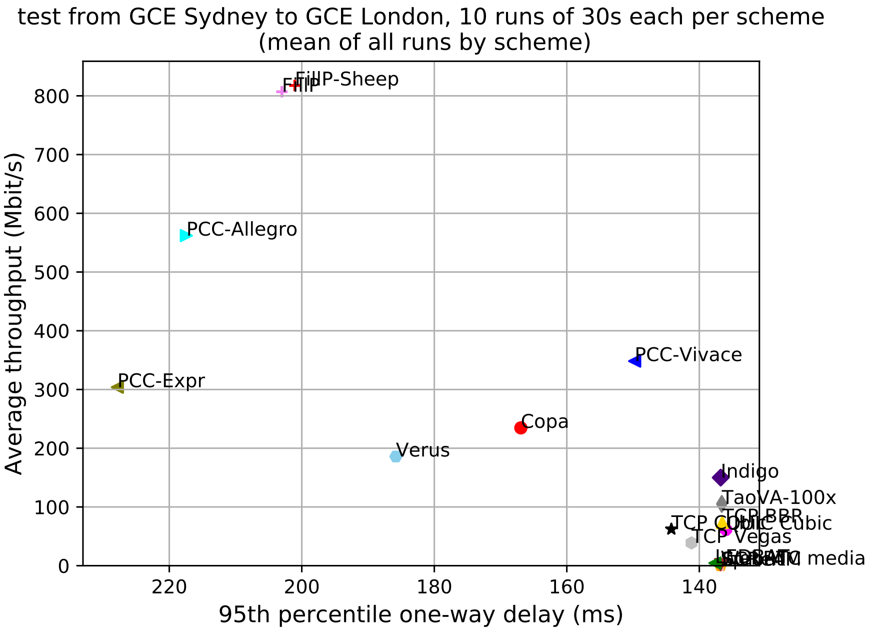
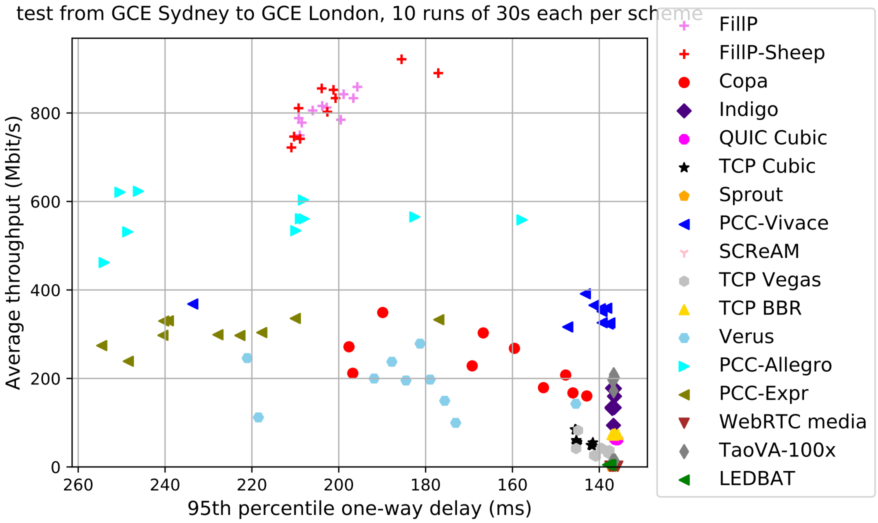
Pantheon Report

Generated at 2018-08-02 06:52:48 (UTC).
Data path: GCE Sydney Ethernet (*local*) →GCE London Ethernet (*remote*).
Repeated the test of 17 congestion control schemes 10 times.
Each test lasted for 30 seconds running 1 flow.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
NTP offsets were measured against `time.google.com` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: master @ 640164b5b17c7c6561fff57729b3b5935d8596ce
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/fillp-sheep @ daed0c84f98531712514b2231f43ec6901114ffe
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
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 @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

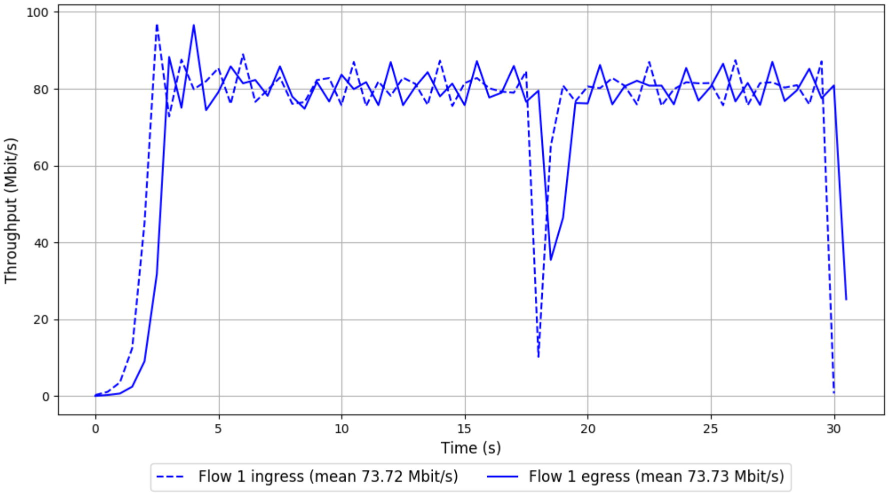

test from GCE Sydney to GCE London, 10 runs of 30s each per scheme
(mean of all runs by scheme)
Average throughput (Mbit/s)
95th percentile one-way delay (ms)
0
100
200
300
400
500
600
700
800
220
200
180
160
140
FillP
FillP-Sheep
PCC-Allegro
PCC-Vivace
PCC-Expr
Copa
Verus
Indigo
TaoVA-100x
TCP BBR
QUIC Cubic
TCP Cubic
TCP Vegas
LEDBAT
WebRTC media
SCReAM
Sprout

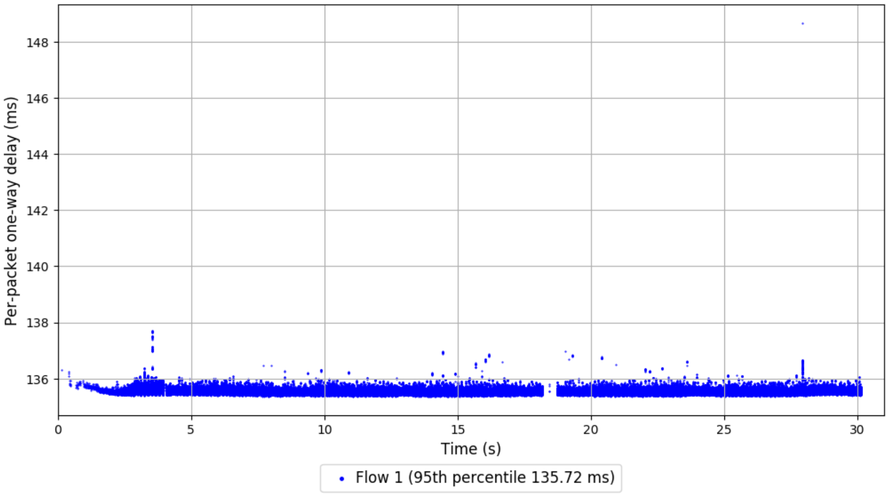

test from GCE Sydney to GCE London, 10 runs of 30s each per scheme
Average throughput (Mbit/s)
95th percentile one-way delay (ms)
0
200
400
600
800
260
240
220
200
180
160
140
FillP
FillP-Sheep
Copa
Indigo
QUIC Cubic
TCP Cubic
Sprout
PCC-Vivace
SCReAM
TCP Vegas
TCP BBR
Verus
PCC-Allegro
PCC-Expr
WebRTC 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	73.55	136.53	0.00
Copa	10	234.65	166.94	0.04
TCP Cubic	10	62.16	144.22	0.00
FillP	10	806.94	203.00	2.33
FillP-Sheep	10	817.65	201.05	3.02
Indigo	10	149.96	136.77	0.00
LEDBAT	10	4.42	137.65	0.00
PCC-Allegro	10	561.98	217.42	1.63
PCC-Expr	10	303.88	227.84	1.16
QUIC Cubic	4	61.39	135.98	0.00
SCReAM	10	0.22	136.54	0.00
Sprout	10	0.16	136.80	0.00
TaoVA-100x	10	105.15	136.61	0.00
TCP Vegas	10	38.79	141.18	0.00
Verus	10	185.90	185.80	0.60
PCC-Vivace	10	348.34	149.76	0.15
WebRTC media	10	1.81	136.79	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2018-08-02 01:13:56
End at: 2018-08-02 01:14:26
Local clock offset: -0.048 ms
Remote clock offset: -0.113 ms

# Below is generated by plot.py at 2018-08-02 05:10:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.73 Mbit/s
95th percentile per-packet one-way delay: 135.718 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 73.73 Mbit/s
95th percentile per-packet one-way delay: 135.718 ms
Loss rate: 0.00%
```

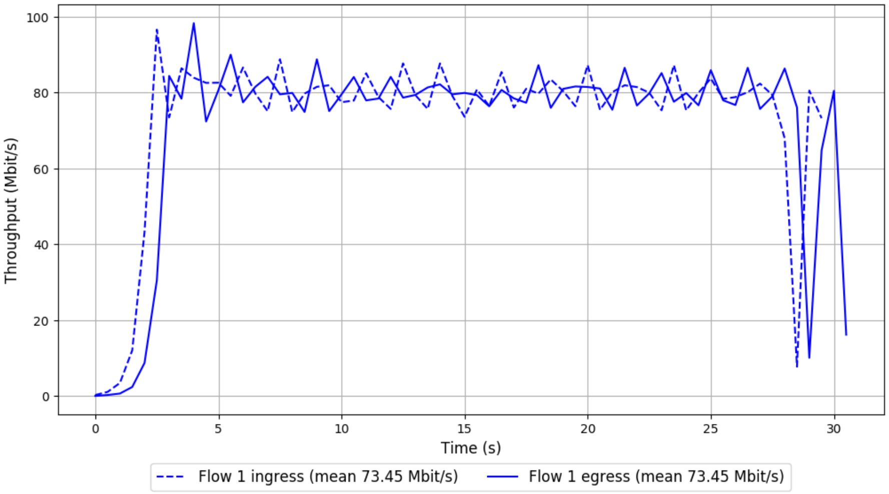
Run 1: Report of TCP BBR — Data Link

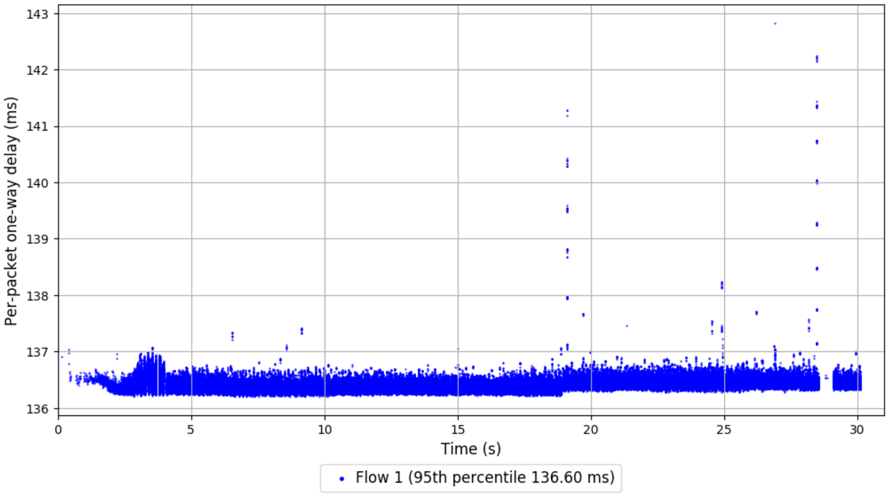




```
Run 2: Statistics of TCP BBR

Start at: 2018-08-02 01:37:15
End at: 2018-08-02 01:37:45
Local clock offset: 0.098 ms
Remote clock offset: -0.121 ms

# Below is generated by plot.py at 2018-08-02 05:10:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.45 Mbit/s
95th percentile per-packet one-way delay: 136.597 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 73.45 Mbit/s
95th percentile per-packet one-way delay: 136.597 ms
Loss rate: 0.00%
```

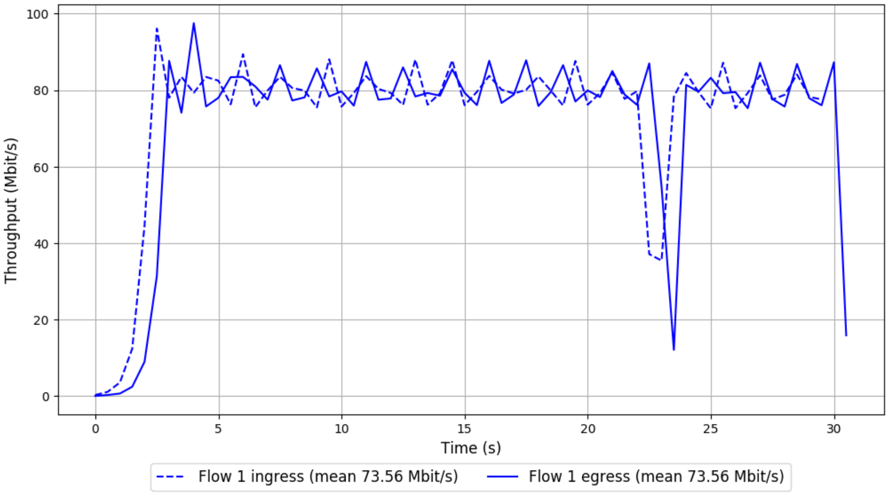
Run 2: Report of TCP BBR — Data Link

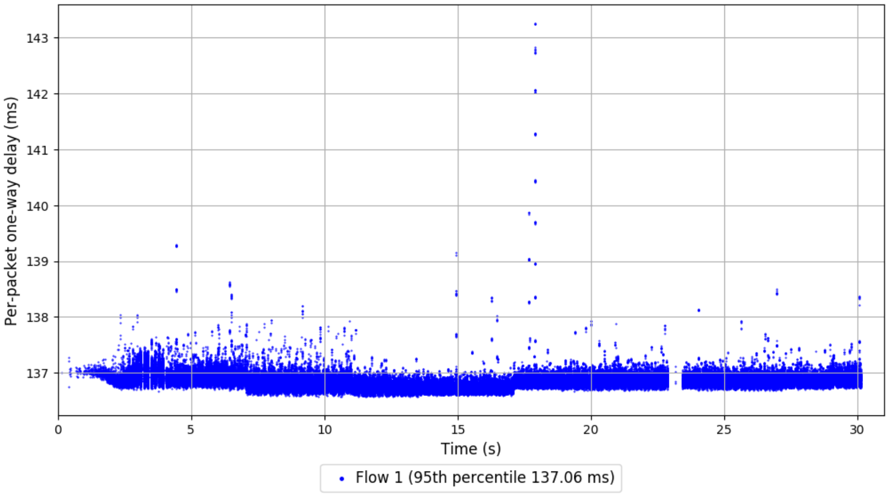




```
Run 3: Statistics of TCP BBR

Start at: 2018-08-02 02:00:17
End at: 2018-08-02 02:00:47
Local clock offset: 0.097 ms
Remote clock offset: 0.301 ms

# Below is generated by plot.py at 2018-08-02 05:10:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.56 Mbit/s
95th percentile per-packet one-way delay: 137.061 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 73.56 Mbit/s
95th percentile per-packet one-way delay: 137.061 ms
Loss rate: 0.00%
```

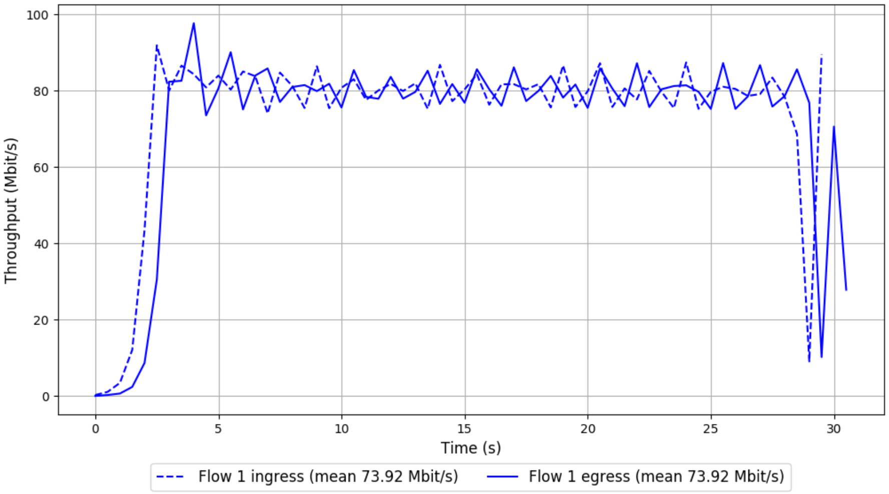
Run 3: Report of TCP BBR — Data Link

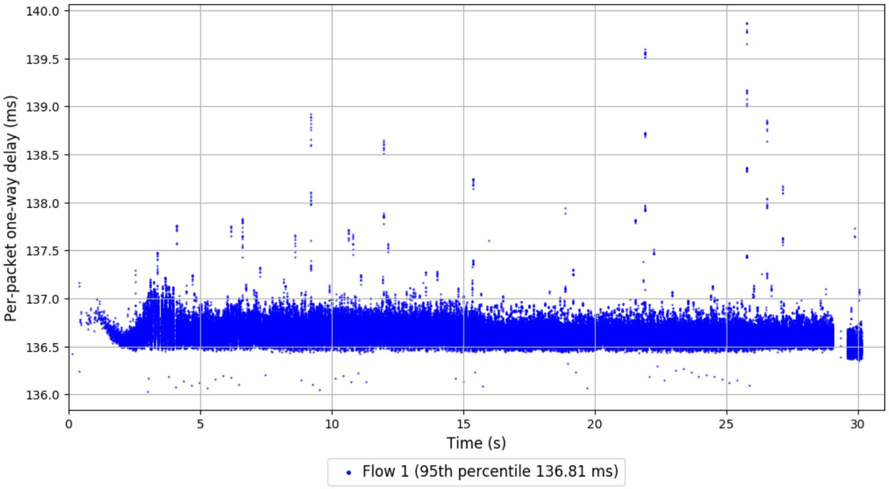




```
Run 4: Statistics of TCP BBR

Start at: 2018-08-02 02:23:34
End at: 2018-08-02 02:24:05
Local clock offset: 0.323 ms
Remote clock offset: 0.288 ms

# Below is generated by plot.py at 2018-08-02 05:10:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.92 Mbit/s
95th percentile per-packet one-way delay: 136.813 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 73.92 Mbit/s
95th percentile per-packet one-way delay: 136.813 ms
Loss rate: 0.00%
```

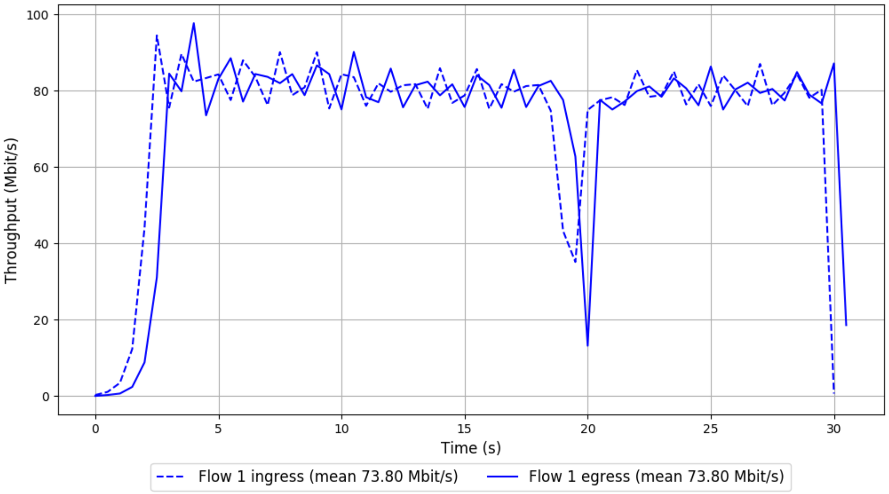
Run 4: Report of TCP BBR — Data Link

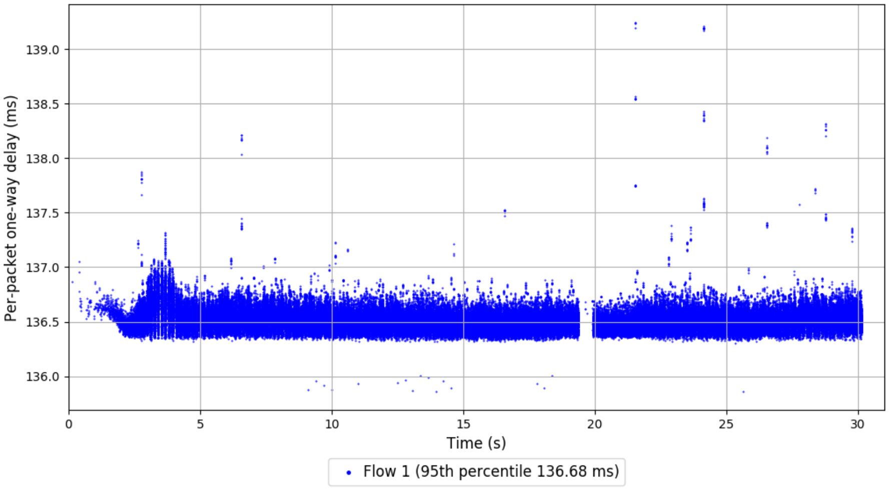




```
Run 5: Statistics of TCP BBR

Start at: 2018-08-02 02:46:55
End at: 2018-08-02 02:47:25
Local clock offset: 0.049 ms
Remote clock offset: -0.105 ms

# Below is generated by plot.py at 2018-08-02 05:10:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.80 Mbit/s
95th percentile per-packet one-way delay: 136.678 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 73.80 Mbit/s
95th percentile per-packet one-way delay: 136.678 ms
Loss rate: 0.00%
```

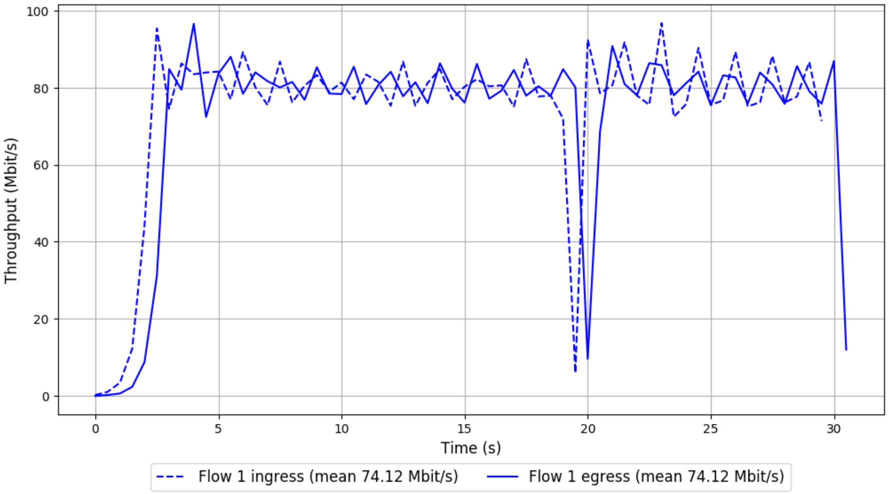
Run 5: Report of TCP BBR — Data Link

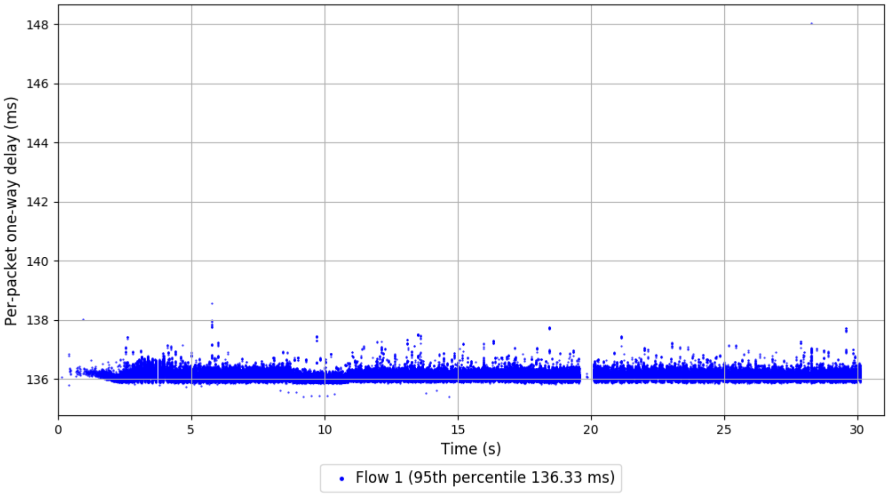




```
Run 6: Statistics of TCP BBR

Start at: 2018-08-02 03:10:37
End at: 2018-08-02 03:11:07
Local clock offset: 0.237 ms
Remote clock offset: -0.45 ms

# Below is generated by plot.py at 2018-08-02 05:10:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.12 Mbit/s
95th percentile per-packet one-way delay: 136.334 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 74.12 Mbit/s
95th percentile per-packet one-way delay: 136.334 ms
Loss rate: 0.00%
```

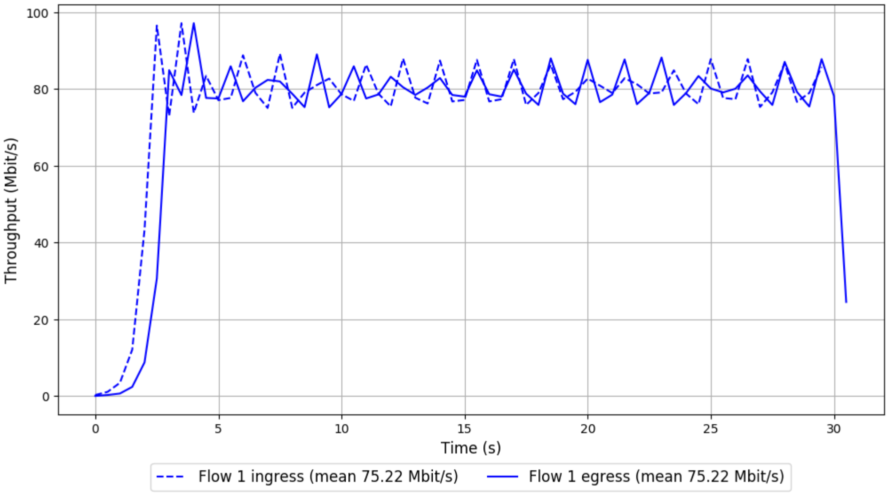
Run 6: Report of TCP BBR — Data Link

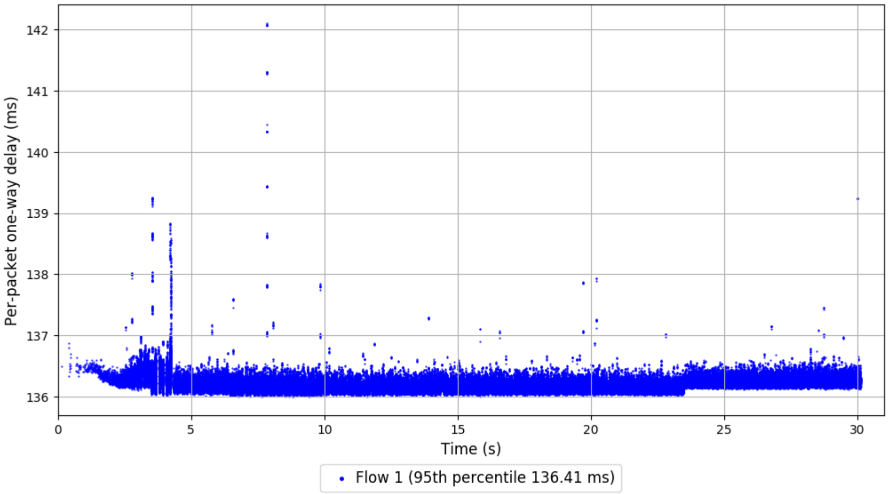




```
Run 7: Statistics of TCP BBR

Start at: 2018-08-02 03:34:00
End at: 2018-08-02 03:34:30
Local clock offset: 0.009 ms
Remote clock offset: -0.404 ms

# Below is generated by plot.py at 2018-08-02 05:10:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.22 Mbit/s
95th percentile per-packet one-way delay: 136.405 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 75.22 Mbit/s
95th percentile per-packet one-way delay: 136.405 ms
Loss rate: 0.00%
```

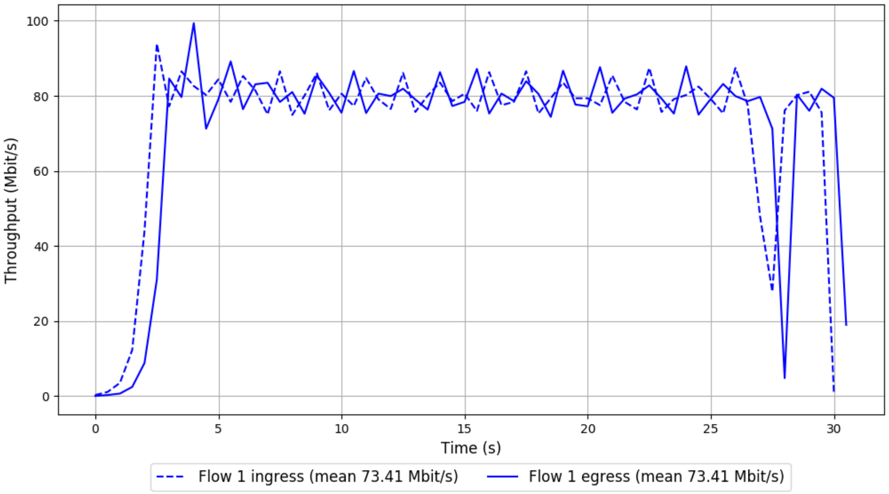
Run 7: Report of TCP BBR — Data Link

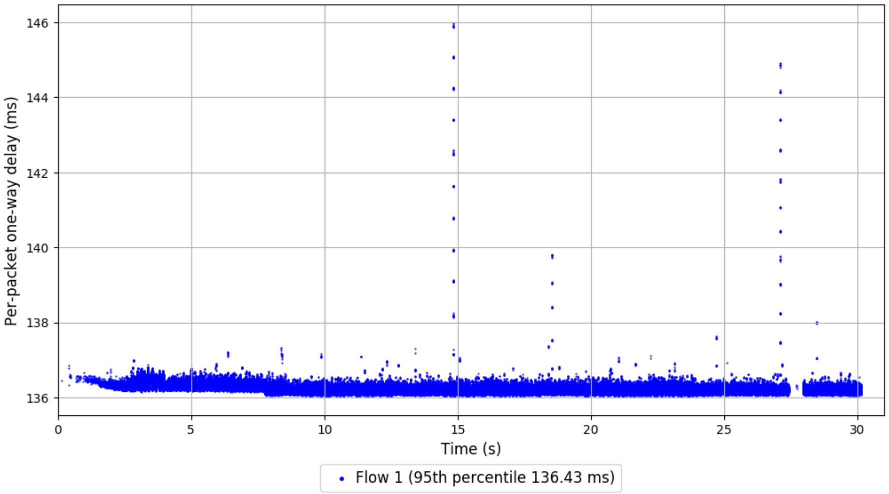




```
Run 8: Statistics of TCP BBR

Start at: 2018-08-02 03:57:36
End at: 2018-08-02 03:58:06
Local clock offset: -0.148 ms
Remote clock offset: -0.418 ms

# Below is generated by plot.py at 2018-08-02 05:10:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.41 Mbit/s
95th percentile per-packet one-way delay: 136.433 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 73.41 Mbit/s
95th percentile per-packet one-way delay: 136.433 ms
Loss rate: 0.00%
```

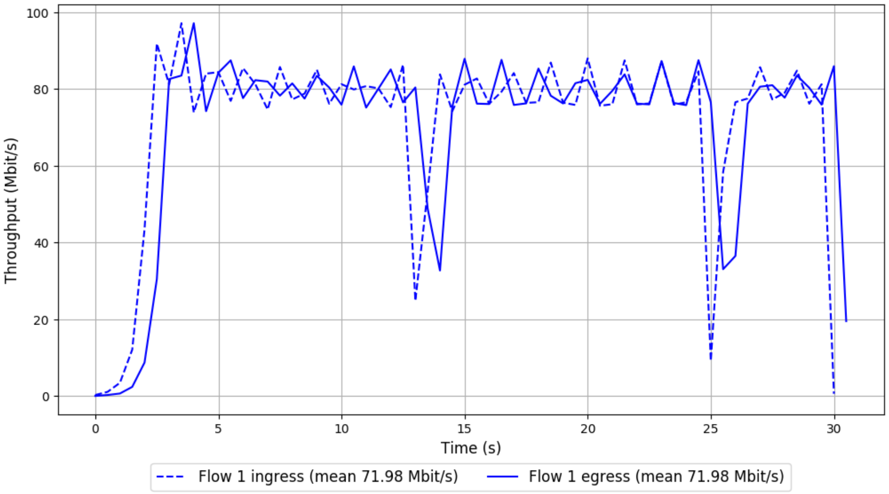
Run 8: Report of TCP BBR — Data Link

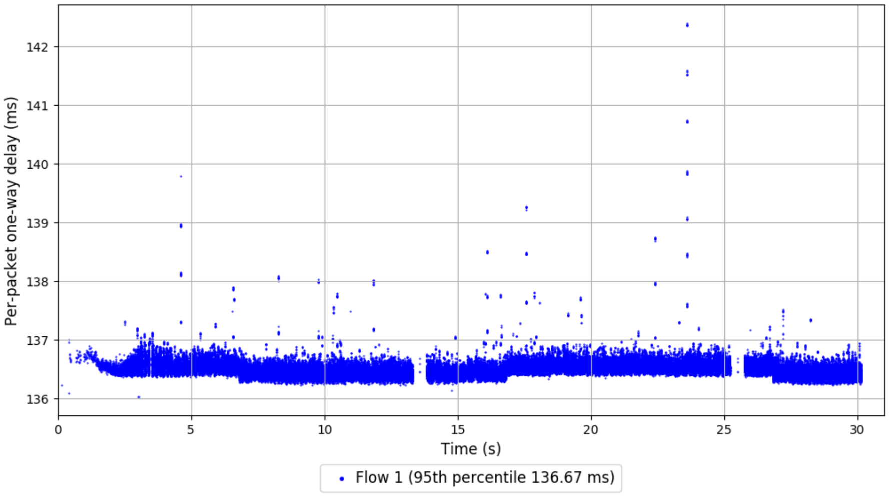




```
Run 9: Statistics of TCP BBR

Start at: 2018-08-02 04:21:17
End at: 2018-08-02 04:21:47
Local clock offset: -0.005 ms
Remote clock offset: -0.131 ms

# Below is generated by plot.py at 2018-08-02 05:11:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.98 Mbit/s
95th percentile per-packet one-way delay: 136.670 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 71.98 Mbit/s
95th percentile per-packet one-way delay: 136.670 ms
Loss rate: 0.00%
```

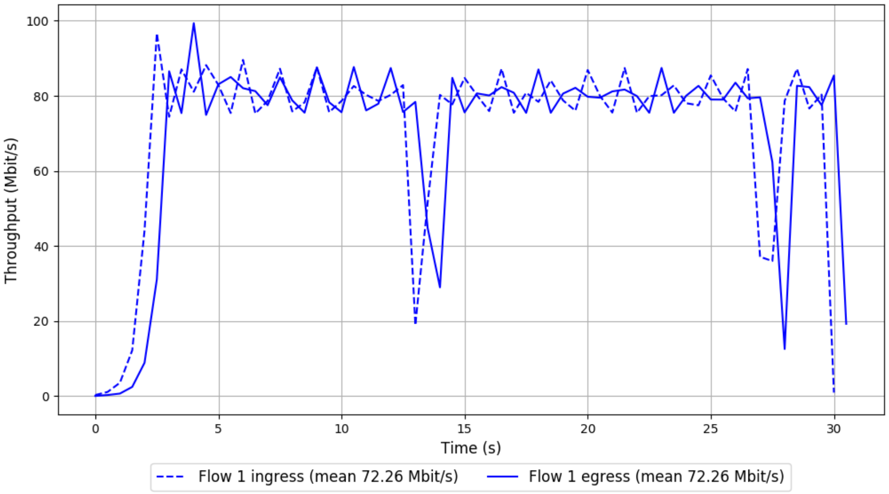
Run 9: Report of TCP BBR — Data Link

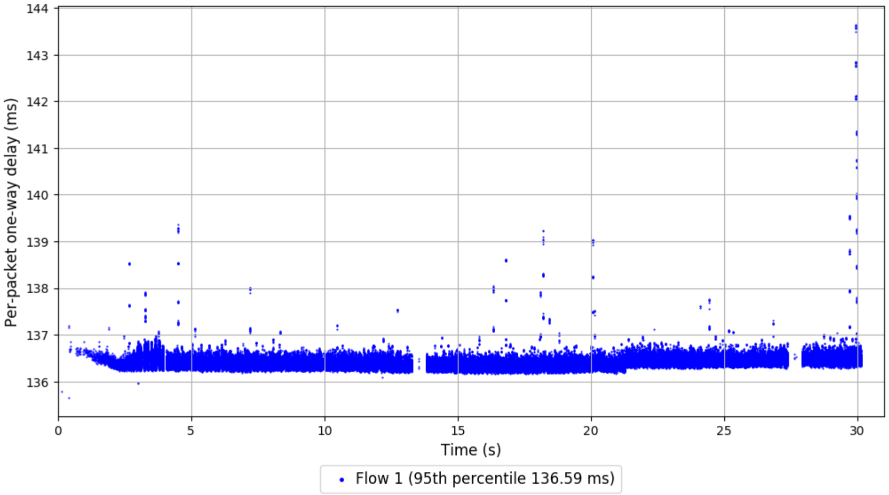




```
Run 10: Statistics of TCP BBR

Start at: 2018-08-02 04:44:22
End at: 2018-08-02 04:44:53
Local clock offset: 0.074 ms
Remote clock offset: -0.105 ms

# Below is generated by plot.py at 2018-08-02 05:11:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.26 Mbit/s
95th percentile per-packet one-way delay: 136.591 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 72.26 Mbit/s
95th percentile per-packet one-way delay: 136.591 ms
Loss rate: 0.00%
```

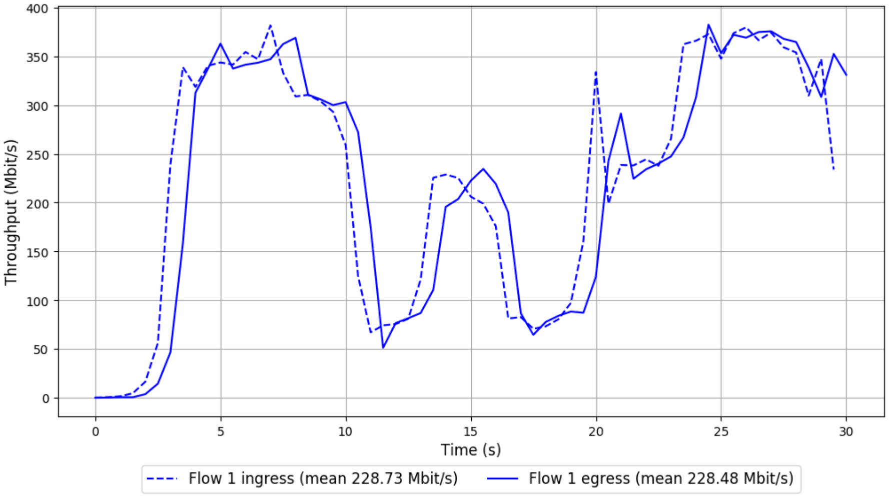
Run 10: Report of TCP BBR — Data Link

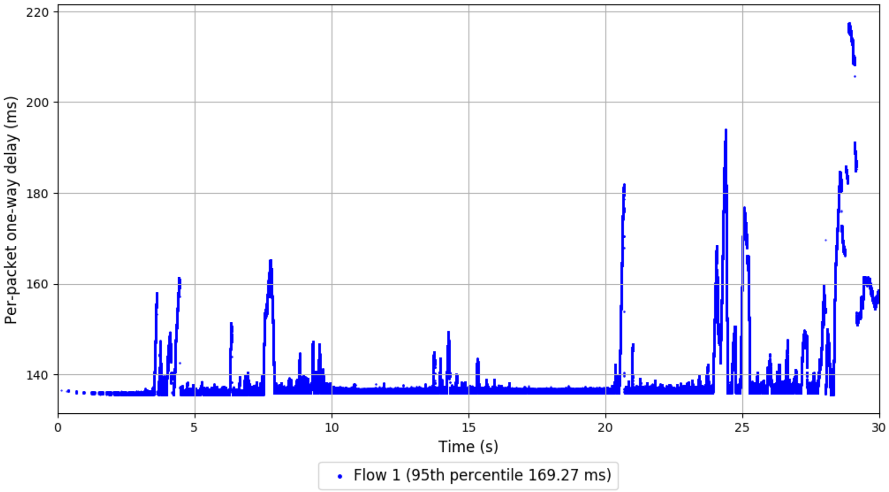




```
Run 1: Statistics of Copa

Start at: 2018-08-02 01:05:36
End at: 2018-08-02 01:06:06
Local clock offset: 0.097 ms
Remote clock offset: 0.213 ms

# Below is generated by plot.py at 2018-08-02 05:17:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 228.48 Mbit/s
95th percentile per-packet one-way delay: 169.273 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 228.48 Mbit/s
95th percentile per-packet one-way delay: 169.273 ms
Loss rate: 0.10%
```

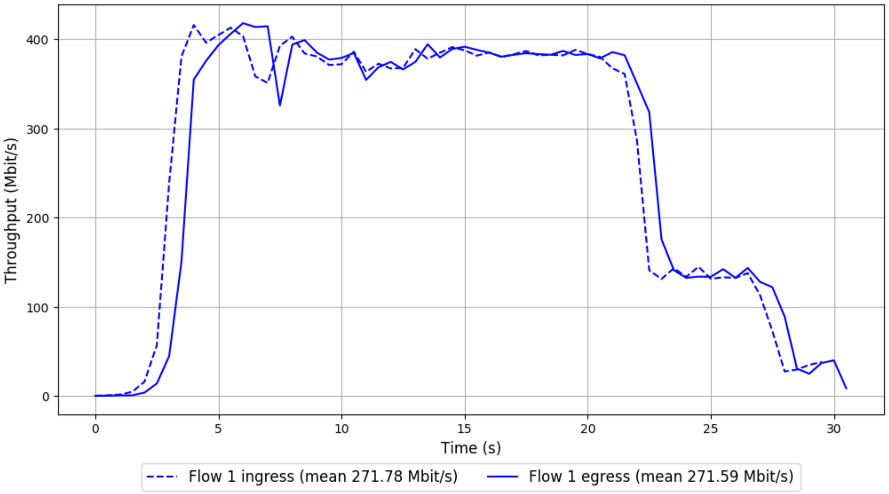
Run 1: Report of Copa — Data Link

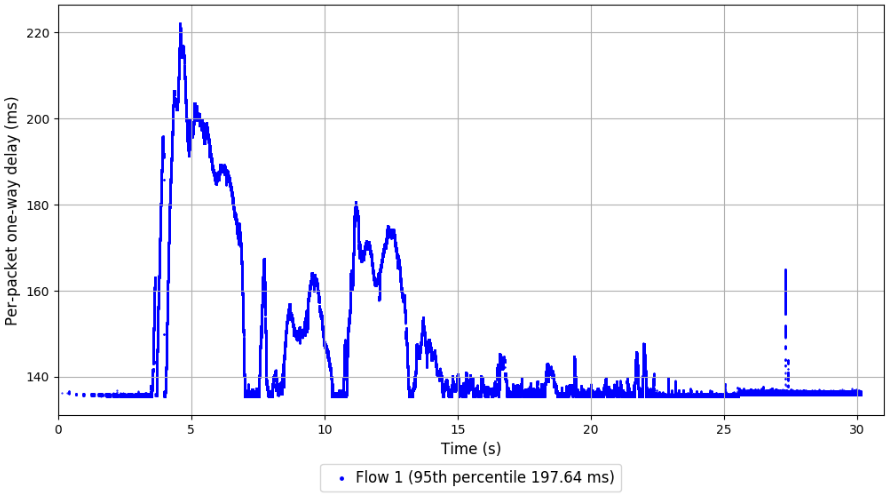




```
Run 2: Statistics of Copa

Start at: 2018-08-02 01:28:48
End at: 2018-08-02 01:29:18
Local clock offset: -0.07 ms
Remote clock offset: -0.126 ms

# Below is generated by plot.py at 2018-08-02 05:18:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 271.59 Mbit/s
95th percentile per-packet one-way delay: 197.643 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 271.59 Mbit/s
95th percentile per-packet one-way delay: 197.643 ms
Loss rate: 0.07%
```

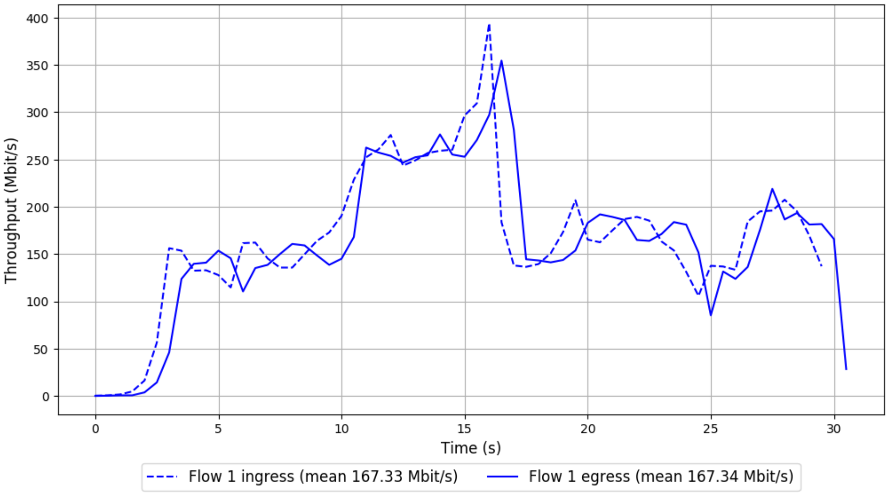
Run 2: Report of Copa — Data Link

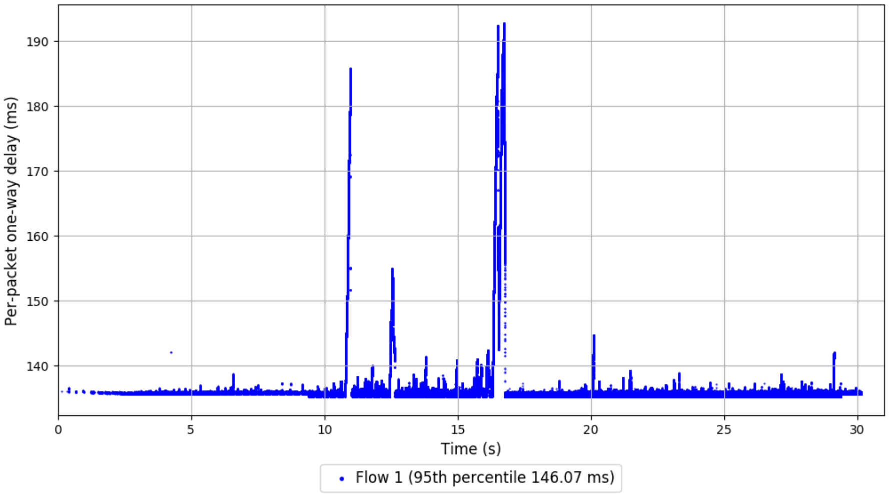




```
Run 3: Statistics of Copa

Start at: 2018-08-02 01:52:04
End at: 2018-08-02 01:52:34
Local clock offset: 0.275 ms
Remote clock offset: -0.438 ms

# Below is generated by plot.py at 2018-08-02 05:18:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 167.34 Mbit/s
95th percentile per-packet one-way delay: 146.075 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 167.34 Mbit/s
95th percentile per-packet one-way delay: 146.075 ms
Loss rate: 0.00%
```

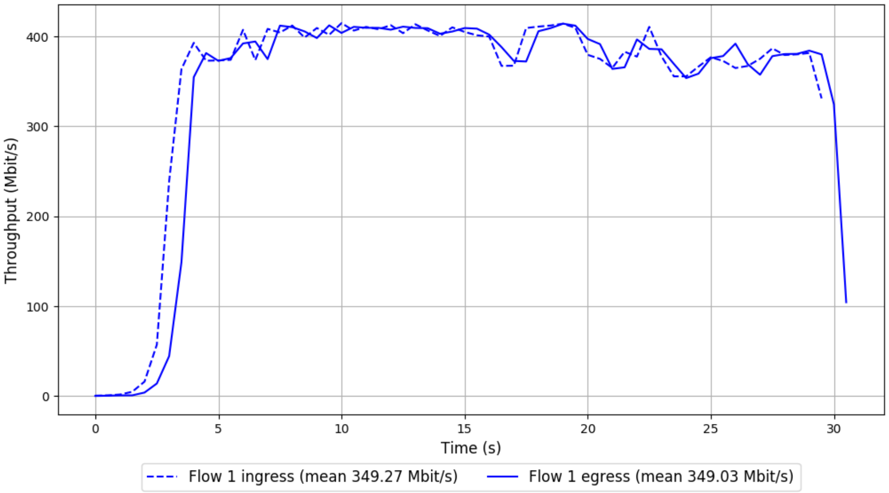
Run 3: Report of Copa — Data Link

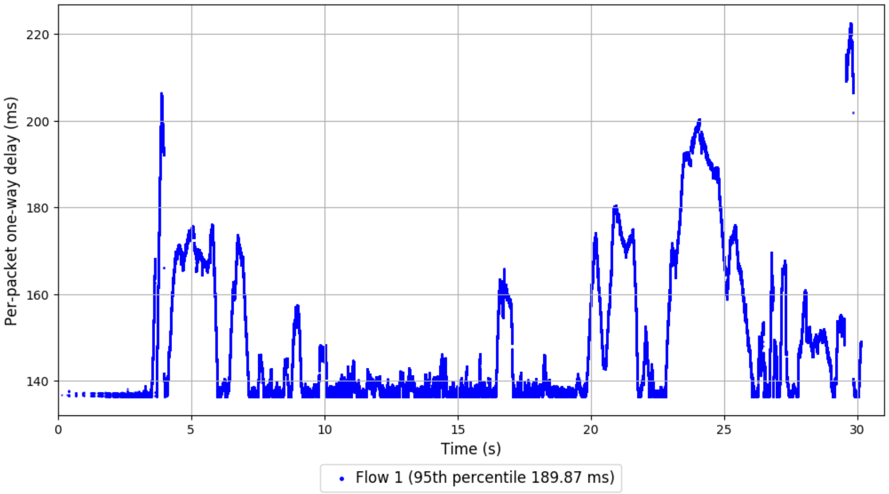




```
Run 4: Statistics of Copa

Start at: 2018-08-02 02:14:55
End at: 2018-08-02 02:15:25
Local clock offset: -0.113 ms
Remote clock offset: 0.345 ms

# Below is generated by plot.py at 2018-08-02 05:21:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 349.03 Mbit/s
95th percentile per-packet one-way delay: 189.874 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 349.03 Mbit/s
95th percentile per-packet one-way delay: 189.874 ms
Loss rate: 0.07%
```

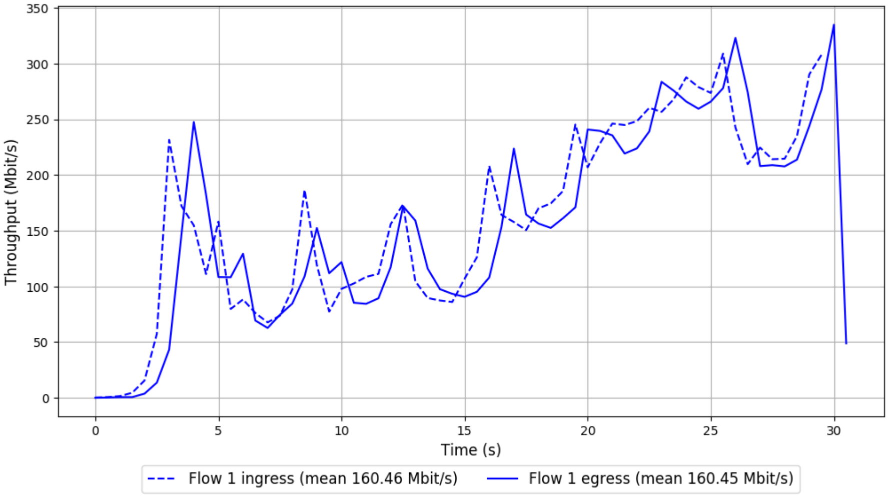
Run 4: Report of Copa — Data Link

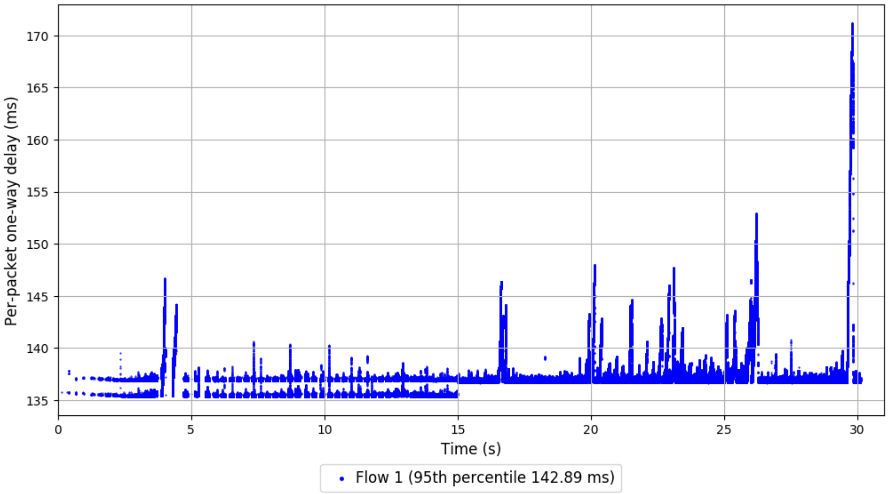




```
Run 5: Statistics of Copa

Start at: 2018-08-02 02:38:38
End at: 2018-08-02 02:39:08
Local clock offset: -0.08 ms
Remote clock offset: 0.284 ms

# Below is generated by plot.py at 2018-08-02 05:21:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 160.45 Mbit/s
95th percentile per-packet one-way delay: 142.887 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 160.45 Mbit/s
95th percentile per-packet one-way delay: 142.887 ms
Loss rate: 0.00%
```

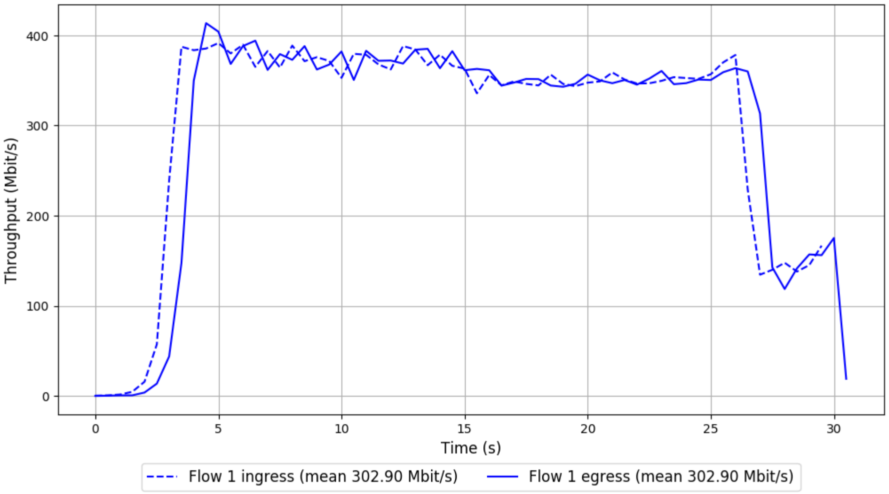
Run 5: Report of Copa — Data Link

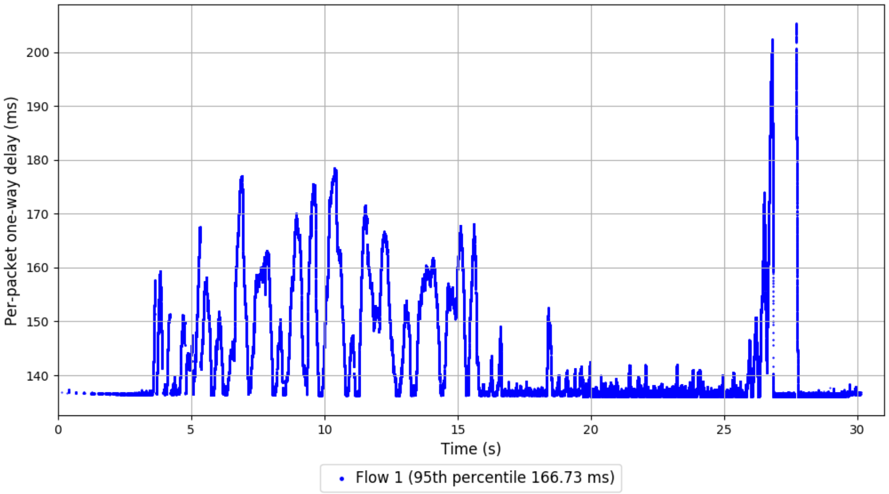




```
Run 6: Statistics of Copa

Start at: 2018-08-02 03:02:04
End at: 2018-08-02 03:02:34
Local clock offset: 0.173 ms
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2018-08-02 05:21:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 302.90 Mbit/s
95th percentile per-packet one-way delay: 166.727 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 302.90 Mbit/s
95th percentile per-packet one-way delay: 166.727 ms
Loss rate: 0.00%
```

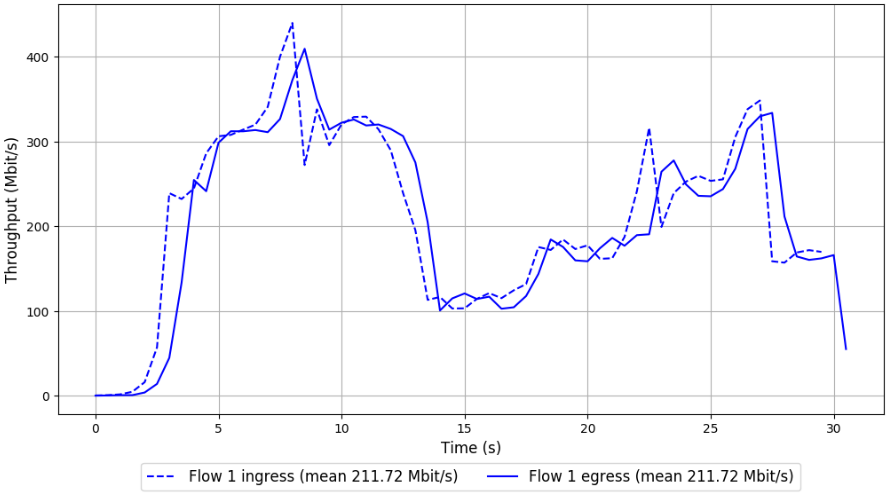
Run 6: Report of Copa — Data Link

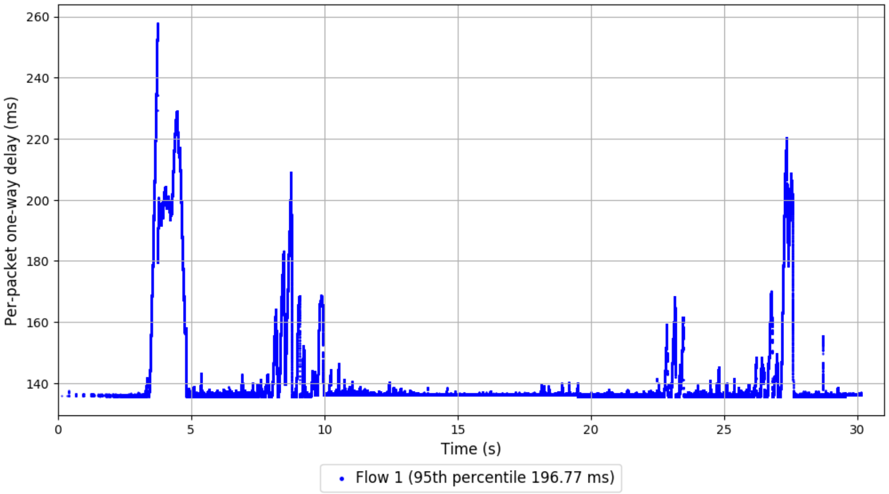




```
Run 7: Statistics of Copa

Start at: 2018-08-02 03:25:34
End at: 2018-08-02 03:26:04
Local clock offset: 0.369 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2018-08-02 05:21:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 211.72 Mbit/s
95th percentile per-packet one-way delay: 196.770 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 211.72 Mbit/s
95th percentile per-packet one-way delay: 196.770 ms
Loss rate: 0.00%
```

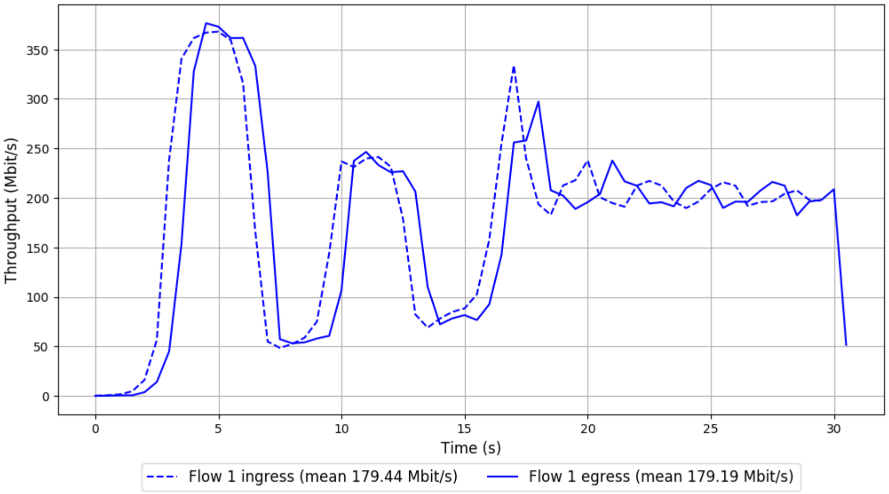
Run 7: Report of Copa — Data Link

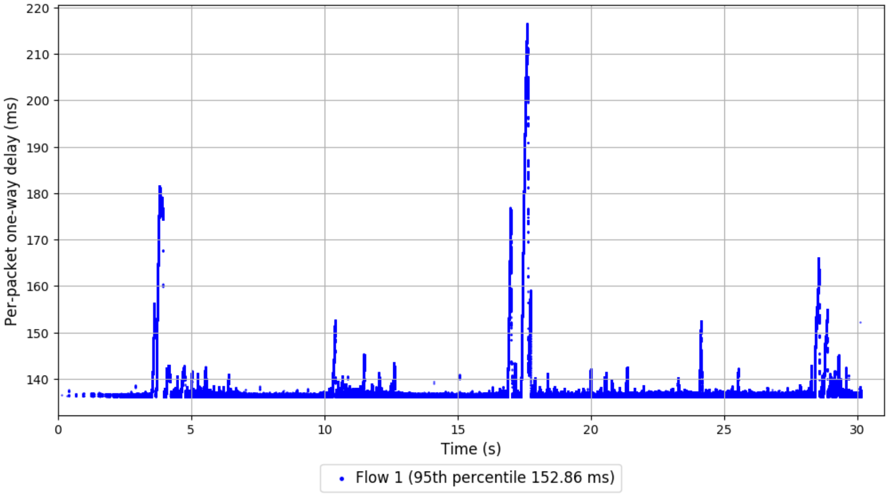




```
Run 8: Statistics of Copa

Start at: 2018-08-02 03:49:13
End at: 2018-08-02 03:49:43
Local clock offset: 0.06 ms
Remote clock offset: 0.326 ms

# Below is generated by plot.py at 2018-08-02 05:21:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 179.19 Mbit/s
95th percentile per-packet one-way delay: 152.859 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 179.19 Mbit/s
95th percentile per-packet one-way delay: 152.859 ms
Loss rate: 0.14%
```

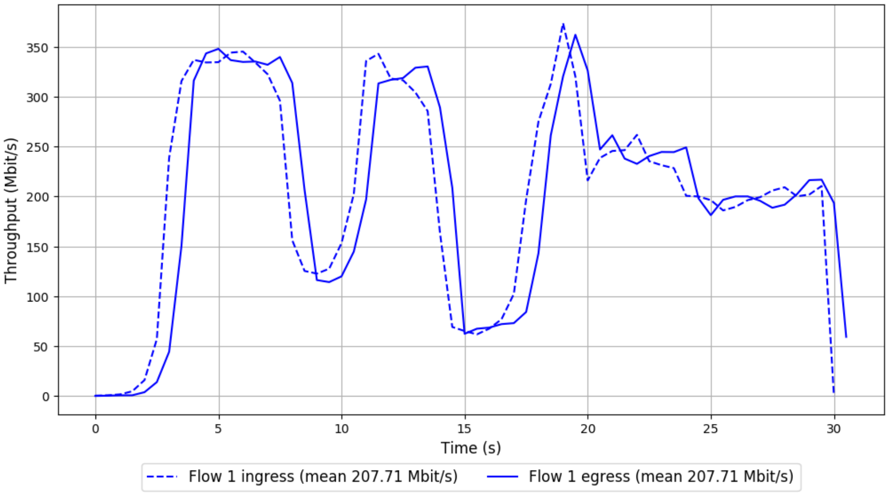
Run 8: Report of Copa — Data Link

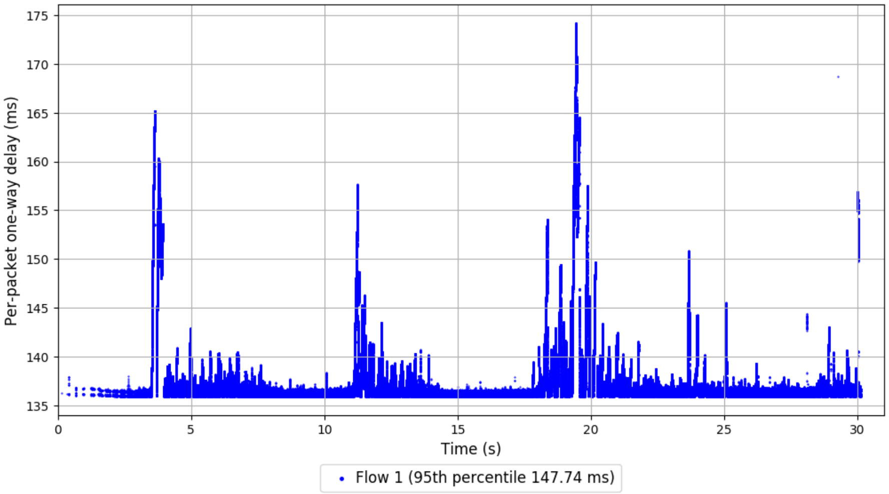




```
Run 9: Statistics of Copa

Start at: 2018-08-02 04:12:52
End at: 2018-08-02 04:13:22
Local clock offset: -0.039 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2018-08-02 05:22:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 207.71 Mbit/s
95th percentile per-packet one-way delay: 147.740 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 207.71 Mbit/s
95th percentile per-packet one-way delay: 147.740 ms
Loss rate: 0.00%
```

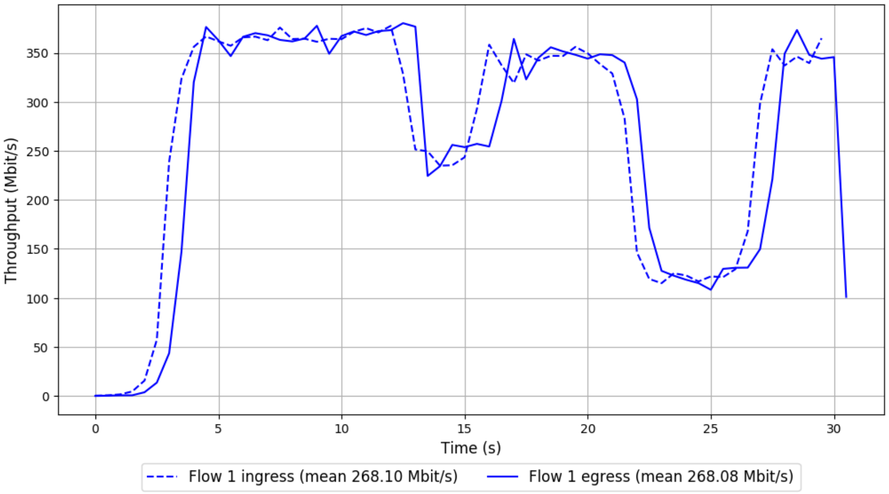
Run 9: Report of Copa — Data Link

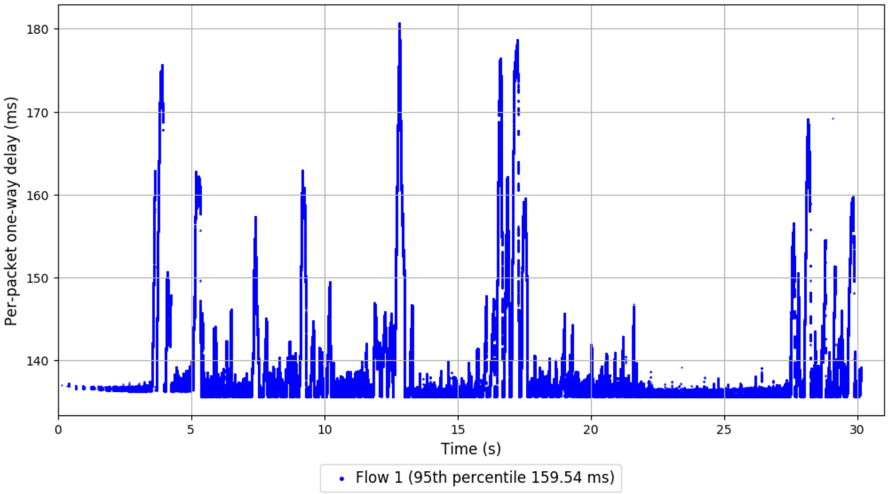




```
Run 10: Statistics of Copa

Start at: 2018-08-02 04:35:58
End at: 2018-08-02 04:36:28
Local clock offset: 0.015 ms
Remote clock offset: -0.138 ms

# Below is generated by plot.py at 2018-08-02 05:23:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 268.08 Mbit/s
95th percentile per-packet one-way delay: 159.544 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 268.08 Mbit/s
95th percentile per-packet one-way delay: 159.544 ms
Loss rate: 0.01%
```

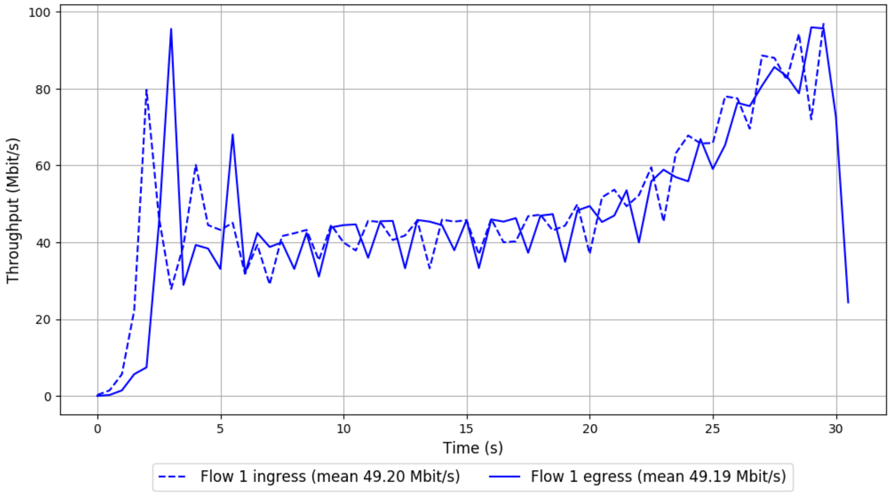
Run 10: Report of Copa — Data Link

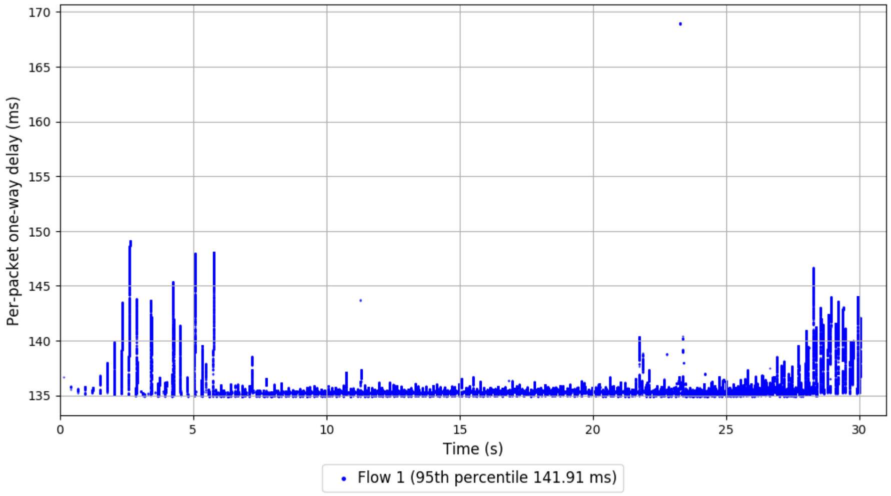




```
Run 1: Statistics of TCP Cubic

Start at: 2018-08-02 01:24:53
End at: 2018-08-02 01:25:23
Local clock offset: 0.086 ms
Remote clock offset: -0.446 ms

# Below is generated by plot.py at 2018-08-02 05:23:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 49.19 Mbit/s
95th percentile per-packet one-way delay: 141.908 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.19 Mbit/s
95th percentile per-packet one-way delay: 141.908 ms
Loss rate: 0.00%
```

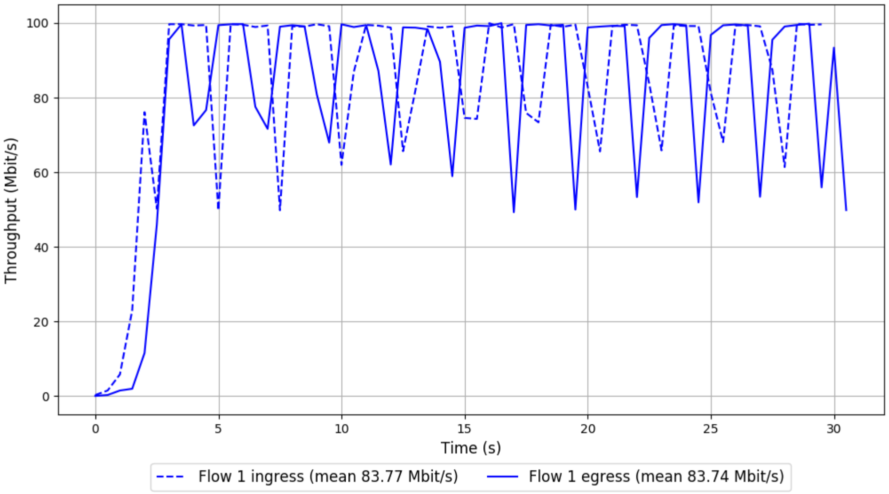
Run 1: Report of TCP Cubic — Data Link

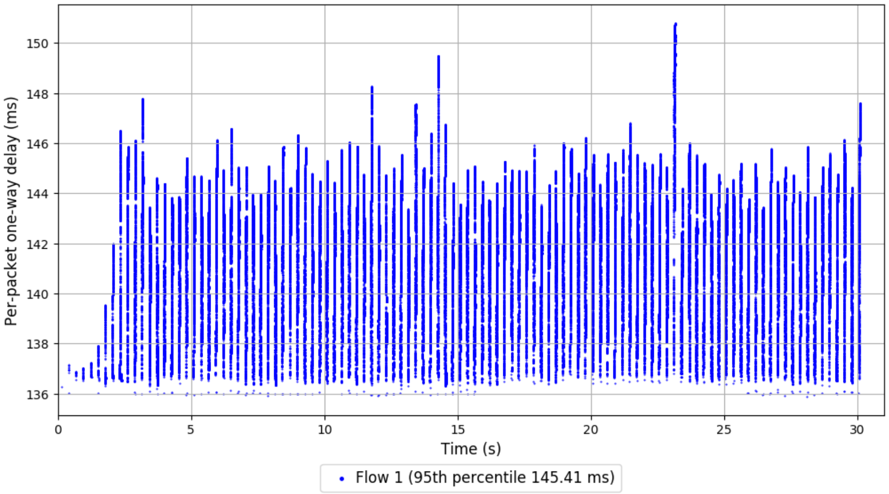




```
Run 2: Statistics of TCP Cubic

Start at: 2018-08-02 01:48:27
End at: 2018-08-02 01:48:57
Local clock offset: 0.091 ms
Remote clock offset: -0.069 ms

# Below is generated by plot.py at 2018-08-02 05:23:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.74 Mbit/s
95th percentile per-packet one-way delay: 145.405 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 83.74 Mbit/s
95th percentile per-packet one-way delay: 145.405 ms
Loss rate: 0.00%
```

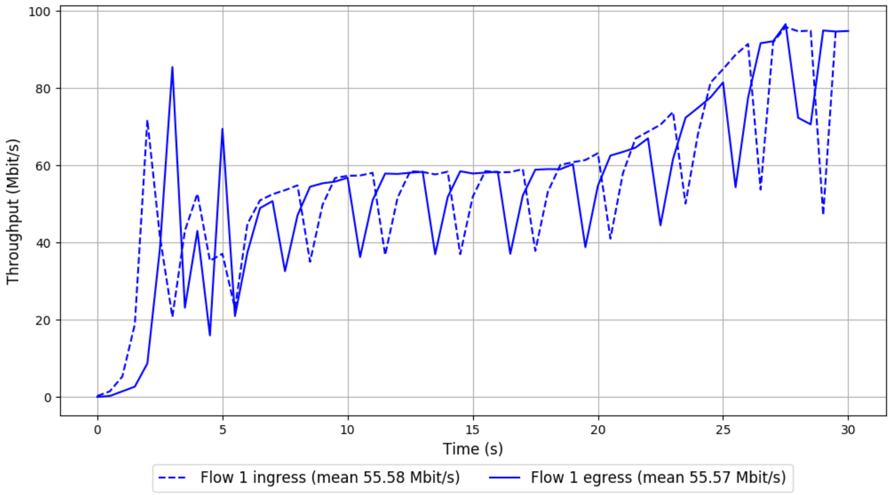
Run 2: Report of TCP Cubic — Data Link

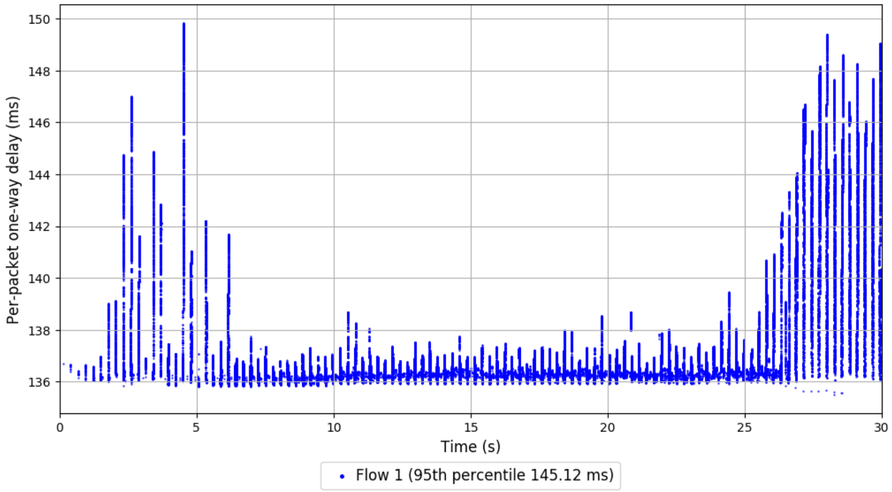




```
Run 3: Statistics of TCP Cubic

Start at: 2018-08-02 02:11:24
End at: 2018-08-02 02:11:54
Local clock offset: 0.136 ms
Remote clock offset: -0.441 ms

# Below is generated by plot.py at 2018-08-02 05:23:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 55.57 Mbit/s
95th percentile per-packet one-way delay: 145.123 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.57 Mbit/s
95th percentile per-packet one-way delay: 145.123 ms
Loss rate: 0.00%
```

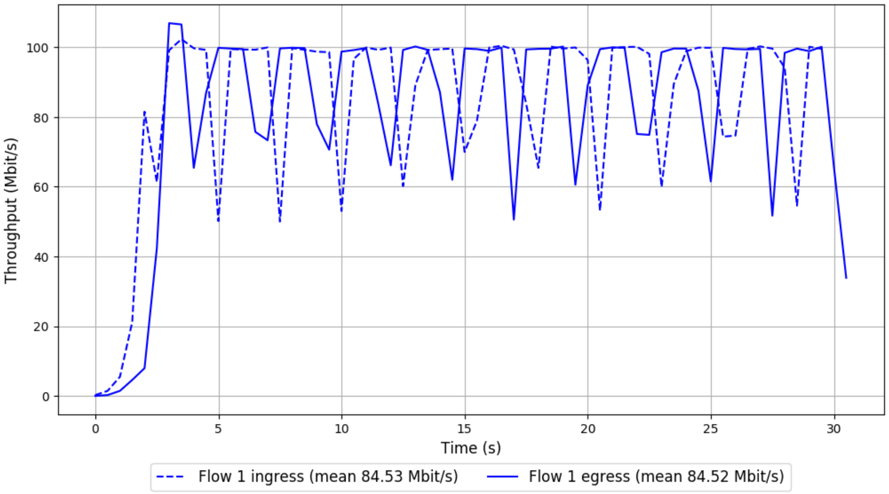
Run 3: Report of TCP Cubic — Data Link

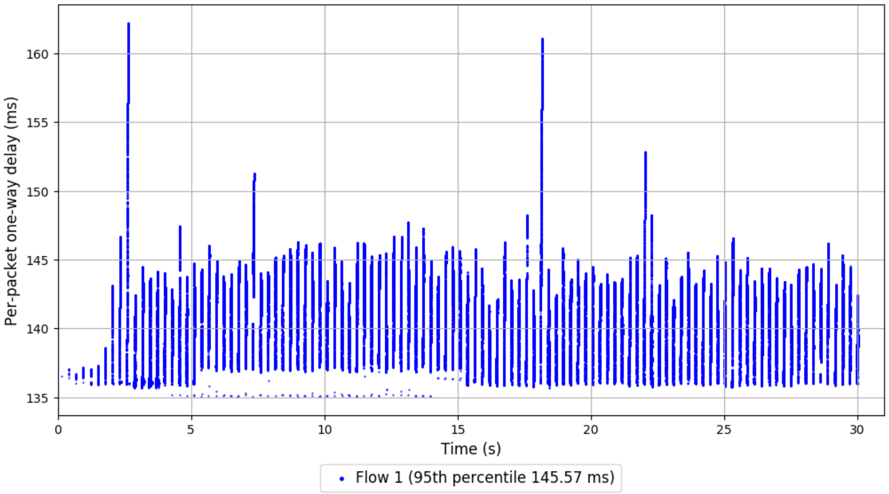




```
Run 4: Statistics of TCP Cubic

Start at: 2018-08-02 02:34:48
End at: 2018-08-02 02:35:19
Local clock offset: 0.045 ms
Remote clock offset: 0.336 ms

# Below is generated by plot.py at 2018-08-02 05:23:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.52 Mbit/s
95th percentile per-packet one-way delay: 145.573 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 84.52 Mbit/s
95th percentile per-packet one-way delay: 145.573 ms
Loss rate: 0.00%
```

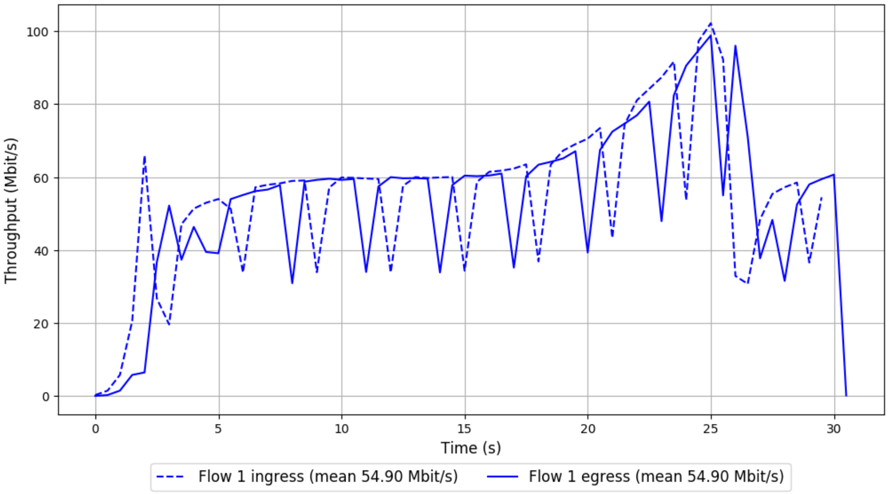
Run 4: Report of TCP Cubic — Data Link

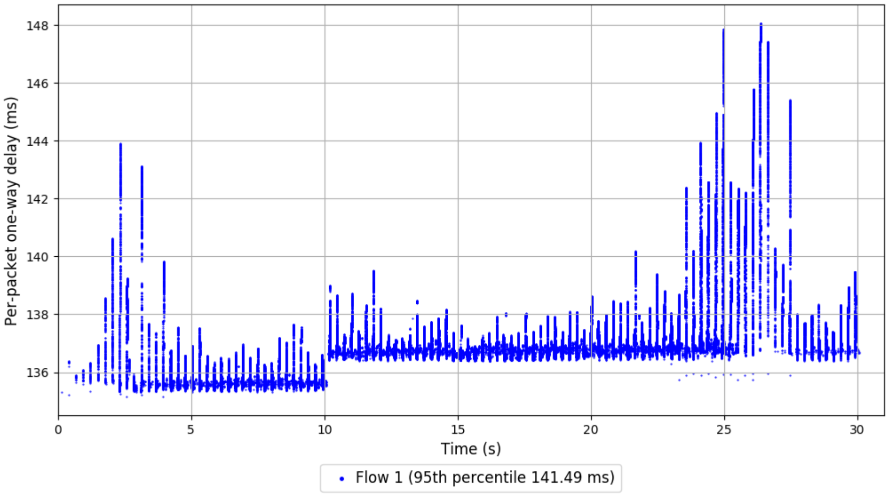




```
Run 5: Statistics of TCP Cubic

Start at: 2018-08-02 02:58:14
End at: 2018-08-02 02:58:44
Local clock offset: 0.075 ms
Remote clock offset: -0.094 ms

# Below is generated by plot.py at 2018-08-02 05:23:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.90 Mbit/s
95th percentile per-packet one-way delay: 141.486 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.90 Mbit/s
95th percentile per-packet one-way delay: 141.486 ms
Loss rate: 0.00%
```

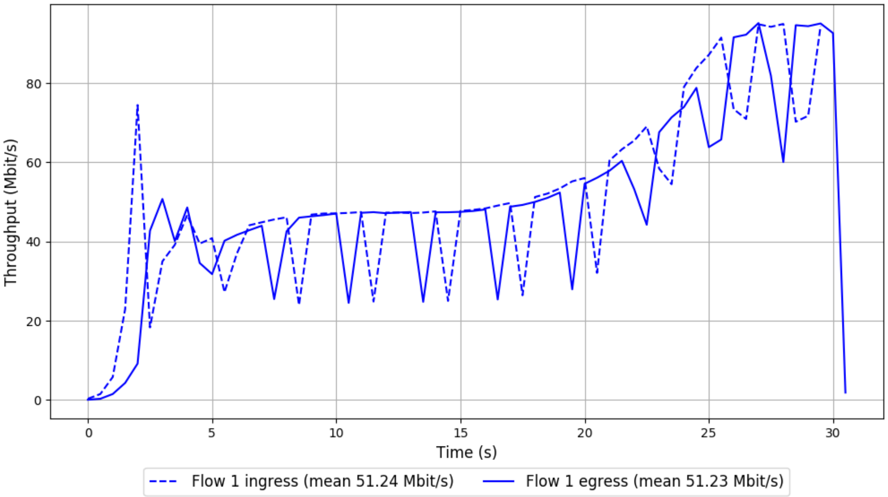
Run 5: Report of TCP Cubic — Data Link

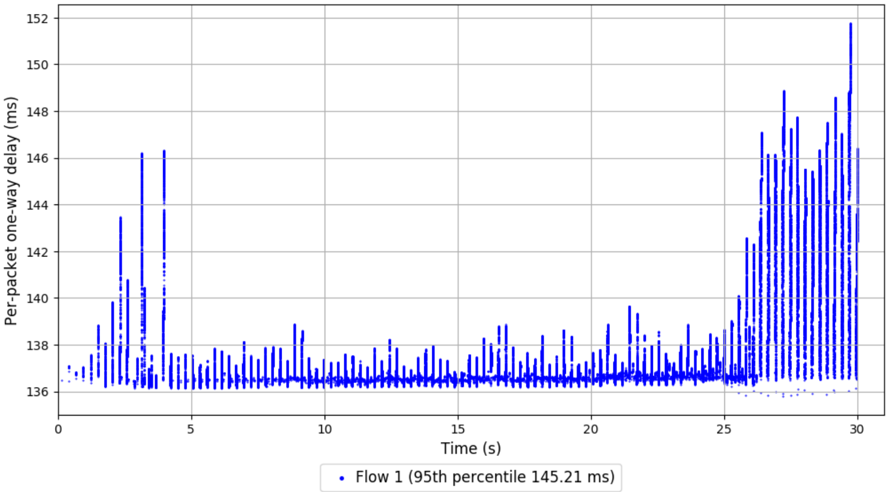




```
Run 6: Statistics of TCP Cubic

Start at: 2018-08-02 03:22:03
End at: 2018-08-02 03:22:33
Local clock offset: 0.32 ms
Remote clock offset: -0.069 ms

# Below is generated by plot.py at 2018-08-02 05:23:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 51.23 Mbit/s
95th percentile per-packet one-way delay: 145.214 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.23 Mbit/s
95th percentile per-packet one-way delay: 145.214 ms
Loss rate: 0.00%
```

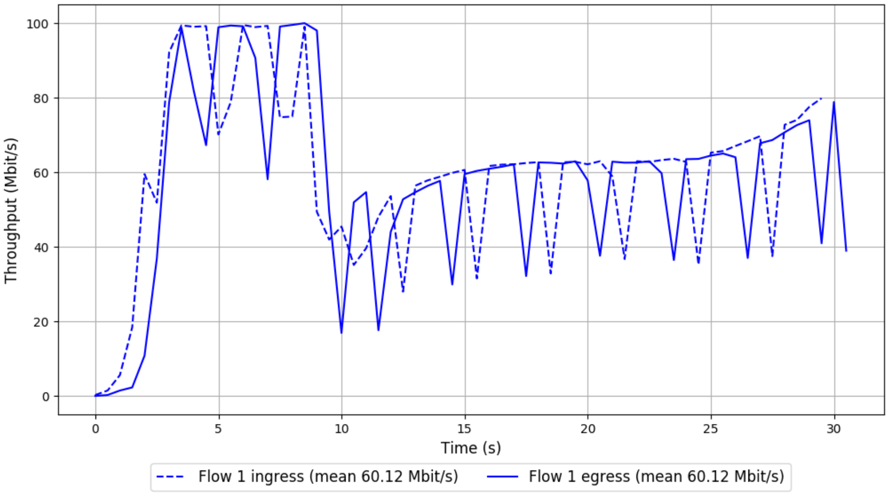
Run 6: Report of TCP Cubic — Data Link

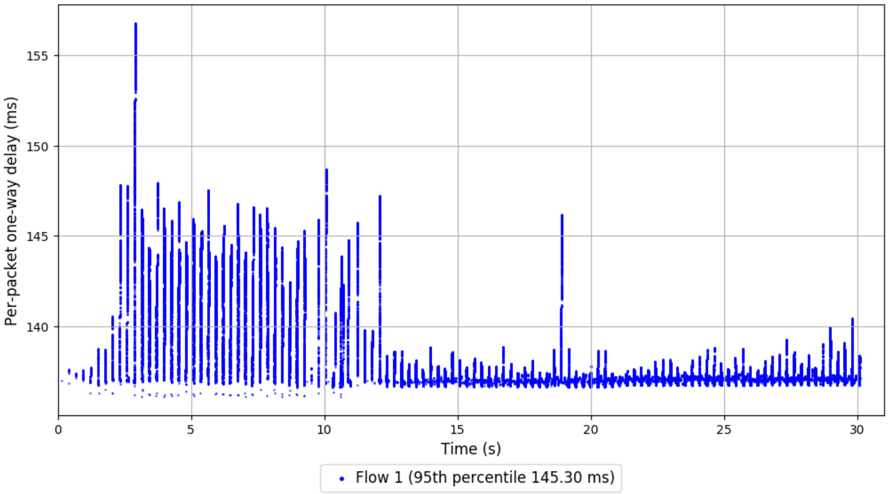




```
Run 7: Statistics of TCP Cubic

Start at: 2018-08-02 03:45:23
End at: 2018-08-02 03:45:53
Local clock offset: 0.034 ms
Remote clock offset: 0.298 ms

# Below is generated by plot.py at 2018-08-02 05:23:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.12 Mbit/s
95th percentile per-packet one-way delay: 145.297 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 60.12 Mbit/s
95th percentile per-packet one-way delay: 145.297 ms
Loss rate: 0.00%
```

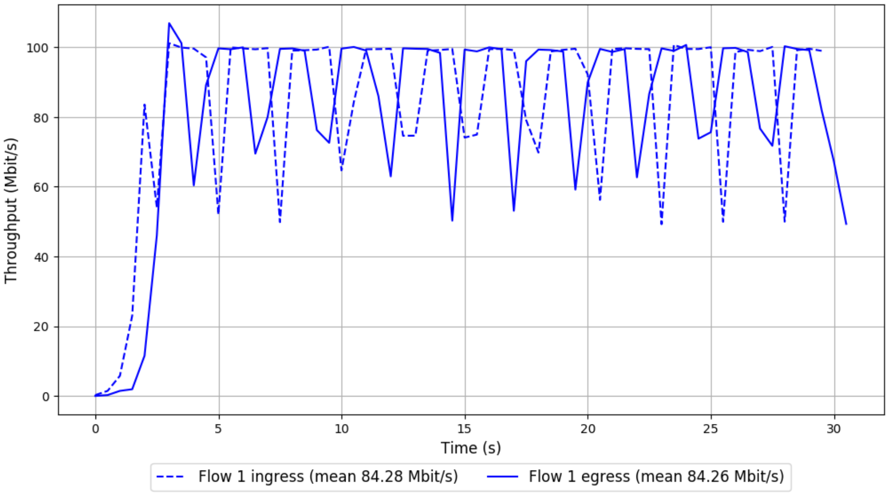
Run 7: Report of TCP Cubic — Data Link

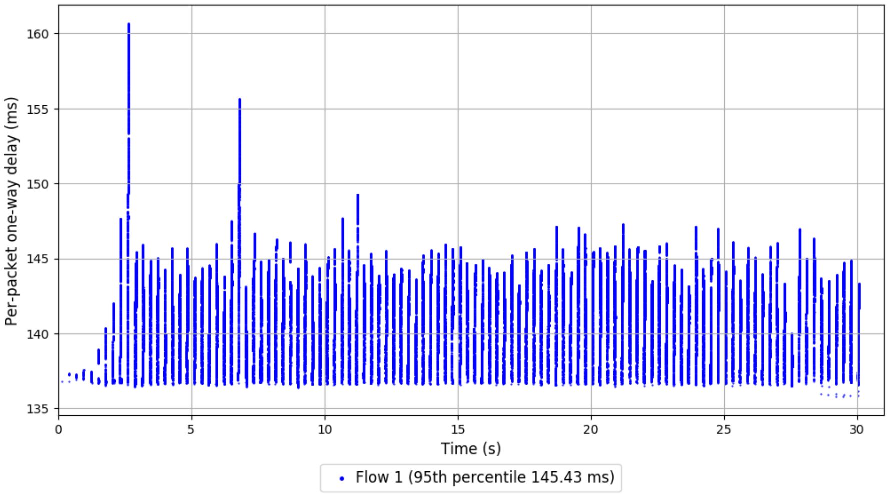




```
Run 8: Statistics of TCP Cubic

Start at: 2018-08-02 04:08:55
End at: 2018-08-02 04:09:25
Local clock offset: 0.186 ms
Remote clock offset: 0.207 ms

# Below is generated by plot.py at 2018-08-02 05:23:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.26 Mbit/s
95th percentile per-packet one-way delay: 145.431 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 84.26 Mbit/s
95th percentile per-packet one-way delay: 145.431 ms
Loss rate: 0.00%
```

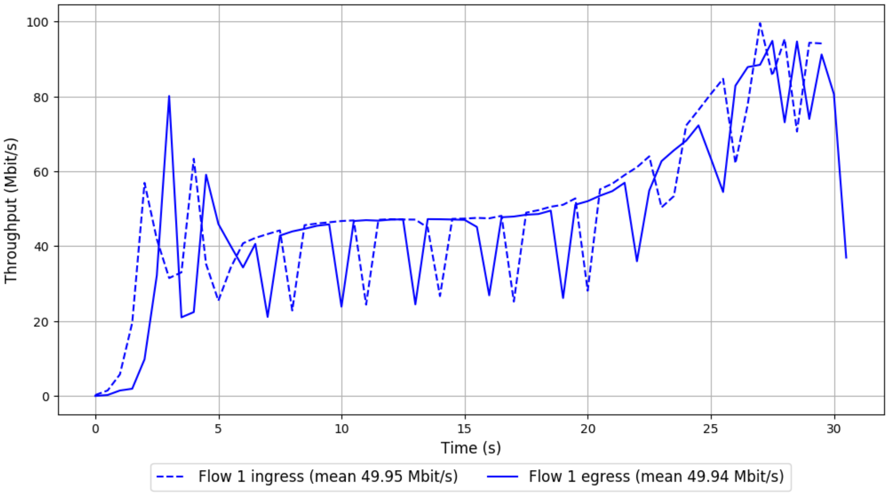
Run 8: Report of TCP Cubic — Data Link

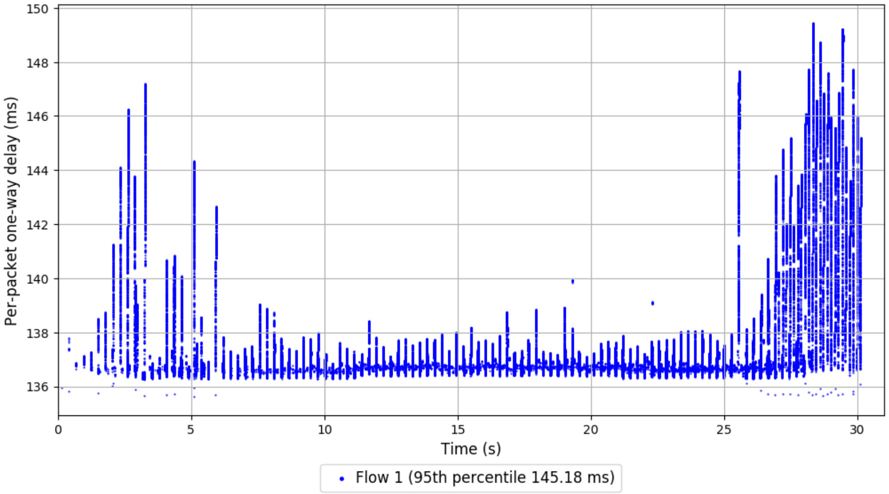




```
Run 9: Statistics of TCP Cubic

Start at: 2018-08-02 04:32:23
End at: 2018-08-02 04:32:53
Local clock offset: -0.115 ms
Remote clock offset: -0.199 ms

# Below is generated by plot.py at 2018-08-02 05:23:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 49.94 Mbit/s
95th percentile per-packet one-way delay: 145.178 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.94 Mbit/s
95th percentile per-packet one-way delay: 145.178 ms
Loss rate: 0.00%
```

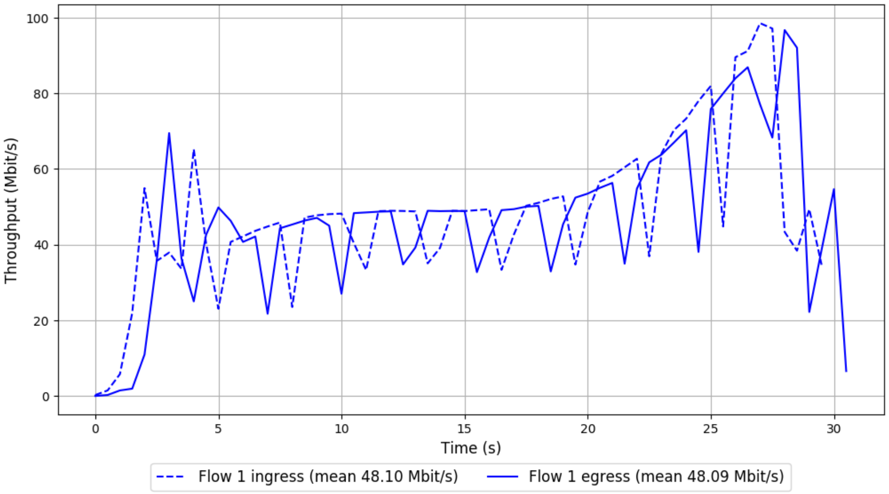
Run 9: Report of TCP Cubic — Data Link

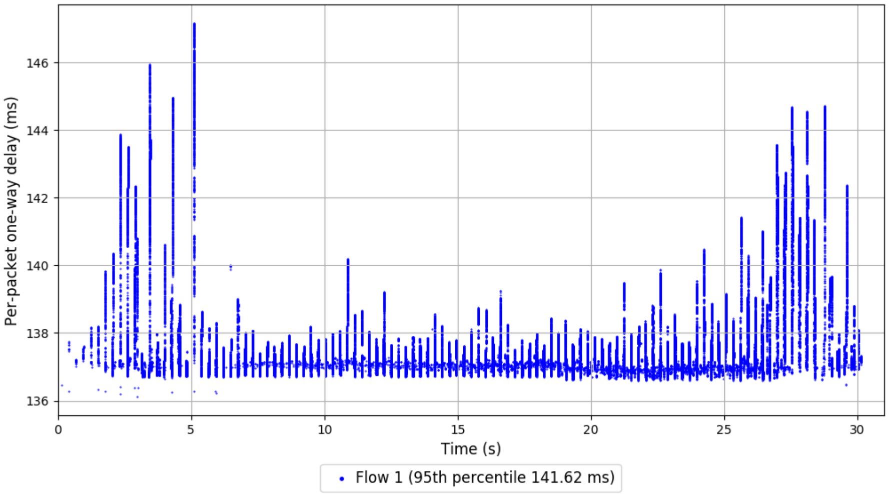




```
Run 10: Statistics of TCP Cubic

Start at: 2018-08-02 04:55:35
End at: 2018-08-02 04:56:05
Local clock offset: 0.065 ms
Remote clock offset: 0.302 ms

# Below is generated by plot.py at 2018-08-02 05:23:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 48.09 Mbit/s
95th percentile per-packet one-way delay: 141.618 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 48.09 Mbit/s
95th percentile per-packet one-way delay: 141.618 ms
Loss rate: 0.01%
```

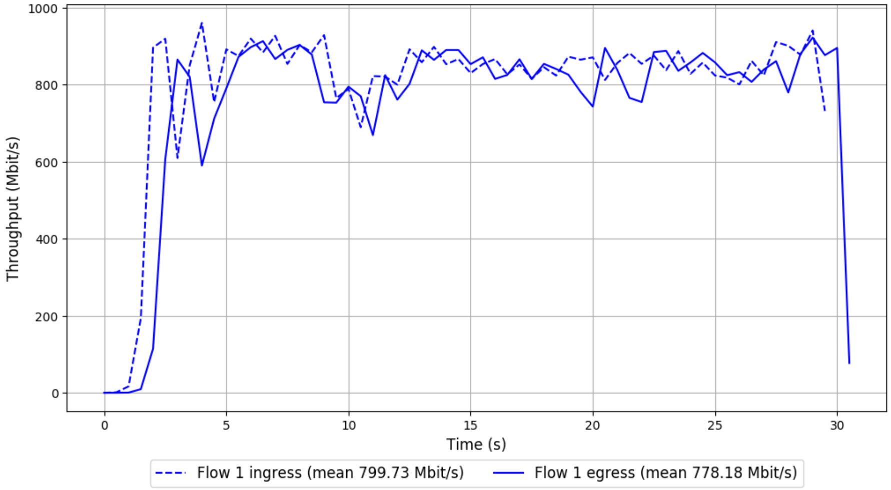
Run 10: Report of TCP Cubic — Data Link

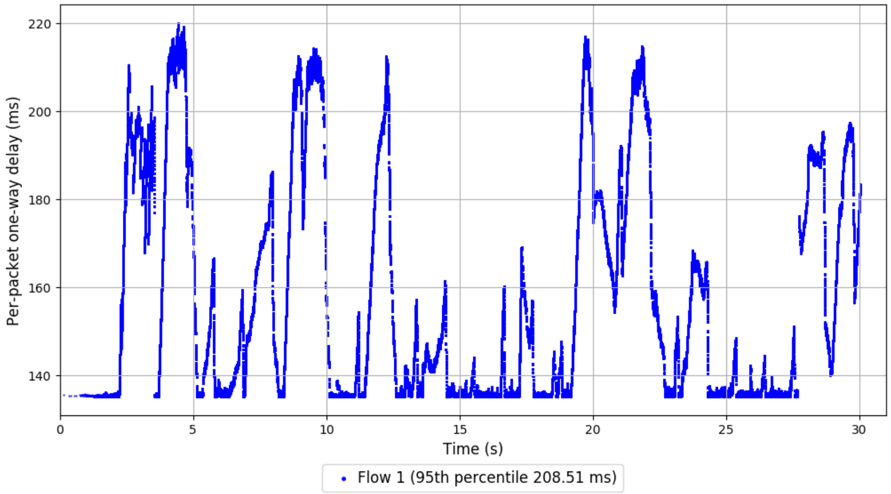




```
Run 1: Statistics of FillP

Start at: 2018-08-02 01:12:10
End at: 2018-08-02 01:12:40
Local clock offset: 0.172 ms
Remote clock offset: -0.486 ms

# Below is generated by plot.py at 2018-08-02 05:36:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 778.18 Mbit/s
95th percentile per-packet one-way delay: 208.512 ms
Loss rate: 2.69%
-- Flow 1:
Average throughput: 778.18 Mbit/s
95th percentile per-packet one-way delay: 208.512 ms
Loss rate: 2.69%
```

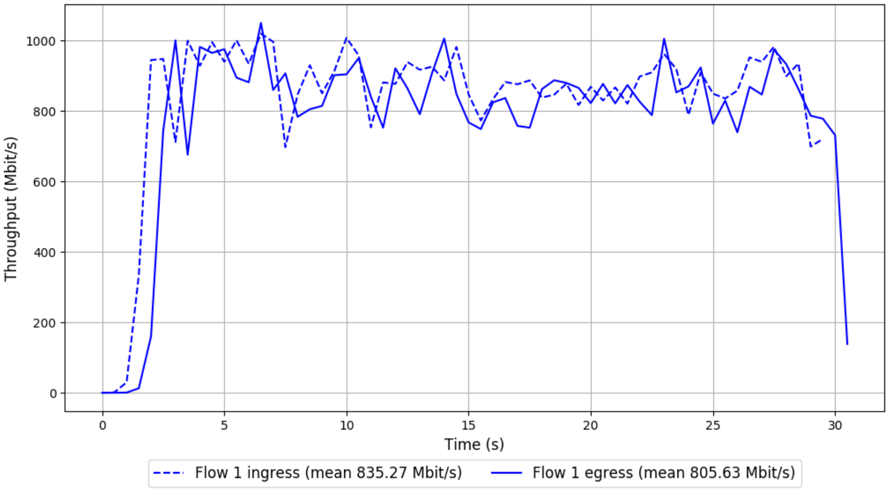
Run 1: Report of FillP — Data Link

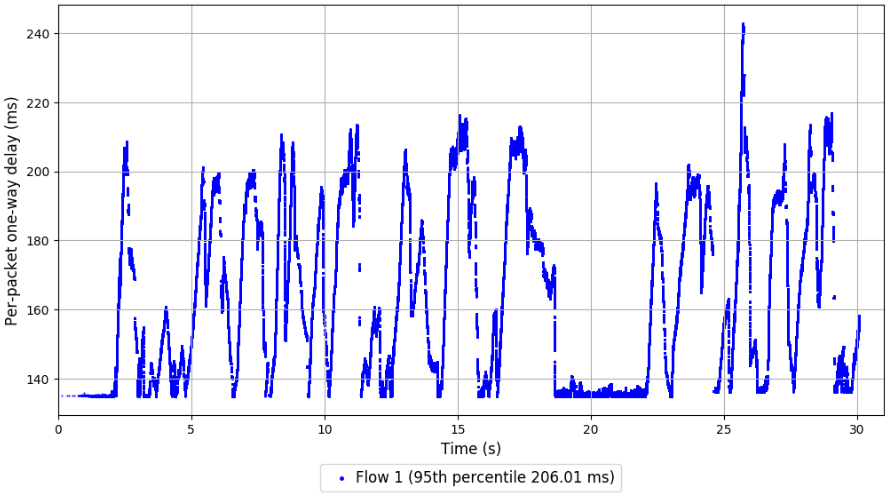




```
Run 2: Statistics of FillP

Start at: 2018-08-02 01:35:28
End at: 2018-08-02 01:35:58
Local clock offset: 0.06 ms
Remote clock offset: 0.245 ms

# Below is generated by plot.py at 2018-08-02 05:36:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 805.63 Mbit/s
95th percentile per-packet one-way delay: 206.008 ms
Loss rate: 3.54%
-- Flow 1:
Average throughput: 805.63 Mbit/s
95th percentile per-packet one-way delay: 206.008 ms
Loss rate: 3.54%
```

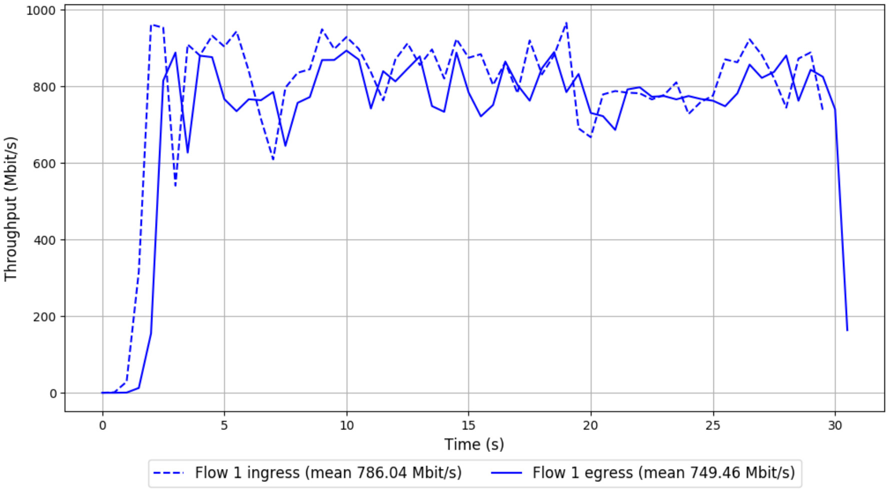
Run 2: Report of FillP — Data Link

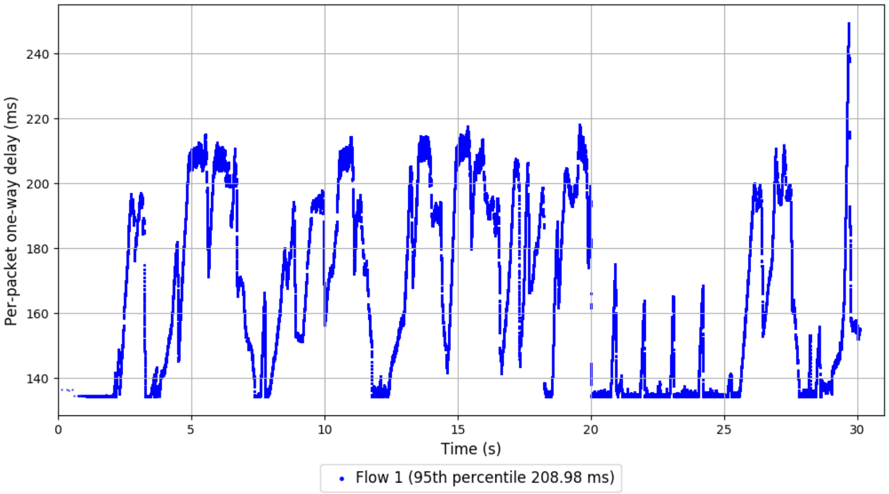




```
Run 3: Statistics of FillP

Start at: 2018-08-02 01:58:33
End at: 2018-08-02 01:59:03
Local clock offset: 0.327 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2018-08-02 05:36:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 749.46 Mbit/s
95th percentile per-packet one-way delay: 208.976 ms
Loss rate: 4.65%
-- Flow 1:
Average throughput: 749.46 Mbit/s
95th percentile per-packet one-way delay: 208.976 ms
Loss rate: 4.65%
```

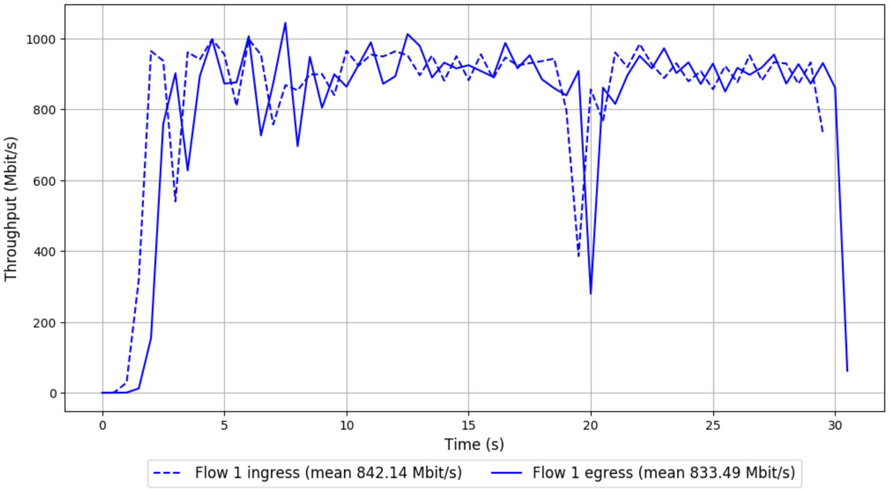
Run 3: Report of FillP — Data Link

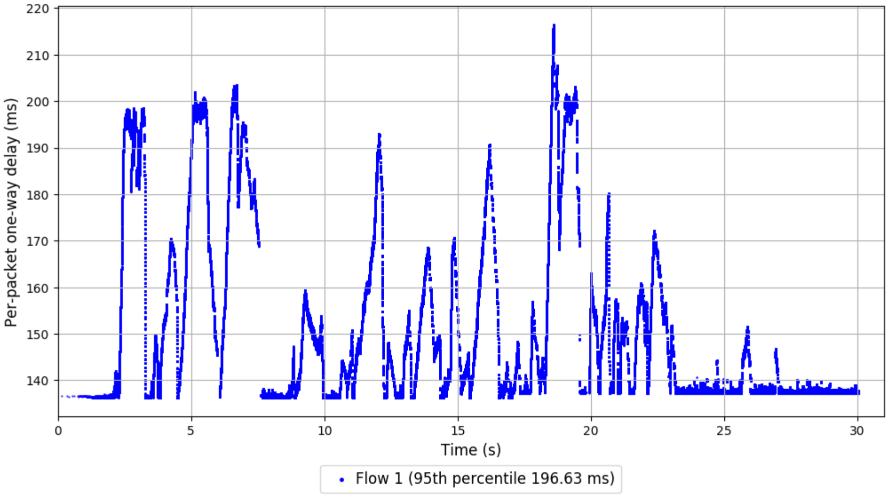




```
Run 4: Statistics of FillP

Start at: 2018-08-02 02:21:47
End at: 2018-08-02 02:22:17
Local clock offset: 0.017 ms
Remote clock offset: 0.303 ms

# Below is generated by plot.py at 2018-08-02 05:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 833.49 Mbit/s
95th percentile per-packet one-way delay: 196.632 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 833.49 Mbit/s
95th percentile per-packet one-way delay: 196.632 ms
Loss rate: 1.14%
```

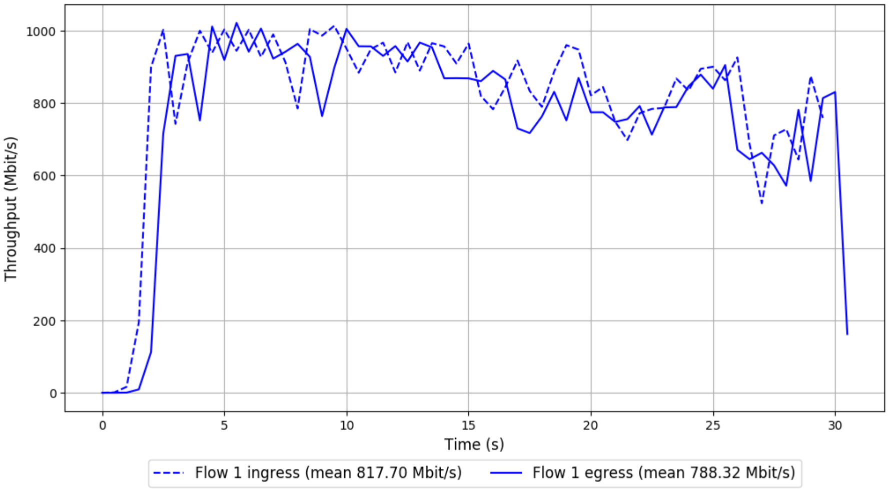
Run 4: Report of FillP — Data Link

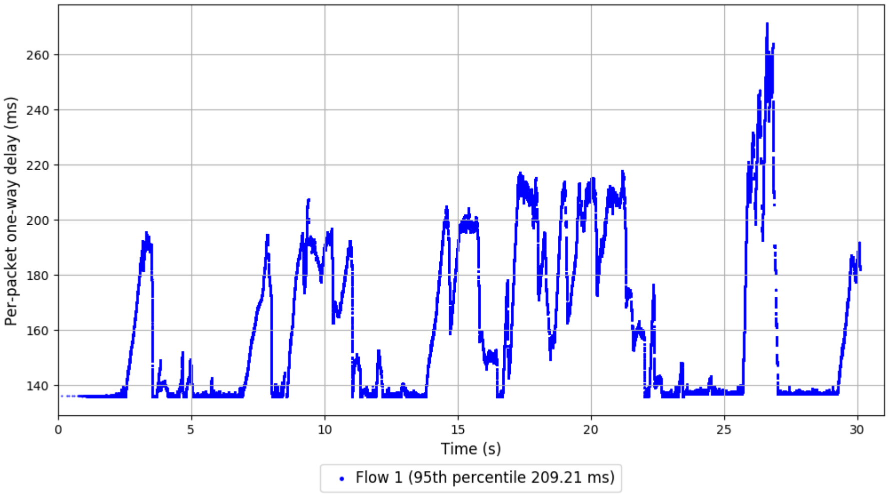




```
Run 5: Statistics of FillP

Start at: 2018-08-02 02:45:09
End at: 2018-08-02 02:45:39
Local clock offset: 0.012 ms
Remote clock offset: -0.093 ms

# Below is generated by plot.py at 2018-08-02 05:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 788.32 Mbit/s
95th percentile per-packet one-way delay: 209.213 ms
Loss rate: 3.59%
-- Flow 1:
Average throughput: 788.32 Mbit/s
95th percentile per-packet one-way delay: 209.213 ms
Loss rate: 3.59%
```

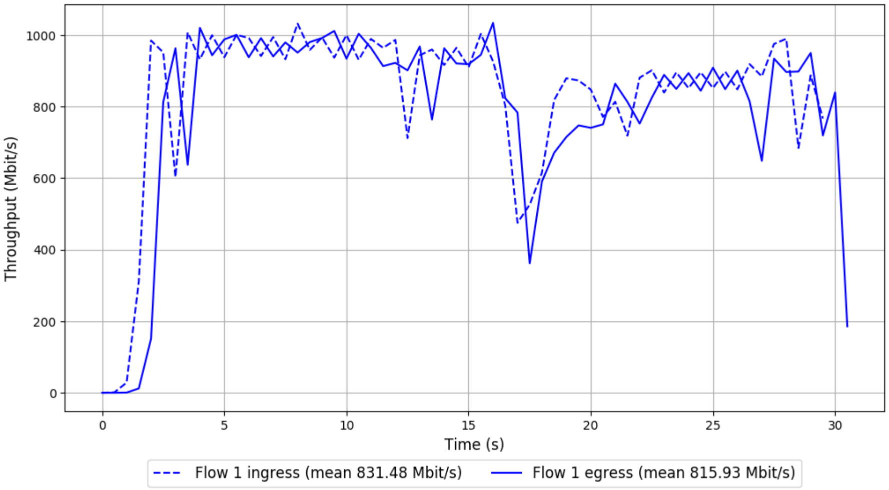
Run 5: Report of FillP — Data Link

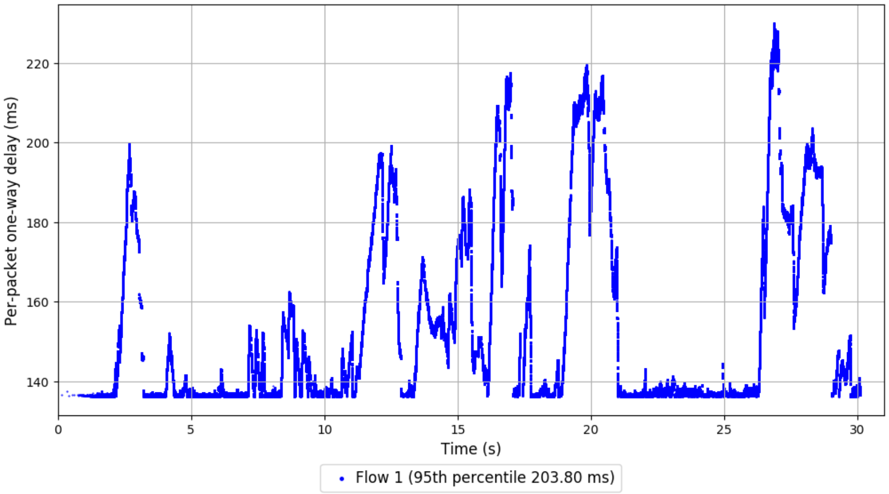




```
Run 6: Statistics of FillP

Start at: 2018-08-02 03:08:49
End at: 2018-08-02 03:09:19
Local clock offset: 0.179 ms
Remote clock offset: -0.486 ms

# Below is generated by plot.py at 2018-08-02 05:38:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 815.93 Mbit/s
95th percentile per-packet one-way delay: 203.803 ms
Loss rate: 1.87%
-- Flow 1:
Average throughput: 815.93 Mbit/s
95th percentile per-packet one-way delay: 203.803 ms
Loss rate: 1.87%
```

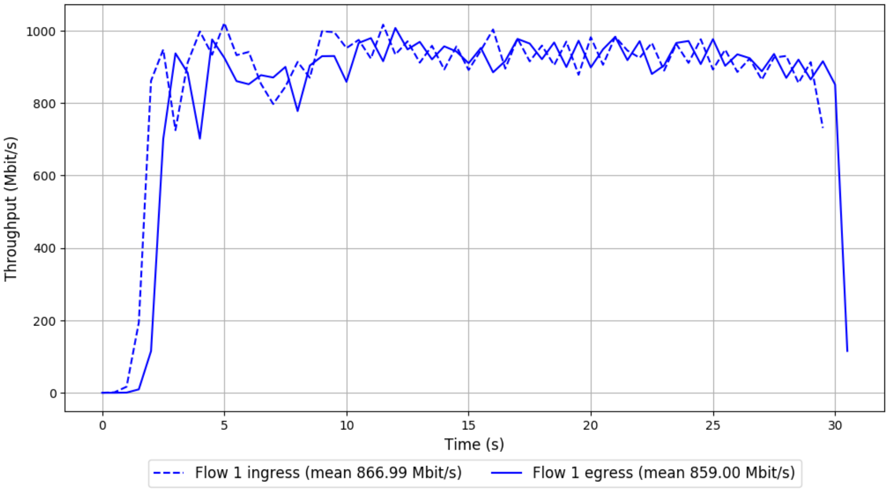
Run 6: Report of FillP — Data Link

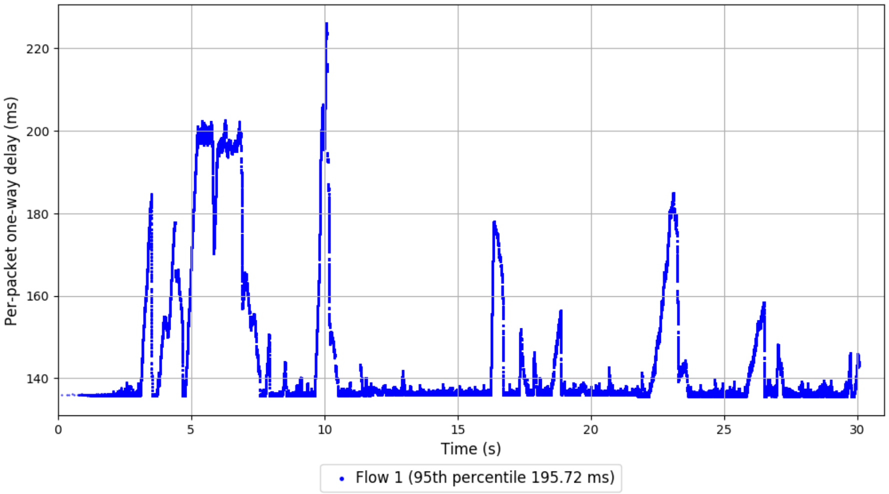




```
Run 7: Statistics of FillP

Start at: 2018-08-02 03:32:12
End at: 2018-08-02 03:32:42
Local clock offset: 0.32 ms
Remote clock offset: -0.12 ms

# Below is generated by plot.py at 2018-08-02 05:39:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 859.00 Mbit/s
95th percentile per-packet one-way delay: 195.718 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 859.00 Mbit/s
95th percentile per-packet one-way delay: 195.718 ms
Loss rate: 0.92%
```

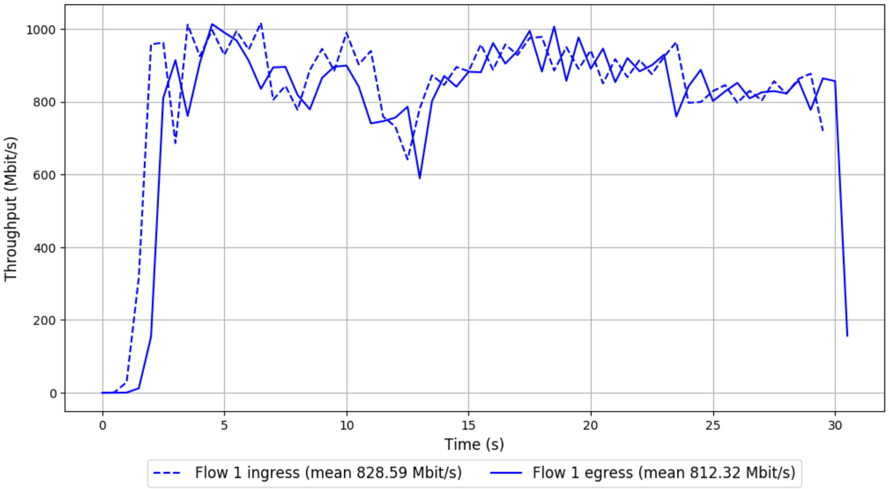
Run 7: Report of FillP — Data Link

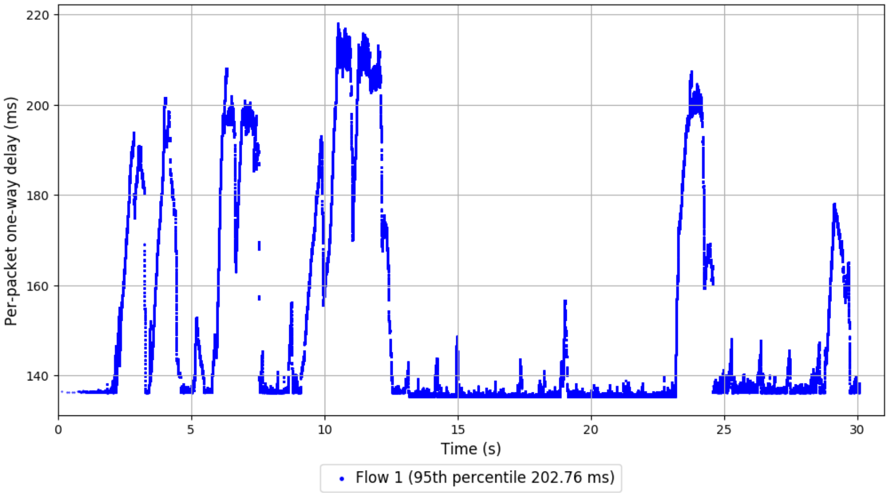




```
Run 8: Statistics of FillP

Start at: 2018-08-02 03:55:49
End at: 2018-08-02 03:56:19
Local clock offset: 0.187 ms
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2018-08-02 05:41:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 812.32 Mbit/s
95th percentile per-packet one-way delay: 202.763 ms
Loss rate: 1.96%
-- Flow 1:
Average throughput: 812.32 Mbit/s
95th percentile per-packet one-way delay: 202.763 ms
Loss rate: 1.96%
```

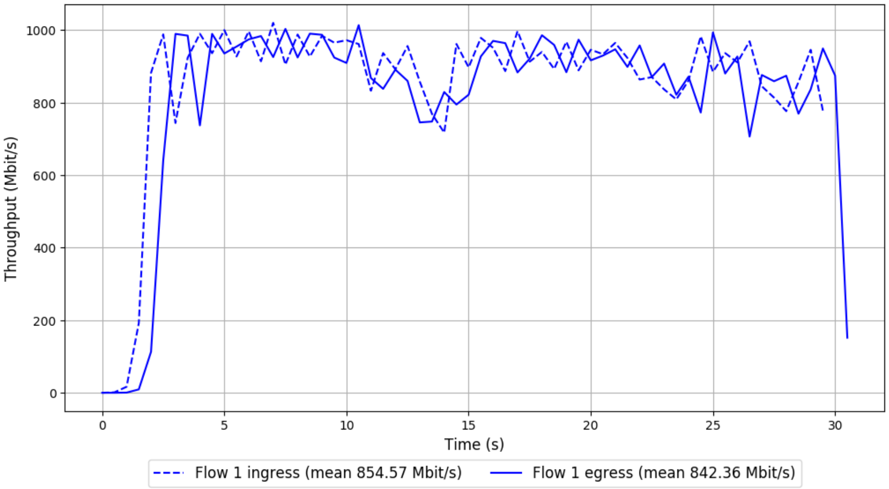
Run 8: Report of FillP — Data Link

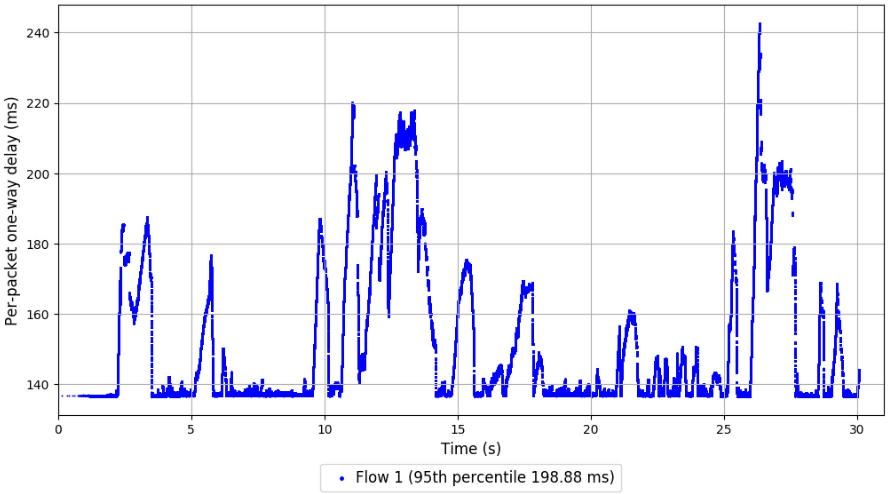




```
Run 9: Statistics of FillP

Start at: 2018-08-02 04:19:29
End at: 2018-08-02 04:19:59
Local clock offset: 0.043 ms
Remote clock offset: 0.164 ms

# Below is generated by plot.py at 2018-08-02 05:53:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 842.36 Mbit/s
95th percentile per-packet one-way delay: 198.877 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 842.36 Mbit/s
95th percentile per-packet one-way delay: 198.877 ms
Loss rate: 1.43%
```

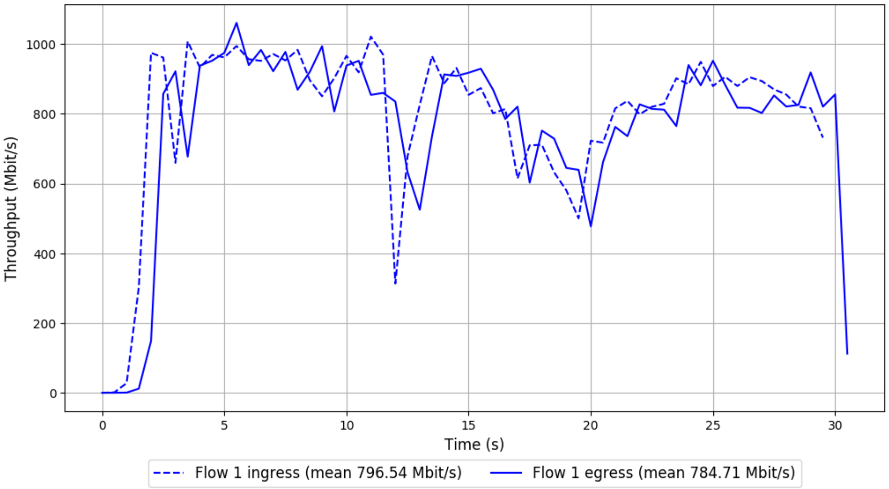
Run 9: Report of FillP — Data Link

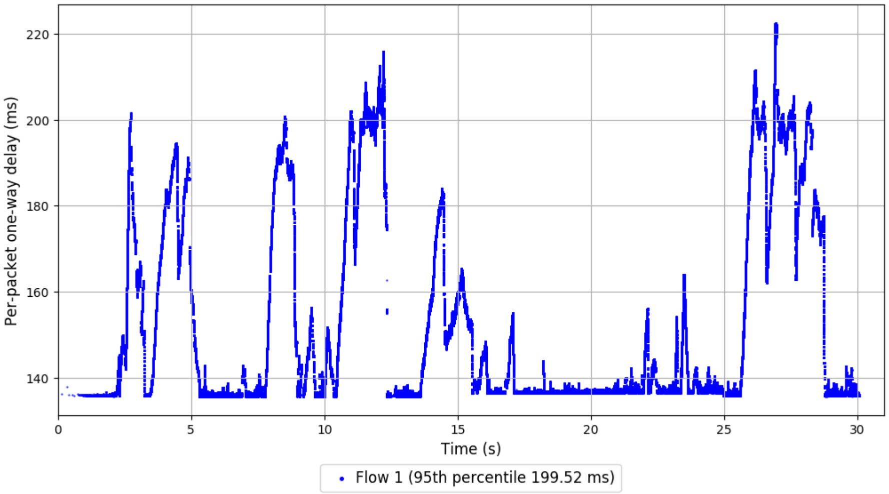




```
Run 10: Statistics of FillP

Start at: 2018-08-02 04:42:38
End at: 2018-08-02 04:43:08
Local clock offset: 0.114 ms
Remote clock offset: -0.076 ms

# Below is generated by plot.py at 2018-08-02 05:53:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 784.71 Mbit/s
95th percentile per-packet one-way delay: 199.517 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 784.71 Mbit/s
95th percentile per-packet one-way delay: 199.517 ms
Loss rate: 1.49%
```

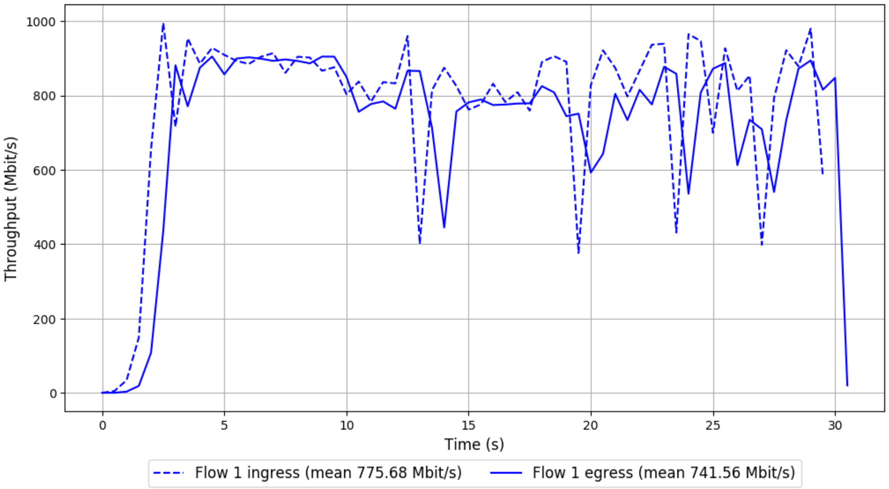
Run 10: Report of FillP — Data Link

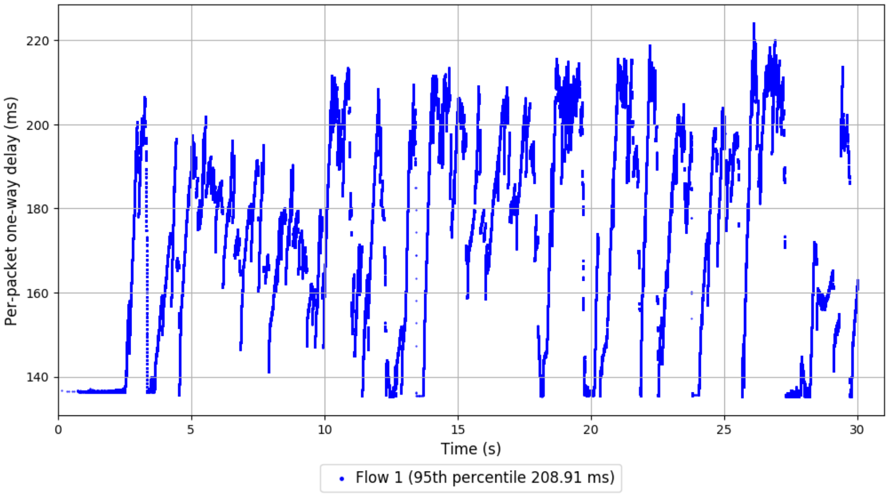




```
Run 1: Statistics of FillP-Sheep

Start at: 2018-08-02 01:16:18
End at: 2018-08-02 01:16:48
Local clock offset: 0.078 ms
Remote clock offset: -0.122 ms

# Below is generated by plot.py at 2018-08-02 05:53:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 741.56 Mbit/s
95th percentile per-packet one-way delay: 208.908 ms
Loss rate: 4.40%
-- Flow 1:
Average throughput: 741.56 Mbit/s
95th percentile per-packet one-way delay: 208.908 ms
Loss rate: 4.40%
```

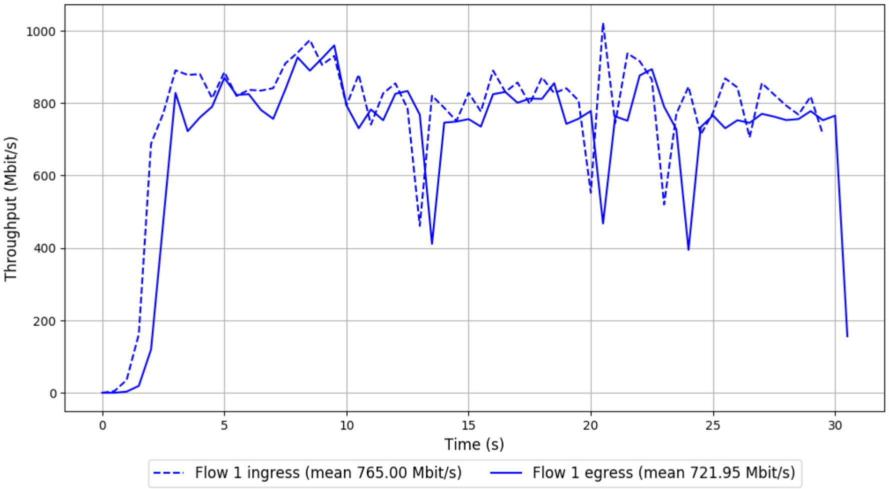
Run 1: Report of FillP-Sheep — Data Link

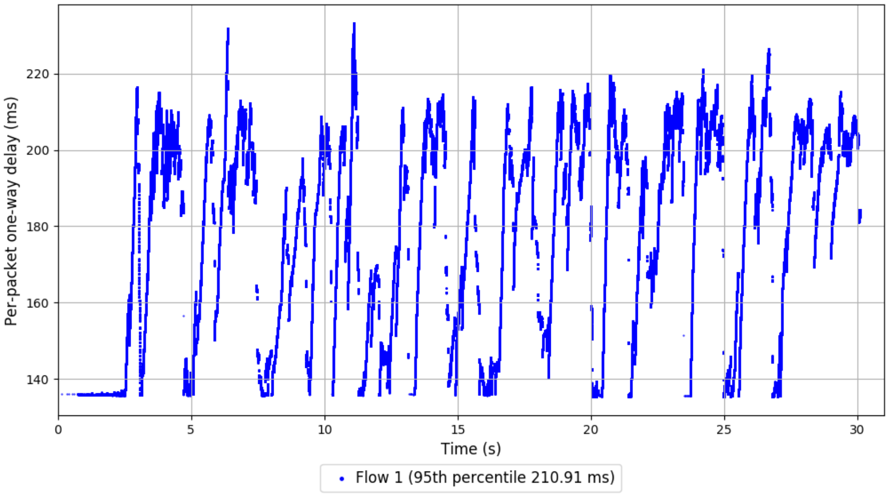




```
Run 2: Statistics of FillP-Sheep

Start at: 2018-08-02 01:39:36
End at: 2018-08-02 01:40:06
Local clock offset: 0.151 ms
Remote clock offset: -0.42 ms

# Below is generated by plot.py at 2018-08-02 05:53:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 721.95 Mbit/s
95th percentile per-packet one-way delay: 210.908 ms
Loss rate: 5.63%
-- Flow 1:
Average throughput: 721.95 Mbit/s
95th percentile per-packet one-way delay: 210.908 ms
Loss rate: 5.63%
```

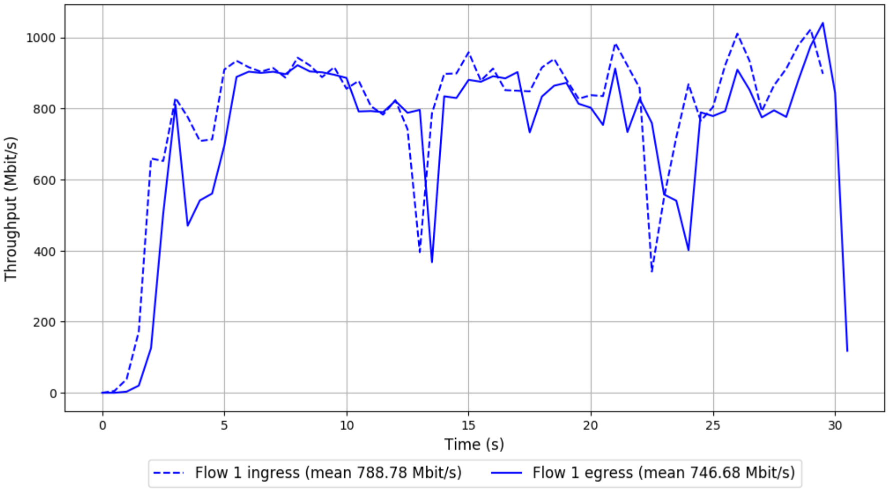
Run 2: Report of FillP-Sheep — Data Link

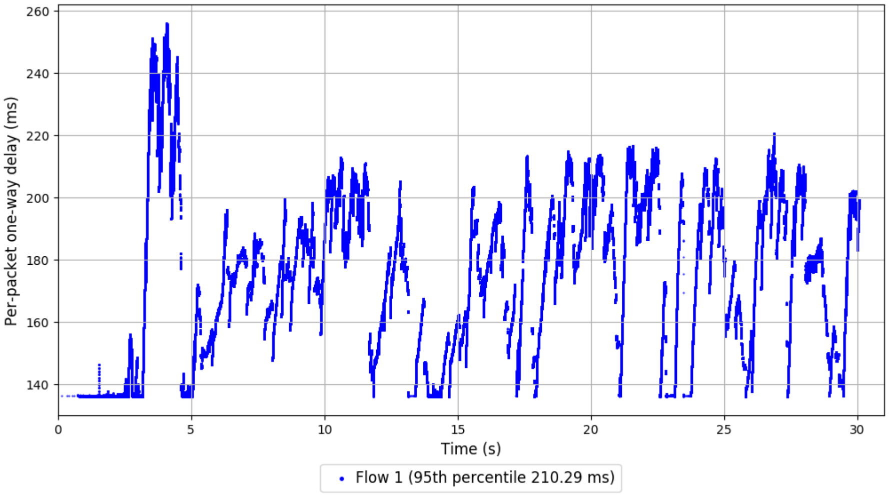




```
Run 3: Statistics of FillP-Sheep

Start at: 2018-08-02 02:02:38
End at: 2018-08-02 02:03:08
Local clock offset: 0.223 ms
Remote clock offset: -0.051 ms

# Below is generated by plot.py at 2018-08-02 05:53:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 746.68 Mbit/s
95th percentile per-packet one-way delay: 210.289 ms
Loss rate: 5.34%
-- Flow 1:
Average throughput: 746.68 Mbit/s
95th percentile per-packet one-way delay: 210.289 ms
Loss rate: 5.34%
```

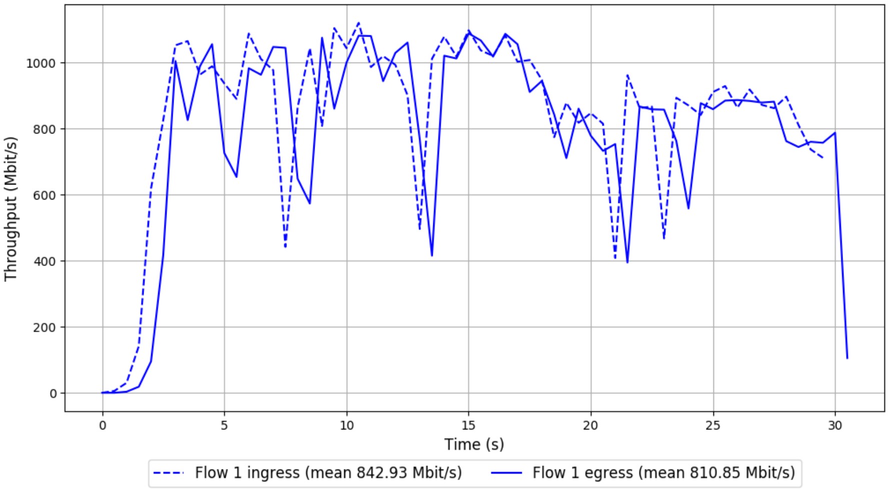
Run 3: Report of FillP-Sheep — Data Link

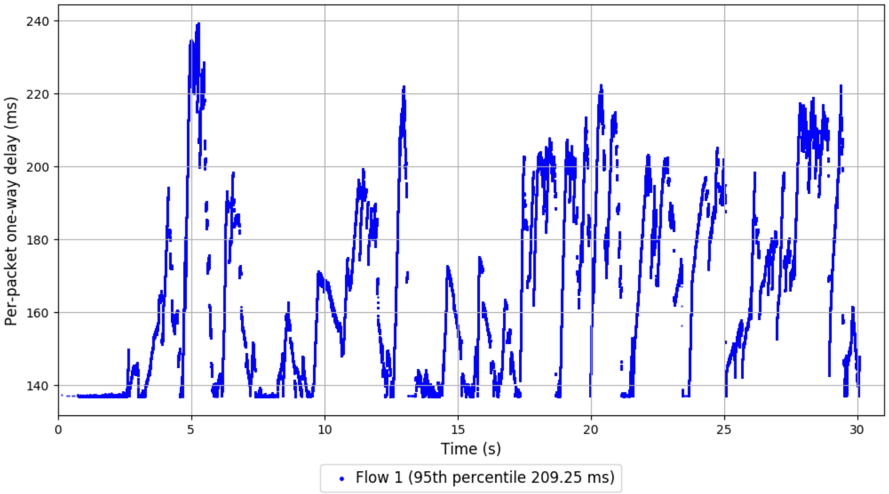




```
Run 4: Statistics of FillP-Sheep

Start at: 2018-08-02 02:25:56
End at: 2018-08-02 02:26:26
Local clock offset: -0.126 ms
Remote clock offset: 0.291 ms

# Below is generated by plot.py at 2018-08-02 05:56:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 810.85 Mbit/s
95th percentile per-packet one-way delay: 209.250 ms
Loss rate: 3.81%
-- Flow 1:
Average throughput: 810.85 Mbit/s
95th percentile per-packet one-way delay: 209.250 ms
Loss rate: 3.81%
```

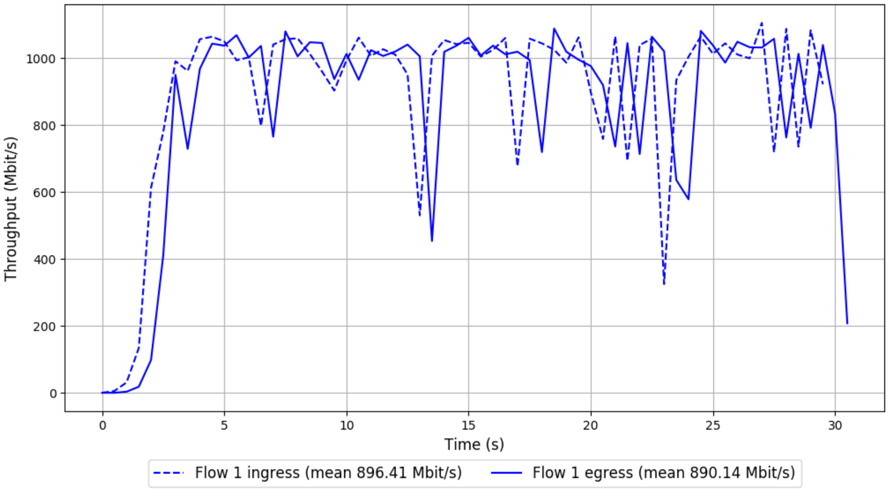
Run 4: Report of FillP-Sheep — Data Link

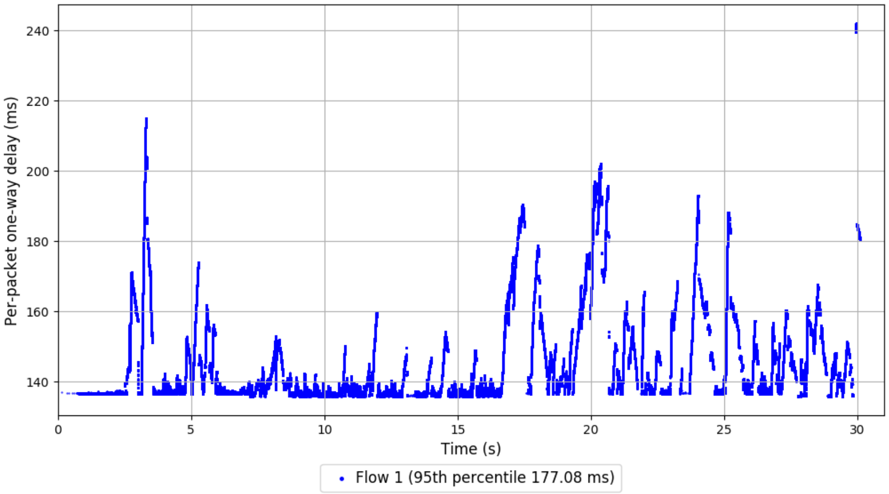




```
Run 5: Statistics of FillP-Sheep

Start at: 2018-08-02 02:49:17
End at: 2018-08-02 02:49:47
Local clock offset: 0.078 ms
Remote clock offset: -0.082 ms

# Below is generated by plot.py at 2018-08-02 05:59:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 890.14 Mbit/s
95th percentile per-packet one-way delay: 177.081 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 890.14 Mbit/s
95th percentile per-packet one-way delay: 177.081 ms
Loss rate: 0.70%
```

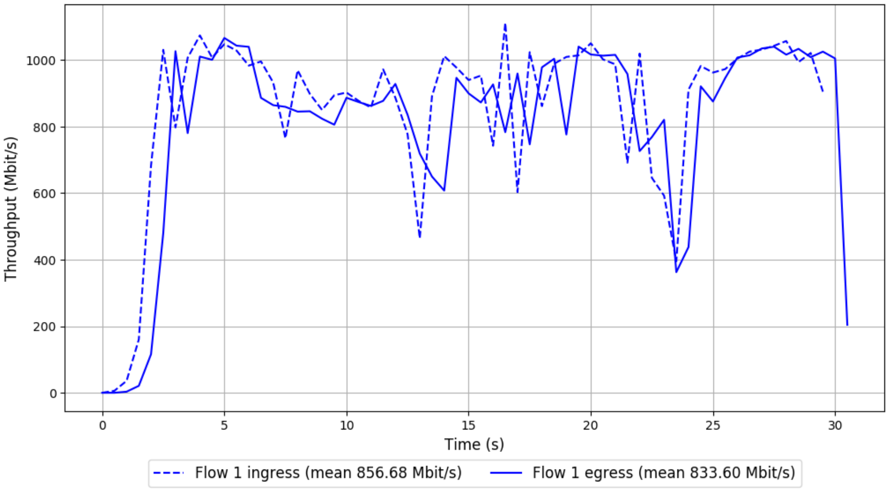
Run 5: Report of FillP-Sheep — Data Link



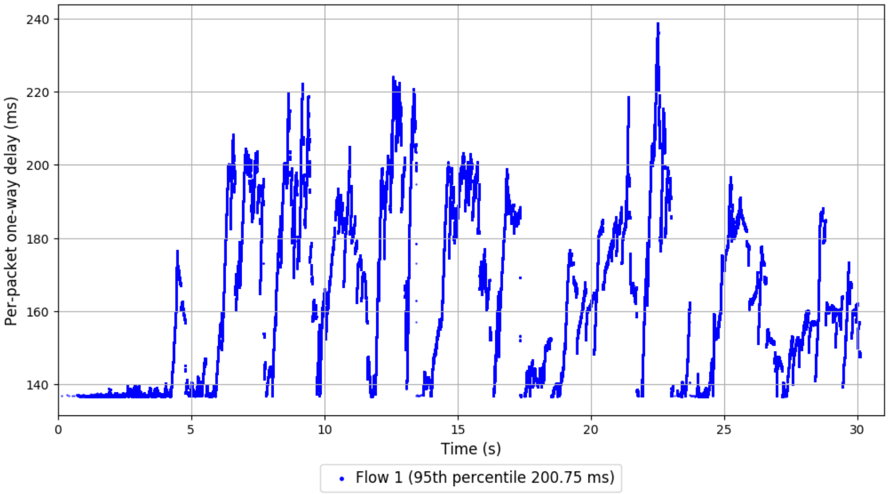


```
Run 6: Statistics of FillP-Sheep

Start at: 2018-08-02 03:12:58
End at: 2018-08-02 03:13:28
Local clock offset: 0.248 ms
Remote clock offset: 0.281 ms

# Below is generated by plot.py at 2018-08-02 06:00:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 833.60 Mbit/s
95th percentile per-packet one-way delay: 200.745 ms
Loss rate: 2.69%
-- Flow 1:
Average throughput: 833.60 Mbit/s
95th percentile per-packet one-way delay: 200.745 ms
Loss rate: 2.69%
```

Run 6: Report of FillP-Sheep — Data Link



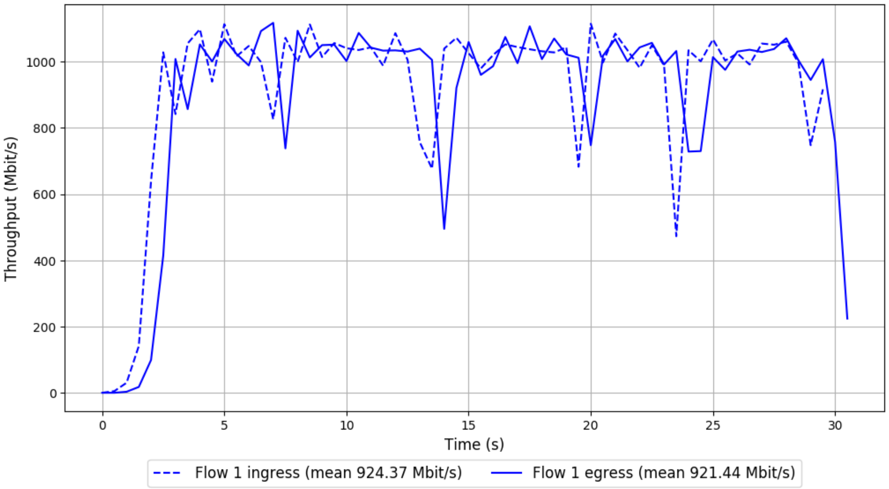
Flow 1 ingress (mean 856.68 Mbit/s) Flow 1 egress (mean 833.60 Mbit/s)

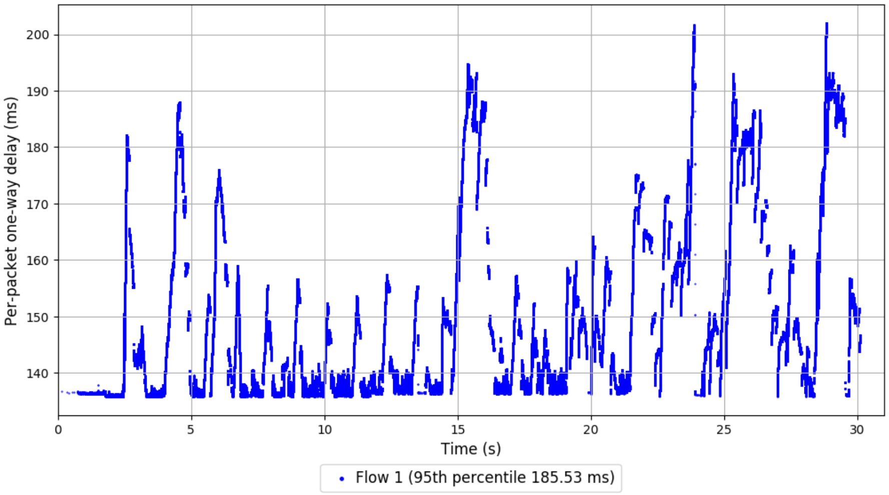


Flow 1 (95th percentile 200.75 ms)

```
Run 7: Statistics of FillP-Sheep

Start at: 2018-08-02 03:36:22
End at: 2018-08-02 03:36:52
Local clock offset: 0.04 ms
Remote clock offset: -0.085 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 921.44 Mbit/s
95th percentile per-packet one-way delay: 185.534 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 921.44 Mbit/s
95th percentile per-packet one-way delay: 185.534 ms
Loss rate: 0.32%
```

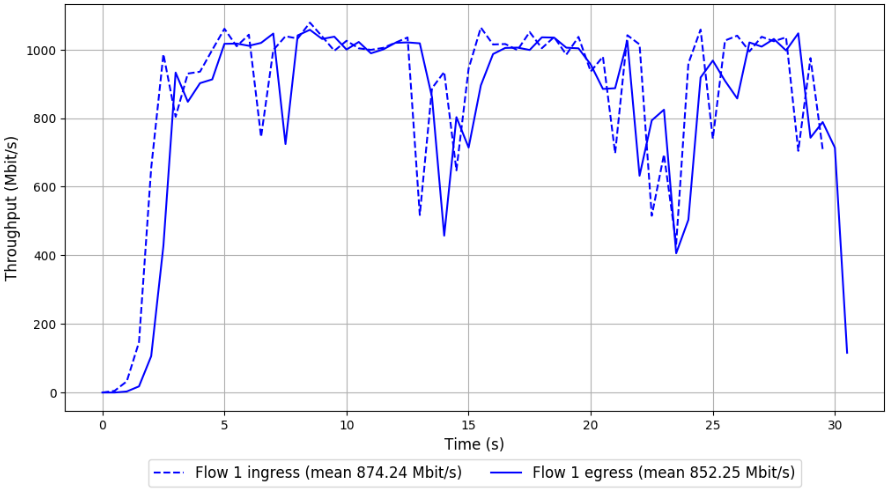
Run 7: Report of FillP-Sheep — Data Link

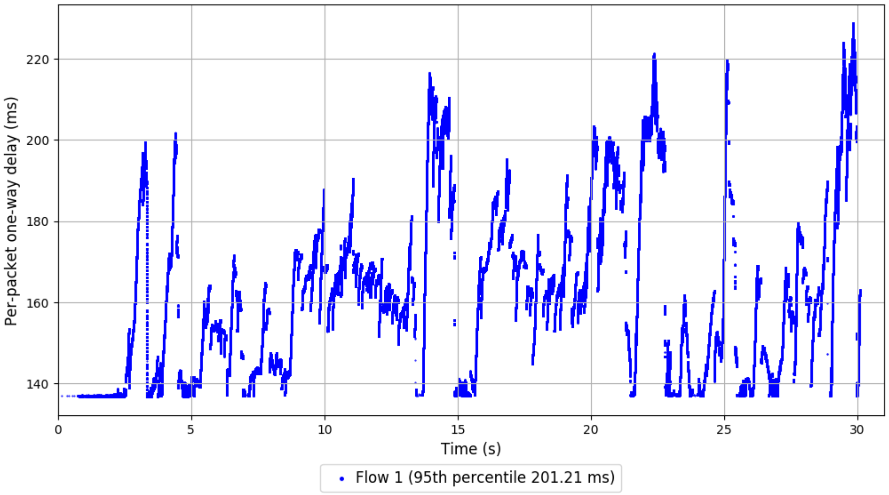




```
Run 8: Statistics of FillP-Sheep

Start at: 2018-08-02 03:59:58
End at: 2018-08-02 04:00:28
Local clock offset: -0.134 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 852.25 Mbit/s
95th percentile per-packet one-way delay: 201.209 ms
Loss rate: 2.52%
-- Flow 1:
Average throughput: 852.25 Mbit/s
95th percentile per-packet one-way delay: 201.209 ms
Loss rate: 2.52%
```

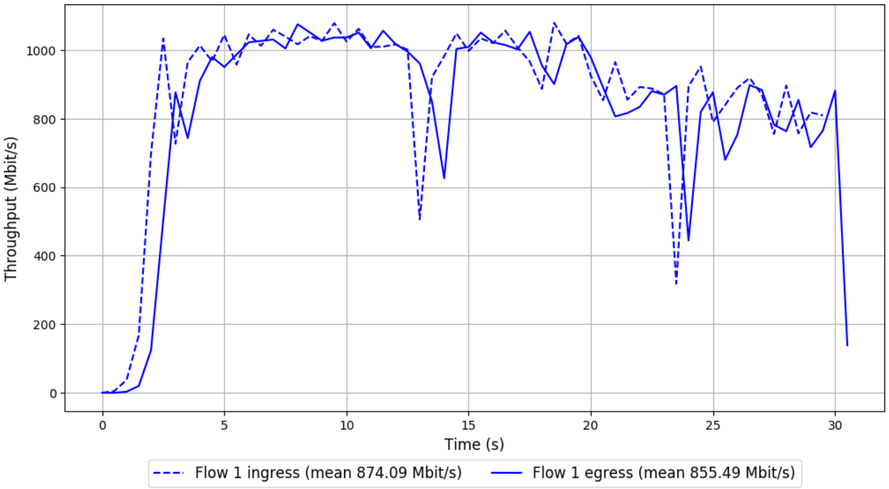
Run 8: Report of FillP-Sheep — Data Link

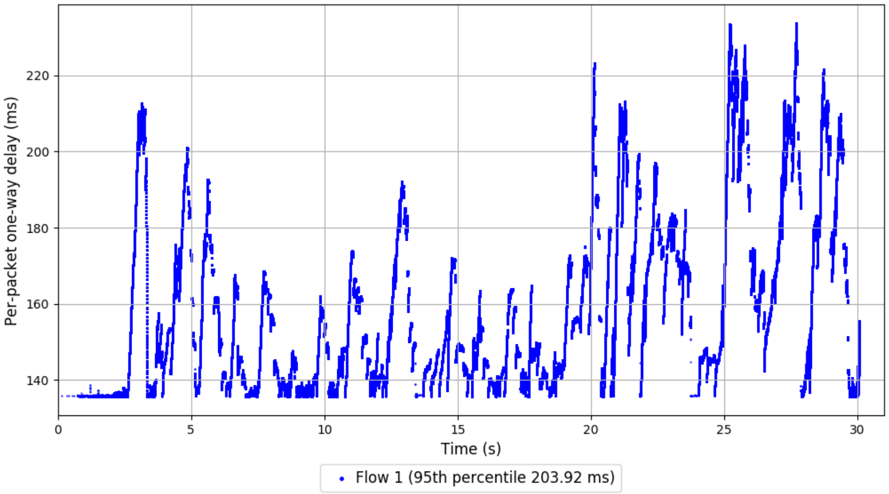




```
Run 9: Statistics of FillP-Sheep

Start at: 2018-08-02 04:23:39
End at: 2018-08-02 04:24:09
Local clock offset: 0.273 ms
Remote clock offset: 0.213 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 855.49 Mbit/s
95th percentile per-packet one-way delay: 203.922 ms
Loss rate: 2.13%
-- Flow 1:
Average throughput: 855.49 Mbit/s
95th percentile per-packet one-way delay: 203.922 ms
Loss rate: 2.13%
```

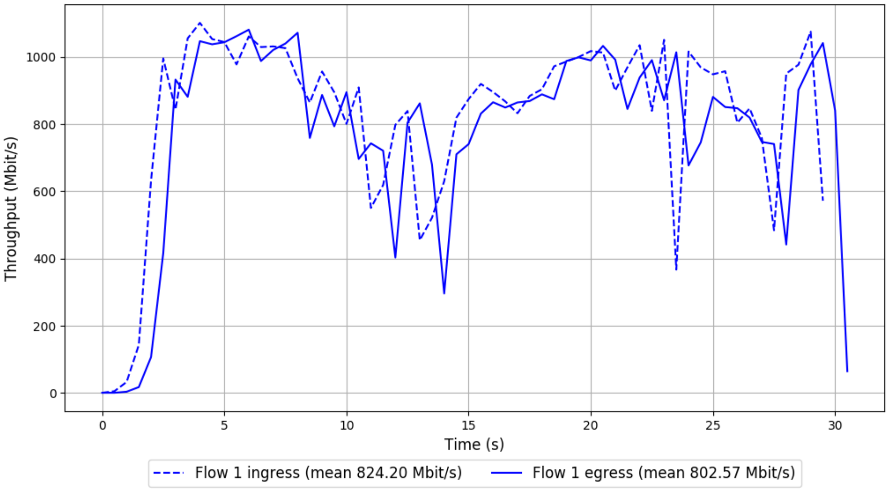
Run 9: Report of FillP-Sheep — Data Link

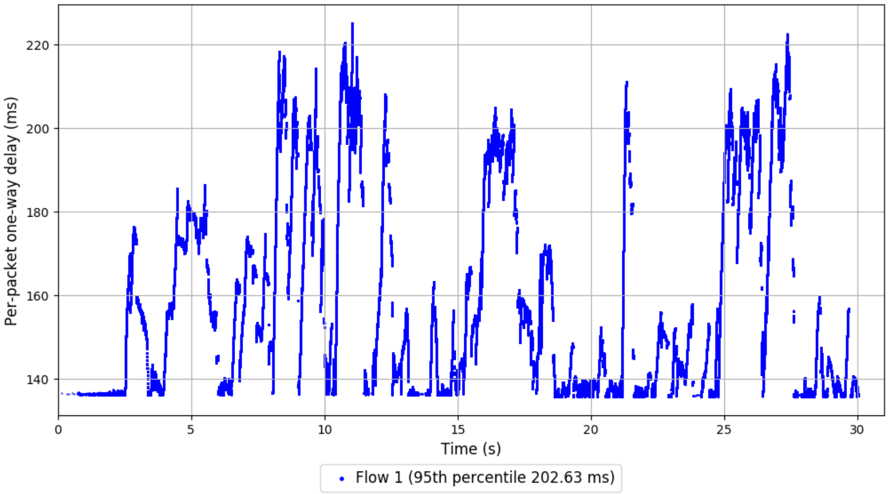




```
Run 10: Statistics of FillP-Sheep

Start at: 2018-08-02 04:46:44
End at: 2018-08-02 04:47:14
Local clock offset: 0.01 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 802.57 Mbit/s
95th percentile per-packet one-way delay: 202.626 ms
Loss rate: 2.63%
-- Flow 1:
Average throughput: 802.57 Mbit/s
95th percentile per-packet one-way delay: 202.626 ms
Loss rate: 2.63%
```

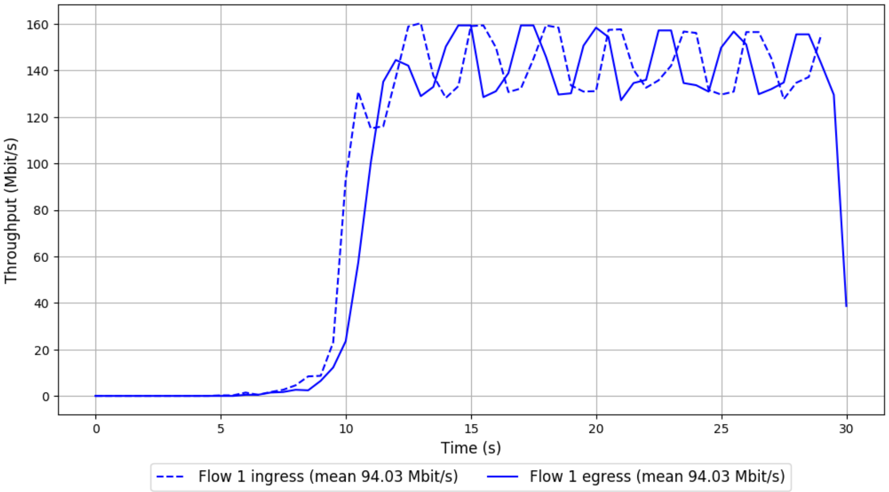
Run 10: Report of FillP-Sheep — Data Link

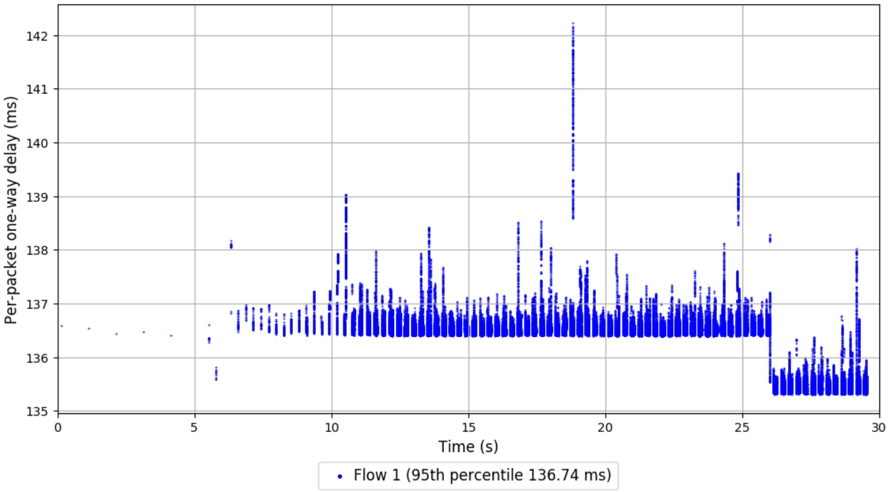




```
Run 1: Statistics of Indigo

Start at: 2018-08-02 01:19:37
End at: 2018-08-02 01:20:07
Local clock offset: 0.025 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.03 Mbit/s
95th percentile per-packet one-way delay: 136.737 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 94.03 Mbit/s
95th percentile per-packet one-way delay: 136.737 ms
Loss rate: 0.00%
```

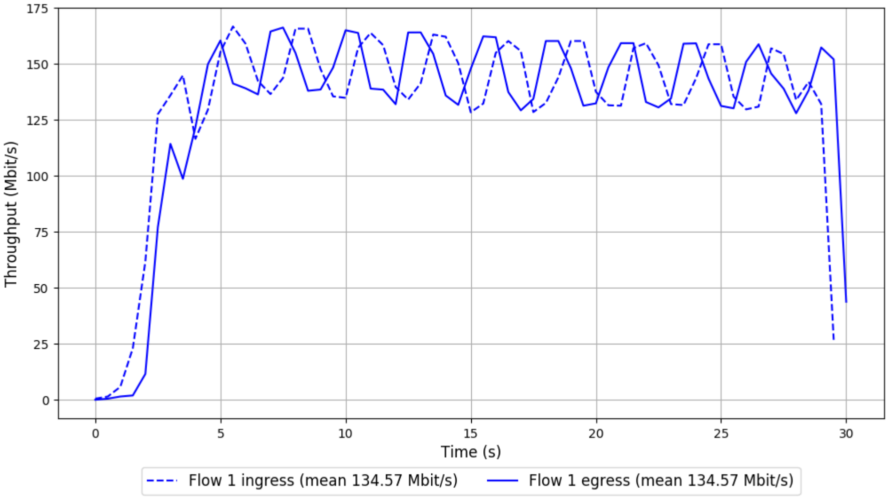
Run 1: Report of Indigo — Data Link

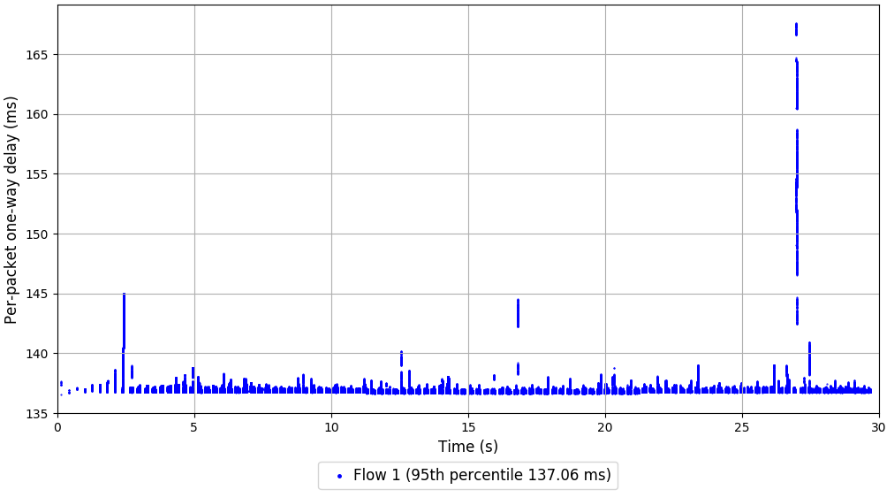




```
Run 2: Statistics of Indigo

Start at: 2018-08-02 01:42:52
End at: 2018-08-02 01:43:22
Local clock offset: 0.05 ms
Remote clock offset: 0.278 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 134.57 Mbit/s
95th percentile per-packet one-way delay: 137.056 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 134.57 Mbit/s
95th percentile per-packet one-way delay: 137.056 ms
Loss rate: 0.00%
```

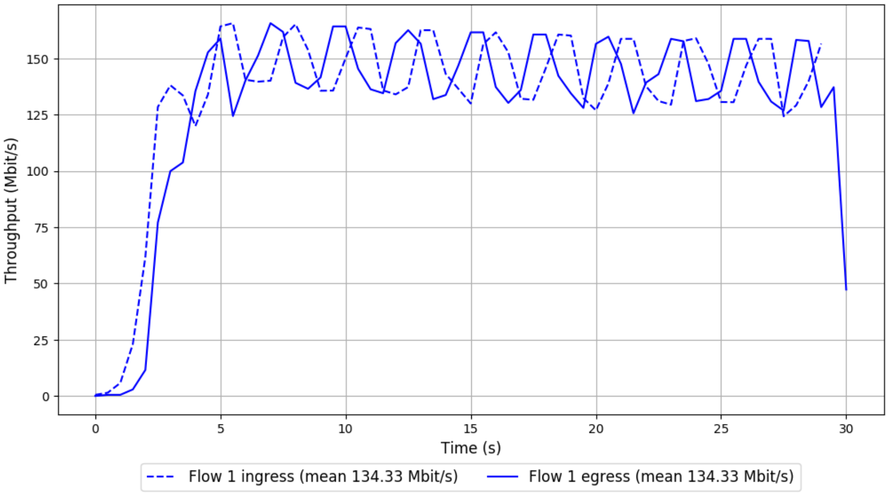
Run 2: Report of Indigo — Data Link

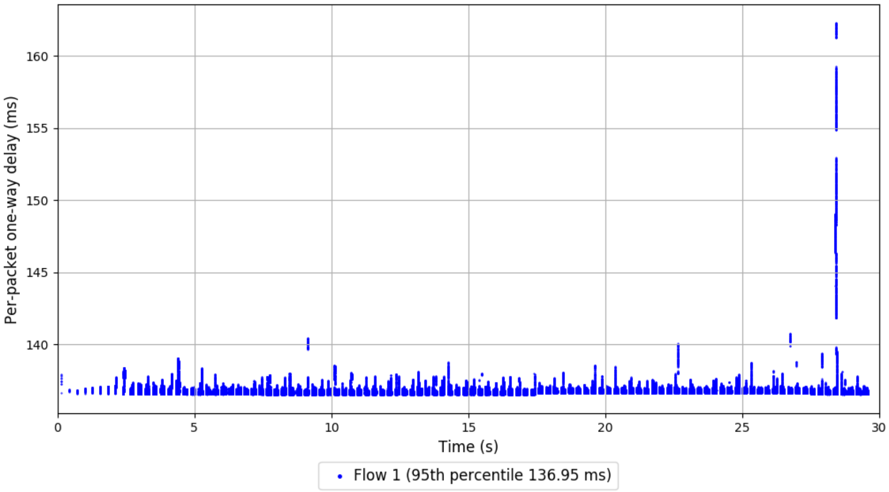




```
Run 3: Statistics of Indigo

Start at: 2018-08-02 02:05:56
End at: 2018-08-02 02:06:26
Local clock offset: -0.188 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 134.33 Mbit/s
95th percentile per-packet one-way delay: 136.947 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 134.33 Mbit/s
95th percentile per-packet one-way delay: 136.947 ms
Loss rate: 0.00%
```

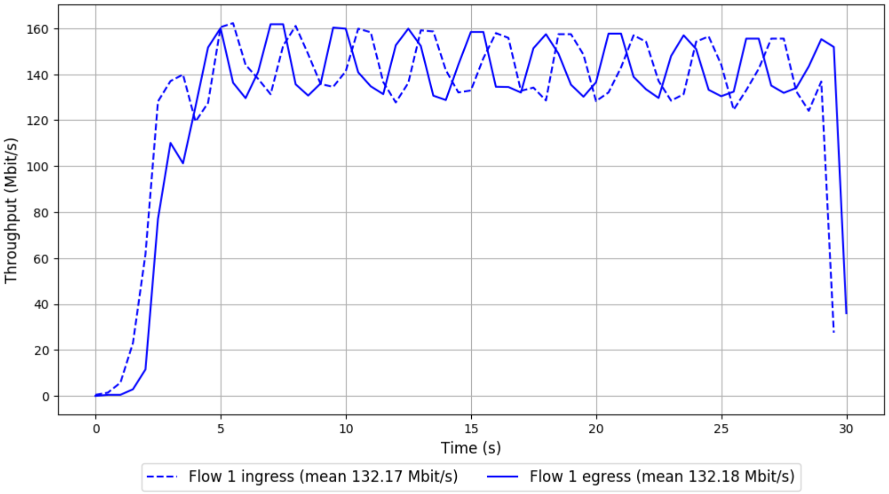
Run 3: Report of Indigo — Data Link

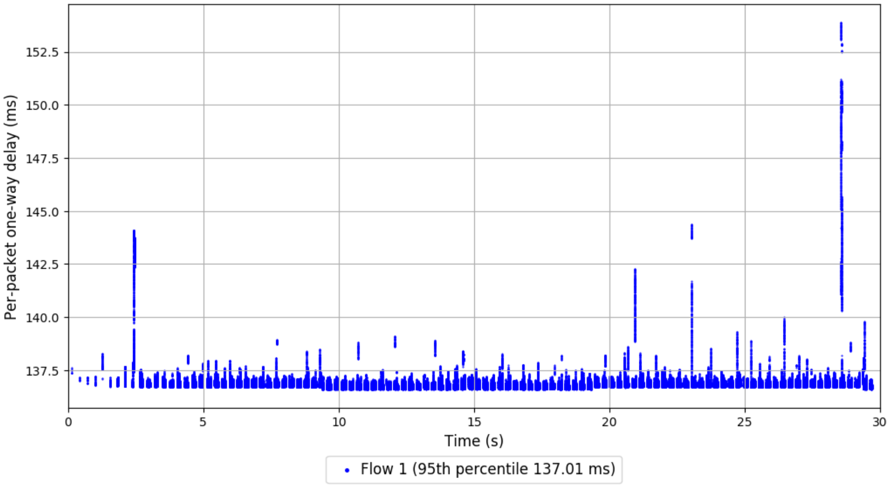




```
Run 4: Statistics of Indigo

Start at: 2018-08-02 02:29:14
End at: 2018-08-02 02:29:44
Local clock offset: 0.086 ms
Remote clock offset: 0.332 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 132.18 Mbit/s
95th percentile per-packet one-way delay: 137.010 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 132.18 Mbit/s
95th percentile per-packet one-way delay: 137.010 ms
Loss rate: 0.00%
```

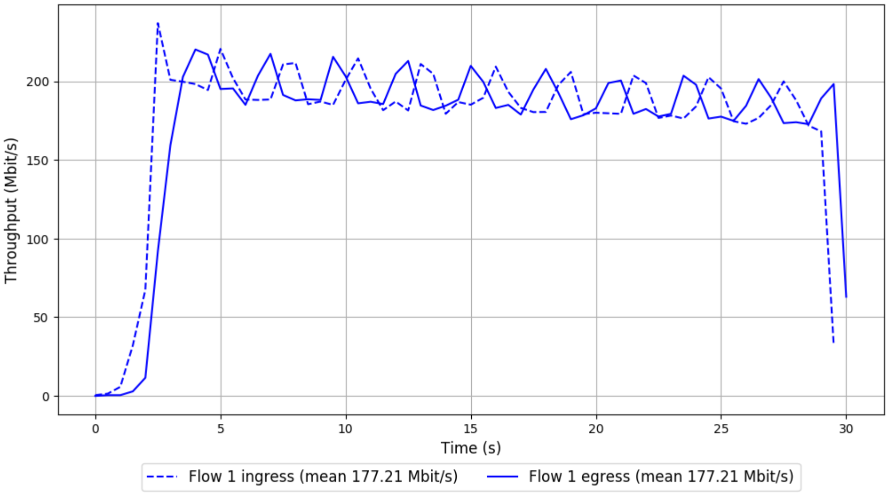
Run 4: Report of Indigo — Data Link

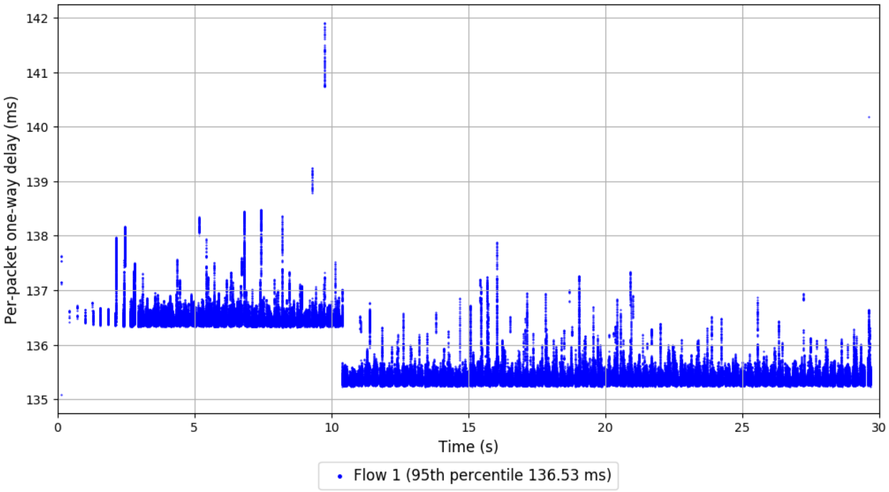




```
Run 5: Statistics of Indigo

Start at: 2018-08-02 02:52:43
End at: 2018-08-02 02:53:13
Local clock offset: 0.104 ms
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 177.21 Mbit/s
95th percentile per-packet one-way delay: 136.530 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 177.21 Mbit/s
95th percentile per-packet one-way delay: 136.530 ms
Loss rate: 0.00%
```

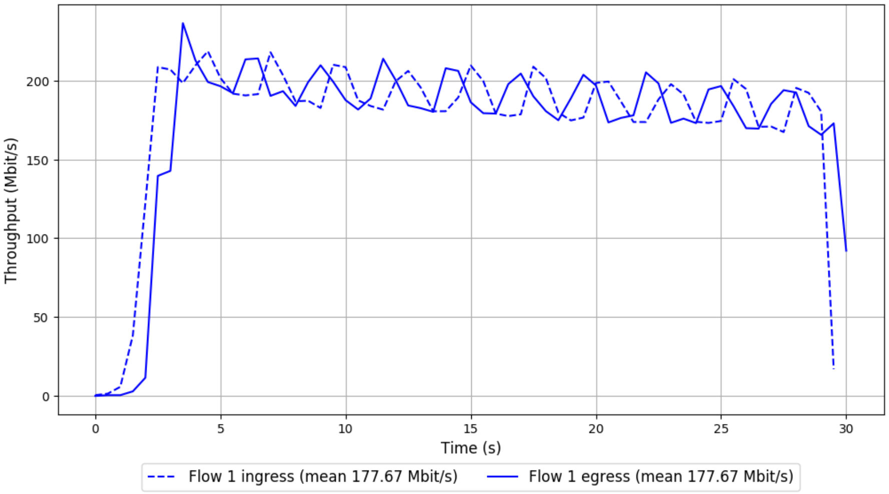
Run 5: Report of Indigo — Data Link

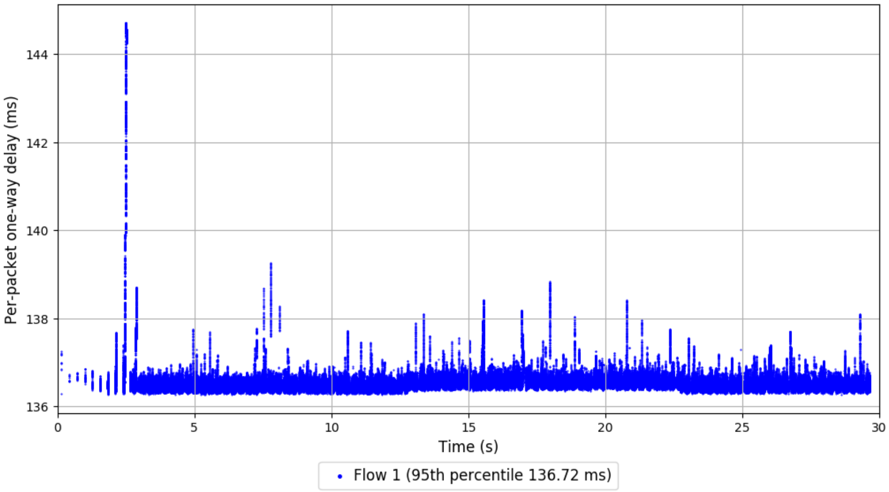




```
Run 6: Statistics of Indigo

Start at: 2018-08-02 03:16:21
End at: 2018-08-02 03:16:51
Local clock offset: 0.212 ms
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 177.67 Mbit/s
95th percentile per-packet one-way delay: 136.723 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 177.67 Mbit/s
95th percentile per-packet one-way delay: 136.723 ms
Loss rate: 0.00%
```

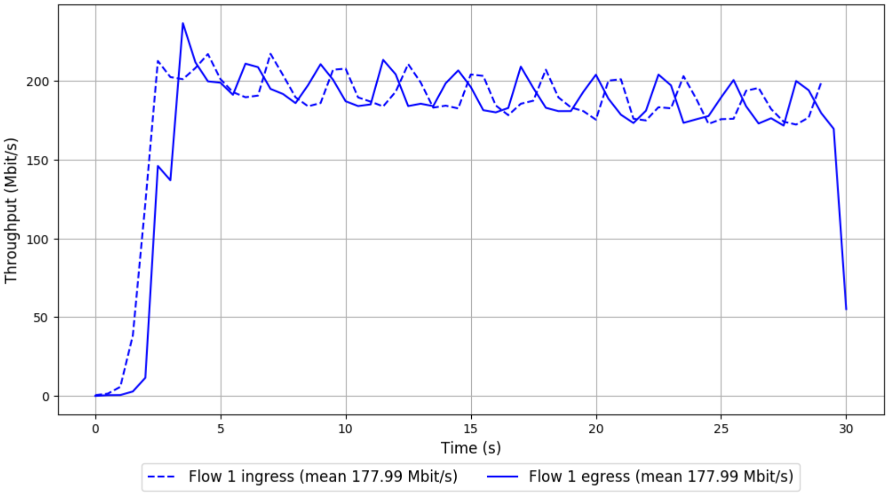
Run 6: Report of Indigo — Data Link

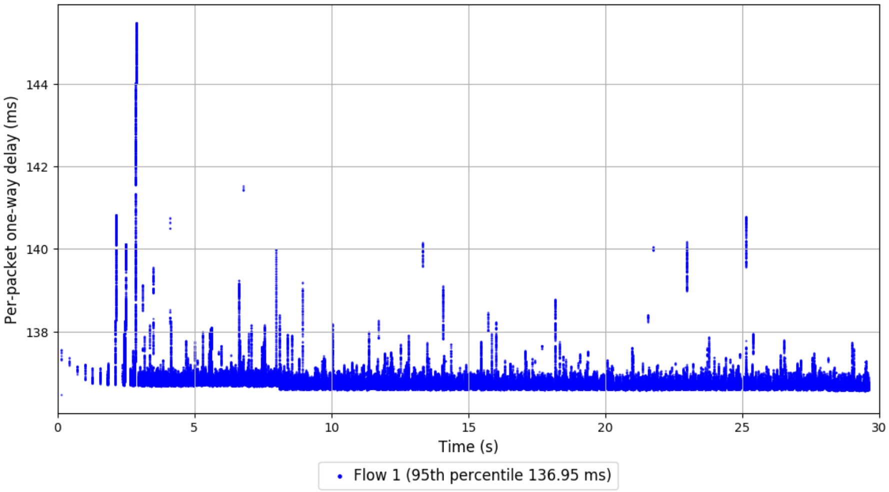




```
Run 7: Statistics of Indigo

Start at: 2018-08-02 03:39:45
End at: 2018-08-02 03:40:15
Local clock offset: 0.076 ms
Remote clock offset: 0.276 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 177.99 Mbit/s
95th percentile per-packet one-way delay: 136.949 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 177.99 Mbit/s
95th percentile per-packet one-way delay: 136.949 ms
Loss rate: 0.00%
```

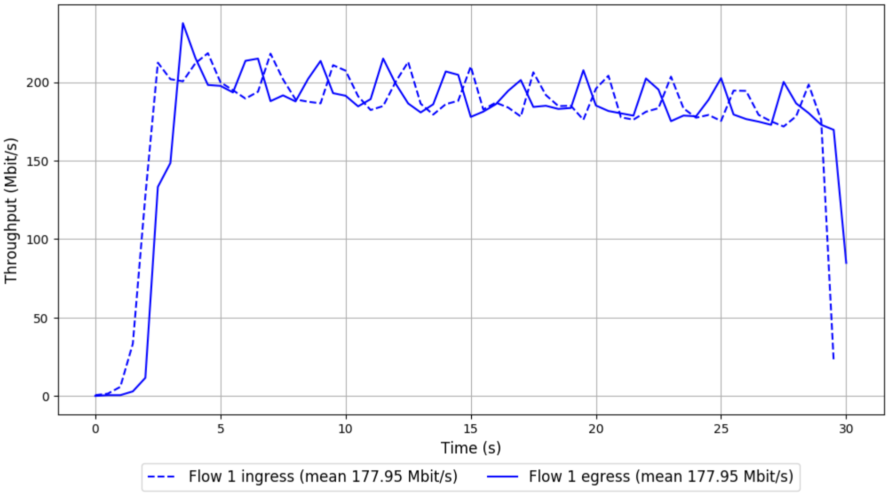
Run 7: Report of Indigo — Data Link

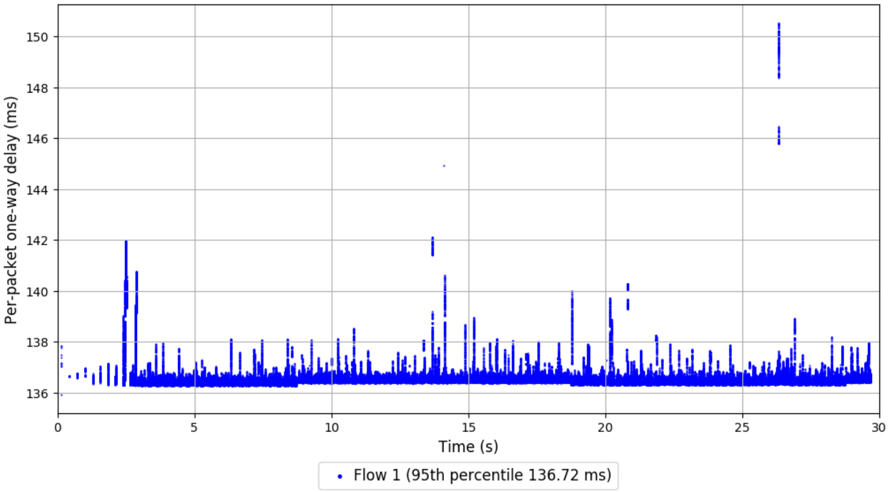




```
Run 8: Statistics of Indigo

Start at: 2018-08-02 04:03:15
End at: 2018-08-02 04:03:45
Local clock offset: -0.041 ms
Remote clock offset: -0.086 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 177.95 Mbit/s
95th percentile per-packet one-way delay: 136.717 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 177.95 Mbit/s
95th percentile per-packet one-way delay: 136.717 ms
Loss rate: 0.00%
```

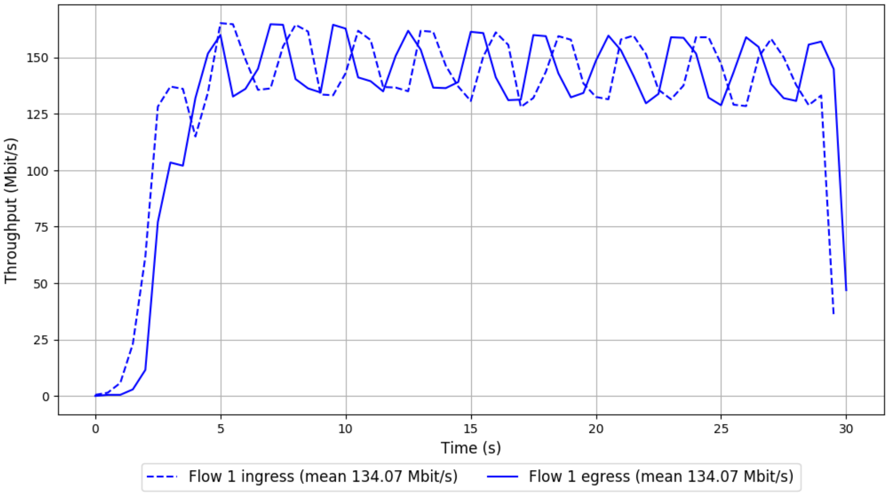
Run 8: Report of Indigo — Data Link

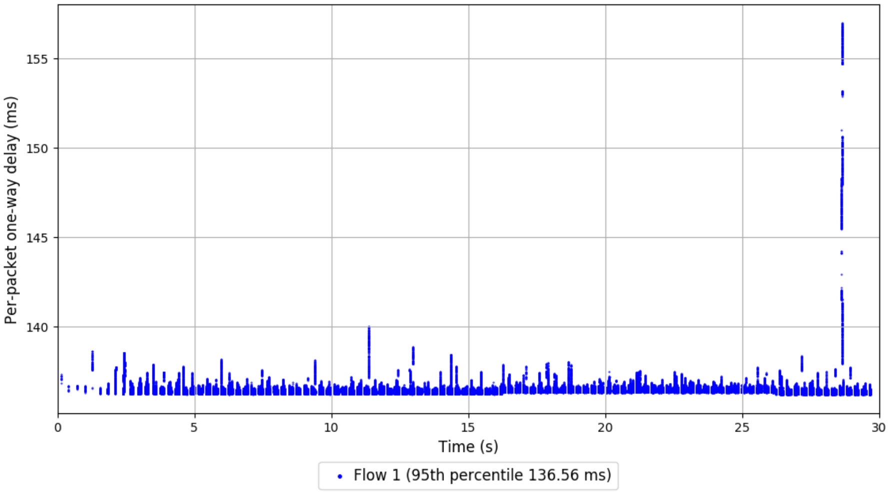




```
Run 9: Statistics of Indigo

Start at: 2018-08-02 04:26:57
End at: 2018-08-02 04:27:27
Local clock offset: 0.014 ms
Remote clock offset: -0.147 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 134.07 Mbit/s
95th percentile per-packet one-way delay: 136.560 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 134.07 Mbit/s
95th percentile per-packet one-way delay: 136.560 ms
Loss rate: 0.00%
```

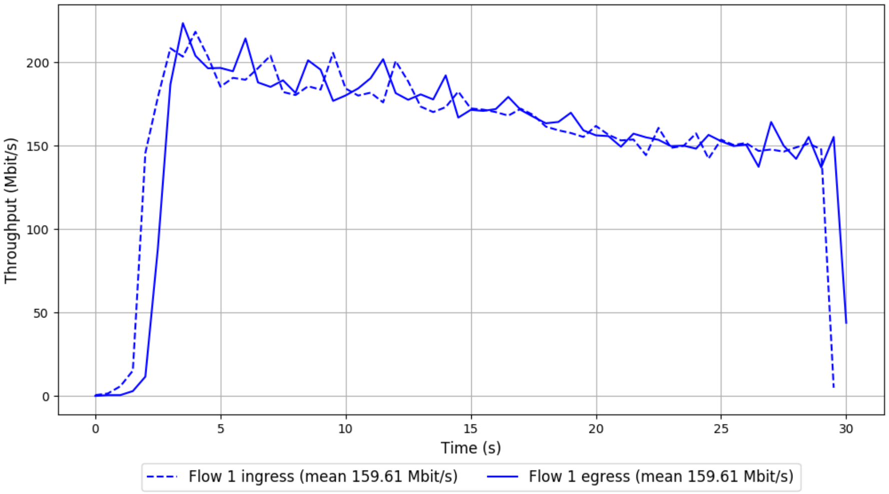
Run 9: Report of Indigo — Data Link

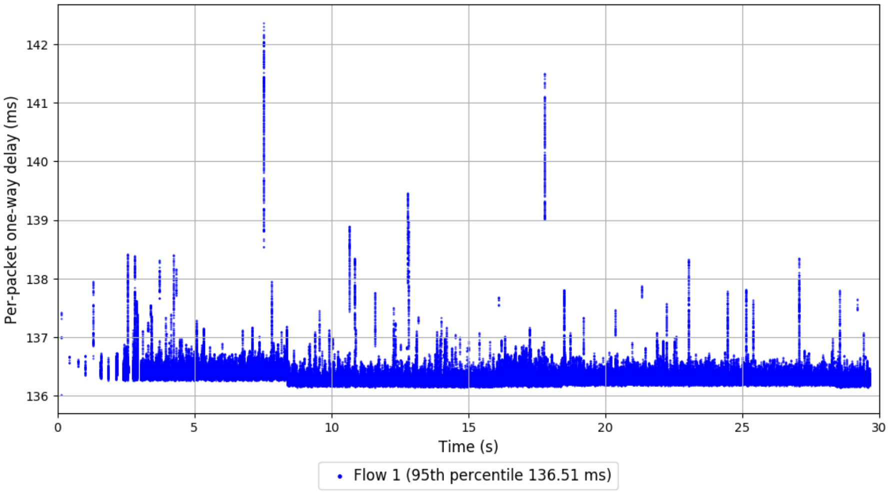




```
Run 10: Statistics of Indigo

Start at: 2018-08-02 04:50:05
End at: 2018-08-02 04:50:35
Local clock offset: 0.136 ms
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 159.61 Mbit/s
95th percentile per-packet one-way delay: 136.508 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 159.61 Mbit/s
95th percentile per-packet one-way delay: 136.508 ms
Loss rate: 0.00%
```

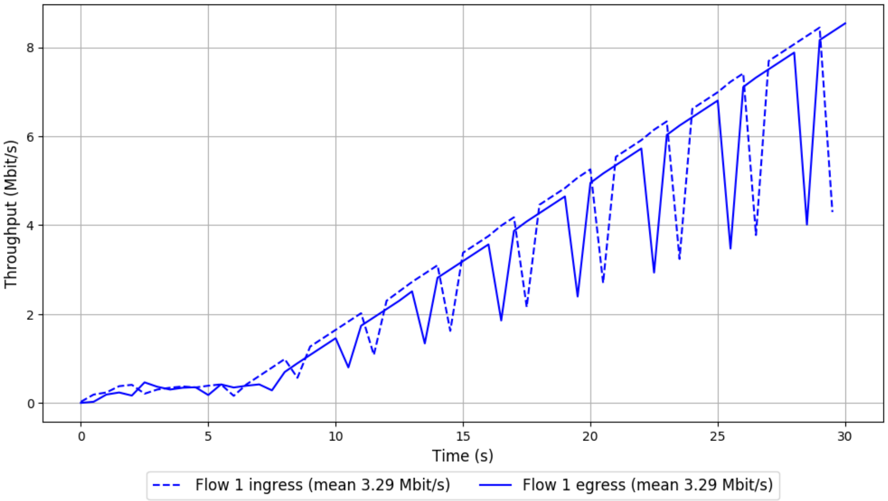
Run 10: Report of Indigo — Data Link

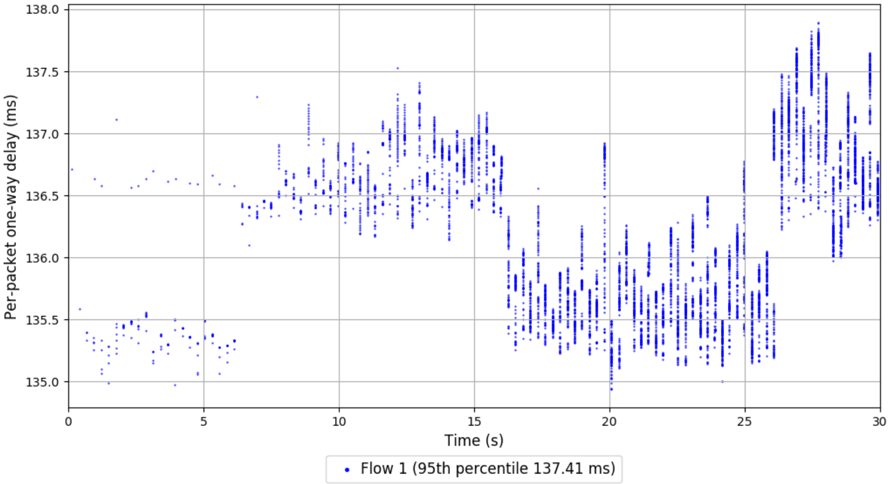




```
Run 1: Statistics of LEDBAT

Start at: 2018-08-02 01:09:27
End at: 2018-08-02 01:09:57
Local clock offset: 0.08 ms
Remote clock offset: -0.466 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.29 Mbit/s
95th percentile per-packet one-way delay: 137.408 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.29 Mbit/s
95th percentile per-packet one-way delay: 137.408 ms
Loss rate: 0.00%
```

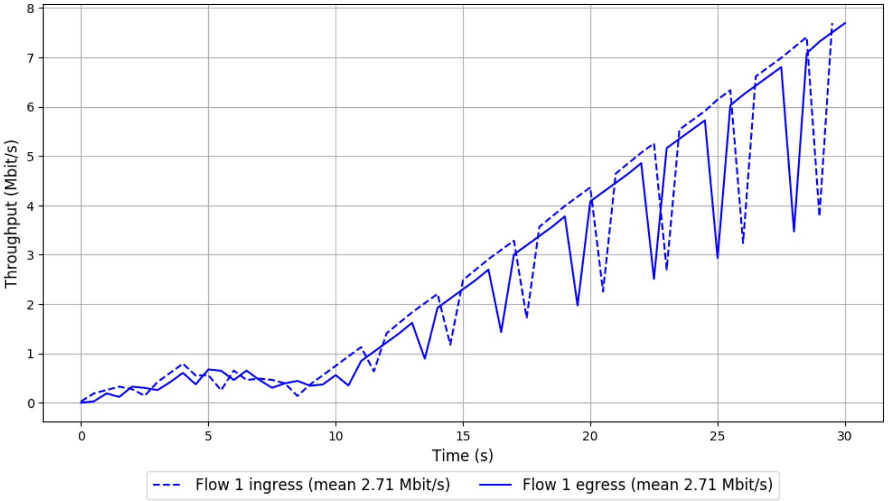
Run 1: Report of LEDBAT — Data Link

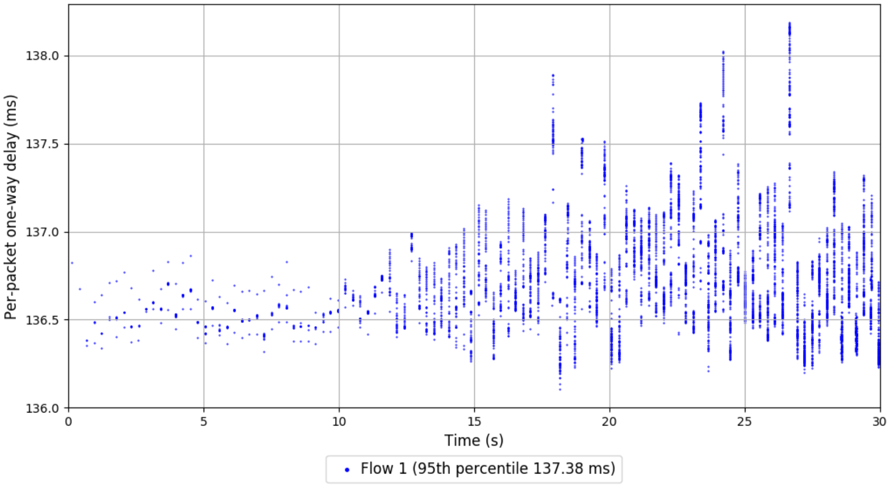




```
Run 2: Statistics of LEDBAT

Start at: 2018-08-02 01:32:45
End at: 2018-08-02 01:33:15
Local clock offset: 0.209 ms
Remote clock offset: -0.102 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.71 Mbit/s
95th percentile per-packet one-way delay: 137.381 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.71 Mbit/s
95th percentile per-packet one-way delay: 137.381 ms
Loss rate: 0.00%
```

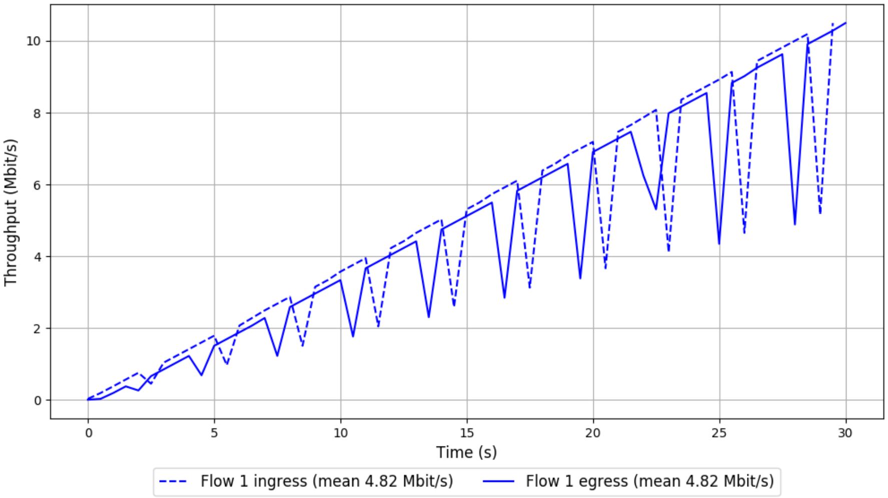
Run 2: Report of LEDBAT — Data Link

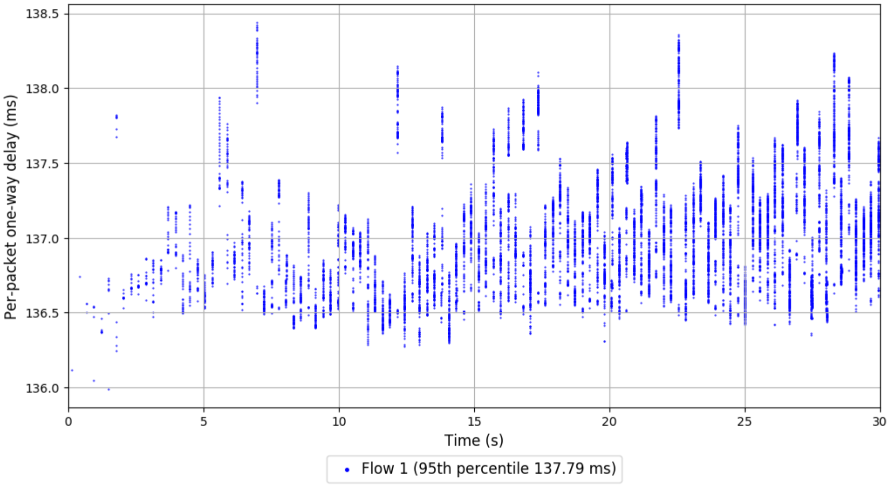




```
Run 3: Statistics of LEDBAT

Start at: 2018-08-02 01:55:49
End at: 2018-08-02 01:56:19
Local clock offset: 0.174 ms
Remote clock offset: -0.002 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.82 Mbit/s
95th percentile per-packet one-way delay: 137.793 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.82 Mbit/s
95th percentile per-packet one-way delay: 137.793 ms
Loss rate: 0.00%
```

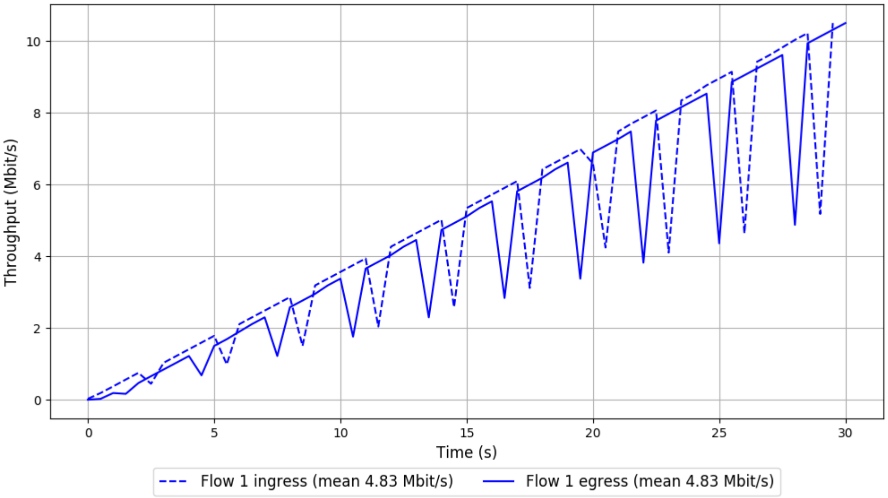
Run 3: Report of LEDBAT — Data Link

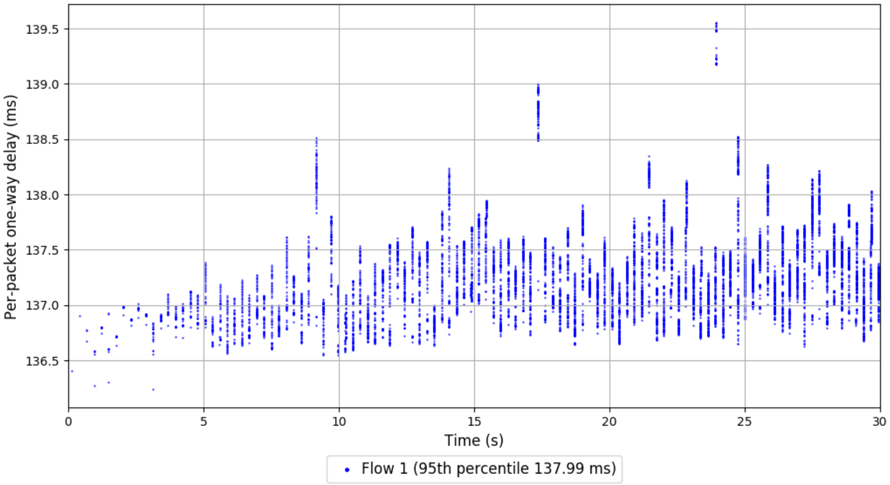




```
Run 4: Statistics of LEDBAT

Start at: 2018-08-02 02:19:00
End at: 2018-08-02 02:19:30
Local clock offset: -0.038 ms
Remote clock offset: -0.013 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.83 Mbit/s
95th percentile per-packet one-way delay: 137.994 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.83 Mbit/s
95th percentile per-packet one-way delay: 137.994 ms
Loss rate: 0.00%
```

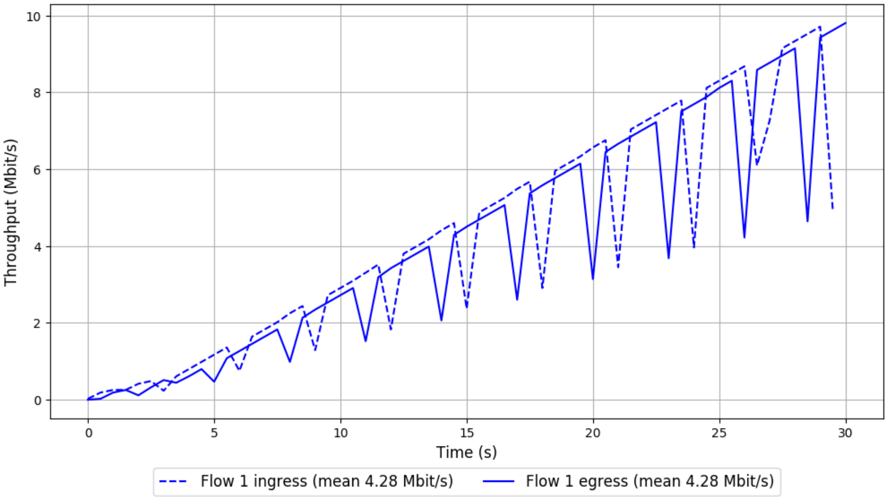
Run 4: Report of LEDBAT — Data Link

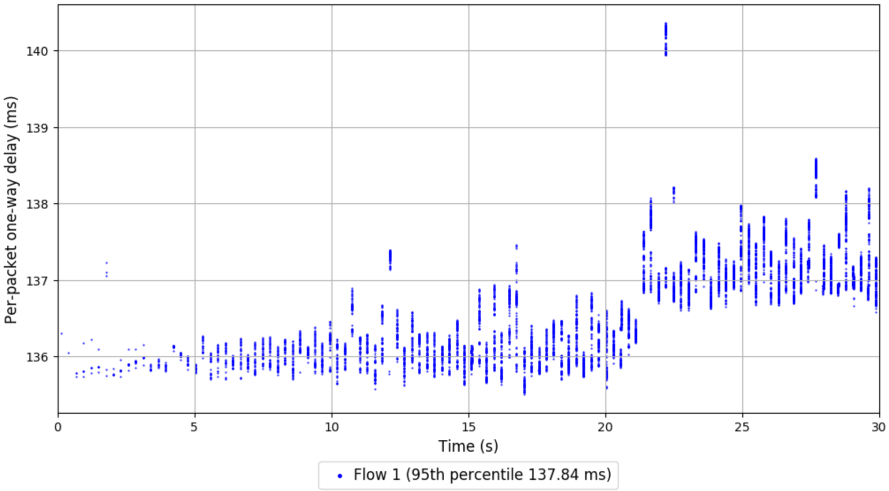




```
Run 5: Statistics of LEDBAT

Start at: 2018-08-02 02:42:22
End at: 2018-08-02 02:42:52
Local clock offset: -0.144 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.28 Mbit/s
95th percentile per-packet one-way delay: 137.839 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.28 Mbit/s
95th percentile per-packet one-way delay: 137.839 ms
Loss rate: 0.00%
```

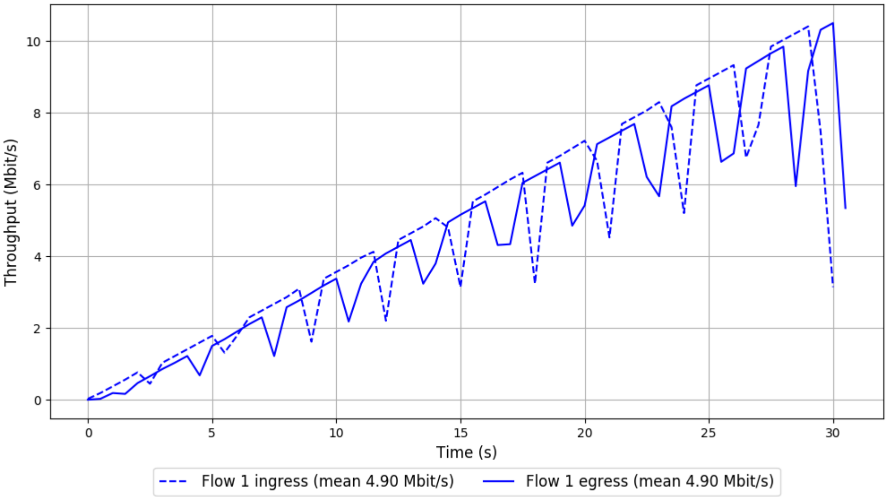
Run 5: Report of LEDBAT — Data Link

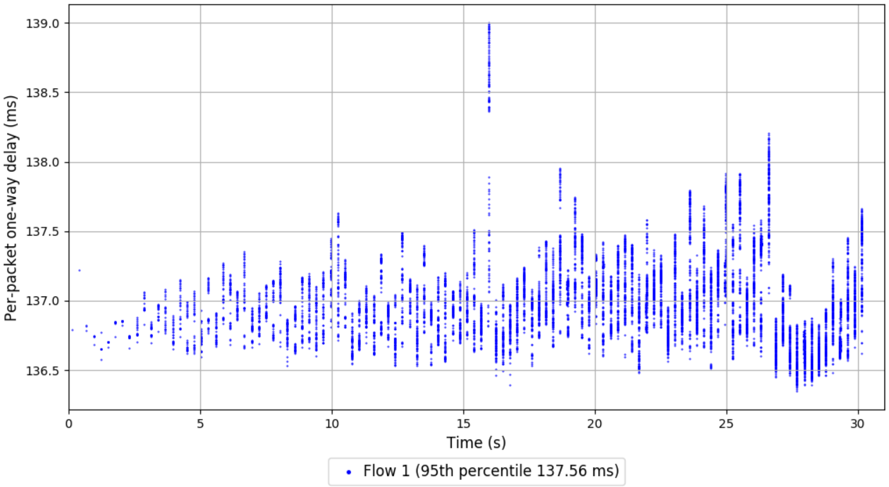




```
Run 6: Statistics of LEDBAT

Start at: 2018-08-02 03:06:03
End at: 2018-08-02 03:06:33
Local clock offset: 0.144 ms
Remote clock offset: -0.062 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.90 Mbit/s
95th percentile per-packet one-way delay: 137.562 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.90 Mbit/s
95th percentile per-packet one-way delay: 137.562 ms
Loss rate: 0.00%
```

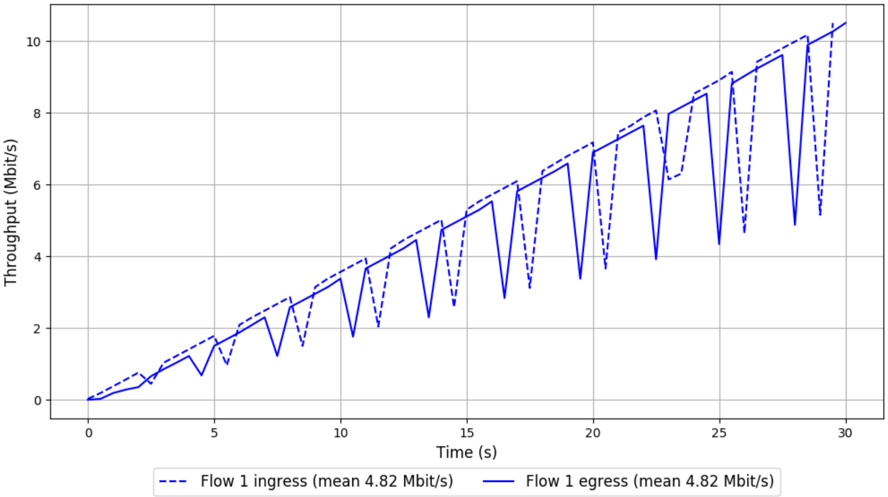
Run 6: Report of LEDBAT — Data Link

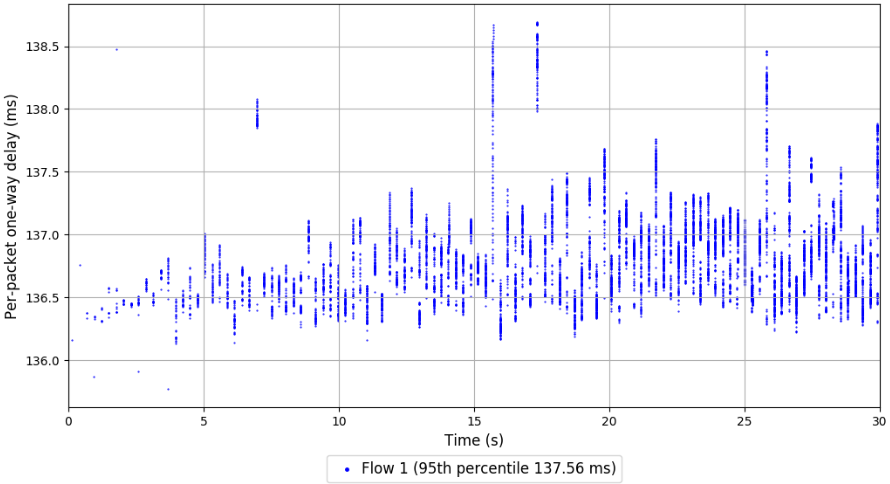




```
Run 7: Statistics of LEDBAT

Start at: 2018-08-02 03:29:23
End at: 2018-08-02 03:29:53
Local clock offset: 0.3 ms
Remote clock offset: -0.075 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.82 Mbit/s
95th percentile per-packet one-way delay: 137.563 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.82 Mbit/s
95th percentile per-packet one-way delay: 137.563 ms
Loss rate: 0.00%
```

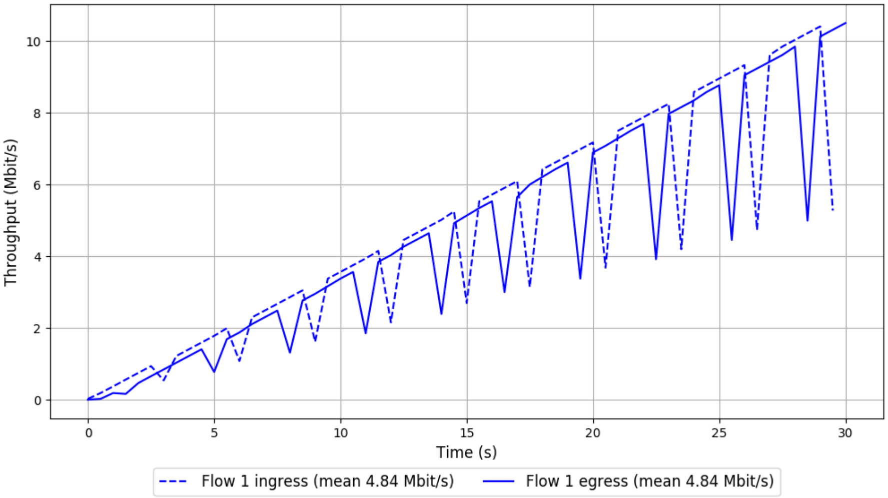
Run 7: Report of LEDBAT — Data Link

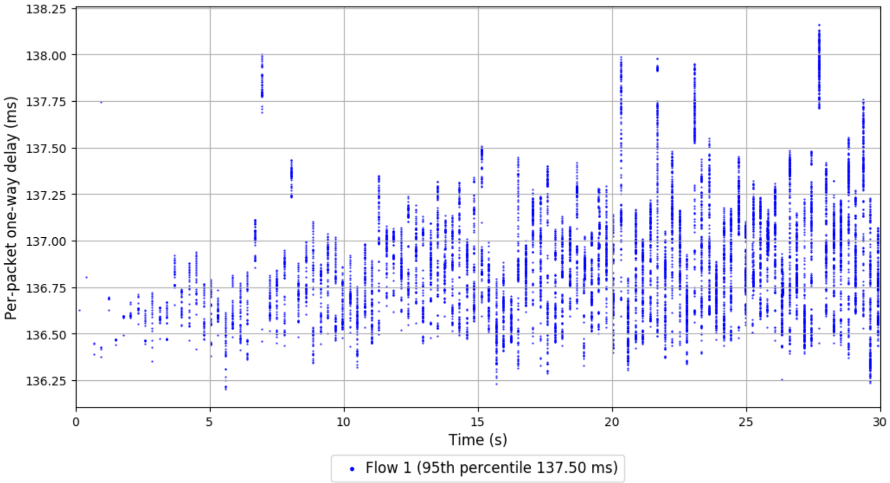




```
Run 8: Statistics of LEDBAT

Start at: 2018-08-02 03:53:03
End at: 2018-08-02 03:53:33
Local clock offset: 0.186 ms
Remote clock offset: -0.032 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.84 Mbit/s
95th percentile per-packet one-way delay: 137.503 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.84 Mbit/s
95th percentile per-packet one-way delay: 137.503 ms
Loss rate: 0.00%
```

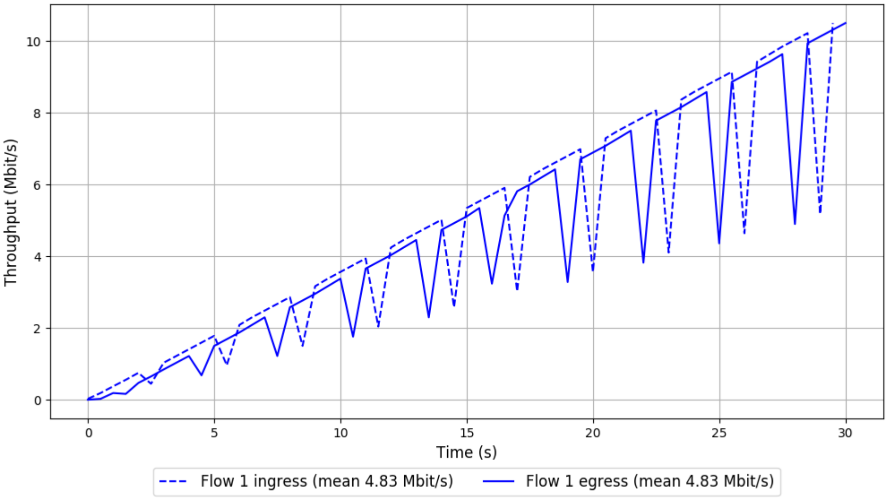
Run 8: Report of LEDBAT — Data Link

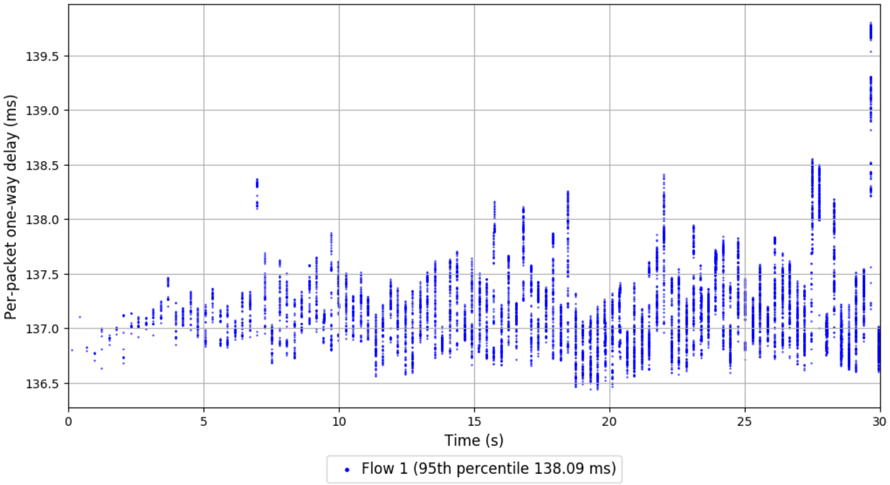




```
Run 9: Statistics of LEDBAT

Start at: 2018-08-02 04:16:42
End at: 2018-08-02 04:17:13
Local clock offset: -0.193 ms
Remote clock offset: -0.117 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.83 Mbit/s
95th percentile per-packet one-way delay: 138.091 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.83 Mbit/s
95th percentile per-packet one-way delay: 138.091 ms
Loss rate: 0.00%
```

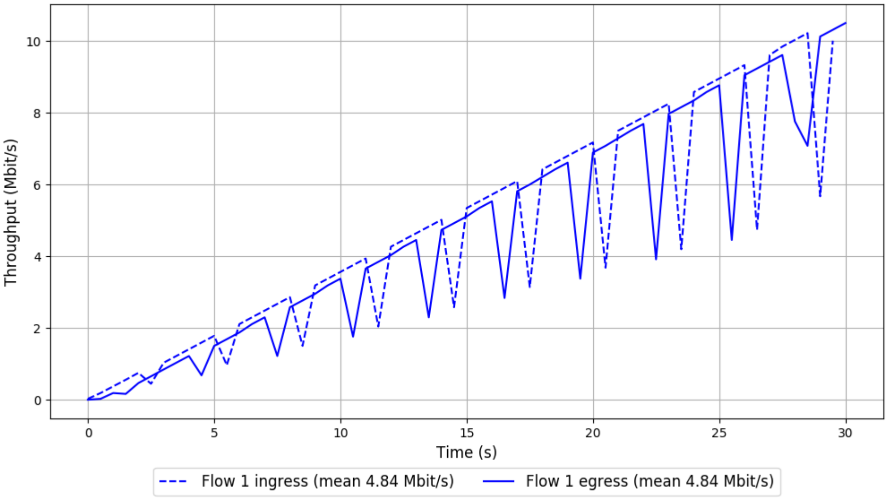
Run 9: Report of LEDBAT — Data Link

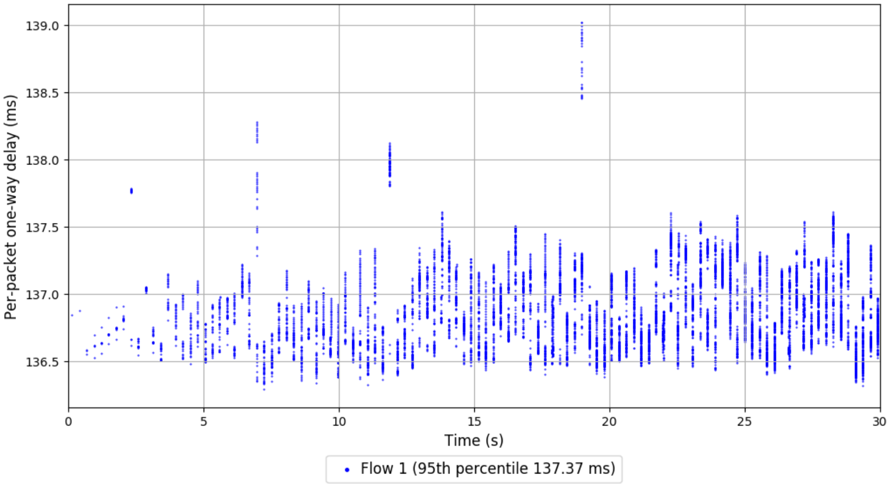




```
Run 10: Statistics of LEDBAT

Start at: 2018-08-02 04:39:55
End at: 2018-08-02 04:40:25
Local clock offset: -0.001 ms
Remote clock offset: -0.084 ms

# Below is generated by plot.py at 2018-08-02 06:12:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.84 Mbit/s
95th percentile per-packet one-way delay: 137.366 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.84 Mbit/s
95th percentile per-packet one-way delay: 137.366 ms
Loss rate: 0.00%
```

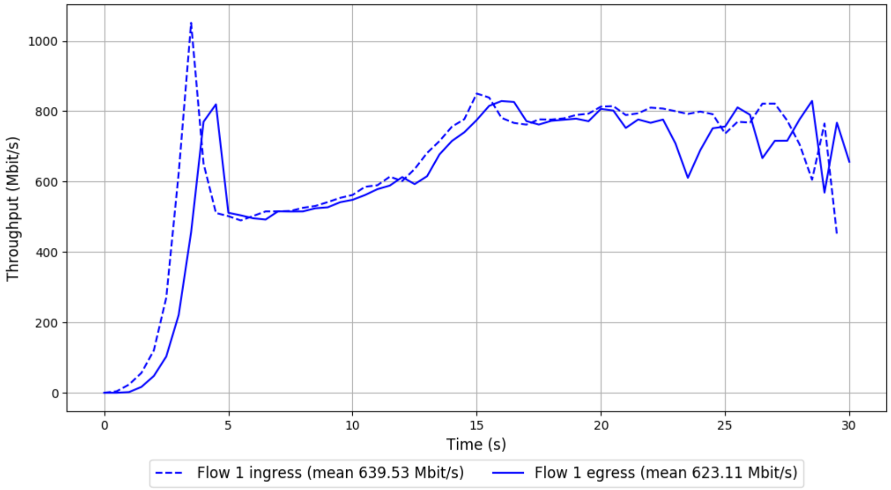
Run 10: Report of LEDBAT — Data Link

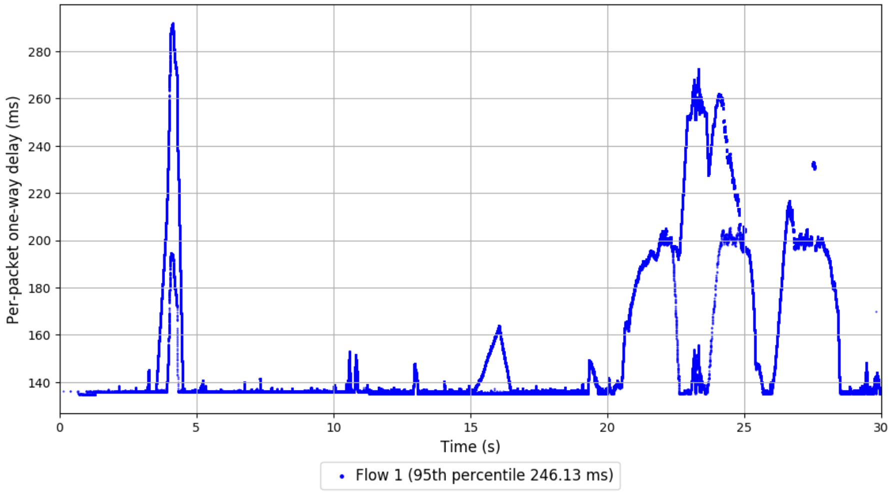




```
Run 1: Statistics of PCC-Allegro

Start at: 2018-08-02 01:18:02
End at: 2018-08-02 01:18:32
Local clock offset: 0.311 ms
Remote clock offset: -0.506 ms

# Below is generated by plot.py at 2018-08-02 06:15:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 623.11 Mbit/s
95th percentile per-packet one-way delay: 246.132 ms
Loss rate: 2.57%
-- Flow 1:
Average throughput: 623.11 Mbit/s
95th percentile per-packet one-way delay: 246.132 ms
Loss rate: 2.57%
```

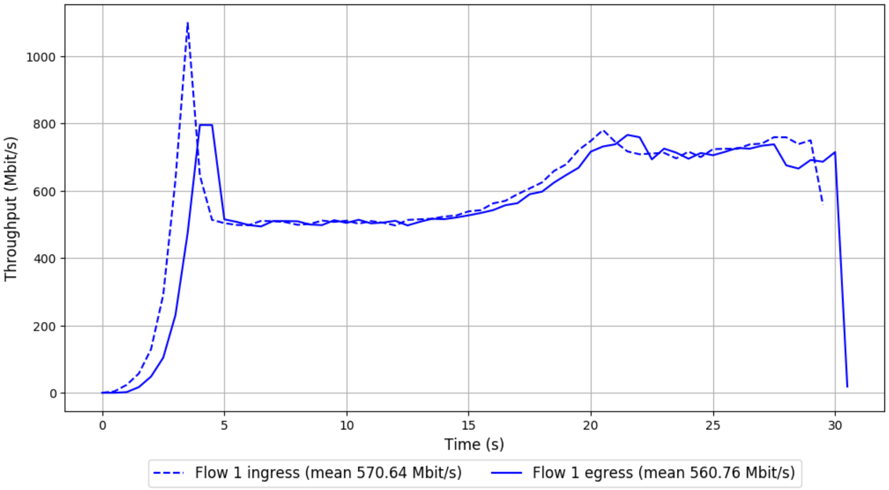
Run 1: Report of PCC-Allegro — Data Link

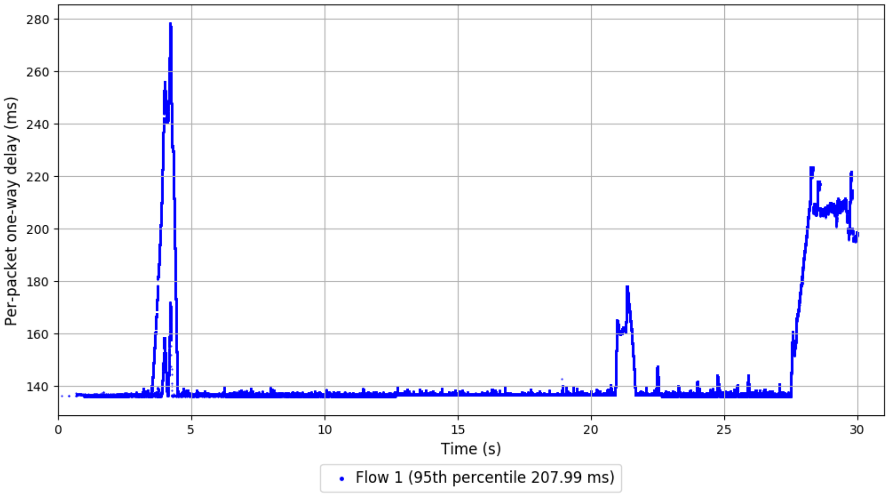




```
Run 2: Statistics of PCC-Allegro

Start at: 2018-08-02 01:41:20
End at: 2018-08-02 01:41:50
Local clock offset: 0.17 ms
Remote clock offset: 0.257 ms

# Below is generated by plot.py at 2018-08-02 06:15:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 560.76 Mbit/s
95th percentile per-packet one-way delay: 207.986 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 560.76 Mbit/s
95th percentile per-packet one-way delay: 207.986 ms
Loss rate: 1.73%
```

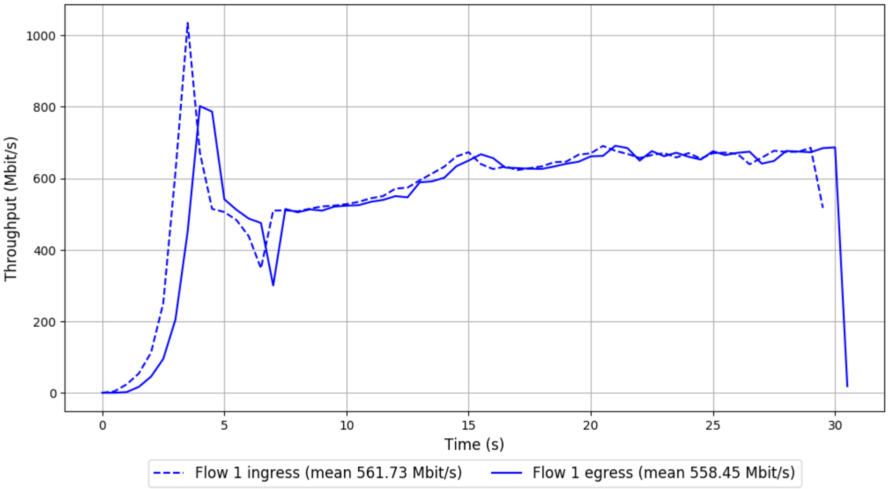
Run 2: Report of PCC-Allegro — Data Link

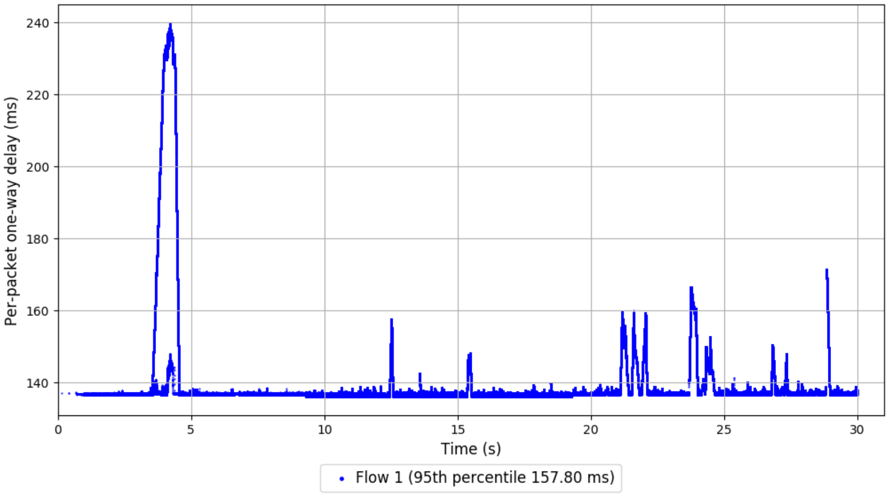




```
Run 3: Statistics of PCC-Allegro

Start at: 2018-08-02 02:04:23
End at: 2018-08-02 02:04:53
Local clock offset: 0.133 ms
Remote clock offset: 0.322 ms

# Below is generated by plot.py at 2018-08-02 06:15:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 558.45 Mbit/s
95th percentile per-packet one-way delay: 157.802 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 558.45 Mbit/s
95th percentile per-packet one-way delay: 157.802 ms
Loss rate: 0.59%
```

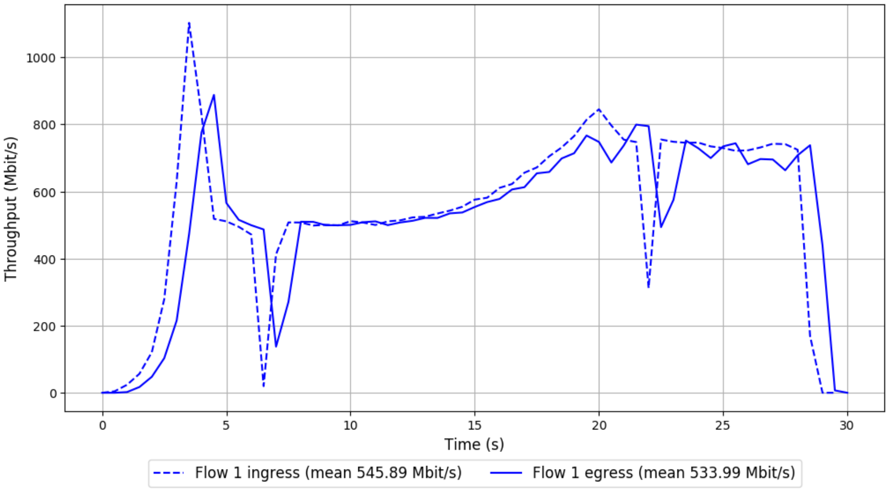
Run 3: Report of PCC-Allegro — Data Link

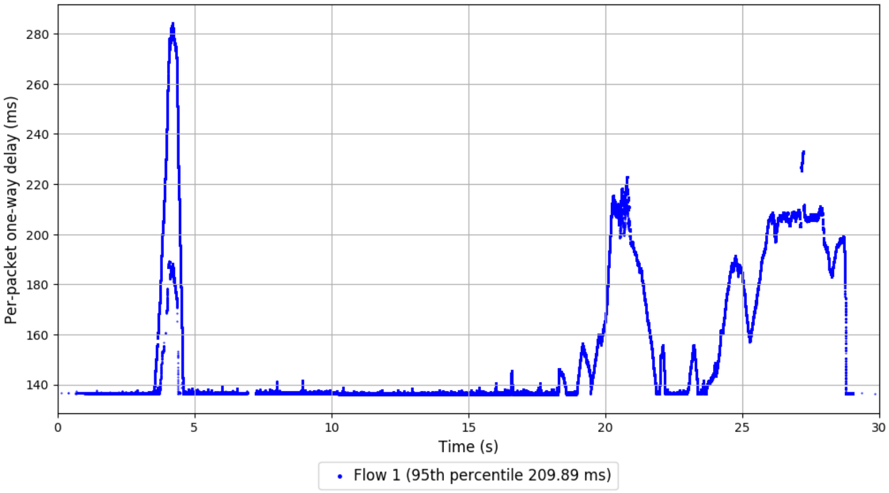




```
Run 4: Statistics of PCC-Allegro

Start at: 2018-08-02 02:27:43
End at: 2018-08-02 02:28:13
Local clock offset: 0.056 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2018-08-02 06:15:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 533.99 Mbit/s
95th percentile per-packet one-way delay: 209.891 ms
Loss rate: 2.18%
-- Flow 1:
Average throughput: 533.99 Mbit/s
95th percentile per-packet one-way delay: 209.891 ms
Loss rate: 2.18%
```

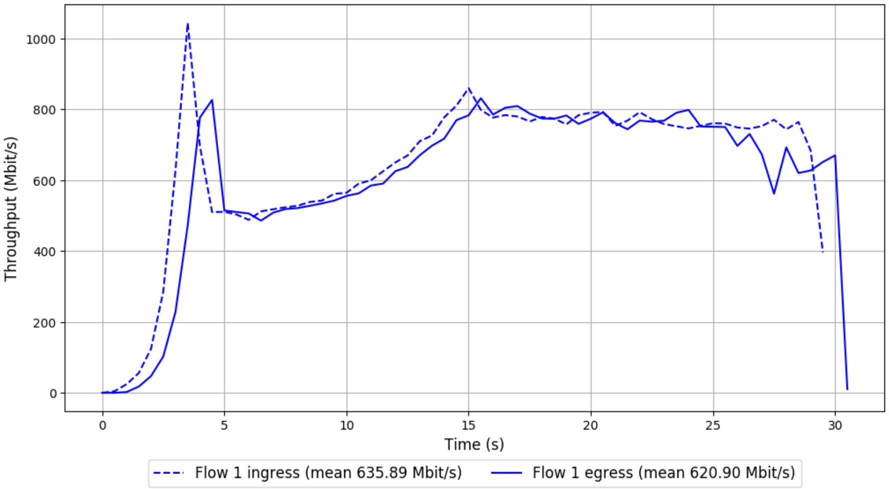
Run 4: Report of PCC-Allegro — Data Link

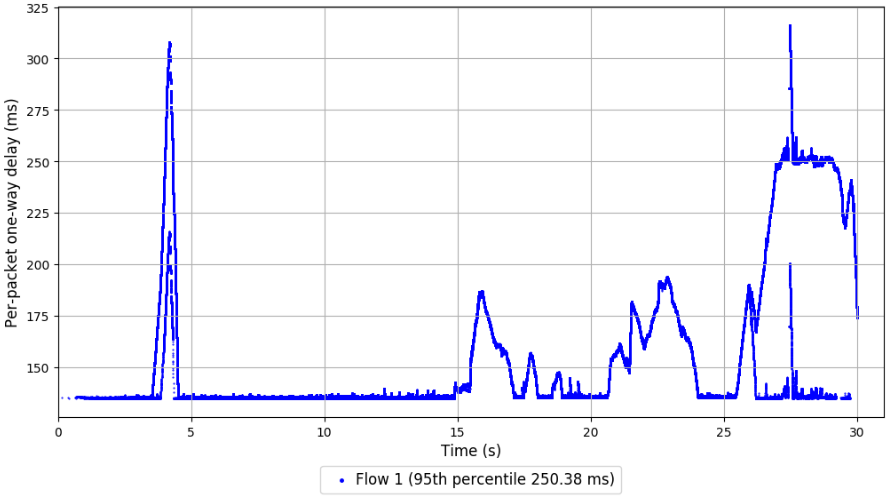




```
Run 5: Statistics of PCC-Allegro

Start at: 2018-08-02 02:51:08
End at: 2018-08-02 02:51:38
Local clock offset: 0.237 ms
Remote clock offset: -0.107 ms

# Below is generated by plot.py at 2018-08-02 06:22:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 620.90 Mbit/s
95th percentile per-packet one-way delay: 250.378 ms
Loss rate: 2.35%
-- Flow 1:
Average throughput: 620.90 Mbit/s
95th percentile per-packet one-way delay: 250.378 ms
Loss rate: 2.35%
```

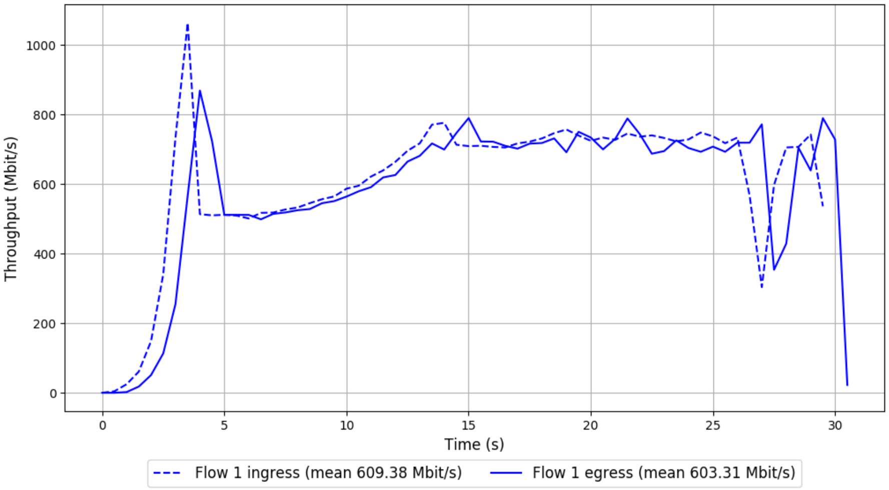
Run 5: Report of PCC-Allegro — Data Link

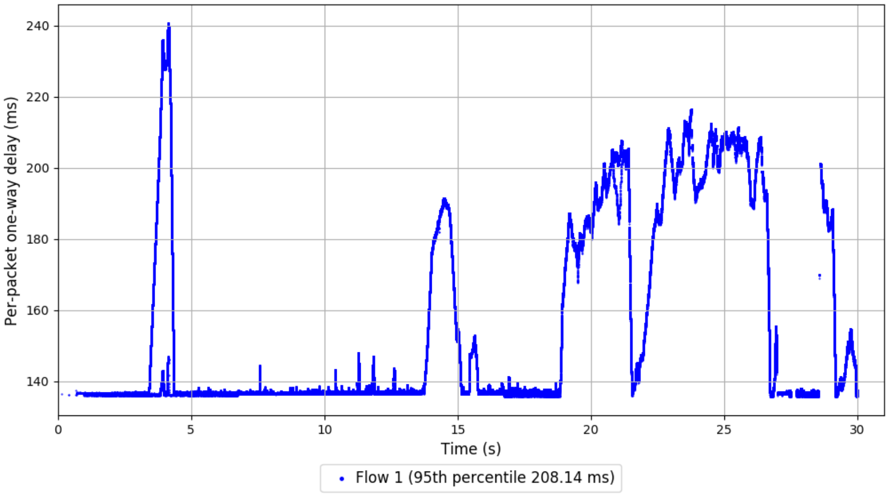




```
Run 6: Statistics of PCC-Allegro

Start at: 2018-08-02 03:14:47
End at: 2018-08-02 03:15:17
Local clock offset: 0.123 ms
Remote clock offset: -0.115 ms

# Below is generated by plot.py at 2018-08-02 06:22:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 603.31 Mbit/s
95th percentile per-packet one-way delay: 208.143 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 603.31 Mbit/s
95th percentile per-packet one-way delay: 208.143 ms
Loss rate: 1.00%
```

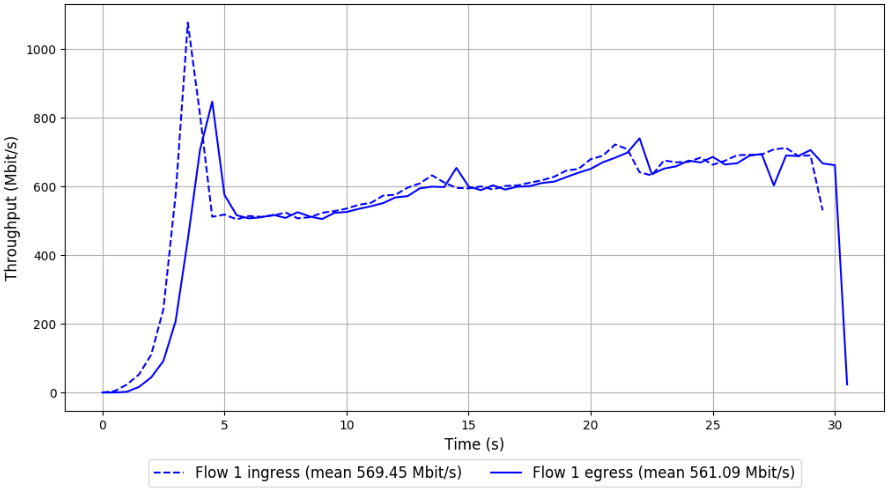
Run 6: Report of PCC-Allegro — Data Link

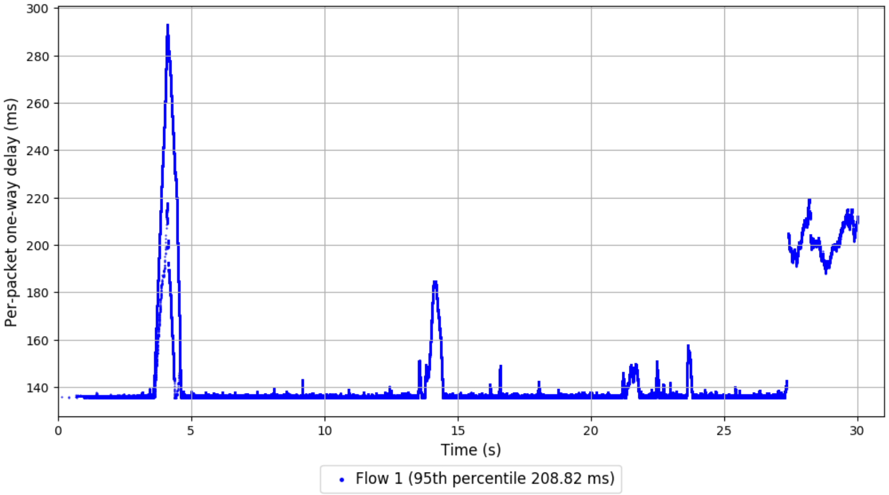




```
Run 7: Statistics of PCC-Allegro

Start at: 2018-08-02 03:38:13
End at: 2018-08-02 03:38:43
Local clock offset: 0.321 ms
Remote clock offset: -0.083 ms

# Below is generated by plot.py at 2018-08-02 06:22:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 561.09 Mbit/s
95th percentile per-packet one-way delay: 208.825 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 561.09 Mbit/s
95th percentile per-packet one-way delay: 208.825 ms
Loss rate: 1.47%
```

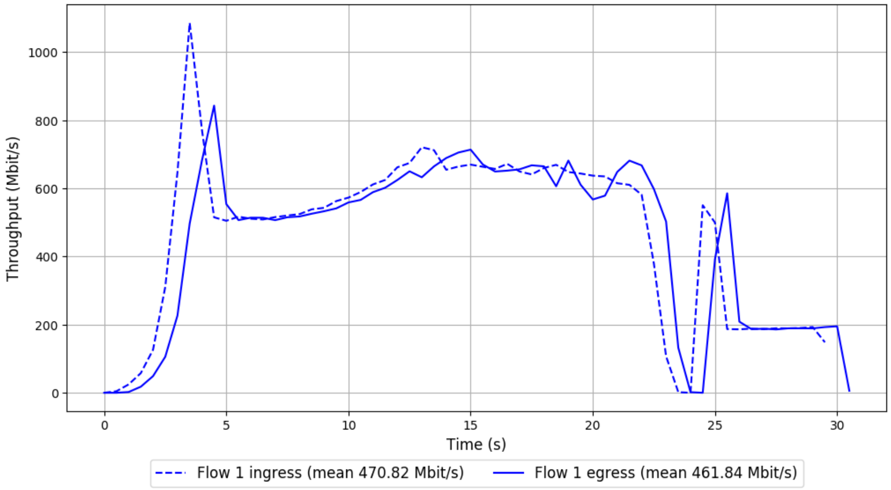
Run 7: Report of PCC-Allegro — Data Link

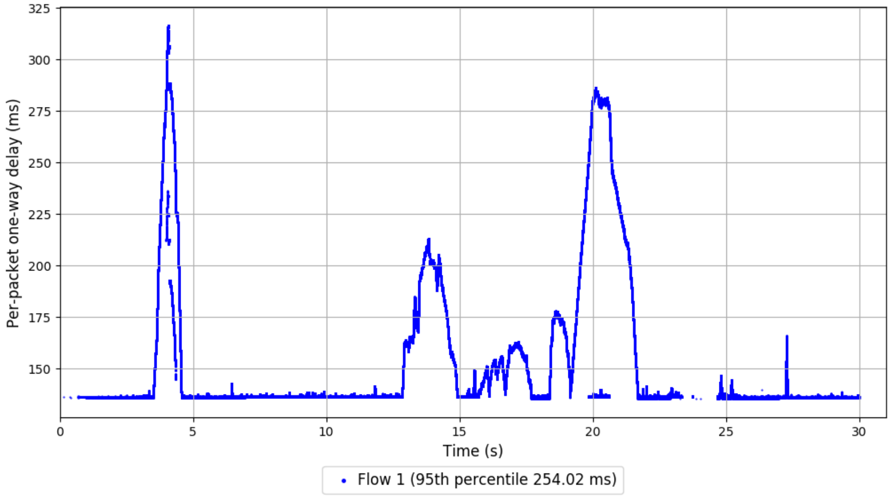




```
Run 8: Statistics of PCC-Allegro

Start at: 2018-08-02 04:01:47
End at: 2018-08-02 04:02:17
Local clock offset: 0.04 ms
Remote clock offset: -0.107 ms

# Below is generated by plot.py at 2018-08-02 06:22:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 461.84 Mbit/s
95th percentile per-packet one-way delay: 254.017 ms
Loss rate: 1.91%
-- Flow 1:
Average throughput: 461.84 Mbit/s
95th percentile per-packet one-way delay: 254.017 ms
Loss rate: 1.91%
```

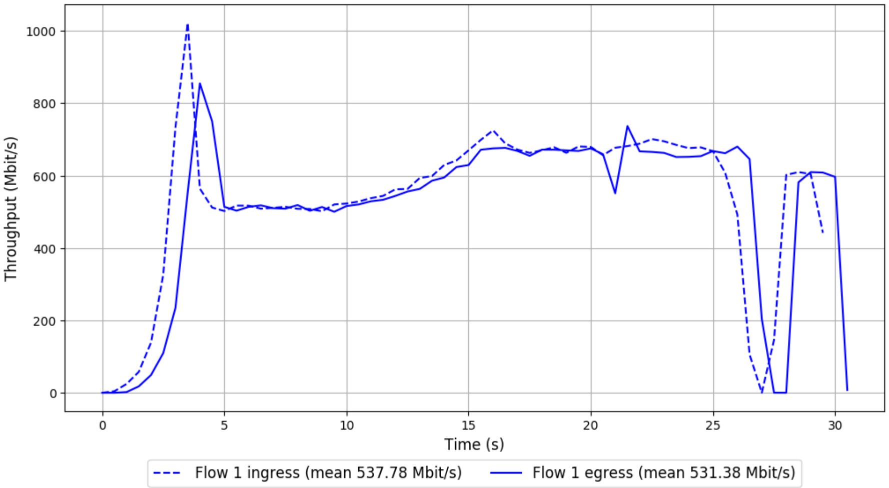
Run 8: Report of PCC-Allegro — Data Link

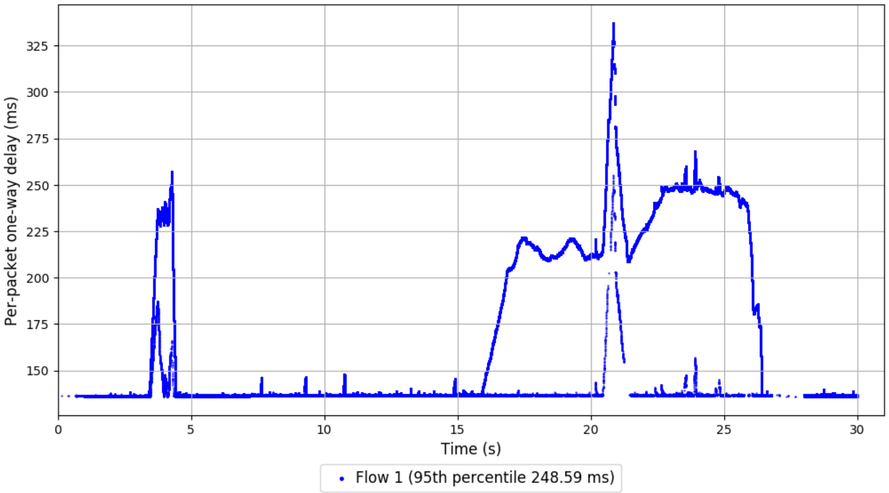




```
Run 9: Statistics of PCC-Allegro

Start at: 2018-08-02 04:25:26
End at: 2018-08-02 04:25:56
Local clock offset: -0.056 ms
Remote clock offset: -0.158 ms

# Below is generated by plot.py at 2018-08-02 06:24:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 531.38 Mbit/s
95th percentile per-packet one-way delay: 248.591 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 531.38 Mbit/s
95th percentile per-packet one-way delay: 248.591 ms
Loss rate: 1.19%
```

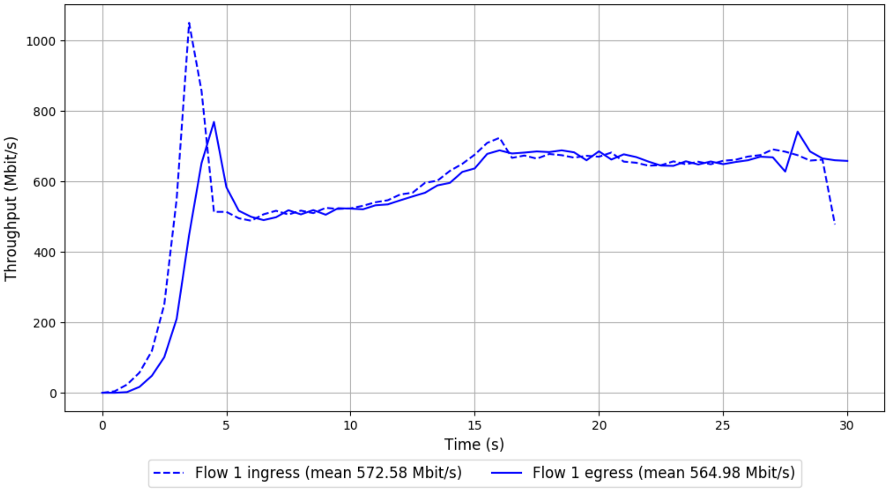
Run 9: Report of PCC-Allegro — Data Link

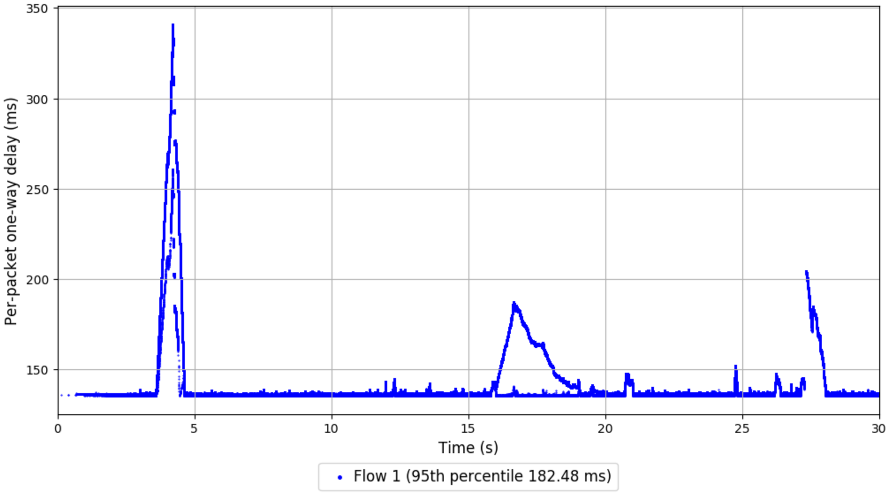




```
Run 10: Statistics of PCC-Allegro

Start at: 2018-08-02 04:48:32
End at: 2018-08-02 04:49:02
Local clock offset: 0.104 ms
Remote clock offset: -0.049 ms

# Below is generated by plot.py at 2018-08-02 06:24:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 564.98 Mbit/s
95th percentile per-packet one-way delay: 182.479 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 564.98 Mbit/s
95th percentile per-packet one-way delay: 182.479 ms
Loss rate: 1.33%
```

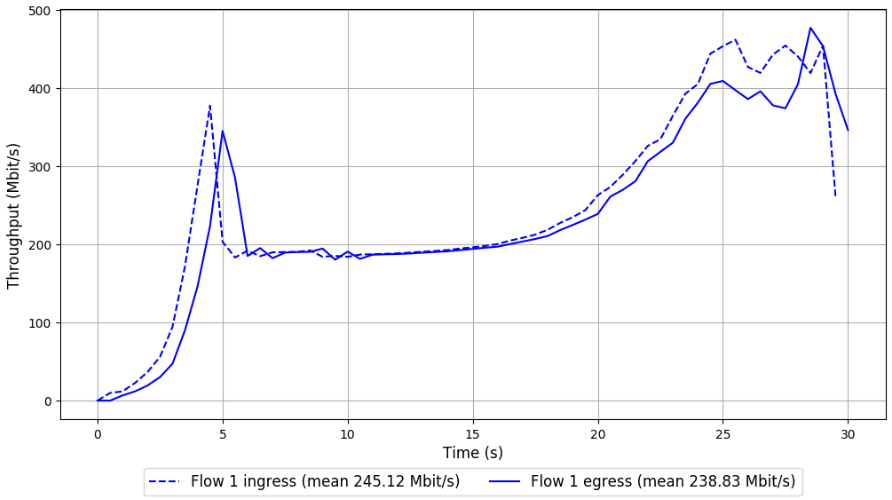
Run 10: Report of PCC-Allegro — Data Link

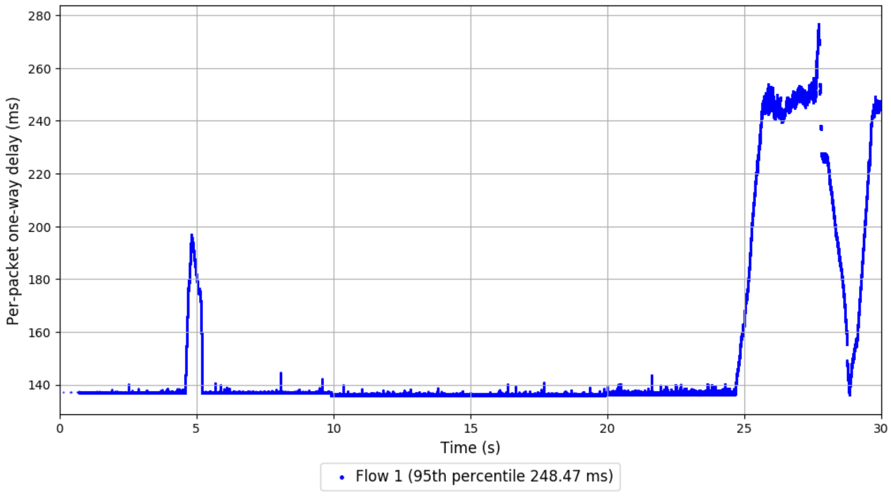




```
Run 1: Statistics of PCC-Expr

Start at: 2018-08-02 01:20:54
End at: 2018-08-02 01:21:24
Local clock offset: -0.144 ms
Remote clock offset: 0.238 ms

# Below is generated by plot.py at 2018-08-02 06:24:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 238.83 Mbit/s
95th percentile per-packet one-way delay: 248.465 ms
Loss rate: 2.56%
-- Flow 1:
Average throughput: 238.83 Mbit/s
95th percentile per-packet one-way delay: 248.465 ms
Loss rate: 2.56%
```

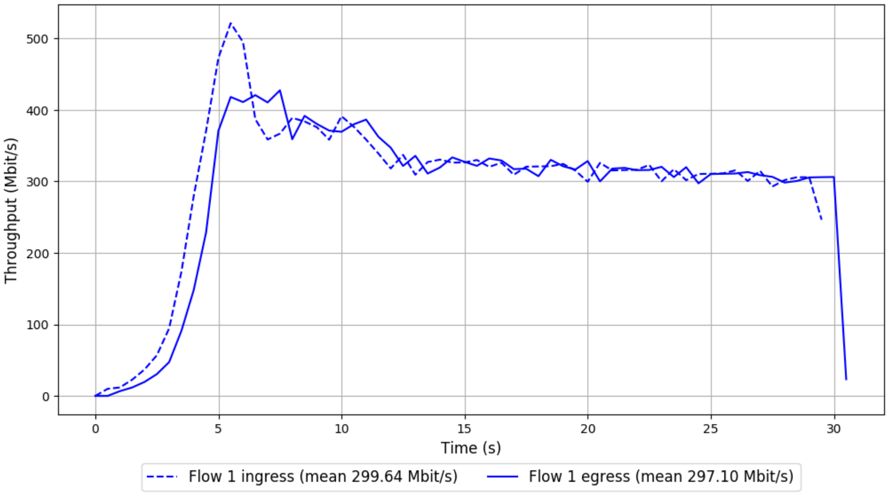
Run 1: Report of PCC-Expr — Data Link

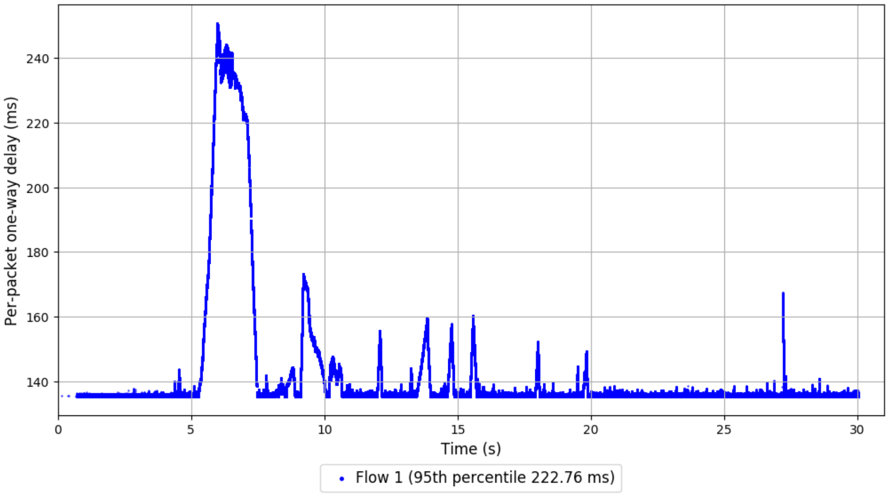




```
Run 2: Statistics of PCC-Expr

Start at: 2018-08-02 01:44:11
End at: 2018-08-02 01:44:41
Local clock offset: 0.171 ms
Remote clock offset: -0.459 ms

# Below is generated by plot.py at 2018-08-02 06:25:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 297.10 Mbit/s
95th percentile per-packet one-way delay: 222.765 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 297.10 Mbit/s
95th percentile per-packet one-way delay: 222.765 ms
Loss rate: 0.85%
```

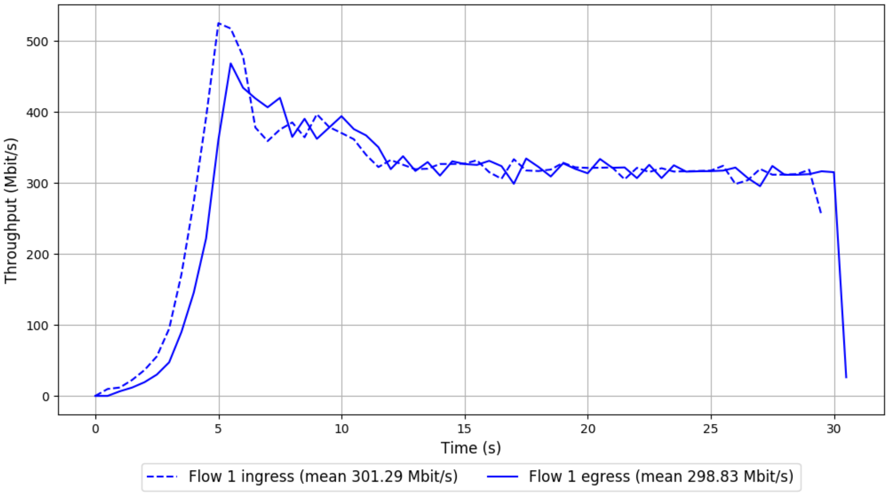
Run 2: Report of PCC-Expr — Data Link

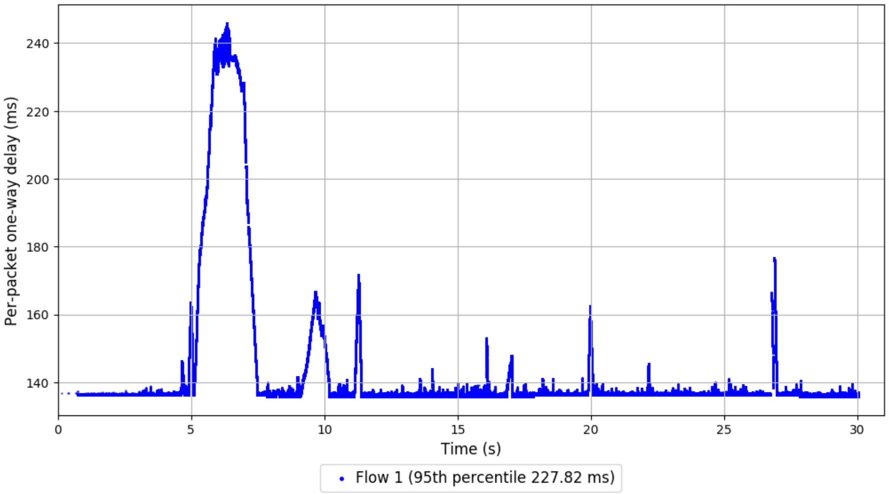




```
Run 3: Statistics of PCC-Expr

Start at: 2018-08-02 02:07:15
End at: 2018-08-02 02:07:45
Local clock offset: 0.159 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2018-08-02 06:30:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 298.83 Mbit/s
95th percentile per-packet one-way delay: 227.823 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 298.83 Mbit/s
95th percentile per-packet one-way delay: 227.823 ms
Loss rate: 0.82%
```

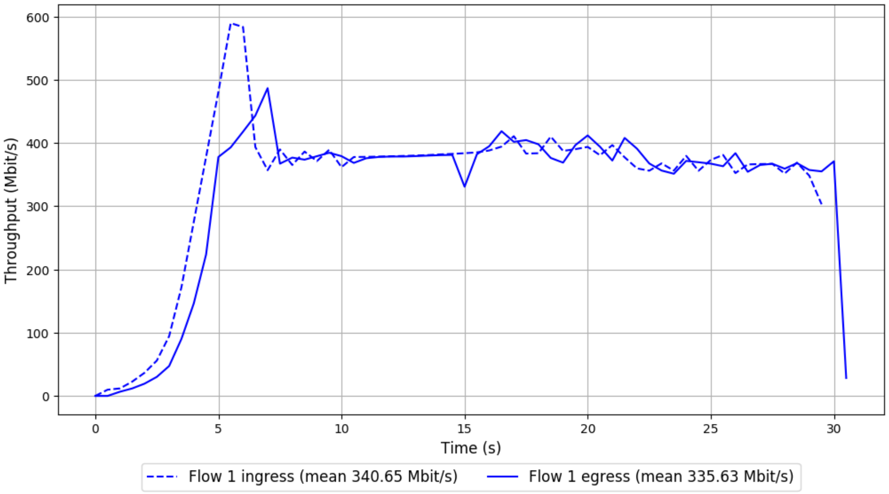
Run 3: Report of PCC-Expr — Data Link

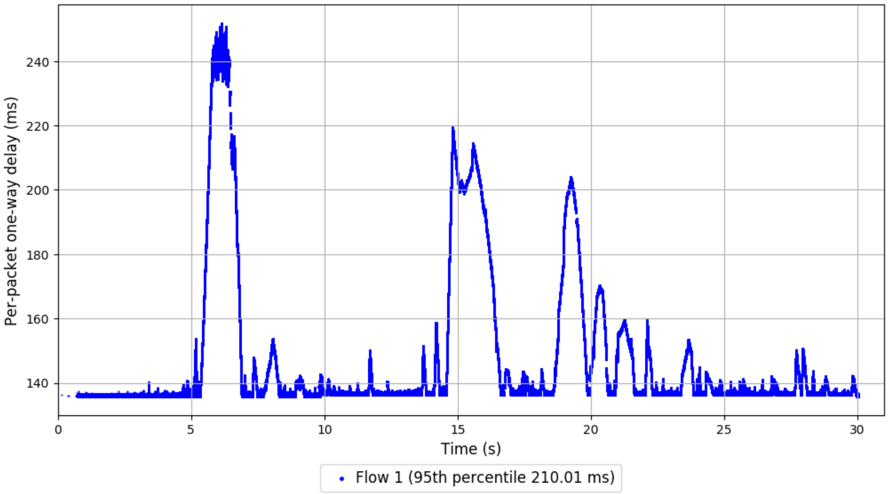




```
Run 4: Statistics of PCC-Expr

Start at: 2018-08-02 02:30:33
End at: 2018-08-02 02:31:03
Local clock offset: 0.038 ms
Remote clock offset: -0.085 ms

# Below is generated by plot.py at 2018-08-02 06:33:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 335.63 Mbit/s
95th percentile per-packet one-way delay: 210.012 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 335.63 Mbit/s
95th percentile per-packet one-way delay: 210.012 ms
Loss rate: 1.47%
```

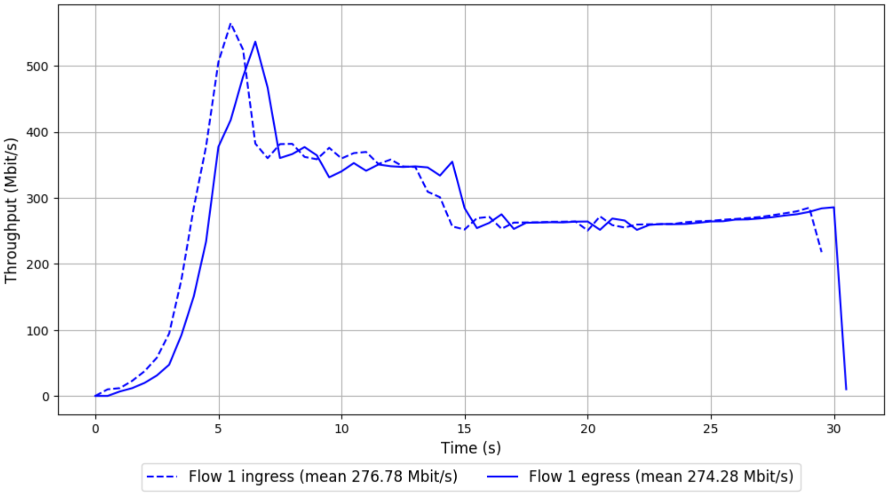
Run 4: Report of PCC-Expr — Data Link

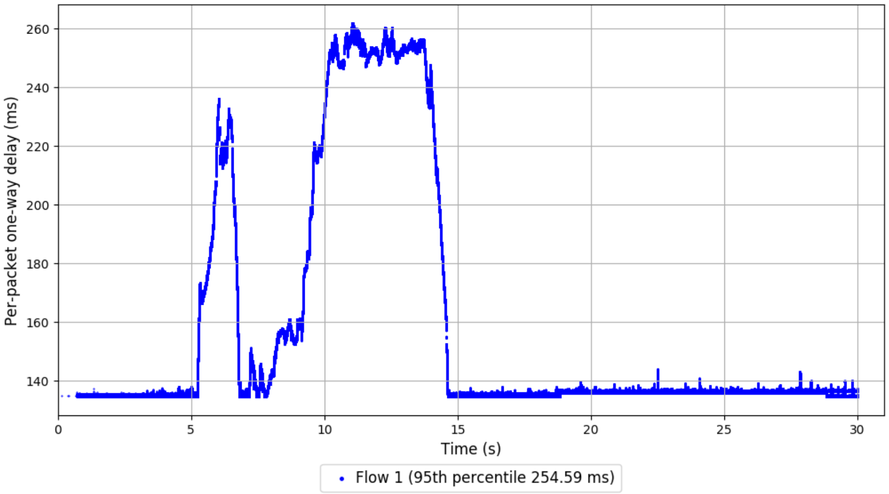




```
Run 5: Statistics of PCC-Expr

Start at: 2018-08-02 02:54:05
End at: 2018-08-02 02:54:35
Local clock offset: 0.258 ms
Remote clock offset: 0.239 ms

# Below is generated by plot.py at 2018-08-02 06:33:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 274.28 Mbit/s
95th percentile per-packet one-way delay: 254.588 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 274.28 Mbit/s
95th percentile per-packet one-way delay: 254.588 ms
Loss rate: 0.90%
```

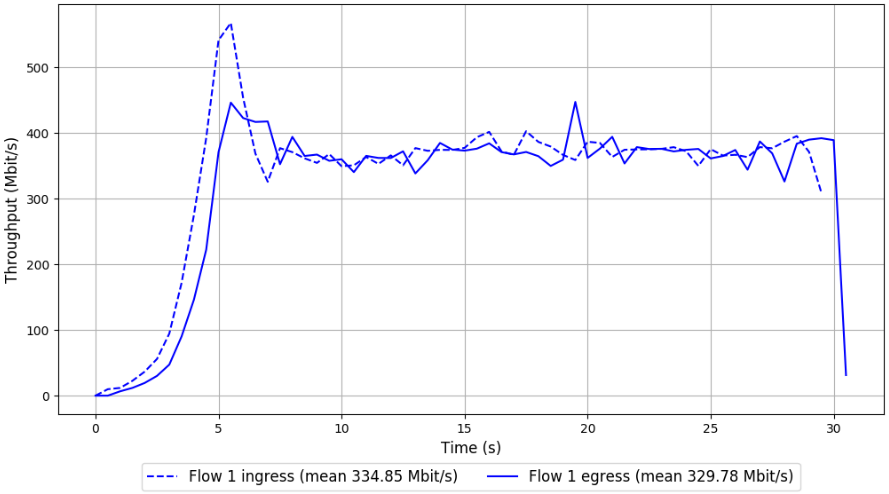
Run 5: Report of PCC-Expr — Data Link

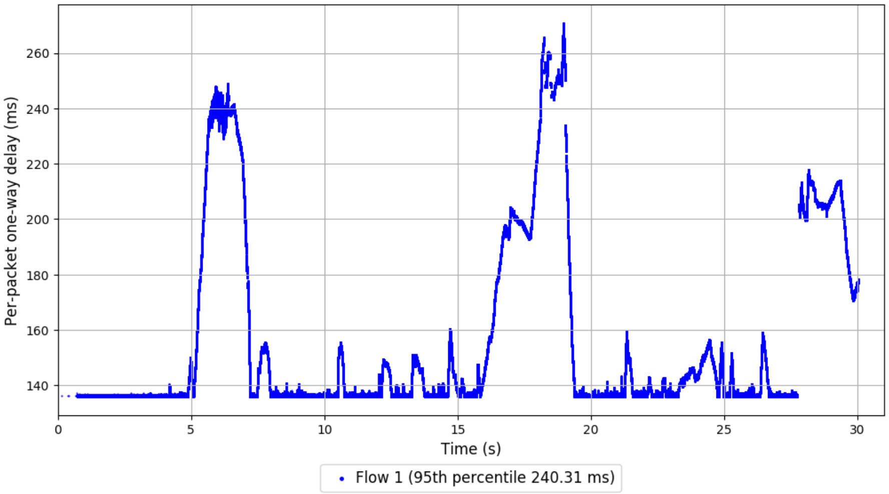




```
Run 6: Statistics of PCC-Expr

Start at: 2018-08-02 03:17:42
End at: 2018-08-02 03:18:12
Local clock offset: 0.216 ms
Remote clock offset: -0.117 ms

# Below is generated by plot.py at 2018-08-02 06:34:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 329.78 Mbit/s
95th percentile per-packet one-way delay: 240.305 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 329.78 Mbit/s
95th percentile per-packet one-way delay: 240.305 ms
Loss rate: 1.51%
```

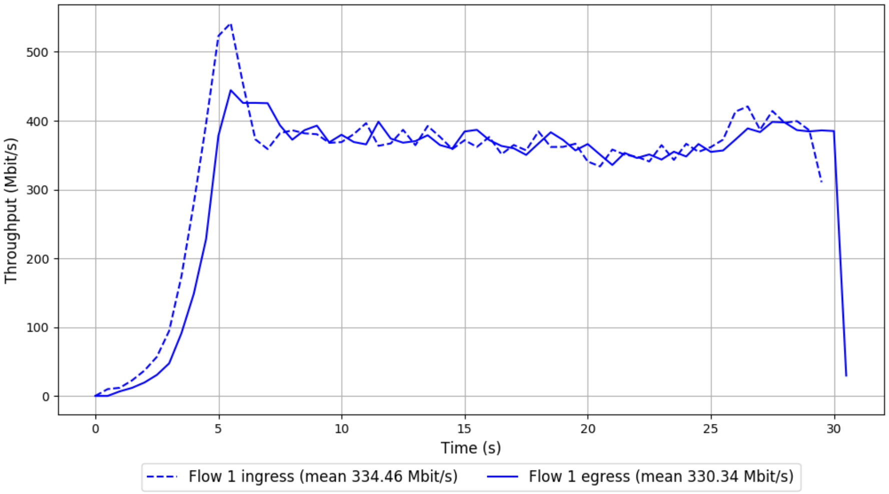
Run 6: Report of PCC-Expr — Data Link

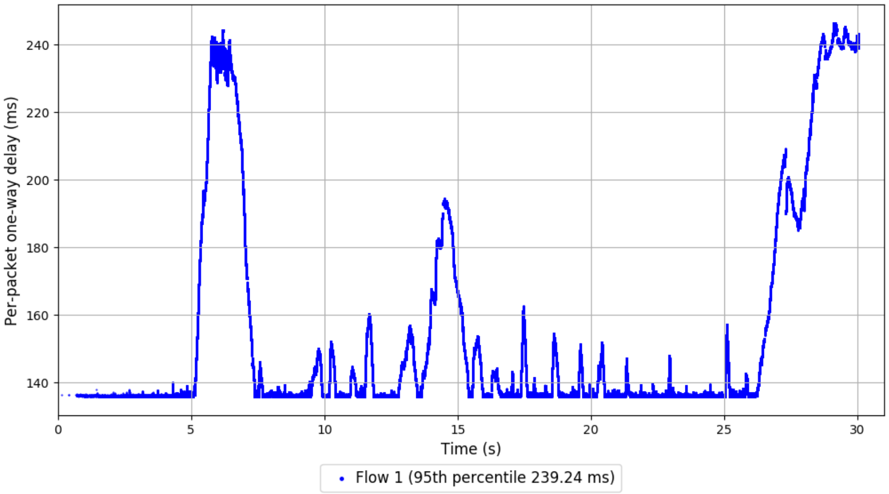




```
Run 7: Statistics of PCC-Expr

Start at: 2018-08-02 03:41:07
End at: 2018-08-02 03:41:37
Local clock offset: 0.273 ms
Remote clock offset: -0.424 ms

# Below is generated by plot.py at 2018-08-02 06:35:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 330.34 Mbit/s
95th percentile per-packet one-way delay: 239.237 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 330.34 Mbit/s
95th percentile per-packet one-way delay: 239.237 ms
Loss rate: 1.23%
```

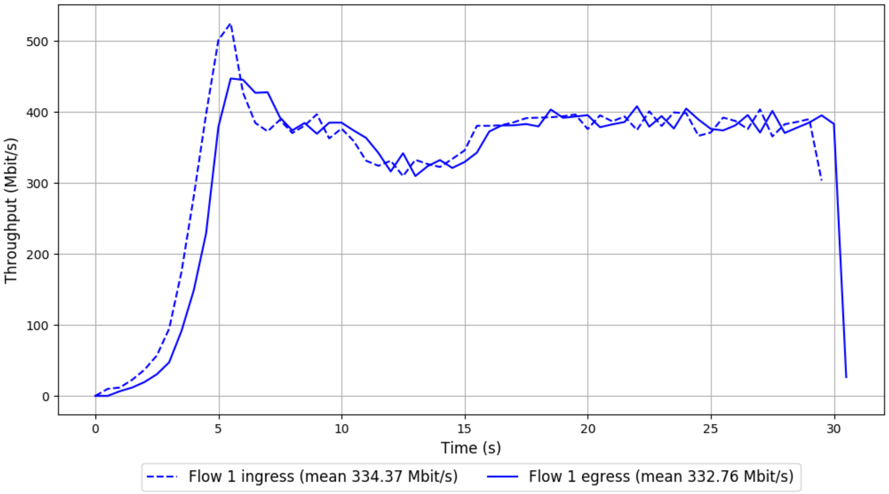
Run 7: Report of PCC-Expr — Data Link

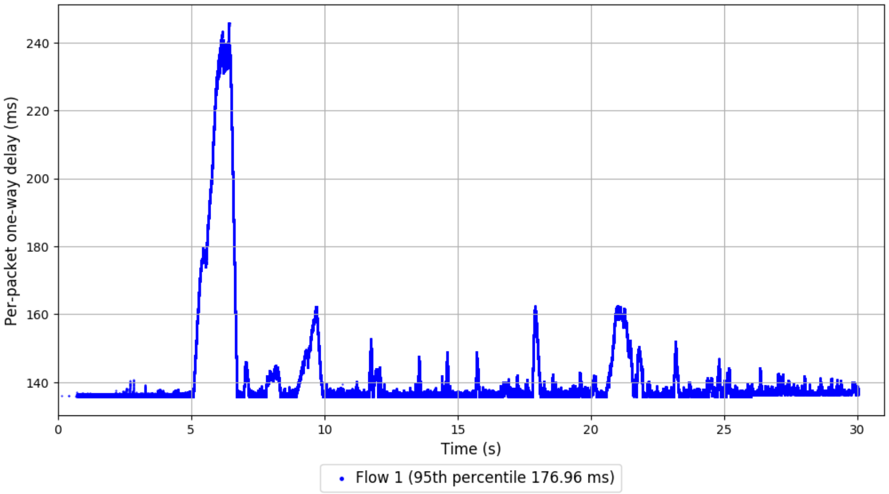




```
Run 8: Statistics of PCC-Expr

Start at: 2018-08-02 04:04:36
End at: 2018-08-02 04:05:07
Local clock offset: 0.017 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2018-08-02 06:35:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 332.76 Mbit/s
95th percentile per-packet one-way delay: 176.963 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 332.76 Mbit/s
95th percentile per-packet one-way delay: 176.963 ms
Loss rate: 0.48%
```

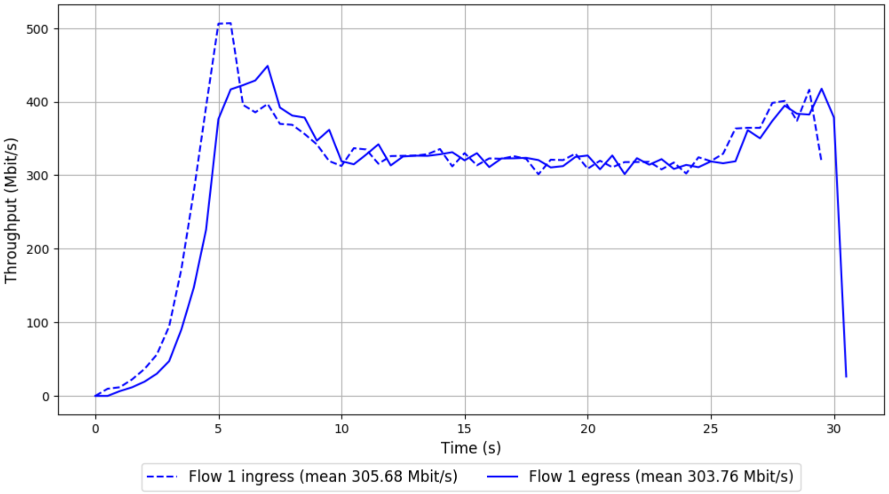
Run 8: Report of PCC-Expr — Data Link

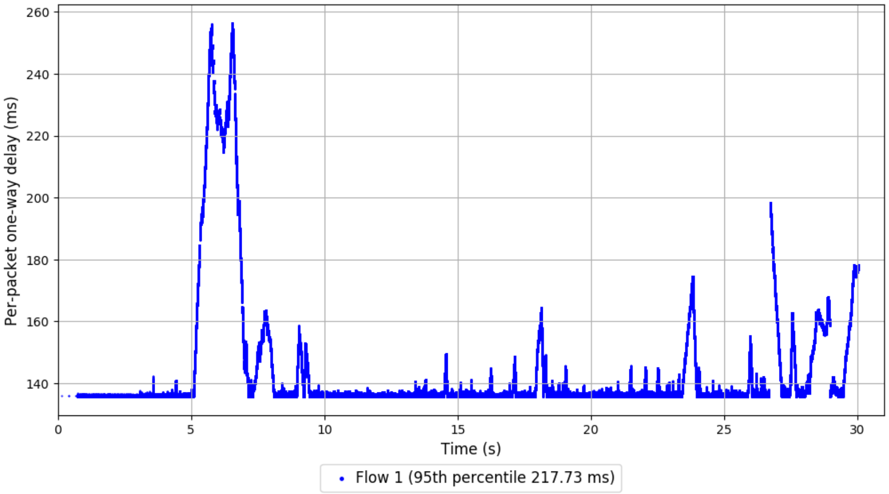




```
Run 9: Statistics of PCC-Expr

Start at: 2018-08-02 04:28:16
End at: 2018-08-02 04:28:46
Local clock offset: -0.022 ms
Remote clock offset: -0.145 ms

# Below is generated by plot.py at 2018-08-02 06:35:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 303.76 Mbit/s
95th percentile per-packet one-way delay: 217.732 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 303.76 Mbit/s
95th percentile per-packet one-way delay: 217.732 ms
Loss rate: 0.63%
```

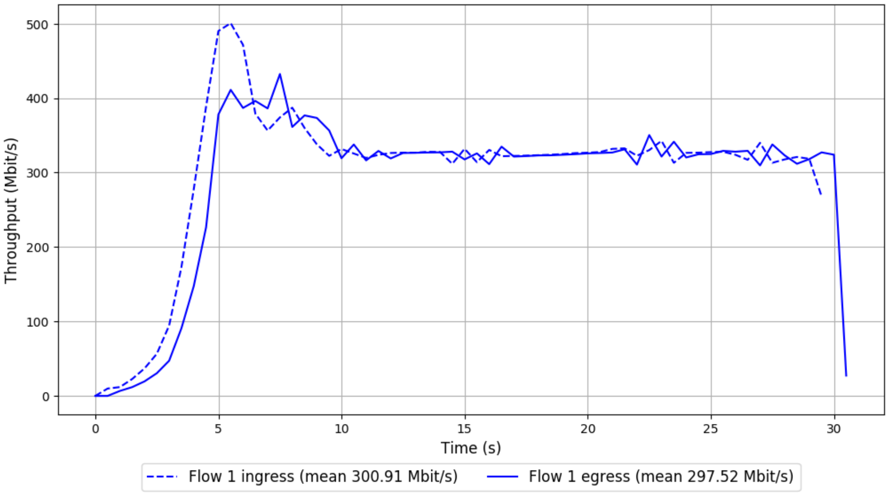
Run 9: Report of PCC-Expr — Data Link

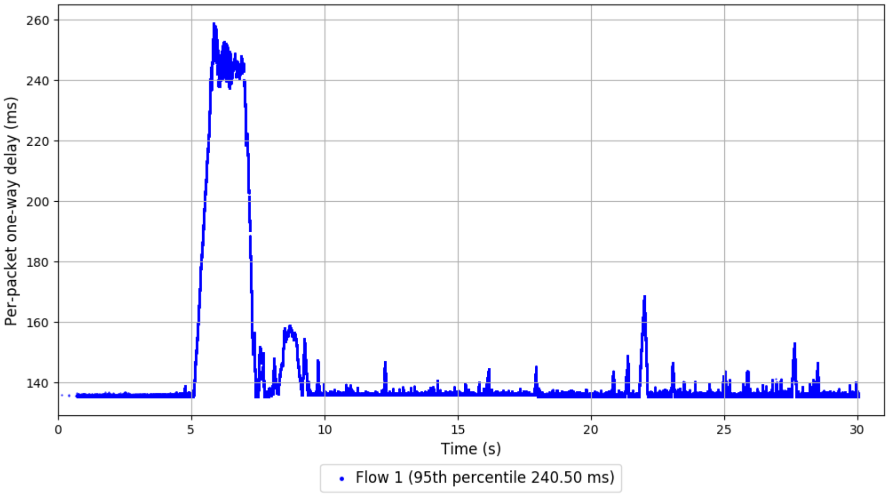




```
Run 10: Statistics of PCC-Expr

Start at: 2018-08-02 04:51:26
End at: 2018-08-02 04:51:56
Local clock offset: 0.224 ms
Remote clock offset: -0.423 ms

# Below is generated by plot.py at 2018-08-02 06:36:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 297.52 Mbit/s
95th percentile per-packet one-way delay: 240.495 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 297.52 Mbit/s
95th percentile per-packet one-way delay: 240.495 ms
Loss rate: 1.13%
```

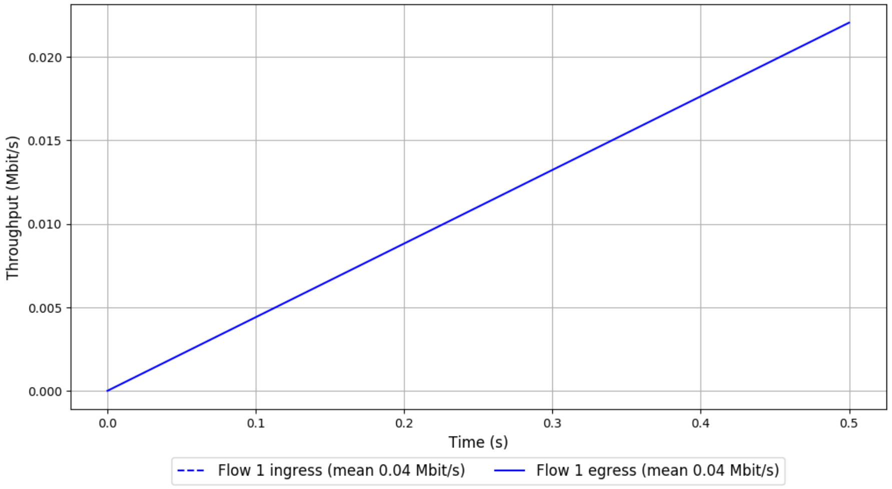
Run 10: Report of PCC-Expr — Data Link

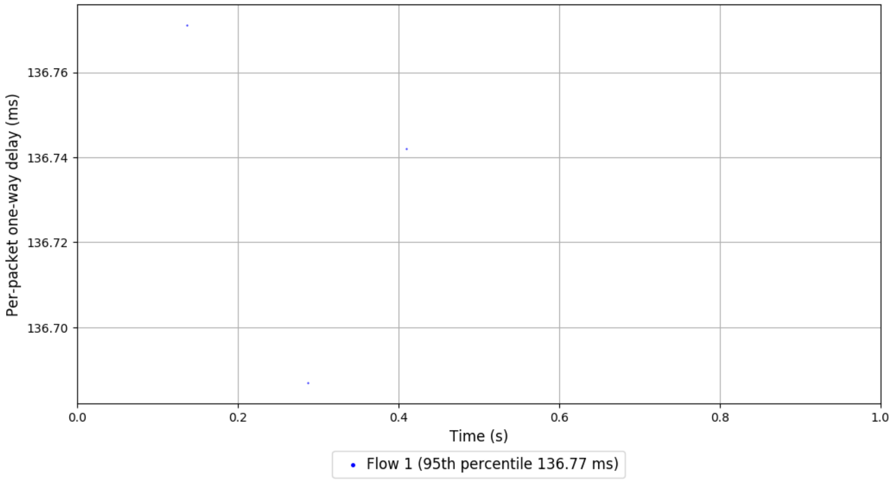




```
Run 1: Statistics of QUIC Cubic

Start at: 2018-08-02 01:04:28
End at: 2018-08-02 01:04:58
Local clock offset: 0.202 ms
Remote clock offset: 0.179 ms
```

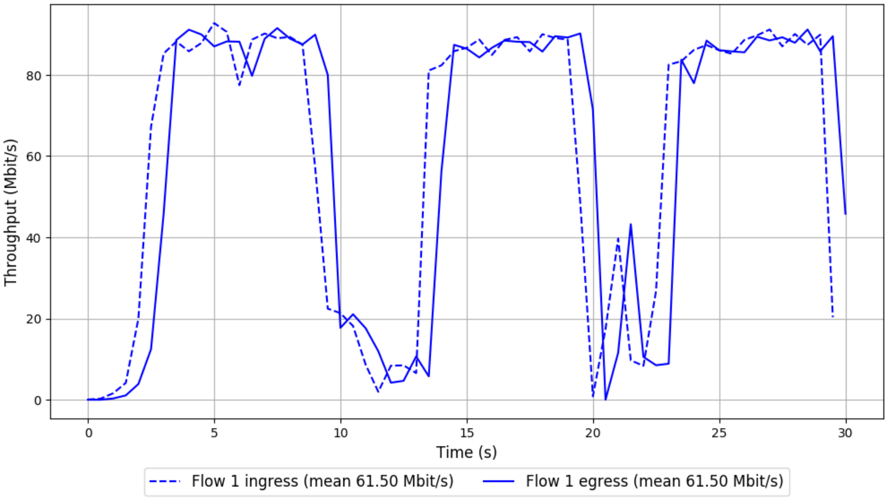
Run 1: Report of QUIC Cubic — Data Link

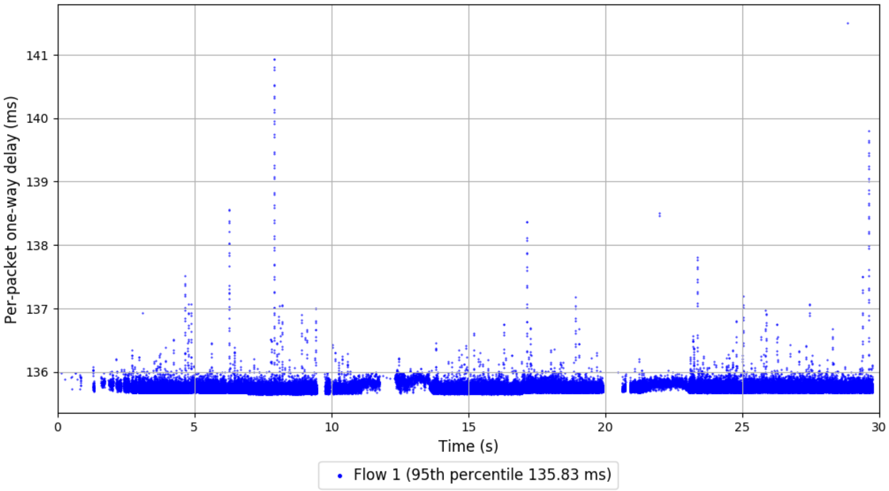




```
Run 2: Statistics of QUIC Cubic

Start at: 2018-08-02 01:27:35
End at: 2018-08-02 01:28:05
Local clock offset: 0.094 ms
Remote clock offset: -0.112 ms

# Below is generated by plot.py at 2018-08-02 06:36:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.50 Mbit/s
95th percentile per-packet one-way delay: 135.827 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.50 Mbit/s
95th percentile per-packet one-way delay: 135.827 ms
Loss rate: 0.00%
```

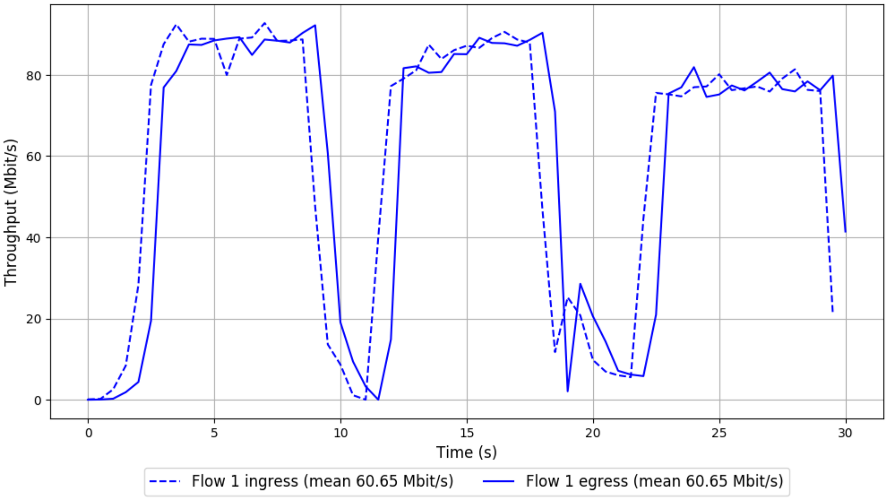
Run 2: Report of QUIC Cubic — Data Link

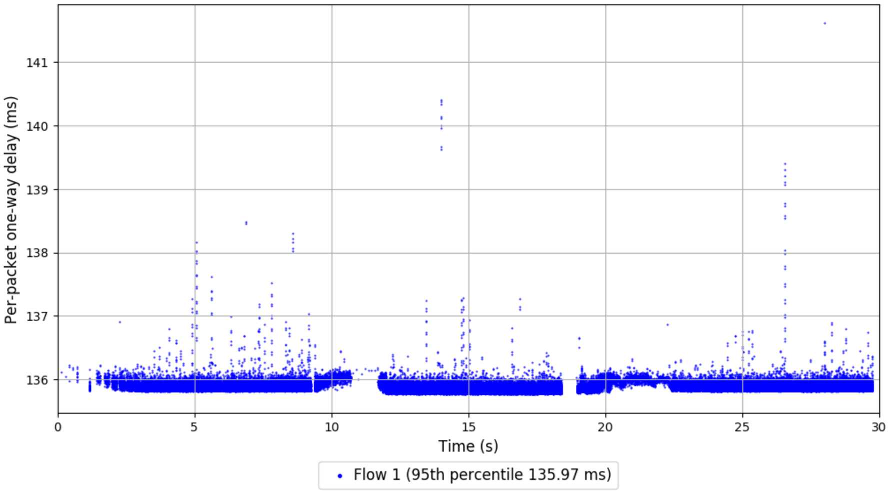




```
Run 3: Statistics of QUIC Cubic

Start at: 2018-08-02 01:50:52
End at: 2018-08-02 01:51:22
Local clock offset: 0.087 ms
Remote clock offset: -0.069 ms

# Below is generated by plot.py at 2018-08-02 06:36:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.65 Mbit/s
95th percentile per-packet one-way delay: 135.970 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 60.65 Mbit/s
95th percentile per-packet one-way delay: 135.970 ms
Loss rate: 0.00%
```

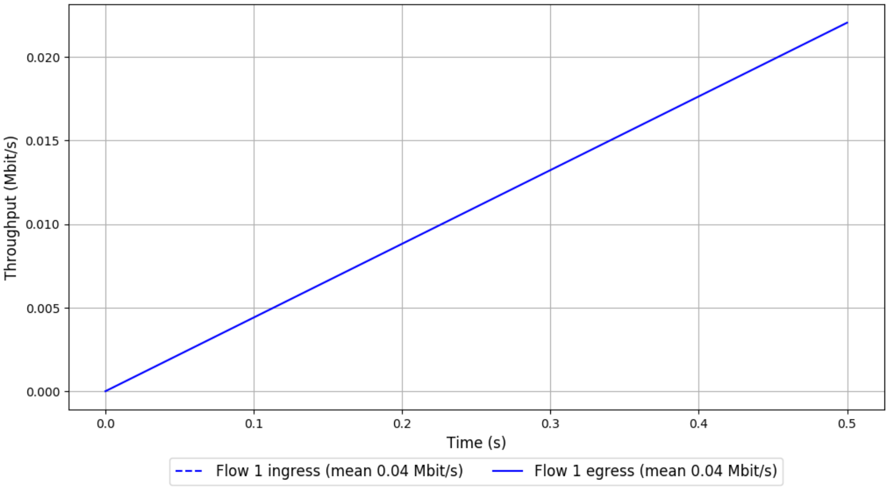
Run 3: Report of QUIC Cubic — Data Link

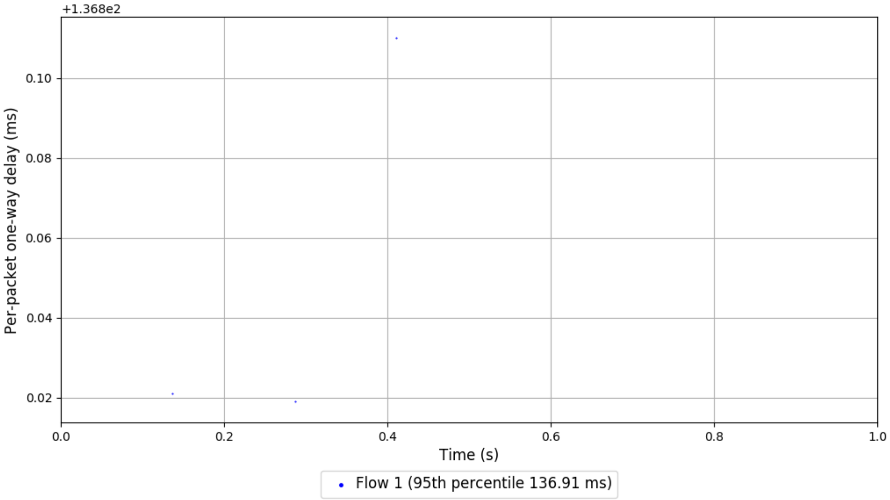




```
Run 4: Statistics of QUIC Cubic

Start at: 2018-08-02 02:13:47
End at: 2018-08-02 02:14:17
Local clock offset: 0.076 ms
Remote clock offset: -0.012 ms
```

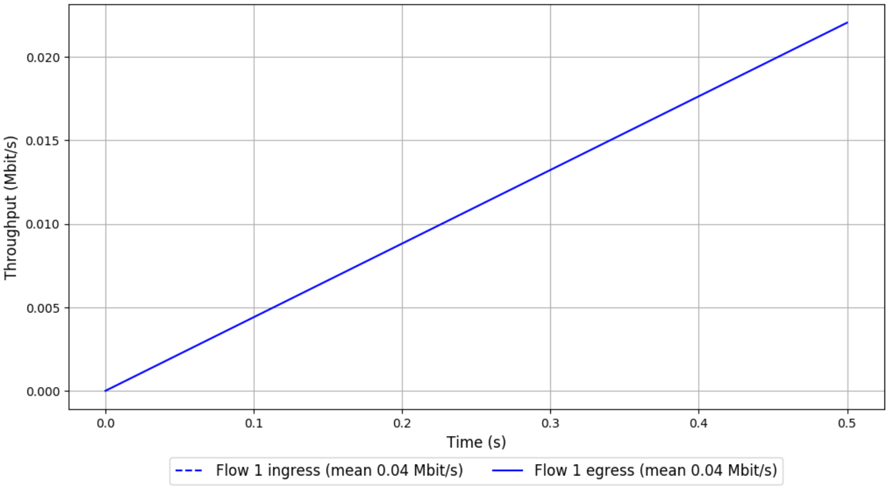
Run 4: Report of QUIC Cubic — Data Link

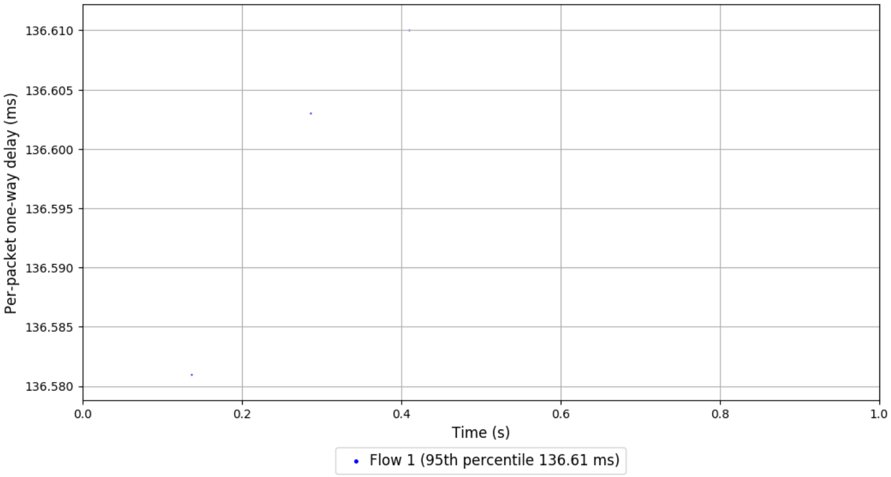




```
Run 5: Statistics of QUIC Cubic

Start at: 2018-08-02 02:37:29
End at: 2018-08-02 02:38:00
Local clock offset: -0.077 ms
Remote clock offset: -0.064 ms
```

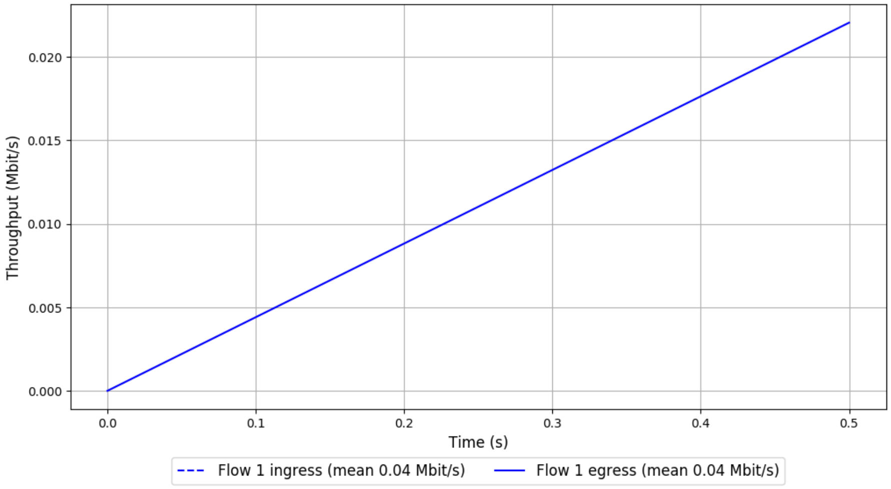
Run 5: Report of QUIC Cubic — Data Link

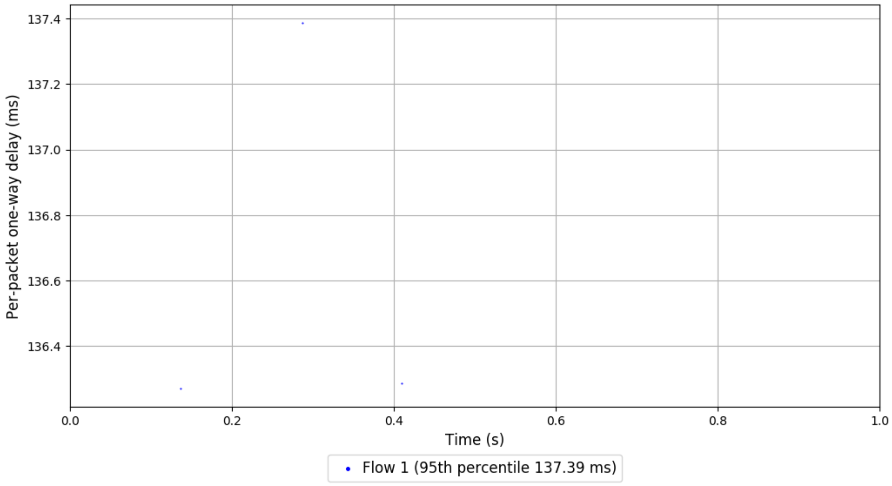




```
Run 6: Statistics of QUIC Cubic

Start at: 2018-08-02 03:00:56
End at: 2018-08-02 03:01:26
Local clock offset: 0.145 ms
Remote clock offset: -0.449 ms
```

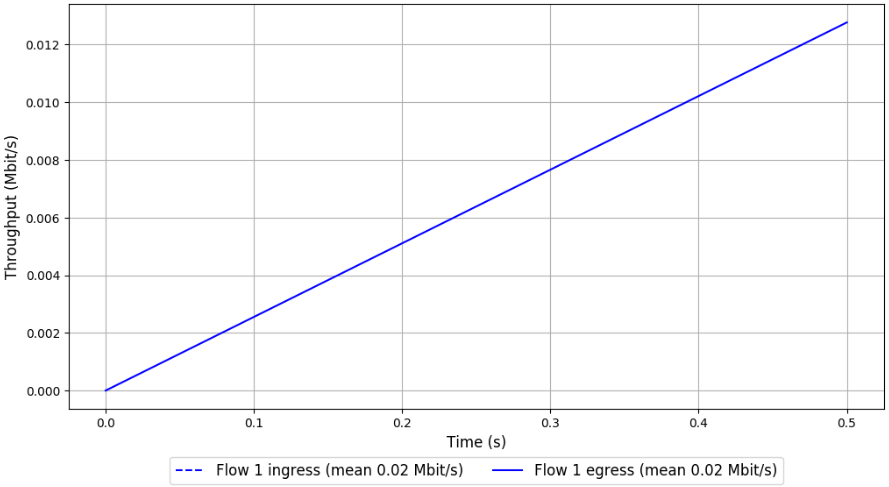
Run 6: Report of QUIC Cubic — Data Link

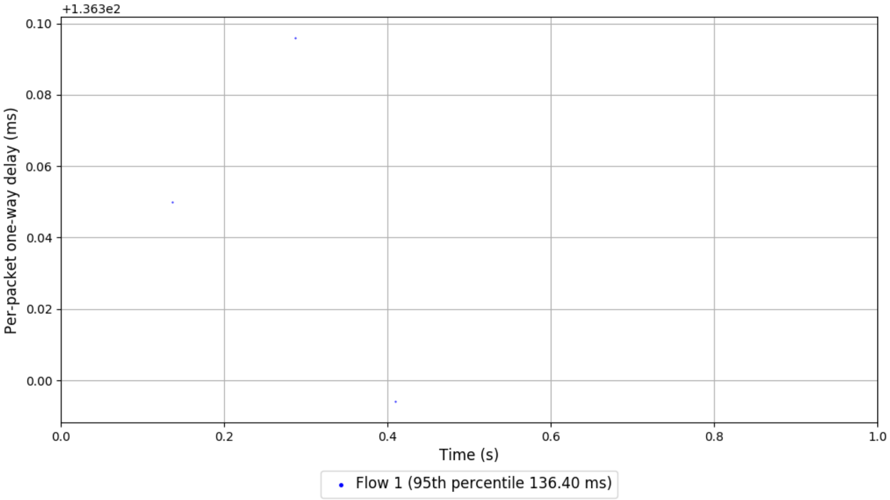




```
Run 7: Statistics of QUIC Cubic

Start at: 2018-08-02 03:24:26
End at: 2018-08-02 03:24:56
Local clock offset: 0.253 ms
Remote clock offset: -0.121 ms
```

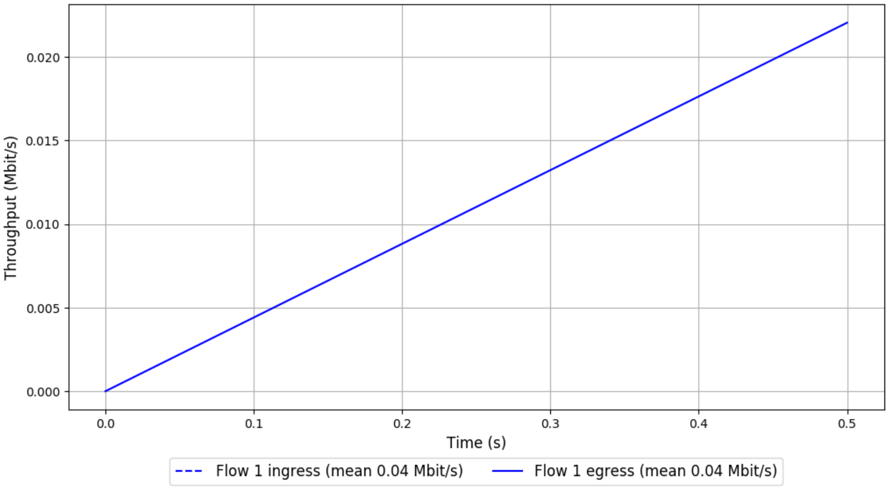
Run 7: Report of QUIC Cubic — Data Link

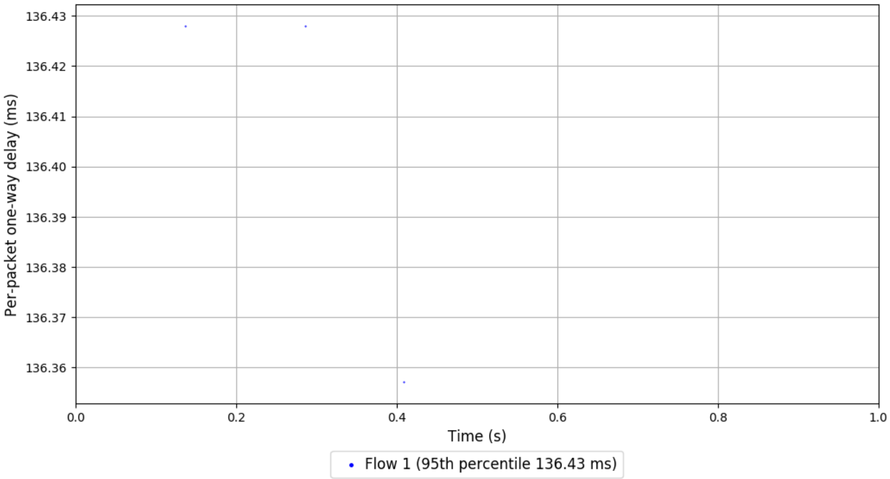




```
Run 8: Statistics of QUIC Cubic

Start at: 2018-08-02 03:48:05
End at: 2018-08-02 03:48:35
Local clock offset: 0.071 ms
Remote clock offset: -0.045 ms
```

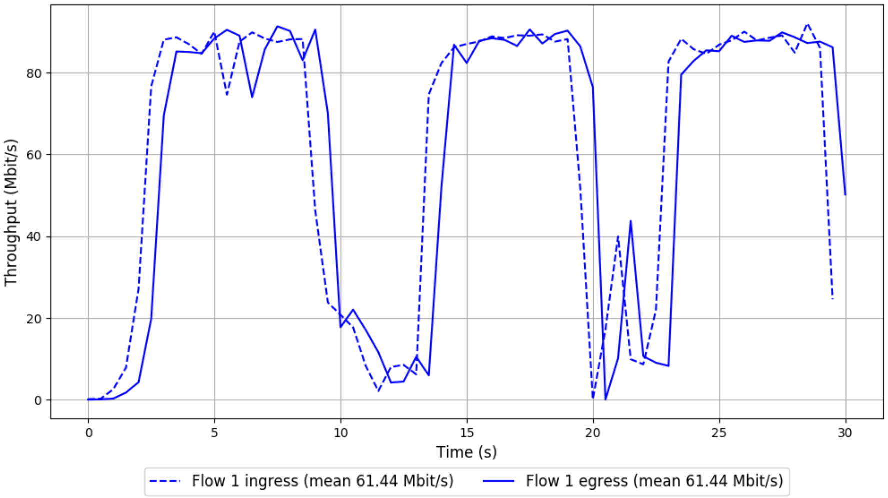
Run 8: Report of QUIC Cubic — Data Link

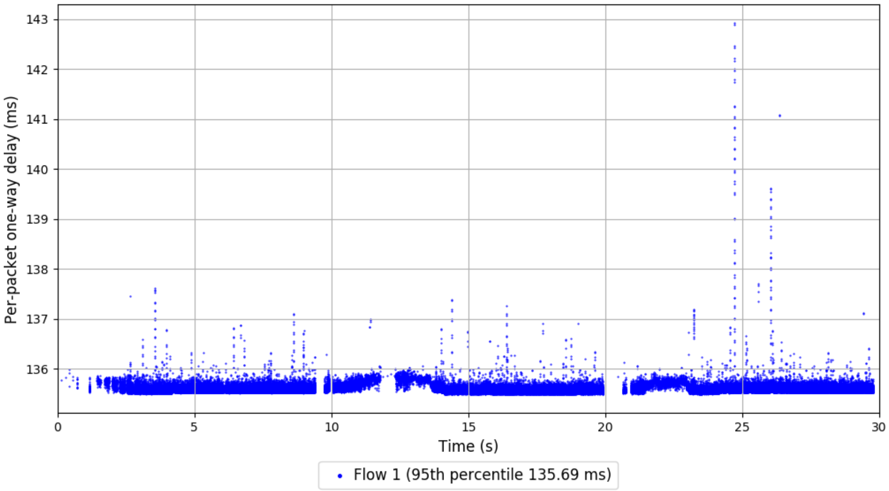




```
Run 9: Statistics of QUIC Cubic

Start at: 2018-08-02 04:11:39
End at: 2018-08-02 04:12:09
Local clock offset: 0.019 ms
Remote clock offset: -0.108 ms

# Below is generated by plot.py at 2018-08-02 06:36:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.44 Mbit/s
95th percentile per-packet one-way delay: 135.691 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.44 Mbit/s
95th percentile per-packet one-way delay: 135.691 ms
Loss rate: 0.00%
```

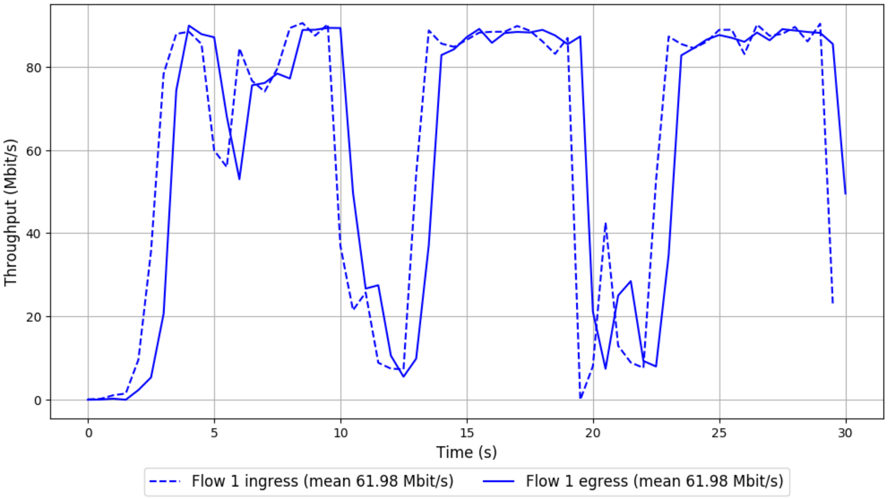
Run 9: Report of QUIC Cubic — Data Link

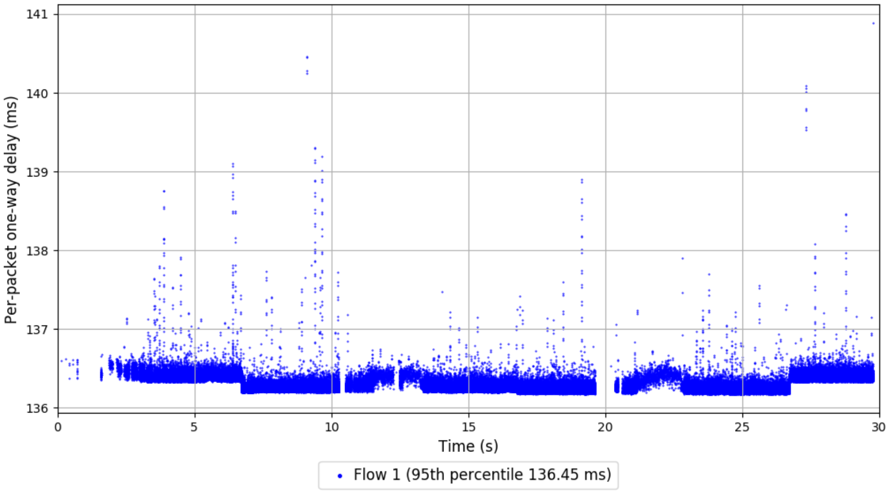




```
Run 10: Statistics of QUIC Cubic

Start at: 2018-08-02 04:34:46
End at: 2018-08-02 04:35:16
Local clock offset: -0.149 ms
Remote clock offset: 0.226 ms

# Below is generated by plot.py at 2018-08-02 06:36:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.98 Mbit/s
95th percentile per-packet one-way delay: 136.448 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.98 Mbit/s
95th percentile per-packet one-way delay: 136.448 ms
Loss rate: 0.00%
```

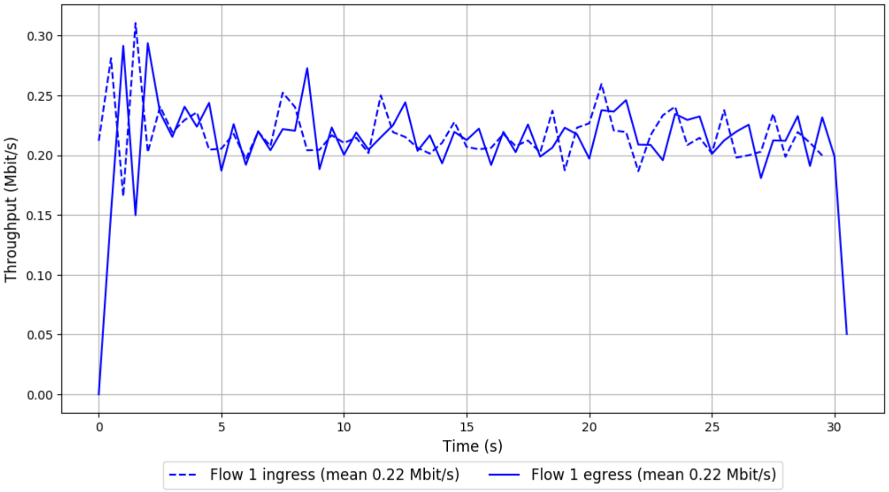
Run 10: Report of QUIC Cubic — Data Link

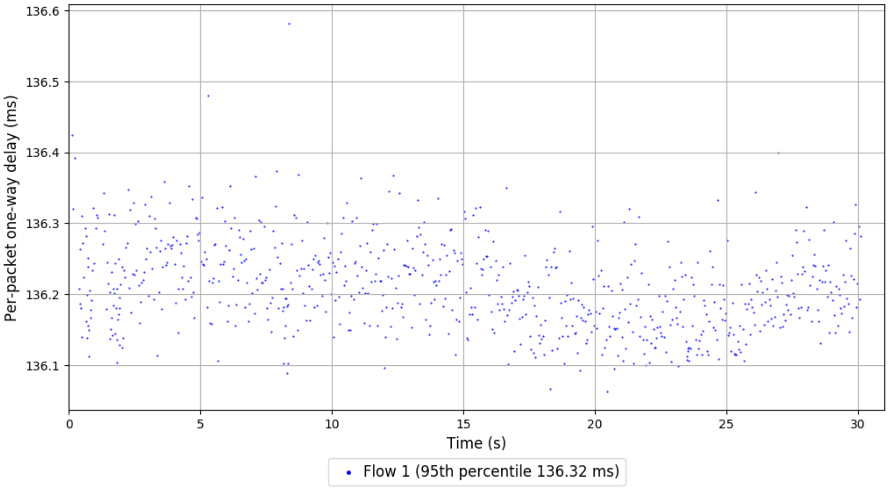




```
Run 1: Statistics of SCReAM

Start at: 2018-08-02 01:07:08
End at: 2018-08-02 01:07:38
Local clock offset: 0.095 ms
Remote clock offset: -0.437 ms

# Below is generated by plot.py at 2018-08-02 06:36:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.319 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.319 ms
Loss rate: 0.00%
```

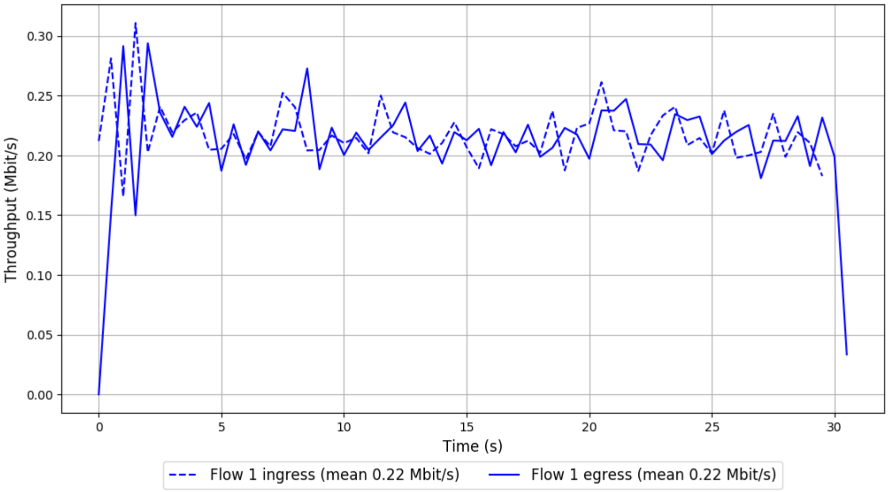
Run 1: Report of SCReAM — Data Link

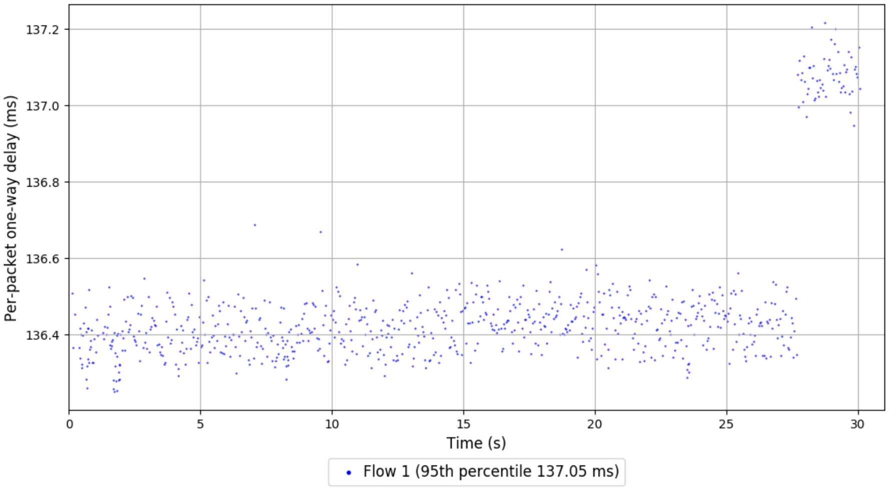




```
Run 2: Statistics of SCReAM

Start at: 2018-08-02 01:30:25
End at: 2018-08-02 01:30:55
Local clock offset: 0.015 ms
Remote clock offset: 0.253 ms

# Below is generated by plot.py at 2018-08-02 06:36:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.052 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.052 ms
Loss rate: 0.00%
```

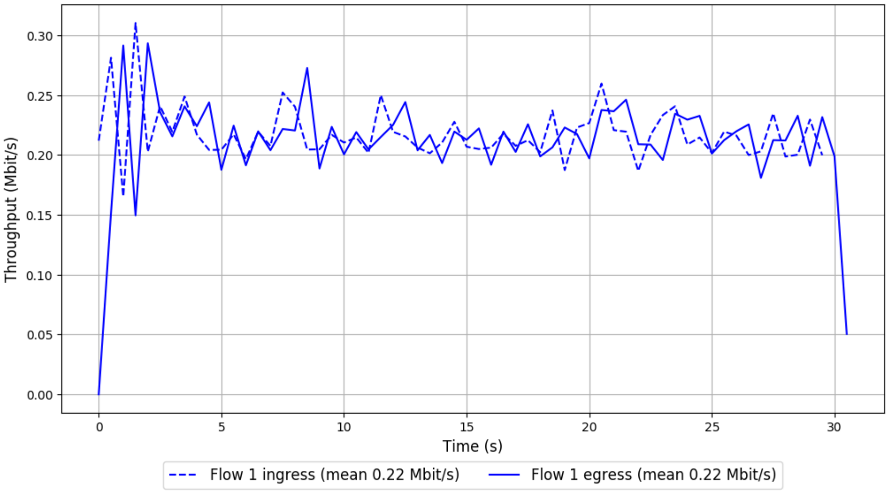
Run 2: Report of SCReAM — Data Link

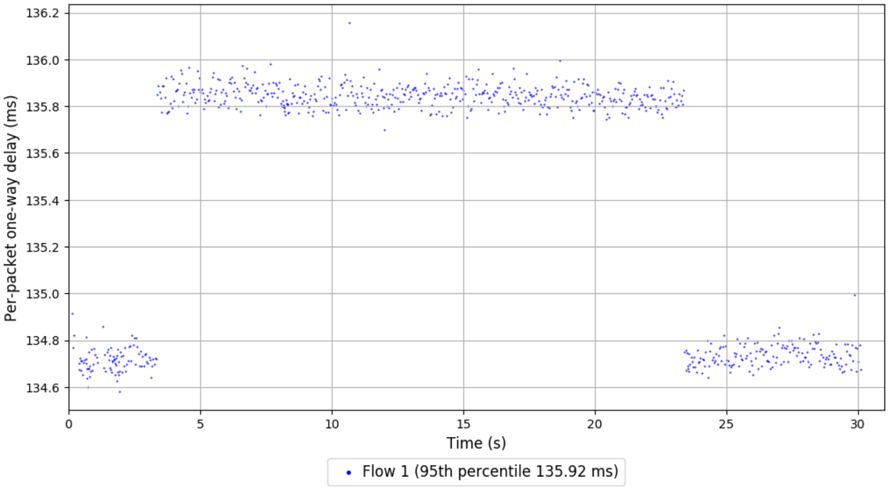




```
Run 3: Statistics of SCReAM

Start at: 2018-08-02 01:53:30
End at: 2018-08-02 01:54:00
Local clock offset: 0.041 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2018-08-02 06:36:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.916 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.916 ms
Loss rate: 0.00%
```

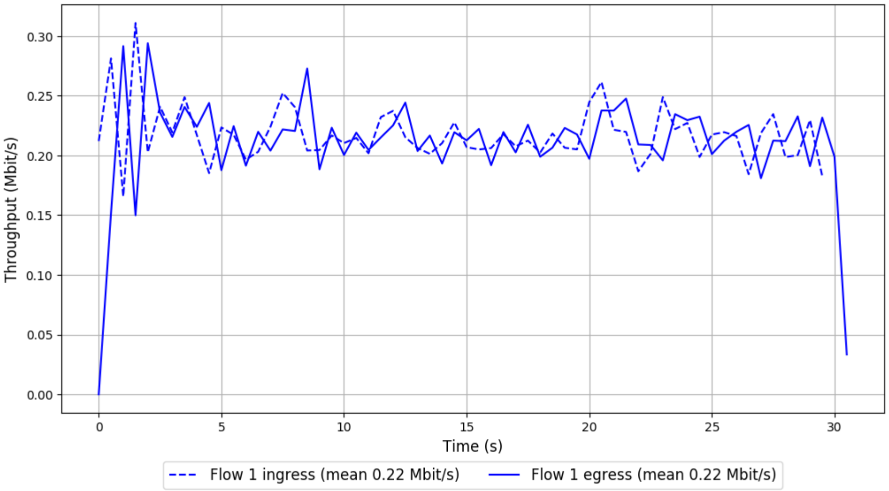
Run 3: Report of SCReAM — Data Link

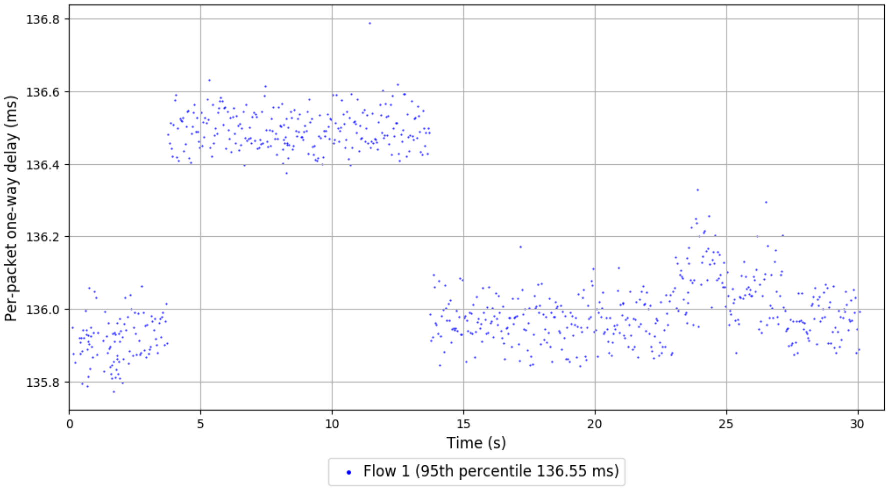




```
Run 4: Statistics of SCReAM

Start at: 2018-08-02 02:16:40
End at: 2018-08-02 02:17:10
Local clock offset: -0.013 ms
Remote clock offset: -0.346 ms

# Below is generated by plot.py at 2018-08-02 06:36:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.547 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.547 ms
Loss rate: 0.00%
```

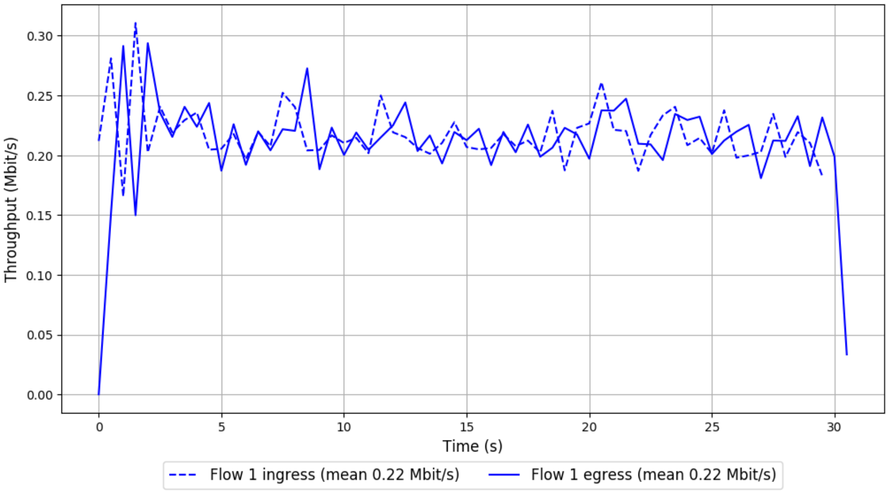
Run 4: Report of SCReAM — Data Link

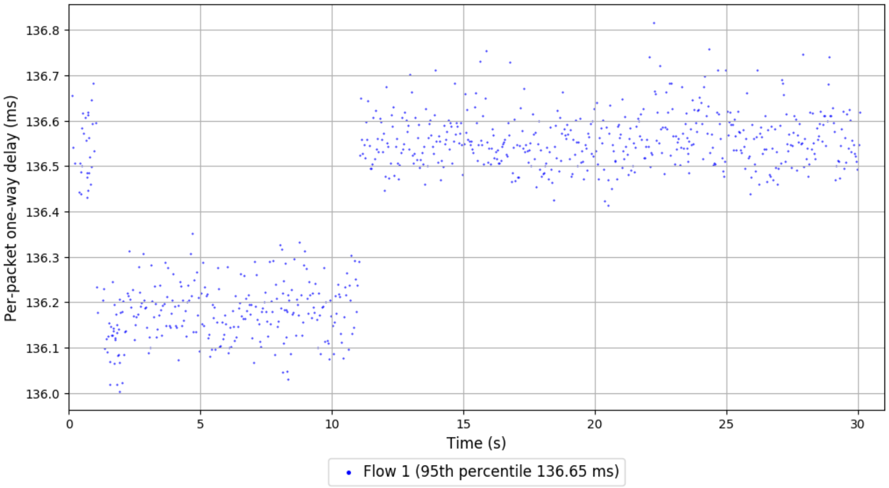




```
Run 5: Statistics of SCReAM

Start at: 2018-08-02 02:40:03
End at: 2018-08-02 02:40:33
Local clock offset: 0.046 ms
Remote clock offset: -0.075 ms

# Below is generated by plot.py at 2018-08-02 06:36:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.647 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.647 ms
Loss rate: 0.00%
```

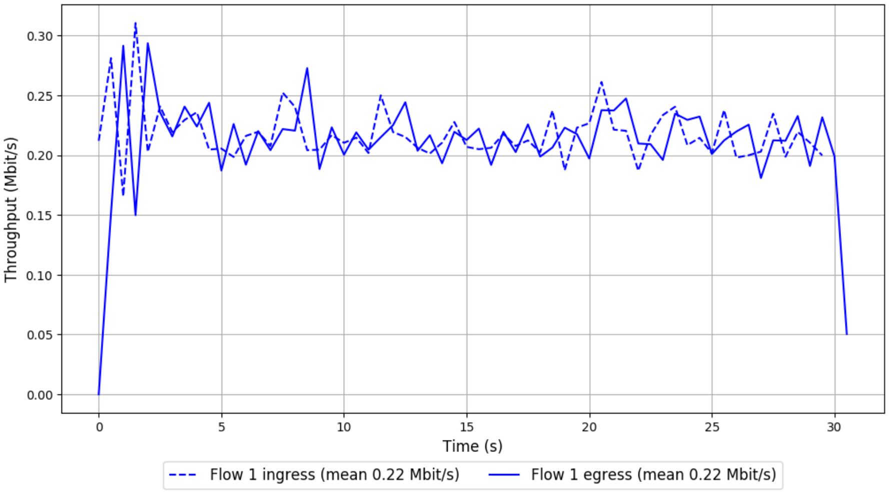
Run 5: Report of SCReAM — Data Link

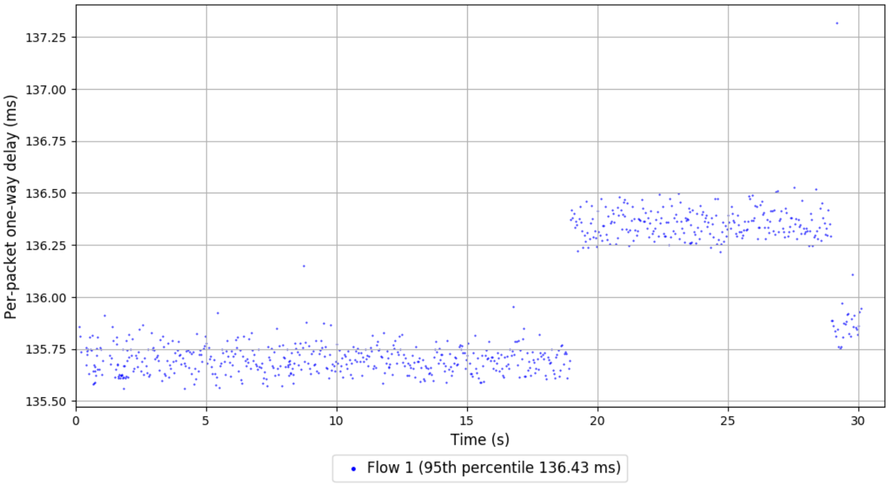




```
Run 6: Statistics of SCReAM

Start at: 2018-08-02 03:03:44
End at: 2018-08-02 03:04:14
Local clock offset: 0.125 ms
Remote clock offset: -0.44 ms

# Below is generated by plot.py at 2018-08-02 06:36:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.426 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.426 ms
Loss rate: 0.00%
```

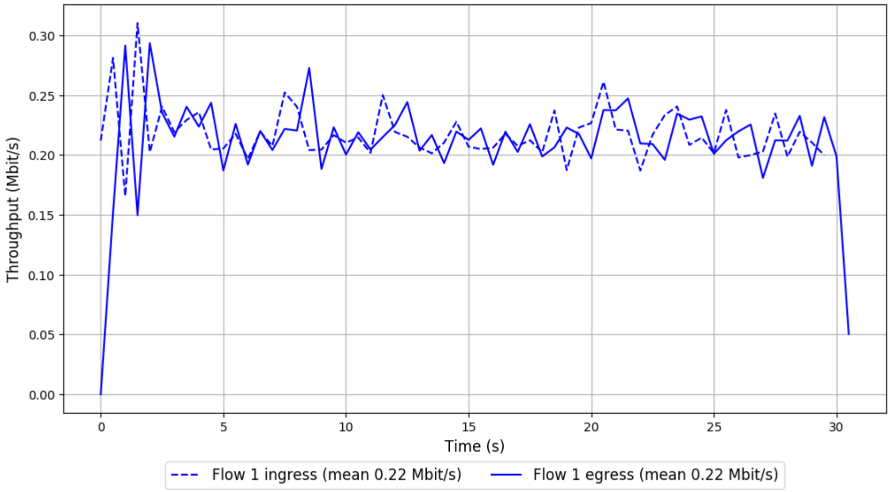
Run 6: Report of SCReAM — Data Link

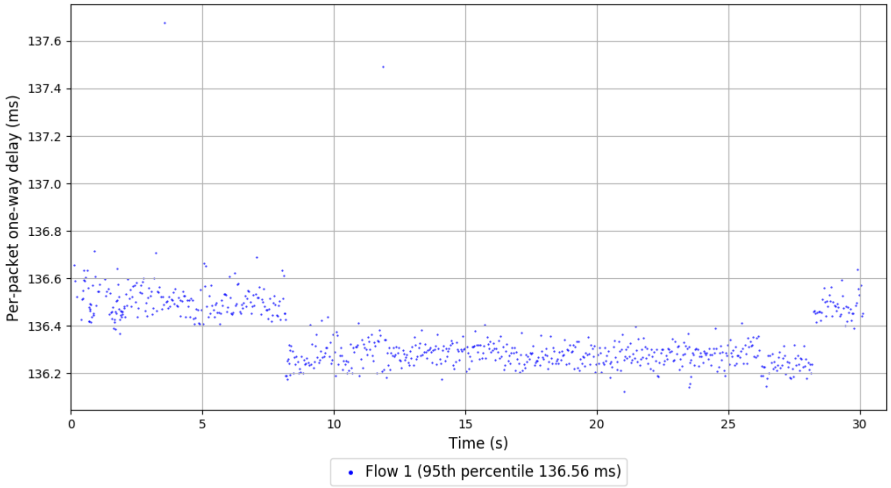




```
Run 7: Statistics of SCReAM

Start at: 2018-08-02 03:27:04
End at: 2018-08-02 03:27:34
Local clock offset: 0.125 ms
Remote clock offset: -0.499 ms

# Below is generated by plot.py at 2018-08-02 06:36:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.563 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.563 ms
Loss rate: 0.00%
```

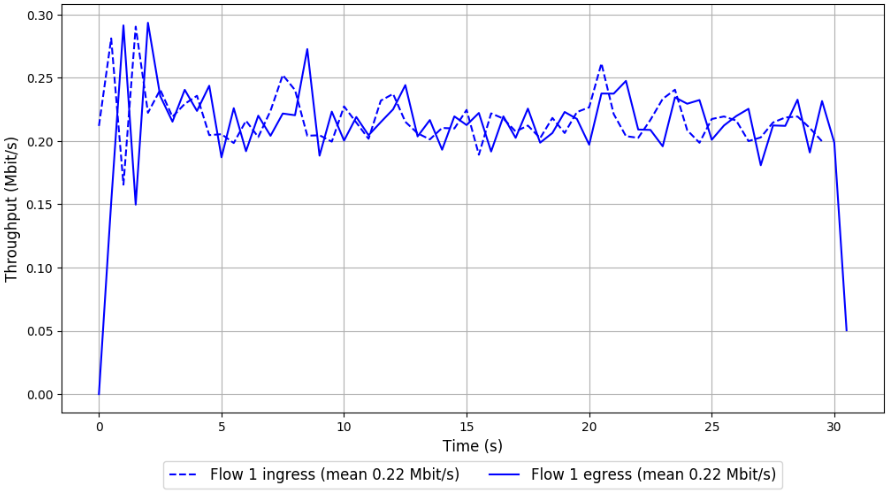
Run 7: Report of SCReAM — Data Link

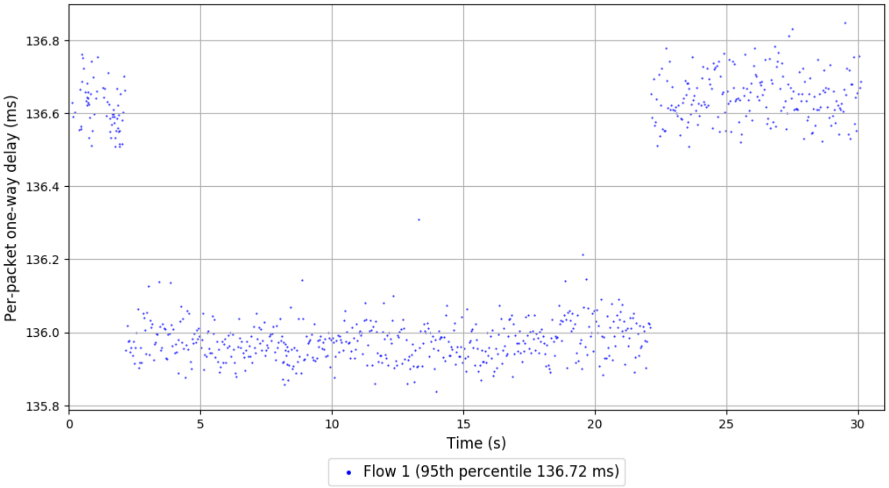




```
Run 8: Statistics of SCReAM

Start at: 2018-08-02 03:50:40
End at: 2018-08-02 03:51:10
Local clock offset: 0.037 ms
Remote clock offset: -0.087 ms

# Below is generated by plot.py at 2018-08-02 06:36:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.719 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.719 ms
Loss rate: 0.00%
```

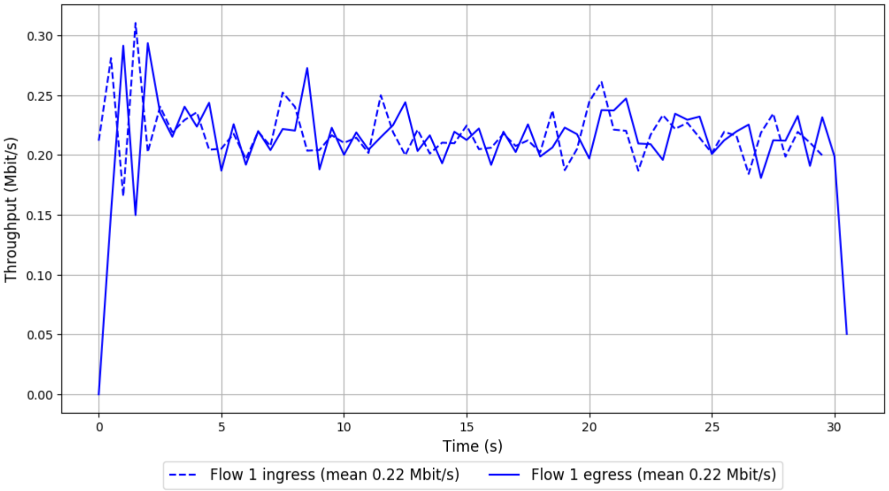
Run 8: Report of SCReAM — Data Link

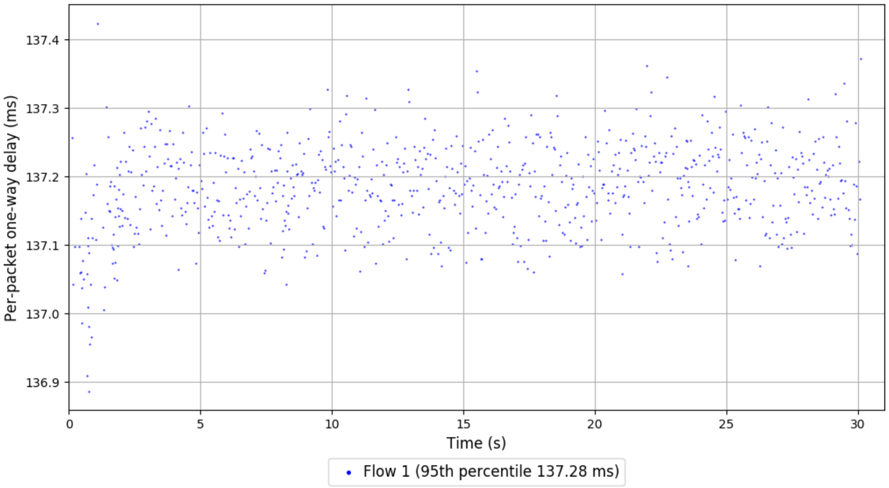




```
Run 9: Statistics of SCReAM

Start at: 2018-08-02 04:14:22
End at: 2018-08-02 04:14:52
Local clock offset: -0.188 ms
Remote clock offset: 0.19 ms

# Below is generated by plot.py at 2018-08-02 06:36:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.280 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.280 ms
Loss rate: 0.00%
```

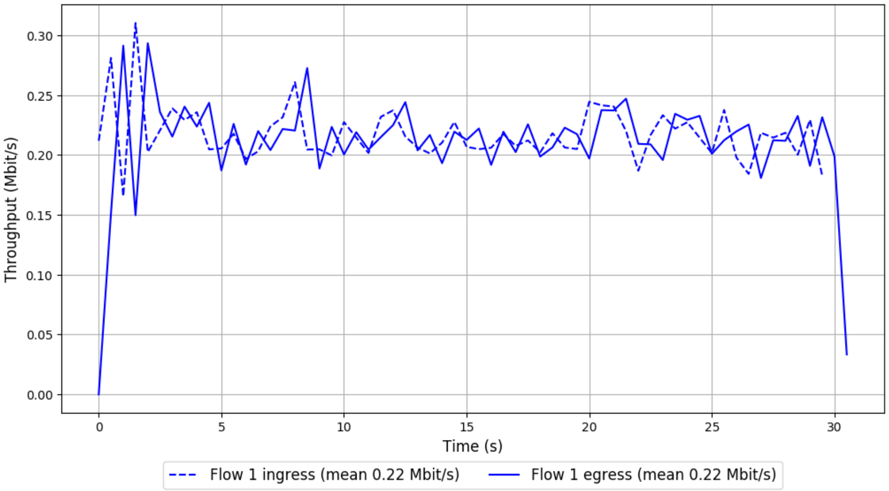
Run 9: Report of SCReAM — Data Link

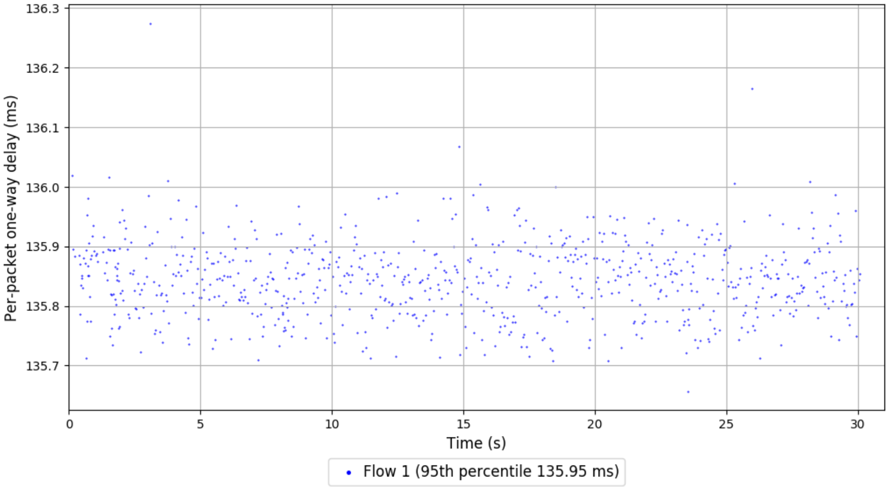




```
Run 10: Statistics of SCReAM

Start at: 2018-08-02 04:37:35
End at: 2018-08-02 04:38:05
Local clock offset: 0.161 ms
Remote clock offset: -0.132 ms

# Below is generated by plot.py at 2018-08-02 06:36:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.948 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.948 ms
Loss rate: 0.00%
```

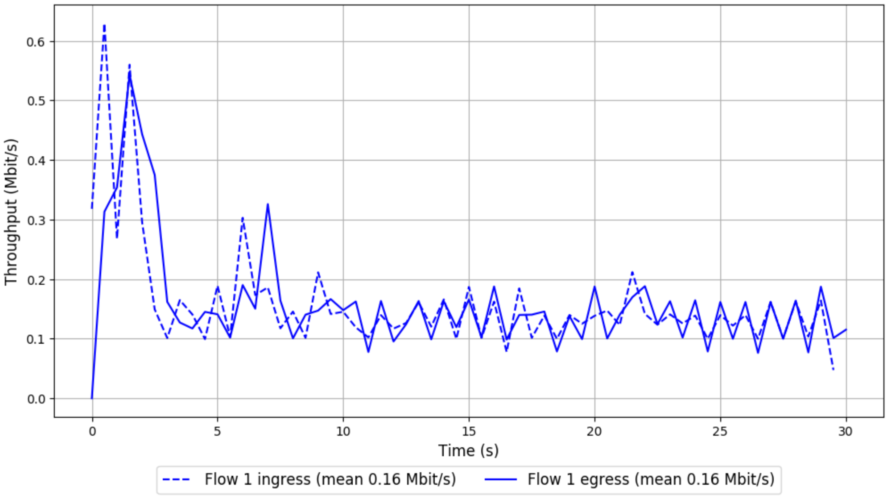
Run 10: Report of SCReAM — Data Link

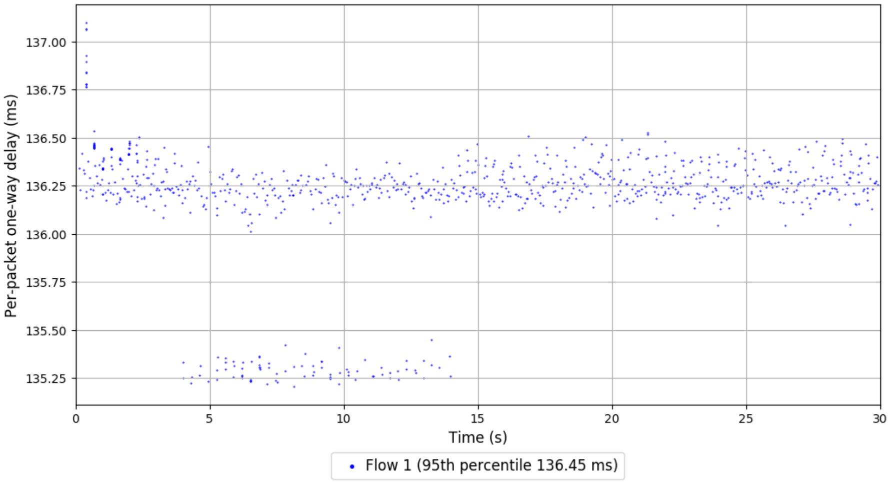




```
Run 1: Statistics of Sprout

Start at: 2018-08-02 01:15:09
End at: 2018-08-02 01:15:40
Local clock offset: 0.003 ms
Remote clock offset: -0.454 ms

# Below is generated by plot.py at 2018-08-02 06:36:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 136.452 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 136.452 ms
Loss rate: 0.00%
```

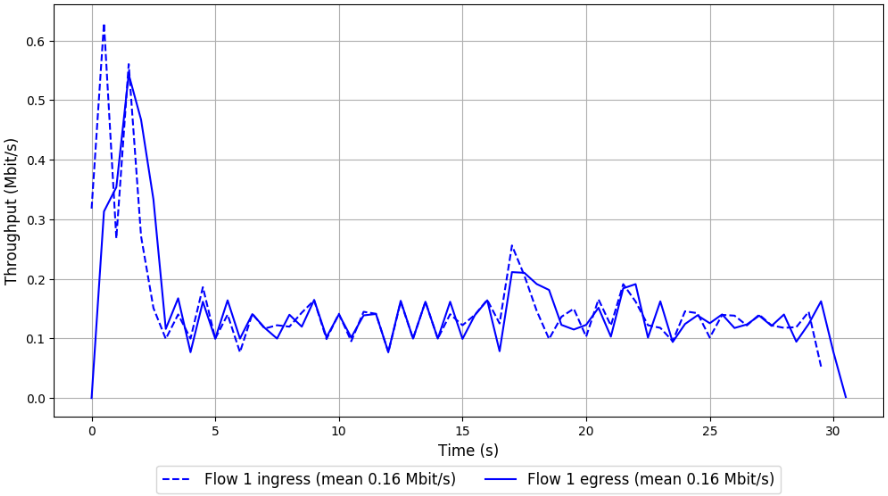
Run 1: Report of Sprout — Data Link

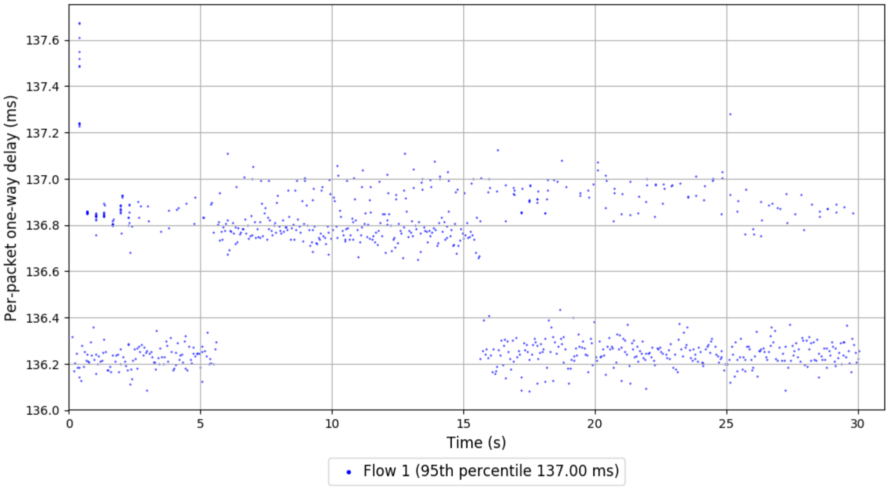




```
Run 2: Statistics of Sprout

Start at: 2018-08-02 01:38:28
End at: 2018-08-02 01:38:58
Local clock offset: 0.111 ms
Remote clock offset: 0.255 ms

# Below is generated by plot.py at 2018-08-02 06:36:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 136.998 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 136.998 ms
Loss rate: 0.00%
```

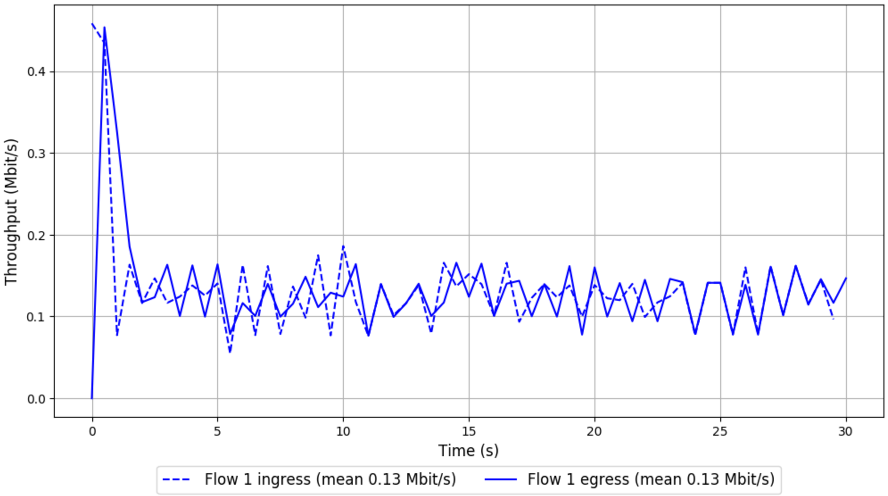
Run 2: Report of Sprout — Data Link

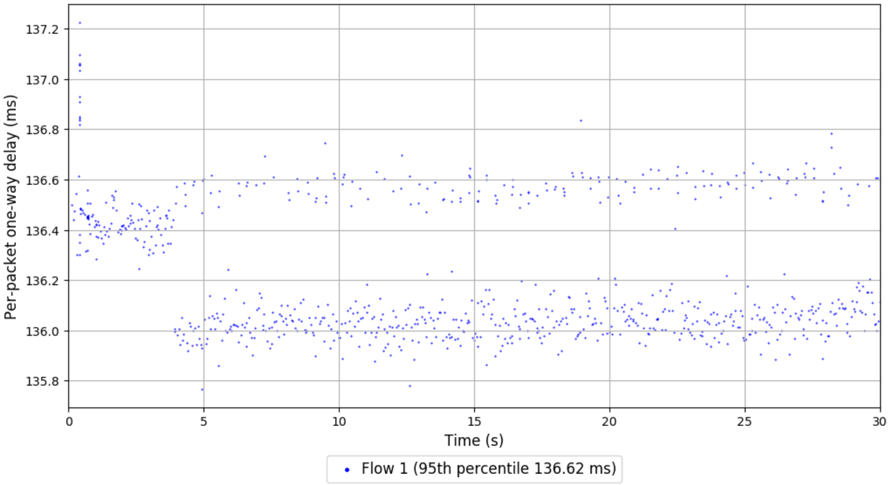




```
Run 3: Statistics of Sprout

Start at: 2018-08-02 02:01:30
End at: 2018-08-02 02:02:00
Local clock offset: 0.201 ms
Remote clock offset: -0.024 ms

# Below is generated by plot.py at 2018-08-02 06:36:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 136.620 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 136.620 ms
Loss rate: 0.00%
```

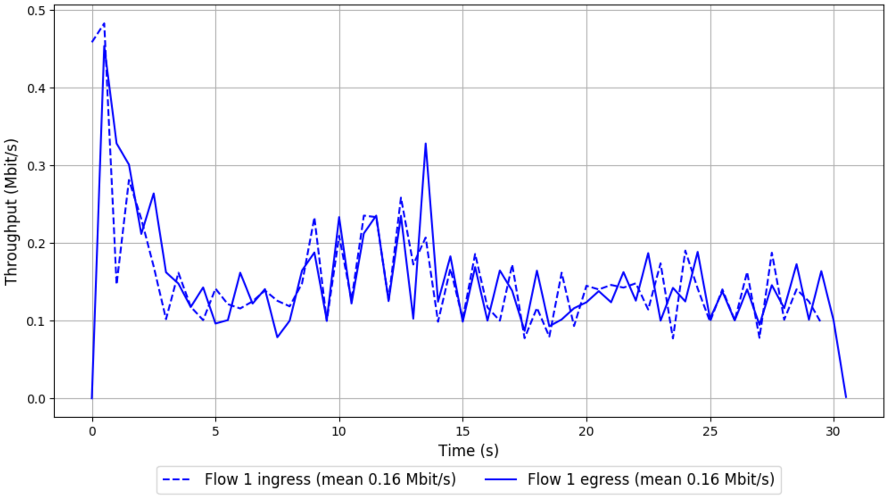
Run 3: Report of Sprout — Data Link

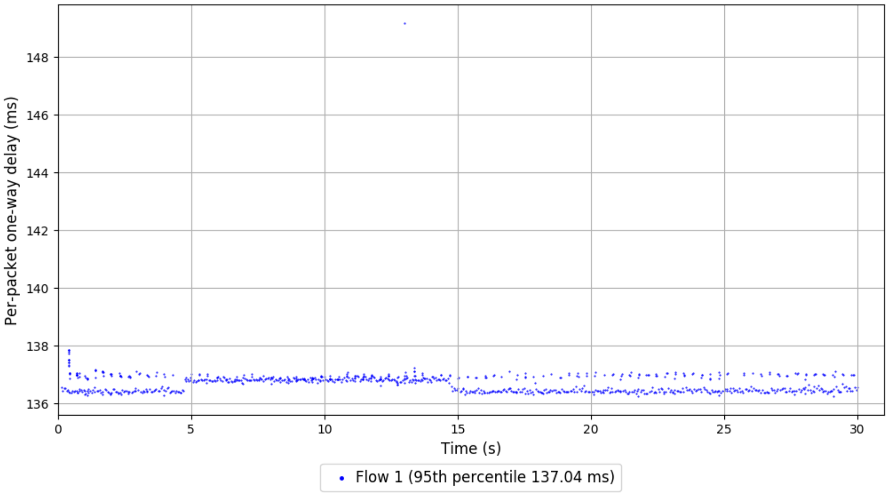




```
Run 4: Statistics of Sprout

Start at: 2018-08-02 02:24:48
End at: 2018-08-02 02:25:18
Local clock offset: 0.135 ms
Remote clock offset: 0.351 ms

# Below is generated by plot.py at 2018-08-02 06:36:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 137.043 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 137.043 ms
Loss rate: 0.00%
```

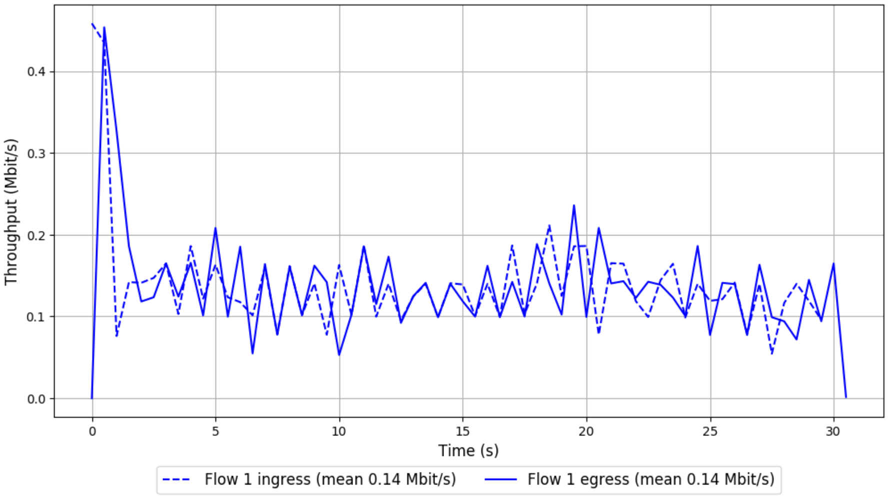
Run 4: Report of Sprout — Data Link

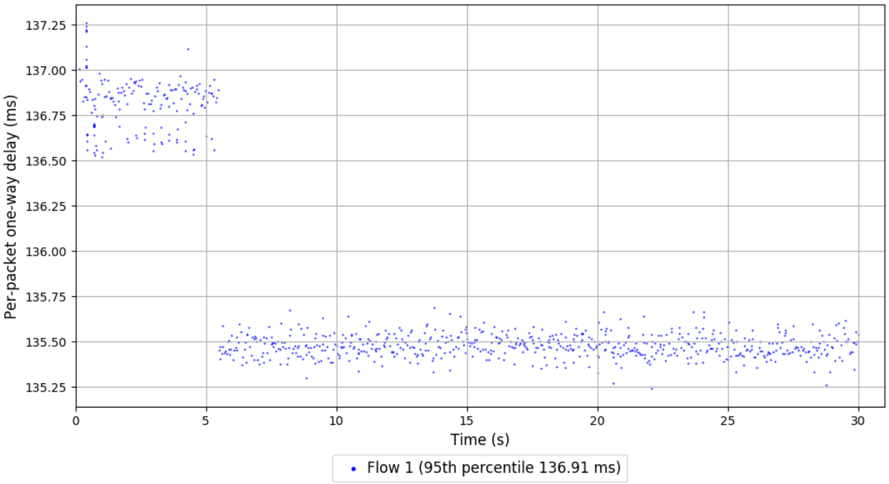




```
Run 5: Statistics of Sprout

Start at: 2018-08-02 02:48:08
End at: 2018-08-02 02:48:38
Local clock offset: 0.143 ms
Remote clock offset: -0.043 ms

# Below is generated by plot.py at 2018-08-02 06:36:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 136.906 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 136.906 ms
Loss rate: 0.00%
```

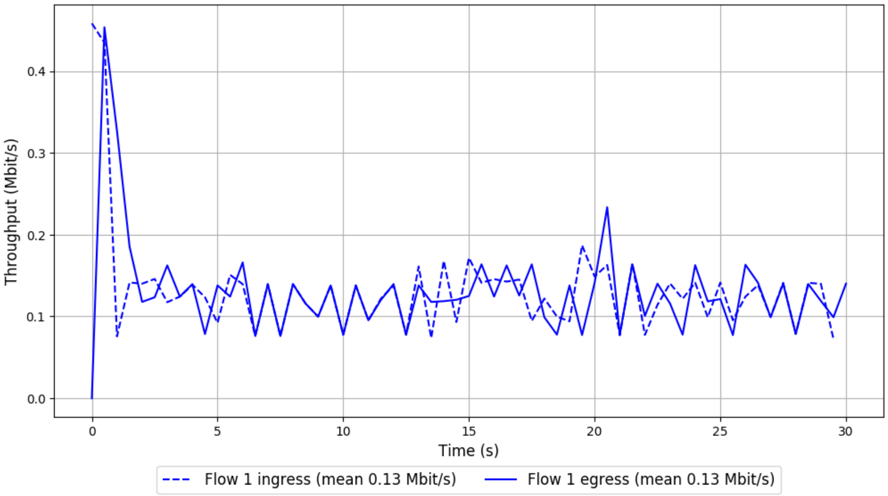
Run 5: Report of Sprout — Data Link

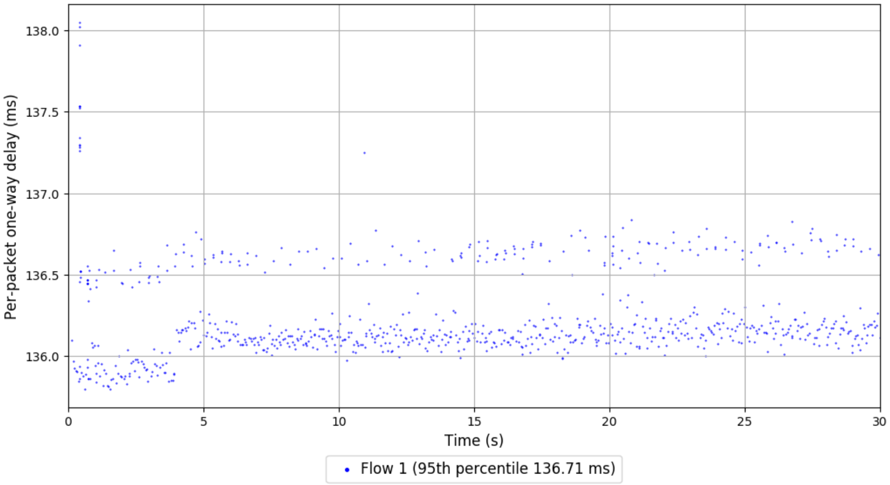




```
Run 6: Statistics of Sprout

Start at: 2018-08-02 03:11:50
End at: 2018-08-02 03:12:20
Local clock offset: 0.234 ms
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2018-08-02 06:36:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 136.705 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 136.705 ms
Loss rate: 0.00%
```

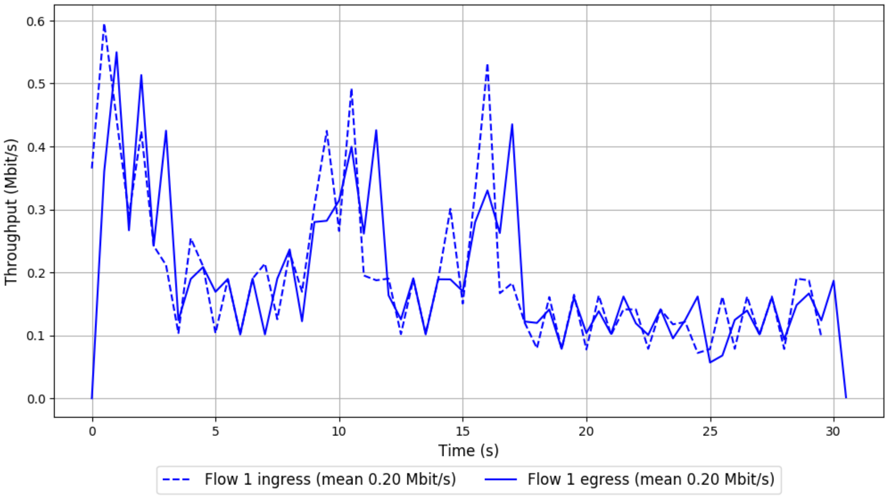
Run 6: Report of Sprout — Data Link

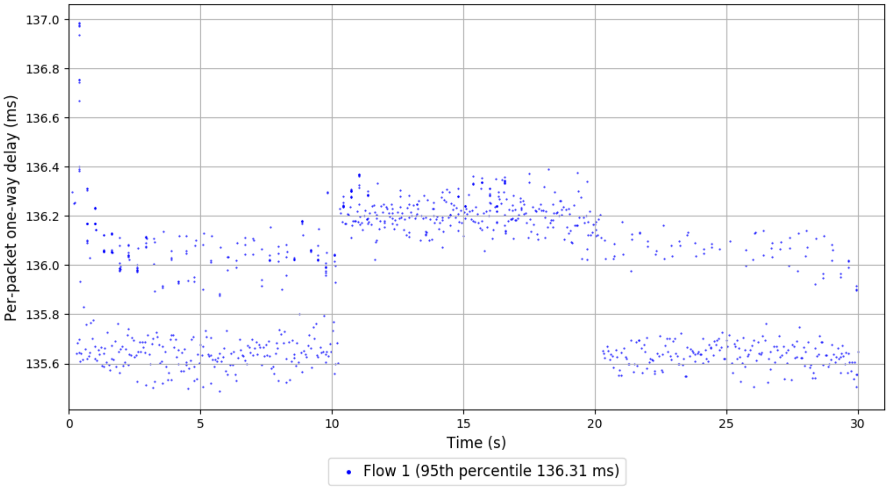




```
Run 7: Statistics of Sprout

Start at: 2018-08-02 03:35:13
End at: 2018-08-02 03:35:43
Local clock offset: 0.147 ms
Remote clock offset: -0.461 ms

# Below is generated by plot.py at 2018-08-02 06:36:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 136.307 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 136.307 ms
Loss rate: 0.00%
```

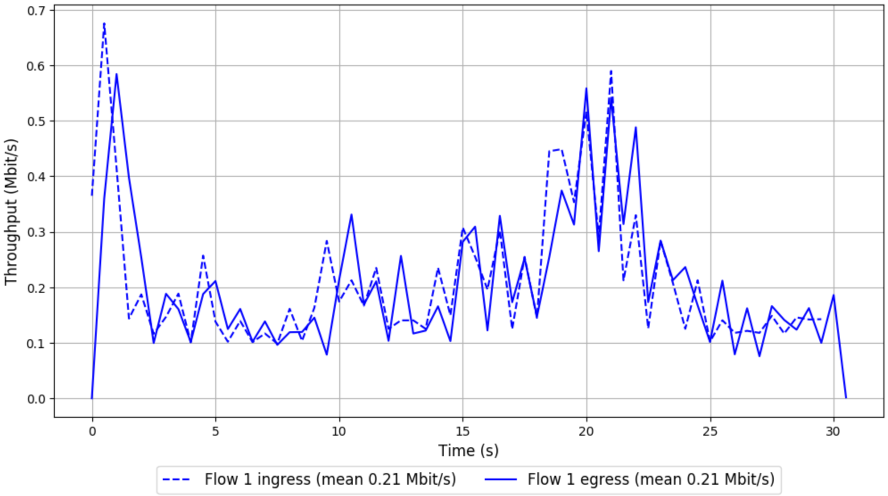
Run 7: Report of Sprout — Data Link

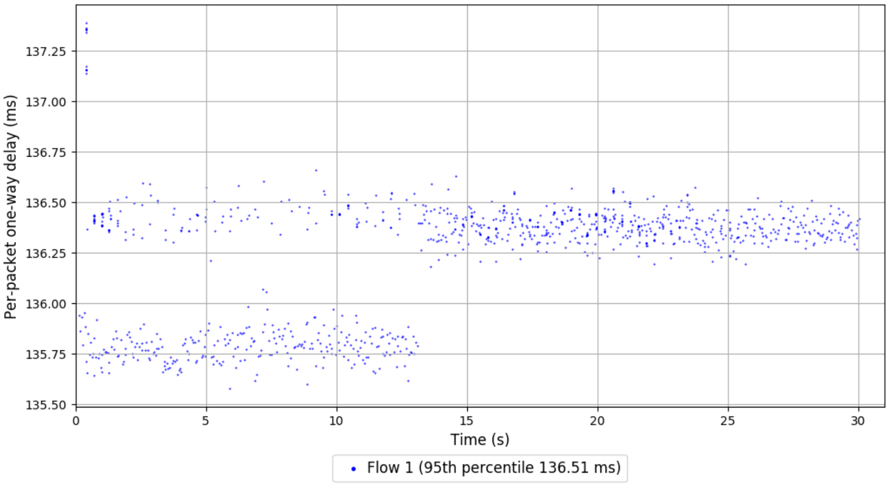




```
Run 8: Statistics of Sprout

Start at: 2018-08-02 03:58:49
End at: 2018-08-02 03:59:19
Local clock offset: -0.207 ms
Remote clock offset: -0.434 ms

# Below is generated by plot.py at 2018-08-02 06:36:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 136.513 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 136.513 ms
Loss rate: 0.00%
```

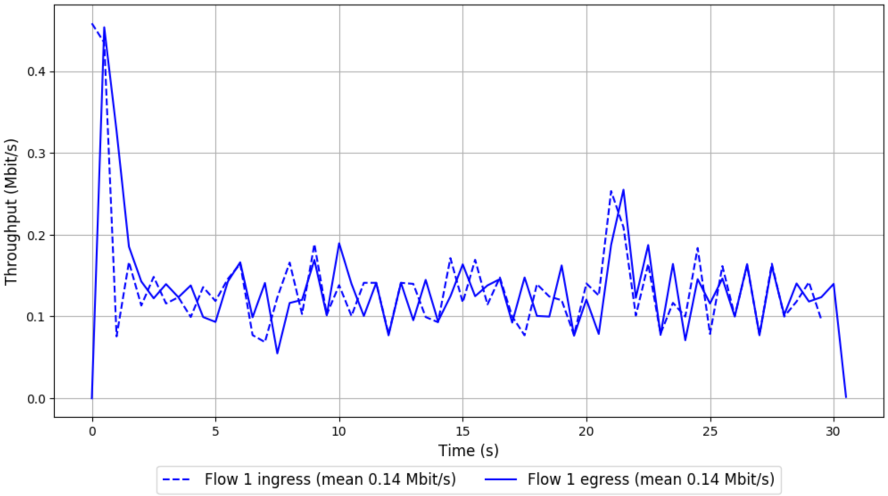
Run 8: Report of Sprout — Data Link

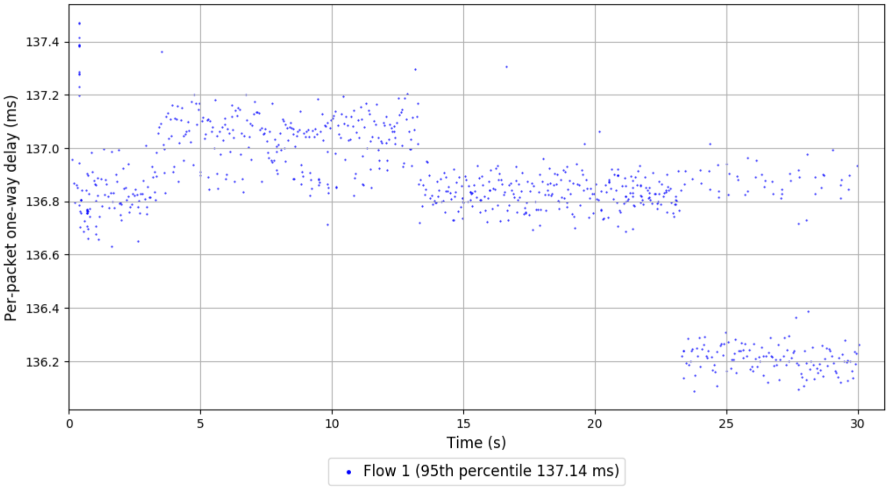




```
Run 9: Statistics of Sprout

Start at: 2018-08-02 04:22:30
End at: 2018-08-02 04:23:00
Local clock offset: 0.088 ms
Remote clock offset: 0.21 ms

# Below is generated by plot.py at 2018-08-02 06:36:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 137.143 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 137.143 ms
Loss rate: 0.00%
```

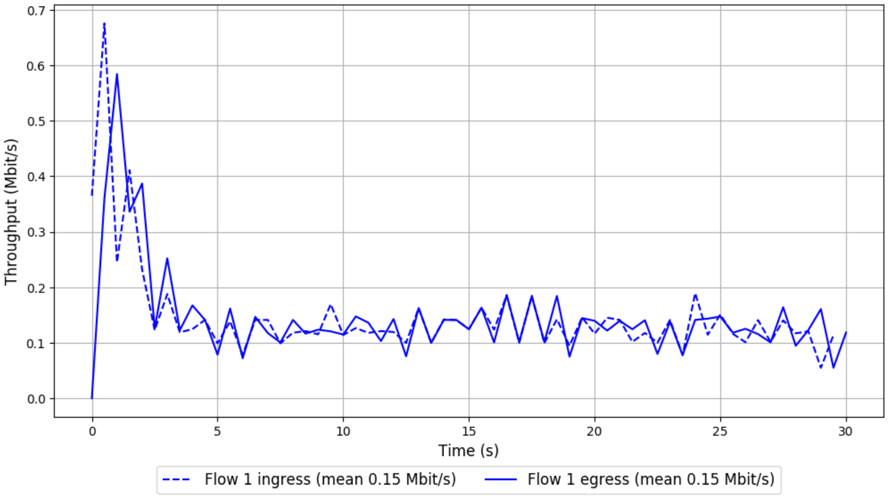
Run 9: Report of Sprout — Data Link

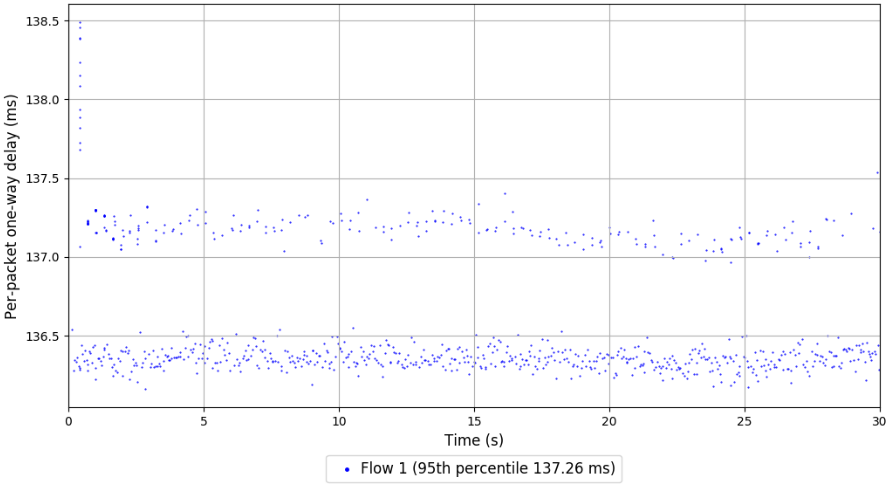




```
Run 10: Statistics of Sprout

Start at: 2018-08-02 04:45:36
End at: 2018-08-02 04:46:06
Local clock offset: -0.105 ms
Remote clock offset: 0.315 ms

# Below is generated by plot.py at 2018-08-02 06:36:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 137.265 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 137.265 ms
Loss rate: 0.00%
```

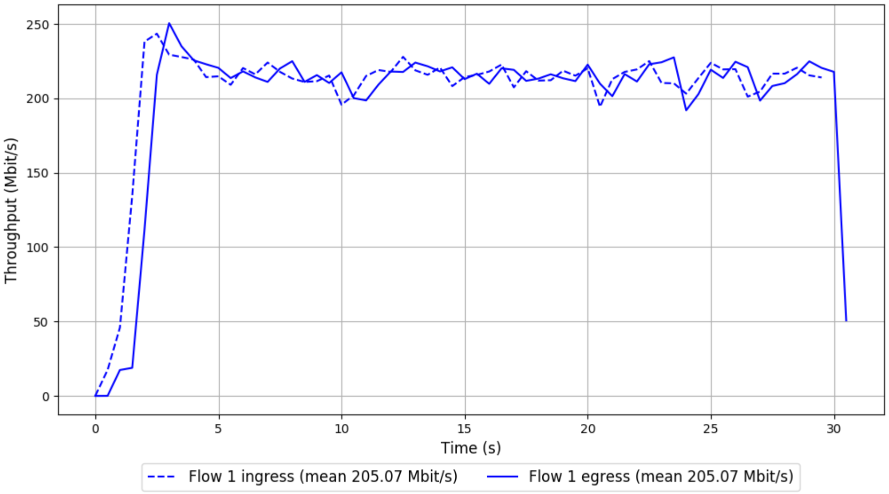
Run 10: Report of Sprout — Data Link

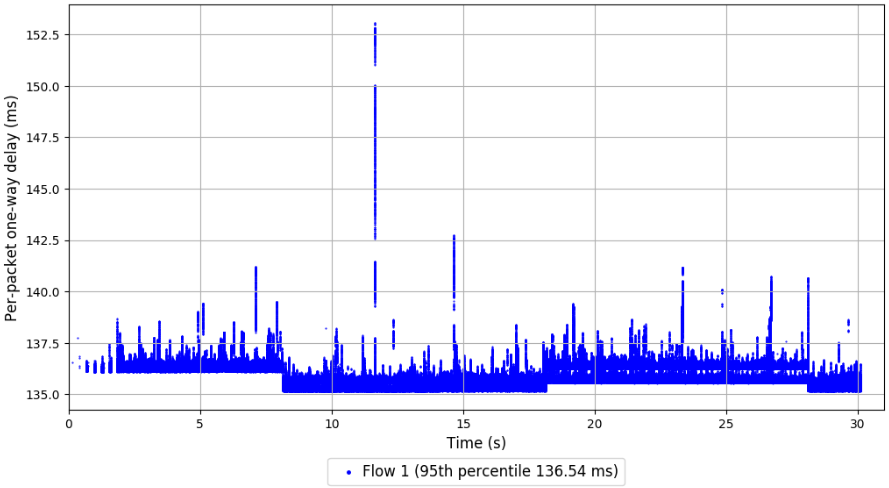




```
Run 1: Statistics of TaoVA-100x

Start at: 2018-08-02 01:26:06
End at: 2018-08-02 01:26:36
Local clock offset: 0.132 ms
Remote clock offset: -0.128 ms

# Below is generated by plot.py at 2018-08-02 06:40:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 205.07 Mbit/s
95th percentile per-packet one-way delay: 136.542 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 205.07 Mbit/s
95th percentile per-packet one-way delay: 136.542 ms
Loss rate: 0.00%
```

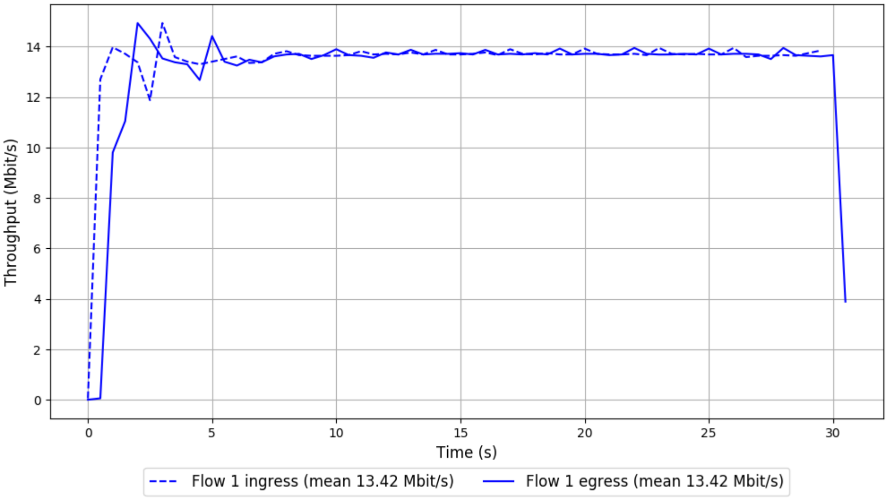
Run 1: Report of TaoVA-100x — Data Link

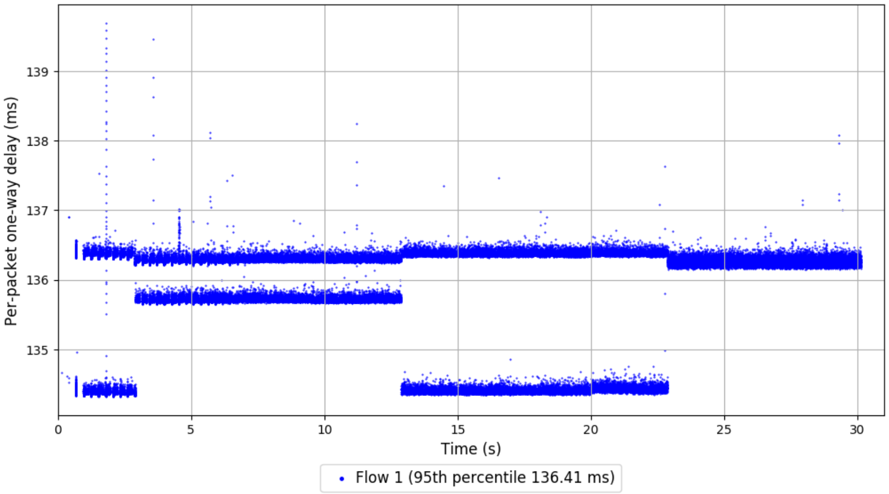




```
Run 2: Statistics of TaoVA-100x

Start at: 2018-08-02 01:49:41
End at: 2018-08-02 01:50:11
Local clock offset: 0.111 ms
Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2018-08-02 06:40:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.42 Mbit/s
95th percentile per-packet one-way delay: 136.415 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.42 Mbit/s
95th percentile per-packet one-way delay: 136.415 ms
Loss rate: 0.00%
```

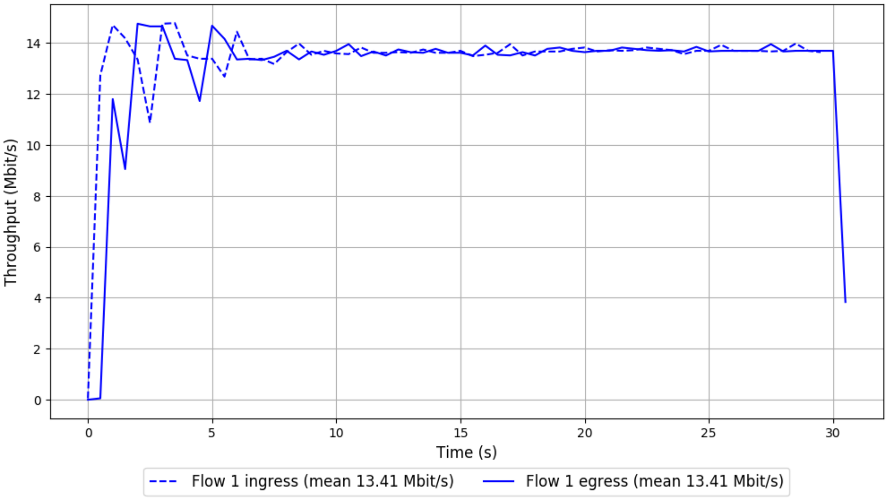
Run 2: Report of TaoVA-100x — Data Link

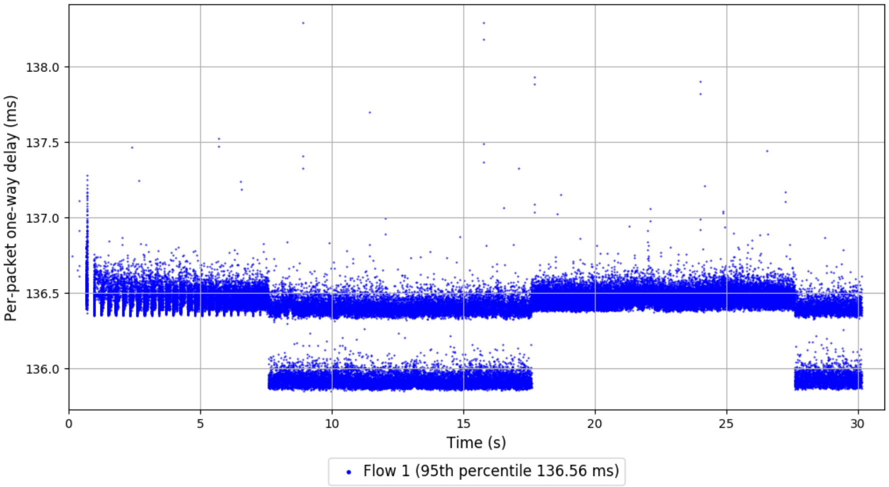




```
Run 3: Statistics of TaoVA-100x

Start at: 2018-08-02 02:12:36
End at: 2018-08-02 02:13:06
Local clock offset: 0.116 ms
Remote clock offset: 0.013 ms

# Below is generated by plot.py at 2018-08-02 06:40:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.41 Mbit/s
95th percentile per-packet one-way delay: 136.558 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.41 Mbit/s
95th percentile per-packet one-way delay: 136.558 ms
Loss rate: 0.00%
```

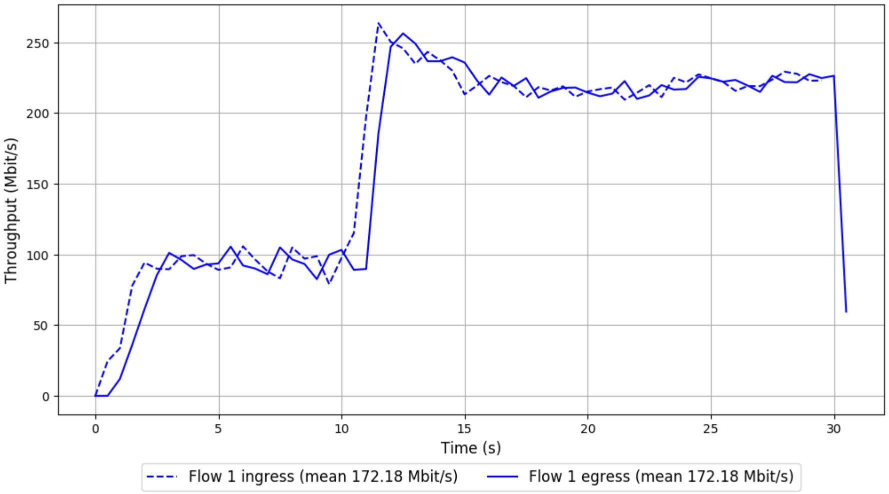
Run 3: Report of TaoVA-100x — Data Link

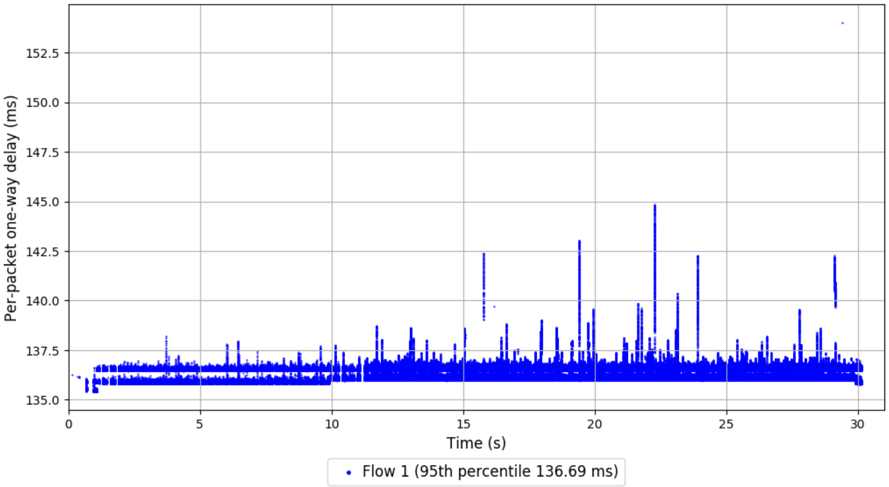




```
Run 4: Statistics of TaoVA-100x

Start at: 2018-08-02 02:36:03
End at: 2018-08-02 02:36:33
Local clock offset: 0.291 ms
Remote clock offset: 0.295 ms

# Below is generated by plot.py at 2018-08-02 06:40:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 172.18 Mbit/s
95th percentile per-packet one-way delay: 136.685 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 172.18 Mbit/s
95th percentile per-packet one-way delay: 136.685 ms
Loss rate: 0.00%
```

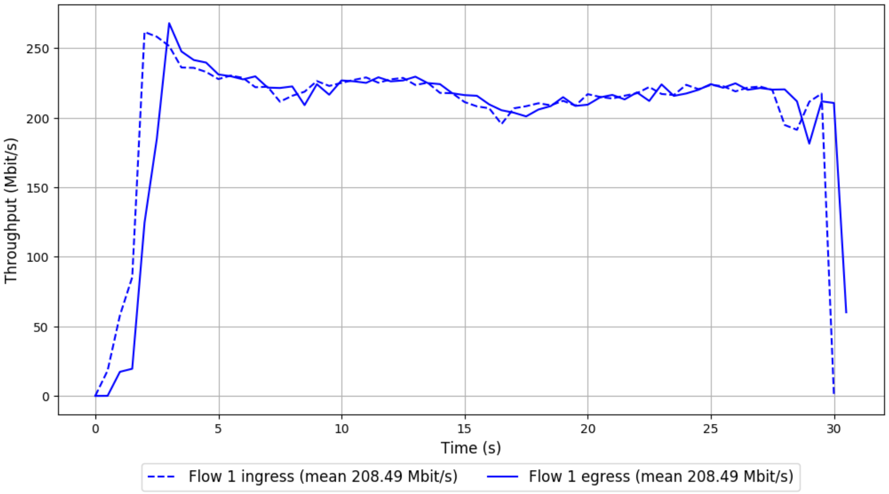
Run 4: Report of TaoVA-100x — Data Link

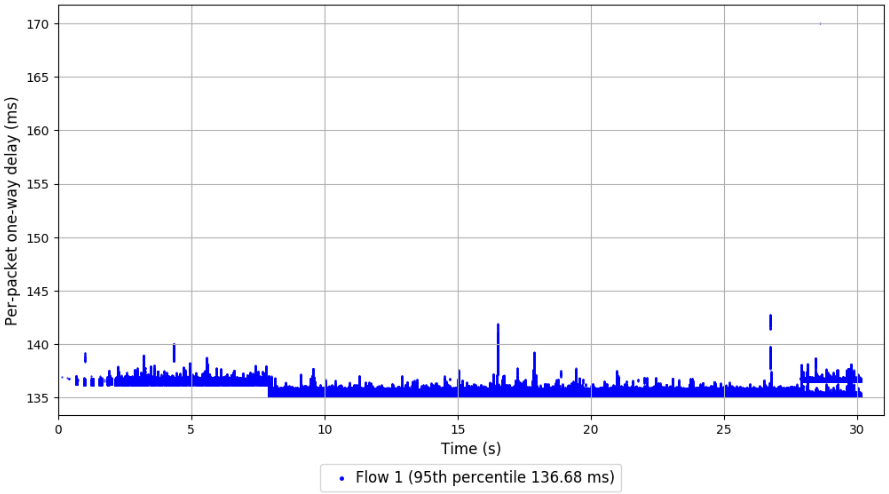




```
Run 5: Statistics of TaoVA-100x

Start at: 2018-08-02 02:59:26
End at: 2018-08-02 02:59:56
Local clock offset: 0.235 ms
Remote clock offset: -0.105 ms

# Below is generated by plot.py at 2018-08-02 06:41:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 208.49 Mbit/s
95th percentile per-packet one-way delay: 136.675 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 208.49 Mbit/s
95th percentile per-packet one-way delay: 136.675 ms
Loss rate: 0.00%
```

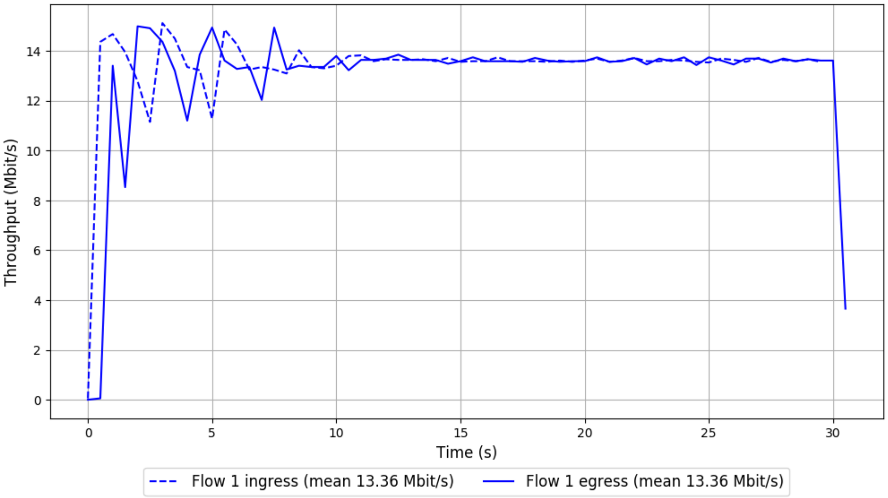
Run 5: Report of TaoVA-100x — Data Link

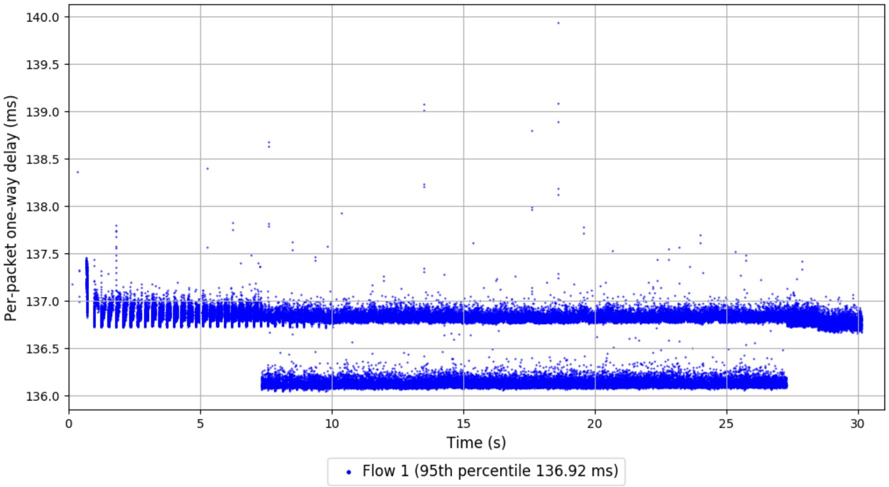




```
Run 6: Statistics of TaoVA-100x

Start at: 2018-08-02 03:23:15
End at: 2018-08-02 03:23:45
Local clock offset: 0.203 ms
Remote clock offset: 0.282 ms

# Below is generated by plot.py at 2018-08-02 06:41:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.36 Mbit/s
95th percentile per-packet one-way delay: 136.924 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.36 Mbit/s
95th percentile per-packet one-way delay: 136.924 ms
Loss rate: 0.00%
```

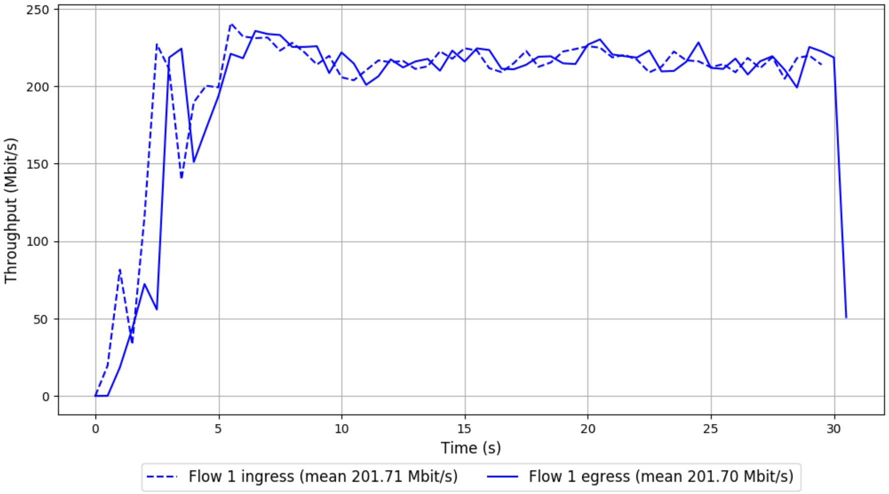
Run 6: Report of TaoVA-100x — Data Link

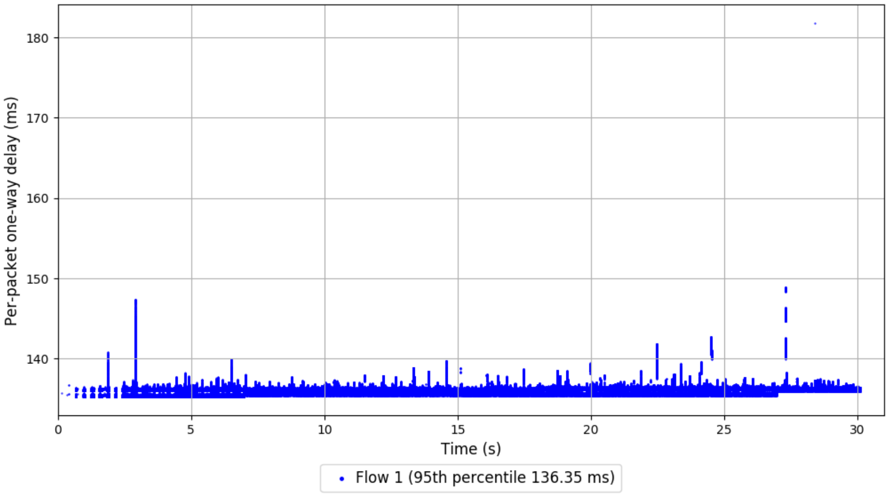




```
Run 7: Statistics of TaoVA-100x

Start at: 2018-08-02 03:46:36
End at: 2018-08-02 03:47:06
Local clock offset: 0.214 ms
Remote clock offset: -0.098 ms

# Below is generated by plot.py at 2018-08-02 06:41:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 201.70 Mbit/s
95th percentile per-packet one-way delay: 136.352 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 201.70 Mbit/s
95th percentile per-packet one-way delay: 136.352 ms
Loss rate: 0.00%
```

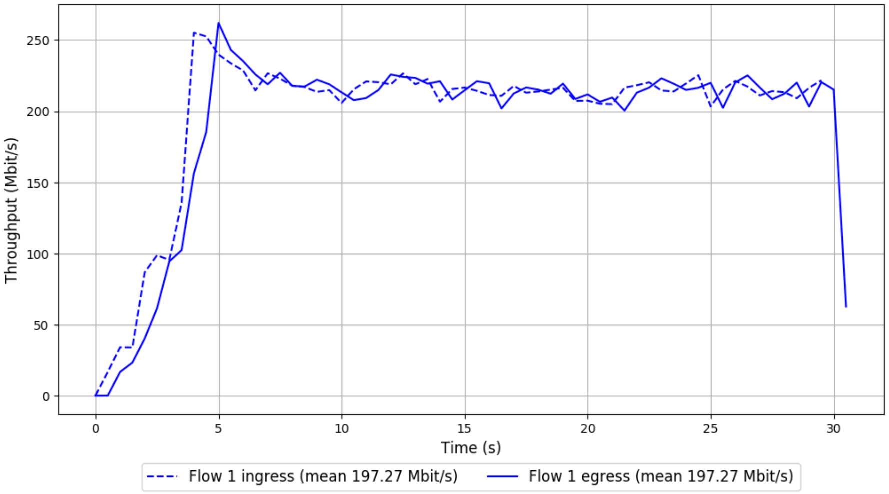
Run 7: Report of TaoVA-100x — Data Link

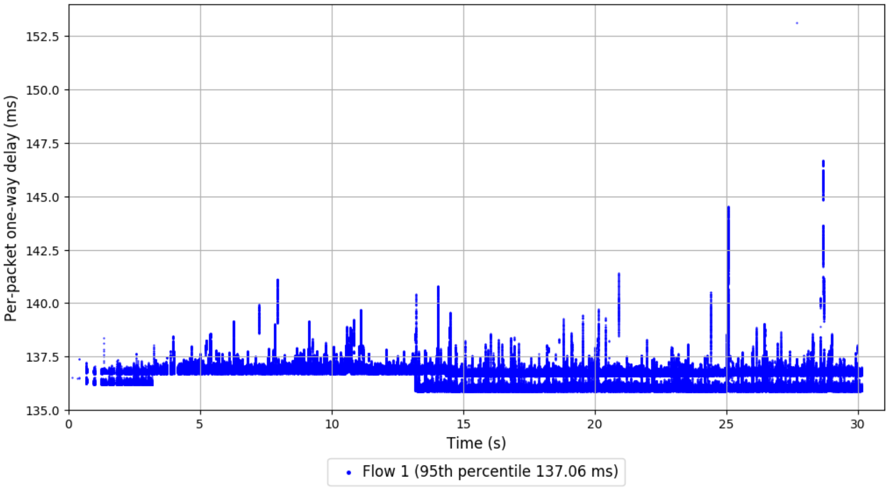




```
Run 8: Statistics of TaoVA-100x

Start at: 2018-08-02 04:10:09
End at: 2018-08-02 04:10:39
Local clock offset: 0.009 ms
Remote clock offset: 0.259 ms

# Below is generated by plot.py at 2018-08-02 06:41:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 197.27 Mbit/s
95th percentile per-packet one-way delay: 137.058 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 197.27 Mbit/s
95th percentile per-packet one-way delay: 137.058 ms
Loss rate: 0.00%
```

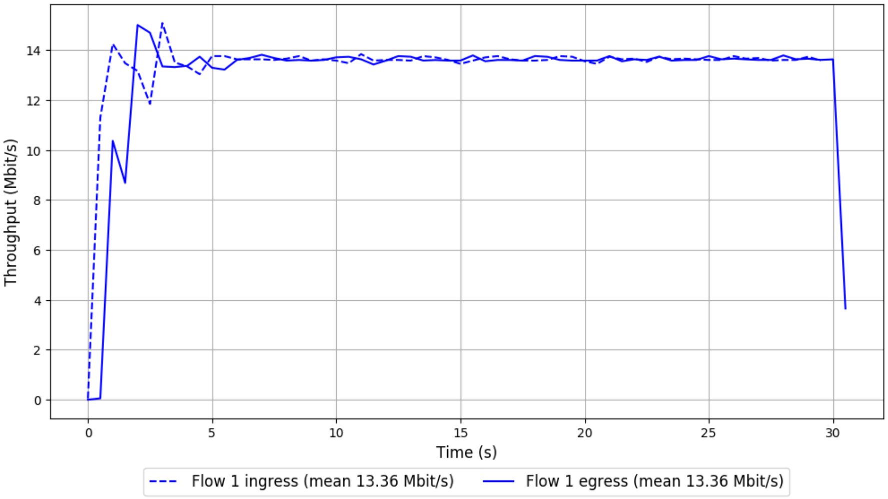
Run 8: Report of TaoVA-100x — Data Link

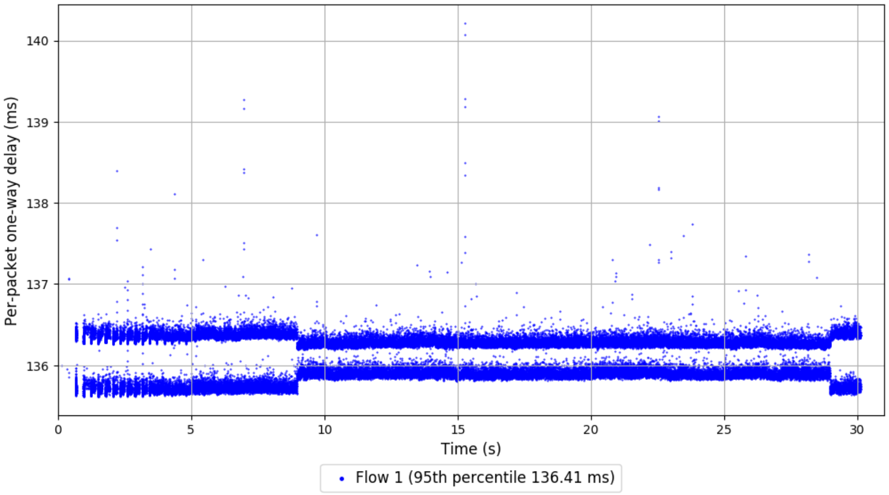




```
Run 9: Statistics of TaoVA-100x

Start at: 2018-08-02 04:33:35
End at: 2018-08-02 04:34:05
Local clock offset: 0.005 ms
Remote clock offset: -0.185 ms

# Below is generated by plot.py at 2018-08-02 06:41:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.36 Mbit/s
95th percentile per-packet one-way delay: 136.407 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.36 Mbit/s
95th percentile per-packet one-way delay: 136.407 ms
Loss rate: 0.00%
```

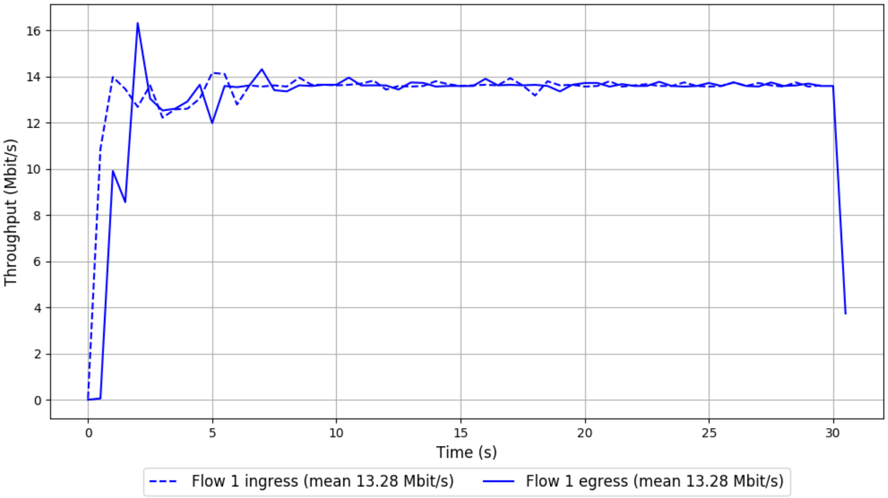
Run 9: Report of TaoVA-100x — Data Link

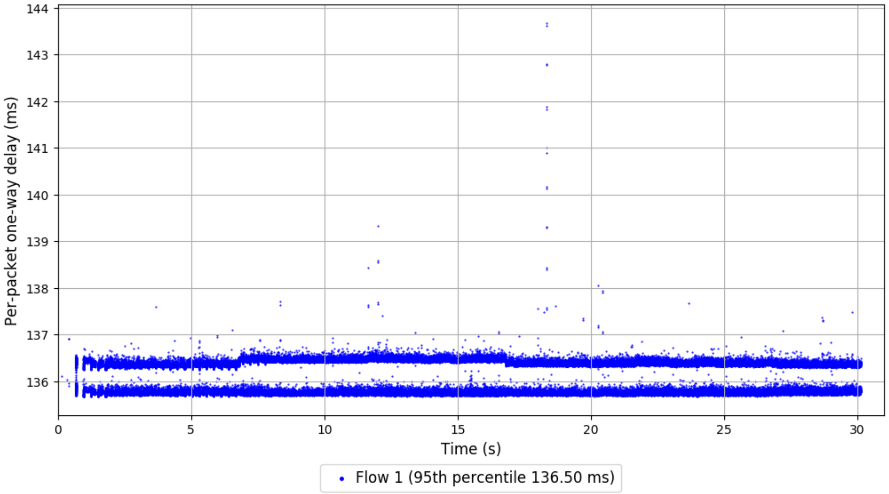




```
Run 10: Statistics of TaoVA-100x

Start at: 2018-08-02 04:56:47
End at: 2018-08-02 04:57:17
Local clock offset: 0.061 ms
Remote clock offset: -0.029 ms

# Below is generated by plot.py at 2018-08-02 06:41:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.28 Mbit/s
95th percentile per-packet one-way delay: 136.502 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.28 Mbit/s
95th percentile per-packet one-way delay: 136.502 ms
Loss rate: 0.00%
```

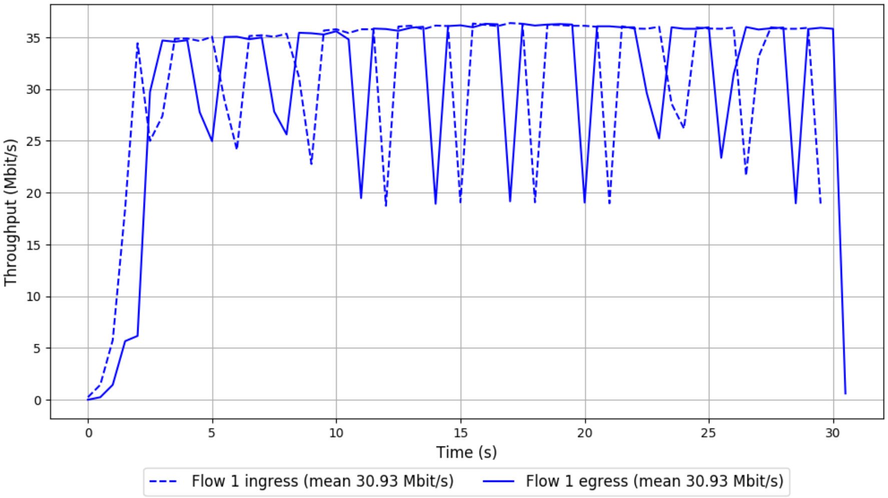
Run 10: Report of TaoVA-100x — Data Link

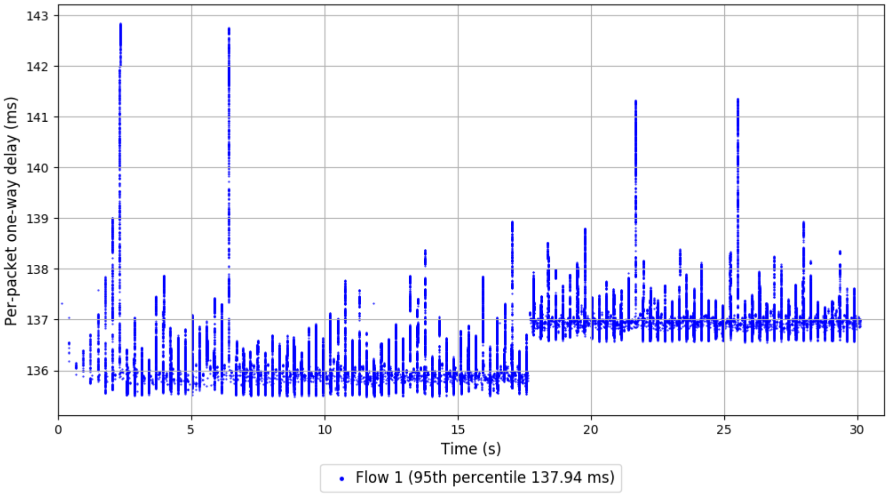




```
Run 1: Statistics of TCP Vegas

Start at: 2018-08-02 01:08:16
End at: 2018-08-02 01:08:46
Local clock offset: 0.174 ms
Remote clock offset: 0.212 ms

# Below is generated by plot.py at 2018-08-02 06:41:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.93 Mbit/s
95th percentile per-packet one-way delay: 137.943 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 30.93 Mbit/s
95th percentile per-packet one-way delay: 137.943 ms
Loss rate: 0.00%
```

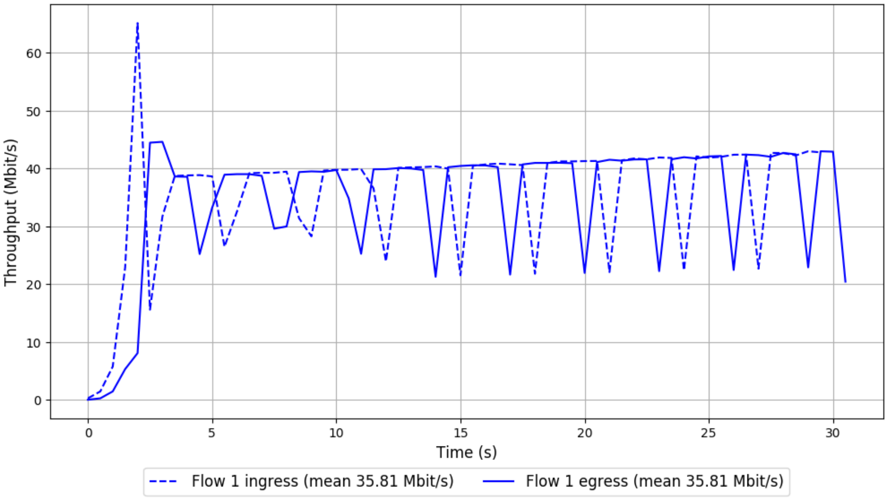
Run 1: Report of TCP Vegas — Data Link

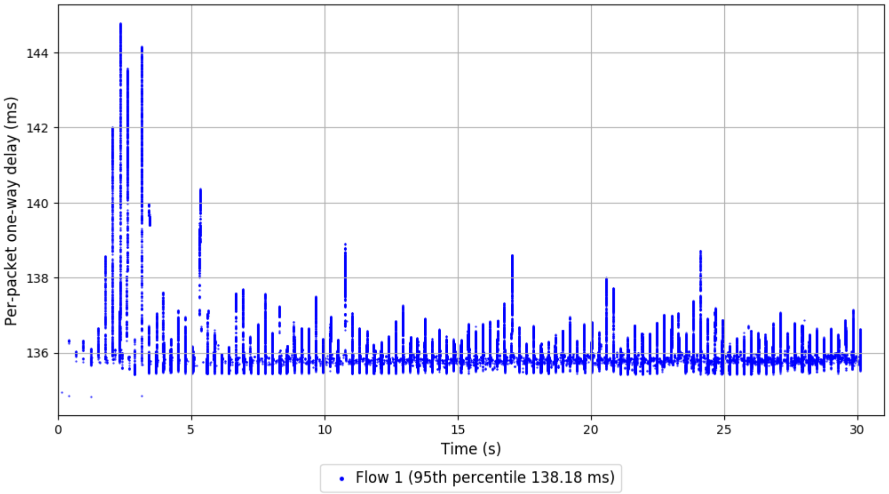




```
Run 2: Statistics of TCP Vegas

Start at: 2018-08-02 01:31:33
End at: 2018-08-02 01:32:03
Local clock offset: 0.22 ms
Remote clock offset: 0.217 ms

# Below is generated by plot.py at 2018-08-02 06:41:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.81 Mbit/s
95th percentile per-packet one-way delay: 138.182 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 35.81 Mbit/s
95th percentile per-packet one-way delay: 138.182 ms
Loss rate: 0.00%
```

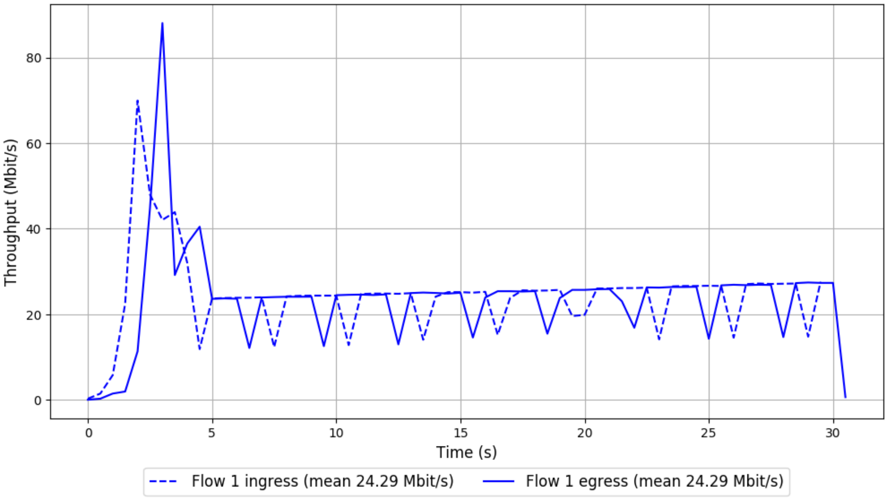
Run 2: Report of TCP Vegas — Data Link

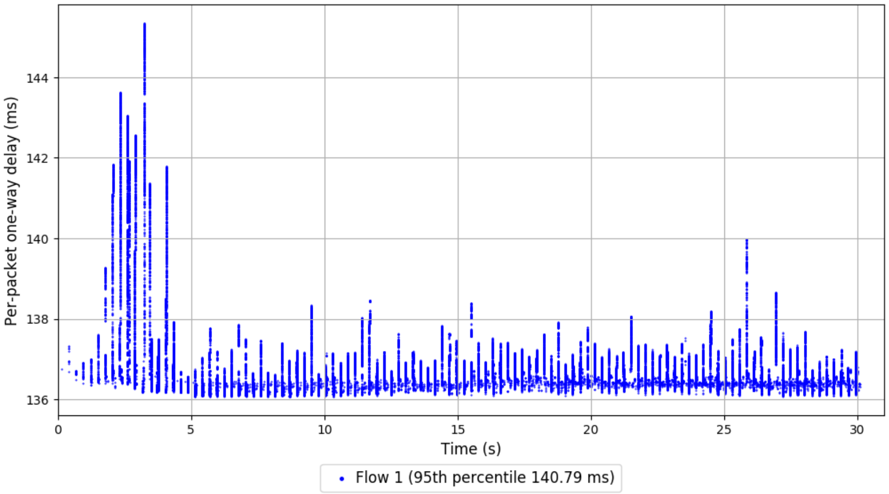




```
Run 3: Statistics of TCP Vegas

Start at: 2018-08-02 01:54:39
End at: 2018-08-02 01:55:09
Local clock offset: 0.26 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2018-08-02 06:41:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.29 Mbit/s
95th percentile per-packet one-way delay: 140.787 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.29 Mbit/s
95th percentile per-packet one-way delay: 140.787 ms
Loss rate: 0.00%
```

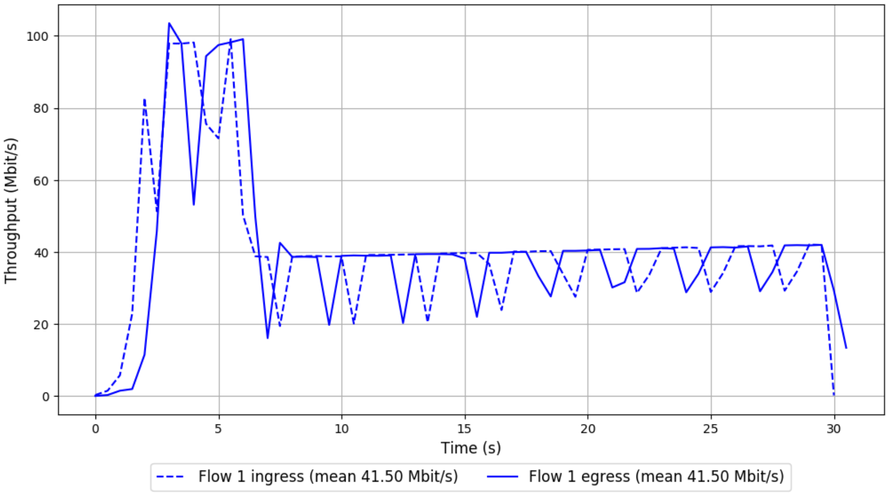
Run 3: Report of TCP Vegas — Data Link

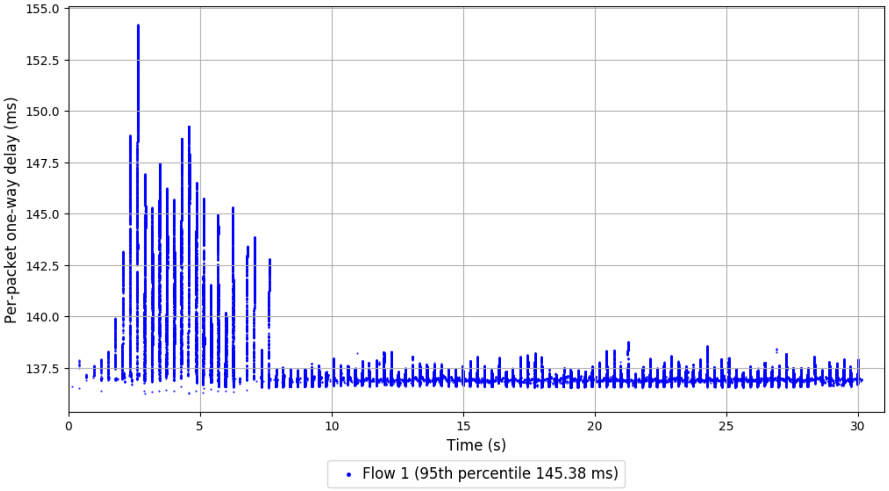




```
Run 4: Statistics of TCP Vegas

Start at: 2018-08-02 02:17:48
End at: 2018-08-02 02:18:18
Local clock offset: 0.176 ms
Remote clock offset: 0.341 ms

# Below is generated by plot.py at 2018-08-02 06:41:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.50 Mbit/s
95th percentile per-packet one-way delay: 145.385 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.50 Mbit/s
95th percentile per-packet one-way delay: 145.385 ms
Loss rate: 0.00%
```

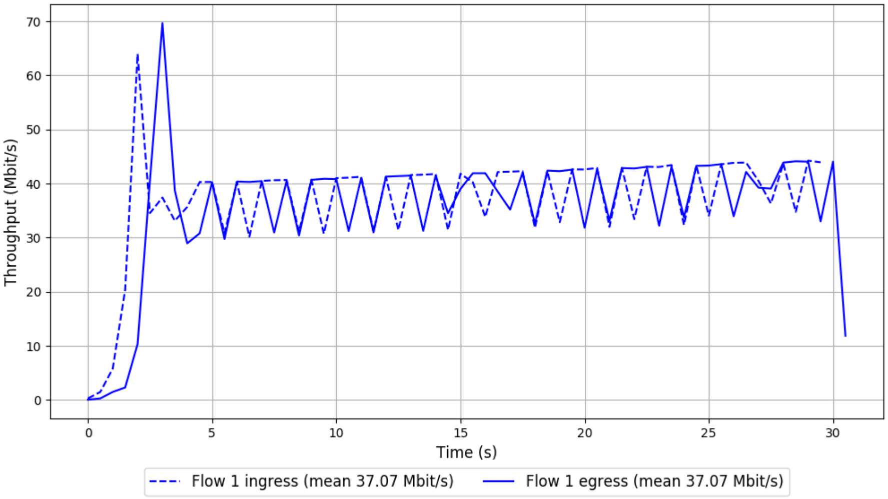
Run 4: Report of TCP Vegas — Data Link

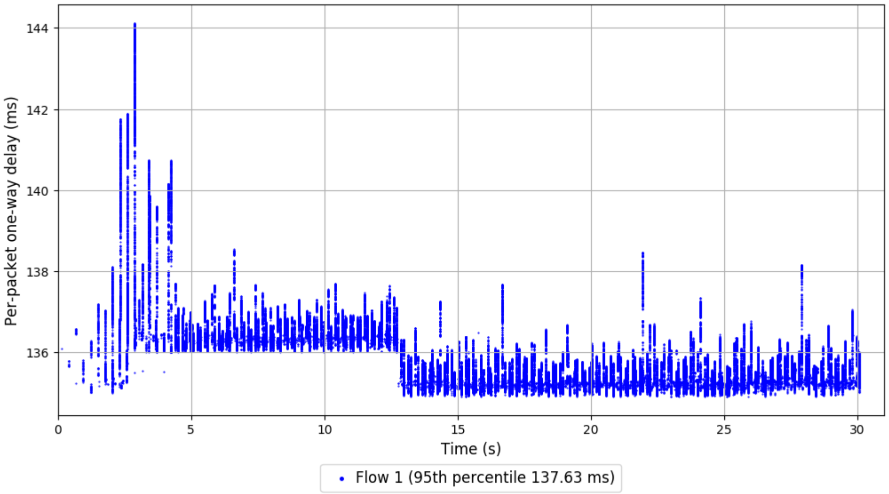




```
Run 5: Statistics of TCP Vegas

Start at: 2018-08-02 02:41:11
End at: 2018-08-02 02:41:41
Local clock offset: 0.052 ms
Remote clock offset: -0.419 ms

# Below is generated by plot.py at 2018-08-02 06:41:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.07 Mbit/s
95th percentile per-packet one-way delay: 137.634 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 37.07 Mbit/s
95th percentile per-packet one-way delay: 137.634 ms
Loss rate: 0.00%
```

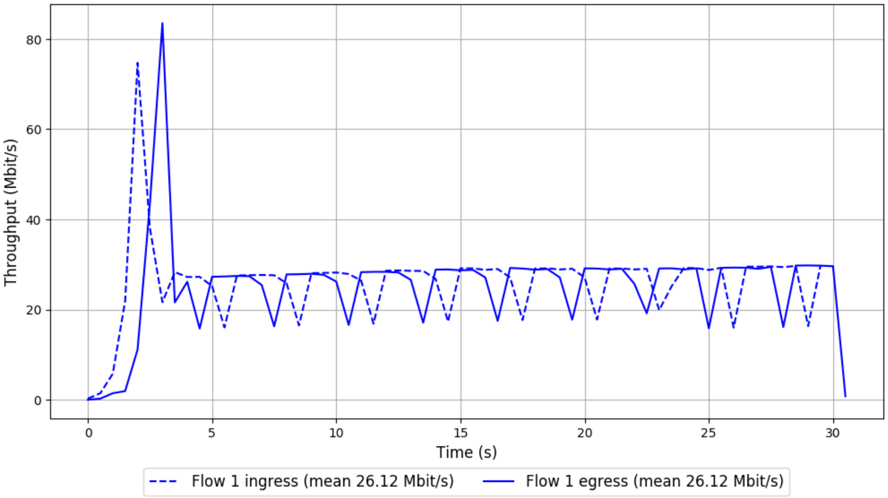
Run 5: Report of TCP Vegas — Data Link

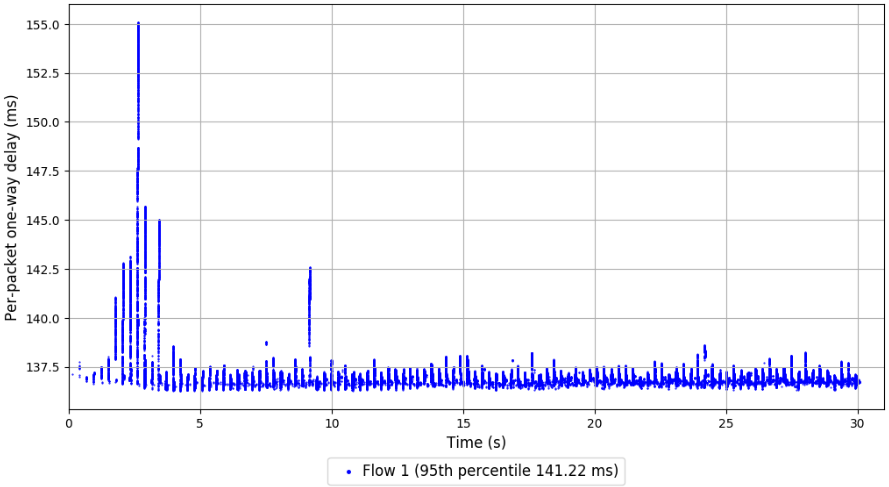




```
Run 6: Statistics of TCP Vegas

Start at: 2018-08-02 03:04:52
End at: 2018-08-02 03:05:22
Local clock offset: 0.26 ms
Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2018-08-02 06:41:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.12 Mbit/s
95th percentile per-packet one-way delay: 141.215 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 26.12 Mbit/s
95th percentile per-packet one-way delay: 141.215 ms
Loss rate: 0.00%
```

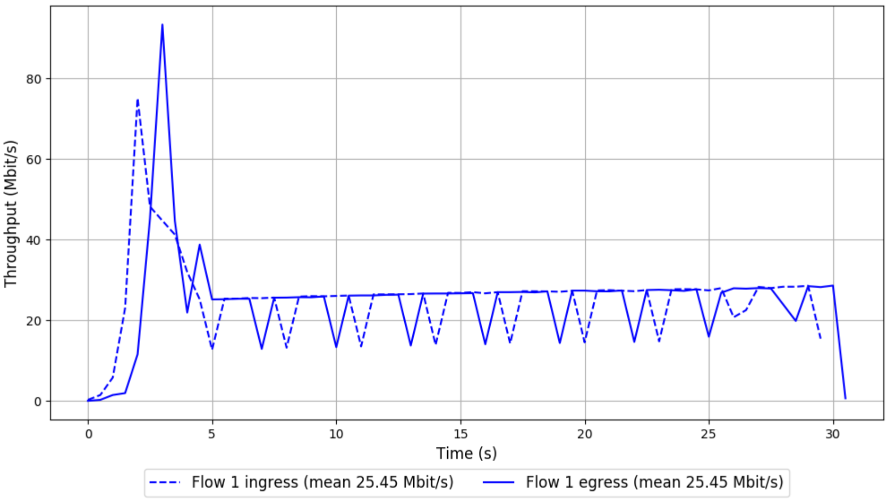
Run 6: Report of TCP Vegas — Data Link

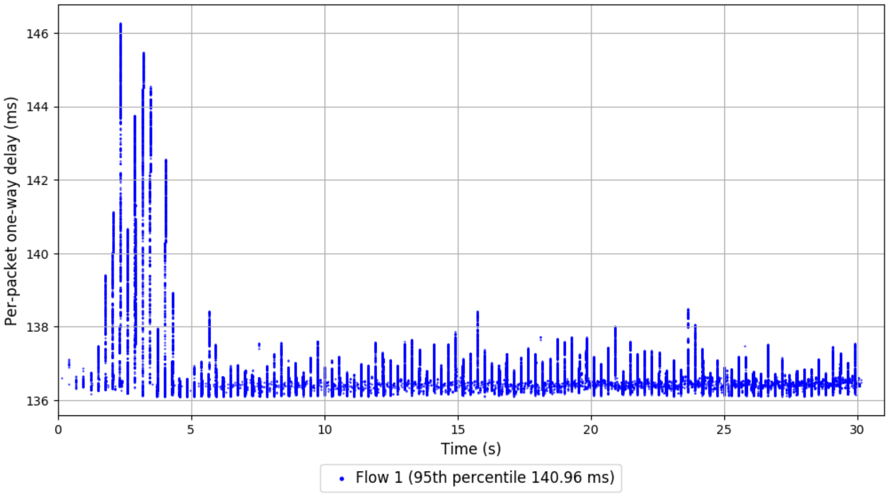




```
Run 7: Statistics of TCP Vegas

Start at: 2018-08-02 03:28:13
End at: 2018-08-02 03:28:43
Local clock offset: 0.319 ms
Remote clock offset: -0.089 ms

# Below is generated by plot.py at 2018-08-02 06:41:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 25.45 Mbit/s
95th percentile per-packet one-way delay: 140.958 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 25.45 Mbit/s
95th percentile per-packet one-way delay: 140.958 ms
Loss rate: 0.00%
```

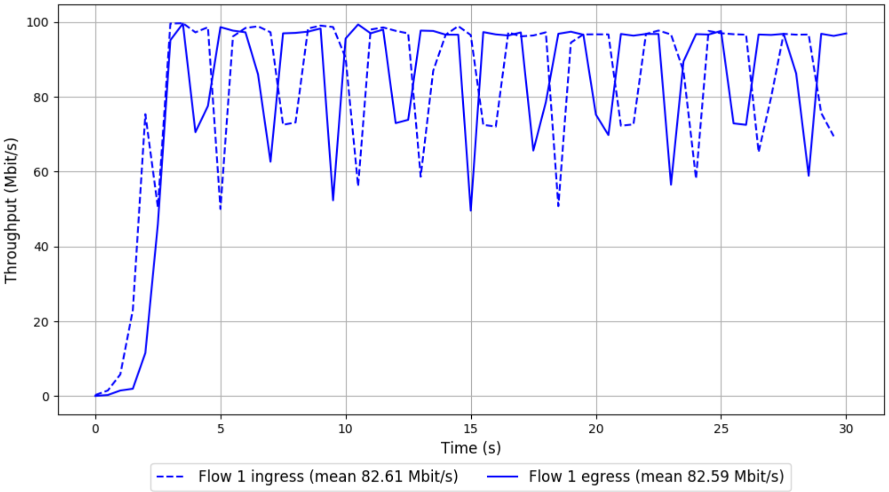
Run 7: Report of TCP Vegas — Data Link

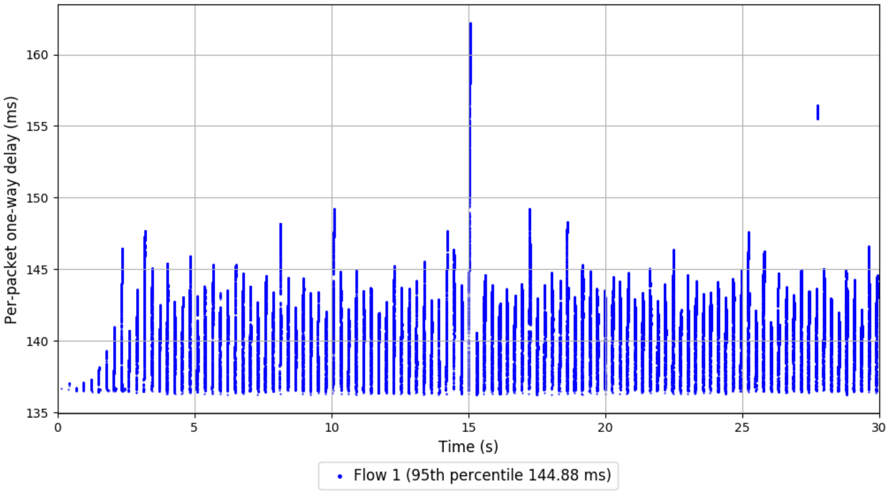




```
Run 8: Statistics of TCP Vegas

Start at: 2018-08-02 03:51:49
End at: 2018-08-02 03:52:19
Local clock offset: 0.057 ms
Remote clock offset: -0.088 ms

# Below is generated by plot.py at 2018-08-02 06:41:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.59 Mbit/s
95th percentile per-packet one-way delay: 144.881 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 82.59 Mbit/s
95th percentile per-packet one-way delay: 144.881 ms
Loss rate: 0.00%
```

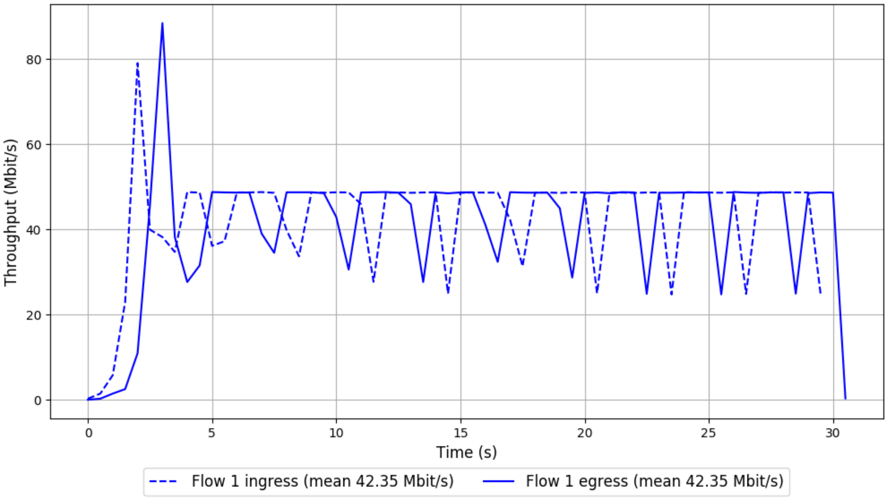
Run 8: Report of TCP Vegas — Data Link

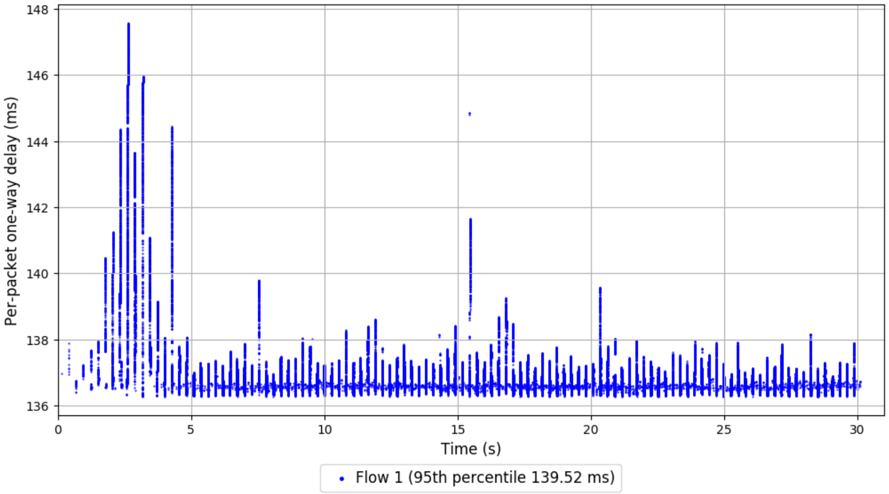




```
Run 9: Statistics of TCP Vegas

Start at: 2018-08-02 04:15:31
End at: 2018-08-02 04:16:01
Local clock offset: 0.074 ms
Remote clock offset: -0.116 ms

# Below is generated by plot.py at 2018-08-02 06:41:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 42.35 Mbit/s
95th percentile per-packet one-way delay: 139.523 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.35 Mbit/s
95th percentile per-packet one-way delay: 139.523 ms
Loss rate: 0.00%
```

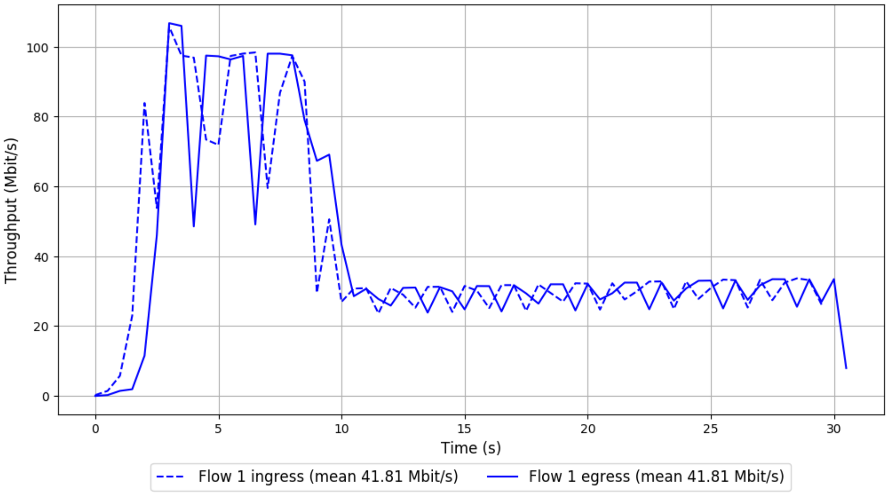
Run 9: Report of TCP Vegas — Data Link

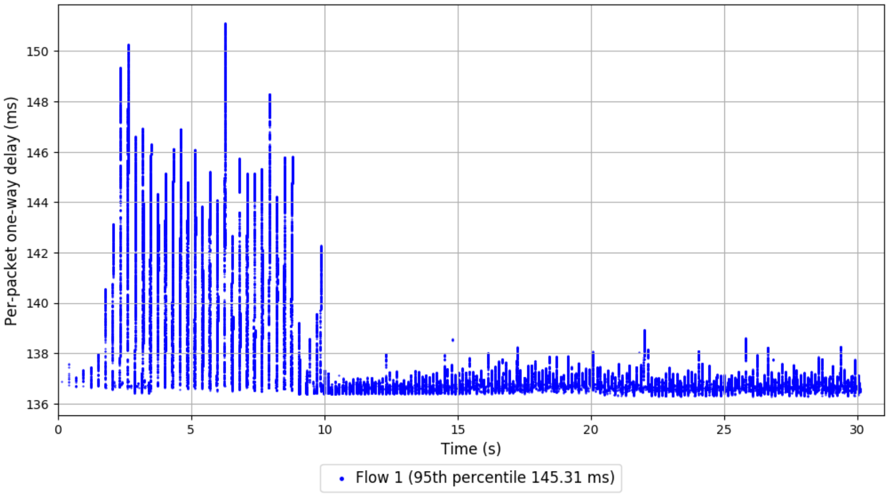




```
Run 10: Statistics of TCP Vegas

Start at: 2018-08-02 04:38:43
End at: 2018-08-02 04:39:13
Local clock offset: -0.036 ms
Remote clock offset: -0.116 ms

# Below is generated by plot.py at 2018-08-02 06:41:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.81 Mbit/s
95th percentile per-packet one-way delay: 145.307 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.81 Mbit/s
95th percentile per-packet one-way delay: 145.307 ms
Loss rate: 0.00%
```

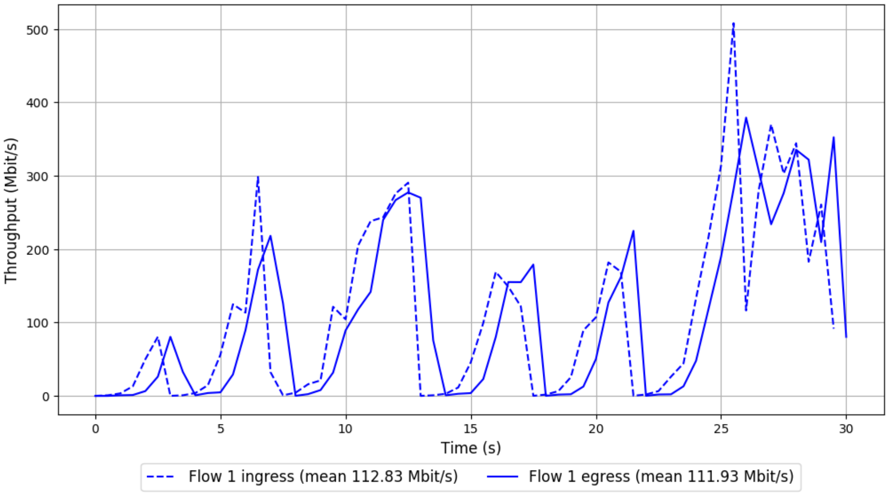
Run 10: Report of TCP Vegas — Data Link

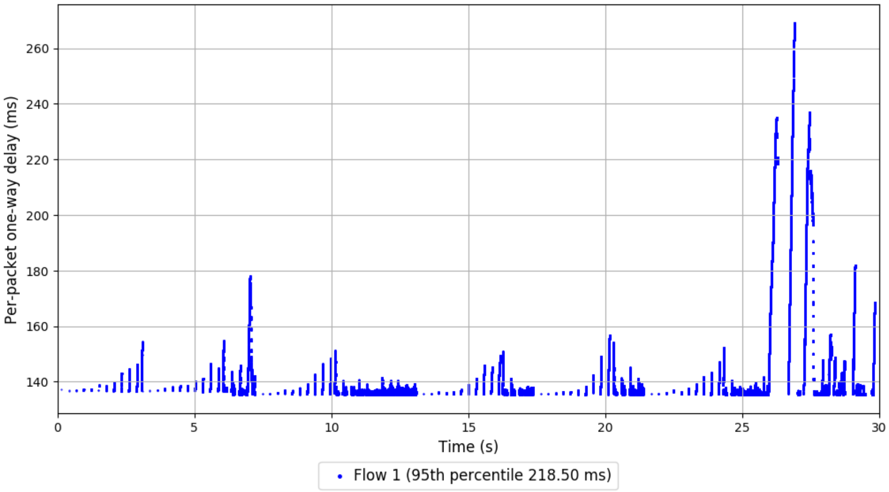




```
Run 1: Statistics of Verus

Start at: 2018-08-02 01:22:27
End at: 2018-08-02 01:22:57
Local clock offset: 0.342 ms
Remote clock offset: 0.254 ms

# Below is generated by plot.py at 2018-08-02 06:41:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 111.93 Mbit/s
95th percentile per-packet one-way delay: 218.498 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 111.93 Mbit/s
95th percentile per-packet one-way delay: 218.498 ms
Loss rate: 0.71%
```

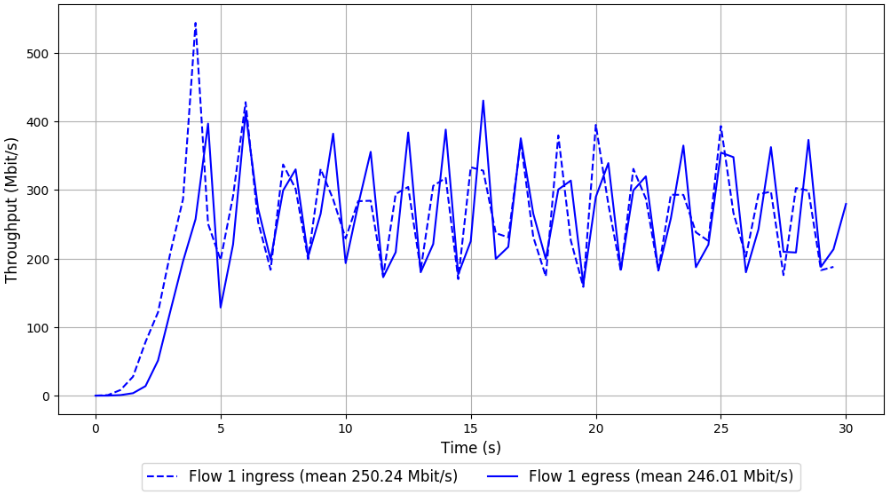
Run 1: Report of Verus — Data Link

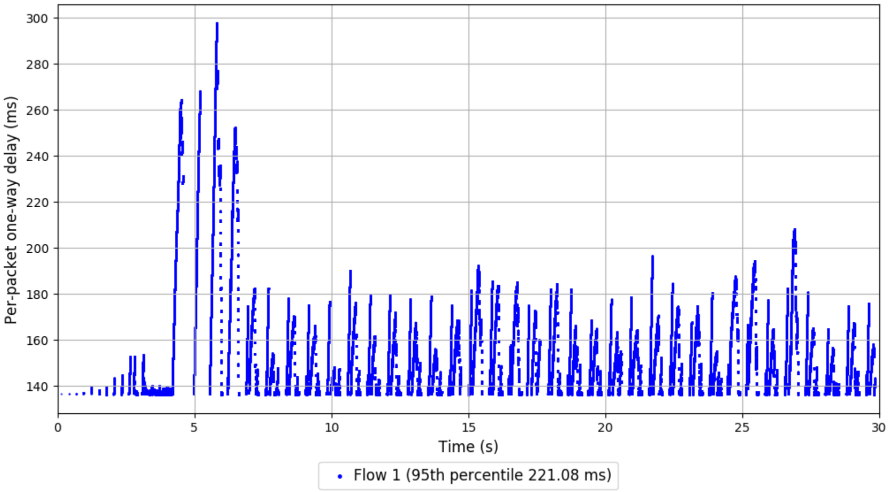




```
Run 2: Statistics of Verus

Start at: 2018-08-02 01:45:51
End at: 2018-08-02 01:46:21
Local clock offset: 0.107 ms
Remote clock offset: -0.092 ms

# Below is generated by plot.py at 2018-08-02 06:43:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 246.01 Mbit/s
95th percentile per-packet one-way delay: 221.082 ms
Loss rate: 1.69%
-- Flow 1:
Average throughput: 246.01 Mbit/s
95th percentile per-packet one-way delay: 221.082 ms
Loss rate: 1.69%
```

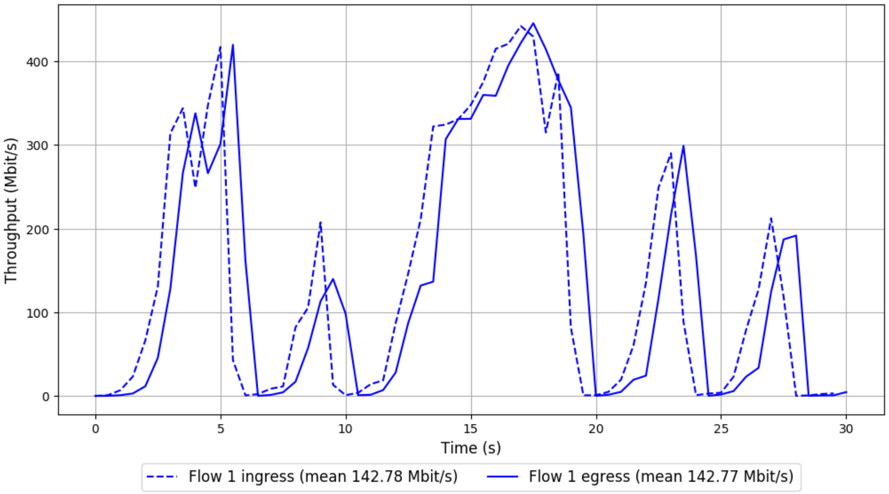
Run 2: Report of Verus — Data Link

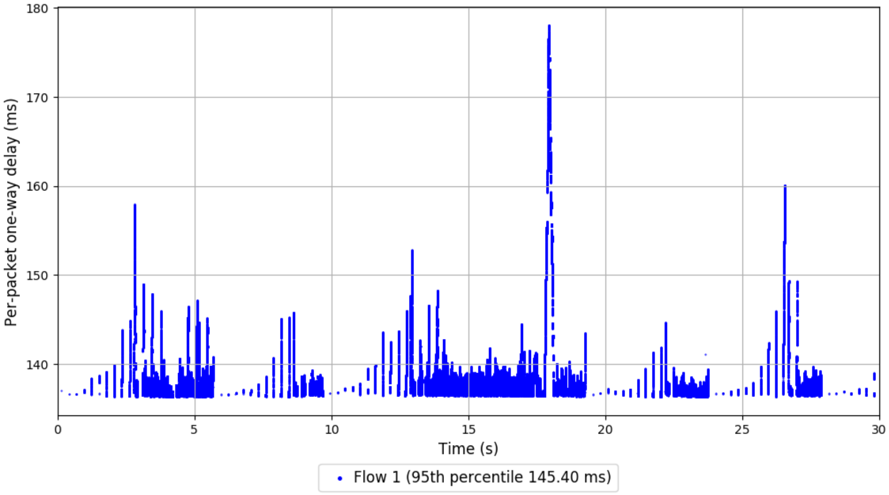




```
Run 3: Statistics of Verus

Start at: 2018-08-02 02:08:54
End at: 2018-08-02 02:09:24
Local clock offset: 0.017 ms
Remote clock offset: -0.073 ms

# Below is generated by plot.py at 2018-08-02 06:43:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 142.77 Mbit/s
95th percentile per-packet one-way delay: 145.396 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 142.77 Mbit/s
95th percentile per-packet one-way delay: 145.396 ms
Loss rate: 0.00%
```

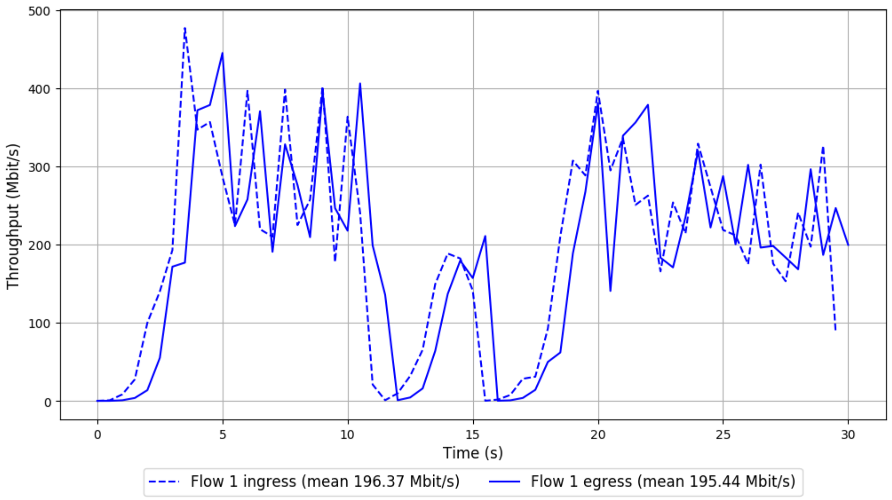
Run 3: Report of Verus — Data Link

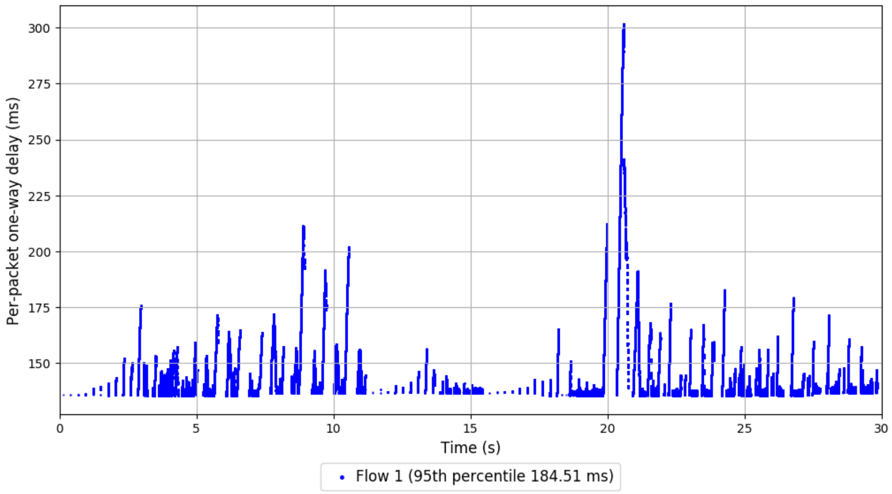




```
Run 4: Statistics of Verus

Start at: 2018-08-02 02:32:16
End at: 2018-08-02 02:32:46
Local clock offset: -0.009 ms
Remote clock offset: -0.085 ms

# Below is generated by plot.py at 2018-08-02 06:43:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 195.44 Mbit/s
95th percentile per-packet one-way delay: 184.514 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 195.44 Mbit/s
95th percentile per-packet one-way delay: 184.514 ms
Loss rate: 0.47%
```

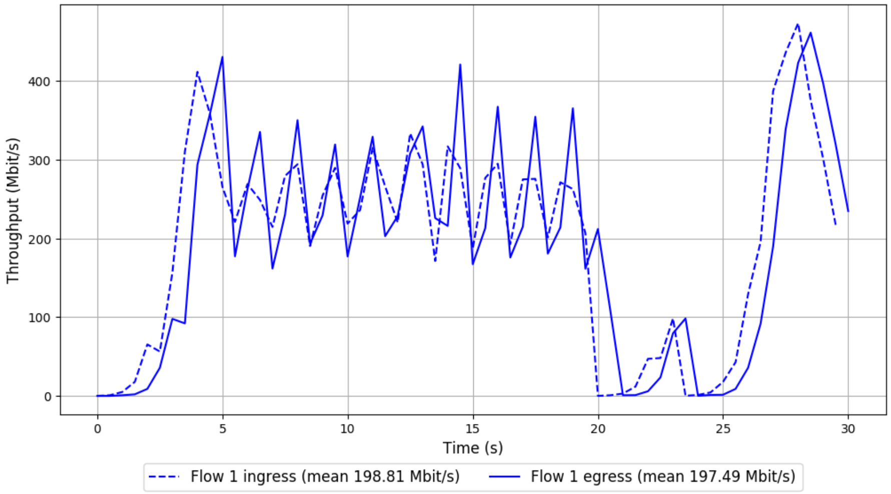
Run 4: Report of Verus — Data Link

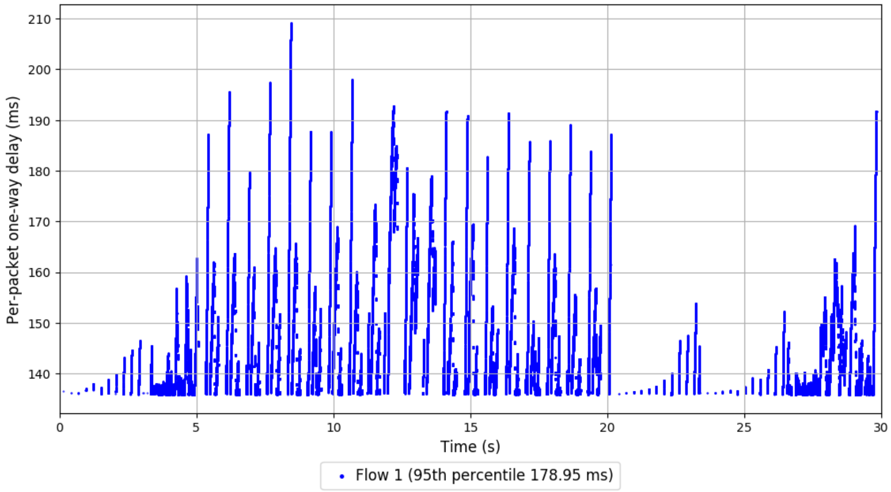




```
Run 5: Statistics of Verus

Start at: 2018-08-02 02:55:41
End at: 2018-08-02 02:56:11
Local clock offset: 0.252 ms
Remote clock offset: -0.452 ms

# Below is generated by plot.py at 2018-08-02 06:44:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 197.49 Mbit/s
95th percentile per-packet one-way delay: 178.951 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 197.49 Mbit/s
95th percentile per-packet one-way delay: 178.951 ms
Loss rate: 0.66%
```

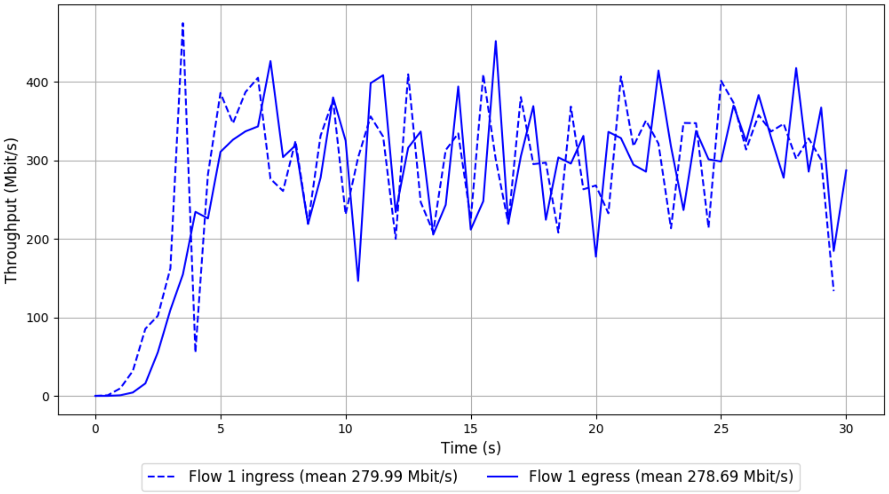
Run 5: Report of Verus — Data Link

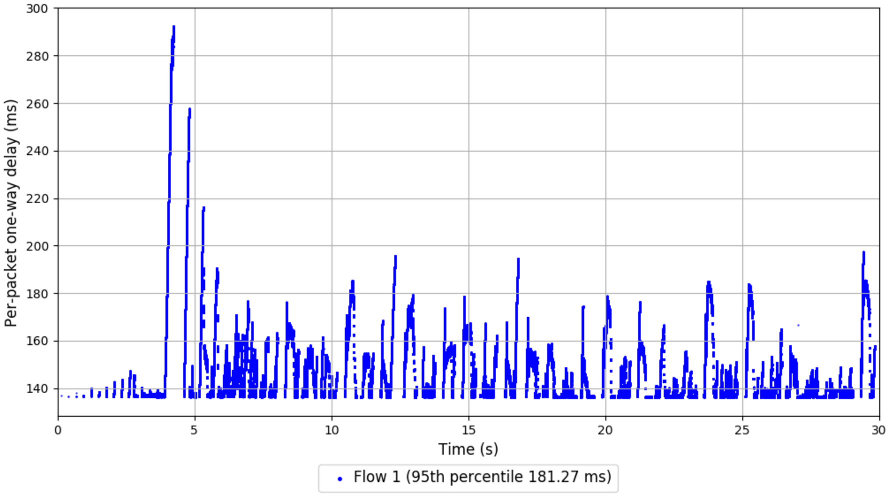




```
Run 6: Statistics of Verus

Start at: 2018-08-02 03:19:25
End at: 2018-08-02 03:19:55
Local clock offset: 0.38 ms
Remote clock offset: -0.057 ms

# Below is generated by plot.py at 2018-08-02 06:45:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 278.69 Mbit/s
95th percentile per-packet one-way delay: 181.269 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 278.69 Mbit/s
95th percentile per-packet one-way delay: 181.269 ms
Loss rate: 0.40%
```

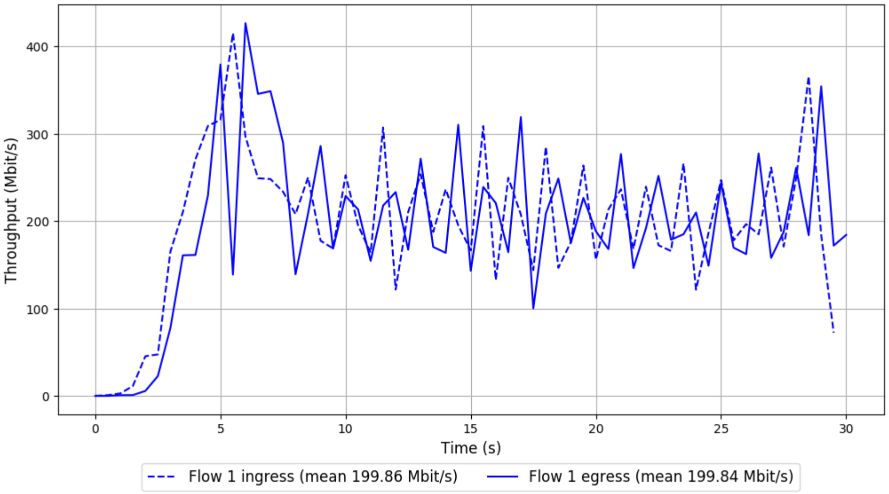
Run 6: Report of Verus — Data Link

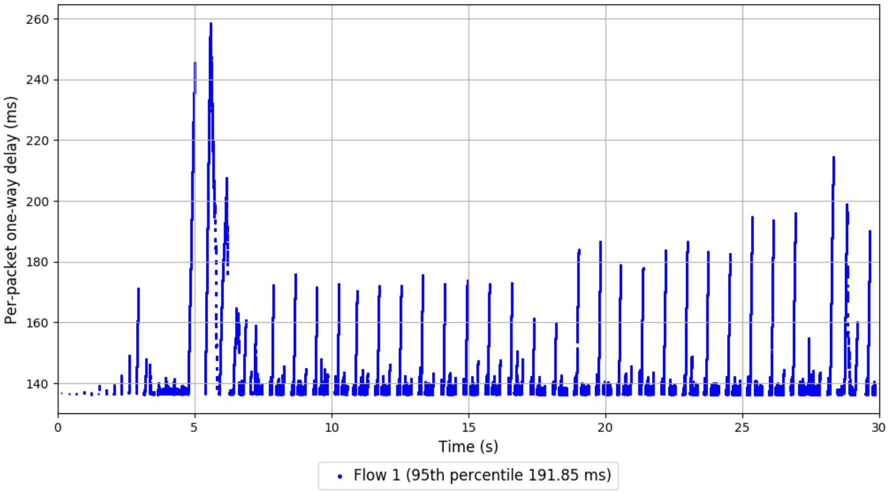




```
Run 7: Statistics of Verus

Start at: 2018-08-02 03:42:50
End at: 2018-08-02 03:43:20
Local clock offset: -0.164 ms
Remote clock offset: -0.386 ms

# Below is generated by plot.py at 2018-08-02 06:45:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 199.84 Mbit/s
95th percentile per-packet one-way delay: 191.851 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 199.84 Mbit/s
95th percentile per-packet one-way delay: 191.851 ms
Loss rate: 0.00%
```

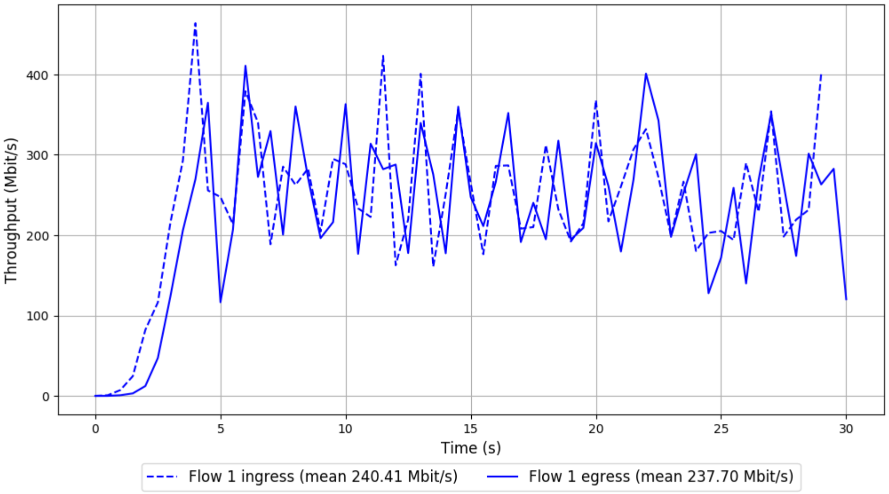
Run 7: Report of Verus — Data Link

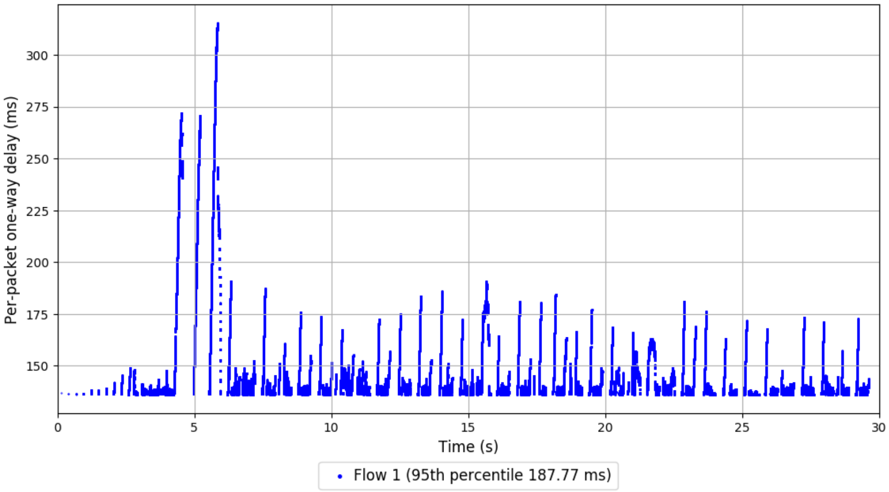




```
Run 8: Statistics of Verus

Start at: 2018-08-02 04:06:20
End at: 2018-08-02 04:06:50
Local clock offset: 0.154 ms
Remote clock offset: -0.107 ms

# Below is generated by plot.py at 2018-08-02 06:45:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 237.70 Mbit/s
95th percentile per-packet one-way delay: 187.771 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 237.70 Mbit/s
95th percentile per-packet one-way delay: 187.771 ms
Loss rate: 1.12%
```

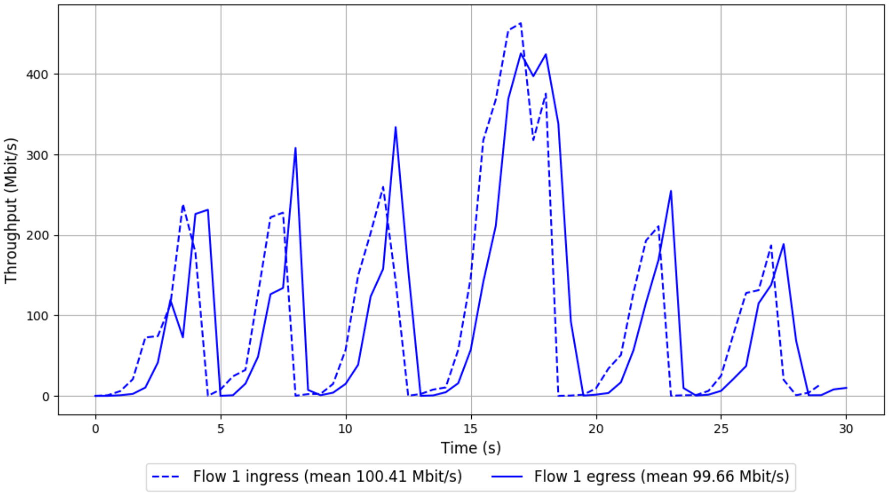
Run 8: Report of Verus — Data Link

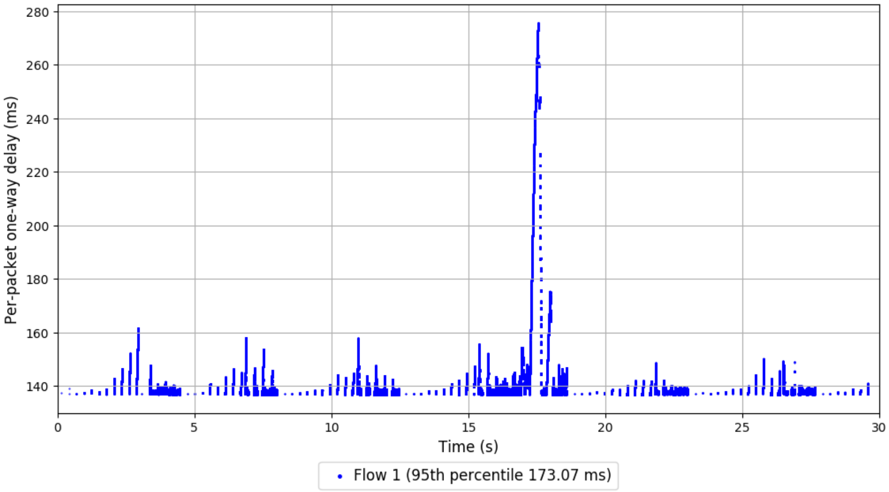




```
Run 9: Statistics of Verus

Start at: 2018-08-02 04:29:57
End at: 2018-08-02 04:30:27
Local clock offset: -0.19 ms
Remote clock offset: 0.207 ms

# Below is generated by plot.py at 2018-08-02 06:45:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 99.66 Mbit/s
95th percentile per-packet one-way delay: 173.068 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 99.66 Mbit/s
95th percentile per-packet one-way delay: 173.068 ms
Loss rate: 0.74%
```

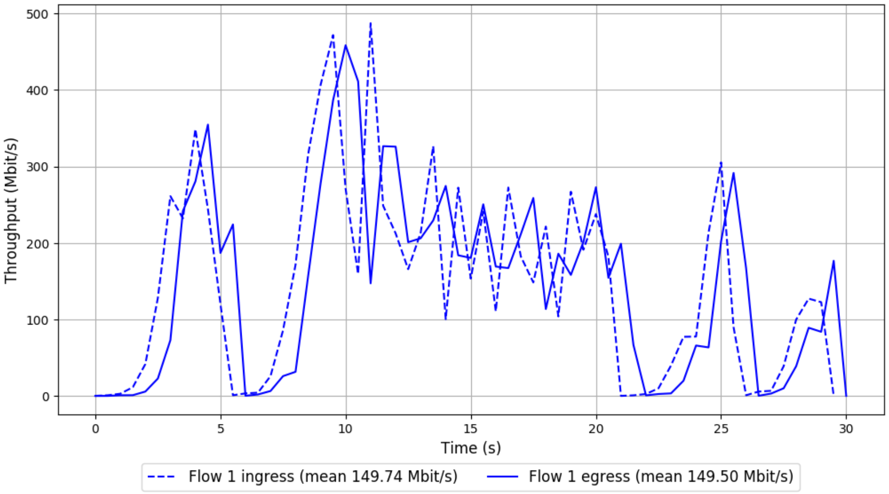
Run 9: Report of Verus — Data Link

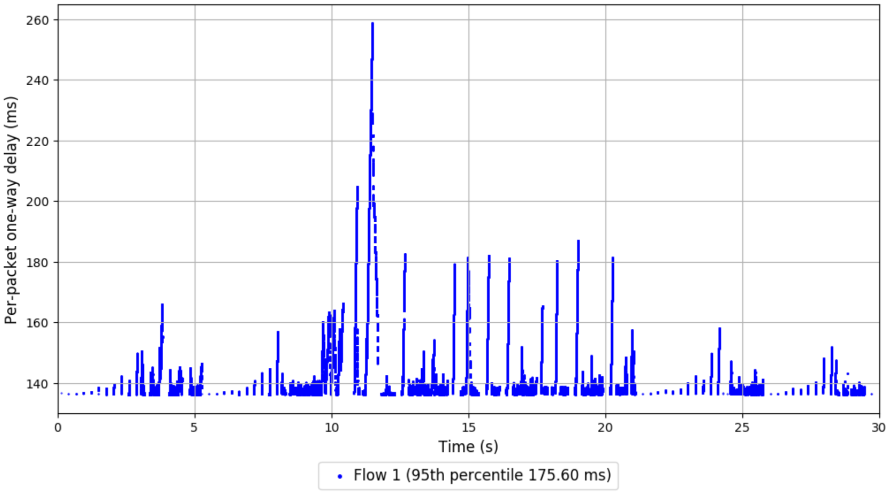




```
Run 10: Statistics of Verus

Start at: 2018-08-02 04:53:06
End at: 2018-08-02 04:53:36
Local clock offset: 0.18 ms
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2018-08-02 06:45:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 149.50 Mbit/s
95th percentile per-packet one-way delay: 175.598 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 149.50 Mbit/s
95th percentile per-packet one-way delay: 175.598 ms
Loss rate: 0.16%
```

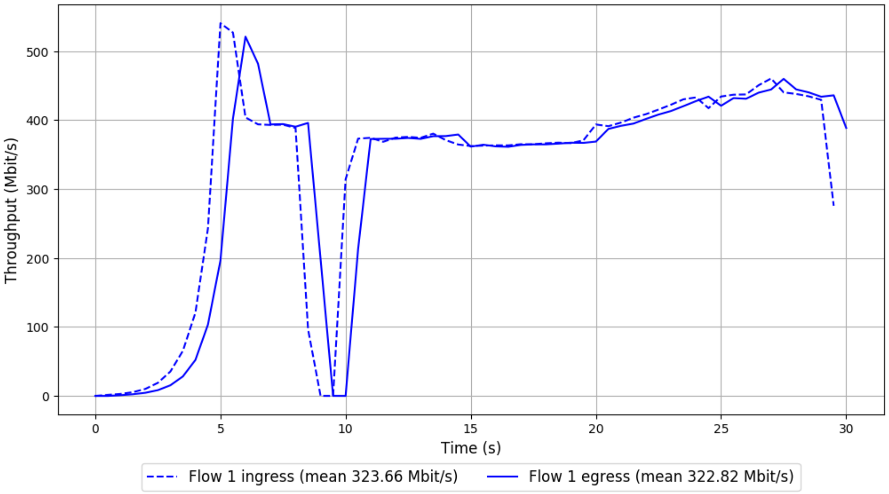
Run 10: Report of Verus — Data Link

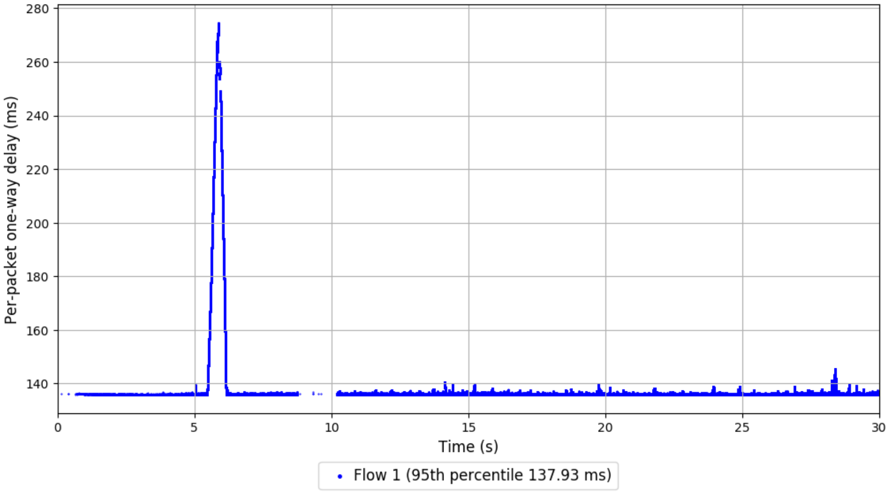




```
Run 1: Statistics of PCC-Vivace

Start at: 2018-08-02 01:10:36
End at: 2018-08-02 01:11:06
Local clock offset: 0.139 ms
Remote clock offset: -0.438 ms

# Below is generated by plot.py at 2018-08-02 06:49:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 322.82 Mbit/s
95th percentile per-packet one-way delay: 137.931 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 322.82 Mbit/s
95th percentile per-packet one-way delay: 137.931 ms
Loss rate: 0.26%
```

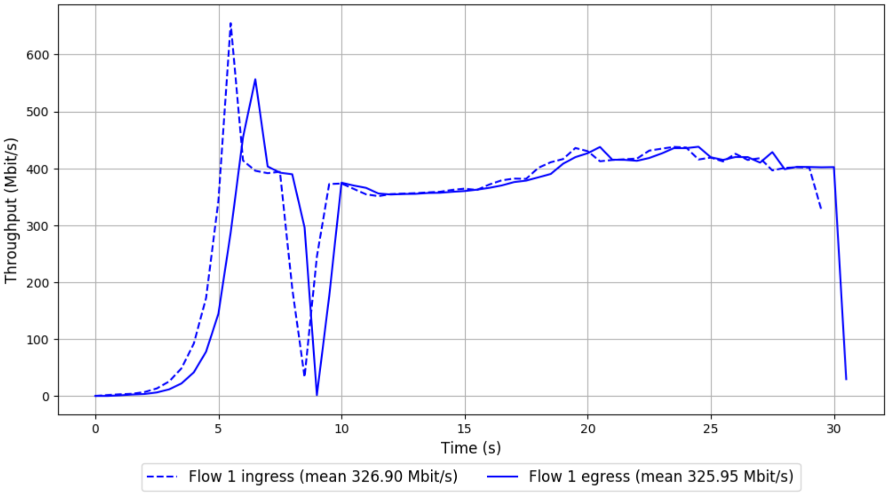
Run 1: Report of PCC-Vivace — Data Link

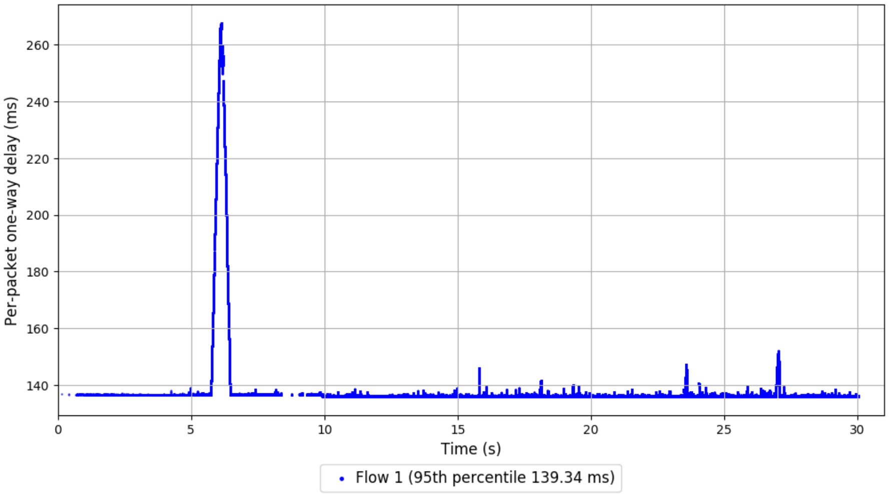




```
Run 2: Statistics of PCC-Vivace

Start at: 2018-08-02 01:33:54
End at: 2018-08-02 01:34:24
Local clock offset: 0.268 ms
Remote clock offset: 0.241 ms

# Below is generated by plot.py at 2018-08-02 06:49:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 325.95 Mbit/s
95th percentile per-packet one-way delay: 139.342 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 325.95 Mbit/s
95th percentile per-packet one-way delay: 139.342 ms
Loss rate: 0.29%
```

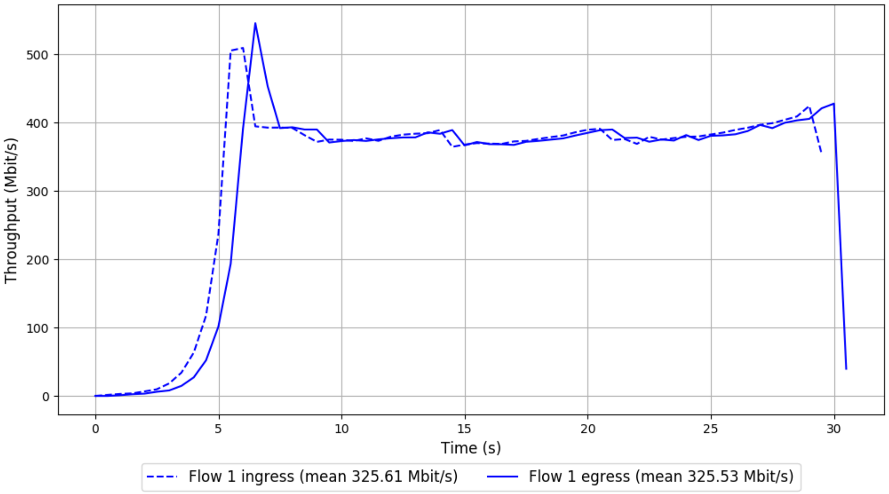
Run 2: Report of PCC-Vivace — Data Link

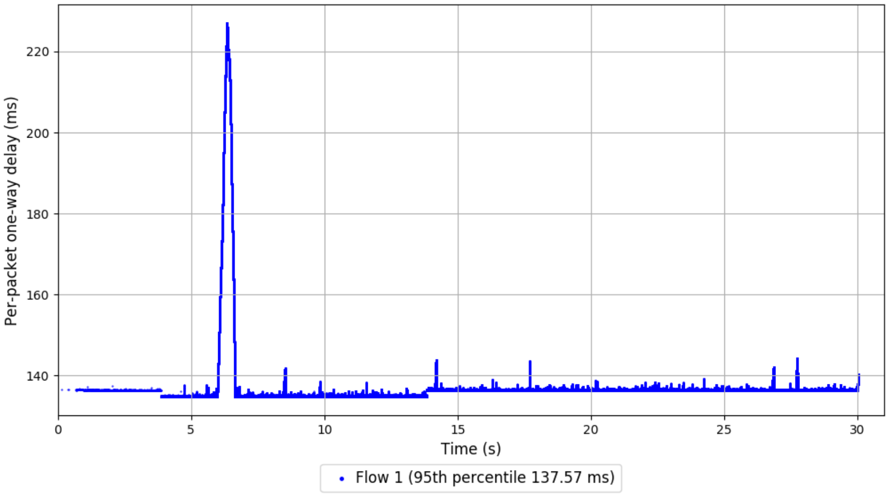




```
Run 3: Statistics of PCC-Vivace

Start at: 2018-08-02 01:56:59
End at: 2018-08-02 01:57:29
Local clock offset: 0.058 ms
Remote clock offset: -0.082 ms

# Below is generated by plot.py at 2018-08-02 06:49:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 325.53 Mbit/s
95th percentile per-packet one-way delay: 137.569 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 325.53 Mbit/s
95th percentile per-packet one-way delay: 137.569 ms
Loss rate: 0.02%
```

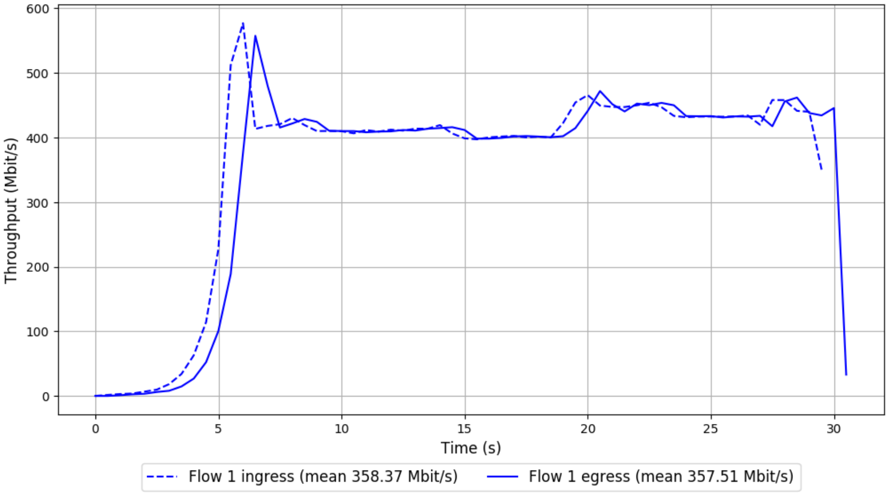
Run 3: Report of PCC-Vivace — Data Link

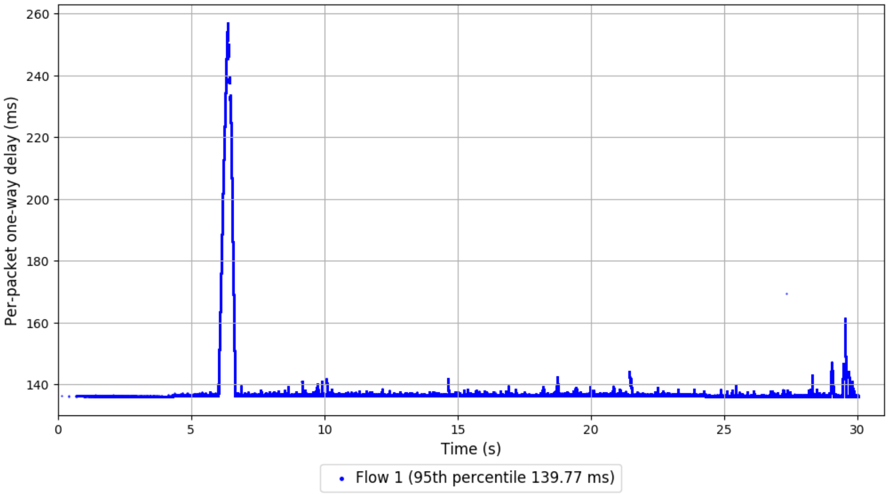




```
Run 4: Statistics of PCC-Vivace

Start at: 2018-08-02 02:20:09
End at: 2018-08-02 02:20:39
Local clock offset: 0.194 ms
Remote clock offset: 0.302 ms

# Below is generated by plot.py at 2018-08-02 06:51:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 357.51 Mbit/s
95th percentile per-packet one-way delay: 139.768 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 357.51 Mbit/s
95th percentile per-packet one-way delay: 139.768 ms
Loss rate: 0.24%
```

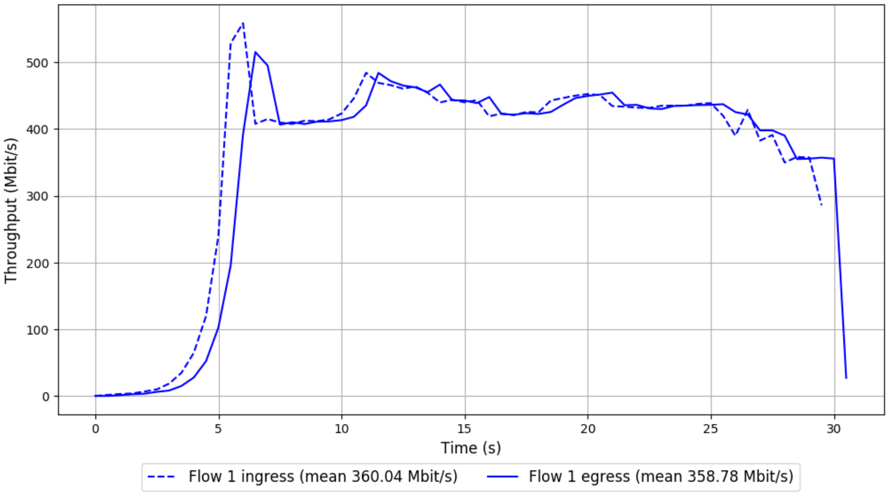
Run 4: Report of PCC-Vivace — Data Link

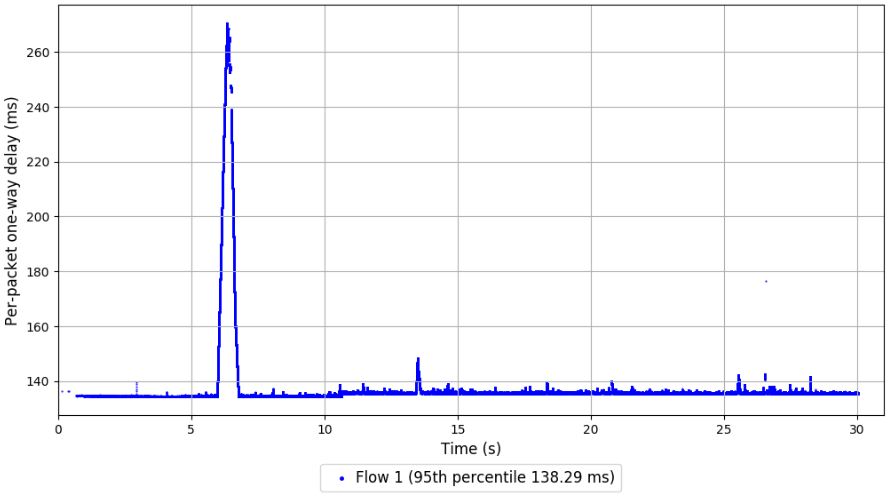




```
Run 5: Statistics of PCC-Vivace

Start at: 2018-08-02 02:43:32
End at: 2018-08-02 02:44:02
Local clock offset: -0.077 ms
Remote clock offset: -0.419 ms

# Below is generated by plot.py at 2018-08-02 06:51:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 358.78 Mbit/s
95th percentile per-packet one-way delay: 138.288 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 358.78 Mbit/s
95th percentile per-packet one-way delay: 138.288 ms
Loss rate: 0.35%
```

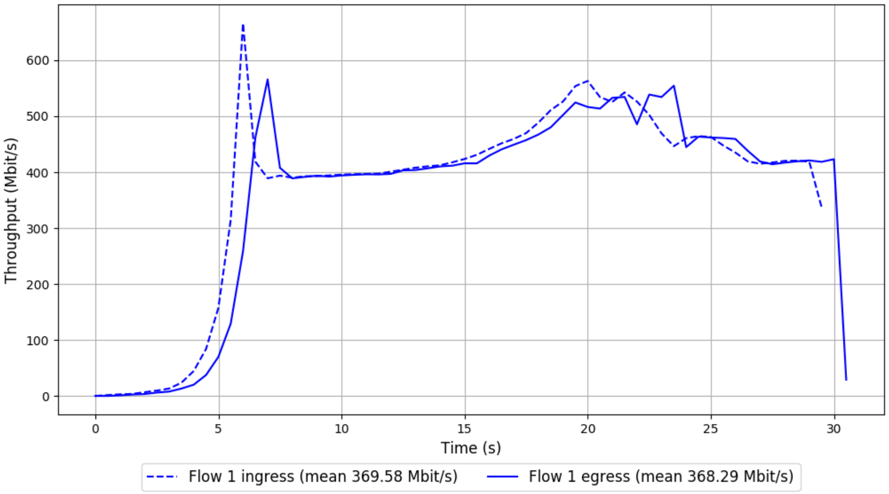
Run 5: Report of PCC-Vivace — Data Link

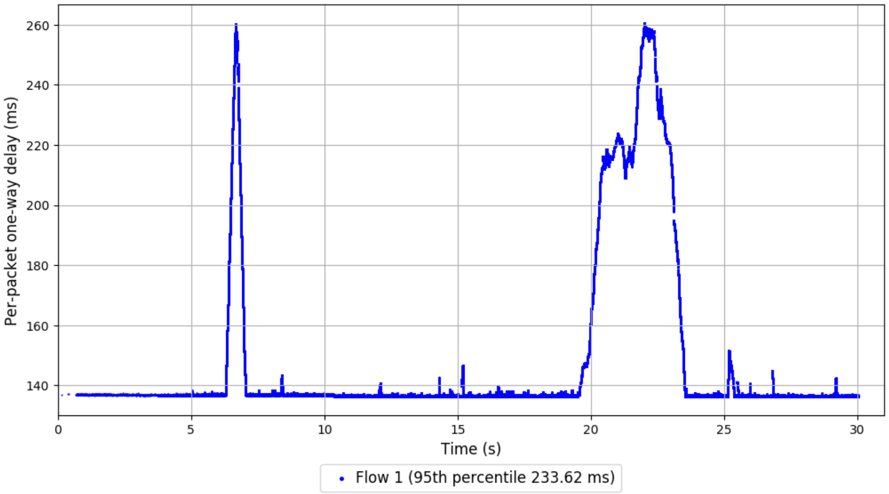




```
Run 6: Statistics of PCC-Vivace

Start at: 2018-08-02 03:07:12
End at: 2018-08-02 03:07:42
Local clock offset: 0.187 ms
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2018-08-02 06:51:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 368.29 Mbit/s
95th percentile per-packet one-way delay: 233.622 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 368.29 Mbit/s
95th percentile per-packet one-way delay: 233.622 ms
Loss rate: 0.35%
```

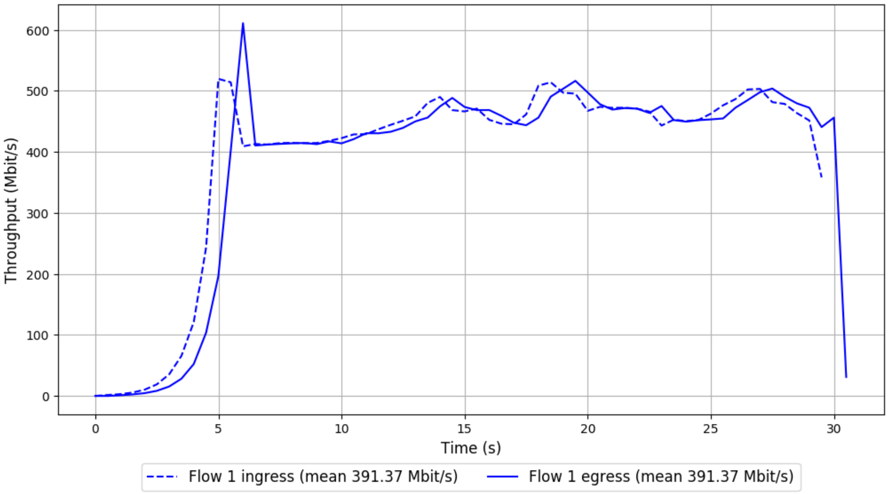
Run 6: Report of PCC-Vivace — Data Link

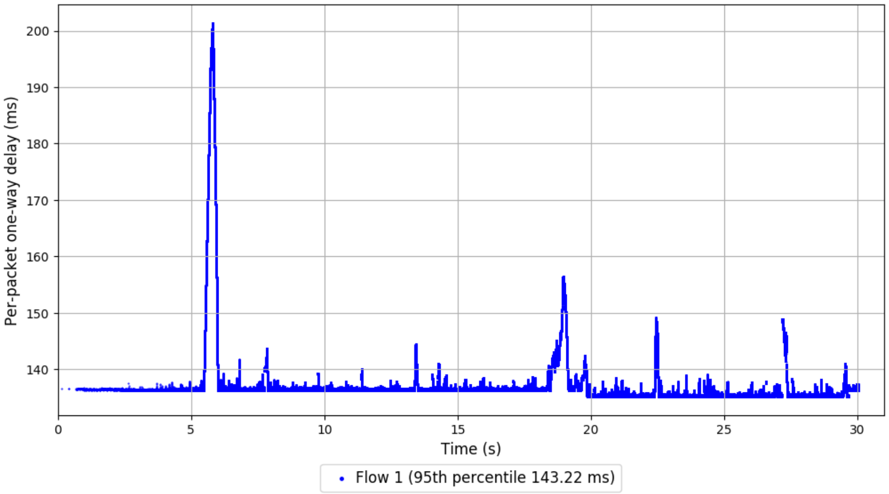




```
Run 7: Statistics of PCC-Vivace

Start at: 2018-08-02 03:30:33
End at: 2018-08-02 03:31:03
Local clock offset: 0.141 ms
Remote clock offset: -0.434 ms

# Below is generated by plot.py at 2018-08-02 06:52:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 391.37 Mbit/s
95th percentile per-packet one-way delay: 143.217 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 391.37 Mbit/s
95th percentile per-packet one-way delay: 143.217 ms
Loss rate: 0.00%
```

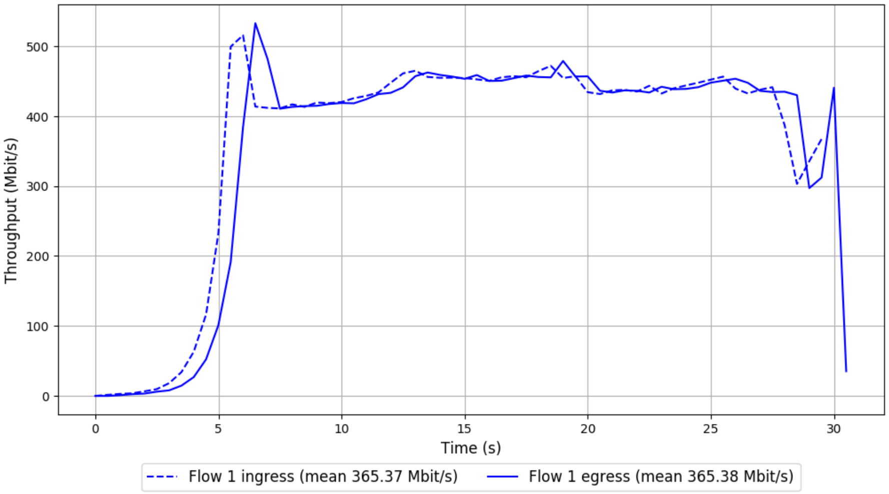
Run 7: Report of PCC-Vivace — Data Link

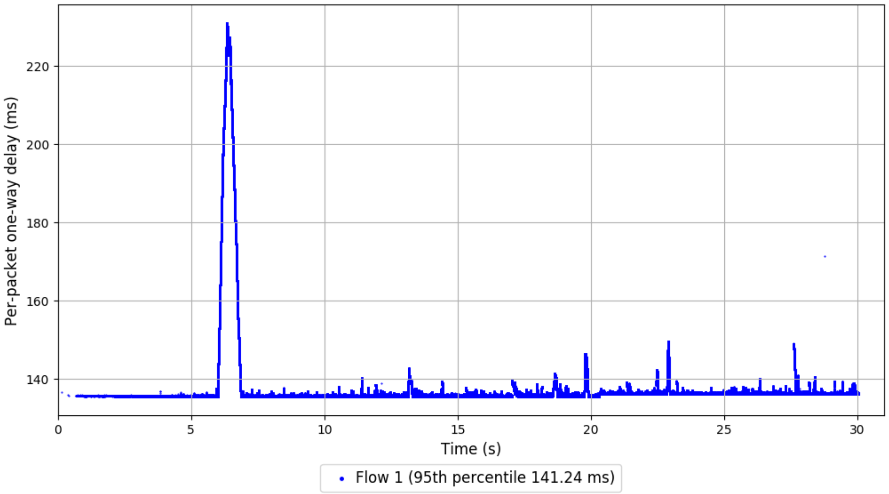




```
Run 8: Statistics of PCC-Vivace

Start at: 2018-08-02 03:54:12
End at: 2018-08-02 03:54:42
Local clock offset: 0.208 ms
Remote clock offset: -0.036 ms

# Below is generated by plot.py at 2018-08-02 06:52:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 365.38 Mbit/s
95th percentile per-packet one-way delay: 141.242 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 365.38 Mbit/s
95th percentile per-packet one-way delay: 141.242 ms
Loss rate: 0.00%
```

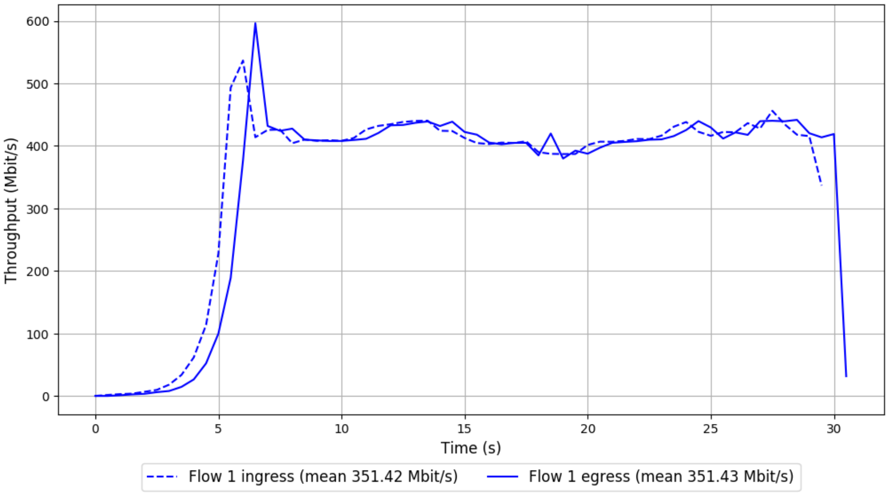
Run 8: Report of PCC-Vivace — Data Link

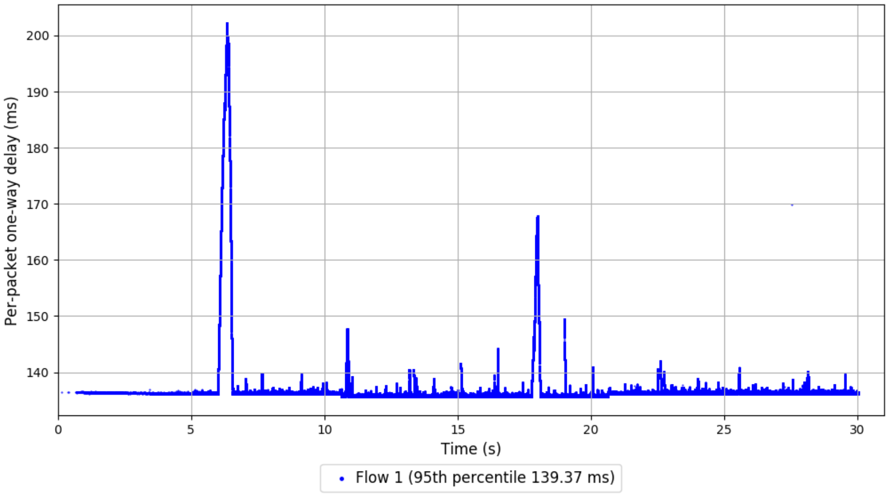




```
Run 9: Statistics of PCC-Vivace

Start at: 2018-08-02 04:17:52
End at: 2018-08-02 04:18:22
Local clock offset: 0.037 ms
Remote clock offset: -0.126 ms

# Below is generated by plot.py at 2018-08-02 06:52:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 351.43 Mbit/s
95th percentile per-packet one-way delay: 139.373 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 351.43 Mbit/s
95th percentile per-packet one-way delay: 139.373 ms
Loss rate: 0.00%
```

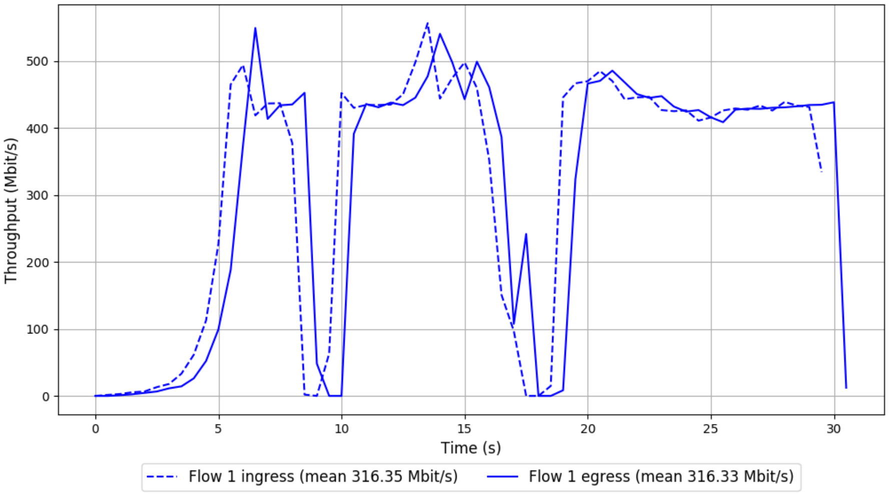
Run 9: Report of PCC-Vivace — Data Link

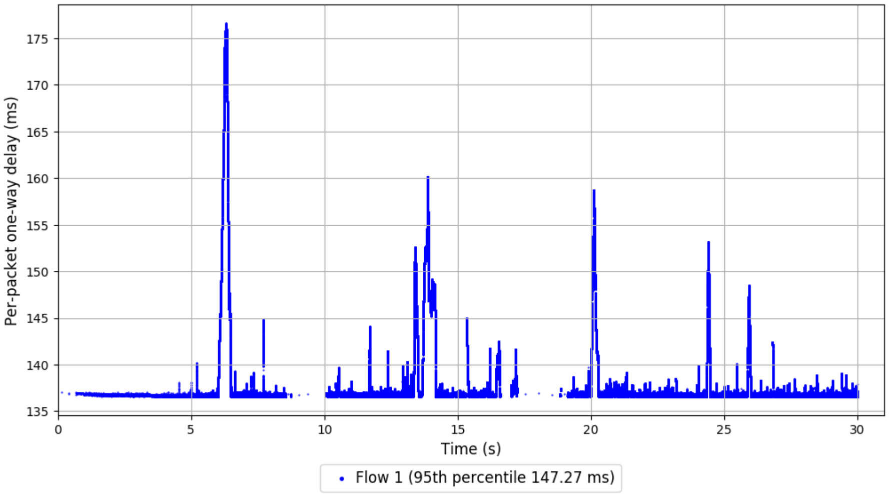




```
Run 10: Statistics of PCC-Vivace

Start at: 2018-08-02 04:41:04
End at: 2018-08-02 04:41:34
Local clock offset: 0.109 ms
Remote clock offset: -0.095 ms

# Below is generated by plot.py at 2018-08-02 06:52:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 316.33 Mbit/s
95th percentile per-packet one-way delay: 147.273 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 316.33 Mbit/s
95th percentile per-packet one-way delay: 147.273 ms
Loss rate: 0.00%
```

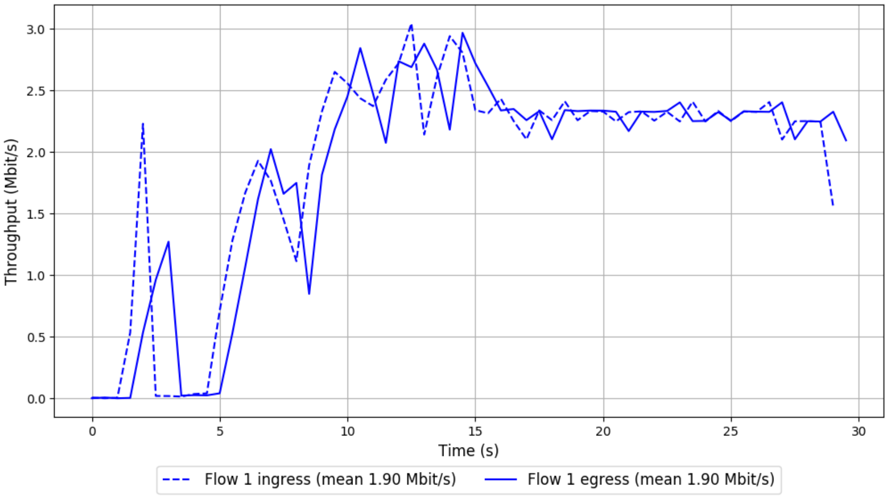
Run 10: Report of PCC-Vivace — Data Link

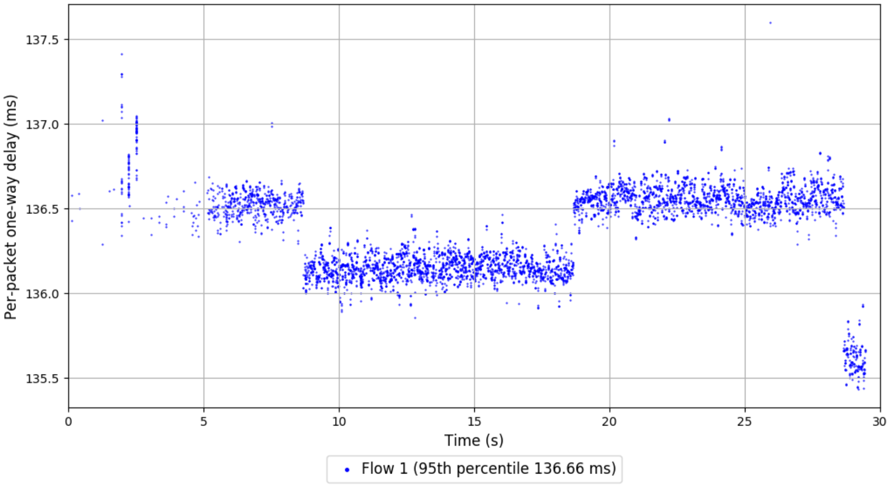




```
Run 1: Statistics of WebRTC media

Start at: 2018-08-02 01:23:44
End at: 2018-08-02 01:24:14
Local clock offset: 0.077 ms
Remote clock offset: -0.084 ms

# Below is generated by plot.py at 2018-08-02 06:52:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 136.660 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 136.660 ms
Loss rate: 0.00%
```

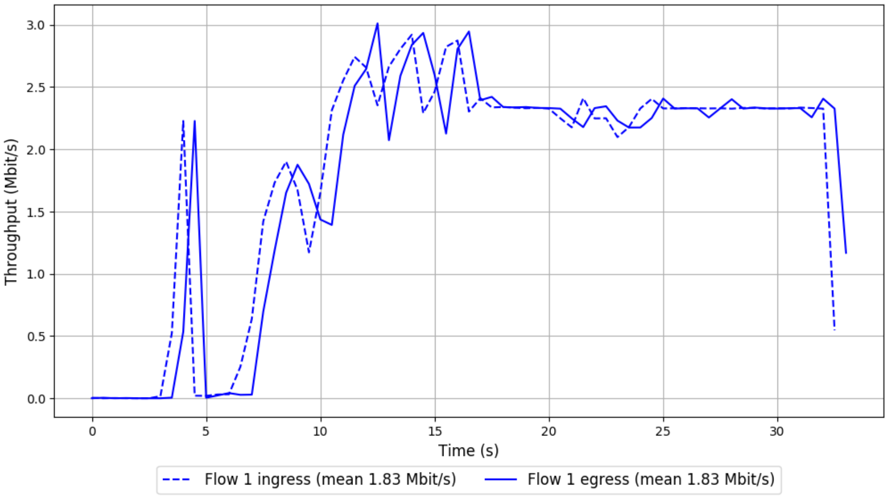
Run 1: Report of WebRTC media — Data Link

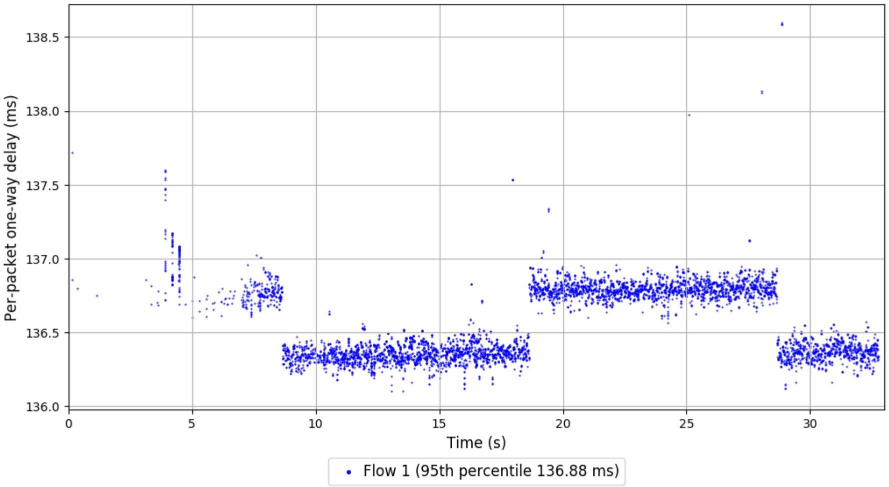




```
Run 2: Statistics of WebRTC media

Start at: 2018-08-02 01:47:18
End at: 2018-08-02 01:47:48
Local clock offset: 0.138 ms
Remote clock offset: 0.285 ms

# Below is generated by plot.py at 2018-08-02 06:52:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.83 Mbit/s
95th percentile per-packet one-way delay: 136.877 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.83 Mbit/s
95th percentile per-packet one-way delay: 136.877 ms
Loss rate: 0.00%
```

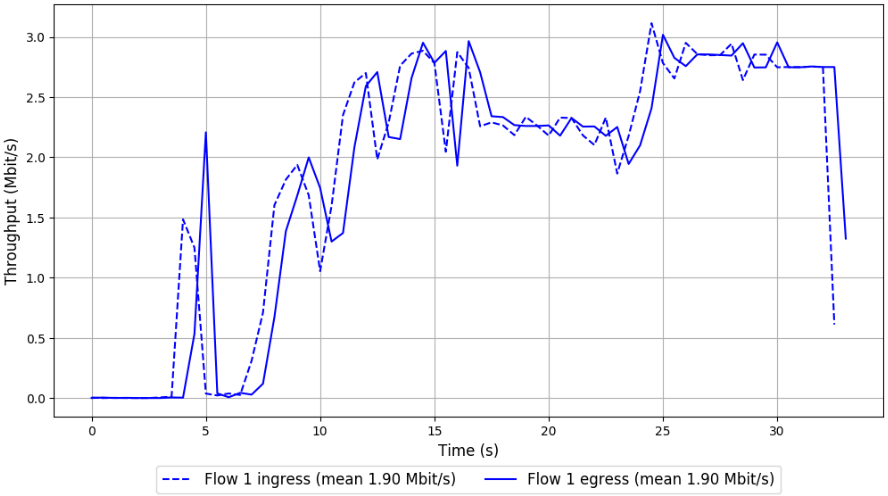
Run 2: Report of WebRTC media — Data Link

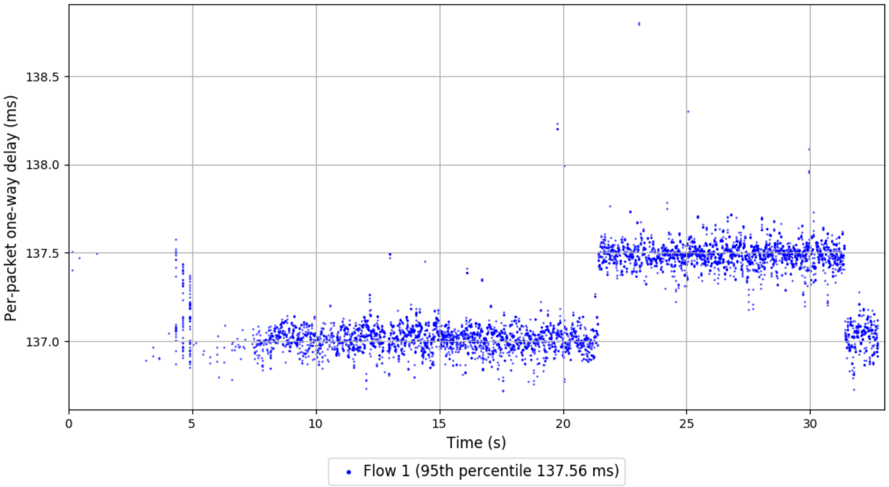




```
Run 3: Statistics of WebRTC media

Start at: 2018-08-02 02:10:15
End at: 2018-08-02 02:10:45
Local clock offset: -0.001 ms
Remote clock offset: 0.345 ms

# Below is generated by plot.py at 2018-08-02 06:52:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 137.560 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 137.560 ms
Loss rate: 0.00%
```

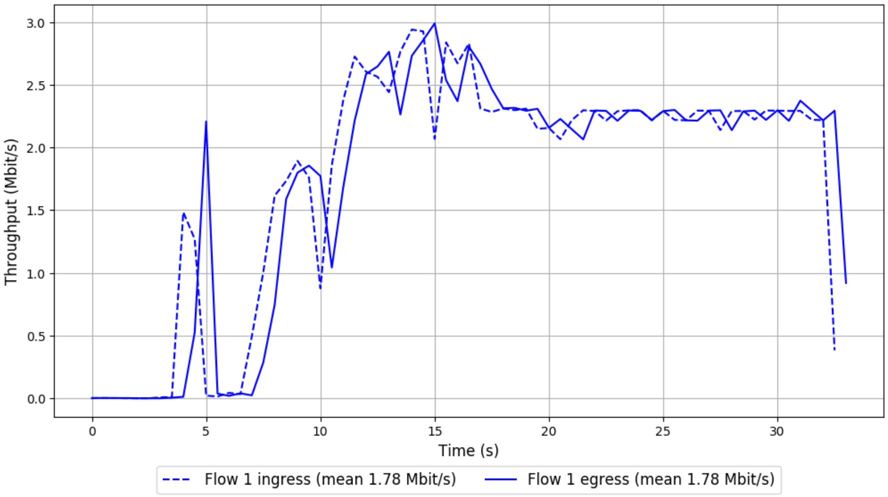
Run 3: Report of WebRTC media — Data Link

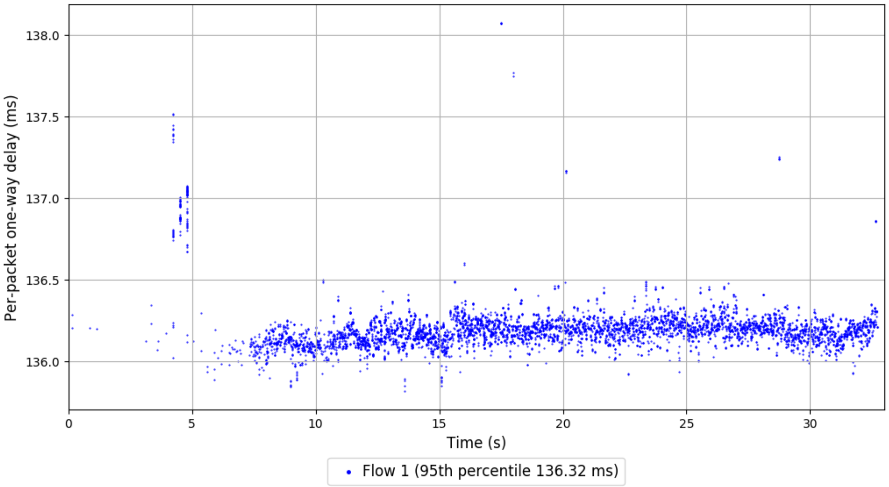




```
Run 4: Statistics of WebRTC media

Start at: 2018-08-02 02:33:40
End at: 2018-08-02 02:34:10
Local clock offset: 0.224 ms
Remote clock offset: 0.295 ms

# Below is generated by plot.py at 2018-08-02 06:52:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 136.325 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 136.325 ms
Loss rate: 0.00%
```

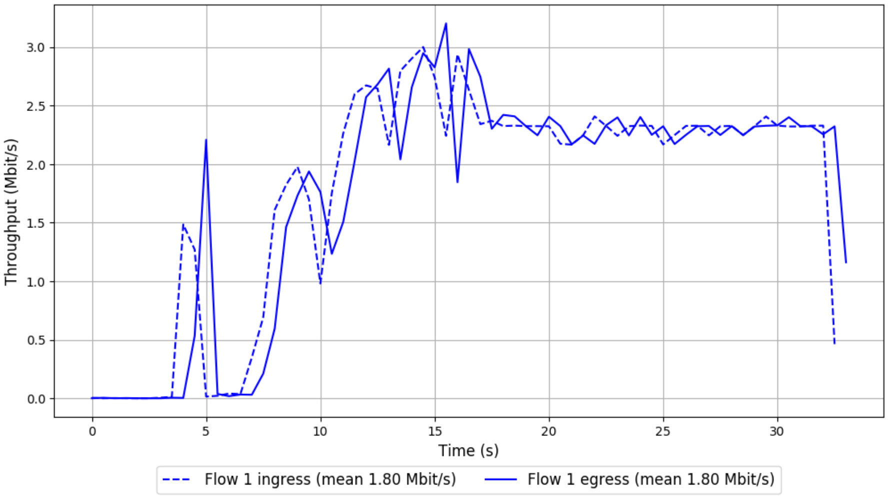
Run 4: Report of WebRTC media — Data Link

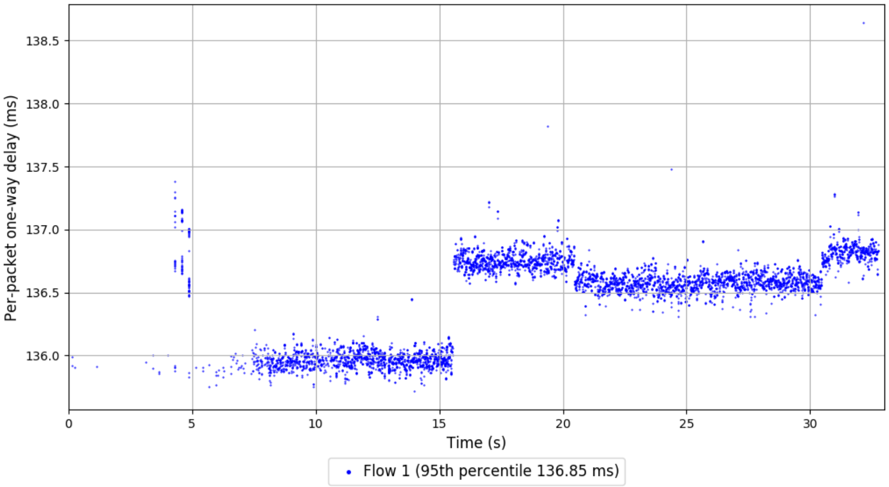




```
Run 5: Statistics of WebRTC media

Start at: 2018-08-02 02:57:05
End at: 2018-08-02 02:57:35
Local clock offset: 0.182 ms
Remote clock offset: -0.099 ms

# Below is generated by plot.py at 2018-08-02 06:52:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 136.852 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 136.852 ms
Loss rate: 0.00%
```

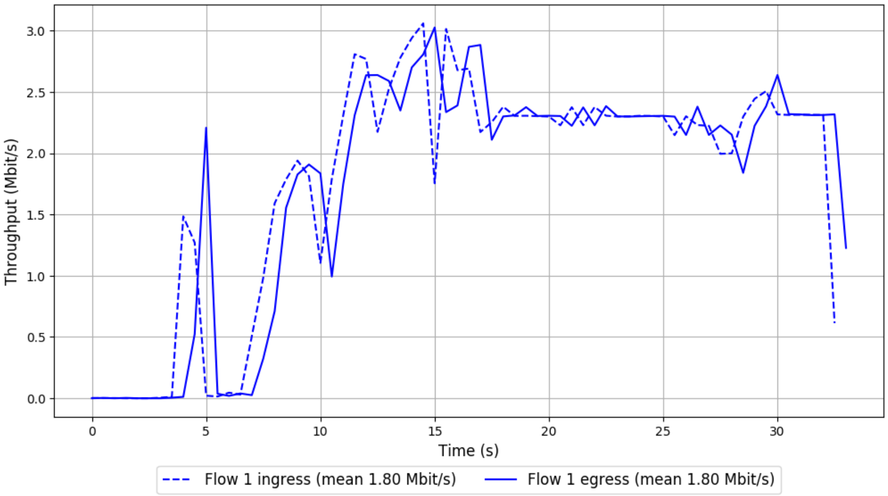
Run 5: Report of WebRTC media — Data Link

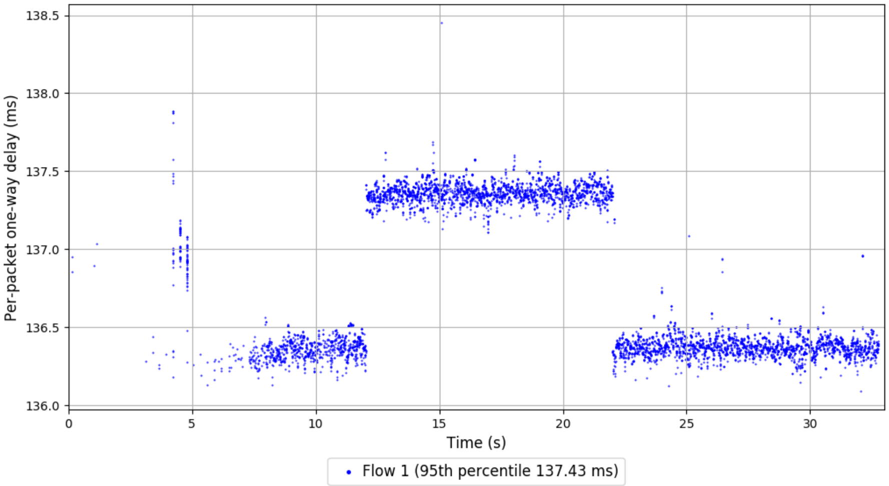




```
Run 6: Statistics of WebRTC media

Start at: 2018-08-02 03:20:54
End at: 2018-08-02 03:21:24
Local clock offset: 0.193 ms
Remote clock offset: 0.282 ms

# Below is generated by plot.py at 2018-08-02 06:52:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 137.432 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 137.432 ms
Loss rate: 0.00%
```

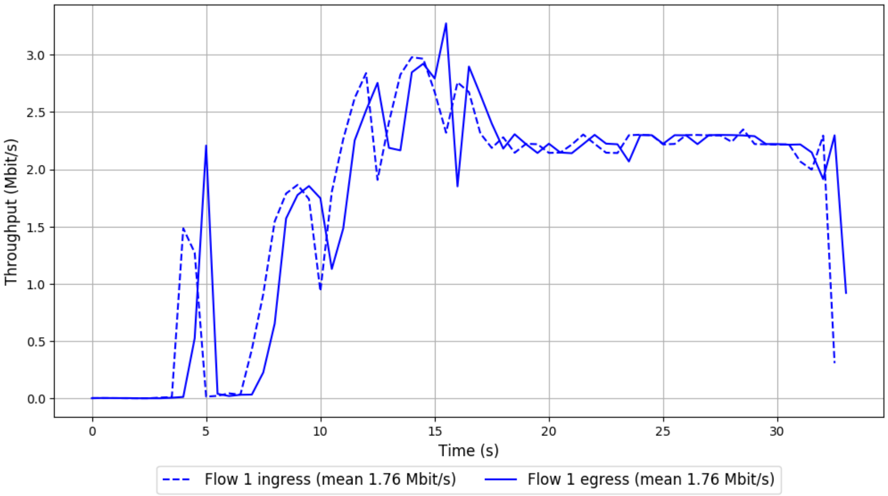
Run 6: Report of WebRTC media — Data Link

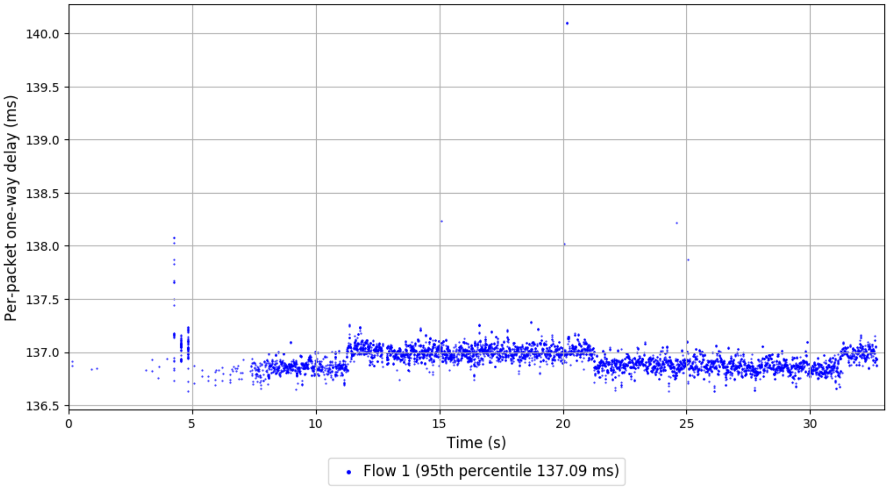




```
Run 7: Statistics of WebRTC media

Start at: 2018-08-02 03:44:14
End at: 2018-08-02 03:44:44
Local clock offset: 0.039 ms
Remote clock offset: 0.255 ms

# Below is generated by plot.py at 2018-08-02 06:52:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.76 Mbit/s
95th percentile per-packet one-way delay: 137.088 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.76 Mbit/s
95th percentile per-packet one-way delay: 137.088 ms
Loss rate: 0.00%
```

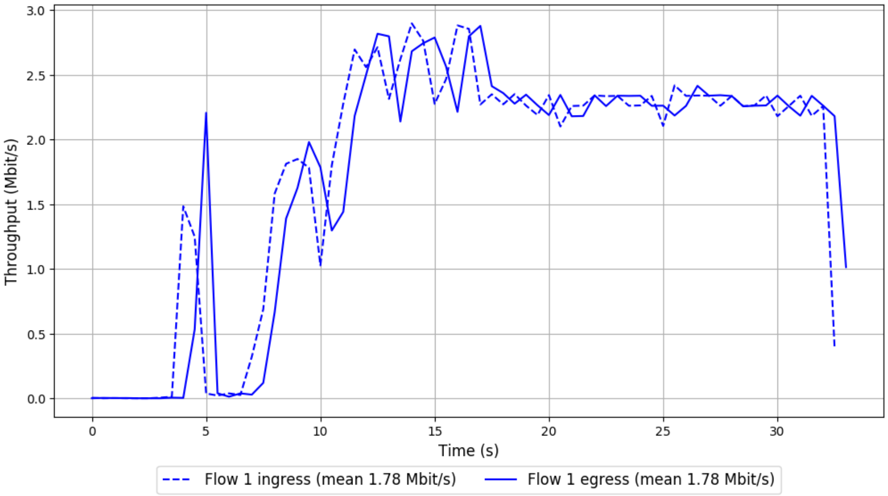
Run 7: Report of WebRTC media — Data Link

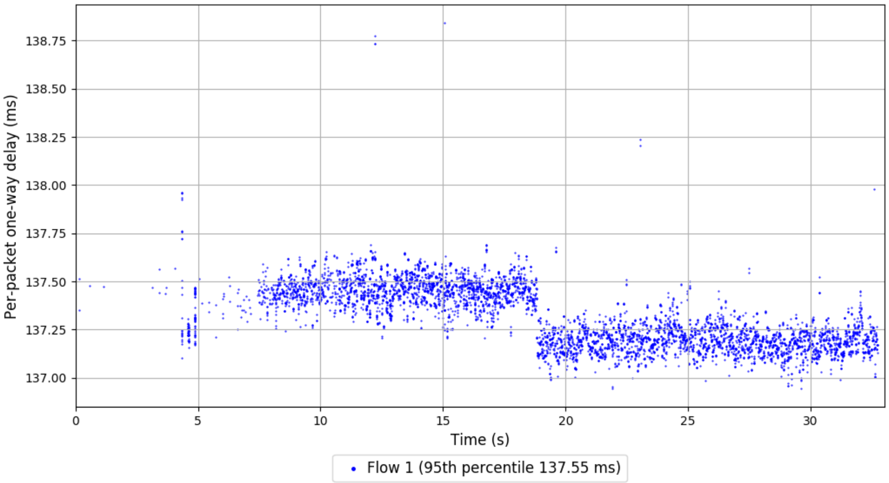




```
Run 8: Statistics of WebRTC media

Start at: 2018-08-02 04:07:46
End at: 2018-08-02 04:08:16
Local clock offset: -0.161 ms
Remote clock offset: 0.284 ms

# Below is generated by plot.py at 2018-08-02 06:52:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 137.550 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 137.550 ms
Loss rate: 0.00%
```

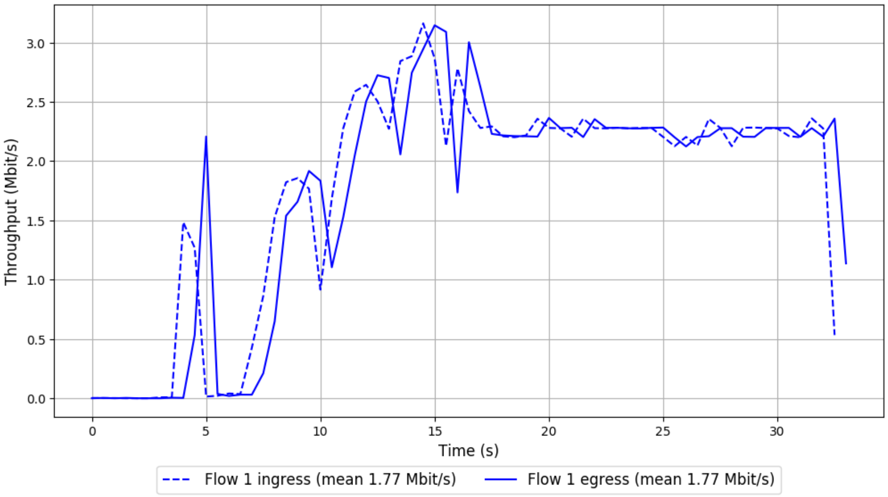
Run 8: Report of WebRTC media — Data Link

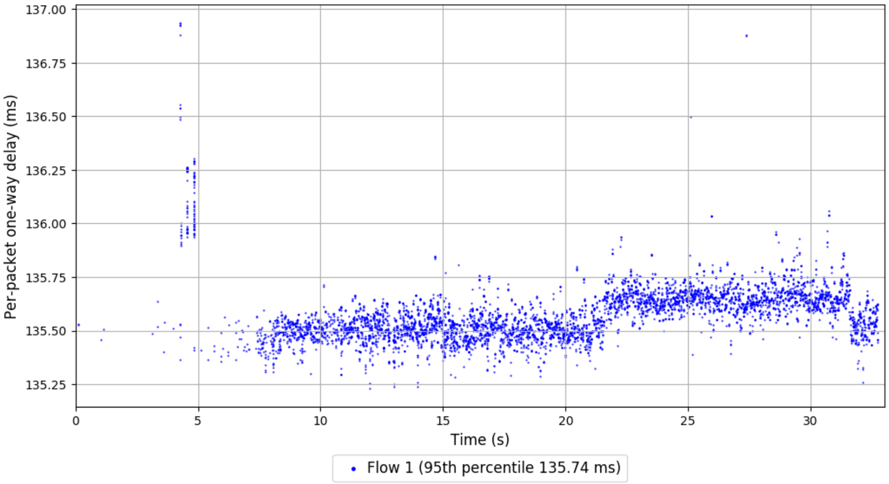




```
Run 9: Statistics of WebRTC media

Start at: 2018-08-02 04:31:14
End at: 2018-08-02 04:31:44
Local clock offset: 0.125 ms
Remote clock offset: -0.48 ms

# Below is generated by plot.py at 2018-08-02 06:52:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 135.743 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 135.743 ms
Loss rate: 0.00%
```

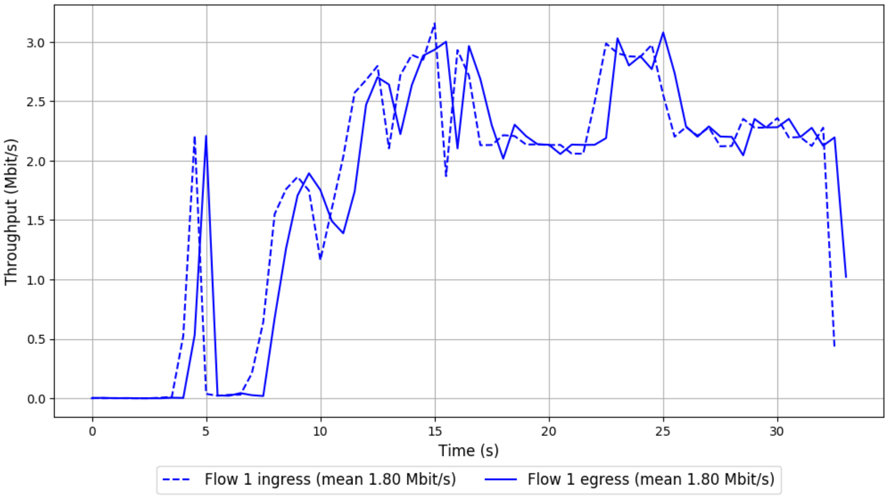
Run 9: Report of WebRTC media — Data Link

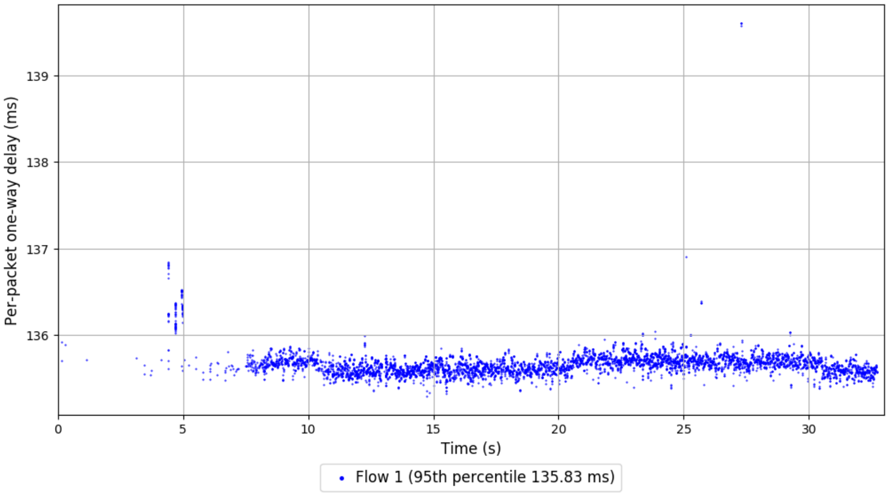




```
Run 10: Statistics of WebRTC media

Start at: 2018-08-02 04:54:26
End at: 2018-08-02 04:54:56
Local clock offset: 0.115 ms
Remote clock offset: -0.451 ms

# Below is generated by plot.py at 2018-08-02 06:52:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 135.829 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 135.829 ms
Loss rate: 0.02%
```

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 1.80 Mbit/s)
Flow 1 egress (mean 1.80 Mbit/s)


Per-packet one-way delay (ms)
139
138
137
136
0
5
10
15
20
25
30
Time (s)
Flow 1 (95th percentile 135.83 ms)