Pantheon Report

Generated at 2017-09-21 15:46:47 (UTC).

Data path: Colombia Ethernet (*remote*) →AWS Brazil 2 Ethernet (*local*).

Repeated the test of 14 congestion control schemes 10 times.

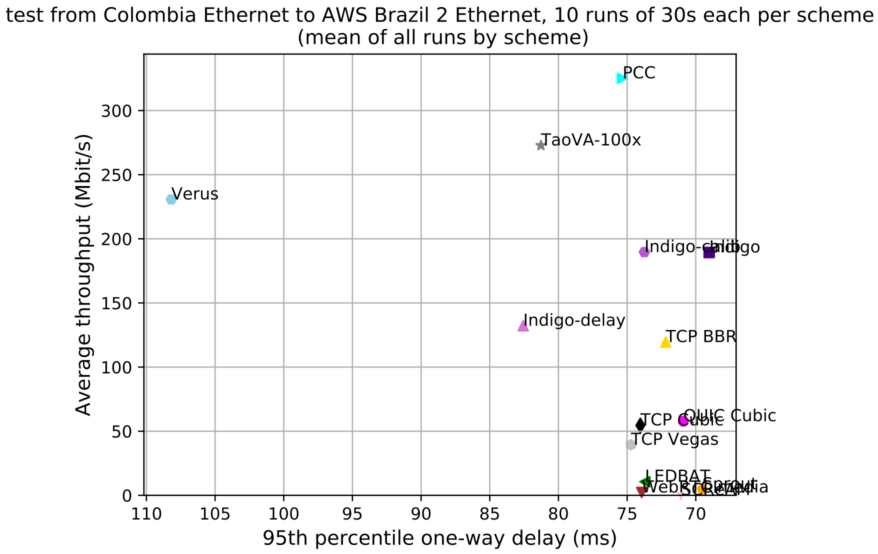
Each test lasted for 30 seconds running 1 flow.

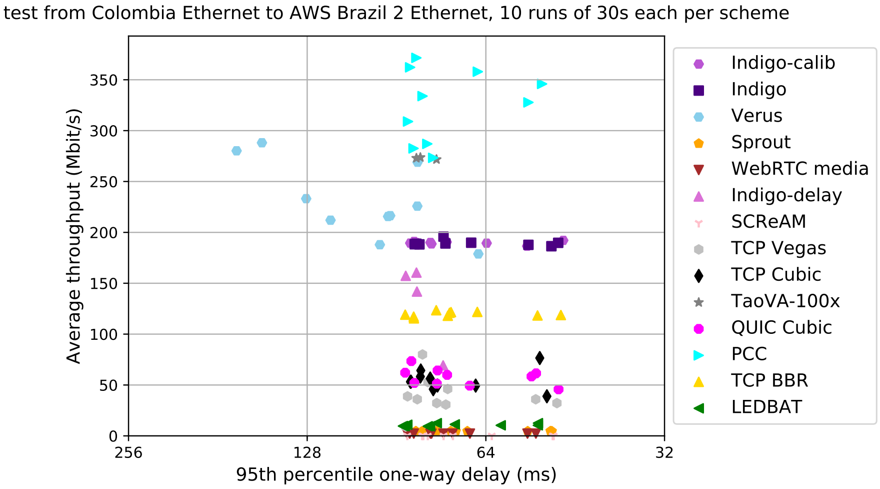
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

NTP offsets were measured against `gps.ntp.br` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: indigos @ 46c7c812d4acb71eea4f5fb0b03b3657cea3062f
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fabb936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
 M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
 M receiver/src/buffer.h
 M receiver/src/core.cpp
 M sender/src/buffer.h
 M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
 M src/examples/cellsim.cc
 M src/examples/sproutbt2.cc
 M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
 M src/verus.hpp
 M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```


test from Colombia Ethernet to AWS Brazil 2 Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)
Average throughput (Mbit/s)
0
50
100
150
200
250
300
95th percentile one-way delay (ms)
110
105
100
95
90
85
80
75
70
PCC
TaoVA-100x
Verus
Indigo-calib
Indigo
Indigo-delay
TCP BBR
QUIC Cubic
TCP Cubic
TCP Vegas
LEDBAT
WebRTC media
Sprout
SCReAM


test from Colombia Ethernet to AWS Brazil 2 Ethernet, 10 runs of 30s each per scheme
Average throughput (Mbit/s)
0
50
100
150
200
250
300
350
95th percentile one-way delay (ms)
256
128
64
32
Indigo-calib
Indigo
Verus
Sprout
WebRTC media
Indigo-delay
SCReAM
TCP Vegas
TCP Cubic
TaoVA-100x
QUIC Cubic
PCC
TCP BBR
LEDBAT

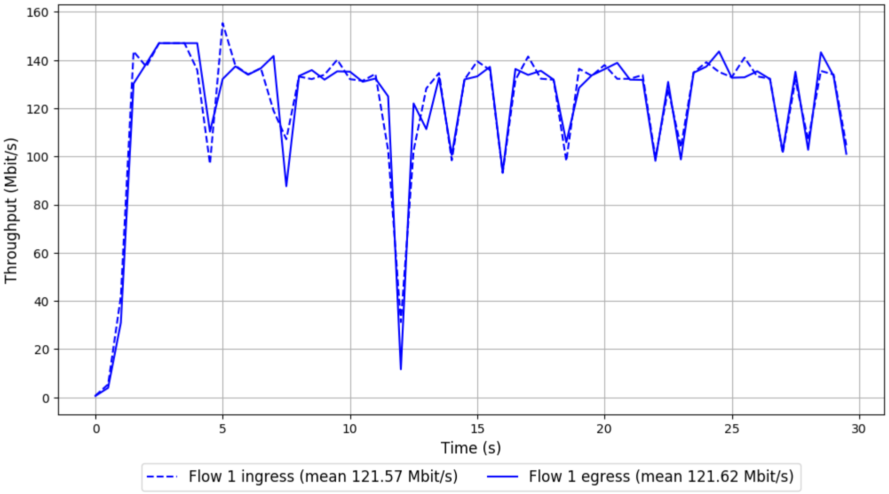
		mean avg tput (Mbit/s)	mean 95th-%ile delay (ms)	mean loss rate (%)
scheme	# runs	flow 1	flow 1	flow 1
TCP BBR	10	119.48	72.19	0.59
TCP Cubic	10	54.55	74.03	0.59
LEDBAT	10	10.60	73.71	0.92
PCC	10	325.10	75.33	7.12
QUIC Cubic	10	57.81	70.91	0.56
SCReAM	9	0.21	71.08	0.53
WebRTC media	10	2.23	73.94	0.66
Sprout	10	4.65	69.52	0.69
TaoVA-100x	3	272.77	81.27	0.62
TCP Vegas	10	39.39	74.72	0.40
Verus	10	230.69	108.19	1.75
Indigo	9	189.34	69.02	0.65
Indigo-calib	10	189.63	73.74	0.60
Indigo-delay	4	132.22	82.56	0.69

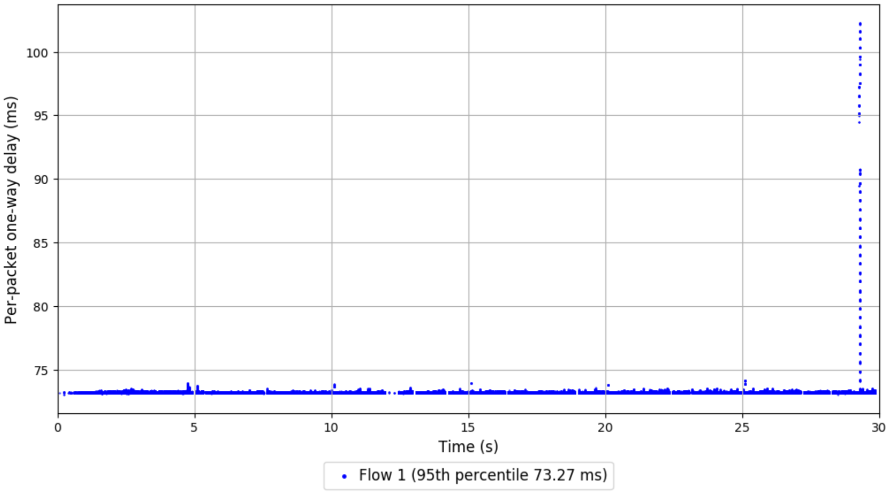
```
Run 1: Statistics of TCP BBR

Start at: 2017-09-21 09:29:09
End at: 2017-09-21 09:29:39
Local clock offset: 0.015 ms
Remote clock offset: 7.07 ms

# Below is generated by plot.py at 2017-09-21 15:21:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 121.62 Mbit/s
95th percentile per-packet one-way delay: 73.265 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 121.62 Mbit/s
95th percentile per-packet one-way delay: 73.265 ms
Loss rate: 0.25%
```

Run 1: Report of TCP BBR — Data Link



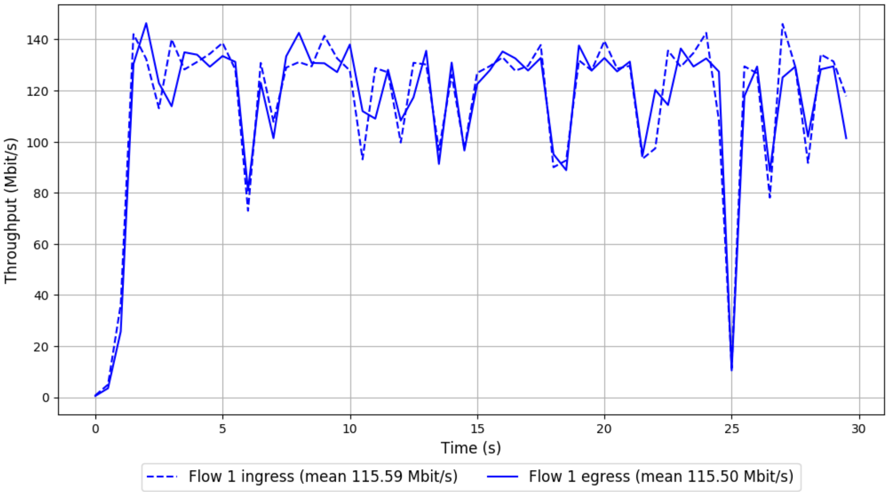


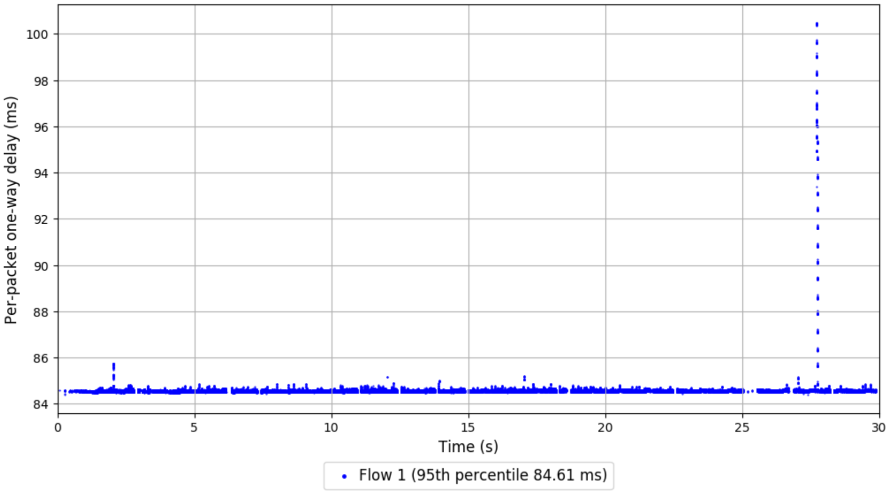
```
Run 2: Statistics of TCP BBR

Start at: 2017-09-21 09:47:07
End at: 2017-09-21 09:47:37
Local clock offset: -0.034 ms
Remote clock offset: -1.686 ms

# Below is generated by plot.py at 2017-09-21 15:21:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 115.50 Mbit/s
95th percentile per-packet one-way delay: 84.607 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 115.50 Mbit/s
95th percentile per-packet one-way delay: 84.607 ms
Loss rate: 0.65%
```

Run 2: Report of TCP BBR — Data Link



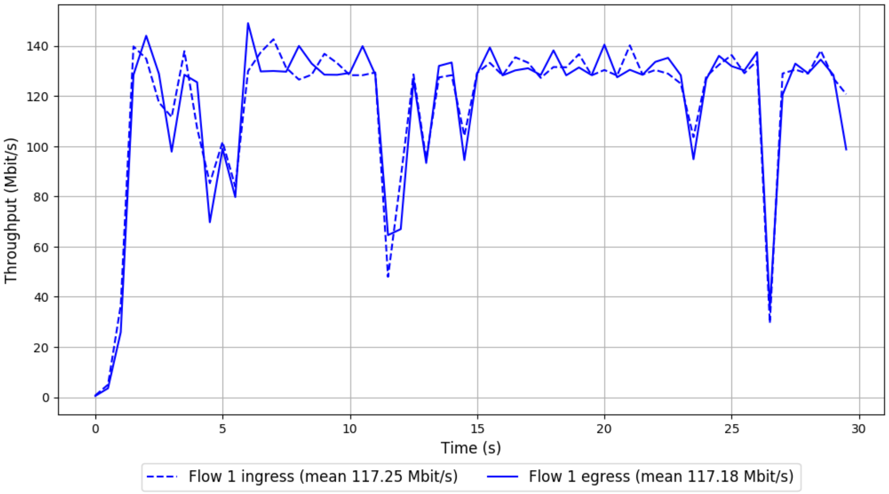


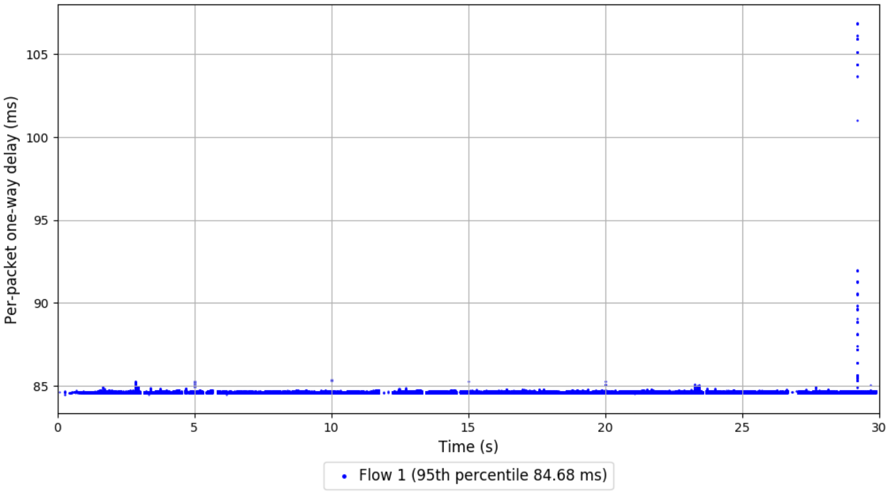
```
Run 3: Statistics of TCP BBR

Start at: 2017-09-21 10:05:33
End at: 2017-09-21 10:06:03
Local clock offset: -0.074 ms
Remote clock offset: -0.965 ms

# Below is generated by plot.py at 2017-09-21 15:21:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 117.18 Mbit/s
95th percentile per-packet one-way delay: 84.679 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 117.18 Mbit/s
95th percentile per-packet one-way delay: 84.679 ms
Loss rate: 0.63%
```

Run 3: Report of TCP BBR — Data Link



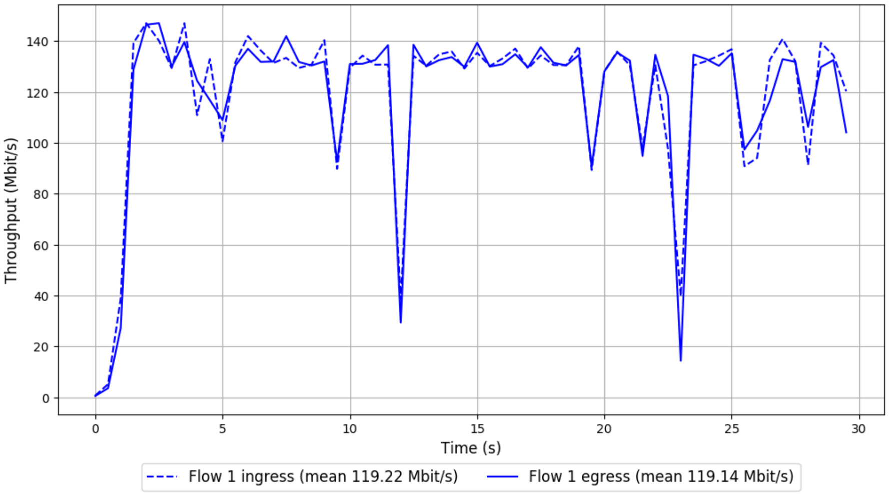


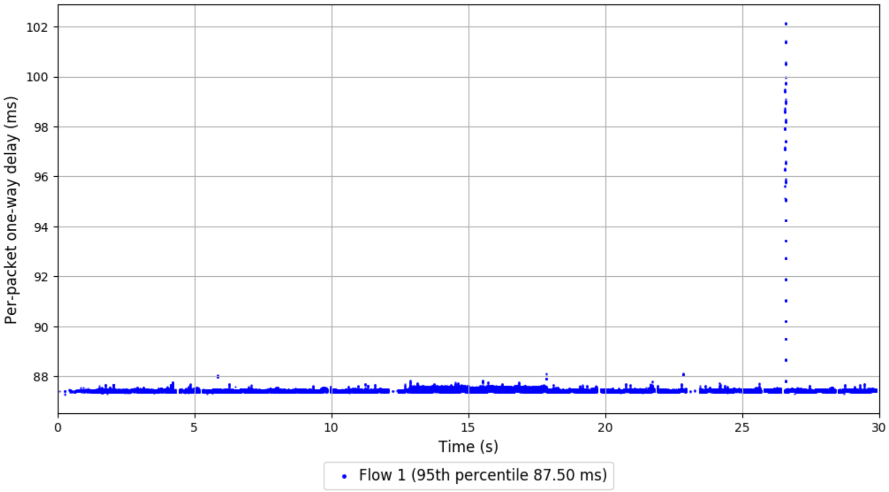
```
Run 4: Statistics of TCP BBR

Start at: 2017-09-21 10:23:07
End at: 2017-09-21 10:23:37
Local clock offset: -0.179 ms
Remote clock offset: -3.859 ms

# Below is generated by plot.py at 2017-09-21 15:21:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 119.14 Mbit/s
95th percentile per-packet one-way delay: 87.504 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 119.14 Mbit/s
95th percentile per-packet one-way delay: 87.504 ms
Loss rate: 0.64%
```

Run 4: Report of TCP BBR — Data Link



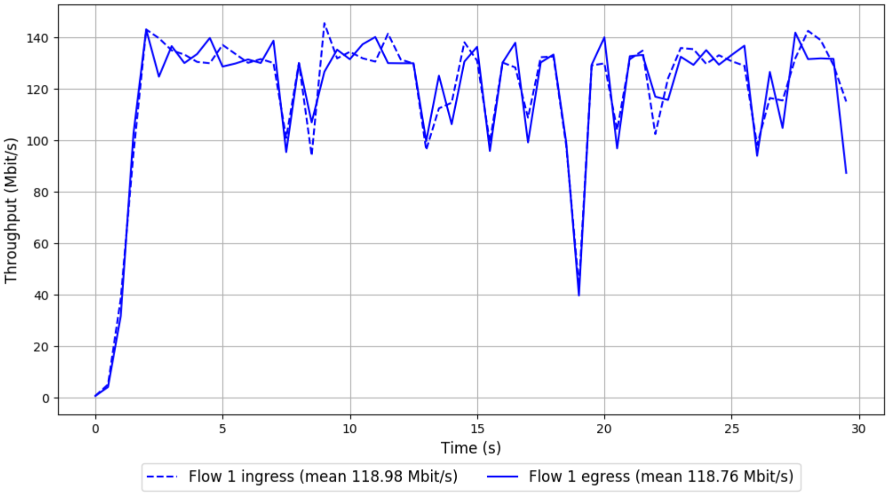


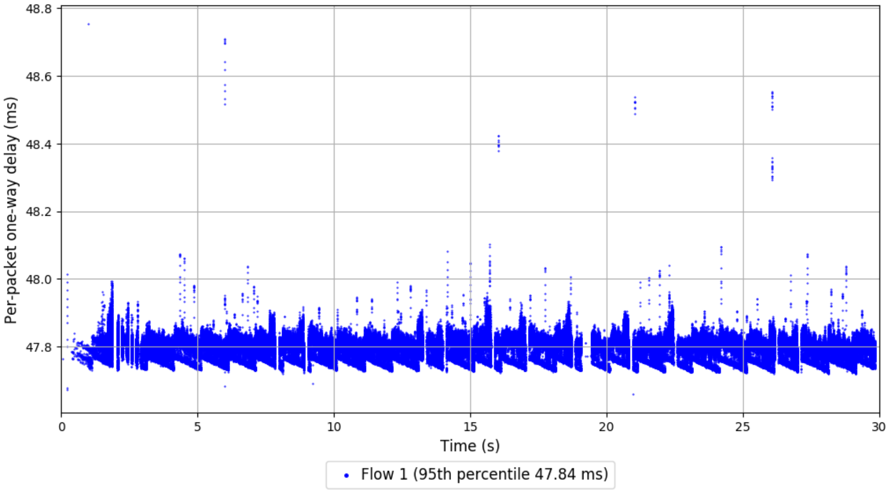
```
Run 5: Statistics of TCP BBR

Start at: 2017-09-21 10:41:08
End at: 2017-09-21 10:41:38
Local clock offset: -0.188 ms
Remote clock offset: 34.398 ms

# Below is generated by plot.py at 2017-09-21 15:21:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 118.76 Mbit/s
95th percentile per-packet one-way delay: 47.840 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 118.76 Mbit/s
95th percentile per-packet one-way delay: 47.840 ms
Loss rate: 0.62%
```

Run 5: Report of TCP BBR — Data Link



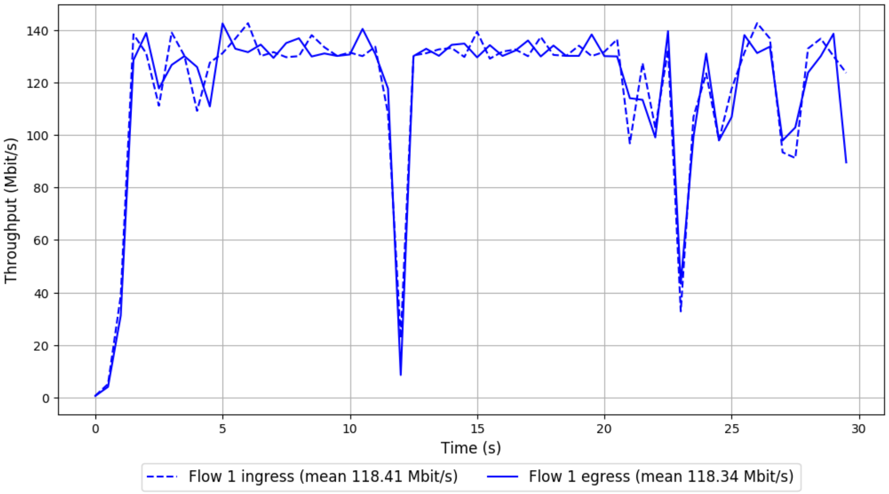


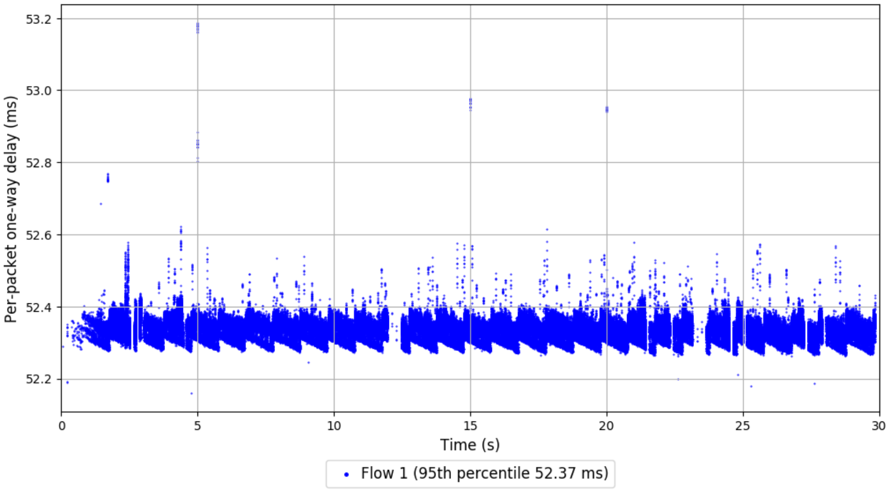
```
Run 6: Statistics of TCP BBR

Start at: 2017-09-21 10:58:48
End at: 2017-09-21 10:59:18
Local clock offset: -0.186 ms
Remote clock offset: 29.128 ms

# Below is generated by plot.py at 2017-09-21 15:21:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 118.34 Mbit/s
95th percentile per-packet one-way delay: 52.374 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 118.34 Mbit/s
95th percentile per-packet one-way delay: 52.374 ms
Loss rate: 0.62%
```

Run 6: Report of TCP BBR — Data Link



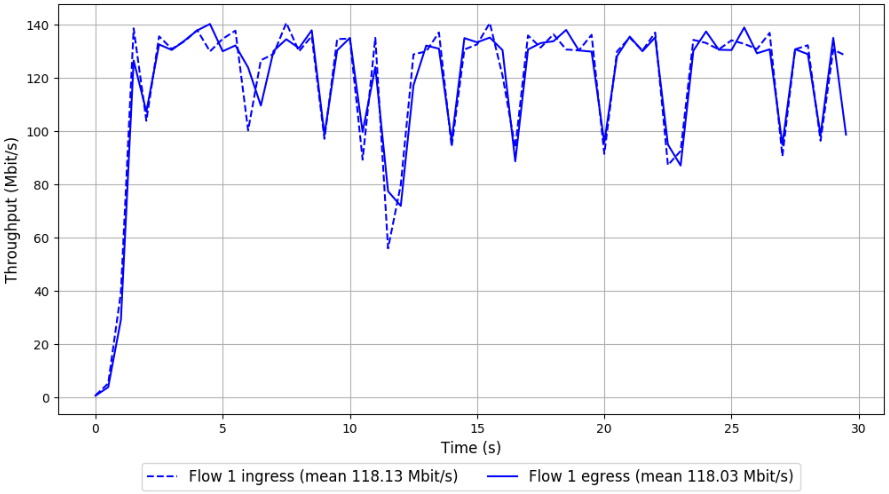


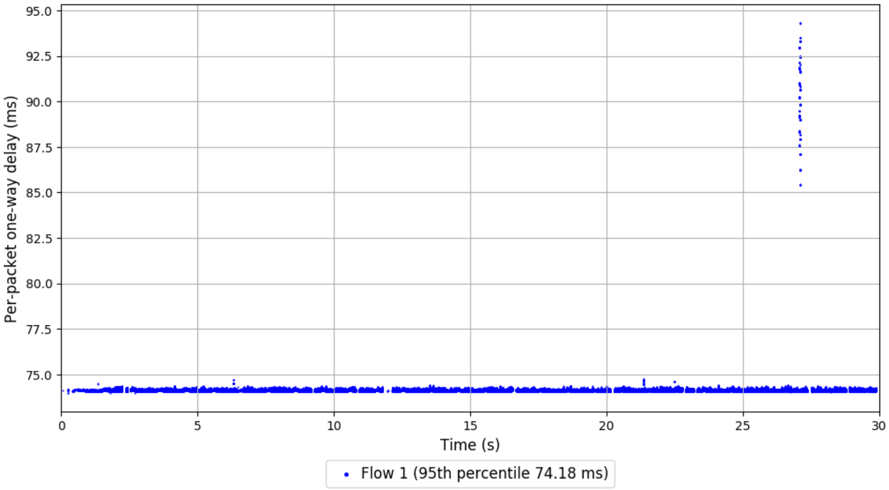
```
Run 7: Statistics of TCP BBR

Start at: 2017-09-21 11:16:27
End at: 2017-09-21 11:16:57
Local clock offset: -0.205 ms
Remote clock offset: 6.838 ms

# Below is generated by plot.py at 2017-09-21 15:21:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 118.03 Mbit/s
95th percentile per-packet one-way delay: 74.182 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 118.03 Mbit/s
95th percentile per-packet one-way delay: 74.182 ms
Loss rate: 0.66%
```

Run 7: Report of TCP BBR — Data Link



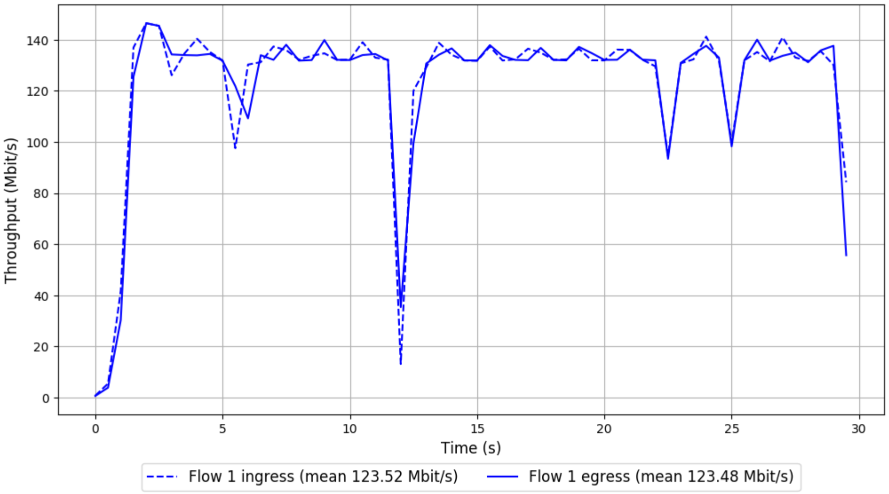


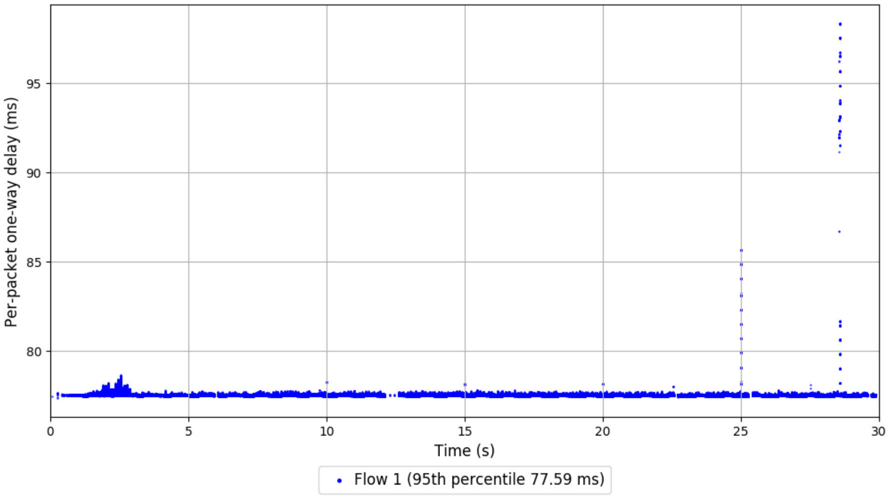
```
Run 8: Statistics of TCP BBR

Start at: 2017-09-21 11:34:11
End at: 2017-09-21 11:34:41
Local clock offset: -0.211 ms
Remote clock offset: 3.496 ms

# Below is generated by plot.py at 2017-09-21 15:21:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 123.48 Mbit/s
95th percentile per-packet one-way delay: 77.587 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 123.48 Mbit/s
95th percentile per-packet one-way delay: 77.587 ms
Loss rate: 0.59%
```

Run 8: Report of TCP BBR — Data Link



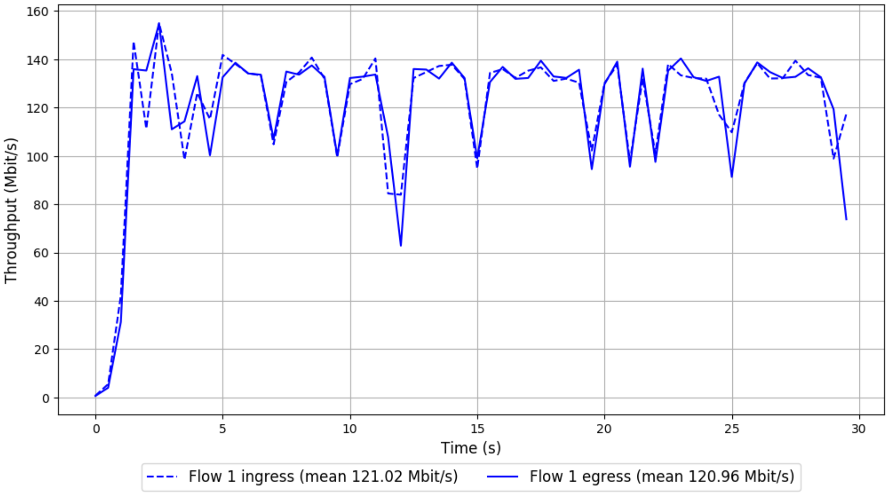


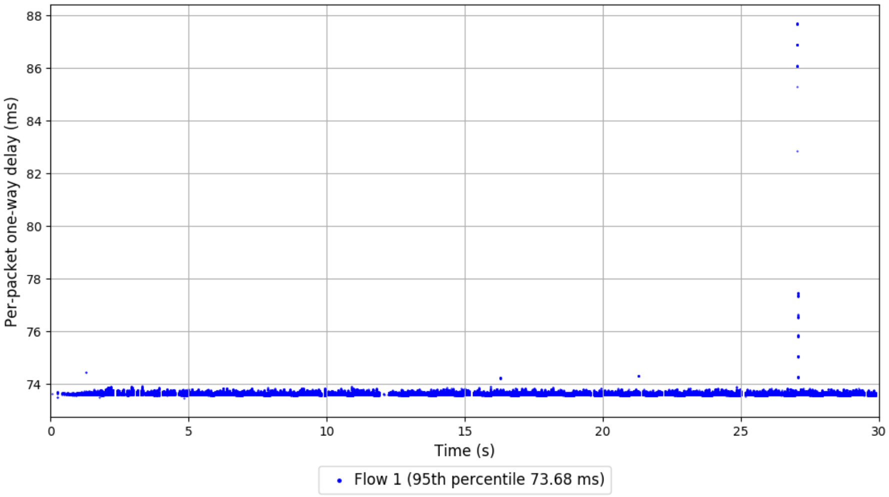
```
Run 9: Statistics of TCP BBR

Start at: 2017-09-21 11:51:47
End at: 2017-09-21 11:52:17
Local clock offset: -0.164 ms
Remote clock offset: 6.849 ms

# Below is generated by plot.py at 2017-09-21 15:23:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 120.96 Mbit/s
95th percentile per-packet one-way delay: 73.677 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 120.96 Mbit/s
95th percentile per-packet one-way delay: 73.677 ms
Loss rate: 0.61%
```

Run 9: Report of TCP BBR — Data Link



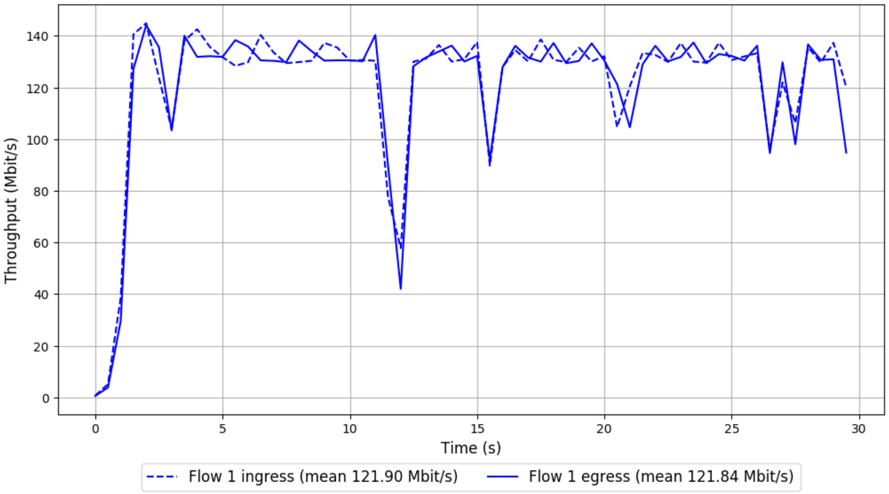


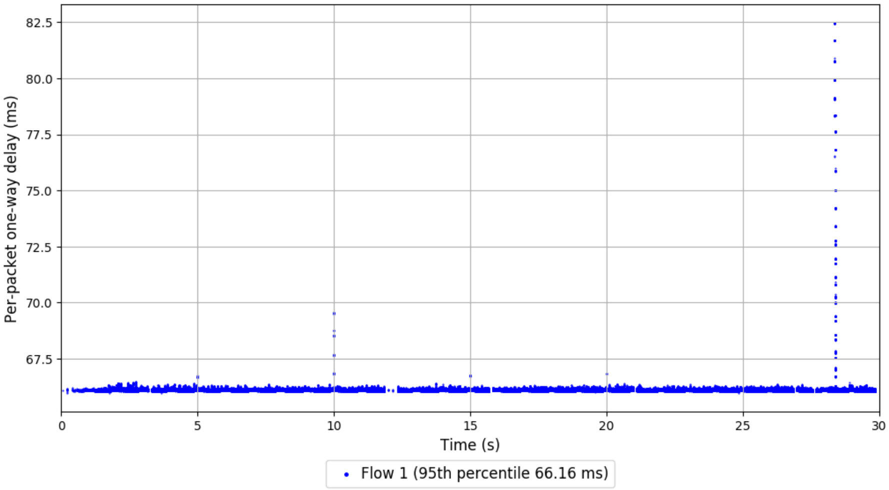
```
Run 10: Statistics of TCP BBR

Start at: 2017-09-21 12:09:13
End at: 2017-09-21 12:09:44
Local clock offset: -0.108 ms
Remote clock offset: 15.753 ms

# Below is generated by plot.py at 2017-09-21 15:23:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 121.84 Mbit/s
95th percentile per-packet one-way delay: 66.158 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 121.84 Mbit/s
95th percentile per-packet one-way delay: 66.158 ms
Loss rate: 0.66%
```

Run 10: Report of TCP BBR — Data Link



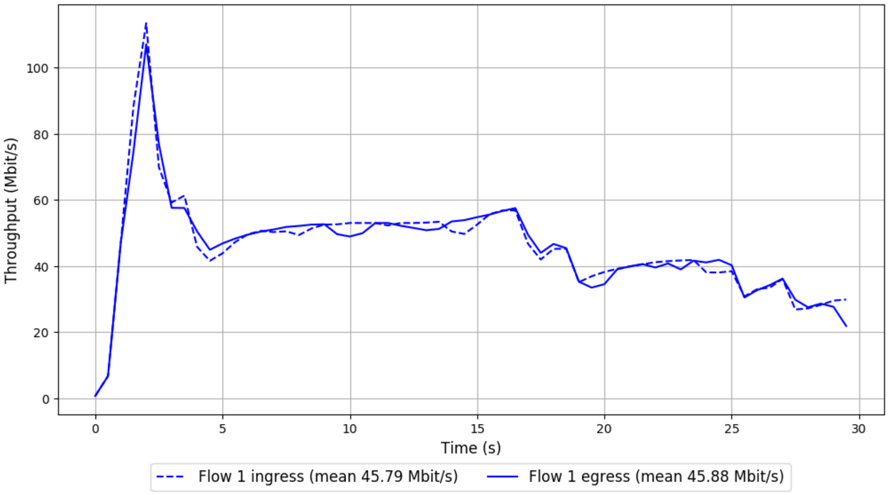


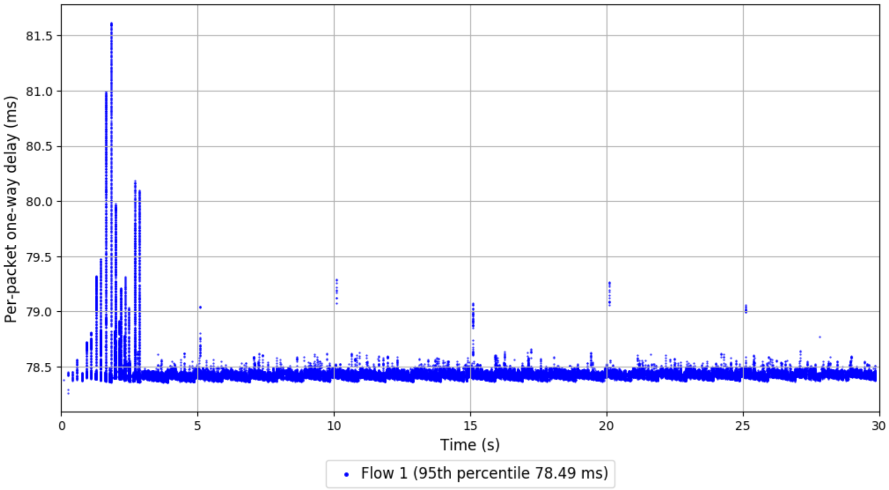
```
Run 1: Statistics of TCP Cubic

Start at: 2017-09-21 09:17:56
End at: 2017-09-21 09:18:26
Local clock offset: 0.032 ms
Remote clock offset: 1.863 ms

# Below is generated by plot.py at 2017-09-21 15:23:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 45.88 Mbit/s
95th percentile per-packet one-way delay: 78.490 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 45.88 Mbit/s
95th percentile per-packet one-way delay: 78.490 ms
Loss rate: 0.37%
```

Run 1: Report of TCP Cubic — Data Link



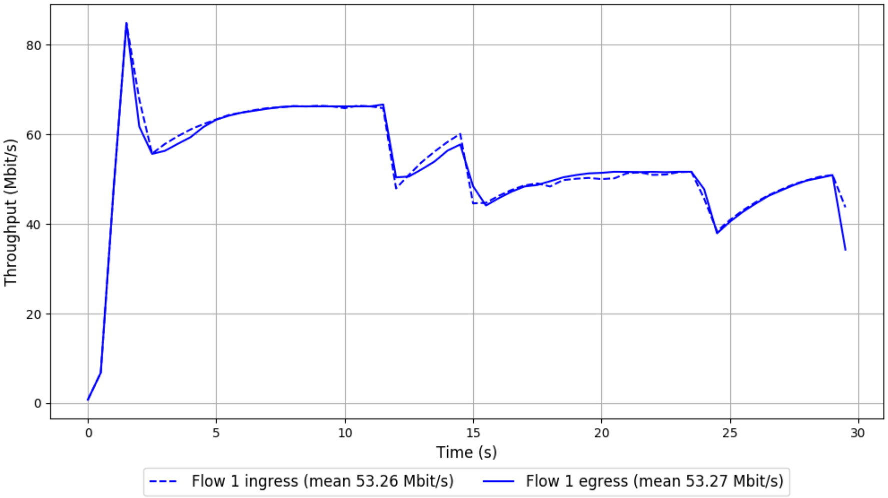


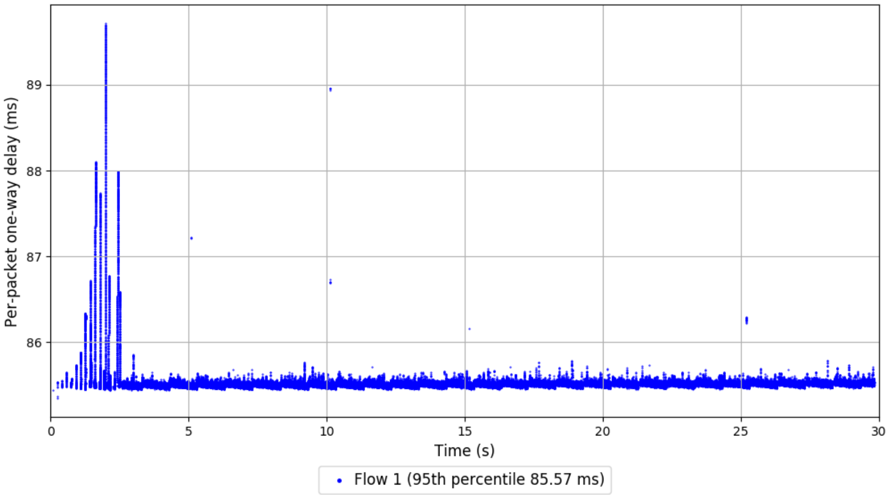
```
Run 2: Statistics of TCP Cubic

Start at: 2017-09-21 09:35:53
End at: 2017-09-21 09:36:23
Local clock offset: 0.033 ms
Remote clock offset: -4.975 ms

# Below is generated by plot.py at 2017-09-21 15:23:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.27 Mbit/s
95th percentile per-packet one-way delay: 85.567 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 53.27 Mbit/s
95th percentile per-packet one-way delay: 85.567 ms
Loss rate: 0.54%
```

Run 2: Report of TCP Cubic — Data Link



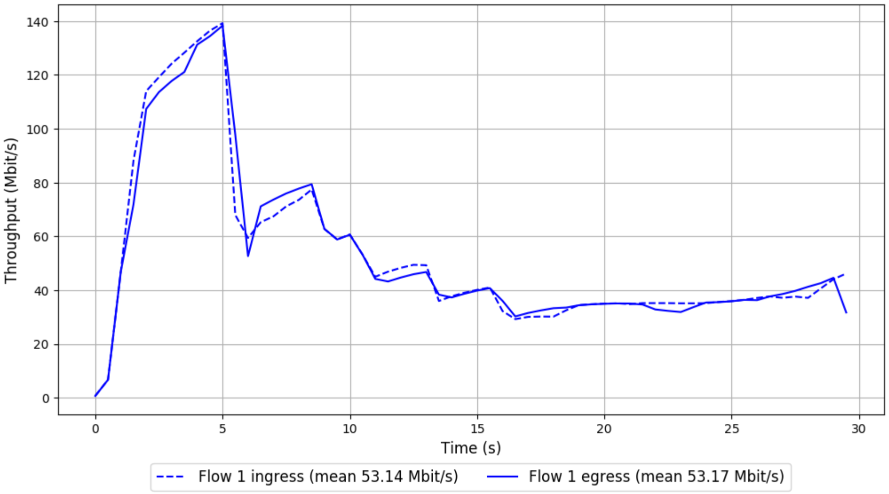


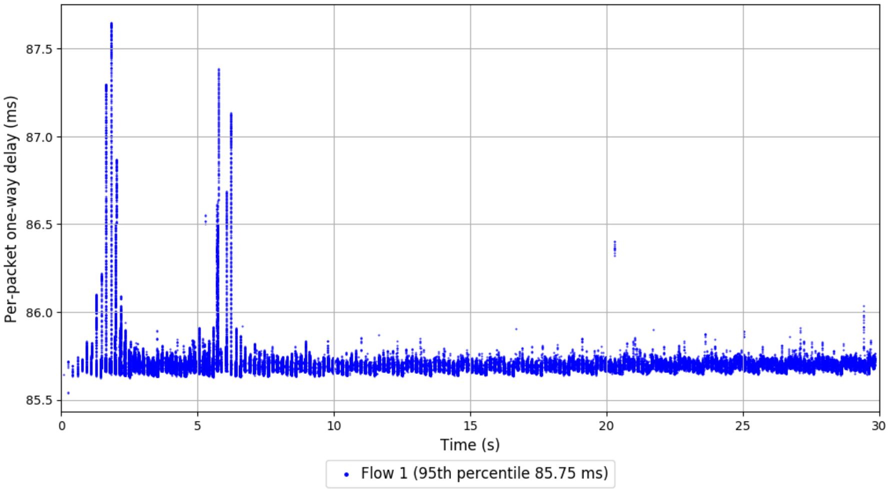
```
Run 3: Statistics of TCP Cubic

Start at: 2017-09-21 09:54:15
End at: 2017-09-21 09:54:45
Local clock offset: -0.056 ms
Remote clock offset: -4.405 ms

# Below is generated by plot.py at 2017-09-21 15:23:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.17 Mbit/s
95th percentile per-packet one-way delay: 85.752 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 53.17 Mbit/s
95th percentile per-packet one-way delay: 85.752 ms
Loss rate: 0.51%
```

Run 3: Report of TCP Cubic — Data Link



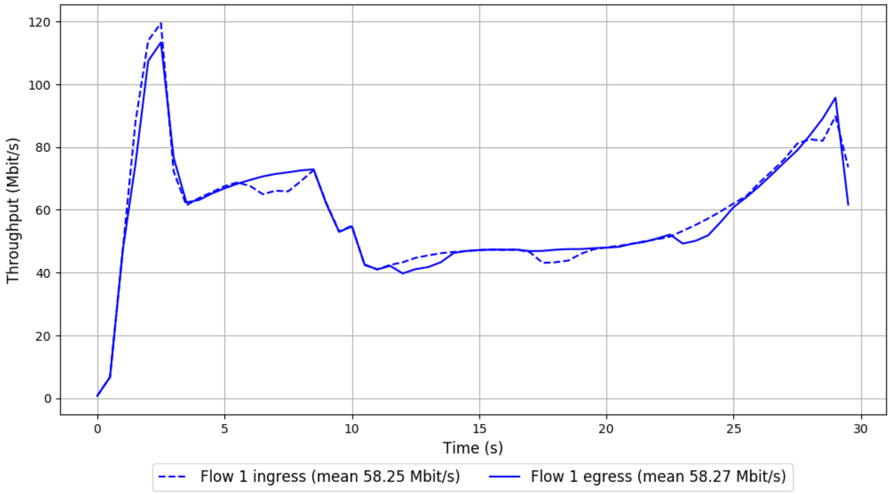


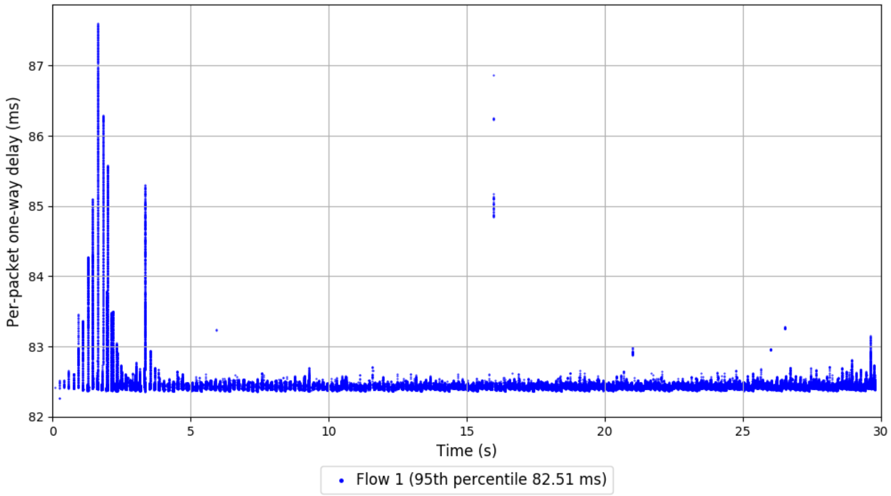
```
Run 4: Statistics of TCP Cubic

Start at: 2017-09-21 10:11:50
End at: 2017-09-21 10:12:20
Local clock offset: -0.194 ms
Remote clock offset: -1.014 ms

# Below is generated by plot.py at 2017-09-21 15:23:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.27 Mbit/s
95th percentile per-packet one-way delay: 82.511 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 58.27 Mbit/s
95th percentile per-packet one-way delay: 82.511 ms
Loss rate: 0.66%
```

Run 4: Report of TCP Cubic — Data Link



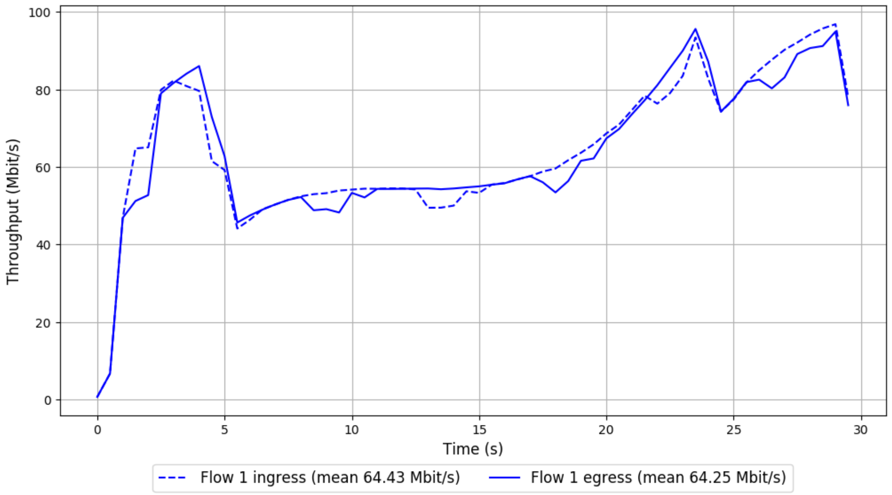


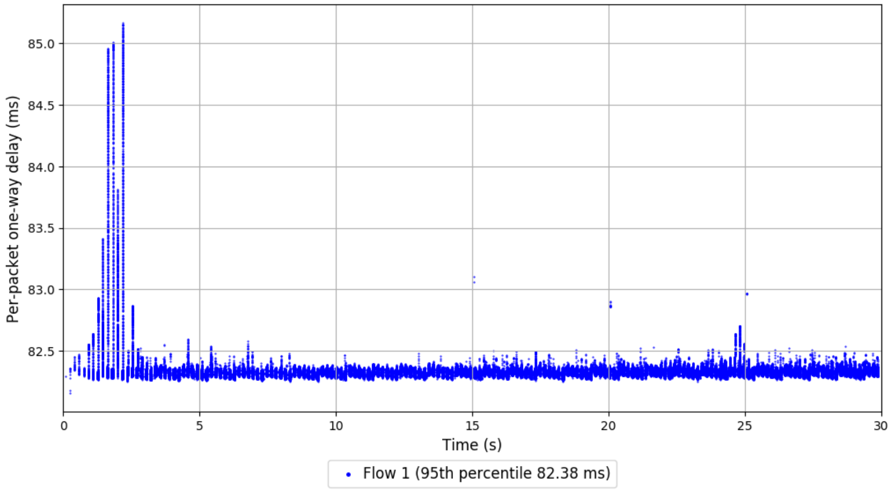
```
Run 5: Statistics of TCP Cubic

Start at: 2017-09-21 10:29:48
End at: 2017-09-21 10:30:18
Local clock offset: -0.19 ms
Remote clock offset: 1.319 ms

# Below is generated by plot.py at 2017-09-21 15:23:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.25 Mbit/s
95th percentile per-packet one-way delay: 82.379 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 64.25 Mbit/s
95th percentile per-packet one-way delay: 82.379 ms
Loss rate: 0.85%
```

Run 5: Report of TCP Cubic — Data Link



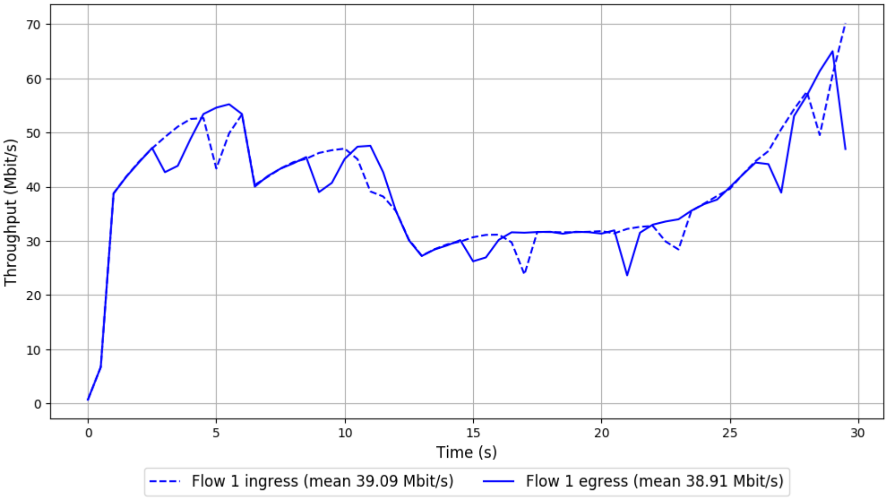


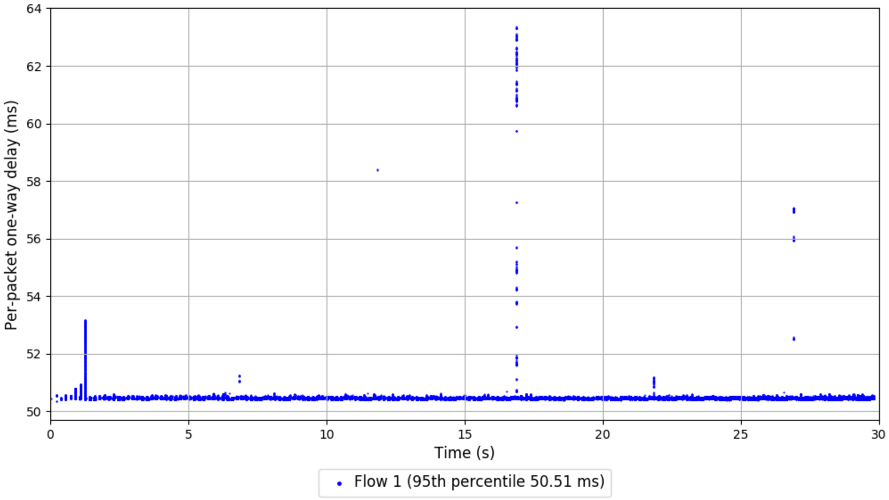
```
Run 6: Statistics of TCP Cubic

Start at: 2017-09-21 10:47:25
End at: 2017-09-21 10:47:55
Local clock offset: -0.213 ms
Remote clock offset: 33.371 ms

# Below is generated by plot.py at 2017-09-21 15:23:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 38.91 Mbit/s
95th percentile per-packet one-way delay: 50.506 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 38.91 Mbit/s
95th percentile per-packet one-way delay: 50.506 ms
Loss rate: 1.04%
```

Run 6: Report of TCP Cubic — Data Link



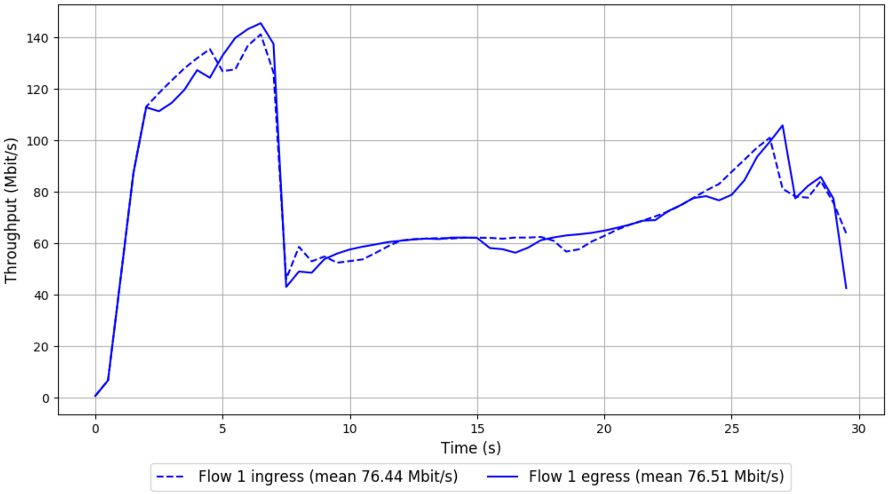


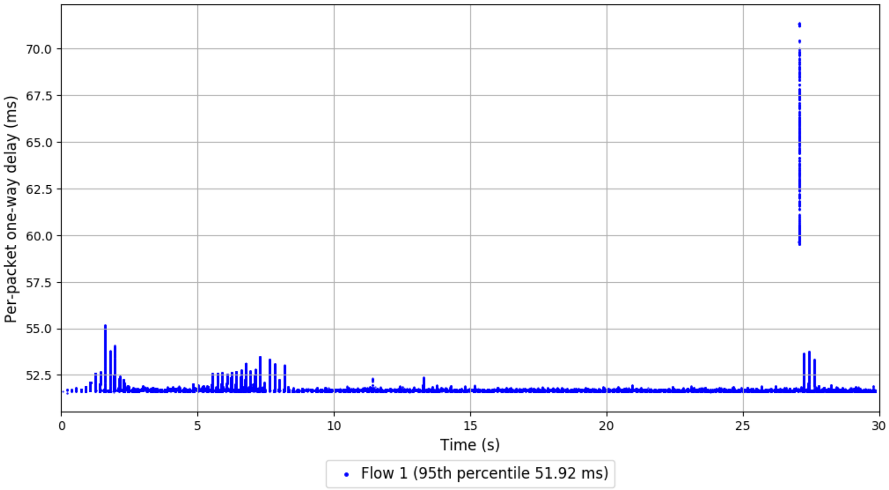
```
Run 7: Statistics of TCP Cubic

Start at: 2017-09-21 11:05:03
End at: 2017-09-21 11:05:33
Local clock offset: -0.247 ms
Remote clock offset: 29.939 ms

# Below is generated by plot.py at 2017-09-21 15:23:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.51 Mbit/s
95th percentile per-packet one-way delay: 51.924 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 76.51 Mbit/s
95th percentile per-packet one-way delay: 51.924 ms
Loss rate: 0.48%
```

Run 7: Report of TCP Cubic — Data Link



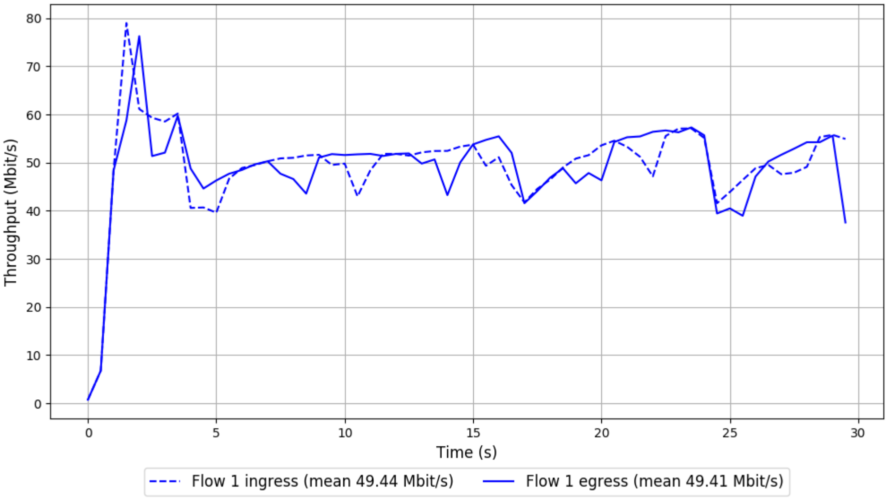


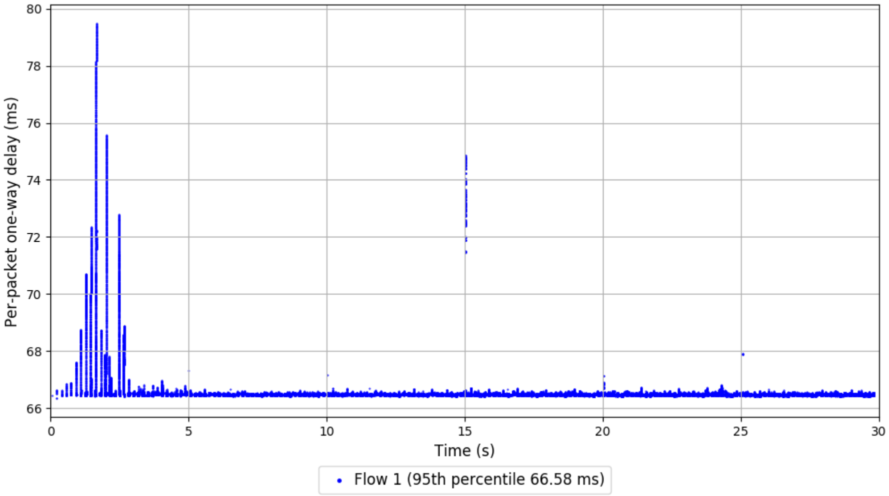
```
Run 8: Statistics of TCP Cubic

Start at: 2017-09-21 11:22:54
End at: 2017-09-21 11:23:24
Local clock offset: -0.307 ms
Remote clock offset: 16.46 ms

# Below is generated by plot.py at 2017-09-21 15:23:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 49.41 Mbit/s
95th percentile per-packet one-way delay: 66.580 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 49.41 Mbit/s
95th percentile per-packet one-way delay: 66.580 ms
Loss rate: 0.64%
```

Run 8: Report of TCP Cubic — Data Link



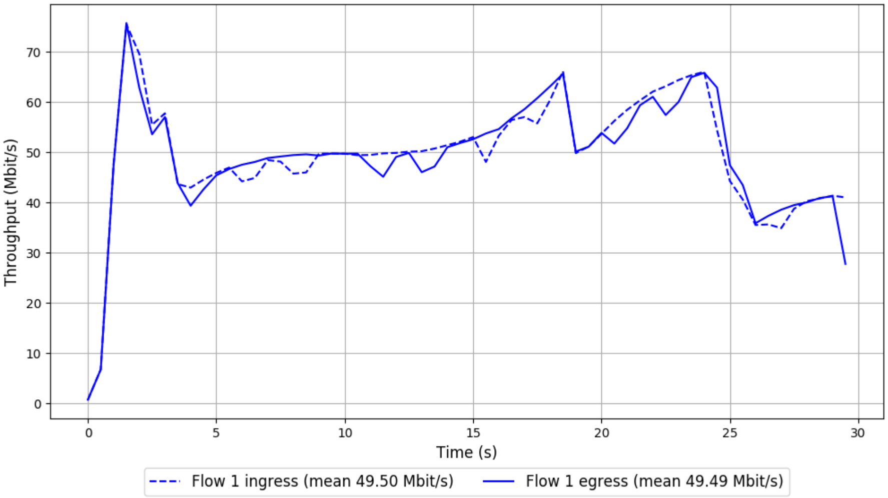


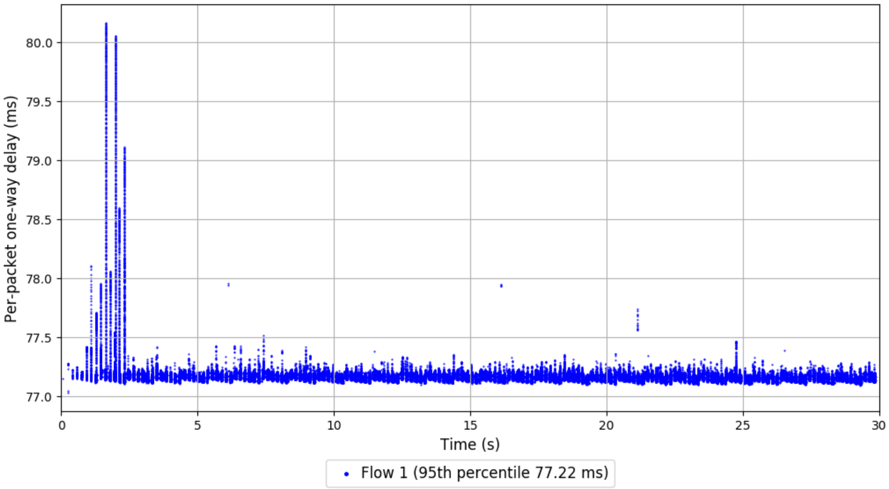
```
Run 9: Statistics of TCP Cubic

Start at: 2017-09-21 11:40:30
End at: 2017-09-21 11:41:00
Local clock offset: -0.195 ms
Remote clock offset: 3.235 ms

# Below is generated by plot.py at 2017-09-21 15:23:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 49.49 Mbit/s
95th percentile per-packet one-way delay: 77.217 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 49.49 Mbit/s
95th percentile per-packet one-way delay: 77.217 ms
Loss rate: 0.47%
```

Run 9: Report of TCP Cubic — Data Link



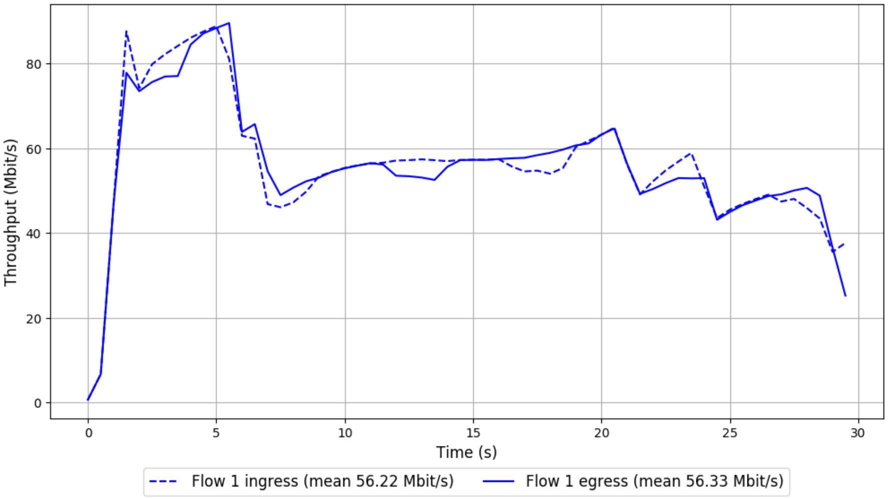


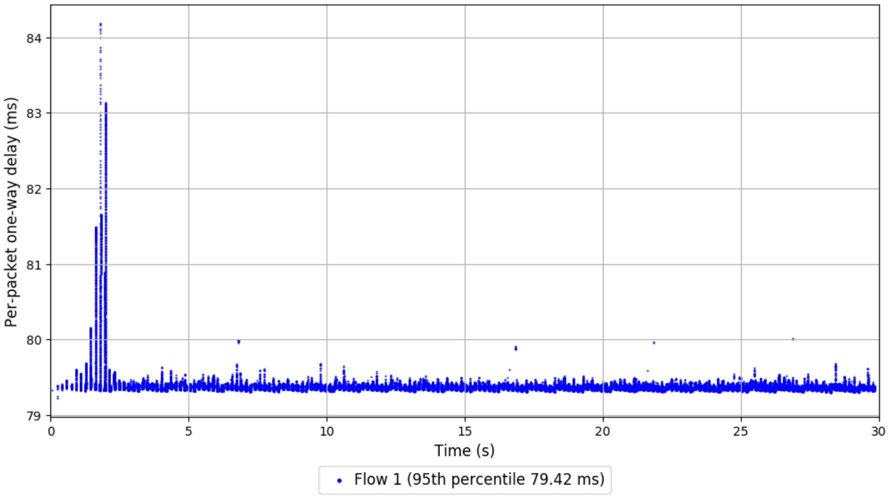
```
Run 10: Statistics of TCP Cubic

Start at: 2017-09-21 11:57:58
End at: 2017-09-21 11:58:28
Local clock offset: -0.134 ms
Remote clock offset: 2.765 ms

# Below is generated by plot.py at 2017-09-21 15:23:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.33 Mbit/s
95th percentile per-packet one-way delay: 79.417 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 56.33 Mbit/s
95th percentile per-packet one-way delay: 79.417 ms
Loss rate: 0.39%
```

Run 10: Report of TCP Cubic — Data Link



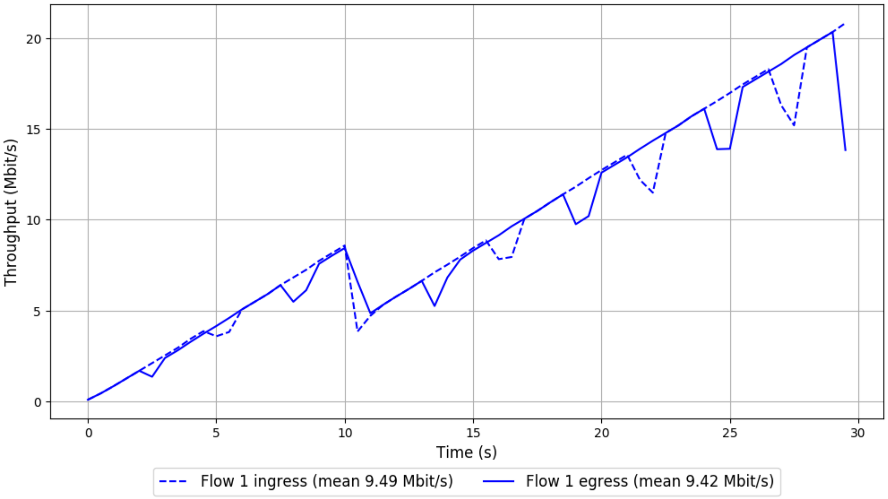


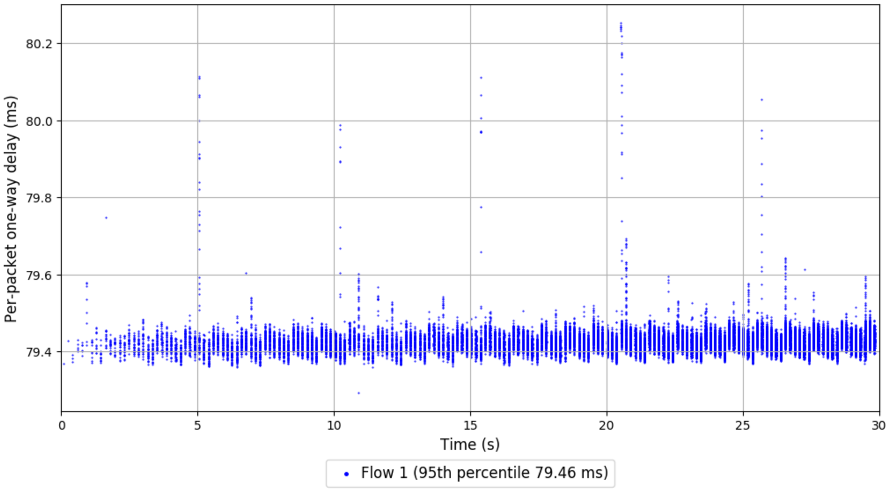
```
Run 1: Statistics of LEDBAT

Start at: 2017-09-21 09:30:25
End at: 2017-09-21 09:30:55
Local clock offset: 0.076 ms
Remote clock offset: 3.165 ms

# Below is generated by plot.py at 2017-09-21 15:23:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.42 Mbit/s
95th percentile per-packet one-way delay: 79.464 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 9.42 Mbit/s
95th percentile per-packet one-way delay: 79.464 ms
Loss rate: 1.24%
```

Run 1: Report of LEDBAT — Data Link



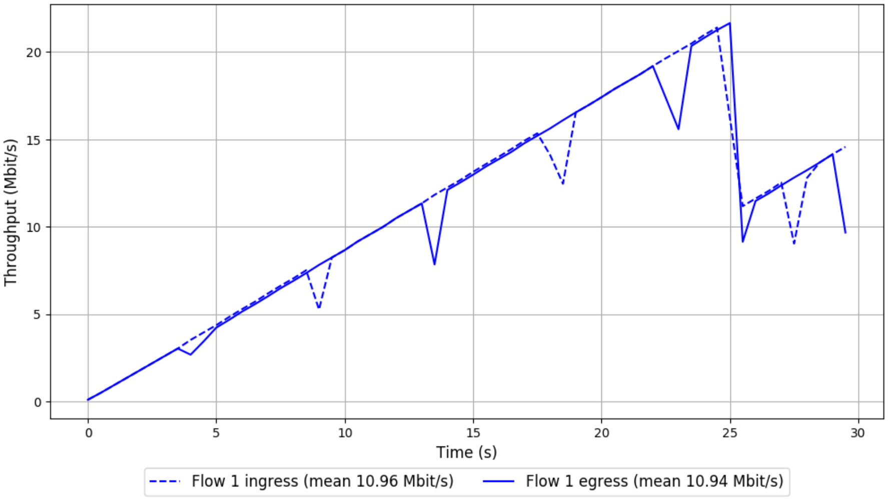


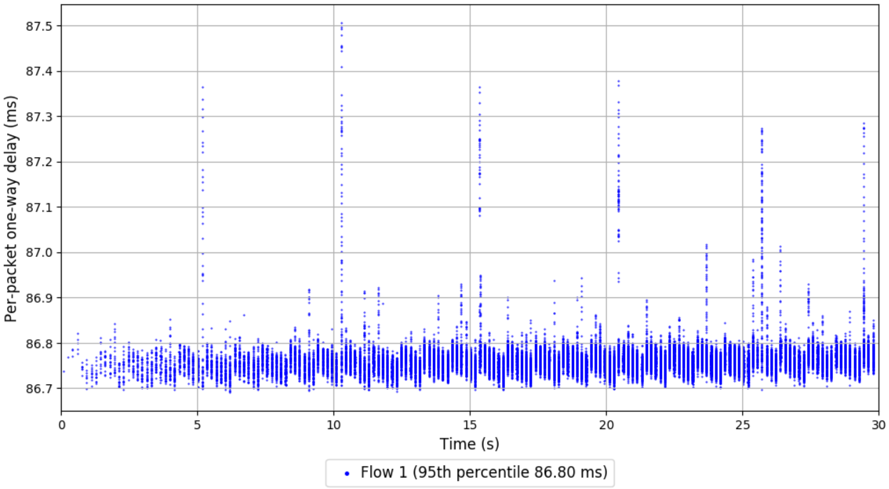
```
Run 2: Statistics of LEDBAT

Start at: 2017-09-21 09:48:23
End at: 2017-09-21 09:48:53
Local clock offset: -0.122 ms
Remote clock offset: -5.542 ms

# Below is generated by plot.py at 2017-09-21 15:23:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.94 Mbit/s
95th percentile per-packet one-way delay: 86.800 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 10.94 Mbit/s
95th percentile per-packet one-way delay: 86.800 ms
Loss rate: 0.75%
```

Run 2: Report of LEDBAT — Data Link



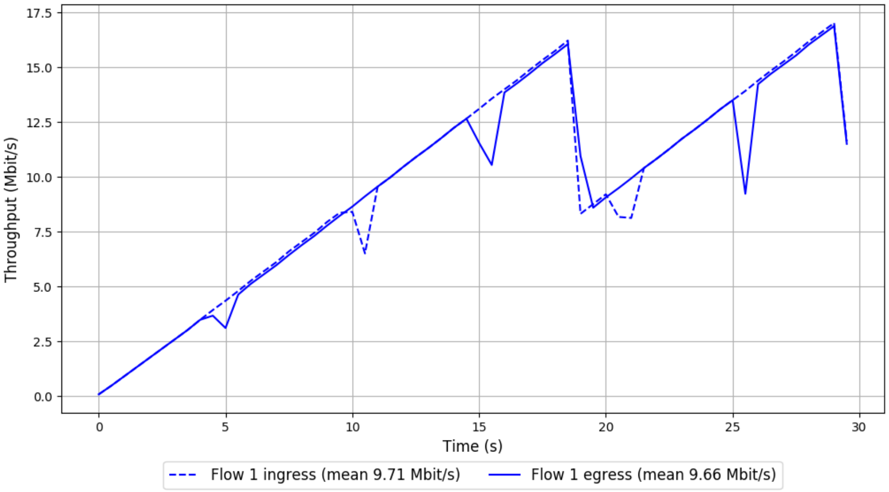


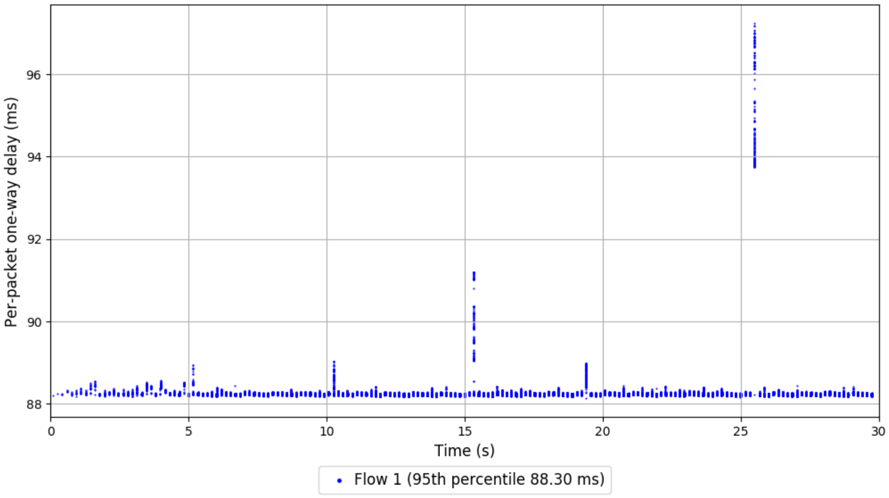
```
Run 3: Statistics of LEDBAT

Start at: 2017-09-21 10:06:49
End at: 2017-09-21 10:07:19
Local clock offset: -0.097 ms
Remote clock offset: -4.986 ms

# Below is generated by plot.py at 2017-09-21 15:23:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.66 Mbit/s
95th percentile per-packet one-way delay: 88.300 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 9.66 Mbit/s
95th percentile per-packet one-way delay: 88.300 ms
Loss rate: 1.01%
```

Run 3: Report of LEDBAT — Data Link



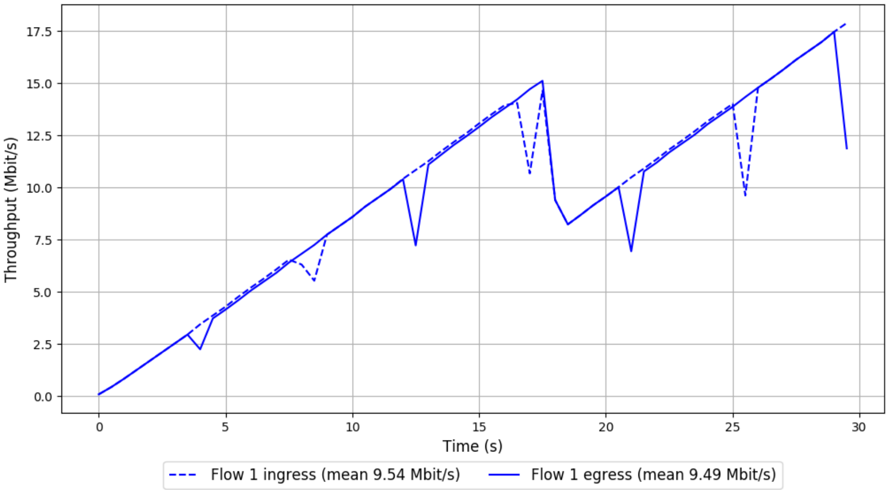


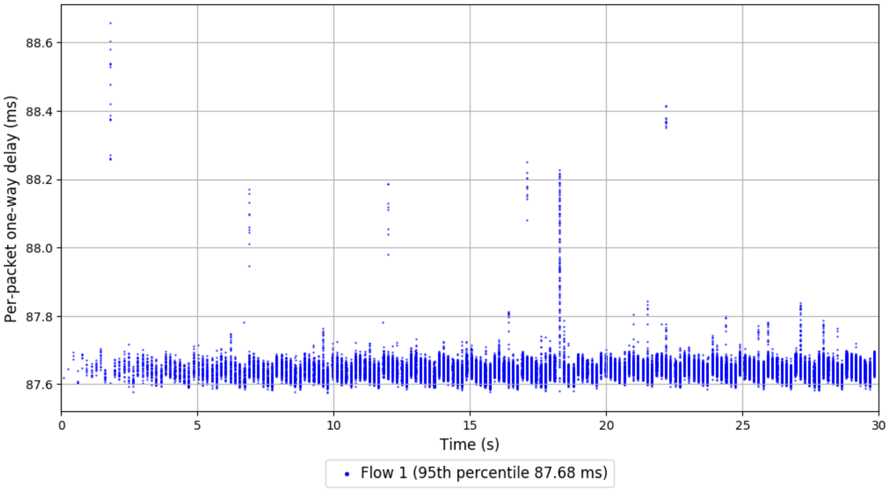
```
Run 4: Statistics of LEDBAT

Start at: 2017-09-21 10:24:23
End at: 2017-09-21 10:24:53
Local clock offset: -0.265 ms
Remote clock offset: -3.957 ms

# Below is generated by plot.py at 2017-09-21 15:23:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.49 Mbit/s
95th percentile per-packet one-way delay: 87.680 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 9.49 Mbit/s
95th percentile per-packet one-way delay: 87.680 ms
Loss rate: 1.06%
```

Run 4: Report of LEDBAT — Data Link



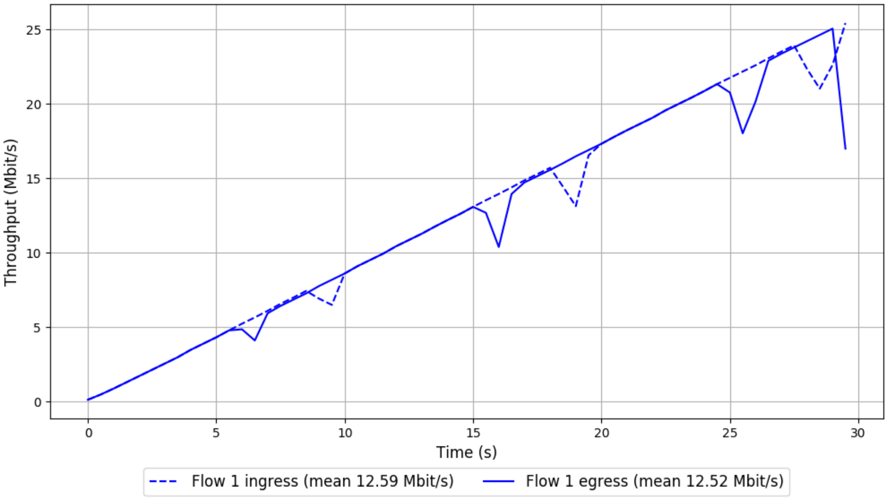


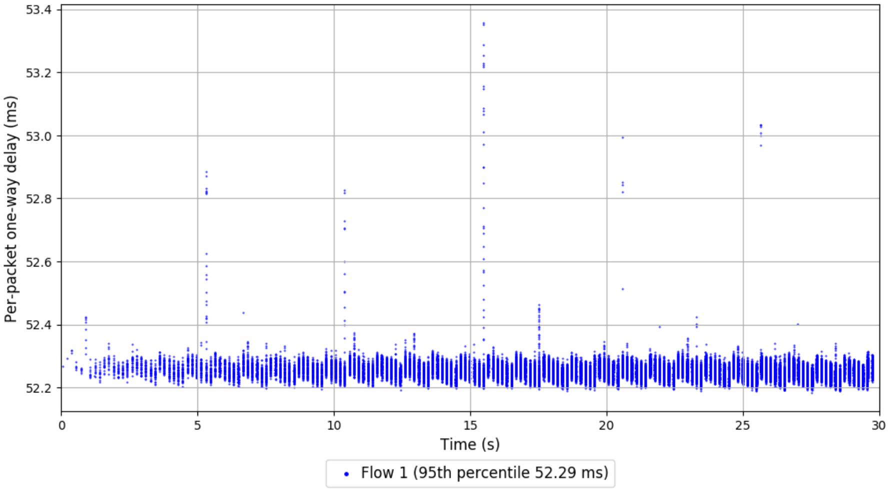
```
Run 5: Statistics of LEDBAT

Start at: 2017-09-21 10:42:24
End at: 2017-09-21 10:42:54
Local clock offset: -0.212 ms
Remote clock offset: 29.483 ms

# Below is generated by plot.py at 2017-09-21 15:23:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.52 Mbit/s
95th percentile per-packet one-way delay: 52.290 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 12.52 Mbit/s
95th percentile per-packet one-way delay: 52.290 ms
Loss rate: 1.14%
```

Run 5: Report of LEDBAT — Data Link



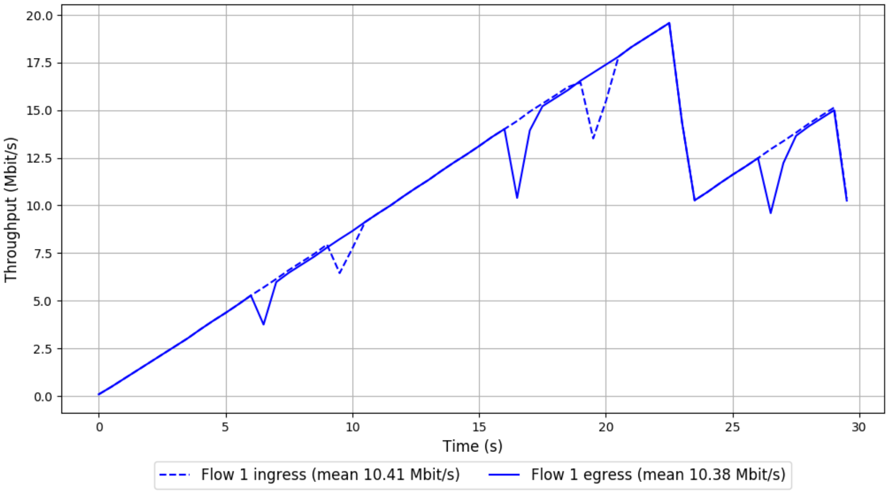


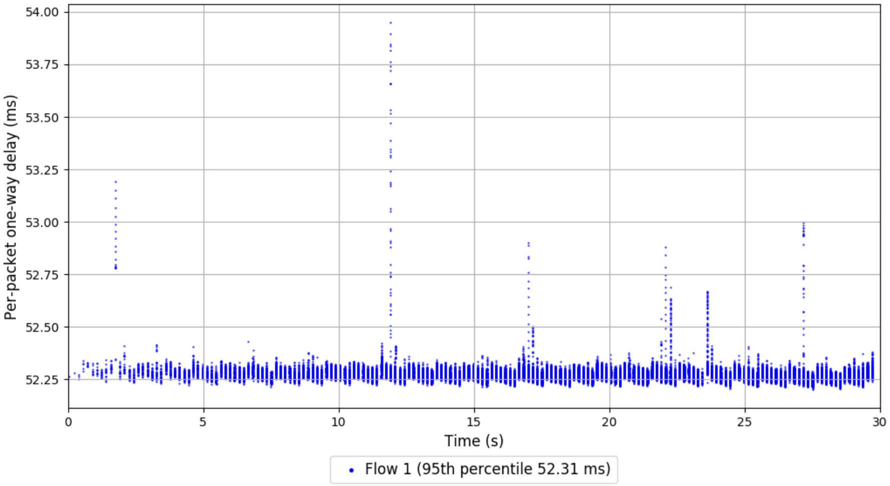
```
Run 6: Statistics of LEDBAT

Start at: 2017-09-21 11:00:05
End at: 2017-09-21 11:00:35
Local clock offset: -0.202 ms
Remote clock offset: 29.105 ms

# Below is generated by plot.py at 2017-09-21 15:23:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.38 Mbit/s
95th percentile per-packet one-way delay: 52.314 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 10.38 Mbit/s
95th percentile per-packet one-way delay: 52.314 ms
Loss rate: 0.84%
```

Run 6: Report of LEDBAT — Data Link



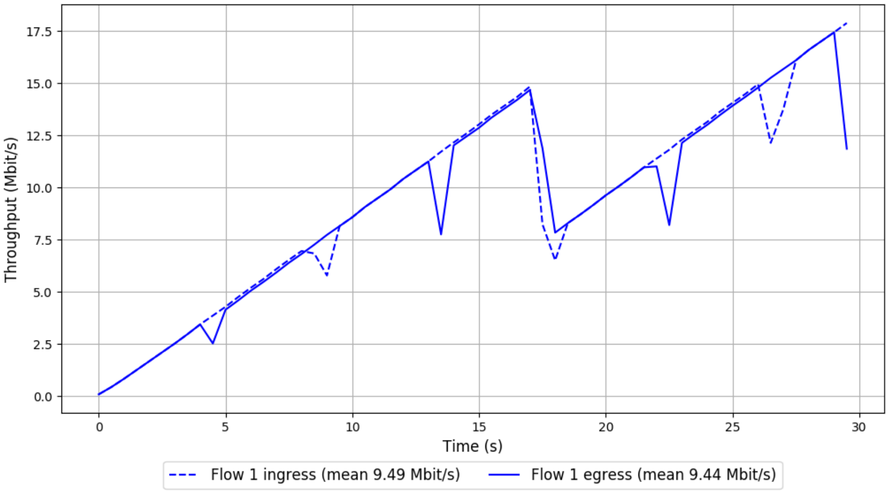


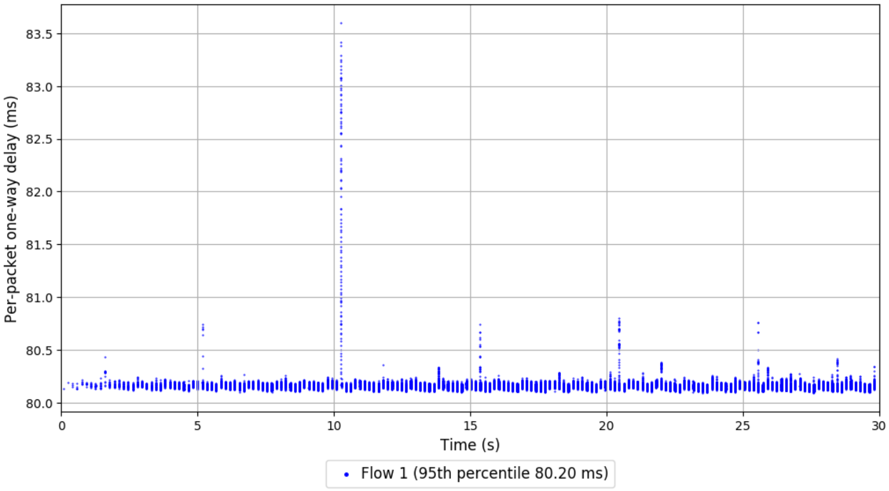
```
Run 7: Statistics of LEDBAT

Start at: 2017-09-21 11:17:42
End at: 2017-09-21 11:18:12
Local clock offset: -0.264 ms
Remote clock offset: 2.927 ms

# Below is generated by plot.py at 2017-09-21 15:23:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.44 Mbit/s
95th percentile per-packet one-way delay: 80.199 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 9.44 Mbit/s
95th percentile per-packet one-way delay: 80.199 ms
Loss rate: 1.07%
```

Run 7: Report of LEDBAT — Data Link



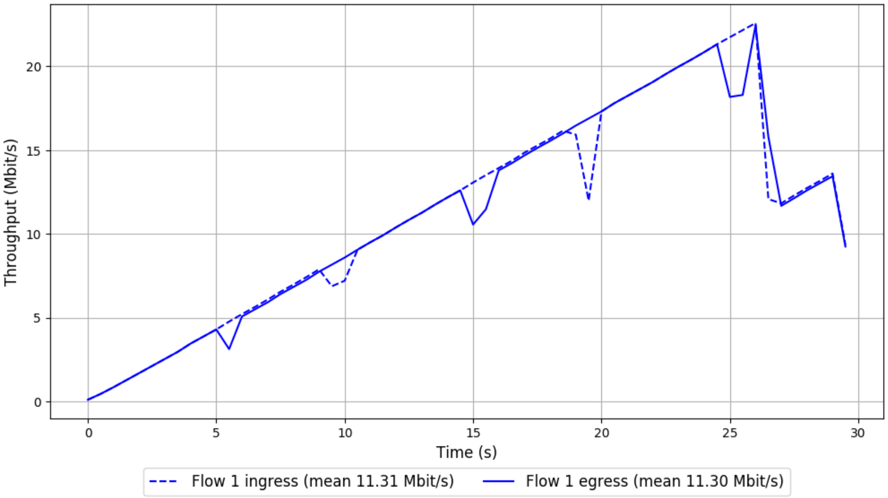


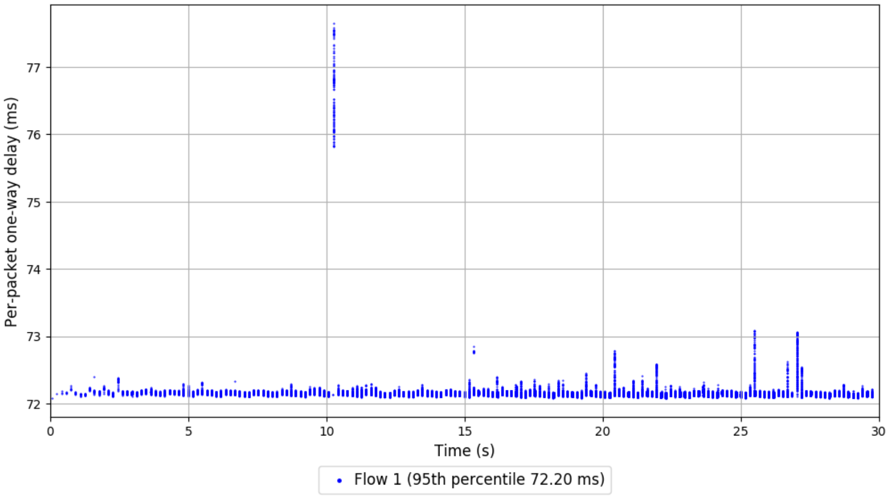
```
Run 8: Statistics of LEDBAT

Start at: 2017-09-21 11:35:28
End at: 2017-09-21 11:35:58
Local clock offset: -0.19 ms
Remote clock offset: 8.431 ms

# Below is generated by plot.py at 2017-09-21 15:23:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.30 Mbit/s
95th percentile per-packet one-way delay: 72.198 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 11.30 Mbit/s
95th percentile per-packet one-way delay: 72.198 ms
Loss rate: 0.70%
```

Run 8: Report of LEDBAT — Data Link



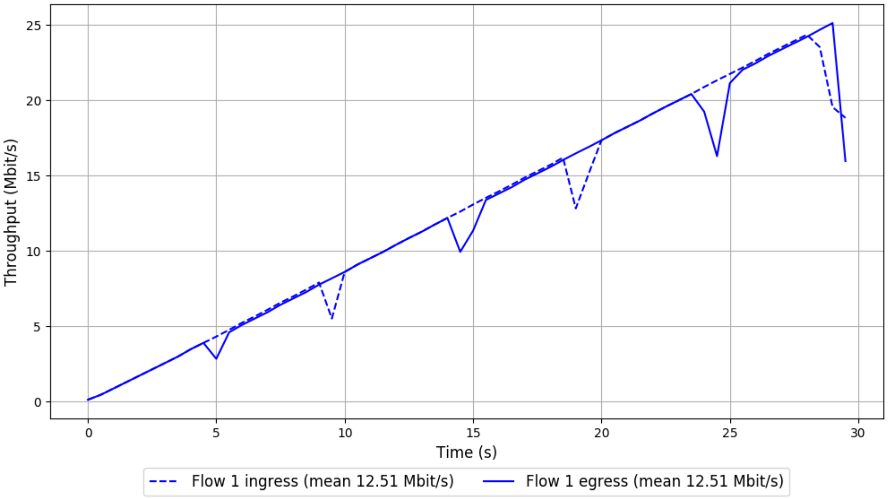


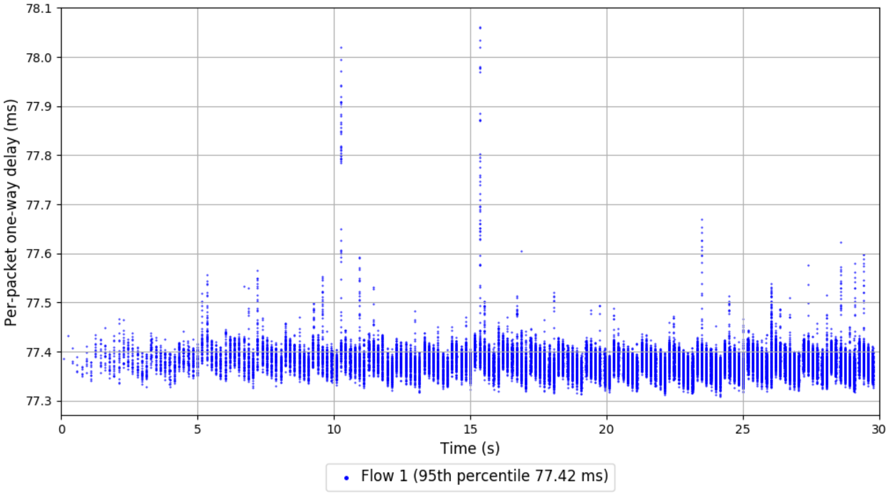
```
Run 9: Statistics of LEDBAT

Start at: 2017-09-21 11:53:03
End at: 2017-09-21 11:53:33
Local clock offset: -0.109 ms
Remote clock offset: 2.896 ms

# Below is generated by plot.py at 2017-09-21 15:23:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.51 Mbit/s
95th percentile per-packet one-way delay: 77.416 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 12.51 Mbit/s
95th percentile per-packet one-way delay: 77.416 ms
Loss rate: 0.58%
```

Run 9: Report of LEDBAT — Data Link



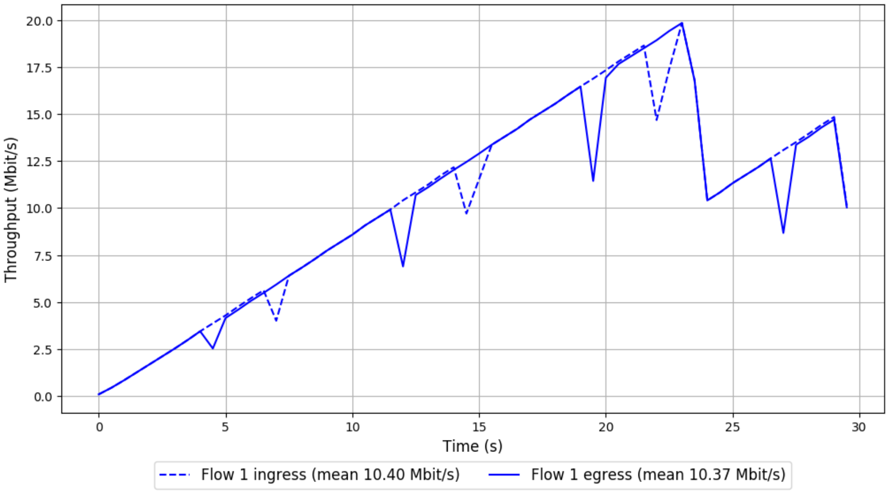


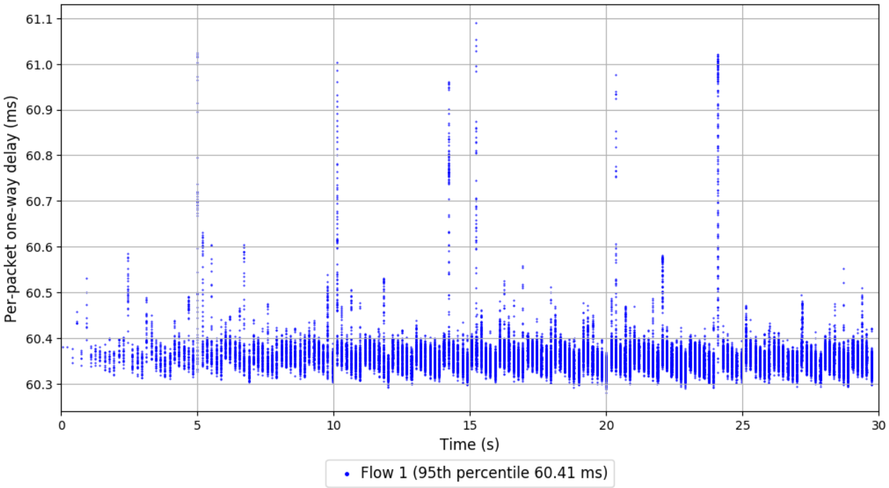
```
Run 10: Statistics of LEDBAT

Start at: 2017-09-21 12:10:30
End at: 2017-09-21 12:11:00
Local clock offset: -0.113 ms
Remote clock offset: 19.661 ms

# Below is generated by plot.py at 2017-09-21 15:23:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.37 Mbit/s
95th percentile per-packet one-way delay: 60.411 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 10.37 Mbit/s
95th percentile per-packet one-way delay: 60.411 ms
Loss rate: 0.82%
```

Run 10: Report of LEDBAT — Data Link



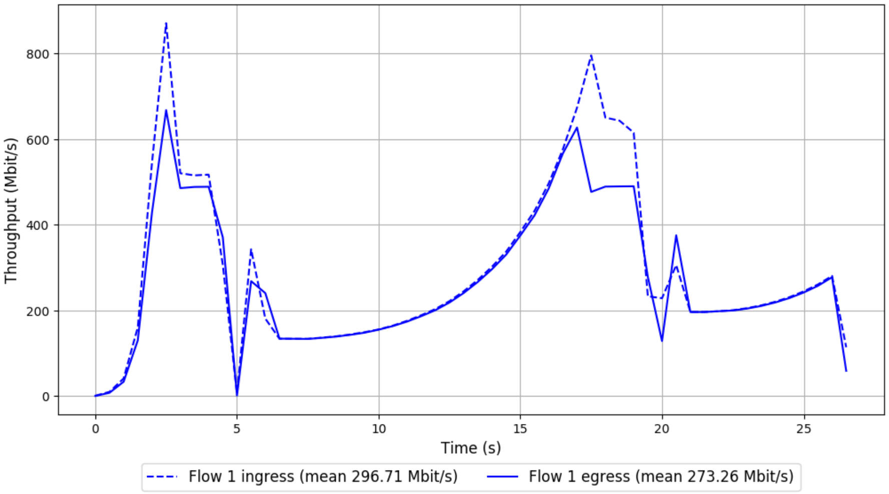


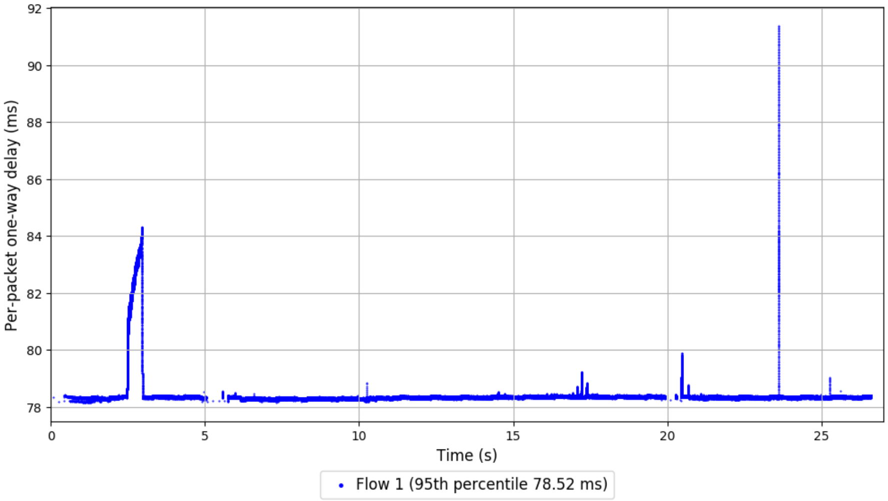
```
Run 1: Statistics of PCC

Start at: 2017-09-21 09:21:46
End at: 2017-09-21 09:22:16
Local clock offset: 0.084 ms
Remote clock offset: 1.916 ms

# Below is generated by plot.py at 2017-09-21 15:26:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 273.26 Mbit/s
95th percentile per-packet one-way delay: 78.516 ms
Loss rate: 8.48%
-- Flow 1:
Average throughput: 273.26 Mbit/s
95th percentile per-packet one-way delay: 78.516 ms
Loss rate: 8.48%
```

Run 1: Report of PCC — Data Link



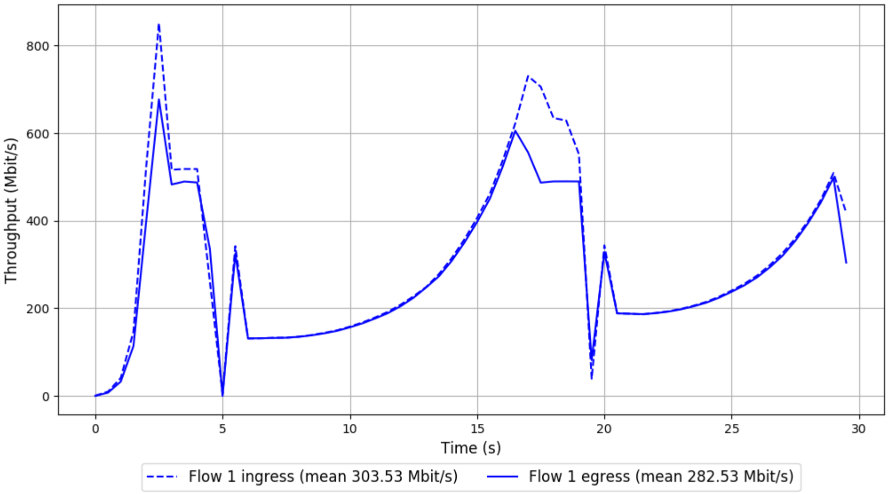


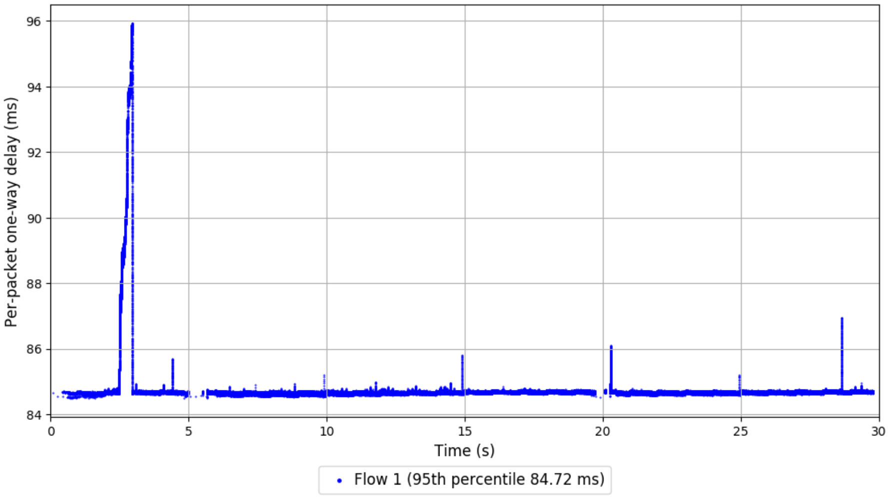
```
Run 2: Statistics of PCC

Start at: 2017-09-21 09:39:40
End at: 2017-09-21 09:40:10
Local clock offset: 0.01 ms
Remote clock offset: -1.817 ms

# Below is generated by plot.py at 2017-09-21 15:27:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 282.53 Mbit/s
95th percentile per-packet one-way delay: 84.722 ms
Loss rate: 7.45%
-- Flow 1:
Average throughput: 282.53 Mbit/s
95th percentile per-packet one-way delay: 84.722 ms
Loss rate: 7.45%
```

Run 2: Report of PCC — Data Link



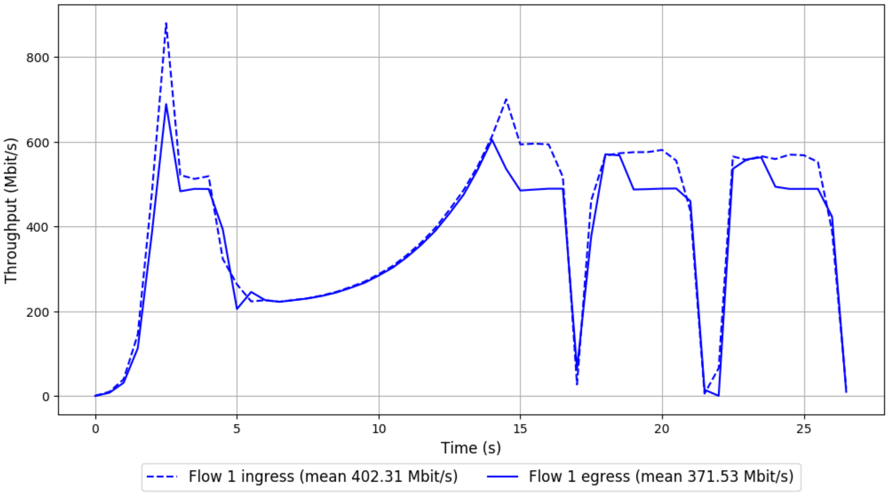


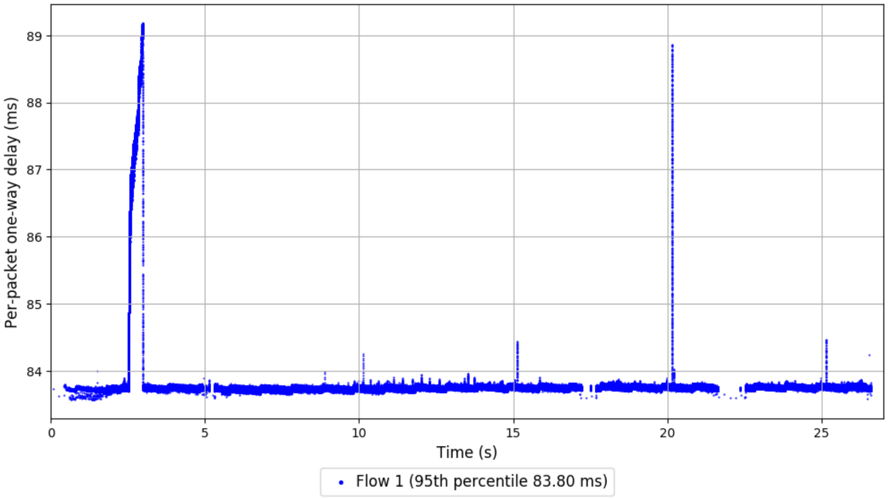
```
Run 3: Statistics of PCC

Start at: 2017-09-21 09:58:08
End at: 2017-09-21 09:58:38
Local clock offset: -0.185 ms
Remote clock offset: -0.444 ms

# Below is generated by plot.py at 2017-09-21 15:28:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 371.53 Mbit/s
95th percentile per-packet one-way delay: 83.796 ms
Loss rate: 7.85%
-- Flow 1:
Average throughput: 371.53 Mbit/s
95th percentile per-packet one-way delay: 83.796 ms
Loss rate: 7.85%
```

Run 3: Report of PCC — Data Link



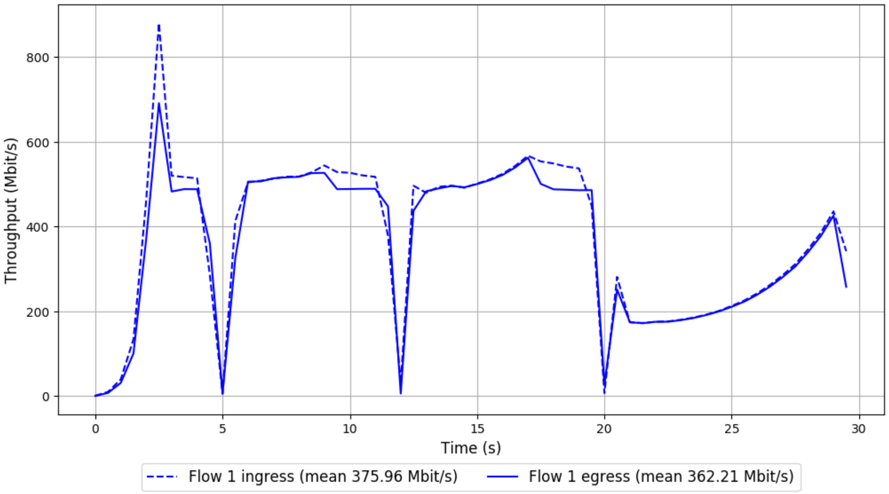


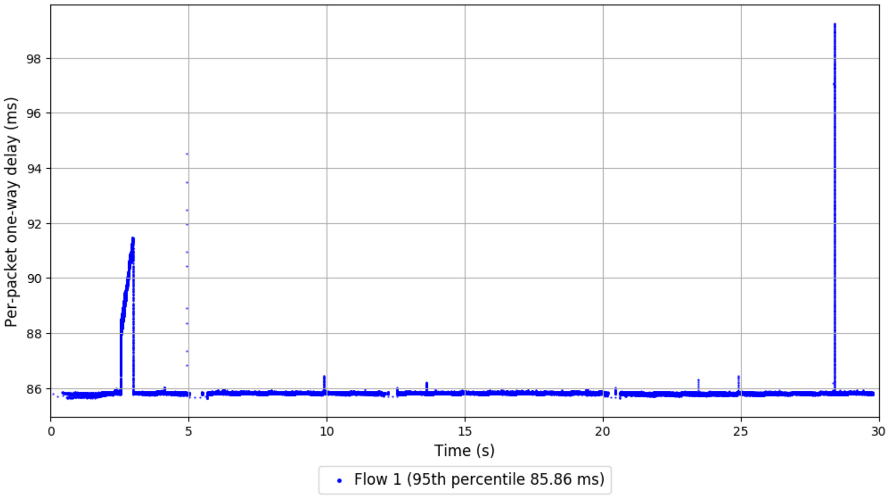
```
Run 4: Statistics of PCC

Start at: 2017-09-21 10:15:39
End at: 2017-09-21 10:16:09
Local clock offset: -0.18 ms
Remote clock offset: -3.983 ms

# Below is generated by plot.py at 2017-09-21 15:28:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 362.21 Mbit/s
95th percentile per-packet one-way delay: 85.861 ms
Loss rate: 4.20%
-- Flow 1:
Average throughput: 362.21 Mbit/s
95th percentile per-packet one-way delay: 85.861 ms
Loss rate: 4.20%
```

Run 4: Report of PCC — Data Link



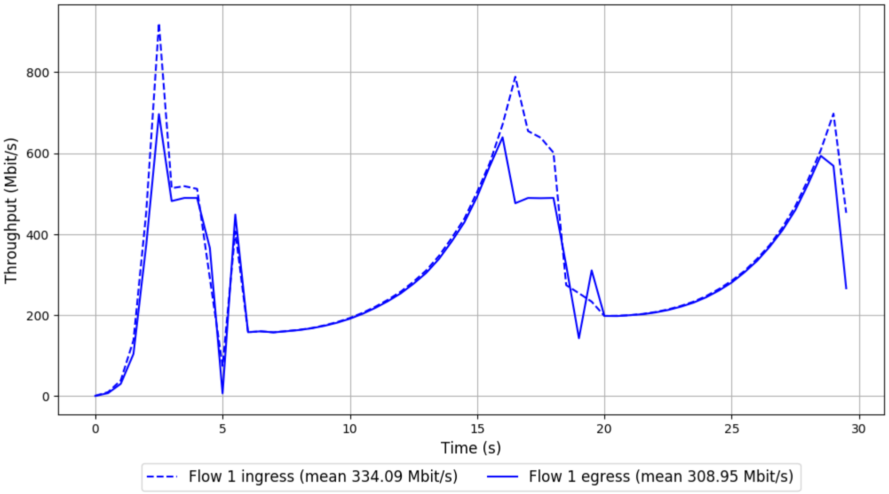


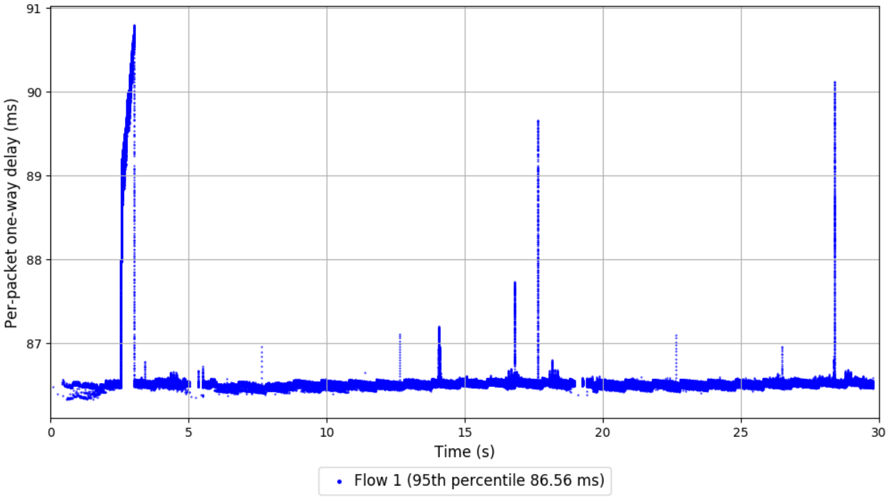
```
Run 5: Statistics of PCC

Start at: 2017-09-21 10:33:34
End at: 2017-09-21 10:34:04
Local clock offset: -0.192 ms
Remote clock offset: -4.621 ms

# Below is generated by plot.py at 2017-09-21 15:28:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 308.95 Mbit/s
95th percentile per-packet one-way delay: 86.558 ms
Loss rate: 8.05%
-- Flow 1:
Average throughput: 308.95 Mbit/s
95th percentile per-packet one-way delay: 86.558 ms
Loss rate: 8.05%
```

Run 5: Report of PCC — Data Link



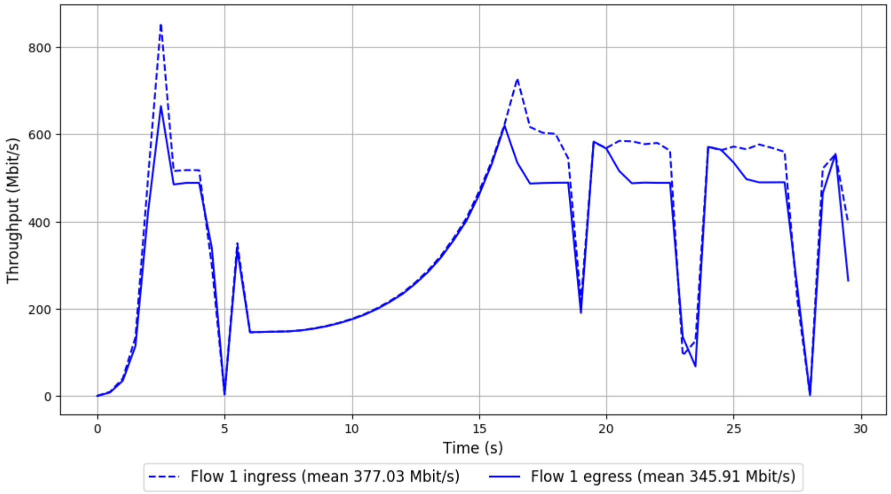


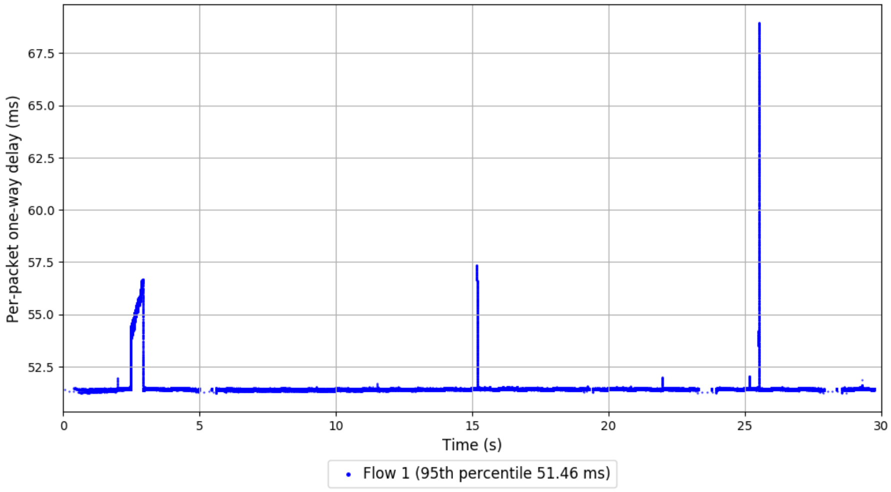
```
Run 6: Statistics of PCC

Start at: 2017-09-21 10:51:13
End at: 2017-09-21 10:51:43
Local clock offset: -0.263 ms
Remote clock offset: 30.276 ms

# Below is generated by plot.py at 2017-09-21 15:28:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 345.91 Mbit/s
95th percentile per-packet one-way delay: 51.457 ms
Loss rate: 8.77%
-- Flow 1:
Average throughput: 345.91 Mbit/s
95th percentile per-packet one-way delay: 51.457 ms
Loss rate: 8.77%
```

Run 6: Report of PCC — Data Link



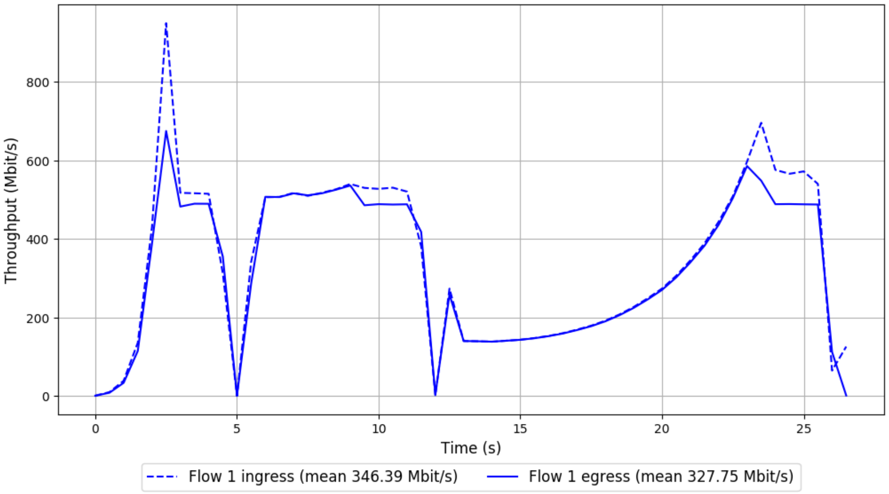


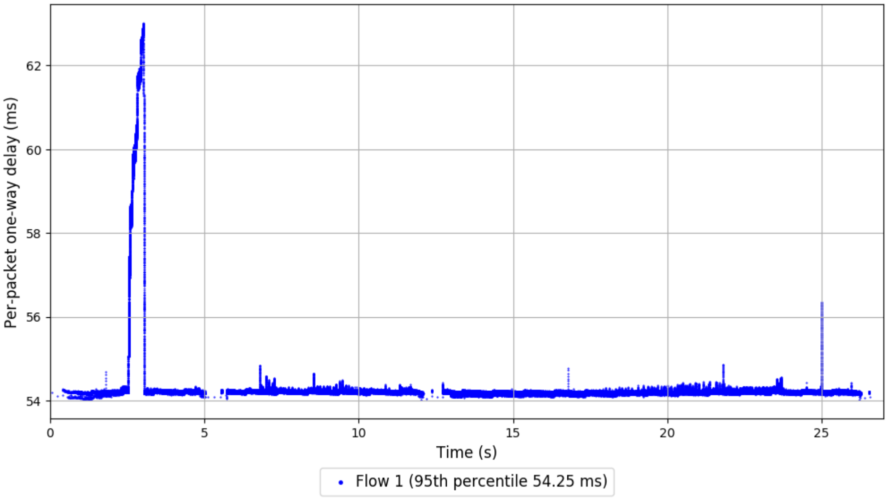
```
Run 7: Statistics of PCC

Start at: 2017-09-21 11:08:57
End at: 2017-09-21 11:09:27
Local clock offset: -0.195 ms
Remote clock offset: 28.941 ms

# Below is generated by plot.py at 2017-09-21 15:28:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 327.75 Mbit/s
95th percentile per-packet one-way delay: 54.254 ms
Loss rate: 6.28%
-- Flow 1:
Average throughput: 327.75 Mbit/s
95th percentile per-packet one-way delay: 54.254 ms
Loss rate: 6.28%
```

Run 7: Report of PCC — Data Link



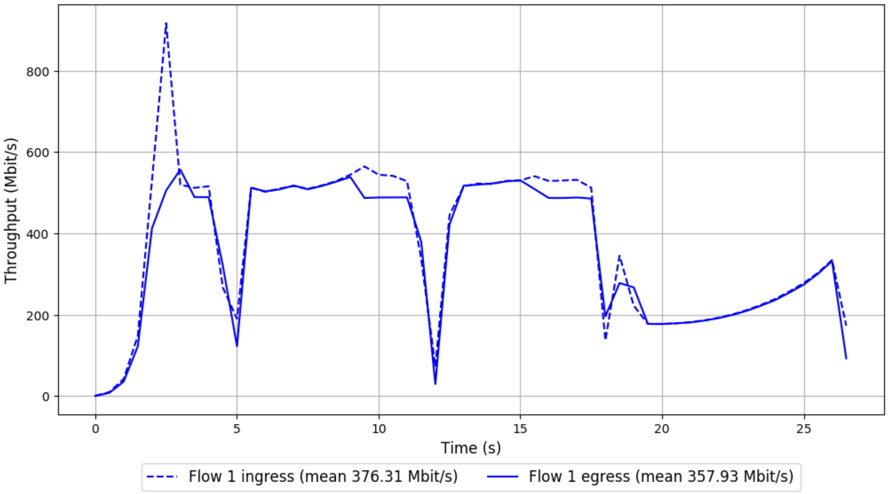


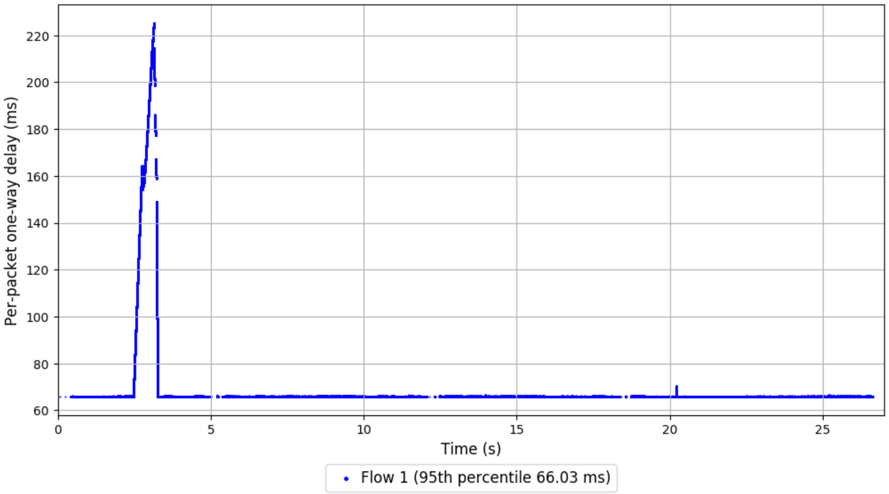
```
Run 8: Statistics of PCC

Start at: 2017-09-21 11:26:42
End at: 2017-09-21 11:27:12
Local clock offset: -0.291 ms
Remote clock offset: 14.69 ms

# Below is generated by plot.py at 2017-09-21 15:28:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 357.93 Mbit/s
95th percentile per-packet one-way delay: 66.025 ms
Loss rate: 5.48%
-- Flow 1:
Average throughput: 357.93 Mbit/s
95th percentile per-packet one-way delay: 66.025 ms
Loss rate: 5.48%
```

Run 8: Report of PCC — Data Link



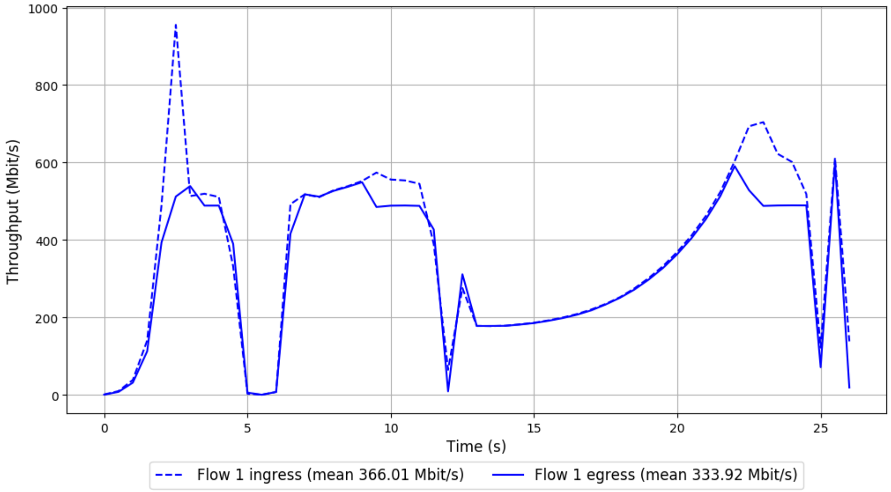


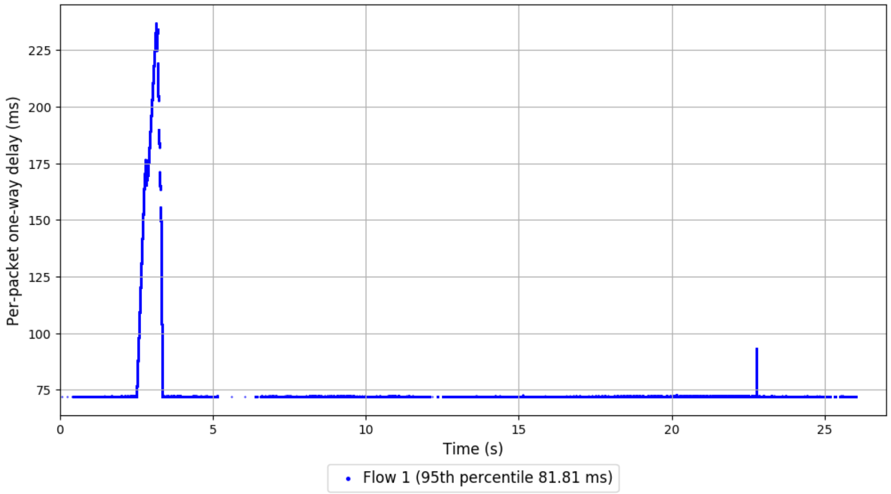
```
Run 9: Statistics of PCC

Start at: 2017-09-21 11:44:20
End at: 2017-09-21 11:44:50
Local clock offset: -0.2 ms
Remote clock offset: 8.114 ms

# Below is generated by plot.py at 2017-09-21 15:31:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 333.92 Mbit/s
95th percentile per-packet one-way delay: 81.815 ms
Loss rate: 9.35%
-- Flow 1:
Average throughput: 333.92 Mbit/s
95th percentile per-packet one-way delay: 81.815 ms
Loss rate: 9.35%
```

Run 9: Report of PCC — Data Link



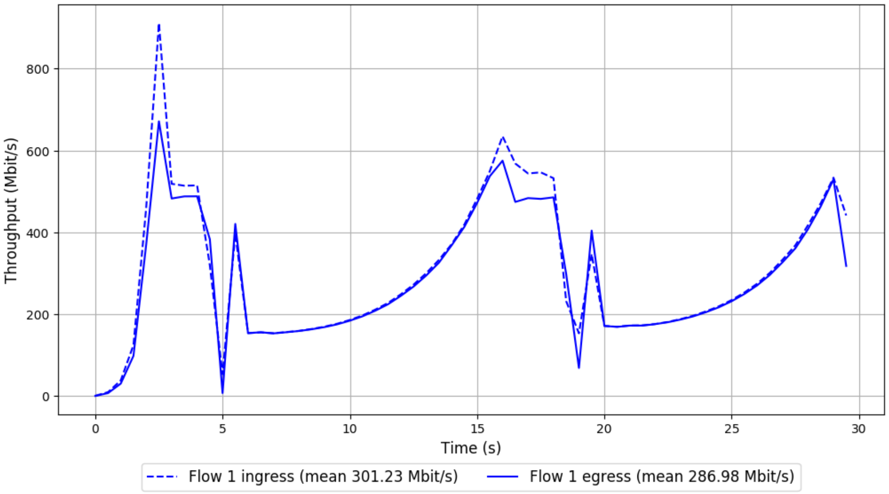


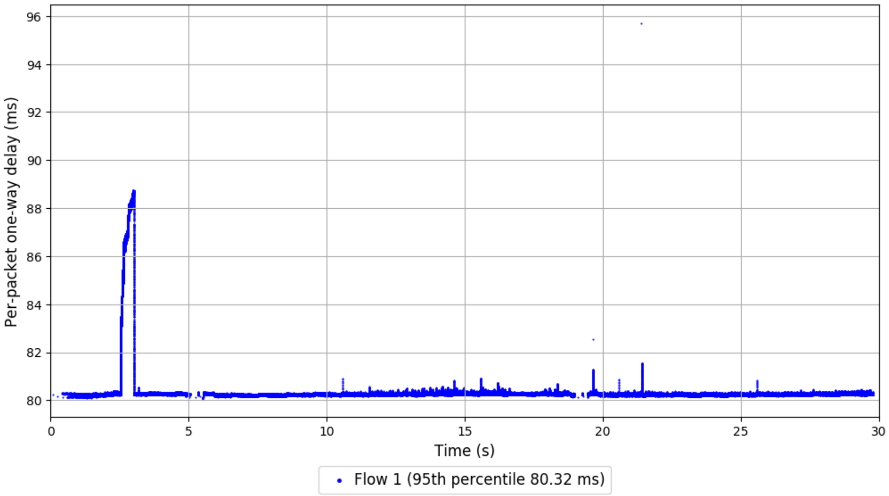
```
Run 10: Statistics of PCC

Start at: 2017-09-21 12:01:45
End at: 2017-09-21 12:02:15
Local clock offset: -0.117 ms
Remote clock offset: 1.753 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 286.98 Mbit/s
95th percentile per-packet one-way delay: 80.321 ms
Loss rate: 5.27%
-- Flow 1:
Average throughput: 286.98 Mbit/s
95th percentile per-packet one-way delay: 80.321 ms
Loss rate: 5.27%
```

Run 10: Report of PCC — Data Link



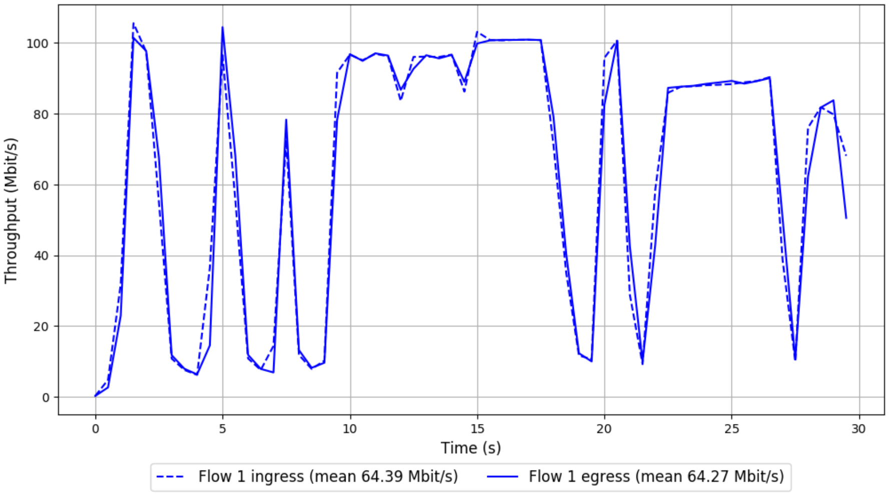


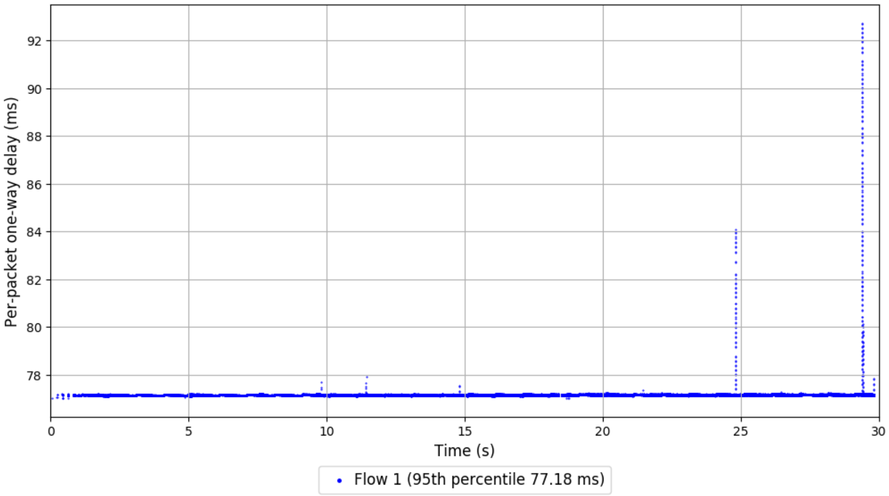
```
Run 1: Statistics of QUIC Cubic

Start at: 2017-09-21 09:26:45
End at: 2017-09-21 09:27:15
Local clock offset: 0.059 ms
Remote clock offset: 3.034 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.27 Mbit/s
95th percentile per-packet one-way delay: 77.183 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 64.27 Mbit/s
95th percentile per-packet one-way delay: 77.183 ms
Loss rate: 0.75%
```

Run 1: Report of QUIC Cubic — Data Link



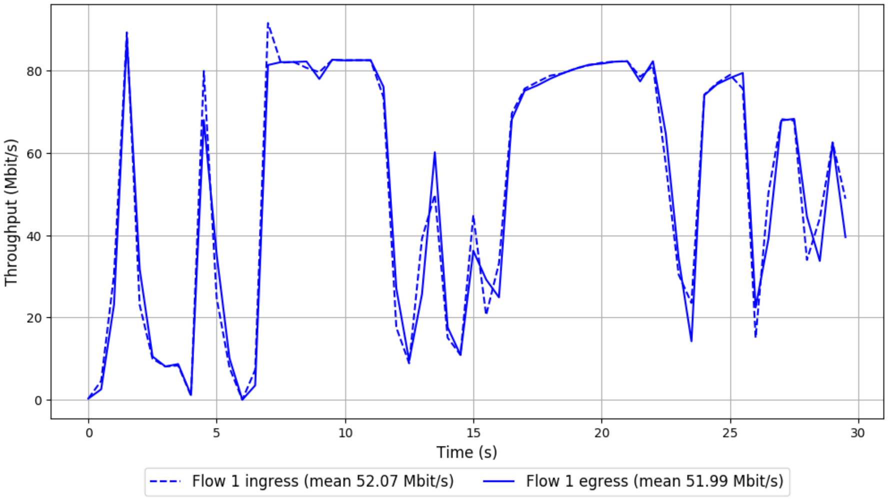


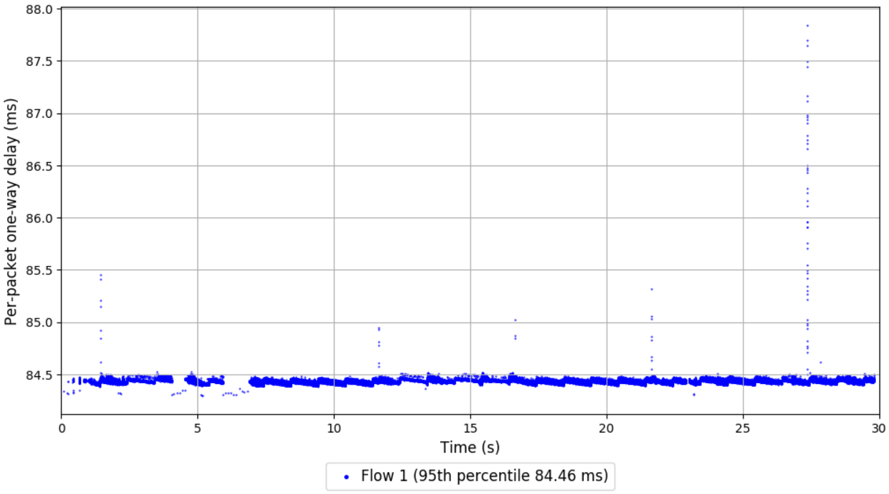
```
Run 2: Statistics of QUIC Cubic

Start at: 2017-09-21 09:44:44
End at: 2017-09-21 09:45:14
Local clock offset: -0.005 ms
Remote clock offset: -1.666 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 51.99 Mbit/s
95th percentile per-packet one-way delay: 84.459 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 51.99 Mbit/s
95th percentile per-packet one-way delay: 84.459 ms
Loss rate: 0.71%
```

Run 2: Report of QUIC Cubic — Data Link



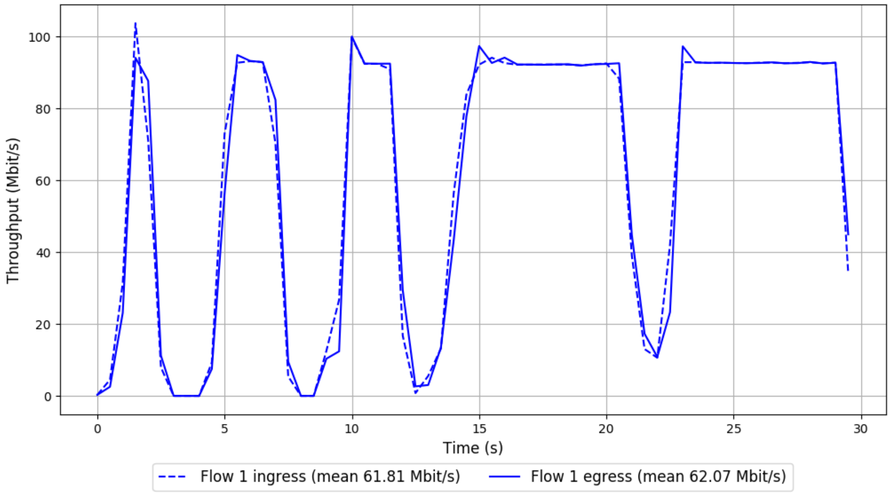


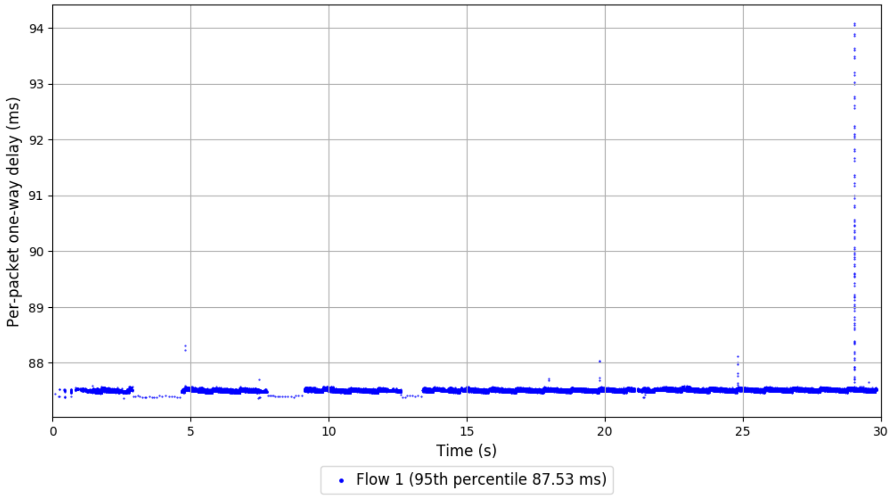
```
Run 3: Statistics of QUIC Cubic

Start at: 2017-09-21 10:03:10
End at: 2017-09-21 10:03:40
Local clock offset: -0.068 ms
Remote clock offset: -4.145 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.07 Mbit/s
95th percentile per-packet one-way delay: 87.533 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 62.07 Mbit/s
95th percentile per-packet one-way delay: 87.533 ms
Loss rate: 0.15%
```

Run 3: Report of QUIC Cubic — Data Link



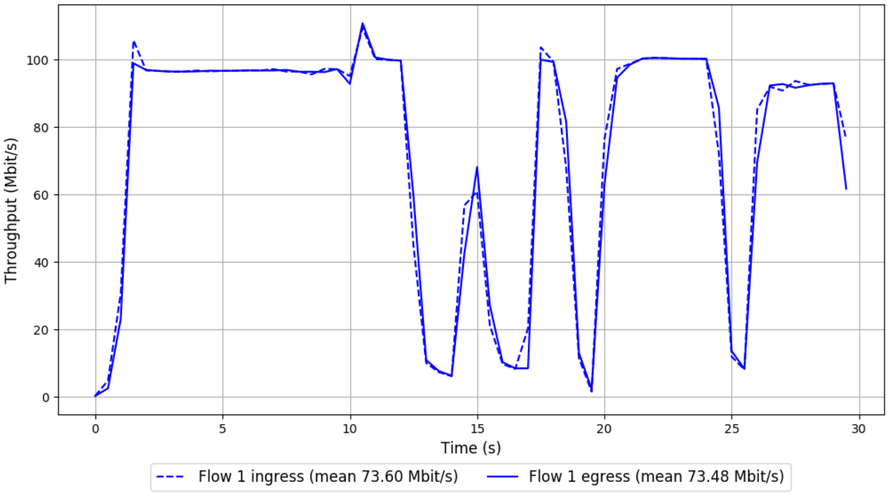


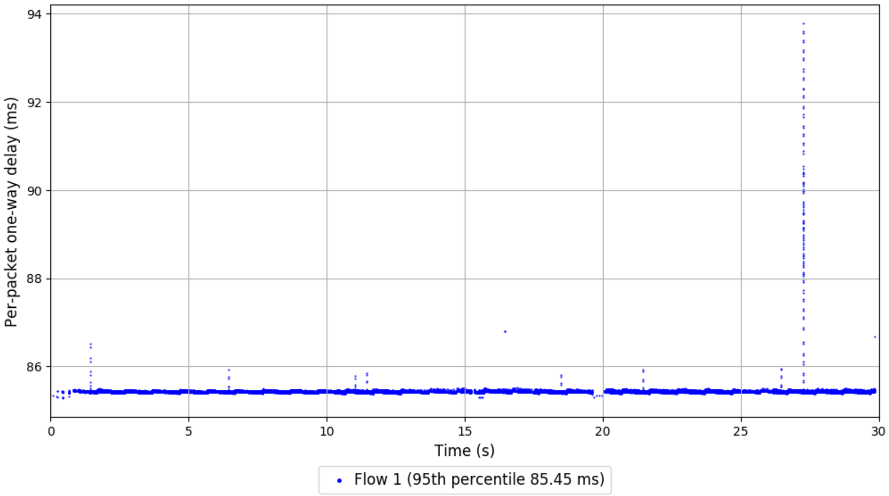
```
Run 4: Statistics of QUIC Cubic

Start at: 2017-09-21 10:20:43
End at: 2017-09-21 10:21:13
Local clock offset: -0.19 ms
Remote clock offset: -3.975 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.48 Mbit/s
95th percentile per-packet one-way delay: 85.453 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 73.48 Mbit/s
95th percentile per-packet one-way delay: 85.453 ms
Loss rate: 0.71%
```

Run 4: Report of QUIC Cubic — Data Link



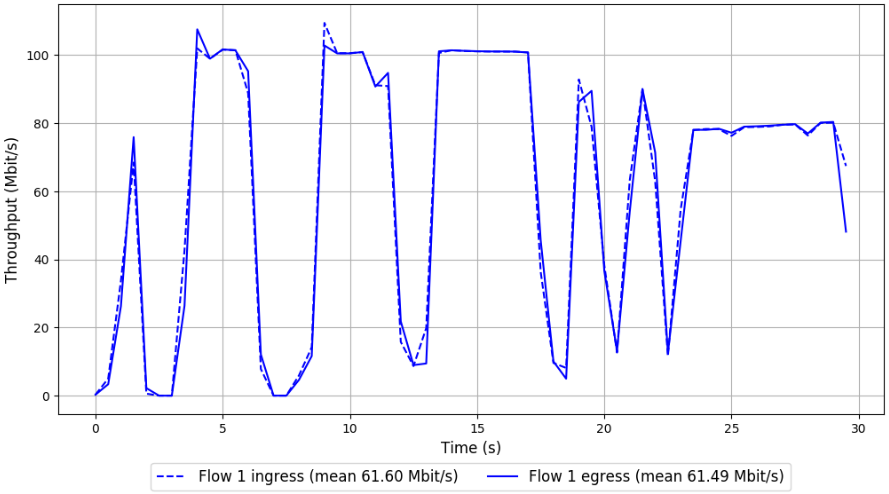


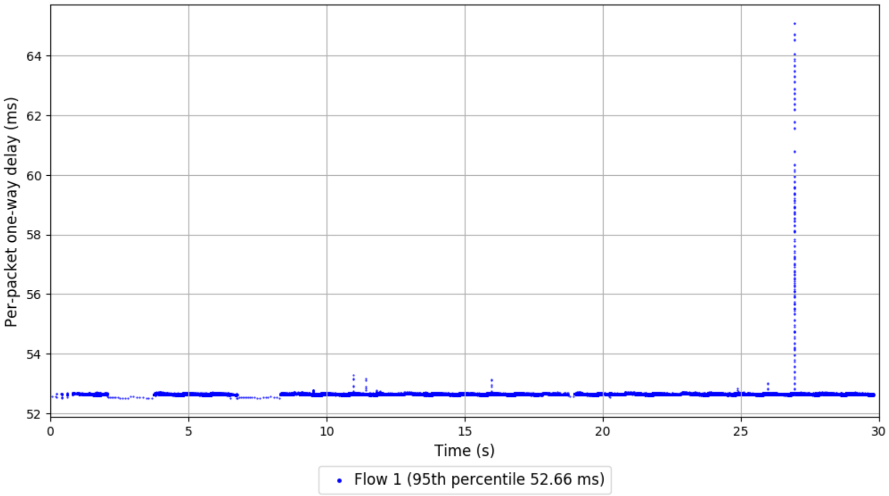
```
Run 5: Statistics of QUIC Cubic

Start at: 2017-09-21 10:38:38
End at: 2017-09-21 10:39:08
Local clock offset: -0.173 ms
Remote clock offset: 29.505 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.49 Mbit/s
95th percentile per-packet one-way delay: 52.664 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 61.49 Mbit/s
95th percentile per-packet one-way delay: 52.664 ms
Loss rate: 0.74%
```

Run 5: Report of QUIC Cubic — Data Link



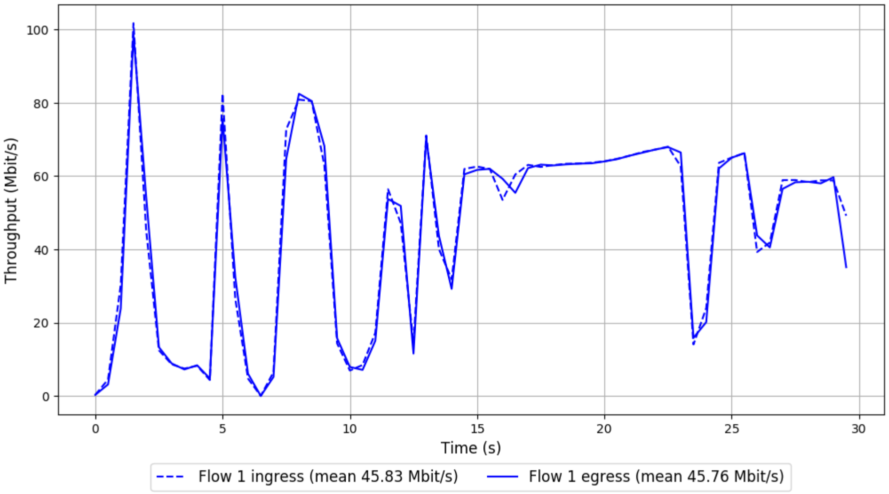


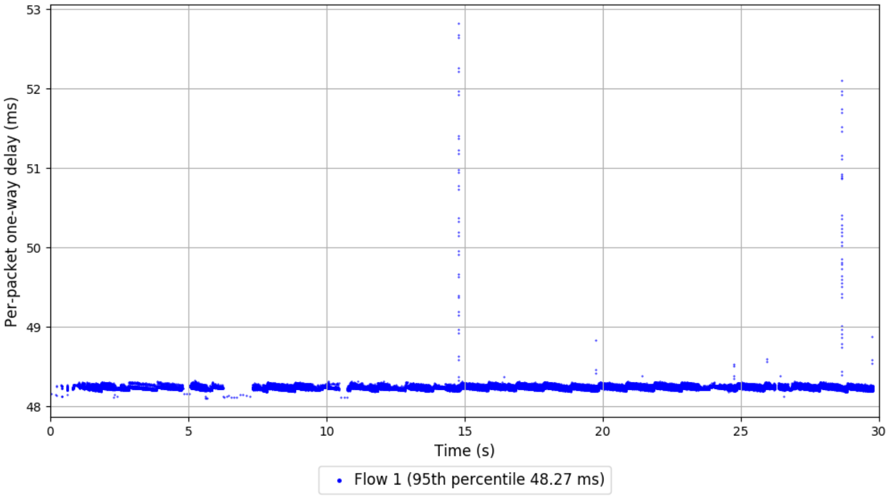
```
Run 6: Statistics of QUIC Cubic

Start at: 2017-09-21 10:56:24
End at: 2017-09-21 10:56:54
Local clock offset: -0.178 ms
Remote clock offset: 35.038 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 45.76 Mbit/s
95th percentile per-packet one-way delay: 48.271 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 45.76 Mbit/s
95th percentile per-packet one-way delay: 48.271 ms
Loss rate: 0.74%
```

Run 6: Report of QUIC Cubic — Data Link



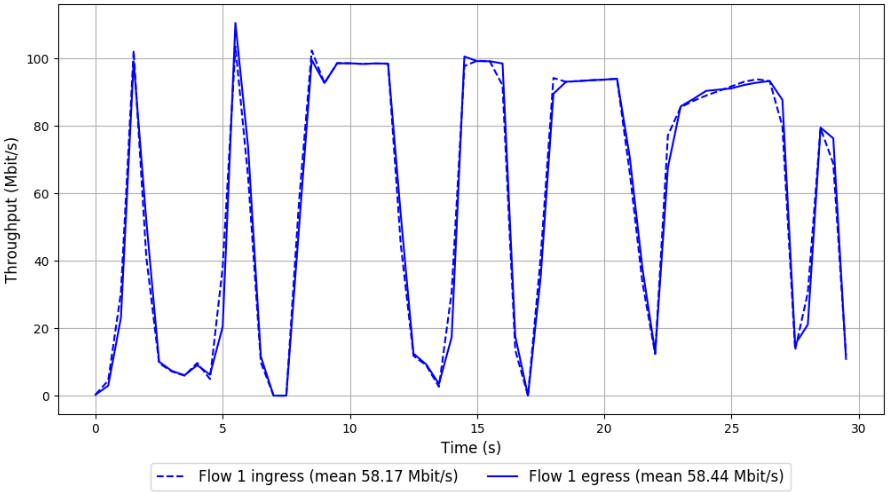


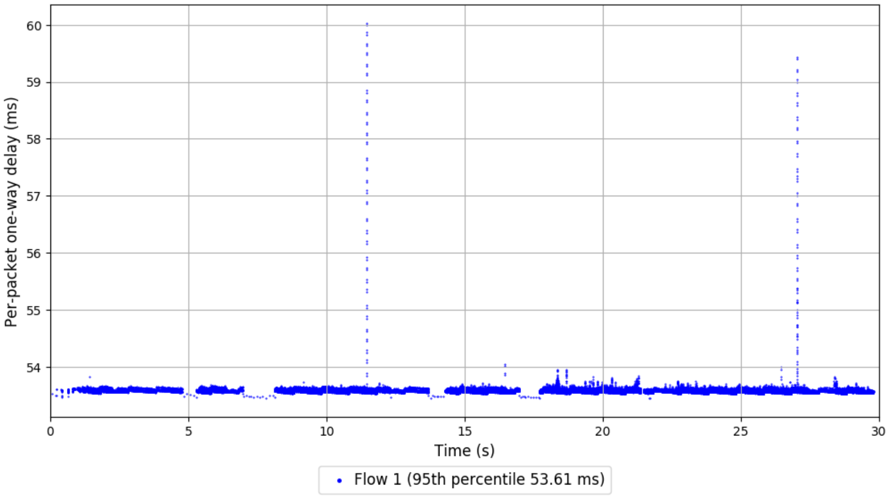
```
Run 7: Statistics of QUIC Cubic

Start at: 2017-09-21 11:14:03
End at: 2017-09-21 11:14:33
Local clock offset: -0.178 ms
Remote clock offset: 29.62 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.44 Mbit/s
95th percentile per-packet one-way delay: 53.614 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 58.44 Mbit/s
95th percentile per-packet one-way delay: 53.614 ms
Loss rate: 0.12%
```

Run 7: Report of QUIC Cubic — Data Link



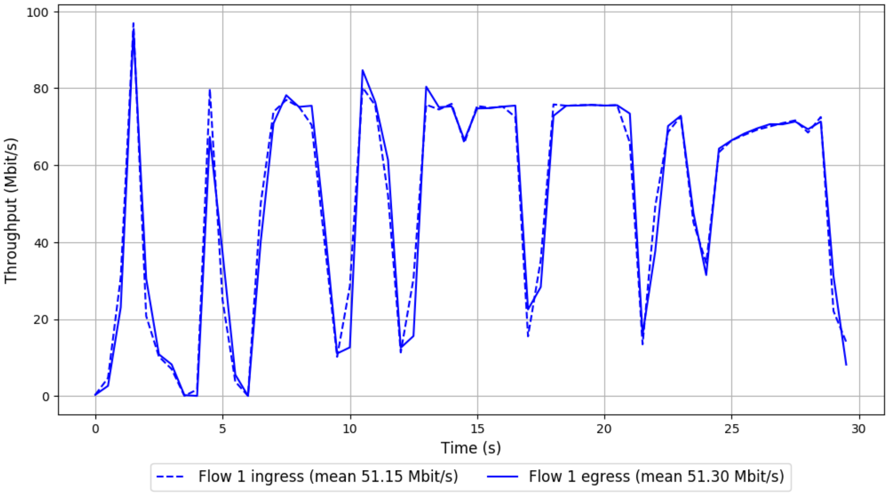


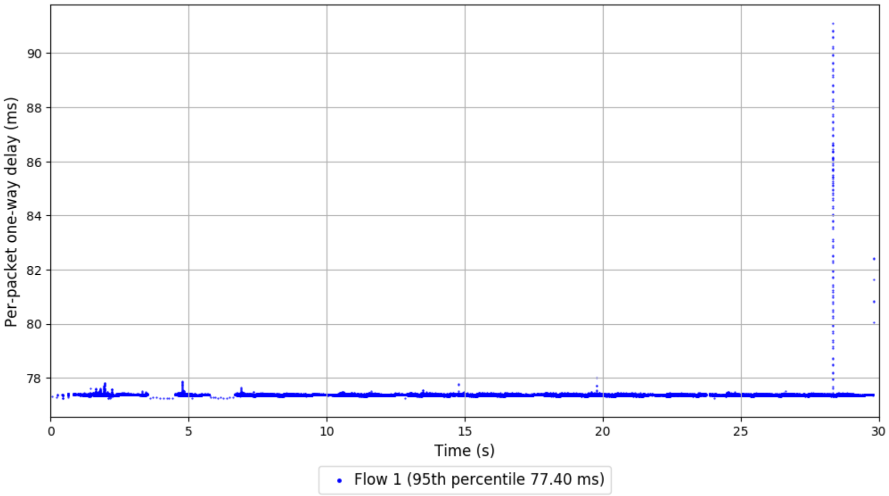
```
Run 8: Statistics of QUIC Cubic

Start at: 2017-09-21 11:31:48
End at: 2017-09-21 11:32:18
Local clock offset: -0.214 ms
Remote clock offset: 3.459 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 51.30 Mbit/s
95th percentile per-packet one-way delay: 77.401 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 51.30 Mbit/s
95th percentile per-packet one-way delay: 77.401 ms
Loss rate: 0.26%
```

Run 8: Report of QUIC Cubic — Data Link



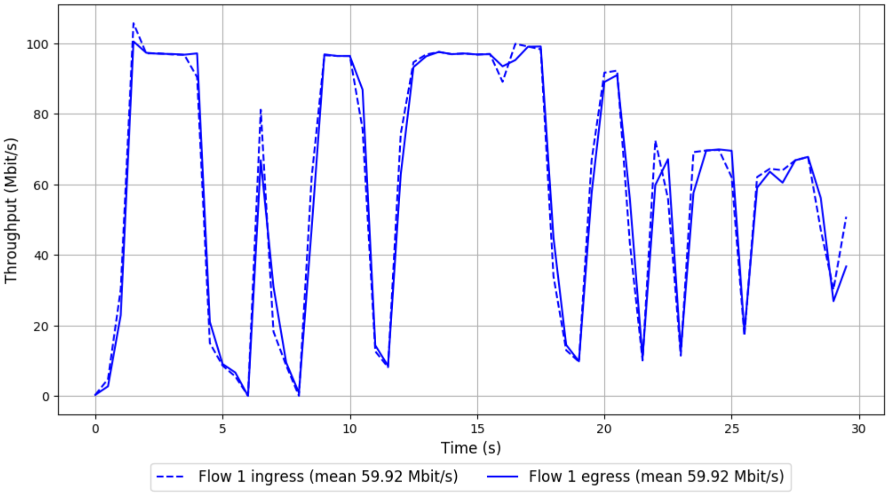


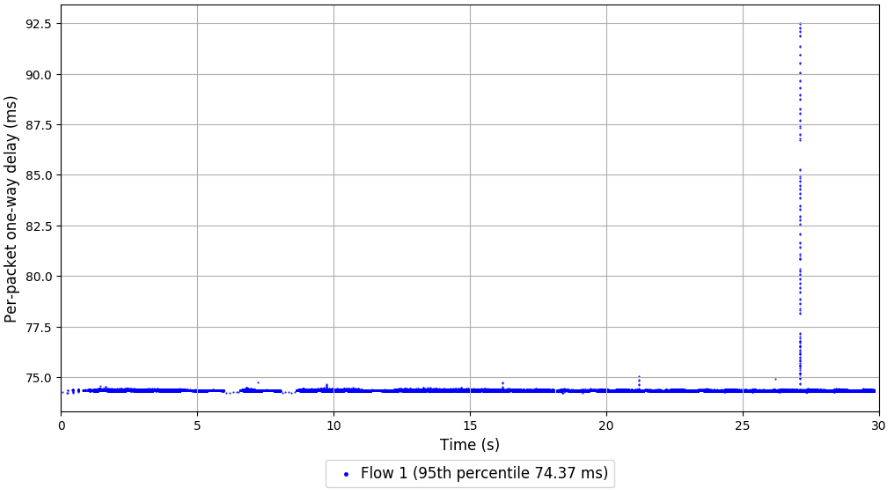
```
Run 9: Statistics of QUIC Cubic

Start at: 2017-09-21 11:49:24
End at: 2017-09-21 11:49:54
Local clock offset: -0.241 ms
Remote clock offset: 7.881 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.92 Mbit/s
95th percentile per-packet one-way delay: 74.373 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 59.92 Mbit/s
95th percentile per-packet one-way delay: 74.373 ms
Loss rate: 0.56%
```

Run 9: Report of QUIC Cubic — Data Link



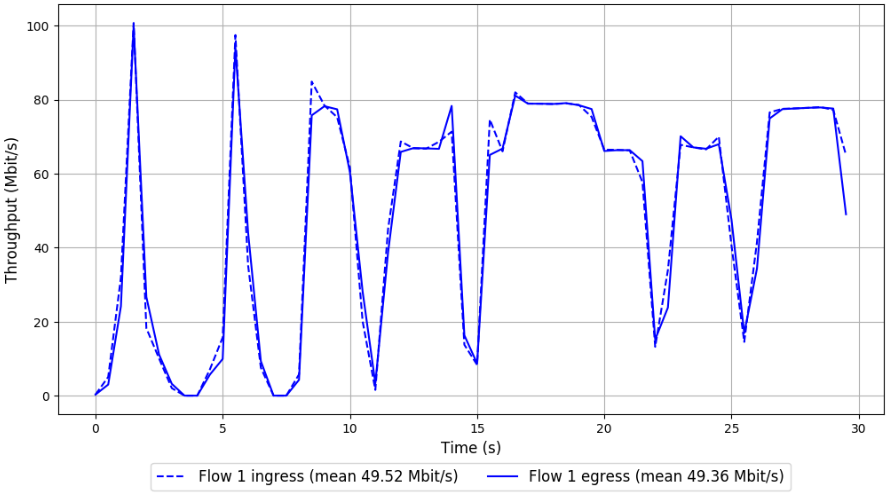


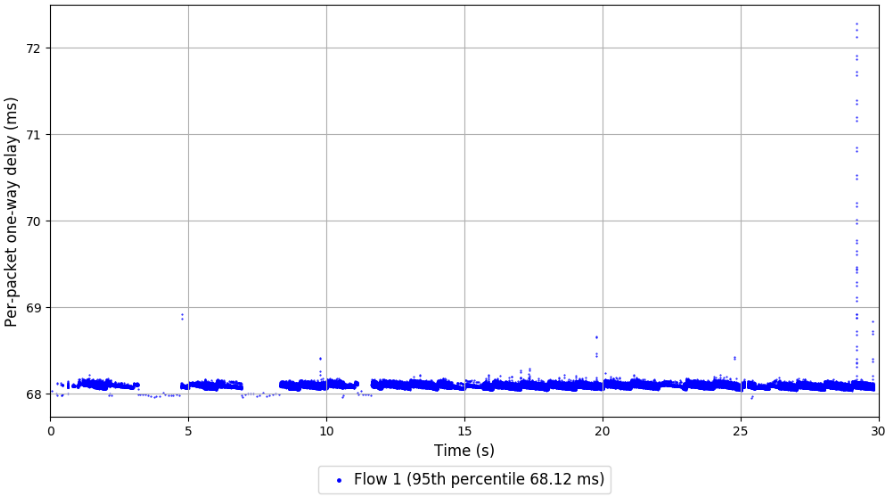
```
Run 10: Statistics of QUIC Cubic

Start at: 2017-09-21 12:06:49
End at: 2017-09-21 12:07:19
Local clock offset: -0.105 ms
Remote clock offset: 11.779 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 49.36 Mbit/s
95th percentile per-packet one-way delay: 68.122 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 49.36 Mbit/s
95th percentile per-packet one-way delay: 68.122 ms
Loss rate: 0.89%
```

Run 10: Report of QUIC Cubic — Data Link



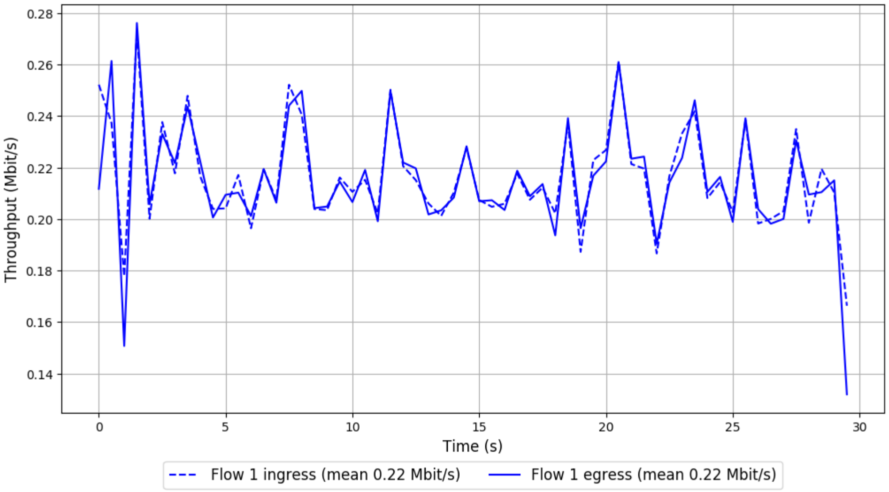


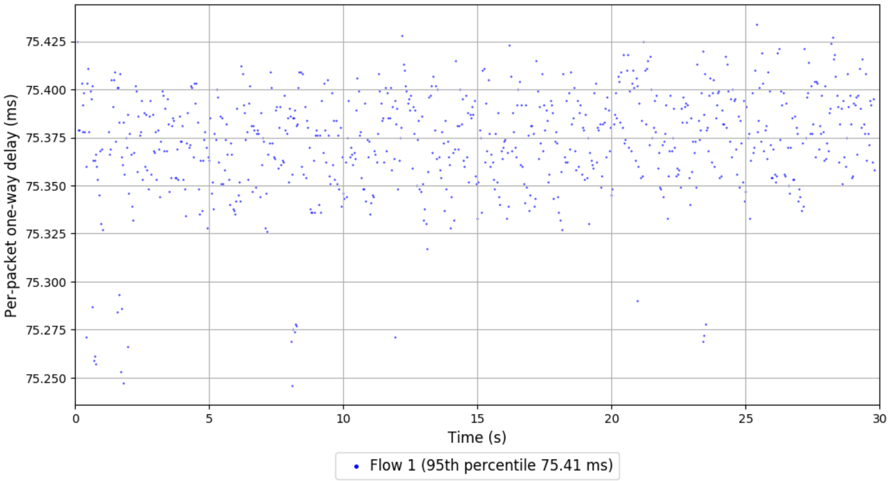
```
Run 1: Statistics of SCReAM

Start at: 2017-09-21 09:24:16
End at: 2017-09-21 09:24:46
Local clock offset: 0.059 ms
Remote clock offset: 6.951 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 75.409 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 75.409 ms
Loss rate: 0.51%
```

Run 1: Report of SCReAM — Data Link



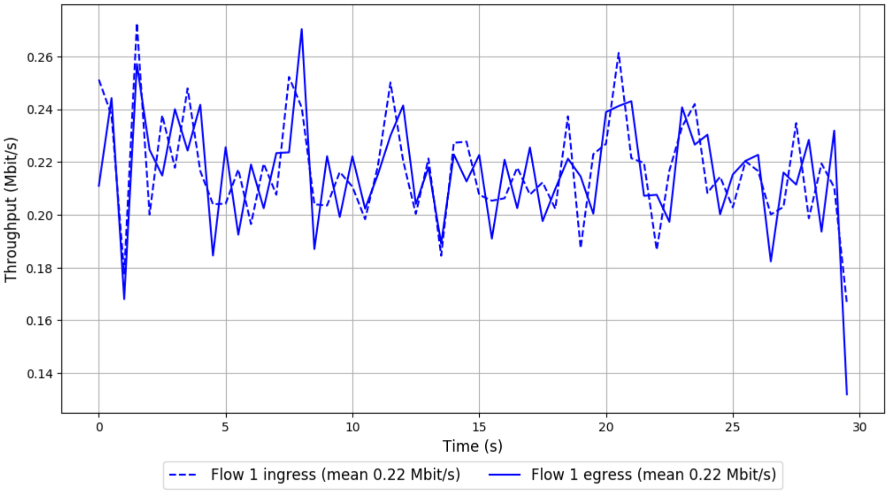


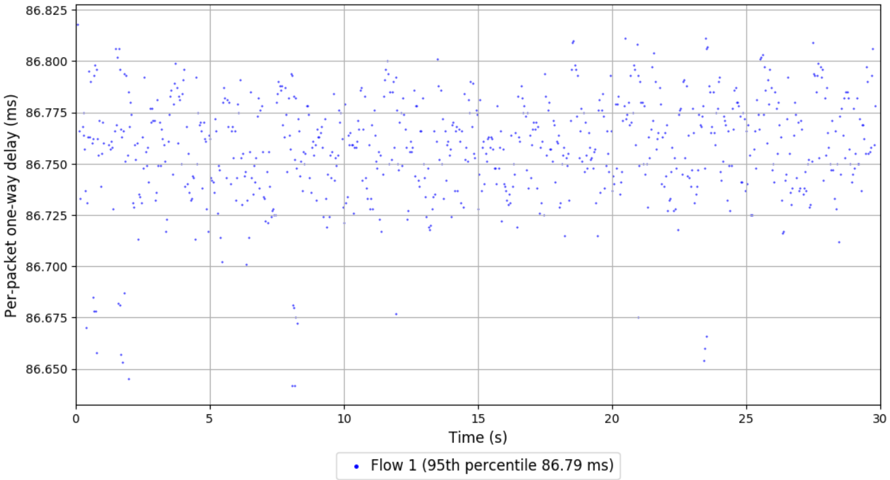
```
Run 2: Statistics of SCReAM

Start at: 2017-09-21 09:42:13
End at: 2017-09-21 09:42:43
Local clock offset: -0.051 ms
Remote clock offset: -5.712 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.794 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.794 ms
Loss rate: 0.51%
```

Run 2: Report of SCReAM — Data Link



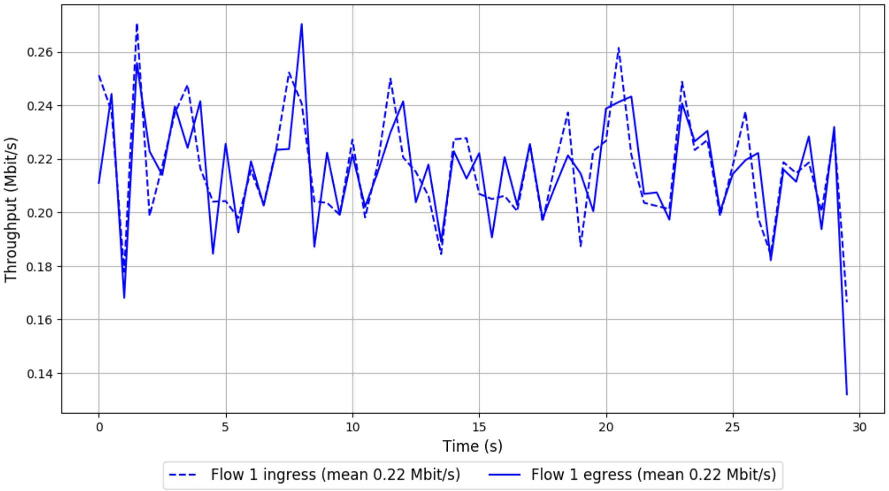


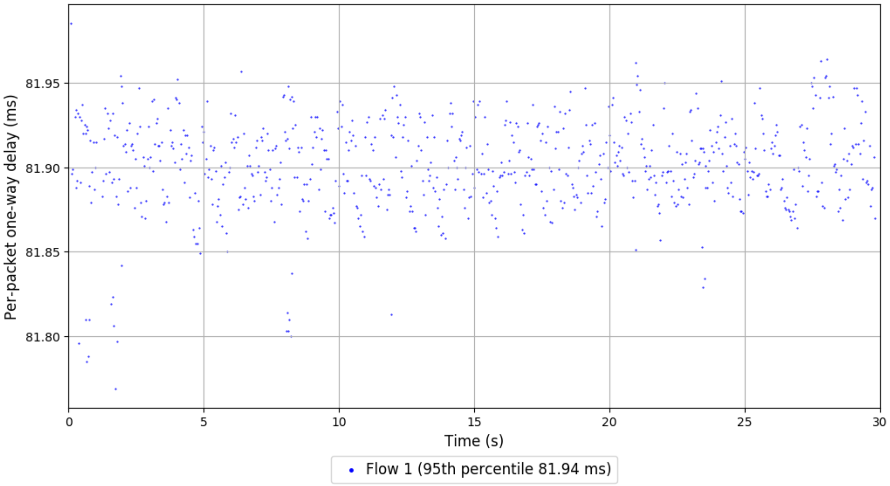
```
Run 3: Statistics of SCReAM

Start at: 2017-09-21 10:00:41
End at: 2017-09-21 10:01:11
Local clock offset: -0.109 ms
Remote clock offset: -0.259 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.941 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.941 ms
Loss rate: 0.52%
```

Run 3: Report of SCReAM — Data Link



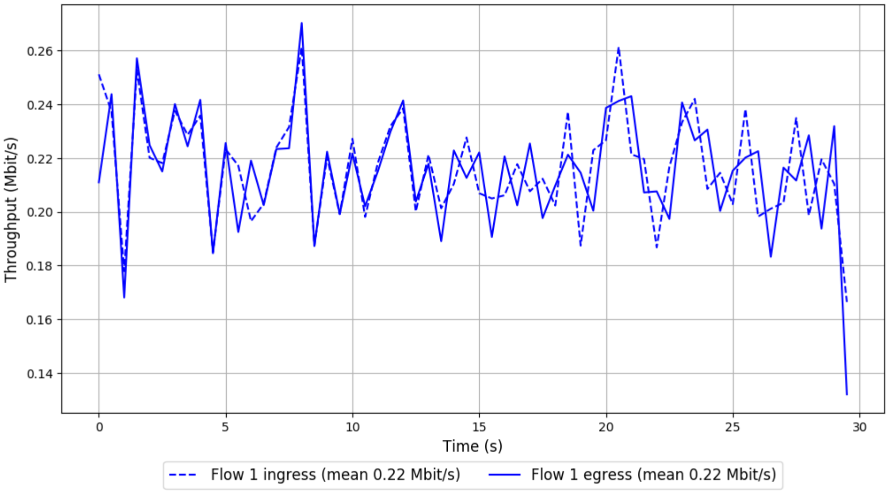


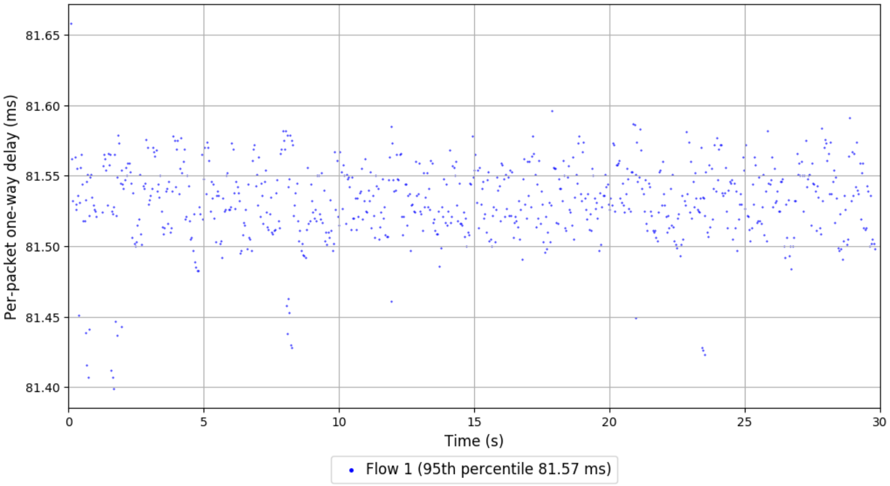
```
Run 4: Statistics of SCReAM

Start at: 2017-09-21 10:18:12
End at: 2017-09-21 10:18:42
Local clock offset: -0.173 ms
Remote clock offset: -0.067 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.573 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.573 ms
Loss rate: 0.51%
```

Run 4: Report of SCReAM — Data Link



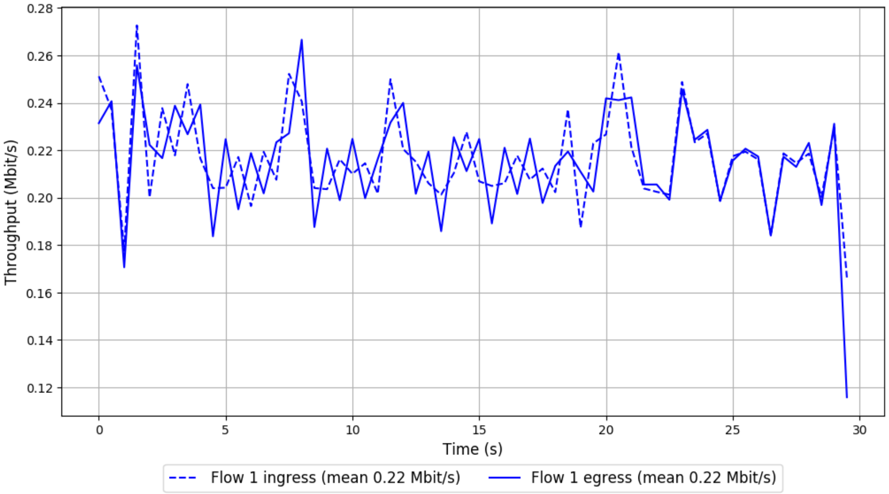


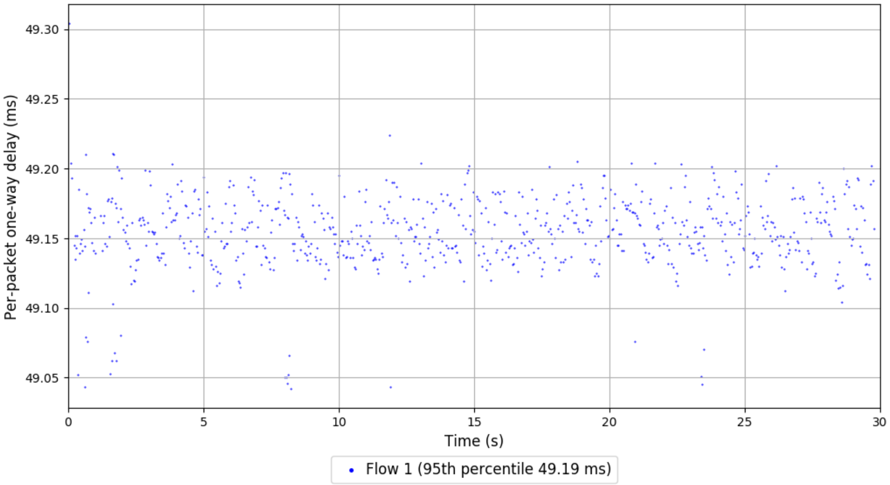
```
Run 5: Statistics of SCReAM

Start at: 2017-09-21 10:36:07
End at: 2017-09-21 10:36:37
Local clock offset: -0.244 ms
Remote clock offset: 34.3 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.193 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.193 ms
Loss rate: 0.51%
```

Run 5: Report of SCReAM — Data Link





```
Run 6: Statistics of SCReAM

Start at: 2017-09-21 10:53:49
End at: 2017-09-21 10:54:19
Local clock offset: -0.253 ms
Remote clock offset: 29.262 ms
```

Run 6: Report of SCReAM — Data Link

Figure is missing

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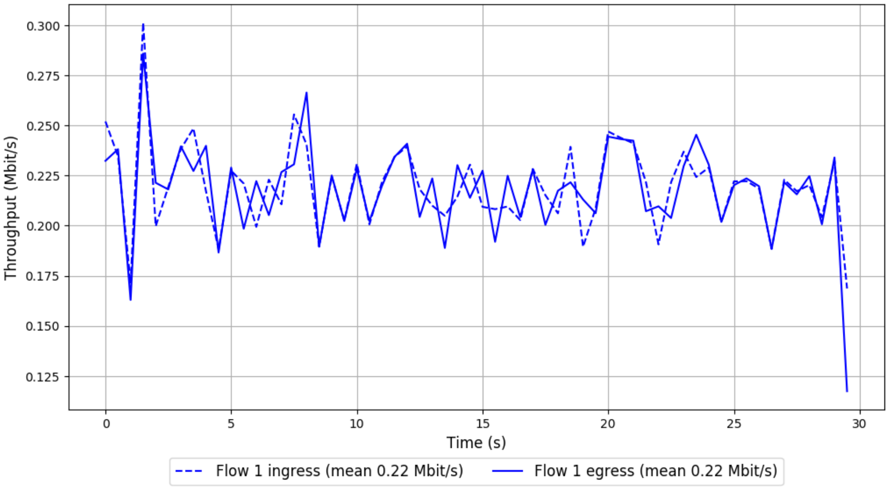
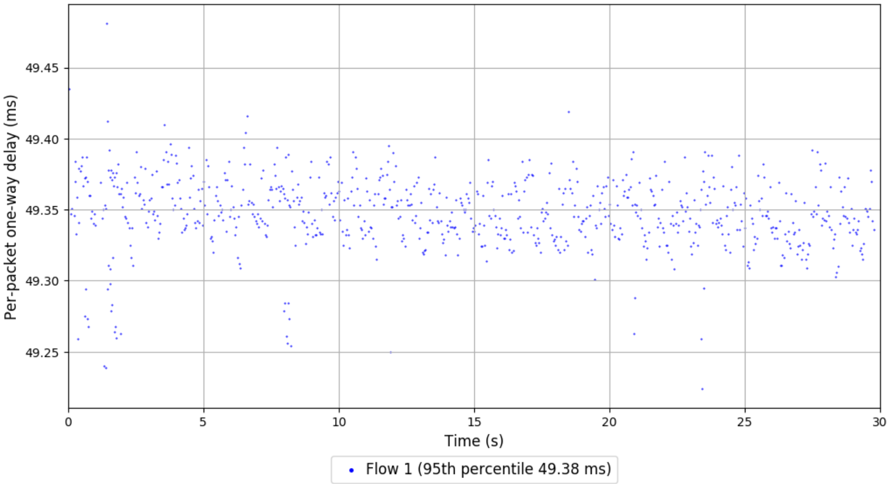
```
Run 7: Statistics of SCReAM

Start at: 2017-09-21 11:11:31
End at: 2017-09-21 11:12:02
Local clock offset: -0.21 ms
Remote clock offset: 33.685 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.384 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.384 ms
Loss rate: 0.52%
```

Run 7: Report of SCReAM — Data Link



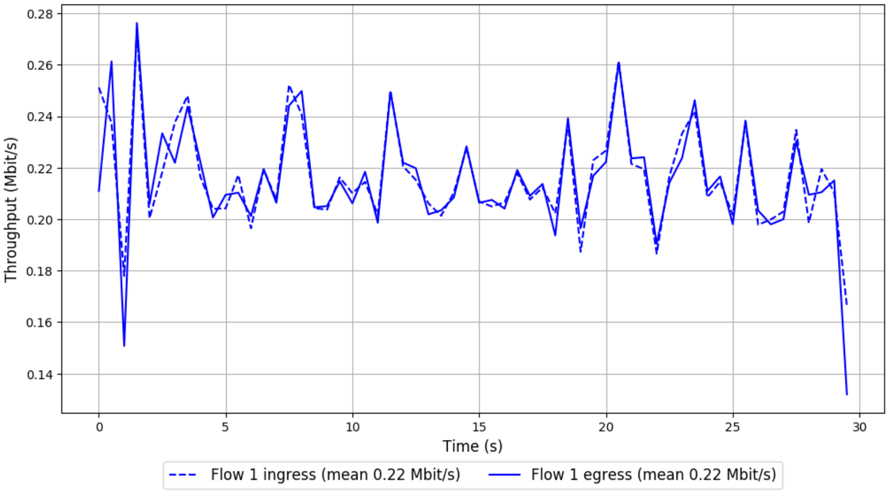


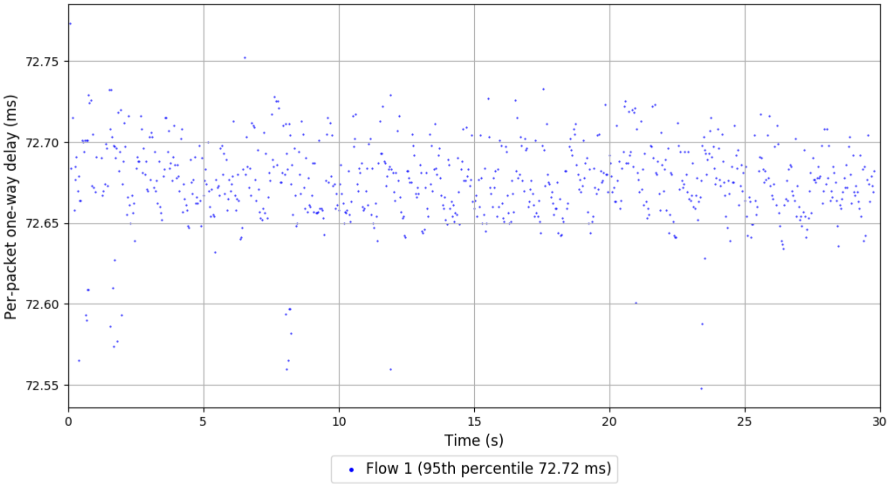
```
Run 8: Statistics of SCReAM

Start at: 2017-09-21 11:29:16
End at: 2017-09-21 11:29:46
Local clock offset: -0.202 ms
Remote clock offset: 8.394 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 72.715 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 72.715 ms
Loss rate: 0.51%
```

Run 8: Report of SCReAM — Data Link



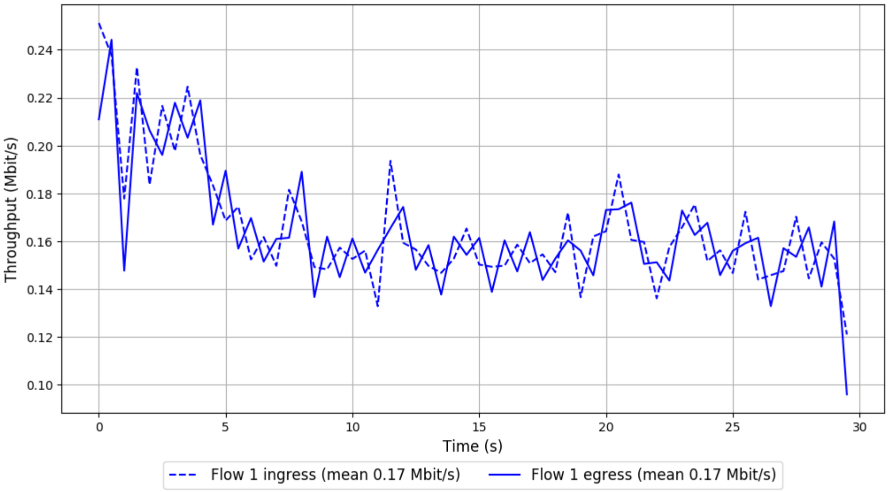


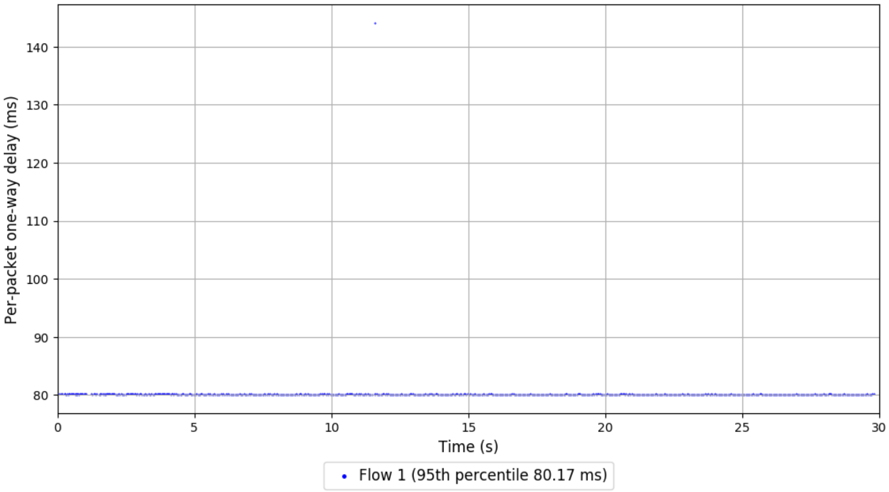
```
Run 9: Statistics of SCReAM

Start at: 2017-09-21 11:46:53
End at: 2017-09-21 11:47:23
Local clock offset: -0.274 ms
Remote clock offset: 2.114 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 80.171 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 80.171 ms
Loss rate: 0.70%
```

Run 9: Report of SCReAM — Data Link



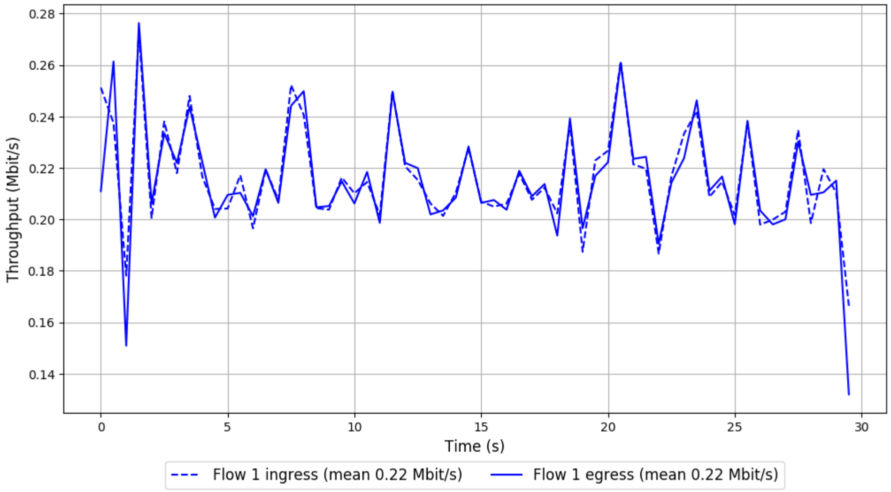


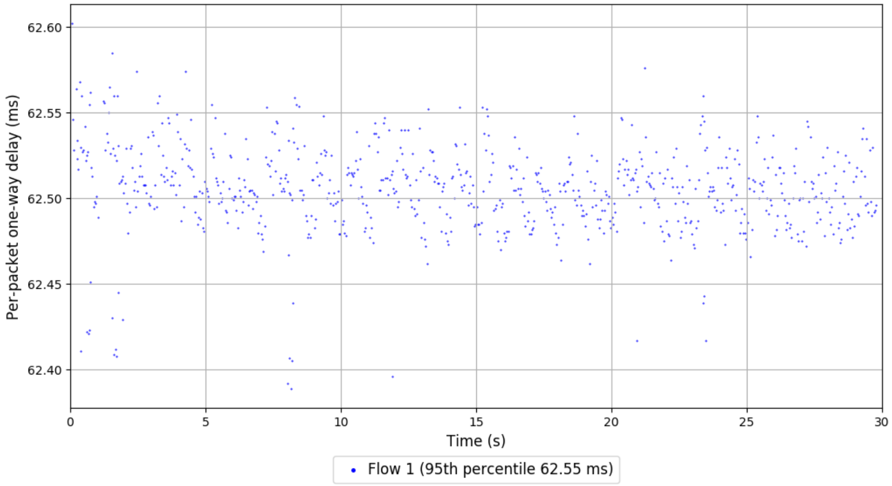
```
Run 10: Statistics of SCReAM

Start at: 2017-09-21 12:04:16
End at: 2017-09-21 12:04:46
Local clock offset: -0.118 ms
Remote clock offset: 17.606 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.546 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.546 ms
Loss rate: 0.51%
```

Run 10: Report of SCReAM — Data Link



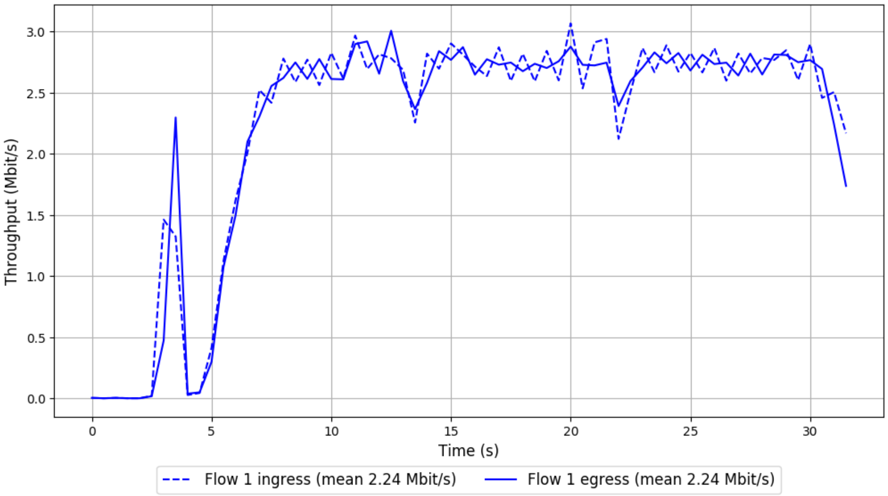


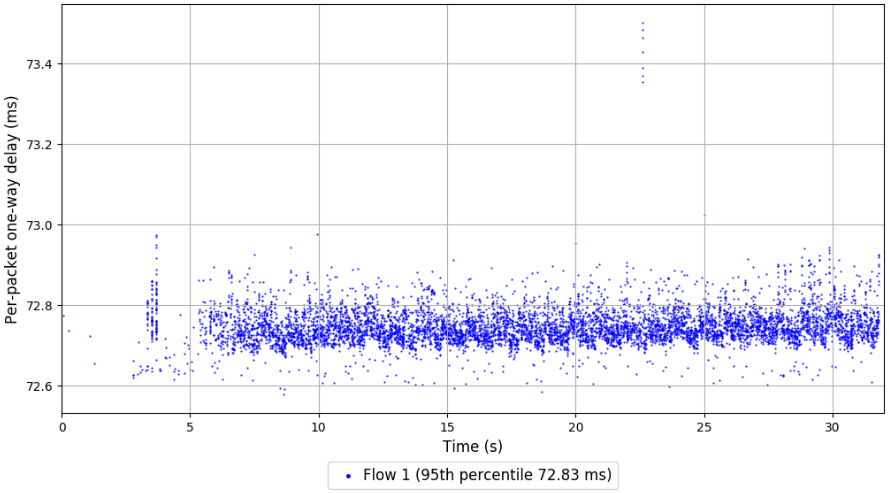
```
Run 1: Statistics of WebRTC media

Start at: 2017-09-21 09:27:59
End at: 2017-09-21 09:28:29
Local clock offset: 0.084 ms
Remote clock offset: 7.916 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 72.826 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 72.826 ms
Loss rate: 0.60%
```

Run 1: Report of WebRTC media — Data Link



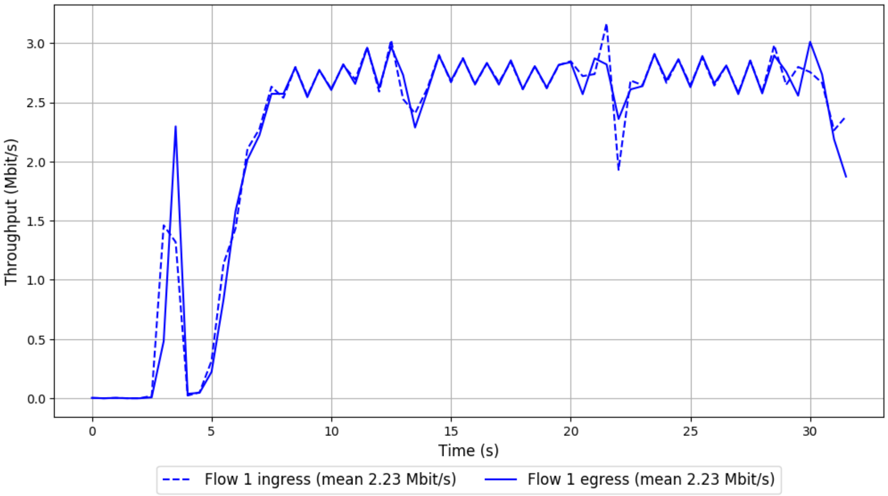


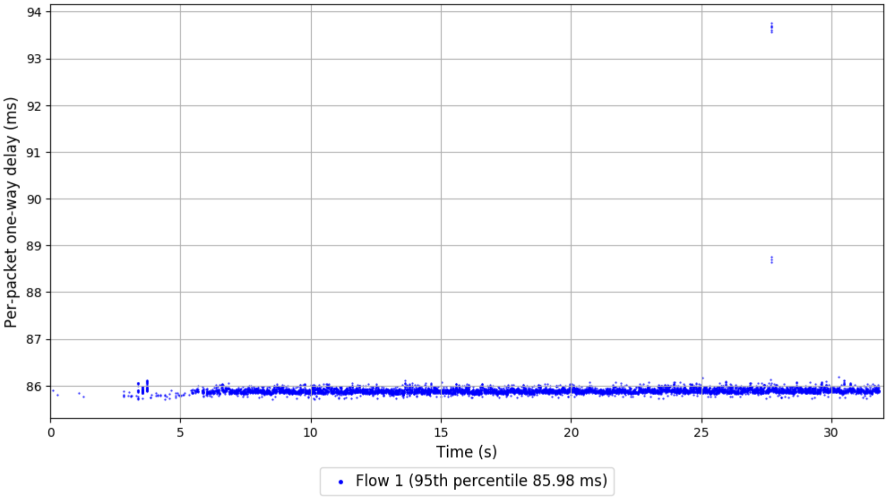
```
Run 2: Statistics of WebRTC media

Start at: 2017-09-21 09:45:57
End at: 2017-09-21 09:46:27
Local clock offset: -0.095 ms
Remote clock offset: -4.75 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 85.985 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 85.985 ms
Loss rate: 0.65%
```

Run 2: Report of WebRTC media — Data Link



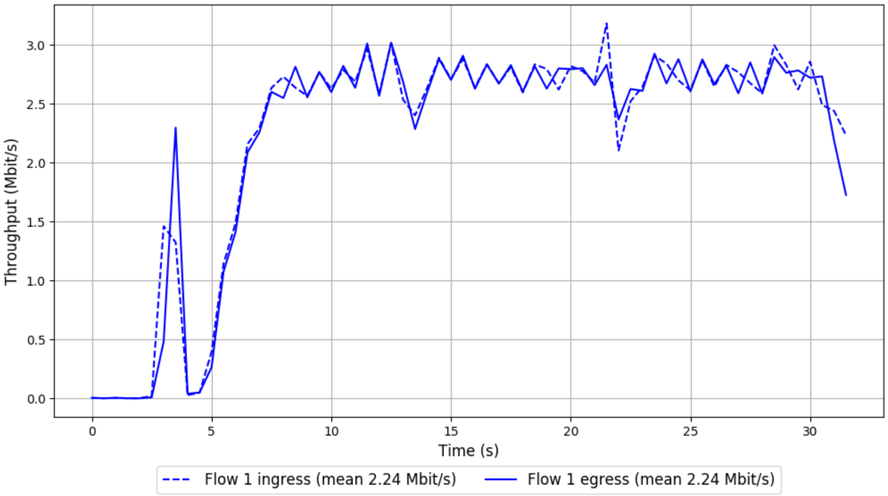


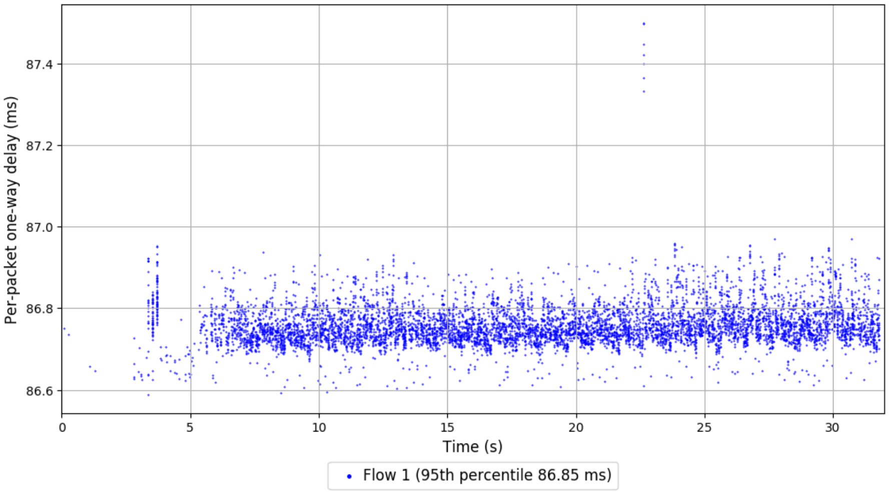
```
Run 3: Statistics of WebRTC media

Start at: 2017-09-21 10:04:23
End at: 2017-09-21 10:04:53
Local clock offset: -0.063 ms
Remote clock offset: -4.945 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 86.852 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 86.852 ms
Loss rate: 0.76%
```

Run 3: Report of WebRTC media — Data Link



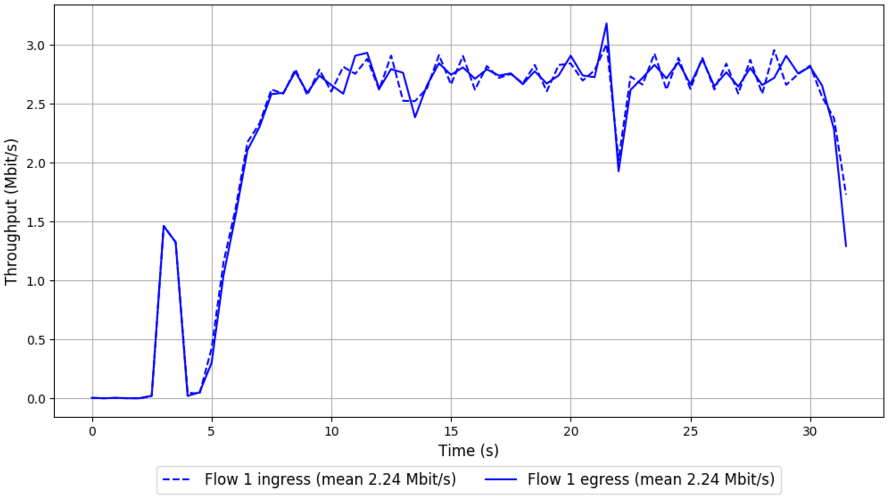


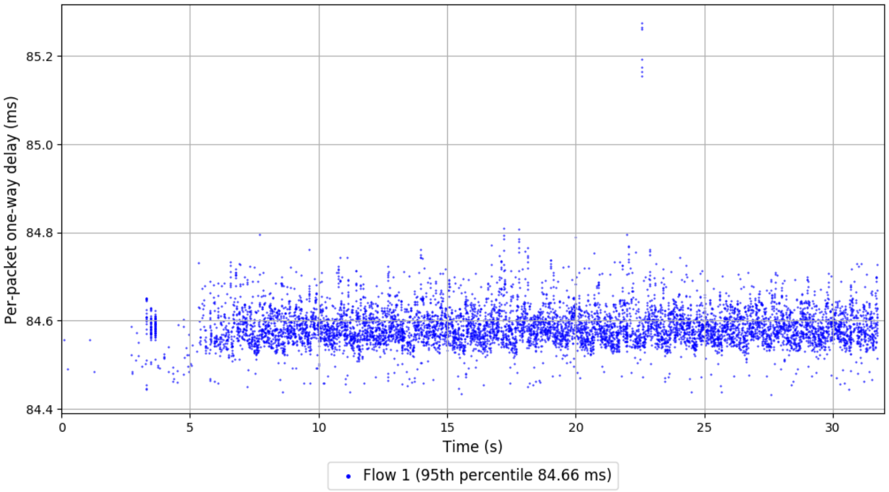
```
Run 4: Statistics of WebRTC media

Start at: 2017-09-21 10:21:57
End at: 2017-09-21 10:22:27
Local clock offset: -0.177 ms
Remote clock offset: -0.892 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 84.662 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 84.662 ms
Loss rate: 0.61%
```

Run 4: Report of WebRTC media — Data Link



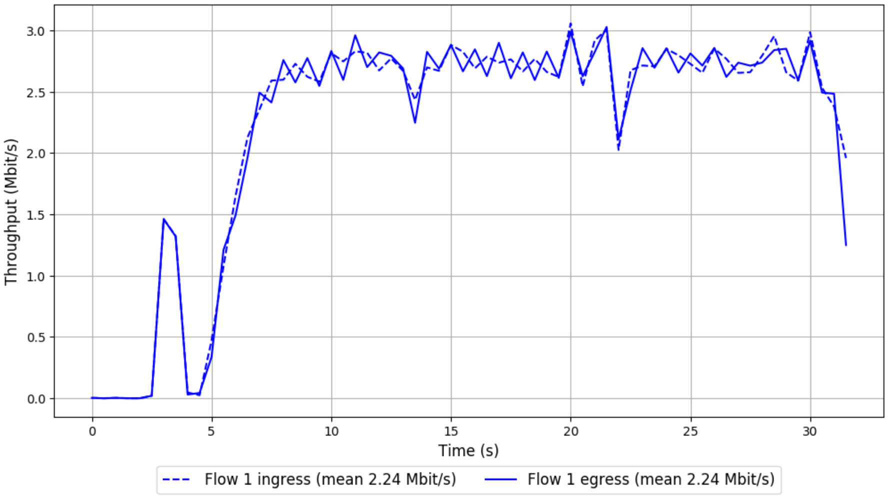


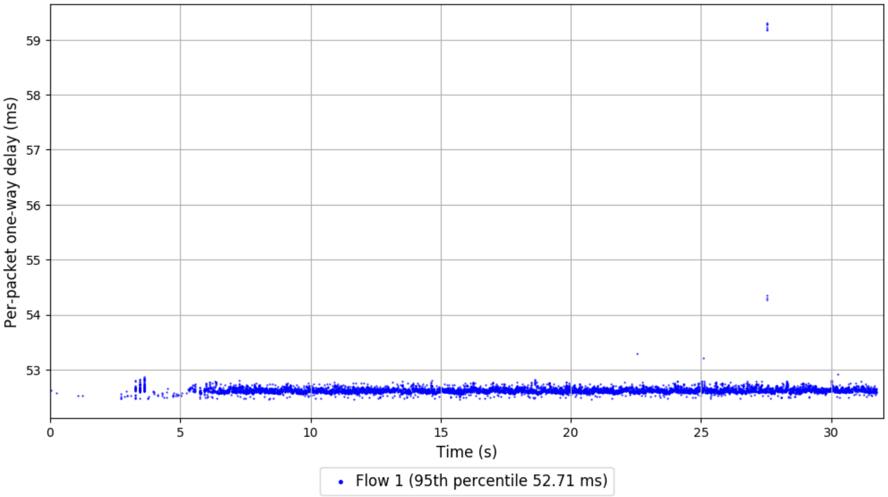
```
Run 5: Statistics of WebRTC media

Start at: 2017-09-21 10:39:52
End at: 2017-09-21 10:40:22
Local clock offset: -0.164 ms
Remote clock offset: 29.57 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 52.708 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 52.708 ms
Loss rate: 0.65%
```

Run 5: Report of WebRTC media — Data Link



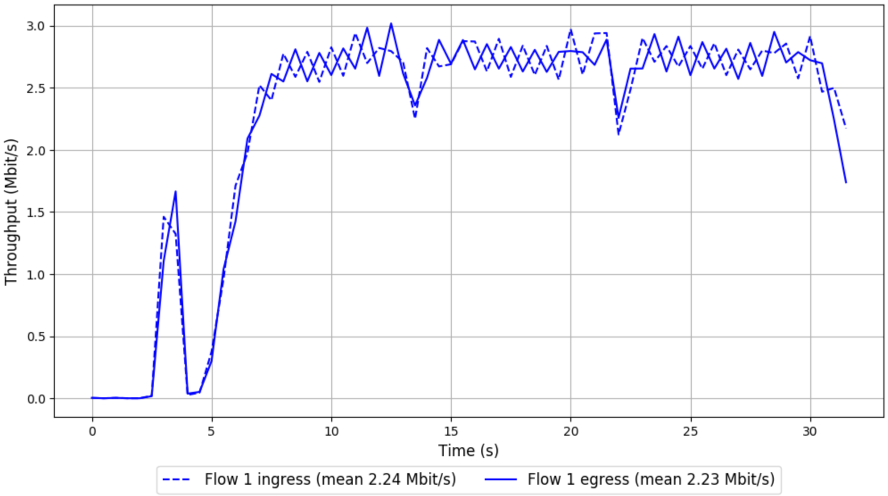


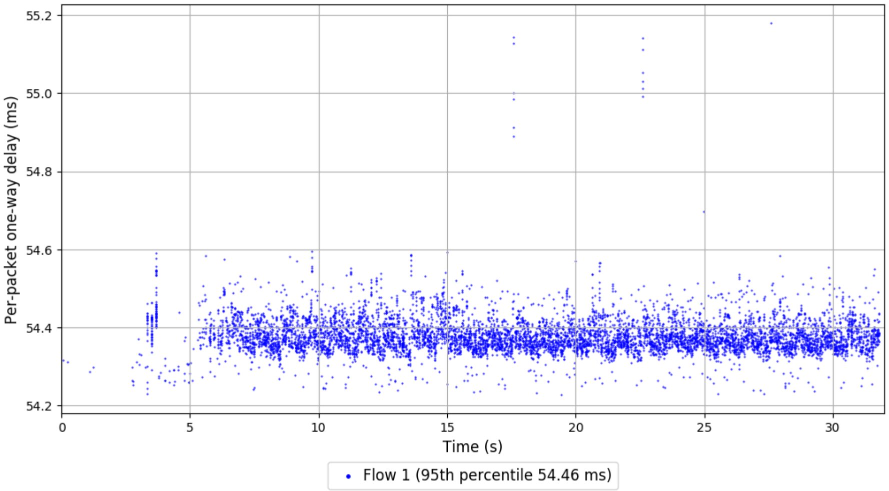
```
Run 6: Statistics of WebRTC media

Start at: 2017-09-21 10:57:37
End at: 2017-09-21 10:58:07
Local clock offset: -0.284 ms
Remote clock offset: 29.186 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 54.456 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 54.456 ms
Loss rate: 0.60%
```

Run 6: Report of WebRTC media — Data Link



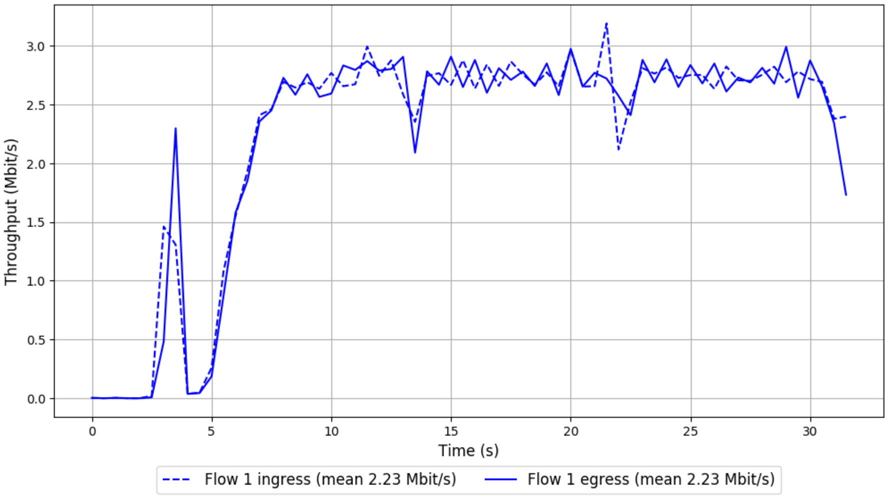


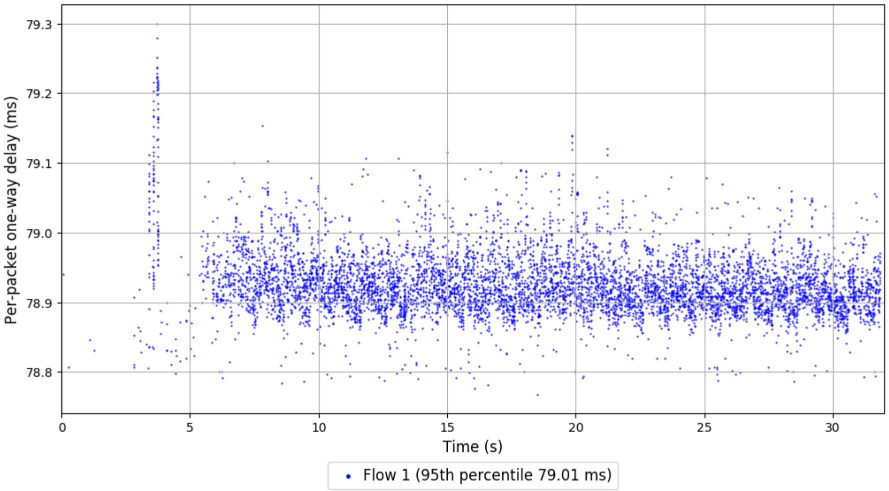
```
Run 7: Statistics of WebRTC media

Start at: 2017-09-21 11:15:16
End at: 2017-09-21 11:15:46
Local clock offset: -0.229 ms
Remote clock offset: 3.819 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 79.012 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 79.012 ms
Loss rate: 0.72%
```

Run 7: Report of WebRTC media — Data Link



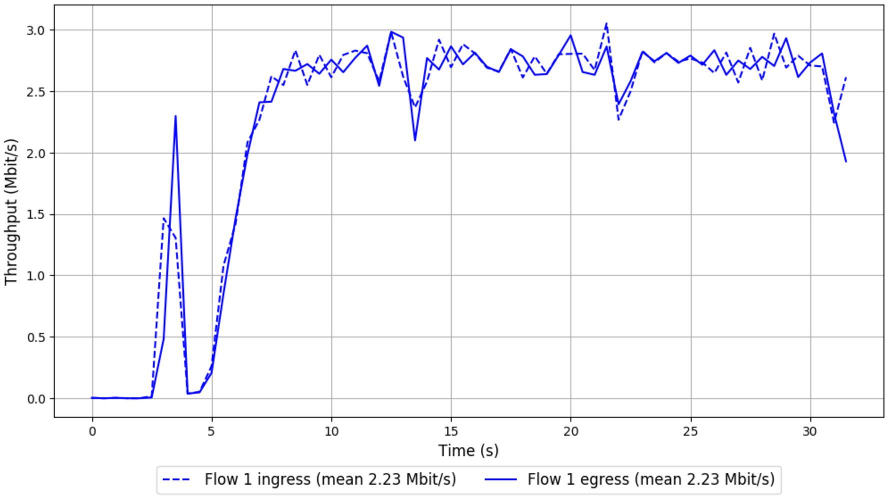


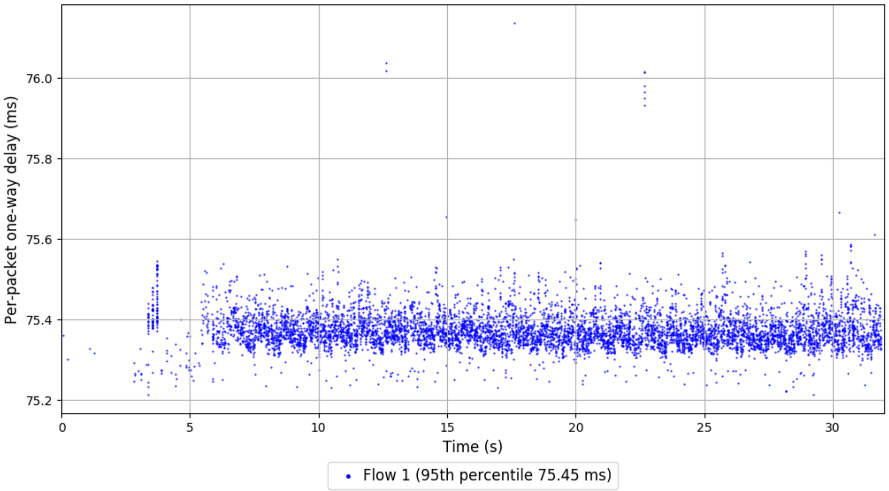
```
Run 8: Statistics of WebRTC media

Start at: 2017-09-21 11:33:01
End at: 2017-09-21 11:33:31
Local clock offset: -0.196 ms
Remote clock offset: 7.474 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 75.454 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 75.454 ms
Loss rate: 0.65%
```

Run 8: Report of WebRTC media — Data Link



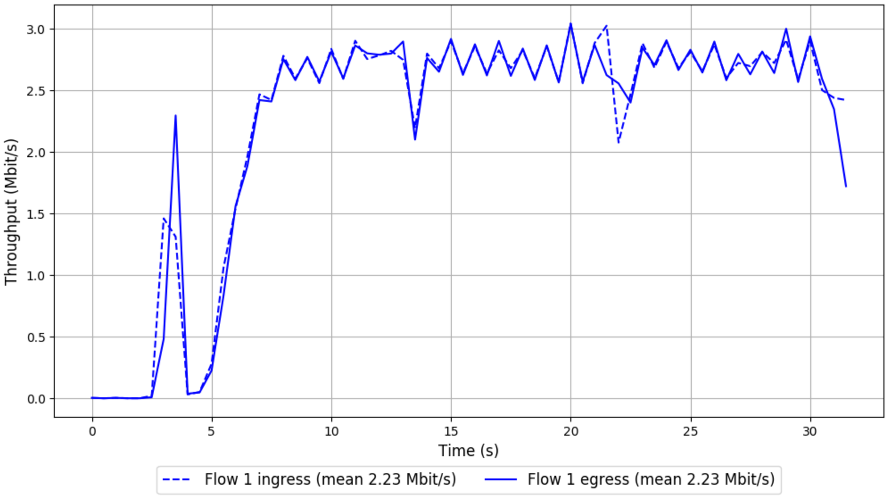


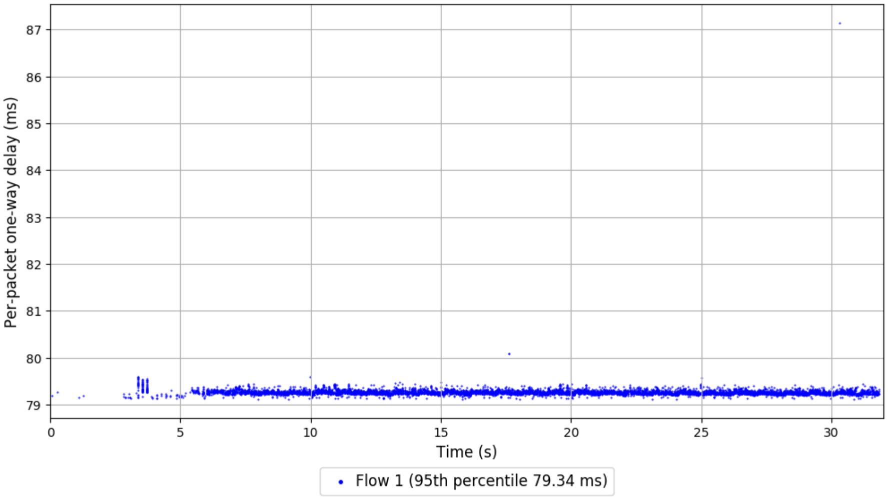
```
Run 9: Statistics of WebRTC media

Start at: 2017-09-21 11:50:37
End at: 2017-09-21 11:51:07
Local clock offset: -0.192 ms
Remote clock offset: 2.975 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 79.345 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 79.345 ms
Loss rate: 0.77%
```

Run 9: Report of WebRTC media — Data Link



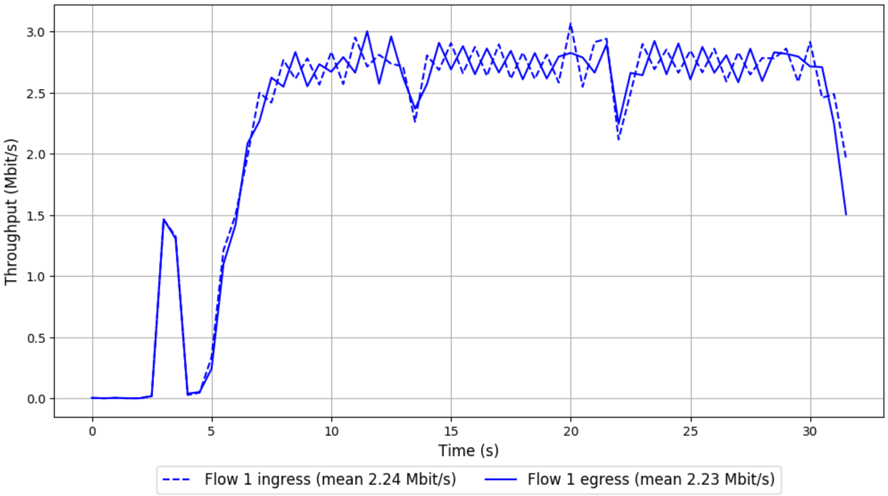


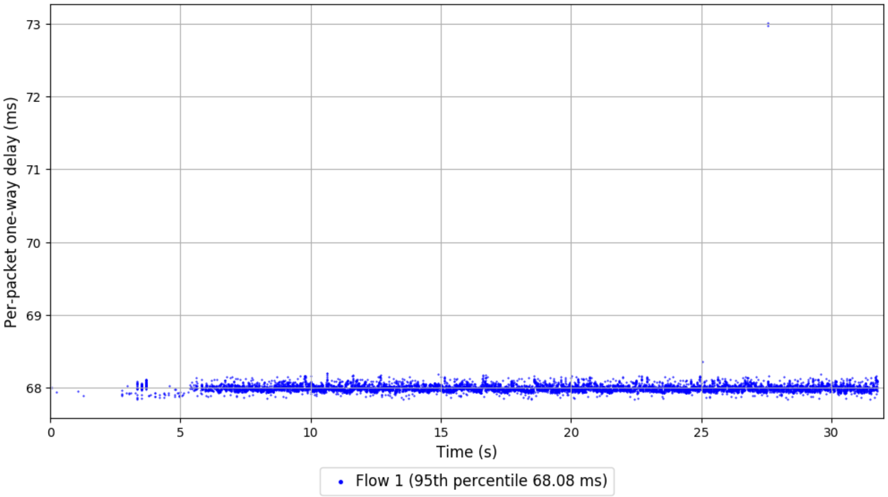
```
Run 10: Statistics of WebRTC media

Start at: 2017-09-21 12:08:03
End at: 2017-09-21 12:08:33
Local clock offset: -0.134 ms
Remote clock offset: 13.636 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 68.085 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 68.085 ms
Loss rate: 0.61%
```

Run 10: Report of WebRTC media — Data Link



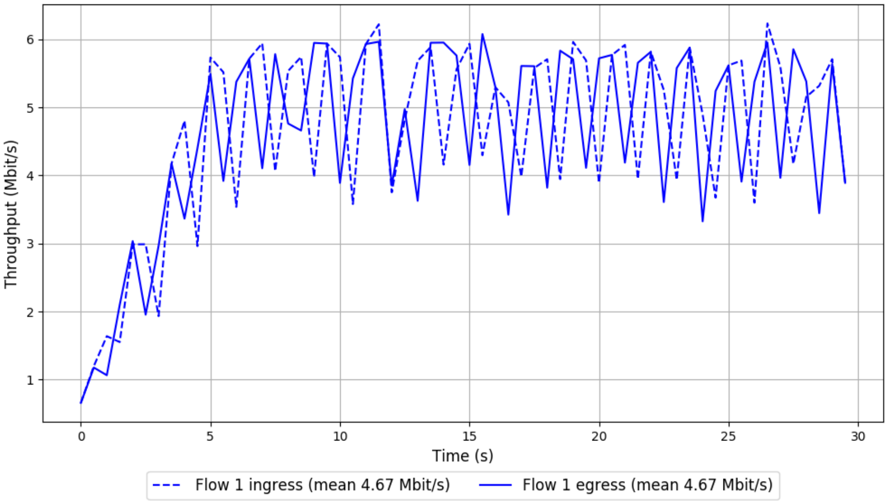


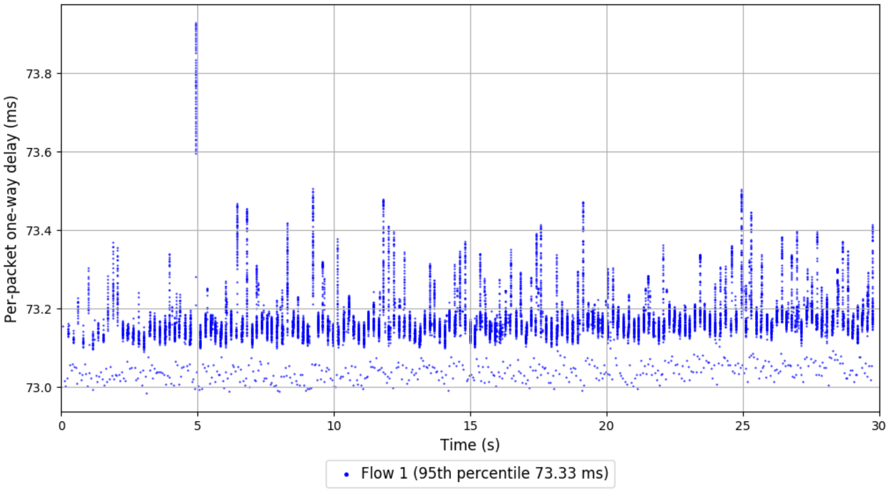
```
Run 1: Statistics of Sprout

Start at: 2017-09-21 09:23:06
End at: 2017-09-21 09:23:36
Local clock offset: -0.017 ms
Remote clock offset: 6.863 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.67 Mbit/s
95th percentile per-packet one-way delay: 73.328 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 4.67 Mbit/s
95th percentile per-packet one-way delay: 73.328 ms
Loss rate: 0.71%
```

Run 1: Report of Sprout — Data Link



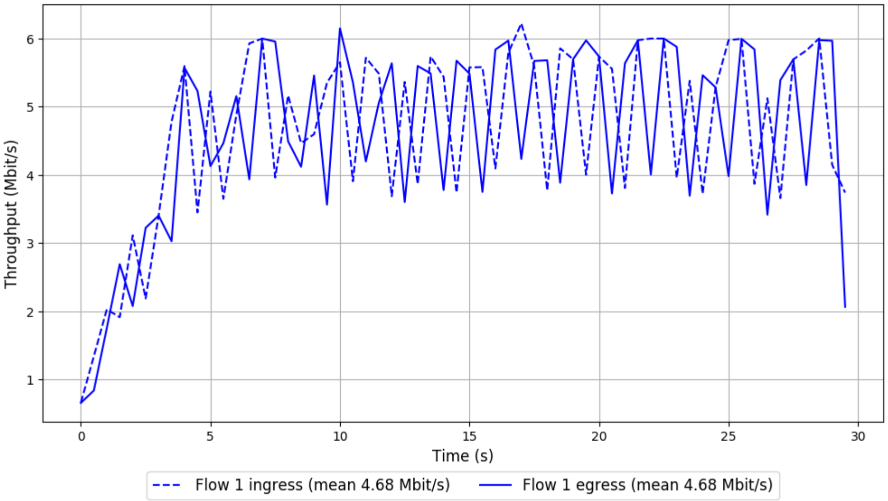


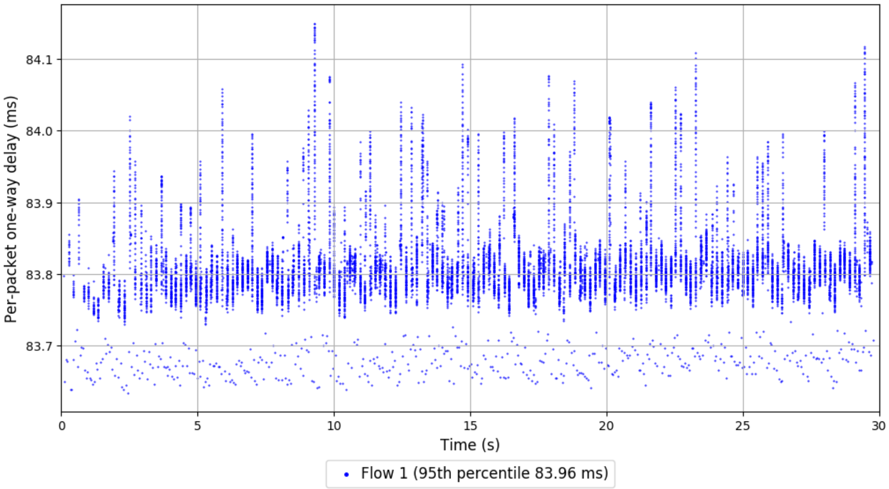
```
Run 2: Statistics of Sprout

Start at: 2017-09-21 09:41:03
End at: 2017-09-21 09:41:33
Local clock offset: 0.01 ms
Remote clock offset: -0.886 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.68 Mbit/s
95th percentile per-packet one-way delay: 83.959 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 4.68 Mbit/s
95th percentile per-packet one-way delay: 83.959 ms
Loss rate: 0.67%
```

Run 2: Report of Sprout — Data Link



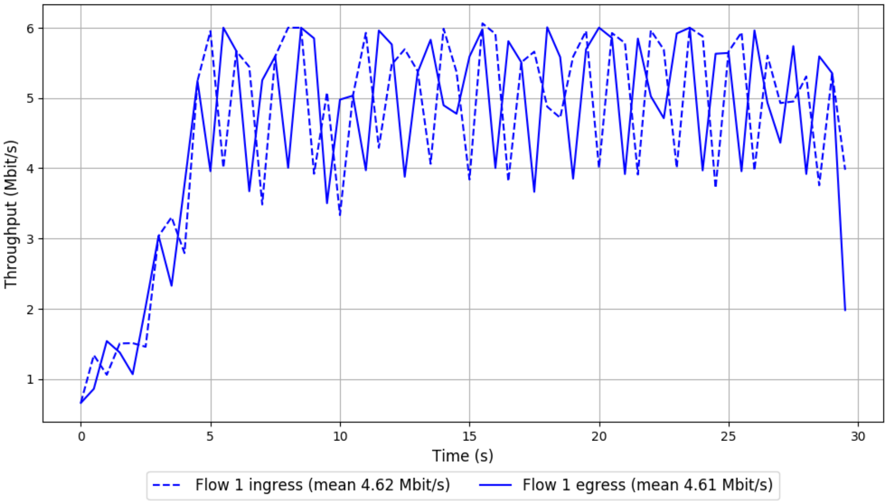


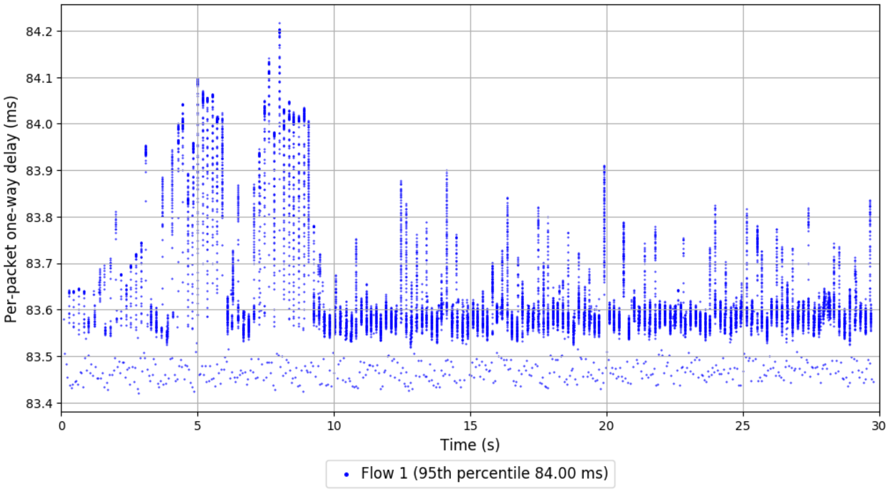
```
Run 3: Statistics of Sprout

Start at: 2017-09-21 09:59:31
End at: 2017-09-21 10:00:01
Local clock offset: -0.146 ms
Remote clock offset: -0.38 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.61 Mbit/s
95th percentile per-packet one-way delay: 84.000 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 4.61 Mbit/s
95th percentile per-packet one-way delay: 84.000 ms
Loss rate: 0.73%
```

Run 3: Report of Sprout — Data Link



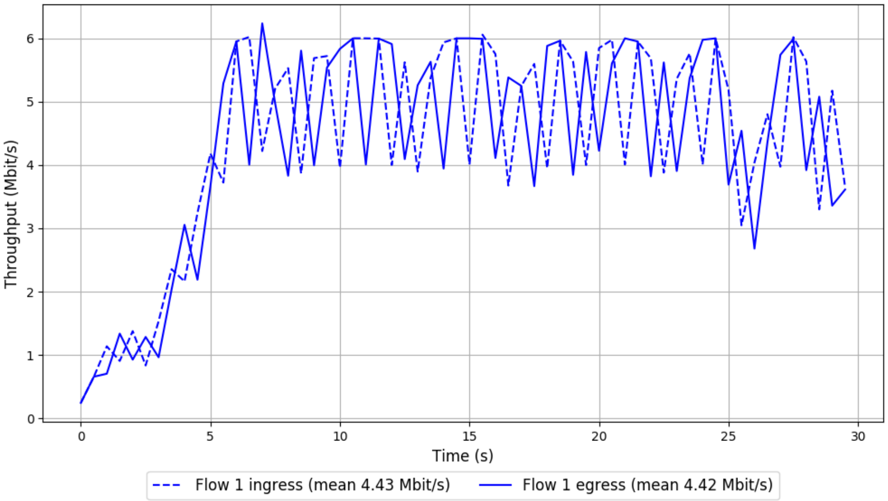


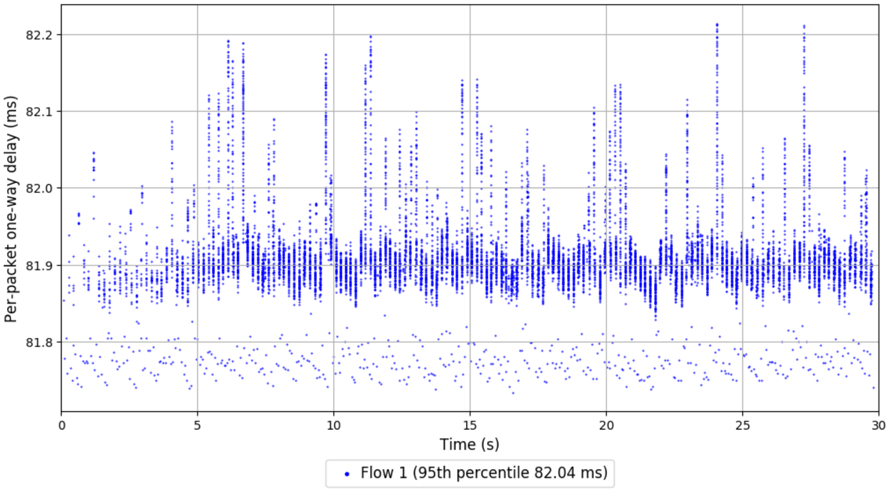
```
Run 4: Statistics of Sprout

Start at: 2017-09-21 10:17:02
End at: 2017-09-21 10:17:32
Local clock offset: -0.165 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.42 Mbit/s
95th percentile per-packet one-way delay: 82.043 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 4.42 Mbit/s
95th percentile per-packet one-way delay: 82.043 ms
Loss rate: 0.70%
```

Run 4: Report of Sprout — Data Link



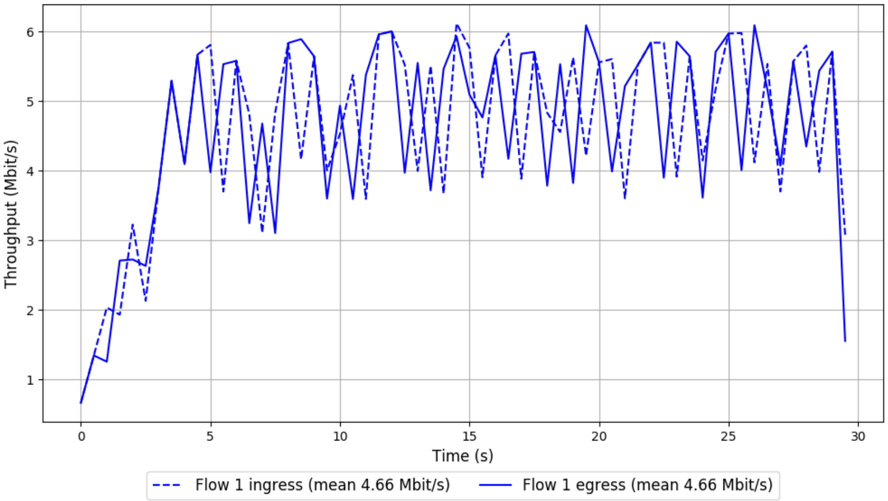


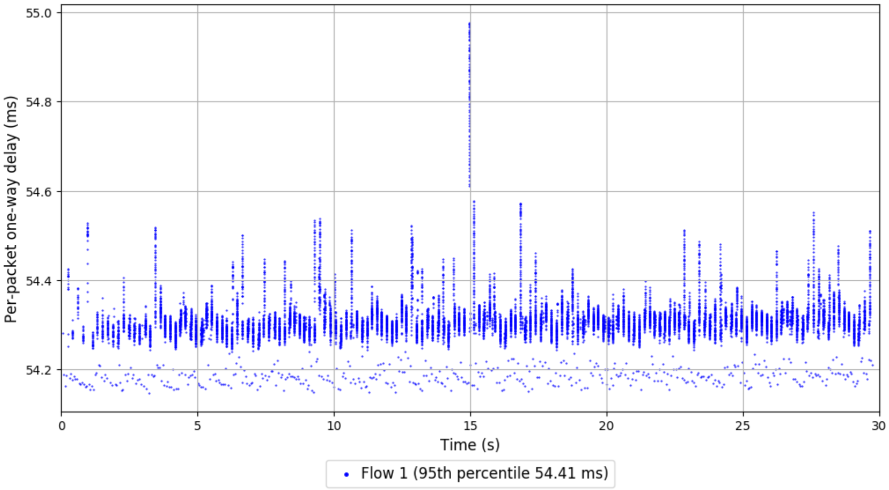
```
Run 5: Statistics of Sprout

Start at: 2017-09-21 10:34:56
End at: 2017-09-21 10:35:26
Local clock offset: -0.211 ms
Remote clock offset: 29.401 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.66 Mbit/s
95th percentile per-packet one-way delay: 54.410 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 4.66 Mbit/s
95th percentile per-packet one-way delay: 54.410 ms
Loss rate: 0.55%
```

Run 5: Report of Sprout — Data Link



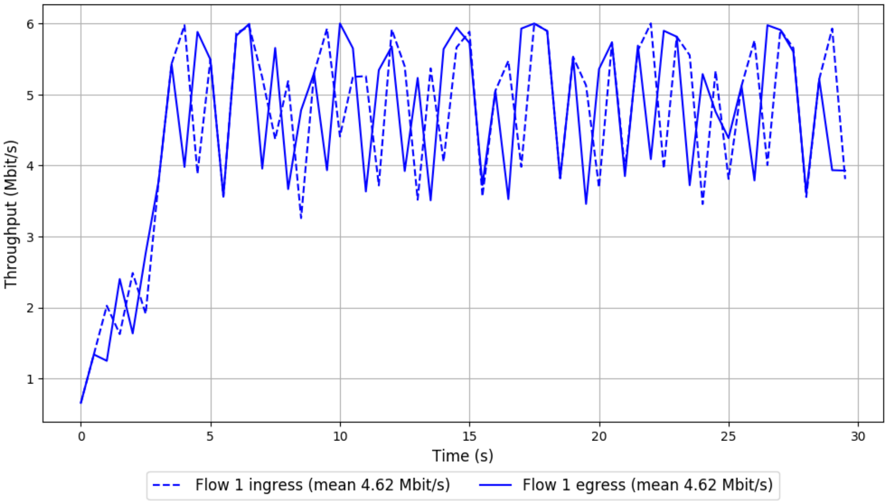


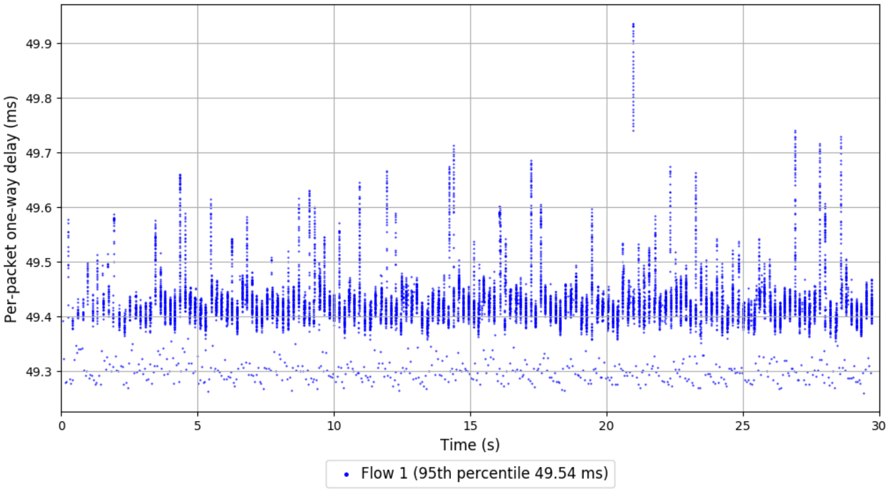
```
Run 6: Statistics of Sprout

Start at: 2017-09-21 10:52:38
End at: 2017-09-21 10:53:08
Local clock offset: -0.221 ms
Remote clock offset: 34.109 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.62 Mbit/s
95th percentile per-packet one-way delay: 49.543 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 4.62 Mbit/s
95th percentile per-packet one-way delay: 49.543 ms
Loss rate: 0.68%
```

Run 6: Report of Sprout — Data Link



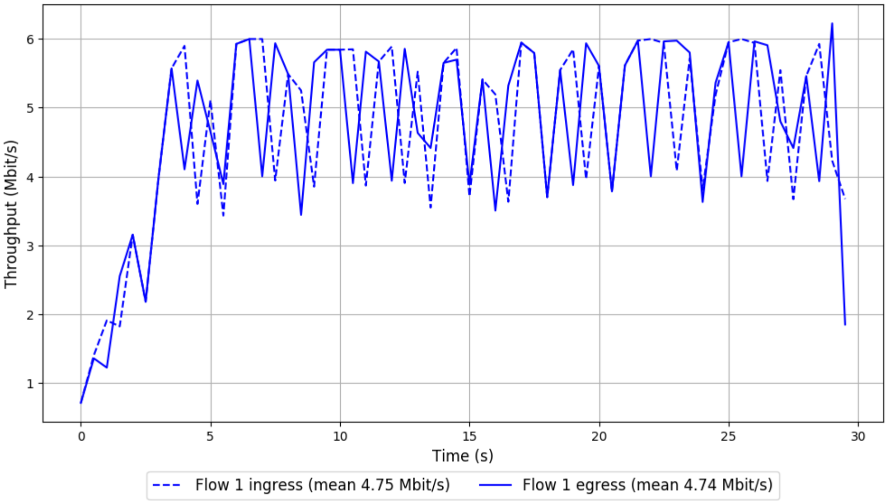


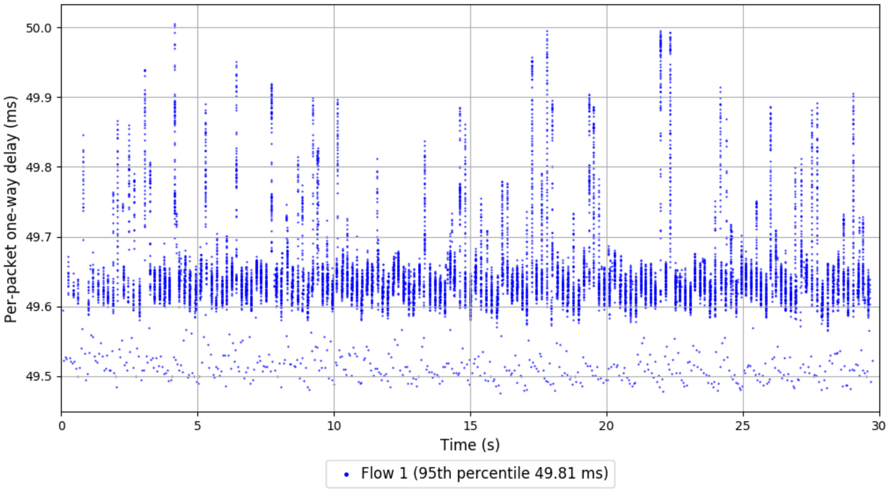
```
Run 7: Statistics of Sprout

Start at: 2017-09-21 11:10:21
End at: 2017-09-21 11:10:51
Local clock offset: -0.19 ms
Remote clock offset: 33.684 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.74 Mbit/s
95th percentile per-packet one-way delay: 49.814 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 4.74 Mbit/s
95th percentile per-packet one-way delay: 49.814 ms
Loss rate: 0.65%
```

Run 7: Report of Sprout — Data Link



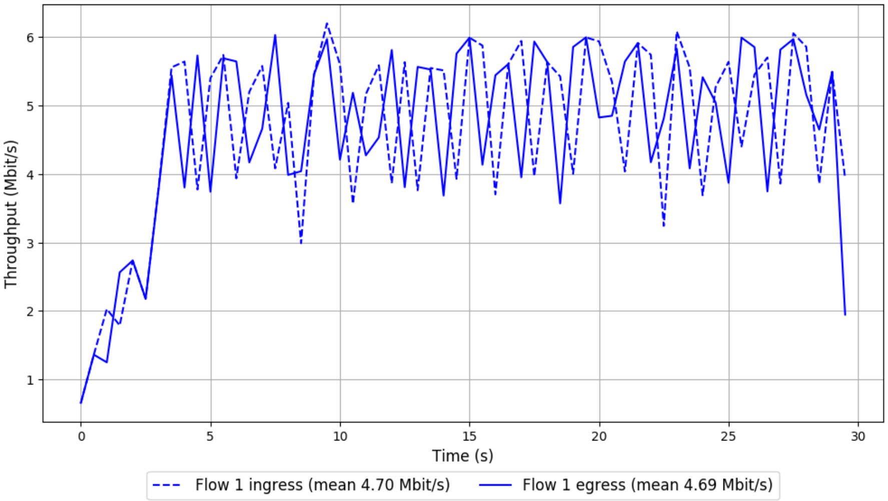


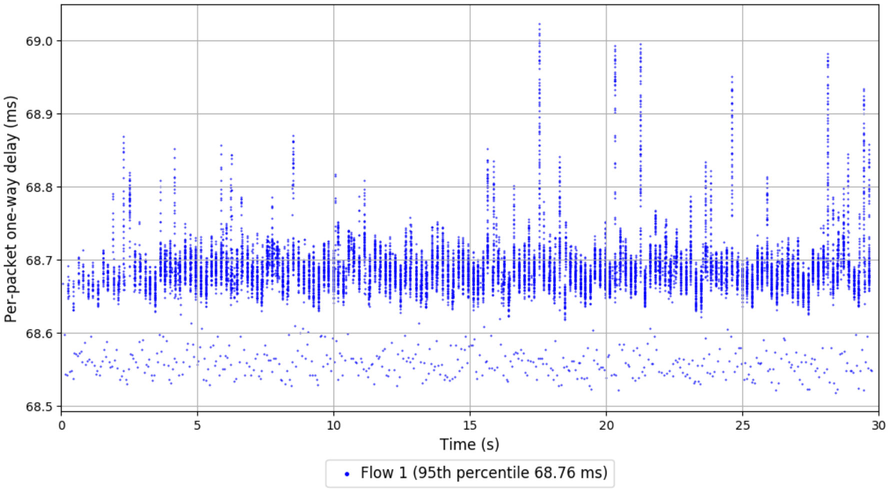
```
Run 8: Statistics of Sprout

Start at: 2017-09-21 11:28:06
End at: 2017-09-21 11:28:36
Local clock offset: -0.194 ms
Remote clock offset: 12.249 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.69 Mbit/s
95th percentile per-packet one-way delay: 68.761 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 4.69 Mbit/s
95th percentile per-packet one-way delay: 68.761 ms
Loss rate: 0.74%
```

Run 8: Report of Sprout — Data Link



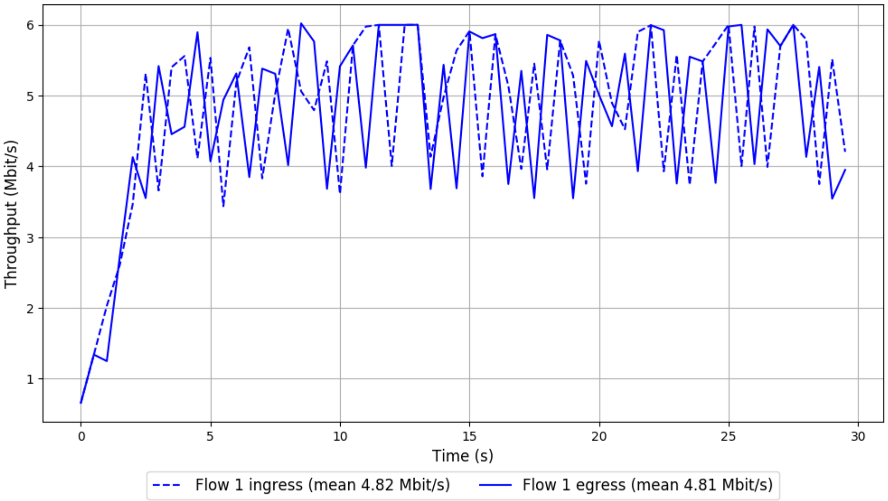


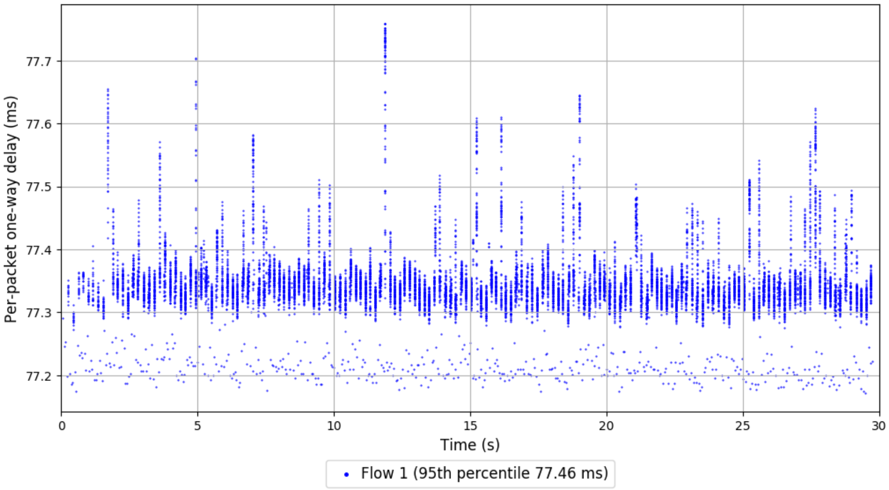
```
Run 9: Statistics of Sprout

Start at: 2017-09-21 11:45:43
End at: 2017-09-21 11:46:13
Local clock offset: -0.223 ms
Remote clock offset: 3.047 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.81 Mbit/s
95th percentile per-packet one-way delay: 77.459 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 4.81 Mbit/s
95th percentile per-packet one-way delay: 77.459 ms
Loss rate: 0.77%
```

Run 9: Report of Sprout — Data Link



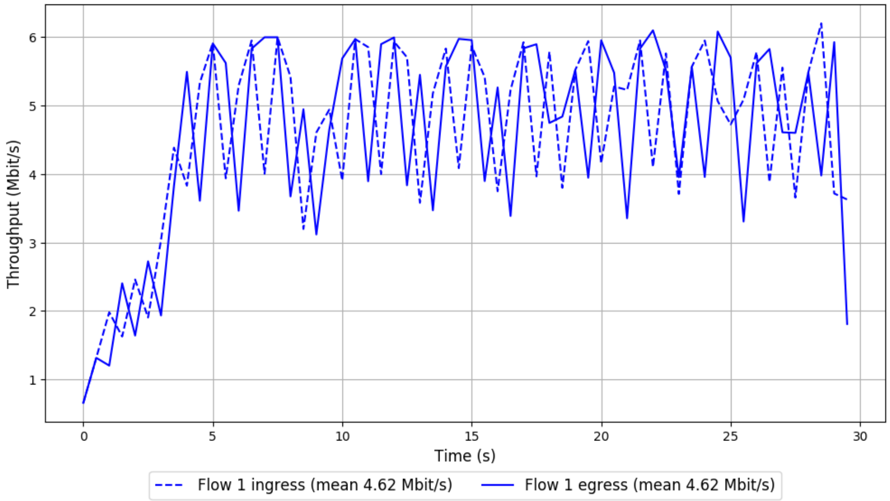


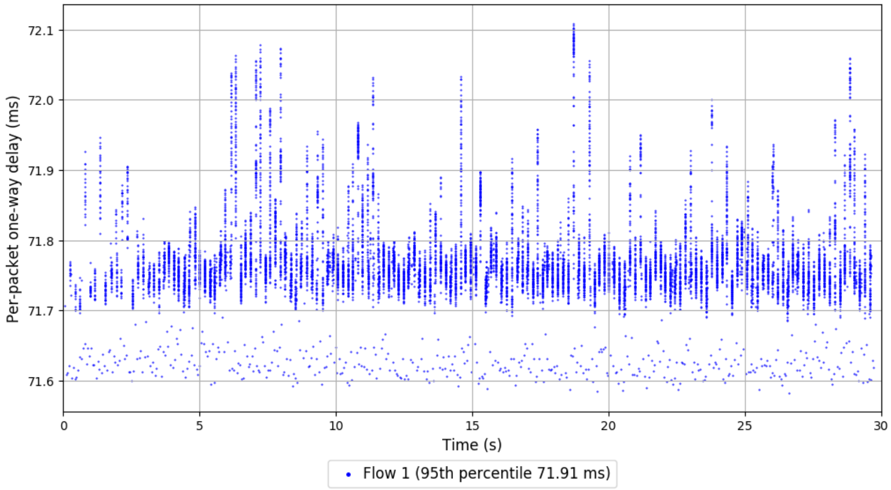
```
Run 10: Statistics of Sprout

Start at: 2017-09-21 12:03:06
End at: 2017-09-21 12:03:36
Local clock offset: -0.189 ms
Remote clock offset: 8.363 ms

# Below is generated by plot.py at 2017-09-21 15:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.62 Mbit/s
95th percentile per-packet one-way delay: 71.909 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 4.62 Mbit/s
95th percentile per-packet one-way delay: 71.909 ms
Loss rate: 0.67%
```

Run 10: Report of Sprout — Data Link



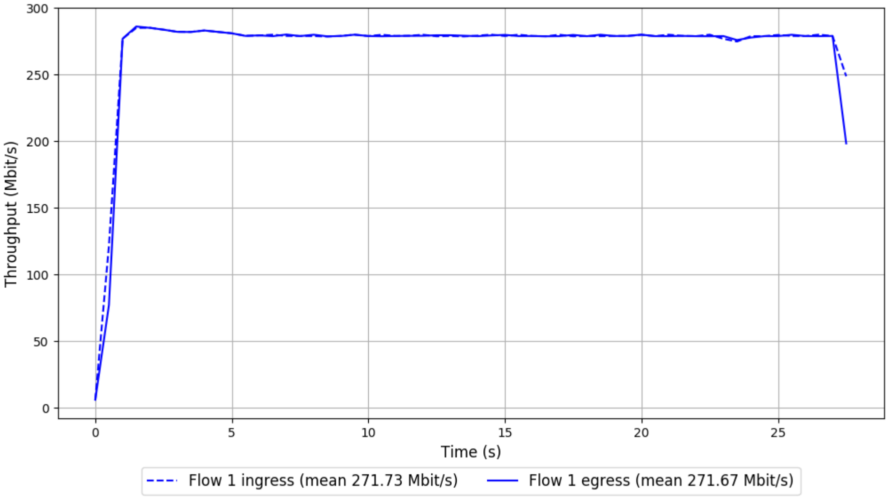


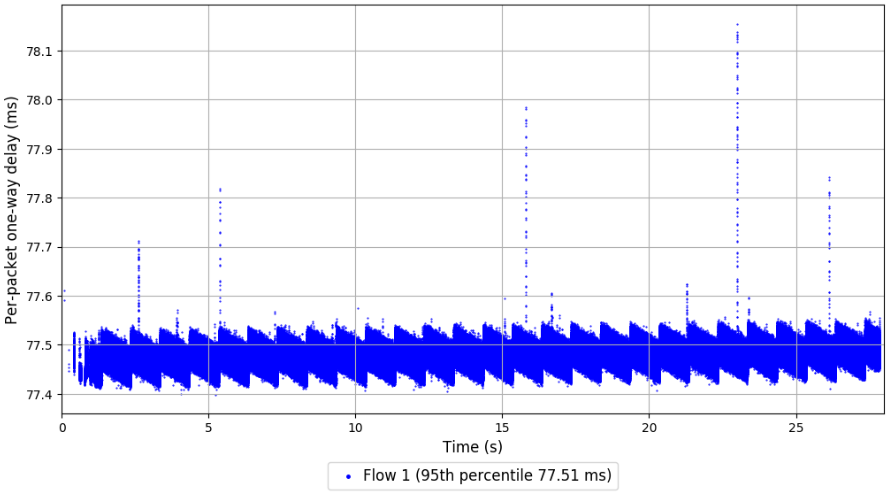
```
Run 1: Statistics of TaoVA-100x

Start at: 2017-09-21 09:32:59
End at: 2017-09-21 09:33:29
Local clock offset: -0.054 ms
Remote clock offset: 3.242 ms

# Below is generated by plot.py at 2017-09-21 15:37:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 271.67 Mbit/s
95th percentile per-packet one-way delay: 77.512 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 271.67 Mbit/s
95th percentile per-packet one-way delay: 77.512 ms
Loss rate: 0.62%
```

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



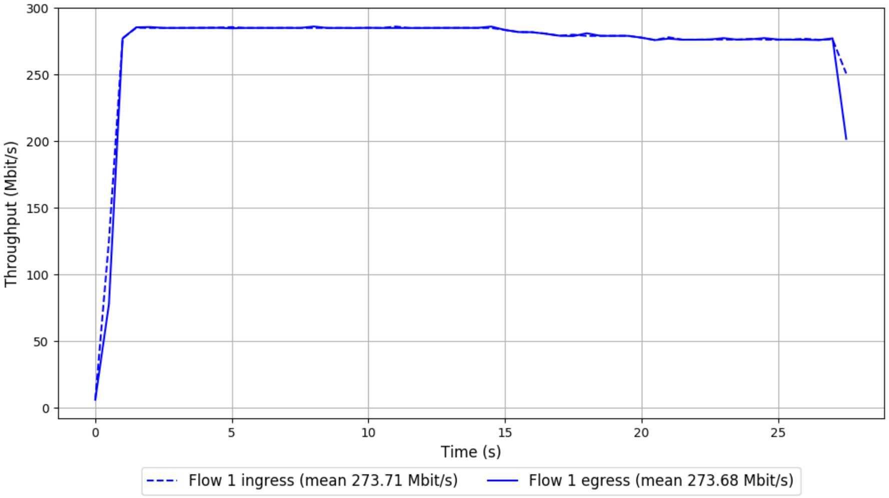


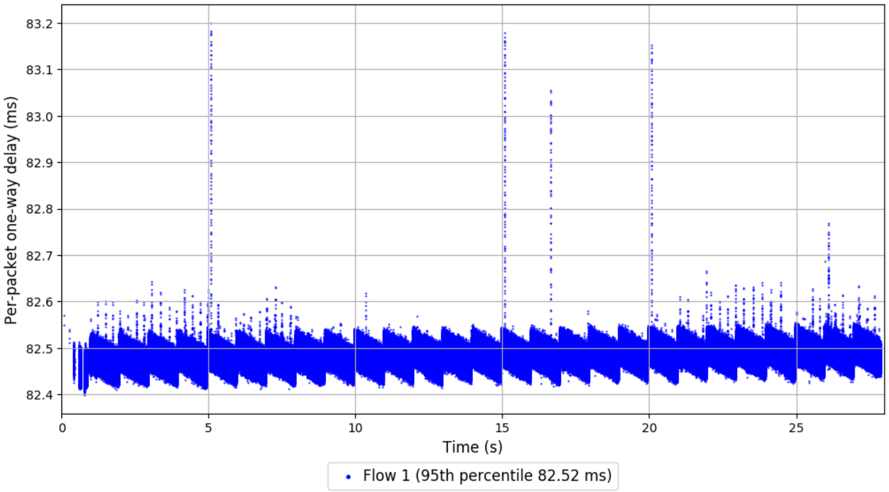
```
Run 2: Statistics of TaoVA-100x

Start at: 2017-09-21 09:51:15
End at: 2017-09-21 09:51:45
Local clock offset: -0.056 ms
Remote clock offset: 0.317 ms

# Below is generated by plot.py at 2017-09-21 15:37:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 273.68 Mbit/s
95th percentile per-packet one-way delay: 82.517 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 273.68 Mbit/s
95th percentile per-packet one-way delay: 82.517 ms
Loss rate: 0.62%
```

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





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

Start at: 2017-09-21 10:09:27
End at: 2017-09-21 10:09:57
Local clock offset: -0.169 ms
Remote clock offset: -0.986 ms
```

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

Figure is missing

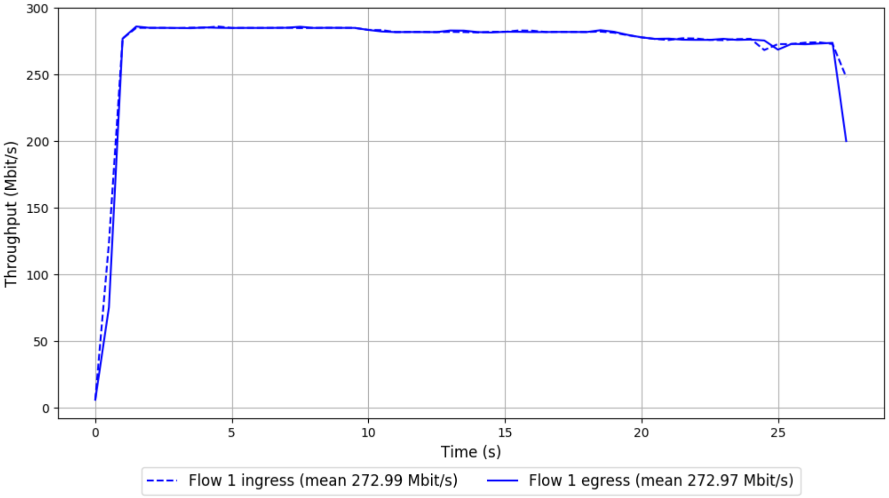
Figure is missing

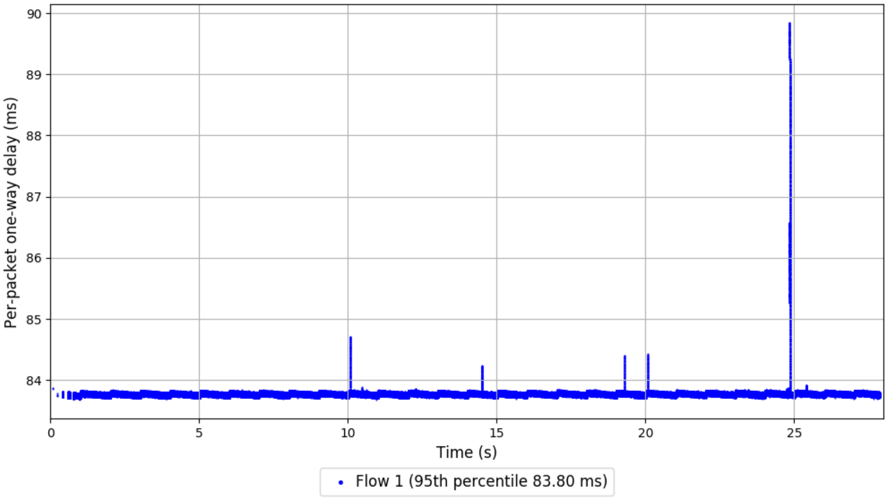
```
Run 4: Statistics of TaoVA-100x

Start at: 2017-09-21 10:26:56
End at: 2017-09-21 10:27:26
Local clock offset: -0.182 ms
Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2017-09-21 15:37:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 272.97 Mbit/s
95th percentile per-packet one-way delay: 83.795 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 272.97 Mbit/s
95th percentile per-packet one-way delay: 83.795 ms
Loss rate: 0.61%
```

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





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

Start at: 2017-09-21 10:45:01
End at: 2017-09-21 10:45:31
Local clock offset: -0.217 ms
Remote clock offset: 34.237 ms
```

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

Figure is missing

Figure is missing

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

Start at: 2017-09-21 11:02:40
End at: 2017-09-21 11:03:10
Local clock offset: -0.294 ms
Remote clock offset: 29.97 ms
```

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

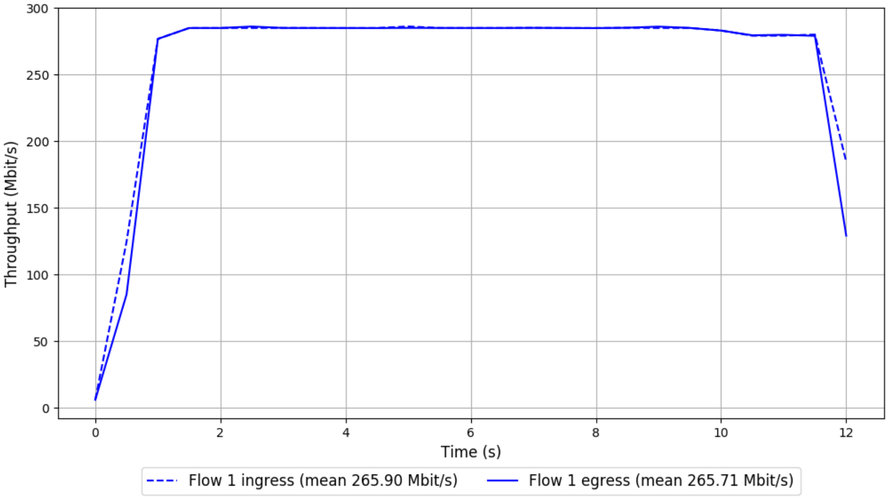
Figure is missing

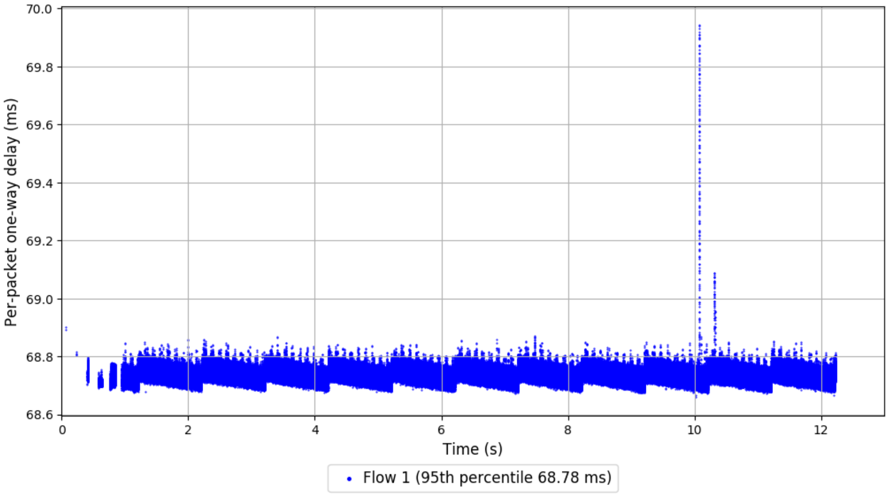
Figure is missing

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

Start at: 2017-09-21 11:20:18
End at: 2017-09-21 11:20:48
Local clock offset: -0.21 ms
Remote clock offset: 12.529 ms
```

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





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

Start at: 2017-09-21 11:38:06
End at: 2017-09-21 11:38:36
Local clock offset: -0.183 ms
Remote clock offset: 8.171 ms
```

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

Figure is missing

Figure is missing

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

Start at: 2017-09-21 11:55:37
End at: 2017-09-21 11:56:07
Local clock offset: -0.119 ms
Remote clock offset: 7.617 ms
```

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

Figure is missing

Figure is missing

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

Start at: 2017-09-21 12:13:11
End at: 2017-09-21 12:13:41
Local clock offset: -0.095 ms
Remote clock offset: 13.602 ms
```

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

Figure is missing

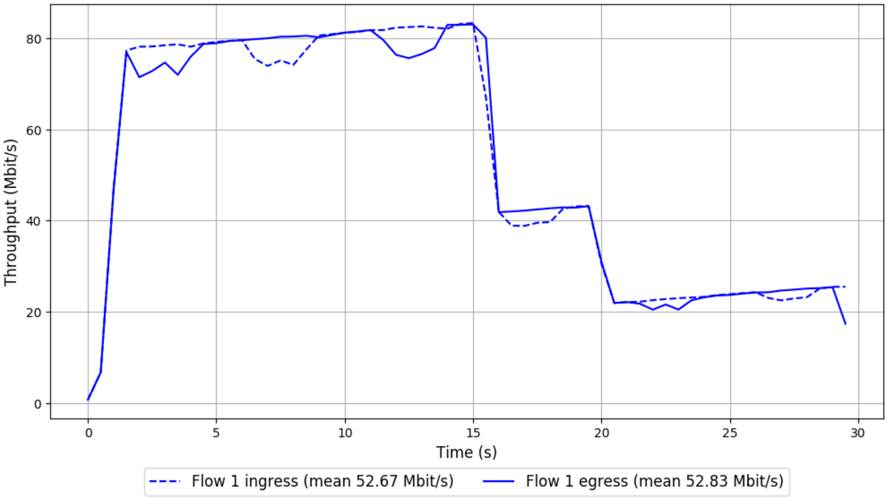
Figure is missing

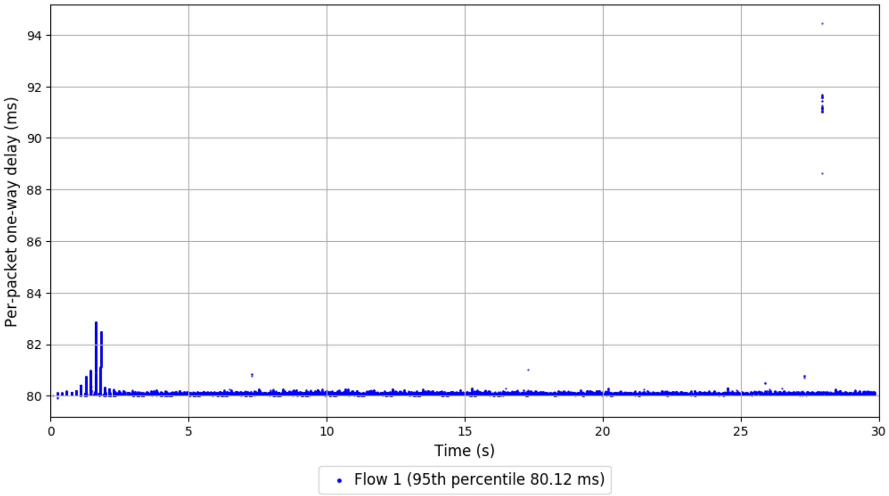
```
Run 1: Statistics of TCP Vegas

Start at: 2017-09-21 09:20:33
End at: 2017-09-21 09:21:03
Local clock offset: 0.094 ms
Remote clock offset: 1.978 ms

# Below is generated by plot.py at 2017-09-21 15:37:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.83 Mbit/s
95th percentile per-packet one-way delay: 80.120 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 52.83 Mbit/s
95th percentile per-packet one-way delay: 80.120 ms
Loss rate: 0.27%
```

Run 1: Report of TCP Vegas — Data Link



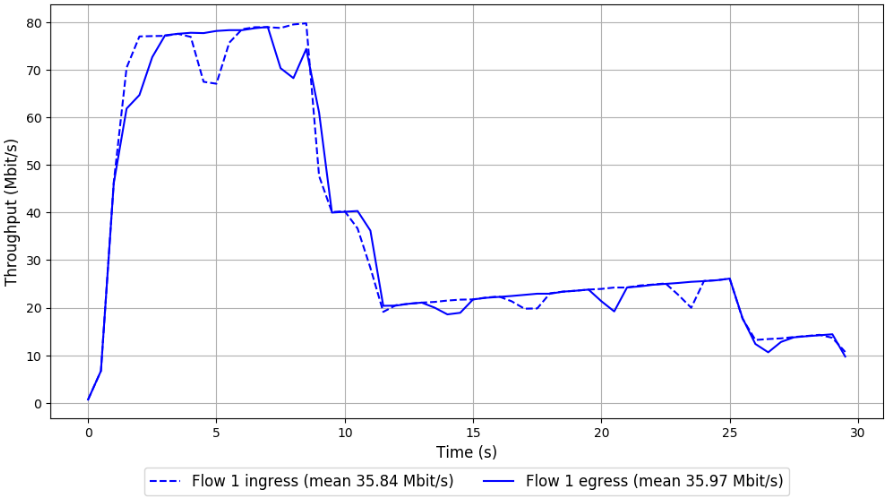


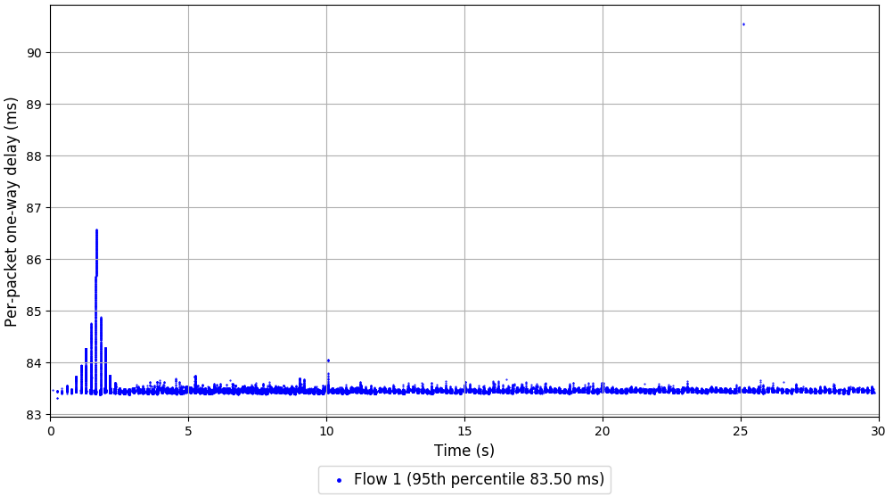
```
Run 2: Statistics of TCP Vegas

Start at: 2017-09-21 09:38:29
End at: 2017-09-21 09:38:59
Local clock offset: -0.043 ms
Remote clock offset: -0.903 ms

# Below is generated by plot.py at 2017-09-21 15:37:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.97 Mbit/s
95th percentile per-packet one-way delay: 83.505 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 35.97 Mbit/s
95th percentile per-packet one-way delay: 83.505 ms
Loss rate: 0.23%
```

Run 2: Report of TCP Vegas — Data Link



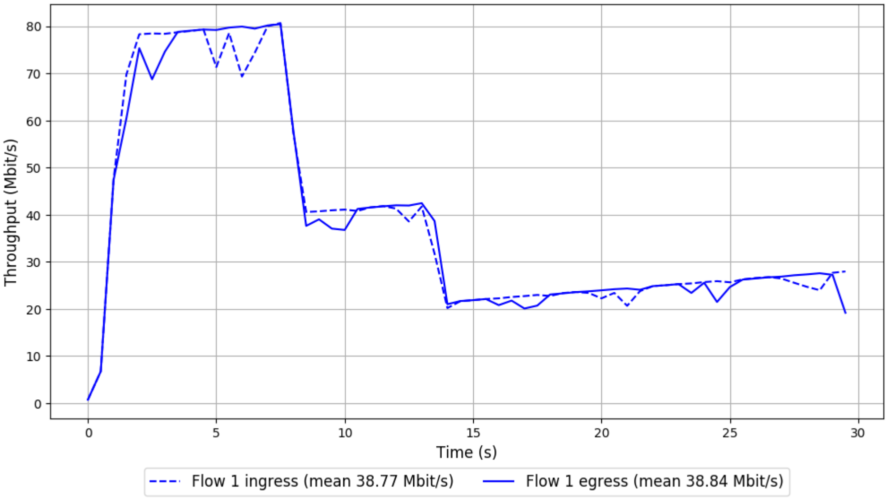


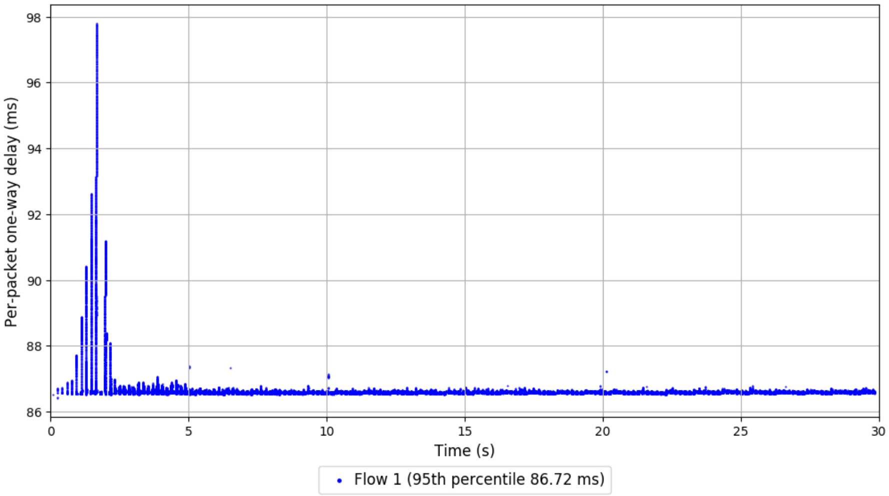
```
Run 3: Statistics of TCP Vegas

Start at: 2017-09-21 09:56:55
End at: 2017-09-21 09:57:25
Local clock offset: -0.088 ms
Remote clock offset: -5.224 ms

# Below is generated by plot.py at 2017-09-21 15:37:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 38.84 Mbit/s
95th percentile per-packet one-way delay: 86.716 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 38.84 Mbit/s
95th percentile per-packet one-way delay: 86.716 ms
Loss rate: 0.41%
```

Run 3: Report of TCP Vegas — Data Link



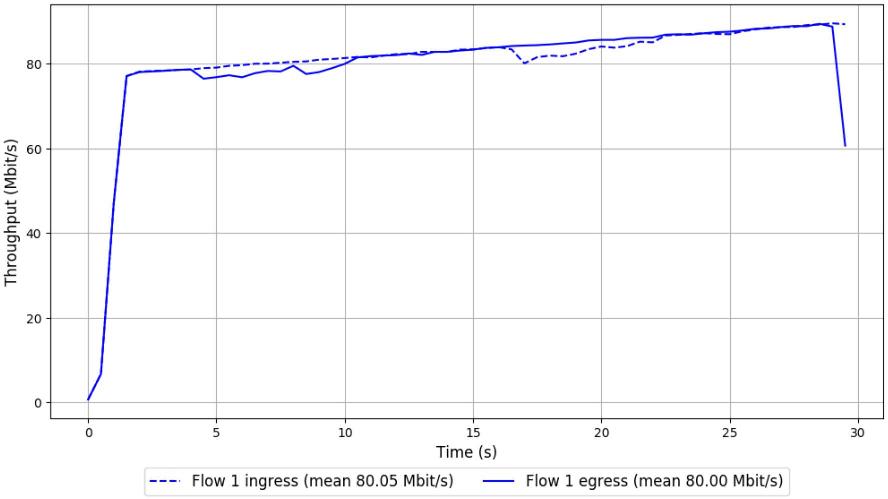


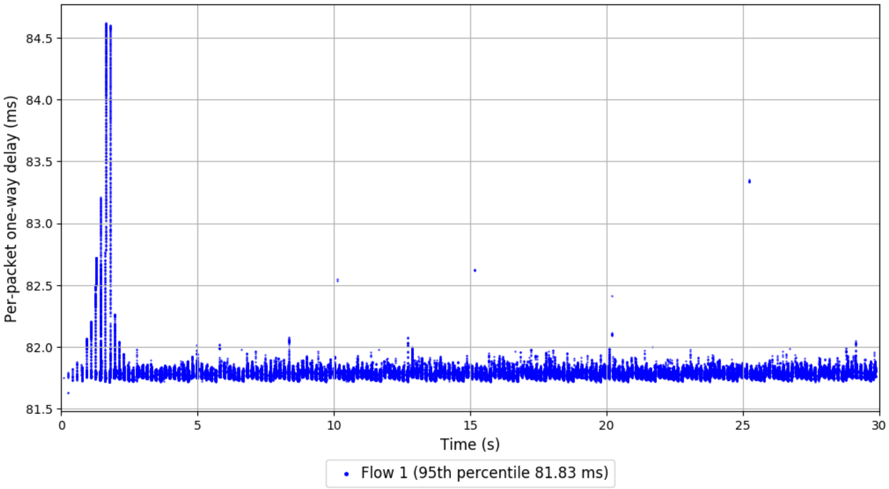
```
Run 4: Statistics of TCP Vegas

Start at: 2017-09-21 10:14:25
End at: 2017-09-21 10:14:55
Local clock offset: -0.182 ms
Remote clock offset: -0.147 ms

# Below is generated by plot.py at 2017-09-21 15:37:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.00 Mbit/s
95th percentile per-packet one-way delay: 81.831 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 80.00 Mbit/s
95th percentile per-packet one-way delay: 81.831 ms
Loss rate: 0.62%
```

Run 4: Report of TCP Vegas — Data Link



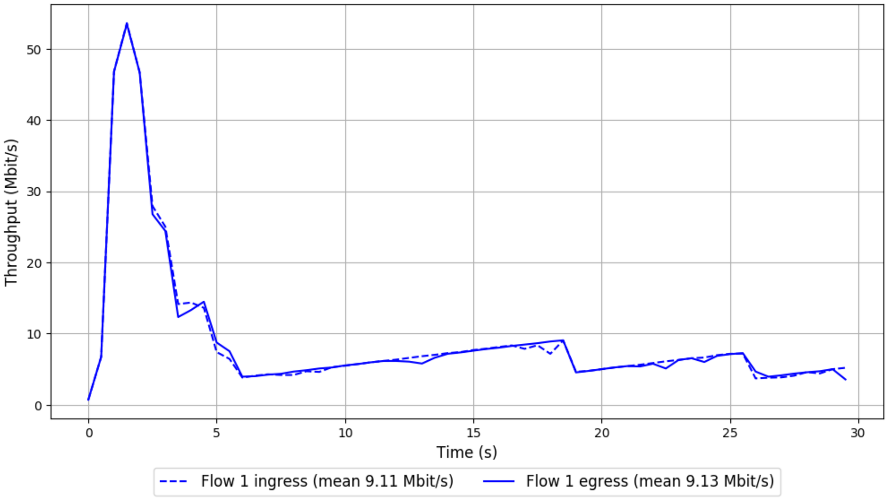


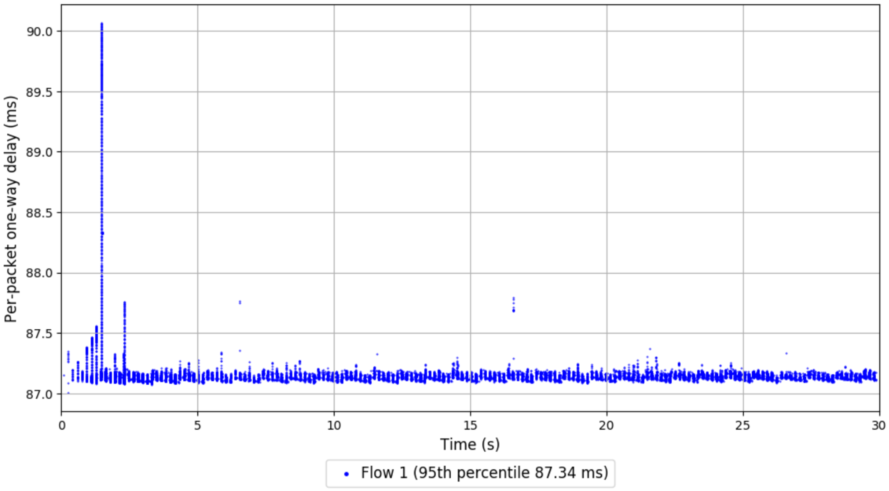
```
Run 5: Statistics of TCP Vegas

Start at: 2017-09-21 10:32:23
End at: 2017-09-21 10:32:53
Local clock offset: -0.204 ms
Remote clock offset: -3.464 ms

# Below is generated by plot.py at 2017-09-21 15:37:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.13 Mbit/s
95th percentile per-packet one-way delay: 87.343 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 9.13 Mbit/s
95th percentile per-packet one-way delay: 87.343 ms
Loss rate: 0.37%
```

Run 5: Report of TCP Vegas — Data Link



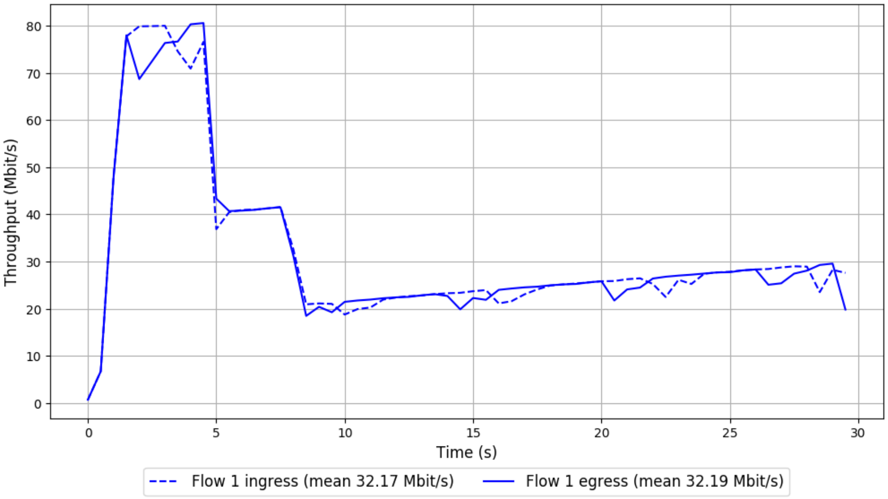


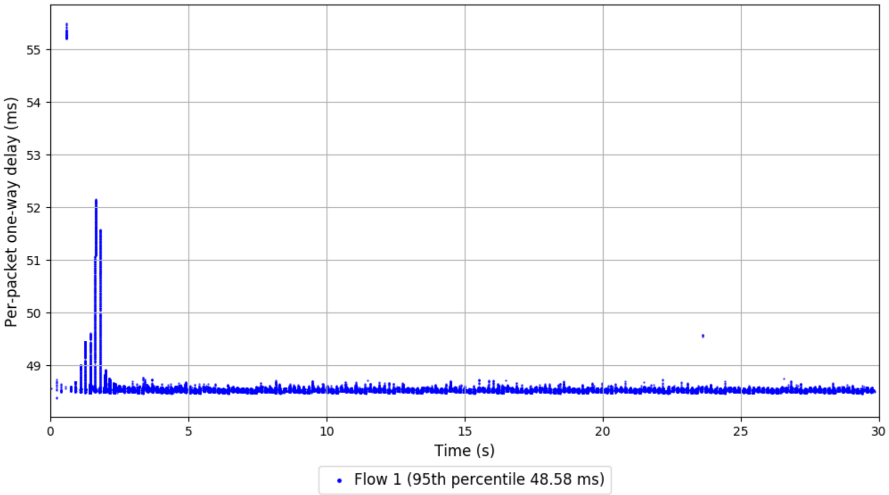
```
Run 6: Statistics of TCP Vegas

Start at: 2017-09-21 10:50:00
End at: 2017-09-21 10:50:30
Local clock offset: -0.21 ms
Remote clock offset: 35.07 ms

# Below is generated by plot.py at 2017-09-21 15:37:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.19 Mbit/s
95th percentile per-packet one-way delay: 48.580 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 32.19 Mbit/s
95th percentile per-packet one-way delay: 48.580 ms
Loss rate: 0.52%
```

Run 6: Report of TCP Vegas — Data Link



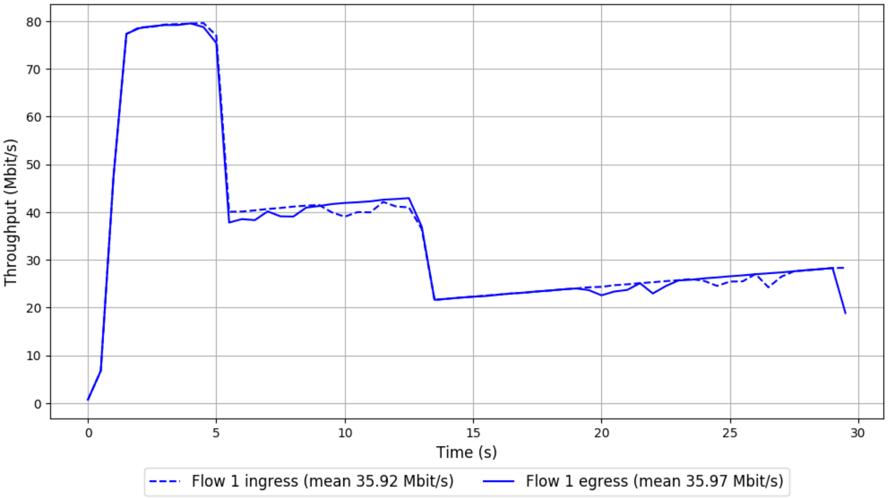


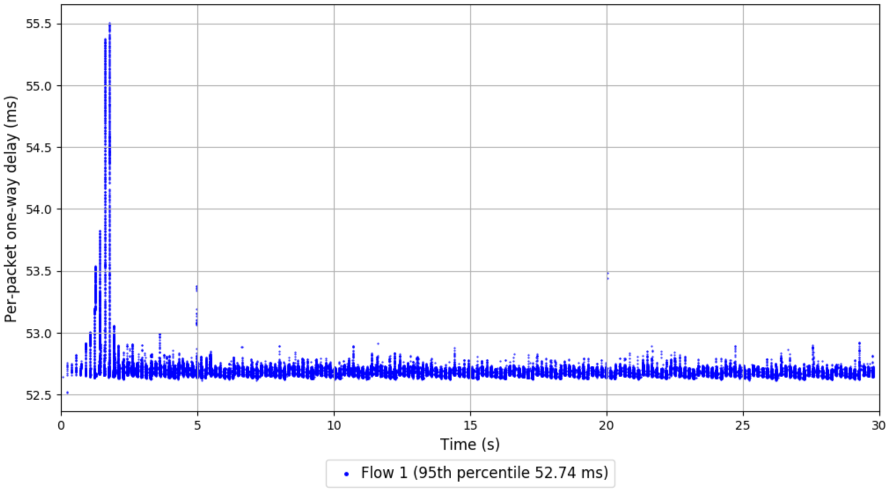
```
Run 7: Statistics of TCP Vegas

Start at: 2017-09-21 11:07:45
End at: 2017-09-21 11:08:15
Local clock offset: -0.195 ms
Remote clock offset: 28.904 ms

# Below is generated by plot.py at 2017-09-21 15:37:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.97 Mbit/s
95th percentile per-packet one-way delay: 52.741 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 35.97 Mbit/s
95th percentile per-packet one-way delay: 52.741 ms
Loss rate: 0.44%
```

Run 7: Report of TCP Vegas — Data Link



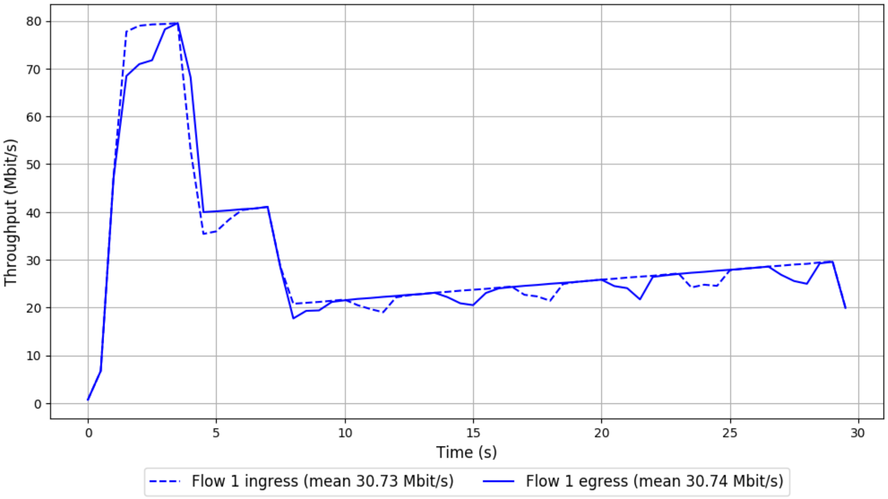


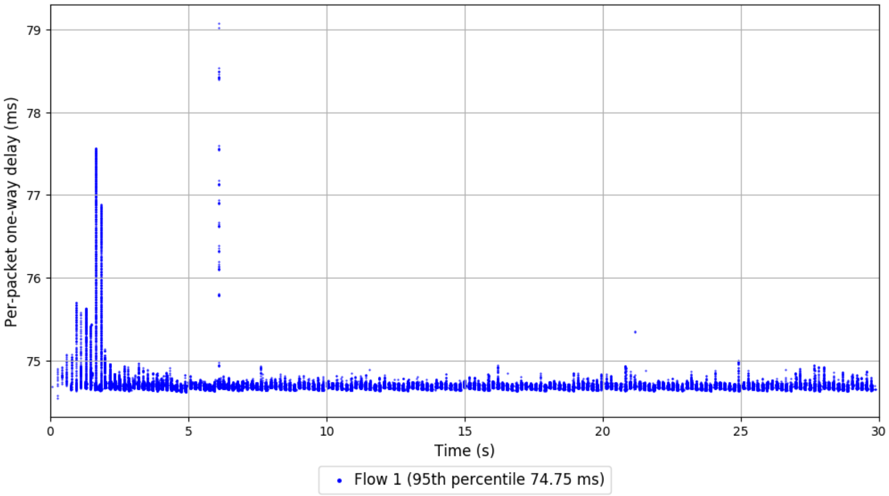
```
Run 8: Statistics of TCP Vegas

Start at: 2017-09-21 11:25:30
End at: 2017-09-21 11:26:00
Local clock offset: -0.235 ms
Remote clock offset: 8.061 ms

# Below is generated by plot.py at 2017-09-21 15:37:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.74 Mbit/s
95th percentile per-packet one-way delay: 74.754 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 30.74 Mbit/s
95th percentile per-packet one-way delay: 74.754 ms
Loss rate: 0.54%
```

Run 8: Report of TCP Vegas — Data Link



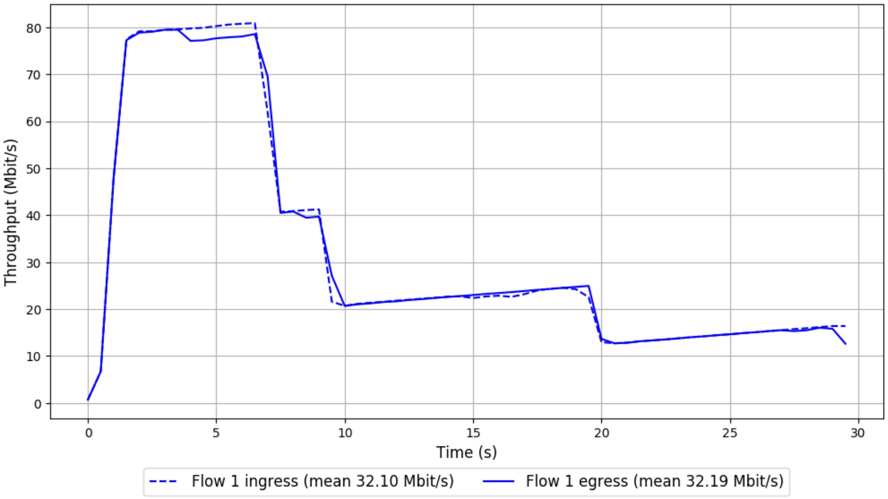


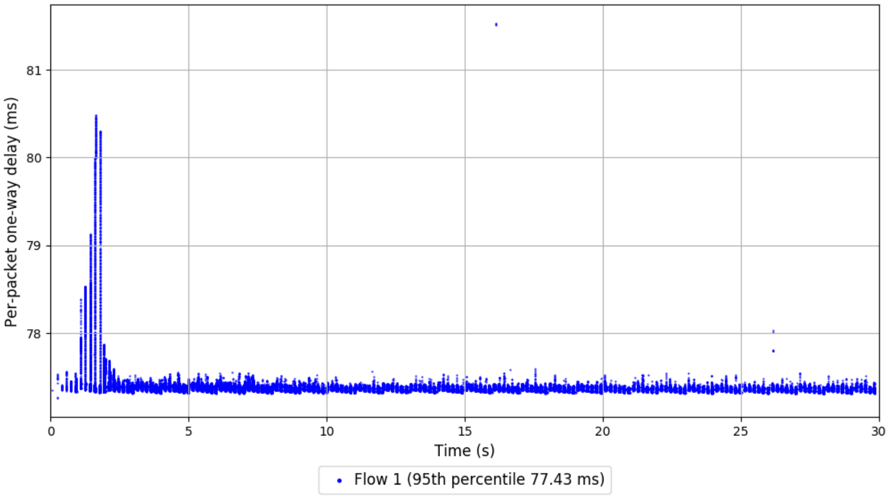
```
Run 9: Statistics of TCP Vegas

Start at: 2017-09-21 11:43:08
End at: 2017-09-21 11:43:38
Local clock offset: -0.183 ms
Remote clock offset: 3.341 ms

# Below is generated by plot.py at 2017-09-21 15:37:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.19 Mbit/s
95th percentile per-packet one-way delay: 77.430 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 32.19 Mbit/s
95th percentile per-packet one-way delay: 77.430 ms
Loss rate: 0.29%
```

Run 9: Report of TCP Vegas — Data Link



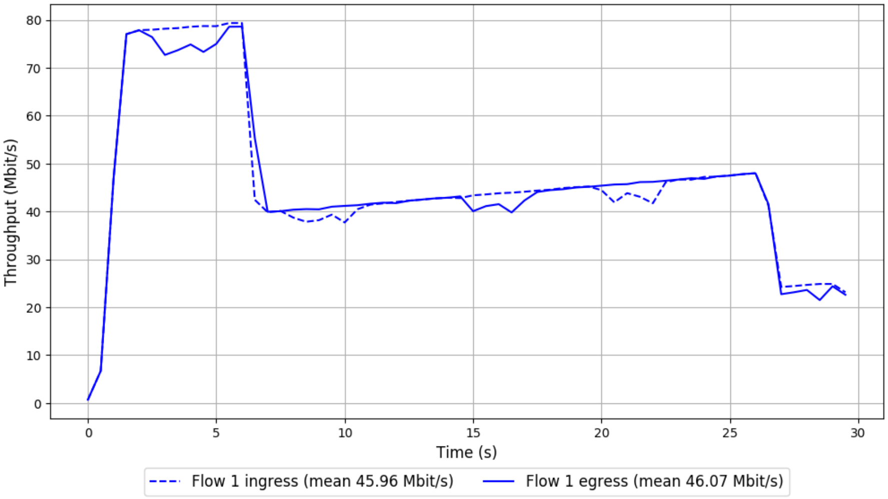


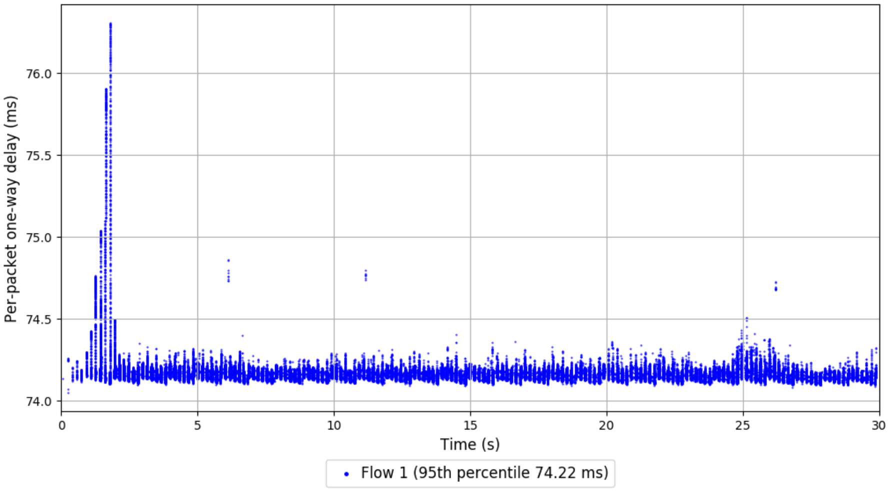
```
Run 10: Statistics of TCP Vegas

Start at: 2017-09-21 12:00:32
End at: 2017-09-21 12:01:02
Local clock offset: -0.113 ms
Remote clock offset: 7.517 ms

# Below is generated by plot.py at 2017-09-21 15:37:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 46.07 Mbit/s
95th percentile per-packet one-way delay: 74.215 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 46.07 Mbit/s
95th percentile per-packet one-way delay: 74.215 ms
Loss rate: 0.31%
```

Run 10: Report of TCP Vegas — Data Link



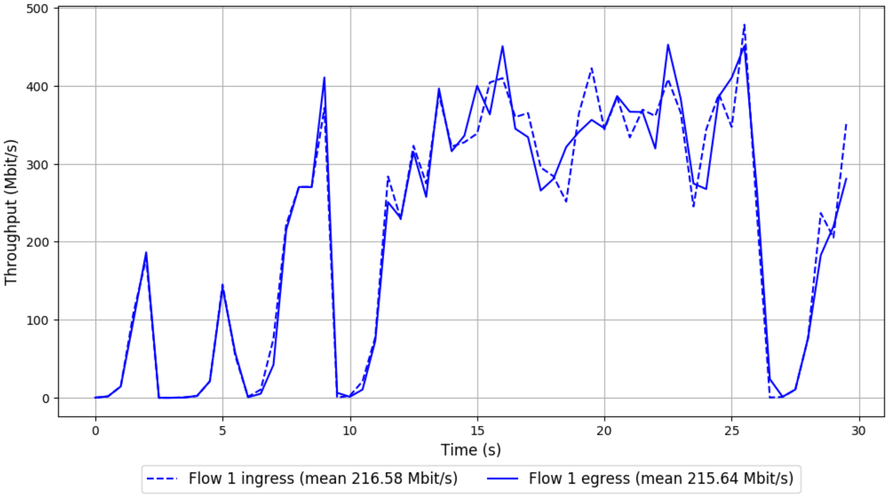


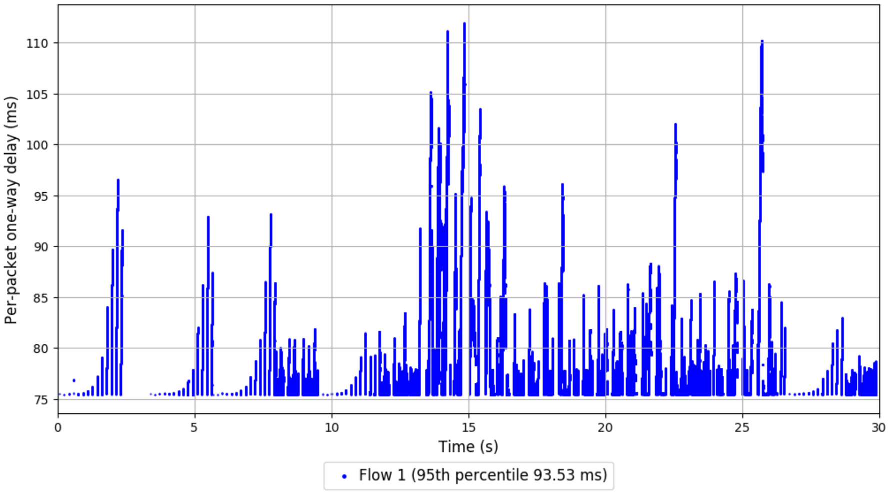
```
Run 1: Statistics of Verus

Start at: 2017-09-21 09:31:35
End at: 2017-09-21 09:32:05
Local clock offset: 0.042 ms
Remote clock offset: 7.128 ms

# Below is generated by plot.py at 2017-09-21 15:37:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.64 Mbit/s
95th percentile per-packet one-way delay: 93.529 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 215.64 Mbit/s
95th percentile per-packet one-way delay: 93.529 ms
Loss rate: 0.93%
```

Run 1: Report of Verus — Data Link



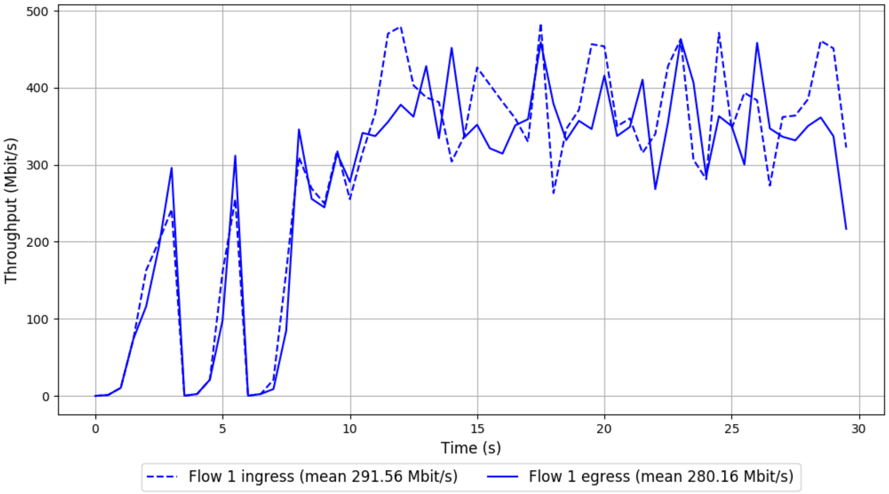


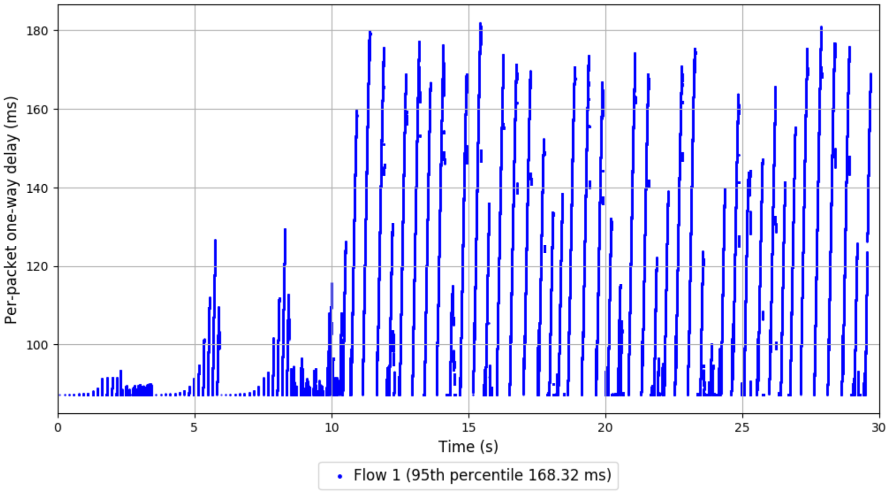
```
Run 2: Statistics of Verus

Start at: 2017-09-21 09:49:34
End at: 2017-09-21 09:50:04
Local clock offset: -0.041 ms
Remote clock offset: -4.55 ms

# Below is generated by plot.py at 2017-09-21 15:37:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 280.16 Mbit/s
95th percentile per-packet one-way delay: 168.319 ms
Loss rate: 5.14%
-- Flow 1:
Average throughput: 280.16 Mbit/s
95th percentile per-packet one-way delay: 168.319 ms
Loss rate: 5.14%
```

Run 2: Report of Verus — Data Link



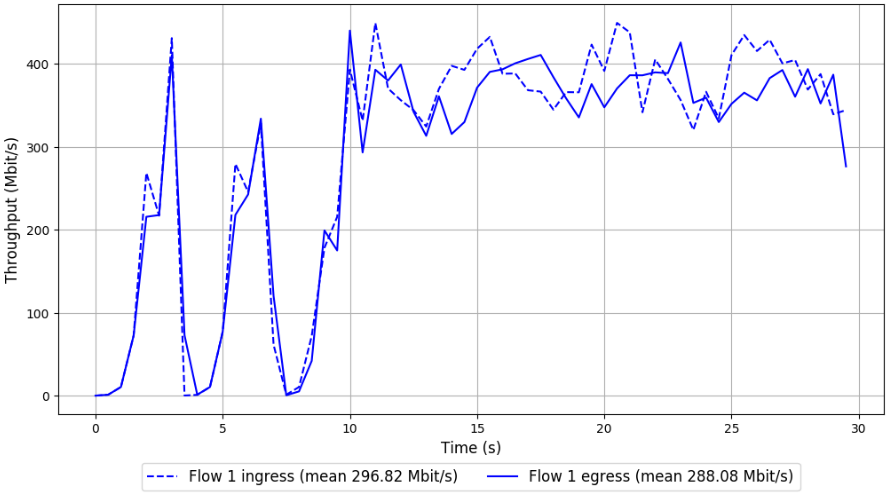


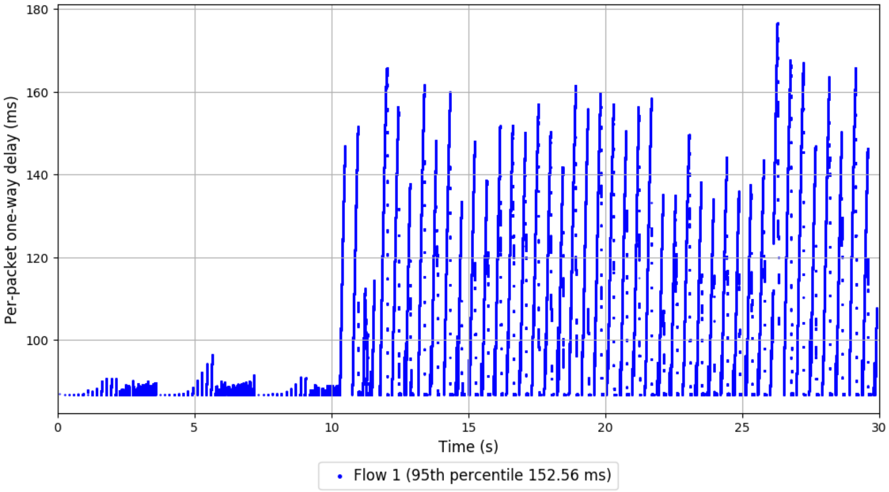
```
Run 3: Statistics of Verus

Start at: 2017-09-21 10:07:59
End at: 2017-09-21 10:08:29
Local clock offset: -0.085 ms
Remote clock offset: -4.979 ms

# Below is generated by plot.py at 2017-09-21 15:37:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 288.08 Mbit/s
95th percentile per-packet one-way delay: 152.558 ms
Loss rate: 3.48%
-- Flow 1:
Average throughput: 288.08 Mbit/s
95th percentile per-packet one-way delay: 152.558 ms
Loss rate: 3.48%
```

Run 3: Report of Verus — Data Link



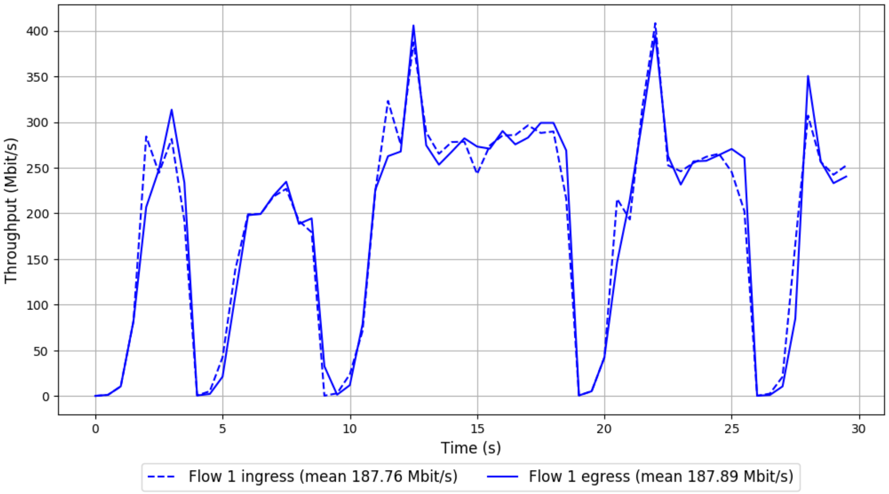


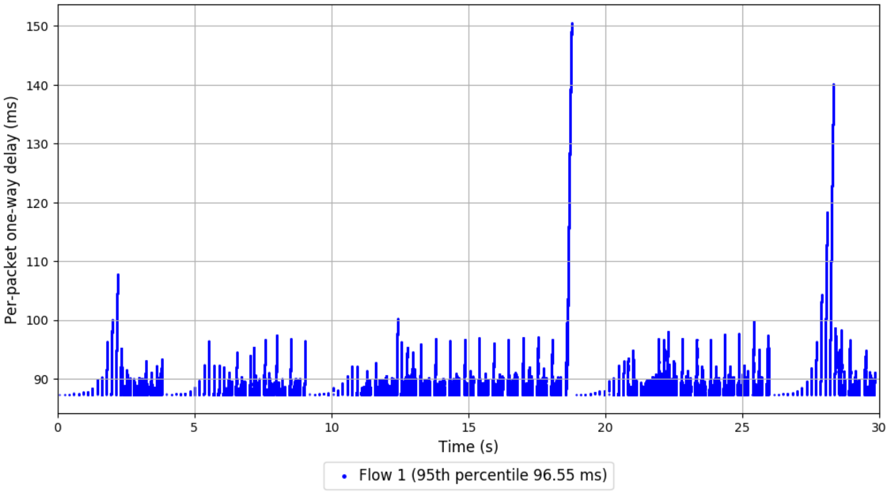
```
Run 4: Statistics of Verus

Start at: 2017-09-21 10:25:33
End at: 2017-09-21 10:26:03
Local clock offset: -0.192 ms
Remote clock offset: -3.963 ms

# Below is generated by plot.py at 2017-09-21 15:37:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 187.89 Mbit/s
95th percentile per-packet one-way delay: 96.550 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 187.89 Mbit/s
95th percentile per-packet one-way delay: 96.550 ms
Loss rate: 0.69%
```

Run 4: Report of Verus — Data Link



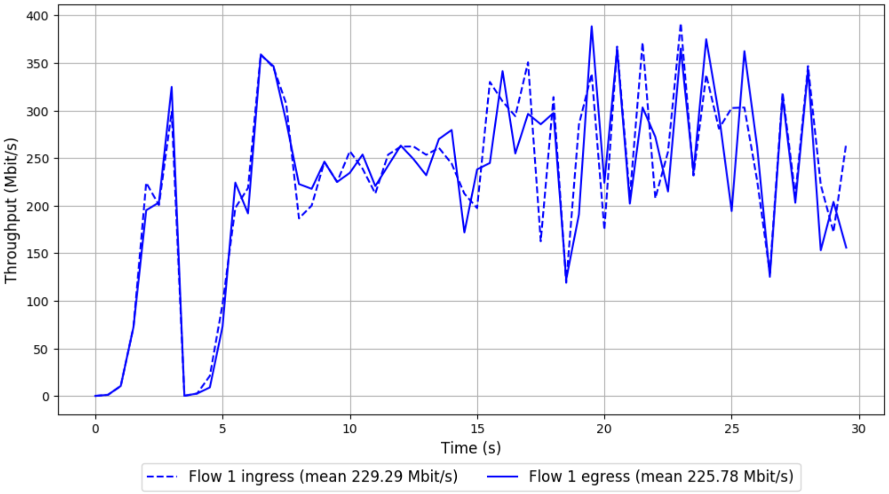


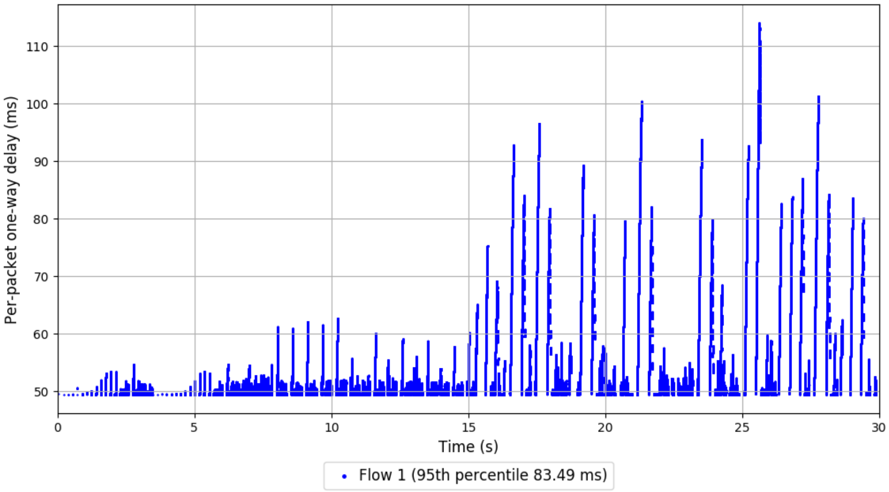
```
Run 5: Statistics of Verus

Start at: 2017-09-21 10:43:36
End at: 2017-09-21 10:44:06
Local clock offset: -0.209 ms
Remote clock offset: 34.306 ms

# Below is generated by plot.py at 2017-09-21 15:37:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.78 Mbit/s
95th percentile per-packet one-way delay: 83.489 ms
Loss rate: 1.75%
-- Flow 1:
Average throughput: 225.78 Mbit/s
95th percentile per-packet one-way delay: 83.489 ms
Loss rate: 1.75%
```

Run 5: Report of Verus — Data Link



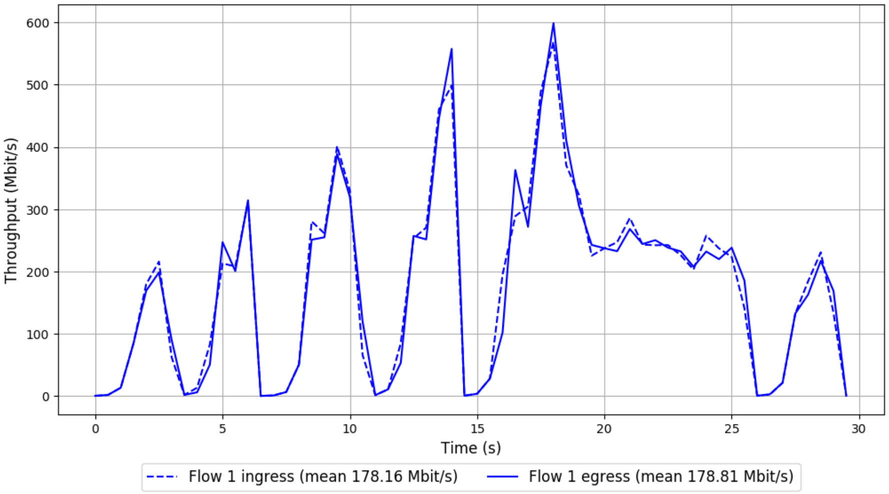


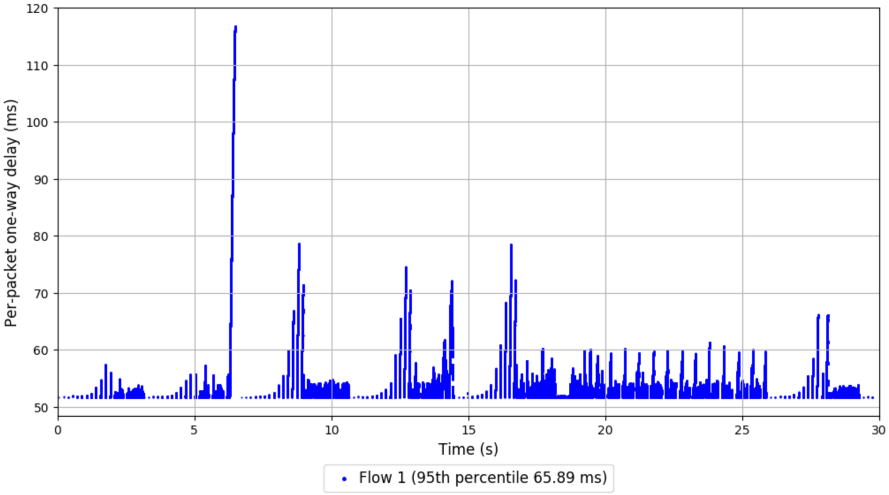
```
Run 6: Statistics of Verus

Start at: 2017-09-21 11:01:17
End at: 2017-09-21 11:01:47
Local clock offset: -0.207 ms
Remote clock offset: 30.0 ms

# Below is generated by plot.py at 2017-09-21 15:37:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 178.81 Mbit/s
95th percentile per-packet one-way delay: 65.888 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 178.81 Mbit/s
95th percentile per-packet one-way delay: 65.888 ms
Loss rate: 0.20%
```

Run 6: Report of Verus — Data Link



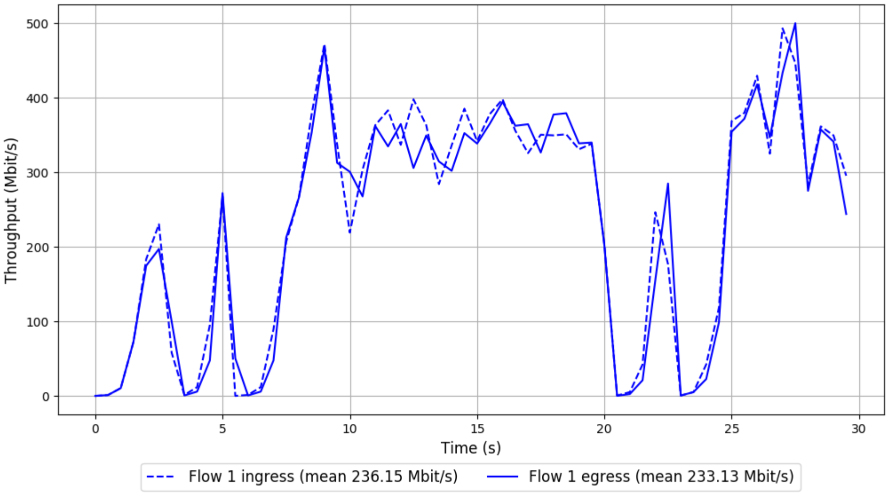


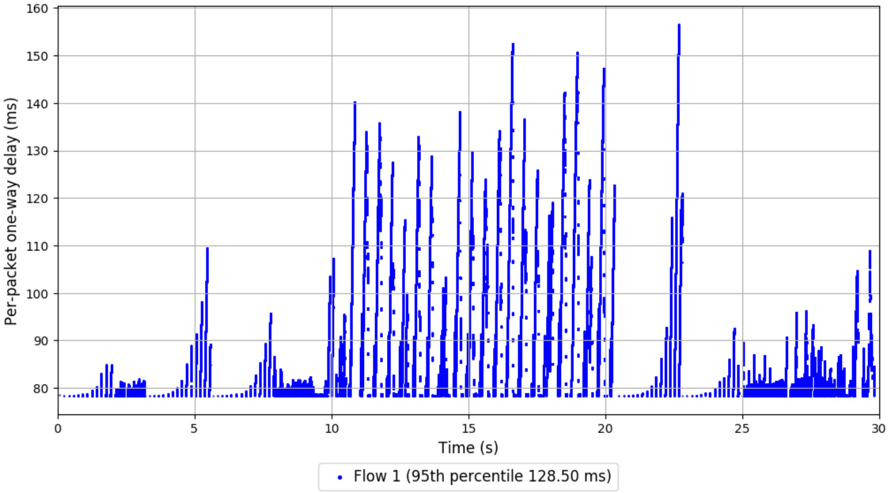
```
Run 7: Statistics of Verus

Start at: 2017-09-21 11:18:53
End at: 2017-09-21 11:19:23
Local clock offset: -0.271 ms
Remote clock offset: 2.857 ms

# Below is generated by plot.py at 2017-09-21 15:39:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 233.13 Mbit/s
95th percentile per-packet one-way delay: 128.495 ms
Loss rate: 2.02%
-- Flow 1:
Average throughput: 233.13 Mbit/s
95th percentile per-packet one-way delay: 128.495 ms
Loss rate: 2.02%
```

Run 7: Report of Verus — Data Link



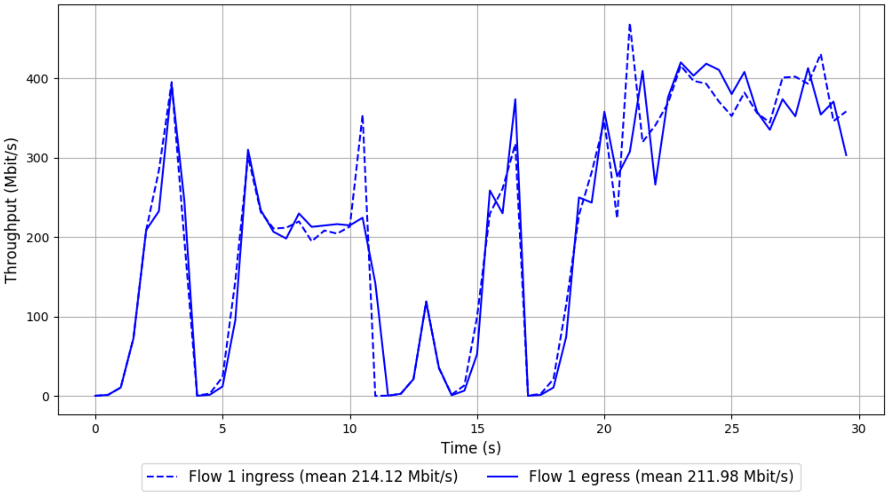


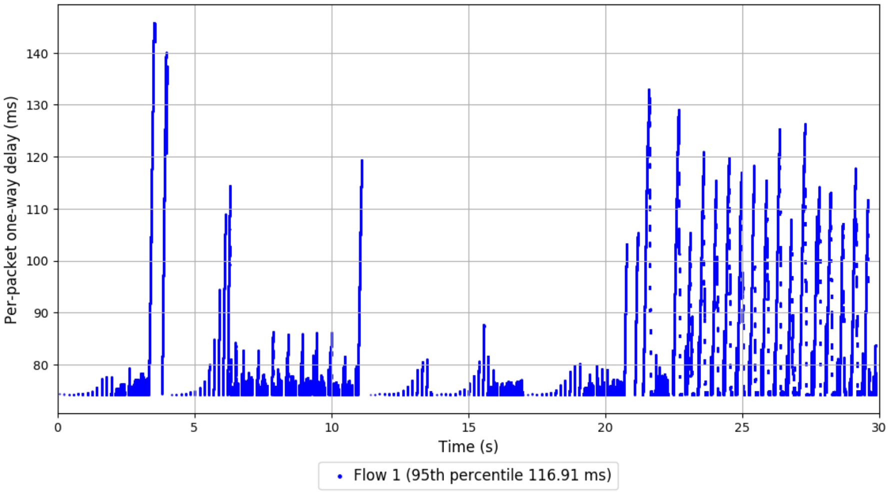
```
Run 8: Statistics of Verus

Start at: 2017-09-21 11:36:38
End at: 2017-09-21 11:37:08
Local clock offset: -0.174 ms
Remote clock offset: 8.498 ms

# Below is generated by plot.py at 2017-09-21 15:39:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 211.98 Mbit/s
95th percentile per-packet one-way delay: 116.910 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 211.98 Mbit/s
95th percentile per-packet one-way delay: 116.910 ms
Loss rate: 1.56%
```

Run 8: Report of Verus — Data Link



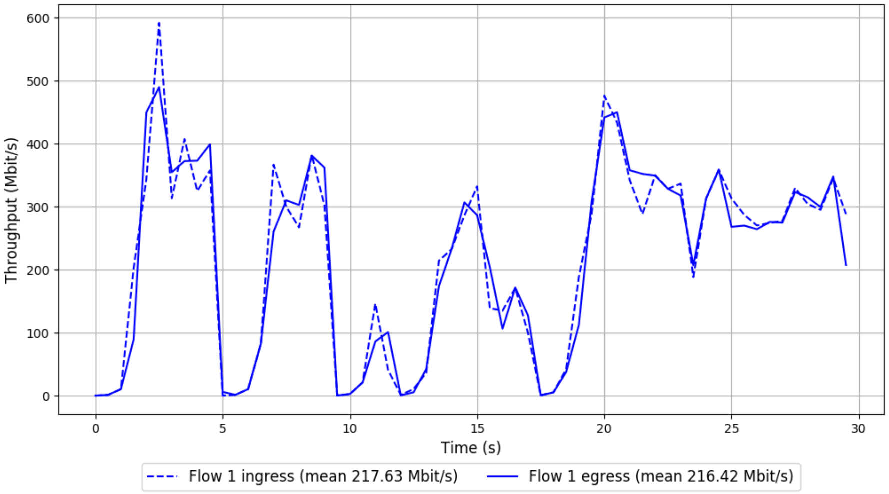


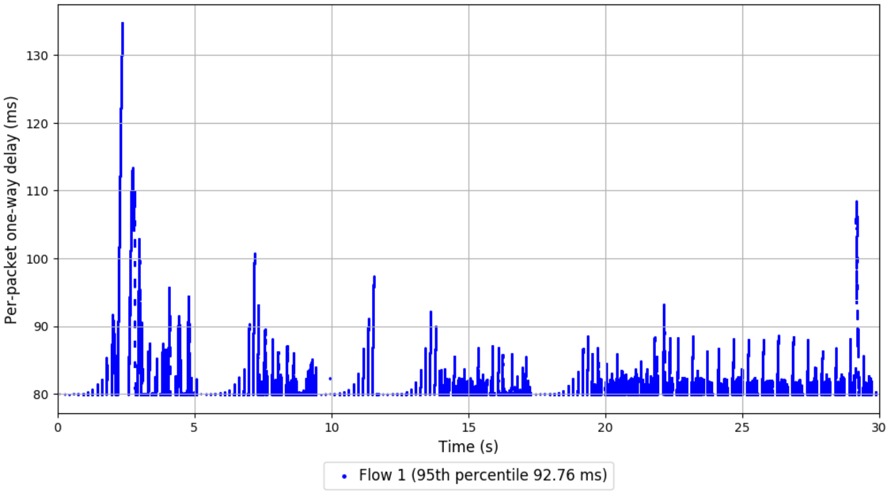
```
Run 9: Statistics of Verus

Start at: 2017-09-21 11:54:14
End at: 2017-09-21 11:54:44
Local clock offset: -0.096 ms
Remote clock offset: 1.952 ms

# Below is generated by plot.py at 2017-09-21 15:39:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.42 Mbit/s
95th percentile per-packet one-way delay: 92.761 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 216.42 Mbit/s
95th percentile per-packet one-way delay: 92.761 ms
Loss rate: 1.14%
```

Run 9: Report of Verus — Data Link



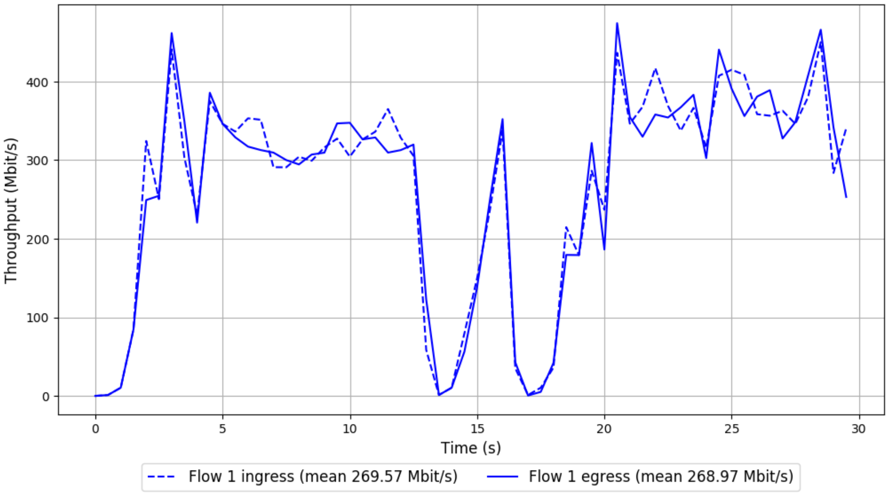


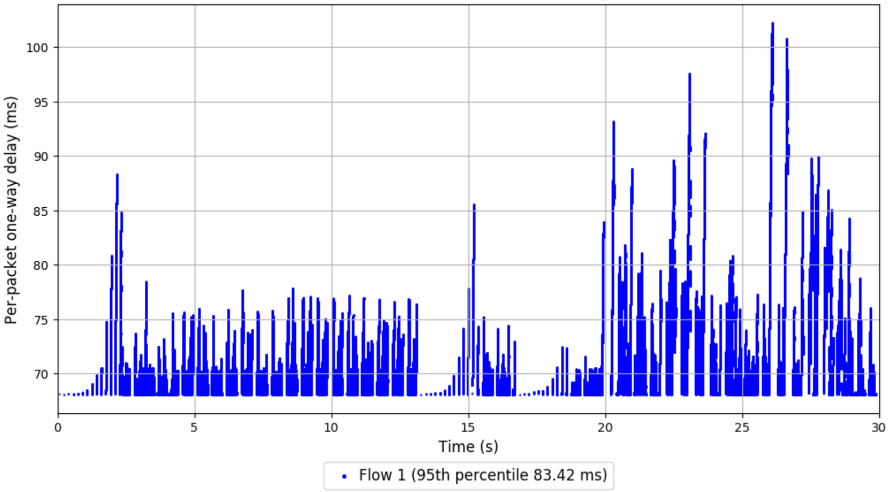
```
Run 10: Statistics of Verus

Start at: 2017-09-21 12:11:41
End at: 2017-09-21 12:12:11
Local clock offset: -0.106 ms
Remote clock offset: 13.678 ms

# Below is generated by plot.py at 2017-09-21 15:40:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 268.97 Mbit/s
95th percentile per-packet one-way delay: 83.416 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 268.97 Mbit/s
95th percentile per-packet one-way delay: 83.416 ms
Loss rate: 0.58%
```

Run 10: Report of Verus — Data Link

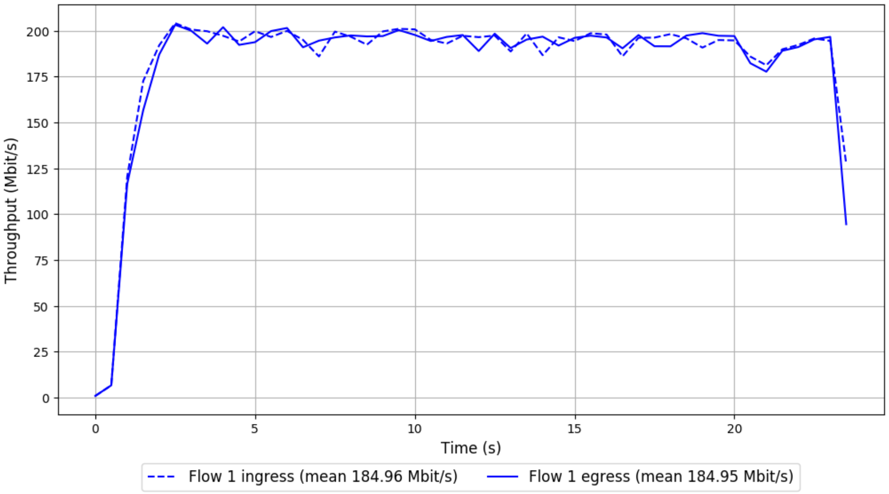


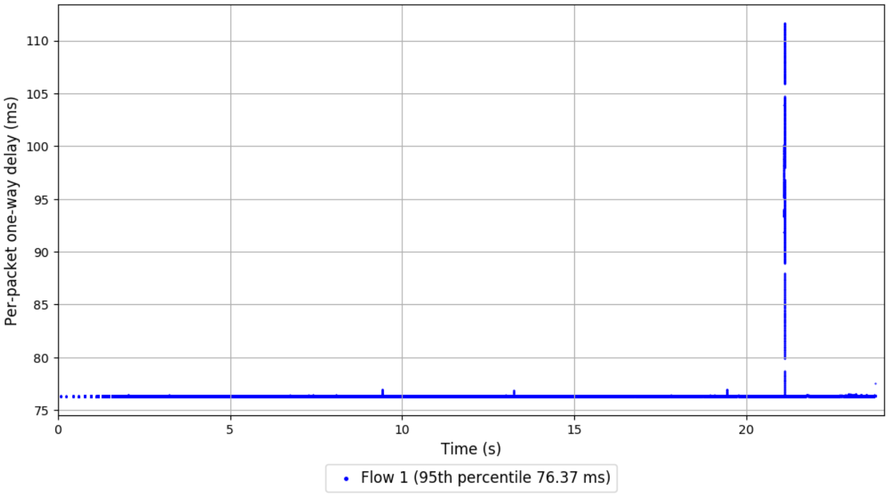


```
Run 1: Statistics of Indigo

Start at: 2017-09-21 09:25:26
End at: 2017-09-21 09:25:56
Local clock offset: -0.009 ms
Remote clock offset: 5.964 ms
```

Run 1: Report of Indigo — Data Link



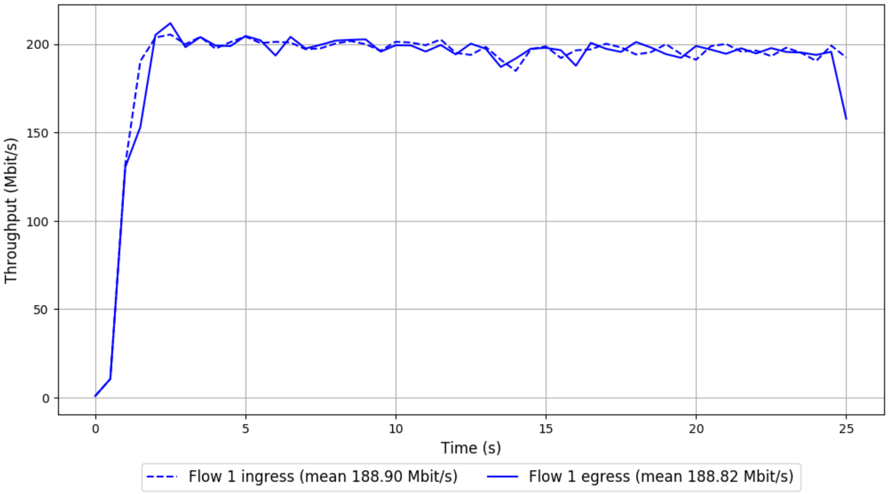


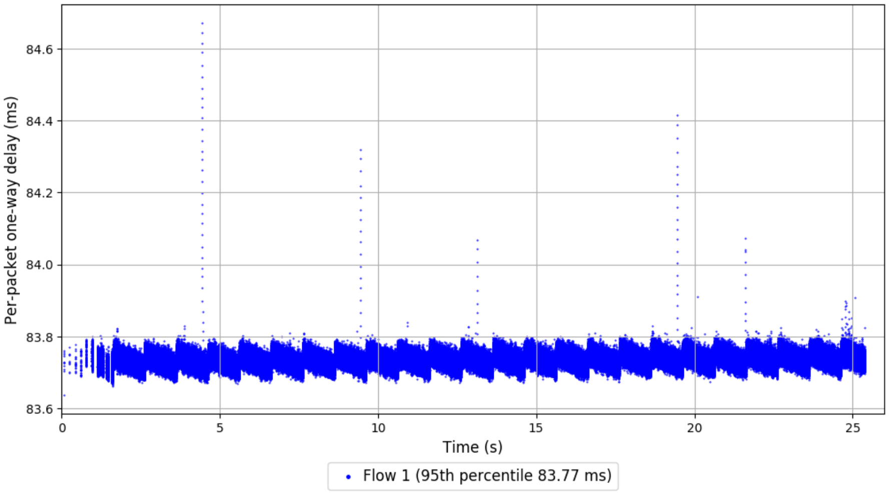
```
Run 2: Statistics of Indigo

Start at: 2017-09-21 09:43:22
End at: 2017-09-21 09:43:52
Local clock offset: -0.008 ms
Remote clock offset: -0.791 ms

# Below is generated by plot.py at 2017-09-21 15:40:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 188.82 Mbit/s
95th percentile per-packet one-way delay: 83.769 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 188.82 Mbit/s
95th percentile per-packet one-way delay: 83.769 ms
Loss rate: 0.71%
```

Run 2: Report of Indigo — Data Link



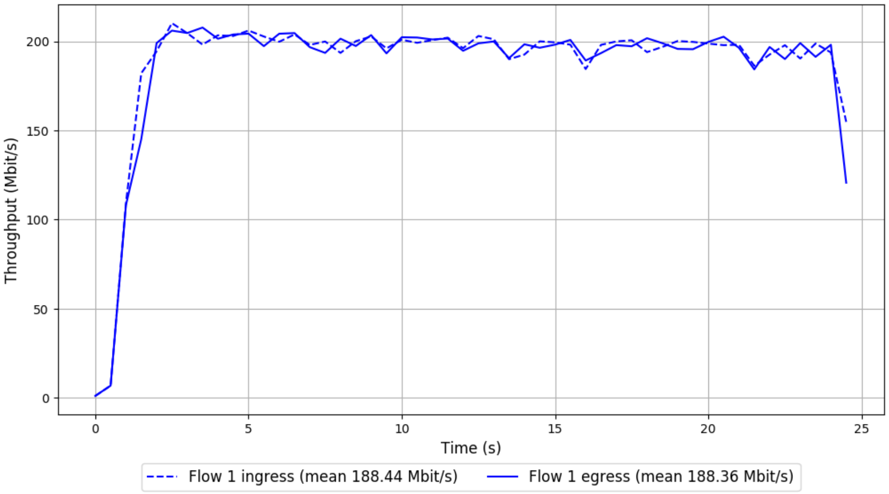


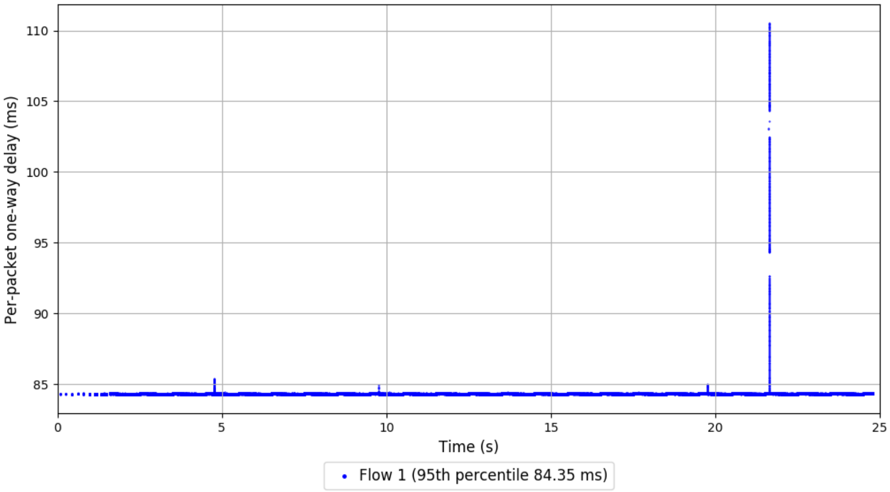
```
Run 3: Statistics of Indigo

Start at: 2017-09-21 10:01:50
End at: 2017-09-21 10:02:20
Local clock offset: -0.076 ms
Remote clock offset: -1.174 ms

# Below is generated by plot.py at 2017-09-21 15:40:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 188.36 Mbit/s
95th percentile per-packet one-way delay: 84.349 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 188.36 Mbit/s
95th percentile per-packet one-way delay: 84.349 ms
Loss rate: 0.72%
```

Run 3: Report of Indigo — Data Link



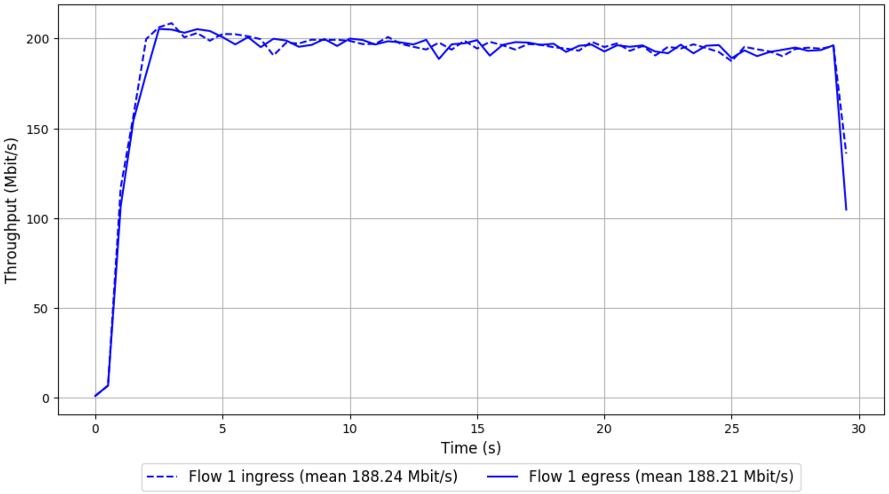


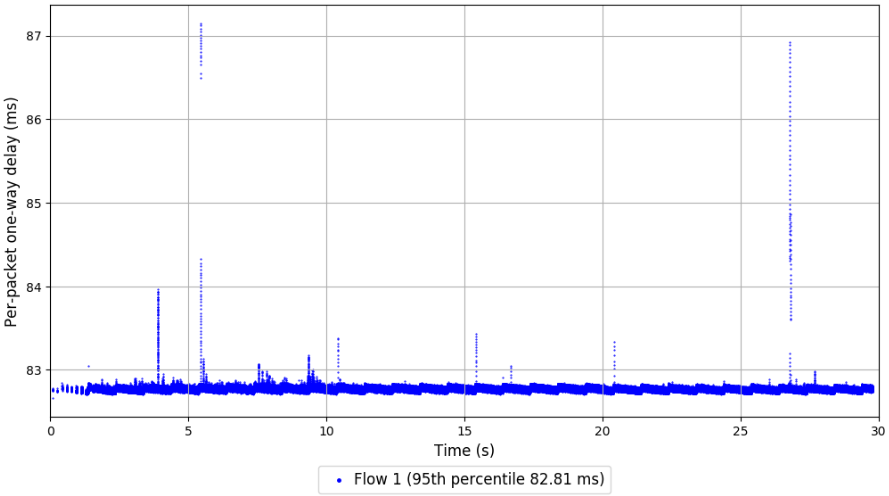
```
Run 4: Statistics of Indigo

Start at: 2017-09-21 10:19:21
End at: 2017-09-21 10:19:51
Local clock offset: -0.225 ms
Remote clock offset: -0.935 ms

# Below is generated by plot.py at 2017-09-21 15:40:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 188.21 Mbit/s
95th percentile per-packet one-way delay: 82.810 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 188.21 Mbit/s
95th percentile per-packet one-way delay: 82.810 ms
Loss rate: 0.58%
```

Run 4: Report of Indigo — Data Link



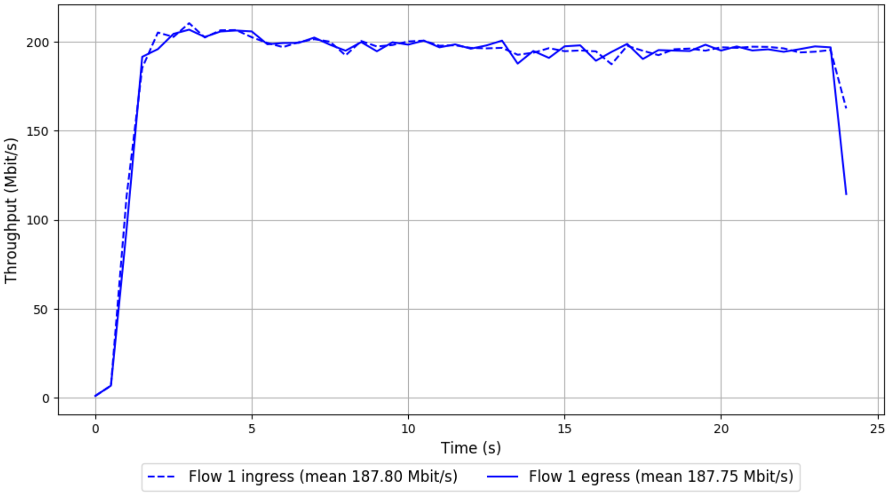


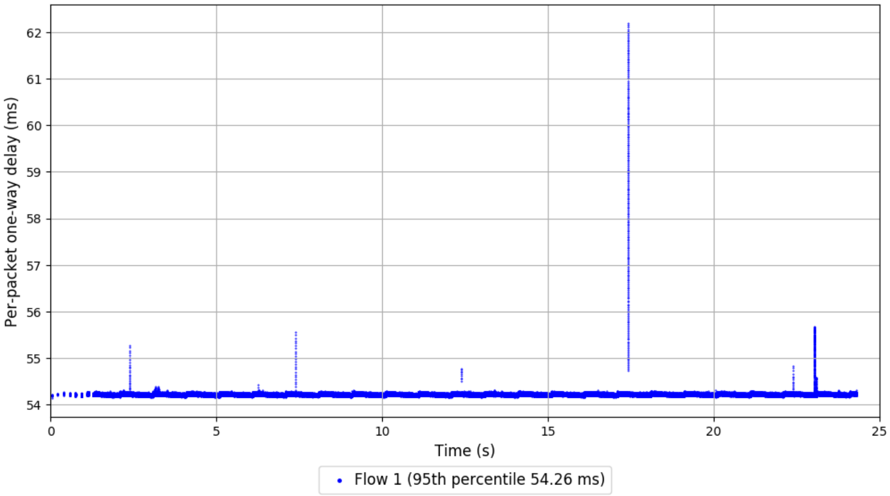
```
Run 5: Statistics of Indigo

Start at: 2017-09-21 10:37:17
End at: 2017-09-21 10:37:47
Local clock offset: -0.2 ms
Remote clock offset: 29.508 ms

# Below is generated by plot.py at 2017-09-21 15:41:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 187.75 Mbit/s
95th percentile per-packet one-way delay: 54.258 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 187.75 Mbit/s
95th percentile per-packet one-way delay: 54.258 ms
Loss rate: 0.73%
```

Run 5: Report of Indigo — Data Link



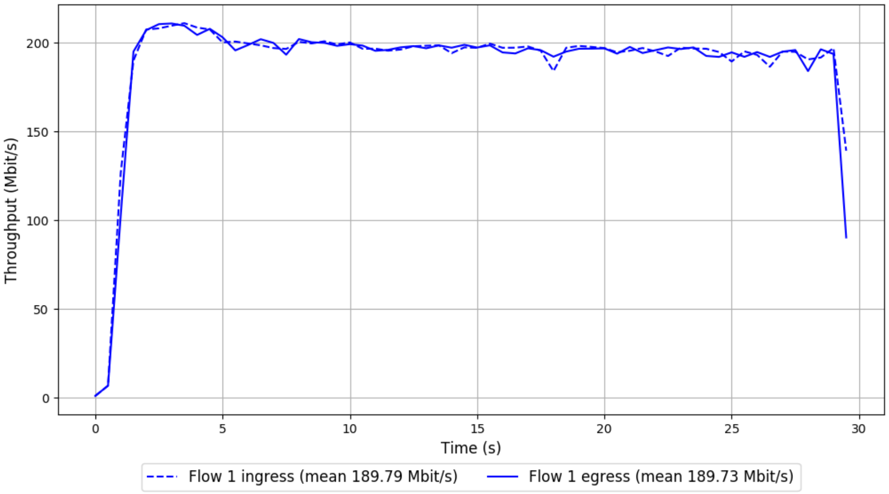


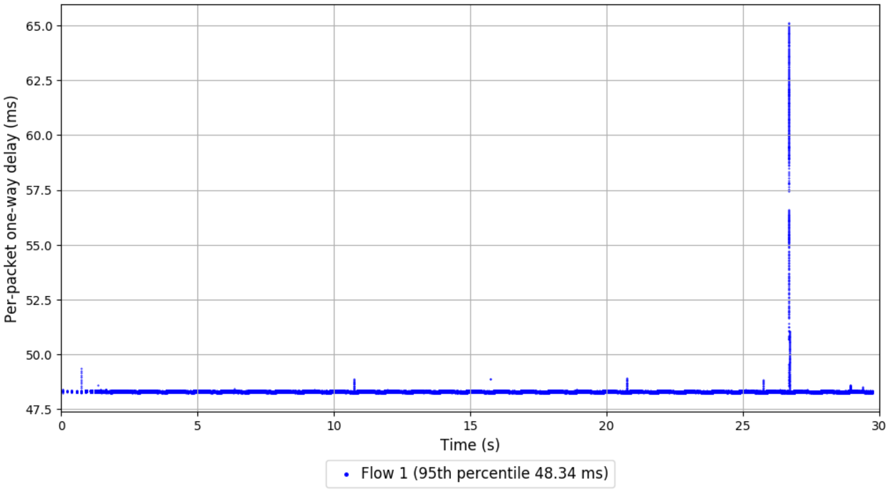
```
Run 6: Statistics of Indigo

Start at: 2017-09-21 10:54:59
End at: 2017-09-21 10:55:29
Local clock offset: -0.192 ms
Remote clock offset: 33.188 ms

# Below is generated by plot.py at 2017-09-21 15:41:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 189.73 Mbit/s
95th percentile per-packet one-way delay: 48.340 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 189.73 Mbit/s
95th percentile per-packet one-way delay: 48.340 ms
Loss rate: 0.59%
```

Run 6: Report of Indigo — Data Link



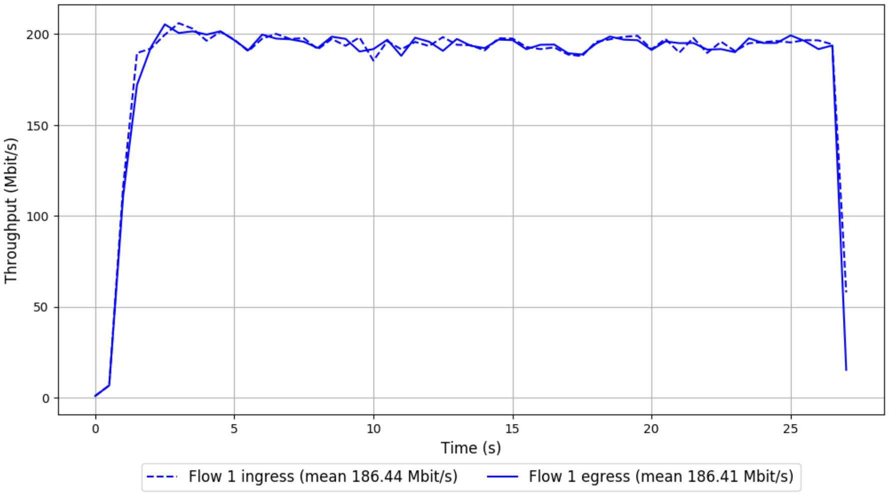


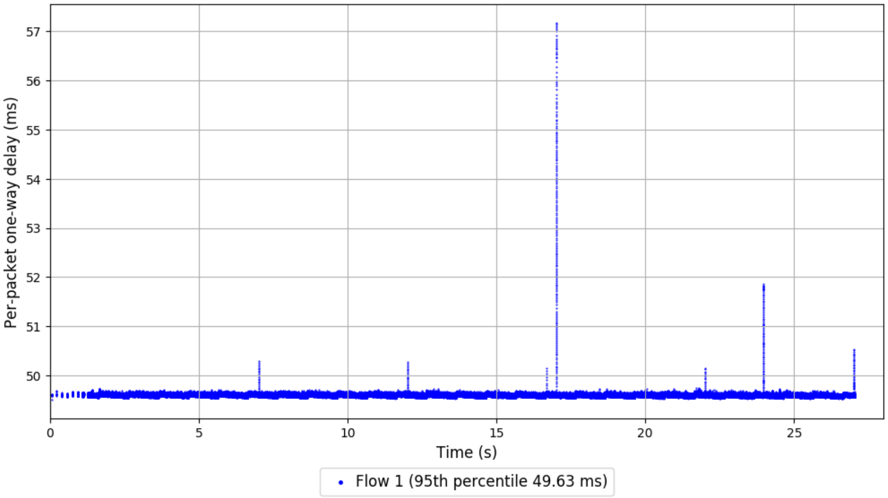
```
Run 7: Statistics of Indigo

Start at: 2017-09-21 11:12:42
End at: 2017-09-21 11:13:12
Local clock offset: -0.189 ms
Remote clock offset: 33.656 ms

# Below is generated by plot.py at 2017-09-21 15:41:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 186.41 Mbit/s
95th percentile per-packet one-way delay: 49.631 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 186.41 Mbit/s
95th percentile per-packet one-way delay: 49.631 ms
Loss rate: 0.64%
```

Run 7: Report of Indigo — Data Link



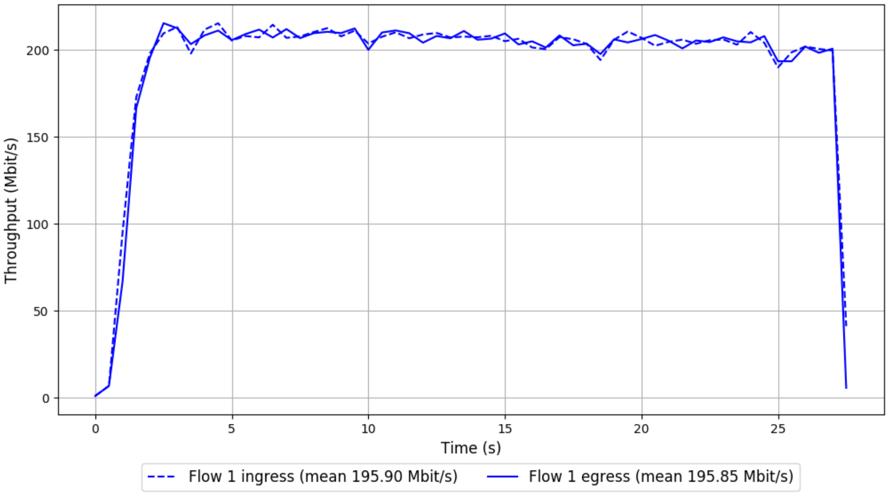


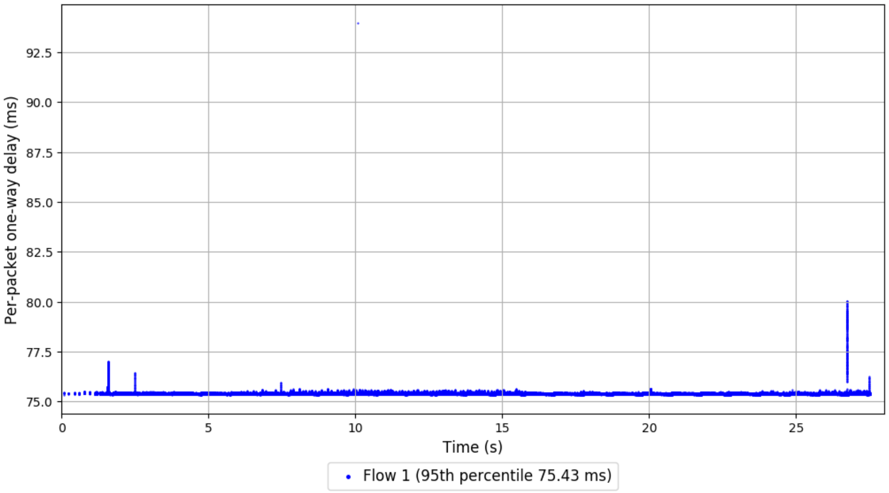
```
Run 8: Statistics of Indigo

Start at: 2017-09-21 11:30:25
End at: 2017-09-21 11:30:55
Local clock offset: -0.291 ms
Remote clock offset: 7.404 ms

# Below is generated by plot.py at 2017-09-21 15:42:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 195.85 Mbit/s
95th percentile per-packet one-way delay: 75.430 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 195.85 Mbit/s
95th percentile per-packet one-way delay: 75.430 ms
Loss rate: 0.64%
```

Run 8: Report of Indigo — Data Link



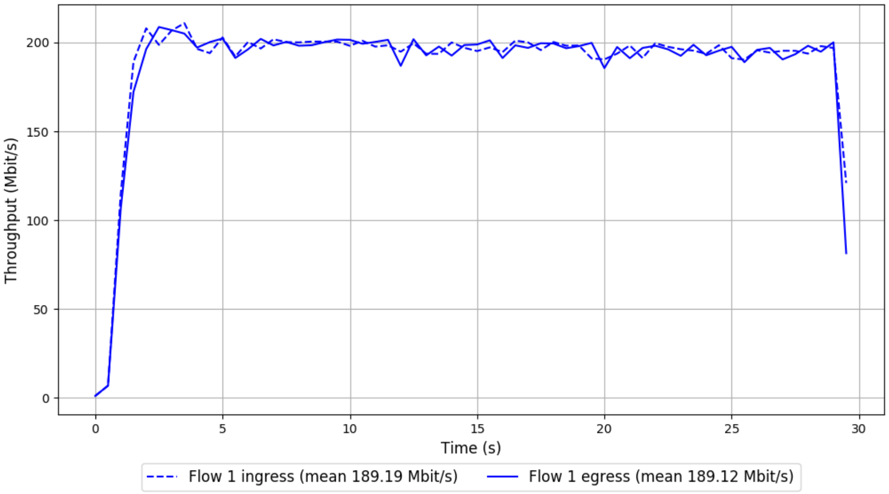


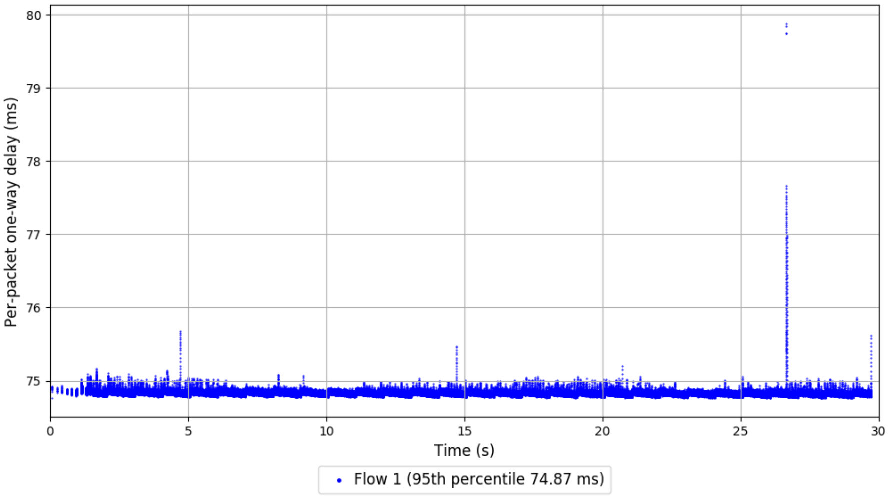
```
Run 9: Statistics of Indigo

Start at: 2017-09-21 11:48:02
End at: 2017-09-21 11:48:32
Local clock offset: -0.217 ms
Remote clock offset: 7.472 ms

# Below is generated by plot.py at 2017-09-21 15:42:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 189.12 Mbit/s
95th percentile per-packet one-way delay: 74.869 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 189.12 Mbit/s
95th percentile per-packet one-way delay: 74.869 ms
Loss rate: 0.60%
```

Run 9: Report of Indigo — Data Link



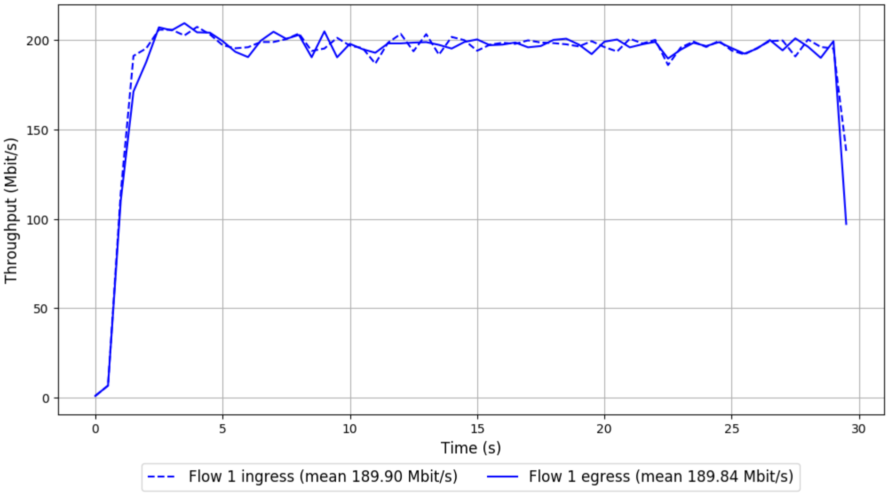


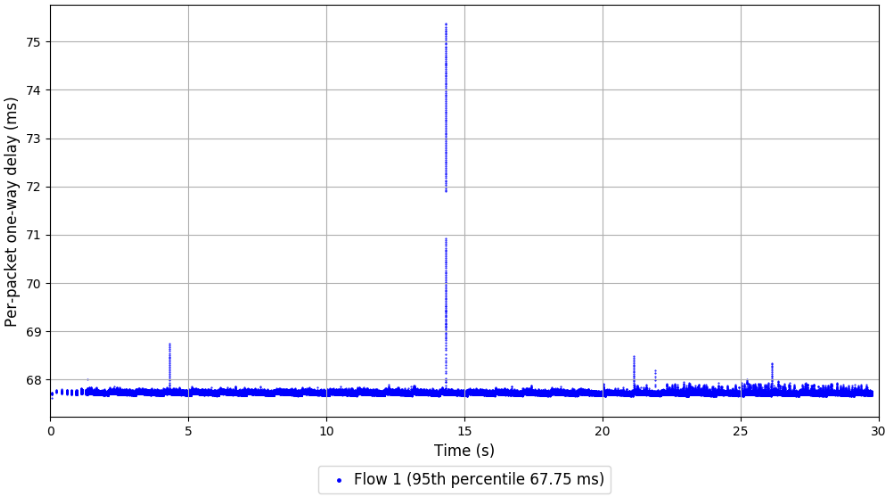
```
Run 10: Statistics of Indigo

Start at: 2017-09-21 12:05:26
End at: 2017-09-21 12:05:56
Local clock offset: -0.126 ms
Remote clock offset: 14.186 ms

# Below is generated by plot.py at 2017-09-21 15:42:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 189.84 Mbit/s
95th percentile per-packet one-way delay: 67.751 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 189.84 Mbit/s
95th percentile per-packet one-way delay: 67.751 ms
Loss rate: 0.60%
```

Run 10: Report of Indigo — Data Link



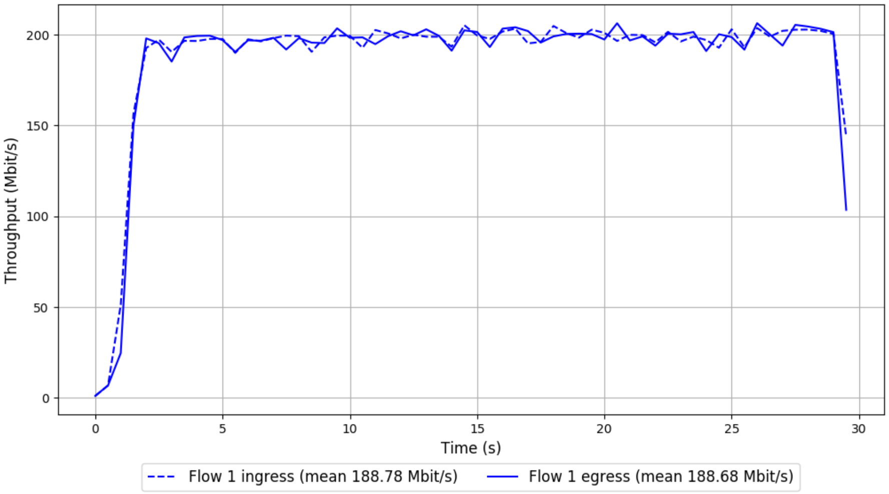


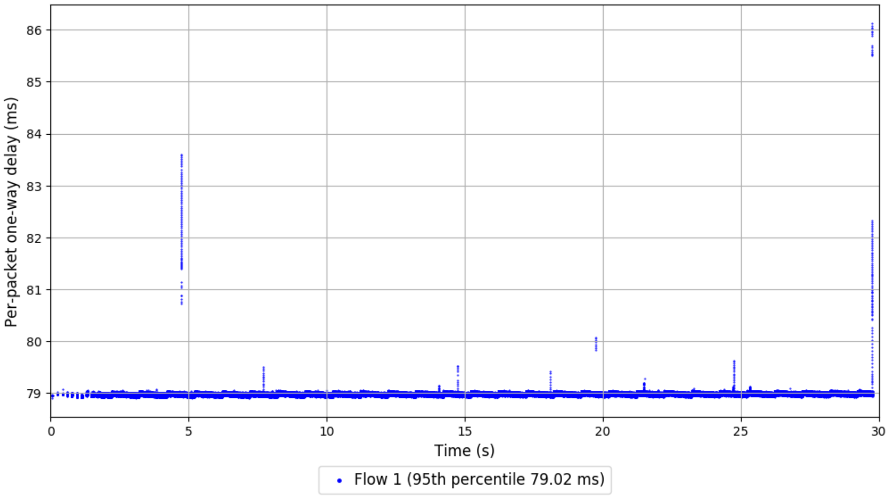
```
Run 1: Statistics of Indigo-calib

Start at: 2017-09-21 09:19:09
End at: 2017-09-21 09:19:39
Local clock offset: 0.079 ms
Remote clock offset: 2.807 ms

# Below is generated by plot.py at 2017-09-21 15:43:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 188.68 Mbit/s
95th percentile per-packet one-way delay: 79.023 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 188.68 Mbit/s
95th percentile per-packet one-way delay: 79.023 ms
Loss rate: 0.62%
```

Run 1: Report of Indigo-calib — Data Link



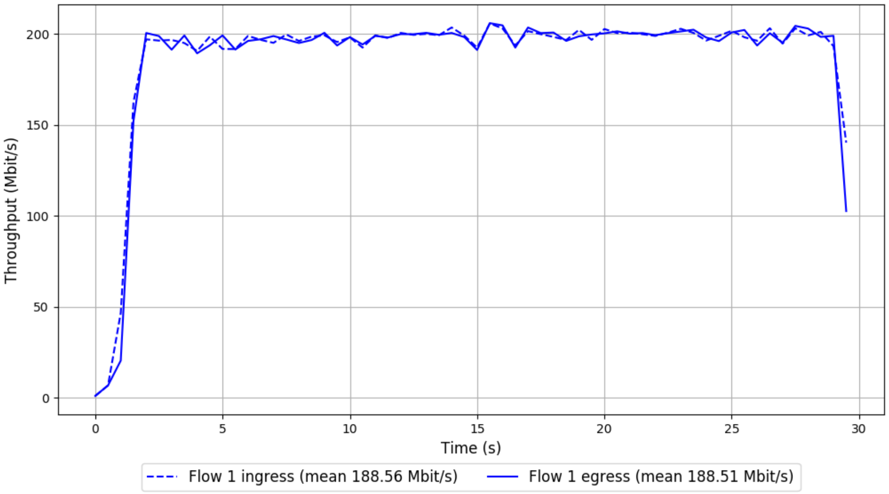


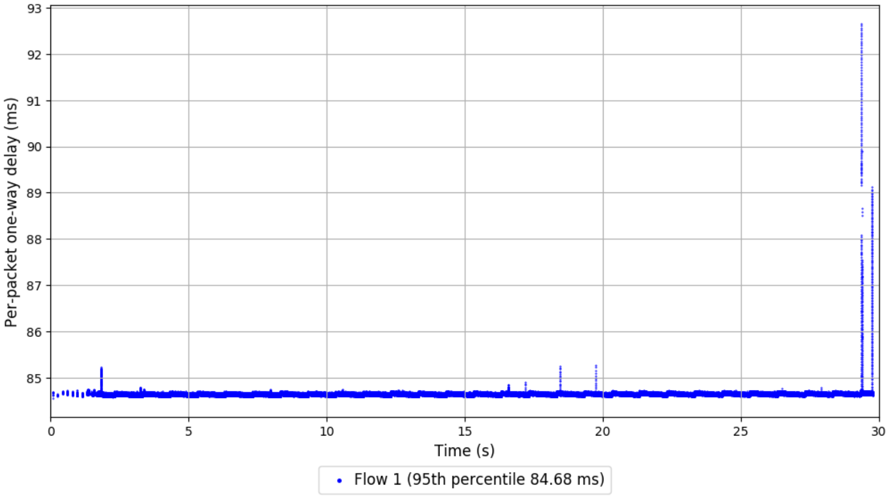
```
Run 2: Statistics of Indigo-calib

Start at: 2017-09-21 09:37:06
End at: 2017-09-21 09:37:36
Local clock offset: 0.007 ms
Remote clock offset: -1.884 ms

# Below is generated by plot.py at 2017-09-21 15:43:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 188.51 Mbit/s
95th percentile per-packet one-way delay: 84.677 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 188.51 Mbit/s
95th percentile per-packet one-way delay: 84.677 ms
Loss rate: 0.60%
```

Run 2: Report of Indigo-calib — Data Link



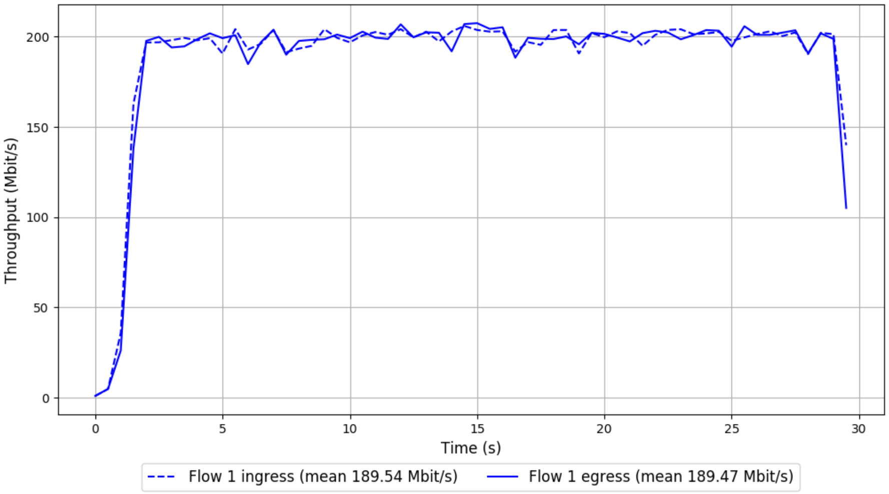


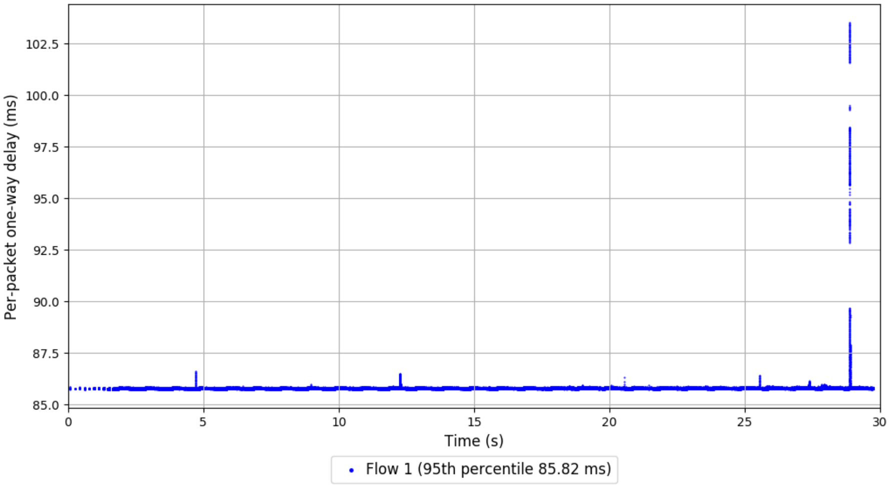
```
Run 3: Statistics of Indigo-calib

Start at: 2017-09-21 09:55:29
End at: 2017-09-21 09:55:59
Local clock offset: -0.142 ms
Remote clock offset: -4.336 ms

# Below is generated by plot.py at 2017-09-21 15:44:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 189.47 Mbit/s
95th percentile per-packet one-way delay: 85.822 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 189.47 Mbit/s
95th percentile per-packet one-way delay: 85.822 ms
Loss rate: 0.60%
```

Run 3: Report of Indigo-calib — Data Link



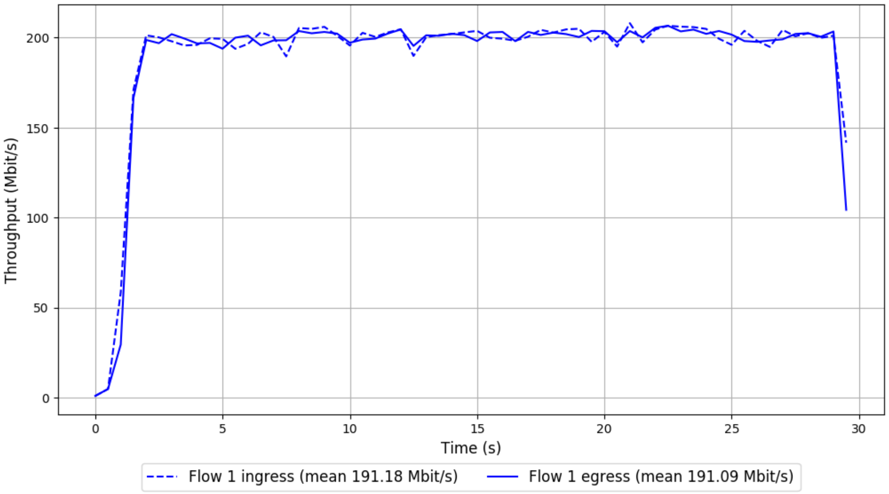


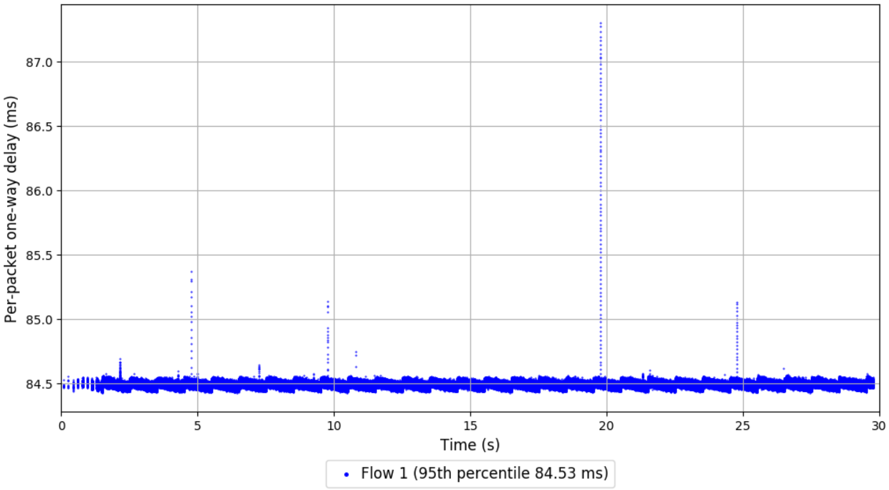
```
Run 4: Statistics of Indigo-calib

Start at: 2017-09-21 10:13:03
End at: 2017-09-21 10:13:33
Local clock offset: -0.132 ms
Remote clock offset: -1.029 ms

# Below is generated by plot.py at 2017-09-21 15:44:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 191.09 Mbit/s
95th percentile per-packet one-way delay: 84.527 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 191.09 Mbit/s
95th percentile per-packet one-way delay: 84.527 ms
Loss rate: 0.60%
```

Run 4: Report of Indigo-calib — Data Link



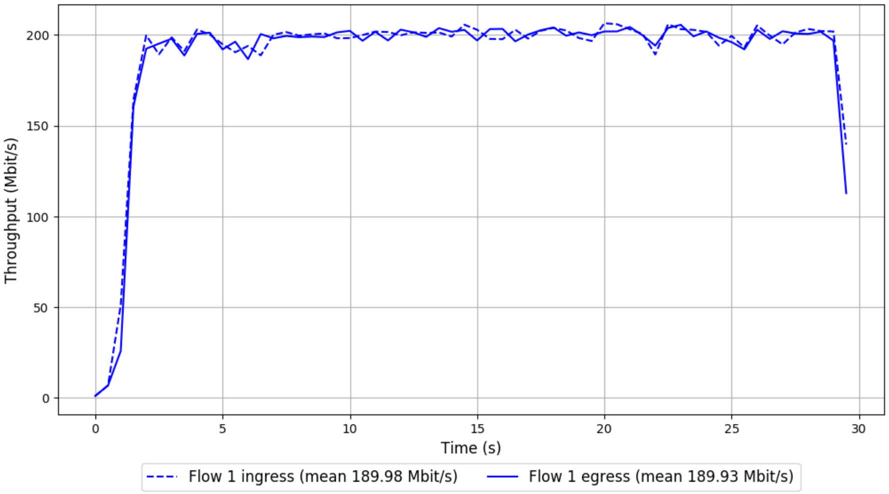


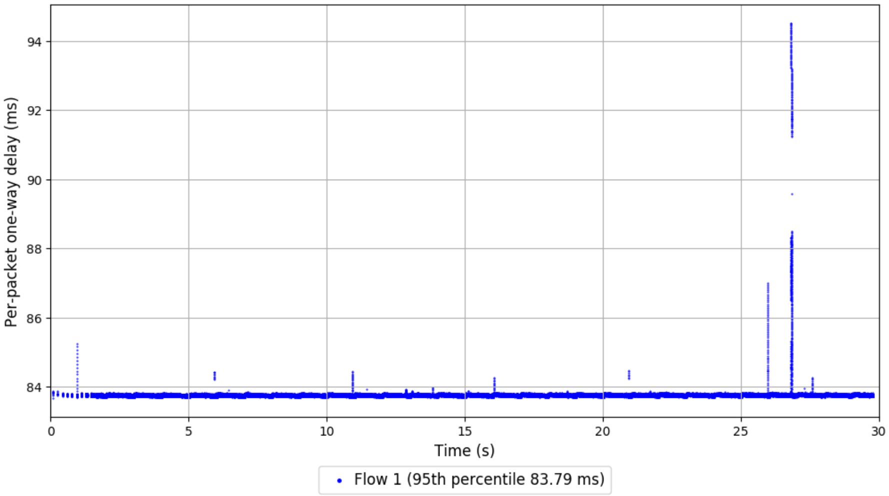
```
Run 5: Statistics of Indigo-calib

Start at: 2017-09-21 10:31:02
End at: 2017-09-21 10:31:32
Local clock offset: -0.195 ms
Remote clock offset: 0.094 ms

# Below is generated by plot.py at 2017-09-21 15:44:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 189.93 Mbit/s
95th percentile per-packet one-way delay: 83.790 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 189.93 Mbit/s
95th percentile per-packet one-way delay: 83.790 ms
Loss rate: 0.59%
```

Run 5: Report of Indigo-calib — Data Link



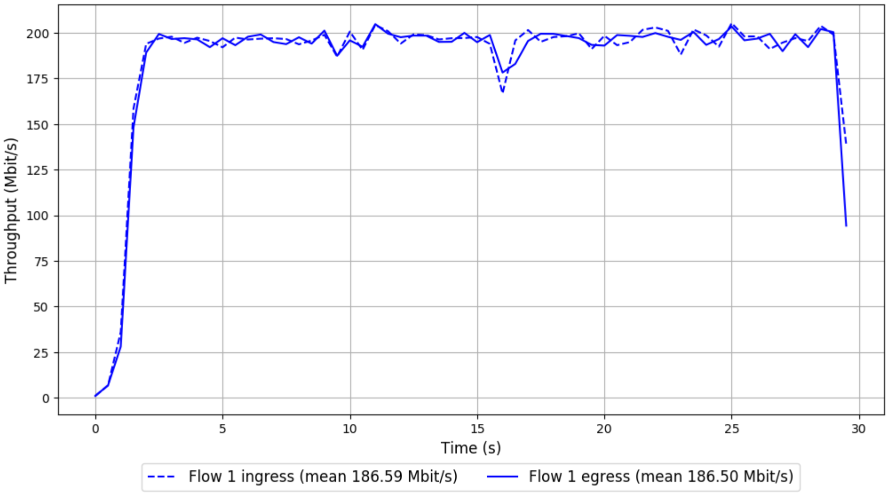


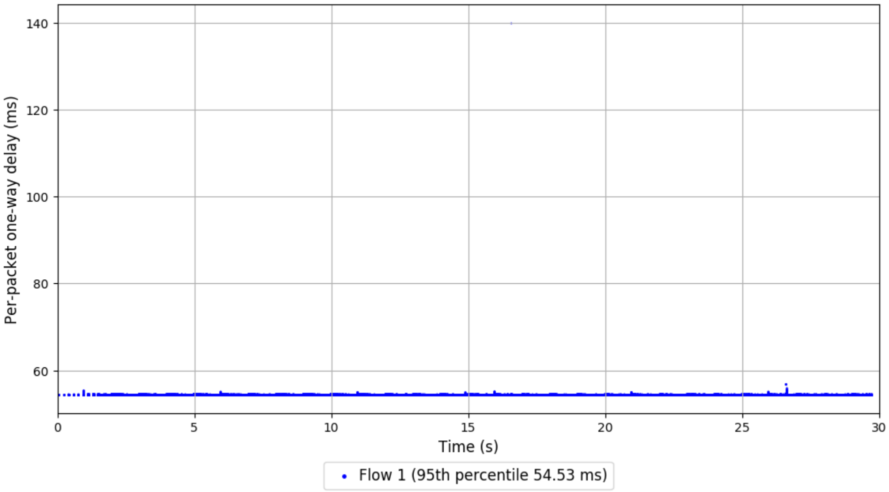
```
Run 6: Statistics of Indigo-calib

Start at: 2017-09-21 10:48:38
End at: 2017-09-21 10:49:08
Local clock offset: -0.182 ms
Remote clock offset: 29.33 ms

# Below is generated by plot.py at 2017-09-21 15:44:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 186.50 Mbit/s
95th percentile per-packet one-way delay: 54.529 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 186.50 Mbit/s
95th percentile per-packet one-way delay: 54.529 ms
Loss rate: 0.62%
```

Run 6: Report of Indigo-calib — Data Link



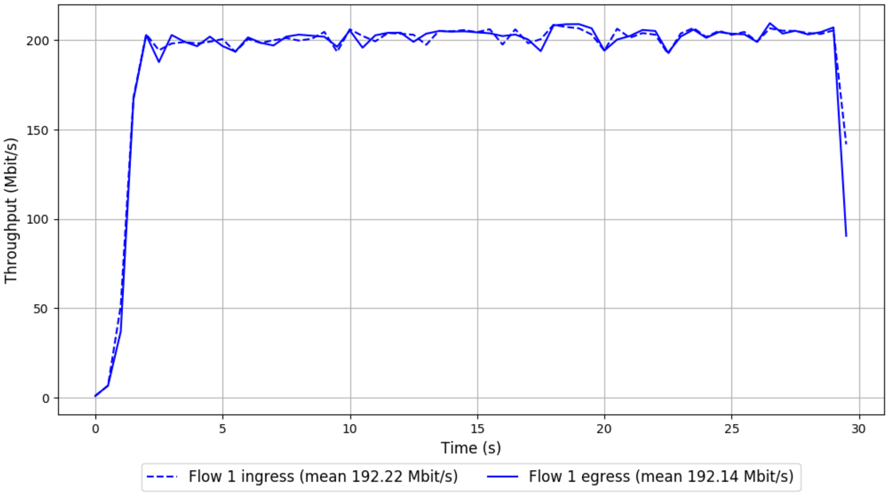


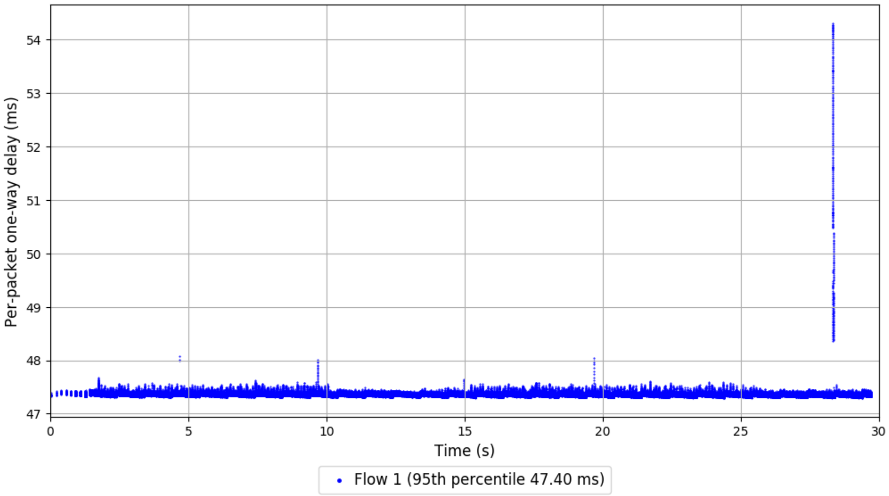
```
Run 7: Statistics of Indigo-calib

Start at: 2017-09-21 11:06:18
End at: 2017-09-21 11:06:48
Local clock offset: -0.19 ms
Remote clock offset: 33.848 ms

# Below is generated by plot.py at 2017-09-21 15:45:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 192.14 Mbit/s
95th percentile per-packet one-way delay: 47.402 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 192.14 Mbit/s
95th percentile per-packet one-way delay: 47.402 ms
Loss rate: 0.60%
```

Run 7: Report of Indigo-calib — Data Link



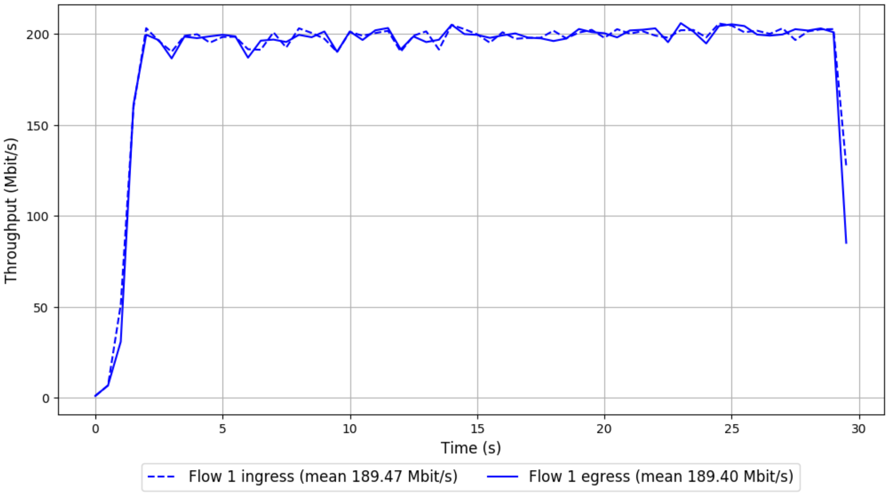


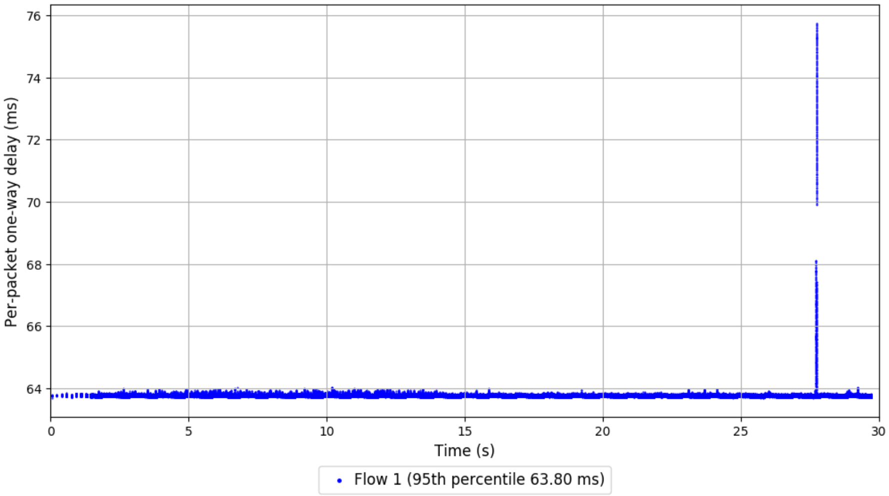
```
Run 8: Statistics of Indigo-calib

Start at: 2017-09-21 11:24:07
End at: 2017-09-21 11:24:37
Local clock offset: -0.301 ms
Remote clock offset: 16.931 ms

# Below is generated by plot.py at 2017-09-21 15:45:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 189.40 Mbit/s
95th percentile per-packet one-way delay: 63.799 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 189.40 Mbit/s
95th percentile per-packet one-way delay: 63.799 ms
Loss rate: 0.60%
```

Run 8: Report of Indigo-calib — Data Link



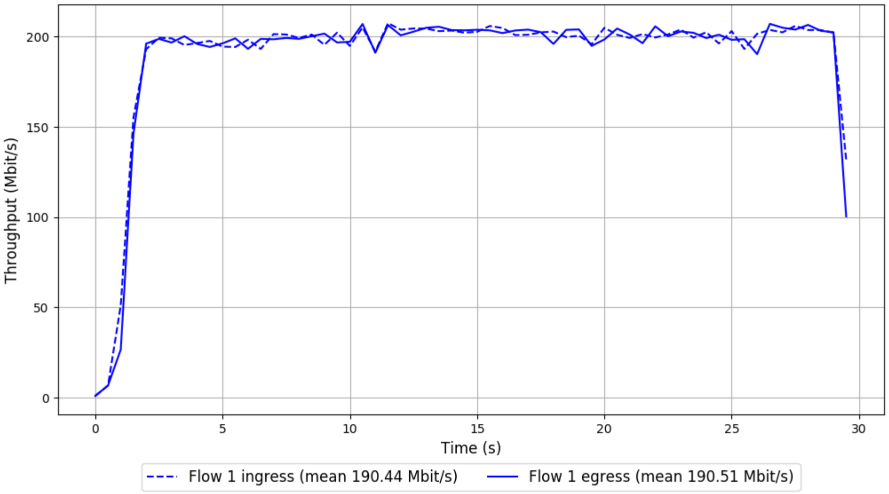


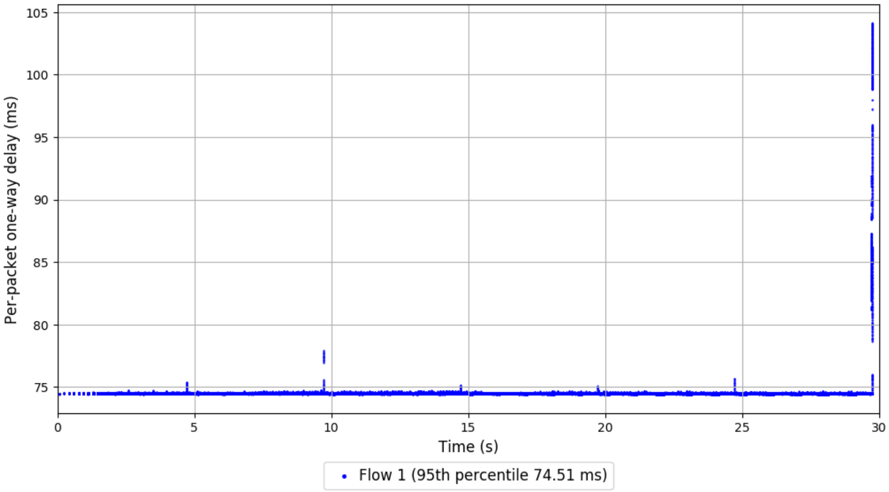
```
Run 9: Statistics of Indigo-calib

Start at: 2017-09-21 11:41:43
End at: 2017-09-21 11:42:13
Local clock offset: -0.247 ms
Remote clock offset: 7.625 ms

# Below is generated by plot.py at 2017-09-21 15:46:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 190.51 Mbit/s
95th percentile per-packet one-way delay: 74.506 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 190.51 Mbit/s
95th percentile per-packet one-way delay: 74.506 ms
Loss rate: 0.53%
```

Run 9: Report of Indigo-calib — Data Link



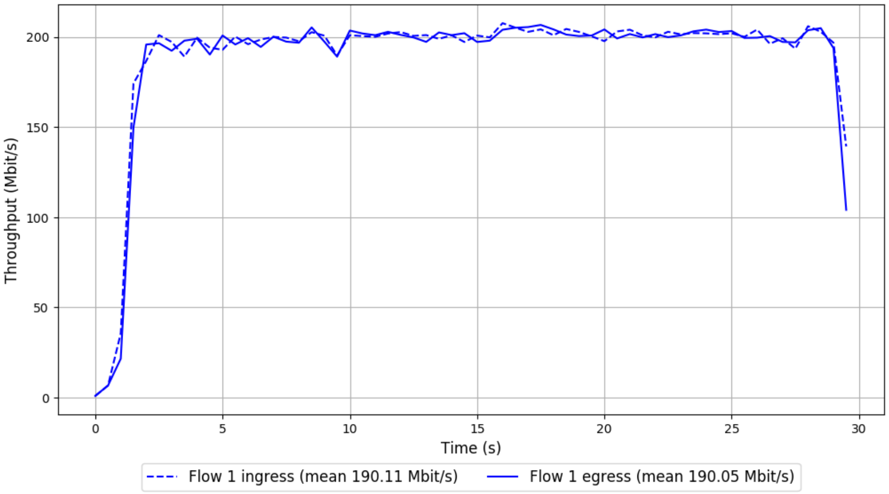


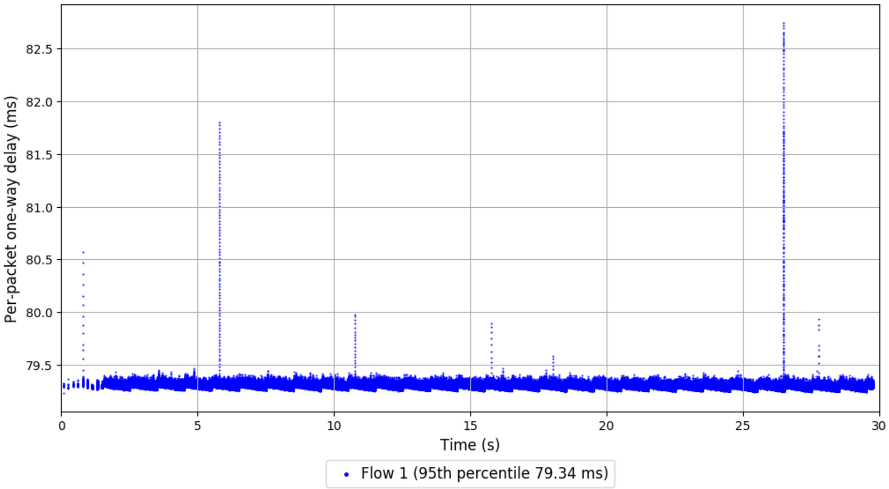
```
Run 10: Statistics of Indigo-calib

Start at: 2017-09-21 11:59:11
End at: 2017-09-21 11:59:41
Local clock offset: -0.162 ms
Remote clock offset: 2.731 ms

# Below is generated by plot.py at 2017-09-21 15:46:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 190.05 Mbit/s
95th percentile per-packet one-way delay: 79.344 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 190.05 Mbit/s
95th percentile per-packet one-way delay: 79.344 ms
Loss rate: 0.60%
```

Run 10: Report of Indigo-calib — Data Link



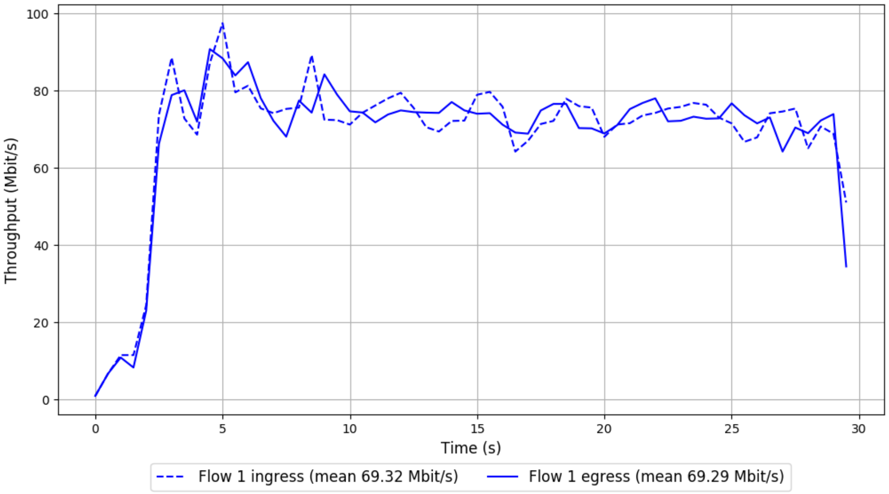


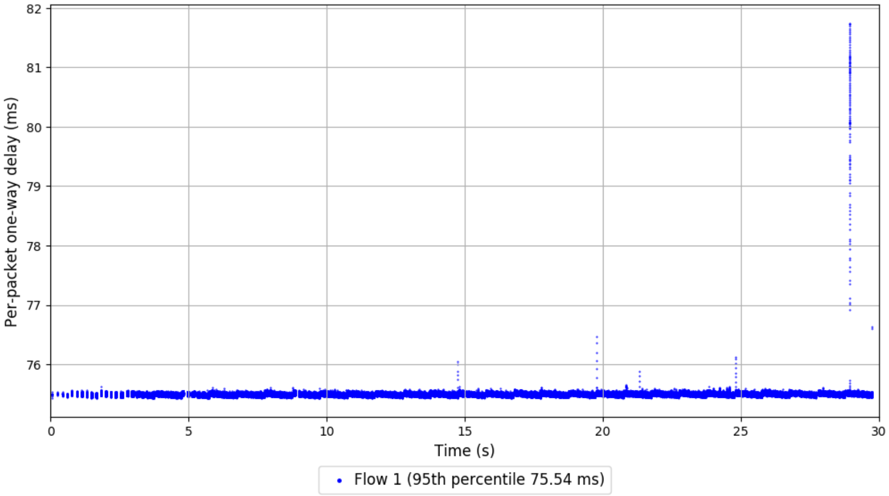
```
Run 1: Statistics of Indigo-delay

Start at: 2017-09-21 09:16:41
End at: 2017-09-21 09:17:11
Local clock offset: 0.106 ms
Remote clock offset: 6.633 ms

# Below is generated by plot.py at 2017-09-21 15:46:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.29 Mbit/s
95th percentile per-packet one-way delay: 75.536 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 69.29 Mbit/s
95th percentile per-packet one-way delay: 75.536 ms
Loss rate: 0.61%
```

Run 1: Report of Indigo-delay — Data Link



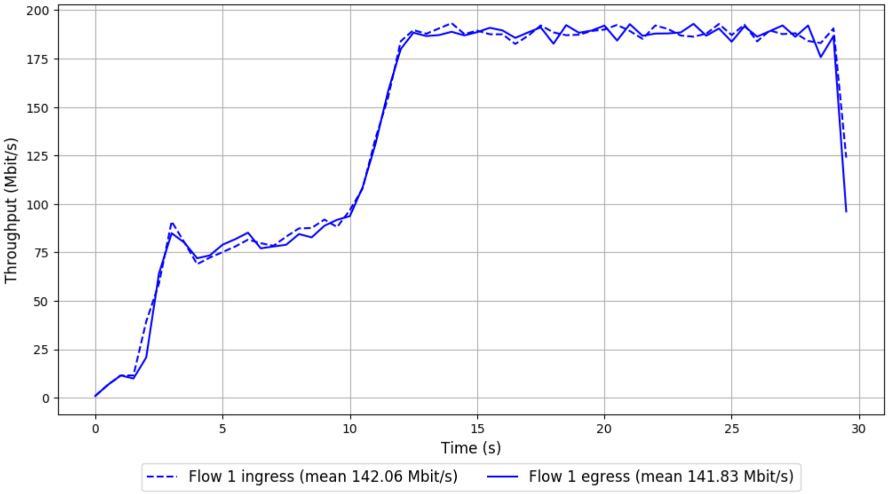


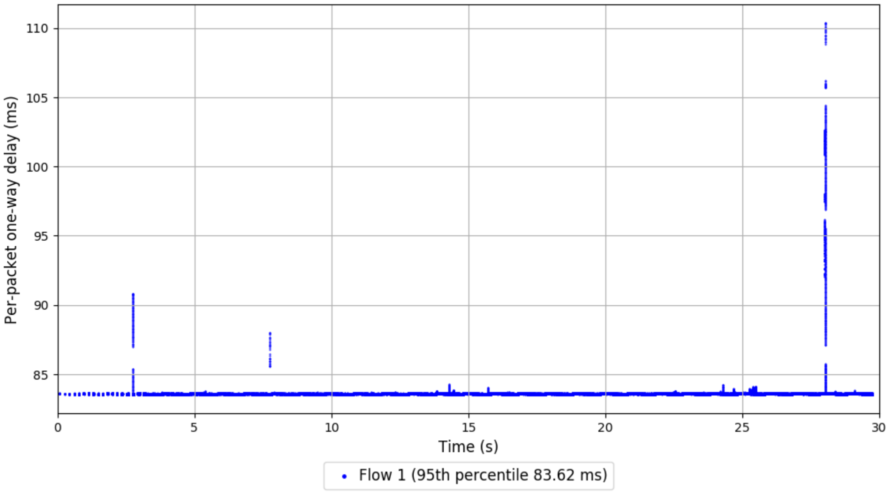
```
Run 2: Statistics of Indigo-delay

Start at: 2017-09-21 09:34:33
End at: 2017-09-21 09:35:04
Local clock offset: 0.018 ms
Remote clock offset: -1.125 ms

# Below is generated by plot.py at 2017-09-21 15:46:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 141.83 Mbit/s
95th percentile per-packet one-way delay: 83.616 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 141.83 Mbit/s
95th percentile per-packet one-way delay: 83.616 ms
Loss rate: 0.73%
```

Run 2: Report of Indigo-delay — Data Link



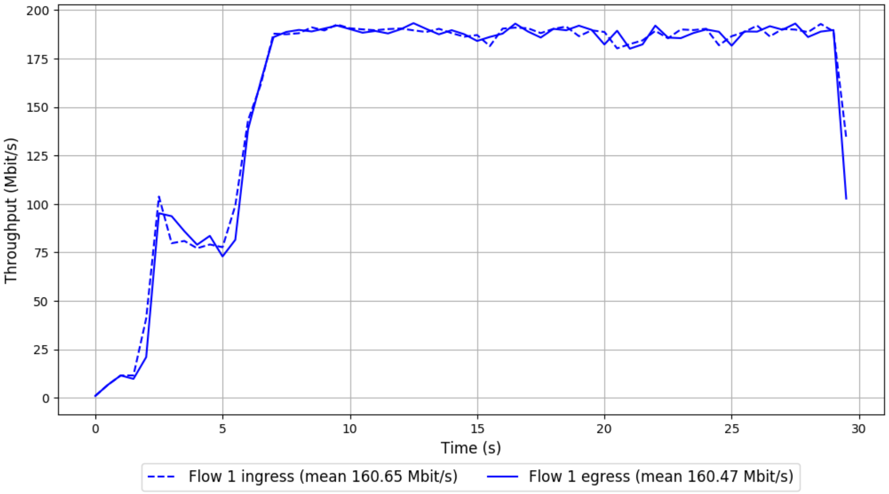


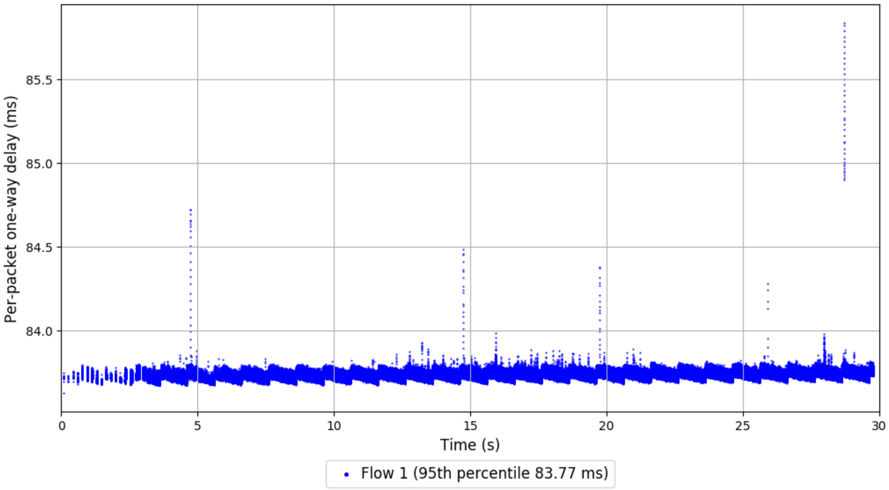
```
Run 3: Statistics of Indigo-delay

Start at: 2017-09-21 09:52:50
End at: 2017-09-21 09:53:20
Local clock offset: -0.122 ms
Remote clock offset: -0.557 ms

# Below is generated by plot.py at 2017-09-21 15:46:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 160.47 Mbit/s
95th percentile per-packet one-way delay: 83.774 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 160.47 Mbit/s
95th percentile per-packet one-way delay: 83.774 ms
Loss rate: 0.68%
```

Run 3: Report of Indigo-delay — Data Link

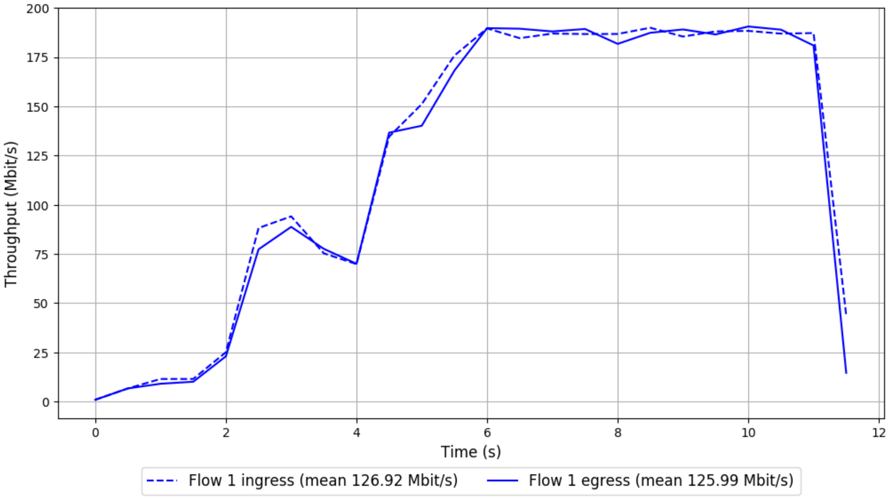


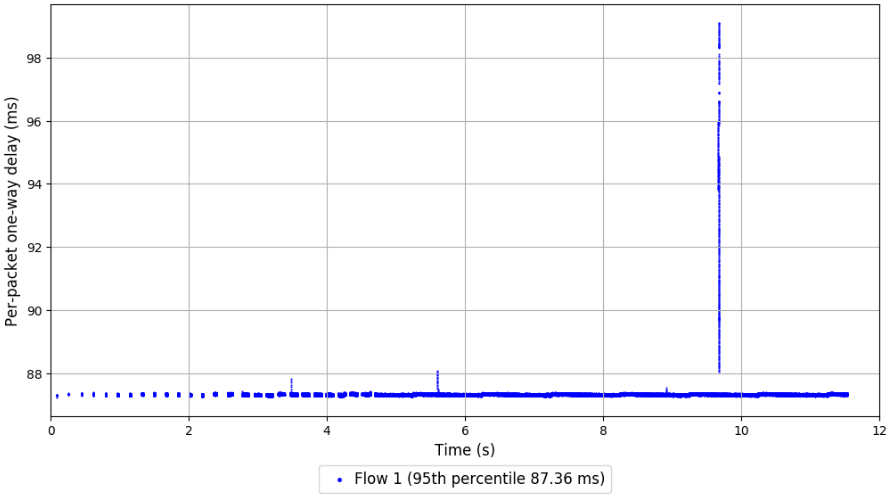


```
Run 4: Statistics of Indigo-delay

Start at: 2017-09-21 10:10:37
End at: 2017-09-21 10:11:07
Local clock offset: -0.094 ms
Remote clock offset: -4.028 ms
```

Run 4: Report of Indigo-delay — Data Link



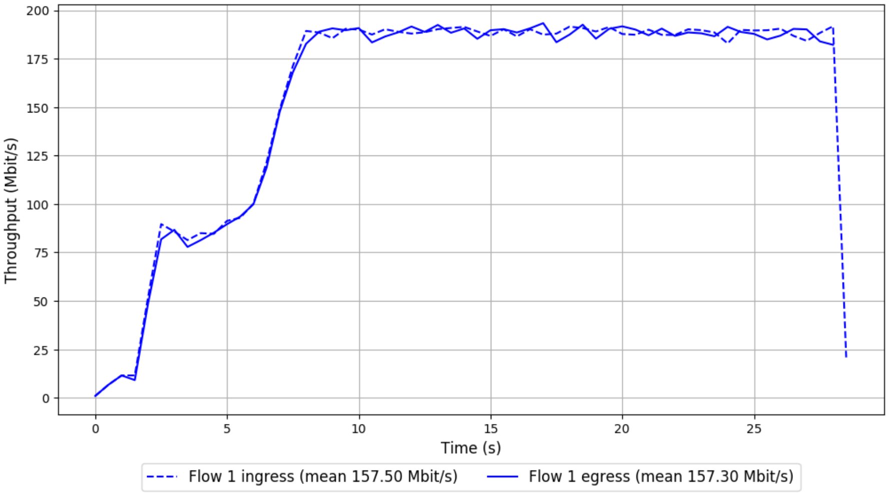


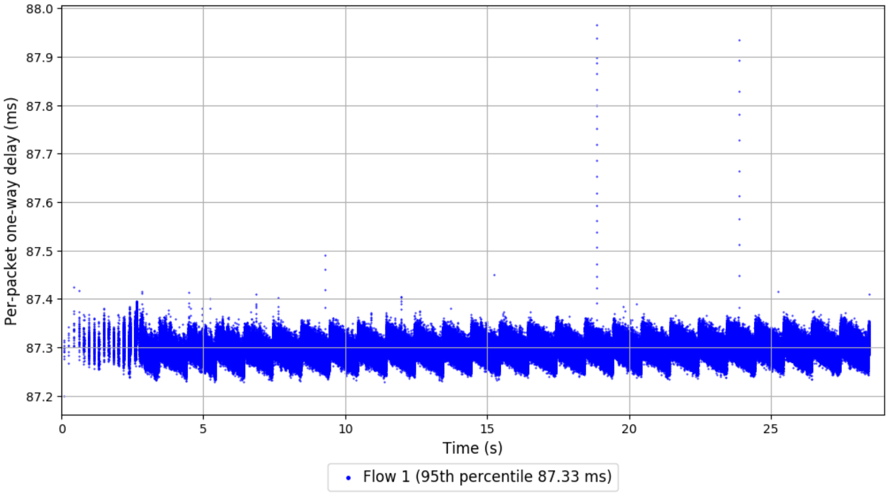
```
Run 5: Statistics of Indigo-delay

Start at: 2017-09-21 10:28:29
End at: 2017-09-21 10:28:59
Local clock offset: -0.187 ms
Remote clock offset: -3.881 ms

# Below is generated by plot.py at 2017-09-21 15:46:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 157.30 Mbit/s
95th percentile per-packet one-way delay: 87.331 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 157.30 Mbit/s
95th percentile per-packet one-way delay: 87.331 ms
Loss rate: 0.72%
```

Run 5: Report of Indigo-delay — Data Link

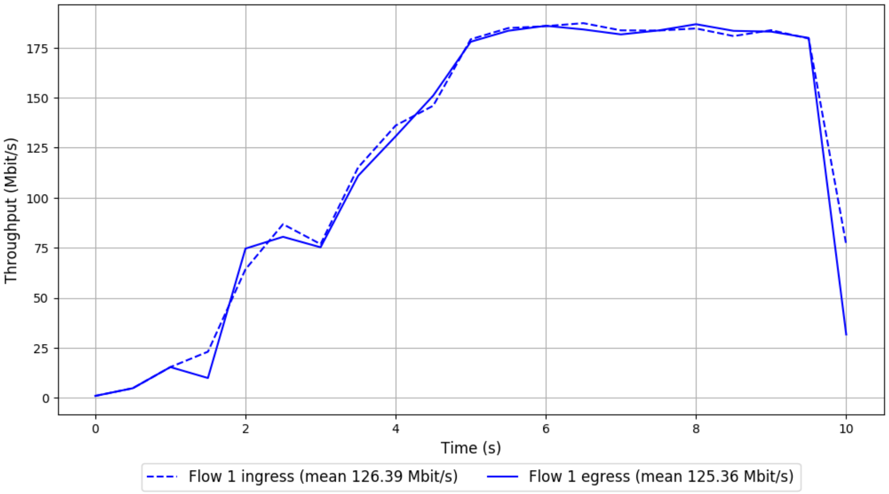


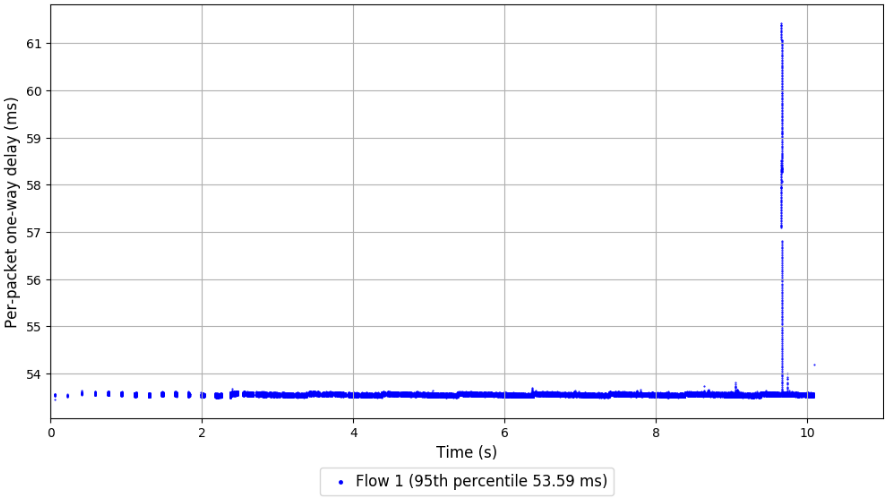


```
Run 6: Statistics of Indigo-delay

Start at: 2017-09-21 10:46:12
End at: 2017-09-21 10:46:42
Local clock offset: -0.202 ms
Remote clock offset: 30.31 ms
```

Run 6: Report of Indigo-delay — Data Link

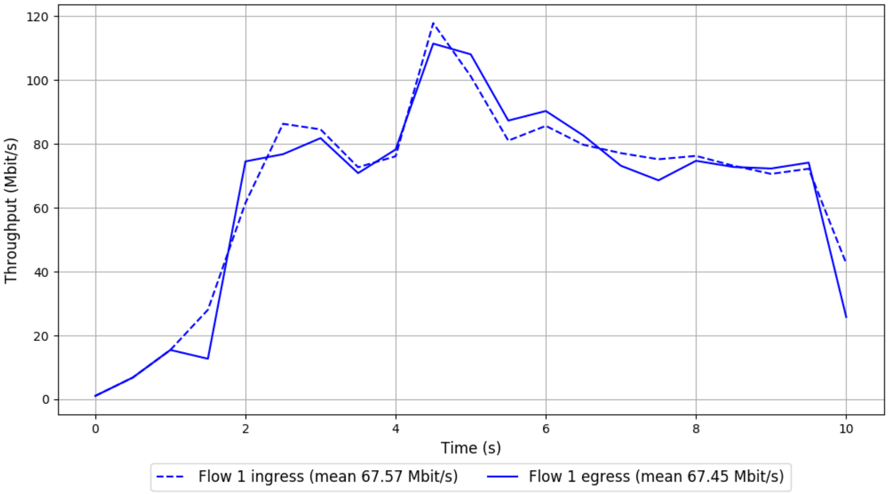


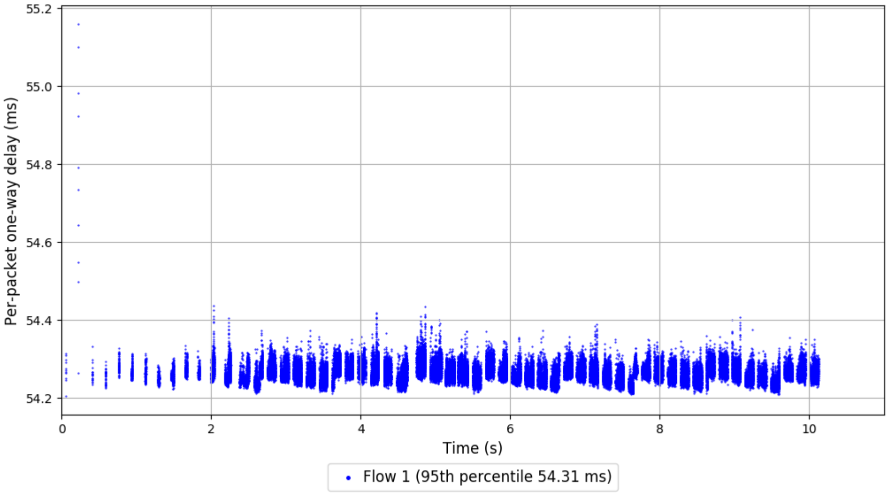


```
Run 7: Statistics of Indigo-delay

Start at: 2017-09-21 11:03:51
End at: 2017-09-21 11:04:21
Local clock offset: -0.201 ms
Remote clock offset: 29.014 ms
```

Run 7: Report of Indigo-delay — Data Link

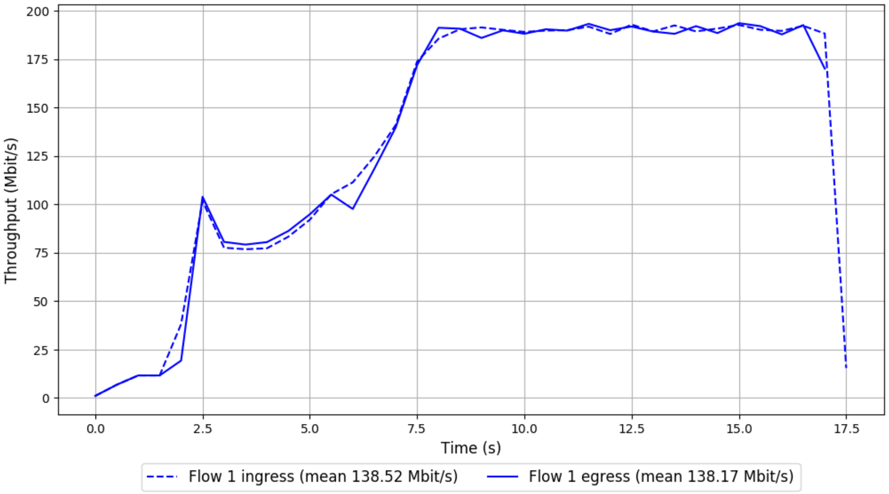


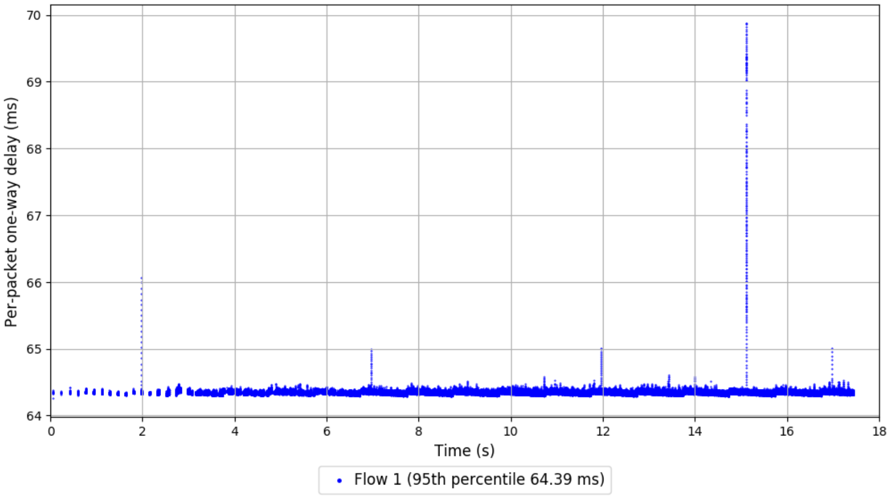


```
Run 8: Statistics of Indigo-delay

Start at: 2017-09-21 11:21:39
End at: 2017-09-21 11:22:09
Local clock offset: -0.232 ms
Remote clock offset: 18.67 ms
```

Run 8: Report of Indigo-delay — Data Link

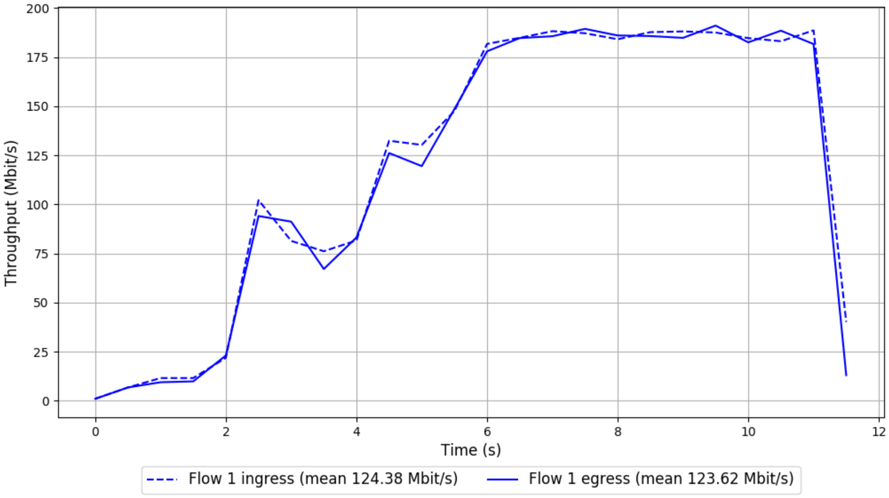


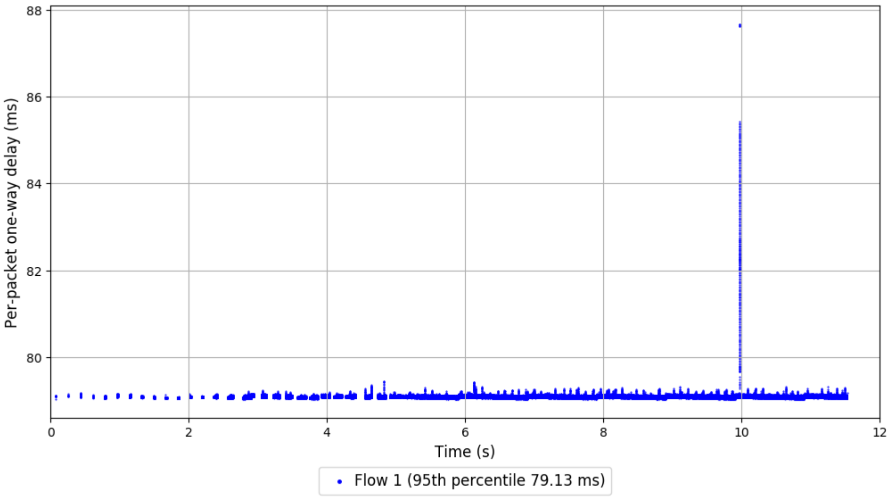


```
Run 9: Statistics of Indigo-delay

Start at: 2017-09-21 11:39:16
End at: 2017-09-21 11:39:46
Local clock offset: -0.257 ms
Remote clock offset: 3.278 ms
```

Run 9: Report of Indigo-delay — Data Link

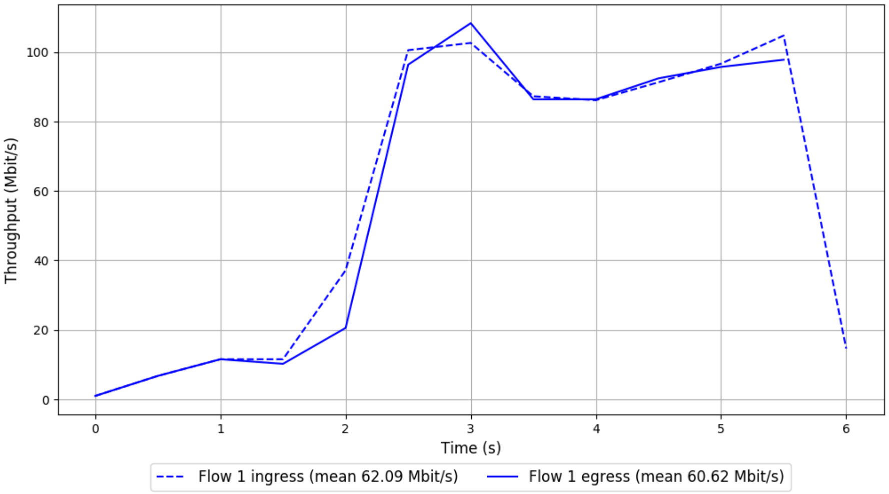


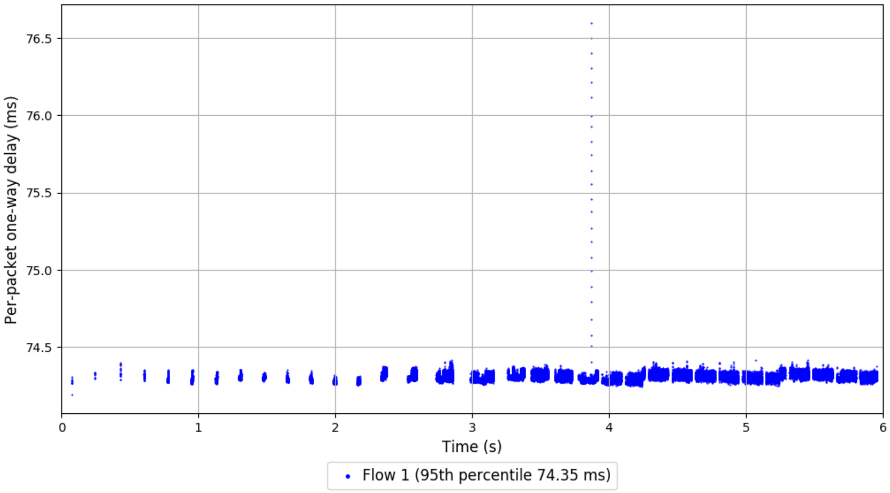


```
Run 10: Statistics of Indigo-delay

Start at: 2017-09-21 11:56:47
End at: 2017-09-21 11:57:17
Local clock offset: -0.191 ms
Remote clock offset: 7.572 ms
```

Run 10: Report of Indigo-delay — Data Link


Throughput (Mbit/s)
0
20
40
60
80
100
0
1
2
3
4
5
6
Time (s)
Flow 1 ingress (mean 62.09 Mbit/s)
Flow 1 egress (mean 60.62 Mbit/s)


Per-packet one-way delay (ms)
74.5
75.0
75.5
76.0
76.5
0
1
2
3
4
5
6
Time (s)
Flow 1 (95th percentile 74.35 ms)