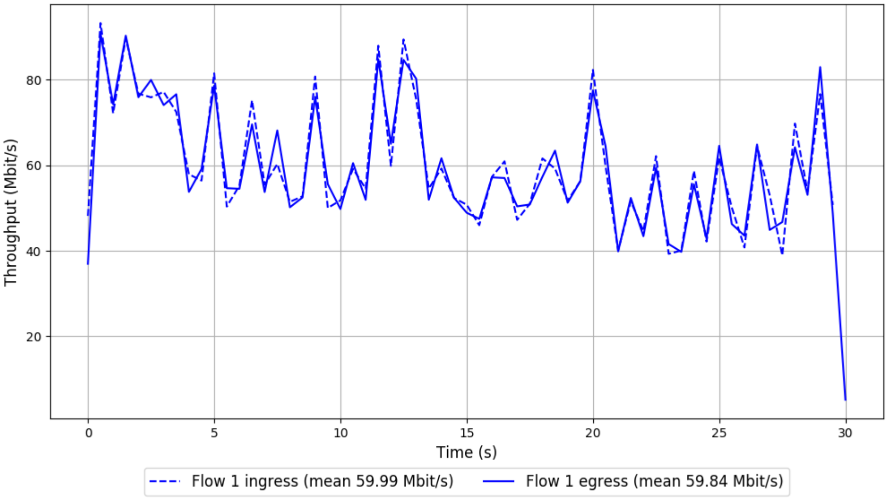
Run 3: Report of TaoVA-100x — Data Link

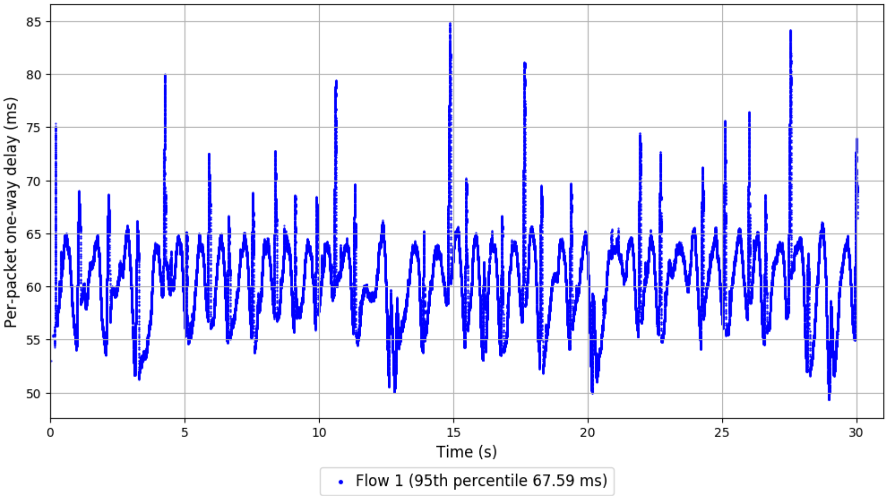




```
Run 4: Statistics of TaoVA-100x

Start at: 2018-04-10 13:39:32
End at: 2018-04-10 13:40:02
Local clock offset: -0.008 ms
Remote clock offset: -1.678 ms

# Below is generated by plot.py at 2018-04-10 16:50:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.84 Mbit/s
95th percentile per-packet one-way delay: 67.594 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 59.84 Mbit/s
95th percentile per-packet one-way delay: 67.594 ms
Loss rate: 0.29%
```

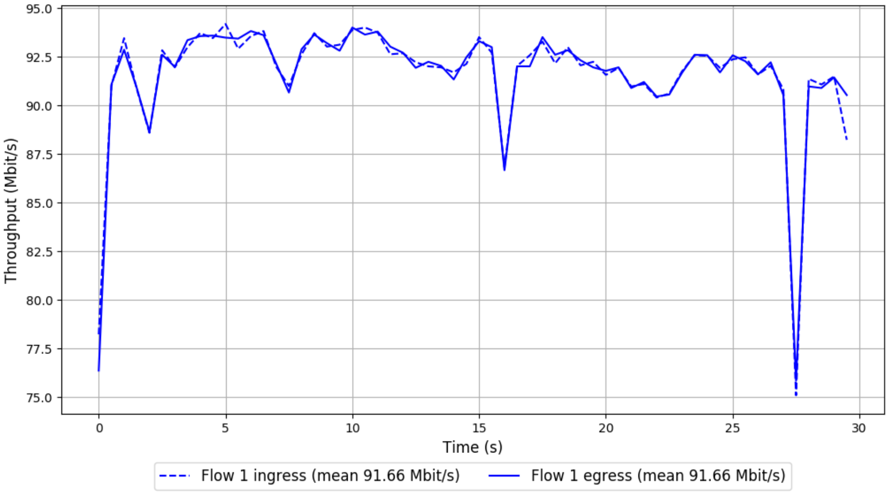
Run 4: Report of TaoVA-100x — Data Link

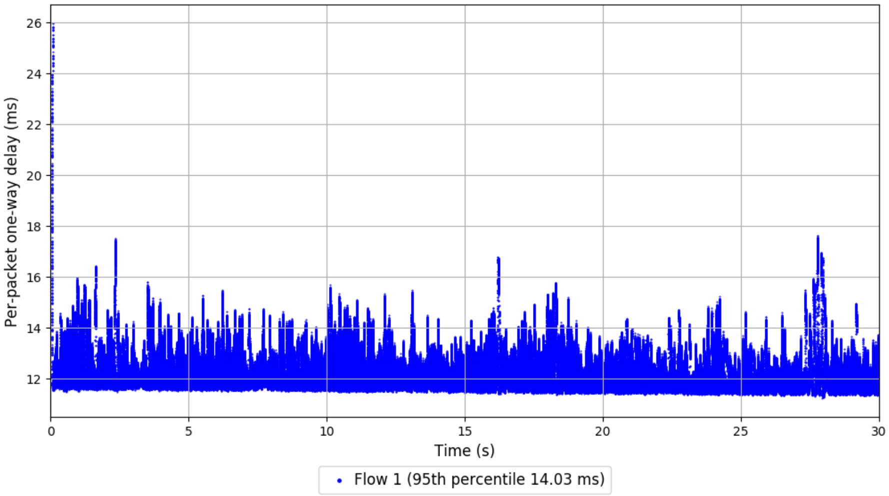




```
Run 5: Statistics of TaoVA-100x

Start at: 2018-04-10 14:01:15
End at: 2018-04-10 14:01:45
Local clock offset: 1.48 ms
Remote clock offset: 22.516 ms

# Below is generated by plot.py at 2018-04-10 16:50:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.66 Mbit/s
95th percentile per-packet one-way delay: 14.032 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 91.66 Mbit/s
95th percentile per-packet one-way delay: 14.032 ms
Loss rate: 0.00%
```

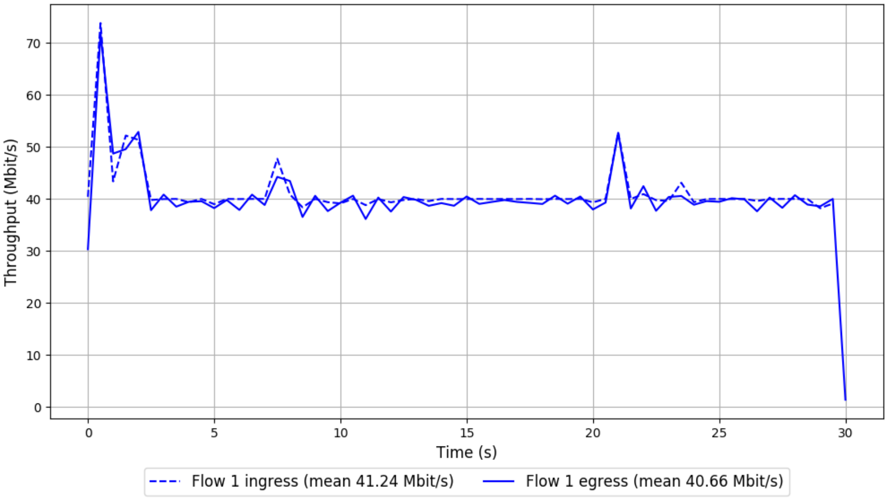
Run 5: Report of TaoVA-100x — Data Link

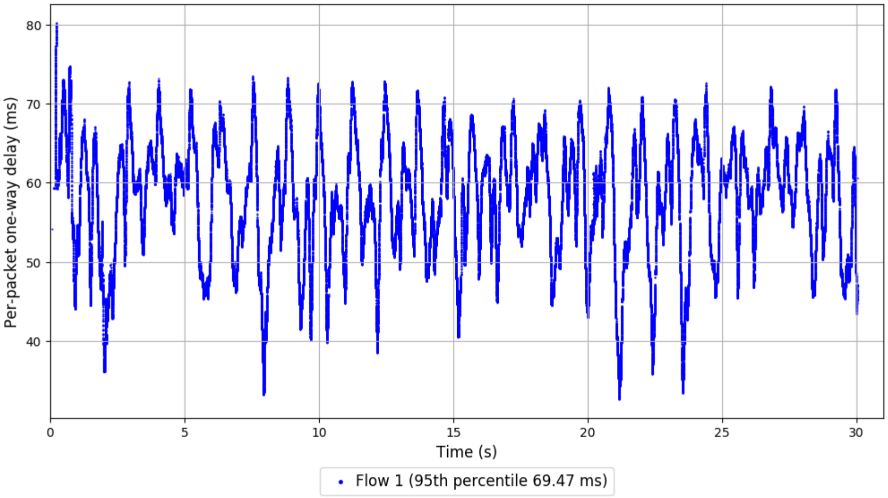




```
Run 6: Statistics of TaoVA-100x

Start at: 2018-04-10 14:22:03
End at: 2018-04-10 14:22:33
Local clock offset: -0.952 ms
Remote clock offset: 29.469 ms

# Below is generated by plot.py at 2018-04-10 16:50:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.66 Mbit/s
95th percentile per-packet one-way delay: 69.465 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 40.66 Mbit/s
95th percentile per-packet one-way delay: 69.465 ms
Loss rate: 1.45%
```

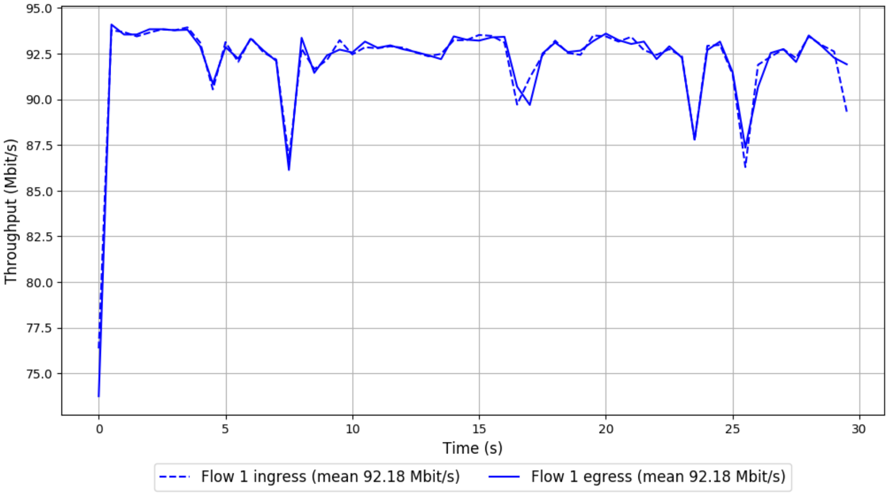
Run 6: Report of TaoVA-100x — Data Link

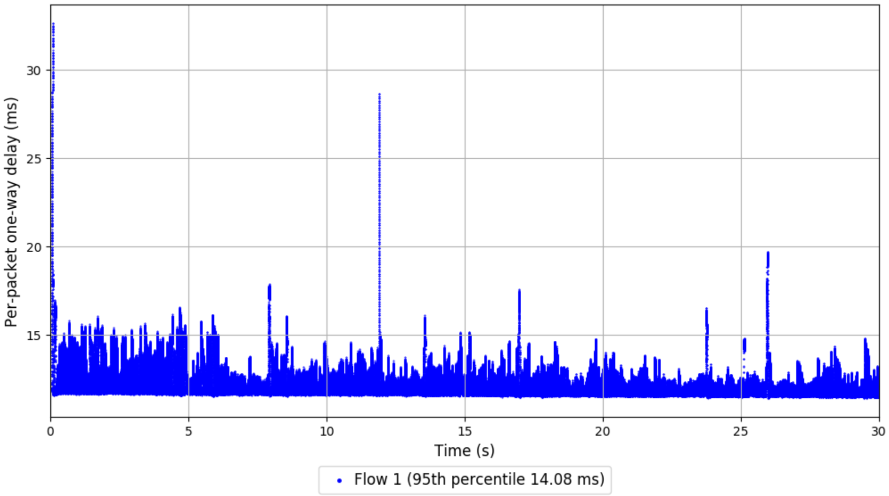




```
Run 7: Statistics of TaoVA-100x

Start at: 2018-04-10 14:43:39
End at: 2018-04-10 14:44:09
Local clock offset: -1.695 ms
Remote clock offset: 35.122 ms

# Below is generated by plot.py at 2018-04-10 16:50:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.18 Mbit/s
95th percentile per-packet one-way delay: 14.080 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 92.18 Mbit/s
95th percentile per-packet one-way delay: 14.080 ms
Loss rate: 0.01%
```

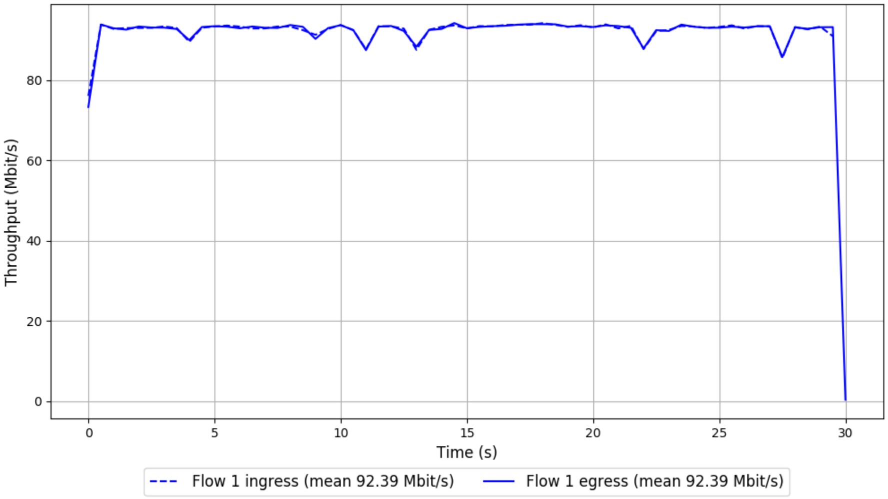
Run 7: Report of TaoVA-100x — Data Link

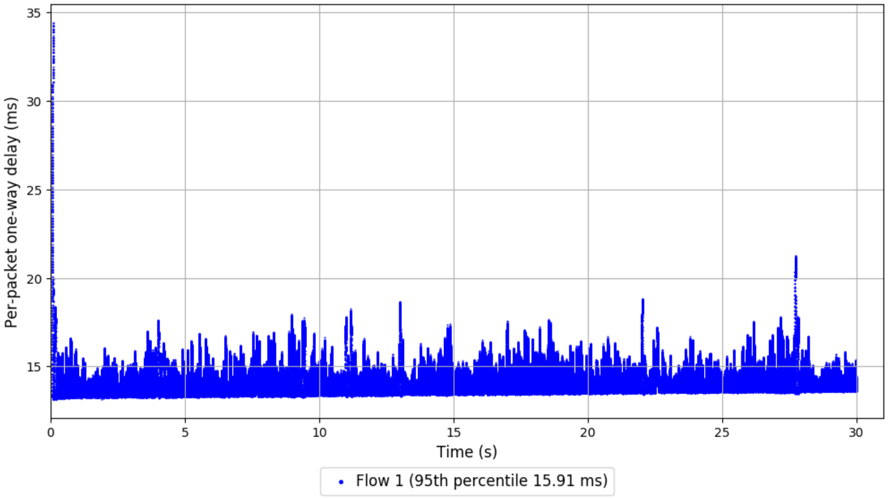




```
Run 8: Statistics of TaoVA-100x

Start at: 2018-04-10 15:05:38
End at: 2018-04-10 15:06:08
Local clock offset: -0.259 ms
Remote clock offset: 1.847 ms

# Below is generated by plot.py at 2018-04-10 16:50:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.39 Mbit/s
95th percentile per-packet one-way delay: 15.908 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 92.39 Mbit/s
95th percentile per-packet one-way delay: 15.908 ms
Loss rate: 0.00%
```

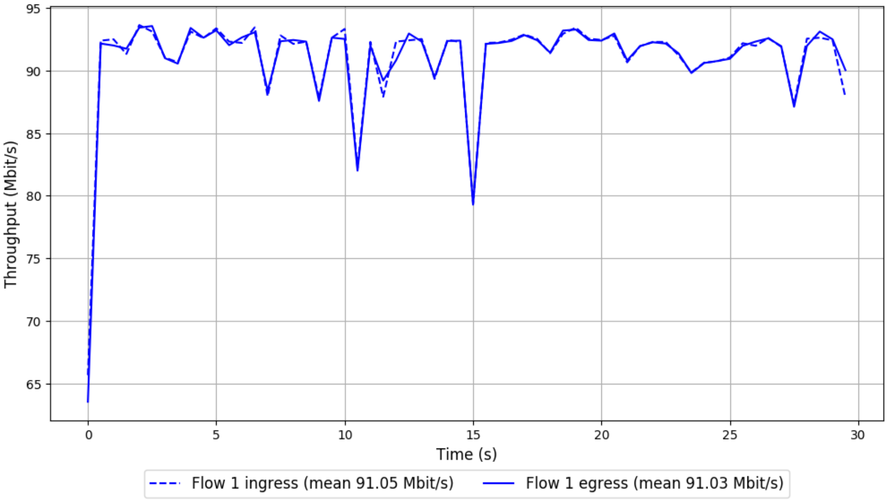
Run 8: Report of TaoVA-100x — Data Link

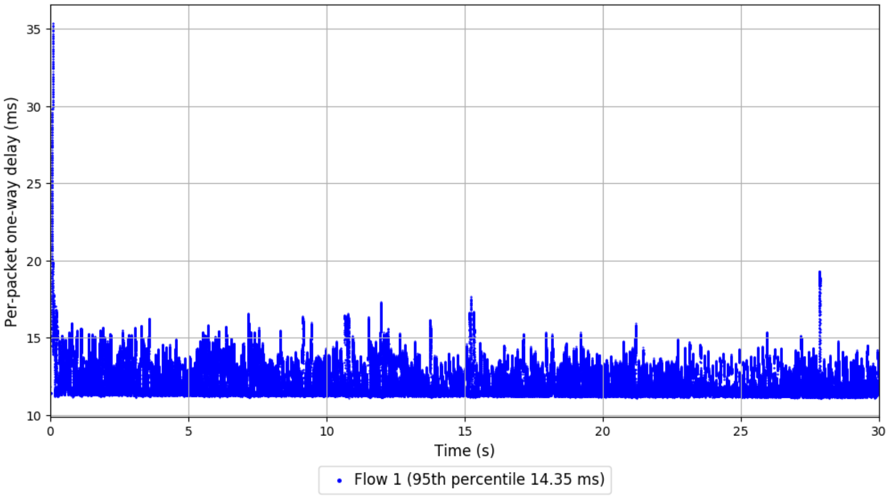




```
Run 9: Statistics of TaoVA-100x

Start at: 2018-04-10 15:27:29
End at: 2018-04-10 15:27:59
Local clock offset: 0.234 ms
Remote clock offset: -5.066 ms

# Below is generated by plot.py at 2018-04-10 16:52:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.03 Mbit/s
95th percentile per-packet one-way delay: 14.349 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 91.03 Mbit/s
95th percentile per-packet one-way delay: 14.349 ms
Loss rate: 0.03%
```

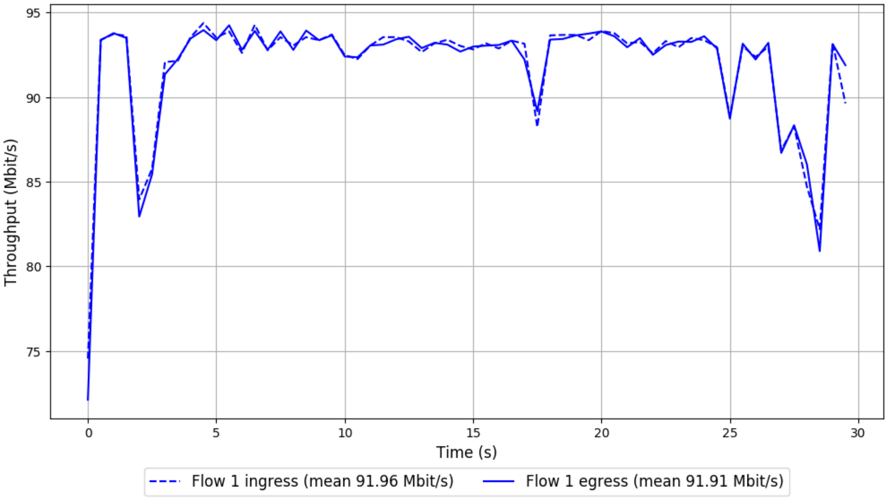
Run 9: Report of TaoVA-100x — Data Link

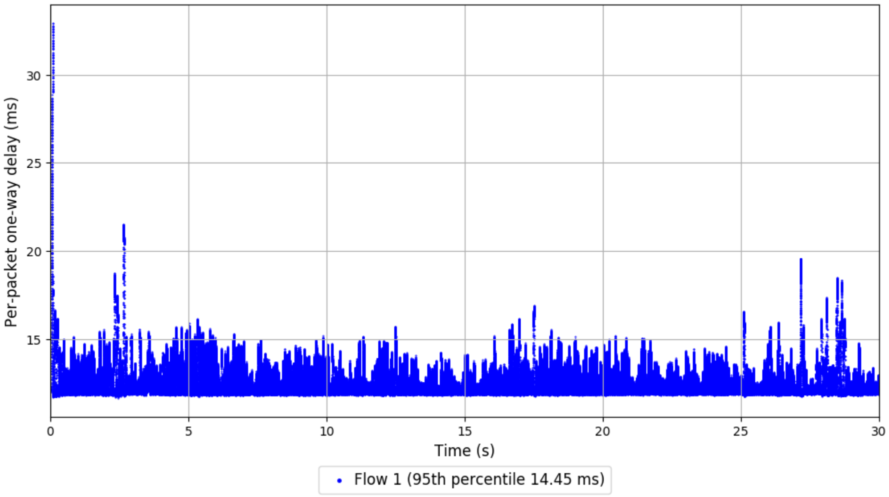




```
Run 10: Statistics of TaoVA-100x

Start at: 2018-04-10 15:49:32
End at: 2018-04-10 15:50:02
Local clock offset: 1.344 ms
Remote clock offset: -2.199 ms

# Below is generated by plot.py at 2018-04-10 16:52:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.91 Mbit/s
95th percentile per-packet one-way delay: 14.447 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 91.91 Mbit/s
95th percentile per-packet one-way delay: 14.447 ms
Loss rate: 0.06%
```

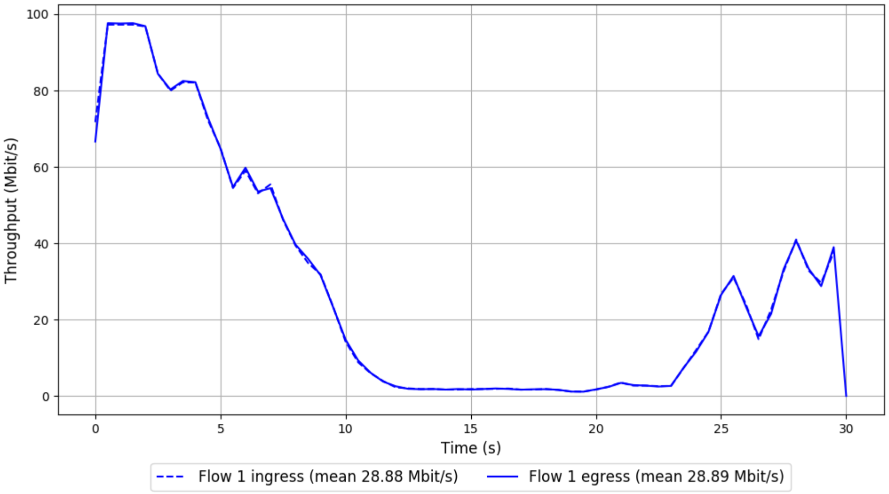
Run 10: Report of TaoVA-100x — Data Link

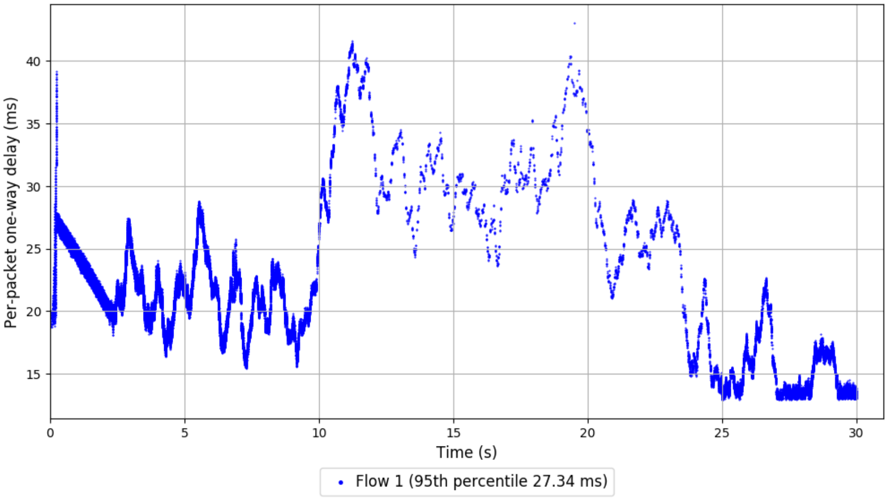




```
Run 1: Statistics of TCP Vegas

Start at: 2018-04-10 12:40:31
End at: 2018-04-10 12:41:01
Local clock offset: 0.776 ms
Remote clock offset: 7.269 ms

# Below is generated by plot.py at 2018-04-10 16:52:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 28.89 Mbit/s
95th percentile per-packet one-way delay: 27.345 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 28.89 Mbit/s
95th percentile per-packet one-way delay: 27.345 ms
Loss rate: 0.00%
```

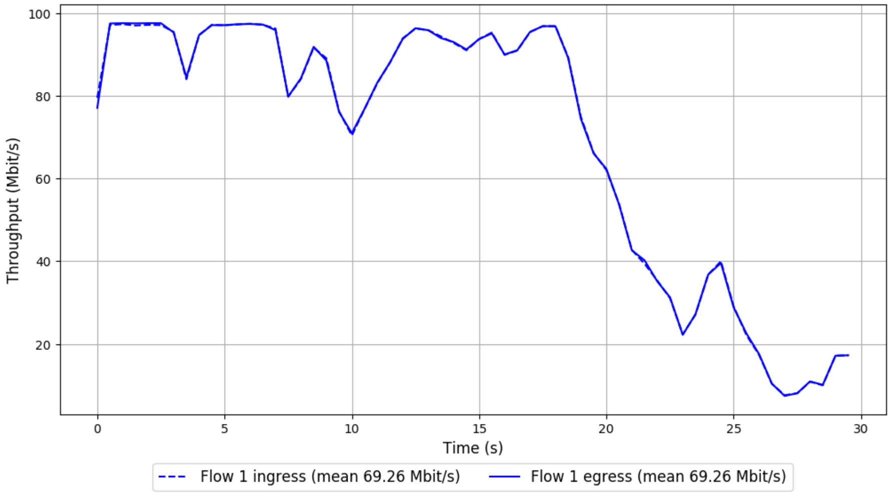
Run 1: Report of TCP Vegas — Data Link

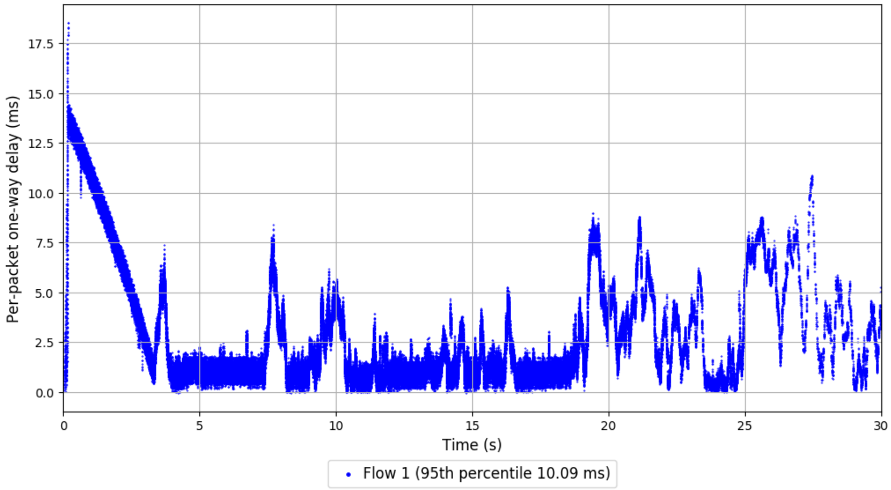




```
Run 2: Statistics of TCP Vegas

Start at: 2018-04-10 13:02:08
End at: 2018-04-10 13:02:38
Local clock offset: 1.08 ms
Remote clock offset: -17.663 ms

# Below is generated by plot.py at 2018-04-10 16:52:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.26 Mbit/s
95th percentile per-packet one-way delay: 10.087 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 69.26 Mbit/s
95th percentile per-packet one-way delay: 10.087 ms
Loss rate: 0.00%
```

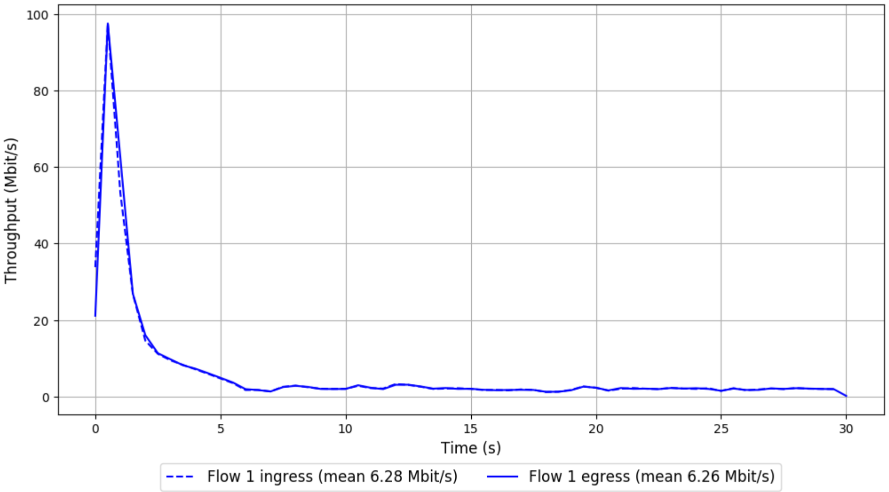
Run 2: Report of TCP Vegas — Data Link

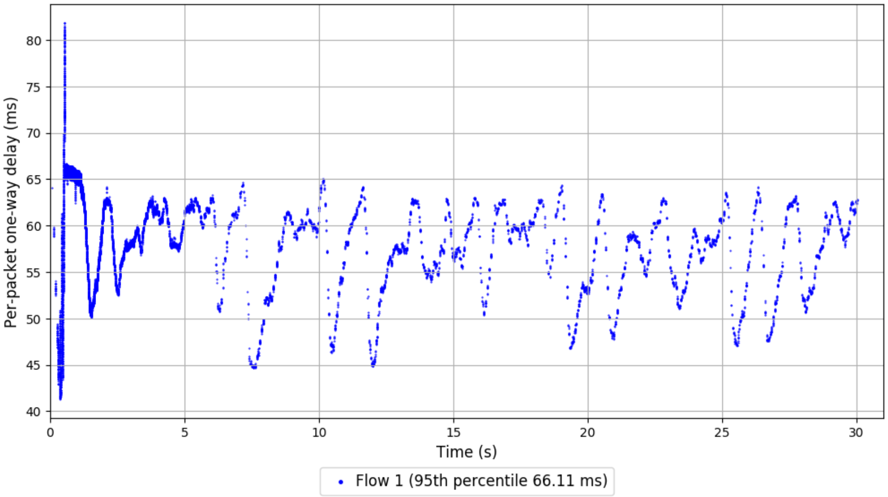




```
Run 3: Statistics of TCP Vegas

Start at: 2018-04-10 13:23:57
End at: 2018-04-10 13:24:28
Local clock offset: -0.55 ms
Remote clock offset: -2.353 ms

# Below is generated by plot.py at 2018-04-10 16:52:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.26 Mbit/s
95th percentile per-packet one-way delay: 66.111 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 6.26 Mbit/s
95th percentile per-packet one-way delay: 66.111 ms
Loss rate: 0.20%
```

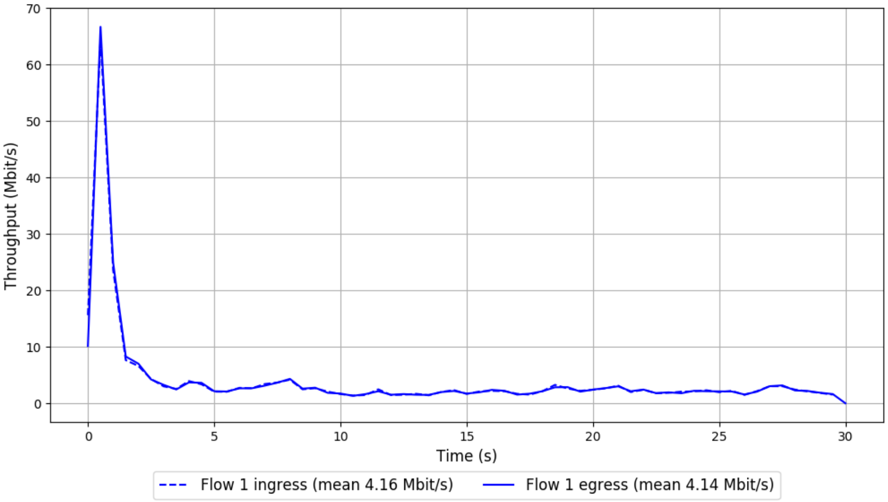
Run 3: Report of TCP Vegas — Data Link

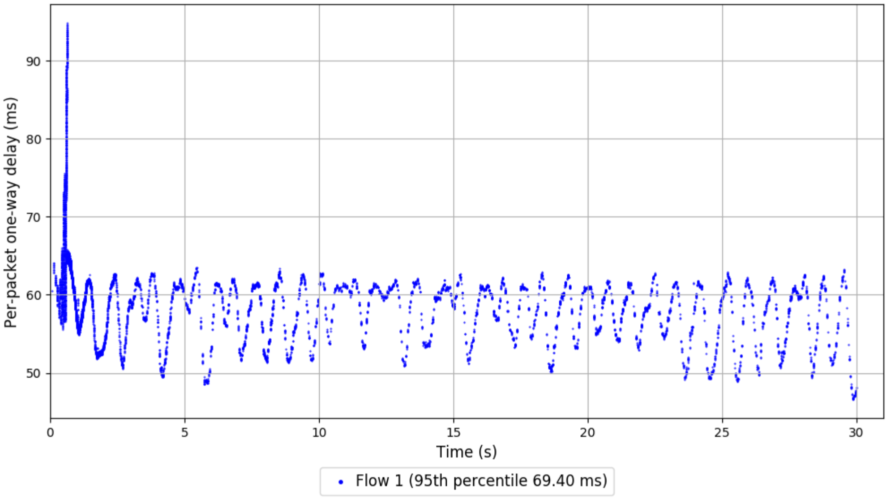




```
Run 4: Statistics of TCP Vegas

Start at: 2018-04-10 13:45:41
End at: 2018-04-10 13:46:11
Local clock offset: 1.198 ms
Remote clock offset: 8.153 ms

# Below is generated by plot.py at 2018-04-10 16:52:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: 69.404 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: 69.404 ms
Loss rate: 0.49%
```

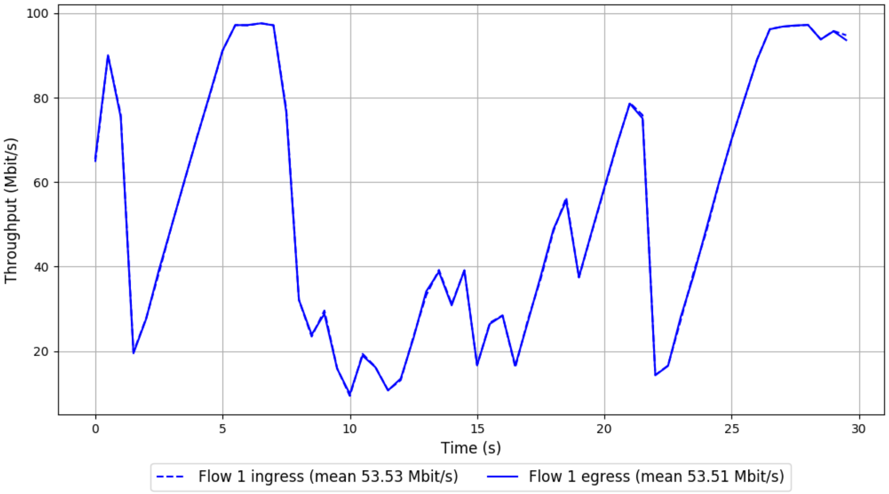
Run 4: Report of TCP Vegas — Data Link

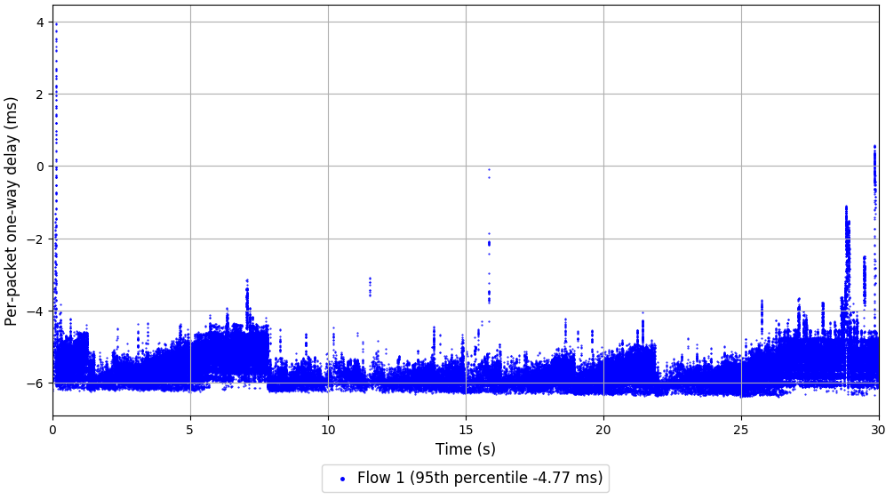




```
Run 5: Statistics of TCP Vegas

Start at: 2018-04-10 14:07:11
End at: 2018-04-10 14:07:41
Local clock offset: 1.871 ms
Remote clock offset: 7.461 ms

# Below is generated by plot.py at 2018-04-10 16:52:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.51 Mbit/s
95th percentile per-packet one-way delay: -4.769 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 53.51 Mbit/s
95th percentile per-packet one-way delay: -4.769 ms
Loss rate: 0.03%
```

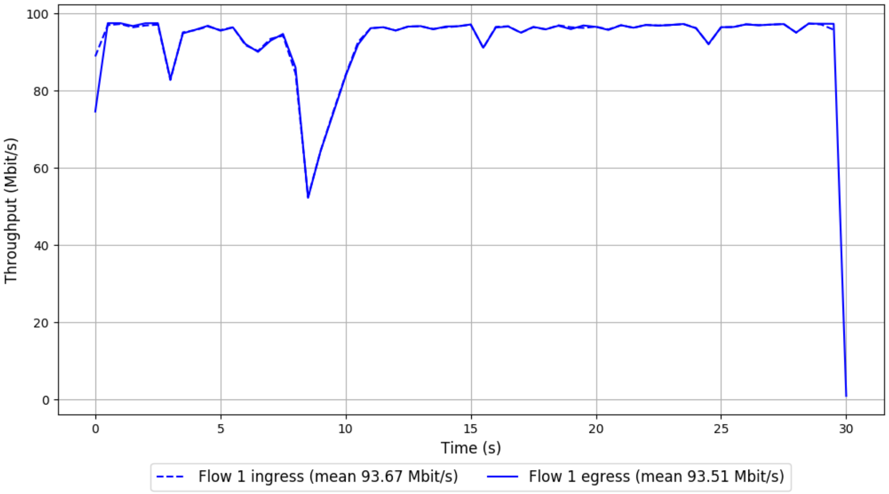
Run 5: Report of TCP Vegas — Data Link

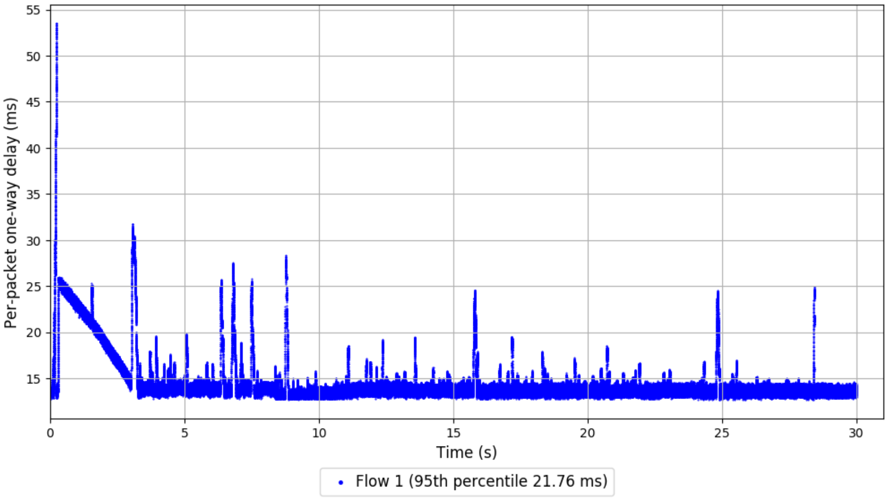




```
Run 6: Statistics of TCP Vegas

Start at: 2018-04-10 14:28:03
End at: 2018-04-10 14:28:33
Local clock offset: -1.124 ms
Remote clock offset: 30.871 ms

# Below is generated by plot.py at 2018-04-10 16:52:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.51 Mbit/s
95th percentile per-packet one-way delay: 21.763 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 93.51 Mbit/s
95th percentile per-packet one-way delay: 21.763 ms
Loss rate: 0.17%
```

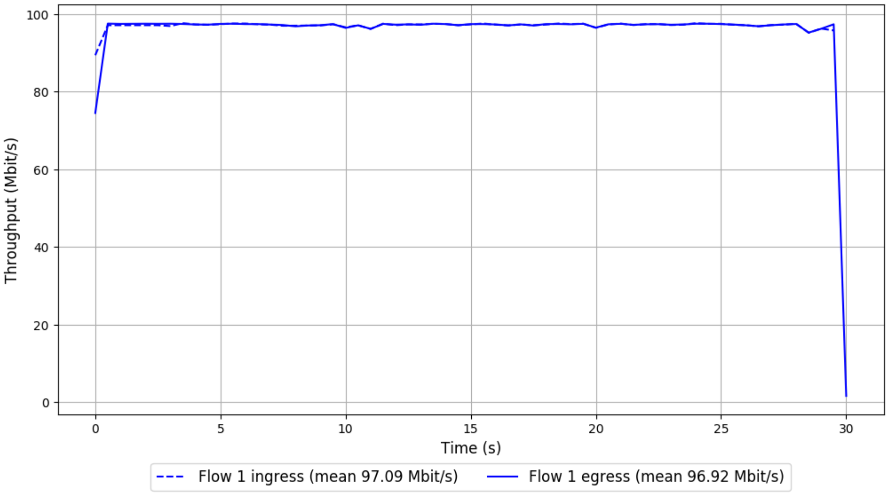
Run 6: Report of TCP Vegas — Data Link

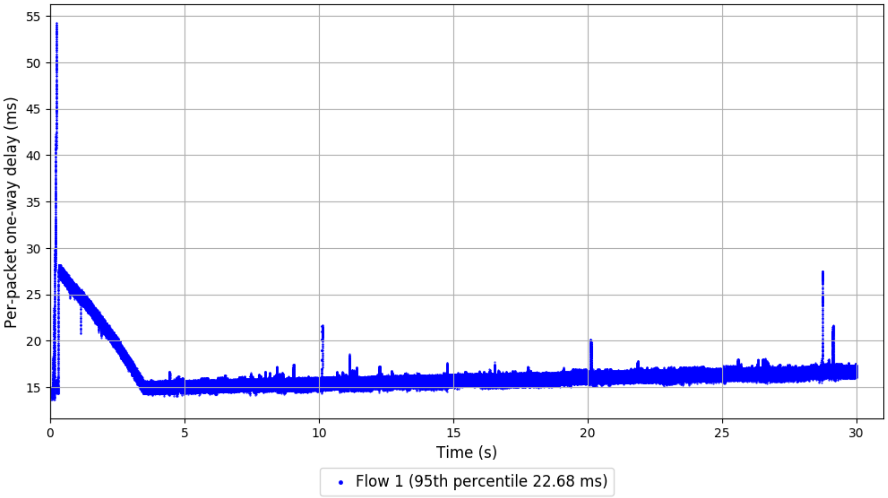




```
Run 7: Statistics of TCP Vegas

Start at: 2018-04-10 14:49:54
End at: 2018-04-10 14:50:24
Local clock offset: -1.451 ms
Remote clock offset: 31.248 ms

# Below is generated by plot.py at 2018-04-10 16:52:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.92 Mbit/s
95th percentile per-packet one-way delay: 22.678 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 96.92 Mbit/s
95th percentile per-packet one-way delay: 22.678 ms
Loss rate: 0.17%
```

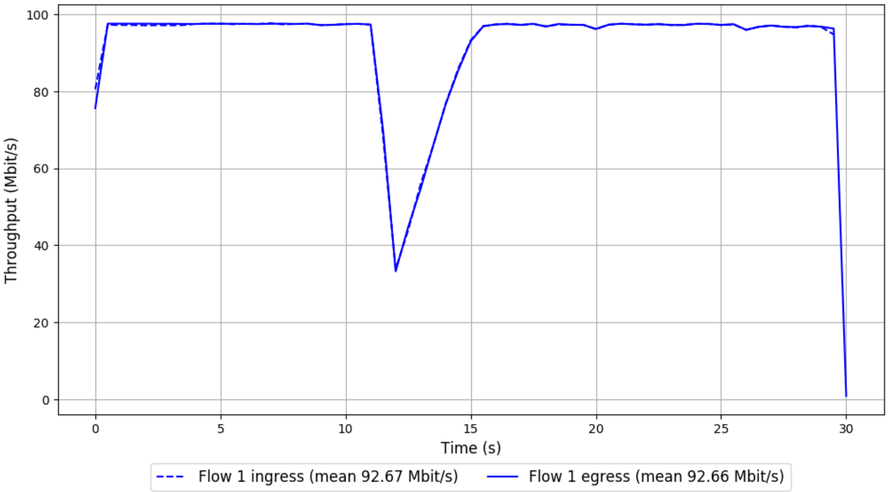
Run 7: Report of TCP Vegas — Data Link

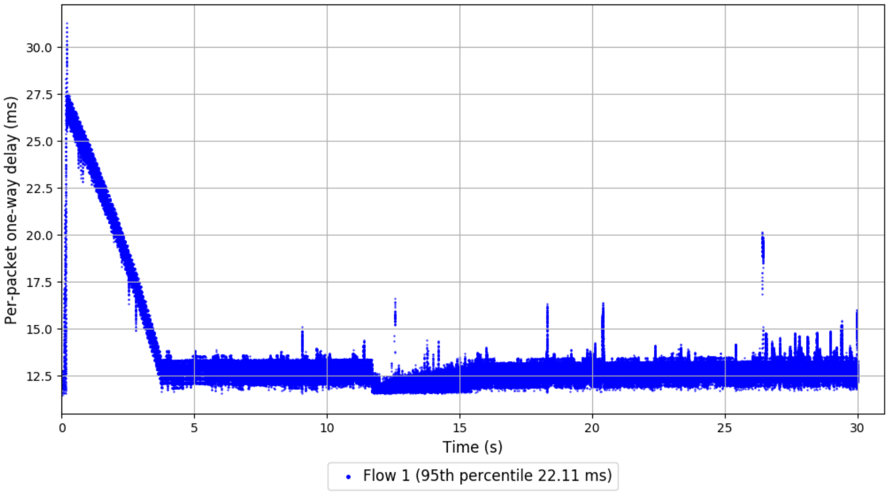




```
Run 8: Statistics of TCP Vegas

Start at: 2018-04-10 15:11:49
End at: 2018-04-10 15:12:20
Local clock offset: 0.205 ms
Remote clock offset: -3.052 ms

# Below is generated by plot.py at 2018-04-10 16:52:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.66 Mbit/s
95th percentile per-packet one-way delay: 22.111 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 92.66 Mbit/s
95th percentile per-packet one-way delay: 22.111 ms
Loss rate: 0.00%
```

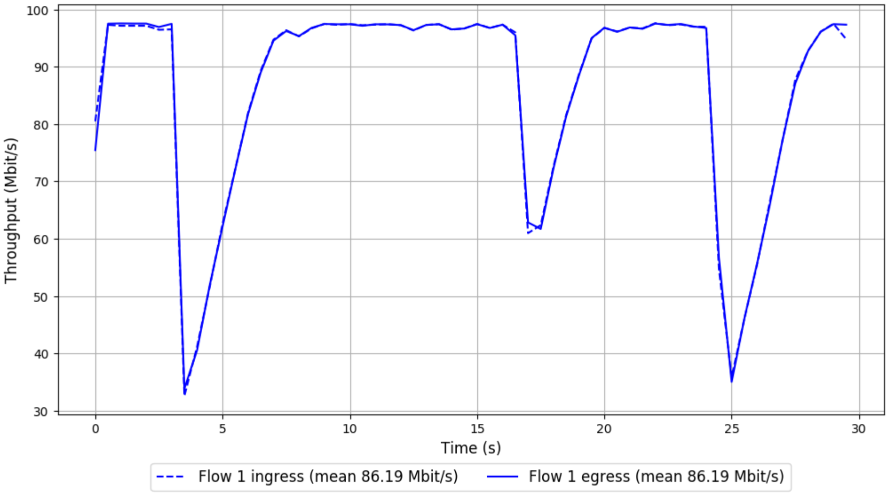
Run 8: Report of TCP Vegas — Data Link

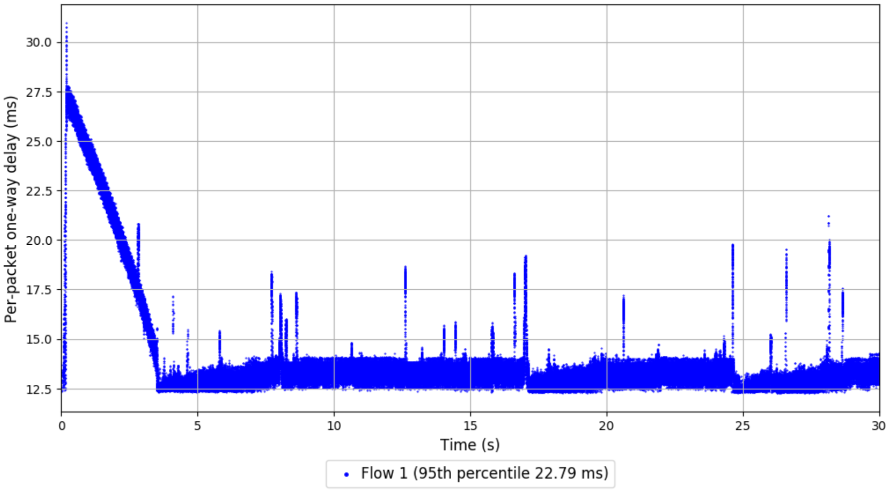




```
Run 9: Statistics of TCP Vegas

Start at: 2018-04-10 15:33:31
End at: 2018-04-10 15:34:01
Local clock offset: 0.465 ms
Remote clock offset: -2.503 ms

# Below is generated by plot.py at 2018-04-10 16:52:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.19 Mbit/s
95th percentile per-packet one-way delay: 22.789 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 86.19 Mbit/s
95th percentile per-packet one-way delay: 22.789 ms
Loss rate: 0.00%
```

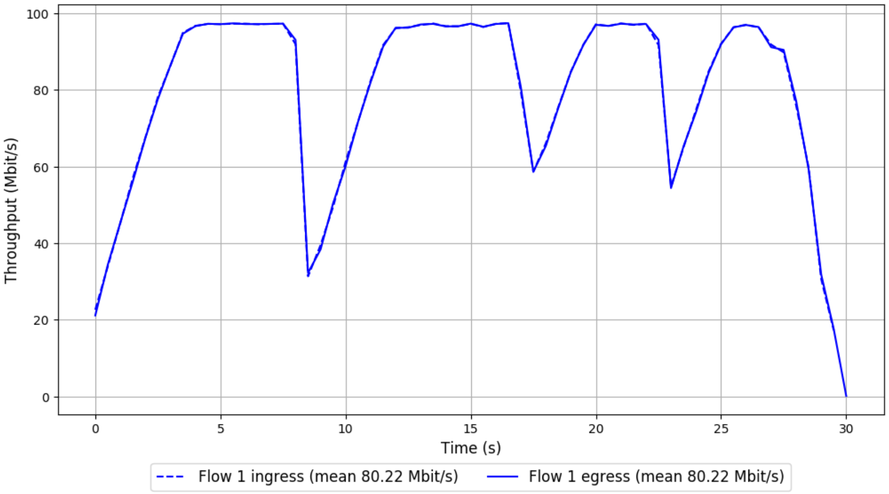
Run 9: Report of TCP Vegas — Data Link

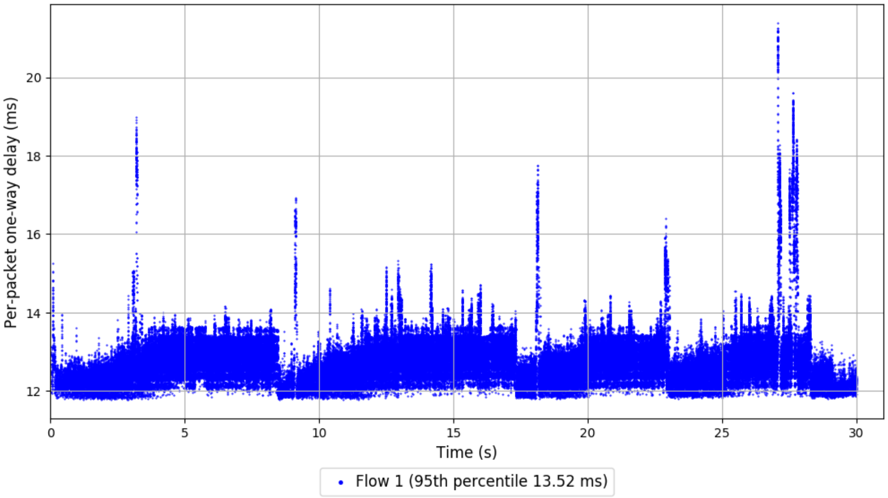




```
Run 10: Statistics of TCP Vegas

Start at: 2018-04-10 15:56:01
End at: 2018-04-10 15:56:31
Local clock offset: 0.692 ms
Remote clock offset: -3.029 ms

# Below is generated by plot.py at 2018-04-10 16:52:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.22 Mbit/s
95th percentile per-packet one-way delay: 13.518 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 80.22 Mbit/s
95th percentile per-packet one-way delay: 13.518 ms
Loss rate: 0.01%
```

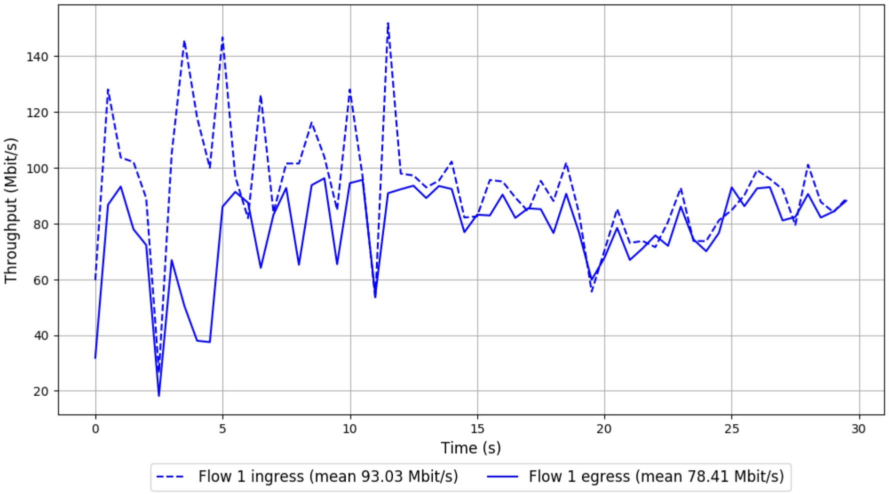
Run 10: Report of TCP Vegas — Data Link

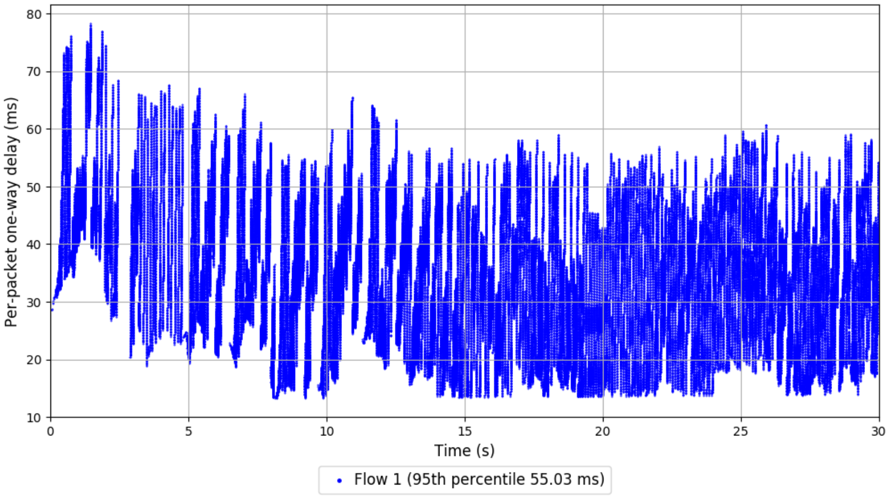




```
Run 1: Statistics of Verus

Start at: 2018-04-10 12:36:58
End at: 2018-04-10 12:37:28
Local clock offset: 0.462 ms
Remote clock offset: 12.827 ms

# Below is generated by plot.py at 2018-04-10 16:52:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.41 Mbit/s
95th percentile per-packet one-way delay: 55.034 ms
Loss rate: 15.68%
-- Flow 1:
Average throughput: 78.41 Mbit/s
95th percentile per-packet one-way delay: 55.034 ms
Loss rate: 15.68%
```

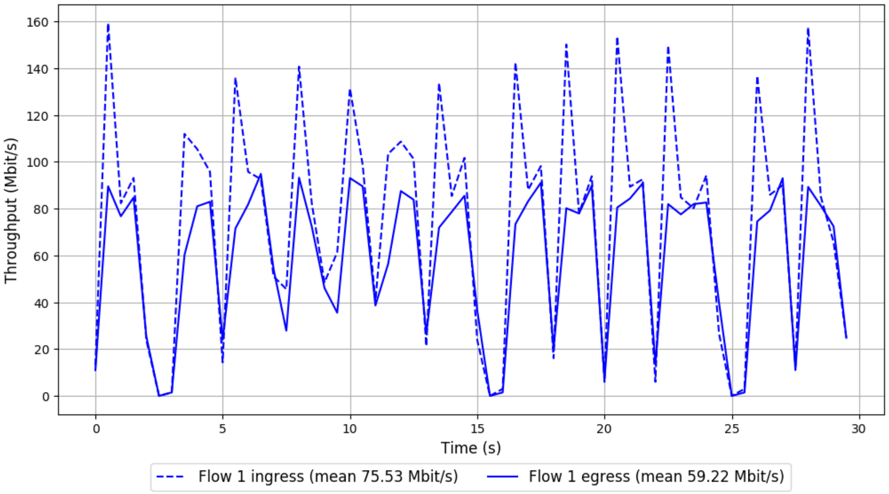
Run 1: Report of Verus — Data Link

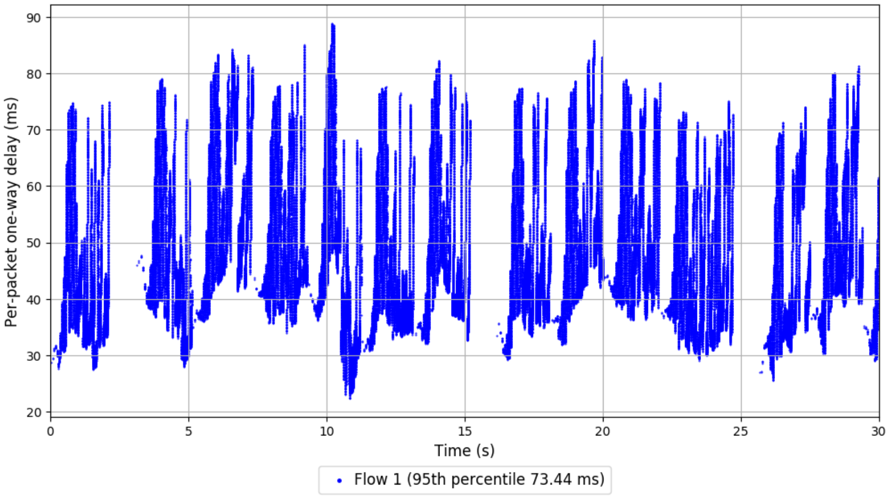




```
Run 2: Statistics of Verus

Start at: 2018-04-10 12:58:35
End at: 2018-04-10 12:59:05
Local clock offset: 0.701 ms
Remote clock offset: -19.955 ms

# Below is generated by plot.py at 2018-04-10 16:52:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.22 Mbit/s
95th percentile per-packet one-way delay: 73.437 ms
Loss rate: 21.51%
-- Flow 1:
Average throughput: 59.22 Mbit/s
95th percentile per-packet one-way delay: 73.437 ms
Loss rate: 21.51%
```

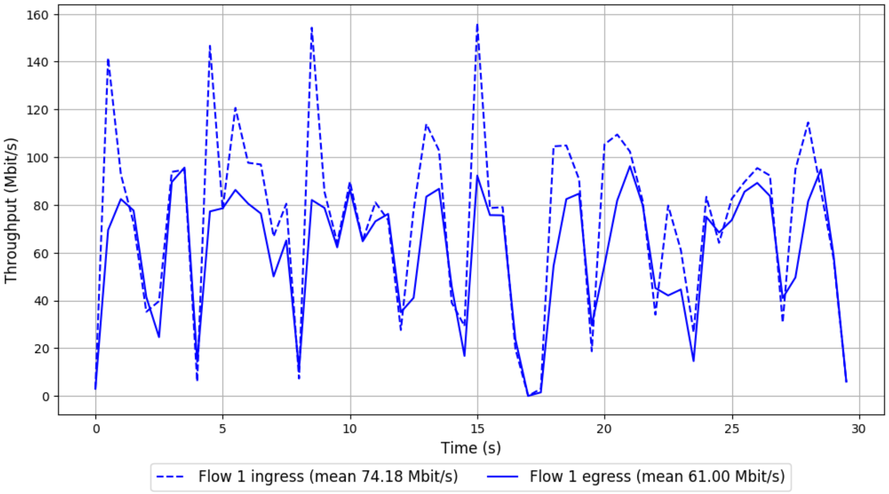
Run 2: Report of Verus — Data Link

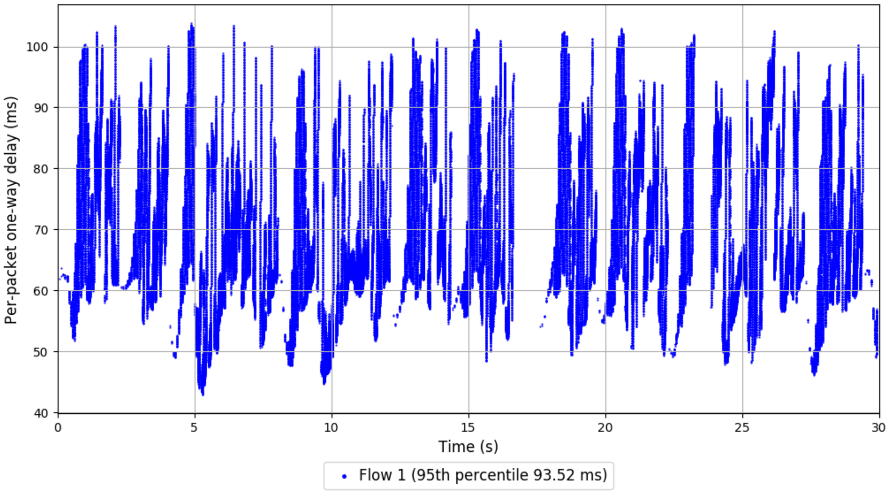




```
Run 3: Statistics of Verus

Start at: 2018-04-10 13:20:08
End at: 2018-04-10 13:20:38
Local clock offset: 0.337 ms
Remote clock offset: -2.138 ms

# Below is generated by plot.py at 2018-04-10 16:53:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.00 Mbit/s
95th percentile per-packet one-way delay: 93.523 ms
Loss rate: 17.78%
-- Flow 1:
Average throughput: 61.00 Mbit/s
95th percentile per-packet one-way delay: 93.523 ms
Loss rate: 17.78%
```

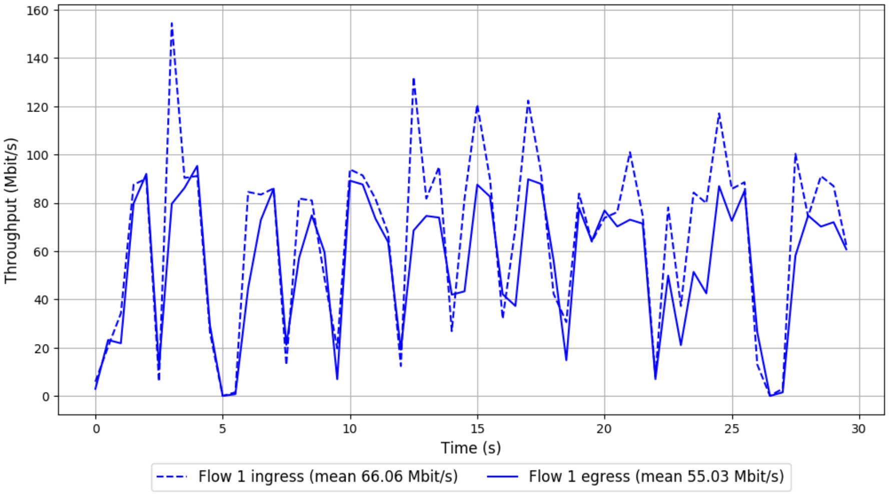
Run 3: Report of Verus — Data Link

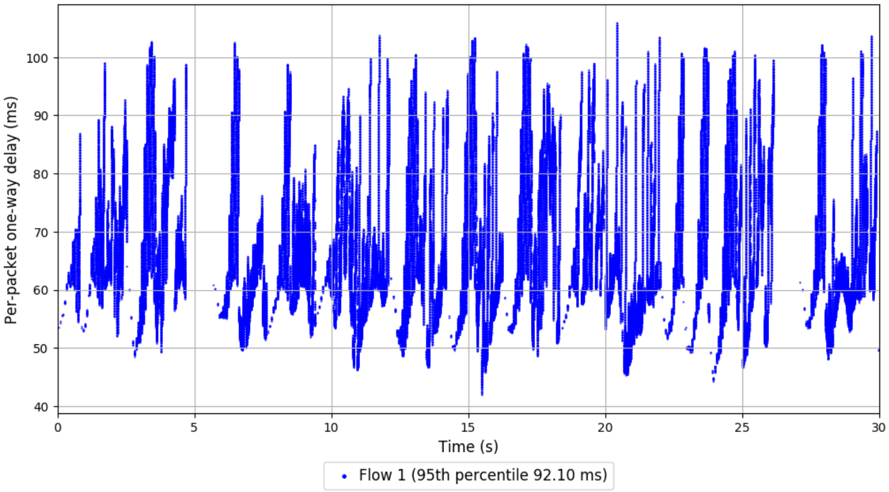




```
Run 4: Statistics of Verus

Start at: 2018-04-10 13:42:03
End at: 2018-04-10 13:42:33
Local clock offset: 0.203 ms
Remote clock offset: 0.711 ms

# Below is generated by plot.py at 2018-04-10 16:53:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 55.03 Mbit/s
95th percentile per-packet one-way delay: 92.098 ms
Loss rate: 16.72%
-- Flow 1:
Average throughput: 55.03 Mbit/s
95th percentile per-packet one-way delay: 92.098 ms
Loss rate: 16.72%
```

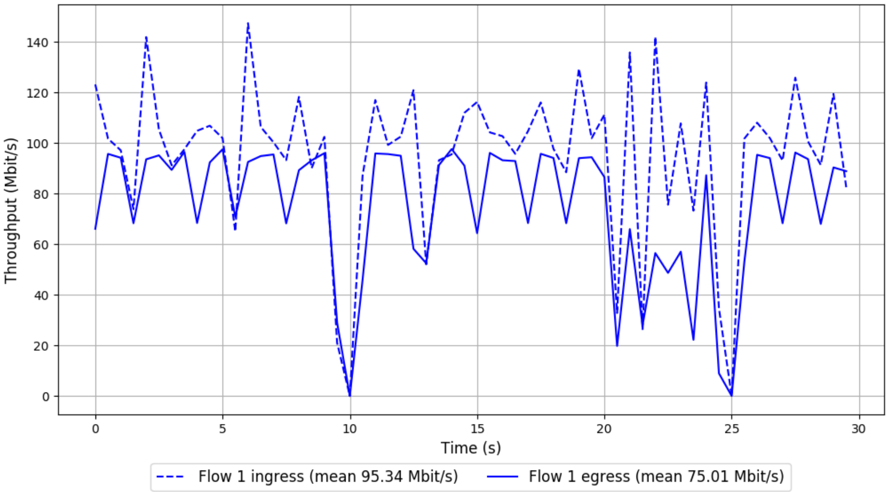
Run 4: Report of Verus — Data Link

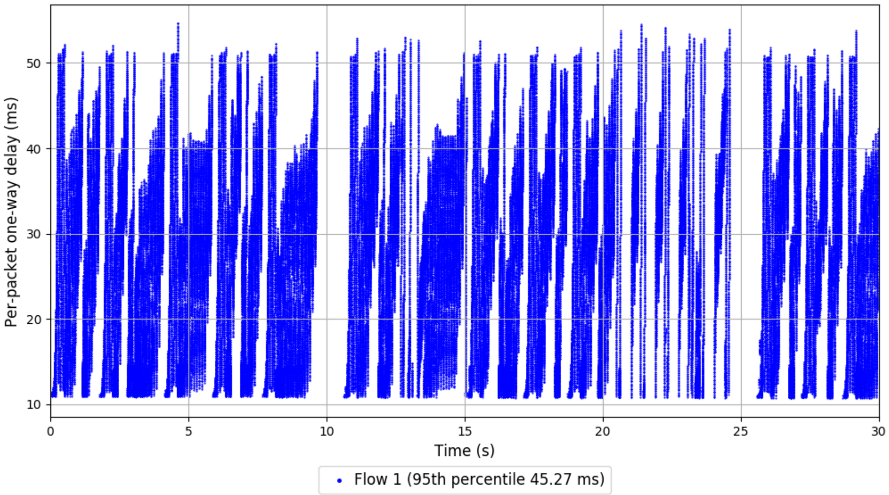




```
Run 5: Statistics of Verus

Start at: 2018-04-10 14:03:38
End at: 2018-04-10 14:04:08
Local clock offset: 1.389 ms
Remote clock offset: 23.05 ms

# Below is generated by plot.py at 2018-04-10 16:53:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.01 Mbit/s
95th percentile per-packet one-way delay: 45.274 ms
Loss rate: 21.26%
-- Flow 1:
Average throughput: 75.01 Mbit/s
95th percentile per-packet one-way delay: 45.274 ms
Loss rate: 21.26%
```

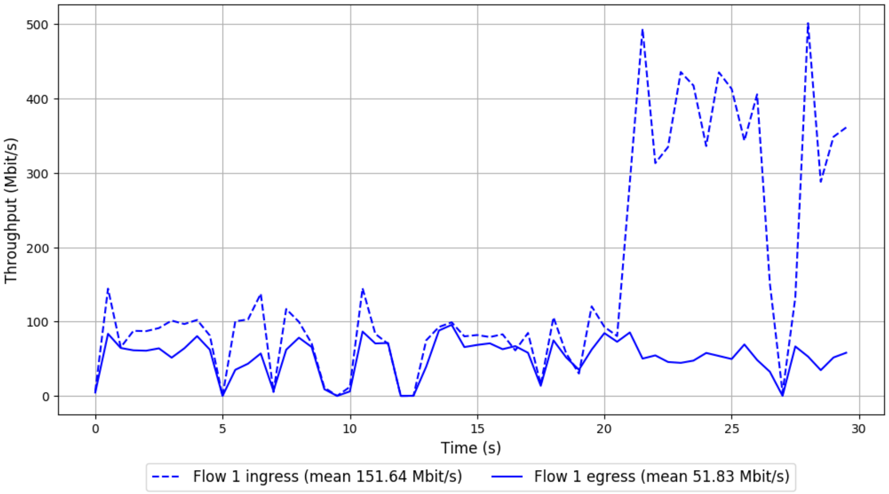
Run 5: Report of Verus — Data Link

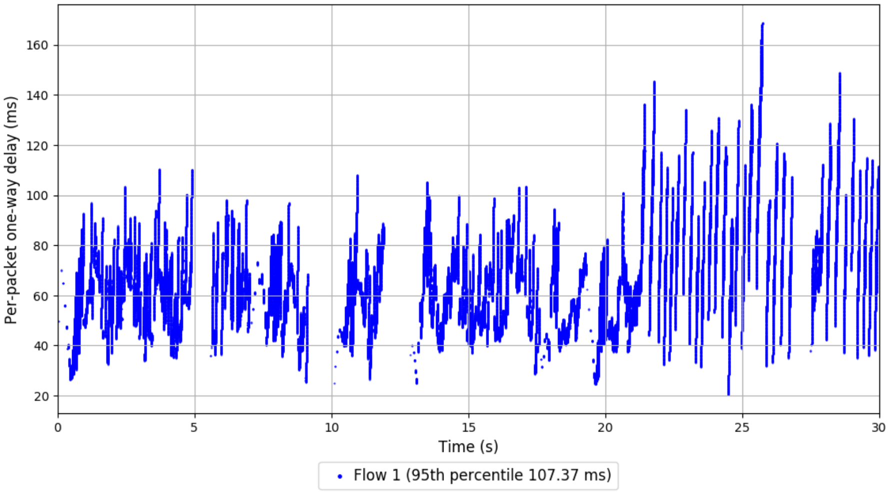




```
Run 6: Statistics of Verus

Start at: 2018-04-10 14:24:26
End at: 2018-04-10 14:24:56
Local clock offset: -1.174 ms
Remote clock offset: 29.525 ms

# Below is generated by plot.py at 2018-04-10 16:53:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 51.83 Mbit/s
95th percentile per-packet one-way delay: 107.372 ms
Loss rate: 65.76%
-- Flow 1:
Average throughput: 51.83 Mbit/s
95th percentile per-packet one-way delay: 107.372 ms
Loss rate: 65.76%
```

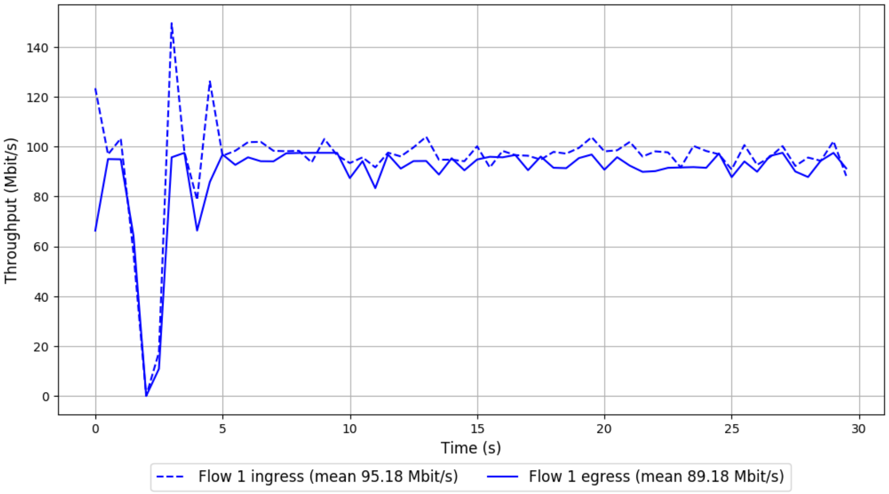
Run 6: Report of Verus — Data Link

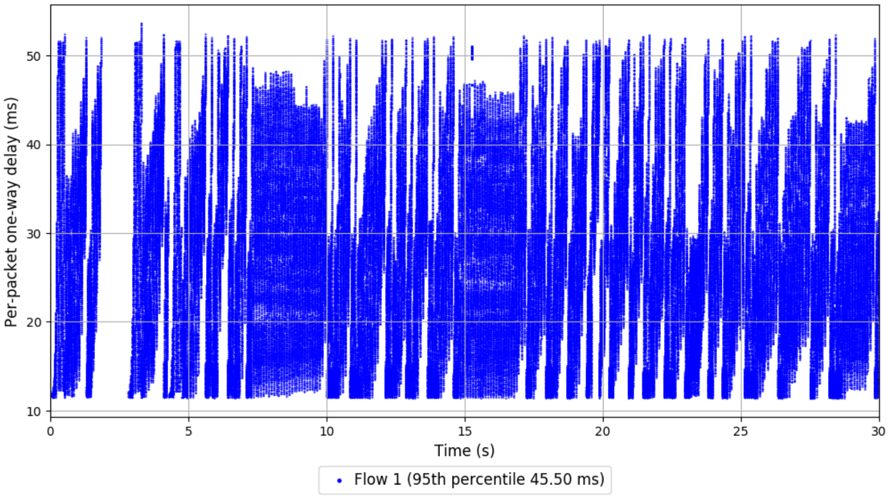




```
Run 7: Statistics of Verus

Start at: 2018-04-10 14:46:11
End at: 2018-04-10 14:46:41
Local clock offset: -1.525 ms
Remote clock offset: 35.841 ms

# Below is generated by plot.py at 2018-04-10 16:53:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.18 Mbit/s
95th percentile per-packet one-way delay: 45.504 ms
Loss rate: 6.27%
-- Flow 1:
Average throughput: 89.18 Mbit/s
95th percentile per-packet one-way delay: 45.504 ms
Loss rate: 6.27%
```

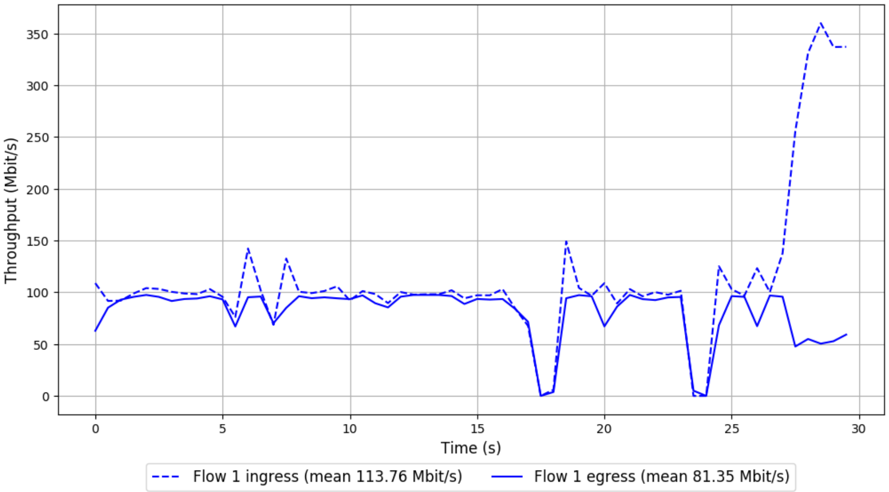
Run 7: Report of Verus — Data Link

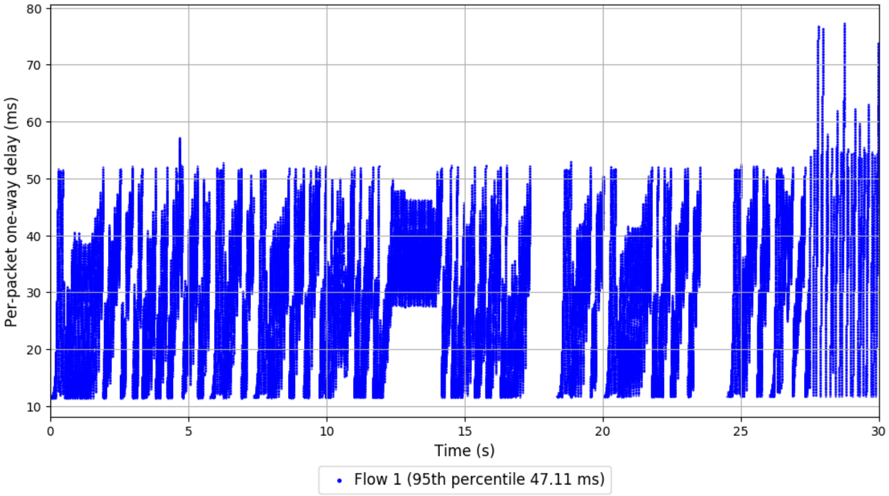




```
Run 8: Statistics of Verus

Start at: 2018-04-10 15:08:11
End at: 2018-04-10 15:08:41
Local clock offset: 0.057 ms
Remote clock offset: -1.781 ms

# Below is generated by plot.py at 2018-04-10 16:53:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.35 Mbit/s
95th percentile per-packet one-way delay: 47.106 ms
Loss rate: 28.34%
-- Flow 1:
Average throughput: 81.35 Mbit/s
95th percentile per-packet one-way delay: 47.106 ms
Loss rate: 28.34%
```

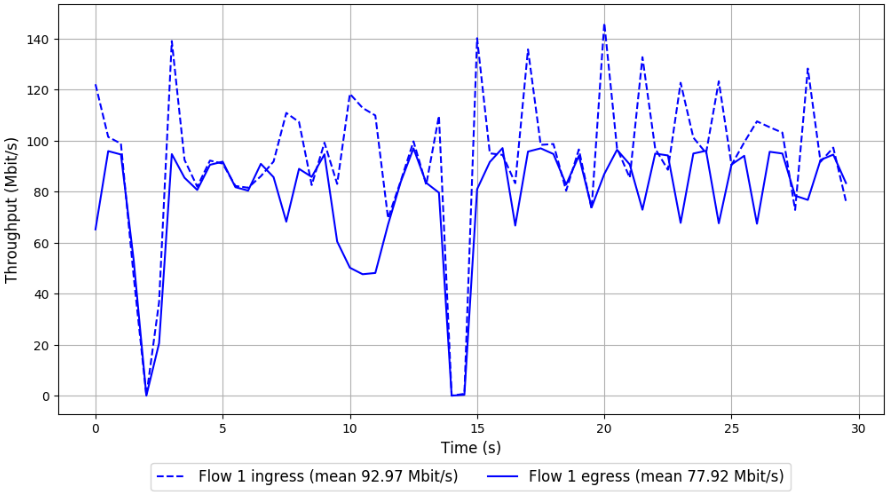
Run 8: Report of Verus — Data Link

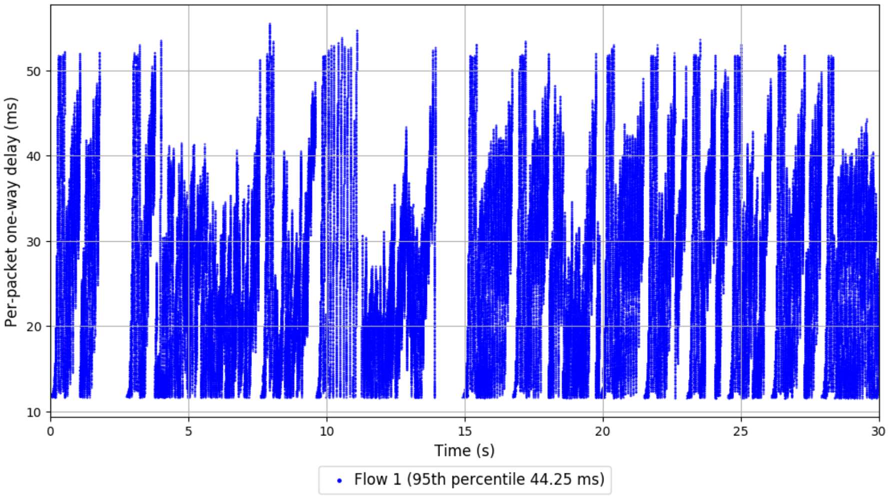




```
Run 9: Statistics of Verus

Start at: 2018-04-10 15:29:54
End at: 2018-04-10 15:30:24
Local clock offset: 0.435 ms
Remote clock offset: -4.171 ms

# Below is generated by plot.py at 2018-04-10 16:53:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.92 Mbit/s
95th percentile per-packet one-way delay: 44.251 ms
Loss rate: 16.16%
-- Flow 1:
Average throughput: 77.92 Mbit/s
95th percentile per-packet one-way delay: 44.251 ms
Loss rate: 16.16%
```

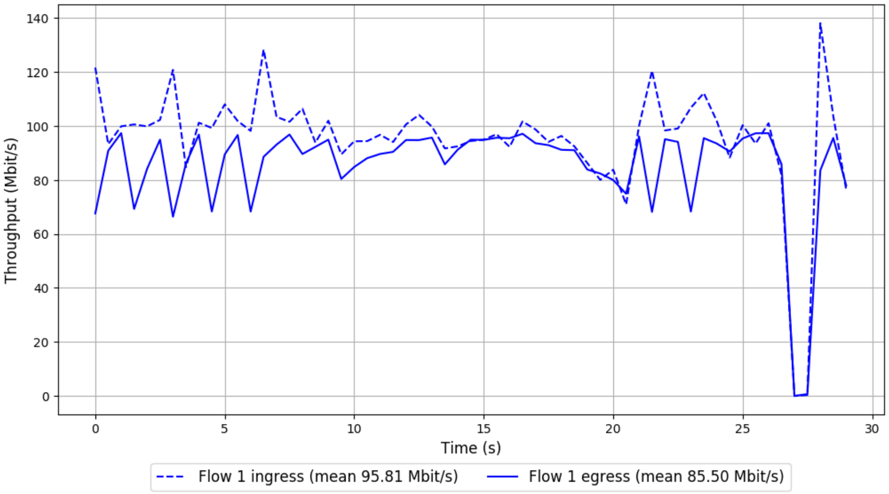
Run 9: Report of Verus — Data Link

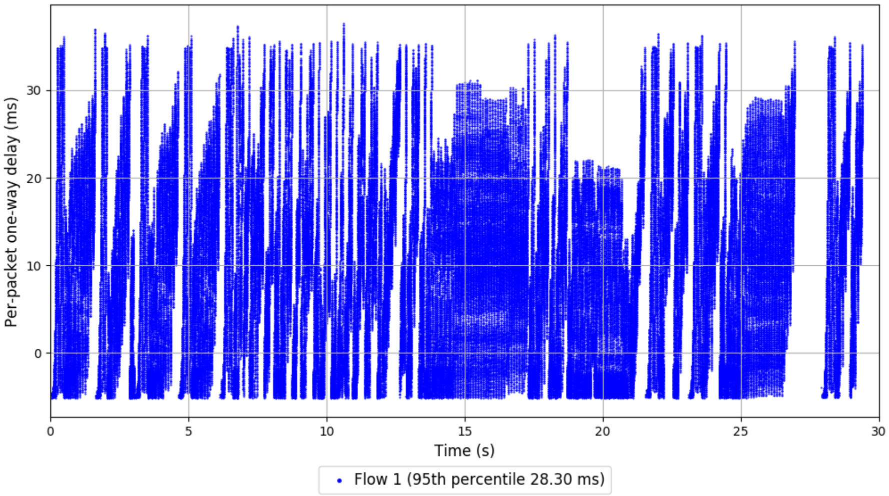




```
Run 10: Statistics of Verus

Start at: 2018-04-10 15:52:14
End at: 2018-04-10 15:52:44
Local clock offset: 0.974 ms
Remote clock offset: -19.514 ms

# Below is generated by plot.py at 2018-04-10 16:54:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.50 Mbit/s
95th percentile per-packet one-way delay: 28.304 ms
Loss rate: 10.65%
-- Flow 1:
Average throughput: 85.50 Mbit/s
95th percentile per-packet one-way delay: 28.304 ms
Loss rate: 10.65%
```

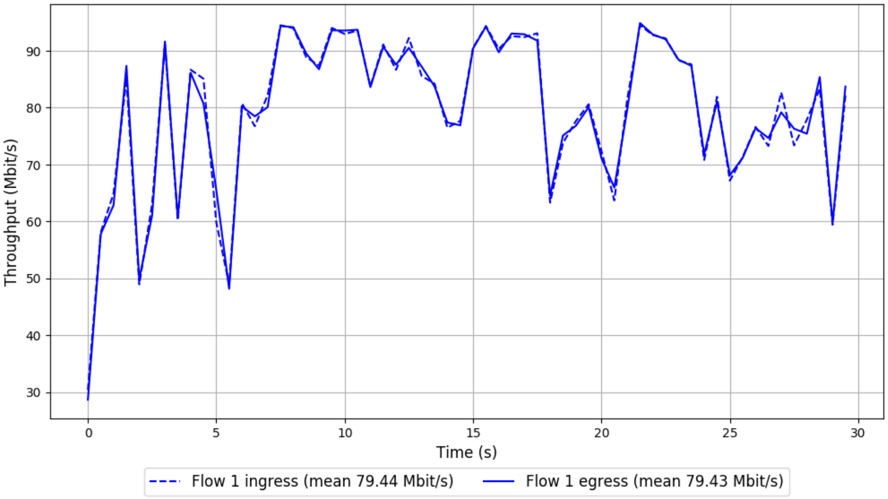
Run 10: Report of Verus — Data Link

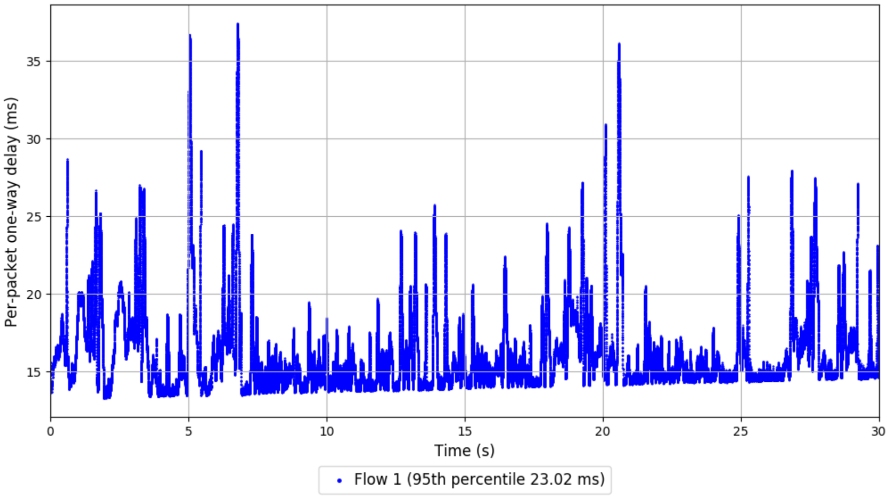




```
Run 1: Statistics of Copa

Start at: 2018-04-10 12:33:22
End at: 2018-04-10 12:33:52
Local clock offset: -0.281 ms
Remote clock offset: 21.149 ms

# Below is generated by plot.py at 2018-04-10 16:55:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.43 Mbit/s
95th percentile per-packet one-way delay: 23.023 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 79.43 Mbit/s
95th percentile per-packet one-way delay: 23.023 ms
Loss rate: 0.00%
```

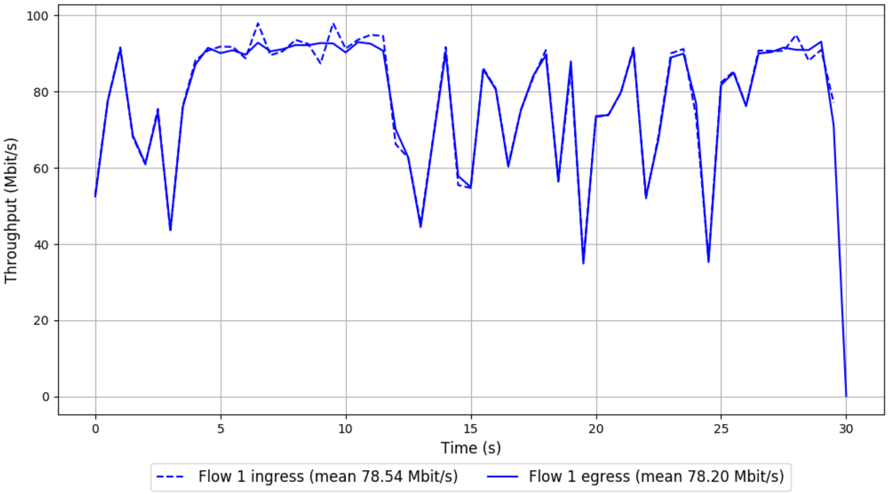
Run 1: Report of Copa — Data Link

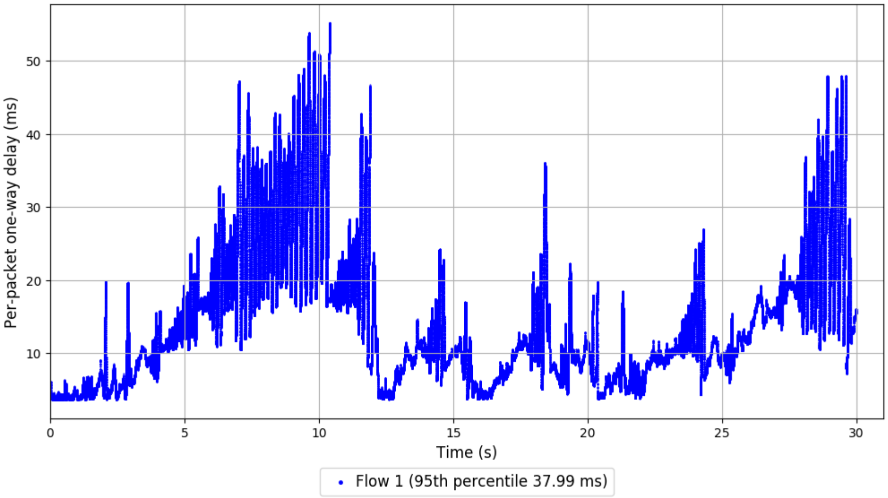




```
Run 2: Statistics of Copa

Start at: 2018-04-10 12:55:01
End at: 2018-04-10 12:55:31
Local clock offset: 0.101 ms
Remote clock offset: -12.932 ms

# Below is generated by plot.py at 2018-04-10 16:55:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.20 Mbit/s
95th percentile per-packet one-way delay: 37.986 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 78.20 Mbit/s
95th percentile per-packet one-way delay: 37.986 ms
Loss rate: 0.41%
```

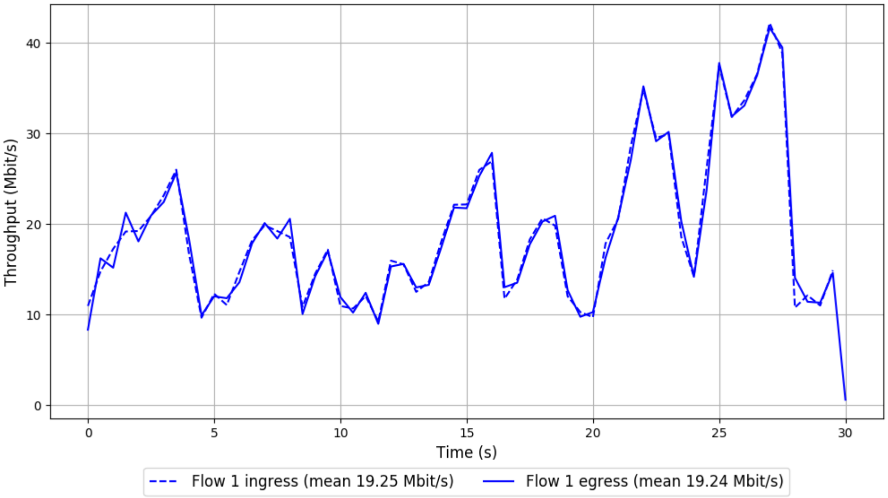
Run 2: Report of Copa — Data Link

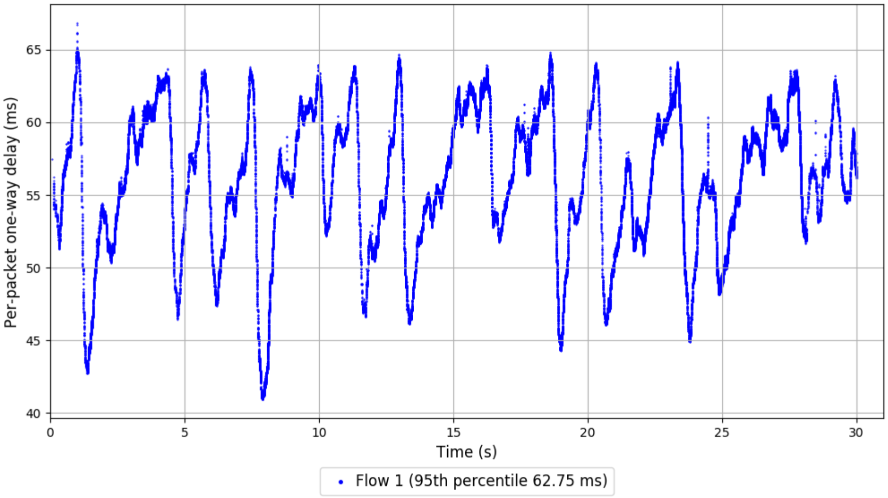




```
Run 3: Statistics of Copa

Start at: 2018-04-10 13:16:15
End at: 2018-04-10 13:16:45
Local clock offset: -0.125 ms
Remote clock offset: -2.466 ms

# Below is generated by plot.py at 2018-04-10 16:55:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 19.24 Mbit/s
95th percentile per-packet one-way delay: 62.751 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 19.24 Mbit/s
95th percentile per-packet one-way delay: 62.751 ms
Loss rate: 0.16%
```

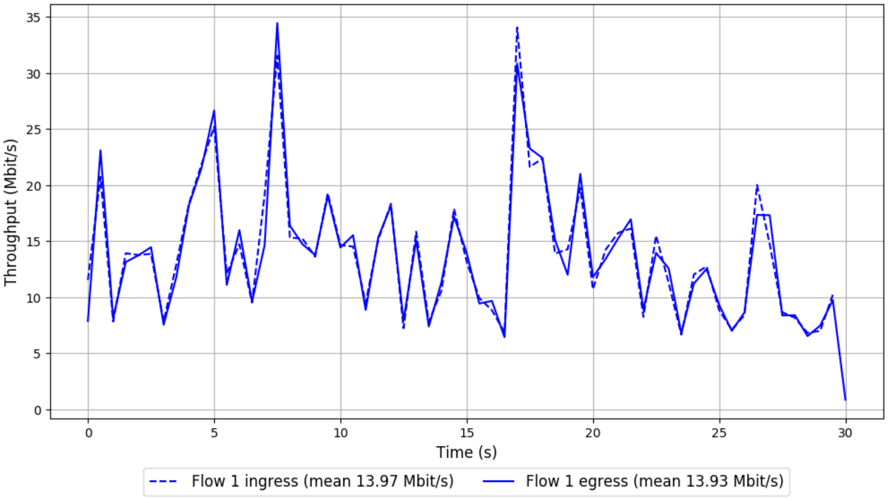
Run 3: Report of Copa — Data Link

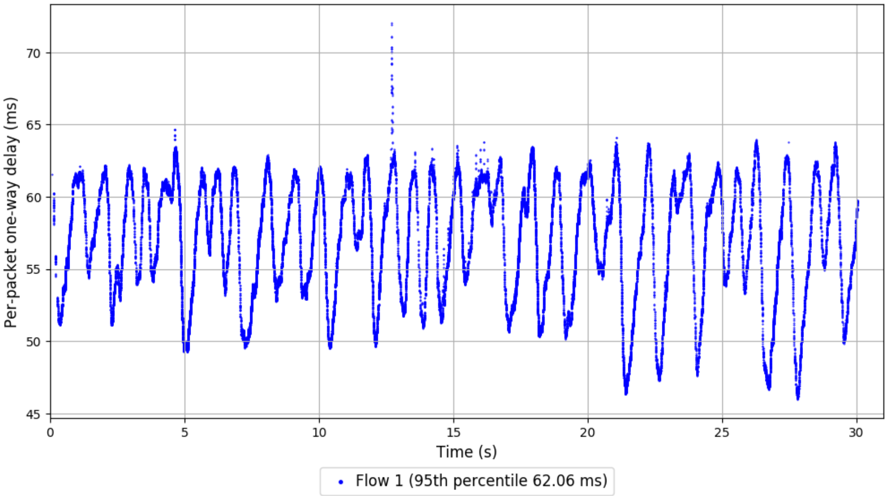




```
Run 4: Statistics of Copa

Start at: 2018-04-10 13:38:23
End at: 2018-04-10 13:38:53
Local clock offset: 0.257 ms
Remote clock offset: -2.866 ms

# Below is generated by plot.py at 2018-04-10 16:55:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.93 Mbit/s
95th percentile per-packet one-way delay: 62.063 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 13.93 Mbit/s
95th percentile per-packet one-way delay: 62.063 ms
Loss rate: 0.27%
```

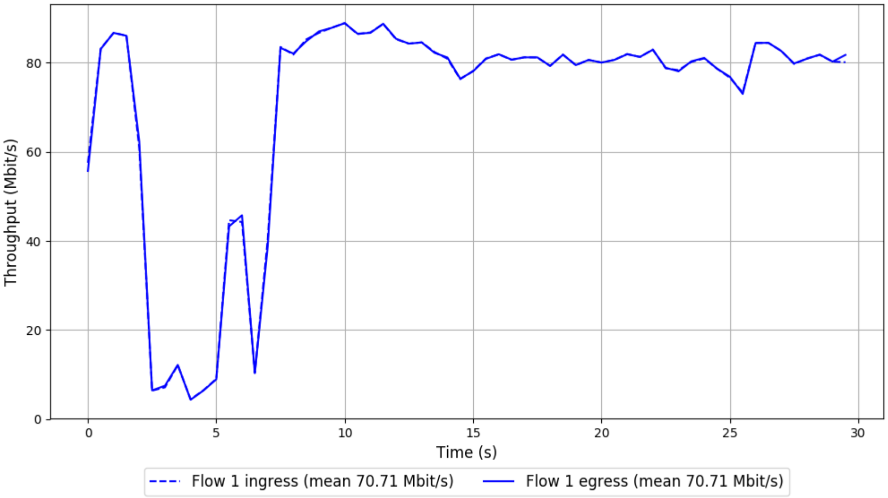
Run 4: Report of Copa — Data Link

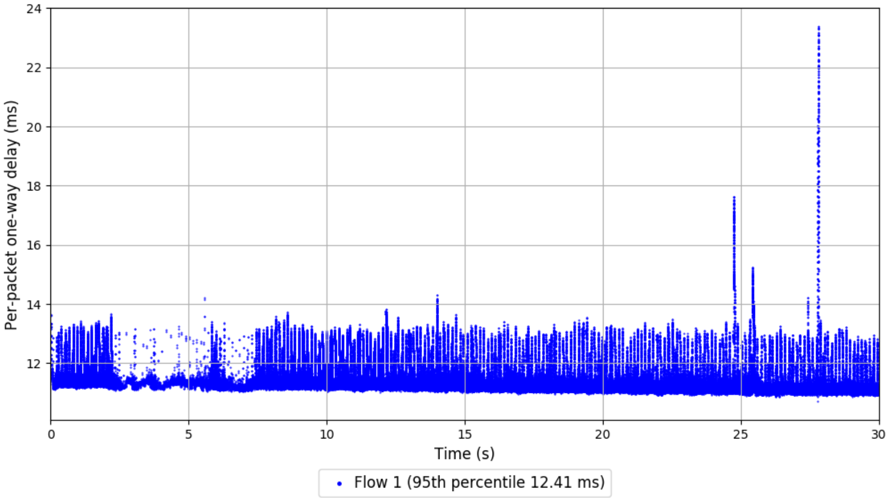




```
Run 5: Statistics of Copa

Start at: 2018-04-10 14:00:03
End at: 2018-04-10 14:00:33
Local clock offset: 0.953 ms
Remote clock offset: 20.487 ms

# Below is generated by plot.py at 2018-04-10 16:55:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.71 Mbit/s
95th percentile per-packet one-way delay: 12.406 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 70.71 Mbit/s
95th percentile per-packet one-way delay: 12.406 ms
Loss rate: 0.00%
```

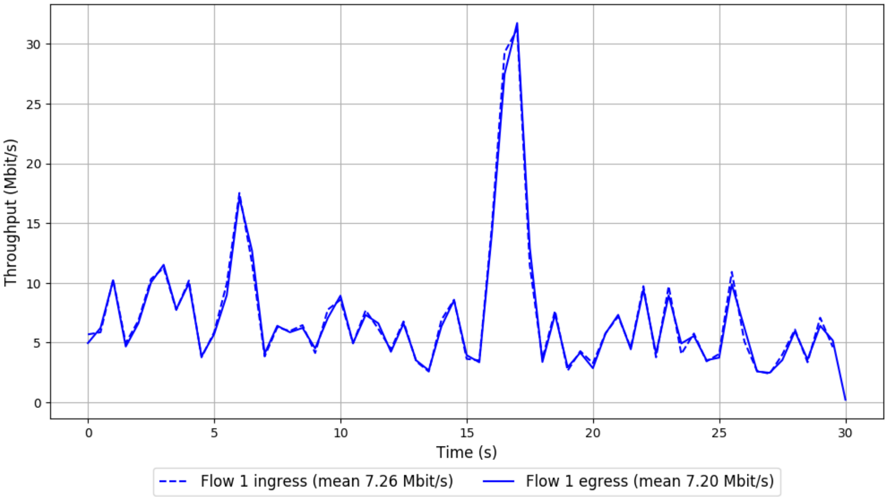
Run 5: Report of Copa — Data Link

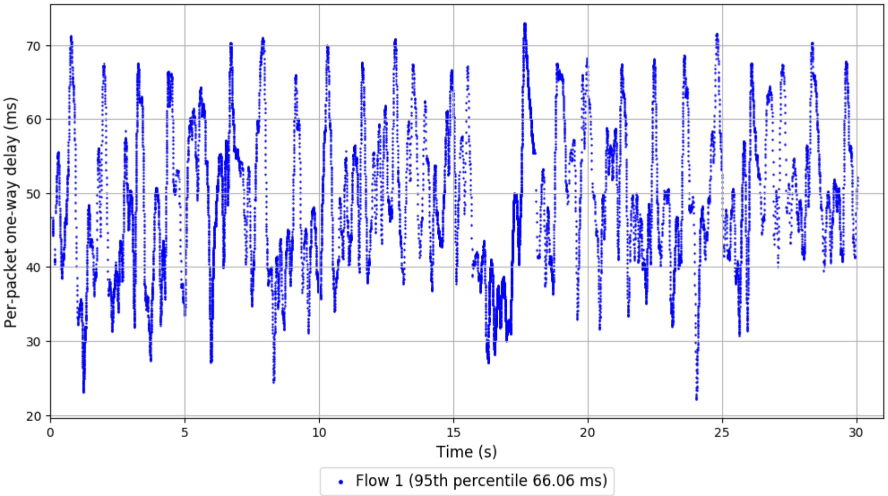




```
Run 6: Statistics of Copa

Start at: 2018-04-10 14:20:55
End at: 2018-04-10 14:21:25
Local clock offset: -0.651 ms
Remote clock offset: 28.49 ms

# Below is generated by plot.py at 2018-04-10 16:55:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.20 Mbit/s
95th percentile per-packet one-way delay: 66.058 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 7.20 Mbit/s
95th percentile per-packet one-way delay: 66.058 ms
Loss rate: 0.85%
```

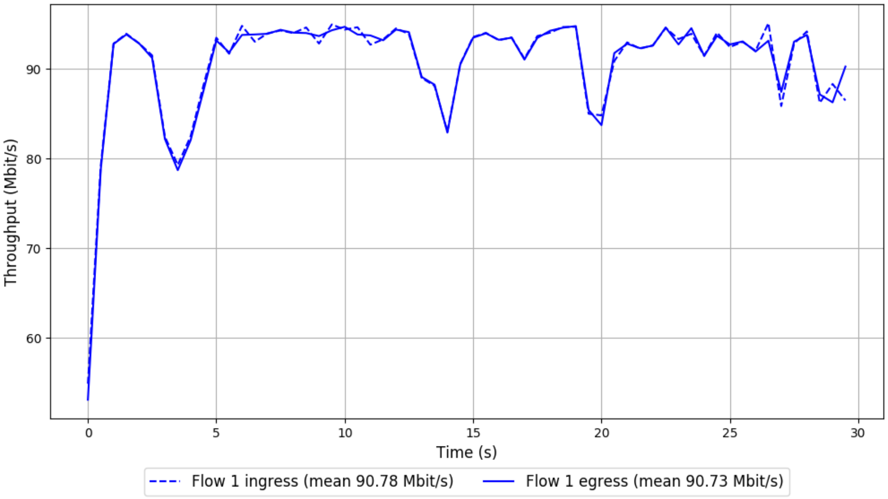
Run 6: Report of Copa — Data Link

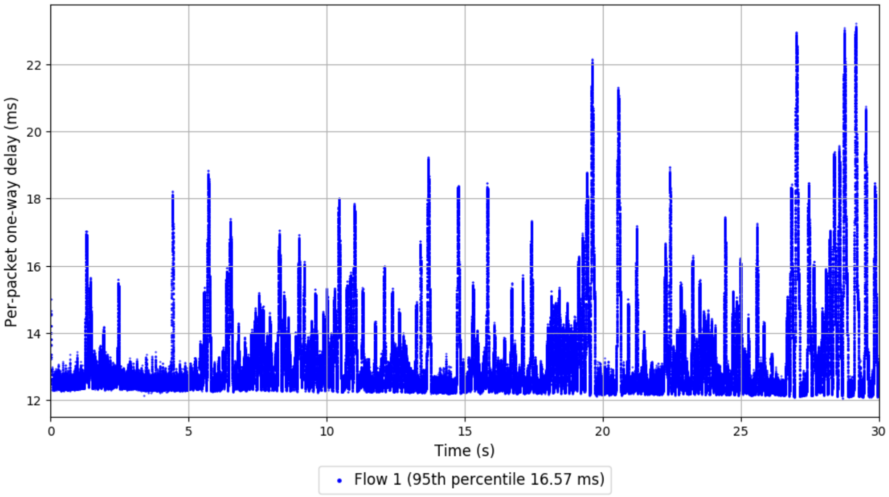




```
Run 7: Statistics of Copa

Start at: 2018-04-10 14:42:21
End at: 2018-04-10 14:42:51
Local clock offset: -1.907 ms
Remote clock offset: 34.703 ms

# Below is generated by plot.py at 2018-04-10 16:56:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.73 Mbit/s
95th percentile per-packet one-way delay: 16.575 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 90.73 Mbit/s
95th percentile per-packet one-way delay: 16.575 ms
Loss rate: 0.05%
```

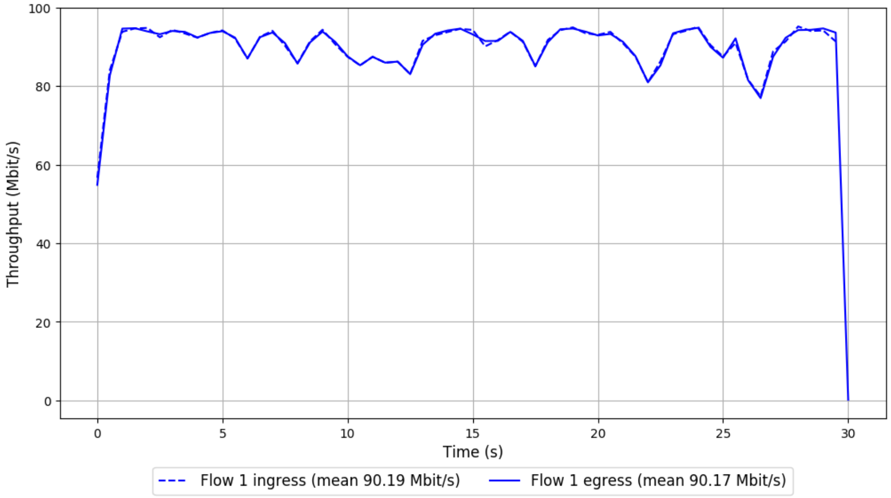
Run 7: Report of Copa — Data Link

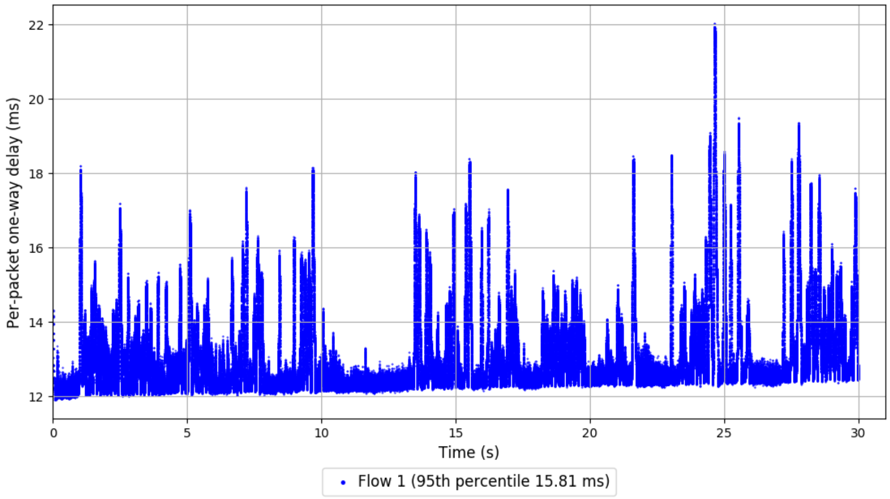




```
Run 8: Statistics of Copa

Start at: 2018-04-10 15:04:23
End at: 2018-04-10 15:04:53
Local clock offset: -0.561 ms
Remote clock offset: 1.425 ms

# Below is generated by plot.py at 2018-04-10 16:56:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.17 Mbit/s
95th percentile per-packet one-way delay: 15.810 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 90.17 Mbit/s
95th percentile per-packet one-way delay: 15.810 ms
Loss rate: 0.03%
```

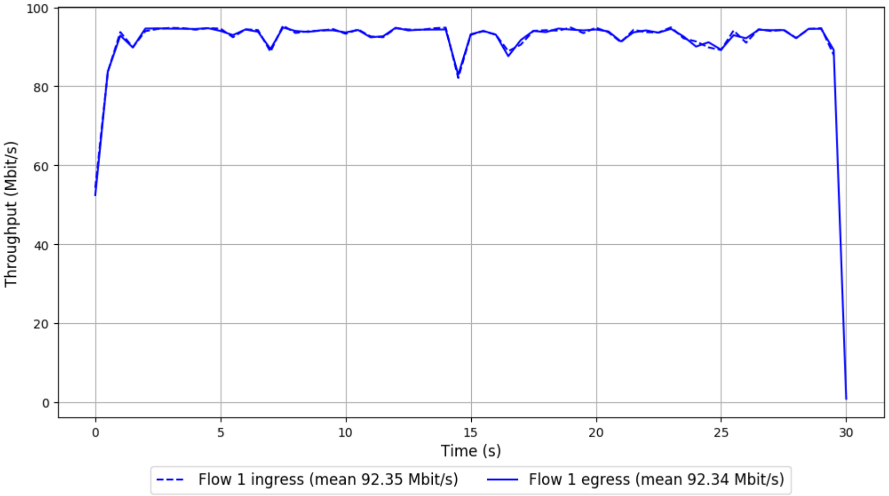
Run 8: Report of Copa — Data Link

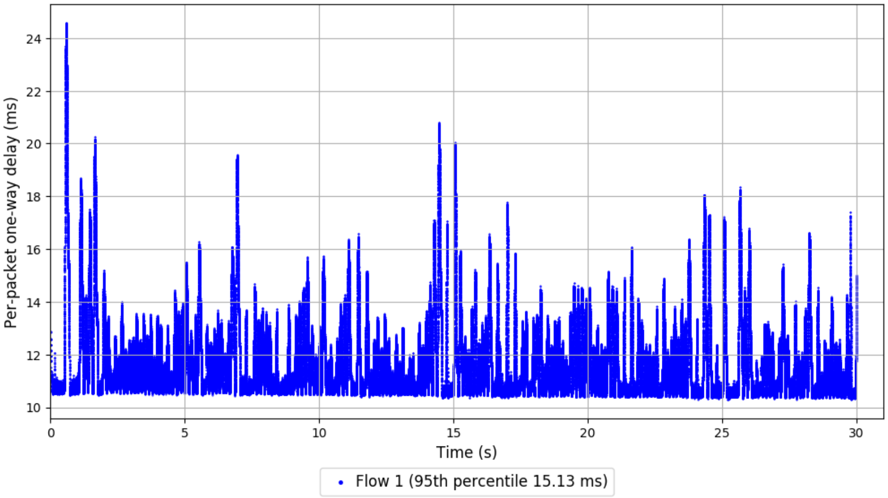




```
Run 9: Statistics of Copa

Start at: 2018-04-10 15:26:10
End at: 2018-04-10 15:26:40
Local clock offset: 0.959 ms
Remote clock offset: -5.578 ms

# Below is generated by plot.py at 2018-04-10 16:56:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.34 Mbit/s
95th percentile per-packet one-way delay: 15.128 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 92.34 Mbit/s
95th percentile per-packet one-way delay: 15.128 ms
Loss rate: 0.00%
```

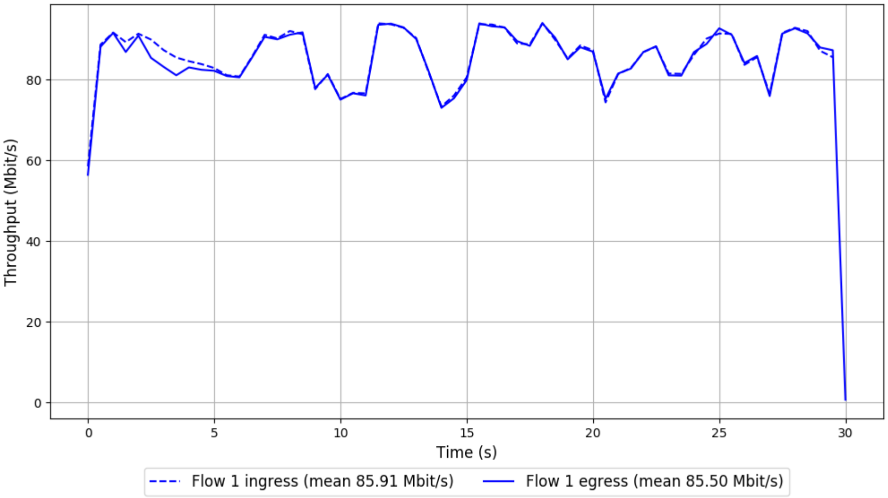
Run 9: Report of Copa — Data Link

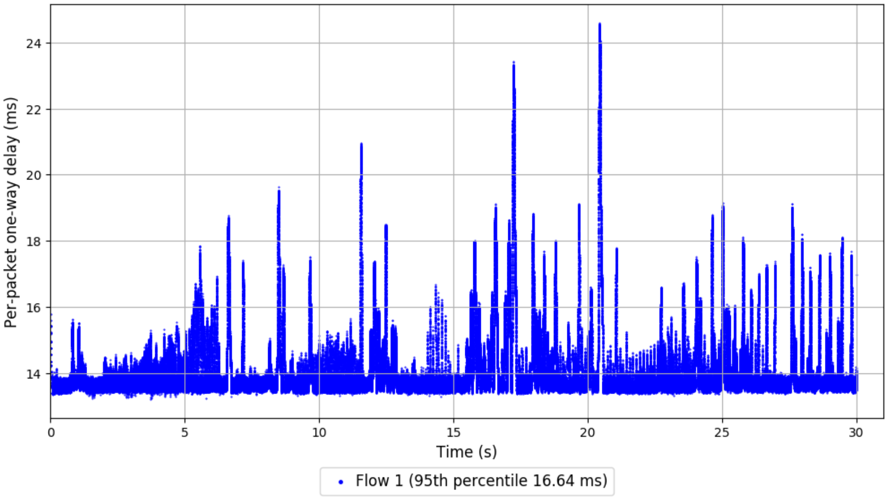




```
Run 10: Statistics of Copa

Start at: 2018-04-10 15:48:11
End at: 2018-04-10 15:48:41
Local clock offset: 0.427 ms
Remote clock offset: -1.403 ms

# Below is generated by plot.py at 2018-04-10 16:56:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.50 Mbit/s
95th percentile per-packet one-way delay: 16.643 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 85.50 Mbit/s
95th percentile per-packet one-way delay: 16.643 ms
Loss rate: 0.47%
```

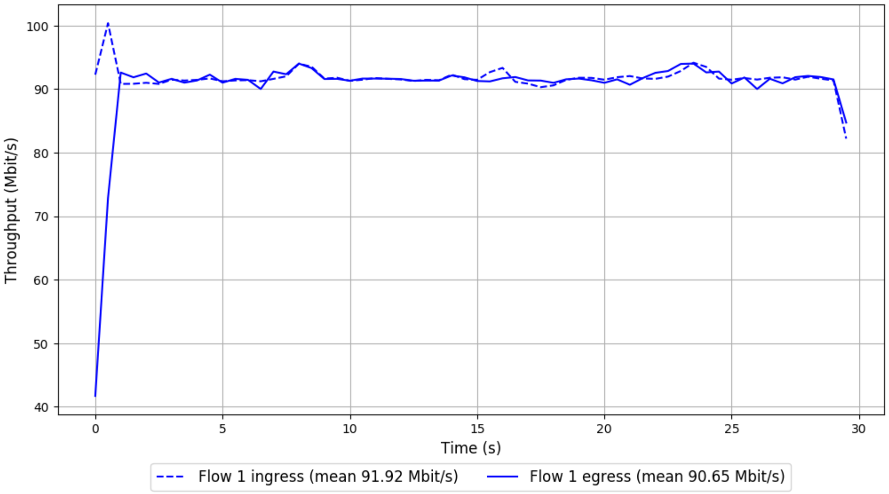
Run 10: Report of Copa — Data Link

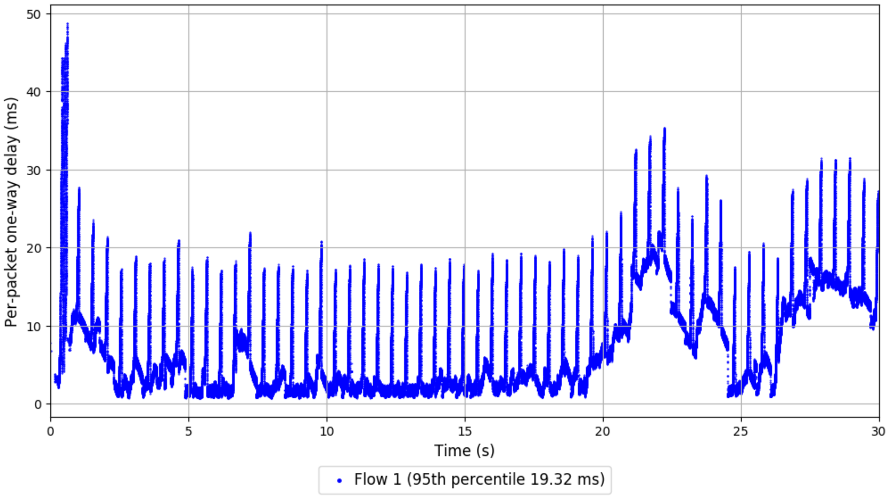




```
Run 1: Statistics of FillP

Start at: 2018-04-10 12:50:14
End at: 2018-04-10 12:50:44
Local clock offset: 0.276 ms
Remote clock offset: -13.207 ms

# Below is generated by plot.py at 2018-04-10 16:56:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.65 Mbit/s
95th percentile per-packet one-way delay: 19.318 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 90.65 Mbit/s
95th percentile per-packet one-way delay: 19.318 ms
Loss rate: 1.32%
```

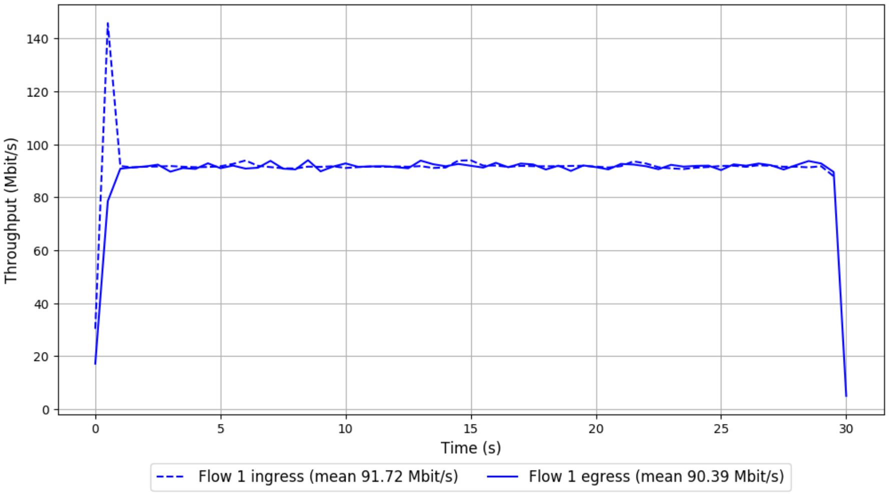
Run 1: Report of FillP — Data Link

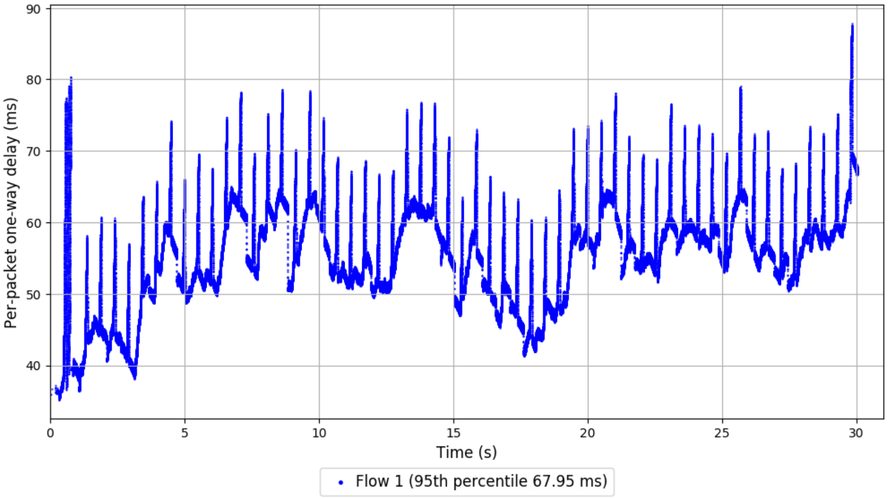




```
Run 2: Statistics of FillP

Start at: 2018-04-10 13:11:27
End at: 2018-04-10 13:11:57
Local clock offset: 0.095 ms
Remote clock offset: -3.156 ms

# Below is generated by plot.py at 2018-04-10 16:56:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.39 Mbit/s
95th percentile per-packet one-way delay: 67.948 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 90.39 Mbit/s
95th percentile per-packet one-way delay: 67.948 ms
Loss rate: 1.35%
```

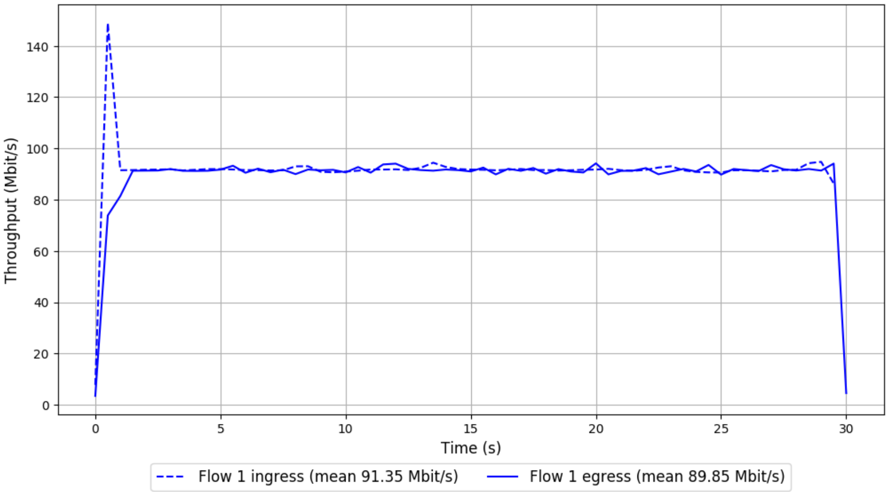
Run 2: Report of FillP — Data Link

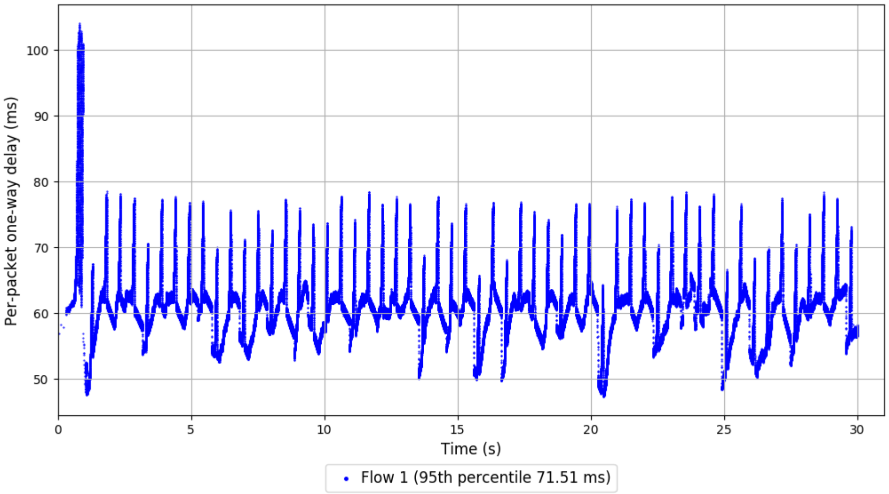




```
Run 3: Statistics of FillP

Start at: 2018-04-10 13:33:43
End at: 2018-04-10 13:34:13
Local clock offset: -0.212 ms
Remote clock offset: -2.721 ms

# Below is generated by plot.py at 2018-04-10 16:56:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.85 Mbit/s
95th percentile per-packet one-way delay: 71.509 ms
Loss rate: 1.64%
-- Flow 1:
Average throughput: 89.85 Mbit/s
95th percentile per-packet one-way delay: 71.509 ms
Loss rate: 1.64%
```

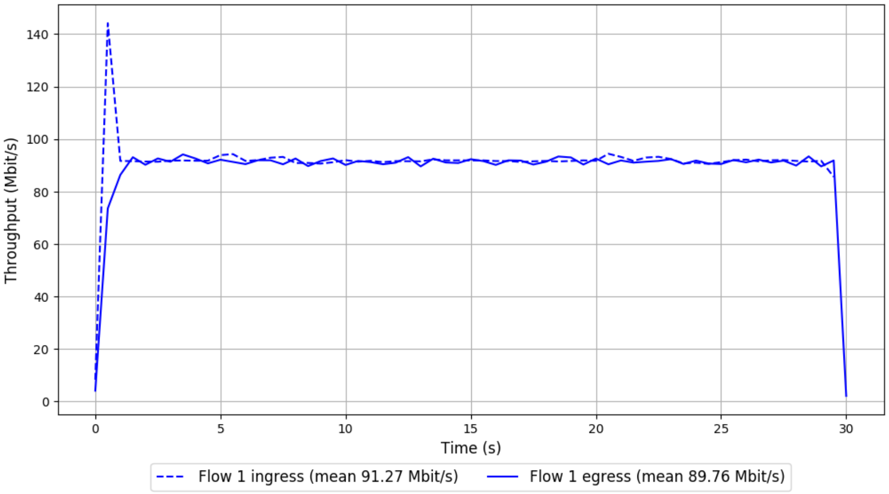
Run 3: Report of FillP — Data Link

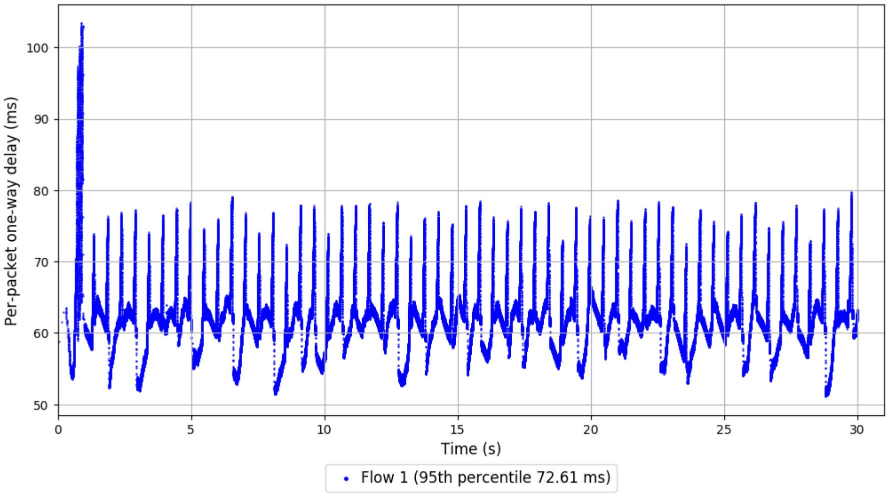




```
Run 4: Statistics of FillP

Start at: 2018-04-10 13:55:04
End at: 2018-04-10 13:55:34
Local clock offset: 1.097 ms
Remote clock offset: 17.759 ms

# Below is generated by plot.py at 2018-04-10 16:57:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.76 Mbit/s
95th percentile per-packet one-way delay: 72.615 ms
Loss rate: 1.70%
-- Flow 1:
Average throughput: 89.76 Mbit/s
95th percentile per-packet one-way delay: 72.615 ms
Loss rate: 1.70%
```

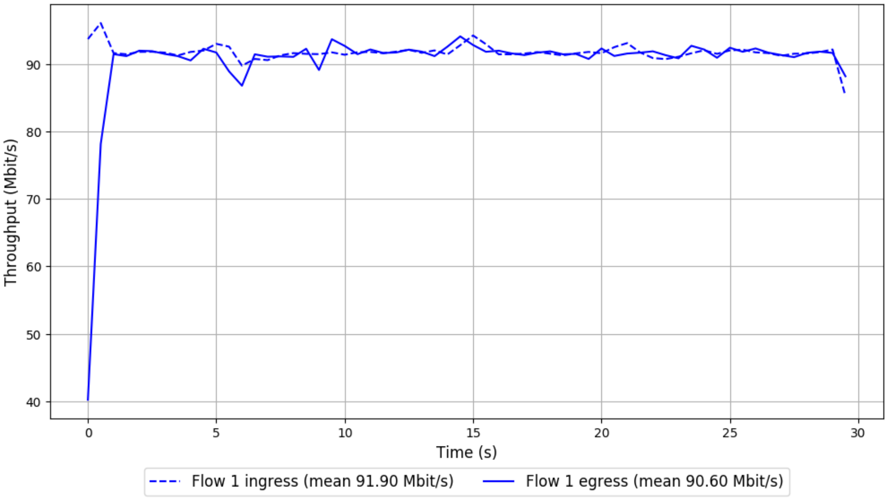
Run 4: Report of FillP — Data Link

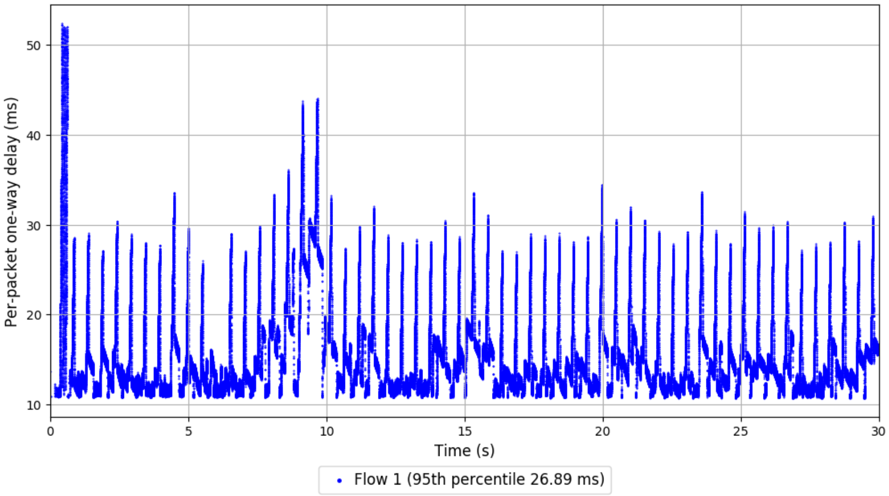




```
Run 5: Statistics of FillP

Start at: 2018-04-10 14:16:24
End at: 2018-04-10 14:16:54
Local clock offset: 0.261 ms
Remote clock offset: 27.628 ms

# Below is generated by plot.py at 2018-04-10 16:57:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.60 Mbit/s
95th percentile per-packet one-way delay: 26.886 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 90.60 Mbit/s
95th percentile per-packet one-way delay: 26.886 ms
Loss rate: 1.40%
```

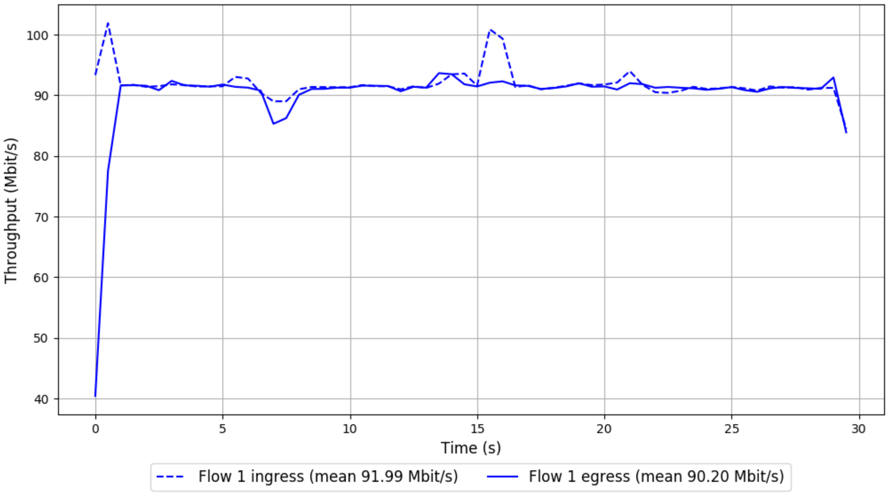
Run 5: Report of FillP — Data Link

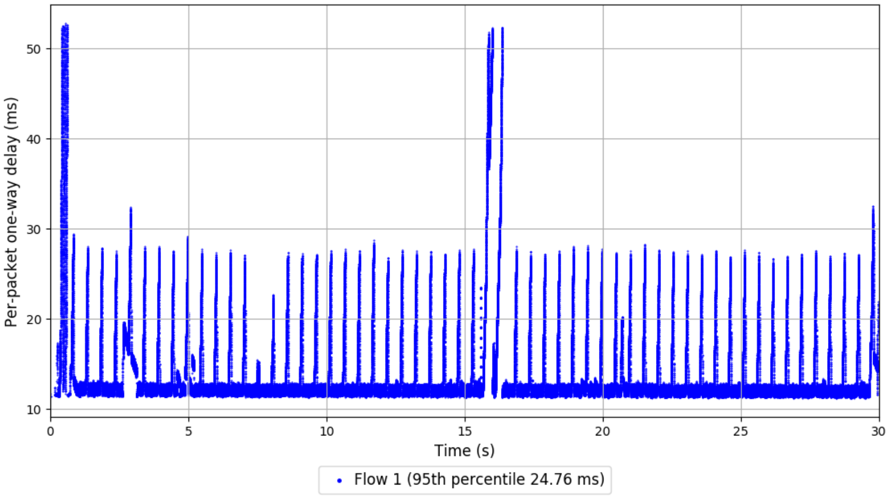




```
Run 6: Statistics of FillP

Start at: 2018-04-10 14:37:34
End at: 2018-04-10 14:38:04
Local clock offset: -1.282 ms
Remote clock offset: 32.61 ms

# Below is generated by plot.py at 2018-04-10 16:57:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.20 Mbit/s
95th percentile per-packet one-way delay: 24.758 ms
Loss rate: 1.92%
-- Flow 1:
Average throughput: 90.20 Mbit/s
95th percentile per-packet one-way delay: 24.758 ms
Loss rate: 1.92%
```

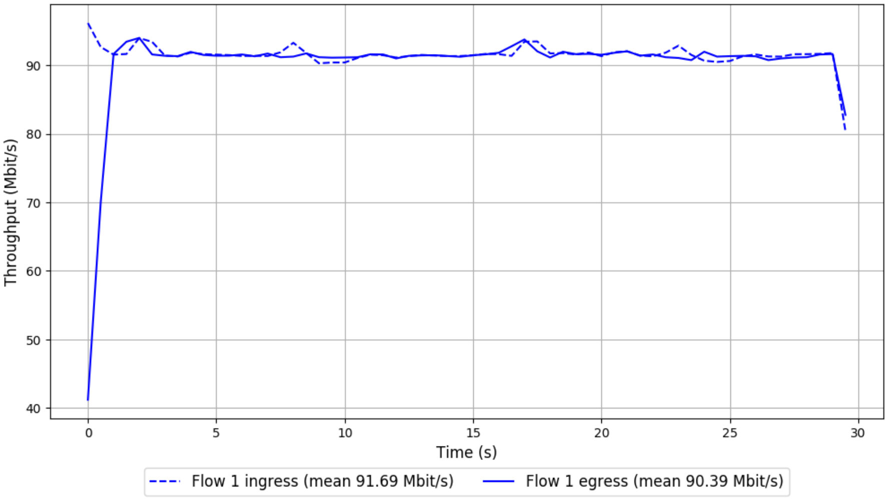
Run 6: Report of FillP — Data Link

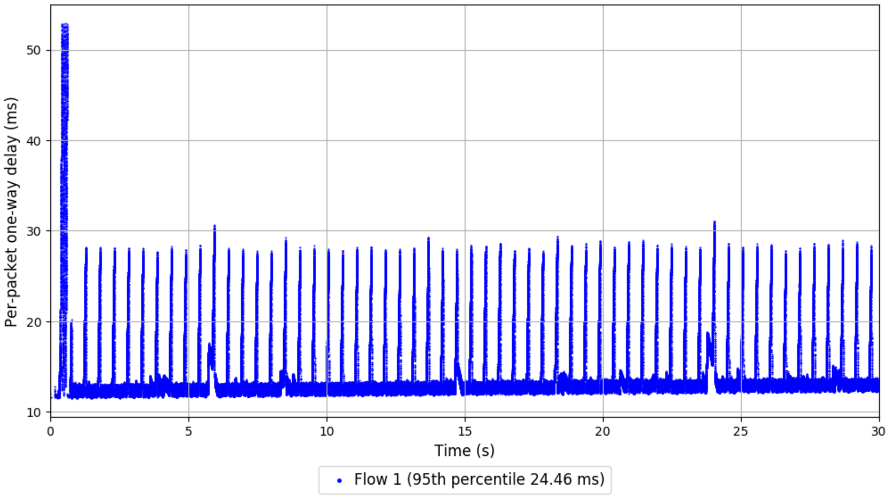




```
Run 7: Statistics of FillP

Start at: 2018-04-10 14:59:36
End at: 2018-04-10 15:00:06
Local clock offset: 0.165 ms
Remote clock offset: 6.884 ms

# Below is generated by plot.py at 2018-04-10 16:58:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.39 Mbit/s
95th percentile per-packet one-way delay: 24.460 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 90.39 Mbit/s
95th percentile per-packet one-way delay: 24.460 ms
Loss rate: 1.41%
```

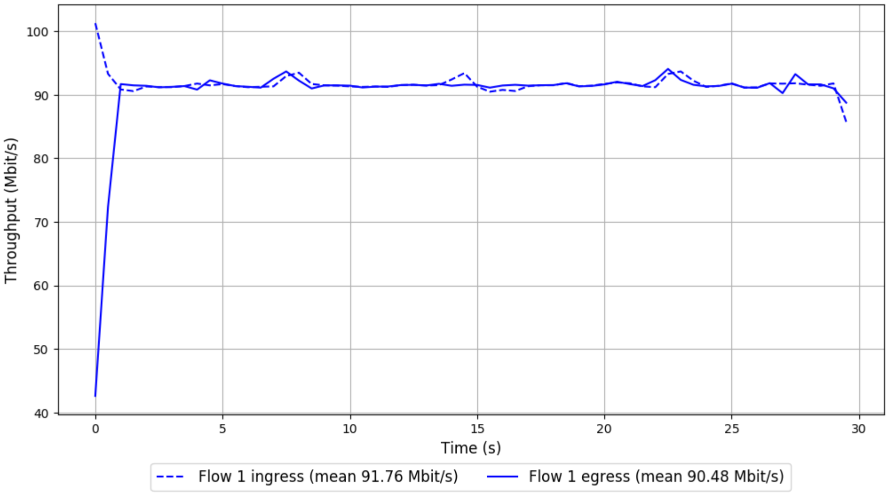
Run 7: Report of FillP — Data Link

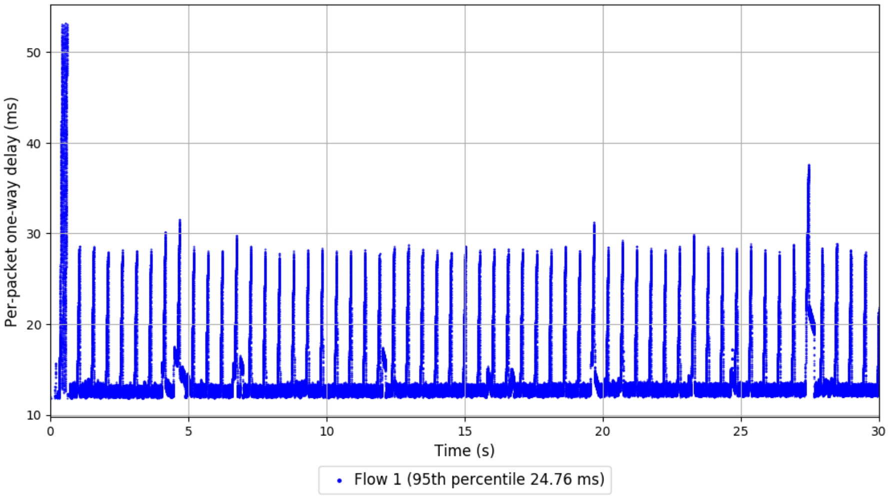




```
Run 8: Statistics of FillP

Start at: 2018-04-10 15:21:31
End at: 2018-04-10 15:22:01
Local clock offset: -0.206 ms
Remote clock offset: -7.058 ms

# Below is generated by plot.py at 2018-04-10 16:58:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.48 Mbit/s
95th percentile per-packet one-way delay: 24.758 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 90.48 Mbit/s
95th percentile per-packet one-way delay: 24.758 ms
Loss rate: 1.37%
```

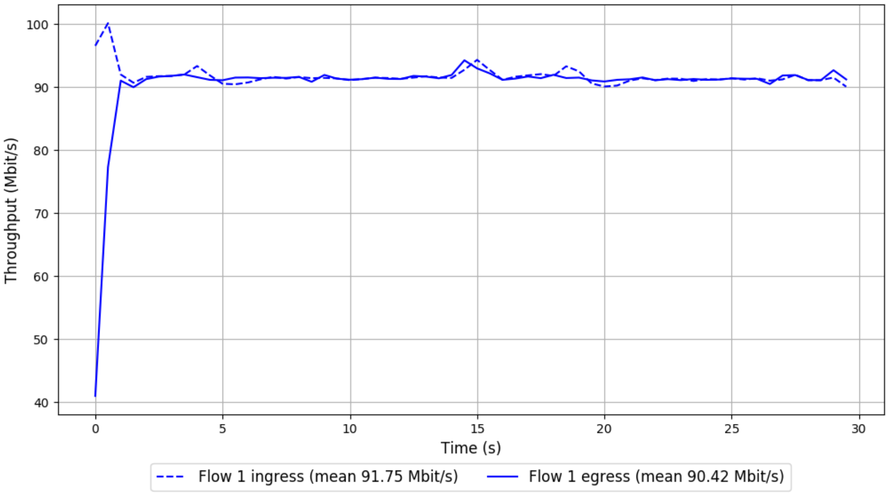
Run 8: Report of FillP — Data Link

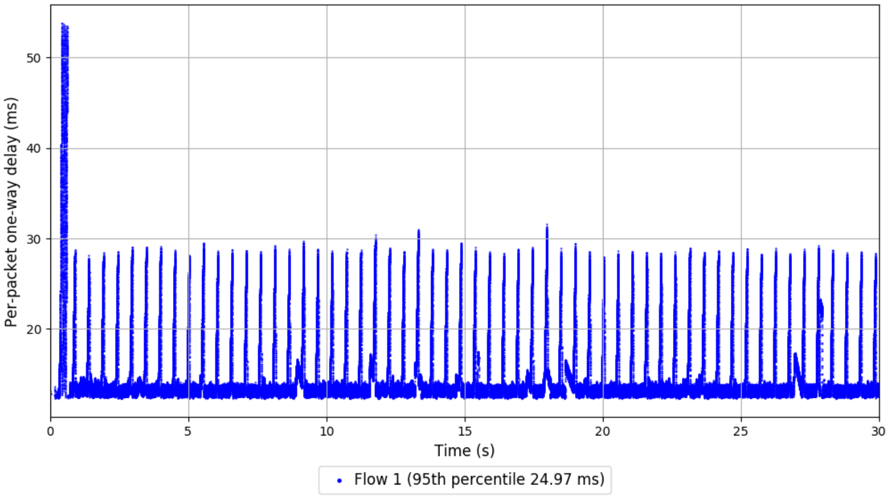




```
Run 9: Statistics of FillP

Start at: 2018-04-10 15:43:06
End at: 2018-04-10 15:43:36
Local clock offset: 0.465 ms
Remote clock offset: -2.087 ms

# Below is generated by plot.py at 2018-04-10 16:58:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.42 Mbit/s
95th percentile per-packet one-way delay: 24.971 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 90.42 Mbit/s
95th percentile per-packet one-way delay: 24.971 ms
Loss rate: 1.44%
```

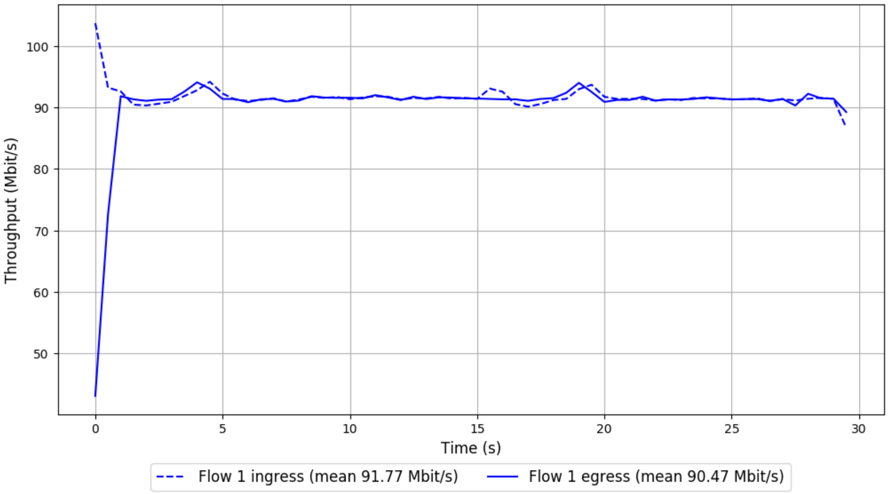
Run 9: Report of FillP — Data Link

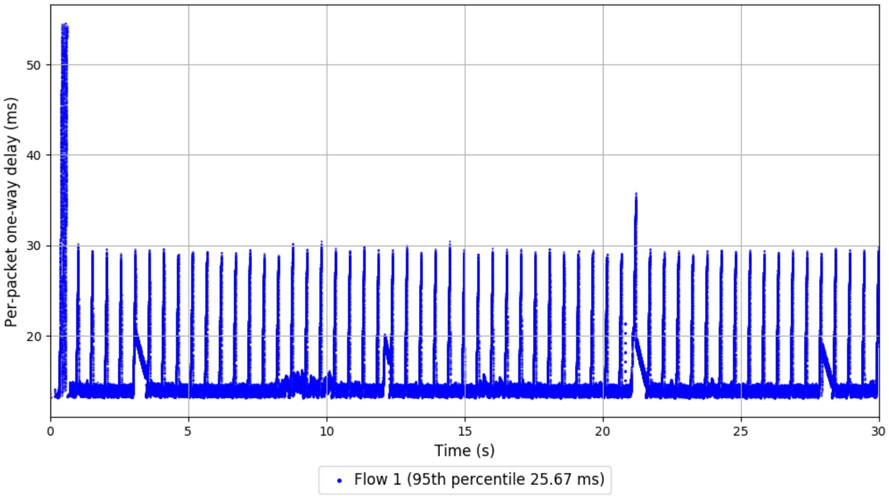




```
Run 10: Statistics of FillP

Start at: 2018-04-10 16:05:44
End at: 2018-04-10 16:06:14
Local clock offset: 0.799 ms
Remote clock offset: -0.718 ms

# Below is generated by plot.py at 2018-04-10 16:58:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.47 Mbit/s
95th percentile per-packet one-way delay: 25.671 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 90.47 Mbit/s
95th percentile per-packet one-way delay: 25.671 ms
Loss rate: 1.39%
```

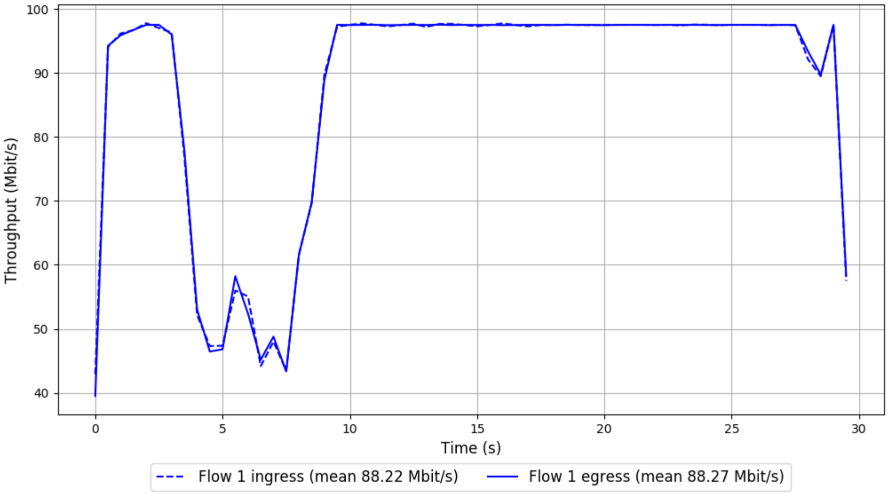
Run 10: Report of FillP — Data Link

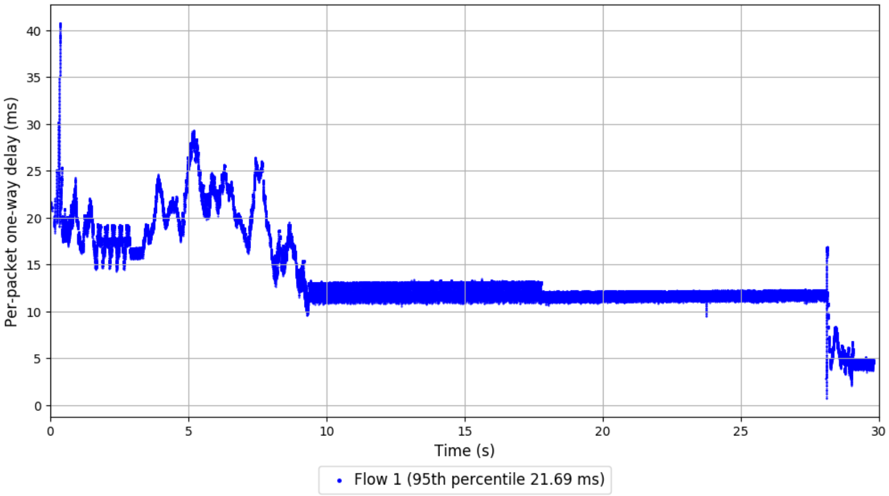




```
Run 1: Statistics of Indigo-1-32

Start at: 2018-04-10 12:43:58
End at: 2018-04-10 12:44:28
Local clock offset: 0.671 ms
Remote clock offset: -15.512 ms

# Below is generated by plot.py at 2018-04-10 16:58:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.27 Mbit/s
95th percentile per-packet one-way delay: 21.689 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 88.27 Mbit/s
95th percentile per-packet one-way delay: 21.689 ms
Loss rate: 0.00%
```

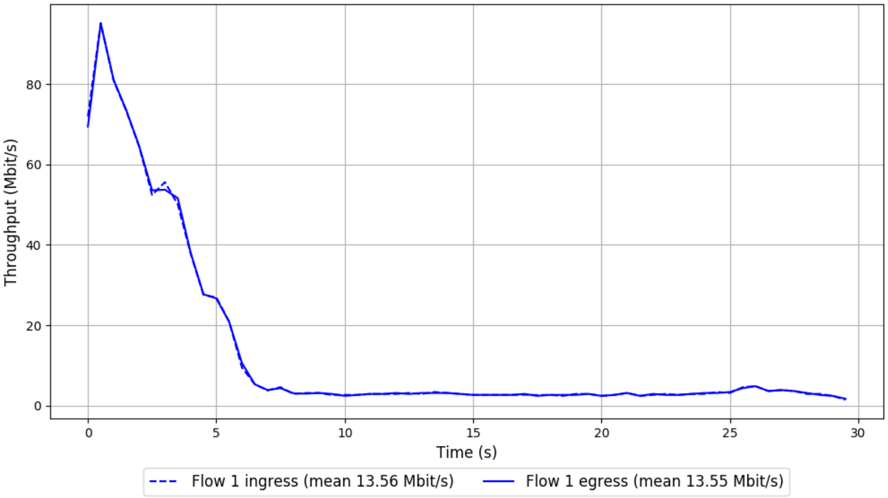
Run 1: Report of Indigo-1-32 — Data Link

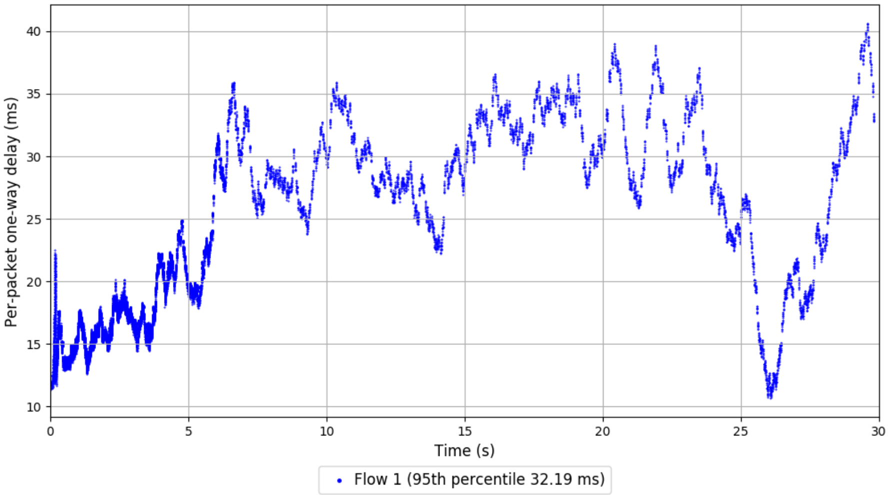




```
Run 2: Statistics of Indigo-1-32

Start at: 2018-04-10 13:05:35
End at: 2018-04-10 13:06:05
Local clock offset: 0.364 ms
Remote clock offset: -7.71 ms

# Below is generated by plot.py at 2018-04-10 16:58:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.55 Mbit/s
95th percentile per-packet one-way delay: 32.190 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.55 Mbit/s
95th percentile per-packet one-way delay: 32.190 ms
Loss rate: 0.00%
```

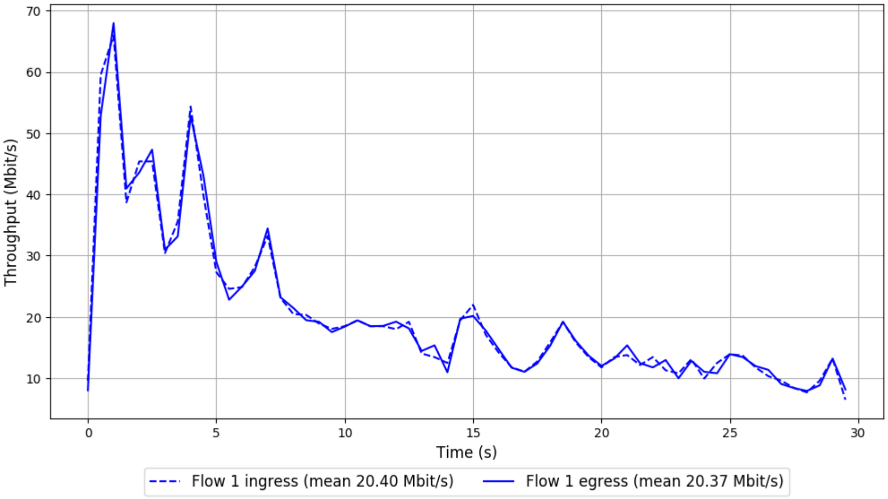
Run 2: Report of Indigo-1-32 — Data Link

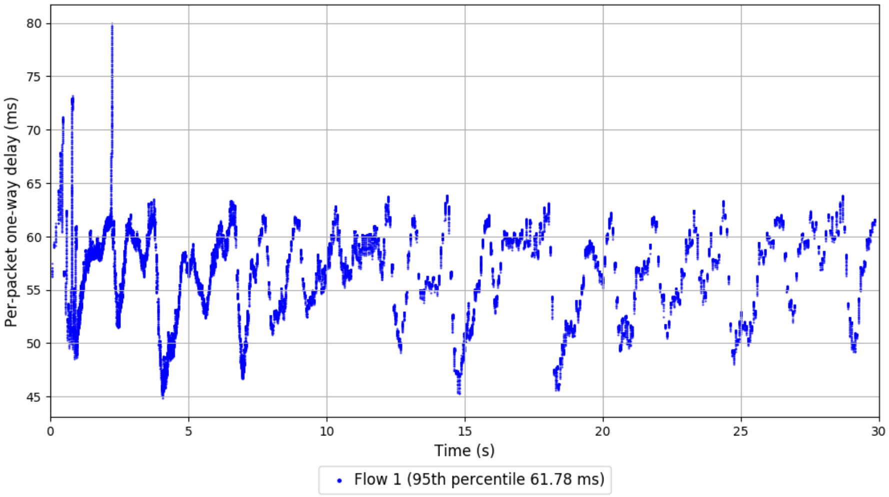




```
Run 3: Statistics of Indigo-1-32

Start at: 2018-04-10 13:27:32
End at: 2018-04-10 13:28:02
Local clock offset: 0.314 ms
Remote clock offset: -2.836 ms

# Below is generated by plot.py at 2018-04-10 16:58:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 20.37 Mbit/s
95th percentile per-packet one-way delay: 61.781 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 20.37 Mbit/s
95th percentile per-packet one-way delay: 61.781 ms
Loss rate: 0.11%
```

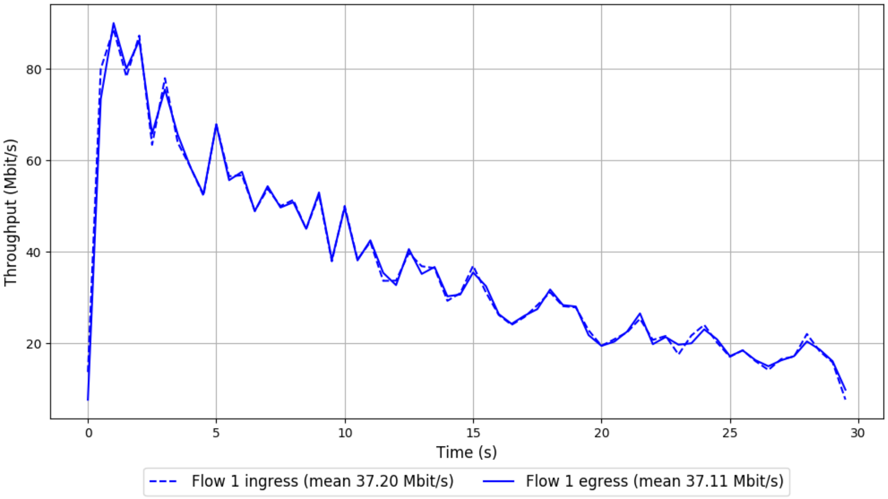
Run 3: Report of Indigo-1-32 — Data Link

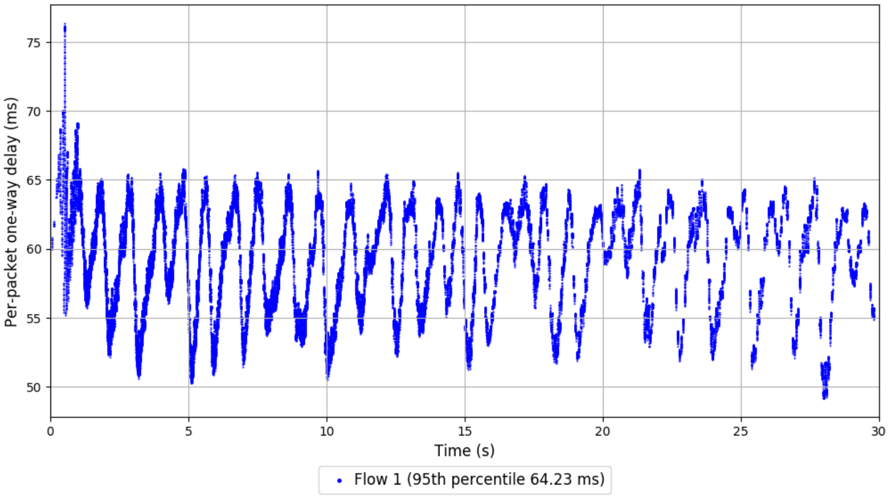




```
Run 4: Statistics of Indigo-1-32

Start at: 2018-04-10 13:49:01
End at: 2018-04-10 13:49:31
Local clock offset: 0.522 ms
Remote clock offset: 13.189 ms

# Below is generated by plot.py at 2018-04-10 16:58:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.11 Mbit/s
95th percentile per-packet one-way delay: 64.230 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 37.11 Mbit/s
95th percentile per-packet one-way delay: 64.230 ms
Loss rate: 0.27%
```

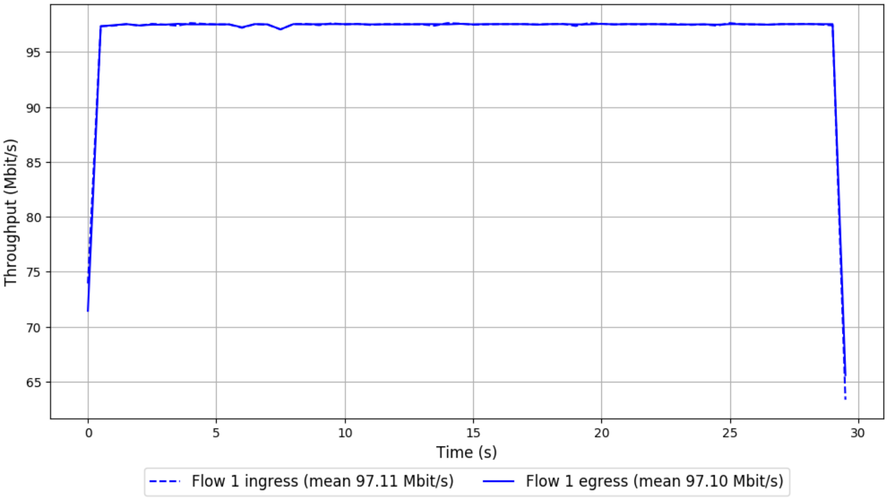
Run 4: Report of Indigo-1-32 — Data Link

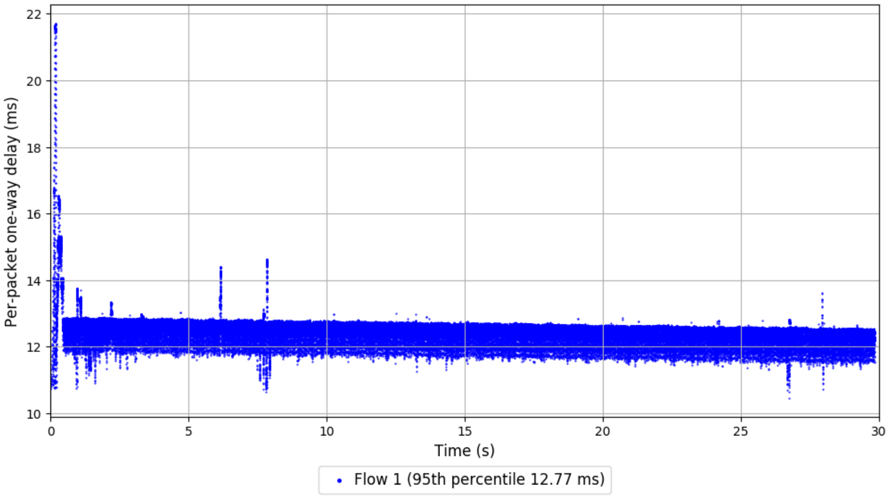




```
Run 5: Statistics of Indigo-1-32

Start at: 2018-04-10 14:10:36
End at: 2018-04-10 14:11:06
Local clock offset: 1.709 ms
Remote clock offset: 26.115 ms

# Below is generated by plot.py at 2018-04-10 16:59:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.10 Mbit/s
95th percentile per-packet one-way delay: 12.767 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 97.10 Mbit/s
95th percentile per-packet one-way delay: 12.767 ms
Loss rate: 0.00%
```

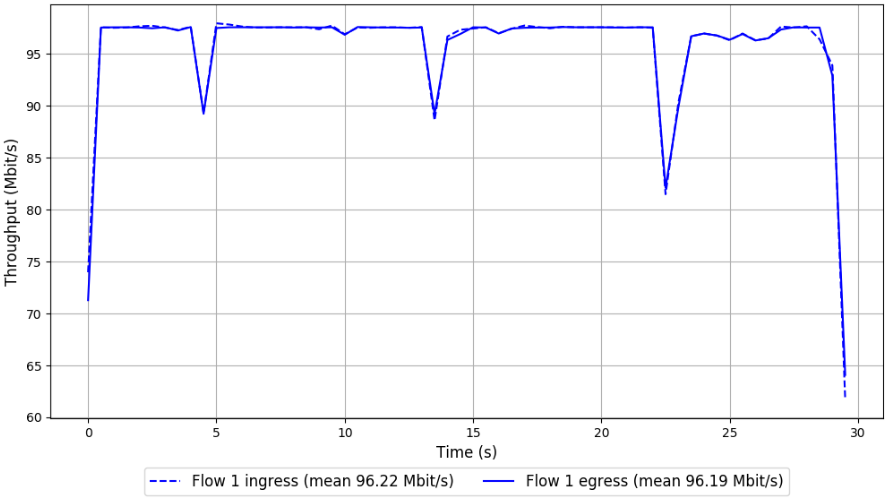
Run 5: Report of Indigo-1-32 — Data Link

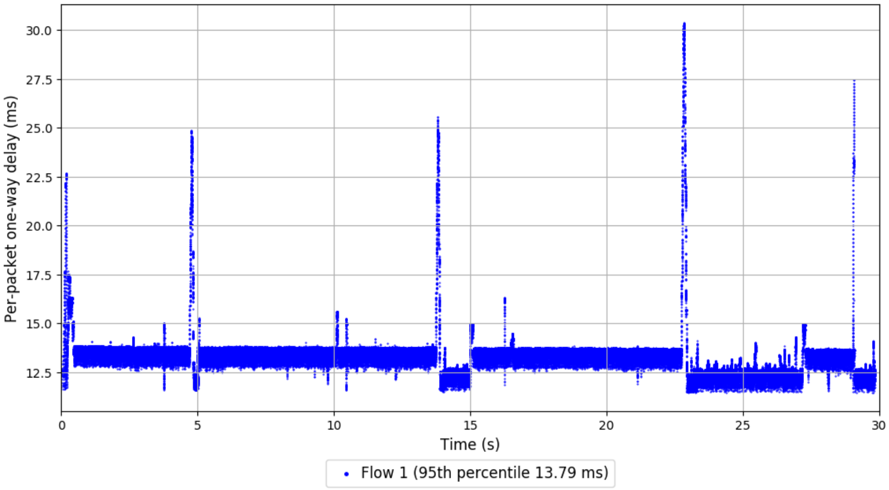




```
Run 6: Statistics of Indigo-1-32

Start at: 2018-04-10 14:31:32
End at: 2018-04-10 14:32:02
Local clock offset: -1.335 ms
Remote clock offset: 31.135 ms

# Below is generated by plot.py at 2018-04-10 16:59:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.19 Mbit/s
95th percentile per-packet one-way delay: 13.787 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 96.19 Mbit/s
95th percentile per-packet one-way delay: 13.787 ms
Loss rate: 0.03%
```

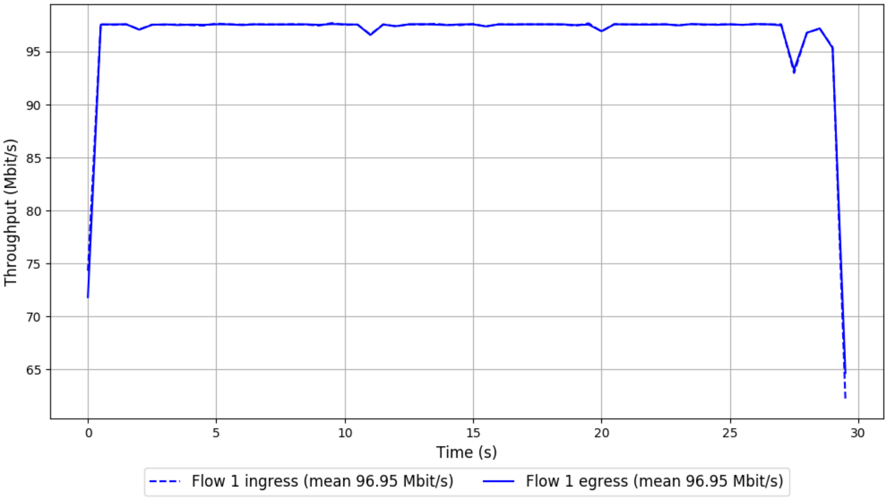
Run 6: Report of Indigo-1-32 — Data Link

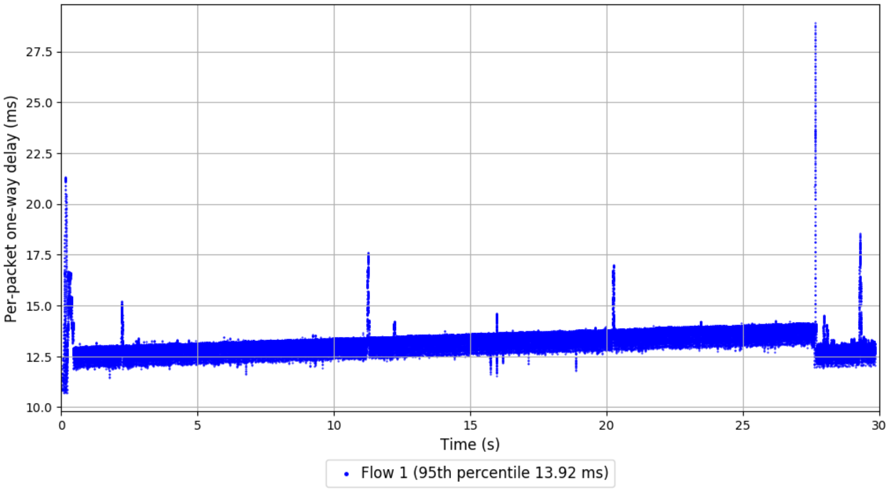




```
Run 7: Statistics of Indigo-1-32

Start at: 2018-04-10 14:53:30
End at: 2018-04-10 14:54:00
Local clock offset: -0.601 ms
Remote clock offset: 17.758 ms

# Below is generated by plot.py at 2018-04-10 16:59:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.95 Mbit/s
95th percentile per-packet one-way delay: 13.920 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 96.95 Mbit/s
95th percentile per-packet one-way delay: 13.920 ms
Loss rate: 0.00%
```

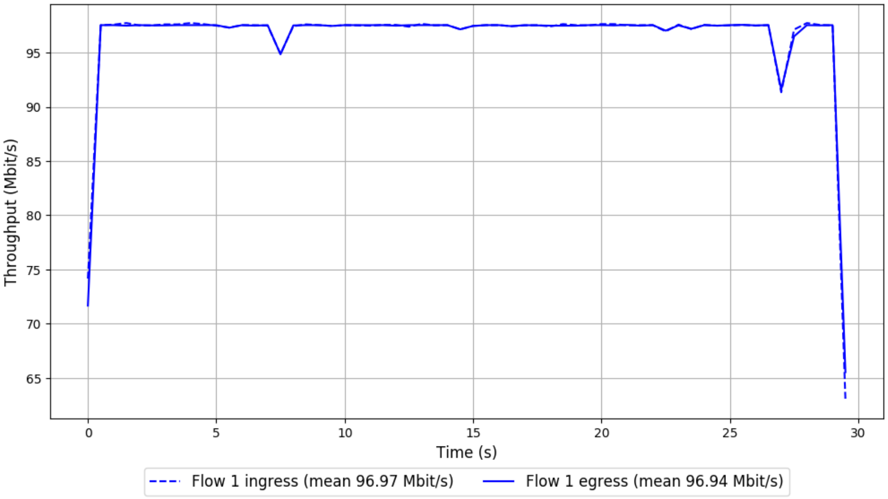
Run 7: Report of Indigo-1-32 — Data Link

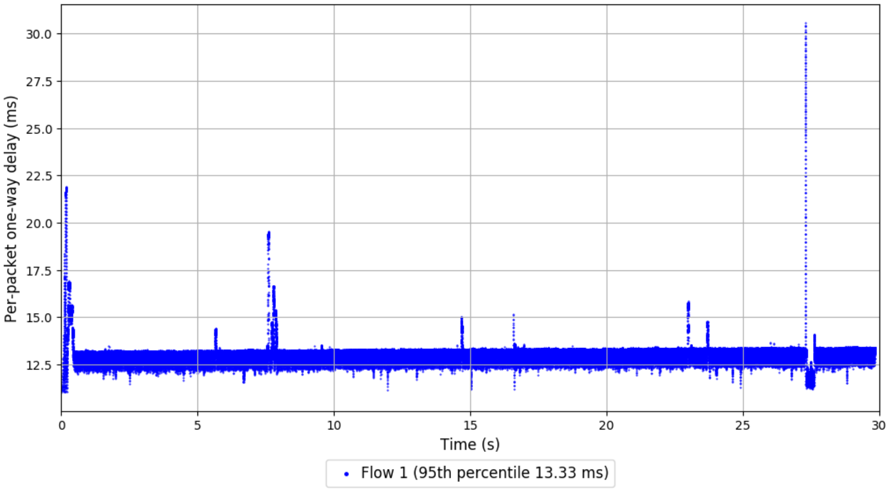




```
Run 8: Statistics of Indigo-1-32

Start at: 2018-04-10 15:15:22
End at: 2018-04-10 15:15:52
Local clock offset: -0.431 ms
Remote clock offset: -5.844 ms

# Below is generated by plot.py at 2018-04-10 16:59:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.94 Mbit/s
95th percentile per-packet one-way delay: 13.327 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 96.94 Mbit/s
95th percentile per-packet one-way delay: 13.327 ms
Loss rate: 0.03%
```

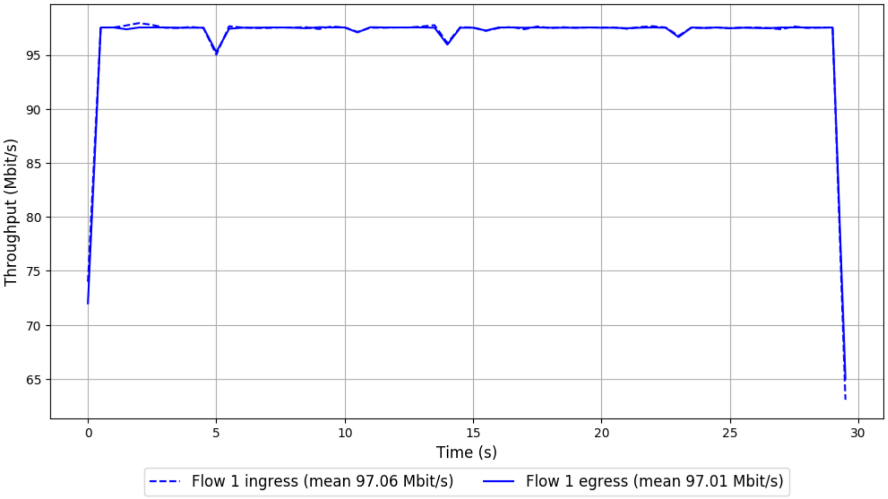
Run 8: Report of Indigo-1-32 — Data Link

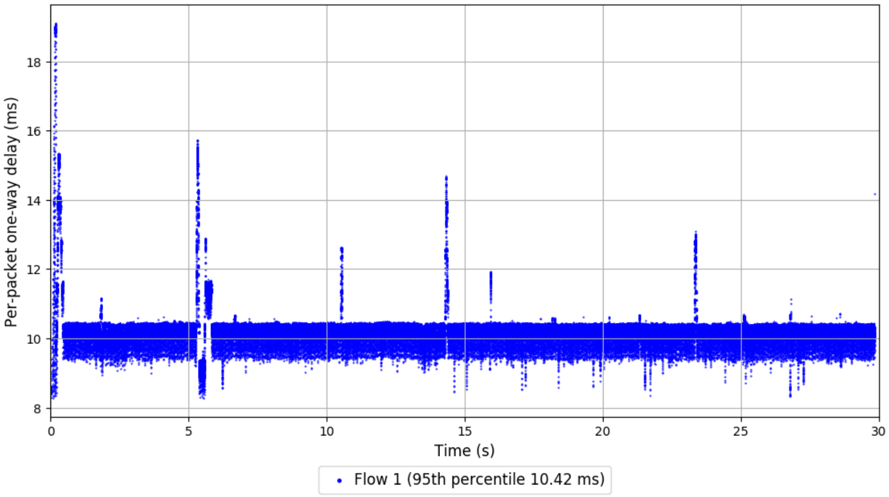




```
Run 9: Statistics of Indigo-1-32

Start at: 2018-04-10 15:37:00
End at: 2018-04-10 15:37:30
Local clock offset: -1.859 ms
Remote clock offset: -8.606 ms

# Below is generated by plot.py at 2018-04-10 16:59:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.01 Mbit/s
95th percentile per-packet one-way delay: 10.416 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 97.01 Mbit/s
95th percentile per-packet one-way delay: 10.416 ms
Loss rate: 0.03%
```

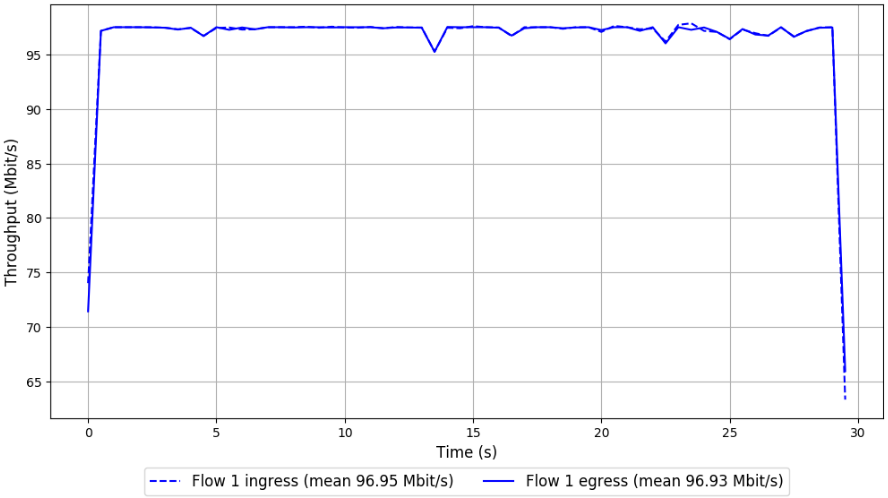
Run 9: Report of Indigo-1-32 — Data Link

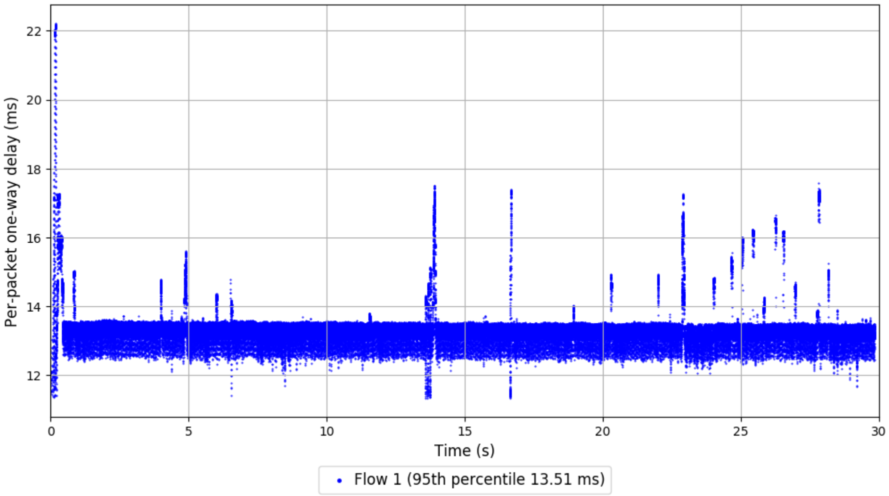




```
Run 10: Statistics of Indigo-1-32

Start at: 2018-04-10 15:59:32
End at: 2018-04-10 16:00:02
Local clock offset: 1.509 ms
Remote clock offset: -2.15 ms

# Below is generated by plot.py at 2018-04-10 16:59:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.93 Mbit/s
95th percentile per-packet one-way delay: 13.512 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 96.93 Mbit/s
95th percentile per-packet one-way delay: 13.512 ms
Loss rate: 0.01%
```

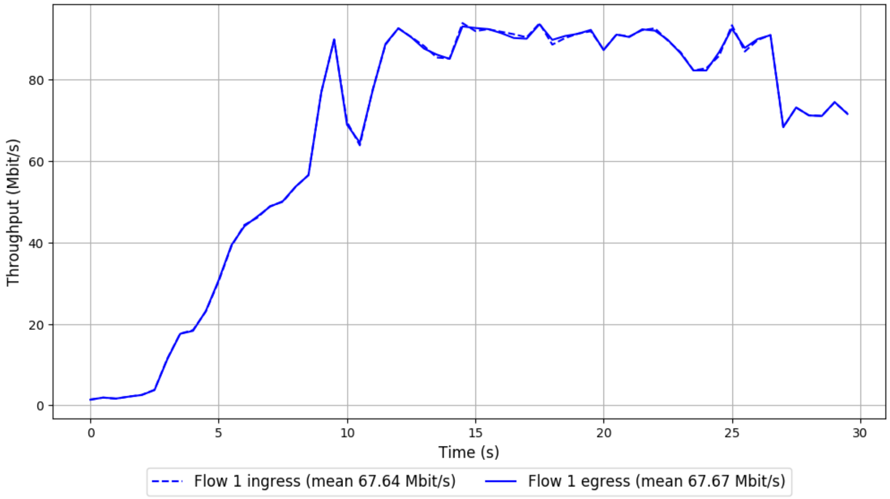
Run 10: Report of Indigo-1-32 — Data Link

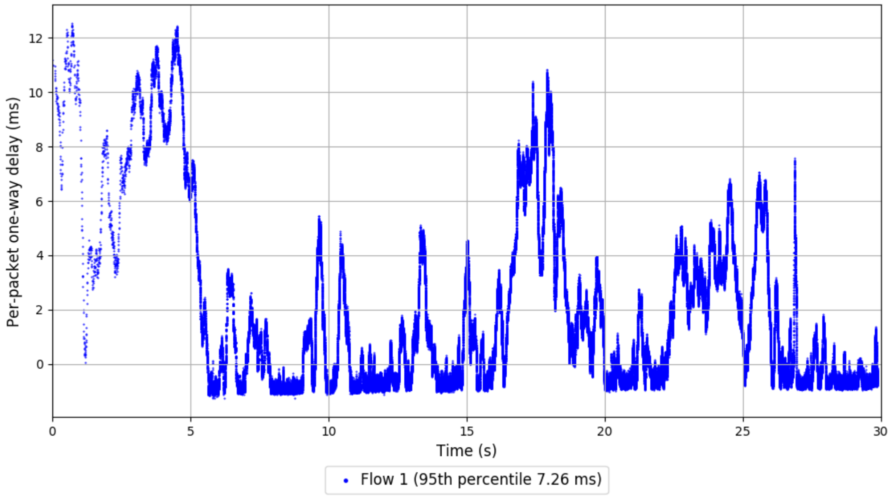




```
Run 1: Statistics of Vivace-latency

Start at: 2018-04-10 12:52:31
End at: 2018-04-10 12:53:01
Local clock offset: 0.361 ms
Remote clock offset: -15.944 ms

# Below is generated by plot.py at 2018-04-10 16:59:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.67 Mbit/s
95th percentile per-packet one-way delay: 7.263 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.67 Mbit/s
95th percentile per-packet one-way delay: 7.263 ms
Loss rate: 0.00%
```

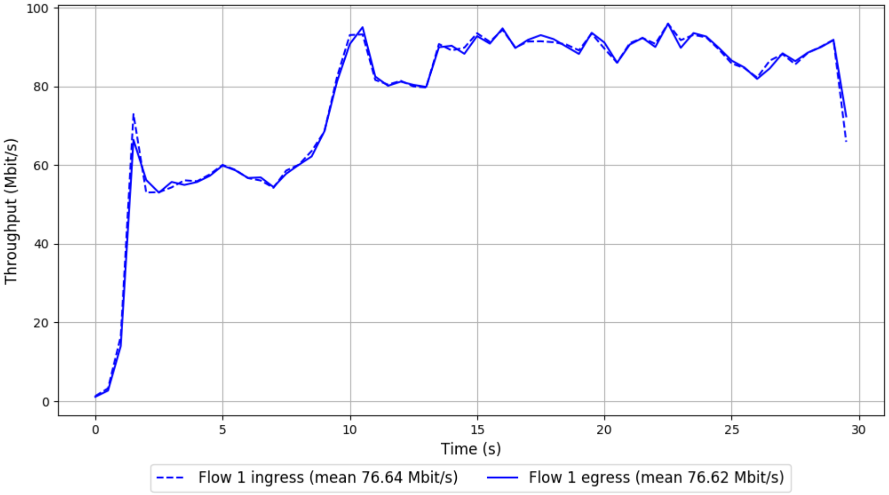
Run 1: Report of Vivace-latency — Data Link

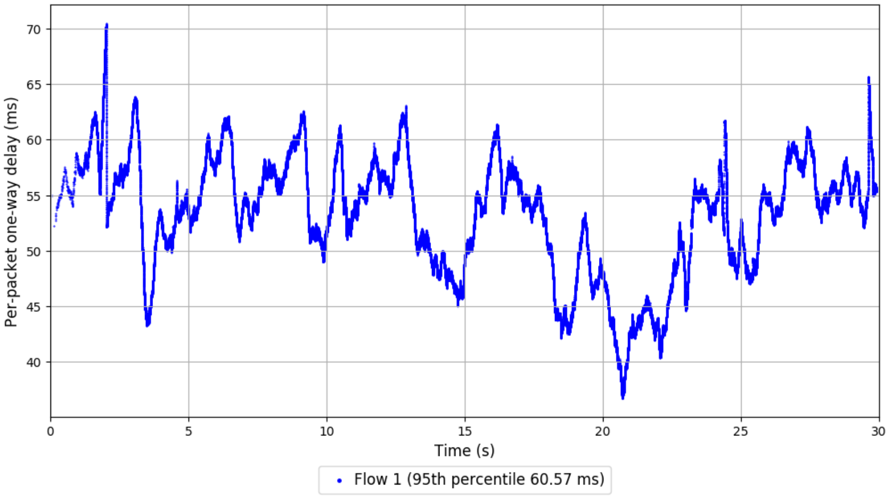




```
Run 2: Statistics of Vivace-latency

Start at: 2018-04-10 13:13:45
End at: 2018-04-10 13:14:15
Local clock offset: 0.699 ms
Remote clock offset: -3.216 ms

# Below is generated by plot.py at 2018-04-10 16:59:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.62 Mbit/s
95th percentile per-packet one-way delay: 60.566 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 76.62 Mbit/s
95th percentile per-packet one-way delay: 60.566 ms
Loss rate: 0.10%
```

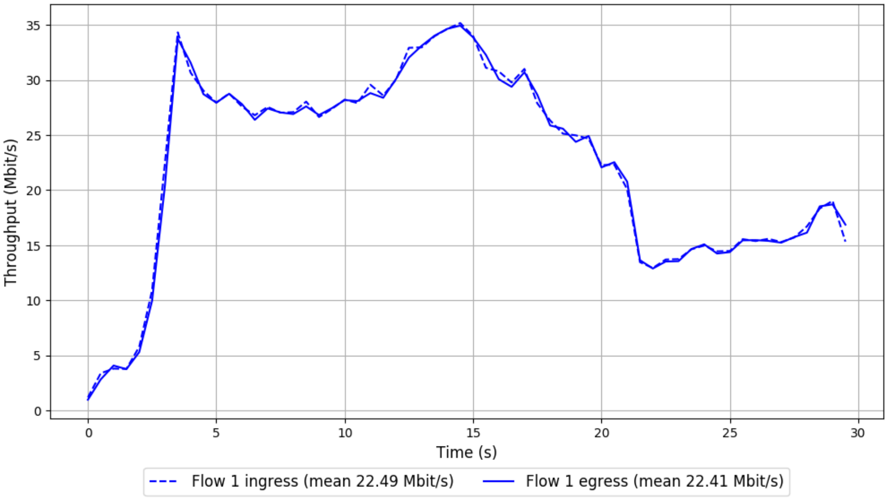
Run 2: Report of Vivace-latency — Data Link

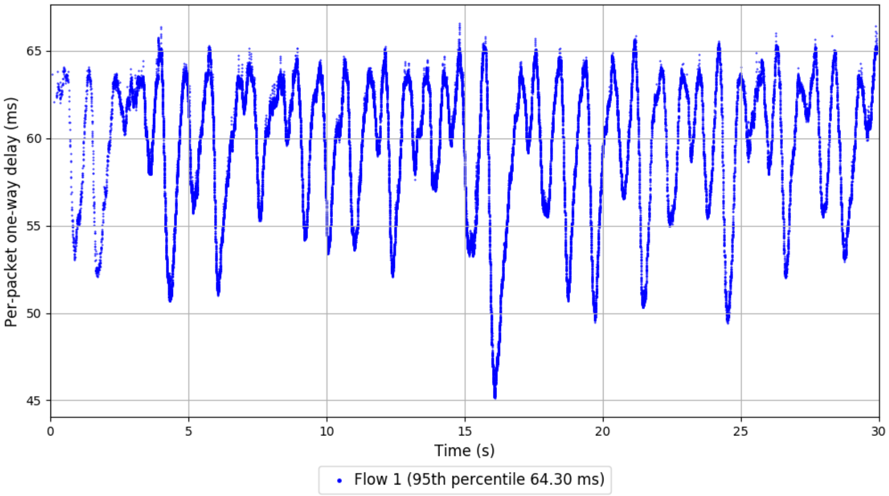




```
Run 3: Statistics of Vivace-latency

Start at: 2018-04-10 13:36:04
End at: 2018-04-10 13:36:34
Local clock offset: -0.105 ms
Remote clock offset: -1.036 ms

# Below is generated by plot.py at 2018-04-10 16:59:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 22.41 Mbit/s
95th percentile per-packet one-way delay: 64.300 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 22.41 Mbit/s
95th percentile per-packet one-way delay: 64.300 ms
Loss rate: 0.40%
```

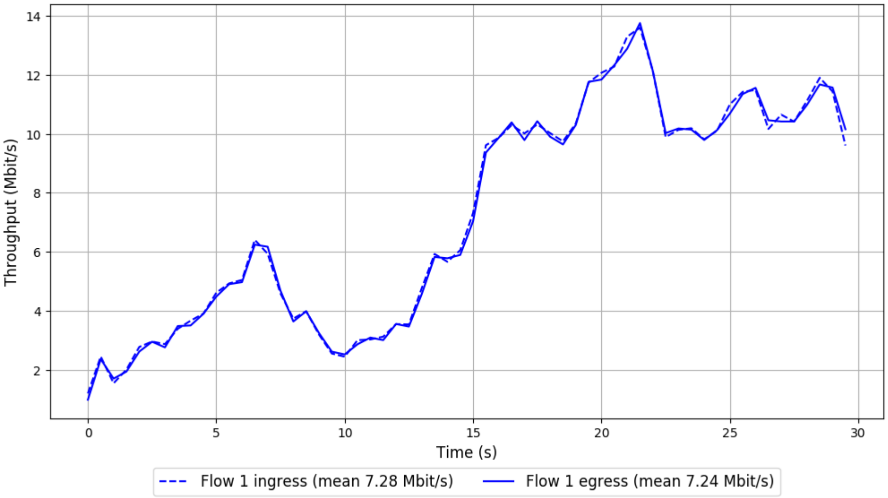
Run 3: Report of Vivace-latency — Data Link

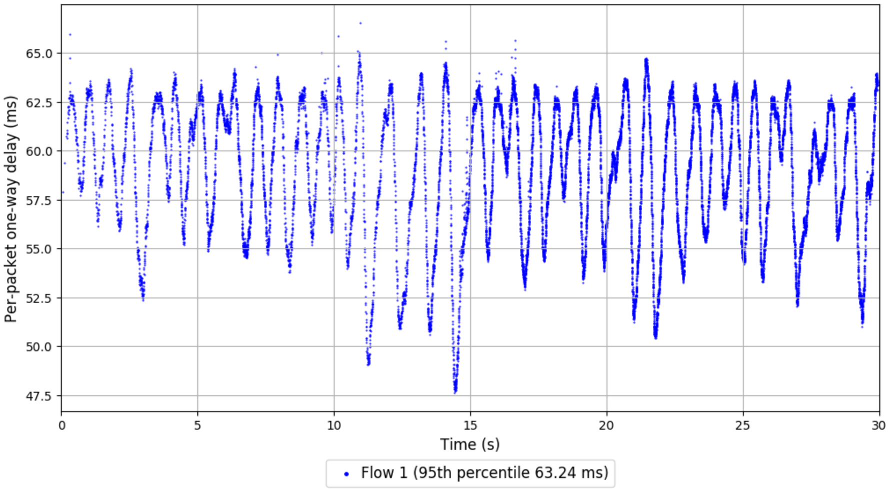




```
Run 4: Statistics of Vivace-latency

Start at: 2018-04-10 13:57:43
End at: 2018-04-10 13:58:13
Local clock offset: 1.171 ms
Remote clock offset: 20.174 ms

# Below is generated by plot.py at 2018-04-10 16:59:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.24 Mbit/s
95th percentile per-packet one-way delay: 63.243 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 7.24 Mbit/s
95th percentile per-packet one-way delay: 63.243 ms
Loss rate: 0.50%
```

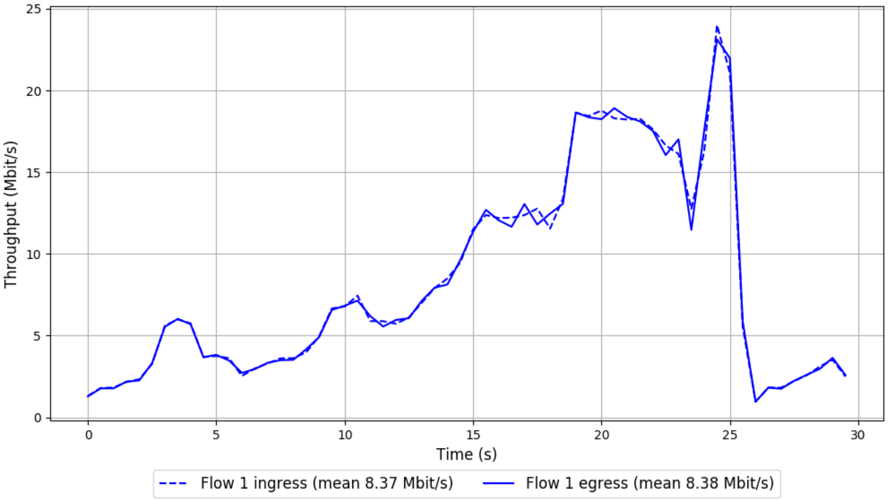
Run 4: Report of Vivace-latency — Data Link

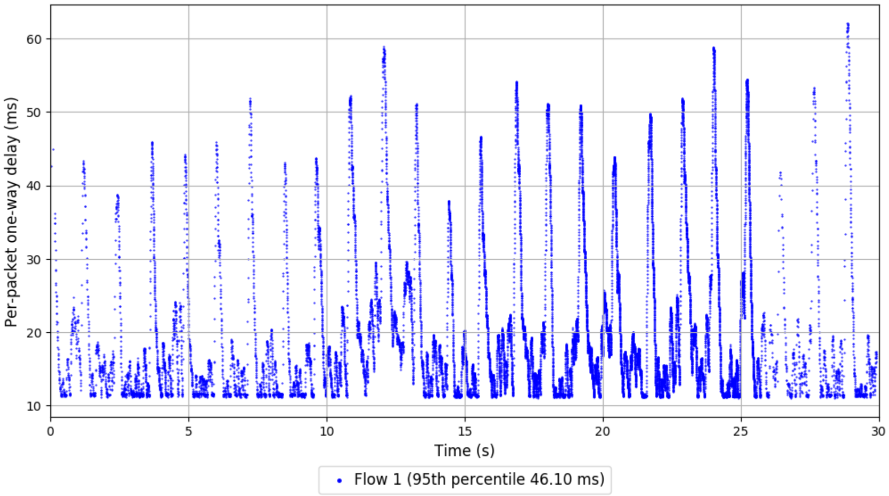




```
Run 5: Statistics of Vivace-latency

Start at: 2018-04-10 14:18:39
End at: 2018-04-10 14:19:09
Local clock offset: -0.015 ms
Remote clock offset: 28.296 ms

# Below is generated by plot.py at 2018-04-10 16:59:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.38 Mbit/s
95th percentile per-packet one-way delay: 46.100 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 8.38 Mbit/s
95th percentile per-packet one-way delay: 46.100 ms
Loss rate: 0.00%
```

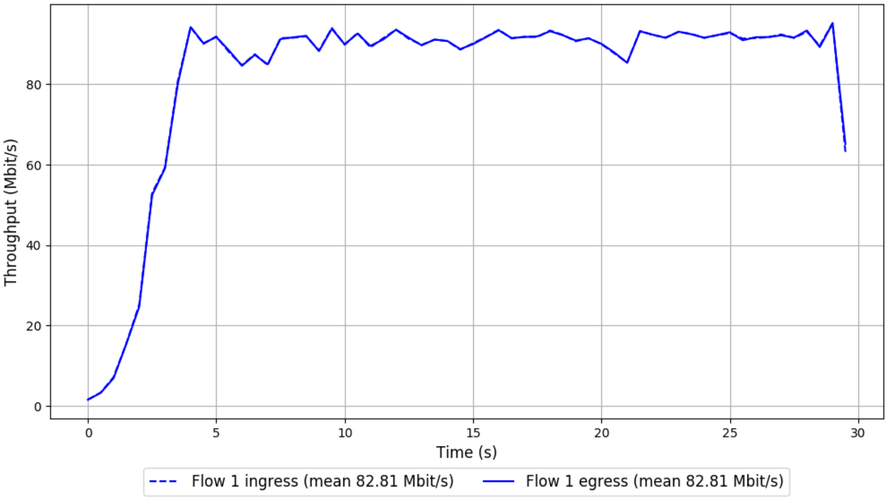
Run 5: Report of Vivace-latency — Data Link

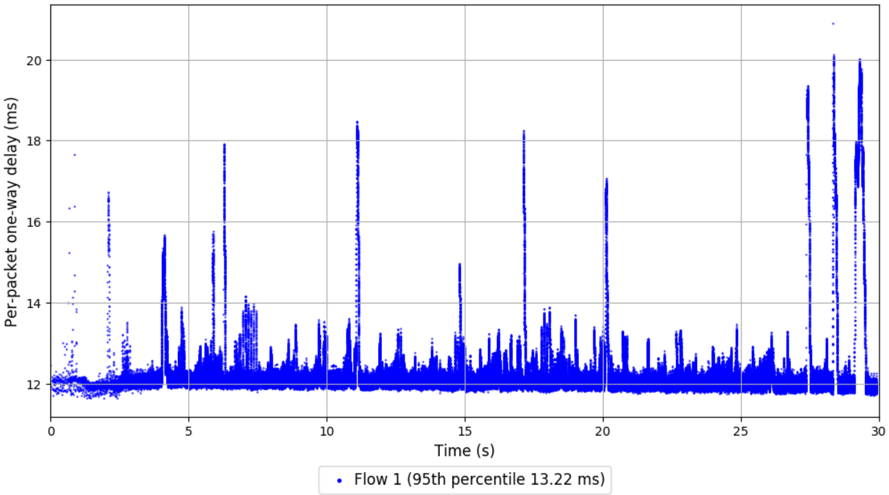




```
Run 6: Statistics of Vivace-latency

Start at: 2018-04-10 14:39:50
End at: 2018-04-10 14:40:20
Local clock offset: -1.788 ms
Remote clock offset: 33.45 ms

# Below is generated by plot.py at 2018-04-10 17:00:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.81 Mbit/s
95th percentile per-packet one-way delay: 13.225 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 82.81 Mbit/s
95th percentile per-packet one-way delay: 13.225 ms
Loss rate: 0.01%
```

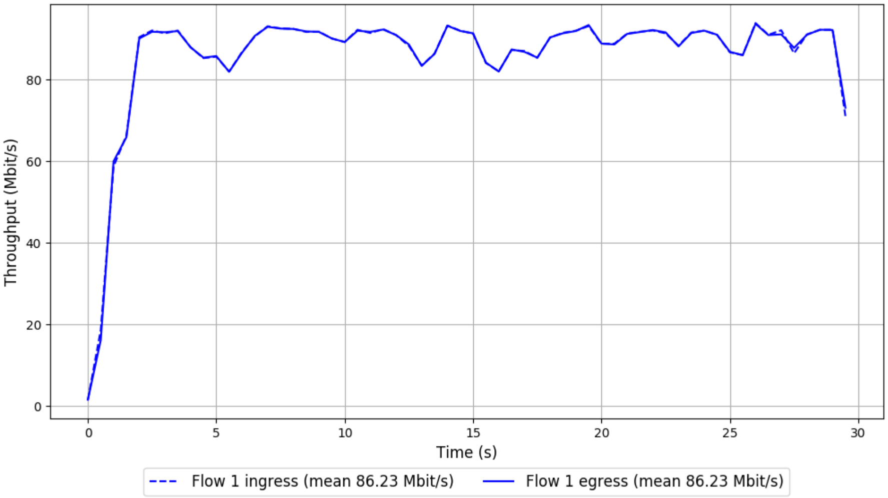
Run 6: Report of Vivace-latency — Data Link

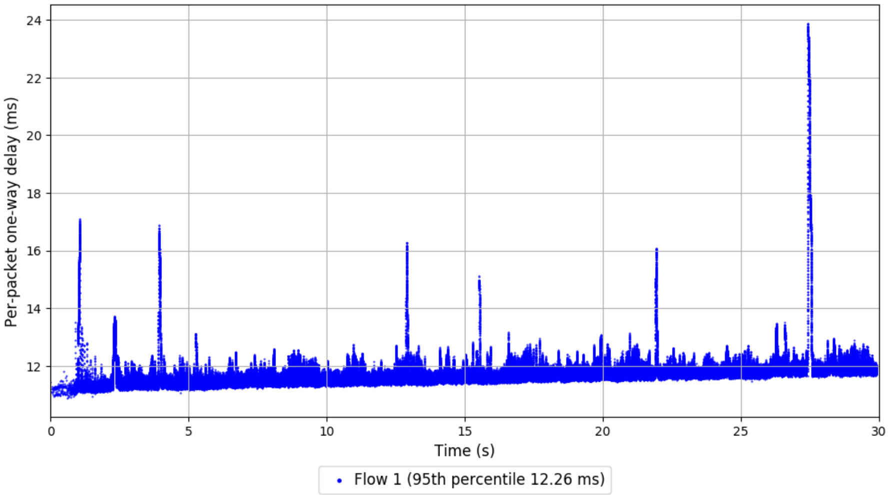




```
Run 7: Statistics of Vivace-latency

Start at: 2018-04-10 15:01:53
End at: 2018-04-10 15:02:23
Local clock offset: 0.225 ms
Remote clock offset: 3.488 ms

# Below is generated by plot.py at 2018-04-10 17:00:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.23 Mbit/s
95th percentile per-packet one-way delay: 12.256 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 86.23 Mbit/s
95th percentile per-packet one-way delay: 12.256 ms
Loss rate: 0.00%
```

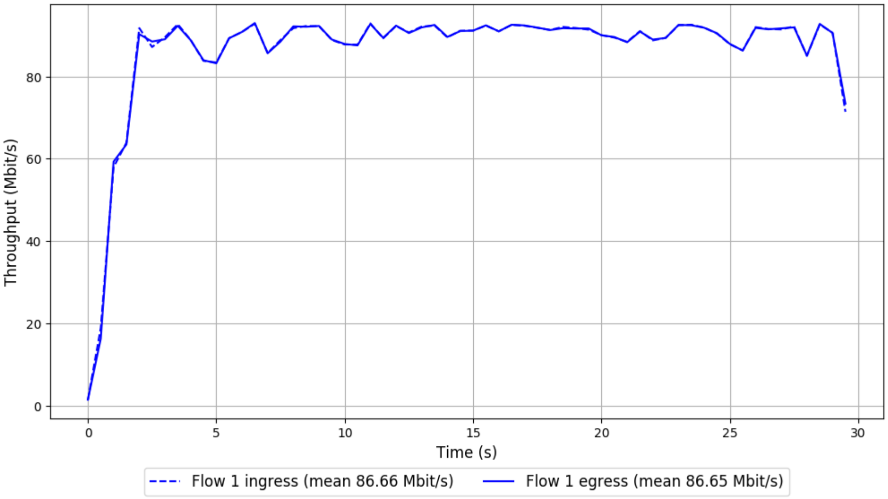
Run 7: Report of Vivace-latency — Data Link

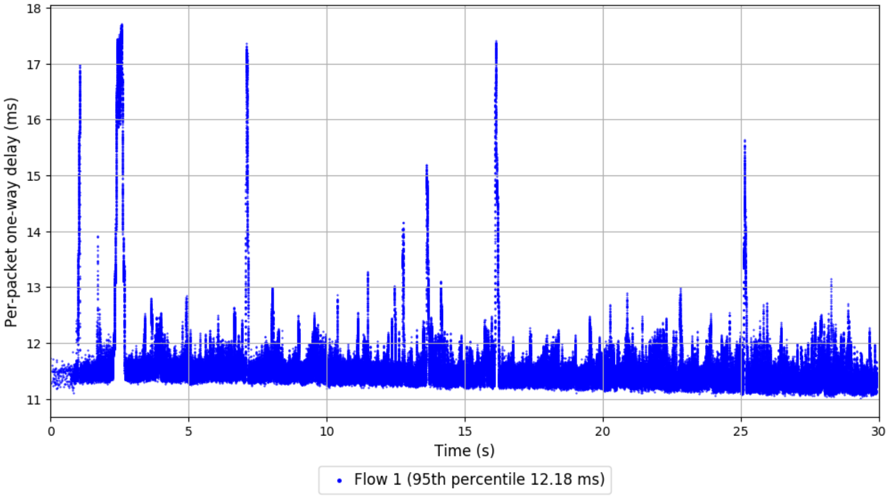




```
Run 8: Statistics of Vivace-latency

Start at: 2018-04-10 15:23:46
End at: 2018-04-10 15:24:16
Local clock offset: 0.346 ms
Remote clock offset: -7.043 ms

# Below is generated by plot.py at 2018-04-10 17:00:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.65 Mbit/s
95th percentile per-packet one-way delay: 12.180 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 86.65 Mbit/s
95th percentile per-packet one-way delay: 12.180 ms
Loss rate: 0.01%
```

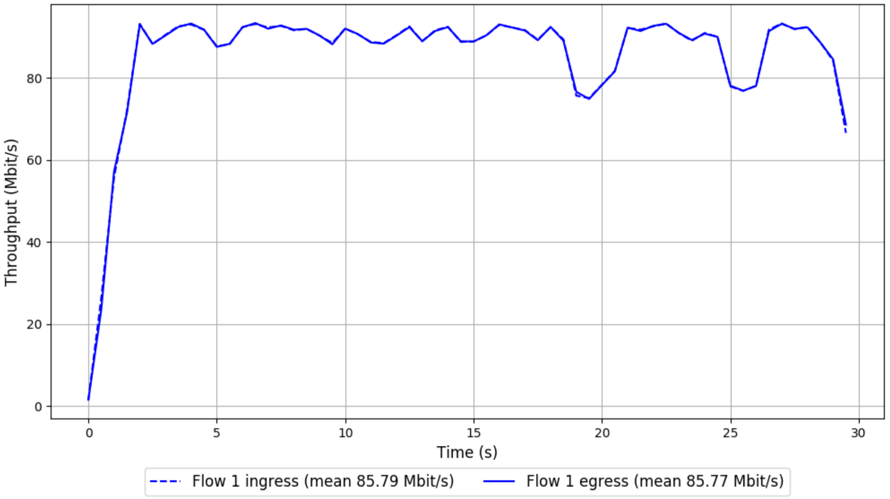
Run 8: Report of Vivace-latency — Data Link

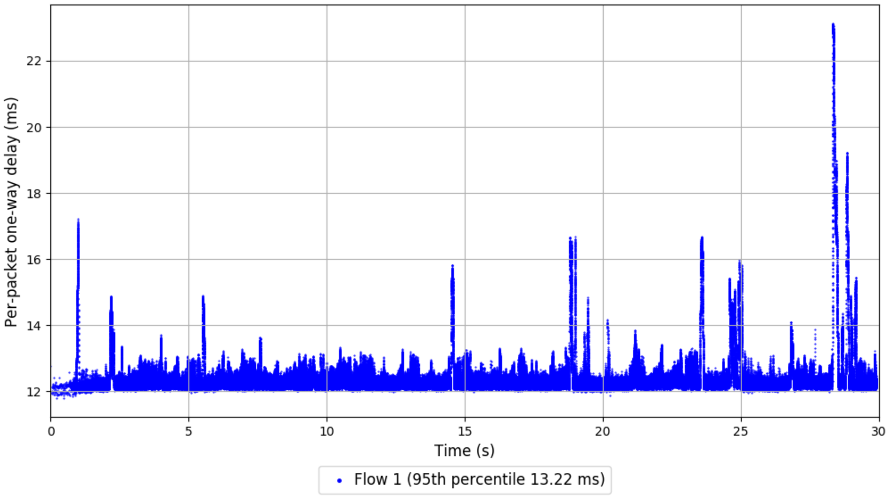




```
Run 9: Statistics of Vivace-latency

Start at: 2018-04-10 15:45:25
End at: 2018-04-10 15:45:55
Local clock offset: 0.348 ms
Remote clock offset: -2.663 ms

# Below is generated by plot.py at 2018-04-10 17:00:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.77 Mbit/s
95th percentile per-packet one-way delay: 13.220 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 85.77 Mbit/s
95th percentile per-packet one-way delay: 13.220 ms
Loss rate: 0.02%
```

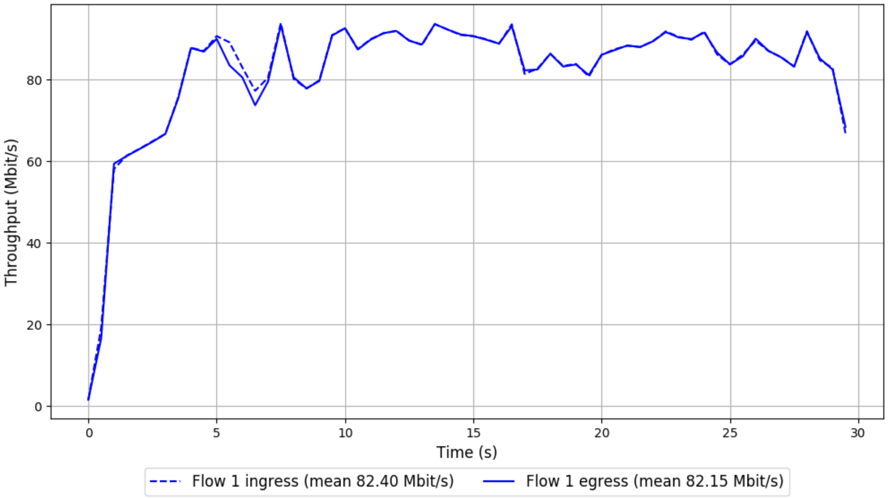
Run 9: Report of Vivace-latency — Data Link

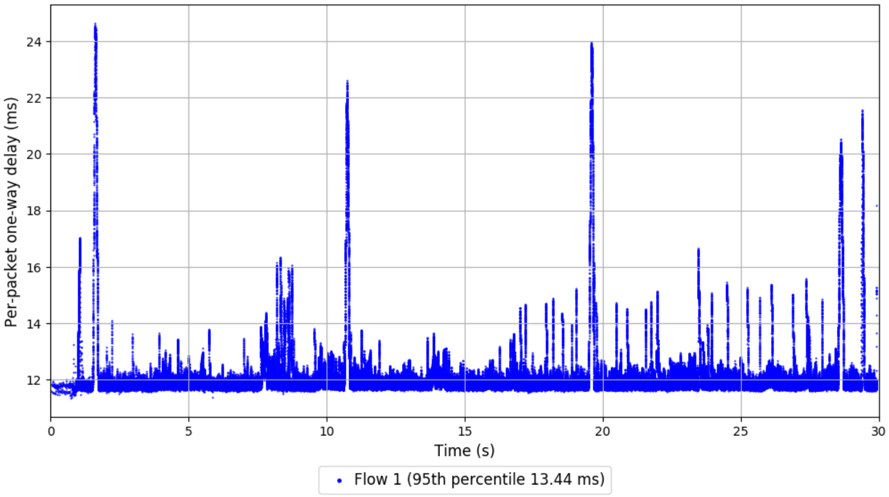




```
Run 10: Statistics of Vivace-latency

Start at: 2018-04-10 16:08:01
End at: 2018-04-10 16:08:31
Local clock offset: 0.786 ms
Remote clock offset: -2.167 ms

# Below is generated by plot.py at 2018-04-10 17:00:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.15 Mbit/s
95th percentile per-packet one-way delay: 13.444 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 82.15 Mbit/s
95th percentile per-packet one-way delay: 13.444 ms
Loss rate: 0.29%
```

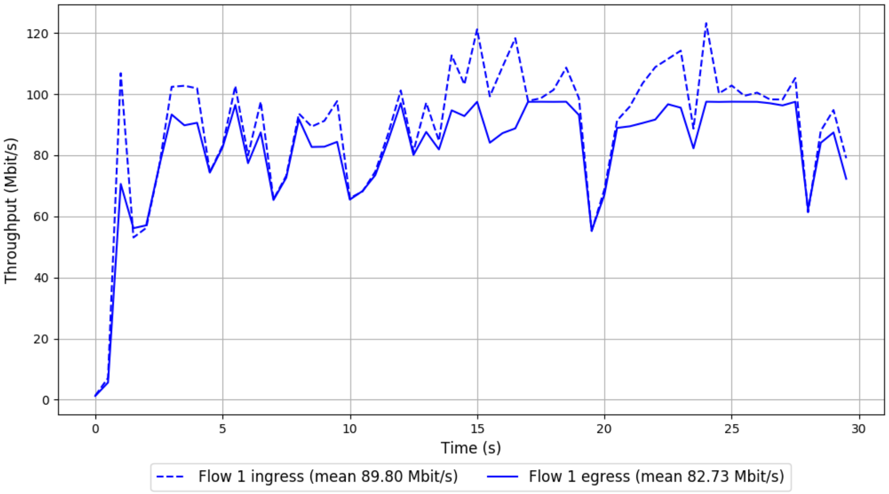
Run 10: Report of Vivace-latency — Data Link

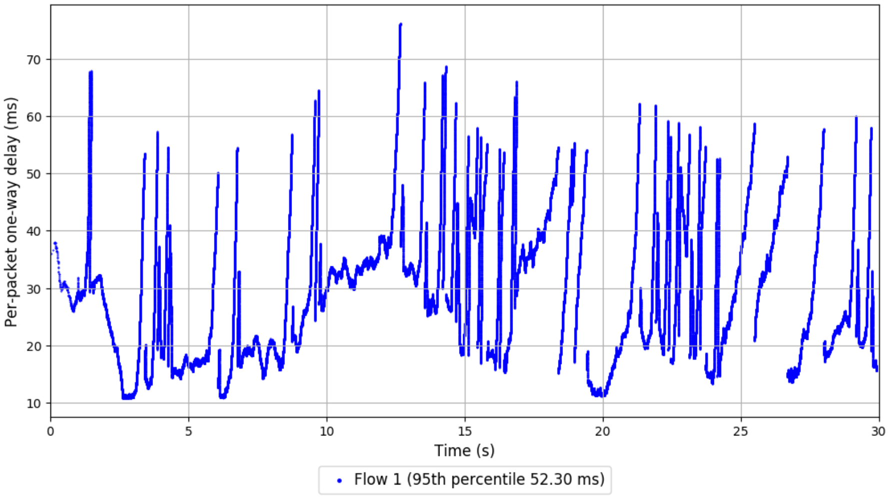




```
Run 1: Statistics of Vivace-loss

Start at: 2018-04-10 12:39:19
End at: 2018-04-10 12:39:49
Local clock offset: 0.712 ms
Remote clock offset: 7.258 ms

# Below is generated by plot.py at 2018-04-10 17:01:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.73 Mbit/s
95th percentile per-packet one-way delay: 52.300 ms
Loss rate: 7.94%
-- Flow 1:
Average throughput: 82.73 Mbit/s
95th percentile per-packet one-way delay: 52.300 ms
Loss rate: 7.94%
```

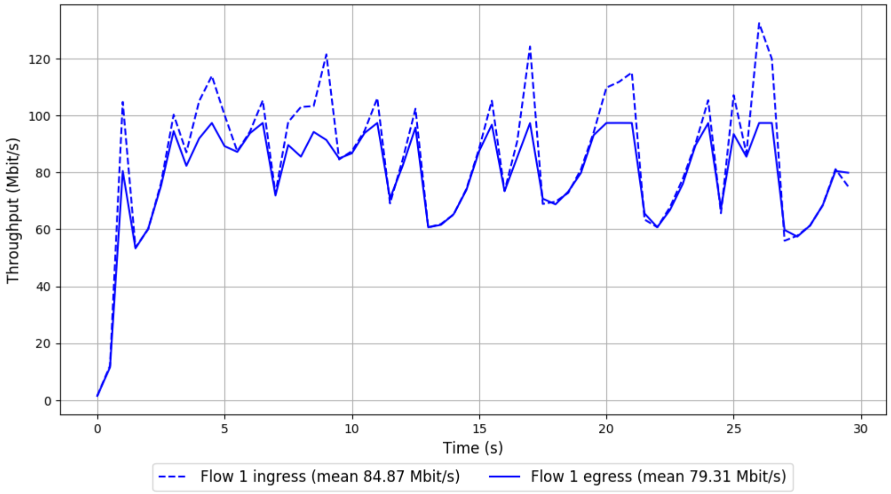
Run 1: Report of Vivace-loss — Data Link

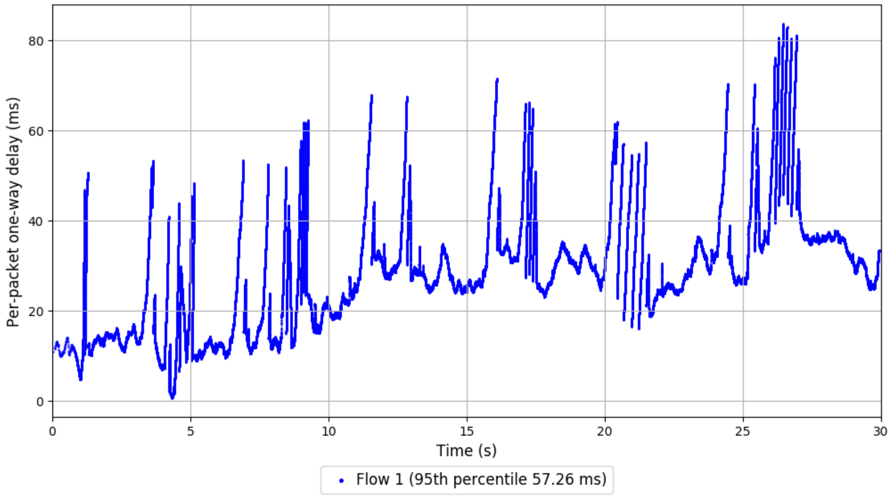




```
Run 2: Statistics of Vivace-loss

Start at: 2018-04-10 13:00:56
End at: 2018-04-10 13:01:26
Local clock offset: 0.656 ms
Remote clock offset: -17.195 ms

# Below is generated by plot.py at 2018-04-10 17:01:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.31 Mbit/s
95th percentile per-packet one-way delay: 57.258 ms
Loss rate: 6.48%
-- Flow 1:
Average throughput: 79.31 Mbit/s
95th percentile per-packet one-way delay: 57.258 ms
Loss rate: 6.48%
```

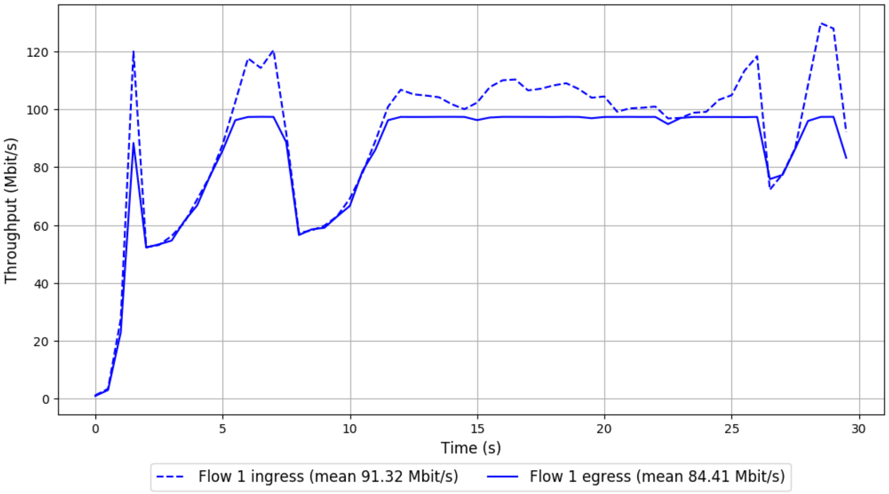
Run 2: Report of Vivace-loss — Data Link

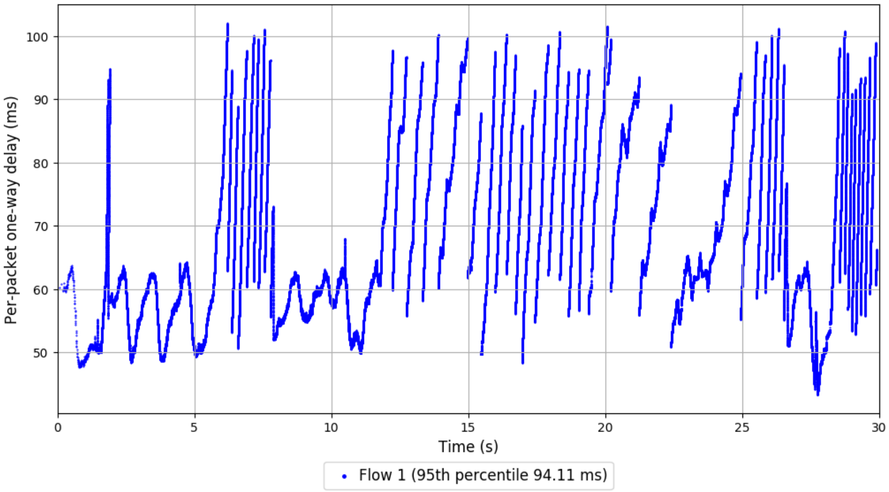




```
Run 3: Statistics of Vivace-loss

Start at: 2018-04-10 13:22:39
End at: 2018-04-10 13:23:09
Local clock offset: -0.534 ms
Remote clock offset: -2.959 ms

# Below is generated by plot.py at 2018-04-10 17:01:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.41 Mbit/s
95th percentile per-packet one-way delay: 94.113 ms
Loss rate: 7.63%
-- Flow 1:
Average throughput: 84.41 Mbit/s
95th percentile per-packet one-way delay: 94.113 ms
Loss rate: 7.63%
```

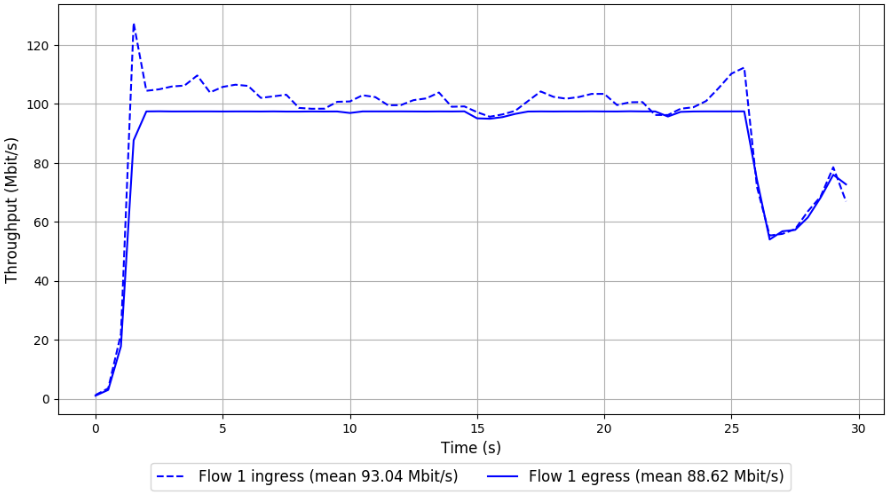
Run 3: Report of Vivace-loss — Data Link

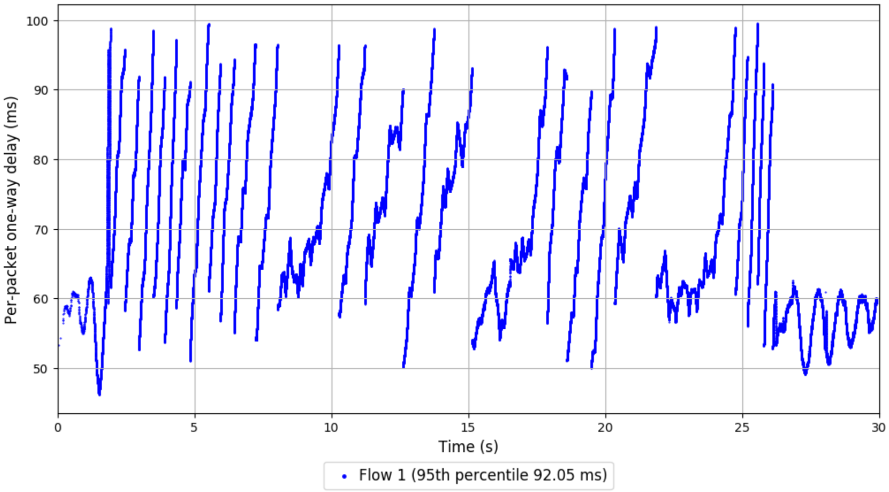




```
Run 4: Statistics of Vivace-loss

Start at: 2018-04-10 13:44:21
End at: 2018-04-10 13:44:51
Local clock offset: 0.764 ms
Remote clock offset: 5.11 ms

# Below is generated by plot.py at 2018-04-10 17:02:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.62 Mbit/s
95th percentile per-packet one-way delay: 92.048 ms
Loss rate: 4.80%
-- Flow 1:
Average throughput: 88.62 Mbit/s
95th percentile per-packet one-way delay: 92.048 ms
Loss rate: 4.80%
```

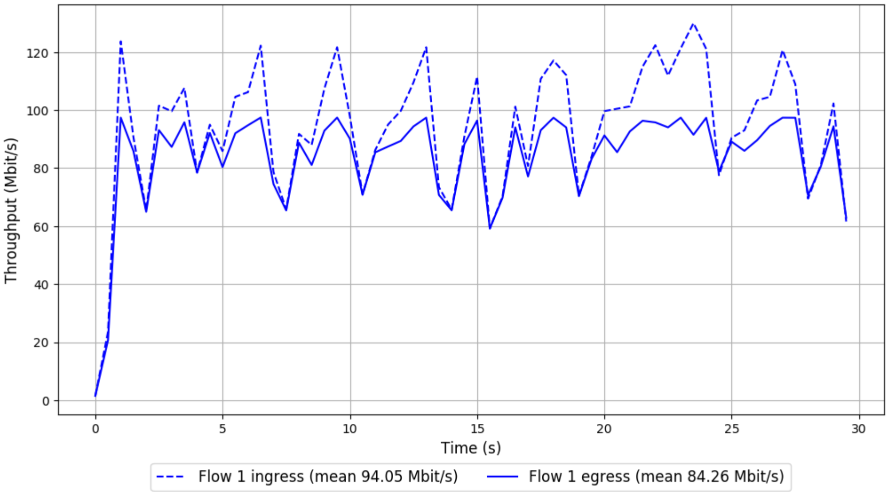
Run 4: Report of Vivace-loss — Data Link

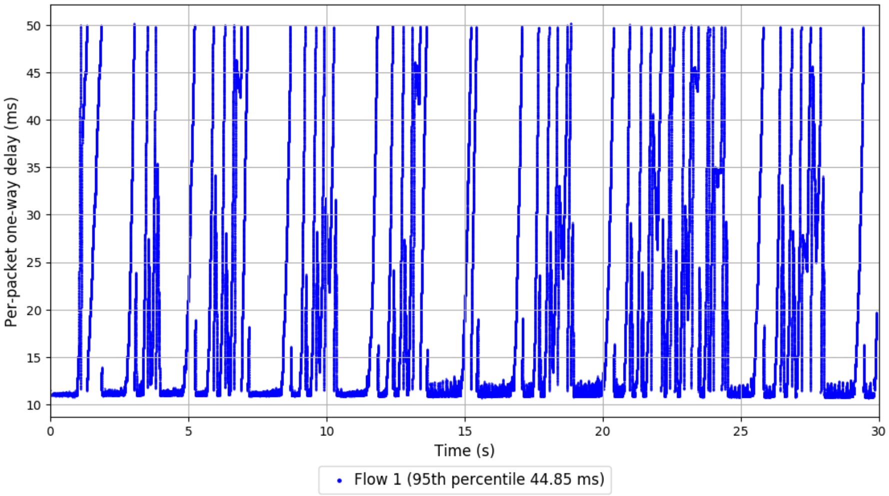




```
Run 5: Statistics of Vivace-loss

Start at: 2018-04-10 14:05:59
End at: 2018-04-10 14:06:29
Local clock offset: 1.236 ms
Remote clock offset: 23.874 ms

# Below is generated by plot.py at 2018-04-10 17:02:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.26 Mbit/s
95th percentile per-packet one-way delay: 44.854 ms
Loss rate: 10.39%
-- Flow 1:
Average throughput: 84.26 Mbit/s
95th percentile per-packet one-way delay: 44.854 ms
Loss rate: 10.39%
```

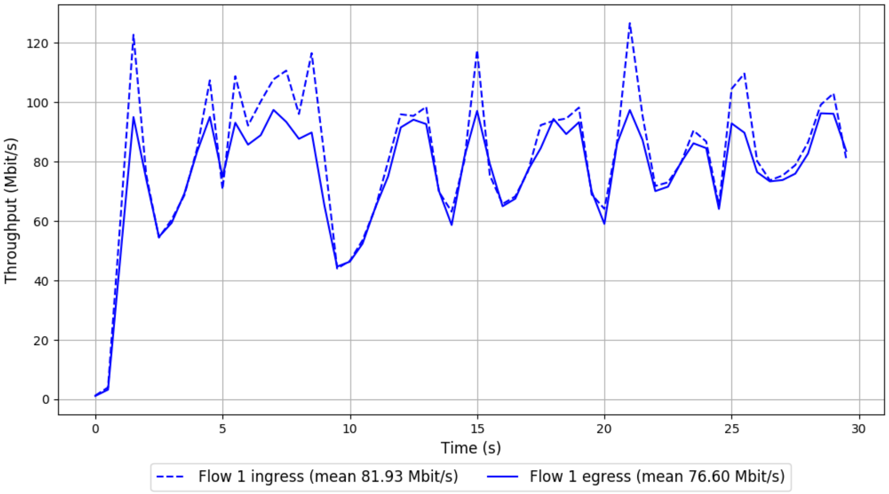
Run 5: Report of Vivace-loss — Data Link

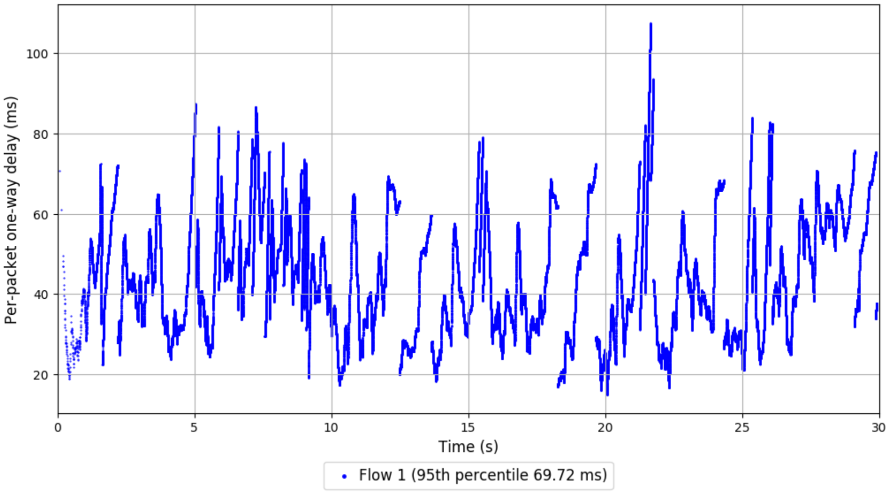




```
Run 6: Statistics of Vivace-loss

Start at: 2018-04-10 14:26:45
End at: 2018-04-10 14:27:15
Local clock offset: -0.973 ms
Remote clock offset: 29.79 ms

# Below is generated by plot.py at 2018-04-10 17:02:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.60 Mbit/s
95th percentile per-packet one-way delay: 69.722 ms
Loss rate: 6.61%
-- Flow 1:
Average throughput: 76.60 Mbit/s
95th percentile per-packet one-way delay: 69.722 ms
Loss rate: 6.61%
```

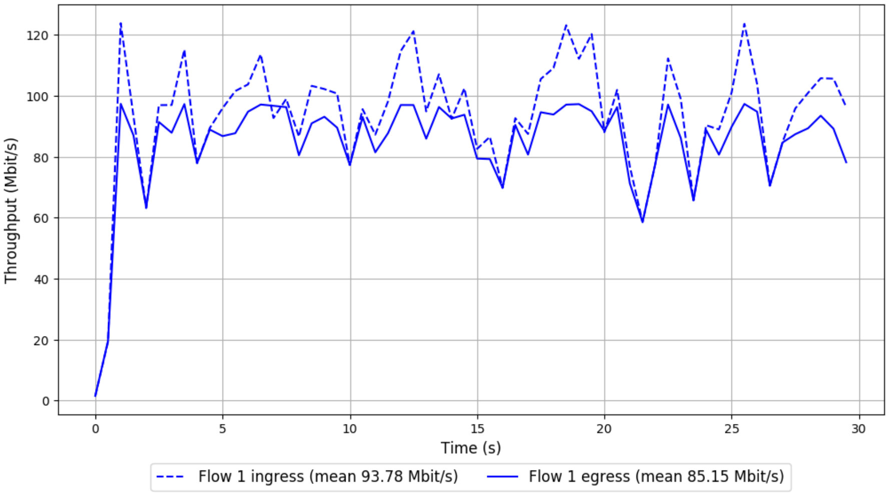
Run 6: Report of Vivace-loss — Data Link

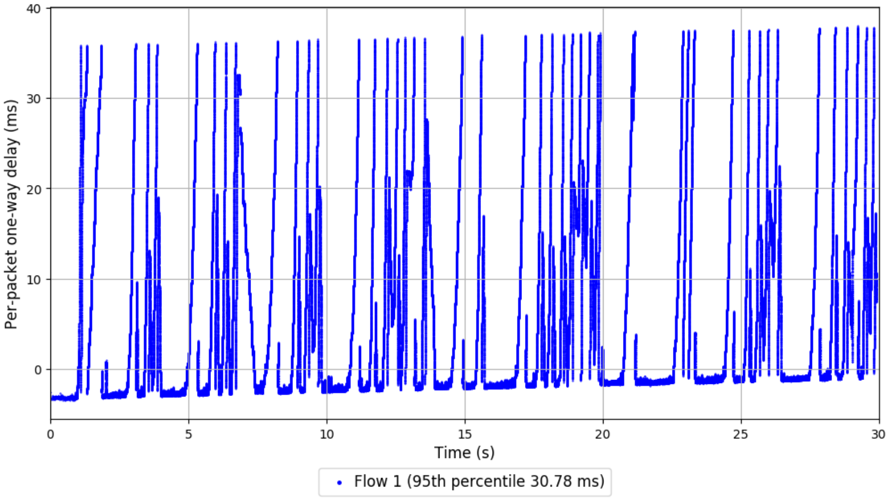




```
Run 7: Statistics of Vivace-loss

Start at: 2018-04-10 14:48:42
End at: 2018-04-10 14:49:12
Local clock offset: -1.279 ms
Remote clock offset: 20.176 ms

# Below is generated by plot.py at 2018-04-10 17:02:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.15 Mbit/s
95th percentile per-packet one-way delay: 30.784 ms
Loss rate: 9.17%
-- Flow 1:
Average throughput: 85.15 Mbit/s
95th percentile per-packet one-way delay: 30.784 ms
Loss rate: 9.17%
```

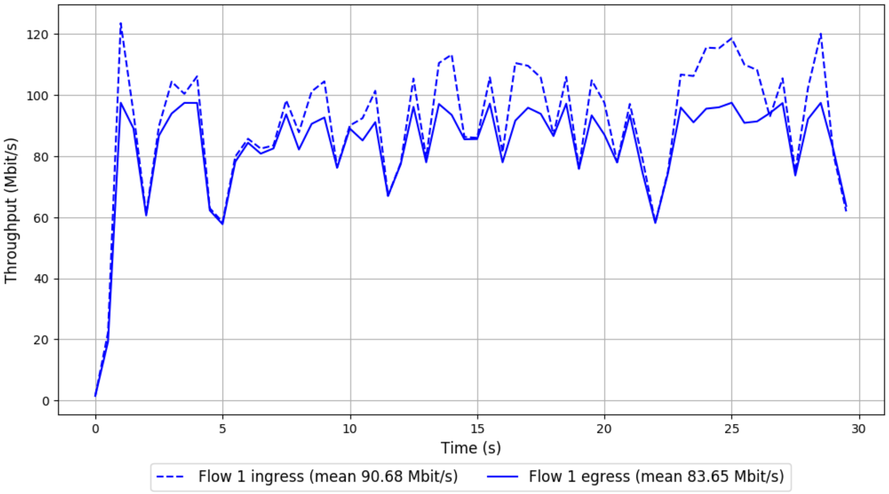
Run 7: Report of Vivace-loss — Data Link

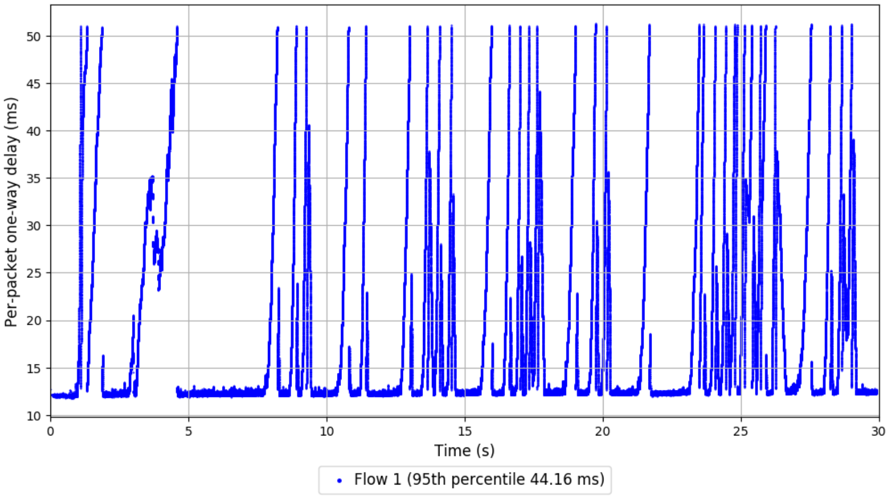




```
Run 8: Statistics of Vivace-loss

Start at: 2018-04-10 15:10:38
End at: 2018-04-10 15:11:08
Local clock offset: 0.269 ms
Remote clock offset: -2.4 ms

# Below is generated by plot.py at 2018-04-10 17:02:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.65 Mbit/s
95th percentile per-packet one-way delay: 44.159 ms
Loss rate: 7.75%
-- Flow 1:
Average throughput: 83.65 Mbit/s
95th percentile per-packet one-way delay: 44.159 ms
Loss rate: 7.75%
```

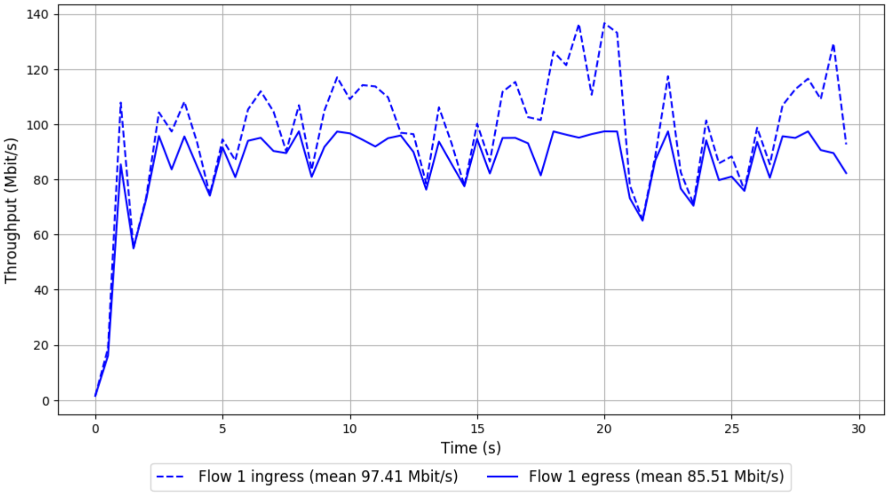
Run 8: Report of Vivace-loss — Data Link

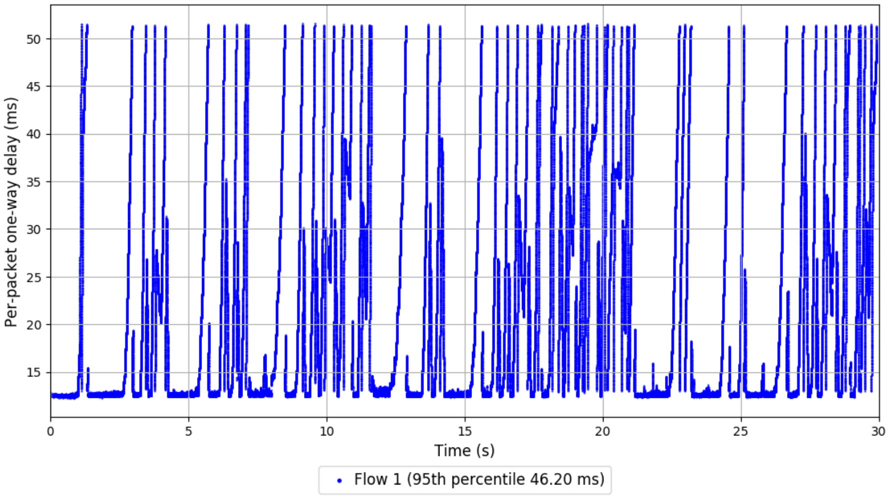




```
Run 9: Statistics of Vivace-loss

Start at: 2018-04-10 15:32:19
End at: 2018-04-10 15:32:49
Local clock offset: 0.549 ms
Remote clock offset: -2.928 ms

# Below is generated by plot.py at 2018-04-10 17:02:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.51 Mbit/s
95th percentile per-packet one-way delay: 46.205 ms
Loss rate: 12.15%
-- Flow 1:
Average throughput: 85.51 Mbit/s
95th percentile per-packet one-way delay: 46.205 ms
Loss rate: 12.15%
```

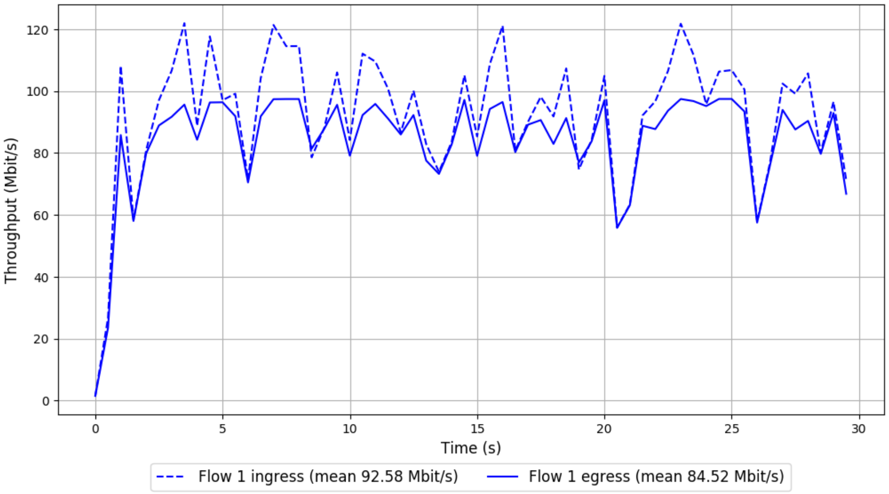
Run 9: Report of Vivace-loss — Data Link

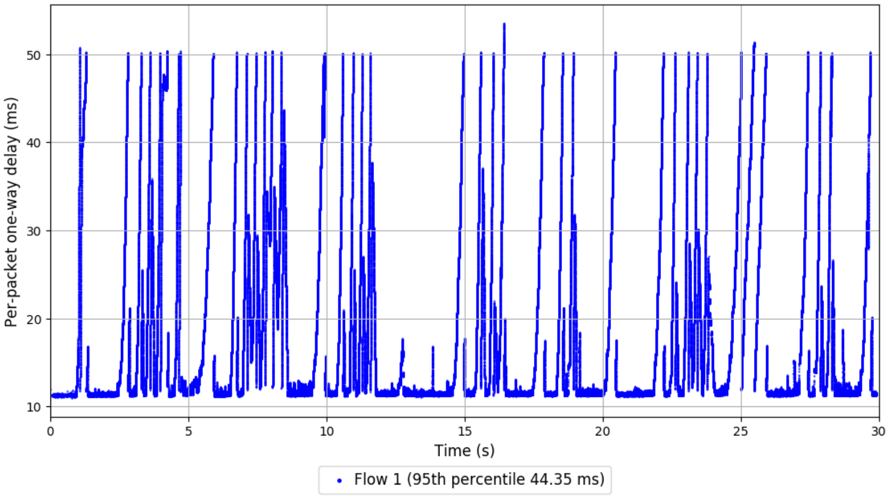




```
Run 10: Statistics of Vivace-loss

Start at: 2018-04-10 15:54:42
End at: 2018-04-10 15:55:12
Local clock offset: 1.119 ms
Remote clock offset: -3.216 ms

# Below is generated by plot.py at 2018-04-10 17:02:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.52 Mbit/s
95th percentile per-packet one-way delay: 44.349 ms
Loss rate: 8.71%
-- Flow 1:
Average throughput: 84.52 Mbit/s
95th percentile per-packet one-way delay: 44.349 ms
Loss rate: 8.71%
```

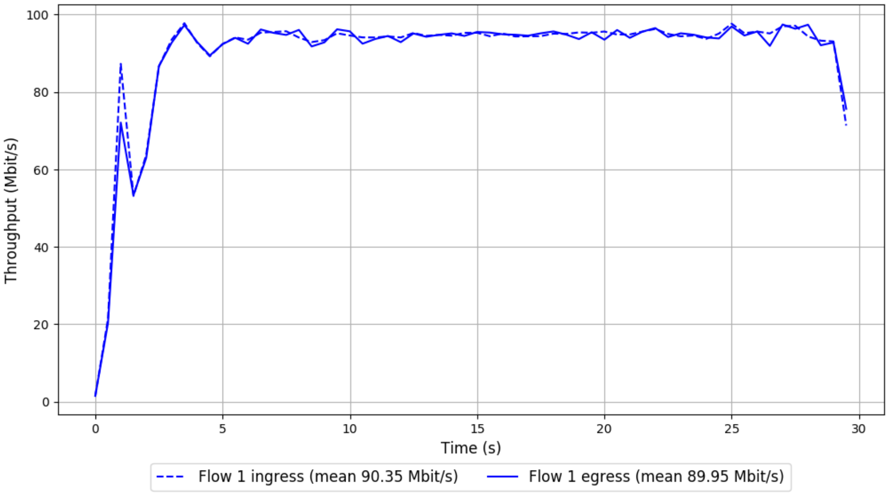
Run 10: Report of Vivace-loss — Data Link

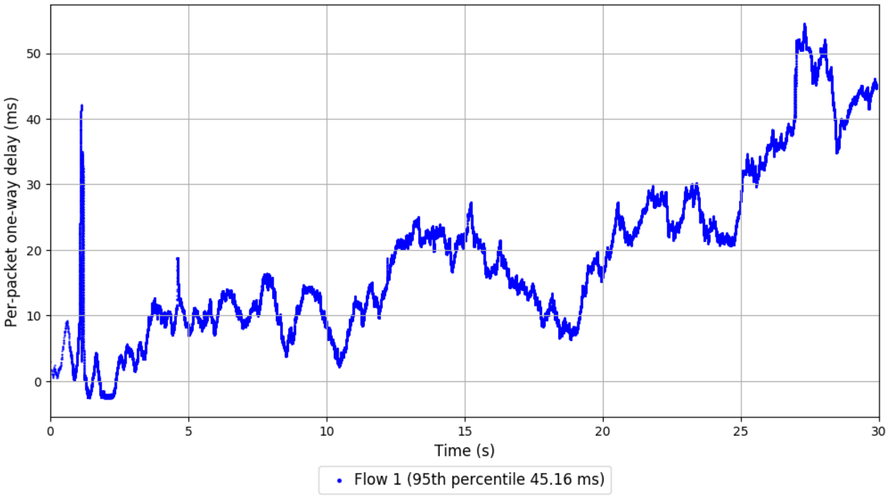




```
Run 1: Statistics of Vivace-LTE

Start at: 2018-04-10 12:45:16
End at: 2018-04-10 12:45:46
Local clock offset: 0.217 ms
Remote clock offset: -13.367 ms

# Below is generated by plot.py at 2018-04-10 17:02:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.95 Mbit/s
95th percentile per-packet one-way delay: 45.165 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 89.95 Mbit/s
95th percentile per-packet one-way delay: 45.165 ms
Loss rate: 0.38%
```

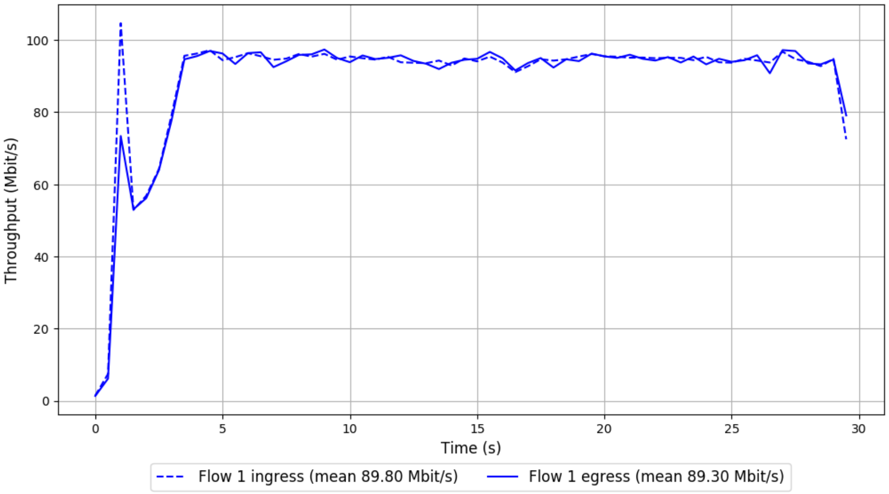
Run 1: Report of Vivace-LTE — Data Link

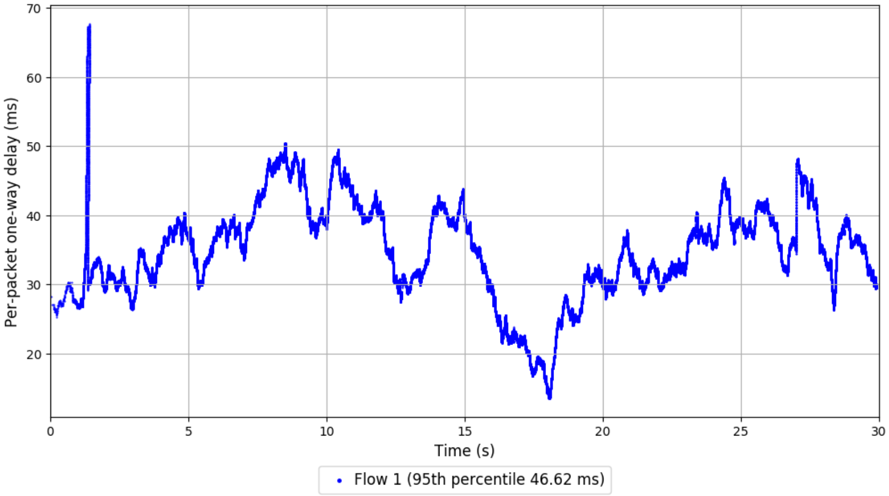




```
Run 2: Statistics of Vivace-LTE

Start at: 2018-04-10 13:06:43
End at: 2018-04-10 13:07:14
Local clock offset: 0.992 ms
Remote clock offset: -6.243 ms

# Below is generated by plot.py at 2018-04-10 17:03:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.30 Mbit/s
95th percentile per-packet one-way delay: 46.619 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 89.30 Mbit/s
95th percentile per-packet one-way delay: 46.619 ms
Loss rate: 0.55%
```

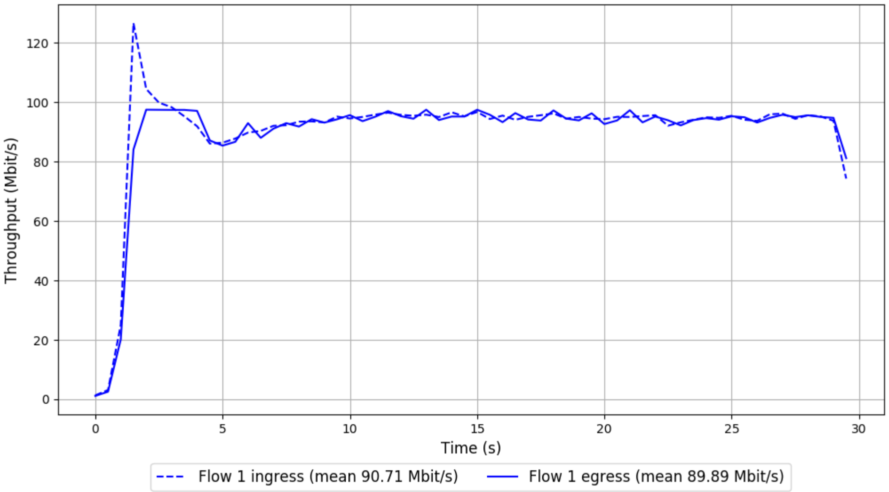
Run 2: Report of Vivace-LTE — Data Link

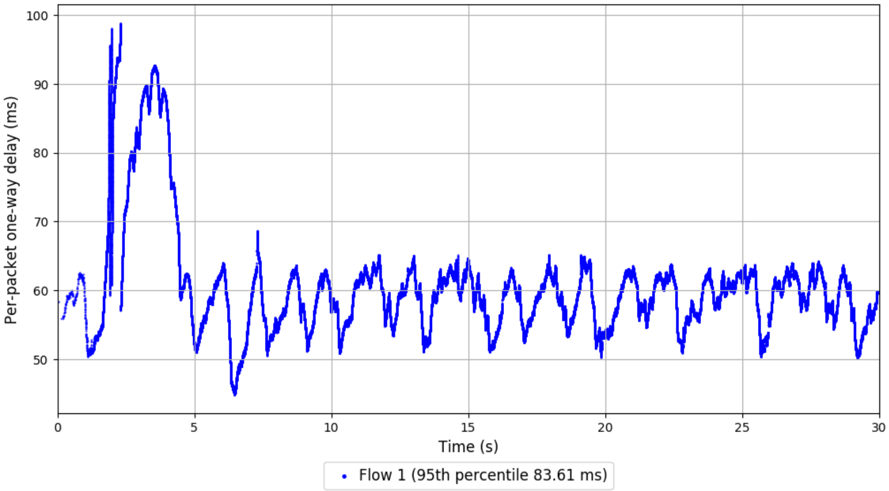




```
Run 3: Statistics of Vivace-LTE

Start at: 2018-04-10 13:28:42
End at: 2018-04-10 13:29:12
Local clock offset: 0.466 ms
Remote clock offset: -2.129 ms

# Below is generated by plot.py at 2018-04-10 17:03:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.89 Mbit/s
95th percentile per-packet one-way delay: 83.609 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 89.89 Mbit/s
95th percentile per-packet one-way delay: 83.609 ms
Loss rate: 0.95%
```

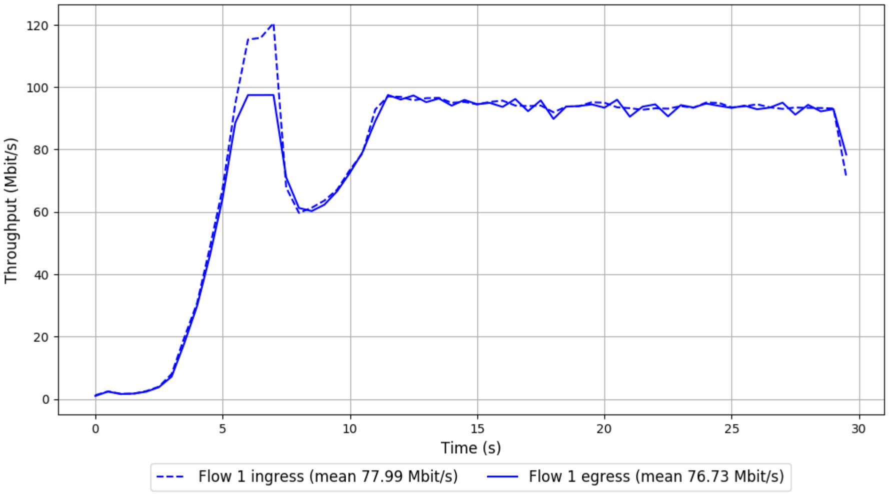
Run 3: Report of Vivace-LTE — Data Link

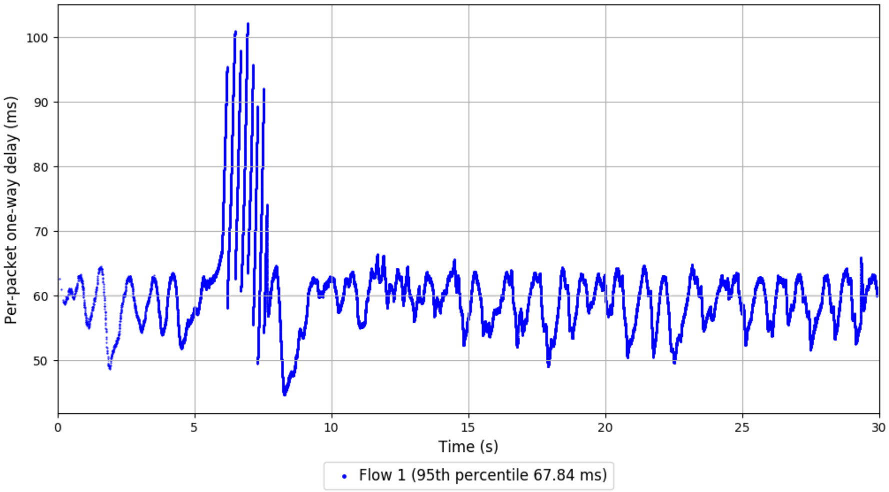




```
Run 4: Statistics of Vivace-LTE

Start at: 2018-04-10 13:50:13
End at: 2018-04-10 13:50:43
Local clock offset: 0.644 ms
Remote clock offset: 13.797 ms

# Below is generated by plot.py at 2018-04-10 17:03:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.73 Mbit/s
95th percentile per-packet one-way delay: 67.841 ms
Loss rate: 1.70%
-- Flow 1:
Average throughput: 76.73 Mbit/s
95th percentile per-packet one-way delay: 67.841 ms
Loss rate: 1.70%
```

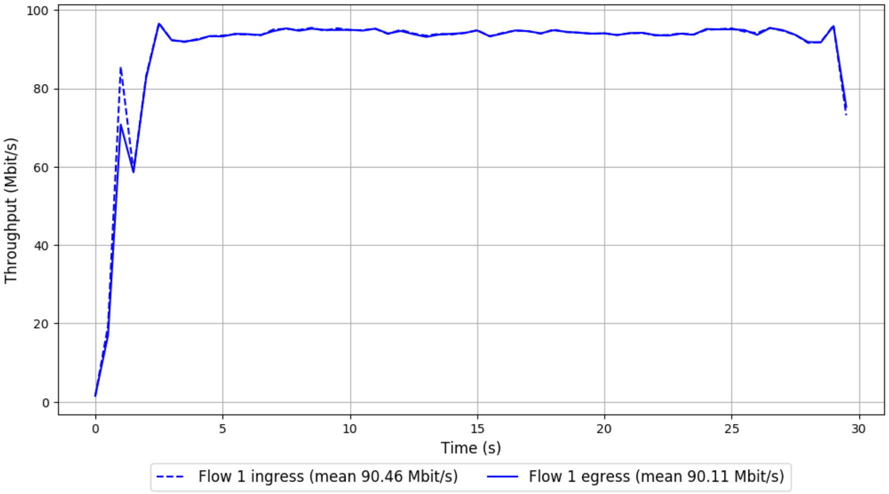
Run 4: Report of Vivace-LTE — Data Link

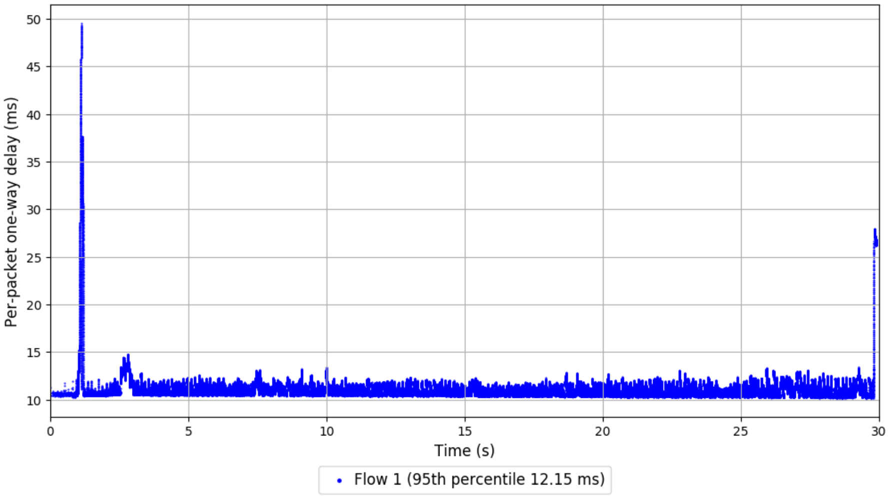




```
Run 5: Statistics of Vivace-LTE

Start at: 2018-04-10 14:11:48
End at: 2018-04-10 14:12:18
Local clock offset: 1.503 ms
Remote clock offset: 26.519 ms

# Below is generated by plot.py at 2018-04-10 17:03:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.11 Mbit/s
95th percentile per-packet one-way delay: 12.149 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 90.11 Mbit/s
95th percentile per-packet one-way delay: 12.149 ms
Loss rate: 0.33%
```

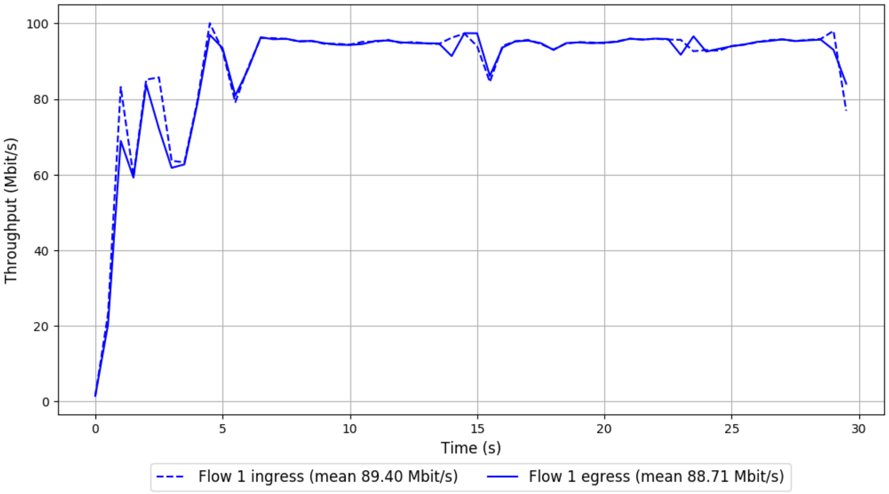
Run 5: Report of Vivace-LTE — Data Link

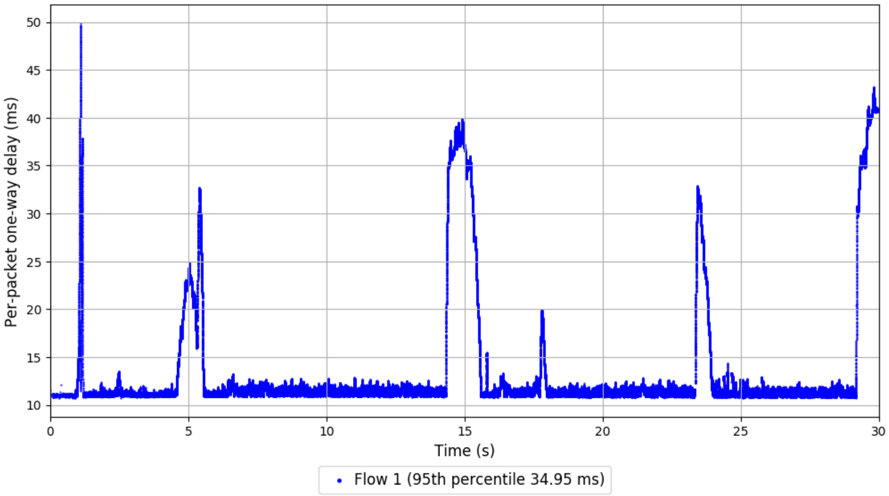




```
Run 6: Statistics of Vivace-LTE

Start at: 2018-04-10 14:32:43
End at: 2018-04-10 14:33:13
Local clock offset: -0.847 ms
Remote clock offset: 31.258 ms

# Below is generated by plot.py at 2018-04-10 17:03:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.71 Mbit/s
95th percentile per-packet one-way delay: 34.954 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 88.71 Mbit/s
95th percentile per-packet one-way delay: 34.954 ms
Loss rate: 0.67%
```

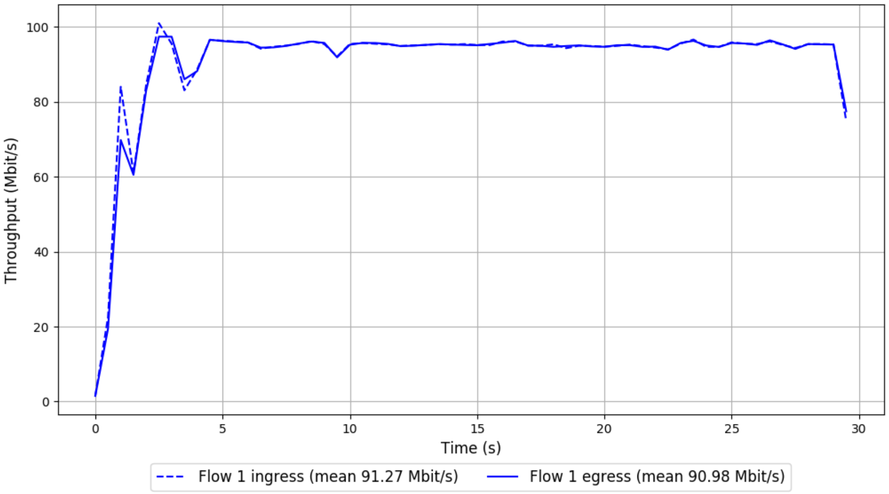
Run 6: Report of Vivace-LTE — Data Link

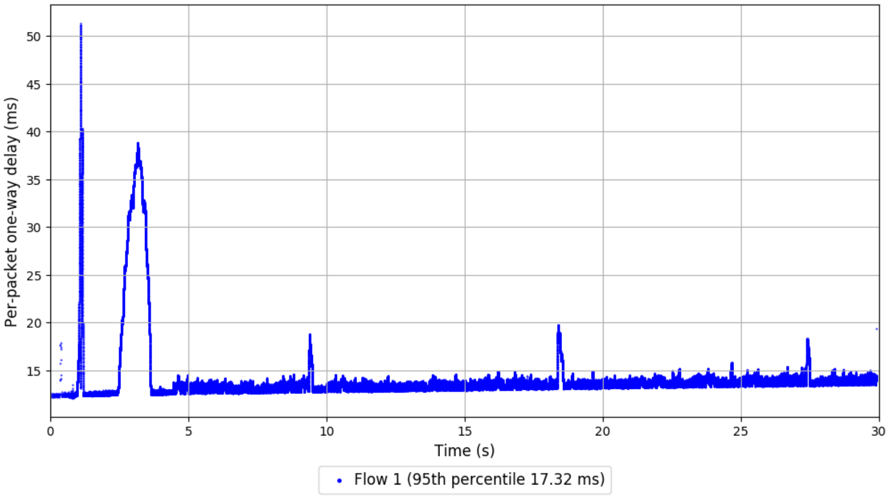




```
Run 7: Statistics of Vivace-LTE

Start at: 2018-04-10 14:54:44
End at: 2018-04-10 14:55:14
Local clock offset: -0.764 ms
Remote clock offset: 15.596 ms

# Below is generated by plot.py at 2018-04-10 17:03:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.98 Mbit/s
95th percentile per-packet one-way delay: 17.317 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 90.98 Mbit/s
95th percentile per-packet one-way delay: 17.317 ms
Loss rate: 0.29%
```

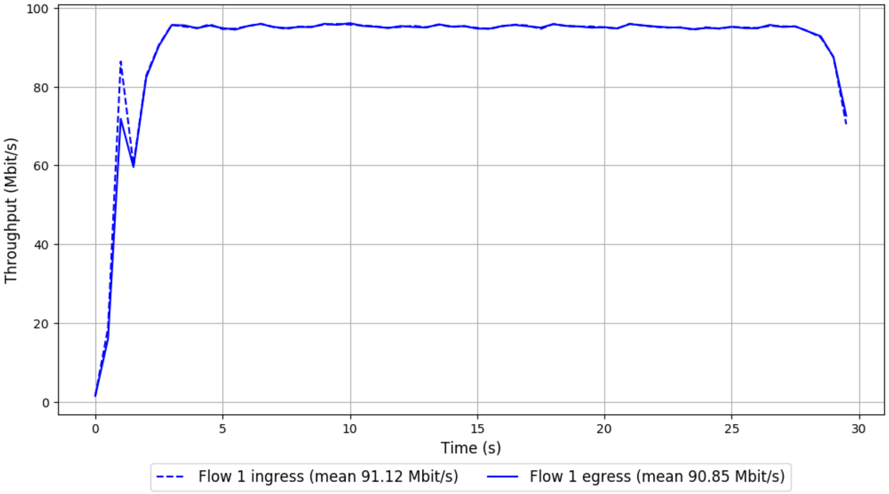
Run 7: Report of Vivace-LTE — Data Link

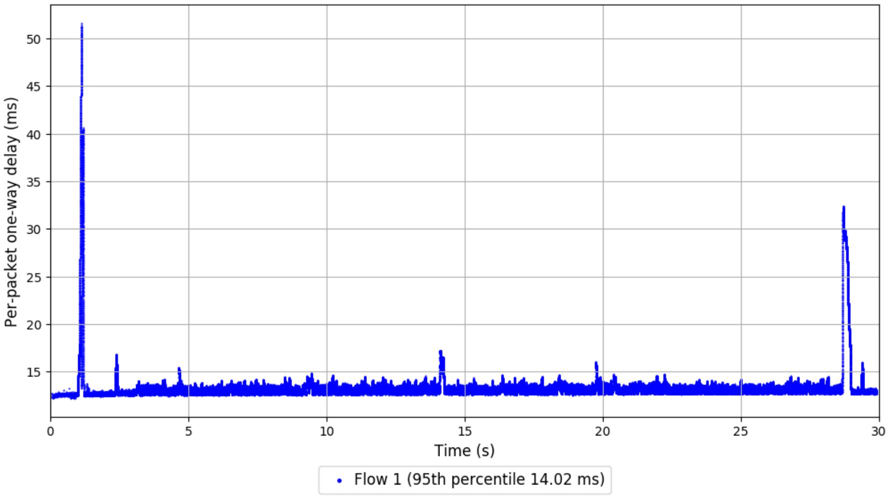




```
Run 8: Statistics of Vivace-LTE

Start at: 2018-04-10 15:16:38
End at: 2018-04-10 15:17:08
Local clock offset: -0.297 ms
Remote clock offset: -5.203 ms

# Below is generated by plot.py at 2018-04-10 17:03:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.85 Mbit/s
95th percentile per-packet one-way delay: 14.017 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 90.85 Mbit/s
95th percentile per-packet one-way delay: 14.017 ms
Loss rate: 0.30%
```

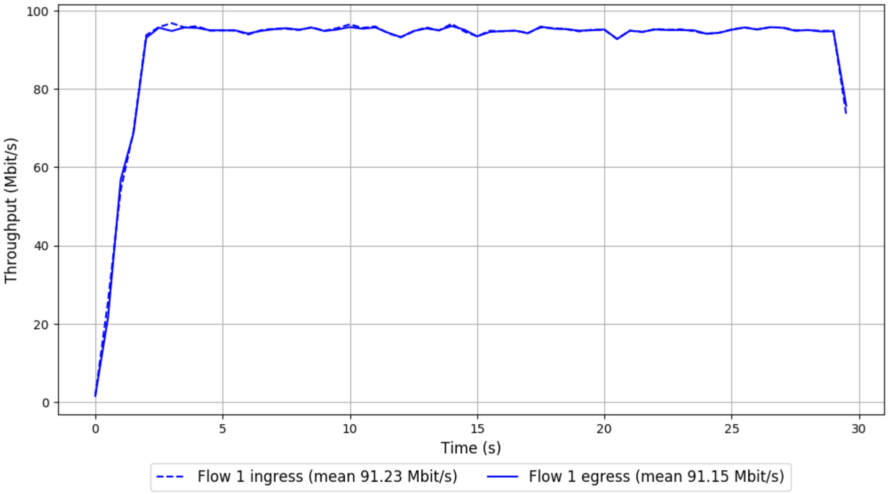
Run 8: Report of Vivace-LTE — Data Link

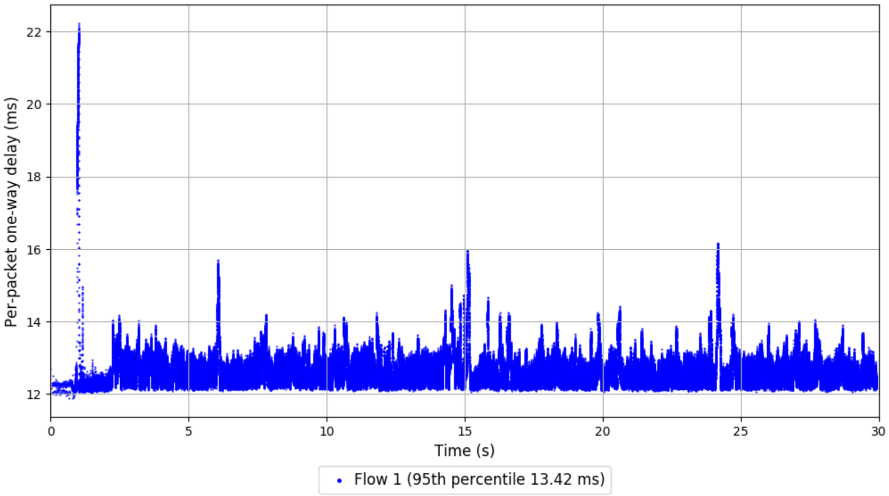




```
Run 9: Statistics of Vivace-LTE

Start at: 2018-04-10 15:38:21
End at: 2018-04-10 15:38:51
Local clock offset: 0.359 ms
Remote clock offset: -2.431 ms

# Below is generated by plot.py at 2018-04-10 17:03:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.15 Mbit/s
95th percentile per-packet one-way delay: 13.421 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 91.15 Mbit/s
95th percentile per-packet one-way delay: 13.421 ms
Loss rate: 0.10%
```

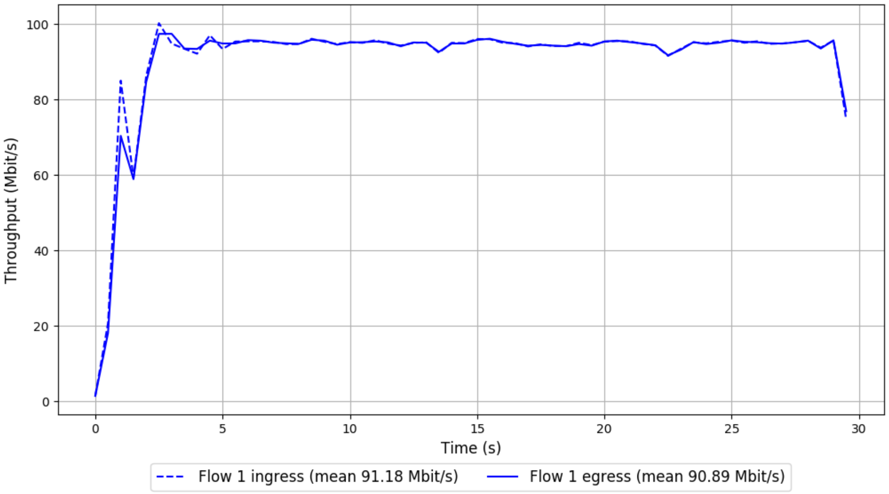
Run 9: Report of Vivace-LTE — Data Link



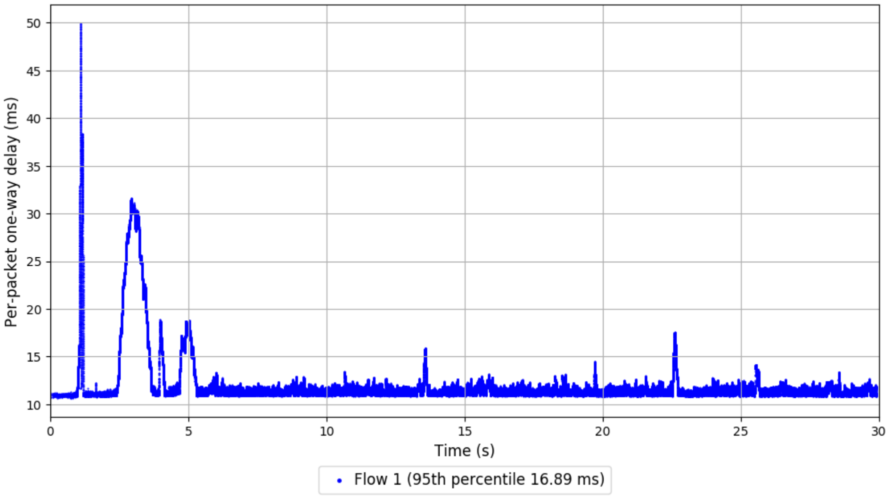


```
Run 10: Statistics of Vivace-LTE

Start at: 2018-04-10 16:00:54
End at: 2018-04-10 16:01:24
Local clock offset: 1.55 ms
Remote clock offset: -2.39 ms

# Below is generated by plot.py at 2018-04-10 17:03:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.89 Mbit/s
95th percentile per-packet one-way delay: 16.888 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 90.89 Mbit/s
95th percentile per-packet one-way delay: 16.888 ms
Loss rate: 0.31%
```

Run 10: Report of Vivace-LTE — Data Link



Throughput (Mbit/s)
0
20
40
60
80
100
0
5
10
15
20
25
30
Time (s)
Flow 1 ingress (mean 91.18 Mbit/s)
Flow 1 egress (mean 90.89 Mbit/s)



Per-packet one-way delay (ms)
10
15
20
25
30
35
40
45
50
0
5
10
15
20
25
30
Time (s)
Flow 1 (95th percentile 16.89 ms)