Pantheon Report

Generated at 2018-06-05 08:12:57 (UTC).

Data path: AWS California 2 Ethernet (*local*) →Mexico Ethernet (*remote*).

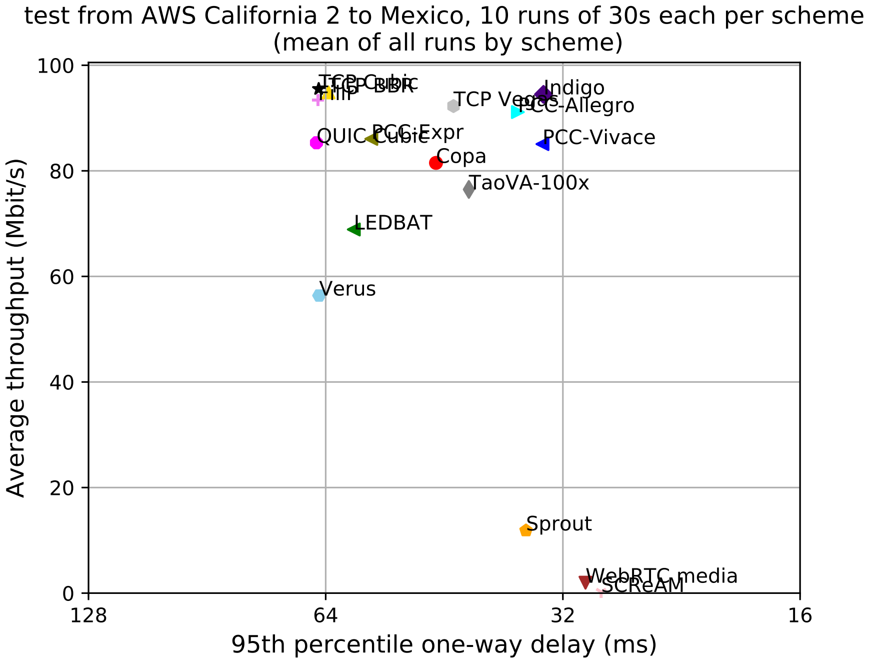
Repeated the test of 16 congestion control schemes 10 times.

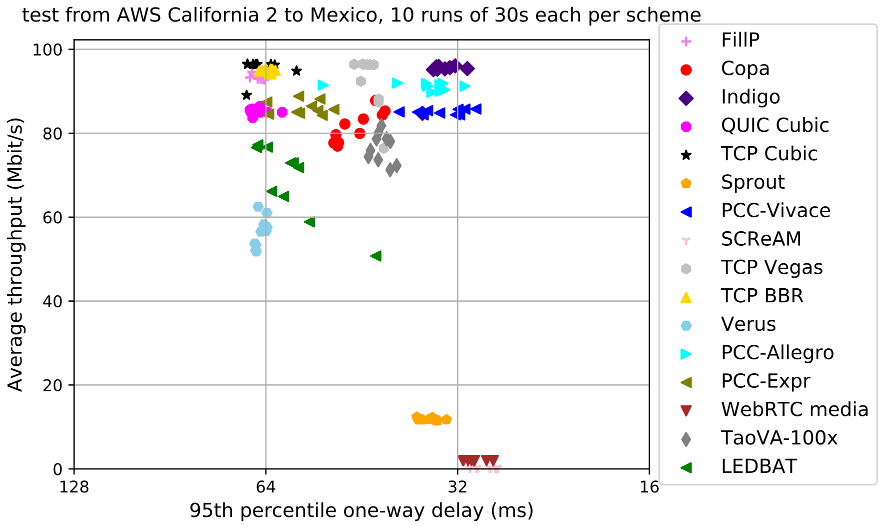
Each test lasted for 30 seconds running 1 flow.

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

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

```
Git summary:
branch: master @ 227fdf9a3757f17b88537cceed5743a33037a3d2
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
 M src/ScreamClient
 M src/ScreamServer
third_party/sprout @ c838669682f0c19f6baf92afc9a596a406d48c1f
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```


test from AWS California 2 to Mexico, 10 runs of 30s each per scheme
(mean of all runs by scheme)
Average throughput (Mbit/s)
95th percentile one-way delay (ms)
100
80
60
40
20
0
128
64
32
16
TCP Cubic
TCP BBR
FillP
Indigo
TCP Vegas
PCC-Allegro
QUIC Cubic
PCC-Expr
PCC-Vivace
Copa
TaoVA-100x
LEDBAT
Verus
Sprout
WebRTC media
SCReAM


test from AWS California 2 to Mexico, 10 runs of 30s each per scheme
Average throughput (Mbit/s)
95th percentile one-way delay (ms)
100
80
60
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128
64
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FillP
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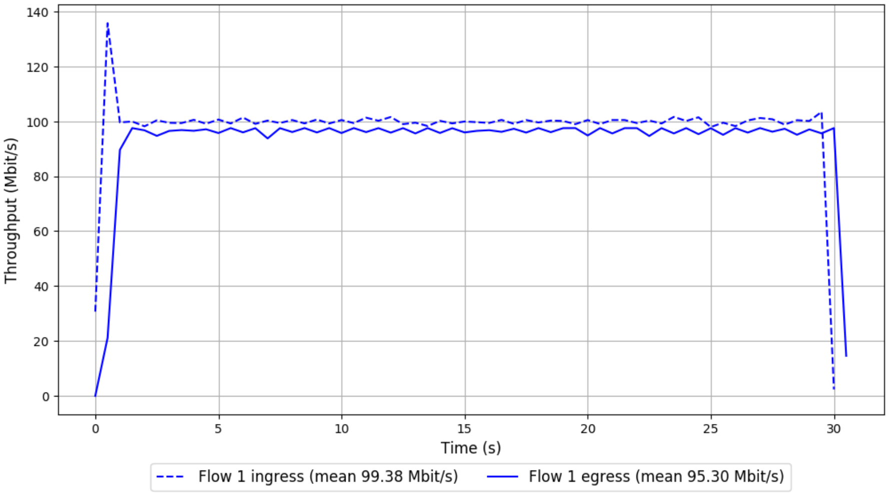
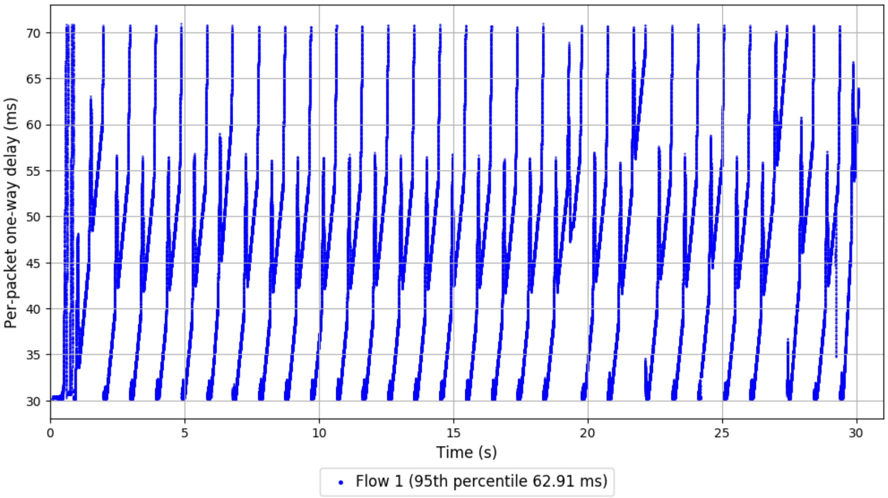
QUIC Cubic
TCP Cubic
Sprout
PCC-Vivace
SCReAM
TCP Vegas
TCP BBR
Verus
PCC-Allegro
PCC-Expr
WebRTC media
TaoVA-100x
LEDBAT

		mean avg tput (Mbit/s)	mean 95th-%ile delay (ms)	mean loss rate (%)
scheme	# runs	flow 1	flow 1	flow 1
TCP BBR	10	94.86	63.47	4.04
Copa	10	81.51	46.37	0.91
TCP Cubic	10	95.51	65.32	0.33
FillP	10	93.41	65.46	7.22
Indigo	10	94.49	33.87	0.01
LEDBAT	10	68.89	58.96	0.02
PCC-Allegro	10	91.13	36.50	0.65
PCC-Expr	10	86.05	56.02	0.65
QUIC Cubic	10	85.32	65.75	1.06
SCReAM	10	0.22	28.62	0.00
Sprout	10	11.87	35.64	0.01
TaoVA-100x	10	76.47	42.12	0.03
TCP Vegas	10	92.27	44.05	0.29
Verus	10	56.38	65.24	25.91
PCC-Vivace	10	85.07	33.97	0.01
WebRTC media	10	1.97	29.96	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2018-06-05 04:33:58
End at: 2018-06-05 04:34:28
Local clock offset: 0.595 ms
Remote clock offset: -4.276 ms

# Below is generated by plot.py at 2018-06-05 07:52:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.30 Mbit/s
95th percentile per-packet one-way delay: 62.914 ms
Loss rate: 4.01%
-- Flow 1:
Average throughput: 95.30 Mbit/s
95th percentile per-packet one-way delay: 62.914 ms
Loss rate: 4.01%
```

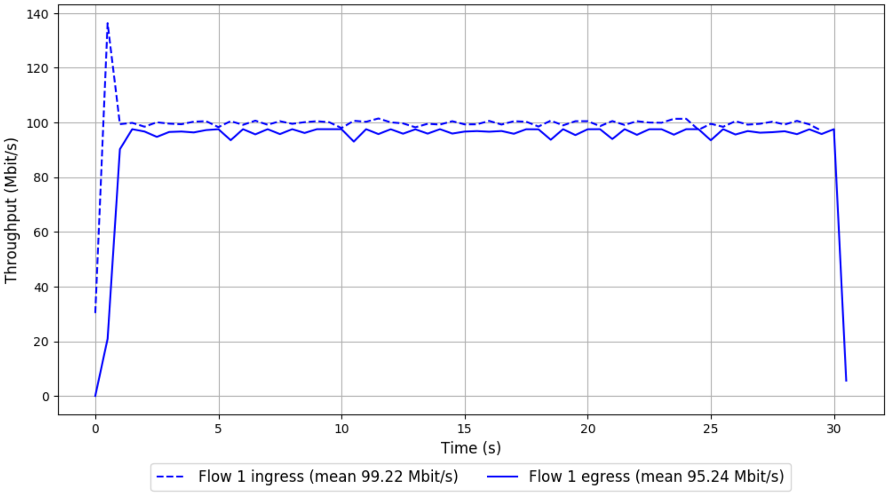
Run 1: Report of TCP BBR — Data Link

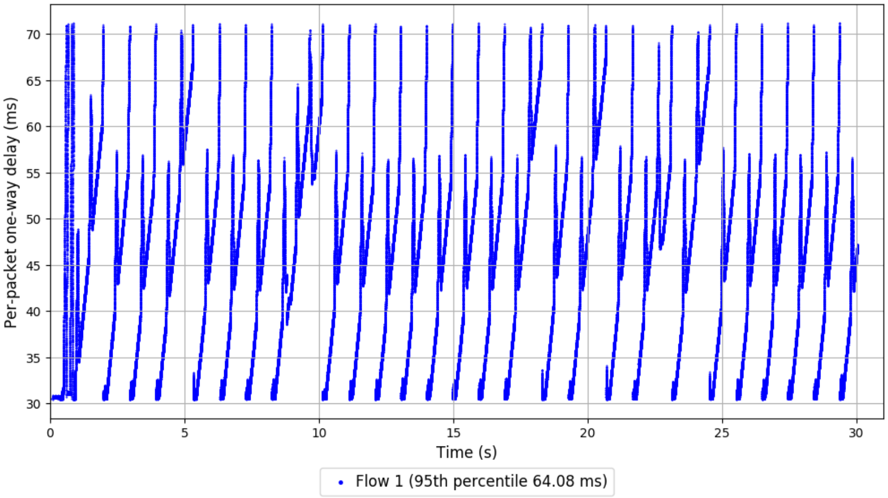




```
Run 2: Statistics of TCP BBR

Start at: 2018-06-05 04:55:35
End at: 2018-06-05 04:56:05
Local clock offset: 0.427 ms
Remote clock offset: -5.593 ms

# Below is generated by plot.py at 2018-06-05 07:52:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.24 Mbit/s
95th percentile per-packet one-way delay: 64.082 ms
Loss rate: 3.96%
-- Flow 1:
Average throughput: 95.24 Mbit/s
95th percentile per-packet one-way delay: 64.082 ms
Loss rate: 3.96%
```

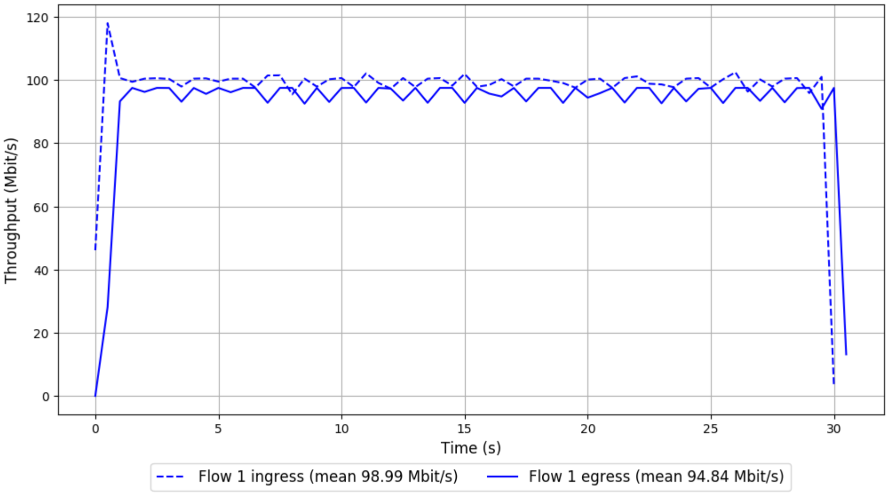
Run 2: Report of TCP BBR — Data Link

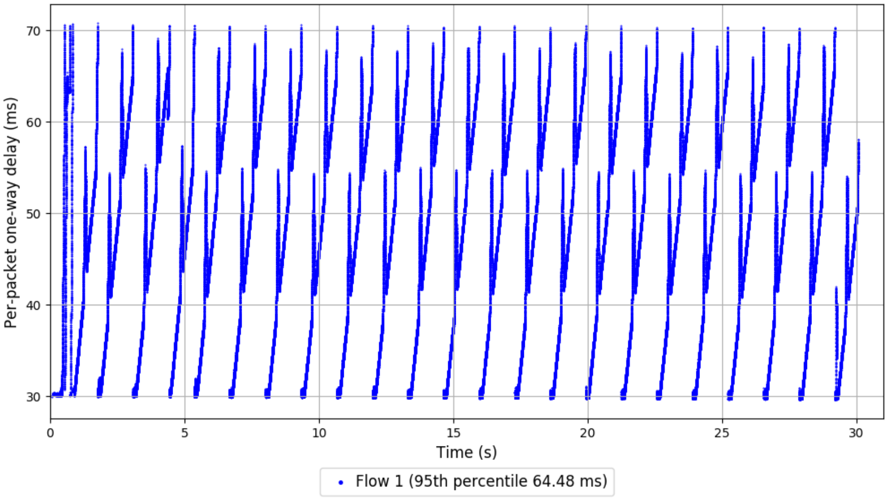




```
Run 3: Statistics of TCP BBR

Start at: 2018-06-05 05:16:46
End at: 2018-06-05 05:17:17
Local clock offset: 0.315 ms
Remote clock offset: -4.878 ms

# Below is generated by plot.py at 2018-06-05 07:52:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.84 Mbit/s
95th percentile per-packet one-way delay: 64.484 ms
Loss rate: 4.10%
-- Flow 1:
Average throughput: 94.84 Mbit/s
95th percentile per-packet one-way delay: 64.484 ms
Loss rate: 4.10%
```

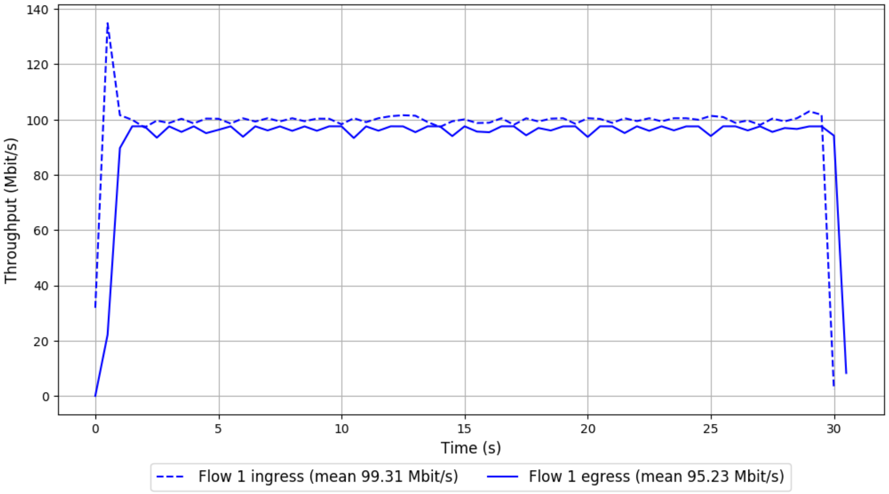
Run 3: Report of TCP BBR — Data Link

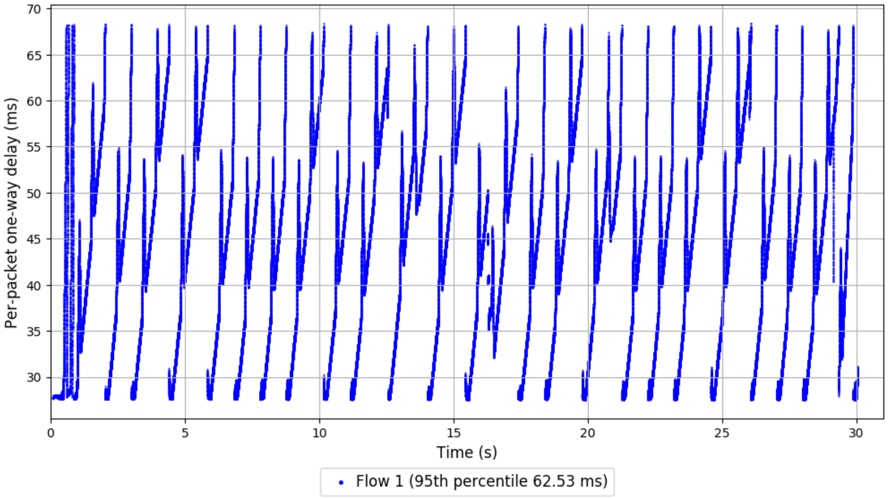




```
Run 4: Statistics of TCP BBR

Start at: 2018-06-05 05:37:43
End at: 2018-06-05 05:38:13
Local clock offset: 0.123 ms
Remote clock offset: -1.109 ms

# Below is generated by plot.py at 2018-06-05 07:52:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.23 Mbit/s
95th percentile per-packet one-way delay: 62.534 ms
Loss rate: 4.10%
-- Flow 1:
Average throughput: 95.23 Mbit/s
95th percentile per-packet one-way delay: 62.534 ms
Loss rate: 4.10%
```

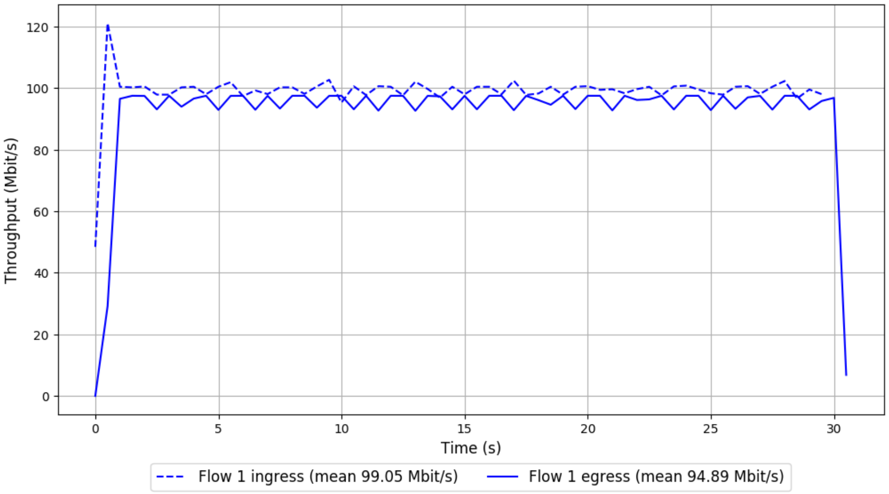
Run 4: Report of TCP BBR — Data Link

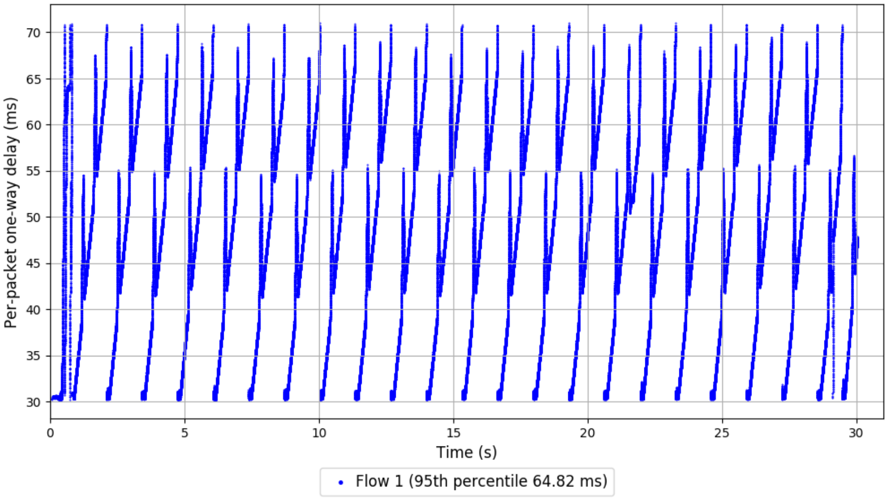




```
Run 5: Statistics of TCP BBR

Start at: 2018-06-05 05:58:50
End at: 2018-06-05 05:59:20
Local clock offset: 0.079 ms
Remote clock offset: 1.461 ms

# Below is generated by plot.py at 2018-06-05 07:52:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.89 Mbit/s
95th percentile per-packet one-way delay: 64.820 ms
Loss rate: 4.14%
-- Flow 1:
Average throughput: 94.89 Mbit/s
95th percentile per-packet one-way delay: 64.820 ms
Loss rate: 4.14%
```

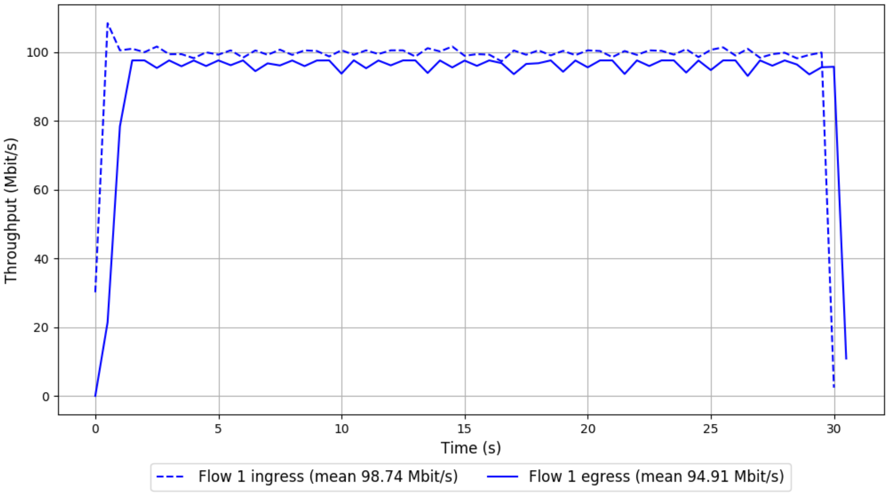
Run 5: Report of TCP BBR — Data Link

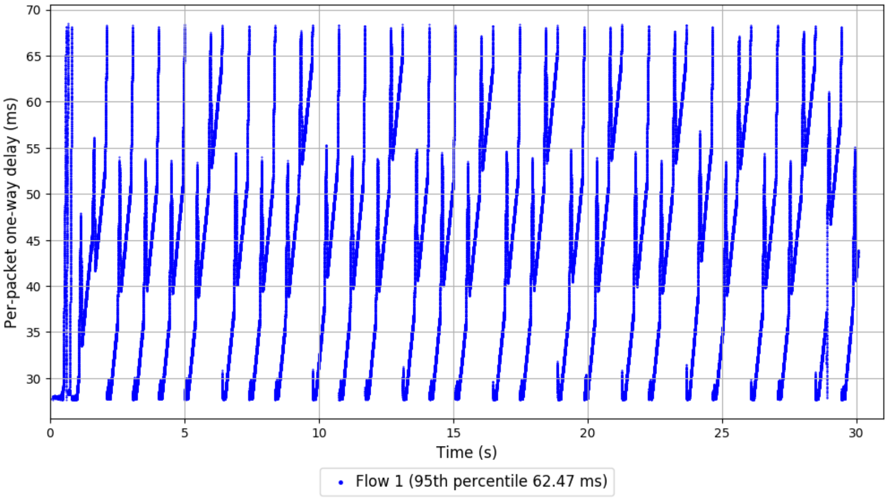




```
Run 6: Statistics of TCP BBR

Start at: 2018-06-05 06:19:44
End at: 2018-06-05 06:20:14
Local clock offset: 0.279 ms
Remote clock offset: -0.82 ms

# Below is generated by plot.py at 2018-06-05 07:52:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.91 Mbit/s
95th percentile per-packet one-way delay: 62.471 ms
Loss rate: 3.83%
-- Flow 1:
Average throughput: 94.91 Mbit/s
95th percentile per-packet one-way delay: 62.471 ms
Loss rate: 3.83%
```

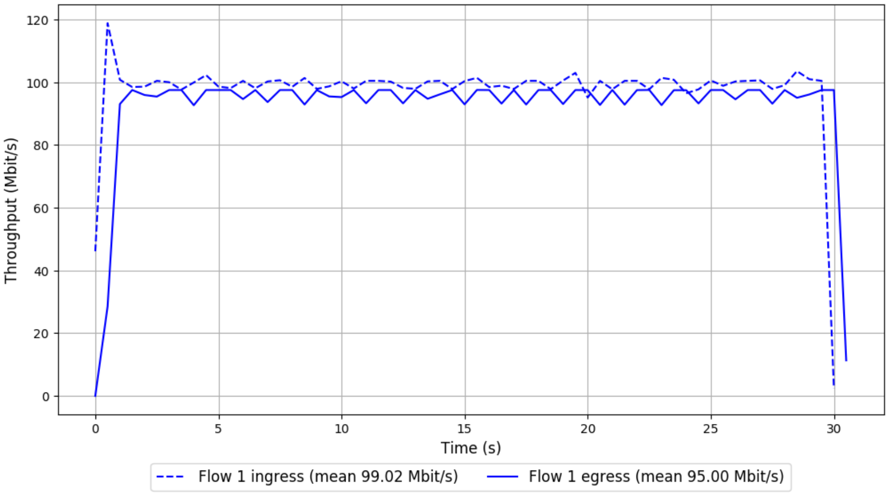
Run 6: Report of TCP BBR — Data Link

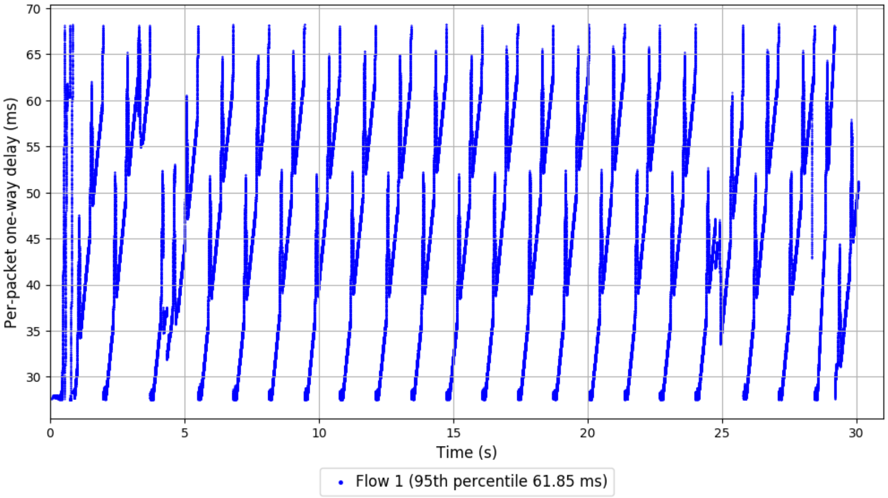




```
Run 7: Statistics of TCP BBR

Start at: 2018-06-05 06:40:41
End at: 2018-06-05 06:41:11
Local clock offset: 0.401 ms
Remote clock offset: -1.709 ms

# Below is generated by plot.py at 2018-06-05 07:52:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.00 Mbit/s
95th percentile per-packet one-way delay: 61.846 ms
Loss rate: 4.00%
-- Flow 1:
Average throughput: 95.00 Mbit/s
95th percentile per-packet one-way delay: 61.846 ms
Loss rate: 4.00%
```

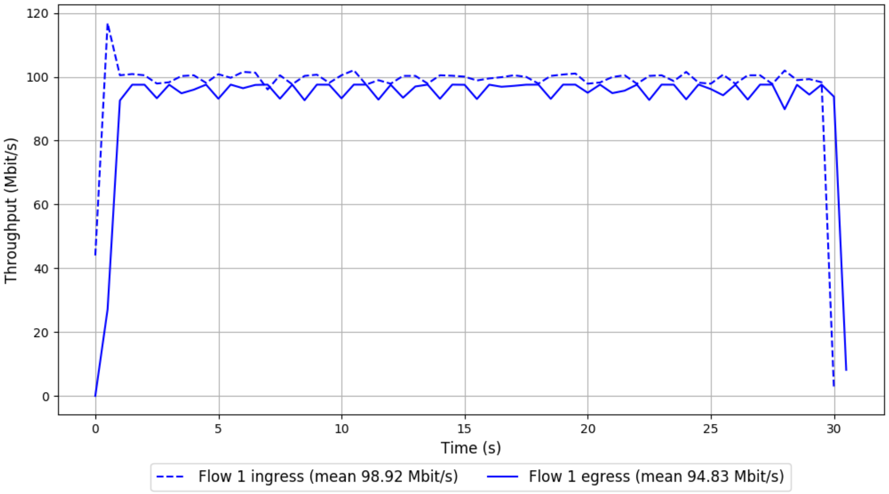
Run 7: Report of TCP BBR — Data Link

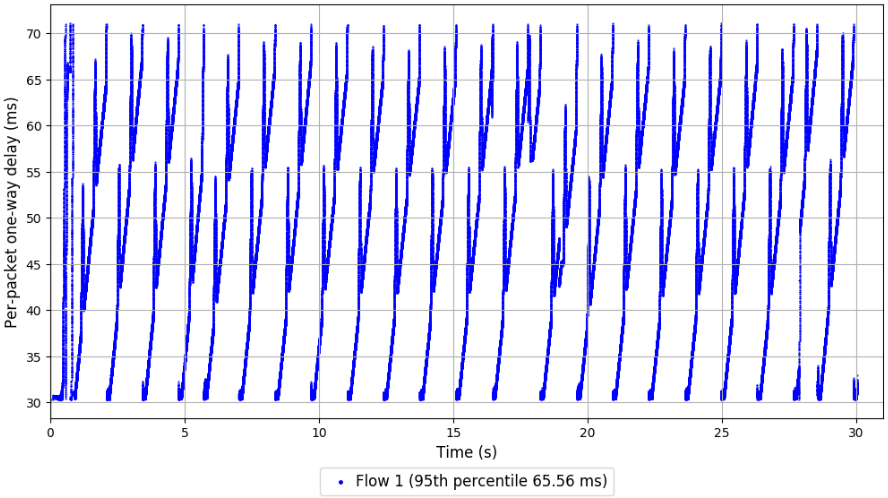




```
Run 8: Statistics of TCP BBR

Start at: 2018-06-05 07:01:37
End at: 2018-06-05 07:02:07
Local clock offset: 0.355 ms
Remote clock offset: 0.328 ms

# Below is generated by plot.py at 2018-06-05 07:52:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.83 Mbit/s
95th percentile per-packet one-way delay: 65.562 ms
Loss rate: 4.13%
-- Flow 1:
Average throughput: 94.83 Mbit/s
95th percentile per-packet one-way delay: 65.562 ms
Loss rate: 4.13%
```

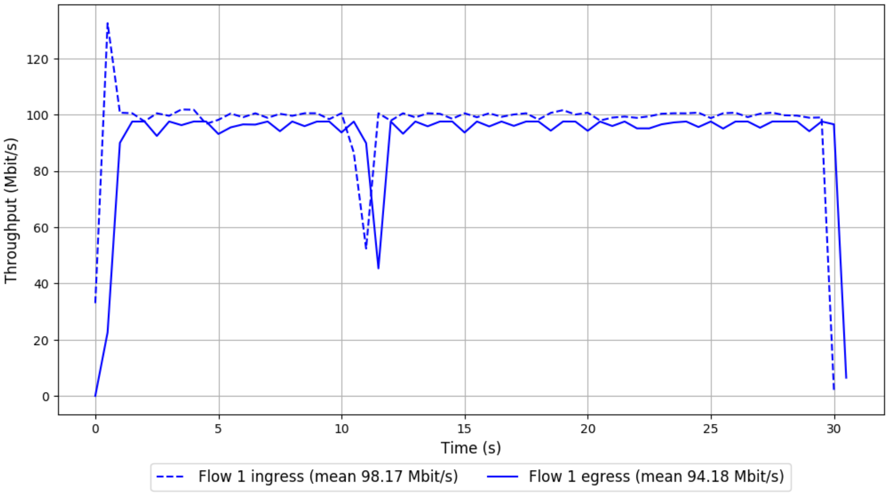
Run 8: Report of TCP BBR — Data Link

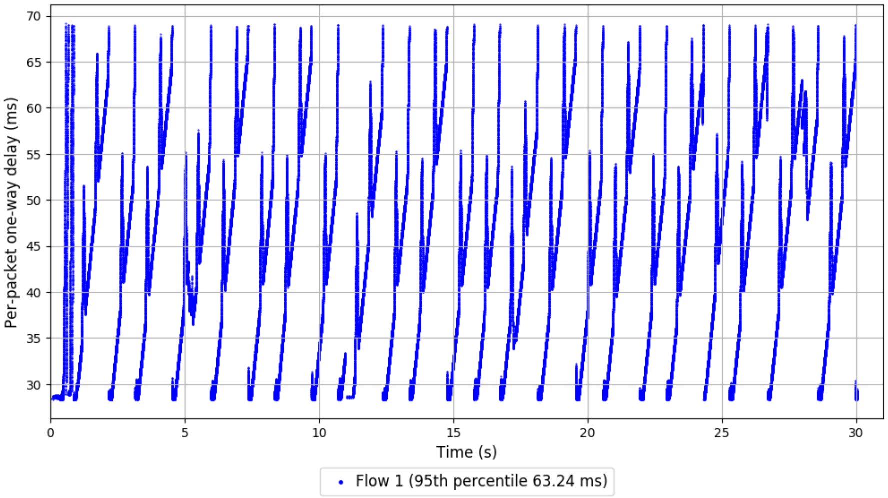




```
Run 9: Statistics of TCP BBR

Start at: 2018-06-05 07:22:35
End at: 2018-06-05 07:23:05
Local clock offset: 0.11 ms
Remote clock offset: -2.146 ms

# Below is generated by plot.py at 2018-06-05 07:53:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.18 Mbit/s
95th percentile per-packet one-way delay: 63.242 ms
Loss rate: 4.07%
-- Flow 1:
Average throughput: 94.18 Mbit/s
95th percentile per-packet one-way delay: 63.242 ms
Loss rate: 4.07%
```

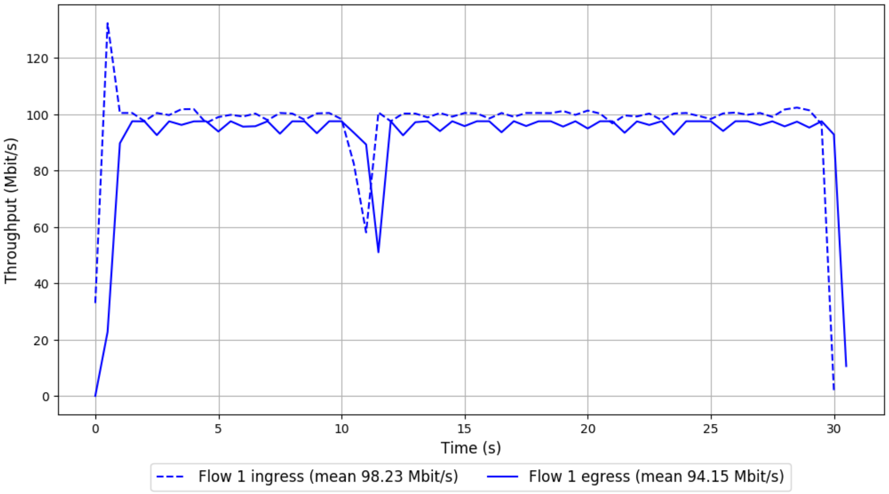
Run 9: Report of TCP BBR — Data Link

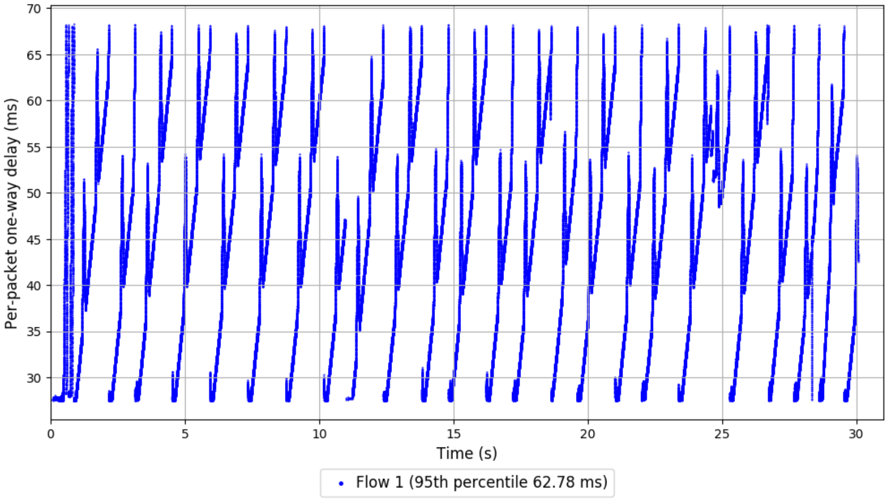




```
Run 10: Statistics of TCP BBR

Start at: 2018-06-05 07:43:29
End at: 2018-06-05 07:43:59
Local clock offset: 0.103 ms
Remote clock offset: -2.648 ms

# Below is generated by plot.py at 2018-06-05 07:53:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.15 Mbit/s
95th percentile per-packet one-way delay: 62.782 ms
Loss rate: 4.09%
-- Flow 1:
Average throughput: 94.15 Mbit/s
95th percentile per-packet one-way delay: 62.782 ms
Loss rate: 4.09%
```

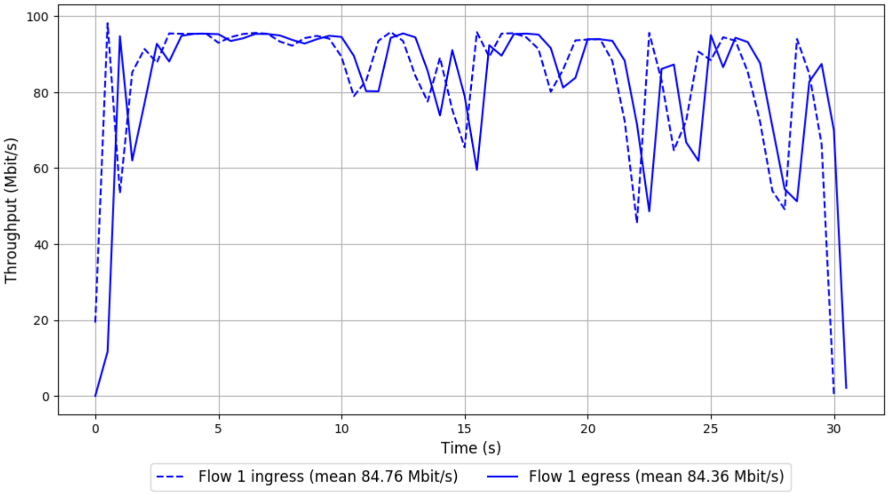
Run 10: Report of TCP BBR — Data Link

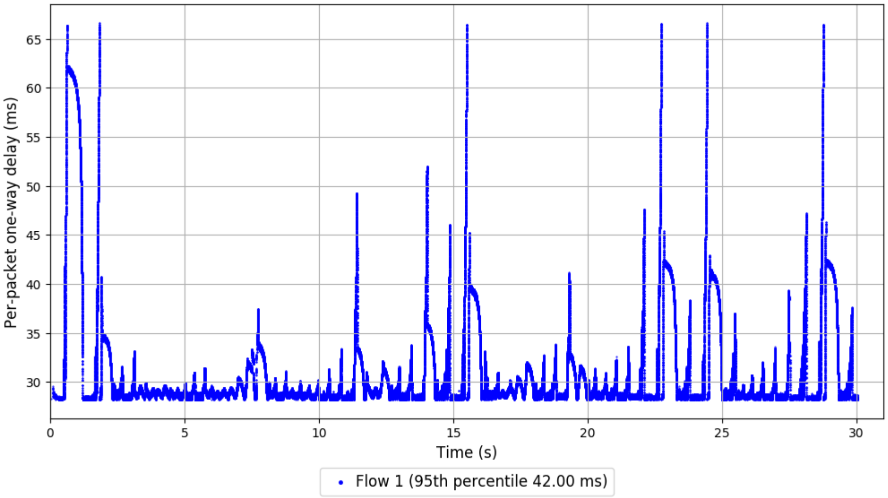




```
Run 1: Statistics of Copa

Start at: 2018-06-05 04:29:59
End at: 2018-06-05 04:30:29
Local clock offset: 0.617 ms
Remote clock offset: -6.621 ms

# Below is generated by plot.py at 2018-06-05 07:54:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.36 Mbit/s
95th percentile per-packet one-way delay: 42.001 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 84.36 Mbit/s
95th percentile per-packet one-way delay: 42.001 ms
Loss rate: 0.48%
```

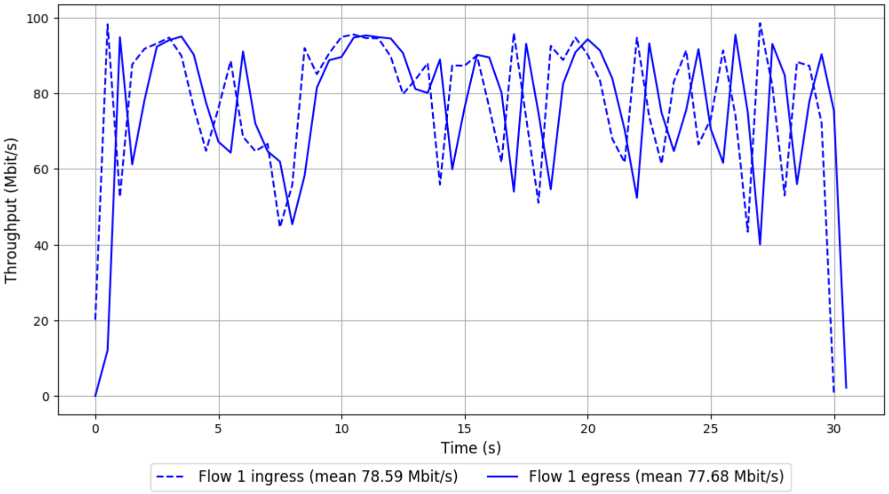
Run 1: Report of Copa — Data Link

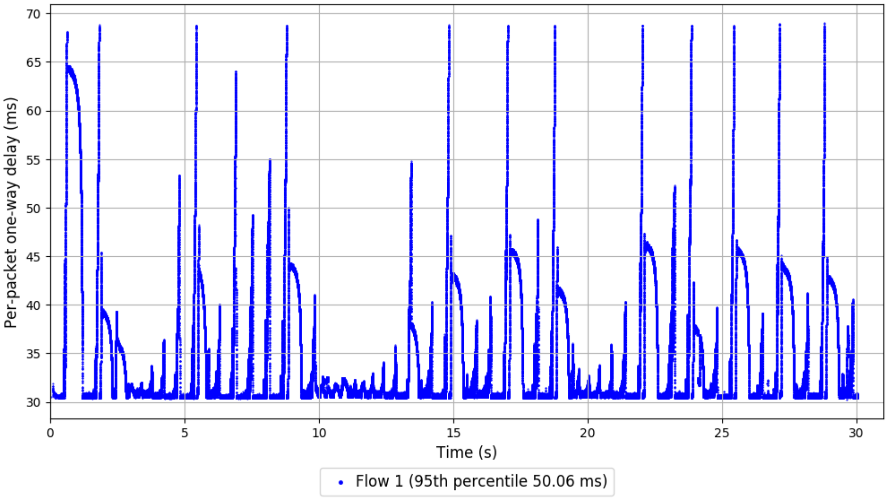




```
Run 2: Statistics of Copa

Start at: 2018-06-05 04:51:35
End at: 2018-06-05 04:52:05
Local clock offset: 0.426 ms
Remote clock offset: -5.492 ms

# Below is generated by plot.py at 2018-06-05 07:54:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.68 Mbit/s
95th percentile per-packet one-way delay: 50.063 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 77.68 Mbit/s
95th percentile per-packet one-way delay: 50.063 ms
Loss rate: 1.15%
```

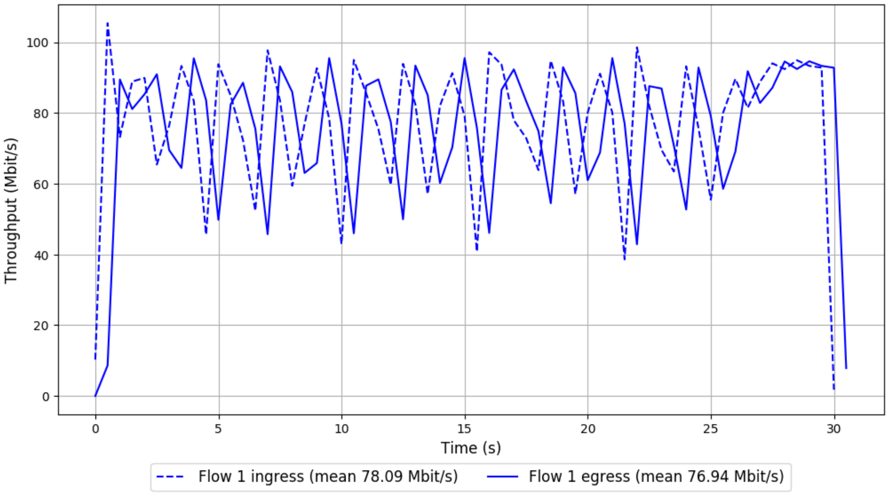
Run 2: Report of Copa — Data Link

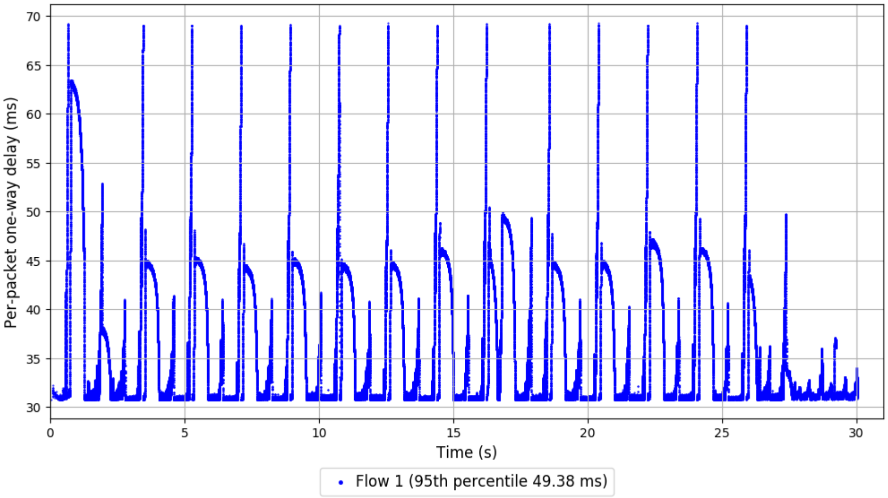




```
Run 3: Statistics of Copa

Start at: 2018-06-05 05:12:47
End at: 2018-06-05 05:13:17
Local clock offset: 0.346 ms
Remote clock offset: -5.757 ms

# Below is generated by plot.py at 2018-06-05 07:54:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.94 Mbit/s
95th percentile per-packet one-way delay: 49.382 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 76.94 Mbit/s
95th percentile per-packet one-way delay: 49.382 ms
Loss rate: 1.47%
```

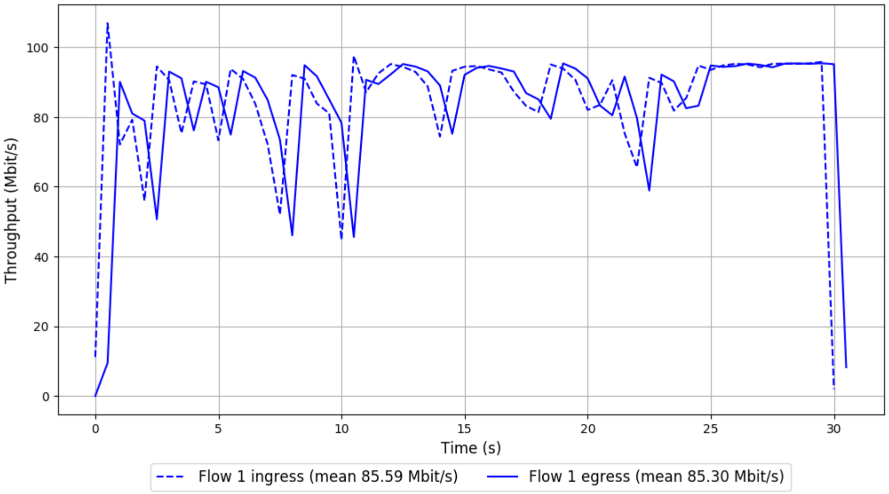
Run 3: Report of Copa — Data Link

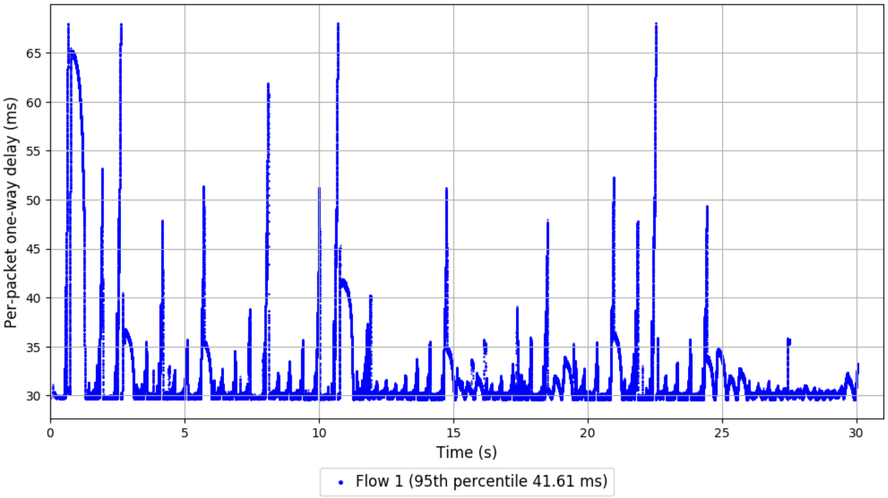




```
Run 4: Statistics of Copa

Start at: 2018-06-05 05:33:43
End at: 2018-06-05 05:34:13
Local clock offset: 0.126 ms
Remote clock offset: 0.378 ms

# Below is generated by plot.py at 2018-06-05 07:54:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.30 Mbit/s
95th percentile per-packet one-way delay: 41.609 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 85.30 Mbit/s
95th percentile per-packet one-way delay: 41.609 ms
Loss rate: 0.32%
```

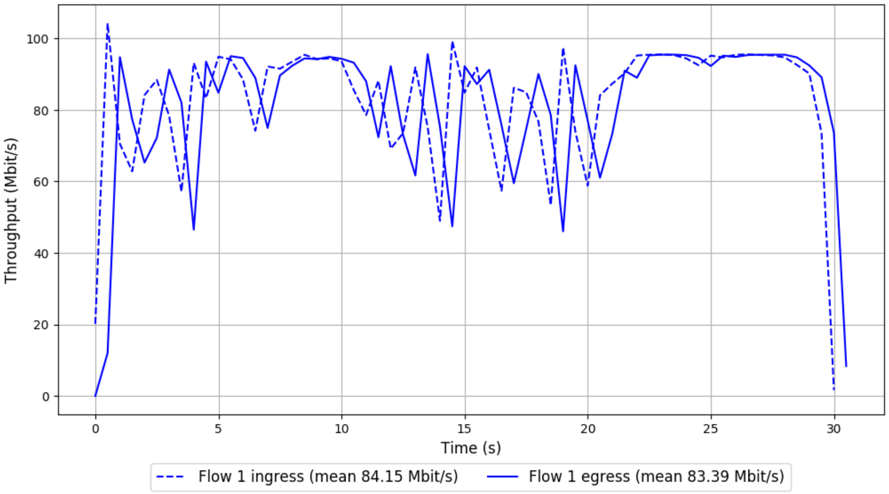
Run 4: Report of Copa — Data Link

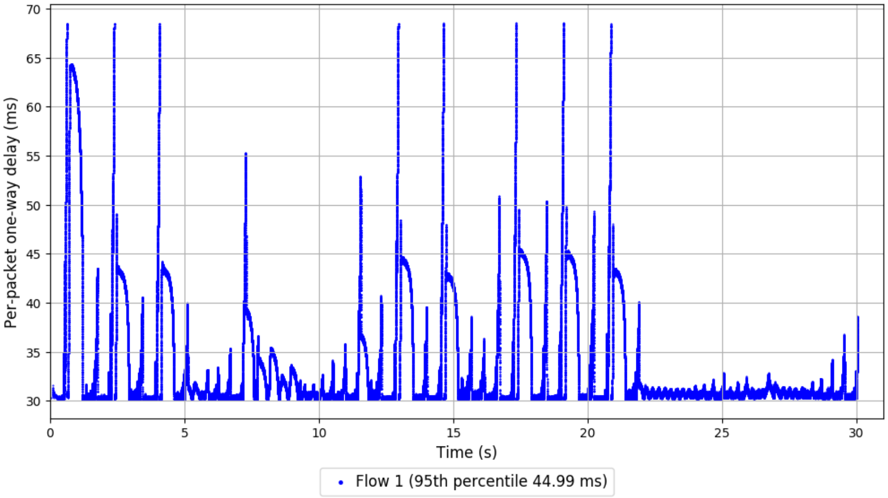




```
Run 5: Statistics of Copa

Start at: 2018-06-05 05:54:50
End at: 2018-06-05 05:55:20
Local clock offset: 0.193 ms
Remote clock offset: 1.789 ms

# Below is generated by plot.py at 2018-06-05 07:54:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.39 Mbit/s
95th percentile per-packet one-way delay: 44.993 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 83.39 Mbit/s
95th percentile per-packet one-way delay: 44.993 ms
Loss rate: 0.87%
```

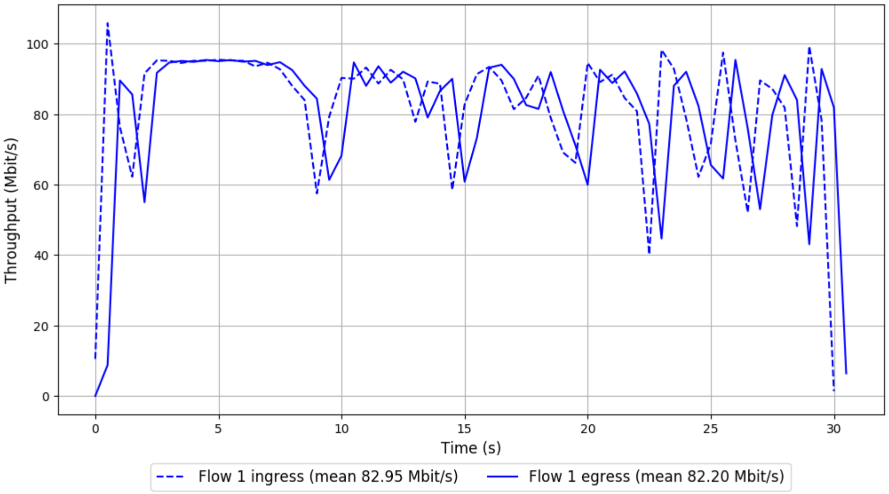
Run 5: Report of Copa — Data Link

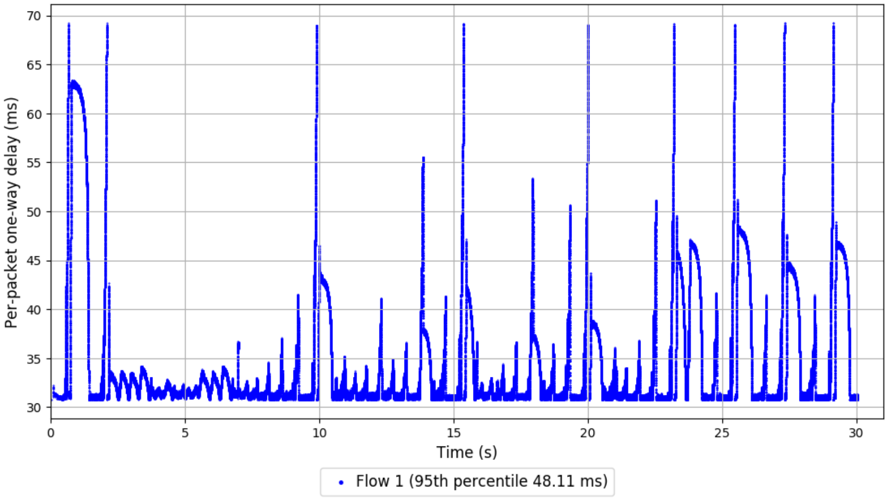




```
Run 6: Statistics of Copa

Start at: 2018-06-05 06:15:44
End at: 2018-06-05 06:16:14
Local clock offset: 0.332 ms
Remote clock offset: 1.524 ms

# Below is generated by plot.py at 2018-06-05 07:54:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.20 Mbit/s
95th percentile per-packet one-way delay: 48.107 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 82.20 Mbit/s
95th percentile per-packet one-way delay: 48.107 ms
Loss rate: 0.91%
```

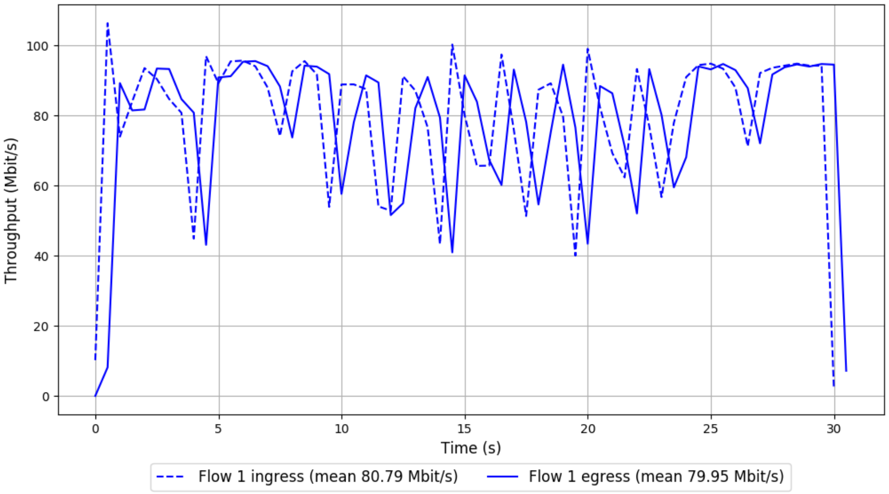
Run 6: Report of Copa — Data Link

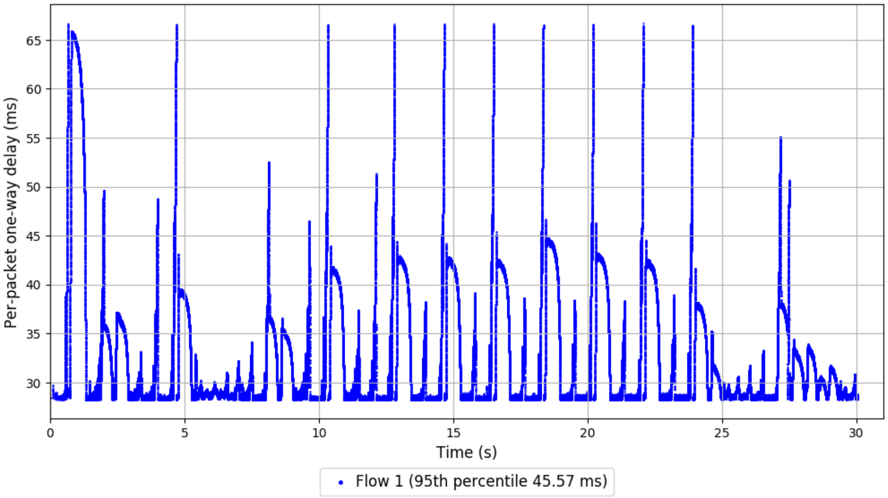




```
Run 7: Statistics of Copa

Start at: 2018-06-05 06:36:41
End at: 2018-06-05 06:37:11
Local clock offset: 0.398 ms
Remote clock offset: -1.678 ms

# Below is generated by plot.py at 2018-06-05 07:55:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.95 Mbit/s
95th percentile per-packet one-way delay: 45.567 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 79.95 Mbit/s
95th percentile per-packet one-way delay: 45.567 ms
Loss rate: 1.04%
```

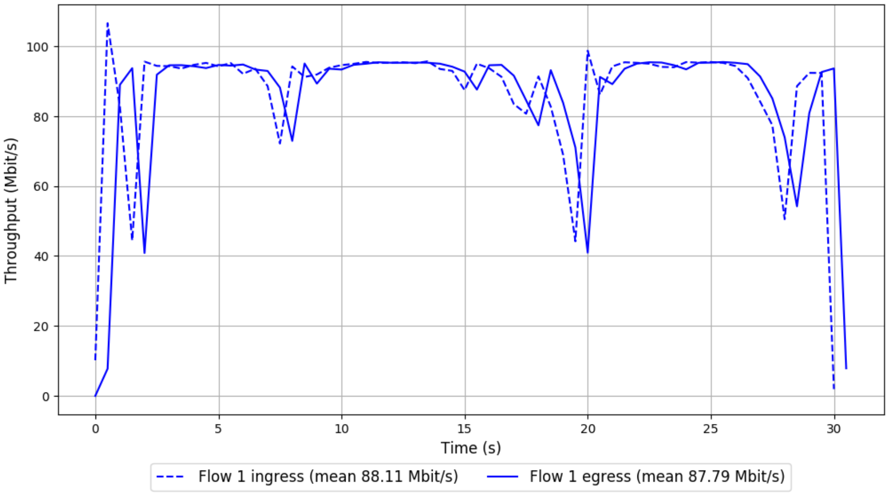
Run 7: Report of Copa — Data Link

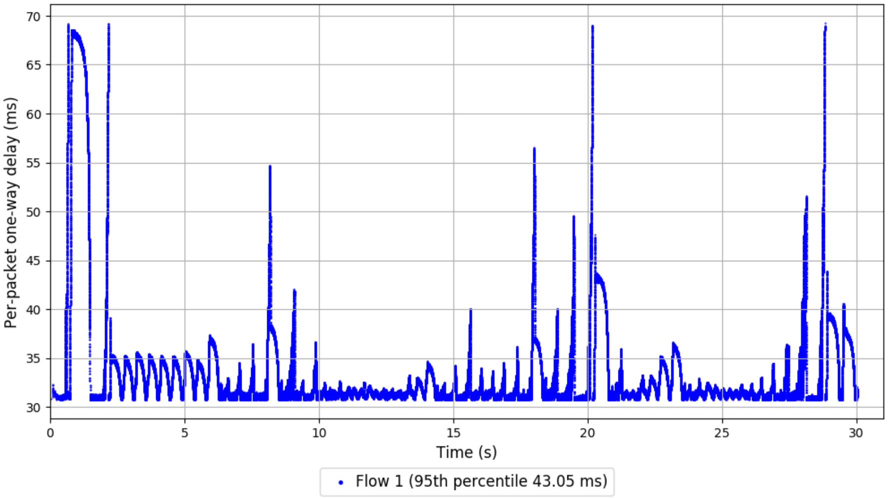




```
Run 8: Statistics of Copa

Start at: 2018-06-05 06:57:37
End at: 2018-06-05 06:58:07
Local clock offset: 0.358 ms
Remote clock offset: 0.989 ms

# Below is generated by plot.py at 2018-06-05 07:55:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.79 Mbit/s
95th percentile per-packet one-way delay: 43.045 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 87.79 Mbit/s
95th percentile per-packet one-way delay: 43.045 ms
Loss rate: 0.36%
```

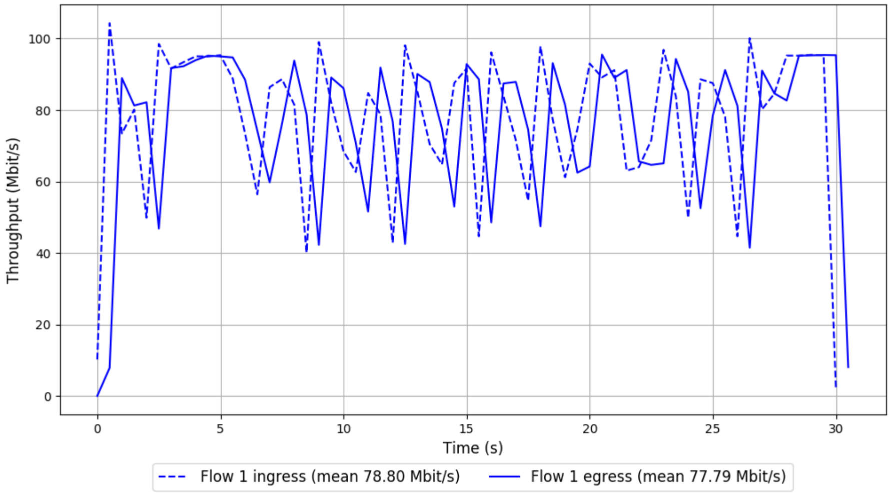
Run 8: Report of Copa — Data Link

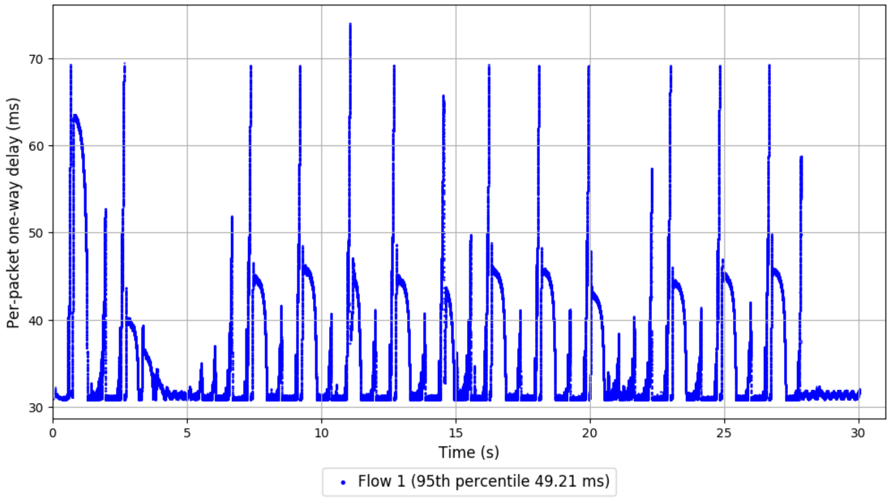




```
Run 9: Statistics of Copa

Start at: 2018-06-05 07:18:35
End at: 2018-06-05 07:19:05
Local clock offset: 0.065 ms
Remote clock offset: 0.301 ms

# Below is generated by plot.py at 2018-06-05 07:55:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.79 Mbit/s
95th percentile per-packet one-way delay: 49.208 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 77.79 Mbit/s
95th percentile per-packet one-way delay: 49.208 ms
Loss rate: 1.28%
```

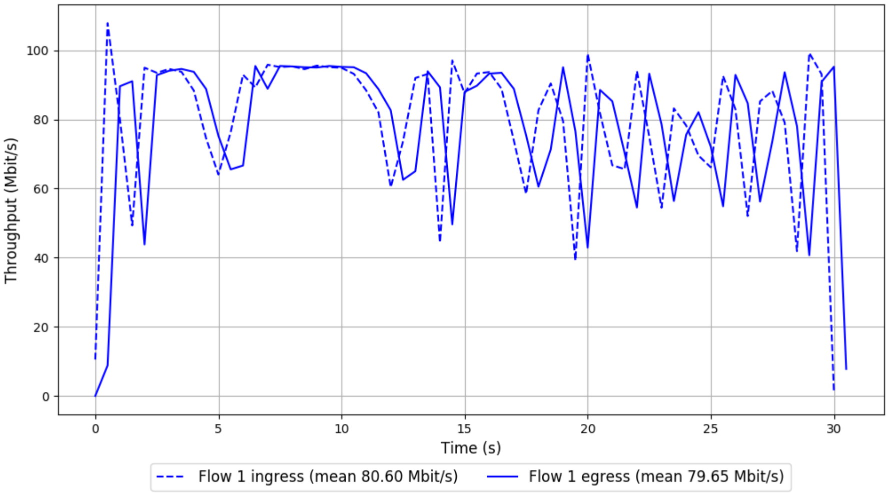
Run 9: Report of Copa — Data Link

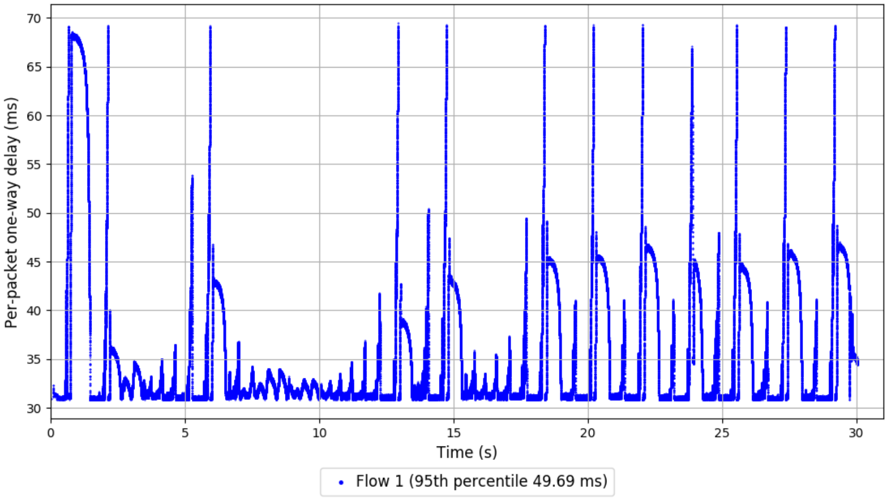




```
Run 10: Statistics of Copa

Start at: 2018-06-05 07:39:29
End at: 2018-06-05 07:39:59
Local clock offset: 0.105 ms
Remote clock offset: 0.07 ms

# Below is generated by plot.py at 2018-06-05 07:55:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.65 Mbit/s
95th percentile per-packet one-way delay: 49.692 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 79.65 Mbit/s
95th percentile per-packet one-way delay: 49.692 ms
Loss rate: 1.17%
```

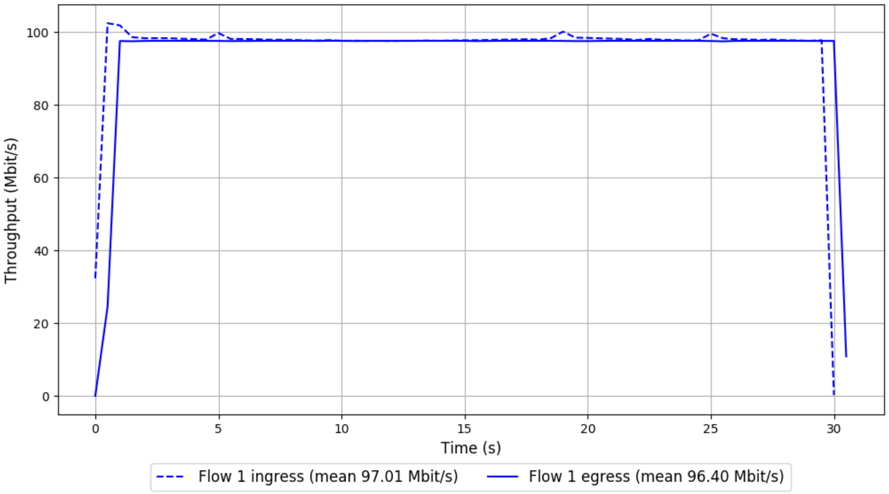
Run 10: Report of Copa — Data Link

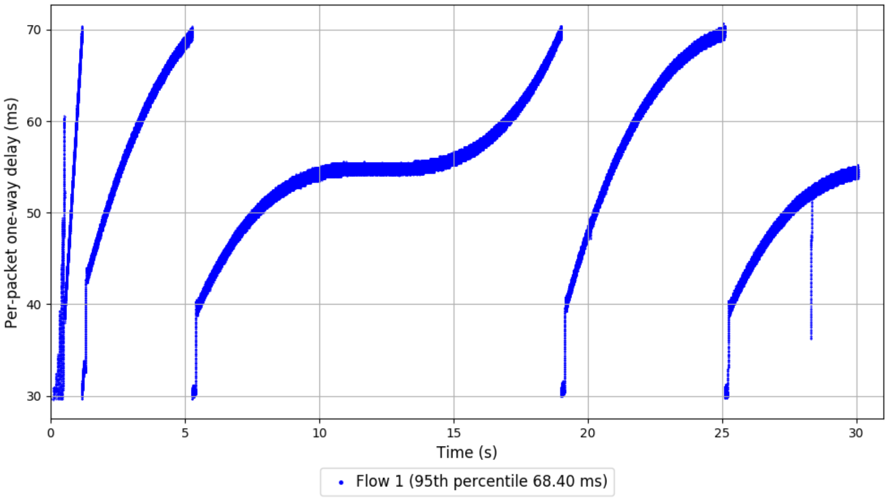




```
Run 1: Statistics of TCP Cubic

Start at: 2018-06-05 04:18:16
End at: 2018-06-05 04:18:46
Local clock offset: 0.615 ms
Remote clock offset: -3.351 ms

# Below is generated by plot.py at 2018-06-05 07:55:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.40 Mbit/s
95th percentile per-packet one-way delay: 68.401 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 96.40 Mbit/s
95th percentile per-packet one-way delay: 68.401 ms
Loss rate: 0.54%
```

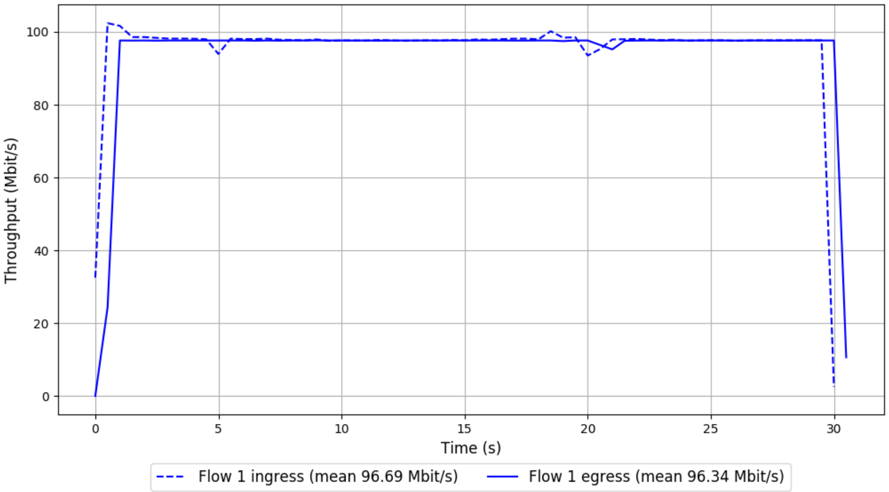
Run 1: Report of TCP Cubic — Data Link

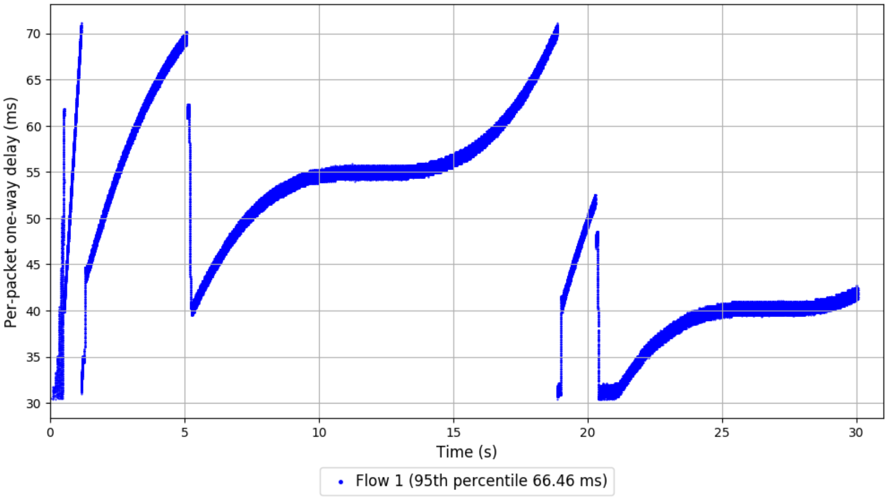




```
Run 2: Statistics of TCP Cubic

Start at: 2018-06-05 04:39:10
End at: 2018-06-05 04:39:40
Local clock offset: 0.475 ms
Remote clock offset: -4.978 ms

# Below is generated by plot.py at 2018-06-05 07:55:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.34 Mbit/s
95th percentile per-packet one-way delay: 66.462 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 96.34 Mbit/s
95th percentile per-packet one-way delay: 66.462 ms
Loss rate: 0.32%
```

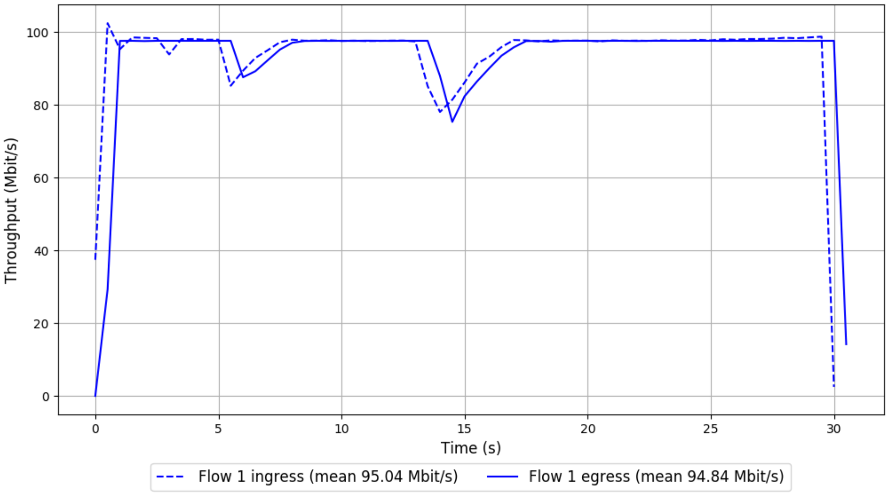
Run 2: Report of TCP Cubic — Data Link

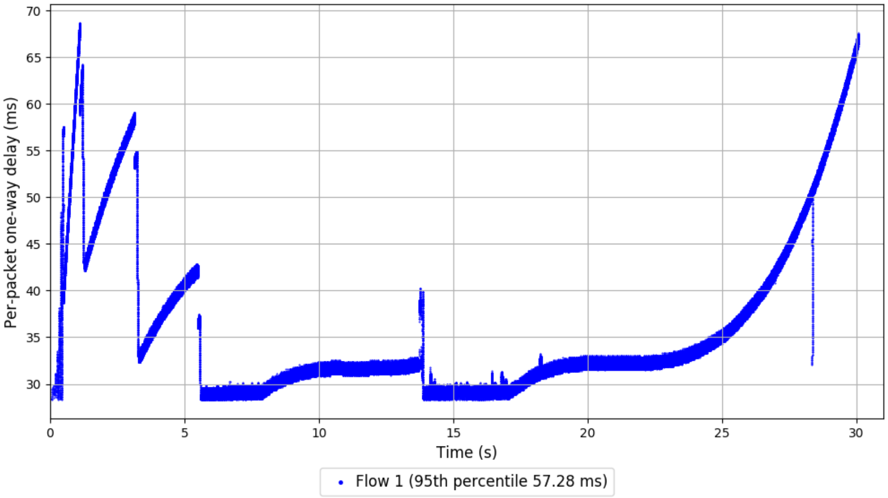




```
Run 3: Statistics of TCP Cubic

Start at: 2018-06-05 05:00:48
End at: 2018-06-05 05:01:18
Local clock offset: 0.424 ms
Remote clock offset: -7.875 ms

# Below is generated by plot.py at 2018-06-05 07:55:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.84 Mbit/s
95th percentile per-packet one-way delay: 57.279 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 94.84 Mbit/s
95th percentile per-packet one-way delay: 57.279 ms
Loss rate: 0.10%
```

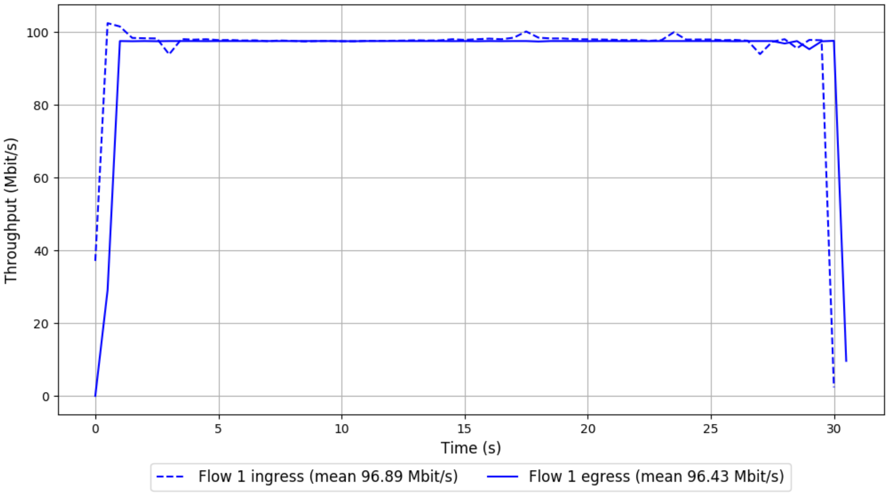
Run 3: Report of TCP Cubic — Data Link

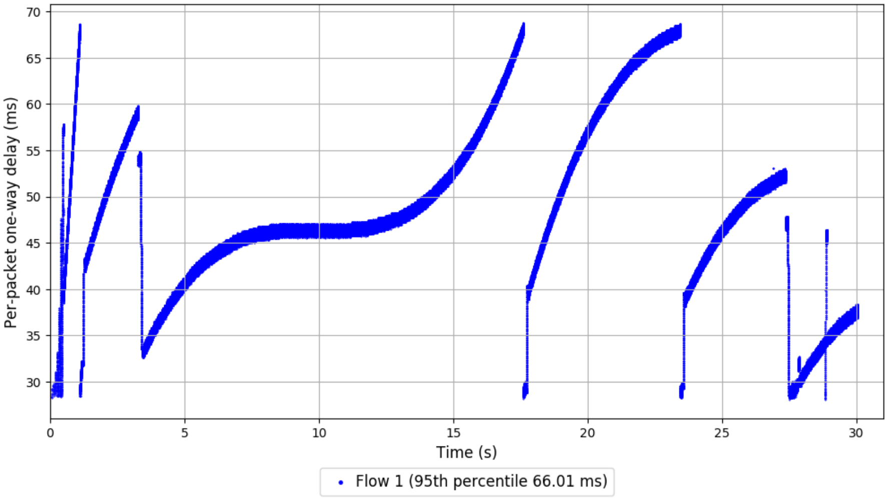




```
Run 4: Statistics of TCP Cubic

Start at: 2018-06-05 05:21:59
End at: 2018-06-05 05:22:29
Local clock offset: 0.243 ms
Remote clock offset: -4.629 ms

# Below is generated by plot.py at 2018-06-05 07:55:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.43 Mbit/s
95th percentile per-packet one-way delay: 66.008 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 96.43 Mbit/s
95th percentile per-packet one-way delay: 66.008 ms
Loss rate: 0.44%
```

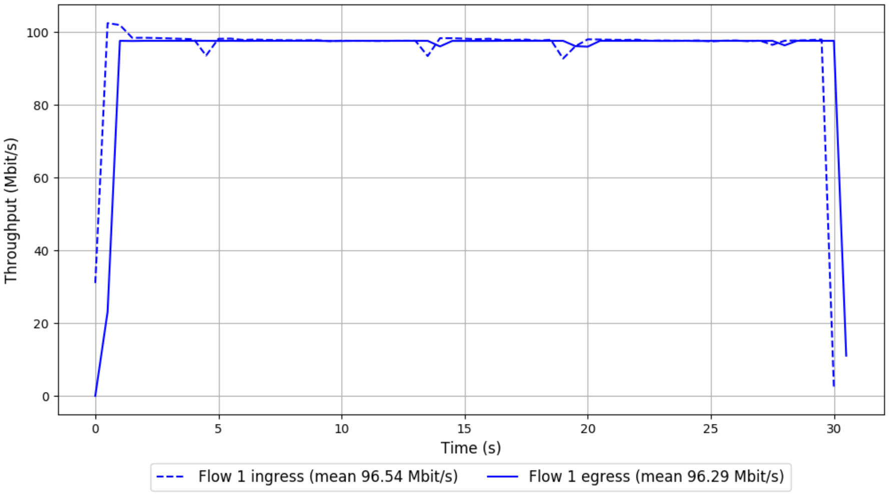
Run 4: Report of TCP Cubic — Data Link

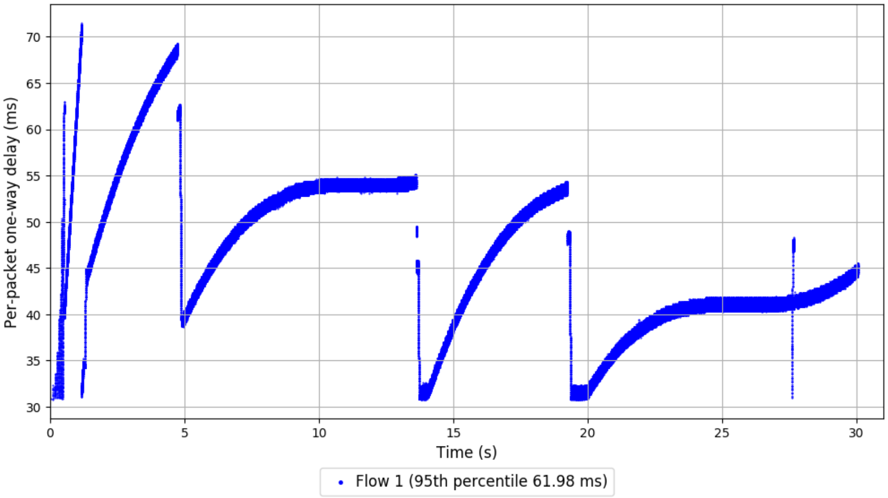




```
Run 5: Statistics of TCP Cubic

Start at: 2018-06-05 05:43:09
End at: 2018-06-05 05:43:39
Local clock offset: 0.122 ms
Remote clock offset: 2.04 ms

# Below is generated by plot.py at 2018-06-05 07:56:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.29 Mbit/s
95th percentile per-packet one-way delay: 61.979 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 96.29 Mbit/s
95th percentile per-packet one-way delay: 61.979 ms
Loss rate: 0.21%
```

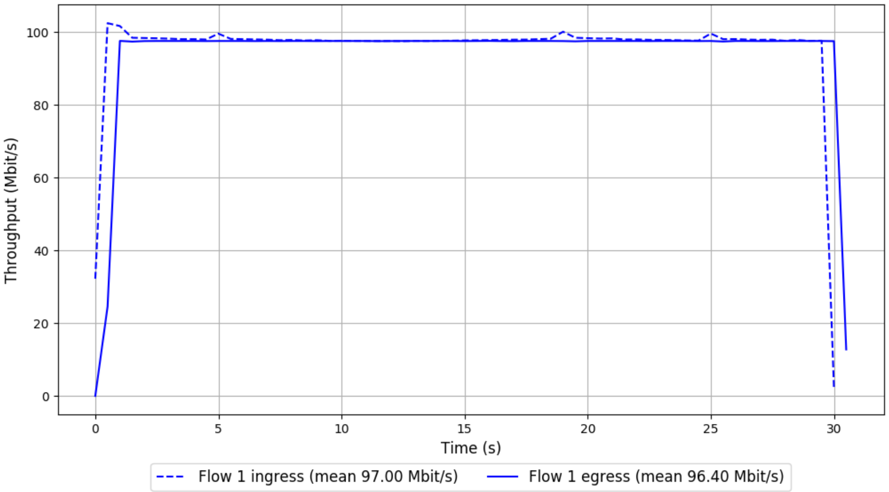
Run 5: Report of TCP Cubic — Data Link

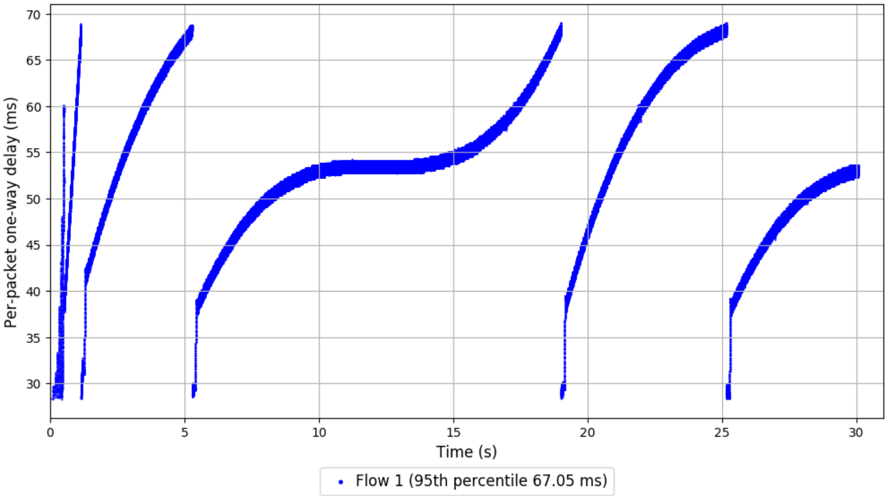




```
Run 6: Statistics of TCP Cubic

Start at: 2018-06-05 06:04:01
End at: 2018-06-05 06:04:31
Local clock offset: 0.155 ms
Remote clock offset: -1.181 ms

# Below is generated by plot.py at 2018-06-05 07:56:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.40 Mbit/s
95th percentile per-packet one-way delay: 67.046 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 96.40 Mbit/s
95th percentile per-packet one-way delay: 67.046 ms
Loss rate: 0.54%
```

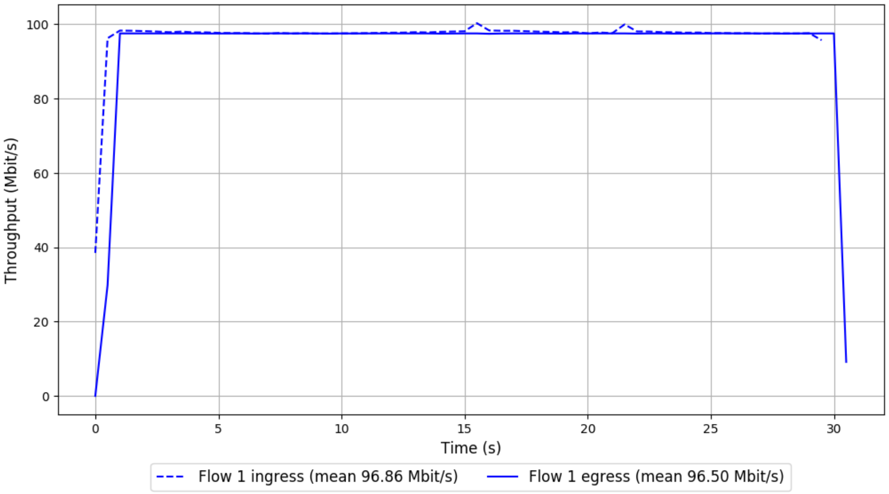
Run 6: Report of TCP Cubic — Data Link

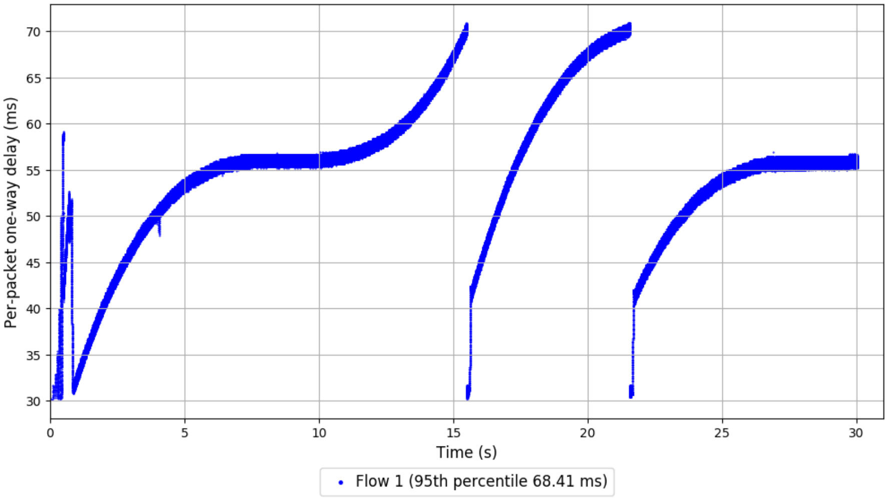




```
Run 7: Statistics of TCP Cubic

Start at: 2018-06-05 06:24:57
End at: 2018-06-05 06:25:27
Local clock offset: 0.395 ms
Remote clock offset: 1.688 ms

# Below is generated by plot.py at 2018-06-05 07:56:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.50 Mbit/s
95th percentile per-packet one-way delay: 68.413 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 96.50 Mbit/s
95th percentile per-packet one-way delay: 68.413 ms
Loss rate: 0.28%
```

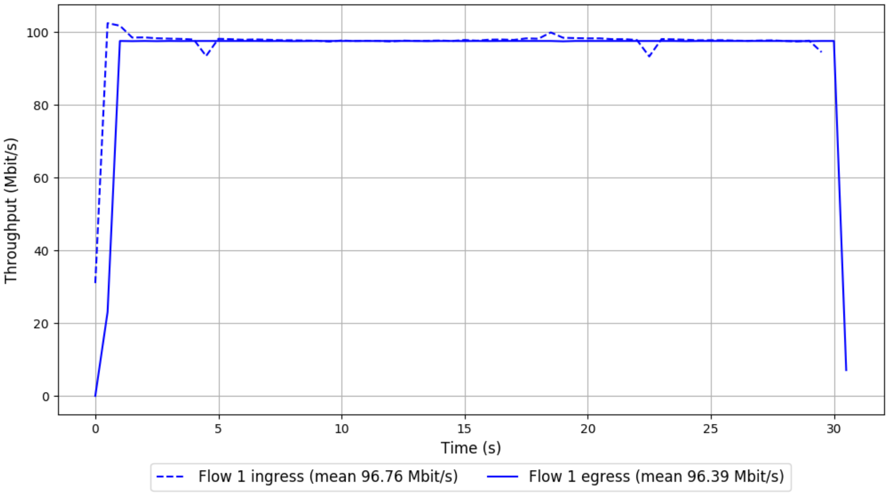
Run 7: Report of TCP Cubic — Data Link

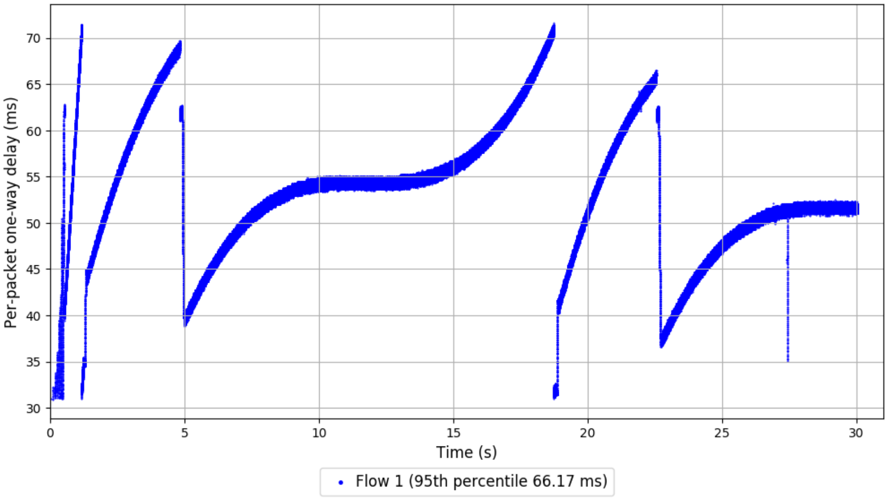




```
Run 8: Statistics of TCP Cubic

Start at: 2018-06-05 06:45:53
End at: 2018-06-05 06:46:23
Local clock offset: 0.29 ms
Remote clock offset: 0.862 ms

# Below is generated by plot.py at 2018-06-05 07:56:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.39 Mbit/s
95th percentile per-packet one-way delay: 66.173 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 96.39 Mbit/s
95th percentile per-packet one-way delay: 66.173 ms
Loss rate: 0.31%
```

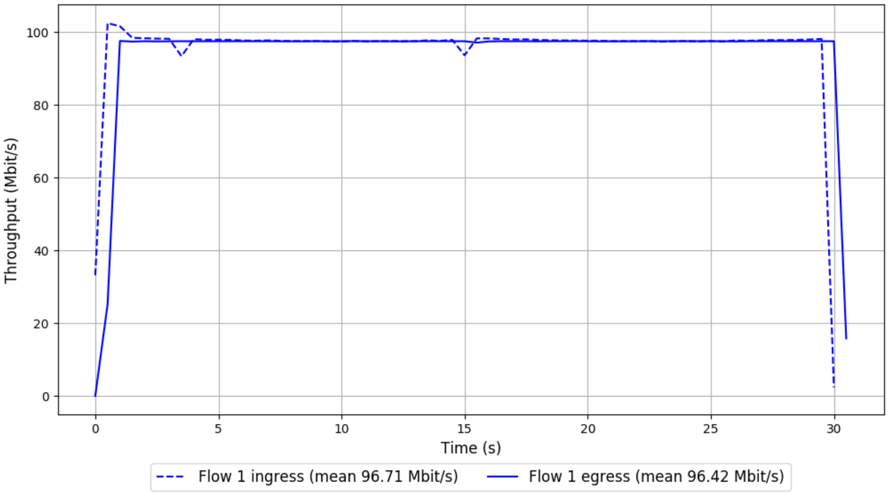
Run 8: Report of TCP Cubic — Data Link

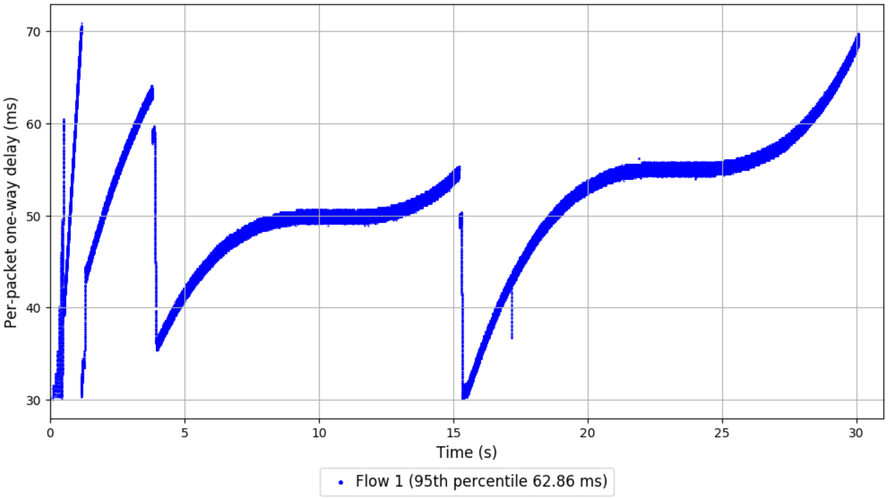




```
Run 9: Statistics of TCP Cubic

Start at: 2018-06-05 07:06:50
End at: 2018-06-05 07:07:20
Local clock offset: 0.311 ms
Remote clock offset: 0.575 ms

# Below is generated by plot.py at 2018-06-05 07:56:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.42 Mbit/s
95th percentile per-packet one-way delay: 62.856 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 96.42 Mbit/s
95th percentile per-packet one-way delay: 62.856 ms
Loss rate: 0.18%
```

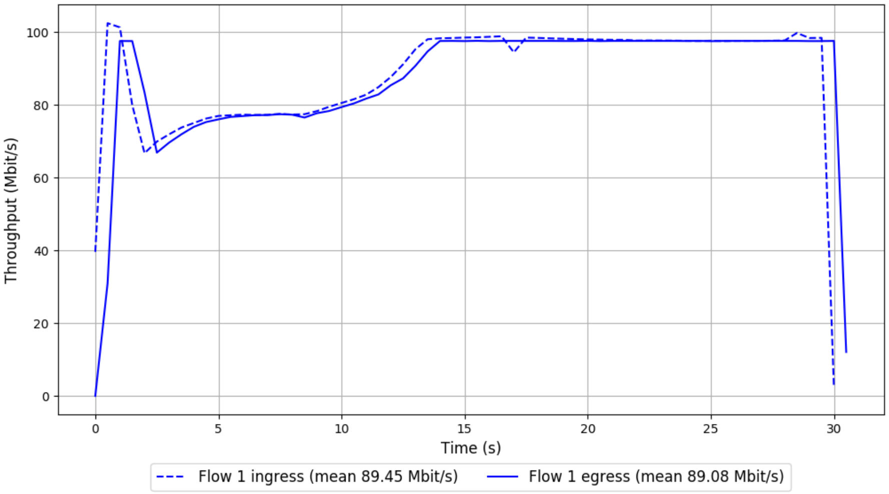
Run 9: Report of TCP Cubic — Data Link

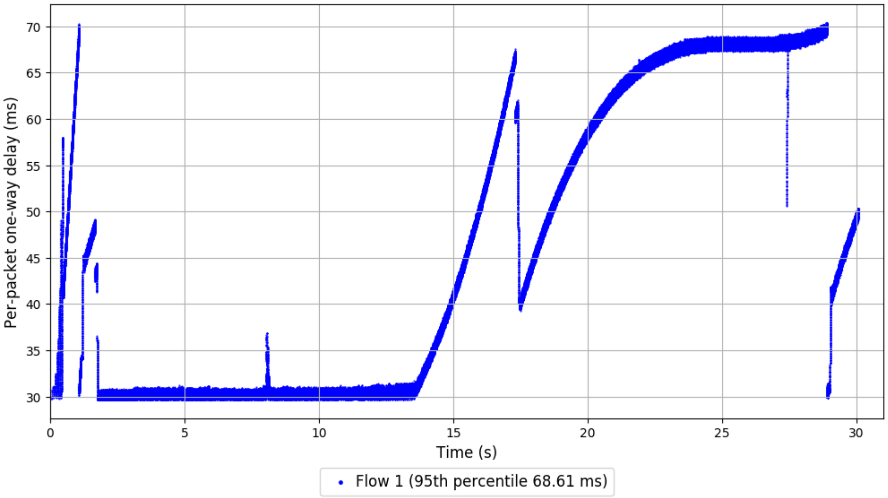




```
Run 10: Statistics of TCP Cubic

Start at: 2018-06-05 07:27:47
End at: 2018-06-05 07:28:17
Local clock offset: 0.007 ms
Remote clock offset: -0.202 ms

# Below is generated by plot.py at 2018-06-05 07:56:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.08 Mbit/s
95th percentile per-packet one-way delay: 68.615 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 89.08 Mbit/s
95th percentile per-packet one-way delay: 68.615 ms
Loss rate: 0.35%
```

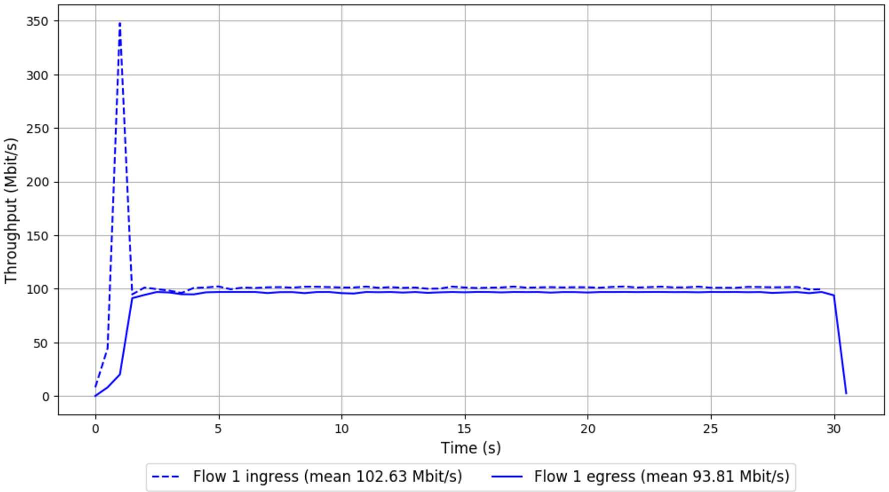
Run 10: Report of TCP Cubic — Data Link

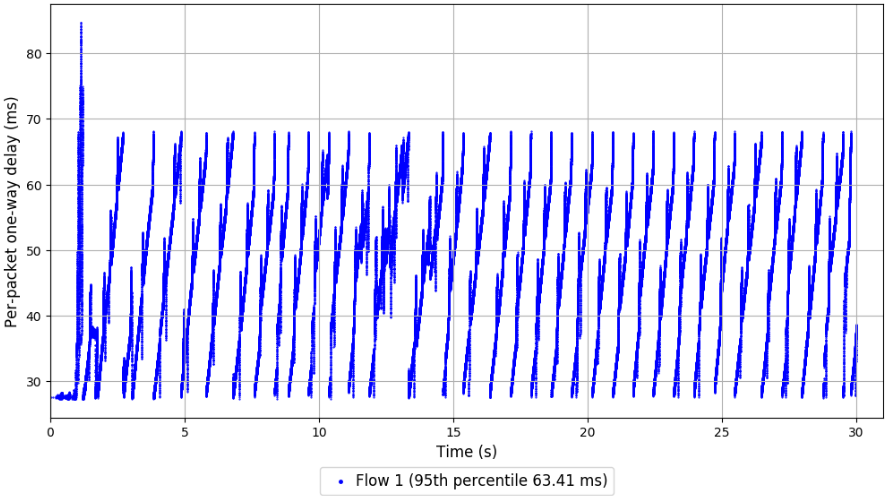




```
Run 1: Statistics of FillP

Start at: 2018-06-05 04:24:43
End at: 2018-06-05 04:25:13
Local clock offset: 0.589 ms
Remote clock offset: -6.223 ms

# Below is generated by plot.py at 2018-06-05 07:57:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.81 Mbit/s
95th percentile per-packet one-way delay: 63.414 ms
Loss rate: 8.56%
-- Flow 1:
Average throughput: 93.81 Mbit/s
95th percentile per-packet one-way delay: 63.414 ms
Loss rate: 8.56%
```

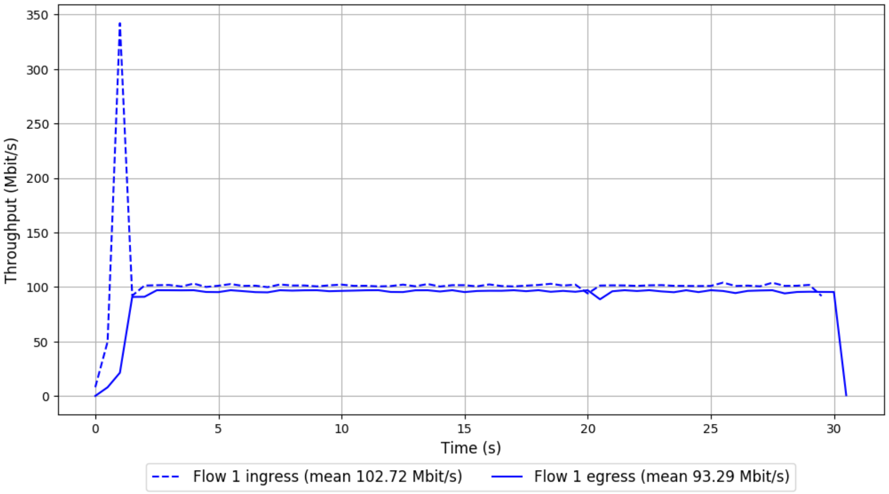
Run 1: Report of FillP — Data Link

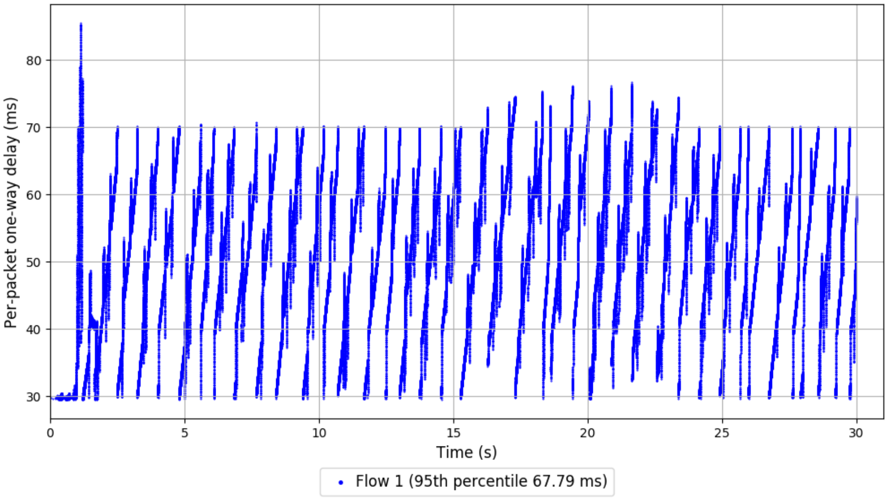




```
Run 2: Statistics of FillP

Start at: 2018-06-05 04:46:19
End at: 2018-06-05 04:46:49
Local clock offset: 0.517 ms
Remote clock offset: -5.287 ms

# Below is generated by plot.py at 2018-06-05 07:57:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.29 Mbit/s
95th percentile per-packet one-way delay: 67.792 ms
Loss rate: 9.10%
-- Flow 1:
Average throughput: 93.29 Mbit/s
95th percentile per-packet one-way delay: 67.792 ms
Loss rate: 9.10%
```

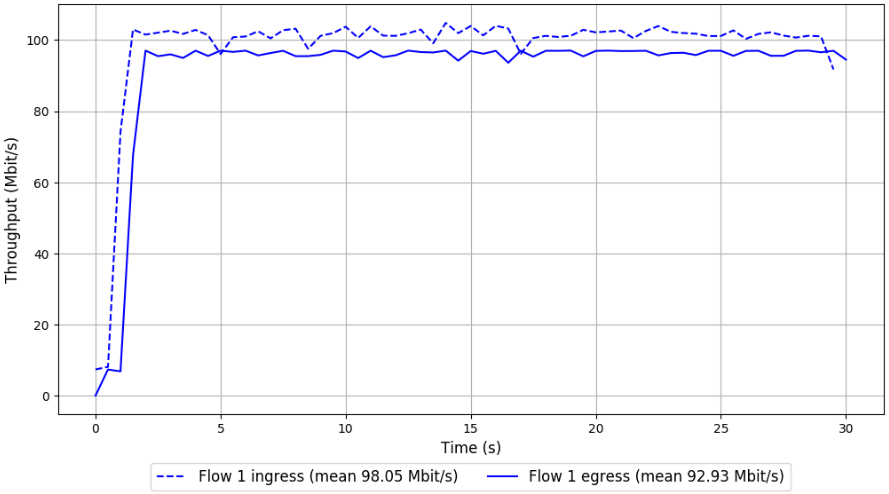
Run 2: Report of FillP — Data Link

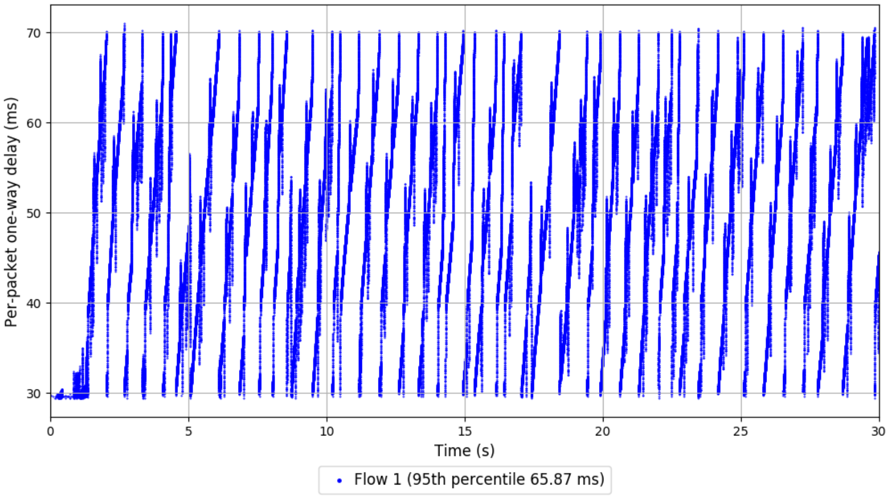




```
Run 3: Statistics of FillP

Start at: 2018-06-05 05:07:31
End at: 2018-06-05 05:08:01
Local clock offset: 0.43 ms
Remote clock offset: -6.03 ms

# Below is generated by plot.py at 2018-06-05 07:57:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.93 Mbit/s
95th percentile per-packet one-way delay: 65.869 ms
Loss rate: 5.18%
-- Flow 1:
Average throughput: 92.93 Mbit/s
95th percentile per-packet one-way delay: 65.869 ms
Loss rate: 5.18%
```

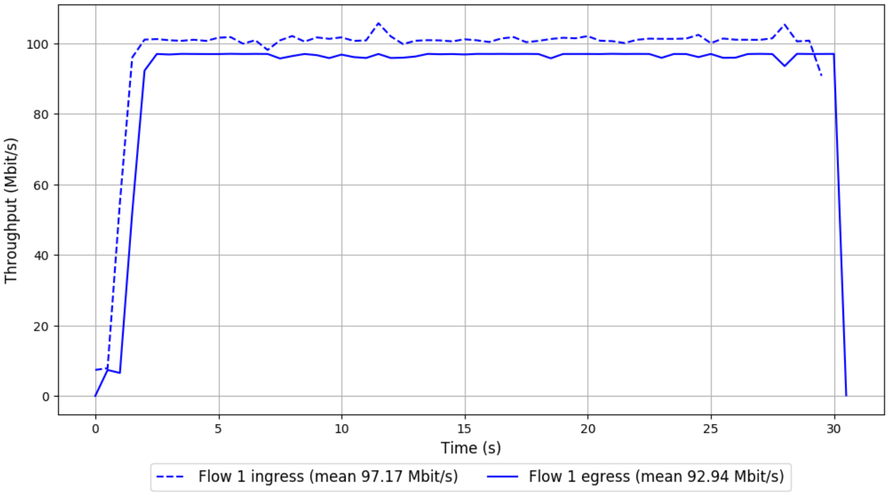
Run 3: Report of FillP — Data Link

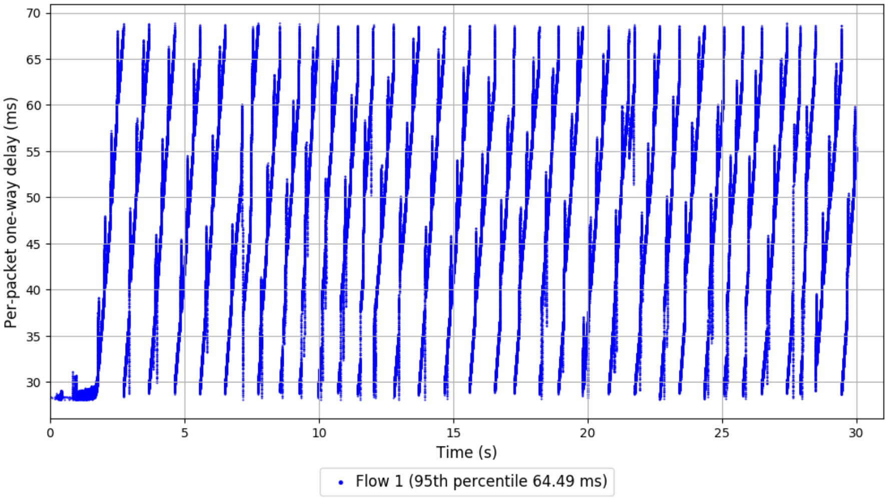




```
Run 4: Statistics of FillP

Start at: 2018-06-05 05:28:28
End at: 2018-06-05 05:28:58
Local clock offset: 0.136 ms
Remote clock offset: -2.731 ms

# Below is generated by plot.py at 2018-06-05 07:57:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.94 Mbit/s
95th percentile per-packet one-way delay: 64.488 ms
Loss rate: 4.27%
-- Flow 1:
Average throughput: 92.94 Mbit/s
95th percentile per-packet one-way delay: 64.488 ms
Loss rate: 4.27%
```

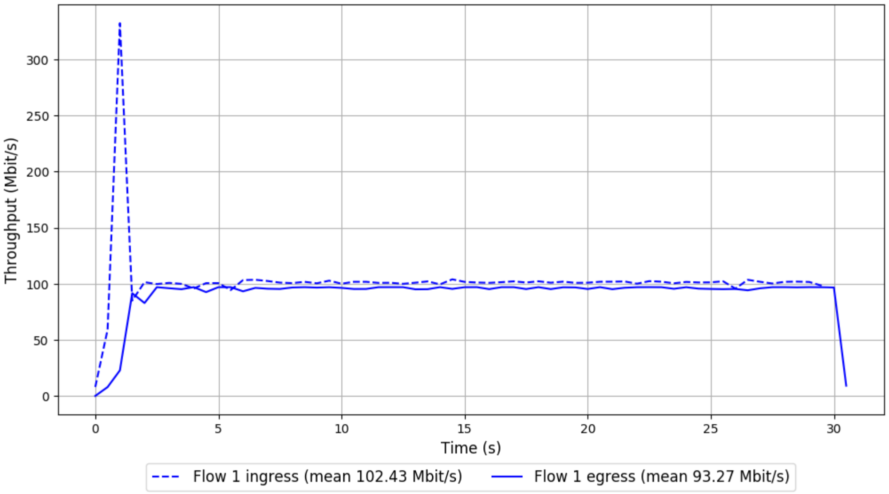
Run 4: Report of FillP — Data Link

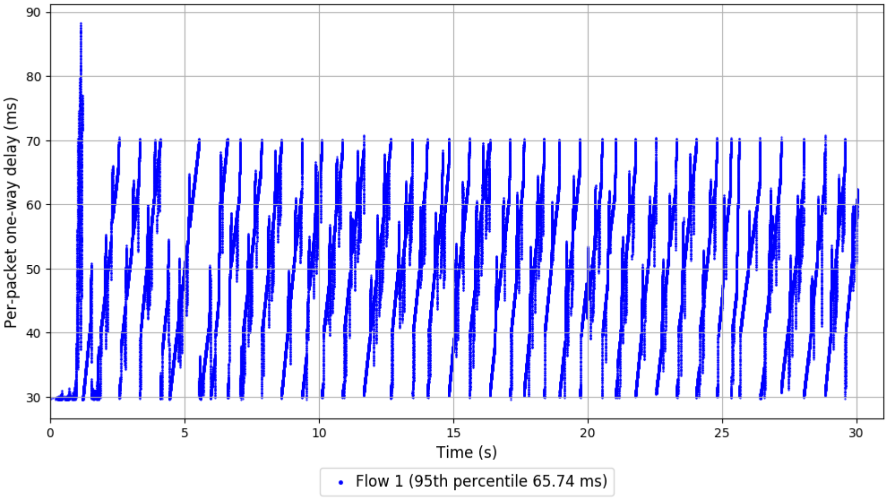




```
Run 5: Statistics of FillP

Start at: 2018-06-05 05:49:37
End at: 2018-06-05 05:50:07
Local clock offset: 0.195 ms
Remote clock offset: 2.312 ms

# Below is generated by plot.py at 2018-06-05 07:57:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.27 Mbit/s
95th percentile per-packet one-way delay: 65.736 ms
Loss rate: 8.84%
-- Flow 1:
Average throughput: 93.27 Mbit/s
95th percentile per-packet one-way delay: 65.736 ms
Loss rate: 8.84%
```

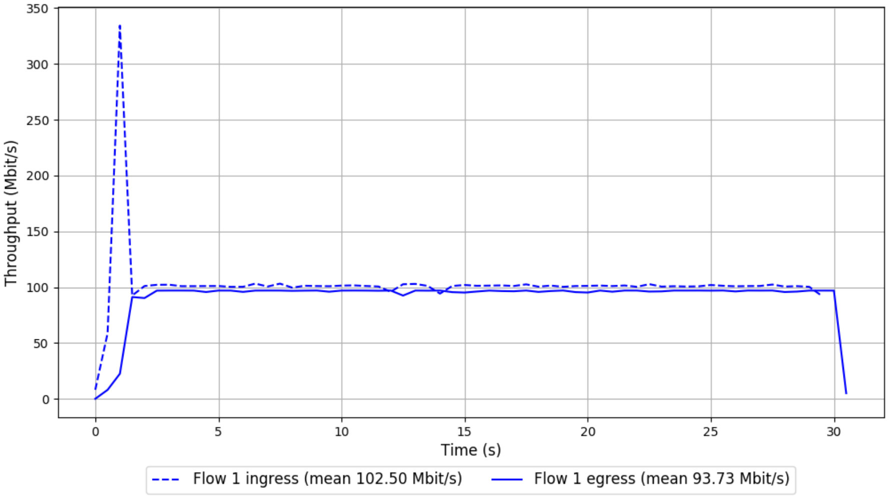
Run 5: Report of FillP — Data Link

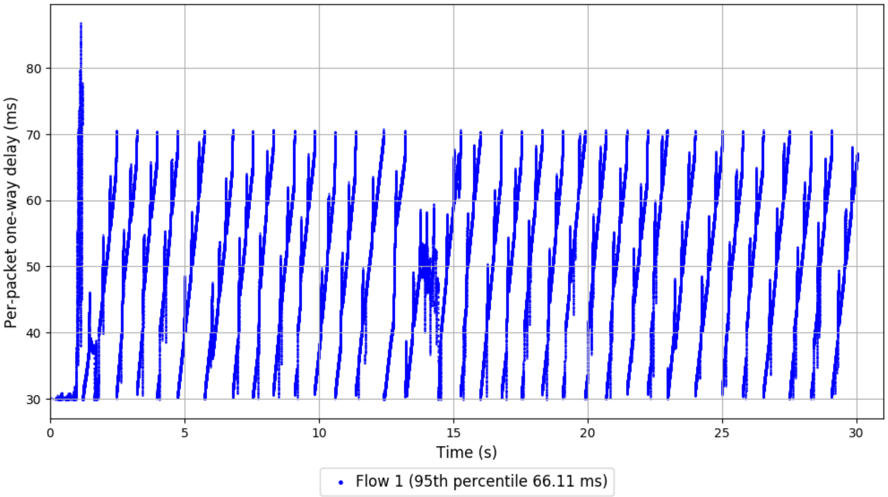




```
Run 6: Statistics of FillP

Start at: 2018-06-05 06:10:30
End at: 2018-06-05 06:11:00
Local clock offset: 0.295 ms
Remote clock offset: 1.37 ms

# Below is generated by plot.py at 2018-06-05 07:57:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.73 Mbit/s
95th percentile per-packet one-way delay: 66.106 ms
Loss rate: 8.44%
-- Flow 1:
Average throughput: 93.73 Mbit/s
95th percentile per-packet one-way delay: 66.106 ms
Loss rate: 8.44%
```

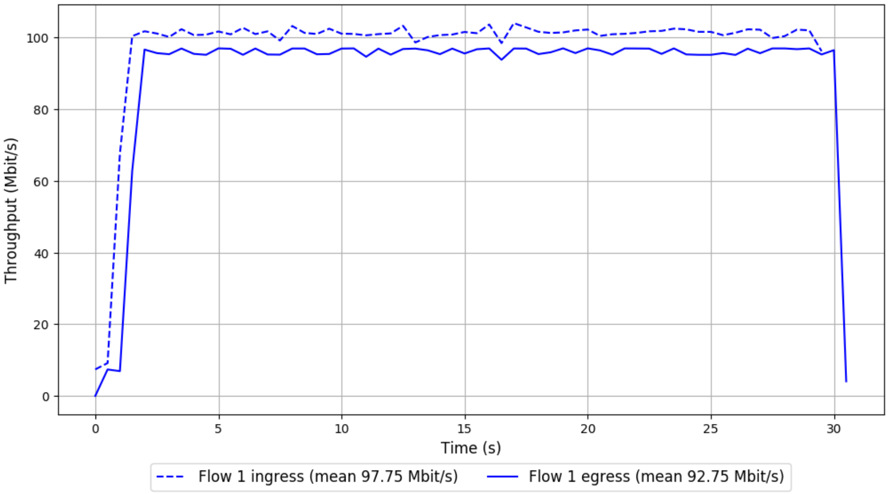
Run 6: Report of FillP — Data Link

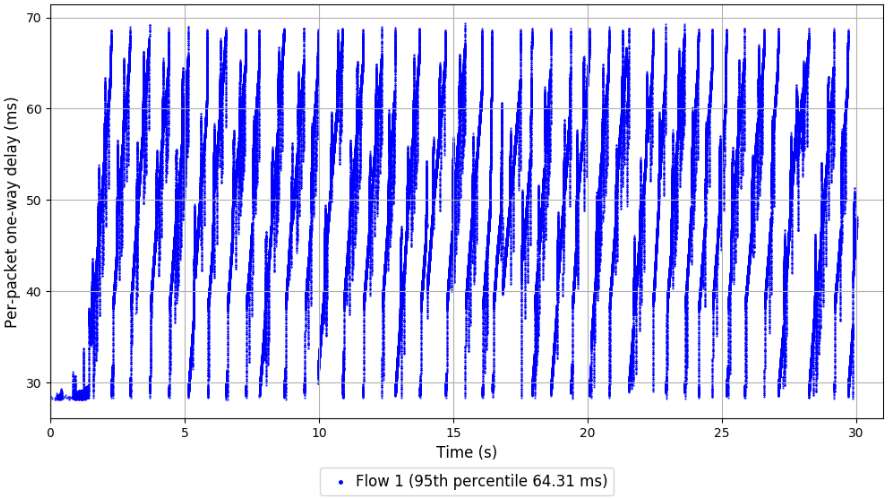




```
Run 7: Statistics of FillP

Start at: 2018-06-05 06:31:25
End at: 2018-06-05 06:31:55
Local clock offset: 0.405 ms
Remote clock offset: -1.459 ms

# Below is generated by plot.py at 2018-06-05 07:57:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.75 Mbit/s
95th percentile per-packet one-way delay: 64.311 ms
Loss rate: 5.05%
-- Flow 1:
Average throughput: 92.75 Mbit/s
95th percentile per-packet one-way delay: 64.311 ms
Loss rate: 5.05%
```

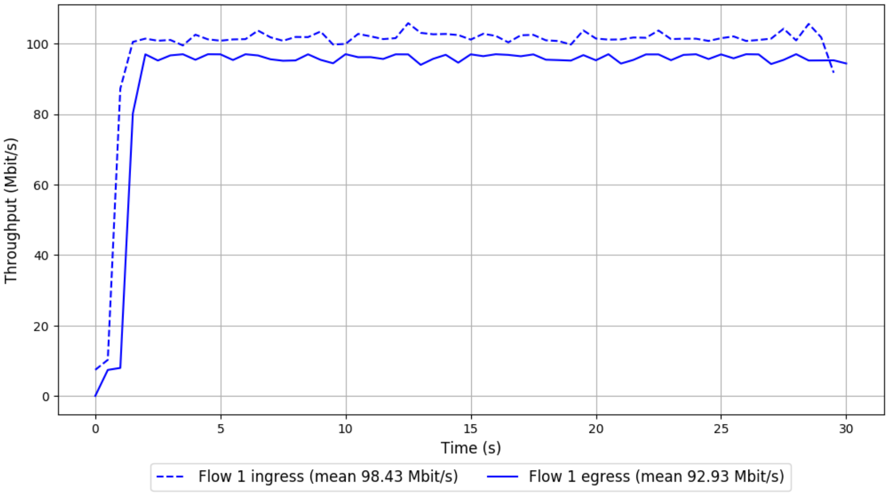
Run 7: Report of FillP — Data Link

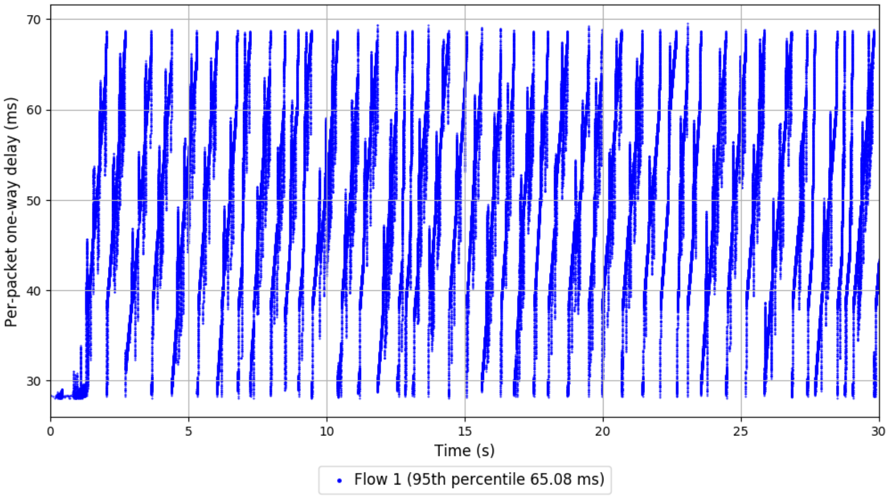




```
Run 8: Statistics of FillP

Start at: 2018-06-05 06:52:21
End at: 2018-06-05 06:52:51
Local clock offset: 0.388 ms
Remote clock offset: -1.569 ms

# Below is generated by plot.py at 2018-06-05 07:57:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.93 Mbit/s
95th percentile per-packet one-way delay: 65.078 ms
Loss rate: 5.54%
-- Flow 1:
Average throughput: 92.93 Mbit/s
95th percentile per-packet one-way delay: 65.078 ms
Loss rate: 5.54%
```

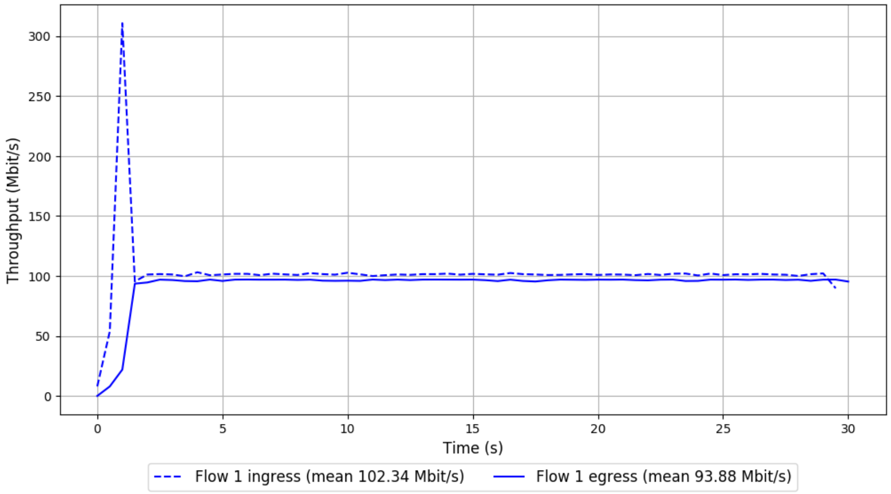
Run 8: Report of FillP — Data Link

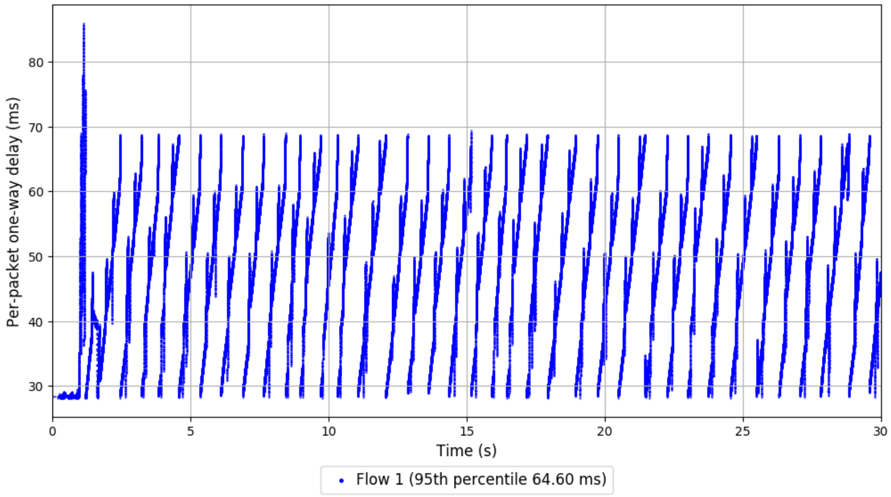




```
Run 9: Statistics of FillP

Start at: 2018-06-05 07:13:20
End at: 2018-06-05 07:13:50
Local clock offset: 0.105 ms
Remote clock offset: -2.153 ms

# Below is generated by plot.py at 2018-06-05 07:58:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.88 Mbit/s
95th percentile per-packet one-way delay: 64.600 ms
Loss rate: 8.20%
-- Flow 1:
Average throughput: 93.88 Mbit/s
95th percentile per-packet one-way delay: 64.600 ms
Loss rate: 8.20%
```

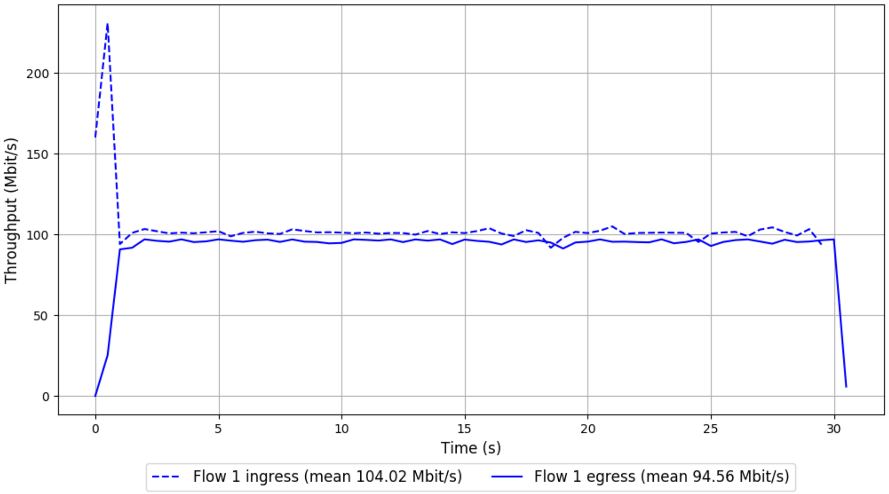
Run 9: Report of FillP — Data Link

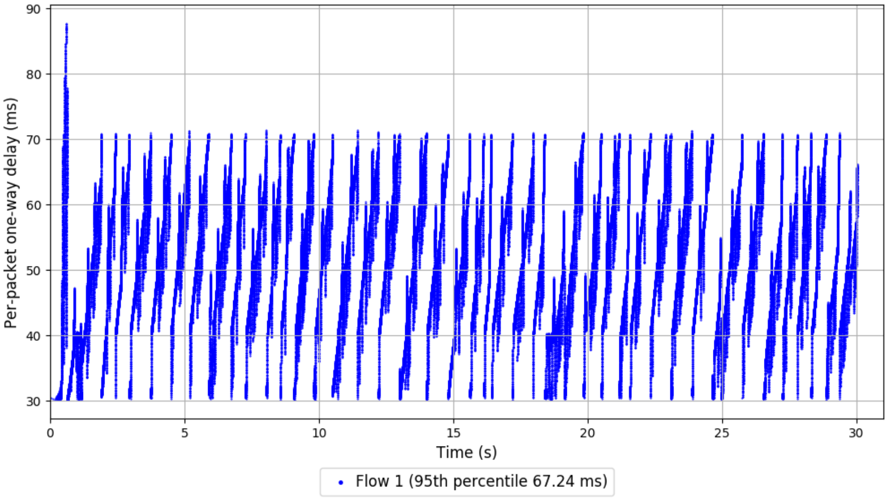




```
Run 10: Statistics of FillP

Start at: 2018-06-05 07:34:15
End at: 2018-06-05 07:34:45
Local clock offset: 0.061 ms
Remote clock offset: -0.275 ms

# Below is generated by plot.py at 2018-06-05 07:58:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.56 Mbit/s
95th percentile per-packet one-way delay: 67.236 ms
Loss rate: 9.01%
-- Flow 1:
Average throughput: 94.56 Mbit/s
95th percentile per-packet one-way delay: 67.236 ms
Loss rate: 9.01%
```

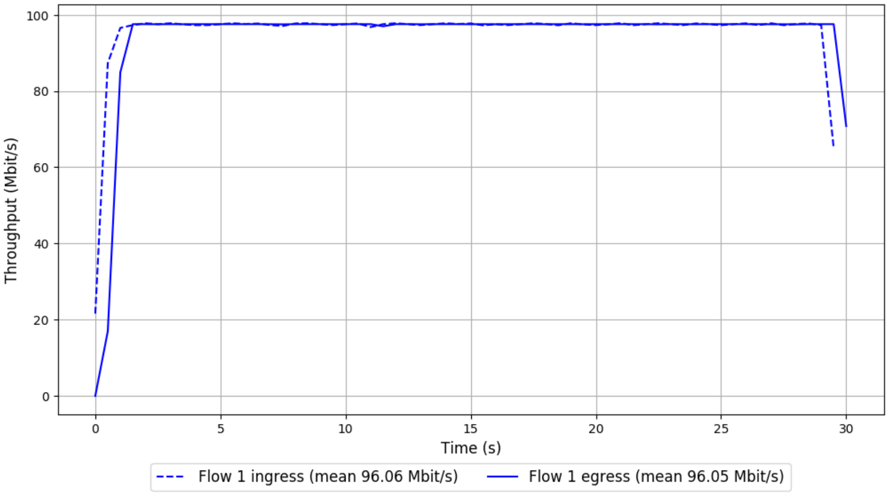
Run 10: Report of FillP — Data Link

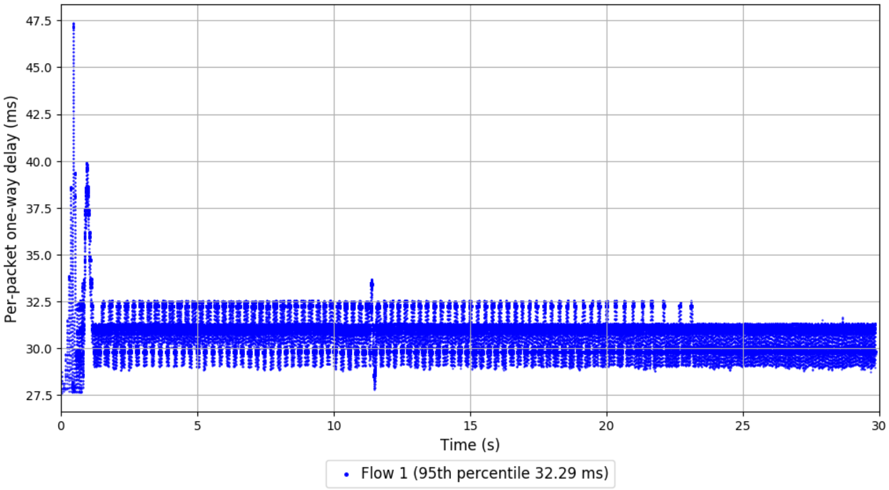




```
Run 1: Statistics of Indigo

Start at: 2018-06-05 04:36:32
End at: 2018-06-05 04:37:02
Local clock offset: 0.502 ms
Remote clock offset: -6.91 ms

# Below is generated by plot.py at 2018-06-05 07:59:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.05 Mbit/s
95th percentile per-packet one-way delay: 32.291 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 96.05 Mbit/s
95th percentile per-packet one-way delay: 32.291 ms
Loss rate: 0.00%
```

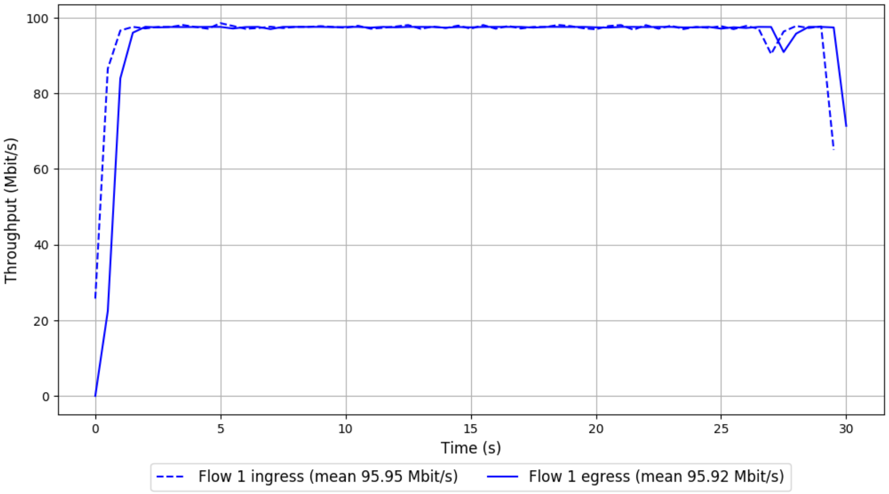
Run 1: Report of Indigo — Data Link

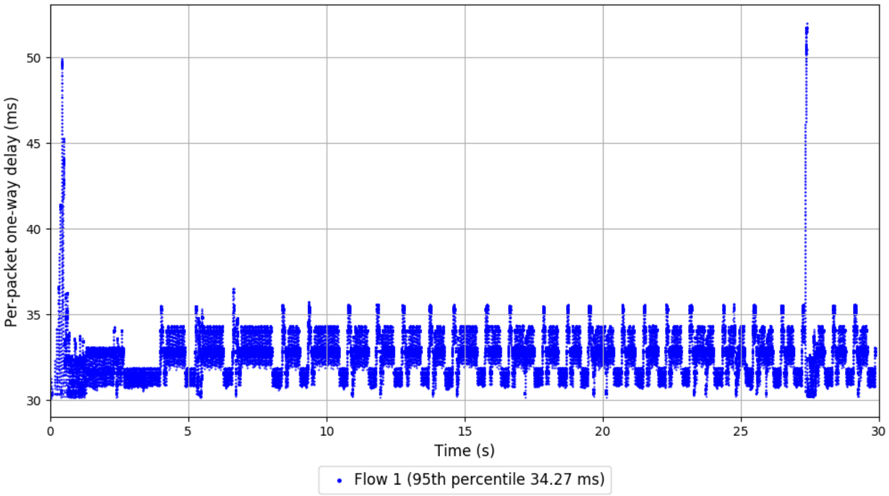




```
Run 2: Statistics of Indigo

Start at: 2018-06-05 04:58:10
End at: 2018-06-05 04:58:40
Local clock offset: 0.497 ms
Remote clock offset: -5.158 ms

# Below is generated by plot.py at 2018-06-05 07:59:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.92 Mbit/s
95th percentile per-packet one-way delay: 34.273 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 95.92 Mbit/s
95th percentile per-packet one-way delay: 34.273 ms
Loss rate: 0.02%
```

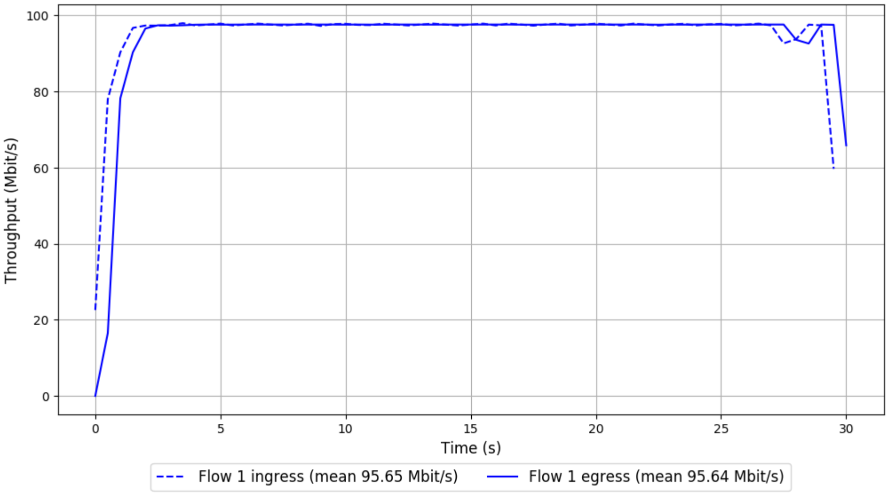
Run 2: Report of Indigo — Data Link

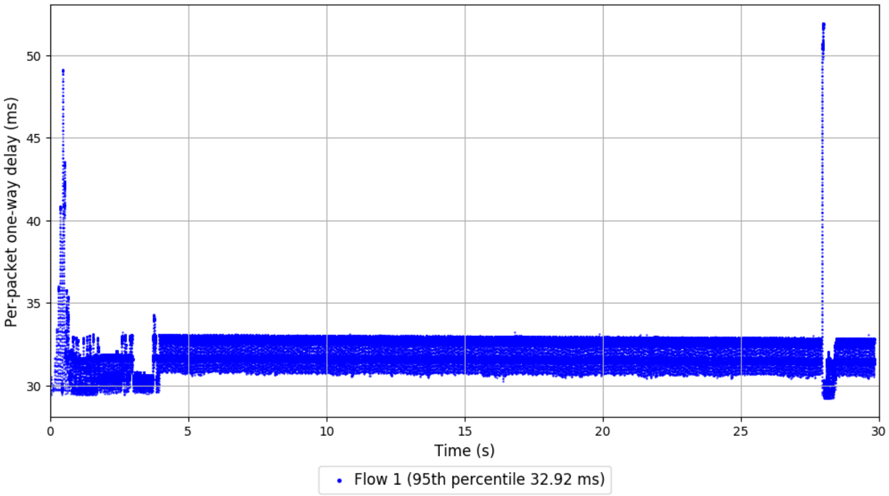




```
Run 3: Statistics of Indigo

Start at: 2018-06-05 05:19:21
End at: 2018-06-05 05:19:51
Local clock offset: 0.259 ms
Remote clock offset: -3.866 ms

# Below is generated by plot.py at 2018-06-05 07:59:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.64 Mbit/s
95th percentile per-packet one-way delay: 32.919 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 95.64 Mbit/s
95th percentile per-packet one-way delay: 32.919 ms
Loss rate: 0.00%
```

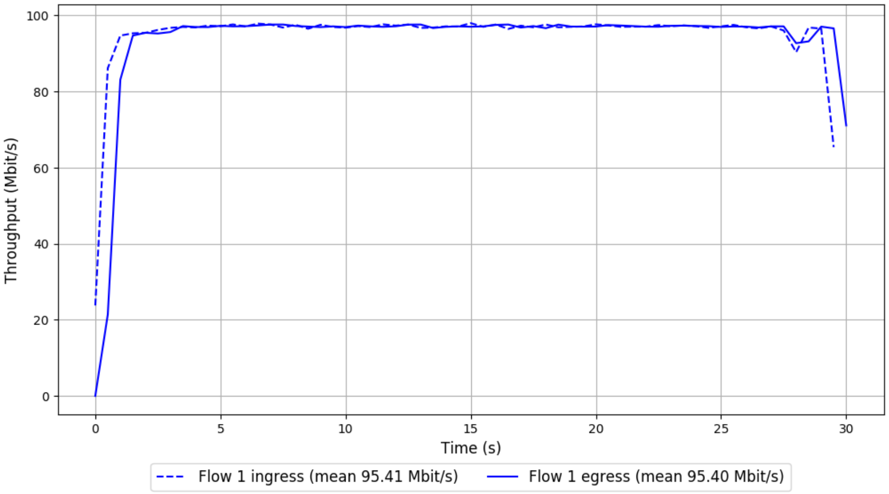
Run 3: Report of Indigo — Data Link

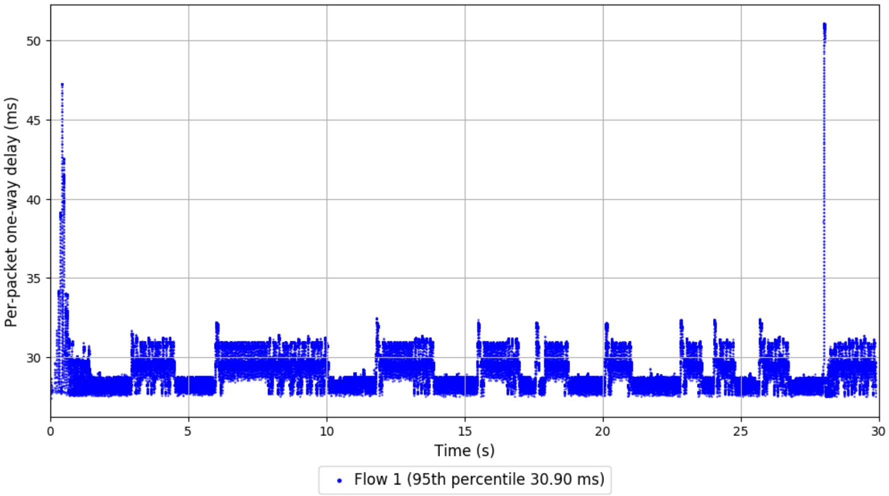




```
Run 4: Statistics of Indigo

Start at: 2018-06-05 05:40:17
End at: 2018-06-05 05:40:47
Local clock offset: 0.193 ms
Remote clock offset: -0.725 ms

# Below is generated by plot.py at 2018-06-05 07:59:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.40 Mbit/s
95th percentile per-packet one-way delay: 30.898 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 95.40 Mbit/s
95th percentile per-packet one-way delay: 30.898 ms
Loss rate: 0.00%
```

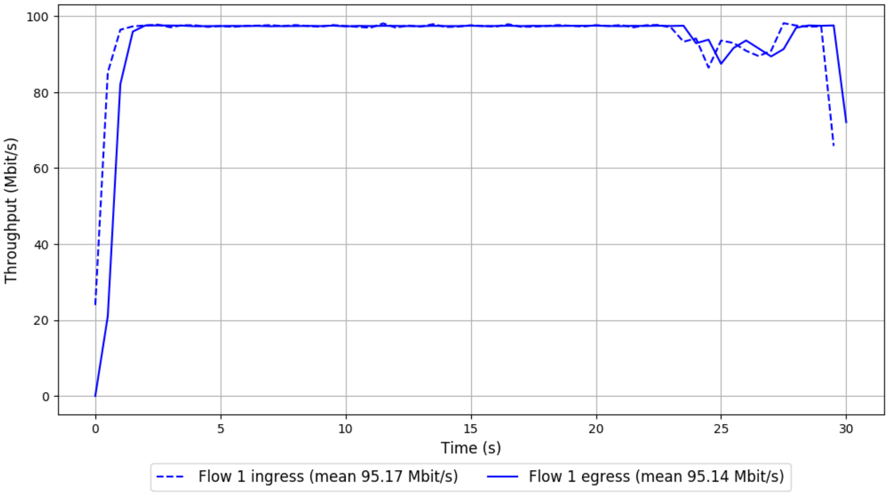
Run 4: Report of Indigo — Data Link

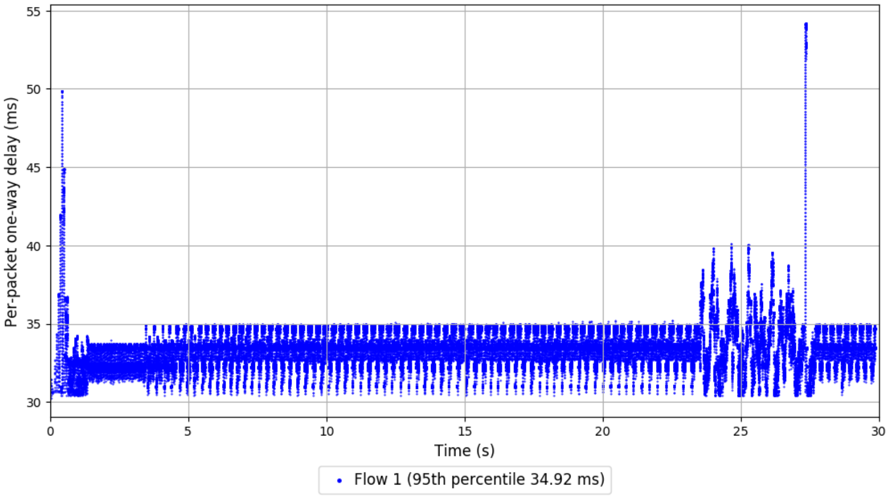




```
Run 5: Statistics of Indigo

Start at: 2018-06-05 06:01:24
End at: 2018-06-05 06:01:54
Local clock offset: 0.068 ms
Remote clock offset: 0.895 ms

# Below is generated by plot.py at 2018-06-05 07:59:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.14 Mbit/s
95th percentile per-packet one-way delay: 34.924 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 95.14 Mbit/s
95th percentile per-packet one-way delay: 34.924 ms
Loss rate: 0.01%
```

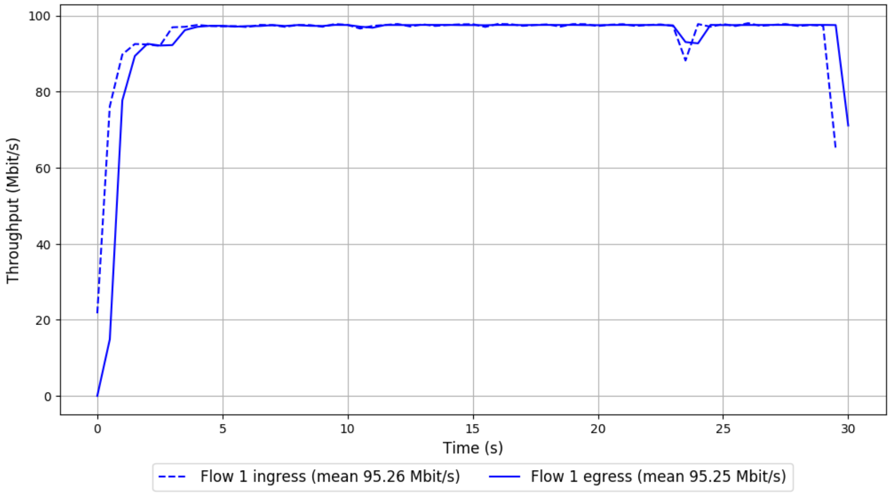
Run 5: Report of Indigo — Data Link

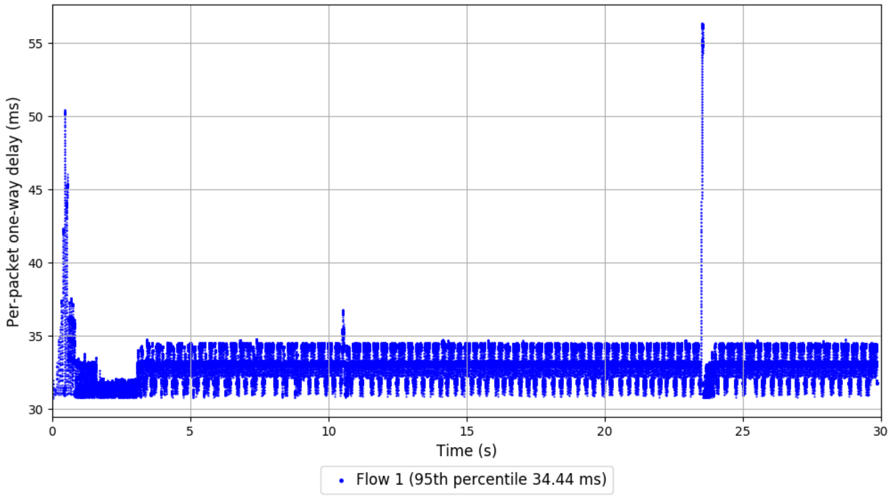




```
Run 6: Statistics of Indigo

Start at: 2018-06-05 06:22:19
End at: 2018-06-05 06:22:49
Local clock offset: 0.389 ms
Remote clock offset: 1.836 ms

# Below is generated by plot.py at 2018-06-05 07:59:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.25 Mbit/s
95th percentile per-packet one-way delay: 34.441 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 95.25 Mbit/s
95th percentile per-packet one-way delay: 34.441 ms
Loss rate: 0.00%
```

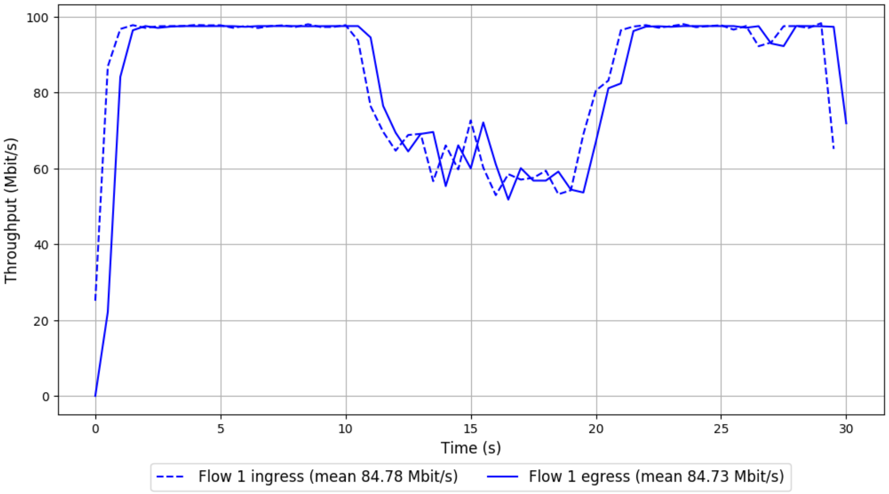
Run 6: Report of Indigo — Data Link

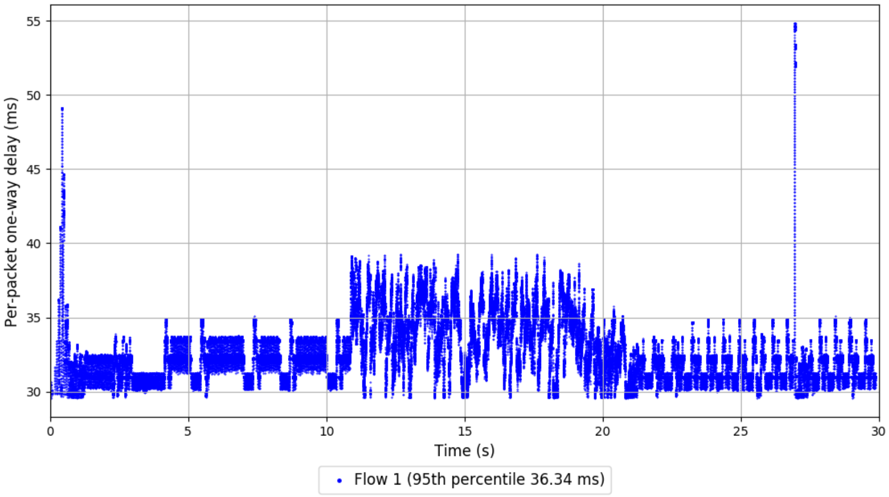




```
Run 7: Statistics of Indigo

Start at: 2018-06-05 06:43:16
End at: 2018-06-05 06:43:46
Local clock offset: 0.398 ms
Remote clock offset: 0.337 ms

# Below is generated by plot.py at 2018-06-05 08:00:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.73 Mbit/s
95th percentile per-packet one-way delay: 36.342 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 84.73 Mbit/s
95th percentile per-packet one-way delay: 36.342 ms
Loss rate: 0.05%
```

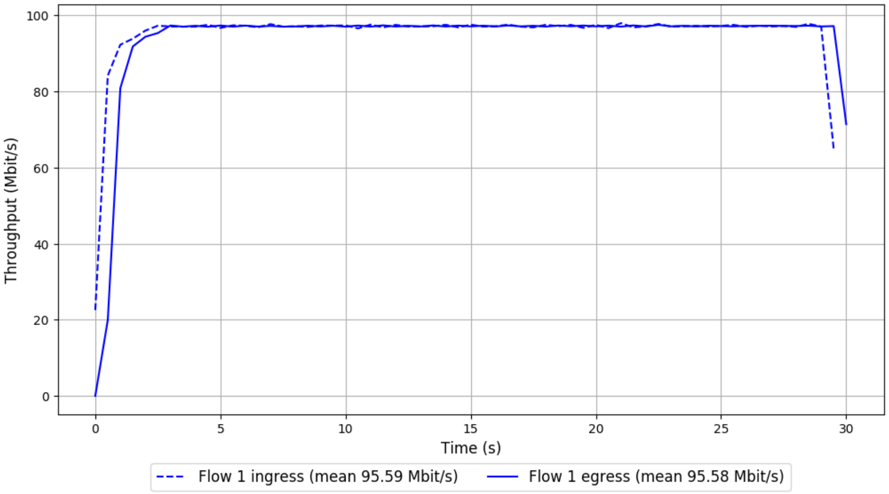
Run 7: Report of Indigo — Data Link

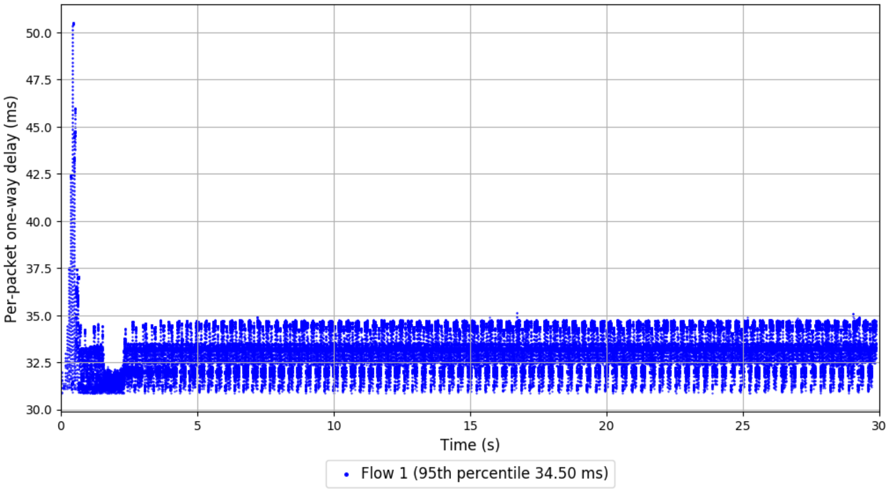




```
Run 8: Statistics of Indigo

Start at: 2018-06-05 07:04:12
End at: 2018-06-05 07:04:42
Local clock offset: 0.275 ms
Remote clock offset: 0.708 ms

# Below is generated by plot.py at 2018-06-05 08:00:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.58 Mbit/s
95th percentile per-packet one-way delay: 34.503 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 95.58 Mbit/s
95th percentile per-packet one-way delay: 34.503 ms
Loss rate: 0.00%
```

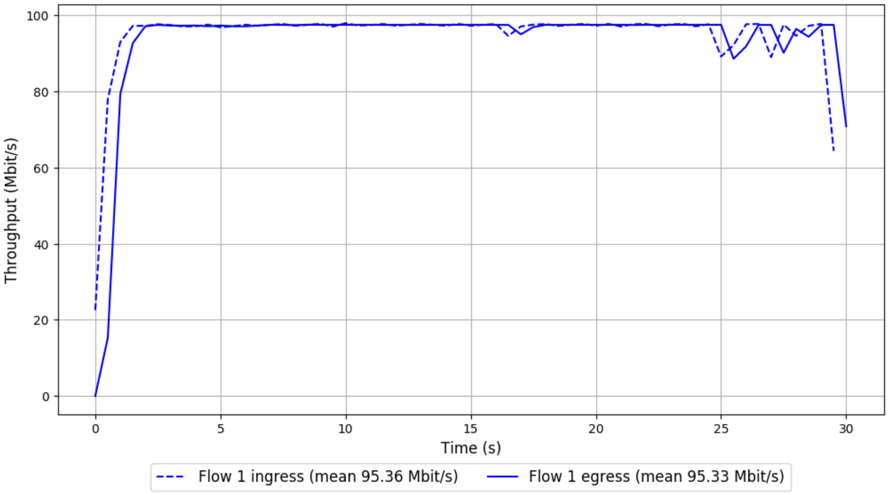
Run 8: Report of Indigo — Data Link

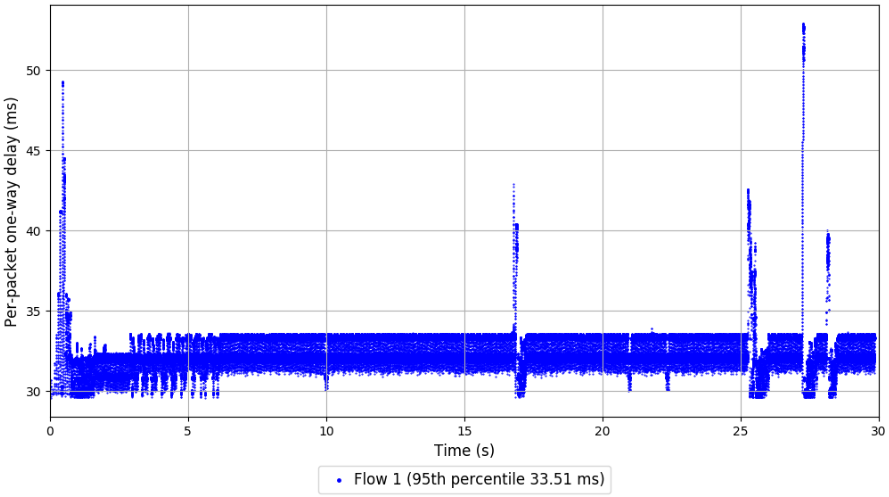




```
Run 9: Statistics of Indigo

Start at: 2018-06-05 07:25:09
End at: 2018-06-05 07:25:39
Local clock offset: 0.112 ms
Remote clock offset: -0.163 ms

# Below is generated by plot.py at 2018-06-05 08:00:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.33 Mbit/s
95th percentile per-packet one-way delay: 33.510 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 95.33 Mbit/s
95th percentile per-packet one-way delay: 33.510 ms
Loss rate: 0.02%
```

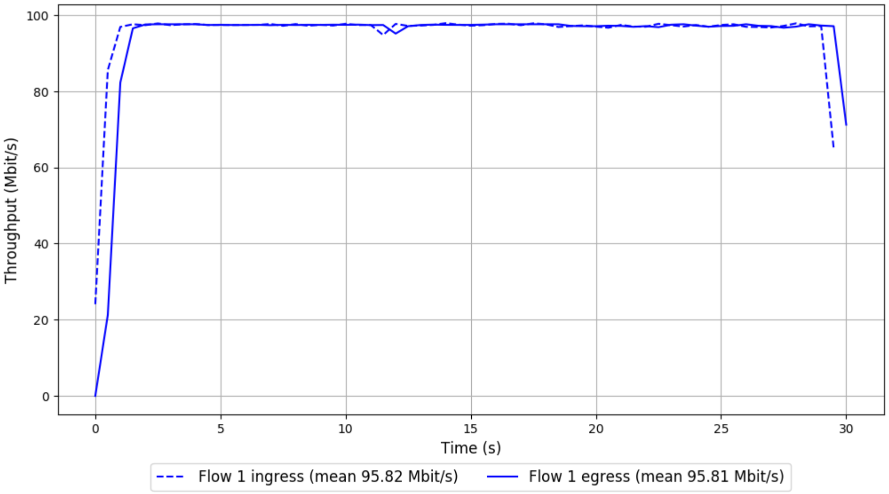
Run 9: Report of Indigo — Data Link

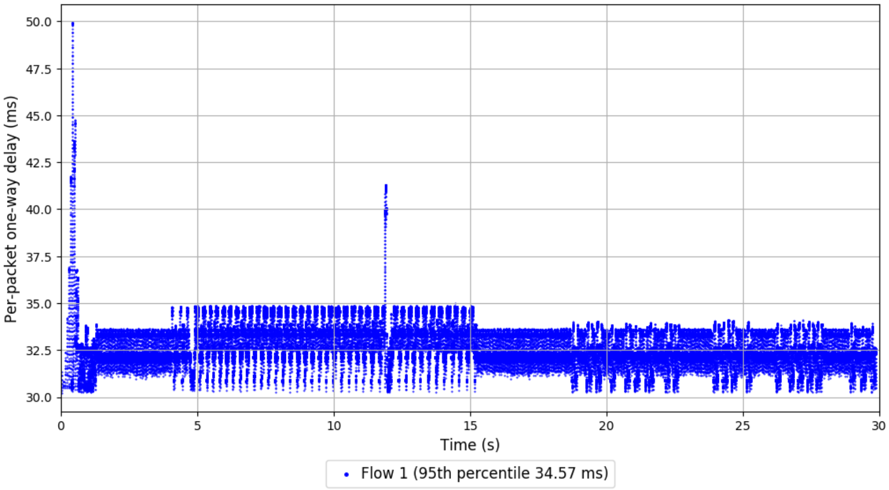




```
Run 10: Statistics of Indigo

Start at: 2018-06-05 07:46:04
End at: 2018-06-05 07:46:34
Local clock offset: 0.122 ms
Remote clock offset: -0.563 ms

# Below is generated by plot.py at 2018-06-05 08:00:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.81 Mbit/s
95th percentile per-packet one-way delay: 34.571 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 95.81 Mbit/s
95th percentile per-packet one-way delay: 34.571 ms
Loss rate: 0.00%
```

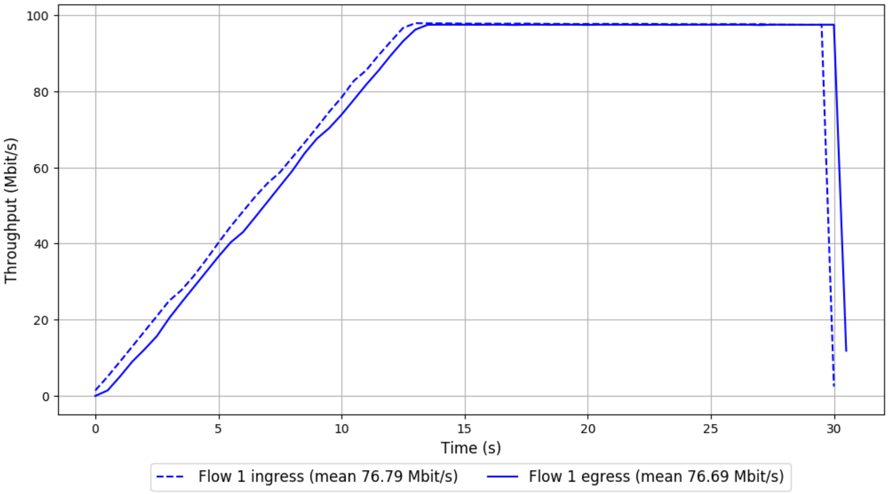
Run 10: Report of Indigo — Data Link

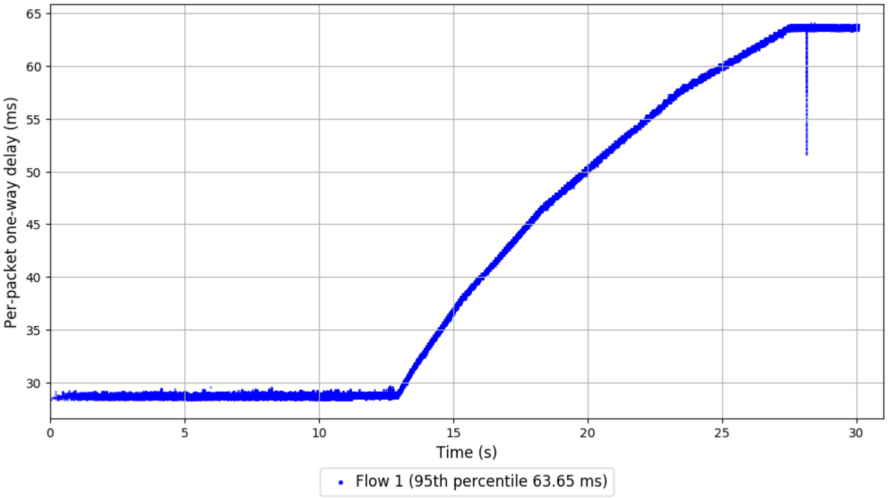




```
Run 1: Statistics of LEDBAT

Start at: 2018-06-05 04:26:02
End at: 2018-06-05 04:26:32
Local clock offset: 0.608 ms
Remote clock offset: -6.189 ms

# Below is generated by plot.py at 2018-06-05 08:00:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.69 Mbit/s
95th percentile per-packet one-way delay: 63.651 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 76.69 Mbit/s
95th percentile per-packet one-way delay: 63.651 ms
Loss rate: 0.07%
```

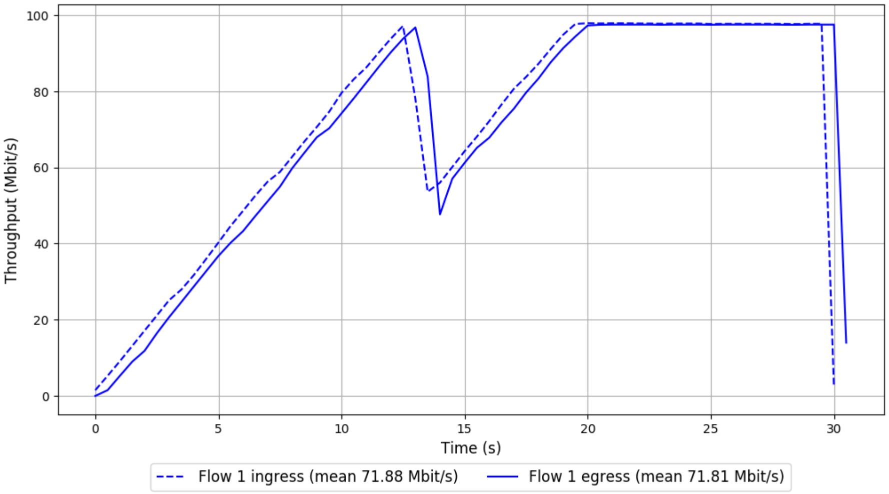
Run 1: Report of LEDBAT — Data Link

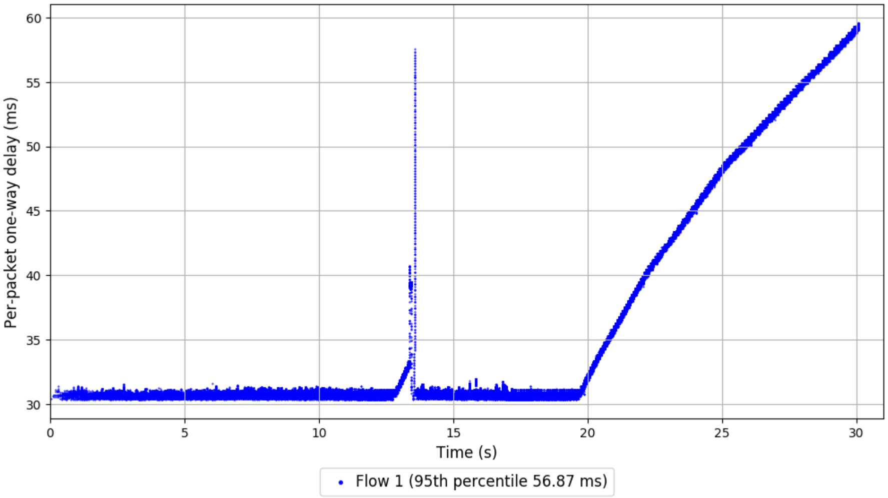




```
Run 2: Statistics of LEDBAT

Start at: 2018-06-05 04:47:38
End at: 2018-06-05 04:48:08
Local clock offset: 0.514 ms
Remote clock offset: -5.306 ms

# Below is generated by plot.py at 2018-06-05 08:00:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.81 Mbit/s
95th percentile per-packet one-way delay: 56.869 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 71.81 Mbit/s
95th percentile per-packet one-way delay: 56.869 ms
Loss rate: 0.01%
```

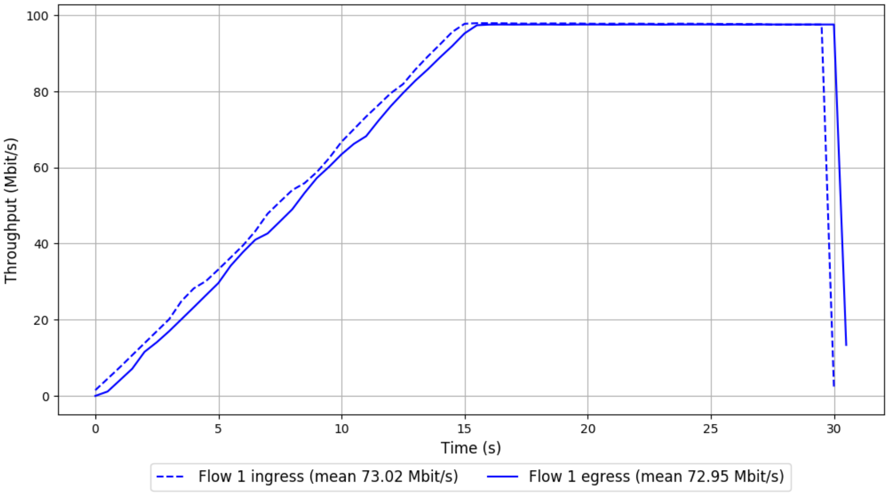
Run 2: Report of LEDBAT — Data Link

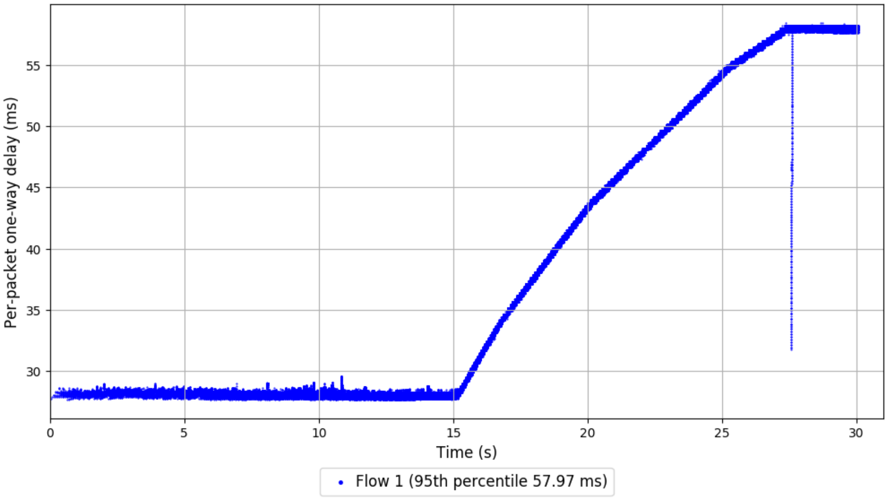




```
Run 3: Statistics of LEDBAT

Start at: 2018-06-05 05:08:49
End at: 2018-06-05 05:09:19
Local clock offset: 0.322 ms
Remote clock offset: -8.109 ms

# Below is generated by plot.py at 2018-06-05 08:00:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.95 Mbit/s
95th percentile per-packet one-way delay: 57.967 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 72.95 Mbit/s
95th percentile per-packet one-way delay: 57.967 ms
Loss rate: 0.01%
```

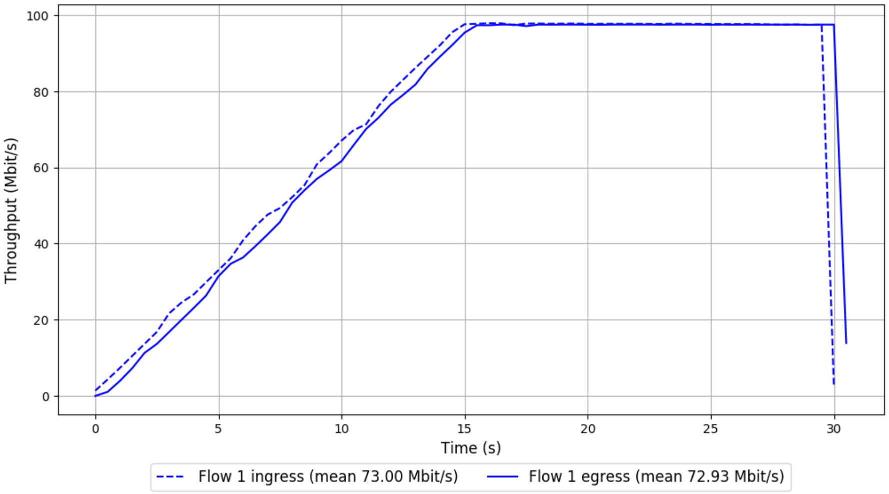
Run 3: Report of LEDBAT — Data Link

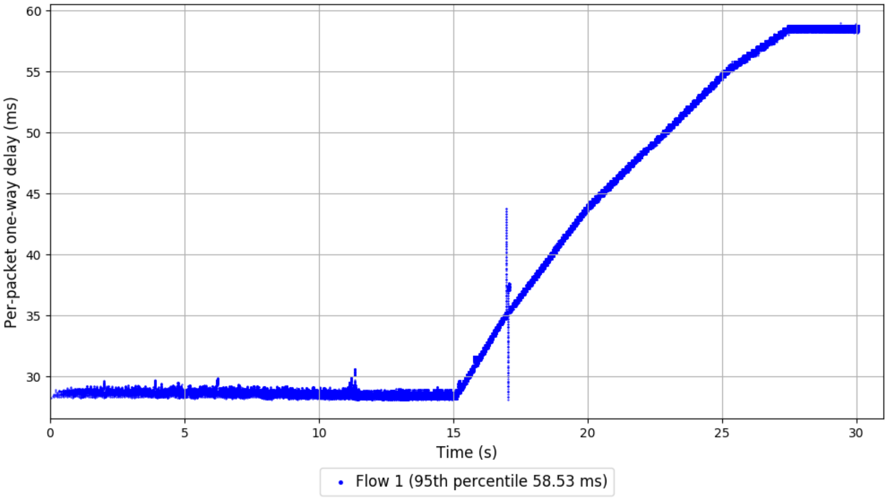




```
Run 4: Statistics of LEDBAT

Start at: 2018-06-05 05:29:46
End at: 2018-06-05 05:30:16
Local clock offset: 0.21 ms
Remote clock offset: -2.466 ms

# Below is generated by plot.py at 2018-06-05 08:00:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.93 Mbit/s
95th percentile per-packet one-way delay: 58.533 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 72.93 Mbit/s
95th percentile per-packet one-way delay: 58.533 ms
Loss rate: 0.00%
```

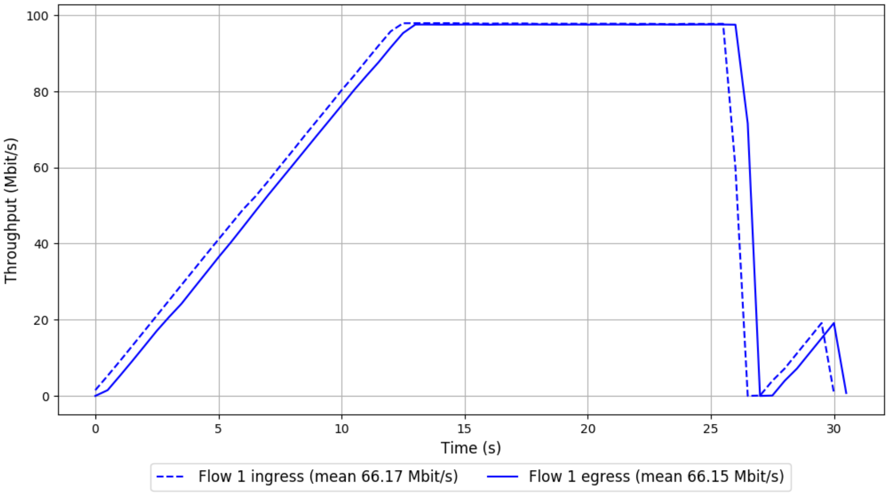
Run 4: Report of LEDBAT — Data Link

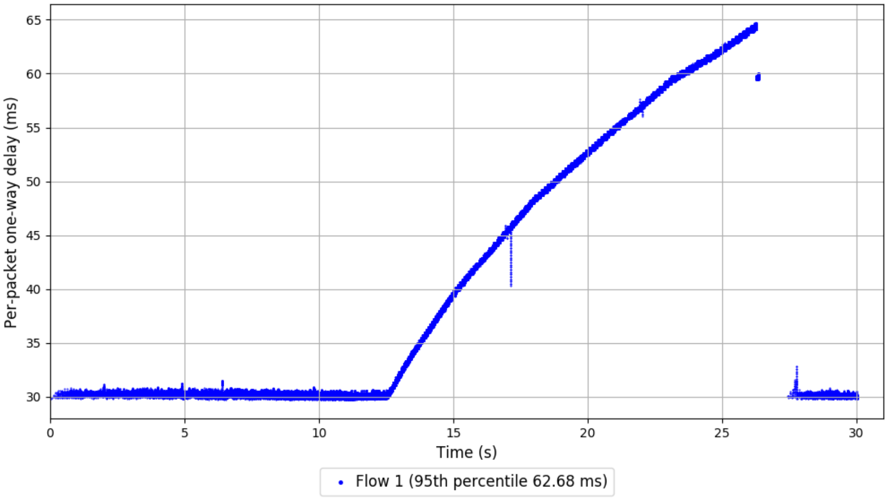




```
Run 5: Statistics of LEDBAT

Start at: 2018-06-05 05:50:55
End at: 2018-06-05 05:51:25
Local clock offset: 0.188 ms
Remote clock offset: 1.942 ms

# Below is generated by plot.py at 2018-06-05 08:00:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 66.15 Mbit/s
95th percentile per-packet one-way delay: 62.680 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 66.15 Mbit/s
95th percentile per-packet one-way delay: 62.680 ms
Loss rate: 0.02%
```

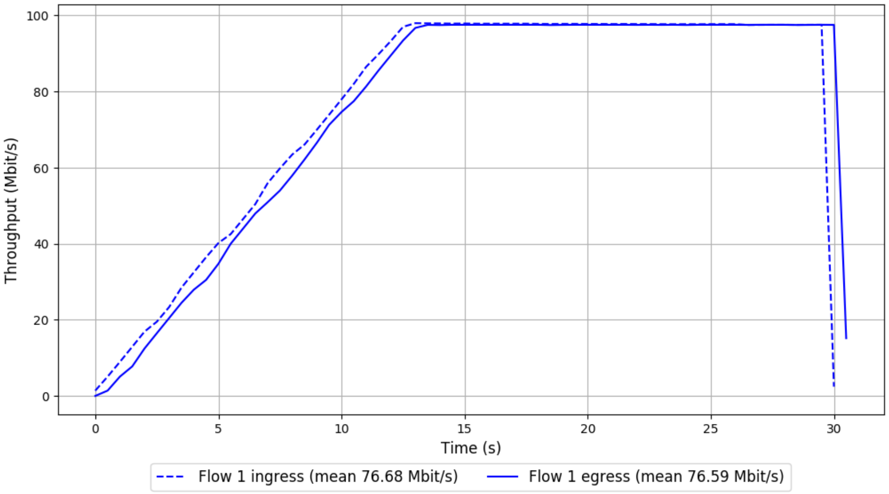
Run 5: Report of LEDBAT — Data Link

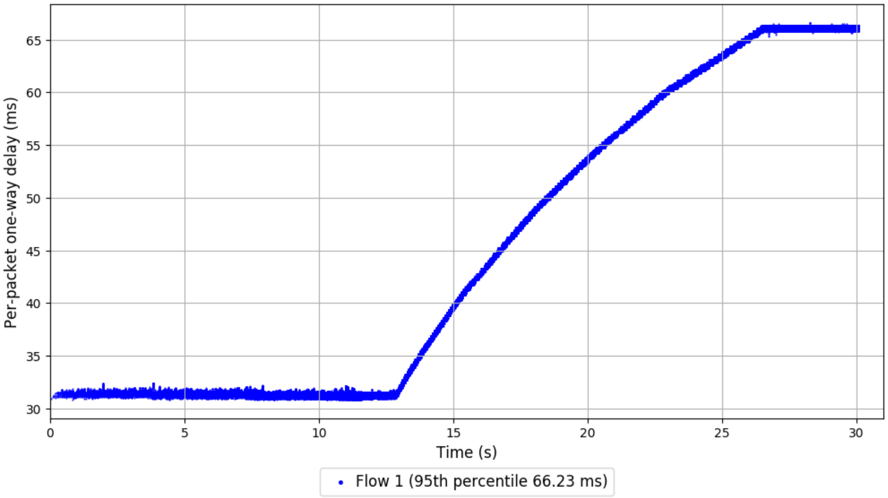




```
Run 6: Statistics of LEDBAT

Start at: 2018-06-05 06:11:48
End at: 2018-06-05 06:12:18
Local clock offset: 0.201 ms
Remote clock offset: 1.389 ms

# Below is generated by plot.py at 2018-06-05 08:01:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.59 Mbit/s
95th percentile per-packet one-way delay: 66.226 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 76.59 Mbit/s
95th percentile per-packet one-way delay: 66.226 ms
Loss rate: 0.00%
```

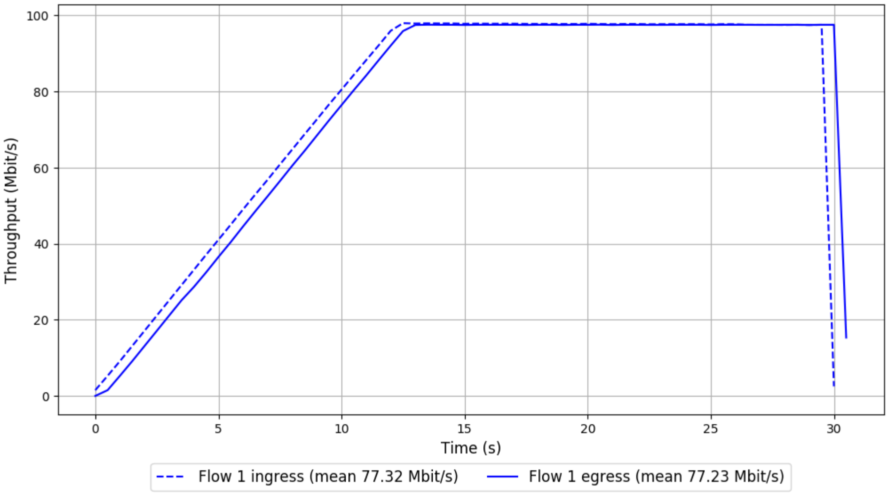
Run 6: Report of LEDBAT — Data Link

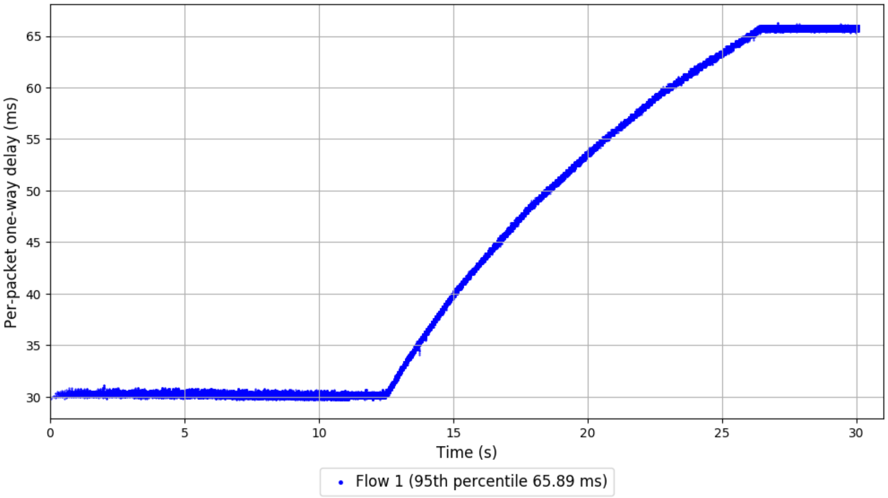




```
Run 7: Statistics of LEDBAT

Start at: 2018-06-05 06:32:44
End at: 2018-06-05 06:33:14
Local clock offset: 0.315 ms
Remote clock offset: 0.499 ms

# Below is generated by plot.py at 2018-06-05 08:01:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.23 Mbit/s
95th percentile per-packet one-way delay: 65.893 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 77.23 Mbit/s
95th percentile per-packet one-way delay: 65.893 ms
Loss rate: 0.00%
```

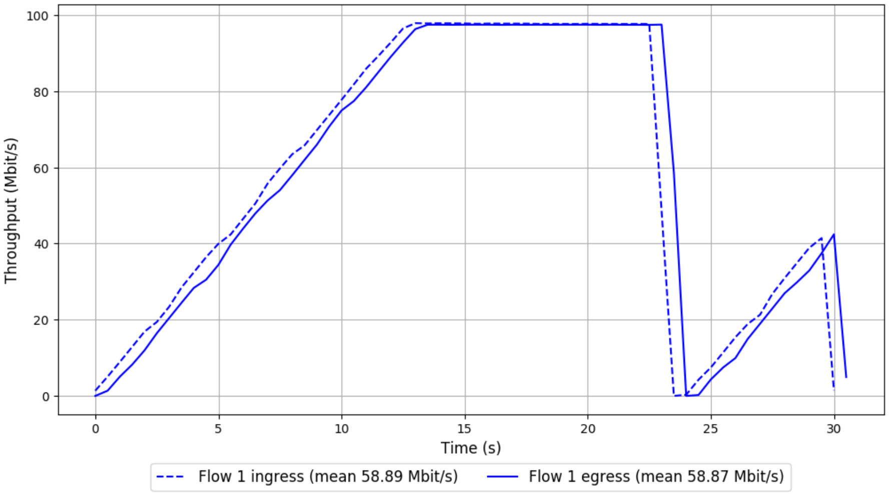
Run 7: Report of LEDBAT — Data Link

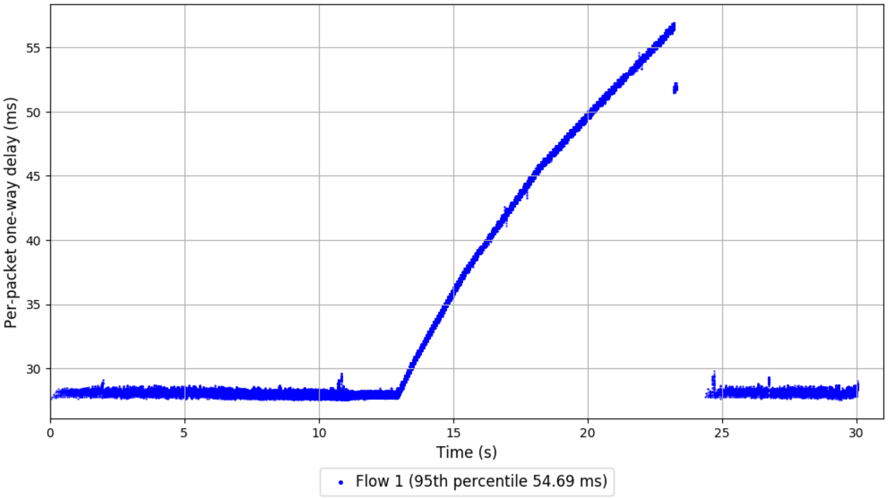




```
Run 8: Statistics of LEDBAT

Start at: 2018-06-05 06:53:40
End at: 2018-06-05 06:54:10
Local clock offset: 0.374 ms
Remote clock offset: -1.563 ms

# Below is generated by plot.py at 2018-06-05 08:01:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.87 Mbit/s
95th percentile per-packet one-way delay: 54.687 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 58.87 Mbit/s
95th percentile per-packet one-way delay: 54.687 ms
Loss rate: 0.03%
```

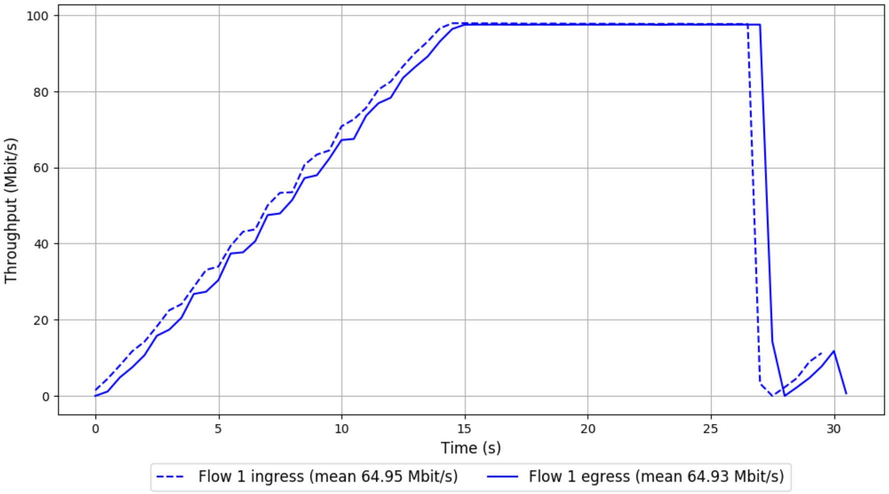
Run 8: Report of LEDBAT — Data Link

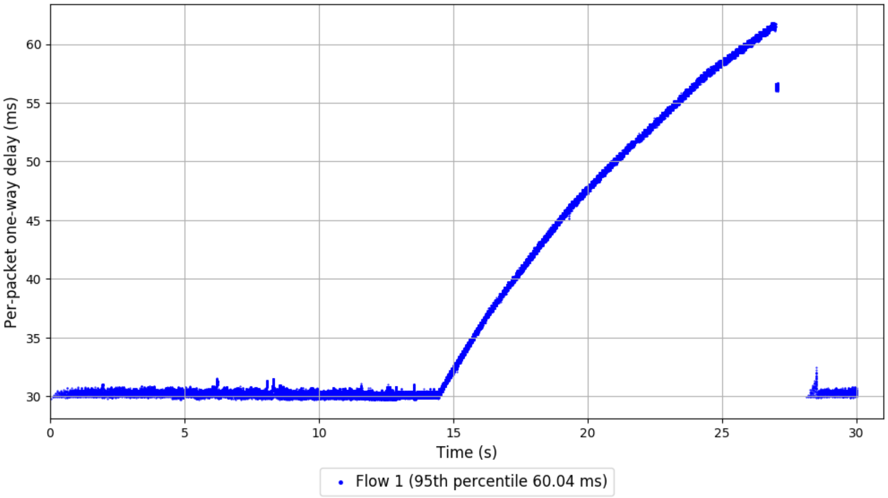




```
Run 9: Statistics of LEDBAT

Start at: 2018-06-05 07:14:38
End at: 2018-06-05 07:15:08
Local clock offset: 0.094 ms
Remote clock offset: -0.079 ms

# Below is generated by plot.py at 2018-06-05 08:01:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.93 Mbit/s
95th percentile per-packet one-way delay: 60.042 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 64.93 Mbit/s
95th percentile per-packet one-way delay: 60.042 ms
Loss rate: 0.03%
```

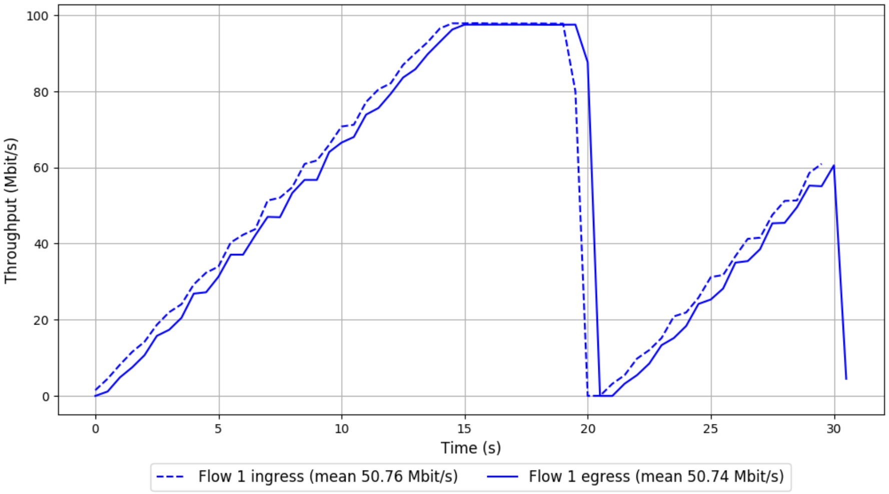
Run 9: Report of LEDBAT — Data Link

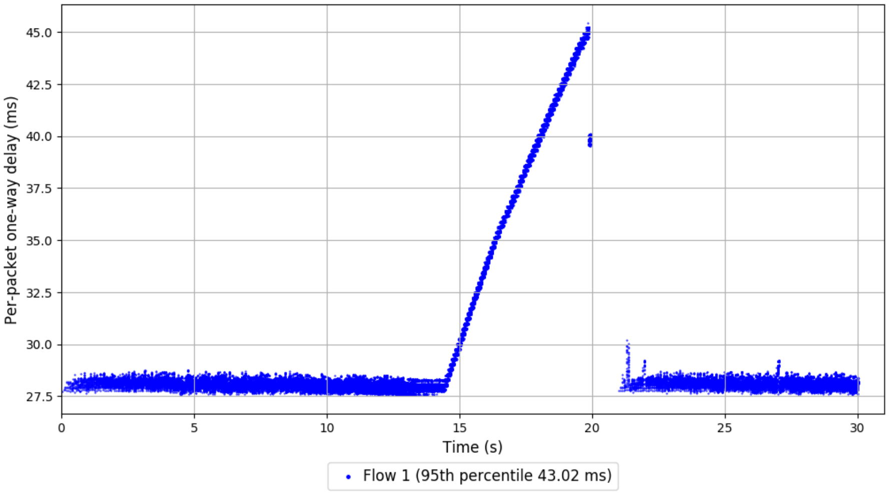




```
Run 10: Statistics of LEDBAT

Start at: 2018-06-05 07:35:34
End at: 2018-06-05 07:36:04
Local clock offset: 0.071 ms
Remote clock offset: -2.391 ms

# Below is generated by plot.py at 2018-06-05 08:01:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.74 Mbit/s
95th percentile per-packet one-way delay: 43.021 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 50.74 Mbit/s
95th percentile per-packet one-way delay: 43.021 ms
Loss rate: 0.03%
```

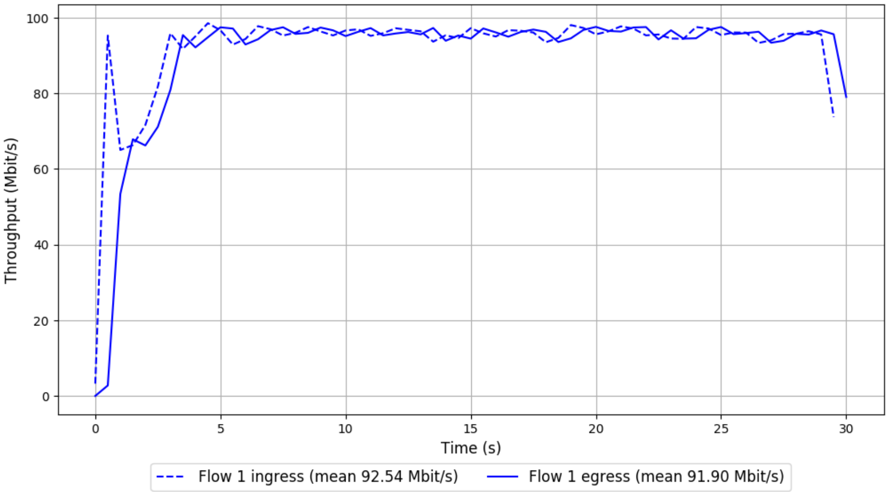
Run 10: Report of LEDBAT — Data Link

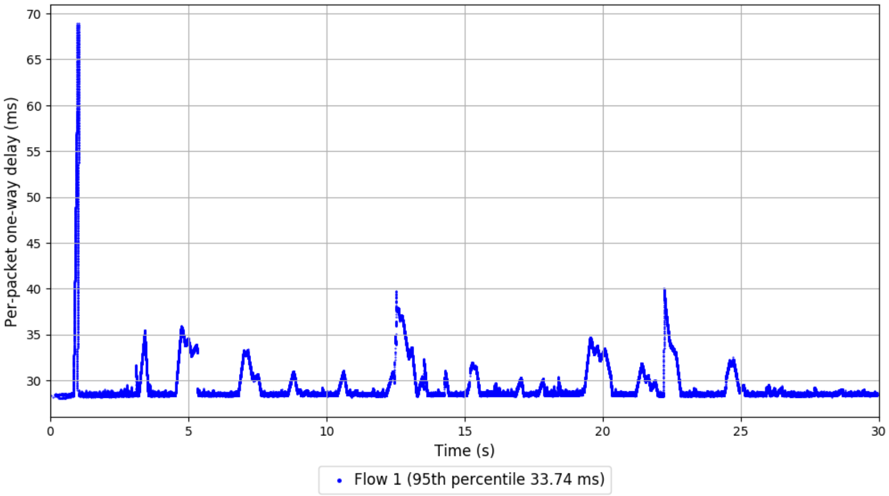




```
Run 1: Statistics of PCC-Allegro

Start at: 2018-06-05 04:37:52
End at: 2018-06-05 04:38:22
Local clock offset: 0.566 ms
Remote clock offset: -6.978 ms

# Below is generated by plot.py at 2018-06-05 08:01:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.90 Mbit/s
95th percentile per-packet one-way delay: 33.739 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 91.90 Mbit/s
95th percentile per-packet one-way delay: 33.739 ms
Loss rate: 0.68%
```

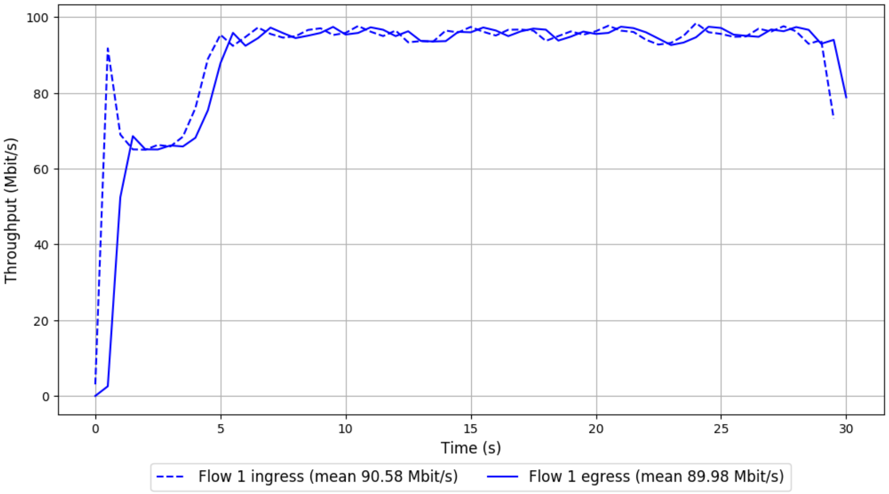
Run 1: Report of PCC-Allegro — Data Link

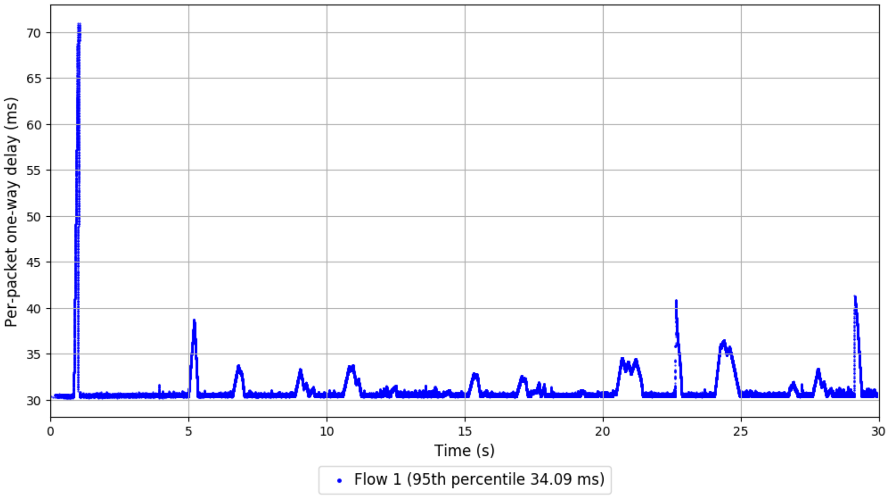




```
Run 2: Statistics of PCC-Allegro

Start at: 2018-06-05 04:59:30
End at: 2018-06-05 05:00:00
Local clock offset: 0.519 ms
Remote clock offset: -5.742 ms

# Below is generated by plot.py at 2018-06-05 08:01:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.98 Mbit/s
95th percentile per-packet one-way delay: 34.094 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 89.98 Mbit/s
95th percentile per-packet one-way delay: 34.094 ms
Loss rate: 0.67%
```

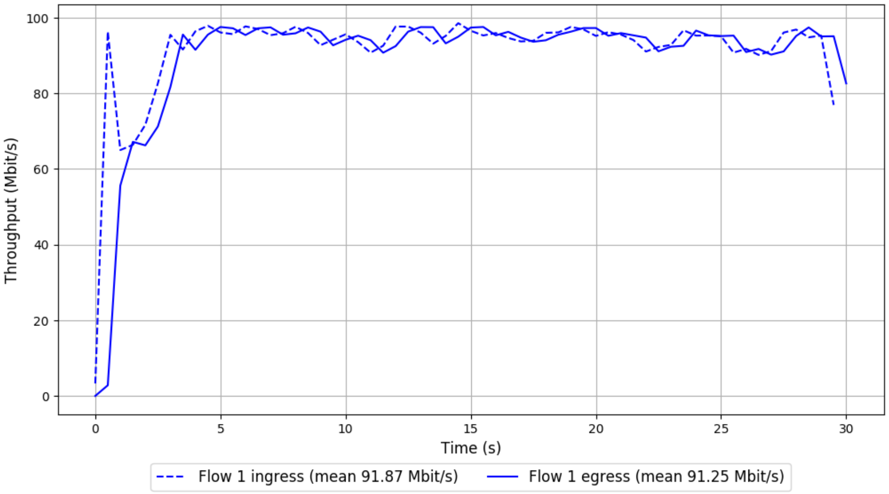
Run 2: Report of PCC-Allegro — Data Link

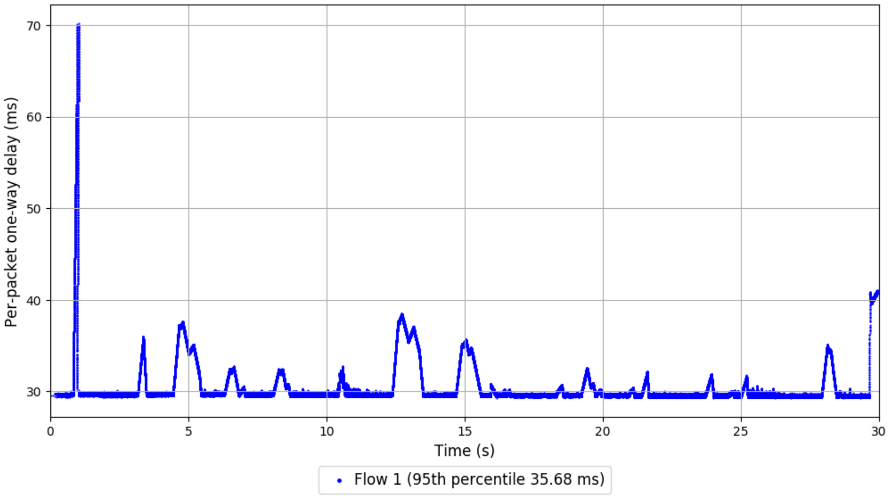




```
Run 3: Statistics of PCC-Allegro

Start at: 2018-06-05 05:20:41
End at: 2018-06-05 05:21:11
Local clock offset: 0.263 ms
Remote clock offset: -3.188 ms

# Below is generated by plot.py at 2018-06-05 08:01:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.25 Mbit/s
95th percentile per-packet one-way delay: 35.679 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 91.25 Mbit/s
95th percentile per-packet one-way delay: 35.679 ms
Loss rate: 0.64%
```

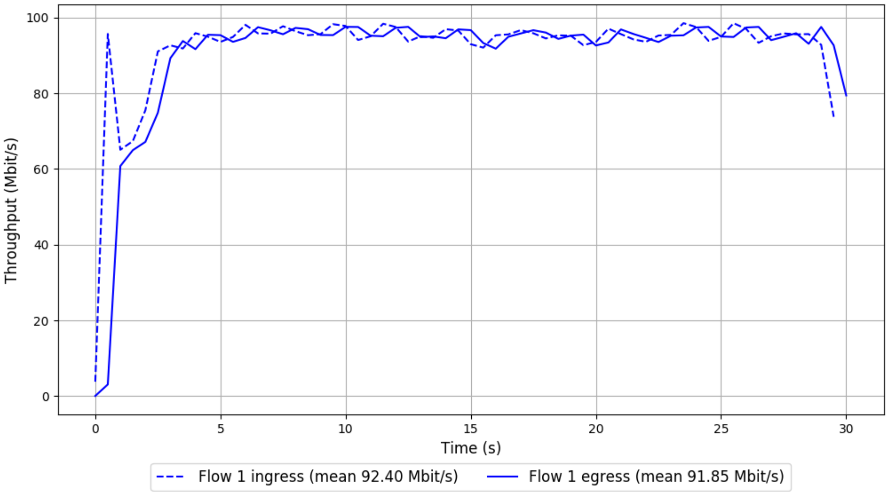
Run 3: Report of PCC-Allegro — Data Link

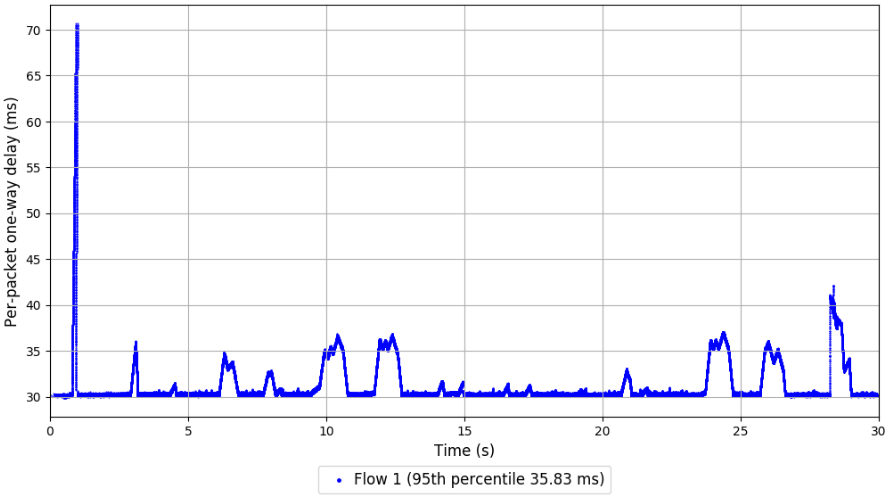




```
Run 4: Statistics of PCC-Allegro

Start at: 2018-06-05 05:41:51
End at: 2018-06-05 05:42:21
Local clock offset: 0.216 ms
Remote clock offset: 1.927 ms

# Below is generated by plot.py at 2018-06-05 08:02:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.85 Mbit/s
95th percentile per-packet one-way delay: 35.825 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 91.85 Mbit/s
95th percentile per-packet one-way delay: 35.825 ms
Loss rate: 0.59%
```

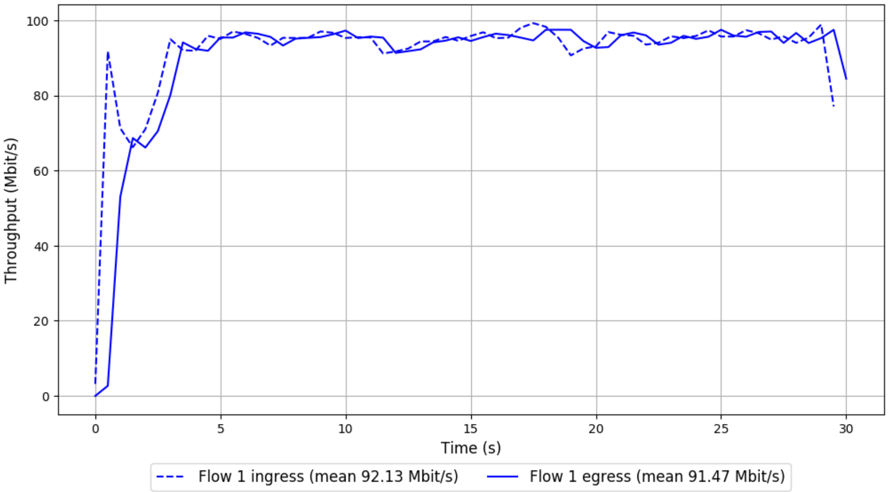
Run 4: Report of PCC-Allegro — Data Link

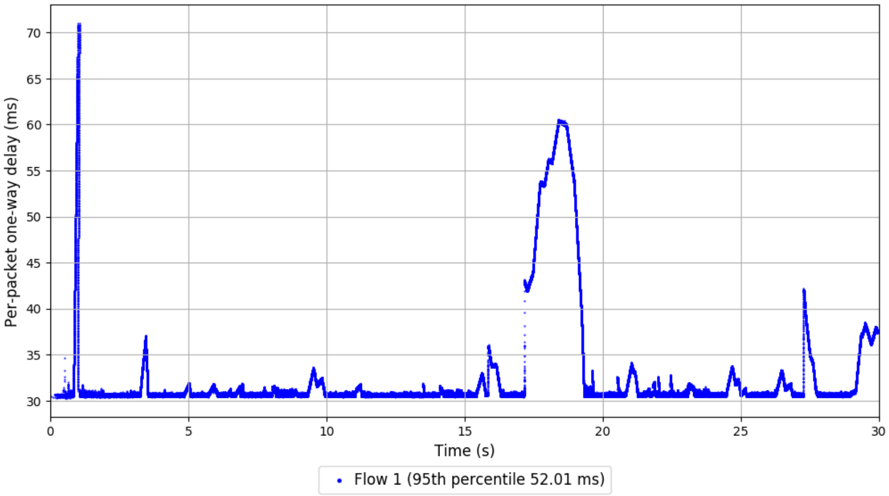




```
Run 5: Statistics of PCC-Allegro

Start at: 2018-06-05 06:02:44
End at: 2018-06-05 06:03:14
Local clock offset: 0.073 ms
Remote clock offset: 0.882 ms

# Below is generated by plot.py at 2018-06-05 08:02:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.47 Mbit/s
95th percentile per-packet one-way delay: 52.008 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 91.47 Mbit/s
95th percentile per-packet one-way delay: 52.008 ms
Loss rate: 0.69%
```

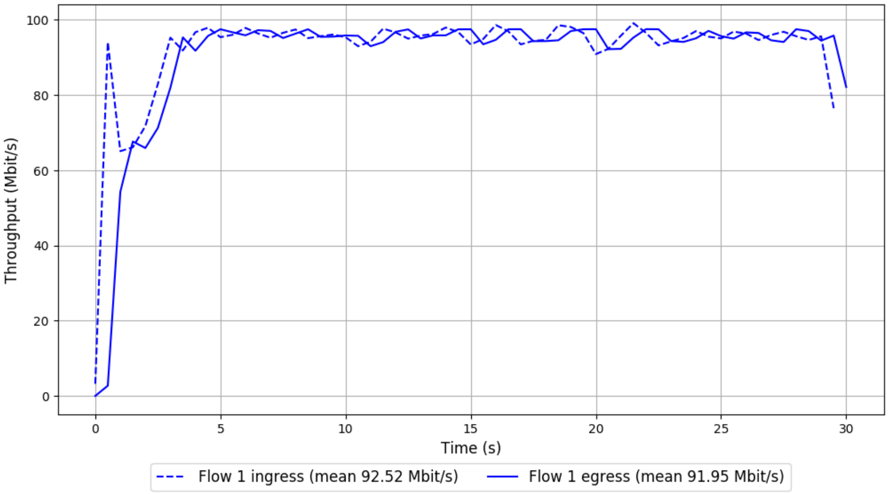
Run 5: Report of PCC-Allegro — Data Link

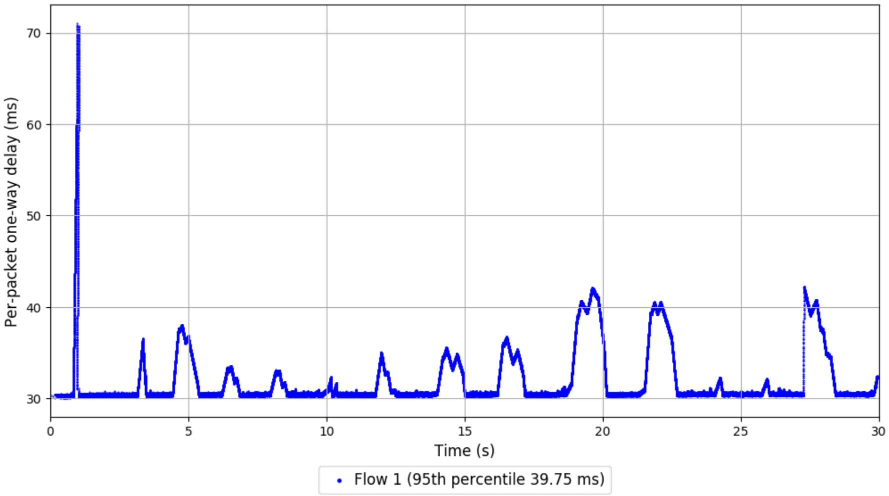




```
Run 6: Statistics of PCC-Allegro

Start at: 2018-06-05 06:23:39
End at: 2018-06-05 06:24:09
Local clock offset: 0.307 ms
Remote clock offset: 1.835 ms

# Below is generated by plot.py at 2018-06-05 08:02:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.95 Mbit/s
95th percentile per-packet one-way delay: 39.748 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 91.95 Mbit/s
95th percentile per-packet one-way delay: 39.748 ms
Loss rate: 0.61%
```

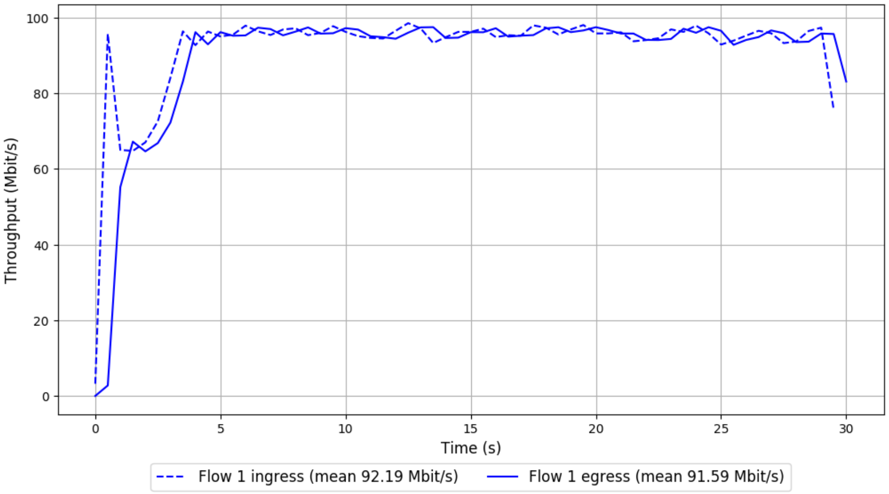
Run 6: Report of PCC-Allegro — Data Link

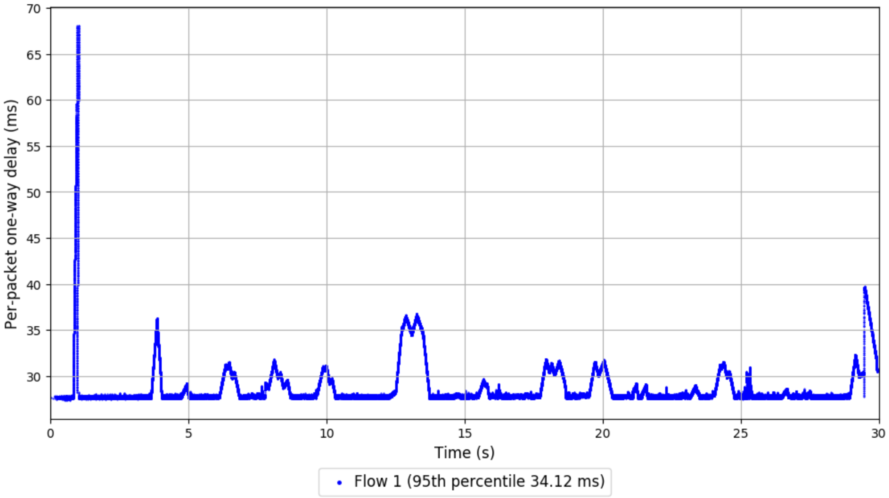




```
Run 7: Statistics of PCC-Allegro

Start at: 2018-06-05 06:44:35
End at: 2018-06-05 06:45:05
Local clock offset: 0.29 ms
Remote clock offset: -1.781 ms

# Below is generated by plot.py at 2018-06-05 08:02:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.59 Mbit/s
95th percentile per-packet one-way delay: 34.118 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 91.59 Mbit/s
95th percentile per-packet one-way delay: 34.118 ms
Loss rate: 0.64%
```

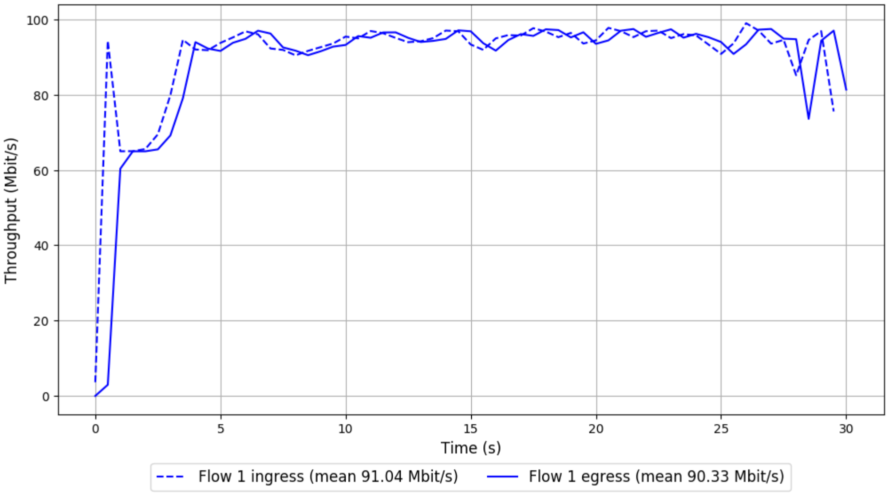
Run 7: Report of PCC-Allegro — Data Link

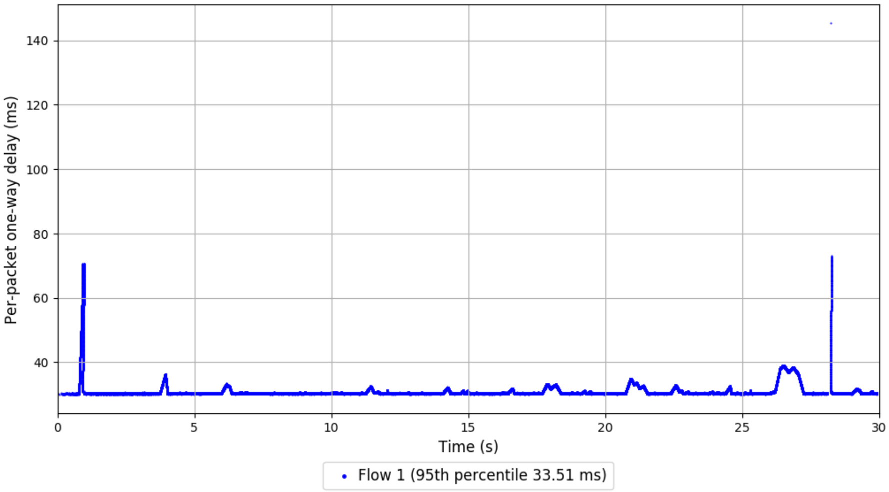




```
Run 8: Statistics of PCC-Allegro

Start at: 2018-06-05 07:05:32
End at: 2018-06-05 07:06:02
Local clock offset: 0.311 ms
Remote clock offset: 0.594 ms

# Below is generated by plot.py at 2018-06-05 08:02:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.33 Mbit/s
95th percentile per-packet one-way delay: 33.510 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 90.33 Mbit/s
95th percentile per-packet one-way delay: 33.510 ms
Loss rate: 0.78%
```

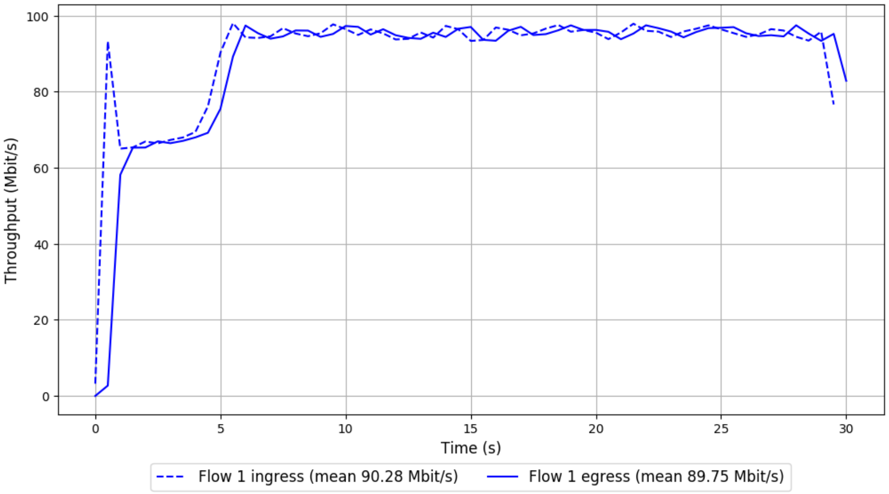
Run 8: Report of PCC-Allegro — Data Link

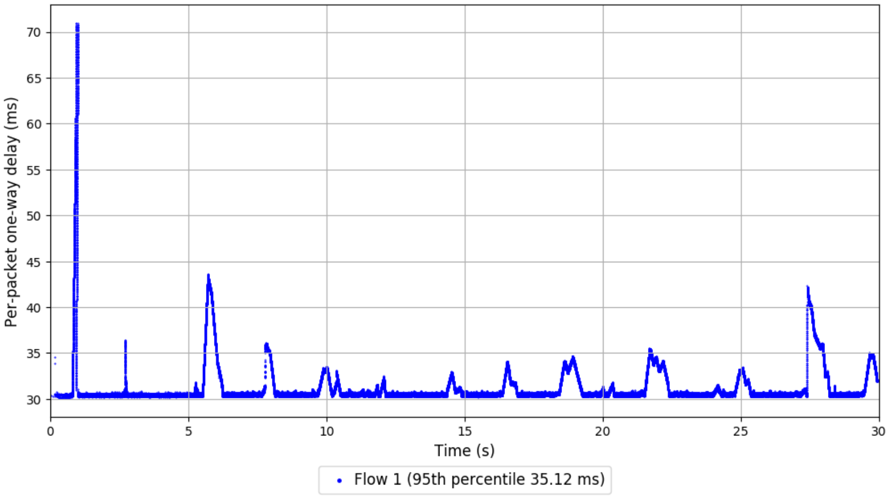




```
Run 9: Statistics of PCC-Allegro

Start at: 2018-06-05 07:26:29
End at: 2018-06-05 07:26:59
Local clock offset: 0.116 ms
Remote clock offset: -0.197 ms

# Below is generated by plot.py at 2018-06-05 08:02:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.75 Mbit/s
95th percentile per-packet one-way delay: 35.119 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 89.75 Mbit/s
95th percentile per-packet one-way delay: 35.119 ms
Loss rate: 0.58%
```

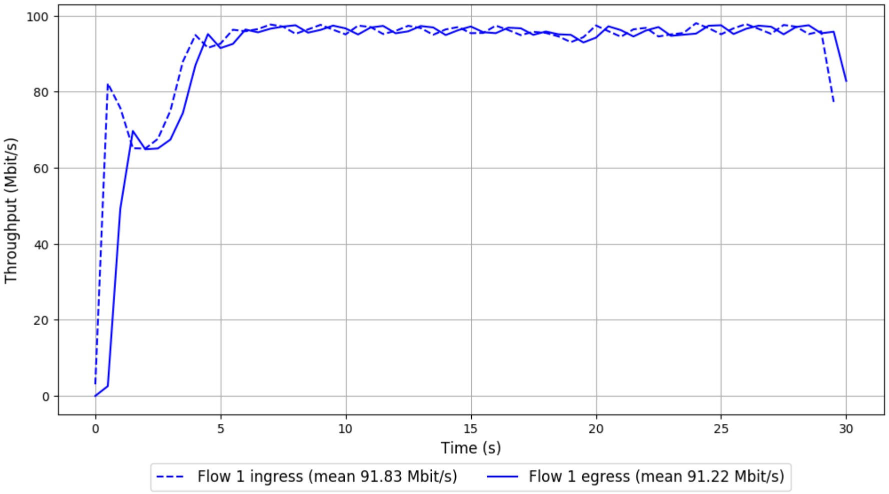
Run 9: Report of PCC-Allegro — Data Link

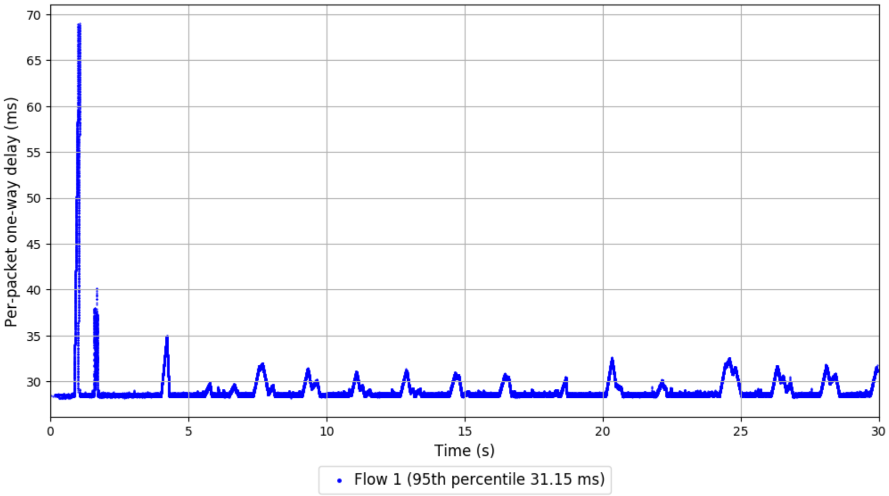




```
Run 10: Statistics of PCC-Allegro

Start at: 2018-06-05 07:47:24
End at: 2018-06-05 07:47:54
Local clock offset: 0.027 ms
Remote clock offset: -2.586 ms

# Below is generated by plot.py at 2018-06-05 08:02:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.22 Mbit/s
95th percentile per-packet one-way delay: 31.150 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 91.22 Mbit/s
95th percentile per-packet one-way delay: 31.150 ms
Loss rate: 0.66%
```

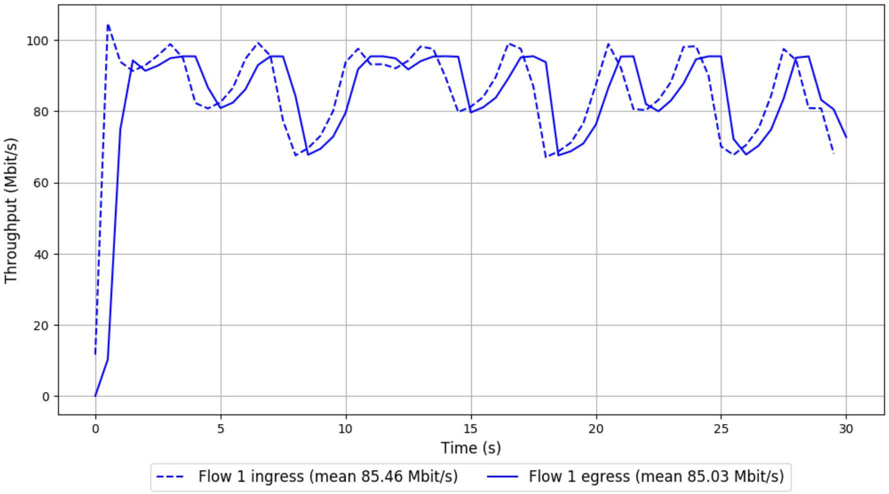
Run 10: Report of PCC-Allegro — Data Link

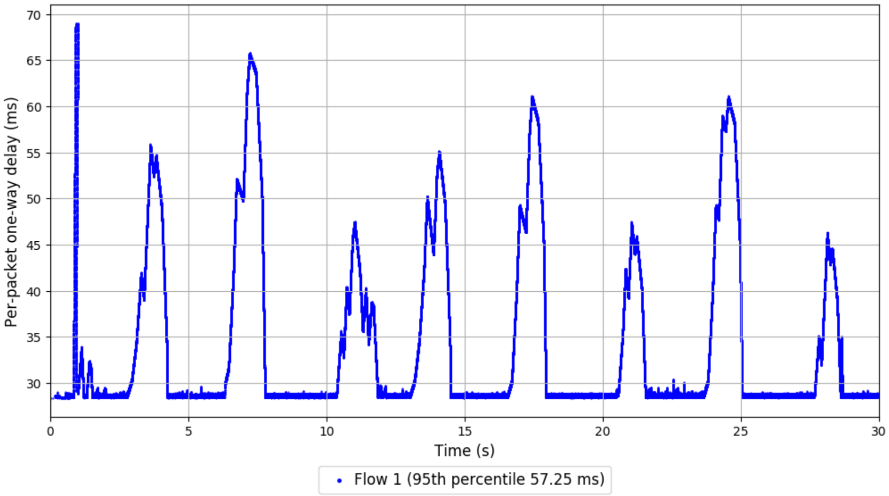




```
Run 1: Statistics of PCC-Expr

Start at: 2018-06-05 04:23:22
End at: 2018-06-05 04:23:52
Local clock offset: 0.5 ms
Remote clock offset: -6.03 ms

# Below is generated by plot.py at 2018-06-05 08:03:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.03 Mbit/s
95th percentile per-packet one-way delay: 57.249 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 85.03 Mbit/s
95th percentile per-packet one-way delay: 57.249 ms
Loss rate: 0.50%
```

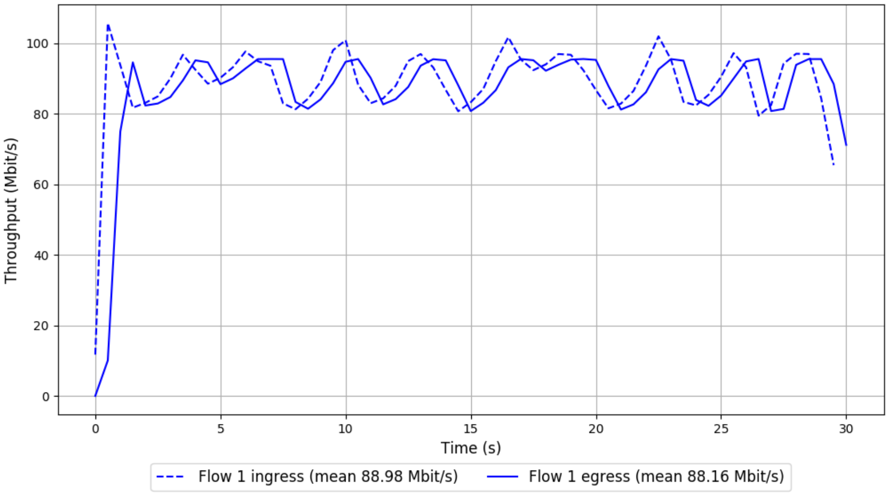
Run 1: Report of PCC-Expr — Data Link

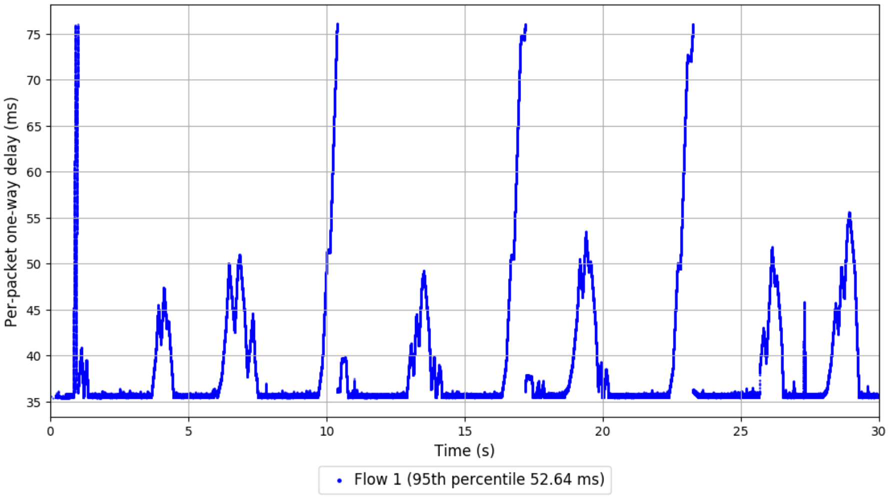




```
Run 2: Statistics of PCC-Expr

Start at: 2018-06-05 04:44:58
End at: 2018-06-05 04:45:28
Local clock offset: 0.439 ms

# Below is generated by plot.py at 2018-06-05 08:03:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.16 Mbit/s
95th percentile per-packet one-way delay: 52.644 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 88.16 Mbit/s
95th percentile per-packet one-way delay: 52.644 ms
Loss rate: 0.91%
```

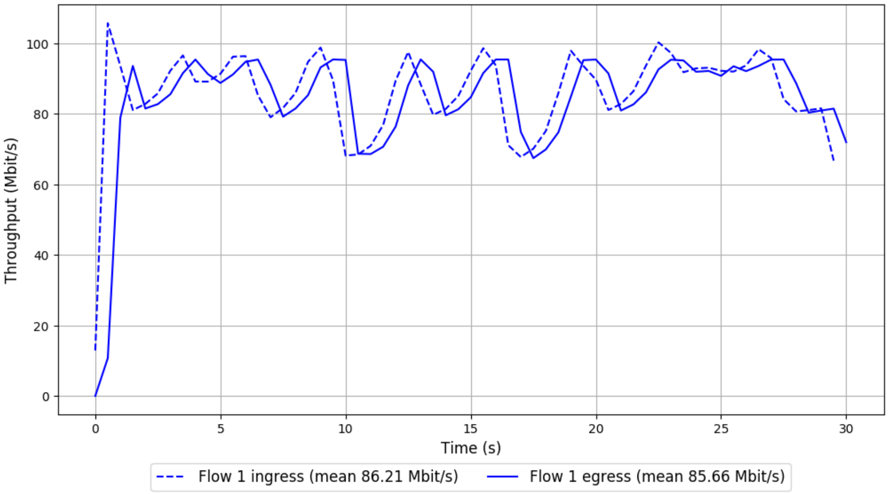
Run 2: Report of PCC-Expr — Data Link

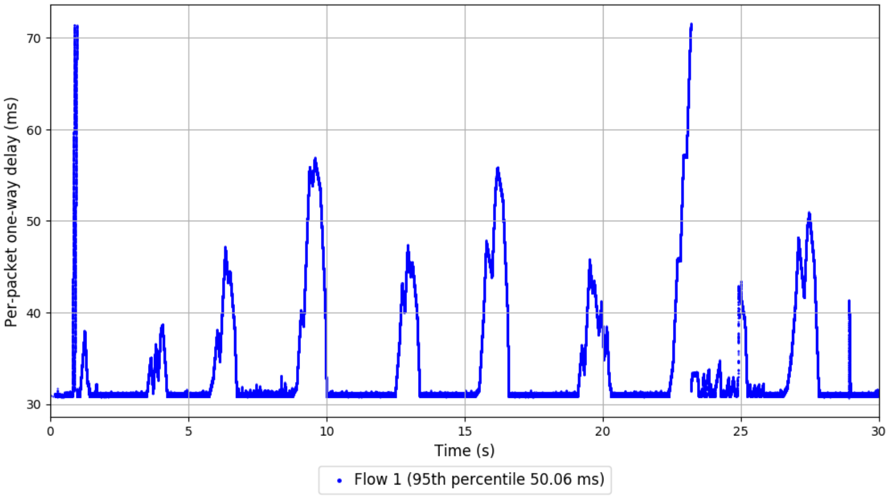




```
Run 3: Statistics of PCC-Expr

Start at: 2018-06-05 05:06:10
End at: 2018-06-05 05:06:40
Local clock offset: 0.479 ms
Remote clock offset: -5.474 ms

# Below is generated by plot.py at 2018-06-05 08:03:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.66 Mbit/s
95th percentile per-packet one-way delay: 50.062 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 85.66 Mbit/s
95th percentile per-packet one-way delay: 50.062 ms
Loss rate: 0.64%
```

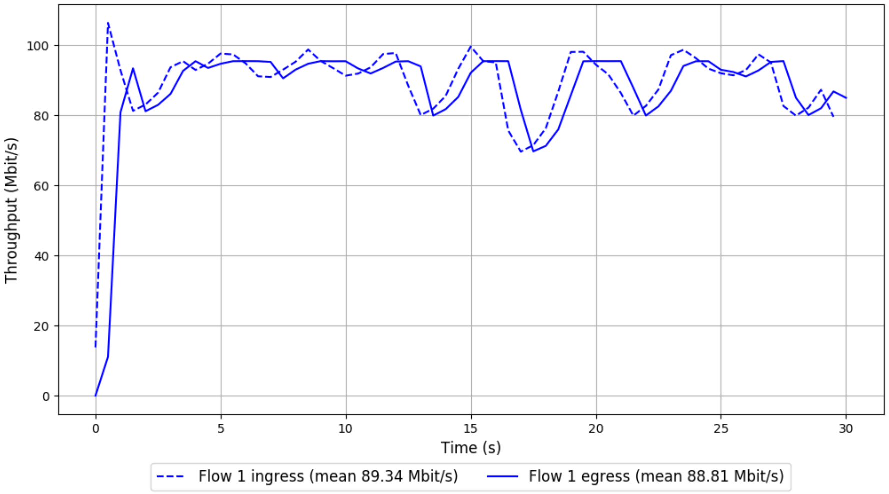
Run 3: Report of PCC-Expr — Data Link

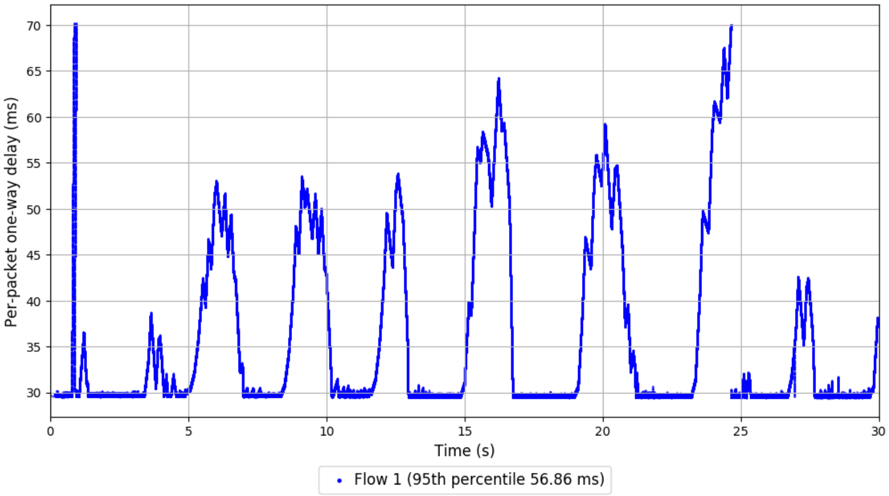




```
Run 4: Statistics of PCC-Expr

Start at: 2018-06-05 05:27:07
End at: 2018-06-05 05:27:37
Local clock offset: 0.246 ms
Remote clock offset: -0.976 ms

# Below is generated by plot.py at 2018-06-05 08:04:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.81 Mbit/s
95th percentile per-packet one-way delay: 56.864 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 88.81 Mbit/s
95th percentile per-packet one-way delay: 56.864 ms
Loss rate: 0.57%
```

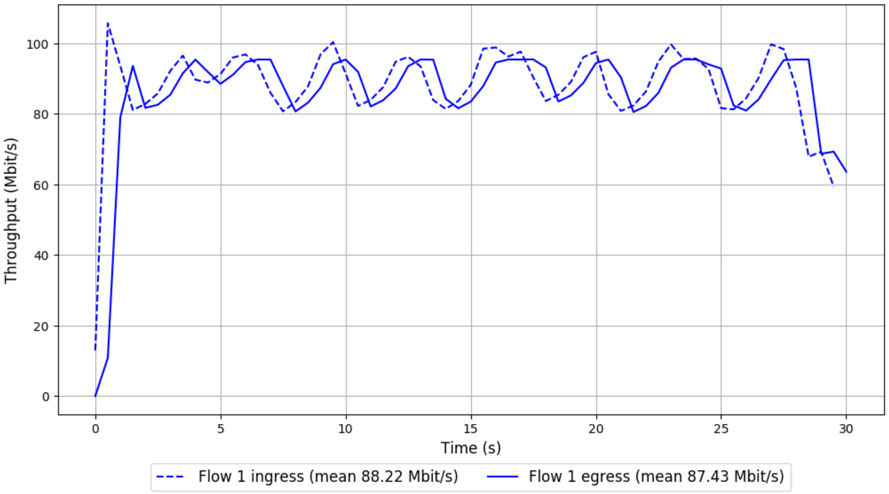
Run 4: Report of PCC-Expr — Data Link

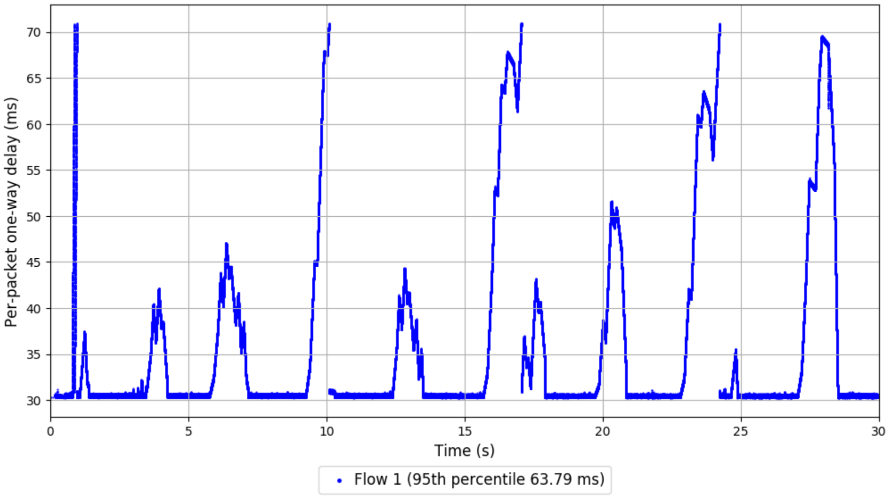




```
Run 5: Statistics of PCC-Expr

Start at: 2018-06-05 05:48:15
End at: 2018-06-05 05:48:45
Local clock offset: 0.203 ms
Remote clock offset: 2.122 ms

# Below is generated by plot.py at 2018-06-05 08:04:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.43 Mbit/s
95th percentile per-packet one-way delay: 63.789 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 87.43 Mbit/s
95th percentile per-packet one-way delay: 63.789 ms
Loss rate: 0.89%
```

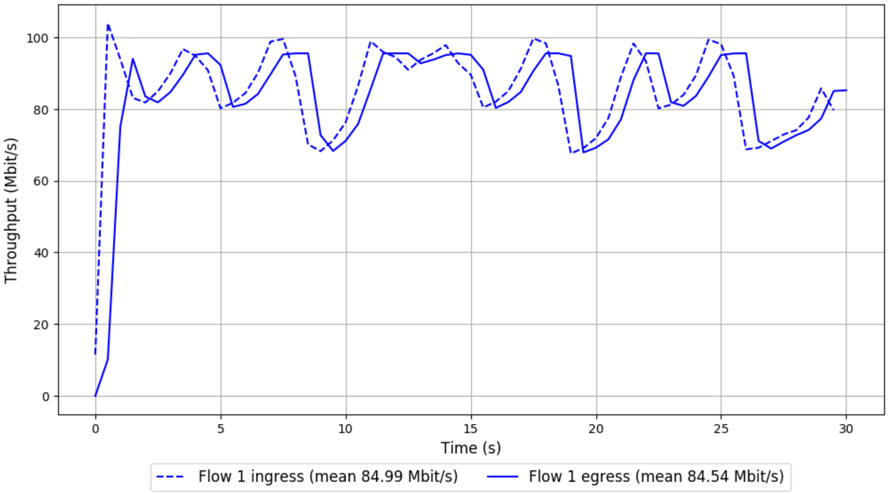
Run 5: Report of PCC-Expr — Data Link

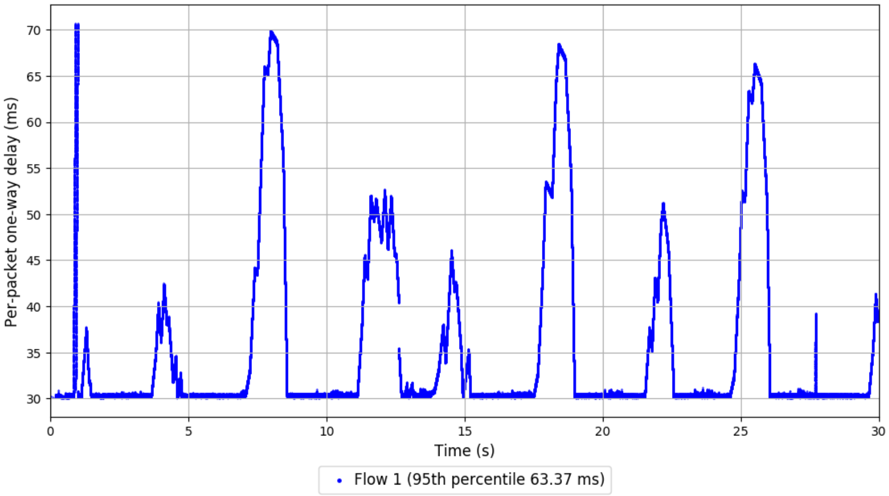




```
Run 6: Statistics of PCC-Expr

Start at: 2018-06-05 06:09:08
End at: 2018-06-05 06:09:38
Local clock offset: 0.268 ms
Remote clock offset: 1.343 ms

# Below is generated by plot.py at 2018-06-05 08:04:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.54 Mbit/s
95th percentile per-packet one-way delay: 63.365 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 84.54 Mbit/s
95th percentile per-packet one-way delay: 63.365 ms
Loss rate: 0.50%
```

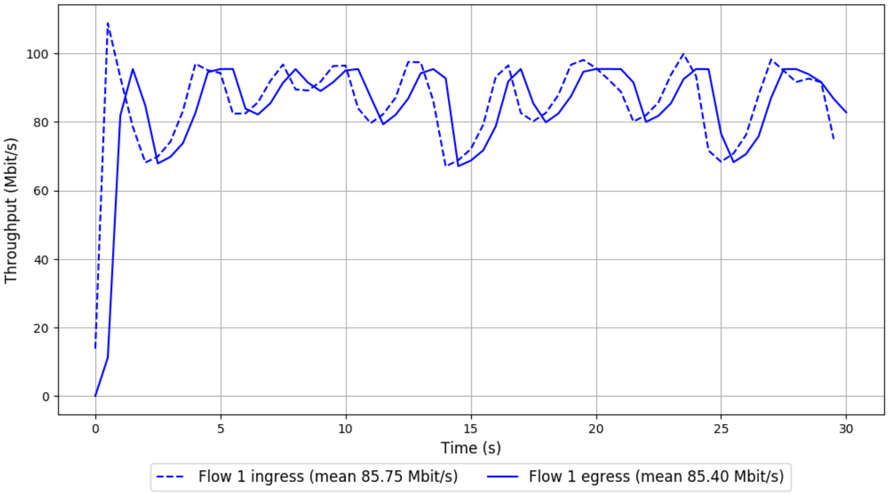
Run 6: Report of PCC-Expr — Data Link

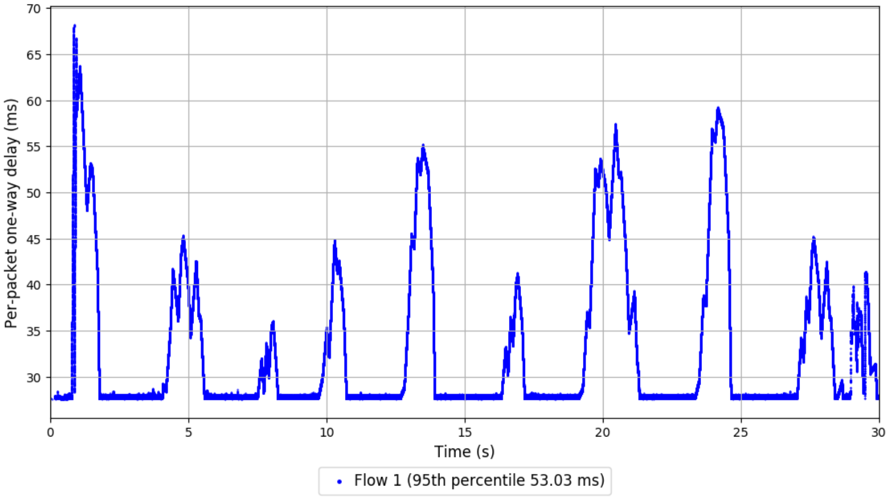




```
Run 7: Statistics of PCC-Expr

Start at: 2018-06-05 06:30:04
End at: 2018-06-05 06:30:34
Local clock offset: 0.407 ms
Remote clock offset: -1.37 ms

# Below is generated by plot.py at 2018-06-05 08:04:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.40 Mbit/s
95th percentile per-packet one-way delay: 53.031 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 85.40 Mbit/s
95th percentile per-packet one-way delay: 53.031 ms
Loss rate: 0.41%
```

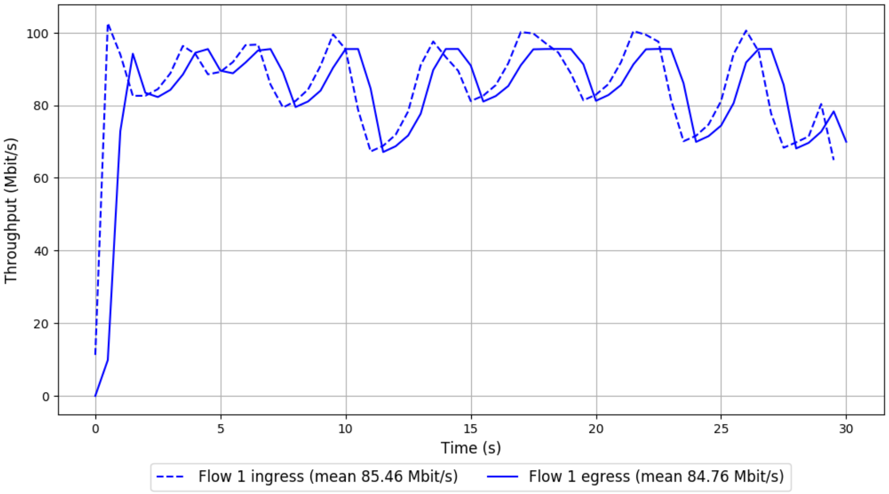
Run 7: Report of PCC-Expr — Data Link

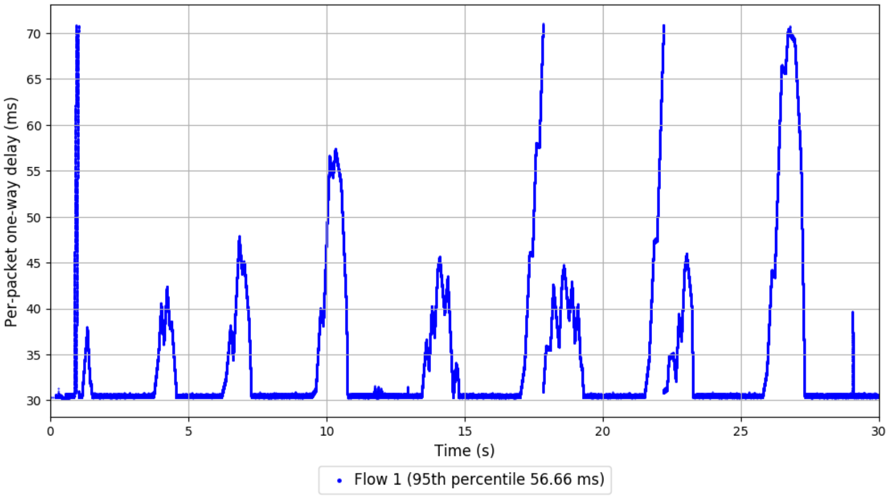




```
Run 8: Statistics of PCC-Expr

Start at: 2018-06-05 06:51:01
End at: 2018-06-05 06:51:31
Local clock offset: 0.378 ms
Remote clock offset: 0.426 ms

# Below is generated by plot.py at 2018-06-05 08:04:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.76 Mbit/s
95th percentile per-packet one-way delay: 56.660 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 84.76 Mbit/s
95th percentile per-packet one-way delay: 56.660 ms
Loss rate: 0.81%
```

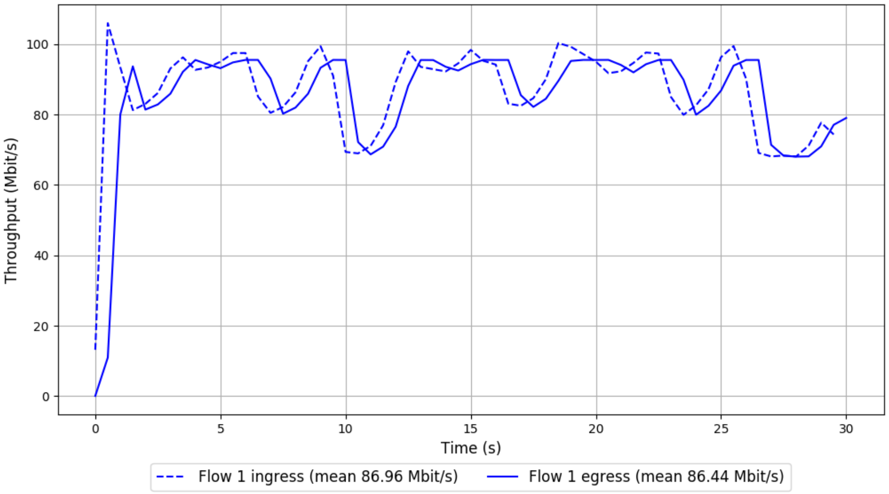
Run 8: Report of PCC-Expr — Data Link

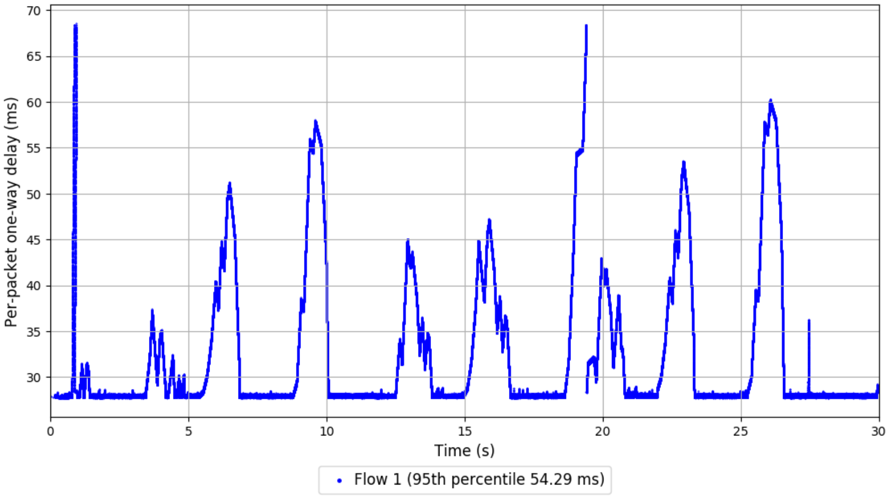




```
Run 9: Statistics of PCC-Expr

Start at: 2018-06-05 07:11:58
End at: 2018-06-05 07:12:28
Local clock offset: 0.111 ms
Remote clock offset: -2.009 ms

# Below is generated by plot.py at 2018-06-05 08:06:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.44 Mbit/s
95th percentile per-packet one-way delay: 54.289 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 86.44 Mbit/s
95th percentile per-packet one-way delay: 54.289 ms
Loss rate: 0.60%
```

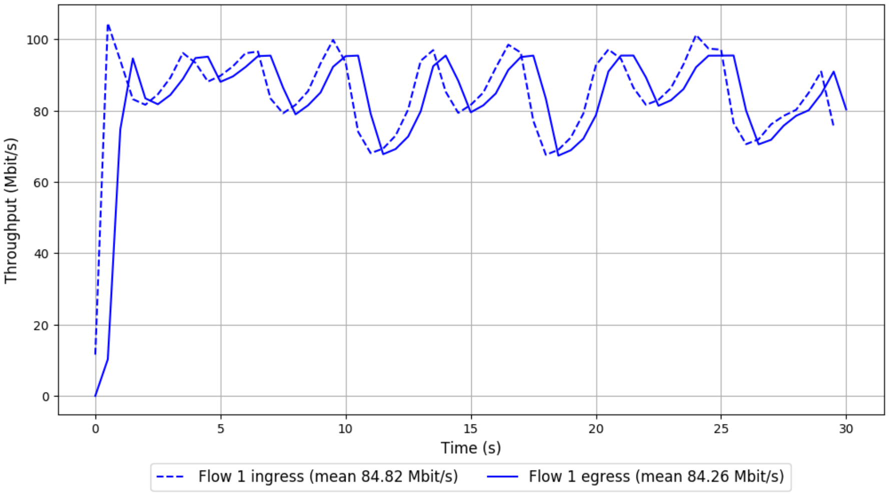
Run 9: Report of PCC-Expr — Data Link

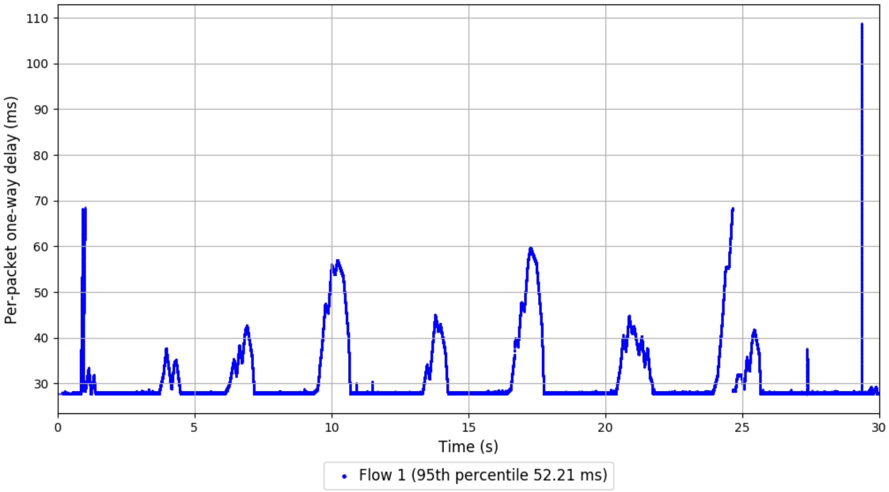




```
Run 10: Statistics of PCC-Expr

Start at: 2018-06-05 07:32:54
End at: 2018-06-05 07:33:24
Local clock offset: -0.019 ms
Remote clock offset: -2.275 ms

# Below is generated by plot.py at 2018-06-05 08:06:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.26 Mbit/s
95th percentile per-packet one-way delay: 52.213 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 84.26 Mbit/s
95th percentile per-packet one-way delay: 52.213 ms
Loss rate: 0.66%
```

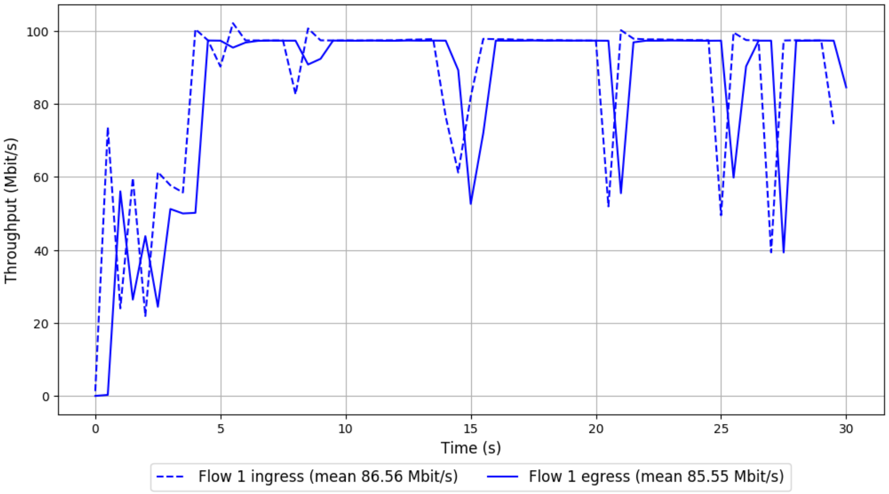
Run 10: Report of PCC-Expr — Data Link

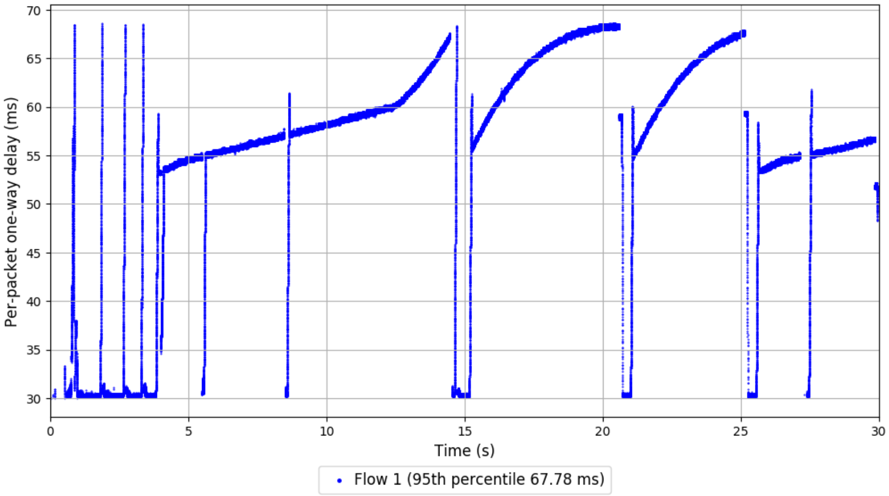




```
Run 1: Statistics of QUIC Cubic

Start at: 2018-06-05 04:27:21
End at: 2018-06-05 04:27:51
Local clock offset: 0.507 ms
Remote clock offset: -3.879 ms

# Below is generated by plot.py at 2018-06-05 08:06:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.55 Mbit/s
95th percentile per-packet one-way delay: 67.781 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 85.55 Mbit/s
95th percentile per-packet one-way delay: 67.781 ms
Loss rate: 1.11%
```

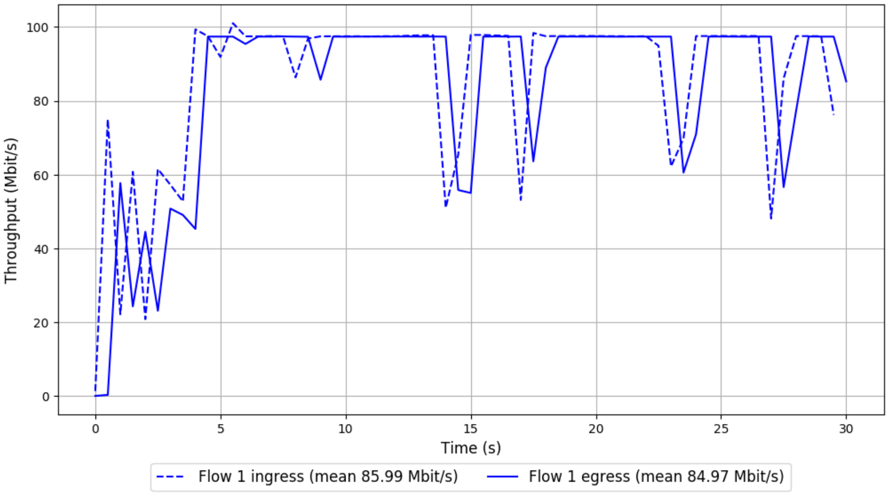
Run 1: Report of QUIC Cubic — Data Link

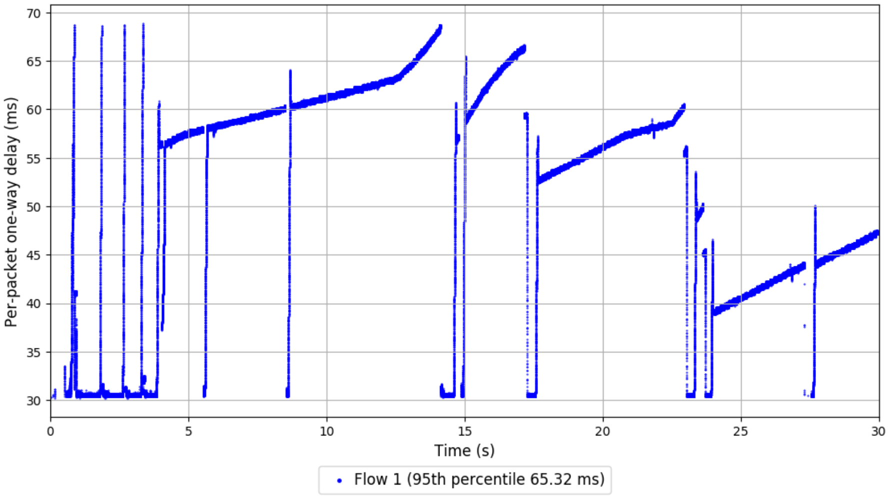




```
Run 2: Statistics of QUIC Cubic

Start at: 2018-06-05 04:48:57
End at: 2018-06-05 04:49:27
Local clock offset: 0.432 ms
Remote clock offset: -5.372 ms

# Below is generated by plot.py at 2018-06-05 08:06:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.97 Mbit/s
95th percentile per-packet one-way delay: 65.321 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 84.97 Mbit/s
95th percentile per-packet one-way delay: 65.321 ms
Loss rate: 1.13%
```

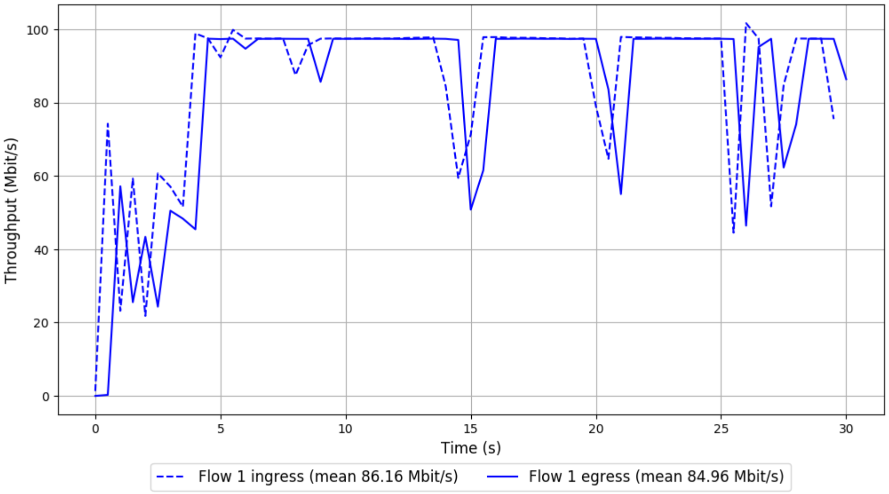
Run 2: Report of QUIC Cubic — Data Link

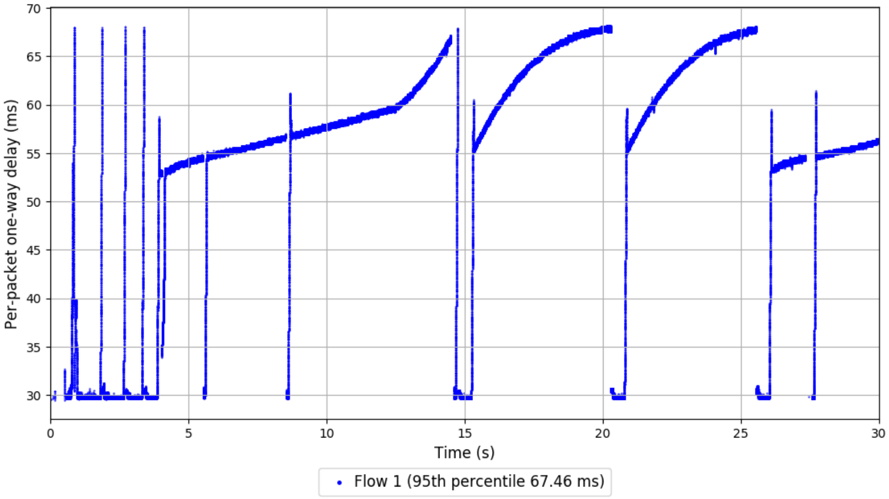




```
Run 3: Statistics of QUIC Cubic

Start at: 2018-06-05 05:10:08
End at: 2018-06-05 05:10:38
Local clock offset: 0.38 ms
Remote clock offset: -6.106 ms

# Below is generated by plot.py at 2018-06-05 08:06:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.96 Mbit/s
95th percentile per-packet one-way delay: 67.462 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 84.96 Mbit/s
95th percentile per-packet one-way delay: 67.462 ms
Loss rate: 1.30%
```

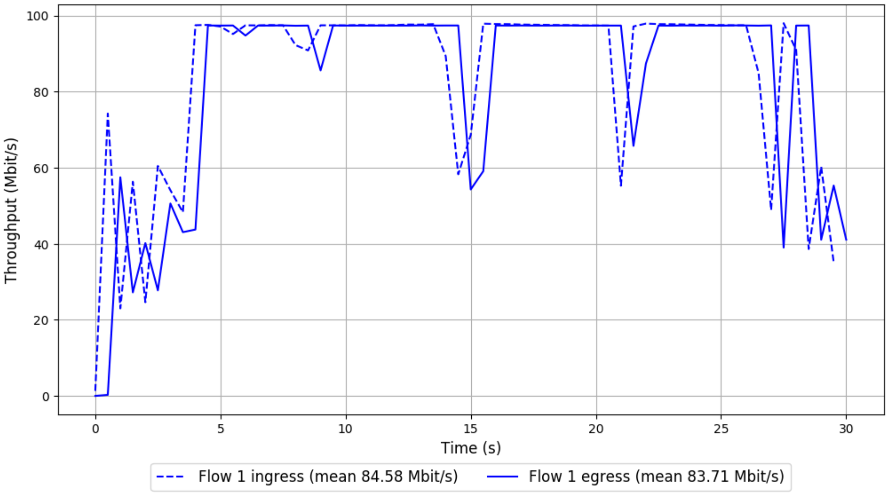
Run 3: Report of QUIC Cubic — Data Link

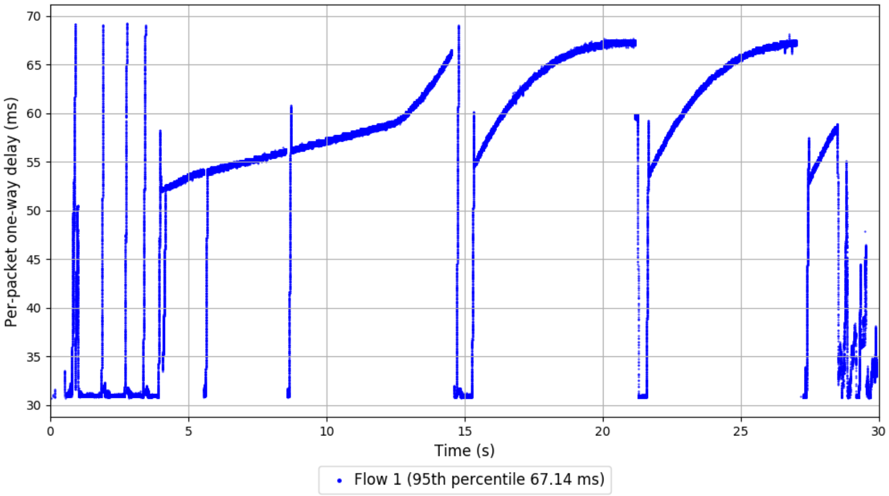




```
Run 4: Statistics of QUIC Cubic

Start at: 2018-06-05 05:31:05
End at: 2018-06-05 05:31:35
Local clock offset: 0.125 ms
Remote clock offset: 0.407 ms

# Below is generated by plot.py at 2018-06-05 08:06:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.71 Mbit/s
95th percentile per-packet one-way delay: 67.137 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 83.71 Mbit/s
95th percentile per-packet one-way delay: 67.137 ms
Loss rate: 1.02%
```

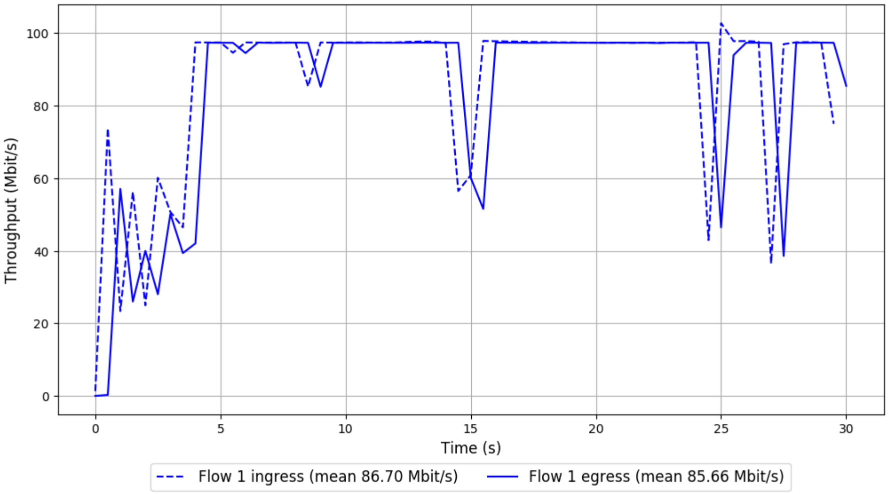
Run 4: Report of QUIC Cubic — Data Link

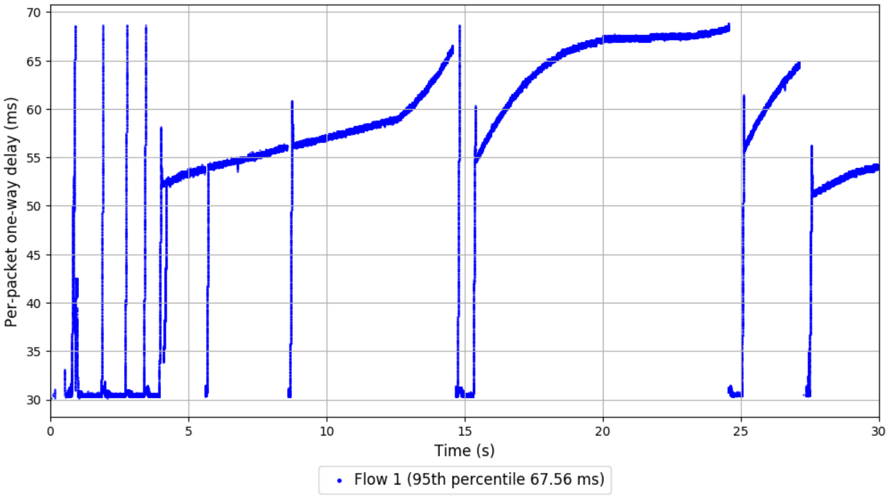




```
Run 5: Statistics of QUIC Cubic

Start at: 2018-06-05 05:52:13
End at: 2018-06-05 05:52:43
Local clock offset: 0.203 ms
Remote clock offset: 1.671 ms

# Below is generated by plot.py at 2018-06-05 08:06:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.66 Mbit/s
95th percentile per-packet one-way delay: 67.562 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 85.66 Mbit/s
95th percentile per-packet one-way delay: 67.562 ms
Loss rate: 1.12%
```

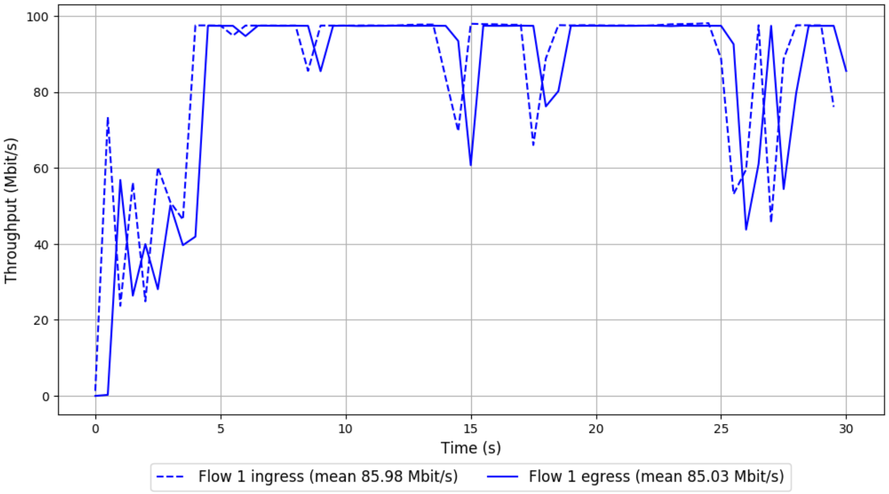
Run 5: Report of QUIC Cubic — Data Link

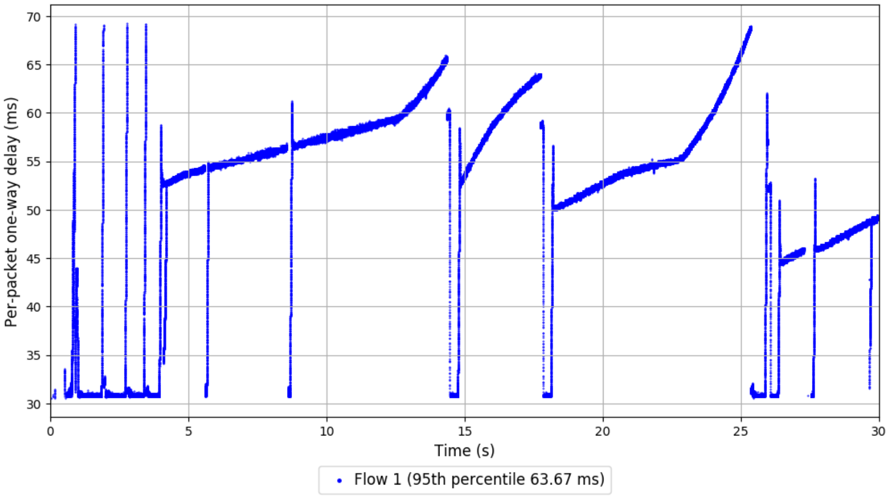




```
Run 6: Statistics of QUIC Cubic

Start at: 2018-06-05 06:13:06
End at: 2018-06-05 06:13:36
Local clock offset: 0.313 ms
Remote clock offset: 1.42 ms

# Below is generated by plot.py at 2018-06-05 08:06:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.03 Mbit/s
95th percentile per-packet one-way delay: 63.666 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 85.03 Mbit/s
95th percentile per-packet one-way delay: 63.666 ms
Loss rate: 1.05%
```

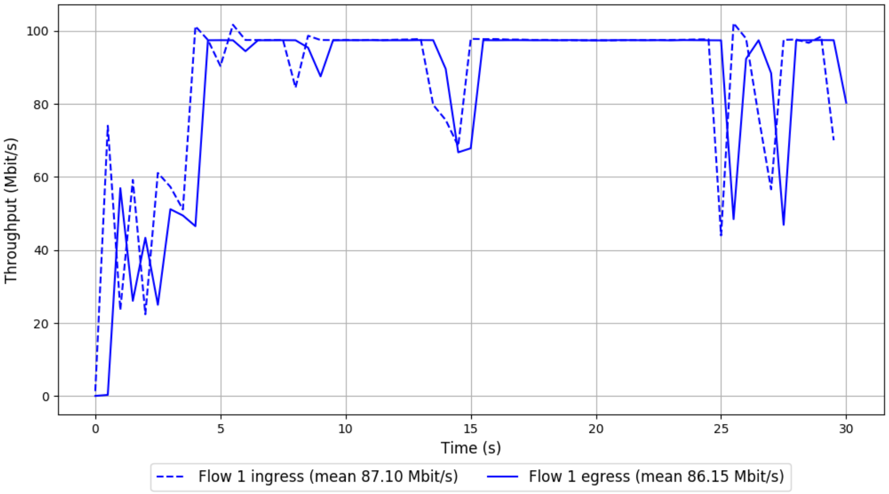
Run 6: Report of QUIC Cubic — Data Link

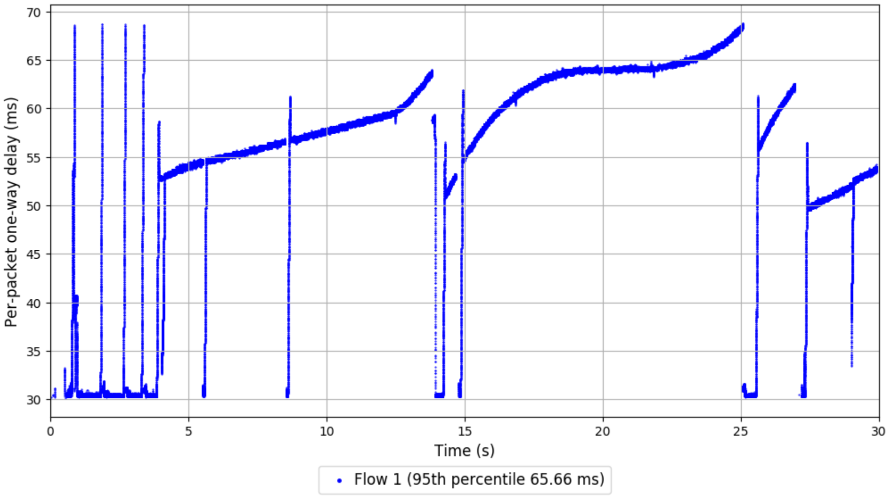




```
Run 7: Statistics of QUIC Cubic

Start at: 2018-06-05 06:34:03
End at: 2018-06-05 06:34:33
Local clock offset: 0.402 ms
Remote clock offset: 0.446 ms

# Below is generated by plot.py at 2018-06-05 08:06:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.15 Mbit/s
95th percentile per-packet one-way delay: 65.662 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 86.15 Mbit/s
95th percentile per-packet one-way delay: 65.662 ms
Loss rate: 1.02%
```

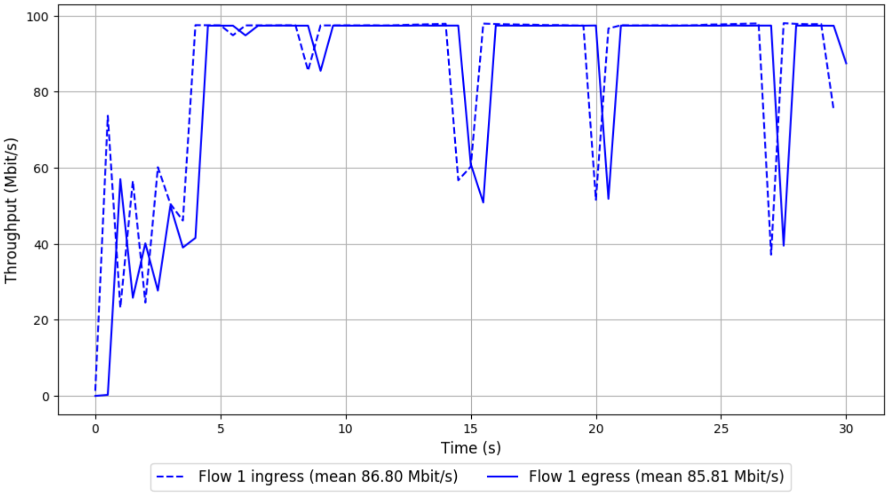
Run 7: Report of QUIC Cubic — Data Link

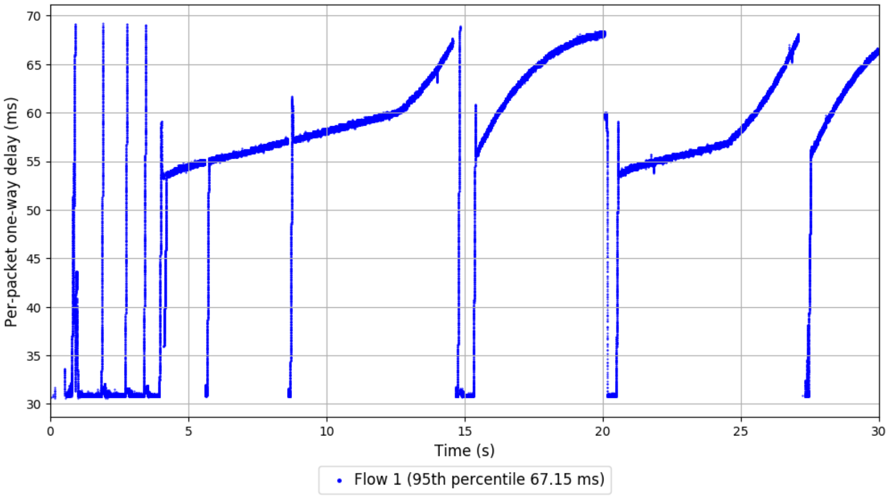




```
Run 8: Statistics of QUIC Cubic

Start at: 2018-06-05 06:54:58
End at: 2018-06-05 06:55:28
Local clock offset: 0.367 ms
Remote clock offset: 0.963 ms

# Below is generated by plot.py at 2018-06-05 08:06:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.81 Mbit/s
95th percentile per-packet one-way delay: 67.152 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 85.81 Mbit/s
95th percentile per-packet one-way delay: 67.152 ms
Loss rate: 1.03%
```

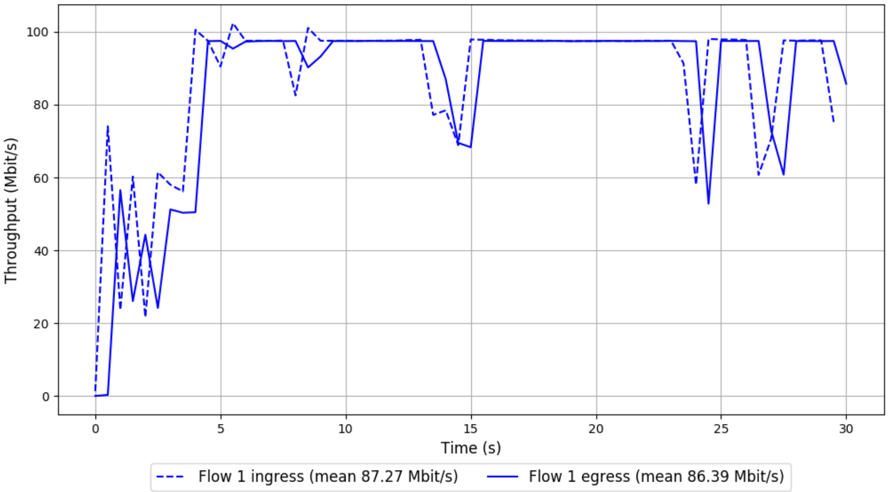
Run 8: Report of QUIC Cubic — Data Link

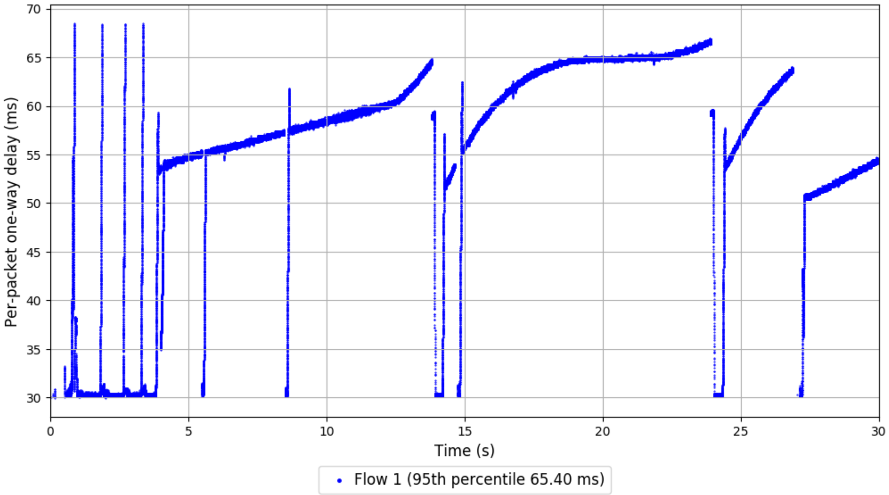




```
Run 9: Statistics of QUIC Cubic

Start at: 2018-06-05 07:15:56
End at: 2018-06-05 07:16:26
Local clock offset: 0.166 ms
Remote clock offset: 0.43 ms

# Below is generated by plot.py at 2018-06-05 08:06:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.39 Mbit/s
95th percentile per-packet one-way delay: 65.403 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 86.39 Mbit/s
95th percentile per-packet one-way delay: 65.403 ms
Loss rate: 0.93%
```

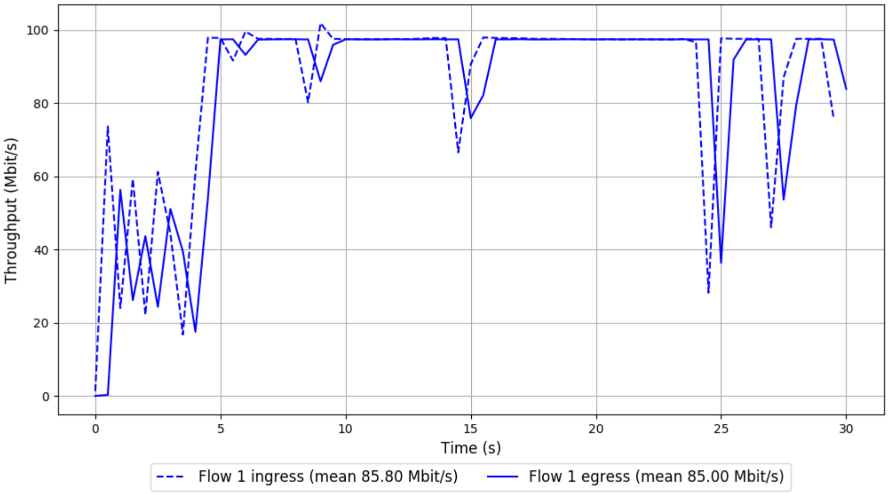
Run 9: Report of QUIC Cubic — Data Link

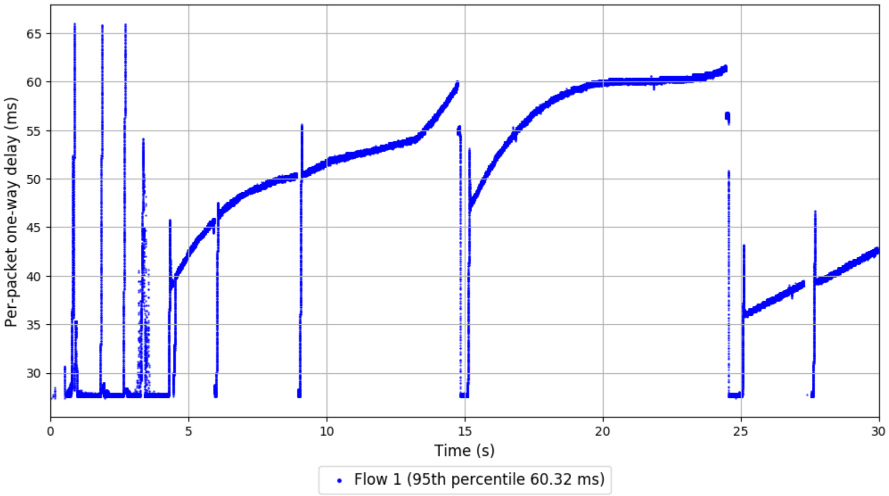




```
Run 10: Statistics of QUIC Cubic

Start at: 2018-06-05 07:36:52
End at: 2018-06-05 07:37:22
Local clock offset: 0.077 ms
Remote clock offset: -2.417 ms

# Below is generated by plot.py at 2018-06-05 08:06:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.00 Mbit/s
95th percentile per-packet one-way delay: 60.322 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 85.00 Mbit/s
95th percentile per-packet one-way delay: 60.322 ms
Loss rate: 0.89%
```

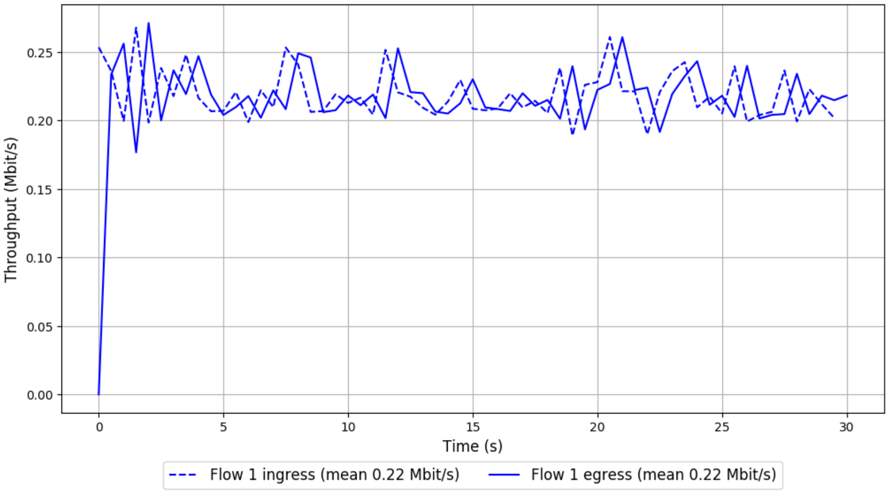
Run 10: Report of QUIC Cubic — Data Link

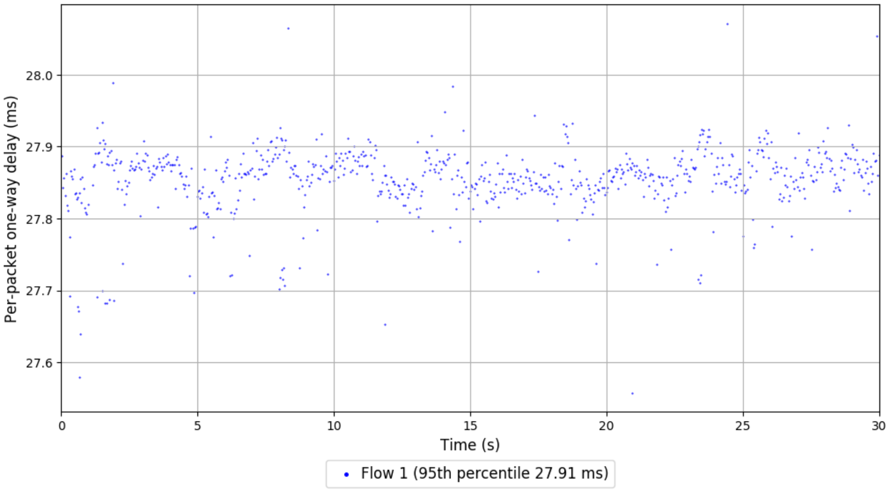




```
Run 1: Statistics of SCReAM

Start at: 2018-06-05 04:22:08
End at: 2018-06-05 04:22:38
Local clock offset: 0.517 ms
Remote clock offset: -5.873 ms

# Below is generated by plot.py at 2018-06-05 08:06:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 27.910 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 27.910 ms
Loss rate: 0.00%
```

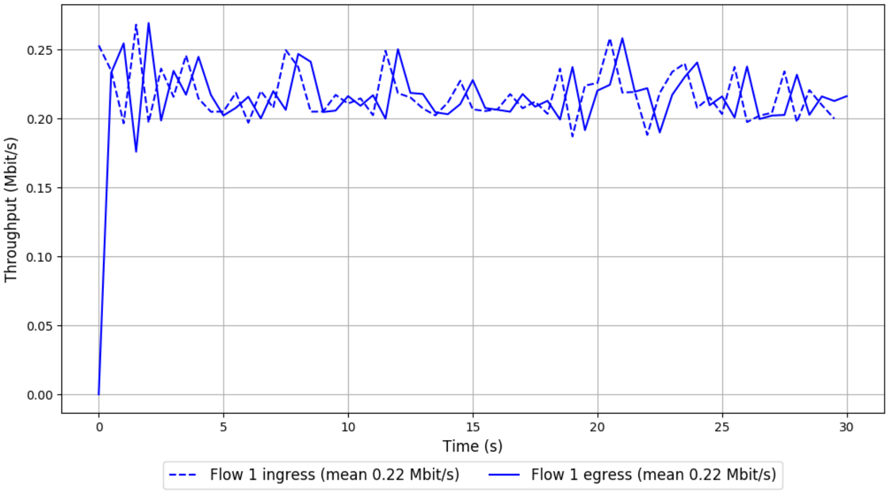
Run 1: Report of SCReAM — Data Link

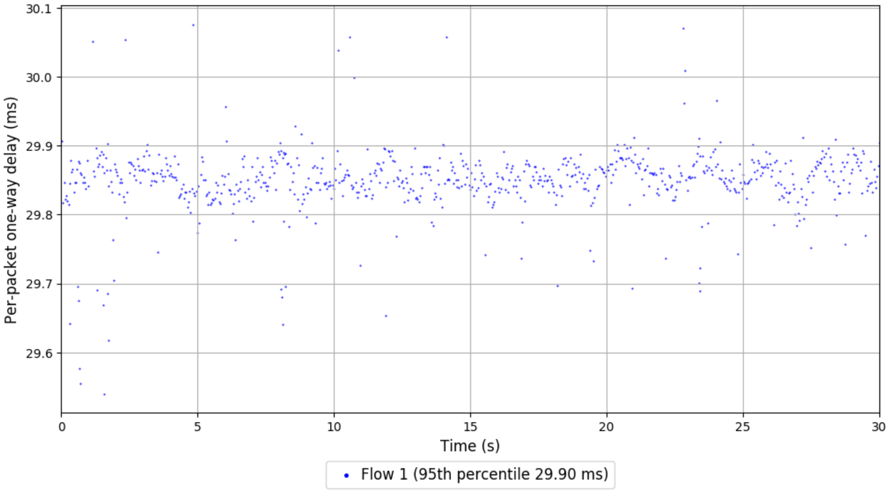




```
Run 2: Statistics of SCReAM

Start at: 2018-06-05 04:43:02
End at: 2018-06-05 04:43:32
Local clock offset: 0.53 ms
Remote clock offset: -5.094 ms

# Below is generated by plot.py at 2018-06-05 08:06:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 29.896 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 29.896 ms
Loss rate: 0.00%
```

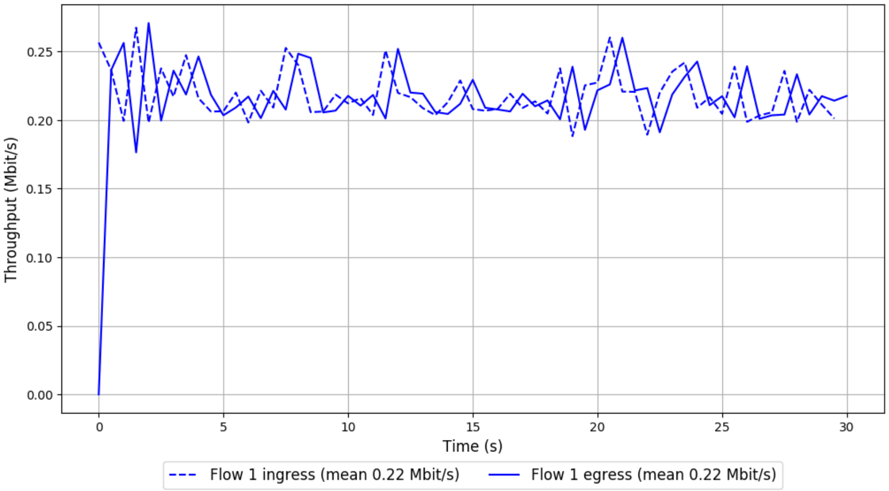
Run 2: Report of SCReAM — Data Link

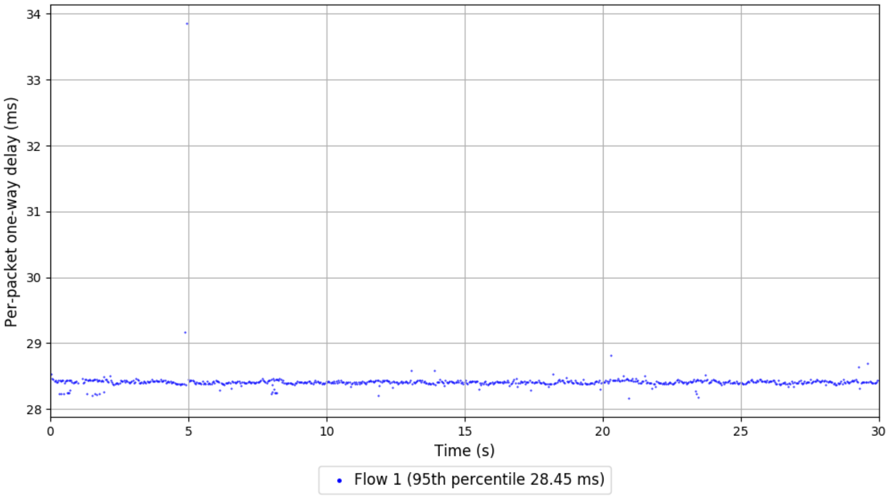




```
Run 3: Statistics of SCReAM

Start at: 2018-06-05 05:04:41
End at: 2018-06-05 05:05:11
Local clock offset: 0.419 ms
Remote clock offset: -8.064 ms

# Below is generated by plot.py at 2018-06-05 08:06:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 28.453 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 28.453 ms
Loss rate: 0.00%
```

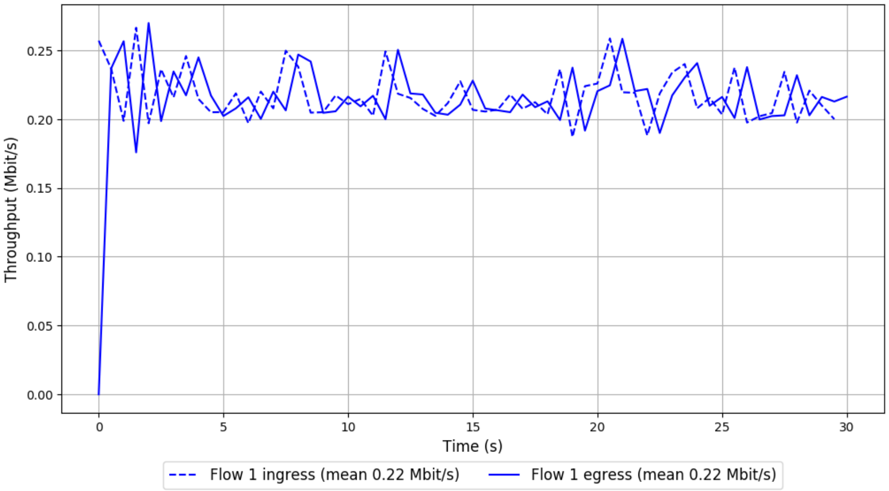
Run 3: Report of SCReAM — Data Link

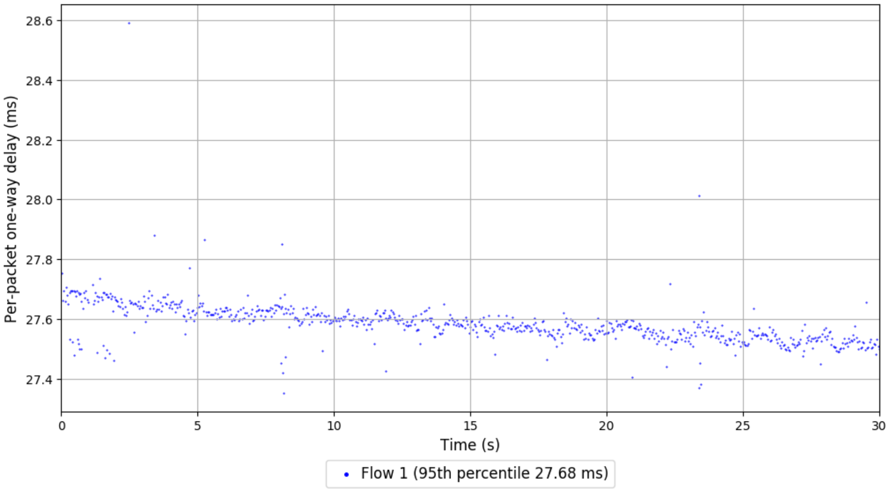




```
Run 4: Statistics of SCReAM

Start at: 2018-06-05 05:25:52
End at: 2018-06-05 05:26:22
Local clock offset: 0.241 ms
Remote clock offset: -3.341 ms

# Below is generated by plot.py at 2018-06-05 08:06:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 27.678 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 27.678 ms
Loss rate: 0.00%
```

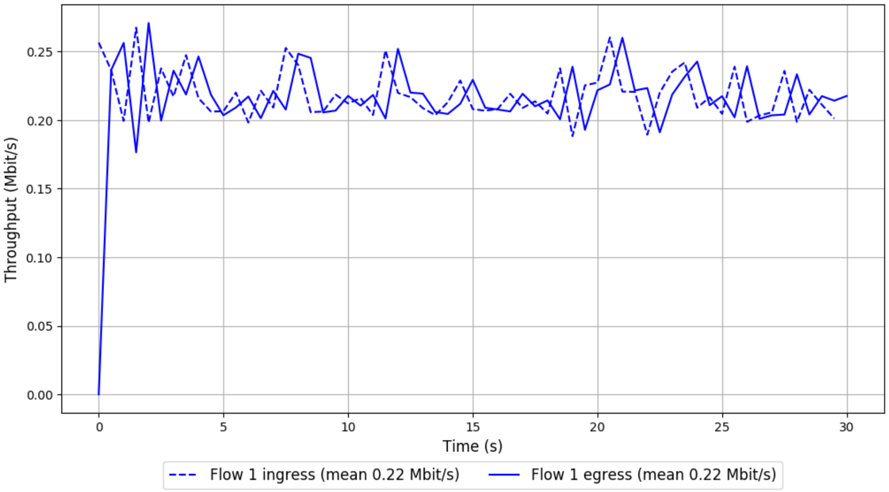
Run 4: Report of SCReAM — Data Link

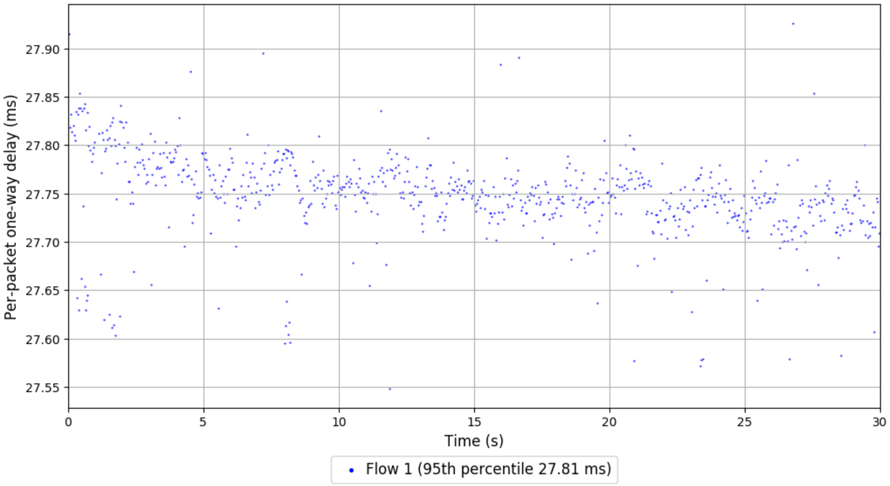




```
Run 5: Statistics of SCReAM

Start at: 2018-06-05 05:47:00
End at: 2018-06-05 05:47:30
Local clock offset: 0.104 ms
Remote clock offset: -0.058 ms

# Below is generated by plot.py at 2018-06-05 08:06:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 27.810 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 27.810 ms
Loss rate: 0.00%
```

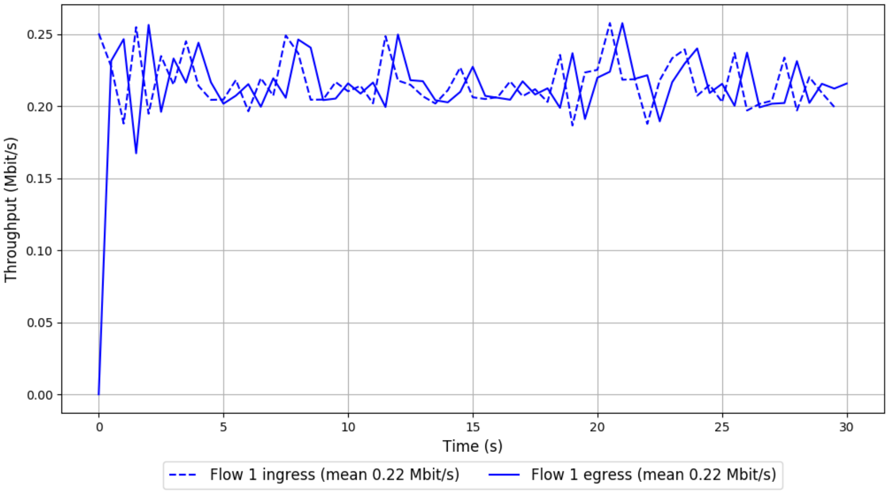
Run 5: Report of SCReAM — Data Link

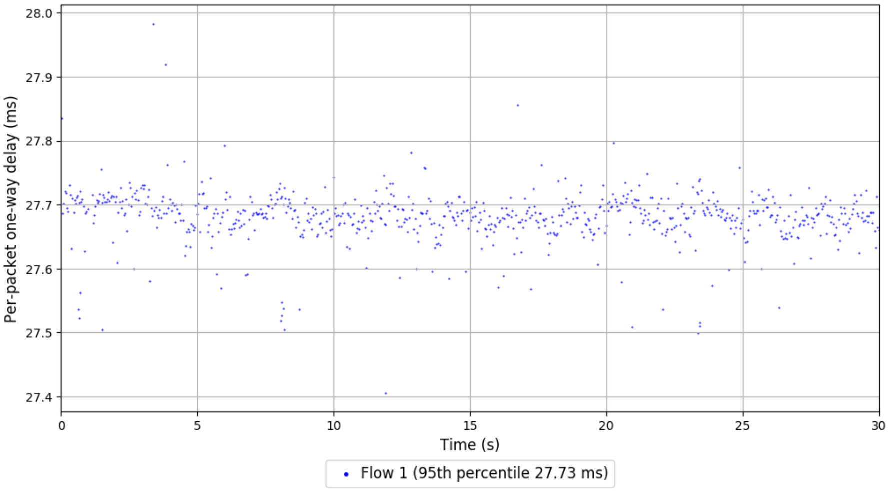




```
Run 6: Statistics of SCReAM

Start at: 2018-06-05 06:07:53
End at: 2018-06-05 06:08:23
Local clock offset: 0.251 ms
Remote clock offset: -1.201 ms

# Below is generated by plot.py at 2018-06-05 08:06:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 27.727 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 27.727 ms
Loss rate: 0.00%
```

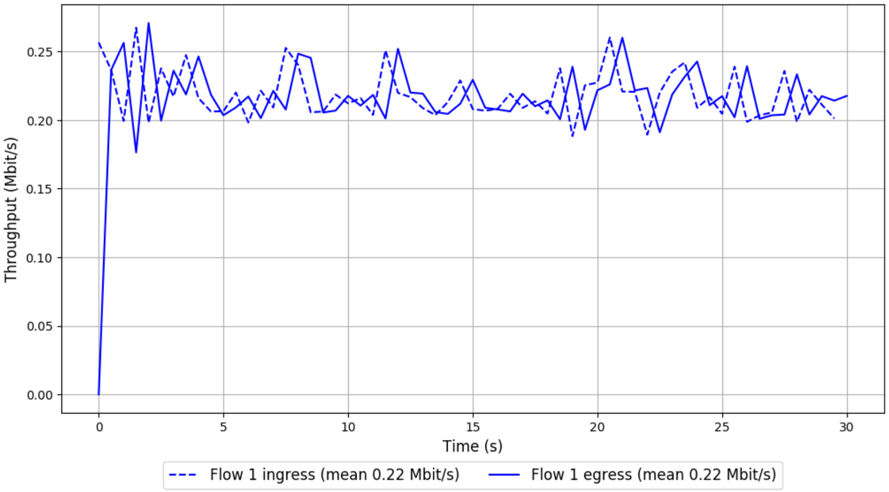
Run 6: Report of SCReAM — Data Link

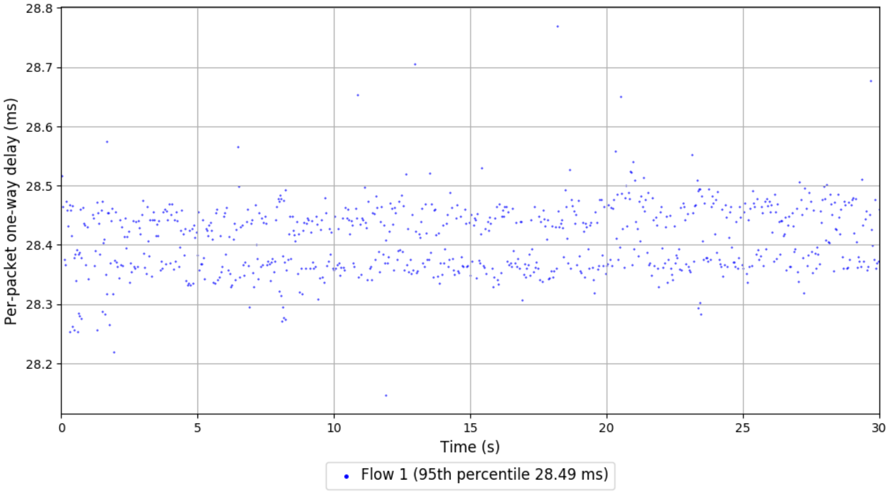




```
Run 7: Statistics of SCReAM

Start at: 2018-06-05 06:28:49
End at: 2018-06-05 06:29:19
Local clock offset: 0.398 ms
Remote clock offset: -1.281 ms

# Below is generated by plot.py at 2018-06-05 08:06:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 28.488 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 28.488 ms
Loss rate: 0.00%
```

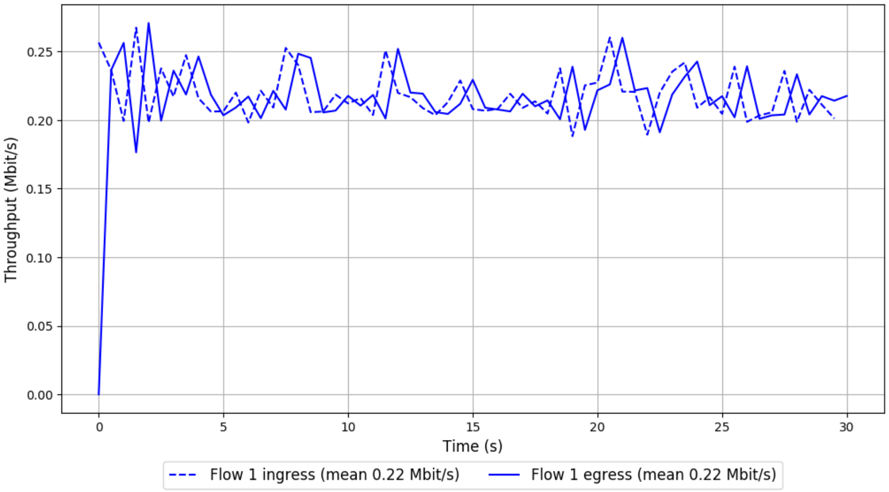
Run 7: Report of SCReAM — Data Link

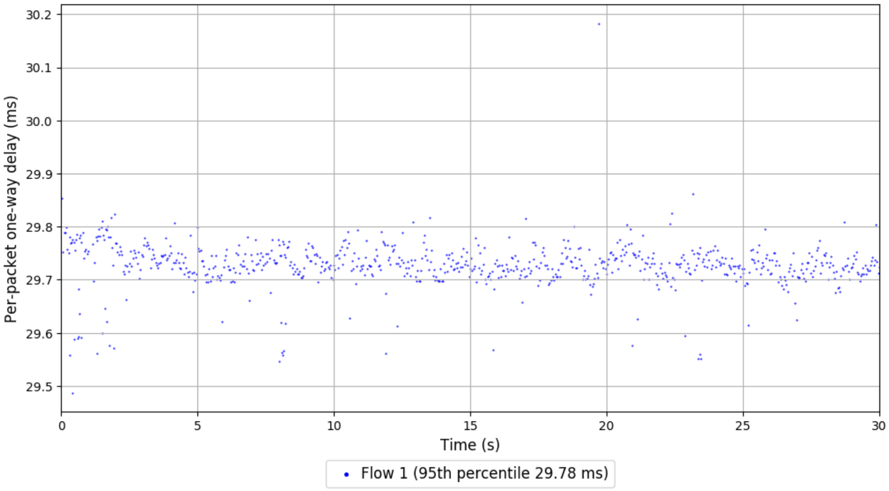




```
Run 8: Statistics of SCReAM

Start at: 2018-06-05 06:49:46
End at: 2018-06-05 06:50:16
Local clock offset: 0.392 ms
Remote clock offset: 0.396 ms

# Below is generated by plot.py at 2018-06-05 08:06:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 29.782 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 29.782 ms
Loss rate: 0.00%
```

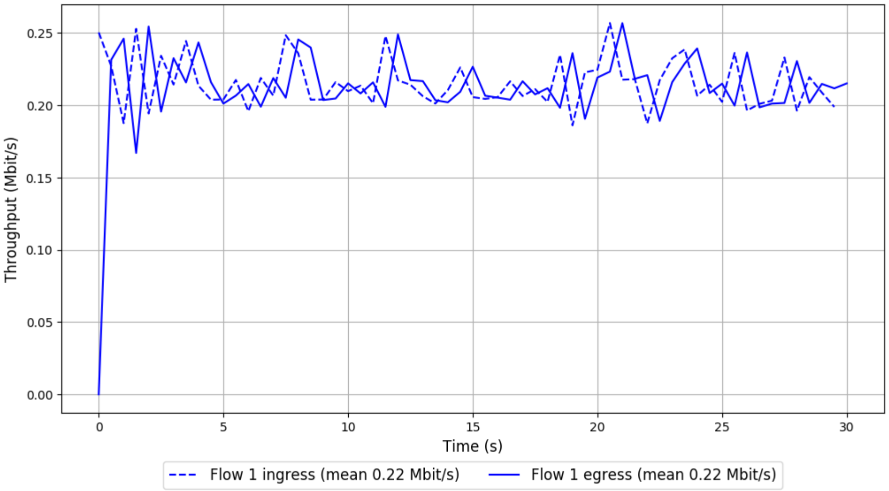
Run 8: Report of SCReAM — Data Link

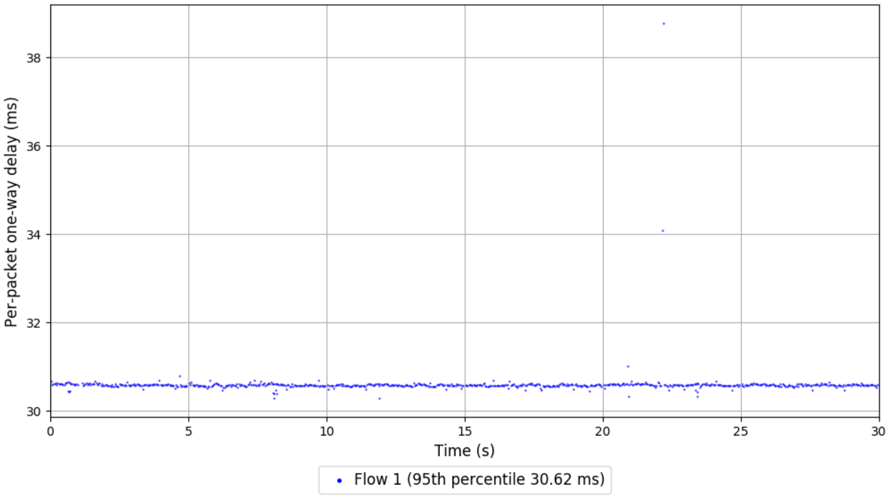




```
Run 9: Statistics of SCReAM

Start at: 2018-06-05 07:10:43
End at: 2018-06-05 07:11:13
Local clock offset: 0.137 ms
Remote clock offset: 0.036 ms

# Below is generated by plot.py at 2018-06-05 08:06:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.621 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.621 ms
Loss rate: 0.00%
```

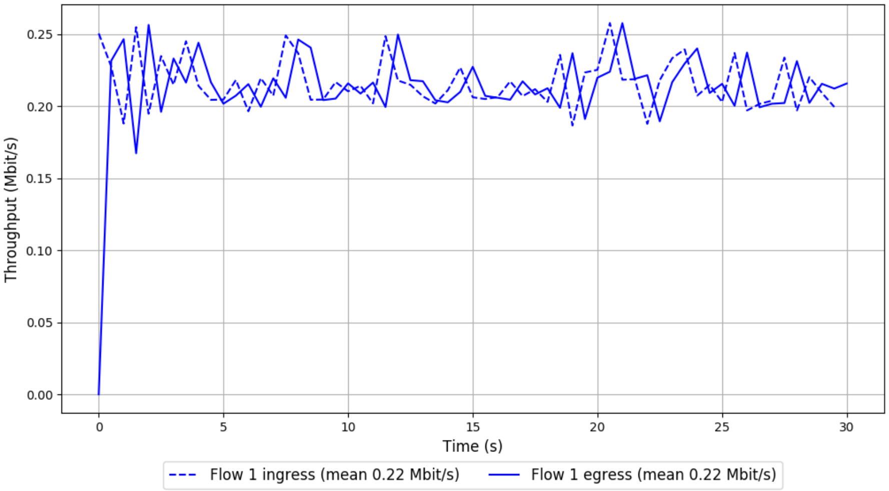
Run 9: Report of SCReAM — Data Link

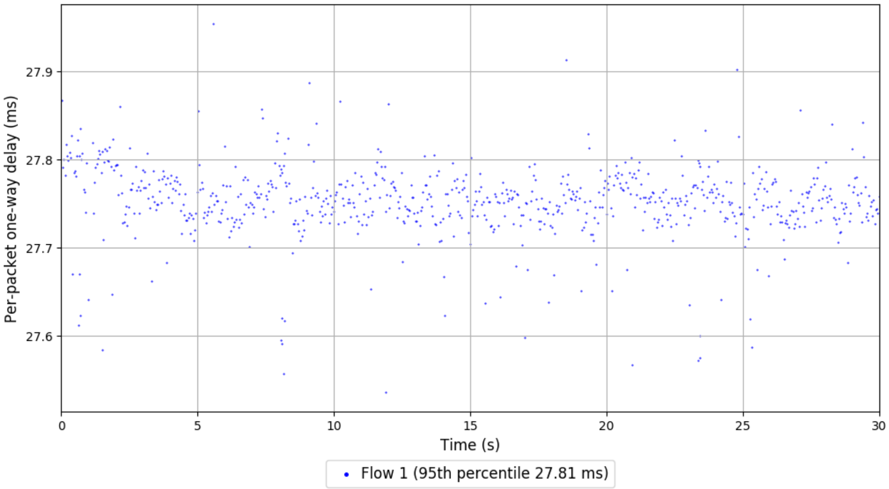




```
Run 10: Statistics of SCReAM

Start at: 2018-06-05 07:31:39
End at: 2018-06-05 07:32:09
Local clock offset: 0.001 ms
Remote clock offset: -2.313 ms

# Below is generated by plot.py at 2018-06-05 08:06:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 27.809 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 27.809 ms
Loss rate: 0.00%
```

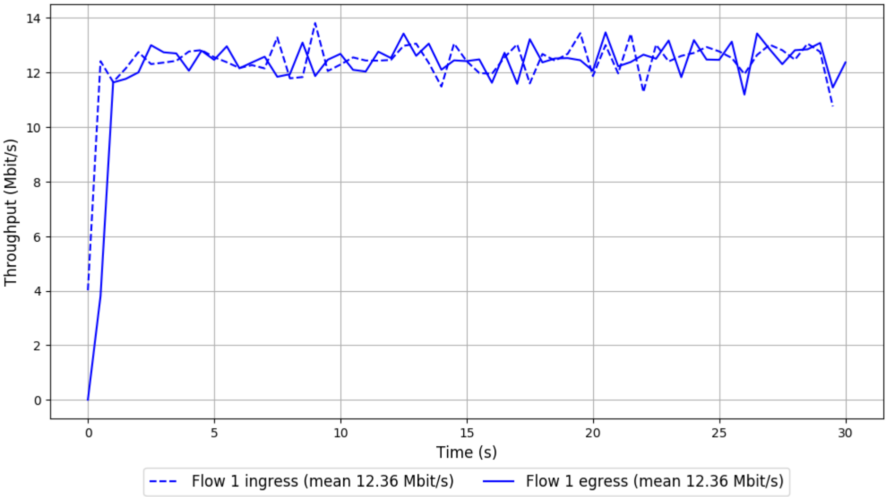
Run 10: Report of SCReAM — Data Link

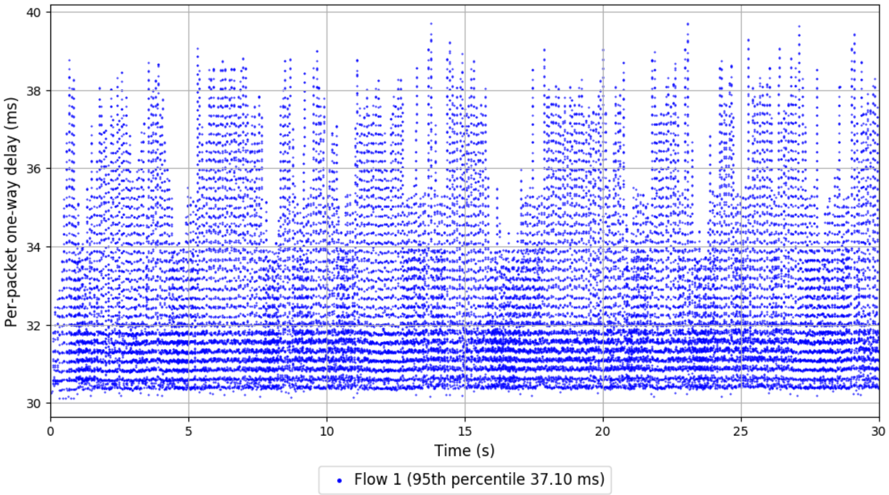




```
Run 1: Statistics of Sprout

Start at: 2018-06-05 04:35:17
End at: 2018-06-05 04:35:47
Local clock offset: 0.58 ms
Remote clock offset: -4.798 ms

# Below is generated by plot.py at 2018-06-05 08:06:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.36 Mbit/s
95th percentile per-packet one-way delay: 37.102 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.36 Mbit/s
95th percentile per-packet one-way delay: 37.102 ms
Loss rate: 0.00%
```

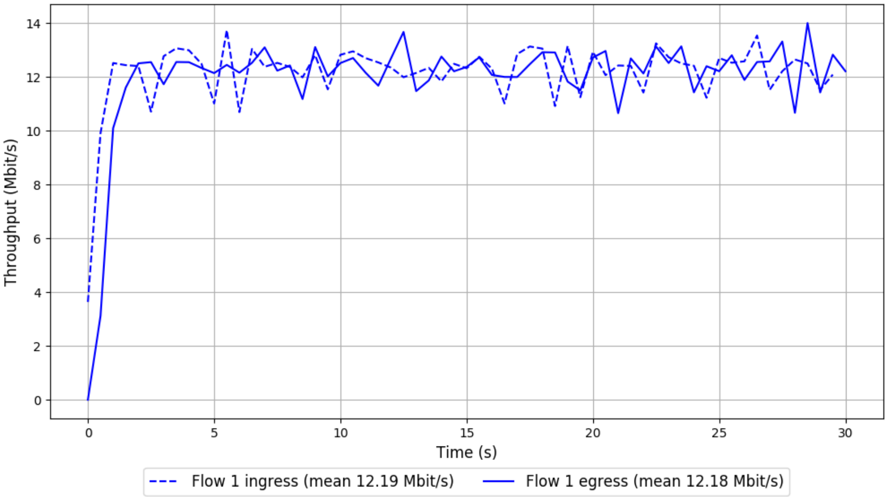
Run 1: Report of Sprout — Data Link

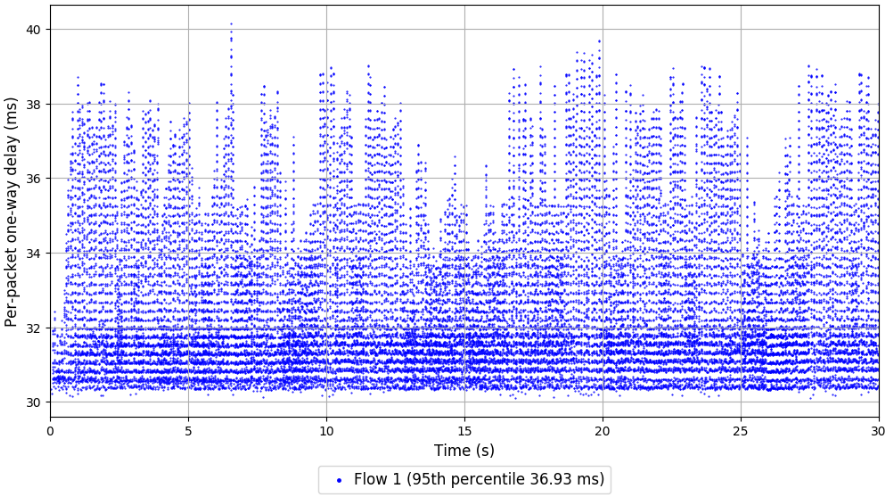




```
Run 2: Statistics of Sprout

Start at: 2018-06-05 04:56:54
End at: 2018-06-05 04:57:24
Local clock offset: 0.507 ms
Remote clock offset: -5.667 ms

# Below is generated by plot.py at 2018-06-05 08:06:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.18 Mbit/s
95th percentile per-packet one-way delay: 36.934 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.18 Mbit/s
95th percentile per-packet one-way delay: 36.934 ms
Loss rate: 0.00%
```

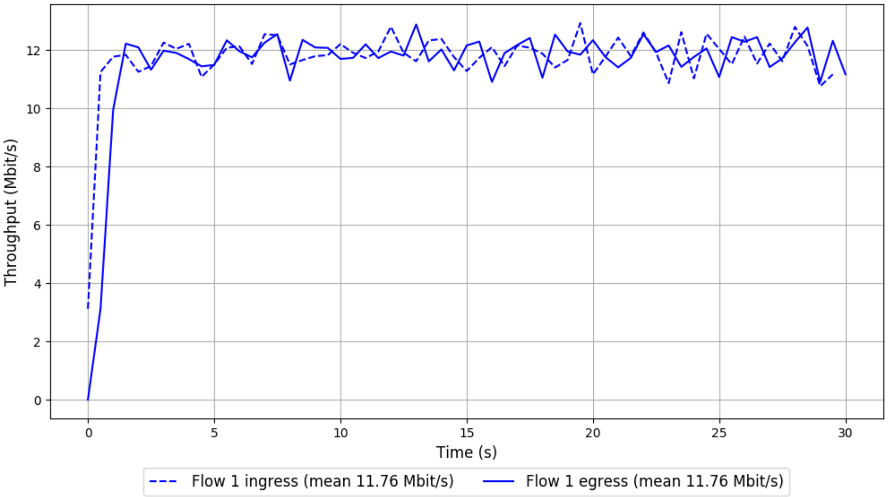
Run 2: Report of Sprout — Data Link

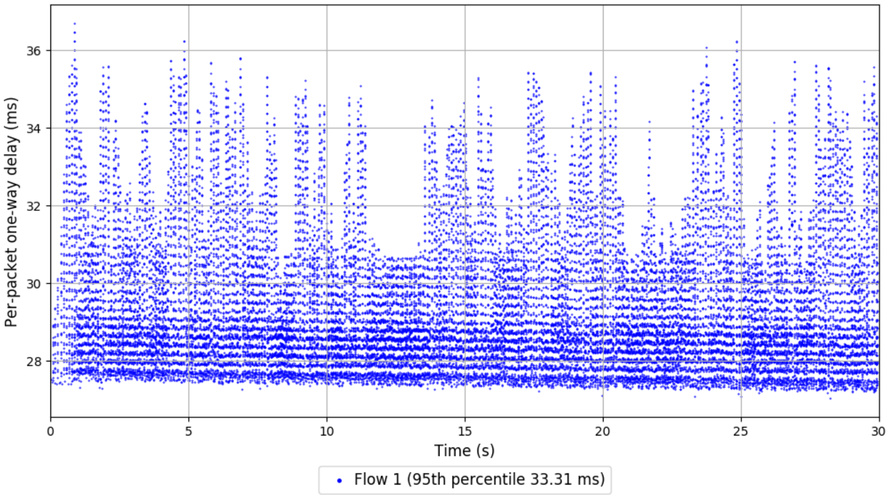




```
Run 3: Statistics of Sprout

Start at: 2018-06-05 05:18:06
End at: 2018-06-05 05:18:36
Local clock offset: 0.191 ms
Remote clock offset: -6.665 ms

# Below is generated by plot.py at 2018-06-05 08:06:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.76 Mbit/s
95th percentile per-packet one-way delay: 33.314 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.76 Mbit/s
95th percentile per-packet one-way delay: 33.314 ms
Loss rate: 0.00%
```

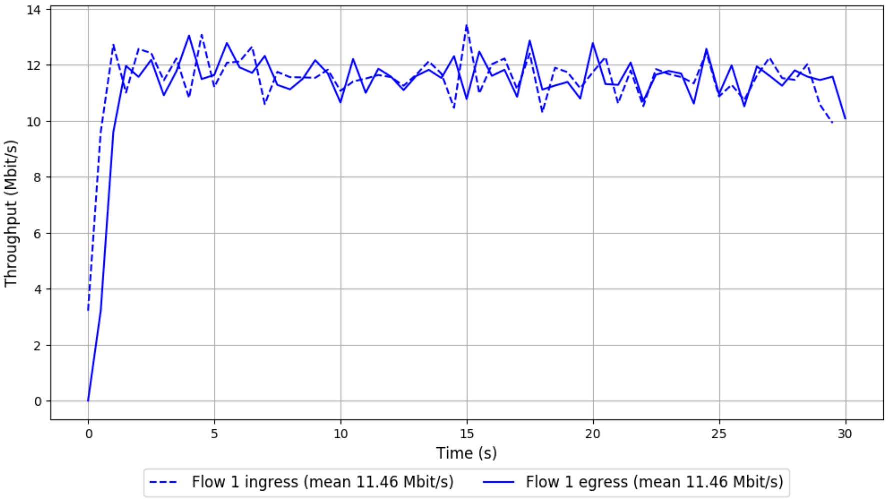
Run 3: Report of Sprout — Data Link

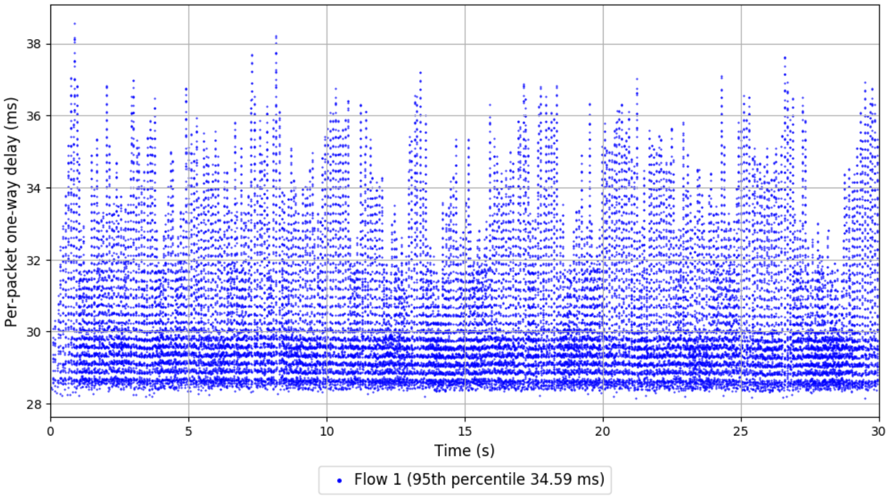




```
Run 4: Statistics of Sprout

Start at: 2018-06-05 05:39:02
End at: 2018-06-05 05:39:32
Local clock offset: 0.122 ms
Remote clock offset: -0.867 ms

# Below is generated by plot.py at 2018-06-05 08:06:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.46 Mbit/s
95th percentile per-packet one-way delay: 34.593 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.46 Mbit/s
95th percentile per-packet one-way delay: 34.593 ms
Loss rate: 0.00%
```

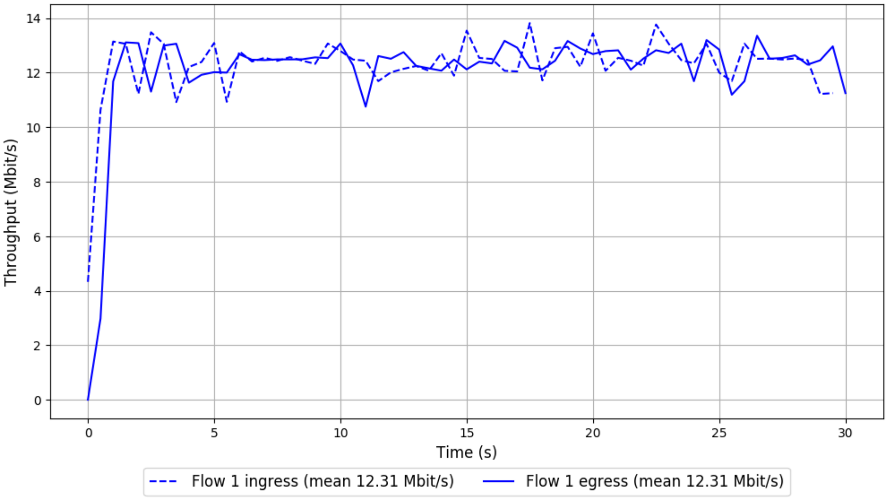
Run 4: Report of Sprout — Data Link

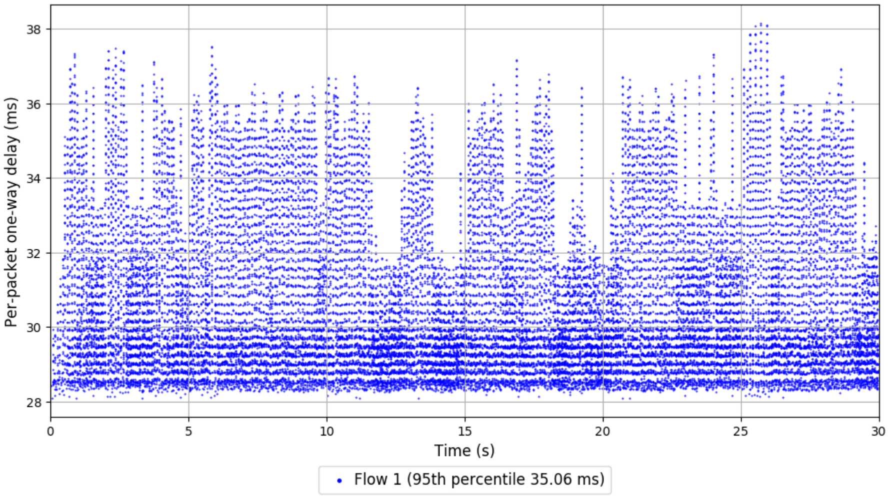




```
Run 5: Statistics of Sprout

Start at: 2018-06-05 06:00:09
End at: 2018-06-05 06:00:39
Local clock offset: 0.159 ms
Remote clock offset: -1.157 ms

# Below is generated by plot.py at 2018-06-05 08:06:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.31 Mbit/s
95th percentile per-packet one-way delay: 35.057 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 12.31 Mbit/s
95th percentile per-packet one-way delay: 35.057 ms
Loss rate: 0.03%
```

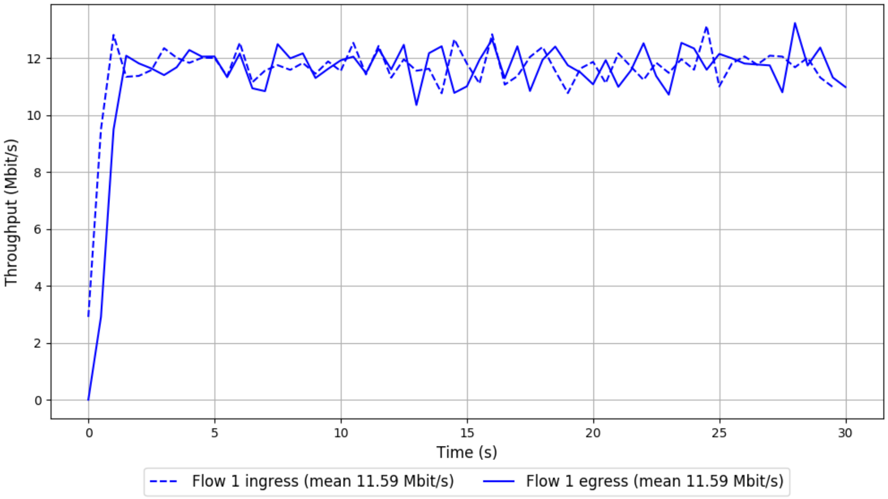
Run 5: Report of Sprout — Data Link

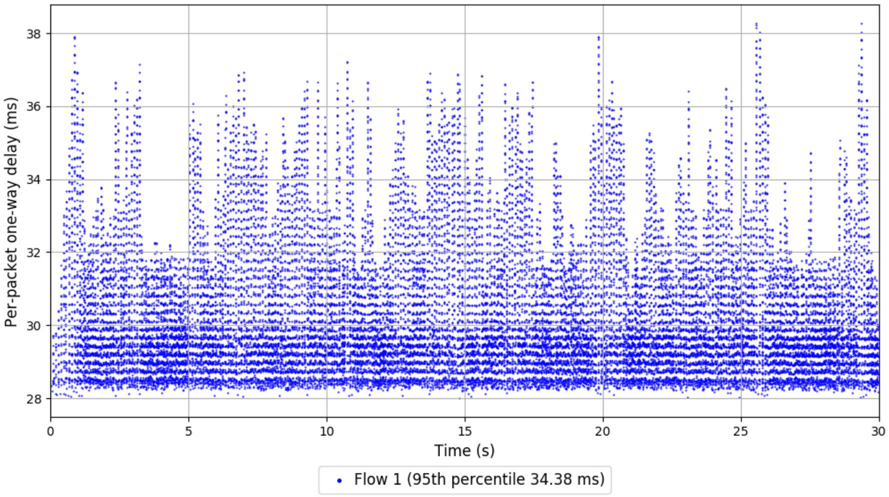




```
Run 6: Statistics of Sprout

Start at: 2018-06-05 06:21:03
End at: 2018-06-05 06:21:33
Local clock offset: 0.373 ms
Remote clock offset: -0.829 ms

# Below is generated by plot.py at 2018-06-05 08:06:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.59 Mbit/s
95th percentile per-packet one-way delay: 34.384 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.59 Mbit/s
95th percentile per-packet one-way delay: 34.384 ms
Loss rate: 0.00%
```

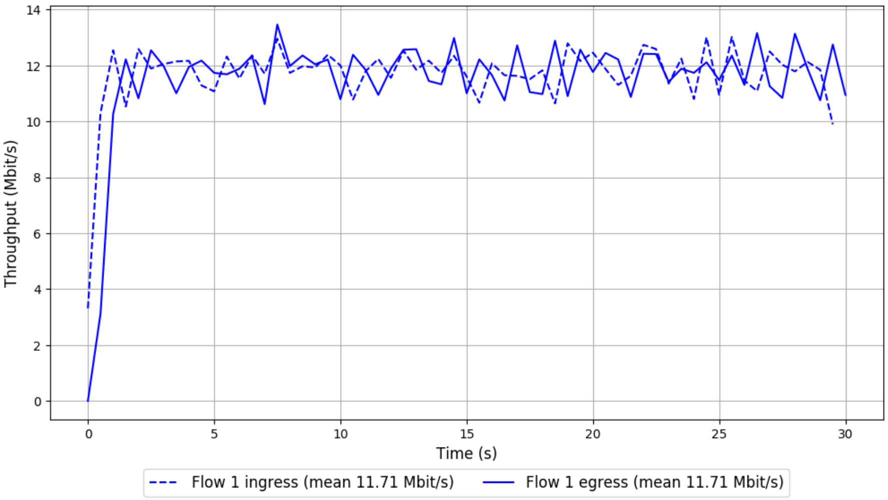
Run 6: Report of Sprout — Data Link

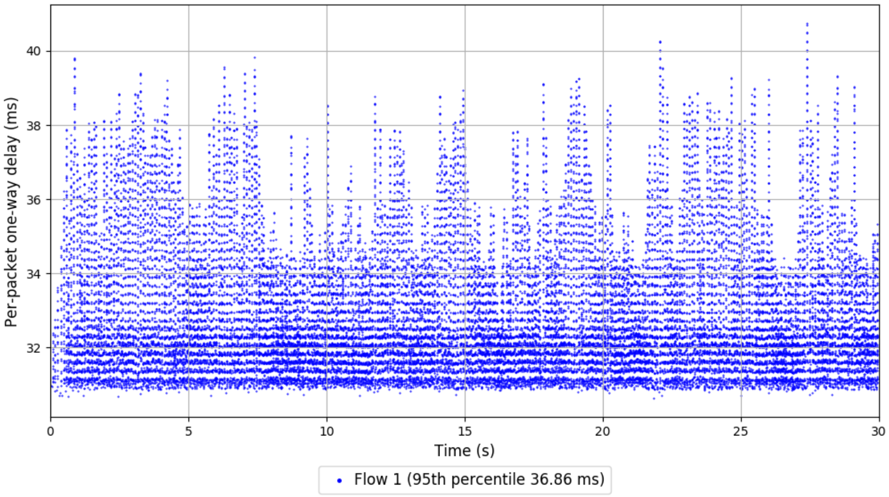




```
Run 7: Statistics of Sprout

Start at: 2018-06-05 06:42:00
End at: 2018-06-05 06:42:30
Local clock offset: 0.385 ms
Remote clock offset: 0.866 ms

# Below is generated by plot.py at 2018-06-05 08:06:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.71 Mbit/s
95th percentile per-packet one-way delay: 36.860 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.71 Mbit/s
95th percentile per-packet one-way delay: 36.860 ms
Loss rate: 0.00%
```

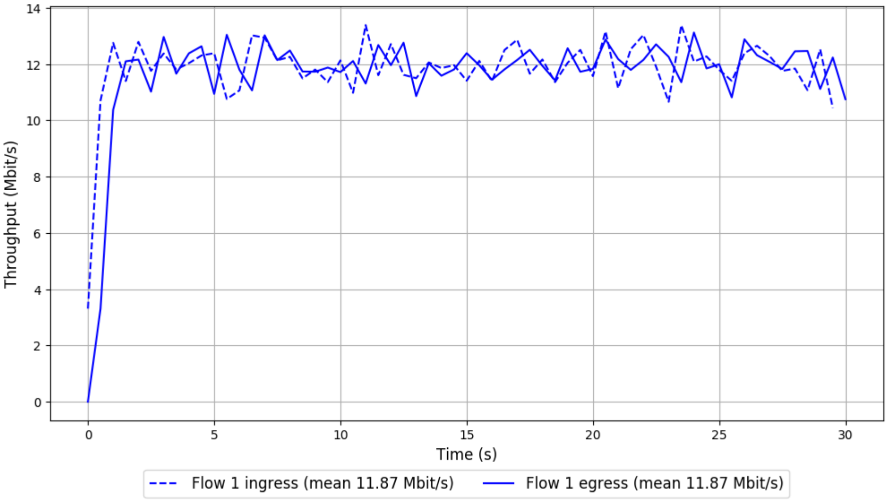
Run 7: Report of Sprout — Data Link

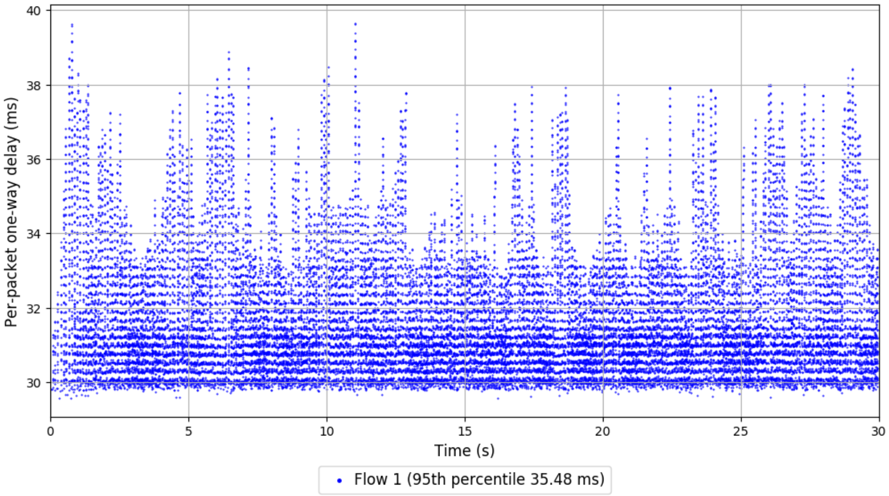




```
Run 8: Statistics of Sprout

Start at: 2018-06-05 07:02:56
End at: 2018-06-05 07:03:26
Local clock offset: 0.259 ms
Remote clock offset: 0.283 ms

# Below is generated by plot.py at 2018-06-05 08:06:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.87 Mbit/s
95th percentile per-packet one-way delay: 35.482 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.87 Mbit/s
95th percentile per-packet one-way delay: 35.482 ms
Loss rate: 0.00%
```

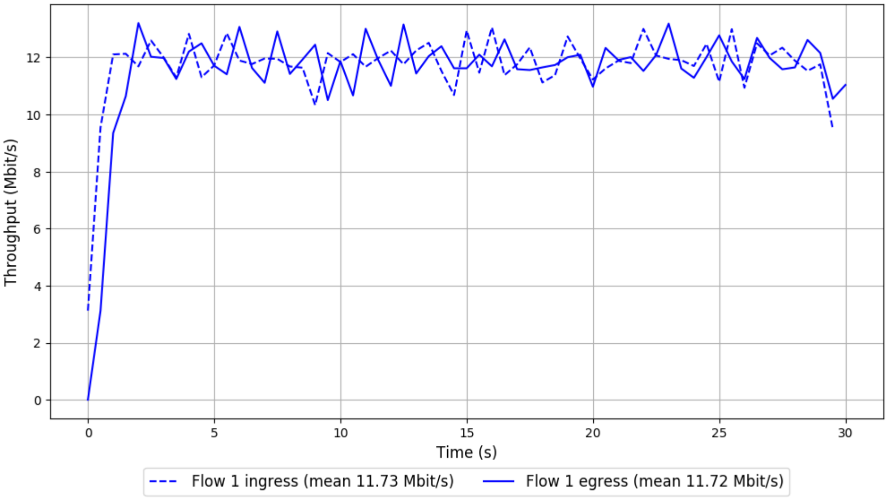
Run 8: Report of Sprout — Data Link

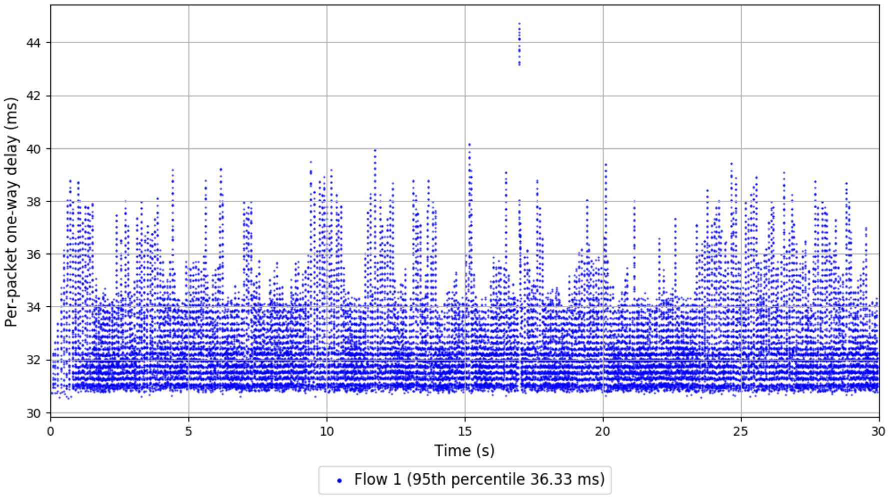




```
Run 9: Statistics of Sprout

Start at: 2018-06-05 07:23:53
End at: 2018-06-05 07:24:23
Local clock offset: 0.123 ms
Remote clock offset: 0.283 ms

# Below is generated by plot.py at 2018-06-05 08:06:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.72 Mbit/s
95th percentile per-packet one-way delay: 36.334 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 11.72 Mbit/s
95th percentile per-packet one-way delay: 36.334 ms
Loss rate: 0.04%
```

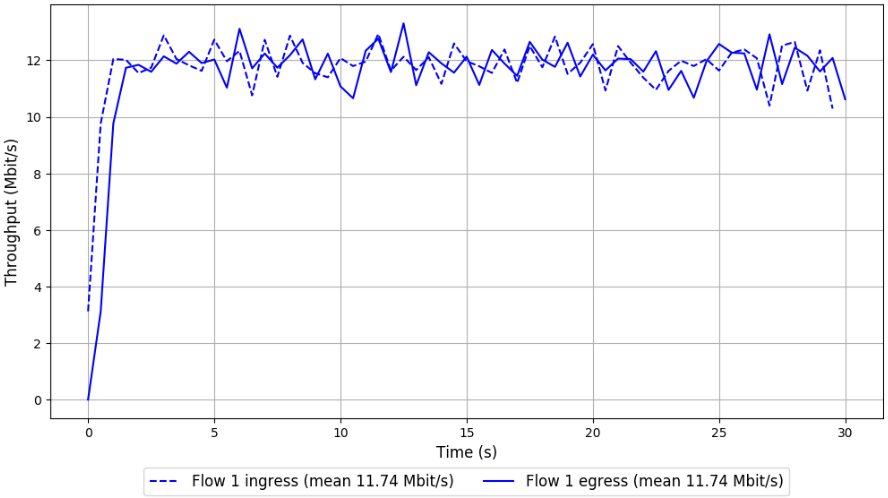
Run 9: Report of Sprout — Data Link

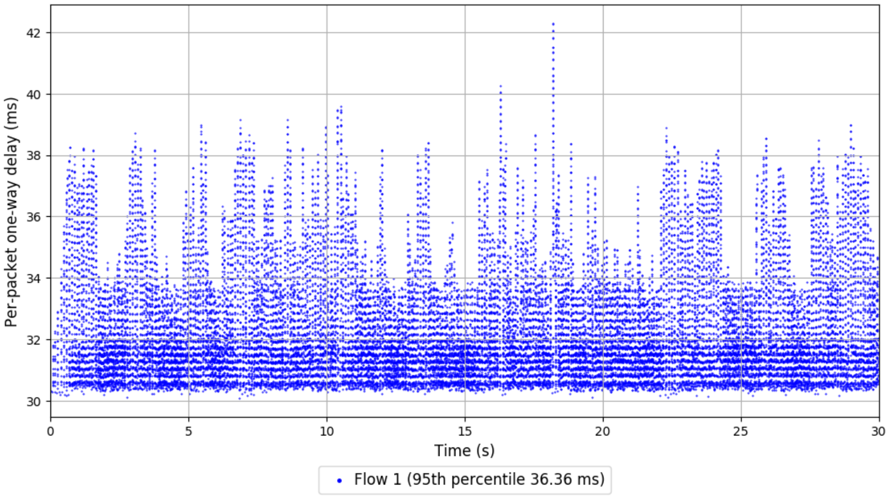




```
Run 10: Statistics of Sprout

Start at: 2018-06-05 07:44:48
End at: 2018-06-05 07:45:18
Local clock offset: 0.118 ms
Remote clock offset: -0.54 ms

# Below is generated by plot.py at 2018-06-05 08:06:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.74 Mbit/s
95th percentile per-packet one-way delay: 36.363 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 11.74 Mbit/s
95th percentile per-packet one-way delay: 36.363 ms
Loss rate: 0.02%
```

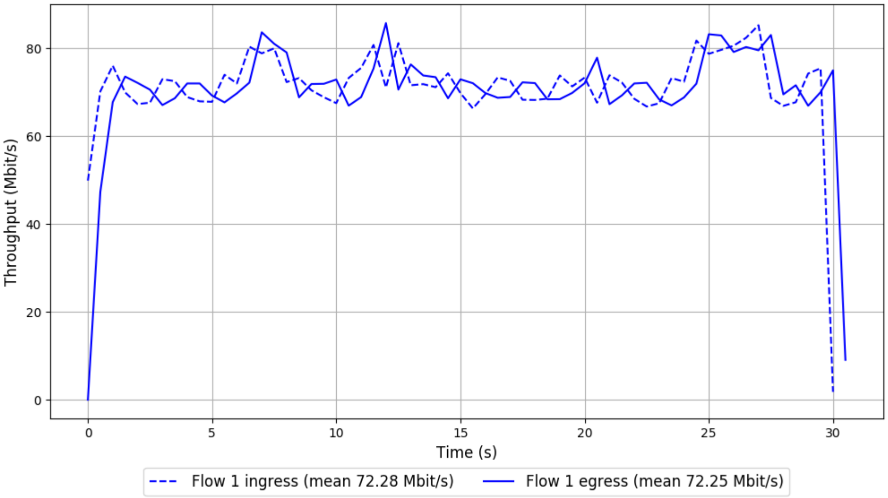
Run 10: Report of Sprout — Data Link

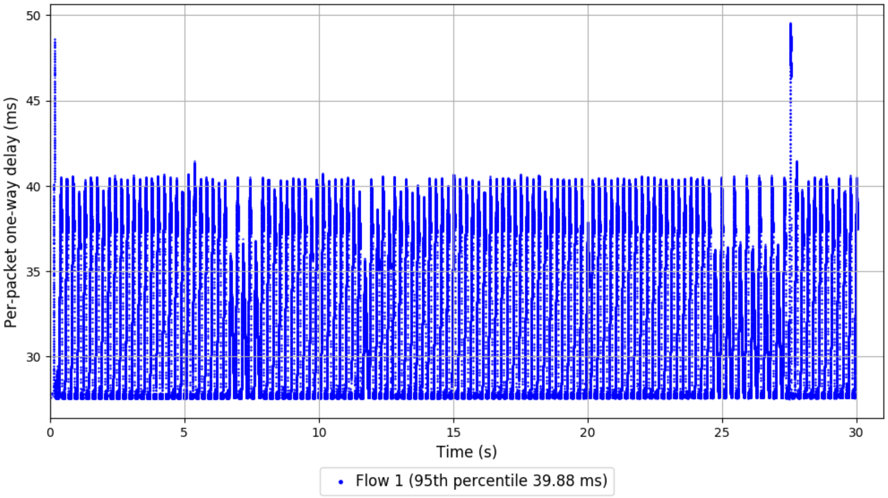




```
Run 1: Statistics of TaoVA-100x

Start at: 2018-06-05 04:32:38
End at: 2018-06-05 04:33:08
Local clock offset: 0.593 ms
Remote clock offset: -6.775 ms

# Below is generated by plot.py at 2018-06-05 08:08:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.25 Mbit/s
95th percentile per-packet one-way delay: 39.880 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 72.25 Mbit/s
95th percentile per-packet one-way delay: 39.880 ms
Loss rate: 0.01%
```

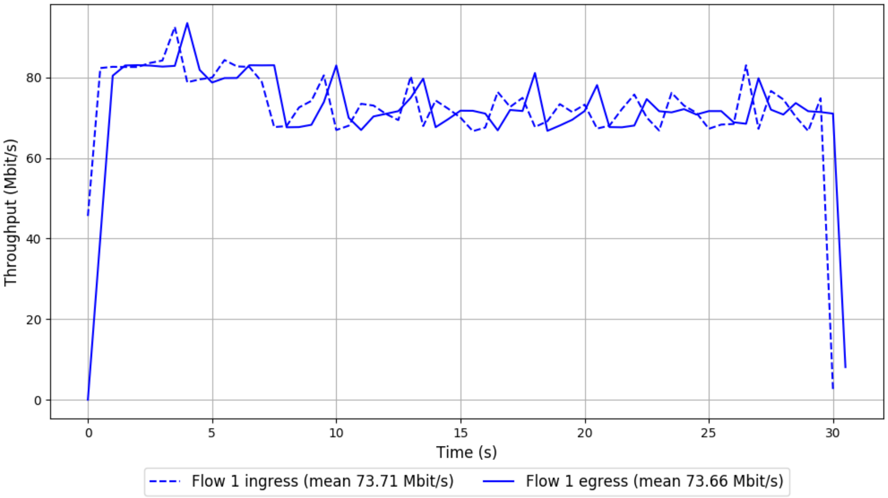
Run 1: Report of TaoVA-100x — Data Link

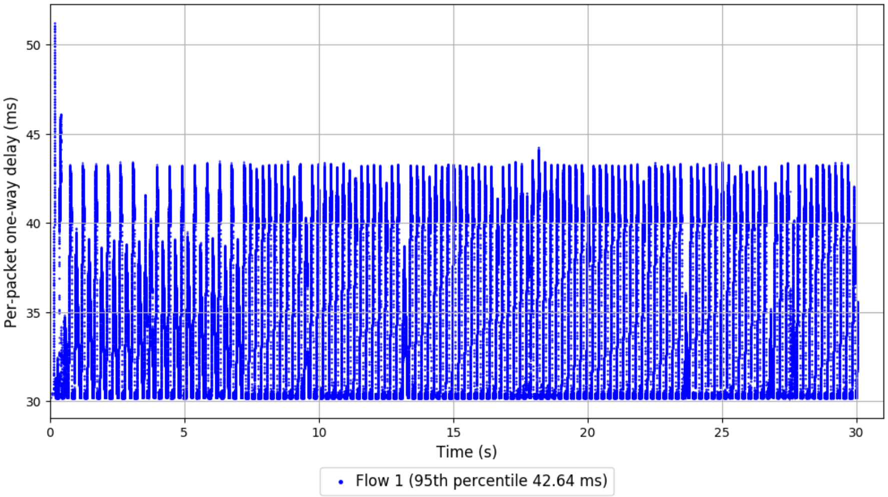




```
Run 2: Statistics of TaoVA-100x

Start at: 2018-06-05 04:54:14
End at: 2018-06-05 04:54:44
Local clock offset: 0.426 ms
Remote clock offset: -5.106 ms

# Below is generated by plot.py at 2018-06-05 08:08:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.66 Mbit/s
95th percentile per-packet one-way delay: 42.642 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 73.66 Mbit/s
95th percentile per-packet one-way delay: 42.642 ms
Loss rate: 0.05%
```

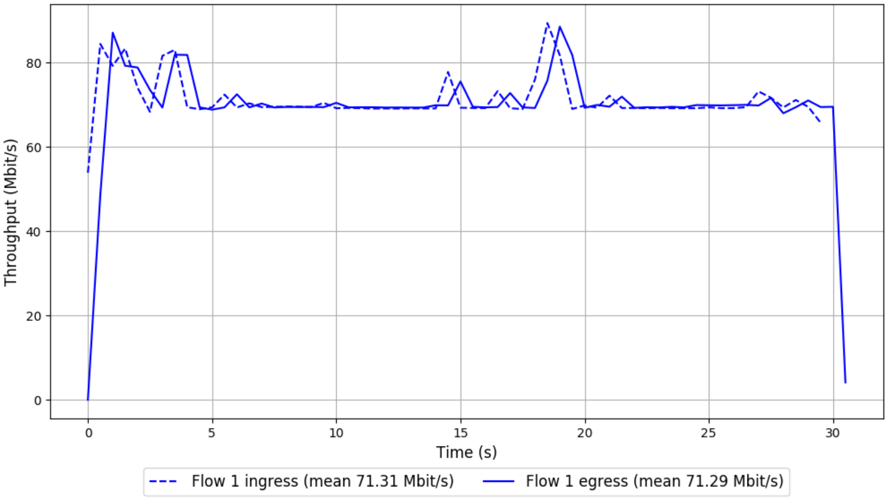
Run 2: Report of TaoVA-100x — Data Link

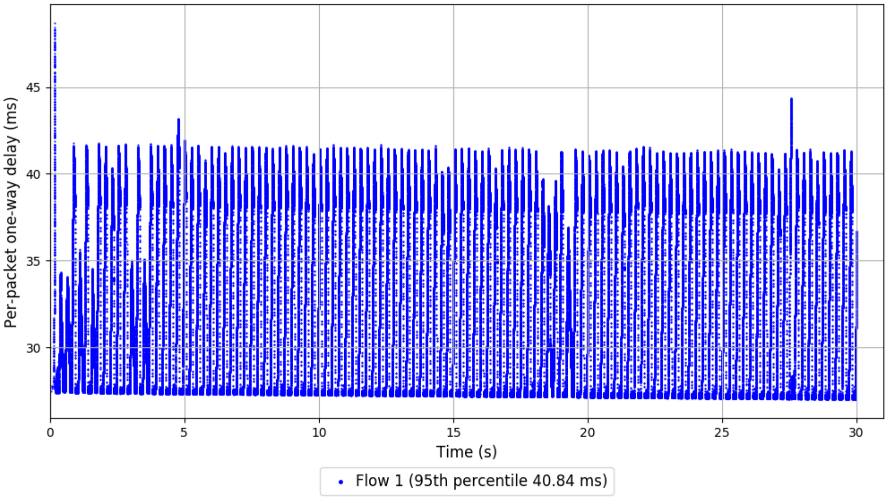




```
Run 3: Statistics of TaoVA-100x

Start at: 2018-06-05 05:15:26
End at: 2018-06-05 05:15:56
Local clock offset: 0.31 ms
Remote clock offset: -8.414 ms

# Below is generated by plot.py at 2018-06-05 08:08:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.29 Mbit/s
95th percentile per-packet one-way delay: 40.838 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 71.29 Mbit/s
95th percentile per-packet one-way delay: 40.838 ms
Loss rate: 0.00%
```

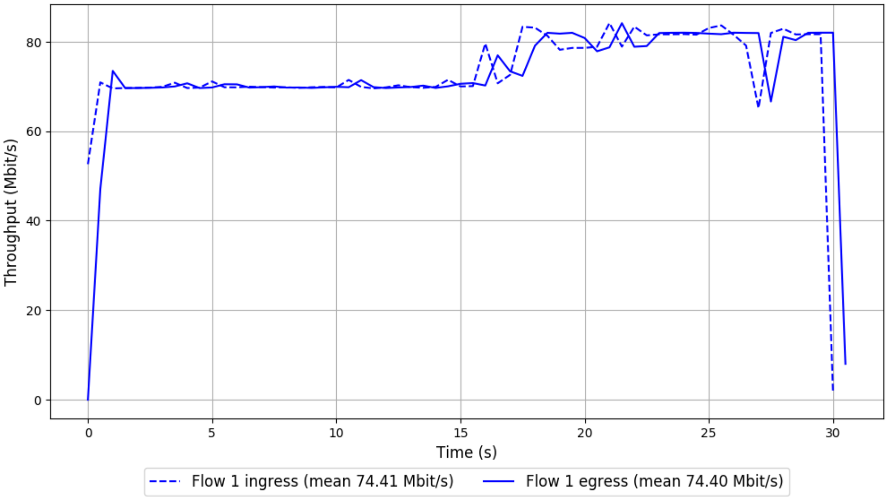
Run 3: Report of TaoVA-100x — Data Link

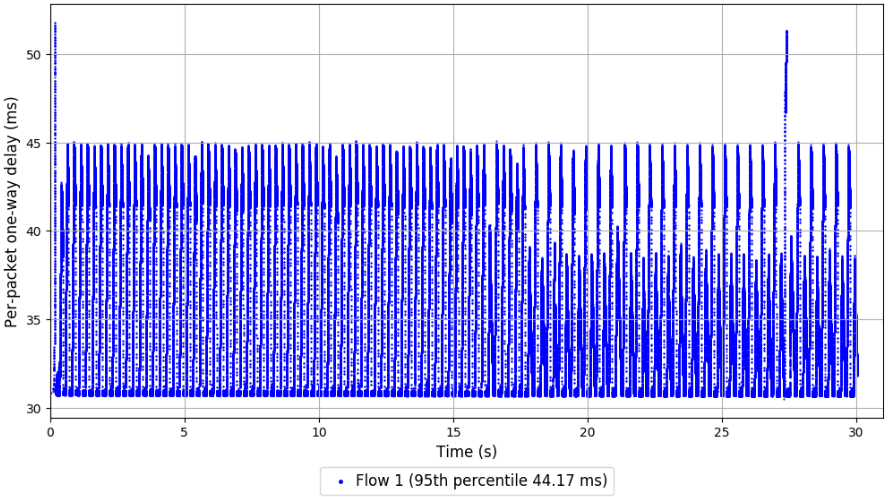




```
Run 4: Statistics of TaoVA-100x

Start at: 2018-06-05 05:36:23
End at: 2018-06-05 05:36:53
Local clock offset: 0.2 ms
Remote clock offset: 1.237 ms

# Below is generated by plot.py at 2018-06-05 08:08:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.40 Mbit/s
95th percentile per-packet one-way delay: 44.174 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 74.40 Mbit/s
95th percentile per-packet one-way delay: 44.174 ms
Loss rate: 0.00%
```

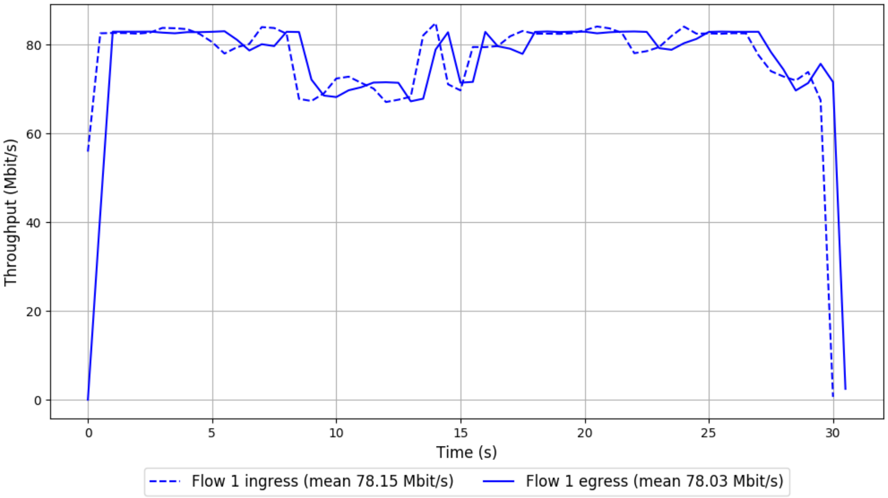
Run 4: Report of TaoVA-100x — Data Link

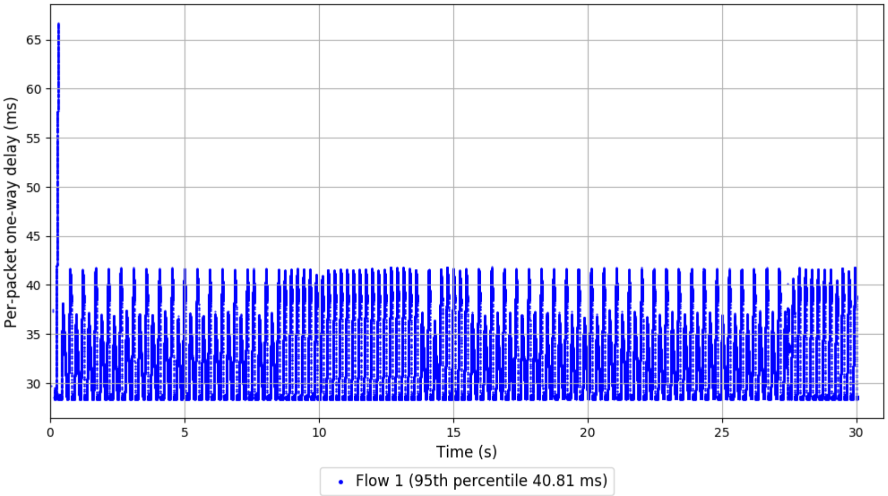




```
Run 5: Statistics of TaoVA-100x

Start at: 2018-06-05 05:57:29
End at: 2018-06-05 05:58:00
Local clock offset: 0.089 ms
Remote clock offset: -0.998 ms

# Below is generated by plot.py at 2018-06-05 08:08:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.03 Mbit/s
95th percentile per-packet one-way delay: 40.806 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 78.03 Mbit/s
95th percentile per-packet one-way delay: 40.806 ms
Loss rate: 0.16%
```

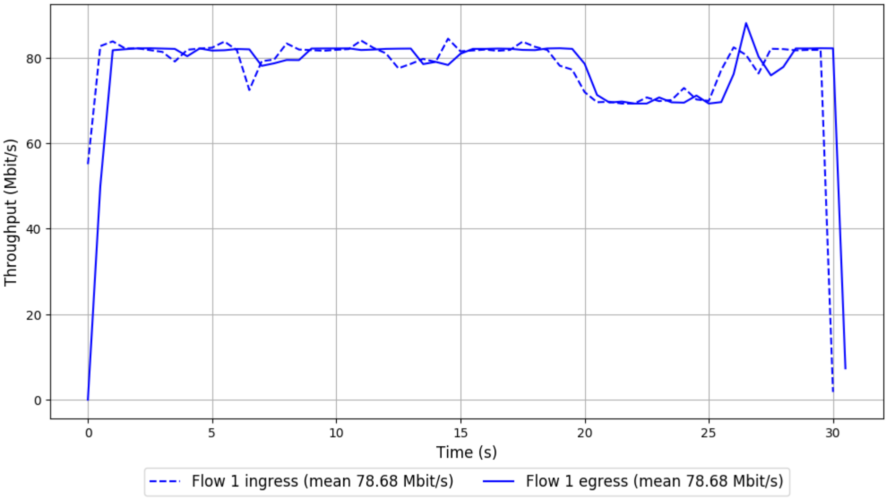
Run 5: Report of TaoVA-100x — Data Link

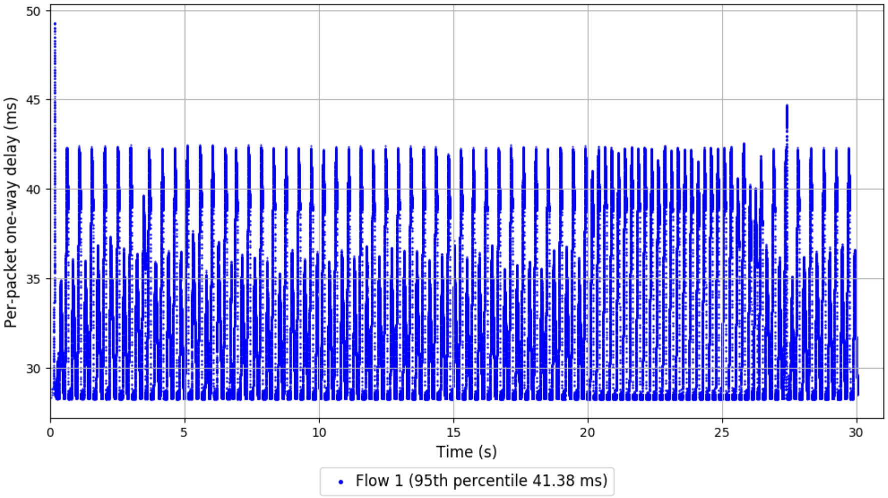




```
Run 6: Statistics of TaoVA-100x

Start at: 2018-06-05 06:18:24
End at: 2018-06-05 06:18:54
Local clock offset: 0.354 ms
Remote clock offset: -0.906 ms

# Below is generated by plot.py at 2018-06-05 08:08:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.68 Mbit/s
95th percentile per-packet one-way delay: 41.377 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 78.68 Mbit/s
95th percentile per-packet one-way delay: 41.377 ms
Loss rate: 0.00%
```

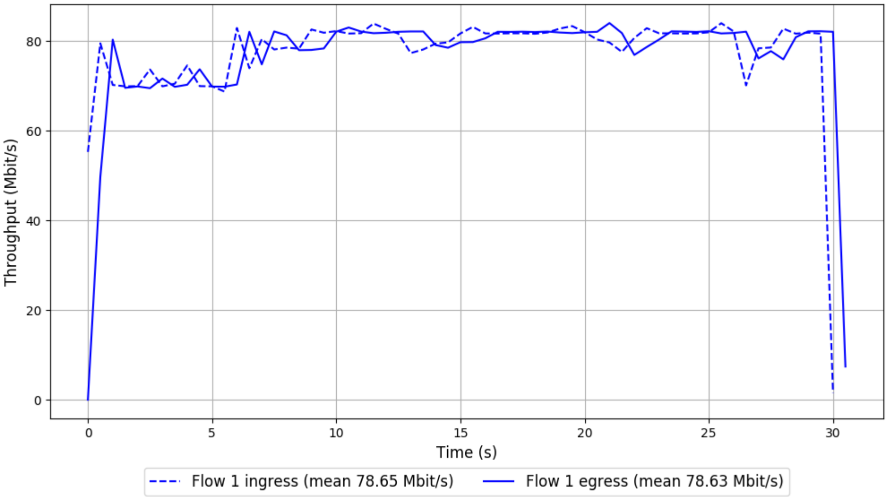
Run 6: Report of TaoVA-100x — Data Link

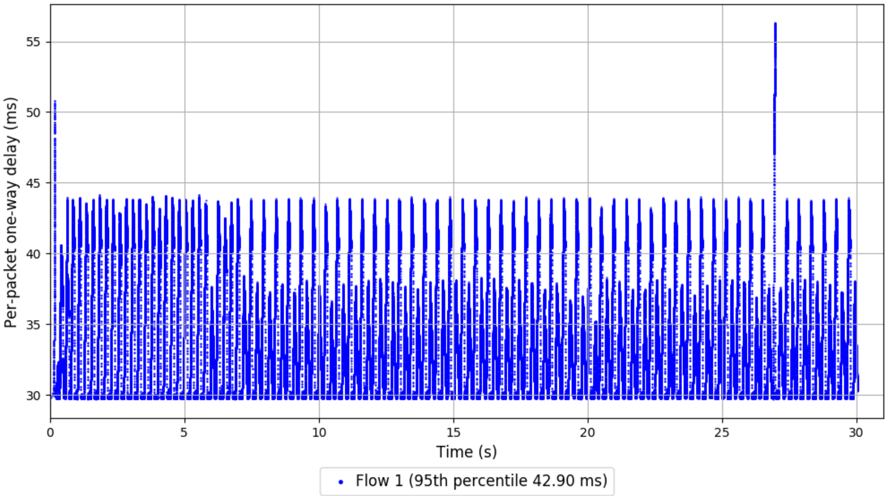




```
Run 7: Statistics of TaoVA-100x

Start at: 2018-06-05 06:39:20
End at: 2018-06-05 06:39:50
Local clock offset: 0.313 ms
Remote clock offset: 0.377 ms

# Below is generated by plot.py at 2018-06-05 08:08:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.63 Mbit/s
95th percentile per-packet one-way delay: 42.902 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 78.63 Mbit/s
95th percentile per-packet one-way delay: 42.902 ms
Loss rate: 0.02%
```

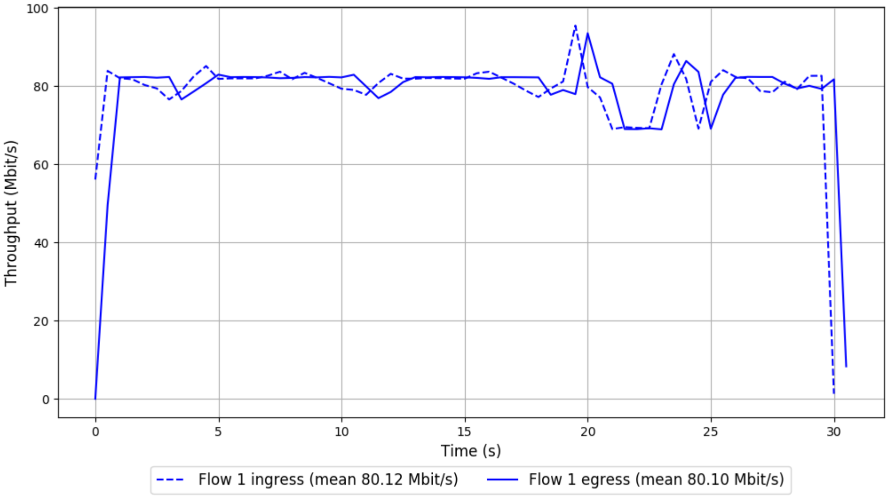
Run 7: Report of TaoVA-100x — Data Link

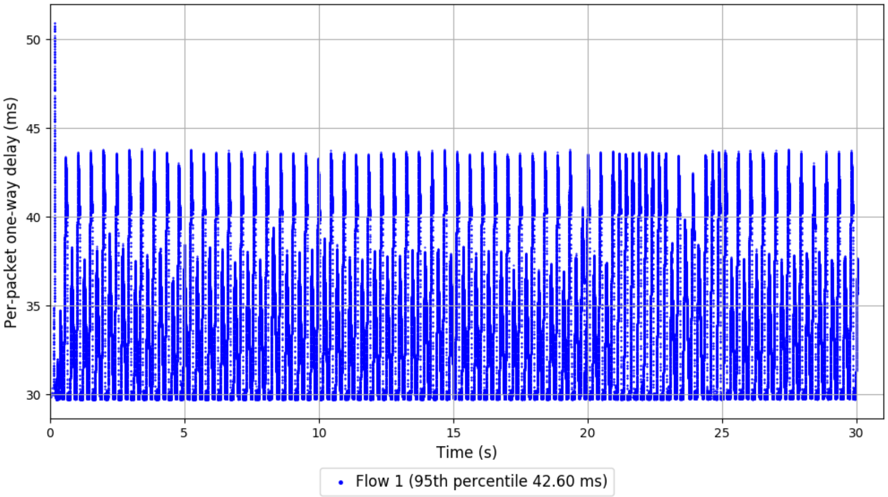




```
Run 8: Statistics of TaoVA-100x

Start at: 2018-06-05 07:00:16
End at: 2018-06-05 07:00:46
Local clock offset: 0.27 ms
Remote clock offset: 0.392 ms

# Below is generated by plot.py at 2018-06-05 08:08:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.10 Mbit/s
95th percentile per-packet one-way delay: 42.599 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 80.10 Mbit/s
95th percentile per-packet one-way delay: 42.599 ms
Loss rate: 0.00%
```

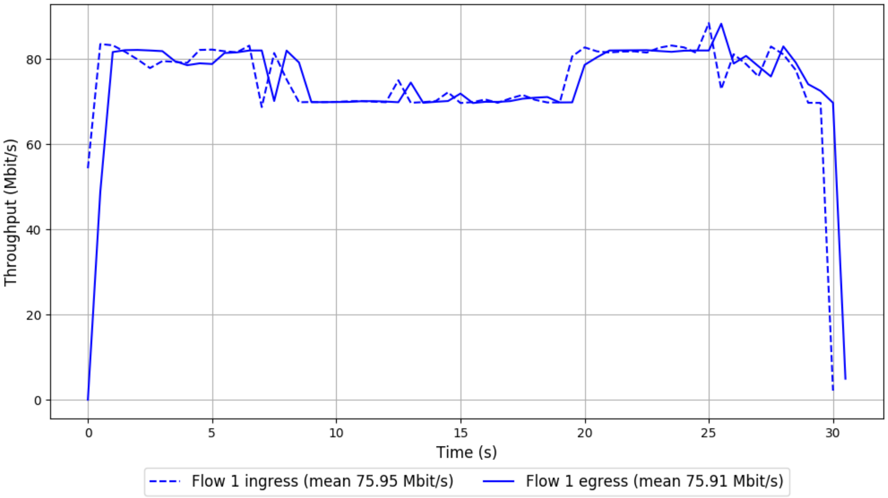
Run 8: Report of TaoVA-100x — Data Link

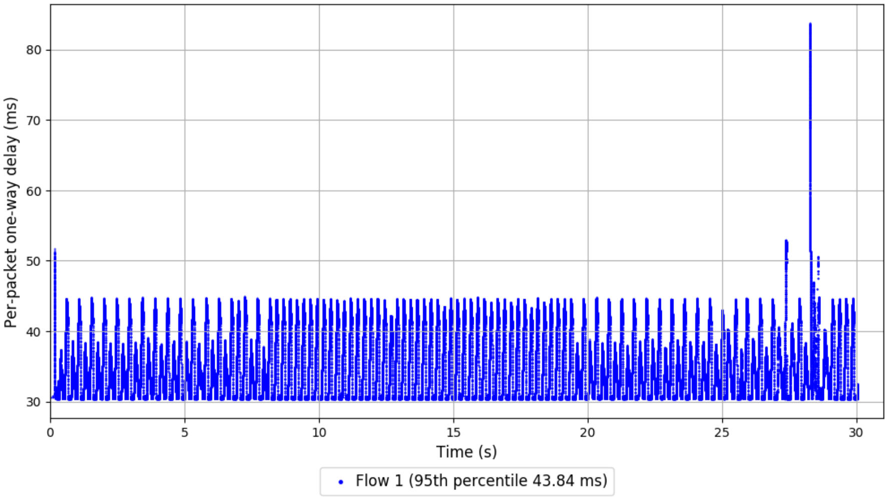




```
Run 9: Statistics of TaoVA-100x

Start at: 2018-06-05 07:21:14
End at: 2018-06-05 07:21:44
Local clock offset: 0.127 ms
Remote clock offset: -0.088 ms

# Below is generated by plot.py at 2018-06-05 08:09:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.91 Mbit/s
95th percentile per-packet one-way delay: 43.839 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 75.91 Mbit/s
95th percentile per-packet one-way delay: 43.839 ms
Loss rate: 0.05%
```

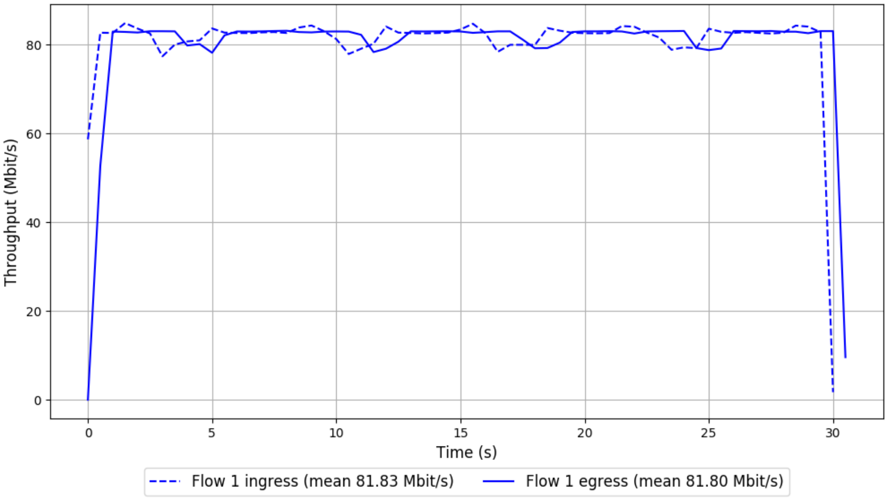
Run 9: Report of TaoVA-100x — Data Link

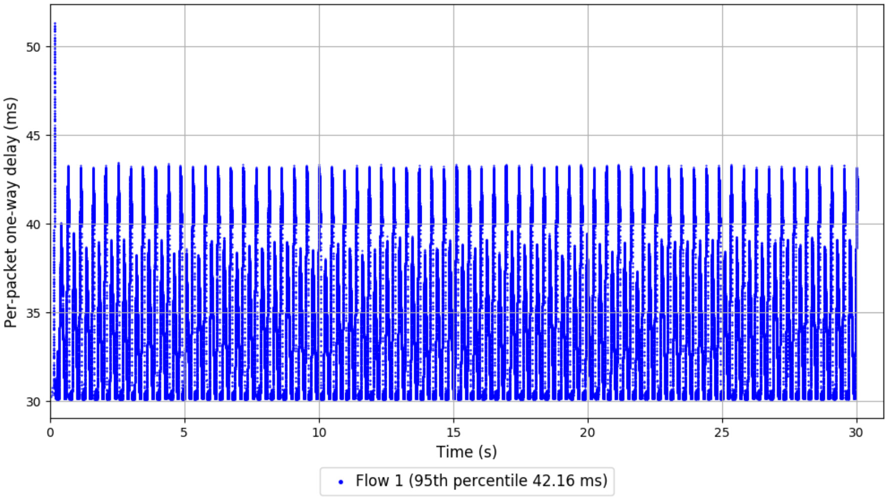




```
Run 10: Statistics of TaoVA-100x

Start at: 2018-06-05 07:42:08
End at: 2018-06-05 07:42:38
Local clock offset: 0.087 ms
Remote clock offset: -0.029 ms

# Below is generated by plot.py at 2018-06-05 08:10:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.80 Mbit/s
95th percentile per-packet one-way delay: 42.155 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 81.80 Mbit/s
95th percentile per-packet one-way delay: 42.155 ms
Loss rate: 0.00%
```

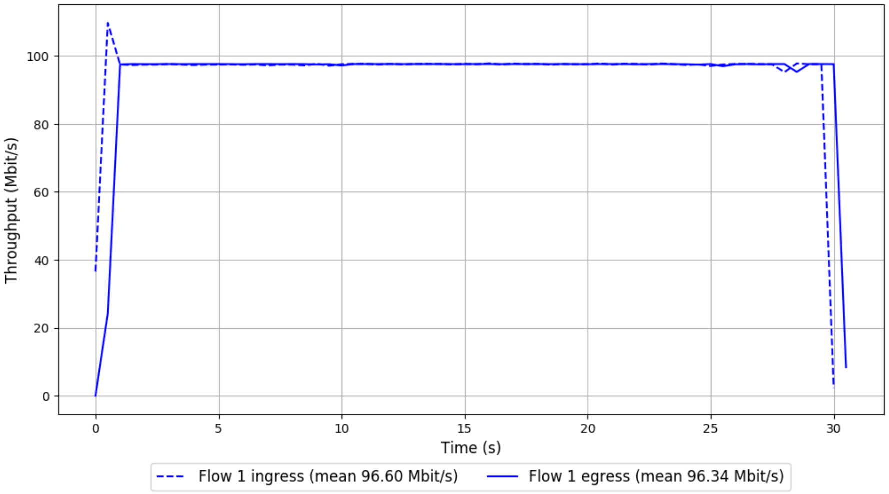
Run 10: Report of TaoVA-100x — Data Link

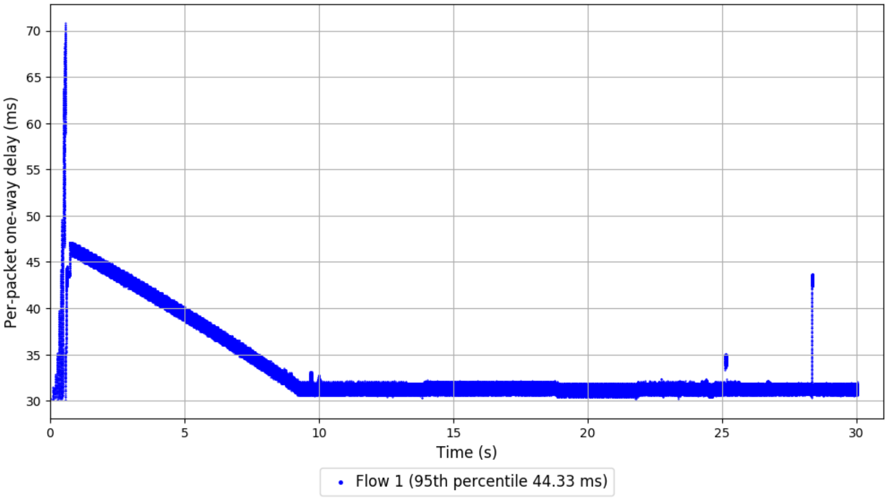




```
Run 1: Statistics of TCP Vegas

Start at: 2018-06-05 04:20:49
End at: 2018-06-05 04:21:19
Local clock offset: 0.586 ms
Remote clock offset: -3.25 ms

# Below is generated by plot.py at 2018-06-05 08:10:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.34 Mbit/s
95th percentile per-packet one-way delay: 44.329 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 96.34 Mbit/s
95th percentile per-packet one-way delay: 44.329 ms
Loss rate: 0.27%
```

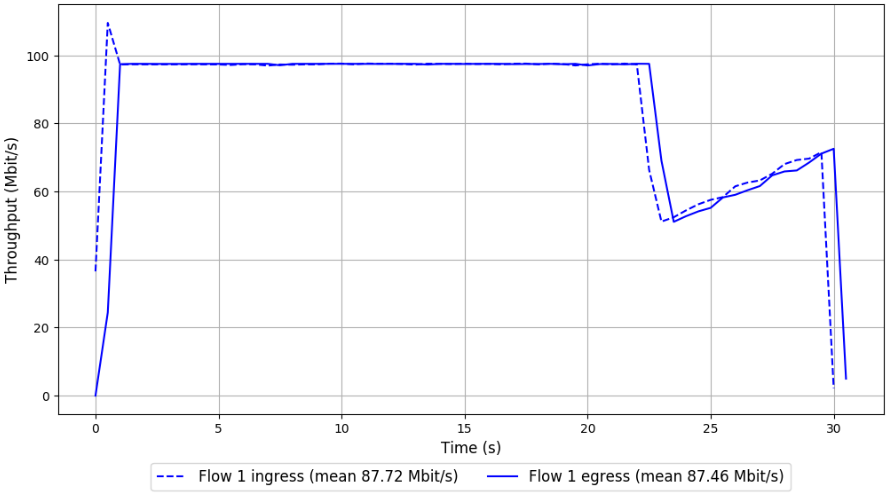
Run 1: Report of TCP Vegas — Data Link

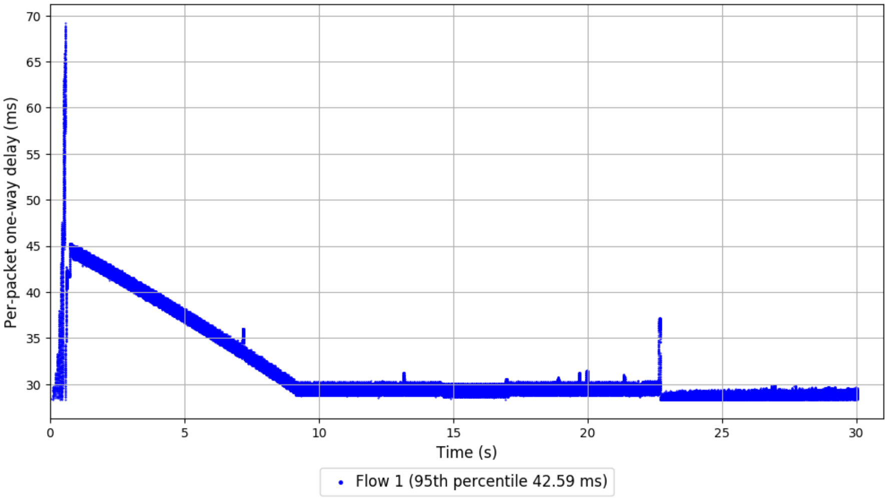




```
Run 2: Statistics of TCP Vegas

Start at: 2018-06-05 04:41:43
End at: 2018-06-05 04:42:13
Local clock offset: 0.536 ms
Remote clock offset: -7.124 ms

# Below is generated by plot.py at 2018-06-05 08:10:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.46 Mbit/s
95th percentile per-packet one-way delay: 42.589 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 87.46 Mbit/s
95th percentile per-packet one-way delay: 42.589 ms
Loss rate: 0.30%
```

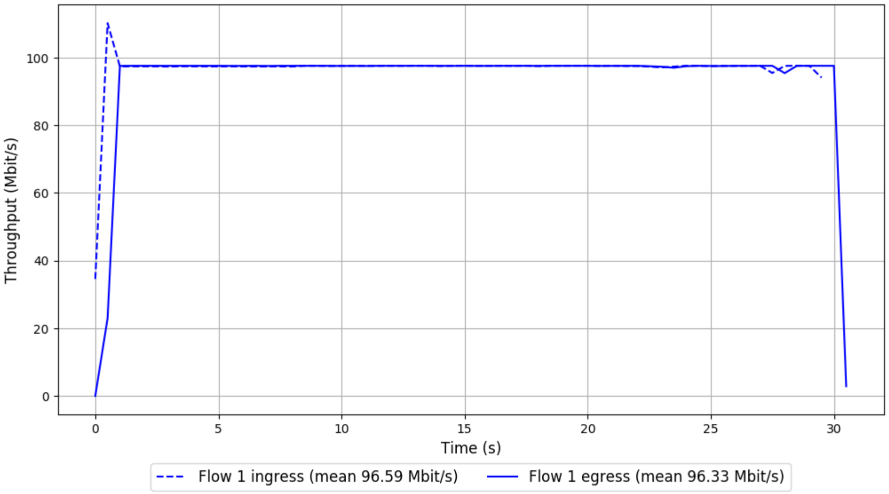
Run 2: Report of TCP Vegas — Data Link

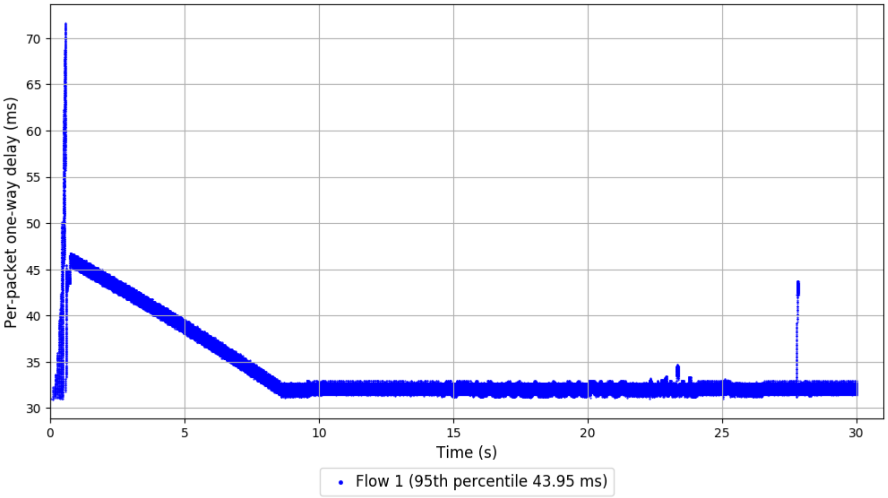




```
Run 3: Statistics of TCP Vegas

Start at: 2018-06-05 05:03:22
End at: 2018-06-05 05:03:52
Local clock offset: 0.436 ms
Remote clock offset: -5.361 ms

# Below is generated by plot.py at 2018-06-05 08:10:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.33 Mbit/s
95th percentile per-packet one-way delay: 43.945 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 96.33 Mbit/s
95th percentile per-packet one-way delay: 43.945 ms
Loss rate: 0.26%
```

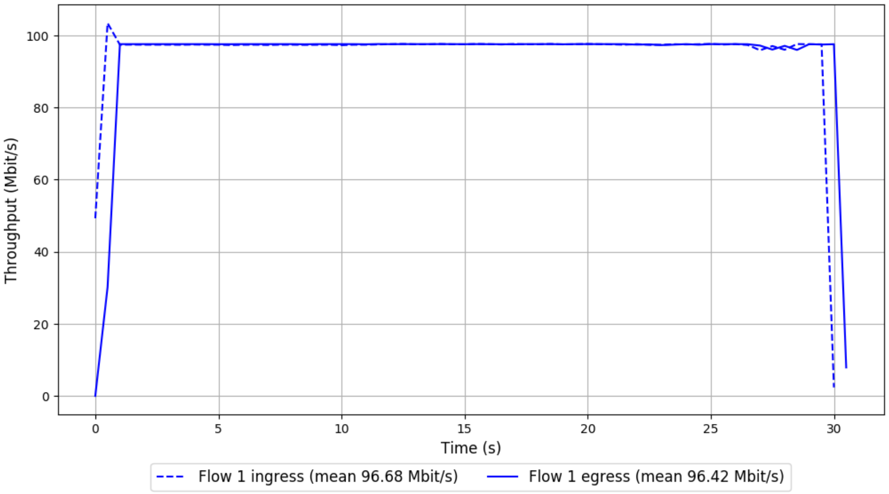
Run 3: Report of TCP Vegas — Data Link

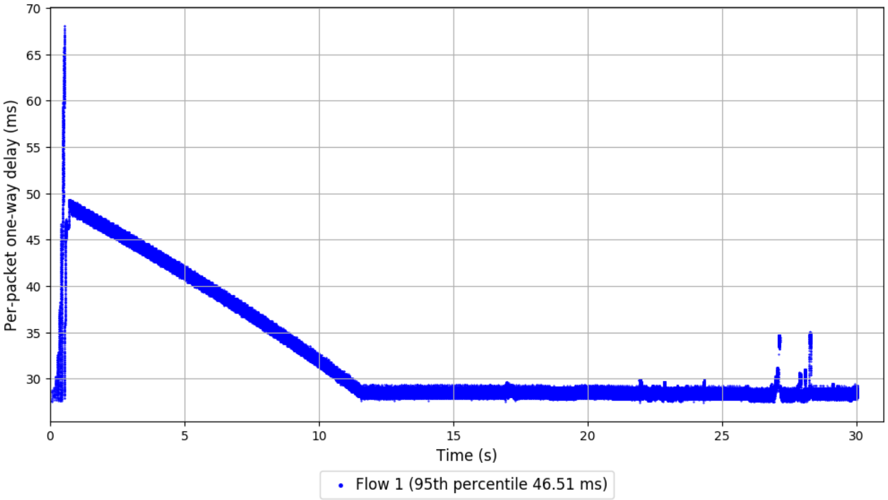




```
Run 4: Statistics of TCP Vegas

Start at: 2018-06-05 05:24:33
End at: 2018-06-05 05:25:03
Local clock offset: 0.249 ms
Remote clock offset: -3.722 ms

# Below is generated by plot.py at 2018-06-05 08:10:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.42 Mbit/s
95th percentile per-packet one-way delay: 46.508 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 96.42 Mbit/s
95th percentile per-packet one-way delay: 46.508 ms
Loss rate: 0.27%
```

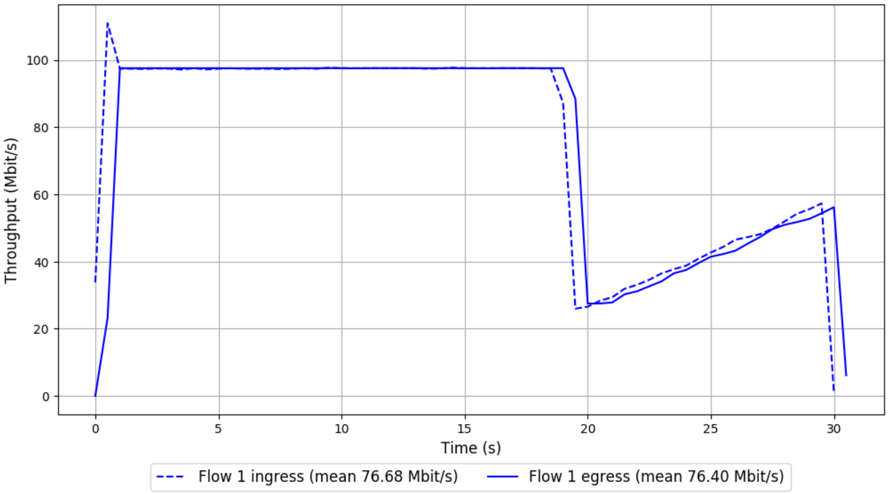
Run 4: Report of TCP Vegas — Data Link

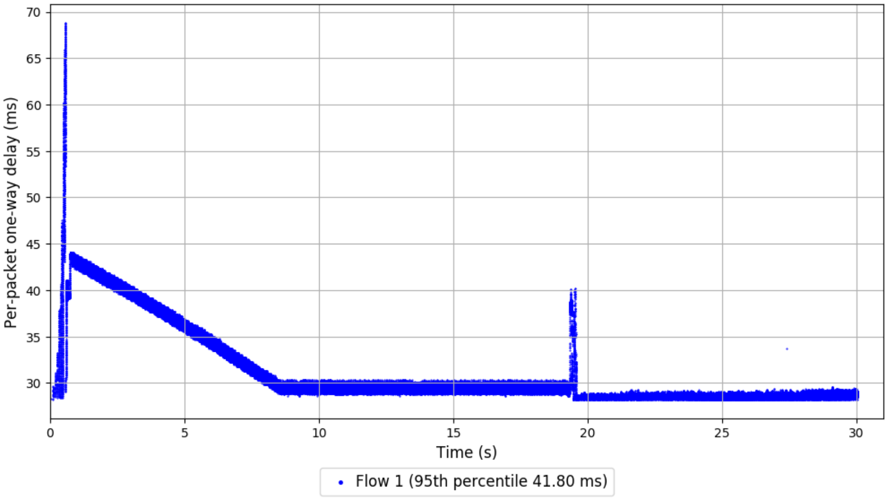




```
Run 5: Statistics of TCP Vegas

Start at: 2018-06-05 05:45:42
End at: 2018-06-05 05:46:12
Local clock offset: 0.202 ms
Remote clock offset: -0.159 ms

# Below is generated by plot.py at 2018-06-05 08:10:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.40 Mbit/s
95th percentile per-packet one-way delay: 41.797 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 76.40 Mbit/s
95th percentile per-packet one-way delay: 41.797 ms
Loss rate: 0.36%
```

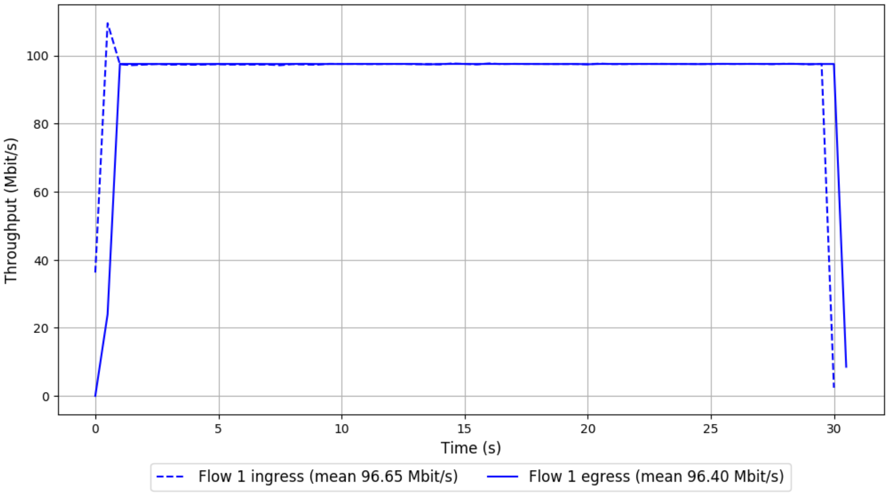
Run 5: Report of TCP Vegas — Data Link

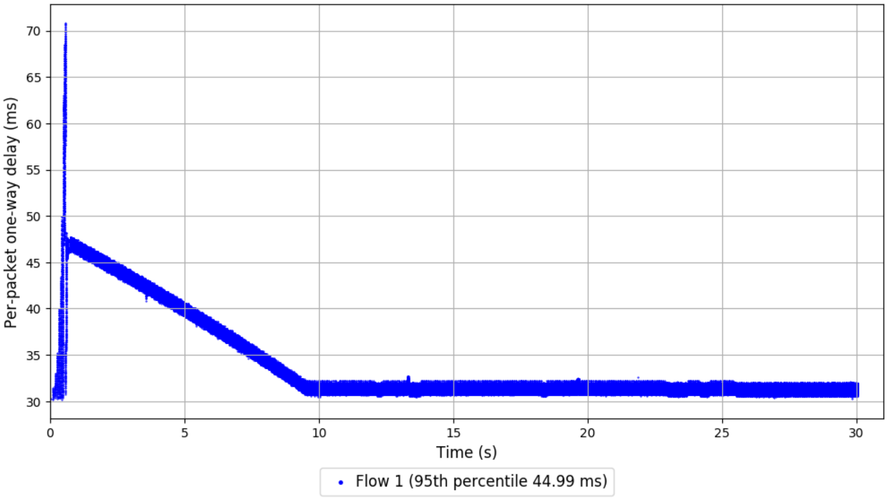




```
Run 6: Statistics of TCP Vegas

Start at: 2018-06-05 06:06:35
End at: 2018-06-05 06:07:05
Local clock offset: 0.117 ms
Remote clock offset: 1.302 ms

# Below is generated by plot.py at 2018-06-05 08:10:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.40 Mbit/s
95th percentile per-packet one-way delay: 44.986 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 96.40 Mbit/s
95th percentile per-packet one-way delay: 44.986 ms
Loss rate: 0.26%
```

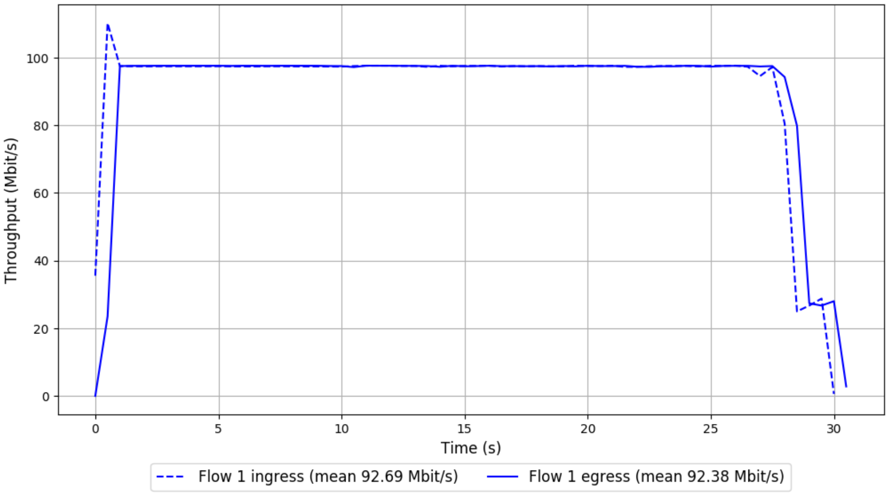
Run 6: Report of TCP Vegas — Data Link

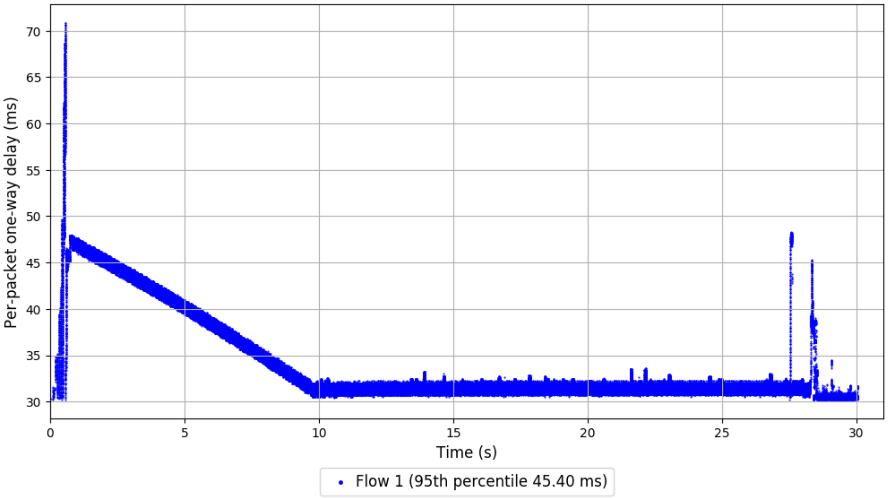




```
Run 7: Statistics of TCP Vegas

Start at: 2018-06-05 06:27:30
End at: 2018-06-05 06:28:00
Local clock offset: 0.317 ms
Remote clock offset: 1.337 ms

# Below is generated by plot.py at 2018-06-05 08:10:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.38 Mbit/s
95th percentile per-packet one-way delay: 45.400 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 92.38 Mbit/s
95th percentile per-packet one-way delay: 45.400 ms
Loss rate: 0.33%
```

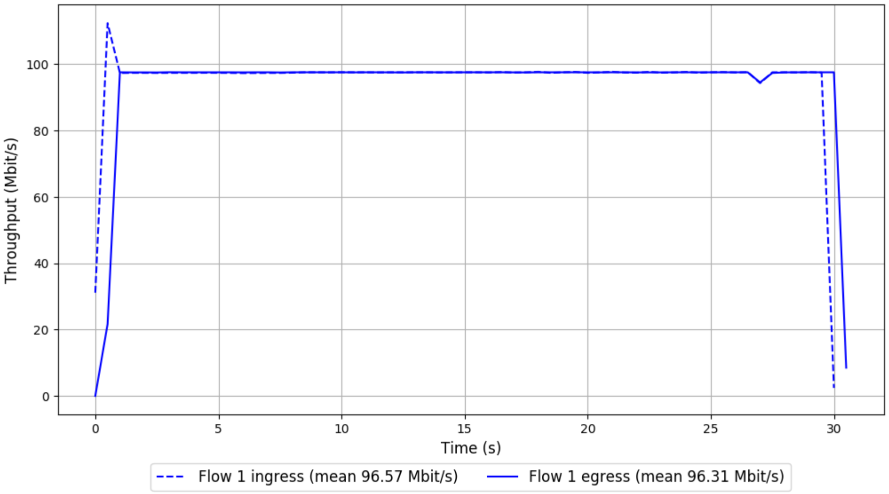
Run 7: Report of TCP Vegas — Data Link

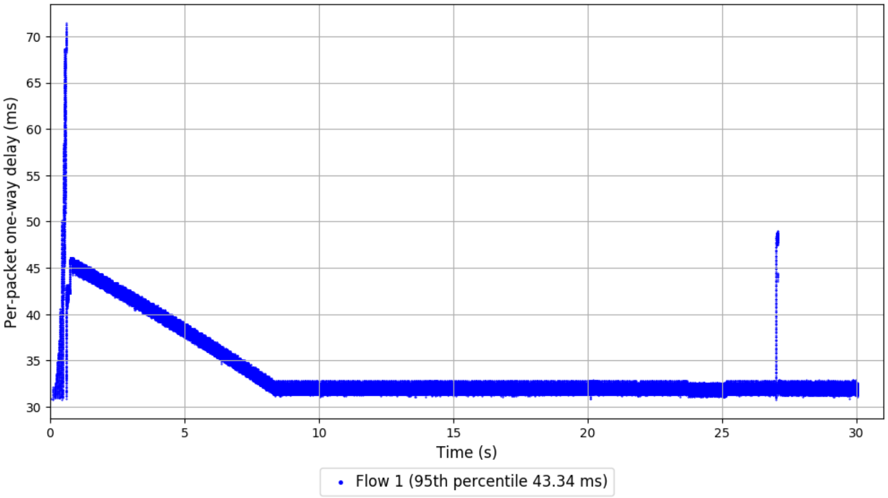




```
Run 8: Statistics of TCP Vegas

Start at: 2018-06-05 06:48:27
End at: 2018-06-05 06:48:57
Local clock offset: 0.374 ms
Remote clock offset: 0.846 ms

# Below is generated by plot.py at 2018-06-05 08:10:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.31 Mbit/s
95th percentile per-packet one-way delay: 43.339 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 96.31 Mbit/s
95th percentile per-packet one-way delay: 43.339 ms
Loss rate: 0.27%
```

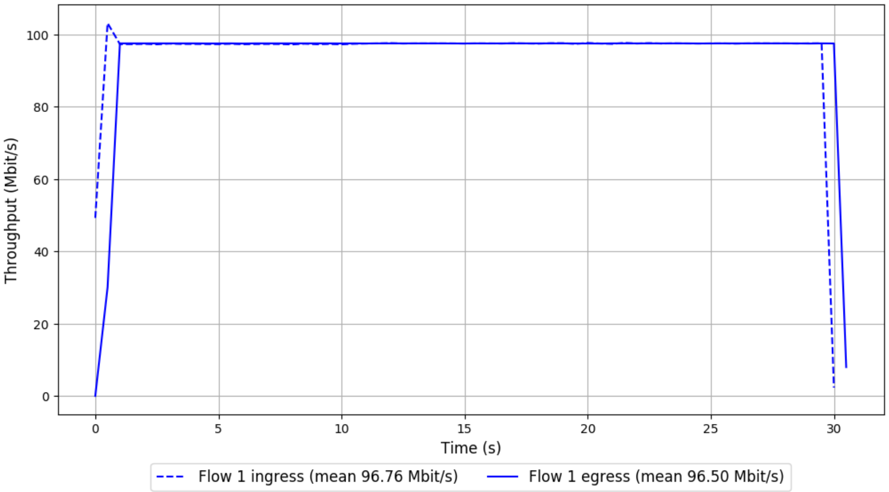
Run 8: Report of TCP Vegas — Data Link

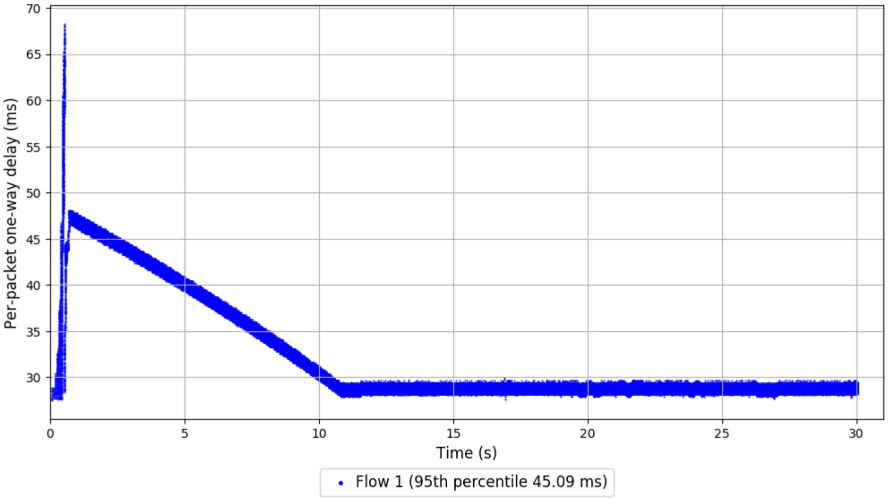




```
Run 9: Statistics of TCP Vegas

Start at: 2018-06-05 07:09:24
End at: 2018-06-05 07:09:54
Local clock offset: 0.256 ms
Remote clock offset: -2.077 ms

# Below is generated by plot.py at 2018-06-05 08:10:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.50 Mbit/s
95th percentile per-packet one-way delay: 45.094 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 96.50 Mbit/s
95th percentile per-packet one-way delay: 45.094 ms
Loss rate: 0.27%
```

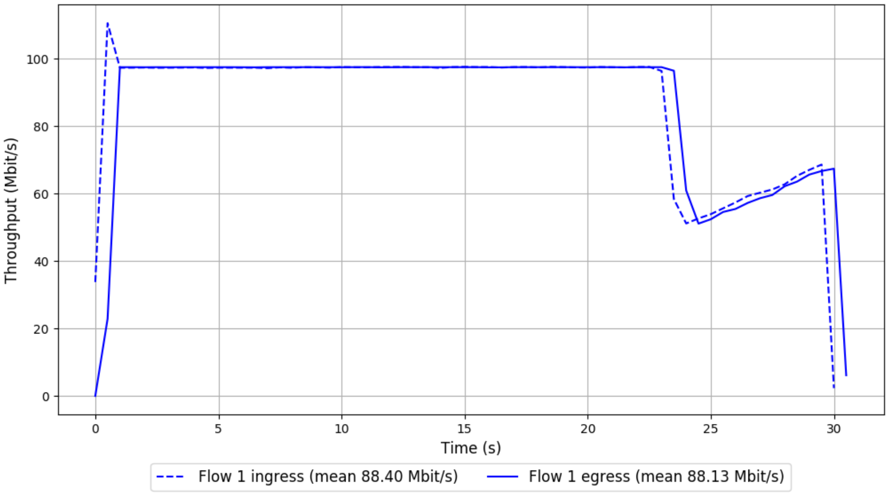
Run 9: Report of TCP Vegas — Data Link

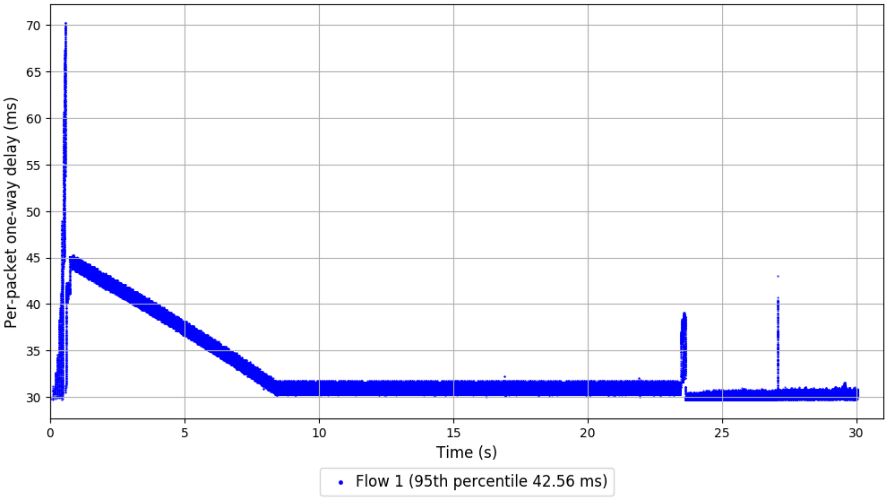




```
Run 10: Statistics of TCP Vegas

Start at: 2018-06-05 07:30:21
End at: 2018-06-05 07:30:51
Local clock offset: -0.003 ms
Remote clock offset: -0.184 ms

# Below is generated by plot.py at 2018-06-05 08:10:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.13 Mbit/s
95th percentile per-packet one-way delay: 42.562 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 88.13 Mbit/s
95th percentile per-packet one-way delay: 42.562 ms
Loss rate: 0.30%
```

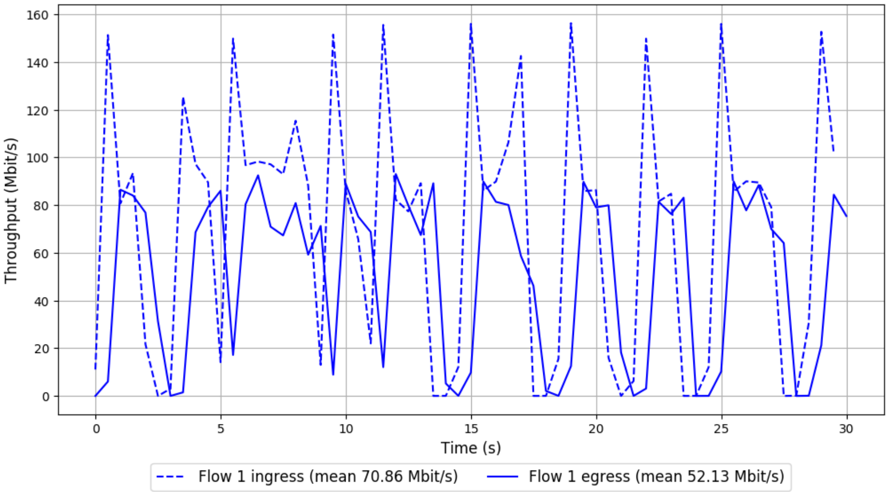
Run 10: Report of TCP Vegas — Data Link

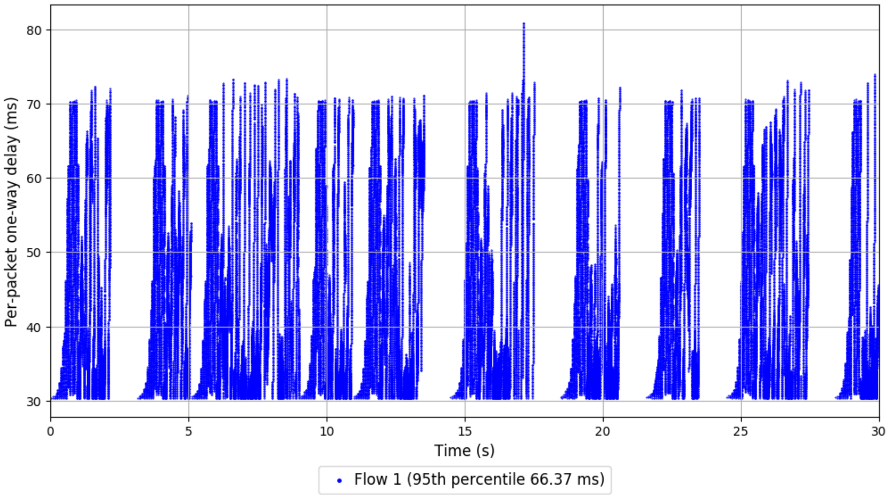




```
Run 1: Statistics of Verus

Start at: 2018-06-05 04:31:20
End at: 2018-06-05 04:31:50
Local clock offset: 0.614 ms
Remote clock offset: -4.568 ms

# Below is generated by plot.py at 2018-06-05 08:10:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.13 Mbit/s
95th percentile per-packet one-way delay: 66.366 ms
Loss rate: 26.41%
-- Flow 1:
Average throughput: 52.13 Mbit/s
95th percentile per-packet one-way delay: 66.366 ms
Loss rate: 26.41%
```

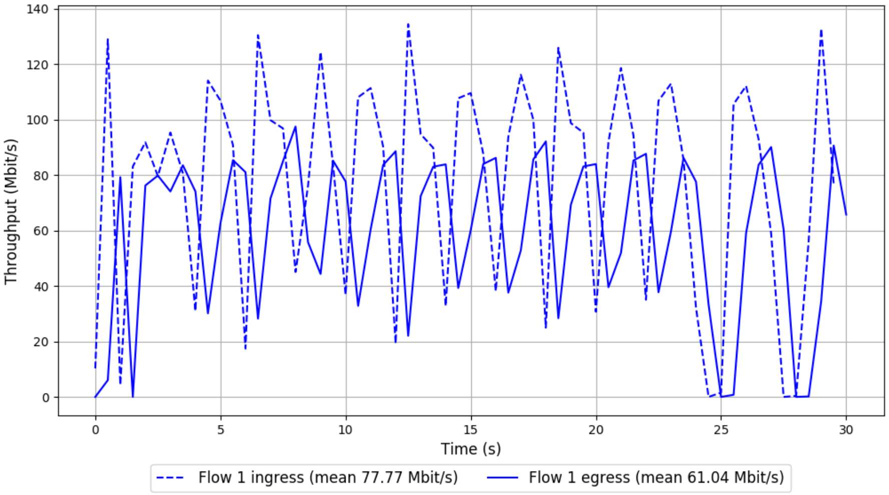
Run 1: Report of Verus — Data Link

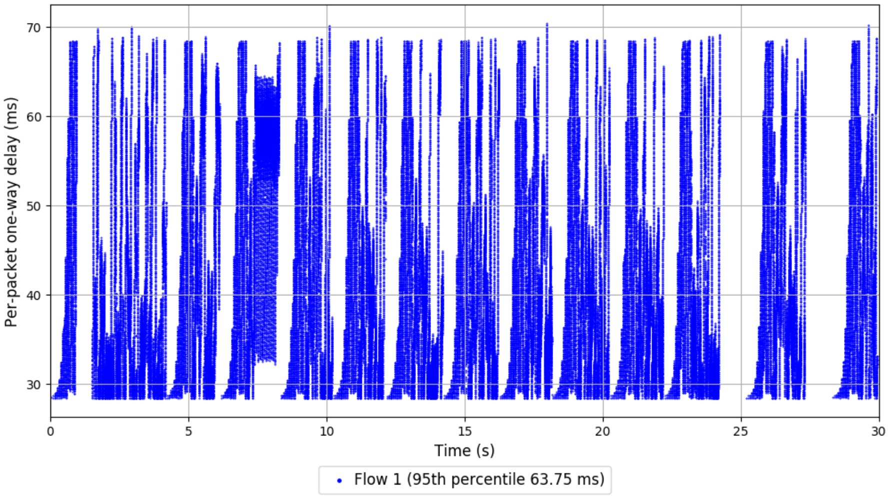




```
Run 2: Statistics of Verus

Start at: 2018-06-05 04:52:55
End at: 2018-06-05 04:53:26
Local clock offset: 0.43 ms
Remote clock offset: -7.559 ms

# Below is generated by plot.py at 2018-06-05 08:10:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.04 Mbit/s
95th percentile per-packet one-way delay: 63.748 ms
Loss rate: 21.50%
-- Flow 1:
Average throughput: 61.04 Mbit/s
95th percentile per-packet one-way delay: 63.748 ms
Loss rate: 21.50%
```

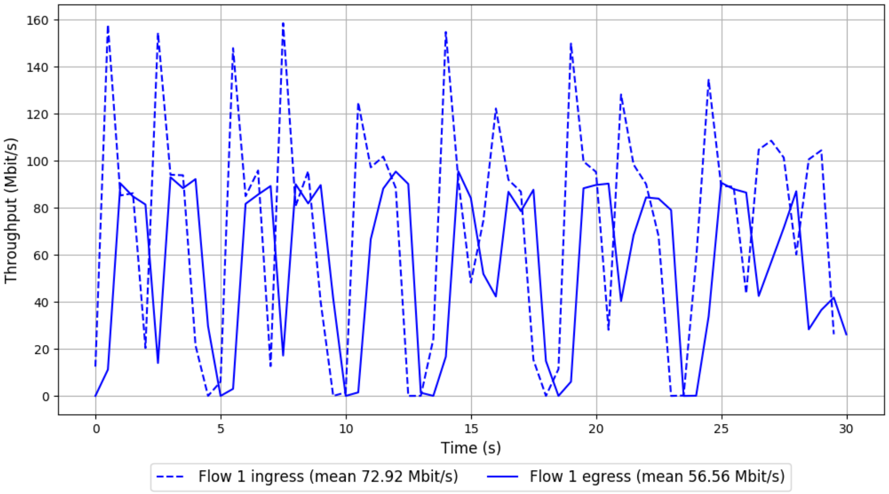
Run 2: Report of Verus — Data Link

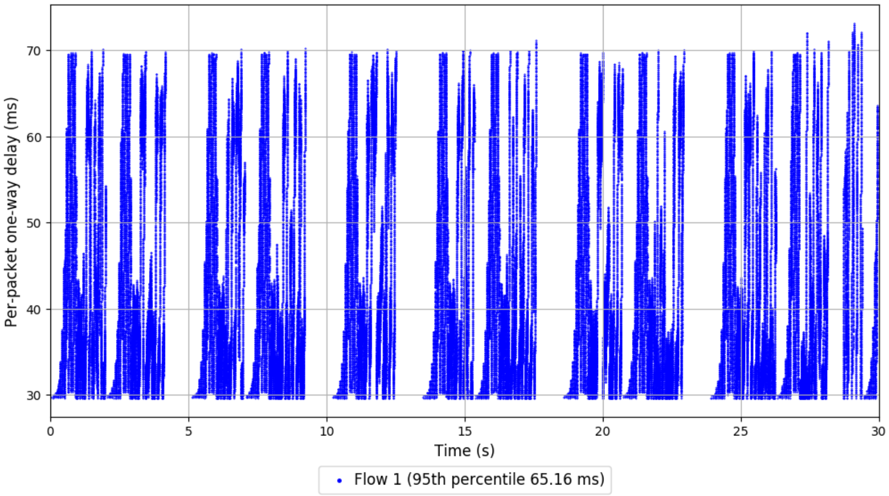




```
Run 3: Statistics of Verus

Start at: 2018-06-05 05:14:08
End at: 2018-06-05 05:14:38
Local clock offset: 0.34 ms
Remote clock offset: -6.248 ms

# Below is generated by plot.py at 2018-06-05 08:10:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.56 Mbit/s
95th percentile per-packet one-way delay: 65.162 ms
Loss rate: 22.34%
-- Flow 1:
Average throughput: 56.56 Mbit/s
95th percentile per-packet one-way delay: 65.162 ms
Loss rate: 22.34%
```

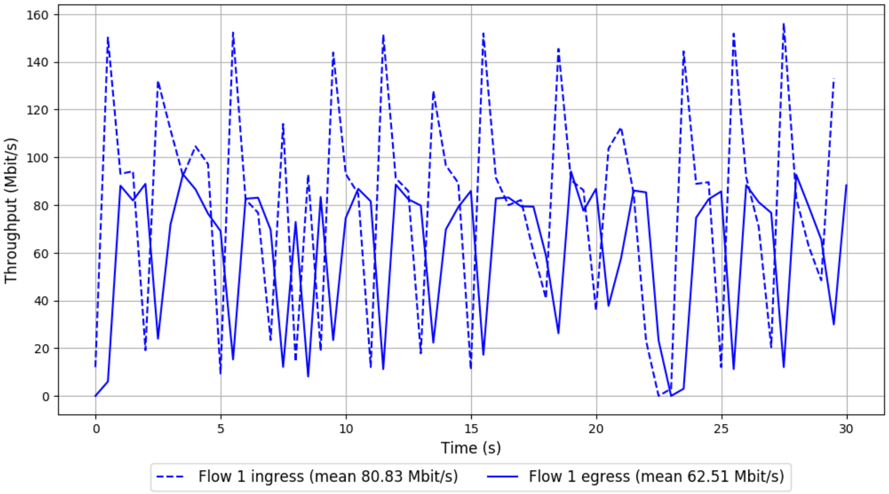
Run 3: Report of Verus — Data Link

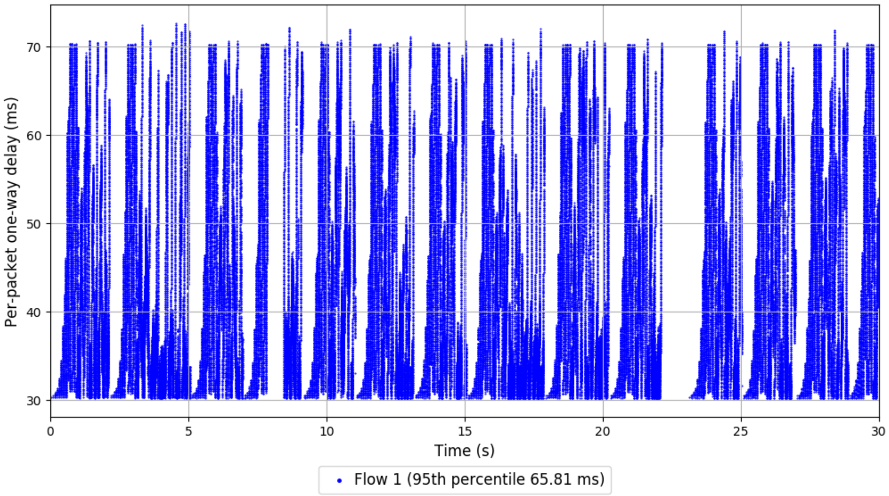




```
Run 4: Statistics of Verus

Start at: 2018-06-05 05:35:04
End at: 2018-06-05 05:35:34
Local clock offset: 0.196 ms
Remote clock offset: 0.626 ms

# Below is generated by plot.py at 2018-06-05 08:11:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.51 Mbit/s
95th percentile per-packet one-way delay: 65.805 ms
Loss rate: 22.63%
-- Flow 1:
Average throughput: 62.51 Mbit/s
95th percentile per-packet one-way delay: 65.805 ms
Loss rate: 22.63%
```

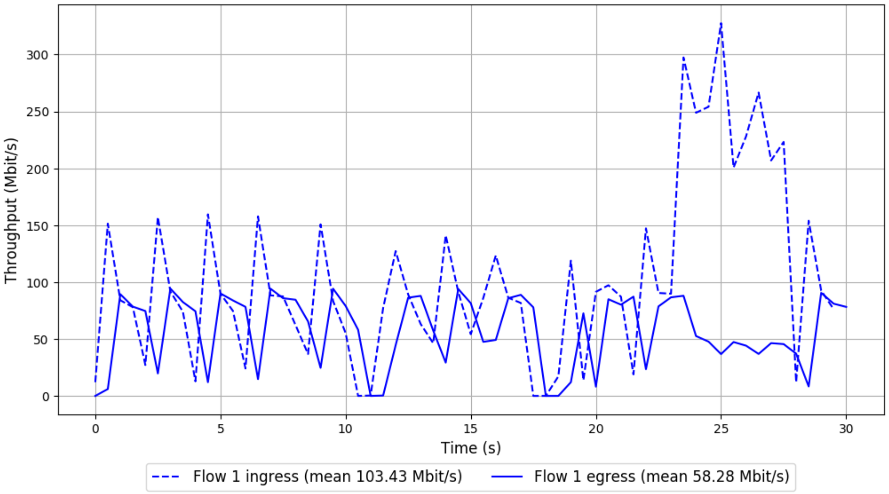
Run 4: Report of Verus — Data Link

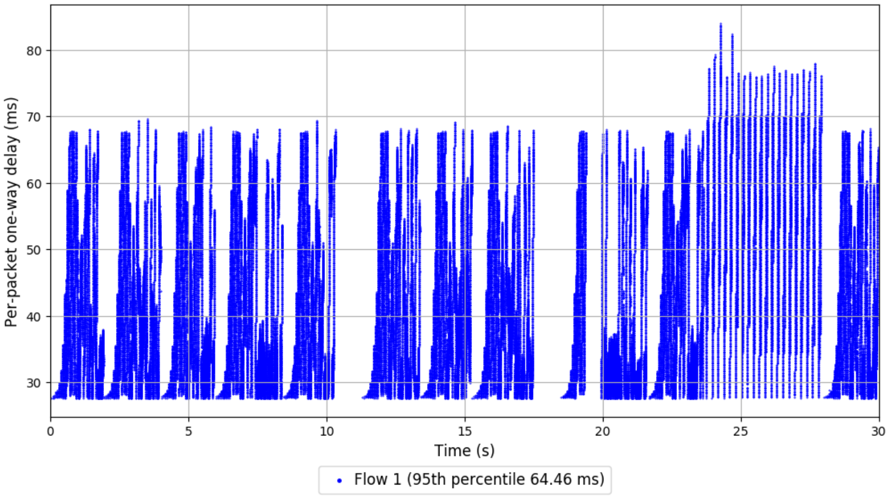




```
Run 5: Statistics of Verus

Start at: 2018-06-05 05:56:11
End at: 2018-06-05 05:56:41
Local clock offset: 0.181 ms
Remote clock offset: -0.86 ms

# Below is generated by plot.py at 2018-06-05 08:11:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.28 Mbit/s
95th percentile per-packet one-way delay: 64.456 ms
Loss rate: 43.60%
-- Flow 1:
Average throughput: 58.28 Mbit/s
95th percentile per-packet one-way delay: 64.456 ms
Loss rate: 43.60%
```

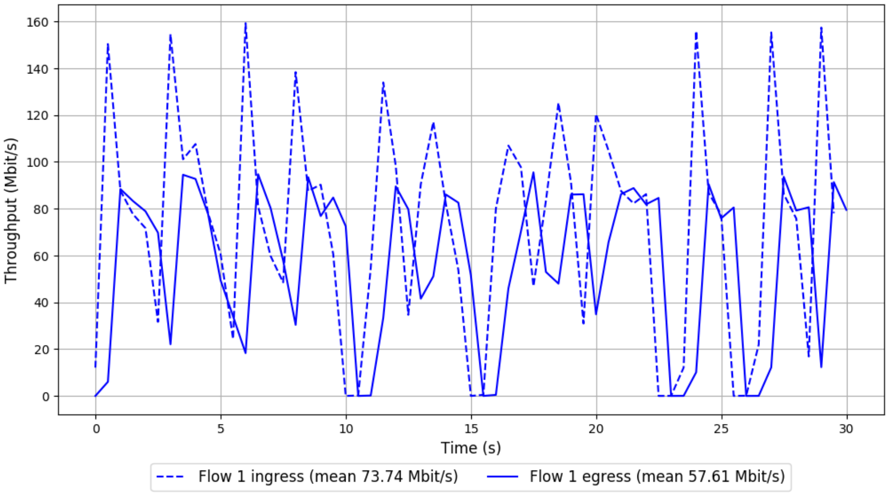
Run 5: Report of Verus — Data Link

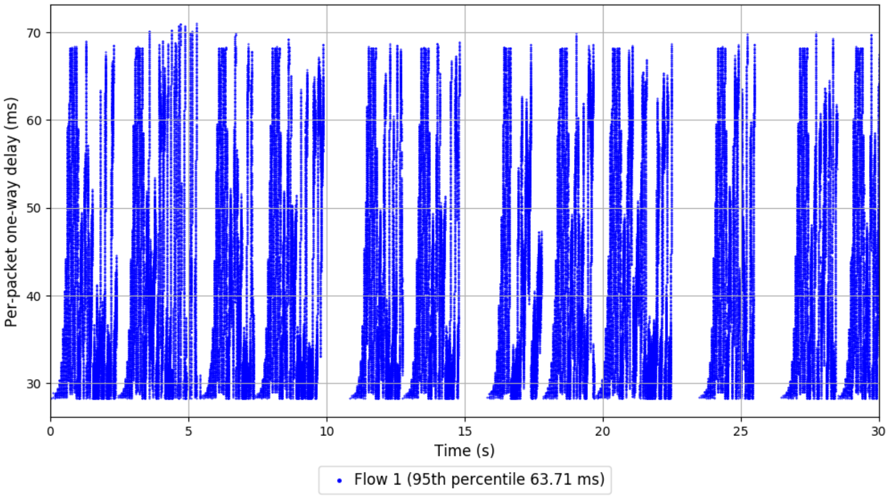




```
Run 6: Statistics of Verus

Start at: 2018-06-05 06:17:05
End at: 2018-06-05 06:17:35
Local clock offset: 0.348 ms
Remote clock offset: -0.945 ms

# Below is generated by plot.py at 2018-06-05 08:11:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.61 Mbit/s
95th percentile per-packet one-way delay: 63.712 ms
Loss rate: 21.78%
-- Flow 1:
Average throughput: 57.61 Mbit/s
95th percentile per-packet one-way delay: 63.712 ms
Loss rate: 21.78%
```

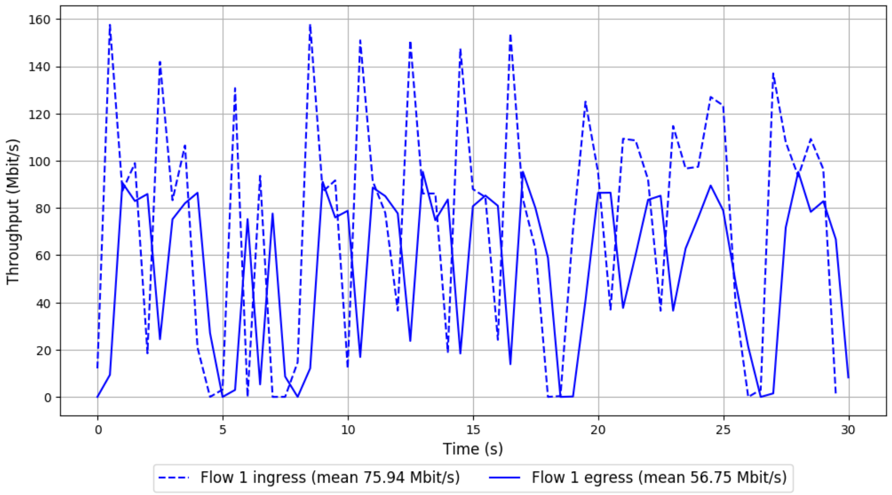
Run 6: Report of Verus — Data Link

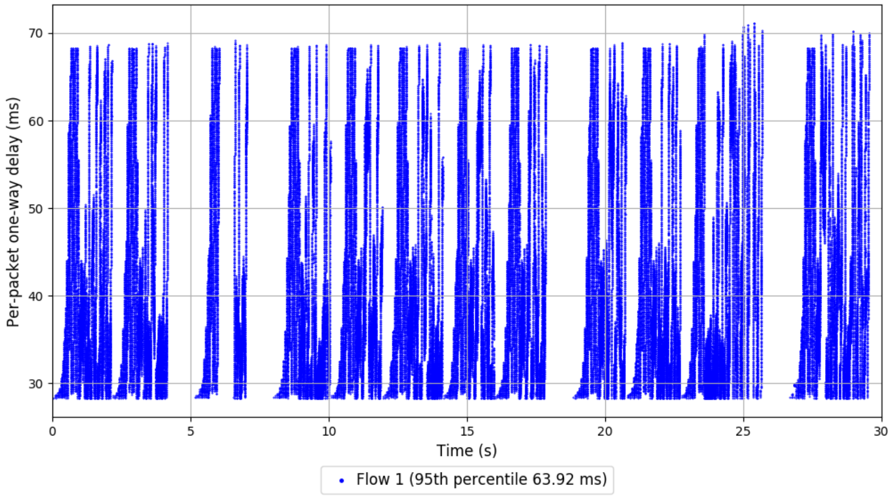




```
Run 7: Statistics of Verus

Start at: 2018-06-05 06:38:02
End at: 2018-06-05 06:38:32
Local clock offset: 0.4 ms
Remote clock offset: -1.665 ms

# Below is generated by plot.py at 2018-06-05 08:11:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.75 Mbit/s
95th percentile per-packet one-way delay: 63.919 ms
Loss rate: 25.27%
-- Flow 1:
Average throughput: 56.75 Mbit/s
95th percentile per-packet one-way delay: 63.919 ms
Loss rate: 25.27%
```

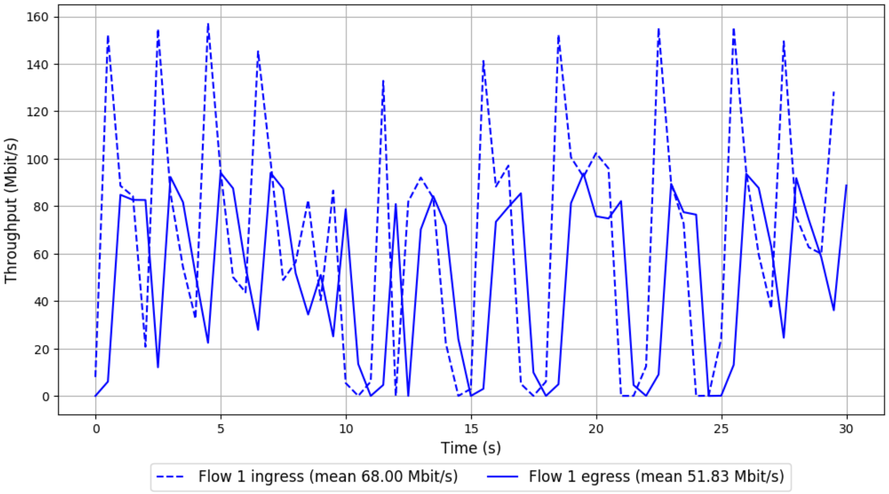
Run 7: Report of Verus — Data Link

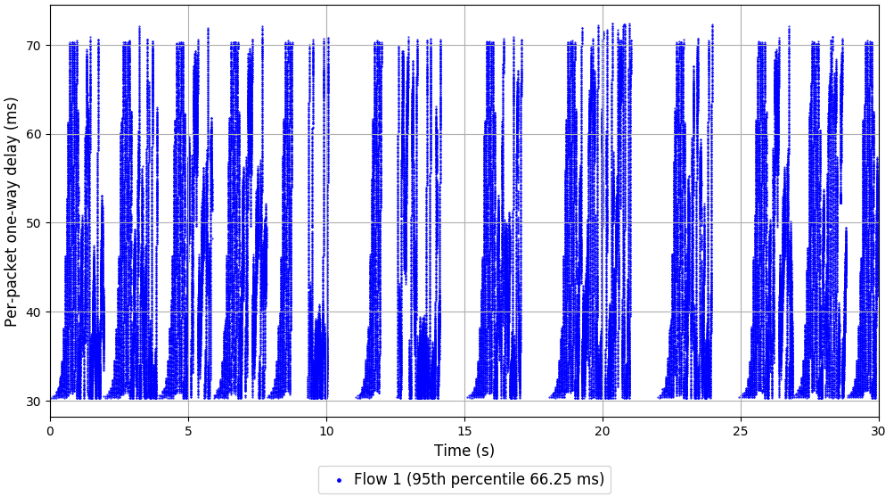




```
Run 8: Statistics of Verus

Start at: 2018-06-05 06:58:58
End at: 2018-06-05 06:59:28
Local clock offset: 0.372 ms
Remote clock offset: 0.473 ms

# Below is generated by plot.py at 2018-06-05 08:11:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 51.83 Mbit/s
95th percentile per-packet one-way delay: 66.252 ms
Loss rate: 23.74%
-- Flow 1:
Average throughput: 51.83 Mbit/s
95th percentile per-packet one-way delay: 66.252 ms
Loss rate: 23.74%
```

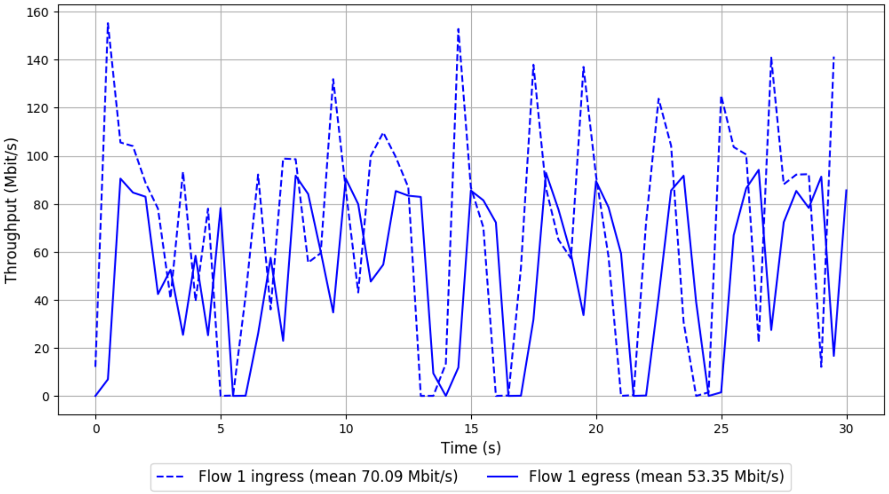
Run 8: Report of Verus — Data Link

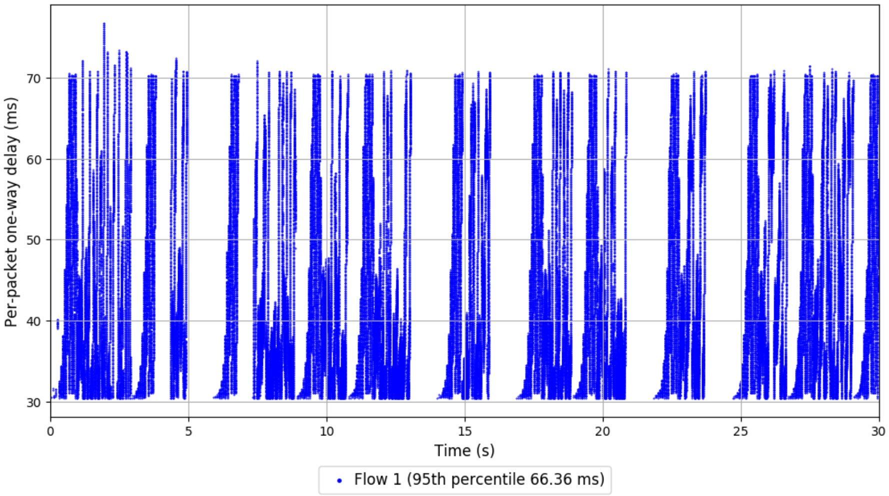




```
Run 9: Statistics of Verus

Start at: 2018-06-05 07:19:56
End at: 2018-06-05 07:20:26
Local clock offset: 0.048 ms
Remote clock offset: -0.121 ms

# Below is generated by plot.py at 2018-06-05 08:11:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.35 Mbit/s
95th percentile per-packet one-way delay: 66.364 ms
Loss rate: 23.85%
-- Flow 1:
Average throughput: 53.35 Mbit/s
95th percentile per-packet one-way delay: 66.364 ms
Loss rate: 23.85%
```

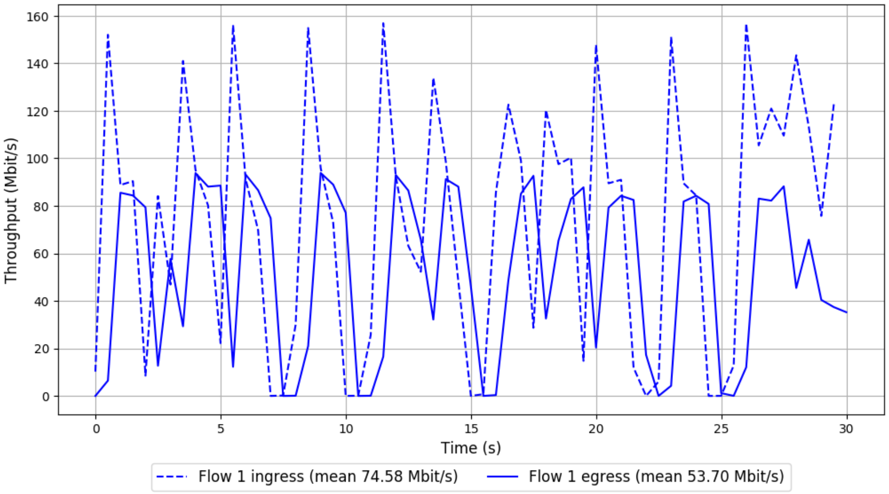
Run 9: Report of Verus — Data Link

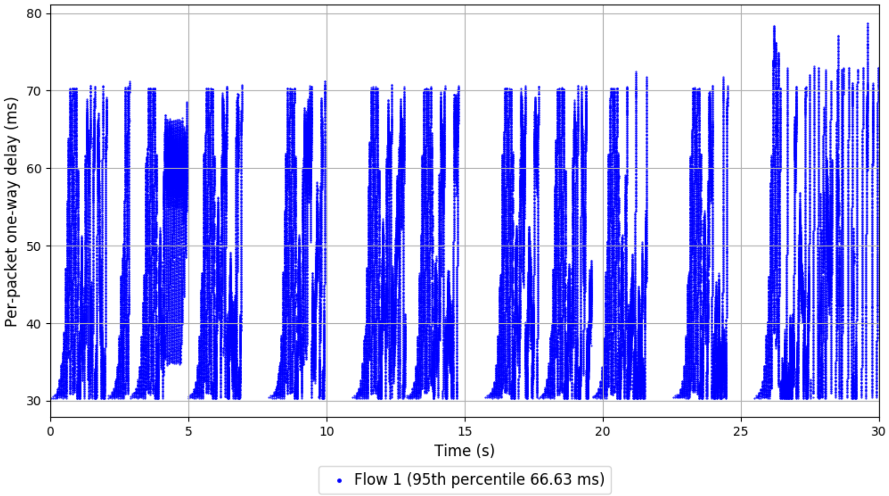




```
Run 10: Statistics of Verus

Start at: 2018-06-05 07:40:50
End at: 2018-06-05 07:41:20
Local clock offset: 0.091 ms
Remote clock offset: -0.494 ms

# Below is generated by plot.py at 2018-06-05 08:11:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.70 Mbit/s
95th percentile per-packet one-way delay: 66.632 ms
Loss rate: 27.98%
-- Flow 1:
Average throughput: 53.70 Mbit/s
95th percentile per-packet one-way delay: 66.632 ms
Loss rate: 27.98%
```

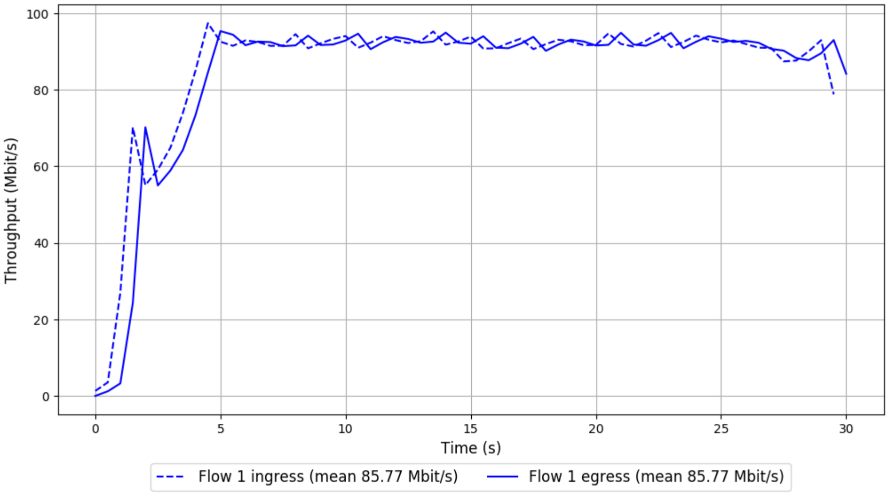
Run 10: Report of Verus — Data Link

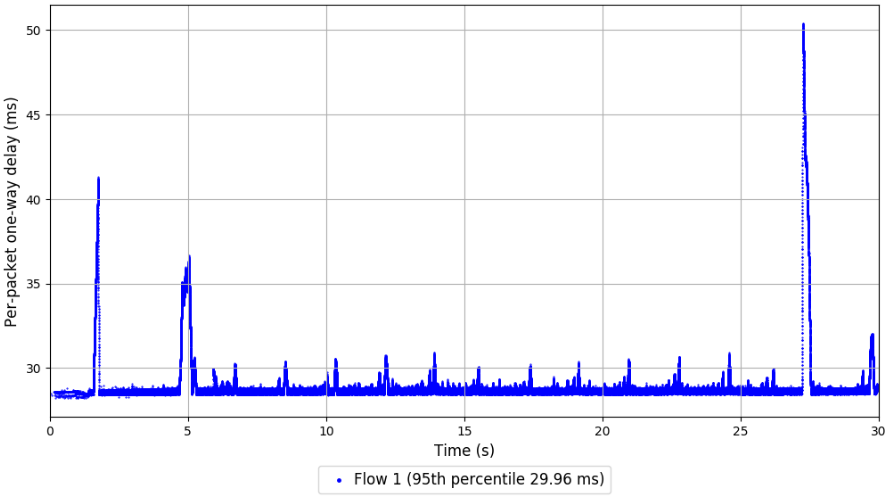




```
Run 1: Statistics of PCC-Vivace

Start at: 2018-06-05 04:28:39
End at: 2018-06-05 04:29:09
Local clock offset: 0.491 ms
Remote clock offset: -6.471 ms

# Below is generated by plot.py at 2018-06-05 08:11:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.77 Mbit/s
95th percentile per-packet one-way delay: 29.963 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 85.77 Mbit/s
95th percentile per-packet one-way delay: 29.963 ms
Loss rate: 0.00%
```

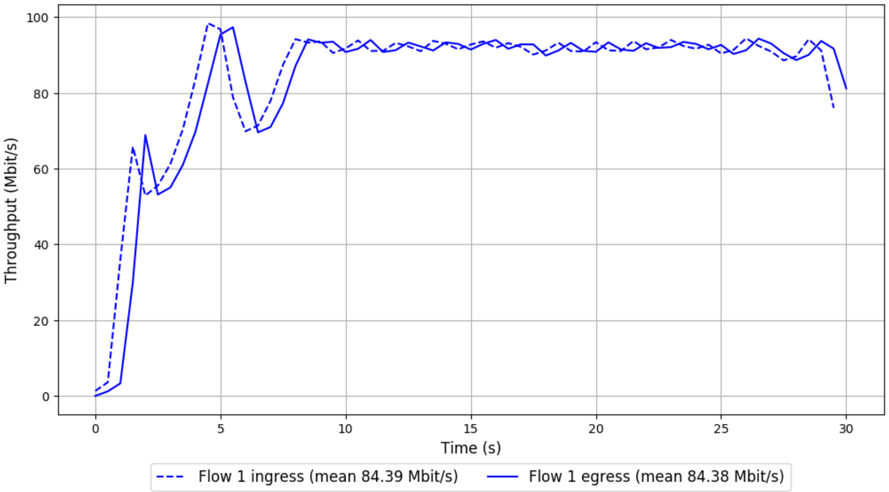
Run 1: Report of PCC-Vivace — Data Link

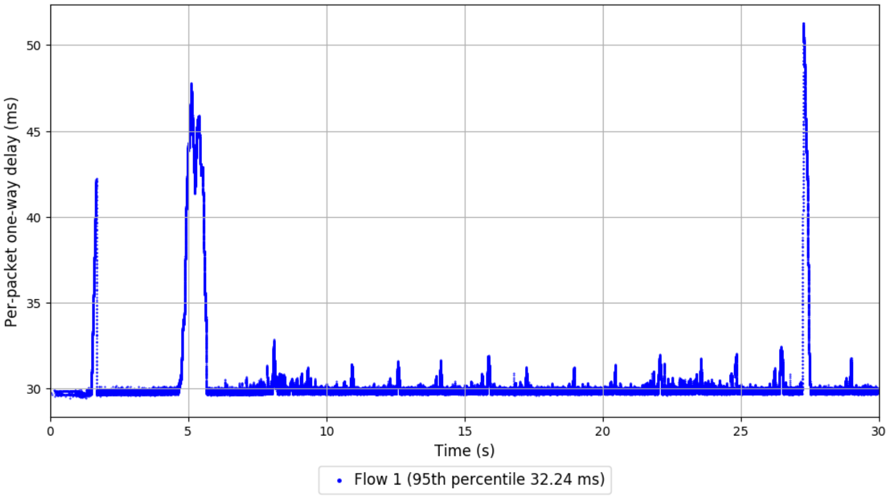




```
Run 2: Statistics of PCC-Vivace

Start at: 2018-06-05 04:50:15
End at: 2018-06-05 04:50:45
Local clock offset: 0.509 ms
Remote clock offset: -5.423 ms

# Below is generated by plot.py at 2018-06-05 08:12:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.38 Mbit/s
95th percentile per-packet one-way delay: 32.236 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 84.38 Mbit/s
95th percentile per-packet one-way delay: 32.236 ms
Loss rate: 0.00%
```

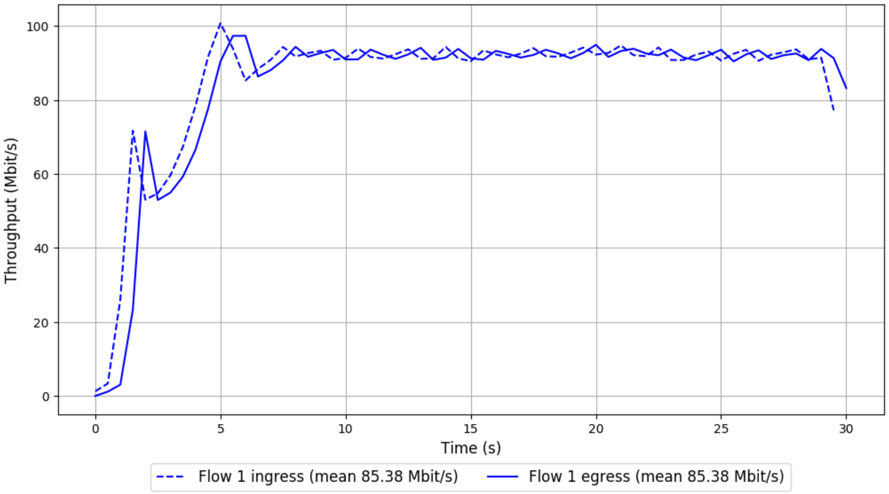
Run 2: Report of PCC-Vivace — Data Link

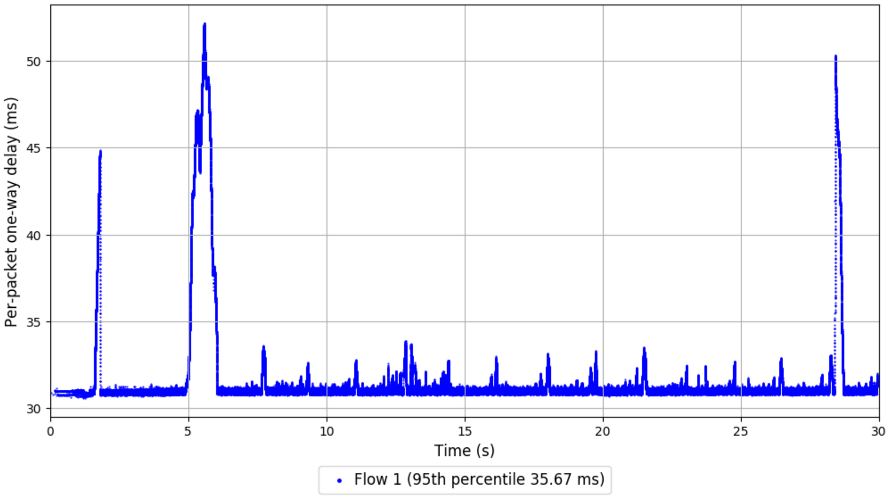




```
Run 3: Statistics of PCC-Vivace

Start at: 2018-06-05 05:11:27
End at: 2018-06-05 05:11:57
Local clock offset: 0.372 ms
Remote clock offset: -5.71 ms

# Below is generated by plot.py at 2018-06-05 08:12:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.38 Mbit/s
95th percentile per-packet one-way delay: 35.673 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 85.38 Mbit/s
95th percentile per-packet one-way delay: 35.673 ms
Loss rate: 0.00%
```

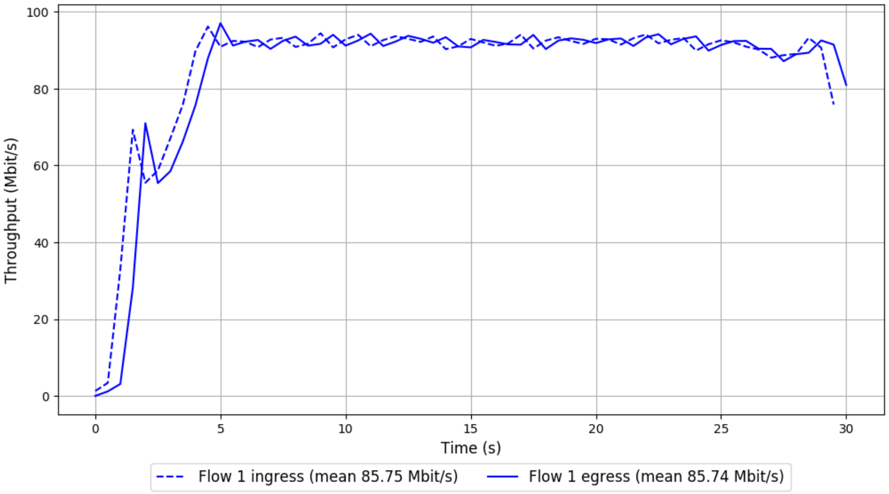
Run 3: Report of PCC-Vivace — Data Link

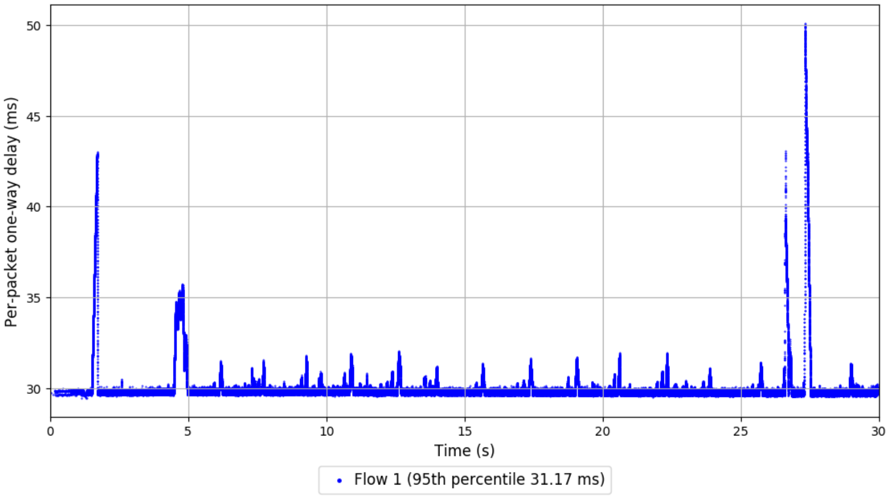




```
Run 4: Statistics of PCC-Vivace

Start at: 2018-06-05 05:32:23
End at: 2018-06-05 05:32:54
Local clock offset: 0.132 ms
Remote clock offset: 0.152 ms

# Below is generated by plot.py at 2018-06-05 08:12:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.74 Mbit/s
95th percentile per-packet one-way delay: 31.173 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 85.74 Mbit/s
95th percentile per-packet one-way delay: 31.173 ms
Loss rate: 0.01%
```

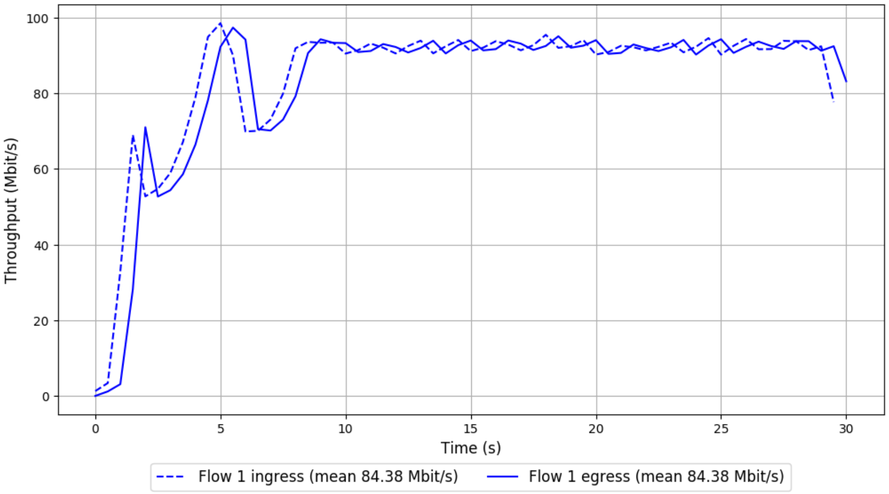
Run 4: Report of PCC-Vivace — Data Link

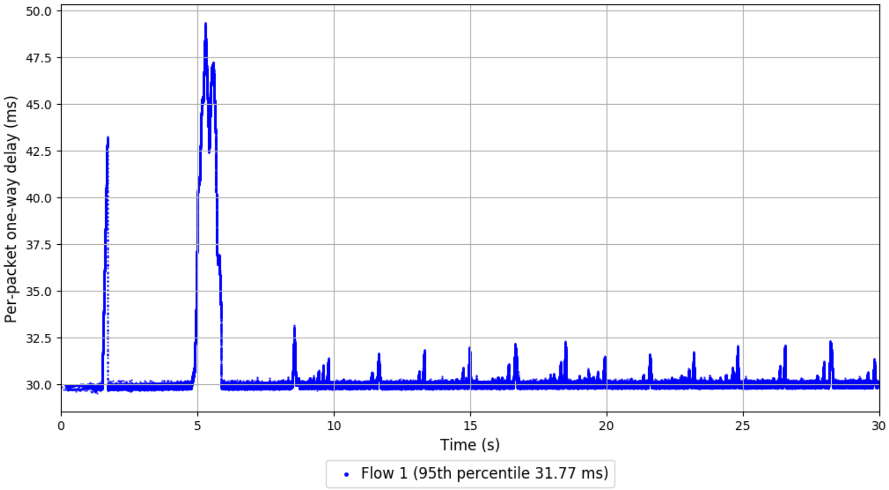




```
Run 5: Statistics of PCC-Vivace

Start at: 2018-06-05 05:53:31
End at: 2018-06-05 05:54:01
Local clock offset: 0.187 ms
Remote clock offset: 1.568 ms

# Below is generated by plot.py at 2018-06-05 08:12:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.38 Mbit/s
95th percentile per-packet one-way delay: 31.775 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 84.38 Mbit/s
95th percentile per-packet one-way delay: 31.775 ms
Loss rate: 0.00%
```

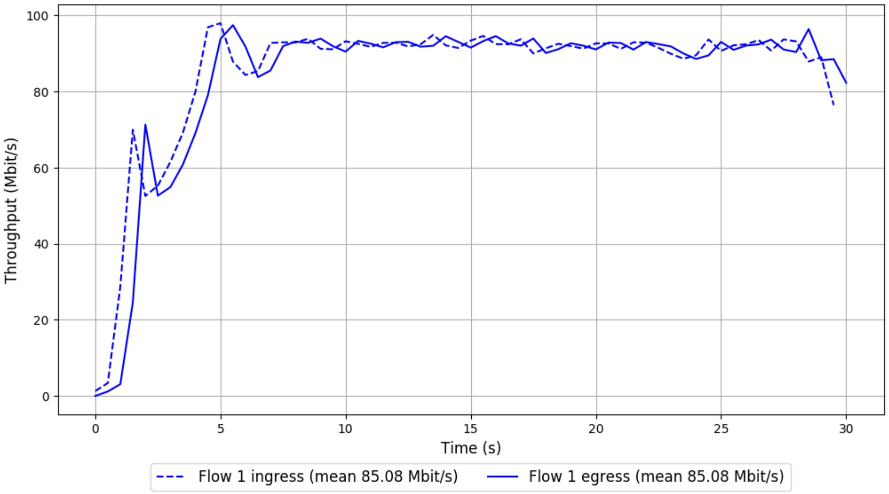
Run 5: Report of PCC-Vivace — Data Link

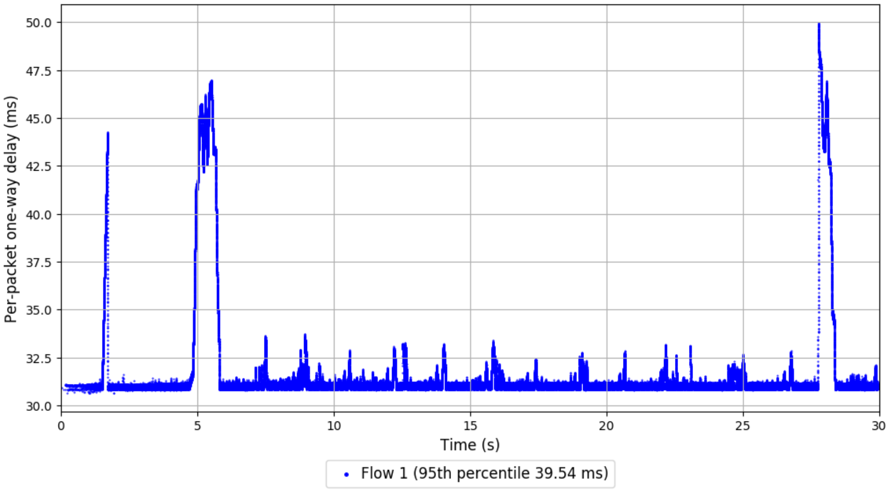




```
Run 6: Statistics of PCC-Vivace

Start at: 2018-06-05 06:14:25
End at: 2018-06-05 06:14:55
Local clock offset: 0.331 ms
Remote clock offset: 1.54 ms

# Below is generated by plot.py at 2018-06-05 08:12:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.08 Mbit/s
95th percentile per-packet one-way delay: 39.536 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 85.08 Mbit/s
95th percentile per-packet one-way delay: 39.536 ms
Loss rate: 0.00%
```

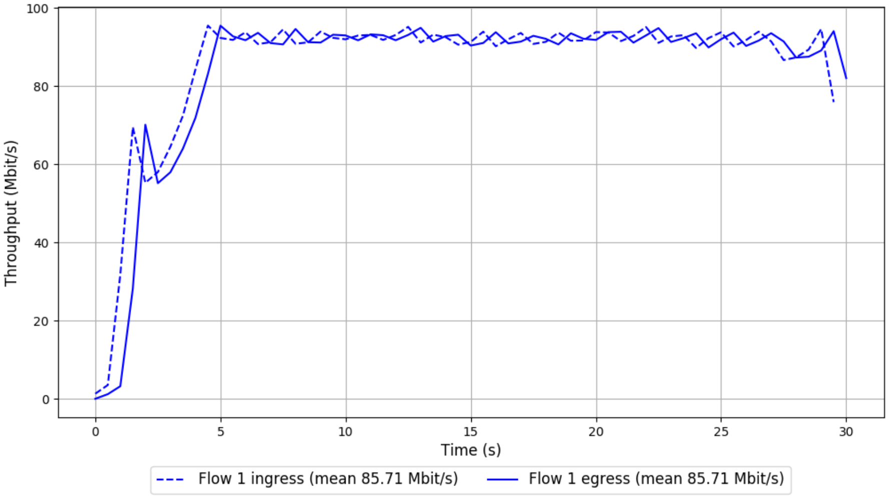
Run 6: Report of PCC-Vivace — Data Link

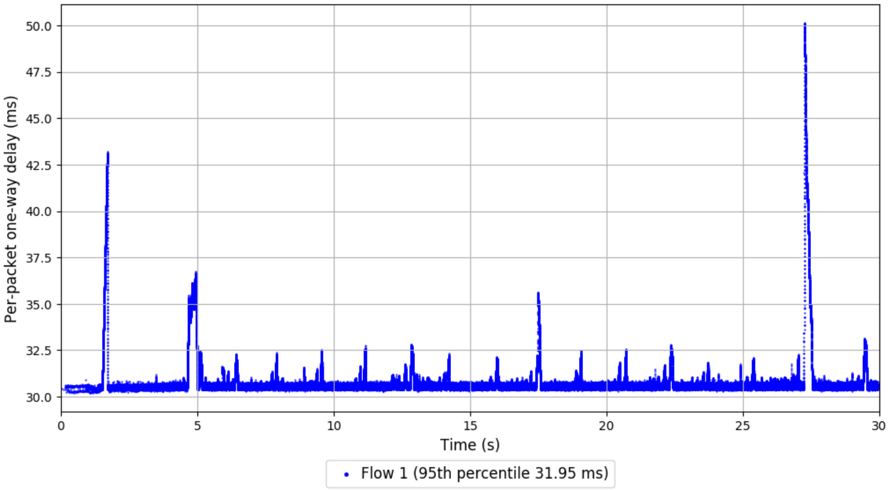




```
Run 7: Statistics of PCC-Vivace

Start at: 2018-06-05 06:35:21
End at: 2018-06-05 06:35:51
Local clock offset: 0.382 ms
Remote clock offset: 0.45 ms

# Below is generated by plot.py at 2018-06-05 08:12:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.71 Mbit/s
95th percentile per-packet one-way delay: 31.951 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 85.71 Mbit/s
95th percentile per-packet one-way delay: 31.951 ms
Loss rate: 0.00%
```

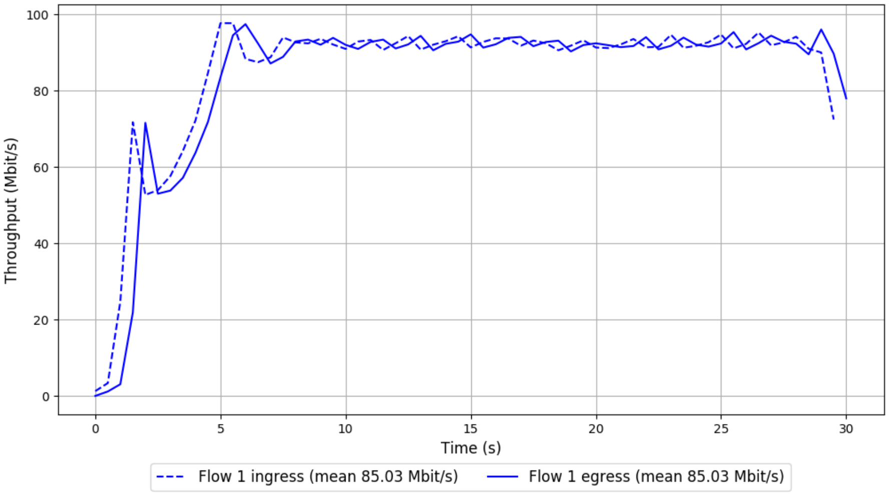
Run 7: Report of PCC-Vivace — Data Link

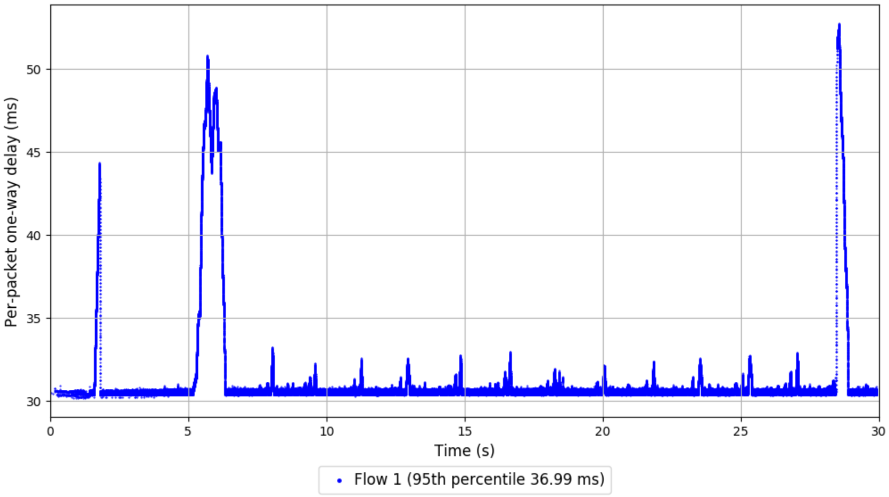




```
Run 8: Statistics of PCC-Vivace

Start at: 2018-06-05 06:56:17
End at: 2018-06-05 06:56:47
Local clock offset: 0.285 ms
Remote clock offset: 0.478 ms

# Below is generated by plot.py at 2018-06-05 08:12:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.03 Mbit/s
95th percentile per-packet one-way delay: 36.992 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 85.03 Mbit/s
95th percentile per-packet one-way delay: 36.992 ms
Loss rate: 0.00%
```

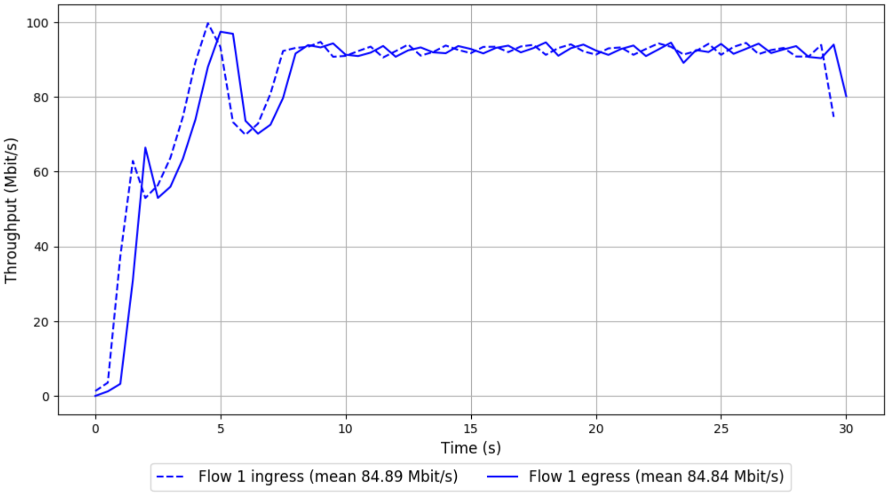
Run 8: Report of PCC-Vivace — Data Link

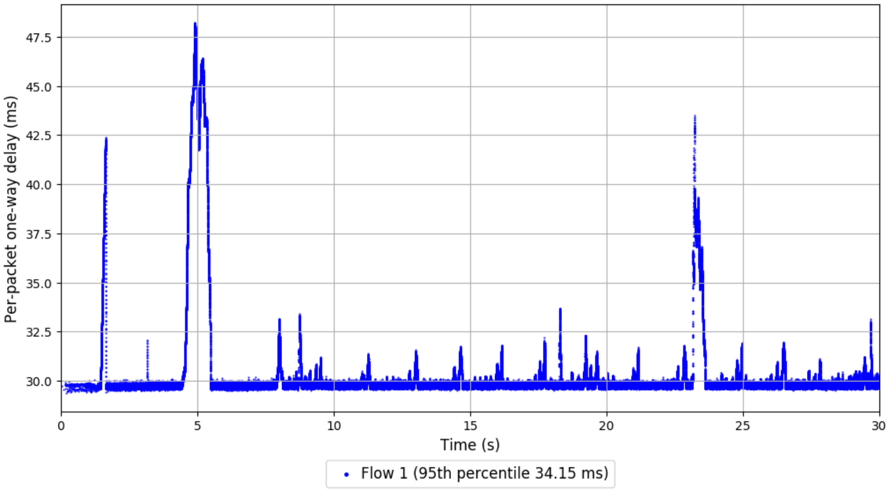




```
Run 9: Statistics of PCC-Vivace

Start at: 2018-06-05 07:17:15
End at: 2018-06-05 07:17:45
Local clock offset: 0.157 ms
Remote clock offset: -0.132 ms

# Below is generated by plot.py at 2018-06-05 08:12:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.84 Mbit/s
95th percentile per-packet one-way delay: 34.149 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 84.84 Mbit/s
95th percentile per-packet one-way delay: 34.149 ms
Loss rate: 0.06%
```

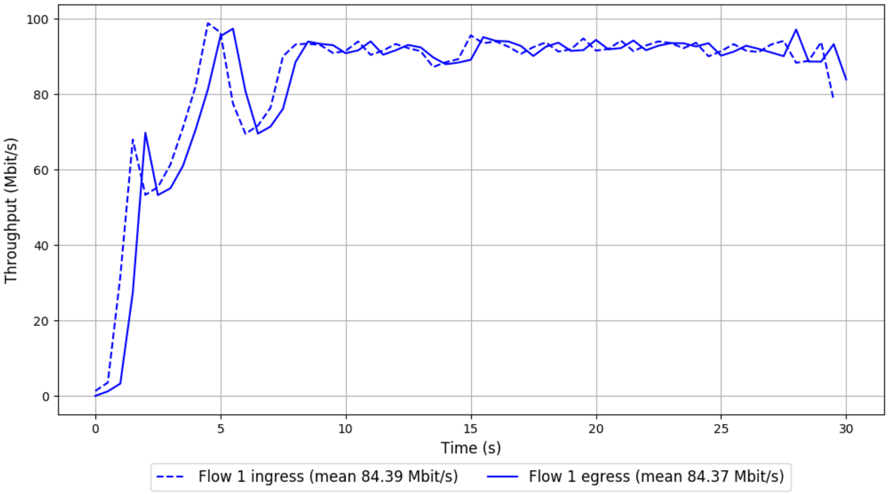
Run 9: Report of PCC-Vivace — Data Link

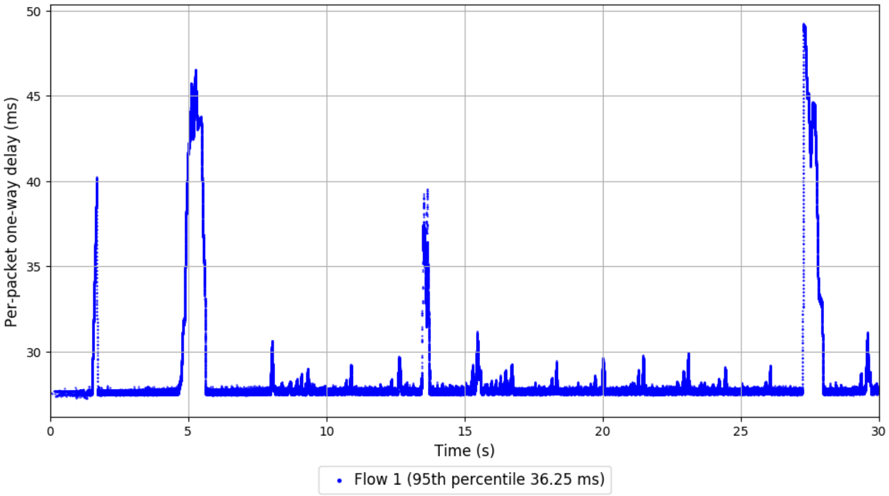




```
Run 10: Statistics of PCC-Vivace

Start at: 2018-06-05 07:38:10
End at: 2018-06-05 07:38:40
Local clock offset: 0.096 ms
Remote clock offset: -2.554 ms

# Below is generated by plot.py at 2018-06-05 08:12:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.37 Mbit/s
95th percentile per-packet one-way delay: 36.246 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 84.37 Mbit/s
95th percentile per-packet one-way delay: 36.246 ms
Loss rate: 0.02%
```

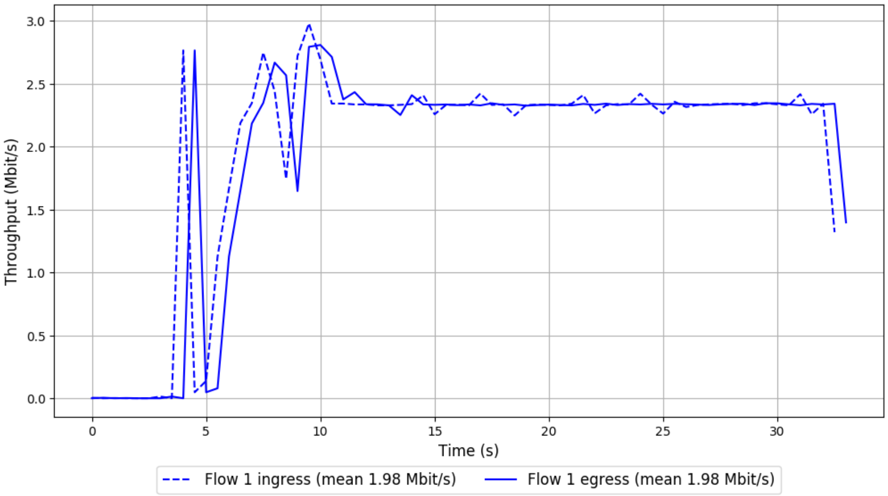
Run 10: Report of PCC-Vivace — Data Link

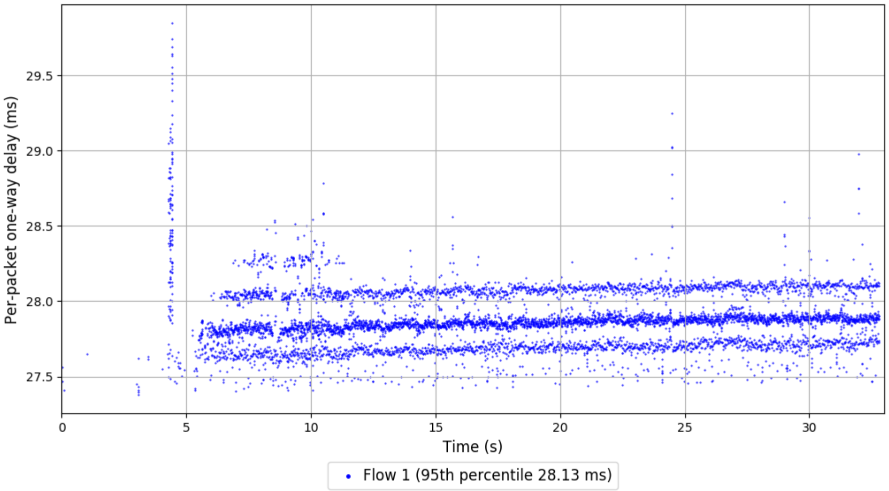




```
Run 1: Statistics of WebRTC media

Start at: 2018-06-05 04:19:34
End at: 2018-06-05 04:20:04
Local clock offset: 0.607 ms
Remote clock offset: -5.576 ms

# Below is generated by plot.py at 2018-06-05 08:12:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 28.127 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 28.127 ms
Loss rate: 0.00%
```

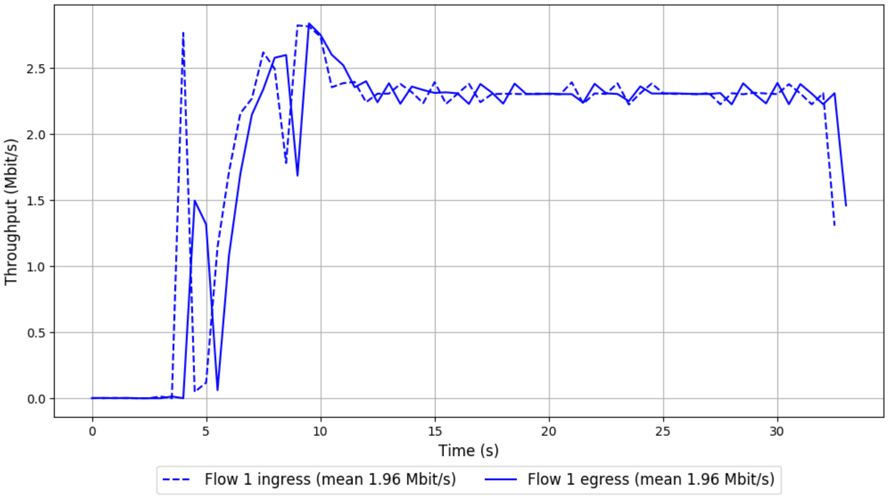
Run 1: Report of WebRTC media — Data Link

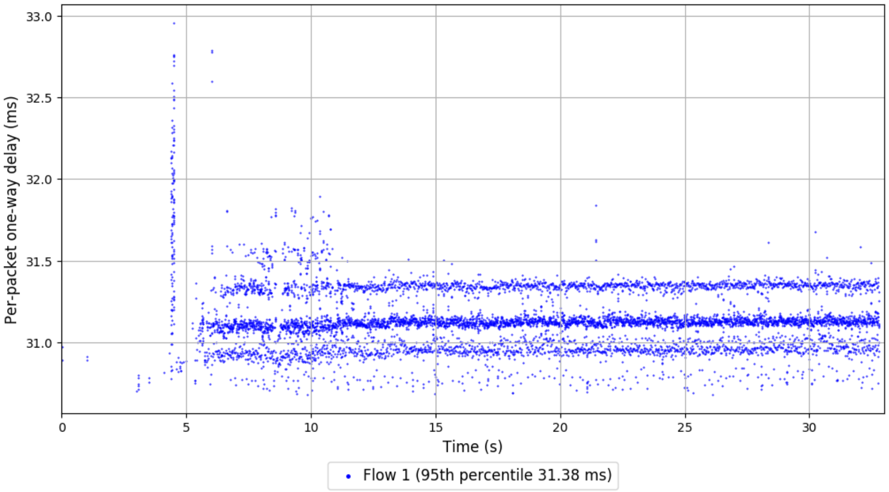




```
Run 2: Statistics of WebRTC media

Start at: 2018-06-05 04:40:28
End at: 2018-06-05 04:40:58
Local clock offset: 0.547 ms
Remote clock offset: -4.473 ms

# Below is generated by plot.py at 2018-06-05 08:12:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 31.381 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 31.381 ms
Loss rate: 0.00%
```

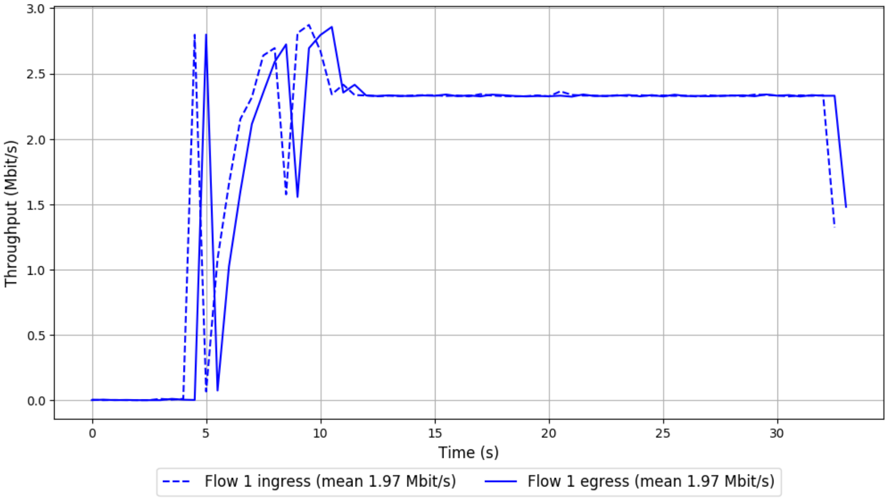
Run 2: Report of WebRTC media — Data Link

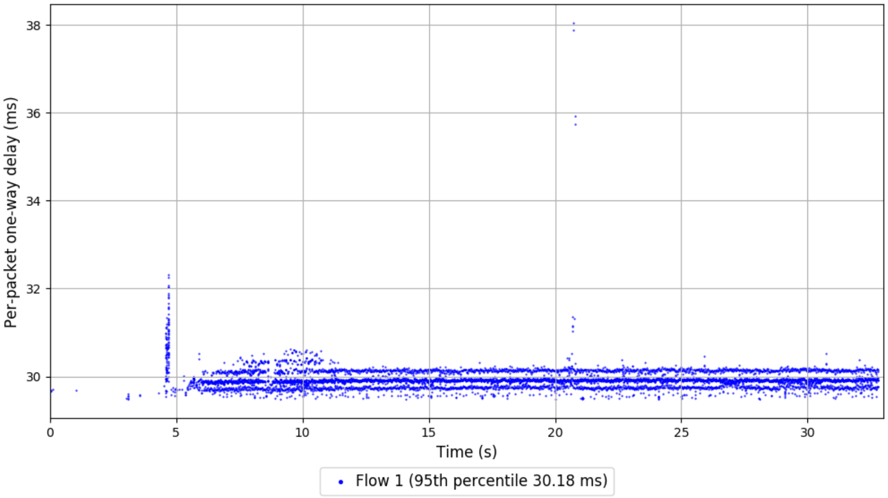




```
Run 3: Statistics of WebRTC media

Start at: 2018-06-05 05:02:07
End at: 2018-06-05 05:02:37
Local clock offset: 0.528 ms
Remote clock offset: -5.784 ms

# Below is generated by plot.py at 2018-06-05 08:12:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 30.184 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 30.184 ms
Loss rate: 0.03%
```

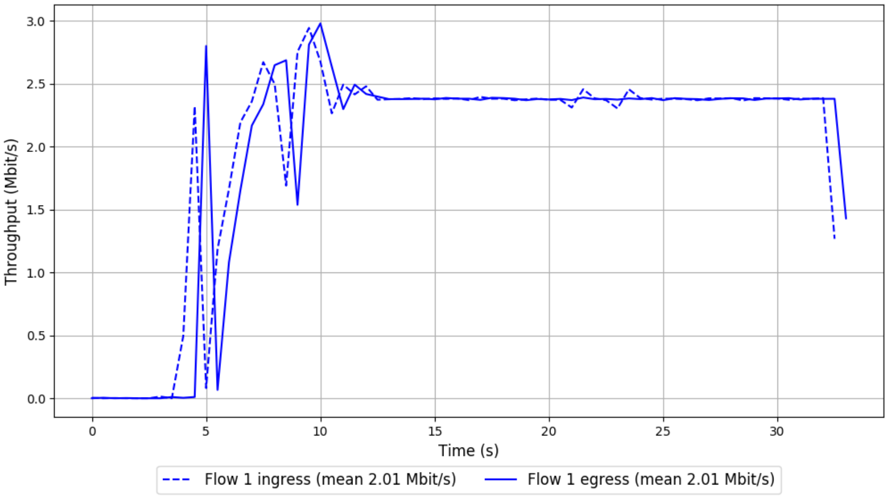
Run 3: Report of WebRTC media — Data Link

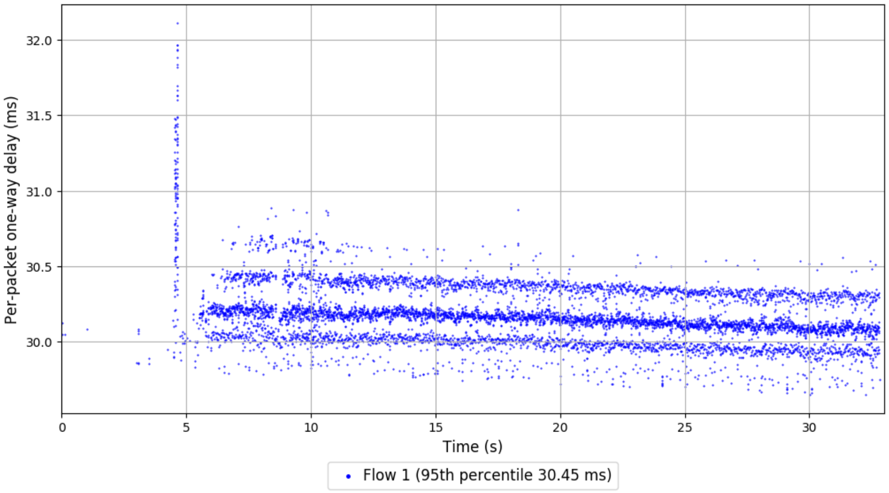




```
Run 4: Statistics of WebRTC media

Start at: 2018-06-05 05:23:18
End at: 2018-06-05 05:23:48
Local clock offset: 0.235 ms
Remote clock offset: -1.648 ms

# Below is generated by plot.py at 2018-06-05 08:12:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 30.449 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 30.449 ms
Loss rate: 0.00%
```

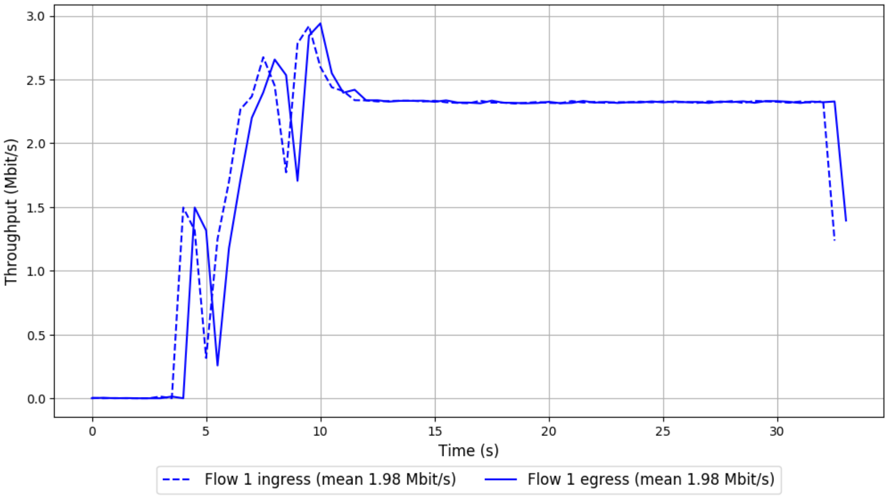
Run 4: Report of WebRTC media — Data Link

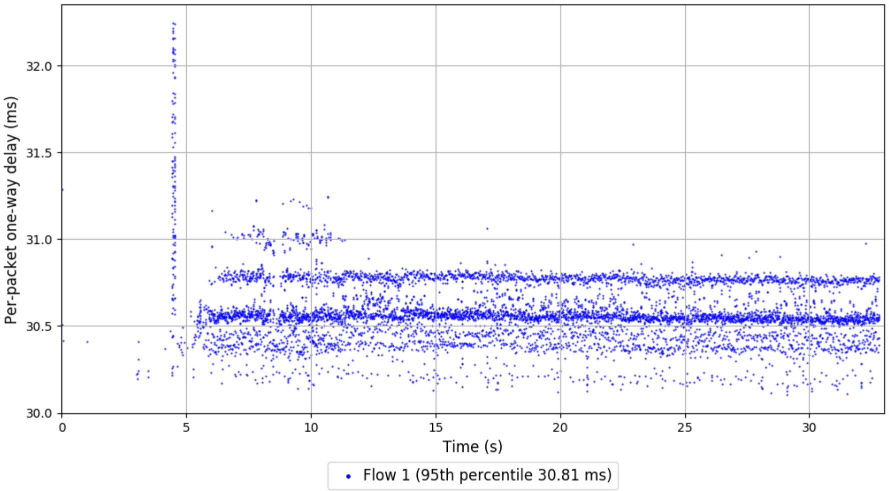




```
Run 5: Statistics of WebRTC media

Start at: 2018-06-05 05:44:27
End at: 2018-06-05 05:44:57
Local clock offset: 0.203 ms
Remote clock offset: 1.83 ms

# Below is generated by plot.py at 2018-06-05 08:12:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 30.810 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 30.810 ms
Loss rate: 0.00%
```

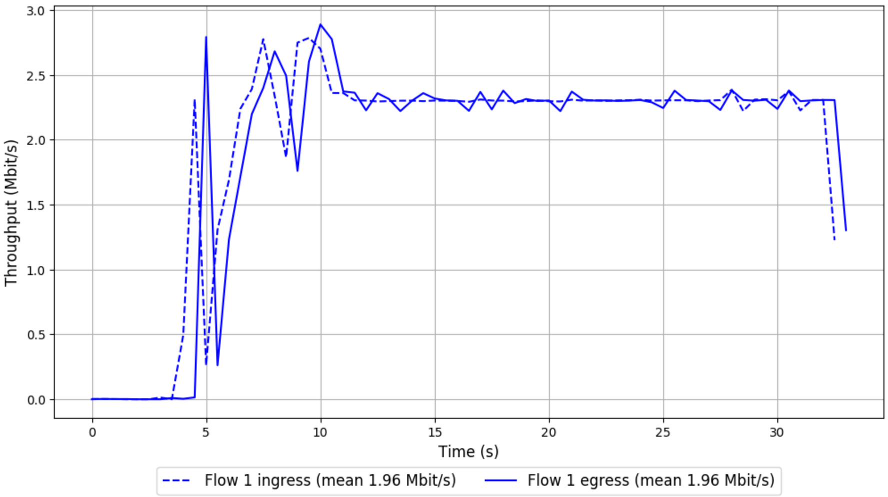
Run 5: Report of WebRTC media — Data Link

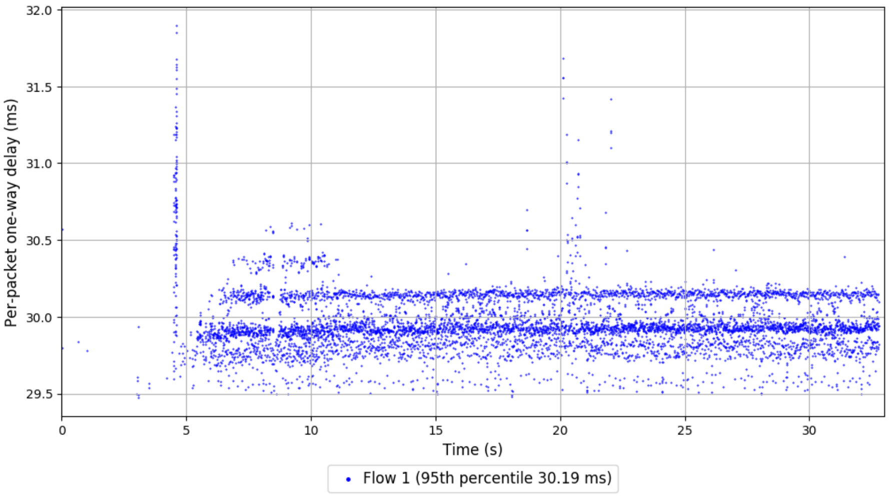




```
Run 6: Statistics of WebRTC media

Start at: 2018-06-05 06:05:20
End at: 2018-06-05 06:05:50
Local clock offset: 0.089 ms
Remote clock offset: 0.834 ms

# Below is generated by plot.py at 2018-06-05 08:12:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 30.190 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 30.190 ms
Loss rate: 0.00%
```

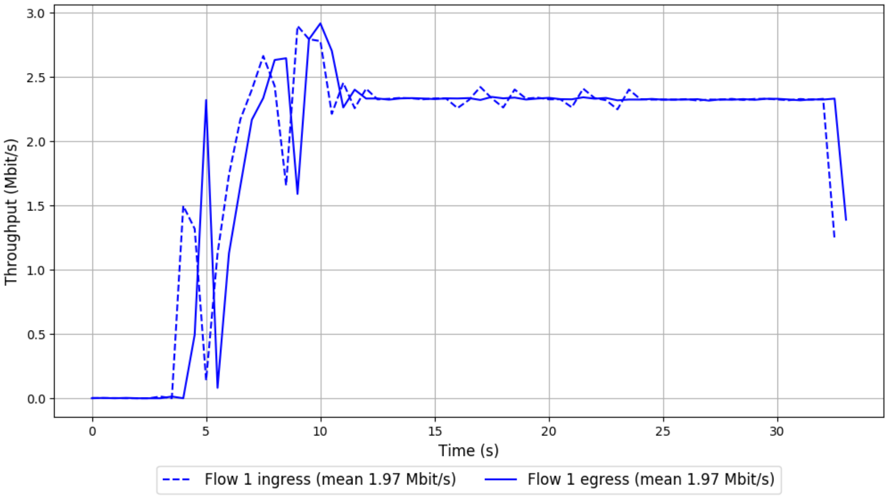
Run 6: Report of WebRTC media — Data Link

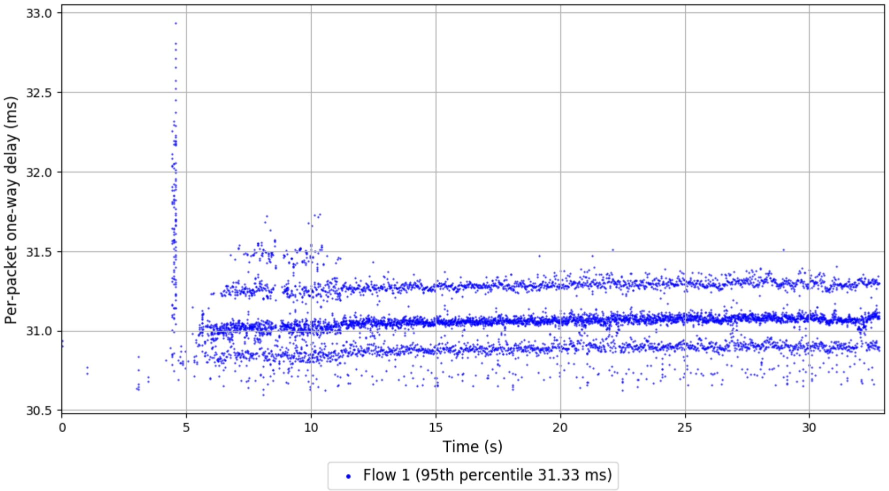




```
Run 7: Statistics of WebRTC media

Start at: 2018-06-05 06:26:15
End at: 2018-06-05 06:26:45
Local clock offset: 0.39 ms
Remote clock offset: 1.494 ms

# Below is generated by plot.py at 2018-06-05 08:12:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 31.333 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 31.333 ms
Loss rate: 0.00%
```

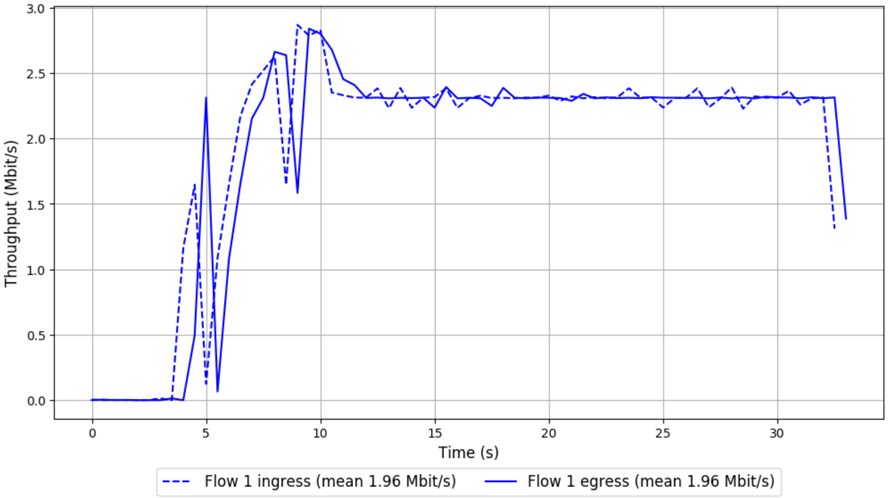
Run 7: Report of WebRTC media — Data Link

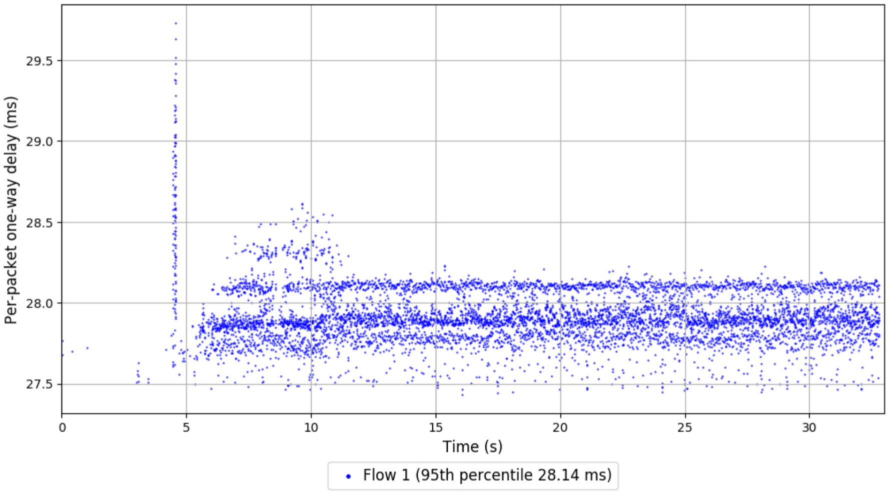




```
Run 8: Statistics of WebRTC media

Start at: 2018-06-05 06:47:12
End at: 2018-06-05 06:47:42
Local clock offset: 0.288 ms
Remote clock offset: -1.648 ms

# Below is generated by plot.py at 2018-06-05 08:12:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 28.142 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 28.142 ms
Loss rate: 0.00%
```

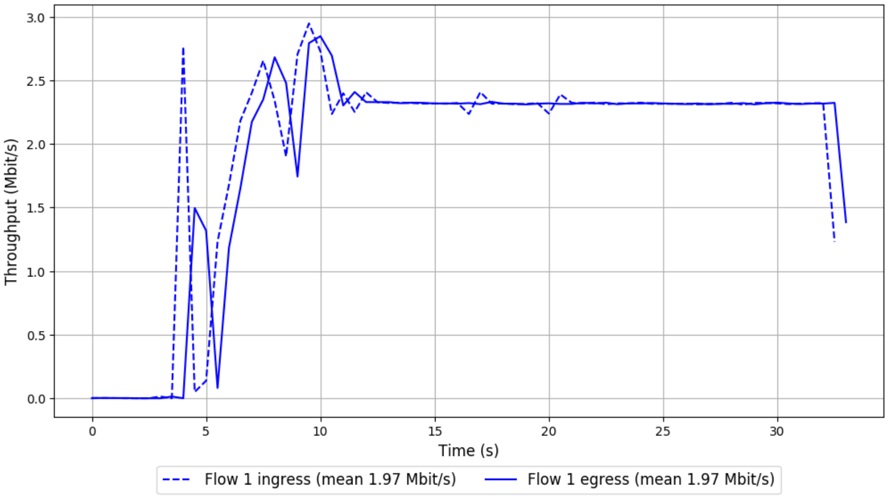
Run 8: Report of WebRTC media — Data Link

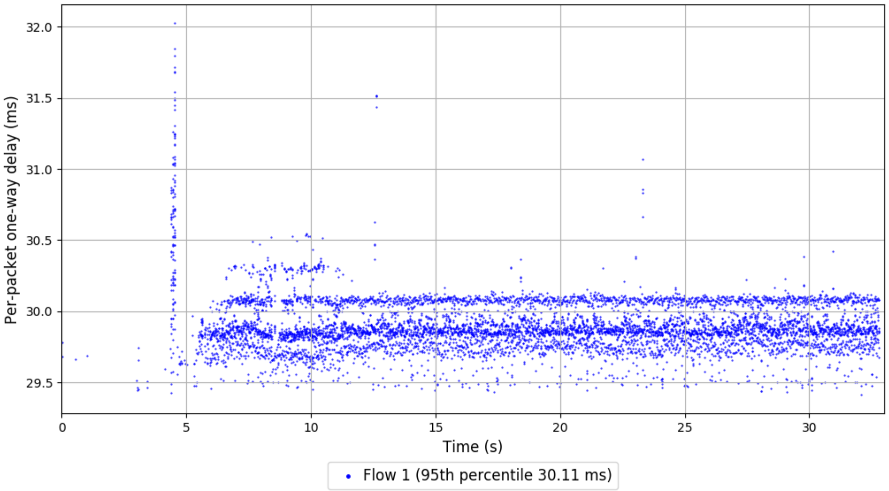




```
Run 9: Statistics of WebRTC media

Start at: 2018-06-05 07:08:09
End at: 2018-06-05 07:08:39
Local clock offset: 0.272 ms
Remote clock offset: 0.077 ms

# Below is generated by plot.py at 2018-06-05 08:12:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 30.110 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 30.110 ms
Loss rate: 0.00%
```

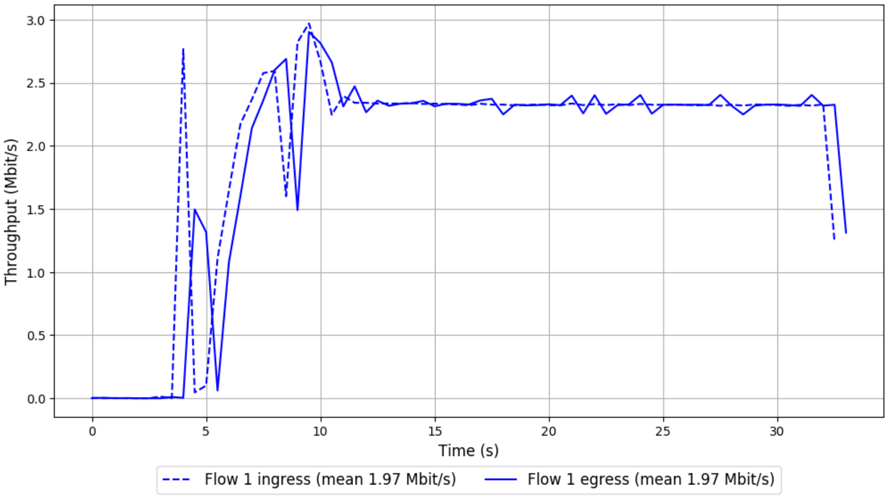
Run 9: Report of WebRTC media — Data Link



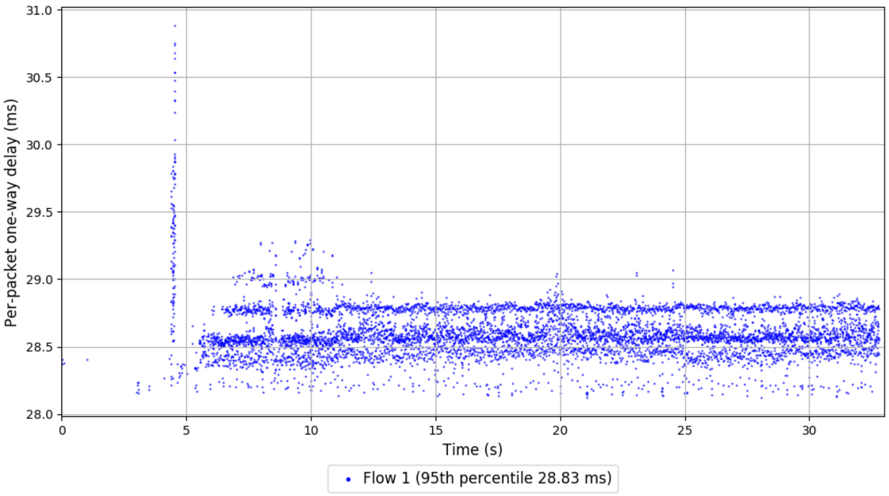


```
Run 10: Statistics of WebRTC media

Start at: 2018-06-05 07:29:05
End at: 2018-06-05 07:29:35
Local clock offset: 0.0 ms
Remote clock offset: -2.243 ms

# Below is generated by plot.py at 2018-06-05 08:12:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 28.826 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 28.826 ms
Loss rate: 0.00%
```

Run 10: Report of WebRTC media — Data Link



Throughput (Mbit/s)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
5
10
15
20
25
30
Time (s)
Flow 1 ingress (mean 1.97 Mbit/s)
Flow 1 egress (mean 1.97 Mbit/s)



Per-packet one-way delay (ms)
31.0
30.5
30.0
29.5
29.0
28.5
28.0
0
5
10
15
20
25
30
Time (s)
Flow 1 (95th percentile 28.83 ms)