Pantheon Report

Generated at 2017-09-18 19:32:07 (UTC).

Data path: China Ethernet (*remote*) →AWS Korea Ethernet (*local*).

Repeated the test of 10 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

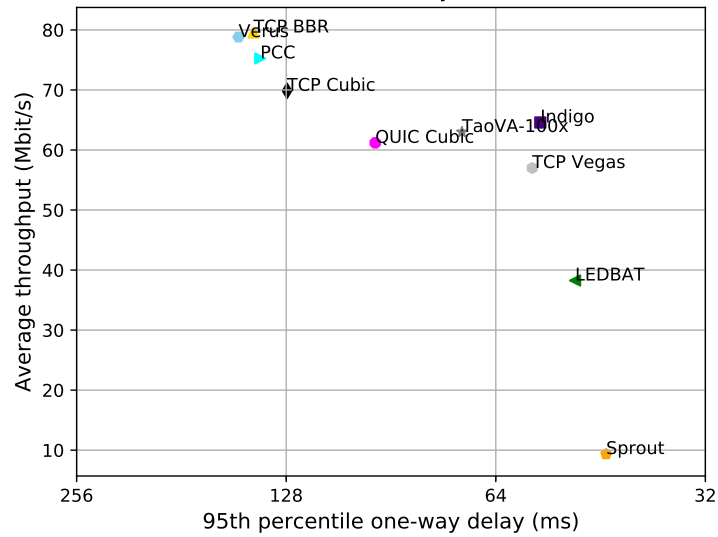Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

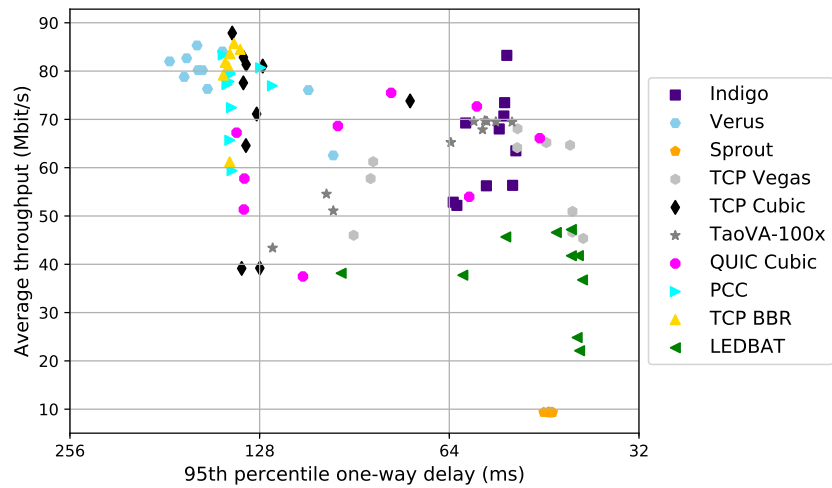NTP offsets were measured against `ntp.nict.jp` and have been applied to correct the timestamps in logs.

```
Git summary:
branch: master @ 57453dc11f8da93a2e03eea75289fea01b816298
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
 M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
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 China Ethernet to AWS Korea Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)

test from China Ethernet to AWS Korea Ethernet, 10 runs of 30s each per scheme

scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	7	79.57	142.63	1.07
TCP Cubic	10	69.86	127.65	0.82
Indigo	10	64.59	55.24	0.32
LEDBAT	10	38.26	49.24	0.70
PCC	10	75.25	139.48	1.13
QUIC Cubic	9	61.19	95.35	0.66
Sprout	9	9.35	44.43	0.29
TaoVA-100x	10	63.00	71.58	1.83
TCP Vegas	10	57.00	56.73	0.41
Verus	10	78.81	149.89	1.31

```
Run 1: Statistics of TCP BBR

Start at: 2017-09-18 17:22:56
End at: 2017-09-18 17:23:26
Local clock offset: -0.643 ms
Remote clock offset: 0.279 ms

# Below is generated by plot.py at 2017-09-18 19:21:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.02 Mbit/s
95th percentile per-packet one-way delay: 143.590 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 81.02 Mbit/s
95th percentile per-packet one-way delay: 143.590 ms
Loss rate: 0.77%
```
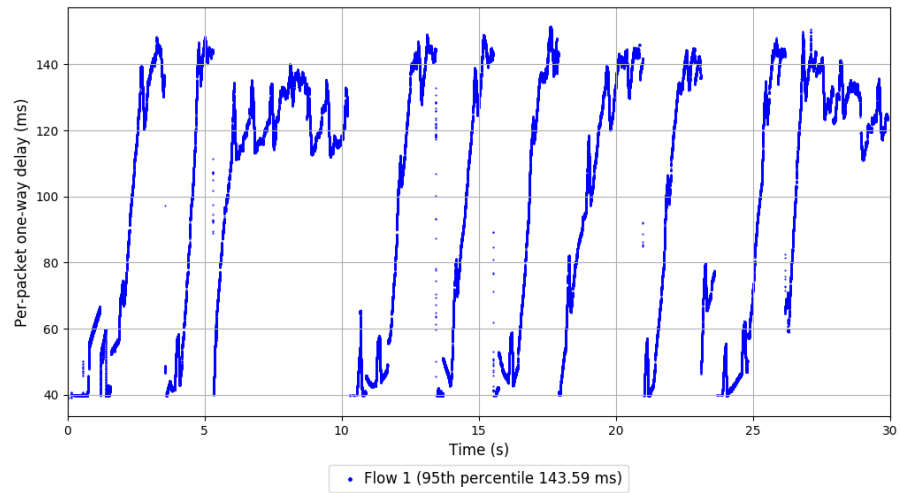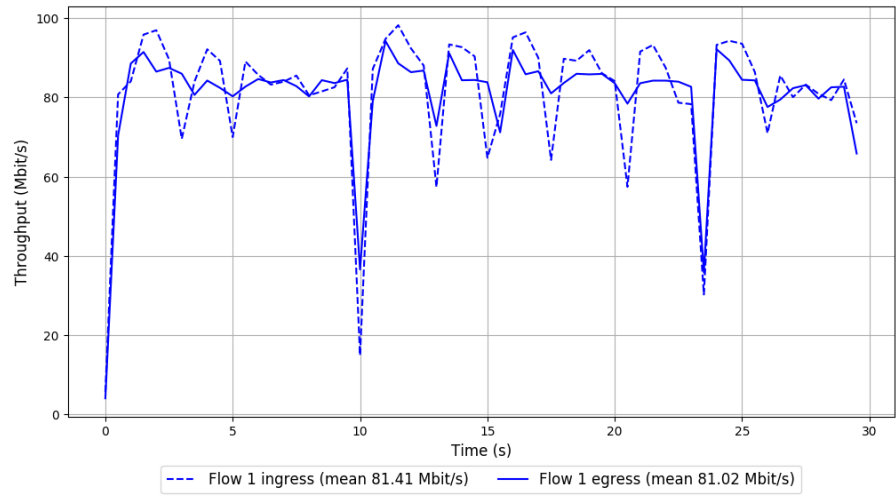
Run 1: Report of TCP BBR — Data Link
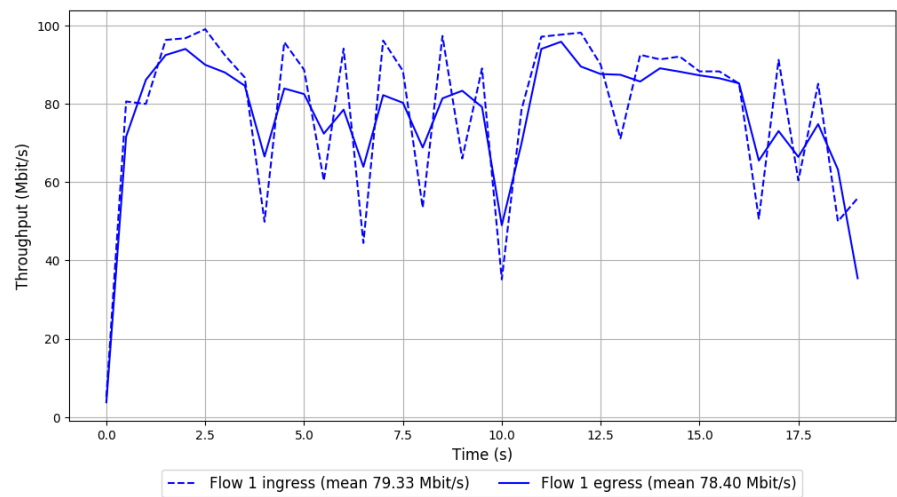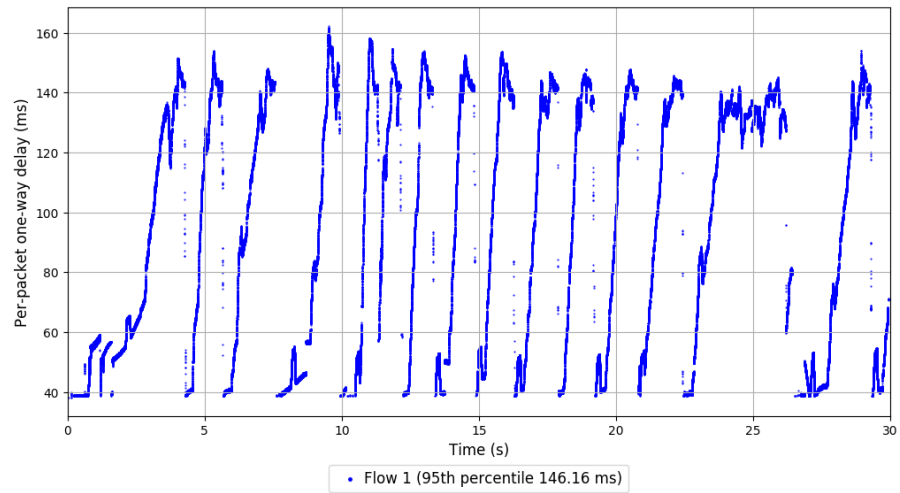
```
Run 2: Statistics of TCP BBR

Start at: 2017-09-18 17:34:57
End at: 2017-09-18 17:35:27
Local clock offset: -2.758 ms
Remote clock offset: 0.694 ms
```

Run 2: Report of TCP BBR — Data Link

Flow 1 ingress (mean 79.33 Mbit/s)   Flow 1 egress (mean 78.40 Mbit/s)

Flow 1 (95th percentile 145.04 ms)

```
Run 3: Statistics of TCP BBR

Start at: 2017-09-18 17:46:56
End at: 2017-09-18 17:47:26
Local clock offset: -3.45 ms
Remote clock offset: 0.898 ms


# Below is generated by plot.py at 2017-09-18 19:21:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.16 Mbit/s
95th percentile per-packet one-way delay: 146.161 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 79.16 Mbit/s
95th percentile per-packet one-way delay: 146.161 ms
Loss rate: 1.44%
```
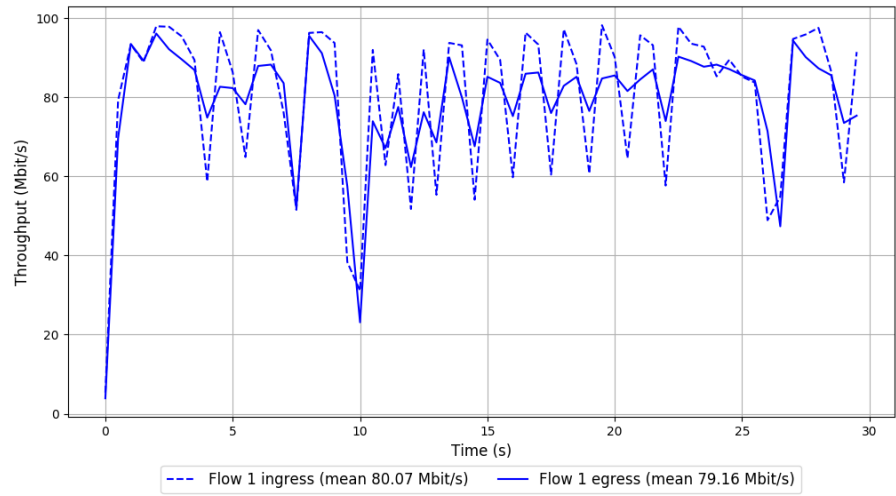
Run 3: Report of TCP BBR — Data Link

Flow 1 ingress (mean 80.07 Mbit/s)   Flow 1 egress (mean 79.16 Mbit/s)

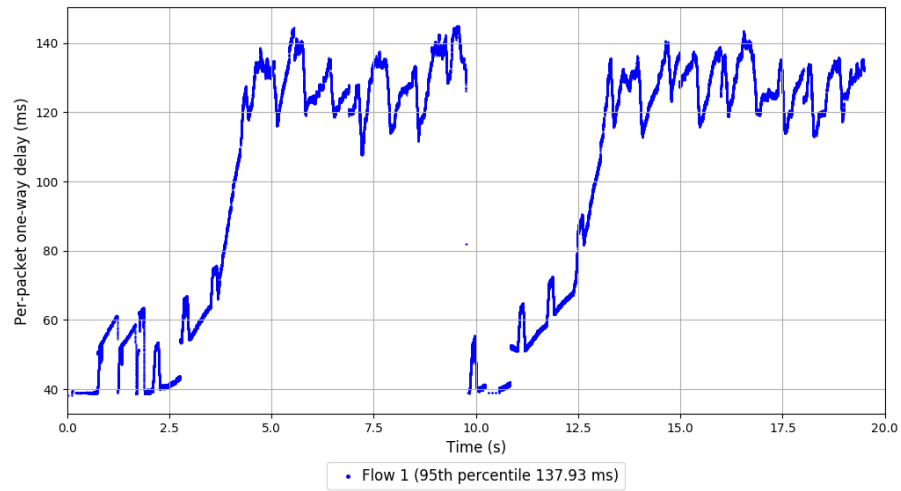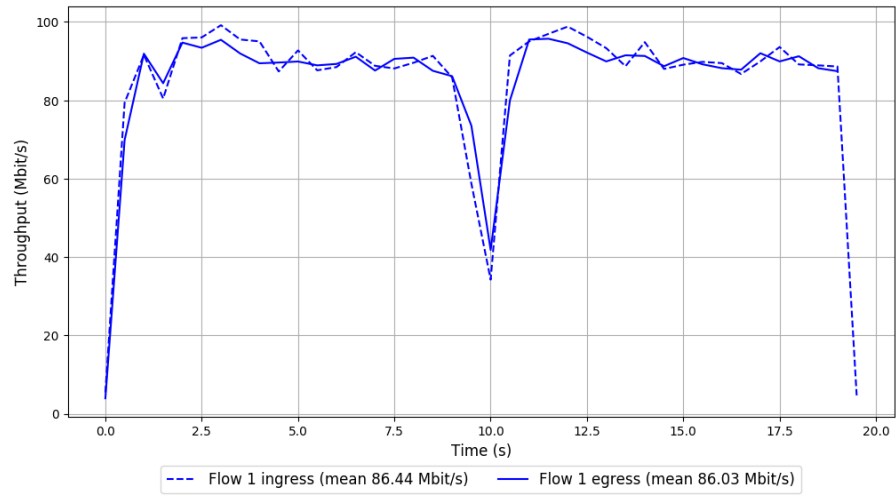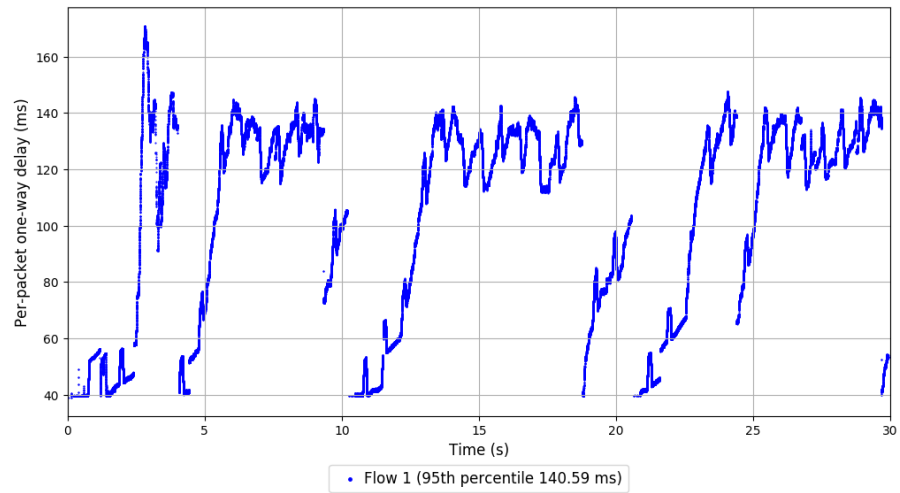Flow 1 (95th percentile 146.16 ms)

```
Run 4: Statistics of TCP BBR

Start at: 2017-09-18 17:58:55
End at: 2017-09-18 17:59:25
Local clock offset: -4.038 ms
Remote clock offset: 1.121 ms
```

Run 4: Report of TCP BBR — Data Link

Flow 1 ingress (mean 86.44 Mbit/s)   Flow 1 egress (mean 86.03 Mbit/s)

Flow 1 (95th percentile 137.93 ms)

```
Run 5: Statistics of TCP BBR

Start at: 2017-09-18 18:10:51
End at: 2017-09-18 18:11:21
Local clock offset: -3.38 ms
Remote clock offset: 1.373 ms


# Below is generated by plot.py at 2017-09-18 19:21:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.72 Mbit/s
95th percentile per-packet one-way delay: 140.587 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 85.72 Mbit/s
95th percentile per-packet one-way delay: 140.587 ms
Loss rate: 0.57%
```
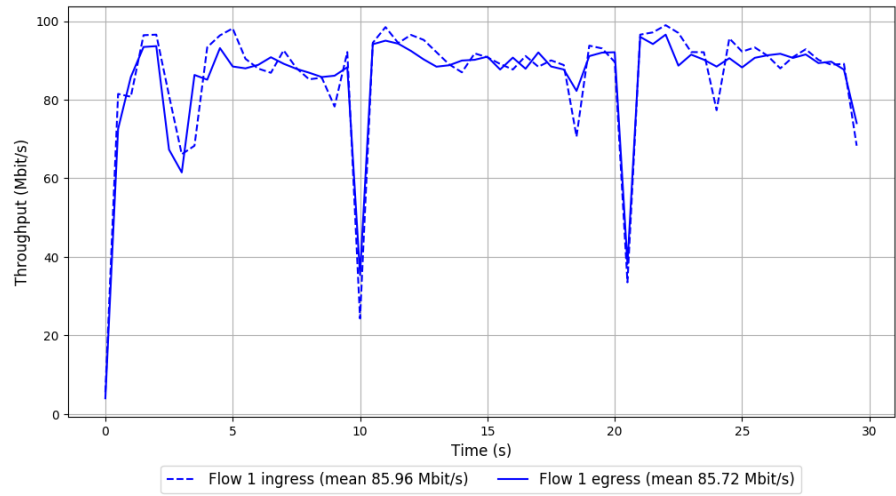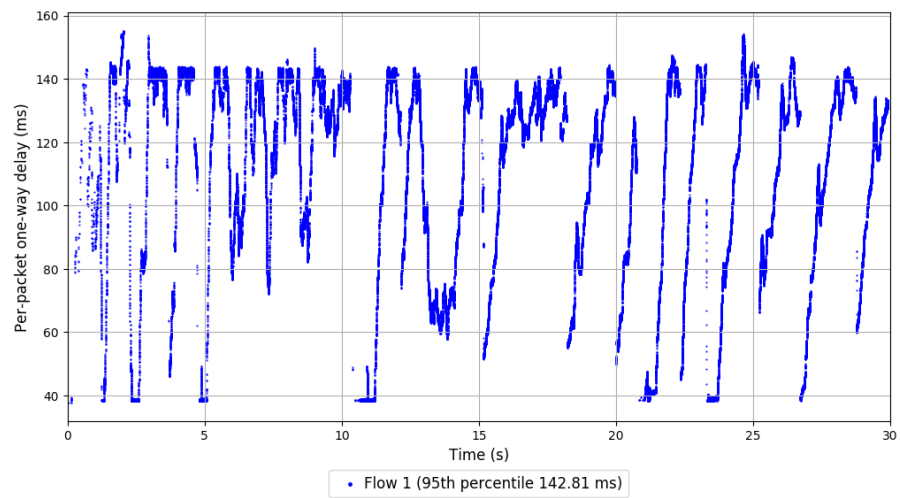
Run 5: Report of TCP BBR — Data Link

Flow 1 ingress (mean 85.96 Mbit/s)   Flow 1 egress (mean 85.72 Mbit/s)

Flow 1 (95th percentile 140.59 ms)

```
Run 6: Statistics of TCP BBR

Start at: 2017-09-18 18:22:53
End at: 2017-09-18 18:23:23
Local clock offset: -4.892 ms
Remote clock offset: 1.601 ms


# Below is generated by plot.py at 2017-09-18 19:21:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.22 Mbit/s
95th percentile per-packet one-way delay: 142.813 ms
Loss rate: 2.57%
-- Flow 1:
Average throughput: 61.22 Mbit/s
95th percentile per-packet one-way delay: 142.813 ms
Loss rate: 2.57%
```
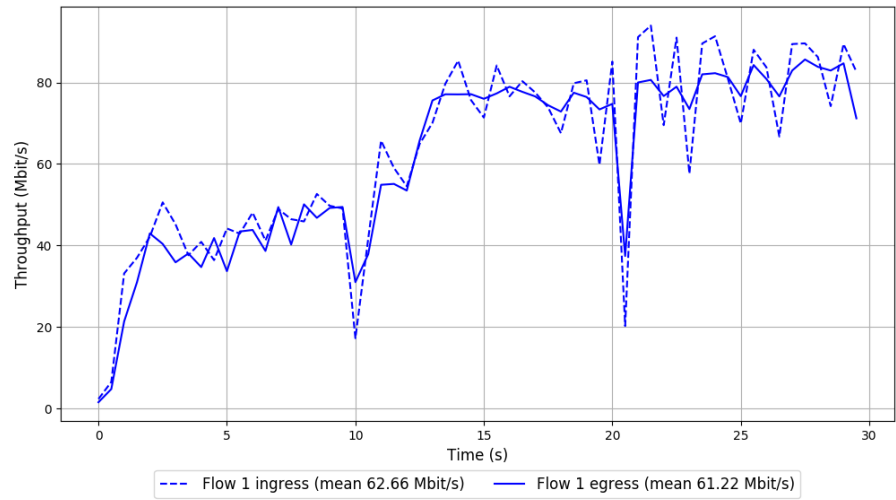
Run 6: Report of TCP BBR — Data Link
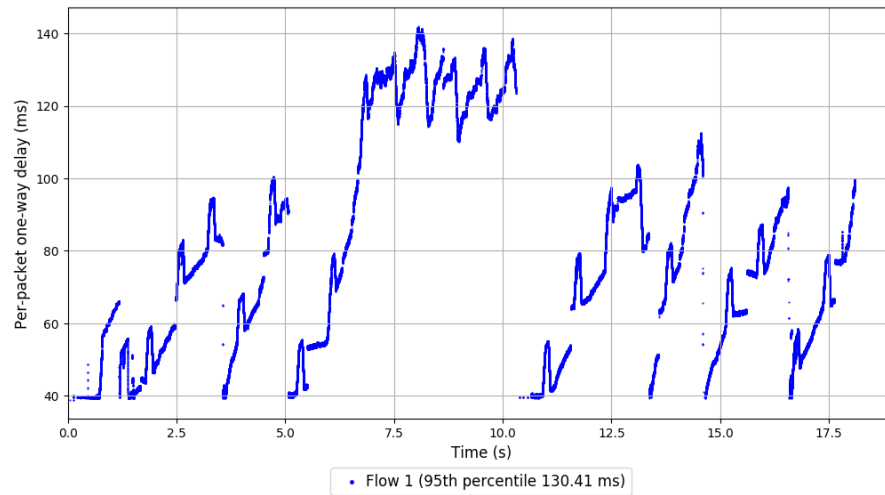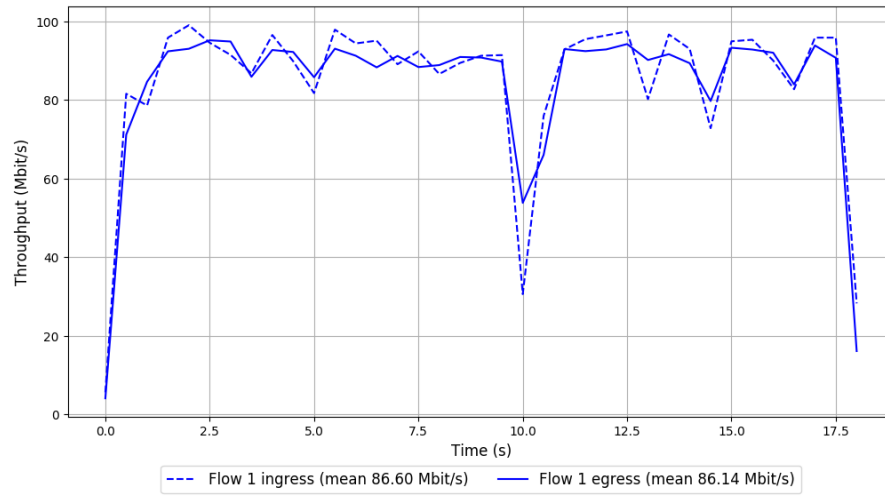
```
Run 7: Statistics of TCP BBR

Start at: 2017-09-18 18:34:48
End at: 2017-09-18 18:35:18
Local clock offset: -3.105 ms
Remote clock offset: 1.079 ms
```

Run 7: Report of TCP BBR — Data Link

Flow 1 ingress (mean 86.60 Mbit/s)   Flow 1 egress (mean 86.14 Mbit/s)

Flow 1 (95th percentile 130.41 ms)

```
Run 8: Statistics of TCP BBR

Start at: 2017-09-18 18:46:50
End at: 2017-09-18 18:47:20
Local clock offset: -2.353 ms
Remote clock offset: 0.631 ms


# Below is generated by plot.py at 2017-09-18 19:21:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.51 Mbit/s
95th percentile per-packet one-way delay: 137.420 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 84.51 Mbit/s
95th percentile per-packet one-way delay: 137.420 ms
Loss rate: 0.55%
```
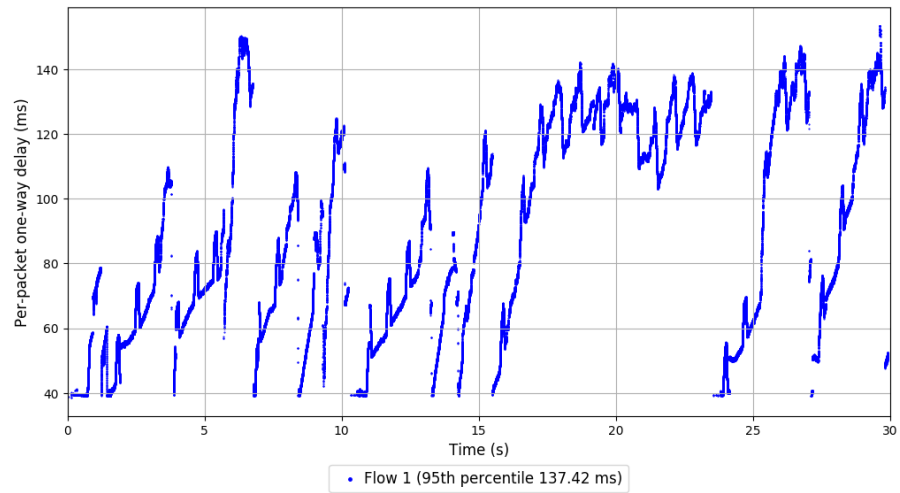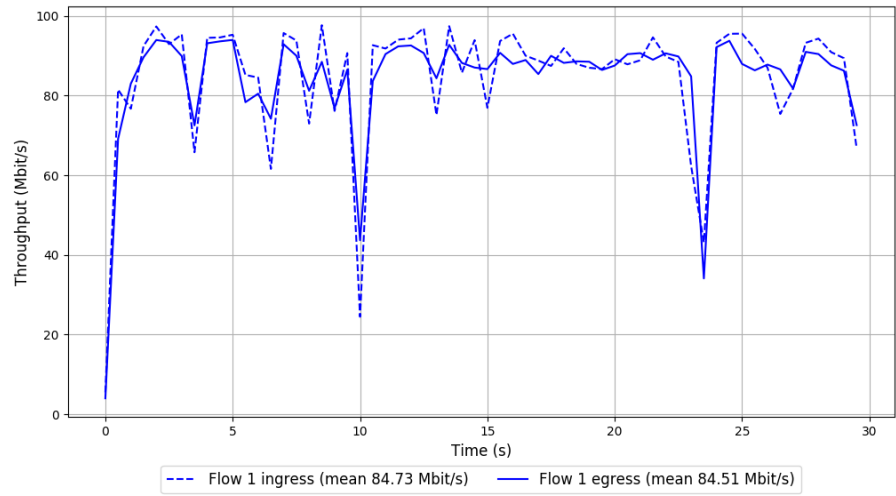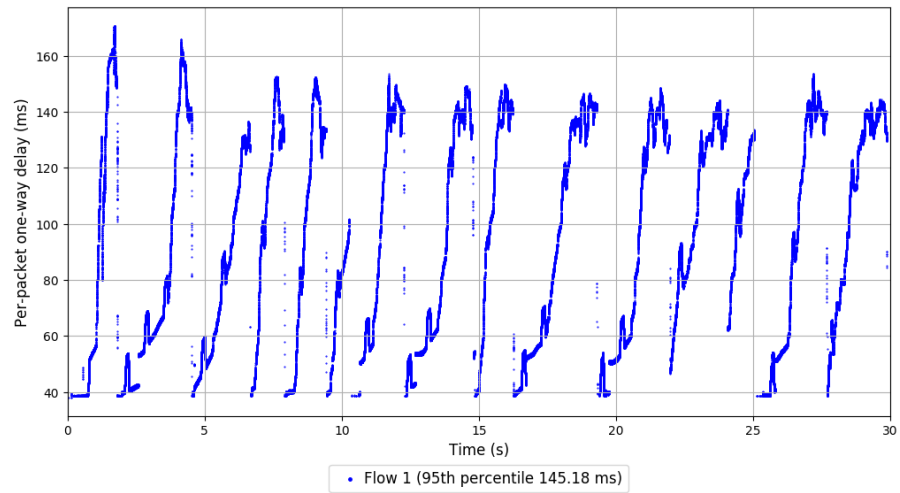
Run 8: Report of TCP BBR — Data Link

Flow 1 ingress (mean 84.73 Mbit/s)   Flow 1 egress (mean 84.51 Mbit/s)

Flow 1 (95th percentile 137.42 ms)

```
Run 9: Statistics of TCP BBR

Start at: 2017-09-18 18:58:46
End at: 2017-09-18 18:59:16
Local clock offset: -3.496 ms
Remote clock offset: 0.368 ms

# Below is generated by plot.py at 2017-09-18 19:21:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.80 Mbit/s
95th percentile per-packet one-way delay: 145.177 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 81.80 Mbit/s
95th percentile per-packet one-way delay: 145.177 ms
Loss rate: 0.95%
```
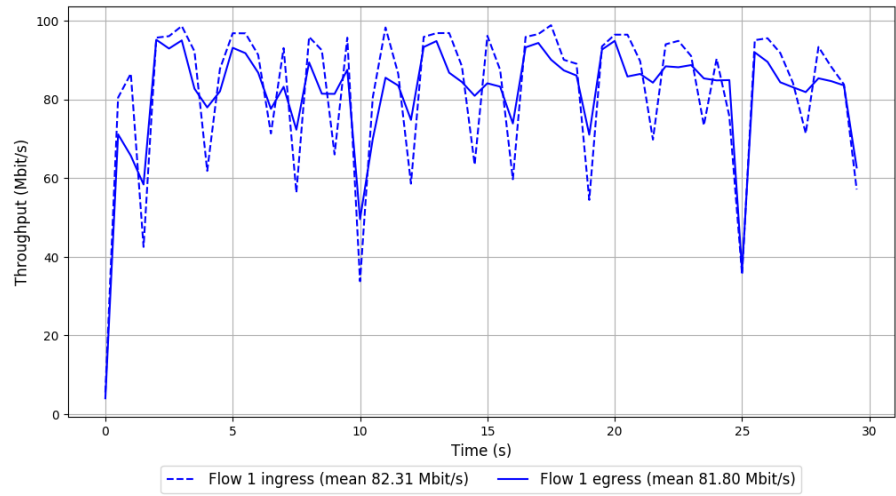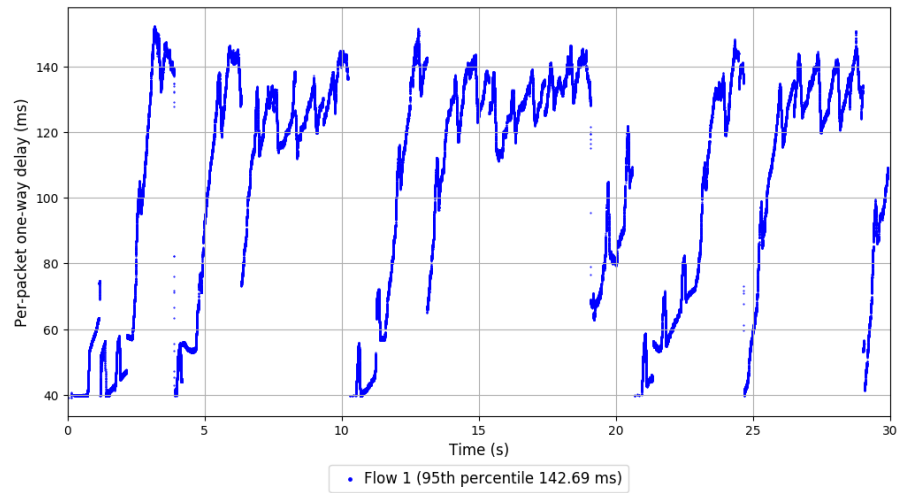
Run 9: Report of TCP BBR — Data Link

Flow 1 ingress (mean 82.31 Mbit/s)   Flow 1 egress (mean 81.80 Mbit/s)

Flow 1 (95th percentile 145.18 ms)

```
Run 10: Statistics of TCP BBR

Start at: 2017-09-18 19:10:44
End at: 2017-09-18 19:11:14
Local clock offset: -1.14 ms
Remote clock offset: 0.206 ms


# Below is generated by plot.py at 2017-09-18 19:22:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.59 Mbit/s
95th percentile per-packet one-way delay: 142.687 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 83.59 Mbit/s
95th percentile per-packet one-way delay: 142.687 ms
Loss rate: 0.64%
```
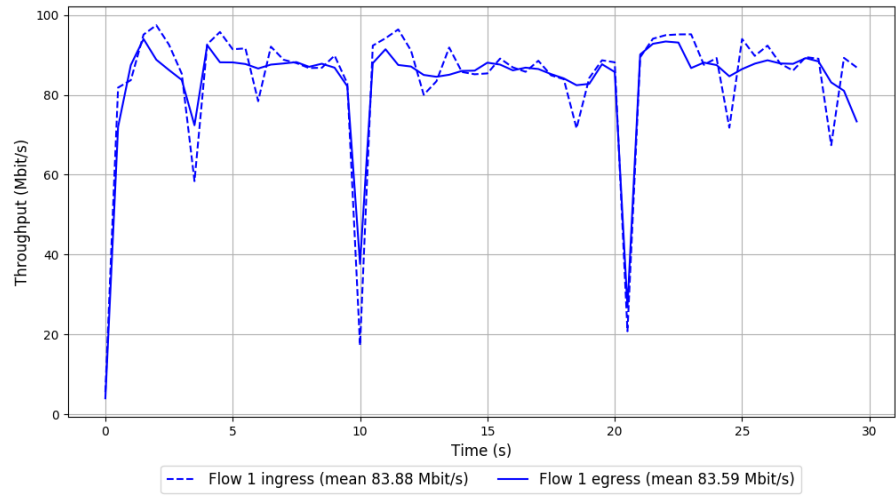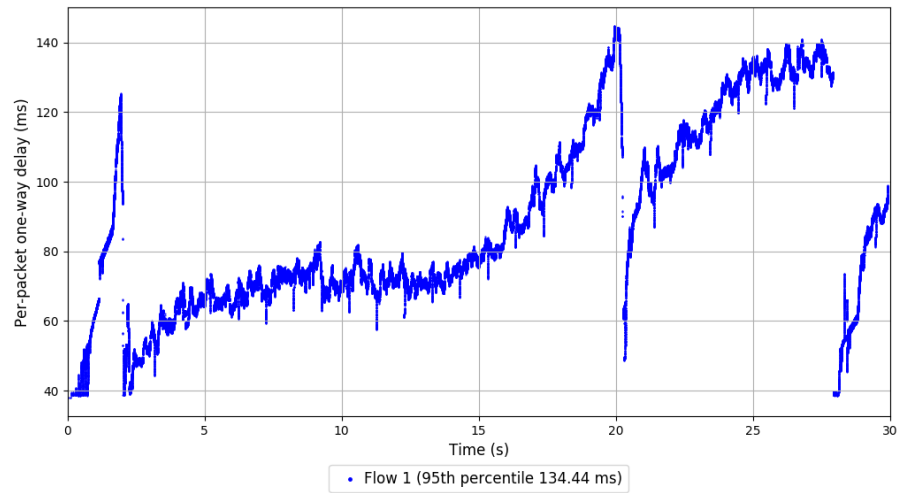
Run 10: Report of TCP BBR — Data Link

Flow 1 ingress (mean 83.88 Mbit/s)   Flow 1 egress (mean 83.59 Mbit/s)

Flow 1 (95th percentile 142.69 ms)

```
Run 1: Statistics of TCP Cubic

Start at: 2017-09-18 17:19:22
End at: 2017-09-18 17:19:52
Local clock offset: -1.617 ms
Remote clock offset: 0.175 ms


# Below is generated by plot.py at 2017-09-18 19:22:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.37 Mbit/s
95th percentile per-packet one-way delay: 134.444 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 81.37 Mbit/s
95th percentile per-packet one-way delay: 134.444 ms
Loss rate: 0.96%
```
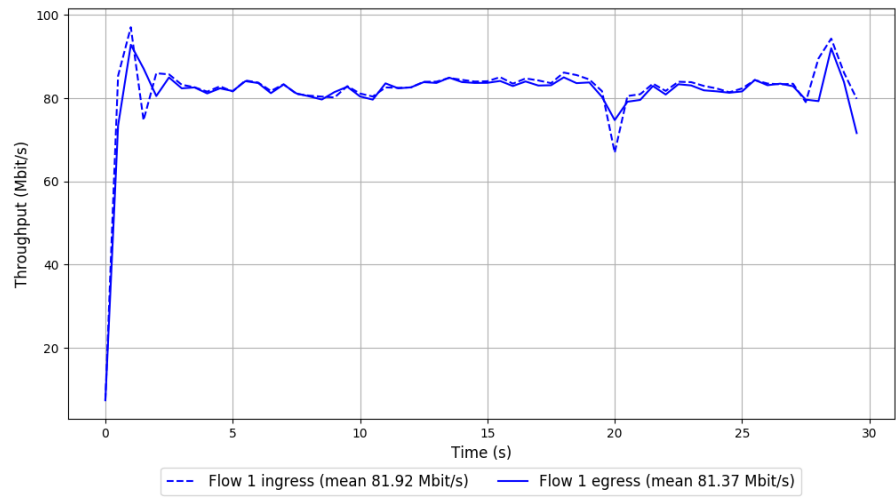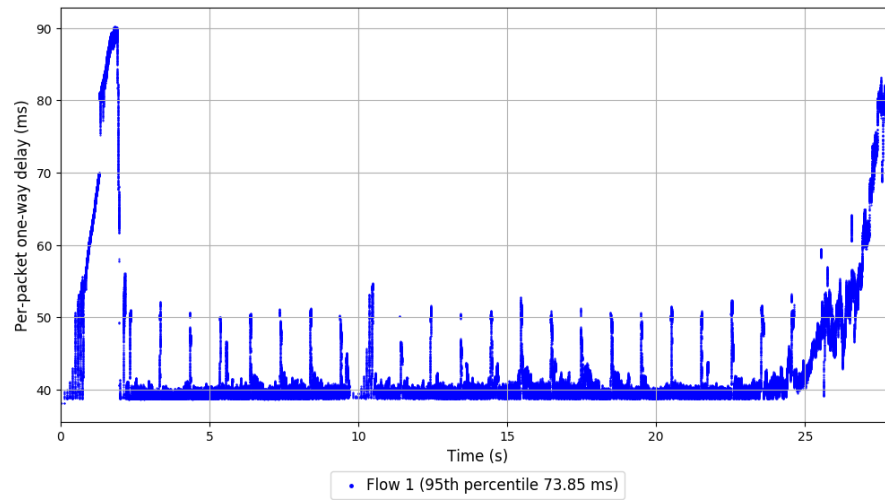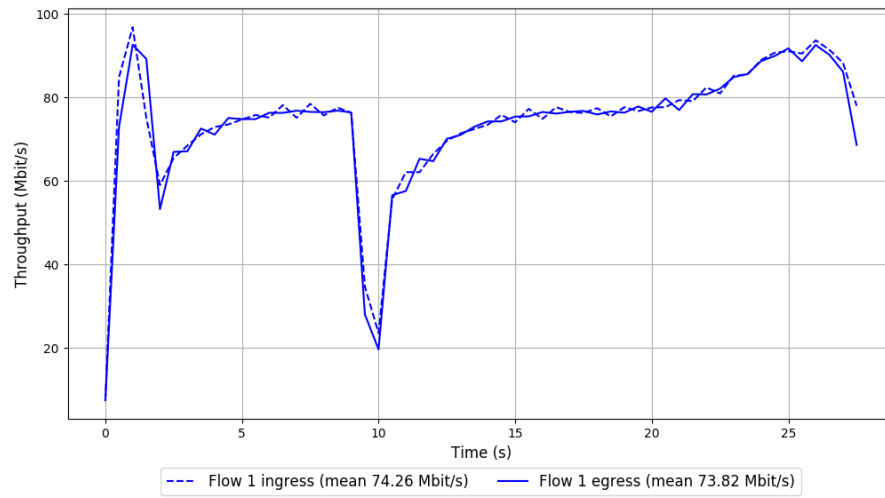
Run 1: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 81.92 Mbit/s)   Flow 1 egress (mean 81.37 Mbit/s)

Flow 1 (95th percentile 134.44 ms)

```
Run 2: Statistics of TCP Cubic

Start at: 2017-09-18 17:31:24
End at: 2017-09-18 17:31:54
Local clock offset: -2.465 ms
Remote clock offset: 0.577 ms

# Below is generated by plot.py at 2017-09-18 19:22:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.82 Mbit/s
95th percentile per-packet one-way delay: 73.851 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 73.82 Mbit/s
95th percentile per-packet one-way delay: 73.851 ms
Loss rate: 0.91%
```
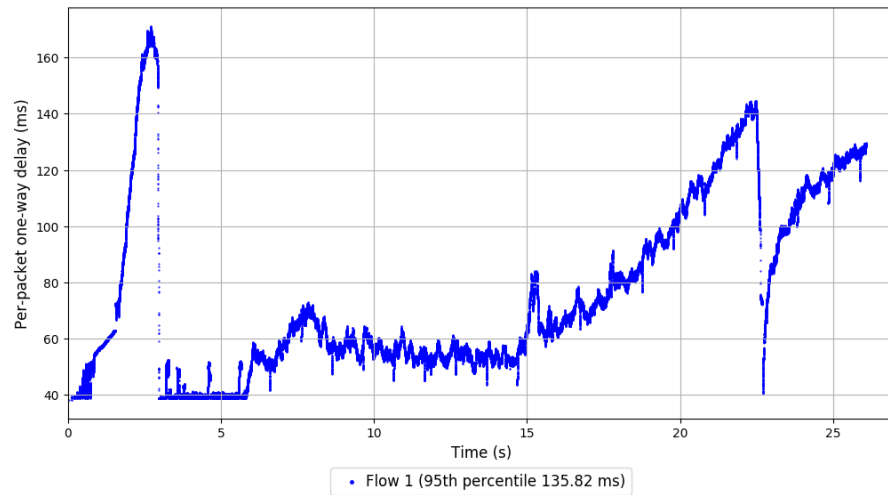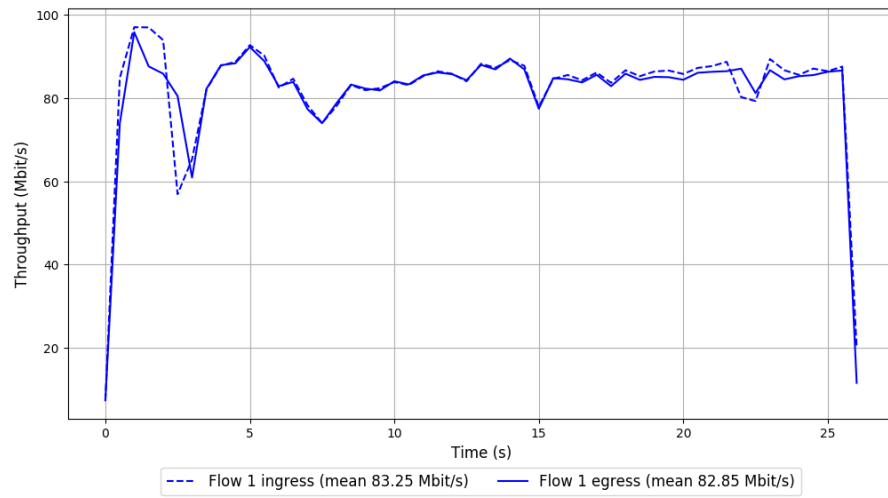
Run 2: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 74.26 Mbit/s)   Flow 1 egress (mean 73.82 Mbit/s)

Flow 1 (95th percentile 73.85 ms)

```
Run 3: Statistics of TCP Cubic

Start at: 2017-09-18 17:43:23
End at: 2017-09-18 17:43:53
Local clock offset: -3.192 ms
Remote clock offset: 0.844 ms


# Below is generated by plot.py at 2017-09-18 19:22:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.85 Mbit/s
95th percentile per-packet one-way delay: 135.816 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 82.85 Mbit/s
95th percentile per-packet one-way delay: 135.816 ms
Loss rate: 0.81%
```
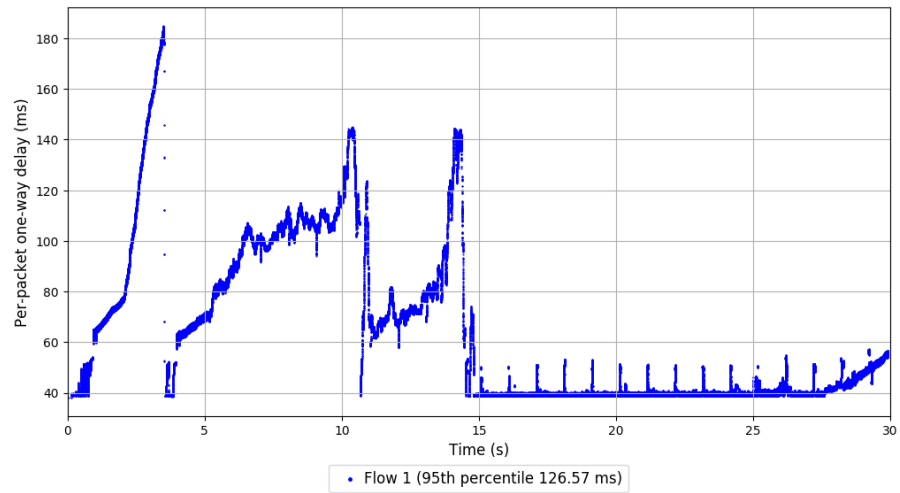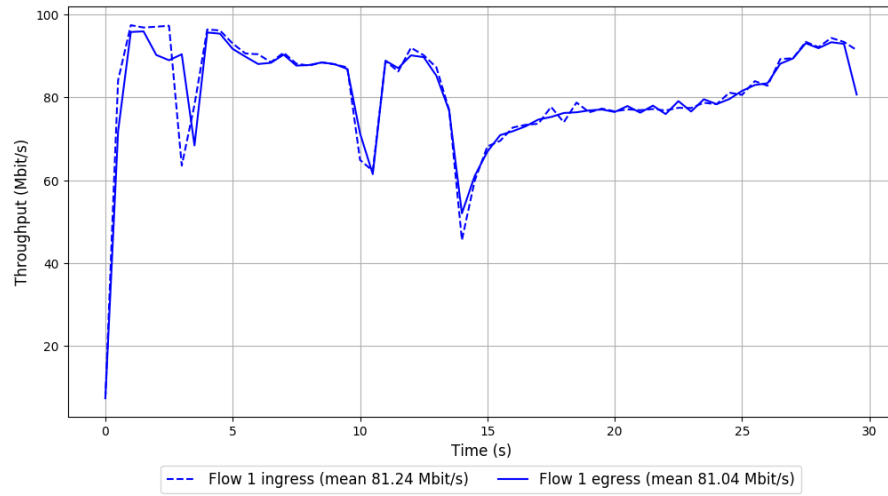
Run 3: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 83.25 Mbit/s)   — Flow 1 egress (mean 82.85 Mbit/s)

• Flow 1 (95th percentile 135.82 ms)

```
Run 4: Statistics of TCP Cubic

Start at: 2017-09-18 17:55:22
End at: 2017-09-18 17:55:52
Local clock offset: -4.022 ms
Remote clock offset: 1.045 ms


# Below is generated by plot.py at 2017-09-18 19:22:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.04 Mbit/s
95th percentile per-packet one-way delay: 126.570 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 81.04 Mbit/s
95th percentile per-packet one-way delay: 126.570 ms
Loss rate: 0.54%
```
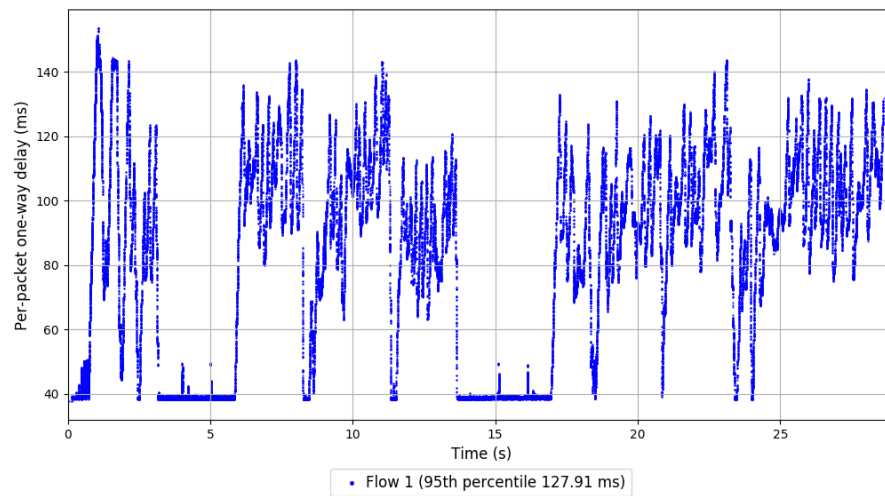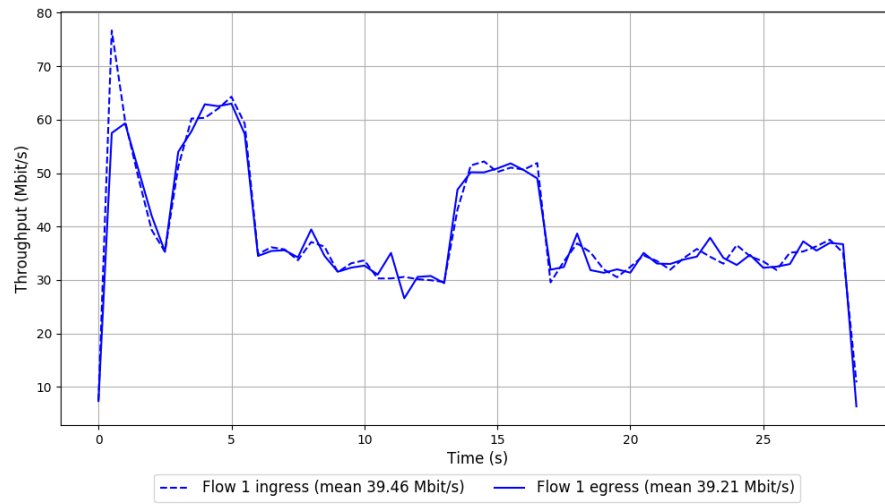
Run 4: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 81.24 Mbit/s)   Flow 1 egress (mean 81.04 Mbit/s)

Flow 1 (95th percentile 126.57 ms)

```
Run 5: Statistics of TCP Cubic

Start at: 2017-09-18 18:07:20
End at: 2017-09-18 18:07:50
Local clock offset: -4.496 ms
Remote clock offset: 1.263 ms


# Below is generated by plot.py at 2017-09-18 19:22:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 39.21 Mbit/s
95th percentile per-packet one-way delay: 127.912 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 39.21 Mbit/s
95th percentile per-packet one-way delay: 127.912 ms
Loss rate: 0.92%
```
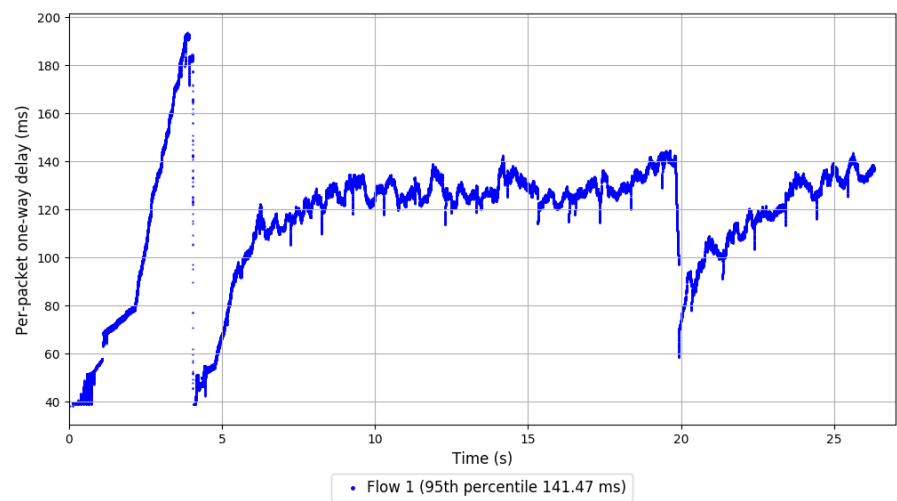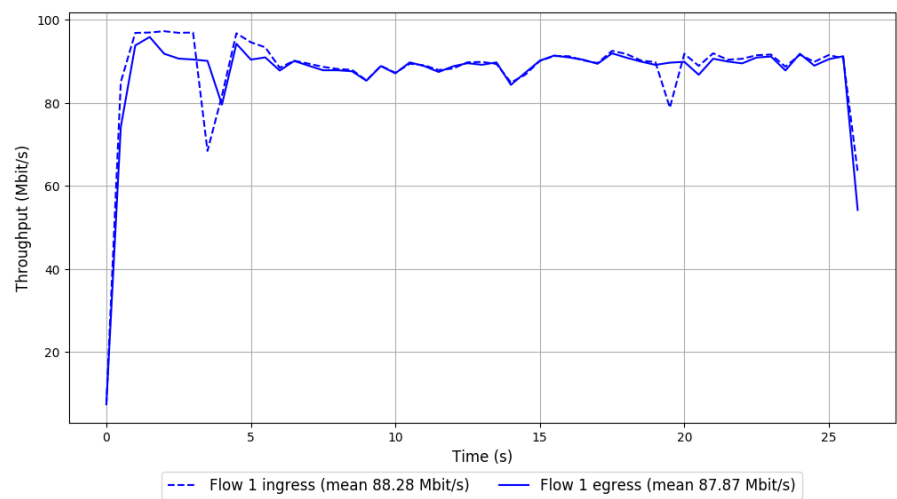
Run 5: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 39.46 Mbit/s) --- Flow 1 egress (mean 39.21 Mbit/s)

Flow 1 (95th percentile 127.91 ms)

```
Run 6: Statistics of TCP Cubic

Start at: 2017-09-18 18:19:20
End at: 2017-09-18 18:19:50
Local clock offset: -4.729 ms
Remote clock offset: 1.567 ms


# Below is generated by plot.py at 2017-09-18 19:22:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.87 Mbit/s
95th percentile per-packet one-way delay: 141.474 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 87.87 Mbit/s
95th percentile per-packet one-way delay: 141.474 ms
Loss rate: 0.79%
```
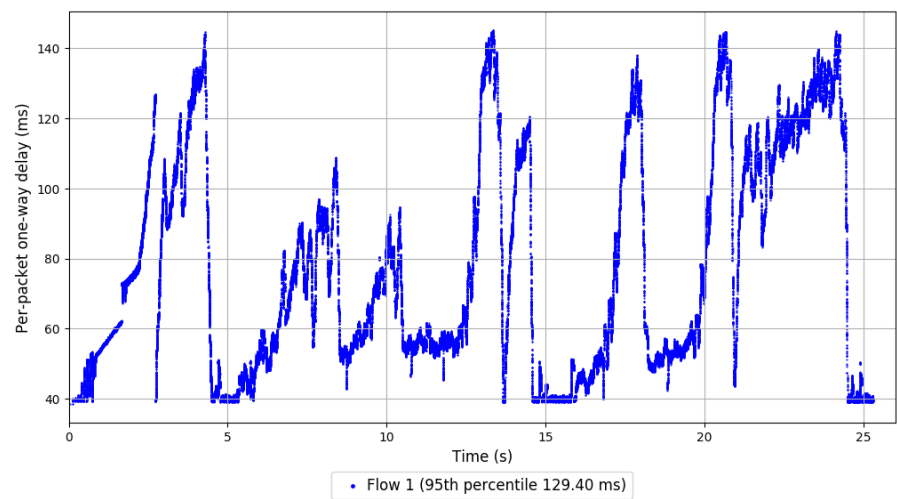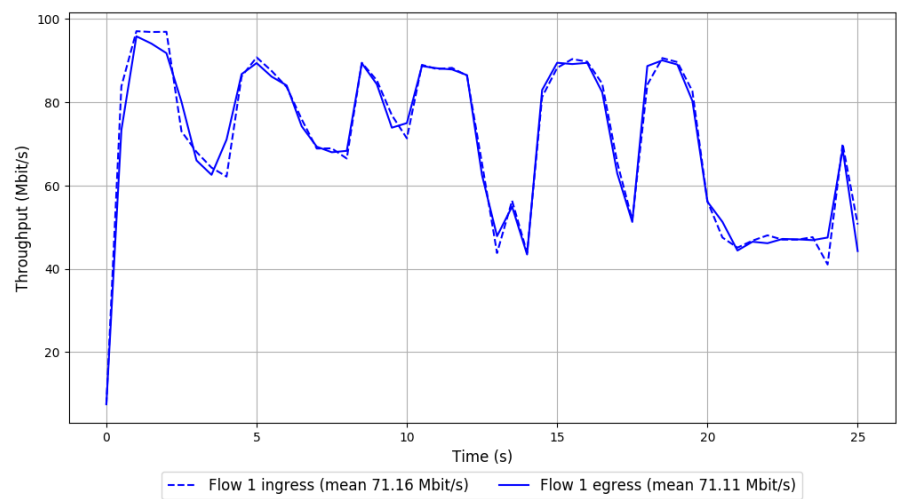
Run 6: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 88.28 Mbit/s)   Flow 1 egress (mean 87.87 Mbit/s)

Flow 1 (95th percentile 141.47 ms)

```
Run 7: Statistics of TCP Cubic

Start at: 2017-09-18 18:31:16
End at: 2017-09-18 18:31:46
Local clock offset: -3.341 ms
Remote clock offset: 1.232 ms


# Below is generated by plot.py at 2017-09-18 19:22:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.11 Mbit/s
95th percentile per-packet one-way delay: 129.404 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 71.11 Mbit/s
95th percentile per-packet one-way delay: 129.404 ms
Loss rate: 0.40%
```
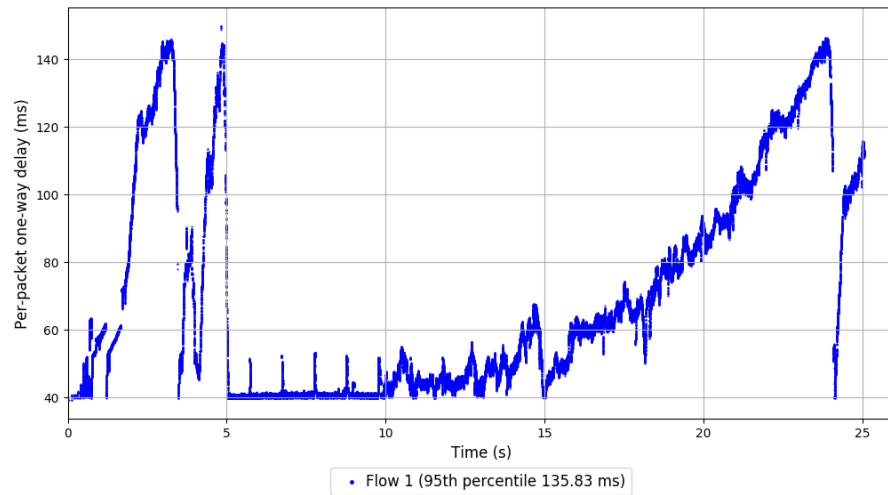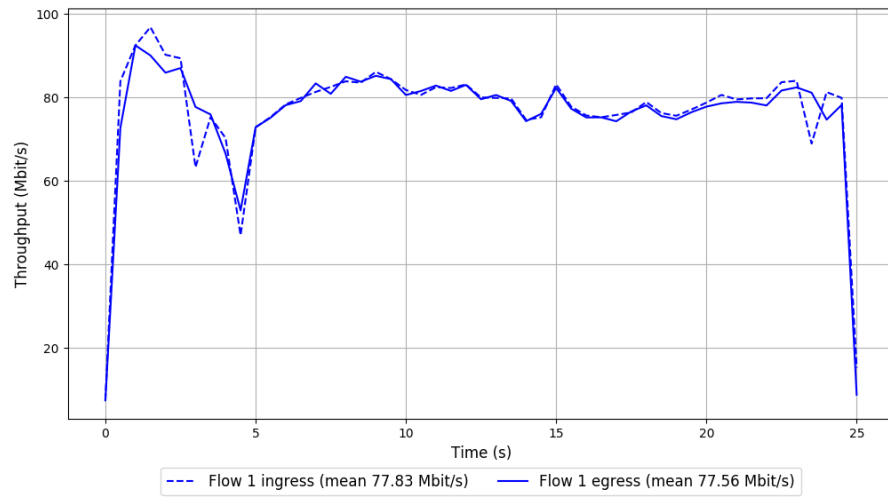
Run 7: Report of TCP Cubic — Data Link

Throughput (Mbit/s)

- - - - Flow 1 ingress (mean 71.16 Mbit/s) —— Flow 1 egress (mean 71.11 Mbit/s)

Per-packet one-way delay (ms)

· Flow 1 (95th percentile 129.40 ms)

```
Run 8: Statistics of TCP Cubic

Start at: 2017-09-18 18:43:17
End at: 2017-09-18 18:43:47
Local clock offset: -2.384 ms
Remote clock offset: 0.678 ms


# Below is generated by plot.py at 2017-09-18 19:22:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.56 Mbit/s
95th percentile per-packet one-way delay: 135.833 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 77.56 Mbit/s
95th percentile per-packet one-way delay: 135.833 ms
Loss rate: 0.68%
```
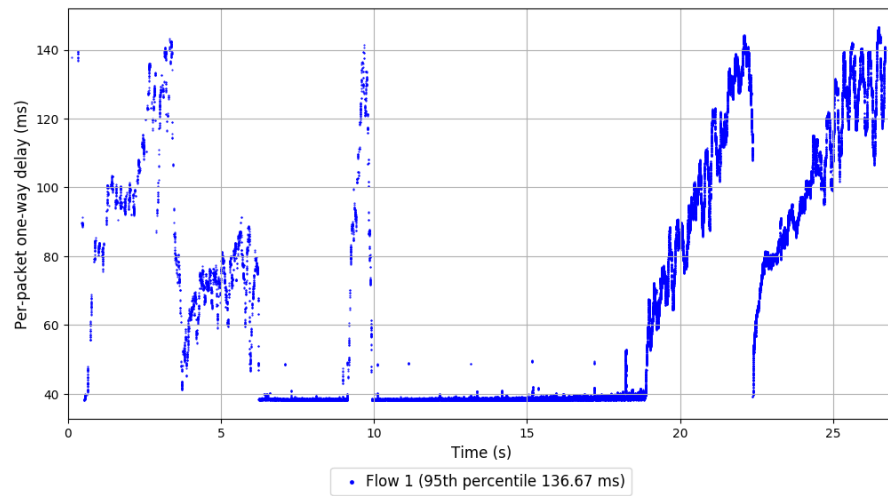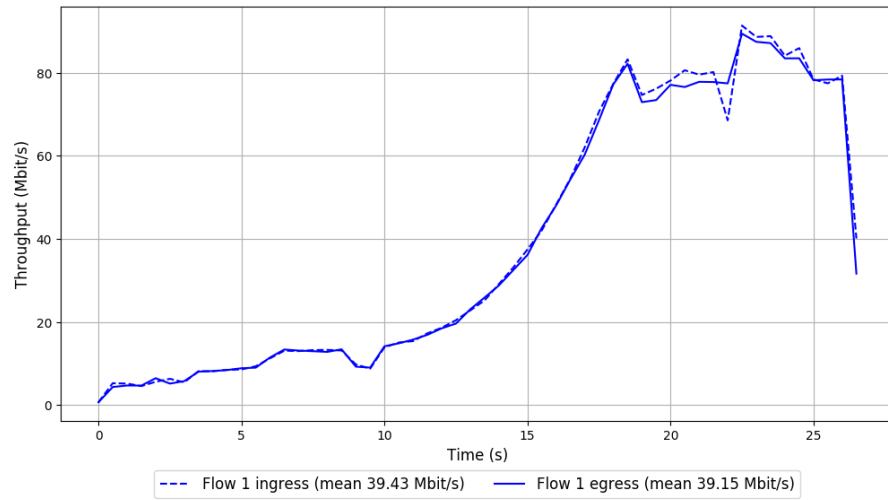
Run 8: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 77.83 Mbit/s)   Flow 1 egress (mean 77.56 Mbit/s)

Flow 1 (95th percentile 135.83 ms)

```
Run 9: Statistics of TCP Cubic

Start at: 2017-09-18 18:55:15
End at: 2017-09-18 18:55:45
Local clock offset: -3.312 ms
Remote clock offset: 0.45 ms


# Below is generated by plot.py at 2017-09-18 19:22:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 39.15 Mbit/s
95th percentile per-packet one-way delay: 136.671 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 39.15 Mbit/s
95th percentile per-packet one-way delay: 136.671 ms
Loss rate: 1.42%
```
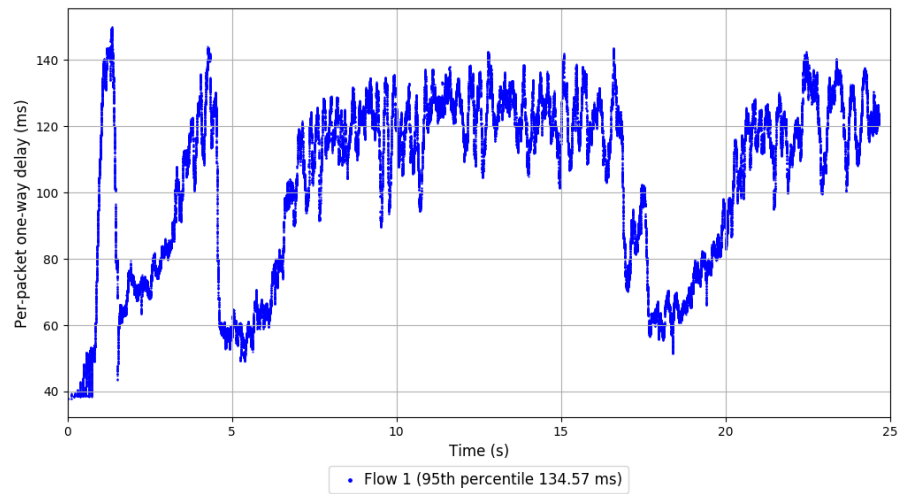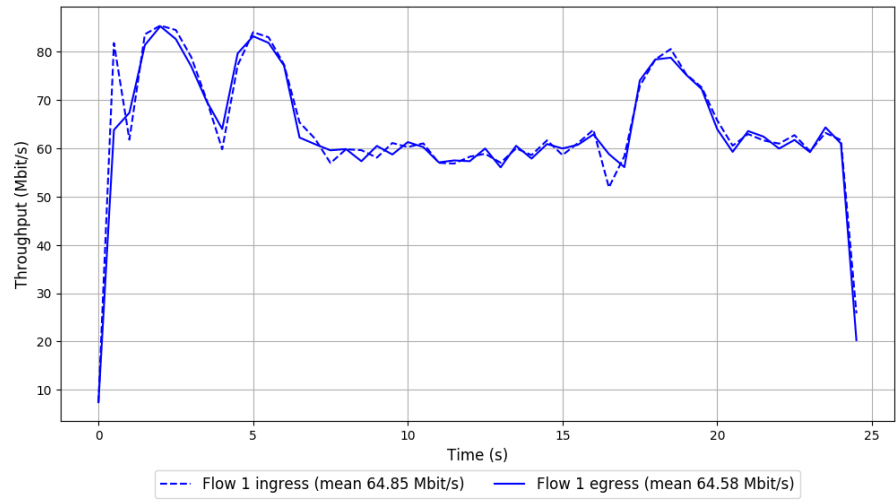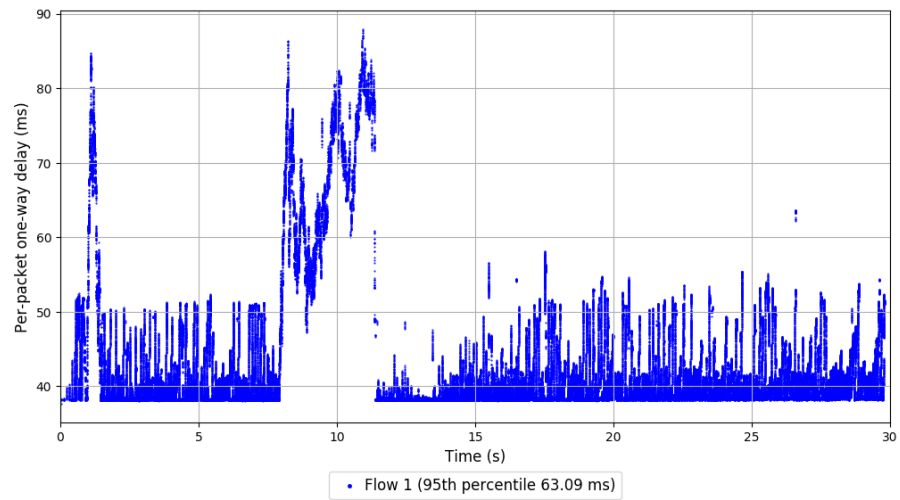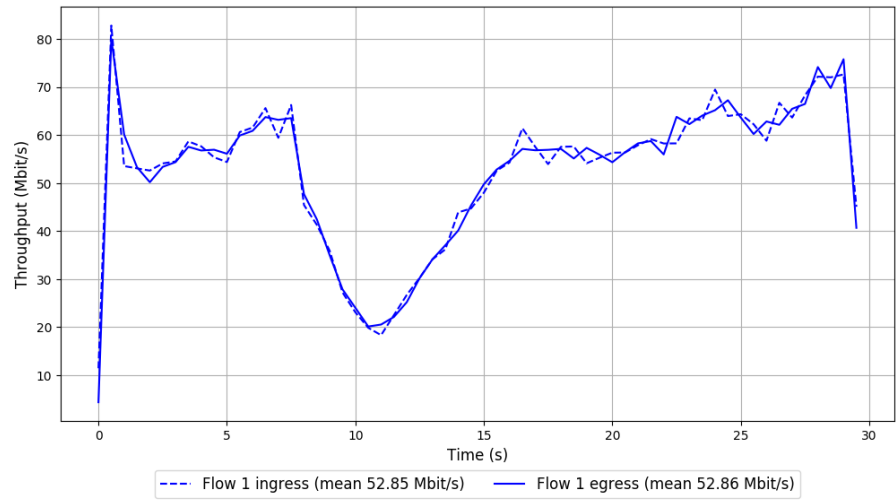
Run 9: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 39.43 Mbit/s) --- Flow 1 egress (mean 39.15 Mbit/s)

- Flow 1 (95th percentile 136.67 ms)

```
Run 10: Statistics of TCP Cubic

Start at: 2017-09-18 19:07:12
End at: 2017-09-18 19:07:42
Local clock offset: -2.745 ms
Remote clock offset: 0.282 ms


# Below is generated by plot.py at 2017-09-18 19:22:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.58 Mbit/s
95th percentile per-packet one-way delay: 134.572 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 64.58 Mbit/s
95th percentile per-packet one-way delay: 134.572 ms
Loss rate: 0.76%
```
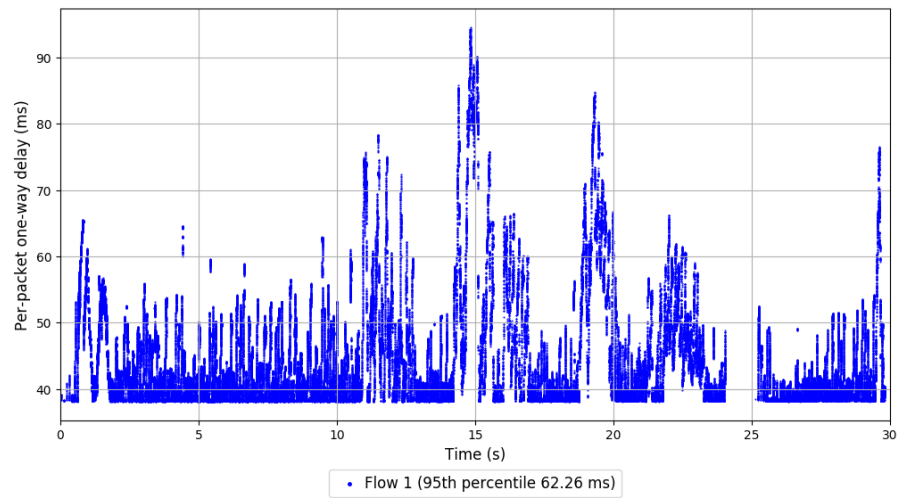
Run 10: Report of TCP Cubic — Data Link

Flow 1 ingress (mean 64.85 Mbit/s) ----- Flow 1 egress (mean 64.58 Mbit/s)

• Flow 1 (95th percentile 134.57 ms)

```
Run 1: Statistics of Indigo

Start at: 2017-09-18 17:18:10
End at: 2017-09-18 17:18:40
Local clock offset: -1.618 ms
Remote clock offset: 0.104 ms


# Below is generated by plot.py at 2017-09-18 19:22:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.86 Mbit/s
95th percentile per-packet one-way delay: 63.085 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 52.86 Mbit/s
95th percentile per-packet one-way delay: 63.085 ms
Loss rate: 0.27%
```
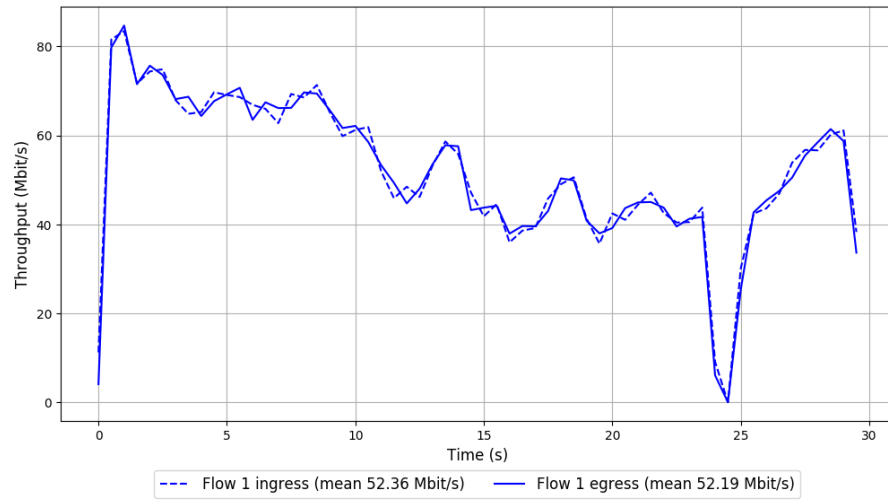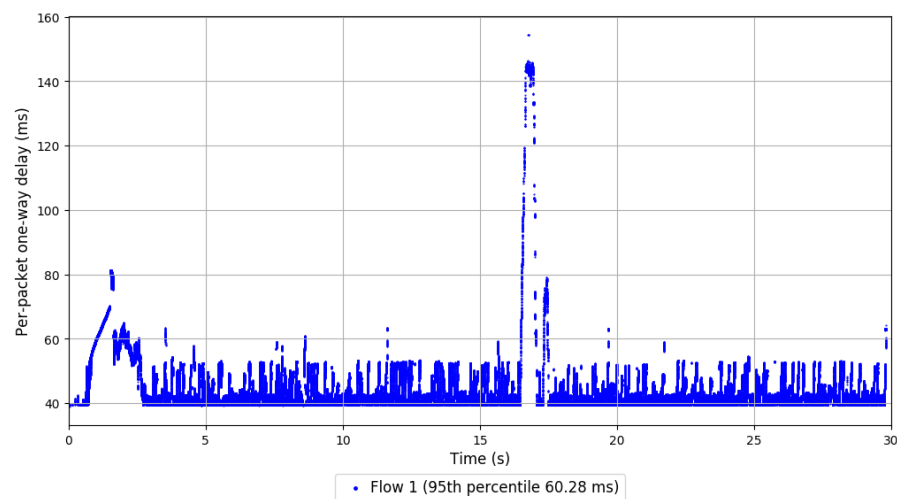
Run 1: Report of Indigo — Data Link

Flow 1 ingress (mean 52.85 Mbit/s)   Flow 1 egress (mean 52.86 Mbit/s)

Flow 1 (95th percentile 63.09 ms)

```
Run 2: Statistics of Indigo

Start at: 2017-09-18 17:30:12
End at: 2017-09-18 17:30:42
Local clock offset: -2.328 ms
Remote clock offset: 0.538 ms

# Below is generated by plot.py at 2017-09-18 19:23:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.19 Mbit/s
95th percentile per-packet one-way delay: 62.256 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 52.19 Mbit/s
95th percentile per-packet one-way delay: 62.256 ms
Loss rate: 0.61%
```
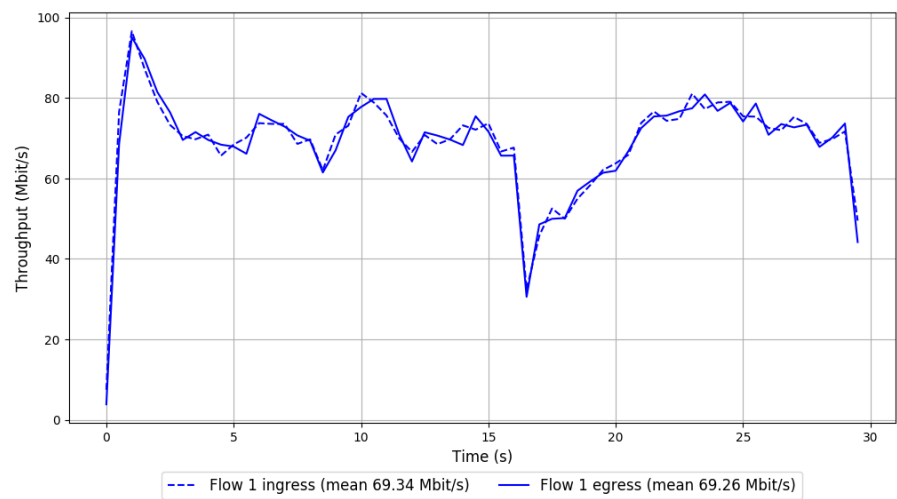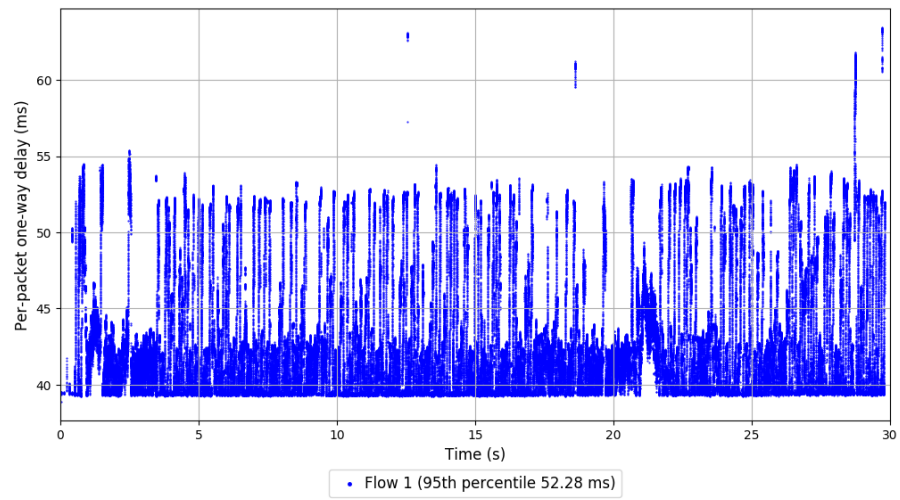
Run 2: Report of Indigo — Data Link

Flow 1 ingress (mean 52.36 Mbit/s) --- Flow 1 egress (mean 52.19 Mbit/s)

Flow 1 (95th percentile 62.26 ms)

```
Run 3: Statistics of Indigo

Start at: 2017-09-18 17:42:10
End at: 2017-09-18 17:42:40
Local clock offset: -1.89 ms
Remote clock offset: 0.8 ms


# Below is generated by plot.py at 2017-09-18 19:23:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.26 Mbit/s
95th percentile per-packet one-way delay: 60.283 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 69.26 Mbit/s
95th percentile per-packet one-way delay: 60.283 ms
Loss rate: 0.39%
```
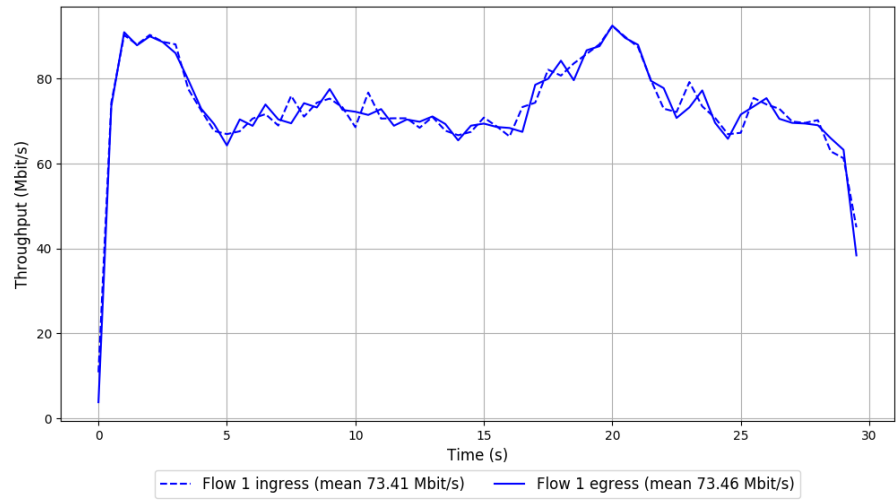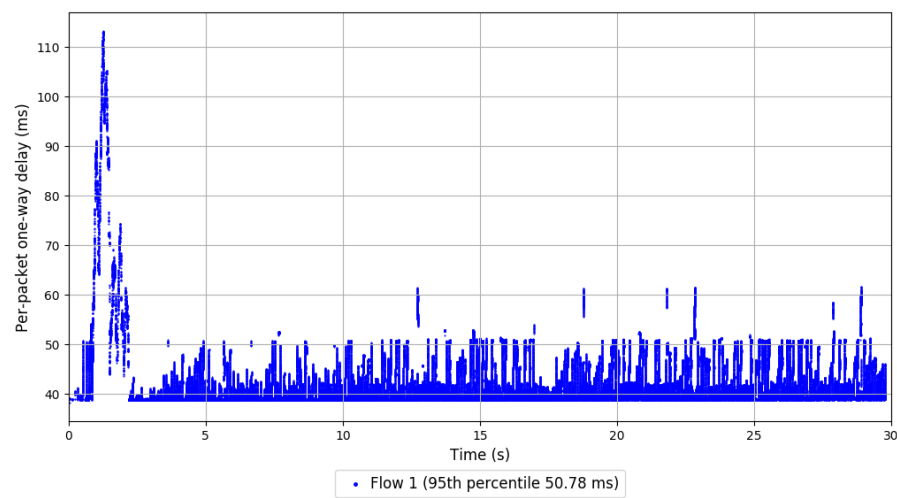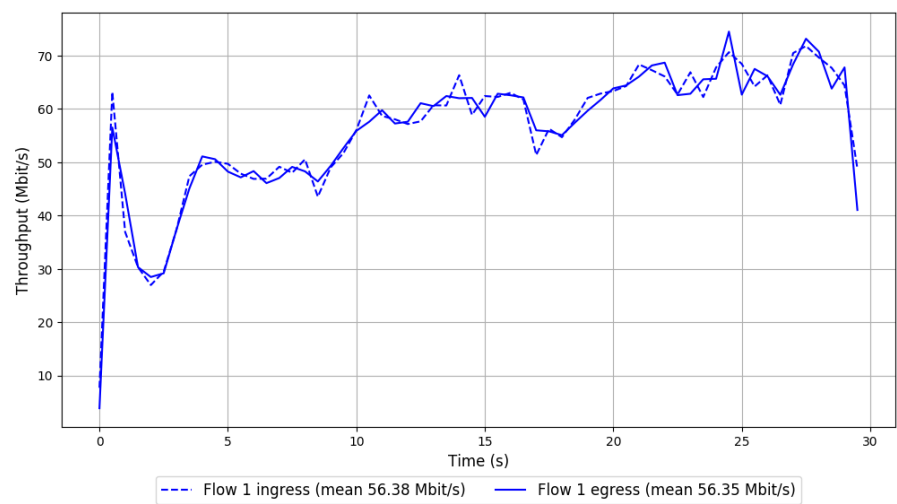
Run 3: Report of Indigo — Data Link

Flow 1 ingress (mean 69.34 Mbit/s)   Flow 1 egress (mean 69.26 Mbit/s)

Flow 1 (95th percentile 60.28 ms)

```
Run 4: Statistics of Indigo

Start at: 2017-09-18 17:54:09
End at: 2017-09-18 17:54:39
Local clock offset: -2.61 ms
Remote clock offset: 1.095 ms


# Below is generated by plot.py at 2017-09-18 19:23:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.46 Mbit/s
95th percentile per-packet one-way delay: 52.285 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 73.46 Mbit/s
95th percentile per-packet one-way delay: 52.285 ms
Loss rate: 0.24%
```
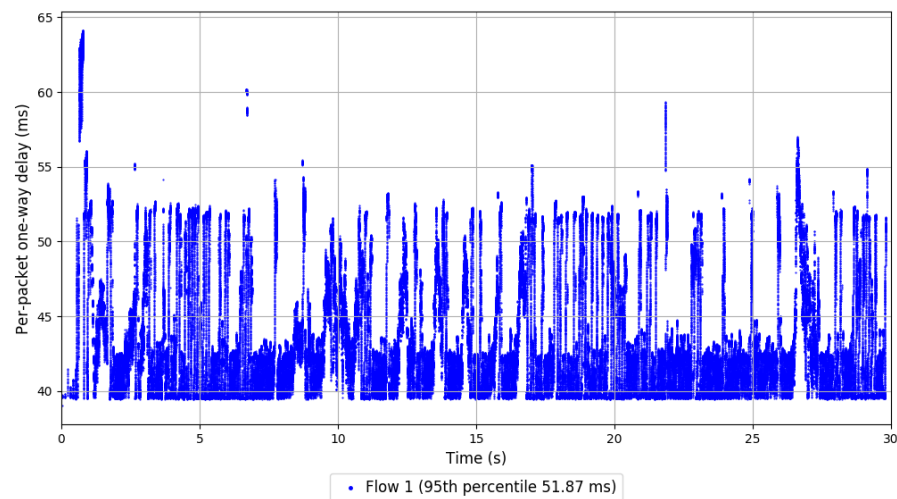
Run 4: Report of Indigo — Data Link

```
Run 5: Statistics of Indigo

Start at: 2017-09-18 18:06:08
End at: 2017-09-18 18:06:38
Local clock offset: -4.291 ms
Remote clock offset: 1.274 ms

# Below is generated by plot.py at 2017-09-18 19:23:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.35 Mbit/s
95th percentile per-packet one-way delay: 50.780 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 56.35 Mbit/s
95th percentile per-packet one-way delay: 50.780 ms
Loss rate: 0.37%
```
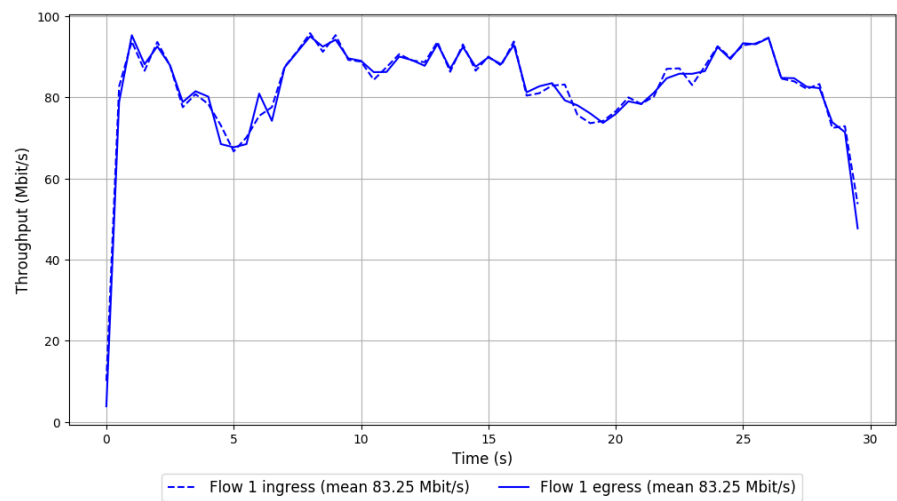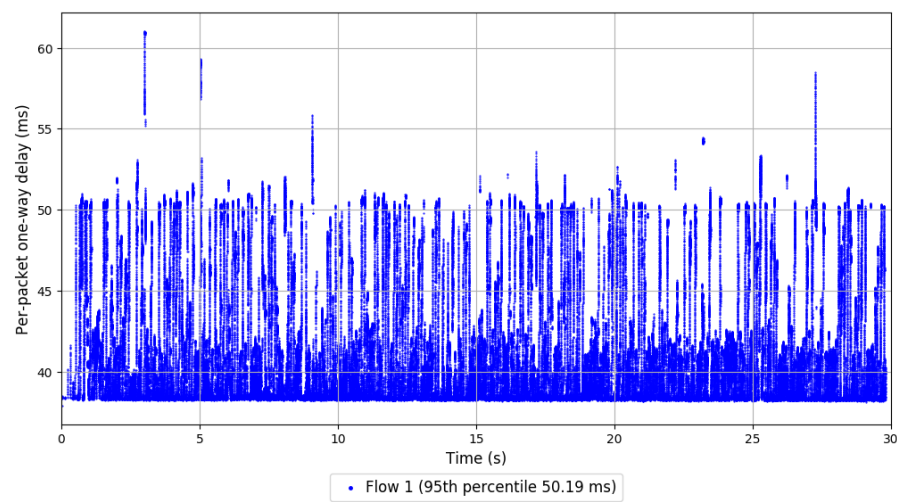
Run 5: Report of Indigo — Data Link

```
Run 6: Statistics of Indigo

Start at: 2017-09-18 18:18:07
End at: 2017-09-18 18:18:37
Local clock offset: -3.618 ms
Remote clock offset: 1.502 ms


# Below is generated by plot.py at 2017-09-18 19:24:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.25 Mbit/s
95th percentile per-packet one-way delay: 51.872 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 83.25 Mbit/s
95th percentile per-packet one-way delay: 51.872 ms
Loss rate: 0.27%
```
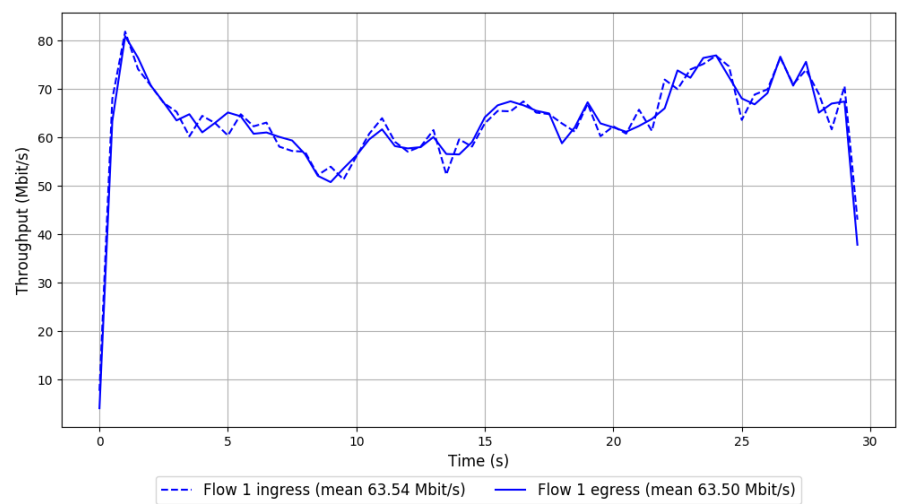
Run 6: Report of Indigo — Data Link

```
Run 7: Statistics of Indigo

Start at: 2017-09-18 18:30:03
End at: 2017-09-18 18:30:33
Local clock offset: -4.532 ms
Remote clock offset: 1.322 ms


# Below is generated by plot.py at 2017-09-18 19:24:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.50 Mbit/s
95th percentile per-packet one-way delay: 50.185 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 63.50 Mbit/s
95th percentile per-packet one-way delay: 50.185 ms
Loss rate: 0.32%
```
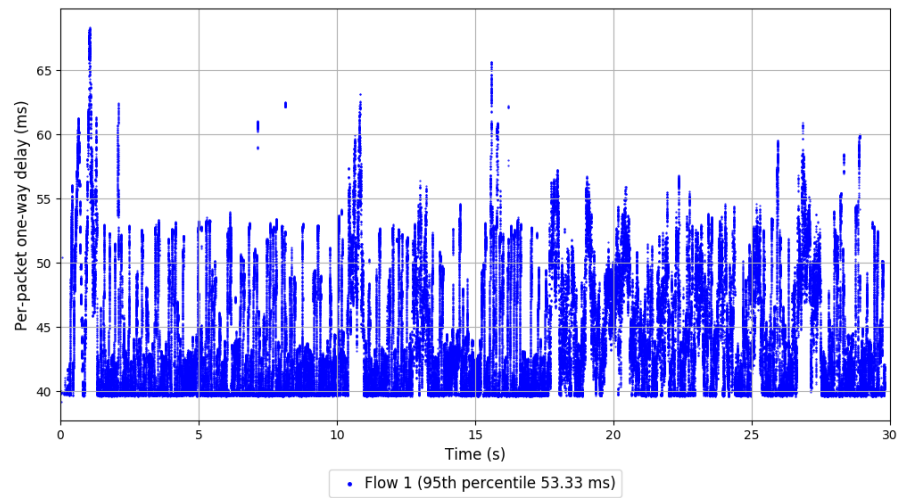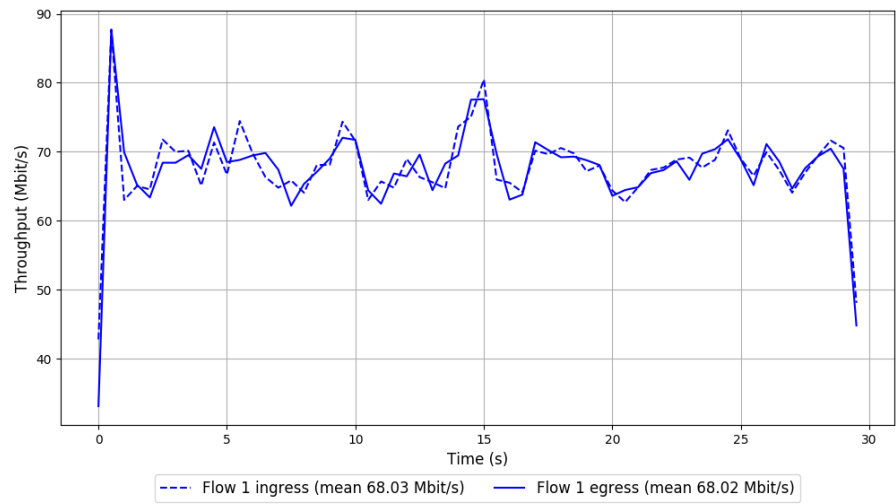
Run 7: Report of Indigo — Data Link

- - - Flow 1 ingress (mean 63.54 Mbit/s) ——— Flow 1 egress (mean 63.50 Mbit/s)

• Flow 1 (95th percentile 50.19 ms)

```
Run 8: Statistics of Indigo

Start at: 2017-09-18 18:42:03
End at: 2017-09-18 18:42:33
Local clock offset: -2.452 ms
Remote clock offset: 0.696 ms


# Below is generated by plot.py at 2017-09-18 19:24:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 68.02 Mbit/s
95th percentile per-packet one-way delay: 53.326 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 68.02 Mbit/s
95th percentile per-packet one-way delay: 53.326 ms
Loss rate: 0.30%
```
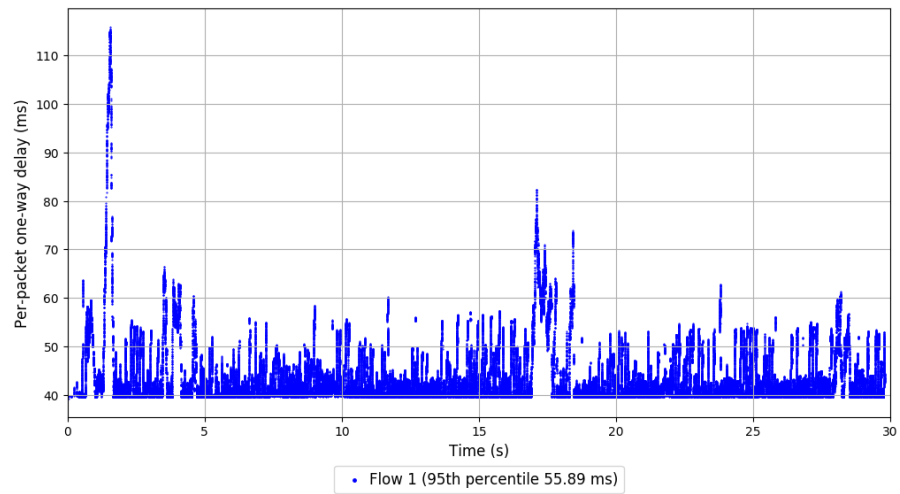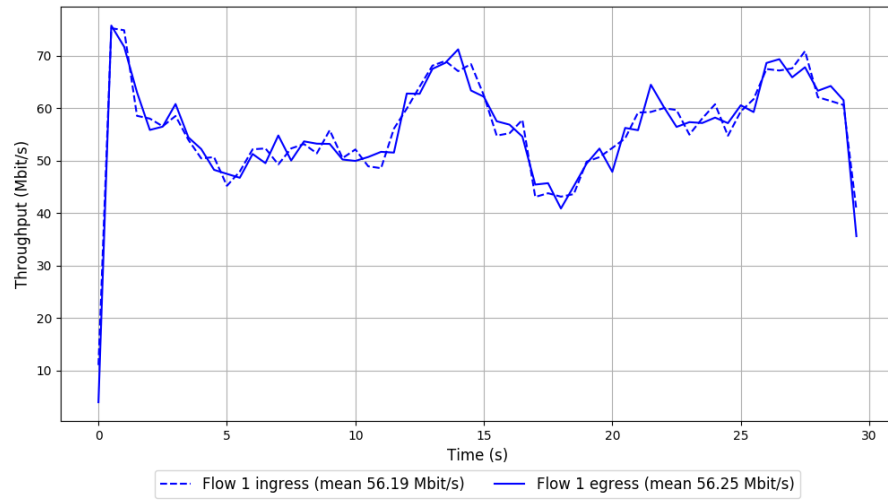
Run 8: Report of Indigo — Data Link

Flow 1 ingress (mean 68.03 Mbit/s) ----   Flow 1 egress (mean 68.02 Mbit/s) ——

• Flow 1 (95th percentile 53.33 ms)

```
Run 9: Statistics of Indigo

Start at: 2017-09-18 18:54:03
End at: 2017-09-18 18:54:33
Local clock offset: -2.098 ms
Remote clock offset: 0.465 ms


# Below is generated by plot.py at 2017-09-18 19:24:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.25 Mbit/s
95th percentile per-packet one-way delay: 55.890 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 56.25 Mbit/s
95th percentile per-packet one-way delay: 55.890 ms
Loss rate: 0.20%
```
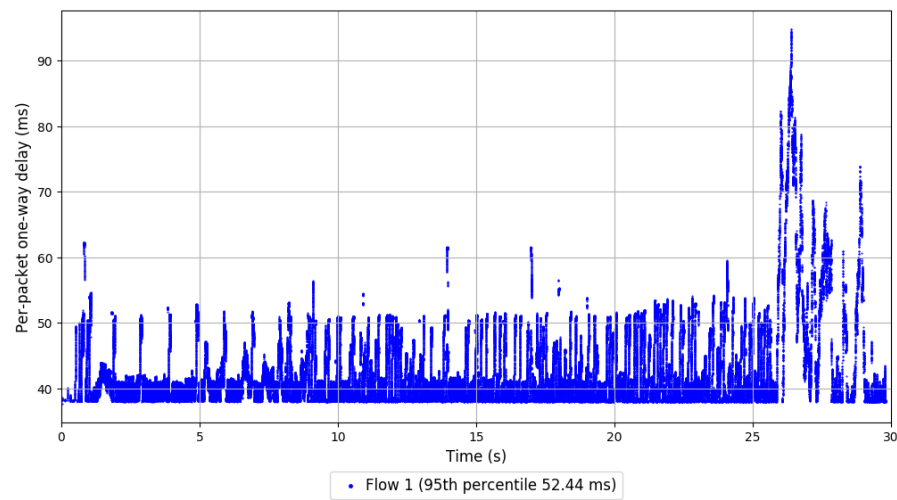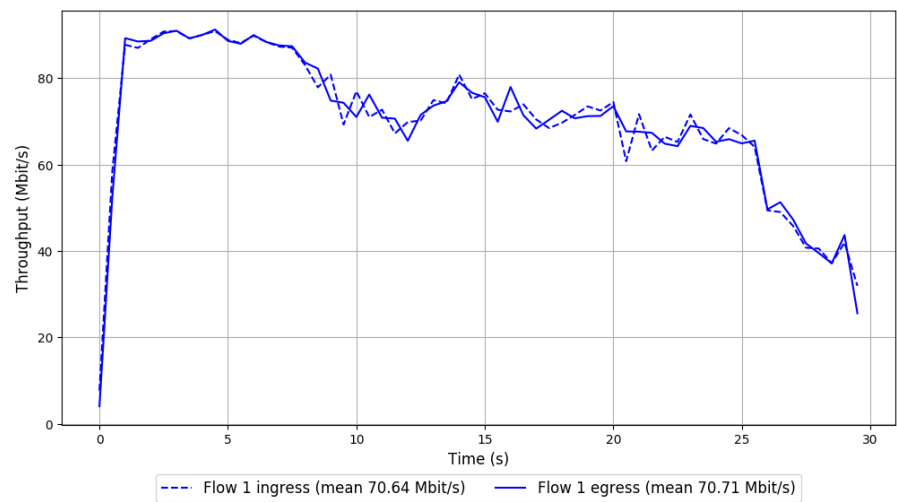
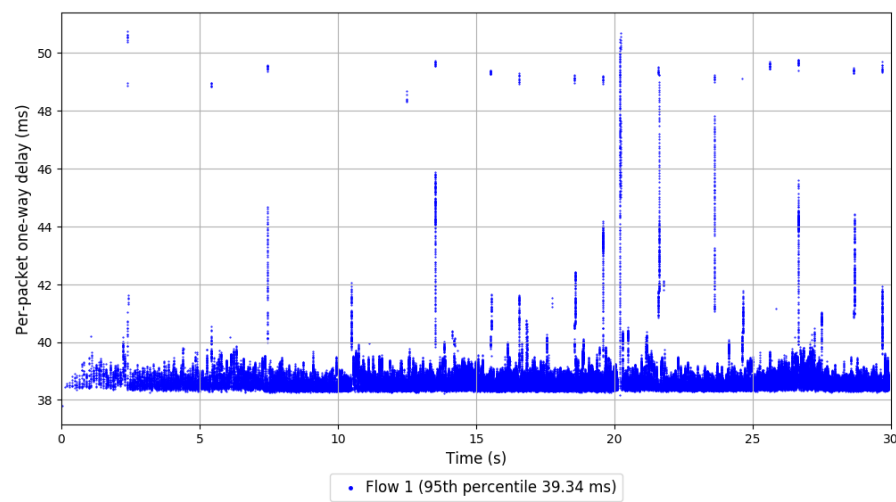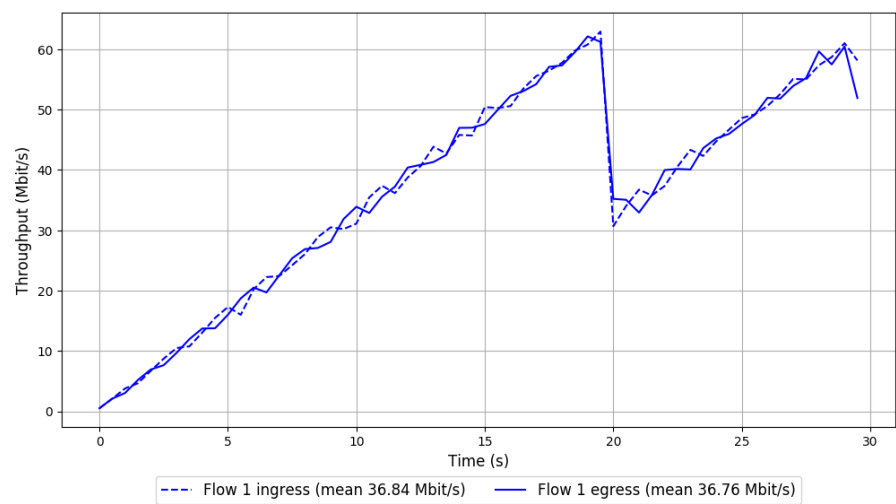Run 9: Report of Indigo — Data Link

Flow 1 ingress (mean 56.19 Mbit/s)   Flow 1 egress (mean 56.25 Mbit/s)

Flow 1 (95th percentile 55.89 ms)

```
Run 10: Statistics of Indigo

Start at: 2017-09-18 19:05:59
End at: 2017-09-18 19:06:29
Local clock offset: -2.885 ms
Remote clock offset: 0.299 ms


# Below is generated by plot.py at 2017-09-18 19:24:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.71 Mbit/s
95th percentile per-packet one-way delay: 52.435 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 70.71 Mbit/s
95th percentile per-packet one-way delay: 52.435 ms
Loss rate: 0.19%
```
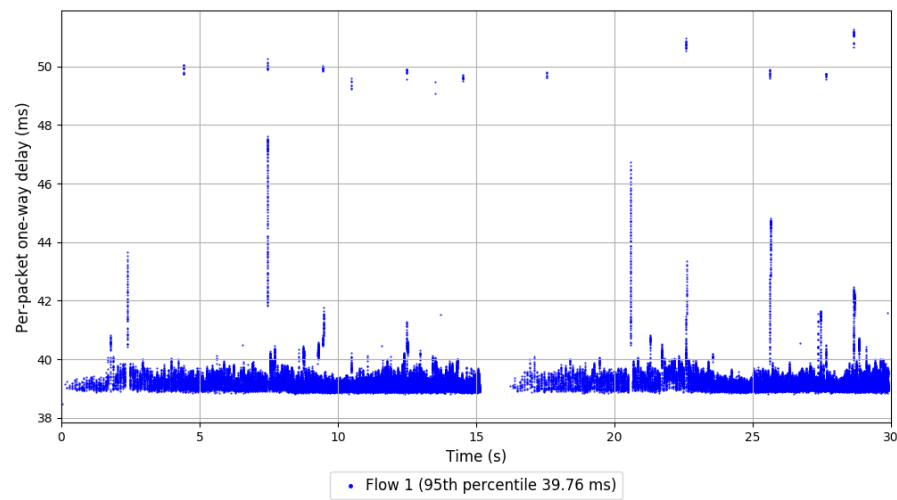
Run 10: Report of Indigo — Data Link

Flow 1 ingress (mean 70.64 Mbit/s) — Flow 1 egress (mean 70.71 Mbit/s)

• Flow 1 (95th percentile 52.44 ms)

```
Run 1: Statistics of LEDBAT

Start at: 2017-09-18 17:26:35
End at: 2017-09-18 17:27:05
Local clock offset: -2.215 ms
Remote clock offset: 0.396 ms

# Below is generated by plot.py at 2017-09-18 19:24:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 36.76 Mbit/s
95th percentile per-packet one-way delay: 39.340 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 36.76 Mbit/s
95th percentile per-packet one-way delay: 39.340 ms
Loss rate: 0.49%
```
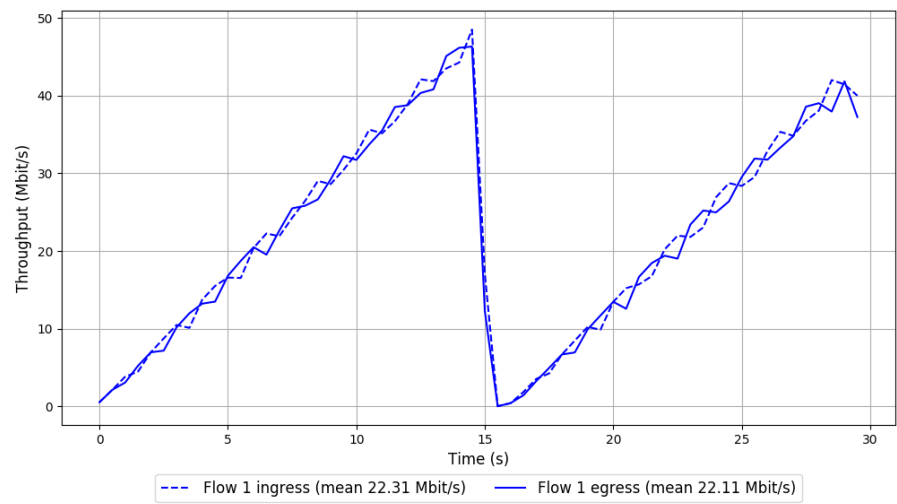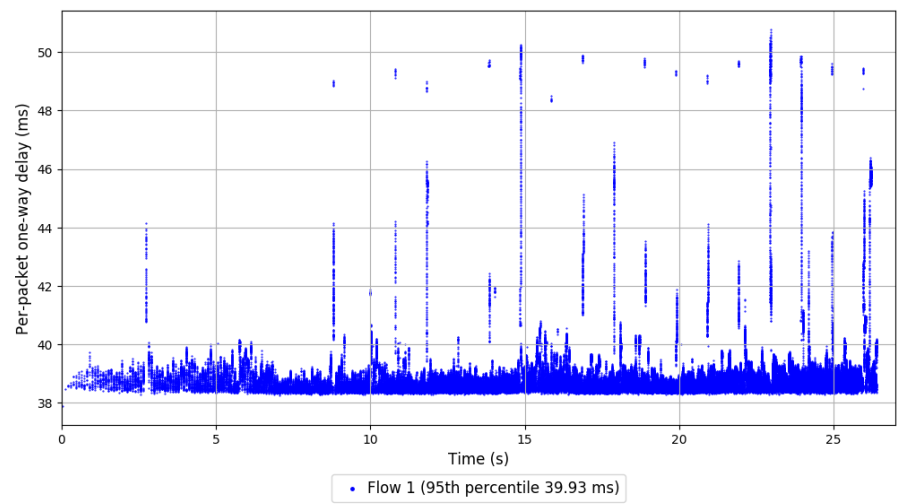
Run 1: Report of LEDBAT — Data Link

Flow 1 ingress (mean 36.84 Mbit/s) --- Flow 1 egress (mean 36.76 Mbit/s)

· Flow 1 (95th percentile 39.34 ms)

```
Run 2: Statistics of LEDBAT

Start at: 2017-09-18 17:38:35
End at: 2017-09-18 17:39:05
Local clock offset: -2.811 ms
Remote clock offset: 0.706 ms


# Below is generated by plot.py at 2017-09-18 19:24:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 22.11 Mbit/s
95th percentile per-packet one-way delay: 39.757 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 22.11 Mbit/s
95th percentile per-packet one-way delay: 39.757 ms
Loss rate: 1.20%
```
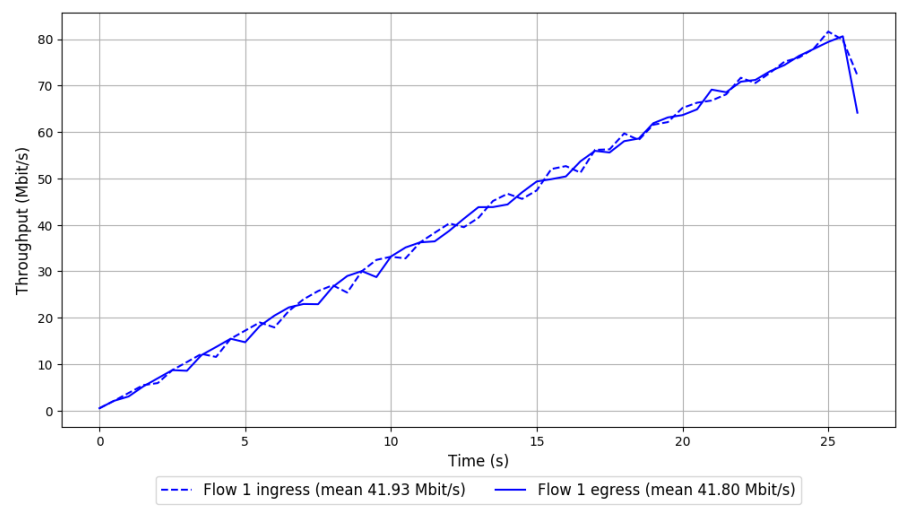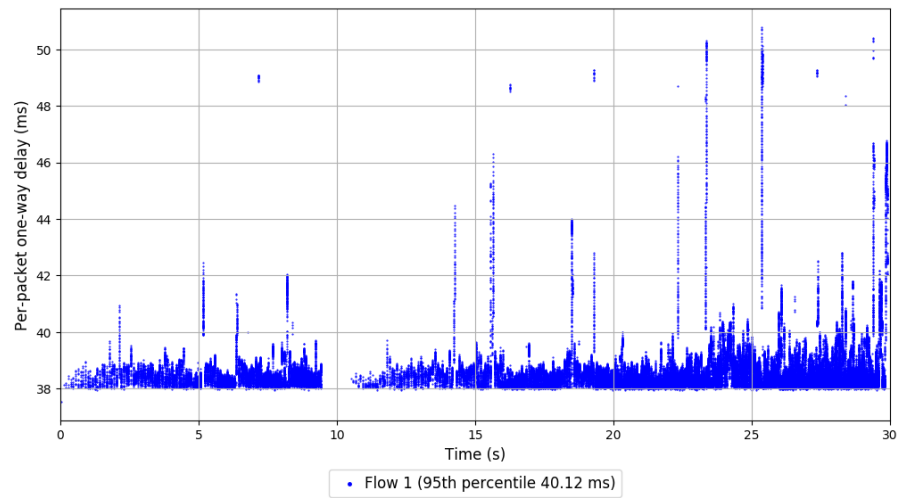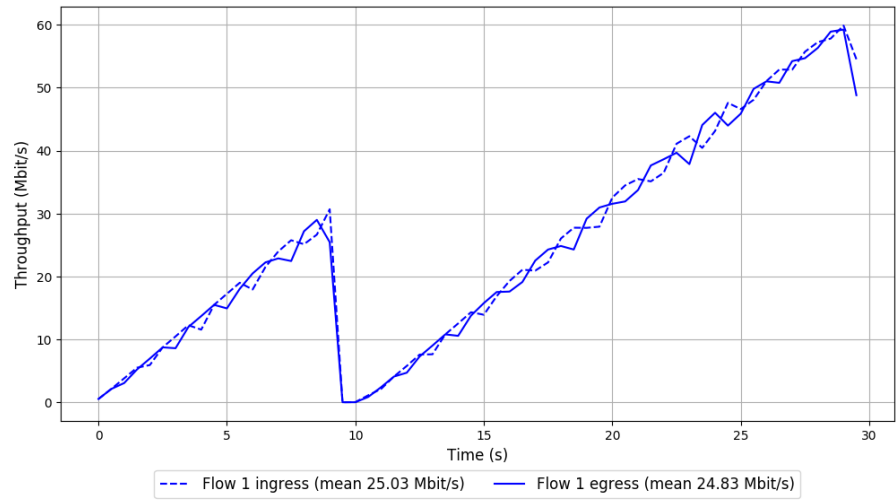
Run 2: Report of LEDBAT — Data Link

Flow 1 ingress (mean 22.31 Mbit/s) --- Flow 1 egress (mean 22.11 Mbit/s)

• Flow 1 (95th percentile 39.76 ms)

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```
Run 3: Statistics of LEDBAT

Start at: 2017-09-18 17:50:34
End at: 2017-09-18 17:51:04
Local clock offset: -3.774 ms
Remote clock offset: 0.942 ms


# Below is generated by plot.py at 2017-09-18 19:24:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.80 Mbit/s
95th percentile per-packet one-way delay: 39.933 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 41.80 Mbit/s
95th percentile per-packet one-way delay: 39.933 ms
Loss rate: 0.65%
```
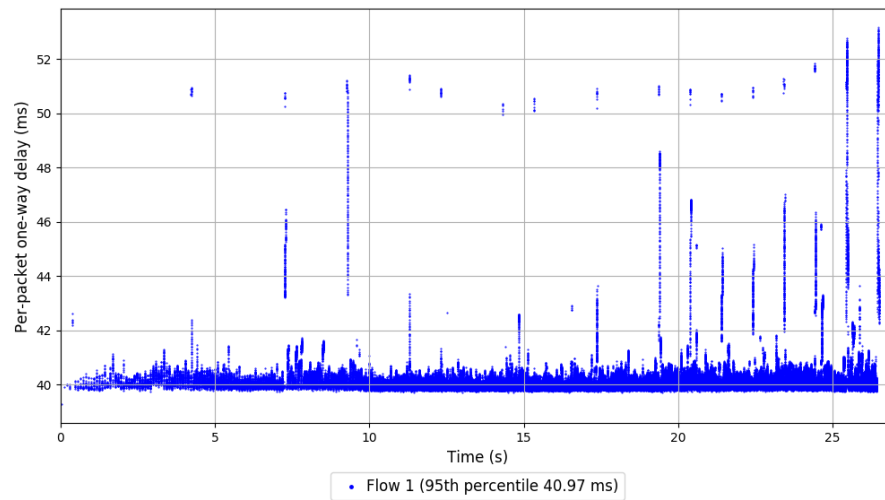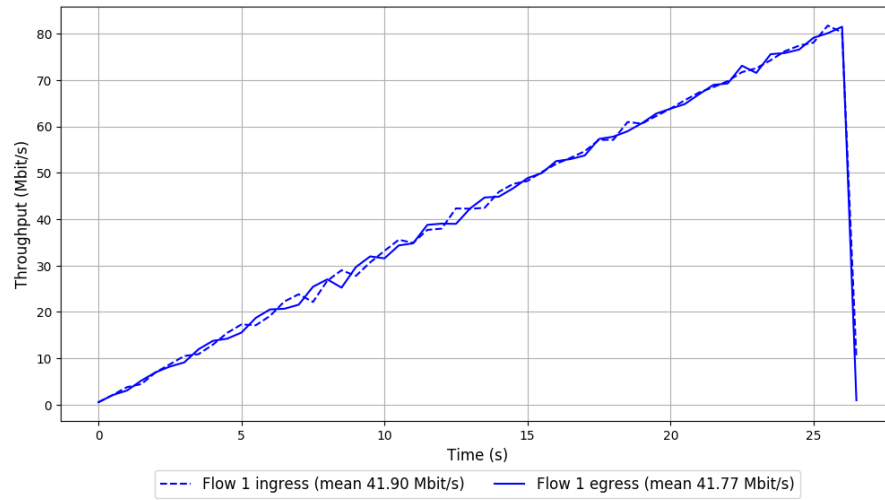
Run 3: Report of LEDBAT — Data Link

```
Run 4: Statistics of LEDBAT

Start at: 2017-09-18 18:02:32
End at: 2017-09-18 18:03:02
Local clock offset: -4.257 ms
Remote clock offset: 1.212 ms


# Below is generated by plot.py at 2017-09-18 19:24:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.83 Mbit/s
95th percentile per-packet one-way delay: 40.116 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 24.83 Mbit/s
95th percentile per-packet one-way delay: 40.116 ms
Loss rate: 1.06%
```
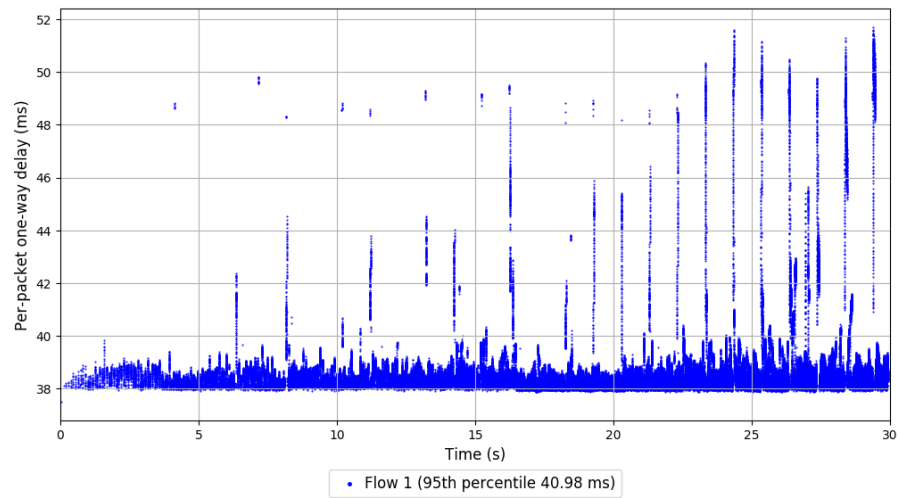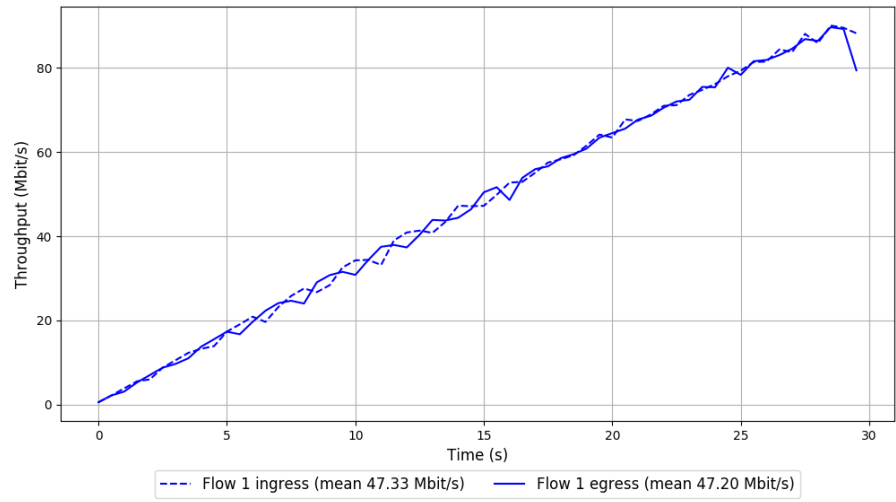
Run 4: Report of LEDBAT — Data Link

Flow 1 ingress (mean 25.03 Mbit/s)   Flow 1 egress (mean 24.83 Mbit/s)

Flow 1 (95th percentile 40.12 ms)

```
Run 5: Statistics of LEDBAT

Start at: 2017-09-18 18:14:30
End at: 2017-09-18 18:15:00
Local clock offset: -3.407 ms
Remote clock offset: 1.41 ms


# Below is generated by plot.py at 2017-09-18 19:24:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.77 Mbit/s
95th percentile per-packet one-way delay: 40.971 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 41.77 Mbit/s
95th percentile per-packet one-way delay: 40.971 ms
Loss rate: 0.65%
```
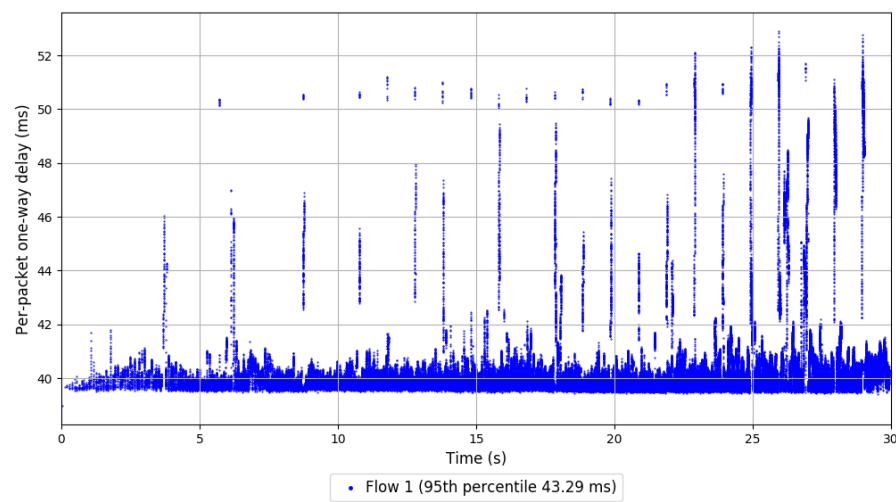
Run 5: Report of LEDBAT — Data Link

```
Run 6: Statistics of LEDBAT

Start at: 2017-09-18 18:26:26
End at: 2017-09-18 18:26:56
Local clock offset: -4.766 ms
Remote clock offset: 1.542 ms


# Below is generated by plot.py at 2017-09-18 19:24:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 47.20 Mbit/s
95th percentile per-packet one-way delay: 40.976 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 47.20 Mbit/s
95th percentile per-packet one-way delay: 40.976 ms
Loss rate: 0.57%
```
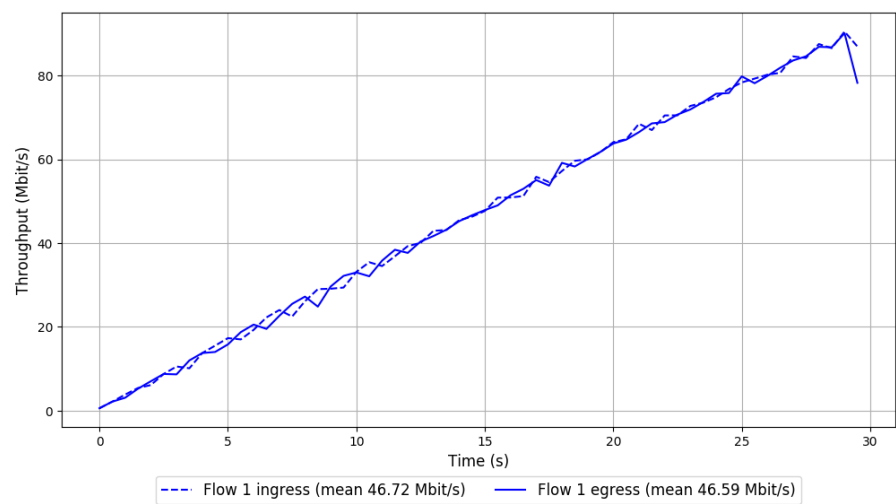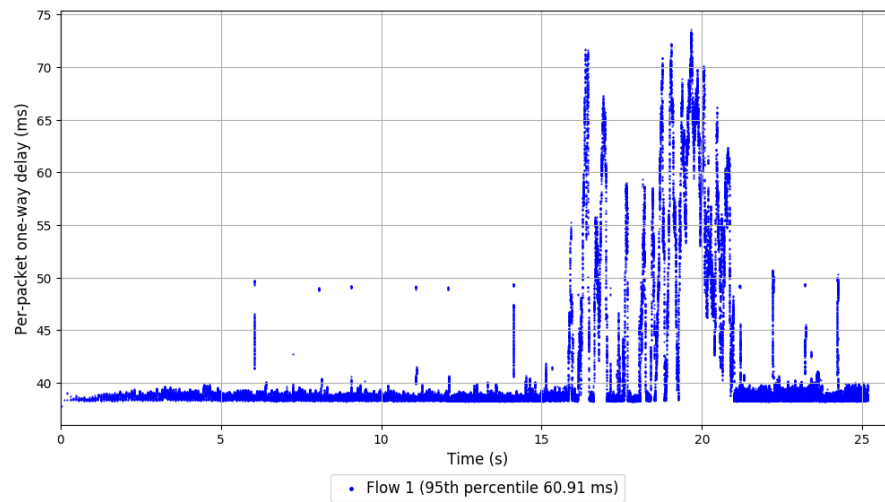
Run 6: Report of LEDBAT — Data Link

Flow 1 ingress (mean 47.33 Mbit/s)   Flow 1 egress (mean 47.20 Mbit/s)

• Flow 1 (95th percentile 40.98 ms)

```
Run 7: Statistics of LEDBAT

Start at: 2017-09-18 18:38:26
End at: 2017-09-18 18:38:56
Local clock offset: -2.849 ms
Remote clock offset: 0.848 ms


# Below is generated by plot.py at 2017-09-18 19:24:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 46.59 Mbit/s
95th percentile per-packet one-way delay: 43.289 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 46.59 Mbit/s
95th percentile per-packet one-way delay: 43.289 ms
Loss rate: 0.57%
```
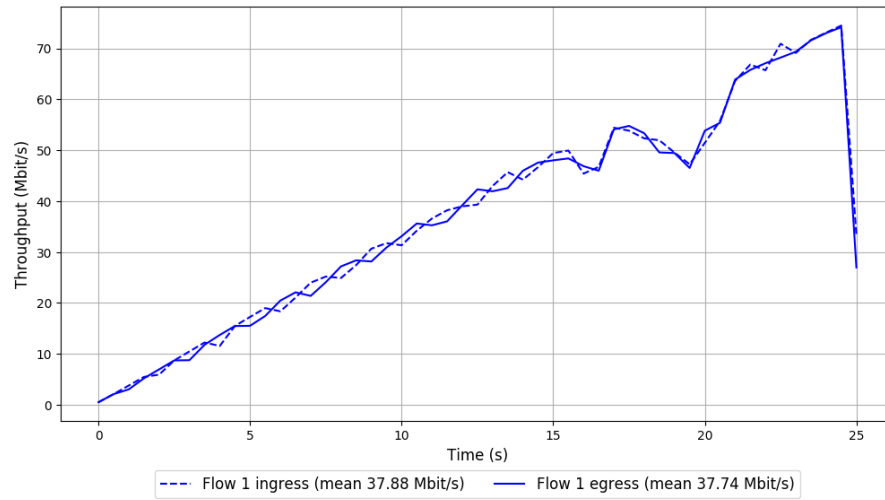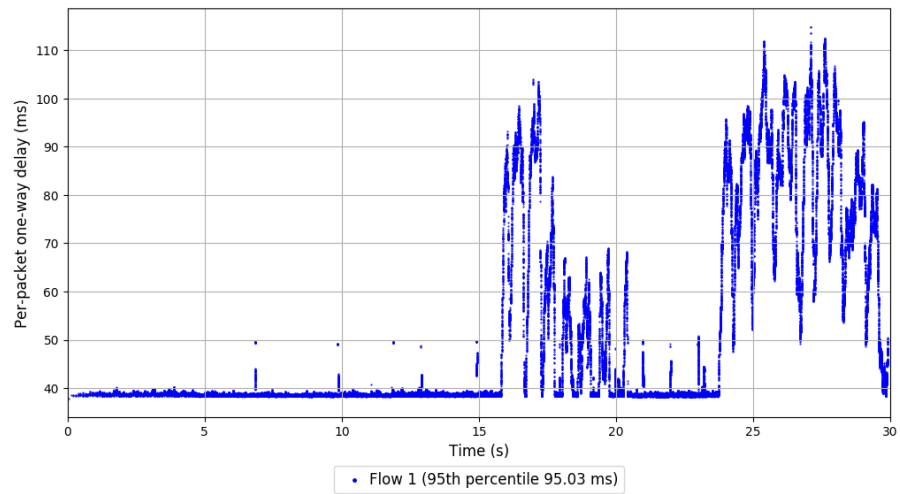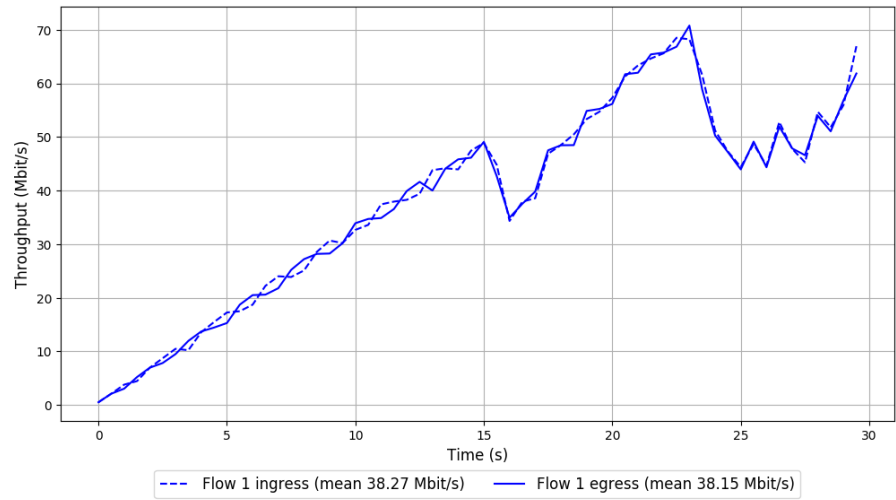
Run 7: Report of LEDBAT — Data Link

Flow 1 ingress (mean 46.72 Mbit/s) ---- Flow 1 egress (mean 46.59 Mbit/s) ——

Flow 1 (95th percentile 43.29 ms)

```
Run 8: Statistics of LEDBAT

Start at: 2017-09-18 18:50:27
End at: 2017-09-18 18:50:57
Local clock offset: -3.416 ms
Remote clock offset: 0.53 ms


# Below is generated by plot.py at 2017-09-18 19:24:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.74 Mbit/s
95th percentile per-packet one-way delay: 60.914 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 37.74 Mbit/s
95th percentile per-packet one-way delay: 60.914 ms
Loss rate: 0.69%
```
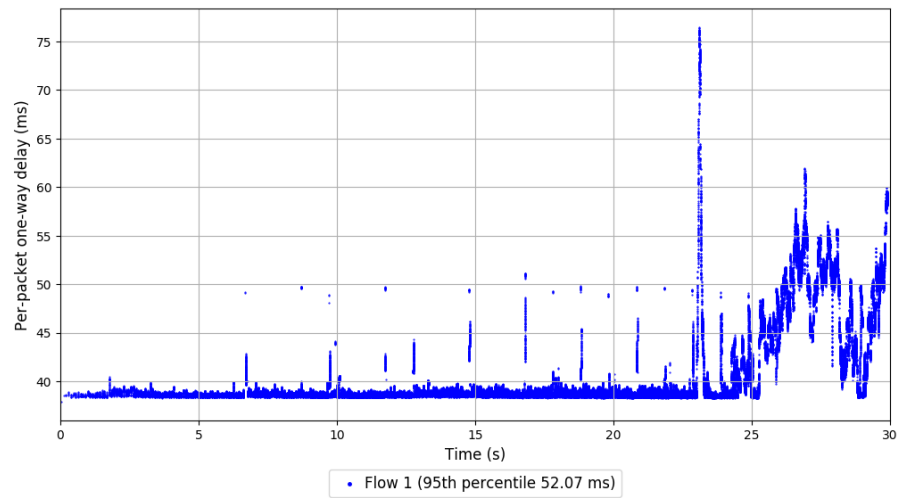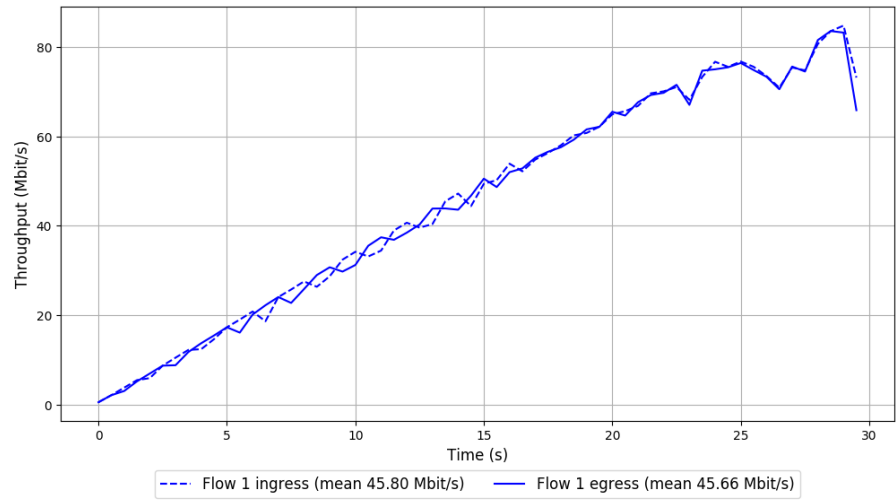
Run 8: Report of LEDBAT — Data Link

```
Run 9: Statistics of LEDBAT

Start at: 2017-09-18 19:02:23
End at: 2017-09-18 19:02:53
Local clock offset: -3.31 ms
Remote clock offset: 0.34 ms


# Below is generated by plot.py at 2017-09-18 19:24:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 38.15 Mbit/s
95th percentile per-packet one-way delay: 95.031 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 38.15 Mbit/s
95th percentile per-packet one-way delay: 95.031 ms
Loss rate: 0.59%
```
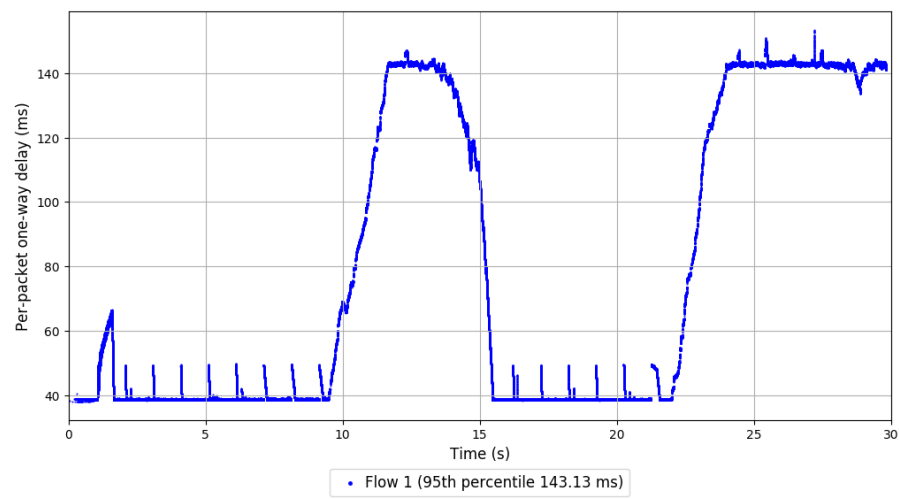
Run 9: Report of LEDBAT — Data Link

Flow 1 ingress (mean 38.27 Mbit/s)   Flow 1 egress (mean 38.15 Mbit/s)

Flow 1 (95th percentile 95.03 ms)

```
Run 10: Statistics of LEDBAT

Start at: 2017-09-18 19:14:23
End at: 2017-09-18 19:14:53
Local clock offset: -2.1 ms
Remote clock offset: 0.198 ms


# Below is generated by plot.py at 2017-09-18 19:24:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 45.66 Mbit/s
95th percentile per-packet one-way delay: 52.073 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 45.66 Mbit/s
95th percentile per-packet one-way delay: 52.073 ms
Loss rate: 0.58%
```
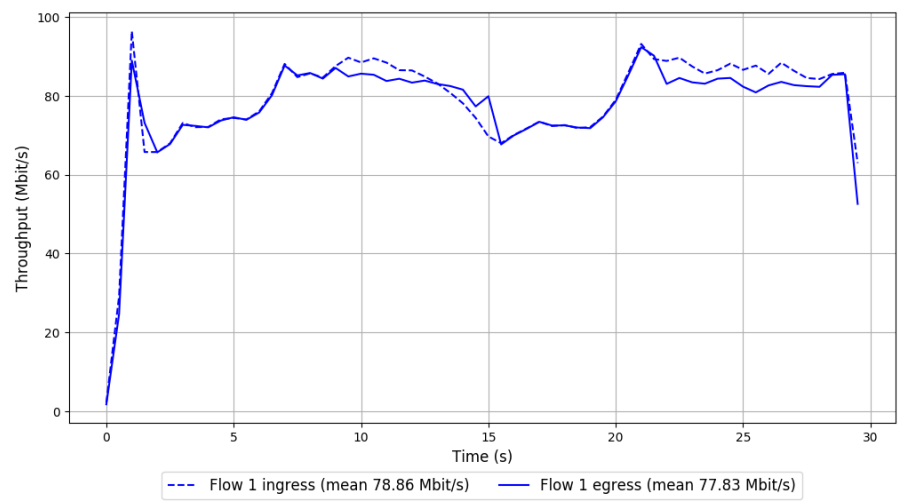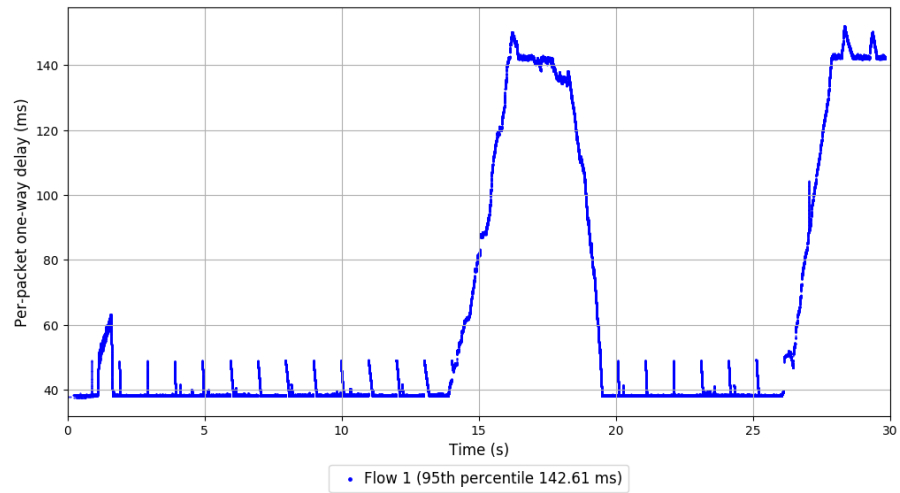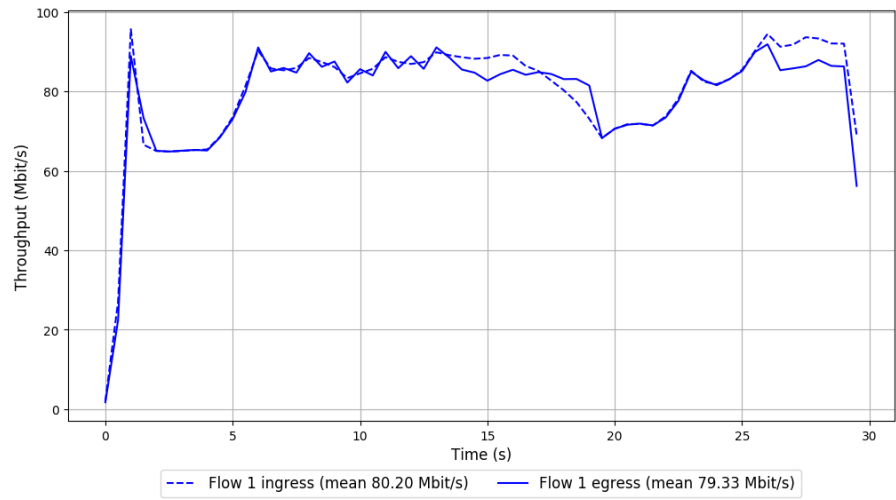
Run 10: Report of LEDBAT — Data Link

Flow 1 ingress (mean 45.80 Mbit/s)   Flow 1 egress (mean 45.66 Mbit/s)

• Flow 1 (95th percentile 52.07 ms)

```
Run 1: Statistics of PCC

Start at: 2017-09-18 17:20:35
End at: 2017-09-18 17:21:05
Local clock offset: -1.841 ms
Remote clock offset: 0.222 ms


# Below is generated by plot.py at 2017-09-18 19:25:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.83 Mbit/s
95th percentile per-packet one-way delay: 143.128 ms
Loss rate: 1.58%
-- Flow 1:
Average throughput: 77.83 Mbit/s
95th percentile per-packet one-way delay: 143.128 ms
Loss rate: 1.58%
```
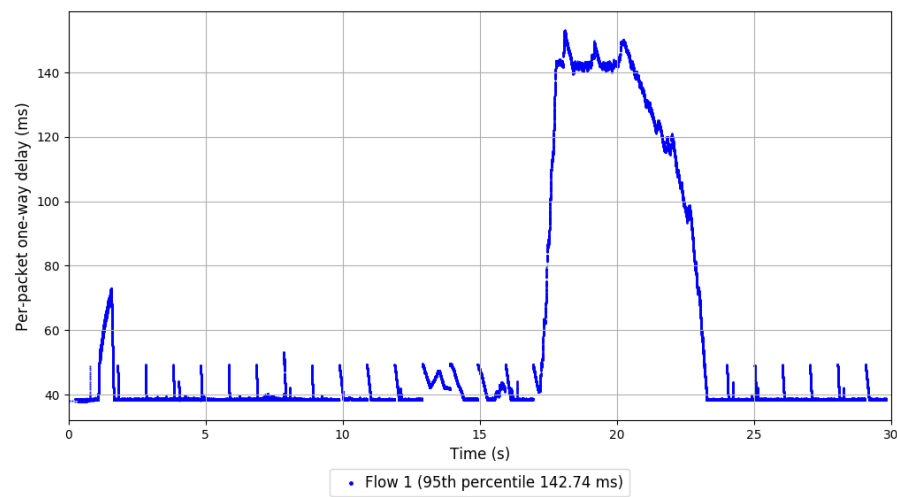
Run 1: Report of PCC — Data Link

```
Run 2: Statistics of PCC

Start at: 2017-09-18 17:32:36
End at: 2017-09-18 17:33:06
Local clock offset: -2.605 ms
Remote clock offset: 0.701 ms


# Below is generated by plot.py at 2017-09-18 19:25:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.33 Mbit/s
95th percentile per-packet one-way delay: 142.608 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 79.33 Mbit/s
95th percentile per-packet one-way delay: 142.608 ms
Loss rate: 1.36%
```
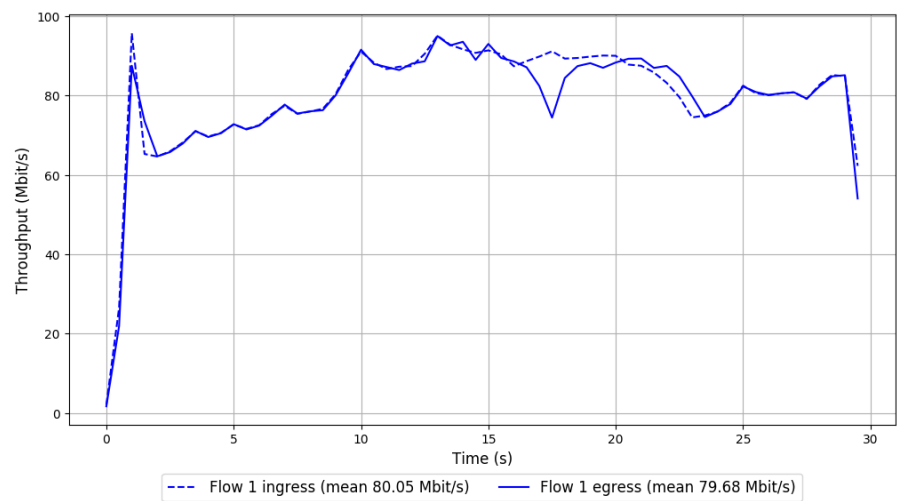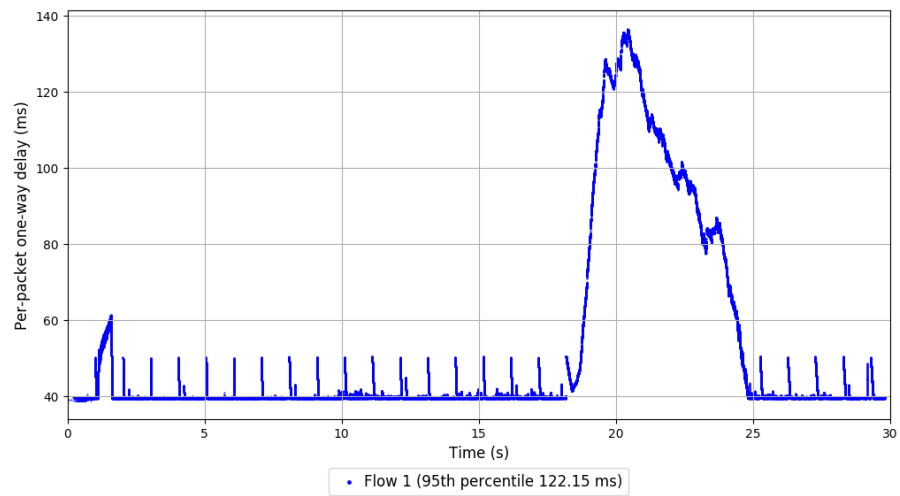
Run 2: Report of PCC — Data Link

```
Run 3: Statistics of PCC

Start at: 2017-09-18 17:44:36
End at: 2017-09-18 17:45:06
Local clock offset: -3.228 ms
Remote clock offset: 0.88 ms


# Below is generated by plot.py at 2017-09-18 19:25:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.68 Mbit/s
95th percentile per-packet one-way delay: 142.740 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 79.68 Mbit/s
95th percentile per-packet one-way delay: 142.740 ms
Loss rate: 0.75%
```
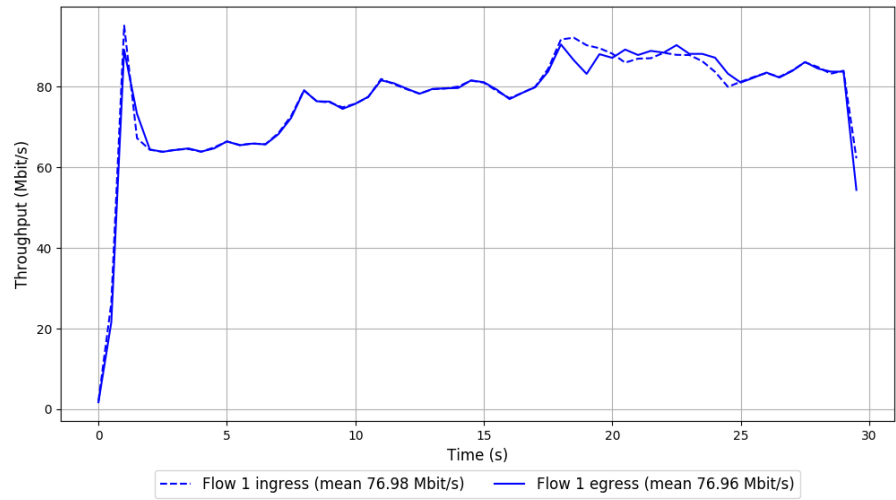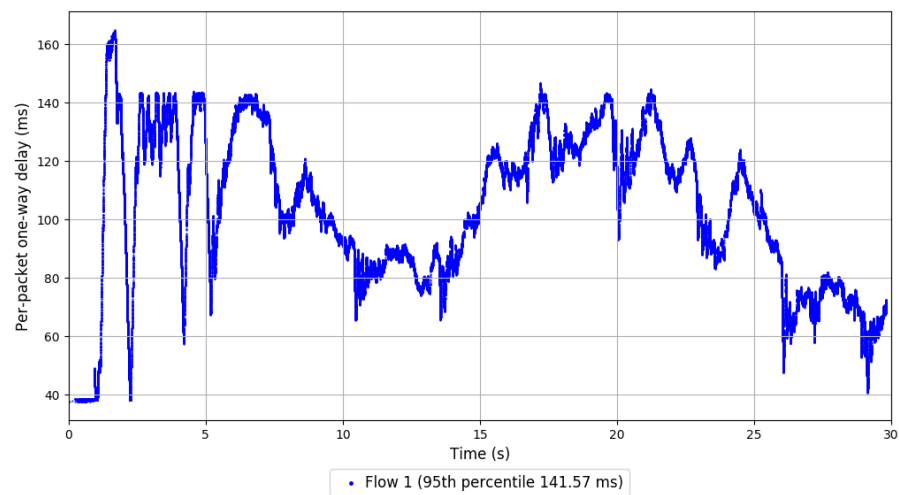
Run 3: Report of PCC — Data Link

Flow 1 ingress (mean 80.05 Mbit/s) ---- Flow 1 egress (mean 79.68 Mbit/s)

• Flow 1 (95th percentile 142.74 ms)

```
Run 4: Statistics of PCC

Start at: 2017-09-18 17:56:34
End at: 2017-09-18 17:57:05
Local clock offset: -2.824 ms
Remote clock offset: 1.091 ms


# Below is generated by plot.py at 2017-09-18 19:25:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.96 Mbit/s
95th percentile per-packet one-way delay: 122.149 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 76.96 Mbit/s
95th percentile per-packet one-way delay: 122.149 ms
Loss rate: 0.32%
```
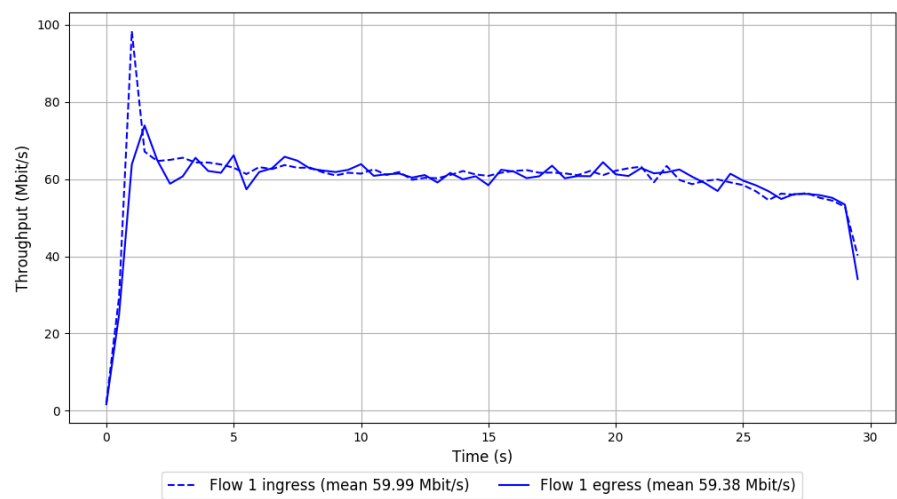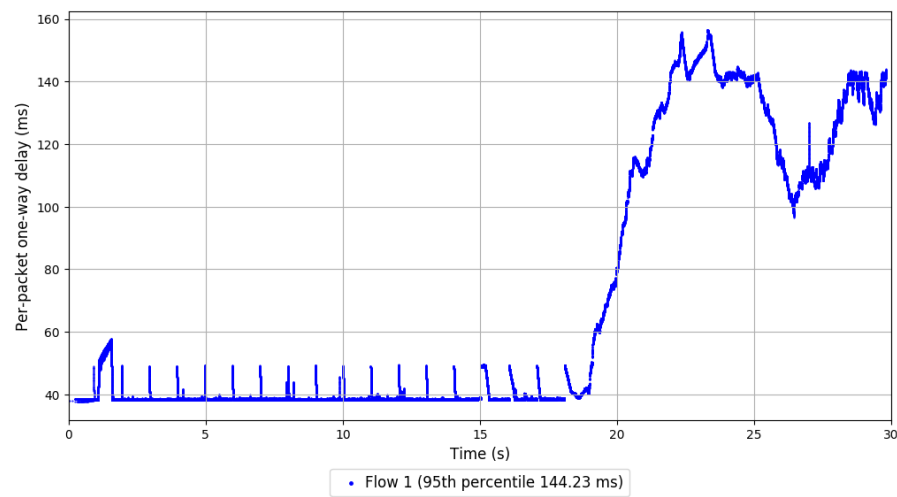
Run 4: Report of PCC — Data Link

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```
Run 5: Statistics of PCC

Start at: 2017-09-18 18:08:31
End at: 2017-09-18 18:09:01
Local clock offset: -4.521 ms
Remote clock offset: 1.287 ms


# Below is generated by plot.py at 2017-09-18 19:25:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.38 Mbit/s
95th percentile per-packet one-way delay: 141.570 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 59.38 Mbit/s
95th percentile per-packet one-way delay: 141.570 ms
Loss rate: 1.30%
```
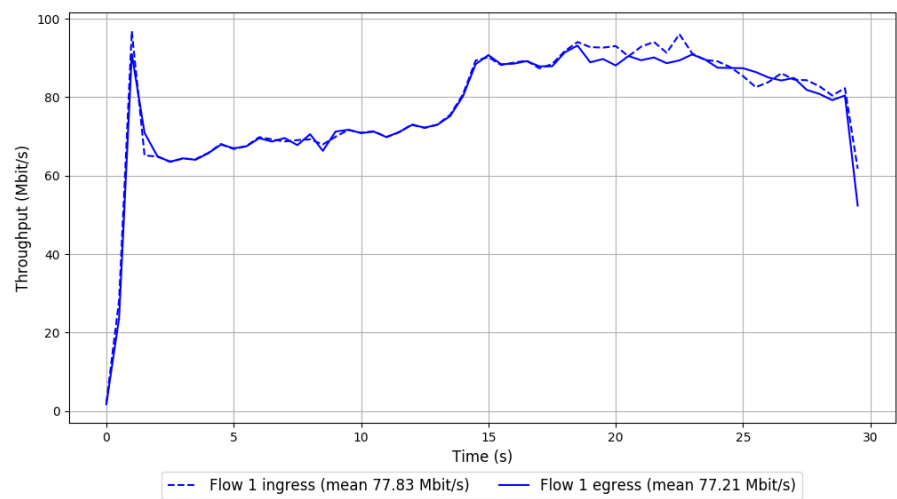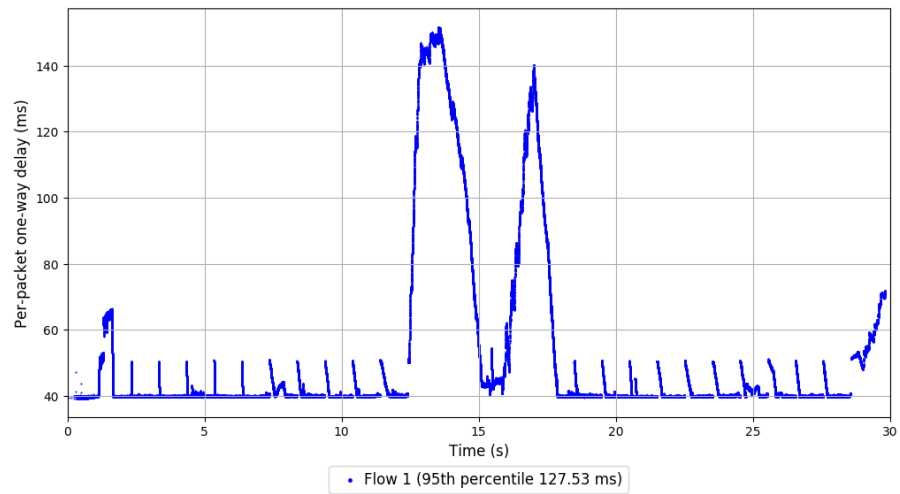
Run 5: Report of PCC — Data Link

Flow 1 ingress (mean 59.99 Mbit/s) —— Flow 1 egress (mean 59.38 Mbit/s)

• Flow 1 (95th percentile 141.57 ms)

```
Run 6: Statistics of PCC

Start at: 2017-09-18 18:20:33
End at: 2017-09-18 18:21:03
Local clock offset: -4.76 ms
Remote clock offset: 1.604 ms


# Below is generated by plot.py at 2017-09-18 19:25:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.21 Mbit/s
95th percentile per-packet one-way delay: 144.232 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 77.21 Mbit/s
95th percentile per-packet one-way delay: 144.232 ms
Loss rate: 1.07%
```
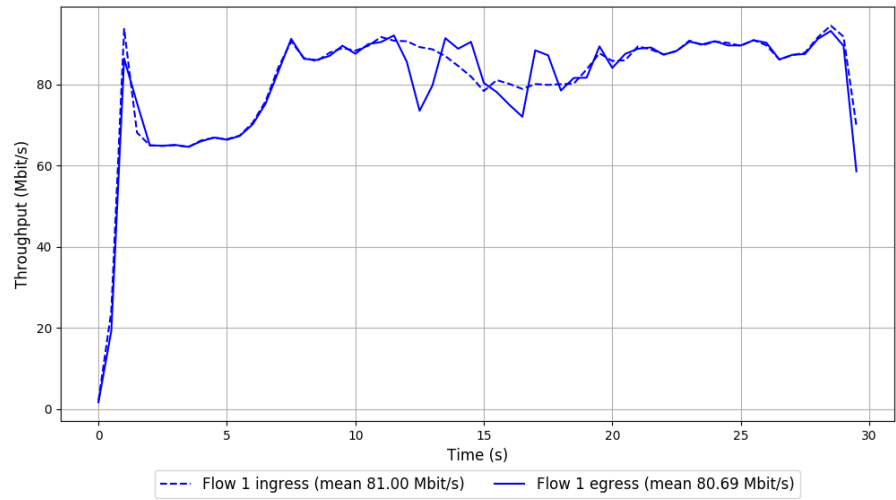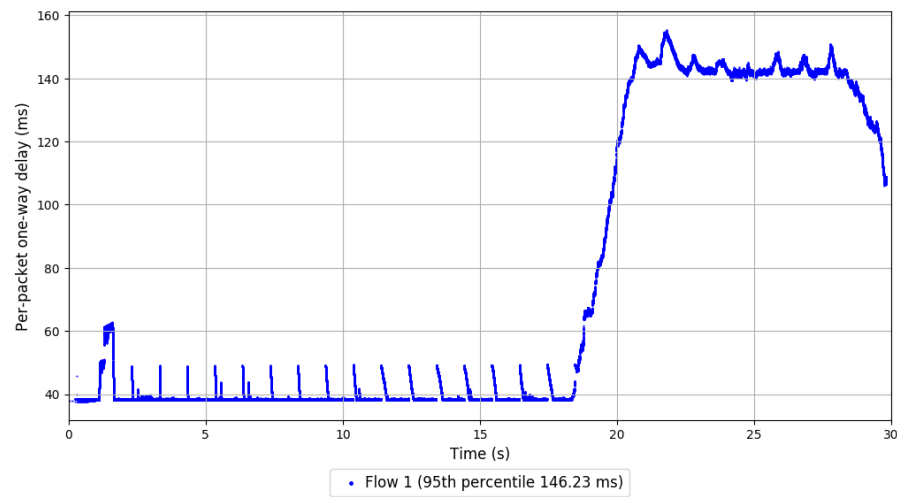
Run 6: Report of PCC — Data Link

Flow 1 ingress (mean 77.83 Mbit/s) —— Flow 1 egress (mean 77.21 Mbit/s)

• Flow 1 (95th percentile 144.23 ms)

```
Run 7: Statistics of PCC

Start at: 2017-09-18 18:32:28
End at: 2017-09-18 18:32:58
Local clock offset: -3.13 ms
Remote clock offset: 1.203 ms


# Below is generated by plot.py at 2017-09-18 19:25:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.69 Mbit/s
95th percentile per-packet one-way delay: 127.535 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 80.69 Mbit/s
95th percentile per-packet one-way delay: 127.535 ms
Loss rate: 0.68%
```
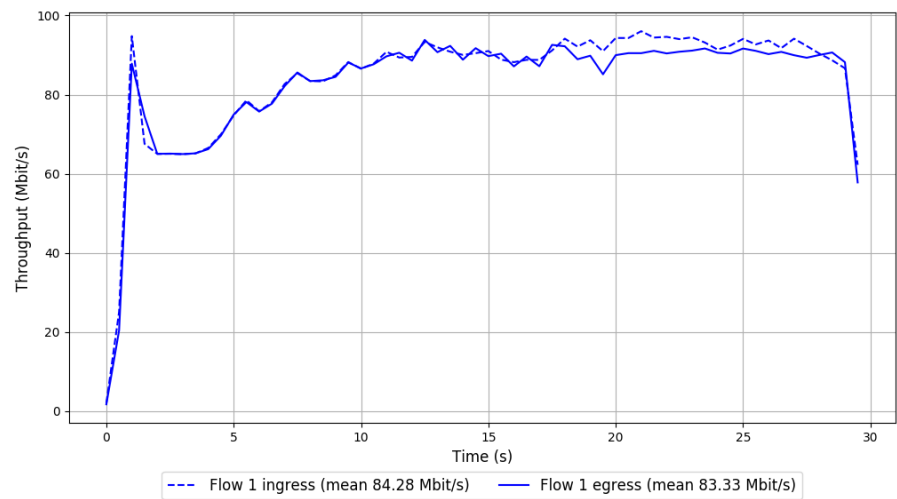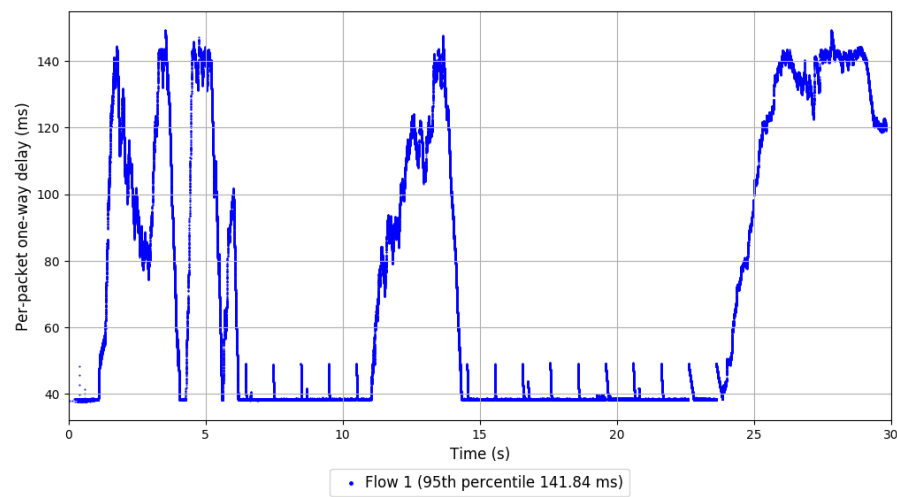
Run 7: Report of PCC — Data Link

Flow 1 ingress (mean 81.00 Mbit/s)   Flow 1 egress (mean 80.69 Mbit/s)

Flow 1 (95th percentile 127.53 ms)

```
Run 8: Statistics of PCC

Start at: 2017-09-18 18:44:29
End at: 2017-09-18 18:44:59
Local clock offset: -3.565 ms
Remote clock offset: 0.664 ms


# Below is generated by plot.py at 2017-09-18 19:26:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.33 Mbit/s
95th percentile per-packet one-way delay: 146.230 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 83.33 Mbit/s
95th percentile per-packet one-way delay: 146.230 ms
Loss rate: 1.41%
```
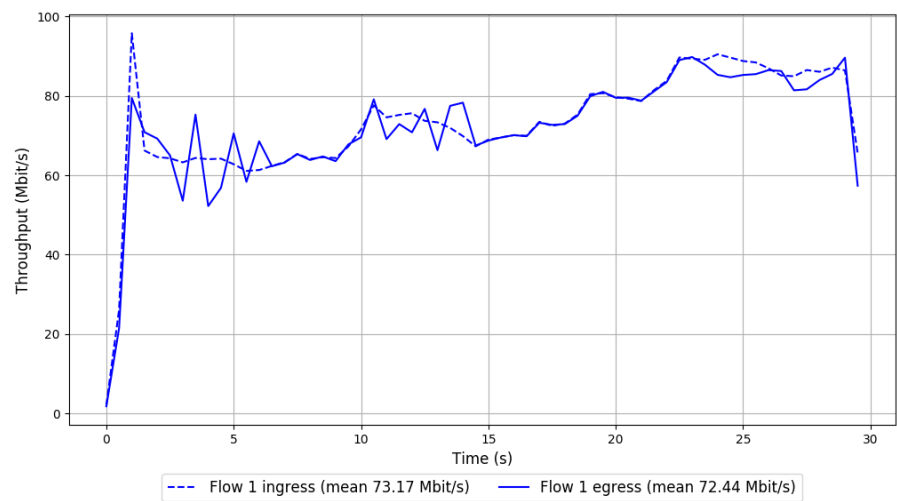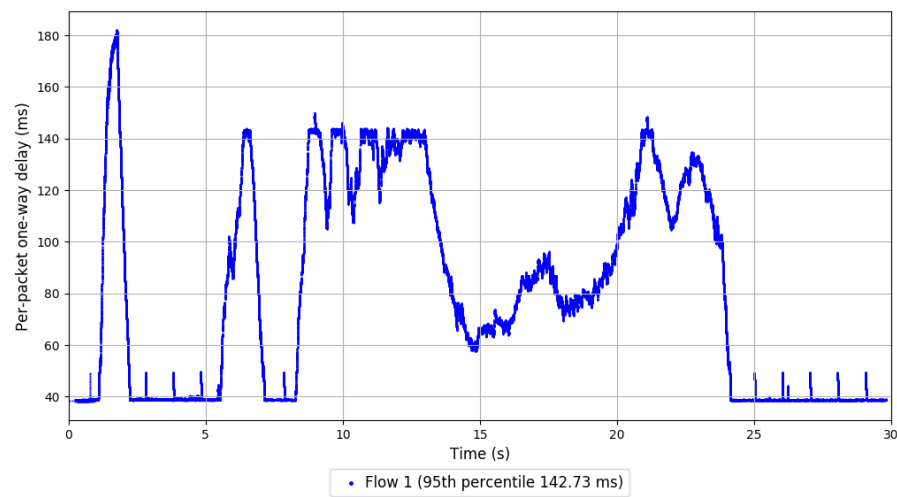
Run 8: Report of PCC — Data Link

```
Run 9: Statistics of PCC

Start at: 2017-09-18 18:56:26
End at: 2017-09-18 18:56:56
Local clock offset: -3.318 ms
Remote clock offset: 0.445 ms


# Below is generated by plot.py at 2017-09-18 19:26:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.44 Mbit/s
95th percentile per-packet one-way delay: 141.838 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 72.44 Mbit/s
95th percentile per-packet one-way delay: 141.838 ms
Loss rate: 1.29%
```
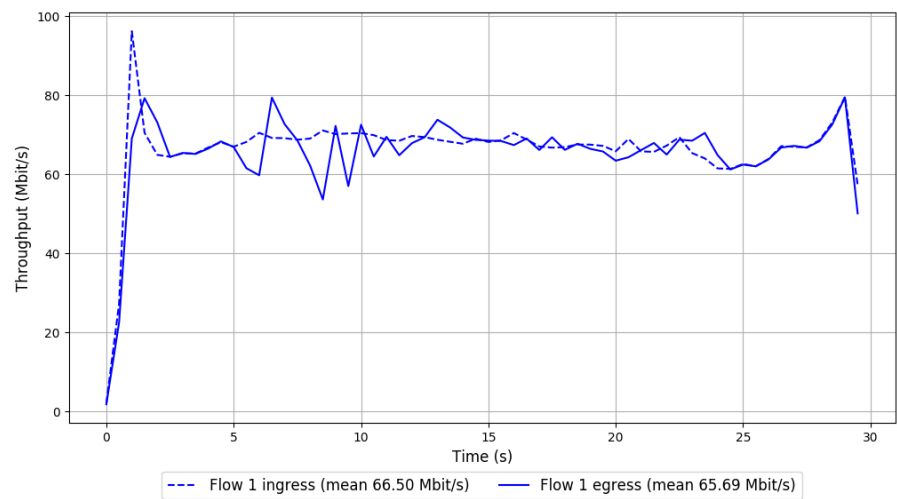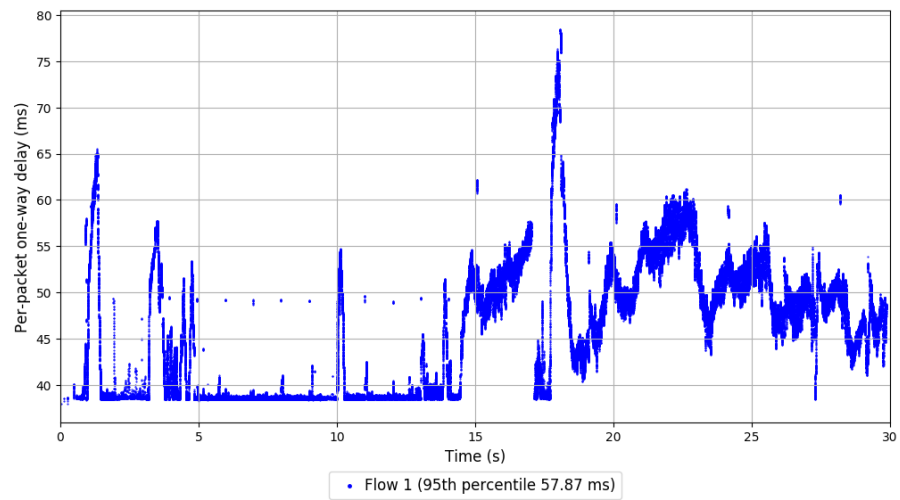
Run 9: Report of PCC — Data Link

Flow 1 ingress (mean 73.17 Mbit/s) — Flow 1 egress (mean 72.44 Mbit/s)

Flow 1 (95th percentile 141.84 ms)

```
Run 10: Statistics of PCC

Start at: 2017-09-18 19:08:23
End at: 2017-09-18 19:08:53
Local clock offset: -2.633 ms
Remote clock offset: 0.24 ms


# Below is generated by plot.py at 2017-09-18 19:26:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.69 Mbit/s
95th percentile per-packet one-way delay: 142.730 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 65.69 Mbit/s
95th percentile per-packet one-way delay: 142.730 ms
Loss rate: 1.50%
```
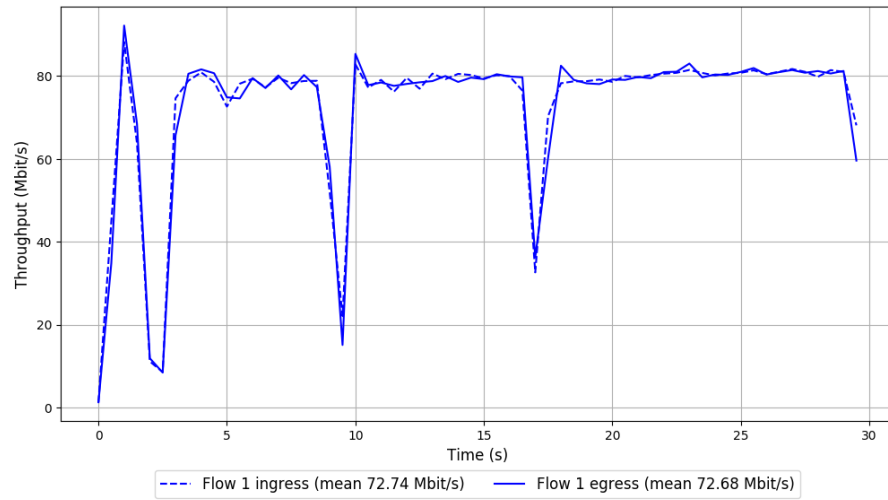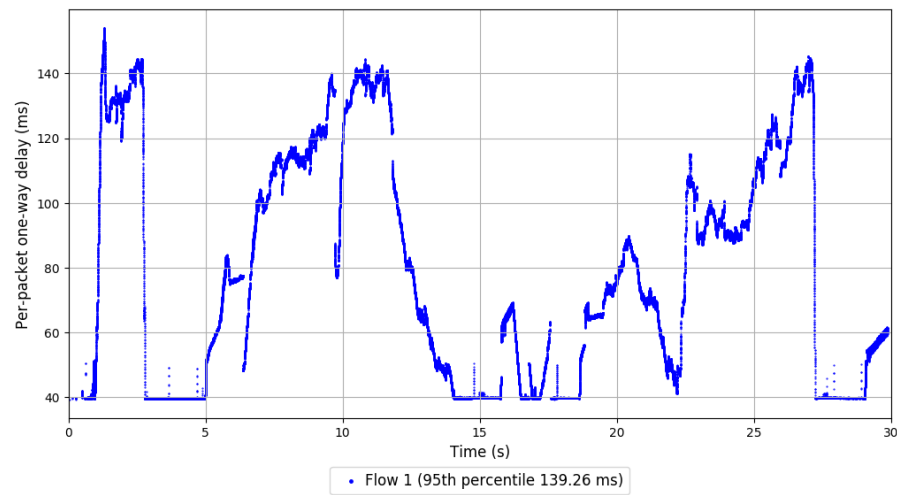
Run 10: Report of PCC — Data Link

Flow 1 ingress (mean 66.50 Mbit/s) — Flow 1 egress (mean 65.69 Mbit/s)

• Flow 1 (95th percentile 142.73 ms)

```
Run 1: Statistics of QUIC Cubic

Start at: 2017-09-18 17:25:23
End at: 2017-09-18 17:25:53
Local clock offset: -2.047 ms
Remote clock offset: 0.342 ms


# Below is generated by plot.py at 2017-09-18 19:26:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.68 Mbit/s
95th percentile per-packet one-way delay: 57.872 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 72.68 Mbit/s
95th percentile per-packet one-way delay: 57.872 ms
Loss rate: 0.37%
```
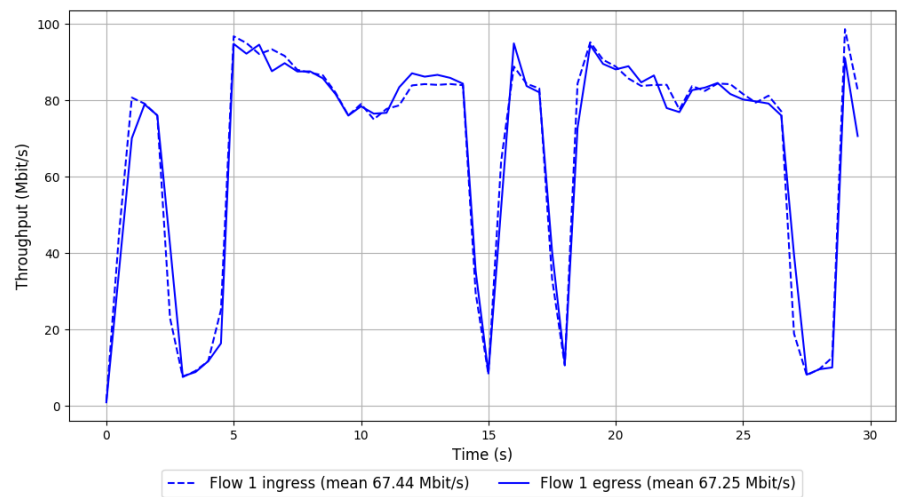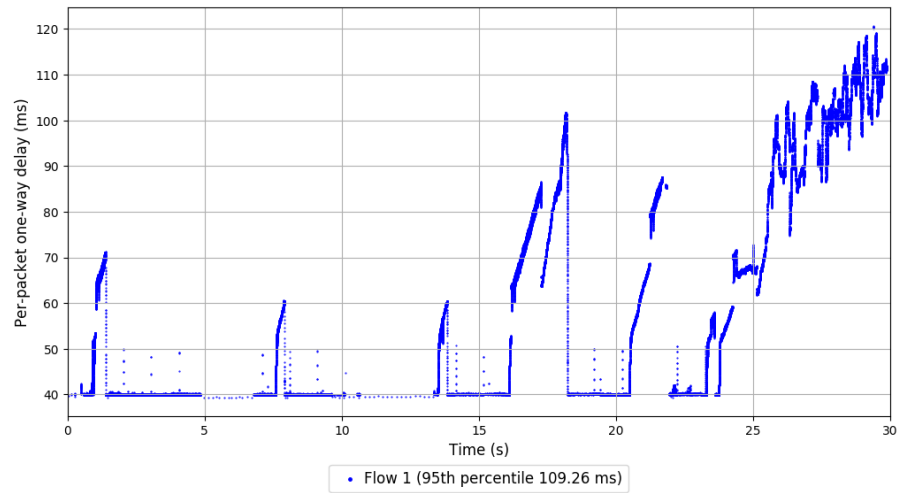
Run 1: Report of QUIC Cubic — Data Link

```
Run 2: Statistics of QUIC Cubic

Start at: 2017-09-18 17:37:22
End at: 2017-09-18 17:37:53
Local clock offset: -1.698 ms
Remote clock offset: 0.73 ms


# Below is generated by plot.py at 2017-09-18 19:26:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.25 Mbit/s
95th percentile per-packet one-way delay: 139.258 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 67.25 Mbit/s
95th percentile per-packet one-way delay: 139.258 ms
Loss rate: 0.60%
```
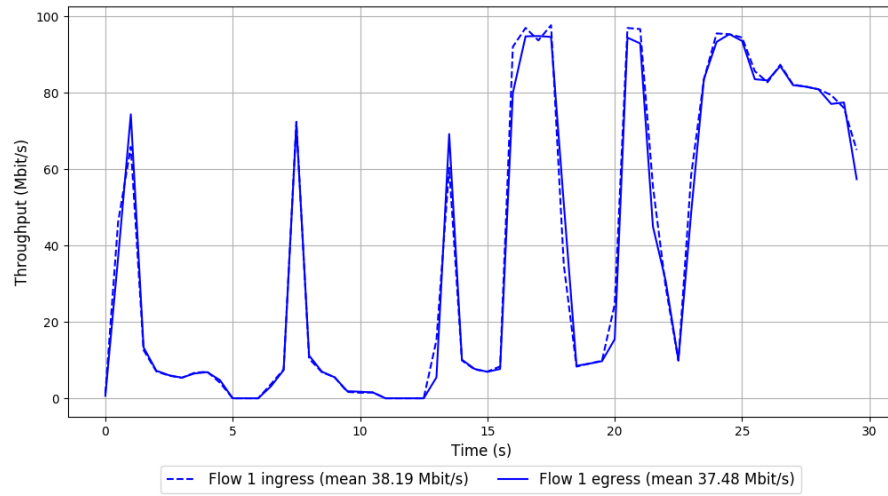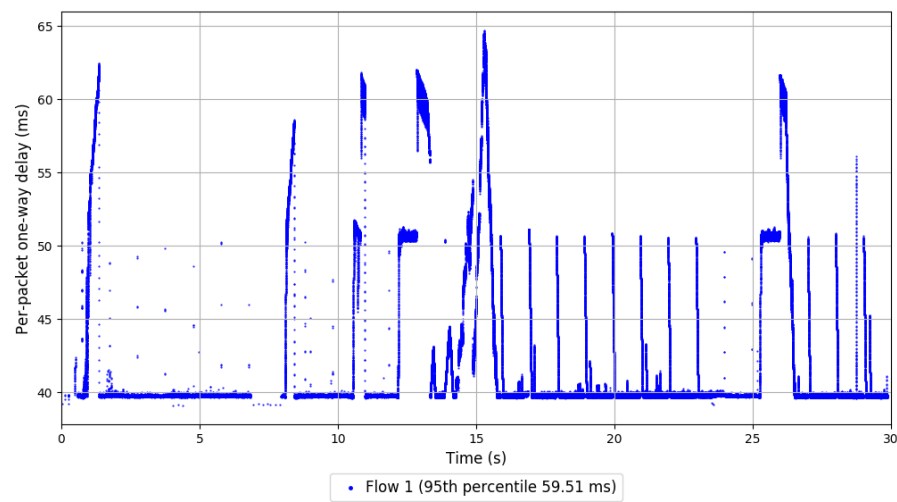
Run 2: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 67.44 Mbit/s)   Flow 1 egress (mean 67.25 Mbit/s)

Flow 1 (95th percentile 139.26 ms)

```
Run 3: Statistics of QUIC Cubic

Start at: 2017-09-18 17:49:23
End at: 2017-09-18 17:49:53
Local clock offset: -2.453 ms
Remote clock offset: 0.934 ms


# Below is generated by plot.py at 2017-09-18 19:26:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.48 Mbit/s
95th percentile per-packet one-way delay: 109.261 ms
Loss rate: 2.15%
-- Flow 1:
Average throughput: 37.48 Mbit/s
95th percentile per-packet one-way delay: 109.261 ms
Loss rate: 2.15%
```
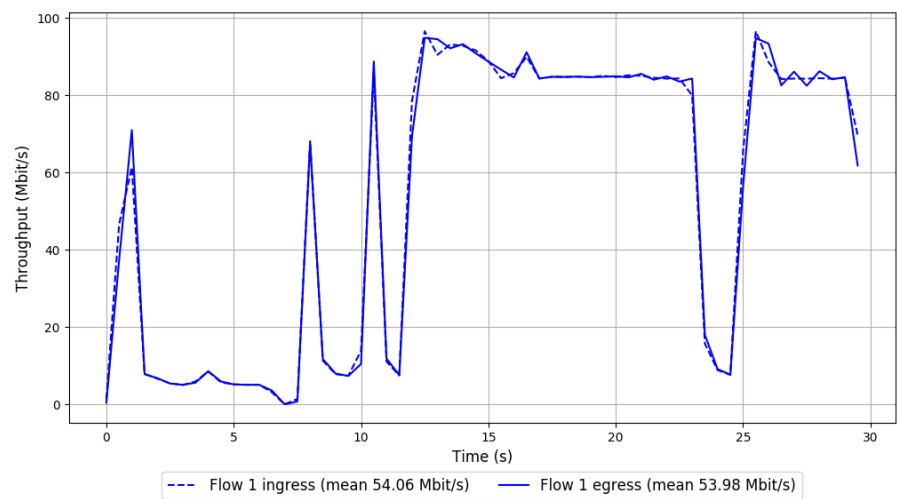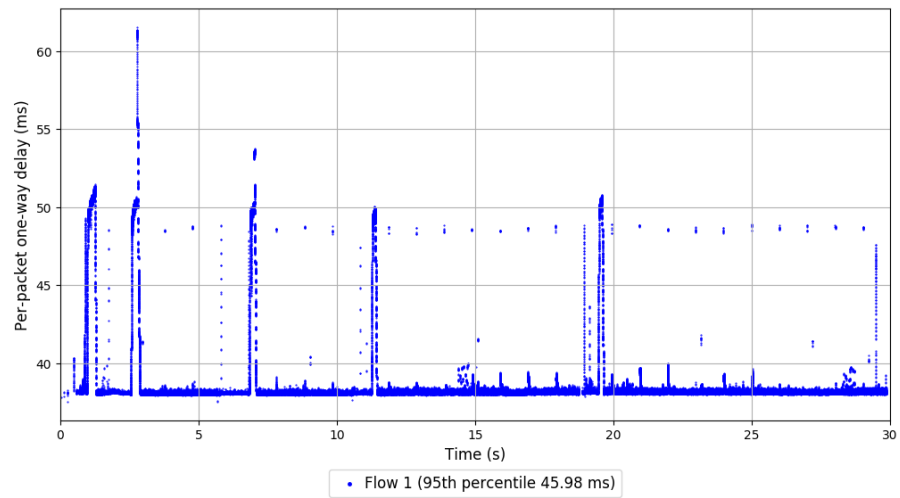
Run 3: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 38.19 Mbit/s)　　Flow 1 egress (mean 37.48 Mbit/s)

Flow 1 (95th percentile 109.26 ms)

```
Run 4: Statistics of QUIC Cubic

Start at: 2017-09-18 18:01:21
End at: 2017-09-18 18:01:51
Local clock offset: -2.903 ms
Remote clock offset: 1.172 ms


# Below is generated by plot.py at 2017-09-18 19:26:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.98 Mbit/s
95th percentile per-packet one-way delay: 59.509 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 53.98 Mbit/s
95th percentile per-packet one-way delay: 59.509 ms
Loss rate: 0.45%
```
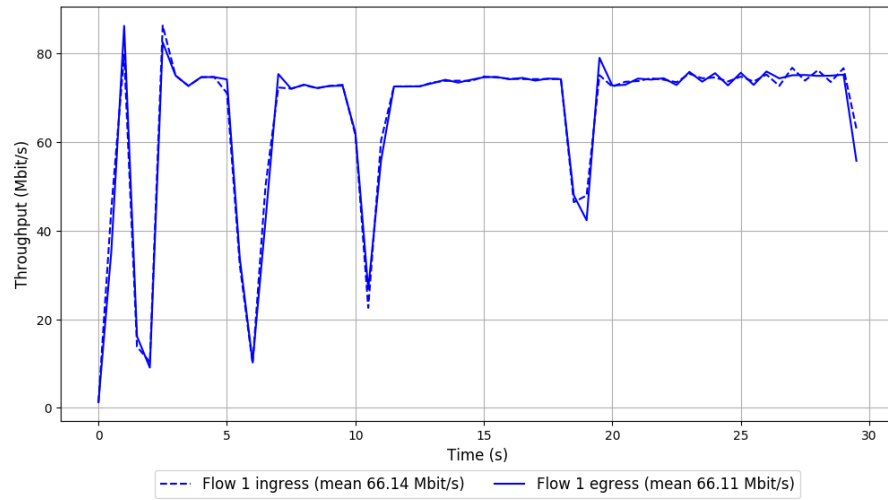
Run 4: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 54.06 Mbit/s)   ——— Flow 1 egress (mean 53.98 Mbit/s)

• Flow 1 (95th percentile 59.51 ms)

```
Run 5: Statistics of QUIC Cubic

Start at: 2017-09-18 18:13:18
End at: 2017-09-18 18:13:48
Local clock offset: -4.719 ms
Remote clock offset: 1.374 ms


# Below is generated by plot.py at 2017-09-18 19:27:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 66.11 Mbit/s
95th percentile per-packet one-way delay: 45.983 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 66.11 Mbit/s
95th percentile per-packet one-way delay: 45.983 ms
Loss rate: 0.33%
```
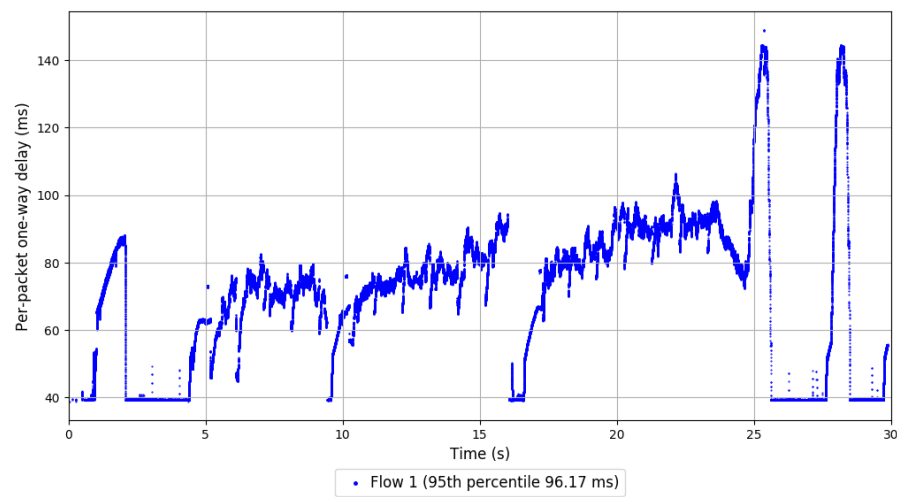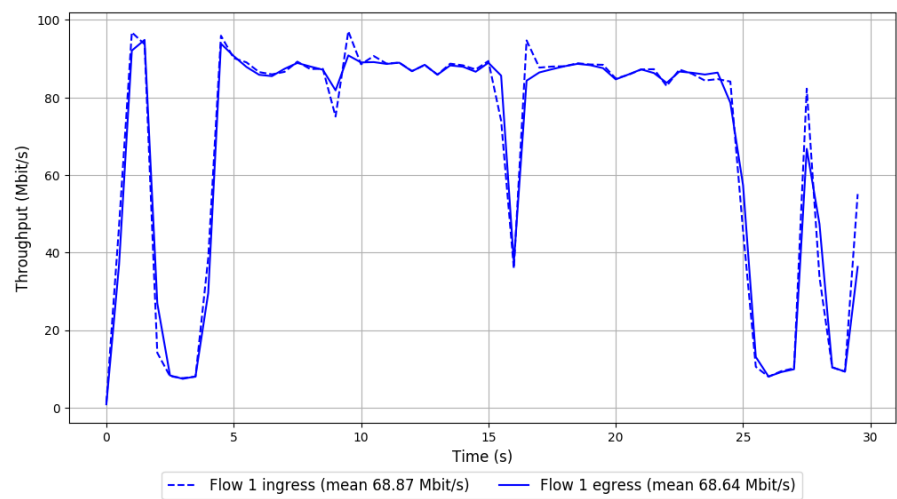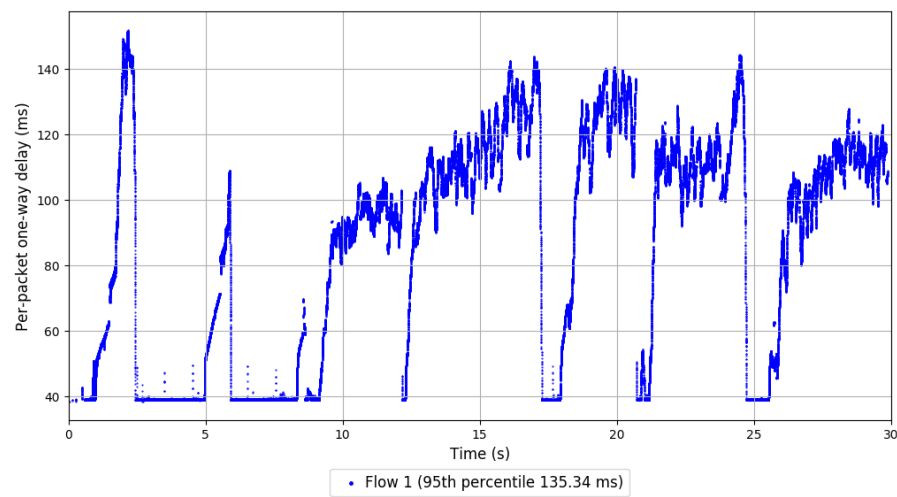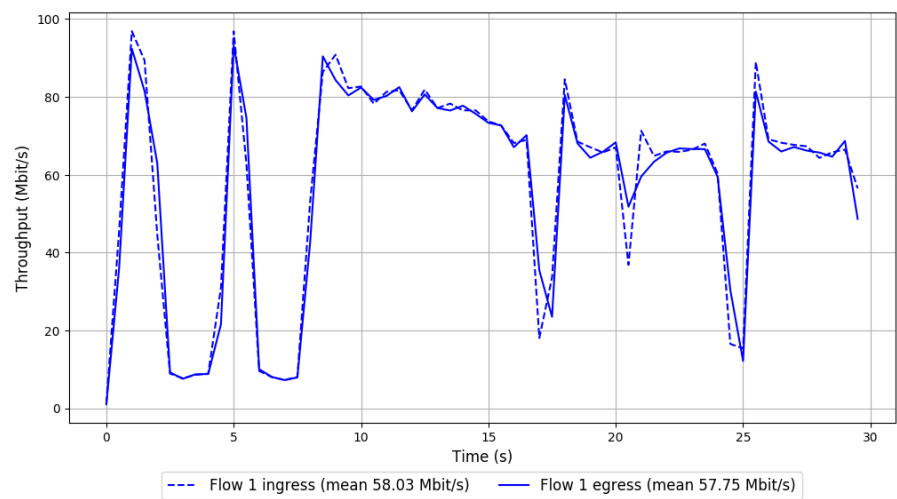
Run 5: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 66.14 Mbit/s) ----- Flow 1 egress (mean 66.11 Mbit/s)

Flow 1 (95th percentile 45.98 ms)

Run 6: Statistics of QUIC Cubic

Start at: 2017-09-18 18:25:18
End at: 2017-09-18 18:25:48
Local clock offset: -4.645 ms
Remote clock offset: 1.606 ms

Run 6: Report of QUIC Cubic — Data Link

Flow 1 ingress (mean 0.46 Mbit/s)   Flow 1 egress (mean 0.46 Mbit/s)

Flow 1 (95th percentile 37.83 ms)

```
Run 7: Statistics of QUIC Cubic

Start at: 2017-09-18 18:37:14
End at: 2017-09-18 18:37:44
Local clock offset: -3.038 ms
Remote clock offset: 0.965 ms


# Below is generated by plot.py at 2017-09-18 19:27:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 68.64 Mbit/s
95th percentile per-packet one-way delay: 96.165 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 68.64 Mbit/s
95th percentile per-packet one-way delay: 96.165 ms
Loss rate: 0.62%
```
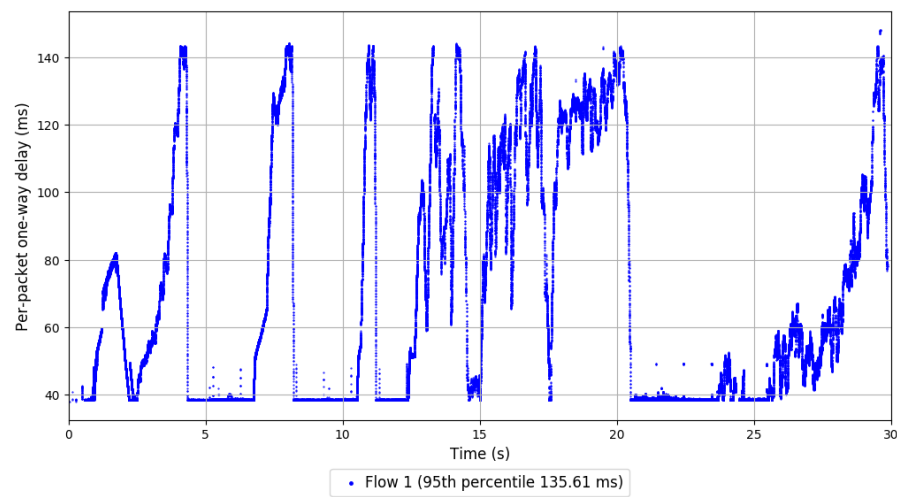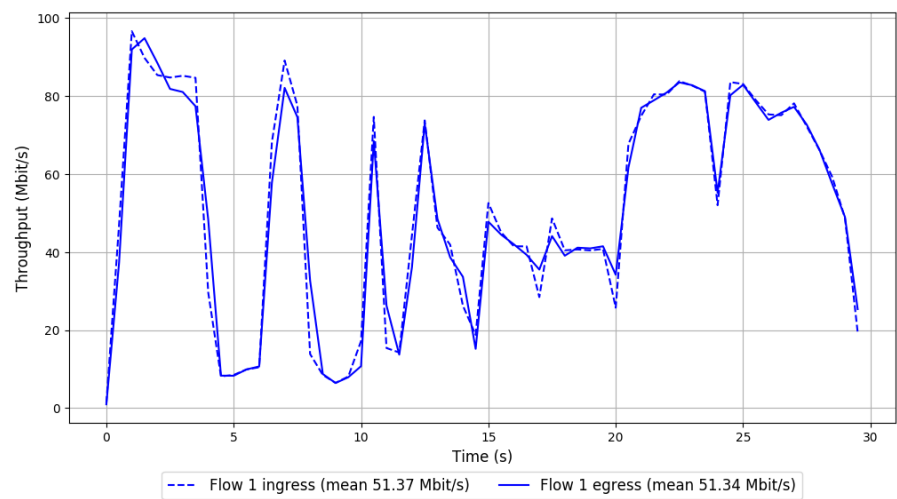
Run 7: Report of QUIC Cubic — Data Link

```
Run 8: Statistics of QUIC Cubic

Start at: 2017-09-18 18:49:15
End at: 2017-09-18 18:49:45
Local clock offset: -2.414 ms
Remote clock offset: 0.554 ms


# Below is generated by plot.py at 2017-09-18 19:27:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.75 Mbit/s
95th percentile per-packet one-way delay: 135.338 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 57.75 Mbit/s
95th percentile per-packet one-way delay: 135.338 ms
Loss rate: 0.78%
```
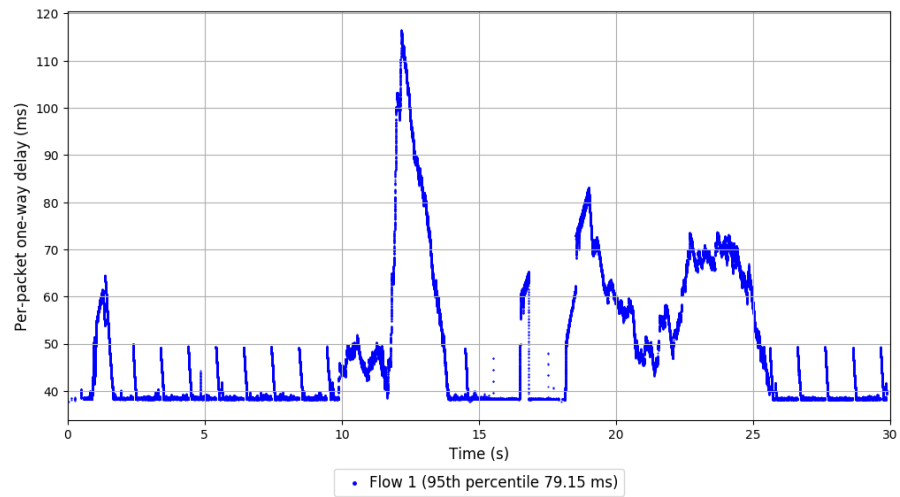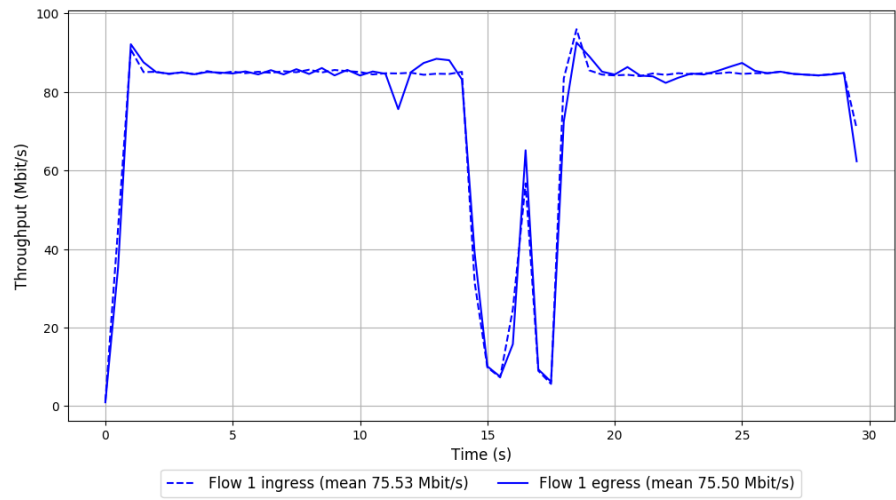
Run 8: Report of QUIC Cubic — Data Link

```
Run 9: Statistics of QUIC Cubic

Start at: 2017-09-18 19:01:12
End at: 2017-09-18 19:01:42
Local clock offset: -3.269 ms
Remote clock offset: 0.33 ms


# Below is generated by plot.py at 2017-09-18 19:27:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 51.34 Mbit/s
95th percentile per-packet one-way delay: 135.614 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 51.34 Mbit/s
95th percentile per-packet one-way delay: 135.614 ms
Loss rate: 0.35%
```
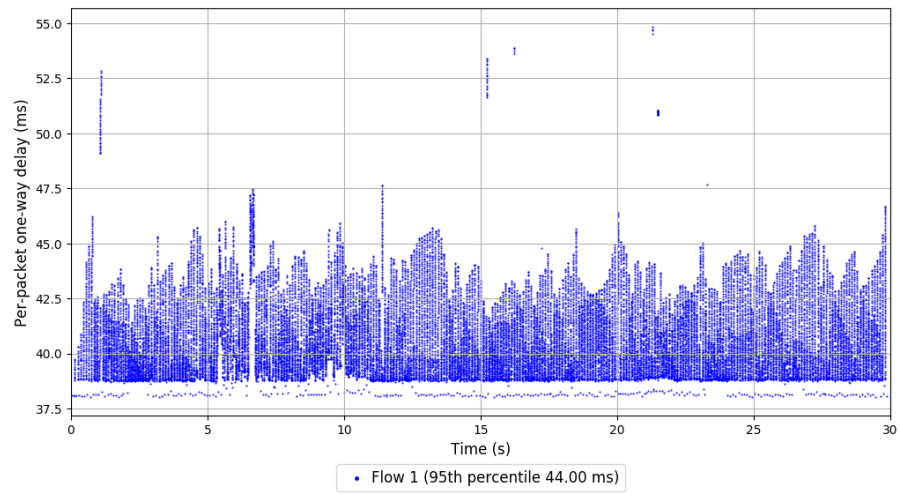
Run 9: Report of QUIC Cubic — Data Link

```
Run 10: Statistics of QUIC Cubic

Start at: 2017-09-18 19:13:11
End at: 2017-09-18 19:13:41
Local clock offset: -2.168 ms
Remote clock offset: 0.196 ms


# Below is generated by plot.py at 2017-09-18 19:27:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.50 Mbit/s
95th percentile per-packet one-way delay: 79.154 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 75.50 Mbit/s
95th percentile per-packet one-way delay: 79.154 ms
Loss rate: 0.33%
```
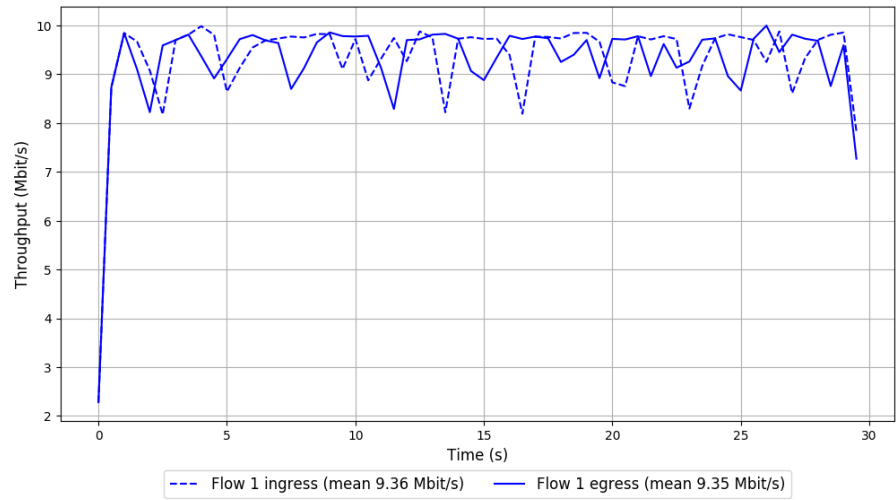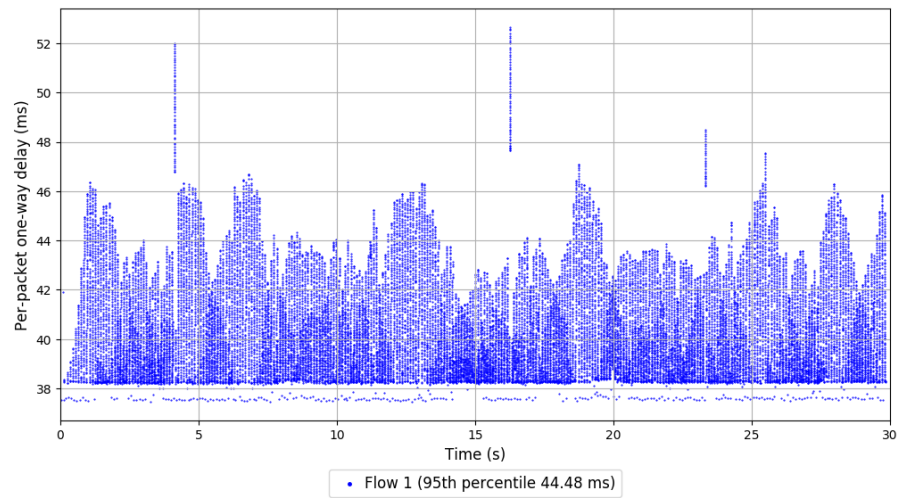
Run 10: Report of QUIC Cubic — Data Link

```
Run 1: Statistics of Sprout

Start at: 2017-09-18 17:21:47
End at: 2017-09-18 17:22:17
Local clock offset: -1.915 ms
Remote clock offset: 0.243 ms


# Below is generated by plot.py at 2017-09-18 19:27:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.35 Mbit/s
95th percentile per-packet one-way delay: 44.001 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 9.35 Mbit/s
95th percentile per-packet one-way delay: 44.001 ms
Loss rate: 0.34%
```
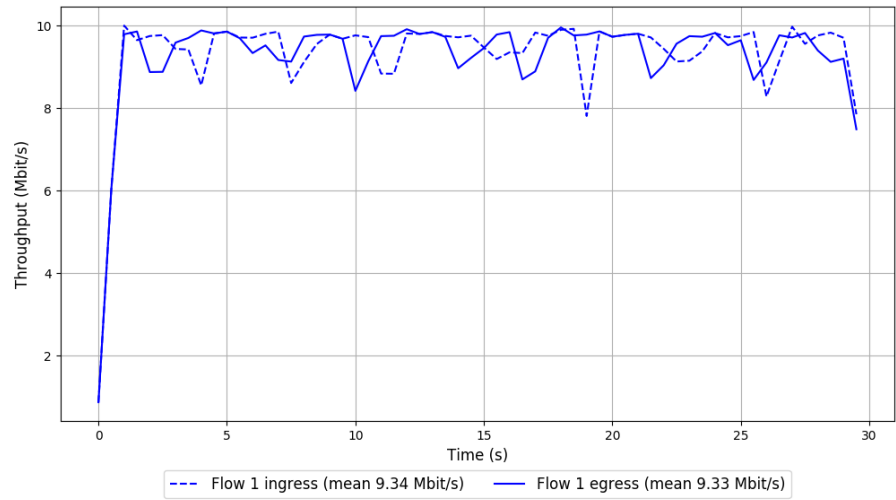
Run 1: Report of Sprout — Data Link

```
Run 2: Statistics of Sprout

Start at: 2017-09-18 17:33:48
End at: 2017-09-18 17:34:18
Local clock offset: -2.542 ms
Remote clock offset: 0.672 ms


# Below is generated by plot.py at 2017-09-18 19:27:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.33 Mbit/s
95th percentile per-packet one-way delay: 44.476 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 9.33 Mbit/s
95th percentile per-packet one-way delay: 44.476 ms
Loss rate: 0.35%
```
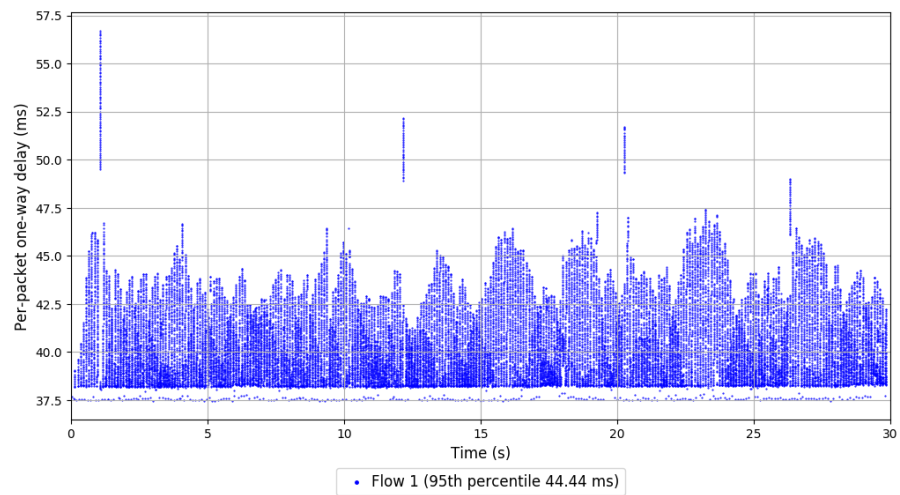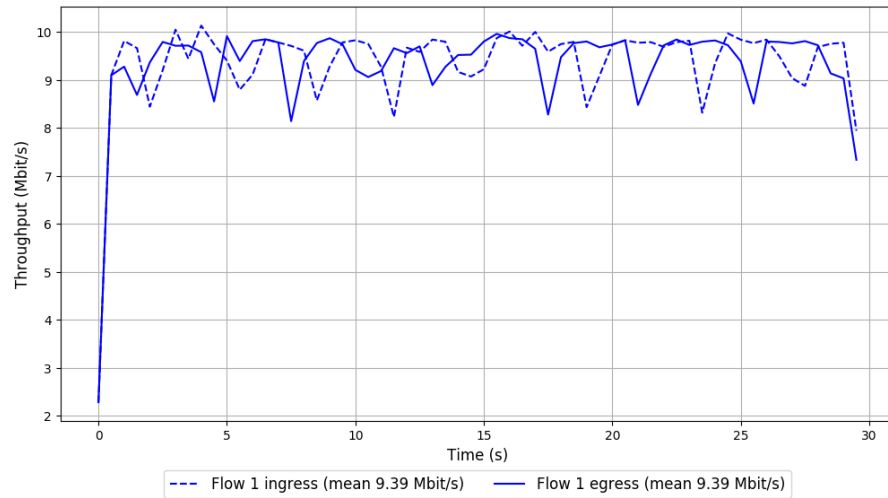
Run 2: Report of Sprout — Data Link

```
Run 3: Statistics of Sprout

Start at: 2017-09-18 17:45:47
End at: 2017-09-18 17:46:17
Local clock offset: -3.346 ms
Remote clock offset: 0.907 ms


# Below is generated by plot.py at 2017-09-18 19:27:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.39 Mbit/s
95th percentile per-packet one-way delay: 44.444 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 9.39 Mbit/s
95th percentile per-packet one-way delay: 44.444 ms
Loss rate: 0.35%
```
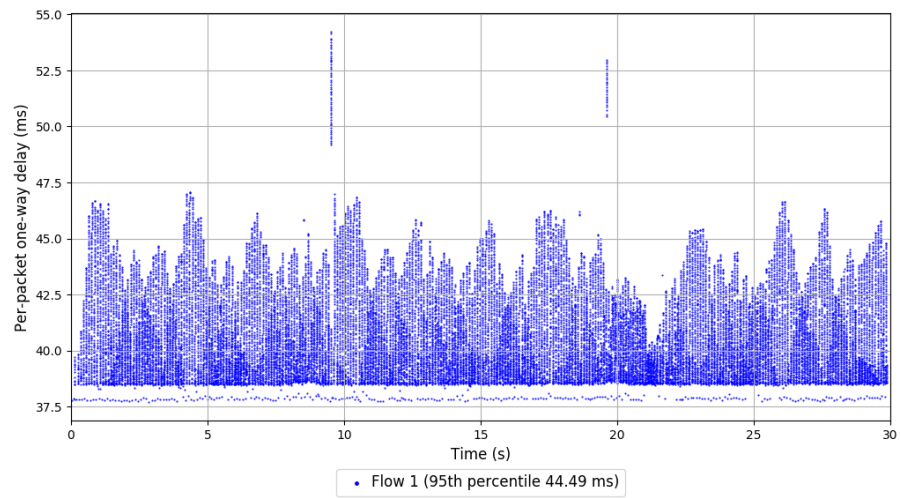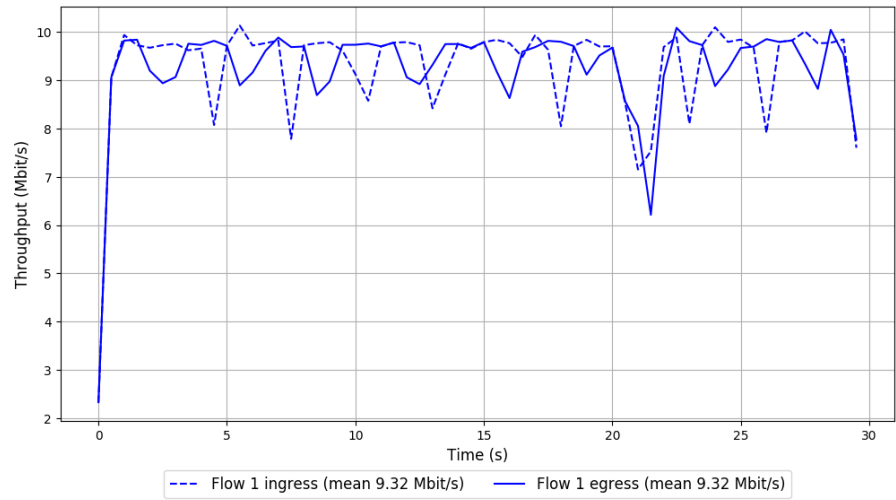
Run 3: Report of Sprout — Data Link

```
Run 4: Statistics of Sprout

Start at: 2017-09-18 17:57:46
End at: 2017-09-18 17:58:16
Local clock offset: -3.989 ms
Remote clock offset: 1.105 ms

# Below is generated by plot.py at 2017-09-18 19:27:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.32 Mbit/s
95th percentile per-packet one-way delay: 44.487 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 9.32 Mbit/s
95th percentile per-packet one-way delay: 44.487 ms
Loss rate: 0.27%
```
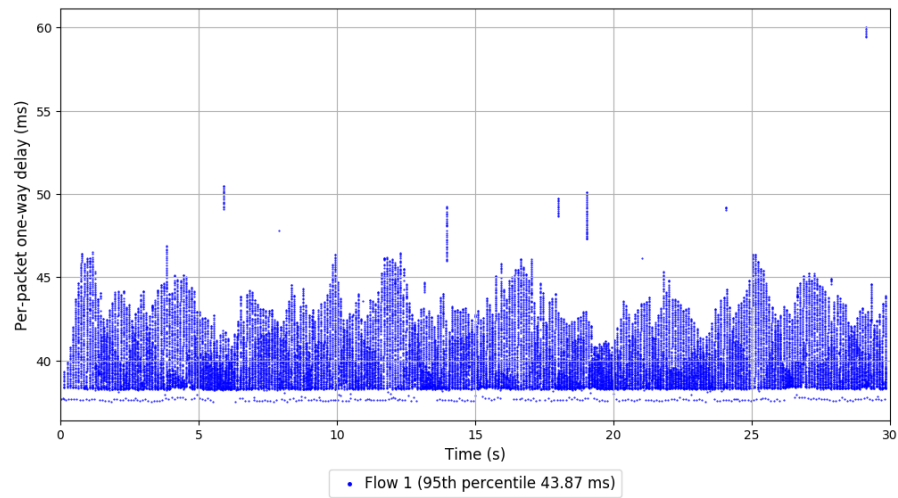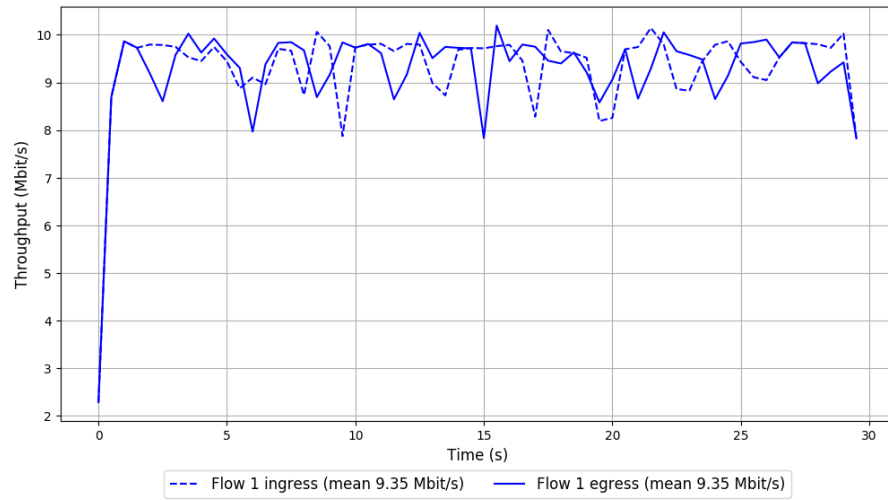
Run 4: Report of Sprout — Data Link

Flow 1 ingress (mean 9.32 Mbit/s)   Flow 1 egress (mean 9.32 Mbit/s)

Flow 1 (95th percentile 44.49 ms)

```
Run 5: Statistics of Sprout

Start at: 2017-09-18 18:09:41
End at: 2017-09-18 18:10:12
Local clock offset: -4.424 ms
Remote clock offset: 1.308 ms


# Below is generated by plot.py at 2017-09-18 19:27:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.35 Mbit/s
95th percentile per-packet one-way delay: 43.873 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 9.35 Mbit/s
95th percentile per-packet one-way delay: 43.873 ms
Loss rate: 0.35%
```
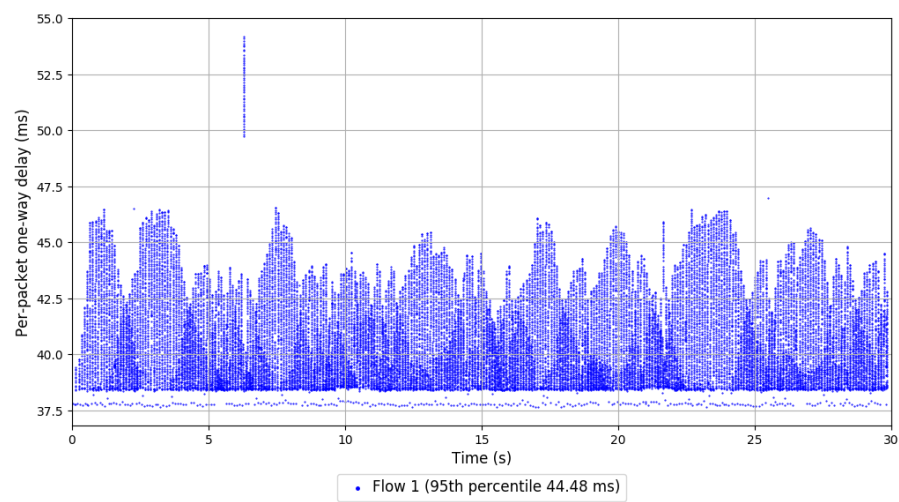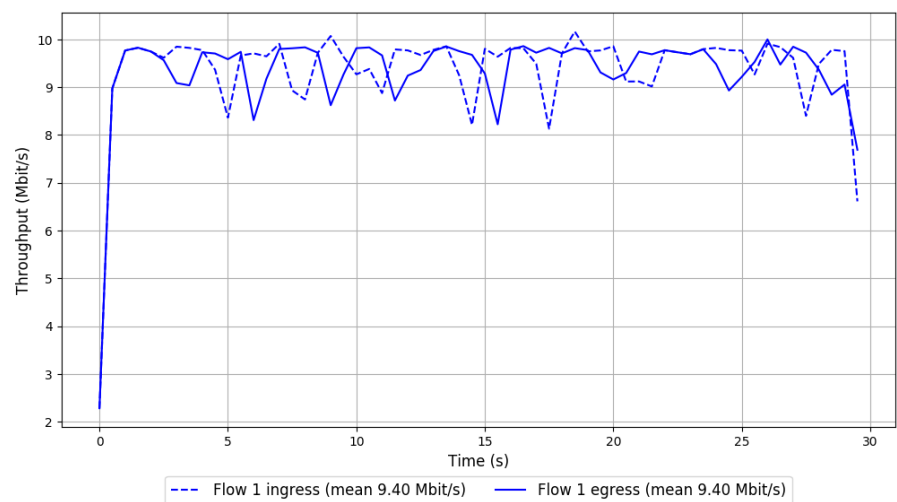
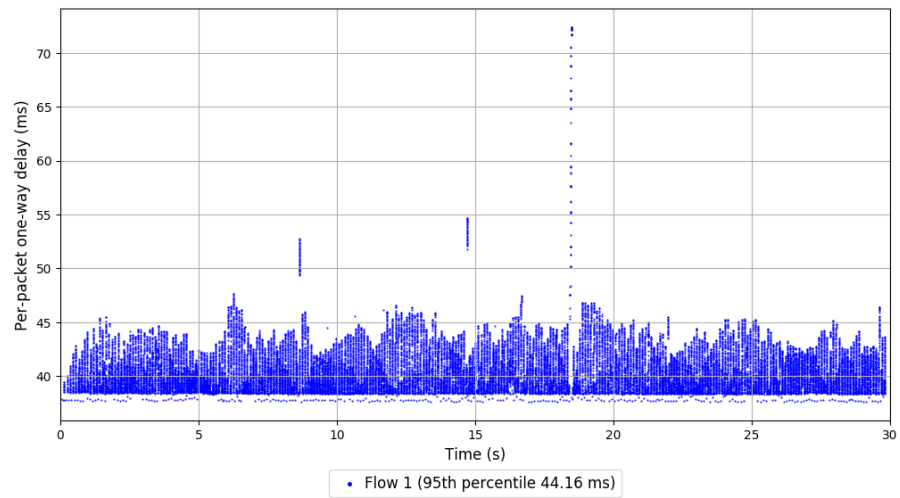# Run 5: Report of Sprout — Data Link

```
Run 6: Statistics of Sprout

Start at: 2017-09-18 18:21:44
End at: 2017-09-18 18:22:14
Local clock offset: -4.842 ms
Remote clock offset: 1.561 ms


# Below is generated by plot.py at 2017-09-18 19:27:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.40 Mbit/s
95th percentile per-packet one-way delay: 44.481 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 9.40 Mbit/s
95th percentile per-packet one-way delay: 44.481 ms
Loss rate: 0.15%
```

Run 6: Report of Sprout — Data Link

Flow 1 ingress (mean 9.40 Mbit/s)   Flow 1 egress (mean 9.40 Mbit/s)

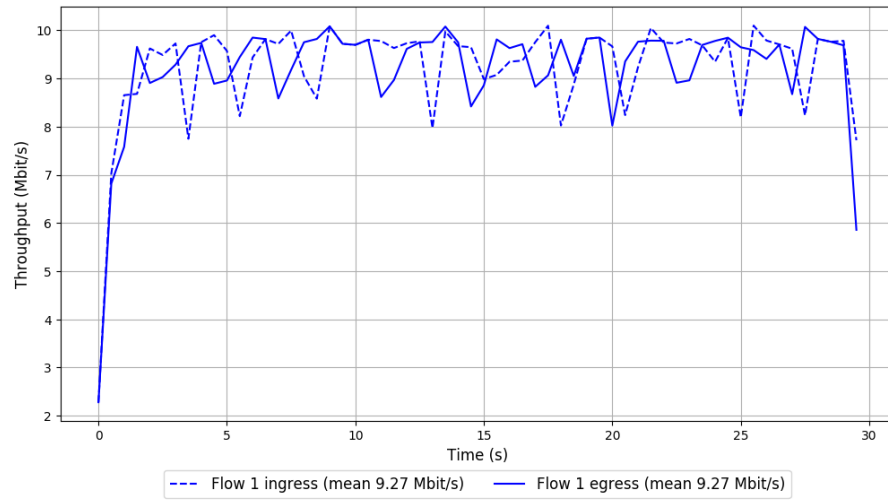Flow 1 (95th percentile 44.48 ms)

135

```
Run 7: Statistics of Sprout

Start at: 2017-09-18 18:33:39
End at: 2017-09-18 18:34:09
Local clock offset: -4.296 ms
Remote clock offset: 1.107 ms


# Below is generated by plot.py at 2017-09-18 19:27:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.27 Mbit/s
95th percentile per-packet one-way delay: 44.159 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 9.27 Mbit/s
95th percentile per-packet one-way delay: 44.159 ms
Loss rate: 0.35%
```
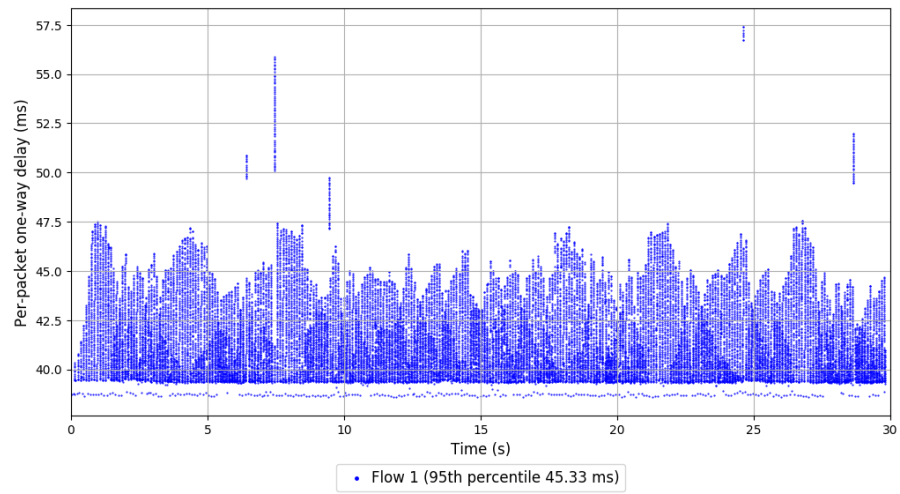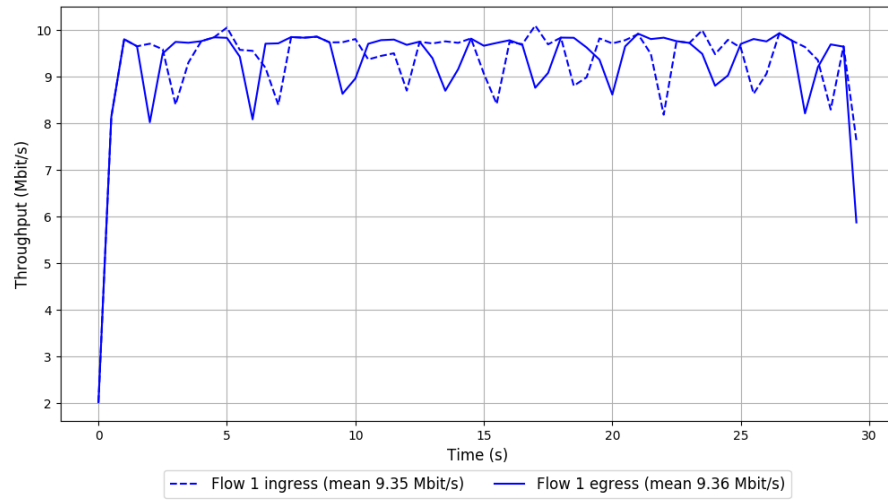
Run 7: Report of Sprout — Data Link

```
Run 8: Statistics of Sprout

Start at: 2017-09-18 18:45:40
End at: 2017-09-18 18:46:10
Local clock offset: -2.279 ms
Remote clock offset: 0.658 ms


# Below is generated by plot.py at 2017-09-18 19:27:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.36 Mbit/s
95th percentile per-packet one-way delay: 45.330 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 9.36 Mbit/s
95th percentile per-packet one-way delay: 45.330 ms
Loss rate: 0.35%
```
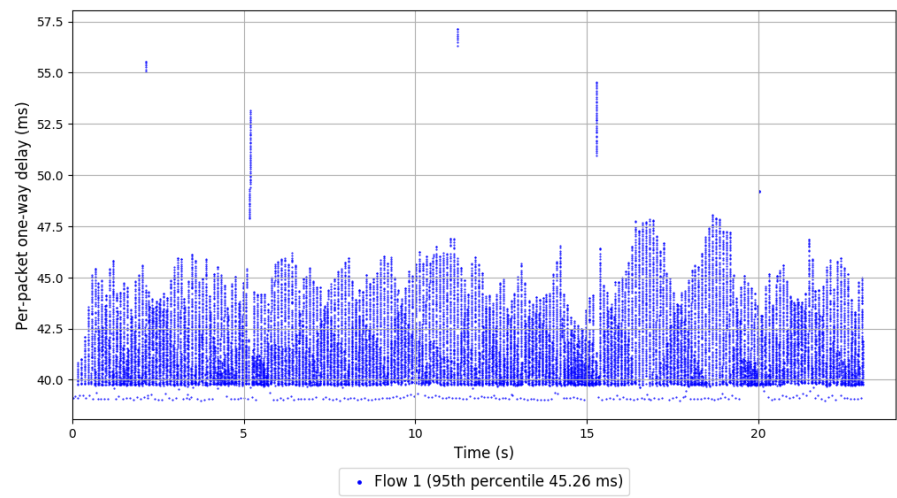
Run 8: Report of Sprout — Data Link

```
Run 9: Statistics of Sprout

Start at: 2017-09-18 18:57:37
End at: 2017-09-18 18:58:07
Local clock offset: -2.114 ms
Remote clock offset: 0.428 ms
```
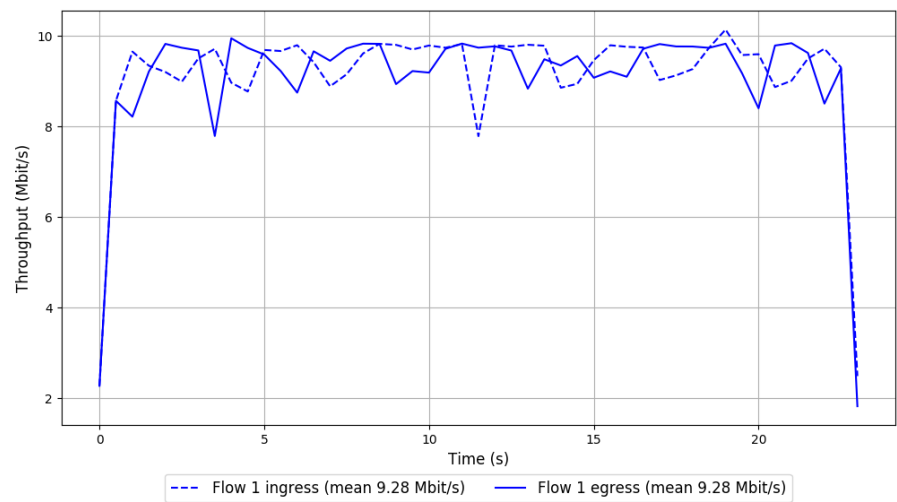
Run 9: Report of Sprout — Data Link

```
Run 10: Statistics of Sprout

Start at: 2017-09-18 19:09:34
End at: 2017-09-18 19:10:04
Local clock offset: -2.633 ms
Remote clock offset: 0.193 ms


# Below is generated by plot.py at 2017-09-18 19:27:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.37 Mbit/s
95th percentile per-packet one-way delay: 44.656 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 9.37 Mbit/s
95th percentile per-packet one-way delay: 44.656 ms
Loss rate: 0.12%
```
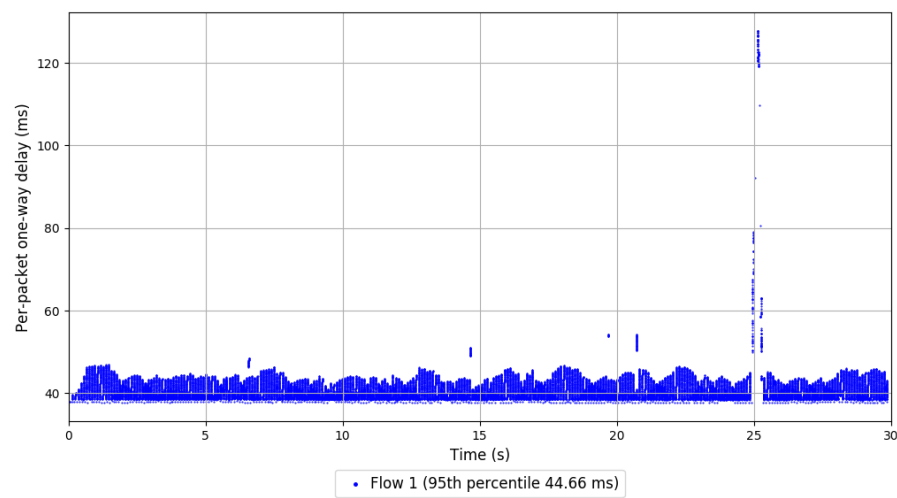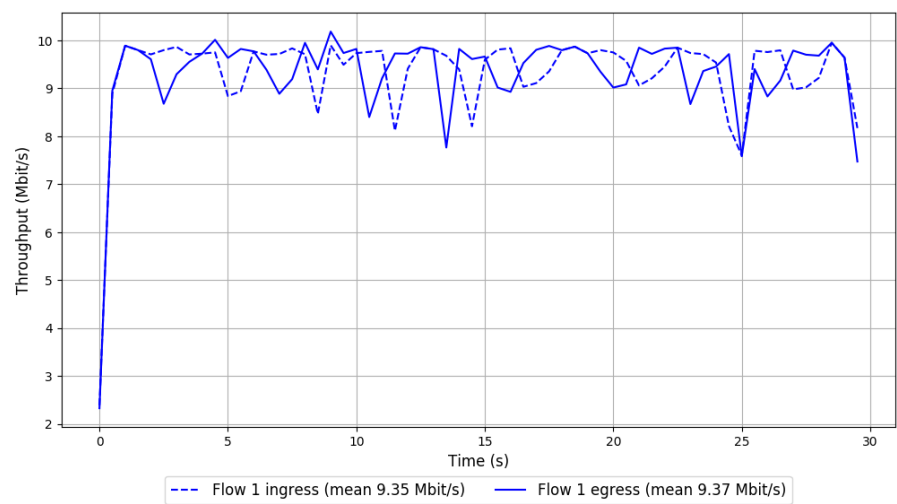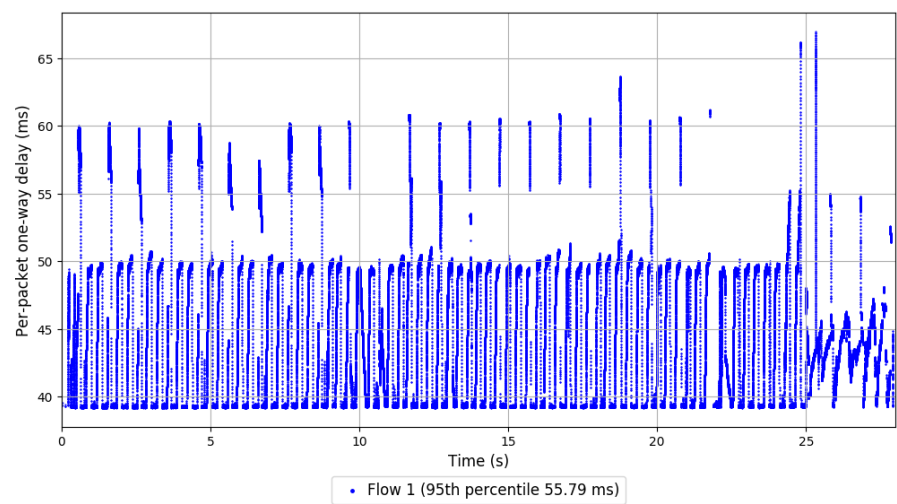
Run 10: Report of Sprout — Data Link

Flow 1 ingress (mean 9.35 Mbit/s) — — —   Flow 1 egress (mean 9.37 Mbit/s) ————

Flow 1 (95th percentile 44.66 ms)

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

Start at: 2017-09-18 17:24:09
End at: 2017-09-18 17:24:39
Local clock offset: -0.857 ms
Remote clock offset: 0.288 ms


# Below is generated by plot.py at 2017-09-18 19:29:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.60 Mbit/s
95th percentile per-packet one-way delay: 55.786 ms
Loss rate: 2.30%
-- Flow 1:
Average throughput: 69.60 Mbit/s
95th percentile per-packet one-way delay: 55.786 ms
Loss rate: 2.30%
```
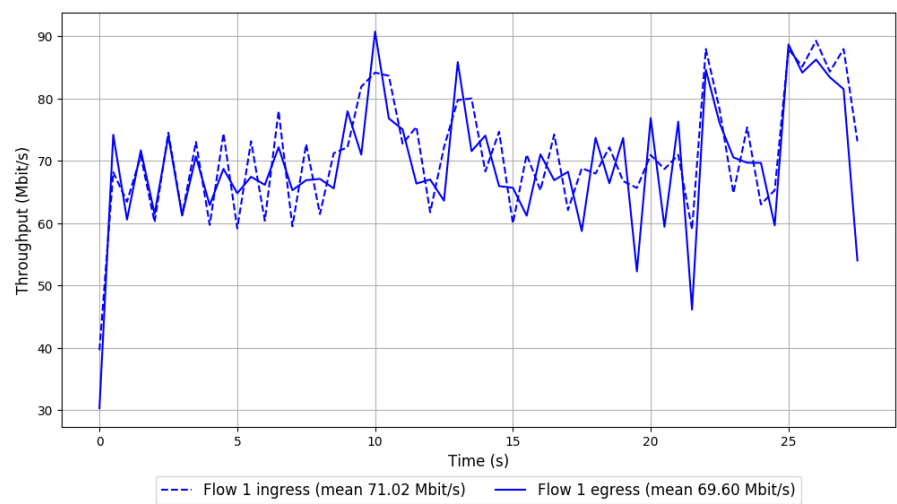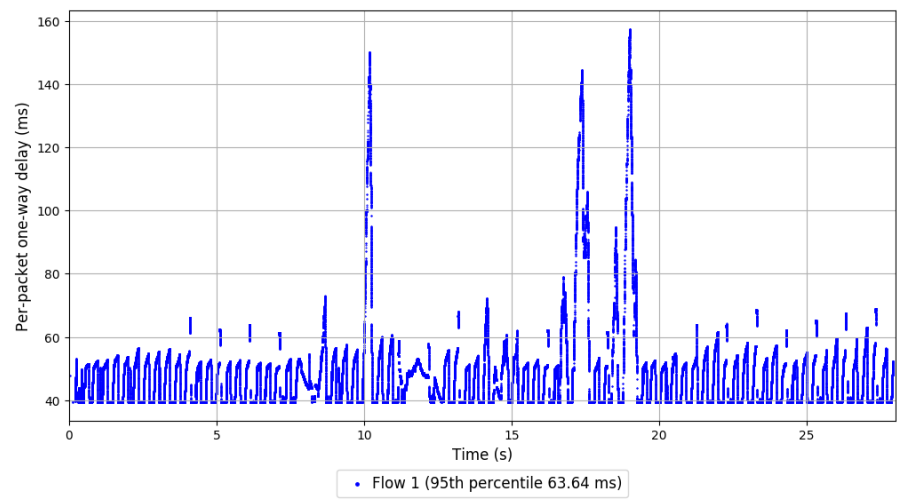
Run 1: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 71.02 Mbit/s)   Flow 1 egress (mean 69.60 Mbit/s)

Flow 1 (95th percentile 55.79 ms)

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

Start at: 2017-09-18 17:36:08
End at: 2017-09-18 17:36:38
Local clock offset: -1.642 ms
Remote clock offset: 0.674 ms


# Below is generated by plot.py at 2017-09-18 19:29:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.23 Mbit/s
95th percentile per-packet one-way delay: 63.639 ms
Loss rate: 2.09%
-- Flow 1:
Average throughput: 65.23 Mbit/s
95th percentile per-packet one-way delay: 63.639 ms
Loss rate: 2.09%
```
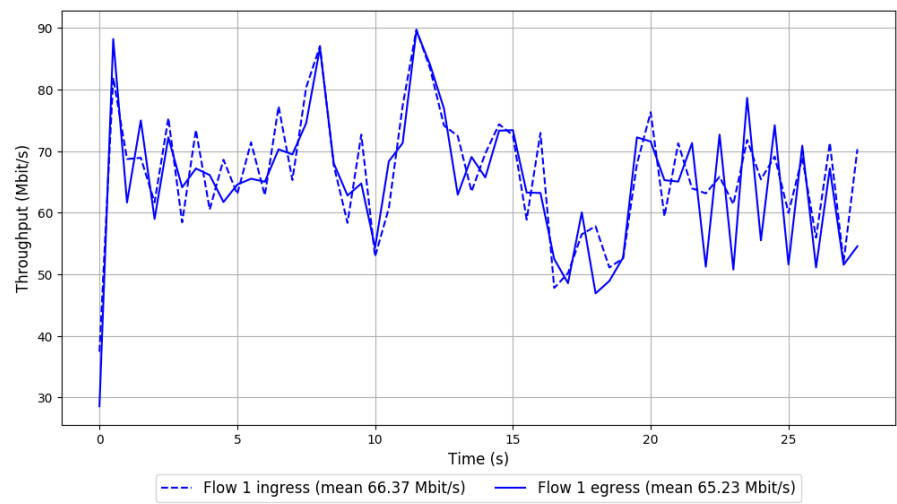
Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2017-09-18 17:48:09
End at: 2017-09-18 17:48:39
Local clock offset: -3.505 ms
Remote clock offset: 0.931 ms


# Below is generated by plot.py at 2017-09-18 19:29:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.73 Mbit/s
95th percentile per-packet one-way delay: 56.237 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 69.73 Mbit/s
95th percentile per-packet one-way delay: 56.237 ms
Loss rate: 1.17%
```
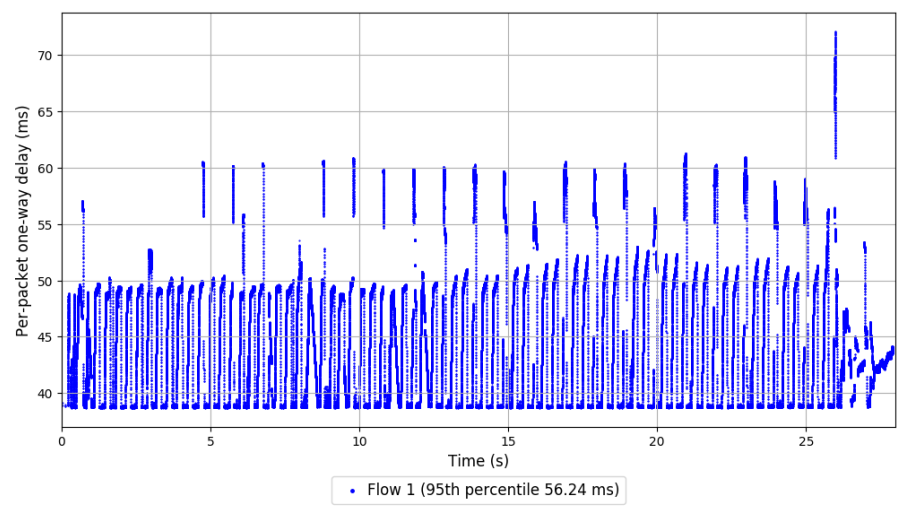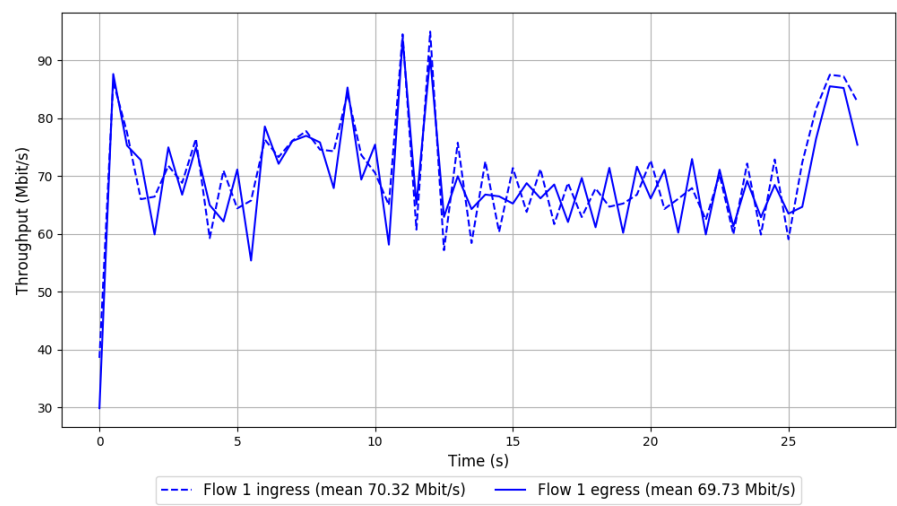
Run 3: Report of TaoVA-100x — Data Link

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

Start at: 2017-09-18 18:00:06
End at: 2017-09-18 18:00:36
Local clock offset: -2.869 ms
Remote clock offset: 1.12 ms


# Below is generated by plot.py at 2017-09-18 19:29:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.58 Mbit/s
95th percentile per-packet one-way delay: 58.495 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 69.58 Mbit/s
95th percentile per-packet one-way delay: 58.495 ms
Loss rate: 1.59%
```
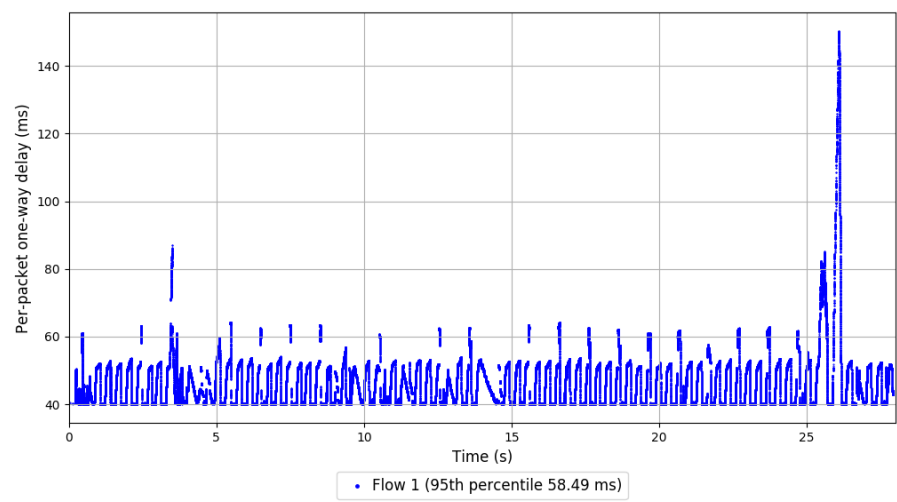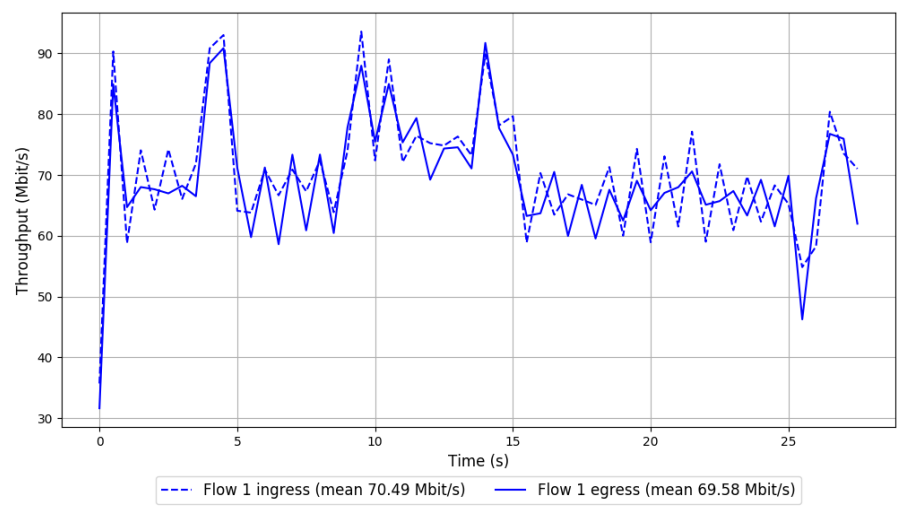
Run 4: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 70.49 Mbit/s) --- Flow 1 egress (mean 69.58 Mbit/s)

Flow 1 (95th percentile 58.49 ms)

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

Start at: 2017-09-18 18:12:03
End at: 2017-09-18 18:12:33
Local clock offset: -4.723 ms
Remote clock offset: 1.375 ms


# Below is generated by plot.py at 2017-09-18 19:29:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.46 Mbit/s
95th percentile per-packet one-way delay: 50.887 ms
Loss rate: 3.51%
-- Flow 1:
Average throughput: 69.46 Mbit/s
95th percentile per-packet one-way delay: 50.887 ms
Loss rate: 3.51%
```
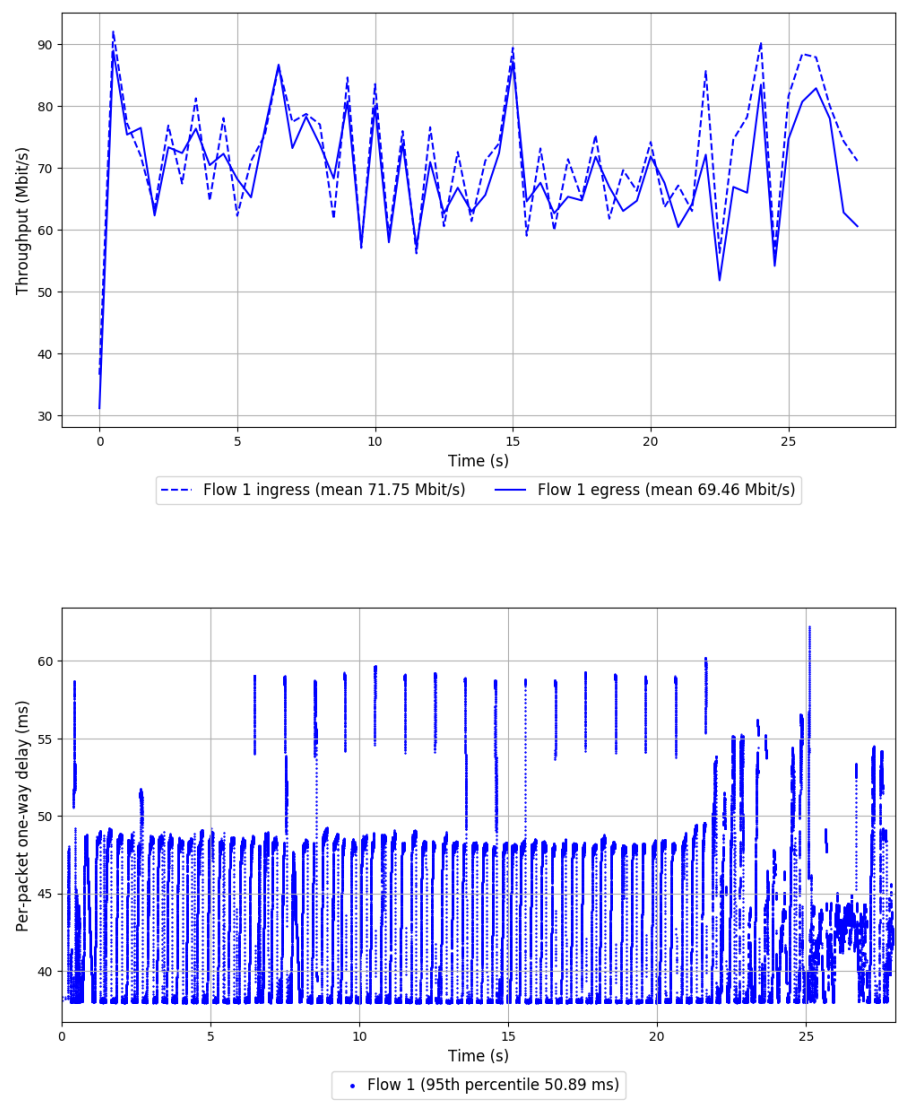
Run 5: Report of TaoVA-100x — Data Link

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

Start at: 2017-09-18 18:24:05
End at: 2017-09-18 18:24:35
Local clock offset: -3.75 ms
Remote clock offset: 1.693 ms


# Below is generated by plot.py at 2017-09-18 19:29:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 43.38 Mbit/s
95th percentile per-packet one-way delay: 122.064 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 43.38 Mbit/s
95th percentile per-packet one-way delay: 122.064 ms
Loss rate: 0.46%
```
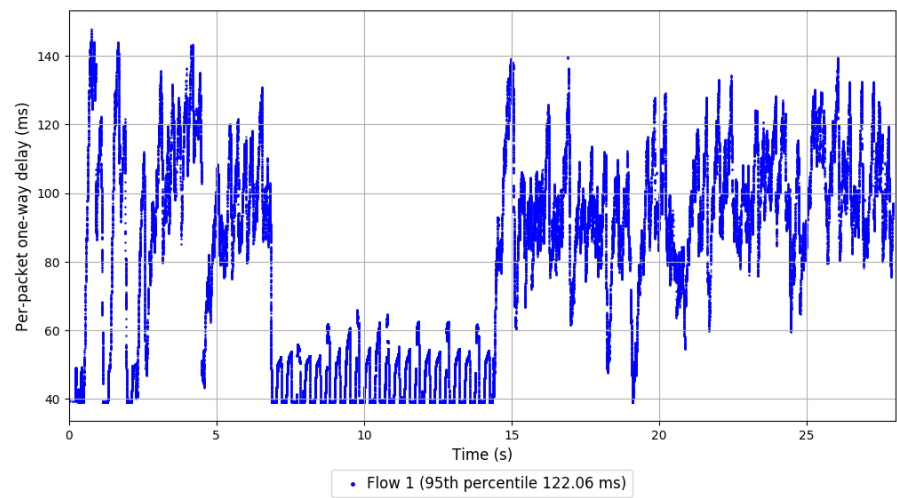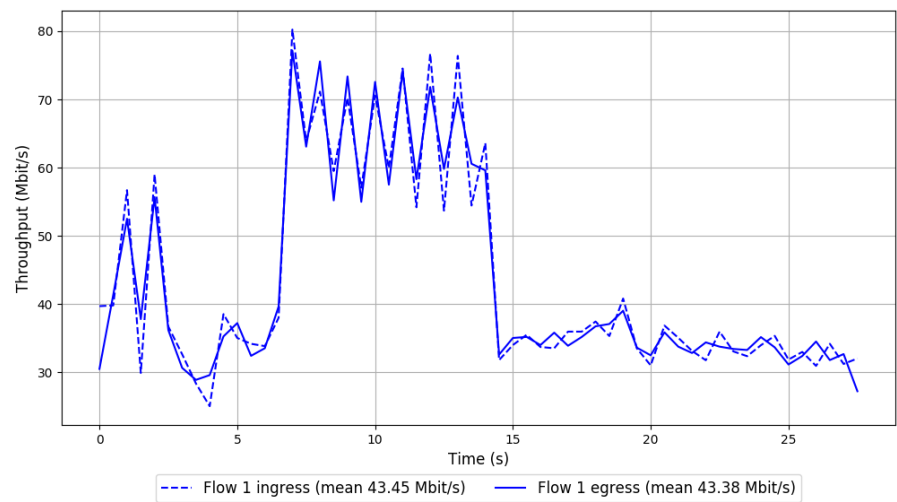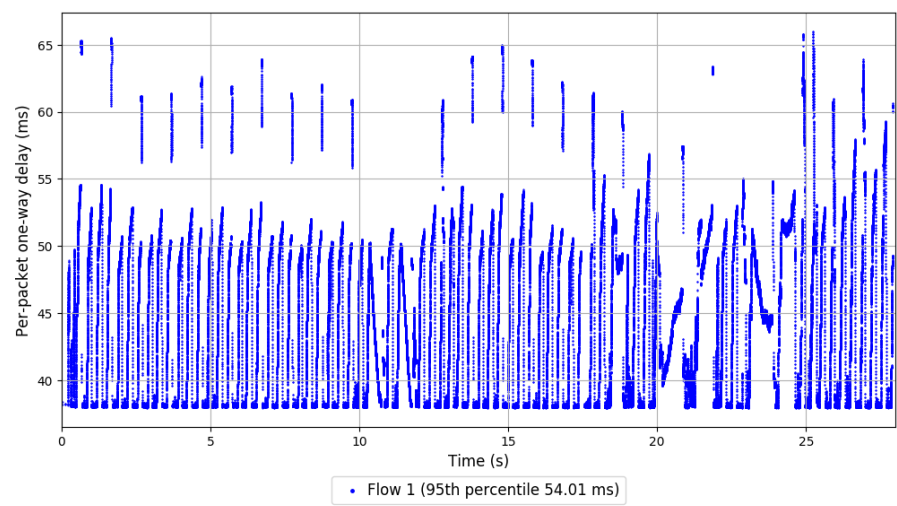
Run 6: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 43.45 Mbit/s) --- Flow 1 egress (mean 43.38 Mbit/s)

Flow 1 (95th percentile 122.06 ms)

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

Start at: 2017-09-18 18:35:59
End at: 2017-09-18 18:36:29
Local clock offset: -4.145 ms
Remote clock offset: 0.961 ms


# Below is generated by plot.py at 2017-09-18 19:29:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.49 Mbit/s
95th percentile per-packet one-way delay: 54.008 ms
Loss rate: 2.75%
-- Flow 1:
Average throughput: 69.49 Mbit/s
95th percentile per-packet one-way delay: 54.008 ms
Loss rate: 2.75%
```
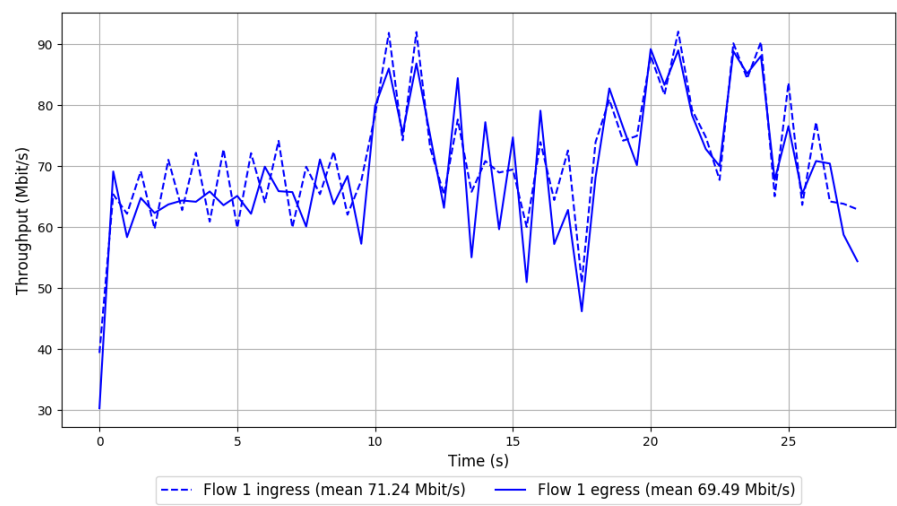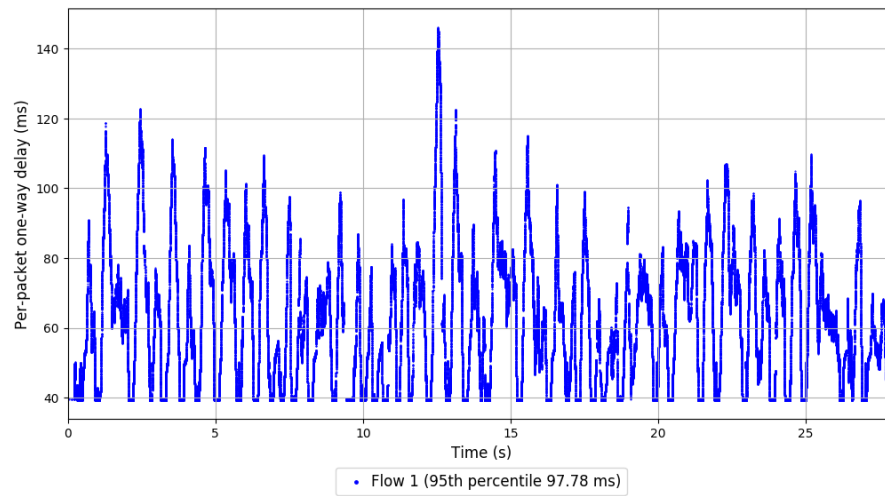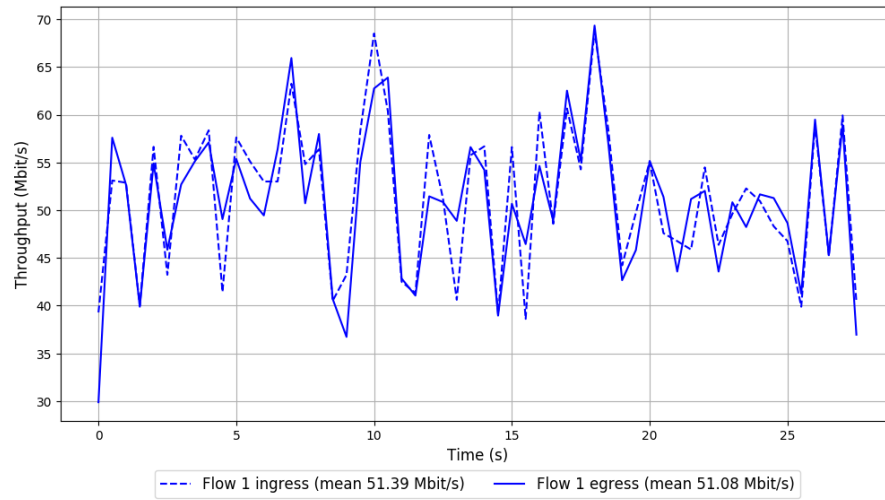
Run 7: Report of TaoVA-100x — Data Link

Flow 1 ingress (mean 71.24 Mbit/s) —— Flow 1 egress (mean 69.49 Mbit/s)

• Flow 1 (95th percentile 54.01 ms)

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

Start at: 2017-09-18 18:48:02
End at: 2017-09-18 18:48:32
Local clock offset: -2.431 ms
Remote clock offset: 0.584 ms


# Below is generated by plot.py at 2017-09-18 19:29:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 51.08 Mbit/s
95th percentile per-packet one-way delay: 97.775 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 51.08 Mbit/s
95th percentile per-packet one-way delay: 97.775 ms
Loss rate: 0.95%
```

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

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

Start at: 2017-09-18 18:59:59
End at: 2017-09-18 19:00:29
Local clock offset: -3.435 ms
Remote clock offset: 0.368 ms


# Below is generated by plot.py at 2017-09-18 19:29:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.55 Mbit/s
95th percentile per-packet one-way delay: 100.256 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 54.55 Mbit/s
95th percentile per-packet one-way delay: 100.256 ms
Loss rate: 1.35%
```
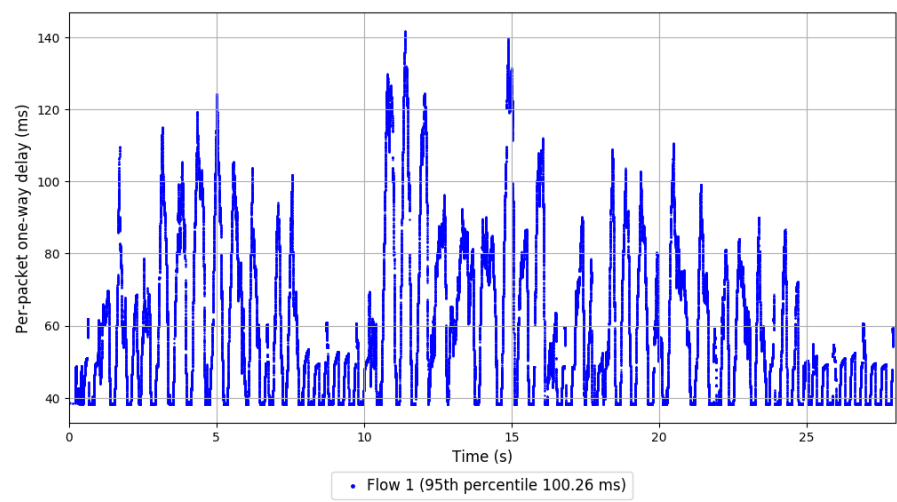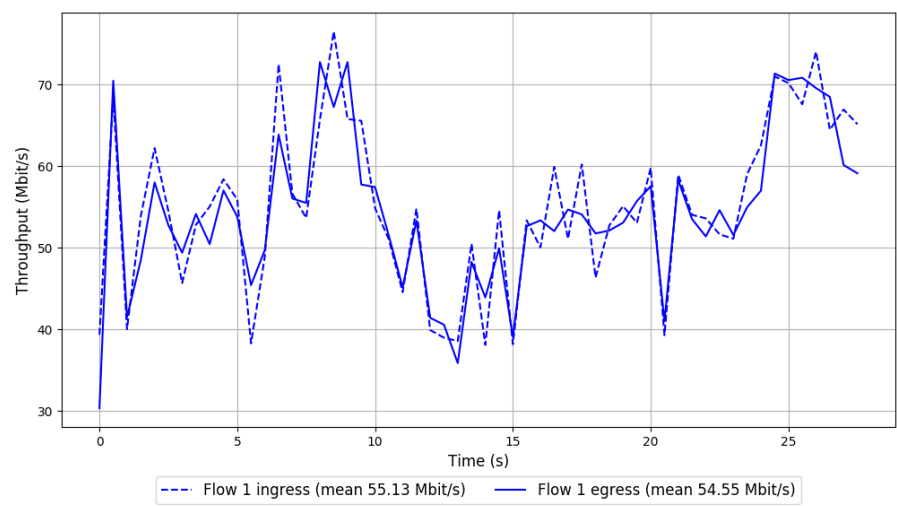
Run 9: Report of TaoVA-100x — Data Link

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

Start at: 2017-09-18 19:11:57
End at: 2017-09-18 19:12:27
Local clock offset: -2.342 ms
Remote clock offset: 0.236 ms


# Below is generated by plot.py at 2017-09-18 19:30:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.87 Mbit/s
95th percentile per-packet one-way delay: 56.674 ms
Loss rate: 2.17%
-- Flow 1:
Average throughput: 67.87 Mbit/s
95th percentile per-packet one-way delay: 56.674 ms
Loss rate: 2.17%
```
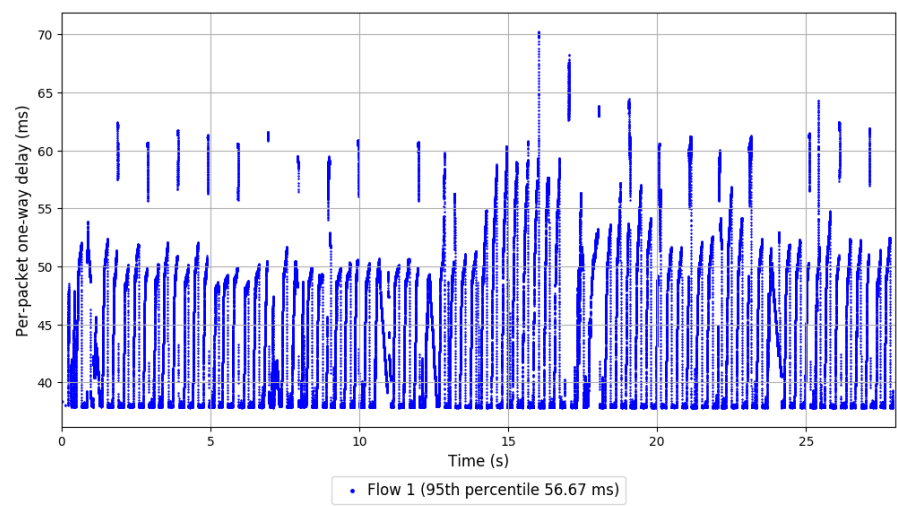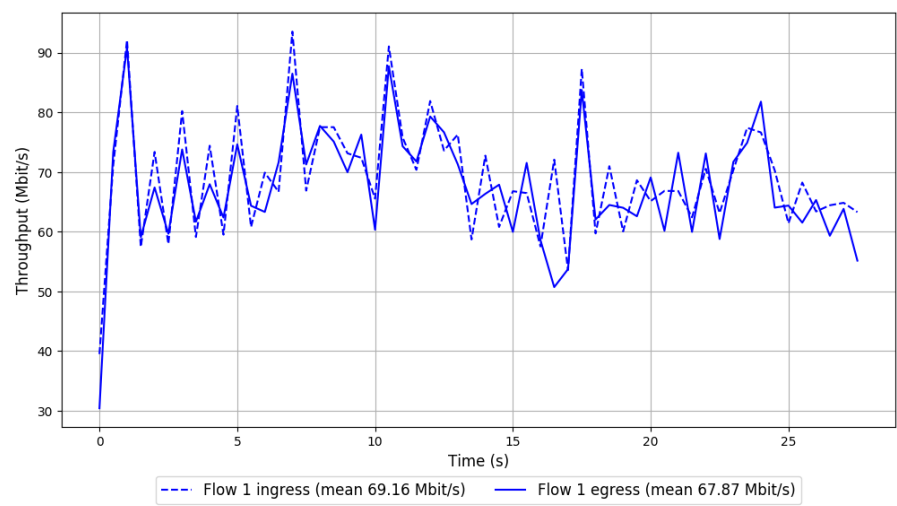
Run 10: Report of TaoVA-100x — Data Link

```
Run 1: Statistics of TCP Vegas

Start at: 2017-09-18 17:27:46
End at: 2017-09-18 17:28:16
Local clock offset: -2.253 ms
Remote clock offset: 0.439 ms


# Below is generated by plot.py at 2017-09-18 19:30:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.66 Mbit/s
95th percentile per-packet one-way delay: 41.159 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 64.66 Mbit/s
95th percentile per-packet one-way delay: 41.159 ms
Loss rate: 0.37%
```
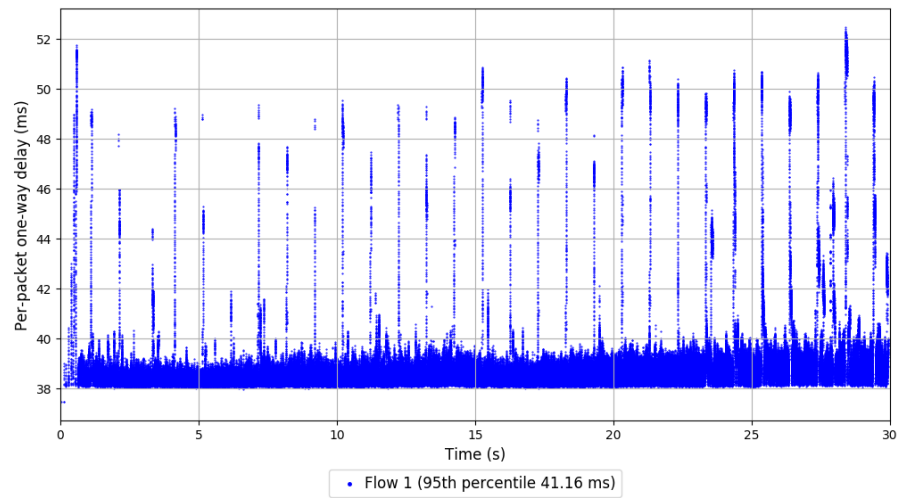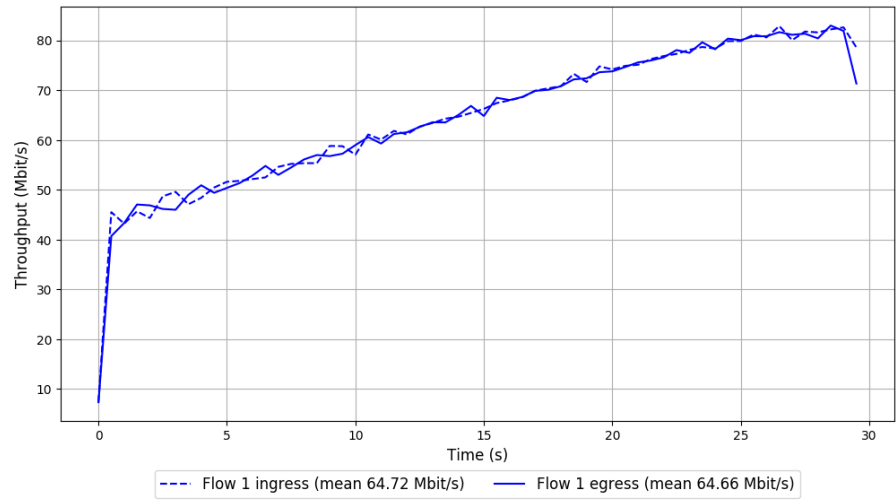
Run 1: Report of TCP Vegas — Data Link

```
Run 2: Statistics of TCP Vegas

Start at: 2017-09-18 17:39:45
End at: 2017-09-18 17:40:15
Local clock offset: -1.696 ms
Remote clock offset: 0.752 ms


# Below is generated by plot.py at 2017-09-18 19:30:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.19 Mbit/s
95th percentile per-packet one-way delay: 44.885 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 65.19 Mbit/s
95th percentile per-packet one-way delay: 44.885 ms
Loss rate: 0.38%
```
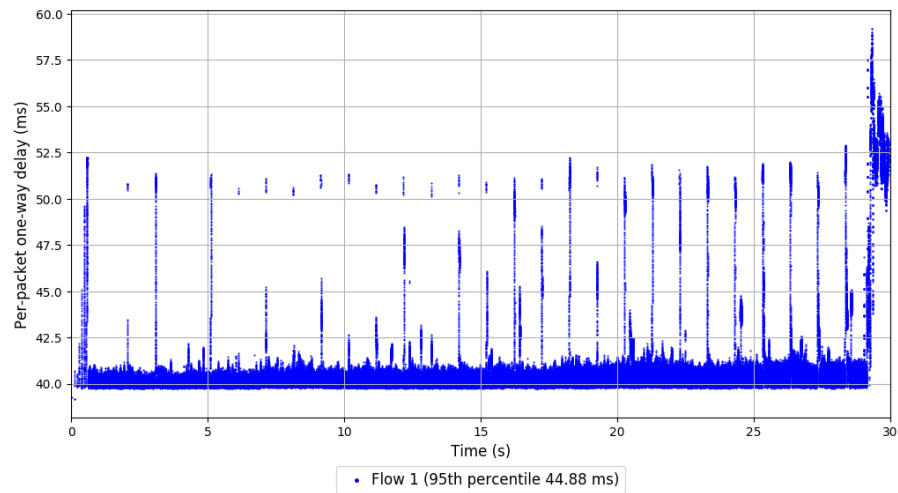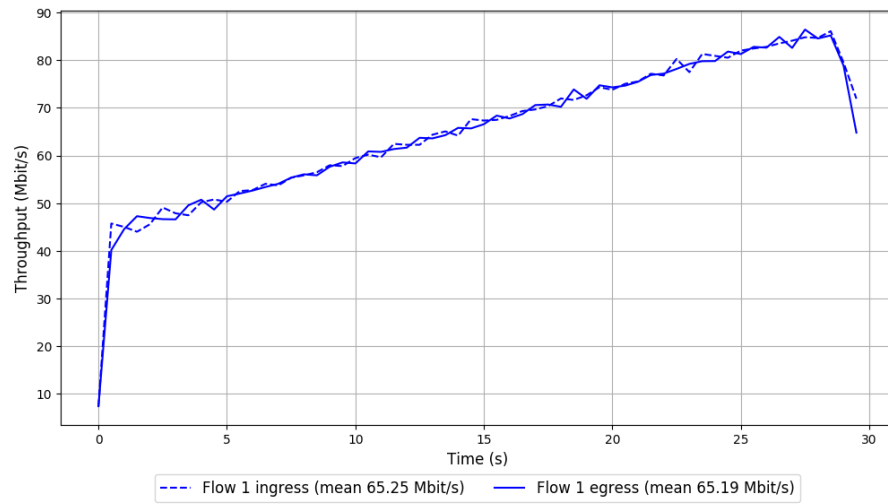
Run 2: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 65.25 Mbit/s)   Flow 1 egress (mean 65.19 Mbit/s)

Flow 1 (95th percentile 44.88 ms)

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```
Run 3: Statistics of TCP Vegas

Start at: 2017-09-18 17:51:45
End at: 2017-09-18 17:52:15
Local clock offset: -3.85 ms
Remote clock offset: 1.009 ms


# Below is generated by plot.py at 2017-09-18 19:30:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 45.35 Mbit/s
95th percentile per-packet one-way delay: 39.235 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 45.35 Mbit/s
95th percentile per-packet one-way delay: 39.235 ms
Loss rate: 0.28%
```
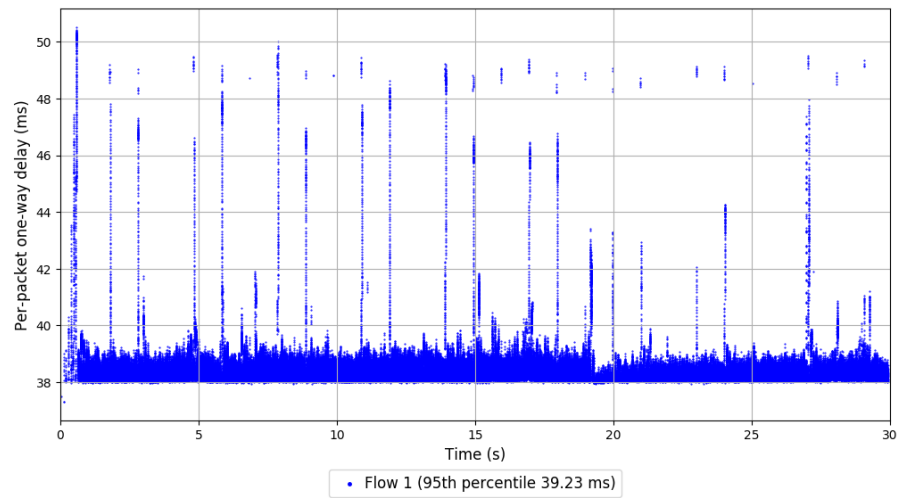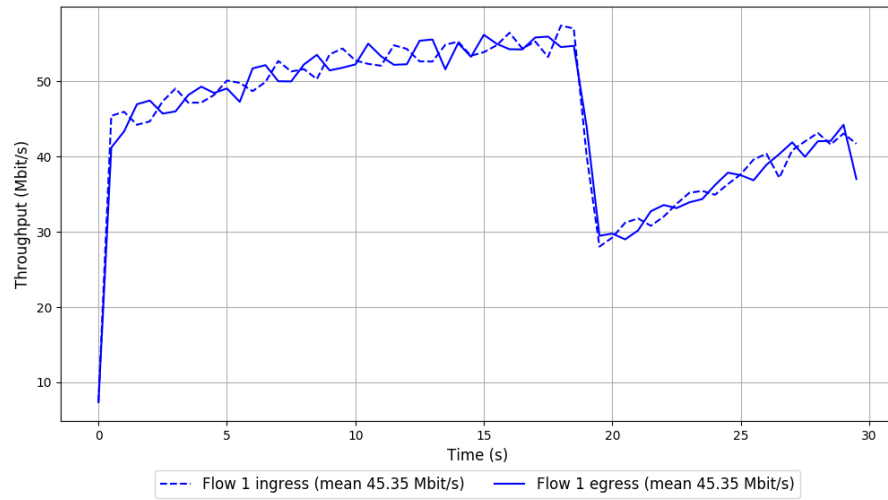
Run 3: Report of TCP Vegas — Data Link

```
Run 4: Statistics of TCP Vegas

Start at: 2017-09-18 18:03:42
End at: 2017-09-18 18:04:12
Local clock offset: -3.101 ms
Remote clock offset: 1.162 ms


# Below is generated by plot.py at 2017-09-18 19:30:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.24 Mbit/s
95th percentile per-packet one-way delay: 84.525 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 61.24 Mbit/s
95th percentile per-packet one-way delay: 84.525 ms
Loss rate: 0.31%
```
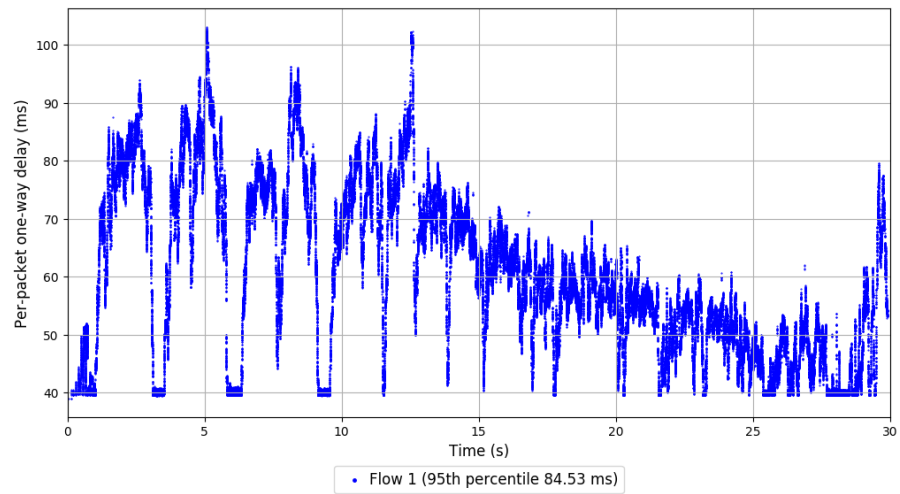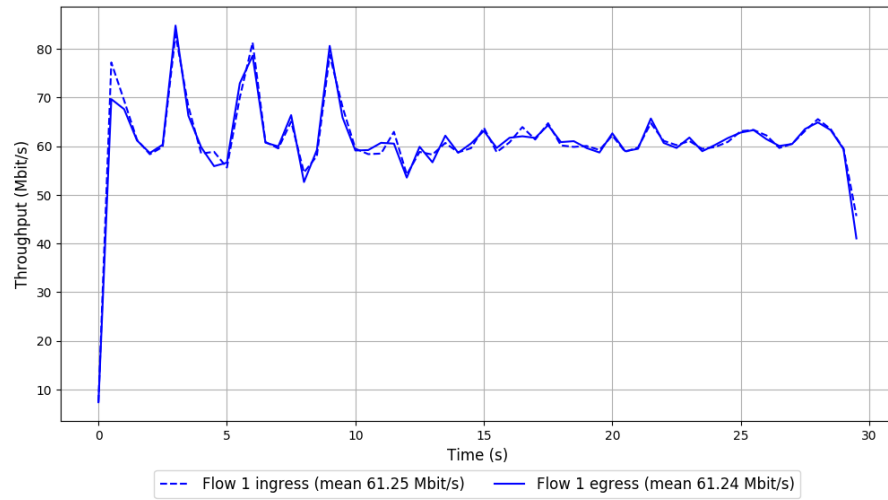
Run 4: Report of TCP Vegas — Data Link

```
Run 5: Statistics of TCP Vegas

Start at: 2017-09-18 18:15:41
End at: 2017-09-18 18:16:11
Local clock offset: -4.792 ms
Remote clock offset: 1.458 ms


# Below is generated by plot.py at 2017-09-18 19:30:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.14 Mbit/s
95th percentile per-packet one-way delay: 49.936 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 64.14 Mbit/s
95th percentile per-packet one-way delay: 49.936 ms
Loss rate: 0.38%
```
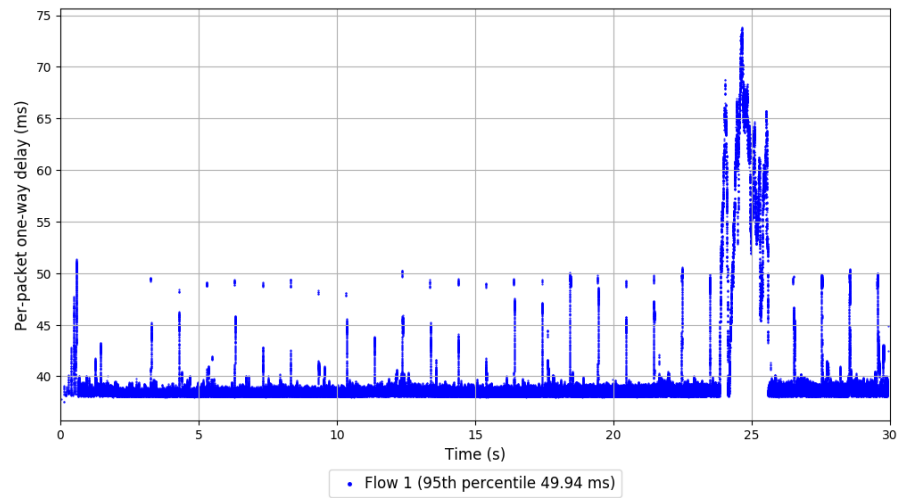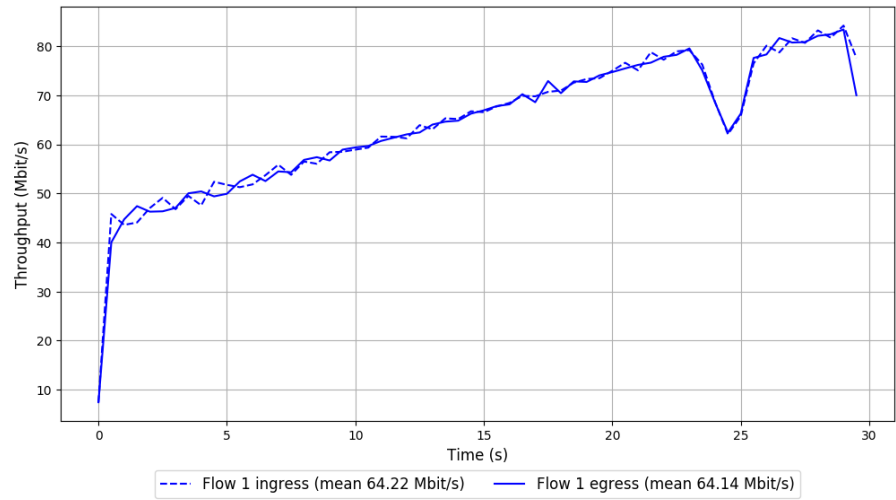
Run 5: Report of TCP Vegas — Data Link

```
Run 6: Statistics of TCP Vegas

Start at: 2017-09-18 18:27:38
End at: 2017-09-18 18:28:08
Local clock offset: -3.606 ms
Remote clock offset: 1.473 ms


# Below is generated by plot.py at 2017-09-18 19:30:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.95 Mbit/s
95th percentile per-packet one-way delay: 40.802 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 50.95 Mbit/s
95th percentile per-packet one-way delay: 40.802 ms
Loss rate: 0.28%
```
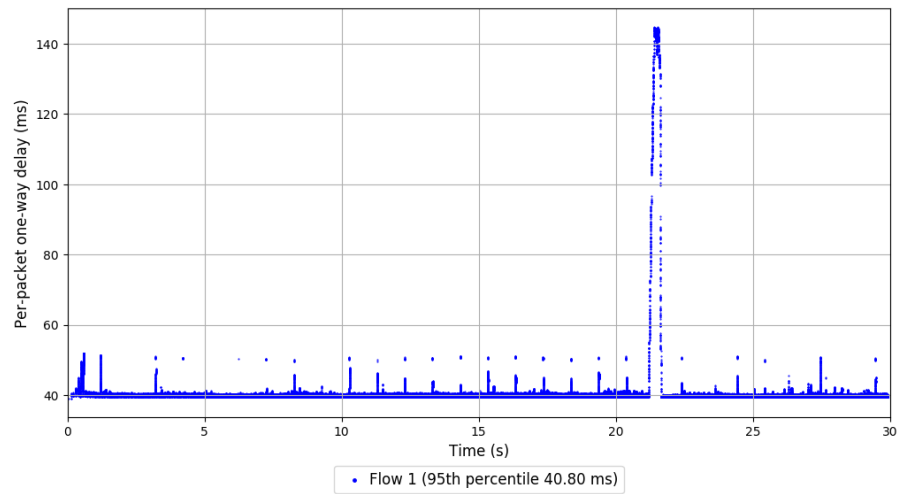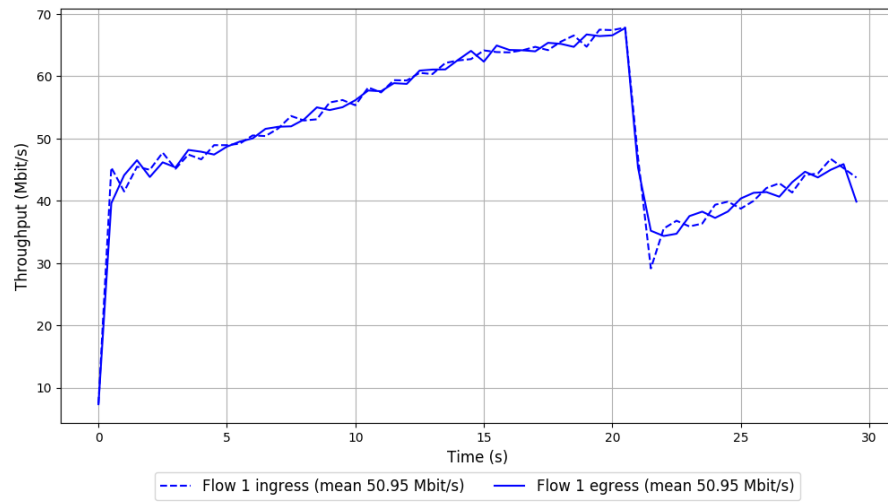
Run 6: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 50.95 Mbit/s)   Flow 1 egress (mean 50.95 Mbit/s)

Flow 1 (95th percentile 40.80 ms)

```
Run 7: Statistics of TCP Vegas

Start at: 2017-09-18 18:39:37
End at: 2017-09-18 18:40:07
Local clock offset: -3.859 ms
Remote clock offset: 0.807 ms


# Below is generated by plot.py at 2017-09-18 19:30:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 68.07 Mbit/s
95th percentile per-packet one-way delay: 49.874 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 68.07 Mbit/s
95th percentile per-packet one-way delay: 49.874 ms
Loss rate: 0.71%
```
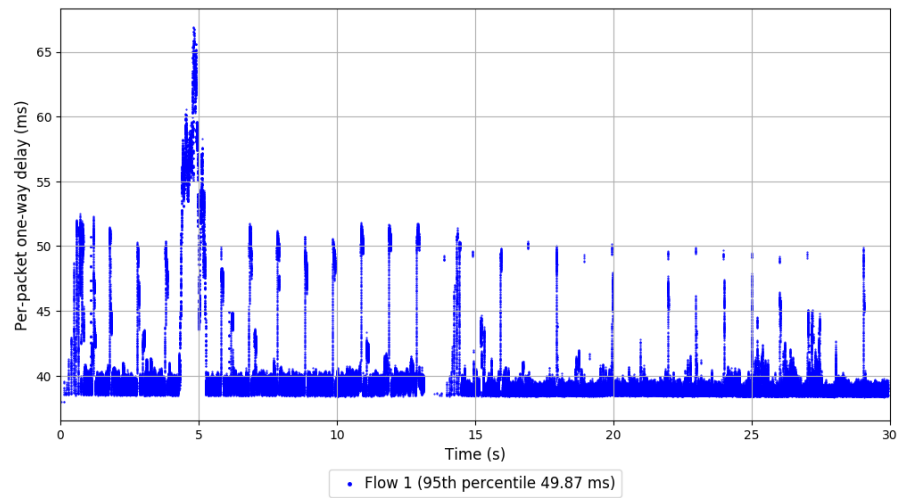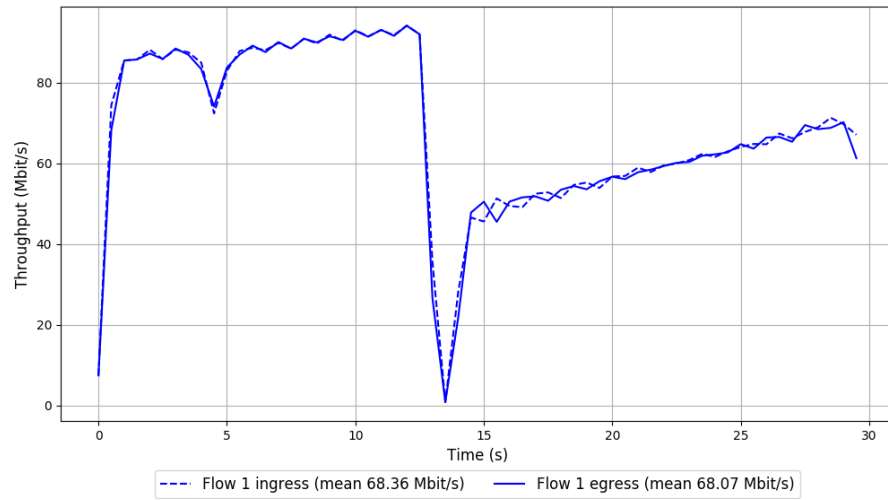
Run 7: Report of TCP Vegas — Data Link

```
Run 8: Statistics of TCP Vegas

Start at: 2017-09-18 18:51:38
End at: 2017-09-18 18:52:08
Local clock offset: -3.507 ms
Remote clock offset: 0.539 ms


# Below is generated by plot.py at 2017-09-18 19:30:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.74 Mbit/s
95th percentile per-packet one-way delay: 85.318 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 57.74 Mbit/s
95th percentile per-packet one-way delay: 85.318 ms
Loss rate: 0.31%
```
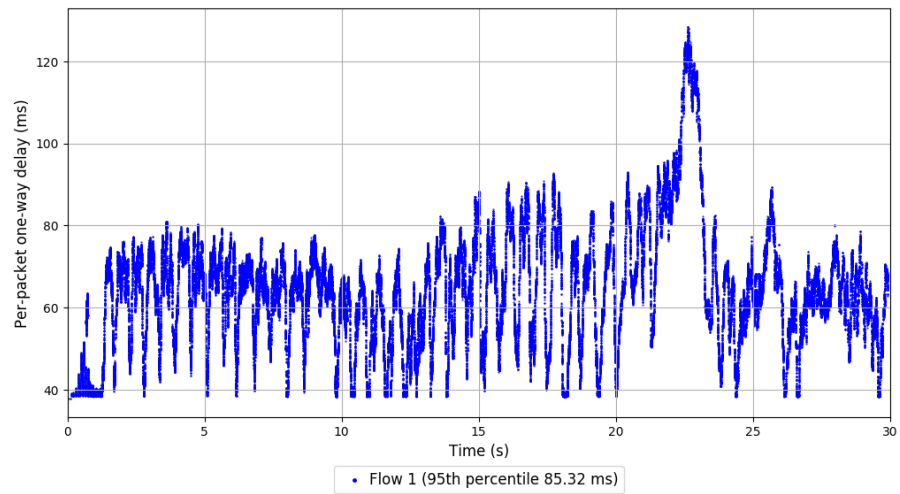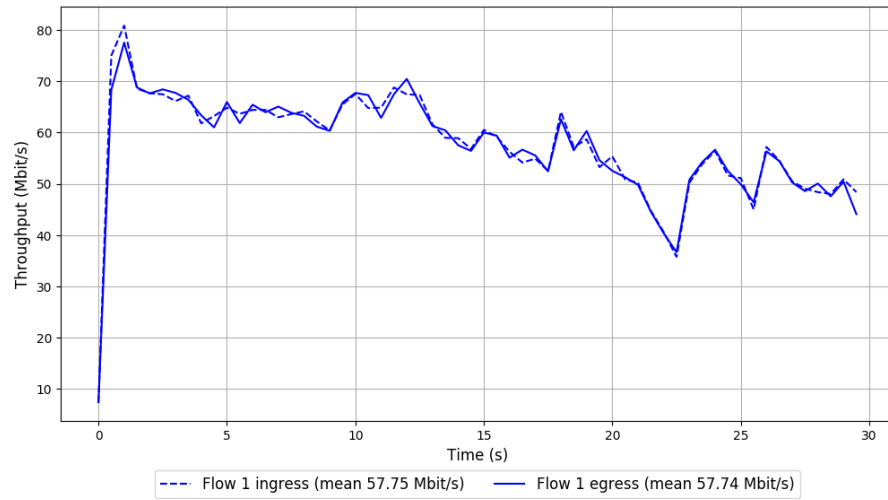
Run 8: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 57.75 Mbit/s) —— Flow 1 egress (mean 57.74 Mbit/s)

• Flow 1 (95th percentile 85.32 ms)

179

```
Run 9: Statistics of TCP Vegas

Start at: 2017-09-18 19:03:34
End at: 2017-09-18 19:04:04
Local clock offset: -3.262 ms
Remote clock offset: 0.343 ms


# Below is generated by plot.py at 2017-09-18 19:30:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 46.00 Mbit/s
95th percentile per-packet one-way delay: 90.791 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 46.00 Mbit/s
95th percentile per-packet one-way delay: 90.791 ms
Loss rate: 0.34%
```
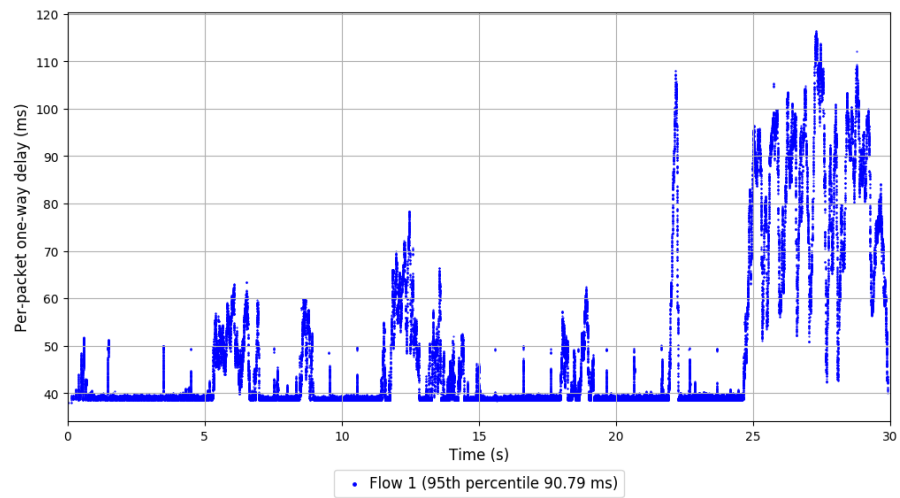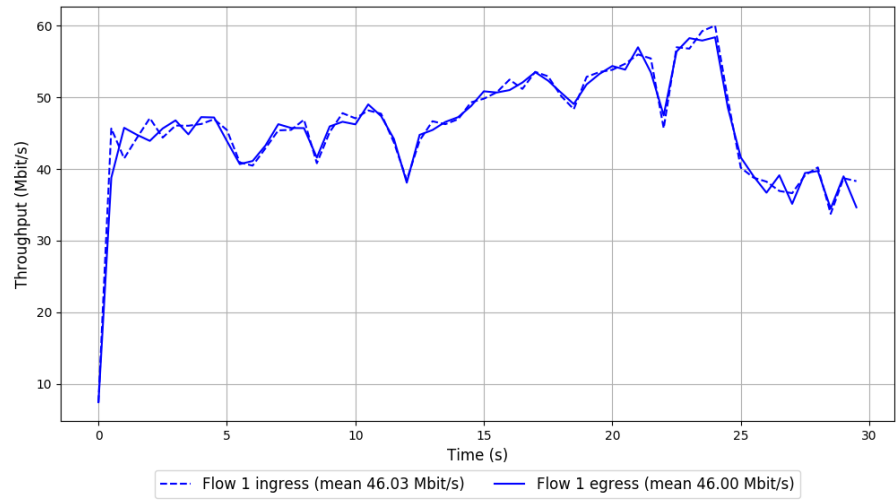
Run 9: Report of TCP Vegas — Data Link

Flow 1 ingress (mean 46.03 Mbit/s) —— Flow 1 egress (mean 46.00 Mbit/s)

• Flow 1 (95th percentile 90.79 ms)

```
Run 10: Statistics of TCP Vegas

Start at: 2017-09-18 19:15:35
End at: 2017-09-18 19:16:05
Local clock offset: -0.829 ms
Remote clock offset: 0.173 ms


# Below is generated by plot.py at 2017-09-18 19:30:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 46.65 Mbit/s
95th percentile per-packet one-way delay: 40.818 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 46.65 Mbit/s
95th percentile per-packet one-way delay: 40.818 ms
Loss rate: 0.74%
```
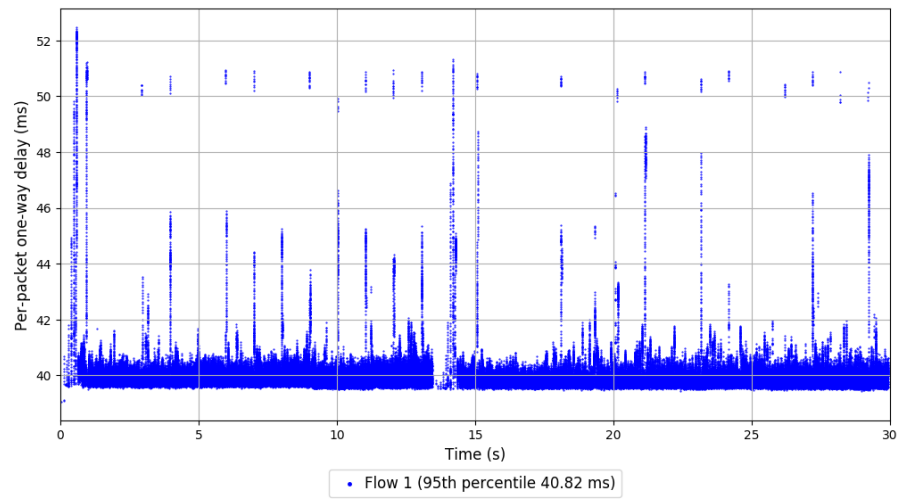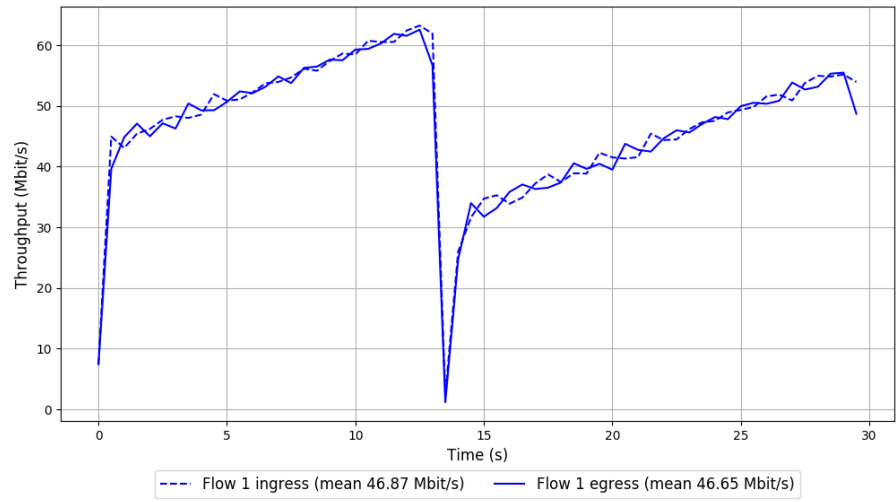
Run 10: Report of TCP Vegas — Data Link

```
Run 1: Statistics of Verus

Start at: 2017-09-18 17:28:58
End at: 2017-09-18 17:29:28
Local clock offset: -2.408 ms
Remote clock offset: 0.496 ms


# Below is generated by plot.py at 2017-09-18 19:31:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.00 Mbit/s
95th percentile per-packet one-way delay: 177.840 ms
Loss rate: 1.71%
-- Flow 1:
Average throughput: 82.00 Mbit/s
95th percentile per-packet one-way delay: 177.840 ms
Loss rate: 1.71%
```
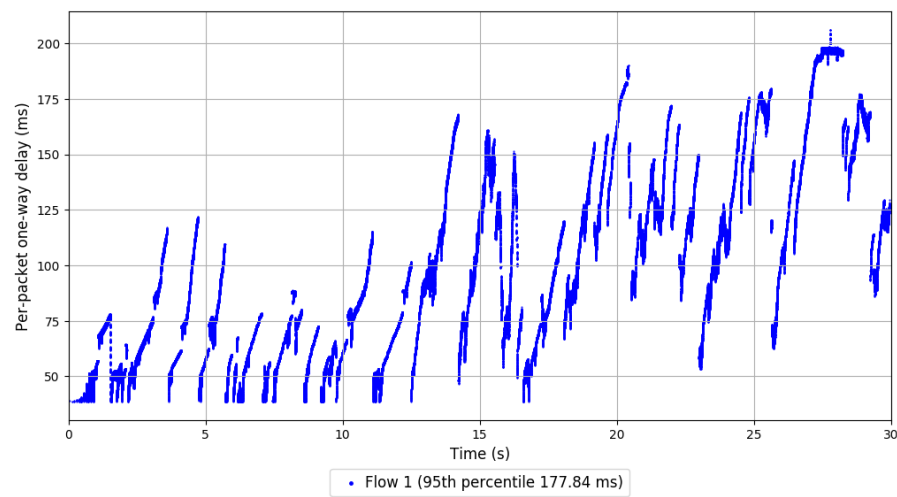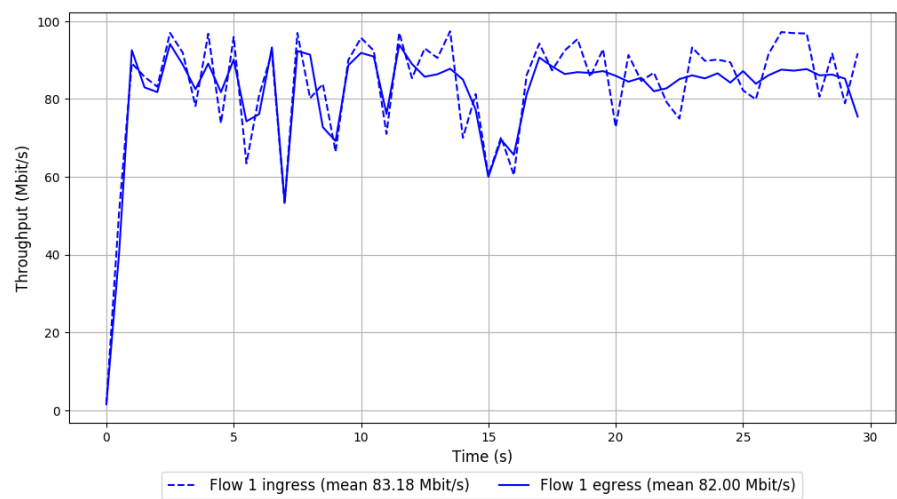
Run 1: Report of Verus — Data Link

Flow 1 ingress (mean 83.18 Mbit/s) Flow 1 egress (mean 82.00 Mbit/s)

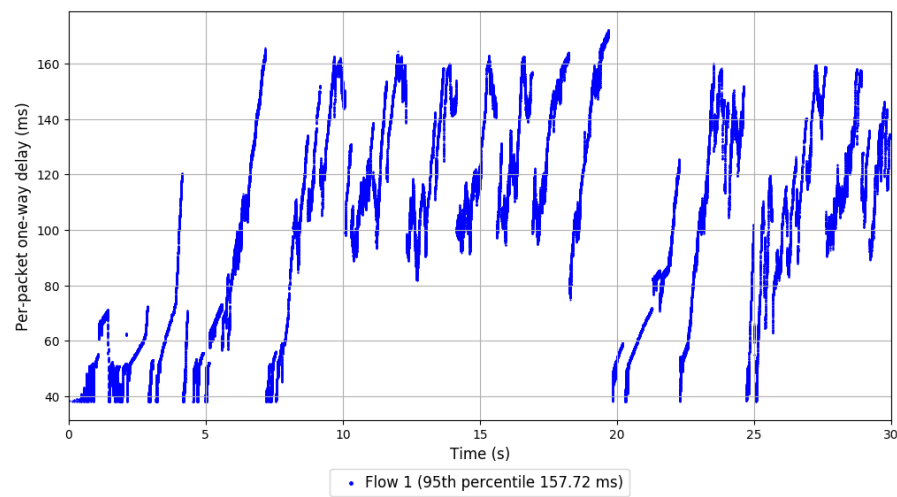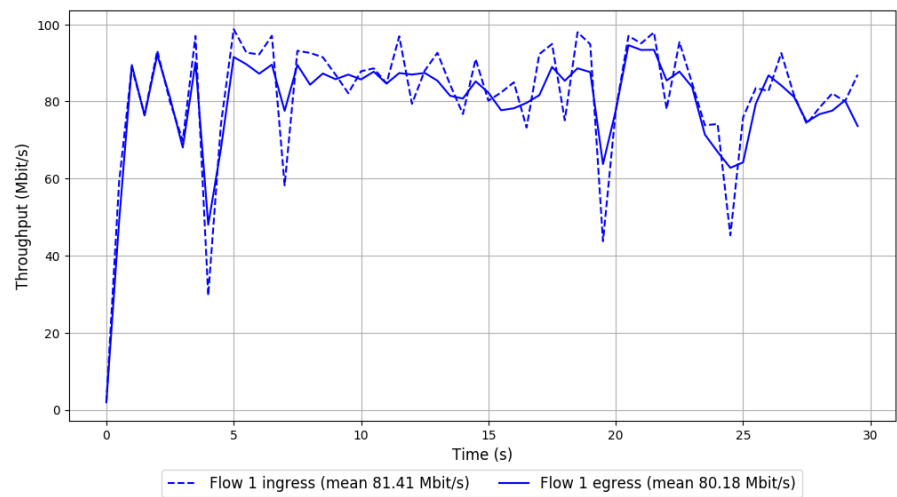· Flow 1 (95th percentile 177.84 ms)

```
Run 2: Statistics of Verus

Start at: 2017-09-18 17:40:56
End at: 2017-09-18 17:41:26
Local clock offset: -3.094 ms
Remote clock offset: 0.748 ms


# Below is generated by plot.py at 2017-09-18 19:31:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.18 Mbit/s
95th percentile per-packet one-way delay: 157.717 ms
Loss rate: 1.78%
-- Flow 1:
Average throughput: 80.18 Mbit/s
95th percentile per-packet one-way delay: 157.717 ms
Loss rate: 1.78%
```

Run 2: Report of Verus — Data Link

```
Run 3: Statistics of Verus

Start at: 2017-09-18 17:52:56
End at: 2017-09-18 17:53:26
Local clock offset: -3.989 ms
Remote clock offset: 1.026 ms


# Below is generated by plot.py at 2017-09-18 19:31:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.54 Mbit/s
95th percentile per-packet one-way delay: 97.800 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 62.54 Mbit/s
95th percentile per-packet one-way delay: 97.800 ms
Loss rate: 0.58%
```
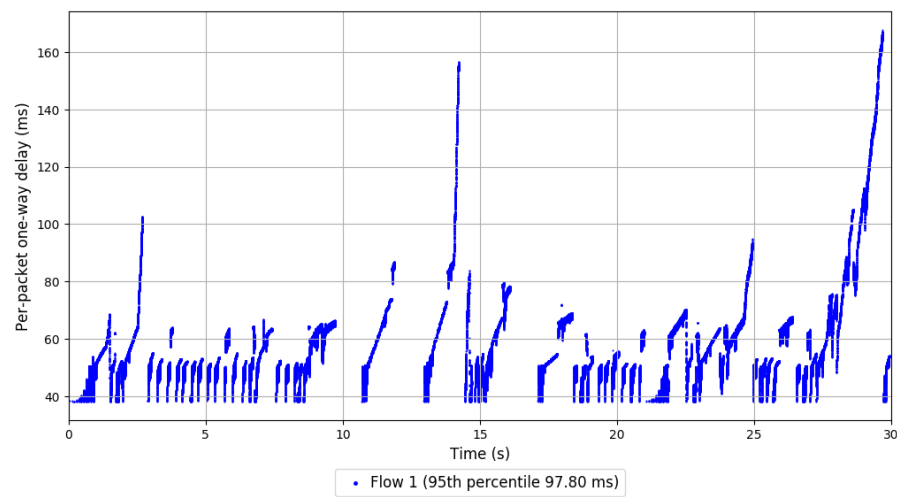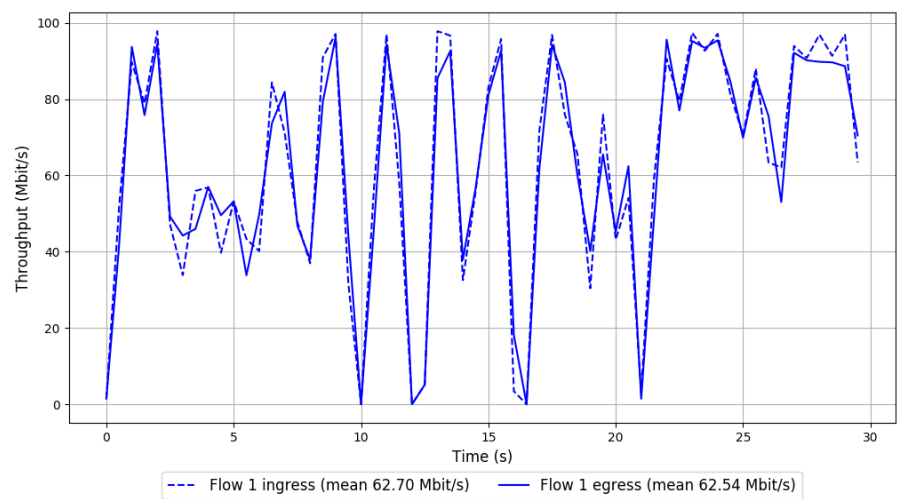
Run 3: Report of Verus — Data Link

```
Run 4: Statistics of Verus

Start at: 2017-09-18 18:04:54
End at: 2017-09-18 18:05:24
Local clock offset: -4.34 ms
Remote clock offset: 1.203 ms


# Below is generated by plot.py at 2017-09-18 19:31:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.30 Mbit/s
95th percentile per-packet one-way delay: 154.869 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 76.30 Mbit/s
95th percentile per-packet one-way delay: 154.869 ms
Loss rate: 1.44%
```
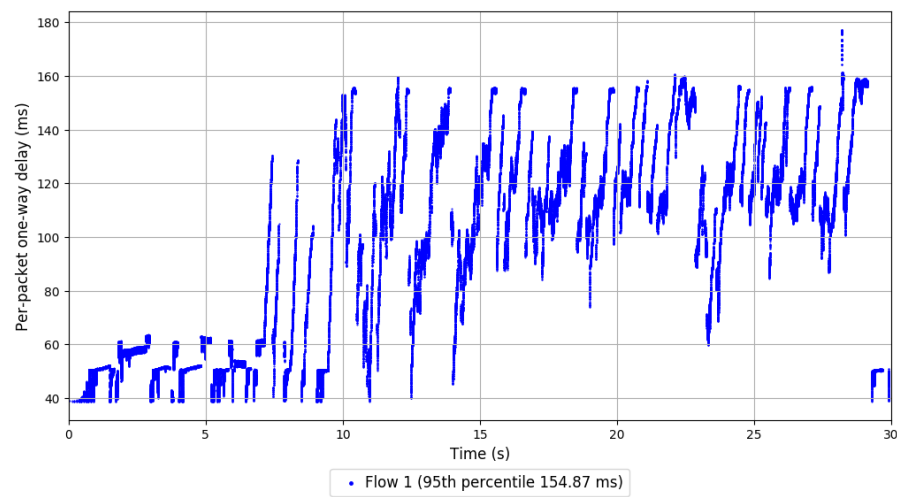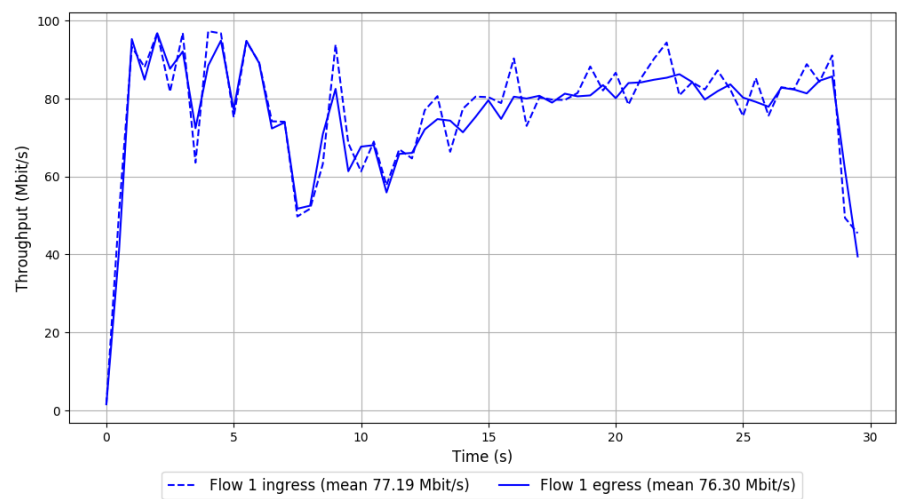
Run 4: Report of Verus — Data Link

```
Run 5: Statistics of Verus

Start at: 2017-09-18 18:16:52
End at: 2017-09-18 18:17:22
Local clock offset: -3.434 ms
Remote clock offset: 1.506 ms


# Below is generated by plot.py at 2017-09-18 19:31:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.06 Mbit/s
95th percentile per-packet one-way delay: 146.627 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 84.06 Mbit/s
95th percentile per-packet one-way delay: 146.627 ms
Loss rate: 0.91%
```
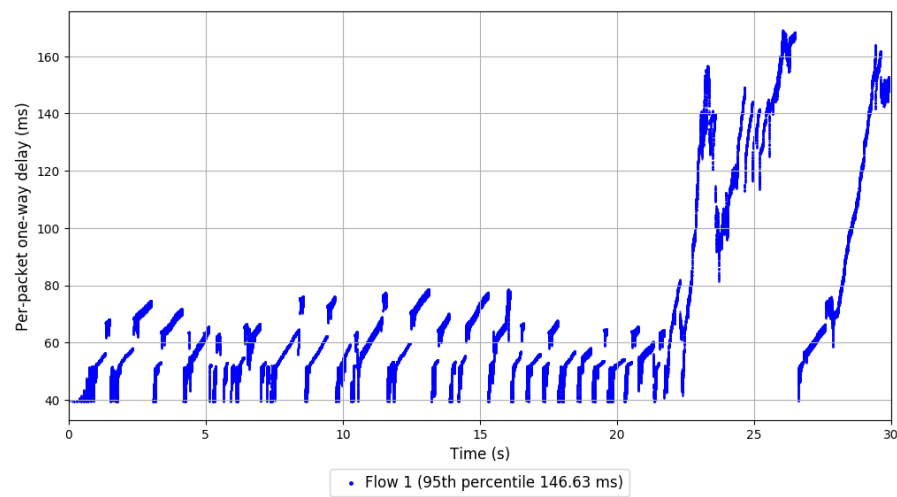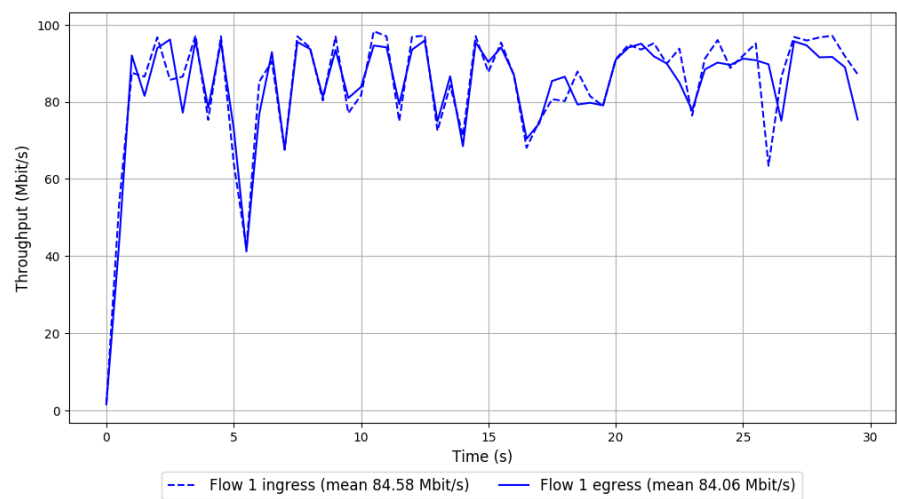
Run 5: Report of Verus — Data Link

Flow 1 ingress (mean 84.58 Mbit/s)   Flow 1 egress (mean 84.06 Mbit/s)

• Flow 1 (95th percentile 146.63 ms)

```
Run 6: Statistics of Verus

Start at: 2017-09-18 18:28:49
End at: 2017-09-18 18:29:19
Local clock offset: -4.585 ms
Remote clock offset: 1.407 ms


# Below is generated by plot.py at 2017-09-18 19:32:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.30 Mbit/s
95th percentile per-packet one-way delay: 160.881 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 85.30 Mbit/s
95th percentile per-packet one-way delay: 160.881 ms
Loss rate: 1.56%
```
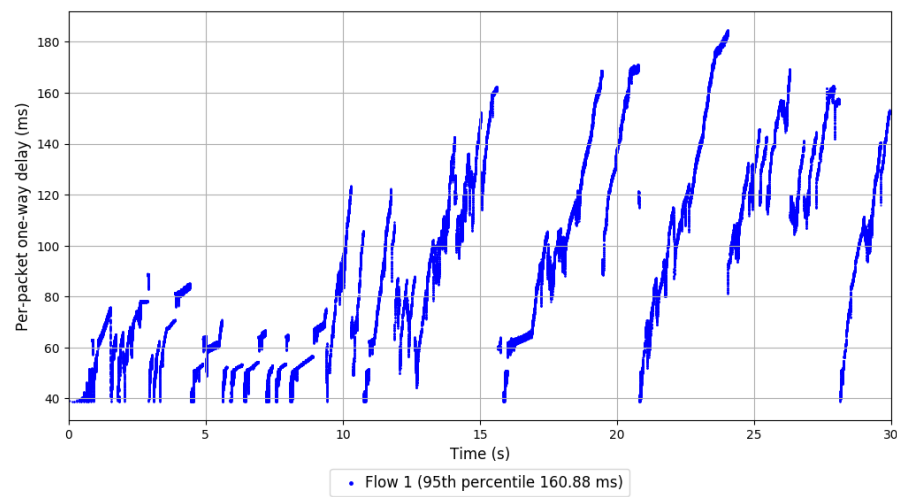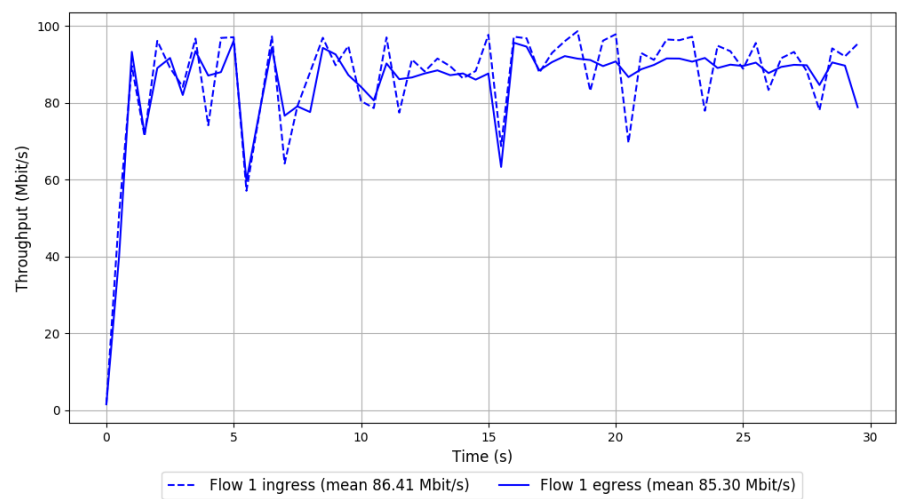
Run 6: Report of Verus — Data Link

```
Run 7: Statistics of Verus

Start at: 2017-09-18 18:40:49
End at: 2017-09-18 18:41:19
Local clock offset: -3.884 ms
Remote clock offset: 0.769 ms


# Below is generated by plot.py at 2017-09-18 19:32:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.20 Mbit/s
95th percentile per-packet one-way delay: 160.302 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 80.20 Mbit/s
95th percentile per-packet one-way delay: 160.302 ms
Loss rate: 1.04%
```
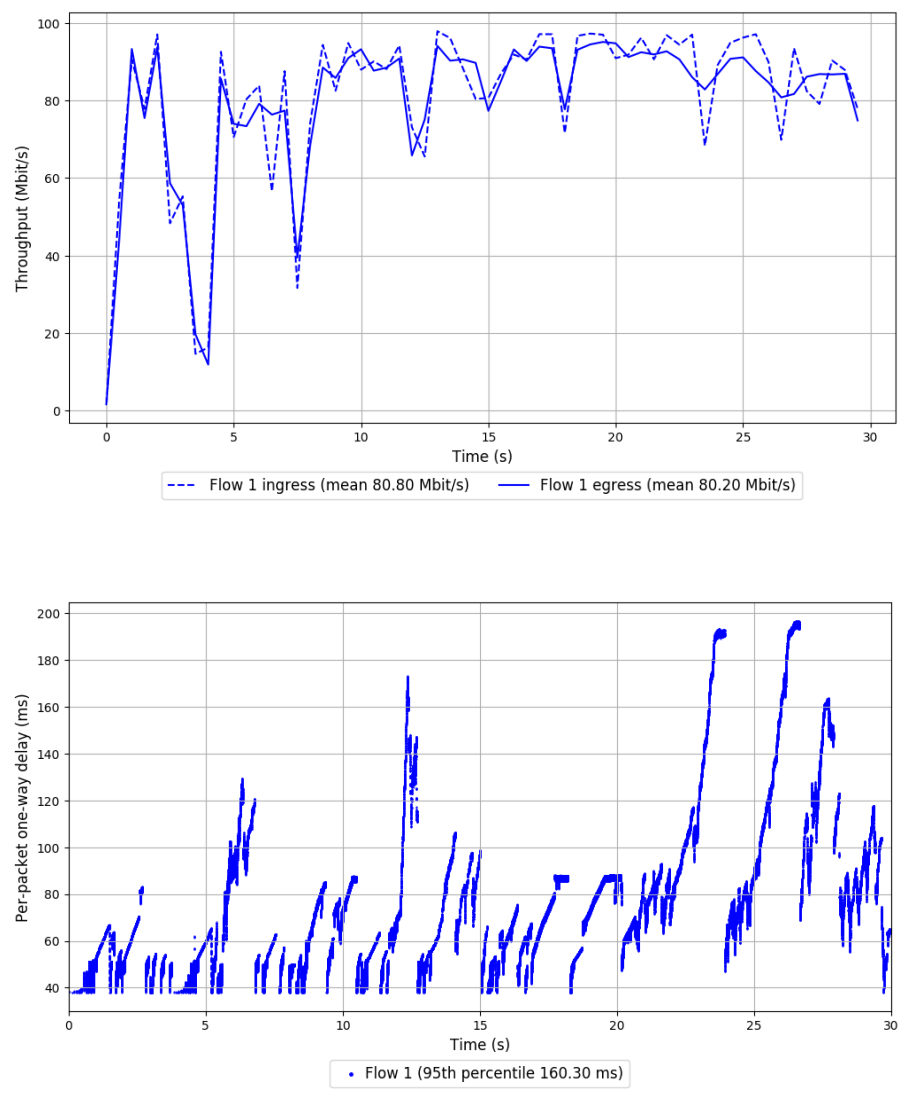
Run 7: Report of Verus — Data Link

```
Run 8: Statistics of Verus

Start at: 2017-09-18 18:52:49
End at: 2017-09-18 18:53:19
Local clock offset: -3.459 ms
Remote clock offset: 0.464 ms


# Below is generated by plot.py at 2017-09-18 19:32:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.78 Mbit/s
95th percentile per-packet one-way delay: 168.630 ms
Loss rate: 1.57%
-- Flow 1:
Average throughput: 78.78 Mbit/s
95th percentile per-packet one-way delay: 168.630 ms
Loss rate: 1.57%
```
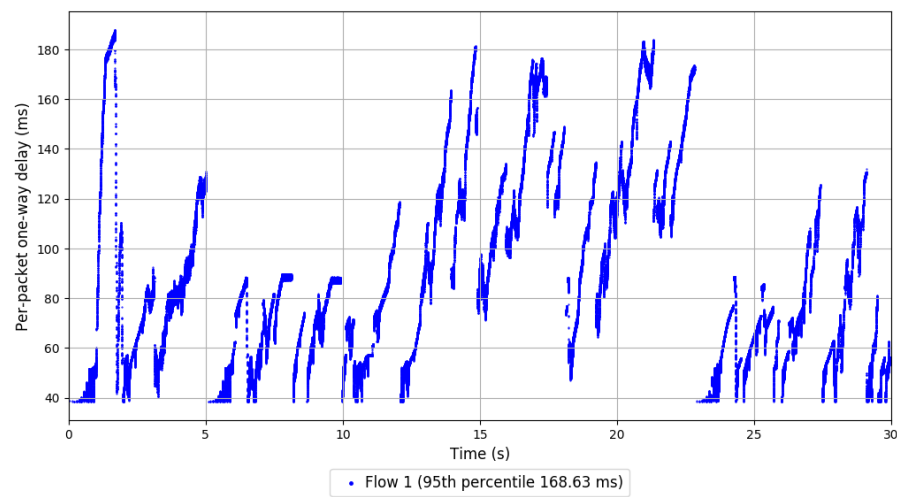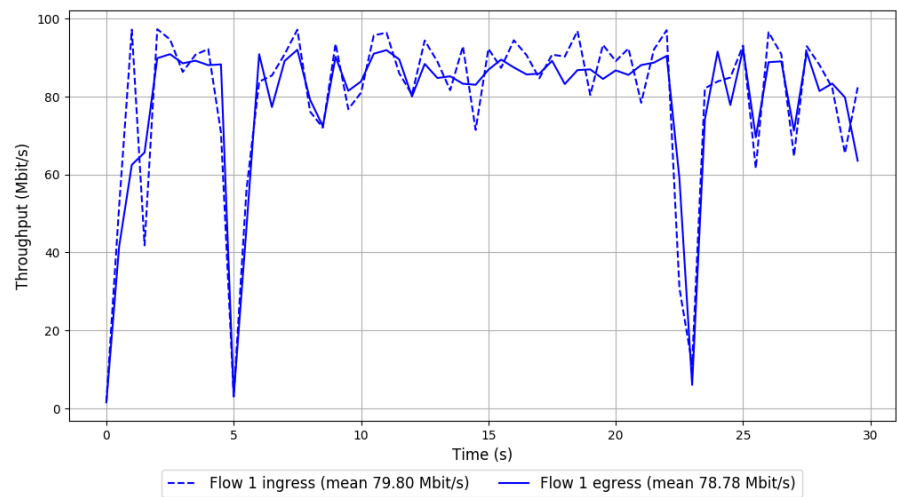
Run 8: Report of Verus — Data Link

Flow 1 ingress (mean 79.80 Mbit/s)   Flow 1 egress (mean 78.78 Mbit/s)

Flow 1 (95th percentile 168.63 ms)

```
Run 9: Statistics of Verus

Start at: 2017-09-18 19:04:45
End at: 2017-09-18 19:05:15
Local clock offset: -3.059 ms
Remote clock offset: 0.31 ms


# Below is generated by plot.py at 2017-09-18 19:32:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.66 Mbit/s
95th percentile per-packet one-way delay: 167.114 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 82.66 Mbit/s
95th percentile per-packet one-way delay: 167.114 ms
Loss rate: 1.59%
```
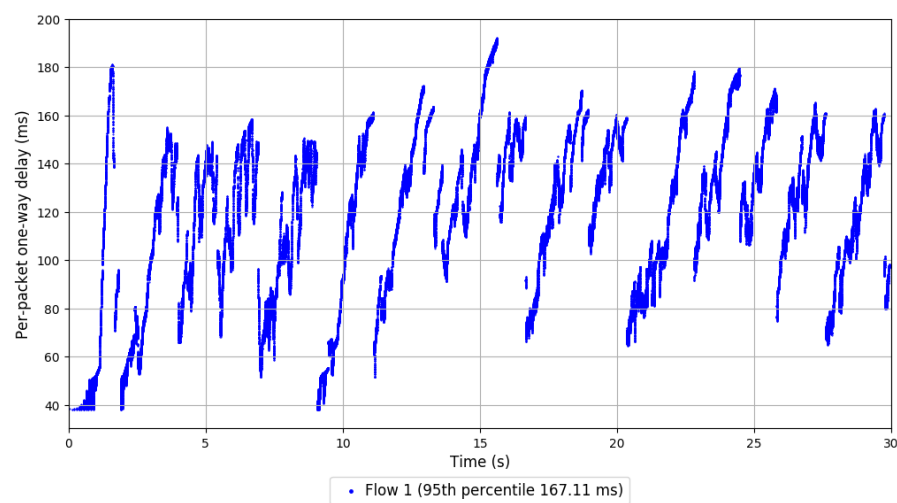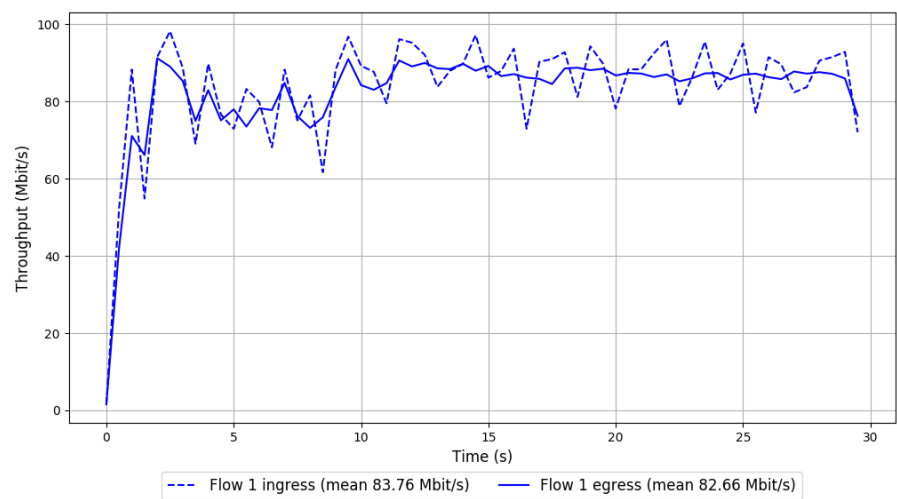
Run 9: Report of Verus — Data Link

```
Run 10: Statistics of Verus

Start at: 2017-09-18 19:16:45
End at: 2017-09-18 19:17:15
Local clock offset: -0.738 ms
Remote clock offset: 0.155 ms


# Below is generated by plot.py at 2017-09-18 19:32:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.07 Mbit/s
95th percentile per-packet one-way delay: 107.114 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 76.07 Mbit/s
95th percentile per-packet one-way delay: 107.114 ms
Loss rate: 0.92%
```

Run 10: Report of Verus — Data Link